# 2025 Annual Groundwater Monitoring and Corrective Action Report and Semi-Annual Remedy Selection and Design Progress Report

for Compliance with the Coal Combustion Residuals (CCR) Rule

Former BC Cobb Power Plant

*Muskegon Environmental Redevelopment Group, LLC*

January 29, 2026

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| **Summary of 40 CFR Section § 257.90(e)(6) Groundwater Monitoring System Requirements and Site-Specific Compliance – Former BC Cobb Power Plant** | | |
|---|---|---|
| **§ 257.90(e)(6)** *A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:* | | **Ponds 0-8 and Bottom Ash Pond Status** |
| §257.90(e)(6)(i) | *At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95.* | Assessment Monitoring Program and Evaluation of Potential Remedies |
| §257.90(e)(6)(ii) | *At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95.* | Assessment Monitoring Program and Evaluation of Potential Remedies |
| §257.90(e)(6)(iii) | *If it was determined that there was a statistically significant increase over background for one or more constituents listed in appendix III to this part pursuant to § 257.94(e):* | Yes |
| §257.90(e)(6)(iii)(A) | *Identify those constituents listed in appendix III to this part and the names of the monitoring wells associated with such an increase.*<br><br>These SSIs are from the original triggering event. | • MW-15009 – boron, pH<br>• MW-15010 - boron<br>• MW-15011 – boron, pH<br>• MW-15012 – fluoride, pH<br>• MW-15014 – boron, pH<br>• MW-15015 – pH<br>• MW-15017 – pH |
| §257.90(e)(6)(iii)(B) | *Provide the date when the assessment monitoring program was initiated for the CCR unit.* | April 25, 2018 |
| §257.90(e)(6)(iv) | *If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in appendix IV to this part pursuant to § 257.95(g) include all of the following:* | Yes |
| §257.90(e)(6)(iv)(A) | *Identify those constituents listed in appendix IV to this part and the names of the monitoring wells associated with such an increase.*<br><br>These SSLs are through the October 2025 sampling event. | MW-17001R – lithium<br>MW-17002 – lithium<br>MW-17003 – arsenic |
| §257.90(e)(6)(iv)(B) | *Provide the date when the assessment of corrective measures was initiated for the CCR unit.* | April 15, 2019 |
| §257.90(e)(6)(iv)(C) | *Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.* | Will be held 30 days prior to remedy selection |
| §257.90(e)(6)(iv)(D) | *Provide the date when the assessment of corrective measures was completed for the CCR unit.* | September 11, 2019 |
| §257.90(e)(6)(v) | *Whether a remedy was selected pursuant to § 257.97 during the current annual reporting period, and if so, the date of remedy selection.* | Evaluation of potential remedies ongoing |
| §257.90(e)(6)(vi) | *Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.* | Evaluation of potential remedies ongoing |

# 1.0 Introduction

The U.S. Environmental Protection Agency's (EPA) final Coal Combustion Residuals (CCR) Rule 40 CFR §257 establishes a comprehensive set of requirements for the management and disposal of CCR (or coal ash) in surface impoundments by electric utilities. The former BC Cobb Power Plant (BCC, BC Cobb, or Site) is the site of a former coal-fired power generation facility located in Muskegon, Michigan (**Figure 1**). Consumers Energy Company (CEC) operated BCC between 1948 and 2016. During operations, coal combustion residuals (CCR) were deposited in Ponds 0-8 and the Bottom Ash Pond (**Figure 2**). This CCR multi-unit is subject to the U.S. Environmental Protection Agency's (EPA) CCR Rule (40 CFR §257). In accordance with §257.91, CEC installed a groundwater monitoring system around the BCC Ponds as required by §257.91, and background groundwater monitoring was completed as required by §257.93. The CCR ponds are considered one CCR multi-unit.

As documented in the CEC January 14, 2019 *Notification of Appendix IV Constituent Exceeding Groundwater Protection Standard per §257.95(g),* lithium was observed present at statistically significant levels above the site-specific groundwater protection standard (GPS) developed for the CCR Rule compliance program in two downgradient monitoring wells at the BCC Ponds, thus necessitating CEC develop the September 2019 *Assessment of Corrective Measures*.

The Muskegon Environmental Redevelopment Group, LLC (MERG) acquired the BCC property in 2020 with the purpose of CCR removal from the ponds as part of closure efforts since August 2020. The CCR excavation efforts were completed in April of 2022 and dewatering efforts were ceased on June 15, 2022. MERG has continued implementation of the federal CCR Rule groundwater monitoring program, as required by §257.90-95.

In 2025, groundwater monitoring was conducted to collect assessment monitoring samples as specified under Part 257.95. This Annual Groundwater Monitoring Report presents the sampling and analysis completed by MERG in 2025:

- The status of the groundwater monitoring program for the CCR ponds at the end of 2025 is assessment monitoring and evaluation of potential remedies.




**Figure 1. Vicinity Map for the former BC Cobb Power Plant**

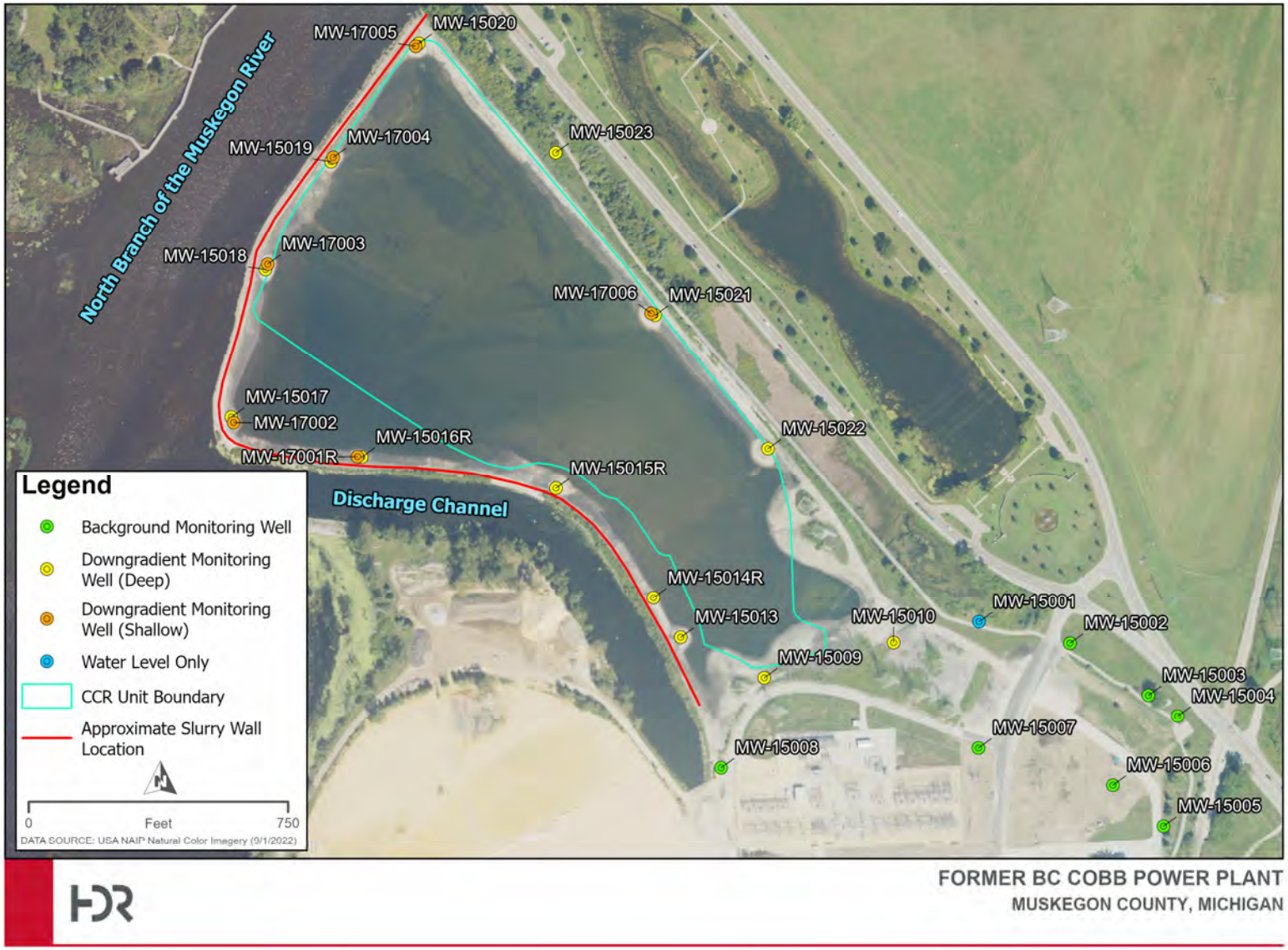



**Figure 2. Former BC Cobb Former CCR Unit and Monitoring Wells**

# 2.0 Facility Description

The Site is in close proximity with several water bodies. The site is adjacent to the North Branch of the Muskegon River on the north and northwest perimeter berms, and the Veterans Memorial Pond is to the northeast. The Discharge Channel is along the southern border of the Site and discharges into the North Branch of the Muskegon River. The CCR unit, which includes Ponds 0-8 and the Bottom Ash Pond, were wet ash dewatering areas. From 1984 through plant closure in 2016, CCR was deposited in the ponds by utilizing sluicing methods. Bottom ash slurry was directed into the Bottom Ash Pond, with Bottom Ash Pond overflow directed into either Ponds 5 or 6. Fly ash from the power plant was directed into Ponds 7 and 8. The ponded CCR was routed through the remaining ponds in series. Each pond allowed a portion of CCR particles to settle out before the overflow was transferred to the next pond. The overflow from Pond 4 was discharged to a National Pollutant Discharge Elimination System (NPDES) outfall located on the Discharge Channel. CCR was periodically removed from the ponds and disposed offsite or beneficially reused. During operation of the CCR units, the pond surface water elevations were at 588 feet. Since plant closure in 2016, the pond water elevation has lowered and before dewatering efforts began, appeared to be approximately that of the adjacent Muskegon River.

MERG initiated clean closure of the ponds in 2020 by installing a slurry wall around the perimeter berm adjacent to the North Branch of the Muskegon River (**Figure 2**). Dewatering began in July 2020 to prepare for excavation and removal of waste CCR and disposal offsite. Ash removal began in August 2020. Excavation, and ash removal was completed in April of 2022, and dewatering ceased on June 15, 2022 (HDR, 2022). A summary of the CCR removal verification activities is provided in Section 5.1.

## 2.1 Hydrogeology

According to historic U.S. Geologic Survey (USGS) topographic maps and aerial photographs dating back to 1929, the area currently occupied by the ash ponds was originally marsh land. The subsurface materials in the pond area generally consist of CCR ranging from 3 to 28 feet below ground surface (ft bgs) overlying 10 to 20 feet of poorly graded, fine-grained sand. Discontinuous layers of organic materials (i.e., humus and peat) are present within the fine-grained sand. Organic-rich silt was also encountered at depths ranging from 20 to 30 ft bgs, beneath the fine-grained sand, ranging in thickness from approximately 1 to 13 feet. The organic-rich silt deposits are thickest in the perimeter berms along the southernmost edge of the pond area (toward Muskegon Lake). Thinner deposits of the organic-rich silt were encountered toward the northernmost edge of the pond area. Silty clay and/or poorly graded, fine- to medium-grained sand is generally observed within 30 to 40 ft bgs, beneath the organic-rich silt. An underlying clay was encountered throughout the pond area at approximately 40 ft bgs, beneath the fine to medium-grained sand.

Ponds 0-8 are bound by surface water features (**Figure 2**). The North Branch Muskegon River and former plant-associated discharge channel adjoin the western and southernmost boundaries of the pond area, and Veterans Memorial Park is located north and northeast of the pond area. MERG understands that there is surface water pumping at the Veterans Memorial Park on an occasional basis to limit the flooding in some areas of the park. Pumping performed at the park has the potential to influence the groundwater flow conditions at BCC. Therefore,

changes over time in groundwater flow conditions at the Site boundary will need to give consideration that potential for impact.

Groundwater flow within the uppermost aquifer has varied during plant operations and the post-shutdown period. While the ponds were actively receiving CCR and non-CCR wastewater, groundwater in the pond area was several feet higher than the surrounding surface water in Muskegon River and upgradient groundwater, creating a mound under the BCC Ponds, with groundwater flowing outward toward the surface water features. During shutdown there were significant changes to the groundwater flow direction as a result of the lack of loading to the ponds that began in April 2016, and for a period in 2017 the Veterans Memorial Pond was dewatered for maintenance activities. Between the shutdown of the plant and ash removal dewatering efforts, groundwater was encountered at a similar elevation to the surrounding surface water, generally within the range of 579 to 583 feet above mean sea level (ft amsl). Using the average hydraulic conductivity measured at the monitoring wells of 58 feet/day (Arcadis, 2016), and an assumed effective porosity of 0.3, this results in groundwater flow rate of approximately 0.31 feet/day (approximately 113 feet/year).

## 2.2 Monitoring Well Network

The CCR Rule requires, at a minimum, one upgradient and three downgradient monitoring wells per CCR unit to be completed in the uppermost aquifer. Section §257.90 of the Rule states that the operator: "…may install a multiunit groundwater monitoring system instead of separate groundwater monitoring systems for each CCR unit." In addition, the Rule states that downgradient monitoring wells should be installed to: "accurately represent the quality of groundwater passing the waste boundary of the CCR unit. The downgradient monitoring system must be installed at the waste boundary that ensures detection of groundwater contamination in the uppermost aquifer."

The certified monitoring network at BC Cobb includes seven background wells on the southeast end of the Site to evaluate groundwater conditions unaffected by the CCR unit. Prior to CCR removal, Ponds 0-8 were separated by narrow embankments that were not recommended for well installation. To install downgradient wells at the waste boundary, wells would have needed to be installed on the embankments. Therefore, MERG monitors Ponds 0-8 and the Bottom Ash Pond as a single multiunit groundwater monitoring system composed of 19 wells surrounding the entire CCR unit. The CCR unit boundary and the monitoring well locations are shown on **Figure 2.**

Seven wells (MW-15002 through MW-15008) were installed in the southeast area of the Site to evaluate water quality unaffected by the CCR unit. **Appendix A** maps illustrate that these background wells are still upgradient or at a side gradient to the CCR unit and therefore even with groundwater flow changes at the site these wells remain appropriate background wells. MW-15001 was sampled during the background monitoring phase of the CCR Rule compliance program but now serves as a nature and extent well with only static water level measurements required. Based on the comments received from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) on the Hydrogeologic Monitoring Plan, MERG is working to recalculate background values for the site to remove monitoring well MW-15008 data from the pool of background data used to calculate the background threshold values for the site. The updated background report is anticipated in the first quarter of 2026.

Downgradient wells MW-15009 through MW-15023 were installed in 2015 to form the MERG multiunit network around the CCR unit (Ponds 0-8 and the Bottom Ash Pond). Shallow wells MW-17001 through MW-17006 were installed in 2017 and were paired with existing wells MW-15016R through MW-15021 to better characterize shallow groundwater quality and flow direction (**Figure 2**). MW-15016R through MW-15021 provide data on deeper groundwater while MW-17001R through MW-17006 provide shallow groundwater data.

No wells were installed, repaired, or abandoned in 2025.

# 3.0 Monitoring

Annual groundwater sampling for assessment monitoring was conducted on the certified monitoring well network during April and October in 2025. **Table 1** provides the well identification number, well location, the dates the samples were collected, and whether the sample was required by the CCR Rule for the background sampling, detection monitoring or assessment monitoring programs. CEC initiated sample collection for background monitoring in December 2015 and completed the eighth round, as required by the CCR Rule, in July 2017. In accordance with CCR Rule §257.94(b), one round of detection monitoring was completed in September 2017. Three COIs were observed with statistically significant increases (SSIs) above background levels. The initial round of assessment monitoring was completed in April 2018 by CEC, and after an Alternative Source Demonstration was unsuccessful, CEC initiated assessment monitoring. The first round of semi-annual assessment monitoring took place in June 2018.

**Table 1. Dates of groundwater samples collected for each well in 2025 and the required monitoring programs for the BC Cobb facility §257.90(e)(3)**

| Monitoring Well I.D. | Well Location | Dates Monitored | CCR Rule Monitoring Purpose |
|---|---|---|---|
| MW-15001 | Water Level Only | April 22, 2025<br>October 27, 2025 | Water Level Monitoring |
| MW-15002 | Background/Upgradient | April 24, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-15003 | Background/Upgradient | April 24, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-15004 | Background/Upgradient | April 24, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-15005 | Background/Upgradient | April 23, 2025<br>October 27, 2025 | Assessment Monitoring |
| MW-15006 | Background/Upgradient | April 23, 2025<br>October 27, 2025 | Assessment Monitoring |
| MW-15007 | Background/Upgradient | April 23, 2025<br>October 27, 2025 | Assessment Monitoring |
| MW-15008 | Background/Upgradient | April 23, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-15009 | Downgradient | April 23, 2025<br>October 27, 2025 | Assessment Monitoring |
| MW-15010 | Downgradient | April 22, 2025<br>October 27, 2025 | Assessment Monitoring |
| MW-15013 | Downgradient | April 24, 2025<br>October 29, 2025 | Assessment Monitoring |
| MW-15014R | Downgradient | April 24, 2025<br>October 29, 2025 | Assessment Monitoring |
| MW-15015R | Downgradient | April 24, 2025<br>October 29, 2025 | Assessment Monitoring |

| Monitoring Well I.D. | Well Location | Dates Monitored | CCR Rule Monitoring Purpose |
|---|---|---|---|
| MW-15016R | Downgradient | April 24, 2025<br>October 29, 2025 | Assessment Monitoring |
| MW-15017 | Downgradient | April 23, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-15018 | Downgradient | April 23, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-15019 | Downgradient | April 23, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-15020 | Downgradient | April 22, 2025<br>October 27, 2025 | Assessment Monitoring |
| MW-15021 | Downgradient | April 23, 2025<br>October 29, 2025 | Assessment Monitoring |
| MW-15022 | Downgradient | April 23, 2025<br>October 29, 2025 | Assessment Monitoring |
| MW-15023 | Downgradient | April 22, 2025<br>October 29, 2025 | Assessment Monitoring |
| MW-17001R | Downgradient | April 24, 2025<br>October 29, 2025 | Assessment Monitoring |
| MW-17002 | Downgradient | April 23, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-17003 | Downgradient | April 23, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-17004 | Downgradient | April 23, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-17005 | Downgradient | April 22, 2025<br>October 28, 2025 | Assessment Monitoring |
| MW-17006 | Downgradient | April 24, 2025<br>October 29, 2025 | Assessment Monitoring |

Note: MW-15001 is measured for water level only. No samples are collected from MW-15001.

## 3.1 Water Levels and Sample Collection

Water levels were collected in each well following the Groundwater Level Monitoring Standard Operating Procedure (SOP) (HDR, 2020). Water levels were measured before well purging began. Wells were purged until field parameters (pH, turbidity, conductivity, dissolved oxygen, temperature, and oxidation reduction potential) stabilized using a peristaltic pump and dedicated tubing. The results of field measurements were recorded on a field data form, which is maintained as part of the field records. After field parameters stabilized, samples were collected and tested for the parameters listed in **Table 2**. Two rounds of assessment monitoring samples were collected from each well in 2025. For quality control, two field duplicate samples were collected during each sample event. Samples from the event were delivered to Trace Analytical Laboratories in Muskegon, Michigan.

## 3.2 Analytical Testing

Groundwater samples collected were analyzed for all Appendix III and Appendix IV parameters, plus TSS as listed in **Table 2**. Additional constituents of copper, nickel, iron, vanadium, silver, and zinc are analyzed to comply with the concurrent State of Michigan Part 115 groundwater program.

**Table 2. Constituents of Interest**

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

## 3.3 Data Validation and Data Management

Data validation was conducted to eliminate data that did not meet validation criteria and designate a data qualifier for data quality limitation discovered. Samples and quality control were reviewed and evaluated, and no samples were rejected. Most quality control analyses were within reportable limits; however, when quality control was outside limit controls, samples were reported as estimated. Data analyses required minimal qualifications, and all data were usable, even when qualified. Qualifiers are included in the footnotes of the reporting tables, contained in **Appendix B**. Laboratory reports and accompanying data validation reports for the sampling completed in 2025 are included in **Appendix C**.

# 4.0 Monitoring Results

## 4.1 Water Levels and Groundwater Flow Direction

Water level measurements collected in 2025 are provided in **Table 3**. Potentiometric surface maps have been developed based on water levels measured in April and October 2025, provided in **Appendix A**. The maps display the groundwater elevations at the wells and groundwater contours for the shallow screened wells (MW-170xx) and deeper screened wells (MW-150xx).

In April and October 2025, the potentiometric contours show flow direction from southeast to northwest toward the North Branch of the Muskegon River, consistent with previous measurements. As observed in Error! Reference source not found., measurements collected in 2024 and 2025 indicate groundwater elevations have returned to stable, pre-construction levels, as anticipated. In 2025, groundwater elevations beneath the area of the impoundments range between 579.20 and 580.18 ft amsl. The observed flow direction in the shallow wells was toward the Muskegon River to the northwest.

**Table 3. Groundwater elevations measured in 2025**

| Well ID | TOC Elevation (ft amsl) | Groundwater Elevation (ft amsl) April 22, 2025 | Groundwater Elevation (ft amsl) October 27, 2025 |
|---|---|---|---|
| MW-15001 | 586.52 | 579.75 | 579.75 |
| MW-15002 | 586.87 | 579.94 | 579.94 |
| MW-15003 | 587.12 | 580.04 | 580.04 |
| MW-15004 | 590.57 | 580.11 | 580.11 |
| MW-15005 | 587.77 | 579.87 | 579.87 |
| MW-15006 | 587.81 | 580.14 | 580.14 |
| MW-15007 | 587.43 | 579.95 | 579.95 |
| MW-15008 | 587.76 | 579.60 | 579.60 |
| MW-15009 | 589.27 | 579.83 | 579.83 |
| MW-15010 | 588.11 | 579.84 | 579.84 |
| MW-15013 | 590.00 | 579.71 | 579.71 |
| MW-15014R | 589.70 | 579.94 | 579.94 |
| MW-15015R | 586.52 | 580.00 | 580.00 |
| MW-15016R | 586.62 | 579.55 | 579.55 |
| MW-15017 | 586.33 | 579.43 | 579.43 |
| MW-15018 | 586.33 | 579.20 | 579.20 |
| MW-15019 | 586.32 | 579.21 | 579.21 |
| MW-15020 | 586.26 | 579.29 | 579.29 |
| MW-15021 | 593.73 | 579.59 | 579.59 |
| MW-15022 | 595.82 | 580.05 | 580.05 |
| MW-15023 | 588.08 | 579.72 | 579.72 |
| MW-17001R | 586.61 | 580.18 | 580.18 |
| MW-17002 | 586.26 | 580.10 | 580.10 |
| MW-17003 | 586.31 | 579.98 | 579.98 |
| MW-17004 | 586.27 | 579.99 | 579.99 |
| MW-17005 | 586.33 | 579.80 | 579.80 |
| MW-17006 | 593.78 | 579.84 | 579.84 |

Note: MW-15001 is measured for water level only. No samples are collected from MW-15001.

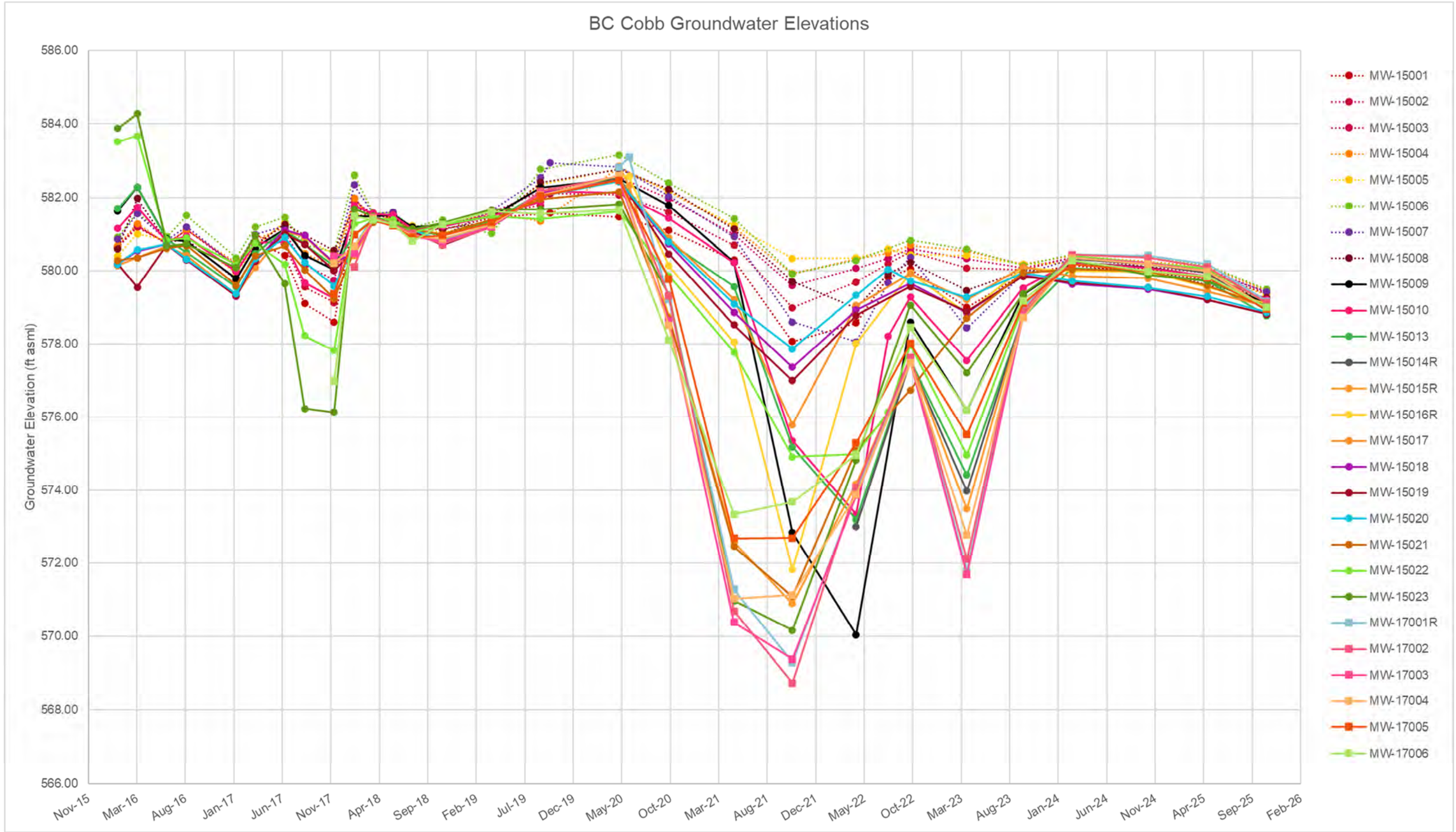



**Figure 3. Groundwater Elevations in Impoundment Monitoring Wells**

## 4.2 Water Quality

As stipulated in the CCR Rule, eight rounds of background groundwater sampling were completed by CEC between December 2015 and July 2017. Samples were analyzed for Appendix III and IV parameters, plus TSS. The water quality collected from the monitoring wells located upgradient of the CCR units were compiled and statistically analyzed to develop background threshold values (BTVs) for each constituent of interest (COI) (TRC, 2019). The first detection monitoring event was conducted in September 2017. After reporting SSIs for boron, fluoride, and pH in several wells, BC Cobb moved into assessment monitoring. The first assessment monitoring event was conducted in April 2018 and samples were analyzed for Appendix IV constituents and compared to GPS values. Lithium was found to be present at statistically significant levels (SSL) above the GPS in MW-17001 and MW-17002. This discovery prompted the Assessment of Corrective Measures and Response Action Plan (TRC, 2019).

Background statistical threshold values were updated in 2024. The statistics and updated background values are documented in the Background Water Quality Statistical Certification (HDR, 2024). This updated the upper tolerance values (UTLs) for most of the parameters, which resulted in updated GPS values for some constituents. The updated background values and updated GPS values are in **Table 4** and were used for the 2025 water quality analysis below.

**Table 4. CCR Rule GPS Values**

| Constituent | Units | Maximum Contaminant Level | Background Concentrations (UTL)[1] | CCR Rule GPS |
|---|---|---|---|---|
| Antimony | ug/L | 6.0 | 1.4 | 6.0 |
| Arsenic | ug/L | 10 | 18 | 18 |
| Barium | ug/L | 2,000 | 270 | 2,000 |
| Beryllium | ug/L | 4.0 | 1.2 | 4.0 |
| Cadmium | ug/L | 5.0 | 0.22 | 5.0 |
| Chromium | ug/L | 100 | 3.7 | 100 |
| Cobalt | ug/L | 6.0* | 1.2 | 6.0 |
| Fluoride | ug/L | 4,000 | 1,400 | 4,000 |
| Lead | ug/L | 15 | 2.0 | 15 |
| Lithium | ug/L | 40* | 48 | 48 |
| Mercury | ug/L | 2.0 | 0.20 | 2.0 |
| Molybdenum | ug/L | 100* | 9.7 | 100 |
| Radium-226/228 | pCi/L | 5.0 | 3.74 | 5.0 |
| Selenium | ug/L | 50 | 3.3 | 50 |
| Thallium | ug/L | 2.0 | 0.19 | 2.0 |

*EPA adopted health-based value in place of MCL.
1 Background values updated in 2024.

In April and October 2025, assessment monitoring samples were collected from the certified monitoring well network wells and all samples were analyzed for Appendix III and Appendix IV COIs plus Michigan Part 115 constituents. Water quality data tables are included in **Appendix B** and laboratory reports are provided in **Appendix C**. Therefore, in accordance with CCR Rule

§257.95(g), downgradient well concentrations were statistically evaluated to determine "if one or more constituents in appendix IV to this part are detected at SSL above the groundwater protection standard." To determine if an exceedance of a GPS was statistically significant, the 95% lower confidence limit (95 LCL) was calculated for each of the downgradient wells for each of the Appendix IV COIs. The LCL results that exceeded their respective GPS are provided in **Table 5.**

During the update of LCLs for annual-reporting, HDR identified several data loading errors involving duplicate and/or diluted fields for certain constituents sampled from wells MW-17001R (March 2024), MW-17002 (May 2022), and MW-17003 (October 2024). HDR corrected the errors and re-calculated the LCLs. As a result, four well-constituent pairs that previously exhibited SSLs for the April 2025 sampling event reported in the 2025 Semi-Annual Groundwater Monitoring and Corrective Action Report and Semi-Annual Remedy Selection and Design Progress Report (HDR, 2025) were affected.

After correction:

- Arsenic at wells MW-17002 and MW-17003, which previously exhibited SSLs, no longer exhibit SSLs.
- Lithium at wells MW-17001R and MW-17002 continue to exhibit SSLs, although the calculated values have changed slightly.

In October 2025, downgradient wells MW-17001R and MW-17002 continue to demonstrate SSLs for lithium. Additionally, MW-17003 demonstrated an SSL for arsenic above the GPS in the October 2025 sampling event.

**Table 5. LCLs for Appendix IV Constituents for Wells with SSLs over GPS in April and October 2025**

| **Appendix IV Constituent** | | **Arsenic** | **Lithium** |
|---|---|---|---|
| **Units** | | **ug/L** | **ug/L** |
| **GPS** | | **18.0** | **48.0** |
| April 2025 95% LCL | MW-17001R | --- | 57 |
| | MW-17002 | --- | 140 |
| October 2025 95% LCL | MW-17001R | --- | 62 |
| | MW-17002 | --- | 140 |
| | MW-17003 | 22 | --- |

# 5.0 Remedy Selection Progress Update

This section provides the semi-annual progress report describing the progress towards remedy selection for the ash impoundments in accordance with §257.97(a). Semiannual progress reports will be prepared and posted to the CCR website until a remedy is selected and documented in a final report.

## 5.1 Source Control

A Closure Plan prepared and certified by Golder Associates, Inc. was placed in CEC's Operating record and provided formal Notification of Intent to Initiate Closure on March 30, 2018, which confirmed that CEC planned to close the BCC Ponds under the CCR Rule's closure by removal provision in §257.102(c). A closure work plan was also submitted by CEC to EGLE, who approved it on October 16, 2018 and clarified the workplan on August 13, 2018 and September 20, 2019. MERG acquired the property on April 16, 2020 to complete the CCR ash removal. Upon acquisition, MERG immediately initiated closure commencement activities. MERG began excavating the CCR material from the impoundments in August 2020 to April 2022.

The CCR Removal Report was submitted to EGLE on September 19, 2022. Supplement No. 1 to this report was submitted to EGLE on December 7, 2022 detailing additional excavation and verification sampling at locations that did not meet verification requirements. On April 11, 2023, MERG received a letter from EGLE concurring that MERG followed the CCR Removal Work Plan and documented the removal of the discreet amount of waste using multiple lines of evidence as required by the work plan.

As described in the 2023 Semiannual Update for Selection of Remedy, sloughing on the interior slope of the North Embankment was observed in January 2023 (HDR, 2023a). CCR Removal Report Supplement No. 2 was submitted on June 8, 2023 detailing reverification at locations potentially impacted by the sloughing of the North Embankment. At the request of EGLE, Supplement No. 3 was submitted on December 7, 2023 detailing reverification at locations along the Southern and Western Perimeter Embankments that experienced minor sloughing. At each of these phases, MERG has held meetings with EGLE and each of these supplements and associated reverifications have been in coordination with EGLE. On February 20, 2024, EGLE approved Supplement No. 3 of the CCR Removal Report.

## 5.2 Progress Towards Remedy Selection

An Assessment of Corrective Measures (ACM) was submitted to EGLE on September 11, 2019 (TRC, 2019). MERG intends to follow the ACM for the Site, and follow the adaptive management strategy, which includes measures to remove source material, reduce infiltration, and minimize the potential for future migration.

As described above, source removal efforts at Site were completed in April 2022 and dewatering was ceased in June 2022. Based on the potentiometric contours of deep monitoring wells of 2024, provided in **Appendix A,** the hydraulic gradient has equilibrated. The reduction of hydraulic loading and recharge of the aquifer are changing groundwater redox conditions and the physical removal of CCR is further changing groundwater quality. Some of the increases of

metals, like arsenic, are assumed to be temporary in response to construction stirring of the sediments and subsurface material as well as exposing subsurface, non-CCR material like the wood chips in the southwestern corner of the impoundments to oxygen temporarily during ash removal and embankment sloughing repairs. Groundwater quality is anticipated to improve as a result of CCR removal. Future groundwater statistical evaluations, once eight samples have been collected after CCR removal, will compare upper confidence limits to GPS to begin to evaluate if there is a statistical downward trend in the UCL at wells with exceedances.

In November 2024, EGLE sent a letter to MERG stating that the perimeter Pond 0-8 berm, which remained in place and is composed of coal ash, needed to be removed in order to meet clean closure regulations. In 2025 MERG has been in coordination with EGLE regarding the potential to remove the remaining berms that contain CCR at the site. There are numerous complications with this approach that include working with the U.S. Army Corp of Engineers, coordination with Muskegon County to remove a force main, and coordination with CEC because a large transmission power supply to North Muskegon would need to be moved. Additionally, removal of the embankments separating the former impoundment and the Muskegon River would remove monitoring of groundwater. MERG has completed site investigations to determine the extent of CCR requiring removal. Areas between the Causeway Street right-of-way and the northeast berm, as well as areas east of Ponds 0-8, have been found to contain CCR which have been added to the berm removal closure plan. MERG has also identified wetlands within the closure areas and required approximately 3 acres of wetlands to be mitigated to allow for CCR removal. These and other complicating factors have been addressed in the closure plan submitted to EGLE, and will take time to evaluate and permit for construction.

Further field investigation is underway regarding the woody debris characterization and in-situ conditions that will be used to determine the limits of removal during the berm removal process. MERG will amend the approved 2018 Closure Plan to address the work noted for submission to EGLE by the end of September 2025. Permitting for the job is anticipated to take 12 to 14 months, and work to remove the berm and other materials (if required) is expected to begin in the second quarter of 2027.

Additionally, MERG will continue executing the self-implementing groundwater compliance schedule in conformance with §257.90 - §257.98, which includes semiannual assessment monitoring in accordance with §257.95 to monitor groundwater conditions and inform the remedy selection. The final remedy will be formally selected per §257.97 once the selected option is reviewed and commented on by EGLE and a public meeting is conducted at least 30-days prior to the final selection as required under §257.96(e).

# 6.0 Summary

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

- Water levels were measured at monitoring wells in April and October 2025. The shallow groundwater appears to be higher in the southwest corner of the impoundments.

- The wells of the certified well network were sampled in April 2025 for the assessment monitoring event. Assessment monitoring data was statistically evaluated, and SSLs above GPS were observed at MW-17001R and MW-17002 for lithium.
- The wells of the certified well network were sampled in October 2025 for the assessment monitoring event. Assessment monitoring data was statistically evaluated, and SSLs above GPS were observed at MW-17001R and MW-17002 for lithium and at MW-17003 for arsenic.
- The CCR status at the end of 2025 is assessment monitoring and evaluation of potential remedies.

MERG has completed source removal; therefore, evaluation of potential remedies includes: 1) whether clean closure criteria in groundwater have been met, 2) if the data trend indicates that MNA in addition to the source removal will be an effective remedy, or 3) if additional evaluation of enhanced MNA or other remedies is warranted.

MERG has been evaluating the means and methods to remove the containment berms that contain CCR at the site as directed by EGLE, and coordinating with the numerous agencies involved, including the U.S. Army Corp of Engineers. Further field investigation is underway regarding the woody debris characterization and in-situ conditions that will be used to determine the limits of removal during the berm removal process. Additionally, MERG will continue executing the self-implementing groundwater compliance schedule in conformance with §257.90 - §257.98, which includes semiannual assessment monitoring in accordance with §257.95 to monitor groundwater conditions and inform the remedy selection.

The final remedy will be formally selected per §257.97 once the selected option is reviewed and commented on by EGLE and a public meeting is conducted at least 30-days prior to the final selection as required under §257.96(e).

# 7.0 References

Arcadis, 2016. Summary of Monitoring Well Design, Installation, and Development. May 13, 2016.

CEC, 2019. Notification of Appendix IV Constituent Exceeding Groundwater Protection Standard per §257.95(g). January 14, 2019.

TRC, 2019. Assessment of Corrective Measures Report. September 11, 2019.

HDR, 2020. Groundwater Level Monitoring Standard Operating Procedure. July 8, 2020.

HDR, 2022. CCR Removal Report. September 19, 2022.

HDR, 2022a. CCR Removal Report Supplement No. 1. December 7, 2022.

HDR, 2023. CCR Removal Report Supplement No. 2. June 8, 2023.

HDR, 2023a. Semiannual Update for Selection of Remedy per §257.97(a). July 21, 2023.

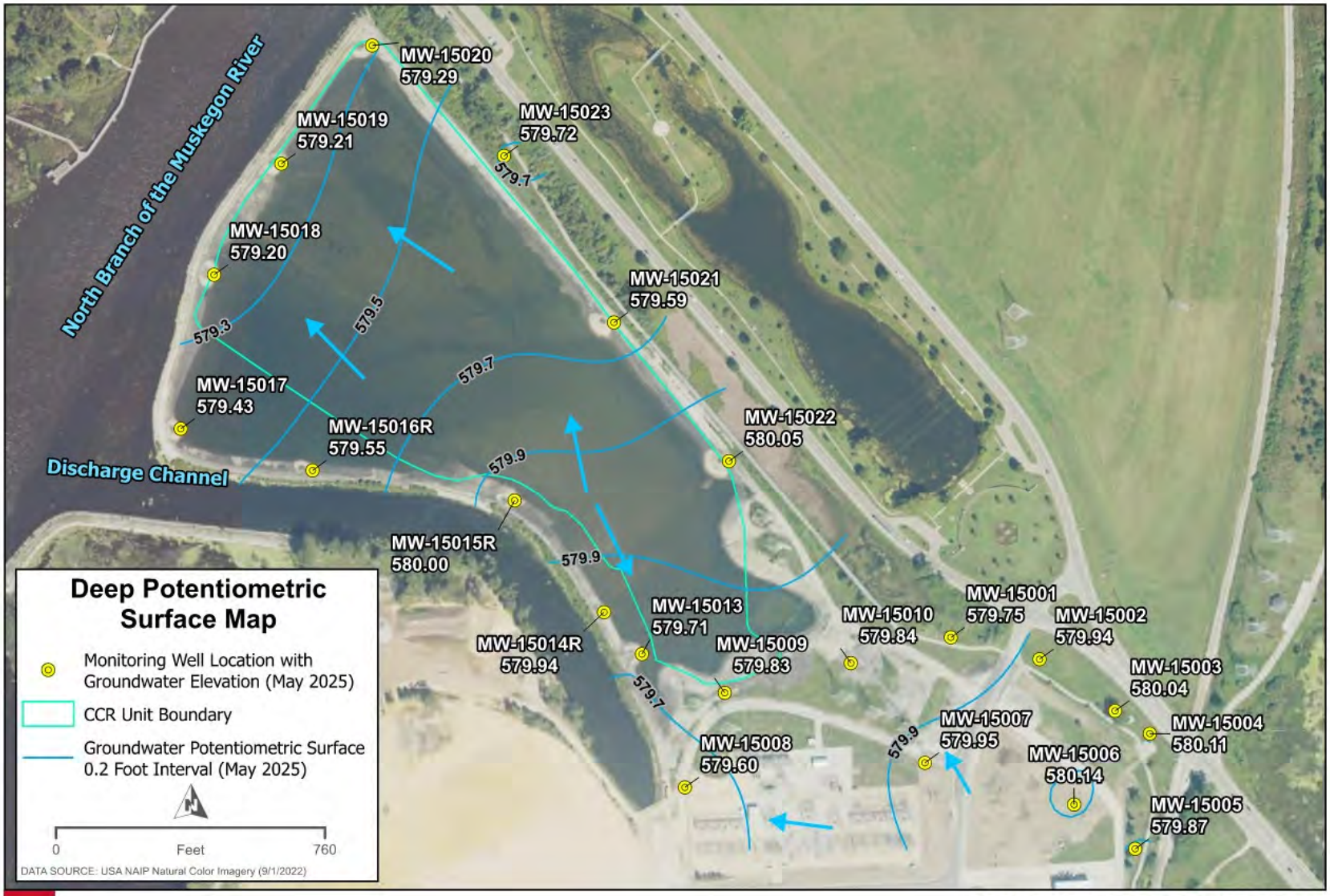
HDR, 2023b. CCR Removal Report Supplement No. 3. December 7, 2023.

HDR, 2024. 2024 Annual Inspection Report. May 17, 2024.

HDR, 2025. 2025 Semi-Annual Groundwater Monitoring and Corrective Action Report and Semi-Annual Remedy Selection and Design Progress Report. July 31, 2025.

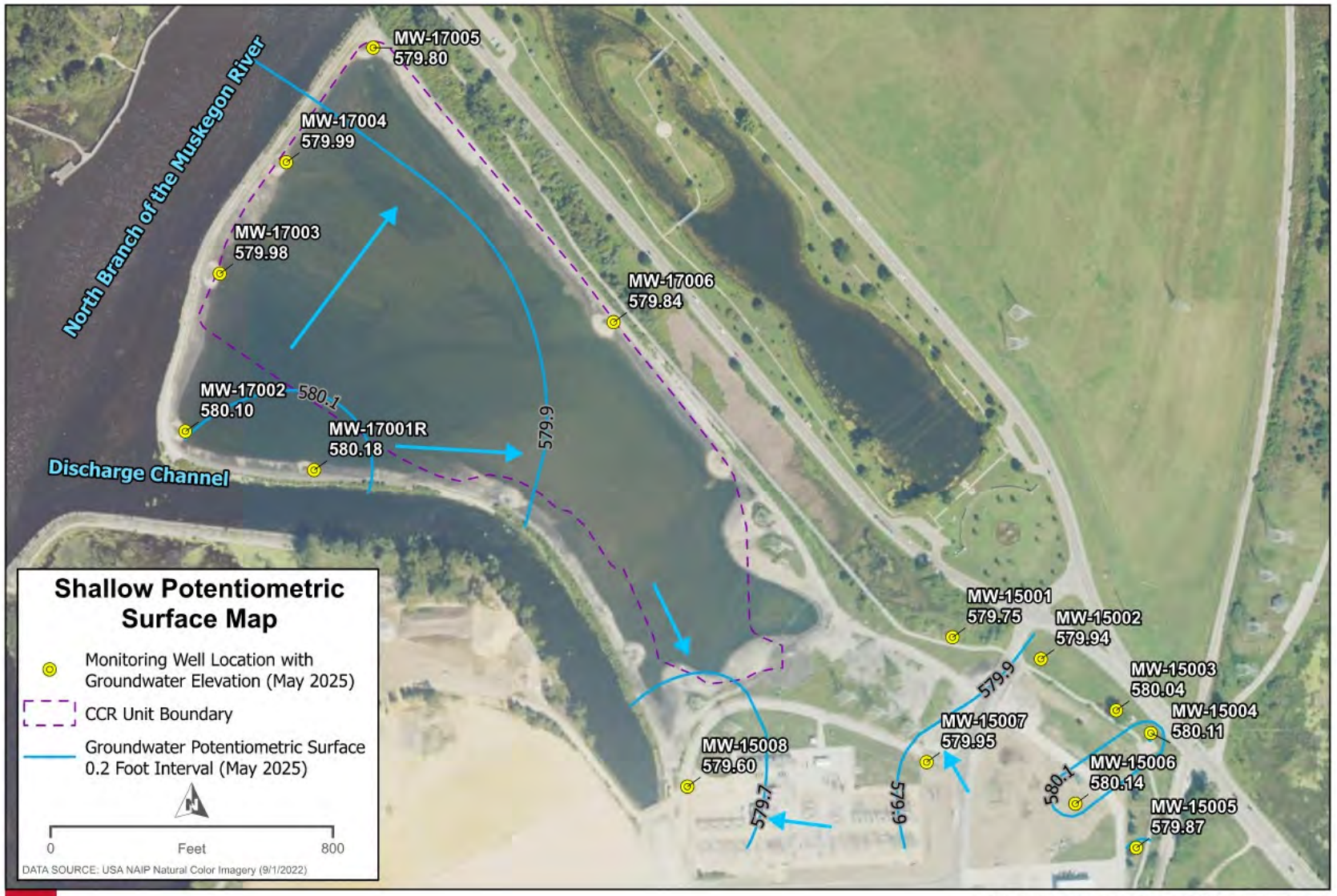
# Appendix A

# Potentiometric Surface Maps

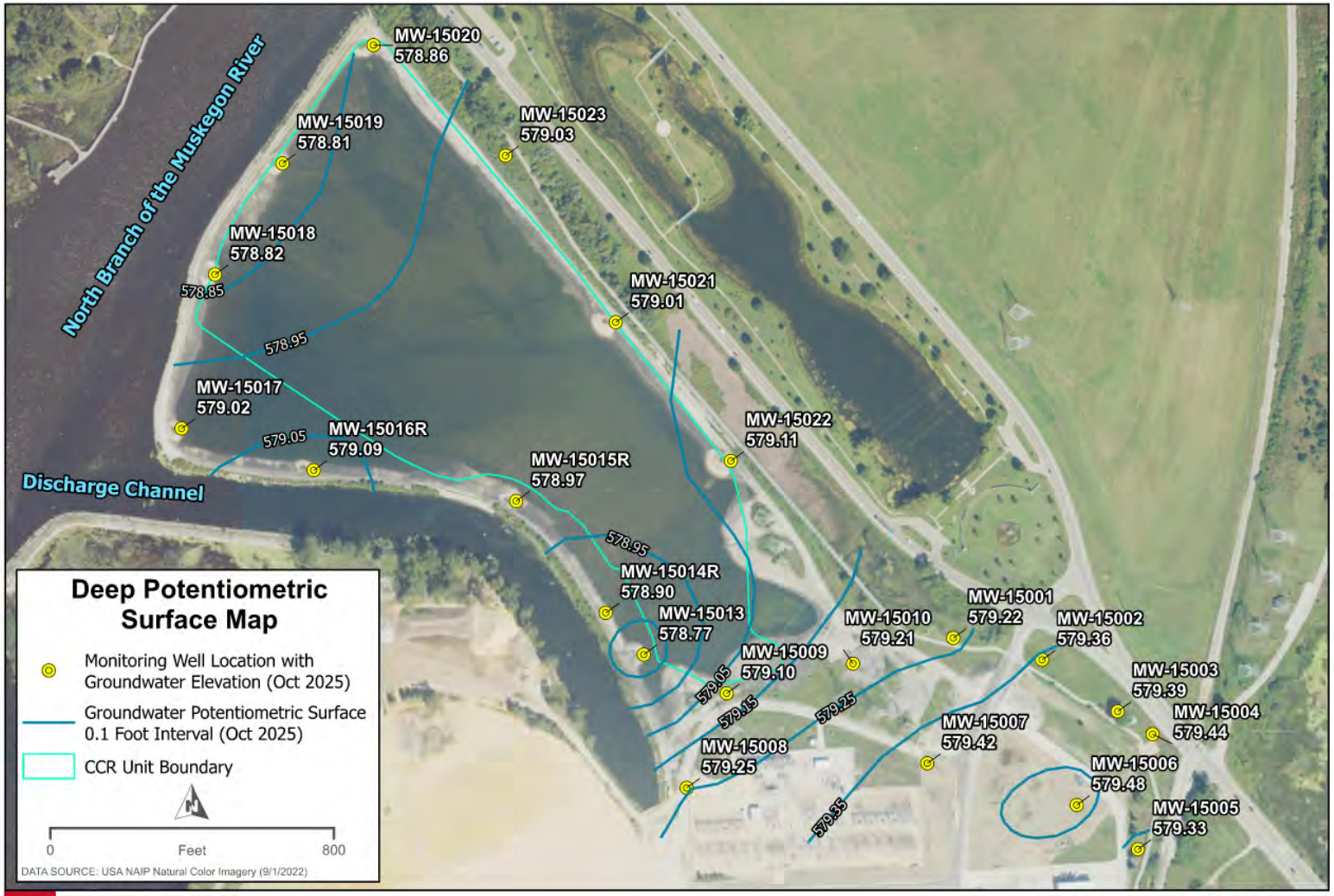



FDR

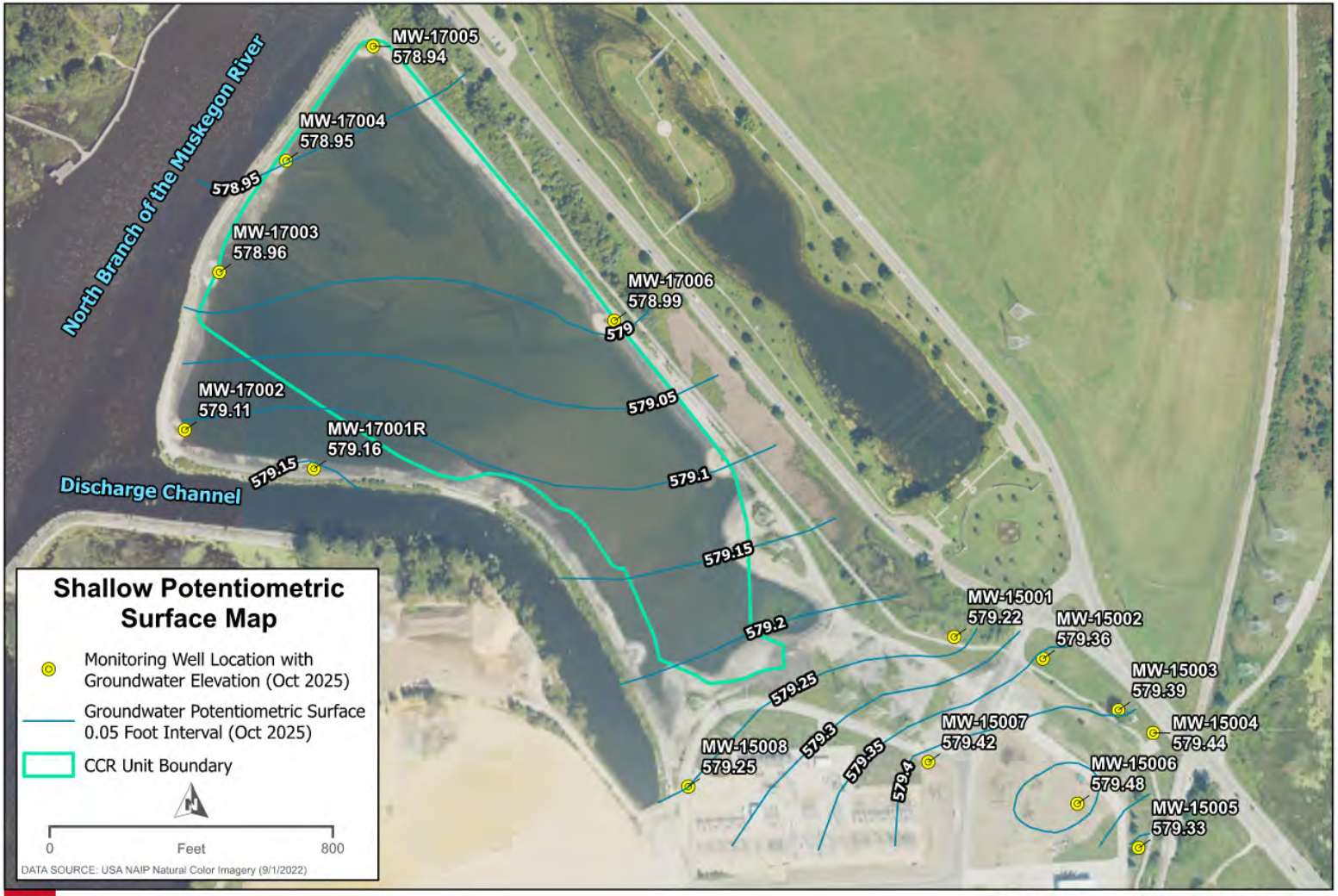
FORMER BC COBB POWER PLANT
MUSKEGON COUNTY, MICHIGAN




FORMER BC COBB POWER PLANT
MUSKEGON COUNTY, MICHIGAN




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# Appendix B

# Lab Results Summary Tables

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Location: | MW-15001 | MW-15001 | MW-15001 | MW-15001 | MW-15001 | MW-15001 | MW-15001 | MW-15001 |
| | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background |
| | | Sample Dates: | 11/30/2015 | 2/17/2016 | 4/12/2016 | 7/12/2016 | 9/27/2016 | 2/13/2017 | 4/4/2017 | 7/11/2017 |
| Constituent | Unit | RDL (Most Common from Previous Data | | | | | | | | |
| **Field Parameters** | | | | | | | | | | |
| pH | su | -- | 6.96 | 7.0 | 7.1 | 7.1 | 6.7 | 6.9 | 7.0 | 6.92 |
| Conductivity | µS/cm | -- | 884 | 859 | 802 | 766 | 880 | 780 | 848 | 721 |
| Turbidity | NTU | -- | 0.94 | 2.4 | 5.6 | 4.5 | <1 | 5.5 | <1 | 3.94 |
| Dissolved Oxygen | mg/L | -- | 0.09 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.1 | 0.11 |
| Temperature | °C | -- | 13.12 | 8.4 | 9.3 | 15.4 | 12.7 | 11.2 | 10.7 | 14.60 |
| Oxidation Reduction Potential | mV | -- | -139.3 | -92.3 | -66.1 | -162.2 | -83.1 | -93.6 | -94.8 | -110.8 |
| **Appendix III** | | | | | | | | | | |
| Boron | ug/L | 5 | 1,120 | 1,290 | 1,310 | 1,290 | 1,010 | 1,060 | 1,080 | 1,100 |
| Calcium | mg/L | 1 | 118 | 129 | 105 | 113 | 130 | 105 | 107 | 91.1 |
| Chloride | mg/L | 5 | 35.0 | 22.4 | 21.3 | 19.7 | 19.9 | 23.2 | 22.3 | 27.0 |
| Fluoride | ug/L | 1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 |
| pH, Field | SU | 0.1 | 6.96 | 7.0 | 7.1 | 7.1 | 6.7 | 6.9 | 7.0 | 6.92 |
| Sulfate | mg/L | 2 | 67.0 | 46.2 | 33.8 | 33.5 | 35.6 | 41.9 | 37.0 | 44.8 |
| Total Dissolved Solids | mg/L | 10 | 580 | 520 | 460 | 470 | 520 | 470 | 470 | 526 |
| **Appendix IV** | | | | | | | | | | |
| Antimony | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1.0 |
| Arsenic | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1.0 |
| Barium | ug/L | 1 | 127 | 118 | 114 | 98 | 116 | 102 | 105 | 109 |
| Beryllium | ug/L | 1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1.0 |
| Cadmium | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.20 |
| Chromium | ug/L | 1 | <1 | 1 | 3 | 2 | <1 | 1 | 1 | <1.0 |
| Cobalt | ug/L | 15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15.0 |
| Fluoride | ug/L | 1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 |
| Lead | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1.0 |
| Lithium | ug/L | 10 | 32.2 | 32.2 | 31 | 30 | 30 | 28 | 27 | 32 |
| Mercury | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.20 |
| Molybdenum | ug/L | 5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5.0 |
| Radium-226 | pCi/L | N/A | 0.366 | 0.387 | 0.312 | 0.255 | 0.311 | 0.297 | <0.276 | <0.948 |
| Radium-226/228 | pCi/L | N/A | 1.54 | 0.963 | 1.23 | 1.39 | <1.11 | 1.55 | 0.885 | <1.80 |
| Radium-228 | pCi/L | N/A | 1.17 | <0.812 | 0.921 | 1.13 | <1.11 | 1.25 | 0.610 | <0.855 |
| Selenium | ug/L | 1 | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1.0 |
| Thallium | ug/L | 2.5 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2.0 |

| | Sample Location: | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM |
| | Sample Dates: | 11/30/2015 | 2/17/2016 | 4/12/2016 | 7/12/2016 | 9/27/2016 | 2/13/2017 | 4/4/2017 | 7/11/2017 | 9/14/2017 | 4/19/2018 | 6/14/2018 | 11/28/2018 | 4/8/2019 | 9/25/2019 | 5/4/2020 | 10/26/2020 | 4/19/2021 | 10/19/2021 | 5/5/2022 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | 6.74 | 7.1 | 7.0 | 7.0 | 7.0 | 7.2 | 7.2 | 7.11 | 7.2 | 7.5 | 7.4 | 7.2 | 7.1 | 7.3 | 7.23 | 7.50 | 6.99 | 7.18 | 7.16 |
| Conductivity | µS/cm | -- | -- | 3,401 | 3,114 | 3,693 | 3,087 | 2,003 | 1,784 | 2,072 | 2,479 | 1,338 | 1,318 | 1,014 | 1,314 | 1,054 | 1,610 | 781 | 650 | 930 | 1,390 | 2,260 |
| Turbidity | NTU | -- | -- | 1.72 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 2.33 | 0.8 | 1.6 | 0.67 | 6.7 | 0.88 | 186.95 | 1.19 | 0.02 | 0.02 | 1.22 |
| Dissolved Oxygen | mg/L | -- | -- | 0.14 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.10 | 0.21 | 0.25 | 0.3 | 0.42 | 0.2 | 0.43 | 0.17 | 0.08 | 0.2 | 0.09 | 0.28 |
| Temperature | °C | -- | -- | 12.52 | 9.6 | 10.5 | 17.0 | 14.1 | 11.4 | 10.2 | 14.21 | 14.73 | 10.8 | 16.2 | 11.64 | 10.9 | 14.9 | 11.1 | 13.2 | 11.1 | 13.8 | 10.9 |
| Oxidation Reduction Potential | mV | -- | -- | -129.4 | -82.0 | -82.9 | -43.4 | -50.5 | -77.4 | -59.8 | -11.0 | 56.4 | -7.1 | 18.4 | 61.4 | -58.6 | -96 | 131.4 | -105.7 | 105.2 | -75.7 | -246.3 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 1,320 | 1,200 | 1,050 | 834 | 979 | 1,110 | 1,170 | 988 | 1,130 | -- | 422 | 434 | 420 | 360 | 295 | 270 | 250 | 1,200 | 5,400 |
| Calcium | mg/L | 1.3 | 2.6 | 214 | 259 | 197 | 169 | 165 | 184 | 167 | 185 | 132 | -- | 95.6 | 103 | 130 | 120 | 115 | 85 | 78 | 120 | 160 |
| Chloride | mg/L | 7.5 | 7.5 | 720 | 519 | 681 | 577 | 328 | 226 | 354 | 472 | 152 | -- | 115 | 161 | 170 | 300 | 54.5 | 34 | 120 | 240 | 480 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 670 | 710 | 530 | 240 | 280 |
| pH, Field | SU | -- | -- | 6.74 | 7.1 | 7.0 | 7.0 | 7.0 | 7.2 | 7.2 | 7.11 | 7.2 | 7.5 | 7.4 | 7.2 | 7.1 | 7.3 | 7.8 | 7.50 | 7.3 | 7.18 | 7.14 |
| Sulfate | mg/L | 1 | 6 | 250 | 327 | 300 | 202 | 127 | 116 | 85.6 | 113 | 13.8 | -- | 3.0 | < 2.0 | < 2.0 | < 20 | 0.068 | < 0.6 | 3.6 | < 3 | 24 |
| Total Dissolved Solids | mg/L | 40 | 50 | 1,900 | 1,900 | 1,900 | 1,800 | 1,100 | 1,100 | 1,200 | 1,500 | 772 | -- | 738 | 644 | 790 | 870 | 442 | 510 | 550 | 870 | 1,300 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 10 | 4 | 2 | 2 | 1 | 1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Barium | ug/L | 2.5 | 2.5 | 274 | 257 | 252 | 232 | 148 | 134 | 146 | 186 | -- | 79.4 | 79.6 | 76.0 | 100 | 100 | 68.0 | 66 | 65 | 120 | 130 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.027 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 1 | 2 | 3 | 2 | <1 | 2 | 2 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.37 | 0.32 | 0.97 | 1.3 | 0.26 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15.0 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.2 | < 0.52 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 670 | 710 | 530 | 240 | 280 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 11 | -- | < 10 | < 10 | < 10 | < 10 | < 10 | 6 | 4.3 | < 1.2 | < 12 | 13 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 1.0 | < 1.2 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.816 | 0.600 | 0.893 | 0.641 | <0.254 | 0.419 | 0.387 | <0.912 | -- | 0.586 | < 0.482 | < 0.719 | 0.391 | 0.380 | 0.138 | 0.31 | 0.33 | 0.26 | -0.01 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 3.03 | 2.03 | 2.32 | 1.88 | <0.927 | 1.41 | 1.79 | 2.20 | -- | < 1.16 | 1.60 | < 1.58 | 0.499 | 1.14 | 1.27 | < 1 | < 0.59 | 0.26 | 0.73 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 2.21 | 1.43 | 1.43 | 1.24 | <0.927 | 0.995 | 1.40 | 1.49 | -- | < 0.685 | 1.24 | 1.10 | < 0.481 | 0.760 | 1.14 | -0.04 | -0.35 | 0.34 | 0.73 |
| Selenium | ug/L | 0.5 | 0.5 | 1 | <1 | <1 | 1 | <1 | <1 | 1 | 1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4 | 4.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1.0 | 1.4 | 0.94 | < 0.25 |
| Iron | ug/L | 50 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 250 | 320 | 460 | 280 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | 0.45 | < 0.25 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | 3.1 | 8.7 | < 1.2 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 | MW-15002 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 8/11/2022 | 10/21/2022 | 4/11/2023 | 10/2/2023 | | 3/28/2024 | 10/22/2024 | 4/24/2025 | 10/29/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | |
| **Field Parameters** | | | | | | | | Field Dup | | | | |
| pH | su | -- | -- | 6.88 | 7.29 | 7.33 | 7.33 | 7.33 | 7.47 | 7.25 | 7.22 | 7.19 |
| Conductivity | µS/cm | -- | -- | 2,180 | 1,910 | 1,690 | 1,910 | 1,910 | 1,840 | 2,350 | 2,490 | 2,642 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.61 | 2.47 |
| Dissolved Oxygen | mg/L | -- | -- | 1.04 | 0.03 | 0.11 | 4.22 | 4.22 | 0.01 | 0.19 | 0.18 | 0.01 |
| Temperature | °C | -- | -- | 12.3 | 12.1 | 10.9 | 13.6 | 13.6 | 10.8 | 14.7 | 12.2 | 13.3 |
| Oxidation Reduction Potential | mV | -- | -- | -186.5 | -129.6 | -244 | -213 | -213 | 117.8 | -27.5 | -14.6 | -99 |
| **Appendix III** | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 4,900 | 4,900 | 4,900 | 4,800 | 4,800 | 3,800 | 3,300 | 2,700 | 2,600 |
| Calcium | mg/L | 1.3 | 2.6 | 160 | 170 | 160 | 210 | 220 | 180 | 160 | 160 | 150 |
| Chloride | mg/L | 7.5 | 7.5 | 410 | 550 | 260 | 270 | 270 | 340 | 480 | 570 | 550 |
| Fluoride | ug/L | 200 | 200 | 310 | 280 | 240 | 210 | 210 | 360 | <200 | 270 | 430 |
| pH, Field | SU | -- | -- | 7.35 | 7.29 | 7.33 | 7.33 | 7.33 | 7.47 | 7.25 | 7.22 | 7.19 |
| Sulfate | mg/L | 1 | 6 | 13 | 4.8 | 26 | 220 | 220 | 30 | <6 | 0.25 | <6 |
| Total Dissolved Solids | mg/L | 40 | 50 | 1,200 | 1,500 | 990 | 1,200 | 1,200 | 1,100 | 1,300 | 1,500 | 1,400 |
| **Appendix IV** | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 2.8 | 0.12 | 0.18 | 0.16 | 0.13 |
| Barium | ug/L | 2.5 | 2.5 | 150 | 160 | 120 | 160 | 160 | 130 | 140 | 140 | 150 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.55 | 0.29 | < 1.2 | < 1.2 | < 1.2 | 0.34 | 0.61 | 0.67 | 0.67 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | < 2.6 | 0.11 | 0.39 | 0.17 | 0.22 |
| Fluoride | ug/L | 200 | 200 | 310 | 280 | 240 | 210 | 210 | 360 | < 200 | 270 | 430 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 23 | 33 | 31 | 38 | 39 | 34 | 27 | 25 | 22 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 6.2 | < 1.2 | 3 | < 1.2 | 0.25 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.58 | 0.03[U] | 0.114[U] | 0.442 | 0.356 | 0.36 | 0.86 | 0.556 | 0.341 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.84 | 1.62 | 0.201[U] | 1.05 | 1.05 | 0.871 | 0.86 | 2.12 | 0.898 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.694 | 1.59 | 0.0873[U] | 0.607 | 0.691 | 0.511[U] | 0.14 | 1.56 | 0.557 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 2.5 | < 0.5 | 0.12 | 0.11 | 0.47 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4 | 4.2 | < 4 | < 8 | < 4 | < 4 | < 4 | < 8 | < 4.0 | 5 | < 4.2 |
| **Michigan CCR** | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 50 | 50 | 150 | 97 | 210 | < 250 | < 250 | 52 | 190 | 230 | 340 |
| Nickel | ug/L | 1.2 | 1.2 | < 0.25 | < 1.2 | < 6.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.15 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 6.2 | < 1.2 | 1.5 | 1.4 | 1.5 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | 12 | 12 | 12 | < 1.2 | < 1.2 | < 1.2 | 15 |

| | Sample Location: | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM |
| | Sample Dates: | 11/30/2015 | 2/17/2016 | 4/12/2016 | 7/12/2016 | 9/27/2016 | 2/13/2017 | 4/4/2017 | 7/12/2017 | 9/14/2017 | 2/21/2018 | 4/19/2018 | 6/14/2018 | 11/28/2018 | 4/8/2019 | 9/25/2019 | 5/4/2020 | 10/26/2020 | 4/19/2021 | 10/19/2021 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | 7.24 | 7.1 | 7.2 | 7.1 | 7.1 | 7.4 | 7.3 | 7.07 | 7.1 | 7.3 | 7.5 | 7.3 | 7.2 | 7.2 | 7.3 | 7.24 | 7.44 | 7.21 | 7.15 |
| Conductivity | µS/cm | -- | -- | 2,957 | 3,291 | 2,991 | 2,796 | 2,749 | 2,438 | 2,349 | 1,803 | 2,151 | -- | 3,911 | 3,522 | 3,225 | 1,549 | 2,760 | 3,125 | 2,230 | 1,890 | 790 |
| Turbidity | NTU | -- | -- | 5.1 | <1 | <1 | <1 | <1 | 2.1 | 1.6 | 5.79 | <1 | -- | 2.5 | 2.3 | 2.16 | 5.1 | 0.99 | 2.11 | 0.02 | 0.02 | 0.26 |
| Dissolved Oxygen | mg/L | -- | -- | 2.32 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.0 | 0.15 | 0.21 | -- | 0.23 | 0.28 | 0.28 | 0.04 | 0.3 | 0.22 | 0.08 | 0.16 | 0.1 |
| Temperature | °C | -- | -- | 11.24 | 7.5 | 9.8 | 15.5 | 14.3 | 9.9 | 9.2 | 14.60 | 14.13 | -- | 8.9 | 14.2 | 11.54 | 8.6 | 14.3 | 8.9 | 13.3 | 9.2 | 15.1 |
| Oxidation Reduction Potential | mV | -- | -- | 34.1 | -76.2 | -51.2 | -119.9 | -67.8 | -82.6 | -107.0 | -87.2 | 69.1 | -- | -28.9 | 14.5 | 60.3 | -67.5 | -110.5 | 90.9 | -110.0 | 48.2 | -70 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 542 | 574 | 2,370 | 528 | 494 | 608 | 679 | 695 | 361 | -- | -- | 290 | 313 | 390 | 230 | 259 | 310 | 280 | 400 |
| Calcium | mg/L | 1.3 | 2.6 | 216 | 233 | 180 | 177 | 179 | 163 | 167 | 154 | 145 | -- | -- | 148 | 129 | 100 | 150 | 149 | 140 | 110 | 82 |
| Chloride | mg/L | 3.8 | 3.8 | 700 | 682 | 640 | 581 | 512 | 456 | 363 | 293 | 493 | -- | -- | 917 | 737 | 360 | 670 | 742 | 480 | 350 | 68 |
| Fluoride | ug/L | 200 | 200 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | < 1,000 | -- | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 360 | 380 | 370 | 340 |
| pH, Field | SU | -- | -- | 7.24 | 7.1 | 7.2 | 7.1 | 7.1 | 7.4 | 7.3 | 7.07 | 7.1 | 7.3 | 7.5 | 7.3 | 7.2 | 7.2 | 7.3 | 7.7 | 7.44 | 7.21 | 7.15 |
| Sulfate | mg/L | 1 | 6 | 46.0 | 48.7 | 41.2 | 28.3 | 27.2 | 20.1 | 16.7 | 6.8 | < 2.0 | -- | -- | < 2.0 | < 2.0 | < 2.0 | < 20 | 4.5 | < 0.6 | < 3 | < 3 |
| Total Dissolved Solids | mg/L | 40 | 51 | 1,900 | 1,900 | 1,700 | 1,600 | 1,500 | 1,400 | 1,200 | 1,110 | 1,370 | -- | -- | 2,060 | 1,550 | 1,100 | 1,400 | 1,660 | 1,400 | 1,100 | 420 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 2 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 5.0 | < 1.0 | < 1.0 | < 1.0 | < 0.55 | < 0.55 | < 0.55 |
| Barium | ug/L | 2.5 | 2.5 | 236 | 219 | 189 | 170 | 159 | 137 | 138 | 112 | -- | -- | 151 | 139 | 108 | 79 | 110 | 119 | 97 | 75 | 43 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.025 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 1.0 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | <1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | -- | -- | < 1.0 | < 1.0 | < 5.0 | 1.0 | < 1.0 | 0.51 | 0.52 | 0.73 | 0.39 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | -- | < 15.0 | < 15.0 | < 30.0 | < 6.0 | -- | 0.28 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | -- | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 360 | 380 | 370 | 340 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 11 | -- | -- | 12 | 12 | 11 | < 10 | < 10 | 8.1 | 4.2 | < 1.2 | < 1.2 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | -- | < 5.0 | < 5.0 | < 25.0 | < 5.0 | < 5.0 | <0.13 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.667 | 0.633 | 0.522 | 0.387 | 0.284 | 0.350 | 0.442 | 0.442 | -- | -- | 0.707 | 0.573 | < 0.862 | 0.194 | < 0.267 | 0.269 | 0.47 | 0.36 | 0.11 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 2.40 | 1.30 | 1.39 | 1.66 | 1.53 | 1.58 | 1.25 | <1.03 | -- | -- | 1.81 | 1.86 | 1.85 | < 0.696 | 1.58 | 0.269 | 1.03 | < 0.52 | 0.96 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 1.73 | 0.664 | 0.870 | 1.27 | 1.25 | 1.23 | 0.807 | <0.858 | -- | -- | 1.10 | 1.29 | 1.13 | < 0.696 | 1.33 | -0.191 | 0.56 | 0.15 | 0.96 |
| Selenium | ug/L | 0.5 | 0.5 | 2 | <1 | <1 | 1 | <1 | <1 | 1 | 1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.33 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 |
| Iron | ug/L | 50 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 690 | 620 | 410 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | < 0.25 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |

**MW-15003**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 | MW-15003 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: 5/6/2022 | 8/11/2022 | 10/21/2022 | 4/11/2023 | 10/2/2023 | 3/28/2024 | 10/22/2024 | | 4/24/2025 | 10/28/2025 |
| **Field Parameters** | | | | | | | | | | | Field Dup | | |
| pH | su | -- | -- | 6.85 | 6.30 | 6.83 | 6.82 | 6.93 | 7.02 | 6.93 | 6.93 | 6.96 | 6.95 |
| Conductivity | µS/cm | -- | -- | 2,050 | 3,130 | 2,730 | 2,280 | 2,090 | 1,920 | 1,720 | 1,720 | 1,720 | 1,686 |
| Turbidity | NTU | -- | -- | 3.26 | 0.02 | 0.02 | 0.02 | 0.36 | 0.02 | 0.02 | 0.02 | 0.94 | 3.64 |
| Dissolved Oxygen | mg/L | -- | -- | 0.48 | 0.38 | 0.03 | 0.57 | 0.24 | 0.2 | 0.15 | 0.15 | 0.17 | 0 |
| Temperature | °C | -- | -- | 9.0 | 13.1 | 13.8 | 9.8 | 14.5 | 9.8 | 14.8 | 14.8 | 10.3 | 13.8 |
| Oxidation Reduction Potential | mV | -- | -- | -23.6 | -63.0 | -74.8 | -120.6 | -87.5 | 18.1 | -10.1 | -10.1 | -7.7 | -49.4 |
| **Appendix III** | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 580 | 630 | 640 | 550 | 600 | 440 | 500 | 510 | 480 | 450 |
| Calcium | mg/L | 1.3 | 2.6 | 170 | 200 | 180 | 150 | 100 | 74 | 88 | 96 | 93 | 100 |
| Chloride | mg/L | 3.8 | 3.8 | 480 | 740 | 770 | 530 | 500 | 350 | 330 | 330 | 360 | 290 |
| Fluoride | ug/L | 200 | 200 | 270 | 290 | 330 | 330 | 410 | 580 | < 200 | < 200 | 540 | 620 |
| pH, Field | SU | -- | -- | 6.84 | 6.88 | 6.89 | 6.82 | 6.93 | 7.02 | 6.93 | 6.93 | 6.96 | 6.95 |
| Sulfate | mg/L | 1 | 6 | < 3 | < 3 | < 3 | < 3 | < 3 | < 3 | < 6.0 | < 6.0 | <1 | <6.0 |
| Total Dissolved Solids | mg/L | 40 | 51 | 1,200 | 2,100 | 1,800 | 1,300 | 1,200 | 1,000 | 970 | 980 | 980 | 940 |
| **Appendix IV** | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | 0.16 | 0.17$^{J-}$ | 0.34$^{J+}$ | 0.13 | 0.12 |
| Barium | ug/L | 2.5 | 2.5 | 150 | 250 | 200 | 170 | 110 | 77 | 93 | 97 | 91 | 91 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.089 | 0.11 | < 0.25 | 0.077 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25$^{UJ}$ | 0.14$^{J+}$ | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.38 | 0.54 | 0.44 | < 1.2 | < 1.2 | 0.78 | 0.77 | 0.97 | 0.83 | 0.86 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | 0.23 | 0.18$^{J-}$ | 0.65$^{J+}$ | 0.16 | 0.18 |
| Fluoride | ug/L | 200 | 200 | 270 | 290 | 330 | 330 | 410 | 580 | < 200$^{UJ}$ | 370$^{J+}$ | 540 | 620 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55$^{UJ}$ | 0.13$^{J+}$ | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 11 | 16 | 16 | 48 | 12 | 8.4 | 11 | 11 | 10 | 8.3 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | 0.71$^{J+}$ | < 1.2$^{J-}$ | 1.1$^{J+}$ | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.18 | 0.444 | 0.84 | 0.443 | 0.334 | 0.194 | 0.31$^{UJ}$ | 0.49$^{UJ}$ | 0.339 | 0.47 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | < 1 | 0.66 | 3.74 | 1.3 | 0.835 | 1.14 | 0.52$^{UJ}$ | 0.49$^{UJ}$ | 1.03 | 0.71 |
| Radium-228 | pCi/L | 1.0 | 1.0 | -0.02 | 0.669 | 2.9 | 0.861 | 0.5$^{U}$ | 0.943 | 0.21$^{UJ}$ | -0.93$^{UJ}$ | 0.69 | 0.24 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | 0.11 | 0.11$^{J-}$ | 0.2$^{J+}$ | 0.1 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | 0.19$^{UJ}$ | < 0.38$^{J-}$ | 0.15$^{J+}$ | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | < 8 | < 5.3 | < 8 | < 4 | < 4 | 7.0 | < 4.0 | < 4.0 | < 4.0 | <4.1 |
| **Michigan CCR** | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25J$^{UJ}$ | 0.56$^{J+}$ | < 0.25 | <0.25 |
| Iron | ug/L | 50 | 50 | 1,200 | 1,500 | 1,600 | 1,600 | 1,400 | 940 | 1,300 | 1,400 | 1,300 | 1,600 |
| Nickel | ug/L | 1.2 | 1.2 | < 0.25 | < 0.25 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2$^{UJ}$ | 0.69$^{J+}$ | < 1.2 | 0.17 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | <0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | 1.0 | 1.7 | 2.0 | 1.6 | 1.7 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | 16 | 8.5 | 7.3 | < 1.2$^{UJ}$ | 4.6$^{J+}$ | < 1.2 | 10 |

| | | | | Sample Location: | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 11/30/2015 | 2/17/2016 | 4/12/2016 | 7/12/2016 | 9/27/2016 | 2/13/2017 | 4/4/2017 | 7/12/2017 | 9/14/2017 | 4/19/2018 | 6/12/2018 | 11/28/2018 | 4/9/2019 | 9/25/2019 | 5/4/2020 | 10/26/2020 | 4/19/2021 | 10/20/2021 | 5/6/2022 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | 7.28 | 7.2 | 6.9 | 6.7 | 6.9 | 7.1 | 7.1 | 6.95 | 6.8 | 7.3 | 7 | 6.8 | 7.2 | 7.3 | 7.11 | 7.13 | 6.9 | 6.9 | 6.72 |
| Conductivity | µS/cm | -- | -- | 655 | 556 | 616 | 741 | 688 | 570 | 615 | 648 | 1,740 | 957 | 909 | 646 | 342 | 1,321 | 920 | 920 | 760 | 990 | 2,130 |
| Turbidity | NTU | -- | -- | 3.09 | 2.3 | <1 | <1 | <1 | <1 | <1 | 3.08 | 1.76 | 2.5 | 3.6 | 0.84 | 7.9 | 0.93 | 10.17 | 2.16 | 0.02 | 0.27 | 2.49 |
| Dissolved Oxygen | mg/L | -- | -- | 1.64 | 1.0 | 0.5 | 0.3 | 0.4 | 0.6 | 0.6 | 0.14 | 0.25 | 0.37 | 0.35 | 0.4 | 0.39 | 0.31 | 0.78 | 0.03 | 0.06 | 1.2 | 0.14 |
| Temperature | °C | -- | -- | 11.07 | 7.0 | 7.6 | 15.9 | 16.9 | 9.0 | 8.7 | 15.02 | 15.57 | 8.8 | 17 | 11.48 | 7.3 | 16 | 9.0 | 14.7 | 9.1 | 15.8 | 9.6 |
| Oxidation Reduction Potential | mV | -- | -- | -7.3 | 41.1 | -14.0 | -120.7 | -69.5 | -11.2 | -67.3 | -39.2 | 77.4 | -29.7 | -23.6 | 13.8 | 0.39 | 0.31 | 119.6 | -89.5 | -45.4 | -80.3 | -3.8 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 198 | 124 | 166 | 338 | 279 | 193 | 376 | 302 | 325 | -- | 269 | 158 | 120 | 270 | 143 | 200 | 130 | 160 | 170 |
| Calcium | mg/L | 0.26 | 0.26 | 94.6 | 80.9 | 70.7 | 87.0 | 81.9 | 75.1 | 73.4 | 67.2 | 115 | -- | 71.4 | 69.6 | 59 | 95 | 71 | 70 | 77 | 84 | 140 |
| Chloride | mg/L | 1.5 | 1.5 | 27.0 | 18.1 | 22.0 | 30.9 | 22.1 | 28.2 | 35.2 | 45.7 | 382 | -- | 98.1 | 24 | 20 | 240 | 116 | 110 | 70 | 140 | 510 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 560 | 690 | 1,400 | 490 | 390 |
| pH, Field | SU | -- | -- | 7.28 | 7.2 | 6.9 | 6.7 | 6.9 | 7.1 | 7.1 | 6.95 | 6.8 | 7.3 | 7.0 | 6.8 | 7.2 | 7.0 | 7.5 | 7.13 | 6.9 | 6.9 | 7.01 |
| Sulfate | mg/L | 6 | 6 | 33.0 | 17.8 | 13.6 | <2 | 8.06 | 7.20 | <2 | 2.9 | 5.8 | -- | < 2.0 | 9.1 | 7.4 | < 20 | 4.3 | < 0.6 | 7.1 | < 3 | 4.3 |
| Total Dissolved Solids | mg/L | 40 | 49 | 440 | 340 | 350 | 420 | 380 | 340 | 380 | 450 | 934 | -- | 506 | 342 | 280 | 730 | 500 | 620 | 440 | 490 | 930 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 2 | 1 | 1 | 2 | 7 | 2 | 2 | 3.2 | -- | 1.5 | 1.1 | 2.7 | 2.2 | 4.7 | 7.1 | 4.6 | 3.3 | 1.3 | 1.1 |
| Barium | ug/L | 2.5 | 2.5 | 33 | 18 | 29 | 43 | 42 | 29 | 33 | 38.4 | -- | 39.4 | 45.8 | 26.3 | 24 | 60 | 45 | 46 | 37 | 54 | 110 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.027 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | <1 | 1 | 2 | 2 | 1 | 1 | 3 | <1.0 | -- | < 1.0 | < 1.0 | < 1.0 | 1.0 | 1.0 | 0.9 | 0.49 | 0.29 | 0.38 | 0.39 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.44 | < 0.52 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 560 | 690 | 1,400 | 490 | 390 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.16 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | -- | < 10 | < 10 | < 10 | < 10 | < 10 | 2.9 | 1.7 | < 1.2 | < 5.9 | 3.1 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | <5 | <5 | 7 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 1.5 | < 1.2 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | <0.203 | <0.216 | <0.370 | <0.157 | <0.292 | <0.181 | <0.308 | <0.654 | -- | 0.602 | < 0.728 | < 0.798 | 0.149 | 0.383 | 0.159 | 0.08 | 0.48 | 0.32 | 0.31 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 1.02 | <0.565 | 0.518 | 0.808 | 1.08 | 1.18 | 1.02 | <1.45 | -- | 1.34 | < 1.43 | < 1.58 | < 0.588 | 1.09 | 0.433 | 0.63 | 1 | 0.92 | < 1 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.879 | <0.565 | 0.518 | 0.768 | 0.986 | 1.10 | 1.02 | <0.796 | -- | < 0.821 | < 0.701 | < 0.786 | < 0.588 | 0.705 | 0.274 | 0.55 | 0.52 | 0.6 | 0.63 |
| Selenium | ug/L | 0.5 | 0.5 | <1 | 2 | 2 | <1 | <1 | <1 | 1 | 1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.53 | < 0.5 | < 0.5 | < 0.5 | 0.73 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 10 | < 4 | < 4 | < 8 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 | 0.73 |
| Iron | ug/L | 50 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1,600 | 2,200 | 1,500 | 3,300 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | < 0.25 | 0.35 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | 1.3 |

**MW-15004**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 | MW-15004 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: 10/21/2022 | 4/11/2023 | 10/2/2023 | 3/28/2024 | 10/22/2024 | 4/24/2025 | 10/28/2025 |
| **Field Parameters** | | | | | | | | | | |
| pH | su | -- | -- | 7.09 | 7.09 | 7.23 | 7.05 | 6.98 | 6.91 | 6.94 |
| Conductivity | µS/cm | -- | -- | 2,370 | 900 | 1,630 | 1,180 | 810 | 700 | 795 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 3.95 | 0.02 | 2.6 | 1 | 3.19 |
| Dissolved Oxygen | mg/L | -- | -- | 0.49 | 2 | 0.09 | 0.47 | 0.99 | 0.25 | 0.02 |
| Temperature | °C | -- | -- | 15.3 | 9.3 | 16 | 9.2 | 16.4 | 10 | 15 |
| Oxidation Reduction Potential | mV | -- | -- | -84.9 | -74.4 | -132.7 | 9.3 | -75.1 | -61.9 | -62.3 |
| **Appendix III** | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 190 | 90 | 150 | 100 | 180 | 120 | 200 |
| Calcium | mg/L | 0.26 | 0.26 | 140 | 95 | 63 | 70 | 71 | 71 | 66 |
| Chloride | mg/L | 1.5 | 1.5 | 640 | 140 | 300 | 190 | 89 | 73 | 75 |
| Fluoride | ug/L | 200 | 200 | 500 | 490 | 540 | 630 | 180 | 550 | 710 |
| pH, Field | SU | -- | -- | 7.09 | 7.09 | 7.23 | 7.05 | 6.98 | 6.93 | 6.94 |
| Sulfate | mg/L | 6 | 6 | 3.3 | 5.7 | 3.9 | 3.9 | 3.9 | 4.7 | 1.1 |
| Total Dissolved Solids | mg/L | 40 | 49 | 1,500 | 520 | 920 | 650 | 460 | 400 | 430 |
| **Appendix IV** | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.11 | 0.12 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 2.0 | < 2.8 | 1.2 | 0.39 | 1.3 | 0.49 | 0.99 |
| Barium | ug/L | 2.5 | 2.5 | 110 | 50 | 50 | 39 | 40 | 36 | 42 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.37 | < 1.2 | < 1.2 | 0.31 | 0.51 | 0.39 | 0.89 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 2.6 | < 2.6 | 0.12 | 0.17 | 0.14 | 0.18 |
| Fluoride | ug/L | 200 | 200 | 500 | 490 | 540 | 630 | 180 | 550 | 710 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | 0.23 |
| Lithium | ug/L | 2.5 | 2.5 | < 2.5 | < 2.5 | < 12 | < 2.5 | 2.5 | 0.19 | < 2.5 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | 1.2 | 0.77 | 0.97 | 0.47 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.29 | 0.0581[U] | 0.123[U] | 0.139 | -0.07[U] | 0.45 | 0.339 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 2.8 | 0.57[U] | 0.85 | 0.573[U] | 0.64[U] | 0.0466 | 0.735 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 2.51 | 0.512[U] | 0.727[U] | 0.434[U] | 0.88 | 0.0466 | 0.396 |
| Selenium | ug/L | 0.5 | 0.5 | 0.68 | < 2.5 | < 2.5 | 0.53 | 0.24 | -0.137 | 0.32 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | < 8 | < 4 | < 4 | < 4 | < 4.0 | < 4.0 | < 4.1 |
| **Michigan CCR** | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.34 | 1.5 | < 1.2 | 0.48 | 0.29 | 0.4 | 0.56 |
| Iron | ug/L | 50 | 50 | 2,700 | 1,100 | 1,500 | 1,000 | 1,800 | 970 | 2,200 |
| Nickel | ug/L | 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.36 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.94 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | 3.7 | 2.5 | < 1.2 | 6 |

**MW-15005**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | MW-15005 Background 12/1/2015 | MW-15005 Background 2/17/2016 | MW-15005 Background 4/12/2016 | MW-15005 Background 7/12/2016 | MW-15005 Background 9/27/2016 | MW-15005 Background 2/13/2017 | MW-15005 Background 4/4/2017 | MW-15005 Background 7/12/2017 | MW-15005 DM 9/14/2017 | MW-15005 Initial A.M. 4/19/2018 | MW-15005 AM 6/14/2018 | MW-15005 AM 11/27/2018 | MW-15005 AM 4/9/2019 | MW-15005 AM 9/25/2019 | MW-15005 AM 5/4/2020 | MW-15005 AM 10/27/2020 | MW-15005 AM 4/19/2021 | MW-15005 AM 10/19/2021 | MW-15005 AM 5/5/2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Field Parameters** | | | | | | | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | 7.18 | 7.2 | 7.3 | 7.2 | 7.1 | 7.3 | 7.6 | 7.33 | 7.3 | 7.7 | 7.4 | 7.4 | 7.4 | 7.4 | 7.40 | 7.56 | 7.21 | 7.2 | 7.1 |
| Conductivity | µS/cm | -- | -- | 345 | 731 | 573 | 482 | 387 | 921 | 424 | 375 | 424 | 513 | 451 | 385 | 824 | 810 | 283 | 375 | 463 | 573 | 519 |
| Turbidity | NTU | -- | -- | 1.23 | <1 | 1.1 | 2.3 | 2.3 | 4.5 | 8.0 | 2.68 | 4.2 | 2.9 | 4.4 | 9.8 | 7.2 | 6 | 57.77 | 18.80 | 7.05 | 5.44 | 0.19 |
| Dissolved Oxygen | mg/L | -- | -- | 0.67 | 0.3 | 0.7 | 0.3 | 0.5 | 0.9 | 3.2 | 0.20 | 0.19 | 4.22 | 0.31 | 0.71 | 0.52 | 0.27 | 0.95 | 0.07 | 0.01 | 0.19 | 0.59 |
| Temperature | °C | -- | -- | 9.19 | 5.4 | 6.7 | 17.3 | 19.0 | 7.1 | 7.4 | 18.31 | 17.26 | 6.3 | 17.2 | 8.64 | 7.7 | 16 | 9.9 | 12.9 | 8.5 | 15.6 | 9 |
| Oxidation Reduction Potential | mV | -- | -- | -100.7 | -65.7 | -37.1 | -141.1 | -79.1 | -35.7 | -66.6 | -90.8 | -117.9 | -62.5 | -14.7 | 35.1 | -22.4 | -149.9 | 207.0 | -141.1 | -40.7 | -82.7 | -7.1 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | <20 | 51 | 35 | 46 | 43 | 39 | 25 | 31.3 | 36.8 | -- | 27.8 | 38.5 | 56 | < 50 | 13.1 | 22 | 16 | 94 | 59 |
| Calcium | mg/L | 0.26 | 0.26 | 57.2 | 93.3 | 60.6 | 75.4 | 67.3 | 99.2 | 43.9 | 60.2 | 64.2 | -- | 51.1 | 55.0 | 76 | 58 | 37 | 58 | 60 | 88 | 73 |
| Chloride | mg/L | 1.5 | 1.5 | 9.50 | 137 | 66.6 | 13.1 | 1.23 | 181 | 20.1 | 3.0 | 7.0 | -- | 14.2 | 32.0 | 150 | 89 | 10 | 3.6 | 60 | 20 | 37 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 110 | < 20 | < 150 | < 100 | 140 |
| pH, Field | SU | -- | -- | 7.18 | 7.2 | 7.3 | 7.2 | 7.1 | 7.3 | 7.6 | 7.33 | 7.3 | 7.7 | 7.4 | 7.4 | 7.4 | 7.4 | 8.0 | 7.56 | 7.05 | 7.20 | 7.13 |
| Sulfate | mg/L | 6.0 | 6 | 10.0 | 5.27 | 4.69 | 5.39 | <2 | 5.57 | 7.88 | 4.4 | 2.9 | -- | 4.9 | 2.8 | 5.4 | 3.8 | 7.5 | 5.5 | 5.6 | < 3 | 3.8 |
| Total Dissolved Solids | mg/L | 48 | 48 | 230 | 480 | 340 | 590 | 230 | 570 | 200 | 204 | 240 | -- | 322 | 244 | 640 | 460 | 158 | 290 | 310 | 300 | 300 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.57 | < 0.25 | 0.65 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 1 | 1 | <1 | 2 | 2 | <1 | <1 | 1.1 | -- | 1.3 | < 1.0 | < 1.0 | < 1.0 | 3.0 | 1.3 | 2.4 | 0.87 | 1.5 | < 0.55 |
| Barium | ug/L | 2.5 | 2.5 | 83 | 125 | 97 | 151 | 147 | 173 | 82 | 116 | -- | 99.3 | 103 | 94.4 | 160 | 150 | 72 | 150 | 130 | 170 | 140 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.20 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | 0.15 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | <1 | <1 | 2 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | 1.1 | 1.3 | 0.5 | 0.51 | 0.35 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.097 | < 0.52 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 110 | < 20 | < 150 | < 100 | 140 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | -- | 2.0 | < 1.0 | < 1.0 | < 1.0 | -- | 1.1 | 1.6 | 0.68 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | -- | < 10 | < 10 | < 10 | < 10 | < 10 | < 20.0 | < 1.2 | < 1.2 | < 5.9 | 3.2 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 1.7 | 1.7 | 1.5 | < 1.2 | 1.4 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.180 | <0.336 | <0.244 | 0.221 | <0.332 | <0.192 | <0.279 | <0.675 | -- | < 0.450 | < 0.635 | < 0.890 | 0.131 | < 0.273 | 0.649 | 0.33 | -0.07 | 0.37 | 0.14 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.882 | <0.494 | <0.378 | 0.662 | 0.545 | 1.02 | 0.447 | <1.41 | -- | < 1.22 | < 1.63 | < 1.43 | < 0.585 | < 0.461 | 0.649 | < 1 | < 0.5 | 0.37 | < 1 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.702 | <0.494 | <0.378 | 0.441 | 0.471 | 1.02 | 0.447 | <0.739 | -- | < 0.769 | < 0.999 | 1.01 | < 0.585 | < 0.461 | -0.476 | 0.02 | -0.5 | 0.25 | 0.21 |
| Selenium | ug/L | 0.5 | 0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 9 | < 4 | 8 | 14 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1.4 | 2.7 | 0.41 | 1.3 |
| Iron | ug/L | 50 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6,100 | 2,500 | 4,500 | 1,200 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.6 | 0.54 | 0.39 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 48 | 30 | 20 | 14 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15005 | MW-15005 | MW-15005 | MW-15005 | MW-15005 | MW-15005 | MW-15005 | MW-15005 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 10/19/2022 | 4/11/2023 | 10/4/2023 | 3/28/2024 | 10/22/2024 | 4/23/2025 | | 10/27/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | |
| **Field Parameters** | | | | | | | | | | Field Dup | |
| pH | su | -- | -- | 7.43 | 7.28 | 7.08 | 7.14 | 6.75 | 7.07 | 7.07 | 6.94 |
| Conductivity | µS/cm | -- | -- | 420 | 430 | 540 | 510 | 590 | 460 | 460 | 559.4 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 9.27 | 9.27 | 3.56 |
| Dissolved Oxygen | mg/L | -- | -- | 0.21 | 0.81 | 0.09 | 0.28 | 0.02 | 0.36 | 0.36 | 0.19 |
| Temperature | °C | -- | -- | 14.4 | 9.4 | 16.3 | 9.0 | 17.3 | 9.5 | 9.5 | 15.3 |
| Oxidation Reduction Potential | mV | -- | -- | -134.9 | -94.1 | 11.9 | -14.1 | -42.9 | 3.1 | 3.1 | -72.9 |
| **Appendix III** | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 54 | 47 | 45 | 48 | 95 | 110 | 91 | 110 |
| Calcium | mg/L | 0.26 | 0.26 | 72 | 71 | 88 | 68 | 85 | 80 | 80 | 89 |
| Chloride | mg/L | 1.5 | 1.5 | 11 | 16 | 9.3 | 16 | 19 | 10 | 9.8 | 7.2 |
| Fluoride | ug/L | 200 | 200 | < 100 | 100 | 77 | 170 | < 200 | 160 | 160 | 220 |
| pH, Field | SU | -- | -- | 7.43 | 7.28 | 7.08 | 7.14 | 6.75 | 7.07 | 7.07 | 6.94 |
| Sulfate | mg/L | 6.0 | 6 | 5.6 | < 3 | 5.9 | 1.9 | < 6.0 | 2.7 | 2.5 | 5 |
| Total Dissolved Solids | mg/L | 48 | 48 | 260 | 250 | 320 | 300 | 360 | 270 | 280 | 320 |
| **Appendix IV** | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.23 | 0.26 | 0.15 |
| Arsenic | ug/L | 0.55 | 0.55 | 1.2 | < 2.8 | 1.1 | 0.41 | 0.74 | 0.96 | 1.1 | 0.68 |
| Barium | ug/L | 2.5 | 2.5 | 150 | 120 | 180 | 110 | 190 | 140 | 140 | 170 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.059 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.078 | < 0.25 | 0.17 | 0.17 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.21 | 0.24 J- | 0.5 J+ | 0.35 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 2.6 | < 2.6 | 0.26 | 0.27 | 0.21 | 0.22 | 0.28 |
| Fluoride | ug/L | 200 | 200 | < 100 | 100 | 77 | 170 | < 200 | 160 | 160 | 220 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | 0.44 J- | 0.57 J+ | 0.16 |
| Lithium | ug/L | 2.5 | 2.5 | < 2.5 | < 2.5 | < 12 | 2.2 | 4 | 2.5 | 2.4 | 2.3 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 1.7 | < 6.2 | 1.2 | 0.75 J+ | 0.86 | 0.82 | 0.8 | 0.84 |
| Radium-226 | pCi/L | 1.0 | 1.0 | -0.05 U | 0.0853 U | 0.134 U | 0.141 | 0.61 | 0.0157 J- | 0.127 J+ | 0.196 U |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.33 U | 1.35 | 0.94 J+ | 0.306 U | 0.61 u | 0.0157 J- | 0.176 J+ | 1.41 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.33 U | 1.26 | 0.805 J+ | 0.165 U | -0.25 u | -0.167 J- | 0.048 J+ | 1.21 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 2.5 | < 2.5 | 0.24 | 0.15 | 0.32 | 0.35 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | < 8 | < 4 | < 4 | 5 | < 4.0 | 12 J+ | 5 J- | 5.2 |
| **Michigan CCR** | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.61 | < 0.25 | 1.4 | 1.4 | 0.51 |
| Iron | ug/L | 50 | 50 | 2,900 | 1,000 | 5,400 | 1,900 | 4,700 | 3,600 | 3,700 | 4,300 |
| Nickel | ug/L | 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 UJ | 0.68 J+ | 0.5 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 0.66 | 0.98 | 1 | 0.95 |
| Zinc | ug/L | 1.2 | 1.2 | 12 | 43 | 27 | 34 | 6.4 | 38 | 39 | 23 |

**MW-15006**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location: | | | | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 |
| Compliance Phase: | | | | Background | Background | Background | Background | Background | Background | Background | Background | DM | | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| Sample Dates: | | | | 11/30/2015 | 2/17/2016 | 4/13/2016 | 7/12/2016 | 9/27/2016 | 2/13/2017 | 4/4/2017 | 7/12/2017 | 9/14/2017 | 2/21/2018 | 4/19/2018 | 6/14/2018 | 11/27/2018 | 4/9/2019 | 9/24/2019 | 5/4/2020 | 10/27/2020 | 4/20/2021 | 10/19/2021 |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | 7.03 | 7.3 | 7.2 | 6.9 | 6.9 | 7.3 | 7.4 | 7.15 | 7.2 | 6.9 | 7.5 | 7.3 | 7.2 | 7.4 | 7.4 | 7.17 | 7.53 | 7.14 | 7.55 |
| Conductivity | µS/cm | -- | -- | 683 | 471 | 518 | 678 | 557 | 503 | 414 | 599 | 545 | -- | 642 | 420 | 446 | 286 | 430 | 394 | 1270 | 491 | 610 |
| Turbidity | NTU | -- | -- | 2.81 | 8.7 | <1 | <1 | <1 | <1 | <1 | <1 | 2.28 | -- | 2.8 | 8.1 | 1.62 | 2.6 | 0.37 | 9.32 | 3.01 | 0.02 | 6.5 |
| Dissolved Oxygen | mg/L | -- | -- | 2.71 | 2.7 | 2.6 | 1.4 | 1.2 | 2.0 | 3.5 | 1.49 | 0.39 | -- | 4.34 | 1.16 | 2.48 | 2.05 | 0.34 | 1.85 | 0.03 | 0.65 | 0.37 |
| Temperature | °C | -- | -- | 9.71 | 4.6 | 6.8 | 23.9 | 19.4 | 5.5 | 8.0 | 21.51 | 20.6 | -- | 5.1 | 18.8 | 7.38 | 8.3 | 19 | 10.0 | 14.2 | 9.2 | 18.8 |
| Oxidation Reduction Potential | mV | -- | -- | -55.1 | 73.4 | 60.5 | -18.5 | -5.5 | -49.7 | -10.0 | 33.2 | -25 | -- | -6 | -15.3 | 22.3 | -20.7 | -118.5 | 148.9 | -123.9 | 61 | -90.1 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 48 | 39 | 33 | 43 | 55 | 32 | 35 | 42.3 | 45.1 | -- | -- | 42.1 | 42.5 | < 50 | 50 | 30 | 51 | 35 | 54 |
| Calcium | mg/L | 0.26 | 0.26 | 84.5 | 73.9 | 60.0 | 60.6 | 86.2 | 70.5 | 67.9 | 68.8 | 79.6 | -- | -- | 49.8 | 74.7 | 63 | 64 | 67 | 60 | 80 | 95 |
| Chloride | mg/L | 1.5 | 1.5 | 50.0 | 12.8 | 32.5 | 63.1 | 19.6 | 48.0 | 23.5 | 69.8 | 16.1 | -- | -- | 16.7 | 24.4 | 2.0 | 10 | 5 | 200 | 2.5 | 9.4 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | -- | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 240 | 320 | 380 | 130 |
| pH, Field | SU | -- | | 7.03 | 7.3 | 7.2 | 6.9 | 6.9 | 7.3 | 7.4 | 7.15 | 7.2 | 6.9 | 7.5 | 7.3 | 7.2 | 7.4 | 7.4 | 7.9 | 7.53 | 7.14 | 7.55 |
| Sulfate | mg/L | 6 | 6.0 | 17.0 | 17.1 | 12.7 | 8.54 | 12.2 | 7.34 | 6.88 | 9.4 | 11.6 | -- | -- | 6.8 | 11.3 | 9.2 | 11 | 8 | 25 | 25 | 12 |
| Total Dissolved Solids | mg/L | 40 | 50 | 380 | 290 | 300 | 380 | 320 | 330 | 260 | 346 | 322 | -- | -- | 340 | 298 | 240 | 310 | 234 | 760 | 310 | 340 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | <1 | 1 | <1 | <1 | 1 | <1 | <1 | <1 | -- | -- | < 1.0 | 1.4 | < 1.0 | < 1.0 | -- | 0.56 | 0.65 | 0.47 | 0.38 |
| Arsenic | ug/L | 0.55 | 0.55 | 1 | 1 | <1 | 2 | 3 | 3 | 2 | 4.3 | -- | -- | 1.6 | 40.9 | 2.3 | 3.1 | 8.5 | 4.6 | 8.5 | 3.4 | 15 |
| Barium | ug/L | 2.5 | 2.5 | 26 | 16 | 17 | 20 | 26 | 17 | 17 | 27.8 | -- | -- | 20.5 | 52.1 | 19.1 | 16 | 25 | 14 | 34 | 20 | 29 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | 0.22 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | <1 | 1 | 2 | 1 | <1 | 1 | 1 | 1 | -- | -- | < 1.0 | 3.7 | < 1.0 | 1.1 | < 1.0 | 0.3 | 0.25 | 0.25 | 0.28 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.41 | 0.54 | 1.2 | 1.1 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | -- | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 240 | 320 | 380 | 130 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | 1.1 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | -- | -- | < 10 | < 10 | < 10 | < 10 | < 10 | < 20.0 | 1.8 | < 1.2 | < 12 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 5 | 6 | 7 | 7 | 7 | 8 | 8 | 8.5 | -- | -- | 5.5 | 7.9 | < 5.0 | 6.0 | 5.8 | 3.7 | 9.7 | 4.6 | 3 |
| Radium-226 | pCi/L | 1.0 | 1.0 | <0.301 | <0.268 | <0.205 | <0.225 | <0.416 | <0.240 | <0.198 | <0.701 | -- | -- | < 0.452 | < 0.515 | < 0.938 | < 0.173 | < 0.157 | -0.0315 | 0.21 | 0.14 | 0.41 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.629 | <0.623 | <0.479 | <0.522 | <0.571 | <0.483 | 0.652 | <1.41 | -- | -- | < 1.13 | < 1.62 | < 1.69 | < 0.681 | < 0.533 | 0.000 | 0.6 | < 0.5 | 1.12 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.584 | <0.623 | <0.479 | <0.522 | <0.571 | <0.483 | 0.459 | <0.708 | -- | -- | < 0.682 | < 1.10 | 0.758 | < 0.681 | < 0.533 | -0.295 | 0.39 | 0.23 | 0.71 |
| Selenium | ug/L | 0.5 | 0.5 | 3 | 3 | 2 | 1 | 1 | <1 | 1 | 1.2 | -- | -- | 1.2 | 2.2 | 1.1 | 1.8 | < 1.0 | 0.93 | 0.55 | 1.2 | 0.79 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | 4 | < 4 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 1 | 0.37 |
| Iron | ug/L | 50 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2,800 | 1,400 | 5,400 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.65 | 0.46 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 | MW-15006 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/5/2022 | 10/19/2022 | 4/11/2023 | 10/2/2023 | 3/28/2024 | 10/22/2024 | 4/23/2025 | 10/27/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | |
| pH | su | -- | -- | 7.01 | 7.24 | 7.24 | 7.3 | 7.28 | 7.03 | 7.15 | 7.00 |
| Conductivity | µS/cm | -- | -- | 601 | 600 | 585 | 510 | 440 | 490 | 456 | 456 |
| Turbidity | NTU | -- | -- | 2.89 | 0.02 | 0.02 | 2.32 | 0.02 | 0.02 | 5.68 | 5.79 |
| Dissolved Oxygen | mg/L | -- | -- | 1.15 | 1.73 | 1.99 | 0.06 | 0.95 | 0.01 | 1.18 | 0.16 |
| Temperature | °C | -- | -- | 9.5 | 13.3 | 9.0 | 18.6 | 7.2 | 17.1 | 8.8 | 15.6 |
| Oxidation Reduction Potential | mV | -- | -- | 25.8 | -73.7 | -72.0 | -145.2 | -25.5 | -51.3 | -37.2 | -89.3 |
| **Appendix III** | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 82 | 70 | 44 | 48 | 25 | 48 | 37 | 35 |
| Calcium | mg/L | 0.26 | 0.26 | 98 | 99 | 100 | 88 | 62 | 80 | 76 | 65 |
| Chloride | mg/L | 1.5 | 1.5 | 16 | 6.8 | 5.2 | 5.6 | 4.3 | 5.1 | 4.7 | 7.3 |
| Fluoride | ug/L | 200 | 200 | 160 | 140 | 140 | 160 | 370 | < 200 | 230 | 250 |
| pH, Field | SU | -- | | 7.26 | 7.24 | 7.24 | 7.3 | 7.28 | 7.03 | 7.15 | 7.00 |
| Sulfate | mg/L | 6 | 6.0 | 42 | 44 | 45 | 20 | 17 | 11 | 7.5 | 4.9 |
| Total Dissolved Solids | mg/L | 40 | 50 | 410 | 370 | 350 | 320 | 260 | 330 | 300 | 250 |
| **Appendix IV** | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | 0.61 | 0.81 | < 1.2 | < 1.2 | 0.14$^{J+}$ | 0.33 | 0.52 | 1.2 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | 2.4 | < 2.8 | 10 | 1.6 | 5 | 4.3 | 11 |
| Barium | ug/L | 2.5 | 2.5 | 32 | 29 | 27 | 28 | 14 | 22 | 18 | 26 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | 0.056 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.078 | 0.14 |
| Chromium | ug/L | 0.25 | 0.25 | < 0.25 | 0.27 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.36 | 1.1 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | 0.58 | < 2.6 | 1.5 | 0.52 | 1.2 | 1.4 | 0.7 |
| Fluoride | ug/L | 200 | 200 | 160 | 140 | 140 | 160 | 370 | < 200 | 230 | 250 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | 0.23 |
| Lithium | ug/L | 2.5 | 2.5 | < 2.5 | < 2.5 | < 2.5 | < 12 | < 2.5 | < 2.5 | < 2.5 | < 2.5 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 1.6 | 2.2 | < 6.2 | 5.2 | 5.1 | 8.1 | 5.4 | 7.9 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.24 | 0.23$^{U}$ | 0.0385$^{U}$ | 0.0485$^{U}$ | 0.0861$^{U}$ | 0.7 | 0.109 | 0.186$^{U}$ |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | < 1 | 0.23$^{U}$ | 0.282$^{U}$ | 0.231$^{U}$ | 0.287$^{U}$ | 1.55 | 0.537 | 0.636$^{U}$ |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.17 | -11.2$^{UG}$ | 0.243$^{U}$ | 0.183$^{U}$ | 0.201$^{U}$ | 0.85 | 0.428 | 0.45$^{U}$ |
| Selenium | ug/L | 0.5 | 0.5 | 1.9 | 3.3 | < 2.5 | < 2.5 | 0.79 | 0.52 | 1.5 | 1.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | < 8 | < 8 | < 4 | 7 | < 4 | 4.0 | 5 | 10 |
| **Michigan CCR** | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.65 | 0.64 | < 1.2 | < 1.2 | 1.0 | 0.6 | 1.5 | 3.2 |
| Iron | ug/L | 50 | 50 | 200 | 2,200 | 1,300 | 7,500 | 1,500 | 2,400 | 3,100 | 7,300 |
| Nickel | ug/L | 1.2 | 1.2 | 0.38 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 1 | 0.91 | 0.97 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | 0.77 | 2.3 |
| Zinc | ug/L | 1.2 | 1.2 | 1.6 | 1.4 | < 6.2 | < 6.2 | 2.1 | < 1.2 | 1.6 | 5.5 |

**MW-15007**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/1/2015 | 2/17/2016 | 4/13/2016 | 7/12/2016 | 9/27/2016 | 2/13/2017 | 4/4/2017 | 7/12/2017 | 9/14/2017 | 2/21/2018 | 4/19/2018 | 6/14/2018 | 11/27/2018 | 4/9/2019 | 9/24/2019 | 5/4/2020 | 10/27/2020 | 4/20/2021 | 10/19/2021 |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | | 6.74 | 6.6 | 6.6 | 6.6 | 6.6 | 6.7 | 6.7 | 6.74 | 6.7 | 6.8 | 7.0 | 6.9 | 6.8 | 6.8 | 6.8 | 6.71 | 7.02 | 6.85 | 7.49 |
| Conductivity | µS/cm | -- | -- | | 6,286 | 7,506 | 7,861 | 7,314 | 8,664 | 6,474 | 6,047 | 4,980 | 4,965 | -- | 2,993 | 2,626 | 2,394 | 2,469 | 3,715 | 2,352 | 2,170 | 2,030 | 1,700 |
| Turbidity | NTU | -- | -- | | 2.03 | 1 | <1 | <1 | <1 | 1.3 | <1 | 2.12 | 2.19 | -- | 2.5 | 3.7 | 2.26 | 3.7 | 0.52 | 13.60 | 2.80 | 5.37 | 1.8 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.23 | 1.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.1 | 0.13 | 0.13 | -- | 0.44 | 0.39 | 0.23 | 0 | 0.38 | 0.25 | 0.25 | 1.53 | 0.23 |
| Temperature | °C | -- | -- | | 10.56 | 5.3 | 7.1 | 19.1 | 20.3 | 6.1 | 7.6 | 19.60 | 19.7 | -- | 5.9 | 17.4 | 10.22 | 6.7 | 19.7 | 8.7 | 14.7 | 8.4 | 18 |
| Oxidation Reduction Potential | mV | -- | -- | | -134.8 | -72.5 | -48.7 | -109.9 | -94.8 | -90.8 | -72.9 | -118.7 | -67.7 | -- | -3 | 22.2 | -0.38 | -86.7 | -114.6 | 109.1 | -113.1 | -46.4 | -108.2 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 79 | 74 | 65 | 89 | 135 | 76 | 83 | 130 | 141 | -- | -- | 93.7 | 91.0 | 90 | 150 | 77 | 120 | 83 | 170 |
| Calcium | mg/L | 0.26 | 0.26 | | 165 | 222 | 226 | 234 | 250 | 181 | 169 | 170 | 133 | -- | -- | 108 | 109 | 130 | 160 | 91 | 63 | 72 | 81 |
| Chloride | mg/L | 1.5 | 1.5 | | 1,900 | 2,300 | 2,480 | 2,280 | 2,390 | 1,850 | 1,670 | 1,900 | 1,940 | -- | -- | 759 | 718 | 790 | 1,100 | 513 | 500 | 440 | 280 |
| Fluoride | ug/L | 200 | 200 | | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | -- | < 1,000 | < 1,000 | < 1,000 | < 5,000[(1)] | < 2,000 | 320 | 490 | 350 | 310 |
| pH, Field | SU | -- | | | 6.74 | 6.6 | 6.6 | 6.6 | 6.6 | 6.7 | 6.7 | 6.74 | 6.7 | 6.8 | 7.0 | 6.9 | 6.8 | 6.8 | 6.8 | 7.3 | 7.02 | 6.85 | 7.49 |
| Sulfate | mg/L | 6.0 | 6.0 | | 21.0 | 15.7 | 11.0 | 9.87 | 9.38 | 3.19 | 4.25 | 9.1 | 8.3 | -- | -- | 17.9 | 44.6 | < 10 | 4.4 | 3.6 | < 0.6 | 4 | < 3 |
| Total Dissolved Solids | mg/L | 40 | 65 | | 3,700 | 2,000 | 3,900 | 4,500 | 4,800 | 3,700 | 3,100 | 3,700 | 2,690 | -- | -- | 1,510 | 1,620 | 1,900 | 2,000 | 1,180 | 1,200 | 1,100 | 830 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | 1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | 0.33 |
| Arsenic | ug/L | 0.55 | 0.55 | | 5 | 1 | 1 | 5 | 3 | 1 | 2 | 5.8 | -- | -- | 2.0 | 6.4 | 2.0 | 1.8 | 5.0 | 2.0 | 3.1 | 1.9 | 1.3 |
| Barium | ug/L | 2.5 | 2.5 | | 285 | 267 | 236 | 294 | 377 | 227 | 167 | 229 | -- | -- | 61.0 | 66.5 | 81.4 | 100 | 150 | 58 | 64 | 66 | 75 |
| Beryllium | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.024 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 1.0 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | <1 | 2 | 2 | 2 | 1 | 2 | 2 | 1.1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.55 | 0.73 | 0.94 | 2.1 |
| Cobalt | ug/L | 0.52 | 0.52 | | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.39 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | -- | < 1,000 | < 1,000 | < 1,000 | < 5,000[(1)] | < 2,000 | 320 | 490 | 350 | 310 |
| Lead | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 5.0 | < 1.0 | -- | 0.092 | < 0.55 | 0.69 | 0.77 |
| Lithium | ug/L | 2.5 | 2.5 | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | -- | -- | < 10 | < 10 | < 10 | < 10 | < 10 | 2.6 | 1.4 | < 1.2 | < 5.9 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | 8 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | -- | < 5.0 | < 5.0 | < 25.0 | < 5.0 | < 5.0 | 2.7 | 5.3 | 4.4 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 0.686 | 0.659 | 0.289 | 0.554 | 1.15 | 0.629 | 0.492 | <0.711 | -- | -- | < 0.445 | < 0.408 | < 0.858 | < 0.177 | 0.198 | 0.0852 | 0.46 | 0.45 | 0.26 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | 2.19 | 1.69 | 1.56 | 1.65 | 2.75 | 2.02 | 1.29 | <1.45 | -- | -- | < 1.21 | < 1.38 | < 1.61 | < 0.718 | < 0.569 | 0.800 | 1.4 | 1.29 | 0.26 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | 1.50 | 1.03 | 1.27 | 1.10 | 1.60 | 1.39 | 0.796 | 0.850 | -- | -- | < 0.760 | < 0.972 | 1.07 | < 0.718 | < 0.569 | 0.715 | 0.94 | 0.84 | 0.19 |
| Selenium | ug/L | 0.5 | 0.5 | | 1 | <1 | <1 | <1 | <1 | <1 | 2 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | -- | < 2.0 | < 2.0 | < 10.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.3 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | < 4 | 5 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | 1.4 | 4.9 |
| Iron | ug/L | 50 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 7,900 | 8,500 | 7,700 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.6 | 0.84 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | 1.7 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | 2.5 | 4.4 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 | MW-15007 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/5/2022 | | 10/19/2022 | 4/12/2023 | 10/4/2023 | 3/28/2024 | 10/22/2024 | 4/23/2025 | 10/27/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | |
| **Field Parameters** | | | | | Field Dup | | | | | | | |
| pH | su | -- | -- | 6.65 | 6.65 | 6.84 | 6.86 | 6.91 | 6.98 | 6.92 | 6.87 | 6.72 |
| Conductivity | µS/cm | -- | -- | 1,880 | 1,880 | 1,730 | 1,750 | 1,390 | 820 | 780 | 820 | 1,096 |
| Turbidity | NTU | -- | -- | 3.64 | 3.64 | 0.02 | 0.75 | 0.77 | 0.02 | 5.87 | 8.66 | 3.86 |
| Dissolved Oxygen | mg/L | -- | -- | 0.09 | 0.09 | 0.24 | 0.2 | 0.15 | 0.05 | 0.09 | 0.41 | 0.01 |
| Temperature | °C | -- | -- | 7.9 | 7.9 | 15.6 | 7.8 | 17.6 | 7.1 | 17.2 | 9 | 17.1 |
| Oxidation Reduction Potential | mV | -- | -- | -94.8 | -94.8 | -94.4 | -115.5 | -94.6 | 119 | -49 | -24.6 | -138.6 |
| **Appendix III** | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 140 | 130 | 160 | 85 | 140 | 65 | 130 | 81 | 140 |
| Calcium | mg/L | 0.26 | 0.26 | 120 | 120 | 120 | 110 | 100 | 72 | 77 | 79 | 82 |
| Chloride | mg/L | 1.5 | 1.5 | 250 | 250 | 270 | 190 | 200 | 99 | 57 | 100 | 140 |
| Fluoride | ug/L | 200 | 200 | 210 | 220 | 250 | 200 | 210 | 300 | < 200 | 320 | 330 |
| pH, Field | SU | -- | | 6.84 | 6.85 | 6.84 | 6.86 | 6.91 | 6.98 | 6.92 | 6.87 | 6.72 |
| Sulfate | mg/L | 6.0 | 6.0 | 29 J- | 170 J+ | 190 | 240 | 62 | 27 | 17 | 9.5 | 1.5 |
| Total Dissolved Solids | mg/L | 40 | 65 | 890 | 910 | 1,100 | 1,200 | 890 | 600 | 500 | 440 | 590 |
| **Appendix IV** | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.48 | 0.31 | 0.1 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | 2.4 | < 2.8 | 3.2 | 1.0 | 3.3 | 4.4 | 1.6 |
| Barium | ug/L | 2.5 | 2.5 | 89 | 96 | 99 | 110 | 95 | 20 | 34 | 32 | 66 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.25 | 0.27 | 0.28 | < 1.2 | < 1.2 | < 0.25 | 0.26 | 0.31 | 0.41 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | 0.52 | < 2.6 | 0.59 | 0.53 | 0.56 | 0.73 | 0.39 |
| Fluoride | ug/L | 200 | 200 | 210 | 220 | 250 | 200 | 210 | 300 | < 200 | 320 | 330 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | 0.1 | 0.11 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 2.5 J- | 5.9 J+ | < 2.5 | 24 | < 12 | < 2.5 | 2.1 | < 2.5 | < 2.5 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | 6.1 | < 6.2 | 2.5 | 7.6 | 13 | 8.9 | 4 |
| Radium-226 | pCi/L | 1.0 | 1.0 | -0.02 | 0.17 | 0.12 U | 0.195 | 0.313 | -0.00361 U | 0.67 | 0.368 | 0.197 U |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.00 | 0.17 | 0.47 U | 1.06 | 0.313 UJ | 0.0996 U | 0.67 U | 0.567 | 0.797 U |
| Radium-228 | pCi/L | 1.0 | 1.0 | -0.13 | -0.67 | 0.35 U | 0.87 | -0.0351 UJ | 0.0996 U | -0.85 U | 0.199 | 0.6 U |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | 2.2 | < 2.5 | < 2.5 | 0.98 | 1.1 | 0.99 | 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.3 | < 8 | < 8 | < 8 | < 4 | < 4 | < 4 | 4.0 | 5 | 5.3 |
| **Michigan CCR** | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.29 | 0.42 | 0.28 | < 1.2 | < 1.2 | 1.1 | 1.1 | 1.1 | 0.3 |
| Iron | ug/L | 50 | 50 | 11,000 | 11,000 | 8,300 | 10,000 | 6,800 | 710 | 2,100 | 5,500 | 6,400 |
| Nickel | ug/L | 1.2 | 1.2 | 0.31 | 0.37 | < 1.2 | < 6.2 | < 6.2 | 0.67 | 1.1 | 1.1 | 0.55 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 1.1 | 1.5 | 0.83 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | 11 | 7.0 | 2.9 | 1.9 | 2.4 | 7 |

**MW-15008**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location: | | | | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 |
| Compliance Phase: | | | | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | | AM | AM | AM | AM | AM | AM | AM |
| Sample Dates: | | | | 12/1/2015 | 2/17/2016 | 4/13/2016 | 7/12/2016 | 9/28/2016 | 2/14/2017 | 4/4/2017 | 7/12/2017 | 9/14/2017 | 4/18/2018 | | 6/14/2018 | 11/27/2018 | 4/9/2019 | 9/24/2019 | 5/4/2020 | 10/27/2020 | 4/20/2021 | 10/19/2021 |
| **Field Parameters** | | | | | | | | | | | | | | Field Dup | | | | | | | | |
| pH | su | -- | -- | 8.15 | 8.3 | 8.1 | 8.1 | 7.8 | 7.8 | 7.6 | 7.62 | 7.7 | 7.8 | 7.8 | 7.5 | 7.4 | 7.5 | 7.6 | 7.33 | 7.72 | 7.5 | 7.2 |
| Conductivity | µS/cm | -- | -- | 938 | 956 | 1,133 | 2,443 | 2,149 | 1,078 | 864 | 711 | 743 | 896 | 896 | 786 | 757 | 953 | 872 | 1,195 | 730 | 481 | 850 |
| Turbidity | NTU | -- | -- | 1.18 | <1 | <1 | <1 | <1 | <1 | <1 | 3.79 | 1.49 | 0.9 | 0.9 | 6.8 | 1.14 | 3.5 | 0.9 | 115.55 | 4.35 | 7.26 | 1.28 |
| Dissolved Oxygen | mg/L | -- | -- | 0.00 | 0.1 | 0.2 | 0.2 | 0.4 | 0.6 | 0.5 | 0.11 | 0.13 | 0.23 | 0.23 | 0.3 | 0.38 | -0.01 | 0.3 | 0.27 | 0.12 | 0.12 | 0.12 |
| Temperature | °C | -- | -- | 12.78 | 6.2 | 6.7 | 21.8 | 19.9 | 6.5 | 7.8 | 18.29 | 19.03 | 6.7 | 6.7 | 17.5 | 10.4 | 6.9 | 19.3 | 9.0 | 14.9 | 8.6 | 21.2 |
| Oxidation Reduction Potential | mV | -- | -- | -308.4 | -219.5 | -230.2 | -239.0 | -250.7 | -117.9 | -88.3 | -114.3 | -108 | -1 | -1 | -23.4 | 32.4 | -81.7 | -126.3 | 111.2 | -133.3 | -77 | -147.5 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 1,060 | 897 | 794 | 866 | 1,160 | 489 | 416 | 396 | 401 | -- | -- | 242 | 269 | 230 | 300 | 294 | 130 | 68 | 700 |
| Calcium | mg/L | 0.26 | 2.6 | 39.6 | 39.5 | 48.4 | 77.2 | 109 | 63.4 | 63.0 | 54.4 | 51.8 | -- | -- | 56.7 | 63.1 | 100 | 87 | 103 | 78 | 71 | 110 |
| Chloride | mg/L | 1.5 | 1.5 | 160 | 157 | 193 | 546 | 423 | 129 | 95.9 | 70.0 | 68.9 | -- | -- | 93.9 | 95.2 | 200 | 81 | 162 | 45 | 13 J | 55 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 240 | 210 | < 150 | 200 |
| pH, Field | SU | -- | | 8.15 | 8.3 | 8.1 | 8.1 | 7.8 | 7.8 | 7.6 | 7.62 | 7.7 | 7.8 | -- | 7.5 | 7.4 | 7.5 | 7.6 | 7.9 | 7.7 | 7.5 | 7.2 |
| Sulfate | mg/L | 6 | 6.0 | 45.0 | 3.05 | 5.13 | 22.3 | 12.0 | 8.70 | 4.60 | 3.9 | 3.0 | -- | -- | < 2.0 | 3.1 | 2.0 | 2.1 | 1.1 | 57.0 | 51 J | 78 |
| Total Dissolved Solids | mg/L | 40 | 51 | 540 | 530 | 590 | 1,300 | 1,100 | 650 | 510 | 414 | 448 | -- | -- | 534 | 474 | 710 | 470 | 656 | 420 | 310 | 430 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 1 | <1 | <1 | 4 | <1 | <1 | <1 | 2.3 | -- | < 1.0 | < 1.0 | 2.1 | 2.3 | 1.6 | 1.8 | 1.3 | 18 | 74 | 17 |
| Barium | ug/L | 2.5 | 2.5 | 39 | 42 | 49 | 61 | 100 | 63 | 59 | 54.6 | -- | 64.2 | 70.7 | 66.5 | 64.1 | 130 | 92 | 120 | 60 | 43 | 85 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | <1 | <1 | 1 | 2 | <1 | <1 | 1 | 1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.2 | < 0.25 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.16 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 240 | 210 | < 150 | 200 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 12.9 | 13.5 | 16 | 19 | 28 | 17 | 18 | 23 | -- | 22 | 18 | 19 | 19 | 14 | 17 | 16 | 9 | 1.7 | 13 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 0.37 | < 1.2 | 1.4 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | <0.188 | <0.215 | <0.199 | 0.174 | <0.217 | <0.173 | <0.284 | <0.592 | -- | 0.690 | < 0.444 | < 0.422 | 1.12 | 0.217 | < 0.138 | 0.401 | -0.02 | 0.32 | 0.39 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.620 | <0.457 | 0.646 | <0.405 | 1.03 | 0.843 | <0.346 | 1.66 | -- | < 1.19 | < 1.06 | < 1.44 | 1.53 | 0.532 | < 0.546 | 0.892 | < 1 | < 0.57 | 0.39 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.521 | <0.457 | 0.516 | <0.405 | 0.893 | 0.672 | <0.346 | 1.47 | -- | < 0.684 | < 0.616 | < 1.02 | < 0.533 | < 0.478 | < 0.546 | 0.491 | 0.2 | 0.21 | 0.08 |
| Selenium | ug/L | 0.5 | 0.5 | <1 | <1 | <1 | 1 | <1 | <1 | 1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 |
| Iron | ug/L | 50 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 830 | 2,500 | 2,200 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | 0.44 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 | MW-15008 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/5/2022 | 10/19/2022 | 4/12/2023 | 10/3/2023 | 3/28/2024 | 10/24/2024 | 4/23/2025 | 10/28/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | |
| pH | su | -- | -- | 7.01 | 7.01 | 7.2 | 7.08 | 7.4 | 6.82 | 7.26 | 7.23 |
| Conductivity | µS/cm | -- | -- | 980 | 850 | 497 | 760 | 570 | 590 | 599 | 656 |
| Turbidity | NTU | -- | -- | 0.56 | 0.81 | 0.02 | 9.04 | 0.02 | 0.02 | 2.36 | 2.10 |
| Dissolved Oxygen | mg/L | -- | -- | 0.74 | 0.09 | 0.75 | 0.13 | 0.05 | 0.01 | 0.14 | 0.02 |
| Temperature | °C | -- | -- | 5.8 | 18.4 | 9.3 | 21.3 | 7.7 | 17 | 9.1 | 17.7 |
| Oxidation Reduction Potential | mV | -- | -- | -50.8 | -81.7 | -84.2 | -102.9 | 102 | 17.3 | -36.5 | -62.2 |
| **Appendix III** | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 640 | 740 | 210 | 610 | 240 | 370 | 180 | 280 |
| Calcium | mg/L | 0.26 | 2.6 | 140 | 130 | 77 | 110 | 74 | 78 | 89 | 96 |
| Chloride | mg/L | 1.5 | 1.5 | 50 | 29 | 8.6 | 48 | 22 | 18 | 12 | 12 |
| Fluoride | ug/L | 200 | 200 | 130 | 200 | 140 | 170 | 320 | < 200 | 200 | 370 |
| pH, Field | SU | -- | | 7.26 | 7.01 | 7.2 | 7.08 | 7.4 | 6.82 | 7.26 | 7.23 |
| Sulfate | mg/L | 6 | 6.0 | 170 | 140 | 31 | 67 | 9.2 | 5.4 | 2.8 | 1.8 |
| Total Dissolved Solids | mg/L | 40 | 51 | 630 | 610 | 290 | 490 | 400 | 340 | 350 | 350 |
| **Appendix IV** | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | 0.31 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.14 | 0.15 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 8 | 4.5 | 3.6 | 12 | 2.7 | 5.8 | 2.7 | 2.8 |
| Barium | ug/L | 2.5 | 2.5 | 100 | 100 | 47 | 75 | 47 | 53 | 52 | 64 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.27 | < 0.25 | 0.21 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | < 0.52 | 0.12 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | 130 | 200 | 140 | 170 | 320 | < 200 | 200 | 370 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 13 | 21 | 11 | 17 | 10 | 15 | 13 | 13 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 2.3 | 2.2 | < 6.2 | 2.8 | 0.72[J+] | 3 | 1.4 | 2.7 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.01 | 0.27 | 0.0515[U] | 0.184[U] | 0.221 | 0.47[U] | 0.102 | 0.08[U] |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | < 1 | 1.82 | 0.722 | 0.299[U] | 0.327[U] | 0.67[U] | 0.503 | 0.929[U] |
| Radium-228 | pCi/L | 1.0 | 1.0 | -0.09 | 1.55 | 0.671[U] | 0.115[U] | 0.106[U] | 0.2[U] | 0.401 | 0.849[UG] |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | < 0.5 | 0.1 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | < 8 | < 8 | < 4 | < 4 | < 4 | < 4.0 | < 4.0 | < 4.2 |
| **Michigan CCR** | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.3 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.69 | < 0.25 |
| Iron | ug/L | 50 | 50 | 970 | 2,400 | 970 | 3,600 | 1,100 | 1,400 | 1,200 | 1,200 |
| Nickel | ug/L | 1.2 | 1.2 | 0.6 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.43 |
| Zinc | ug/L | 1.2 | 1.2 | 1.7 | < 1.2 | < 6.2 | < 6.2 | 4.3 | 2.5 | < 1.2 | 6.1 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 |
| | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 12/1/2015 | 2/17/2016 | 4/18/2016 | 7/12/2016 | 9/28/2016 | 2/14/2017 | 4/5/2017 | 7/11/2017 | | 9/13/2017 | 4/16/2018 | 6/13/2018 | 11/28/2018 | 4/9/2019 | 9/25/2019 | 5/7/2020 | 10/27/2020 | 4/20/2021 | 10/21/2021 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | Field Dup | | | | | | | | | |
| pH | su | -- | -- | 10.62 | 10.8 | 10.3 | 10.0 | 10.0 | 10.2 | 10.1 | 9.60 | 9.60 | 10.2 | 9.8 | 9.8 | 9.8 | 9.4 | 8.7 | 8.05 | 8.32 | 8.08 | 8.19 |
| Conductivity | µS/cm | -- | -- | 335 | 352 | 346 | 356 | 358 | 329 | 338 | 296 | 296 | 307 | 482 | 477 | 516 | 349 | 490 | 810 | 626 | 603 | 660 |
| Turbidity | NTU | -- | -- | 1.93 | <1 | <1 | <1 | <1 | 1.2 | 2.5 | 6.99 | 6.99 | 2.88 | 2.4 | 0.5 | 0.94 | 2.8 | 0.29 | 96.65 | 1.35 | 2.84 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.41 | 0.2 | 0.4 | 0.2 | 0.4 | 0.4 | 0.0 | 0.05 | 0.05 | 0.03 | 0.3 | 0.31 | 0.28 | 0.02 | 0.31 | 2.25 | 0.06 | 0.63 | 0.12 |
| Temperature | °C | -- | -- | 13.50 | 12.7 | 17.7 | 19.7 | 16.8 | 13.6 | 13.5 | 17.00 | 17.00 | 16.14 | 10.9 | 18.1 | 12.73 | 13.2 | 15.6 | 13.7 | 13.9 | 11.8 | 15.1 |
| Oxidation Reduction Potential | mV | -- | -- | -236.7 | -280.2 | -195.5 | -367.1 | -365.3 | -361.2 | -292.0 | -319.6 | -319.6 | -363.9 | -381.1 | -107.9 | -34.6 | -254.3 | -258.8 | -157.3 | -168.4 | -88.4 | -201.9 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 2,380 | 2,520 | 2,170 | 2,070 | 2,190 | 2,110 | 2,190 | 2,210 | 1,690 | 2,120 | -- | 1,670 | 1,690 | 1,600 | 1,500 | 1,560 | 1,100 | 760 | 1,700 |
| Calcium | mg/L | 1.3 | 2.6 | 42.7 | 44.1 | 40.1 | 44.1 | 46.7 | 37.7 | 38.2 | 37.6 | 36.5 | 34.9 | -- | 42.4 | 27.9 | 33 | 51 | 97 | 74 | 96 | 110 |
| Chloride | mg/L | 1.5 | 1.5 | 24.0 | 24.0 | 27.1 | 26.9 | 24.3 | 22.8 | 24.9 | 26.3 | 26.3 | 26.0 | -- | 95.7 | 51.1 | 32 | 41 | 134 | 55 | 32 | 30 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | < 1000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 37 | < 20 | 120 | < 100 |
| pH, Field | SU | -- | | 10.62 | 10.8 | 10.3 | 10 | 10 | 10.2 | 10.1 | 9.6 | -- | 10.2 | 9.8 | 9.8 | 9.8 | 9.4 | 8.7 | 8.2 | 8.3 | 8.08 | 8.19 |
| Sulfate | mg/L | 6 | 30 | 63.0 | 39.3 | 49.5 | 55.2 | 49.1 | 31.6 | 39.8 | 43.0 | 47.2 | 41.7 | -- | < 2.0 | 19.2 | 49 | 30 | 17 | 12 | 5.3 | 18 |
| Total Dissolved Solids | mg/L | 40 | 51 | 240 | 230 | 220 | 220 | 230 | 200 | 190 | 216 | 246 | 188 | -- | 456 | 454 | 300 | 290 | 502 | 500 | 340 | 230 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 45 | 31 | 24 | 24 | 20 | 14 | 13 | 12.0 | 10.8 | -- | 9.4 | 8.5 | 4.1 | 3.9 | 2.3 | 1.4 | 1.0 | 0.74 | 0.93 |
| Barium | ug/L | 2.5 | 2.5 | 16 | 12 | 11 | 11 | 11 | 9 | 10 | 13.2 | 10.8 | -- | 16.5 | 13.8 | 10.2 | 16 | 27 | 64 | 55 | 49 | 65 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | <1 | <1 | 1 | 2 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.19 | < 0.25 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.16 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | -- | < 1000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 37 | < 20 | 120 | < 100 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 15.6 | 14.6 | 15 | 14 | 14 | 13 | 14 | 19 | 19 | -- | 24 | 21 | 20 | 21 | 32 | 64 | 46 | 30 | 11 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 57 | 60 | 50 | 49 | 49 | 40 | 38 | 43.7 | 41.8 | -- | 16.0 | 11.6 | 5.2 | < 5.0 | < 5.0 | 0.56 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | <0.166 | <0.157 | <0.209 | <0.158 | <0.269 | <0.159 | <0.347 | <0.756 | < 0.887 | -- | < 0.934 | < 0.580 | < 0.567 | < 0.153 | 0.370 | 0.0720 | 0.0500 | 0.13 | 0.38 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | <0.451 | <0.475 | <0.467 | <0.461 | <0.628 | 0.747 | <0.502 | <2.72 | < 3.85 | -- | < 1.89 | < 3.85 | < 1.47 | < 0.583 | 0.807 | 0.0720 | 1.0300 | < 0.48 | 0.86 |
| Radium-228 | pCi/L | 1.0 | 1.0 | <0.451 | <0.475 | <0.467 | <0.461 | <0.628 | 0.678 | <0.502 | <1.96 | < 2.96 | -- | < 0.957 | < 3.27 | < 0.903 | < 0.583 | < 0.551 | -0.960 | 0.980 | -0.33 | 0.48 |
| Selenium | ug/L | 0.5 | 0.5 | <1 | <1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 |
| Iron | ug/L | 250 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 200 | 37 | 21 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | 0.25 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 |
| Vanadium | mg/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 | MW-15009 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/5/2022 | 10/19/2022 | 4/12/2023 | 10/3/2023 | 3/28/2024 | 10/23/2024 | 4/23/2025 | 10/27/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | |
| pH | su | -- | -- | 7.13 | 7.75 | 7.74 | 7.82 | 7.78 | 7.66 | 7.73 | 7.48 |
| Conductivity | µS/cm | -- | -- | 1870 | 740 | 1020 | 720 | 990 | 1020 | 740 | 989 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 0.02 | 2.63 | 0.02 | 0.02 | 4 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.08 | 0.14 | 0.05 | 0.05 | 0.02 | 0.01 | 0.05 | 0.08 |
| Temperature | °C | -- | -- | 11.2 | 11.7 | 12.6 | 15 | 12.1 | 13.5 | 12.4 | 12.8 |
| Oxidation Reduction Potential | mV | -- | -- | -195.6 | -155.8 | -206.1 | -162.6 | 104.8 | -90.9 | -119.7 | -90.4 |
| **Appendix III** | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 2,200 | 870 | 1,000 | 650 | 700 | 800 | 650 | 890 |
| Calcium | mg/L | 1.3 | 2.6 | 270 | 100 | 150 | 98 | 140 | 150 | 97 | 210 |
| Chloride | mg/L | 1.5 | 1.5 | 220 | 46 | 54 | 41 | 45 | 44 | 48 | 42 |
| Fluoride | ug/L | 200 | 200 | < 100 | < 100 | 100 | 92 | 88 | < 200 | 120 | 220 |
| pH, Field | SU | -- | | 7.2 | 7.75 | 7.74 | 7.82 | 7.78 | 7.66 | 7.73 | 7.48 |
| Sulfate | mg/L | 6 | 30 | 34 | 86 | 140 | 85 | 200 | 210 | 170 | 420 |
| Total Dissolved Solids | mg/L | 40 | 51 | 900 | 480 | 640 | 460 | 740 | 700 | 480 | 950 |
| **Appendix IV** | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | 2.4 | 14 | 15 | 21 | 22 | 8.4 | 21 |
| Barium | ug/L | 2.5 | 2.5 | 250 | 72 | 120 | 80 | 100 | 120 | 60 | 130 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.32 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | < 0.52 | 0.1 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 100 | < 100 | 100 | 92 | 88 | < 200 | 120 | 220 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 30 | 21 | 30 | 25 | 28 | 32 | 27 | 40 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | 1.4 | 0.9 | 1.5 | 6.5 | 4.4 | 16 | 7.3 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.71 | 0.03$^{U}$ | 0.324 | 0.0829$^{U}$ | 0.182 | 0.4$^{U}$ | 0.0959 | 0.382 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.71 | 0.03$^{U}$ | 0.805 | 0.343$^{U}$ | 0.487$^{U}$ | 1.01$^{U}$ | 0.0959 | 0.731 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.08 | -1.53$^{U}$ | 0.481$^{U}$ | 0.26$^{U}$ | 0.305$^{U}$ | 0.61 | -0.011 | 0.349$^{U}$ |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | < 7.7 | < 8 | < 4 | < 4 | < 4 | 5.0 | < 4 | < 4.2 |
| **Michigan CCR** | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 250 | 50 | 570 | 200 | 1,300 | 760 | 1,500 | 1,500 | 1,100 | 2,700 |
| Nickel | ug/L | 1.2 | 1.2 | 0.36 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.47 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | mg/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.37 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | 12 | 6.2 | 9.0 | 4.7 | < 1.2 | 11 |

| | | | Sample Location: | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | Background | DM | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 12/1/2015 | 2/17/2016 | 4/13/2016 | 7/13/2016 | 9/28/2016 | 2/14/2017 | 4/5/2017 | 7/11/2017 | 9/13/2017 | | | 4/16/2018 | 6/14/2018 | 11/28/2018 | 4/9/2019 | 9/24/2019 | 5/4/2020 | 10/27/2020 | 4/21/2021 | 10/21/2021 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | | Field Dup | | | | | | | | |
| pH | su | -- | -- | 7.74 | 7.8 | 7.8 | 7.8 | 8.0 | 8.0 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.4 | 7.5 | 7.6 | 7.4 | 7.16 | 7.39 | 7.38 | 7.30 |
| Conductivity | µS/cm | -- | -- | 587 | 402 | 344 | 449 | 547 | 390 | 556 | 345 | 875 | 875 | 941 | 991 | 1,003 | 570 | 798 | 814 | 565 | 720 | 1,080 |
| Turbidity | NTU | -- | -- | 2.51 | 2.8 | <1 | 3.1 | <1 | <1 | <1 | 4.71 | 1.43 | 1.43 | 0.7 | 5.1 | 2.83 | 4.5 | 1 | 9.07 | 9.13 | 1.16 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.01 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.08 | 0.11 | 0.11 | 0.26 | 0.34 | 0.38 | 0.02 | 0.29 | 0.23 | 0.05 | 0.23 | 0.23 |
| Temperature | °C | -- | -- | 12.97 | 11.4 | 10.9 | 16.0 | 18.5 | 12.0 | 11.3 | 15.50 | 14.98 | 14.98 | 10.6 | 13.3 | 12.15 | 11.9 | 14.8 | 11.4 | 12.9 | 11.3 | 13.9 |
| Oxidation Reduction Potential | mV | -- | -- | -246.0 | -197.3 | -182.6 | -174.7 | -104.8 | -192.3 | -52.9 | -193.4 | -126.9 | -126.9 | -146.3 | 5.3 | 68.1 | -140.2 | -120.3 | 105.4 | -105.7 | 9.6 | -128.7 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 1,970 | 1,510 | 1,340 | 1,270 | 1,570 | 1,440 | 1,760 | 1,340 | 1,770 | 1,770 | -- | 2,100 | 1,850 | 1,700 | 1,100 | 638 | 510 | 730 | 530 |
| Calcium | mg/L | 1.3 | 2.6 | 71.2 | 51.9 | 37.4 | 58.2 | 66.4 | 49.8 | 80.5 | 40.7 | 129 | 133 | -- | 133 | 115 | 110 | 130 | 127 | 78 | 89 | 120 |
| Chloride | mg/L | 1.5 | 1.5 | 23.0 | 22.5 | 21.5 | 22.7 | 25.1 | 22.3 | 24.2 | 25.5 | 24.5 | 24.4 | -- | 29.3 | 39.6 | 22 | 42 | 43 | 35 | 58 | 140 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 360 | 380 | 360 | 260 |
| pH, Field | SU | -- | | 7.74 | 7.8 | 7.8 | 7.8 | 8.0 | 8.0 | 7.8 | 7.8 | 7.8 | -- | 7.8 | 7.4 | 7.5 | 7.6 | 7.4 | 7.6 | 7.4 | 7.38 | 7.3 |
| Sulfate | mg/L | 6.0 | 6.0 | 120 | 52.6 | 31.0 | 50.7 | 69.7 | 24.2 | 53.5 | 24.8 | 143 | 143 | -- | 73.7 | 48.3 | 49 | 2.9 | 1 | < 0.6 | < 3 | 8.9 |
| Total Dissolved Solids | mg/L | 40 | 51 | 410 | 270 | 220 | 260 | 320 | 250 | 360 | 288 | 570 | 618 | -- | 636 | 590 | 490 | 450 | 471 | 520 | 430 | 580 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.55 | < 0.55 | < 0.55 |
| Barium | ug/L | 2.5 | 2.5 | 49 | 34 | 28 | 42 | 45 | 31 | 51 | 29.2 | -- | -- | 63.4 | 64.8 | 68.1 | 78 | 61 | 55 | 39 | 47 | 60 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | <1 | <1 | 2 | <1 | <1 | 1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.26 | < 0.25 | 0.32 | 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.19 | < 0.52 | 0.56 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 360 | 380 | 360 | 260 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 36.1 | 22.7 | 18 | 15 | 22 | 14 | 18 | 21 | -- | -- | 46 | 54 | 51 | 41 | 43 | 41 | 28 | 20 | 21 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 33 | 29 | 27 | 15 | 20 | 9 | 7 | 16.2 | -- | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 1.1 | 1.6 | 1.8 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | <0.302 | <0.217 | <0.244 | <0.145 | <0.297 | <0.179 | <0.216 | <0.642 | -- | -- | < 0.869 | 0.661 | < 0.820 | < 0.185 | < 0.140 | 0.146 | 0.05 | 0.43 | 0.40 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.973 | <0.502 | <0.447 | 0.451 | 0.820 | <0.363 | <0.380 | <1.60 | -- | -- | < 1.75 | < 1.45 | < 1.63 | < 0.516 | < 0.578 | 0.780 | 1.350 | 2.03 | 0.40 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.849 | <0.502 | <0.447 | 0.420 | 0.728 | <0.363 | <0.380 | <0.956 | -- | -- | < 0.877 | < 0.978 | < 0.805 | < 0.516 | < 0.578 | 0.634 | 1.3 | 1.60 | -0.80 |
| Selenium | ug/L | 0.5 | 0.5 | <1 | <1 | 1 | 1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.3 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | 0.51 | < 0.25 |
| Iron | ug/L | 50 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1,700 | 1,700 | 2,100 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.63 | 0.72 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | 1.6 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |

| | | | Sample Location: | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 | MW-15010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/5/2022 | 8/11/2022 | 10/19/2022 | 4/12/2023 | 10/4/2023 | 3/28/2024 | 10/22/2024 | 4/22/2025 | | 10/27/2025 | |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | Field Dup | | Field Dup |
| pH | su | -- | -- | 7.08 | 5.63 | 7.11 | 7.06 | 7.24 | 7.15 | 7.02 | 7.04 | 7.04 | 7.05 | 7.05 |
| Conductivity | µS/cm | -- | -- | 2,170 | 1,660 | 1,580 | 2,210 | 1,890 | 2,040 | 1,820 | 1 | 1 | 1,184 | 1,184 |
| Turbidity | NTU | -- | -- | 0.93 | 0.02 | 0.49 | 0.02 | 2.32 | 0.02 | 0.02 | 3.99 | 3.99 | 0.02 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.38 | 2.68 | 0.05 | 0.2 | 0.08 | 0.21 | 0.13 | 0.16 | 0.16 | 0.1 | 0.1 |
| Temperature | °C | -- | -- | 11.0 | 12.5 | 10.2 | 12.4 | 13.6 | 11.4 | 14.5 | 11.7 | 11.7 | 14.0 | 14.0 |
| Oxidation Reduction Potential | mV | -- | -- | -104.2 | -144.0 | -94.1 | -121.5 | -69.7 | 39.3 | -66.0 | -32.0 | -32.0 | -81.9 | -81.9 |
| **Appendix III** | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 1,000 | 1,300 | 1,600 | 1,000 | 1,200 | 860 | 1,100 | 1,000 | 1,000 | 1,000 | 1,100 |
| Calcium | mg/L | 1.3 | 2.6 | 180 | 130 | 110 | 240 | 140 | 160 | 180 | 180 | 180 | 180 | 180 |
| Chloride | mg/L | 1.5 | 1.5 | 400 | 300 | 290 | 390 | 390 | 330 | 300 | 79 | 79 | 190 | 210 |
| Fluoride | ug/L | 200 | 200 | 410 | 320 | 310 | 280 | 270 | 300 | < 200 | 310 | 300 | 370 | 360 |
| pH, Field | SU | -- | | 7.23 | 7.28 | 7.11 | 7.06 | 7.24 | 7.15 | 7.02 | 7.04 | 7.04 | 7.05 | 7.05 |
| Sulfate | mg/L | 6.0 | 6.0 | 110 | 22 | 3.1 | 170 | 38 | 70 | 51 | 42 | 42 | 27 | 26 |
| Total Dissolved Solids | mg/L | 40 | 51 | 1,200 | 960 | 860 | 1,400 | 1,100 | 1,200 | 1000 | 790 | 760 | 900 | 910 |
| **Appendix IV** | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | 0.41 | 0.33 | 0.15 | 0.15 | 0.2 | 0.21 |
| Barium | ug/L | 2.5 | 2.5 | 130 | 130 | 130 | 210 | 130 | 120 | 140 | 85 | 87 | 120 | 140 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.058 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.25 | 0.36 | 0.35 | < 1.2 | < 1.2 | < 0.25 | 0.21 | 0.24 | 0.21 | 0.23 | 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | 0.11 | 0.50 | < 0.52 | < 0.52 | 0.15 | 0.16 |
| Fluoride | ug/L | 200 | 200 | 410 | 320 | 310 | 280 | 270 | 300 | < 200 | 310 | 310 | 370 | 360 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 29 | 24 | 22 | 44 | 25 | 29 | 29 | 46 | 44 | 28 | 30 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | 1.7 | 3.2 | 1.4 | 1.3 | 0.42 | 0.42 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.16 | 0.636 | $0.25^{U}$ | 0.328 | 0.35 | 0.21 | $0.28^{U}$ | $0.223^{J-}$ | $0.591^{J+}$ | $0.342^{J-}$ | $0.479^{J+}$ |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | < 1 | 1.06 | 1.81 | 1.93 | 1.77 | 1.30 | $0.28^{U}$ | $0.8^{J-}$ | $1.51^{J+}$ | $0.454^{UJ}$ | $1.74^{J+}$ |
| Radium-228 | pCi/L | 1.0 | 1.0 | -0.53 | 0.6 | 1.56 | 1.6 | 1.42 | 1.09 | $-0.8^{U}$ | $0.576^{J-}$ | $0.916^{J+}$ | $0.112^{UJ}$ | $1.26^{J+}$ |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1.2 | 1.3 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.3 | < 8 | < 4 | < 8 | < 4 | < 4 | 4 | 7.0 | < 4 | < 4 | < 4.3 | < 4.1 |
| **Michigan CCR** | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.22 | 0.43 | < 0.25 | < -- | < 0.25 | < 0.25 |
| Iron | ug/L | 50 | 50 | 1,800 | 1,400 | 1,600 | 2,500 | 1,000 | 730 | 730 | 810 | 900 | 490 | 460 |
| Nickel | ug/L | 1.2 | 1.2 | 0.61 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | 0.15 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 1 | < 1.2 | < 1.2 | 0.35 | 0.38 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | 19 | 9.3 | 10 | < 1.2 | < 1.2 | < 1.2 | 11 | 12 |

| Constituent | Unit | RDL (Most Common from Previous Data | Sample Location: | Compliance Phase: | Sample Dates: |
|---|---|---|---|---|---|
| | | | MW-15011 | Background | 12/1/2015 |
| | | | MW-15011 | Background | 2/17/2016 |
| | | | MW-15011 | Background | 4/13/2016 |
| | | | MW-15011 | Background | 7/12/2016 |
| | | | MW-15011 | Background | 9/28/2016 |
| | | | MW-15011 | Background | 2/14/2017 |
| | | | MW-15011 | Background | 4/5/2017 |
| | | | MW-15011 | Background | 7/11/2017 |
| | | | MW-15011 | DM | 9/13/2017 |
| | | | MW-15011 | Initial A.M. | 4/16/2018 |
| | | | MW-15011 | AM | 6/13/2018 |
| | | | MW-15011 | AM | 11/28/2018 |
| | | | MW-15011 | AM | 4/10/2019 |
| | | | MW-15011 | AM | 9/25/2019 |
| | | | MW-15011 | AM | 9/25/2019 |
| | | | MW-15011 | AM | 5/7/2020 |
| | | | MW-15011 | AM | 10/27/2020 |
| | | | MW-15011 | AM | 10/27/2020 |
| | | | MW-15011 | AM | 4/20/2021 |
| | | | MW-15011 | AM | 4/20/2021 |
| | | | MW-15011 | AM | 10/21 |
| **Field Parameters** | | | | | |
| pH | su | -- | 8.68 | 8.5 | 8.2 | 8.5 | 8.7 | 9.2 | 9.0 | 8.2 | 8.5 | 9.1 | 8.5 | 8.9 | 8.8 | 8.4 | 8.4 | Field Dup | 8.23 | 8.34 | 8.34 | Field Dup | 8.08 | 8.08 | 7.51 |
| Conductivity | µS/cm | -- | 391 | 346 | 323 | 371 | 390 | 389 | 427 | 346 | 247 | 272 | 251 | 332 | 300 | 655 | 655 | 655 | 708 | 820 | 820 | 650 | 650 | 970 |
| Turbidity | NTU | -- | 3.54 | <1 | <1 | <1 | <1 | <1 | <1 | 2.65 | <1 | 3.5 | 1.2 | 0.71 | 2.5 | 1.25 | 1.25 | 1.25 | 46.18 | 0.14 | 0.14 | 0.02 | 0.02 | 0.02 |
| Dissolved Oxygen | mg/L | -- | 0.00 | 0.2 | 0.3 | 0.2 | 0.4 | 0.5 | 0.1 | 0.10 | 0.11 | 0.25 | 0.34 | 0.45 | 0.12 | 0.38 | 0.38 | 0.38 | 0.13 | 0.19 | 0.19 | 0.5 | 0.5 | 4.77 |
| Temperature | °C | -- | 13.76 | 10.4 | 14.1 | 19.2 | 15.2 | 12.2 | 13.0 | 16.00 | 15.07 | 12.5 | 18.3 | 12.22 | 13 | 14.9 | 14.9 | 14.9 | 13.8 | 13.1 | 13.1 | 13.2 | 13.2 | 13.9 |
| Oxidation Reduction Potential | mV | -- | -322.4 | -180.3 | -145.7 | -208.0 | -100.0 | -221.3 | -198.5 | -198.1 | -127.8 | -215.1 | -25.9 | 55.5 | -204.2 | -179.1 | -179.1 | -179.1 | -248.7 | -135.9 | -135.9 | -53.3 | -53.3 | -129.1 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 125 | 1,680 | 1,420 | 1,340 | 1,210 | 1,180 | 1,280 | 1,340 | 1,060 | 1,490 | -- | 1,630 | 1,650 | 1,600 | 1,600 | 1,600 | 1,600 | 1,870 | 1,500 | 1,400 | 1,200 | 1,200 | 2,000 |
| Calcium | mg/L | 1 | 53.0 | 47.6 | 36.9 | 47.3 | 48.0 | 47.9 | 52.0 | 42.2 | 23.9 | -- | 22.6 | 29.5 | 41 | 63 | 63 | 63 | 90 | 120 | 120 | 98 | 98 | 170 |
| Chloride | mg/L | 5 | 22.0 | 20.7 | 22.1 | 24.8 | 21.0 | 19.5 | 22.2 | 22.9 | 24.0 | -- | 23.2 | 26.3 | 38 | 37 | 37 | 37 | 31 | 42 | 43 | 34 | 34 | 17 |
| Fluoride | ug/L | 1000 | 1,200 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 180 | 250 | 240 | 230 | 240 | 100 |
| pH, Field | SU | 0.1 | 8.68 | 8.5 | 8.2 | 8.5 | 8.7 | 9.2 | 9.0 | 8.2 | 8.5 | 9.1 | 8.5 | 8.9 | 8.8 | 8.4 | -- | 8.4 | 8.34 | 8.34 | 8.08 | 8.08 | 7.51 |
| Sulfate | mg/L | 2 | 50.0 | 30.8 | 35.8 | 43.8 | 38.5 | 37.2 | 42.8 | 29.1 | 6.4 | -- | 12.3 | 21.9 | 38 | 97 | 99 | 109 | 81 | 83 | < 3 | < 3 | 170 |
| Total Dissolved Solids | mg/L | 10 | 270 | 230 | 210 | 240 | 230 | 230 | 240 | 224 | 140 | -- | 244 | 182 | 260 | 380 | 400 | 464 | 610 | 600 | 410 | 430 | 520 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 1 | 5 | 3 | 3 | 4 | 6 | 7 | 8 | <1 | -- | 6.4 | 1.5 | 7.3 | 9.3 | < 1.0 | < 1.0 | 0.84 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Barium | ug/L | 1 | 36 | 29 | 25 | 30 | 31 | 31 | 32 | 30.7 | -- | 15.2 | 16.6 | 18.5 | 31 | 39 | 39 | 55 | 74 | 72 | 63 | 63 | 90 |
| Beryllium | ug/L | 1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 1 | 1 | <1 | 2 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.18 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.41 |
| Cobalt | ug/L | 15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | -- | 0.15 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 1000 | 1,200 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 180 | 250 | 240 | 230 | 240 | 100 |
| Lead | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | -- | 0.041 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 10 | 17.2 | 16 | 14 | 15 | 16 | 17 | 17 | 20 | -- | 21 | 11 | 18 | 18 | 13 | 13 | 20 | 24 | 23 | 27 | 27 | 9 |
| Mercury | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 5 | 20 | 29 | 35 | 26 | 27 | 25 | 22 | 21.4 | -- | 8.9 | 5.8 | 13.9 | 15 | < 5.0 | < 5.0 | 1.3 | 1.4 | 1.3 | 1.8 | 1.7 | 4.3 |
| Radium-226 | pCi/L | N/A | <0.199 | <0.141 | <0.319 | <0.166 | <0.284 | <0.160 | <0.296 | <1.12 | -- | < 0.742 | 0.350 | < 0.771 | 0.226 | 0.272 | < 0.192 | 0.209 | 0.15 | 0.33 | 0.89 | 0.37 | 0.54 |
| Radium-226/228 | pCi/L | N/A | 1.01 | <0.447 | <0.435 | <0.402 | <0.496 | <0.394 | <0.599 | <2.07 | -- | < 1.61 | < 1.25 | < 1.52 | < 0.532 | 0.726 | 0.622 | 0.209 | 0.950 | 1.830 | 1.1 | 0.65 | 1.13 |
| Radium-228 | pCi/L | N/A | 0.956 | <0.447 | <0.435 | <0.402 | <0.496 | <0.394 | <0.599 | <0.954 | -- | < 0.872 | < 0.923 | < 0.747 | < 0.532 | 0.454 | < 0.519 | -0.278 | 0.8 | 1.5 | 0.21 | -0.41 | 0.59 |
| Selenium | ug/L | 1 | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.34 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 2.0 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 2.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 4 | < 4 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 | 0.31 |
| Iron | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 200 | 140 | 110 | 260 |
| Nickel | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | < 0.25 | 12 |
| Silver | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 |
| Zinc | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | 1.2 | < 1.2 | < 1.2 |

| | |
|---|---|
| Sample Location: | MW-15011 |
| Compliance Phase: | AM |
| Sample Dates: | /2021 |

| Constituent | Unit | RDL (Most Common from Previous Data | |
|---|---|---|---|
| **Field Parameters** | | | Field Dup |
| pH | su | -- | 7.51 |
| Conductivity | µS/cm | -- | 970 |
| Turbidity | NTU | -- | 0.02 |
| Dissolved Oxygen | mg/L | -- | 4.77 |
| Temperature | °C | -- | 13.9 |
| Oxidation Reduction Potential | mV | -- | -129.1 |
| **Appendix III** | | | |
| Boron | ug/L | 125 | 1,900 |
| Calcium | mg/L | 1 | 170 |
| Chloride | mg/L | 5 | 17 |
| Fluoride | ug/L | 1000 | < 100 |
| pH, Field | SU | 0.1 | 7.51 |
| Sulfate | mg/L | 2 | 170 |
| Total Dissolved Solids | mg/L | 10 | 400 |
| **Appendix IV** | | | |
| Antimony | ug/L | 1 | < 0.25 |
| Arsenic | ug/L | 1 | < 0.55 |
| Barium | ug/L | 1 | 90 |
| Beryllium | ug/L | 1.0 | < 0.25 |
| Cadmium | ug/L | 0.2 | < 0.25 |
| Chromium | ug/L | 1 | 0.41 |
| Cobalt | ug/L | 15 | < 0.52 |
| Fluoride | ug/L | 1000 | < 100 |
| Lead | ug/L | 1 | < 0.55 |
| Lithium | ug/L | 10 | 8.8 |
| Mercury | ug/L | 0.2 | < 0.2 |
| Molybdenum | ug/L | 5 | 3.7 |
| Radium-226 | pCi/L | N/A | 0.42 |
| Radium-226/228 | pCi/L | N/A | 1.14 |
| Radium-228 | pCi/L | N/A | 0.72 |
| Selenium | ug/L | 1 | < 0.5 |
| Thallium | ug/L | 2.0 | < 0.38 |
| Total Suspended Solids | mg/L | 2.5 | < 8 |
| **Michigan CCR** | | | |
| Copper | ug/L | -- | < 0.25 |
| Iron | ug/L | -- | 260 |
| Nickel | ug/L | -- | 12 |
| Silver | ug/L | -- | < 0.05 |
| Vanadium | ug/L | -- | < 1.2 |
| Zinc | ug/L | -- | < 1.2 |

| | Sample Location: | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 | MW-15012 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM |
| | Sample Dates: | 12/1/2015 | 2/17/2016 | 4/13/2016 | 7/13/2016 | 9/29/2016 | 2/14/2017 | 4/5/2017 | 7/12/2017 | 9/13/2017 | 4/17/2018 | 6/13/2018 | 11/28/2018 | 4/10/2019 | | 9/25/2019 | 5/7/2020 |
| Constituent | Unit | RDL (Most Common from Previous Data | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | | | Field Dup | | |
| pH | su | -- | 7.98 | -- | 8.1 | 8.9 | 9.2 | 8.6 | 8.5 | 9.89 | 11.4 | 9.7 | 10.2 | 9.8 | 9.4 | 9.4 | 10.1 | 10.02 |
| Conductivity | µS/cm | -- | 374 | -- | 570 | 406 | 354 | 318 | 340 | 265 | 441 | 774 | 884 | 556 | 420 | 420 | 1,123 | 1,573 |
| Turbidity | NTU | -- | 2.25 | -- | 1.8 | <1 | <1 | <1 | <1 | 4.41 | <1 | 0.5 | 0.8 | 0.66 | 4.3 | 4.3 | 1.41 | 40.91 |
| Dissolved Oxygen | mg/L | -- | 0.49 | -- | 0.2 | 0.4 | 0.5 | 0.6 | 0.4 | 0.12 | 0.12 | 0.24 | 0.34 | 0.34 | 0.65 | 0.65 | 0.37 | 0.13 |
| Temperature | °C | -- | 14.33 | -- | 14.2 | 19.9 | 14.7 | 12.2 | 12.6 | 15.20 | 15.91 | 12.3 | 18.3 | 12.04 | 13.3 | 13.3 | 15.1 | 13.5 |
| Oxidation Reduction Potential | mV | -- | 0.8 | -- | -217.3 | -179.0 | -174.9 | -186.8 | -208.8 | -297.0 | -172.3 | -345.6 | -98.6 | 6.5 | -218.4 | -218.4 | -288.7 | -241.5 |
| **Appendix III** | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 125 | 961 | 1,390 | 1,830 | 1,450 | 1,470 | 1,380 | 1,500 | 1,340 | 1,140 | -- | 1,450 | 1,280 | 1,300 | 1,300 | 1,300 | 1,470 |
| Calcium | mg/L | 1 | 49.5 | 82.1 | 65.5 | 44.5 | 43.5 | 32.0 | 34.9 | 24.6 | 48.7 | -- | 95.1 | 55.7 | 61 | 60 | 140 | 250 |
| Chloride | mg/L | 5 | 20.0 | 20.4 | 23.7 | 23.0 | 22.6 | 19.7 | 22.7 | 24.1 | 23.3 | -- | 22.7 | 21.5 | 20 | 20 | 22 | 21 |
| Fluoride | ug/L | 1000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | 1,200 | 1,100 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 120 |
| pH, Field | SU | 0.1 | 7.98 | 8.1 | 8.1 | 8.9 | 9.2 | 8.6 | 8.5 | 9.89 | 11.4 | 9.7 | 10.2 | 9.8 | 9.4 | -- | 10.1 | 9.4 |
| Sulfate | mg/L | 2 | 69.0 | 111 | 106 | 65.6 | 50.9 | 55.7 | 57.2 | 21.8 | 59.6 | -- | 355 | 137 | 190 | 180 | 540 | 768 |
| Total Dissolved Solids | mg/L | 10 | 300 | 370 | 340 | 250 | 210 | 190 | 200 | 168 | 318 | -- | 902 | 302 | 380 | 380 | 850 | 1,260 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.18 |
| Arsenic | ug/L | 1 | <1 | 2 | 8 | 12 | 9 | 2 | 3 | 6.1 | -- | 1.8 | 3.4 | 1.3 | 1.4 | 1.4 | 2.3 | 2.3 |
| Barium | ug/L | 1 | 40 | 63 | 68 | 34 | 22 | 25 | 28 | 14.3 | -- | 109 | 105 | 51.7 | 79 | 79 | 190 | 234 |
| Beryllium | ug/L | 1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 |
| Cadmium | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | 0.029 |
| Chromium | ug/L | 1 | <1 | <1 | 1 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Cobalt | ug/L | 15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | < 6.0 | -- | 0.26 |
| Fluoride | ug/L | 1000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | 1,200 | 1,100 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 120 |
| Lead | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 |
| Lithium | ug/L | 10 | 15.6 | 20.8 | 19 | 18 | 15 | 11 | 12 | 12 | -- | 13 | 11 | 10 | 12 | 12 | < 10 | 26.6 |
| Mercury | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 |
| Molybdenum | ug/L | 5 | 29 | 9 | 35 | 37 | 44 | 35 | 27 | 94.5 | -- | 50.8 | 71.3 | 28.3 | 26 | 26 | 75 | 245 |
| Radium-226 | pCi/L | N/A | <0.164 | <0.243 | <0.256 | <0.216 | <0.335 | <0.153 | <0.243 | 0.436 | -- | < 0.693 | < 0.526 | 0.700 | < 0.142 | 0.219 | 0.241 | 0.125 |
| Radium-226/228 | pCi/L | N/A | <0.471 | <0.634 | 0.919 | <0.539 | <0.548 | <0.416 | <0.554 | <2.28 | -- | < 1.43 | < 1.32 | 1.27 | < 0.485 | 0.514 | 0.776 | 0.125 |
| Radium-228 | pCi/L | N/A | <0.471 | <0.634 | 0.827 | <0.539 | <0.548 | <0.416 | <0.554 | <2.08 | -- | < 0.733 | < 0.789 | < 0.992 | < 0.485 | < 0.481 | < 0.551 | -0.219 |
| Selenium | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1.2 | -- | 1.2 | 3.3 | < 1.0 | < 1.0 | < 1.0 | 2.2 | 1.4 |
| Thallium | ug/L | 2.0 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 |
| Total Suspended Solids | mg/L | 2.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Iron | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nickel | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Silver | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Vanadium | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Zinc | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | Background | Detection | Initial A.M. | | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/1/2015 | 2/18/2016 | 4/13/2016 | 7/13/2016 | 9/29/2016 | 2/14/2017 | 4/5/2017 | 7/12/2017 | 9/13/2017 | 4/17/2018 | | | 6/13/2018 | | 11/29/2018 | 4/11/2019 | 9/25/2019 | 5/7/2020 | 10/28/2020 | 4/21/2021 |
| **Field Parameters** | | | | | | | | | | | | | | | Field Dup | | | Field Dup | | | | | |
| pH | su | -- | -- | | 7.61 | 7.2 | 7.4 | 7.3 | 7.4 | 7.7 | 7.4 | 7.36 | 7.9 | 7.6 | 7.6 | | 7.7 | 7.7 | 7 | 7.3 | 8 | 8.8 | 7.72 | 7.74 |
| Conductivity | µS/cm | -- | -- | | 528 | 436 | 400 | 392 | 449 | 444 | 435 | 417 | 320 | 423 | 423 | | 400 | 400 | 321 | 304 | 400 | 695 | 432 | 740 |
| Turbidity | NTU | -- | -- | | 1.59 | <1 | <1 | <1 | <1 | 1.2 | <1 | 3.97 | <1 | 1.6 | 1.6 | | 1.2 | 1.2 | 0.63 | 3.1 | 0.76 | 105.32 | 0.02 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.07 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 0.13 | 0.12 | 0.28 | 0.28 | | 0.41 | 0.41 | 0.89 | 0.08 | 0.35 | 0.15 | 0.15 | 0.43 |
| Temperature | °C | -- | -- | | 14.25 | 8.7 | 13.5 | 15.8 | 14.4 | 12.4 | 13.0 | 14.80 | 15.46 | 12.4 | 12.4 | | 18.3 | 18.3 | 11.85 | 12 | 14.8 | 13.4 | 13.5 | 13.3 |
| Oxidation Reduction Potential | mV | -- | -- | | -262.9 | -119.7 | -130.3 | -117.9 | -118.8 | -161.6 | -137.0 | -169.9 | -122.3 | -91.5 | -91.5 | | -17.8 | -17.8 | 70.6 | -126.9 | -209.3 | -211.8 | -136.1 | -115.7 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 1,140 | 1,290 | 1,180 | 1,080 | 1,090 | 1,050 | 1,120 | 916 | 1,270 | -- | -- | | 1,130 | 1,100 | 1,070 | 1,200 | 1,300 | 1,230 | 1,100 | 1,400 |
| Calcium | mg/L | 0.26 | 2.6 | | 65.2 | 58.3 | 47.5 | 48.4 | 59.7 | 52.5 | 50.9 | 43.9 | 34.4 | -- | -- | | 47.3 | 48.9 | 50.8 | 50 | 45 | 66 | 52 | 120 |
| Chloride | mg/L | 1.5 | 1.5 | | 21.0 | 20.9 | 21.5 | 21.0 | 22.9 | 19.8 | 19.9 | 23.4 | 21.2 | -- | -- | | 21.5 | 21.6 | 21.3 | 21 | 24 | 21 | 24 | 23 |
| Fluoride | ug/L | 200 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 280 | 490 | 270 |
| pH, Field | SU | -- | | | 7.61 | 7.2 | 7.4 | 7.3 | 7.4 | 7.7 | 7.4 | 7.36 | 7.9 | 7.6 | -- | | 7.7 | -- | 7.0 | 7.3 | 8.0 | 8.7 | 7.7 | 7.74 |
| Sulfate | mg/L | 6 | 30 | | 89.0 | 44.3 | 34.3 | 27.5 | 31.3 | 23.1 | 15.1 | 8.7 | 59.9 | -- | -- | | 8.7 | 7.9 | 5.9 | 4.8 | 53 | 226 | 6 | < 3 |
| Total Dissolved Solids | mg/L | 40 | 40 | | 330 | 290 | 260 | 250 | 250 | 260 | 250 | 240 | 192 | -- | -- | | 324 | 268 | 210 | 260 | 250 | 451 | 310 | 430 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 1.3 | < 0.55 | < 0.55 |
| Barium | ug/L | 2.5 | 2.5 | | 71 | 58 | 49 | 47 | 51 | 52 | 48 | 41.9 | -- | 43.3 | 44.7 | | 43.9 | 41.1 | 39.5 | 45 | 31 | 40 | 48 | 88 |
| Beryllium | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | <1 | <1 | 2 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 1.0 | 0.1 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.082 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 280 | 490 | 270 |
| Lead | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | | 17.5 | 19.9 | 18 | 17 | 18 | 18 | 17 | 23 | -- | 27 | 28 | | 24 | 24 | 23 | 17 | 13 | 17 | 24 | 17 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | 17 | 20 | 21 | 12 | 11 | 10 | 9 | 7.7 | -- | < 5.0 | < 5.0 | | < 5.0 | < 5.0 | 5.0 | 5.7 | 9.9 | 77.2 | 3.7 | 1.6 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 0.272 | <0.299 | 0.173 | <0.181 | <0.215 | <0.230 | <0.215 | 0.731 | -- | < 0.505 | < 0.506 | | < 0.546 | < 0.585 | < 0.696 | < 0.232 | < 0.201 | 0.495 | 0.19 | 0.37 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | 1.19 | <0.527 | 0.900 | 0.596 | <0.598 | <0.481 | <0.516 | <1.56 | -- | < 1.14 | < 1.29 | | < 1.30 | < 1.49 | < 1.42 | < 0.450 | 0.508 | 0.495 | 1.060 | 0.83 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | 0.914 | <0.527 | 0.727 | 0.483 | <0.598 | <0.481 | <0.516 | <0.940 | -- | < 0.633 | < 0.780 | | < 0.754 | < 0.903 | < 0.728 | < 0.450 | < 0.482 | -1.76 | 0.87 | 0.46 |
| Selenium | ug/L | 0.5 | 0.5 | | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.9 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | < 2.5 | < 20 | 4 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 |
| Iron | ug/L | 250 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | 900 | 2,200 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 |

| | | | Sample Location: | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 | MW-15013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 10/21/2021 | 5/5/2022 | 10/19/2022 | 4/12/2023 | 10/3/2023 | 3/28/2024 | 10/24/2024 | 4/24/2025 | 10/29/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | |
| pH | su | -- | -- | 7.33 | 7.17 | 7.11 | 7.05 | 7.13 | 7.46 | 7.51 | 7.55 | 7.76 |
| Conductivity | µS/cm | -- | -- | 1,000 | 850 | 740 | 850 | 830 | 700 | 1180 | 0.577 | 1,570 |
| Turbidity | NTU | -- | -- | 0.02 | 1.96 | 1.48 | 0.84 | 7.38 | 2.21 | 1.07 | 2.02 | 5.76 |
| Dissolved Oxygen | mg/L | -- | -- | 0.04 | 0.04 | 0.02 | 0.12 | 0.21 | 0.01 | 0.05 | 0.19 | 0.17 |
| Temperature | °C | -- | -- | 14.4 | 13.6 | 14.0 | 13 | 16.8 | 10.4 | 13.2 | 11.1 | 12.8 |
| Oxidation Reduction Potential | mV | -- | -- | -207.1 | -296.4 | -128.0 | -170 | -114.7 | 104.7 | 18.3 | -85 | 154.5 |
| **Appendix III** | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 1,500 | 1,400 | 890 | 1,000 | 780 | 700 | 830 | 660 | 1,200 |
| Calcium | mg/L | 0.26 | 2.6 | 160 | 120 | 100 | 110 | 110 | 97 | 220 | 79 | 280 |
| Chloride | mg/L | 1.5 | 1.5 | 27 | 41 | 46 | 44 | 40 | 48 | 39 | 48 | 35 |
| Fluoride | ug/L | 200 | 200 | 170 | < 100 | < 100 | 140 | 97 | 230 | < 200 | 130 | 130 |
| pH, Field | SU | -- | | 7.33 | 7.2 | 7.11 | 7.05 | 7.13 | 7.46 | 7.51 | 7.55 | 7.76 |
| Sulfate | mg/L | 6 | 30 | 100 | 110 | 54 | 20 | 70 | 74 | 360 | 48 | 650 |
| Total Dissolved Solids | mg/L | 40 | 40 | 660 | 410 | 480 | 470 | 490 | 460 | 810 | 360 | 1,200 |
| **Appendix IV** | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 0.78 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | 0.2 | 0.24 | 2 | 0.14 |
| Barium | ug/L | 2.5 | 2.5 | 140 | 76 | 120 | 140 | 120 | 93 | 180 | 75 | 200 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.28 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 2.5 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | 0.11 | 0.12 | 0.35 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | 170 | < 100 | < 100 | 140 | 97 | 230 | < 200 | 130 | 130 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | 4.7 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 21 | 37 | 35 | 38 | 31 | 28 | 46 | 27 | 41 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 3.2 | 2 | < 1.2 | < 6.2 | < 6.2 | 0.62$^{J+}$ | 1.1 | 1.2 | 0.75 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.57 | 0.16 | 0.32 | 0.12 | 0.338 | 0.181 | 0.52 | 0.0625 | 0.123$^{U}$ |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.57 | 0.16 | 0.95$^{U}$ | 0.36 | 0.996$^{J+}$ | 1.06 | 0.52$^{U}$ | 0.447 | 0.574$^{U}$ |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.18 | 0.09 | 0.63$^{U}$ | 0.24 | 0.658$^{UJ}$ | 0.879 | 0.11$^{U}$ | 0.384 | 0.451$^{U}$ |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | < 0.5 | 0.28 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | 0.14 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | 10 | < 7.7 | < 8.0 | < 4 | < 4 | 4.0 | < 4.0 | 240.0 | < 4.0 |
| **Michigan CCR** | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | 0.26 | < 0.25 | < 1.2 | 3.3 | < 0.25 | 0.27 | 5.1 | < 0.25 |
| Iron | ug/L | 250 | 50 | 5,100 | 1,400 | 1,300 | 1,400 | 700 | 420 | 290 | 2,700 | 120 |
| Nickel | ug/L | 1.2 | 1.2 | < 0.25 | 0.35 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 1.8 | 1.5 | 2.4 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | 5.3 | 0.57 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | 15 | 11 | 8.3 | 7.2 | 3.3 | 16 |

| | Sample Location: | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 | MW-15014 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | Sample Dates: | 12/1/2015 | 2/18/2016 | 4/18/2016 | 7/13/2016 | 9/29/2016 | 2/14/2017 | 4/5/2017 | 7/12/2017 | 9/13/2017 | 4/17/2018 | 6/13/2018 | 11/29/2018 | 4/11/2019 | | 9/25/2019 | 5/6/2020 | 10/28/2020 | 4/21/2021 | 10/21/2021 |
| Constituent | Unit | RDL (Most Common from Previous Data | | | | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | | | Field Dup | | | | | |
| pH | su | -- | 11.53 | 11.6 | 11.2 | 11 | 11.1 | 11.5 | 11.3 | 11.5 | 12 | 11.6 | 11.4 | 11.5 | 11.3 | 11.3 | 11.3 | 11.07 | 11.11 | 10.99 | 9.99 |
| Conductivity | µS/cm | -- | 605 | 642 | 654 | 676 | 590 | 576 | 568 | 761 | 679 | 554 | 474 | 391 | 373 | 373 | 524 | 476 | 1650 | 391 | 1340 |
| Turbidity | NTU | -- | 3.47 | <1 | 1 | 1.6 | <1 | <1 | <1 | 4.76 | 1.65 | 2.9 | 2.2 | 2.39 | 3.6 | 3.6 | 0.25 | 144.5 | 22.7 | 2.31 | 0.02 |
| Dissolved Oxygen | mg/L | -- | 0.17 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.14 | 0.09 | 0.21 | 0.27 | 0.36 | 0.04 | 0.04 | 0.32 | 0.1 | 0.04 | 0.28 | 0.49 |
| Temperature | °C | -- | 15.87 | 10.8 | 13.6 | 14.8 | 12.4 | 10.9 | 10.5 | 14.00 | 15.11 | 11.6 | 17.9 | 10.14 | 11.8 | 11.8 | 14.6 | 13.4 | 12.9 | 12.1 | 14.2 |
| Oxidation Reduction Potential | mV | -- | -308.7 | -215.0 | -221.3 | -205.9 | -242.5 | -226.2 | -237.2 | -315.6 | -185.6 | -155.1 | -71.2 | -33.7 | -263.5 | -263.5 | -286.5 | -389.2 | -274.6 | -143.6 | -278.2 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 125 | 2,560 | 2,230 | 1,840 | 1,630 | 1,690 | 1,530 | 1,560 | 1,300 | 1,410 | -- | 1,370 | 1,400 | 1,500 | 1,600 | 1,400 | 1,330 | 1,000 | 1,100 | 1,200 |
| Calcium | mg/L | 1 | 75.6 | 75.3 | 63.9 | 73.5 | 64.7 | 66.3 | 65.3 | 61.8 | 57.8 | -- | 50.8 | 51.1 | 49 | 53 | 50 | 43 | 350 | 40 | 240 |
| Chloride | mg/L | 5 | 21.0 | 21.9 | 21.9 | 22.0 | 22.7 | 18.6 | 22.1 | 22.4 | 22.5 | -- | 21.3 | 20.5 | 20 | 22 | 23 | 24 | 24 | 22 | 22 |
| Fluoride | ug/L | 1000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 330 | 330 | 160 | < 100 |
| pH, Field | SU | 0.1 | 11.53 | 11.6 | 11.2 | 11 | 11.1 | 11.5 | 11.3 | 11.5 | 12.0 | 11.6 | 11.4 | 11.5 | 11.3 | -- | 11.3 | 11.1 | 11.1 | 11.0 | 10.0 |
| Sulfate | mg/L | 2 | 43.0 | 34.7 | 31.4 | 35.6 | 23.7 | 27.8 | 23.9 | 24.9 | 19.2 | -- | 2.4 | 12.4 | 12 | 14 | 25 | 12 | 870 | 59 | 770 |
| Total Dissolved Solids | mg/L | 10 | 350 | 310 | 270 | 290 | 250 | 280 | 270 | 292 | 282 | -- | 338 | 224 | 260 | 290 | 250 | 212 | 1,600 | 220 | 1,000 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1.7 | -- | 1.1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.43 | < 0.25 | 0.5 | 0.52 |
| Arsenic | ug/L | 1 | 15 | 11 | 11 | 8 | 9 | 7 | 7 | 8.4 | -- | 6.2 | 5.5 | 4.0 | 3.8 | 4.0 | 2.6 | 2.5 | 2.1 | 4.3 | 1.3 |
| Barium | ug/L | 1 | 329 | 376 | 257 | 508 | 357 | 571 | 546 | 732 | -- | 779 | 607 | 604 | 620 | 630 | 560 | 468 | 480 | 130 | 410 |
| Beryllium | ug/L | 1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | 0.25 |
| Chromium | ug/L | 1 | <1 | 2 | 1 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 1.4 | < 1.0 | 0.17 | < 0.25 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | < 6.0 | -- | 0.081 | < 0.5 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 1000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 330 | 330 | 160 | < 100 |
| Lead | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.11 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 19 | -- | 27 | 16 | 21 | 12 | 11 | 23 | 21 | 35 | 10 | 150 |
| Mercury | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 5 | 119 | 76 | 58 | 69 | 81 | 80 | 77 | 70.9 | -- | 94.7 | 100 | 106 | 120 | 110 | 99 | 88 | 44 | 11 | 1,400 |
| Radium-226 | pCi/L | N/A | <0.176 | <0.175 | <0.177 | 0.214 | <0.218 | <0.211 | <0.289 | <0.511 | -- | < 1.11 | < 1.17 | < 1.52 | < 0.192 | < 0.182 | < 0.185 | 0.143 | 0.15 | 0 | 0.29 |
| Radium-226/228 | pCi/L | N/A | 1.31 | <0.735 | <0.562 | <0.606 | <0.485 | 0.883 | <0.423 | <1.58 | -- | < 2.08 | < 3.02 | < 3.25 | < 0.538 | < 0.379 | < 0.513 | 0.369 | 1.06 | < 0.39 | 1.03 |
| Radium-228 | pCi/L | N/A | 1.23 | <0.735 | <0.562 | <0.606 | <0.485 | 0.810 | <0.423 | <1.07 | -- | < 0.972 | < 1.85 | < 1.73 | < 0.538 | < 0.379 | < 0.513 | 0.225 | 0.91 | 0.26 | 0.74 |
| Selenium | ug/L | 1 | <1 | 1 | <1 | <1 | <1 | 1 | 8 | 2.3 | -- | 1.2 | 1.2 | 2.6 | 5.2 | 2.6 | 4.7 | 3.9 | 0.7 | < 0.5 | < 0.5 |
| Thallium | ug/L | 2.0 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 2.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | 5 | < 4 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | 0.37 |
| Iron | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 200 | 11 | 20 |
| Nickel | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.29 | 0.43 |
| Silver | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 |
| Vanadium | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | 11 | 5.9 |
| Zinc | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |

**MW-15014R**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15014R | MW-15014R | MW-15014R | MW-15014R | MW-15014R | MW-15014R | MW-15014R | MW-15014R | MW-15014R | MW-15014R | MW-15014R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | Background | Background | Background |
| | | | | Sample Dates: | 2/1/2022 | 3/10/2022 | 5/4/2022 | 10/19/2022 | 4/11/2023 | | 10/3/2023 | 3/28/2024 | 10/23/2024 | 4/24/2025 | 10/29/2025 |
| **Field Parameters** | | | | | | | | | | Field Dup | | | | | |
| pH | su | -- | -- | | 7.14 | 7 | 7.18 | 7.10 | 6.83 | 6.83 | 6.97 | 7.12 | 7.04 | 7.11 | 7.01 |
| Conductivity | µS/cm | -- | -- | | 3,400 | 2,820 | 2,620 | 1,270 | 2,140 | 2,140 | 2,280 | 1,820 | 2,000 | 1,419 | 1,816 |
| Turbidity | NTU | -- | -- | | 0.1 | 7.93 | 3.98 | 0.02 | 0.87 | 0.87 | 1.31 | 0.63 | 1.17 | 0.02 | 5.6 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.32 | 0.08 | 0.04 | 0.02 | 0.14 | 0.14 | 0.09 | 0.01 | 0.08 | 0.47 | 0.01 |
| Temperature | °C | -- | -- | | 12.9 | 13.0 | 13.9 | 10.9 | 13.6 | 13.6 | 14.8 | 12 | 13.9 | 14 | 14.1 |
| Oxidation Reduction Potential | mV | -- | -- | | -119 | -110 | -90.2 | -130.4 | -116.2 | -116.2 | -132.5 | 117.6 | -118.9 | -87.7 | -101.1 |
| **Appendix III** | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 1,400 | 1,300 | 1,500 | 1,400 | 1,600 | 1,600 | 1,500 | 1,300 | 1,400 | 1,400 | 1,400 |
| Calcium | mg/L | 1.3 | 2.6 | | 460 | 340 | 350 | 340 | 300 | 300 | 330 | 290 | 320 | 300 | 280 |
| Chloride | mg/L | 1.5 | 1.5 | | 27 | 28 | 28 | 98 | 130 | 120 | 280 | 140 | 130 | 77 | 120 |
| Fluoride | ug/L | 200 | 200 | | 270 | 300 | 270 | 180 | 250 | 200 | 200 | 290 | < 200 | 290 | 510 |
| pH, Field | SU | -- | | | 7.14 | 7 | 7.02 | 7.10 | 6.83 | 6.83 | 6.97 | 7.12 | 7.04 | 7.11 | 7.01 |
| Sulfate | mg/L | 30 | 15 | | 1,700 | 1,400 | 1,300 | 1,100 | 510 | 520 | 250 | 350 | 410 | 530 | 260 |
| Total Dissolved Solids | mg/L | 40 | 49 | | 2,900 | 2,300 | 1,600 | 1,800 | 1,400 | *2,000 R* | 1,500 | 1,400 | 1400 | 1,400 | 1,200 |
| **Appendix IV** | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1.2 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | 2 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 2.8 | 0.28 | 0.26 | 0.2 | 0.25 |
| Barium | ug/L | 2.5 | 2.5 | | 190 | 160 | 170 | 170 | 170 | 160 | 200 | 160 | 180 | 160 | 140 |
| Beryllium | ug/L | 0.25 | 0.25 | | <0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | 0.1 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <1.2 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | <0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.43 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | | <0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | < 2.6 | < 0.52 | 0.13 | < 0.52 | 0.11 |
| Fluoride | ug/L | 200 | 200 | | 270 | 300 | 270 | 180 | 250 | 200 | 200 | 290 | < 200 | 290 | 510 |
| Lead | ug/L | 0.55 | 0.55 | | <2.8 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | | 67 | 36 | 39 | 43 | 130 | 130 | 56 | 48 | 48 | 48 | 41 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | 11 | 3 | 3.3 | 2.0 | < 6.2 | < 6.2 | < 6.2 | 0.68$^{J+}$ | 1.1 | 1.9 | 0.73 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 0.44 | 0.670 | 0.72 | 0.11$^{U}$ | 0.283 | 0.309 | 0.24$^{U}$ | 0.348 | 0.54$^{U}$ | 0.3 | 0.115$^{U}$ |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | 1.76 | 0.670 | 0.72 | 0.23$^{U}$ | 0.452$^{U}$ | 0.642$^{U}$ | 1.45 | 1.43 | 0.75$^{U}$ | 0.431 | 1.21 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | 1.32 | 0.250 | -0.03 | 0.12$^{U}$ | 0.17$^{U}$ | 0.333$^{U}$ | 1.21 | 1.08 | 0.21$^{U}$ | 0.131 | 1.09 |
| Selenium | ug/L | 0.5 | 0.5 | | <0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 2.5 | < 0.5 | 0.11 | < 0.5 | 1.1 |
| Thallium | ug/L | 0.38 | 0.38 | | <1.9 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | | 15 | 18 | 35 | 30$^{J}$ | 28$^{J+}$ | *< 4 UR* | 30 | 14 | 26 | 6 | 17 |
| **Michigan CCR** | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | <0.25 | 1.80 | 0.29 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 250 | 50 | | 1,600 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 6,100 | 7,300 | 5,000 | 6,300 |
| Nickel | ug/L | 1.2 | 1.2 | | 3 | 2.5 | 2 | < 1.2 | < 6.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.33 |
| Silver | ug/L | 0.05 | 0.05 | | <0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | <1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.41 |
| Zinc | ug/L | 1.2 | 1.2 | | <1.2 | < 1.2 | < 1.2 | < 1.2 | 16 | 16 | 13 | 13 | 7 | < 1.2 | 13 |

**MW-15015**
**Charah-BC Cobb**

| | Sample Location: | RDL (Most Common from Previous Data | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 | MW-15015 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Compliance Phase: | | Background | Background | Background | Background | Background | Background | Background | Background | Background | DM | DM | Initial A.M. | AM | AM | AM | AM | AM |
| | Sample Dates: | | 12/1/2015 | 2/18/2016 | 4/13/2016 | 7/13/2016 | 9/29/2016 | 2/14/2017 | 4/5/2017 | 7/12/2017 | | 9/13/2017 | | 4/17/2018 | 6/13/2018 | 11/29/2018 | 4/11/2019 | 9/26/2019 | 5/6/2020 |
| Constituent | Unit | | | | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | Field Dup | | Field Dup | | | | | | |
| pH | su | -- | 7.56 | 7.4 | 7.4 | 7.4 | 7.8 | 7.7 | 7.6 | 8.35 | 8.35 | 8.7 | 8.7 | 8.3 | 7.9 | 7.8 | 7.6 | 8.4 | 7.96 |
| Conductivity | µS/cm | -- | 313 | 298 | 296 | 318 | 349 | 354 | 369 | 329 | 329 | 340 | 340 | 407 | 408 | 345 | 419 | 444 | 944 |
| Turbidity | NTU | -- | 1.84 | <1 | <1 | <1 | <1 | <1 | 1.2 | 1.77 | 1.77 | <1 | <1 | 1.2 | 1.5 | 0.81 | 7.5 | 0.77 | 3.8 |
| Dissolved Oxygen | mg/L | -- | 0.02 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.1 | 0.14 | 0.14 | 0.07 | 0.07 | 0.24 | 0.33 | 0.29 | 0.05 | 0.4 | 0.2 |
| Temperature | °C | -- | 14.51 | 9.4 | 12.5 | 15.8 | 13.6 | 10.8 | 11.1 | 14.10 | 14.10 | 15.06 | 15.06 | 11.2 | 16.4 | 10.91 | 10.2 | 13.5 | 12.8 |
| Oxidation Reduction Potential | mV | -- | -299.8 | -230.1 | -222.5 | -140.4 | -152.8 | -201.7 | -170.2 | -222.6 | -222.6 | -183.4 | -183.4 | -125.4 | 11.3 | -0.4 | -190 | -239 | -304.5 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 125 | 1,190 | 1,170 | 963 | 614 | 656 | 662 | 599 | 489 | 678 | 433 | 433 | -- | 398 | 505 | 630 | 510 | 512 |
| Calcium | mg/L | 1 | 32.8 | 33.0 | 30.6 | 36.2 | 40.1 | 38.4 | 37.6 | 29.4 | 32.3 | 36.9 | 36.9 | -- | 45.0 | 50.8 | 68 | 46 | 128 |
| Chloride | mg/L | 5 | 21.0 | 22.0 | 21.6 | 20.4 | 19.5 | 19.2 | 22.7 | 20.1 | 20.0 | 20.3 | 20.3 | -- | 19.5 | 17.8 | 20 | 17 | 19 |
| Fluoride | ug/L | 1000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | < 1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 140 |
| pH, Field | SU | 0.1 | 7.56 | 7.4 | 7.4 | 7.4 | 7.8 | 7.7 | 7.6 | 8.35 | -- | 8.7 | 8.7 | 8.3 | 7.9 | 7.8 | 7.6 | 8.4 | 8.1 |
| Sulfate | mg/L | 2 | 7.80 | 6.56 | 8.34 | 13.9 | 9.26 | 10.4 | 13.8 | 18.8 | 17.9 | 16.1 | 16.1 | -- | 12.6 | 13.2 | 88 | 69 | 291 |
| Total Dissolved Solids | mg/L | 10 | 220 | 200 | 190 | 180 | 180 | 200 | 190 | 166 | 190 | 192 | 192 | -- | 316 | 238 | 360 | 250 | 646 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.18 |
| Arsenic | ug/L | 1 | 2 | 2 | 2 | 6 | 5 | 5 | 6 | 6.4 | 7.6 | -- | -- | 4.7 | 5.5 | 4.3 | 4.3 | 5.7 | 6.6 |
| Barium | ug/L | 1 | 23 | 22 | 21 | 25 | 28 | 30 | 28 | 30.1 | 33.6 | -- | -- | 39.9 | 37.9 | 41.0 | 63 | 44 | 135 |
| Beryllium | ug/L | 1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 |
| Cadmium | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 |
| Chromium | ug/L | 1 | <1 | <1 | 1 | 1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 2.0 | 0.16 |
| Cobalt | ug/L | 15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.16 |
| Fluoride | ug/L | 1000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 140 |
| Lead | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.074 |
| Lithium | ug/L | 10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 12 | 11 | -- | -- | 16 | 13 | 14 | 11 | < 10 | 21.7 |
| Mercury | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 |
| Molybdenum | ug/L | 5 | 17 | 14 | 17 | 11 | 10 | 9 | 11 | 11.9 | 13.0 | -- | -- | 9.4 | 7.0 | 7.2 | 11 | < 10 | 9.6 |
| Radium-226 | pCi/L | N/A | <0.193 | <0.157 | <0.242 | <0.133 | <0.378 | <0.166 | <0.340 | <0.832 | < 0.698 | -- | -- | < 0.467 | < 0.475 | < 0.677 | < 0.224 | < 0.165 | 0.932 |
| Radium-226/228 | pCi/L | N/A | <0.578 | <0.577 | <0.521 | <0.467 | 0.850 | <0.408 | <0.420 | <1.63 | < 1.45 | -- | -- | < 1.20 | < 1.24 | < 1.75 | < 0.518 | < 0.491 | 0.932 |
| Radium-228 | pCi/L | N/A | <0.578 | <0.577 | <0.521 | <0.467 | 0.850 | <0.408 | <0.420 | <0.799 | < 0.748 | -- | -- | < 0.730 | < 0.763 | < 1.07 | < 0.518 | < 0.491 | -1.49 |
| Selenium | ug/L | 1 | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 2.0 | 0.39 |
| Thallium | ug/L | 2.0 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 |
| Total Suspended Solids | mg/L | 2.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Iron | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nickel | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Silver | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Vanadium | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Zinc | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| | | | Sample Location: | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R | MW-15015R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/21/2020 | 6/15/2020 | 10/30/2020 | 4/21/2021 | 10/21/2021 | 5/4/2022 | 10/19/2022 | 4/11/2023 | | 10/3/2023 | 3/28/2024 | 10/23/2024 | 4/24/2025 | 10/29/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | Field Dup | | | | | |
| pH | su | -- | -- | 7.67 | 6.84 | 7.89 | 7.41 | 7.5 | 7.37 | 7.20 | 7.07 | 7.07 | 7.19 | 7.15 | 7.09 | 7.04 | 7.04 |
| Conductivity | µS/cm | -- | -- | 1,721 | 1,010 | 1,570 | 1,680 | 2,200 | 2,990 | 2,200 | 2,850 | 2,850 | 2,430 | 2,370 | 2,800 | 2,184 | 2,940 |
| Turbidity | NTU | -- | -- | 5.05 | 6.78 | 2.96 | 0.02 | 0.02 | 6.5 | 1.98 | 2.49 | 2.49 | 0.36 | 7.62 | 0.23 | 9.29 | 2.61 |
| Dissolved Oxygen | mg/L | -- | -- | 0.23 | 0.1 | 0.66 | 0.13 | 0.09 | 0.23 | 0.02 | 0.79 | 0.79 | 0.1 | 0.12 | 0.08 | 0.3 | 0.01 |
| Temperature | °C | -- | -- | 13.3 | 11.7 | 14.2 | 11.9 | 13.5 | 10.7 | 13.2 | 11.6 | 11.6 | 14 | 10.7 | 14.2 | 12.6 | 14.6 |
| Oxidation Reduction Potential | mV | -- | -- | -151.9 | -321.1 | -233.3 | -83.4 | -142 | -50 | -108.9 | -81 | -81 | -119.4 | 122.4 | -90.2 | -54.5 | -79.3 |
| **Appendix III** | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 718 | 675 | 870 | 1,100 | 1,400 | 1,600 | 1,400 | 2,000 | 1,900 | 1,600 | 1,700 | 2,200 | 2,100 | 2,200 |
| Calcium | mg/L | 2.6 | 5.1 | 282 | 228 | 240 | 250 | 330 | 510 | 340 | 510 | 460$^{J}$ | 430 | 400 | 540 | 580 | 550 |
| Chloride | mg/L | 1.5 | 1.5 | 17 | 17 | 20 | 21 | 24 | 29 | 25 | 33 | 32 | 26 | 29 | 37 | 45 | 38 |
| Fluoride | ug/L | 200 | 200 | 84 | 12 | 140 | 180 | < 100 | 110 | < 100 | < 100 | < 100 | 110 | < 100 | < 200 | < 200 | 130 |
| pH, Field | SU | -- | | 7.70 | 7.80 | 7.89 | 7.41 | 7.5 | 7.49 | 7.20 | 7.07 | 7.07 | 7.19 | 7.15 | 7.09 | 7.04 | 7.04 |
| Sulfate | mg/L | 60 | 60 | 825 | 636 | 670 | 670 | 1,200 | 1,700 | 1,300 | 1,400 | 1,300 | 1,100 | 1,100 | 1300 | 1,700 | 1,500 |
| Total Dissolved Solids | mg/L | 40 | 74 | 1,460 | 1,140 | 1,200 | 1,300 | 860 | 1,600 | 2,000 | 2,400 | 2,300 | 2,000 | 2,300 | 2400 | 2,800 | 2,600 |
| **Appendix IV** | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 1.0 | < 1.0 | < 0.25 | < 0.25 | < 0.25 | 4 | 0.85 | 13$^{J+}$ | 6.9$^{J-}$ | < 1.2 | 1.7 | 0.41 | 0.62 | 0.27 |
| Arsenic | ug/L | 0.55 | 0.55 | 12.7 | 8.8 | 12.0 | 3.2 | 8.6 | 25 | 24 | 38 | 37 | 19 | 23 | 43 | 55 | 60 |
| Barium | ug/L | 2.5 | 2.5 | 107 | 108 | 140 | 150 | 120 | 120 | 170 | 83 | 79 | 150 | 60 | 82 | 66 | 70 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.20 | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | 0.058 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.20 | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.22 | < 1.0 | < 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | 0.42 | 0.31 | < 0.5 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | < 2.6 | 0.22 | 0.21 | 0.15 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | 84 | 12 | 140 | 180 | < 100 | 110 | < 100 | < 100 | < 100 | 110 | < 100 | < 200 | < 200 | 130 |
| Lead | ug/L | 2.8 | 1.1 | < 1.0 | < 1.0 | < 0.55 | < 0.55 | < 2.8 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 2.8 | < 1.1 |
| Lithium | ug/L | 25 | 2.5 | 36 | 23.2 | 27 | 3.8 | 55 | 40 | 41 | 120 | 140 | 52 | 48 | 58 | 67 | 58 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.20 | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 27.7 | 23.1 | 18 | 4.4 | 2 | 430 | 240 | 230 | 180 | 30 | 240 | 180 | 140 | 120 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.394 | 0.166 | 0.09 | 0.13 | 0.25 | 0.12 | 0.33 | 0.398$^{J+}$ | 0.24$^{J-}$ | 0.398 | 0.148$^{U}$ | 0.16$^{U}$ | 0.15 | 0.0933$^{U}$ |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.918 | 2.12 | 0.58 | < 0.47 | 0.25 | < 1 | 1.58 | 2.05$^{J+}$ | 0.892$^{J-}$ | 0.998$^{J+}$ | 0.63$^{U}$ | 0.46$^{U}$ | 0.681 | 0.386$^{U}$ |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.524 | 1.95 | 0.49 | 0.1 | -2.16 | -0.13 | 1.25 | 1.65$^{J+}$ | 0.652$^{J-}$ | 0.601$^{J+}$ | 0.482 | 0.3$^{U}$ | 0.531 | 0.293$^{U}$ |
| Selenium | ug/L | 0.5 | 0.5 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | 1.1 | 1.0 | < 2.5 | < 2.5 | < 2.5 | 0.27 | 0.29 | 0.24 | 0.32 |
| Thallium | ug/L | 1.9 | 0.75 | < 1.0 | < 1.0 | < 0.38 | < 0.38 | < 1.9 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 1.9 | < 0.75 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | 4 | < 2.5 | < 4 | 9 | 46 | 10 | 16 | 5 | 6 | 31 | 4 | 17 | 12 | 20 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | < 1 | < 0.25 | < 0.25 | 0.91 | 0.42 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 500 | 50 | -- | -- | 390 | 660 | 24,000 | 3,600 | 8,400 | 4,100 | 4,100 | 16,000 | 3,000 | 5,000 | 8,900 | 8,400 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | < 50 | < 0.25 | < 0.25 | 0.65 | < 1.2 | < 6.2 | < 6.2 | < 6.2 | 1.2 | 0.7 | 0.82 | 0.54 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | < 10 | 9.4 | < 1.2 | 660 | 66 | 240$^{J+}$ | 150$^{J-}$ | 19 | 34 | 51 | 31 | 28 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | 9.5 | 8.4 | 10 | 4.3 | 2.5 | < 1.2 | 4.9 |

| | Sample Location: | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 | MW-15016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM |
| | Sample Dates: | 12/1/2015 | 2/18/2016 | 4/13/2016 | 7/13/2016 | 9/29/2016 | 2/14/2017 | 4/5/2017 | 7/12/2017 | 9/13/2017 | 4/17/2018 | 6/12/2018 | 11/29/2018 | 4/11/2019 | 9/26/2019 | 5/6/2020 |
| Constituent | Unit | RDL (Most Common from Previous Data | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | | | | |
| pH | su | -- | 6.55 | 6.5 | 6.4 | 6.3 | 6.4 | 6.4 | 6.6 | 6.44 | 6.6 | 6.8 | 6.5 | 6.6 | 6.4 | 6.6 | 6.35 |
| Conductivity | µS/cm | -- | 1,902 | 2,061 | 2,170 | 2,171 | 2,161 | 2,061 | 1,929 | 2,005 | 2,018 | 2,121 | 2,038 | 1,607 | 1,552 | 2,143 | 2,084 |
| Turbidity | NTU | -- | 2.92 | 2.8 | <1 | 5 | <1 | 1.3 | <1 | 3.58 | 3.11 | 2.2 | 3.2 | 2.41 | 5.6 | 4.45 | 119.37 |
| Dissolved Oxygen | mg/L | -- | 0.84 | 0.1 | 0.1 | 0.3 | 0.3 | 0.5 | 0.4 | 0.09 | 0.11 | 0.2 | 0.27 | 0.37 | 0.04 | 0.28 | 0.12 |
| Temperature | °C | -- | 10.85 | 11.0 | 12.1 | 16.7 | 15.0 | 11.4 | 10.6 | 14.21 | 15.55 | 9.9 | 17.8 | 11.5 | 11.2 | 15 | 12.8 |
| Oxidation Reduction Potential | mV | -- | -109.7 | -61.8 | -92.2 | -126.3 | -90.1 | -97.3 | -96.3 | -63.7 | -87.9 | -71.6 | -88.4 | -15.5 | -100.6 | -109.8 | -184 |
| **Appendix III** | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 125 | 108 | 119 | 86 | 100 | 88 | 92 | 83 | 85.9 | 83.0 | -- | 76.6 | 80.8 | 110 | 100 | 89 |
| Calcium | mg/L | 1 | 172 | 184 | 164 | 172 | 181 | 176 | 172 | 170 | 182 | -- | 168 | 169 | 170 | 160 | 176 |
| Chloride | mg/L | 5 | 200 | 204 | 203 | 165 | 204 | 196 | 200 | 10.4 | 226 | -- | 197 | 201 | 190 | 230 | 239 |
| Fluoride | ug/L | 1000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | <2.6 |
| pH, Field | SU | 0.1 | 6.55 | 6.5 | 6.4 | 6.3 | 6.4 | 6.4 | 6.6 | 6.44 | 6.6 | 6.8 | 6.5 | 6.6 | 6.4 | 6.6 | 6.7 |
| Sulfate | mg/L | 2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 20 | <0.041 |
| Total Dissolved Solids | mg/L | 10 | 980 | 1,000 | 980 | 920 | 930 | 990 | 1,000 | 1,050 | 995 | -- | 986 | 968 | 1,000 | 980 | 944 |
| **Appendix IV** | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 |
| Arsenic | ug/L | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 1.5 | -- | 1.5 | 1.3 | 1.3 | 1.6 | 1.4 | 1.6 |
| Barium | ug/L | 1 | 656 | 647 | 614 | 619 | 621 | 666 | 613 | 596 | -- | 649 | 652 | 548 | 700 | 630 | 678 |
| Beryllium | ug/L | 1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 |
| Cadmium | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 |
| Chromium | ug/L | 1 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 1.9 | -- | 2.1 | 2.0 | 2.3 | 2.3 | 2.4 | 1.5 |
| Cobalt | ug/L | 15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 1.6 |
| Fluoride | ug/L | 1000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 100 |
| Lead | ug/L | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.045 |
| Lithium | ug/L | 10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | -- | < 10 | < 10 | < 10 | < 10 | < 10 | 8.7 |
| Mercury | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 |
| Molybdenum | ug/L | 5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 1.0 |
| Radium-226 | pCi/L | N/A | <0.263 | 1.51 | 1.31 | 1.50 | 1.06 | 1.17 | 1.60 | 1.30 | -- | 1.56 | < 0.810 | 1.75 | 1.18 | 1.31 | 1.37 |
| Radium-226/228 | pCi/L | N/A | 2.29 | 3.83 | 3.00 | 3.18 | 2.74 | 3.54 | 3.66 | 2.36 | -- | 3.64 | 2.50 | 3.95 | 2.94 | 3.27 | 2.02 |
| Radium-228 | pCi/L | N/A | 2.29 | 2.32 | 1.69 | 1.68 | 1.68 | 2.37 | 2.06 | 1.06 | -- | 2.08 | 1.81 | 2.20 | 1.76 | 1.97 | 0.647 |
| Selenium | ug/L | 1 | 2 | 4 | 2 | 7 | 1 | 2 | 2 | 3.6 | -- | 1.5 | 1.4 | < 1.0 | < 1.0 | < 1.0 | 0.47 |
| Thallium | ug/L | 2.0 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 |
| Total Suspended Solids | mg/L | 2.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 111 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | |
| Copper | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Iron | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nickel | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Silver | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Vanadium | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Zinc | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

**MW-15016R**
**Charah-BC Cobb**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R | MW-15016R |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/21/2020 | 6/15/2020 | 10/29/2020 | 4/21/2021 | 10/22/2021 | 5/4/2022 | 10/20/2022 | 4/12/2023 | 10/3/2023 | 3/27/2024 | 10/23/2024 | 4/24/2025 | 10/29/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | 6.54 | 6.52 | 6.66 | 6.55 | 6.5 | 6.36 | 6.57 | 6.48 | 6.57 | 6.58 | 6.46 | 6.46 | 6.48 |
| Conductivity | µS/cm | -- | -- | 1,553 | 2,210 | 2,240 | 2,290 | 2,180 | 2,800 | 2,260 | 2,640 | 2,750 | 2,450 | 2,730 | 2,003 | 2,705 |
| Turbidity | NTU | -- | -- | 20.54 | 0.02 | 0.02 | 0.06 | 0.8 | 6.31 | 0.02 | 5.23 | 2.13 | 0.02 | 0.02 | 5.89 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.13 | 0.13 | 0.06 | 0.36 | 0.22 | 0.15 | 0.02 | 0.35 | 1.98 | 0.04 | 0.05 | 0.22 | 0.07 |
| Temperature | °C | -- | -- | 13.7 | 14.4 | 12.3 | 13.2 | 13.1 | 13.2 | 12.9 | 12.6 | 15.1 | 10.2 | 14.3 | 13.7 | 13.5 |
| Oxidation Reduction Potential | mV | -- | -- | -134.4 | -68.9 | -243.7 | -64.3 | -120.5 | -35.7 | -101.8 | -92.5 | -108.2 | 144.2 | -142.4 | -98.6 | -261 |
| **Appendix III** | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 112 | 109 | 150 | 130 | 170 | 1,800 | 230 | 130 | 140 | 120 | 150 | 150 | 130 |
| Calcium | mg/L | 1.3 | 2.6 | 192 | 195 | 200 | 220 | 240 | 270 | 250 | 250 | 250 | 210 | 250 | 220 | 240 |
| Chloride | mg/L | 7.5 | 7.5 | 314 | 293 | 320 | 340 | 400 | 470 | 440 | 460 | 500 | 420 | 410 | 450 | 430 |
| Fluoride | ug/L | 20 | 200 | 81 | 140 | < 20 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 200 | 53 | < 200 |
| pH, Field | SU | -- | | 6.6 | 6.6 | 6.7 | 6.6 | 6.5 | 6.83 | 6.57 | 6.48 | 6.57 | 6.58 | 6.46 | 6.46 | 6.48 |
| Sulfate | mg/L | 1 | 6.0 | 2.8 | 5.8 | < 0.6 | < 3 | < 3 | < 3 | < 3 | < 3 | < 3 | 4.0 | 2.9 | 0.5 | < 6.0 |
| Total Dissolved Solids | mg/L | 67 | 67 | 1,190 | 1,130 | 1,200 | 1,200 | 1,200 | 1,600 | 1,600 | 1,400 | 1,700 | 1,500 | 1,300 | 1,400 | 1,500 |
| **Appendix IV** | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | 0.22 | 0.14 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 5.5 | 10.1 | 1.6 | 1.7 | 1.3 | 1.4 | 2.0 | < 2.8 | 1.7 | 1.8 | 2.2 | 2.6 | 2.2 |
| Barium | ug/L | 120 | 5 | 806 | 789 | 890 | 960 | 950 | 1,200 | 1,100 | 1,300 | 1,100 | 910 | 1,100 | 1,000 | 1,100 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.20 | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.085 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.20 | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.7 | 0.8 | 0.7 | 1.1 | 0.7 | 0.88 | 0.85 | < 1.2 | < 1.2 | 0.65 | 1.2 | 0.8 | 0.79 |
| Cobalt | ug/L | 0.52 | 0.52 | 1.9 | 1.6 | 1 | 1.3 | 0.8 | 0.9 | 0.91 | < 2.6 | 0.96 | 0.66 | 1.1 | 0.89 | 0.96 |
| Fluoride | ug/L | 200 | 200 | 81 | 140 | < 20 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 200 | 53 | < 200 |
| Lead | ug/L | 0.55 | 0.55 | 0.059 | < 1.0 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | 0.1 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 10.9 | 3.7 | 5.0 | < 5.9 | < 12 | 5.2 | 6.1 | 110 | < 12 | 4.8 | 6.2 | 5 | 4.4 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.20 | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 4.3 | 7.5 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 0.39 | 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.926 | 1.470 | 1.600 | < 0.38 | 1.64 | 3.16 | 2.01 | 1.84 | 2.15 | 1.74 | 2.2 | 1.51 | 2.32 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 2.93 | 4.71 | 4.00 | 1.6 | 4.17 | 3.16 | 4.06 | 5.51 | 5.64 | 5.45 | 4.08 | 4.19 | 6.04 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 2.00 | 3.24 | 2.40 | 2.9 | 2.53 | 2.67 | 2.05 | 3.67 | 3.49 | 3.71 | 1.88 | 2.68 | 3.72 |
| Selenium | ug/L | 0.5 | 0.5 | < 1.0 | < 1.0 | < 0.5 | 1.3 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | 0.12 | 0.19 | 0.14 | 5.9 |
| Thallium | ug/L | 0.38 | 0.38 | < 1.0 | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | 104 | 74 | 120 | 120 | 100 | 130 | 100 | 120 | 120 | 130 | 110 | 130 | 100 |
| **Michigan CCR** | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | < 1 | < 0.25 | < 0.25 | 0.25 | < 0.25 | < 1.2 | 1.4 | 0.35 | 0.43 | < 0.25 | 0.46 |
| Iron | ug/L | 250 | 50 | -- | -- | 49,000 | 54,000 | 60,000 | 74,000 | 67,000 | 65,000 | 64,000 | 55,000 | 73,000 | 55,000 | 60,000 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | < 50 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.16 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 1.6 | < 1.2 | 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | < 10 | 17 | < 1.2 | < 1.2 | < 1.2 | 110 | 73 | < 1.2 | 43 | < 1.2 | 93 |

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | Detection | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/1/2015 | 2/18/2016 | 4/18/2016 | 7/13/2016 | 9/29/2016 | 2/14/2017 | 4/5/2017 | 7/12/2017 | 9/13/2017 | 4/17/2018 | 6/12/2018 | | 11/29/2018 | 4/11/2019 | 9/26/2019 | 5/6/2020 | 10/29/2020 | 4/21/2021 | 10/22/2021 |
| **Field Parameters** | | | | | | | | | | | | | | | | Field Dup | | | | | | | |
| pH | su | -- | -- | | 6.46 | 6.4 | 6.4 | 6.4 | 6.4 | 6.6 | 6.5 | 6.41 | 6.5 | 6.8 | 6.5 | 6.5 | 6.7 | 6.4 | 6.6 | 6.5 | 6.59 | 6.47 | 6.64 |
| Conductivity | µS/cm | -- | -- | | 1,963 | 2,237 | 2,159 | 2,211 | 2,242 | 1,988 | 2,410 | 2,182 | 2,420 | 2,334 | 2,225 | 2,225 | 1,790 | 1,590 | 2,391 | 2,345 | 2,300 | 2,430 | 2,290 |
| Turbidity | NTU | -- | -- | | 1.39 | <1 | <1 | <1 | 3.2 | 5.4 | 3.5 | 3.52 | 2.68 | 2.8 | 1.3 | 1.3 | 0.65 | 1.5 | 1.75 | 165.79 | 0.51 | 0.13 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.04 | 0.2 | 0.3 | 0.2 | 0.5 | 0.5 | 0.0 | 0.07 | 0.17 | 0.21 | 0.24 | 0.24 | 0.42 | 0 | 0.29 | 0.13 | 0.12 | 0.62 | 0.37 |
| Temperature | °C | -- | -- | | 11.22 | 10.1 | 14.8 | 16.1 | 13.9 | 11.1 | 10.0 | 13.75 | 14.49 | 9.6 | 17.4 | 17.4 | 11.15 | 10.7 | 13.8 | 12.2 | 11.9 | 11.7 | 12.4 |
| Oxidation Reduction Potential | mV | -- | -- | | -204.9 | -132.6 | -95.2 | -101.2 | -83.1 | -86.8 | -99.8 | -79.5 | -71.2 | -85.4 | -96.8 | -96.8 | -55 | -185.8 | -120.8 | 27.3 | -168.6 | -41.6 | -149.9 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 59 | 90 | 66 | 76 | 78 | 76 | 75 | 75.0 | 82.8 | -- | 83.8 | 79.0 | 73.2 | 100 | 93 | 88 | 150 | 110 | 110 |
| Calcium | mg/L | 1.3 | 2.6 | | 225 | 247 | 220 | 232 | 252 | 232 | 232 | 203 | 245 | -- | 243 | 232 | 242 | 220 | 220 | 249 | 240 | 260 | 250 |
| Chloride | mg/L | 3.8 | 7.5 | | 200 | 201 | 184 | 204 | 182 | 192 | 187 | 199 | 224 | -- | 224 | 224 | 193 | 210 | 250 | 229 | 230 | 280 | 320 |
| Fluoride | ug/L | 20 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <2.6 | < 20 | < 100 | < 100 |
| pH, Field | SU | -- | | | 6.46 | 6.4 | 6.4 | 6.4 | 6.4 | 6.6 | 6.5 | 6.41 | 6.5 | 6.8 | 6.5 | -- | 6.7 | 6.4 | 6.6 | 6.7 | 6.6 | 6.5 | 6.6 |
| Sulfate | mg/L | 1 | 6.0 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 20 | <0.041 | < 0.6 | < 3 | < 3 |
| Total Dissolved Solids | mg/L | 67 | 110 | | 850 | 1,100 | 1,200 | 1,100 | 1,100 | 1,200 | 1,100 | 1,230 | 1,130 | -- | 1,120 | 1,170 | 1,110 | 1,200 | 1,200 | 1,120 | 1,200 | 1,200 | 1,400 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | 13 | 7 | 5 | 12 | 12 | 5 | 4 | 3.0 | -- | 2.3 | 2.1 | 2.1 | 1.8 | 1.9 | 1.8 | 2.1 | 2.0 | 2.20 | 1.9 |
| Barium | ug/L | 120 | 5 | | 1,030 | 981 | 924 | 985 | 955 | 968 | 876 | 772 | -- | 955 | 936 | 953 | 824 | 960 | 900 | 1,010 | 1,000 | 1,100 | 1,000 |
| Beryllium | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | 0.02 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | 4 | 4 | 4 | 9 | 11 | 5 | 5 | 5.3 | -- | 3.4 | 3.4 | 3.3 | 3.1 | 2.9 | 3.4 | 2.9 | 0.8 | 1.0 | 0.51 |
| Cobalt | ug/L | 0.52 | 0.52 | | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 1.3 | 0.96 | 1.2 | 0.89 |
| Fluoride | ug/L | 200 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <2.6 | < 20 | < 100 | < 100 |
| Lead | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 2.8 |
| Lithium | ug/L | 2.5 | 2.5 | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | -- | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 | 11.2 | 3.5 | < 12 | < 12 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 0.2 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 1.61 | 2.38 | 2.18 | 1.91 | 1.94 | 1.82 | 1.56 | 1.97 | -- | 2.23 | 2.13 | 2.87 | 1.93 | 1.52 | 1.42 | 1.61 | 2.20 | 1.4 | 2.07 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | 4.30 | 5.35 | 5.68 | 5.89 | 4.44 | 4.97 | 4.34 | 4.75 | -- | 5.16 | 5.43 | 5.59 | 5.12 | 5.46 | 4.16 | 4.66 | 5.70 | 4.3 | 4.57 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | 2.69 | 2.97 | 3.50 | 3.98 | 2.50 | 3.15 | 2.78 | 2.78 | -- | 2.93 | 3.30 | 2.72 | 3.19 | 3.93 | 2.75 | 3.05 | 3.50 | 2.9 | 2.5 |
| Selenium | ug/L | 0.5 | 0.5 | | 3 | 4 | 3 | 8 | 2 | 2 | 3 | 2.7 | -- | 1.7 | 2.4 | 2.5 | < 1.0 | < 1.0 | < 1.0 | 0.56 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 1.9 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 137 | 150 | 180 | 130 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 |
| Iron | ug/L | 250 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 70,000 | 77,000 | 74,000 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | < 0.25 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | 5.5 | < 1.2 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 | MW-15017 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/5/2022 | 10/20/2022 | 4/12/2023 | 10/2/2023 | 3/27/2024 | 10/23/2024 | 4/23/2025 | 10/28/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | |
| pH | su | -- | -- | 6.67 | 6.62 | 6.49 | 6.24 | 6.64 | 6.52 | 6.49 | 6.49 |
| Conductivity | µS/cm | -- | -- | 2,570 | 2,300 | 2,490 | 2,500 | 2,260 | 2,530 | 1,799 | 2,102 |
| Turbidity | NTU | -- | -- | 2.99 | 0.02 | 0.92 | 0.02 | 0.10 | 0.02 | 3.84 | 1.23 |
| Dissolved Oxygen | mg/L | -- | -- | 0.16 | 0.02 | 0.22 | 0.33 | 0.10 | 0.14 | 0.12 | 0.05 |
| Temperature | °C | -- | -- | 11.8 | 12.5 | 11.6 | 14 | 10.3 | 13.4 | 11.8 | 13.5 |
| Oxidation Reduction Potential | mV | -- | -- | -94.1 | -99.0 | -93.2 | -79.6 | 136.3 | -93.1 | -33.6 | -115.1 |
| **Appendix III** | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 270 | 200 | 69 | 81 | 52 | 54 | 74 | 47 |
| Calcium | mg/L | 1.3 | 2.6 | 290 | 270 | 270 | 270 | 230 | 270 | 270 | 280 |
| Chloride | mg/L | 3.8 | 7.5 | 340 | 320 | 330 | 350 | 310 | 320 | 360 | 320 |
| Fluoride | ug/L | 20 | 200 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | 44 | < 200 |
| pH, Field | SU | -- | | 6.48 | 6.62 | 6.49 | 6.24 | 6.64 | 6.52 | 6.49 | 6.49 |
| Sulfate | mg/L | 1 | 6.0 | < 3 | < 3 | < 3 | < 3 | 1.4 | < 6.0 | 0.36 | 1.1 |
| Total Dissolved Solids | mg/L | 67 | 110 | 1,100 | 1,400 | 1,200 | 1,400 | 1,300 | 1,200 | 1,300 | 1,400 |
| **Appendix IV** | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 1.9 | 2.2 | < 2.8 | 2.0 | 1.6 | 1.8 | 2.1 | 1.9 |
| Barium | ug/L | 120 | 5 | 1,100 | 1,100 | 1,200 | 1,100 | 880 | 980 | 1,000 | 1,100 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.066 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.62 | 0.96 | 2.3 | < 1.2 | 0.67 | 1.2 | 1 | 1 |
| Cobalt | ug/L | 0.52 | 0.52 | 0.77 | 0.93 | < 2.6 | 0.85 | 0.5 | 0.86 | 0.63 | 0.69 |
| Fluoride | ug/L | 200 | 200 | < 100 | < 100 | < 100 | < 100 | < 100 | < 200 | 360 | < 200 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 4.1 | 4.8 | 18 | < 12 | 4.4 | 5.5 | 5.5 | 3.7 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | 1.5 | 0.36 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.62 | 1.77 | 1.68 | 1.64 | 1.66 | 2.3 | 1.86 | 1.38 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 3 | 4.47 | 4.94 | 4.21 | 5.19 | 3.98 | 5.06 | 4.75 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 2.38 | 2.7 | 3.26 | 2.57 | 3.53 | 1.68 | 3.2 | 3.37 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | 0.15 | < 0.5 | 4.6 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | 150 | 110 | 150 | 100 | 160 | 140 | 180 | 140 |
| **Michigan CCR** | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.4 | < 0.25 | 3.7 | < 1.2 | 0.23 | 0.37 | < 0.25 | 0.93 |
| Iron | ug/L | 250 | 50 | 93,000 | 80,000 | 81,000 | 77,000 | 64,000 | 79,000 | 66,000 | 75,000 |
| Nickel | ug/L | 1.2 | 1.2 | < 0.25 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.18 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 1.6 | 1.2 | 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | 130 | 70 | < 1.2 | 37 | < 1.2 | 92 |

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | Background | Detection Monitoring | | Initial A.M. | | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/2/2015 | 2/18/2016 | 4/14/2016 | 7/14/2016 | 9/29/2016 | 2/14/2017 | 4/5/2017 | 7/11/2017 | | 9/13/2017 | | 4/18/2018 | | 6/12/2018 | 11/29/2018 | 4/11/2019 | 9/26/2019 | 5/6/2020 | 10/29/2020 |
| **Field Parameters** | | | | | | | | | | | | | Field Dup | | Field Dup | | Field Dup | | | | | | |
| pH | su | -- | -- | | 7.0 | 6.9 | 6.8 | 6.5 | 6.5 | 6.7 | 6.8 | 6.78 | 6.78 | 6.8 | 6.8 | 6.9 | 6.9 | 6.8 | 6.9 | 6.8 | 6.9 | 6.61 | 6.86 |
| Conductivity | µS/cm | -- | -- | | 710 | 753 | 772 | 819 | 824 | 793 | 680 | 762 | 762 | 839 | 839 | 817 | 817 | 771 | 648 | 628 | 854 | 894 | 890 |
| Turbidity | NTU | -- | -- | | 5.46 | <1 | <1 | <1 | <1 | <1 | 7 | 1.71 | 1.71 | 4.65 | 4.65 | 4.6 | 4.6 | 2.9 | 0.7 | 8.9 | 6.9 | 174.94 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.20 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.11 | 0.11 | 0.19 | 0.19 | 0.27 | 0.27 | 0.32 | 0.55 | 0.05 | 0.34 | 0.16 | 0.36 |
| Temperature | °C | -- | -- | | 12.77 | 9.8 | 10.1 | 14.9 | 13.0 | 10.5 | 9.5 | 14.54 | 14.54 | 14.52 | 14.52 | 10 | 10 | 17.8 | 10.8 | 11.4 | 14.7 | 12.2 | 12.7 |
| Oxidation Reduction Potential | mV | -- | -- | | -138.5 | -76.6 | -80.8 | -83.7 | -53.5 | -71.1 | -55.3 | -36.7 | -36.7 | -55.3 | -55.3 | -45 | -45 | -68.7 | -6.3 | -133.5 | -100.7 | 4.8 | -231.4 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 487 | 526 | 478 | 399 | 438 | 479 | 493 | 538 | 446 | 492 | 502 | -- | -- | 559 | 488 | 640 | 550 | 541 | 640 |
| Calcium | mg/L | 0.26 | 0.26 | | 88.6 | 100 | 87.9 | 86.8 | 98.5 | 100 | 92.1 | 84.8 | 81.1 | 90.7 | 89.1 | -- | -- | 87.6 | 101 | 96 | 94 | 106 | 110 |
| Chloride | mg/L | 1.5 | 1.5 | | 38.0 | 38.0 | 40.8 | 39.3 | 37.5 | 43.6 | 44.4 | 53.4 | 52.6 | 49.1 | 50.2 | -- | -- | 48.9 | 49.1 | 59 | 55 | 57 | 65 |
| Fluoride | ug/L | 200 | 200 | | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | < 1,000 | <1,000 | < 1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 130 | 150 |
| pH, Field | SU | -- | | | 7.0 | 6.9 | 6.8 | 6.5 | 6.5 | 6.7 | 6.8 | 6.78 | < 2.0 | 6.8 | -- | 6.9 | -- | 6.8 | 6.9 | 6.8 | 6.9 | 7.0 | 6.9 |
| Sulfate | mg/L | 1 | 6.0 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2.0 | 438 | <2.0 | < 2.0 | -- | -- | < 2.0 | < 2.0 | < 2.0 | < 20 | < 0.25 | < 0.6 |
| Total Dissolved Solids | mg/L | 50 | 49 | | 290 | 400 | 430 | 390 | 410 | 450 | 410 | 420 | -- | 392 | 380 | -- | -- | 598 | 426 | 480 | 430 | 424 | 490 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | 1 | <1 | <1 | 2 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.46 | < 0.55 |
| Barium | ug/L | 2.5 | 2.5 | | 155 | 149 | 139 | 133 | 143 | 171 | 149 | 153 | 143 | -- | -- | 139 | 141 | 156 | 127 | 150 | 140 | 154 | 240 |
| Beryllium | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | <1 | 1 | 1 | 1 | 1 | <1 | 1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.35 | 0.29 |
| Cobalt | ug/L | 0.52 | 0.52 | | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | -- | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.35 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | < 1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 130 | 150 |
| Lead | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | | 21.4 | 23.1 | 24 | 12 | 14 | 21 | 21 | 26 | 26 | -- | -- | 29 | 27 | 26 | 22 | 24 | 20 | 24 | 33 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 1.0 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 0.227 | 0.394 | 0.430 | 0.234 | 0.522 | 0.363 | <0.314 | <0.479 | < 1.02 | -- | -- | < 0.843 | 0.290 | < 0.756 | < 0.842 | 0.316 | 0.511 | 0.707 | 0.730 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | <0.586 | 1.17 | 1.08 | 1.08 | 1.33 | 1.36 | 1.37 | <1.25 | < 0.950 | -- | -- | 1.59 | 0.622 | 1.77 | < 1.84 | 0.915 | 1.36 | 0.707 | 1.730 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | <0.586 | 0.778 | 0.649 | 0.845 | 0.803 | 0.996 | 1.08 | <0.767 | < 1.97 | -- | -- | 0.869 | 0.912 | 1.39 | < 0.997 | 0.598 | 0.846 | -0.267 | 1.000 |
| Selenium | ug/L | 0.5 | 0.5 | | <1 | <1 | 1 | 4 | <1 | <1 | <1 | <1 | 1 | -- | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.44 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | -- | 43 | 32 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 |
| Iron | ug/L | 50 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 13,000 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 | MW-15018 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 4/22/2021 | 10/22/2021 | 5/4/2022 | 10/20/2022 | 4/13/2023 | 10/2/2023 | 3/27/2024 | 10/23/2024 | 4/23/2025 | 10/28/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | | |
| pH | su | -- | -- | 6.77 | 7.24 | 7.1 | 7.16 | 6.92 | 6.64 | 7.06 | 7.01 | 6.89 | 6.91 |
| Conductivity | µS/cm | -- | -- | 900 | 504 | 530 | 470 | 506 | 510 | 480 | 575 | 469.1 | 585 |
| Turbidity | NTU | -- | -- | 8.9 | 118 | 9.2 | 8.80 | 7.32 | 0.02 | 0.02 | 1.01 | 4.58 | 3.4 |
| Dissolved Oxygen | mg/L | -- | -- | 0.51 | 0.04 | 0.27 | 0.02 | 0.29 | 0.09 | 0.01 | 0.07 | 0.12 | 0.06 |
| Temperature | °C | -- | -- | 12.1 | 12.3 | 12.1 | 12.9 | 12.1 | 14.4 | 10.6 | 13.8 | 12.7 | 13.4 |
| Oxidation Reduction Potential | mV | -- | -- | -155.9 | -131.1 | -107.4 | -95.2 | -104.2 | -78.5 | 100.5 | -96.9 | -32.1 | -94.3 |
| **Appendix III** | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 660 | 210 | 200 | 180 | 140 | 130 | 130 | 180 | 220 | 230 |
| Calcium | mg/L | 0.26 | 0.26 | 110 | 70 | 74 | 62 | 62 | 63 | 59 | 76 | 80 | 76 |
| Chloride | mg/L | 1.5 | 1.5 | 75 | 34 | 32 | 35 | 34 | 33 | 32 | 43 | 40 | 48 |
| Fluoride | ug/L | 200 | 200 | 250 | 230 | 190 | 180 | 110 | 110 | 240 | < 200 | 180 | 150 |
| pH, Field | SU | -- | | 6.8 | 7.2 | 7.09 | 7.16 | 6.92 | 6.64 | 7.06 | 7.01 | 6.89 | 6.91 |
| Sulfate | mg/L | 1 | 6.0 | < 3 | 4.6 | 9.1 | 13 | < 15 | 7.3 | 3.7 | 3.5 | 0.51 | < 6.0 |
| Total Dissolved Solids | mg/L | 50 | 49 | 500 | 220 | 270 | 290 | *640R* | 300 | 320 | 360 | 360 | 370 |
| **Appendix IV** | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | 3.8 | 0.93 | 0.81 | < 2.8 | 0.52 | 0.44 | 0.64 | 0.57 | 0.35 |
| Barium | ug/L | 2.5 | 2.5 | 280 | 160 | 130 | 120 | 120 | 110 | 93 | 120 | 140 | 120 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.14 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.47 | 1.8 | 0.67 | 0.60 | < 1.2 | < 1.2 | 0.28 | 0.58 | 0.51 | 0.32 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | 0.56 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | < 0.52 | 0.45 | 0.16 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | 250 | 230 | 190 | 180 | 110 | 110 | 240 | < 200 | 180 | 150 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | 3.9 | 0.66 | 0.74 | < 2.8 | < 2.8 | 0.31 | 0.83 | 0.69 | 0.16 |
| Lithium | ug/L | 2.5 | 2.5 | 26 | 14 | 15 | 18 | 17 | 17 | 13 | 19 | 20 | 16 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 0.53 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.75 | 1.16 | 0.44 | 0.4 | 0.179 | 0.168[U] | 0.244 | 0.45[U] | 0.195 | 0.332 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 1.23 | 1.16 | < 1 | 1.09 | 0.705[U] | 0.554[U] | 0.64[U] | 1.25 | 1.27 | 1.1 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.48 | 0.27 | -0.15 | 0.69 | 0.526[U] | 0.386[U] | 0.396[U] | 0.8 | 1.08 | 0.773 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | 0.19 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | 0.17 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | 36 | 98 | 22 | 12 | *7.8R* | 4 | < 8 | 24 | 12 | 7.2 |
| **Michigan CCR** | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.38 | 3 | 0.89 | 0.52 | < 1.2 | < 1.2 | 0.23 | 0.73 | 0.47 | < 0.25 |
| Iron | ug/L | 50 | 50 | 8,500 | 10,000 | 8,200 | 6,700 | 6,100 | 5,900 | 7,600 | 7,800 | 9,600 | 8,600 |
| Nickel | ug/L | 1.2 | 1.2 | < 0.25 | 2 | 0.55 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.15 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | 5.3 | 1.4 | 1.4 | < 6.2 | < 6.2 | < 1.2 | 1.5 | 1.3 | 0.74 |
| Zinc | ug/L | 1.2 | 1.2 | 1.2 | 7.2 | 2.5 | 1.8 | 13 | 8.6 | < 1.2 | 6.2 | 1.5 | 11 |

**MW-15019**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/2/2015 | 2/18/2016 | 4/14/2016 | 7/13/2016 | 9/30/2016 | 2/15/2017 | 4/5/2017 | 7/11/2017 | 9/13/2017 | 4/18/2018 | 6/12/2018 | 11/30/2018 | 4/12/2019 | | 9/26/2019 | 5/5/2020 | | 10/29/2020 | 4/22/2021 |
| **Field Parameters** | | | | | | | | | | | | | | | | | | Field Dup | | | Field Dup | | |
| pH | su | -- | -- | | 7 | 6.8 | -- | 6.7 | 6.4 | 6.8 | 6.9 | 6.79 | 6.7 | 7 | 6.7 | 6.9 | 6.7 | 6.7 | 6.9 | 6.69 | 6.69 | 6.94 | 6.74 |
| Conductivity | µS/cm | -- | -- | | 646 | 727 | -- | 733 | 762 | 692 | 821 | 843 | 1,058 | 944 | 980 | 812 | 560 | 560 | 1,031 | 1,028 | 1,028 | 830 | 540 |
| Turbidity | NTU | -- | -- | | 8 | <1 | -- | <1 | <1 | <1 | <1 | 1.56 | 2.94 | 2.6 | 3.4 | 2.48 | 8.2 | 8.2 | 4.75 | 145.62 | 145.62 | 0.02 | 4.73 |
| Dissolved Oxygen | mg/L | -- | -- | | 1.46 | 0.2 | -- | 0.2 | 0.6 | 0.6 | 0.0 | 0.09 | 0.16 | 0.25 | 0.31 | 1.06 | 0.06 | 0.06 | 0.2 | 0.18 | 0.18 | 0.72 | 0.41 |
| Temperature | °C | -- | -- | | 12.09 | 6.6 | -- | 17.5 | 13.0 | 9.7 | 9.0 | 14.50 | 13.81 | 11.1 | 18.4 | 11.65 | 10.9 | 10.9 | 14.2 | 12.2 | 12.2 | 12.2 | 11.5 |
| Oxidation Reduction Potential | mV | -- | -- | | -88.0 | -122.7 | -- | -106.7 | -70.7 | -119.2 | -125.9 | -78.9 | -70.2 | -89.9 | -102.6 | -10.4 | -142.1 | -142.1 | -123.7 | -16.9 | -16.9 | -181 | -54.3 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 1,530 | 1,590 | 1,440 | 1,320 | 1,260 | 1,370 | 1,410 | 1,430 | 1,010 | -- | 1,170 | 1,540 | 1,600 | 1,500 | 1,000 | 837 | 814 | 730 | 69 |
| Calcium | mg/L | 1.3 | 2.6 | | 84.6 | 93.6 | 83.0 | 90.0 | 92.6 | 91.8 | 92.8 | 90.1 | 107 | -- | 97.7 | 98.2 | 97 | 94 | 100 | 106 | 109 | 110 | 84 |
| Chloride | mg/L | 1.5 | 1.5 | | 34.0 | 32.4 | 33.7 | 37.7 | 35.6 | 34.5 | 33.6 | 52.5 | 73.9 | -- | 67.7 | 42.6 | 39 | 39 | 68 | 80 | 75 | 94 | 12 |
| Fluoride | ug/L | 20 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 51 | 52 | < 20 | < 100 |
| pH, Field | SU | -- | | | 7.0 | 6.8 | 6.9 | 6.7 | 6.4 | 6.8 | 6.9 | 6.79 | 6.7 | 7.0 | 6.7 | 6.9 | 6.7 | -- | 6.9 | 6.9 | 6.9 | 6.9 | 6.74 |
| Sulfate | mg/L | 1 | 6.0 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2.0 | <2.0 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 20 | 0.13 | < 250 | < 0.6 | 160 |
| Total Dissolved Solids | mg/L | 40 | 51 | | 340 | 390 | 440 | 410 | 370 | 410 | 420 | 470 | 618 | -- | 524 | 556 | 430 | 440 | 530 | 481 | 490 | 600 | 350 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.4 | < 6 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.4 | 0.48 | < 0.55 | 1.8 |
| Barium | ug/L | 2.5 | 2.5 | | 91 | 94 | 88 | 88 | 96 | 93 | 90 | 109 | -- | 161 | 187 | 114 | 110 | 120 | 150 | 174 | 171 | 340 | 96 |
| Beryllium | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1 | < 4 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.2 | < 3.1 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | <1 | <1 | 1 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.64 | 0.63 | 0.53 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | < 6.0 | -- | 0.76 | 0.75 | 0.64 | 0.61 |
| Fluoride | ug/L | 200 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 51 | 52 | < 20 | < 100 |
| Lead | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 2 | < 15 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | | 23.7 | 27.9 | 26 | 24 | 22 | 23 | 22 | 27 | -- | 25 | 23 | 26 | 22 | 22 | 20 | 20 | 23 | 5 | < 1.2 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.2 | < 2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 9.7 | < 100 | < 1.2 | 3.7 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 0.333 | 0.279 | 0.465 | 0.282 | 0.315 | 0.329 | <0.360 | <0.620 | -- | < 0.717 | < 0.594 | < 0.880 | 0.246 | < 0.197 | 0.443 | 0.331 | 0.443 | 0.740 | 0.77 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | 0.674 | 0.798 | 0.997 | 0.969 | <0.739 | 2.13 | 0.974 | <1.64 | -- | < 1.46 | 1.75 | < 1.77 | 0.794 | 0.669 | 1.09 | 0.331 | 0.781 | 1.640 | 0.97 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | <0.484 | <0.567 | 0.532 | <0.718 | <0.739 | 1.80 | 0.872 | <1.02 | -- | < 0.742 | 1.36 | 1.16 | 0.548 | < 0.513 | 0.651 | -0.0196 | 0.338 | 0.900 | 0.2 |
| Selenium | ug/L | 0.5 | 0.5 | | <1 | <1 | <1 | 2 | <1 | <1 | <1 | 1.2 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.36 | 0.34 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 0.19 | < 2 | < 0.38 | 0.58 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | 46 | 59 | 66 | 14 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | 1.2 |
| Iron | ug/L | 250 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 26,000 | 2,000 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 1.8 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | 23 |

**MW-15019**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 | MW-15019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: 10/22/2021 | 5/3/2022 | 10/20/2022 | 4/12/2023 | 10/3/2023 | 3/27/2024 | | 10/23/2024 | 4/23/2025 | 10/28/2025 |
| **Field Parameters** | | | | | | | | | | Field Dup | | | |
| pH | su | -- | -- | 6.56 | 6.84 | 6.63 | 6.73 | 6.41 | 6.73 | 6.73 | 6.62 | 6.99 | 6.63 |
| Conductivity | µS/cm | -- | -- | 1,600 | 1,620 | 600 | 940 | 1,200 | 990 | 990 | 1,080 | 737 | 1,063 |
| Turbidity | NTU | -- | -- | 25.9 | 0.02 | 0.02 | 2.76 | 0.02 | 5.11 | 5.11 | 0.02 | 4.28 | 0.72 |
| Dissolved Oxygen | mg/L | -- | -- | 0.23 | 0.48 | 0.29 | 0.11 | 0.07 | 0.29 | 0.29 | 0.16 | 0.15 | 0.08 |
| Temperature | °C | -- | -- | 13.1 | 9.4 | 13.0 | 11.8 | 13.5 | 10 | 10 | 13.9 | 11.4 | 13.5 |
| Oxidation Reduction Potential | mV | -- | -- | -129.6 | 11.7 | -110.0 | -8.4 | -45.6 | 143.4 | 143.4 | -59.6 | 7.7 | -71.1 |
| **Appendix III** | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 400 | 1,100 | 290 | 230 | 200 | 300 | 300 | 390 | 480 | 360 |
| Calcium | mg/L | 1.3 | 2.6 | 190 | 190 | 110 | 110 | 110 | 97 | 94 | 110 | 110 | 120 |
| Chloride | mg/L | 1.5 | 1.5 | 120 | 15 | 91 | 96 | 94 | 80 | 81 | 78 | 76 | 86 |
| Fluoride | ug/L | 20 | 200 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 200 | 100 | 170 |
| pH, Field | SU | -- | | 6.56 | 6.74 | 6.63 | 6.73 | 6.41 | 6.73 | 6.73 | 6.62 | 6.99 | 6.63 |
| Sulfate | mg/L | 1 | 6.0 | < 3 | 770 | < 3 | < 3 | 0.62 | < 3 | < 3 | 2.5 | 350 | 0.63 |
| Total Dissolved Solids | mg/L | 40 | 51 | 630 | 560 | 570 | 550 | 620 | 550 | 570 | 600 | 540 | 520 |
| **Appendix IV** | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 1.5 | 8.1 | 0.90 | < 2.8 | 0.58 | 0.45 | 0.42 | 0.53 | 0.46 | 0.47 |
| Barium | ug/L | 2.5 | 2.5 | 640 | 78 | 410 | 440 | 380 | 280 | 280 | 320 | 280 | 370 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.058 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.078 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.91 | 0.3 | 0.7 | < 1.2 | < 1.2 | 0.4 | 0.37 | 0.54 | 0.51 | 0.61 |
| Cobalt | ug/L | 0.52 | 0.52 | 1.4 | 1.8 | 0.7 | < 2.6 | 0.68 | 0.66 | 0.5 | 0.72 | 0.59 | 0.78 |
| Fluoride | ug/L | 200 | 200 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 200 | 100 | 170 |
| Lead | ug/L | 0.55 | 0.55 | 0.93 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | 0.17 | 0.2 | 0.16 | 0.34 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | < 5.9 | 33 | 4.4 | 4.8 | < 12 | 6.1 | 6.2 | 8.8 | 1.2 | 7.6 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | 8.8 | < 1.2 | < 6.2 | < 6.2 | 1.2$^{J+}$ | < 1.2$^{UJ}$ | 0.58 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 1.6 | 0.05 | 0.85 | 0.729 | 0.966 | 0.65 | 0.505 | 0.43$^{U}$ | 0.382 | 0.629 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 3.81 | < 1 | 2.79 | 1.45 | 2.58 | 2.16 | 2.42 | 1.26 | 1.88 | 1.39 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 2.21 | 0.21 | 1.94 | 0.723 | 1.62 | 1.51 | 1.91 | 0.83 | 1.49 | 0.759 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | 0.12 | 0.12 | 0.15 | < 0.5 | 0.9 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | 0.28$^{J+}$ | < 0.38$^{UJ}$ | 0.097 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | 130 | 40 | 68 | 72 | 77 | 36 | 30 | 73 | 58 | 68 |
| **Michigan CCR** | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.56 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.53$^{J+}$ | < 0.25$^{UJ}$ | 0.2 | 10 | 0.21 |
| Iron | ug/L | 250 | 50 | 50,000 | 3,600 | 30,000 | 28,000 | 30,000 | 23,000 | 23,000 | 28,000 | 20,000 | 29,000 |
| Nickel | ug/L | 1.2 | 1.2 | 0.44 | 2.0 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | 0.2 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | 0.67 | < 1.2 | 0.59 |
| Zinc | ug/L | 1.2 | 1.2 | 2.1 | 5.2 | 1.4 | 40 | 26 | < 1.2$^{UJ}$ | 2.2$^{J+}$ | 13 | 1.8 | 32 |

**MW-15020**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/2/2015 | 2/18/2016 | 4/14/2016 | 7/14/2016 | 9/30/2016 | 2/15/2017 | 4/5/2017 | 7/11/2017 | 9/13/2017 | 4/18/2018 | 6/12/2018 | | 11/30/2018 | | 4/12/2019 | 9/26/2019 | 5/5/2020 | 10/28/2020 | 4/22/2021 | 10/20/2021 |
| **Field Parameters** | | | | | | | | | | | | | | | | Field Dup | | Field Dup | | | | | | |
| pH | su | -- | -- | | 7.27 | -- | 7.0 | 6.9 | 6.9 | 7.0 | 7.1 | 7.01 | 6.8 | 7 | 6.7 | 6.7 | 5.9 | 5.9 | 6.8 | 6.8 | 6.55 | 6.73 | 6.54 | 6.55 |
| Conductivity | µS/cm | -- | -- | | 475 | -- | 555 | 549 | 560 | 540 | 507 | 604 | 985 | 853 | 968 | 968 | 710 | 710 | 487 | 1,380 | 1,397 | 1,290 | 1,210 | 1,200 |
| Turbidity | NTU | -- | -- | | 2.1 | -- | <1 | <1 | <1 | <1 | <1 | 3.42 | 4.62 | 4.2 | 2 | 2 | 0.54 | 0.54 | 3.7 | 1.65 | 217.26 | 0.02 | 1.4 | 0.58 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.77 | -- | 2.7 | 0.4 | 0.6 | 0.5 | 0.5 | 0.12 | 0.22 | 0.24 | 0.3 | 0.3 | 1.29 | 1.29 | 0.06 | 0.26 | 0.18 | 0.1 | 0.61 | 0.3 |
| Temperature | °C | -- | -- | | 12.61 | -- | 11.3 | 15.7 | 13.7 | 9.8 | 10.0 | 15.57 | 14.4 | 11.2 | 18 | 18 | 12.1 | 12.1 | 12.1 | 14.3 | 12.6 | 13.4 | 11.1 | 14.2 |
| Oxidation Reduction Potential | mV | -- | -- | | -97.2 | -- | -79.8 | -95.3 | -65.9 | -96.7 | -79.3 | -76.7 | -59.7 | -89.9 | -102.4 | -102.4 | 3.9 | 3.9 | -120.7 | -115.4 | 25.7 | -131.4 | -113.9 | -110.5 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 630 | 738 | 638 | 603 | 608 | 621 | 667 | 618 | 745 | -- | 708 | 699 | 721 | 930 | 700 | 830 | 815 | 900 | 960 | 570 |
| Calcium | mg/L | 0.26 | 2.6 | | 61.0 | 67.6 | 59.1 | 60.7 | 66.5 | 67.0 | 66.6 | 68.1 | 107 | -- | 96.3 | 91.6 | 81.5 | 81.7 | 76 | 110 | 127 | 110 | 120 | 110 |
| Chloride | mg/L | 1.5 | 1.5 | | 39.0 | 35.4 | 34.3 | 69.6 | 33.5 | 33.3 | 33.9 | 45.7 | 87.8 | -- | 92.1 | 92.0 | 49.6 | 49.6 | 45 | 130 | 162 | 140 | 110 | 110 |
| Fluoride | ug/L | 20 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 15 | < 20 | < 100 | < 100 |
| pH, Field | SU | -- | | | 7.27 | 7.2 | 7.0 | 6.9 | 6.9 | 7.0 | 7.1 | 7.01 | 6.8 | 7.0 | 6.7 | -- | 6.9 | -- | 6.8 | 6.8 | 6.8 | 6.7 | 6.5 | 6.6 |
| Sulfate | mg/L | 1 | 6.0 | | 2.20 | 2.34 | <2 | <2 | <2 | <2 | <2 | <2.0 | 3.0 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | 2.9 | < 0.25 | < 0.6 | < 3 | < 3 |
| Total Dissolved Solids | mg/L | 40 | 51 | | 320 | 310 | 320 | 310 | 310 | 330 | 320 | 388 | 608 | -- | 622 | 508 | 428 | 382 | 400 | 660 | 634 | 680 | 590 | 630 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.45 | < 0.55 | 0.7 | 0.57 |
| Barium | ug/L | 2.5 | 2.5 | | 48 | 52 | 51 | 47 | 54 | 53 | 52 | 60.4 | -- | 148 | 197 | 196 | 119 | 115 | 120 | 330 | 393 | 360 | 330 | 330 |
| Beryllium | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | <1 | 2 | <1 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 1.1 | 0.5 | 0.5 | 0.8 | 0.55 |
| Cobalt | ug/L | 0.52 | 0.52 | | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | < 6.0 | -- | 0.63 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 15 | < 20 | < 100 | < 100 |
| Lead | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | 0.71 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | | 15.1 | 17.8 | 16 | 14 | 14 | 14 | 14 | 18 | -- | 16 | 16 | 16 | 20 | 20 | 15 | < 10 | 9.5 | 5.3 | < 1.2 | < 12 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 1.0 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | <0.269 | <0.240 | <0.341 | <0.190 | <0.276 | <0.294 | <0.290 | <0.761 | -- | 0.744 | < 0.899 | < 0.774 | 1.14 | < 1.06 | 0.226 | 0.672 | 1.19 | 0.78 | 0.6 | 0.7 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | <0.467 | 0.847 | 0.730 | <0.598 | 0.724 | <0.591 | 0.652 | <1.39 | -- | 1.56 | 2.64 | 2.00 | 2.07 | 1.79 | < 0.558 | 1.94 | 4.68 | 2.45 | 3.2 | 1.47 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | <0.467 | 0.731 | 0.474 | <0.598 | 0.682 | <0.591 | 0.543 | <0.627 | -- | 0.813 | 1.75 | 1.47 | 0.925 | 1.30 | < 0.558 | 1.26 | 3.49 | 1.70 | 2.6 | 0.77 |
| Selenium | ug/L | 0.5 | 0.5 | | <1 | 1 | <1 | 2 | <1 | <1 | <1 | 1.4 | -- | < 1.0 | < 1.0 | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | -- | 69 | 78 | 72 | 62 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | 0.76 | < 0.25 |
| Iron | ug/L | 50 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 27,000 | 29,000 | 27,000 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.61 | 0.68 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | 1.7 | < 1.2 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 | MW-15020 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 5/3/2022 | 10/20/2022 | 4/13/2023 | 10/3/2023 | 3/27/2024 | 10/23/2024 | 4/22/2025 | 10/27/2025 | |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | | Field Dup |
| pH | su | -- | -- | 7.34 | 6.67 | 6.72 | 6.55 | 6.85 | 6.75 | 6.82 | 6.71 | 6.71 |
| Conductivity | µS/cm | -- | -- | 476 | 900 | 1,140 | 1,130 | 830 | 820 | 605 | 1,087 | 1,087 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 5.38 | 0.02 | 0.02 | 0.02 | 7.97 | 4.04 | 4.04 |
| Dissolved Oxygen | mg/L | -- | -- | 0.97 | 0.27 | 0.14 | 0.12 | 0.48 | 0.05 | 0.21 | 0.00 | 0.00 |
| Temperature | °C | -- | -- | 7.5 | 12.8 | 12.5 | 14.8 | 11.9 | 13.6 | 12 | 13.2 | 13.2 |
| Oxidation Reduction Potential | mV | -- | -- | -25.7 | -14.4 | -94.6 | -29.2 | -61.7 | -57.1 | -36.8 | -100.2 | -100.2 |
| **Appendix III** | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 87 | 300 | 280 | 270 | 300 | 380 | 400 | 340 | 340 |
| Calcium | mg/L | 0.26 | 2.6 | 62 | 83 | 91 | 91 | 71 | 88 | 85 | 100 | 100 |
| Chloride | mg/L | 1.5 | 1.5 | 25 | 110 | 110 | 130 | 62 | 62 | 57 | 110 | 110 |
| Fluoride | ug/L | 20 | 200 | 120 | < 100 | < 100 | < 100 | < 100 | < 200 | 150 | 190 | 180 |
| pH, Field | SU | -- | | 7.12 | 6.67 | 6.72 | 6.55 | 6.85 | 6.75 | 6.82 | 6.71 | 6.71 |
| Sulfate | mg/L | 1 | 6.0 | 12 | < 3 | < 3 | < 3 | < 3 | < 6.0 | < 1 | < 6.0 | < 6.0 |
| Total Dissolved Solids | mg/L | 40 | 51 | 900 | 520 | 530 | 660 | 420 | 430 | 430 | 540 | 540 |
| **Appendix IV** | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | 0.24 | 0.32 | 0.23 | 0.27 | 0.29 |
| Barium | ug/L | 2.5 | 2.5 | 90 | 260 | 340 | 250 | 150 | 180 | 150 | 230 | 230 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.4 | 0.39 | < 1.2 | < 1.2 | < 0.25 | 0.28 | 0.26 | 0.35 | 0.36 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | 0.18 | 0.29 | 0.2 | 0.27 | 0.27 |
| Fluoride | ug/L | 200 | 200 | 120 | < 100 | < 100 | < 100 | < 100 | < 200 | 150 | 190 | 180 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 4.6 | 5.3 | 5.1 | < 12 | 6.9 | 9.2 | 11 | 6.6 | 6.5 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 0.25 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.07 | 0.56 | 0.705 | 0.483 | 0.41 | 0.35[U] | 0.504 | 0.6[J+] | 0.341[UJ] |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | < 1 | 1.99 | 2.39 | 2.72 | 1.44 | 1.4 | 2.15 | 0.822J- | 1.39[J+] |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.59 | 1.43 | 1.69 | 2.24 | 1.03 | 1.05 | 1.64 | 0.222[UJ] | 1.05[J+] |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | < 0.5 | < 0.5 | 0.44[J-] | 0.56[J+] |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | 14 | 30 | 37 | 48 | 10 | 8.0 | 34 | 36 | 30 |
| **Michigan CCR** | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.34 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.29 | 0.23 | < 0.25 |
| Iron | ug/L | 50 | 50 | 580 | 18,000 | 21,000 | 20,000 | 12,000 | 15,000 | 13,000 | 17,000 | 18,000 |
| Nickel | ug/L | 1.2 | 1.2 | 0.27 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.26[J+] | 0.21[J-] |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.48 | 0.48 |
| Zinc | ug/L | 1.2 | 1.2 | 2.2 | < 1.2 | 29 | 18 | < 1.2 | 7.6 | < 1.2 | 21 | 22 |

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/2/2015 | 2/18/2016 | 4/14/2016 | 7/13/2016 | 10/5/2016 | 2/15/2017 | 4/6/2017 | 7/12/2017 | 9/13/2017 | 4/18/2018 | 6/12/2018 | 11/30/2018 | 4/12/2019 | 9/26/2019 | | 5/5/2020 | 10/30/2020 | 4/21/2021 | 6/15/2021 |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | Field Dup | | | No sample | |
| pH | su | -- | -- | | 6.83 | 6.8 | 6.8 | 6.7 | 6.8 | 6.9 | 6.9 | 6.81 | 6.8 | 7.1 | 6.8 | 6.7 | 6.7 | 6.9 | 6.9 | 6.7 | 6.9 | | 6.7 |
| Conductivity | µS/cm | -- | -- | | 1,019 | 1,032 | 1,018 | 1,040 | 1,114 | 962 | 1,189 | 1,039 | 1,123 | 1,131 | 1,035 | 1,076 | 762 | 1,150 | 1,150 | 1,082 | 1,220 | | 1,400 |
| Turbidity | NTU | -- | -- | | 2.29 | <1 | <1 | <1 | 1 | <1 | <1 | 1.05 | 2.32 | 8.3 | 0.7 | 1.2 | 3.4 | 7.95 | 7.95 | 179.52 | 7.66 | | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.33 | 0.2 | 0.3 | 0.2 | 0.6 | 0.5 | 0.1 | 0.11 | 0.24 | 0.21 | 0.37 | 1.96 | 0.08 | 0.32 | 0.32 | 0.24 | 0.87 | | 0.1 |
| Temperature | °C | -- | -- | | 13.17 | 9.1 | 12.6 | 17.3 | 14.8 | 10.9 | 7.3 | 13.76 | 13.87 | 12.2 | 17 | 12.06 | 11.3 | 13.2 | 13.2 | 12.4 | 12.6 | | 13.6 |
| Oxidation Reduction Potential | mV | -- | -- | | -144.3 | -111.7 | -101.2 | -97.6 | -15.8 | -108.6 | -122.1 | -83.0 | -81.7 | -97.3 | -107.8 | -16.8 | -124.9 | -125.9 | -125.9 | -12.9 | -156.9 | | -124.8 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 362 | 489 | 400 | 425 | 491 | 465 | 519 | 519 | 602 | -- | 809 | 798 | 940 | 930 | 960 | 1080 | 540 | | 350 |
| Calcium | mg/L | 1.3 | 2.6 | | 86.4 | 98.5 | 89.6 | 97.4 | 96.9 | 97.9 | 96.3 | 86.8 | 91.3 | -- | 89.4 | 96.6 | 93 | 92 | 95 | 101 | 92 | | 1.3 |
| Chloride | mg/L | 3.8 | 3.8 | | 88.0 | 82.7 | 87.2 | 98.3 | 98.9 | 94.6 | 93.9 | 97.0 | 108 | -- | 112 | 120 | 110 | 110 | 110 | 125 | 150 | | 3.80 |
| Fluoride | ug/L | 20 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 13 | < 20 | | < 100 |
| pH, Field | SU | -- | | | 6.83 | 6.8 | 6.8 | 6.7 | 6.8 | 6.9 | 6.9 | 6.81 | 6.8 | 7.1 | 6.8 | 6.7 | 6.7 | 6.9 | -- | 7.1 | 6.94 | | 6.70 |
| Sulfate | mg/L | 1 | 6.0 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2.0 | <2.0 | -- | < 2.0 | < 2.0 | < 2.0 | < 20 | < 20 | < 0.25 | < 0.6 | | 3.00 |
| Total Dissolved Solids | mg/L | 67 | 71 | | 610 | 540 | 570 | 590 | 620 | 570 | 560 | 548 | 490 | -- | 576 | 534 | 590 | 570 | 570 | 543 | 660 | | 830 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | -- | < 1.0 | < 0.25 | | <0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.6 | 0.73 | | 0.12 |
| Barium | ug/L | 2.5 | 2.5 | | 274 | 244 | 236 | 233 | 252 | 240 | 228 | 211 | -- | 236 | 238 | 224 | 250 | 240 | 230 | 236 | 280 | | 350 |
| Beryllium | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | -- | 0.024 | < 0.25 | | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | -- | < 0.20 | < 0.25 | | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | <1 | 2 | 2 | 2 | 1 | 2 | 2 | <1 | -- | < 1.0 | 1.1 | < 1.0 | 1.2 | 1.2 | 1.1 | 0.7 | 0.7 | | 0.77 |
| Cobalt | ug/L | 0.52 | 0.52 | | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | -- | 0.47 | < 0.52 | | 0.76 |
| Fluoride | ug/L | 200 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 13 | < 20 | | < 100 |
| Lead | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | -- | < 1.0 | < 0.55 | | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | -- | < 10 | < 10 | < 10 | < 8.0 | < 10 | < 10 | <4.1 | 2.1 | | < 1.2 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | -- | < 0.20 | < 0.2 | | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | -- | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 1.0 | < 1.2 | | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 0.569 | 0.629 | 0.563 | 0.429 | 0.483 | 0.524 | <0.215 | <0.768 | -- | < 0.461 | < 0.689 | 1.49 | 0.531 | 0.794 | 0.460 | 0.328 | 0.470 | | 0.67 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | 1.55 | 1.41 | 1.41 | 1.30 | 2.00 | 0.966 | <0.354 | <1.47 | -- | < 1.96 | 1.97 | 2.61 | 1.31 | 1.53 | 1.05 | 0.490 | 1.770 | | 2.77 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | 0.984 | 0.782 | 0.846 | 0.871 | 1.52 | <0.582 | <0.354 | <0.697 | -- | < 1.50 | 1.60 | 1.12 | 0.783 | 0.738 | 0.587 | 0.162 | 1.300 | | 2.1 |
| Selenium | ug/L | 0.5 | 0.5 | | 1 | 2 | 1 | 4 | <1 | <1 | 1 | 1.6 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | -- | < 1.0 | < 0.38 | | < 0.38 |
| Total Suspended Solids | mg/L | 4.1 | 4.1 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | < 2.5 | 32 | | 72 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | | <0.25 |
| Iron | ug/L | 250 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 18,000 | | 21,000 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | | <0.25 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | | <0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | | 1.3 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | | 26 |

| | | | Sample Location: | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 | MW-15021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 10/20/2021 | 5/2/2022 | 10/20/2022 | | 4/13/2023 | 10/3/2023 | 3/27/2024 | 10/23/2024 | 4/23/2025 | 10/29/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | |
| **Field Parameters** | | | | | | | Field Dup | | | | | | |
| pH | su | -- | -- | 6.71 | 6.85 | 6.64 | 6.64 | 6.77 | 6.59 | 6.79 | 6.58 | 6.72 | 6.74 |
| Conductivity | µS/cm | -- | -- | 1,510 | 1,640 | 1,490 | 1,490 | 1,850 | 1,460 | 1,870 | 1,770 | 2 | 1,880 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 1.19 |
| Dissolved Oxygen | mg/L | -- | -- | 0.27 | 0.37 | 0.09 | 0.09 | 0.15 | 0.14 | 0.45 | 0.02 | 0.07 | 0.03 |
| Temperature | °C | -- | -- | 13.1 | 12.2 | 13.1 | 13.1 | 12.5 | 15 | 11.3 | 13.2 | 12.8 | 13.1 |
| Oxidation Reduction Potential | mV | -- | -- | -114.1 | -113.4 | -103.5 | -103.5 | -138.6 | -29.5 | -69.6 | -70.9 | -80 | -105.1 |
| **Appendix III** | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 140 | 280 | 280 | 280 | 240 | 230 | 200 | 250 | 260 | 260 |
| Calcium | mg/L | 1.3 | 2.6 | 130 | 110 | 120 | 120 | 130 | 130 | 110 | 140 | 130 | 130 |
| Chloride | mg/L | 3.8 | 3.8 | 230 | 260 | 290 | 290 | 300 | 370 | 280 | 280 | 310 | 290 |
| Fluoride | ug/L | 20 | 200 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 200 | 68 | 140 |
| pH, Field | SU | -- | | 6.71 | 6.67 | 6.64 | 6.64 | 6.77 | 6.59 | 6.79 | 6.58 | 6.72 | 6.74 |
| Sulfate | mg/L | 1 | 6.0 | < 3 | < 3 | < 3 | < 3 | < 3 | 1.2 | < 3 | < 6.0 | < 1 | 0.64 |
| Total Dissolved Solids | mg/L | 67 | 71 | 820 | 690 | 940 | 960 | 930 | 1,100 | 970 | 950 | 1,000 | 1,000 |
| **Appendix IV** | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.15[J+] | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 1.5 | 1.3 | 1.7 | 1.6 | < 2.8 | 1.2 | 1.1 | 1.3 | 1.4 | 1.2 |
| Barium | ug/L | 2.5 | 2.5 | 380 | 360 | 410 | 410 | 480 | 390 | 320 | 430 | 380 | 400 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.94 | 1.0 | 0.82 | 0.85 | < 1.2 | < 1.2 | 0.72 | 0.99 | 0.96 | 0.91 |
| Cobalt | ug/L | 0.52 | 0.52 | 1.0 | 0.96 | 0.81 | 0.83 | < 2.6 | 1.0 | 0.7 | 0.9 | 0.9 | 0.98 |
| Fluoride | ug/L | 200 | 200 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 200 | 68 | 140 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | < 12 | < 2.5 | 2.7 | 2.6 | 3.7 | < 12 | 2.3 | 3.7 | 3 | 1.9 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | 0.75 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.46 | 0.39 | -0.22[U] | 0.650 | 0.697 | 0.965 | 0.577 | 0.66 | 0.578 | 0.983 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 1.39 | 0.98 | 2.50 | 2.94 | 1.87 | 3.24 | 2.61 | 0.72[U] | 1.46 | 2.51 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.93 | 0.59 | 2.50 | 2.290 | 1.18 | 2.27 | 2.03 | 0.06[U] | 0.879 | 1.53 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | 0.15 | 0.19 | 0.12 | 3 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.1 | 4.1 | 36 | 46 | 26 | 20[J] | 57 | 62 | 30 | 10 | 58 | 67 |
| **Michigan CCR** | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 31 | 0.32 |
| Iron | ug/L | 250 | 50 | 29,000 | 23,000 | 26,000 | 26,000 | 28,000 | 27,000 | 22,000 | 30,000 | 24,000 | 27,000 |
| Nickel | ug/L | 1.2 | 1.2 | < 0.25 | 0.29 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 1.1 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 1.4 | 1.4 | 1.5 |
| Zinc | ug/L | 1.2 | 1.2 | 1.2 | 10 | 1.2 | < 1.2 | 43 | 26 | < 1.2 | 15 | 3.5 | 36 |

**MW-15022**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/2/2015 | 2/18/2016 | 4/14/2016 | 7/14/2016 | 10/5/2016 | 2/15/2017 | 4/6/2017 | 7/12/2017 | 9/13/2017 | 4/18/2018 | 6/11/2018 | 11/27/2018 | 4/12/2019 | 9/25/2019 | 5/5/2020 | 10/28/2020 | 4/21/2021 | 10/20/2021 | 5/2/2022 |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | | 8.29 | 8.5 | 8.2 | 8.2 | 8.1 | 7.8 | 8.1 | 8.36 | 7.6 | 7.8 | 8.3 | 7.8 | 7.7 | 7.5 | 7.53 | 7.37 | 7.93 | 8.41 | 7.66 |
| Conductivity | µS/cm | -- | -- | | 383 | 377 | 422 | 356 | 365 | 421 | 380 | 414 | 376 | 388 | 377 | 1,605 | 1,475 | 2,296 | 1,465 | 1,600 | 1,720 | 960 | 1,120 |
| Turbidity | NTU | -- | -- | | 0.34 | <1 | <1 | <1 | <1 | <1 | <1 | 1.30 | 2.84 | 1.9 | 1.1 | 0.66 | 1.4 | 0.2 | 43.28 | 4.04 | 2.02 | 5.94 | 3.69 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.53 | 0.2 | 0.4 | 0.3 | 0.3 | 0.5 | 0.5 | 0.10 | 0.3 | 0.21 | 0.35 | 0.21 | 0.08 | 0.15 | 0.22 | 0.02 | 0.56 | 0.01 | 0.04 |
| Temperature | °C | -- | -- | | 10.47 | 5.0 | 11.6 | 14.6 | 13.9 | 9.6 | 10.1 | 15.20 | 15.43 | 14 | 18.8 | 11.77 | 12.3 | 15.9 | 15.4 | 14.4 | 13.6 | 13.7 | 11.3 |
| Oxidation Reduction Potential | mV | -- | -- | | -72.3 | -91.2 | -64.5 | -74.4 | -172.3 | -121.4 | -163.8 | -271.2 | -71.3 | -82.1 | -190.5 | 1.2 | -204.1 | -279 | -96.6 | -211 | -138.9 | -328.9 | -201.2 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 250 | 388 | 387 | 362 | 391 | 394 | 434 | 478 | 833 | -- | 1,170 | 3,840 | 6,800 | 10,000 | 8,310 | 8,600 | 2,600 | 1,400 | 910 |
| Calcium | mg/L | 1.3 | 2.6 | | 46.7 | 46.4 | 47.8 | 43.0 | 43.7 | 54.1 | 49.3 | 51.8 | 35.2 | -- | 38.2 | 265 | 310 | 300 | 172 | 180 | 270 | 140 | 160 |
| Chloride | mg/L | 0.5 | 1.5 | | 25.0 | 18.7 | 17.6 | 16.8 | 17.1 | 18.2 | 18.6 | 22.1 | 23.3 | -- | 21.5 | 23.1 | 19 | 24 | 37 | 42 | 18 | 20 | 30 |
| Fluoride | ug/L | 200 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 380 | 440 | 280 | < 100 | 130 |
| pH, Field | SU | -- | | | 8.29 | 8.5 | 8.2 | 8.2 | 8.1 | 7.8 | 8.1 | 8.36 | 7.6 | 7.8 | 8.3 | 7.8 | 7.7 | 7.5 | 7.7 | 7.4 | 7.9 | 8.4 | 7.59 |
| Sulfate | mg/L | 6 | 6.0 | | 39.0 | 38.3 | 29.9 | 34.3 | 32.8 | 34.1 | 32.8 | 45.9 | 44.1 | -- | 24.1 | 953 | 1,100 | 1,200 | 587 | 700 | 710 | 200 | 220 |
| Total Dissolved Solids | mg/L | 40 | 50 | | 270 | 210 | 250 | 250 | 210 | 250 | 230 | 254 | 266 | -- | 210 | 1,670 | 1,900 | 1,900 | 1,140 | 1,200 | 1,400 | 600 | 780 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | 1.9 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | 6 | 7 | 8 | 8 | 6 | 4 | 4 | 5.8 | -- | < 1.0 | 1.1 | < 1.0 | 1.4 | 4.0 | 0.6 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Barium | ug/L | 2.5 | 2.5 | | 139 | 119 | 155 | 116 | 119 | 137 | 129 | 138 | -- | 102 | 104 | 242 | 190 | 130 | 135 | 290 | 210 | 120 | 140 |
| Beryllium | ug/L | 0.25 | 0.25 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | <1 | 1 | 2 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.26 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.19 | < 0.52 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 380 | 440 | 280 | < 100 | 130 |
| Lead | ug/L | 0.55 | 0.55 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | -- | 13 | 11 | 25 | 23 | 22 | 23 | 20 | 15 | 14 | 32 |
| Mercury | ug/L | 0.2 | 0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | 22 | 16 | 11 | 17 | 19 | 12 | 14 | 13.6 | -- | < 5.0 | < 5.0 | 47.6 | < 5.0 | < 5.0 | 3.6 | < 1.2 | < 1.2 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 0.246 | <0.242 | <0.247 | <0.150 | <0.346 | <0.217 | <0.291 | <0.468 | -- | 0.666 | < 0.708 | < 0.596 | < 0.182 | 0.261 | 0.286 | 0.260 | 0.75 | 0.45 | 0.1 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | <0.484 | <0.450 | 0.812 | <0.472 | <0.514 | <0.477 | 0.862 | <1.27 | -- | 1.13 | < 1.45 | < 1.40 | < 0.470 | 0.877 | 3.50 | < 1 | 1.28 | 0.45 | < 1 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | <0.484 | <0.450 | 0.740 | <0.472 | <0.514 | <0.477 | 0.709 | <0.799 | -- | < 0.644 | < 0.742 | < 0.807 | < 0.470 | 0.617 | 3.22 | -0.16 | 0.53 | -1.9 | -0.16 |
| Selenium | ug/L | 0.5 | 0.5 | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 20 | < 4 | < 8 | < 8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 50 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 200 | 13 | 32 | < 50 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 1.3 | 0.28 | < 0.25 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 | MW-15022 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 8/11/2022 | 10/20/2022 | 4/12/2023 | 10/4/2023 | 3/28/2024 | 10/23/2024 | 4/232025 | 10/28/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | |
| **Field Parameters** | | | | | | | | | | | |
| pH | su | -- | -- | 6.96 | 7.07 | 7.1 | 6.75 | 7.11 | 6.63 | 7.00 | 6.84 |
| Conductivity | µS/cm | -- | -- | 1,100 | 700 | 1,080 | 1,390 | 1,350 | 1,520 | 1,110 | 1,429 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 3.02 | 1.97 |
| Dissolved Oxygen | mg/L | -- | -- | 0.05 | 0.10 | 0.09 | 0.07 | 0.18 | 0.25 | 0.38 | 0.02 |
| Temperature | °C | -- | -- | 13.6 | 13.4 | 13.3 | 13.5 | 11 | 13.4 | 11.5 | 12.8 |
| Oxidation Reduction Potential | mV | -- | -- | -201.5 | -101.2 | -229 | 45.2 | 12.2 | -77.7 | -69.7 | -60.6 |
| **Appendix III** | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 1,300 | 1,500 | 1,300 | 1,300 | 1,200 | 1,200 | 1,200 | 1,500 |
| Calcium | mg/L | 1.3 | 2.6 | 160 | 160 | 150 | 180 | 150 | 240 | 150 | 200 |
| Chloride | mg/L | 0.5 | 1.5 | 46 | 69 | 57 | 120 | 97 | 94 | 89 | 100 |
| Fluoride | ug/L | 200 | 200 | 160 | < 100 | 110 | < 100 | < 100 | < 200 | 130 | 210 |
| pH, Field | SU | -- | | 7.62 | 7.07 | 7.1 | 6.75 | 7.11 | 6.63 | 6.88 | 6.84 |
| Sulfate | mg/L | 6 | 6.0 | 190 | 5.6 | 4.9 | 0.86 | < 3 | 250 | 3 | 2.0 |
| Total Dissolved Solids | mg/L | 40 | 50 | 660 | 710 | 610 | 810 | 800 | 960 | 620 | 820 |
| **Appendix IV** | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | 0.19 | 0.21 | 0.21 | 0.11 |
| Barium | ug/L | 2.5 | 2.5 | 220 | 260 | 210 | 220 | 150 | 230 | 190 | 220 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | < 0.25 | 0.37 | < 1.2 | < 1.2 | 0.28 | 0.39 | 0.24 | 0.27 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 2.6 | 0.52 | 0.35 | 0.35 | 0.25 | 0.41 |
| Fluoride | ug/L | 200 | 200 | 160 | < 100 | 110 | < 100 | < 100 | < 200 | 130 | 210 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 2.5 | 2.5 | 30 | 44 | 25 | 68 | 47 | 62 | 53 | 52 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | 0.29 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | 0.32$^{J+}$ | 0.42 | 0.31 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.618 | 0.19$^{U}$ | 0.177$^{U}$ | 0.148$^{U}$ | 0.617 | 0.88 | 0.273 | 0.595 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.955 | 0.19$^{U}$ | 0.837 | 0.666$^{UJ}$ | 1.51 | 0.88 | 0.644 | 0.975 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.647 | -0.63$^{U}$ | 0.66$^{U}$ | 0.519$^{UJ}$ | 0.891 | -0.04$^{U}$ | 0.371 | 0.38$^{U}$ |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | 0.11 | < 0.5 | 0.34 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | < 4 | 28 | < 4 | 4 | 4 | < 4.0 | < 4.0 | < 4.1 |
| **Michigan CCR** | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | 0.49 | < 1.2 | < 1.2 | 0.46 | 0.2 | < 0.25 | < 0.25 |
| Iron | ug/L | 50 | 50 | < 50 | 230 | 150 | 410 | 250 | 50 | 110 | 530 |
| Nickel | ug/L | 1.2 | 1.2 | < 0.25 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 0.81 | < 1.2 | 0.79 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | 1.8 | < 6.2 | < 6.2 | 1.3 | 2.4 | 1.7 | 1.7 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | 1.6 | 19 | 15 | 12 | 8.8 | < 1.2 | 20 |

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location: | | | | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 |
| Compliance Phase: | | | | Background | Background | Background | Background | Background | Background | Background | Background | DM | Initial A.M. | AM | AM | AM | AM | AM | AM | AM | AM |
| Sample Dates: | | | | 12/2/2015 | 2/18/2016 | 4/14/2016 | 7/14/2016 | 10/5/2016 | 2/15/2017 | 4/5/2017 | 7/11/2017 | 9/13/2017 | 4/18/2018 | 6/11/2018 | 11/29/2018 | 4/12/2019 | 9/26/2019 | 5/6/2020 | 10/30/2020 | 4/21/2021 | 10/22/2021 | 5/2/2022 |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | | | |
| pH | su | -- | -- | 7.43 | 7.5 | 7.5 | 7.5 | 7.4 | 7.6 | 7.6 | 7.63 | 7.6 | 7.6 | 7.4 | 7.5 | 7 | 7.5 | 7.51 | 7.68 | 7.24 | 7.26 | 7.51 |
| Conductivity | µS/cm | -- | -- | 493 | 456 | 436 | 447 | 480 | 446 | 600 | 452 | 519 | 981 | 702 | 655 | 602 | 770 | 614 | 588 | 930 | 477 | 490 |
| Turbidity | NTU | -- | -- | 0.89 | <1 | <1 | <1 | <1 | <1 | 2 | 0.56 | 1.28 | 1.1 | 0.4 | 0.41 | 5.2 | 0.65 | 4.68 | 1.7 | 0.02 | 1.48 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.27 | 0.2 | 0.3 | 0.5 | 0.5 | 0.6 | 0.1 | 0.13 | 0.22 | 0.29 | 0.35 | 0.81 | 0.41 | 0.35 | 0.29 | 0.59 | 0.45 | 0.04 | 0.04 |
| Temperature | °C | -- | -- | 13.49 | 6.8 | 10.7 | 16.9 | 14.8 | 7.3 | 8.1 | 12.84 | 14.16 | 11.3 | 17.8 | 10.26 | 11.1 | 13 | 11.2 | 12.5 | 9.3 | 18.8 | 8.8 |
| Oxidation Reduction Potential | mV | -- | -- | -139.1 | -82.7 | -79.0 | -72.7 | -75.0 | -53.4 | -83.6 | -46.3 | -33.4 | -15.5 | -68.7 | 30.9 | -30.7 | -128.7 | 144.1 | -159.8 | -193.7 | -111.4 | -82.9 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 414 | 284 | 267 | 308 | 526 | 484 | 1,590 | 701 | 504 | -- | 1,650 | 1,350 | 2,600 | 1,000 | 717 | 610 | 880 | 690 | 180 |
| Calcium | mg/L | 1.3 | 2.6 | 59.7 | 59.4 | 53.3 | 54.1 | 64.0 | 59.9 | 74.5 | 50.8 | 60.9 | -- | 98.9 | 116 | 120 | 100 | 85 | 73 | 86 | 52 | 56 |
| Chloride | mg/L | 1.5 | 1.5 | 30.0 | 26.9 | 24.6 | 28.7 | 24.8 | 23.8 | 24.6 | 26.8 | 25.5 | -- | 19.4 | 17.0 | 16 | 16 | 15 | 12 | 110 | 46 | 34 |
| Fluoride | ug/L | 20 | 200 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 120 | 120 | 260 | 260 | 140 |
| pH, Field | SU | -- | | 7.43 | 7.5 | 7.5 | 7.5 | 7.4 | 7.6 | 7.6 | 7.63 | 7.6 | 7.6 | 7.4 | 7.5 | 7.0 | 7.5 | 7.8 | 7.7 | 7.2 | 7.3 | 7.55 |
| Sulfate | mg/L | 30 | 30 | 20.0 | 26.5 | 28.9 | 25.0 | 24.3 | 21.0 | 22.5 | 22.6 | 36.2 | -- | 139 | 156 | 140 | 130 | 113 | 130 | 38 | 20 | 47 |
| Total Dissolved Solids | mg/L | 40 | 91 | 240 | 270 | 270 | 290 | 290 | 280 | 300 | 290 | 408 | -- | 474 | 530 | 600 | 490 | 384 | 340 | 520 | 320 | 320 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 2 | 2 | 1 | 3 | 2 | 2 | <1 | 1.9 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.59 | < 0.55 | 0.7 | 0.67 | 0.74 |
| Barium | ug/L | 2.5 | 2.5 | 57 | 48 | 43 | 40 | 47 | 42 | 46 | 38.0 | -- | 97.1 | 87.8 | 90.4 | 100 | 92 | 78 | 70 | 89 | 53 | 47 |
| Beryllium | ug/L | 0.25 | 0.25 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | <1 | <1 | 2 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.26 | < 0.25 | < 0.25 | 0.26 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | <15 | -- | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.11 | < 0.52 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 120 | 120 | 260 | 260 | 140 |
| Lead | ug/L | 0.55 | 0.55 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 12.1 | 10.6 | <10 | <10 | <10 | <10 | 11 | <10 | -- | 19 | 18 | 20 | 31 | 13 | 18 | 13 | 24 | 15 | 8.7 |
| Mercury | ug/L | 0.2 | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | -- | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 8 | 6 | <5 | 7 | 6 | 6 | <5 | 6 | -- | < 5.0 | 7.1 | 6.6 | < 5.0 | 5.1 | 6.2 | 5.9 | 20 | 30 | 6.6 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.232 | <0.237 | <0.242 | 0.226 | <0.309 | 0.257 | 0.455 | <0.889 | -- | < 0.572 | < 0.958 | < 0.537 | 0.181 | 0.209 | 0.178 | 0.150 | 0.48 | 0.3 | 0.24 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | <0.530 | 0.599 | <0.456 | <0.545 | <0.355 | 0.426 | 1.42 | <1.53 | -- | < 1.32 | < 1.85 | < 1.72 | 0.952 | 0.527 | 0.178 | 0.780 | 1.11 | 0.3 | < 1 |
| Radium-228 | pCi/L | 1.0 | 1.0 | <0.530 | 0.426 | <0.456 | <0.545 | <0.355 | <0.400 | 0.963 | <0.636 | -- | < 0.749 | < 0.891 | < 1.18 | 0.771 | < 0.400 | -1.24 | 0.63 | 0.63 | 0.08 | -0.5 |
| Selenium | ug/L | 0.5 | 0.5 | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | -- | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.32 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | -- | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 | < 7.8 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 250 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 420 | 830 | 850 | 1,200 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.68 | 0.29 | < 0.25 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 | MW-15023 |
| | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 10/19/2022 | 4/13/2023 | 10/3/2023 | 3/27/2024 | 10/23/2024 | 4/22/2025 | 10/29/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | |
| **Field Parameters** | | | | | | | | | | |
| pH | su | -- | -- | 7.47 | 7.25 | 6.89 | 7.16 | 6.9 | 6.88 | 6.95 |
| Conductivity | µS/cm | -- | -- | 350 | 636 | 421 | 1,310 | 1,580 | 1,384 | 1,775 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 5.25 | 2.15 |
| Dissolved Oxygen | mg/L | -- | -- | 0.17 | 0.12 | 0.07 | 0.34 | 0.11 | 0.22 | 0.27 |
| Temperature | °C | -- | -- | 10.6 | 11.9 | 13.2 | 10.5 | 12.5 | 10.4 | 12.1 |
| Oxidation Reduction Potential | mV | -- | -- | -108.4 | -127.5 | 31.9 | -70.4 | -44.1 | -25.4 | -161.8 |
| **Appendix III** | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 200 | 330 | 180 | 1,300 | 3,100 | 3,100 | 3,300 |
| Calcium | mg/L | 1.3 | 2.6 | 51 | 78 | 54 | 110 | 180 | 280 | 250 |
| Chloride | mg/L | 1.5 | 1.5 | 29 | 41 | 23 | 140 | 160 | 160 | 150 |
| Fluoride | ug/L | 20 | 200 | 100 | < 100 | 89 | 110 | < 200 | 91 | 150 |
| pH, Field | SU | -- | | 7.47 | 7.25 | 6.89 | 7.16 | 6.9 | 6.88 | 6.95 |
| Sulfate | mg/L | 30 | 30 | 9.9 | < 15 | < 3 | 130 | 290 | 560 | 380 |
| Total Dissolved Solids | mg/L | 40 | 91 | 280 | *750 R* | 240 | 740 | 1,100 | 1,400 | 1,300 |
| **Appendix IV** | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 1.8 | < 2.8 | 0.65 | 9.4 | 9.9 | 27 | 22 |
| Barium | ug/L | 2.5 | 2.5 | 42 | 85 | 42 | 99 | 190 | 270 | 260 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.25 | 0.48 | 0.3 | 0.26 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 2.6 | < 2.6 | < 0.52 | 0.11 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | 100 | < 100 | 89 | 110 | < 200 | 91 | 150 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 8.3 | 12 | 10 | 28 | 36 | 67 | 46 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | 0.55 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 10 | 7.5 | 8.7 | 34 | 21 | 16 | 27 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.23[U] | 0.141[U] | 0.115[U] | 0.244 | 0.74 | 0.567 | 0.482 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.23[U] | 0.298[U] | 0.594[UJ] | 0.924 | 1.71 | 3.28 | 1.32 |
| Radium-228 | pCi/L | 1.0 | 1.0 | -1.54[U] | 0.157[U] | 0.478[UJ] | 0.68 | 0.97 | 2.71 | 0.835 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | 0.11 | < 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | < 8 | *< 4 UR* | < 4 | < 8 | 7.1 | 44 | 41 |
| **Michigan CCR** | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 250 | 50 | 1,400 | 1,800 | 1,300 | 11,000 | 12,000 | 17,000 | 20,000 |
| Nickel | ug/L | 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.32 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | 0.38 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | 7.9 | < 6.2 | < 1.2 | 7.6 | < 1.2 | 22 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Location: | MW-17001 | MW-17001 | MW-17001 | MW-17001 | MW-17001 | MW-17001 | MW-17001 | MW-17001 | MW-17001 |
| | | Compliance Phase: | Background & Detection | | AM | AM | AM | AM | AM | AM | AM |
| | | Sample Dates: | 12/7/2017 | 2/20/2018 | 6/15/2018 | 8/6/2018 | 11/29/2018 | | 4/11/2019 | 9/26/2019 | 5/6/2020 |
| Constituent | Unit | RDL (Most Common from Previous Data | | | | | | | | | |
| **Field Parameters** | | | | | | | | Field Dup | | | |
| pH | su | -- | 7.1 | 7.0 | 7.2 | 6.9 | 7.3 | 7.3 | 6.9 | 7 | 7.09 |
| Conductivity | µS/cm | -- | 920 | 943 | 903 | 894 | 731 | 731 | 661 | 862 | 1,092 |
| Turbidity | NTU | -- | 3.4 | 3.1 | 3.6 | 3.7 | 0.87 | 0.87 | 4.1 | 0.55 | 48.22 |
| Dissolved Oxygen | mg/L | -- | 0.10 | 0.20 | 0.22 | 0.35 | 0.28 | 0.28 | -0.01 | 0.28 | 0.43 |
| Temperature | °C | -- | 11.9 | 11.6 | 15.0 | 17.6 | 11.55 | 11.55 | 10.4 | 15.5 | 11.4 |
| Oxidation Reduction Potential | mV | -- | -253.7 | -206.4 | -328.2 | 69.7 | -136.2 | -136.2 | -312.2 | -149.8 | -318.2 |
| **Appendix III** | | | | | | | | | | | |
| Boron | ug/L | 125 | 991 | 827 | 1,100 | 1,220 | 1,480 | 1,550 | 1,700 | 1,800 | 1,780 |
| Calcium | mg/L | 1 | 118 | 118 | 124 | 117 | 135 | 134 | 130 | 120 | 167 |
| Chloride | mg/L | 5 | 27.3 | 28.5 | 29.1 | 29.1 | 29.0 | 29.2 | 31 | 28 | 31 |
| Fluoride | ug/L | 1000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 97 |
| pH, Field | SU | 0.1 | 7.1 | 7.0 | 7.2 | 6.9 | 7.3 | -- | 6.9 | 7.0 | 7.4 |
| Sulfate | mg/L | 2 | 156 | 135 | 90.8 | 18.7 | 148 | 140 | 64 | 17 | 138 |
| Total Dissolved Solids | mg/L | 10 | 558 | 552 | 566 | 476 | 568 | 554 | 570 | 490 | 682 |
| **Appendix IV** | | | | | | | | | | | |
| Antimony | ug/L | 1 | < 1.0 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 |
| Arsenic | ug/L | 1 | 5.2 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.72 |
| Barium | ug/L | 1 | 85.6 | 71.3 | 65.8 | 73.8 | 74.4 | 70.6 | 82 | 81 | 92 |
| Beryllium | ug/L | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 |
| Cadmium | ug/L | 0.2 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 |
| Chromium | ug/L | 1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 1.3 | < 1.0 | 0.18 |
| Cobalt | ug/L | 15 | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | < 6.0 | -- | 0.21 |
| Fluoride | ug/L | 1000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 97 |
| Lead | ug/L | 1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 |
| Lithium | ug/L | 10 | 55 | 73 | 65 | 62 | 64 | 63 | 43 | 60 | 77 |
| Mercury | ug/L | 0.2 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 |
| Molybdenum | ug/L | 5 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 0.76 |
| Radium-226 | pCi/L | N/A | < 0.509 | < 0.890 | < 0.766 | < 0.616 | < 0.942 | < 0.754 | 0.314 | 0.260 | 0.0779 |
| Radium-226/228 | pCi/L | N/A | < 1.34 | < 1.79 | < 1.71 | < 1.44 | < 1.69 | < 1.45 | 0.721 | 1.08 | 0.0779 |
| Radium-228 | pCi/L | N/A | < 0.830 | < 0.901 | < 0.947 | < 0.822 | 0.989 | 1.20 | < 0.413 | 0.821 | -0.413 |
| Selenium | ug/L | 1 | < 1.0 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.31 |
| Thallium | ug/L | 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 |
| Total Suspended Solids | mg/L | 2.5 | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 |
| **Michigan CCR** | | | | | | | | | | | |
| Copper | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Iron | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nickel | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Silver | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Vanadium | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Zinc | ug/L | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

**MW-17001R**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R | MW-17001R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 5/21/2020 | 6/15/2020 | 10/29/2020 | 4/21/2021 | 10/22/2021 | 5/4/2022 | 10/20/2022 | 4/12/2023 | 10/4/2023 | | 3/27/2024 | | 10/23/2024 | 4/22/2025 | 10/29/2025 |
| **Field Parameters** | | | | | | | | | | | | | | Field Dup | | Field Dup | | | |
| pH | su | -- | -- | | 7.32 | 7.68 | 6.98 | 6.7 | 6.56 | 6.74 | 6.68 | 6.54 | 6.61 | 6.61 | 6.84 | 6.84 | 6.8 | 6.81 | 6.79 |
| Conductivity | µS/cm | -- | -- | | 1,144 | 1,460 | 1,040 | 900 | 890 | 1,330 | 1,200 | 1,450 | 1,610 | 1,610 | 1,910 | 1,910 | 2,240 | 1,815 | 2,053 |
| Turbidity | NTU | -- | -- | | 1.55 | 11.8 | 3.88 | 0.02 | 6.52 | 0.02 | 1.90 | 2.64 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.17 | 0.17 | 0.1 | 0.3 | 0.17 | 0.09 | 0.02 | 0.14 | 0.43 | 0.43 | 0.19 | 0.19 | 0.06 | 0.11 | 0.08 |
| Temperature | °C | -- | -- | | 11 | 13.2 | 13.1 | 12.9 | 13.2 | 11.7 | 13.2 | 12.4 | 14.2 | 14.2 | 10.6 | 10.6 | 14.7 | 11.6 | 14.0 |
| Oxidation Reduction Potential | mV | -- | -- | | -324 | -103.1 | -353.9 | -59.7 | -138.4 | -61.6 | -110.1 | -93.4 | -87.6 | -87.6 | 122.3 | 122.3 | -210.6 | -279.9 | -323.7 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 2,060 | 1,940 | 2,100 | 2,000 | 2,100 | 2,400 | 2,100 | 2,200 | 2,000 | 2,100[J] | 2,000 | 2,000 | 4,000 | 2,400 | 3,500 |
| Calcium | mg/L | 2.6 | 2.6 | | 158 | 150 | 160 | 130 | 140 | 210 | 200 | 210 | 210 | 220 | 270 | 280 | 380 | 470 | 480 |
| Chloride | mg/L | 1.5 | 1.5 | | 30 | 28 | 21 | 36 | 39 | 35 | 46 | 46 | 59 | 59 | 34 | 34 | 30 | 27 | 24 |
| Fluoride | ug/L | 200 | 200 | | 160 | 180 | 120 | 130 J | < 100 | 160 | < 100 | 100 | 130 | 150 | 120 | 78 | < 200 | 120 | 200 |
| pH, Field | SU | -- | | | 7.50 | 7.10 | 6.98 | 6.70 | 6.56 | 6.70 | 6.68 | 6.54 | 6.61 | 6.61 | 6.84 | 6.84 | 6.80 | 6.81 | 6.79 |
| Sulfate | mg/L | 30 | 6.0 | | 220 | 122 | 4 | 3 | < 3 | 140 | 140 | 120 | 90 | 88 | 150 | 150 | 150 | 490 | 190 |
| Total Dissolved Solids | mg/L | 40 | 50 | | 751 | 622 | 620 | 520 | 340 | 810 | 850 | 900 | 940 | 940 | 1,300 | 1,300 | 1500 | 1,900 | 1,600 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | 0.12 | < 1.0 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | 7.3 | 2 | 0.71 | < 0.55 | < 0.55 | < 0.55 | 0.56 | < 2.8 | < 2.8 | < 2.8 | 0.2 | 0.18 | 0.19 | 0.3 | 0.2 |
| Barium | ug/L | 2.5 | 2.5 | | 91 | 101 | 100 | 120 | 130 | 180 | 210 | 220 | 230 | 240 | 200 | 200 | 230 | 300 | 260 |
| Beryllium | ug/L | 0.25 | 0.25 | | < 0.20 | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | < 0.20 | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | 0.17 | 0.18 | < 0.25 | 0.28 | 0.33 | < 0.25 | < 0.25[UJ] | < 1.2 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | 0.21 | < 0.25 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | | 0.25 | 0.29 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | 0.83 | 0.74 | 0.26 | 0.26 | 0.39 | 0.22 | 0.23 |
| Fluoride | ug/L | 200 | 200 | | 160 | 180 | 120 | 130 | < 100 | 160 | < 100 | 100 | 130 | 150 | 120[J+] | 78[J-] | < 200 | 120 | 200 |
| Lead | ug/L | 0.55 | 0.55 | | < 1.0 | < 1.0 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | | 97 | 75 | 93 | 25 | 26 | 50 | 50 | 100 | 47 | 48 | 90 | 89 | 120 | 170 | 140 |
| Mercury | ug/L | 0.2 | 0.2 | | < 0.20 | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | 2.5 | 0.37 | < 1.2 | < 1.2 | < 1.2 | 1.9 | 2.0 | < 6.2 | < 6.2 | < 6.2 | 0.43[J+] | < 1.2[UJ] | 0.48 | < 1.2 | < 1.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | 0.112 | 0.128 | 0.270 | 0.85 | 0 | 0.23 | 0.52 | 0.371 | 0.262[J-] | 0.671[J+] | 0.378 | 0.452 | 0.6 | 0.556 | 0.302 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | 0.31 | 0.806 | 0.930 | 1.24 | 0 | 0.23 | 2.02 | 1.08 | 1.89 | 1.47 | 1.4 | 1.94 | 1.4 | 1.18 | 1.58 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | 0.196 | 0.679 | 0.660 | 0.39 | 0.47 | -0.54 | 1.5 | 0.712 | 1.63[J+] | 0.797[UJ] | 1.02 | 1.49 | 0.8 | 0.625 | 1.27 |
| Selenium | ug/L | 0.5 | 0.5 | | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 2.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 0.17 |
| Thallium | ug/L | 0.38 | 0.38 | | < 1.0 | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | | < 2.5 | < 2.5 | < 4 | 44 | 42 | 72 | 56 | 42 | 54 | 51 | < 8[UJ] | 10[J+] | 7.0 | 6 | < 4.2 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | < 1 | 0.32 | 0.39 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 1.2 | 0.21 | 0.24 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 250 | 50 | | -- | -- | < 200 | 17,000 | 22,000 | 28,000 | 24,000 | 17,000 | 17,000 | 18,000[J] | 5,000 | 4,900 | 880 | 1,200 | 46 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | < 50 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 6.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | 21 | 16 | 16 | < 1.2 | < 1.2 | 9 | < 1.2 | 22 |

**MW-17002**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location: | | | | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 | MW-17002 |
| Compliance Phase: | | | | Background & Detection | | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| Sample Dates: | | | | 12/7/2017 | 2/20/2018 | 6/15/2018 | 8/6/2018 | 11/29/2018 | 4/11/2019 | 9/26/2019 | 5/6/2020 | 10/29/2020 | 4/21/2021 | 10/22/2021 | 5/4/2022 | 5/4/2022 | 10/20/2022 | 4/12/2023 | 10/2/2023 | 3/27/2024 | 10/23/2024 | 4/23/2025 | 10/28/2025 |
| **Field Parameters** | | | | | | | | | | | | | | | | Diss. Metals | | | | | | |
| pH | su | -- | -- | 7.0 | 7.1 | 7.2 | 7.1 | 7 | 6.6 | 7.3 | 6.9 | 7.6 | 7.4 | 7.1 | 7.01 | - | 6.92 | 6.89 | 6.65 | 7.08 | 7.00 | 7.00 | 6.98 |
| Conductivity | µS/cm | -- | -- | 1,069 | 1,252 | 1,227 | 1,090 | 871 | 946 | 1,206 | 1,361 | 1,160 | 1,100 | 2,040 | 2,780 | - | 2,210 | 2,340 | 2,180 | 2,270 | 2,480 | 1,668 | 2,142 |
| Turbidity | NTU | -- | -- | 4.3 | 2.9 | 2.0 | 2.8 | 0.56 | 0.3 | 0.2 | 2.0 | 1.6 | 0.02 | 12.5 | 45.9 | - | 3.24 | 4.35 | 0.02 | 5.02 | 2.48 | 5.14 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.10 | 0.21 | 0.26 | 0.35 | 0.43 | 0.0 | 0.35 | 0.23 | 0.22 | 0.09 | 0.04 | 0.17 | - | 0.03 | 0.13 | 0.18 | 0.17 | 0.04 | 0.15 | 0.07 |
| Temperature | °C | -- | -- | 11.3 | 11.1 | 14.6 | 17.4 | 12.18 | 10.3 | 13.8 | 10.8 | 12.7 | 11.7 | 13.5 | 9.6 | - | 13.3 | 11.4 | 15 | 9.6 | 14.9 | 11 | 14.6 |
| Oxidation Reduction Potential | mV | -- | -- | -283.4 | -262.1 | -365.0 | -294.3 | -152.8 | -339.3 | -348.5 | -184.6 | -393.3 | -346.6 | -131.1 | -72.5 | - | -95.1 | -90.4 | -78.5 | 113.3 | -115.1 | -39.1 | -138.7 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 44 | 8.8 | 8,280 | 12,800 | 13,300 | 9,440 | 9,030 | 9,200 | 13,000 | 10,800 | 16,000 | 12,000 | 13,000 | 20,000 | 18,000 | 12,000 | 18,000 | 12,000 | 14,000 | 18,000 | 17,000 | 16,000 |
| Calcium | mg/L | 2.6 | 2.6 | 178 | 201 | 224 | 194 | 197 | 220 | 200 | 254 | 220 | 210 | 410 | 590 | 570 | 450 | 440 | 380 | 400 | 490 | 470 | 490 |
| Chloride | mg/L | 1.5 | 1.5 | 15.3 | 14.2 | 13.2 | 15.4 | 16.8 | 15 | 12 | 8 | 4 | 2.7 | 12 | 9.80 | - | 13 | 8.20 | 12 | 8.4 | 9.2 | 10 | 11 |
| Fluoride | ug/L | 20 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 160 | 240 | 530 | 260 | 210 | - | 340 | 290 | 230 | 250 | < 200 | 280 | 380 |
| pH, Field | SU | -- | | 7.0 | 7.1 | 7.2 | 7.1 | 7.0 | 6.6 | 7.3 | 7.1 | 7.6 | 7.4 | 7.1 | 6.84 | - | 6.92 | 6.89 | 6.65 | 7.08 | 7.00 | 7.00 | 6.98 |
| Sulfate | mg/L | 30 | 30 | 330 | 325 | 332 | 226 | 402 | 690 | 540 | 483 | 280 | 260 | 960 | 1,400 | - | 1,100 | 770 | 720 | 680 | 590 | 680 | 610 |
| Total Dissolved Solids | mg/L | 67 | 87 | 726 | 892 | 936 | 740 | 800 | 1,000 | 860 | 1,060 | 860 | 770 | 1,400 | 2,500 | - | 2,000 | 1,800 | 1,700 | 1,900 | 1800 | 1,900 | 1,800 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | 1.5 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.14[J+] | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 45.5 | 2.0 | 2.6 | 3.8 | 2.0 | 1.6 | 1.8 | 0.6 | 1.4 | 31 | 6.3 | 37 | 1.2 | 58 | 220 | 63 | 92 | 100 | 90 | 48 |
| Barium | ug/L | 2.5 | 2.5 | 148 | 76.7 | 62.8 | 57.6 | 97.7 | 130 | 75 | 135 | 71 | 83 | 240 | 99 | 80 | 170 | 66 | 85 | 39 | 69 | 54 | 80 |
| Beryllium | ug/L | 0.25 | 0.25 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.14 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | 0.26 | 1.2 | < 0.25 | < 1.2 | < 1.2 | 0.35 | 0.35 | 0.26 | 0.087 |
| Chromium | ug/L | 0.25 | 0.25 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.15 | 0.4 | 0.25 | < 0.25 | 0.33 | < 0.25 | 0.33[J] | < 1.2 | < 1.2 | < 0.25 | 0.47 | 0.29 | 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.3 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | < 0.52 | 0.42 | < 0.52 | 0.12 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 160 | 240 | 530 | 260 | 210 | - | 340 | 290 | 230 | 250 | < 200 | 280 | 380 |
| Lead | ug/L | 0.55 | 0.55 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 2.8 | < 0.55 | < 0.55 | < 0.55[UJ] | < 2.8 | < 2.8 | < 2.8 | 0.13 | < 0.55 | < 0.55 |
| Lithium | ug/L | 25 | 2.5 | 75 | 160 | 150 | 130 | 120 | 100 | 140 | 141 | 140 | 46 | 190 | 220 | 230 | 160 | 220 | 170 | 220 | 240 | 240 | 220 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | - | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 62 | 1.2 | 30.1 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 2.7 | 3.5 | 8.8 | 210 | 1,800 | 1,800 | 1,100 | 1,800 | 700 | 1,300 | 1,100 | 770 | 420 |
| Radium-226 | pCi/L | 1.0 | 1.0 | < 1.03 | < 1.07 | < 0.757 | 0.306 | < 0.968 | 0.233 | 0.501 | 0.592 | 0.390 | 0.32 | 0.87 | 0.1 | - | 0.39 | 0.193 | 0.422 | 0.267 | 0.61 | 0.556 | 0.29 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | < 2.03 | < 4.84 | < 3.11 | 1.56 | 2.29 | 0.688 | 0.702 | 0.742 | 0.940 | 1.02 | 2.76 | 0.1 | - | 5.04 | 0.551[U] | 1.07 | 0.474[U] | 1.54 | 1.19 | 1.41 |
| Radium-228 | pCi/L | 1.0 | 1.0 | < 0.996 | < 3.77 | < 2.35 | 1.25 | 2.01 | < 0.598 | < 0.527 | 0.150 | 0.550 | 0.7 | 1.89 | -0.49 | - | 4.65 | 0.358[U] | 0.647[U] | 0.207[U] | 0.93 | 0.637 | 1.12 |
| Selenium | ug/L | 0.5 | 0.5 | 1.1 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | 0.11 | 0.26 | < 0.5 | 0.21 |
| Thallium | ug/L | 0.38 | 0.38 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 1.9 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 1.9 | 0.12 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 | 84 | - | 66 | 79 | 57 | 110 | 99 | 72 | 59 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | 7.4 | 1.4 | 15 | < 0.25 | 0.4 | < 1.2 | < 1.2 | 0.25 | 0.39 | < 0.25 | 0.63 |
| Iron | ug/L | 500 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | 220 | 180 | 3,300 | 39,000 | 11,000 | 31,000 | 39,000 | 27,000 | 39,000 | 42,000 | 26,000 | 23,000 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | < 0.25 | 0.53 | < 0.25 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 1.2 | 0.69 | 0.6 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | 1.4 | < 1.2 | < 1.2[UJ] | 6.3 | 5.9 | < 1.2 | 2.5 | < 1.2 | 6.8 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Location: | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 | MW-17003 |
| | | | Compliance Phase: | Background & Detection | | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | Sample Dates: | 12/7/2017 | 2/20/2018 | 6/15/2018 | 8/7/2018 | 8/7/2018 | 11/29/2018 | 4/12/2019 | 9/26/2019 | 5/6/2020 | 10/29/2020 | 4/22/2021 | 10/22/2021 | 5/4/2022 | 10/20/2022 | 4/12/2023 | 10/2/2023 | 3/27/2024 | 10/23/2024 | 10/23/2024 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | | | | | | | | | | | | | | | |
| **Field Parameters** | | | | | | | | Field Dup | | | | | | | | | | | | | Field Dup |
| pH | su | -- | -- | 7.0 | 7.2 | 7.4 | 7.3 | 7.3 | 7.3 | 7.1 | 7.5 | 7.2 | 7.44 | 7.02 | 7.22 | 7.01 | 7.02 | 6.72 | 6.4 | 6.53 | 6.31 | 6.31 |
| Conductivity | µS/cm | -- | -- | 580 | 510 | 517 | 553 | 553 | 516 | 410 | 701 | 682 | 660 | 1,570 | 880 | 1,460 | 1,200 | 2,440 | 2,450 | 2,560 | 3,010 | 3,010 |
| Turbidity | NTU | -- | -- | 4.1 | 1.9 | 1.2 | 1.8 | 1.8 | 0.7 | 5 | 0.23 | 46.47 | 0.02 | 0.02 | 1.25 | 0.02 | 0.02 | 2.37 | 0.02 | 7.03 | 4.67 | 4.67 |
| Dissolved Oxygen | mg/L | -- | -- | 0.19 | 0.28 | 0.38 | 0.33 | 0.33 | 0.62 | 0.06 | 0.24 | 0.19 | 0.42 | 5.72 | 0.04 | 0.04 | 0.02 | 0.11 | 0.18 | 0.19 | 0.33 | 0.33 |
| Temperature | °C | -- | -- | 11.7 | 11.2 | 14.9 | 16.8 | 16.8 | 11.17 | 10.5 | 13.7 | 10.9 | 13 | 11.5 | 13.4 | 9.8 | 13.5 | 12.2 | 15 | 9.7 | 15 | 15 |
| Oxidation Reduction Potential | mV | -- | -- | 81.3 | -115.5 | 5.10 | -84.3 | -84.3 | 0.3 | -227 | -219.3 | -72.8 | -325.9 | -280.1 | -108.8 | -130.3 | -207.5 | -109.5 | -62.4 | 119.1 | -17.5 | -17.5 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 413 | 394 | 369 | 383 | 377 | 410 | 380 | 350 | 403 | 480 | 580 | 540 | 910 | 680 | 890 | 1,400 | 1,700 | 2,800 | 3,300 |
| Calcium | mg/L | 2.6 | 2.6 | 74.3 | 55.7 | 63.2 | 74.6 | 76.9 | 88.7 | 78 | 82 | 94 | 86 | 270 | 140 | 220 | 210 | 400 | 360 | 380 | 410 | 470 |
| Chloride | mg/L | 1.5 | 1.5 | 18.3 | 21.5 | 22.7 | 21.9 | 21.8 | 19.1 | 17 | 23 | 17 | 11 | 19 | 28 | 30 | 36 | 42 | 45 | 55 | 55 | 54 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 81 | < 20 | 120 | < 100 | 120 | 110 | < 100 | 96 | 89 | < 200 | < 200 |
| pH, Field | SU | -- | | 7.0 | 7.2 | 7.4 | 7.3 | -- | 7.3 | 7.1 | 7.5 | 7.6 | 7.4 | 7.0 | 7.2 | 6.9 | 7.02 | 6.72 | 6.4 | 6.53 | 6.31 | 6.31 |
| Sulfate | mg/L | 120 | 60 | 48.4 | < 2.0 | < 2.0 | 17.7 | 25.9 | 49.6 | 12 | 37 | 24 | 52 | 520 | 60 | 390 | 320 | 1,000 | 1,100 | 1,500 | 1,700 | 1,700 |
| Total Dissolved Solids | mg/L | 67 | 50 | 324 | 330 | 412 | 326 | 324 | 362 | 360 | 380 | 373 | 400 | 1,200 | 560 | 810 | 1,000 | *2,700 R* | 2,100 | 2,700 | 3,100 | 2,800 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | 1.1 | < 1.0 | < 1.0 | < 2.0 | < 2.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 26.0 | < 1.0 | < 1.0 | 1.0 | 1.1 | < 1.0 | 3.8 | 9.4 | 21.1 | 7.9 | 48 | 20 | 29 | 43 | 10 | 37 | 130 | 210 | 230 |
| Barium | ug/L | 2.5 | 2.5 | 128 | 78.1 | 66.5 | 77.9 | 83.3 | 92.7 | 83 | 93 | 109 | 120 | 320 | 180 | 82 | 23 | 50 | 52 | 18 | 33 | 38 |
| Beryllium | ug/L | 0.25 | 0.25 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.16 | 0.15 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.16 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.25 | < 1.2 | < 1.2 | 0.24 | 0.52 | 0.48 |
| Cobalt | ug/L | 0.52 | 0.52 | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.12 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | 0.71 | 2 | 38 | 43 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | 81 | < 20 | 120 | < 100 | < 100 | 110 | < 100 | 96 | 89 | < 200 | < 200 |
| Lead | ug/L | 2.8 | 1.1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 2.8 | < 2.8 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 19 | 17 | 13 | 18 | 18 | 19 | 15 | 14 | 19 | 20 | 47 | 25 | 34 | 36 | 83 | 150 | 200 | 270 | 330 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 48.8 | 6.3 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 11.2 | 7.6 | 12 | 17 | 17 | 31 | 18 | 47 | 87 | $120^{J-}$ | $170^{J+}$ |
| Radium-226 | pCi/L | 1.0 | 1.0 | < 0.889 | < 0.755 | < 0.594 | < 0.687 | 0.353 | < 0.685 | 0.205 | 0.347 | 0.351 | 0.460 | 0.39 | 0.47 | -0.49 | 0.59 | 0.174 | 0.256 | 0.22 | $0.05^{UJ}$ | $0.36^{UJ}$ |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | < 1.55 | < 1.46 | < 1.42 | < 1.49 | < 1.03 | < 1.38 | 0.539 | 0.676 | 0.351 | 1.380 | < 0.91 | 1.1 | < 1 | $0.59^{U}$ | $0.366^{U}$ | 0.775 | 0.808 | $1.28^{J+}$ | $0.72^{UJ}$ |
| Radium-228 | pCi/L | 1.0 | 1.0 | < 0.663 | < 0.707 | < 0.828 | 0.932 | < 0.871 | < 0.695 | < 0.483 | < 0.521 | -0.162 | 0.92 | 0.44 | 0.63 | -0.18 | $-0.51^{U}$ | $0.192^{U}$ | 0.52 | 0.588 | $1.23^{J+}$ | $0.36^{J-}$ |
| Selenium | ug/L | 0.5 | 0.5 | < 1.0 | 2.2 | < 1.0 | < 2.0 | < 2.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | 0.15 | 0.21 | 0.22 |
| Thallium | ug/L | 1.9 | 0.75 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 1.9 | < 1.9 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 | 14 | < 8 | *< 4 UR* | 37 | 90 | 42 | 50 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 | 0.57 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 500 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 200 | 57 | 160 | 5,500 | 2,300 | 12,000 | 45,000 | 100,000 | 97,000 | 110,000 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.26 | < 0.25 | 0.25 | < 1.2 | < 6.2 | 4.1 | 13 | 84 | 99 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 0.82 | 0.93 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | 1.4 | 28 | < 6.2 | 3.4 | 19 | 22 |

| | | | Sample Location: | MW-17003 | MW-17003 |
|---|---|---|---|---|---|
| | | | Compliance Phase: | AM | AM |
| | | | Sample Dates: | 4/23/2025 | 10/28/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | |
| **Field Parameters** | | | | | |
| pH | su | -- | -- | 6.33 | 6.29 |
| Conductivity | µS/cm | -- | -- | 2,059 | 2,394 |
| Turbidity | NTU | -- | -- | 6.69 | 4.21 |
| Dissolved Oxygen | mg/L | -- | -- | 0.21 | 0.10 |
| Temperature | °C | -- | -- | 11.7 | 15.0 |
| Oxidation Reduction Potential | mV | -- | -- | 9.5 | 16.9 |
| **Appendix III** | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 3,100 | 3,200 |
| Calcium | mg/L | 2.6 | 2.6 | 460 | 510 |
| Chloride | mg/L | 1.5 | 1.5 | 53 | 39 |
| Fluoride | ug/L | 200 | 200 | 140 | 360 |
| pH, Field | SU | -- | | 6.33 | 6.29 |
| Sulfate | mg/L | 120 | 60 | 1,800 | 1,700 |
| Total Dissolved Solids | mg/L | 67 | 50 | 2,800 | 2,800 |
| **Appendix IV** | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 180 | 220 |
| Barium | ug/L | 2.5 | 2.5 | 34 | 31 |
| Beryllium | ug/L | 0.25 | 0.25 | 0.15 | 0.27 |
| Cadmium | ug/L | 0.25 | 0.25 | 0.081 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.45 | 0.48 |
| Cobalt | ug/L | 0.52 | 0.52 | 52 | 87 |
| Fluoride | ug/L | 200 | 200 | 140 | 360 |
| Lead | ug/L | 2.8 | 1.1 | < 2.8 | < 1.1 |
| Lithium | ug/L | 12 | 2.5 | 360 | 310 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 120 | 230 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.181 | 0.412 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.802 | 1.35 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.621 | 0.943 |
| Selenium | ug/L | 0.5 | 0.5 | 0.13 | 0.2 |
| Thallium | ug/L | 1.9 | 0.75 | < 0.38 | < 0.75 |
| Total Suspended Solids | mg/L | 4.0 | 4.0 | 78 | 41 |
| **Michigan CCR** | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 |
| Iron | ug/L | 500 | 50 | 110,000 | 88,000 |
| Nickel | ug/L | 1.2 | 1.2 | 130 | 180 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | 0.74 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | 44 |

**MW-17004**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 | MW-17004 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background & Detection | | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/6/2017 | 2/20/2018 | 6/15/2018 | 8/7/2018 | 11/30/2018 | 4/12/2019 | | 9/26/2019 | 5/5/2020 | 10/29/2020 | 4/22/2021 | 10/22/2021 | 5/3/2022 | 5/3/2022 | 10/20/2022 | 4/12/2023 | 10/3/2023 | 3/27/2024 | 10/23/2024 |
| **Field Parameters** | | | | | | | | | | | Field Dup | | | | | | | Diss. Metals | | | | | |
| pH | su | -- | -- | | 7.2 | 7.3 | 7.4 | 7.3 | 7.3 | 7.5 | 7.5 | 7.6 | 7.53 | 6.92 | 6.98 | 6.8 | 6.9 | - | 6.66 | 6.77 | 6.63 | 6.76 | 6.71 |
| Conductivity | µS/cm | -- | -- | | 452 | 450 | 569 | 550 | 783 | 387 | 387 | 519 | 858 | 970 | 1,450 | 1,340 | 1,000 | - | 2,020 | 2,830 | 2,210 | 1,960 | 2,060 |
| Turbidity | NTU | -- | -- | | 3.4 | <1.0 | <1.0 | 1.4 | 0.41 | 6.9 | 6.9 | 0.75 | 7.04 | 0.02 | 0.27 | 5.15 | 131 | - | 0.02 | 9.58 | 0.02 | 5.0 | 4.3 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.25 | 0.26 | 0.36 | 0.37 | 1.22 | 0.05 | 0.05 | 0.35 | 0.26 | 0.38 | 1.01 | 0.04 | 0.3 | - | 0.37 | 0.2 | 0.11 | 0.07 | 0.09 |
| Temperature | °C | -- | -- | | 14.0 | 13.6 | 15.4 | 18.5 | 12.19 | 10.7 | 10.7 | 14.4 | 11.2 | 12.9 | 11.7 | 14.6 | 10.5 | - | 14.1 | 12.9 | 14.7 | 8.9 | 15.5 |
| Oxidation Reduction Potential | mV | -- | -- | | 28.7 | -72.0 | 7.90 | -51.2 | 41.5 | -191.8 | -191.8 | -148.9 | 34.5 | -130.8 | -41.8 | -40.7 | -52.1 | - | -81.1 | -34.7 | 5 | 123.6 | -23.6 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 367 | 429 | 525 | 425 | 601 | 440 | 450 | 570 | 542 | 830 | 780 | 1,300 | 340 | 290 | 120 | 1,000 | 1,200 | 980 | 1,100 |
| Calcium | mg/L | 1.3 | 2.6 | | 53.7 | 48.1 | 73.1 | 68.9 | 116 | 67 | 71 | 66 | 126 | 150 | 220 | 150 | 86 | 93 | 320 | 370 | 320 | 290 | 320 |
| Chloride | mg/L | 1.5 | 1.5 | | 21.3 | 21.3 | 21.4 | 21.2 | 18.7 | 19 | 20 | 16 | 17 | 5 | 12 | 13 | 66 | - | 21 | 17 | 22 | 22 | 22 |
| Fluoride | ug/L | 20 | 200 | | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 89 | 120 | 230 | < 100 | < 100 | - | < 100 | < 100 | 71 | < 100 | < 200 |
| pH, Field | SU | -- | | | 7.2 | 7.3 | 7.4 | 7.3 | 7.3 | 7.5 | -- | 7.6 | 7.7 | 6.9 | 7.0 | 6.8 | 6.64 | - | 6.66 | 6.77 | 6.63 | 6.76 | 6.71 |
| Sulfate | mg/L | 60 | 60 | | < 2.0 | < 2.0 | 8.3 | < 2.0 | 166 | 7.8 | 7.5 | 3.1 | 104.0 | 220 | 450 | 290 | 10 | - | 1,200 | 1,100 | 1,000 | 1,000 | 900 |
| Total Dissolved Solids | mg/L | 40 | 53 | | 228 | 238 | 410 | 320 | 500 | 330 | 340 | 300 | 490 | 620 | 1,100 | 1,800 | 400 | - | 2,100 | 1,900 | 1,800 | 1,900 | 1700 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | < 1.0 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 | 1.2 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.11[J+] | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | | 2.5 | 1.8 | 1.1 | < 1.0 | 2.1 | 1.7 | 1.7 | < 1.0 | 5.3 | 0.65 | 1.9 | 6.9 | 17 | < 0.55 | 15 | 18 | 6.6 | 2.7 | 9.7 |
| Barium | ug/L | 2.5 | 2.5 | | 145 | 116 | 175 | 148 | 252 | 150 | 150 | 140 | 253 | 370 | 450 | 190 | 370 | 190 | 85 | 120 | 110 | 51 | 82 |
| Beryllium | ug/L | 0.25 | 0.25 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | 0.49 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | | < 1.0 | < 1.0 | 1.2 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.17 | < 0.25 | < 0.25 | < 0.25 | 7.8 | < 0.25 | 0.36 | < 1.2 | < 1.2 | < 0.25 | 0.36 |
| Cobalt | ug/L | 0.52 | 0.52 | | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | < 6.0 | -- | 0.16 | < 0.5 | < 0.52 | < 0.52 | 2.6 | < 0.52 | 3.4 | < 2.6 | < 2.6 | 0.32 | 0.47 |
| Fluoride | ug/L | 200 | 200 | | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 89 | 120 | 230 | < 100 | < 100 | - | < 100 | < 100 | 71 | < 100 | < 200 |
| Lead | ug/L | 0.55 | 0.55 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 | 19 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 2.8 | 0.13 |
| Lithium | ug/L | 12 | 2.5 | | < 10 | < 10 | < 10 | < 10 | 14 | < 8.0 | 8.0 | < 10 | 15.2 | 13 | 2.8 | 9.9 | 8.9 | < 2.5 | 50 | 63 | 55 | 50 | 59 |
| Mercury | ug/L | 0.2 | 0.2 | | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | - | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | 9.9 | 5.9 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 0.8 | < 1.2 | 14 | 16 | 7.5 | < 1.2 | < 1.2 | 26 | 46 | 32 | 36 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | < 0.945 | < 0.723 | < 0.441 | < 0.519 | < 0.766 | 0.182 | < 0.203 | 0.271 | 0.191 | 0.280 | 0.73 | -0.37 | 0.69 | - | 0.48 | 0.197 | 0.142 | 0.175 | 0.71 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | < 1.75 | < 1.44 | < 1.25 | < 1.46 | < 1.56 | 0.721 | 0.638 | < 0.546 | 0.191 | 1.040 | 4.93 | 0 | 0.69 | - | 0.82[U] | 0.917 | 0.693 | 0.836 | 1.11 |
| Radium-228 | pCi/L | 1.0 | 1.0 | | < 0.804 | < 0.719 | < 0.810 | 1.03 | < 0.790 | 0.539 | < 0.623 | < 0.546 | -0.620 | 0.760 | 4.2 | -1.93 | 0.42 | - | 0.34[U] | 0.72 | 0.551 | 0.66 | 0.4[U] |
| Selenium | ug/L | 0.5 | 0.5 | | < 1.0 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | 2.6 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | 0.18 | 0.15 |
| Thallium | ug/L | 0.38 | 0.38 | | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | 1.8 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 1.9 | 0.13 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | | -- | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | < 4 | < 8 | 250 | - | 26 | 15 | 17 | < 8 | 16 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | 0.38 | < 0.25 | 11 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | 0.2 | < 0.25 |
| Iron | ug/L | 250 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 390 | 280 | 1,100 | 29,000 | 2,000 | 17,000 | 6,400 | 8,700 | 2,900 | 9,900 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | 0.39 | 0.28 | 7 | < 0.25 | 8.1 | < 6.2 | < 6.2 | 0.76 | 1.1 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | 26 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | 0.7 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | 2.5 | 1.3 | 44 | < 1.2 | 3.3 | 12 | 7.3 | 4.6 | 6.1 |

| | | | Sample Location: | MW-17004 | MW-17004 |
|---|---|---|---|---|---|
| | | | Compliance Phase: | AM | AM |
| | | | Sample Dates: | 4/23/2025 | 10/28/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | |
| **Field Parameters** | | | | | |
| pH | su | -- | -- | 6.78 | 6.82 |
| Conductivity | µS/cm | -- | -- | 1,499 | 1,691 |
| Turbidity | NTU | -- | -- | 3.2 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.25 | 0.16 |
| Temperature | °C | -- | -- | 10.5 | 14.4 |
| Oxidation Reduction Potential | mV | -- | -- | 18 | 64.8 |
| **Appendix III** | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 1,100 | 980 |
| Calcium | mg/L | 1.3 | 2.6 | 330 | 330 |
| Chloride | mg/L | 1.5 | 1.5 | 24 | 20 |
| Fluoride | ug/L | 20 | 200 | 67 | < 200 |
| pH, Field | SU | -- | | 6.78 | 6.82 |
| Sulfate | mg/L | 60 | 60 | 1,000 | 870 |
| Total Dissolved Solids | mg/L | 40 | 53 | 1,800 | 1,700 |
| **Appendix IV** | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | 0.1 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 3.7 | 6.2 |
| Barium | ug/L | 2.5 | 2.5 | 74 | 88 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.28 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | 0.28 | 0.25 |
| Fluoride | ug/L | 200 | 200 | 67 | < 200 |
| Lead | ug/L | 0.55 | 0.55 | 0.13 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 71 | 55 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 29 | 30 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.261 | 0.224 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.593 | 0.793 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.332 | 0.569[U] |
| Selenium | ug/L | 0.5 | 0.5 | 0.17 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | 0.12 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | 6 | 10 |
| **Michigan CCR** | | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.24 | < 0.25 |
| Iron | ug/L | 250 | 50 | 3,000 | 4,900 |
| Nickel | ug/L | 1.2 | 1.2 | 1 | 0.92 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | 1.2 | 0.48 |
| Zinc | ug/L | 1.2 | 1.2 | 3.7 | 9.7 |

**MW-17005**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | Sample Location: | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 | MW-17005 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Compliance Phase: | Background & Detection Monitoring | | | | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| | | | | Sample Dates: | 12/6/2017 | | 2/20/2018 | | 6/15/2018 | | 8/7/2018 | 11/30/2018 | 4/12/2019 | 9/26/2019 | | 5/5/2020 | 10/28/2020 | 4/22/2021 | 10/20/2021 | 5/3/2022 | 10/20/2022 | 4/13/2023 | 10/3/2023 |
| **Field Parameters** | | | | | | Field Dup | | Field Dup | | Field Dup | | | | | Field Dup | | | | | | | | |
| pH | su | -- | -- | | 7.3 | 7.3 | 7.3 | 7.3 | 7.4 | 7.4 | 7.3 | 7.6 | 7.5 | 7.3 | 7.3 | 6.79 | 7.44 | 7.21 | 7.09 | 6.85 | 7.15 | 7.11 | 6.9 |
| Conductivity | µS/cm | -- | -- | | 426 | 426 | 483 | 483 | 568 | 568 | 512 | 496 | 378 | 900 | 900 | 1,911 | 599 | 453 | 480 | 1020 | 430 | 523 | 490 |
| Turbidity | NTU | -- | -- | | 3.8 | 3.8 | 2.5 | 2.5 | 3.6 | 3.6 | <1.0 | 1.69 | 6.4 | 0.99 | 0.99 | 1.8 | 7.59 | 3.77 | 1.91 | 0.91 | 0.02 | 4.88 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | | 0.22 | 0.22 | 0.23 | 0.23 | 0.38 | 0.38 | 0.35 | 1.23 | 0.07 | 0.31 | 0.31 | 0.26 | 0.13 | 0.43 | 0.05 | 0.04 | 0.23 | 0.17 | 0.1 |
| Temperature | °C | -- | -- | | 14.9 | 14.9 | 13.9 | 13.9 | 16.7 | 16.7 | 20.8 | 12.22 | 10.8 | 14.4 | 14.4 | 11.9 | 14.6 | 6.5 | 18.8 | 10.9 | 15.4 | 12.0 | 15.6 |
| Oxidation Reduction Potential | mV | -- | -- | | 28.9 | 28.9 | -80.8 | -80.8 | 9.2 | 9.2 | -104.3 | 45.8 | -116.6 | -126 | -126 | 57.2 | -128.6 | -88.6 | -168 | -77.5 | -95.2 | -82.5 | 0.9 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | | 191 | 208 | 238 | 228 | 377 | 353 | 342 | 350 | 400 | 490 | 520 | 1,450 | 430 | 88 | 140 | 350 | 130 | 170 | 130 |
| Calcium | mg/L | 0.26 | 2.6 | | 51.9 | 54.0 | 54.2 | 53.1 | 71.2 | 71.1 | 68.1 | 68.1 | 69 | 120 | 120 | 343 | 76 | 53 | 61 | 77 | 57 | 64 | 62 |
| Chloride | mg/L | 1.5 | 1.5 | | 19.4 | 19.4 | 21.6 | 21.3 | 20.5 | 20.5 | 19.6 | 18.5 | 15 | 17 | 17 | 20 | 22 | 23 | 22 | 100 | 22 | 23 | 20 |
| Fluoride | ug/L | 20 | 200 | | < 1,000 | <1,000 | < 1,000 | <1,000 | < 1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 22 | 120 | < 100 | < 100 | < 100 | < 100 | < 100 | 81 |
| pH, Field | SU | -- | | | 7.3 | -- | 7.3 | -- | 7.4 | -- | 7.3 | 7.6 | 7.5 | 7.3 | -- | 7.1 | 7.44 | 7.21 | 7.09 | 6.7 | 7.15 | 7.11 | 6.9 |
| Sulfate | mg/L | 6 | 30 | | 11.5 | 11.0 | < 2.0 | < 2.0 | 9.6 | 9.0 | 4.3 | 42.1 | 120 | 65 | 64 | 589 | 6 | 15 | < 3 | < 3 | < 3 | < 3 | < 3 |
| Total Dissolved Solids | mg/L | 40 | 57 | | 262 | 220 | 310 | 266 | 358 | 416 | 318 | 318 | 380 | 550 | 520 | 1,390 | 340 | 250 | 200 | 360 | 270 | 290 | 290 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | -- | -- | < 1.0 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 |
| Arsenic | ug/L | 0.55 | 0.55 | | 2.9 | 2.8 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 0.31 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 |
| Barium | ug/L | 2.5 | 2.5 | | 168 | 167 | 123 | 128 | 161 | 149 | 179 | 131 | 84 | 340 | 350 | 456 | 170 | 77 | 82 | 240 | 73 | 67 | 64 |
| Beryllium | ug/L | 0.25 | 0.25 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 |
| Cadmium | ug/L | 0.25 | 0.25 | | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | -- | < 0.20 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 |
| Chromium | ug/L | 0.25 | 0.25 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 1.1 | 3.8 | 0.3 | 0.4 | 0.3 | < 0.25 | 0.48 | < 0.25 | < 1.2 | < 1.2 |
| Cobalt | ug/L | 0.52 | 0.52 | | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | -- | 0.36 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 |
| Fluoride | ug/L | 200 | 200 | | < 1,000 | <1,000 | < 1,000 | <1,000 | < 1,000 | <1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 22 | 120 | < 100 | < 100 | < 100 | < 100 | < 100 | 81 |
| Lead | ug/L | 0.55 | 0.55 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | -- | < 1.0 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 |
| Lithium | ug/L | 12 | 2.5 | | 10 | 12 | 11 | 11 | < 10 | < 10 | 13 | 11 | < 8.0 | 14 | 14 | 48 | 13 | 4.1 | 5.1 | 3.9 | 6.2 | 7.1 | < 12 |
| Mercury | ug/L | 0.2 | 0.2 | | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | -- | < 0.20 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 0.29 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 |
| Radium-226 | pCi/L | 1.0 | 1.0 | | < 0.863 | 1.56 | < 0.804 | 0.910 | < 0.692 | < 0.610 | 0.440 | < 0.592 | 0.270 | 0.497 | 0.481 | 0.285 | 0.150 | 0.6 | 0.45 | 0.32 | 0.16[U] | 0.111[U] | 0.201[U] |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | | < 1.59 | < 1.61 | < 1.71 | < 1.80 | < 1.49 | < 1.46 | < 1.15 | < 1.25 | 0.700 | 0.739 | 1.08 | 0.541 | 0.960 | 0.68 | 0.45 | 0.32 | 4.22 | 0.721[U] | 0.563[U] |
| Radium-228 | pCi/L | 1.0 | 1.0 | | < 0.722 | < 0.649 | < 0.904 | < 0.945 | < 0.796 | < 0.853 | < 0.741 | < 0.656 | < 0.479 | < 0.564 | 0.596 | 0.256 | 0.810 | 0.08 | -1.07 | -0.06 | 4.06 | 0.61[U] | 0.362[U] |
| Selenium | ug/L | 0.5 | 0.5 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 |
| Thallium | ug/L | 0.38 | 0.38 | | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | -- | < 1.0 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 49 | < 4 | 9 | < 8 | 42 | < 8 | < 4 | < 4 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 |
| Iron | ug/L | 250 | 50 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1,700 | 290 | 220 | 17,000 | 1,200 | 1,400 | 1,000 |
| Nickel | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | < 0.25 | < 0.25 | 0.26 | < 1.2 | < 6.2 | < 6.2 |
| Silver | ug/L | 0.05 | 0.05 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 |
| Vanadium | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 |
| Zinc | ug/L | 1.2 | 1.2 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | < 1.2 | < 1.2 | < 1.2 | < 1.2 | 7.2 | < 6.2 |

| | | | Sample Location: | MW-17005 | MW-17005 | MW-17005 | MW-17005 |
|---|---|---|---|---|---|---|---|
| | | | Compliance Phase: | AM | AM | AM | AM |
| | | | Sample Dates: | 3/27/2024 | 10/23/2024 | 4/22/2025 | 10/28/2025 |
| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | | | | |
| **Field Parameters** | | | | | | | |
| pH | su | -- | -- | 7.12 | 6.53 | 7.26 | 6.64 |
| Conductivity | µS/cm | -- | -- | 690 | 1800 | 465.1 | 1,544 |
| Turbidity | NTU | -- | -- | 0.02 | 0.02 | 9.75 | 5.26 |
| Dissolved Oxygen | mg/L | -- | -- | 0.19 | 0.02 | 0.09 | 0.21 |
| Temperature | °C | -- | -- | 11.1 | 14.3 | 11.3 | 13.2 |
| Oxidation Reduction Potential | mV | -- | -- | 43.9 | -38.7 | -32.3 | -47.6 |
| **Appendix III** | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 220 | 1,300 | 230 | 1,000 |
| Calcium | mg/L | 0.26 | 2.6 | 76 | 270 | 78 | 240 |
| Chloride | mg/L | 1.5 | 1.5 | 21 | 27 | 53 | 32 |
| Fluoride | ug/L | 20 | 200 | < 100 | < 200 | 140 | < 200 |
| pH, Field | SU | -- | | 7.12 | 6.53 | 7.26 | 6.64 |
| Sulfate | mg/L | 6 | 30 | 110 | 730 | 86 | 540 |
| Total Dissolved Solids | mg/L | 40 | 57 | 430 | 1,300 | 410 | 1,200 |
| **Appendix IV** | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 0.11 | 0.16 | 0.21 | 0.14 |
| Barium | ug/L | 2.5 | 2.5 | 95 | 180 | 99 | 290 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 | 0.06 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | < 0.25 | 0.35 | 0.24 | 0.27 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 100 | < 200 | 140 | < 200 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 | 0.13 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 7.3 | 36 | 10 | 24 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 1.2 | 0.29 | 7.6 | 3.1 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.232 | 0.07[U] | 0.295 | 0.87 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.968 | 0.73[U] | 1.37 | 1.86 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.735 | 0.66[U] | 1.07 | 0.988 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 | < 0.5 | < 0.5 | 0.12 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.2 | < 8 | 54 | 7 | 26 |
| **Michigan CCR** | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | < 0.25 | 2.6 | < 0.25 | 0.24 |
| Iron | ug/L | 250 | 50 | 3,700 | 40,000 | 3,500 | 23,000 |
| Nickel | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | 1.3 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | < 1.2 | < 1.2 | < 1.2 | 0.37 |
| Zinc | ug/L | 1.2 | 1.2 | < 1.2 | 8 | < 1.2 | 28 |

**MW-17006**
**Charah-BC Cobb**

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location: | | | | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 | MW-17006 |
| Compliance Phase: | | | | Background & Detection | | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM | AM |
| Sample Dates: | | | | 12/6/2017 | 2/20/2018 | 6/15/2018 | 8/7/2018 | 11/30/2018 | 4/12/2019 | 9/26/2019 | 5/5/2020 | 10/30/2020 | 4/21/2021 | 6/15/2021 | 10/20/2021 | 5/2/2022 | 10/20/2022 | 4/13/2023 | 10/3/2023 | 3/27/2024 | 10/23/2024 | 4/24/2025 |
| **Field Parameters** | | | | | | | | | | | | | No sample | | | | | | | | |
| pH | su | -- | -- | 7.7 | 7.3 | 7.5 | 7.5 | 7.7 | 7.5 | 7.8 | 7.03 | 7.02 | | 7.00 | 7.41 | 7.21 | 7.00 | 7.25 | 6.9 | 7.26 | 7.14 | 7.29 |
| Conductivity | µS/cm | -- | -- | 794 | 11 | 717 | 693 | 686 | 732 | 975 | 1,029 | 1,320 | | 1,100 | 970 | 770 | 490 | 615 | 620 | 840 | 890 | 740 |
| Turbidity | NTU | -- | -- | 3.0 | 1.3 | 1.3 | <1.0 | 0.43 | 1.7 | 0.95 | 2.47 | 0.02 | | 8.8 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Dissolved Oxygen | mg/L | -- | -- | 0.22 | 2.09 | 0.42 | 0.37 | 1.35 | 0.11 | 0.39 | 0.27 | 0.9 | | 0.2 | 0.09 | 0.78 | 0.89 | 0.13 | 0.09 | 0.33 | 0.85 | 0.1 |
| Temperature | °C | -- | -- | 11.1 | 13.5 | 15.8 | 19.6 | 11.93 | 12 | 13.2 | 12.1 | 12.1 | | 13.9 | 12.6 | 12.2 | 12.7 | 13.0 | 14.3 | 9.0 | 13.6 | 12.8 |
| Oxidation Reduction Potential | mV | -- | -- | 60.7 | 10.8 | 16.4 | -60.7 | 20.2 | -156.7 | -209 | 30.3 | -79.1 | | -140.2 | -90 | -106.1 | -80.9 | -129.5 | 10.2 | 4.8 | -32.5 | -42.8 |
| **Appendix III** | | | | | | | | | | | | | | | | | | | | | | |
| Boron | ug/L | 8.8 | 8.8 | 669 | 594 | 653 | 765 | 630 | 650 | 600 | 745 | 980 | | 800 | 740 | 820 | 710 | 680 | 640 | 550 | 690 | 540 |
| Calcium | mg/L | 1.3 | 2.6 | 106 | 95.0 | 97.5 | 90.4 | 99.8 | 150 | 130 | 153 | 220 | | 170 | 140 | 98 | 80 | 79 | 75 | 100 | 130 | 96 |
| Chloride | mg/L | 1.5 | 1.5 | 19.0 | 20.3 | 20.9 | 21.5 | 20.4 | 19 | 18 | 25 | 19 | | 36 | 76 | 45 | 47 | 40 | 38 | 43 | 48 | 52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 22 | 130 | | 120 | < 100 | 190 | 110 | 170 | 140 | 110 | < 200 | 180 |
| pH, Field | SU | -- | | 7.7 | 7.3 | 7.5 | 7.5 | 7.7 | 7.5 | 7.8 | 7.4 | 7.0 | | 7.0 | 7.4 | 7.2 | 7.00 | 7.25 | 6.9 | 7.26 | 7.14 | 7.29 |
| Sulfate | mg/L | 6 | 6.0 | 129 | 93.1 | 69.8 | 46.2 | 102 | 290 | 220 | 182 | 340 | | 240 | 97 | 50 | 19 | 12 | 5.2 | 96 | 97 | 93 |
| Total Dissolved Solids | mg/L | 40 | 40 | 474 | 472 | 478 | 438 | 432 | 800 | 680 | 631 | 940 | | 690 | 570 | 500 | 390 | 350 | 360 | 510 | 560 | 490 |
| **Appendix IV** | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 1.0 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.25 | | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 4.9 | 2.4 | 4.6 | < 1.0 | 6.6 | 5.9 | 4.3 | 5.7 | 0.7 | | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | 0.97 | 1.9 | 4.2 |
| Barium | ug/L | 2.5 | 2.5 | 83.3 | 79.0 | 70.3 | 73.0 | 68.6 | 120 | 98 | 129 | 190 | | 140 | 110 | 88 | 72 | 72 | 65 | 76 | 100 | 75 |
| Beryllium | ug/L | 0.25 | 0.25 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 0.20 | < 0.25 | | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.25 | | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | < 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 1.2 | 0.2 | < 0.25 | | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | < 0.25 | 0.22 | < 0.25 |
| Cobalt | ug/L | 0.52 | 0.52 | < 15.0 | < 15.0 | < 15.0 | < 15.0 | < 6.0 | < 6.0 | -- | 0.17 | < 0.52 | | < 0.52 | < 0.52 | < 0.52 | < 0.52 | < 2.6 | < 2.6 | < 0.52 | < 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | < 1,000 | 22 | 130 | | 120 | < 100 | 190 | 110 | 170 | 140 | 110 | < 200 | 180 |
| Lead | ug/L | 0.55 | 0.55 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | -- | < 1.0 | < 0.55 | | < 0.55 | < 0.55 | < 0.55 | < 0.55 | < 2.8 | < 2.8 | < 0.55 | < 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 38 | 37 | 31 | 36 | 32 | 35 | 28 | 38 | 57 | | 14 | 22 | 32 | 26 | 12 | 26 | 25 | 29 | 28 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | -- | < 0.20 | < 0.2 | | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | 1.2 | < 0.2 | < 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 1.6 | < 1.2 | | < 1.2 | < 1.2 | 1.2 | < 1.2 | < 6.2 | < 6.2 | 6.3 | 12 | 53 |
| Radium-226 | pCi/L | 1.0 | 1.0 | < 0.930 | < 0.766 | < 0.862 | < 0.582 | 1.13 | < 0.225 | 0.497 | 0.754 | 0.440 | | 0.86 | 0.35 | 0.21 | 0.48 | 0.0903[U] | 0.202[U] | 0.187 | 0.97 | 0.0124 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | < 0.833 | < 0.716 | < 0.888 | < 0.757 | 1.06 | < 0.556 | < 0.437 | 0.955 | 1.180 | | 2.66 | 0.35 | 0.21 | 2.11 | 0.814 | 0.999 | 0.964 | 1.76 | 0.741 |
| Radium-228 | pCi/L | 1.0 | 1.0 | < 1.76 | < 1.48 | < 1.75 | < 1.34 | 2.19 | < 0.556 | 0.819 | 0.201 | 0.740 | | 1.8 | 0.09 | -0.17 | 1.63 | 0.724 | 0.797 | 0.777 | 0.79 | 0.729 |
| Selenium | ug/L | 0.5 | 0.5 | < 1.0 | < 1.0 | < 1.0 | < 2.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 0.5 | | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2.5 | < 2.5 | < 0.5 | 0.14 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | -- | < 1.0 | < 0.38 | | < 0.38 | < 0.38 | < 0.38 | < 0.38 | < 1.9 | < 1.9 | < 0.38 | < 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | -- | -- | -- | -- | -- | -- | -- | < 2.5 | < 4 | | 11 | < 8 | < 8 | < 8 | < 4 | < 4 | < 8 | < 4.0 | < 4.0 |
| **Michigan CCR** | | | | | | | | | | | | | | | | | | | | | | |
| Copper | ug/L | 0.25 | 0.25 | -- | -- | -- | -- | -- | -- | -- | -- | < 1 | | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 1.2 | < 1.2 | 1.2 | < 0.25 | < 0.25 |
| Iron | ug/L | 250 | 50 | -- | -- | -- | -- | -- | -- | -- | -- | 2,100 | | 2,100 | 1,900 | 2,900 | 1,600 | 1,700 | 1,500 | 1,000 | 940 | 710 |
| Nickel | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | < 50 | | < 0.25 | 0.37 | 0.27 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 |
| Silver | ug/L | 0.05 | 0.05 | -- | -- | -- | -- | -- | -- | -- | -- | < 0.2 | | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.05 | < 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | | < 1.2 | < 1.2 | < 1.2 | < 1.2 | < 6.2 | < 6.2 | < 1.2 | < 1.2 | < 1.2 |
| Zinc | ug/L | 1.2 | 1.2 | -- | -- | -- | -- | -- | -- | -- | -- | < 10 | | 8.8 | < 1.2 | < 1.2 | < 1.2 | 7 | 6.2 | < 1.2 | 3.7 | < 1.2 |

| | |
|---|---|
| Sample Location: | MW-17006 |
| Compliance Phase: | AM |
| Sample Dates: | 10/29/2025 |

| Constituent | Unit | RDL (Trace 04/2025) | RDL (Trace 10/2025) | |
|---|---|---|---|---|
| **Field Parameters** | | | | |
| pH | su | -- | -- | 7.27 |
| Conductivity | µS/cm | -- | -- | 779 |
| Turbidity | NTU | -- | -- | 1.76 |
| Dissolved Oxygen | mg/L | -- | -- | 0.01 |
| Temperature | °C | -- | -- | 12.7 |
| Oxidation Reduction Potential | mV | -- | -- | -68.3 |
| **Appendix III** | | | | |
| Boron | ug/L | 8.8 | 8.8 | 680 |
| Calcium | mg/L | 1.3 | 2.6 | 110 |
| Chloride | mg/L | 1.5 | 1.5 | 48 |
| Fluoride | ug/L | 200 | 200 | 290 |
| pH, Field | SU | -- | | 7.27 |
| Sulfate | mg/L | 6 | 6.0 | 33 |
| Total Dissolved Solids | mg/L | 40 | 40 | 460 |
| **Appendix IV** | | | | |
| Antimony | ug/L | 0.25 | 0.25 | < 0.25 |
| Arsenic | ug/L | 0.55 | 0.55 | 1.3 |
| Barium | ug/L | 2.5 | 2.5 | 87 |
| Beryllium | ug/L | 0.25 | 0.25 | < 0.25 |
| Cadmium | ug/L | 0.25 | 0.25 | < 0.25 |
| Chromium | ug/L | 0.25 | 0.25 | 0.58 |
| Cobalt | ug/L | 0.52 | 0.52 | < 0.52 |
| Fluoride | ug/L | 200 | 200 | 290 |
| Lead | ug/L | 0.55 | 0.55 | < 0.55 |
| Lithium | ug/L | 12 | 2.5 | 26 |
| Mercury | ug/L | 0.2 | 0.2 | < 0.2 |
| Molybdenum | ug/L | 1.2 | 1.2 | 16 |
| Radium-226 | pCi/L | 1.0 | 1.0 | 0.258 |
| Radium-226/228 | pCi/L | 1.0 | 1.0 | 0.918 |
| Radium-228 | pCi/L | 1.0 | 1.0 | 0.66 |
| Selenium | ug/L | 0.5 | 0.5 | < 0.5 |
| Thallium | ug/L | 0.38 | 0.38 | < 0.38 |
| Total Suspended Solids | mg/L | 4.0 | 4.1 | < 4.1 |
| **Michigan CCR** | | | | |
| Copper | ug/L | 0.25 | 0.25 | 0.21 |
| Iron | ug/L | 250 | 50 | 860 |
| Nickel | ug/L | 1.2 | 1.2 | 0.86 |
| Silver | ug/L | 0.05 | 0.05 | < 0.05 |
| Vanadium | ug/L | 1.2 | 1.2 | 0.41 |
| Zinc | ug/L | 1.2 | 1.2 | 8.5 |

**Notes:**

ug/l - micrograms per liter.

mg/l = milligrams per liter.

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

pCi/L = picocuries per liter.

All metals were analyzed as total unless otherwise indicated.

**Qualifiers:**

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

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

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

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

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

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

# Appendix C

# Lab Reports

Trace Analytical Laboratories, Inc.
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TRACE ANALYTICAL LABORATORIES, INC.

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May 07, 2025

Ms. Lara Zawaideh
HDR Michigan Inc.
1000 Oakbrook Dr., Suite 200
Ann Arbor, MI 48104

RE: Trace Project 25D1770
Client Project BC Cobb

Dear Ms. Zawaideh:

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

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

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## SAMPLE SUMMARY

Trace Project ID: 25D1770
Client Project ID: BC Cobb

| Trace ID | Sample ID | Matrix | Collected By | Date Collected | Date Received |
|---|---|---|---|---|---|
| 25D1770-01 | MW-15023 | Ground Water | AB/FDR | 04/22/25 09:40 | 04/23/25 08:00 |
| 25D1770-02 | MW-15020 | Ground Water | AB/FDR | 04/22/25 11:20 | 04/23/25 08:00 |
| 25D1770-03 | MW-17005 | Ground Water | AB/FDR | 04/22/25 12:50 | 04/23/25 08:00 |
| 25D1770-04 | MW-15010 | Ground Water | AB/FDR | 04/22/25 11:48 | 04/23/25 08:00 |
| 25D1770-05 | MWT-15010 | Ground Water | AB/FDR | 04/22/25 11:48 | 04/23/25 08:00 |
| 25D1770-06 | MW-17004 | Ground Water | AB/FDR | 04/23/25 10:15 | 04/25/25 08:09 |
| 25D1770-07 | MW-15019 | Ground Water | AB/FDR | 04/23/25 11:40 | 04/25/25 08:09 |
| 25D1770-08 | MW-17003 | Ground Water | AB/FDR | 04/23/25 12:45 | 04/25/25 08:09 |
| 25D1770-09 | MW-15018 | Ground Water | AB/FDR | 04/23/25 14:00 | 04/25/25 08:09 |
| 25D1770-10 | MW-15017 | Ground Water | AB/FDR | 04/23/25 15:45 | 04/25/25 08:09 |
| 25D1770-11 | MW-17002 | Ground Water | AB/FDR | 04/23/25 17:05 | 04/25/25 08:09 |
| 25D1770-12 | MW-15005 | Ground Water | AB/FDR | 04/23/25 09:52 | 04/25/25 08:09 |
| 25D1770-13 | MWT-15005 | Ground Water | AB/FDR | 04/23/25 09:52 | 04/25/25 08:09 |
| 25D1770-14 | MW-15006 | Ground Water | AB/FDR | 04/23/25 11:28 | 04/25/25 08:09 |
| 25D1770-15 | MW-15008 | Ground Water | AB/FDR | 04/23/25 12:34 | 04/25/25 08:09 |
| 25D1770-16 | MW-15007 | Ground Water | AB/FDR | 04/23/25 13:48 | 04/25/25 08:09 |
| 25D1770-17 | MW-15009 | Ground Water | AB/FDR | 04/23/25 14:58 | 04/25/25 08:09 |
| 25D1770-18 | MW-15022 | Ground Water | AB/FDR | 04/23/25 16:02 | 04/25/25 08:09 |
| 25D1770-19 | MW-15021 | Ground Water | AB/FDR | 04/23/25 17:00 | 04/25/25 08:09 |
| 25D1770-20 | MW-17001R | Ground Water | AB/FDR | 04/24/25 10:05 | 04/25/25 08:09 |
| 25D1770-21 | MW-15016R | Ground Water | AB/FDR | 04/24/25 11:00 | 04/25/25 08:09 |
| 25D1770-22 | MW-15015R | Ground Water | AB/FDR | 04/24/25 12:50 | 04/25/25 08:09 |
| 25D1770-23 | MW-15014R | Ground Water | AB/FDR | 04/24/25 14:05 | 04/25/25 08:09 |
| 25D1770-24 | MW-15013 | Ground Water | AB/FDR | 04/24/25 08:50 | 04/25/25 08:09 |
| 25D1770-25 | MW-15004 | Ground Water | AB/FDR | 04/24/25 10:00 | 04/25/25 08:09 |
| 25D1770-26 | MW-15003 | Ground Water | AB/FDR | 04/24/25 11:10 | 04/25/25 08:09 |
| 25D1770-27 | MW-15002 | Ground Water | AB/FDR | 04/24/25 12:10 | 04/25/25 08:09 |
| 25D1770-28 | MW-17006 | Ground Water | AB/FDR | 04/24/25 13:50 | 04/25/25 08:09 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-01 Date Collected: 04/22/25 09:40 Matrix: Ground Water
Sample ID: MW-15023 Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T165995* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/25/25 | cma | 04/28/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **3.1** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **280** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.067** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.027** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.27** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00030** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.016** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166090* | | | | | | | | | | |
| **Fluoride** | **0.091** | **mg/L** | **0.020** | **1** | **04/28/25** | **ljs** | **04/28/25** | **ljs** | **N** | **0.011** |
| **Chloride** | **160** | **mg/L** | **1.5** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **560** | **mg/L** | **30** | **50** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **11** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T165871* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-01 Date Collected: 04/22/25 09:40 Matrix: Ground Water
Sample ID: MW-15023 Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1400** | **mg/L** | **40** | **4** | **04/23/25** | **cdj** | **04/23/25** | **cdj** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T165867* | | | | | | | | | | |
| **Total Suspended Solids** | **44** | **mg/L** | **4.0** | **1** | **04/23/25** | **cdj** | **04/23/25** | **cdj** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-02 | Date Collected: 04/22/25 11:20 | Matrix: Ground Water
Sample ID: MW-15020 | Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T165995* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/25/25 | cma | 04/28/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.40** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **85** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| **Lithium** | **0.011** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00023** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.15** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00026** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00020** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166090* | | | | | | | | | | |
| **Fluoride** | **0.15** | **mg/L** | **0.020** | **1** | **04/28/25** | **ljs** | **04/28/25** | **ljs** | **N** | **0.011** |
| **Chloride** | **57** | **mg/L** | **1.5** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | | **1.2** |
| Sulfate as SO4 | <0.22 | mg/L | 1.0 | 1 | 04/28/25 | ljs | 04/28/25 | ljs | | 0.22 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T165871* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-02 | Date Collected: 04/22/25 11:20 | Matrix: Ground Water
Sample ID: MW-15020 | Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **430** | **mg/L** | **40** | **4** | **04/23/25** | **cdj** | **04/23/25** | **cdj** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T165867* | | | | | | | | | | |
| **Total Suspended Solids** | **34** | **mg/L** | **4.0** | **1** | **04/23/25** | **cdj** | **04/23/25** | **cdj** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-03 | Date Collected: 04/22/25 12:50 | Matrix: Ground Water
Sample ID: MW-17005 | Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T165995* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/25/25 | cma | 04/28/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.23** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **78** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| **Lithium** | **0.010** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00021** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.099** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00024** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0076** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166090* | | | | | | | | | | |
| **Fluoride** | **0.14** | **mg/L** | **0.020** | **1** | **04/28/25** | **ljs** | **04/28/25** | **ljs** | **N** | **0.011** |
| **Chloride** | **53** | **mg/L** | **1.5** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **86** | **mg/L** | **6.0** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T165871* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-03 | Date Collected: 04/22/25 12:50 | Matrix: Ground Water
Sample ID: MW-17005 | Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **410** | **mg/L** | **40** | **4** | **04/23/25** | **cdj** | **04/23/25** | **cdj** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T165867* | | | | | | | | | | |
| **Total Suspended Solids** | **7.0** | **mg/L** | **4.0** | **1** | **04/23/25** | **cdj** | **04/23/25** | **cdj** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-04 | Date Collected: 04/22/25 11:48 | Matrix: Ground Water
Sample ID: MW-15010 | Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T165995* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/25/25 | cma | 04/28/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **1.0** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **180** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.046** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00015** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.085** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00024** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0014** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T165878* | | | | | | | | | | |
| **Fluoride** | **0.31** | **mg/L** | **0.20** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **79** | **mg/L** | **1.5** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **42** | **mg/L** | **6.0** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T165871* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-04 | Date Collected: 04/22/25 11:48 | Matrix: Ground Water
Sample ID: MW-15010 | Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **790** | **mg/L** | **40** | **4** | **04/23/25** | **cdj** | **04/23/25** | **cdj** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T165867* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 04/23/25 | cdj | 04/23/25 | cdj | | 4.0 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-05 Date Collected: 04/22/25 11:48 Matrix: Ground Water
Sample ID: MWT-15010 Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T165995* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/25/25 | cma | 04/28/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **1.0** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **180** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.044** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00015** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.087** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00021** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0013** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T165892* | | | | | | | | | | |
| **Fluoride** | **0.30** | **mg/L** | **0.20** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **79** | **mg/L** | **1.5** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **42** | **mg/L** | **6.0** | **10** | **04/23/25** | **ljs** | **04/24/25** | **ljs** | | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T165873* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-05 | Date Collected: 04/22/25 11:48 | Matrix: Ground Water
Sample ID: MWT-15010 | Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **760** | **mg/L** | **40** | **4** | **04/23/25** | **cdj** | **04/23/25** | **cdj** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T165867* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 04/23/25 | cdj | 04/23/25 | cdj | | 4.0 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-06 Date Collected: 04/23/25 10:15 Matrix: Ground Water
Sample ID: MW-17004 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **1.1** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **330** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.071** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Antimony** | **0.00010** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Arsenic** | **0.0037** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.074** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00028** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00028** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Lead** | **0.00013** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Molybdenum** | **0.029** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00017** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Thallium** | **0.00012** | **mg/L** | **0.00038** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.000075** |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166090* | | | | | | | | | | |
| **Fluoride** | **0.067** | **mg/L** | **0.020** | **1** | **04/28/25** | **ljs** | **04/28/25** | **ljs** | **N** | **0.011** |
| **Chloride** | **24** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **1000** | **mg/L** | **60** | **100** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **22** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-06 | Date Collected: 04/23/25 10:15 | Matrix: Ground Water
Sample ID: MW-17004 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1800** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **6.0** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-07 | Date Collected: 04/23/25 11:40 | Matrix: Ground Water
Sample ID: MW-15019 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.48** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **110** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.012** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00046** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.28** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00051** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00059** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Lead** | **0.00034** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166090* | | | | | | | | | | |
| **Fluoride** | **0.10** | **mg/L** | **0.020** | **1** | **04/28/25** | **ljs** | **04/28/25** | **ljs** | **N** | **0.011** |
| **Chloride** | **76** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **0.35** | **mg/L** | **1.0** | **1** | **04/28/25** | **ljs** | **04/28/25** | **ljs** | **J** | **0.22** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-07 | Date Collected: 04/23/25 11:40 | Matrix: Ground Water
Sample ID: MW-15019 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **540** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **58** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-08 Date Collected: 04/23/25 12:45 Matrix: Ground Water
Sample ID: MW-17003 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **3.1** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **460** | **mg/L** | **2.6** | **10** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.37** |
| **Lithium** | **0.36** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.18** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.034** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| **Beryllium** | **0.00015** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.000052** |
| **Cadmium** | **0.000081** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.000075** |
| **Chromium** | **0.00045** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.052** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| Lead | <0.00050 | mg/L | 0.0028 | 5 | 04/29/25 | ejb | 05/02/25 | drm | DL02 | 0.00050 |
| **Molybdenum** | **0.12** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00013** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.00038 | mg/L | 0.0019 | 5 | 04/29/25 | ejb | 05/02/25 | drm | DL02 | 0.00038 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.14** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **53** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **1800** | **mg/L** | **120** | **200** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **44** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-08 | Date Collected: 04/23/25 12:45 | Matrix: Ground Water
Sample ID: MW-17003 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **2800** | **mg/L** | **67** | **6.666667** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **78** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-09 | Date Collected: 04/23/25 14:00 | Matrix: Ground Water
Sample ID: MW-15018 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.22** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **80** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| **Lithium** | **0.020** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00057** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.14** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00051** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00016** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Lead** | **0.00069** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.18** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **40** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **0.57** | **mg/L** | **1.0** | **1** | **04/28/25** | **ljs** | **04/29/25** | **ljs** | **J** | **0.22** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-09 Date Collected: 04/23/25 14:00 Matrix: Ground Water
Sample ID: MW-15018 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **360** | **mg/L** | **50** | **5** | **04/28/25** | **sm** | **04/28/25** | **sm** | **RPD** | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **12** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-10 Date Collected: 04/23/25 15:45 Matrix: Ground Water
Sample ID: MW-15017 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.074** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **270** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.0055** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.0021** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **1.0** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.0010** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00063** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166090* | | | | | | | | | | |
| **Fluoride** | **0.044** | **mg/L** | **0.020** | **1** | **04/28/25** | **ljs** | **04/29/25** | **ljs** | **N** | **0.011** |
| **Chloride** | **360** | **mg/L** | **3.8** | **25** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **3.0** |
| **Sulfate as SO4** | **0.36** | **mg/L** | **1.0** | **1** | **04/28/25** | **ljs** | **04/29/25** | **ljs** | **J** | **0.22** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-10 | Date Collected: 04/23/25 15:45 | Matrix: Ground Water
Sample ID: MW-15017 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1300** | **mg/L** | **67** | **6.666667** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **180** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-11 | Date Collected: 04/23/25 17:05 | Matrix: Ground Water
Sample ID: MW-17002 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **17** | **mg/L** | **0.044** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.026** |
| **Calcium** | **470** | **mg/L** | **2.6** | **10** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.37** |
| **Lithium** | **0.24** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.090** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.054** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| **Cadmium** | **0.00026** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.000075** |
| **Chromium** | **0.00029** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.77** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.28** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **10** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **680** | **mg/L** | **30** | **50** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **11** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-11 | Date Collected: 04/23/25 17:05 | Matrix: Ground Water
Sample ID: MW-17002 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1900** | **mg/L** | **67** | **6.666667** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **72** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-12 | Date Collected: 04/23/25 09:52 | Matrix: Ground Water
Sample ID: MW-15005 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.11** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **80** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| **Lithium** | **0.0025** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Antimony** | **0.00023** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Arsenic** | **0.00096** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.14** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| **Cadmium** | **0.00017** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.000075** |
| **Chromium** | **0.00024** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00020** |
| **Cobalt** | **0.00021** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Lead** | **0.00044** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Molybdenum** | **0.00082** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00025** |
| **Selenium** | **0.00032** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.16** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **10** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **2.7** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J** | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-12 | Date Collected: 04/23/25 09:52 | Matrix: Ground Water
Sample ID: MW-15005 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **270** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **12** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-13 | Date Collected: 04/23/25 09:52 | Matrix: Ground Water
Sample ID: MWT-15005 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.091** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **80** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| **Lithium** | **0.0024** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **J, N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Antimony** | **0.00026** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Arsenic** | **0.0011** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.14** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| **Cadmium** | **0.00017** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.000075** |
| **Chromium** | **0.00050** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00022** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Lead** | **0.00057** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Molybdenum** | **0.00080** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00025** |
| **Selenium** | **0.00035** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.16** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **9.8** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **2.5** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J** | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-13 | Date Collected: 04/23/25 09:52 | Matrix: Ground Water
Sample ID: MWT-15005 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **280** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **5.0** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-14 | Date Collected: 04/23/25 11:28 | Matrix: Ground Water
Sample ID: MW-15006 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.037** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **76** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| Lithium | <0.0019 | mg/L | 0.0025 | 1 | 04/29/25 | ejb | 05/02/25 | jlh | N | 0.0019 |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Antimony** | **0.00052** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Arsenic** | **0.0043** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.018** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| **Cadmium** | **0.000078** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.000075** |
| **Chromium** | **0.00036** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.0014** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0054** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| **Selenium** | **0.0015** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.23** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **4.7** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **7.5** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-14 Date Collected: 04/23/25 11:28 Matrix: Ground Water
Sample ID: MW-15006 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **300** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **5.0** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-15 Date Collected: 04/23/25 12:34 Matrix: Ground Water
Sample ID: MW-15008 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.18** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **89** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| **Lithium** | **0.013** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Antimony** | **0.00015** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Arsenic** | **0.0027** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.052** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0014** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00010** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.20** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **12** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **2.8** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J** | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-15 Date Collected: 04/23/25 12:34 Matrix: Ground Water
Sample ID: MW-15008 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **350** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 04/28/25 | sm | 04/28/25 | sm | | 4.0 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-16 | Date Collected: 04/23/25 13:48 | Matrix: Ground Water
Sample ID: MW-15007 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.081** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **79** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| Lithium | <0.0019 | mg/L | 0.0025 | 1 | 04/29/25 | ejb | 05/02/25 | jlh | N | 0.0019 |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Antimony** | **0.00031** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Arsenic** | **0.0044** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.032** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00031** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00073** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Lead** | **0.00011** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Molybdenum** | **0.0089** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00099** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.32** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **100** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **9.5** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-16 | Date Collected: 04/23/25 13:48 | Matrix: Ground Water
Sample ID: MW-15007 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **440** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **5.0** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-17 | Date Collected: 04/23/25 14:58 | Matrix: Ground Water
Sample ID: MW-15009 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.62** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **97** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.027** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.0084** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.060** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.016** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.12** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **48** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **170** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-17 Date Collected: 04/23/25 14:58 Matrix: Ground Water
Sample ID: MW-15009 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **480** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 04/28/25 | sm | 04/28/25 | sm | | 4.0 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-18 | Date Collected: 04/23/25 16:02 | Matrix: Ground Water
Sample ID: MW-15022 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **1.2** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **150** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.053** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00021** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.19** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00024** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00020** |
| **Cobalt** | **0.00025** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.00031** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.13** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **89** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **3.0** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J** | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166103* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-18 Date Collected: 04/23/25 16:02 Matrix: Ground Water
Sample ID: MW-15022 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **620** | **mg/L** | **40** | **4** | **04/28/25** | **sm** | **04/28/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 04/28/25 | sm | 04/28/25 | sm | | 4.0 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-19 Date Collected: 04/23/25 17:00 Matrix: Ground Water
Sample ID: MW-15021 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **0.26** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **130** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.0030** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.0014** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.38** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00096** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00089** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| **Selenium** | **0.00012** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166090* | | | | | | | | | | |
| **Fluoride** | **0.068** | **mg/L** | **0.020** | **1** | **04/28/25** | **ljs** | **04/29/25** | **ljs** | **N** | **0.011** |
| **Chloride** | **310** | **mg/L** | **3.8** | **25** | **04/25/25** | **ljs** | **04/28/25** | **ljs** | | **3.0** |
| Sulfate as SO4 | <0.22 | mg/L | 1.0 | 1 | 04/28/25 | ljs | 04/29/25 | ljs | | 0.22 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-19 Date Collected: 04/23/25 17:00 Matrix: Ground Water
Sample ID: MW-15021 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1000** | **mg/L** | **67** | **6.666667** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **58** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-20 Date Collected: 04/24/25 10:05 Matrix: Ground Water
Sample ID: MW-17001R Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Boron** | **2.4** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **470** | **mg/L** | **2.6** | **10** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.37** |
| **Lithium** | **0.17** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00030** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.30** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| **Cobalt** | **0.00022** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.12** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **27** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **490** | **mg/L** | **30** | **50** | **04/25/25** | **ljs** | **04/28/25** | **ljs** | | **11** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-20 Date Collected: 04/24/25 10:05 Matrix: Ground Water
Sample ID: MW-17001R Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1900** | **mg/L** | **40** | **4** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **6.0** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-21 Date Collected: 04/24/25 11:00 Matrix: Ground Water
Sample ID: MW-15016R Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Boron** | **0.15** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **220** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.0050** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.0026** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **1.0** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00080** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00089** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| **Selenium** | **0.00014** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166090* | | | | | | | | | | |
| **Fluoride** | **0.053** | **mg/L** | **0.020** | **1** | **04/28/25** | **ljs** | **04/29/25** | **ljs** | **N** | **0.011** |
| **Chloride** | **450** | **mg/L** | **7.5** | **50** | **04/25/25** | **ljs** | **04/28/25** | **ljs** | | **6.0** |
| **Sulfate as SO4** | **0.53** | **mg/L** | **1.0** | **1** | **04/28/25** | **ljs** | **04/29/25** | **ljs** | **J** | **0.22** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-21 | Date Collected: 04/24/25 11:00 | Matrix: Ground Water
Sample ID: MW-15016R | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1400** | **mg/L** | **67** | **6.666667** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **130** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-22 | Date Collected: 04/24/25 12:50 | Matrix: Ground Water
Sample ID: MW-15015R | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Boron** | **2.1** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **580** | **mg/L** | **2.6** | **10** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.37** |
| **Lithium** | **0.067** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Antimony** | **0.00062** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Arsenic** | **0.055** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.066** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| **Cobalt** | **0.00015** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00050 | mg/L | 0.0028 | 5 | 04/29/25 | ejb | 05/02/25 | drm | DL02 | 0.00050 |
| **Molybdenum** | **0.14** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00024** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.00038 | mg/L | 0.0019 | 5 | 04/29/25 | ejb | 05/02/25 | drm | DL02 | 0.00038 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| Fluoride | <0.11 | mg/L | 0.20 | 10 | 04/25/25 | ljs | 04/26/25 | ljs | N | 0.11 |
| **Chloride** | **45** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **1700** | **mg/L** | **60** | **100** | **04/25/25** | **ljs** | **04/28/25** | **ljs** | | **22** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-22 | Date Collected: 04/24/25 12:50 | Matrix: Ground Water
Sample ID: MW-15015R | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **2800** | **mg/L** | **40** | **4** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **12** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-23 | Date Collected: 04/24/25 14:05 | Matrix: Ground Water
Sample ID: MW-15014R | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Boron** | **1.4** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **300** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.048** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00020** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.16** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00043** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0019** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.29** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **77** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **530** | **mg/L** | **30** | **50** | **04/25/25** | **ljs** | **04/28/25** | **ljs** | | **11** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-23 | Date Collected: 04/24/25 14:05 | Matrix: Ground Water
Sample ID: MW-15014R | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1400** | **mg/L** | **40** | **4** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **6.0** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-24 Date Collected: 04/24/25 08:50 Matrix: Ground Water
Sample ID: MW-15013 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Boron** | **0.66** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **79** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| **Lithium** | **0.027** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.0020** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.075** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| **Beryllium** | **0.00028** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.000052** |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.0025** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00035** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Lead** | **0.0047** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Molybdenum** | **0.0012** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00028** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Thallium** | **0.00014** | **mg/L** | **0.00038** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.000075** |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.13** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **48** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **48** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-24 Date Collected: 04/24/25 08:50 Matrix: Ground Water
Sample ID: MW-15013 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **360** | **mg/L** | **40** | **4** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| **Total Suspended Solids** | **240** | **mg/L** | **4.0** | **1** | **04/28/25** | **sm** | **04/28/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-25 | Date Collected: 04/24/25 10:00 | Matrix: Ground Water
Sample ID: MW-15004 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166128* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 04/30/25 | cma | 05/01/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Boron** | **0.12** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **71** | **mg/L** | **0.26** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.037** |
| **Lithium** | **0.0019** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **J, N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Antimony** | **0.00012** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Arsenic** | **0.00049** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.036** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00039** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00014** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.00097** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00025** |
| **Selenium** | **0.00045** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166026* | | | | | | | | | | |
| **Fluoride** | **0.55** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **73** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **4.7** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J** | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-25 Date Collected: 04/24/25 10:00 Matrix: Ground Water
Sample ID: MW-15004 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **400** | **mg/L** | **40** | **4** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166085* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 04/28/25 | sm | 04/28/25 | sm | | 4.0 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-26 | Date Collected: 04/24/25 11:10 | Matrix: Ground Water
Sample ID: MW-15003 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166287* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 05/01/25 | cma | 05/02/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Boron** | **0.48** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **93** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.010** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00013** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.091** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00083** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00016** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| **Selenium** | **0.00010** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166042* | | | | | | | | | | |
| **Fluoride** | **0.54** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **360** | **mg/L** | **3.8** | **25** | **04/25/25** | **ljs** | **04/28/25** | **ljs** | | **3.0** |
| Sulfate as SO4 | <0.22 | mg/L | 1.0 | 1 | 04/28/25 | ljs | 04/29/25 | ljs | | 0.22 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-26 | Date Collected: 04/24/25 11:10 | Matrix: Ground Water
Sample ID: MW-15003 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **980** | **mg/L** | **40** | **4** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166109* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 04/28/25 | sm | 04/28/25 | sm | | 4.0 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-27 | Date Collected: 04/24/25 12:10 | Matrix: Ground Water
Sample ID: MW-15002 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166287* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 05/01/25 | cma | 05/02/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Boron** | **2.7** | **mg/L** | **0.0088** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **160** | **mg/L** | **1.3** | **5** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.025** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.00016** | **mg/L** | **0.00055** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.14** | **mg/L** | **0.0025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **Chromium** | **0.00067** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00017** | **mg/L** | **0.00052** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00025 |
| **Selenium** | **0.00011** | **mg/L** | **0.00050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166042* | | | | | | | | | | |
| **Fluoride** | **0.27** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **N** | **0.11** |
| **Chloride** | **570** | **mg/L** | **7.5** | **50** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **6.0** |
| **Sulfate as SO4** | **0.25** | **mg/L** | **1.0** | **1** | **04/28/25** | **ljs** | **04/29/25** | **ljs** | **J** | **0.22** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-27 | Date Collected: 04/24/25 12:10 | Matrix: Ground Water
Sample ID: MW-15002 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1500** | **mg/L** | **40** | **4** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166172* | | | | | | | | | | |
| **Total Suspended Solids** | **5.0** | **mg/L** | **4.0** | **1** | **04/29/25** | **sm** | **04/29/25** | **sm** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-28 | Date Collected: 04/24/25 13:50 | Matrix: Ground Water
Sample ID: MW-17006 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T166287* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 05/01/25 | cma | 05/02/25 | jlh | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166262* | | | | | | | | | | |
| **Boron** | **0.54** | **mg/L** | **0.0088** | **1** | **04/30/25** | **ejb** | **05/02/25** | **jlh** | | **0.0051** |
| **Calcium** | **96** | **mg/L** | **1.3** | **5** | **04/30/25** | **ejb** | **05/02/25** | **jlh** | | **0.18** |
| **Lithium** | **0.028** | **mg/L** | **0.0025** | **1** | **04/30/25** | **ejb** | **05/02/25** | **jlh** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166262* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Arsenic** | **0.0042** | **mg/L** | **0.00055** | **1** | **04/30/25** | **ejb** | **05/02/25** | **drm** | | **0.00010** |
| **Barium** | **0.075** | **mg/L** | **0.0025** | **1** | **04/30/25** | **ejb** | **05/02/25** | **drm** | | **0.00068** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.00010 |
| **Molybdenum** | **0.053** | **mg/L** | **0.0012** | **1** | **04/30/25** | **ejb** | **05/02/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T166042* | | | | | | | | | | |
| **Fluoride** | **0.18** | **mg/L** | **0.20** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | **J, N** | **0.11** |
| **Chloride** | **52** | **mg/L** | **1.5** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **1.2** |
| **Sulfate as SO4** | **93** | **mg/L** | **6.0** | **10** | **04/25/25** | **ljs** | **04/26/25** | **ljs** | | **2.2** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T166159* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-28 | Date Collected: 04/24/25 13:50 | Matrix: Ground Water
Sample ID: MW-17006 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **490** | **mg/L** | **40** | **4** | **04/29/25** | **sm** | **04/29/25** | **sm** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T166109* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 04/28/25 | sm | 04/28/25 | sm | | 4.0 |

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## QUALITY CONTROL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T165995
QC Batch Method: EPA 7470A Prep
Analysis Description: Mercury, Total, EPA 7470/7471
Analysis Method: EPA 7470A

### METHOD BLANK: T165995-BLK1

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

### LABORATORY CONTROL SAMPLE: T165995-BS1

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Mercury | mg/L | 0.00200 | 0.00210 | 105 | 80-120 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166128
QC Batch Method: EPA 7470A Prep
Analysis Description: Mercury, Total, EPA 7470/7471
Analysis Method: EPA 7470A

### METHOD BLANK: T166128-BLK1

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

### LABORATORY CONTROL SAMPLE: T166128-BS1

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Mercury | mg/L | 0.00200 | 0.00228 | 114 | 80-120 | |

### MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T166128-MSD1

Original: **25D1770-06**

| 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 | 0.00232 | 0.00234 | 116 | 117 | 76-123 | 0.9 | 20 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166287
QC Batch Method: EPA 7470A Prep
Analysis Description: Mercury, Total, EPA 7470/7471
Analysis Method: EPA 7470A

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**METHOD BLANK: T166287-BLK1**

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

**LABORATORY CONTROL SAMPLE: T166287-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Mercury | mg/L | 0.00200 | 0.00226 | 113 | 80-120 | |

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T166287-MSD1** Original: **25D1770-26**

| 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 | 0.00222 | 0.00226 | 111 | 113 | 76-123 | 2 | 20 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166049
QC Batch Method: EPA 200.2

Analysis Description: Boron, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T166049-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Boron | mg/L | <0.0088 | 0.0088 | |
| Calcium | mg/L | <0.26 | 0.26 | |
| Lithium | mg/L | <0.0025 | 0.0025 | |

**LABORATORY CONTROL SAMPLE: T166049-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Boron | mg/L | 1.60 | 1.60 | 100 | 85-115 | |
| Calcium | mg/L | 16.0 | 15.4 | 96 | 85-115 | |
| Lithium | mg/L | 1.60 | 1.67 | 105 | 85-115 | |

**MATRIX SPIKE: T166049-MS1** Original: **25D1770-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Boron | mg/L | 3.13 | 1.60 | 4.89 | 110 | 70-130 | |
| **Calcium** | **mg/L** | **275** | **16.0** | 285 | **63** | **70-130** | **MS09** |
| Lithium | mg/L | 0.0669 | 1.60 | 1.78 | 107 | 70-130 | |

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**MATRIX SPIKE: T166049-MS2** Original: **25D1770-02**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Boron | mg/L | 0.402 | 1.60 | 2.04 | 102 | 70-130 | |
| Calcium | mg/L | 85.1 | 16.0 | 101 | 102 | 70-130 | |
| Lithium | mg/L | 0.0111 | 1.60 | 1.72 | 107 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166051
QC Batch Method: EPA 200.2
Analysis Description: Boron, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T166051-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Boron | mg/L | <0.0088 | 0.0088 | |
| Calcium | mg/L | <0.26 | 0.26 | |
| Lithium | mg/L | <0.0025 | 0.0025 | |

**LABORATORY CONTROL SAMPLE: T166051-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Boron | mg/L | 1.60 | 1.59 | 99 | 85-115 | |
| Calcium | mg/L | 16.0 | 15.9 | 99 | 85-115 | |
| Lithium | mg/L | 1.60 | 1.76 | 110 | 85-115 | |

**MATRIX SPIKE: T166051-MS1** Original: **25D1770-21**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Boron | mg/L | 0.153 | 1.60 | 1.76 | 100 | 70-130 | |
| Calcium | mg/L | 220 | 16.0 | 233 | 83 | 70-130 | |
| Lithium | mg/L | 0 | 1.60 | 1.79 | 112 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166262
QC Batch Method: EPA 200.2
Analysis Description: Boron, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T166262-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Boron | mg/L | <0.0088 | 0.0088 | |

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**METHOD BLANK: T166262-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Calcium | mg/L | <0.26 | 0.26 | |
| Lithium | mg/L | <0.0025 | 0.0025 | |

**LABORATORY CONTROL SAMPLE: T166262-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Boron | mg/L | 1.60 | 1.50 | 94 | 85-115 | |
| Calcium | mg/L | 16.0 | 15.2 | 95 | 85-115 | |
| Lithium | mg/L | 1.60 | 1.67 | 104 | 85-115 | |

**MATRIX SPIKE: T166262-MS1** Original: **25D1770-28**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Boron | mg/L | 0.538 | 1.60 | 2.19 | 104 | 70-130 | |
| **Calcium** | **mg/L** | **96.2** | **16.0** | 127 | **193** | **70-130** | **MS09** |
| Lithium | mg/L | 0.0277 | 1.60 | 1.85 | 114 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166049
QC Batch Method: EPA 200.2

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

**METHOD BLANK: T166049-BLK1**

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

**LABORATORY CONTROL SAMPLE: T166049-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|



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**LABORATORY CONTROL SAMPLE: T166049-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.100 | 0.0996 | 100 | 85-115 | |
| Barium | mg/L | 1.60 | 1.66 | 104 | 85-115 | |
| Beryllium | mg/L | 0.200 | 0.203 | 101 | 85-115 | |
| Cadmium | mg/L | 0.0500 | 0.0570 | 114 | 85-115 | |
| Cobalt | mg/L | 1.60 | 1.54 | 96 | 85-115 | |
| Chromium | mg/L | 0.0500 | 0.0480 | 96 | 85-115 | |
| Molybdenum | mg/L | 1.60 | 1.62 | 101 | 85-115 | |
| Lead | mg/L | 0.100 | 0.0998 | 100 | 85-115 | |
| Antimony | mg/L | 0.100 | 0.0964 | 96 | 85-115 | |
| Selenium | mg/L | 0.100 | 0.100 | 100 | 85-115 | |
| Thallium | mg/L | 0.100 | 0.0987 | 99 | 85-115 | |

**MATRIX SPIKE: T166049-MS1** Original: **25D1770-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.0267 | 0.100 | 0.128 | 102 | 70-130 | |
| Barium | mg/L | 0.273 | 1.60 | 1.98 | 107 | 70-130 | |
| Beryllium | mg/L | 0 | 0.200 | 0.175 | 87 | 70-130 | |
| Cadmium | mg/L | 0 | 0.0500 | 0.0545 | 109 | 70-130 | |
| Cobalt | mg/L | 0 | 1.60 | 1.46 | 91 | 70-130 | |
| Chromium | mg/L | 0 | 0.0500 | 0.0464 | 93 | 70-130 | |
| Molybdenum | mg/L | 0.0158 | 1.60 | 1.71 | 106 | 70-130 | |
| Lead | mg/L | 0 | 0.100 | 0.104 | 104 | 70-130 | |
| Antimony | mg/L | 0 | 0.100 | 0.119 | 119 | 70-130 | |
| Selenium | mg/L | 0 | 0.100 | 0.0927 | 93 | 70-130 | |
| Thallium | mg/L | 0 | 0.100 | 0.106 | 106 | 70-130 | |

**MATRIX SPIKE: T166049-MS2** Original: **25D1770-02**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0 | 0.100 | 0.0979 | 98 | 70-130 | |
| Barium | mg/L | 0.155 | 1.60 | 1.86 | 107 | 70-130 | |
| Beryllium | mg/L | 0 | 0.200 | 0.195 | 98 | 70-130 | |
| Cadmium | mg/L | 0 | 0.0500 | 0.0567 | 113 | 70-130 | |
| Cobalt | mg/L | 0 | 1.60 | 1.51 | 94 | 70-130 | |
| Chromium | mg/L | 0 | 0.0500 | 0.0476 | 95 | 70-130 | |
| Molybdenum | mg/L | 0 | 1.60 | 1.67 | 104 | 70-130 | |
| Lead | mg/L | 0 | 0.100 | 0.102 | 102 | 70-130 | |

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**MATRIX SPIKE: T166049-MS2** Original: **25D1770-02**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Antimony | mg/L | 0 | 0.100 | 0.119 | 119 | 70-130 | |
| Selenium | mg/L | 0 | 0.100 | 0.0919 | 92 | 70-130 | |
| Thallium | mg/L | 0 | 0.100 | 0.103 | 103 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166051
QC Batch Method: EPA 200.2

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

**METHOD BLANK: T166051-BLK1**

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

**LABORATORY CONTROL SAMPLE: T166051-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.100 | 0.0979 | 98 | 85-115 | |
| Barium | mg/L | 1.60 | 1.71 | 107 | 85-115 | |
| Beryllium | mg/L | 0.200 | 0.223 | 111 | 85-115 | |
| Cadmium | mg/L | 0.0500 | 0.0457 | 91 | 85-115 | |
| Cobalt | mg/L | 1.60 | 1.54 | 96 | 85-115 | |
| Chromium | mg/L | 0.0500 | 0.0477 | 95 | 85-115 | |
| Molybdenum | mg/L | 1.60 | 1.67 | 105 | 85-115 | |
| Lead | mg/L | 0.100 | 0.102 | 102 | 85-115 | |
| Antimony | mg/L | 0.100 | 0.0928 | 93 | 85-115 | |
| Selenium | mg/L | 0.100 | 0.0948 | 95 | 85-115 | |
| Thallium | mg/L | 0.100 | 0.102 | 102 | 85-115 | |

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**MATRIX SPIKE: T166051-MS1** Original: **25D1770-21**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.00264 | 0.100 | 0.0999 | 97 | 70-130 | |
| Barium | mg/L | 1.03 | 1.60 | 2.75 | 108 | 70-130 | |
| Beryllium | mg/L | 0 | 0.200 | 0.199 | 100 | 70-130 | |
| Cadmium | mg/L | 0 | 0.0500 | 0.0549 | 110 | 70-130 | |
| Cobalt | mg/L | 0.000889 | 1.60 | 1.52 | 95 | 70-130 | |
| Chromium | mg/L | 0.000800 | 0.0500 | 0.0614 | 123 | 70-130 | |
| Molybdenum | mg/L | 0 | 1.60 | 1.69 | 106 | 70-130 | |
| Lead | mg/L | 0 | 0.100 | 0.105 | 105 | 70-130 | |
| Antimony | mg/L | 0 | 0.100 | 0.118 | 118 | 70-130 | |
| Selenium | mg/L | 0 | 0.100 | 0.0878 | 88 | 70-130 | |
| Thallium | mg/L | 0 | 0.100 | 0.105 | 105 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166262
QC Batch Method: EPA 200.2

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

**METHOD BLANK: T166262-BLK1**

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

**LABORATORY CONTROL SAMPLE: T166262-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.100 | 0.0961 | 96 | 85-115 | |
| Barium | mg/L | 1.60 | 1.65 | 103 | 85-115 | |
| Beryllium | mg/L | 0.200 | 0.201 | 101 | 85-115 | |
| Cadmium | mg/L | 0.0500 | 0.0551 | 110 | 85-115 | |

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**LABORATORY CONTROL SAMPLE: T166262-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Cobalt | mg/L | 1.60 | 1.49 | 93 | 85-115 | |
| Chromium | mg/L | 0.0500 | 0.0451 | 90 | 85-115 | |
| Molybdenum | mg/L | 1.60 | 1.57 | 98 | 85-115 | |
| Lead | mg/L | 0.100 | 0.0964 | 96 | 85-115 | |
| Antimony | mg/L | 0.100 | 0.115 | 115 | 85-115 | |
| Selenium | mg/L | 0.100 | 0.0920 | 92 | 85-115 | |
| Thallium | mg/L | 0.100 | 0.0956 | 96 | 85-115 | |

**MATRIX SPIKE: T166262-MS1** Original: **25D1770-28**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.00418 | 0.100 | 0.101 | 96 | 70-130 | |
| Barium | mg/L | 0.0754 | 1.60 | 1.82 | 109 | 70-130 | |
| Beryllium | mg/L | 0 | 0.200 | 0.202 | 101 | 70-130 | |
| Cadmium | mg/L | 0 | 0.0500 | 0.0565 | 113 | 70-130 | |
| Cobalt | mg/L | 0 | 1.60 | 1.47 | 92 | 70-130 | |
| Chromium | mg/L | 0 | 0.0500 | 0.0455 | 91 | 70-130 | |
| Molybdenum | mg/L | 0.0529 | 1.60 | 1.74 | 105 | 70-130 | |
| Lead | mg/L | 0 | 0.100 | 0.103 | 103 | 70-130 | |
| Antimony | mg/L | 0 | 0.100 | 0.121 | 121 | 70-130 | |
| Selenium | mg/L | 0 | 0.100 | 0.0886 | 89 | 70-130 | |
| Thallium | mg/L | 0 | 0.100 | 0.103 | 103 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T165878
QC Batch Method: IC Prep W

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

**METHOD BLANK: T165878-BLK1**

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

**LABORATORY CONTROL SAMPLE: T165878-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 5.00 | 5.17 | 103 | 90-110 | |

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**LABORATORY CONTROL SAMPLE: T165878-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Fluoride | mg/L | 1.00 | 1.07 | 107 | 90-110 | |
| Sulfate as SO4 | mg/L | 5.00 | 5.04 | 101 | 90-110 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T165892
QC Batch Method: IC Prep W
Analysis Description: Sulfate
Analysis Method: EPA 300.0 Rev. 2.1

**METHOD BLANK: T165892-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: T165892-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| **Chloride** | **mg/L** | **5.00** | **<10** | **103** | **90-110** | **J** |
| Fluoride | mg/L | 1.00 | 1.07 | 107 | 90-110 | |
| Sulfate as SO4 | mg/L | 5.00 | 5.04 | 101 | 90-110 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166026
QC Batch Method: IC Prep W
Analysis Description: Chloride
Analysis Method: EPA 300.0 Rev. 2.1

**METHOD BLANK: T166026-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: T166026-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| **Chloride** | **mg/L** | **5.00** | **<10** | **103** | **90-110** | **J** |
| Fluoride | mg/L | 1.00 | 1.08 | 108 | 90-110 | |

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**LABORATORY CONTROL SAMPLE: T166026-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Sulfate as SO4 | mg/L | 5.00 | 4.99 | 100 | 90-110 | |

**MATRIX SPIKE: T166026-MS1** Original: **25D1770-07**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 76.1 | 50.0 | 130 | 108 | 80-120 | |
| Fluoride | mg/L | 0 | 10.0 | 10.4 | 104 | 80-120 | |
| Sulfate as SO4 | mg/L | 0 | 50.0 | 50.1 | 100 | 80-120 | |

**MATRIX SPIKE: T166026-MS2** Original: **25D1770-09**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 40.3 | 50.0 | 92.9 | 105 | 80-120 | |
| Fluoride | mg/L | 0.180 | 10.0 | 10.5 | 103 | 80-120 | |
| Sulfate as SO4 | mg/L | 0 | 50.0 | 50.8 | 102 | 80-120 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166042
QC Batch Method: IC Prep W
Analysis Description: Sulfate
Analysis Method: EPA 300.0 Rev. 2.1

**METHOD BLANK: T166042-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: T166042-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| **Chloride** | **mg/L** | **5.00** | **<10** | **103** | **90-110** | **J** |
| Fluoride | mg/L | 1.00 | 1.08 | 108 | 90-110 | |
| Sulfate as SO4 | mg/L | 5.00 | 4.99 | 100 | 90-110 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166090
QC Batch Method: IC Prep W
Analysis Description: Fluoride
Analysis Method: EPA 300.0 Rev. 2.1

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**METHOD BLANK: T166090-BLK1**

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

**LABORATORY CONTROL SAMPLE: T166090-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Fluoride | mg/L | 1.00 | 1.09 | 109 | 90-110 | |
| Sulfate as SO4 | mg/L | 5.00 | 5.03 | 101 | 90-110 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T165871
QC Batch Method: SM 2540 C-20
Analysis Description: Total Dissolved Solids
Analysis Method: SM 2540 C-20

**METHOD BLANK: T165871-BLK1**

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

**LABORATORY CONTROL SAMPLE: T165871-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 500 | 486 | 97 | 80-120 | |

**SAMPLE DUPLICATE: T165871-DUP1** Original: **25D1770-04**

| Parameter | Units | Original Result | DUP Result | RPD | Max RPD | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 788 | 804 | 2 | 10 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T165873
QC Batch Method: SM 2540 C-20
Analysis Description: Total Dissolved Solids
Analysis Method: SM 2540 C-20

**METHOD BLANK: T165873-BLK1**

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

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**LABORATORY CONTROL SAMPLE: T165873-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 500 | 486 | 97 | 80-120 | |

**SAMPLE DUPLICATE: T165873-DUP1** Original: **25D1770-05**

| Parameter | Units | Original Result | DUP Result | RPD | Max RPD | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 764 | 764 | 0 | 10 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166103
QC Batch Method: SM 2540 C-20
Analysis Description: Total Dissolved Solids
Analysis Method: SM 2540 C-20

**METHOD BLANK: T166103-BLK1**

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

**LABORATORY CONTROL SAMPLE: T166103-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 500 | 484 | 97 | 80-120 | |

**SAMPLE DUPLICATE: T166103-DUP1** Original: **25D1770-09**

| Parameter | Units | Original Result | DUP Result | RPD | Max RPD | Notes |
|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **mg/L** | **365** | **320** | **13** | **10** | **RPD** |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166159
QC Batch Method: SM 2540 C-20
Analysis Description: Total Dissolved Solids
Analysis Method: SM 2540 C-20

**METHOD BLANK: T166159-BLK1**

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

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**LABORATORY CONTROL SAMPLE: T166159-BS1**

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

**SAMPLE DUPLICATE: T166159-DUP1** Original: **25D1770-19**

| Parameter | Units | Original Result | DUP Result | RPD | Max RPD | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 1030 | 967 | 6 | 10 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T165867
QC Batch Method: SM 2540 D-20
Analysis Description: Total Suspended Solids
Analysis Method: SM 2540 D-20

**METHOD BLANK: T165867-BLK1**

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

**LABORATORY CONTROL SAMPLE: T165867-BS1**

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

**SAMPLE DUPLICATE: T165867-DUP1** Original: **25D1770-01**

| Parameter | Units | Original Result | DUP Result | RPD | Max RPD | Notes |
|---|---|---|---|---|---|---|
| Total Suspended Solids | mg/L | 44.0 | 46.0 | 4 | 10 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166085
QC Batch Method: SM 2540 D-20
Analysis Description: Total Suspended Solids
Analysis Method: SM 2540 D-20

**METHOD BLANK: T166085-BLK1**

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

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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

**LABORATORY CONTROL SAMPLE: T166085-BS1**

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

**SAMPLE DUPLICATE: T166085-DUP1** Original: **25D1770-06**

| Parameter | Units | Original Result | DUP Result | RPD | Max RPD | Notes |
|---|---|---|---|---|---|---|
| **Total Suspended Solids** | **mg/L** | **6.00** | **6.00** | **0** | **10** | **J** |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166109
QC Batch Method: SM 2540 D-20
Analysis Description: Total Suspended Solids
Analysis Method: SM 2540 D-20

**METHOD BLANK: T166109-BLK1**

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

**LABORATORY CONTROL SAMPLE: T166109-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Total Suspended Solids | mg/L | 100 | 92.0 | 92 | 85-115 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166172
QC Batch Method: SM 2540 D-20
Analysis Description: Total Suspended Solids
Analysis Method: SM 2540 D-20

**METHOD BLANK: T166172-BLK1**

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

**LABORATORY CONTROL SAMPLE: T166172-BS1**

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

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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: 25D1770-08

***Analysis: EPA 200.8 Rev. 5.4***

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

Trace ID: 25D1770-09

***Analysis: SM 2540 C-20***

| | |
|---|---|
| **Total Dissolved Solids** | Note RPD : The relative percent difference between the sample and sample duplicate is out of control. The sample result should be considered estimated. |

Trace ID: 25D1770-22

***Analysis: EPA 200.8 Rev. 5.4***

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

Trace ID: T166049-MS1

***Analysis: EPA 200.7 Rev. 4.4***

| | |
|---|---|
| **Calcium** | Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification. |

Trace ID: T166103-DUP1

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***Analysis: SM 2540 C-20***

| | |
|---|---|
| **Total Dissolved Solids** | Note RPD : The relative percent difference between the sample and sample duplicate is out of control. The sample result should be considered estimated. |

Trace ID: T166262-MS1

***Analysis: EPA 200.7 Rev. 4.4***

| | |
|---|---|
| **Calcium** | Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification. |



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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

Page 1 of 1

Trace ID No. 25D1770

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR Michigan, Inc. |
| Report To: | Andrew Byks/Molly Reeves |
| Mailing Address: | 1000 Oakbrook Drive, Suite 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byks@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10220433 |
| Contact Name: | Lara Zawaideh |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | |

**Trace Use:**

| | |
|---|---|
| Logged By: | CM |
| Checked By: | MG |
| Soil Volatiles Preserved (circle if applicable): | MeOH / Low Level / Lab |
| Sampling Time: | |

**Turnaround Requirements:**
- ☒ Standard, 5-10 Days
- ☐ 3 Day*
- ☐ 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**
S = Soil / Solid, W = Water, SL = Sludge, Oil = Oil, WI = Wipes, LW = Liquid Waste, A = Air, D = Drinking Water

Project Name: BC Cobb
Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: App III Part 257 | App IV Part 257 | Part 115 Metals | TSS | Possible Health Hazards? | Remarks | Time | Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4/22/25 | 940 | MW-15023 | N | W | 3 | | 2 | | | | | X | X | X | X | | | | |
| 2 | 4/22/25 | 1120 | MW-15020 | N | W | 3 | | 2 | | | | | X | X | X | X | | | | |
| 3 | 4/22/25 | 1250 | MW-17005 | N | W | 3 | | 2 | | | | | X | X | X | X | | | | |
| 4 | 4/22/25 | 1148 | MW-15010 | N | W | 3 | | 2 | | | | | X | X | X | X | | | | |
| 5 | 4/22/25 | 1148 | MWT-15010 | N | W | 3 | | 2 | | | | | X | X | X | X | | AB | | |

Please Sign

| | Released By | Received By | Date | Time |
|---|---|---|---|---|
| 1) | Andrew J Byks | | 4/23/25 | 800 |
| 2) | | | | |
| 3) | | | | |
| 4) | | | | |

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Phone 231.773.5998
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Page 1 of 3

Trace ID No. 25D1770

**Report Results To:**

Company Name: HDR Michigan, Inc
Report To: Andrew Byks/Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: Cell Phone:
Email Address: andrew.byks@hdrinc.com

**Bill To:**

PO #: 10222433
Contact Name: Lara Zawadan
Billing Address (if different):
City, State, Zip Code:
Phone Number:
Billing Email Address: lara.zawadan@hdrinc.com

**Turnaround Requirements:**

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

**Trace Use:**

Logged By: NC
Checked By: MT
Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab
Sampling Time:

Project Name: BC Cobb
Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested | Possible Health Hazards? | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 4/23/25 | 1015 | MW-17004 | N | W | 3 | 3 | | 2 | | | | App III Part 257 | | |
| | | | | | | | | | | | | | App IV Part 257 | | |
| | | | | | | | | | | | | | Part 115 Metals | | |
| | | | | | | | | | | | | | TSS | | |
| 7 | 4/23/25 | 1140 | MW-15019 | N | W | 3 | 3 | | 2 | | | | | | |
| 8 | 4/23/25 | 1245 | MW-17003 | N | W | 3 | 3 | | 2 | | | | | | |
| 9 | 4/23/25 | 1400 | MW-15018 | N | W | 3 | 3 | | 2 | | | | | | |
| 10 | 4/23/25 | 1545 | MW-15017 | N | W | 3 | 3 | | 2 | | | | | | |
| 11 | 4/23/25 | 1705 | MW-17002 | N | W | 3 | 3 | | 2 | | | | | | |
| 12 | 4/23/25 | 952 | MW-15005 | N | W | 3 | 3 | | 2 | | | | | | |
| 13 | 4/23/25 | 952 | MWT-15005 | N | W | 3 | 3 | | 2 | | | | | | |
| 14 | 4/23/25 | 1128 | MW-15006 | N | W | 3 | 3 | | 2 | | | | | | |
| 15 | 4/23/25 | 1234 | MW-15009 | N | W | 3 | 3 | | 2 | | | | | | |

Please Sign

| | Released By | Received By | Date | Time |
|---|---|---|---|---|
| 1) | Andrew Byks | | 4/25/25 | 809 |
| 2) | | | | |
| 3) | | | | |
| 4) | | | | |

| Received By | Date | Time |
|---|---|---|
| | 4/25/25 | 1055 |

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

**25D1770**
**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: +0.1°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: 0.0°C) | SR1 (CF: -0.4°C) | SR2 (CF: -0.1°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|
| Date: 4/23/25 | | | | | | | | | |
| Time: 855 | | | | | | | | | |
| Initials: CM | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | |
| Package Temp °C | -0.3 | -0.3 | | / | | | | | |
| Representative Sample Temp °C | 0.7 | 0.3 | | | | / | | / | |

### 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
- [ ] [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:

MW-15010
MW-15020
MWT-15010
MW-17005
MW-15023

Form 70-A.57
Effective 2/20/25

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TRACE ANALYTICAL LABORATORIES, INC.

# CHAIN-OF-CUSTODY RECORD

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2241 Black Creek Road
Muskegon, MI 49444-2673

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com



Trace ID No. 25D1770

4/25/25 NC 25D1770

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR Michigan Inc |
| Report To: | Andrew Byks/Molly Reeves |
| Mailing Address: | 1000 Oakbrook Drive, Suite 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byks@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10220433 |
| Contact Name: | Lara Zawacken |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | lara.zawacken@hdrinc.com |

**Trace Use:**

| | |
|---|---|
| Logged By: | NC |
| Checked By: | MS |
| Soil Volatiles Preserved (circle if applicable): | MeOH / Low Level / Lab |
| Sampling Time: | |

**Turnaround Requirements:**

- ☒ Standard, 5-10 Days
- ☐ 3 Day*
- ☐ 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

| | |
|---|---|
| S = Soil / Solid | WI = Wipes |
| W = Water | LW = Liquid Waste |
| SL = Sludge | A = Air |
| Ol = Oil | D = Drinking Water |

Project Name: BC Cobb

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 4/23/25 | 1348 | MW-15007 | N | W | 3 | | 2 | | | | | X App III Part 257 | |
| 17 | 4/23/25 | 1458 | MW-15009 | N | W | 3 | | 2 | | | | | X App IV Part 257 | |
| 18 | 4/23/25 | 1602 | MW-15022 | N | W | 3 | | 2 | | | | | X TSS | |
| 19 | 4/23/25 | 1700 | MW-15021 | N | W | 3 | | 2 | | | | | X Part 115 Metals | |
| 20 | 4/24/25 | 1005 | MW-17001R | N | W | 3 | | 2 | | | | | X | |
| 21 | 4/24/25 | 1100 | MW-15016R | N | W | 3 | | 2 | | | | | X | |
| 22 | 4/24/25 | 1250 | MW-15015R | N | W | 3 | | 2 | | | | | X | |
| 23 | 4/24/25 | 1405 | MW-15014R | N | W | 4 | | 4 | | 3 | | | X | 2-250mL $HNO_3$ Pres |
| 24 | 4/24/25 | 950 | MW-15013 | N | W | 3 | | 3 | | 2 | | | X | |
| 25 | 4/24/25 | 1000 | MW-15004 | N | W | 3 | | 3 | | 2 | | | X | |

Possible Health Hazards?

| Please Sign | Released By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|---|
| 1) | Andy Byk | 4/25/25 | 8:10 | 2) | | |
| 3) | | | | 4) | 4/25/25 | 1055 |

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Muskegon, MI 49444-2673

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Page 3 of 3

Trace ID No. 25D1770

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR Michigan Inc |
| Report To: | Andrew Bykis/Molly Reeves |
| Mailing Address: | 1000 Oakbrook Dr, Ste 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.bykis@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10220433 |
| Contact Name: | Lara Zawaideh |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | lara.zawaideh@hdrinc.com |

**Trace Use:**

| | |
|---|---|
| Logged By: | NC |
| Checked By: | MJ |
| Soil Volatiles Preserved (circle if applicable): | MeOH / Low Level / Lab |
| Sampling Time: | |

**Turnaround Requirements:**

☑ Standard: 5-10 Days
☐ 3 Day*
☐ 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: BC Cobb

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: App III Part 257 | App IV Part 257 | Part 115 Metals | TDS | Remarks | Possible Health Hazards? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 4/24/25 | 1110 | MW-15003 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 27 | 4/24/25 | 1210 | MW-15002 | N | W | 6 | | | 2 | | | | X | X | X | X | -500mL unpres in 4x125mL | |
| 28 | 4/24/25 | 1350 | MW-17006 | N | W | 3 | | | 1 | | | | X | X | X | X | add nitric to pH<2 @ Lab | |
| | | | | | | | | | | | | | | | | | QB | |

Please Sign

| | Released By | Received By | Date | Time |
|---|---|---|---|---|
| 1) | Andrew Bykis | Courier | 4/25/25 | 8:11 |
| 2) | Courier | Courier | 4/25/25 | 10:55 |
| 3) | | | | |
| 4) | | | | |

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

**25D1770**
**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: +0.1°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: 0.0°C) | SR1 (CF: -0.4°C) | SR2 (CF: -0.1°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|
| Date: 4/25/25 | | | | | | | | | |
| Time: 9:00 | | | | | | | | | |
| Initials: CN | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | |
| Package Temp °C | -0.4 | -0.4 | | X | | | | | |
| Representative Sample Temp °C | 1.0 | 1.0 | | X | | | | | |

### 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:

Form 70-A.57
Effective 2/20/25

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TRACE ANALYTICAL LABORATORIES, INC.

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

May 07, 2025

Ms. Lara Zawaideh
HDR Michigan Inc.
1000 Oakbrook Dr., Suite 200
Ann Arbor, MI 48104

RE: Trace Project 25D1770
Client Project BC Cobb

Dear Ms. Zawaideh:

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

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

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## SAMPLE SUMMARY

Trace Project ID: 25D1770
Client Project ID: BC Cobb

| Trace ID | Sample ID | Matrix | Collected By | Date Collected | Date Received |
|---|---|---|---|---|---|
| 25D1770-01 | MW-15023 | Ground Water | AB/FDR | 04/22/25 09:40 | 04/23/25 08:00 |
| 25D1770-02 | MW-15020 | Ground Water | AB/FDR | 04/22/25 11:20 | 04/23/25 08:00 |
| 25D1770-03 | MW-17005 | Ground Water | AB/FDR | 04/22/25 12:50 | 04/23/25 08:00 |
| 25D1770-04 | MW-15010 | Ground Water | AB/FDR | 04/22/25 11:48 | 04/23/25 08:00 |
| 25D1770-05 | MWT-15010 | Ground Water | AB/FDR | 04/22/25 11:48 | 04/23/25 08:00 |
| 25D1770-06 | MW-17004 | Ground Water | AB/FDR | 04/23/25 10:15 | 04/25/25 08:09 |
| 25D1770-07 | MW-15019 | Ground Water | AB/FDR | 04/23/25 11:40 | 04/25/25 08:09 |
| 25D1770-08 | MW-17003 | Ground Water | AB/FDR | 04/23/25 12:45 | 04/25/25 08:09 |
| 25D1770-09 | MW-15018 | Ground Water | AB/FDR | 04/23/25 14:00 | 04/25/25 08:09 |
| 25D1770-10 | MW-15017 | Ground Water | AB/FDR | 04/23/25 15:45 | 04/25/25 08:09 |
| 25D1770-11 | MW-17002 | Ground Water | AB/FDR | 04/23/25 17:05 | 04/25/25 08:09 |
| 25D1770-12 | MW-15005 | Ground Water | AB/FDR | 04/23/25 09:52 | 04/25/25 08:09 |
| 25D1770-13 | MWT-15005 | Ground Water | AB/FDR | 04/23/25 09:52 | 04/25/25 08:09 |
| 25D1770-14 | MW-15006 | Ground Water | AB/FDR | 04/23/25 11:28 | 04/25/25 08:09 |
| 25D1770-15 | MW-15008 | Ground Water | AB/FDR | 04/23/25 12:34 | 04/25/25 08:09 |
| 25D1770-16 | MW-15007 | Ground Water | AB/FDR | 04/23/25 13:48 | 04/25/25 08:09 |
| 25D1770-17 | MW-15009 | Ground Water | AB/FDR | 04/23/25 14:58 | 04/25/25 08:09 |
| 25D1770-18 | MW-15022 | Ground Water | AB/FDR | 04/23/25 16:02 | 04/25/25 08:09 |
| 25D1770-19 | MW-15021 | Ground Water | AB/FDR | 04/23/25 17:00 | 04/25/25 08:09 |
| 25D1770-20 | MW-17001R | Ground Water | AB/FDR | 04/24/25 10:05 | 04/25/25 08:09 |
| 25D1770-21 | MW-15016R | Ground Water | AB/FDR | 04/24/25 11:00 | 04/25/25 08:09 |
| 25D1770-22 | MW-15015R | Ground Water | AB/FDR | 04/24/25 12:50 | 04/25/25 08:09 |
| 25D1770-23 | MW-15014R | Ground Water | AB/FDR | 04/24/25 14:05 | 04/25/25 08:09 |
| 25D1770-24 | MW-15013 | Ground Water | AB/FDR | 04/24/25 08:50 | 04/25/25 08:09 |
| 25D1770-25 | MW-15004 | Ground Water | AB/FDR | 04/24/25 10:00 | 04/25/25 08:09 |
| 25D1770-26 | MW-15003 | Ground Water | AB/FDR | 04/24/25 11:10 | 04/25/25 08:09 |
| 25D1770-27 | MW-15002 | Ground Water | AB/FDR | 04/24/25 12:10 | 04/25/25 08:09 |
| 25D1770-28 | MW-17006 | Ground Water | AB/FDR | 04/24/25 13:50 | 04/25/25 08:09 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-01 Date Collected: 04/22/25 09:40 Matrix: Ground Water
Sample ID: MW-15023 Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **17** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-02 | Date Collected: 04/22/25 11:20 | Matrix: Ground Water
Sample ID: MW-15020 | Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **13** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.00029** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-03 Date Collected: 04/22/25 12:50 Matrix: Ground Water
Sample ID: MW-17005 Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **3.5** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-04 Date Collected: 04/22/25 11:48 Matrix: Ground Water
Sample ID: MW-15010 Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **0.81** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-05 Date Collected: 04/22/25 11:48 Matrix: Ground Water
Sample ID: MWT-15010 Date Received: 04/23/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **0.90** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-06 | Date Collected: 04/23/25 10:15 | Matrix: Ground Water
Sample ID: MW-17004 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **3.0** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.00024** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00020** |
| **Nickel** | **0.0010** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00065** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0012** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| **Zinc** | **0.0037** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-07 | Date Collected: 04/23/25 11:40 | Matrix: Ground Water
Sample ID: MW-15019 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **20** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.010** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| **Zinc** | **0.0018** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-08 | Date Collected: 04/23/25 12:45 | Matrix: Ground Water
Sample ID: MW-17003 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **110** | **mg/L** | **0.50** | **10** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| **Nickel** | **0.13** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00065** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| **Zinc** | **0.046** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-09 | Date Collected: 04/23/25 14:00 | Matrix: Ground Water
Sample ID: MW-15018 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **9.6** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.00047** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0013** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| **Zinc** | **0.0015** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-10 Date Collected: 04/23/25 15:45 Matrix: Ground Water
Sample ID: MW-15017 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **66** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0012** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-11 | Date Collected: 04/23/25 17:05 | Matrix: Ground Water
Sample ID: MW-17002 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **26** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.00069** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00062** |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-12 | Date Collected: 04/23/25 09:52 | Matrix: Ground Water
Sample ID: MW-15005 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **3.6** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.0014** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.00092** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00062** |
| **Zinc** | **0.038** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-13 Date Collected: 04/23/25 09:52 Matrix: Ground Water
Sample ID: MWT-15005 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **3.7** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.0014** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Nickel** | **0.00068** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00065** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0010** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00062** |
| **Zinc** | **0.039** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-14 | Date Collected: 04/23/25 11:28 | Matrix: Ground Water
Sample ID: MW-15006 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **3.1** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.0015** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Nickel** | **0.00091** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00065** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.00077** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00062** |
| **Zinc** | **0.0016** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-15 Date Collected: 04/23/25 12:34 Matrix: Ground Water
Sample ID: MW-15008 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **1.2** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.00069** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-16 | Date Collected: 04/23/25 13:48 | Matrix: Ground Water
Sample ID: MW-15007 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **5.5** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.0011** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Nickel** | **0.0011** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00065** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0015** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| **Zinc** | **0.0024** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-17 Date Collected: 04/23/25 14:58 Matrix: Ground Water
Sample ID: MW-15009 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **1.1** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-18 Date Collected: 04/23/25 16:02 Matrix: Ground Water
Sample ID: MW-15022 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **0.11** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0017** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-19 | Date Collected: 04/23/25 17:00 | Matrix: Ground Water
Sample ID: MW-15021 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **24** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Copper** | **0.031** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0014** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| **Zinc** | **0.0035** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-20 Date Collected: 04/24/25 10:05 Matrix: Ground Water
Sample ID: MW-17001R Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| **Iron** | **1.2** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166049* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-21 | Date Collected: 04/24/25 11:00 | Matrix: Ground Water
Sample ID: MW-15016R | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Iron** | **55** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0010** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00062** |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-22 | Date Collected: 04/24/25 12:50 | Matrix: Ground Water
Sample ID: MW-15015R | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Iron** | **8.9** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| **Nickel** | **0.00082** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | **J** | **0.00065** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.031** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-23 Date Collected: 04/24/25 14:05 Matrix: Ground Water
Sample ID: MW-15014R Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Iron** | **5.0** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-24 Date Collected: 04/24/25 08:50 Matrix: Ground Water
Sample ID: MW-15013 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Iron** | **2.7** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Copper** | **0.0051** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| **Nickel** | **0.0015** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00065** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0053** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| **Zinc** | **0.0033** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.0012** |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-25 Date Collected: 04/24/25 10:00 Matrix: Ground Water
Sample ID: MW-15004 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Iron** | **0.97** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Copper** | **0.00040** | **mg/L** | **0.00025** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00020** |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-26 | Date Collected: 04/24/25 11:10 | Matrix: Ground Water
Sample ID: MW-15003 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Iron** | **1.3** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0016** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-27 | Date Collected: 04/24/25 12:10 | Matrix: Ground Water
Sample ID: MW-15002 | Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| **Iron** | **0.23** | **mg/L** | **0.050** | **1** | **04/29/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166051* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.000050 |
| **Vanadium** | **0.0014** | **mg/L** | **0.0012** | **1** | **04/29/25** | **ejb** | **05/02/25** | **drm** | | **0.00062** |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/29/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## ANALYTICAL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

Trace ID: 25D1770-28 Date Collected: 04/24/25 13:50 Matrix: Ground Water
Sample ID: MW-17006 Date Received: 04/25/25 08:09

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T166262* | | | | | | | | | | |
| **Iron** | **0.71** | **mg/L** | **0.050** | **1** | **04/30/25** | **ejb** | **05/02/25** | **jlh** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T166262* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.00020 |
| Nickel | <0.00065 | mg/L | 0.0012 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.00065 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.000050 |
| Vanadium | <0.00062 | mg/L | 0.0012 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.00062 |
| Zinc | <0.0012 | mg/L | 0.0012 | 1 | 04/30/25 | ejb | 05/02/25 | drm | | 0.0012 |

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## QUALITY CONTROL RESULTS

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166049
QC Batch Method: EPA 200.2
Analysis Description: Iron, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T166049-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Iron | mg/L | <0.050 | 0.050 | |

**LABORATORY CONTROL SAMPLE: T166049-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Iron | mg/L | 16.0 | 15.2 | 95 | 85-115 | |

**MATRIX SPIKE: T166049-MS1** Original: **25D1770-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Iron | mg/L | 16.8 | 16.0 | 32.8 | 100 | 70-130 | |

**MATRIX SPIKE: T166049-MS2** Original: **25D1770-02**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Iron | mg/L | 12.7 | 16.0 | 28.6 | 99 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166051
QC Batch Method: EPA 200.2
Analysis Description: Iron, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T166051-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Iron | mg/L | <0.050 | 0.050 | |

**LABORATORY CONTROL SAMPLE: T166051-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Iron | mg/L | 16.0 | 14.9 | 93 | 85-115 | |

**MATRIX SPIKE: T166051-MS1** Original: **25D1770-21**

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

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**MATRIX SPIKE: T166051-MS1** Original: **25D1770-21**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Iron | mg/L | 55.3 | 16.0 | 72.6 | 108 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166262
QC Batch Method: EPA 200.2
Analysis Description: Iron, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T166262-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Iron | mg/L | <0.050 | 0.050 | |

**LABORATORY CONTROL SAMPLE: T166262-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Iron | mg/L | 16.0 | 14.1 | 88 | 85-115 | |

**MATRIX SPIKE: T166262-MS1** Original: **25D1770-28**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Iron | mg/L | 0.714 | 16.0 | 15.2 | 91 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166049
QC Batch Method: EPA 200.2
Analysis Description: Copper, Total
Analysis Method: EPA 200.8 Rev. 5.4

**METHOD BLANK: T166049-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: T166049-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Silver | mg/L | 0.0500 | 0.0513 | 103 | 85-115 | |

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**LABORATORY CONTROL SAMPLE: T166049-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Copper | mg/L | 1.60 | 1.50 | 94 | 85-115 | |
| Nickel | mg/L | 1.60 | 1.57 | 98 | 85-115 | |
| Vanadium | mg/L | 1.60 | 1.58 | 99 | 85-115 | |
| Zinc | mg/L | 1.60 | 1.63 | 102 | 85-115 | |

**MATRIX SPIKE: T166049-MS1** Original: **25D1770-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Silver | mg/L | 0 | 0.0500 | 0.0485 | 97 | 70-130 | |
| Copper | mg/L | 0 | 1.60 | 1.36 | 85 | 70-130 | |
| Nickel | mg/L | 0 | 1.60 | 1.44 | 90 | 70-130 | |
| Vanadium | mg/L | 0 | 1.60 | 1.56 | 98 | 70-130 | |
| Zinc | mg/L | 0 | 1.60 | 1.41 | 88 | 70-130 | |

**MATRIX SPIKE: T166049-MS2** Original: **25D1770-02**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Silver | mg/L | 0 | 0.0500 | 0.0505 | 101 | 70-130 | |
| Copper | mg/L | 0 | 1.60 | 1.43 | 89 | 70-130 | |
| Nickel | mg/L | 0 | 1.60 | 1.49 | 93 | 70-130 | |
| Vanadium | mg/L | 0 | 1.60 | 1.59 | 99 | 70-130 | |
| Zinc | mg/L | 0 | 1.60 | 1.49 | 93 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166051
QC Batch Method: EPA 200.2

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

**METHOD BLANK: T166051-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: T166051-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|



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**LABORATORY CONTROL SAMPLE: T166051-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Silver | mg/L | 0.0500 | 0.0529 | 106 | 85-115 | |
| Copper | mg/L | 1.60 | 1.50 | 94 | 85-115 | |
| Nickel | mg/L | 1.60 | 1.57 | 98 | 85-115 | |
| Vanadium | mg/L | 1.60 | 1.58 | 99 | 85-115 | |
| Zinc | mg/L | 1.60 | 1.56 | 97 | 85-115 | |

**MATRIX SPIKE: T166051-MS1** Original: **25D1770-21**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Silver | mg/L | 0 | 0.0500 | 0.0489 | 98 | 70-130 | |
| Copper | mg/L | 0 | 1.60 | 1.38 | 86 | 70-130 | |
| Nickel | mg/L | 0 | 1.60 | 1.46 | 91 | 70-130 | |
| Vanadium | mg/L | 0 | 1.60 | 1.57 | 98 | 70-130 | |
| Zinc | mg/L | 0 | 1.60 | 1.41 | 88 | 70-130 | |

Trace Project ID: 25D1770
Client Project ID: BC Cobb

QC Batch: T166262
QC Batch Method: EPA 200.2

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

**METHOD BLANK: T166262-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: T166262-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Silver | mg/L | 0.0500 | 0.0498 | 100 | 85-115 | |
| Copper | mg/L | 1.60 | 1.47 | 92 | 85-115 | |
| Nickel | mg/L | 1.60 | 1.52 | 95 | 85-115 | |
| Vanadium | mg/L | 1.60 | 1.52 | 95 | 85-115 | |
| Zinc | mg/L | 1.60 | 1.53 | 96 | 85-115 | |

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**MATRIX SPIKE: T166262-MS1** Original: **25D1770-28**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Silver | mg/L | 0 | 0.0500 | 0.0509 | 102 | 70-130 | |
| Copper | mg/L | 0 | 1.60 | 1.37 | 86 | 70-130 | |
| Nickel | mg/L | 0 | 1.60 | 1.45 | 91 | 70-130 | |
| Vanadium | mg/L | 0 | 1.60 | 1.56 | 97 | 70-130 | |
| Zinc | mg/L | 0 | 1.60 | 1.42 | 89 | 70-130 | |



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## AN EXPLANATION OF TERMS AND SYMBOLS WHICH MAY OCCUR IN THIS REPORT

### DEFINITIONS

| | |
|---|---|
| LCS | Laboratory Control Sample |
| LCSD | Laboratory Control Sample Duplicate |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| RPD | Relative Percent Difference |
| DUP | Matrix Duplicate |
| LOQ | Limit of Quantitation |
| LOD | Limit of Detection |
| TIC | Tentatively Identified Compound |
| <, ND or U | Indicates the compound was analyzed for but not detected |
| * | Indicates a result that exceeds its associated MCL or Surrogate control limits |
| N | Indicates that the compound has not been evaluated by NELAC |
| NA | Indicates that the compound is not available. |

NOTE: Samples for volatiles that have been extracted with a water miscible solvent were corrected for the total volume of the solvent/water mixture.
Solid matrices Method Blanks are at 100% solids as such results are the same wet or dry.



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# CHAIN-OF-CUSTODY RECORD

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Page 1 of 1

Trace ID No. 25D1770

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR Michigan, Inc. |
| Report To: | Andrew Byks/Molly Reeves |
| Mailing Address: | 1000 Oakbrook Drive, Suite 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byks@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10220433 |
| Contact Name: | Lara Zawaideh |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | |

**Trace Use:**

| | |
|---|---|
| Logged By: | CM |
| Checked By: | MG |
| Soil Volatiles Preserved (circle if applicable): | MeOH / Low Level / Lab |
| Sampling Time: | |

**Turnaround Requirements:**
- ☒ Standard, 5-10 Days
- ☐ 3 Day*
- ☐ 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**
S = Soil / Solid, W = Water, SL = Sludge, Oil = Oil, WI = Wipes, LW = Liquid Waste, A = Air, D = Drinking Water

Project Name: BC Cobb
Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: App III Part 257 | App IV Part 257 | Part 115 Metals | TSS | Possible Health Hazards? | Remarks | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4/22/25 | 940 | MW-15023 | N | W | 3 | | 2 | | | | | X | X | X | X | | | | |
| 2 | 4/22/25 | 1120 | MW-15020 | N | W | 3 | | 2 | | | | | X | X | X | X | | | | |
| 3 | 4/22/25 | 1250 | MW-17005 | N | W | 3 | | 2 | | | | | X | X | X | X | | | | |
| 4 | 4/22/25 | 1148 | MW-15010 | N | W | 3 | | 2 | | | | | X | X | X | X | | | | |
| 5 | 4/22/25 | 1148 | MWT-15010 | N | W | 3 | | 2 | | | | | X | X | X | X | | AB | | |

Please Sign

| | Released By | Received By | Date | Time |
|---|---|---|---|---|
| 1) | Andrew J Byks | | 4/23/25 | 800 |
| 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.1

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TRACE
ANALYTICAL LABORATORIES, INC.

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

# CHAIN-OF-CUSTODY RECORD

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

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com



Trace ID No. 25D1770

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR Michigan, Inc |
| Report To: | Andrew Byks/Molly Reeves |
| Mailing Address: | 1000 Oakbrook Drive, Suite 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byks@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10222433 |
| Contact Name: | Lara Zawadan |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | lara.zawadan@hdrinc.com |

**Trace Use:**

| | |
|---|---|
| Logged By: | NC |
| Checked By: | MT |
| Soil Volatiles Preserved (circle if applicable): MeOH / Low Level / Lab | |
| Sampling Time: | |

**Turnaround Requirements:**

- ☒ Standard, 5-10 Days
- ☐ 3 Day*
- ☐ 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid; WI = Wipes; W = Water; LW = Liquid Waste; SL = Sludge; A = Air; OI = Oil; D = Drinking Water

Project Name: BC Cobb

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: App III Part 257 | App IV Part 257 | Part 115 Metals | TSS | Possible Health Hazards? | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 4/23/25 | 1615 | MW-17004 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 7 | 4/23/25 | 1140 | MW-15019 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 8 | 4/23/25 | 1245 | MW-17003 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 9 | 4/23/25 | 1400 | MW-15018 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 10 | 4/23/25 | 1545 | MW-15017 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 11 | 4/23/25 | 1705 | MW-17002 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 12 | 4/23/25 | 952 | MW-15005 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 13 | 4/23/25 | 952 | MWT-15005 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 14 | 4/23/25 | 1128 | MW-15006 | N | W | 3 | | | 2 | | | | X | X | X | X | | |
| 15 | 4/23/25 | 1234 | MW-15009 | N | W | 3 | | | 2 | | | | X | X | X | X | | |

| Please Sign | Released By | Date | Time | Received By |
|---|---|---|---|---|
| 1) | Andrew Byks | 4/25/25 | 809 | 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.

| Released By | Date | Time | Received By |
|---|---|---|---|
| | | | |
| | 4/25/25 | 1055 | |

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

**25D1770**
**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: +0.1°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: 0.0°C) | SR1 (CF: -0.4°C) | SR2 (CF: -0.1°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|
| Date: 4/23/25 | | | | | | | | | |
| Time: 855 | | | | | | | | | |
| Initials: CM | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | |
| Package Temp °C | -0.3 | -0.3 | | / | | | | | |
| Representative Sample Temp °C | 0.7 | 0.3 | | | | / | | / | |

### 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
- [x] [ ] COC signed by client

### Notes:

MW-15010
MW-15020
MWT-15010
MW-17005
MW-15023

Form 70-A.57
Effective 2/20/25

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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



Trace ID No. 25D1770

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR Michigan Inc |
| Report To: | Andrew Byks/Molly Reeves |
| Mailing Address: | 1000 Oakbrook Drive, Suite 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byks@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10220433 |
| Contact Name: | Lara Zawacken |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | lara.zawacken@hdrinc.com |

**Trace Use:**

| | |
|---|---|
| Logged By: | NC |
| Checked By: | MS |
| Soil Volatiles Preserved (circle if applicable): MeOH / Low Level / Lab | |
| Sampling Time: | |

**Turnaround Requirements:**

- ☒ Standard, 5-10 Days
- ☐ 3 Day*
- ☐ 1 Day*

**Results provided end of business day, requires prior approval.*

**Matrix Key:**

| | |
|---|---|
| S = Soil / Solid | WI = Wipes |
| W = Water | LW = Liquid Waste |
| SL = Sludge | A = Air |
| OI = Oil | D = Drinking Water |

Project Name: BC Cobb

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 4/23/25 | 1348 | MW-15007 | N | W | 3 | | 2 | | | | | App IV Part 257 | |
| 17 | 4/23/25 | 1458 | MW-15009 | N | W | 3 | | 2 | | | | | App IV Part 257 | |
| 18 | 4/23/25 | 1602 | MW-15022 | N | W | 3 | | 2 | | | | | TSS | |
| 19 | 4/23/25 | 1700 | MW-15021 | N | W | 3 | | 2 | | | | | Part 11S Metals | |
| 20 | 4/24/25 | 1005 | MW-17001R | N | W | 3 | | 2 | | | | | | |
| 21 | 4/24/25 | 1100 | MW-15016R | N | W | 3 | | 2 | | | | | | |
| 22 | 4/24/25 | 1250 | MW-15015R | N | W | 3 | | 2 | | | | | | |
| 23 | 4/24/25 | 1405 | MW-15014R | N | W | 4 | | 4 | | | | | | 2-250mL $HNO_3$ Pres |
| 24 | 4/24/25 | 950 | MW-15013 | N | W | 3 | | 3 | | 2 | | | | |
| 25 | 4/24/25 | 1000 | MW-15004 | N | W | 3 | | 2 | | | | | | |

| Please Sign | Released By | Received By | Date | Time |
|---|---|---|---|---|
| 1) | Andy Byk | Cyhl | 4/25/25 | 8:10 |
| 2) | | | | |
| 3) | | | | |
| 4) | | | 4/25/25 | 1055 |

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TRACE
ANALYTICAL LABORATORIES, INC.

## CHAIN-OF-CUSTODY RECORD

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Page 3 of 3

Trace ID No. 25D1770

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR Michigan Inc |
| Report To: | Andrew Byers/Molly Reeves |
| Mailing Address: | 1000 Oakbrook Dr, Ste 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byers@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10220433 |
| Contact Name: | Lara Zawaideh |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | lara.zawaideh@hdrinc.com |

**Trace Use:**

| | |
|---|---|
| Logged By: | NC |
| Checked By: | MJ |
| Soil Volatiles Preserved (circle if applicable): | MeOH / Low Level / Lab |
| Sampling Time: | |

**Turnaround Requirements:**

☑ Standard: 5-10 Days
☐ 3 Day*
☐ 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: BC Cobb

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | App III Part 257 | App IV Part 257 | Part 115 Metals | TSS | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 4/24/25 | 1110 | MW-15003 | N | W | 3 | | 2 | | | | | X | X | X | X | |
| 27 | 4/24/25 | 1210 | MW-15002 | N | W | 6 | | 2 | | | | | X | X | X | X | -500mL unpres in 4x125mL |
| 28 | 4/24/25 | 1350 | MW-17006 | N | W | 3 | | 1 | | | | | X | X | X | X | add nitric to pH<2 @ Lab |

**Analysis Requested**

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| 1) | 4/25/25 | 8:11 | 2) | | |
| 3) | | | 4) | | |

Please Sign

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www.trace-labs.com

TRACE ANALYTICAL LABORATORIES, INC.

**25D1770**
HDR Michigan Inc.
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: +0.1°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: 0.0°C) | SR1 (CF: -0.4°C) | SR2 (CF: -0.1°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|
| Date: 4/25/25 | | | | | | | | | |
| Time: 9:00 | | | | | | | | | |
| Initials: CN | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | |
| Package Temp °C | -0.4 | -0.4 | | X | | | | | |
| Representative Sample Temp °C | 1.0 | 1.0 | | X | | | | | |

### 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:

Form 70-A.57
Effective 2/20/25

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www.trace-labs.com

June 05, 2025

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

RE: Trace Project 25D1772
Client Project BC Cobb- MW Radium Analysis- April 2025

Dear Ms. Reeves:

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

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

The results were obtained from Eurofins Eaton East Analytical.

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

Sincerely,

Jon Mink
Senior Project Manager

Enclosures

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

## SAMPLE SUMMARY

Trace Project ID: 25D1772
Client Project ID: BC Cobb- MW Radium Analysis- April 2025

| Trace ID | Sample ID | Matrix | Collected By | Date Collected | Date Received |
|---|---|---|---|---|---|
| 25D1772-01 | MW-15023 | Ground Water | AB/FDR | 04/22/25 09:40 | 04/23/25 08:00 |
| 25D1772-02 | MW-15020 | Ground Water | AB/FDR | 04/22/25 11:20 | 04/23/25 08:00 |
| 25D1772-03 | MW-17005 | Ground Water | AB/FDR | 04/22/25 12:50 | 04/23/25 08:00 |
| 25D1772-04 | MW-15010 | Ground Water | AB/FDR | 04/22/25 11:48 | 04/23/25 08:00 |
| 25D1772-05 | MWT-15010 | Ground Water | AB/FDR | 04/22/25 11:48 | 04/23/25 08:00 |
| 25D1772-06 | MW-17004 | Ground Water | AB/FDR | 04/23/25 10:15 | 04/25/25 08:09 |
| 25D1772-07 | MW-15019 | Ground Water | AB/FDR | 04/23/25 11:40 | 04/25/25 08:09 |
| 25D1772-08 | MW-17003 | Ground Water | AB/FDR | 04/23/25 12:45 | 04/25/25 08:09 |
| 25D1772-09 | MW-15018 | Ground Water | AB/FDR | 04/23/25 14:00 | 04/25/25 08:09 |
| 25D1772-10 | MW-15017 | Ground Water | AB/FDR | 04/23/25 15:45 | 04/25/25 08:09 |
| 25D1772-11 | MW-17002 | Ground Water | AB/FDR | 04/23/25 17:05 | 04/25/25 08:09 |
| 25D1772-12 | MW-15005 | Ground Water | AB/FDR | 04/23/25 09:52 | 04/25/25 08:09 |
| 25D1772-13 | MWT-15005 | Ground Water | AB/FDR | 04/23/25 09:52 | 04/25/25 08:09 |
| 25D1772-14 | MW-15006 | Ground Water | AB/FDR | 04/23/25 11:28 | 04/25/25 08:09 |
| 25D1772-15 | MW-15008 | Ground Water | AB/FDR | 04/23/25 12:34 | 04/25/25 08:09 |
| 25D1772-16 | MW-15007 | Ground Water | AB/FDR | 04/23/25 13:48 | 04/25/25 08:09 |
| 25D1772-17 | MW-15009 | Ground Water | AB/FDR | 04/23/25 14:58 | 04/25/25 08:09 |
| 25D1772-18 | MW-15022 | Ground Water | AB/FDR | 04/23/25 16:02 | 04/25/25 08:09 |
| 25D1772-19 | MW-15021 | Ground Water | AB/FDR | 04/23/25 17:00 | 04/25/25 08:09 |
| 25D1772-20 | MW-17001R | Ground Water | AB/FDR | 04/24/25 10:05 | 04/25/25 08:09 |
| 25D1772-21 | MW-15016R | Ground Water | AB/FDR | 04/24/25 11:00 | 04/25/25 08:09 |

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| | | | | | |
|---|---|---|---|---|---|
| 25D1772-22 | MW-15015R | Ground Water | AB/FDR | 04/24/25 12:50 | 04/25/25 08:09 |
| 25D1772-23 | MW-15014R | Ground Water | AB/FDR | 04/24/25 14:05 | 04/25/25 08:09 |
| 25D1772-24 | MW-15013 | Ground Water | AB/FDR | 04/24/25 08:50 | 04/25/25 08:09 |
| 25D1772-25 | MW-15004 | Ground Water | AB/FDR | 04/24/25 10:00 | 04/25/25 08:09 |
| 25D1772-26 | MW-15003 | Ground Water | AB/FDR | 04/24/25 11:10 | 04/25/25 08:09 |
| 25D1772-27 | MW-15002 | Ground Water | AB/FDR | 04/24/25 12:10 | 04/25/25 08:09 |
| 25D1772-28 | MW-17006 | Ground Water | AB/FDR | 04/24/25 13:50 | 04/25/25 08:09 |

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eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 6/3/2025 1:23:45 PM

## JOB DESCRIPTION

25D1772

## JOB NUMBER

810-146319-1

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.



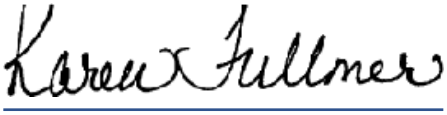
myEOL

## Job Notes

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

## Authorization



Generated
6/3/2025 1:23:45 PM

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

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# Definitions/Glossary

Client: Trace Analytical Laboratories
Job ID: 810-146319-1
Project/Site: 25D1772

## 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: 810-146319-1 — Eurofins Eaton Analytical South Bend

**Job Narrative**
**810-146319-1**

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

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

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

**Receipt**
The samples were received on 4/28/2025 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

**Gas Flow Proportional Counter**
Method 903.0: Radium-226 prep batch 160-716338:

Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-15005 (810-146319-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) was prepared with a DU to demonstrate batch precision.

Method 904.0: Radium-228 prep batch 160-716340:

Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-15005 (810-146319-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) was prepared with a DU to demonstrate batch precision.

Method 904.0: Radium 228 Batch 716180

The Radium-228 laboratory control sample (LCS) associated with the following samples recovered at 127%: (LCS 160-716180/2-A). The limits in our LIMS system at 75-125% reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of 68-154%. The LCS is within criteria and no further action is required.

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
Job ID: 810-146319-1
Project/Site: 25D1772

**Client Sample ID: MW-17004** **Lab Sample ID: 810-146319-1**

No Detections.

**Client Sample ID: MW-15019** **Lab Sample ID: 810-146319-2**

No Detections.

**Client Sample ID: MW-17003** **Lab Sample ID: 810-146319-3**

No Detections.

**Client Sample ID: MW-15018** **Lab Sample ID: 810-146319-4**

No Detections.

**Client Sample ID: MW-15017** **Lab Sample ID: 810-146319-5**

No Detections.

**Client Sample ID: MW-17002** **Lab Sample ID: 810-146319-6**

No Detections.

**Client Sample ID: MW-15005** **Lab Sample ID: 810-146319-7**

No Detections.

**Client Sample ID: MWT-15005** **Lab Sample ID: 810-146319-8**

No Detections.

**Client Sample ID: MW-15006** **Lab Sample ID: 810-146319-9**

No Detections.

**Client Sample ID: MW-15008** **Lab Sample ID: 810-146319-10**

No Detections.

**Client Sample ID: MW-15007** **Lab Sample ID: 810-146319-11**

No Detections.

**Client Sample ID: MW-15009** **Lab Sample ID: 810-146319-12**

No Detections.

**Client Sample ID: MW-15022** **Lab Sample ID: 810-146319-13**

No Detections.

**Client Sample ID: MW-15021** **Lab Sample ID: 810-146319-14**

No Detections.

**Client Sample ID: MW-17001R** **Lab Sample ID: 810-146319-15**

No Detections.

**Client Sample ID: MW-15016R** **Lab Sample ID: 810-146319-16**

No Detections.

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

**Client Sample ID: MW-15015R** — **Lab Sample ID: 810-146319-17**

No Detections.

**Client Sample ID: MW-15014R** — **Lab Sample ID: 810-146319-18**

No Detections.

**Client Sample ID: MW-15013** — **Lab Sample ID: 810-146319-19**

No Detections.

**Client Sample ID: MW-15004** — **Lab Sample ID: 810-146319-20**

No Detections.

**Client Sample ID: MW-15003** — **Lab Sample ID: 810-146319-21**

No Detections.

**Client Sample ID: MW-15002** — **Lab Sample ID: 810-146319-22**

No Detections.

**Client Sample ID: MW-17006** — **Lab Sample ID: 810-146319-23**

No Detections.

**Client Sample ID: MW-15023** — **Lab Sample ID: 810-146319-24**

No Detections.

**Client Sample ID: MW-15020** — **Lab Sample ID: 810-146319-25**

No Detections.

**Client Sample ID: MW-17005** — **Lab Sample ID: 810-146319-26**

No Detections.

**Client Sample ID: MW-15010** — **Lab Sample ID: 810-146319-27**

No Detections.

**Client Sample ID: MWT-15010** — **Lab Sample ID: 810-146319-28**

No Detections.

This Detection Summary does not include radiochemical test results.

## Client Sample ID: MW-17004

**Lab Sample ID: 810-146319-1**

**Date Collected: 04/23/25 10:15**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.261 | U | 0.215 | 0.216 | 1.00 | 0.313 | pCi/L | 05/06/25 07:36 | 06/02/25 16:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.6* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:24* | *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 | 0.332 | U | 0.361 | 0.362 | 1.00 | 0.587 | pCi/L | 05/06/25 07:40 | 06/02/25 12:10 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *1* |
| *Y Carrier* | *77.0* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *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** | **0.593** | | 0.420 | 0.422 | 5.00 | 0.587 | pCi/L | | 06/02/25 10:11 | 1 |

## Client Sample ID: MW-15019

**Lab Sample ID: 810-146319-2**

**Date Collected: 04/23/25 11:40**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.382 | U | 0.314 | 0.316 | 1.00 | 0.458 | pCi/L | 05/06/25 07:36 | 06/02/25 16:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *78.9* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:24* | *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** | **1.49** | | 0.622 | 0.637 | 1.00 | 0.810 | pCi/L | 05/06/25 07:40 | 06/02/25 12:10 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *78.9* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *1* |
| *Y Carrier* | *82.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *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** | **1.88** | | 0.697 | 0.711 | 5.00 | 0.810 | pCi/L | | 06/02/25 10:11 | 1 |

## Client Sample ID: MW-17003

**Lab Sample ID: 810-146319-3**

**Date Collected: 04/23/25 12:45**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.181 | U | 0.202 | 0.203 | 1.00 | 0.325 | pCi/L | 05/06/25 07:36 | 06/02/25 16:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.1* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:24* | *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** | **0.621** | | 0.407 | 0.411 | 1.00 | 0.611 | pCi/L | 05/06/25 07:40 | 06/02/25 12:10 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.1* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *1* |
| *Y Carrier* | *84.1* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *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** | **0.802** | | 0.454 | 0.458 | 5.00 | 0.611 | pCi/L | | 06/02/25 10:11 | 1 |

## Client Sample ID: MW-15018

**Lab Sample ID: 810-146319-4**

**Date Collected: 04/23/25 14:00**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.195 | U | 0.333 | 0.334 | 1.00 | 0.578 | pCi/L | 05/06/25 07:36 | 06/02/25 16:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.3* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:24* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **1.08** | | 0.548 | 0.557 | 1.00 | 0.751 | pCi/L | 05/06/25 07:40 | 06/02/25 12:10 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.3* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *1* |
| *Y Carrier* | *76.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium 226 and 228** | **1.27** | | 0.641 | 0.649 | 5.00 | 0.751 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15017

**Lab Sample ID: 810-146319-5**

**Date Collected: 04/23/25 15:45**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.86 | | 0.516 | 0.542 | 1.00 | 0.446 | pCi/L | 05/06/25 07:36 | 06/02/25 16:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *93.0* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:24* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.20 | | 0.759 | 0.814 | 1.00 | 0.796 | pCi/L | 05/06/25 07:40 | 06/02/25 12:10 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *93.0* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *1* |
| *Y Carrier* | *78.9* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *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 | 5.06 | | 0.918 | 0.978 | 5.00 | 0.796 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-17002

**Lab Sample ID: 810-146319-6**

**Date Collected: 04/23/25 17:05**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.556 | | 0.378 | 0.382 | 1.00 | 0.522 | pCi/L | 05/06/25 07:36 | 06/02/25 16:25 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *74.1* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:25* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.637 | U | 0.526 | 0.529 | 1.00 | 0.807 | pCi/L | 05/06/25 07:40 | 06/02/25 12:10 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *74.1* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *1* |
| *Y Carrier* | *74.8* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *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 | 1.19 | | 0.648 | 0.653 | 5.00 | 0.807 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15005

**Lab Sample ID: 810-146319-7**

**Date Collected: 04/23/25 09:52**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0157 | U | 0.0943 | 0.0943 | 1.00 | 0.190 | pCi/L | 05/07/25 07:48 | 06/01/25 13:17 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.6* | | *30 - 110* | *05/07/25 07:48* | *06/01/25 13:17* | *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 | -0.167 | U | 0.338 | 0.339 | 1.00 | 0.674 | pCi/L | 05/07/25 07:52 | 05/30/25 13:54 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.6* | | *30 - 110* | *05/07/25 07:52* | *05/30/25 13:54* | *1* |
| *Y Carrier* | *75.9* | | *30 - 110* | *05/07/25 07:52* | *05/30/25 13:54* | *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 | 0.0157 | U | 0.351 | 0.352 | 5.00 | 0.674 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MWT-15005

**Lab Sample ID: 810-146319-8**

**Date Collected: 04/23/25 09:52**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.127 | U | 0.200 | 0.200 | 1.00 | 0.346 | pCi/L | 05/06/25 07:36 | 06/02/25 16:25 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *80.3* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:25* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.0480 | U | 0.347 | 0.347 | 1.00 | 0.635 | pCi/L | 05/06/25 07:40 | 06/02/25 12:10 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *80.3* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *1* |
| *Y Carrier* | *81.1* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:10* | *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 | 0.176 | U | 0.401 | 0.401 | 5.00 | 0.635 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15006

**Lab Sample ID: 810-146319-9**

**Date Collected: 04/23/25 11:28**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.109 | U | 0.208 | 0.208 | 1.00 | 0.371 | pCi/L | 05/06/25 07:36 | 06/02/25 16:25 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *77.6* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:25* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.428 | U | 0.414 | 0.415 | 1.00 | 0.662 | pCi/L | 05/06/25 07:40 | 06/02/25 12:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *77.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:11* | *1* |
| *Y Carrier* | *78.9* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:11* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium 226 and 228 | 0.537 | U | 0.463 | 0.464 | 5.00 | 0.662 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15008

**Lab Sample ID: 810-146319-10**

**Date Collected: 04/23/25 12:34**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.102 | U | 0.192 | 0.192 | 1.00 | 0.342 | pCi/L | 05/06/25 07:36 | 06/02/25 16:26 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.3* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:26* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.401 | U | 0.409 | 0.411 | 1.00 | 0.663 | pCi/L | 05/06/25 07:40 | 06/02/25 12:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.3* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:11* | *1* |
| *Y Carrier* | *82.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:11* | *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 | 0.503 | U | 0.452 | 0.454 | 5.00 | 0.663 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15007

**Date Collected: 04/23/25 13:48**
**Date Received: 04/28/25 09:00**

## Lab Sample ID: 810-146319-11

**Matrix: Ground 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 | 0.368 | U | 0.322 | 0.324 | 1.00 | 0.476 | pCi/L | 05/06/25 07:36 | 06/02/25 16:26 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *72.6* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:26* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.199 | U | 0.516 | 0.516 | 1.00 | 0.917 | pCi/L | 05/06/25 07:40 | 06/02/25 12:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *72.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:11* | *1* |
| *Y Carrier* | *76.3* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:11* | *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 | 0.567 | U | 0.608 | 0.609 | 5.00 | 0.917 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15009

**Date Collected: 04/23/25 14:58**
**Date Received: 04/28/25 09:00**

## Lab Sample ID: 810-146319-12

**Matrix: Ground 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 | 0.0959 | U | 0.214 | 0.214 | 1.00 | 0.390 | pCi/L | 05/06/25 07:36 | 06/02/25 16:26 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *76.1* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:26* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | -0.0110 | U | 0.370 | 0.370 | 1.00 | 0.694 | pCi/L | 05/06/25 07:40 | 06/02/25 12:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *76.1* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:11* | *1* |
| *Y Carrier* | *80.0* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:11* | *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 | 0.0959 | U | 0.427 | 0.427 | 5.00 | 0.694 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15022

**Date Collected: 04/23/25 16:02**
**Date Received: 04/28/25 09:00**

## Lab Sample ID: 810-146319-13

**Matrix: Ground 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 | 0.273 | U | 0.225 | 0.226 | 1.00 | 0.327 | pCi/L | 05/06/25 07:36 | 06/02/25 16:26 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.3* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:26* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.371 | U | 0.387 | 0.389 | 1.00 | 0.628 | pCi/L | 05/06/25 07:40 | 06/02/25 12:13 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.3* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:13* | *1* |
| *Y Carrier* | *78.9* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 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** | **0.644** | | 0.448 | 0.450 | 5.00 | 0.628 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15021

**Date Collected: 04/23/25 17:00**
**Date Received: 04/28/25 09:00**

## Lab Sample ID: 810-146319-14

**Matrix: Ground 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** | **0.578** | | 0.332 | 0.336 | 1.00 | 0.398 | pCi/L | 05/06/25 07:36 | 06/02/25 16:27 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.6* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:27* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **0.879** | | 0.570 | 0.576 | 1.00 | 0.848 | pCi/L | 05/06/25 07:40 | 06/02/25 12:13 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:13* | *1* |
| *Y Carrier* | *78.9* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 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** | **1.46** | | 0.660 | 0.667 | 5.00 | 0.848 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-17001R

**Lab Sample ID: 810-146319-15**

**Date Collected: 04/24/25 10:05**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.556 | | 0.337 | 0.341 | 1.00 | 0.433 | pCi/L | 05/06/25 07:36 | 06/02/25 16:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.6* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:32* | *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 | 0.625 | U | 0.505 | 0.508 | 1.00 | 0.781 | pCi/L | 05/06/25 07:40 | 06/02/25 12:13 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:13* | *1* |
| *Y Carrier* | *77.8* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 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 | 1.18 | | 0.607 | 0.612 | 5.00 | 0.781 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15016R

**Lab Sample ID: 810-146319-16**

**Date Collected: 04/24/25 11:00**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.51 | | 0.533 | 0.550 | 1.00 | 0.583 | pCi/L | 05/06/25 07:36 | 06/02/25 16:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.8* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:32* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 2.68 | | 0.730 | 0.770 | 1.00 | 0.804 | pCi/L | 05/06/25 07:40 | 06/02/25 12:14 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.8* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |
| *Y Carrier* | *79.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium 226 and 228 | 4.19 | | 0.904 | 0.946 | 5.00 | 0.804 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15015R

**Date Collected: 04/24/25 12:50**
**Date Received: 04/28/25 09:00**

## Lab Sample ID: 810-146319-17

**Matrix: Ground 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 | 0.150 | U | 0.233 | 0.234 | 1.00 | 0.402 | pCi/L | 05/06/25 07:36 | 06/02/25 16:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.6* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:32* | *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 | 0.531 | U | 0.421 | 0.423 | 1.00 | 0.654 | pCi/L | 05/06/25 07:40 | 06/02/25 12:14 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.6* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |
| *Y Carrier* | *78.5* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium 226 and 228** | **0.681** | | 0.481 | 0.483 | 5.00 | 0.654 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15014R

**Date Collected: 04/24/25 14:05**
**Date Received: 04/28/25 09:00**

## Lab Sample ID: 810-146319-18

**Matrix: Ground 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 | 0.300 | U | 0.262 | 0.263 | 1.00 | 0.402 | pCi/L | 05/06/25 07:36 | 06/02/25 16:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *90.3* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:32* | *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 | 0.131 | U | 0.324 | 0.324 | 1.00 | 0.574 | pCi/L | 05/06/25 07:40 | 06/02/25 12:14 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *90.3* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |
| *Y Carrier* | *77.0* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium 226 and 228 | 0.431 | U | 0.417 | 0.417 | 5.00 | 0.574 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15013

**Lab Sample ID: 810-146319-19**

**Date Collected: 04/24/25 08:50**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0625 | U | 0.258 | 0.259 | 1.00 | 0.487 | pCi/L | 05/06/25 07:36 | 06/02/25 16:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *93.3* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:32* | *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 | 0.384 | U | 0.415 | 0.416 | 1.00 | 0.674 | pCi/L | 05/06/25 07:40 | 06/02/25 12:14 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *93.3* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |
| *Y Carrier* | *83.4* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium 226 and 228 | 0.447 | U | 0.489 | 0.490 | 5.00 | 0.674 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15004

**Lab Sample ID: 810-146319-20**

**Date Collected: 04/24/25 10:00**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0466 | U | 0.219 | 0.219 | 1.00 | 0.437 | pCi/L | 05/06/25 07:36 | 06/02/25 16:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.1* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:32* | *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 | -0.137 | U | 0.457 | 0.458 | 1.00 | 0.889 | pCi/L | 05/06/25 07:40 | 06/02/25 12:14 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.1* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |
| *Y Carrier* | *80.4* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium 226 and 228 | 0.0466 | U | 0.507 | 0.508 | 5.00 | 0.889 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15003

**Date Collected: 04/24/25 11:10**
**Date Received: 04/28/25 09:00**

## Lab Sample ID: 810-146319-21

**Matrix: Ground 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 | 0.339 | U | 0.388 | 0.389 | 1.00 | 0.633 | pCi/L | 05/06/25 07:36 | 06/02/25 16:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.1* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:32* | *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 | 0.690 | U | 0.543 | 0.547 | 1.00 | 0.845 | pCi/L | 05/06/25 07:40 | 06/02/25 12:14 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.1* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |
| *Y Carrier* | *84.1* | | *30 - 110* | *05/06/25 07:40* | *06/02/25 12:14* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium 226 and 228** | **1.03** | | 0.667 | 0.671 | 5.00 | 0.845 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15002

**Date Collected: 04/24/25 12:10**
**Date Received: 04/28/25 09:00**

## Lab Sample ID: 810-146319-22

**Matrix: Ground 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** | **0.556** | | 0.276 | 0.280 | 1.00 | 0.320 | pCi/L | 05/06/25 07:42 | 06/02/25 09:41 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.6* | | *30 - 110* | *05/06/25 07:42* | *06/02/25 09:41* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **1.56** | | 0.646 | 0.662 | 1.00 | 0.839 | pCi/L | 05/06/25 07:50 | 06/01/25 10:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.6* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:24* | *1* |
| *Y Carrier* | *72.9* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:24* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium 226 and 228** | **2.12** | | 0.702 | 0.719 | 5.00 | 0.839 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-17006

**Lab Sample ID: 810-146319-23**

**Date Collected: 04/24/25 13:50**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0124 | U | 0.153 | 0.153 | 1.00 | 0.301 | pCi/L | 05/06/25 07:42 | 06/02/25 09:41 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.1* | | *30 - 110* | *05/06/25 07:42* | *06/02/25 09:41* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **0.729** | | 0.414 | 0.419 | 1.00 | 0.588 | pCi/L | 05/06/25 07:50 | 06/01/25 10:26 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.1* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:26* | *1* |
| *Y Carrier* | *74.4* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:26* | *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** | **0.741** | | 0.441 | 0.446 | 5.00 | 0.588 | pCi/L | | 06/02/25 16:25 | 1 |

## Client Sample ID: MW-15023

**Lab Sample ID: 810-146319-24**

**Date Collected: 04/22/25 09:40**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-226** | **0.567** | | 0.290 | 0.295 | 1.00 | 0.358 | pCi/L | 05/06/25 07:42 | 06/02/25 09:41 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.1* | | *30 - 110* | *05/06/25 07:42* | *06/02/25 09:41* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **2.71** | | 0.760 | 0.800 | 1.00 | 0.872 | pCi/L | 05/06/25 07:50 | 06/01/25 10:26 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.1* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:26* | *1* |
| *Y Carrier* | *76.3* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:26* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium 226 and 228** | **3.28** | | 0.813 | 0.853 | 5.00 | 0.872 | pCi/L | | 06/03/25 11:57 | 1 |

## Client Sample ID: MW-15020

**Lab Sample ID: 810-146319-25**

**Date Collected: 04/22/25 11:20**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.504 | | 0.302 | 0.305 | 1.00 | 0.416 | pCi/L | 05/06/25 07:42 | 06/02/25 09:41 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.3* | | *30 - 110* | *05/06/25 07:42* | *06/02/25 09:41* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.64 | | 0.620 | 0.639 | 1.00 | 0.805 | pCi/L | 05/06/25 07:50 | 06/01/25 10:26 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.3* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:26* | *1* |
| *Y Carrier* | *80.0* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:26* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium 226 and 228 | 2.15 | | 0.690 | 0.708 | 5.00 | 0.805 | pCi/L | | 06/03/25 11:57 | 1 |

## Client Sample ID: MW-17005

**Lab Sample ID: 810-146319-26**

**Date Collected: 04/22/25 12:50**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.295 | | 0.195 | 0.197 | 1.00 | 0.266 | pCi/L | 05/06/25 07:42 | 06/02/25 09:41 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.8* | | *30 - 110* | *05/06/25 07:42* | *06/02/25 09:41* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.07 | | 0.472 | 0.482 | 1.00 | 0.628 | pCi/L | 05/06/25 07:50 | 06/01/25 10:26 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.8* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:26* | *1* |
| *Y Carrier* | *74.4* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:26* | *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 | 1.37 | | 0.511 | 0.521 | 5.00 | 0.628 | pCi/L | | 06/03/25 11:57 | 1 |

## Client Sample ID: MW-15010

**Lab Sample ID: 810-146319-27**

**Date Collected: 04/22/25 11:48**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.223 | U | 0.177 | 0.178 | 1.00 | 0.257 | pCi/L | 05/06/25 07:42 | 06/02/25 09:41 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.8* | | *30 - 110* | *05/06/25 07:42* | *06/02/25 09:41* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **0.576** | | 0.389 | 0.393 | 1.00 | 0.576 | pCi/L | 05/06/25 07:50 | 06/01/25 10:27 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.8* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:27* | *1* |
| *Y Carrier* | *73.6* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:27* | *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** | **0.800** | | 0.427 | 0.431 | 5.00 | 0.576 | pCi/L | | 06/03/25 11:57 | 1 |

## Client Sample ID: MWT-15010

**Lab Sample ID: 810-146319-28**

**Date Collected: 04/22/25 11:48**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

### Method: EPA 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-226** | **0.591** | | 0.239 | 0.245 | 1.00 | 0.250 | pCi/L | 05/06/25 07:42 | 06/02/25 09:42 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.3* | | *30 - 110* | *05/06/25 07:42* | *06/02/25 09:42* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **0.916** | | 0.464 | 0.472 | 1.00 | 0.652 | pCi/L | 05/06/25 07:50 | 06/01/25 10:27 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.3* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:27* | *1* |
| *Y Carrier* | *75.5* | | *30 - 110* | *05/06/25 07:50* | *06/01/25 10:27* | *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** | **1.51** | | 0.522 | 0.532 | 5.00 | 0.652 | pCi/L | | 06/03/25 11:57 | 1 |

# Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

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

**Matrix: Ground Water** — **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | Ba (30-110) | | | | | | |
| 810-146319-1 | MW-17004 | 85.6 | | | | | | |
| 810-146319-1 DU | MW-17004 | 83.1 | | | | | | |
| 810-146319-2 | MW-15019 | 78.9 | | | | | | |
| 810-146319-3 | MW-17003 | 88.1 | | | | | | |
| 810-146319-4 | MW-15018 | 86.3 | | | | | | |
| 810-146319-5 | MW-15017 | 93.0 | | | | | | |
| 810-146319-6 | MW-17002 | 74.1 | | | | | | |
| 810-146319-7 | MW-15005 | 84.6 | | | | | | |
| 810-146319-8 | MWT-15005 | 80.3 | | | | | | |
| 810-146319-9 | MW-15006 | 77.6 | | | | | | |
| 810-146319-10 | MW-15008 | 88.3 | | | | | | |
| 810-146319-11 | MW-15007 | 72.6 | | | | | | |
| 810-146319-12 | MW-15009 | 76.1 | | | | | | |
| 810-146319-13 | MW-15022 | 82.3 | | | | | | |
| 810-146319-14 | MW-15021 | 82.6 | | | | | | |
| 810-146319-15 | MW-17001R | 84.6 | | | | | | |
| 810-146319-16 | MW-15016R | 86.8 | | | | | | |
| 810-146319-17 | MW-15015R | 84.6 | | | | | | |
| 810-146319-18 | MW-15014R | 90.3 | | | | | | |
| 810-146319-19 | MW-15013 | 93.3 | | | | | | |
| 810-146319-20 | MW-15004 | 81.1 | | | | | | |
| 810-146319-21 | MW-15003 | 87.1 | | | | | | |
| 810-146319-22 | MW-15002 | 82.6 | | | | | | |
| 810-146319-23 | MW-17006 | 83.1 | | | | | | |
| 810-146319-24 | MW-15023 | 83.1 | | | | | | |
| 810-146319-25 | MW-15020 | 88.3 | | | | | | |
| 810-146319-26 | MW-17005 | 81.8 | | | | | | |
| 810-146319-27 | MW-15010 | 83.8 | | | | | | |
| 810-146319-28 | MWT-15010 | 82.3 | | | | | | |

**Tracer/Carrier Legend**

Ba = Ba Carrier

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

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | Ba (30-110) | | | | | | |
| LCS 160-716176/2-A | Lab Control Sample | 87.6 | | | | | | |
| LCS 160-716178/2-A | Lab Control Sample | 86.6 | | | | | | |
| LCS 160-716338/2-A | Lab Control Sample | 87.8 | | | | | | |
| LCSD 160-716338/3-A | Lab Control Sample Dup | 90.5 | | | | | | |
| MB 160-716176/1-A | Method Blank | 89.3 | | | | | | |
| MB 160-716178/1-A | Method Blank | 84.3 | | | | | | |
| MB 160-716338/1-A | Method Blank | 89.1 | | | | | | |

**Tracer/Carrier Legend**

Ba = Ba Carrier

# Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Job ID: 810-146319-1
Project/Site: 25D1772

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

**Matrix: Ground Water** **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | |
|---|---|---|---|
| | | Ba | Y |
| Lab Sample ID | Client Sample ID | (30-110) | (30-110) |
| 810-146319-1 | MW-17004 | 85.6 | 77.0 |
| 810-146319-1 DU | MW-17004 | 83.1 | 80.0 |
| 810-146319-2 | MW-15019 | 78.9 | 82.6 |
| 810-146319-3 | MW-17003 | 88.1 | 84.1 |
| 810-146319-4 | MW-15018 | 86.3 | 76.6 |
| 810-146319-5 | MW-15017 | 93.0 | 78.9 |
| 810-146319-6 | MW-17002 | 74.1 | 74.8 |
| 810-146319-7 | MW-15005 | 84.6 | 75.9 |
| 810-146319-8 | MWT-15005 | 80.3 | 81.1 |
| 810-146319-9 | MW-15006 | 77.6 | 78.9 |
| 810-146319-10 | MW-15008 | 88.3 | 82.6 |
| 810-146319-11 | MW-15007 | 72.6 | 76.3 |
| 810-146319-12 | MW-15009 | 76.1 | 80.0 |
| 810-146319-13 | MW-15022 | 82.3 | 78.9 |
| 810-146319-14 | MW-15021 | 82.6 | 78.9 |
| 810-146319-15 | MW-17001R | 84.6 | 77.8 |
| 810-146319-16 | MW-15016R | 86.8 | 79.6 |
| 810-146319-17 | MW-15015R | 84.6 | 78.5 |
| 810-146319-18 | MW-15014R | 90.3 | 77.0 |
| 810-146319-19 | MW-15013 | 93.3 | 83.4 |
| 810-146319-20 | MW-15004 | 81.1 | 80.4 |
| 810-146319-21 | MW-15003 | 87.1 | 84.1 |
| 810-146319-22 | MW-15002 | 82.6 | 72.9 |
| 810-146319-23 | MW-17006 | 83.1 | 74.4 |
| 810-146319-24 | MW-15023 | 83.1 | 76.3 |
| 810-146319-25 | MW-15020 | 88.3 | 80.0 |
| 810-146319-26 | MW-17005 | 81.8 | 74.4 |
| 810-146319-27 | MW-15010 | 83.8 | 73.6 |
| 810-146319-28 | MWT-15010 | 82.3 | 75.5 |

**Tracer/Carrier Legend**

Ba = Ba Carrier

Y = Y Carrier

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

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | |
|---|---|---|---|
| | | Ba | Y |
| Lab Sample ID | Client Sample ID | (30-110) | (30-110) |
| LCS 160-716177/2-A | Lab Control Sample | 87.6 | 77.4 |
| LCS 160-716180/2-A | Lab Control Sample | 86.6 | 79.3 |
| LCS 160-716340/2-A | Lab Control Sample | 87.8 | 76.6 |
| LCSD 160-716340/3-A | Lab Control Sample Dup | 90.5 | 78.5 |
| MB 160-716177/1-A | Method Blank | 89.3 | 78.9 |
| MB 160-716180/1-A | Method Blank | 84.3 | 79.6 |
| MB 160-716340/1-A | Method Blank | 89.1 | 77.4 |

**Tracer/Carrier Legend**

Ba = Ba Carrier

Y = Y Carrier

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

**Lab Sample ID: MB 160-716176/1-A**
**Matrix: Water**
**Analysis Batch: 720203**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 716176**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | -0.1095 | U | 0.159 | 0.159 | 1.00 | 0.374 | pCi/L | 05/06/25 07:36 | 06/02/25 16:24 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *89.3* | | *30 - 110* | *05/06/25 07:36* | *06/02/25 16:24* | *1* |

**Lab Sample ID: LCS 160-716176/2-A**
**Matrix: Water**
**Analysis Batch: 720203**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 716176**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 9.58 | 8.049 | | 1.13 | 1.00 | 0.351 | pCi/L | 84 | 75 - 125 | | |

| *Carrier* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *87.6* | | *30 - 110* |

**Lab Sample ID: 810-146319-1 DU**
**Matrix: Ground Water**
**Analysis Batch: 720203**

**Client Sample ID: MW-17004**
**Prep Type: Total/NA**
**Prep Batch: 716176**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.261 | U | | -0.00713 3 | U | 0.200 | 1.00 | 0.403 | pCi/L | | | 0.64 | 1 |

| *Carrier* | *DU %Yield* | *DU Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *83.1* | | *30 - 110* |

**Lab Sample ID: MB 160-716178/1-A**
**Matrix: Water**
**Analysis Batch: 720203**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 716178**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | -0.02039 | U | 0.165 | 0.165 | 1.00 | 0.335 | pCi/L | 05/06/25 07:42 | 06/02/25 07:47 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.3* | | *30 - 110* | *05/06/25 07:42* | *06/02/25 07:47* | *1* |

**Lab Sample ID: LCS 160-716178/2-A**
**Matrix: Water**
**Analysis Batch: 720203**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 716178**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 9.58 | 10.54 | | 1.30 | 1.00 | 0.263 | pCi/L | 110 | 75 - 125 | | |

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

**Lab Sample ID: LCS 160-716178/2-A**
**Matrix: Water**
**Analysis Batch: 720203**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 716178**

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 86.6 | | 30 - 110 |

**Lab Sample ID: MB 160-716338/1-A**
**Matrix: Water**
**Analysis Batch: 720203**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 716338**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | -0.008723 | U | 0.0917 | 0.0917 | 1.00 | 0.187 | pCi/L | 05/07/25 07:48 | 06/02/25 14:49 | 1 |

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Ba Carrier | 89.1 | | 30 - 110 | 05/07/25 07:48 | 06/02/25 14:49 | 1 |

**Lab Sample ID: LCS 160-716338/2-A**
**Matrix: Water**
**Analysis Batch: 720201**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 716338**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 9.58 | 9.252 | | 1.11 | 1.00 | 0.252 | pCi/L | 97 | 75 - 125 | | |

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 87.8 | | 30 - 110 |

**Lab Sample ID: LCSD 160-716338/3-A**
**Matrix: Water**
**Analysis Batch: 720201**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 716338**

| Analyte | | | Spike Added | LCSD Result | LCSD Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 9.58 | 8.066 | | 0.988 | 1.00 | 0.197 | pCi/L | 84 | 75 - 125 | 0.57 | 1 |

| Carrier | LCSD %Yield | LCSD Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 90.5 | | 30 - 110 |

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

**Lab Sample ID: MB 160-716177/1-A**
**Matrix: Water**
**Analysis Batch: 720381**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 716177**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.5739 | | 0.368 | 0.372 | 1.00 | 0.538 | pCi/L | 05/06/25 07:40 | 06/02/25 12:11 | 1 |

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Ba Carrier | 89.3 | | 30 - 110 | 05/06/25 07:40 | 06/02/25 12:11 | 1 |

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

**Lab Sample ID: MB 160-716177/1-A**
**Matrix: Water**
**Analysis Batch: 720381**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 716177**

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Y Carrier | 78.9 | | 30 - 110 | 05/06/25 07:40 | 06/02/25 12:11 | 1 |

**Lab Sample ID: LCS 160-716177/2-A**
**Matrix: Water**
**Analysis Batch: 720381**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 716177**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 9.39 | 11.76 | | 1.56 | 1.00 | 0.535 | pCi/L | 125 | 75 - 125 | | |

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 87.6 | | 30 - 110 |
| Y Carrier | 77.4 | | 30 - 110 |

**Lab Sample ID: 810-146319-1 DU**
**Matrix: Ground Water**
**Analysis Batch: 720202**

**Client Sample ID: MW-17004**
**Prep Type: Total/NA**
**Prep Batch: 716177**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.332 | U | | 0.3232 | U | 0.340 | 1.00 | 0.547 | pCi/L | | | 0.01 | 1 |

| Carrier | DU %Yield | DU Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 83.1 | | 30 - 110 |
| Y Carrier | 80.0 | | 30 - 110 |

**Lab Sample ID: MB 160-716180/1-A**
**Matrix: Water**
**Analysis Batch: 720153**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 716180**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.7566 | | 0.401 | 0.407 | 1.00 | 0.562 | pCi/L | 05/06/25 07:50 | 06/01/25 10:24 | 1 |

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Ba Carrier | 84.3 | | 30 - 110 | 05/06/25 07:50 | 06/01/25 10:24 | 1 |
| Y Carrier | 79.6 | | 30 - 110 | 05/06/25 07:50 | 06/01/25 10:24 | 1 |

**Lab Sample ID: LCS 160-716180/2-A**
**Matrix: Water**
**Analysis Batch: 720153**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 716180**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 9.39 | 11.96 | | 1.55 | 1.00 | 0.517 | pCi/L | 127 | 75 - 125 | | |

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

**Lab Sample ID: LCS 160-716180/2-A**
**Matrix: Water**
**Analysis Batch: 720153**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 716180**

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 86.6 | | 30 - 110 |
| Y Carrier | 79.3 | | 30 - 110 |

**Lab Sample ID: MB 160-716340/1-A**
**Matrix: Water**
**Analysis Batch: 720104**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 716340**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | -0.2313 | U | 0.281 | 0.282 | 1.00 | 0.595 | pCi/L | 05/07/25 07:52 | 05/30/25 13:55 | 1 |

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Ba Carrier | 89.1 | | 30 - 110 | 05/07/25 07:52 | 05/30/25 13:55 | 1 |
| Y Carrier | 77.4 | | 30 - 110 | 05/07/25 07:52 | 05/30/25 13:55 | 1 |

**Lab Sample ID: LCS 160-716340/2-A**
**Matrix: Water**
**Analysis Batch: 720104**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 716340**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 9.40 | 10.46 | | 1.44 | 1.00 | 0.638 | pCi/L | 111 | 75 - 125 | | |

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 87.8 | | 30 - 110 |
| Y Carrier | 76.6 | | 30 - 110 |

**Lab Sample ID: LCSD 160-716340/3-A**
**Matrix: Water**
**Analysis Batch: 720104**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 716340**

| Analyte | | | Spike Added | LCSD Result | LCSD Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 9.40 | 10.01 | | 1.38 | 1.00 | 0.554 | pCi/L | 106 | 75 - 125 | 0.16 | 1 |

| Carrier | LCSD %Yield | LCSD Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 90.5 | | 30 - 110 |
| Y Carrier | 78.5 | | 30 - 110 |

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### Prep Batch: 716176

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-146319-1 | MW-17004 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-2 | MW-15019 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-3 | MW-17003 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-4 | MW-15018 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-5 | MW-15017 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-6 | MW-17002 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-8 | MWT-15005 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-9 | MW-15006 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-10 | MW-15008 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-11 | MW-15007 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-12 | MW-15009 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-13 | MW-15022 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-14 | MW-15021 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-15 | MW-17001R | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-16 | MW-15016R | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-17 | MW-15015R | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-18 | MW-15014R | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-19 | MW-15013 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-20 | MW-15004 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-21 | MW-15003 | Total/NA | Ground Water | PrecSep-21 | |
| MB 160-716176/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-716176/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 810-146319-1 DU | MW-17004 | Total/NA | Ground Water | PrecSep-21 | |

### Prep Batch: 716177

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-146319-1 | MW-17004 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-2 | MW-15019 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-3 | MW-17003 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-4 | MW-15018 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-5 | MW-15017 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-6 | MW-17002 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-8 | MWT-15005 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-9 | MW-15006 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-10 | MW-15008 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-11 | MW-15007 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-12 | MW-15009 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-13 | MW-15022 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-14 | MW-15021 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-15 | MW-17001R | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-16 | MW-15016R | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-17 | MW-15015R | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-18 | MW-15014R | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-19 | MW-15013 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-20 | MW-15004 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-21 | MW-15003 | Total/NA | Ground Water | PrecSep_0 | |
| MB 160-716177/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-716177/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 810-146319-1 DU | MW-17004 | Total/NA | Ground Water | PrecSep_0 | |

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### Prep Batch: 716178

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-146319-22 | MW-15002 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-23 | MW-17006 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-24 | MW-15023 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-25 | MW-15020 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-26 | MW-17005 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-27 | MW-15010 | Total/NA | Ground Water | PrecSep-21 | |
| 810-146319-28 | MWT-15010 | Total/NA | Ground Water | PrecSep-21 | |
| MB 160-716178/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-716178/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |

### Prep Batch: 716180

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-146319-22 | MW-15002 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-23 | MW-17006 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-24 | MW-15023 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-25 | MW-15020 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-26 | MW-17005 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-27 | MW-15010 | Total/NA | Ground Water | PrecSep_0 | |
| 810-146319-28 | MWT-15010 | Total/NA | Ground Water | PrecSep_0 | |
| MB 160-716180/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-716180/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |

### Prep Batch: 716338

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-146319-7 | MW-15005 | Total/NA | Ground Water | PrecSep-21 | |
| MB 160-716338/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-716338/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| LCSD 160-716338/3-A | Lab Control Sample Dup | Total/NA | Water | PrecSep-21 | |

### Prep Batch: 716340

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-146319-7 | MW-15005 | Total/NA | Ground Water | PrecSep_0 | |
| MB 160-716340/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-716340/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| LCSD 160-716340/3-A | Lab Control Sample Dup | Total/NA | Water | PrecSep_0 | |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

## Client Sample ID: MW-17004

**Lab Sample ID: 810-146319-1**

**Date Collected: 04/23/25 10:15**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 16:24 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:10 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 10:11 |

## Client Sample ID: MW-15019

**Lab Sample ID: 810-146319-2**

**Date Collected: 04/23/25 11:40**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:24 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:10 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 10:11 |

## Client Sample ID: MW-17003

**Lab Sample ID: 810-146319-3**

**Date Collected: 04/23/25 12:45**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:24 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:10 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 10:11 |

## Client Sample ID: MW-15018

**Lab Sample ID: 810-146319-4**

**Date Collected: 04/23/25 14:00**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:24 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:10 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

## Client Sample ID: MW-15017

**Lab Sample ID: 810-146319-5**

**Date Collected: 04/23/25 15:45**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:24 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:10 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-17002

**Lab Sample ID: 810-146319-6**

**Date Collected: 04/23/25 17:05**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:25 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:10 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15005

**Lab Sample ID: 810-146319-7**

**Date Collected: 04/23/25 09:52**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716338 | OGC | EET SL | 05/07/25 07:48 |
| Total/NA | Analysis | 903.0 | | 1 | 720200 | SWS | EET SL | 06/01/25 13:17 |
| Total/NA | Prep | PrecSep_0 | | | 716340 | OGC | EET SL | 05/07/25 07:52 |
| Total/NA | Analysis | 904.0 | | 1 | 720103 | SWS | EET SL | 05/30/25 13:54 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MWT-15005

**Lab Sample ID: 810-146319-8**

**Date Collected: 04/23/25 09:52**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:25 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:10 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

## Client Sample ID: MW-15006

**Lab Sample ID: 810-146319-9**

**Date Collected: 04/23/25 11:28**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:25 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15008

**Lab Sample ID: 810-146319-10**

**Date Collected: 04/23/25 12:34**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:26 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15007

**Lab Sample ID: 810-146319-11**

**Date Collected: 04/23/25 13:48**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:26 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15009

**Lab Sample ID: 810-146319-12**

**Date Collected: 04/23/25 14:58**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:26 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 12:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

## Client Sample ID: MW-15022

**Lab Sample ID: 810-146319-13**

**Date Collected: 04/23/25 16:02**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:26 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:13 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15021

**Lab Sample ID: 810-146319-14**

**Date Collected: 04/23/25 17:00**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:27 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:13 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-17001R

**Lab Sample ID: 810-146319-15**

**Date Collected: 04/24/25 10:05**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 16:32 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:13 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15016R

**Lab Sample ID: 810-146319-16**

**Date Collected: 04/24/25 11:00**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 16:32 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:14 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

## Client Sample ID: MW-15015R

**Lab Sample ID: 810-146319-17**

**Date Collected: 04/24/25 12:50**
**Date Received: 04/28/25 09:00**

**Matrix: Ground Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 16:32 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:14 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15014R

**Lab Sample ID: 810-146319-18**

**Date Collected: 04/24/25 14:05**
**Date Received: 04/28/25 09:00**

**Matrix: Ground Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 16:32 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:14 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15013

**Lab Sample ID: 810-146319-19**

**Date Collected: 04/24/25 08:50**
**Date Received: 04/28/25 09:00**

**Matrix: Ground Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 16:32 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:14 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15004

**Lab Sample ID: 810-146319-20**

**Date Collected: 04/24/25 10:00**
**Date Received: 04/28/25 09:00**

**Matrix: Ground Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 16:32 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:14 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

## Client Sample ID: MW-15003

**Lab Sample ID: 810-146319-21**

**Date Collected: 04/24/25 11:10**
**Matrix: Ground Water**
**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716176 | OGC | EET SL | 05/06/25 07:36 |
| Total/NA | Analysis | 903.0 | | 1 | 720202 | SWS | EET SL | 06/02/25 16:32 |
| Total/NA | Prep | PrecSep_0 | | | 716177 | OGC | EET SL | 05/06/25 07:40 |
| Total/NA | Analysis | 904.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 12:14 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15002

**Lab Sample ID: 810-146319-22**

**Date Collected: 04/24/25 12:10**
**Matrix: Ground Water**
**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716178 | OGC | EET SL | 05/06/25 07:42 |
| Total/NA | Analysis | 903.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 09:41 |
| Total/NA | Prep | PrecSep_0 | | | 716180 | OGC | EET SL | 05/06/25 07:50 |
| Total/NA | Analysis | 904.0 | | 1 | 720153 | SWS | EET SL | 06/01/25 10:24 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-17006

**Lab Sample ID: 810-146319-23**

**Date Collected: 04/24/25 13:50**
**Matrix: Ground Water**
**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716178 | OGC | EET SL | 05/06/25 07:42 |
| Total/NA | Analysis | 903.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 09:41 |
| Total/NA | Prep | PrecSep_0 | | | 716180 | OGC | EET SL | 05/06/25 07:50 |
| Total/NA | Analysis | 904.0 | | 1 | 720153 | SWS | EET SL | 06/01/25 10:26 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/02/25 16:25 |

## Client Sample ID: MW-15023

**Lab Sample ID: 810-146319-24**

**Date Collected: 04/22/25 09:40**
**Matrix: Ground Water**
**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716178 | OGC | EET SL | 05/06/25 07:42 |
| Total/NA | Analysis | 903.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 09:41 |
| Total/NA | Prep | PrecSep_0 | | | 716180 | OGC | EET SL | 05/06/25 07:50 |
| Total/NA | Analysis | 904.0 | | 1 | 720153 | SWS | EET SL | 06/01/25 10:26 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/03/25 11:57 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

## Client Sample ID: MW-15020

**Lab Sample ID: 810-146319-25**

**Date Collected: 04/22/25 11:20**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716178 | OGC | EET SL | 05/06/25 07:42 |
| Total/NA | Analysis | 903.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 09:41 |
| Total/NA | Prep | PrecSep_0 | | | 716180 | OGC | EET SL | 05/06/25 07:50 |
| Total/NA | Analysis | 904.0 | | 1 | 720153 | SWS | EET SL | 06/01/25 10:26 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/03/25 11:57 |

## Client Sample ID: MW-17005

**Lab Sample ID: 810-146319-26**

**Date Collected: 04/22/25 12:50**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716178 | OGC | EET SL | 05/06/25 07:42 |
| Total/NA | Analysis | 903.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 09:41 |
| Total/NA | Prep | PrecSep_0 | | | 716180 | OGC | EET SL | 05/06/25 07:50 |
| Total/NA | Analysis | 904.0 | | 1 | 720153 | SWS | EET SL | 06/01/25 10:26 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/03/25 11:57 |

## Client Sample ID: MW-15010

**Lab Sample ID: 810-146319-27**

**Date Collected: 04/22/25 11:48**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716178 | OGC | EET SL | 05/06/25 07:42 |
| Total/NA | Analysis | 903.0 | | 1 | 720203 | SCB | EET SL | 06/02/25 09:41 |
| Total/NA | Prep | PrecSep_0 | | | 716180 | OGC | EET SL | 05/06/25 07:50 |
| Total/NA | Analysis | 904.0 | | 1 | 720153 | SWS | EET SL | 06/01/25 10:27 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/03/25 11:57 |

## Client Sample ID: MWT-15010

**Lab Sample ID: 810-146319-28**

**Date Collected: 04/22/25 11:48**

**Matrix: Ground Water**

**Date Received: 04/28/25 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 716178 | OGC | EET SL | 05/06/25 07:42 |
| Total/NA | Analysis | 903.0 | | 1 | 720381 | SWS | EET SL | 06/02/25 09:42 |
| Total/NA | Prep | PrecSep_0 | | | 716180 | OGC | EET SL | 05/06/25 07:50 |
| Total/NA | Analysis | 904.0 | | 1 | 720153 | SWS | EET SL | 06/01/25 10:27 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 720380 | FLC | EET SL | 06/03/25 11:57 |

**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: 25D1772

Job ID: 810-146319-1

## Laboratory: Eurofins St. Louis

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

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Alaska (UST) | State | 20-001 | 05-06-27 |
| ANAB | Dept. of Defense ELAP | L2305 | 04-06-27 |
| ANAB | Dept. of Energy | L2305.01 | 04-06-27 |
| ANAB | ISO/IEC 17025 | L2305 | 04-06-27 |
| Arizona | State | AZ0813 | 12-08-25 |
| California | Los Angeles County Sanitation Districts | 10259 | 06-30-22 * |
| California | State | 2886 | 06-30-25 |
| Connecticut | State | PH-0241 | 03-31-27 |
| Florida | NELAP | E87689 | 06-30-25 |
| HI - RadChem Recognition | State | n/a | 06-30-25 |
| Illinois | NELAP | 200023 | 11-30-25 |
| Iowa | State | 373 | 12-01-26 |
| Kansas | NELAP | E-10236 | 10-31-25 |
| Kentucky (DW) | State | KY90125 | 12-31-25 |
| Kentucky (WW) | State | KY90125 (Permit KY0004049) | 12-31-25 |
| Louisiana (All) | NELAP | 106151 | 06-30-25 |
| Louisiana (DW) | State | LA011 | 12-31-25 |
| Maryland | State | 310 | 09-30-25 |
| Massachusetts | State | M-MO054 | 06-30-25 |
| MI - RadChem Recognition | State | 9005 | 06-30-25 |
| Missouri | State | 780 | 06-30-25 |
| Nevada | State | MO00054 | 07-31-25 |
| New Jersey | NELAP | MO002 | 06-30-25 |
| New Mexico | State | MO00054 | 06-30-25 |
| New York | NELAP | 11616 | 03-31-26 |
| North Carolina (DW) | State | 29700 | 07-31-25 |
| North Dakota | State | R-207 | 06-30-25 |
| Oklahoma | NELAP | 9997 | 08-31-25 |
| Oregon | NELAP | 4157 | 09-01-25 |
| Pennsylvania | NELAP | 68-00540 | 02-28-26 |
| South Carolina | State | 85002 | 06-30-25 |
| Texas | NELAP | T104704193 | 07-31-25 |
| US Fish & Wildlife | US Federal Programs | 058448 | 07-31-25 |
| USDA | US Federal Programs | 525-23-138-94730 | 05-18-26 |
| Utah | NELAP | MO00054 | 07-31-25 |
| Virginia | NELAP | 460230 | 06-14-25 |
| Washington | State | C592 | 08-30-25 |
| West Virginia DEP | State | 381 | 10-31-25 |

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

# Method Summary

Client: Trace Analytical Laboratories
Project/Site: 25D1772

Job ID: 810-146319-1

| 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: 25D1772

Job ID: 810-146319-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 810-146319-1 | MW-17004 | Ground Water | 04/23/25 10:15 | 04/28/25 09:00 |
| 810-146319-2 | MW-15019 | Ground Water | 04/23/25 11:40 | 04/28/25 09:00 |
| 810-146319-3 | MW-17003 | Ground Water | 04/23/25 12:45 | 04/28/25 09:00 |
| 810-146319-4 | MW-15018 | Ground Water | 04/23/25 14:00 | 04/28/25 09:00 |
| 810-146319-5 | MW-15017 | Ground Water | 04/23/25 15:45 | 04/28/25 09:00 |
| 810-146319-6 | MW-17002 | Ground Water | 04/23/25 17:05 | 04/28/25 09:00 |
| 810-146319-7 | MW-15005 | Ground Water | 04/23/25 09:52 | 04/28/25 09:00 |
| 810-146319-8 | MWT-15005 | Ground Water | 04/23/25 09:52 | 04/28/25 09:00 |
| 810-146319-9 | MW-15006 | Ground Water | 04/23/25 11:28 | 04/28/25 09:00 |
| 810-146319-10 | MW-15008 | Ground Water | 04/23/25 12:34 | 04/28/25 09:00 |
| 810-146319-11 | MW-15007 | Ground Water | 04/23/25 13:48 | 04/28/25 09:00 |
| 810-146319-12 | MW-15009 | Ground Water | 04/23/25 14:58 | 04/28/25 09:00 |
| 810-146319-13 | MW-15022 | Ground Water | 04/23/25 16:02 | 04/28/25 09:00 |
| 810-146319-14 | MW-15021 | Ground Water | 04/23/25 17:00 | 04/28/25 09:00 |
| 810-146319-15 | MW-17001R | Ground Water | 04/24/25 10:05 | 04/28/25 09:00 |
| 810-146319-16 | MW-15016R | Ground Water | 04/24/25 11:00 | 04/28/25 09:00 |
| 810-146319-17 | MW-15015R | Ground Water | 04/24/25 12:50 | 04/28/25 09:00 |
| 810-146319-18 | MW-15014R | Ground Water | 04/24/25 14:05 | 04/28/25 09:00 |
| 810-146319-19 | MW-15013 | Ground Water | 04/24/25 08:50 | 04/28/25 09:00 |
| 810-146319-20 | MW-15004 | Ground Water | 04/24/25 10:00 | 04/28/25 09:00 |
| 810-146319-21 | MW-15003 | Ground Water | 04/24/25 11:10 | 04/28/25 09:00 |
| 810-146319-22 | MW-15002 | Ground Water | 04/24/25 12:10 | 04/28/25 09:00 |
| 810-146319-23 | MW-17006 | Ground Water | 04/24/25 13:50 | 04/28/25 09:00 |
| 810-146319-24 | MW-15023 | Ground Water | 04/22/25 09:40 | 04/28/25 09:00 |
| 810-146319-25 | MW-15020 | Ground Water | 04/22/25 11:20 | 04/28/25 09:00 |
| 810-146319-26 | MW-17005 | Ground Water | 04/22/25 12:50 | 04/28/25 09:00 |
| 810-146319-27 | MW-15010 | Ground Water | 04/22/25 11:48 | 04/28/25 09:00 |
| 810-146319-28 | MWT-15010 | Ground Water | 04/22/25 11:48 | 04/28/25 09:00 |

eurofins | Eaton Analytical

810-146319 Chain of Custody

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order # 

Batch # _____

6/3/2025

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# 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 | 25D1772 | 25D1772 |
| 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 | 04/23/25 | 10:15 | x | | MW-17004 | Radium 226/228 | | | | 1 | GW | SW |
| 2 | 04/23/25 | 11:40 | x | | MW-15019 | Radium 226/228 | | | | 1 | GW | SW |
| 3 | 04/23/25 | 12:45 | | x | MW-17003 | Radium 226/228 | | | | 1 | GW | SW |
| 4 | 04/23/25 | 14:00 | | x | MW-15018 | Radium 226/228 | | | | 1 | GW | SW |
| 5 | 04/23/25 | 15:45 | | x | MW-15017 | Radium 226/228 | | | | 1 | GW | SW |
| 6 | 04/23/25 | 17:05 | | x | MW-17002 | Radium 226/228 | | | | 1 | GW | SW |
| 7 | 04/23/25 | 9:52 | x | | MW-15005 | Radium 226/228 | | | | 1 | GW | SW |
| 8 | 04/23/25 | 9:52 | x | | MWT-15005 | Radium 226/228 | | | | 1 | GW | SW |
| 9 | 04/23/25 | 11:28 | x | | MW-15006 | Radium 226/228 | | | | 1 | GW | SW |
| 10 | 04/23/25 | 12:34 | | x | MW-15008 | Radium 226/228 | | | | 1 | GW | SW |
| 11 | 04/23/25 | 13:48 | | x | MW-15007 | Radium 226/228 | | | | 1 | GW | SW |
| 12 | 04/23/25 | 14:58 | | x | MW-15009 | Radium 226/228 | | | | 1 | GW | SW |
| 13 | 04/23/25 | 16:02 | | x | MW-15022 | Radium 226/228 | | | | 1 | GW | SW |
| 14 | 04/23/25 | 17:00 | | x | MW-15021 | Radium 226/228 | | | | 1 | GW | SW |

PH Acceptable SR

| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
|---|---|---|---|---|---|
| [signature] | 4/25/25 | 17:00 AM PM | Fedex | | AM PM |
| RELINQUISHED BY:(Signature) Fedex | DATE | TIME AM PM | RECEIVED BY:(Signature) | DATE | TIME AM PM |
| RELINQUISHED BY:(Signature) | DATE | TIME AM PM | RECEIVED FOR LABORATORY BY: [signature] | DATE 04/28/2025 | TIME 0900 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 |

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.

*** Please call, expedited service not available for all testing**



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

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T: 1.800.332.4345
F: 1.574.233.8207

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Batch # _____

6/3/2025

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# CHAIN OF CUSTODY RECORD

Page _____ of _____

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| 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 | 25D1772 | 25D1772 |
| 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 | 04/24/25 | 10:05 | X | | MW-17001R | Radium 226/228 | | | | 1 | GW | SW |
| 2 | 04/24/25 | 11:00 | X | | MW-15016R | Radium 226/228 | | | | 1 | GW | SW |
| 3 | 04/24/25 | 12:50 | | X | MW-15015R | Radium 226/228 | | | | 1 | GW | SW |
| 4 | 04/24/25 | 14:05 | | X | MW-15014R | Radium 226/228 | | | | 1 | GW | SW |
| 5 | 04/24/25 | 8:50 | X | | MW-15013 | Radium 226/228 | | | | 1 | GW | SW |
| 6 | 04/24/25 | 10:00 | X | | MW-15004 | Radium 226/228 | | | | 1 | GW | SW |
| 7 | 04/24/25 | 11:10 | X | | MW-15003 | Radium 226/228 | | | | 1 | GW | SW |
| 8 | 04/24/25 | 12:10 | | X | MW-15002 | Radium 226/228 | | | | 1 | GW | SW |
| 9 | 04/24/25 | 13:50 | | X | MW-17006 | Radium 226/228 | | | | 1 | GW | SW |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |

pH Acceptable 4-9

| RELINQUISHED BY:(Signature) | DATE | TIME AM/PM | RECEIVED BY:(Signature) | DATE | TIME AM/PM |
|---|---|---|---|---|---|
| [signature] | 4/25/25 | 17:00 | Fedex | | |
| RELINQUISHED BY:(Signature) | DATE | TIME AM/PM | RECEIVED BY:(Signature) | DATE | TIME AM/PM |
| Fedex | | | | | |
| RELINQUISHED BY:(Signature) | DATE | TIME AM/PM | RECEIVED FOR LABORATORY BY: | DATE | TIME AM/PM |
| | | | [signature] | 04/28/2025 | 0900 |

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.

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Batch # _____

6/3/2025

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# 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 | 25D1772 | 25D1772 |
| 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 | 04/22/25 | 9:40 | X | | MW-15023 | RADIUM 226/228 | | | | | | SW |
| 2 | 04/22/25 | 11:20 | X | | MW-15020 | RADIUM 226/228 | | | | | | |
| 3 | 04/22/25 | 12:50 | | X | MW-17005 | RADIUM 226/228 | | | | | | |
| 4 | 04/22/25 | 11:48 | X | | MW-15010 | RADIUM 226/228 | | | | | | |
| 5 | 04/22/25 | 11:48 | X | | MWT-15010 | RADIUM 226/228 | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |

PH Acceptable

| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
|---|---|---|---|---|---|
| CM | 04.23.25 | 10:00 AM PM | Fedex | | AM PM |
| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
| Fedex | | AM PM | | | AM PM |
| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED FOR LABORATORY BY: | DATE | TIME |
| | | AM PM | | 04/28/25 | 0900 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.

**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: N/A | Lab PM: Fullmer, Karen | Carrier Tracking No(s): N/A | COC No: 810-55180.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: N/A | E-Mail: Karen.Fullmer@et.eurofinsus.com | State of Origin: Michigan | Page: Page 1 of 4 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Michigan | | Job #: 810-146319-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 6/2/2025 | | | Preservation Codes: - |
| City: Earth City | TAT Requested (days): N/A | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: N/A | | | |
| Email: N/A | WO #: N/A | | | |
| Project Name: 25D1772 | Project #: 81000263 | | | |
| Site: N/A | SSOW#: N/A | | | Other: N/A |

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | Ra226_228GFPC_P/Combined Radium-226 and Radium-228 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| MW-17004 (810-146319-1) | 4/23/25 | 10:15 Eastern | G | Water | | | X | 1 | |
| MW-15019 (810-146319-2) | 4/23/25 | 11:40 Eastern | G | Water | | | X | 1 | |
| MW-17003 (810-146319-3) | 4/23/25 | 12:45 Eastern | G | Water | | | X | 1 | |
| MW-15018 (810-146319-4) | 4/23/25 | 14:00 Eastern | G | Water | | | X | 1 | |
| MW-15017 (810-146319-5) | 4/23/25 | 15:45 Eastern | G | Water | | | X | 1 | |
| MW-17002 (810-146319-6) | 4/23/25 | 17:05 Eastern | G | Water | | | X | 1 | |
| MW-15005 (810-146319-7) | 4/23/25 | 09:52 Eastern | G | Water | | | X | 1 | |
| MWT-15005 (810-146319-8) | 4/23/25 | 09:52 Eastern | G | Water | | | X | 1 | |
| MW-15006 (810-146319-9) | 4/23/25 | 11:28 Eastern | G | Water | | | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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 |
|---|---|---|---|---|---|
| Heather Mosteller | 04/29/2025 0940 | | | 10:00 APR 30 2025 | |
| Relinquished by: | Date/Time: | Company | Received by: Cheyenne Forrest | 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: 10/10/2024

**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: N/A | Lab PM: Fullmer, Karen | Carrier Tracking No(s): N/A | COC No: 810-55180.2 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: N/A | E-Mail: Karen.Fullmer@et.eurofinsus.com | State of Origin: Michigan | Page: Page 2 of 4 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Michigan | | Job #: 810-146319-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 6/2/2025 | | | Preservation Codes: - |
| City: Earth City | TAT Requested (days): N/A | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: N/A | | | |
| Email: N/A | WO #: N/A | | | |
| Project Name: 25D1772 | Project #: 81000263 | | | |
| Site: N/A | SSOW#: N/A | | | Other: N/A |

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | Ra226_228GFPC_P/ Combined Radium-226 and Radium-228 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| MW-15008 (810-146319-10) | 4/23/25 | 12:34 Eastern | G | Water | | | X | 1 | |
| MW-15007 (810-146319-11) | 4/23/25 | 13:48 Eastern | G | Water | | | X | 1 | |
| MW-15009 (810-146319-12) | 4/23/25 | 14:58 Eastern | G | Water | | | X | 1 | |
| MW-15022 (810-146319-13) | 4/23/25 | 16:02 Eastern | G | Water | | | X | 1 | |
| MW-15021 (810-146319-14) | 4/23/25 | 17:00 Eastern | G | Water | | | X | 1 | |
| MW-17001R (810-146319-15) | 4/24/25 | 10:05 Eastern | G | Water | | | X | 1 | |
| MW-15016R (810-146319-16) | 4/24/25 | 11:00 Eastern | G | Water | | | X | 1 | |
| MW-15015R (810-146319-17) | 4/24/25 | 12:50 Eastern | G | Water | | | X | 1 | |
| MW-15014R (810-146319-18) | 4/24/25 | 14:05 Eastern | G | Water | | | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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: HM 04/29/2025 | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Heather Mayfield | 04/29/2025 0930 | 0940 | | 10:00 APR 30 2025 | |
| Relinquished by: | Date/Time: | Company | Received by: Cheyenne Forrest | 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: 10/10/2024

**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: N/A | Lab PM: Fullmer, Karen | Carrier Tracking No(s): N/A | COC No: 810-55180.3 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: N/A | E-Mail: Karen.Fullmer@et.eurofinsus.com | State of Origin: Michigan | Page: Page 3 of 4 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Michigan | | Job #: 810-146319-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 6/2/2025 | | | Preservation Codes: - |
| City: Earth City | TAT Requested (days): N/A | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: N/A | | | |
| Email: N/A | WO #: N/A | | | |
| Project Name: 25D1772 | Project #: 81000263 | | | |
| Site: N/A | SSOW#: N/A | | | Other: N/A |

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | Ra226_228GFPC_P/ Combined Radium-226 and Radium-228 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| MW-15013 (810-146319-19) | 4/24/25 | 08:50 Eastern | G | Water | | | X | 1 | |
| MW-15004 (810-146319-20) | 4/24/25 | 10:00 Eastern | G | Water | | | X | 1 | |
| MW-15003 (810-146319-21) | 4/24/25 | 11:10 Eastern | G | Water | | | X | 1 | |
| MW-15002 (810-146319-22) | 4/24/25 | 12:10 Eastern | G | Water | | | X | 1 | |
| MW-17006 (810-146319-23) | 4/24/25 | 13:50 Eastern | G | Water | | | X | 1 | |
| MW-15023 (810-146319-24) | 4/22/25 | 09:40 Eastern | G | Water | | | X | 1 | |
| MW-15020 (810-146319-25) | 4/22/25 | 11:20 Eastern | G | Water | | | X | 1 | |
| MW-17005 (810-146319-26) | 4/22/25 | 12:50 Eastern | G | Water | | | X | 1 | |
| MW-15010 (810-146319-27) | 4/22/25 | 11:48 Eastern | G | Water | | | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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: Hm 04/29/2025 | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: Heather Mulgate | Date/Time: 04/29/2025 0930 | Company 0940 | Received by: Cheyenne Forrest | Date/Time: 10:00 APR 30 2025 | Company |
|---|---|---|---|---|---|
| Relinquished by: | Date/Time: | Company | Received by: Cheyenne Forrest | 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: 10/10/2024

**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: N/A | Lab PM: Fullmer, Karen | Carrier Tracking No(s): N/A | COC No: 810-55180.4 |
| Client Contact: Shipping/Receiving | Phone: N/A | E-Mail: Karen.Fullmer@et.eurofinsus.com | State of Origin: Michigan | Page: Page 4 of 4 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Michigan | | Job #: 810-146319-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 6/2/2025 | | | |
| City: Earth City | TAT Requested (days): N/A | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: N/A | | | |
| Email: N/A | WO #: N/A | | | |
| Project Name: 25D1772 | Project #: 81000263 | | | |
| Site: N/A | SSOW#: N/A | | | |

**Analysis Requested**

**Preservation Codes:** -

**Other:** N/A

| 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) | Ra226_228GFPC_P/ Combined Radium-226 and Radium-228 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| MWT-15010 (810-146319-28) | 4/22/25 | 11:48 Eastern | G | Water | | | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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: [signature] | Date/Time: 04/29/2025 0940 | Company | Received by: [signature] | Date/Time: 10:00 APR 30 2025 | Company |
| Relinquished by: | Date/Time: | Company | Received by: Cheyenne Forrest | 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: 10/10/2024

# Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-146319-1

**Login Number: 146319**

**List Source: Eurofins Eaton Analytical South Bend**

**List Number: 1**

**Creator: Moffitt, Heather**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | | |
| Sample custody seals, if present, are intact. | | |
| Samples were received on ice. | | |
| Cooler Temperature is acceptable. | | |
| Cooler Temperature is recorded. | | |
| COC is present. | | |
| COC is filled out in ink and legible. | | |
| COC is filled out with all pertinent information. | | |
| There are no discrepancies between the containers received and the COC. | | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | | |
| Sample containers have legible labels. | | |
| Containers are not broken or leaking. | | |
| Sample collection date/times are provided. | | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | | |
| Samples do not require splitting or compositing. | | |
| Were samples preserved to correct pH upon receipt, if applicable? | | |
| Container provided by EEA | | |

# Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-146319-1

**Login Number: 146319**
**List Number: 2**
**Creator: Forrest, Cheyenne L**

**List Source: Eurofins St. Louis**
**List Creation: 04/30/25 01:02 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 | |

# Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-146319-1

**Login Number: 146319**
**List Number: 3**
**Creator: Carr, Olivia G**

**List Source: Eurofins St. Louis**
**List Creation: 05/05/25 03:24 PM**

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

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

TRACE ANALYTICAL LABORATORIES, INC.

231-773-5998 Phone
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Order # _____ Batch # _____

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# CHAIN OF CUSTODY RECORD

Page ____ of ____

**Shaded area for EEA use only**

REPORT TO: | SAMPLER (Signature) | PWS ID # | STATE (sample origin)

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

BILL TO: | COMPLIANCE MONITORING (Yes / No) | POPULATION SERVED | SOURCE WATER

Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444

PROJECT NAME: 25D1772 | PO#: 25D1772

| LAB Number | COLLECTION DATE | COLLECTION TIME | AM | PM | SAMPLING SITE | TEST NAME | SAMPLE REMARKS | CHLORINATED YES | CHLORINATED NO |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 04/22/25 | 9:40 | X | | MW-15023 | RADIUM 226/228 | | | SW |
| 2 | 04/22/25 | 11:20 | X | | MW-15020 | RADIUM 226/228 | | | |
| 3 | 04/22/25 | 12:50 | | X | MW-17005 | RADIUM 226/228 | | | |
| 4 | 04/22/25 | 11:48 | X | | MW-15010 | RADIUM 226/228 | | | |
| 5 | 04/22/25 | 11:48 | X | | MWT-15010 | RADIUM 226/228 | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |

# OF CONTAINERS

MATRIX CODE

TURNAROUND TIME

RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME

RELINQUISHED BY:(Signature) | DATE: 04.23.25 | TIME: 10:00 AM PM | RECEIVED BY:(Signature): Fedex | DATE | TIME AM PM

Fedex

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%
RV* = Rush Verbal: (5 working days) 50%
RW* = Rush Written: (5 working days) 75%

IV* = Immediate Verbal: (3 working days) 100%
IW* =Immediate Written: (3 working days) 125%
SP* = Weekend, Holiday CALL
STAT* = Less than 48 hours CALL

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.

*** Please call, expedited service not available for all testing**

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.



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Muskegon, MI 49444-2673

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

**25D1772**
**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: +0.1°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: 0.0°C) | SR1 (CF: -0.4°C) | SR2 (CF: -0.1°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|
| Date: 4/23/25 | | | | | | | | | |
| Time: 855 | | | | | | | | | |
| Initials: CM | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | |
| Package Temp °C | -0.3 | -0.3 | | / | | | | | |
| Representative Sample Temp °C | 0.7 | 0.3 | | | | / | | / | |

### 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
- [X] / [ ] COC signed by client

### Notes:

MW-15010
MW-15020
MWT-15010
MW-17005
MW-15023



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Order #

Batch # _____

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# 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 | 25D1772 | 25D1772 |

| BILL TO: | COMPLIANCE MONITORING | Yes | No | POPULATION SERVED | SOURCE WATER |
|---|---|---|---|---|---|
| Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 | | X | | | |

| | LAB Number | COLLECTION DATE | COLLECTION TIME | AM | PM | SAMPLING SITE | TEST NAME | SAMPLE REMARKS | CHLORINATED YES | CHLORINATED NO | # OF CONTAINERS | MATRIX CODE | TURNAROUND TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 04/24/25 | 10:05 | X | | MW-17001R | Radium 226/228 | | | | 1 | GW | SW |
| 2 | | 04/24/25 | 11:00 | X | | MW-15016R | Radium 226/228 | | | | 1 | GW | SW |
| 3 | | 04/24/25 | 12:50 | | X | MW-15015R | Radium 226/228 | | | | 1 | GW | SW |
| 4 | | 04/24/25 | 14:05 | | X | MW-15014R | Radium 226/228 | | | | 1 | GW | SW |
| 5 | | 04/24/25 | 8:50 | X | | MW-15013 | Radium 226/228 | | | | 1 | GW | SW |
| 6 | | 04/24/25 | 10:00 | X | | MW-15004 | Radium 226/228 | | | | 1 | GW | SW |
| 7 | | 04/24/25 | 11:10 | X | | MW-15003 | Radium 226/228 | | | | 1 | GW | SW |
| 8 | | 04/24/25 | 12:10 | | X | MW-15002 | Radium 226/228 | | | | 1 | GW | SW |
| 9 | | 04/24/25 | 13:50 | | X | MW-17006 | Radium 226/228 | | | | 1 | GW | SW |
| 10 | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | |

| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
|---|---|---|---|---|---|
| [signature] | 4/25/25 | 17:00 AM PM | Fedex | | AM PM |
| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
| Fedex | | AM PM | | | AM PM |
| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED FOR LABORATORY BY: | DATE | TIME |
| | | AM PM | | | 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%
**RV*** = Rush Verbal: (5 working days) 50%
**RW*** = Rush Written: (5 working days) 75%
**IV*** = Immediate Verbal: (3 working days) 100%
**IW*** =Immediate Written: (3 working days) 125%
**SP*** = Weekend, Holiday CALL
**STAT*** = Less than 48 hours CALL

* 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.

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F: 1.574.233.8207

Order # 

Batch # _____

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# CHAIN OF CUSTODY RECORD

Page _____ of _____

REPORT TO:

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

SAMPLER (Signature)

PWS ID #

STATE (sample origin): MI

PROJECT NAME: 25D1772

PO#: 25D1772

BILL TO:

Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444

| COMPLIANCE MONITORING | Yes | No |
|---|---|---|
| | X | |

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 | 04/23/25 | 10:15 | x | | MW-17004 | Radium 226/228 | | | | 1 | GW | SW |
| 2 | 04/23/25 | 11:40 | x | | MW-15019 | Radium 226/228 | | | | 1 | GW | SW |
| 3 | 04/23/25 | 12:45 | | x | MW-17003 | Radium 226/228 | | | | 1 | GW | SW |
| 4 | 04/23/25 | 14:00 | | x | MW-15018 | Radium 226/228 | | | | 1 | GW | SW |
| 5 | 04/23/25 | 15:45 | | x | MW-15017 | Radium 226/228 | | | | 1 | GW | SW |
| 6 | 04/23/25 | 17:05 | | x | MW-17002 | Radium 226/228 | | | | 1 | GW | SW |
| 7 | 04/23/25 | 9:52 | x | | MW-15005 | Radium 226/228 | | | | 1 | GW | SW |
| 8 | 04/23/25 | 9:52 | x | | MWT-15005 | Radium 226/228 | | | | 1 | GW | SW |
| 9 | 04/23/25 | 11:28 | x | | MW-15006 | Radium 226/228 | | | | 1 | GW | SW |
| 10 | 04/23/25 | 12:34 | | x | MW-15008 | Radium 226/228 | | | | 1 | GW | SW |
| 11 | 04/23/25 | 13:48 | | x | MW-15007 | Radium 226/228 | | | | 1 | GW | SW |
| 12 | 04/23/25 | 14:58 | | x | MW-15009 | Radium 226/228 | | | | 1 | GW | SW |
| 13 | 04/23/25 | 16:02 | | x | MW-15022 | Radium 226/228 | | | | 1 | GW | SW |
| 14 | 04/23/25 | 17:00 | | x | MW-15021 | Radium 226/228 | | | | 1 | GW | SW |

| RELINQUISHED BY:(Signature) | DATE | TIME AM | TIME PM | RECEIVED BY:(Signature) | DATE | TIME AM | TIME PM |
|---|---|---|---|---|---|---|---|
| [signature] | 4/25/25 | | 17:00 | Fedex | | | |
| RELINQUISHED BY:(Signature) | DATE | TIME AM | TIME PM | RECEIVED BY:(Signature) | DATE | TIME AM | TIME PM |
| Fedex | | | | | | | |
| RELINQUISHED BY:(Signature) | DATE | TIME AM | TIME PM | RECEIVED FOR LABORATORY BY: | DATE | TIME AM | TIME 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.

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

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

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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

eurofins | Eaton Analytical

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order # 

Batch # _____

www.EurofinsUS.com/Eaton

Shaded area for EEA use only

# CHAIN OF CUSTODY RECORD

Page _____ of _____

REPORT TO:

Jon Mink, Tim Brewer (jmink@trace-labs.com, tbrewer@trace-labs.com) Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-773-5998

SAMPLER (Signature)

PWS ID #

STATE (sample origin): MI

PROJECT NAME: 25D1772

PO#: 25D1772

BILL TO:

Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444

| COMPLIANCE MONITORING | Yes | No |
|---|---|---|
| | X | |

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 | 04/23/25 | 10:15 | x | | MW-17004 | Radium 226/228 | | | | 1 | GW | SW |
| 2 | 04/23/25 | 11:40 | x | | MW-15019 | Radium 226/228 | | | | 1 | GW | SW |
| 3 | 04/23/25 | 12:45 | | x | MW-17003 | Radium 226/228 | | | | 1 | GW | SW |
| 4 | 04/23/25 | 14:00 | | x | MW-15018 | Radium 226/228 | | | | 1 | GW | SW |
| 5 | 04/23/25 | 15:45 | | x | MW-15017 | Radium 226/228 | | | | 1 | GW | SW |
| 6 | 04/23/25 | 17:05 | | x | MW-17002 | Radium 226/228 | | | | 1 | GW | SW |
| 7 | 04/23/25 | 9:52 | x | | MW-15005 | Radium 226/228 | | | | 1 | GW | SW |
| 8 | 04/23/25 | 9:52 | x | | MWT-15005 | Radium 226/228 | | | | 1 | GW | SW |
| 9 | 04/23/25 | 11:28 | x | | MW-15006 | Radium 226/228 | | | | 1 | GW | SW |
| 10 | 04/23/25 | 12:34 | | x | MW-15008 | Radium 226/228 | | | | 1 | GW | SW |
| 11 | 04/23/25 | 13:48 | | x | MW-15007 | Radium 226/228 | | | | 1 | GW | SW |
| 12 | 04/23/25 | 14:58 | | x | MW-15009 | Radium 226/228 | | | | 1 | GW | SW |
| 13 | 04/23/25 | 16:02 | | x | MW-15022 | Radium 226/228 | | | | 1 | GW | SW |
| 14 | 04/23/25 | 17:00 | | x | MW-15021 | Radium 226/228 | | | | 1 | GW | SW |

| RELINQUISHED BY:(Signature) | DATE | TIME AM | TIME PM | RECEIVED BY:(Signature) | DATE | TIME AM | TIME PM |
|---|---|---|---|---|---|---|---|
| [signature] | 4/25/25 | | 17:00 | Fedex | | | |
| RELINQUISHED BY:(Signature) | DATE | TIME AM | TIME PM | RECEIVED BY:(Signature) | DATE | TIME AM | TIME PM |
| Fedex | | | | | | | |
| RELINQUISHED BY:(Signature) | DATE | TIME AM | TIME PM | RECEIVED FOR LABORATORY BY: | DATE | TIME AM | TIME 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.

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

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

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2241 Black Creek Road
Muskegon, MI 49444-2673

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

**25D1772**
HDR Michigan Inc.
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: +0.1°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: 0.0°C) | SR1 (CF: -0.4°C) | SR2 (CF: -0.1°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|
| Date: 4/25/25 | | | | | | | | | |
| Time: 9:00 | | | | | | | | | |
| Initials: CN | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | |
| Package Temp °C | -0.4 | -0.4 | | X | | | | | |
| Representative Sample Temp °C | 1.0 | 1.0 | | X | | | | | |

### 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 |
| ☐ | ✓ | ☐ | Samples preserved at Trace _____ |
| ☐ | ☐ | X | Chemical preservation verified, check EMD pH test strip used (if applicable) |
| | | | ☐ pH 0-2.5 (Lot: HC311850) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other |
| ☐ | ☐ | 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:



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# CHAIN-OF-CUSTODY RECORD

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Trace Analytical Laboratories, Inc.
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Muskegon, MI 49444-2673
Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

4/25/25 Page 3 of 3

NE Trace ID No. 25D1772 ~~25D1928~~

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR Michigan Inc |
| Report To: | Andrew Byles / Molly Reeves |
| Mailing Address: | 1000 Oakbrook Dr, Suite 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byles@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10220933 |
| Contact Name: | Lara Zawaideh |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | lara.zawaideh@hdrinc.com |

**Trace Use:**

| | |
|---|---|
| Logged By: | NE |
| Checked By: | MJ |
| Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab | |
| Sampling Time: | |

**Turnaround Requirements:**

- [x] Standard, 5-10 Days
- [ ] 3 Day*
- [ ] 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid; W = Water; SL = Sludge; OI = Oil; WI = Wipes; LW = Liquid Waste; A = Air; D = Drinking Water

Project Name: BC Cobb

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: App III Part 257 | App IV Part 257 | Part 115 Metals | TSS | Remarks | Possible Health Hazards? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 4/24/25 | 1110 | MW-15003 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 27 | 4/24/25 | 1210 | MW-15002 | N | W | 6 | 6 | | 2 | | | | X | X | X | X | -500mL unpres in 4x125mL | |
| 28 | 4/24/25 | 1350 | MW-17006 | N | W | 3 | 3 | | 1 | | | | X | X | X | X | add nitric to pres @ Lab | |
| | | | | | | | | | | | | | | | | | AB | |

| Please Sign | Released By | Received By | Date | Time | Released By | Received By | Date | Time |
|---|---|---|---|---|---|---|---|---|
| | 1) Andrew Byles | Coty M | 4/25/25 | 8:11 | 2) | Coty M | 4/25/25 | 11:05 |
| | 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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231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com

# CHAIN-OF-CUSTODY RECORD



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Muskegon, MI 49444-2673
Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

NE 4/25/25 Trace ID No. 2501772
~~2501927~~

**Report Results To:**

| | |
|---|---|
| Company Name: HDR Michigan Inc | |
| Report To: Andrew Byks/ Molly Reeves | |
| Mailing Address: 1000 Oakbrook Drive, Suite 200 | |
| City, State, Zip Code: Ann Arbor MI 48104 | |
| Office Phone: | Cell Phone: |
| Email Address: andrew.byks@hdrinc.com | |

**Bill To:**

| | |
|---|---|
| PO #: 10220433 | |
| Contact Name: Lara Zawaideh | |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: lara.zawaideh@hdrinc.com | |

**Trace Use:**

| | |
|---|---|
| Logged By: | NE |
| Checked By: | MJ |
| Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab | |
| Sampling Time: | |

**Turnaround Requirements:**

- [x] Standard, 5-10 Days
- [ ] 3 Day*
- [ ] 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid; W = Water; SL = Sludge; OI = Oil; WI = Wipes; LW = Liquid Waste; A = Air; D = Drinking Water

Project Name: BC Cobb

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | App III Part 257 | App IV Part 257 | TSS | Part 115 Metals | Remarks | Possible Health Hazards? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 4/23/25 | 1348 | MW-15007 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 17 | 4/23/25 | 1458 | MW-15009 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 18 | 4/23/25 | 1602 | MW-15022 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 19 | 4/23/25 | 1700 | MW-15021 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 20 | 4/24/25 | 1005 | MW-17001R | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 21 | 4/24/25 | 1100 | MW-15016R | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 22 | 4/24/25 | 1250 | MW-15015R | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 23 | 4/24/25 | 1405 | MW-15014R | N | W | 4 | 4 | | 3 | | | | X | X | X | X | 2-250mL $HNO_3$ Pres | |
| 24 | 4/24/25 | 850 | MW-15013 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 25 | 4/24/25 | 1000 | MW-15004 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |

Please Sign

| Released By | Received By | Date | Time | Released By | Received By | Date | Time |
|---|---|---|---|---|---|---|---|
| 1) Andrew J Byks | Cty Mh | 4/25/25 | 8:10 | 2) | Cty Mh | 4/25/25 | 11:05 |
| 3) | | | | 4) | | | |

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

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www.trace-labs.com

# CHAIN-OF-CUSTODY RECORD



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Muskegon, MI 49444-2673
Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

NE 4/25/25 Trace ID No. 2501772
~~2501927~~

**Report Results To:**

| | |
|---|---|
| Company Name: HDR Michigan Inc | |
| Report To: Andrew Byks/ Molly Reeves | |
| Mailing Address: 1000 Oakbrook Drive, Suite 200 | |
| City, State, Zip Code: Ann Arbor MI 48104 | |
| Office Phone: | Cell Phone: |
| Email Address: andrew.byks@hdrinc.com | |

**Bill To:**

| | |
|---|---|
| PO #: 10220433 | |
| Contact Name: Lara Zawaideh | |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: lara.zawaideh@hdrinc.com | |

**Trace Use:**

| | |
|---|---|
| Logged By: | NE |
| Checked By: | MJ |
| Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab | |
| Sampling Time: | |

**Turnaround Requirements:**

- [x] Standard, 5-10 Days
- [ ] 3 Day*
- [ ] 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid; W = Water; SL = Sludge; OI = Oil; WI = Wipes; LW = Liquid Waste; A = Air; D = Drinking Water

Project Name: BC Cobb

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | App III Part 257 | App IV Part 257 | TSS | Part 115 Metals | Remarks | Possible Health Hazards? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 4/23/25 | 1348 | MW-15007 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 17 | 4/23/25 | 1458 | MW-15009 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 18 | 4/23/25 | 1602 | MW-15022 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 19 | 4/23/25 | 1700 | MW-15021 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 20 | 4/24/25 | 1005 | MW-17001R | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 21 | 4/24/25 | 1100 | MW-15016R | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 22 | 4/24/25 | 1250 | MW-15015R | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 23 | 4/24/25 | 1405 | MW-15014R | N | W | 4 | 4 | | 3 | | | | X | X | X | X | 2-250mL $HNO_3$ Pres | |
| 24 | 4/24/25 | 850 | MW-15013 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 25 | 4/24/25 | 1000 | MW-15004 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |

Please Sign

| Released By | Received By | Date | Time | Released By | Received By | Date | Time |
|---|---|---|---|---|---|---|---|
| 1) Andrew J Byks | Cty Mh | 4/25/25 | 8:10 | 2) | Cty Mh | 4/25/25 | 11:05 |
| 3) | | | | 4) | | | |

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# CHAIN-OF-CUSTODY RECORD

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Muskegon, MI 49444-2673
Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com



NC 4/25/25
Trace ID No. 25D1772
~~25D1726~~

**Report Results To:**

| | |
|---|---|
| Company Name: HDR Michigan, Inc | |
| Report To: Andrew Byrs / Molly Reeves | |
| Mailing Address: 1000 Oakbrook Drive, Suite 200 | |
| City, State, Zip Code: Ann Arbor MI 48104 | |
| Office Phone: | Cell Phone: |
| Email Address: andrew.byrs@hdrinc.com | |

**Bill To:**

| | |
|---|---|
| PO #: 10220433 | |
| Contact Name: Lara Zawaideh | |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: lara.zawaideh@hdrinc.com | |

**Trace Use:**

| | |
|---|---|
| Logged By: | NC |
| Checked By: | MJ |
| Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab | |
| Sampling Time: | |

**Turnaround Requirements:**

- ☒ Standard, 5-10 Days
- ☐ 3 Day*
- ☐ 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid; WI = Wipes; W = Water; LW = Liquid Waste; SL = Sludge; A = Air; OI = Oil; D = Drinking Water

Project Name: BC Cobb
Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y/N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: App III Part 257 | App IV Part 257 | Part 115 Metals | TSS | Remarks | Possible Health Hazards? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 4/23/25 | 1015 | MW-17004 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 7 | 4/23/25 | 1140 | MW-15019 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 8 | 4/23/25 | 1245 | MW-17003 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 9 | 4/23/25 | 1400 | MW-15018 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 10 | 4/23/25 | 1545 | MW-15017 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 11 | 4/23/25 | 1705 | MW-17002 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 12 | 4/23/25 | 952 | MW-15005 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 13 | 4/23/25 | 952 | MWT-15005 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 14 | 4/23/25 | 1128 | MW-15006 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |
| 15 | 4/23/25 | 1234 | MW-15008 | N | W | 3 | 3 | | 2 | | | | X | X | X | X | | |

Please Sign

| | Released By | Received By | Date | Time |
|---|---|---|---|---|
| 1) | Andrew J Byrs | [signature] | 4/25/25 | 8:09 |
| 2) | | [signature] | 4/25/25 | 11:05 |
| 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.1

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**Data Validation Checklist**

Site Name: Cobb  Sampling Personnel: Andrew Byks & Franklin Davis Ray

Data Validation: Andrew Byks

Sample Date(s): 4/22/2025-4/24/2025  Lab Drop-off Date(s): 4/23/2025 and 4/25/2025

Lab Report Number: 25D1770, 25D1772

Lab Report Date: 5/5/2025 (CCR & Part 115); 6/5/2025 (radium)

Reason for Sample Event: CCR Compliance and Michigan Part 115 Compliance

**Field Records:** Circle Yes/No unless Not Applicable – *Complete during sample event*

| Item Description | Verification (Completeness) | Validation (Conformance to Specifications) |
|---|---|---|
| Field equipment calibration records | (Yes) / No | (Yes) / No |
| Chain-of-Custody forms | (Yes) / No | N/A |
| Field decontamination documentation | N/A | N/A |
| Sample collection field forms | (Yes) / No | N/A |
| Drilling logs | (Yes) / No | N/A |
| Well construction logs | (Yes) / No | N/A |
| Well development field forms | (Yes) / No | N/A |

**Analytical Data Package:** Circle Yes/No unless N/A – *Complete when lab report is received*

| Item Description | Verification (Completeness) | Validation (Conformance to Specifications) |
|---|---|---|
| Cover sheet (laboratory identifying information) | (Yes) / No | (Yes) / No |
| Case narrative | (Yes) / No | (Yes) / No |
| Internal laboratory Chain-of-Custody forms | (Yes) / No | (Yes) / No |
| Sample chronology and consistency (that is, dates and times of receipt, preparation, and analysis) | (Yes) / No | (Yes) / No |
| Communication records with laboratory | (Yes) / No | (Yes) / No |
| EDD format consistency | (Yes) / No | N/A |
| Sample identification, results nomenclature, and data qualifier consistency | (Yes) / No | N/A |
| Method detection limit consistency<br>RLs as requested; MDLs<RLs | (Yes) / No | (Yes) / No |
| Instrument calibration records | (Yes) / No | (Yes) / No |
| Laboratory Report | (Yes) / No | (Yes) / No |
| Field QC sample results and calculation of accuracy and precision | (Yes) / No<br>Duplicate Well ID:<br>MW-15003<br>MW-17003 | Yes / (No)<br>Duplicate RPD:<br>Over 20% + NDs<br>Over 20% |

**Corrections Needed:**

Parent sample MW-15005 required qualification as estimated with low bias, or as estimated but not detected (J-, UJ) and field duplicate MWT-15005 required qualification as estimated with high bias (J+) for chromium, lead, nickel, Rad-226, and Rad-228 due to RPDs outside of control limits and analytes being detected in the duplicate sample but not the parent sample. Parent sample MW-15005 required qualification as estimated with high bias (J+) and field duplicate MWT-15005 for TSS due to RPDs outside of control limits.

Parent sample MW-15010 required qualification as estimated with low bias, or as estimated but not detected (J-, UJ) and field duplicate MWT-15010 required qualification as estimated with high bias (J+) for Rad-226 and Rad-228 due to RPDs outside of control limits.

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November 14, 2025

Andrew Byks
HDR Michigan Inc.
1000 Oakbrook Dr., Suite 200
Ann Arbor, MI 48104

RE: Trace Project 25J1958
Client Project Charah-BC Cobb

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

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

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## SAMPLE SUMMARY

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

| Trace ID | Sample ID | Matrix | Collected By | Date Collected | Date Received |
|---|---|---|---|---|---|
| 25J1958-01 | MW-15005 | Ground Water | AB/FDR | 10/27/25 12:05 | 10/29/25 08:00 |
| 25J1958-02 | MW-15006 | Ground Water | AB/FDR | 10/27/25 13:05 | 10/29/25 08:00 |
| 25J1958-03 | MW-15007 | Ground Water | AB/FDR | 10/27/25 14:35 | 10/29/25 08:00 |
| 25J1958-04 | MW-15020 | Ground Water | AB/FDR | 10/27/25 15:45 | 10/29/25 08:00 |
| 25J1958-05 | MWT-15020 | Ground Water | AB/FDR | 10/27/25 15:45 | 10/29/25 08:00 |
| 25J1958-06 | MW-17005 | Ground Water | AB/FDR | 10/28/25 09:15 | 10/29/25 08:00 |
| 25J1958-07 | MW-15004 | Ground Water | AB/FDR | 10/28/25 10:25 | 10/29/25 08:00 |
| 25J1958-08 | MW-15003 | Ground Water | AB/FDR | 10/28/25 11:35 | 10/29/25 08:00 |
| 25J1958-09 | MW-15002 | Ground Water | AB/FDR | 10/28/25 12:50 | 10/29/25 08:00 |
| 25J1958-10 | MW-15008 | Ground Water | AB/FDR | 10/28/25 14:30 | 10/29/25 08:00 |
| 25J1958-11 | MW-15022 | Ground Water | AB/FDR | 10/28/25 16:05 | 10/29/25 08:00 |
| 25J1958-12 | MW-15019 | Ground Water | AB/FDR | 10/28/25 11:45 | 10/29/25 08:00 |
| 25J1958-13 | MW-17004 | Ground Water | AB/FDR | 10/28/25 09:50 | 10/29/25 08:00 |
| 25J1958-14 | MWT-15010 | Ground Water | AB/FDR | 10/27/25 16:05 | 10/29/25 08:00 |
| 25J1958-15 | MW-15010 | Ground Water | AB/FDR | 10/27/25 15:50 | 10/29/25 08:00 |
| 25J1958-16 | MW-15009 | Ground Water | AB/FDR | 10/27/25 14:15 | 10/29/25 08:00 |
| 25J1958-17 | MW-17003 | Ground Water | AB/FDR | 10/28/25 13:10 | 10/29/25 08:00 |
| 25J1958-18 | MW-15018 | Ground Water | AB/FDR | 10/28/25 14:25 | 10/29/25 08:00 |
| 25J1958-19 | MW-15017 | Ground Water | AB/FDR | 10/28/25 15:50 | 10/29/25 08:00 |
| 25J1958-20 | MW-17002 | Ground Water | AB/FDR | 10/28/25 17:00 | 10/29/25 08:00 |
| 25J1958-21 | MW-15013 | Ground Water | AB/FDR | 10/29/25 09:10 | 10/29/25 14:59 |
| 25J1958-22 | MW-15021 | Ground Water | AB/FDR | 10/29/25 10:20 | 10/29/25 14:59 |
| 25J1958-23 | MW-17006 | Ground Water | AB/FDR | 10/29/25 11:25 | 10/29/25 14:59 |
| 25J1958-24 | MW-15015R | Ground Water | AB/FDR | 10/29/25 12:45 | 10/29/25 14:59 |
| 25J1958-25 | MW-15023 | Ground Water | AB/FDR | 10/29/25 12:50 | 10/29/25 14:59 |
| 25J1958-26 | MW-15016R | Ground Water | AB/FDR | 10/29/25 11:20 | 10/29/25 14:59 |
| 25J1958-27 | MW-17001R | Ground Water | AB/FDR | 10/29/25 10:25 | 10/29/25 14:59 |
| 25J1958-28 | MW-15014R | Ground Water | AB/FDR | 10/29/25 13:40 | 10/29/25 14:59 |



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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-01 Date Collected: 10/27/25 12:05 Matrix: Ground Water
Sample ID: MW-15005 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175622* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/05/25 | ejb | 11/06/25 | jrc | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Boron** | **0.11** | **mg/L** | **0.0088** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **89** | **mg/L** | **0.26** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.037** |
| **Lithium** | **0.0023** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | **J, N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Antimony** | **0.00015** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Arsenic** | **0.00068** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.17** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00035** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00028** | **mg/L** | **0.00052** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Lead** | **0.00016** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Molybdenum** | **0.00084** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.22** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | **N** | **0.11** |
| **Chloride** | **7.2** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **5.0** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-01 | Date Collected: 10/27/25 12:05 | Matrix: Ground Water
Sample ID: MW-15005 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **320** | **mg/L** | **48** | **4.761905** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175355* | | | | | | | | | | |
| **Total Suspended Solids** | **5.2** | **mg/L** | **4.2** | **1.041667** | **10/30/25** | **cp** | **10/30/25** | **cp** | | **4.2** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-02 Date Collected: 10/27/25 13:05 Matrix: Ground Water
Sample ID: MW-15006 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175622* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/05/25 | ejb | 11/06/25 | jrc | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Boron** | **0.035** | **mg/L** | **0.0088** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **65** | **mg/L** | **0.26** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.037** |
| Lithium | <0.0019 | mg/L | 0.0025 | 1 | 11/06/25 | ejb | 11/12/25 | cma | N | 0.0019 |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Antimony** | **0.0012** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Arsenic** | **0.011** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.026** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| **Beryllium** | **0.000056** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.000052** |
| **Cadmium** | **0.00014** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.000075** |
| **Chromium** | **0.0011** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00070** | **mg/L** | **0.00052** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Lead** | **0.00023** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Molybdenum** | **0.0079** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| **Selenium** | **0.0015** | **mg/L** | **0.00050** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.25** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | **N** | **0.11** |
| **Chloride** | **7.3** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **4.9** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-02 | Date Collected: 10/27/25 13:05 | Matrix: Ground Water
Sample ID: MW-15006 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **250** | **mg/L** | **50** | **5** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175355* | | | | | | | | | | |
| **Total Suspended Solids** | **10** | **mg/L** | **4.1** | **1.020408** | **10/30/25** | **cp** | **10/30/25** | **cp** | | **4.1** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-03 Date Collected: 10/27/25 14:35 Matrix: Ground Water
Sample ID: MW-15007 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175622* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/05/25 | ejb | 11/06/25 | jrc | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Boron** | **0.14** | **mg/L** | **0.0088** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **82** | **mg/L** | **0.26** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.037** |
| Lithium | <0.0019 | mg/L | 0.0025 | 1 | 11/06/25 | ejb | 11/12/25 | cma | N | 0.0019 |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Antimony** | **0.00010** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Arsenic** | **0.0016** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.066** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00041** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00039** | **mg/L** | **0.00052** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0040** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00050** | **mg/L** | **0.00050** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.33** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | **N** | **0.11** |
| **Chloride** | **140** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **1.5** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-03 | Date Collected: 10/27/25 14:35 | Matrix: Ground Water
Sample ID: MW-15007 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **590** | **mg/L** | **65** | **6.451613** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175355* | | | | | | | | | | |
| **Total Suspended Solids** | **5.3** | **mg/L** | **4.3** | **1.06383** | **10/30/25** | **cp** | **10/30/25** | **cp** | | **4.3** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-04 | Date Collected: 10/27/25 15:45 | Matrix: Ground Water
Sample ID: MW-15020 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175622* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/05/25 | ejb | 11/06/25 | jrc | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Boron** | **0.34** | **mg/L** | **0.0088** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **100** | **mg/L** | **2.6** | **10** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.0066** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00027** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.23** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00035** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00027** | **mg/L** | **0.00052** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00025 |
| **Selenium** | **0.00044** | **mg/L** | **0.00050** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.19** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | **J, N** | **0.11** |
| **Chloride** | **110** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | | **1.2** |
| Sulfate as SO4 | <0.58 | mg/L | 6.0 | 10 | 10/29/25 | ch | 10/30/25 | ch | | 0.58 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-04 | Date Collected: 10/27/25 15:45 | Matrix: Ground Water
Sample ID: MW-15020 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **540** | **mg/L** | **51** | **5.128205** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175355* | | | | | | | | | | |
| **Total Suspended Solids** | **36** | **mg/L** | **4.0** | **1.010101** | **10/30/25** | **cp** | **10/30/25** | **cp** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-05 Date Collected: 10/27/25 15:45 Matrix: Ground Water
Sample ID: MWT-15020 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175622* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/05/25 | ejb | 11/06/25 | jrc | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Boron** | **0.34** | **mg/L** | **0.0088** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **100** | **mg/L** | **2.6** | **10** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.0065** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00029** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.23** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00036** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00027** | **mg/L** | **0.00052** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00025 |
| **Selenium** | **0.00056** | **mg/L** | **0.00050** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.18** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | **J, N** | **0.11** |
| **Chloride** | **110** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/30/25** | **ch** | | **1.2** |
| Sulfate as SO4 | <0.58 | mg/L | 6.0 | 10 | 10/29/25 | ch | 10/30/25 | ch | | 0.58 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-05 Date Collected: 10/27/25 15:45 Matrix: Ground Water
Sample ID: MWT-15020 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **540** | **mg/L** | **50** | **5** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175355* | | | | | | | | | | |
| **Total Suspended Solids** | **30** | **mg/L** | **4.2** | **1.041667** | **10/30/25** | **cp** | **10/30/25** | **cp** | | **4.2** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-06 | Date Collected: 10/28/25 09:15 | Matrix: Ground Water
Sample ID: MW-17005 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175622* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/05/25 | ejb | 11/06/25 | jrc | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Boron** | **1.0** | **mg/L** | **0.0088** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **240** | **mg/L** | **2.6** | **10** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.024** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00014** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.29** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00027** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0031** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00012** | **mg/L** | **0.00050** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| Fluoride | <0.11 | mg/L | 0.20 | 10 | 10/29/25 | ch | 10/31/25 | ch | N | 0.11 |
| **Chloride** | **32** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **540** | **mg/L** | **30** | **50** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **2.9** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-06 | Date Collected: 10/28/25 09:15 | Matrix: Ground Water
Sample ID: MW-17005 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1200** | **mg/L** | **57** | **5.714286** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **26** | **mg/L** | **4.2** | **1.052632** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.2** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-07 | Date Collected: 10/28/25 10:25 | Matrix: Ground Water
Sample ID: MW-15004 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175622* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/05/25 | ejb | 11/06/25 | jrc | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Boron** | **0.20** | **mg/L** | **0.0088** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **66** | **mg/L** | **0.26** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.037** |
| Lithium | <0.0019 | mg/L | 0.0025 | 1 | 11/06/25 | ejb | 11/12/25 | cma | N | 0.0019 |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00099** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.042** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00089** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00018** | **mg/L** | **0.00052** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Lead** | **0.00023** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Molybdenum** | **0.00047** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00025** |
| **Selenium** | **0.00032** | **mg/L** | **0.00050** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.71** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **75** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **1.1** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-07 | Date Collected: 10/28/25 10:25 | Matrix: Ground Water
Sample ID: MW-15004 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **430** | **mg/L** | **49** | **4.878049** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| Total Suspended Solids | <4.1 | mg/L | 4.1 | 1.030928 | 10/31/25 | cp | 10/31/25 | cp | | 4.1 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-08 Date Collected: 10/28/25 11:35 Matrix: Ground Water
Sample ID: MW-15003 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175622* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/05/25 | ejb | 11/06/25 | jrc | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Boron** | **0.45** | **mg/L** | **0.0088** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **100** | **mg/L** | **2.6** | **10** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.0083** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00012** | **mg/L** | **0.00055** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.091** | **mg/L** | **0.0025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| **Beryllium** | **0.000077** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.000052** |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00086** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00018** | **mg/L** | **0.00052** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00025 |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.62** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **290** | **mg/L** | **3.8** | **25** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **3.0** |
| Sulfate as SO4 | <0.58 | mg/L | 6.0 | 10 | 10/29/25 | ch | 10/31/25 | ch | | 0.58 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-08 | Date Collected: 10/28/25 11:35 | Matrix: Ground Water
Sample ID: MW-15003 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **940** | **mg/L** | **51** | **5.128205** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| Total Suspended Solids | <4.1 | mg/L | 4.1 | 1.030928 | 10/31/25 | cp | 10/31/25 | cp | | 4.1 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-09 Date Collected: 10/28/25 12:50 Matrix: Ground Water
Sample ID: MW-15002 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **2.6** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **150** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.022** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00013** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.15** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00067** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00022** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.00025** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00025** |
| **Selenium** | **0.00047** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.43** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **550** | **mg/L** | **7.5** | **50** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **6.0** |
| Sulfate as SO4 | <0.58 | mg/L | 6.0 | 10 | 10/29/25 | ch | 10/31/25 | ch | | 0.58 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-09 | Date Collected: 10/28/25 12:50 | Matrix: Ground Water
Sample ID: MW-15002 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1400** | **mg/L** | **50** | **5** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| Total Suspended Solids | <4.2 | mg/L | 4.2 | 1.041667 | 10/31/25 | cp | 10/31/25 | cp | | 4.2 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-10 Date Collected: 10/28/25 14:30 Matrix: Ground Water
Sample ID: MW-15008 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.28** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **96** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.013** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.0028** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.064** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00021** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0027** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.37** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **12** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **1.8** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-10 | Date Collected: 10/28/25 14:30 | Matrix: Ground Water
Sample ID: MW-15008 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **350** | **mg/L** | **51** | **5.128205** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| Total Suspended Solids | <4.2 | mg/L | 4.2 | 1.052632 | 10/31/25 | cp | 10/31/25 | cp | | 4.2 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-11 Date Collected: 10/28/25 16:05 Matrix: Ground Water
Sample ID: MW-15022 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **1.5** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **200** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.052** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00011** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.22** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00027** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00041** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00025 |
| **Selenium** | **0.00034** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.21** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **100** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **2.0** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-11 Date Collected: 10/28/25 16:05 Matrix: Ground Water
Sample ID: MW-15022 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **820** | **mg/L** | **50** | **5** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| Total Suspended Solids | <4.1 | mg/L | 4.1 | 1.030928 | 10/31/25 | cp | 10/31/25 | cp | | 4.1 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-12 Date Collected: 10/28/25 11:45 Matrix: Ground Water
Sample ID: MW-15019 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.36** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **120** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.0076** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00047** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.37** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00061** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00078** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00025 |
| **Selenium** | **0.00090** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.17** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **J, N** | **0.11** |
| **Chloride** | **86** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **0.63** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-12 | Date Collected: 10/28/25 11:45 | Matrix: Ground Water
Sample ID: MW-15019 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **520** | **mg/L** | **51** | **5.128205** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **68** | **mg/L** | **4.1** | **1.030928** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.1** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-13 Date Collected: 10/28/25 09:50 Matrix: Ground Water
Sample ID: MW-17004 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.98** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **330** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.055** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.0062** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.088** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Cobalt** | **0.00025** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.030** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| Fluoride | <0.11 | mg/L | 0.20 | 10 | 10/29/25 | ch | 10/31/25 | ch | N | 0.11 |
| **Chloride** | **20** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **870** | **mg/L** | **60** | **100** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **5.8** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-13 | Date Collected: 10/28/25 09:50 | Matrix: Ground Water
Sample ID: MW-17004 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1700** | **mg/L** | **53** | **5.263158** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **10** | **mg/L** | **4.1** | **1.020408** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.1** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-14 Date Collected: 10/27/25 16:05 Matrix: Ground Water
Sample ID: MWT-15010 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **1.1** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **180** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.030** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00021** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.14** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00025** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00016** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.00042** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00025** |
| **Selenium** | **0.0013** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.36** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **210** | **mg/L** | **3.8** | **25** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **3.0** |
| **Sulfate as SO4** | **26** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-14 Date Collected: 10/27/25 16:05 Matrix: Ground Water
Sample ID: MWT-15010 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **910** | **mg/L** | **50** | **5** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175355* | | | | | | | | | | |
| Total Suspended Solids | <4.1 | mg/L | 4.1 | 1.030928 | 10/30/25 | cp | 10/30/25 | cp | | 4.1 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-15 Date Collected: 10/27/25 15:50 Matrix: Ground Water
Sample ID: MW-15010 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **1.0** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **180** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.028** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00020** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.12** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00023** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00020** |
| **Cobalt** | **0.00015** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.00042** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00025** |
| **Selenium** | **0.0012** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.37** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **190** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **27** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-15 | Date Collected: 10/27/25 15:50 | Matrix: Ground Water
Sample ID: MW-15010 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **900** | **mg/L** | **51** | **5.128205** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175355* | | | | | | | | | | |
| Total Suspended Solids | <4.3 | mg/L | 4.3 | 1.06383 | 10/30/25 | cp | 10/30/25 | cp | | 4.3 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-16 Date Collected: 10/27/25 14:15 Matrix: Ground Water
Sample ID: MW-15009 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.89** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **210** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.040** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.021** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.13** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.0073** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.22** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **42** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **420** | **mg/L** | **30** | **50** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **2.9** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-16 | Date Collected: 10/27/25 14:15 | Matrix: Ground Water
Sample ID: MW-15009 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **950** | **mg/L** | **51** | **5.128205** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175355* | | | | | | | | | | |
| Total Suspended Solids | <4.2 | mg/L | 4.2 | 1.041667 | 10/30/25 | cp | 10/30/25 | cp | | 4.2 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-17 Date Collected: 10/28/25 13:10 Matrix: Ground Water
Sample ID: MW-17003 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **3.2** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **510** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.31** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.22** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.031** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| **Beryllium** | **0.00027** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.000052** |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00048** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.087** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Lead | <0.00020 | mg/L | 0.0011 | 2 | 11/07/25 | ejb | 11/10/25 | drm | DL02 | 0.00020 |
| **Molybdenum** | **0.23** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00020** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.00015 | mg/L | 0.00075 | 2 | 11/07/25 | ejb | 11/10/25 | drm | DL02 | 0.00015 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.36** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **39** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **1700** | **mg/L** | **60** | **100** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **5.8** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-17 Date Collected: 10/28/25 13:10 Matrix: Ground Water
Sample ID: MW-17003 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **2800** | **mg/L** | **50** | **5** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **41** | **mg/L** | **4.0** | **1** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-18 Date Collected: 10/28/25 14:25 Matrix: Ground Water
Sample ID: MW-15018 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.23** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **76** | **mg/L** | **0.26** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.037** |
| **Lithium** | **0.016** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00035** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.12** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00032** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Lead** | **0.00016** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00025 |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.15** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **J, N** | **0.11** |
| **Chloride** | **48** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| Sulfate as SO4 | <0.58 | mg/L | 6.0 | 10 | 10/29/25 | ch | 10/31/25 | ch | | 0.58 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-18 | Date Collected: 10/28/25 14:25 | Matrix: Ground Water
Sample ID: MW-15018 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **370** | **mg/L** | **49** | **4.878049** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **7.2** | **mg/L** | **4.1** | **1.030928** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.1** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-19 Date Collected: 10/28/25 15:50 Matrix: Ground Water
Sample ID: MW-15017 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.047** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **280** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.0037** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.0019** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **1.1** | **mg/L** | **0.0050** | **2** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00060** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.0010** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00069** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00025 |
| **Selenium** | **0.0046** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| Fluoride | <0.11 | mg/L | 0.20 | 10 | 10/29/25 | ch | 10/31/25 | ch | N | 0.11 |
| **Chloride** | **320** | **mg/L** | **7.5** | **50** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **6.0** |
| **Sulfate as SO4** | **1.1** | **mg/L** | **6.0** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-19 Date Collected: 10/28/25 15:50 Matrix: Ground Water
Sample ID: MW-15017 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1400** | **mg/L** | **110** | **10.52632** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **140** | **mg/L** | **4.0** | **1.010101** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-20 Date Collected: 10/28/25 17:00 Matrix: Ground Water
Sample ID: MW-17002 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **16** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **490** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.22** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.048** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.080** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| **Cadmium** | **0.000087** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.000075** |
| **Chromium** | **0.00025** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00012** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.42** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00021** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175316* | | | | | | | | | | |
| **Fluoride** | **0.38** | **mg/L** | **0.20** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **11** | **mg/L** | **1.5** | **10** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **610** | **mg/L** | **30** | **50** | **10/29/25** | **ch** | **10/31/25** | **ch** | | **2.9** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175380* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-20 | Date Collected: 10/28/25 17:00 | Matrix: Ground Water
Sample ID: MW-17002 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1800** | **mg/L** | **87** | **8.695652** | **10/30/25** | **ans** | **10/30/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **59** | **mg/L** | **4.1** | **1.030928** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.1** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-21 Date Collected: 10/29/25 09:10 Matrix: Ground Water
Sample ID: MW-15013 Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **1.2** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **280** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.041** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00014** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.20** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.00075** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175383* | | | | | | | | | | |
| **Fluoride** | **0.13** | **mg/L** | **0.20** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | **J, N** | **0.11** |
| **Chloride** | **35** | **mg/L** | **1.5** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **650** | **mg/L** | **30** | **50** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **2.9** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175381* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-21 Date Collected: 10/29/25 09:10 Matrix: Ground Water
Sample ID: MW-15013 Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1200** | **mg/L** | **40** | **4** | **10/30/25** | **ans** | **10/31/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| Total Suspended Solids | <4.0 | mg/L | 4.0 | 1 | 10/31/25 | cp | 10/31/25 | cp | | 4.0 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-22 | Date Collected: 10/29/25 10:20 | Matrix: Ground Water
Sample ID: MW-15021 | Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.26** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **130** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.0019** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **J, N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.0012** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.40** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00091** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00098** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00025 |
| **Selenium** | **0.0030** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175383* | | | | | | | | | | |
| **Fluoride** | **0.14** | **mg/L** | **0.20** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | **J, N** | **0.11** |
| **Chloride** | **290** | **mg/L** | **3.8** | **25** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **3.0** |
| **Sulfate as SO4** | **0.64** | **mg/L** | **6.0** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | **J** | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175381* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-22 | Date Collected: 10/29/25 10:20 | Matrix: Ground Water
Sample ID: MW-15021 | Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1000** | **mg/L** | **71** | **7.142857** | **10/30/25** | **ans** | **10/31/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **67** | **mg/L** | **4.1** | **1.030928** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.1** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-23 Date Collected: 10/29/25 11:25 Matrix: Ground Water
Sample ID: MW-17006 Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.68** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **110** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.026** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.0013** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.087** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00058** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.016** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175383* | | | | | | | | | | |
| **Fluoride** | **0.29** | **mg/L** | **0.20** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **48** | **mg/L** | **1.5** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **33** | **mg/L** | **6.0** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175381* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-23 | Date Collected: 10/29/25 11:25 | Matrix: Ground Water
Sample ID: MW-17006 | Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **460** | **mg/L** | **40** | **4** | **10/30/25** | **ans** | **10/31/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| Total Suspended Solids | <4.1 | mg/L | 4.1 | 1.020408 | 10/31/25 | cp | 10/31/25 | cp | | 4.1 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-24 Date Collected: 10/29/25 12:45 Matrix: Ground Water
Sample ID: MW-15015R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **2.2** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **550** | **mg/L** | **5.1** | **20** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.74** |
| **Lithium** | **0.058** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Antimony** | **0.00027** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Arsenic** | **0.060** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.070** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Lead | <0.00020 | mg/L | 0.0011 | 2 | 11/07/25 | ejb | 11/10/25 | drm | DL02 | 0.00020 |
| **Molybdenum** | **0.12** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| **Selenium** | **0.00032** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.00015 | mg/L | 0.00075 | 2 | 11/07/25 | ejb | 11/10/25 | drm | DL02 | 0.00015 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175383* | | | | | | | | | | |
| **Fluoride** | **0.13** | **mg/L** | **0.20** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | **J, N** | **0.11** |
| **Chloride** | **38** | **mg/L** | **1.5** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **1500** | **mg/L** | **60** | **100** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **5.8** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175381* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-24 Date Collected: 10/29/25 12:45 Matrix: Ground Water
Sample ID: MW-15015R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **2600** | **mg/L** | **74** | **7.407407** | **10/30/25** | **ans** | **10/31/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **20** | **mg/L** | **4.2** | **1.052632** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.2** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-25 Date Collected: 10/29/25 12:50 Matrix: Ground Water
Sample ID: MW-15023 Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **3.3** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **250** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.046** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.022** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **0.26** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00026** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| Cobalt | <0.00010 | mg/L | 0.00052 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.027** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00025** |
| Selenium | <0.00010 | mg/L | 0.00050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175383* | | | | | | | | | | |
| **Fluoride** | **0.15** | **mg/L** | **0.20** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | **J, N** | **0.11** |
| **Chloride** | **150** | **mg/L** | **1.5** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **380** | **mg/L** | **30** | **50** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **2.9** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175381* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-25 | Date Collected: 10/29/25 12:50 | Matrix: Ground Water
Sample ID: MW-15023 | Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1300** | **mg/L** | **91** | **9.090909** | **10/30/25** | **ans** | **10/31/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **41** | **mg/L** | **4.2** | **1.041667** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.2** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-26 Date Collected: 10/29/25 11:20 Matrix: Ground Water
Sample ID: MW-15016R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **0.13** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **240** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.0044** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.0022** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| **Barium** | **1.1** | **mg/L** | **0.0050** | **2** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00060** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **Chromium** | **0.00079** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Cobalt** | **0.00096** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00025 |
| **Selenium** | **0.0059** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175383* | | | | | | | | | | |
| Fluoride | <0.11 | mg/L | 0.20 | 10 | 10/30/25 | ch | 10/31/25 | ch | N | 0.11 |
| **Chloride** | **430** | **mg/L** | **7.5** | **50** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **6.0** |
| Sulfate as SO4 | <0.58 | mg/L | 6.0 | 10 | 10/30/25 | ch | 10/31/25 | ch | | 0.58 |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175381* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-26 | Date Collected: 10/29/25 11:20 | Matrix: Ground Water
Sample ID: MW-15016R | Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1500** | **mg/L** | **67** | **6.666667** | **10/30/25** | **ans** | **10/31/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **100** | **mg/L** | **4.0** | **1.010101** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.0** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-27 Date Collected: 10/29/25 10:25 Matrix: Ground Water
Sample ID: MW-17001R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **3.5** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **480** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.14** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00020** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.26** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Cobalt** | **0.00023** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| Molybdenum | <0.00025 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00025 |
| **Selenium** | **0.00017** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175383* | | | | | | | | | | |
| **Fluoride** | **0.20** | **mg/L** | **0.20** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **24** | **mg/L** | **1.5** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **190** | **mg/L** | **6.0** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **0.58** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175381* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-27 Date Collected: 10/29/25 10:25 Matrix: Ground Water
Sample ID: MW-17001R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1600** | **mg/L** | **50** | **5** | **10/30/25** | **ans** | **10/31/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| Total Suspended Solids | <4.2 | mg/L | 4.2 | 1.052632 | 10/31/25 | cp | 10/31/25 | cp | | 4.2 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-28 Date Collected: 10/29/25 13:40 Matrix: Ground Water
Sample ID: MW-15014R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 7470A** | | | | | | | | | | |
| *Batch: T175631* | | | | | | | | | | |
| Mercury | <0.00016 | mg/L | 0.00020 | 1 | 11/06/25 | ejb | 11/13/25 | pn | | 0.00016 |
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Boron** | **1.4** | **mg/L** | **0.0088** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0051** |
| **Calcium** | **280** | **mg/L** | **2.6** | **10** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.37** |
| **Lithium** | **0.041** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **N** | **0.0019** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Antimony | <0.00010 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Arsenic** | **0.00025** | **mg/L** | **0.00055** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| **Barium** | **0.14** | **mg/L** | **0.0025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00030** |
| Beryllium | <0.000052 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000052 |
| Cadmium | <0.000075 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| Chromium | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Cobalt** | **0.00011** | **mg/L** | **0.00052** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00010** |
| Lead | <0.00010 | mg/L | 0.00055 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00010 |
| **Molybdenum** | **0.00073** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00025** |
| **Selenium** | **0.0011** | **mg/L** | **0.00050** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00010** |
| Thallium | <0.000075 | mg/L | 0.00038 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000075 |
| **WET CHEMISTRY** | | | | | | | | | | |
| **Analysis Method: EPA 300.0 Rev. 2.1** | | | | | | | | | | |
| *Batch: T175383* | | | | | | | | | | |
| **Fluoride** | **0.51** | **mg/L** | **0.20** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | **N** | **0.11** |
| **Chloride** | **120** | **mg/L** | **1.5** | **10** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **1.2** |
| **Sulfate as SO4** | **260** | **mg/L** | **15** | **25** | **10/30/25** | **ch** | **10/31/25** | **ch** | | **1.4** |
| **Analysis Method: SM 2540 C-20** | | | | | | | | | | |
| *Batch: T175381* | | | | | | | | | | |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-28 Date Collected: 10/29/25 13:40 Matrix: Ground Water
Sample ID: MW-15014R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **WET CHEMISTRY** | | | | | | | | | | |
| **Total Dissolved Solids** | **1200** | **mg/L** | **49** | **4.878049** | **10/30/25** | **ans** | **10/31/25** | **ans** | | |
| **Analysis Method: SM 2540 D-20** | | | | | | | | | | |
| *Batch: T175413* | | | | | | | | | | |
| **Total Suspended Solids** | **17** | **mg/L** | **4.0** | **1.010101** | **10/31/25** | **cp** | **10/31/25** | **cp** | | **4.0** |

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## QUALITY CONTROL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175622
QC Batch Method: EPA 7470A Prep
Analysis Description: Mercury, Total, EPA 7470/7471
Analysis Method: EPA 7470A

### METHOD BLANK: T175622-BLK1

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

### LABORATORY CONTROL SAMPLE: T175622-BS1

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Mercury | mg/L | 0.00200 | 0.00210 | 105 | 80-120 | |

### MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T175622-MSD1

Original: **25J1958-02**

| 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 | 0.00210 | 0.00204 | 105 | 102 | 76-123 | 3 | 20 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175631
QC Batch Method: EPA 7470A Prep
Analysis Description: Mercury, Total, EPA 7470/7471
Analysis Method: EPA 7470A

### METHOD BLANK: T175631-BLK1

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

### LABORATORY CONTROL SAMPLE: T175631-BS1

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Mercury | mg/L | 0.00200 | 0.00181 | 91 | 80-120 | |

### MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T175631-MSD1

Original: **25J1958-09**

| 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 | 0.00188 | 0.00199 | 94 | 99 | 76-123 | 6 | 20 | |

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Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175614
QC Batch Method: EPA 200.2

Analysis Description: Lithium, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T175614-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Boron | mg/L | <0.0088 | 0.0088 | |
| Calcium | mg/L | <0.26 | 0.26 | |
| Lithium | mg/L | <0.0025 | 0.0025 | |

**LABORATORY CONTROL SAMPLE: T175614-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Boron | mg/L | 1.60 | 1.52 | 95 | 85-115 | |
| Calcium | mg/L | 16.0 | 15.3 | 95 | 85-115 | |
| Lithium | mg/L | 1.60 | 1.52 | 95 | 85-115 | |

**MATRIX SPIKE: T175614-MS1** Original: **25J1958-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Boron | mg/L | 0.113 | 1.60 | 1.69 | 99 | 70-130 | |
| Calcium | mg/L | 89.3 | 16.0 | 101 | 70 | 70-130 | |
| Lithium | mg/L | 0 | 1.60 | 1.52 | 95 | 70-130 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175664
QC Batch Method: EPA 200.2

Analysis Description: Lithium, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T175664-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Boron | mg/L | <0.0088 | 0.0088 | |
| Calcium | mg/L | <0.26 | 0.26 | |
| Lithium | mg/L | <0.0025 | 0.0025 | |

**LABORATORY CONTROL SAMPLE: T175664-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Boron | mg/L | 1.60 | 1.55 | 97 | 85-115 | |

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**LABORATORY CONTROL SAMPLE: T175664-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Calcium | mg/L | 16.0 | 15.7 | 98 | 85-115 | |
| Lithium | mg/L | 1.60 | 1.53 | 96 | 85-115 | |

**MATRIX SPIKE: T175664-MS1** Original: **25J1958-09**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Boron | mg/L | 2.59 | 1.60 | 4.17 | 99 | 70-130 | |
| Calcium | mg/L | 149 | 16.0 | 161 | 74 | 70-130 | |
| Lithium | mg/L | 0.0221 | 1.60 | 1.51 | 93 | 70-130 | |

**MATRIX SPIKE: T175664-MS2** Original: **25J1958-10**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Boron | mg/L | 0.277 | 1.60 | 1.82 | 97 | 70-130 | |
| **Calcium** | **mg/L** | **96.4** | **16.0** | 103 | **43** | **70-130** | **MS09** |
| Lithium | mg/L | 0.0134 | 1.60 | 1.51 | 94 | 70-130 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175614
QC Batch Method: EPA 200.2

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

**METHOD BLANK: T175614-BLK1**

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

**LABORATORY CONTROL SAMPLE: T175614-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|

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**LABORATORY CONTROL SAMPLE: T175614-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.100 | 0.0969 | 97 | 85-115 | |
| Barium | mg/L | 1.60 | 1.70 | 106 | 85-115 | |
| Beryllium | mg/L | 0.200 | 0.201 | 100 | 85-115 | |
| Cadmium | mg/L | 0.0500 | 0.0518 | 104 | 85-115 | |
| Cobalt | mg/L | 1.60 | 1.48 | 92 | 85-115 | |
| Chromium | mg/L | 0.0500 | 0.0485 | 97 | 85-115 | |
| Molybdenum | mg/L | 1.60 | 1.58 | 99 | 85-115 | |
| Lead | mg/L | 0.100 | 0.0990 | 99 | 85-115 | |
| Antimony | mg/L | 0.100 | 0.0962 | 96 | 85-115 | |
| Selenium | mg/L | 0.100 | 0.0956 | 96 | 85-115 | |
| Thallium | mg/L | 0.100 | 0.0998 | 100 | 85-115 | |

**MATRIX SPIKE: T175614-MS1** Original: **25J1958-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.000683 | 0.100 | 0.0996 | 99 | 70-130 | |
| Barium | mg/L | 0.175 | 1.60 | 1.91 | 108 | 70-130 | |
| Beryllium | mg/L | 0 | 0.200 | 0.206 | 103 | 70-130 | |
| Cadmium | mg/L | 0 | 0.0500 | 0.0524 | 105 | 70-130 | |
| Cobalt | mg/L | 0 | 1.60 | 1.50 | 94 | 70-130 | |
| Chromium | mg/L | 0 | 0.0500 | 0.0500 | 100 | 70-130 | |
| Molybdenum | mg/L | 0 | 1.60 | 1.65 | 103 | 70-130 | |
| Lead | mg/L | 0 | 0.100 | 0.100 | 100 | 70-130 | |
| Antimony | mg/L | 0 | 0.100 | 0.116 | 116 | 70-130 | |
| Selenium | mg/L | 0 | 0.100 | 0.0963 | 96 | 70-130 | |
| Thallium | mg/L | 0 | 0.100 | 0.103 | 103 | 70-130 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175664
QC Batch Method: EPA 200.2

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

**METHOD BLANK: T175664-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 | |

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**METHOD BLANK: T175664-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Cadmium | mg/L | <0.00025 | 0.00025 | |
| Cobalt | mg/L | <0.00052 | 0.00052 | |
| Chromium | mg/L | <0.00025 | 0.00025 | |
| Molybdenum | mg/L | <0.0012 | 0.0012 | |
| Lead | mg/L | <0.00055 | 0.00055 | |
| Antimony | mg/L | <0.00025 | 0.00025 | |
| Selenium | mg/L | <0.00050 | 0.00050 | |
| Thallium | mg/L | <0.00038 | 0.00038 | |

**LABORATORY CONTROL SAMPLE: T175664-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.100 | 0.0989 | 99 | 85-115 | |
| Barium | mg/L | 1.60 | 1.75 | 110 | 85-115 | |
| Beryllium | mg/L | 0.200 | 0.199 | 99 | 85-115 | |
| Cadmium | mg/L | 0.0500 | 0.0535 | 107 | 85-115 | |
| Cobalt | mg/L | 1.60 | 1.53 | 96 | 85-115 | |
| Chromium | mg/L | 0.0500 | 0.0482 | 96 | 85-115 | |
| Molybdenum | mg/L | 1.60 | 1.60 | 100 | 85-115 | |
| Lead | mg/L | 0.100 | 0.100 | 100 | 85-115 | |
| Antimony | mg/L | 0.100 | 0.0980 | 98 | 85-115 | |
| Selenium | mg/L | 0.100 | 0.0968 | 97 | 85-115 | |
| Thallium | mg/L | 0.100 | 0.102 | 102 | 85-115 | |

**MATRIX SPIKE: T175664-MS1** Original: **25J1958-09**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0 | 0.100 | 0.100 | 100 | 70-130 | |
| Barium | mg/L | 0.145 | 1.60 | 1.93 | 112 | 70-130 | |
| Beryllium | mg/L | 0 | 0.200 | 0.214 | 107 | 70-130 | |
| Cadmium | mg/L | 0 | 0.0500 | 0.0491 | 98 | 70-130 | |
| Cobalt | mg/L | 0 | 1.60 | 1.60 | 100 | 70-130 | |
| Chromium | mg/L | 0 | 0.0500 | 0.0495 | 99 | 70-130 | |
| Molybdenum | mg/L | 0 | 1.60 | 1.74 | 109 | 70-130 | |
| Lead | mg/L | 0 | 0.100 | 0.103 | 103 | 70-130 | |
| Antimony | mg/L | 0 | 0.100 | 0.115 | 115 | 70-130 | |
| Selenium | mg/L | 0.000468 | 0.100 | 0.0913 | 91 | 70-130 | |
| Thallium | mg/L | 0 | 0.100 | 0.104 | 104 | 70-130 | |



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**MATRIX SPIKE: T175664-MS2** Original: **25J1958-10**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Arsenic | mg/L | 0.00278 | 0.100 | 0.102 | 99 | 70-130 | |
| Barium | mg/L | 0.0638 | 1.60 | 1.82 | 110 | 70-130 | |
| Beryllium | mg/L | 0 | 0.200 | 0.203 | 102 | 70-130 | |
| Cadmium | mg/L | 0 | 0.0500 | 0.0512 | 102 | 70-130 | |
| Cobalt | mg/L | 0 | 1.60 | 1.53 | 96 | 70-130 | |
| Chromium | mg/L | 0 | 0.0500 | 0.0495 | 99 | 70-130 | |
| Molybdenum | mg/L | 0.00265 | 1.60 | 1.65 | 103 | 70-130 | |
| Lead | mg/L | 0 | 0.100 | 0.101 | 101 | 70-130 | |
| Antimony | mg/L | 0 | 0.100 | 0.115 | 115 | 70-130 | |
| Selenium | mg/L | 0 | 0.100 | 0.0949 | 95 | 70-130 | |
| Thallium | mg/L | 0 | 0.100 | 0.101 | 101 | 70-130 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175316
QC Batch Method: IC Prep W
Analysis Description: Sulfate
Analysis Method: EPA 300.0 Rev. 2.1

**METHOD BLANK: T175316-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: T175316-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| **Chloride** | **mg/L** | **5.00** | **<10** | **94** | **90-110** | **J** |
| Fluoride | mg/L | 1.00 | 0.956 | 96 | 90-110 | |
| Sulfate as SO4 | mg/L | 5.00 | 4.88 | 98 | 90-110 | |

**MATRIX SPIKE: T175316-MS1** Original: **25J1958-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 7.20 | 50.0 | 52.7 | 91 | 80-120 | |
| Fluoride | mg/L | 0.221 | 10.0 | 9.44 | 92 | 80-120 | |
| Sulfate as SO4 | mg/L | 5.01 | 50.0 | 52.0 | 94 | 80-120 | |

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**MATRIX SPIKE: T175316-MS2** Original: **25J1958-02**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 7.34 | 50.0 | 52.7 | 91 | 80-120 | |
| Fluoride | mg/L | 0.253 | 10.0 | 9.74 | 95 | 80-120 | |
| Sulfate as SO4 | mg/L | 4.94 | 50.0 | 50.9 | 92 | 80-120 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175383
QC Batch Method: IC Prep W
Analysis Description: Sulfate
Analysis Method: EPA 300.0 Rev. 2.1

**METHOD BLANK: T175383-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: T175383-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| **Chloride** | **mg/L** | **5.00** | **<10** | **93** | **90-110** | **J** |
| Fluoride | mg/L | 1.00 | 0.949 | 95 | 90-110 | |
| Sulfate as SO4 | mg/L | 5.00 | 4.85 | 97 | 90-110 | |

**MATRIX SPIKE: T175383-MS1** Original: **25J1958-23**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 48.0 | 50.0 | 91.2 | 86 | 80-120 | |
| Fluoride | mg/L | 0.288 | 10.0 | 9.17 | 89 | 80-120 | |
| Sulfate as SO4 | mg/L | 32.5 | 50.0 | 77.1 | 89 | 80-120 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175380
QC Batch Method: SM 2540 C-20
Analysis Description: Total Dissolved Solids
Analysis Method: SM 2540 C-20

**METHOD BLANK: T175380-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Total Dissolved Solids | mg/L | <25 | 25 | |

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

**LABORATORY CONTROL SAMPLE: T175380-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 500 | 465 | 93 | 80-120 | |

**SAMPLE DUPLICATE: T175380-DUP1** Original: **25J1958-01**

| Parameter | Units | Original Result | DUP Result | RPD | Max RPD | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 319 | 308 | 4 | 10 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175381
QC Batch Method: SM 2540 C-20
Analysis Description: Total Dissolved Solids
Analysis Method: SM 2540 C-20

**METHOD BLANK: T175381-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| **Total Dissolved Solids** | **mg/L** | **6.00** | **10** | **J** |

**LABORATORY CONTROL SAMPLE: T175381-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 500 | 488 | 98 | 80-120 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175355
QC Batch Method: SM 2540 D-20
Analysis Description: Total Suspended Solids
Analysis Method: SM 2540 D-20

**METHOD BLANK: T175355-BLK1**

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

**LABORATORY CONTROL SAMPLE: T175355-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Total Suspended Solids | mg/L | 100 | 93.5 | 93 | 85-115 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

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888-979-4469 Fax
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QC Batch: T175413
QC Batch Method: SM 2540 D-20

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

**METHOD BLANK: T175413-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Total Suspended Solids | mg/L | <4.1 | 4.1 | |

**LABORATORY CONTROL SAMPLE: T175413-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Total Suspended Solids | mg/L | 100 | 91.3 | 91 | 85-115 | |

**SAMPLE DUPLICATE: T175413-DUP1** Original: **25J1958-06**

| Parameter | Units | Original Result | DUP Result | RPD | Max RPD | Notes |
|---|---|---|---|---|---|---|
| Total Suspended Solids | mg/L | 26.3 | 25.0 | 5 | 10 | |

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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: 25J1958-17

***Analysis: EPA 200.8 Rev. 5.4***

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

Trace ID: 25J1958-24

***Analysis: EPA 200.8 Rev. 5.4***

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

Trace ID: T175664-MS2

***Analysis: EPA 200.7 Rev. 4.4***

| | |
|---|---|
| **Calcium** | Note MS09 : The MS recovery was out of control. Because the background concentration of this analyte is greater than 4X the spike amount, no data require qualification. |

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Page 1 of 2

## CHAIN-OF-CUSTODY RECORD

Trace ID No. 25J1958

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

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

**Report Results To:**

Company Name: HDR
Report To: Andrew Byks/Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: | Cell Phone:
Email Address: andrew.byks@hdrinc.com

**Bill To:**

PO #: 10220433
Contact Name: Lara Zawaideh
Billing Address (if different):
City, State, Zip Code:
Phone Number:
Billing Email Address: lara.zawaideh@hdrinc.com

**Trace Use:**

Logged By: NC
Checked By: MJ
Soil Volatiles Preserved (circle if applicable): MeOH | Low Level | Lab
Sampling Time:

**Turnaround Requirements:**

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
Oil = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: Charah - BC Cobb
Sampled By:

| | Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | App III 40 CFR Part 257 | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Possible Health Hazards? | Remarks | Received By | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 10/27/25 | 1205 | MW-15005 | N | W | 3 | 2 | | | | | | X | X | X | X | | copy last event | | | |
| 2 | | 10/27/25 | 1305 | MW-15006 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |
| 3 | | 10/27/25 | 1435 | MW-15007 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |
| 4 | | 10/27/25 | 1545 | MW-15020 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |
| 5 | | 10/27/25 | 1545 | MWT-15020 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |
| 6 | | 10/28/25 | 915 | MW-17005 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |
| 7 | | 10/28/25 | 1025 | MW-15004 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |
| 8 | | 10/28/25 | 1135 | MW-15003 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |
| 9 | | 10/28/25 | 1250 | MW-15002 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |
| 10 | | 10/28/25 | 1430 | MW-15008 | N | W | 3 | 2 | | | | | | X | X | X | X | | | | | |

**Please Sign**

| Released By | Received By | Date | Time |
|---|---|---|---|
| 1) | | | |
| 3) | 2) | 10/29/25 | 800 |
| | 4) | | |

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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. 25J1958

**Report Results To:**

Company Name: HDR
Report To: Andrew Byks / Molly Reyes
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: Cell Phone:
Email Address: andrew.byks@hdrinc.com

**Bill To:**

PO #: 10220433
Contact Name: Lara Zawaideh
Billing Address (if different):
City, State, Zip Code:
Phone Number:
Billing Email Address: lara.zawaideh@hdrinc.com

**Trace Use:**

Logged By: NC
Checked By: MT
Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab
Sampling Time:

**Turnaround Requirements:**

☐ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: Chavan - BC Cobb
Sampled By: BB / FDE

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: 40 CFR Part 257 App III | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Possible Health Hazards? | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 10/28/25 | 1605 | MW-15022 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 12 | 10/28/25 | 1195 | MW-15019 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 13 | 10/28/25 | 950 | MW-17004 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 14 | 10/27/25 | 1605 | MWT-15010 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 15 | 10/27/25 | 1550 | MW-15010 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 16 | 10/27/25 | 1415 | MW-15009 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 17 | 10/28/25 | 1310 | MW-17003 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 18 | 10/28/25 | 1425 | MW-15018 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 19 | 10/28/25 | 1550 | MW-15017 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 20 | 10/28/25 | 1700 | MW-17002 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |

Please Sign

| | Released By | Received By | Date | Time | Released By | Received By | Date | Time |
|---|---|---|---|---|---|---|---|---|
| 1) | | | 10/29/25 | 805 | 2) | | | |
| 3) | | | | | 4) | | | |

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# CHAIN-OF-CUSTODY RECORD

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Muskegon, MI 49444-2673

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

Page 1 of 1

Trace ID No. 25J1958

**Report Results To:**

Company Name: HDR
Report To: Andrew Byks/Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: Cell Phone:
Email Address: andrew.byks@hdrinc.com

**Bill To:**

PO #: 10220433
Contact Name: Lara Zawaideh
Billing Address (if different):
City, State, Zip Code:
Phone Number:
Billing Email Address: lara.zawaideh@hdrinc.com

**Trace Use:**

Logged By: NC
Checked By: MW
Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab
Sampling Time:

**Turnaround Requirements:**

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: BC Lobb
Sampled By: AB / FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: 40 CFR Part 257 App III | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Possible Health Hazards? | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 10/29/25 | 910 | MW-15013 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 22 | 10/29/25 | 1020 | MW-15021 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 23 | 10/29/25 | 1125 | MW-17006 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 24 | 10/27/25 | 1245 | MW-15015R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 25 | 10/27/25 | 1250 | MW-15023 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 26 | 10/27/25 | 1120 | MW-15016R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 27 | 10/29/25 | 1025 | MW-17001R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 28 | 10/29/25 | 1340 | MW-15014R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |

| | Released By | Received By | Date | Time |
|---|---|---|---|---|
| 1) | Please Sign | | | |
| 2) | | | 10/29/25 | 1647 |
| 3) | | | | |
| 4) | | | | |

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

# 25J1958

HDR Michigan Inc.
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | ✓ | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | ✓ | | | | | | ✓ |

### 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)
- [ ] 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

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

### Notes:

MW-15020
MWT-15020
MW-15005
MW-15007
MW-15006

Form 70-A.59
Effective 3/20/25

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Muskegon, MI 49444-2673

TRACE ANALYTICAL LABORATORIES, INC.

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

**25J1958**
**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | ✓ | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | ✓ | | | | | | ✓ |

### 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)
- [ ] 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

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

**Notes:**

MW-15008
MW-17005
MW-15002
MW-15003
MW-15004

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Effective 3/20/25

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# 25J1958

HDR Michigan Inc.
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | | | | | | | |

### 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)
- [ ] 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

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

### Notes:

MW-17003
MW-15018
MW-15017
MW-17002
MW-15022

Form 70-A.59
Effective 8/20/25

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Muskegon, MI 49444-2673

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

# 25J1958

**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 15:37 | | | | | | | | | | |
| Initials: SAB | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | / | | | | | | |
| Representative Sample Temp °C | 0.0 | 0.0 | | / | | | | | | / |

### 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

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

### Notes:

Form 70-A.59
Effective 3/20/25

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November 14, 2025

Andrew Byks
HDR Michigan Inc.
1000 Oakbrook Dr., Suite 200
Ann Arbor, MI 48104

RE: Trace Project 25J1958
Client Project Charah-BC Cobb

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

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

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## SAMPLE SUMMARY

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

| Trace ID | Sample ID | Matrix | Collected By | Date Collected | Date Received |
|---|---|---|---|---|---|
| 25J1958-01 | MW-15005 | Ground Water | AB/FDR | 10/27/25 12:05 | 10/29/25 08:00 |
| 25J1958-02 | MW-15006 | Ground Water | AB/FDR | 10/27/25 13:05 | 10/29/25 08:00 |
| 25J1958-03 | MW-15007 | Ground Water | AB/FDR | 10/27/25 14:35 | 10/29/25 08:00 |
| 25J1958-04 | MW-15020 | Ground Water | AB/FDR | 10/27/25 15:45 | 10/29/25 08:00 |
| 25J1958-05 | MWT-15020 | Ground Water | AB/FDR | 10/27/25 15:45 | 10/29/25 08:00 |
| 25J1958-06 | MW-17005 | Ground Water | AB/FDR | 10/28/25 09:15 | 10/29/25 08:00 |
| 25J1958-07 | MW-15004 | Ground Water | AB/FDR | 10/28/25 10:25 | 10/29/25 08:00 |
| 25J1958-08 | MW-15003 | Ground Water | AB/FDR | 10/28/25 11:35 | 10/29/25 08:00 |
| 25J1958-09 | MW-15002 | Ground Water | AB/FDR | 10/28/25 12:50 | 10/29/25 08:00 |
| 25J1958-10 | MW-15008 | Ground Water | AB/FDR | 10/28/25 14:30 | 10/29/25 08:00 |
| 25J1958-11 | MW-15022 | Ground Water | AB/FDR | 10/28/25 16:05 | 10/29/25 08:00 |
| 25J1958-12 | MW-15019 | Ground Water | AB/FDR | 10/28/25 11:45 | 10/29/25 08:00 |
| 25J1958-13 | MW-17004 | Ground Water | AB/FDR | 10/28/25 09:50 | 10/29/25 08:00 |
| 25J1958-14 | MWT-15010 | Ground Water | AB/FDR | 10/27/25 16:05 | 10/29/25 08:00 |
| 25J1958-15 | MW-15010 | Ground Water | AB/FDR | 10/27/25 15:50 | 10/29/25 08:00 |
| 25J1958-16 | MW-15009 | Ground Water | AB/FDR | 10/27/25 14:15 | 10/29/25 08:00 |
| 25J1958-17 | MW-17003 | Ground Water | AB/FDR | 10/28/25 13:10 | 10/29/25 08:00 |
| 25J1958-18 | MW-15018 | Ground Water | AB/FDR | 10/28/25 14:25 | 10/29/25 08:00 |
| 25J1958-19 | MW-15017 | Ground Water | AB/FDR | 10/28/25 15:50 | 10/29/25 08:00 |
| 25J1958-20 | MW-17002 | Ground Water | AB/FDR | 10/28/25 17:00 | 10/29/25 08:00 |
| 25J1958-21 | MW-15013 | Ground Water | AB/FDR | 10/29/25 09:10 | 10/29/25 14:59 |
| 25J1958-22 | MW-15021 | Ground Water | AB/FDR | 10/29/25 10:20 | 10/29/25 14:59 |
| 25J1958-23 | MW-17006 | Ground Water | AB/FDR | 10/29/25 11:25 | 10/29/25 14:59 |
| 25J1958-24 | MW-15015R | Ground Water | AB/FDR | 10/29/25 12:45 | 10/29/25 14:59 |
| 25J1958-25 | MW-15023 | Ground Water | AB/FDR | 10/29/25 12:50 | 10/29/25 14:59 |
| 25J1958-26 | MW-15016R | Ground Water | AB/FDR | 10/29/25 11:20 | 10/29/25 14:59 |
| 25J1958-27 | MW-17001R | Ground Water | AB/FDR | 10/29/25 10:25 | 10/29/25 14:59 |
| 25J1958-28 | MW-15014R | Ground Water | AB/FDR | 10/29/25 13:40 | 10/29/25 14:59 |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-01 | Date Collected: 10/27/25 12:05 | Matrix: Ground Water
Sample ID: MW-15005 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Iron** | **4.3** | **mg/L** | **0.050** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Copper** | **0.00051** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Nickel** | **0.00050** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00095** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.023** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-02 | Date Collected: 10/27/25 13:05 | Matrix: Ground Water
Sample ID: MW-15006 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Iron** | **7.3** | **mg/L** | **0.050** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Copper** | **0.0032** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Nickel** | **0.00097** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.0023** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00028** |
| **Zinc** | **0.0055** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-03 | Date Collected: 10/27/25 14:35 | Matrix: Ground Water
Sample ID: MW-15007 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Iron** | **6.4** | **mg/L** | **0.050** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Copper** | **0.00030** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Nickel** | **0.00055** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00083** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.0070** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-04 | Date Collected: 10/27/25 15:45 | Matrix: Ground Water
Sample ID: MW-15020 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Iron** | **17** | **mg/L** | **0.050** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Copper** | **0.00023** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00020** |
| **Nickel** | **0.00026** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00048** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.021** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-05 | Date Collected: 10/27/25 15:45 | Matrix: Ground Water
Sample ID: MWT-15020 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Iron** | **18** | **mg/L** | **0.050** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00021** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00048** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.022** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-06 Date Collected: 10/28/25 09:15 Matrix: Ground Water
Sample ID: MW-17005 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Iron** | **23** | **mg/L** | **0.050** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Copper** | **0.00024** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00020** |
| **Nickel** | **0.0013** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00037** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.028** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-07 | Date Collected: 10/28/25 10:25 | Matrix: Ground Water
Sample ID: MW-15004 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Iron** | **2.2** | **mg/L** | **0.050** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Copper** | **0.00056** | **mg/L** | **0.00025** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Nickel** | **0.00036** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00094** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.0060** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-08 | Date Collected: 10/28/25 11:35 | Matrix: Ground Water
Sample ID: MW-15003 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| **Iron** | **1.6** | **mg/L** | **0.050** | **1** | **11/06/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175614* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00017** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/06/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.0017** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00028** |
| **Zinc** | **0.010** | **mg/L** | **0.0012** | **1** | **11/06/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-09 | Date Collected: 10/28/25 12:50 | Matrix: Ground Water
Sample ID: MW-15002 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **0.34** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00015** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.0015** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00028** |
| **Zinc** | **0.015** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-10 | Date Collected: 10/28/25 14:30 | Matrix: Ground Water
Sample ID: MW-15008 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **1.2** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| Nickel | <0.00015 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00015 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00043** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.0061** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-11 | Date Collected: 10/28/25 16:05 | Matrix: Ground Water
Sample ID: MW-15022 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **0.53** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00079** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.0017** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00028** |
| **Zinc** | **0.020** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-12 | Date Collected: 10/28/25 11:45 | Matrix: Ground Water
Sample ID: MW-15019 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **29** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Copper** | **0.00021** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00020** |
| **Nickel** | **0.00020** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00059** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.032** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-13 | Date Collected: 10/28/25 09:50 | Matrix: Ground Water
Sample ID: MW-17004 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **4.9** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00092** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00048** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.0097** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-14 | Date Collected: 10/27/25 16:05 | Matrix: Ground Water
Sample ID: MWT-15010 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **0.46** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00015** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00038** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.012** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-15 | Date Collected: 10/27/25 15:50 | Matrix: Ground Water
Sample ID: MW-15010 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **0.49** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| Nickel | <0.00015 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00015 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00035** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.011** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-16 | Date Collected: 10/27/25 14:15 | Matrix: Ground Water
Sample ID: MW-15009 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **2.7** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00047** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00037** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.011** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-17 | Date Collected: 10/28/25 13:10 | Matrix: Ground Water
Sample ID: MW-17003 | Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **88** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.18** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00074** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.044** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-18 Date Collected: 10/28/25 14:25 Matrix: Ground Water
Sample ID: MW-15018 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **8.6** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00015** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00074** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.011** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-19 Date Collected: 10/28/25 15:50 Matrix: Ground Water
Sample ID: MW-15017 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **75** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Copper** | **0.00093** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Nickel** | **0.00018** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.0012** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00028** |
| **Zinc** | **0.092** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-20 Date Collected: 10/28/25 17:00 Matrix: Ground Water
Sample ID: MW-17002 Date Received: 10/29/25 08:00

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **23** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Copper** | **0.00063** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| Nickel | <0.00015 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00015 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00060** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.0068** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-21 | Date Collected: 10/29/25 09:10 | Matrix: Ground Water
Sample ID: MW-15013 | Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **0.12** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.0024** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00057** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.016** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-22 Date Collected: 10/29/25 10:20 Matrix: Ground Water
Sample ID: MW-15021 Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **27** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Copper** | **0.00032** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Nickel** | **0.0011** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.0015** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00028** |
| **Zinc** | **0.036** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-23 Date Collected: 10/29/25 11:25 Matrix: Ground Water
Sample ID: MW-17006 Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **0.86** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Copper** | **0.00021** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00020** |
| **Nickel** | **0.00086** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00041** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.0085** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-24 Date Collected: 10/29/25 12:45 Matrix: Ground Water
Sample ID: MW-15015R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **8.4** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00054** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.028** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00028** |
| **Zinc** | **0.0049** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-25 Date Collected: 10/29/25 12:50 Matrix: Ground Water
Sample ID: MW-15023 Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **20** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00032** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00038** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.022** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-26 Date Collected: 10/29/25 11:20 Matrix: Ground Water
Sample ID: MW-15016R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **60** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Copper** | **0.00046** | **mg/L** | **0.00025** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00020** |
| **Nickel** | **0.00016** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.0012** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00028** |
| **Zinc** | **0.093** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-27 Date Collected: 10/29/25 10:25 Matrix: Ground Water
Sample ID: MW-17001R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **0.046** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | **J** | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| Nickel | <0.00015 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00015 |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| Vanadium | <0.00028 | mg/L | 0.0012 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00028 |
| **Zinc** | **0.022** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## ANALYTICAL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

Trace ID: 25J1958-28 Date Collected: 10/29/25 13:40 Matrix: Ground Water
Sample ID: MW-15014R Date Received: 10/29/25 14:59

| PARAMETERS | RESULTS | UNITS | LOQ | DILUTION | PREPARED | BY | ANALYZED | BY | NOTES | LOD |
|---|---|---|---|---|---|---|---|---|---|---|
| **METALS, TOTAL** | | | | | | | | | | |
| **Analysis Method: EPA 200.7 Rev. 4.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| **Iron** | **6.3** | **mg/L** | **0.050** | **1** | **11/07/25** | **ejb** | **11/12/25** | **cma** | | **0.0075** |
| **Analysis Method: EPA 200.8 Rev. 5.4** | | | | | | | | | | |
| *Batch: T175664* | | | | | | | | | | |
| Copper | <0.00020 | mg/L | 0.00025 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.00020 |
| **Nickel** | **0.00033** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00015** |
| Silver | <0.000050 | mg/L | 0.000050 | 1 | 11/07/25 | ejb | 11/10/25 | drm | | 0.000050 |
| **Vanadium** | **0.00041** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | **J** | **0.00028** |
| **Zinc** | **0.013** | **mg/L** | **0.0012** | **1** | **11/07/25** | **ejb** | **11/10/25** | **drm** | | **0.00048** |

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## QUALITY CONTROL RESULTS

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175614
QC Batch Method: EPA 200.2
Analysis Description: Iron, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T175614-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Iron | mg/L | <0.050 | 0.050 | |

**LABORATORY CONTROL SAMPLE: T175614-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Iron | mg/L | 16.0 | 15.4 | 96 | 85-115 | |

**MATRIX SPIKE: T175614-MS1** Original: **25J1958-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Iron | mg/L | 4.34 | 16.0 | 19.5 | 95 | 70-130 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175664
QC Batch Method: EPA 200.2
Analysis Description: Iron, Total
Analysis Method: EPA 200.7 Rev. 4.4

**METHOD BLANK: T175664-BLK1**

| Parameter | Units | Blank Result | Reporting Limit | Notes |
|---|---|---|---|---|
| Iron | mg/L | <0.050 | 0.050 | |

**LABORATORY CONTROL SAMPLE: T175664-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Iron | mg/L | 16.0 | 15.6 | 97 | 85-115 | |

**MATRIX SPIKE: T175664-MS1** Original: **25J1958-09**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Iron | mg/L | 0.342 | 16.0 | 15.5 | 95 | 70-130 | |

**MATRIX SPIKE: T175664-MS2** Original: **25J1958-10**

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

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**MATRIX SPIKE: T175664-MS2** Original: **25J1958-10**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Iron | mg/L | 1.24 | 16.0 | 16.3 | 94 | 70-130 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175614
QC Batch Method: EPA 200.2
Analysis Description: Copper, Total
Analysis Method: EPA 200.8 Rev. 5.4

**METHOD BLANK: T175614-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: T175614-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Silver | mg/L | 0.0500 | 0.0534 | 107 | 85-115 | |
| Copper | mg/L | 1.60 | 1.45 | 91 | 85-115 | |
| Nickel | mg/L | 1.60 | 1.47 | 92 | 85-115 | |
| Vanadium | mg/L | 1.60 | 1.51 | 94 | 85-115 | |
| Zinc | mg/L | 1.60 | 1.51 | 95 | 85-115 | |

**MATRIX SPIKE: T175614-MS1** Original: **25J1958-01**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Silver | mg/L | 0 | 0.0500 | 0.0536 | 107 | 70-130 | |
| Copper | mg/L | 0 | 1.60 | 1.46 | 91 | 70-130 | |
| Nickel | mg/L | 0 | 1.60 | 1.46 | 91 | 70-130 | |
| Vanadium | mg/L | 0 | 1.60 | 1.57 | 98 | 70-130 | |
| Zinc | mg/L | 0.0233 | 1.60 | 1.53 | 94 | 70-130 | |

Trace Project ID: 25J1958
Client Project ID: Charah-BC Cobb

QC Batch: T175664
QC Batch Method: EPA 200.2
Analysis Description: Copper, Total
Analysis Method: EPA 200.8 Rev. 5.4

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**METHOD BLANK: T175664-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: T175664-BS1**

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limit | Notes |
|---|---|---|---|---|---|---|
| Silver | mg/L | 0.0500 | 0.0543 | 109 | 85-115 | |
| Copper | mg/L | 1.60 | 1.49 | 93 | 85-115 | |
| Nickel | mg/L | 1.60 | 1.50 | 94 | 85-115 | |
| Vanadium | mg/L | 1.60 | 1.52 | 95 | 85-115 | |
| Zinc | mg/L | 1.60 | 1.55 | 97 | 85-115 | |

**MATRIX SPIKE: T175664-MS1** Original: **25J1958-09**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Silver | mg/L | 0 | 0.0500 | 0.0509 | 102 | 70-130 | |
| Copper | mg/L | 0 | 1.60 | 1.47 | 92 | 70-130 | |
| Nickel | mg/L | 0 | 1.60 | 1.54 | 96 | 70-130 | |
| Vanadium | mg/L | 0.00151 | 1.60 | 1.61 | 101 | 70-130 | |
| Zinc | mg/L | 0.0146 | 1.60 | 1.47 | 91 | 70-130 | |

**MATRIX SPIKE: T175664-MS2** Original: **25J1958-10**

| Parameter | Units | Original Result | Spike Conc. | MS Result | MS % Rec | % Rec Unit | Notes |
|---|---|---|---|---|---|---|---|
| Silver | mg/L | 0 | 0.0500 | 0.0530 | 106 | 70-130 | |
| Copper | mg/L | 0 | 1.60 | 1.47 | 92 | 70-130 | |
| Nickel | mg/L | 0 | 1.60 | 1.50 | 94 | 70-130 | |
| Vanadium | mg/L | 0 | 1.60 | 1.56 | 97 | 70-130 | |
| Zinc | mg/L | 0.00606 | 1.60 | 1.49 | 93 | 70-130 | |

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## AN EXPLANATION OF TERMS AND SYMBOLS WHICH MAY OCCUR IN THIS REPORT

### DEFINITIONS

| | |
|---|---|
| LCS | Laboratory Control Sample |
| LCSD | Laboratory Control Sample Duplicate |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| RPD | Relative Percent Difference |
| DUP | Matrix Duplicate |
| LOQ | Limit of Quantitation |
| LOD | Limit of Detection |
| TIC | Tentatively Identified Compound |
| <, ND or U | Indicates the compound was analyzed for but not detected |
| * | Indicates a result that exceeds its associated MCL or Surrogate control limits |
| N | Indicates that the compound has not been evaluated by NELAC |
| NA | Indicates that the compound is not available. |

NOTE: Samples for volatiles that have been extracted with a water miscible solvent were corrected for the total volume of the solvent/water mixture.
Solid matrices Method Blanks are at 100% solids as such results are the same wet or dry.



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www.trace-labs.com

TRACE
ANALYTICAL LABORATORIES, INC.

Page 1 of 2

## CHAIN-OF-CUSTODY RECORD

Trace ID No. 25J1958

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

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

**Report Results To:**

Company Name: HDR
Report To: Andrew Byks/Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: | Cell Phone:
Email Address: andrew.byks@hdrinc.com

**Bill To:**

PO #: 10220433
Contact Name: Lara Zawaideh
Billing Address (if different):
City, State, Zip Code:
Phone Number:
Billing Email Address: lara.zawaideh@hdrinc.com

**Trace Use:**

Logged By: NC
Checked By: MJ
Soil Volatiles Preserved (circle if applicable): MeOH | Low Level | Lab
Sampling Time:

**Turnaround Requirements:**

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
Oil = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: Charah - BC Cobb
Sampled By:

| | Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | App III 40 CFR Part 257 | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Possible Health Hazards? | Remarks | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 10/27/25 | 1205 | MW-15005 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | copy last event | |
| 2 | | 10/27/25 | 1305 | MW-15006 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |
| 3 | | 10/27/25 | 1435 | MW-15007 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |
| 4 | | 10/27/25 | 1545 | MW-15020 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |
| 5 | | 10/27/25 | 1545 | MWT-15020 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |
| 6 | | 10/28/25 | 915 | MW-17005 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |
| 7 | | 10/28/25 | 1025 | MW-15004 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |
| 8 | | 10/28/25 | 1135 | MW-15003 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |
| 9 | | 10/28/25 | 1250 | MW-15002 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |
| 10 | | 10/28/25 | 1430 | MW-15008 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | | |

**Analysis Requested**

| Please Sign | Released By | Date | Time | Received By | Released By | Date | Time | Received By |
|---|---|---|---|---|---|---|---|---|
| 1) | | | | | | | | |
| 2) | | 10/29/25 | 800 | | | | | |
| 3) | | | | | | | | |
| 4) | | | | | | | | |

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Trace ID No. 25J1958

**Report Results To:**

Company Name: HDR
Report To: Andrew Byks / Molly Reyes
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: Cell Phone:
Email Address: andrew.byks@hdrinc.com

**Bill To:**

PO #: 10220433
Contact Name: Lara Zawaideh
Billing Address (if different):
City, State, Zip Code:
Phone Number:
Billing Email Address: lara.zawaideh@hdrinc.com

**Trace Use:**

Logged By: NC
Checked By: MT
Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab
Sampling Time:

**Turnaround Requirements:**

☐ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: Chavan - BC Cobb
Sampled By: BB/FDE

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: 40 CFR Part 257 App III | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Possible Health Hazards? | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 10/28/25 | 1605 | MW-15022 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 12 | 10/28/25 | 1195 | MW-15019 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 13 | 10/28/25 | 950 | MW-17004 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 14 | 10/27/25 | 1605 | MWT-15010 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 15 | 10/27/25 | 1550 | MW-15010 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 16 | 10/27/25 | 1415 | MW-15009 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 17 | 10/28/25 | 1310 | MW-17003 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 18 | 10/28/25 | 1425 | MW-15018 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 19 | 10/28/25 | 1550 | MW-15017 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 20 | 10/28/25 | 1700 | MW-17002 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |

| Please Sign | Released By | Received By | Date | Time | Released By | Received By | Date | Time |
|---|---|---|---|---|---|---|---|---|
| 1) | 1) | | | | 2) | | | |
| 3) | | | 10/29/25 | 8:05 | 4) | | | |

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# CHAIN-OF-CUSTODY RECORD

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Page 1 of 1

Trace ID No. 25J1958

**Report Results To:**

Company Name: HDR
Report To: Andrew Byks/Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: Cell Phone:
Email Address: andrew.byks@hdrinc.com

**Bill To:**

PO #: 10220433
Contact Name: Lara Zawaideh
Billing Address (if different):
City, State, Zip Code:
Phone Number:
Billing Email Address: lara.zawaideh@hdrinc.com

**Trace Use:**

Logged By: NC
Checked By: MW
Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab
Sampling Time:

**Turnaround Requirements:**

☒ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*
*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
OI = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: BC Lobb
Sampled By: AB / FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: 40 CFR Part 257 App III | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Possible Health Hazards? | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 10/29/25 | 910 | MW-15013 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 22 | 10/29/25 | 1020 | MW-15021 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 23 | 10/29/25 | 1125 | MW-17006 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 24 | 10/27/25 | 1245 | MW-15015R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 25 | 10/27/25 | 1250 | MW-15023 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 26 | 10/27/25 | 1120 | MW-15016R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 27 | 10/29/25 | 1025 | MW-17001R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 28 | 10/29/25 | 1340 | MW-15014R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |

| | Released By | Received By | Date | Time |
|---|---|---|---|---|
| Please Sign | 1) | | 10/29/25 | 1647 |
| | 2) | | | |
| | 3) | | | |
| | 4) | | | |

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# 25J1958

HDR Michigan Inc.
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | ✓ | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | ✓ | | | | | | ✓ |

### 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)
- [ ] 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

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

### Notes:

MW-15020
MWT-15020
MW-15005
MW-15007
MW-15006

Form 70-A.59
Effective 3/20/25

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

**25J1958**
**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | ✓ | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | ✓ | | | | | | ✓ |

### Sample Receipt

Yes No

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

### Sample Condition

Yes No N/A

- ☑ ☐ ☐ All sample containers arrived unbroken and labeled
- ☑ ☐ ☐ Sufficient sample to run requested analyses
- ☑ ☐ ☐ Correct chemical preservative added to samples
- ☐ ☑ ☐ Samples preserved at Trace
- ☑ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)
  - ☑ pH 0-2.5 (Lot: HC461264) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
- ☐ ☐ ☑ Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

- ☑ ☐ All bottle labels agree with COC
- ☑ ☐ COC filled out properly
- ☐ ☐ COC signed by client

**Notes:**

MW-15008
MW-17005
MW-15002
MW-15003
MW-15004

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Effective 3/20/25

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# 25J1958

HDR Michigan Inc.
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | | | | | | | |

### 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)
- [ ] 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

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

### Notes:

MW-17003
MW-15018
MW-15017
MW-17002
MW-15022

Form 70-A.59
Effective 8/20/25

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# 25J1958

**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 15:37 | | | | | | | | | | |
| Initials: SAB | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | / | | | | | | |
| Representative Sample Temp °C | 0.0 | 0.0 | | / | | | | | | / |

### 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

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

### Notes:

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Effective 3/20/25

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December 05, 2025

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

RE: Trace Project 25J1966
Client Project BC Cobb- MW Radium Analysis- October 2025

Dear Ms. Reeves:

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

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

The results were obtained from Eurofins Eaton East Analytical.

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

Sincerely,

Jon Mink
Senior Project Manager

Enclosures

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## SAMPLE SUMMARY

Trace Project ID: 25J1966
Client Project ID: BC Cobb- MW Radium Analysis- October 2025

| Trace ID | Sample ID | Matrix | Collected By | Date Collected | Date Received |
|---|---|---|---|---|---|
| 25J1966-01 | MW-15005 | Ground Water | Client | 10/27/25 12:05 | 10/29/25 08:00 |
| 25J1966-02 | MW-15006 | Ground Water | Client | 10/27/25 13:05 | 10/29/25 08:00 |
| 25J1966-03 | MW-15007 | Ground Water | Client | 10/27/25 14:35 | 10/29/25 08:00 |
| 25J1966-04 | MW-15020 | Ground Water | Client | 10/27/25 15:45 | 10/29/25 08:00 |
| 25J1966-05 | MWT-15020 | Ground Water | Client | 10/27/25 15:45 | 10/29/25 08:00 |
| 25J1966-06 | MW-17005 | Ground Water | Client | 10/28/25 09:15 | 10/29/25 08:00 |
| 25J1966-07 | MW-15004 | Ground Water | Client | 10/28/25 10:25 | 10/29/25 08:00 |
| 25J1966-08 | MW-15003 | Ground Water | Client | 10/28/25 11:35 | 10/29/25 08:00 |
| 25J1966-09 | MW-15002 | Ground Water | Client | 10/28/25 12:50 | 10/29/25 08:00 |
| 25J1966-10 | MW-15008 | Ground Water | Client | 10/28/25 14:30 | 10/29/25 08:00 |
| 25J1966-11 | MW-15022 | Ground Water | AB/FDR | 10/28/25 16:05 | 10/29/25 08:00 |
| 25J1966-12 | MW-15019 | Ground Water | AB/FDR | 10/28/25 11:45 | 10/29/25 08:00 |
| 25J1966-13 | MW-17004 | Ground Water | AB/FDR | 10/28/25 09:50 | 10/29/25 08:00 |
| 25J1966-14 | MWT-15010 | Ground Water | AB/FDR | 10/27/25 16:05 | 10/29/25 08:00 |
| 25J1966-15 | MW-15010 | Ground Water | AB/FDR | 10/27/25 15:50 | 10/29/25 08:00 |
| 25J1966-16 | MW-15009 | Ground Water | AB/FDR | 10/27/25 14:15 | 10/29/25 08:00 |
| 25J1966-17 | MW-17003 | Ground Water | AB/FDR | 10/28/25 13:10 | 10/29/25 08:00 |
| 25J1966-18 | MW-15018 | Ground Water | AB/FDR | 10/28/25 14:25 | 10/29/25 08:00 |
| 25J1966-19 | MW-15017 | Ground Water | AB/FDR | 10/28/25 15:50 | 10/29/25 08:00 |
| 25J1966-20 | MW-17002 | Ground Water | AB/FDR | 10/28/25 17:00 | 10/29/25 08:00 |
| 25J1966-21 | MW-15013 | Ground Water | AB/FDR | 10/29/25 09:10 | 10/29/25 14:59 |

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| | | | | | |
|---|---|---|---|---|---|
| 25J1966-22 | MW-15021 | Ground Water | AB/FDR | 10/29/25 10:20 | 10/29/25 14:59 |
| 25J1966-23 | MW-17006 | Ground Water | AB/FDR | 10/29/25 11:25 | 10/29/25 14:59 |
| 25J1966-24 | MW-15015R | Ground Water | AB/FDR | 10/29/25 12:45 | 10/29/25 14:59 |
| 25J1966-25 | MW-15023 | Ground Water | AB/FDR | 10/29/25 12:50 | 10/29/25 14:59 |
| 25J1966-26 | MW-15016R | Ground Water | AB/FDR | 10/29/25 11:20 | 10/29/25 14:59 |
| 25J1966-27 | MW-17001R | Ground Water | AB/FDR | 10/29/25 10:25 | 10/29/25 14:59 |
| 25J1966-28 | MW-15014R | Ground Water | AB/FDR | 10/29/25 13:40 | 10/29/25 14:59 |

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eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 12/5/2025 4:18:11 PM

## JOB DESCRIPTION

25J1966

## JOB NUMBER

810-170042-1

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.



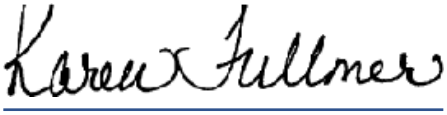
myEOL

## 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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# Definitions/Glossary

Client: Trace Analytical Laboratories
Job ID: 810-170042-1
Project/Site: 25J1966

## Qualifiers

### Rad

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

## Glossary

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

## Job ID: 810-170042-1 — Eurofins Eaton Analytical South Bend

**Job Narrative**
**810-170042-1**

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

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

**Receipt**
The samples were received on 10/31/2025 8:50 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 samples were received with a pH of 7: MW-15002 (810-170042-9) and MW-15019 (810-170042-12). The samples were adjusted to the appropriate pH in the laboratory.

Affected containers:
A-9
A-12

**Gas Flow Proportional Counter**
Method 904.0: Radium-228 batch 744245
The LCS recovered at (128%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (63%-154%) per method requirements. The LCS passes, no further action is required

(LCS 160-744245/2-A)

Method 904.0: Radium-228 batch 744245
The detection goal was not met for the following sample due to the reduced sample volume for prep attributed to the presence of matrix interferences: MW-15008 (810-170042-10). Analytical results are reported with the detection limit achieved.

Method 904.0: Radium-228 batch 744243
The detection goal was not met for the following sample due to the reduced sample volume for prep attributed to the presence of matrix interferences: MW-15004 (810-170042-7). Analytical results are reported with the detection limit achieved.

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

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

# Detection Summary

Client: Trace Analytical Laboratories
Job ID: 810-170042-1
Project/Site: 25J1966

**Client Sample ID: MW-15005** **Lab Sample ID: 810-170042-1**

No Detections.

**Client Sample ID: MW-15006** **Lab Sample ID: 810-170042-2**

No Detections.

**Client Sample ID: MW-15007** **Lab Sample ID: 810-170042-3**

No Detections.

**Client Sample ID: MW-15020** **Lab Sample ID: 810-170042-4**

No Detections.

**Client Sample ID: MWT-15020** **Lab Sample ID: 810-170042-5**

No Detections.

**Client Sample ID: MW-17005** **Lab Sample ID: 810-170042-6**

No Detections.

**Client Sample ID: MW-15004** **Lab Sample ID: 810-170042-7**

No Detections.

**Client Sample ID: MW-15003** **Lab Sample ID: 810-170042-8**

No Detections.

**Client Sample ID: MW-15002** **Lab Sample ID: 810-170042-9**

No Detections.

**Client Sample ID: MW-15008** **Lab Sample ID: 810-170042-10**

No Detections.

**Client Sample ID: MW-15022** **Lab Sample ID: 810-170042-11**

No Detections.

**Client Sample ID: MW-15019** **Lab Sample ID: 810-170042-12**

No Detections.

**Client Sample ID: MW-17004** **Lab Sample ID: 810-170042-13**

No Detections.

**Client Sample ID: MWT-15010** **Lab Sample ID: 810-170042-14**

No Detections.

**Client Sample ID: MW-15010** **Lab Sample ID: 810-170042-15**

No Detections.

**Client Sample ID: MW-15009** **Lab Sample ID: 810-170042-16**

No Detections.

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 25J1966

Job ID: 810-170042-1

**Client Sample ID: MW-17003** — **Lab Sample ID: 810-170042-17**

No Detections.

**Client Sample ID: MW-15018** — **Lab Sample ID: 810-170042-18**

No Detections.

**Client Sample ID: MW-15017** — **Lab Sample ID: 810-170042-19**

No Detections.

**Client Sample ID: MW-17002** — **Lab Sample ID: 810-170042-20**

No Detections.

**Client Sample ID: MW-15013** — **Lab Sample ID: 810-170042-21**

No Detections.

**Client Sample ID: MW-15021** — **Lab Sample ID: 810-170042-22**

No Detections.

**Client Sample ID: MW-17006** — **Lab Sample ID: 810-170042-23**

No Detections.

**Client Sample ID: MW-15015R** — **Lab Sample ID: 810-170042-24**

No Detections.

**Client Sample ID: MW-15023** — **Lab Sample ID: 810-170042-25**

No Detections.

**Client Sample ID: MW-15016R** — **Lab Sample ID: 810-170042-26**

No Detections.

**Client Sample ID: MW-17001R** — **Lab Sample ID: 810-170042-27**

No Detections.

**Client Sample ID: MW-15014R** — **Lab Sample ID: 810-170042-28**

No Detections.

This Detection Summary does not include radiochemical test results.

## Client Sample ID: MW-15005

**Date Collected: 10/27/25 12:05**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-1**
**Matrix: 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 | 0.196 | U | 0.177 | 0.177 | 1.00 | 0.272 | pCi/L | 11/07/25 07:43 | 12/03/25 20:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.2* | | *30 - 110* | *11/07/25 07:43* | *12/03/25 20:21* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **1.21** | | 0.498 | 0.511 | 1.00 | 0.666 | pCi/L | 11/07/25 07:54 | 12/02/25 13:10 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.2* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:10* | *1* |
| *Y Carrier* | *84.5* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:10* | *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** | **1.41** | | 0.529 | 0.541 | 5.00 | 0.666 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-15006

**Date Collected: 10/27/25 13:05**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-2**
**Matrix: 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 | 0.186 | U | 0.221 | 0.222 | 1.00 | 0.363 | pCi/L | 11/07/25 07:43 | 12/03/25 20:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.2* | | *30 - 110* | *11/07/25 07:43* | *12/03/25 20:21* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.450 | U | 0.522 | 0.523 | 1.00 | 0.858 | pCi/L | 11/07/25 07:54 | 12/02/25 13:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.2* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *1* |
| *Y Carrier* | *84.9* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *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 | 0.636 | U | 0.567 | 0.568 | 5.00 | 0.858 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-15007

**Lab Sample ID: 810-170042-3**

**Date Collected: 10/27/25 14:35**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.197 | U | 0.259 | 0.259 | 1.00 | 0.432 | pCi/L | 11/07/25 07:43 | 12/03/25 20:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.3* | | *30 - 110* | *11/07/25 07:43* | *12/03/25 20:21* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.600 | U | 0.545 | 0.547 | 1.00 | 0.864 | pCi/L | 11/07/25 07:54 | 12/02/25 13:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.3* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *1* |
| *Y Carrier* | *83.7* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *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 | 0.797 | U | 0.603 | 0.605 | 5.00 | 0.864 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-15020

**Lab Sample ID: 810-170042-4**

**Date Collected: 10/27/25 15:45**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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** | **0.600** | | 0.273 | 0.278 | 1.00 | 0.326 | pCi/L | 11/07/25 07:43 | 12/03/25 20:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.2* | | *30 - 110* | *11/07/25 07:43* | *12/03/25 20:21* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.222 | U | 0.450 | 0.451 | 1.00 | 0.783 | pCi/L | 11/07/25 07:54 | 12/02/25 13:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.2* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *1* |
| *Y Carrier* | *84.9* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *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** | **0.822** | | 0.526 | 0.530 | 5.00 | 0.783 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MWT-15020

**Lab Sample ID: 810-170042-5**

**Date Collected: 10/27/25 15:45**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.341 | U | 0.251 | 0.253 | 1.00 | 0.362 | pCi/L | 11/07/25 07:43 | 12/03/25 20:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.2* | | *30 - 110* | *11/07/25 07:43* | *12/03/25 20:21* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **1.05** | | 0.572 | 0.581 | 1.00 | 0.816 | pCi/L | 11/07/25 07:54 | 12/02/25 13:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.2* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *1* |
| *Y Carrier* | *85.2* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *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** | **1.39** | | 0.625 | 0.634 | 5.00 | 0.816 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-17005

**Lab Sample ID: 810-170042-6**

**Date Collected: 10/28/25 09:15**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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** | **0.870** | | 0.347 | 0.355 | 1.00 | 0.413 | pCi/L | 11/07/25 07:43 | 12/03/25 20:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *90.3* | | *30 - 110* | *11/07/25 07:43* | *12/03/25 20:21* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **0.988** | | 0.606 | 0.612 | 1.00 | 0.907 | pCi/L | 11/07/25 07:54 | 12/02/25 13:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *90.3* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *1* |
| *Y Carrier* | *86.7* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *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** | | 0.698 | 0.708 | 5.00 | 0.907 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-15004

**Date Collected: 10/28/25 10:25**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-7**
**Matrix: 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 | 0.339 | U | 0.242 | 0.243 | 1.00 | 0.350 | pCi/L | 11/07/25 07:43 | 12/03/25 20:17 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.4* | | *30 - 110* | *11/07/25 07:43* | *12/03/25 20:17* | *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 | 0.396 | U G | 0.596 | 0.597 | 1.00 | 1.01 | pCi/L | 11/07/25 07:54 | 12/02/25 13:11 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.4* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *1* |
| *Y Carrier* | *80.7* | | *30 - 110* | *11/07/25 07:54* | *12/02/25 13:11* | *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 | 0.735 | U | 0.643 | 0.645 | 5.00 | 1.01 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-15003

**Date Collected: 10/28/25 11:35**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-8**
**Matrix: 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** | **0.470** | | 0.236 | 0.240 | 1.00 | 0.280 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.0* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.496 | 0.497 | 1.00 | 0.861 | pCi/L | 11/07/25 07:59 | 12/02/25 13:15 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.0* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:15* | *1* |
| *Y Carrier* | *82.6* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:15* | *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 | 0.710 | U | 0.549 | 0.552 | 5.00 | 0.861 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-15002

**Lab Sample ID: 810-170042-9**

**Date Collected: 10/28/25 12:50**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.341 | | 0.237 | 0.239 | 1.00 | 0.336 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.0* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.557 | U | 0.608 | 0.610 | 1.00 | 0.992 | pCi/L | 11/07/25 07:59 | 12/02/25 13:15 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.0* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:15* | *1* |
| *Y Carrier* | *76.6* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:15* | *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 | 0.898 | U | 0.653 | 0.655 | 5.00 | 0.992 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-15008

**Lab Sample ID: 810-170042-10**

**Date Collected: 10/28/25 14:30**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.0800 | U | 0.230 | 0.230 | 1.00 | 0.417 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.9* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.849 | U G | 0.656 | 0.661 | 1.00 | 1.02 | pCi/L | 11/07/25 07:59 | 12/02/25 13:15 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.9* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:15* | *1* |
| *Y Carrier* | *83.0* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:15* | *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 | 0.929 | U | 0.695 | 0.700 | 5.00 | 1.02 | pCi/L | | 12/05/25 08:47 | 1 |

## Client Sample ID: MW-15022

**Date Collected: 10/28/25 16:05**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-11**
**Matrix: 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 | 0.595 | | 0.265 | 0.271 | 1.00 | 0.332 | pCi/L | 11/07/25 07:55 | 12/03/25 22:48 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.1* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:48* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.380 | U | 0.401 | 0.403 | 1.00 | 0.653 | pCi/L | 11/07/25 07:59 | 12/02/25 13:20 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.1* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:20* | *1* |
| *Y Carrier* | *86.0* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:20* | *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 | 0.975 | | 0.481 | 0.486 | 5.00 | 0.653 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15019

**Date Collected: 10/28/25 11:45**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-12**
**Matrix: 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 | 0.629 | | 0.281 | 0.287 | 1.00 | 0.337 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.5* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.759 | | 0.508 | 0.513 | 1.00 | 0.753 | pCi/L | 11/07/25 07:59 | 12/02/25 13:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.5* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *1* |
| *Y Carrier* | *79.3* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *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 | 1.39 | | 0.581 | 0.588 | 5.00 | 0.753 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-17004

**Lab Sample ID: 810-170042-13**

**Date Collected: 10/28/25 09:50**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.224 | | 0.159 | 0.160 | 1.00 | 0.223 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.2* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.569 | U | 0.473 | 0.476 | 1.00 | 0.747 | pCi/L | 11/07/25 07:59 | 12/02/25 13:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.2* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *1* |
| *Y Carrier* | *79.6* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *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 | | 0.499 | 0.502 | 5.00 | 0.747 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MWT-15010

**Lab Sample ID: 810-170042-14**

**Date Collected: 10/27/25 16:05**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.479 | | 0.210 | 0.214 | 1.00 | 0.232 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *76.9* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 1.26 | | 0.500 | 0.513 | 1.00 | 0.642 | pCi/L | 11/07/25 07:59 | 12/02/25 13:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *76.9* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *1* |
| *Y Carrier* | *83.4* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *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 | 1.74 | | 0.542 | 0.556 | 5.00 | 0.642 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15010

**Date Collected: 10/27/25 15:50**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-15**
**Matrix: 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 | 0.342 | | 0.191 | 0.193 | 1.00 | 0.247 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.1* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.112 | U | 0.368 | 0.369 | 1.00 | 0.658 | pCi/L | 11/07/25 07:59 | 12/02/25 13:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.1* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *1* |
| *Y Carrier* | *80.0* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *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 | 0.454 | U | 0.415 | 0.416 | 5.00 | 0.658 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15009

**Date Collected: 10/27/25 14:15**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-16**
**Matrix: 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 | 0.382 | | 0.199 | 0.202 | 1.00 | 0.247 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *77.2* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.349 | U | 0.391 | 0.393 | 1.00 | 0.640 | pCi/L | 11/07/25 07:59 | 12/02/25 13:21 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *77.2* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *1* |
| *Y Carrier* | *80.7* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:21* | *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 | 0.731 | | 0.439 | 0.442 | 5.00 | 0.640 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-17003

**Lab Sample ID: 810-170042-17**

**Date Collected: 10/28/25 13:10**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.412 | | 0.192 | 0.195 | 1.00 | 0.226 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *89.4* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.943 | | 0.426 | 0.434 | 1.00 | 0.577 | pCi/L | 11/07/25 07:59 | 12/02/25 13:22 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *89.4* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *1* |
| *Y Carrier* | *83.0* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium 226 and 228 | 1.35 | | 0.467 | 0.476 | 5.00 | 0.577 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15018

**Lab Sample ID: 810-170042-18**

**Date Collected: 10/28/25 14:25**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.332 | | 0.195 | 0.197 | 1.00 | 0.258 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *78.8* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *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 | 0.773 | | 0.499 | 0.504 | 1.00 | 0.750 | pCi/L | 11/07/25 07:59 | 12/02/25 13:22 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *78.8* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *1* |
| *Y Carrier* | *78.1* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *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 | 1.10 | | 0.536 | 0.541 | 5.00 | 0.750 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15017

**Date Collected: 10/28/25 15:50**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-19**
**Matrix: 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 | 1.38 | | 0.352 | 0.373 | 1.00 | 0.311 | pCi/L | 11/07/25 07:55 | 12/04/25 07:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.4* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 07:47* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.37 | | 0.821 | 0.878 | 1.00 | 0.877 | pCi/L | 11/07/25 07:59 | 12/02/25 13:22 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.4* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *1* |
| *Y Carrier* | *77.4* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *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 | 4.75 | | 0.893 | 0.954 | 5.00 | 0.877 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-17002

**Date Collected: 10/28/25 17:00**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-20**
**Matrix: 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 | 0.290 | | 0.176 | 0.178 | 1.00 | 0.240 | pCi/L | 11/07/25 07:55 | 12/04/25 07:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.7* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 07:47* | *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 | 1.12 | | 0.477 | 0.488 | 1.00 | 0.625 | pCi/L | 11/07/25 07:59 | 12/02/25 13:22 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.7* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *1* |
| *Y Carrier* | *78.1* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *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 | 1.41 | | 0.508 | 0.519 | 5.00 | 0.625 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15013

**Date Collected: 10/29/25 09:10**
**Date Received: 10/31/25 08:50**

## Lab Sample ID: 810-170042-21

**Matrix: 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 | 0.123 | U | 0.129 | 0.130 | 1.00 | 0.205 | pCi/L | 11/07/25 07:55 | 12/04/25 07:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.8* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 07:47* | *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 | 0.451 | U | 0.387 | 0.389 | 1.00 | 0.608 | pCi/L | 11/07/25 07:59 | 12/02/25 13:22 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.8* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *1* |
| *Y Carrier* | *81.1* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:22* | *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 | 0.574 | U | 0.408 | 0.410 | 5.00 | 0.608 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15021

**Date Collected: 10/29/25 10:20**
**Date Received: 10/31/25 08:50**

## Lab Sample ID: 810-170042-22

**Matrix: 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** | **0.983** | | 0.308 | 0.320 | 1.00 | 0.275 | pCi/L | 11/07/25 07:55 | 12/04/25 07:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *79.9* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 07:47* | *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** | **1.53** | | 0.641 | 0.656 | 1.00 | 0.836 | pCi/L | 11/07/25 07:59 | 12/02/25 13:23 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *79.9* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:23* | *1* |
| *Y Carrier* | *81.5* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:23* | *1* |

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium 226 and 228** | **2.51** | | 0.711 | 0.730 | 5.00 | 0.836 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-17006

**Date Collected: 10/29/25 11:25**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-23**
**Matrix: 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** | **0.258** | | 0.159 | 0.161 | 1.00 | 0.212 | pCi/L | 11/07/25 07:55 | 12/04/25 07:47 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.3* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 07:47* | *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** | **0.660** | | 0.382 | 0.387 | 1.00 | 0.546 | pCi/L | 11/07/25 07:59 | 12/02/25 13:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.3* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *1* |
| *Y Carrier* | *85.2* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *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** | **0.918** | | 0.414 | 0.419 | 5.00 | 0.546 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15015R

**Date Collected: 10/29/25 12:45**
**Date Received: 10/31/25 08:50**

**Lab Sample ID: 810-170042-24**
**Matrix: 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 | 0.0933 | U | 0.156 | 0.156 | 1.00 | 0.270 | pCi/L | 11/07/25 07:55 | 12/04/25 15:23 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.9* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 15:23* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.293 | U | 0.322 | 0.323 | 1.00 | 0.524 | pCi/L | 11/07/25 07:59 | 12/02/25 13:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.9* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *1* |
| *Y Carrier* | *81.1* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *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 | 0.386 | U | 0.358 | 0.359 | 5.00 | 0.524 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15023

**Date Collected: 10/29/25 12:50**
**Date Received: 10/31/25 08:50**

## Lab Sample ID: 810-170042-25

**Matrix: 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 | 0.482 | | 0.194 | 0.198 | 1.00 | 0.205 | pCi/L | 11/07/25 07:55 | 12/04/25 07:53 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.6* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 07:53* | *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 | 0.835 | | 0.411 | 0.419 | 1.00 | 0.557 | pCi/L | 11/07/25 07:59 | 12/02/25 13:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.6* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *1* |
| *Y Carrier* | *81.5* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *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 | 1.32 | | 0.454 | 0.463 | 5.00 | 0.557 | pCi/L | | 12/05/25 15:08 | 1 |

## Client Sample ID: MW-15016R

**Date Collected: 10/29/25 11:20**
**Date Received: 10/31/25 08:50**

## Lab Sample ID: 810-170042-26

**Matrix: 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 | 2.32 | | 0.460 | 0.506 | 1.00 | 0.295 | pCi/L | 11/07/25 07:55 | 12/04/25 07:53 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *78.3* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 07:53* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.72 | | 0.817 | 0.885 | 1.00 | 0.743 | pCi/L | 11/07/25 07:59 | 12/02/25 13:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *78.3* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *1* |
| *Y Carrier* | *81.5* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *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 | 6.04 | | 0.938 | 1.02 | 5.00 | 0.743 | pCi/L | | 12/05/25 15:09 | 1 |

## Client Sample ID: MW-17001R

**Lab Sample ID: 810-170042-27**

**Date Collected: 10/29/25 10:25**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.302 | | 0.168 | 0.170 | 1.00 | 0.211 | pCi/L | 11/07/25 07:55 | 12/04/25 07:53 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.5* | | *30 - 110* | *11/07/25 07:55* | *12/04/25 07:53* | *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 | 1.27 | | 0.488 | 0.502 | 1.00 | 0.614 | pCi/L | 11/07/25 07:59 | 12/02/25 13:24 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *82.5* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *1* |
| *Y Carrier* | *80.4* | | *30 - 110* | *11/07/25 07:59* | *12/02/25 13:24* | *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 | 1.58 | | 0.516 | 0.530 | 5.00 | 0.614 | pCi/L | | 12/05/25 15:09 | 1 |

## Client Sample ID: MW-15014R

**Lab Sample ID: 810-170042-28**

**Date Collected: 10/29/25 13:40**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

### 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 | 0.115 | U | 0.139 | 0.140 | 1.00 | 0.229 | pCi/L | 11/11/25 07:52 | 12/04/25 15:44 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.4* | | *30 - 110* | *11/11/25 07:52* | *12/04/25 15:44* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.09 | | 0.441 | 0.453 | 1.00 | 0.562 | pCi/L | 11/11/25 07:58 | 12/02/25 13:39 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *86.4* | | *30 - 110* | *11/11/25 07:58* | *12/02/25 13:39* | *1* |
| *Y Carrier* | *82.2* | | *30 - 110* | *11/11/25 07:58* | *12/02/25 13:39* | *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 | 1.21 | | 0.462 | 0.474 | 5.00 | 0.562 | pCi/L | | 12/05/25 15:09 | 1 |

# Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 25J1966

Job ID: 810-170042-1

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

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| | | Ba |
| Lab Sample ID | Client Sample ID | (30-110) |
| 810-170042-1 | MW-15005 | 87.2 |
| 810-170042-2 | MW-15006 | 87.2 |
| 810-170042-3 | MW-15007 | 81.3 |
| 810-170042-4 | MW-15020 | 87.2 |
| 810-170042-5 | MWT-15020 | 87.2 |
| 810-170042-6 | MW-17005 | 90.3 |
| 810-170042-7 | MW-15004 | 86.4 |
| 810-170042-8 | MW-15003 | 88.0 |
| 810-170042-9 | MW-15002 | 83.0 |
| 810-170042-10 | MW-15008 | 81.9 |
| 810-170042-11 | MW-15022 | 81.1 |
| 810-170042-11 DU | MW-15022 | 78.8 |
| 810-170042-12 | MW-15019 | 85.5 |
| 810-170042-13 | MW-17004 | 85.2 |
| 810-170042-14 | MWT-15010 | 76.9 |
| 810-170042-15 | MW-15010 | 81.1 |
| 810-170042-16 | MW-15009 | 77.2 |
| 810-170042-17 | MW-17003 | 89.4 |
| 810-170042-18 | MW-15018 | 78.8 |
| 810-170042-19 | MW-15017 | 86.4 |
| 810-170042-20 | MW-17002 | 82.7 |
| 810-170042-21 | MW-15013 | 85.8 |
| 810-170042-22 | MW-15021 | 79.9 |
| 810-170042-23 | MW-17006 | 83.3 |
| 810-170042-24 | MW-15015R | 81.9 |
| 810-170042-25 | MW-15023 | 83.6 |
| 810-170042-26 | MW-15016R | 78.3 |
| 810-170042-27 | MW-17001R | 82.5 |
| 810-170042-28 | MW-15014R | 86.4 |
| 810-170042-28 DU | MW-15014R | 83.0 |
| LCS 160-744242/2-A | Lab Control Sample | 81.3 |
| LCS 160-744244/2-A | Lab Control Sample | 87.5 |
| LCS 160-744794/2-A | Lab Control Sample | 84.7 |
| MB 160-744242/1-A | Method Blank | 83.0 |
| MB 160-744244/1-A | Method Blank | 85.2 |
| MB 160-744794/1-A | Method Blank | 84.4 |

**Tracer/Carrier Legend**

Ba = Ba Carrier

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

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | |
|---|---|---|---|
| | | Ba | Y |
| Lab Sample ID | Client Sample ID | (30-110) | (30-110) |
| 810-170042-1 | MW-15005 | 87.2 | 84.5 |
| 810-170042-2 | MW-15006 | 87.2 | 84.9 |
| 810-170042-3 | MW-15007 | 81.3 | 83.7 |
| 810-170042-4 | MW-15020 | 87.2 | 84.9 |

# Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Job ID: 810-170042-1
Project/Site: 25J1966

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

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ba | Y | | | | | | | | |
| Lab Sample ID | Client Sample ID | (30-110) | (30-110) | | | | | | | | |
| 810-170042-5 | MWT-15020 | 87.2 | 85.2 | | | | | | | | |
| 810-170042-6 | MW-17005 | 90.3 | 86.7 | | | | | | | | |
| 810-170042-7 | MW-15004 | 86.4 | 80.7 | | | | | | | | |
| 810-170042-8 | MW-15003 | 88.0 | 82.6 | | | | | | | | |
| 810-170042-9 | MW-15002 | 83.0 | 76.6 | | | | | | | | |
| 810-170042-10 | MW-15008 | 81.9 | 83.0 | | | | | | | | |
| 810-170042-11 | MW-15022 | 81.1 | 86.0 | | | | | | | | |
| 810-170042-11 DU | MW-15022 | 78.8 | 84.1 | | | | | | | | |
| 810-170042-12 | MW-15019 | 85.5 | 79.3 | | | | | | | | |
| 810-170042-13 | MW-17004 | 85.2 | 79.6 | | | | | | | | |
| 810-170042-14 | MWT-15010 | 76.9 | 83.4 | | | | | | | | |
| 810-170042-15 | MW-15010 | 81.1 | 80.0 | | | | | | | | |
| 810-170042-16 | MW-15009 | 77.2 | 80.7 | | | | | | | | |
| 810-170042-17 | MW-17003 | 89.4 | 83.0 | | | | | | | | |
| 810-170042-18 | MW-15018 | 78.8 | 78.1 | | | | | | | | |
| 810-170042-19 | MW-15017 | 86.4 | 77.4 | | | | | | | | |
| 810-170042-20 | MW-17002 | 82.7 | 78.1 | | | | | | | | |
| 810-170042-21 | MW-15013 | 85.8 | 81.1 | | | | | | | | |
| 810-170042-22 | MW-15021 | 79.9 | 81.5 | | | | | | | | |
| 810-170042-23 | MW-17006 | 83.3 | 85.2 | | | | | | | | |
| 810-170042-24 | MW-15015R | 81.9 | 81.1 | | | | | | | | |
| 810-170042-25 | MW-15023 | 83.6 | 81.5 | | | | | | | | |
| 810-170042-26 | MW-15016R | 78.3 | 81.5 | | | | | | | | |
| 810-170042-27 | MW-17001R | 82.5 | 80.4 | | | | | | | | |
| 810-170042-28 | MW-15014R | 86.4 | 82.2 | | | | | | | | |
| 810-170042-28 DU | MW-15014R | 83.0 | 84.5 | | | | | | | | |
| LCS 160-744243/2-A | Lab Control Sample | 81.3 | 85.6 | | | | | | | | |
| LCS 160-744245/2-A | Lab Control Sample | 87.5 | 82.2 | | | | | | | | |
| LCS 160-744795/2-A | Lab Control Sample | 84.7 | 83.7 | | | | | | | | |
| MB 160-744243/1-A | Method Blank | 83.0 | 83.0 | | | | | | | | |
| MB 160-744245/1-A | Method Blank | 85.2 | 81.1 | | | | | | | | |
| MB 160-744795/1-A | Method Blank | 84.4 | 85.6 | | | | | | | | |

**Tracer/Carrier Legend**

Ba = Ba Carrier

Y = Y Carrier

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

**Lab Sample ID: MB 160-744242/1-A**
**Matrix: Water**
**Analysis Batch: 747720**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 744242**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.04394 | U | 0.127 | 0.127 | 1.00 | 0.238 | pCi/L | 11/07/25 07:43 | 12/03/25 20:06 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.0* | | *30 - 110* | *11/07/25 07:43* | *12/03/25 20:06* | *1* |

**Lab Sample ID: LCS 160-744242/2-A**
**Matrix: Water**
**Analysis Batch: 747720**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 744242**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 9.57 | 9.205 | | 1.15 | 1.00 | 0.317 | pCi/L | 96 | 75 - 125 | | |

| *Carrier* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *81.3* | | *30 - 110* |

**Lab Sample ID: MB 160-744244/1-A**
**Matrix: Water**
**Analysis Batch: 747726**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 744244**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | -0.08231 | U | 0.0985 | 0.0988 | 1.00 | 0.245 | pCi/L | 11/07/25 07:55 | 12/03/25 22:47 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.2* | | *30 - 110* | *11/07/25 07:55* | *12/03/25 22:47* | *1* |

**Lab Sample ID: LCS 160-744244/2-A**
**Matrix: Water**
**Analysis Batch: 747726**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 744244**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 9.57 | 8.986 | | 1.13 | 1.00 | 0.264 | pCi/L | 94 | 75 - 125 | | |

| *Carrier* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *87.5* | | *30 - 110* |

**Lab Sample ID: 810-170042-11 DU**
**Matrix: Water**
**Analysis Batch: 747727**

**Client Sample ID: MW-15022**
**Prep Type: Total/NA**
**Prep Batch: 744244**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.595 | | | 0.3974 | | 0.215 | 1.00 | 0.277 | pCi/L | | | 0.41 | 1 |

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

**Lab Sample ID: 810-170042-11 DU**
**Matrix: Water**
**Analysis Batch: 747727**

**Client Sample ID: MW-15022**
**Prep Type: Total/NA**
**Prep Batch: 744244**

| Carrier | DU %Yield | DU Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 78.8 | | 30 - 110 |

**Lab Sample ID: MB 160-744794/1-A**
**Matrix: Water**
**Analysis Batch: 747875**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 744794**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.001402 | U | 0.118 | 0.118 | 1.00 | 0.235 | pCi/L | 11/11/25 07:52 | 12/04/25 15:43 | 1 |

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Ba Carrier | 84.4 | | 30 - 110 | 11/11/25 07:52 | 12/04/25 15:43 | 1 |

**Lab Sample ID: LCS 160-744794/2-A**
**Matrix: Water**
**Analysis Batch: 747875**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 744794**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 9.57 | 9.073 | | 1.09 | 1.00 | 0.234 | pCi/L | 95 | 75 - 125 | | |

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 84.7 | | 30 - 110 |

**Lab Sample ID: 810-170042-28 DU**
**Matrix: Water**
**Analysis Batch: 747875**

**Client Sample ID: MW-15014R**
**Prep Type: Total/NA**
**Prep Batch: 744794**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.115 | U | | 0.2915 | | 0.158 | 1.00 | 0.190 | pCi/L | | | 0.59 | 1 |

| Carrier | DU %Yield | DU Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 83.0 | | 30 - 110 |

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

**Lab Sample ID: MB 160-744243/1-A**
**Matrix: Water**
**Analysis Batch: 747563**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 744243**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.5801 | U | 0.457 | 0.460 | 1.00 | 0.711 | pCi/L | 11/07/25 07:54 | 12/02/25 13:16 | 1 |

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Ba Carrier | 83.0 | | 30 - 110 | 11/07/25 07:54 | 12/02/25 13:16 | 1 |

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

**Lab Sample ID: MB 160-744243/1-A**
**Matrix: Water**
**Analysis Batch: 747563**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 744243**

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Y Carrier | 83.0 | | 30 - 110 | 11/07/25 07:54 | 12/02/25 13:16 | 1 |

**Lab Sample ID: LCS 160-744243/2-A**
**Matrix: Water**
**Analysis Batch: 747563**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 744243**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 7.88 | 8.283 | | 1.27 | 1.00 | 0.732 | pCi/L | 105 | 75 - 125 | | |

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 81.3 | | 30 - 110 |
| Y Carrier | 85.6 | | 30 - 110 |

**Lab Sample ID: MB 160-744245/1-A**
**Matrix: Water**
**Analysis Batch: 747564**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 744245**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.2664 | U | 0.473 | 0.474 | 1.00 | 0.807 | pCi/L | 11/07/25 07:59 | 12/02/25 13:15 | 1 |

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Ba Carrier | 85.2 | | 30 - 110 | 11/07/25 07:59 | 12/02/25 13:15 | 1 |
| Y Carrier | 81.1 | | 30 - 110 | 11/07/25 07:59 | 12/02/25 13:15 | 1 |

**Lab Sample ID: LCS 160-744245/2-A**
**Matrix: Water**
**Analysis Batch: 747564**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 744245**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 7.88 | 10.08 | | 1.42 | 1.00 | 0.672 | pCi/L | 128 | 75 - 125 | | |

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 87.5 | | 30 - 110 |
| Y Carrier | 82.2 | | 30 - 110 |

**Lab Sample ID: 810-170042-11 DU**
**Matrix: Water**
**Analysis Batch: 747562**

**Client Sample ID: MW-15022**
**Prep Type: Total/NA**
**Prep Batch: 744245**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.380 | U | | 1.128 | | 0.467 | 1.00 | 0.575 | pCi/L | | | 0.86 | 1 |

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

**Lab Sample ID: 810-170042-11 DU**
**Matrix: Water**
**Analysis Batch: 747562**

**Client Sample ID: MW-15022**
**Prep Type: Total/NA**
**Prep Batch: 744245**

| Carrier | DU %Yield | DU Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 78.8 | | 30 - 110 |
| Y Carrier | 84.1 | | 30 - 110 |

**Lab Sample ID: MB 160-744795/1-A**
**Matrix: Water**
**Analysis Batch: 747562**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 744795**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.1777 | U | 0.332 | 0.332 | 1.00 | 0.573 | pCi/L | 11/11/25 07:58 | 12/02/25 13:29 | 1 |

| Carrier | MB %Yield | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Ba Carrier | 84.4 | | 30 - 110 | 11/11/25 07:58 | 12/02/25 13:29 | 1 |
| Y Carrier | 85.6 | | 30 - 110 | 11/11/25 07:58 | 12/02/25 13:29 | 1 |

**Lab Sample ID: LCS 160-744795/2-A**
**Matrix: Water**
**Analysis Batch: 747562**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 744795**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 7.88 | 8.204 | | 1.20 | 1.00 | 0.528 | pCi/L | 104 | 75 - 125 | | |

| Carrier | LCS %Yield | LCS Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 84.7 | | 30 - 110 |
| Y Carrier | 83.7 | | 30 - 110 |

**Lab Sample ID: 810-170042-28 DU**
**Matrix: Water**
**Analysis Batch: 747566**

**Client Sample ID: MW-15014R**
**Prep Type: Total/NA**
**Prep Batch: 744795**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.09 | | | 0.8538 | | 0.455 | 1.00 | 0.635 | pCi/L | | | 0.26 | 1 |

| Carrier | DU %Yield | DU Qualifier | Limits |
|---|---|---|---|
| Ba Carrier | 83.0 | | 30 - 110 |
| Y Carrier | 84.5 | | 30 - 110 |

## Rad

### Prep Batch: 744242

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-170042-1 | MW-15005 | Total/NA | Water | PrecSep-21 | |
| 810-170042-2 | MW-15006 | Total/NA | Water | PrecSep-21 | |
| 810-170042-3 | MW-15007 | Total/NA | Water | PrecSep-21 | |
| 810-170042-4 | MW-15020 | Total/NA | Water | PrecSep-21 | |
| 810-170042-5 | MWT-15020 | Total/NA | Water | PrecSep-21 | |
| 810-170042-6 | MW-17005 | Total/NA | Water | PrecSep-21 | |
| 810-170042-7 | MW-15004 | Total/NA | Water | PrecSep-21 | |
| MB 160-744242/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-744242/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |

### Prep Batch: 744243

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-170042-1 | MW-15005 | Total/NA | Water | PrecSep_0 | |
| 810-170042-2 | MW-15006 | Total/NA | Water | PrecSep_0 | |
| 810-170042-3 | MW-15007 | Total/NA | Water | PrecSep_0 | |
| 810-170042-4 | MW-15020 | Total/NA | Water | PrecSep_0 | |
| 810-170042-5 | MWT-15020 | Total/NA | Water | PrecSep_0 | |
| 810-170042-6 | MW-17005 | Total/NA | Water | PrecSep_0 | |
| 810-170042-7 | MW-15004 | Total/NA | Water | PrecSep_0 | |
| MB 160-744243/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-744243/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |

### Prep Batch: 744244

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-170042-8 | MW-15003 | Total/NA | Water | PrecSep-21 | |
| 810-170042-9 | MW-15002 | Total/NA | Water | PrecSep-21 | |
| 810-170042-10 | MW-15008 | Total/NA | Water | PrecSep-21 | |
| 810-170042-11 | MW-15022 | Total/NA | Water | PrecSep-21 | |
| 810-170042-12 | MW-15019 | Total/NA | Water | PrecSep-21 | |
| 810-170042-13 | MW-17004 | Total/NA | Water | PrecSep-21 | |
| 810-170042-14 | MWT-15010 | Total/NA | Water | PrecSep-21 | |
| 810-170042-15 | MW-15010 | Total/NA | Water | PrecSep-21 | |
| 810-170042-16 | MW-15009 | Total/NA | Water | PrecSep-21 | |
| 810-170042-17 | MW-17003 | Total/NA | Water | PrecSep-21 | |
| 810-170042-18 | MW-15018 | Total/NA | Water | PrecSep-21 | |
| 810-170042-19 | MW-15017 | Total/NA | Water | PrecSep-21 | |
| 810-170042-20 | MW-17002 | Total/NA | Water | PrecSep-21 | |
| 810-170042-21 | MW-15013 | Total/NA | Water | PrecSep-21 | |
| 810-170042-22 | MW-15021 | Total/NA | Water | PrecSep-21 | |
| 810-170042-23 | MW-17006 | Total/NA | Water | PrecSep-21 | |
| 810-170042-24 | MW-15015R | Total/NA | Water | PrecSep-21 | |
| 810-170042-25 | MW-15023 | Total/NA | Water | PrecSep-21 | |
| 810-170042-26 | MW-15016R | Total/NA | Water | PrecSep-21 | |
| 810-170042-27 | MW-17001R | Total/NA | Water | PrecSep-21 | |
| MB 160-744244/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-744244/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 810-170042-11 DU | MW-15022 | Total/NA | Water | PrecSep-21 | |

### Prep Batch: 744245

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-170042-8 | MW-15003 | Total/NA | Water | PrecSep_0 | |

## Rad (Continued)

### Prep Batch: 744245 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-170042-9 | MW-15002 | Total/NA | Water | PrecSep_0 | |
| 810-170042-10 | MW-15008 | Total/NA | Water | PrecSep_0 | |
| 810-170042-11 | MW-15022 | Total/NA | Water | PrecSep_0 | |
| 810-170042-12 | MW-15019 | Total/NA | Water | PrecSep_0 | |
| 810-170042-13 | MW-17004 | Total/NA | Water | PrecSep_0 | |
| 810-170042-14 | MWT-15010 | Total/NA | Water | PrecSep_0 | |
| 810-170042-15 | MW-15010 | Total/NA | Water | PrecSep_0 | |
| 810-170042-16 | MW-15009 | Total/NA | Water | PrecSep_0 | |
| 810-170042-17 | MW-17003 | Total/NA | Water | PrecSep_0 | |
| 810-170042-18 | MW-15018 | Total/NA | Water | PrecSep_0 | |
| 810-170042-19 | MW-15017 | Total/NA | Water | PrecSep_0 | |
| 810-170042-20 | MW-17002 | Total/NA | Water | PrecSep_0 | |
| 810-170042-21 | MW-15013 | Total/NA | Water | PrecSep_0 | |
| 810-170042-22 | MW-15021 | Total/NA | Water | PrecSep_0 | |
| 810-170042-23 | MW-17006 | Total/NA | Water | PrecSep_0 | |
| 810-170042-24 | MW-15015R | Total/NA | Water | PrecSep_0 | |
| 810-170042-25 | MW-15023 | Total/NA | Water | PrecSep_0 | |
| 810-170042-26 | MW-15016R | Total/NA | Water | PrecSep_0 | |
| 810-170042-27 | MW-17001R | Total/NA | Water | PrecSep_0 | |
| MB 160-744245/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-744245/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 810-170042-11 DU | MW-15022 | Total/NA | Water | PrecSep_0 | |

### Prep Batch: 744794

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-170042-28 | MW-15014R | Total/NA | Water | PrecSep-21 | |
| MB 160-744794/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-744794/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 810-170042-28 DU | MW-15014R | Total/NA | Water | PrecSep-21 | |

### Prep Batch: 744795

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 810-170042-28 | MW-15014R | Total/NA | Water | PrecSep_0 | |
| MB 160-744795/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-744795/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 810-170042-28 DU | MW-15014R | Total/NA | Water | PrecSep_0 | |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25J1966

Job ID: 810-170042-1

## Client Sample ID: MW-15005

**Date Collected: 10/27/25 12:05**
**Date Received: 10/31/25 08:50**

## Lab Sample ID: 810-170042-1

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744242 | VLQ | EET SL | 11/07/25 07:43 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 20:21 |
| Total/NA | Prep | PrecSep_0 | | | 744243 | VLQ | EET SL | 11/07/25 07:54 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:10 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MW-15006

**Date Collected: 10/27/25 13:05**
**Date Received: 10/31/25 08:50**

## Lab Sample ID: 810-170042-2

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744242 | VLQ | EET SL | 11/07/25 07:43 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 20:21 |
| Total/NA | Prep | PrecSep_0 | | | 744243 | VLQ | EET SL | 11/07/25 07:54 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MW-15007

**Date Collected: 10/27/25 14:35**
**Date Received: 10/31/25 08:50**

## Lab Sample ID: 810-170042-3

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744242 | VLQ | EET SL | 11/07/25 07:43 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 20:21 |
| Total/NA | Prep | PrecSep_0 | | | 744243 | VLQ | EET SL | 11/07/25 07:54 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MW-15020

**Date Collected: 10/27/25 15:45**
**Date Received: 10/31/25 08:50**

## Lab Sample ID: 810-170042-4

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744242 | VLQ | EET SL | 11/07/25 07:43 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 20:21 |
| Total/NA | Prep | PrecSep_0 | | | 744243 | VLQ | EET SL | 11/07/25 07:54 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MWT-15020

**Lab Sample ID: 810-170042-5**

**Date Collected: 10/27/25 15:45**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744242 | VLQ | EET SL | 11/07/25 07:43 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 20:21 |
| Total/NA | Prep | PrecSep_0 | | | 744243 | VLQ | EET SL | 11/07/25 07:54 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MW-17005

**Lab Sample ID: 810-170042-6**

**Date Collected: 10/28/25 09:15**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744242 | VLQ | EET SL | 11/07/25 07:43 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 20:21 |
| Total/NA | Prep | PrecSep_0 | | | 744243 | VLQ | EET SL | 11/07/25 07:54 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MW-15004

**Lab Sample ID: 810-170042-7**

**Date Collected: 10/28/25 10:25**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744242 | VLQ | EET SL | 11/07/25 07:43 |
| Total/NA | Analysis | 903.0 | | 1 | 747727 | SWS | EET SL | 12/03/25 20:17 |
| Total/NA | Prep | PrecSep_0 | | | 744243 | VLQ | EET SL | 11/07/25 07:54 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:11 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MW-15003

**Lab Sample ID: 810-170042-8**

**Date Collected: 10/28/25 11:35**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:15 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25J1966

Job ID: 810-170042-1

## Client Sample ID: MW-15002

**Lab Sample ID: 810-170042-9**

**Date Collected: 10/28/25 12:50**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:15 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MW-15008

**Lab Sample ID: 810-170042-10**

**Date Collected: 10/28/25 14:30**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747564 | FLC | EET SL | 12/02/25 13:15 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 08:47 |

## Client Sample ID: MW-15022

**Lab Sample ID: 810-170042-11**

**Date Collected: 10/28/25 16:05**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747726 | SWS | EET SL | 12/03/25 22:48 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:20 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15019

**Lab Sample ID: 810-170042-12**

**Date Collected: 10/28/25 11:45**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747727 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:21 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25J1966

Job ID: 810-170042-1

## Client Sample ID: MW-17004

**Lab Sample ID: 810-170042-13**

**Date Collected: 10/28/25 09:50**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747727 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:21 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MWT-15010

**Lab Sample ID: 810-170042-14**

**Date Collected: 10/27/25 16:05**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747727 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:21 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15010

**Lab Sample ID: 810-170042-15**

**Date Collected: 10/27/25 15:50**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747727 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:21 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15009

**Lab Sample ID: 810-170042-16**

**Date Collected: 10/27/25 14:15**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747727 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:21 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25J1966

Job ID: 810-170042-1

## Client Sample ID: MW-17003

**Lab Sample ID: 810-170042-17**

**Date Collected: 10/28/25 13:10**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747727 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:22 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15018

**Lab Sample ID: 810-170042-18**

**Date Collected: 10/28/25 14:25**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747727 | SWS | EET SL | 12/03/25 22:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:22 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15017

**Lab Sample ID: 810-170042-19**

**Date Collected: 10/28/25 15:50**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747876 | SWS | EET SL | 12/04/25 07:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:22 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-17002

**Lab Sample ID: 810-170042-20**

**Date Collected: 10/28/25 17:00**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747876 | SWS | EET SL | 12/04/25 07:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:22 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15013

**Lab Sample ID: 810-170042-21**

**Date Collected: 10/29/25 09:10**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747876 | SWS | EET SL | 12/04/25 07:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:22 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15021

**Lab Sample ID: 810-170042-22**

**Date Collected: 10/29/25 10:20**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747876 | SWS | EET SL | 12/04/25 07:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:23 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-17006

**Lab Sample ID: 810-170042-23**

**Date Collected: 10/29/25 11:25**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747876 | SWS | EET SL | 12/04/25 07:47 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:24 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15015R

**Lab Sample ID: 810-170042-24**

**Date Collected: 10/29/25 12:45**

**Matrix: Water**

**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747875 | SWS | EET SL | 12/04/25 15:23 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:24 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

# Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 25J1966

Job ID: 810-170042-1

## Client Sample ID: MW-15023

**Lab Sample ID: 810-170042-25**

**Date Collected: 10/29/25 12:50**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747875 | SWS | EET SL | 12/04/25 07:53 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:24 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:08 |

## Client Sample ID: MW-15016R

**Lab Sample ID: 810-170042-26**

**Date Collected: 10/29/25 11:20**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747875 | SWS | EET SL | 12/04/25 07:53 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:24 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:09 |

## Client Sample ID: MW-17001R

**Lab Sample ID: 810-170042-27**

**Date Collected: 10/29/25 10:25**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744244 | VLQ | EET SL | 11/07/25 07:55 |
| Total/NA | Analysis | 903.0 | | 1 | 747875 | SWS | EET SL | 12/04/25 07:53 |
| Total/NA | Prep | PrecSep_0 | | | 744245 | VLQ | EET SL | 11/07/25 07:59 |
| Total/NA | Analysis | 904.0 | | 1 | 747562 | FLC | EET SL | 12/02/25 13:24 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:09 |

## Client Sample ID: MW-15014R

**Lab Sample ID: 810-170042-28**

**Date Collected: 10/29/25 13:40**
**Matrix: Water**
**Date Received: 10/31/25 08:50**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 744794 | VLQ | EET SL | 11/11/25 07:52 |
| Total/NA | Analysis | 903.0 | | 1 | 747875 | SWS | EET SL | 12/04/25 15:44 |
| Total/NA | Prep | PrecSep_0 | | | 744795 | VLQ | EET SL | 11/11/25 07:58 |
| Total/NA | Analysis | 904.0 | | 1 | 747566 | FLC | EET SL | 12/02/25 13:39 |
| Total/NA | Analysis | Ra226_Ra228 Pos | | 1 | 747927 | CMM | EET SL | 12/05/25 15:09 |

**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: 25J1966

Job ID: 810-170042-1

## Laboratory: Eurofins St. Louis

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

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Alaska (UST) | State | 20-001 | 05-06-27 |
| ANAB | Dept. of Defense ELAP | L2305 | 04-06-27 |
| ANAB | Dept. of Energy | L2305.01 | 04-06-27 |
| ANAB | ISO/IEC 17025 | L2305 | 04-06-27 |
| Arizona | State | AZ0813 | 12-08-25 |
| California | Los Angeles County Sanitation Districts | 10259 | 06-30-22 * |
| California | State | 2886 | 07-01-26 |
| Connecticut | State | PH-0241 | 03-31-27 |
| Florida | NELAP | E87689 | 06-30-26 |
| HI - RadChem Recognition | State | n/a | 06-30-26 |
| Illinois | NELAP | 200023 | 11-30-25 * |
| Iowa | State | 373 | 12-01-26 |
| Kansas | NELAP | E-10236 | 10-31-26 |
| Kentucky (DW) | State | KY90125 | 12-31-25 |
| Kentucky (WW) | State | KY90125 (Permit KY0004049) | 12-31-25 |
| Louisiana (All) | NELAP | 106151 | 06-30-26 |
| Louisiana (DW) | State | LA011 | 12-31-25 |
| Maryland | State | 310 | 10-01-26 |
| Massachusetts | State | M-MO054 | 06-30-26 |
| MI - RadChem Recognition | State | 9005 | 06-30-26 |
| Missouri | State | 780 | 06-30-28 |
| Nevada | State | MO00054 | 07-31-26 |
| New Jersey | NELAP | MO002 | 06-30-26 |
| New Mexico | State | MO00054 | 06-30-26 |
| New York | NELAP | 11616 | 03-31-26 |
| North Carolina (DW) | State | 29700 | 06-30-26 |
| North Dakota | State | R-207 | 06-30-25 * |
| Oklahoma | NELAP | 9997 | 12-31-25 |
| Oregon | NELAP | 4157 | 09-01-26 |
| Pennsylvania | NELAP | 68-00540 | 02-28-26 |
| South Carolina | State | 85002 | 06-30-26 |
| Texas | NELAP | T104704193 | 07-31-26 |
| US Fish & Wildlife | US Federal Programs | 058448 | 07-31-26 |
| USDA | US Federal Programs | 525-23-138-94730 | 05-18-26 |
| Utah | NELAP | MO00054 | 07-31-26 |
| Virginia | NELAP | 460230 | 06-14-26 |
| Washington | State | C592 | 08-31-26 |
| West Virginia DEP | State | 381 | 11-30-26 |

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

# Method Summary

Client: Trace Analytical Laboratories
Project/Site: 25J1966

Job ID: 810-170042-1

| 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: 25J1966

Job ID: 810-170042-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Sample Origin |
|---|---|---|---|---|---|
| 810-170042-1 | MW-15005 | Water | 10/27/25 12:05 | 10/31/25 08:50 | Michigan |
| 810-170042-2 | MW-15006 | Water | 10/27/25 13:05 | 10/31/25 08:50 | Michigan |
| 810-170042-3 | MW-15007 | Water | 10/27/25 14:35 | 10/31/25 08:50 | Michigan |
| 810-170042-4 | MW-15020 | Water | 10/27/25 15:45 | 10/31/25 08:50 | Michigan |
| 810-170042-5 | MWT-15020 | Water | 10/27/25 15:45 | 10/31/25 08:50 | Michigan |
| 810-170042-6 | MW-17005 | Water | 10/28/25 09:15 | 10/31/25 08:50 | Michigan |
| 810-170042-7 | MW-15004 | Water | 10/28/25 10:25 | 10/31/25 08:50 | Michigan |
| 810-170042-8 | MW-15003 | Water | 10/28/25 11:35 | 10/31/25 08:50 | Michigan |
| 810-170042-9 | MW-15002 | Water | 10/28/25 12:50 | 10/31/25 08:50 | Michigan |
| 810-170042-10 | MW-15008 | Water | 10/28/25 14:30 | 10/31/25 08:50 | Michigan |
| 810-170042-11 | MW-15022 | Water | 10/28/25 16:05 | 10/31/25 08:50 | Michigan |
| 810-170042-12 | MW-15019 | Water | 10/28/25 11:45 | 10/31/25 08:50 | Michigan |
| 810-170042-13 | MW-17004 | Water | 10/28/25 09:50 | 10/31/25 08:50 | Michigan |
| 810-170042-14 | MWT-15010 | Water | 10/27/25 16:05 | 10/31/25 08:50 | Michigan |
| 810-170042-15 | MW-15010 | Water | 10/27/25 15:50 | 10/31/25 08:50 | Michigan |
| 810-170042-16 | MW-15009 | Water | 10/27/25 14:15 | 10/31/25 08:50 | Michigan |
| 810-170042-17 | MW-17003 | Water | 10/28/25 13:10 | 10/31/25 08:50 | Michigan |
| 810-170042-18 | MW-15018 | Water | 10/28/25 14:25 | 10/31/25 08:50 | Michigan |
| 810-170042-19 | MW-15017 | Water | 10/28/25 15:50 | 10/31/25 08:50 | Michigan |
| 810-170042-20 | MW-17002 | Water | 10/28/25 17:00 | 10/31/25 08:50 | Michigan |
| 810-170042-21 | MW-15013 | Water | 10/29/25 09:10 | 10/31/25 08:50 | Michigan |
| 810-170042-22 | MW-15021 | Water | 10/29/25 10:20 | 10/31/25 08:50 | Michigan |
| 810-170042-23 | MW-17006 | Water | 10/29/25 11:25 | 10/31/25 08:50 | Michigan |
| 810-170042-24 | MW-15015R | Water | 10/29/25 12:45 | 10/31/25 08:50 | Michigan |
| 810-170042-25 | MW-15023 | Water | 10/29/25 12:50 | 10/31/25 08:50 | Michigan |
| 810-170042-26 | MW-15016R | Water | 10/29/25 11:20 | 10/31/25 08:50 | Michigan |
| 810-170042-27 | MW-17001R | Water | 10/29/25 10:25 | 10/31/25 08:50 | Michigan |
| 810-170042-28 | MW-15014R | Water | 10/29/25 13:40 | 10/31/25 08:50 | Michigan |

eurofins | Eaton Analytical

810-170042 Chain of Custody

www.EurofinsUS.com/Eaton

Shaded area for EEA use only

# CHAIN OF CUSTODY RECORD

Page 1 of 2

| REPORT TO: | SAMPLER (Signature) | PWS ID # | STATE (sample origin) | PROJECT NAME | PO# |
|---|---|---|---|---|---|
| Tracesubout@trace-labs.com<br>Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-773-5998 | | | MI | 25J1966 | 25J1966 |
| BILL TO: | 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 | 10/27/25 | 12:05 | | | MW-15005 | Radium 226/226 | | | | 1 | GW | SW |
| 2 | 10/27/25 | 13:05 | | | MW-15006 | Radium 226/226 | | | | 1 | GW | SW |
| 3 | 10/27/25 | 14:35 | | | MW-15007 | Radium 226/226 | | | | 1 | GW | SW |
| 4 | 10/27/25 | 15:45 | | | MW-15020 | Radium 226/226 | | | | 1 | GW | SW |
| 5 | 10/27/25 | 15:45 | | | MWT-15020 | Radium 226/226 | | | | 1 | GW | SW |
| 6 | 10/28/25 | 9:15 | | | MW-17005 | Radium 226/226 | | | | 1 | GW | SW |
| 7 | 10/28/25 | 10:25 | | | MW-15004 | Radium 226/226 | | | | 1 | GW | SW |
| 8 | 10/28/25 | 11:35 | | | MW-15003 | Radium 226/226 | | | | 1 | GW | SW |
| 9 | 10/28/25 | 12:50 | | | MW-15002 | Radium 226/226 | | | | 1 | GW | SW |
| 10 | 10/28/25 | 14:30 | | | MW-15008 | Radium 226/226 | | | | 1 | GW | SW |
| 11 | 10/28/25 | 16:05 | | | MW-15022 | Radium 226/226 | | | | 1 | GW | SW |
| 12 | 10/28/25 | 11:45 | | | MW-15019 | Radium 226/226 | | | | 1 | GW | SW |
| 13 | 10/28/25 | 9:50 | | | MW-17004 | Radium 226/226 | | | | 1 | GW | SW |
| 14 | 10/27/25 | 16:05 | | | MWT-15010 | Radium 226/226 | | | | 1 | GW | SW |

| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
|---|---|---|---|---|---|
| Natalie Cooper | 10/30/25 | 17:00 AM PM | Fedex | | AM PM |
| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
| Fedex | | AM PM | Sierra Bottleyter | 10/31/25 | 0850 AM PM |
| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED FOR LABORATORY BY: | DATE | TIME |
| | | AM PM | | | AM PM |

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS

St. Louis EDD

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%
RV* = Rush Verbal: (5 working days) 50%
RW* = Rush Written: (5 working days) 75%
IV* = Immediate Verbal: (3 working days) 100%
IW* =Immediate Written: (3 working days) 125%
SP* = Weekend, Holiday CALL
STAT* = Less than 48 hours CALL

* 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

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order # 

Batch # 

www.EurofinsUS.com/Eaton

Shaded area for EEA use only

# CHAIN OF CUSTODY RECORD



| REPORT TO: | SAMPLER (Signature) | PWS ID # | STATE (sample origin) | PROJECT NAME | PO# |
|---|---|---|---|---|---|
| Tracesubout@trace-labs.com<br>Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-773-5998 | | | MI | 25J1966 | 25J1966 |
| BILL TO: | COMPLIANCE MONITORING: Yes x / No | POPULATION SERVED | SOURCE WATER | | |

| LAB Number | COLLECTION DATE | COLLECTION TIME | AM | PM | SAMPLING SITE | TEST NAME | SAMPLE REMARKS | CHLORINATED YES | CHLORINATED NO | # OF CONTAINERS | MATRIX CODE | TURNAROUND TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10/27/25 | 15:50 | | | MW-15010 | Radium 226/226 | | | | 1 | GW | SW |
| 2 | 10/27/25 | 14:15 | | | MW-15009 | Radium 226/226 | | | | 1 | GW | SW |
| 3 | 10/28/25 | 13:10 | | | MW-17003 | Radium 226/226 | | | | 1 | GW | SW |
| 4 | 10/28/25 | 14:25 | | | MW-15018 | Radium 226/226 | | | | 1 | GW | SW |
| 5 | 10/28/25 | 15:50 | | | MW-15017 | Radium 226/226 | | | | 1 | GW | SW |
| 6 | 10/28/25 | 17:00 | | | MW-17002 | Radium 226/226 | | | | 1 | GW | SW |
| 7 | 10/29/25 | 9:10 | | | MW-15013 | Radium 226/226 | | | | 1 | GW | SW |
| 8 | 10/29/25 | 10:20 | | | MW-15021 | Radium 226/226 | | | | 1 | GW | SW |
| 9 | 10/29/25 | 11:25 | | | MW-17006 | Radium 226/226 | | | | 1 | GW | SW |
| 10 | 10/29/25 | 12:45 | | | MW-15015R | Radium 226/226 | | | | 1 | GW | SW |
| 11 | 10/29/25 | 12:50 | | | MW-15023 | Radium 226/226 | | | | 1 | GW | SW |
| 12 | 10/29/25 | 11:20 | | | MW-15016R | Radium 226/226 | | | | 1 | GW | SW |
| 13 | 10/29/25 | 10:25 | | | MW-17001R | Radium 226/226 | | | | 1 | GW | SW |
| 14 | 10/29/25 | 13:40 | | | MW-15014R | Radium 226/226 | | | | 1 | GW | SW |

| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
|---|---|---|---|---|---|
| Natalie Cooper | 10/30/25 | 17:00 AM PM | Fedex | | AM PM |
| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED BY:(Signature) | DATE | TIME |
| Fedex | | AM PM | Siena Worthington | 10/31/25 | 0850 (AM) PM |
| RELINQUISHED BY:(Signature) | DATE | TIME | RECEIVED FOR LABORATORY BY: | DATE | TIME |
| | | AM PM | | | AM PM |

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

**LAB COMMENTS**

St. Louis EDD

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%
RV* = Rush Verbal: (5 working days) 50%
RW* = Rush Written: (5 working days) 75%
IV* = Immediate Verbal: (3 working days) 100%
IW* =Immediate Written: (3 working days) 125%
SP* = Weekend, Holiday CALL
STAT* = Less than 48 hours CALL

* 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

eurofins | Environment Testing

| Client Information (Sub Contract Lab) | Sampler: N/A | Lab PM: Fullmer, Karen | Carrier Tracking No(s): N/A | COC No: 810-63400.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: N/A | E-Mail: Karen.Fullmer@et.eurofinsus.com | State of Origin: Michigan | Page: Page 1 of 4 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Michigan | | Job #: 810-170042-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/8/2025 | | | Preservation Codes: - |
| City: Earth City | TAT Requested (days): N/A | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: N/A | | | |
| Email: N/A | WO #: N/A | | | |
| Project Name: 25J1966 | Project #: 81000263 | | | |
| Site: N/A | SSOW#: N/A | | | Other: N/A |

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 903.0/PrecSep_21EPA 903.0 - Radium 226 (St. Louis) | 904.0/PrecSep_0EPA 904.0 - Radium 228 (St. Louis) | Ra226_228GFPC_PCombined Radium-226 and Radium-228 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| MW-15005 (810-170042-1) | 10/27/25 | 12:05 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15006 (810-170042-2) | 10/27/25 | 13:05 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15007 (810-170042-3) | 10/27/25 | 14:35 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15020 (810-170042-4) | 10/27/25 | 15:45 Eastern | G | Water | | | X | X | X | 1 | |
| MWT-15020 (810-170042-5) | 10/27/25 | 15:45 Eastern | G | Water | | | X | X | X | 1 | |
| MW-17005 (810-170042-6) | 10/28/25 | 09:15 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15004 (810-170042-7) | 10/28/25 | 10:25 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15003 (810-170042-8) | 10/28/25 | 11:35 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15002 (810-170042-9) | 10/28/25 | 12:50 Eastern | G | Water | | | X | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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 |
|---|---|---|---|---|---|
| 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: 10/10/2024

**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: N/A | Lab PM: Fullmer, Karen | Carrier Tracking No(s): N/A | COC No: 810-63400.2 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: N/A | E-Mail: Karen.Fullmer@et.eurofinsus.com | State of Origin: Michigan | Page: Page 2 of 4 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Michigan | | Job #: 810-170042-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/8/2025 | | | Preservation Codes: - |
| City: Earth City | TAT Requested (days): N/A | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: N/A | | | |
| Email: N/A | WO #: N/A | | | |
| Project Name: 25J1966 | Project #: 81000263 | | | |
| Site: N/A | SSOW#: N/A | | | Other: N/A |

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 903.0/PrecSep_21EPA 903.0 - Radium 226 (St. Louis) | 904.0/PrecSep_0EPA 904.0 - Radium 228 (St. Louis) | Ra226_228GFPC_PCombined Radium-226 and Radium-228 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| MW-15008 (810-170042-10) | 10/28/25 | 14:30 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15022 (810-170042-11) | 10/28/25 | 16:05 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15019 (810-170042-12) | 10/28/25 | 11:45 Eastern | G | Water | | | X | X | X | 1 | |
| MW-17004 (810-170042-13) | 10/28/25 | 09:50 Eastern | G | Water | | | X | X | X | 1 | |
| MWT-15010 (810-170042-14) | 10/27/25 | 16:05 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15010 (810-170042-15) | 10/27/25 | 15:50 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15009 (810-170042-16) | 10/27/25 | 14:15 Eastern | G | Water | | | X | X | X | 1 | |
| MW-17003 (810-170042-17) | 10/28/25 | 13:10 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15018 (810-170042-18) | 10/28/25 | 14:25 Eastern | G | Water | | | X | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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 |
|---|---|---|---|---|---|
| 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: 10/10/2024



12/5/2025

**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: N/A | Lab PM: Fullmer, Karen | Carrier Tracking No(s): N/A | COC No: 810-63400.3 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: N/A | E-Mail: Karen.Fullmer@et.eurofinsus.com | State of Origin: Michigan | Page: Page 3 of 4 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Michigan | | Job #: 810-170042-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/8/2025 | | | Preservation Codes: - |
| City: Earth City | TAT Requested (days): N/A | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: N/A | | | |
| Email: N/A | WO #: N/A | | | |
| Project Name: 25J1966 | Project #: 81000263 | | | |
| Site: N/A | SSOW#: N/A | | | Other: N/A |

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 903.0/PrecSep_21EPA 903.0 - Radium 226 (St. Louis) | 904.0/PrecSep_0EPA 904.0 - Radium 228 (St. Louis) | Ra226_228GFPC_PCombined Radium-226 and Radium-228 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| MW-15017 (810-170042-19) | 10/28/25 | 15:50 Eastern | G | Water | | | X | X | X | 1 | |
| MW-17002 (810-170042-20) | 10/28/25 | 17:00 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15013 (810-170042-21) | 10/29/25 | 09:10 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15021 (810-170042-22) | 10/29/25 | 10:20 Eastern | G | Water | | | X | X | X | 1 | |
| MW-17006 (810-170042-23) | 10/29/25 | 11:25 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15015R (810-170042-24) | 10/29/25 | 12:45 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15023 (810-170042-25) | 10/29/25 | 12:50 Eastern | G | Water | | | X | X | X | 1 | |
| MW-15016R (810-170042-26) | 10/29/25 | 11:20 Eastern | G | Water | | | X | X | X | 1 | |
| MW-17001R (810-170042-27) | 10/29/25 | 10:25 Eastern | G | Water | | | X | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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 |
|---|---|---|---|---|---|
| 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: 10/10/2024



12/5/2025

**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: N/A | Lab PM: Fullmer, Karen | Carrier Tracking No(s): N/A | COC No: 810-63400.4 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: N/A | E-Mail: Karen.Fullmer@et.eurofinsus.com | State of Origin: Michigan | Page: Page 4 of 4 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Michigan | | Job #: 810-170042-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/8/2025 | | | Preservation Codes: - |
| City: Earth City | TAT Requested (days): N/A | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: N/A | | | |
| Email: N/A | WO #: N/A | | | |
| Project Name: 25J1966 | Project #: 81000263 | | | |
| Site: N/A | SSOW#: N/A | | | Other: N/A |

**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_21EPA 903.0 - Radium 226 (St. Louis) | 904.0/PrecSep_0EPA 904.0 - Radium 228 (St. Louis) | Ra226_228GFPC_PCombined Radium-226 and Radium-228 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| MW-15014R (810-170042-28) | 10/29/25 | 13:40 Eastern | G | Water | | | X | X | X | 1 | |

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| 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 |
|---|---|---|---|---|---|
| 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: 10/10/2024

# Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-170042-1

**Login Number: 170042**

**List Source: Eurofins Eaton Analytical South Bend**

**List Number: 1**

**Creator: Blackburn, Kelly**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| Samples were received on ice. | False | Thermal preservation not required. |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | False | Thermal preservation not required. |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Samples do not require splitting or compositing. | True | |
| Were samples preserved to correct pH upon receipt, if applicable? | True | |
| Container provided by EEA | True | |

# Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-170042-1

**Login Number: 170042**
**List Number: 2**
**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**
**List Creation: 10/31/25 01:26 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 | |

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

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

# 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. 25J1966

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR |
| Report To: | Andrew Byks/Molly Reeves |
| Mailing Address: | 1000 Oakbrook Drive, Suite 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byks@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO#: | 10220433 |
| Contact Name: | Lara Zawaideh |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | lara.zawaideh@hdrinc.com |

**Trace Use:**

| | |
|---|---|
| Logged By: | NE |
| Checked By: | MT |
| Soil Volatiles Preserved (circle if applicable): | MeOH / Low Level / Lab |
| Sampling Time: | |

25J1966

**Turnaround Requirements:**

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

**Results provided end of business day, requires prior approval.*

**Matrix Key:**

S = Soil / Solid
W = Water
SL = Sludge
Oil = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: Charah - BC Cobb

Sampled By:

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | App III 40 CFR Part 257 | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Possible Health Hazards? | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10/27/25 | 1205 | MW-15005 | N | W | 3 | 2 | | | | | | X | X | X | X | | copy last event |
| 2 | 10/27/25 | 1305 | MW-15006 | N | W | 3 | 2 | | | | | | X | X | X | X | | |
| 3 | 10/27/25 | 1435 | MW-15007 | N | W | 3 | 2 | | | | | | X | X | X | X | | |
| 4 | 10/27/25 | 1545 | MW-15020 | N | W | 3 | 2 | | | | | | X | X | X | X | | |
| 5 | 10/27/25 | 1545 | MWT-15020 | N | W | 3 | 2 | | | | | | X | X | X | X | | |
| 6 | 10/28/25 | 915 | MW-17005 | N | W | 3 | 2 | | | | | | X | X | X | X | | |
| 7 | 10/28/25 | 1025 | MW-15004 | N | W | 3 | 2 | | | | | | X | X | X | X | | |
| 8 | 10/28/25 | 1135 | MW-15003 | N | W | 3 | 2 | | | | | | X | X | X | X | | |
| 9 | 10/28/25 | 1250 | MW-15002 | N | W | 3 | 2 | | | | | | X | X | X | X | | |
| 10 | 10/28/25 | 1430 | MW-15008 | N | W | 3 | 2 | | | | | | X | X | X | X | | |

| Please Sign | Released By | Received By | Date | Time | Released By | Received By | Date | Time |
|---|---|---|---|---|---|---|---|---|
| 1) | | | | | 2) | | | |
| 3) | | | 10/29/25 | 0830 | 4) | | | |

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

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TRACE
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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



Trace ID No. KC 10/28/25
25J1958
25J1966

**Report Results To:**

| | |
|---|---|
| Company Name: | HDR |
| Report To: | Andrew Byks/ Molly Reed |
| Mailing Address: | 1000 Oakbrook Drive, Suite 200 |
| City, State, Zip Code: | Ann Arbor MI 48104 |
| Office Phone: | Cell Phone: |
| Email Address: | andrew.byks@hdrinc.com |

**Bill To:**

| | |
|---|---|
| PO #: | 10220433 |
| Contact Name: | Lara Zawaideh |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: | lara.zawaideh@hdrinc.com |

**Trace Use:**

| | |
|---|---|
| Logged By: | KC |
| Checked By: | MB |
| Soil Volatiles Preserved (circle if applicable): | MeOH / Low Level / Lab |
| Sampling Time: | |

**Turnaround Requirements:**

☐ Standard, 5-10 Days
☐ 3 Day*
☐ 1 Day*

**Results provided end of business day, requires prior approval.*

**Matrix Key:**

S = Soil / Solid
W = Water
Sl = Sludge
Ol = Oil
WI = Wipes
LW = Liquid Waste
A = Air
D = Drinking Water

Project Name: Charah - BC Cobb

Sampled By: AB / FDE

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y / N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: 40 CFR Part 257 App III | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Possible Health Hazards? | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 10/28/25 | 1605 | MW-15022 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 12 | 10/28/25 | 1195 | MW-15019 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 13 | 10/28/25 | 950 | MW-17004 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 14 | 10/27/25 | 1605 | MWT-15010 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 15 | 10/27/25 | 1550 | MW-15010 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 16 | 10/27/25 | 1415 | MW-15009 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 17 | 10/28/25 | 1310 | MW-17003 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 18 | 10/28/25 | 1425 | MW-15018 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 19 | 10/28/25 | 1550 | MW-15017 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 20 | 10/28/25 | 1700 | MW-17002 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |

| Please Sign | Released By | Received By | Date | Time | Released By | Received By | Date | Time |
|---|---|---|---|---|---|---|---|---|
| 1) | | | 10/29/25 | 800 | 2) | | | |
| 3) | | | | | 4) | | | |

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# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Trace ID No. 25J1966

**Report Results To:**

| | |
|---|---|
| Company Name: HDR | |
| Report To: Andrew Byks/ Molly Reeves | |
| Mailing Address: 1000 Oakbrook Drive, Suite 200 | |
| City, State, Zip Code: Ann Arbor MI 48104 | |
| Office Phone: | Cell Phone: |
| Email Address: andrew.byks@hdrinc.com | |

**Bill To:**

| | |
|---|---|
| PO #: 10220433 | |
| Contact Name: Lara Zawaideh | |
| Billing Address (if different): | |
| City, State, Zip Code: | |
| Phone Number: | |
| Billing Email Address: lara.zawaideh@hdrinc.com | |

**Trace Use:**

| | |
|---|---|
| Logged By: | |
| Checked By: | |
| Soil Volatiles Preserved (circle if applicable): MeOH Low Level Lab | |
| Sampling Time: | |

**Turnaround Requirements:**

- [x] Standard, 5-10 Days
- [ ] 3 Day*
- [ ] 1 Day*

*Results provided end of business day, requires prior approval.

**Matrix Key:**

S = Soil / Solid; WI = Wipes; W = Water; LW = Liquid Waste; SL = Sludge; A = Air; Oil = Oil; D = Drinking Water

Project Name: BC C066

Sampled By: AB/FDR

| Trace No. | Date Collected | Time Collected | Client Sample ID | Metals Field Filtered (Y/N) | Matrix | Number of Containers | Preservation: Cool | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | Other | Analysis Requested: 40 CFR Part 257 App III | 40 CFR Part 257 App IV | MI Part 115 Metals | TSS | Remarks | Possible Health Hazards? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 10/29/25 | 910 | MW-15013 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 22 | 10/29/25 | 1020 | MW-15021 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 23 | 10/29/25 | 1125 | MW-17006 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 24 | 10/29/25 | 1245 | MW-15015R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 25 | 10/29/25 | 1250 | MW-15023 | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 26 | 10/29/25 | 1120 | MW-15016R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 27 | 10/29/25 | 1025 | MW-17001R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| 28 | 10/29/25 | 1340 | MW-15014R | N | W | 3 | 3 | 2 | | | | | X | X | X | X | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

Please Sign

| Released By | Received By | Date | Time | Released By | Received By | Date | Time |
|---|---|---|---|---|---|---|---|
| 1) | | 10/29/25 | ~~10~~14:59 | 2) | | | |
| 3) | | | | 4) | | | |

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TRACE ANALYTICAL LABORATORIES, INC.

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

# 25J1966

HDR Michigan Inc.
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | ✓ | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | ✓ | | | | | | ✓ |

## 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)
- [ ] 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

## Chain of Custody (COC)

Yes No

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

**Notes:**

MW-15008
MW-17005
MW-15002
MW-15003
MW-15004

Form 70-A.59
Effective 8/20/25

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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

# 25J1966

**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | ✓ | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | ✓ | | | | | | ✓ |

### Sample Receipt

Yes No

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

### Sample Condition

Yes No N/A

- ☑ ☐ ☐ All sample containers arrived unbroken and labeled
- ☑ ☐ ☐ Sufficient sample to run requested analyses
- ☑ ☐ ☐ Correct chemical preservative added to samples
- ☐ ☑ ☐ Samples preserved at Trace
- ☑ ☐ ☐ Chemical preservation verified, check EMD pH test strip used (if applicable)
  - ☑ pH 0-2.5 (Lot: HC461264) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other
- ☐ ☐ ☑ Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

Yes No

- ☑ ☐ All bottle labels agree with COC
- ☑ ☐ COC filled out properly
- ☑ ☐ COC signed by client

**Notes:**

MW-15020
MWT-15020
MW-15005
MW-15007
MW-15006

Form 70-A.59
Effective 8/20/25



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

**25J1966**
**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | | | | | | | |

### Sample Receipt

| Yes | No | |
|---|---|---|
| ☑ | ☐ | Received on ice or other coolant |
| ☑ | ☐ | Ice still present upon receipt |
| ☐ | ☑ | Custody seals present |

☐ Yes ☐ No Custody seals intact (if applicable)

☐ Trace Courier ☑ Client Drop-off ☐ UPS ☐ Fed Ex ☐ US Mail ☐ Other

### Sample Condition

| Yes | No | N/A | |
|---|---|---|---|
| ☑ | ☐ | ☐ | All sample containers arrived unbroken and labeled |
| ☑ | ☐ | ☐ | Sufficient sample to run requested analyses |
| ☑ | ☐ | ☐ | Correct chemical preservative added to samples |
| ☐ | ☑ | ☐ | Samples preserved at Trace |
| ☑ | ☐ | ☐ | Chemical preservation verified, check EMD pH test strip used (if applicable) |

☑ pH 0-2.5 (Lot: HC461264) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other

☐ ☐ ☑ Air bubbles absent from VOAs (no bubble grater than 6mm)

### Chain of Custody (COC)

| Yes | No | |
|---|---|---|
| ☑ | ☐ | All bottle labels agree with COC |
| ☑ | ☐ | COC filled out properly |
| ☑ | ☐ | COC signed by client |

### Notes:

MW-17003
MW-15018
MW-15017
MW-17002
MW-15022

Form 70-A.59
Effective 8/20/25

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# 25J1966

**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 9:00 | | | | | | | | | | |
| Initials: MJ | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | | | | | | | |
| Representative Sample Temp °C | 3.0 | 3.0 | | | | | | | | |

## 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: HC461264) [ ] pH 11.0-13.0 (Lot: HC022540) [ ] Other
- [ ] [ ] [x] Air bubbles absent from VOAs (no bubble grater than 6mm)

## Chain of Custody (COC)

Yes No

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

## Notes:

MW-15010
MW-15009
MW-17004
MW-15019
MWT-15010



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# 25J1966

**HDR Michigan Inc.**
Project Manager: Jon Mink

## Sample Log In Checklist

| | Original Observation | Corrected Temperature | IR-9 (CF: 0.0°C) | IR-12 (CF: 0.0°C) | IR-13 (CF: -0.5°C) | IR-14 (CF: -1.1°C) | SR1 (CF: -0.2°C) | SR2 (CF: -0.3°C) | Temp Blank | Client Sample |
|---|---|---|---|---|---|---|---|---|---|---|
| Date: 10/29/25 | | | | | | | | | | |
| Time: 15:37 | | | | | | | | | | |
| Initials: SAB | | | | | | | | | | |
| Package Description: Cooler | | | | | | | | | | |
| Package Temp °C | 0.0 | 0.0 | | ✓ | | | | | | |
| Representative Sample Temp °C | 0.0 | 0.0 | | ✓ | | | | | | ✓ |

### Sample Receipt

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

### Sample Condition

| Yes | No | N/A | |
|---|---|---|---|
| ✓ | ☐ | ☐ | All sample containers arrived unbroken and labeled |
| ✓ | ☐ | ☐ | Sufficient sample to run requested analyses |
| ✓ | ☐ | ☐ | Correct chemical preservative added to samples |
| ☐ | ✓ | ☐ | Samples preserved at Trace |
| ☐ | ☐ | ✓ | Chemical preservation verified, check EMD pH test strip used (if applicable) |
| | | | ☐ pH 0-2.5 (Lot: HC461264) ☐ pH 11.0-13.0 (Lot: HC022540) ☐ Other |
| ☐ | ☐ | ✓ | Air bubbles absent from VOAs (no bubble grater than 6mm) |

### Chain of Custody (COC)

| Yes | No | |
|---|---|---|
| ✓ | ☐ | All bottle labels agree with COC |
| ✓ | ☐ | COC filled out properly |
| ✓ | ☐ | COC signed by client |

**Notes:**

Form 70-A.59
Effective 8/20/25

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**Data Validation Checklist**

Site Name: Cobb  Sampling Personnel: Andrew Byks & Franklin Davis Ray

Data Validation: Andrew Byks

Sample Date(s): 10/27/2025-10/29/2025  Lab Drop-off Date(s): 10/29/2025

Lab Report Number: 25J1958, 25J1966

Lab Report Date: 11/14/2025 (CCR & Part 115); 12/5/2025 (radium)

Reason for Sample Event: CCR Compliance and Michigan Part 115 Compliance

---

**Field Records:** Circle Yes/No unless Not Applicable – *Complete during sample event*

| Item Description | Verification (Completeness) | Validation (Conformance to Specifications) |
|---|---|---|
| Field equipment calibration records | (Yes) / No | (Yes) / No |
| Chain-of-Custody forms | (Yes) / No | N/A |
| Field decontamination documentation | N/A | N/A |
| Sample collection field forms | (Yes) / No | N/A |
| Drilling logs | (Yes) / No | N/A |
| Well construction logs | (Yes) / No | N/A |
| Well development field forms | (Yes) / No | N/A |

**Analytical Data Package:** Circle Yes/No unless N/A – *Complete when lab report is received*

| Item Description | Verification (Completeness) | Validation (Conformance to Specifications) |
|---|---|---|
| Cover sheet (laboratory identifying information) | (Yes) / No | (Yes) / No |
| Case narrative | (Yes) / No | (Yes) / No |
| Internal laboratory Chain-of-Custody forms | (Yes) / No | (Yes) / No |
| Sample chronology and consistency (that is, dates and times of receipt, preparation, and analysis) | (Yes) / No | (Yes) / No |
| Communication records with laboratory | (Yes) / No | (Yes) / No |
| EDD format consistency | (Yes) / No | N/A |
| Sample identification, results nomenclature, and data qualifier consistency | (Yes) / No | N/A |
| Method detection limit consistency<br>RLs as requested; MDLs<RLs | (Yes) / No | (Yes) / No |
| Instrument calibration records | (Yes) / No | (Yes) / No |
| Laboratory Report | (Yes) / No | (Yes) / No |
| Field QC sample results and calculation of accuracy and precision | (Yes) / No<br>Duplicate Well ID:<br>MW-15010<br>MW-15020 | Yes / (No)<br>Duplicate RPD:<br>Over 20% + NDs<br>Over 20% |

**Corrections Needed:**

The RPDs of Radium-226, Radium-228, and Combined Radium 226+228 were outside of control limits for the MW-15010 and MWT-15010 parent sample and field duplicate pair. Radium-226, Radium-228, and Combined Radium 226+228 required qualification as estimated with low bias (J-, or UJ if non-detect) in parent sample MW-15010 and as estimated with high bias (J+) in field duplicate MWT-15010.

The RPD of nickel between parent sample MW-15020 and field duplicate MWT-15020 was 21%. Nickel required qualification as estimated with high bias (J+) in parent sample MW-15020 and as estimated with low bias (J-) in field duplicate MWT-15020.

The RPD of selenium between parent sample MW-15020 and field duplicate MWT-15020 was 24%. Selenium required qualification as estimated with low bias (J-) in parent sample MW-15020 and as estimated with high bias (J+) in field duplicate MWT-15020.

The RPDs of Radium-226, Radium-228, and Combined Radium 226+228 were outside of control limits for the MW-15010 and MWT-15010 parent sample and field duplicate pair. Radium-226 required qualification as estimated but not detected (UJ) in parent sample MW-15020 and as estimated with high bias (J+) in field duplicate MWT-15020. Radium-228 and Combined Radium 226+228 required qualification as estimated with low bias (J-, or UJ if non-detect) in parent sample MW-15020 and as estimated with high bias (J+) in field duplicate MWT-15020.

# Appendix D

# Statistical Reports

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.757 | 1.00 | 0.250 | 1.20 | 0.382 | 0.505 | -0.603 |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | 2015-12-01 to 2025-04-23 | Gamma; Normal | Gamma | 12.4 | 10.7 | 0.550 | 45.0 | 11.3 | 0.911 | 1.14 |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-23 | Nonparametric | Nonparametric | 50.5 | 21.8 | 9.00 | 250 | 55.8 | 1.11 | 2.21 |
| 01_2_104 | MW-15009 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.722 | 1.00 | 0.200 | 1.20 | 0.395 | 0.548 | -0.406 |
| 01_2_106 | MW-15009 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.304 | 0.200 | 0.200 | 1.20 | 0.284 | 0.932 | 3.10 |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 24 | 20 | 83% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.777 | 1.00 | 0.190 | 2.00 | 0.464 | 0.597 | 0.373 |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | 2015-12-01 to 2025-04-23 | | Nonparametric | 7.44 | 6.00 | 0.100 | 15.0 | 6.96 | 0.935 | 0.146 |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 24 | 18 | 75% | 2015-12-01 to 2025-04-23 | Gamma; Normal | Nonparametric | 587 | 1000 | 20.0 | 1000 | 460 | 0.785 | -0.192 |
| 01_2_116 | MW-15009 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 1.00 | 1.00 | 0.550 | 2.80 | 0.607 | 0.607 | 2.44 |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 24.2 | 21.0 | 11.0 | 63.9 | 11.9 | 0.490 | 1.85 |
| 01_2_118 | MW-15009 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 24 | 6 | 25% | 2015-12-01 to 2025-04-23 | Nonparametric | Nonparametric | 19.4 | 5.85 | 0.560 | 60.0 | 21.7 | 1.12 | 0.769 |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 24 | 16 | 67% | 2015-12-01 to 2025-04-23 | Nonparametric | Nonparametric | 0.874 | 0.606 | 0.0300 | 3.85 | 0.866 | 0.991 | 2.31 |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-04-23 | | Nonparametric | 1.00 | 1.00 | 0.500 | 2.50 | 0.571 | 0.571 | 1.72 |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 1.38 | 2.00 | 0.380 | 2.00 | 0.777 | 0.562 | -0.539 |
| 02_2_101 | MW-15010 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.735 | 1.00 | 0.250 | 1.20 | 0.388 | 0.528 | -0.478 |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 25 | 22 | 88% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.952 | 1.00 | 0.150 | 2.80 | 0.618 | 0.649 | 2.18 |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal | Gamma | 76.8 | 61.0 | 28.0 | 210 | 46.1 | 0.600 | 1.24 |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.694 | 1.00 | 0.0580 | 1.20 | 0.410 | 0.590 | -0.328 |
| 02_2_106 | MW-15010 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 25 | 15 | 60% | 2015-12-01 to 2025-04-22 | Nonparametric | Nonparametric | 0.766 | 1.00 | 0.210 | 2.00 | 0.456 | 0.596 | 0.466 |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | 2015-12-01 to 2025-04-22 | | Nonparametric | 7.15 | 4.30 | 0.110 | 15.0 | 6.95 | 0.971 | 0.229 |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 683 | 1000 | 200 | 1000 | 351 | 0.514 | -0.202 |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.981 | 1.00 | 0.550 | 2.80 | 0.601 | 0.612 | 2.48 |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal | Gamma | 30.4 | 28.0 | 14.0 | 54.0 | 12 | 0.394 | 0.527 |
| 02_2_118 | MW-15010 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 25 | 11 | 44% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal; Normal | Gamma | 8.37 | 5.00 | 1.10 | 33.0 | 9.48 | 1.13 | 1.55 |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 1.04 | 0.973 | 0.280 | 2.03 | 0.575 | 0.553 | 0.298 |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 25 | 23 | 92% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.940 | 1.00 | 0.500 | 2.50 | 0.527 | 0.560 | 2.12 |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-04-22 | | Nonparametric | 1.34 | 1.95 | 0.380 | 2.00 | 0.788 | 0.587 | -0.418 |
| 03_2_101 | MW-15013 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.757 | 1.00 | 0.250 | 1.20 | 0.382 | 0.505 | -0.603 |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 24 | 19 | 79% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 1.05 | 1.00 | 0.200 | 2.80 | 0.645 | 0.612 | 1.73 |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-24 | Nonparametric | Nonparametric | 72.5 | 51.5 | 31.0 | 180 | 39.9 | 0.550 | 1.32 |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.723 | 1.00 | 0.200 | 1.20 | 0.394 | 0.545 | -0.407 |
| 03_2_106 | MW-15013 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.304 | 0.200 | 0.200 | 1.20 | 0.284 | 0.932 | 3.10 |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 24 | 19 | 79% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 0.866 | 1.00 | 0.140 | 2.50 | 0.574 | 0.663 | 0.978 |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | 2015-12-01 to 2025-04-24 | | Nonparametric | 7.41 | 6.00 | 0.0820 | 15.0 | 6.99 | 0.943 | 0.143 |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 25 | 17 | 68% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 648 | 1000 | 97.0 | 1000 | 412 | 0.635 | -0.349 |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | 2015-12-01 to 2025-04-24 | | Nonparametric | 1.18 | 1.00 | 0.550 | 4.70 | 0.973 | 0.824 | 2.71 |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-24 | Lognormal | Lognormal | 23.9 | 22.0 | 13.0 | 46.0 | 8.32 | 0.348 | 1.14 |
| 03_2_118 | MW-15013 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 24 | 5 | 21% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal | Gamma | 10.1 | 5.95 | 0.620 | 77.2 | 15.4 | 1.52 | 3.88 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 24 | 11 | 46% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 0.776 | 0.597 | 0.160 | 1.56 | 0.371 | 0.478 | 0.517 |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.945 | 1.00 | 0.280 | 2.50 | 0.540 | 0.571 | 1.99 |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | 2015-12-01 to 2025-04-24 | | Nonparametric | 1.37 | 2.00 | 0.140 | 2.00 | 0.793 | 0.577 | -0.556 |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 9 | 9 | 100% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.567 | 0.250 | 0.250 | 1.20 | 0.475 | 0.838 | 0.857 |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 9 | 5 | 56% | 2022-02-01 to 2025-04-24 | | Nonparametric | 1.07 | 0.550 | 0.200 | 2.80 | 1.07 | 1.00 | 1.13 |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 9 | 0 | 0% | 2022-02-01 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 173 | 170 | 160 | 200 | 14.1 | 0.0816 | 0.947 |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 9 | 8 | 89% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.444 | 0.250 | 0.100 | 1.20 | 0.431 | 0.970 | 1.56 |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 9 | 9 | 100% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.567 | 0.250 | 0.250 | 1.20 | 0.475 | 0.838 | 0.857 |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 9 | 8 | 89% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.481 | 0.250 | 0.250 | 1.20 | 0.412 | 0.856 | 1.54 |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 9 | 8 | 89% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.939 | 0.520 | 0.130 | 2.60 | 0.950 | 1.01 | 1.53 |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 9 | 1 | 11% | 2022-02-01 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 250 | 270 | 180 | 300 | 45.3 | 0.181 | -0.561 |
| 04_2_116 | MW-15014R | Appendix IV | Lead | ug/L | 9 | 9 | 100% | 2022-02-01 to 2025-04-24 | | Nonparametric | 1.30 | 0.550 | 0.550 | 2.80 | 1.12 | 0.865 | 0.857 |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 9 | 0 | 0% | 2022-02-01 to 2025-04-24 | Lognormal | Lognormal | 57.2 | 48.0 | 36.0 | 130 | 28.8 | 0.503 | 2.46 |
| 04_2_118 | MW-15014R | Appendix IV | Mercury | ug/L | 9 | 9 | 100% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 9 | 2 | 22% | 2022-02-01 to 2025-04-24 | Gamma; Lognormal | Gamma | 3.93 | 3.00 | 0.680 | 11.0 | 3.32 | 0.844 | 1.33 |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 9 | 3 | 33% | 2022-02-01 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 0.877 | 0.720 | 0.230 | 1.76 | 0.536 | 0.611 | 0.622 |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 9 | 8 | 89% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.901 | 0.500 | 0.110 | 2.50 | 0.915 | 1.02 | 1.53 |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 9 | 9 | 100% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.887 | 0.380 | 0.380 | 1.90 | 0.760 | 0.857 | 0.857 |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 12 | 6 | 50% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 2.04 | 0.925 | 0.250 | 13.0 | 3.60 | 1.76 | 3.02 |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 22.7 | 21.0 | 3.20 | 55.0 | 15.7 | 0.690 | 0.868 |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 113 | 114 | 60.0 | 170 | 35.4 | 0.313 | -0.00731 |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.384 | 0.250 | 0.0580 | 1.20 | 0.385 | 1.00 | 1.95 |
| 05_2_106 | MW-15015R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.400 | 0.250 | 0.200 | 1.20 | 0.374 | 0.935 | 2.04 |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 12 | 10 | 83% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.468 | 0.250 | 0.220 | 1.20 | 0.404 | 0.863 | 1.38 |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 12 | 7 | 58% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 0.757 | 0.510 | 0.150 | 2.60 | 0.871 | 1.15 | 1.94 |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 12 | 6 | 50% | 2020-05-21 to 2025-04-24 | Gamma; Normal | Nonparametric | 120 | 105 | 12.0 | 200 | 53.6 | 0.448 | -0.0432 |
| 05_2_116 | MW-15015R | Appendix IV | Lead | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-24 | | Nonparametric | 1.38 | 0.775 | 0.550 | 2.80 | 1.07 | 0.775 | 0.731 |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 47.6 | 44.5 | 3.80 | 120 | 28.6 | 0.600 | 1.31 |
| 05_2_118 | MW-15015R | Appendix IV | Mercury | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal | Gamma | 130 | 85.0 | 2.00 | 430 | 136 | 1.04 | 0.944 |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 12 | 4 | 33% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 0.978 | 0.799 | 0.250 | 2.12 | 0.621 | 0.635 | 0.979 |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 12 | 7 | 58% | 2020-05-21 to 2025-04-24 | Lognormal | Nonparametric | 0.950 | 0.750 | 0.240 | 2.50 | 0.789 | 0.830 | 1.38 |
| 05_2_131 | MW-15015R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.990 | 0.690 | 0.380 | 1.90 | 0.710 | 0.717 | 0.504 |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 12 | 10 | 83% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.397 | 0.250 | 0.140 | 1.20 | 0.377 | 0.949 | 2.02 |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 12 | 1 | 8% | 2020-05-21 to 2025-04-24 | Nonparametric | Nonparametric | 2.89 | 1.90 | 1.30 | 10.1 | 2.53 | 0.876 | 2.53 |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 1009 | 980 | 789 | 1300 | 155 | 0.154 | 0.351 |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.386 | 0.250 | 0.0850 | 1.20 | 0.383 | 0.992 | 1.98 |
| 06_2_106 | MW-15016R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.400 | 0.250 | 0.200 | 1.20 | 0.374 | 0.935 | 2.04 |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 12 | 2 | 17% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 0.897 | 0.825 | 0.650 | 1.20 | 0.217 | 0.242 | 0.542 |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 12 | 1 | 8% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 1.22 | 0.980 | 0.660 | 2.60 | 0.560 | 0.459 | 1.64 |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 12 | 9 | 75% | 2020-05-21 to 2025-04-24 | | Nonparametric | 99.5 | 100 | 20.0 | 200 | 43.2 | 0.435 | 0.637 |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 12 | 10 | 83% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.884 | 0.550 | 0.0590 | 2.80 | 0.926 | 1.05 | 1.75 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 12 | 3 | 25% | 2020-05-21 to 2025-04-24 | Nonparametric | Nonparametric | 15.6 | 6.00 | 3.70 | 110 | 29.9 | 1.92 | 3.41 |
| 06_2_118 | MW-15016R | Appendix IV | Mercury | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 12 | 8 | 67% | 2020-05-21 to 2025-04-24 | | Nonparametric | 2.75 | 1.20 | 0.390 | 7.50 | 2.54 | 0.925 | 1.02 |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Normal | Normal | 4.12 | 4.12 | 1.60 | 5.64 | 1.17 | 0.284 | -0.683 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 12 | 8 | 67% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.896 | 0.500 | 0.120 | 2.50 | 0.833 | 0.930 | 1.29 |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.737 | 0.380 | 0.380 | 1.90 | 0.593 | 0.804 | 1.48 |
| 07_2_101 | MW-15017 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.757 | 1.00 | 0.250 | 1.20 | 0.382 | 0.505 | -0.603 |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | 2015-12-01 to 2025-04-23 | Nonparametric | Nonparametric | 3.90 | 2.15 | 1.60 | 13.0 | 3.51 | 0.902 | 1.90 |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 981 | 980 | 772 | 1200 | 96.1 | 0.0980 | 0.0844 |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 23 | 21 | 91% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.706 | 1.00 | 0.0200 | 1.20 | 0.419 | 0.593 | -0.475 |
| 07_2_106 | MW-15017 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.304 | 0.200 | 0.200 | 1.20 | 0.284 | 0.932 | 3.10 |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 24 | 1 | 4% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 3.19 | 3.00 | 0.510 | 11.0 | 2.61 | 0.818 | 1.54 |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 7.54 | 6.00 | 0.500 | 15.0 | 6.84 | 0.906 | 0.165 |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 25 | 24 | 96% | 2015-12-01 to 2025-04-23 | | Nonparametric | 611 | 1000 | 2.60 | 1000 | 452 | 0.739 | -0.310 |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 1.10 | 1.00 | 0.550 | 2.80 | 0.704 | 0.642 | 1.94 |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 24 | 16 | 67% | 2015-12-01 to 2025-04-23 | Lognormal | Nonparametric | 9.29 | 10.0 | 3.50 | 18.0 | 3.24 | 0.349 | 0.113 |
| 07_2_118 | MW-15017 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 24 | 21 | 88% | 2015-12-01 to 2025-04-23 | | Nonparametric | 3.61 | 5.00 | 0.200 | 6.20 | 2.09 | 0.578 | -0.512 |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 4.80 | 4.84 | 3.00 | 5.89 | 0.663 | 0.138 | -0.592 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 24 | 12 | 50% | 2015-12-01 to 2025-04-23 | Gamma | Nonparametric | 1.83 | 1.35 | 0.150 | 8.00 | 1.72 | 0.936 | 2.11 |
| 07_2_131 | MW-15017 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | 2015-12-01 to 2025-04-23 | | Nonparametric | 1.45 | 2.00 | 0.380 | 2.00 | 0.752 | 0.519 | -0.750 |
| 08_2_101 | MW-15018 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.757 | 1.00 | 0.250 | 1.20 | 0.382 | 0.505 | -0.603 |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 24 | 14 | 58% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 1.09 | 1.00 | 0.440 | 3.80 | 0.766 | 0.705 | 2.59 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 149 | 142 | 93.0 | 280 | 38.9 | 0.262 | 2.17 |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.717 | 1.00 | 0.140 | 1.20 | 0.402 | 0.561 | -0.418 |
| 08_2_106 | MW-15018 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.304 | 0.200 | 0.200 | 1.20 | 0.284 | 0.932 | 3.10 |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 24 | 10 | 42% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 0.873 | 1.00 | 0.280 | 1.80 | 0.345 | 0.396 | 0.204 |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | 2015-12-02 to 2025-04-23 | | Nonparametric | 7.45 | 6.00 | 0.160 | 15.0 | 6.95 | 0.933 | 0.148 |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 25 | 15 | 60% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 639 | 1000 | 110 | 1000 | 417 | 0.653 | -0.276 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 23 | 17 | 74% | 2015-12-02 to 2025-04-23 | Lognormal | Nonparametric | 1.17 | 1.00 | 0.310 | 3.90 | 0.838 | 0.718 | 2.34 |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 20.8 | 21.0 | 12.0 | 33.0 | 5.28 | 0.254 | 0.247 |
| 08_2_118 | MW-15018 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 24 | 22 | 92% | 2015-12-02 to 2025-04-23 | | Nonparametric | 3.64 | 5.00 | 0.530 | 6.20 | 2.04 | 0.560 | -0.469 |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 24 | 7 | 29% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 1.17 | 1.20 | 0.554 | 1.84 | 0.362 | 0.310 | 0.00565 |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 24 | 20 | 83% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.05 | 1.00 | 0.190 | 4.00 | 0.838 | 0.801 | 2.41 |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.38 | 2.00 | 0.170 | 2.00 | 0.791 | 0.575 | -0.552 |
| 09_2_101 | MW-15019 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.757 | 1.00 | 0.250 | 1.20 | 0.382 | 0.505 | -0.603 |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 24 | 15 | 62% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 1.29 | 1.00 | 0.400 | 8.10 | 1.53 | 1.18 | 4.15 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 205 | 132 | 78.0 | 640 | 149 | 0.729 | 1.41 |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.748 | 1.00 | 0.0580 | 1.20 | 0.396 | 0.529 | -0.644 |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.297 | 0.200 | 0.0780 | 1.20 | 0.287 | 0.968 | 3.04 |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 24 | 14 | 58% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.841 | 1.00 | 0.250 | 1.20 | 0.279 | 0.331 | -0.898 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 7.53 | 6.00 | 0.590 | 15.0 | 6.86 | 0.911 | 0.161 |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | 2015-12-02 to 2025-04-23 | | Nonparametric | 603 | 1000 | 20.0 | 1000 | 458 | 0.760 | -0.269 |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 23 | 19 | 83% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.02 | 1.00 | 0.160 | 2.80 | 0.678 | 0.667 | 1.65 |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 24 | 3 | 12% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 17.3 | 22.0 | 1.20 | 33.0 | 9.85 | 0.571 | -0.423 |
| 09_2_118 | MW-15019 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 24 | 20 | 83% | 2015-12-02 to 2025-04-23 | | Nonparametric | 4.39 | 5.00 | 0.580 | 9.00 | 2.26 | 0.515 | -0.0864 |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 24 | 5 | 21% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 1.49 | 1.35 | 0.331 | 3.81 | 0.794 | 0.535 | 1.22 |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 24 | 19 | 79% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.951 | 1.00 | 0.120 | 2.50 | 0.622 | 0.654 | 1.33 |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 23 | 20 | 87% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.42 | 2.00 | 0.0970 | 2.00 | 0.798 | 0.562 | -0.711 |
| 10_2_101 | MW-15020 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.757 | 1.00 | 0.250 | 1.20 | 0.382 | 0.505 | -0.603 |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 24 | 18 | 75% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 0.948 | 1.00 | 0.230 | 2.80 | 0.634 | 0.668 | 2.11 |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-22 | Normal | Normal | 174 | 149 | 47.0 | 393 | 120 | 0.691 | 0.523 |
| 10_2_104 | MW-15020 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.722 | 1.00 | 0.200 | 1.20 | 0.395 | 0.548 | -0.406 |
| 10_2_106 | MW-15020 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.304 | 0.200 | 0.200 | 1.20 | 0.284 | 0.932 | 3.10 |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 24 | 13 | 54% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal | Nonparametric | 0.851 | 1.00 | 0.250 | 2.00 | 0.398 | 0.468 | 0.561 |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | 2015-12-02 to 2025-04-22 | | Nonparametric | 7.44 | 6.00 | 0.180 | 15.0 | 6.96 | 0.935 | 0.146 |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 25 | 22 | 88% | 2015-12-02 to 2025-04-22 | | Nonparametric | 604 | 1000 | 15.0 | 1000 | 457 | 0.756 | -0.274 |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-22 | | Nonparametric | 1.01 | 1.00 | 0.550 | 2.80 | 0.602 | 0.598 | 2.47 |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 24 | 4 | 17% | 2015-12-02 to 2025-04-22 | Normal | Normal | 11.8 | 13.0 | 1.20 | 20.0 | 4.97 | 0.423 | -0.441 |
| 10_2_118 | MW-15020 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-04-22 | | Nonparametric | 3.63 | 5.00 | 0.250 | 6.20 | 2.06 | 0.567 | -0.485 |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 24 | 6 | 25% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 1.65 | 1.46 | 0.467 | 4.68 | 1.03 | 0.622 | 1.14 |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | 2015-12-02 to 2025-04-22 | | Nonparametric | 1.02 | 1.00 | 0.500 | 2.50 | 0.577 | 0.567 | 1.59 |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 1.38 | 2.00 | 0.380 | 2.00 | 0.777 | 0.562 | -0.539 |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.752 | 1.00 | 0.150 | 1.20 | 0.389 | 0.517 | -0.616 |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 24 | 6 | 25% | 2015-12-02 to 2025-04-23 | Gamma; Normal | Normal | 1.36 | 1.15 | 0.120 | 3.00 | 0.666 | 0.488 | 0.862 |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 297 | 251 | 211 | 480 | 79.2 | 0.267 | 0.874 |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.714 | 1.00 | 0.0240 | 1.20 | 0.407 | 0.571 | -0.455 |
| 11_2_106 | MW-15021 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.304 | 0.200 | 0.200 | 1.20 | 0.284 | 0.932 | 3.10 |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 24 | 6 | 25% | 2015-12-02 to 2025-04-23 | Lognormal | Lognormal | 1.19 | 1.00 | 0.710 | 2.00 | 0.449 | 0.378 | 1.13 |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 23 | 14 | 61% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 7.51 | 6.00 | 0.470 | 15.0 | 6.87 | 0.916 | 0.163 |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | 2015-12-02 to 2025-04-23 | | Nonparametric | 600 | 1000 | 13.0 | 1000 | 462 | 0.769 | -0.272 |
| 11_2_116 | MW-15021 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.00 | 1.00 | 0.550 | 2.80 | 0.607 | 0.607 | 2.44 |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 24 | 18 | 75% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 7.39 | 10.0 | 1.20 | 12.0 | 3.73 | 0.505 | -0.499 |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.224 | 0.200 | 0.200 | 0.750 | 0.115 | 0.512 | 4.80 |
| 11_2_119 | MW-15021 | Appendix IV | Molybdenum | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 3.67 | 5.00 | 1.00 | 6.20 | 2.0 | 0.545 | -0.451 |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 24 | 4 | 17% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 1.65 | 1.50 | 0.354 | 3.24 | 0.724 | 0.438 | 0.320 |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 24 | 15 | 62% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 1.11 | 1.00 | 0.120 | 4.00 | 0.884 | 0.799 | 1.83 |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.38 | 2.00 | 0.380 | 2.00 | 0.777 | 0.562 | -0.539 |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.773 | 1.00 | 0.250 | 1.90 | 0.453 | 0.586 | 0.225 |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 25 | 10 | 40% | 2015-12-02 to 2025-04-23 | Normal | Nonparametric | 2.70 | 1.10 | 0.190 | 8.00 | 2.68 | 0.993 | 0.839 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-04-23 | Lognormal | Lognormal | 168 | 140 | 102 | 290 | 53.6 | 0.319 | 0.717 |

*(Table continues on next page)*

[a] Non-detects are excluded from goodness-of-fit tests.

**Table 1:** Summary Statistics, Non-Detects Included *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit[a] | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12_2_104 | MW-15022 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.702 | 1.00 | 0.200 | 1.20 | 0.398 | 0.568 | -0.295 |
| 12_2_106 | MW-15022 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 0.768 | 1.00 | 0.240 | 2.00 | 0.454 | 0.592 | 0.473 |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 7.06 | 4.30 | 0.190 | 15.0 | 7.03 | 0.996 | 0.235 |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 26 | 19 | 73% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 624 | 1000 | 100 | 1000 | 421 | 0.675 | -0.260 |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.981 | 1.00 | 0.550 | 2.80 | 0.601 | 0.612 | 2.48 |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 25 | 8 | 32% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Gamma | 24.3 | 20.0 | 10.0 | 68.0 | 17.5 | 0.719 | 1.30 |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.204 | 0.200 | 0.200 | 0.290 | 0.0184 | 0.0902 | 4.90 |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 25 | 12 | 48% | 2015-12-02 to 2025-04-23 | Normal | Nonparametric | 8.66 | 5.00 | 0.310 | 47.6 | 10.5 | 1.21 | 2.34 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 25 | 13 | 52% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 0.943 | 0.862 | 0.190 | 3.50 | 0.643 | 0.681 | 2.73 |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.924 | 1.00 | 0.110 | 2.50 | 0.546 | 0.590 | 1.86 |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.34 | 1.95 | 0.380 | 2.00 | 0.788 | 0.587 | -0.418 |
| 13_2_101 | MW-15023 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.757 | 1.00 | 0.250 | 1.20 | 0.382 | 0.505 | -0.603 |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 24 | 8 | 33% | 2015-12-02 to 2025-04-22 | Nonparametric | Nonparametric | 3.11 | 1.00 | 0.550 | 27.0 | 5.64 | 1.81 | 3.70 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal | Gamma | 78.9 | 63.5 | 38.0 | 270 | 52.9 | 0.671 | 2.53 |
| 13_2_104 | MW-15023 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.722 | 1.00 | 0.200 | 1.20 | 0.395 | 0.548 | -0.406 |
| 13_2_106 | MW-15023 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.304 | 0.200 | 0.200 | 1.20 | 0.284 | 0.932 | 3.10 |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 24 | 17 | 71% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal | Nonparametric | 0.790 | 1.00 | 0.250 | 2.00 | 0.451 | 0.572 | 0.410 |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | 2015-12-02 to 2025-04-22 | | Nonparametric | 7.44 | 6.00 | 0.110 | 15.0 | 6.96 | 0.936 | 0.146 |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 25 | 16 | 64% | 2015-12-02 to 2025-04-22 | Lognormal | Nonparametric | 624 | 1000 | 89.0 | 1000 | 435 | 0.698 | -0.286 |
| 13_2_116 | MW-15023 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 1.00 | 1.00 | 0.550 | 2.80 | 0.607 | 0.607 | 2.44 |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 24 | 5 | 21% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal | Gamma | 17.7 | 12.6 | 8.30 | 67.0 | 12.9 | 0.730 | 2.74 |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.215 | 0.200 | 0.200 | 0.550 | 0.0730 | 0.339 | 4.80 |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 24 | 4 | 17% | 2015-12-02 to 2025-04-22 | Nonparametric | Nonparametric | 10.2 | 6.60 | 5.00 | 34.0 | 8.09 | 0.796 | 2.02 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 24 | 12 | 50% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 0.943 | 0.690 | 0.178 | 3.28 | 0.715 | 0.758 | 1.65 |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.914 | 1.00 | 0.110 | 2.50 | 0.564 | 0.618 | 1.79 |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | 2015-12-02 to 2025-04-22 | | Nonparametric | 1.38 | 2.00 | 0.380 | 2.00 | 0.777 | 0.562 | -0.539 |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 12 | 11 | 92% | 2020-05-21 to 2025-04-22 | | Nonparametric | 0.460 | 0.250 | 0.120 | 1.20 | 0.411 | 0.893 | 1.35 |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 12 | 5 | 42% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal | Gamma | 1.54 | 0.555 | 0.190 | 7.30 | 2.05 | 1.33 | 2.32 |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 176 | 190 | 90.6 | 300 | 66.6 | 0.379 | 0.224 |
| 14_2_104 | MW-17001R | Appendix IV | Beryllium | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-22 | | Nonparametric | 0.400 | 0.250 | 0.200 | 1.20 | 0.374 | 0.935 | 2.04 |
| 14_2_106 | MW-17001R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-22 | | Nonparametric | 0.400 | 0.250 | 0.200 | 1.20 | 0.374 | 0.935 | 2.04 |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 12 | 7 | 58% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 0.402 | 0.250 | 0.170 | 1.20 | 0.375 | 0.934 | 2.0 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 12 | 6 | 50% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 0.620 | 0.520 | 0.220 | 2.60 | 0.647 | 1.04 | 3.05 |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 12 | 3 | 25% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 135 | 125 | 100 | 200 | 32.9 | 0.244 | 0.791 |
| 14_2_116 | MW-17001R | Appendix IV | Lead | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-22 | | Nonparametric | 1.00 | 0.550 | 0.550 | 2.80 | 0.858 | 0.858 | 1.89 |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 78.5 | 82.5 | 25.0 | 170 | 42.1 | 0.536 | 0.702 |
| 14_2_118 | MW-17001R | Appendix IV | Mercury | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-22 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 12 | 6 | 50% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 2.07 | 1.20 | 0.370 | 6.20 | 2.03 | 0.981 | 1.62 |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-22 | Normal | Normal | 1.04 | 1.13 | 0 | 2.02 | 0.628 | 0.604 | -0.179 |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-22 | | Nonparametric | 0.917 | 0.500 | 0.500 | 2.50 | 0.764 | 0.833 | 1.80 |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | 2020-05-21 to 2025-04-22 | | Nonparametric | 0.737 | 0.380 | 0.380 | 1.90 | 0.593 | 0.804 | 1.48 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 17 | 15 | 88% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.752 | 1.00 | 0.140 | 2.00 | 0.557 | 0.740 | 0.614 |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 42.1 | 18.6 | 0.590 | 220 | 56.8 | 1.35 | 1.99 |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 97.7 | 79.8 | 39.0 | 240 | 50 | 0.512 | 1.58 |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.617 | 0.250 | 0.140 | 1.20 | 0.426 | 0.690 | 0.189 |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 17 | 13 | 76% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.354 | 0.250 | 0.200 | 1.20 | 0.322 | 0.909 | 2.50 |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.673 | 0.735 | 0.150 | 1.20 | 0.392 | 0.582 | -0.000926 |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 17 | 15 | 88% | 2017-12-07 to 2025-04-23 | | Nonparametric | 4.80 | 0.520 | 0.300 | 15.0 | 6.11 | 1.27 | 1.09 |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 18 | 8 | 44% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 555 | 315 | 160 | 1000 | 373 | 0.672 | 0.383 |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 1.24 | 1.00 | 0.130 | 2.80 | 0.927 | 0.748 | 1.07 |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 159 | 155 | 46.0 | 240 | 55.4 | 0.348 | -0.222 |
| 15_2_118 | MW-17002 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 18 | 6 | 33% | 2017-12-07 to 2025-04-23 | Gamma; Normal | Gamma | 492 | 19.4 | 2.70 | 1800 | 658 | 1.34 | 1.00 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 18 | 5 | 28% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 1.70 | 1.13 | 0.100 | 5.04 | 1.43 | 0.838 | 1.38 |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 18 | 15 | 83% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.971 | 1.00 | 0.110 | 2.50 | 0.700 | 0.721 | 1.28 |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 1.33 | 1.90 | 0.120 | 2.00 | 0.794 | 0.596 | -0.505 |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.735 | 1.00 | 0.250 | 2.00 | 0.524 | 0.713 | 0.713 |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 18 | 3 | 17% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 43.3 | 20.6 | 1.00 | 210 | 63.2 | 1.46 | 1.92 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 91.1 | 80.0 | 18.0 | 320 | 70.2 | 0.770 | 2.21 |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 17 | 15 | 88% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.612 | 0.250 | 0.150 | 1.20 | 0.431 | 0.703 | 0.185 |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.331 | 0.250 | 0.0810 | 1.20 | 0.330 | 0.995 | 2.52 |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 18 | 13 | 72% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.668 | 0.760 | 0.160 | 1.20 | 0.400 | 0.599 | -0.0301 |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 17 | 12 | 71% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 10.0 | 2.60 | 0.120 | 52.0 | 14.6 | 1.46 | 2.02 |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 18 | 12 | 67% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 453 | 130 | 20.0 | 1000 | 450 | 0.993 | 0.480 |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 17 | 17 | 100% | 2017-12-07 to 2025-04-23 | | Nonparametric | 1.40 | 1.00 | 0.550 | 2.80 | 0.953 | 0.682 | 0.845 |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Nonparametric | Nonparametric | 75.5 | 22.5 | 13.0 | 360 | 102 | 1.35 | 1.90 |
| 16_2_118 | MW-17003 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 18 | 5 | 28% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 31.6 | 14.5 | 5.00 | 120 | 38.7 | 1.23 | 1.62 |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 18 | 9 | 50% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.993 | 0.955 | 0.351 | 1.55 | 0.402 | 0.405 | -0.113 |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | 2017-12-07 to 2025-04-23 | | Nonparametric | 1.01 | 1.00 | 0.130 | 2.50 | 0.778 | 0.770 | 0.950 |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | 2017-12-07 to 2025-04-23 | | Nonparametric | 1.35 | 1.90 | 0.380 | 2.00 | 0.771 | 0.573 | -0.477 |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 17 | 14 | 82% | 2017-12-06 to 2025-04-23 | | Nonparametric | 0.768 | 1.00 | 0.100 | 2.00 | 0.537 | 0.700 | 0.413 |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 18 | 2 | 11% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal | Gamma | 5.48 | 2.60 | 0.650 | 18.0 | 5.72 | 1.04 | 1.35 |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal | Gamma | 182 | 146 | 51.0 | 450 | 114 | 0.623 | 1.20 |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-23 | | Nonparametric | 0.624 | 0.250 | 0.200 | 1.20 | 0.419 | 0.672 | 0.202 |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-23 | | Nonparametric | 0.355 | 0.250 | 0.200 | 1.20 | 0.325 | 0.915 | 2.42 |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 18 | 12 | 67% | 2017-12-06 to 2025-04-23 | Lognormal | Nonparametric | 1.09 | 1.00 | 0.170 | 7.80 | 1.72 | 1.59 | 3.85 |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 17 | 11 | 65% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 5.06 | 2.60 | 0.160 | 15.0 | 5.97 | 1.18 | 1.06 |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 18 | 13 | 72% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 460 | 160 | 67.0 | 1000 | 445 | 0.968 | 0.473 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 17 | 14 | 82% | 2017-12-06 to 2025-04-23 | | Nonparametric | 2.17 | 1.00 | 0.130 | 19.0 | 4.42 | 2.04 | 3.87 |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 18 | 6 | 33% | 2017-12-06 to 2025-04-23 | Lognormal | Nonparametric | 26.1 | 11.5 | 2.80 | 71.0 | 23.8 | 0.910 | 0.857 |
| 17_2_118 | MW-17004 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-23 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 18 | 7 | 39% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal; Normal | Gamma | 13.9 | 6.70 | 0.800 | 46.0 | 13.8 | 0.991 | 1.11 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 18 | 7 | 39% | 2017-12-06 to 2025-04-23 | Nonparametric | Nonparametric | 1.14 | 0.876 | 0 | 4.93 | 1.05 | 0.921 | 2.94 |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | 2017-12-06 to 2025-04-23 | | Nonparametric | 1.06 | 1.00 | 0.150 | 2.60 | 0.807 | 0.761 | 0.953 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 17 | 14 | 82% | 2017-12-06 to 2025-04-23 | | Nonparametric | 1.31 | 1.90 | 0.120 | 2.00 | 0.810 | 0.619 | -0.515 |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-22 | | Nonparametric | 0.729 | 1.00 | 0.250 | 2.00 | 0.521 | 0.714 | 0.752 |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 18 | 13 | 72% | 2017-12-06 to 2025-04-22 | Lognormal | Nonparametric | 1.00 | 0.775 | 0.110 | 2.90 | 0.898 | 0.896 | 1.45 |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-06 to 2025-04-22 | Gamma; Lognormal | Gamma | 155 | 127 | 64.0 | 456 | 103 | 0.666 | 1.84 |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-22 | | Nonparametric | 0.612 | 0.250 | 0.0600 | 1.20 | 0.432 | 0.706 | 0.161 |
| 18_2_106 | MW-17005 | Appendix IV | Cadmium | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-22 | | Nonparametric | 0.341 | 0.250 | 0.200 | 1.20 | 0.324 | 0.950 | 2.58 |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | 2017-12-06 to 2025-04-22 | Gamma; Lognormal | Nonparametric | 0.687 | 0.740 | 0.240 | 1.20 | 0.389 | 0.567 | 0.00929 |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-22 | | Nonparametric | 4.81 | 0.520 | 0.360 | 15.0 | 6.10 | 1.27 | 1.09 |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 18 | 14 | 78% | 2017-12-06 to 2025-04-22 | | Nonparametric | 454 | 130 | 22.0 | 1000 | 450 | 0.992 | 0.481 |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-22 | | Nonparametric | 0.975 | 1.00 | 0.130 | 2.80 | 0.735 | 0.754 | 1.96 |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 18 | 3 | 17% | 2017-12-06 to 2025-04-22 | Lognormal | Lognormal | 12.7 | 10.0 | 3.90 | 47.5 | 11.2 | 0.877 | 2.48 |
| 18_2_118 | MW-17005 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-22 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-04-22 | | Nonparametric | 3.49 | 5.00 | 0.290 | 7.60 | 2.42 | 0.694 | -0.0168 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 18 | 8 | 44% | 2017-12-06 to 2025-04-22 | Gamma; Lognormal | Gamma | 1.12 | 0.850 | 0.320 | 4.22 | 0.875 | 0.781 | 2.83 |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-04-22 | | Nonparametric | 1.00 | 1.00 | 0.500 | 2.50 | 0.664 | 0.664 | 1.52 |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-22 | | Nonparametric | 1.17 | 1.00 | 0.380 | 2.00 | 0.799 | 0.685 | 0.0485 |
| 19_2_101 | MW-17006 | Appendix IV | Antimony | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.729 | 1.00 | 0.250 | 2.00 | 0.521 | 0.714 | 0.752 |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 18 | 7 | 39% | 2017-12-06 to 2025-04-24 | Gamma; Normal | Normal | 2.83 | 2.60 | 0.550 | 6.60 | 2.12 | 0.751 | 0.382 |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-06 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 95 | 81.2 | 65.0 | 190 | 32.6 | 0.343 | 1.71 |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.624 | 0.250 | 0.200 | 1.20 | 0.419 | 0.672 | 0.202 |
| 19_2_106 | MW-17006 | Appendix IV | Cadmium | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.341 | 0.250 | 0.200 | 1.20 | 0.324 | 0.950 | 2.58 |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.654 | 0.625 | 0.210 | 1.20 | 0.430 | 0.657 | 0.0848 |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-24 | | Nonparametric | 4.80 | 0.520 | 0.170 | 15.0 | 6.11 | 1.27 | 1.09 |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 18 | 9 | 50% | 2017-12-06 to 2025-04-24 | Normal | Nonparametric | 471 | 185 | 22.0 | 1000 | 436 | 0.927 | 0.471 |
| 19_2_116 | MW-17006 | Appendix IV | Lead | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-24 | | Nonparametric | 1.00 | 1.00 | 0.550 | 2.80 | 0.712 | 0.712 | 2.15 |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 2017-12-06 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 30.3 | 30.0 | 12.0 | 57.0 | 9.95 | 0.328 | 0.607 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.259 | 0.200 | 0.200 | 1.20 | 0.243 | 0.937 | 4.12 |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 18 | 13 | 72% | 2017-12-06 to 2025-04-24 | Gamma; Lognormal | Nonparametric | 7.02 | 5.00 | 1.20 | 53.0 | 11.8 | 1.68 | 3.87 |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 18 | 6 | 33% | 2017-12-06 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 0.999 | 0.861 | 0.210 | 2.66 | 0.616 | 0.616 | 1.50 |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.980 | 1.00 | 0.140 | 2.50 | 0.685 | 0.699 | 1.38 |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | 2017-12-06 to 2025-04-24 | | Nonparametric | 1.17 | 1.00 | 0.380 | 2.00 | 0.799 | 0.685 | 0.0485 |

[a] Non-detects are excluded from goodness-of-fit tests.

**Table 2:** Summary Statistics, Non-Detects Excluded

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | 2015-12-01 to 2025-04-23 | | Nonparametric | 1.00 | 1.00 | 1.00 | 1.00 | NA | NA | NA |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | 2015-12-01 to 2025-04-23 | Gamma; Normal | Gamma | 13 | 12.0 | 0.740 | 45.0 | 11.3 | 0.872 | 1.11 |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-23 | Nonparametric | Nonparametric | 50.5 | 21.8 | 9.00 | 250 | 55.8 | 1.11 | 2.21 |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 24 | 20 | 83% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.877 | 0.660 | 0.190 | 2.00 | 0.828 | 0.944 | 1.08 |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.130 | 0.130 | 0.100 | 0.160 | 0.0424 | 0.326 | NA |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 24 | 18 | 75% | 2015-12-01 to 2025-04-23 | Gamma; Normal | Nonparametric | 92.8 | 96.0 | 37.0 | 120 | 30.6 | 0.329 | -1.41 |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 24.2 | 21.0 | 11.0 | 63.9 | 11.9 | 0.490 | 1.85 |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 24 | 6 | 25% | 2015-12-01 to 2025-04-23 | Nonparametric | Nonparametric | 25.0 | 16.0 | 0.560 | 60.0 | 22.4 | 0.896 | 0.284 |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 24 | 16 | 67% | 2015-12-01 to 2025-04-23 | Nonparametric | Nonparametric | 0.641 | 0.776 | 0.0720 | 1.03 | 0.357 | 0.557 | -1.12 |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-04-23 | | Nonparametric | 2.00 | 2.00 | 2.00 | 2.00 | NA | NA | NA |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 25 | 22 | 88% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.297 | 0.330 | 0.150 | 0.410 | 0.133 | 0.449 | -1.06 |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal | Gamma | 76.8 | 61.0 | 28.0 | 210 | 46.1 | 0.600 | 1.24 |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.0580 | 0.0580 | 0.0580 | 0.0580 | NA | NA | NA |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 25 | 15 | 60% | 2015-12-01 to 2025-04-22 | Nonparametric | Nonparametric | 0.524 | 0.290 | 0.210 | 2.00 | 0.568 | 1.08 | 2.42 |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | 2015-12-01 to 2025-04-22 | | Nonparametric | 0.340 | 0.345 | 0.110 | 0.560 | 0.223 | 0.656 | -0.0479 |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 324 | 310 | 260 | 410 | 48.0 | 0.148 | 0.448 |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal | Gamma | 30.4 | 28.0 | 14.0 | 54.0 | 12 | 0.394 | 0.527 |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 25 | 11 | 44% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal; Normal | Gamma | 11.9 | 8.00 | 1.10 | 33.0 | 11.5 | 0.960 | 0.712 |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 2015-12-01 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 1.19 | 1.06 | 0.400 | 2.03 | 0.556 | 0.467 | 0.198 |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 25 | 23 | 92% | 2015-12-01 to 2025-04-22 | | Nonparametric | 1.00 | 1.00 | 1.00 | 1.00 | 0 | 0 | NA |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 24 | 19 | 79% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 0.904 | 0.780 | 0.200 | 2.00 | 0.760 | 0.841 | 0.698 |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-24 | Nonparametric | Nonparametric | 72.5 | 51.5 | 31.0 | 180 | 39.9 | 0.550 | 1.32 |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.280 | 0.280 | 0.280 | 0.280 | NA | NA | NA |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 24 | 19 | 79% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 1.33 | 1.00 | 0.140 | 2.50 | 0.929 | 0.699 | 0.0863 |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.166 | 0.115 | 0.0820 | 0.350 | 0.124 | 0.750 | 1.90 |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 25 | 17 | 68% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 226 | 200 | 97.0 | 490 | 126 | 0.557 | 1.42 |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | 2015-12-01 to 2025-04-24 | | Nonparametric | 4.70 | 4.70 | 4.70 | 4.70 | NA | NA | NA |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-24 | Lognormal | Lognormal | 23.9 | 22.0 | 13.0 | 46.0 | 8.32 | 0.348 | 1.14 |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 24 | 5 | 21% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal | Gamma | 11.5 | 7.70 | 0.620 | 77.2 | 17.1 | 1.48 | 3.45 |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 24 | 11 | 46% | 2015-12-01 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 0.706 | 0.596 | 0.160 | 1.19 | 0.319 | 0.452 | -0.0157 |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.727 | 0.900 | 0.280 | 1.00 | 0.390 | 0.537 | -1.60 |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | 2015-12-01 to 2025-04-24 | | Nonparametric | 0.140 | 0.140 | 0.140 | 0.140 | NA | NA | NA |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 9 | 5 | 56% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.585 | 0.270 | 0.200 | 1.60 | 0.678 | 1.16 | 1.98 |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 9 | 0 | 0% | 2022-02-01 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 173 | 170 | 160 | 200 | 14.1 | 0.0816 | 0.947 |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 9 | 8 | 89% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.100 | 0.100 | 0.100 | 0.100 | NA | NA | NA |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 9 | 8 | 89% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.430 | 0.430 | 0.430 | 0.430 | NA | NA | NA |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 9 | 8 | 89% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.130 | 0.130 | 0.130 | 0.130 | NA | NA | NA |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 9 | 1 | 11% | 2022-02-01 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 256 | 270 | 180 | 300 | 44.1 | 0.172 | -1.02 |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 9 | 0 | 0% | 2022-02-01 to 2025-04-24 | Lognormal | Lognormal | 57.2 | 48.0 | 36.0 | 130 | 28.8 | 0.503 | 2.46 |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 9 | 2 | 22% | 2022-02-01 to 2025-04-24 | Gamma; Lognormal | Gamma | 3.28 | 2.00 | 0.680 | 11.0 | 3.53 | 1.08 | 2.27 |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 9 | 3 | 33% | 2022-02-01 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 1.08 | 1.07 | 0.431 | 1.76 | 0.537 | 0.498 | 0.0634 |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 9 | 8 | 89% | 2022-02-01 to 2025-04-24 | | Nonparametric | 0.110 | 0.110 | 0.110 | 0.110 | NA | NA | NA |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 12 | 6 | 50% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 3.43 | 1.27 | 0.410 | 13.0 | 4.87 | 1.42 | 2.09 |

*(Table continues on next page)*

**Table 2:** Summary Statistics, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 22.7 | 21.0 | 3.20 | 55.0 | 15.7 | 0.690 | 0.868 |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 113 | 114 | 60.0 | 170 | 35.4 | 0.313 | -0.00731 |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.0580 | 0.0580 | 0.0580 | 0.0580 | NA | NA | NA |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 12 | 10 | 83% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.235 | 0.235 | 0.220 | 0.250 | 0.0212 | 0.0903 | NA |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 12 | 7 | 58% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Nonparametric | 0.262 | 0.220 | 0.150 | 0.420 | 0.105 | 0.402 | 0.871 |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 12 | 6 | 50% | 2020-05-21 to 2025-04-24 | Gamma; Normal | Nonparametric | 106 | 110 | 12.0 | 180 | 56.5 | 0.533 | -0.658 |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 47.6 | 44.5 | 3.80 | 120 | 28.6 | 0.600 | 1.31 |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal | Gamma | 130 | 85.0 | 2.00 | 430 | 136 | 1.04 | 0.944 |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 12 | 4 | 33% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 1.15 | 0.958 | 0.250 | 2.12 | 0.694 | 0.605 | 0.409 |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 12 | 7 | 58% | 2020-05-21 to 2025-04-24 | Lognormal | Nonparametric | 0.580 | 0.290 | 0.240 | 1.10 | 0.431 | 0.743 | 0.631 |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 12 | 10 | 83% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.180 | 0.180 | 0.140 | 0.220 | 0.0566 | 0.314 | NA |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 12 | 1 | 8% | 2020-05-21 to 2025-04-24 | Nonparametric | Nonparametric | 2.90 | 1.80 | 1.30 | 10.1 | 2.66 | 0.916 | 2.45 |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 1009 | 980 | 789 | 1300 | 155 | 0.154 | 0.351 |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.0850 | 0.0850 | 0.0850 | 0.0850 | NA | NA | NA |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 12 | 2 | 17% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 0.837 | 0.795 | 0.650 | 1.20 | 0.182 | 0.217 | 1.19 |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 12 | 1 | 8% | 2020-05-21 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 1.09 | 0.960 | 0.660 | 1.90 | 0.369 | 0.338 | 1.30 |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 12 | 9 | 75% | 2020-05-21 to 2025-04-24 | | Nonparametric | 91.3 | 81.0 | 53.0 | 140 | 44.4 | 0.486 | 0.990 |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 12 | 10 | 83% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.0795 | 0.0795 | 0.0590 | 0.100 | 0.0290 | 0.365 | NA |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 12 | 3 | 25% | 2020-05-21 to 2025-04-24 | Nonparametric | Nonparametric | 17.4 | 5.20 | 3.70 | 110 | 34.8 | 1.99 | 2.98 |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 12 | 8 | 67% | 2020-05-21 to 2025-04-24 | | Nonparametric | 3.35 | 2.75 | 0.390 | 7.50 | 3.24 | 0.968 | 0.719 |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-24 | Gamma; Normal | Normal | 4.12 | 4.12 | 1.60 | 5.64 | 1.17 | 0.284 | -0.683 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 12 | 8 | 67% | 2020-05-21 to 2025-04-24 | | Nonparametric | 0.438 | 0.165 | 0.120 | 1.30 | 0.576 | 1.32 | 1.98 |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | 2015-12-01 to 2025-04-23 | Nonparametric | Nonparametric | 3.94 | 2.10 | 1.60 | 13.0 | 3.58 | 0.909 | 1.84 |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 981 | 980 | 772 | 1200 | 96.1 | 0.0980 | 0.0844 |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 23 | 21 | 91% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.0430 | 0.0430 | 0.0200 | 0.0660 | 0.0325 | 0.756 | NA |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 24 | 1 | 4% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 3.28 | 3.10 | 0.510 | 11.0 | 2.64 | 0.803 | 1.49 |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.889 | 0.875 | 0.500 | 1.30 | 0.237 | 0.267 | 0.228 |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 25 | 24 | 96% | 2015-12-01 to 2025-04-23 | | Nonparametric | 360 | 360 | 360 | 360 | NA | NA | NA |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 24 | 16 | 67% | 2015-12-01 to 2025-04-23 | Lognormal | Nonparametric | 7.12 | 5.15 | 3.50 | 18.0 | 5.00 | 0.702 | 1.88 |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 24 | 21 | 88% | 2015-12-01 to 2025-04-23 | | Nonparametric | 0.687 | 0.360 | 0.200 | 1.50 | 0.709 | 1.03 | 1.63 |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 24 | 0 | 0% | 2015-12-01 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 4.80 | 4.84 | 3.00 | 5.89 | 0.663 | 0.138 | -0.592 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 24 | 12 | 50% | 2015-12-01 to 2025-04-23 | Gamma | Nonparametric | 2.71 | 2.55 | 0.150 | 8.00 | 1.98 | 0.732 | 1.71 |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 24 | 14 | 58% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 1.12 | 0.725 | 0.440 | 3.80 | 1.05 | 0.939 | 2.28 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 149 | 142 | 93.0 | 280 | 38.9 | 0.262 | 2.17 |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.140 | 0.140 | 0.140 | 0.140 | NA | NA | NA |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 24 | 10 | 42% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 0.754 | 0.635 | 0.280 | 1.80 | 0.411 | 0.546 | 1.16 |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.380 | 0.400 | 0.160 | 0.560 | 0.170 | 0.447 | -0.612 |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 25 | 15 | 60% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 177 | 180 | 110 | 250 | 51.9 | 0.293 | 0.0649 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 23 | 17 | 74% | 2015-12-02 to 2025-04-23 | Lognormal | Nonparametric | 1.19 | 0.715 | 0.310 | 3.90 | 1.34 | 1.13 | 2.35 |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 20.8 | 21.0 | 12.0 | 33.0 | 5.28 | 0.254 | 0.247 |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 24 | 22 | 92% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.865 | 0.865 | 0.530 | 1.20 | 0.474 | 0.548 | NA |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 24 | 7 | 29% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 1.26 | 1.25 | 0.707 | 1.77 | 0.270 | 0.214 | 0.140 |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 24 | 20 | 83% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.41 | 0.720 | 0.190 | 4.00 | 1.76 | 1.25 | 1.79 |

*(Table continues on next page)*

**Table 2:** Summary Statistics, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.170 | 0.170 | 0.170 | 0.170 | NA | NA | NA |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 24 | 15 | 62% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 1.64 | 0.580 | 0.400 | 8.10 | 2.48 | 1.51 | 2.78 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 205 | 132 | 78.0 | 640 | 149 | 0.729 | 1.41 |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.0580 | 0.0580 | 0.0580 | 0.0580 | NA | NA | NA |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.0780 | 0.0780 | 0.0780 | 0.0780 | NA | NA | NA |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 24 | 14 | 58% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.653 | 0.590 | 0.300 | 1.00 | 0.246 | 0.377 | 0.318 |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 0.856 | 0.690 | 0.590 | 1.80 | 0.406 | 0.475 | 1.94 |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | 2015-12-02 to 2025-04-23 | | Nonparametric | 75.5 | 75.5 | 51.0 | 100 | 34.6 | 0.459 | NA |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 23 | 19 | 83% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.400 | 0.255 | 0.160 | 0.930 | 0.363 | 0.907 | 1.71 |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 24 | 3 | 12% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 18.8 | 22.0 | 1.20 | 33.0 | 9.40 | 0.499 | -0.738 |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 24 | 20 | 83% | 2015-12-02 to 2025-04-23 | | Nonparametric | 3.57 | 2.45 | 0.580 | 8.80 | 3.74 | 1.05 | 1.31 |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 24 | 5 | 21% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 1.53 | 1.26 | 0.331 | 3.81 | 0.868 | 0.568 | 1.11 |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 24 | 19 | 79% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.766 | 0.360 | 0.120 | 2.00 | 0.817 | 1.07 | 1.06 |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 23 | 20 | 87% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.319 | 0.280 | 0.0970 | 0.580 | 0.244 | 0.764 | 0.701 |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 24 | 18 | 75% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 0.418 | 0.385 | 0.230 | 0.700 | 0.190 | 0.454 | 0.551 |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-22 | Normal | Normal | 174 | 149 | 47.0 | 393 | 120 | 0.691 | 0.523 |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 24 | 13 | 54% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal | Nonparametric | 0.707 | 0.540 | 0.260 | 2.00 | 0.509 | 0.720 | 1.85 |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.325 | 0.245 | 0.180 | 0.630 | 0.209 | 0.643 | 1.71 |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 25 | 22 | 88% | 2015-12-02 to 2025-04-22 | | Nonparametric | 95.0 | 120 | 15.0 | 150 | 70.9 | 0.746 | -1.39 |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.710 | 0.710 | 0.710 | 0.710 | NA | NA | NA |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 24 | 4 | 17% | 2015-12-02 to 2025-04-22 | Normal | Normal | 12.3 | 14.0 | 4.60 | 20.0 | 4.85 | 0.393 | -0.389 |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.250 | 0.250 | 0.250 | 0.250 | NA | NA | NA |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 24 | 6 | 25% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 1.95 | 1.97 | 0.652 | 4.68 | 1.01 | 0.520 | 1.01 |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | 2015-12-02 to 2025-04-22 | | Nonparametric | 1.47 | 1.40 | 1.00 | 2.00 | 0.503 | 0.343 | 0.586 |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.150 | 0.150 | 0.150 | 0.150 | NA | NA | NA |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 24 | 6 | 25% | 2015-12-02 to 2025-04-23 | Gamma; Normal | Normal | 1.39 | 1.30 | 0.120 | 3.00 | 0.662 | 0.478 | 0.492 |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-23 | Nonparametric | Nonparametric | 297 | 251 | 211 | 480 | 79.2 | 0.267 | 0.874 |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.0240 | 0.0240 | 0.0240 | 0.0240 | NA | NA | NA |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 24 | 6 | 25% | 2015-12-02 to 2025-04-23 | Lognormal | Lognormal | 1.23 | 1.00 | 0.710 | 2.00 | 0.513 | 0.417 | 0.801 |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 23 | 14 | 61% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.836 | 0.890 | 0.470 | 1.00 | 0.168 | 0.201 | -1.33 |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | 2015-12-02 to 2025-04-23 | | Nonparametric | 40.5 | 40.5 | 13.0 | 68.0 | 38.9 | 0.960 | NA |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 24 | 18 | 75% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 2.92 | 2.85 | 2.10 | 3.70 | 0.682 | 0.234 | 0.163 |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.750 | 0.750 | 0.750 | 0.750 | NA | NA | NA |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 24 | 4 | 17% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 1.76 | 1.54 | 0.490 | 3.24 | 0.694 | 0.395 | 0.459 |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 24 | 15 | 62% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 1.23 | 1.00 | 0.120 | 4.00 | 1.23 | 0.998 | 1.57 |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 1.90 | 1.90 | 1.90 | 1.90 | NA | NA | NA |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 25 | 10 | 40% | 2015-12-02 to 2025-04-23 | Normal | Nonparametric | 3.77 | 4.00 | 0.190 | 8.00 | 2.94 | 0.782 | 0.0526 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-04-23 | Lognormal | Lognormal | 168 | 140 | 102 | 290 | 53.6 | 0.319 | 0.717 |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 0.692 | 0.380 | 0.240 | 2.00 | 0.616 | 0.890 | 1.62 |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.332 | 0.350 | 0.190 | 0.520 | 0.125 | 0.378 | 0.685 |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 26 | 19 | 73% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 233 | 160 | 110 | 440 | 134 | 0.577 | 0.746 |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 25 | 8 | 32% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Gamma | 31 | 25.0 | 11.0 | 68.0 | 17.5 | 0.566 | 0.937 |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.290 | 0.290 | 0.290 | 0.290 | NA | NA | NA |

*(Table continues on next page)*

**Table 2:** Summary Statistics, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 25 | 12 | 48% | 2015-12-02 to 2025-04-23 | Normal | Nonparametric | 13.6 | 13.6 | 0.310 | 47.6 | 12.6 | 0.927 | 1.57 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 25 | 13 | 52% | 2015-12-02 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 1.14 | 0.878 | 0.450 | 3.50 | 0.792 | 0.692 | 2.75 |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | 2015-12-02 to 2025-04-23 | | Nonparametric | 0.110 | 0.110 | 0.110 | 0.110 | NA | NA | NA |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 24 | 8 | 33% | 2015-12-02 to 2025-04-22 | Nonparametric | Nonparametric | 4.08 | 1.95 | 0.590 | 27.0 | 6.75 | 1.65 | 2.99 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal | Gamma | 78.9 | 63.5 | 38.0 | 270 | 52.9 | 0.671 | 2.53 |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 24 | 17 | 71% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal | Nonparametric | 0.650 | 0.300 | 0.250 | 2.00 | 0.653 | 1.01 | 1.90 |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.110 | 0.110 | 0.110 | 0.110 | 0 | 0 | NA |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 25 | 16 | 64% | 2015-12-02 to 2025-04-22 | Lognormal | Nonparametric | 143 | 120 | 89.0 | 260 | 68.0 | 0.474 | 1.39 |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 24 | 5 | 21% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal | Gamma | 19.7 | 15.0 | 8.30 | 67.0 | 13.9 | 0.703 | 2.46 |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.550 | 0.550 | 0.550 | 0.550 | NA | NA | NA |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 24 | 4 | 17% | 2015-12-02 to 2025-04-22 | Nonparametric | Nonparametric | 11.2 | 7.05 | 5.10 | 34.0 | 8.51 | 0.761 | 1.78 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 24 | 12 | 50% | 2015-12-02 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 1.02 | 0.852 | 0.178 | 3.28 | 0.843 | 0.829 | 1.93 |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | 2015-12-02 to 2025-04-22 | | Nonparametric | 0.477 | 0.320 | 0.110 | 1.00 | 0.465 | 0.976 | 1.34 |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 12 | 11 | 92% | 2020-05-21 to 2025-04-22 | | Nonparametric | 0.120 | 0.120 | 0.120 | 0.120 | NA | NA | NA |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 12 | 5 | 42% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal | Gamma | 1.61 | 0.560 | 0.190 | 7.30 | 2.59 | 1.61 | 2.35 |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 176 | 190 | 90.6 | 300 | 66.6 | 0.379 | 0.224 |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 12 | 7 | 58% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 0.234 | 0.210 | 0.170 | 0.330 | 0.0688 | 0.294 | 0.703 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 12 | 6 | 50% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 0.373 | 0.275 | 0.220 | 0.830 | 0.231 | 0.619 | 2.13 |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 12 | 3 | 25% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 136 | 130 | 100 | 180 | 25.5 | 0.188 | 0.582 |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Normal | 78.5 | 82.5 | 25.0 | 170 | 42.1 | 0.536 | 0.702 |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 12 | 6 | 50% | 2020-05-21 to 2025-04-22 | Gamma; Lognormal; Normal | Nonparametric | 1.28 | 1.19 | 0.370 | 2.50 | 0.957 | 0.748 | 0.187 |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 2020-05-21 to 2025-04-22 | Normal | Normal | 1.04 | 1.13 | 0 | 2.02 | 0.628 | 0.604 | -0.179 |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 17 | 15 | 88% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.820 | 0.820 | 0.140 | 1.50 | 0.962 | 1.17 | NA |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 42.1 | 18.6 | 0.590 | 220 | 56.8 | 1.35 | 1.99 |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 97.7 | 79.8 | 39.0 | 240 | 50 | 0.512 | 1.58 |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.140 | 0.140 | 0.140 | 0.140 | NA | NA | NA |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 17 | 13 | 76% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.305 | 0.305 | 0.260 | 0.350 | 0.0520 | 0.170 | 0 |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.317 | 0.330 | 0.150 | 0.470 | 0.103 | 0.325 | -0.181 |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 17 | 15 | 88% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.360 | 0.360 | 0.300 | 0.420 | 0.0849 | 0.236 | NA |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 18 | 8 | 44% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 279 | 255 | 160 | 530 | 100 | 0.360 | 1.89 |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.130 | 0.130 | 0.130 | 0.130 | NA | NA | NA |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Normal | 159 | 155 | 46.0 | 240 | 55.4 | 0.348 | -0.222 |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 18 | 6 | 33% | 2017-12-07 to 2025-04-23 | Gamma; Normal | Gamma | 735 | 735 | 2.70 | 1800 | 689 | 0.937 | 0.341 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 18 | 5 | 28% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 1.51 | 1.07 | 0.100 | 5.04 | 1.27 | 0.842 | 1.99 |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 18 | 15 | 83% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.490 | 0.260 | 0.110 | 1.10 | 0.534 | 1.09 | 1.58 |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.120 | 0.120 | 0.120 | 0.120 | NA | NA | NA |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 1.10 | 1.10 | 1.10 | 1.10 | NA | NA | NA |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 18 | 3 | 17% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 51.7 | 26.0 | 1.00 | 210 | 66.2 | 1.28 | 1.70 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 91.1 | 80.0 | 18.0 | 320 | 70.2 | 0.770 | 2.21 |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 17 | 15 | 88% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.155 | 0.155 | 0.150 | 0.160 | 0.00707 | 0.0456 | NA |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.0810 | 0.0810 | 0.0810 | 0.0810 | NA | NA | NA |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 18 | 13 | 72% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.324 | 0.250 | 0.160 | 0.520 | 0.153 | 0.472 | 0.479 |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 17 | 12 | 71% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 18.6 | 2.00 | 0.120 | 52.0 | 24.6 | 1.33 | 0.785 |

*(Table continues on next page)*

**Table 2:** Summary Statistics, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 18 | 12 | 67% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 106 | 103 | 81.0 | 140 | 21.8 | 0.206 | 0.594 |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 2017-12-07 to 2025-04-23 | Nonparametric | Nonparametric | 75.5 | 22.5 | 13.0 | 360 | 102 | 1.35 | 1.90 |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 18 | 5 | 28% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal | Gamma | 41.8 | 18.0 | 6.30 | 120 | 41.3 | 0.990 | 1.21 |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 18 | 9 | 50% | 2017-12-07 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 0.857 | 0.802 | 0.351 | 1.38 | 0.338 | 0.394 | 0.272 |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | 2017-12-07 to 2025-04-23 | | Nonparametric | 0.672 | 0.180 | 0.130 | 2.20 | 1.02 | 1.52 | 1.99 |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 17 | 14 | 82% | 2017-12-06 to 2025-04-23 | | Nonparametric | 0.470 | 0.110 | 0.100 | 1.20 | 0.632 | 1.35 | 1.73 |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 18 | 2 | 11% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal | Gamma | 6.04 | 3.20 | 0.650 | 18.0 | 5.83 | 0.966 | 1.20 |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal | Gamma | 182 | 146 | 51.0 | 450 | 114 | 0.623 | 1.20 |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-23 | | Nonparametric | 0.490 | 0.490 | 0.490 | 0.490 | NA | NA | NA |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 18 | 12 | 67% | 2017-12-06 to 2025-04-23 | Lognormal | Nonparametric | 1.70 | 0.360 | 0.170 | 7.80 | 3.01 | 1.78 | 2.37 |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 17 | 11 | 65% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal | Nonparametric | 1.21 | 0.395 | 0.160 | 3.40 | 1.42 | 1.18 | 1.08 |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 18 | 13 | 72% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal; Normal | Nonparametric | 115 | 89.0 | 67.0 | 230 | 67.4 | 0.584 | 1.75 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 17 | 14 | 82% | 2017-12-06 to 2025-04-23 | | Nonparametric | 6.42 | 0.130 | 0.130 | 19.0 | 10.9 | 1.70 | 1.73 |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 18 | 6 | 33% | 2017-12-06 to 2025-04-23 | Lognormal | Nonparametric | 34.3 | 32.6 | 2.80 | 71.0 | 25.5 | 0.744 | 0.113 |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 18 | 7 | 39% | 2017-12-06 to 2025-04-23 | Gamma; Lognormal; Normal | Gamma | 20.3 | 16.0 | 0.800 | 46.0 | 14.4 | 0.709 | 0.388 |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 18 | 7 | 39% | 2017-12-06 to 2025-04-23 | Nonparametric | Nonparametric | 1.07 | 0.721 | 0 | 4.93 | 1.32 | 1.24 | 2.93 |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | 2017-12-06 to 2025-04-23 | | Nonparametric | 0.775 | 0.175 | 0.150 | 2.60 | 1.22 | 1.57 | 2.0 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 17 | 14 | 82% | 2017-12-06 to 2025-04-23 | | Nonparametric | 0.683 | 0.130 | 0.120 | 1.80 | 0.967 | 1.42 | 1.73 |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 18 | 13 | 72% | 2017-12-06 to 2025-04-22 | Lognormal | Nonparametric | 0.738 | 0.210 | 0.110 | 2.90 | 1.21 | 1.64 | 2.22 |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-06 to 2025-04-22 | Gamma; Lognormal | Gamma | 155 | 127 | 64.0 | 456 | 103 | 0.666 | 1.84 |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-22 | | Nonparametric | 0.0600 | 0.0600 | 0.0600 | 0.0600 | NA | NA | NA |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | 2017-12-06 to 2025-04-22 | Gamma; Lognormal | Nonparametric | 0.459 | 0.350 | 0.240 | 1.10 | 0.295 | 0.644 | 2.21 |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-22 | | Nonparametric | 0.360 | 0.360 | 0.360 | 0.360 | NA | NA | NA |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 18 | 14 | 78% | 2017-12-06 to 2025-04-22 | | Nonparametric | 90.8 | 100 | 22.0 | 140 | 52 | 0.573 | -0.862 |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-22 | | Nonparametric | 0.130 | 0.130 | 0.130 | 0.130 | NA | NA | NA |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 18 | 3 | 17% | 2017-12-06 to 2025-04-22 | Lognormal | Lognormal | 13.3 | 10.0 | 3.90 | 47.5 | 12.2 | 0.919 | 2.21 |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-04-22 | | Nonparametric | 2.73 | 0.290 | 0.290 | 7.60 | 4.22 | 1.55 | 1.73 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 18 | 8 | 44% | 2017-12-06 to 2025-04-22 | Gamma; Lognormal | Gamma | 1.09 | 0.720 | 0.320 | 4.22 | 1.14 | 1.04 | 2.78 |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 18 | 7 | 39% | 2017-12-06 to 2025-04-24 | Gamma; Normal | Normal | 3.83 | 4.30 | 0.650 | 6.60 | 2.04 | 0.533 | -0.390 |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 2017-12-06 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 95 | 81.2 | 65.0 | 190 | 32.6 | 0.343 | 1.71 |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.543 | 0.220 | 0.210 | 1.20 | 0.569 | 1.05 | 1.73 |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.170 | 0.170 | 0.170 | 0.170 | NA | NA | NA |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 18 | 9 | 50% | 2017-12-06 to 2025-04-24 | Normal | Nonparametric | 130 | 130 | 22.0 | 190 | 50.5 | 0.387 | -1.11 |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 2017-12-06 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 30.3 | 30.0 | 12.0 | 57.0 | 9.95 | 0.328 | 0.607 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 17 | 16 | 94% | 2017-12-06 to 2025-04-24 | | Nonparametric | 1.20 | 1.20 | 1.20 | 1.20 | NA | NA | NA |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 18 | 13 | 72% | 2017-12-06 to 2025-04-24 | Gamma; Lognormal | Nonparametric | 14.8 | 6.30 | 1.20 | 53.0 | 21.8 | 1.47 | 2.02 |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 18 | 6 | 33% | 2017-12-06 to 2025-04-24 | Gamma; Lognormal; Normal | Normal | 1.15 | 0.982 | 0.210 | 2.66 | 0.706 | 0.614 | 0.956 |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-04-24 | | Nonparametric | 0.140 | 0.140 | 0.140 | 0.140 | NA | NA | NA |

**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 |
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | 0.897 | 0.021 | 0.140 | 0.289 | 0.913 | 0.047 | 0.184 | 0.043 | 0.120 | >= 0.10 | 0.447 | >= 0.10 | 1.226 | Gamma; Normal | Gamma |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.734 | 0.000 | 0.229 | 0.002 | 0.885 | 0.010 | 0.227 | 0.002 | 0.248 | < 0.01 | 1.229 | < 0.01 | 1.019 | Nonparametric | Nonparametric |
| 01_2_104 | MW-15009 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_106 | MW-15009 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 24 | 20 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.069 | | Nonparametric |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.332 | | Nonparametric |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 24 | 18 | 75% | 0.852 | 0.162 | 0.270 | 0.183 | 0.754 | 0.022 | 0.345 | 0.025 | 0.322 | 0.05 <= p < 0.10 | 0.664 | 0.05 <= p < 0.10 | 0.438 | Gamma; Normal | Nonparametric |
| 01_2_116 | MW-15009 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.828 | 0.001 | 0.172 | 0.063 | 0.954 | 0.331 | 0.124 | 0.446 | 0.125 | >= 0.10 | 0.527 | >= 0.10 | 0.428 | Gamma; Lognormal; Normal | Normal |
| 01_2_118 | MW-15009 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 24 | 6 | 25% | 0.847 | 0.008 | 0.212 | 0.032 | 0.871 | 0.019 | 0.219 | 0.023 | 0.223 | 0.01 <= p < 0.05 | 0.797 | 0.01 <= p < 0.05 | 1.585 | Nonparametric | Nonparametric |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 24 | 16 | 67% | 0.795 | 0.025 | 0.327 | 0.012 | 0.680 | 0.001 | 0.406 | 0.000 | 0.403 | < 0.01 | 1.295 | < 0.01 | 1.068 | Nonparametric | Nonparametric |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_101 | MW-15010 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 25 | 22 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.529 | | Nonparametric |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.852 | 0.002 | 0.215 | 0.004 | 0.949 | 0.233 | 0.138 | 0.251 | 0.153 | >= 0.10 | 0.726 | 0.05 <= p < 0.10 | 0.561 | Gamma; Lognormal | Gamma |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_106 | MW-15010 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 25 | 15 | 60% | 0.596 | 0.000 | 0.414 | 0.000 | 0.746 | 0.003 | 0.332 | 0.003 | 0.380 | < 0.01 | 1.472 | < 0.01 | 0.730 | Nonparametric | Nonparametric |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.783 | | Nonparametric |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | 0.948 | 0.620 | 0.167 | 0.535 | 0.958 | 0.747 | 0.150 | 0.699 | 0.156 | >= 0.10 | 0.270 | >= 0.10 | 0.147 | Gamma; Lognormal; Normal | Nonparametric |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.916 | 0.041 | 0.186 | 0.026 | 0.949 | 0.237 | 0.140 | 0.233 | 0.140 | >= 0.10 | 0.615 | >= 0.10 | 0.396 | Gamma; Lognormal | Gamma |
| 02_2_118 | MW-15010 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 25 | 11 | 44% | 0.853 | 0.024 | 0.205 | 0.112 | 0.880 | 0.057 | 0.196 | 0.151 | 0.203 | >= 0.10 | 0.642 | >= 0.10 | 1.278 | Gamma; Lognormal; Normal | Gamma |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.929 | 0.335 | 0.159 | 0.489 | 0.926 | 0.300 | 0.142 | 0.671 | 0.160 | >= 0.10 | 0.332 | >= 0.10 | 0.529 | Gamma; Lognormal; Normal | Normal |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 25 | 23 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.000 | | Nonparametric |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_101 | MW-15013 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 24 | 19 | 79% | 0.913 | 0.486 | 0.209 | 0.672 | 0.905 | 0.436 | 0.227 | 0.538 | 0.252 | >= 0.10 | 0.318 | >= 0.10 | 1.019 | Gamma; Lognormal; Normal | Nonparametric |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.823 | 0.001 | 0.238 | 0.001 | 0.911 | 0.036 | 0.209 | 0.008 | 0.227 | < 0.01 | 1.195 | < 0.01 | 0.485 | Nonparametric | Nonparametric |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_106 | MW-15013 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 24 | 19 | 79% | 0.949 | 0.730 | 0.238 | 0.463 | 0.841 | 0.167 | 0.325 | 0.091 | 0.275 | >= 0.10 | 0.382 | >= 0.10 | 1.136 | Gamma; Lognormal; Normal | Nonparametric |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.634 | | Nonparametric |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 25 | 17 | 68% | 0.874 | 0.165 | 0.209 | 0.385 | 0.972 | 0.912 | 0.133 | 0.944 | 0.153 | >= 0.10 | 0.257 | >= 0.10 | 0.519 | Gamma; Lognormal; Normal | Nonparametric |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | 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 |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.880 | 0.008 | 0.178 | 0.048 | 0.936 | 0.132 | 0.182 | 0.039 | 0.187 | 0.01 <= p < 0.05 | 0.805 | 0.01 <= p < 0.05 | 0.321 | Lognormal | Lognormal |
| 03_2_118 | MW-15013 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 24 | 5 | 21% | 0.572 | 0.000 | 0.278 | 0.000 | 0.975 | 0.872 | 0.113 | 0.751 | 0.135 | >= 0.10 | 0.423 | >= 0.10 | 1.212 | Gamma; Lognormal | Gamma |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 24 | 11 | 46% | 0.947 | 0.548 | 0.173 | 0.358 | 0.899 | 0.132 | 0.156 | 0.529 | 0.155 | >= 0.10 | 0.373 | >= 0.10 | 0.562 | Gamma; Lognormal; Normal | Normal |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.706 | | Nonparametric |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 9 | 9 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 9 | 5 | 56% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.951 | | Nonparametric |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 9 | 0 | 0% | 0.867 | 0.113 | 0.260 | 0.081 | 0.875 | 0.139 | 0.249 | 0.110 | 0.256 | >= 0.10 | 0.532 | >= 0.10 | 0.080 | Gamma; Lognormal; Normal | Normal |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 9 | 8 | 89% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 9 | 9 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 9 | 8 | 89% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 9 | 8 | 89% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 9 | 1 | 11% | 0.860 | 0.119 | 0.248 | 0.158 | 0.833 | 0.063 | 0.264 | 0.103 | 0.273 | 0.05 <= p < 0.10 | 0.714 | 0.05 <= p < 0.10 | 0.187 | Gamma; Lognormal; Normal | Normal |
| 04_2_116 | MW-15014R | Appendix IV | Lead | ug/L | 9 | 9 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 9 | 0 | 0% | 0.677 | 0.001 | 0.295 | 0.023 | 0.820 | 0.035 | 0.267 | 0.064 | 0.287 | 0.01 <= p < 0.05 | 0.893 | 0.01 <= p < 0.05 | 0.384 | Lognormal | Lognormal |
| 04_2_118 | MW-15014R | Appendix IV | Mercury | ug/L | 9 | 9 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 9 | 2 | 22% | 0.704 | 0.004 | 0.355 | 0.008 | 0.960 | 0.819 | 0.194 | 0.592 | 0.246 | >= 0.10 | 0.423 | >= 0.10 | 0.888 | Gamma; Lognormal | Gamma |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 9 | 3 | 33% | 0.896 | 0.351 | 0.247 | 0.301 | 0.902 | 0.383 | 0.266 | 0.203 | 0.281 | >= 0.10 | 0.432 | >= 0.10 | 0.557 | Gamma; Lognormal; Normal | Normal |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 9 | 8 | 89% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 9 | 9 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 12 | 6 | 50% | 0.701 | 0.006 | 0.305 | 0.084 | 0.940 | 0.659 | 0.193 | 0.687 | 0.234 | >= 0.10 | 0.437 | >= 0.10 | 1.295 | Gamma; Lognormal; Normal | Nonparametric |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 12 | 0 | 0% | 0.922 | 0.307 | 0.191 | 0.260 | 0.959 | 0.771 | 0.131 | 0.826 | 0.118 | >= 0.10 | 0.187 | >= 0.10 | 0.806 | Gamma; Lognormal; Normal | Normal |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.957 | 0.739 | 0.135 | 0.788 | 0.940 | 0.502 | 0.160 | 0.536 | 0.139 | >= 0.10 | 0.301 | >= 0.10 | 0.336 | Gamma; Lognormal; Normal | Normal |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_106 | MW-15015R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 12 | 10 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.090 | | Nonparametric |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 12 | 7 | 58% | 0.936 | 0.638 | 0.255 | 0.352 | 0.974 | 0.901 | 0.212 | 0.650 | 0.243 | >= 0.10 | 0.248 | >= 0.10 | 0.394 | Gamma; Lognormal; Normal | Nonparametric |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 12 | 6 | 50% | 0.958 | 0.804 | 0.195 | 0.675 | 0.744 | 0.018 | 0.342 | 0.027 | 0.297 | >= 0.10 | 0.626 | 0.05 <= p < 0.10 | 0.977 | Gamma; Normal | Nonparametric |
| 05_2_116 | MW-15015R | Appendix IV | Lead | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 0.898 | 0.151 | 0.191 | 0.263 | 0.815 | 0.014 | 0.225 | 0.096 | 0.176 | >= 0.10 | 0.508 | >= 0.10 | 0.841 | Gamma; Lognormal; Normal | Normal |
| 05_2_118 | MW-15015R | Appendix IV | Mercury | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 12 | 0 | 0% | 0.847 | 0.034 | 0.270 | 0.016 | 0.902 | 0.170 | 0.214 | 0.134 | 0.202 | >= 0.10 | 0.508 | >= 0.10 | 1.734 | Gamma; Lognormal | Gamma |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 12 | 4 | 33% | 0.918 | 0.415 | 0.210 | 0.374 | 0.937 | 0.577 | 0.138 | 0.923 | 0.150 | >= 0.10 | 0.246 | >= 0.10 | 0.721 | Gamma; Lognormal; Normal | Normal |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 12 | 7 | 58% | 0.753 | 0.032 | 0.350 | 0.045 | 0.772 | 0.047 | 0.330 | 0.080 | 0.363 | 0.01 <= p < 0.05 | 0.735 | 0.01 <= p < 0.05 | 0.755 | Lognormal | Nonparametric |
| 05_2_131 | MW-15015R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 12 | 10 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.320 | | Nonparametric |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 12 | 1 | 8% | 0.618 | 0.000 | 0.363 | 0.000 | 0.787 | 0.006 | 0.256 | 0.042 | 0.298 | 0.01 <= p < 0.05 | 1.357 | < 0.01 | 0.627 | Nonparametric | Nonparametric |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.962 | 0.805 | 0.138 | 0.761 | 0.968 | 0.883 | 0.154 | 0.601 | 0.157 | >= 0.10 | 0.224 | >= 0.10 | 0.153 | 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 |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 06_2_106 | MW-15016R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 12 | 2 | 17% | 0.861 | 0.079 | 0.207 | 0.263 | 0.901 | 0.227 | 0.166 | 0.607 | 0.174 | >= 0.10 | 0.519 | >= 0.10 | 0.203 | Gamma; Lognormal; Normal | Normal |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 12 | 1 | 8% | 0.867 | 0.072 | 0.236 | 0.089 | 0.938 | 0.494 | 0.192 | 0.309 | 0.212 | >= 0.10 | 0.501 | >= 0.10 | 0.308 | Gamma; Lognormal; Normal | Normal |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 12 | 9 | 75% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.487 | | Nonparametric |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 12 | 10 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.373 | | Nonparametric |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 12 | 3 | 25% | 0.435 | 0.000 | 0.463 | 0.000 | 0.630 | 0.000 | 0.365 | 0.001 | 0.414 | < 0.01 | 2.059 | < 0.01 | 1.036 | Nonparametric | Nonparametric |
| 06_2_118 | MW-15016R | Appendix IV | Mercury | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 12 | 8 | 67% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.325 | | Nonparametric |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 0.925 | 0.332 | 0.208 | 0.163 | 0.837 | 0.025 | 0.270 | 0.016 | 0.251 | 0.01 <= p < 0.05 | 0.594 | >= 0.10 | 0.349 | Gamma; Normal | Normal |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 12 | 8 | 67% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.106 | | Nonparametric |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_101 | MW-15017 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | 0.643 | 0.000 | 0.329 | 0.000 | 0.765 | 0.000 | 0.307 | 0.000 | 0.328 | < 0.01 | 2.772 | < 0.01 | 0.677 | Nonparametric | Nonparametric |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.972 | 0.709 | 0.130 | 0.367 | 0.970 | 0.671 | 0.121 | 0.487 | 0.117 | >= 0.10 | 0.367 | >= 0.10 | 0.099 | Gamma; Lognormal; Normal | Normal |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 23 | 21 | 91% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.844 | | Nonparametric |
| 07_2_106 | MW-15017 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 24 | 1 | 4% | 0.845 | 0.002 | 0.175 | 0.065 | 0.930 | 0.109 | 0.201 | 0.017 | 0.151 | >= 0.10 | 0.604 | >= 0.10 | 0.877 | Gamma; Lognormal; Normal | Normal |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | 0.961 | 0.798 | 0.182 | 0.452 | 0.954 | 0.718 | 0.184 | 0.436 | 0.166 | >= 0.10 | 0.273 | >= 0.10 | 0.280 | Gamma; Lognormal; Normal | Nonparametric |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 25 | 24 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 24 | 16 | 67% | 0.722 | 0.004 | 0.377 | 0.001 | 0.838 | 0.072 | 0.320 | 0.015 | 0.353 | < 0.01 | 0.832 | 0.01 <= p < 0.05 | 0.560 | Lognormal | Nonparametric |
| 07_2_118 | MW-15017 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 24 | 21 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.036 | | Nonparametric |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 24 | 0 | 0% | 0.961 | 0.456 | 0.085 | 0.922 | 0.919 | 0.055 | 0.105 | 0.709 | 0.101 | >= 0.10 | 0.349 | >= 0.10 | 0.148 | Gamma; Lognormal; Normal | Normal |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 24 | 12 | 50% | 0.835 | 0.024 | 0.275 | 0.013 | 0.829 | 0.020 | 0.278 | 0.011 | 0.217 | >= 0.10 | 0.627 | >= 0.10 | 1.017 | Gamma | Nonparametric |
| 07_2_131 | MW-15017 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_101 | MW-15018 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 24 | 14 | 58% | 0.677 | 0.000 | 0.344 | 0.001 | 0.866 | 0.089 | 0.213 | 0.221 | 0.268 | 0.05 <= p < 0.10 | 0.836 | 0.01 <= p < 0.05 | 0.691 | Gamma; Lognormal | Nonparametric |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.766 | 0.000 | 0.262 | 0.000 | 0.881 | 0.009 | 0.205 | 0.010 | 0.221 | < 0.01 | 1.316 | < 0.01 | 0.225 | Nonparametric | Nonparametric |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_106 | MW-15018 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 24 | 10 | 42% | 0.868 | 0.039 | 0.203 | 0.121 | 0.935 | 0.362 | 0.206 | 0.109 | 0.202 | >= 0.10 | 0.470 | >= 0.10 | 0.547 | Gamma; Lognormal; Normal | Normal |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.546 | | Nonparametric |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 25 | 15 | 60% | 0.922 | 0.377 | 0.147 | 0.785 | 0.915 | 0.316 | 0.175 | 0.523 | 0.161 | >= 0.10 | 0.351 | >= 0.10 | 0.306 | Gamma; Lognormal; Normal | Nonparametric |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 23 | 17 | 74% | 0.620 | 0.001 | 0.439 | 0.001 | 0.833 | 0.114 | 0.336 | 0.033 | 0.392 | < 0.01 | 0.864 | 0.01 <= p < 0.05 | 0.832 | Lognormal | Nonparametric |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.977 | 0.836 | 0.079 | 0.961 | 0.971 | 0.693 | 0.113 | 0.588 | 0.096 | >= 0.10 | 0.250 | >= 0.10 | 0.262 | Gamma; Lognormal; Normal | Normal |
| 08_2_118 | MW-15018 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 24 | 22 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.578 | | 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 |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 24 | 7 | 29% | 0.962 | 0.669 | 0.169 | 0.224 | 0.947 | 0.415 | 0.158 | 0.313 | 0.146 | >= 0.10 | 0.322 | >= 0.10 | 0.224 | Gamma; Lognormal; Normal | Normal |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 24 | 20 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.298 | | Nonparametric |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_101 | MW-15019 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 24 | 15 | 62% | 0.554 | 0.000 | 0.362 | 0.001 | 0.823 | 0.037 | 0.240 | 0.143 | 0.260 | >= 0.10 | 1.052 | < 0.01 | 0.976 | Gamma; Lognormal | Nonparametric |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.800 | 0.000 | 0.228 | 0.002 | 0.875 | 0.007 | 0.215 | 0.005 | 0.230 | < 0.01 | 1.410 | < 0.01 | 0.648 | Nonparametric | Nonparametric |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 24 | 14 | 58% | 0.922 | 0.373 | 0.177 | 0.504 | 0.944 | 0.601 | 0.143 | 0.813 | 0.160 | >= 0.10 | 0.290 | >= 0.10 | 0.397 | Gamma; Lognormal; Normal | Nonparametric |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | 0.657 | 0.000 | 0.393 | 0.000 | 0.722 | 0.002 | 0.346 | 0.001 | 0.370 | < 0.01 | 1.487 | < 0.01 | 0.377 | Nonparametric | Nonparametric |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.476 | | Nonparametric |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 23 | 19 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.819 | | Nonparametric |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 24 | 3 | 12% | 0.854 | 0.005 | 0.264 | 0.001 | 0.747 | 0.000 | 0.349 | 0.000 | 0.338 | < 0.01 | 2.146 | < 0.01 | 0.864 | Nonparametric | Nonparametric |
| 09_2_118 | MW-15019 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 24 | 20 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.202 | | Nonparametric |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 24 | 5 | 21% | 0.915 | 0.090 | 0.167 | 0.176 | 0.975 | 0.878 | 0.102 | 0.868 | 0.132 | >= 0.10 | 0.255 | >= 0.10 | 0.584 | Gamma; Lognormal; Normal | Normal |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 24 | 19 | 79% | 0.845 | 0.180 | 0.290 | 0.179 | 0.910 | 0.465 | 0.204 | 0.706 | 0.228 | >= 0.10 | 0.365 | >= 0.10 | 1.243 | Gamma; Lognormal; Normal | Nonparametric |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 23 | 20 | 87% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.899 | | Nonparametric |
| 10_2_101 | MW-15020 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 24 | 18 | 75% | 0.916 | 0.475 | 0.198 | 0.653 | 0.923 | 0.528 | 0.179 | 0.792 | 0.195 | >= 0.10 | 0.305 | >= 0.10 | 0.460 | Gamma; Lognormal; Normal | Nonparametric |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.865 | 0.004 | 0.161 | 0.110 | 0.879 | 0.008 | 0.178 | 0.048 | 0.181 | 0.01 <= p < 0.05 | 0.966 | 0.01 <= p < 0.05 | 0.778 | Normal | Normal |
| 10_2_104 | MW-15020 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_106 | MW-15020 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 24 | 13 | 54% | 0.801 | 0.010 | 0.258 | 0.040 | 0.955 | 0.707 | 0.177 | 0.434 | 0.216 | >= 0.10 | 0.388 | >= 0.10 | 0.618 | Gamma; Lognormal | Nonparametric |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.567 | | Nonparametric |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 25 | 22 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.270 | | Nonparametric |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 24 | 4 | 17% | 0.909 | 0.061 | 0.234 | 0.005 | 0.851 | 0.005 | 0.278 | 0.000 | 0.271 | < 0.01 | 1.130 | < 0.01 | 0.479 | Normal | Normal |
| 10_2_118 | MW-15020 | Appendix IV | Mercury | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 24 | 6 | 25% | 0.922 | 0.141 | 0.112 | 0.801 | 0.944 | 0.335 | 0.149 | 0.365 | 0.120 | >= 0.10 | 0.332 | >= 0.10 | 0.551 | Gamma; Lognormal; Normal | Normal |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.347 | | Nonparametric |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 24 | 6 | 25% | 0.960 | 0.603 | 0.121 | 0.689 | 0.803 | 0.002 | 0.239 | 0.008 | 0.188 | >= 0.10 | 0.556 | >= 0.10 | 0.696 | Gamma; Normal | Normal |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.842 | 0.002 | 0.256 | 0.000 | 0.863 | 0.004 | 0.243 | 0.001 | 0.252 | < 0.01 | 1.588 | < 0.01 | 0.250 | Nonparametric | Nonparametric |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_106 | MW-15021 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 24 | 6 | 25% | 0.779 | 0.001 | 0.245 | 0.005 | 0.845 | 0.007 | 0.202 | 0.051 | 0.211 | 0.01 <= p < 0.05 | 1.303 | < 0.01 | 0.392 | Lognormal | Lognormal |

*(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 |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 23 | 14 | 61% | 0.876 | 0.142 | 0.183 | 0.520 | 0.805 | 0.023 | 0.225 | 0.209 | 0.202 | >= 0.10 | 0.600 | >= 0.10 | 0.235 | Gamma; Lognormal; Normal | Nonparametric |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.170 | | Nonparametric |
| 11_2_116 | MW-15021 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 24 | 18 | 75% | 0.901 | 0.379 | 0.208 | 0.575 | 0.914 | 0.466 | 0.198 | 0.652 | 0.224 | >= 0.10 | 0.334 | >= 0.10 | 0.237 | Gamma; Lognormal; Normal | Nonparametric |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_119 | MW-15021 | Appendix IV | Molybdenum | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 24 | 4 | 17% | 0.955 | 0.457 | 0.167 | 0.151 | 0.938 | 0.219 | 0.159 | 0.206 | 0.132 | >= 0.10 | 0.344 | >= 0.10 | 0.438 | Gamma; Lognormal; Normal | Normal |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 24 | 15 | 62% | 0.831 | 0.046 | 0.241 | 0.139 | 0.893 | 0.215 | 0.277 | 0.046 | 0.220 | >= 0.10 | 0.414 | >= 0.10 | 1.244 | Gamma; Lognormal; Normal | Nonparametric |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 25 | 10 | 40% | 0.884 | 0.054 | 0.189 | 0.157 | 0.819 | 0.007 | 0.282 | 0.002 | 0.257 | 0.01 <= p < 0.05 | 0.907 | 0.01 <= p < 0.05 | 1.415 | Normal | Nonparametric |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.899 | 0.017 | 0.218 | 0.003 | 0.929 | 0.080 | 0.190 | 0.021 | 0.204 | < 0.01 | 0.893 | 0.01 <= p < 0.05 | 0.307 | Lognormal | Lognormal |
| 12_2_104 | MW-15022 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_106 | MW-15022 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | 0.766 | 0.012 | 0.313 | 0.020 | 0.865 | 0.134 | 0.264 | 0.102 | 0.301 | 0.01 <= p < 0.05 | 0.664 | 0.05 <= p < 0.10 | 0.786 | Gamma; Lognormal | Nonparametric |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | 0.943 | 0.685 | 0.243 | 0.429 | 0.967 | 0.855 | 0.214 | 0.636 | 0.207 | >= 0.10 | 0.259 | >= 0.10 | 0.382 | Gamma; Lognormal; Normal | Nonparametric |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 26 | 19 | 73% | 0.845 | 0.110 | 0.278 | 0.105 | 0.874 | 0.203 | 0.232 | 0.302 | 0.264 | >= 0.10 | 0.536 | >= 0.10 | 0.566 | Gamma; Lognormal; Normal | Nonparametric |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 25 | 8 | 32% | 0.885 | 0.039 | 0.222 | 0.026 | 0.957 | 0.583 | 0.138 | 0.524 | 0.173 | >= 0.10 | 0.411 | >= 0.10 | 0.554 | Gamma; Lognormal | Gamma |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 25 | 12 | 48% | 0.837 | 0.019 | 0.181 | 0.293 | 0.785 | 0.005 | 0.321 | 0.001 | 0.277 | 0.01 <= p < 0.05 | 0.910 | 0.01 <= p < 0.05 | 1.739 | Normal | Nonparametric |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 25 | 13 | 52% | 0.653 | 0.000 | 0.266 | 0.019 | 0.887 | 0.109 | 0.200 | 0.203 | 0.232 | 0.05 <= p < 0.10 | 0.921 | 0.01 <= p < 0.05 | 0.503 | Gamma; Lognormal | Nonparametric |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_101 | MW-15023 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 24 | 8 | 33% | 0.547 | 0.000 | 0.376 | 0.000 | 0.867 | 0.024 | 0.245 | 0.011 | 0.324 | < 0.01 | 1.498 | < 0.01 | 1.110 | Nonparametric | Nonparametric |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.690 | 0.000 | 0.262 | 0.000 | 0.876 | 0.007 | 0.173 | 0.061 | 0.177 | 0.05 <= p < 0.10 | 1.291 | < 0.01 | 0.507 | Gamma; Lognormal | Gamma |
| 13_2_104 | MW-15023 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_106 | MW-15023 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 24 | 17 | 71% | 0.707 | 0.004 | 0.317 | 0.032 | 0.808 | 0.049 | 0.279 | 0.103 | 0.300 | 0.05 <= p < 0.10 | 0.791 | 0.01 <= p < 0.05 | 0.813 | Gamma; Lognormal | Nonparametric |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.000 | | Nonparametric |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 25 | 16 | 64% | 0.730 | 0.003 | 0.301 | 0.018 | 0.814 | 0.030 | 0.258 | 0.085 | 0.282 | 0.01 <= p < 0.05 | 0.917 | 0.01 <= p < 0.05 | 0.410 | Lognormal | Nonparametric |
| 13_2_116 | MW-15023 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 24 | 5 | 21% | 0.730 | 0.000 | 0.229 | 0.010 | 0.933 | 0.199 | 0.156 | 0.262 | 0.170 | >= 0.10 | 0.708 | 0.05 <= p < 0.10 | 0.541 | Gamma; Lognormal | Gamma |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 24 | 4 | 17% | 0.689 | 0.000 | 0.315 | 0.000 | 0.792 | 0.001 | 0.244 | 0.003 | 0.275 | < 0.01 | 2.163 | < 0.01 | 0.588 | Nonparametric | Nonparametric |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 24 | 12 | 50% | 0.818 | 0.015 | 0.206 | 0.171 | 0.995 | 1.000 | 0.091 | 0.997 | 0.108 | >= 0.10 | 0.166 | >= 0.10 | 0.793 | Gamma; Lognormal; Normal | Nonparametric |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.104 | | Nonparametric |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 23 | 23 | 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 |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 12 | 11 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 12 | 5 | 42% | 0.631 | 0.001 | 0.350 | 0.010 | 0.900 | 0.330 | 0.201 | 0.535 | 0.287 | >= 0.10 | 0.620 | >= 0.10 | 1.331 | Gamma; Lognormal | Gamma |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.920 | 0.289 | 0.172 | 0.426 | 0.909 | 0.207 | 0.190 | 0.272 | 0.182 | >= 0.10 | 0.528 | >= 0.10 | 0.401 | Gamma; Lognormal; Normal | Normal |
| 14_2_104 | MW-17001R | Appendix IV | Beryllium | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_106 | MW-17001R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 12 | 7 | 58% | 0.900 | 0.409 | 0.236 | 0.473 | 0.915 | 0.501 | 0.203 | 0.712 | 0.228 | >= 0.10 | 0.346 | >= 0.10 | 0.286 | Gamma; Lognormal; Normal | Nonparametric |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 12 | 6 | 50% | 0.705 | 0.007 | 0.307 | 0.079 | 0.818 | 0.085 | 0.276 | 0.162 | 0.303 | >= 0.10 | 0.710 | 0.01 <= p < 0.05 | 0.489 | Gamma; Lognormal; Normal | Nonparametric |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 12 | 3 | 25% | 0.910 | 0.317 | 0.253 | 0.100 | 0.927 | 0.455 | 0.224 | 0.218 | 0.236 | >= 0.10 | 0.464 | >= 0.10 | 0.185 | Gamma; Lognormal; Normal | Normal |
| 14_2_116 | MW-17001R | Appendix IV | Lead | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 0.935 | 0.430 | 0.168 | 0.460 | 0.935 | 0.437 | 0.183 | 0.321 | 0.169 | >= 0.10 | 0.327 | >= 0.10 | 0.593 | Gamma; Lognormal; Normal | Normal |
| 14_2_118 | MW-17001R | Appendix IV | Mercury | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 12 | 6 | 50% | 0.818 | 0.084 | 0.298 | 0.096 | 0.802 | 0.062 | 0.283 | 0.139 | 0.308 | >= 0.10 | 0.701 | 0.05 <= p < 0.10 | 0.889 | Gamma; Lognormal; Normal | Nonparametric |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 0.958 | 0.757 | 0.128 | 0.848 | NA | NA | NA | NA | NA | | NA | | NA | Normal | Normal |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 17 | 15 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.677 | | Nonparametric |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 18 | 0 | 0% | 0.746 | 0.000 | 0.236 | 0.009 | 0.890 | 0.038 | 0.193 | 0.076 | 0.208 | 0.05 <= p < 0.10 | 0.868 | 0.01 <= p < 0.05 | 1.913 | Gamma; Lognormal | Nonparametric |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.851 | 0.009 | 0.212 | 0.032 | 0.969 | 0.773 | 0.143 | 0.431 | 0.172 | >= 0.10 | 0.496 | >= 0.10 | 0.454 | Gamma; Lognormal | Gamma |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 17 | 13 | 76% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.172 | | Nonparametric |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | 0.984 | 0.978 | 0.165 | 0.819 | 0.931 | 0.560 | 0.175 | 0.745 | 0.163 | >= 0.10 | 0.250 | >= 0.10 | 0.369 | Gamma; Lognormal; Normal | Nonparametric |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 17 | 15 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.238 | | Nonparametric |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 18 | 8 | 44% | 0.821 | 0.026 | 0.256 | 0.061 | 0.936 | 0.511 | 0.191 | 0.375 | 0.209 | >= 0.10 | 0.469 | >= 0.10 | 0.316 | Gamma; Lognormal; Normal | Normal |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 0.955 | 0.517 | 0.142 | 0.434 | 0.886 | 0.034 | 0.172 | 0.173 | 0.142 | >= 0.10 | 0.450 | >= 0.10 | 0.426 | Gamma; Lognormal; Normal | Normal |
| 15_2_118 | MW-17002 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 18 | 6 | 33% | 0.875 | 0.075 | 0.194 | 0.245 | 0.805 | 0.011 | 0.285 | 0.008 | 0.261 | 0.05 <= p < 0.10 | 0.847 | 0.01 <= p < 0.05 | 2.532 | Gamma; Normal | Gamma |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 18 | 5 | 28% | 0.797 | 0.006 | 0.254 | 0.022 | 0.895 | 0.116 | 0.230 | 0.058 | 0.184 | >= 0.10 | 0.406 | >= 0.10 | 0.926 | Gamma; Lognormal | Gamma |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 18 | 15 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.163 | | Nonparametric |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 18 | 3 | 17% | 0.718 | 0.000 | 0.323 | 0.000 | 0.966 | 0.789 | 0.124 | 0.776 | 0.172 | >= 0.10 | 0.412 | >= 0.10 | 1.441 | Gamma; Lognormal | Gamma |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.789 | 0.001 | 0.212 | 0.032 | 0.974 | 0.865 | 0.154 | 0.308 | 0.122 | >= 0.10 | 0.310 | >= 0.10 | 0.713 | Gamma; Lognormal | Gamma |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 17 | 15 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.046 | | Nonparametric |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 18 | 13 | 72% | 0.897 | 0.394 | 0.286 | 0.197 | 0.926 | 0.572 | 0.234 | 0.489 | 0.270 | >= 0.10 | 0.360 | >= 0.10 | 0.486 | Gamma; Lognormal; Normal | Nonparametric |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 17 | 12 | 71% | 0.778 | 0.053 | 0.349 | 0.046 | 0.919 | 0.522 | 0.229 | 0.528 | 0.268 | >= 0.10 | 0.415 | >= 0.10 | 2.606 | Gamma; Lognormal; Normal | Nonparametric |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 18 | 12 | 67% | 0.962 | 0.836 | 0.177 | 0.807 | 0.977 | 0.938 | 0.157 | 0.915 | 0.176 | >= 0.10 | 0.186 | >= 0.10 | 0.203 | Gamma; Lognormal; Normal | Nonparametric |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 17 | 17 | 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 |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 0.663 | 0.000 | 0.332 | 0.000 | 0.832 | 0.005 | 0.228 | 0.014 | 0.263 | < 0.01 | 1.763 | < 0.01 | 1.096 | Nonparametric | Nonparametric |
| 16_2_118 | MW-17003 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 18 | 5 | 28% | 0.785 | 0.005 | 0.256 | 0.020 | 0.931 | 0.348 | 0.186 | 0.253 | 0.229 | 0.05 <= p < 0.10 | 0.562 | >= 0.10 | 1.010 | Gamma; Lognormal | Gamma |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 18 | 9 | 50% | 0.953 | 0.725 | 0.224 | 0.215 | 0.950 | 0.687 | 0.150 | 0.810 | 0.175 | >= 0.10 | 0.244 | >= 0.10 | 0.431 | Gamma; Lognormal; Normal | Nonparametric |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.326 | | Nonparametric |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 17 | 14 | 82% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.408 | | Nonparametric |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 18 | 2 | 11% | 0.803 | 0.003 | 0.218 | 0.040 | 0.955 | 0.577 | 0.138 | 0.573 | 0.184 | >= 0.10 | 0.514 | >= 0.10 | 1.006 | Gamma; Lognormal | Gamma |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.863 | 0.014 | 0.223 | 0.018 | 0.973 | 0.844 | 0.129 | 0.599 | 0.167 | >= 0.10 | 0.410 | >= 0.10 | 0.595 | Gamma; Lognormal | Gamma |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 18 | 12 | 67% | 0.587 | 0.000 | 0.399 | 0.003 | 0.844 | 0.142 | 0.319 | 0.056 | 0.362 | 0.01 <= p < 0.05 | 0.828 | 0.01 <= p < 0.05 | 1.396 | Lognormal | Nonparametric |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 17 | 11 | 65% | 0.752 | 0.021 | 0.365 | 0.012 | 0.869 | 0.220 | 0.256 | 0.250 | 0.320 | 0.05 <= p < 0.10 | 0.630 | 0.05 <= p < 0.10 | 1.260 | Gamma; Lognormal | Nonparametric |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 18 | 13 | 72% | 0.795 | 0.074 | 0.273 | 0.255 | 0.884 | 0.327 | 0.215 | 0.624 | 0.247 | >= 0.10 | 0.450 | >= 0.10 | 0.503 | Gamma; Lognormal; Normal | Nonparametric |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 17 | 14 | 82% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 2.878 | | Nonparametric |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 18 | 6 | 33% | 0.847 | 0.034 | 0.273 | 0.014 | 0.870 | 0.066 | 0.269 | 0.016 | 0.274 | 0.01 <= p < 0.05 | 0.793 | 0.01 <= p < 0.05 | 1.041 | Lognormal | Nonparametric |
| 17_2_118 | MW-17004 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 18 | 7 | 39% | 0.953 | 0.676 | 0.162 | 0.576 | 0.862 | 0.061 | 0.165 | 0.548 | 0.176 | >= 0.10 | 0.287 | >= 0.10 | 1.156 | Gamma; Lognormal; Normal | Gamma |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 18 | 7 | 39% | 0.587 | 0.000 | 0.396 | 0.000 | NA | NA | NA | NA | NA | | NA | | NA | Nonparametric | Nonparametric |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.377 | | Nonparametric |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 17 | 14 | 82% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.541 | | Nonparametric |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 18 | 13 | 72% | 0.609 | 0.001 | 0.438 | 0.002 | 0.818 | 0.114 | 0.309 | 0.120 | 0.390 | 0.01 <= p < 0.05 | 0.795 | 0.01 <= p < 0.05 | 1.290 | Lognormal | Nonparametric |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.792 | 0.001 | 0.237 | 0.008 | 0.935 | 0.234 | 0.137 | 0.492 | 0.156 | >= 0.10 | 0.608 | >= 0.10 | 0.563 | Gamma; Lognormal | Gamma |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_106 | MW-17005 | Appendix IV | Cadmium | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | 0.720 | 0.006 | 0.328 | 0.022 | 0.880 | 0.227 | 0.223 | 0.367 | 0.255 | >= 0.10 | 0.592 | >= 0.10 | 0.503 | Gamma; Lognormal | Nonparametric |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 18 | 14 | 78% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.841 | | Nonparametric |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 18 | 3 | 17% | 0.681 | 0.000 | 0.343 | 0.000 | 0.918 | 0.179 | 0.191 | 0.148 | 0.244 | 0.01 <= p < 0.05 | 0.891 | 0.01 <= p < 0.05 | 0.703 | Lognormal | Lognormal |
| 18_2_118 | MW-17005 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 18 | 15 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.886 | | Nonparametric |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 18 | 8 | 44% | 0.611 | 0.000 | 0.344 | 0.001 | 0.905 | 0.247 | 0.211 | 0.236 | 0.269 | 0.05 <= p < 0.10 | 0.807 | 0.01 <= p < 0.05 | 0.706 | Gamma; Lognormal | Gamma |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_101 | MW-17006 | Appendix IV | Antimony | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 18 | 7 | 39% | 0.927 | 0.383 | 0.209 | 0.200 | 0.844 | 0.036 | 0.288 | 0.011 | 0.276 | 0.01 <= p < 0.05 | 0.636 | 0.05 <= p < 0.10 | 0.776 | Gamma; Normal | Normal |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.810 | 0.002 | 0.196 | 0.067 | 0.886 | 0.033 | 0.180 | 0.128 | 0.190 | 0.05 <= p < 0.10 | 0.906 | 0.01 <= p < 0.05 | 0.296 | 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 |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_106 | MW-17006 | Appendix IV | Cadmium | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 18 | 15 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.993 | | Nonparametric |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 18 | 9 | 50% | 0.900 | 0.253 | 0.233 | 0.170 | 0.688 | 0.001 | 0.364 | 0.001 | 0.325 | < 0.01 | 0.890 | 0.01 <= p < 0.05 | 0.652 | Normal | Nonparametric |
| 19_2_116 | MW-17006 | Appendix IV | Lead | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 0.928 | 0.180 | 0.165 | 0.220 | 0.905 | 0.071 | 0.185 | 0.108 | 0.159 | >= 0.10 | 0.574 | >= 0.10 | 0.360 | Gamma; Lognormal; Normal | Normal |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 17 | 16 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 18 | 13 | 72% | 0.719 | 0.015 | 0.351 | 0.043 | 0.943 | 0.689 | 0.203 | 0.712 | 0.215 | >= 0.10 | 0.349 | >= 0.10 | 1.546 | Gamma; Lognormal | Nonparametric |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 18 | 6 | 33% | 0.911 | 0.218 | 0.233 | 0.071 | 0.929 | 0.367 | 0.199 | 0.210 | 0.156 | >= 0.10 | 0.346 | >= 0.10 | 0.707 | Gamma; Lognormal; Normal | Normal |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

**Table 4:** Autocorrelation Tests, Non-Detects Excluded

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Autocorrelation | Box-Ljung p-value | Sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | NA | NA | |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | 0.691 | 0.000 | *** |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.460 | 0.017 | * |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 24 | 20 | 83% | -0.122 | 0.730 | |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | -0.500 | 0.157 | |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 24 | 18 | 75% | -0.312 | 0.334 | |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.564 | 0.003 | ** |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 24 | 6 | 25% | 0.863 | 0.000 | *** |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 24 | 16 | 67% | -0.310 | 0.295 | |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 24 | 23 | 96% | NA | NA | |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 25 | 22 | 88% | -0.031 | 0.932 | |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.748 | 0.000 | *** |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 25 | 15 | 60% | 0.337 | 0.218 | |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | -0.806 | 0.023 | * |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | 0.024 | 0.928 | |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.579 | 0.002 | ** |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 25 | 11 | 44% | 0.652 | 0.007 | ** |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.249 | 0.316 | |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 25 | 23 | 92% | NA | NA | |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 24 | 19 | 79% | -0.096 | 0.776 | |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.574 | 0.003 | ** |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | NA | NA | |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 24 | 19 | 79% | -0.323 | 0.339 | |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | -0.027 | 0.940 | |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 25 | 17 | 68% | 0.346 | 0.242 | |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | NA | NA | |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.586 | 0.002 | ** |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 24 | 5 | 21% | 0.031 | 0.885 | |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 24 | 11 | 46% | 0.215 | 0.387 | |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | -0.099 | 0.787 | |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | NA | NA | |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 9 | 5 | 56% | -0.062 | 0.861 | |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 9 | 0 | 0% | -0.486 | 0.087 | |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 9 | 8 | 89% | NA | NA | |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 9 | 8 | 89% | NA | NA | |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 9 | 8 | 89% | NA | NA | |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 9 | 1 | 11% | 0.016 | 0.956 | |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 9 | 0 | 0% | -0.076 | 0.789 | |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 9 | 2 | 22% | 0.132 | 0.670 | |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 9 | 3 | 33% | -0.251 | 0.436 | |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 9 | 8 | 89% | 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. |
|---|---|---|---|---|---|---|---|---|---|---|
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 12 | 6 | 50% | -0.245 | 0.448 | |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 12 | 0 | 0% | 0.506 | 0.048 | * |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | -0.006 | 0.982 | |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | NA | NA | |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 12 | 10 | 83% | -0.500 | 0.157 | |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 12 | 7 | 58% | 0.307 | 0.364 | |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 12 | 6 | 50% | 0.106 | 0.742 | |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 0.157 | 0.540 | |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 12 | 0 | 0% | 0.214 | 0.402 | |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 12 | 4 | 33% | -0.098 | 0.742 | |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 12 | 7 | 58% | 0.373 | 0.270 | |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 12 | 10 | 83% | -0.500 | 0.157 | |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 12 | 1 | 8% | 0.283 | 0.285 | |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.451 | 0.078 | |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | NA | NA | |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 12 | 2 | 17% | -0.489 | 0.074 | |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 12 | 1 | 8% | 0.331 | 0.211 | |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 12 | 9 | 75% | -0.600 | 0.100 | |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 12 | 10 | 83% | -0.500 | 0.157 | |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 12 | 3 | 25% | -0.143 | 0.614 | |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 12 | 8 | 67% | -0.063 | 0.859 | |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 0.225 | 0.378 | |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 12 | 8 | 67% | -0.122 | 0.729 | |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | 0.599 | 0.002 | ** |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.477 | 0.013 | * |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 23 | 21 | 91% | -0.500 | 0.157 | |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 24 | 1 | 4% | 0.724 | 0.000 | *** |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | 0.156 | 0.570 | |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 25 | 24 | 96% | NA | NA | |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 24 | 16 | 67% | -0.255 | 0.389 | |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 24 | 21 | 88% | -0.658 | 0.071 | |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 24 | 0 | 0% | 0.060 | 0.756 | |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 24 | 12 | 50% | 0.123 | 0.631 | |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 24 | 14 | 58% | -0.174 | 0.526 | |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.573 | 0.003 | ** |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | NA | NA | |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 24 | 10 | 42% | 0.131 | 0.587 | |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | -0.095 | 0.789 | |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 25 | 15 | 60% | 0.171 | 0.531 | |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 23 | 17 | 74% | -0.034 | 0.915 | |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.503 | 0.009 | ** |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 24 | 22 | 92% | -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. |
|---|---|---|---|---|---|---|---|---|---|---|
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 24 | 7 | 29% | -0.223 | 0.316 | |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 24 | 20 | 83% | -0.256 | 0.468 | |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | NA | NA | |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 24 | 15 | 62% | -0.025 | 0.930 | |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.162 | 0.400 | |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | NA | NA | |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 23 | 22 | 96% | NA | NA | |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 24 | 14 | 58% | 0.021 | 0.939 | |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | 0.290 | 0.290 | |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | -0.500 | 0.157 | |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 23 | 19 | 83% | -0.132 | 0.708 | |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 24 | 3 | 12% | 0.353 | 0.083 | |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 24 | 20 | 83% | -0.110 | 0.755 | |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 24 | 5 | 21% | 0.208 | 0.327 | |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 24 | 19 | 79% | 0.381 | 0.259 | |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 23 | 20 | 87% | -0.013 | 0.972 | |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 24 | 18 | 75% | 0.336 | 0.297 | |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.704 | 0.000 | *** |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 24 | 13 | 54% | 0.352 | 0.183 | |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | -0.266 | 0.452 | |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 25 | 22 | 88% | -0.062 | 0.865 | |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | NA | NA | |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 24 | 4 | 17% | 0.837 | 0.000 | *** |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 24 | 23 | 96% | NA | NA | |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 24 | 6 | 25% | 0.358 | 0.100 | |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | -0.561 | 0.124 | |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | NA | NA | |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 24 | 6 | 25% | 0.224 | 0.303 | |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.812 | 0.000 | *** |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | NA | NA | |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 24 | 6 | 25% | 0.567 | 0.009 | ** |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 23 | 14 | 61% | 0.046 | 0.872 | |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | -0.500 | 0.157 | |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 24 | 18 | 75% | -0.384 | 0.234 | |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | NA | NA | |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 24 | 4 | 17% | 0.073 | 0.727 | |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 24 | 15 | 62% | 0.014 | 0.961 | |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | NA | NA | |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 25 | 10 | 40% | 0.705 | 0.003 | ** |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.317 | 0.093 | |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | 0.454 | 0.125 | |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | -0.389 | 0.250 | |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 4:** Autocorrelation Tests, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Autocorrelation | Box-Ljung p-value | Sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 26 | 19 | 73% | 0.595 | 0.054 | |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 25 | 8 | 32% | 0.540 | 0.015 | * |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | NA | NA | |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 25 | 12 | 48% | 0.082 | 0.740 | |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 25 | 13 | 52% | -0.028 | 0.914 | |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | NA | NA | |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 24 | 8 | 33% | 0.335 | 0.142 | |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.499 | 0.009 | ** |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 24 | 17 | 71% | 0.301 | 0.329 | |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | NA | NA | |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 25 | 16 | 64% | 0.462 | 0.104 | |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 24 | 5 | 21% | 0.354 | 0.095 | |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | NA | NA | |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 24 | 4 | 17% | 0.367 | 0.078 | |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 24 | 12 | 50% | 0.269 | 0.293 | |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | -0.057 | 0.877 | |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 12 | 11 | 92% | NA | NA | |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 12 | 5 | 42% | 0.203 | 0.511 | |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.656 | 0.010 | * |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 12 | 7 | 58% | 0.163 | 0.630 | |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 12 | 6 | 50% | -0.314 | 0.330 | |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 12 | 3 | 25% | 0.000 | 0.999 | |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 0.352 | 0.169 | |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 12 | 6 | 50% | -0.253 | 0.433 | |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 0.132 | 0.605 | |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 17 | 15 | 88% | -0.500 | 0.157 | |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 18 | 0 | 0% | 0.462 | 0.033 | * |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | -0.026 | 0.903 | |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | NA | NA | |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 17 | 13 | 76% | -0.250 | 0.480 | |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | -0.350 | 0.257 | |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 17 | 15 | 88% | -0.500 | 0.157 | |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 18 | 8 | 44% | -0.124 | 0.650 | |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | NA | NA | |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 0.362 | 0.095 | |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 18 | 6 | 33% | 0.448 | 0.080 | |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 18 | 5 | 28% | -0.388 | 0.118 | |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 18 | 15 | 83% | -0.254 | 0.487 | |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 17 | 16 | 94% | NA | NA | |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 17 | 16 | 94% | NA | NA | |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 18 | 3 | 17% | 0.686 | 0.003 | ** |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.505 | 0.020 | * |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 4:** Autocorrelation Tests, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Autocorrelation | Box-Ljung p-value | Sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 17 | 15 | 88% | -0.500 | 0.157 | |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | NA | NA | |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 18 | 13 | 72% | 0.284 | 0.401 | |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 17 | 12 | 71% | 0.392 | 0.246 | |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 18 | 12 | 67% | -0.312 | 0.334 | |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 0.696 | 0.001 | ** |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 18 | 5 | 28% | 0.709 | 0.004 | ** |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 18 | 9 | 50% | -0.053 | 0.853 | |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | -0.098 | 0.781 | |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 17 | 14 | 82% | -0.162 | 0.657 | |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 18 | 2 | 11% | 0.582 | 0.011 | * |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.409 | 0.060 | |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | NA | NA | |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 18 | 12 | 67% | -0.287 | 0.374 | |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 17 | 11 | 65% | 0.099 | 0.759 | |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 18 | 13 | 72% | -0.139 | 0.680 | |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 17 | 14 | 82% | -0.167 | 0.648 | |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 18 | 6 | 33% | 0.714 | 0.005 | ** |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 18 | 7 | 39% | 0.643 | 0.015 | * |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 18 | 7 | 39% | -0.190 | 0.473 | |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | -0.076 | 0.831 | |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 17 | 14 | 82% | -0.164 | 0.654 | |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 18 | 13 | 72% | 0.002 | 0.995 | |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.314 | 0.149 | |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | NA | NA | |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | -0.125 | 0.685 | |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | NA | NA | |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 18 | 14 | 78% | -0.343 | 0.332 | |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | NA | NA | |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 18 | 3 | 17% | 0.054 | 0.816 | |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 18 | 15 | 83% | -0.167 | 0.648 | |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 18 | 8 | 44% | -0.139 | 0.612 | |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 18 | 7 | 39% | 0.361 | 0.172 | |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.613 | 0.005 | ** |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 18 | 15 | 83% | -0.172 | 0.638 | |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | NA | NA | |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 18 | 9 | 50% | -0.168 | 0.555 | |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 0.072 | 0.740 | |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 17 | 16 | 94% | NA | NA | |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 18 | 13 | 72% | 0.112 | 0.741 | |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 18 | 6 | 33% | -0.348 | 0.174 | |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 18 | 17 | 94% | NA | NA | |

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 5:** Outlier Counts by Date

| Date | Count |
|---|---|
| 2016-07-13 | 1 |
| 2016-09-29 | 1 |
| 2017-12-06 | 1 |
| 2018-02-20 | 1 |
| 2019-09-26 | 2 |
| 2020-05-05 | 3 |
| 2020-05-07 | 2 |
| 2020-05-21 | 1 |
| 2020-06-15 | 1 |
| 2021-04-21 | 1 |
| 2021-04-22 | 3 |
| 2021-10-22 | 1 |
| 2022-02-01 | 2 |
| 2022-05-03 | 6 |
| 2022-05-05 | 1 |
| 2022-10-20 | 2 |
| 2023-04-11 | 2 |
| 2023-04-12 | 2 |
| 2023-10-04 | 1 |
| 2025-04-22 | 4 |
| 2025-04-24 | 1 |

**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 | Value |
|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 24 | 2022-05-05 | 250 |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 24 | 2020-05-07 | 63.9 |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 24 | 5 | 21% | 19 | 2020-05-07 | 77.2 |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 9 | 5 | 56% | 4 | 2022-02-01 | 1.60 |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 9 | 0 | 0% | 9 | 2023-04-11 | 130 |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 9 | 2 | 22% | 7 | 2022-02-01 | 11.0 |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 12 | 6 | 50% | 6 | 2023-04-11 | 13.0 |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 12 | 1 | 8% | 11 | 2020-06-15 | 10.1 |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 12 | 3 | 25% | 9 | 2023-04-12 | 110 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 12 | 8 | 67% | 4 | 2021-04-21 | 1.30 |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 24 | 1 | 4% | 23 | 2016-09-29 | 11.0 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 24 | 12 | 50% | 12 | 2016-07-13 | 8.00 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 24 | 2021-04-22 | 280 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 23 | 17 | 74% | 6 | 2021-10-22 | 3.90 |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 24 | 15 | 62% | 9 | 2022-05-03 | 8.10 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 25 | 13 | 52% | 12 | 2020-05-05 | 3.50 |

*(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 | Value |
|---|---|---|---|---|---|---|---|---|---|---|
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 24 | 8 | 33% | 16 | 2025-04-22 | 27.0 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 24 | 2025-04-22 | 270 |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 24 | 5 | 21% | 19 | 2025-04-22 | 67.0 |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 12 | 5 | 42% | 7 | 2020-05-21 | 7.30 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 12 | 6 | 50% | 6 | 2023-10-04 | 0.830 |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 18 | 0 | 0% | 18 | 2023-04-12 | 220 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 18 | 5 | 28% | 13 | 2022-10-20 | 5.04 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 18 | 2021-04-22 | 320 |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | 4 | 2018-02-20 | 2.20 |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 17 | 14 | 82% | 3 | 2022-05-03 | 1.20 |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 18 | 12 | 67% | 6 | 2022-05-03 | 7.80 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 17 | 14 | 82% | 3 | 2022-05-03 | 19.0 |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 18 | 7 | 39% | 11 | 2021-04-22 | 4.93 |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | 4 | 2022-05-03 | 2.60 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 17 | 14 | 82% | 3 | 2022-05-03 | 1.80 |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 18 | 13 | 72% | 5 | 2017-12-06 | 2.90 |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 18 | 2020-05-05 | 456 |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | 7 | 2019-09-26 | 1.10 |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 18 | 3 | 17% | 15 | 2020-05-05 | 47.5 |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 18 | 15 | 83% | 3 | 2025-04-22 | 7.60 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 18 | 8 | 44% | 10 | 2022-10-20 | 4.22 |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 18 | 15 | 83% | 3 | 2019-09-26 | 1.20 |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 18 | 13 | 72% | 5 | 2025-04-24 | 53.0 |

**Table 7:** Seasonality Tests

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.514 | 0.310 | 0.250 | 1 | 0 | 0 | 0 | 1 | NA | NA | NA |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 4% | 3 | 10 | 3 | 8 | 24 | 0.121 | 0.018 * | 0.141 | 3 | 9 | 3 | 8 | 23 | 0.130 | 0.023 * | 0.130 |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.148 | 0.271 | 0.085 | 3 | 10 | 3 | 8 | 24 | 0.148 | 0.271 | 0.085 |
| 01_2_104 | MW-15009 | Appendix IV | Beryllium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.449 | 0.264 | 0.212 | NA | NA | NA | NA | NA | NA | NA | NA |
| 01_2_106 | MW-15009 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.095 | 0.771 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 83% | 3 | 10 | 3 | 8 | 24 | 0.266 | 0.083 | 0.149 | 0 | 3 | 1 | 0 | 4 | 0.180 | 0.097 | 0.239 |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 91% | 3 | 10 | 3 | 7 | 23 | 0.033 * | 0.009 ** | 0.042 * | 0 | 1 | 0 | 1 | 2 | 0.317 | NA | NA |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 75% | 3 | 10 | 3 | 8 | 24 | 0.121 | 0.080 | 0.109 | 0 | 5 | 0 | 1 | 6 | 0.766 | 0.980 | 0.905 |
| 01_2_116 | MW-15009 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.514 | 1.000 | 0.909 | NA | NA | NA | NA | NA | NA | NA | NA |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.129 | 0.258 | 0.148 | 3 | 10 | 3 | 8 | 24 | 0.129 | 0.258 | 0.148 |
| 01_2_118 | MW-15009 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | NA | 0.071 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 25% | 3 | 10 | 3 | 8 | 24 | 0.029 * | 0.004 ** | 0.018 * | 3 | 7 | 3 | 5 | 18 | 0.081 | 0.045 * | 0.113 |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 67% | 3 | 10 | 3 | 8 | 24 | 0.341 | 0.008 ** | 0.298 | 1 | 4 | 0 | 3 | 8 | 0.074 | 0.220 | 0.303 |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.681 | 0.985 | 0.876 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.077 | 0.146 | 0.161 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_101 | MW-15010 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | 0.679 | 0.517 | 0.453 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 88% | 3 | 10 | 4 | 8 | 25 | 0.749 | 0.996 | 0.906 | 0 | 2 | 0 | 1 | 3 | 1.000 | 0.861 | 0.798 |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 4 | 8 | 25 | 0.211 | 0.412 | 0.236 | 3 | 10 | 4 | 8 | 25 | 0.211 | 0.412 | 0.236 |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 96% | 3 | 10 | 4 | 7 | 24 | 0.600 | 0.448 | 0.362 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 02_2_106 | MW-15010 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | 0.180 | 0.755 | 0.623 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 60% | 3 | 10 | 4 | 8 | 25 | 0.680 | 0.741 | 0.516 | 1 | 5 | 1 | 3 | 10 | 0.397 | 0.756 | 0.545 |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 83% | 3 | 10 | 4 | 7 | 24 | 0.098 | 0.042 * | 0.132 | 0 | 3 | 0 | 1 | 4 | 0.655 | 0.522 | 0.496 |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 58% | 3 | 10 | 4 | 9 | 26 | 0.251 | 0.253 | 0.258 | 0 | 6 | 1 | 4 | 11 | 0.578 | 0.642 | 0.612 |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | 0.679 | 0.991 | 0.953 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 0% | 3 | 10 | 4 | 8 | 25 | 0.693 | 0.727 | 0.625 | 3 | 10 | 4 | 8 | 25 | 0.693 | 0.727 | 0.625 |
| 02_2_118 | MW-15010 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | NA | 0.059 | 0.059 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 44% | 3 | 10 | 4 | 8 | 25 | 0.085 | 0.014 * | 0.063 | 3 | 6 | 2 | 3 | 14 | 0.144 | 0.173 | 0.119 |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 48% | 3 | 10 | 4 | 8 | 25 | 0.558 | 0.620 | 0.625 | 1 | 5 | 2 | 5 | 13 | 0.745 | 0.649 | 0.659 |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 92% | 3 | 10 | 4 | 8 | 25 | 0.747 | 0.993 | 0.920 | 0 | 1 | 1 | 0 | 2 | NA | NA | NA |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | 0.190 | 0.327 | 0.349 | NA | NA | NA | NA | NA | NA | NA | NA |
| 03_2_101 | MW-15013 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.514 | 0.310 | 0.250 | NA | NA | NA | NA | NA | NA | NA | NA |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 79% | 3 | 10 | 3 | 8 | 24 | 0.736 | 0.966 | 0.924 | 0 | 3 | 0 | 2 | 5 | 0.564 | 0.421 | 0.584 |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.384 | 0.324 | 0.452 | 3 | 10 | 3 | 8 | 24 | 0.384 | 0.324 | 0.452 |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.453 | 0.264 | 0.212 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 03_2_106 | MW-15013 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.095 | 0.771 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 79% | 3 | 10 | 3 | 8 | 24 | 0.742 | 0.661 | 0.517 | 0 | 3 | 1 | 1 | 5 | 0.839 | 0.896 | 0.997 |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 83% | 3 | 10 | 3 | 7 | 23 | 0.041 * | 0.009 ** | 0.057 | 0 | 3 | 0 | 1 | 4 | 0.655 | 0.755 | 0.842 |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 68% | 3 | 10 | 3 | 9 | 25 | 0.148 | 0.113 | 0.153 | 0 | 5 | 0 | 3 | 8 | 0.881 | 0.680 | 0.990 |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.549 | 0.818 | 0.828 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | | Sample Size | | | | | p-Value | | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | | Log ANOVA | | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | | Log ANOVA | |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.670 | 0.540 | | 0.608 | | 3 | 10 | 3 | 8 | 24 | 0.670 | 0.540 | | 0.608 | |
| 03_2_118 | MW-15013 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | NA | 0.071 | | NA | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 21% | 3 | 10 | 3 | 8 | 24 | 0.150 | 0.688 | | 0.321 | | 3 | 8 | 2 | 6 | 19 | 0.249 | 0.786 | | 0.452 | |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 46% | 3 | 10 | 3 | 8 | 24 | 0.133 | 0.197 | | 0.252 | | 1 | 7 | 1 | 4 | 13 | 0.289 | 0.381 | | 0.534 | |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 88% | 3 | 10 | 3 | 8 | 24 | 0.493 | 0.994 | | 0.809 | | 0 | 2 | 1 | 0 | 3 | 0.221 | 0.585 | | 0.619 | |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.087 | 0.152 | | 0.207 | | 0 | 1 | 0 | 0 | 1 | NA | NA | | NA | |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 100% | 1 | 5 | 0 | 3 | 9 | 0.344 | 0.394 | | 0.394 | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 56% | 1 | 5 | 0 | 3 | 9 | 0.690 | 0.838 | | 0.672 | | 1 | 2 | 0 | 1 | 4 | 0.407 | 0.048 | * | 0.144 | |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 0% | 1 | 5 | 0 | 3 | 9 | 0.070 | 0.049 | * | 0.045 | * | 1 | 5 | 0 | 3 | 9 | 0.070 | 0.049 | * | 0.045 | * |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 89% | 1 | 5 | 0 | 3 | 9 | 0.906 | 0.896 | | 0.951 | | 0 | 0 | 0 | 1 | 1 | NA | NA | | NA | |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 100% | 1 | 5 | 0 | 3 | 9 | 0.344 | 0.394 | | 0.394 | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 89% | 1 | 5 | 0 | 3 | 9 | 0.786 | 0.842 | | 0.842 | | 0 | 1 | 0 | 0 | 1 | NA | NA | | NA | |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 89% | 1 | 5 | 0 | 3 | 9 | 0.906 | 0.904 | | 0.930 | | 0 | 0 | 0 | 1 | 1 | NA | NA | | NA | |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 11% | 1 | 5 | 0 | 3 | 9 | 0.058 | 0.001 | ** | 0.001 | *** | 1 | 5 | 0 | 2 | 8 | 0.116 | 0.006 | ** | 0.004 | ** |
| 04_2_116 | MW-15014R | Appendix IV | Lead | ug/L | 100% | 1 | 5 | 0 | 3 | 9 | 0.344 | 0.394 | | 0.394 | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 0% | 1 | 5 | 0 | 3 | 9 | 0.475 | 0.853 | | 0.818 | | 1 | 5 | 0 | 3 | 9 | 0.475 | 0.853 | | 0.818 | |
| 04_2_118 | MW-15014R | Appendix IV | Mercury | ug/L | 100% | 1 | 5 | 0 | 3 | 9 | NA | 0.000 | *** | 0.000 | *** | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 22% | 1 | 5 | 0 | 3 | 9 | 0.298 | 0.047 | * | 0.304 | | 1 | 4 | 0 | 2 | 7 | 0.300 | 0.004 | ** | 0.136 | |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 33% | 1 | 5 | 0 | 3 | 9 | 0.278 | 0.231 | | 0.427 | | 1 | 4 | 0 | 1 | 6 | 0.168 | 0.240 | | 0.328 | |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 89% | 1 | 5 | 0 | 3 | 9 | 0.906 | 0.906 | | 0.919 | | 0 | 0 | 0 | 1 | 1 | NA | NA | | NA | |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 100% | 1 | 5 | 0 | 3 | 9 | 0.344 | 0.394 | | 0.394 | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 50% | 0 | 6 | 1 | 5 | 12 | 0.296 | 0.451 | | 0.293 | | 0 | 4 | 0 | 2 | 6 | 0.165 | 0.376 | | 0.199 | |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.523 | 0.617 | | 0.708 | | 0 | 6 | 1 | 5 | 12 | 0.523 | 0.617 | | 0.708 | |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.292 | 0.289 | | 0.299 | | 0 | 6 | 1 | 5 | 12 | 0.292 | 0.289 | | 0.299 | |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 92% | 0 | 6 | 1 | 5 | 12 | 0.426 | 0.902 | | 0.862 | | 0 | 0 | 0 | 1 | 1 | NA | NA | | NA | |
| 05_2_106 | MW-15015R | Appendix IV | Cadmium | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.192 | 0.867 | | 0.778 | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 83% | 0 | 6 | 1 | 5 | 12 | 0.421 | 0.424 | | 0.329 | | 0 | 2 | 0 | 0 | 2 | NA | NA | | NA | |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 58% | 0 | 6 | 1 | 5 | 12 | 0.675 | 0.865 | | 0.801 | | 0 | 3 | 1 | 1 | 5 | 0.670 | 0.887 | | 0.871 | |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 50% | 0 | 6 | 1 | 5 | 12 | 0.251 | 0.100 | | 0.000 | *** | 0 | 3 | 1 | 2 | 6 | 0.322 | 0.195 | | 0.018 | * |
| 05_2_116 | MW-15015R | Appendix IV | Lead | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.946 | 0.941 | | 0.998 | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.415 | 0.678 | | 0.786 | | 0 | 6 | 1 | 5 | 12 | 0.415 | 0.678 | | 0.786 | |
| 05_2_118 | MW-15015R | Appendix IV | Mercury | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | NA | 0.651 | | 0.651 | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.529 | 0.461 | | 0.646 | | 0 | 6 | 1 | 5 | 12 | 0.529 | 0.461 | | 0.646 | |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 33% | 0 | 6 | 1 | 5 | 12 | 0.198 | 0.137 | | 0.242 | | 0 | 3 | 1 | 4 | 8 | 0.256 | 0.292 | | 0.406 | |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 58% | 0 | 6 | 1 | 5 | 12 | 0.901 | 0.997 | | 0.913 | | 0 | 3 | 0 | 2 | 5 | 0.564 | 0.825 | | 0.760 | |
| 05_2_131 | MW-15015R | Appendix IV | Thallium | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.946 | 1.000 | | 0.940 | | NA | NA | NA | NA | NA | NA | NA | | NA | |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 83% | 0 | 6 | 1 | 5 | 12 | 0.145 | 0.800 | | 0.500 | | 0 | 1 | 1 | 0 | 2 | 0.317 | NA | | NA | |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 8% | 0 | 6 | 1 | 5 | 12 | 0.154 | 0.000 | *** | 0.008 | ** | 0 | 5 | 1 | 5 | 11 | 0.213 | 0.001 | *** | 0.013 | * |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.276 | 0.370 | | 0.302 | | 0 | 6 | 1 | 5 | 12 | 0.276 | 0.370 | | 0.302 | |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 92% | 0 | 6 | 1 | 5 | 12 | 0.426 | 0.898 | 0.869 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 06_2_106 | MW-15016R | Appendix IV | Cadmium | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.192 | 0.867 | 0.778 | NA | NA | NA | NA | NA | NA | NA | NA |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 17% | 0 | 6 | 1 | 5 | 12 | 0.811 | 0.851 | 0.879 | 0 | 5 | 1 | 4 | 10 | 0.911 | 0.929 | 0.949 |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 8% | 0 | 6 | 1 | 5 | 12 | 0.531 | 0.395 | 0.402 | 0 | 5 | 1 | 5 | 11 | 0.449 | 0.293 | 0.332 |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 75% | 0 | 6 | 1 | 5 | 12 | 0.279 | 0.572 | 0.733 | 0 | 2 | 1 | 0 | 3 | 0.221 | 0.204 | 0.287 |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 83% | 0 | 6 | 1 | 5 | 12 | 0.523 | 0.987 | 0.868 | 0 | 1 | 0 | 1 | 2 | 0.317 | NA | NA |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 25% | 0 | 6 | 1 | 5 | 12 | 0.209 | 0.683 | 0.643 | 0 | 5 | 1 | 3 | 9 | 0.298 | 0.703 | 0.591 |
| 06_2_118 | MW-15016R | Appendix IV | Mercury | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | NA | 0.651 | 0.651 | NA | NA | NA | NA | NA | NA | NA | NA |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 67% | 0 | 6 | 1 | 5 | 12 | 0.165 | 0.138 | 0.243 | 0 | 2 | 1 | 1 | 4 | 0.259 | 0.391 | 0.393 |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.697 | 0.666 | 0.559 | 0 | 6 | 1 | 5 | 12 | 0.697 | 0.666 | 0.559 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 67% | 0 | 6 | 1 | 5 | 12 | 0.835 | 0.981 | 0.881 | 0 | 3 | 0 | 1 | 4 | 0.655 | 0.713 | 0.825 |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.552 | 0.907 | 0.715 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_101 | MW-15017 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.514 | 0.310 | 0.250 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 4% | 3 | 10 | 3 | 8 | 24 | 0.033 * | 0.050 | 0.021 * | 3 | 9 | 3 | 8 | 23 | 0.039 * | 0.062 | 0.025 * |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.584 | 0.462 | 0.424 | 3 | 10 | 3 | 8 | 24 | 0.584 | 0.462 | 0.424 |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 91% | 3 | 10 | 3 | 7 | 23 | 0.453 | 0.265 | 0.347 | 0 | 1 | 0 | 1 | 2 | 0.317 | NA | NA |
| 07_2_106 | MW-15017 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.095 | 0.771 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 4% | 3 | 10 | 3 | 8 | 24 | 0.051 | 0.173 | 0.099 | 3 | 10 | 3 | 7 | 23 | 0.061 | 0.198 | 0.128 |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 57% | 3 | 10 | 3 | 7 | 23 | 0.038 * | 0.008 ** | 0.021 * | 0 | 5 | 0 | 5 | 10 | 0.602 | 0.913 | 0.656 |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 96% | 3 | 10 | 3 | 9 | 25 | 0.137 | 0.111 | 0.233 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.788 | 0.821 | 0.918 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 67% | 3 | 10 | 3 | 8 | 24 | 0.979 | 0.857 | 0.750 | 0 | 5 | 0 | 3 | 8 | 0.368 | 0.303 | 0.280 |
| 07_2_118 | MW-15017 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | NA | 0.071 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 88% | 3 | 10 | 3 | 8 | 24 | 0.498 | 0.329 | 0.345 | 0 | 2 | 0 | 1 | 3 | 1.000 | 0.739 | 0.850 |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.271 | 0.408 | 0.483 | 3 | 10 | 3 | 8 | 24 | 0.271 | 0.408 | 0.483 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 50% | 3 | 10 | 3 | 8 | 24 | 0.032 * | 0.006 ** | 0.016 * | 3 | 4 | 3 | 2 | 12 | 0.282 | 0.289 | 0.178 |
| 07_2_131 | MW-15017 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.089 | 0.233 | 0.268 | NA | NA | NA | NA | NA | NA | NA | NA |
| 08_2_101 | MW-15018 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.514 | 0.310 | 0.250 | NA | NA | NA | NA | NA | NA | NA | NA |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 58% | 3 | 10 | 3 | 8 | 24 | 0.349 | 0.900 | 0.706 | 1 | 4 | 1 | 4 | 10 | 0.276 | 0.638 | 0.431 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.341 | 0.972 | 0.910 | 3 | 10 | 3 | 8 | 24 | 0.341 | 0.972 | 0.910 |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.448 | 0.259 | 0.207 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 08_2_106 | MW-15018 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.095 | 0.771 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 42% | 3 | 10 | 3 | 8 | 24 | 0.549 | 0.527 | 0.462 | 1 | 7 | 1 | 5 | 14 | 0.511 | 0.658 | 0.630 |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 83% | 3 | 10 | 3 | 7 | 23 | 0.041 * | 0.009 ** | 0.040 * | 0 | 2 | 0 | 2 | 4 | 0.121 | 0.150 | 0.205 |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 60% | 3 | 10 | 3 | 9 | 25 | 0.148 | 0.106 | 0.120 | 0 | 6 | 0 | 4 | 10 | 0.520 | 0.664 | 0.701 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 74% | 3 | 10 | 3 | 7 | 23 | 0.711 | 0.590 | 0.687 | 0 | 3 | 0 | 3 | 6 | 0.050 * | 0.291 | 0.188 |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.670 | 0.904 | 0.861 | 3 | 10 | 3 | 8 | 24 | 0.670 | 0.904 | 0.861 |
| 08_2_118 | MW-15018 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | NA | 0.071 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 92% | 3 | 10 | 3 | 8 | 24 | 0.494 | 0.326 | 0.269 | 0 | 0 | 0 | 2 | 2 | NA | NA | NA |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 29% | 3 | 10 | 3 | 8 | 24 | 0.496 | 0.375 | 0.449 | 2 | 7 | 2 | 6 | 17 | 0.832 | 0.637 | 0.624 |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 83% | 3 | 10 | 3 | 8 | 24 | 0.267 | 0.219 | 0.282 | 0 | 2 | 1 | 1 | 4 | 0.259 | 0.130 | 0.258 |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.074 | 0.142 | 0.152 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 09_2_101 | MW-15019 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.514 | 0.310 | 0.250 | NA | NA | NA | NA | NA | NA | NA | NA |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 62% | 3 | 10 | 3 | 8 | 24 | 0.783 | 0.624 | 0.810 | 0 | 5 | 0 | 4 | 9 | 0.624 | 0.448 | 0.721 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.065 | 0.079 | 0.065 | 3 | 10 | 3 | 8 | 24 | 0.065 | 0.079 | 0.065 |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.486 | 0.289 | 0.221 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.312 | 0.833 | 0.846 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 58% | 3 | 10 | 3 | 8 | 24 | 0.432 | 0.325 | 0.257 | 0 | 5 | 1 | 4 | 10 | 0.265 | 0.308 | 0.334 |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 57% | 3 | 10 | 3 | 7 | 23 | 0.038 * | 0.008 ** | 0.021 * | 0 | 5 | 0 | 5 | 10 | 0.602 | 0.842 | 0.965 |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 92% | 3 | 10 | 3 | 9 | 25 | 0.130 | 0.104 | 0.135 | 0 | 2 | 0 | 0 | 2 | NA | NA | NA |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 83% | 3 | 10 | 3 | 7 | 23 | 0.673 | 0.999 | 0.903 | 0 | 2 | 0 | 2 | 4 | 1.000 | 0.539 | 0.667 |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 12% | 3 | 10 | 3 | 8 | 24 | 0.105 | 0.165 | 0.301 | 3 | 9 | 3 | 6 | 21 | 0.177 | 0.296 | 0.426 |
| 09_2_118 | MW-15019 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | NA | 0.071 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 83% | 3 | 10 | 3 | 8 | 24 | 0.478 | 0.337 | 0.227 | 0 | 3 | 0 | 1 | 4 | 0.180 | 0.467 | 0.265 |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 21% | 3 | 10 | 3 | 8 | 24 | 0.321 | 0.214 | 0.270 | 3 | 8 | 2 | 6 | 19 | 0.173 | 0.151 | 0.199 |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 79% | 3 | 10 | 3 | 8 | 24 | 0.205 | 0.617 | 0.445 | 0 | 2 | 2 | 1 | 5 | 0.223 | 0.131 | 0.119 |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 87% | 3 | 10 | 3 | 7 | 23 | 0.093 | 0.169 | 0.174 | 0 | 2 | 0 | 1 | 3 | 0.221 | 0.422 | 0.265 |
| 10_2_101 | MW-15020 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.514 | 0.310 | 0.250 | NA | NA | NA | NA | NA | NA | NA | NA |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 75% | 3 | 10 | 3 | 8 | 24 | 0.491 | 0.991 | 0.748 | 0 | 4 | 0 | 2 | 6 | 0.643 | 0.837 | 0.730 |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.055 | 0.083 | 0.029 * | 3 | 10 | 3 | 8 | 24 | 0.055 | 0.083 | 0.029 * |
| 10_2_104 | MW-15020 | Appendix IV | Beryllium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.449 | 0.264 | 0.212 | NA | NA | NA | NA | NA | NA | NA | NA |
| 10_2_106 | MW-15020 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.095 | 0.771 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 54% | 3 | 10 | 3 | 8 | 24 | 0.353 | 0.099 | 0.210 | 1 | 4 | 1 | 5 | 11 | 0.281 | 0.009 ** | 0.103 |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 83% | 3 | 10 | 3 | 7 | 23 | 0.039 * | 0.009 ** | 0.042 * | 0 | 3 | 0 | 1 | 4 | 0.655 | 0.888 | 0.979 |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 88% | 3 | 10 | 3 | 9 | 25 | 0.141 | 0.105 | 0.158 | 0 | 3 | 0 | 0 | 3 | NA | NA | NA |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.486 | 1.000 | 0.910 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 17% | 3 | 10 | 3 | 8 | 24 | 0.102 | 0.129 | 0.238 | 3 | 9 | 3 | 5 | 20 | 0.227 | 0.226 | 0.236 |
| 10_2_118 | MW-15020 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | NA | 0.071 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.494 | 0.327 | 0.293 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 25% | 3 | 10 | 3 | 8 | 24 | 0.138 | 0.326 | 0.113 | 1 | 8 | 1 | 8 | 18 | 0.540 | 0.631 | 0.560 |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 88% | 3 | 10 | 3 | 8 | 24 | 0.219 | 0.578 | 0.369 | 1 | 0 | 2 | 0 | 3 | 0.221 | 0.407 | 0.344 |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.077 | 0.146 | 0.161 | NA | NA | NA | NA | NA | NA | NA | NA |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 96% | 3 | 9 | 4 | 7 | 23 | 0.732 | 0.524 | 0.497 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 25% | 3 | 9 | 4 | 8 | 24 | 0.489 | 0.294 | 0.239 | 3 | 6 | 3 | 6 | 18 | 0.541 | 0.311 | 0.285 |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 0% | 3 | 9 | 4 | 8 | 24 | 0.303 | 0.411 | 0.406 | 3 | 9 | 4 | 8 | 24 | 0.303 | 0.411 | 0.406 |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 96% | 3 | 9 | 4 | 7 | 23 | 0.690 | 0.523 | 0.545 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 11_2_106 | MW-15021 | Appendix IV | Cadmium | ug/L | 100% | 3 | 9 | 4 | 7 | 23 | 0.190 | 0.761 | 0.640 | NA | NA | NA | NA | NA | NA | NA | NA |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 25% | 3 | 9 | 4 | 8 | 24 | 0.342 | 0.164 | 0.212 | 2 | 7 | 3 | 6 | 18 | 0.238 | 0.077 | 0.115 |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 61% | 3 | 9 | 4 | 7 | 23 | 0.138 | 0.046 * | 0.094 | 0 | 4 | 1 | 4 | 9 | 0.264 | 0.411 | 0.448 |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 92% | 3 | 9 | 4 | 9 | 25 | 0.289 | 0.299 | 0.324 | 0 | 2 | 0 | 0 | 2 | NA | NA | NA |
| 11_2_116 | MW-15021 | Appendix IV | Lead | ug/L | 100% | 3 | 9 | 4 | 7 | 23 | 0.676 | 0.981 | 0.938 | NA | NA | NA | NA | NA | NA | NA | NA |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 75% | 3 | 9 | 4 | 8 | 24 | 0.416 | 0.422 | 0.554 | 0 | 3 | 0 | 3 | 6 | 0.658 | 0.801 | 0.775 |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 96% | 3 | 9 | 4 | 7 | 23 | 0.515 | 0.544 | 0.544 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 11_2_119 | MW-15021 | Appendix IV | Molybdenum | ug/L | 100% | 3 | 9 | 4 | 8 | 24 | 0.735 | 0.608 | 0.535 | NA | NA | NA | NA | NA | NA | NA | NA |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 17% | 3 | 9 | 4 | 8 | 24 | 0.310 | 0.289 | 0.327 | 3 | 7 | 3 | 7 | 20 | 0.183 | 0.147 | 0.154 |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 62% | 3 | 9 | 4 | 8 | 24 | 0.397 | 0.361 | 0.417 | 2 | 4 | 2 | 1 | 9 | 0.148 | 0.122 | 0.155 |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 100% | 3 | 9 | 4 | 7 | 23 | 0.201 | 0.348 | 0.361 | NA | NA | NA | NA | NA | NA | NA | NA |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 96% | 3 | 10 | 4 | 7 | 24 | 0.710 | 0.628 | 0.502 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 40% | 3 | 10 | 4 | 8 | 25 | 0.142 | 0.110 | 0.140 | 3 | 6 | 3 | 3 | 15 | 0.390 | 0.414 | 0.342 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 4 | 8 | 25 | 0.259 | 0.139 | 0.195 | 3 | 10 | 4 | 8 | 25 | 0.259 | 0.139 | 0.195 |
| 12_2_104 | MW-15022 | Appendix IV | Beryllium | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | 0.618 | 0.467 | 0.405 | NA | NA | NA | NA | NA | NA | NA | NA |
| 12_2_106 | MW-15022 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | 0.180 | 0.755 | 0.623 | NA | NA | NA | NA | NA | NA | NA | NA |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 68% | 3 | 10 | 4 | 8 | 25 | 0.812 | 0.794 | 0.616 | 1 | 4 | 1 | 2 | 8 | 0.567 | 0.874 | 0.700 |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 79% | 3 | 10 | 4 | 7 | 24 | 0.083 | 0.038 * | 0.092 | 0 | 3 | 0 | 2 | 5 | 0.139 | 0.144 | 0.155 |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 73% | 3 | 10 | 4 | 9 | 26 | 0.263 | 0.271 | 0.315 | 0 | 5 | 1 | 1 | 7 | 0.308 | 0.272 | 0.394 |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | 0.679 | 0.991 | 0.953 | NA | NA | NA | NA | NA | NA | NA | NA |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 32% | 3 | 10 | 4 | 8 | 25 | 0.065 | 0.158 | 0.073 | 0 | 8 | 2 | 7 | 17 | 0.623 | 0.499 | 0.493 |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 96% | 3 | 10 | 4 | 7 | 24 | 0.488 | 0.515 | 0.515 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 48% | 3 | 10 | 4 | 8 | 25 | 0.151 | 0.362 | 0.231 | 3 | 5 | 2 | 3 | 13 | 0.183 | 0.346 | 0.402 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 52% | 3 | 10 | 4 | 8 | 25 | 0.126 | 0.258 | 0.111 | 0 | 8 | 1 | 3 | 12 | 0.576 | 0.579 | 0.398 |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 96% | 3 | 10 | 4 | 8 | 25 | 0.713 | 0.988 | 0.756 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 4 | 7 | 24 | 0.190 | 0.327 | 0.349 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_101 | MW-15023 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.514 | 0.310 | 0.250 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 33% | 3 | 10 | 3 | 8 | 24 | 0.407 | 0.806 | 0.914 | 3 | 6 | 2 | 5 | 16 | 0.728 | 0.760 | 0.990 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 8 | 24 | 0.178 | 0.495 | 0.311 | 3 | 10 | 3 | 8 | 24 | 0.178 | 0.495 | 0.311 |
| 13_2_104 | MW-15023 | Appendix IV | Beryllium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.449 | 0.264 | 0.212 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_106 | MW-15023 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.095 | 0.771 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 71% | 3 | 10 | 3 | 8 | 24 | 0.643 | 0.633 | 0.388 | 0 | 4 | 1 | 2 | 7 | 0.600 | 0.786 | 0.660 |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 91% | 3 | 10 | 3 | 7 | 23 | 0.034 * | 0.009 ** | 0.045 * | 0 | 1 | 0 | 1 | 2 | NA | NA | NA |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 64% | 3 | 10 | 3 | 9 | 25 | 0.145 | 0.106 | 0.121 | 0 | 5 | 0 | 4 | 9 | 0.621 | 0.969 | 0.896 |
| 13_2_116 | MW-15023 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.514 | 1.000 | 0.909 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 21% | 3 | 10 | 3 | 8 | 24 | 0.442 | 0.400 | 0.328 | 2 | 9 | 1 | 7 | 19 | 0.509 | 0.589 | 0.511 |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 96% | 3 | 10 | 3 | 7 | 23 | 0.515 | 0.544 | 0.544 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 17% | 3 | 10 | 3 | 8 | 24 | 0.850 | 0.710 | 0.750 | 3 | 6 | 3 | 8 | 20 | 0.441 | 0.428 | 0.375 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 50% | 3 | 10 | 3 | 8 | 24 | 0.393 | 0.462 | 0.479 | 2 | 6 | 0 | 4 | 12 | 0.376 | 0.483 | 0.606 |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 88% | 3 | 10 | 3 | 8 | 24 | 0.494 | 0.983 | 0.706 | 0 | 1 | 1 | 1 | 3 | 0.368 | NA | NA |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 3 | 7 | 23 | 0.077 | 0.146 | 0.161 | NA | NA | NA | NA | NA | NA | NA | NA |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 92% | 0 | 6 | 1 | 5 | 12 | 0.421 | 0.419 | 0.335 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 42% | 0 | 6 | 1 | 5 | 12 | 0.766 | 0.748 | 0.706 | 0 | 3 | 1 | 3 | 7 | 0.565 | 0.687 | 0.678 |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.567 | 0.543 | 0.495 | 0 | 6 | 1 | 5 | 12 | 0.567 | 0.543 | 0.495 |
| 14_2_104 | MW-17001R | Appendix IV | Beryllium | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.192 | 0.867 | 0.778 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_106 | MW-17001R | Appendix IV | Cadmium | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.192 | 0.867 | 0.778 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 58% | 0 | 6 | 1 | 5 | 12 | 0.377 | 0.837 | 0.695 | 0 | 2 | 1 | 2 | 5 | 0.497 | 0.700 | 0.692 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 50% | 0 | 6 | 1 | 5 | 12 | 0.408 | 0.819 | 0.733 | 0 | 3 | 1 | 2 | 6 | 0.117 | 0.221 | 0.126 |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 25% | 0 | 6 | 1 | 5 | 12 | 0.392 | 0.396 | 0.402 | 0 | 6 | 1 | 2 | 9 | 0.279 | 0.177 | 0.244 |
| 14_2_116 | MW-17001R | Appendix IV | Lead | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.552 | 1.000 | 0.938 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.768 | 0.740 | 0.798 | 0 | 6 | 1 | 5 | 12 | 0.768 | 0.740 | 0.798 |
| 14_2_118 | MW-17001R | Appendix IV | Mercury | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | NA | 0.651 | 0.651 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 50% | 0 | 6 | 1 | 5 | 12 | 0.266 | 0.723 | 0.352 | 0 | 3 | 1 | 2 | 6 | 0.343 | 0.646 | 0.600 |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 0% | 0 | 6 | 1 | 5 | 12 | 0.550 | 0.664 | NA | 0 | 6 | 1 | 5 | 12 | 0.550 | 0.664 | NA |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.552 | 0.994 | 0.887 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 100% | 0 | 6 | 1 | 5 | 12 | 0.552 | 0.907 | 0.715 | NA | NA | NA | NA | NA | NA | NA | NA |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 88% | 2 | 7 | 2 | 6 | 17 | 0.163 | 0.060 | 0.134 | 1 | 1 | 0 | 0 | 2 | 0.317 | NA | NA |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 0% | 2 | 7 | 2 | 7 | 18 | 0.891 | 0.472 | 0.679 | 2 | 7 | 2 | 7 | 18 | 0.891 | 0.472 | 0.679 |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 0% | 2 | 7 | 2 | 7 | 18 | 0.245 | 0.508 | 0.426 | 2 | 7 | 2 | 7 | 18 | 0.245 | 0.508 | 0.426 |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.418 | 0.246 | 0.191 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 76% | 2 | 7 | 2 | 6 | 17 | 0.133 | 0.784 | 0.588 | 0 | 3 | 0 | 1 | 4 | 0.317 | 0.423 | 0.423 |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 61% | 2 | 7 | 2 | 7 | 18 | 0.315 | 0.248 | 0.171 | 0 | 4 | 0 | 3 | 7 | 0.050 * | 0.051 | 0.082 |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 88% | 2 | 7 | 2 | 6 | 17 | 0.024 * | 0.000 *** | 0.003 ** | 0 | 1 | 0 | 1 | 2 | 0.317 | NA | NA |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 44% | 2 | 7 | 2 | 7 | 18 | 0.119 | 0.039 * | 0.056 | 0 | 6 | 0 | 4 | 10 | 1.000 | 0.787 | 0.965 |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.961 | 0.960 | 0.968 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 0% | 2 | 7 | 2 | 7 | 18 | 0.665 | 0.673 | 0.753 | 2 | 7 | 2 | 7 | 18 | 0.665 | 0.673 | 0.753 |
| 15_2_118 | MW-17002 | Appendix IV | Mercury | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | NA | 0.037 * | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 33% | 2 | 7 | 2 | 7 | 18 | 0.516 | 0.297 | 0.432 | 1 | 6 | 0 | 5 | 12 | 0.636 | 0.460 | 0.790 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 28% | 2 | 7 | 2 | 7 | 18 | 0.022 * | 0.043 * | 0.019 * | 0 | 5 | 1 | 7 | 13 | 0.115 | 0.230 | 0.132 |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 83% | 2 | 7 | 2 | 7 | 18 | 0.372 | 0.745 | 0.573 | 1 | 1 | 0 | 1 | 3 | 0.368 | NA | NA |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.080 | 0.312 | 0.387 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.222 | 0.079 | 0.145 | 1 | 0 | 0 | 0 | 1 | NA | NA | NA |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 17% | 2 | 7 | 2 | 7 | 18 | 0.143 | 0.640 | 0.072 | 1 | 7 | 1 | 6 | 15 | 0.438 | 0.866 | 0.155 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 0% | 2 | 7 | 2 | 7 | 18 | 0.805 | 0.959 | 0.937 | 2 | 7 | 2 | 7 | 18 | 0.805 | 0.959 | 0.937 |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 88% | 2 | 7 | 2 | 6 | 17 | 0.412 | 0.242 | 0.186 | 0 | 1 | 0 | 1 | 2 | 0.317 | NA | NA |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.192 | 0.852 | 0.789 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 72% | 2 | 7 | 2 | 7 | 18 | 0.377 | 0.284 | 0.235 | 0 | 3 | 0 | 2 | 5 | 0.248 | 0.547 | 0.534 |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 71% | 2 | 7 | 2 | 6 | 17 | 0.229 | 0.908 | 0.244 | 0 | 3 | 0 | 2 | 5 | 1.000 | 0.963 | 0.785 |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 67% | 2 | 7 | 2 | 7 | 18 | 0.110 | 0.029 * | 0.061 | 0 | 4 | 0 | 2 | 6 | 1.000 | 0.841 | 0.921 |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | 0.920 | 0.797 | 0.918 | NA | NA | NA | NA | NA | NA | NA | NA |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 0% | 2 | 7 | 2 | 7 | 18 | 0.126 | 0.602 | 0.336 | 2 | 7 | 2 | 7 | 18 | 0.126 | 0.602 | 0.336 |
| 16_2_118 | MW-17003 | Appendix IV | Mercury | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | NA | 0.037 * | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 28% | 2 | 7 | 2 | 7 | 18 | 0.311 | 0.784 | 0.494 | 2 | 6 | 0 | 5 | 13 | 0.834 | 0.889 | 0.844 |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 50% | 2 | 7 | 2 | 7 | 18 | 0.015 * | 0.005 ** | 0.019 * | 0 | 4 | 0 | 5 | 9 | 0.142 | 0.058 | 0.060 |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 78% | 2 | 7 | 2 | 7 | 18 | 0.366 | 0.510 | 0.378 | 1 | 2 | 0 | 1 | 4 | 0.259 | 0.008 ** | 0.044 * |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | 0.076 | 0.306 | 0.361 | NA | NA | NA | NA | NA | NA | NA | NA |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 82% | 2 | 7 | 2 | 6 | 17 | 0.440 | 0.139 | 0.317 | 0 | 3 | 0 | 0 | 3 | NA | NA | NA |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 11% | 2 | 7 | 2 | 7 | 18 | 0.263 | 0.501 | 0.315 | 2 | 7 | 1 | 6 | 16 | 0.363 | 0.621 | 0.477 |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 0% | 2 | 7 | 2 | 7 | 18 | 0.905 | 0.849 | 0.979 | 2 | 7 | 2 | 7 | 18 | 0.905 | 0.849 | 0.979 |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | 0.374 | 0.243 | 0.176 | NA | NA | NA | NA | NA | NA | NA | NA |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.113 | 0.790 | 0.624 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 67% | 2 | 7 | 2 | 7 | 18 | 0.562 | 0.824 | 0.724 | 0 | 3 | 1 | 2 | 6 | 0.643 | 0.773 | 0.837 |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 65% | 2 | 7 | 2 | 6 | 17 | 0.026 * | 0.000 *** | 0.013 * | 0 | 4 | 0 | 2 | 6 | 0.165 | 0.433 | 0.391 |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 72% | 2 | 7 | 2 | 7 | 18 | 0.088 | 0.029 * | 0.038 * | 0 | 3 | 0 | 2 | 5 | 1.000 | 0.661 | 0.745 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 82% | 2 | 7 | 2 | 6 | 17 | 0.534 | 0.653 | 0.711 | 0 | 2 | 0 | 1 | 3 | 0.480 | 0.667 | 0.667 |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 33% | 2 | 7 | 2 | 7 | 18 | 0.703 | 0.537 | 0.628 | 0 | 6 | 0 | 6 | 12 | 0.936 | 0.916 | 0.749 |
| 17_2_118 | MW-17004 | Appendix IV | Mercury | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | NA | 0.037 * | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 39% | 2 | 7 | 2 | 7 | 18 | 0.754 | 0.708 | 0.913 | 2 | 6 | 0 | 3 | 11 | 0.121 | 0.145 | 0.401 |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 39% | 2 | 7 | 2 | 7 | 18 | 0.167 | 0.788 | NA | 0 | 7 | 0 | 4 | 11 | 0.850 | 0.531 | NA |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 78% | 2 | 7 | 2 | 7 | 18 | 0.640 | 0.826 | 0.738 | 0 | 3 | 0 | 1 | 4 | 0.180 | 0.658 | 0.618 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 82% | 2 | 7 | 2 | 6 | 17 | 0.079 | 0.193 | 0.296 | 0 | 2 | 0 | 1 | 3 | 1.000 | 0.670 | 0.683 |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | 0.261 | 0.085 | 0.155 | NA | NA | NA | NA | NA | NA | NA | NA |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 72% | 2 | 7 | 2 | 7 | 18 | 0.218 | 0.484 | 0.379 | 1 | 3 | 0 | 1 | 5 | 0.344 | 0.003 ** | 0.082 |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 0% | 2 | 7 | 2 | 7 | 18 | 0.829 | 0.993 | 0.920 | 2 | 7 | 2 | 7 | 18 | 0.829 | 0.993 | 0.920 |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.418 | 0.249 | 0.235 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 18_2_106 | MW-17005 | Appendix IV | Cadmium | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | 0.096 | 0.829 | 0.685 | NA | NA | NA | NA | NA | NA | NA | NA |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 61% | 2 | 7 | 2 | 7 | 18 | 0.545 | 0.321 | 0.264 | 0 | 4 | 0 | 3 | 7 | 0.157 | 0.208 | 0.167 |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.019 * | 0.000 *** | 0.003 ** | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 78% | 2 | 7 | 2 | 7 | 18 | 0.084 | 0.027 * | 0.036 * | 0 | 2 | 0 | 2 | 4 | 1.000 | 0.783 | 0.605 |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 94% | 2 | 7 | 2 | 6 | 17 | 0.500 | 0.999 | 0.801 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 17% | 2 | 7 | 2 | 7 | 18 | 0.405 | 0.984 | 0.852 | 2 | 6 | 1 | 6 | 15 | 0.540 | 0.990 | 0.906 |
| 18_2_118 | MW-17005 | Appendix IV | Mercury | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | NA | 0.037 * | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 83% | 2 | 7 | 2 | 7 | 18 | 0.718 | 0.593 | 0.492 | 0 | 2 | 0 | 1 | 3 | 0.480 | 0.667 | 0.667 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 44% | 2 | 7 | 2 | 7 | 18 | 0.090 | 0.559 | 0.252 | 0 | 6 | 0 | 4 | 10 | 0.522 | 0.284 | 0.361 |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | 0.432 | 0.766 | 0.567 | NA | NA | NA | NA | NA | NA | NA | NA |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 100% | 2 | 7 | 2 | 6 | 17 | 0.063 | 0.116 | 0.144 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_101 | MW-17006 | Appendix IV | Antimony | ug/L | 100% | 2 | 6 | 3 | 6 | 17 | 0.620 | 0.443 | 0.483 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 39% | 2 | 6 | 3 | 7 | 18 | 0.734 | 0.774 | 0.675 | 2 | 4 | 1 | 4 | 11 | 0.943 | 0.945 | 0.901 |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 0% | 2 | 6 | 3 | 7 | 18 | 0.976 | 0.919 | 0.951 | 2 | 6 | 3 | 7 | 18 | 0.976 | 0.919 | 0.951 |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 100% | 2 | 6 | 3 | 6 | 17 | 0.612 | 0.515 | 0.429 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_106 | MW-17006 | Appendix IV | Cadmium | ug/L | 100% | 2 | 6 | 3 | 6 | 17 | 0.196 | 0.797 | 0.688 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 83% | 2 | 6 | 3 | 7 | 18 | 0.741 | 0.611 | 0.513 | 0 | 1 | 0 | 2 | 3 | 0.221 | 0.661 | 0.652 |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 94% | 2 | 6 | 3 | 6 | 17 | 0.071 | 0.002 ** | 0.049 * | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 50% | 2 | 6 | 3 | 7 | 18 | 0.293 | 0.147 | 0.190 | 0 | 5 | 1 | 3 | 9 | 0.817 | 0.967 | 0.955 |
| 19_2_116 | MW-17006 | Appendix IV | Lead | ug/L | 100% | 2 | 6 | 3 | 6 | 17 | 0.721 | 0.982 | 0.966 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 0% | 2 | 6 | 3 | 7 | 18 | 0.340 | 0.675 | 0.629 | 2 | 6 | 3 | 7 | 18 | 0.340 | 0.675 | 0.629 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 94% | 2 | 6 | 3 | 6 | 17 | 0.608 | 0.650 | 0.650 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 72% | 2 | 6 | 3 | 7 | 18 | 0.729 | 0.663 | 0.812 | 0 | 4 | 0 | 1 | 5 | 0.480 | 0.908 | 0.683 |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 33% | 2 | 6 | 3 | 7 | 18 | 0.367 | 0.353 | 0.472 | 0 | 5 | 1 | 6 | 12 | 0.051 | 0.020 * | 0.152 |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 94% | 2 | 6 | 3 | 7 | 18 | 0.747 | 0.954 | 0.782 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 100% | 2 | 6 | 3 | 6 | 17 | 0.197 | 0.348 | 0.388 | NA | NA | NA | NA | NA | NA | NA | NA |

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 8:** Trend Tests: Lognormal MLE and MK

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Type | Method | Slope | p-value | Trend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | Parametric | Lognormal MLE | -0.000427 | 0.071 | ↔ |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | Nonparametric | MK | 0.0273 | 0.000 | ↑ |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | Parametric | Lognormal MLE | 0.000217 | 0.001 | ↑ |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | 0.000412 | 0.000 | ↑ |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | 0.0000951 | 0.171 | ↔ |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 25 | 11 | 44% | Parametric | Lognormal MLE | -0.000990 | 0.000 | ↓ |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | Parametric | Lognormal MLE | 0.000347 | 0.028 | ↔ |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | Nonparametric | MK | 0.0136 | 0.059 | ↔ |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | Parametric | Lognormal MLE | 0.000201 | 0.000 | ↑ |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 24 | 5 | 21% | Parametric | Lognormal MLE | -0.000867 | 0.000 | ↓ |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 24 | 11 | 46% | Parametric | Lognormal MLE | 0.00000317 | 0.979 | ↔ |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 9 | 0 | 0% | Parametric | Lognormal MLE | -0.0000256 | 0.674 | ↔ |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 9 | 1 | 11% | Parametric | Lognormal MLE | -0.0000849 | 0.609 | ↔ |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 9 | 0 | 0% | Parametric | Lognormal MLE | 0.0000263 | 0.929 | ↔ |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 9 | 2 | 22% | Parametric | Lognormal MLE | -0.00127 | 0.007 | ↓ |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 9 | 3 | 33% | Parametric | Lognormal MLE | -0.000309 | 0.669 | ↔ |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 12 | 0 | 0% | Parametric | Lognormal MLE | 0.00101 | 0.000 | ↑ |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | Parametric | Lognormal MLE | -0.000310 | 0.016 | ↔ |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | Parametric | Lognormal MLE | 0.000730 | 0.027 | ↔ |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 12 | 0 | 0% | Parametric | Lognormal MLE | 0.00163 | 0.013 | ↔ |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 12 | 4 | 33% | Parametric | Lognormal MLE | -0.000241 | 0.554 | ↔ |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 12 | 1 | 8% | Nonparametric | MK | 0.000127 | 0.783 | ↔ |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | Parametric | Lognormal MLE | 0.000138 | 0.020 | ↔ |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 12 | 2 | 17% | Parametric | Lognormal MLE | 0.0000757 | 0.409 | ↔ |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 12 | 1 | 8% | Parametric | Lognormal MLE | -0.000297 | 0.008 | ↓ |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | Parametric | Lognormal MLE | 0.000246 | 0.092 | ↔ |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | Nonparametric | MK | -0.00107 | 0.000 | ↓ |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | Parametric | Lognormal MLE | 0.0000378 | 0.022 | ↔ |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 24 | 1 | 4% | Parametric | Lognormal MLE | -0.000676 | 0.000 | ↓ |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 24 | 0 | 0% | Parametric | Lognormal MLE | -0.0000441 | 0.087 | ↔ |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | Nonparametric | MK | -0.00798 | 0.086 | ↔ |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 24 | 10 | 42% | Parametric | Lognormal MLE | -0.000179 | 0.049 | ↔ |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | Parametric | Lognormal MLE | -0.0000623 | 0.183 | ↔ |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 24 | 7 | 29% | Parametric | Lognormal MLE | -0.0000958 | 0.214 | ↔ |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | Nonparametric | MK | 0.0670 | 0.000 | ↑ |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 24 | 5 | 21% | Parametric | Lognormal MLE | 0.000262 | 0.008 | ↑ |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | Parametric | Lognormal MLE | 0.000485 | 0.000 | ↑ |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 24 | 4 | 17% | Parametric | Lognormal MLE | -0.000364 | 0.001 | ↓ |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 24 | 6 | 25% | Parametric | Lognormal MLE | 0.000413 | 0.001 | ↑ |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 24 | 6 | 25% | Parametric | Lognormal MLE | -0.0000958 | 0.467 | ↔ |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | Nonparametric | MK | 0.0490 | 0.001 | ↑ |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 24 | 6 | 25% | Parametric | Lognormal MLE | -0.000198 | 0.001 | ↓ |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 24 | 4 | 17% | Parametric | Lognormal MLE | 0.000113 | 0.302 | ↔ |

*(Table continues on next page)*

**Table 8:** Trend Tests: Lognormal MLE and MK *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Type | Method | Slope | p-value | Trend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | 0.000162 | 0.000 | ↑ |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 25 | 8 | 32% | Parametric | Lognormal MLE | 0.000682 | 0.000 | ↑ |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | Parametric | Lognormal MLE | 0.000255 | 0.001 | ↑ |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 24 | 5 | 21% | Parametric | Lognormal MLE | 0.000324 | 0.002 | ↑ |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 24 | 4 | 17% | Nonparametric | MK | 0.00140 | 0.004 | ↑ |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 12 | 5 | 42% | Parametric | Lognormal MLE | -0.00124 | 0.002 | ↓ |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | Parametric | Lognormal MLE | 0.000616 | 0.000 | ↑ |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 12 | 3 | 25% | Parametric | Lognormal MLE | -0.000153 | 0.159 | ↔ |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | Parametric | Lognormal MLE | 0.000394 | 0.118 | ↔ |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 18 | 0 | 0% | Nonparametric | MK | 0.0349 | 0.007 | ↑ |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | Parametric | Lognormal MLE | -0.000124 | 0.290 | ↔ |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 18 | 8 | 44% | Parametric | Lognormal MLE | -0.0000474 | 0.783 | ↔ |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | Parametric | Lognormal MLE | 0.000283 | 0.002 | ↑ |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 18 | 6 | 33% | Parametric | Lognormal MLE | 0.00331 | 0.000 | ↑ |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 18 | 5 | 28% | Parametric | Lognormal MLE | -0.0000762 | 0.796 | ↔ |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 18 | 3 | 17% | Parametric | Lognormal MLE | 0.00181 | 0.000 | ↑ |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | Parametric | Lognormal MLE | -0.000451 | 0.004 | ↓ |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | Nonparametric | MK | 0.0401 | 0.000 | ↑ |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 18 | 5 | 28% | Parametric | Lognormal MLE | 0.00123 | 0.000 | ↑ |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 18 | 2 | 11% | Parametric | Lognormal MLE | 0.000792 | 0.001 | ↑ |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | Parametric | Lognormal MLE | -0.000289 | 0.043 | ↔ |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 18 | 7 | 39% | Parametric | Lognormal MLE | 0.00119 | 0.003 | ↑ |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | Parametric | Lognormal MLE | -0.000232 | 0.096 | ↔ |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 18 | 3 | 17% | Parametric | Lognormal MLE | -0.0000209 | 0.914 | ↔ |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 18 | 8 | 44% | Parametric | Lognormal MLE | 0.000176 | 0.468 | ↔ |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 18 | 7 | 39% | Parametric | Lognormal MLE | -0.000564 | 0.107 | ↔ |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | Parametric | Lognormal MLE | -0.0000299 | 0.703 | ↔ |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | Parametric | Lognormal MLE | -0.000177 | 0.039 | ↔ |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 18 | 6 | 33% | Parametric | Lognormal MLE | 0.000473 | 0.058 | ↔ |

**Table 9:** 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 |
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | -0.00028992 | 0.039 | ↔ | < 0.0001 | 0.940 | ↔ | 2021-10-20 | 0.422 | ↔ |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | -0.026199 | 0.000 | ↓ | 0.0096005 | 0.001 | ↑ | 2019-07-08 | 0.781 | ↔ |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.045962 | 0.001 | ↑ | -0.041856 | 0.547 | ↔ | 2023-03-19 | 0.544 | ↔ |
| 01_2_104 | MW-15009 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | -0.00037385 | 0.023 | ↔ | < 0.0001 | 0.759 | ↔ | 2021-04-19 | 0.461 | ↔ |
| 01_2_106 | MW-15009 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | < 0.0001 | 1.000 | ↔ | 0.0001562 | 0.211 | ↔ | 2018-12-31 | 0.200 | ↔ |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 24 | 20 | 83% | -0.00043493 | 0.019 | ↔ | < 0.0001 | 0.829 | ↔ | 2021-04-19 | 0.453 | ↔ |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | -0.0088956 | 0.000 | ↓ | < 0.0001 | 0.975 | ↔ | 2021-02-16 | 0.903 | ↔ |

*(Table continues on next page)*

**Table 9:** 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 |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 24 | 18 | 75% | -0.46861 | 0.000 | ↓ | 0.063535 | 0.826 | ↔ | 2022-06-21 | 0.802 | ↔ |
| 01_2_116 | MW-15009 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | -0.00010371 | 0.786 | ↔ | 0.00020707 | 0.604 | ↔ | 2020-10-26 | 0.020 | ↔ |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.016189 | 0.012 | ↔ | -0.0069116 | 0.178 | ↔ | 2020-05-06 | 0.457 | ↔ |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 24 | 6 | 25% | -0.048035 | 0.000 | ↓ | 0.0037006 | 0.077 | ↔ | 2019-06-06 | 0.966 | ↔ |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 24 | 16 | 67% | 0.0024203 | 0.087 | ↔ | -0.0006312 | 0.012 | ↔ | 2017-10-17 | 0.354 | ↔ |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 24 | 23 | 96% | -0.00023671 | 0.400 | ↔ | 0.0001727 | 0.689 | ↔ | 2020-10-27 | 0.049 | ↔ |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | -0.00076342 | 0.002 | ↓ | < 0.0001 | 0.963 | ↔ | 2021-06-08 | 0.611 | ↔ |
| 02_2_101 | MW-15010 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | -0.00030844 | 0.027 | ↔ | < 0.0001 | 0.998 | ↔ | 2021-10-20 | 0.448 | ↔ |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 25 | 22 | 88% | 0.00012802 | 0.363 | ↔ | -0.0022068 | 0.318 | ↔ | 2023-10-04 | 0.187 | ↔ |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.036876 | 0.000 | ↑ | -0.24929 | 0.287 | ↔ | 2024-09-10 | 0.644 | ↔ |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | -0.0003795 | 0.009 | ↓ | < 0.0001 | 0.910 | ↔ | 2021-04-21 | 0.480 | ↔ |
| 02_2_106 | MW-15010 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.0001554 | 0.205 | ↔ | 2019-03-12 | 0.189 | ↔ |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 25 | 15 | 60% | -0.00043514 | 0.014 | ↔ | < 0.0001 | 0.872 | ↔ | 2021-04-20 | 0.483 | ↔ |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | -0.0088842 | 0.000 | ↓ | 0.00012485 | 0.938 | ↔ | 2021-02-28 | 0.907 | ↔ |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | -0.33449 | 0.000 | ↓ | -0.0074943 | 0.976 | ↔ | 2023-01-31 | 0.848 | ↔ |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | -0.00011592 | 0.712 | ↔ | 0.0002372 | 0.602 | ↔ | 2021-03-15 | 0.021 | ↔ |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.024327 | 0.044 | ↔ | -0.0046423 | 0.255 | ↔ | 2018-06-14 | 0.278 | ↔ |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 25 | 11 | 44% | -0.05373 | 0.000 | ↓ | -0.002139 | 0.016 | ↔ | 2017-03-21 | 0.901 | ↔ |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.00030612 | 0.029 | ↔ | -0.001922 | 0.132 | ↔ | 2023-10-03 | 0.275 | ↔ |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 25 | 23 | 92% | -0.00013949 | 0.542 | ↔ | 0.0001737 | 0.708 | ↔ | 2021-04-21 | 0.025 | ↔ |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | -0.00076303 | 0.002 | ↓ | < 0.0001 | 0.890 | ↔ | 2021-10-10 | 0.629 | ↔ |
| 03_2_101 | MW-15013 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | -0.0002897 | 0.039 | ↔ | < 0.0001 | 0.938 | ↔ | 2021-10-20 | 0.422 | ↔ |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 24 | 19 | 79% | < 0.0001 | 0.812 | ↔ | 0.0036493 | 0.488 | ↔ | 2024-09-22 | 0.077 | ↔ |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | -0.019993 | 0.479 | ↔ | 0.043164 | 0.000 | ↑ | 2018-10-29 | 0.617 | ↔ |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | -0.00037503 | 0.022 | ↔ | < 0.0001 | 0.729 | ↔ | 2021-04-20 | 0.461 | ↔ |
| 03_2_106 | MW-15013 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | < 0.0001 | 1.000 | ↔ | 0.0001561 | 0.211 | ↔ | 2018-12-31 | 0.200 | ↔ |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 24 | 19 | 79% | -0.00048833 | 0.010 | ↓ | 0.0011489 | 0.031 | ↔ | 2022-03-26 | 0.406 | ↔ |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | -0.0089027 | 0.000 | ↓ | < 0.0001 | 0.964 | ↔ | 2021-02-10 | 0.903 | ↔ |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 25 | 17 | 68% | -0.4039 | 0.000 | ↓ | 0.042299 | 0.883 | ↔ | 2023-01-14 | 0.853 | ↔ |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | -0.00019804 | 0.522 | ↔ | 0.0020107 | 0.031 | ↔ | 2022-03-21 | 0.370 | ↔ |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.00078781 | 0.832 | ↔ | 0.0096368 | 0.005 | ↑ | 2020-03-28 | 0.569 | ↔ |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 24 | 5 | 21% | 0.0034607 | 0.677 | ↔ | -0.011203 | 0.244 | ↔ | 2020-05-07 | 0.134 | ↔ |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 24 | 11 | 46% | 0.00028053 | 0.566 | ↔ | -0.00016739 | 0.196 | ↔ | 2018-04-17 | 0.104 | ↔ |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | -0.00012395 | 0.645 | ↔ | < 0.0001 | 0.820 | ↔ | 2020-10-28 | 0.015 | ↔ |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | -0.00075689 | 0.003 | ↓ | -0.0001176 | 0.798 | ↔ | 2021-04-21 | 0.611 | ↔ |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 9 | 9 | 100% | 0.00076395 | 0.611 | ↔ | -0.0014633 | 0.272 | ↔ | 2023-09-02 | 0.285 | ↔ |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 9 | 5 | 56% | 0.003325 | 0.260 | ↔ | -0.0040173 | 0.128 | ↔ | 2023-07-04 | 0.509 | ↔ |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 9 | 8 | 89% | 0.0019638 | 0.084 | ↔ | -0.0015474 | 0.101 | ↔ | 2023-06-04 | 0.634 | ↔ |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 9 | 9 | 100% | 0.00076395 | 0.611 | ↔ | -0.0014633 | 0.272 | ↔ | 2023-09-02 | 0.285 | ↔ |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 9 | 8 | 89% | 0.0019638 | 0.091 | ↔ | -0.0011831 | 0.196 | ↔ | 2023-05-14 | 0.574 | ↔ |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 9 | 8 | 89% | 0.0042997 | 0.087 | ↔ | -0.0034225 | 0.101 | ↔ | 2023-06-03 | 0.631 | ↔ |
| 04_2_116 | MW-15014R | Appendix IV | Lead | ug/L | 9 | 9 | 100% | 0.0018093 | 0.611 | ↔ | -0.0034657 | 0.272 | ↔ | 2023-09-02 | 0.285 | ↔ |

*(Table continues on next page)*

**Table 9:** 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 |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 9 | 0 | 0% | 0.11043 | 0.478 | ↔ | -0.07043 | 0.205 | ↔ | 2023-04-10 | 0.379 | ↔ |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 9 | 3 | 33% | -0.029459 | 0.201 | ↔ | 0.00020075 | 0.728 | ↔ | 2022-03-10 | 0.403 | ↔ |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 9 | 8 | 89% | 0.0041343 | 0.087 | ↔ | -0.0032992 | 0.101 | ↔ | 2023-06-03 | 0.631 | ↔ |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 9 | 9 | 100% | 0.0012223 | 0.611 | ↔ | -0.0023413 | 0.272 | ↔ | 2023-09-02 | 0.285 | ↔ |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 12 | 6 | 50% | 0.0058103 | 0.187 | ↔ | -0.0086926 | 0.164 | ↔ | 2023-04-10 | 0.364 | ↔ |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 12 | 0 | 0% | 0.014088 | 0.028 | ↔ | 0.068435 | 0.300 | ↔ | 2024-03-28 | 0.810 | ↔ |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.025252 | 0.603 | ↔ | -0.088242 | 0.050 | ↔ | 2022-10-18 | 0.491 | ↔ |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | 0.00060532 | 0.043 | ↔ | -0.0014524 | 0.247 | ↔ | 2023-10-03 | 0.490 | ↔ |
| 05_2_106 | MW-15015R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | 0.0006144 | 0.036 | ↔ | -0.0013247 | 0.272 | ↔ | 2023-10-03 | 0.496 | ↔ |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 12 | 10 | 83% | 0.00036598 | 0.296 | ↔ | -0.0011566 | 0.465 | ↔ | 2023-10-03 | 0.222 | ↔ |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 12 | 7 | 58% | 0.0013349 | 0.043 | ↔ | -0.003591 | 0.197 | ↔ | 2023-10-03 | 0.519 | ↔ |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 12 | 6 | 50% | 0.016777 | 0.654 | ↔ | 0.24977 | 0.171 | ↔ | 2024-03-27 | 0.463 | ↔ |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 0.049606 | 0.072 | ↔ | -0.019878 | 0.744 | ↔ | 2023-04-11 | 0.434 | ↔ |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 12 | 0 | 0% | 0.38064 | 0.191 | ↔ | -0.094961 | 0.456 | ↔ | 2022-05-03 | 0.466 | ↔ |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 12 | 4 | 33% | 0.00037627 | 0.568 | ↔ | -0.0012161 | 0.455 | ↔ | 2023-04-11 | 0.171 | ↔ |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 12 | 7 | 58% | 0.0010113 | 0.085 | ↔ | -0.003438 | 0.184 | ↔ | 2023-10-03 | 0.497 | ↔ |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 12 | 10 | 83% | 0.0006252 | 0.033 | ↔ | -0.0013301 | 0.268 | ↔ | 2023-10-03 | 0.505 | ↔ |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 12 | 1 | 8% | -0.037052 | 0.014 | ↔ | 0.00062631 | 0.562 | ↔ | 2020-11-16 | 0.761 | ↔ |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.40322 | 0.007 | ↑ | -0.30759 | 0.091 | ↔ | 2023-02-20 | 0.728 | ↔ |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 12 | 11 | 92% | 0.00060559 | 0.042 | ↔ | -0.0014322 | 0.249 | ↔ | 2023-10-03 | 0.491 | ↔ |
| 06_2_106 | MW-15016R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | 0.00061338 | 0.036 | ↔ | -0.0013223 | 0.272 | ↔ | 2023-10-03 | 0.496 | ↔ |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 12 | 1 | 8% | -0.012 | 0.725 | ↔ | < 0.0001 | 0.906 | ↔ | 2020-07-22 | 0.211 | ↔ |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 12 | 10 | 83% | 0.0013774 | 0.060 | ↔ | -0.0033989 | 0.274 | ↔ | 2023-10-03 | 0.451 | ↔ |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 12 | 3 | 25% | 0.043116 | 0.254 | ↔ | -0.065798 | 0.222 | ↔ | 2023-04-11 | 0.296 | ↔ |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 12 | 8 | 67% | -0.026268 | 0.856 | ↔ | 0.00034195 | 0.826 | ↔ | 2020-10-27 | 0.308 | ↔ |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 0.0015261 | 0.114 | ↔ | -0.0032872 | 0.429 | ↔ | 2024-03-16 | 0.361 | ↔ |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 12 | 8 | 67% | 0.00074983 | 0.252 | ↔ | -0.0032071 | 0.284 | ↔ | 2023-10-03 | 0.368 | ↔ |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | 0.0005487 | 0.278 | ↔ | -0.0018166 | 0.426 | ↔ | 2023-10-03 | 0.249 | ↔ |
| 07_2_101 | MW-15017 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | -0.0002898 | 0.020 | ↔ | < 0.0001 | 0.950 | ↔ | 2021-10-22 | 0.422 | ↔ |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | -0.012224 | 0.002 | ↓ | < 0.0001 | 0.991 | ↔ | 2017-12-10 | 0.750 | ↔ |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.065809 | 0.008 | ↑ | -0.17702 | 0.379 | ↔ | 2023-04-12 | 0.330 | ↔ |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 23 | 21 | 91% | -0.0004052 | 0.022 | ↔ | < 0.0001 | 0.914 | ↔ | 2020-12-04 | 0.450 | ↔ |
| 07_2_106 | MW-15017 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | < 0.0001 | 1.000 | ↔ | 0.00015616 | 0.212 | ↔ | 2018-12-31 | 0.200 | ↔ |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 24 | 1 | 4% | -0.0026496 | 0.001 | ↓ | 0.00028073 | 0.850 | ↔ | 2021-09-04 | 0.622 | ↔ |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | -0.0085346 | 0.000 | ↓ | -0.00027868 | 0.860 | ↔ | 2021-03-13 | 0.912 | ↔ |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 25 | 24 | 96% | -0.46575 | 0.000 | ↓ | 0.33532 | 0.378 | ↔ | 2022-12-13 | 0.792 | ↔ |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | 0.00027824 | 0.102 | ↔ | -0.0023871 | 0.338 | ↔ | 2023-10-02 | 0.210 | ↔ |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 24 | 16 | 67% | -0.00012867 | 0.877 | ↔ | -0.0093741 | 0.214 | ↔ | 2023-09-26 | 0.187 | ↔ |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 24 | 21 | 88% | -0.0018118 | 0.033 | ↔ | 0.00012236 | 0.921 | ↔ | 2021-04-20 | 0.409 | ↔ |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 24 | 0 | 0% | -0.00036691 | 0.130 | ↔ | 0.00039171 | 0.569 | ↔ | 2022-05-04 | 0.169 | ↔ |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 24 | 12 | 50% | -0.0024724 | 0.005 | ↓ | 0.00020398 | 0.763 | ↔ | 2019-11-01 | 0.530 | ↔ |
| 07_2_131 | MW-15017 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | -0.00062431 | 0.032 | ↔ | -0.00027702 | 0.493 | ↔ | 2020-10-29 | 0.528 | ↔ |

*(Table continues on next page)*

**Table 9:** 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 |
| 08_2_101 | MW-15018 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | -0.00028985 | 0.038 | ↔ | < 0.0001 | 0.940 | ↔ | 2021-10-21 | 0.422 | ↔ |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 24 | 14 | 58% | 0.00016233 | 0.435 | ↔ | -0.0015274 | 0.408 | ↔ | 2023-04-13 | 0.109 | ↔ |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.02467 | 0.130 | ↔ | -0.062578 | 0.017 | ↔ | 2021-04-21 | 0.341 | ↔ |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | -0.00036967 | 0.027 | ↔ | < 0.0001 | 0.851 | ↔ | 2021-04-21 | 0.460 | ↔ |
| 08_2_106 | MW-15018 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | < 0.0001 | 1.000 | ↔ | 0.00015632 | 0.211 | ↔ | 2019-01-02 | 0.200 | ↔ |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 24 | 10 | 42% | < 0.0001 | 1.000 | ↔ | -0.00011783 | 0.206 | ↔ | 2017-03-09 | 0.122 | ↔ |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | -0.0088493 | 0.000 | ↓ | < 0.0001 | 0.997 | ↔ | 2021-02-20 | 0.904 | ↔ |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 25 | 15 | 60% | -0.40876 | 0.000 | ↓ | 0.1199 | 0.713 | ↔ | 2023-01-23 | 0.818 | ↔ |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 23 | 17 | 74% | 0.00033707 | 0.102 | ↔ | -0.0024703 | 0.412 | ↔ | 2023-10-06 | 0.180 | ↔ |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | 0.0082351 | 0.354 | ↔ | -0.0038206 | 0.018 | ↔ | 2018-04-17 | 0.276 | ↔ |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 24 | 22 | 92% | -0.0017466 | 0.034 | ↔ | < 0.0001 | 0.999 | ↔ | 2021-04-21 | 0.419 | ↔ |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 24 | 7 | 29% | 0.00091691 | 0.122 | ↔ | -0.00026822 | 0.012 | ↔ | 2017-11-07 | 0.341 | ↔ |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 24 | 20 | 83% | -0.00052275 | 0.263 | ↔ | 0.00018833 | 0.720 | ↔ | 2020-05-06 | 0.100 | ↔ |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | -0.00076285 | 0.003 | ↓ | < 0.0001 | 0.842 | ↔ | 2021-04-29 | 0.611 | ↔ |
| 09_2_101 | MW-15019 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | -0.0002899 | 0.038 | ↔ | < 0.0001 | 0.940 | ↔ | 2021-10-21 | 0.422 | ↔ |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 24 | 15 | 62% | 0.00092351 | 0.091 | ↔ | -0.0024216 | 0.124 | ↔ | 2022-05-02 | 0.223 | ↔ |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.11627 | 0.001 | ↑ | -0.13148 | 0.622 | ↔ | 2023-06-02 | 0.504 | ↔ |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | -0.00018232 | 0.028 | ↔ | -0.00076771 | 0.512 | ↔ | 2023-10-05 | 0.441 | ↔ |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 23 | 22 | 96% | < 0.0001 | 1.000 | ↔ | 0.00013121 | 0.247 | ↔ | 2018-08-27 | 0.155 | ↔ |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 24 | 14 | 58% | -0.00010726 | 0.089 | ↔ | -0.00046386 | 0.612 | ↔ | 2023-10-05 | 0.300 | ↔ |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | -0.0087299 | 0.000 | ↓ | -0.00040416 | 0.803 | ↔ | 2021-01-17 | 0.907 | ↔ |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | -0.47273 | 0.000 | ↓ | 0.048056 | 0.865 | ↔ | 2022-06-03 | 0.807 | ↔ |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 23 | 19 | 83% | 0.00018621 | 0.242 | ↔ | -0.0026307 | 0.269 | ↔ | 2023-10-07 | 0.228 | ↔ |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 24 | 3 | 12% | 0.036807 | 0.774 | ↔ | -0.0068806 | 0.000 | ↓ | 2016-02-26 | 0.563 | ↔ |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 24 | 20 | 83% | -0.00026204 | 0.631 | ↔ | -0.0076218 | 0.126 | ↔ | 2023-10-02 | 0.290 | ↔ |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 24 | 5 | 21% | 0.0004246 | 0.027 | ↔ | -0.00096177 | 0.723 | ↔ | 2023-10-03 | 0.240 | ↔ |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 24 | 19 | 79% | < 0.0001 | 0.976 | ↔ | -0.0016119 | 0.481 | ↔ | 2023-10-07 | 0.126 | ↔ |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 23 | 20 | 87% | < 0.0001 | 1.000 | ↔ | -0.00062262 | 0.002 | ↓ | 2017-10-20 | 0.576 | ↔ |
| 10_2_101 | MW-15020 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | -0.00029026 | 0.038 | ↔ | < 0.0001 | 0.941 | ↔ | 2021-10-19 | 0.422 | ↔ |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 24 | 18 | 75% | -0.00012547 | 0.731 | ↔ | < 0.0001 | 0.856 | ↔ | 2020-05-05 | 0.009 | ↔ |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.18592 | 0.000 | ↑ | -0.10922 | 0.016 | ↔ | 2020-10-27 | 0.720 | ↔ |
| 10_2_104 | MW-15020 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | -0.00037351 | 0.023 | ↔ | < 0.0001 | 0.757 | ↔ | 2021-04-21 | 0.461 | ↔ |
| 10_2_106 | MW-15020 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | < 0.0001 | 1.000 | ↔ | 0.00015661 | 0.210 | ↔ | 2019-01-04 | 0.201 | ↔ |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 24 | 13 | 54% | -0.0011607 | 0.557 | ↔ | -0.00020636 | 0.011 | ↔ | 2016-08-14 | 0.442 | ↔ |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | -0.0087919 | 0.000 | ↓ | < 0.0001 | 0.966 | ↔ | 2021-03-02 | 0.905 | ↔ |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 25 | 22 | 88% | -0.47246 | 0.000 | ↓ | 0.087581 | 0.761 | ↔ | 2022-06-29 | 0.801 | ↔ |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | < 0.0001 | 0.792 | ↔ | 0.00018622 | 0.689 | ↔ | 2020-10-28 | 0.016 | ↔ |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 24 | 4 | 17% | -0.0047858 | 0.000 | ↓ | 0.005517 | 0.225 | ↔ | 2022-09-30 | 0.596 | ↔ |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 24 | 23 | 96% | -0.0017385 | 0.019 | ↔ | < 0.0001 | 0.965 | ↔ | 2021-04-22 | 0.419 | ↔ |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 24 | 6 | 25% | 0.0014616 | 0.007 | ↑ | -0.00062406 | 0.148 | ↔ | 2020-05-04 | 0.494 | ↔ |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | -0.00023551 | 0.407 | ↔ | 0.00016638 | 0.702 | ↔ | 2020-12-14 | 0.051 | ↔ |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | -0.0007628 | 0.002 | ↓ | < 0.0001 | 0.966 | ↔ | 2021-06-12 | 0.611 | ↔ |

*(Table continues on next page)*

**Table 9:** 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 |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 23 | 22 | 96% | -0.00029065 | 0.038 | ↔ | < 0.0001 | 0.884 | ↔ | 2021-10-19 | 0.428 | ↔ |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 24 | 6 | 25% | -0.00082985 | 0.040 | ↔ | 0.00049915 | 0.136 | ↔ | 2019-12-19 | 0.285 | ↔ |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | -0.066115 | 0.373 | ↔ | 0.081897 | 0.000 | ↑ | 2017-10-29 | 0.774 | ↔ |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 23 | 22 | 96% | -0.00040405 | 0.019 | ↔ | < 0.0001 | 0.750 | ↔ | 2021-01-25 | 0.452 | ↔ |
| 11_2_106 | MW-15021 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | < 0.0001 | 1.000 | ↔ | 0.00015635 | 0.213 | ↔ | 2019-01-06 | 0.200 | ↔ |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 24 | 6 | 25% | -0.00056164 | 0.006 | ↓ | 0.00011949 | 0.579 | ↔ | 2020-06-14 | 0.490 | ↔ |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 23 | 14 | 61% | -0.0088254 | 0.000 | ↓ | < 0.0001 | 0.992 | ↔ | 2021-02-08 | 0.907 | ↔ |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 25 | 23 | 92% | -0.47386 | 0.000 | ↓ | 0.022848 | 0.936 | ↔ | 2022-05-11 | 0.805 | ↔ |
| 11_2_116 | MW-15021 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | -0.00010278 | 0.747 | ↔ | 0.00020468 | 0.668 | ↔ | 2020-10-30 | 0.019 | ↔ |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 24 | 18 | 75% | -0.0030616 | 0.037 | ↔ | -0.00099943 | 0.648 | ↔ | 2020-11-19 | 0.447 | ↔ |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | < 0.0001 | 0.097 | ↔ | -0.00023255 | 0.577 | ↔ | 2023-10-03 | 0.151 | ↔ |
| 11_2_119 | MW-15021 | Appendix IV | Molybdenum | ug/L | 24 | 24 | 100% | -0.0017351 | 0.015 | ↔ | 0.00020917 | 0.882 | ↔ | 2021-06-15 | 0.419 | ↔ |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 24 | 4 | 17% | 0.00031517 | 0.072 | ↔ | -0.0030882 | 0.230 | ↔ | 2024-03-22 | 0.205 | ↔ |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 24 | 15 | 62% | -0.00016298 | 0.440 | ↔ | -0.0018309 | 0.563 | ↔ | 2023-10-05 | 0.172 | ↔ |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | -0.00075838 | 0.002 | ↓ | < 0.0001 | 0.966 | ↔ | 2021-06-23 | 0.614 | ↔ |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | 0.0001454 | 0.831 | ↔ | -0.00034664 | 0.008 | ↓ | 2018-04-17 | 0.405 | ↔ |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 25 | 10 | 40% | -0.0068509 | 0.000 | ↓ | -0.00036736 | 0.416 | ↔ | 2018-06-11 | 0.820 | ↔ |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.034775 | 0.012 | ↔ | -0.014335 | 0.857 | ↔ | 2022-10-20 | 0.338 | ↔ |
| 12_2_104 | MW-15022 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | -0.00038711 | 0.017 | ↔ | < 0.0001 | 0.727 | ↔ | 2021-04-20 | 0.483 | ↔ |
| 12_2_106 | MW-15022 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.00015541 | 0.205 | ↔ | 2019-03-12 | 0.189 | ↔ |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | -0.00045685 | 0.004 | ↓ | 0.00010381 | 0.720 | ↔ | 2021-04-21 | 0.487 | ↔ |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | -0.0088937 | 0.000 | ↓ | -0.00016059 | 0.919 | ↔ | 2021-03-01 | 0.912 | ↔ |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 26 | 19 | 73% | -0.40784 | 0.000 | ↓ | 0.10323 | 0.786 | ↔ | 2023-05-06 | 0.872 | ↔ |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | -0.00011606 | 0.712 | ↔ | 0.0002368 | 0.602 | ↔ | 2021-03-14 | 0.021 | ↔ |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 25 | 8 | 32% | 0.006624 | 0.049 | ↔ | 0.031128 | 0.000 | ↑ | 2021-10-19 | 0.825 | ↔ |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.439 | ↔ | 2020-07-11 | 0.080 | ↔ |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 25 | 12 | 48% | -0.0075395 | 0.049 | ↔ | -0.00065012 | 0.930 | ↔ | 2021-10-14 | 0.367 | ↔ |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 25 | 13 | 52% | 0.00064161 | 0.059 | ↔ | -0.00054849 | 0.147 | ↔ | 2020-05-05 | 0.232 | ↔ |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | -0.00012559 | 0.643 | ↔ | < 0.0001 | 0.844 | ↔ | 2021-04-20 | 0.020 | ↔ |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | -0.00076378 | 0.002 | ↓ | < 0.0001 | 0.889 | ↔ | 2021-10-10 | 0.629 | ↔ |
| 13_2_101 | MW-15023 | Appendix IV | Antimony | ug/L | 23 | 23 | 100% | -0.00029023 | 0.020 | ↔ | < 0.0001 | 0.953 | ↔ | 2021-10-22 | 0.422 | ↔ |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 24 | 8 | 33% | -0.00027743 | 0.523 | ↔ | 0.043883 | 0.000 | ↑ | 2023-11-16 | 0.914 | ↔ |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.0048315 | 0.375 | ↔ | 0.43723 | 0.000 | ↑ | 2024-01-25 | 0.848 | ↔ |
| 13_2_104 | MW-15023 | Appendix IV | Beryllium | ug/L | 23 | 23 | 100% | -0.0003739 | 0.023 | ↔ | < 0.0001 | 0.757 | ↔ | 2021-04-20 | 0.461 | ↔ |
| 13_2_106 | MW-15023 | Appendix IV | Cadmium | ug/L | 23 | 23 | 100% | < 0.0001 | 1.000 | ↔ | 0.00015668 | 0.210 | ↔ | 2019-01-04 | 0.201 | ↔ |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 24 | 17 | 71% | -0.0004548 | 0.005 | ↓ | 0.00013131 | 0.667 | ↔ | 2021-04-21 | 0.469 | ↔ |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | -0.0089055 | 0.000 | ↓ | < 0.0001 | 0.973 | ↔ | 2021-02-16 | 0.903 | ↔ |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 25 | 16 | 64% | -0.42302 | 0.000 | ↓ | 0.051775 | 0.876 | ↔ | 2023-01-04 | 0.828 | ↔ |
| 13_2_116 | MW-15023 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | -0.00010403 | 0.744 | ↔ | 0.00020859 | 0.655 | ↔ | 2020-10-30 | 0.020 | ↔ |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 24 | 5 | 21% | 0.0005061 | 0.739 | ↔ | 0.09811 | 0.000 | ↑ | 2023-12-24 | 0.798 | ↔ |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.402 | ↔ | 2020-03-27 | 0.085 | ↔ |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 24 | 4 | 17% | -0.00029288 | 0.961 | ↔ | 0.0065977 | 0.026 | ↔ | 2019-02-21 | 0.391 | ↔ |

*(Table continues on next page)*

**Table 9:** 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 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 24 | 12 | 50% | < 0.0001 | 0.508 | ↔ | 0.008674 | 0.041 | ↔ | 2024-06-24 | 0.561 | ↔ |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | -0.00018944 | 0.557 | ↔ | 0.00015563 | 0.672 | ↔ | 2020-10-29 | 0.032 | ↔ |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | -0.00076332 | 0.002 | ↓ | < 0.0001 | 0.966 | ↔ | 2021-06-11 | 0.612 | ↔ |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 12 | 11 | 92% | 0.00039681 | 0.264 | ↔ | -0.0011834 | 0.460 | ↔ | 2023-10-04 | 0.233 | ↔ |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 12 | 5 | 42% | -0.212 | 0.008 | ↓ | < 0.0001 | 0.977 | ↔ | 2020-06-20 | 0.804 | ↔ |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.12307 | 0.002 | ↑ | 0.078871 | 0.071 | ↔ | 2022-10-20 | 0.918 | ↔ |
| 14_2_104 | MW-17001R | Appendix IV | Beryllium | ug/L | 12 | 12 | 100% | 0.0006132 | 0.036 | ↔ | -0.0013294 | 0.272 | ↔ | 2023-10-04 | 0.496 | ↔ |
| 14_2_106 | MW-17001R | Appendix IV | Cadmium | ug/L | 12 | 12 | 100% | 0.0006132 | 0.036 | ↔ | -0.0013294 | 0.272 | ↔ | 2023-10-04 | 0.496 | ↔ |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 12 | 7 | 58% | 0.00062019 | 0.066 | ↔ | -0.0013835 | 0.091 | ↔ | 2023-10-03 | 0.513 | ↔ |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 12 | 6 | 50% | 0.0011218 | 0.135 | ↔ | -0.0017974 | 0.097 | ↔ | 2023-04-11 | 0.444 | ↔ |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 12 | 3 | 25% | -0.13365 | 0.307 | ↔ | 0.02925 | 0.323 | ↔ | 2021-07-23 | 0.284 | ↔ |
| 14_2_116 | MW-17001R | Appendix IV | Lead | ug/L | 12 | 12 | 100% | 0.0011012 | 0.120 | ↔ | -0.0029041 | 0.349 | ↔ | 2023-10-04 | 0.356 | ↔ |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | -0.17624 | 0.091 | ↔ | 0.094417 | 0.002 | ↑ | 2021-08-16 | 0.755 | ↔ |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 12 | 6 | 50% | 0.0029352 | 0.120 | ↔ | -0.0076824 | 0.102 | ↔ | 2023-09-25 | 0.446 | ↔ |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | 0.00082494 | 0.117 | ↔ | -0.00054774 | 0.807 | ↔ | 2023-10-20 | 0.337 | ↔ |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 12 | 12 | 100% | 0.00091708 | 0.149 | ↔ | -0.0025385 | 0.367 | ↔ | 2023-10-04 | 0.328 | ↔ |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | -0.0031465 | 0.936 | ↔ | 0.00019144 | 0.651 | ↔ | 2020-10-28 | 0.068 | ↔ |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 17 | 15 | 88% | -0.00085375 | 0.071 | ↔ | < 0.0001 | 0.853 | ↔ | 2021-04-07 | 0.504 | ↔ |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 18 | 0 | 0% | -0.061091 | 0.574 | ↔ | 0.063483 | 0.006 | ↑ | 2019-07-07 | 0.533 | ↔ |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.043194 | 0.177 | ↔ | -0.078477 | 0.129 | ↔ | 2021-10-22 | 0.284 | ↔ |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | -0.00084724 | 0.106 | ↔ | < 0.0001 | 0.671 | ↔ | 2020-07-23 | 0.435 | ↔ |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 17 | 13 | 76% | 0.00029839 | 0.012 | ↔ | -0.0008875 | 0.382 | ↔ | 2023-10-02 | 0.419 | ↔ |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | -0.000704 | 0.047 | ↔ | 0.00013333 | 0.583 | ↔ | 2020-11-17 | 0.404 | ↔ |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 17 | 15 | 88% | -0.021943 | 0.000 | ↓ | 0.00033685 | 0.711 | ↔ | 2019-12-25 | 0.938 | ↔ |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 18 | 8 | 44% | -0.76004 | 0.003 | ↓ | -0.085794 | 0.413 | ↔ | 2020-10-28 | 0.835 | ↔ |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | 0.00060132 | 0.052 | ↔ | -0.0051693 | 0.439 | ↔ | 2024-03-29 | 0.343 | ↔ |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 0.0075918 | 0.841 | ↔ | 0.080739 | 0.010 | ↔ | 2021-04-20 | 0.609 | ↔ |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 18 | 6 | 33% | 0.75147 | 0.003 | ↑ | -0.36931 | 0.631 | ↔ | 2023-04-11 | 0.623 | ↔ |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 18 | 5 | 28% | -0.0048268 | 0.176 | ↔ | 0.00016228 | 0.800 | ↔ | 2019-04-11 | 0.248 | ↔ |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 18 | 15 | 83% | < 0.0001 | 0.762 | ↔ | -0.0018526 | 0.485 | ↔ | 2023-10-14 | 0.137 | ↔ |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 17 | 16 | 94% | -0.0012535 | 0.208 | ↔ | < 0.0001 | 0.855 | ↔ | 2020-10-28 | 0.387 | ↔ |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 17 | 16 | 94% | -0.00074068 | 0.112 | ↔ | < 0.0001 | 0.863 | ↔ | 2021-04-21 | 0.437 | ↔ |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 18 | 3 | 17% | 0.013421 | 0.157 | ↔ | 0.26601 | 0.000 | ↑ | 2023-06-01 | 0.905 | ↔ |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.082947 | 0.147 | ↔ | -0.12436 | 0.007 | ↓ | 2021-04-21 | 0.483 | ↔ |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 17 | 15 | 88% | -0.00084651 | 0.111 | ↔ | < 0.0001 | 0.761 | ↔ | 2020-07-06 | 0.432 | ↔ |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | 0.00029413 | 0.014 | ↔ | -0.0011847 | 0.254 | ↔ | 2023-10-02 | 0.432 | ↔ |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 18 | 13 | 72% | -0.00078713 | 0.028 | ↔ | 0.00022683 | 0.351 | ↔ | 2020-11-26 | 0.439 | ↔ |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 17 | 12 | 71% | -0.0072476 | 0.000 | ↓ | 0.12867 | 0.000 | ↑ | 2024-01-20 | 0.934 | ↔ |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 18 | 12 | 67% | -0.95409 | 0.000 | ↓ | 0.032532 | 0.802 | ↔ | 2021-02-19 | 0.870 | ↔ |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 17 | 17 | 100% | -0.00036203 | 0.355 | ↔ | 0.0021904 | 0.000 | ↑ | 2021-10-21 | 0.795 | ↔ |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | 0.012289 | 0.008 | ↑ | 0.3603 | 0.000 | ↑ | 2022-12-07 | 0.995 | ↑ |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 18 | 5 | 28% | 0.0032444 | 0.620 | ↔ | 0.14763 | 0.000 | ↑ | 2023-02-21 | 0.901 | ↔ |

*(Table continues on next page)*

**Table 9:** 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 |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 18 | 9 | 50% | -0.001676 | 0.050 | ↔ | < 0.0001 | 0.737 | ↔ | 2019-05-31 | 0.492 | ↔ |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | -0.00073419 | 0.478 | ↔ | < 0.0001 | 0.977 | ↔ | 2020-09-28 | 0.131 | ↔ |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | -0.0015049 | 0.021 | ↔ | 0.00081771 | 0.067 | ↔ | 2021-04-11 | 0.548 | ↔ |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 17 | 14 | 82% | -0.00023034 | 0.229 | ↔ | -0.0010449 | 0.562 | ↔ | 2023-10-06 | 0.333 | ↔ |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 18 | 2 | 11% | 0.0069021 | 0.004 | ↑ | -0.012641 | 0.095 | ↔ | 2023-04-11 | 0.559 | ↔ |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.17157 | 0.044 | ↔ | -0.22157 | 0.002 | ↓ | 2021-04-21 | 0.596 | ↔ |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 17 | 17 | 100% | -0.00084586 | 0.100 | ↔ | 0.00012052 | 0.579 | ↔ | 2020-08-06 | 0.440 | ↔ |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | 0.00030622 | 0.009 | ↑ | -0.0010574 | 0.294 | ↔ | 2023-10-03 | 0.448 | ↔ |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 18 | 12 | 67% | 0.0010455 | 0.379 | ↔ | -0.0021321 | 0.266 | ↔ | 2022-05-02 | 0.134 | ↔ |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 17 | 11 | 65% | -0.021845 | 0.000 | ↓ | 0.00019784 | 0.844 | ↔ | 2019-12-03 | 0.921 | ↔ |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 18 | 13 | 72% | -0.83212 | 0.000 | ↓ | 0.016531 | 0.913 | ↔ | 2021-06-30 | 0.873 | ↔ |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 17 | 14 | 82% | 0.0037651 | 0.208 | ↔ | -0.0056168 | 0.239 | ↔ | 2022-05-02 | 0.209 | ↔ |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 18 | 6 | 33% | -0.001023 | 0.896 | ↔ | 0.044222 | 0.000 | ↑ | 2021-04-22 | 0.861 | ↔ |
| 17_2_118 | MW-17004 | Appendix IV | Mercury | ug/L | 17 | 17 | 100% | < 0.0001 | 0.020 | ↔ | < 0.0001 | 0.183 | ↔ | 2020-12-23 | 0.496 | ↔ |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 18 | 7 | 39% | -0.0066809 | 0.531 | ↔ | 0.020717 | 0.001 | ↑ | 2020-06-21 | 0.705 | ↔ |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 18 | 7 | 39% | -0.0009559 | 0.815 | ↔ | -0.00013123 | 0.779 | ↔ | 2019-04-11 | 0.048 | ↔ |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | 0.00028754 | 0.381 | ↔ | -0.0030921 | 0.103 | ↔ | 2023-10-02 | 0.273 | ↔ |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 17 | 14 | 82% | -0.0013162 | 0.193 | ↔ | 0.00010582 | 0.807 | ↔ | 2020-10-28 | 0.397 | ↔ |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 17 | 17 | 100% | -0.00071498 | 0.061 | ↔ | < 0.0001 | 0.898 | ↔ | 2021-04-22 | 0.416 | ↔ |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 18 | 13 | 72% | -0.025 | 0.132 | ↔ | < 0.0001 | 0.930 | ↔ | 2018-02-23 | 0.280 | ↔ |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.16622 | 0.357 | ↔ | -0.094086 | 0.094 | ↔ | 2019-12-12 | 0.238 | ↔ |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | -0.00084586 | 0.113 | ↔ | < 0.0001 | 0.736 | ↔ | 2020-07-14 | 0.430 | ↔ |
| 18_2_106 | MW-17005 | Appendix IV | Cadmium | ug/L | 17 | 17 | 100% | 0.0002874 | 0.017 | ↔ | -0.00097374 | 0.353 | ↔ | 2023-10-03 | 0.395 | ↔ |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | -0.00058893 | 0.092 | ↔ | < 0.0001 | 0.832 | ↔ | 2021-01-24 | 0.388 | ↔ |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | -0.021845 | 0.000 | ↓ | 0.00034353 | 0.705 | ↔ | 2019-12-28 | 0.938 | ↔ |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 18 | 14 | 78% | -0.92025 | 0.000 | ↓ | 0.041402 | 0.752 | ↔ | 2021-04-01 | 0.867 | ↔ |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | -0.00017786 | 0.876 | ↔ | 0.00014802 | 0.769 | ↔ | 2020-10-27 | 0.009 | ↔ |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 18 | 3 | 17% | -0.0028923 | 0.617 | ↔ | 0.016275 | 0.431 | ↔ | 2023-04-12 | 0.072 | ↔ |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 18 | 15 | 83% | -0.0041766 | 0.061 | ↔ | 0.0025465 | 0.112 | ↔ | 2021-03-03 | 0.372 | ↔ |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 18 | 8 | 44% | -0.0018508 | 0.429 | ↔ | 0.00024724 | 0.567 | ↔ | 2019-05-28 | 0.092 | ↔ |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 18 | 18 | 100% | -0.0004571 | 0.521 | ↔ | 0.0001815 | 0.727 | ↔ | 2020-10-28 | 0.047 | ↔ |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | -0.0015052 | 0.018 | ↔ | 0.00012645 | 0.755 | ↔ | 2020-12-27 | 0.604 | ↔ |
| 19_2_101 | MW-17006 | Appendix IV | Antimony | ug/L | 17 | 17 | 100% | -0.00068688 | 0.142 | ↔ | < 0.0001 | 0.854 | ↔ | 2021-06-14 | 0.417 | ↔ |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 18 | 7 | 39% | -0.0025231 | 0.027 | ↔ | 0.0022028 | 0.380 | ↔ | 2022-05-02 | 0.362 | ↔ |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.068105 | 0.012 | ↔ | -0.049716 | 0.014 | ↔ | 2020-10-30 | 0.535 | ↔ |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 17 | 17 | 100% | -0.00084586 | 0.100 | ↔ | 0.00011989 | 0.585 | ↔ | 2020-08-06 | 0.440 | ↔ |
| 19_2_106 | MW-17006 | Appendix IV | Cadmium | ug/L | 17 | 17 | 100% | 0.00028547 | 0.017 | ↔ | -0.00096355 | 0.357 | ↔ | 2023-10-03 | 0.391 | ↔ |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 18 | 15 | 83% | -0.00072424 | 0.061 | ↔ | < 0.0001 | 0.804 | ↔ | 2020-11-06 | 0.402 | ↔ |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | -0.021845 | 0.000 | ↓ | 0.00039155 | 0.669 | ↔ | 2019-12-31 | 0.938 | ↔ |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 18 | 9 | 50% | -0.91355 | 0.000 | ↓ | 0.039465 | 0.768 | ↔ | 2021-03-03 | 0.859 | ↔ |
| 19_2_116 | MW-17006 | Appendix IV | Lead | ug/L | 17 | 17 | 100% | -0.00021156 | 0.790 | ↔ | 0.00023705 | 0.682 | ↔ | 2020-10-30 | 0.022 | ↔ |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | -0.0078891 | 0.065 | ↔ | 0.008661 | 0.699 | ↔ | 2023-04-13 | 0.261 | ↔ |

*(Table continues on next page)*

**Table 9:** 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 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 17 | 16 | 94% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.494 | ↔ | 2020-04-01 | 0.070 | ↔ |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 18 | 13 | 72% | -0.00034043 | 0.644 | ↔ | 0.22404 | 0.000 | ↑ | 2024-09-14 | 0.972 | ↔ |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 18 | 6 | 33% | 0.00044339 | 0.491 | ↔ | -0.00013246 | 0.781 | ↔ | 2021-06-14 | 0.094 | ↔ |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 18 | 17 | 94% | -0.00042287 | 0.656 | ↔ | < 0.0001 | 0.830 | ↔ | 2020-10-29 | 0.043 | ↔ |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | -0.0015039 | 0.018 | ↔ | 0.00012147 | 0.769 | ↔ | 2020-12-26 | 0.603 | ↔ |

**Table 10:** 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 |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | -0.075005 | 0.001 | ↓ | -0.010392 | 0.004 | ↓ | 0.013372 | 0.000 | ↑ | 2016-11-07 | 2021-01-10 | 0.880 | ↔ |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | -0.0018121 | 0.945 | ↔ | 0.12579 | 0.012 | ↔ | -0.059008 | 0.215 | ↔ | 2019-08-03 | 2022-05-05 | 0.686 | ↔ |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | < 0.0001 | 1.000 | ↔ | -0.031051 | 0.000 | ↓ | 0.00030656 | 0.580 | ↔ | 2018-05-06 | 2019-08-17 | 0.983 | ↔ |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 24 | 6 | 25% | -0.049704 | 0.000 | ↓ | -0.0024035 | 0.379 | ↔ | 0.02133 | 0.027 | ↔ | 2019-01-30 | 2023-08-10 | 0.976 | ↔ |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 24 | 23 | 96% | 0.002151 | 0.852 | ↔ | -0.00028703 | 0.399 | ↔ | 0.00021497 | 0.635 | ↔ | 2016-04-17 | 2021-01-06 | 0.062 | ↔ |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | < 0.0001 | 0.982 | ↔ | -0.0025713 | 0.138 | ↔ | 0.00018799 | 0.510 | ↔ | 2019-04-02 | 2020-10-26 | 0.730 | ↔ |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.0099676 | 0.192 | ↔ | 0.20975 | 0.000 | ↑ | -0.12341 | 0.009 | ↓ | 2021-09-19 | 2023-04-12 | 0.876 | ↔ |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | < 0.0001 | 1.000 | ↔ | -0.031133 | 0.000 | ↓ | 0.00032092 | 0.551 | ↔ | 2018-05-07 | 2019-08-18 | 0.984 | ↔ |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | < 0.0001 | 0.953 | ↔ | -0.00028724 | 0.723 | ↔ | 0.00025611 | 0.593 | ↔ | 2018-03-18 | 2020-10-27 | 0.026 | ↔ |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.028669 | 0.002 | ↑ | -0.030013 | 0.072 | ↔ | 0.012273 | 0.129 | ↔ | 2019-01-15 | 2021-07-03 | 0.512 | ↔ |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 25 | 11 | 44% | -0.05353 | 0.000 | ↓ | -0.0072502 | 0.008 | ↓ | 0.0010571 | 0.544 | ↔ | 2017-01-20 | 2020-06-09 | 0.930 | ↔ |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.00070919 | 0.316 | ↔ | 0.00016458 | 0.508 | ↔ | -0.0017308 | 0.387 | ↔ | 2018-04-16 | 2023-10-16 | 0.303 | ↔ |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | -0.02247 | 0.261 | ↔ | 0.059344 | 0.000 | ↑ | -0.33789 | 0.069 | ↔ | 2019-03-08 | 2024-09-22 | 0.752 | ↔ |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 24 | 19 | 79% | -0.00021217 | 0.558 | ↔ | -0.0011991 | 0.309 | ↔ | 0.0010384 | 0.022 | ↔ | 2019-05-15 | 2021-07-02 | 0.437 | ↔ |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | < 0.0001 | 1.000 | ↔ | -0.030839 | 0.000 | ↓ | 0.00022628 | 0.688 | ↔ | 2018-05-06 | 2019-08-19 | 0.983 | ↔ |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 25 | 17 | 68% | < 0.0001 | 1.000 | ↔ | -1.0941 | 0.000 | ↓ | 0.036408 | 0.636 | ↔ | 2019-04-29 | 2021-07-12 | 0.963 | ↔ |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 23 | 22 | 96% | -0.0001221 | 0.674 | ↔ | 0.00048454 | 0.609 | ↔ | 0.015703 | 0.009 | ↑ | 2021-06-10 | 2024-10-02 | 0.617 | ↔ |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 24 | 5 | 21% | -0.027513 | 0.317 | ↔ | 0.028481 | 0.418 | ↔ | -0.016708 | 0.047 | ↔ | 2018-01-12 | 2020-05-06 | 0.273 | ↔ |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 23 | 22 | 96% | -0.00082045 | 0.000 | ↓ | 0.0086857 | 0.010 | ↔ | -0.0027135 | 0.006 | ↓ | 2022-10-08 | 2023-04-15 | 0.829 | ↔ |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 9 | 8 | 89% | 0.0019638 | 0.079 | ↔ | -0.0053672 | 0.089 | ↔ | 0.00081967 | 0.721 | ↔ | 2023-09-17 | 2024-05-18 | 0.852 | ↔ |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 9 | 8 | 89% | 0.0019638 | 0.079 | ↔ | -0.0053672 | 0.089 | ↔ | 0.00098361 | 0.670 | ↔ | 2023-09-17 | 2024-04-29 | 0.838 | ↔ |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 9 | 8 | 89% | 0.0042997 | 0.079 | ↔ | -0.011751 | 0.089 | ↔ | 0.0021311 | 0.673 | ↔ | 2023-09-17 | 2024-05-27 | 0.854 | ↔ |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 9 | 0 | 0% | -0.91989 | 0.489 | ↔ | 0.18076 | 0.533 | ↔ | -0.079882 | 0.219 | ↔ | 2022-03-20 | 2023-04-10 | 0.577 | ↔ |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 9 | 3 | 33% | -0.010364 | 0.164 | ↔ | 0.0034978 | 0.102 | ↔ | -0.0025651 | 0.150 | ↔ | 2022-07-17 | 2023-12-27 | 0.821 | ↔ |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 9 | 9 | 100% | -0.041081 | 0.174 | ↔ | 0.00447 | 0.172 | ↔ | -0.0023413 | 0.196 | ↔ | 2022-03-20 | 2023-05-06 | 0.763 | ↔ |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 12 | 0 | 0% | -0.0037799 | 0.960 | ↔ | 0.018941 | 0.093 | ↔ | 0.071239 | 0.341 | ↔ | 2021-04-20 | 2024-05-22 | 0.823 | ↔ |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.032717 | 0.441 | ↔ | -0.12274 | 0.664 | ↔ | -0.028757 | 0.818 | ↔ | 2022-10-19 | 2024-03-27 | 0.518 | ↔ |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 12 | 10 | 83% | -0.00068556 | 0.443 | ↔ | 0.0027937 | 0.113 | ↔ | -0.0014633 | 0.136 | ↔ | 2022-04-21 | 2023-05-06 | 0.555 | ↔ |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 12 | 6 | 50% | 0.54358 | 0.116 | ↔ | -0.089473 | 0.212 | ↔ | 0.19632 | 0.061 | ↔ | 2020-12-21 | 2023-07-02 | 0.746 | ↔ |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | 0.0056123 | 0.931 | ↔ | 0.11556 | 0.629 | ↔ | -0.038595 | 0.429 | ↔ | 2022-01-23 | 2023-04-10 | 0.513 | ↔ |

*(Table continues on next page)*

**Table 10:** 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 |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 12 | 4 | 33% | -0.0032276 | 0.143 | ↔ | 0.0036688 | 0.114 | ↔ | -0.0017197 | 0.093 | ↔ | 2021-08-10 | 2022-12-13 | 0.631 | ↔ |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 12 | 7 | 58% | -0.001023 | 0.472 | ↔ | 0.0041205 | 0.139 | ↔ | -0.0034704 | 0.044 | ↔ | 2021-12-28 | 2023-05-03 | 0.702 | ↔ |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 12 | 1 | 8% | -0.037052 | 0.035 | ↔ | 0.00050091 | 0.788 | ↔ | 0.0021858 | 0.871 | ↔ | 2020-11-14 | 2024-10-13 | 0.761 | ↔ |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 12 | 0 | 0% | 0.58609 | 0.535 | ↔ | 0.37032 | 0.213 | ↔ | -0.3071 | 0.147 | ↔ | 2020-10-29 | 2023-03-08 | 0.731 | ↔ |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 12 | 1 | 8% | -0.001861 | 0.190 | ↔ | 0.0026528 | 0.586 | ↔ | -0.0014757 | 0.164 | ↔ | 2022-01-20 | 2023-04-11 | 0.470 | ↔ |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 12 | 3 | 25% | -0.021819 | 0.756 | ↔ | 0.1518 | 0.257 | ↔ | -0.095733 | 0.212 | ↔ | 2022-02-15 | 2023-04-12 | 0.471 | ↔ |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 12 | 8 | 67% | -0.0093722 | 0.106 | ↔ | 0.014647 | 0.151 | ↔ | -0.0081405 | 0.157 | ↔ | 2022-02-08 | 2023-05-07 | 0.608 | ↔ |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 12 | 0 | 0% | -0.00072623 | 0.668 | ↔ | 0.0083333 | 0.356 | ↔ | -0.0030219 | 0.253 | ↔ | 2022-06-24 | 2023-06-13 | 0.582 | ↔ |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | -0.0012638 | 0.272 | ↔ | 0.0044527 | 0.056 | ↔ | -0.0023365 | 0.071 | ↔ | 2022-04-10 | 2023-05-07 | 0.675 | ↔ |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 24 | 1 | 4% | -0.04179 | 0.240 | ↔ | -0.009416 | 0.077 | ↔ | < 0.0001 | 0.991 | ↔ | 2016-02-27 | 2018-03-14 | 0.766 | ↔ |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | -0.28543 | 0.068 | ↔ | 0.13138 | 0.001 | ↑ | -0.26432 | 0.029 | ↔ | 2017-07-11 | 2023-04-11 | 0.630 | ↔ |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 24 | 1 | 4% | 0.024633 | 0.001 | ↑ | -0.028701 | 0.002 | ↓ | -0.0011951 | 0.001 | ↓ | 2016-09-28 | 2017-05-08 | 0.867 | ↔ |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | < 0.0001 | 1.000 | ↔ | -0.030759 | 0.000 | ↓ | -0.00020865 | 0.661 | ↔ | 2018-05-05 | 2019-07-25 | 0.987 | ↔ |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 23 | 23 | 100% | -0.00011647 | 0.719 | ↔ | 0.0012034 | 0.189 | ↔ | -0.0034503 | 0.163 | ↔ | 2020-11-26 | 2023-10-02 | 0.328 | ↔ |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 24 | 0 | 0% | < 0.0001 | 0.992 | ↔ | -0.002096 | 0.671 | ↔ | 0.00098697 | 0.151 | ↔ | 2020-10-29 | 2022-04-21 | 0.290 | ↔ |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 24 | 12 | 50% | 0.0049193 | 0.533 | ↔ | -0.0031997 | 0.040 | ↔ | 0.00029462 | 0.621 | ↔ | 2016-07-13 | 2019-09-11 | 0.570 | ↔ |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 24 | 14 | 58% | -0.00047686 | 0.413 | ↔ | 0.0013694 | 0.312 | ↔ | -0.0011167 | 0.185 | ↔ | 2019-06-15 | 2021-10-22 | 0.193 | ↔ |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | < 0.0001 | 1.000 | ↔ | -0.030759 | 0.000 | ↓ | 0.00023495 | 0.669 | ↔ | 2018-05-05 | 2019-08-17 | 0.983 | ↔ |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 24 | 0 | 0% | -0.039997 | 0.149 | ↔ | 0.040927 | 0.069 | ↔ | -0.0041341 | 0.006 | ↓ | 2016-09-06 | 2017-08-08 | 0.467 | ↔ |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 24 | 7 | 29% | 0.00091691 | 0.085 | ↔ | -0.00044279 | 0.002 | ↓ | 0.0016402 | 0.120 | ↔ | 2018-02-23 | 2024-02-23 | 0.535 | ↔ |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 24 | 15 | 62% | -0.00067357 | 0.581 | ↔ | 0.0026455 | 0.155 | ↔ | -0.0034629 | 0.028 | ↔ | 2019-03-14 | 2022-05-02 | 0.358 | ↔ |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.039992 | 0.579 | ↔ | 0.36921 | 0.427 | ↔ | -0.064793 | 0.510 | ↔ | 2020-02-01 | 2021-10-20 | 0.549 | ↔ |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 23 | 13 | 57% | < 0.0001 | 1.000 | ↔ | -0.030679 | 0.000 | ↓ | < 0.0001 | 0.917 | ↔ | 2018-05-05 | 2019-08-02 | 0.986 | ↔ |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 23 | 19 | 83% | -0.00011071 | 0.820 | ↔ | 0.00065251 | 0.357 | ↔ | -0.0032039 | 0.052 | ↔ | 2020-05-04 | 2023-10-02 | 0.278 | ↔ |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 24 | 3 | 12% | 0.00062737 | 0.917 | ↔ | -0.02015 | 0.427 | ↔ | -0.0027879 | 0.512 | ↔ | 2018-11-30 | 2020-10-28 | 0.622 | ↔ |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 24 | 5 | 21% | < 0.0001 | 0.909 | ↔ | 0.002731 | 0.648 | ↔ | -0.00061135 | 0.337 | ↔ | 2020-06-15 | 2021-10-20 | 0.342 | ↔ |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.013675 | 0.908 | ↔ | 0.31892 | 0.006 | ↑ | -0.11151 | 0.011 | ↔ | 2017-10-17 | 2020-05-05 | 0.771 | ↔ |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 24 | 13 | 54% | 0.0053144 | 0.375 | ↔ | -0.0019076 | 0.488 | ↔ | -0.00018671 | 0.029 | ↔ | 2016-02-26 | 2016-11-11 | 0.487 | ↔ |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 23 | 19 | 83% | < 0.0001 | 1.000 | ↔ | -0.030679 | 0.000 | ↓ | < 0.0001 | 0.860 | ↔ | 2018-05-05 | 2019-08-14 | 0.983 | ↔ |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 24 | 4 | 17% | 0.0019988 | 0.476 | ↔ | -0.016348 | 0.002 | ↓ | 0.004051 | 0.043 | ↔ | 2018-11-29 | 2021-01-28 | 0.783 | ↔ |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 24 | 21 | 88% | 0.00013512 | 0.907 | ↔ | -0.00037585 | 0.620 | ↔ | 0.00020076 | 0.661 | ↔ | 2017-07-13 | 2020-10-28 | 0.059 | ↔ |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | < 0.0001 | 0.989 | ↔ | -0.0025909 | 0.140 | ↔ | 0.00019072 | 0.504 | ↔ | 2019-04-07 | 2020-10-27 | 0.730 | ↔ |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 24 | 6 | 25% | -0.00085348 | 0.010 | ↔ | 0.0017391 | 0.098 | ↔ | -0.0012952 | 0.186 | ↔ | 2020-10-22 | 2023-04-12 | 0.453 | ↔ |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | -0.0090817 | 0.642 | ↔ | 0.18325 | 0.000 | ↑ | -0.079289 | 0.144 | ↔ | 2020-01-08 | 2023-01-26 | 0.882 | ↔ |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 24 | 6 | 25% | 0.01164 | 0.047 | ↔ | -0.001196 | 0.008 | ↓ | < 0.0001 | 0.888 | ↔ | 2016-02-26 | 2018-07-10 | 0.649 | ↔ |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 23 | 14 | 61% | < 0.0001 | 1.000 | ↔ | -0.030679 | 0.000 | ↓ | 0.00025767 | 0.591 | ↔ | 2018-05-05 | 2019-08-15 | 0.987 | ↔ |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 24 | 18 | 75% | < 0.0001 | 1.000 | ↔ | -0.01091 | 0.316 | ↔ | 0.00011116 | 0.951 | ↔ | 2019-02-14 | 2020-07-10 | 0.520 | ↔ |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 23 | 22 | 96% | < 0.0001 | 0.659 | ↔ | 0.00010276 | 0.127 | ↔ | -0.00031789 | 0.454 | ↔ | 2018-11-01 | 2023-10-03 | 0.223 | ↔ |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 24 | 4 | 17% | < 0.0001 | 0.857 | ↔ | 0.00095401 | 0.346 | ↔ | -0.0030882 | 0.241 | ↔ | 2020-11-18 | 2023-11-27 | 0.253 | ↔ |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | < 0.0001 | 0.995 | ↔ | -0.0025896 | 0.140 | ↔ | 0.00019008 | 0.511 | ↔ | 2019-04-10 | 2020-10-29 | 0.729 | ↔ |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | 0.00050393 | 0.264 | ↔ | -0.00089369 | 0.074 | ↔ | 0.00010819 | 0.658 | ↔ | 2018-04-18 | 2021-04-05 | 0.552 | ↔ |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 25 | 10 | 40% | 0.01454 | 0.238 | ↔ | -0.0088476 | 0.036 | ↔ | -0.00029903 | 0.398 | ↔ | 2016-04-16 | 2018-04-17 | 0.857 | ↔ |

*(Table continues on next page)*

**Table 10:** 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 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | -0.00046357 | 0.996 | ↔ | 0.094432 | 0.409 | ↔ | 0.0058772 | 0.821 | ↔ | 2018-04-13 | 2020-01-17 | 0.352 | ↔ |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | -0.0004699 | 0.000 | ↓ | 0.0040609 | 0.019 | ↔ | -0.0014212 | 0.043 | ↔ | 2022-08-06 | 2023-04-12 | 0.698 | ↔ |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | < 0.0001 | 1.000 | ↔ | -0.030454 | 0.000 | ↓ | < 0.0001 | 0.908 | ↔ | 2018-05-02 | 2019-08-20 | 0.987 | ↔ |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 26 | 19 | 73% | < 0.0001 | 1.000 | ↔ | -1.1442 | 0.000 | ↓ | 0.026791 | 0.623 | ↔ | 2019-05-31 | 2021-07-20 | 0.981 | ↔ |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | < 0.0001 | 0.955 | ↔ | -0.00028743 | 0.722 | ↔ | 0.00025615 | 0.592 | ↔ | 2018-03-27 | 2020-10-28 | 0.026 | ↔ |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 25 | 8 | 32% | 0.010333 | 0.051 | ↔ | -0.017931 | 0.781 | ↔ | 0.032217 | 0.000 | ↑ | 2020-03-23 | 2021-04-20 | 0.837 | ↔ |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 25 | 12 | 48% | -0.0002613 | 0.978 | ↔ | -0.015239 | 0.217 | ↔ | 0.0024851 | 0.740 | ↔ | 2018-11-26 | 2021-09-10 | 0.413 | ↔ |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 25 | 13 | 52% | 0.0009587 | 0.014 | ↔ | -0.0024371 | 0.298 | ↔ | 0.00023422 | 0.619 | ↔ | 2020-05-04 | 2021-10-01 | 0.388 | ↔ |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | < 0.0001 | 0.989 | ↔ | -0.0026595 | 0.027 | ↔ | 0.000201 | 0.533 | ↔ | 2019-04-10 | 2020-10-28 | 0.743 | ↔ |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 24 | 8 | 33% | -0.00068251 | 0.114 | ↔ | 0.0099111 | 0.007 | ↑ | 0.089494 | 0.000 | ↑ | 2022-08-18 | 2024-09-21 | 0.960 | ↔ |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 24 | 0 | 0% | 0.046983 | 0.001 | ↑ | -0.028649 | 0.017 | ↔ | 0.4371 | 0.000 | ↑ | 2019-04-12 | 2023-11-25 | 0.934 | ↔ |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 23 | 21 | 91% | < 0.0001 | 1.000 | ↔ | -0.030552 | 0.000 | ↓ | 0.00032229 | 0.561 | ↔ | 2018-05-04 | 2019-08-23 | 0.983 | ↔ |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 24 | 5 | 21% | 0.011007 | 0.018 | ↔ | -0.0077968 | 0.016 | ↔ | 0.099029 | 0.000 | ↑ | 2019-04-11 | 2023-10-25 | 0.888 | ↔ |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 24 | 4 | 17% | -0.00064021 | 0.902 | ↔ | 0.0078972 | 0.081 | ↔ | -0.024004 | 0.666 | ↔ | 2019-04-28 | 2024-09-21 | 0.412 | ↔ |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 24 | 12 | 50% | 0.0015027 | 0.060 | ↔ | -0.00063152 | 0.005 | ↓ | 0.0046256 | 0.000 | ↑ | 2018-01-04 | 2023-08-27 | 0.735 | ↔ |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 23 | 23 | 100% | < 0.0001 | 0.989 | ↔ | -0.0025814 | 0.140 | ↔ | 0.00019104 | 0.504 | ↔ | 2019-04-07 | 2020-10-29 | 0.730 | ↔ |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 12 | 5 | 42% | -0.212 | 0.006 | ↓ | 0.0016379 | 0.217 | ↔ | -0.0038658 | 0.115 | ↔ | 2020-06-24 | 2023-10-02 | 0.896 | ↔ |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 12 | 6 | 50% | < 0.0001 | 0.966 | ↔ | 0.0034156 | 0.494 | ↔ | -0.0024062 | 0.045 | ↔ | 2022-03-18 | 2023-04-11 | 0.589 | ↔ |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 12 | 3 | 25% | -0.28435 | 0.364 | ↔ | -0.013201 | 0.884 | ↔ | 0.055681 | 0.389 | ↔ | 2020-10-30 | 2023-04-11 | 0.366 | ↔ |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 12 | 0 | 0% | -0.17624 | 0.089 | ↔ | 0.058804 | 0.110 | ↔ | 0.27624 | 0.177 | ↔ | 2021-06-15 | 2024-07-16 | 0.835 | ↔ |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 12 | 12 | 100% | -0.0012638 | 0.272 | ↔ | 0.0044527 | 0.056 | ↔ | -0.0023479 | 0.071 | ↔ | 2022-04-10 | 2023-05-08 | 0.675 | ↔ |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 17 | 15 | 88% | -0.00088824 | 0.004 | ↓ | 0.0027829 | 0.100 | ↔ | -0.0013994 | 0.138 | ↔ | 2022-04-15 | 2023-04-24 | 0.688 | ↔ |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 18 | 0 | 0% | -0.012377 | 0.663 | ↔ | 0.24513 | 0.017 | ↔ | -0.082435 | 0.337 | ↔ | 2021-09-17 | 2023-04-12 | 0.726 | ↔ |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | -0.017779 | 0.836 | ↔ | 0.13237 | 0.506 | ↔ | -0.097622 | 0.034 | ↔ | 2020-03-26 | 2021-10-20 | 0.354 | ↔ |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | -0.00067836 | 0.001 | ↓ | 0.0025486 | 0.029 | ↔ | -0.0012767 | 0.048 | ↔ | 2022-03-22 | 2023-05-01 | 0.716 | ↔ |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 17 | 15 | 88% | -0.021573 | 0.000 | ↓ | 0.0015197 | 0.335 | ↔ | -0.0030876 | 0.633 | ↔ | 2020-02-05 | 2023-10-02 | 0.944 | ↔ |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 17 | 16 | 94% | -0.00028857 | 0.730 | ↔ | 0.0017611 | 0.137 | ↔ | -0.0059174 | 0.070 | ↔ | 2021-01-28 | 2024-02-02 | 0.463 | ↔ |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 18 | 5 | 28% | -0.0045218 | 0.091 | ↔ | 0.0029204 | 0.423 | ↔ | -0.00090952 | 0.544 | ↔ | 2019-12-13 | 2021-10-22 | 0.323 | ↔ |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 17 | 16 | 94% | -0.00098685 | 0.009 | ↓ | 0.0043846 | 0.081 | ↔ | -0.0039947 | 0.074 | ↔ | 2022-09-03 | 2023-10-20 | 0.657 | ↔ |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 18 | 3 | 17% | -0.33333 | 0.439 | ↔ | 0.017591 | 0.131 | ↔ | 0.26601 | 0.000 | ↑ | 2018-02-22 | 2023-06-12 | 0.914 | ↔ |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.11314 | 0.013 | ↔ | -0.50515 | 0.187 | ↔ | -0.0046965 | 0.943 | ↔ | 2021-08-21 | 2022-07-31 | 0.648 | ↔ |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 17 | 15 | 88% | -0.00071001 | 0.001 | ↓ | 0.0027829 | 0.016 | ↔ | -0.0016691 | 0.012 | ↔ | 2022-03-31 | 2023-05-16 | 0.791 | ↔ |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 18 | 13 | 72% | -0.00070614 | 0.001 | ↓ | 0.0027829 | 0.025 | ↔ | -0.00099416 | 0.131 | ↔ | 2022-04-09 | 2023-04-14 | 0.694 | ↔ |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 17 | 12 | 71% | -0.021885 | 0.010 | ↔ | 0.00096484 | 0.702 | ↔ | 0.12867 | 0.000 | ↑ | 2020-01-18 | 2024-02-29 | 0.974 | ↔ |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 18 | 12 | 67% | -0.95409 | 0.000 | ↓ | -0.01775 | 0.946 | ↔ | 0.14025 | 0.843 | ↔ | 2021-01-26 | 2023-11-12 | 0.871 | ↔ |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 18 | 0 | 0% | -0.0034326 | 0.873 | ↔ | 0.019405 | 0.046 | ↔ | 0.3603 | 0.000 | ↑ | 2019-07-26 | 2022-12-17 | 0.995 | ↔ |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 18 | 5 | 28% | -0.56667 | 0.002 | ↓ | 0.012798 | 0.011 | ↔ | 0.14763 | 0.000 | ↑ | 2018-03-02 | 2023-04-11 | 0.973 | ↔ |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 18 | 9 | 50% | -0.0016257 | 0.073 | ↔ | < 0.0001 | 0.756 | ↔ | 0.00037234 | 0.641 | ↔ | 2019-04-18 | 2023-04-12 | 0.514 | ↔ |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 17 | 17 | 100% | -0.0013236 | 0.000 | ↓ | 0.0087356 | 0.011 | ↔ | -0.0023614 | 0.015 | ↔ | 2022-08-30 | 2023-06-13 | 0.858 | ↔ |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 17 | 14 | 82% | -0.00076187 | 0.055 | ↔ | 0.0010983 | 0.352 | ↔ | -0.0016158 | 0.153 | ↔ | 2021-07-19 | 2023-06-01 | 0.517 | ↔ |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 18 | 2 | 11% | 0.00039803 | 0.868 | ↔ | 0.052332 | 0.034 | ↔ | -0.012957 | 0.006 | ↓ | 2021-07-24 | 2022-05-07 | 0.808 | ↔ |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.21207 | 0.004 | ↑ | -0.39547 | 0.215 | ↔ | -0.061709 | 0.646 | ↔ | 2021-04-22 | 2023-01-24 | 0.671 | ↔ |

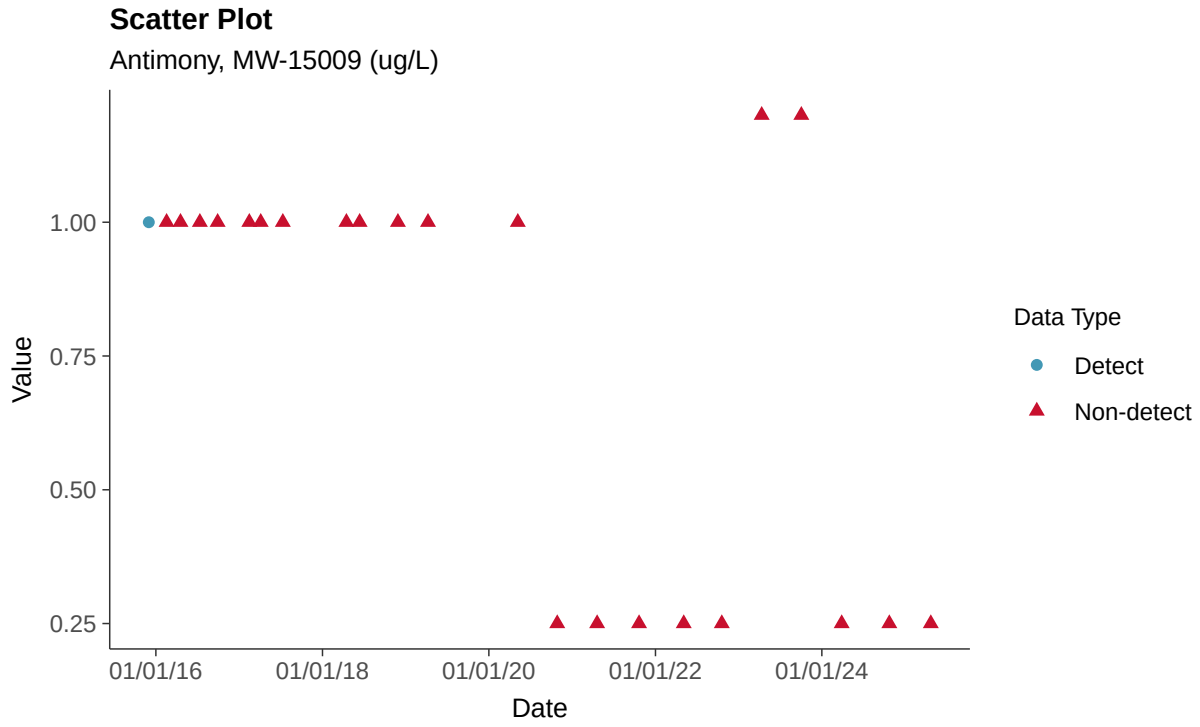
*(Table continues on next page)*

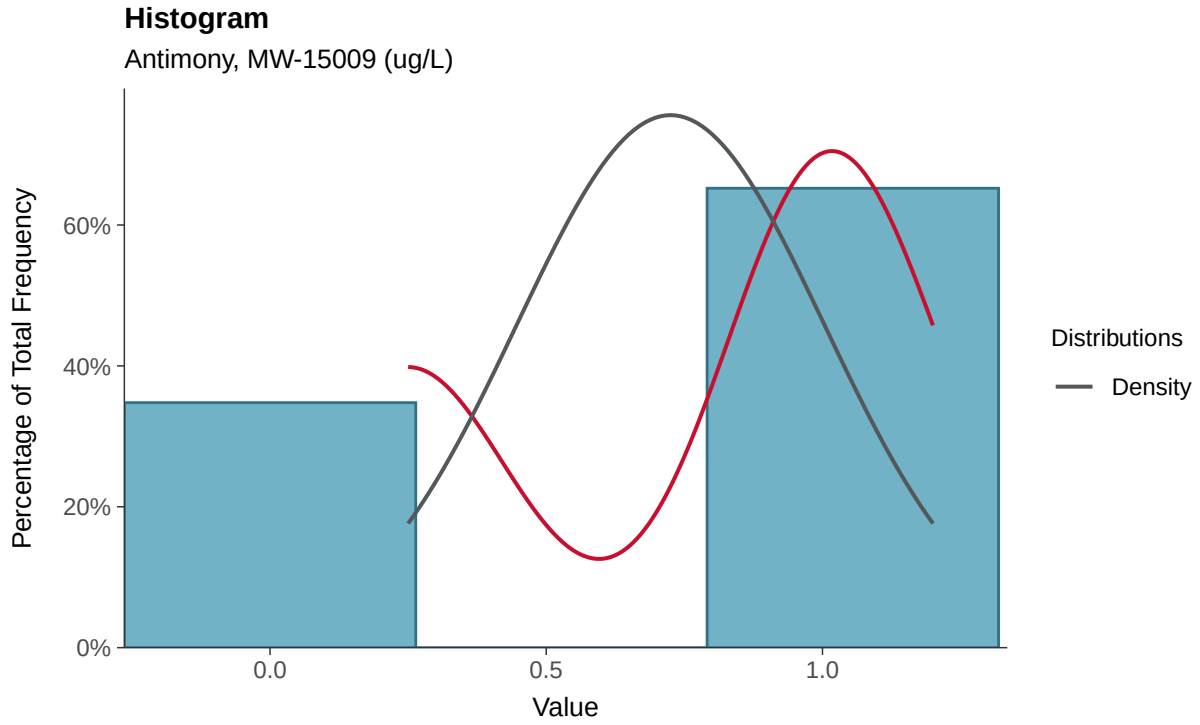
**Table 10:** Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

| | | | | | | | | 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 |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 17 | 17 | 100% | -0.00070975 | 0.001 | ↓ | 0.0027722 | 0.018 | ↔ | -0.0014636 | 0.025 | ↔ | 2022-03-30 | 2023-05-08 | 0.771 | ↔ |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 17 | 16 | 94% | < 0.0001 | 0.778 | ↔ | 0.0020773 | 0.040 | ↔ | -0.0014636 | 0.015 | ↔ | 2022-04-16 | 2023-05-24 | 0.694 | ↔ |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 18 | 12 | 67% | -0.0013846 | 0.388 | ↔ | 0.0086812 | 0.173 | ↔ | -0.0039801 | 0.079 | ↔ | 2021-02-12 | 2022-05-03 | 0.397 | ↔ |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 17 | 11 | 65% | -0.021845 | 0.000 | ↓ | 0.0035737 | 0.150 | ↔ | -0.0035833 | 0.250 | ↔ | 2020-02-17 | 2022-11-30 | 0.941 | ↔ |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 18 | 13 | 72% | -0.89033 | 0.003 | ↓ | -0.28946 | 0.537 | ↔ | 0.039117 | 0.875 | ↔ | 2020-10-28 | 2022-06-07 | 0.876 | ↔ |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 17 | 14 | 82% | -0.002965 | 0.622 | ↔ | 0.013784 | 0.429 | ↔ | -0.0086342 | 0.077 | ↔ | 2020-07-04 | 2022-05-02 | 0.364 | ↔ |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 18 | 6 | 33% | -0.0045651 | 0.639 | ↔ | 0.05489 | 0.001 | ↑ | 0.011938 | 0.741 | ↔ | 2021-04-13 | 2023-12-14 | 0.880 | ↔ |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 18 | 7 | 39% | -0.0066809 | 0.533 | ↔ | 0.026449 | 0.003 | ↑ | -0.038462 | 0.560 | ↔ | 2020-10-03 | 2024-08-24 | 0.747 | ↔ |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 18 | 7 | 39% | 0.00036236 | 0.705 | ↔ | -0.0011858 | 0.589 | ↔ | 0.00069246 | 0.875 | ↔ | 2021-04-22 | 2023-10-31 | 0.092 | ↔ |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 18 | 14 | 78% | -0.00055439 | 0.341 | ↔ | 0.0022616 | 0.230 | ↔ | -0.0036067 | 0.051 | ↔ | 2021-05-31 | 2023-05-28 | 0.450 | ↔ |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 17 | 14 | 82% | -0.001531 | 0.002 | ↓ | 0.0018007 | 0.062 | ↔ | -0.0046398 | 0.022 | ↔ | 2021-05-27 | 2023-12-29 | 0.754 | ↔ |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 18 | 13 | 72% | -0.0016604 | 0.109 | ↔ | 0.0017605 | 0.107 | ↔ | -0.0039693 | 0.046 | ↔ | 2020-09-19 | 2023-09-19 | 0.491 | ↔ |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.20228 | 0.251 | ↔ | -0.25299 | 0.068 | ↔ | 0.08955 | 0.590 | ↔ | 2020-05-04 | 2022-11-21 | 0.398 | ↔ |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 17 | 16 | 94% | -0.00071045 | 0.001 | ↓ | 0.0027667 | 0.021 | ↔ | -0.0015747 | 0.022 | ↔ | 2022-03-30 | 2023-05-08 | 0.766 | ↔ |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 18 | 11 | 61% | -0.00064003 | 0.002 | ↓ | 0.0021033 | 0.068 | ↔ | -0.0014257 | 0.034 | ↔ | 2022-03-03 | 2023-05-25 | 0.696 | ↔ |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | < 0.0001 | 1.000 | ↔ | -0.03535 | 0.001 | ↓ | 0.00034353 | 0.656 | ↔ | 2018-06-19 | 2019-08-03 | 0.963 | ↔ |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 18 | 3 | 17% | 0.025594 | 0.065 | ↔ | -0.048673 | 0.243 | ↔ | 0.017938 | 0.111 | ↔ | 2020-05-05 | 2021-12-14 | 0.433 | ↔ |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 18 | 8 | 44% | -0.0015909 | 0.194 | ↔ | 0.0016234 | 0.329 | ↔ | -0.0011131 | 0.488 | ↔ | 2020-05-15 | 2022-10-20 | 0.223 | ↔ |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 18 | 7 | 39% | 0.0025843 | 0.348 | ↔ | -0.028371 | 0.035 | ↔ | 0.0020489 | 0.085 | ↔ | 2020-05-02 | 2020-11-27 | 0.646 | ↔ |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 18 | 0 | 0% | 0.093579 | 0.000 | ↑ | -0.15797 | 0.070 | ↔ | 0.017499 | 0.472 | ↔ | 2020-12-21 | 2022-08-22 | 0.781 | ↔ |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 17 | 17 | 100% | -0.00085291 | 0.009 | ↓ | 0.0011336 | 0.045 | ↔ | -0.0014603 | 0.041 | ↔ | 2021-06-07 | 2023-08-14 | 0.714 | ↔ |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 17 | 16 | 94% | -0.021947 | 0.000 | ↓ | 0.0015275 | 0.427 | ↔ | -0.0030081 | 0.475 | ↔ | 2020-01-27 | 2023-10-02 | 0.944 | ↔ |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 17 | 16 | 94% | < 0.0001 | 0.702 | ↔ | -0.0028604 | 0.147 | ↔ | -0.0010396 | 0.065 | ↔ | 2023-07-27 | 2022-08-16 | 0.446 | ↔ |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 18 | 13 | 72% | -0.00343 | 0.000 | ↓ | 0.0087459 | 0.001 | ↑ | 0.22404 | 0.000 | ↑ | 2022-02-10 | 2024-10-09 | 0.994 | ↔ |

## Appendix IV: Antimony, MW-15009

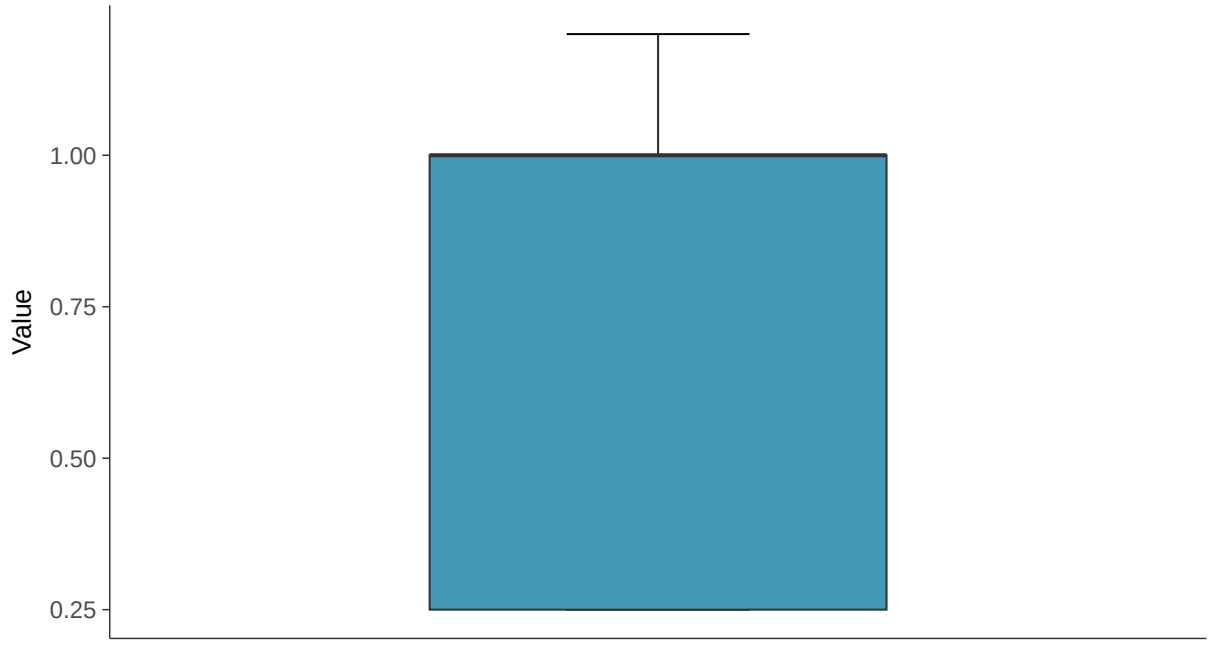
ID: 01_2_101



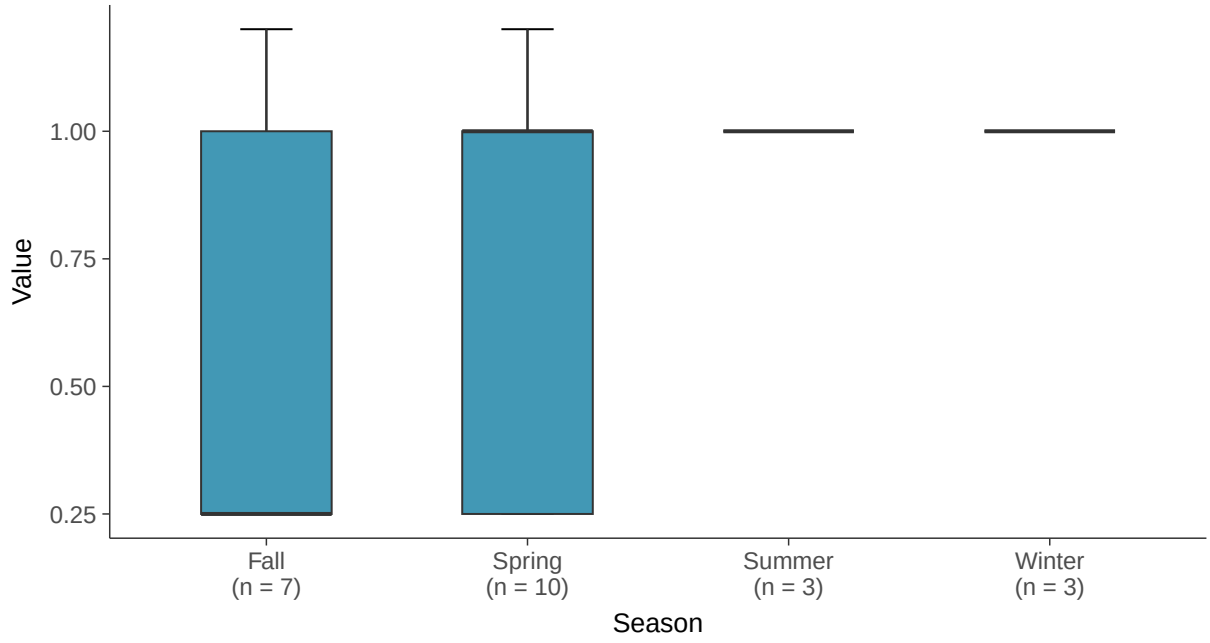
**Boxplot**

Antimony, MW-15009 (ug/L)



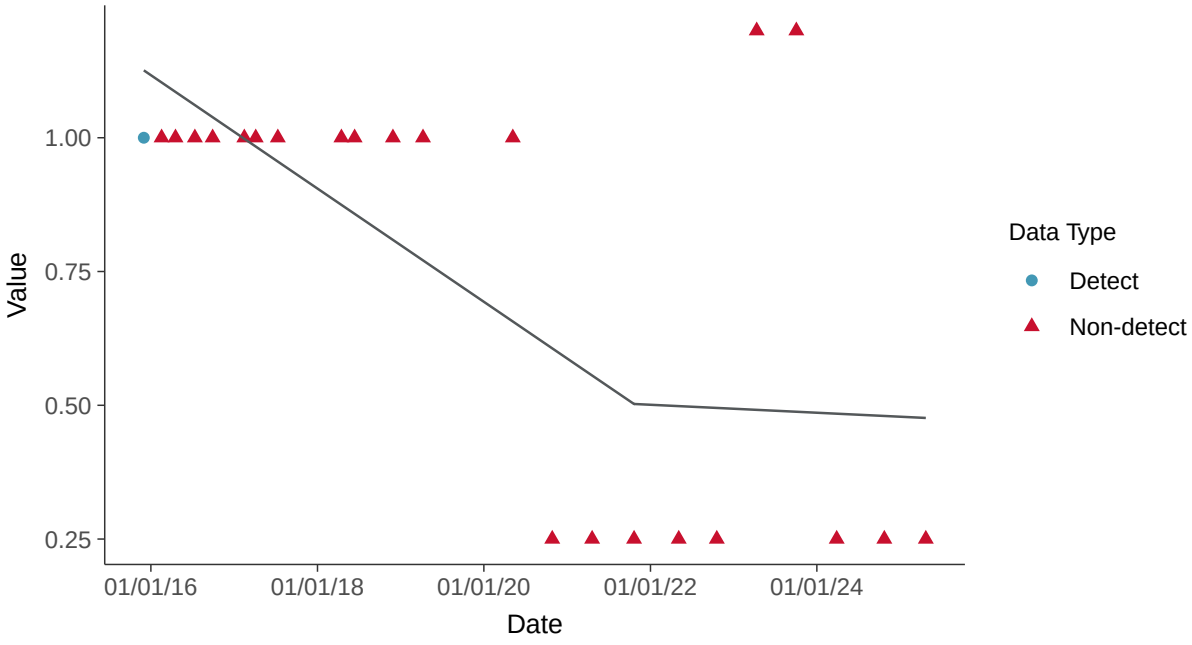

**Boxplot by Season**

Antimony, MW-15009 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15009 (ug/L)

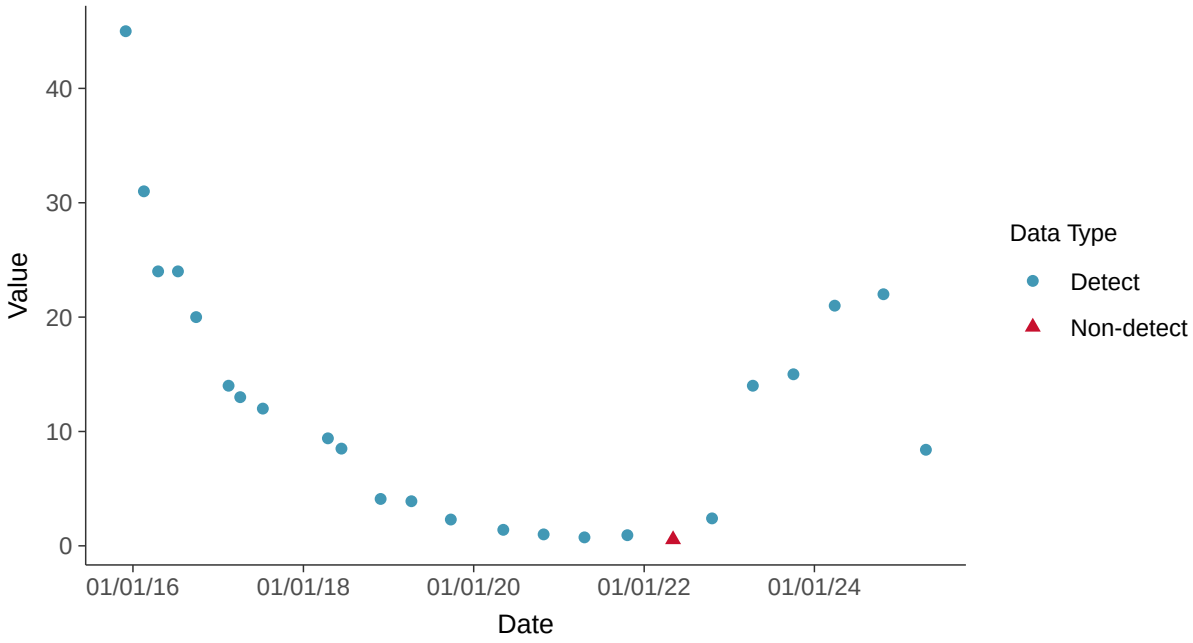


## Appendix IV: Arsenic, MW-15009

ID: 01_2_102

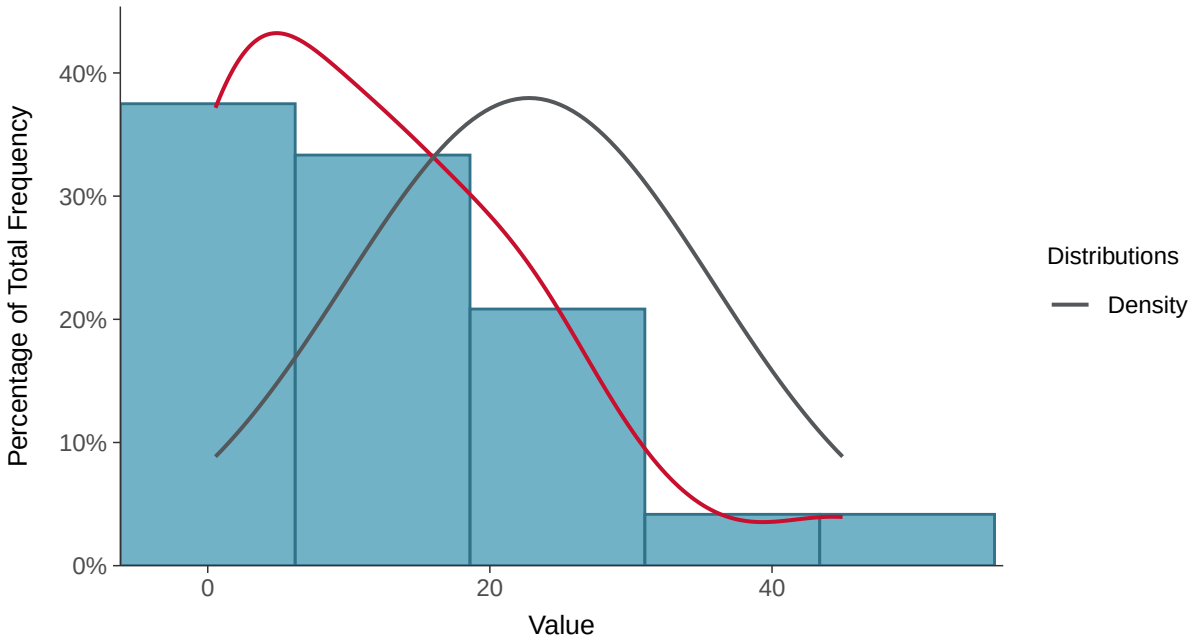
**Scatter Plot**

Arsenic, MW-15009 (ug/L)



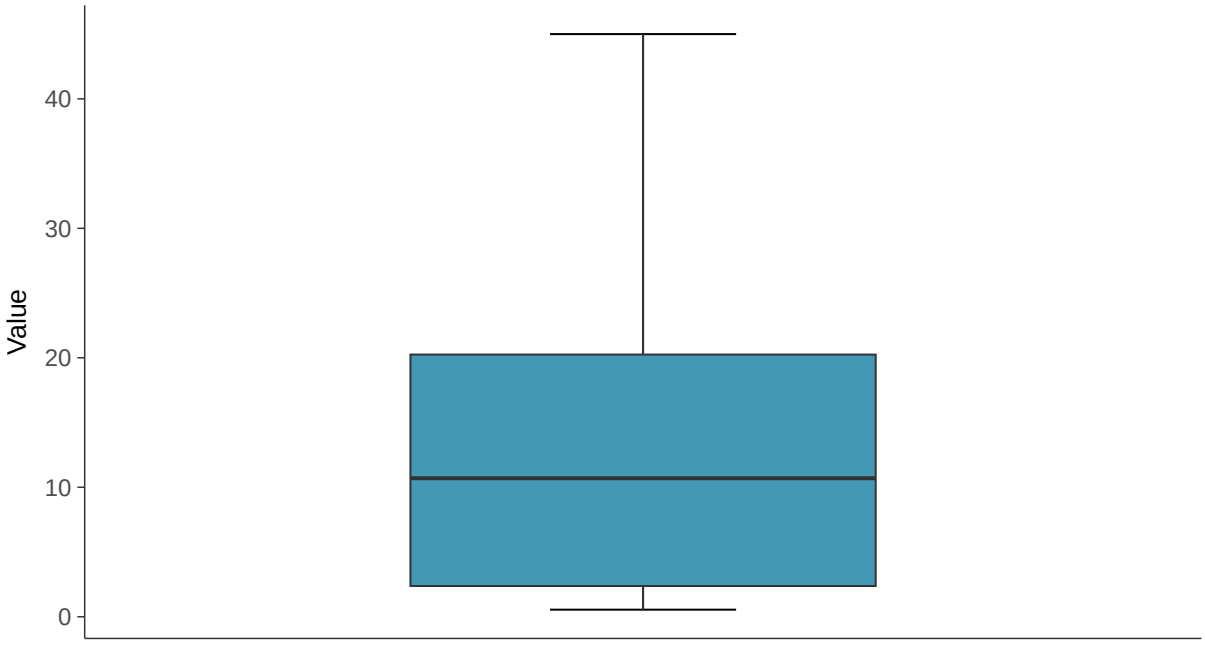

**Histogram**

Arsenic, MW-15009 (ug/L)



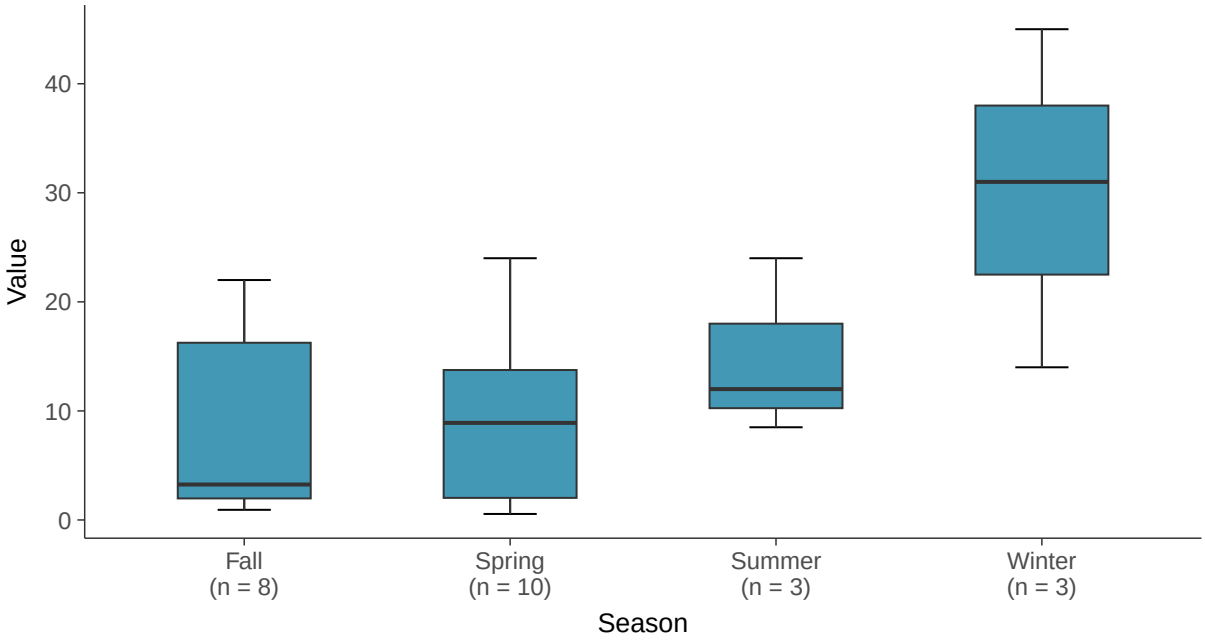
**Boxplot**

Arsenic, MW-15009 (ug/L)



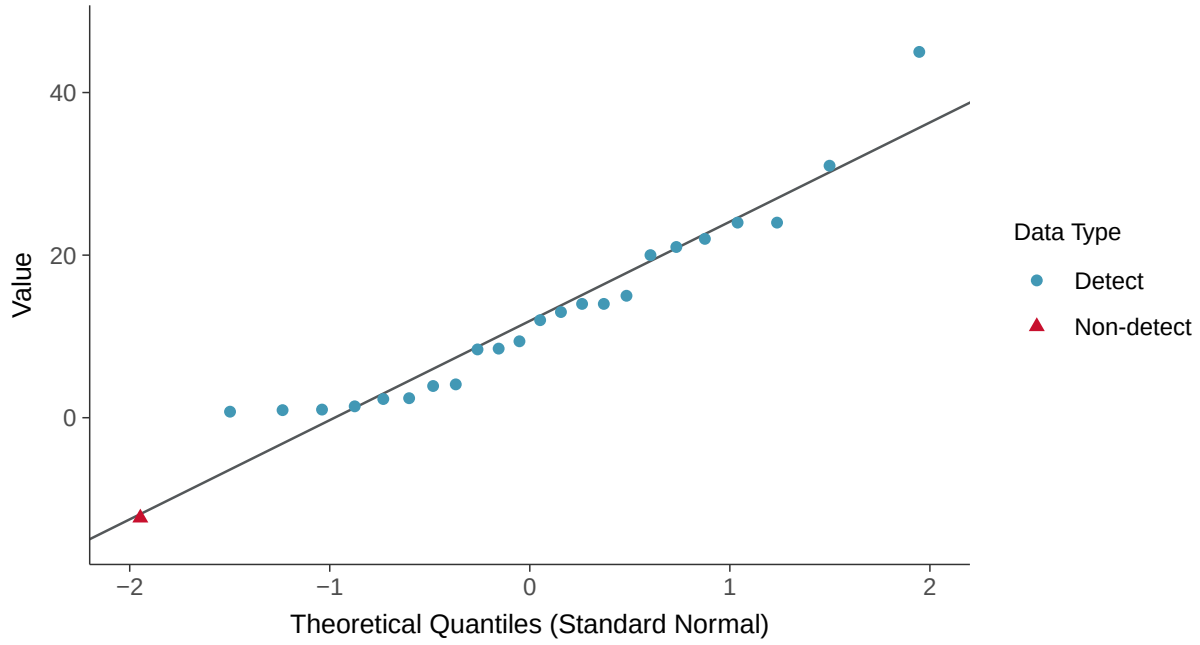

**Boxplot by Season**

Arsenic, MW-15009 (ug/L)



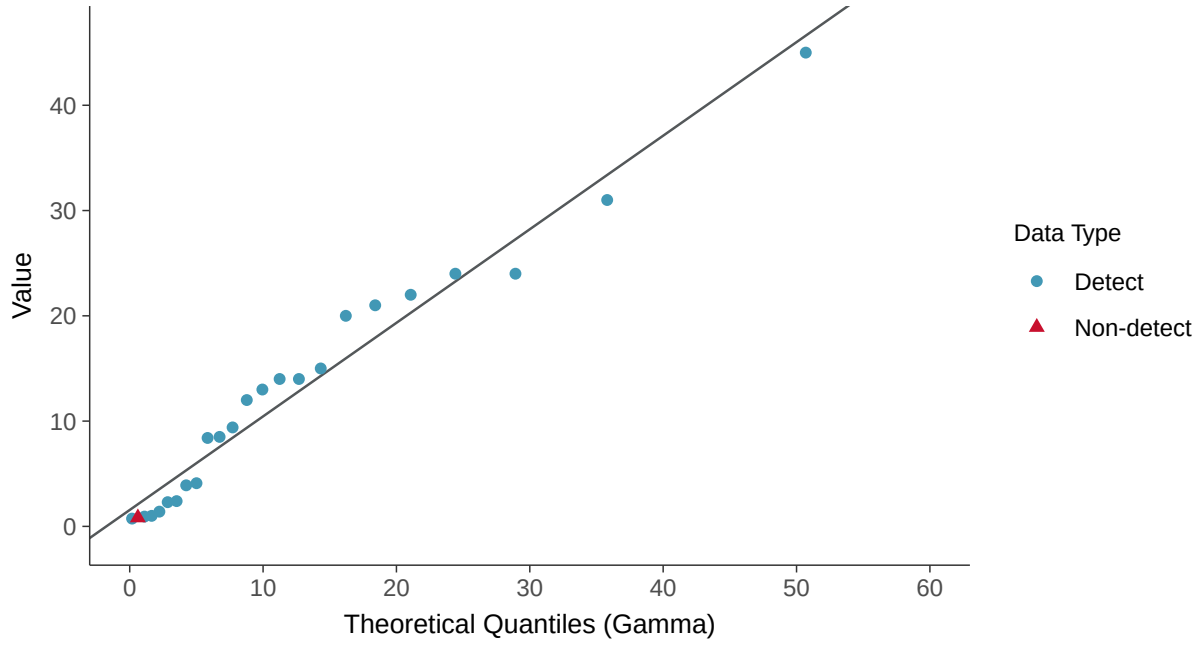
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15009 (ug/L)



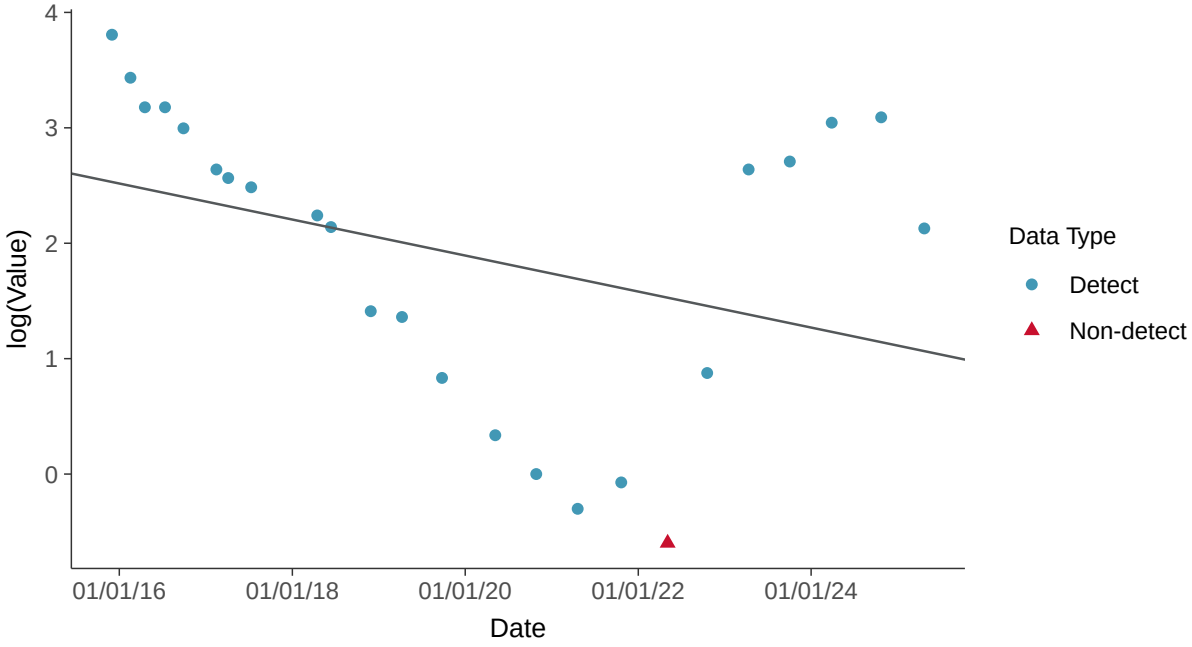

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15009 (ug/L)



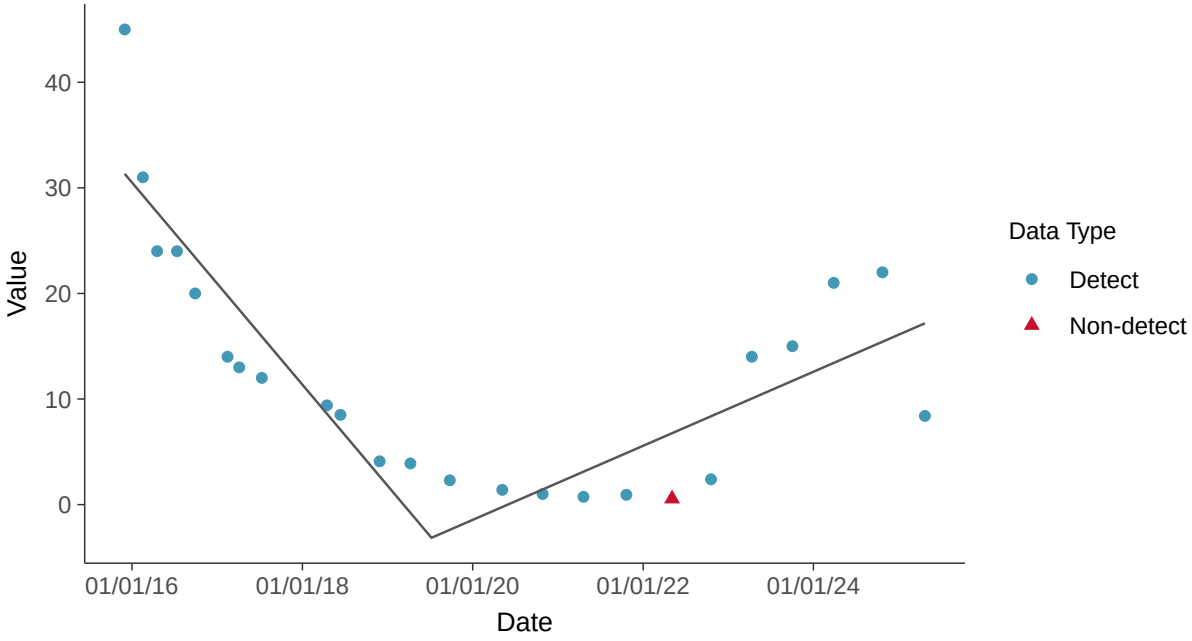
**Trend Regression: Lognormal MLE**

Arsenic, MW-15009 (ug/L)



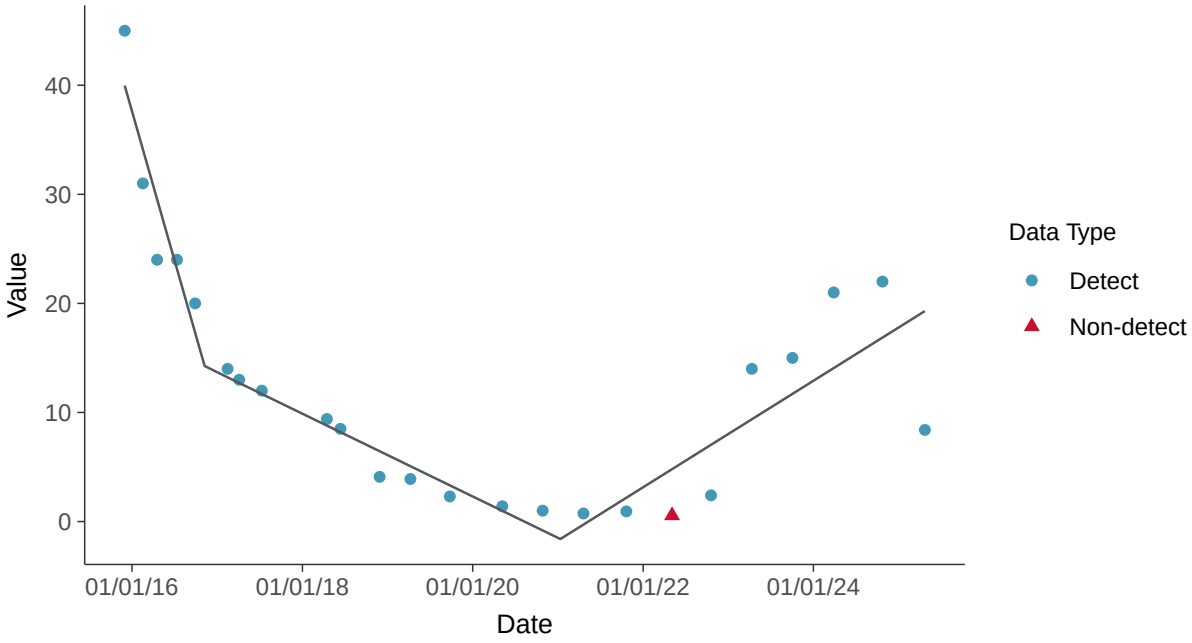

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15009 (ug/L)



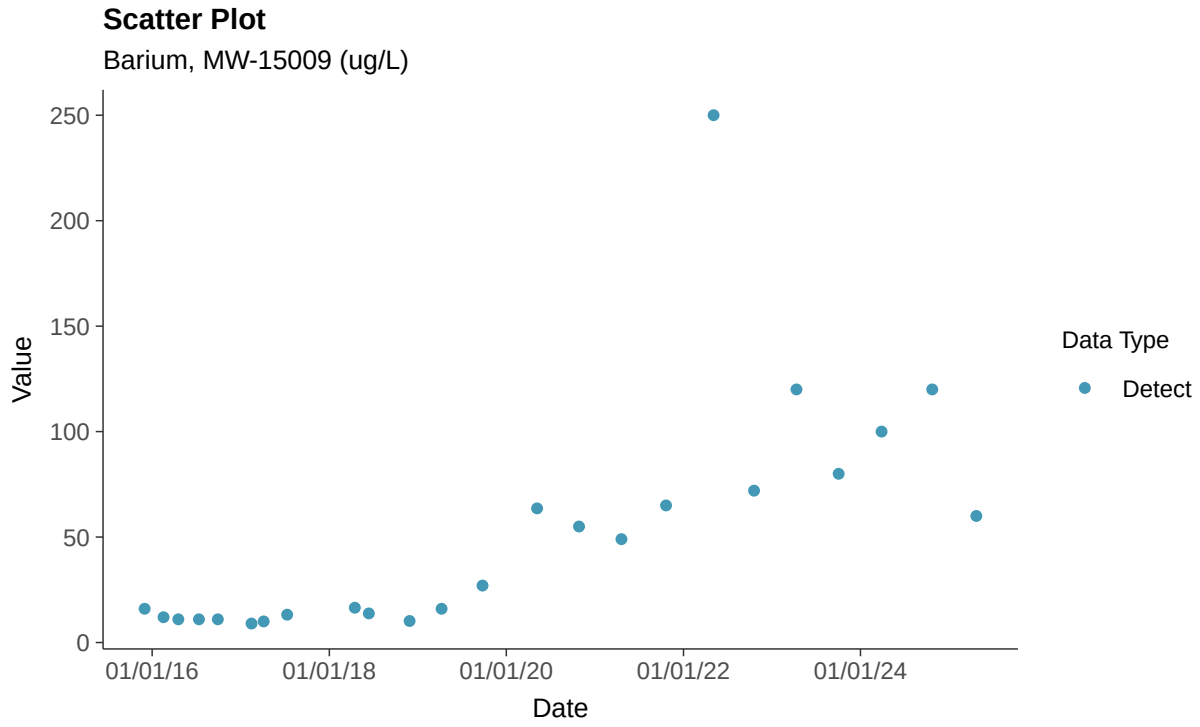
**Trend Regression: Piecewise Linear-Linear-Linear**

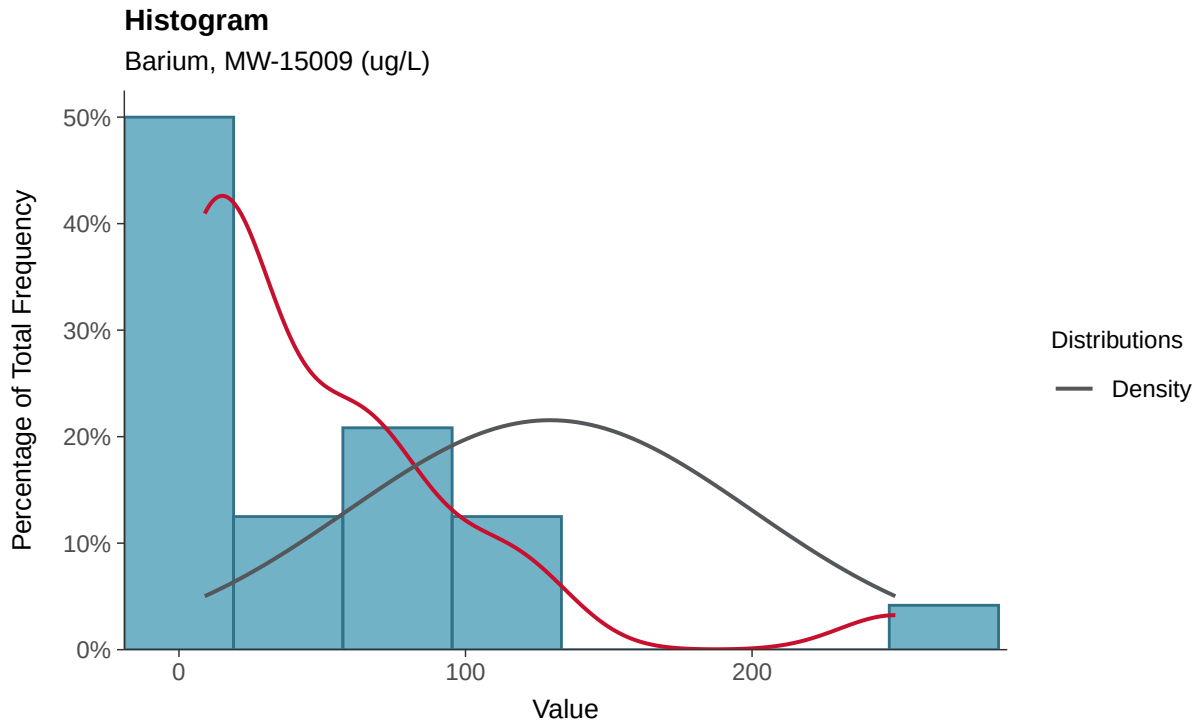
Arsenic, MW-15009 (ug/L)



## Appendix IV: Barium, MW-15009

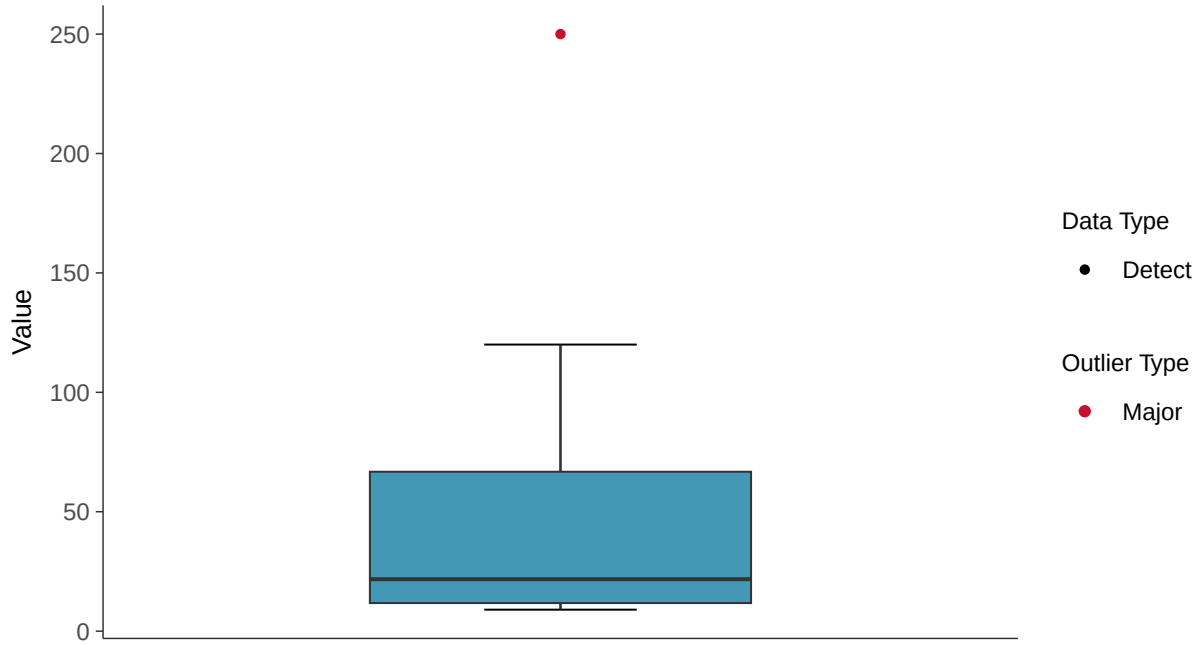
ID: 01_2_103



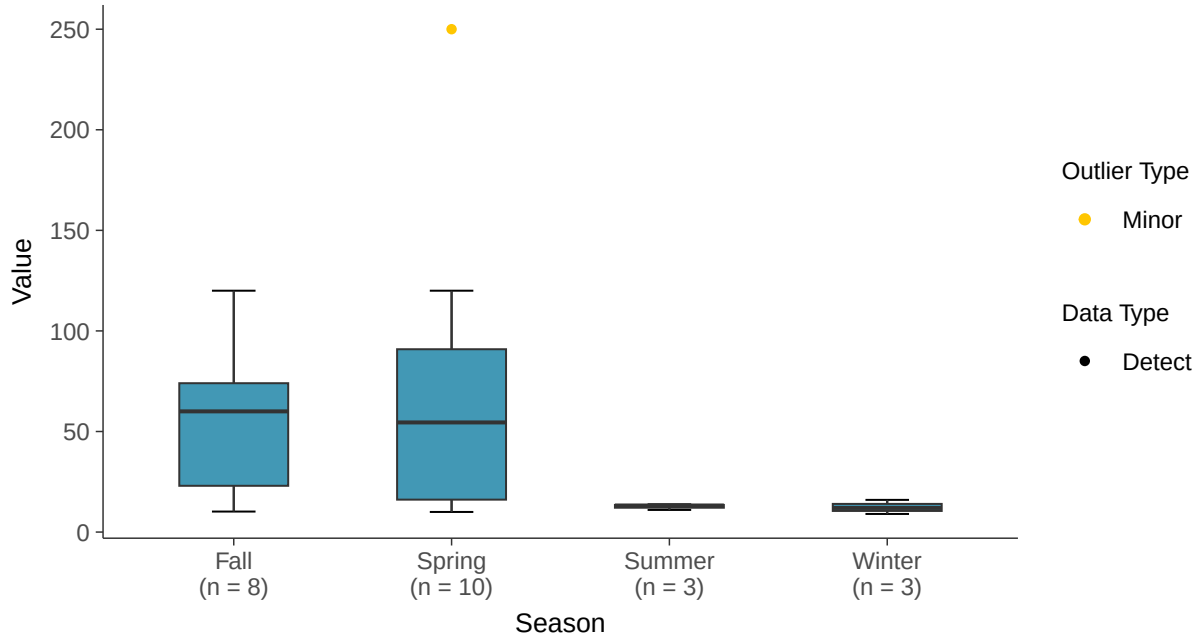
## Boxplot

Barium, MW-15009 (ug/L)



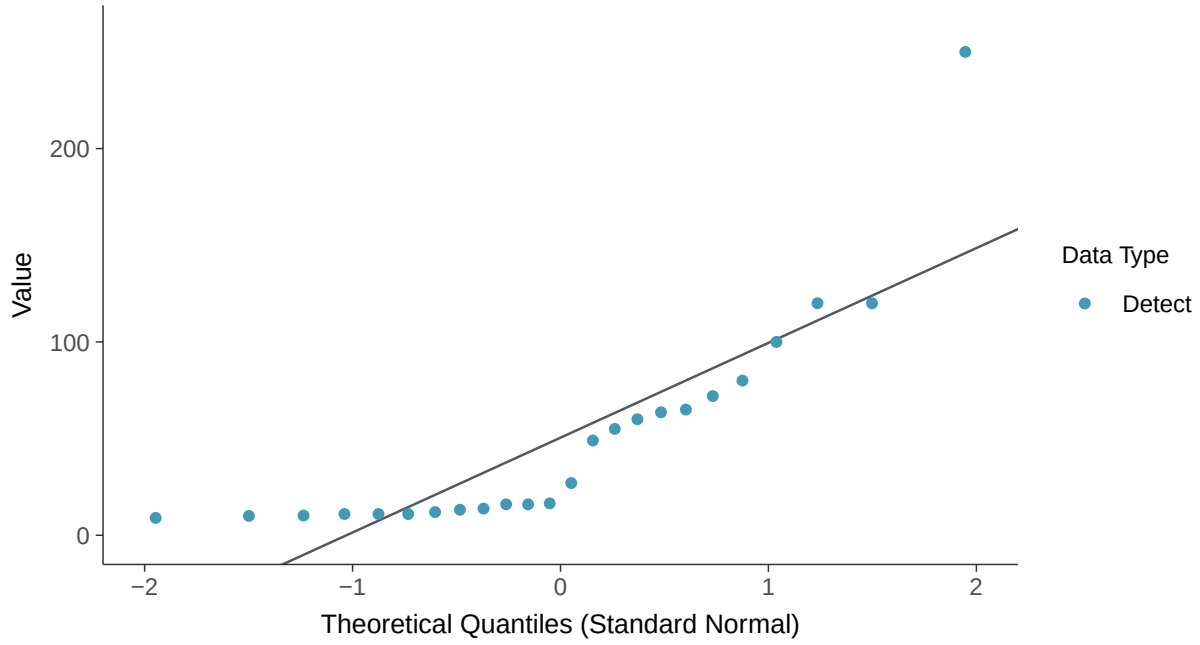

## Boxplot by Season

Barium, MW-15009 (ug/L)



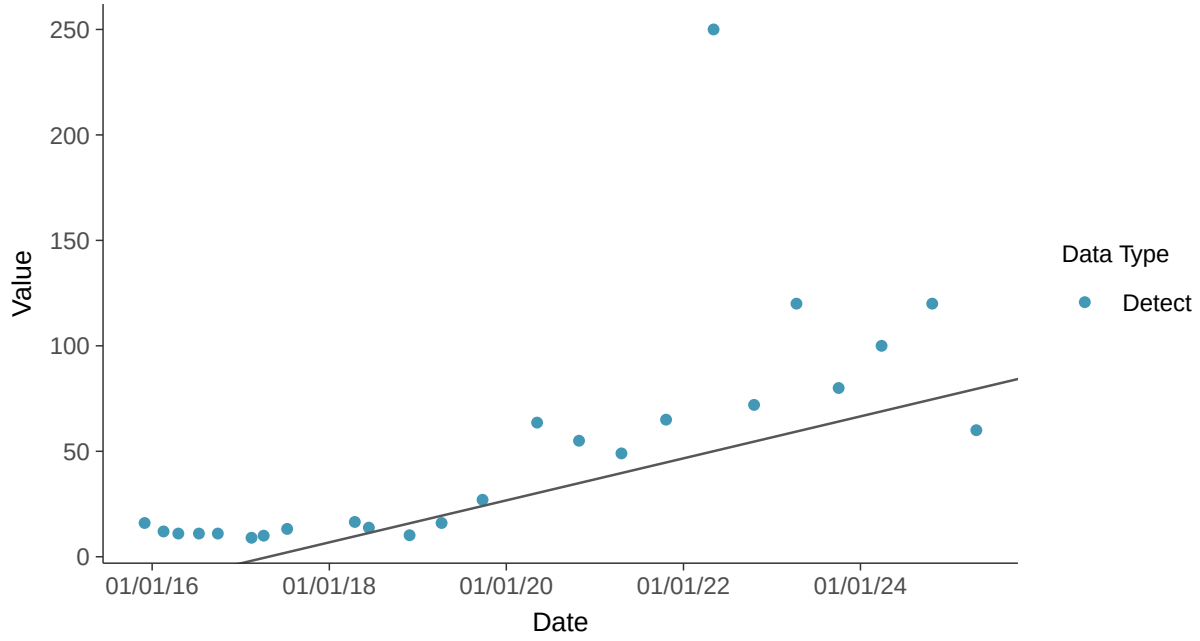
**Normal Q-Q plot**

Barium, MW-15009 (ug/L)



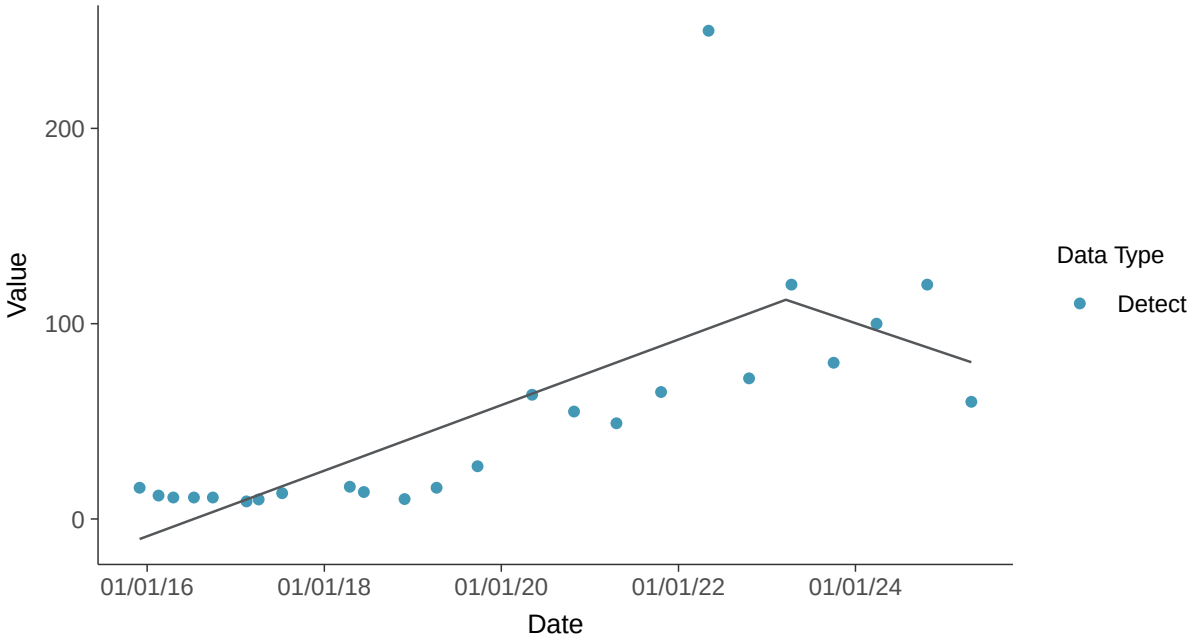

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15009 (ug/L)



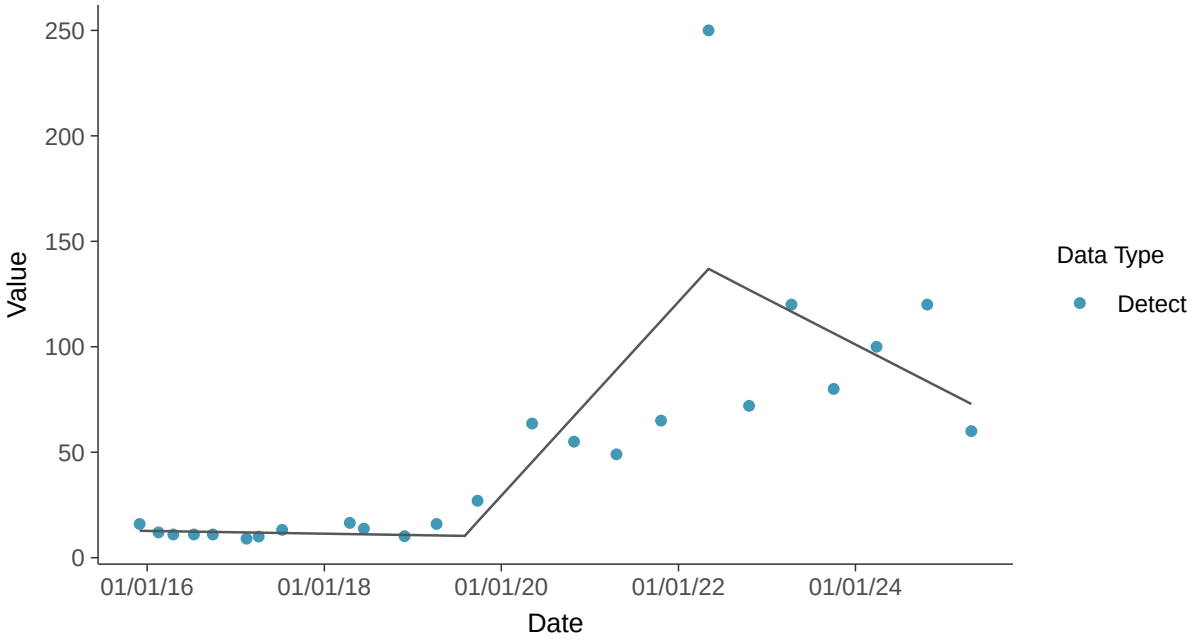
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15009 (ug/L)



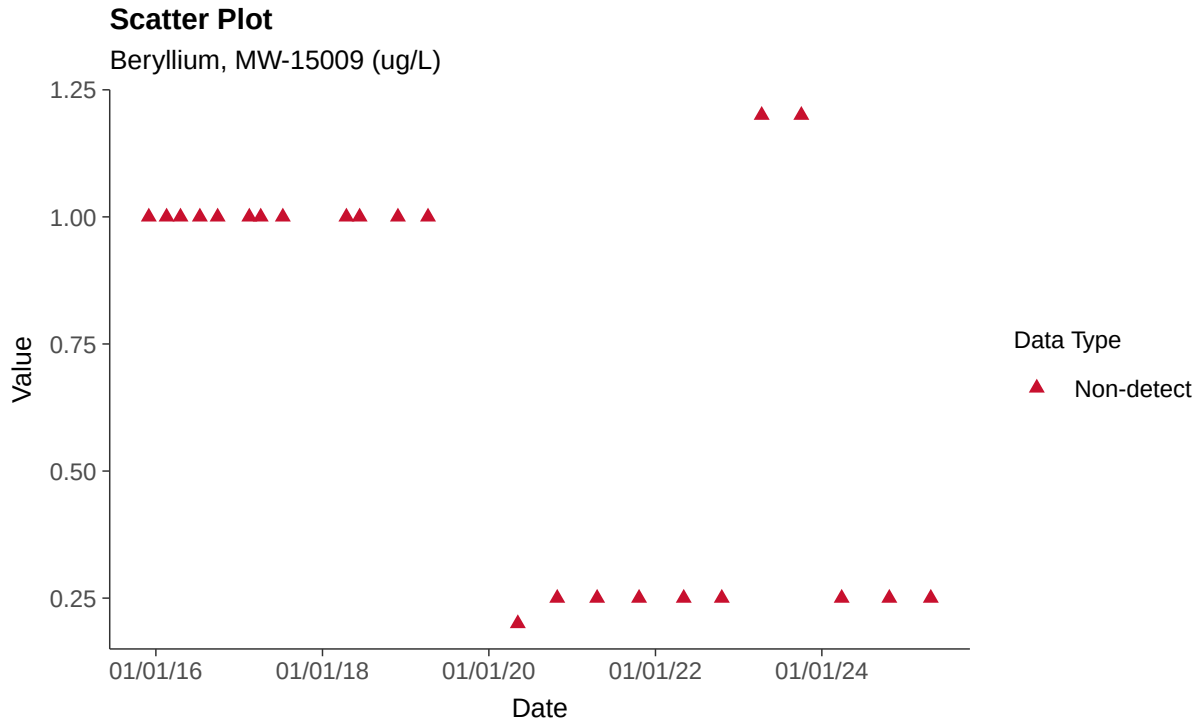

**Trend Regression: Piecewise Linear-Linear-Linear**

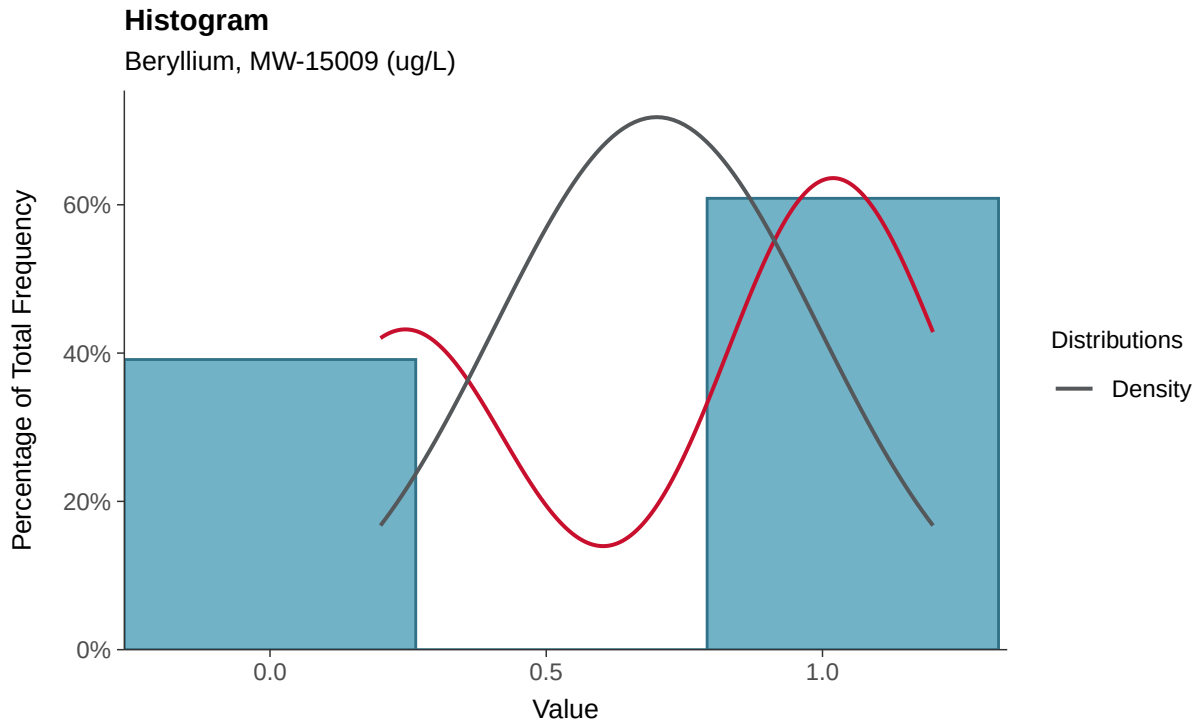
Barium, MW-15009 (ug/L)



## Appendix IV: Beryllium, MW-15009

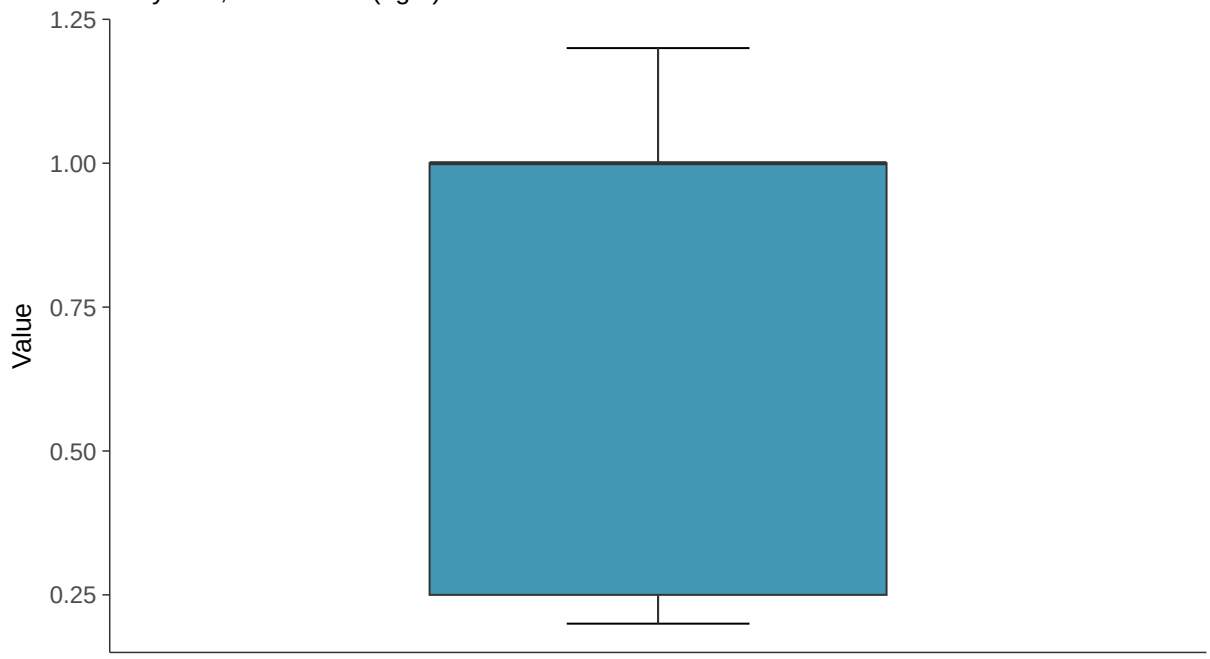
ID: 01_2_104



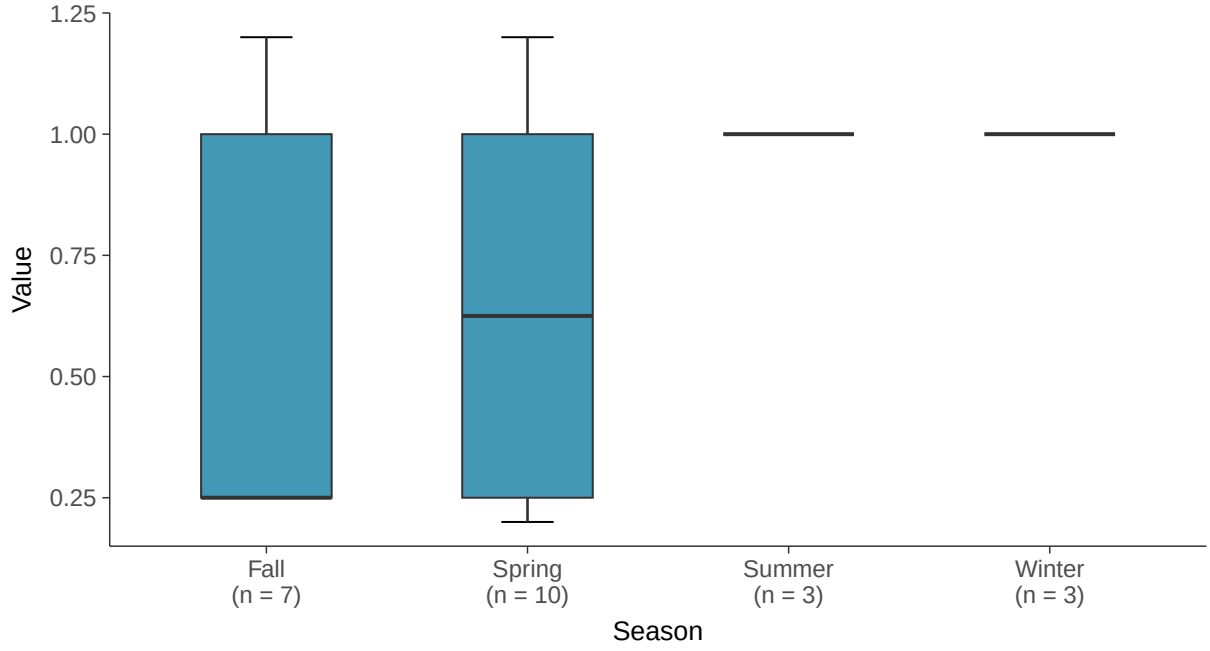
**Boxplot**

Beryllium, MW-15009 (ug/L)



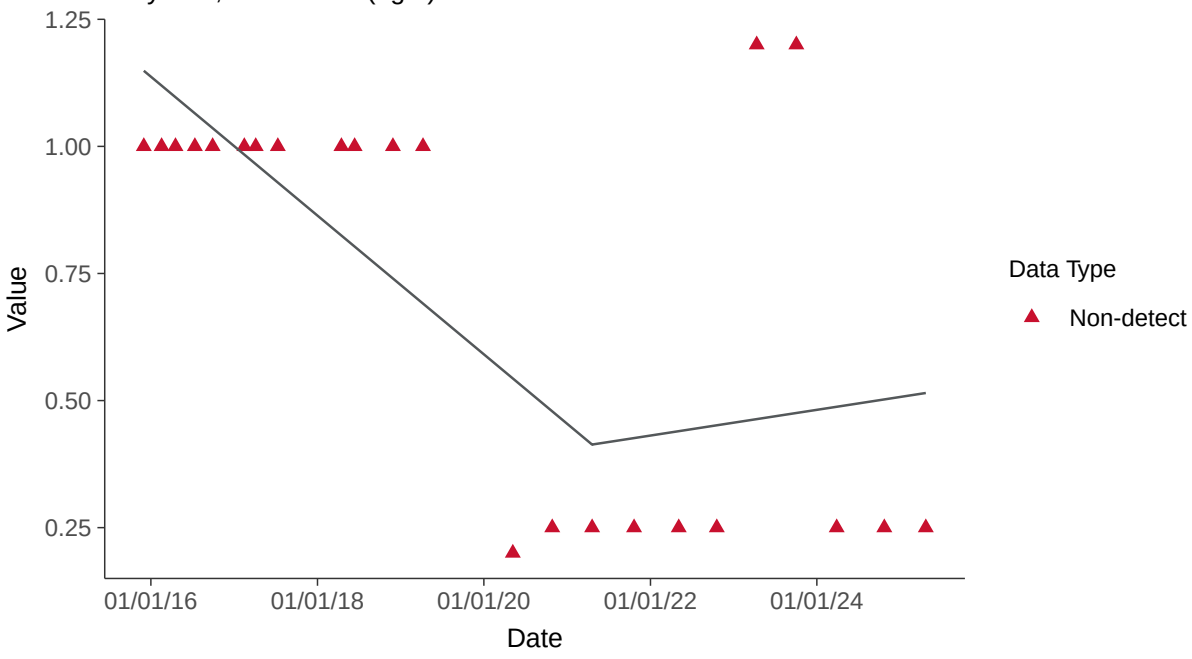

**Boxplot by Season**

Beryllium, MW-15009 (ug/L)



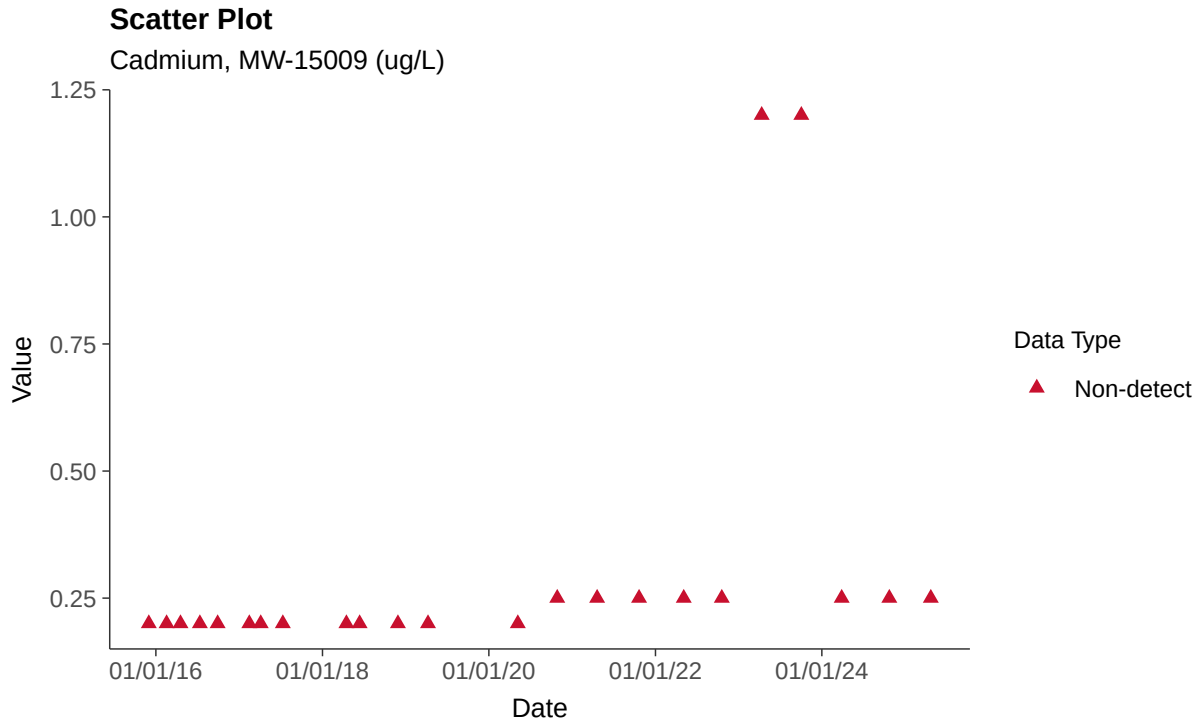
**Trend Regression: Piecewise Linear-Linear**

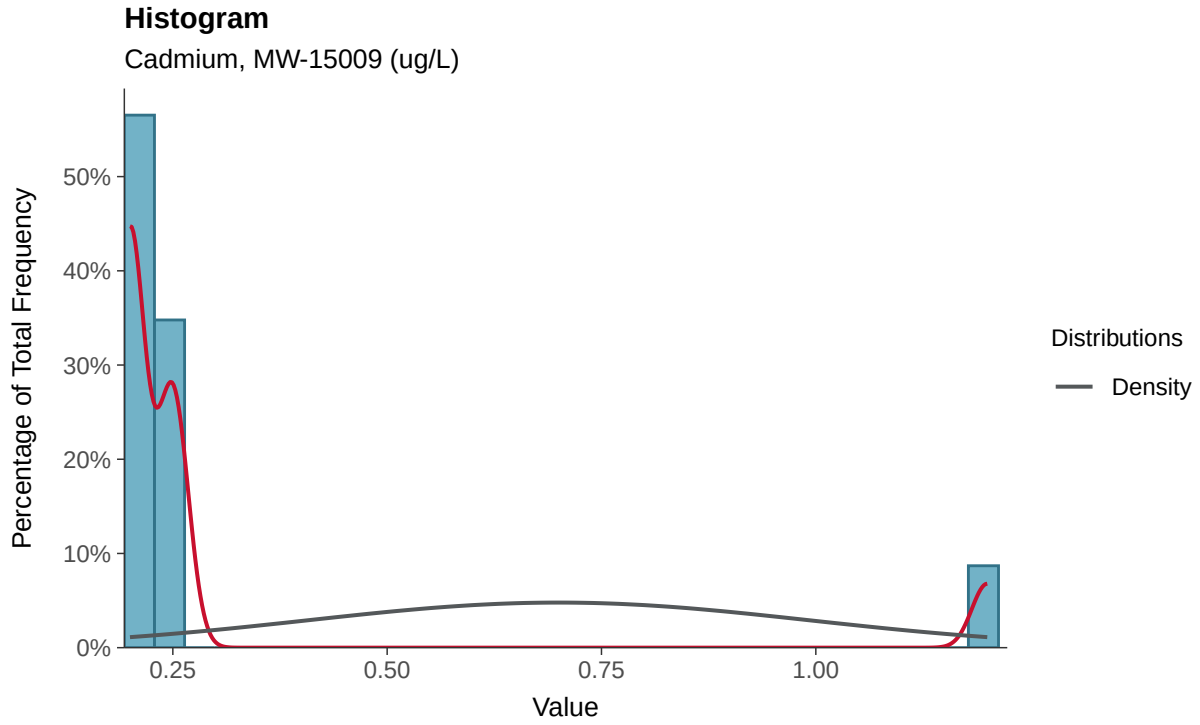
Beryllium, MW-15009 (ug/L)



## Appendix IV: Cadmium, MW-15009

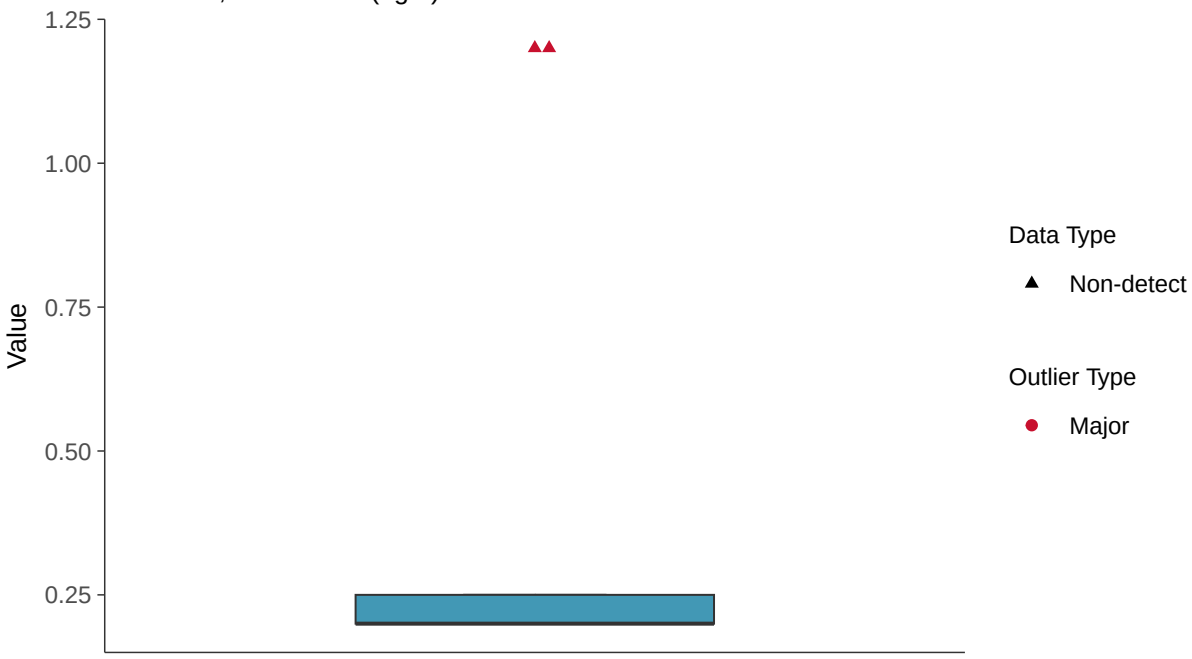
ID: 01_2_106



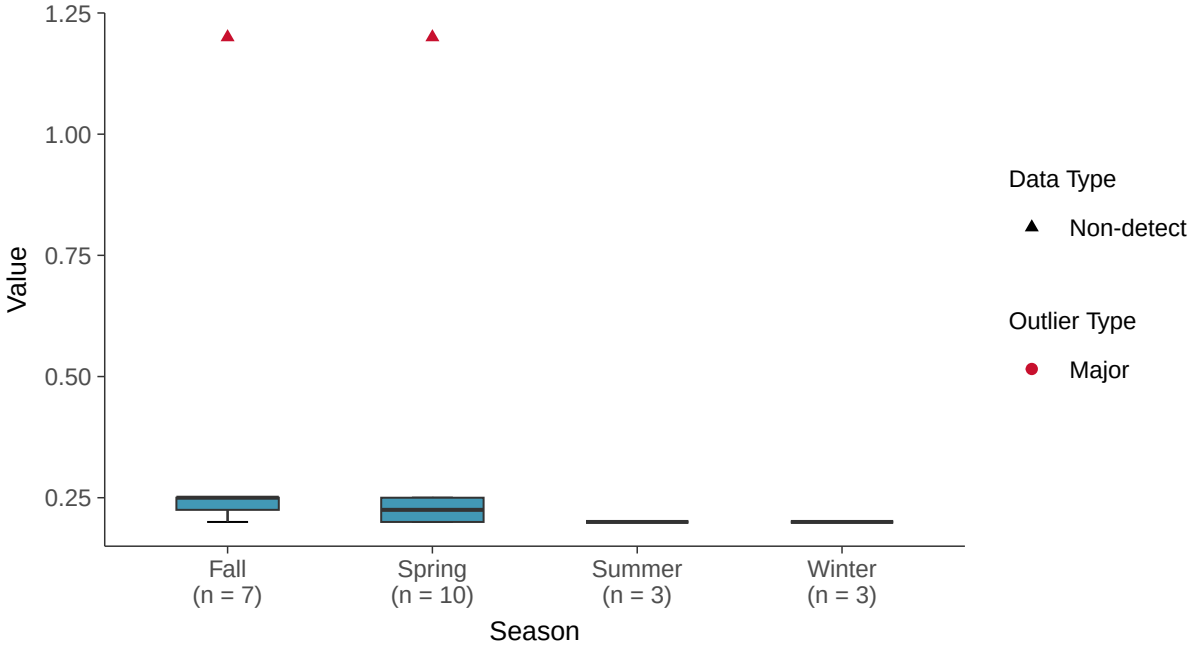
## Boxplot

Cadmium, MW-15009 (ug/L)



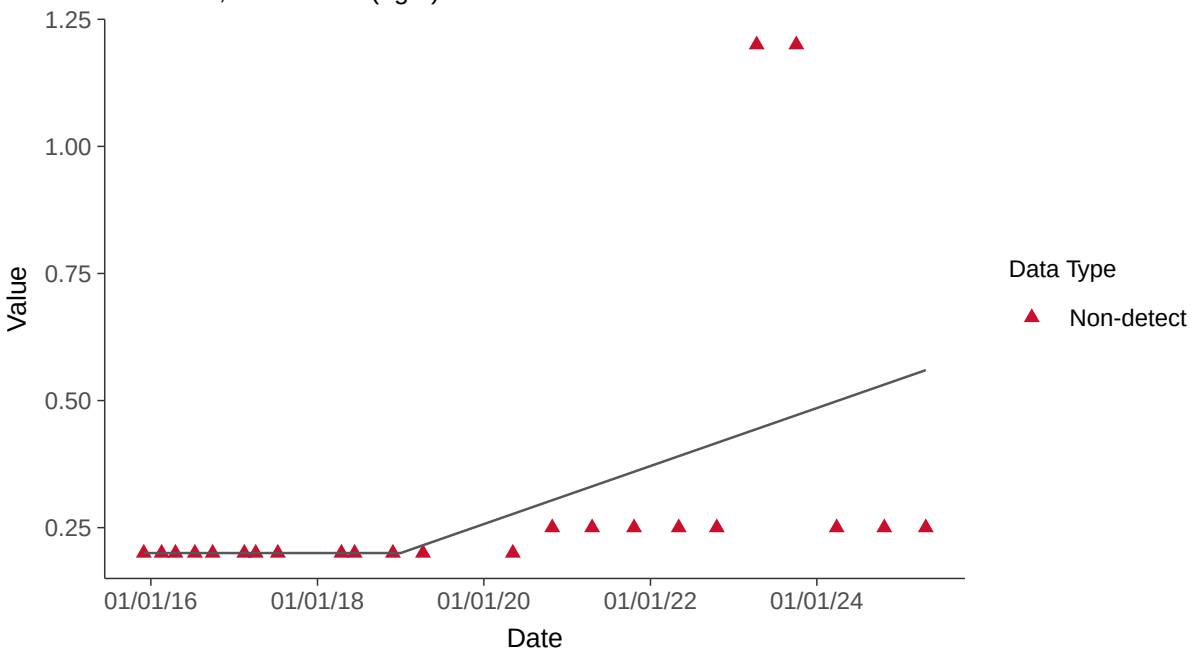

## Boxplot by Season

Cadmium, MW-15009 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15009 (ug/L)

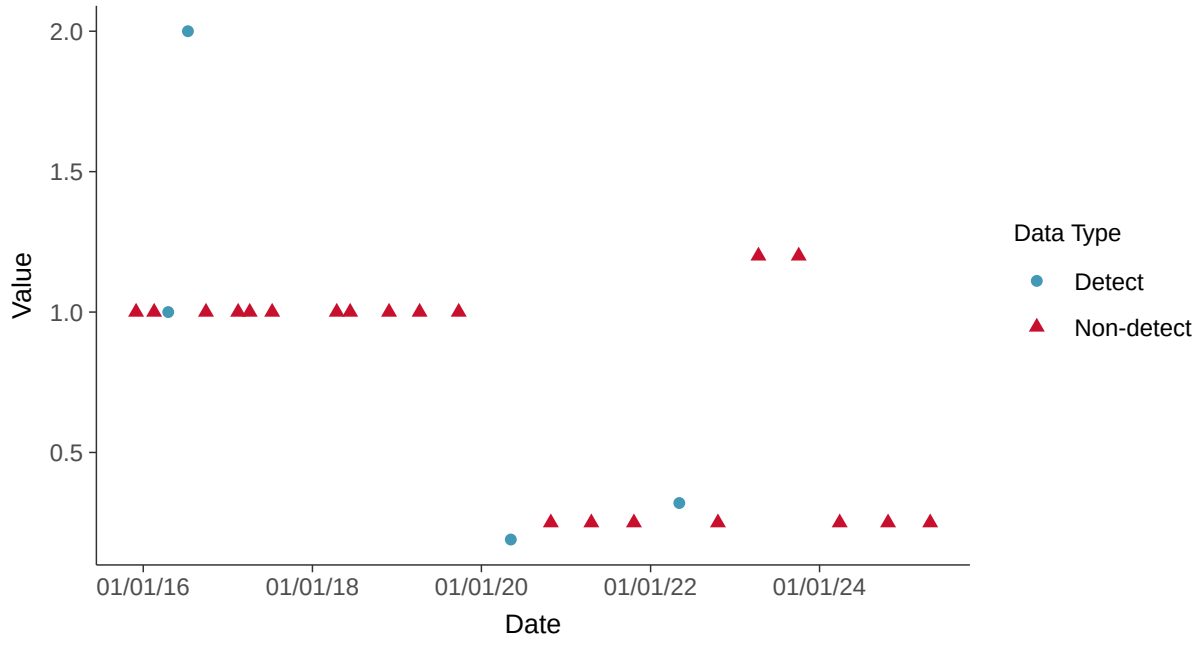


## Appendix IV: Chromium, MW-15009

ID: 01_2_109

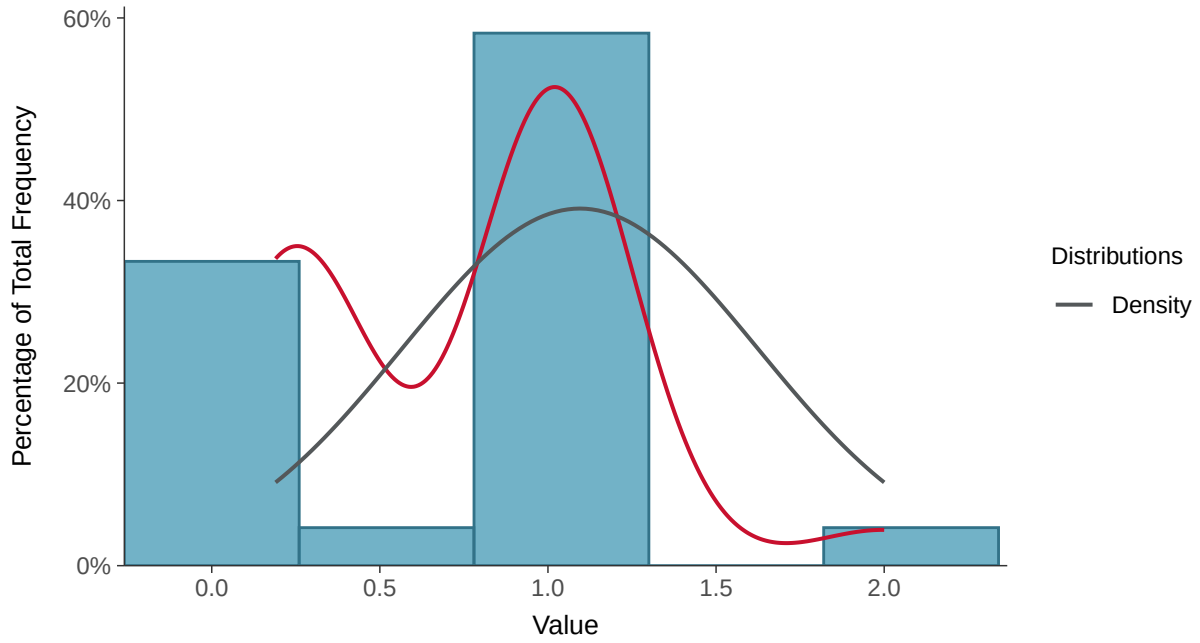
**Scatter Plot**

Chromium, MW-15009 (ug/L)



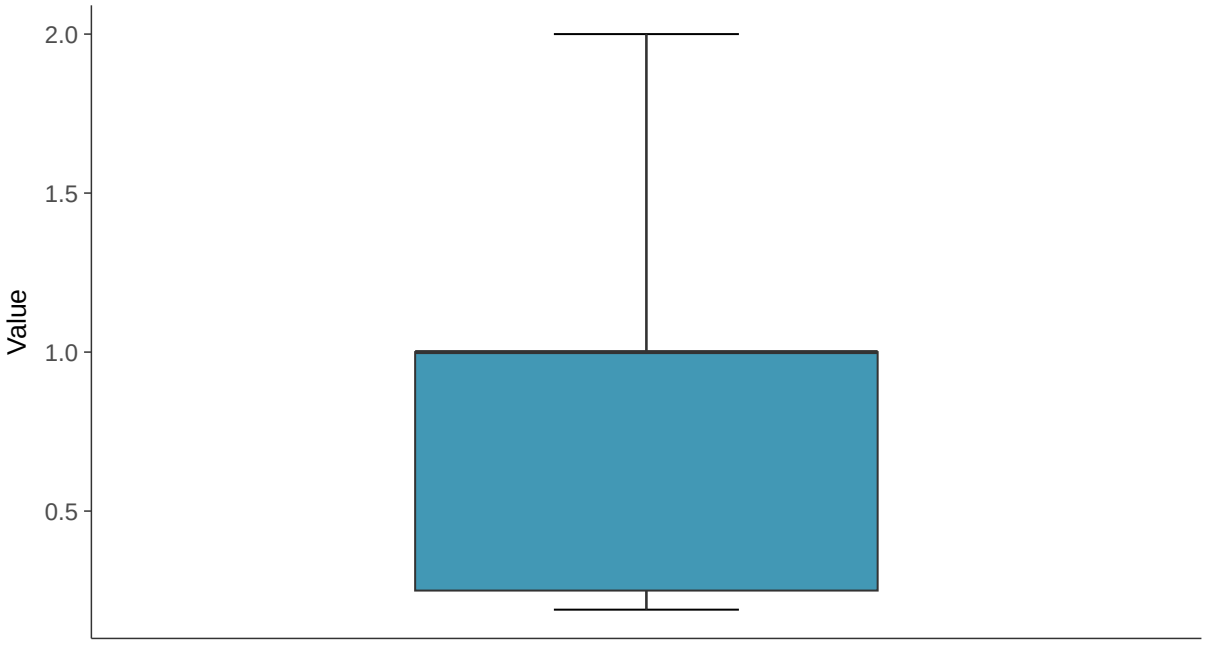

**Histogram**

Chromium, MW-15009 (ug/L)



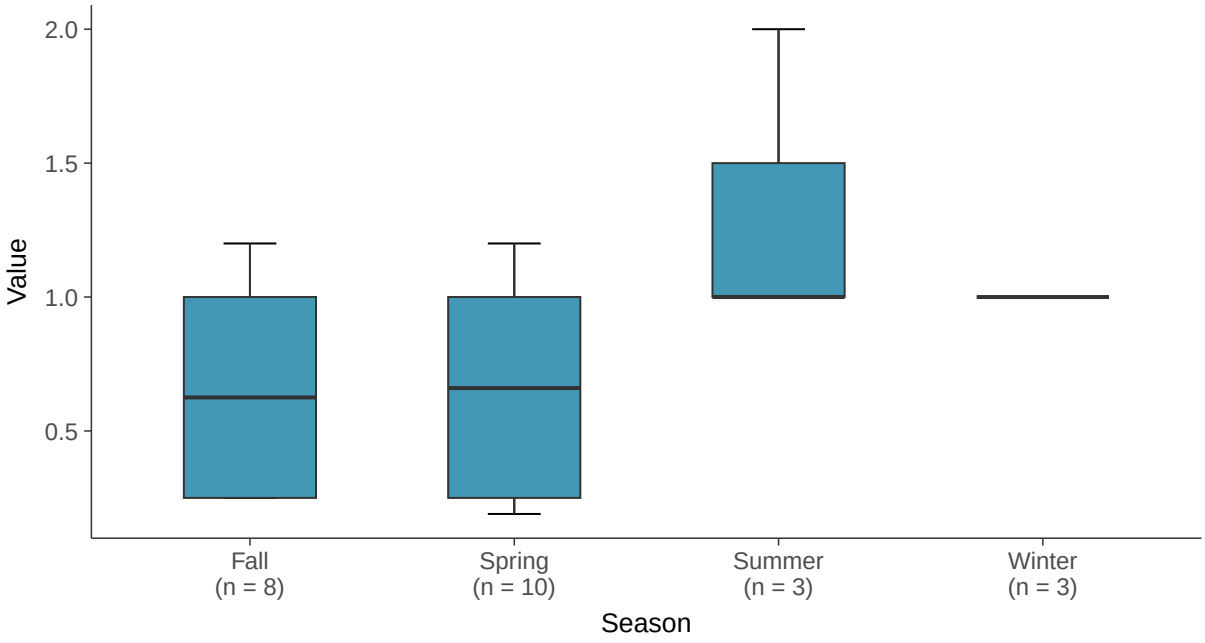
**Boxplot**

Chromium, MW-15009 (ug/L)



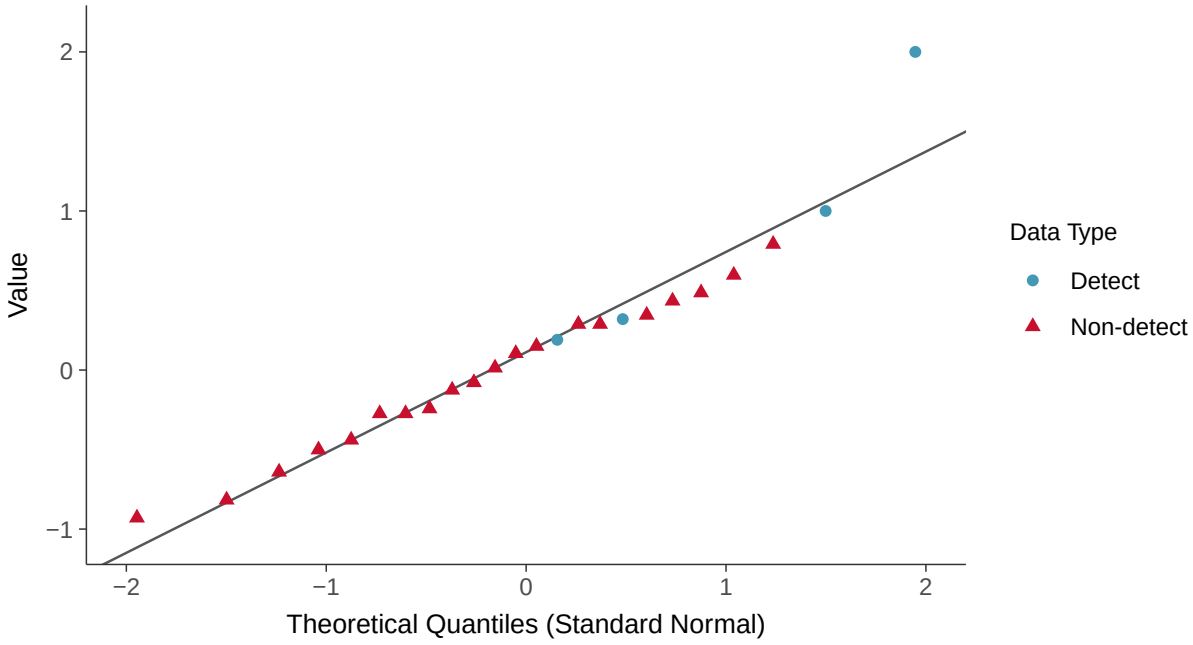

**Boxplot by Season**

Chromium, MW-15009 (ug/L)



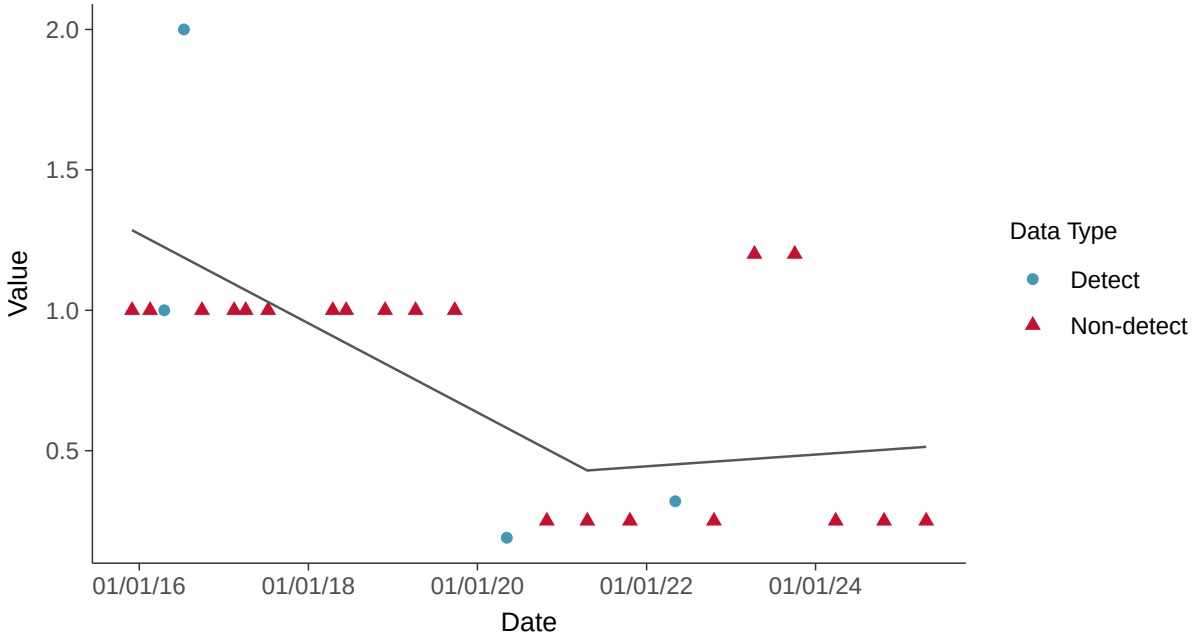
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15009 (ug/L)



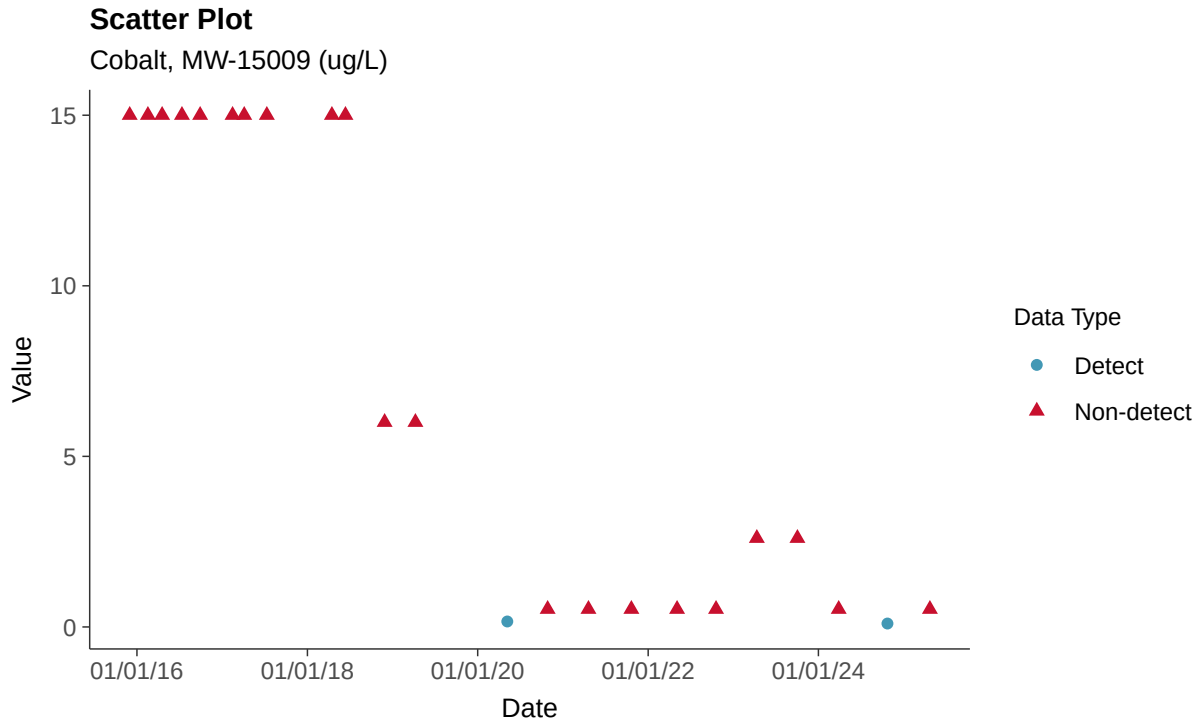

**Trend Regression: Piecewise Linear-Linear**

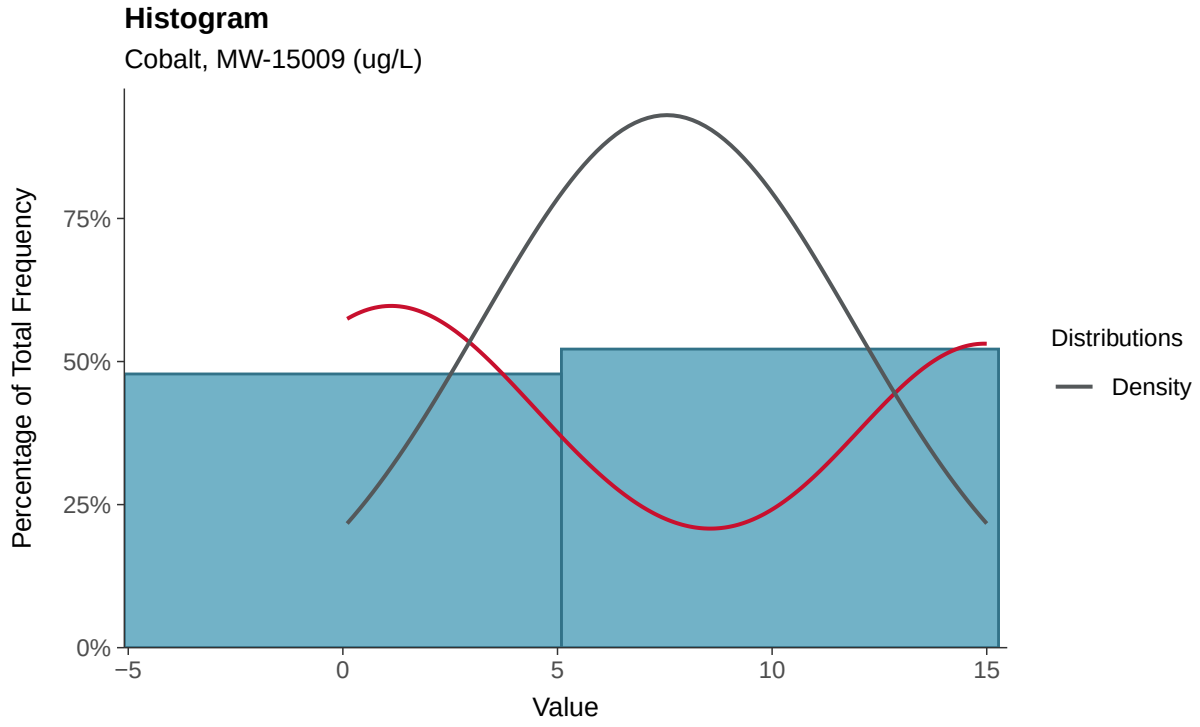
Chromium, MW-15009 (ug/L)



## Appendix IV: Cobalt, MW-15009

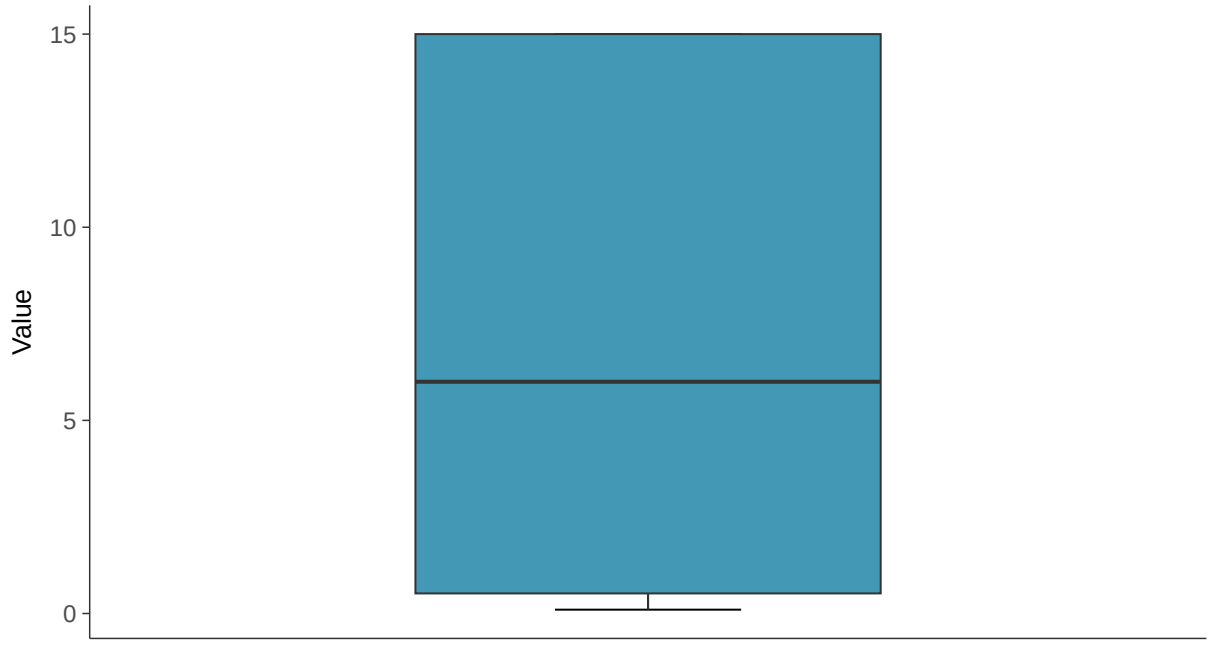
ID: 01_2_110



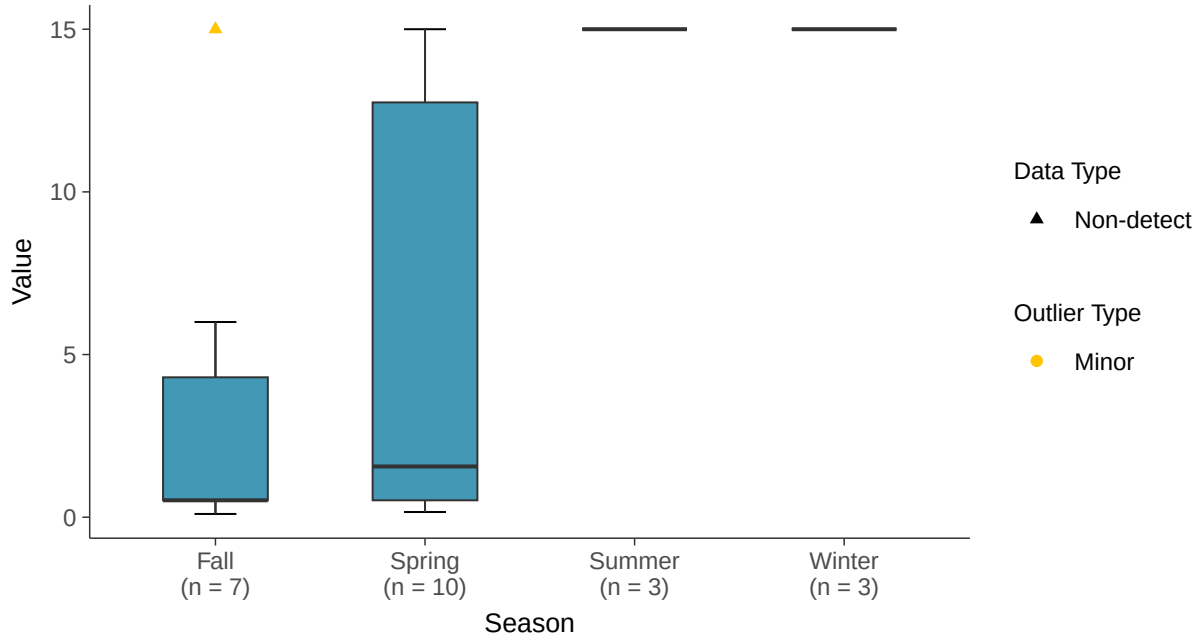
**Boxplot**

Cobalt, MW-15009 (ug/L)



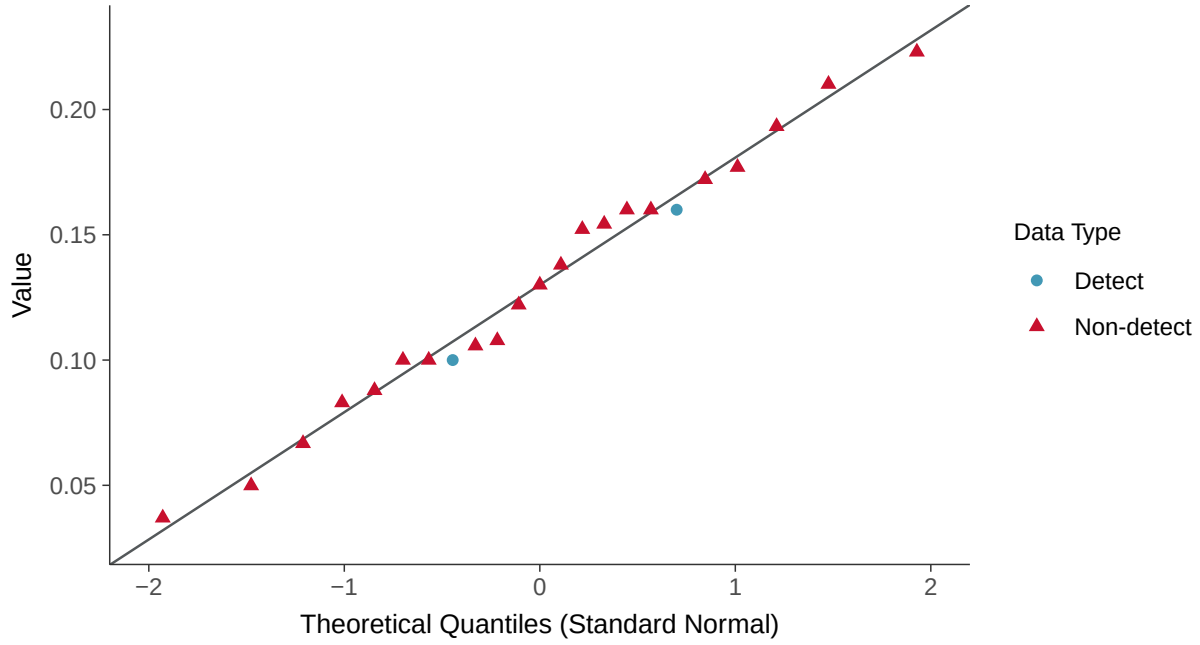

**Boxplot by Season**

Cobalt, MW-15009 (ug/L)



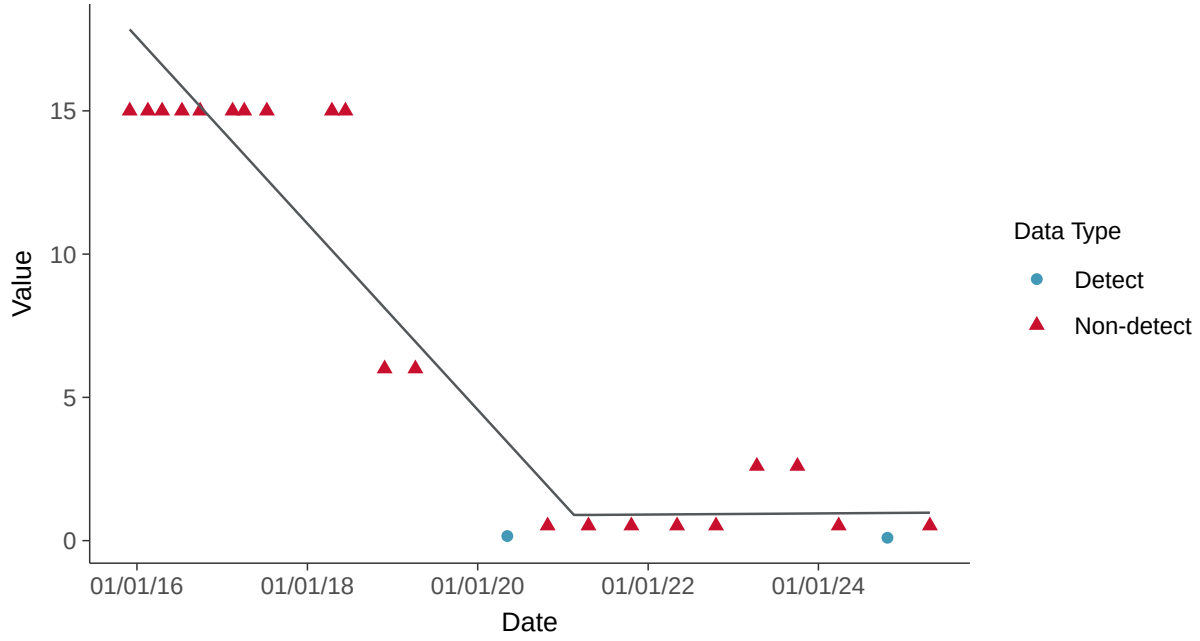
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15009 (ug/L)



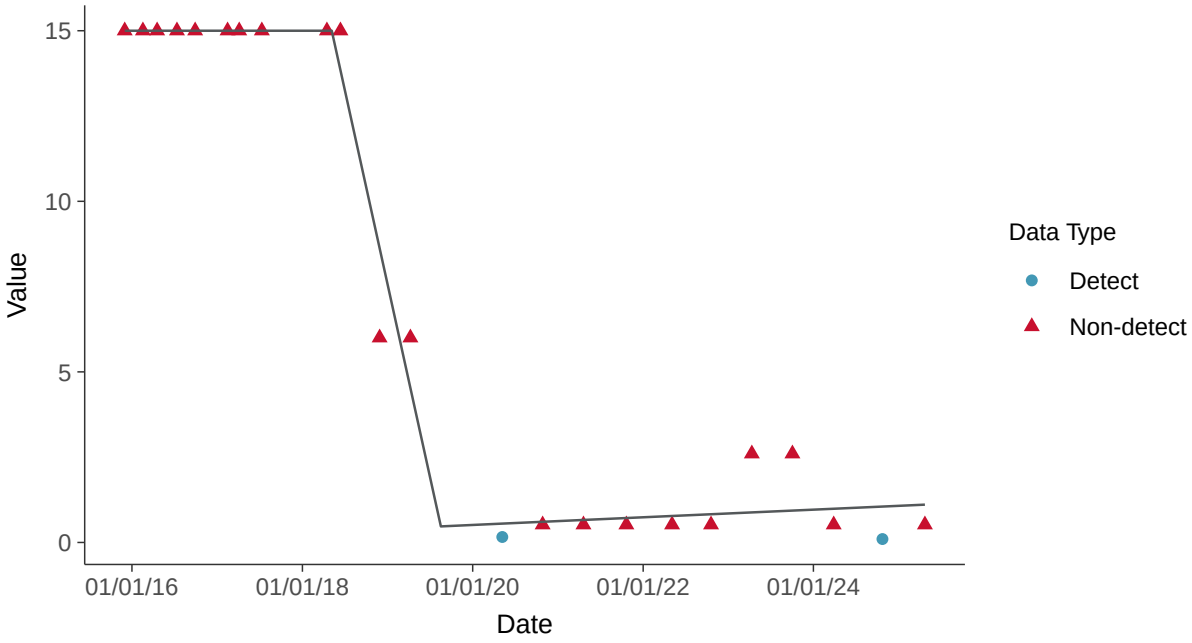

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15009 (ug/L)



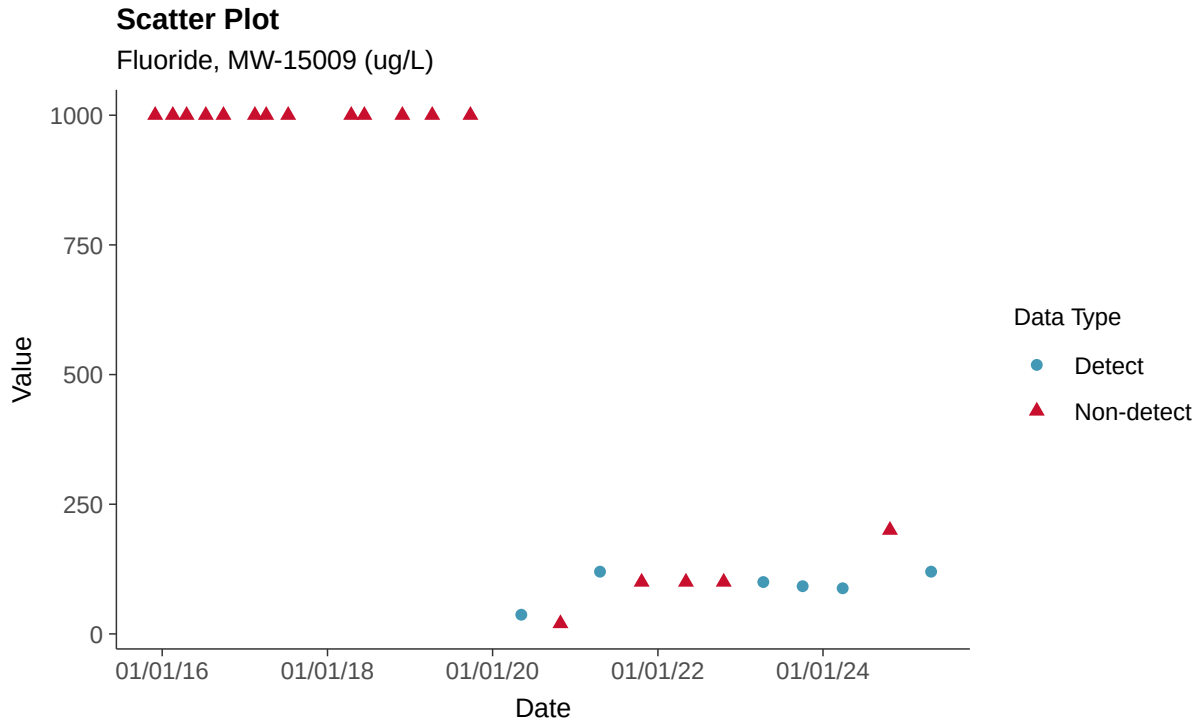
**Trend Regression: Piecewise Linear-Linear-Linear**

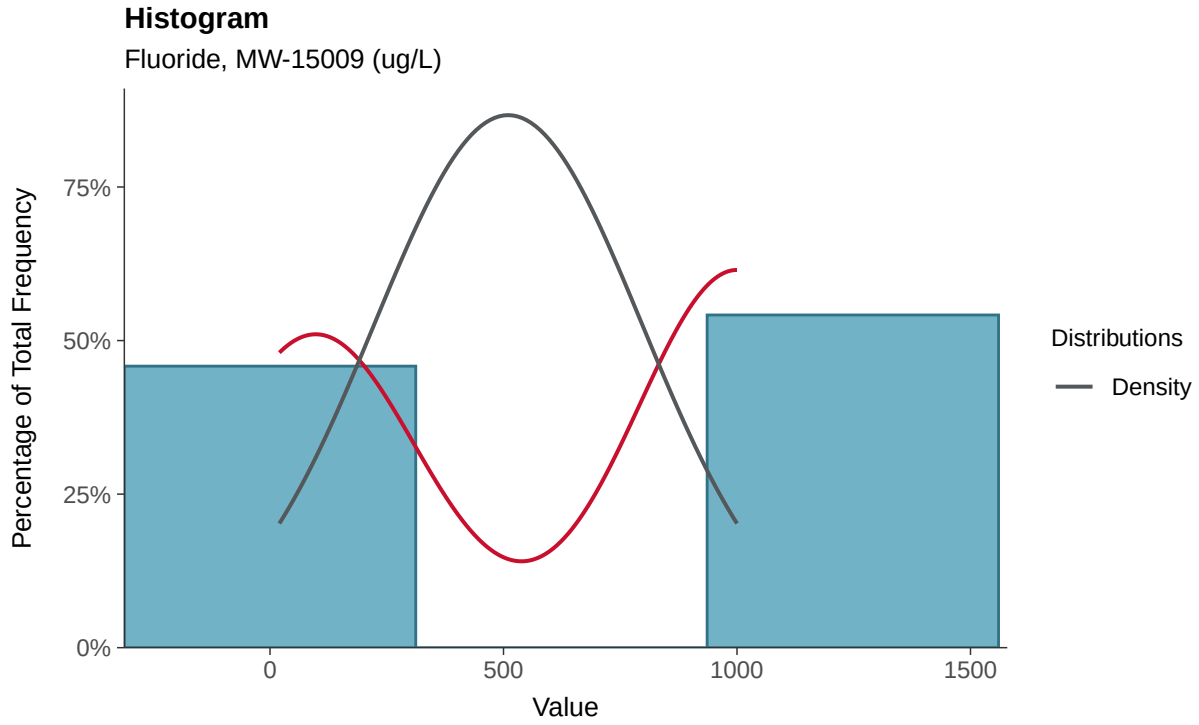
Cobalt, MW-15009 (ug/L)



## Appendix IV: Fluoride, MW-15009

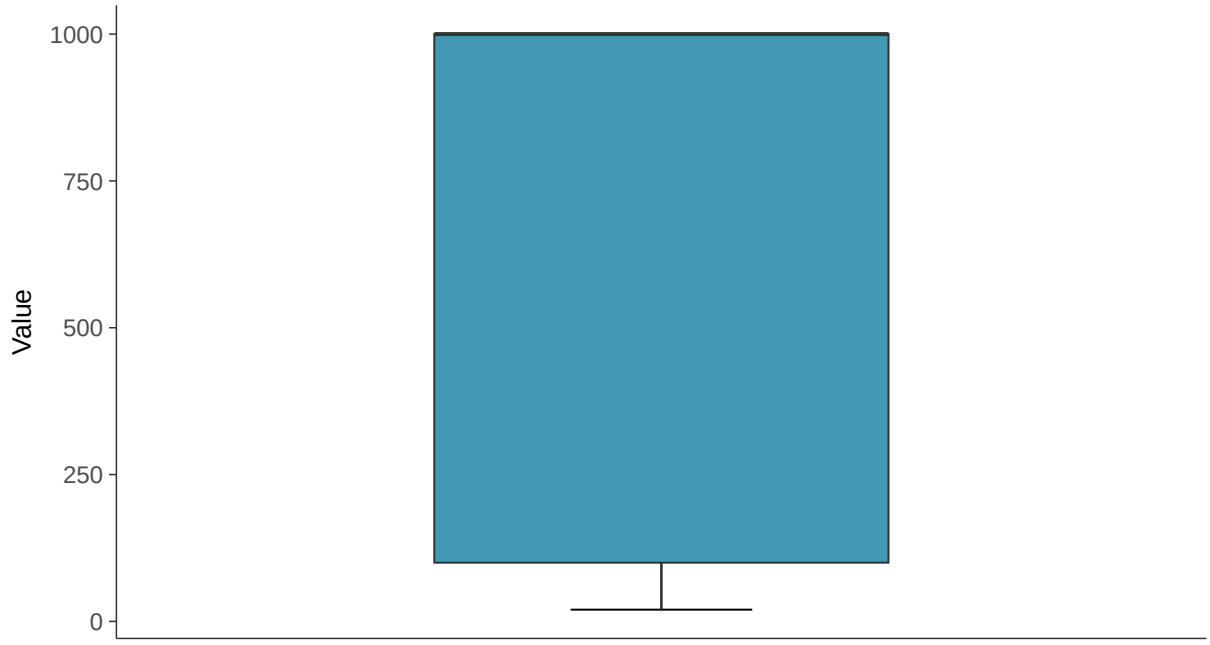
ID: 01_2_114



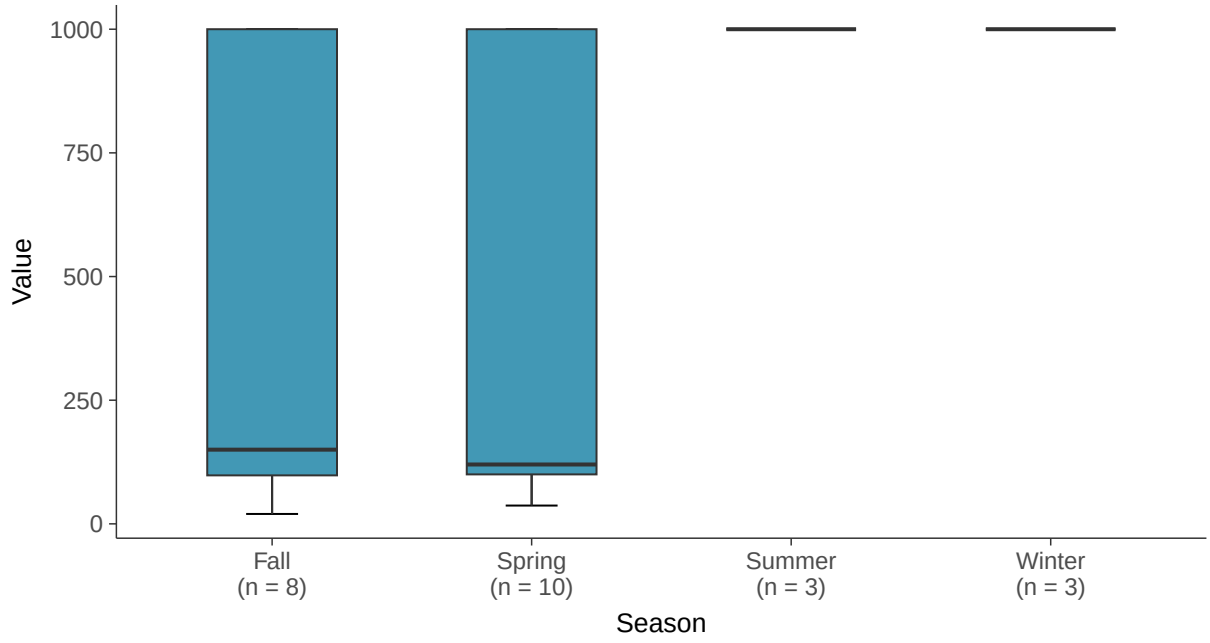
**Boxplot**

Fluoride, MW-15009 (ug/L)



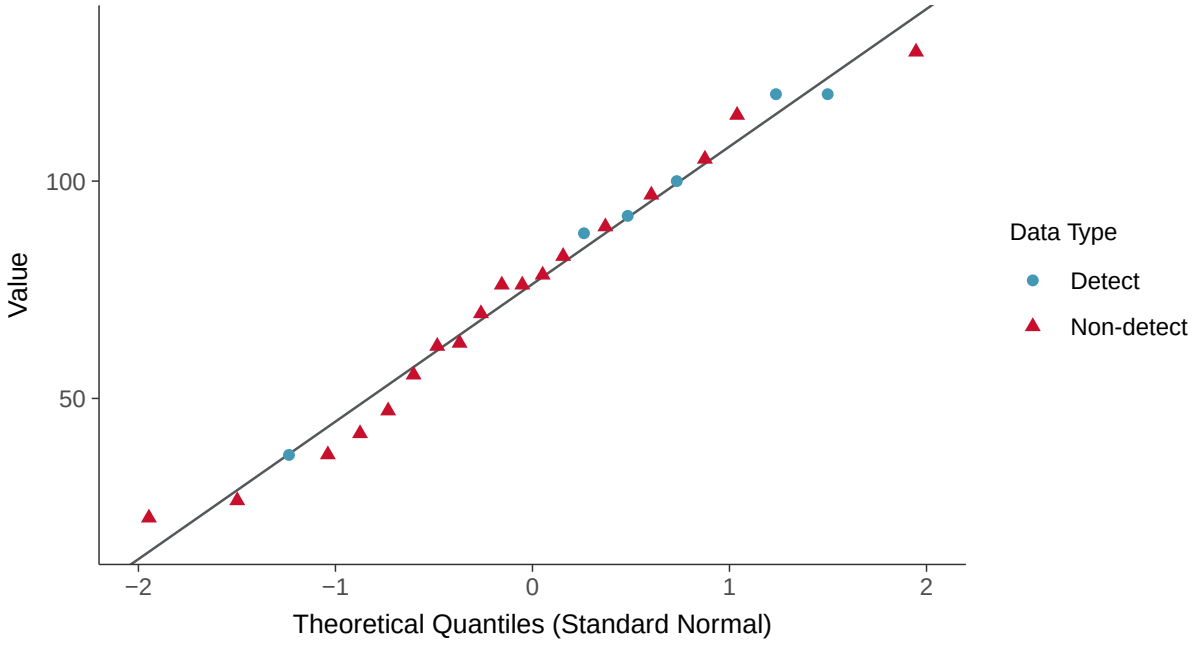

**Boxplot by Season**

Fluoride, MW-15009 (ug/L)



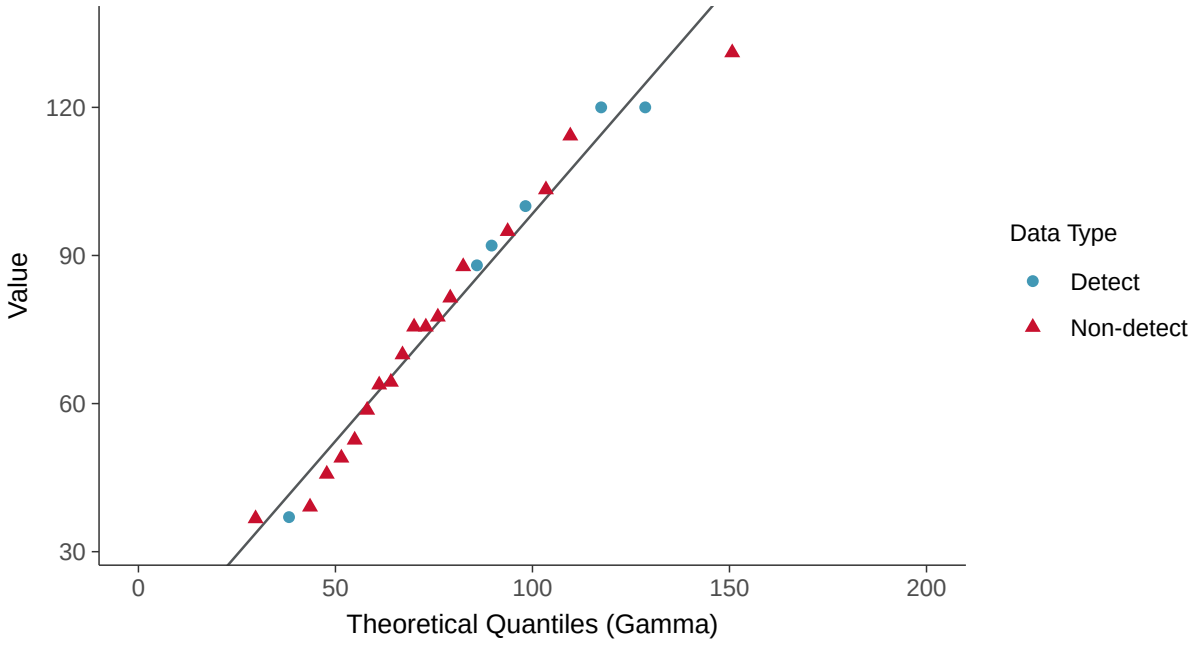
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15009 (ug/L)



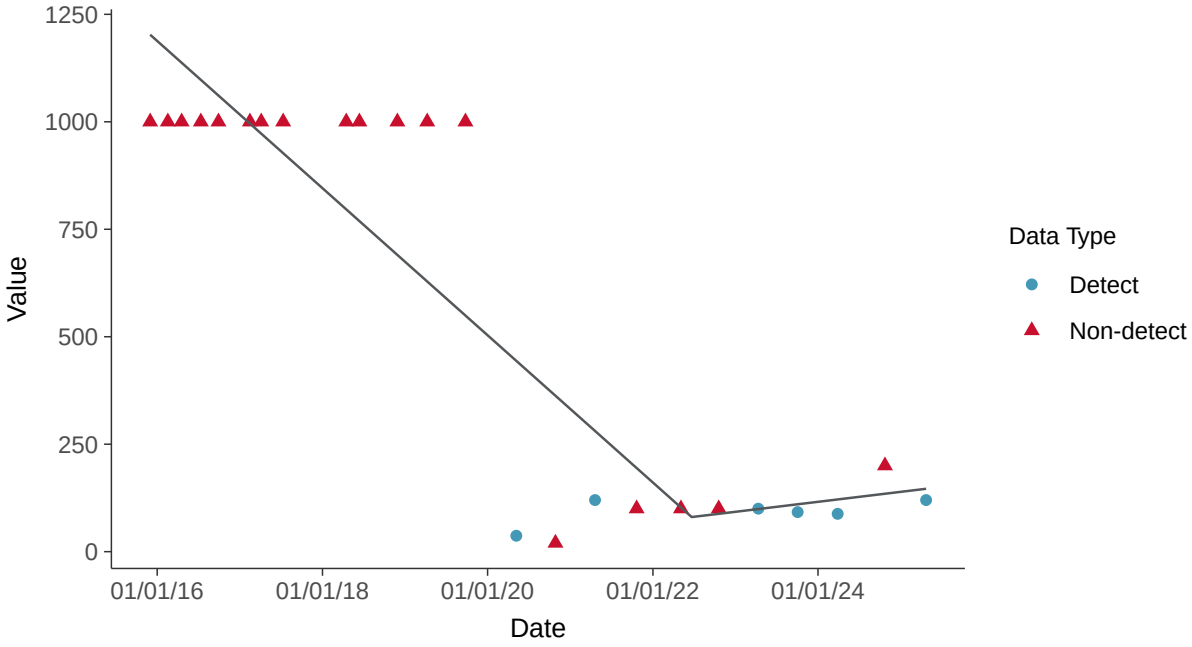

**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15009 (ug/L)



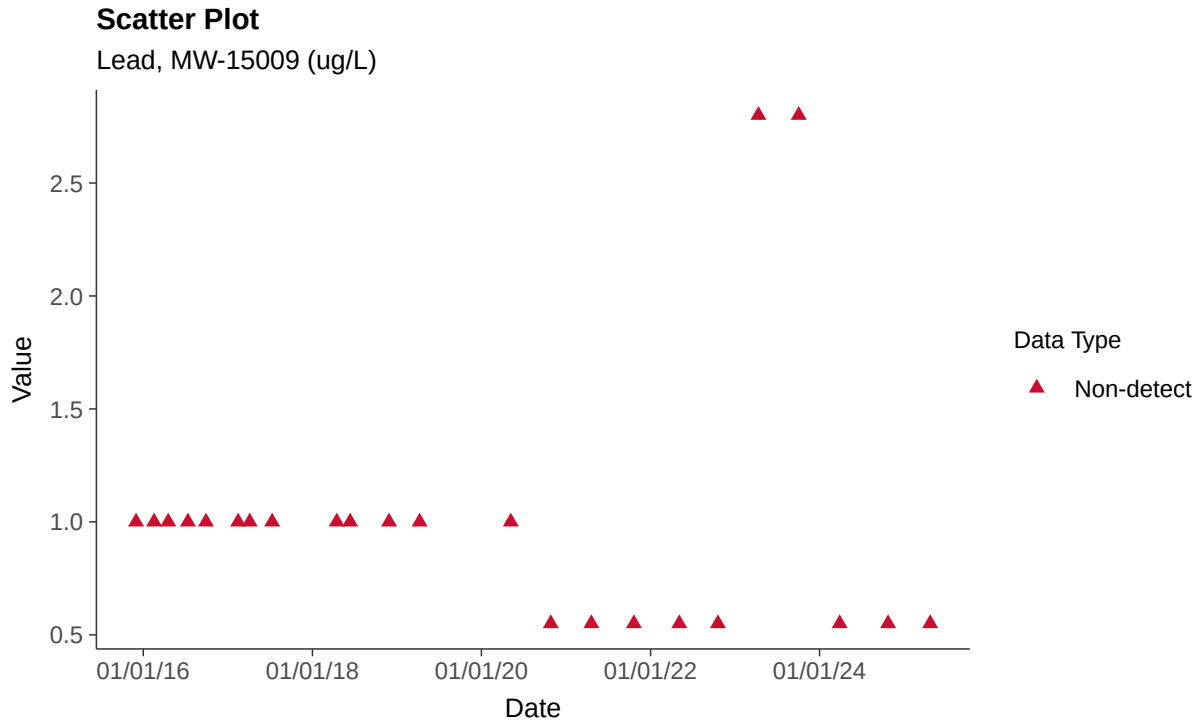
**Trend Regression: Piecewise Linear-Linear**

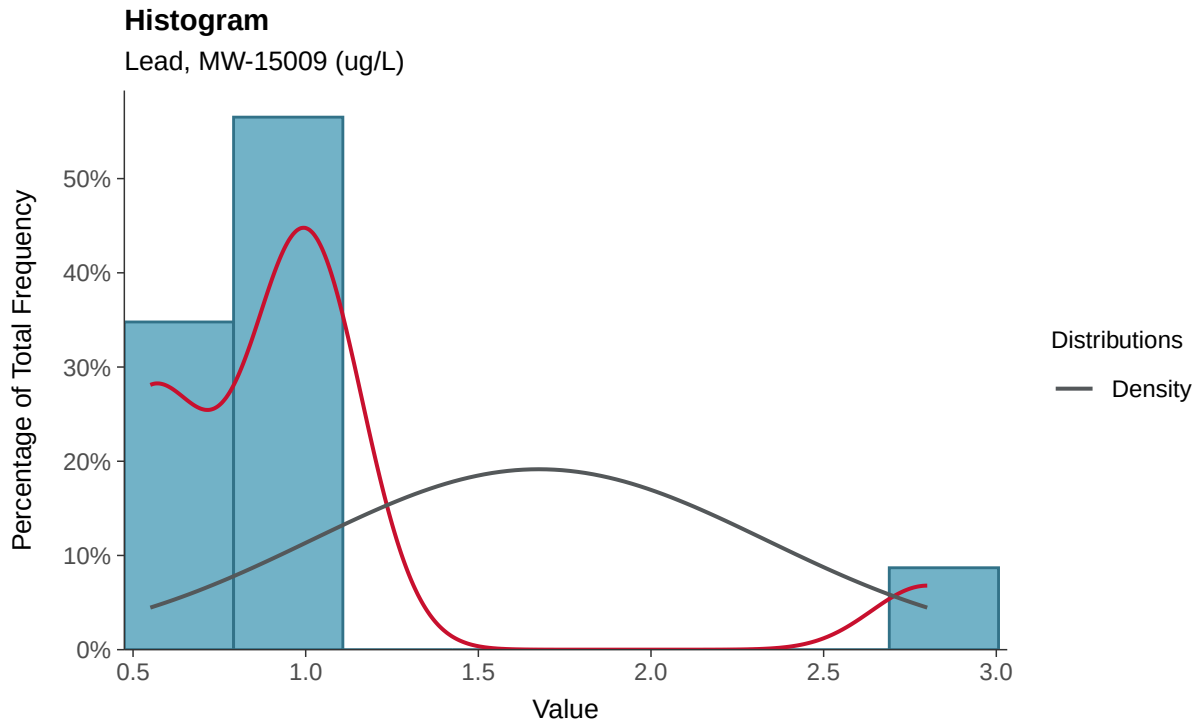
Fluoride, MW-15009 (ug/L)



# Appendix IV: Lead, MW-15009

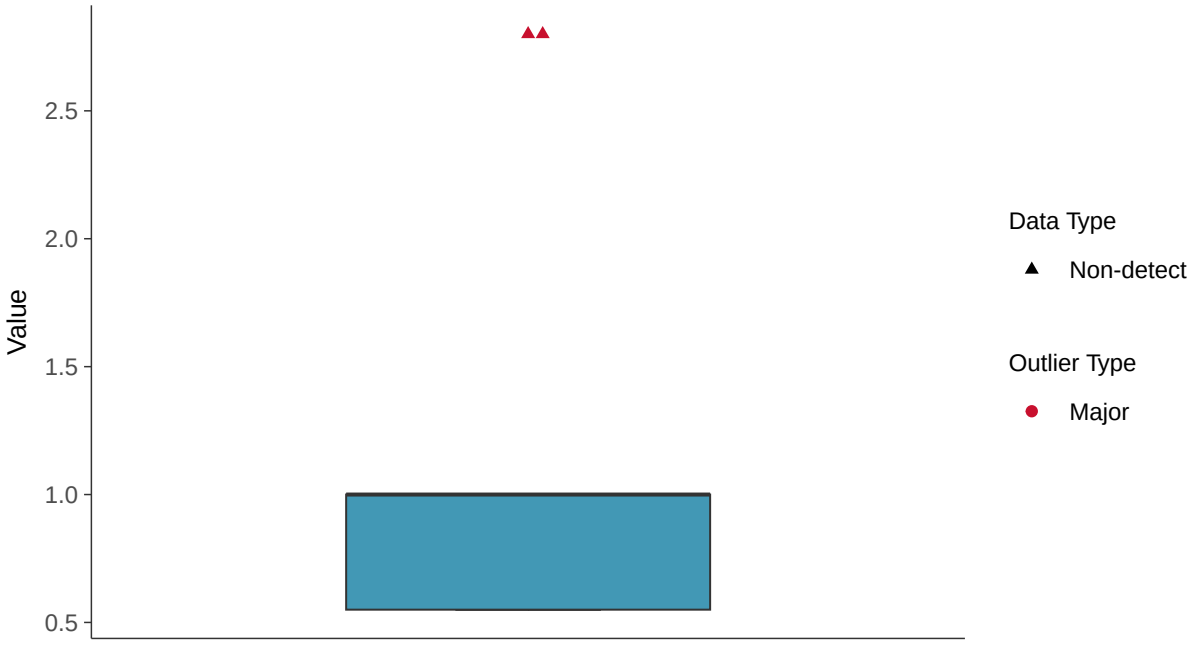
ID: 01_2_116



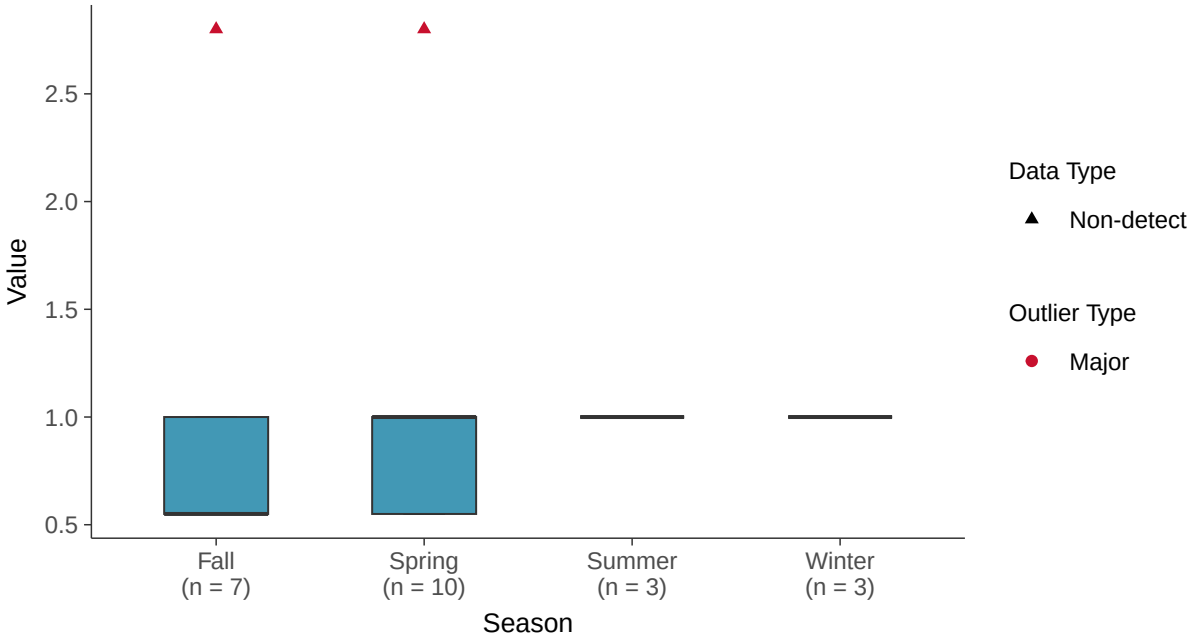
## Boxplot

Lead, MW-15009 (ug/L)



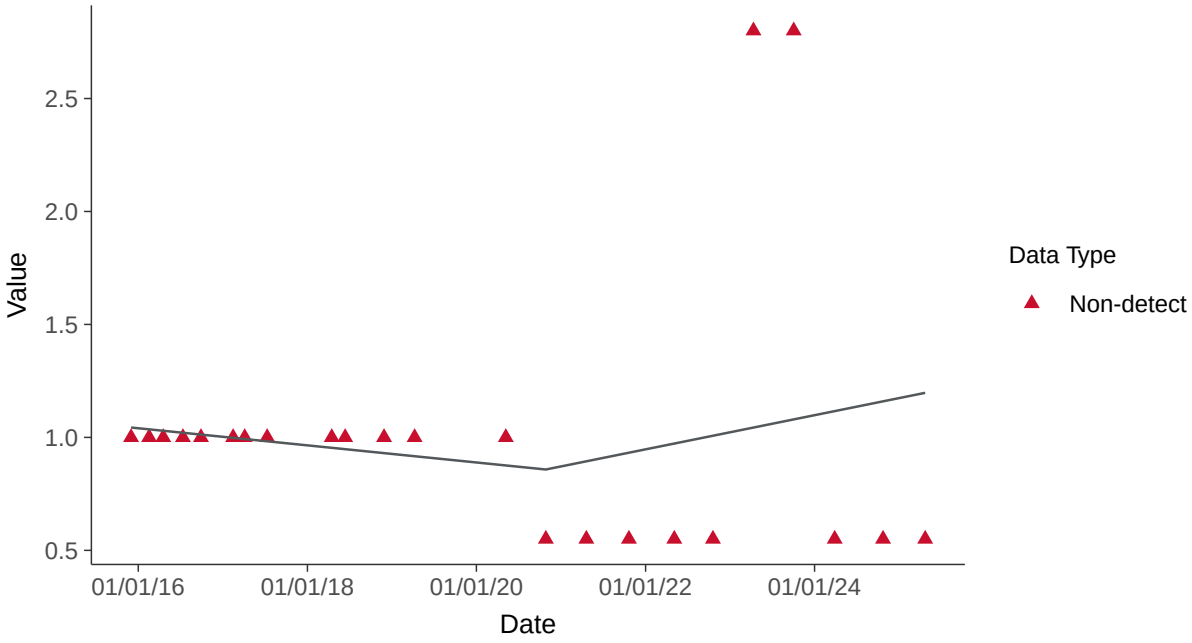

## Boxplot by Season

Lead, MW-15009 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15009 (ug/L)

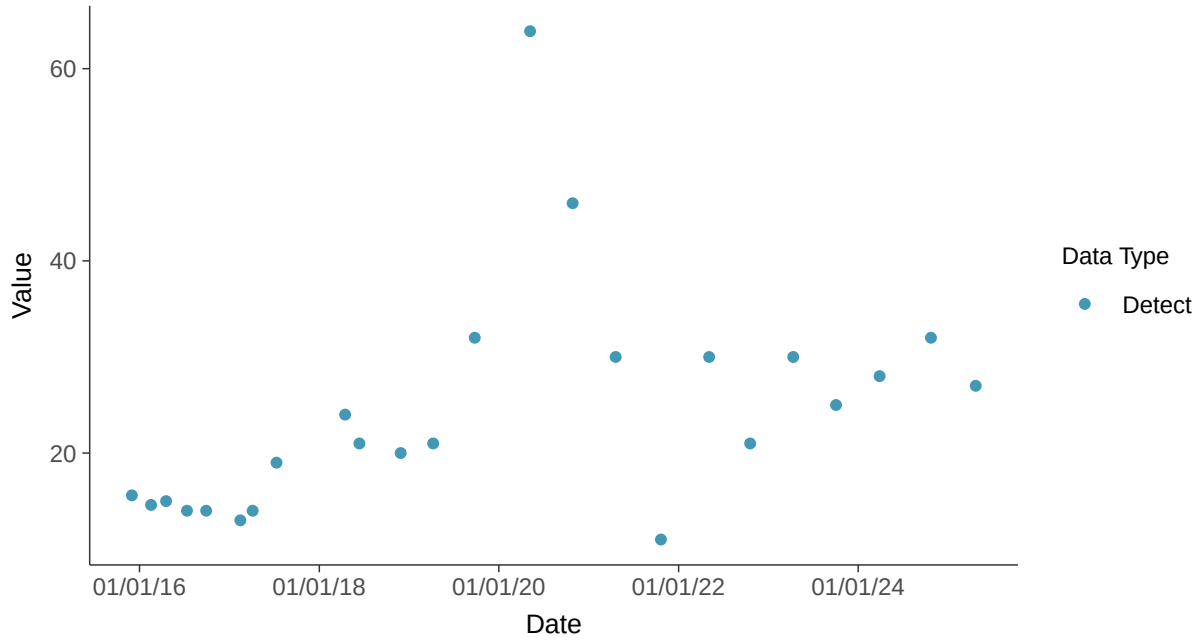


## Appendix IV: Lithium, MW-15009

ID: 01_2_117

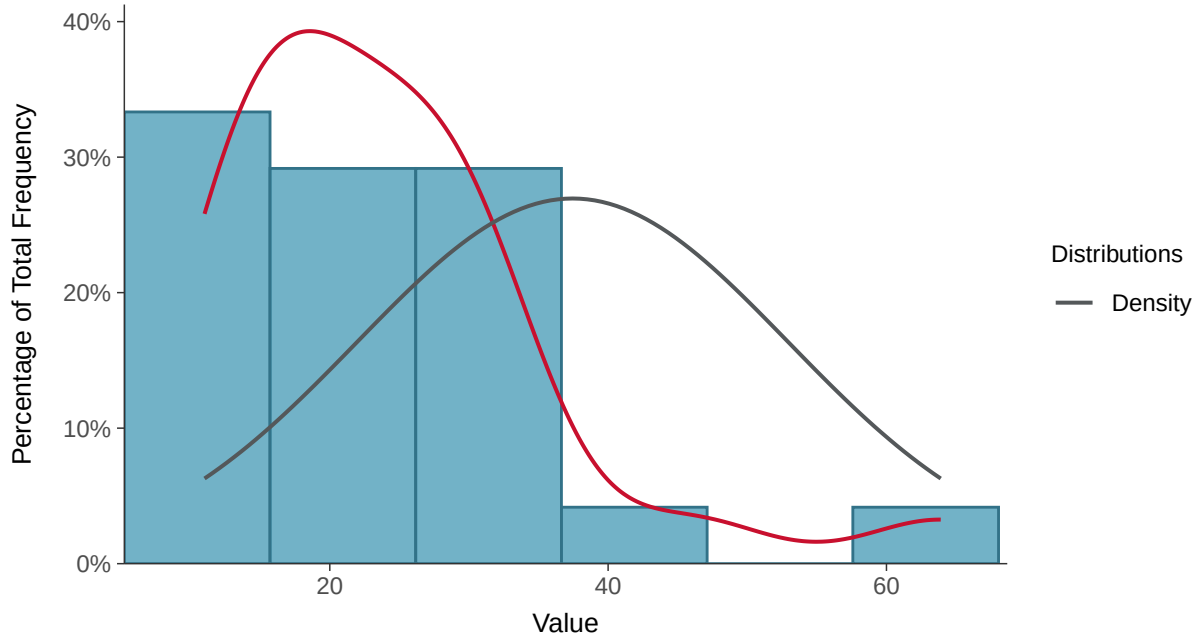
**Scatter Plot**

Lithium, MW-15009 (ug/L)



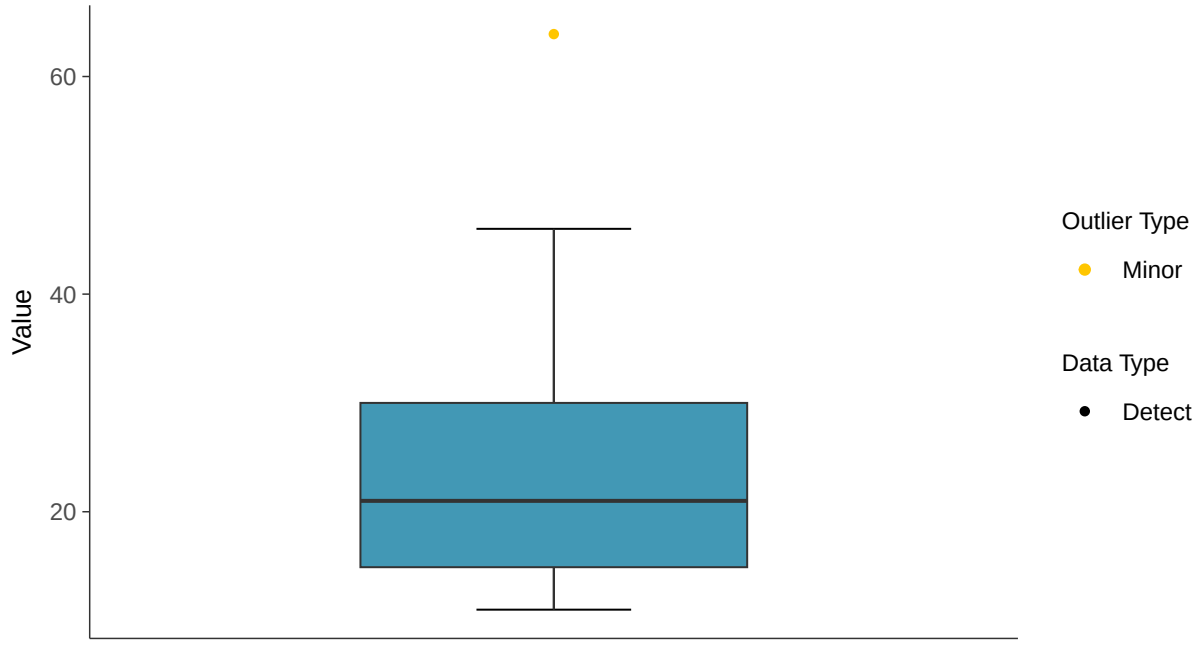

**Histogram**

Lithium, MW-15009 (ug/L)



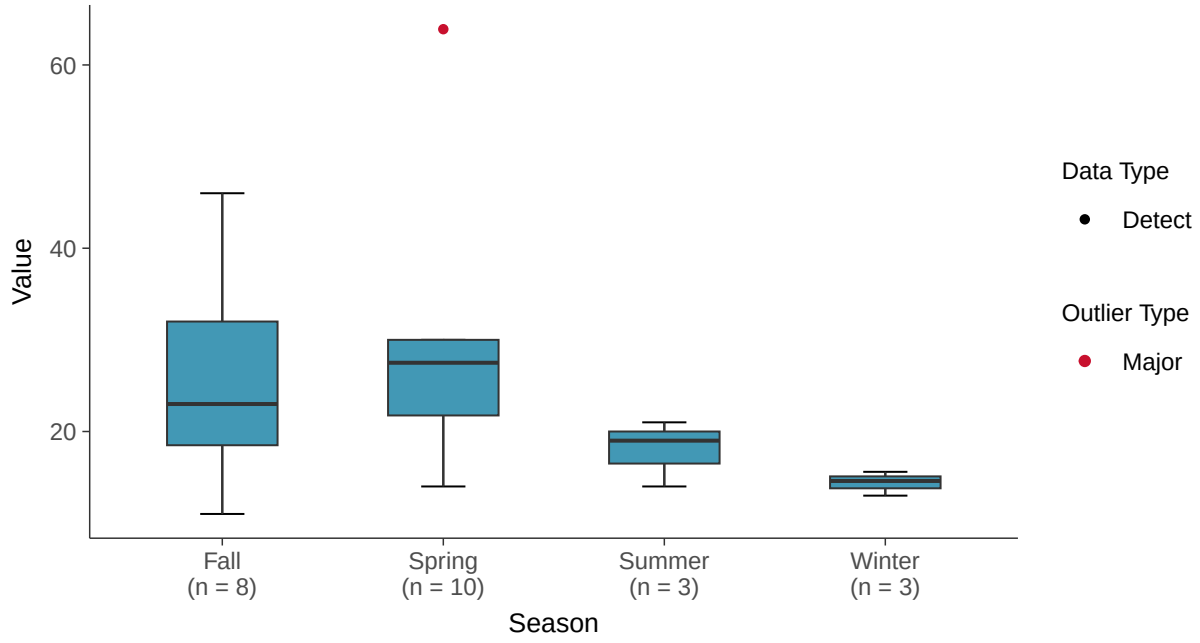
**Boxplot**

Lithium, MW-15009 (ug/L)



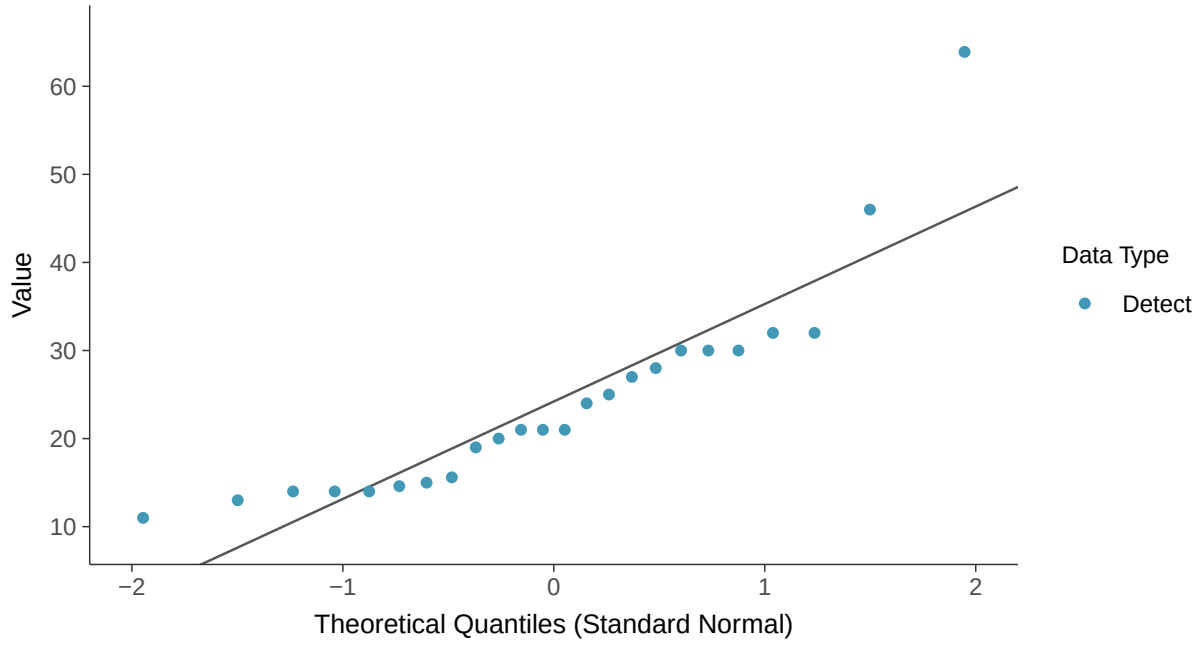

**Boxplot by Season**

Lithium, MW-15009 (ug/L)



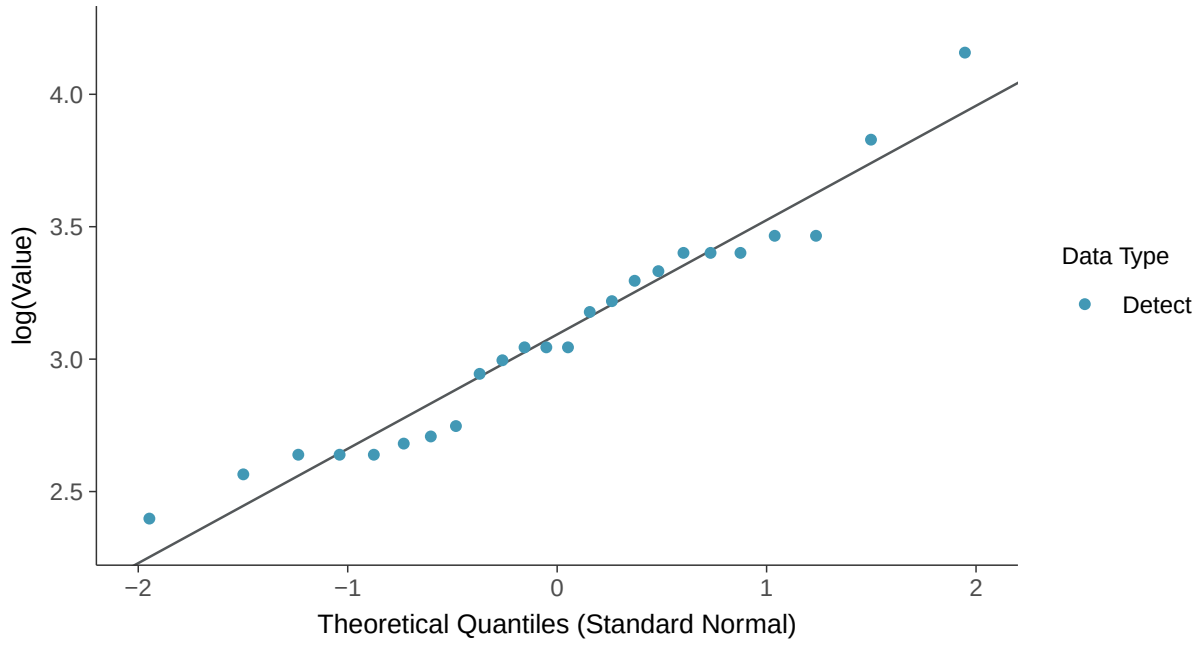
**Normal Q-Q plot**

Lithium, MW-15009 (ug/L)



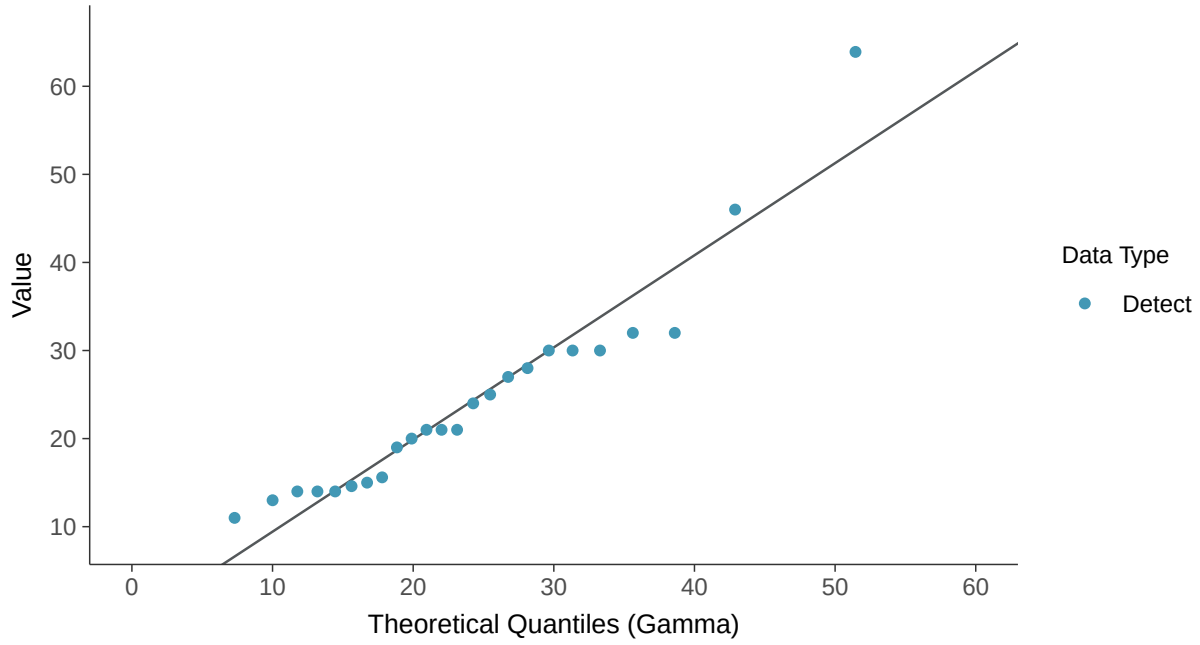

**Lognormal Q-Q plot**

Lithium, MW-15009 (ug/L)



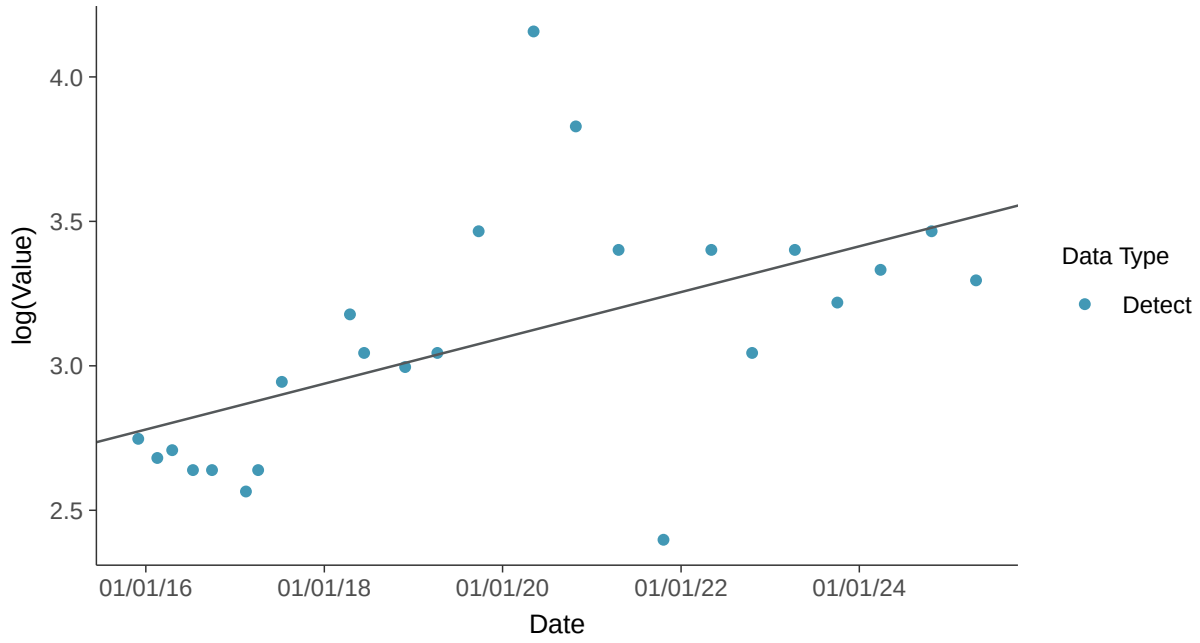
**Gamma Q-Q plot**

Lithium, MW-15009 (ug/L)



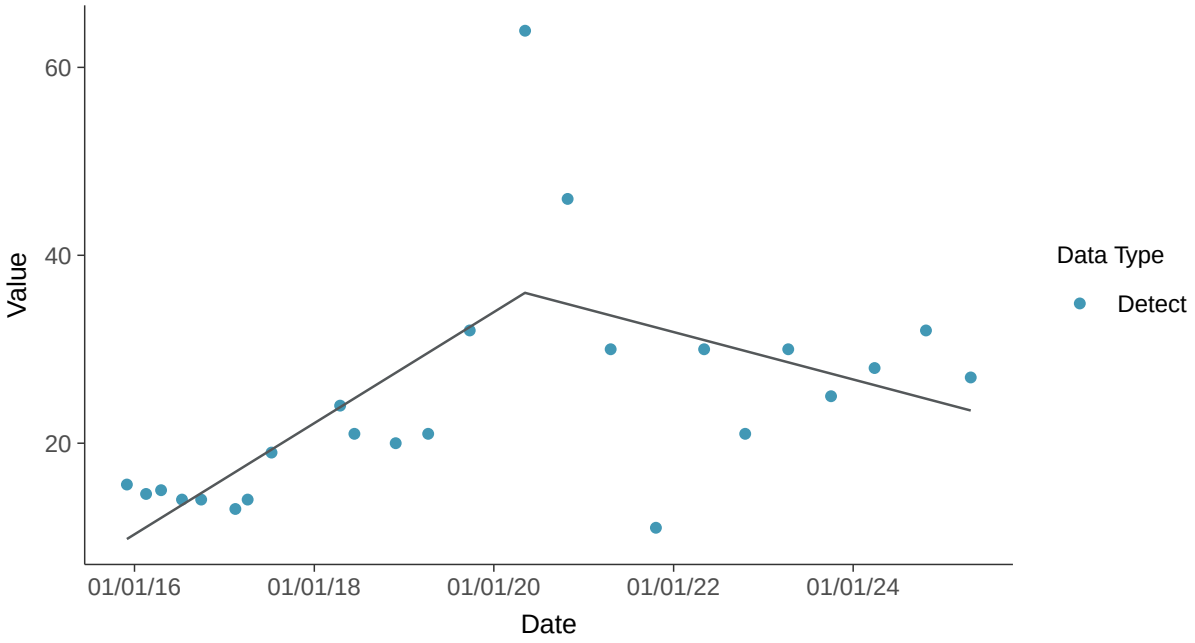

**Trend Regression: Lognormal MLE**

Lithium, MW-15009 (ug/L)



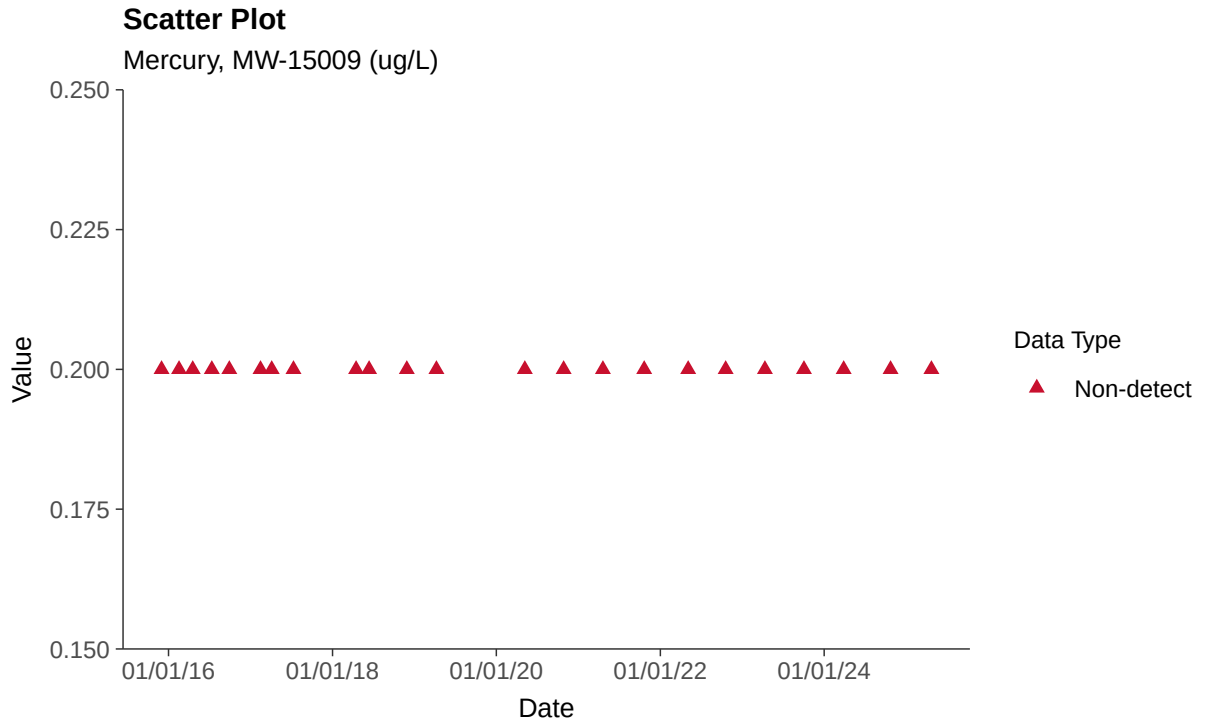
**Trend Regression: Piecewise Linear-Linear**

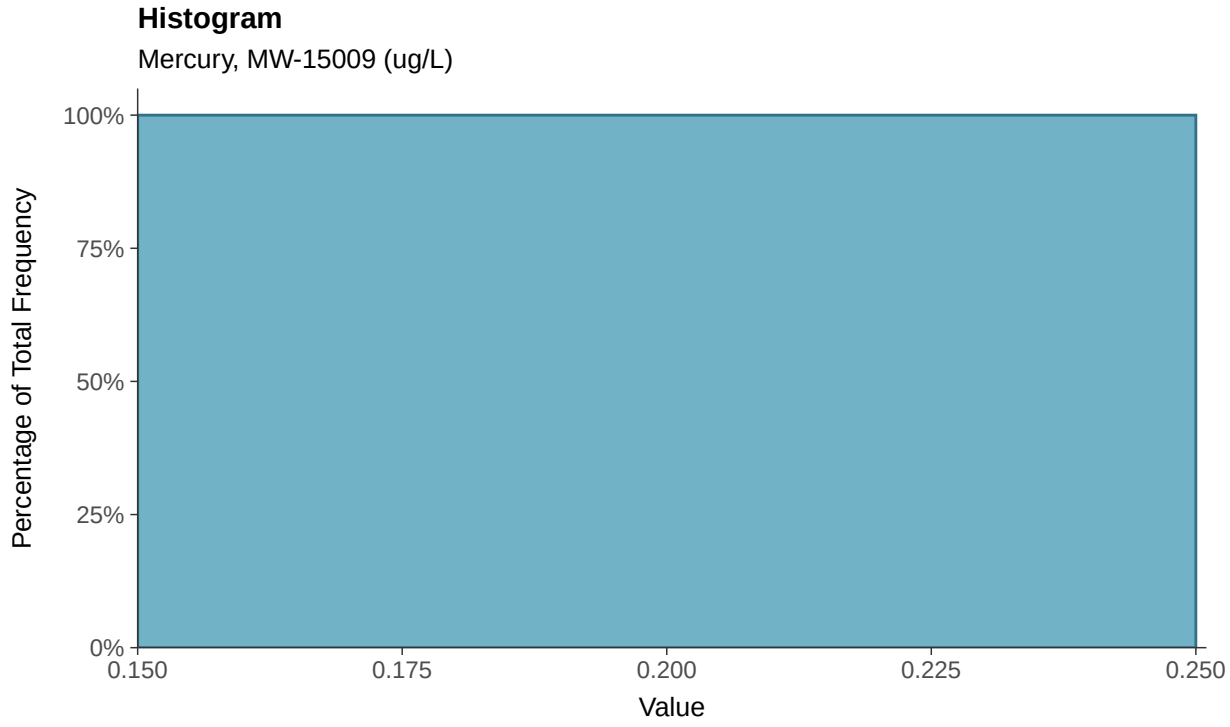
Lithium, MW-15009 (ug/L)



## Appendix IV: Mercury, MW-15009

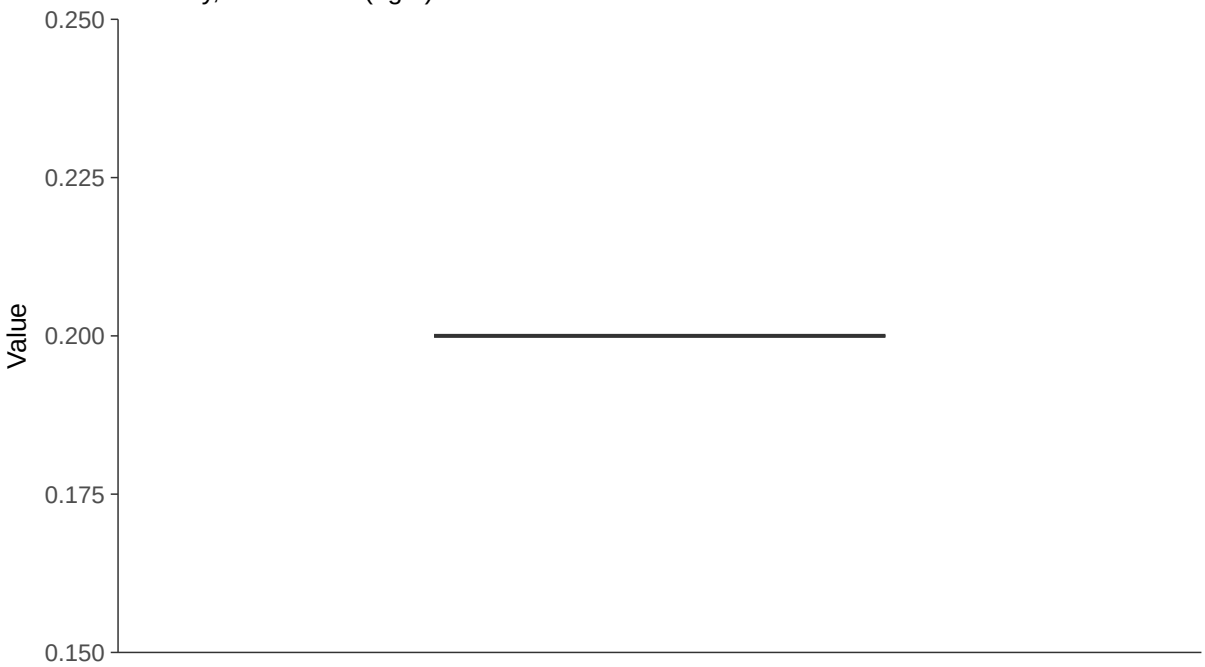
ID: 01_2_118



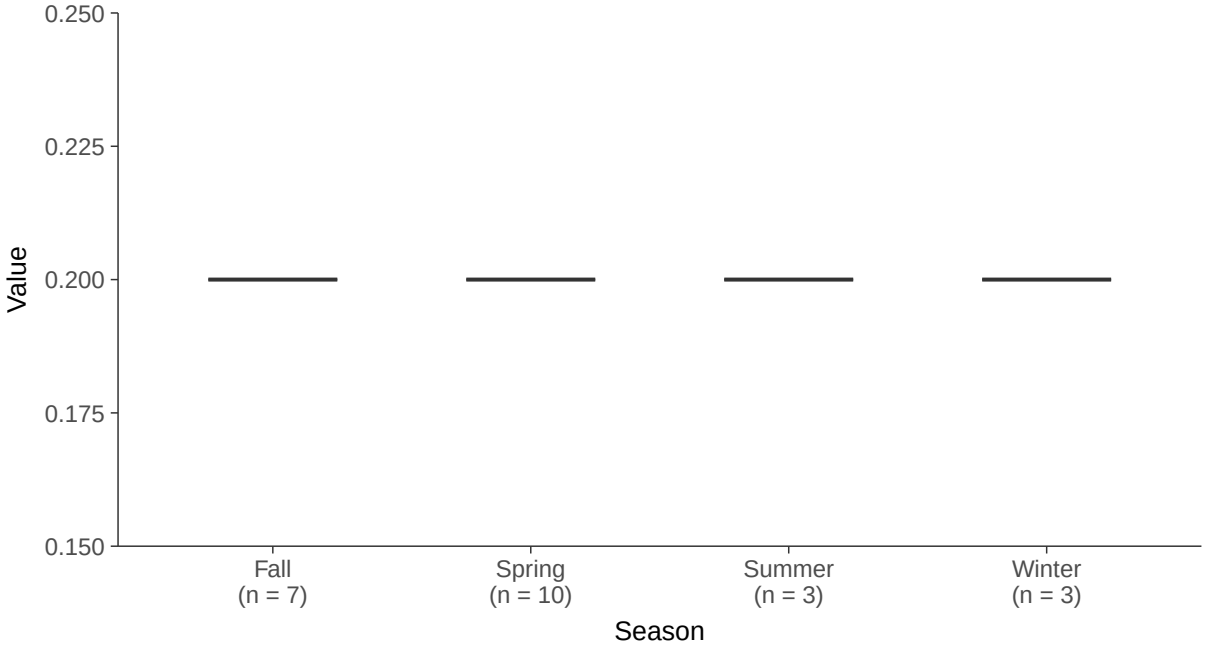
**Boxplot**

Mercury, MW-15009 (ug/L)




**Boxplot by Season**

Mercury, MW-15009 (ug/L)

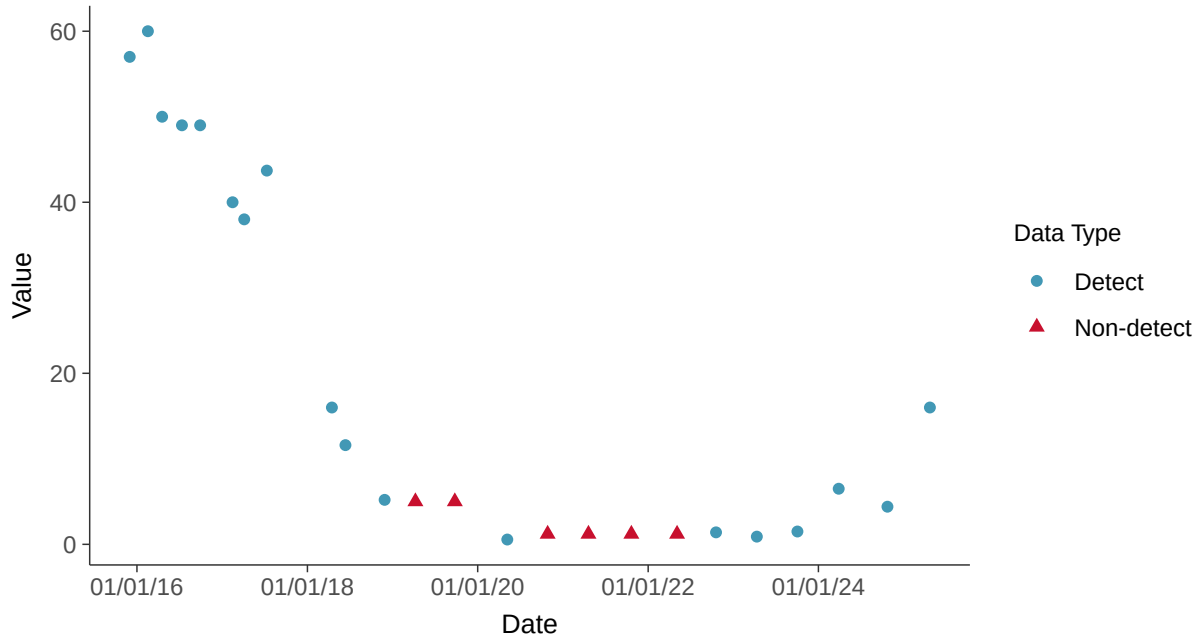


## Appendix IV: Molybdenum, MW-15009

ID: 01_2_119

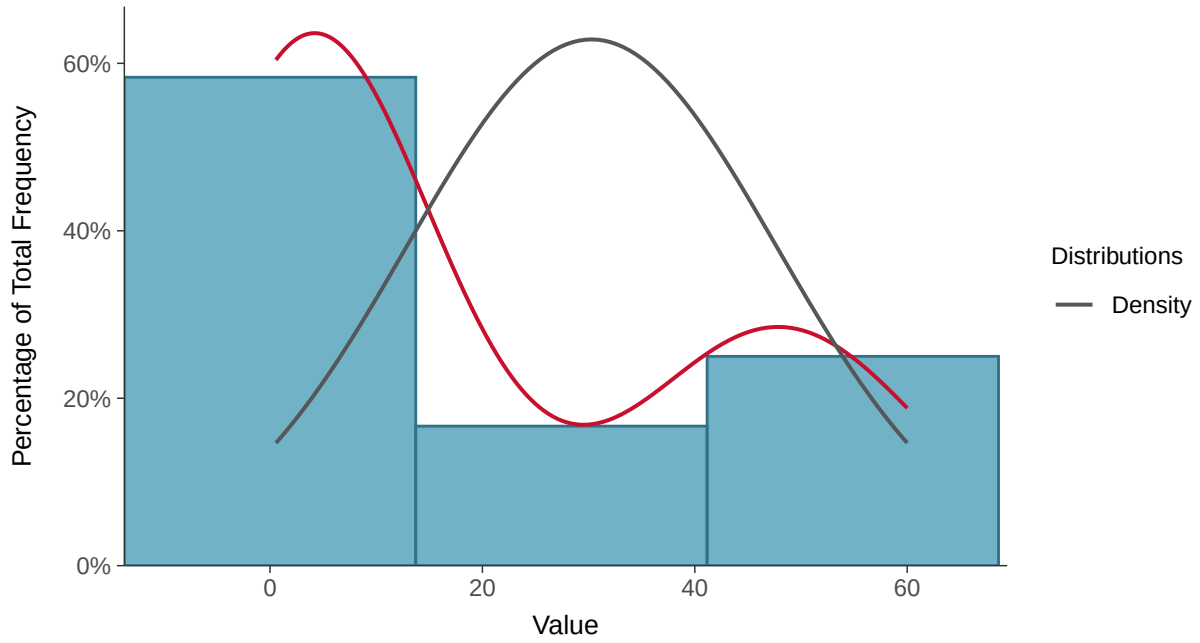
**Scatter Plot**

Molybdenum, MW-15009 (ug/L)



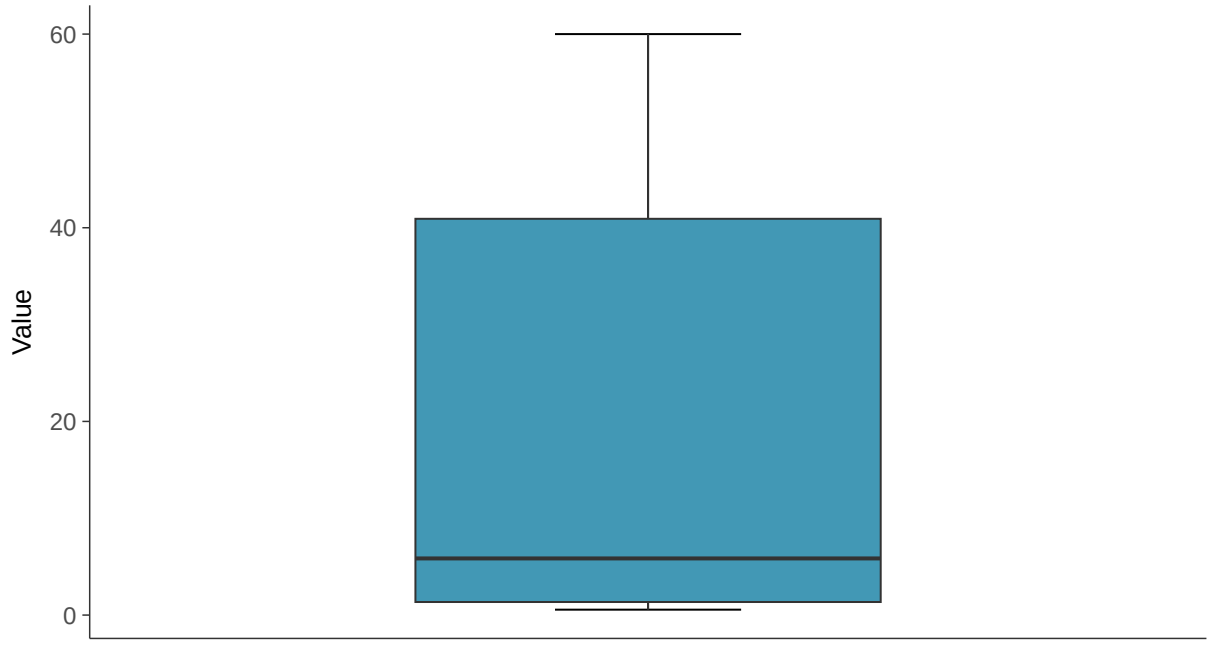

**Histogram**

Molybdenum, MW-15009 (ug/L)



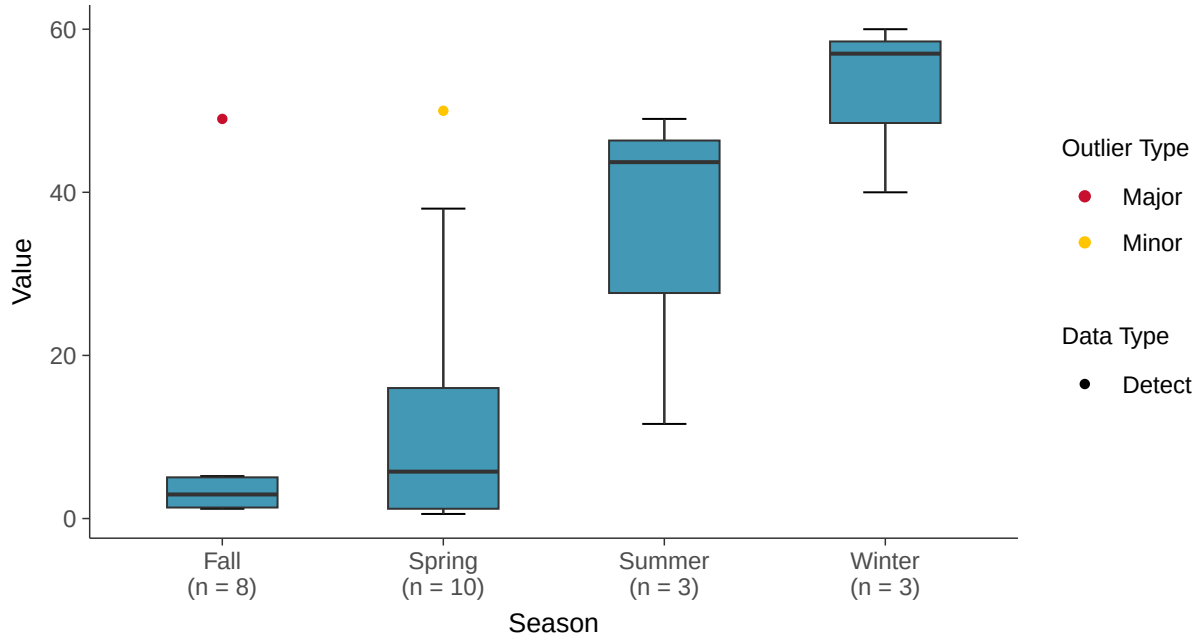
**Boxplot**

Molybdenum, MW-15009 (ug/L)



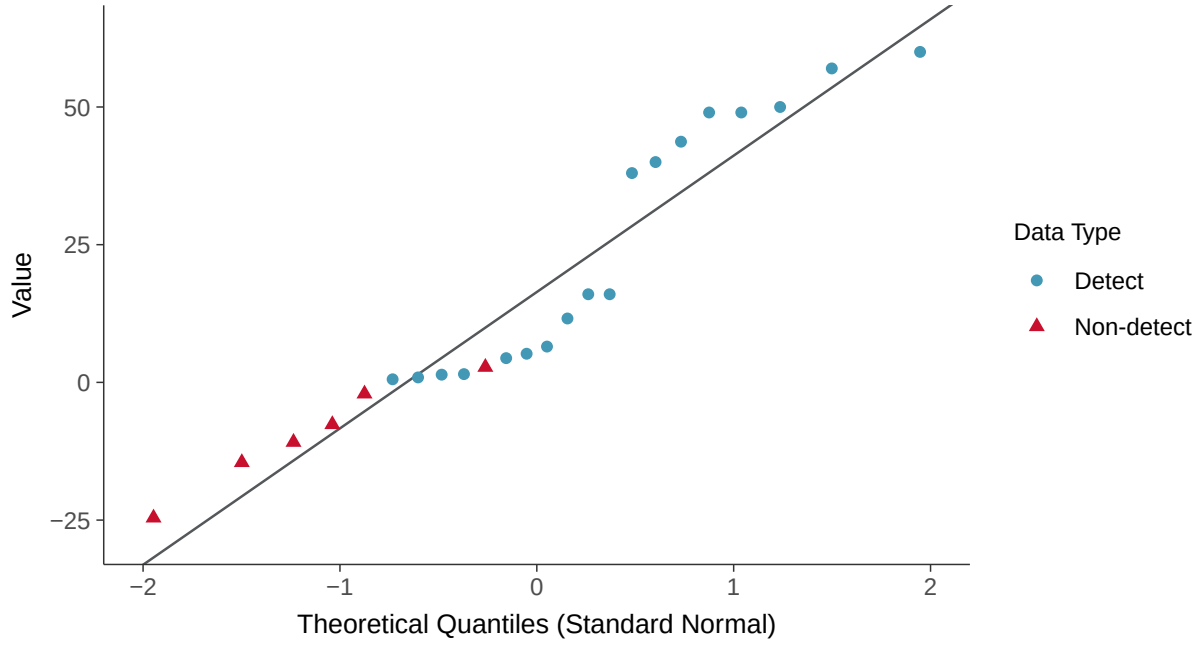

**Boxplot by Season**

Molybdenum, MW-15009 (ug/L)



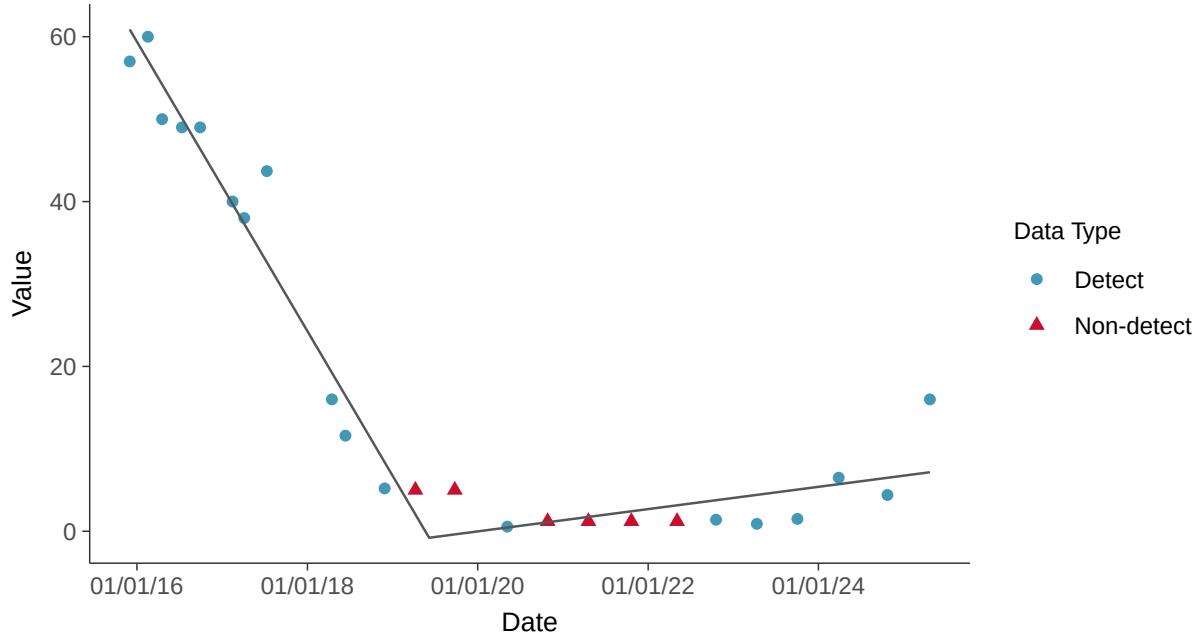
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15009 (ug/L)



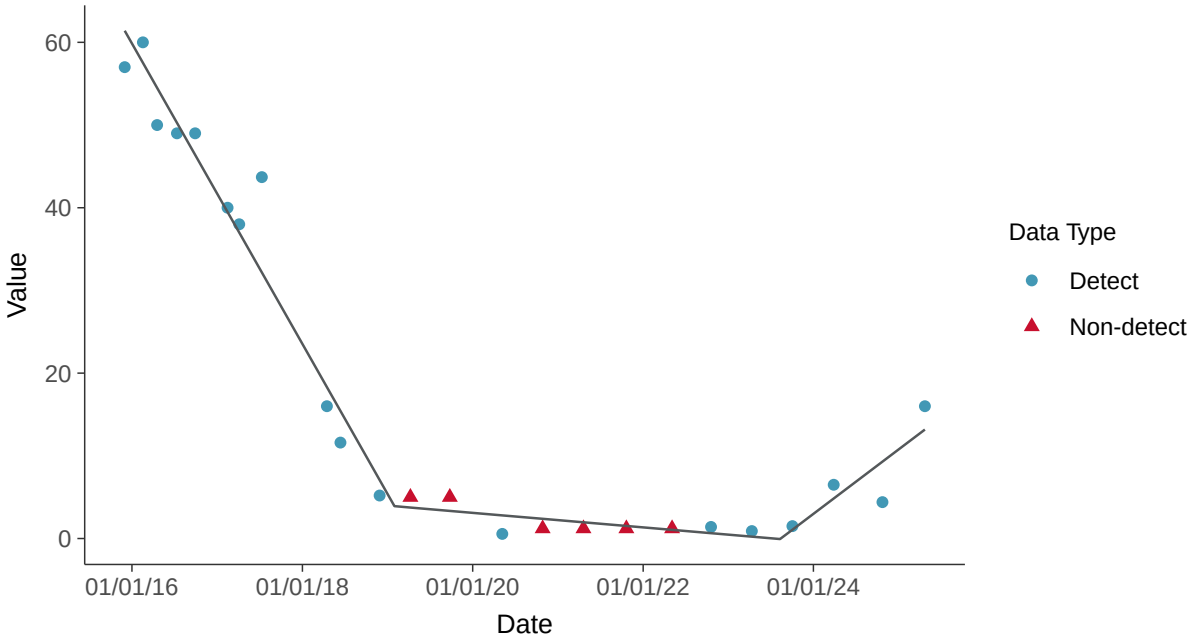

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15009 (ug/L)



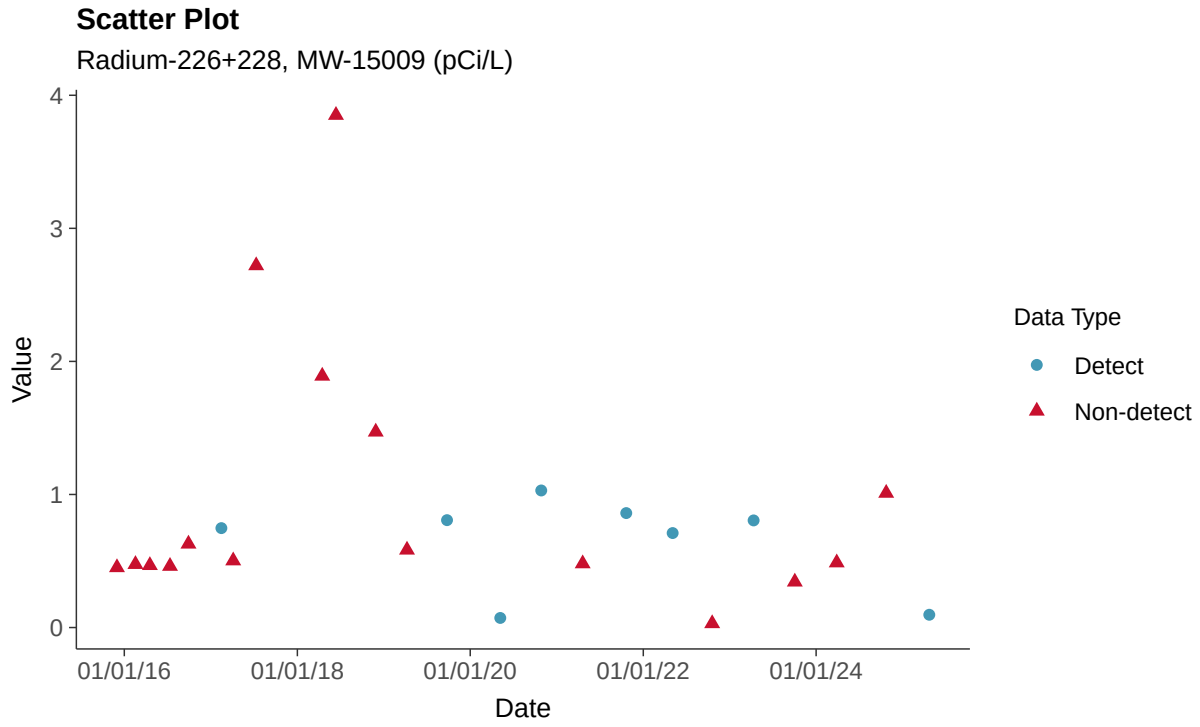
**Trend Regression: Piecewise Linear-Linear-Linear**

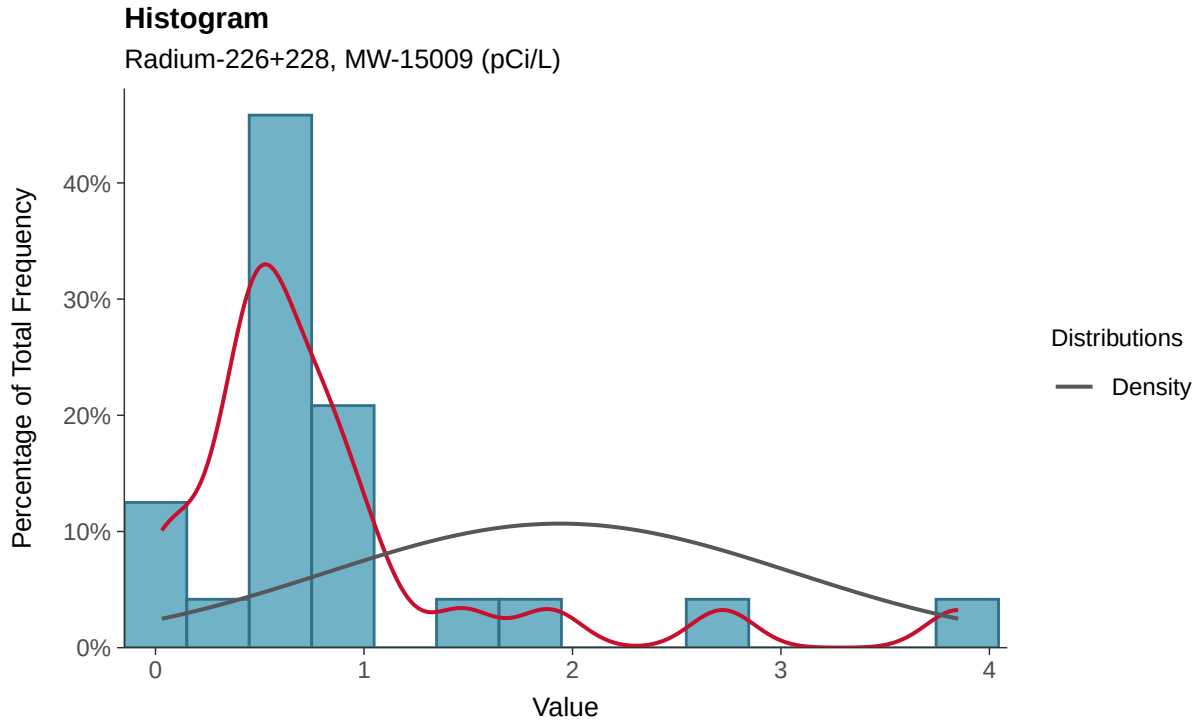
Molybdenum, MW-15009 (ug/L)



## Appendix IV: Radium-226+228, MW-15009

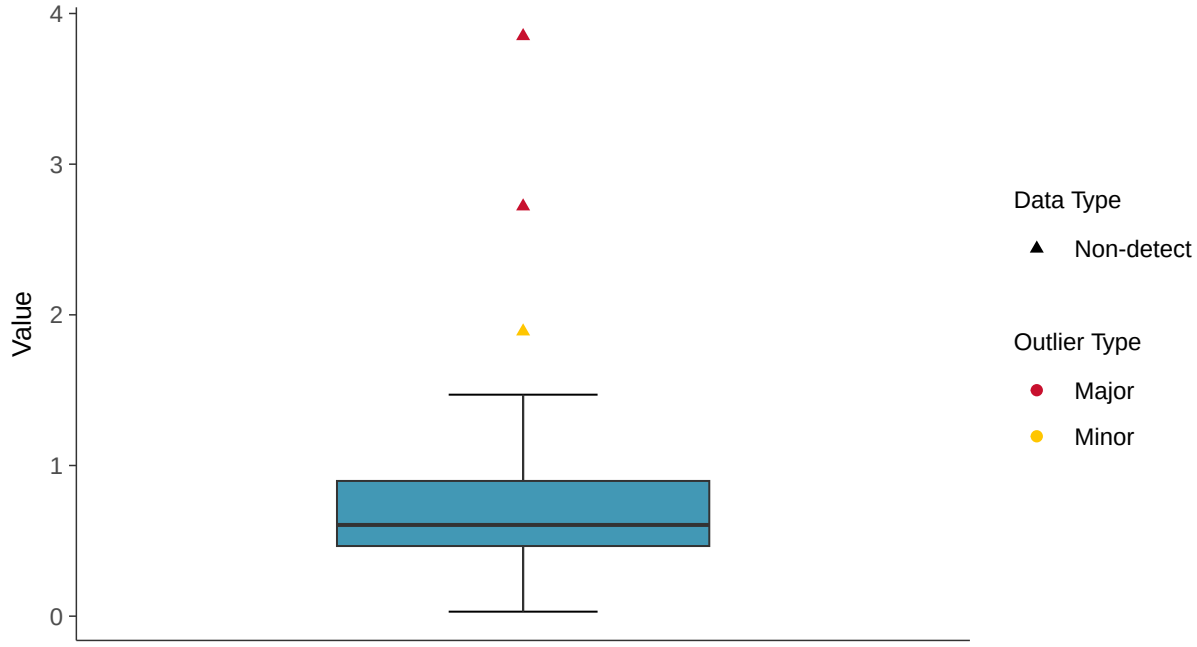
ID: 01_2_125



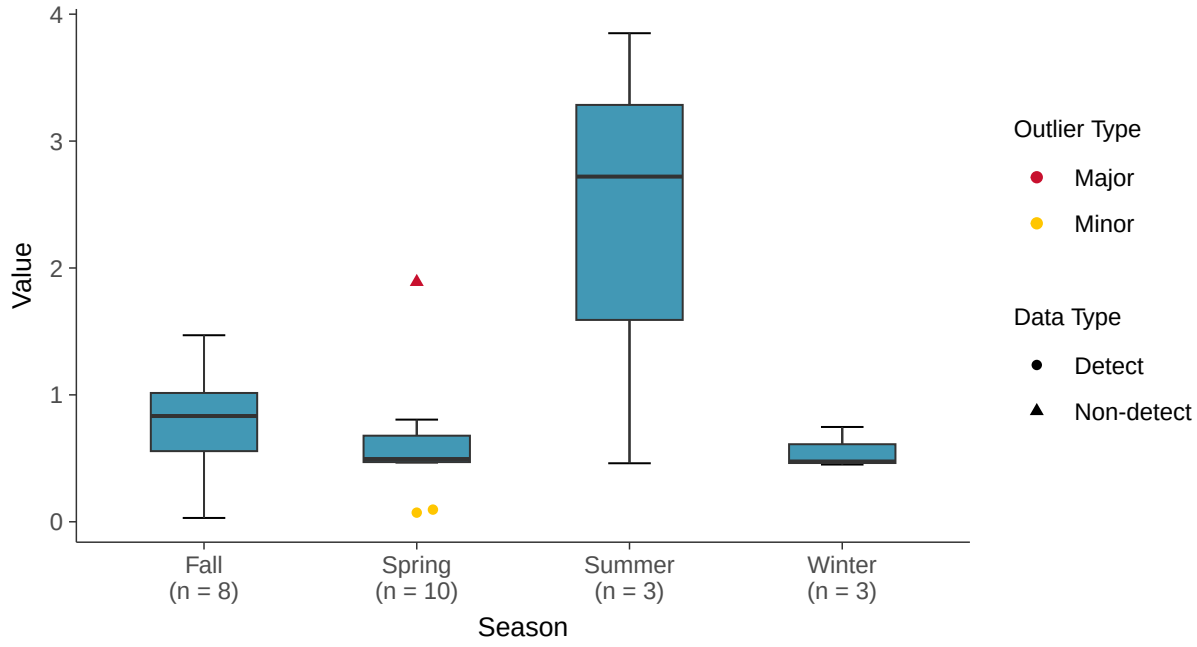
## Boxplot

Radium-226+228, MW-15009 (pCi/L)



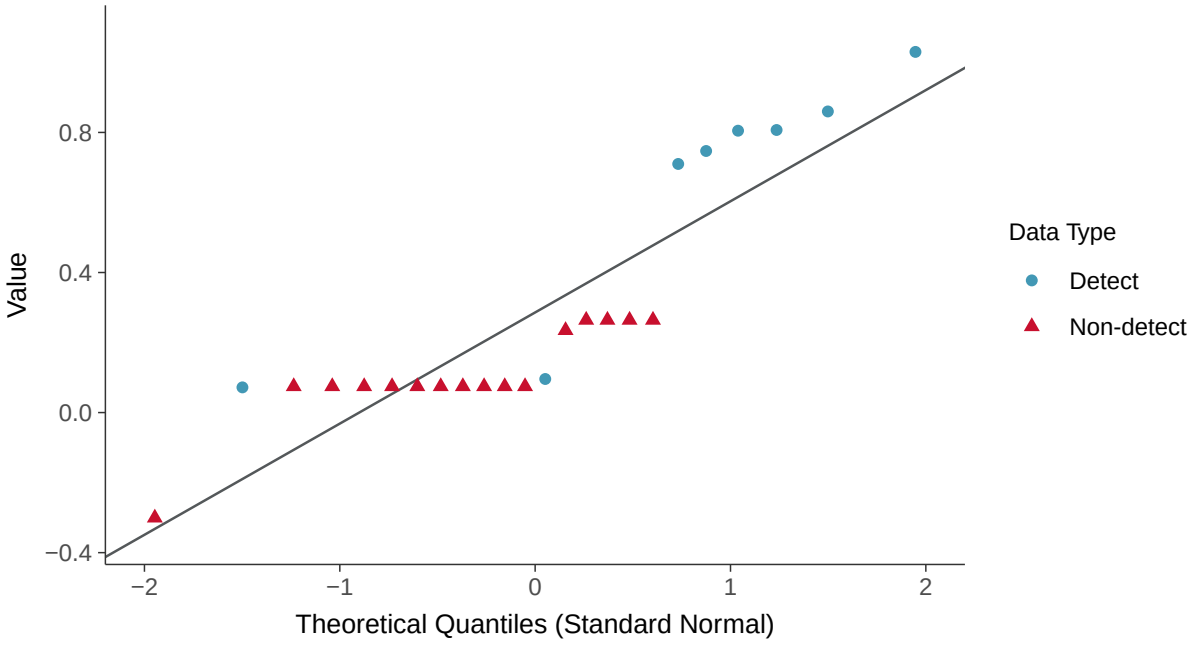

## Boxplot by Season

Radium-226+228, MW-15009 (pCi/L)



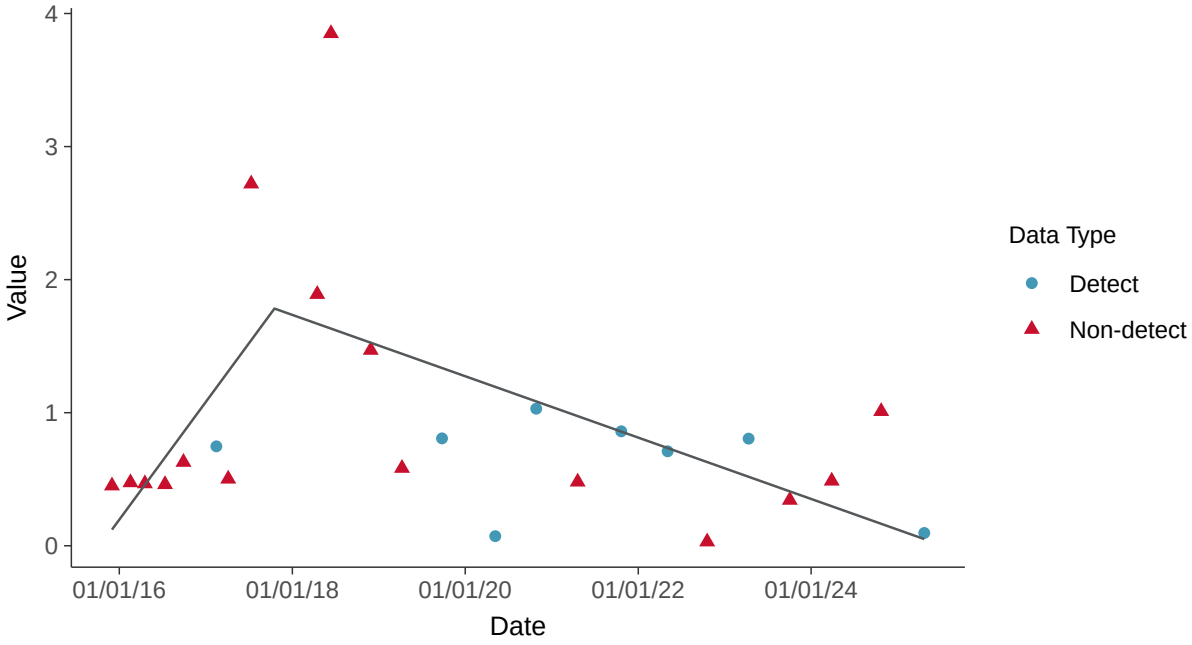
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15009 (pCi/L)



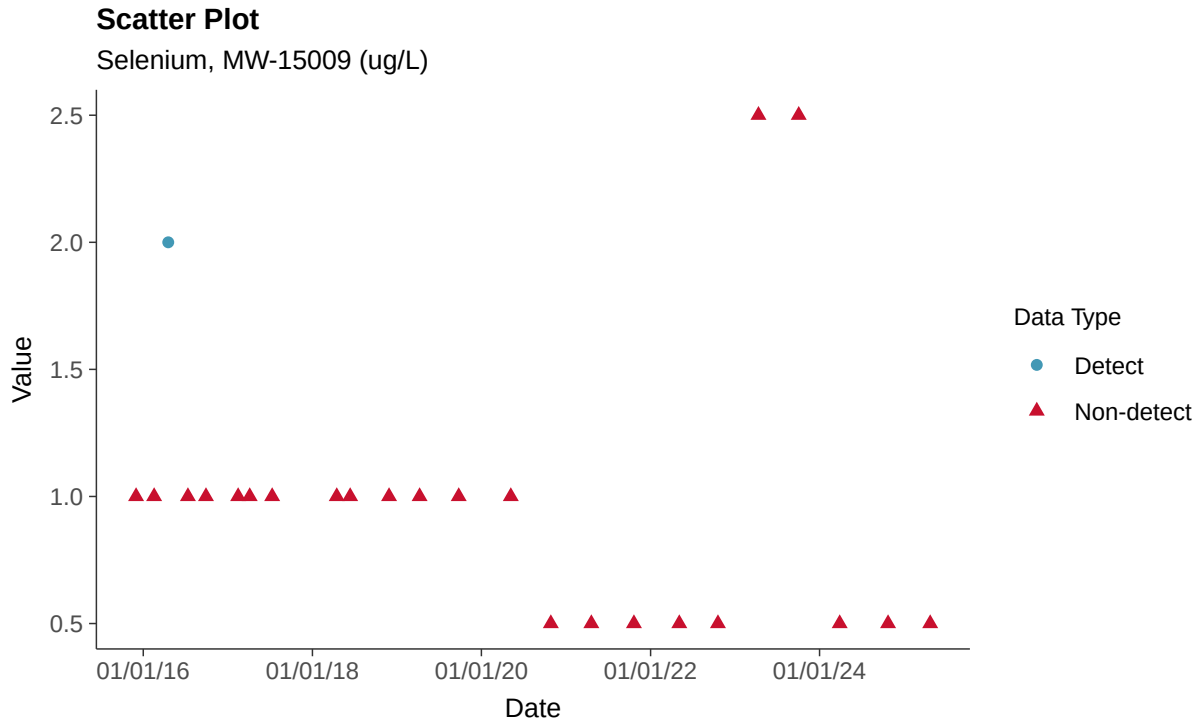

**Trend Regression: Piecewise Linear-Linear**

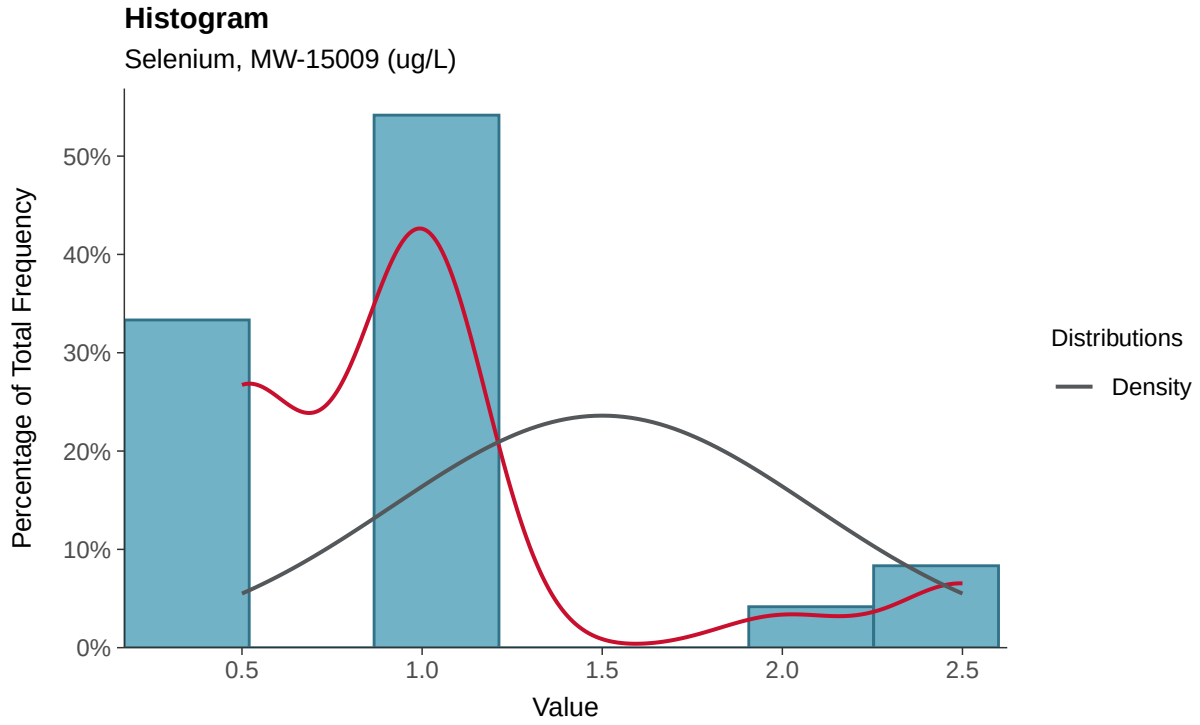
Radium-226+228, MW-15009 (pCi/L)



## Appendix IV: Selenium, MW-15009

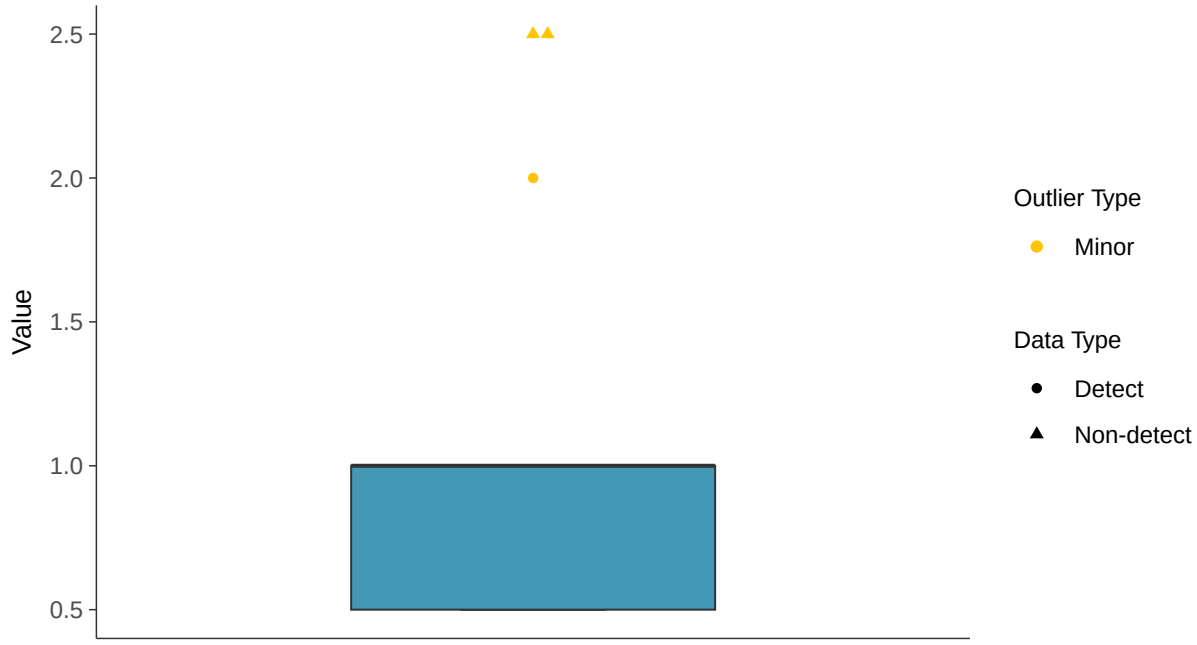
ID: 01_2_127



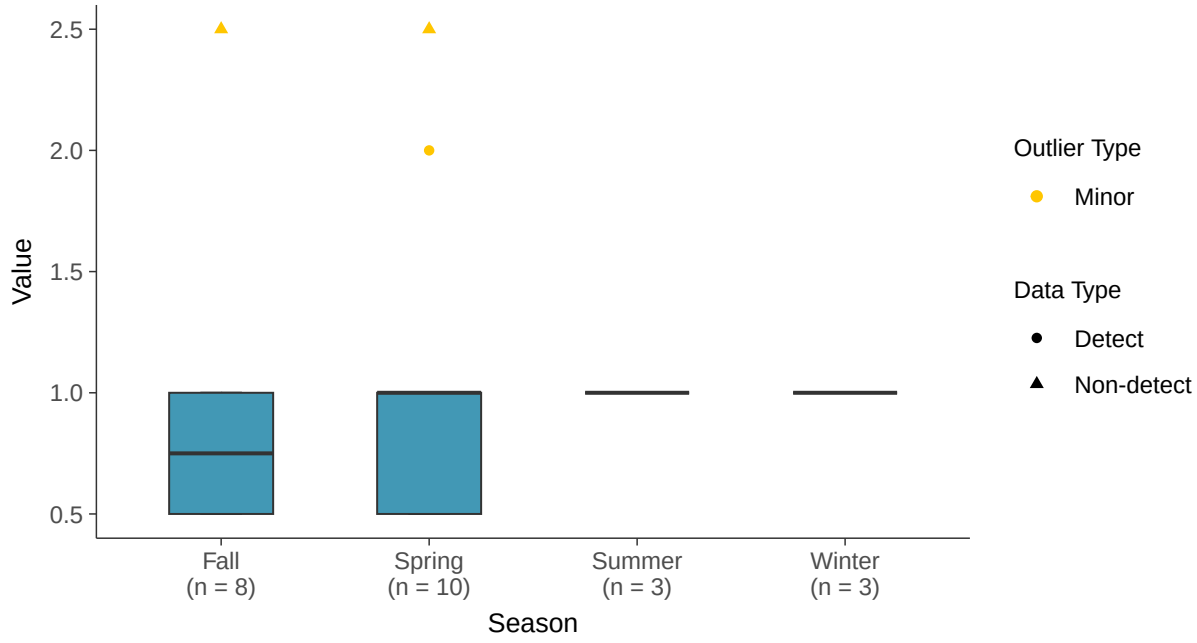
## Boxplot

Selenium, MW-15009 (ug/L)



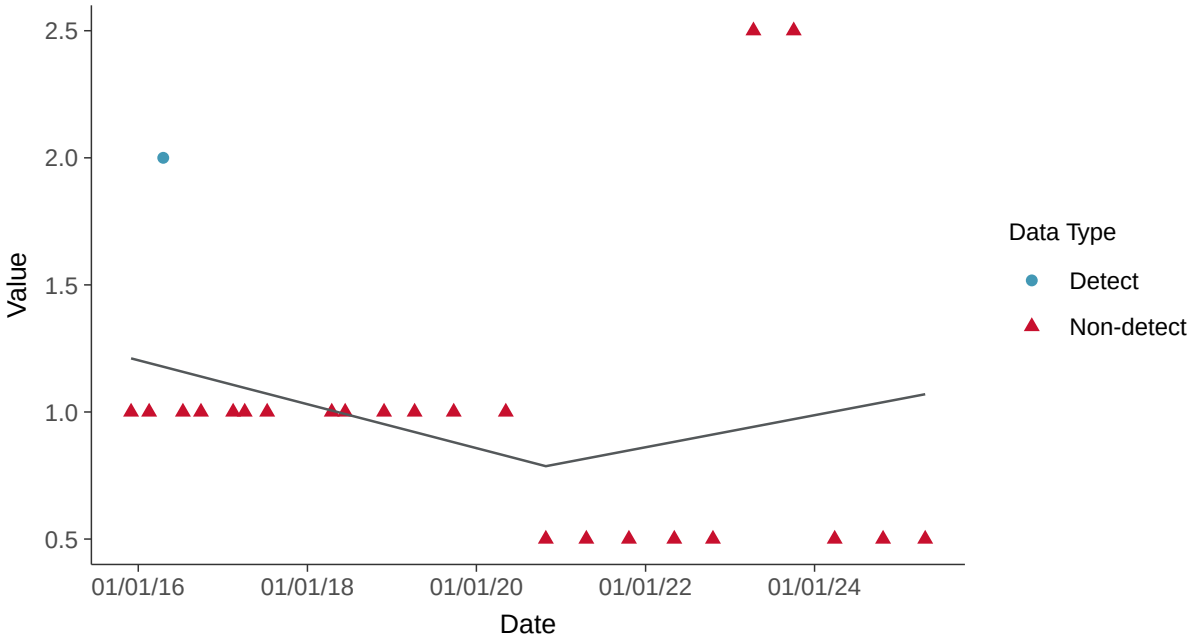

## Boxplot by Season

Selenium, MW-15009 (ug/L)



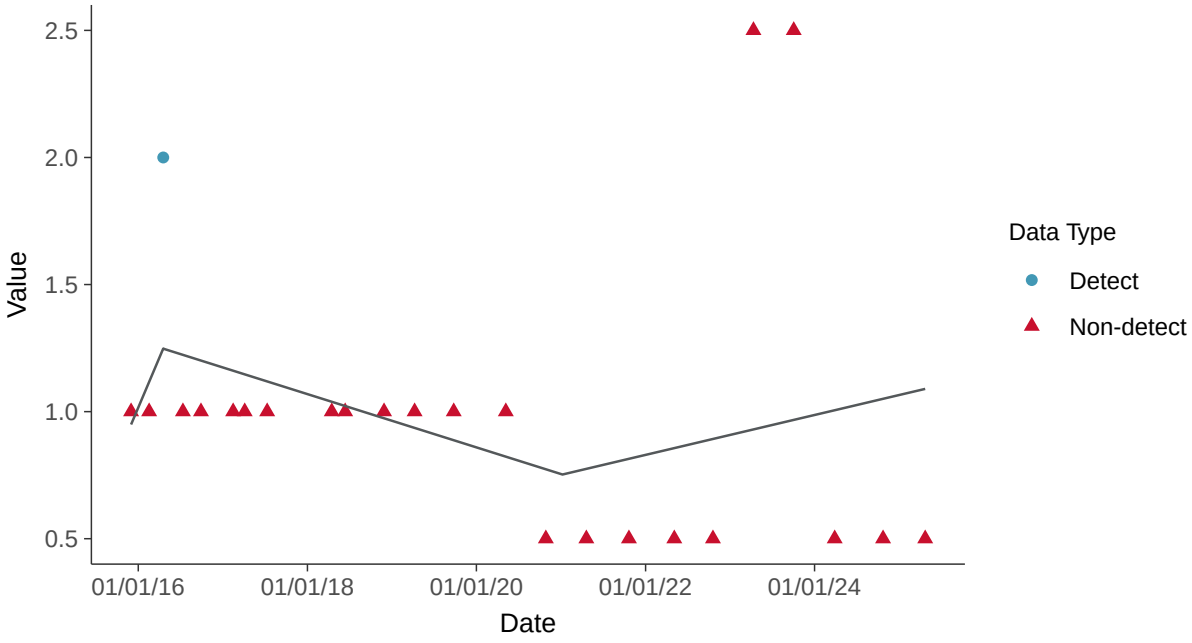
**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15009 (ug/L)



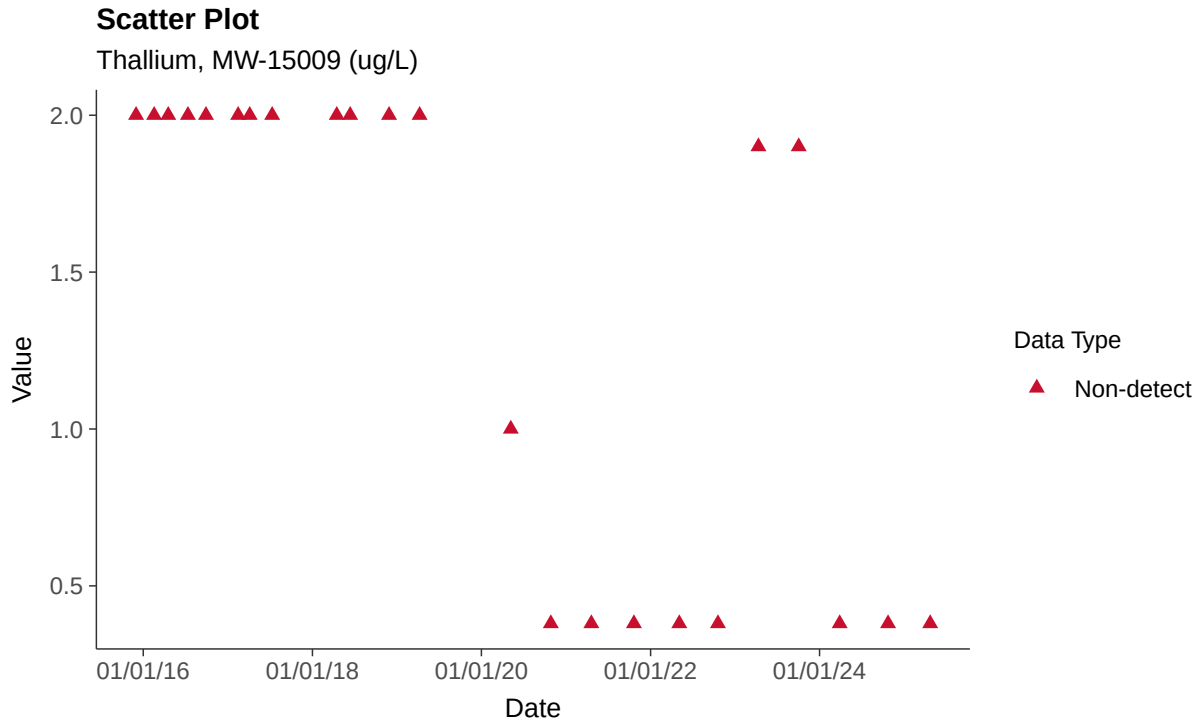

**Trend Regression: Piecewise Linear-Linear-Linear**

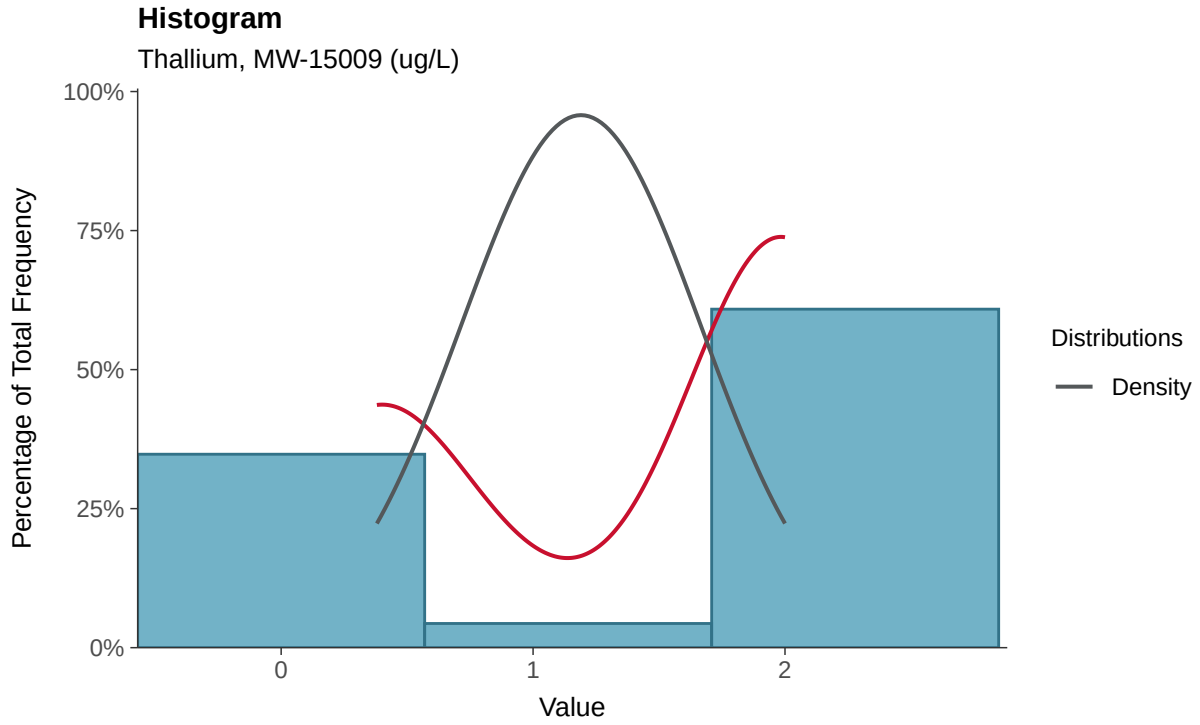
Selenium, MW-15009 (ug/L)



## Appendix IV: Thallium, MW-15009

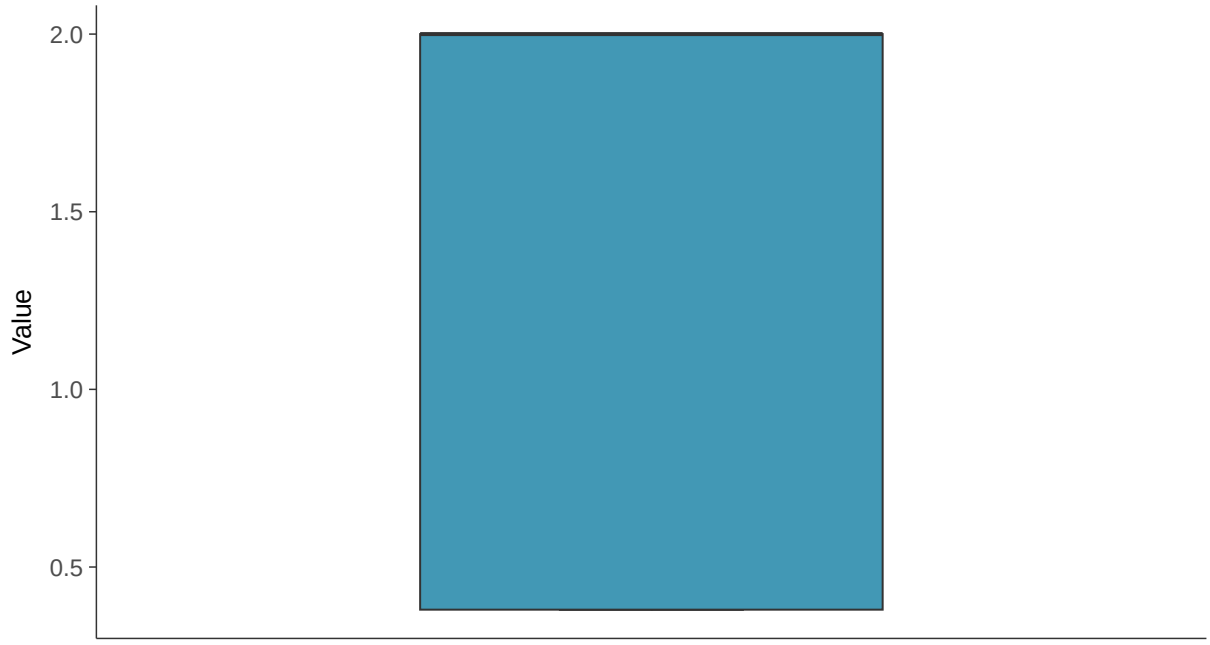
ID: 01_2_131



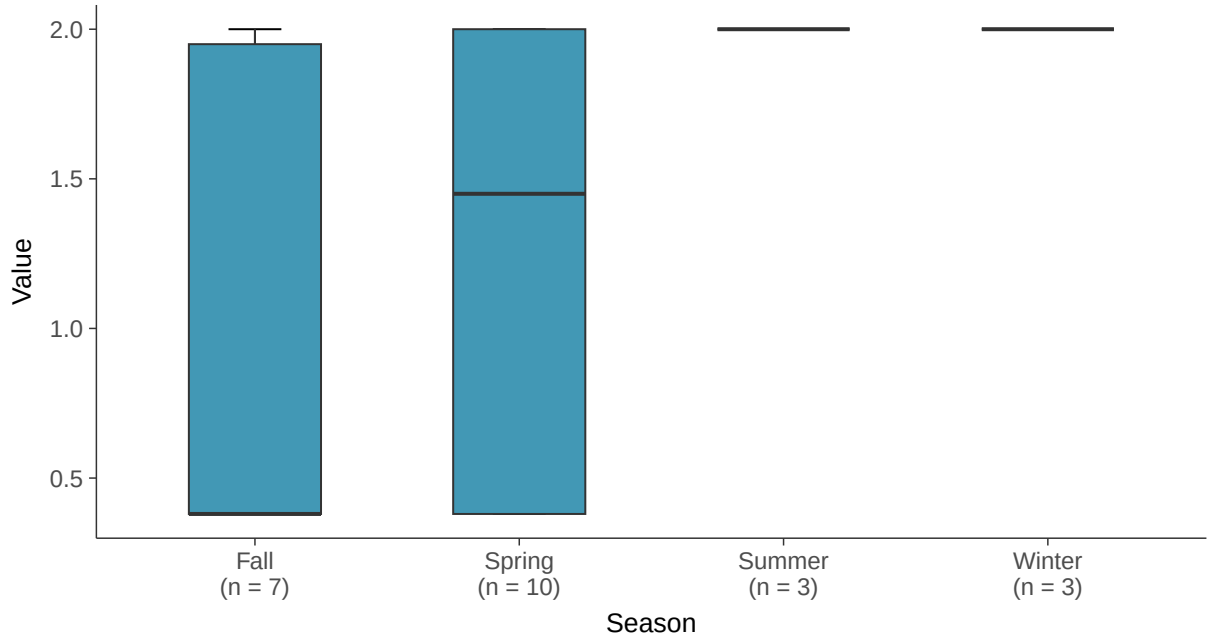
**Boxplot**

Thallium, MW-15009 (ug/L)



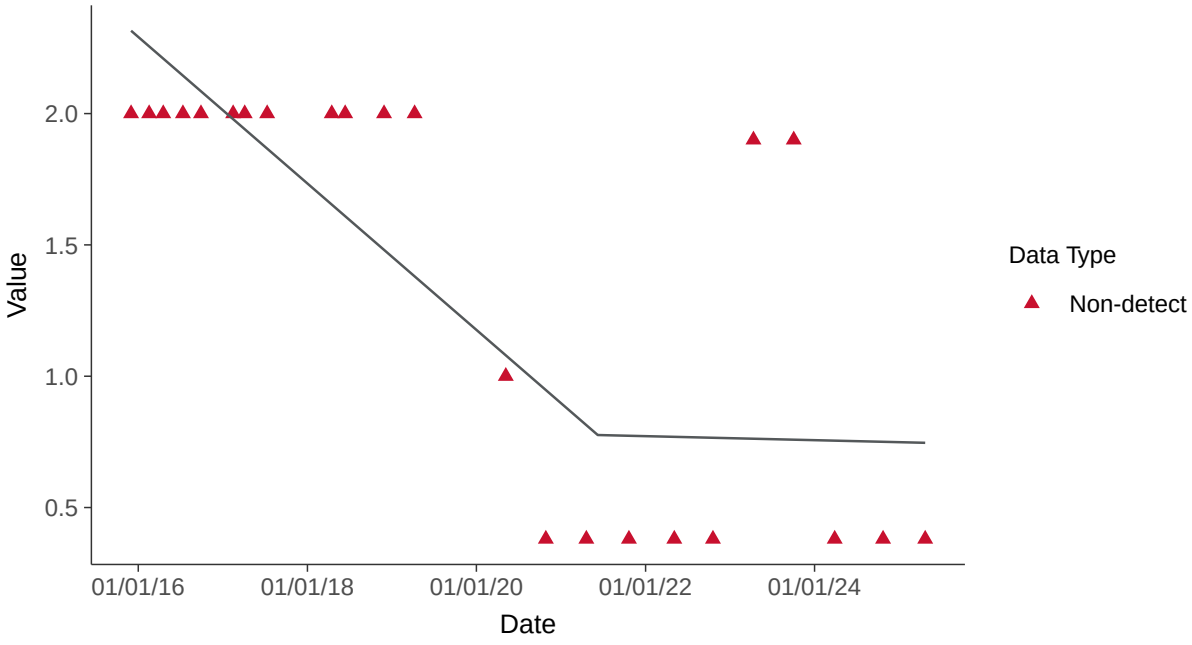

**Boxplot by Season**

Thallium, MW-15009 (ug/L)



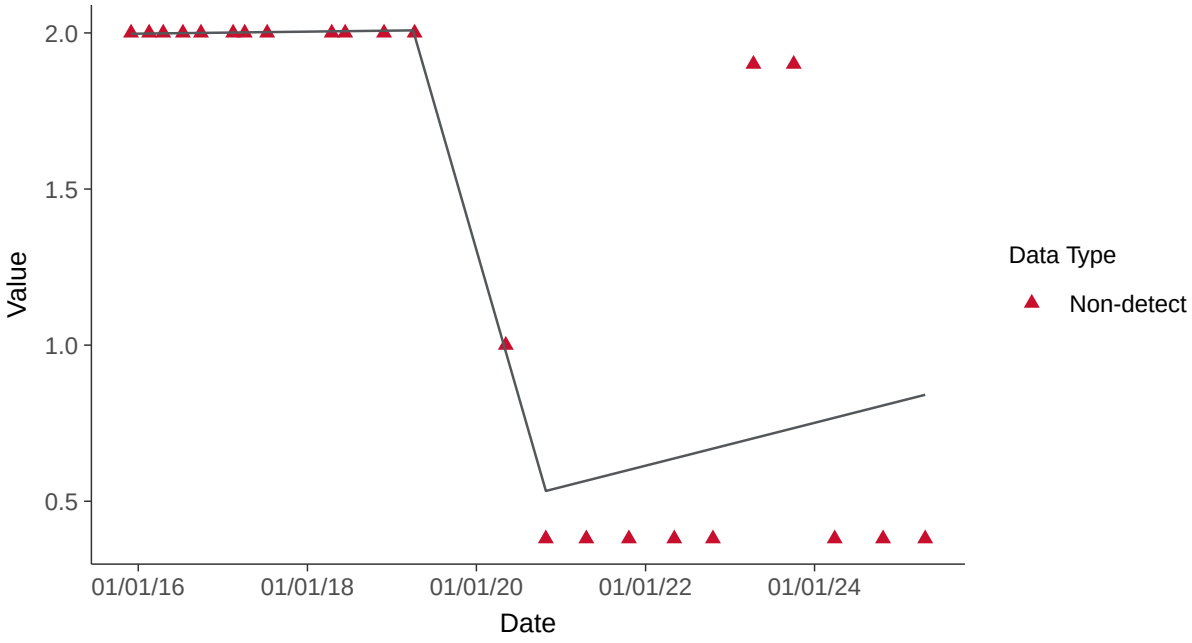
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15009 (ug/L)



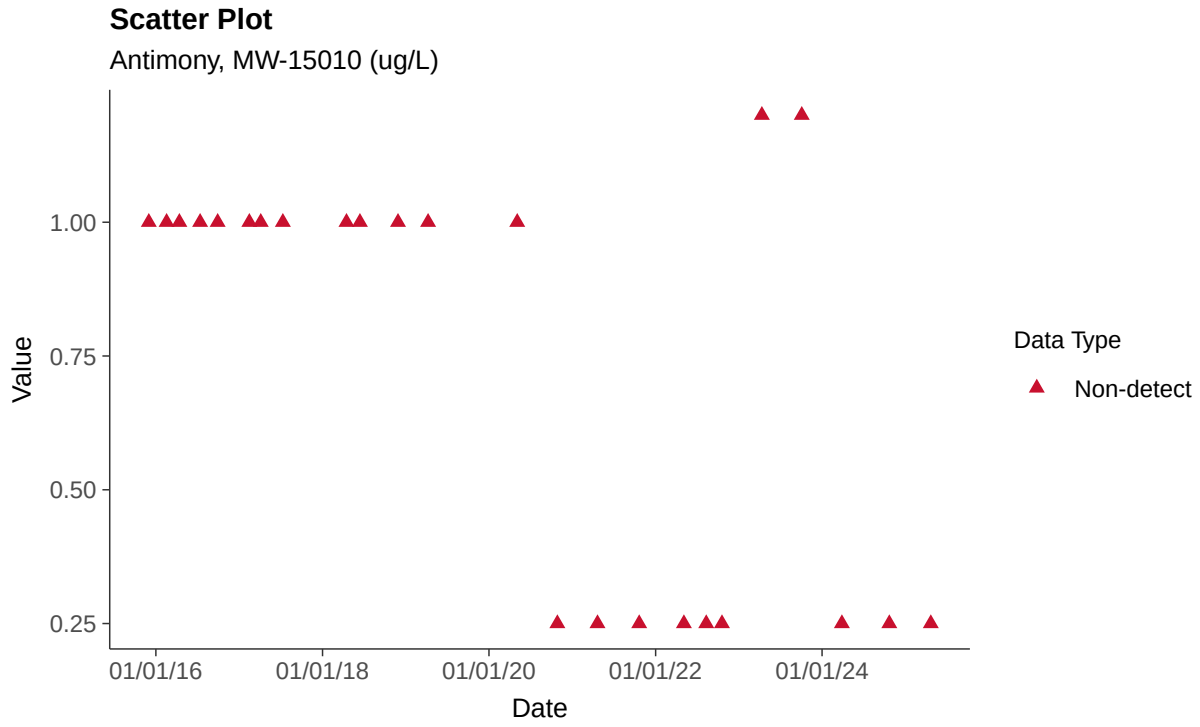

**Trend Regression: Piecewise Linear-Linear-Linear**

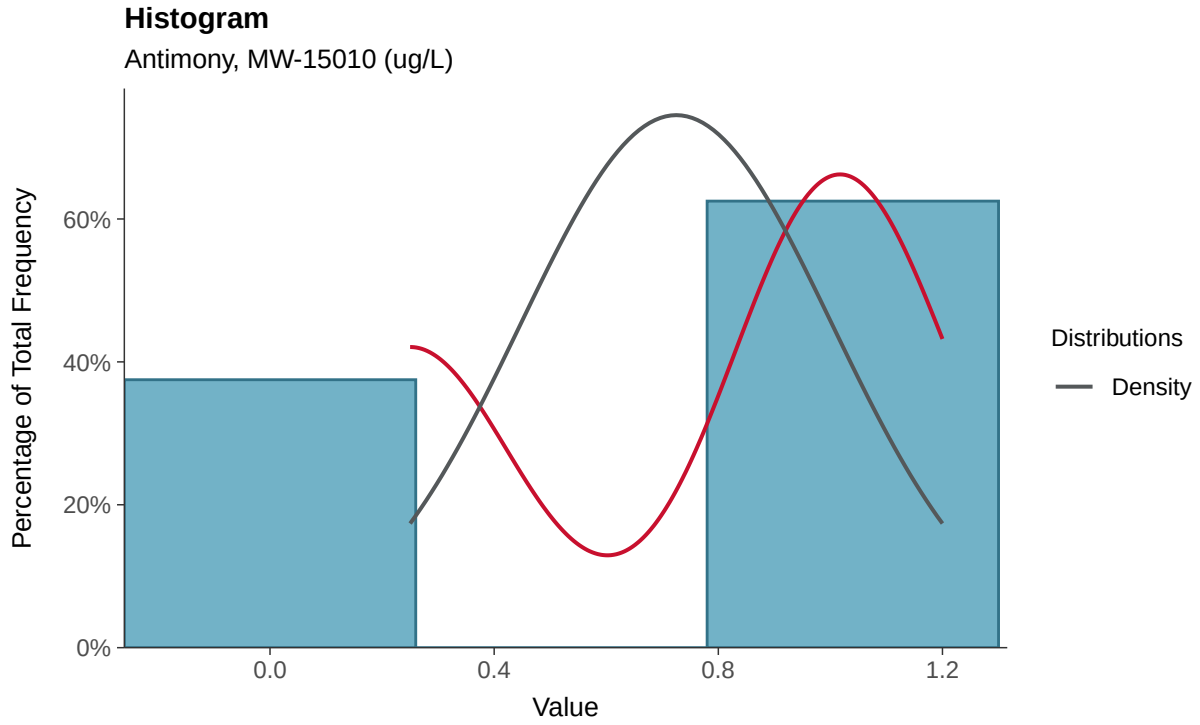
Thallium, MW-15009 (ug/L)



# Appendix IV: Antimony, MW-15010

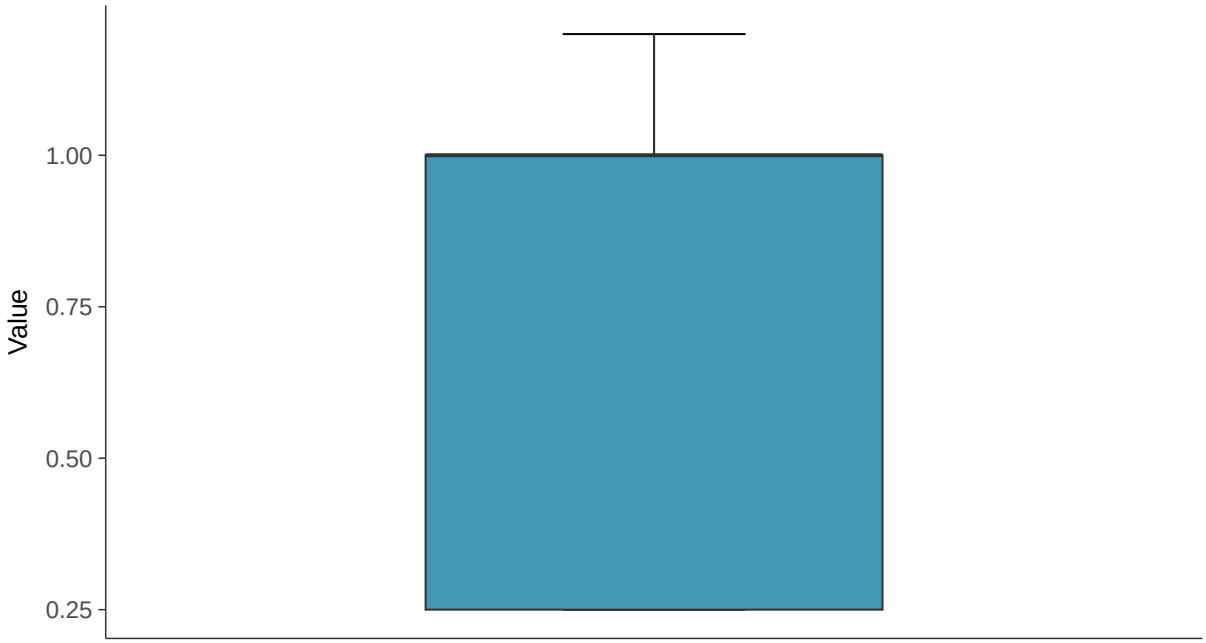
ID: 02_2_101



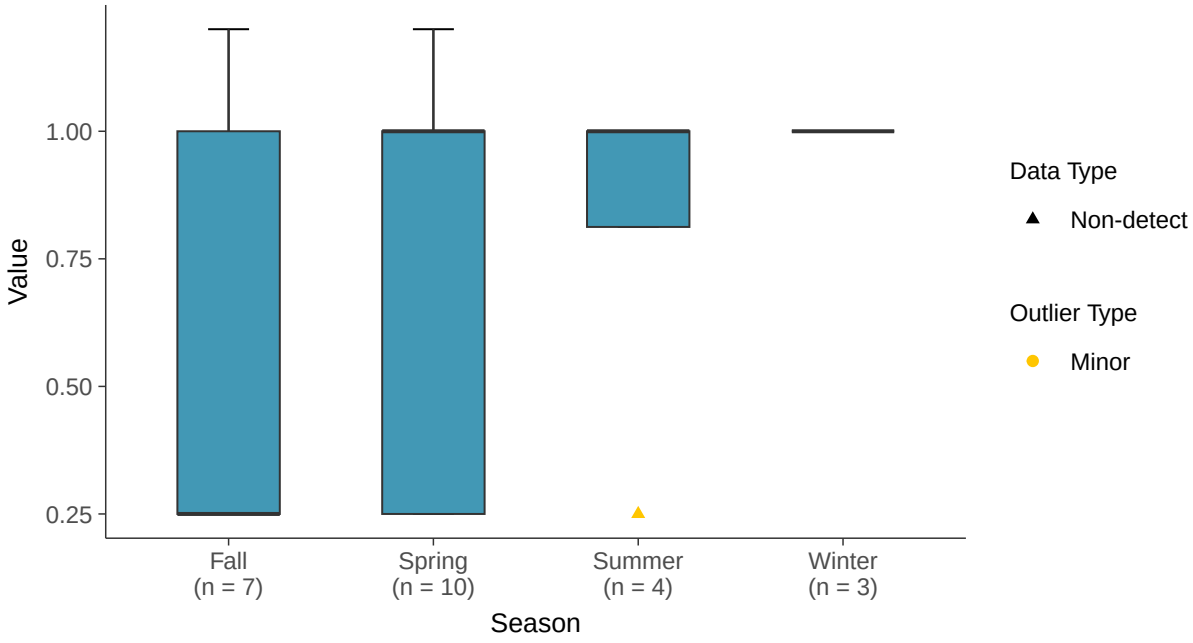
**Boxplot**

Antimony, MW-15010 (ug/L)



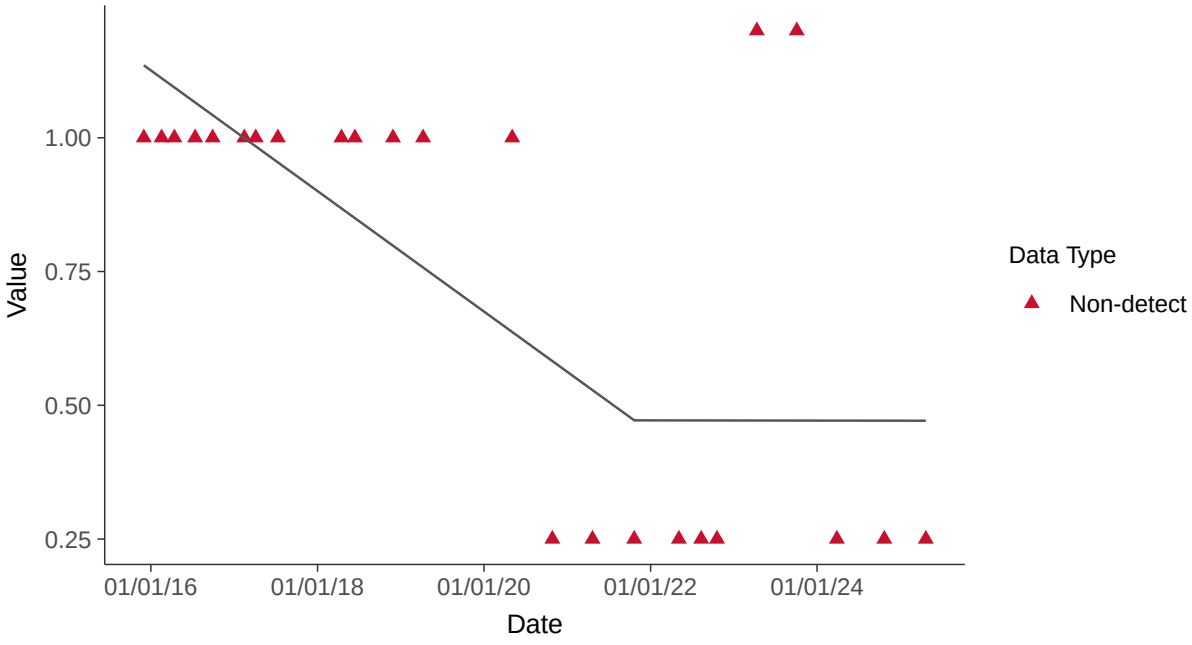

**Boxplot by Season**

Antimony, MW-15010 (ug/L)



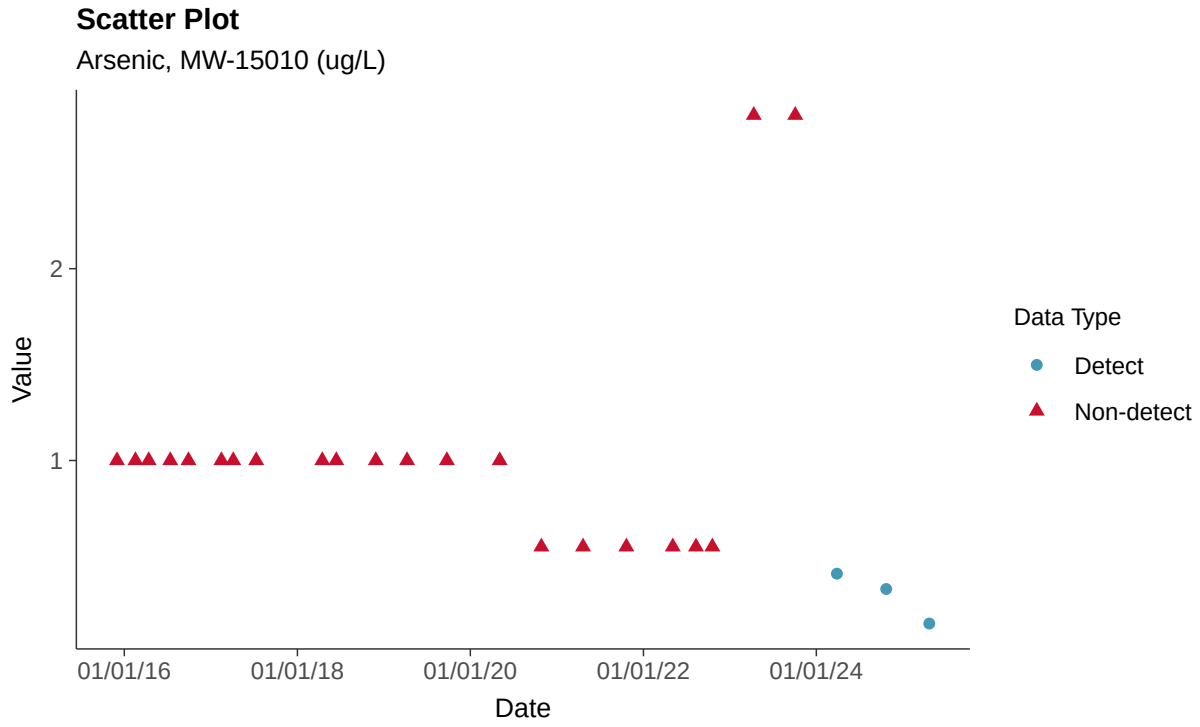
**Trend Regression: Piecewise Linear-Linear**

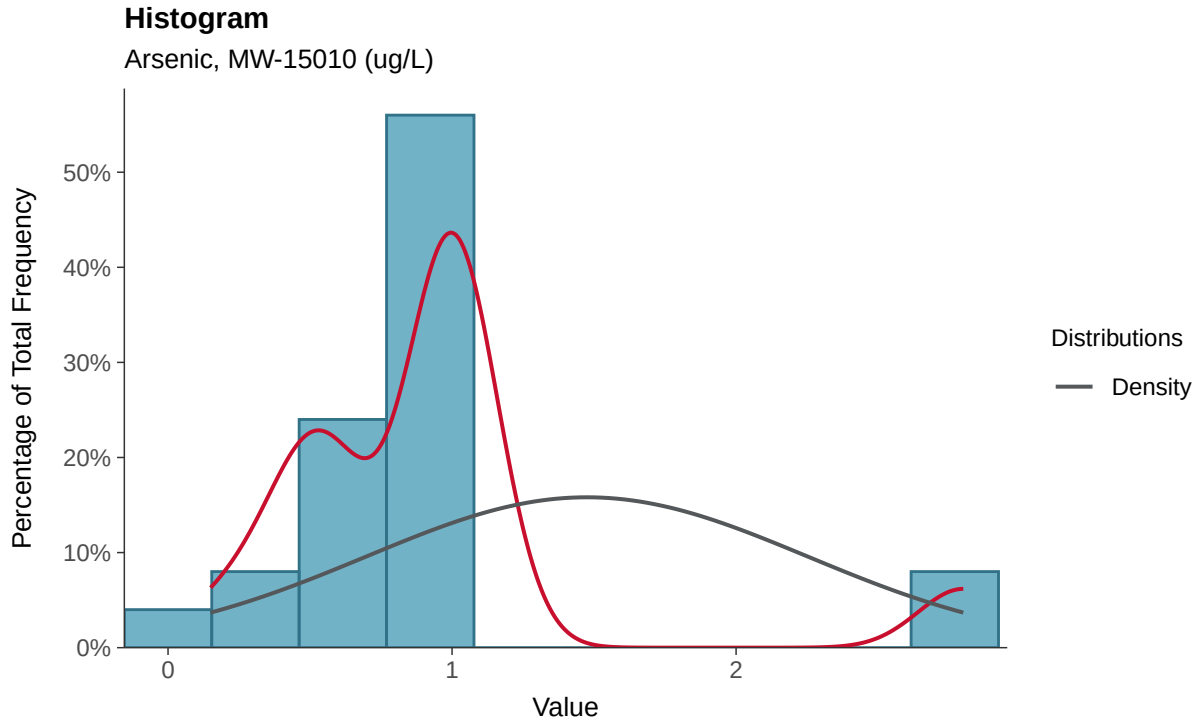
Antimony, MW-15010 (ug/L)



## Appendix IV: Arsenic, MW-15010

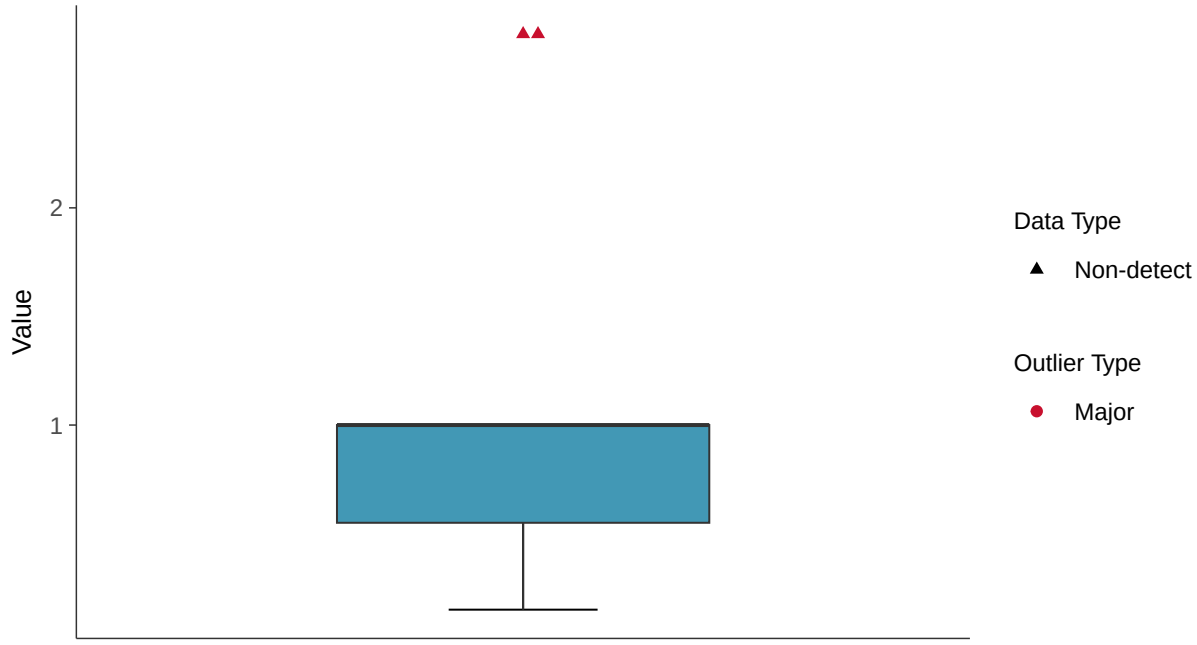
ID: 02_2_102



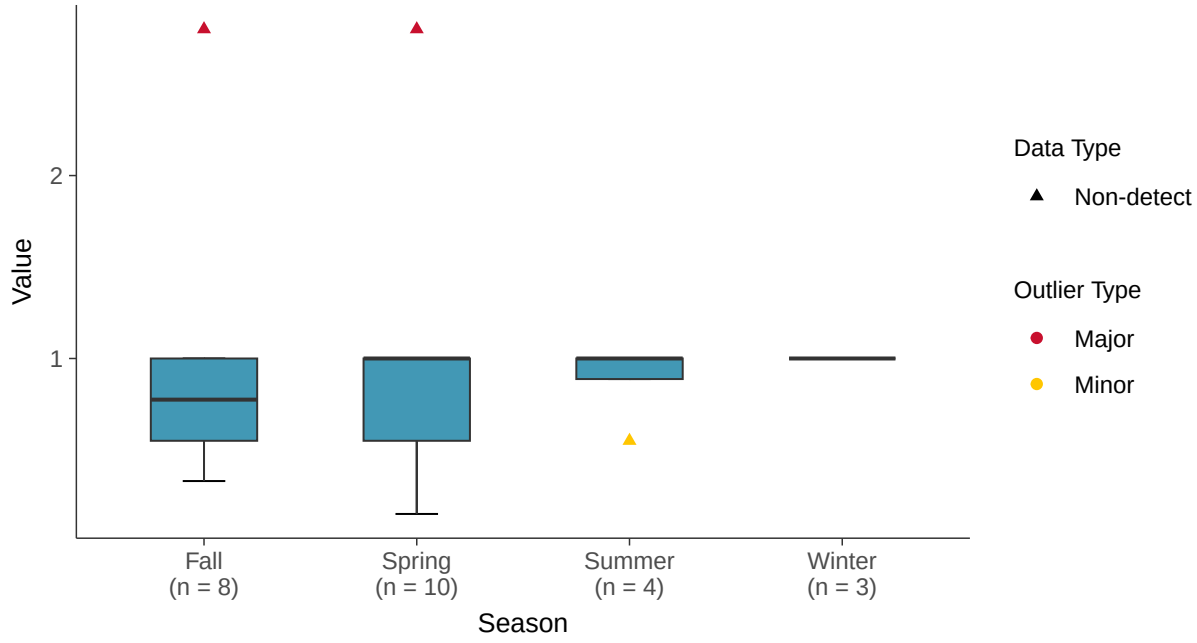
## Boxplot

Arsenic, MW-15010 (ug/L)



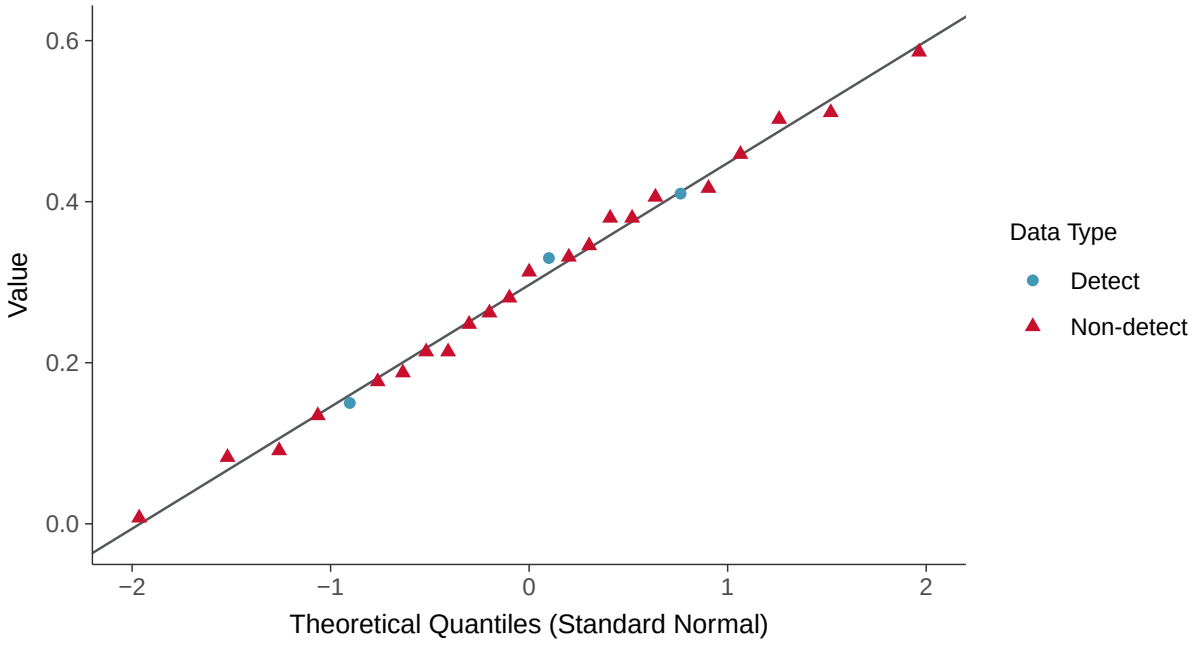

## Boxplot by Season

Arsenic, MW-15010 (ug/L)



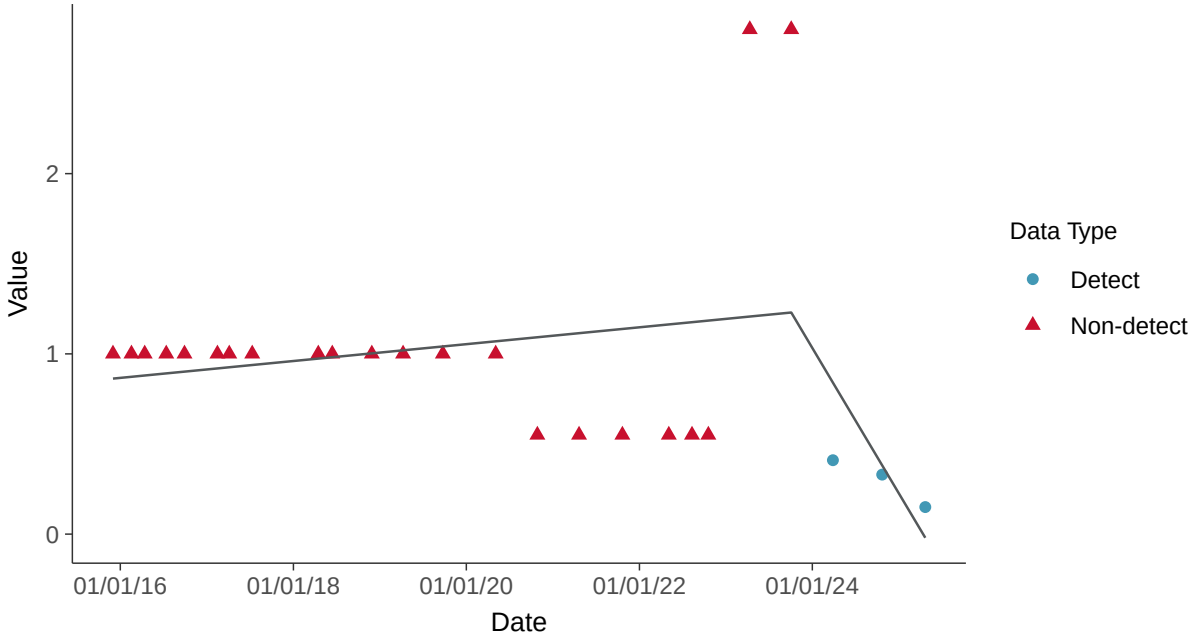
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15010 (ug/L)



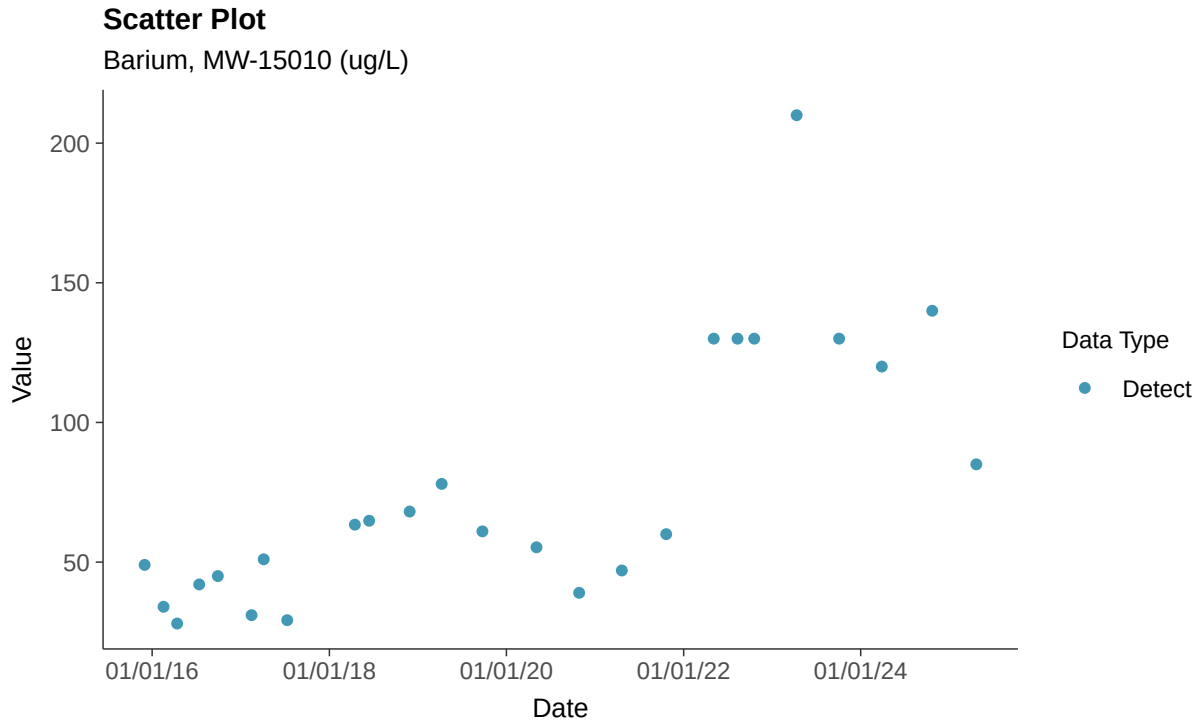

**Trend Regression: Piecewise Linear-Linear**

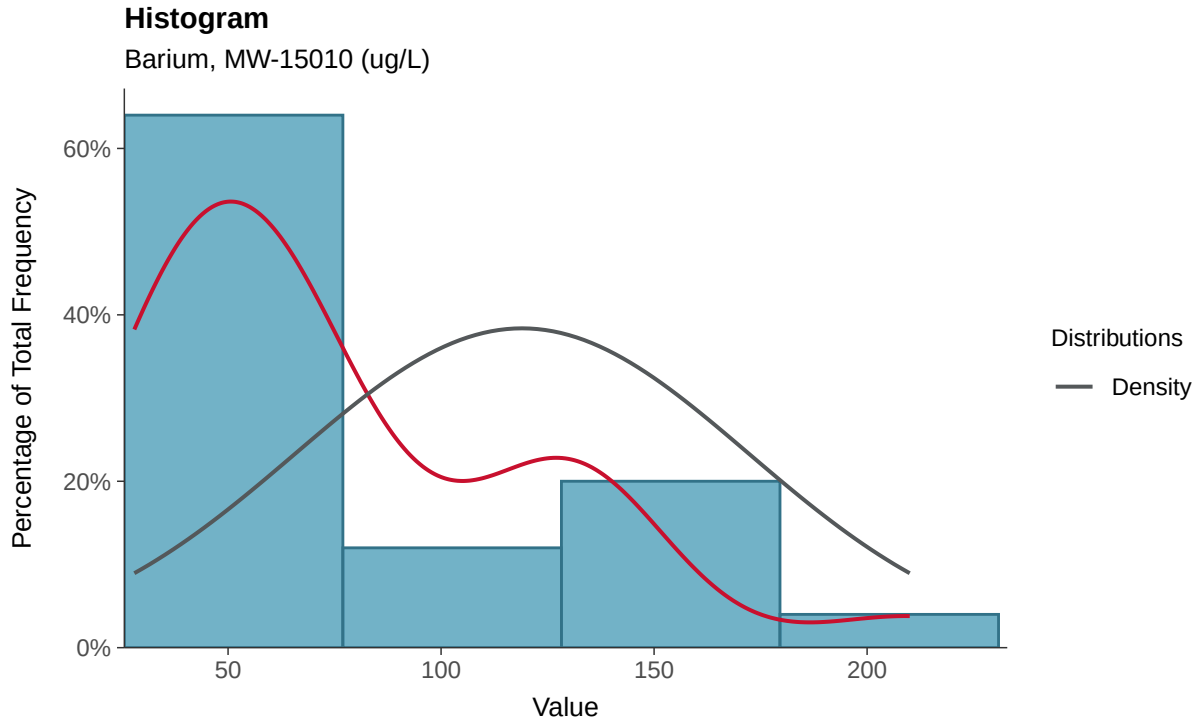
Arsenic, MW-15010 (ug/L)



# Appendix IV: Barium, MW-15010

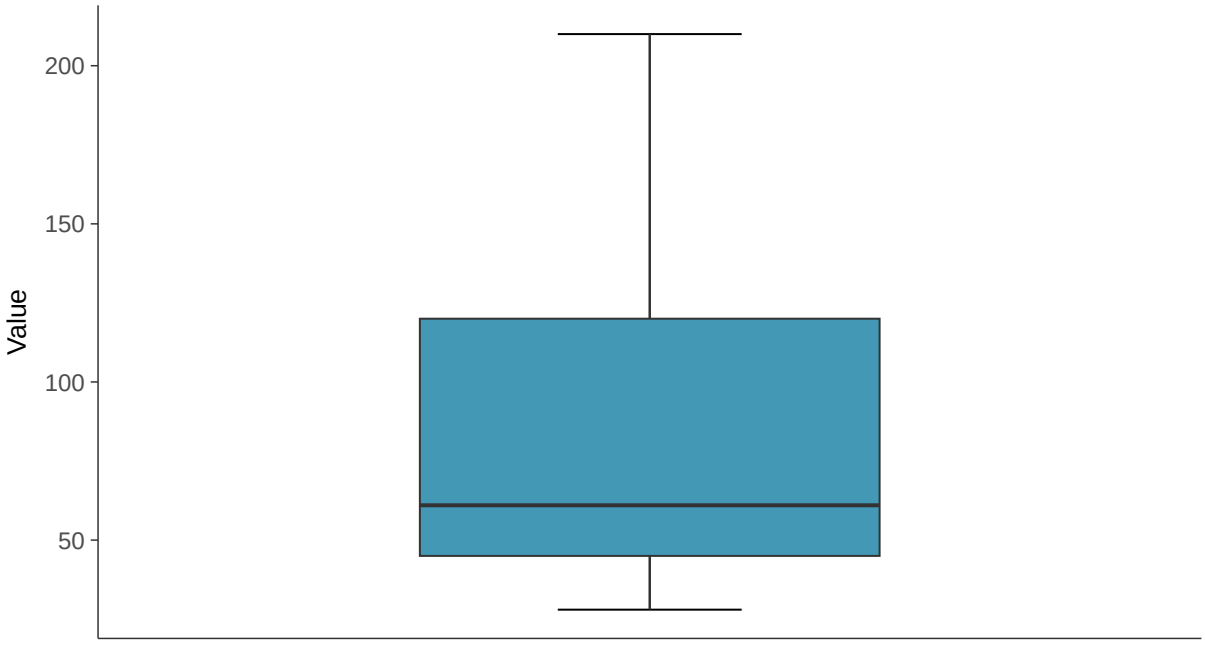
ID: 02_2_103



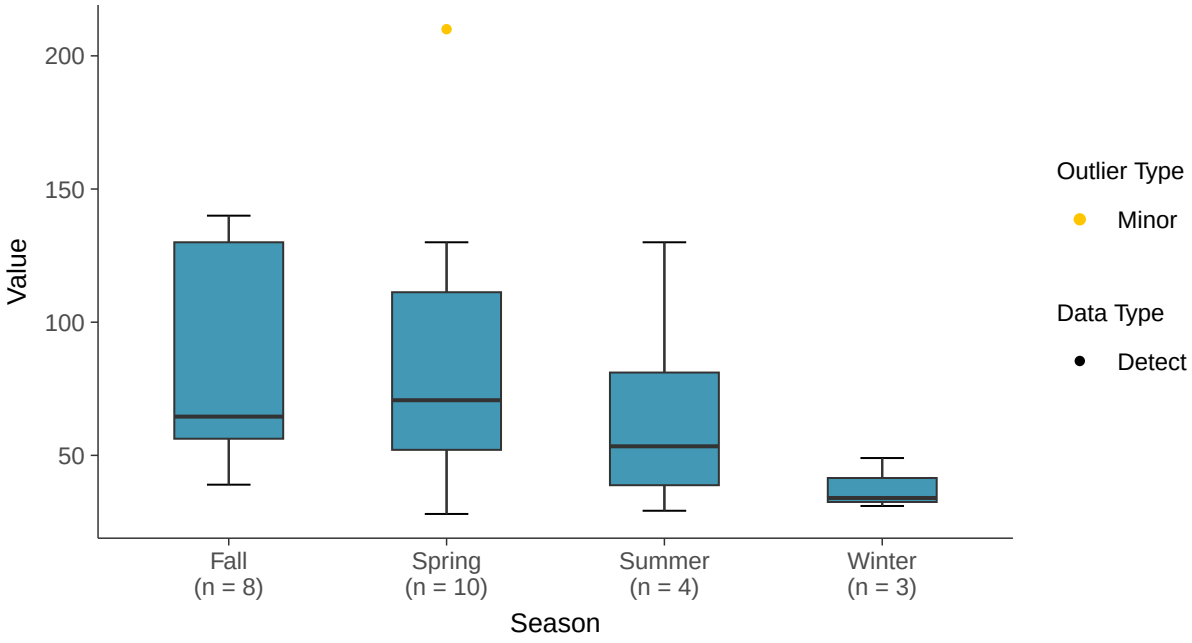
**Boxplot**

Barium, MW-15010 (ug/L)



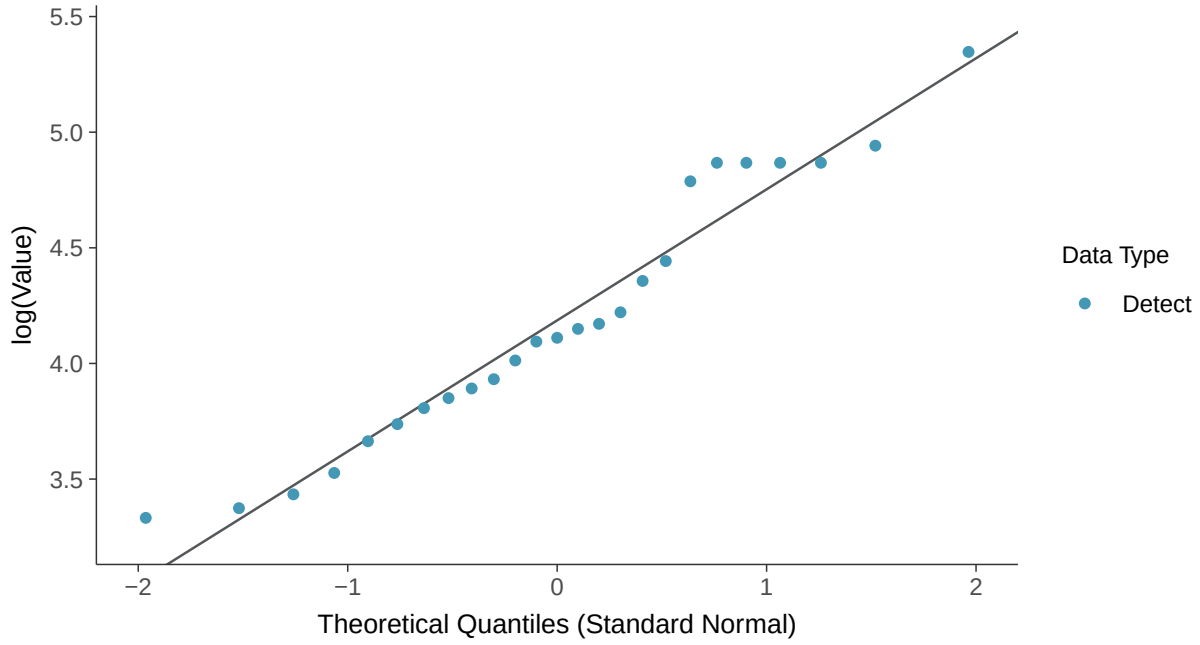

**Boxplot by Season**

Barium, MW-15010 (ug/L)



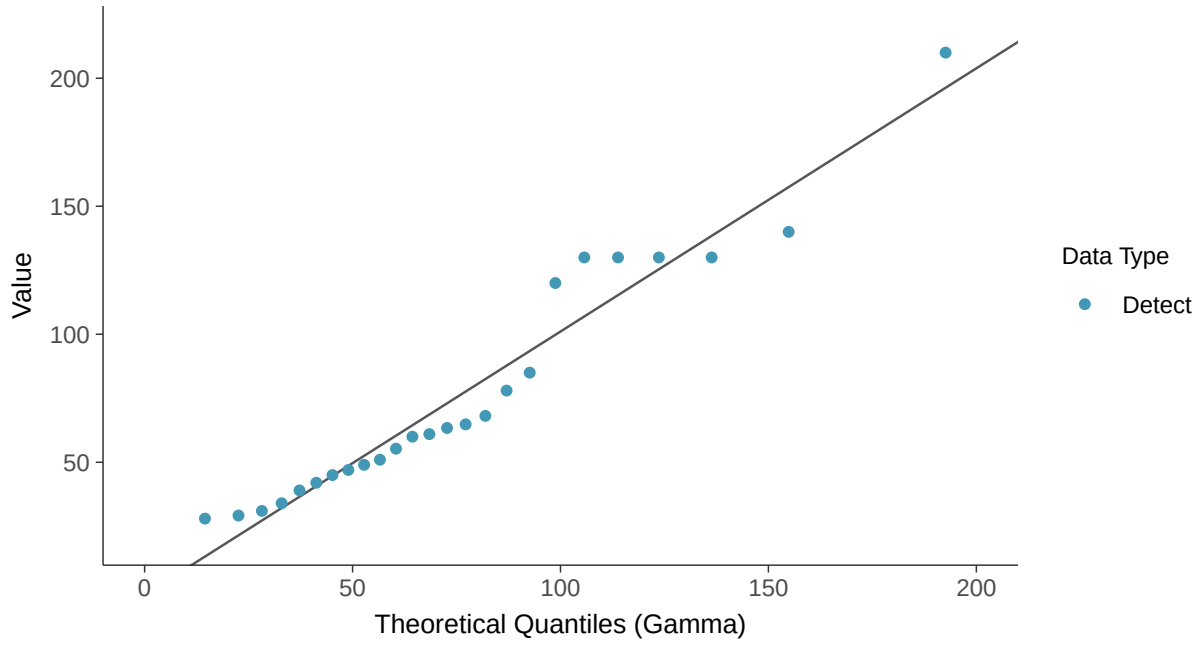
**Lognormal Q-Q plot**

Barium, MW-15010 (ug/L)



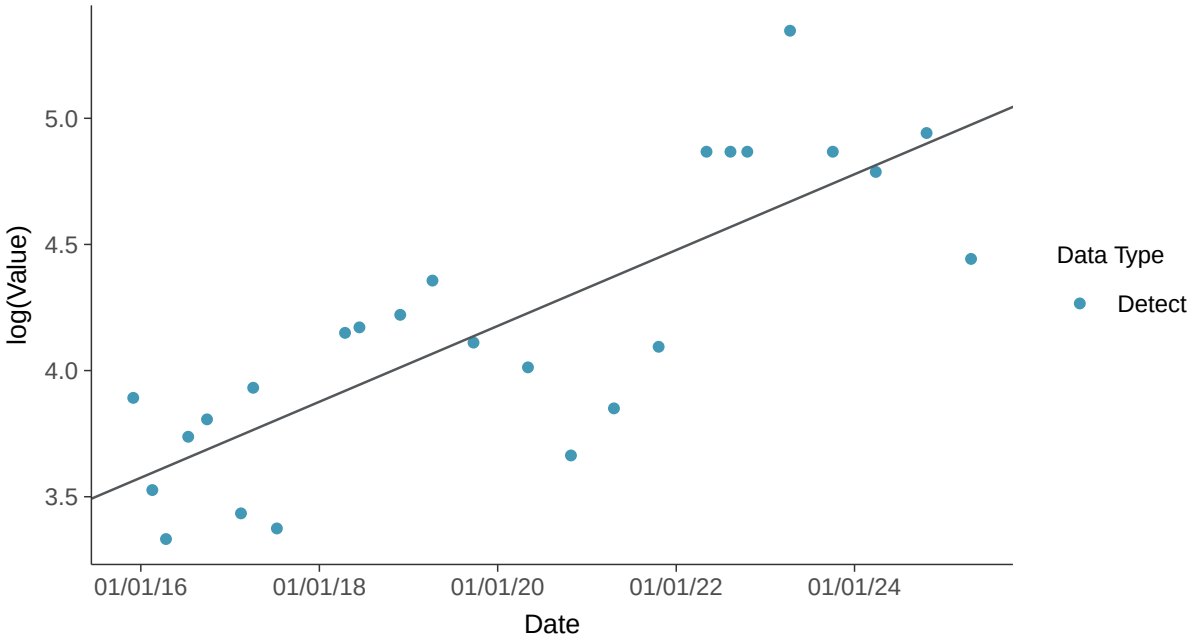

**Gamma Q-Q plot**

Barium, MW-15010 (ug/L)



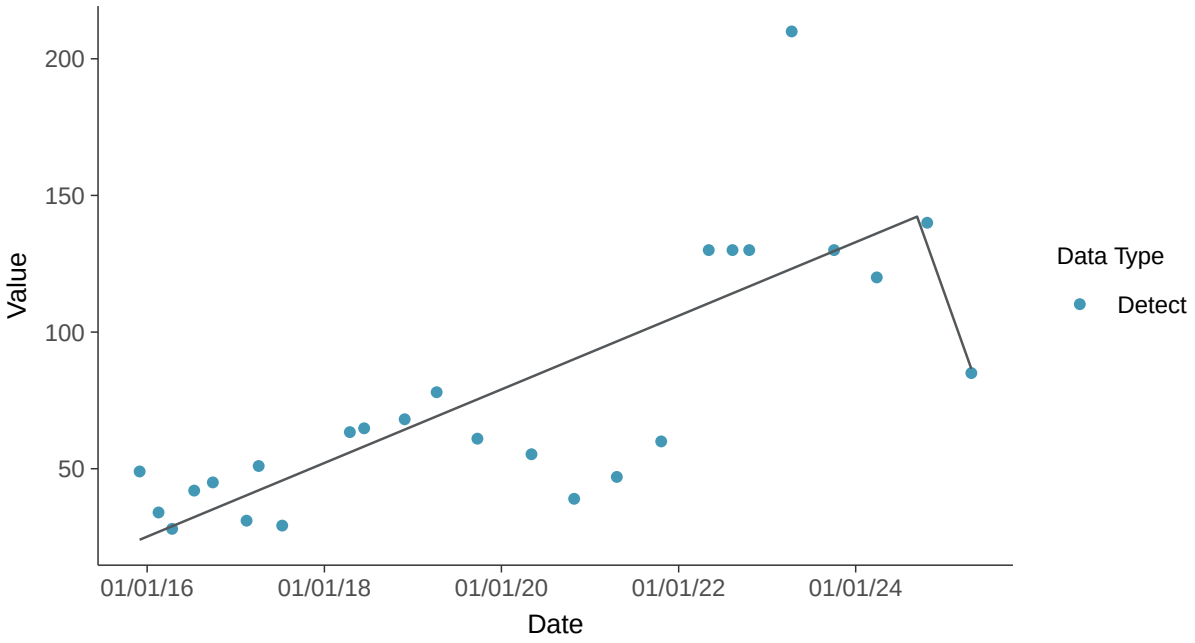
**Trend Regression: Lognormal MLE**

Barium, MW-15010 (ug/L)



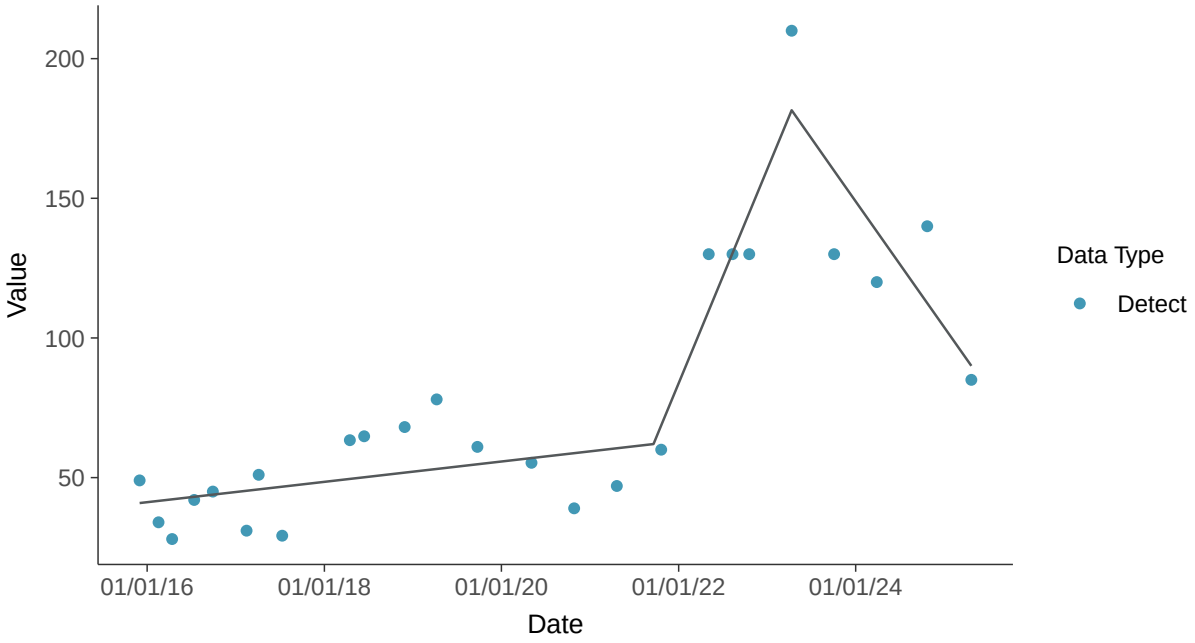

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15010 (ug/L)



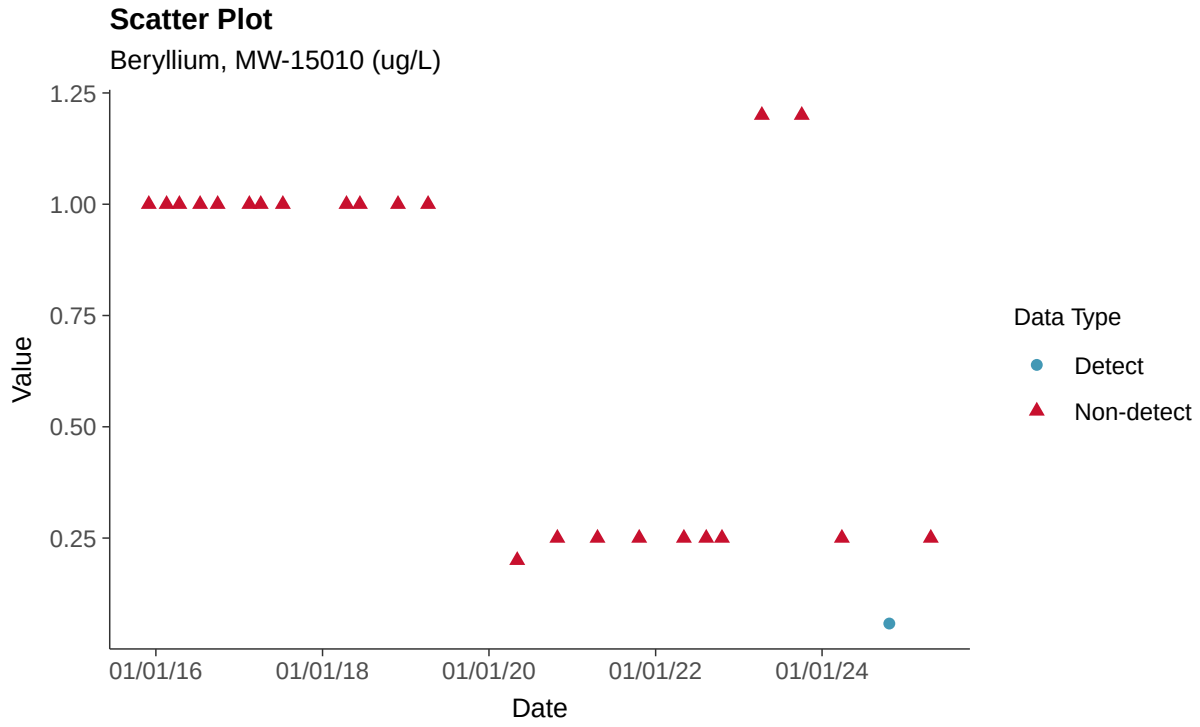
**Trend Regression: Piecewise Linear-Linear-Linear**

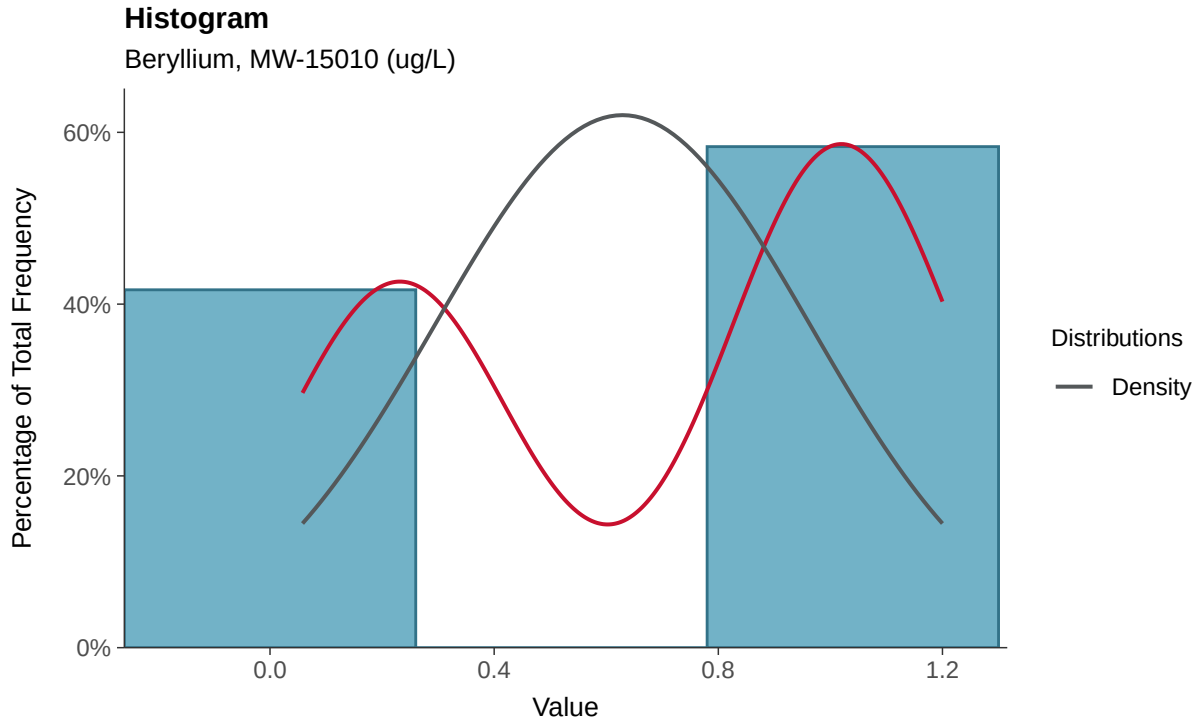
Barium, MW-15010 (ug/L)



## Appendix IV: Beryllium, MW-15010

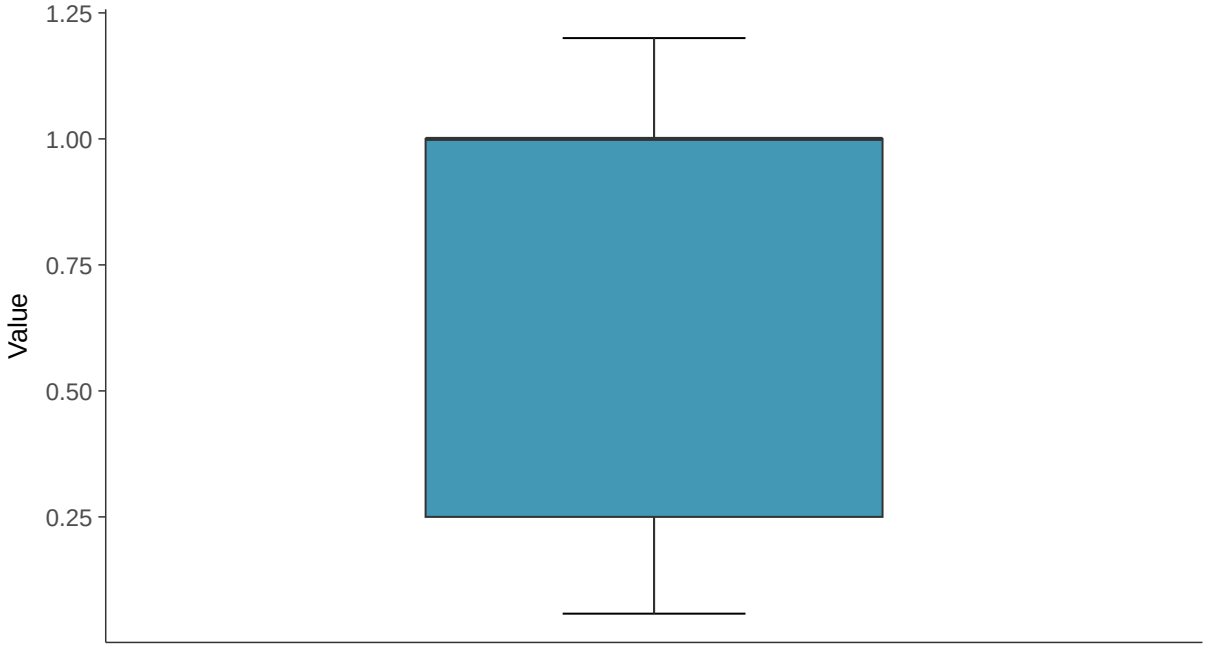
ID: 02_2_104



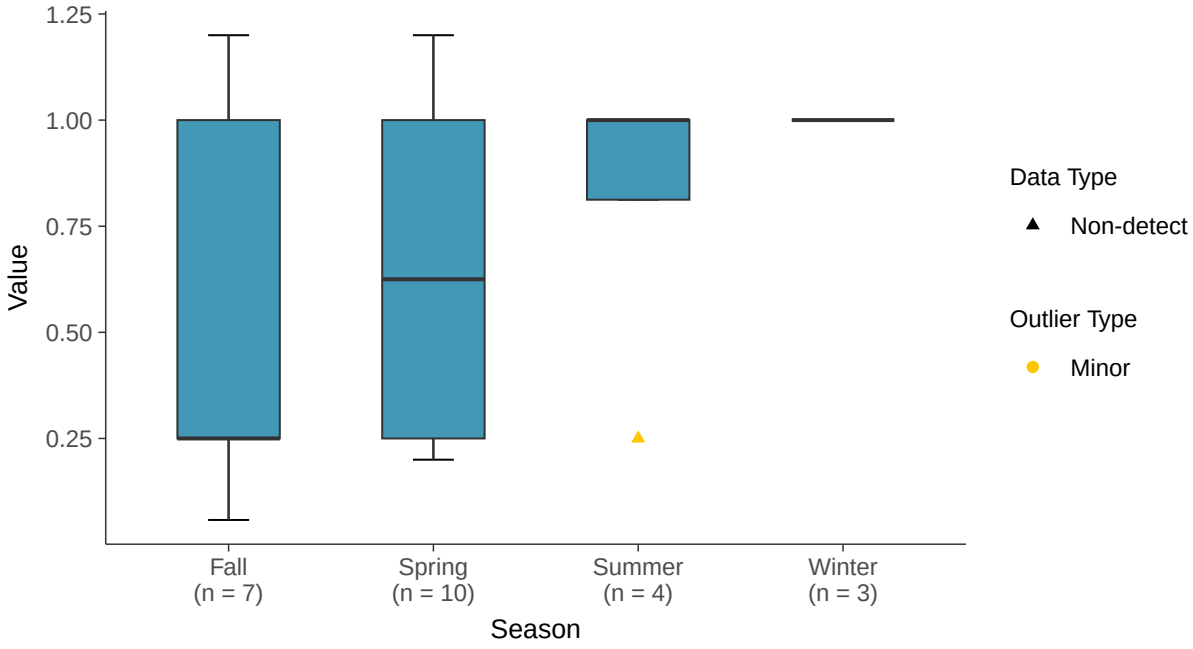
## Boxplot

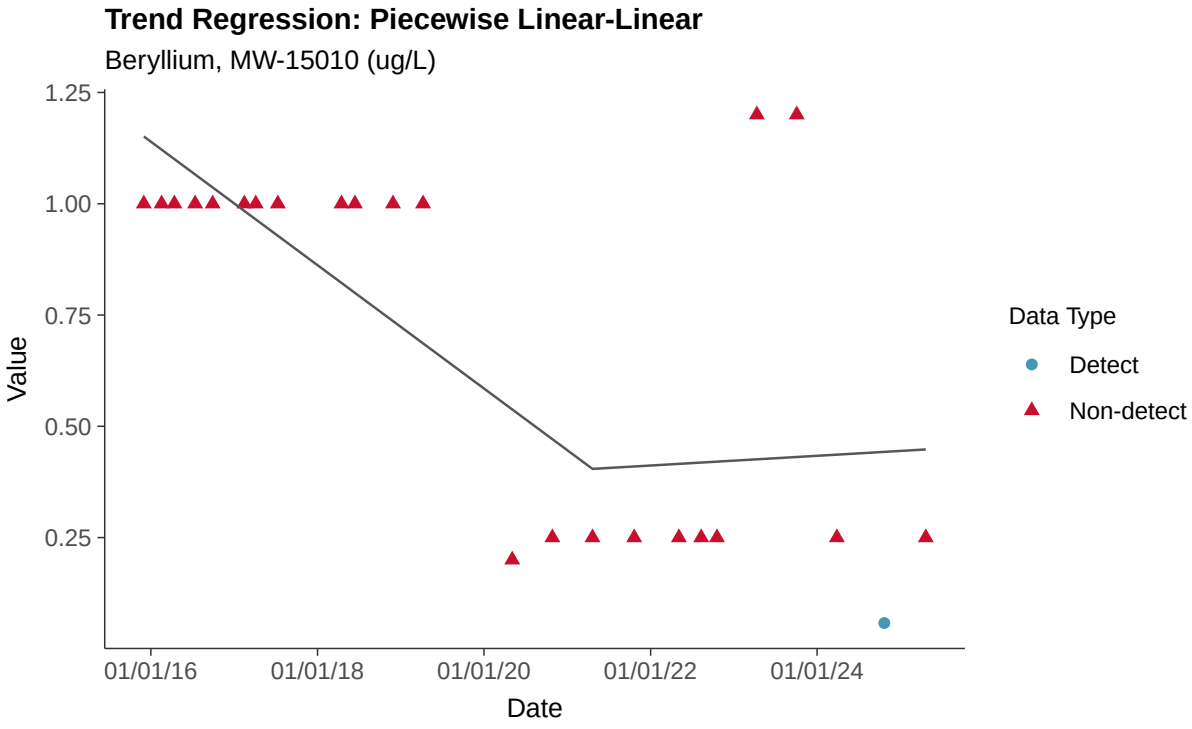
Beryllium, MW-15010 (ug/L)




## Boxplot by Season

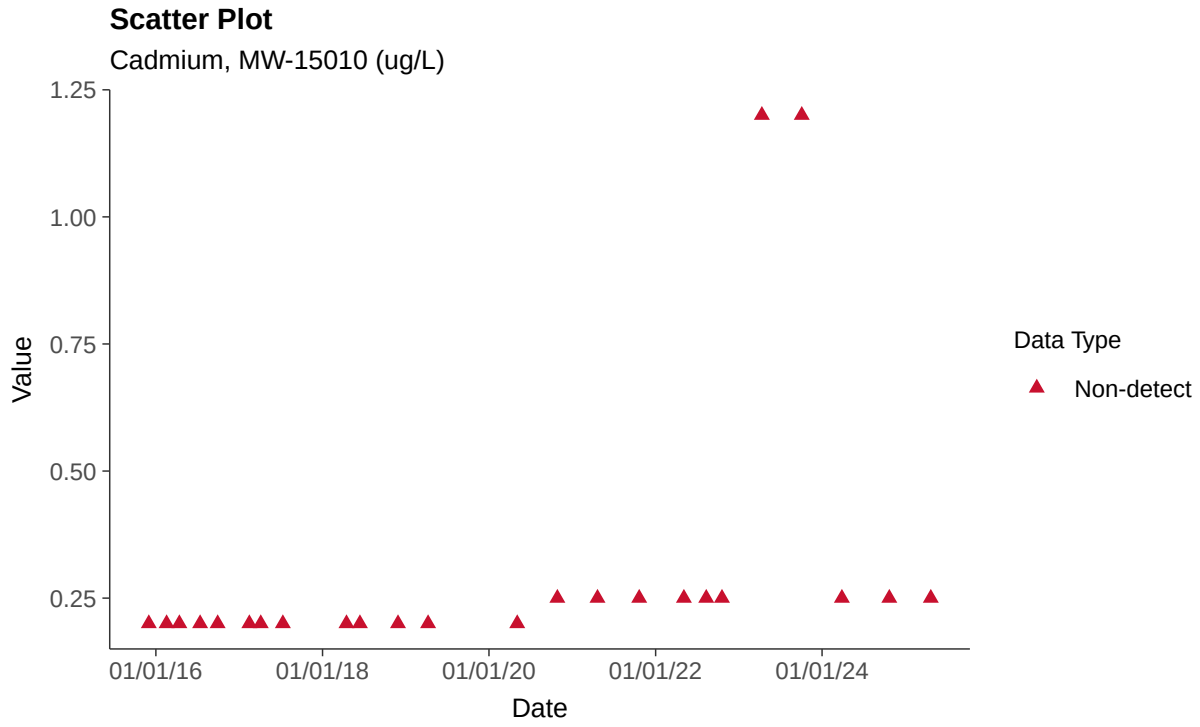
Beryllium, MW-15010 (ug/L)

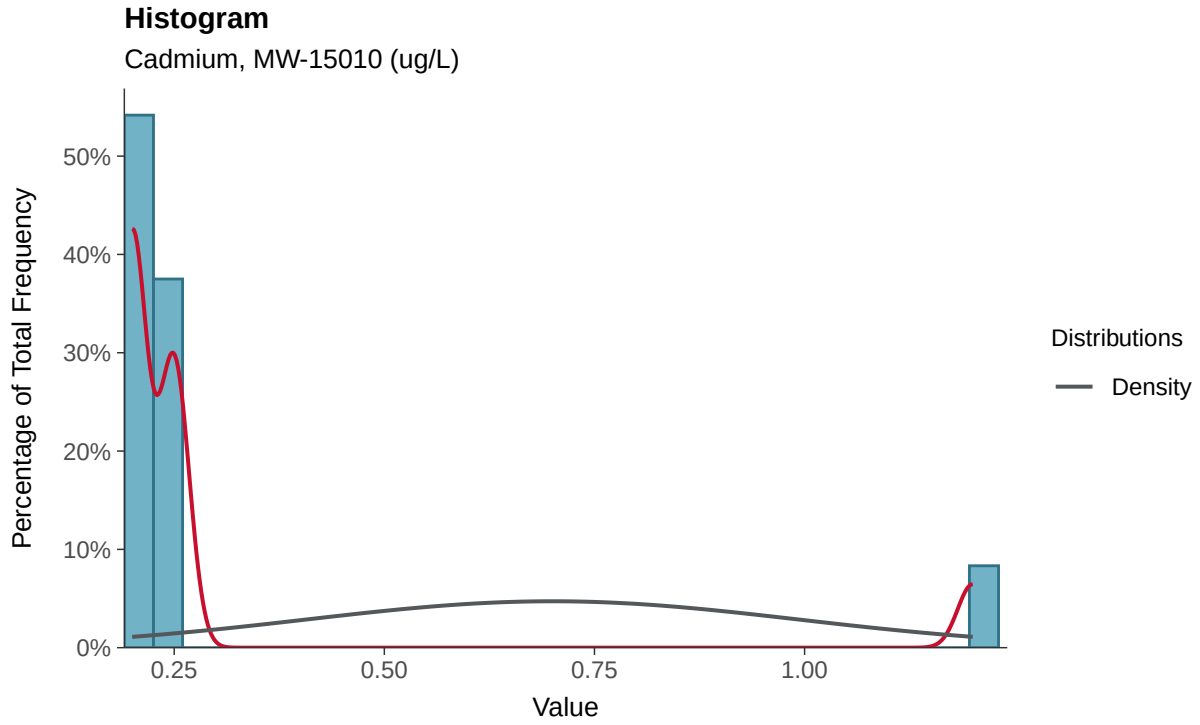



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15010 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15010

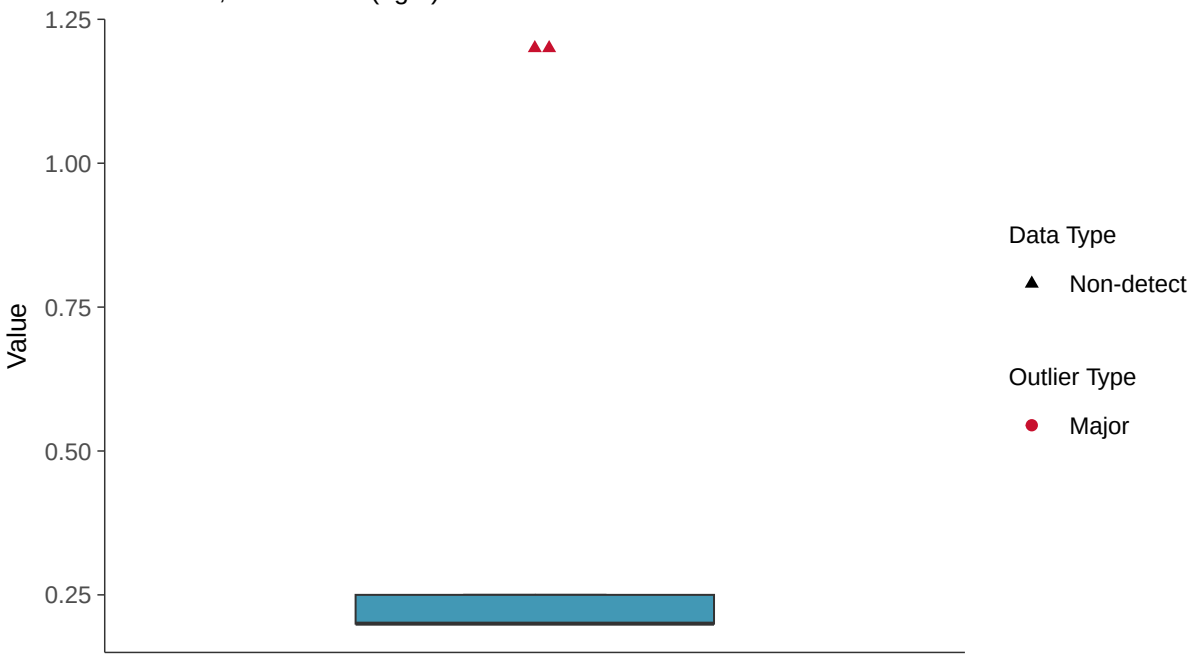
ID: 02_2_106



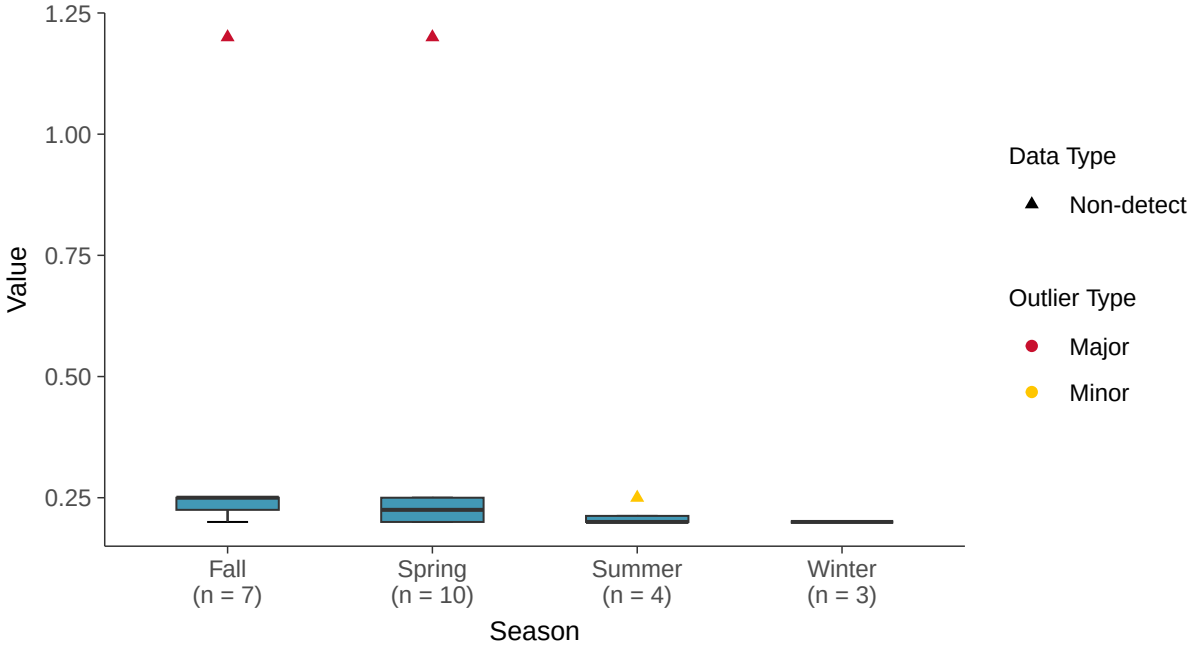
## Boxplot

Cadmium, MW-15010 (ug/L)



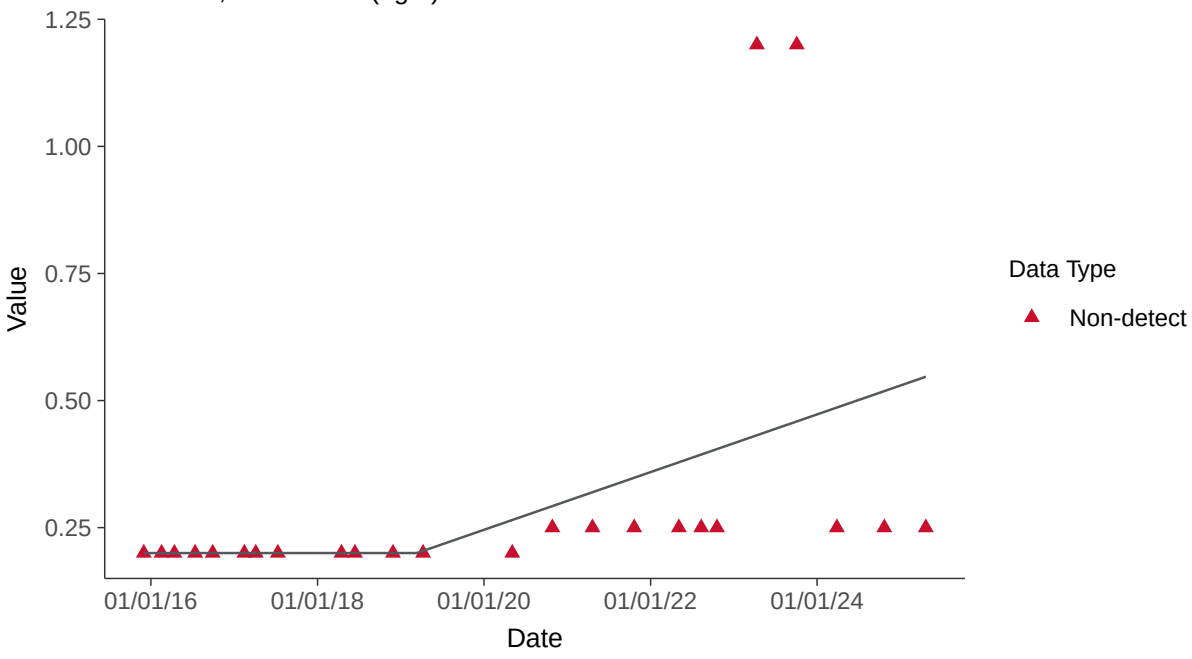

## Boxplot by Season

Cadmium, MW-15010 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15010 (ug/L)

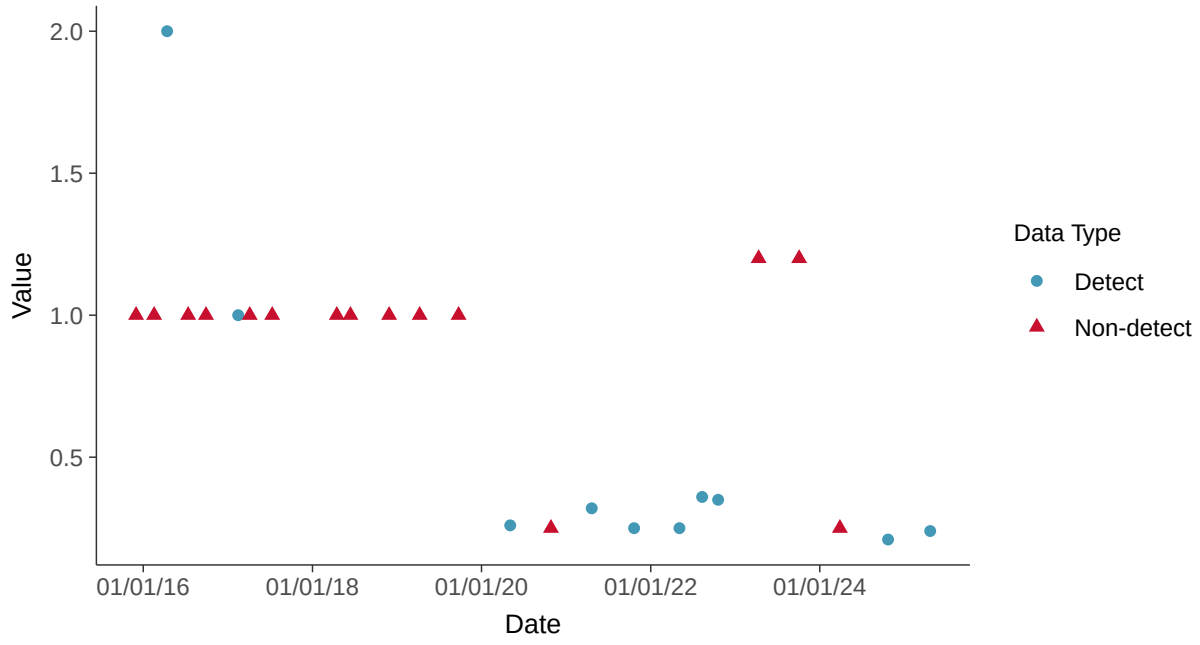


## Appendix IV: Chromium, MW-15010

ID: 02_2_109

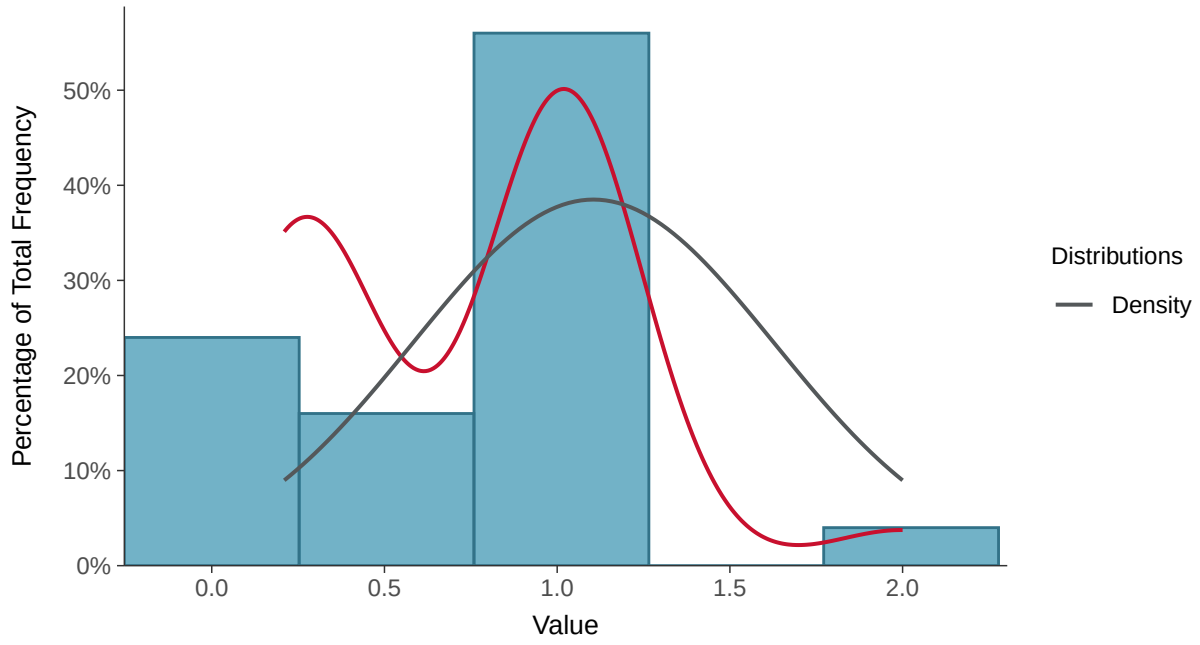
**Scatter Plot**

Chromium, MW-15010 (ug/L)



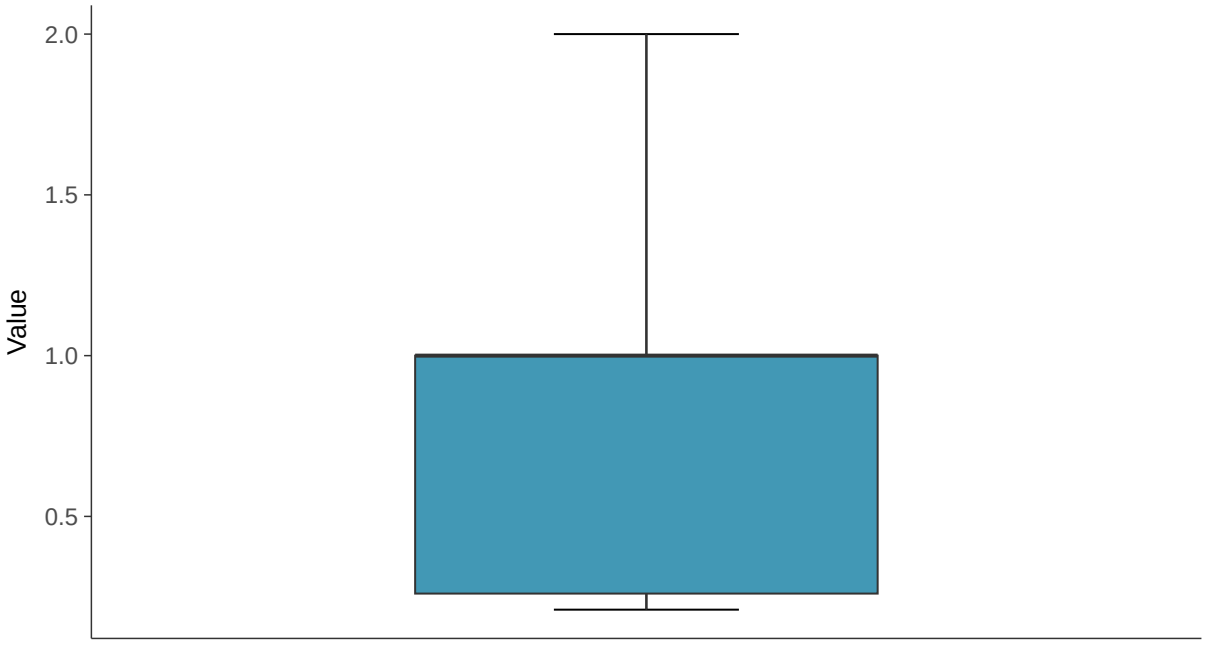

**Histogram**

Chromium, MW-15010 (ug/L)



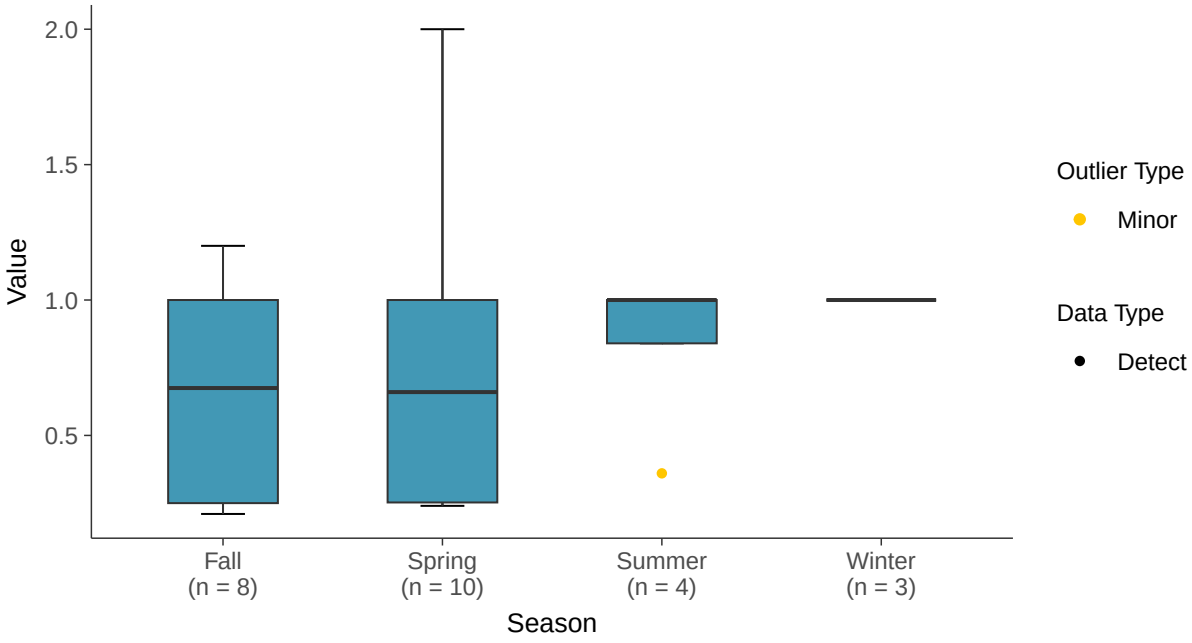
## Boxplot

Chromium, MW-15010 (ug/L)



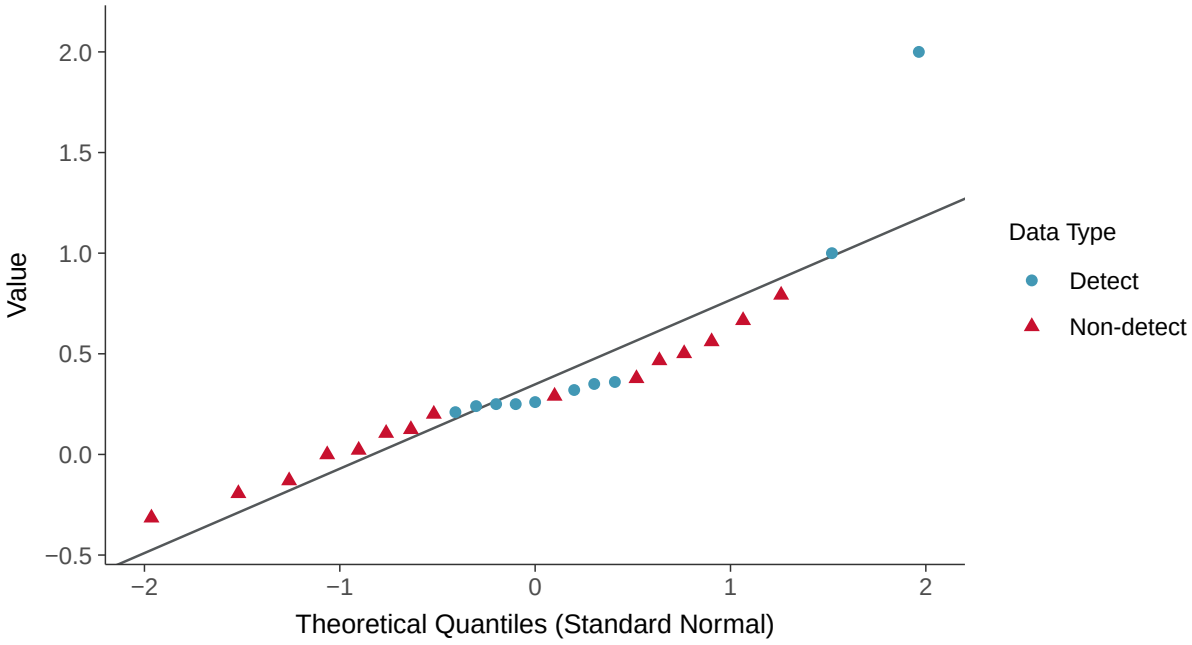

## Boxplot by Season

Chromium, MW-15010 (ug/L)



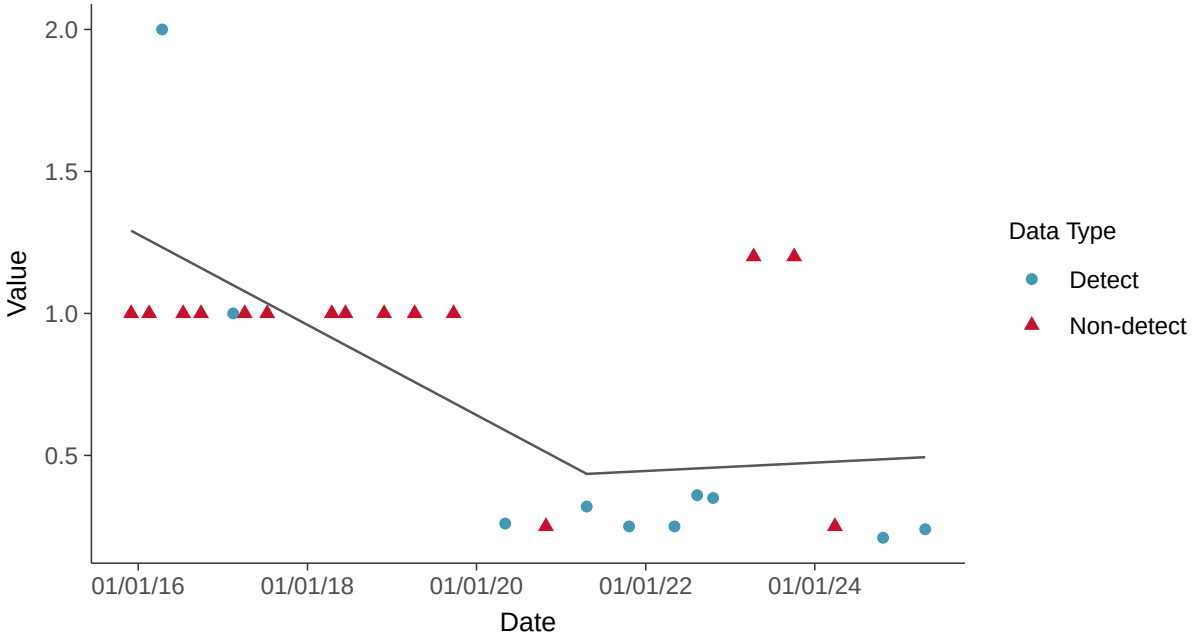
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15010 (ug/L)



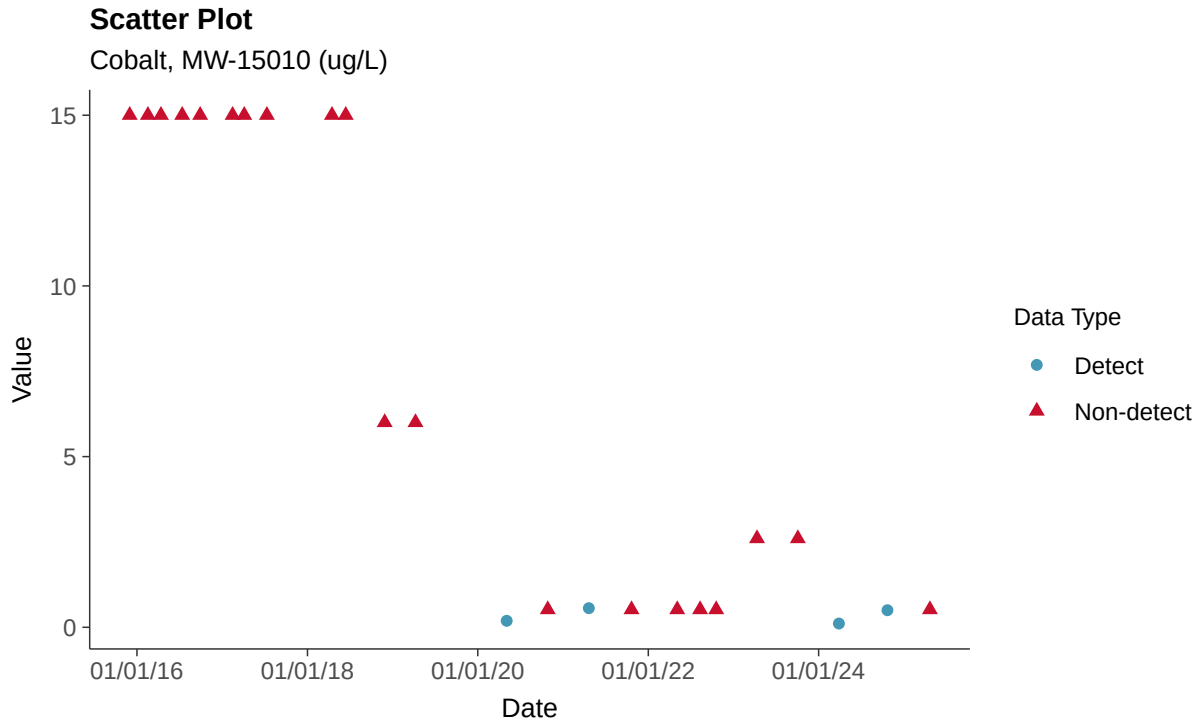

**Trend Regression: Piecewise Linear-Linear**

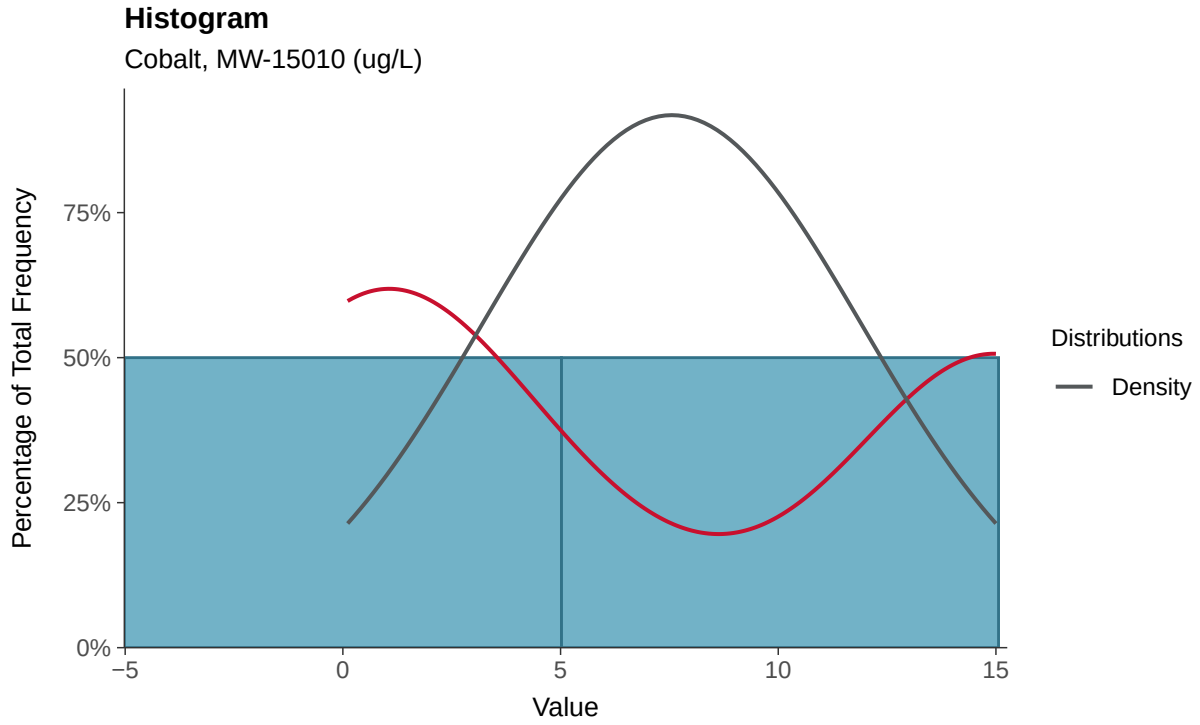
Chromium, MW-15010 (ug/L)



# Appendix IV: Cobalt, MW-15010

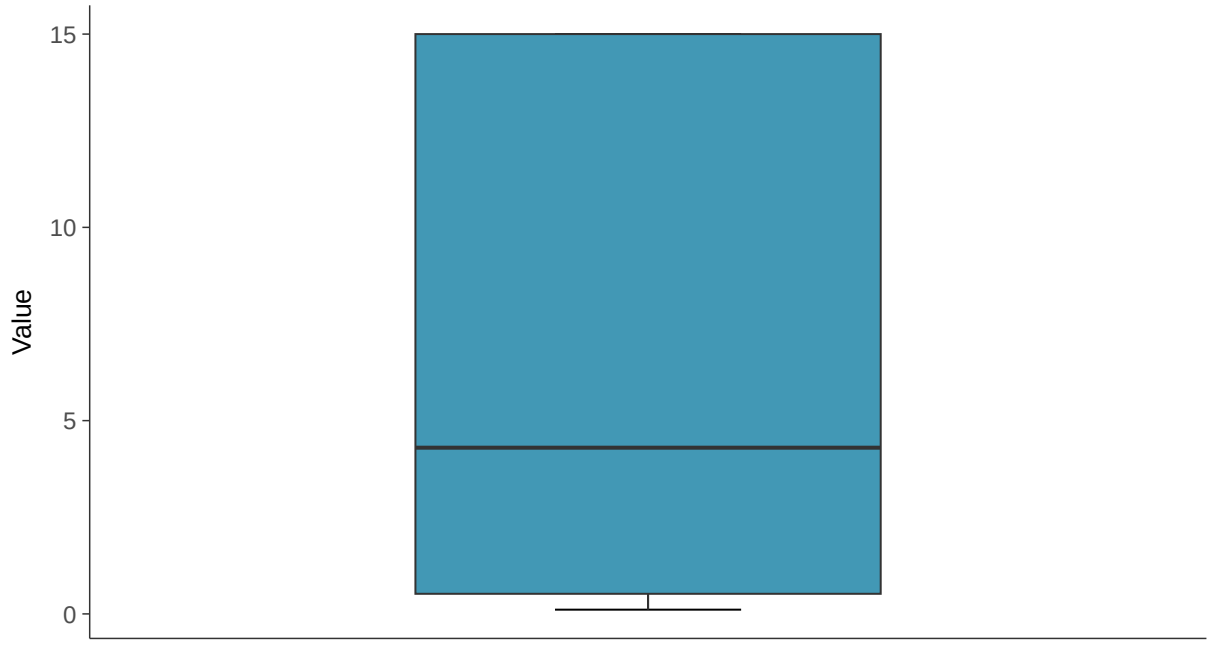
ID: 02_2_110



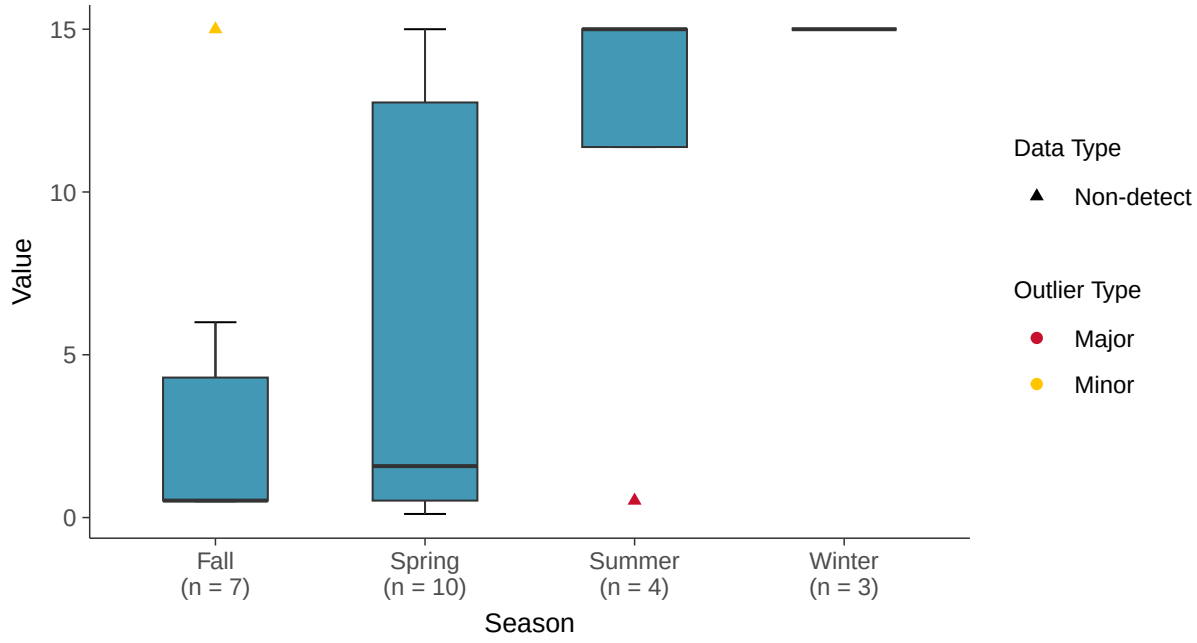
**Boxplot**

Cobalt, MW-15010 (ug/L)



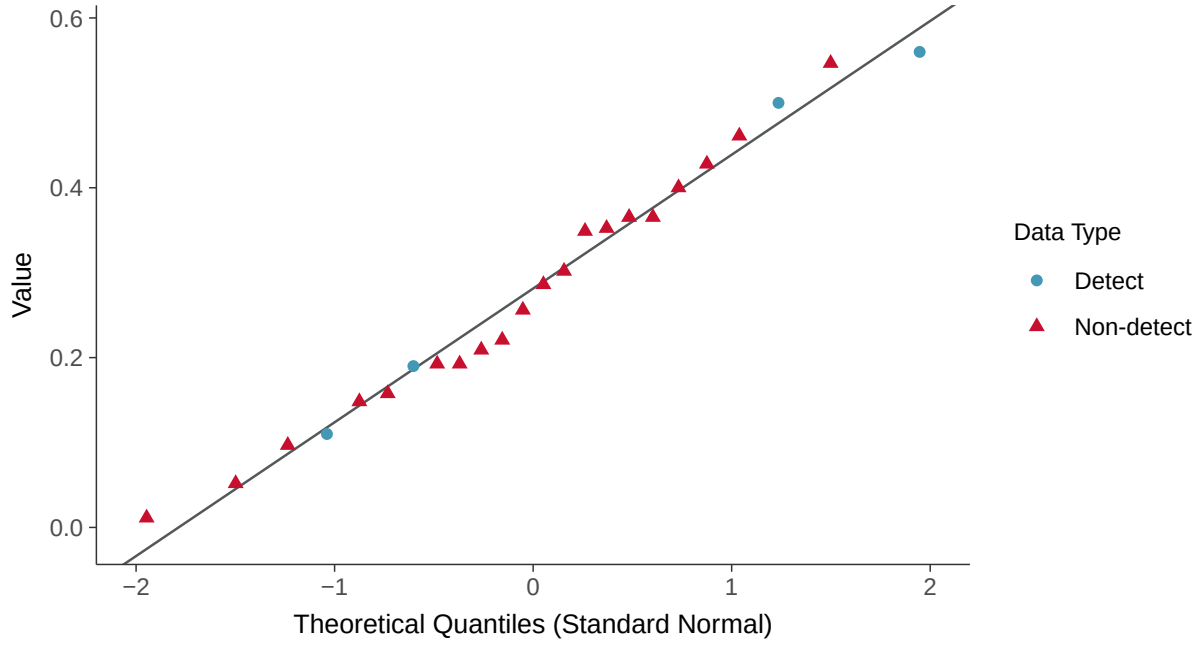

**Boxplot by Season**

Cobalt, MW-15010 (ug/L)



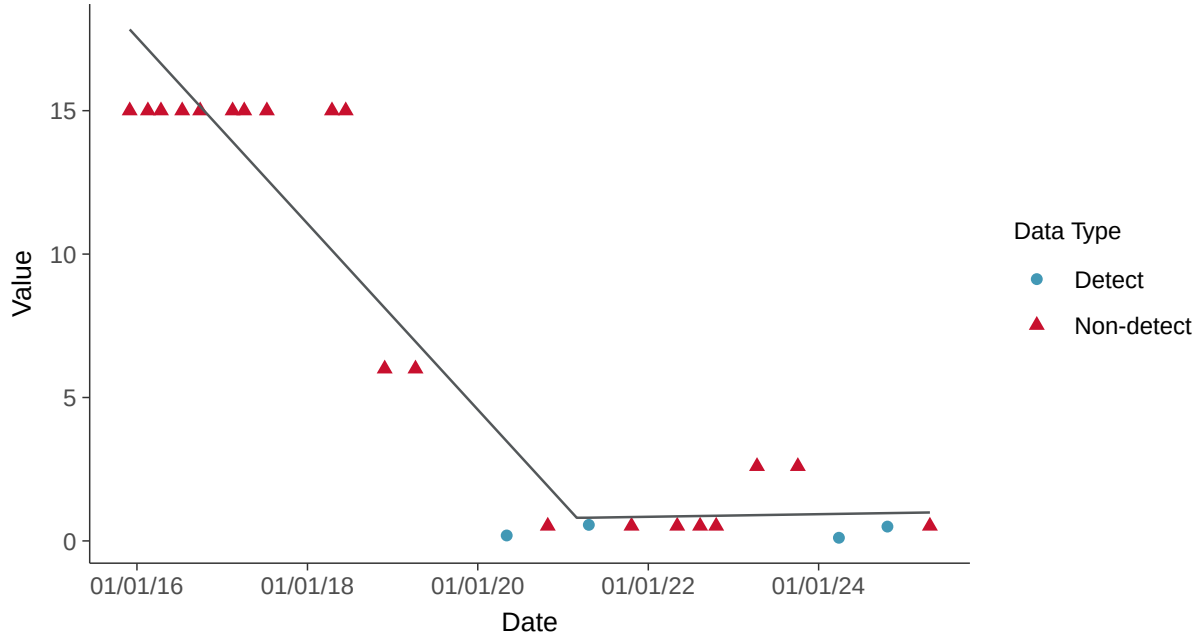
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15010 (ug/L)



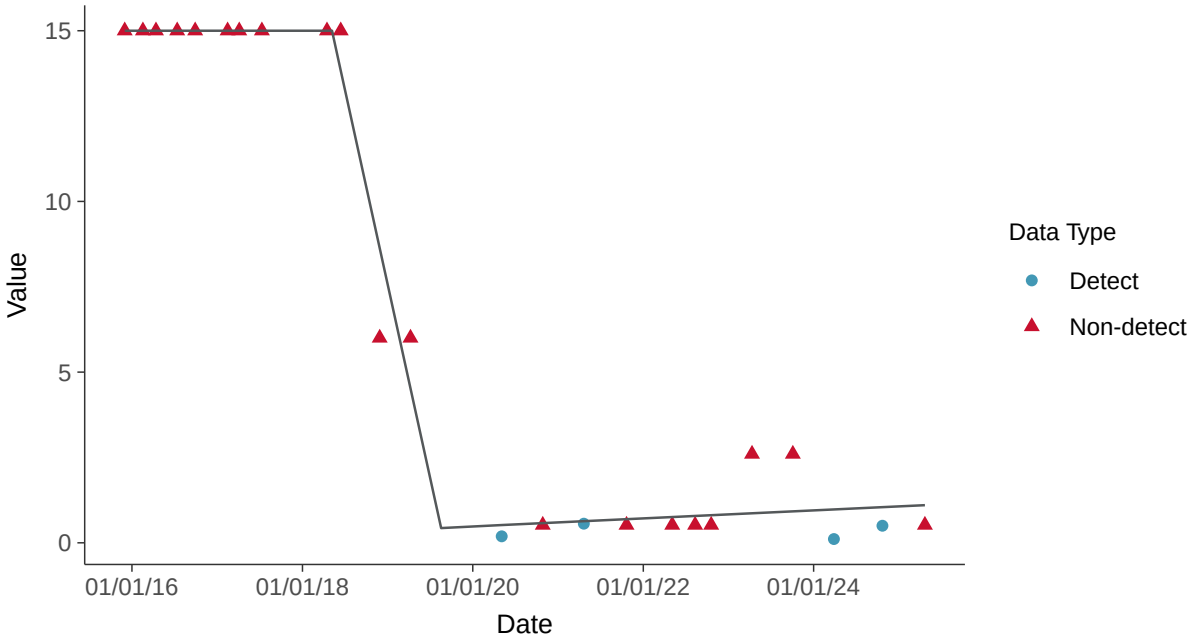

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15010 (ug/L)



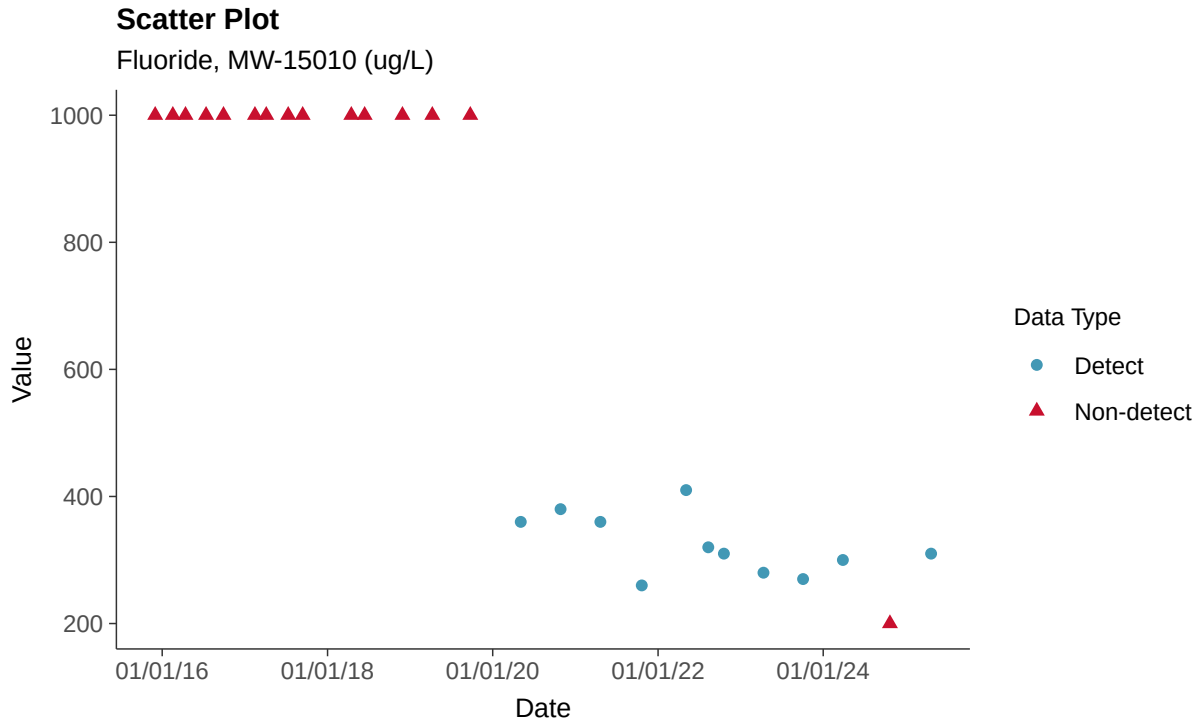
**Trend Regression: Piecewise Linear-Linear-Linear**

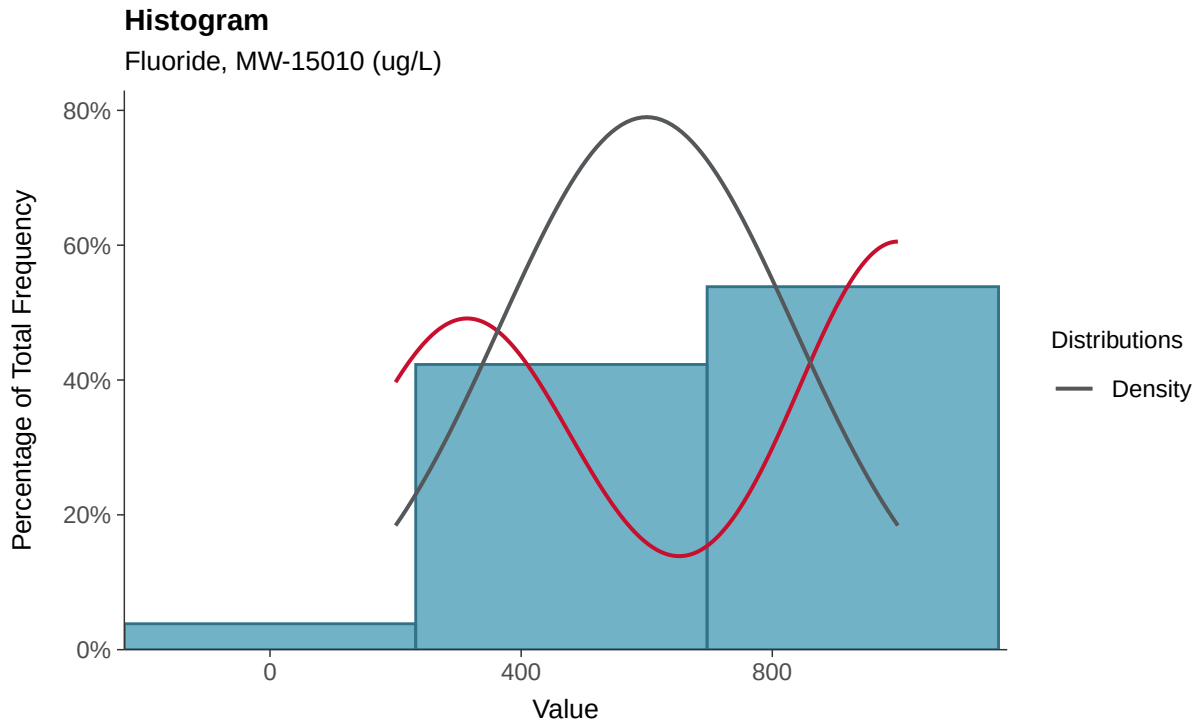
Cobalt, MW-15010 (ug/L)



# Appendix IV: Fluoride, MW-15010

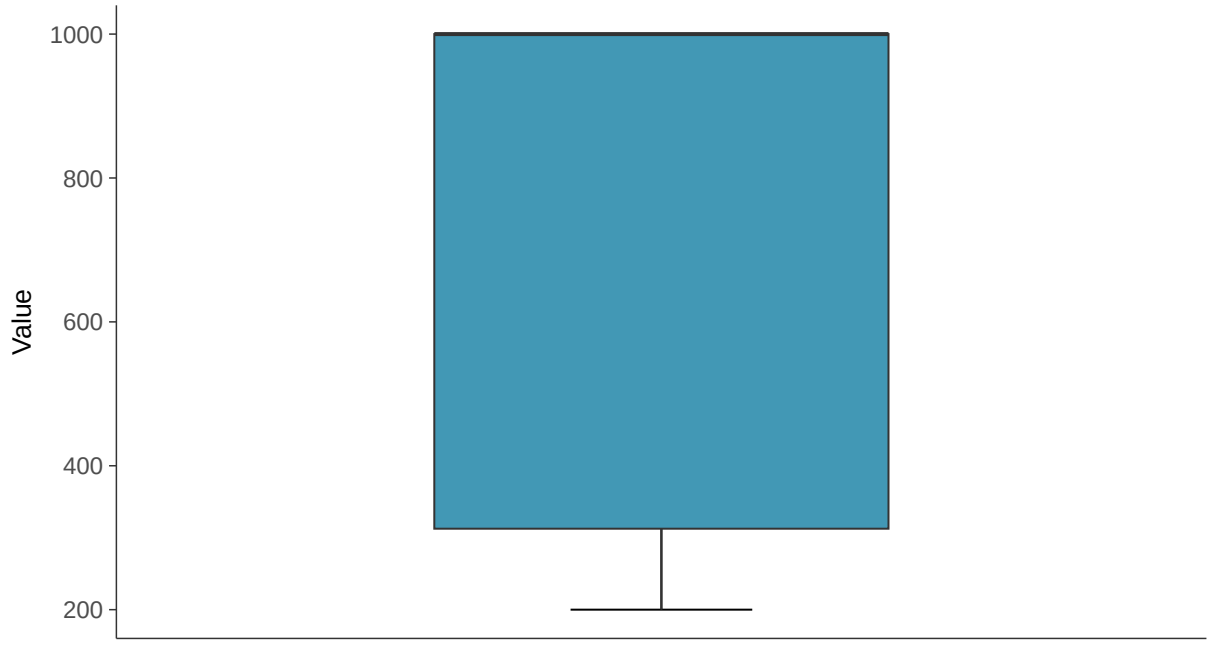
ID: 02_2_114



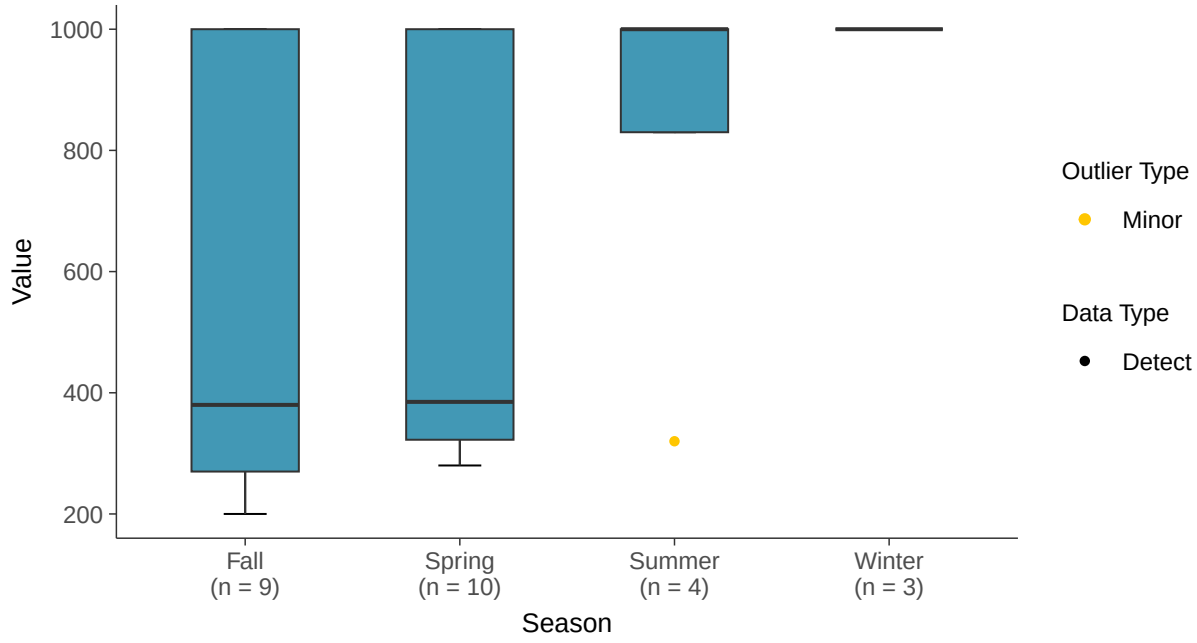
**Boxplot**

Fluoride, MW-15010 (ug/L)



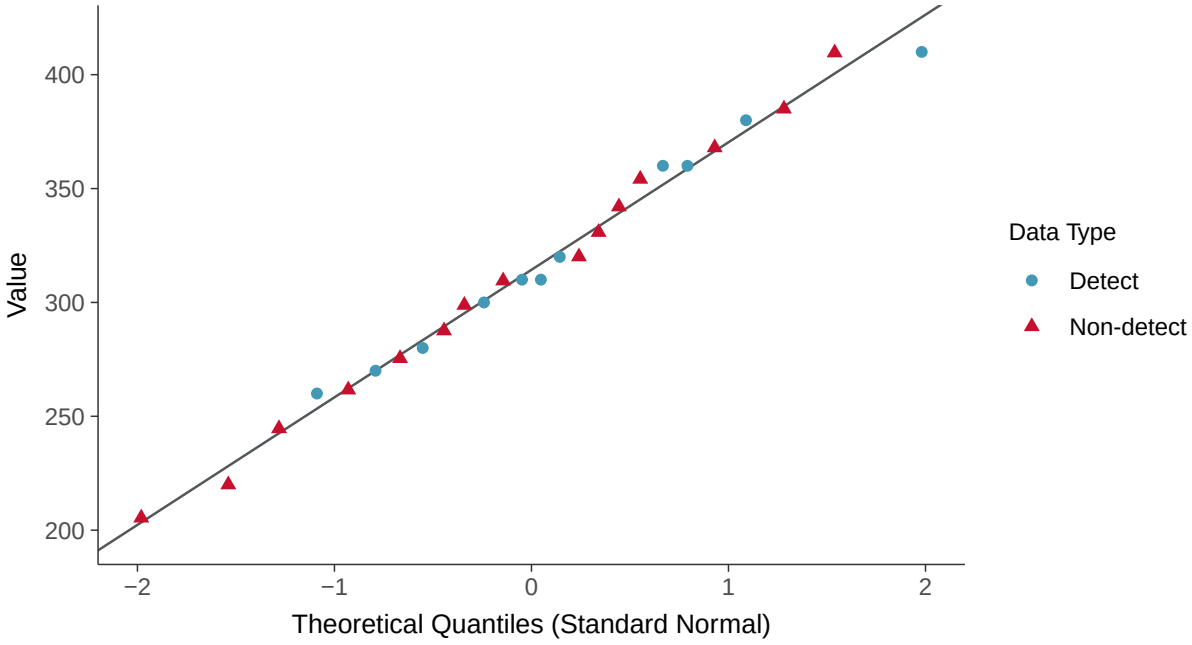

**Boxplot by Season**

Fluoride, MW-15010 (ug/L)



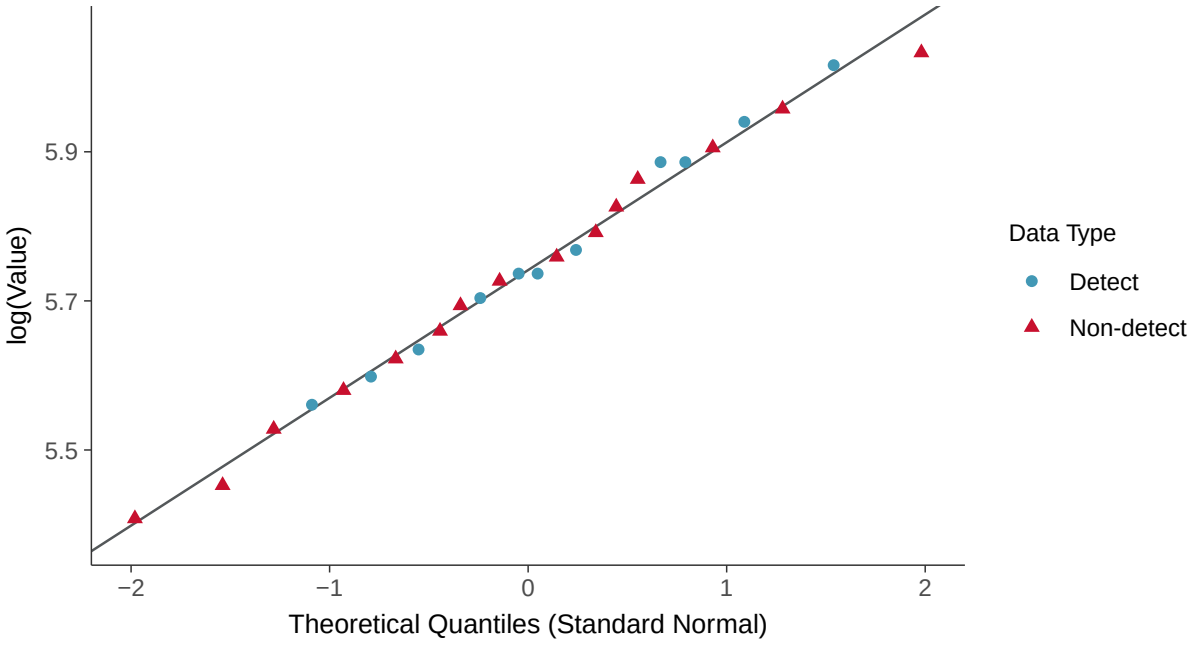
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15010 (ug/L)



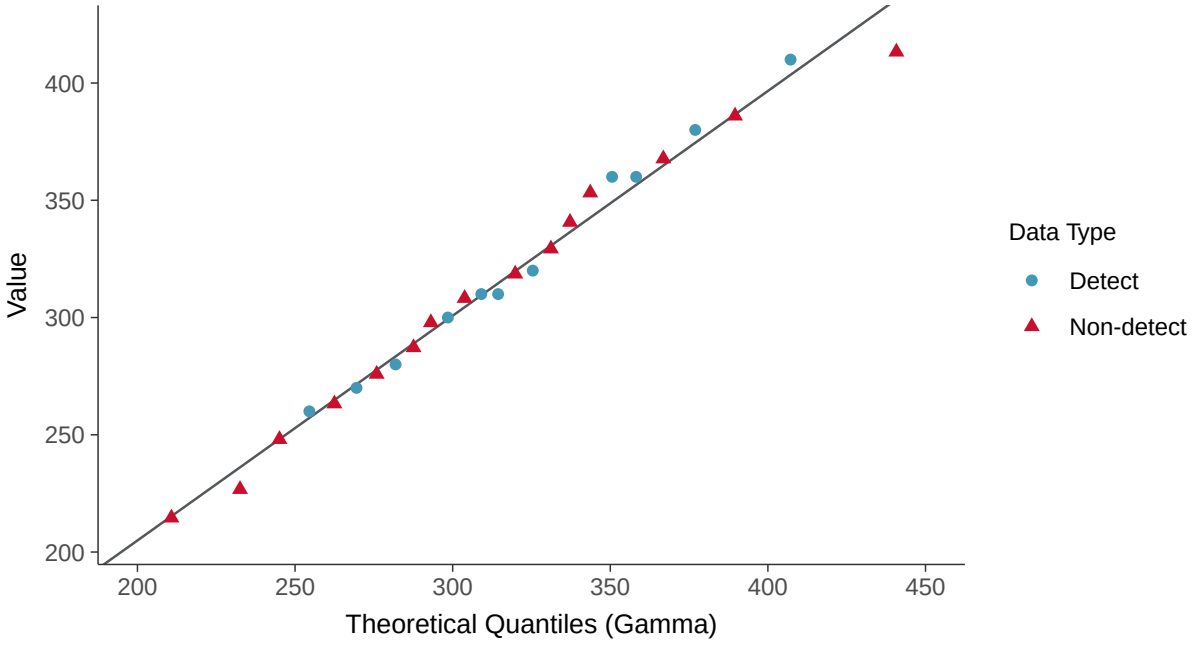

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15010 (ug/L)



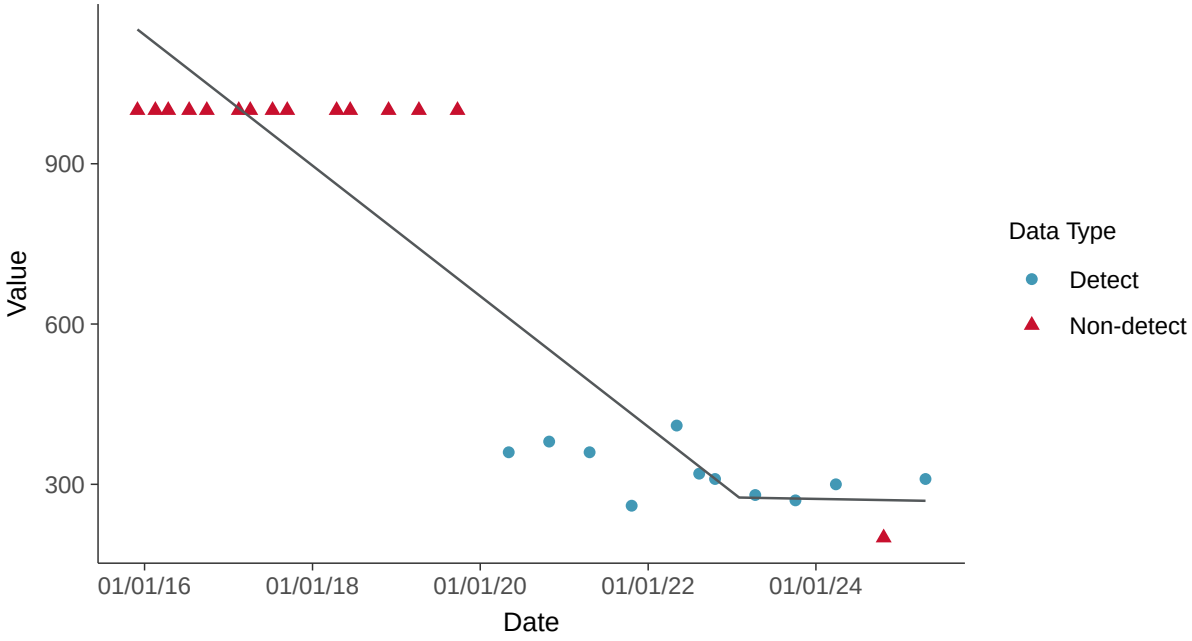
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15010 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15010 (ug/L)

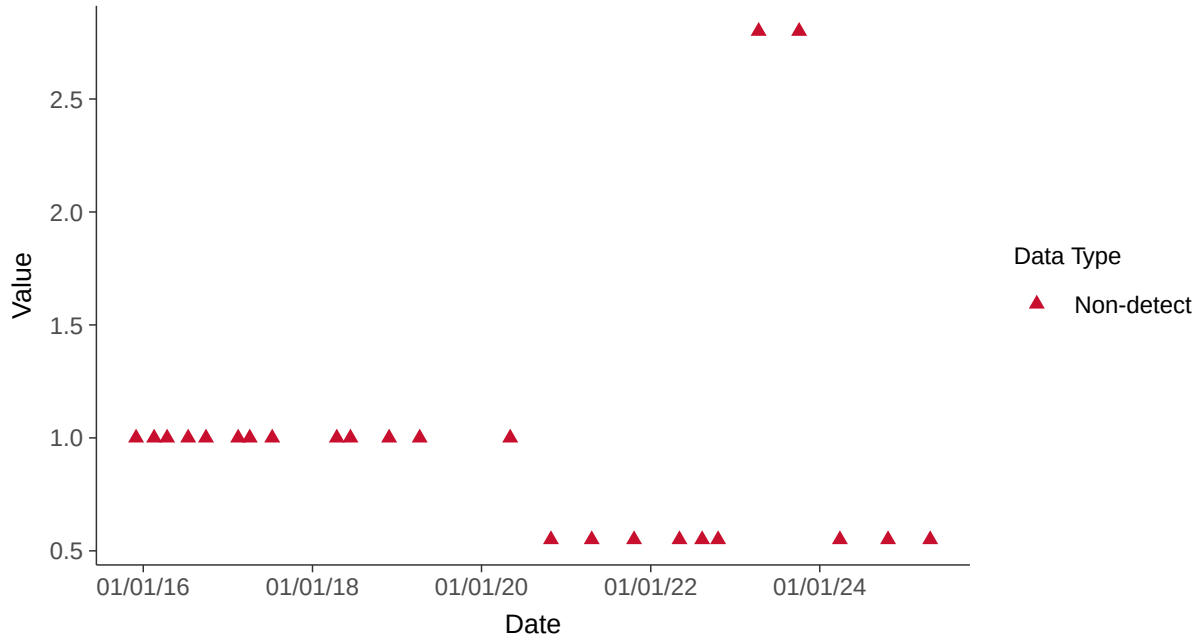


# Appendix IV: Lead, MW-15010

ID: 02_2_116

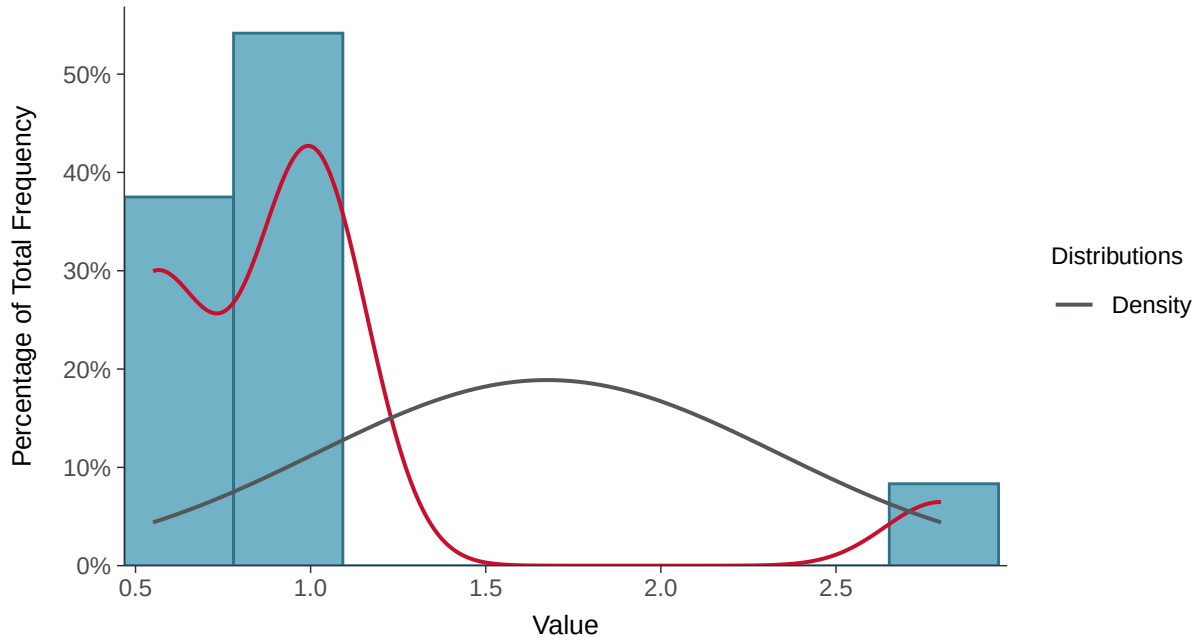
**Scatter Plot**

Lead, MW-15010 (ug/L)



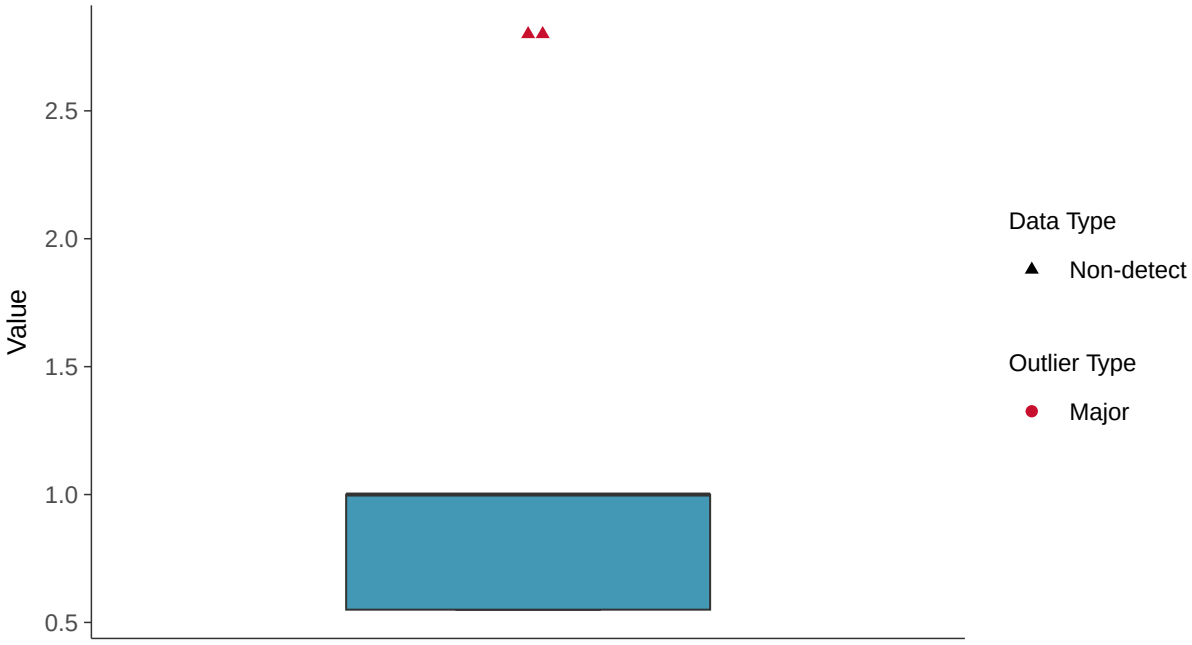

**Histogram**

Lead, MW-15010 (ug/L)



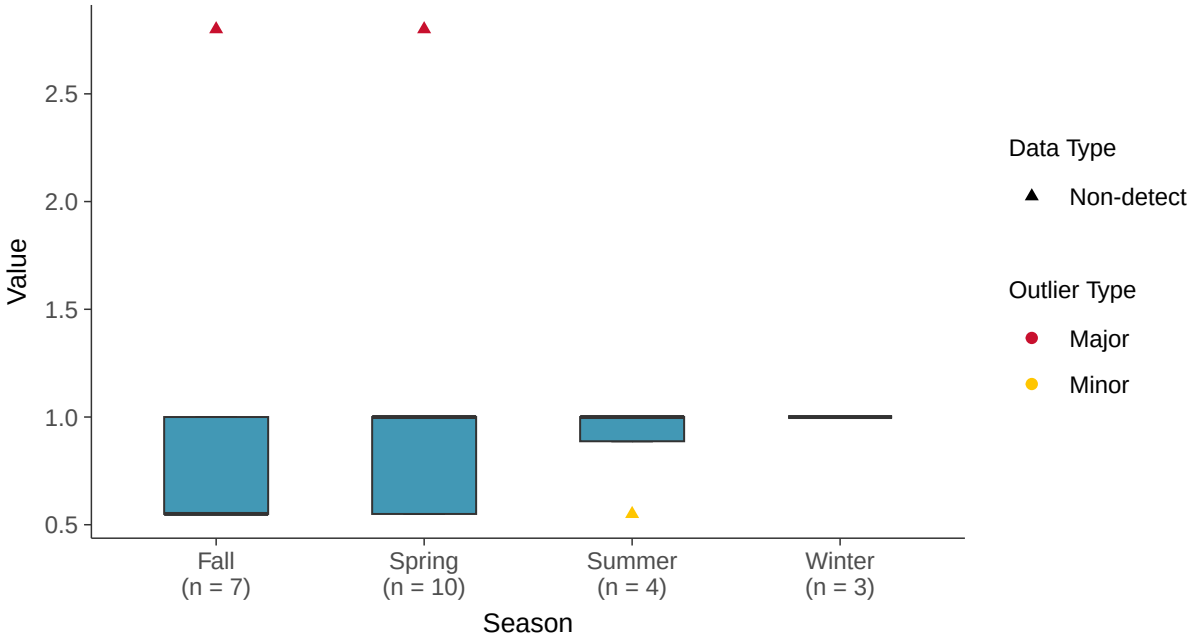
## Boxplot

Lead, MW-15010 (ug/L)



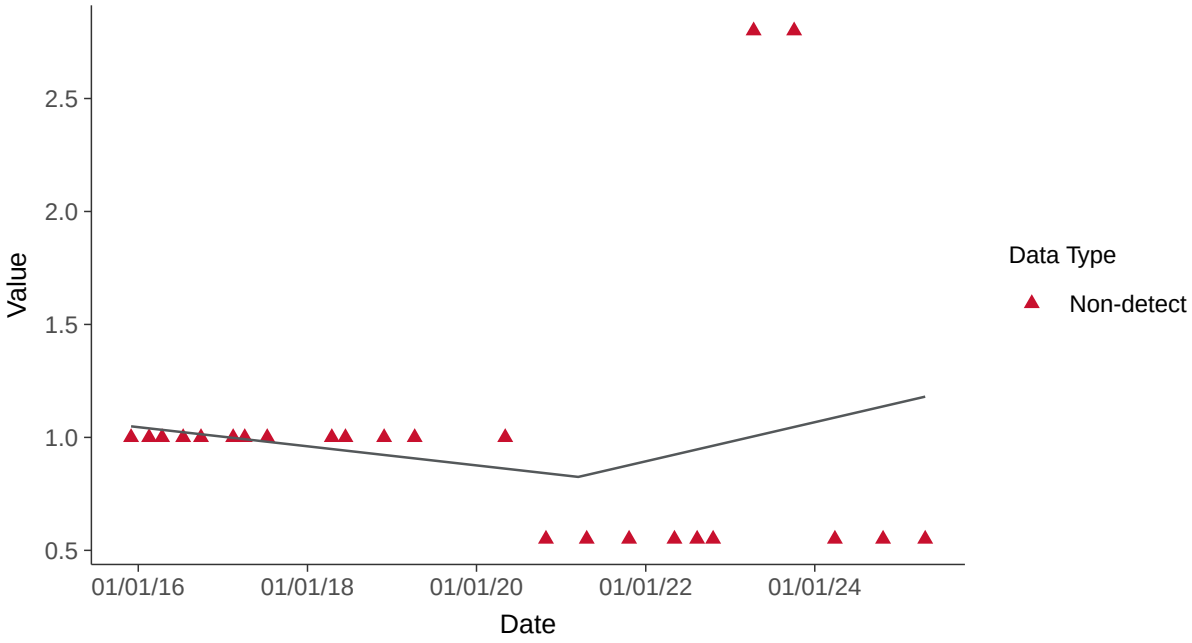

## Boxplot by Season

Lead, MW-15010 (ug/L)



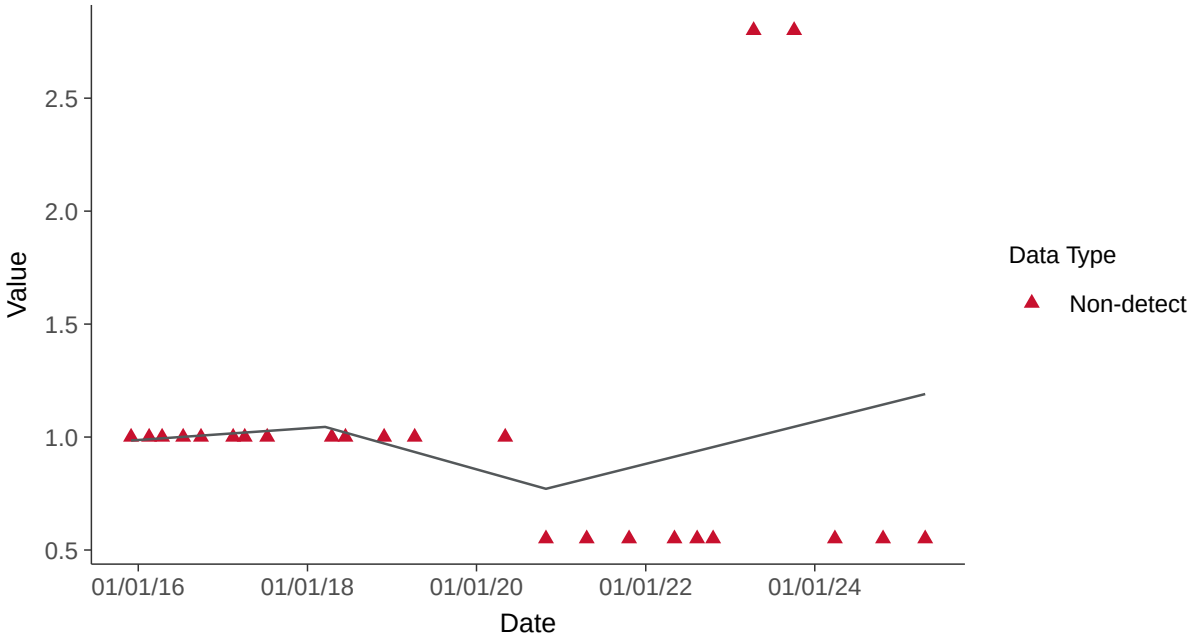
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15010 (ug/L)



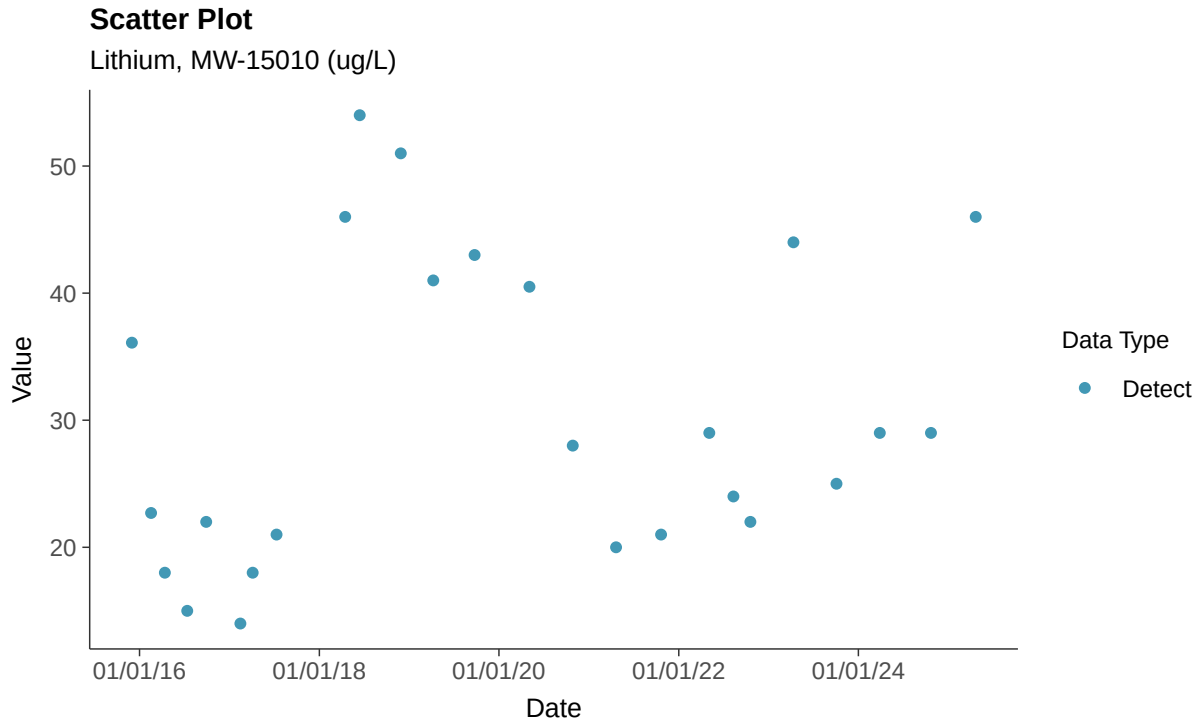

**Trend Regression: Piecewise Linear-Linear-Linear**

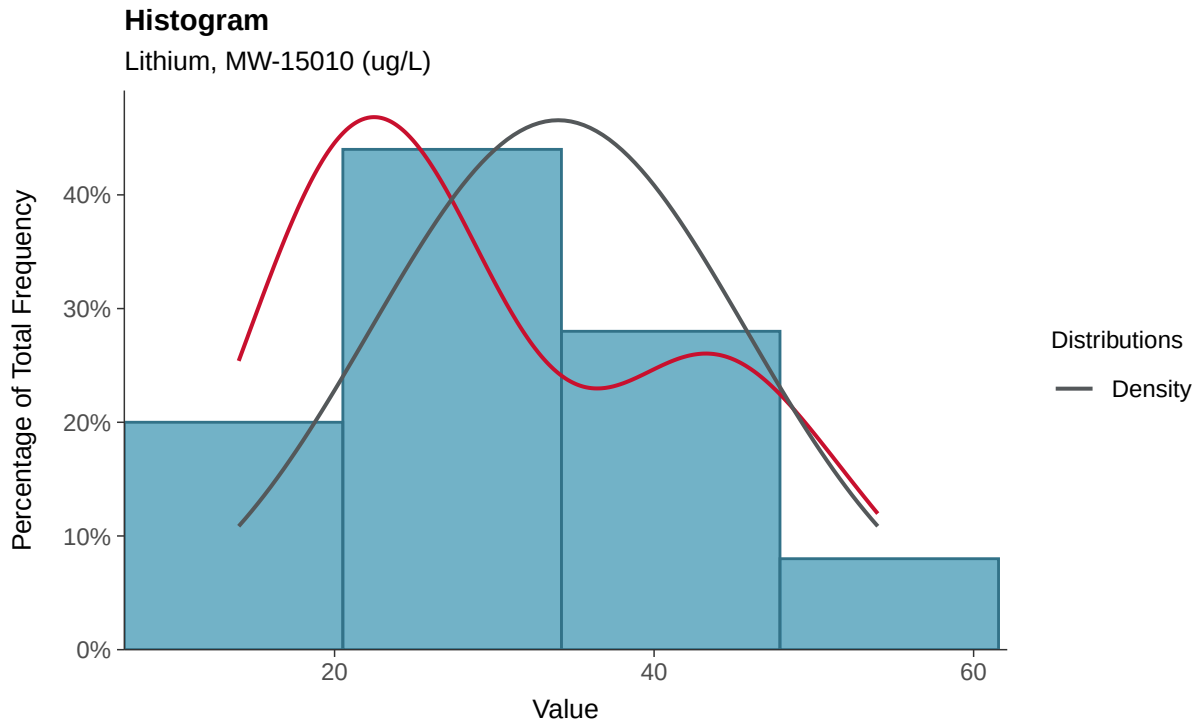
Lead, MW-15010 (ug/L)



# Appendix IV: Lithium, MW-15010

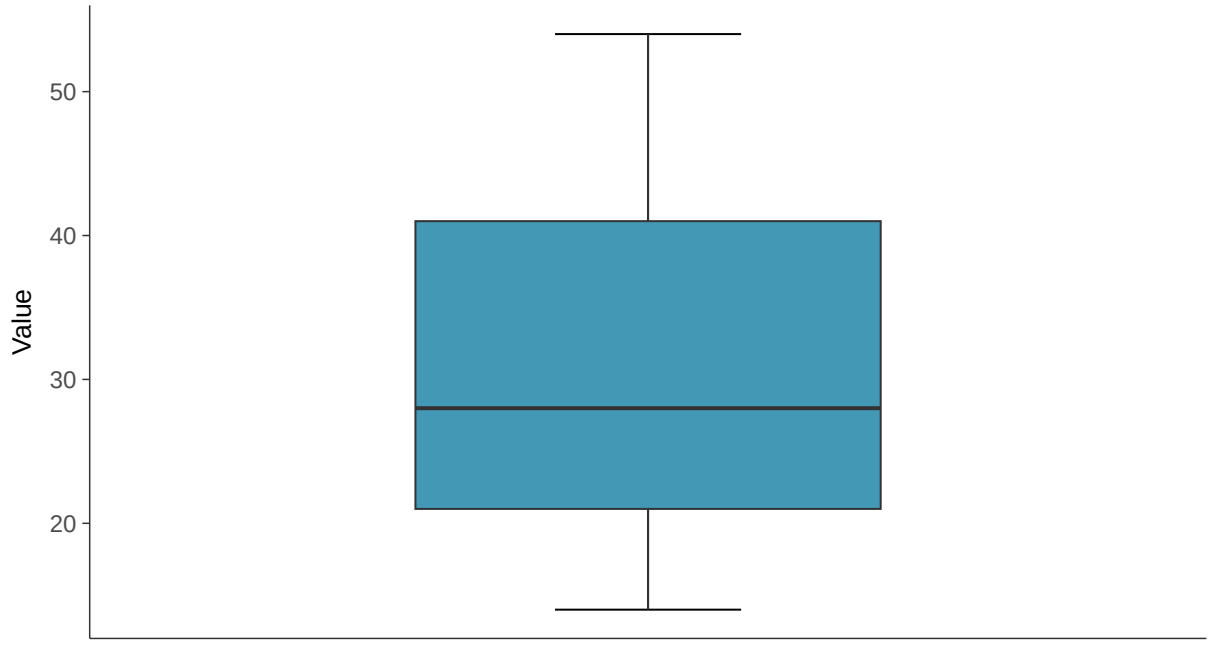
ID: 02_2_117



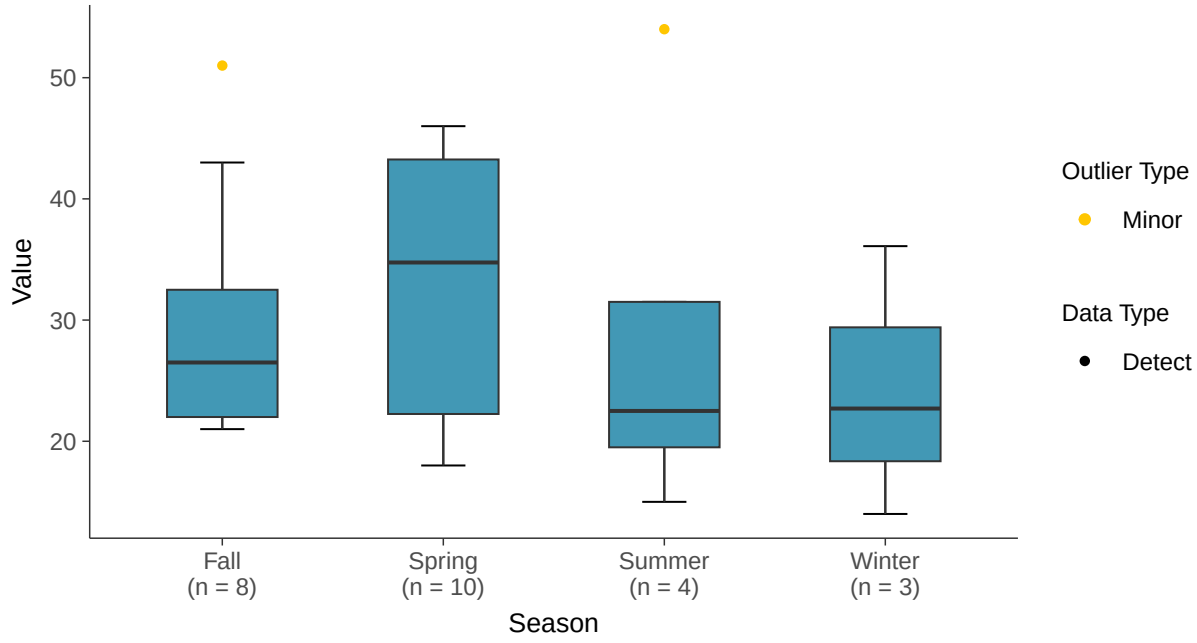
**Boxplot**

Lithium, MW-15010 (ug/L)



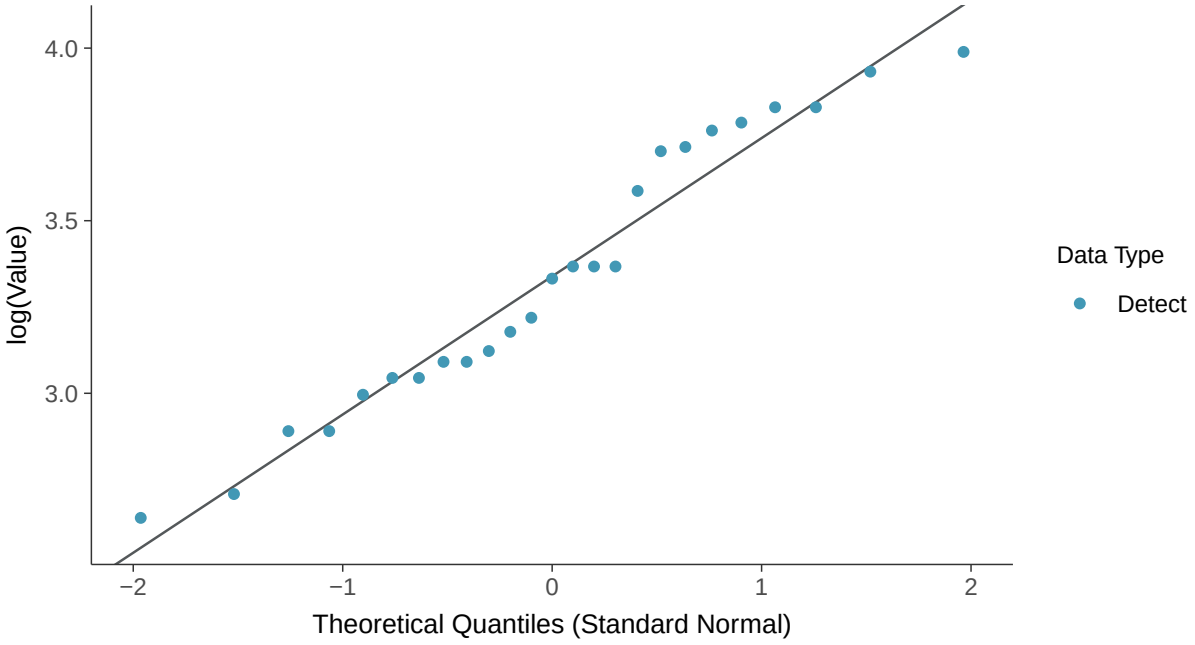

**Boxplot by Season**

Lithium, MW-15010 (ug/L)



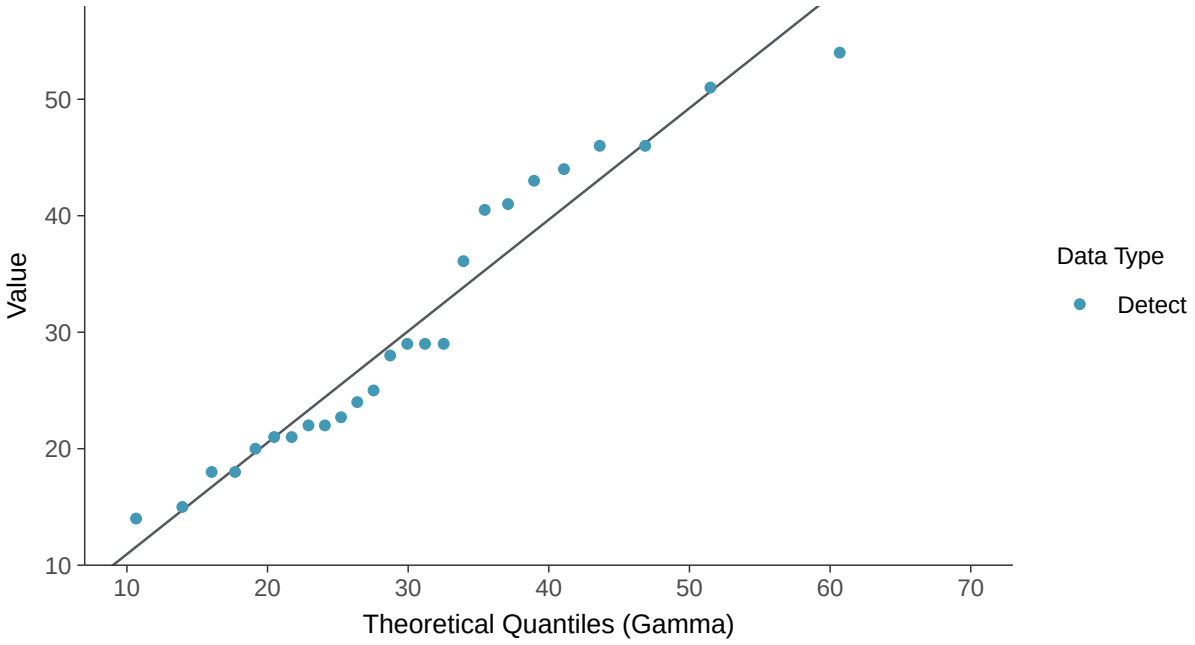
**Lognormal Q-Q plot**

Lithium, MW-15010 (ug/L)



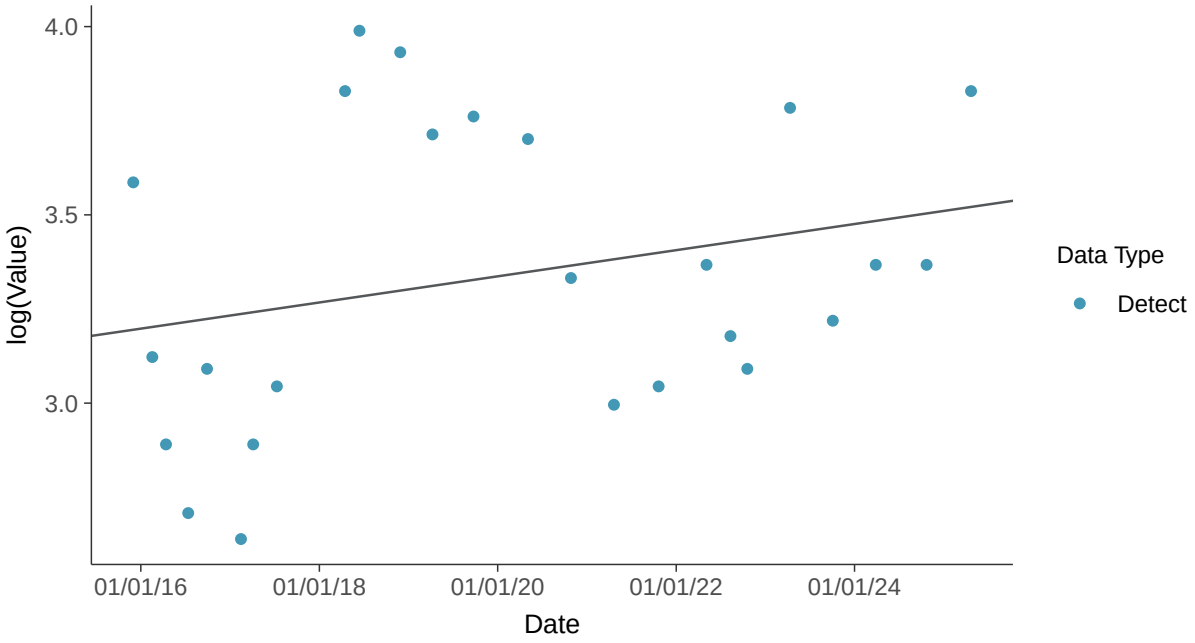

**Gamma Q-Q plot**

Lithium, MW-15010 (ug/L)



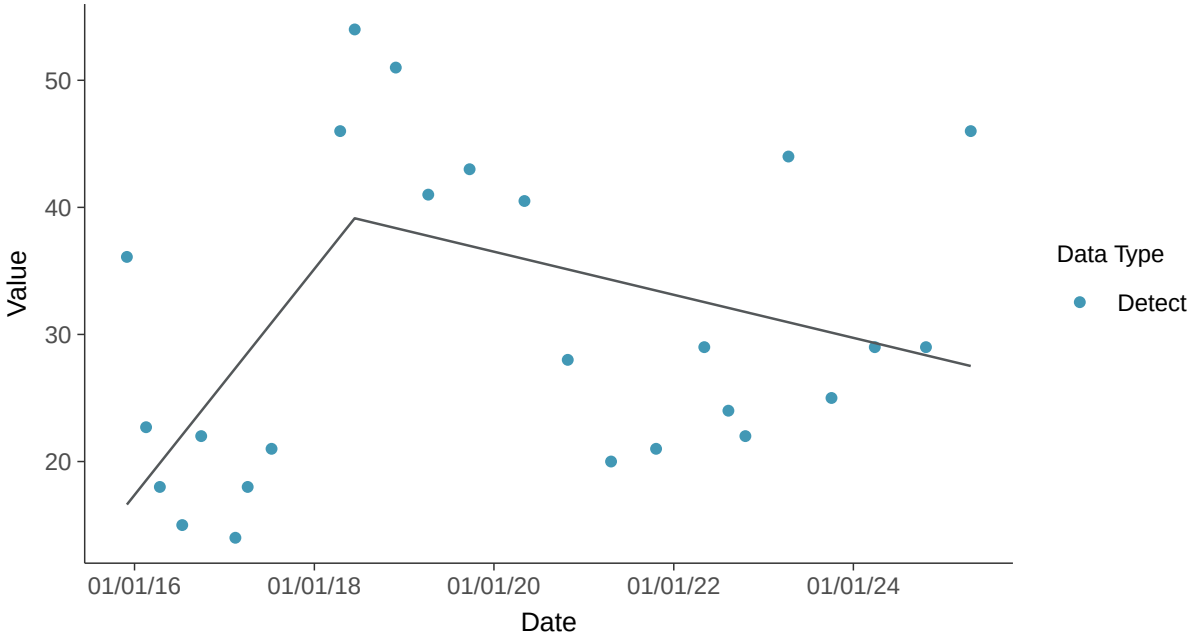
**Trend Regression: Lognormal MLE**

Lithium, MW-15010 (ug/L)



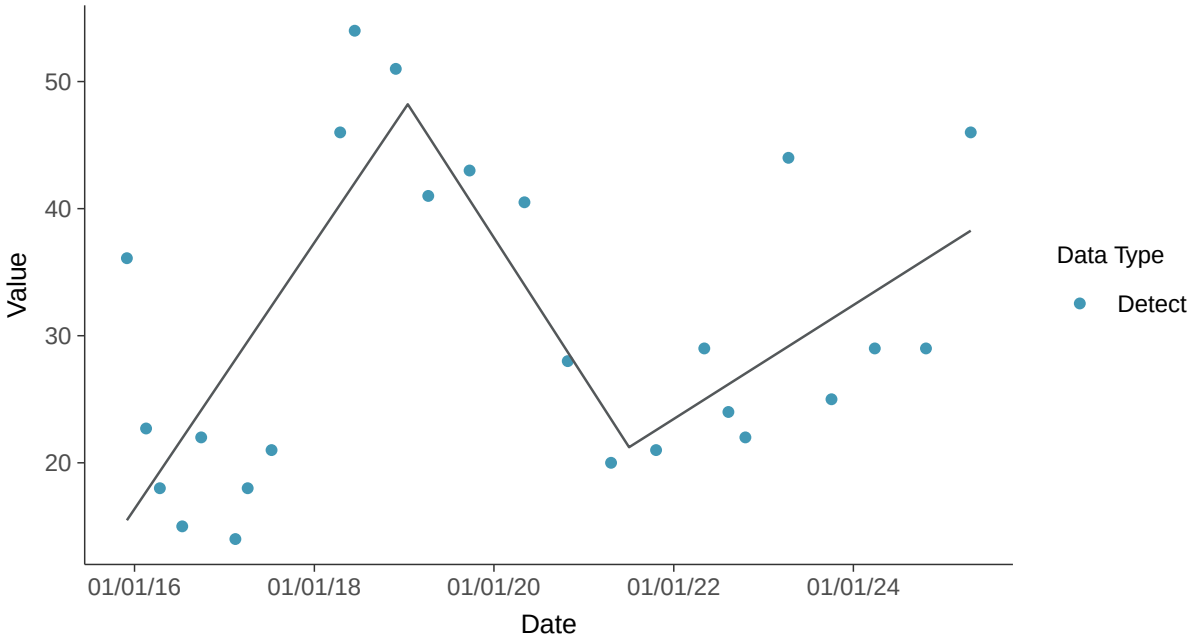

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15010 (ug/L)



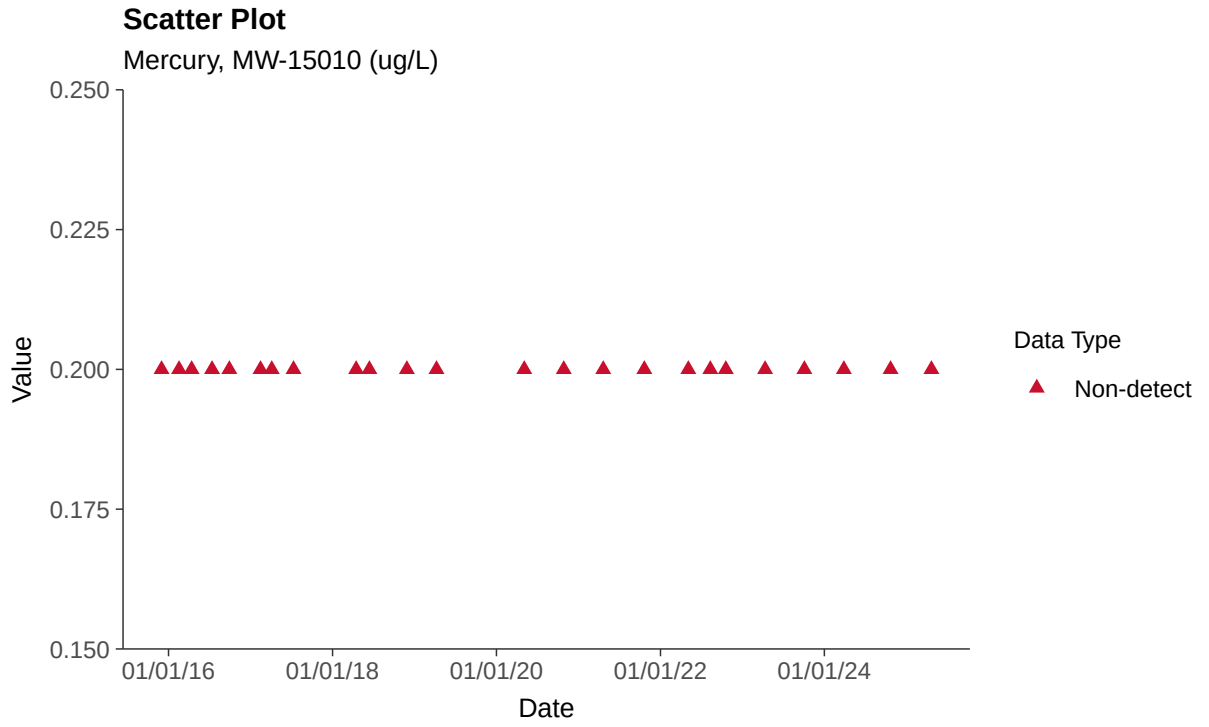
**Trend Regression: Piecewise Linear-Linear-Linear**

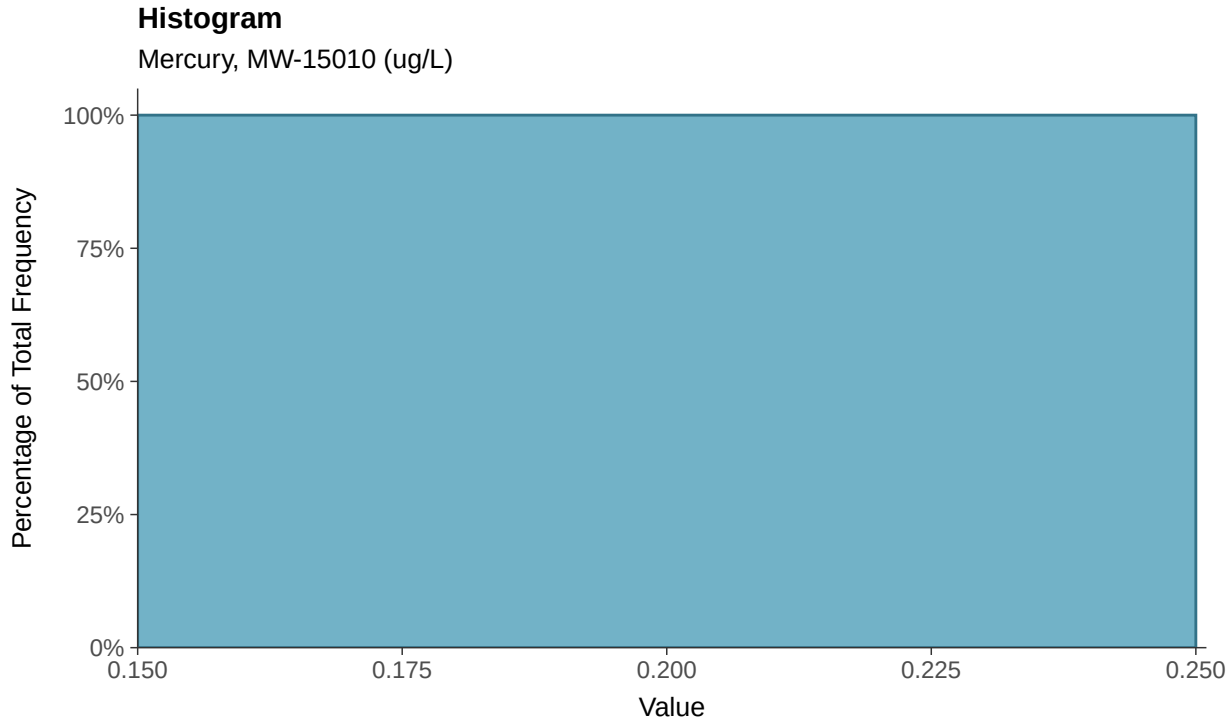
Lithium, MW-15010 (ug/L)



## Appendix IV: Mercury, MW-15010

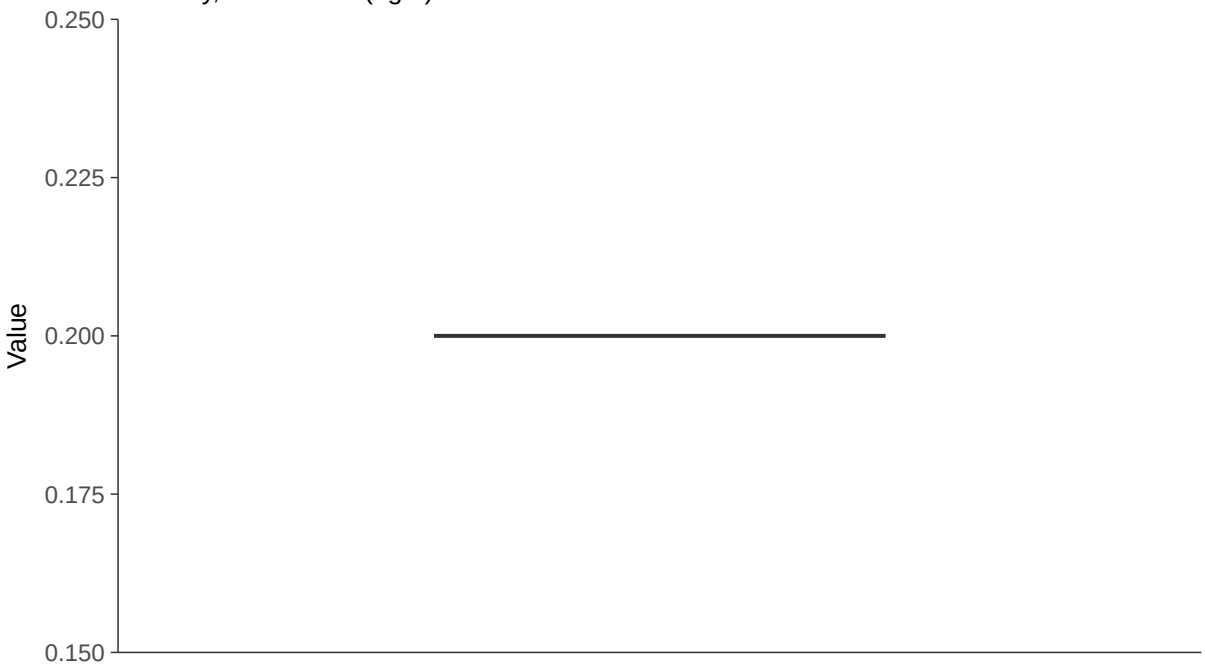
ID: 02_2_118



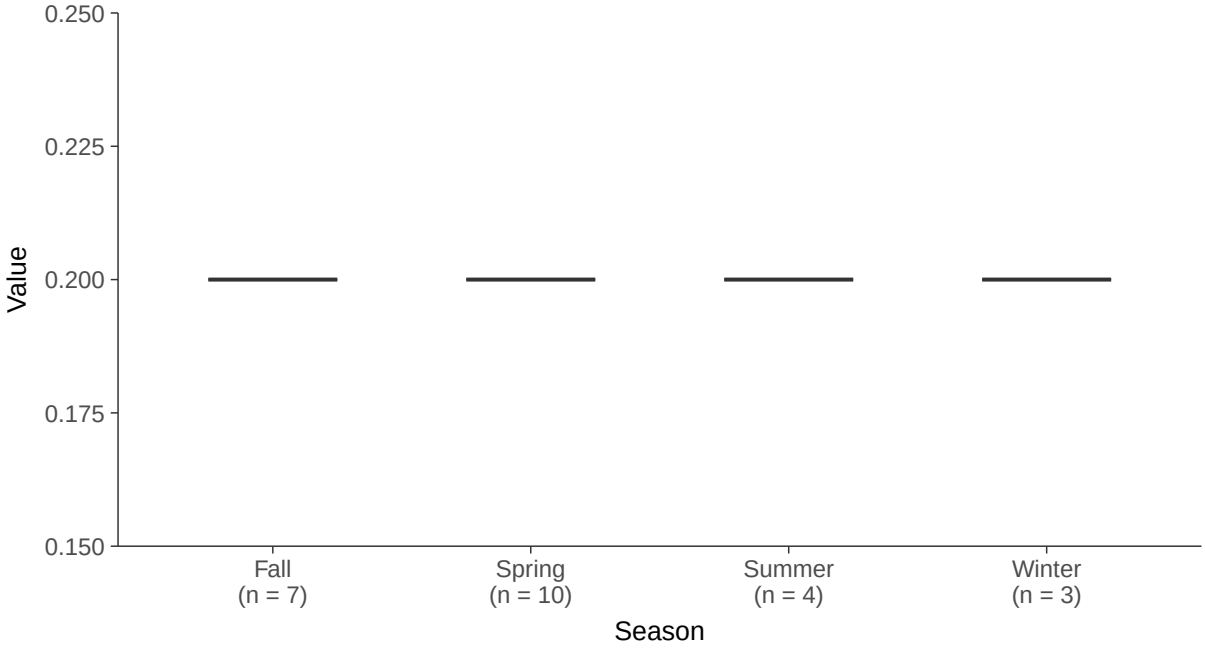
**Boxplot**

Mercury, MW-15010 (ug/L)




**Boxplot by Season**

Mercury, MW-15010 (ug/L)

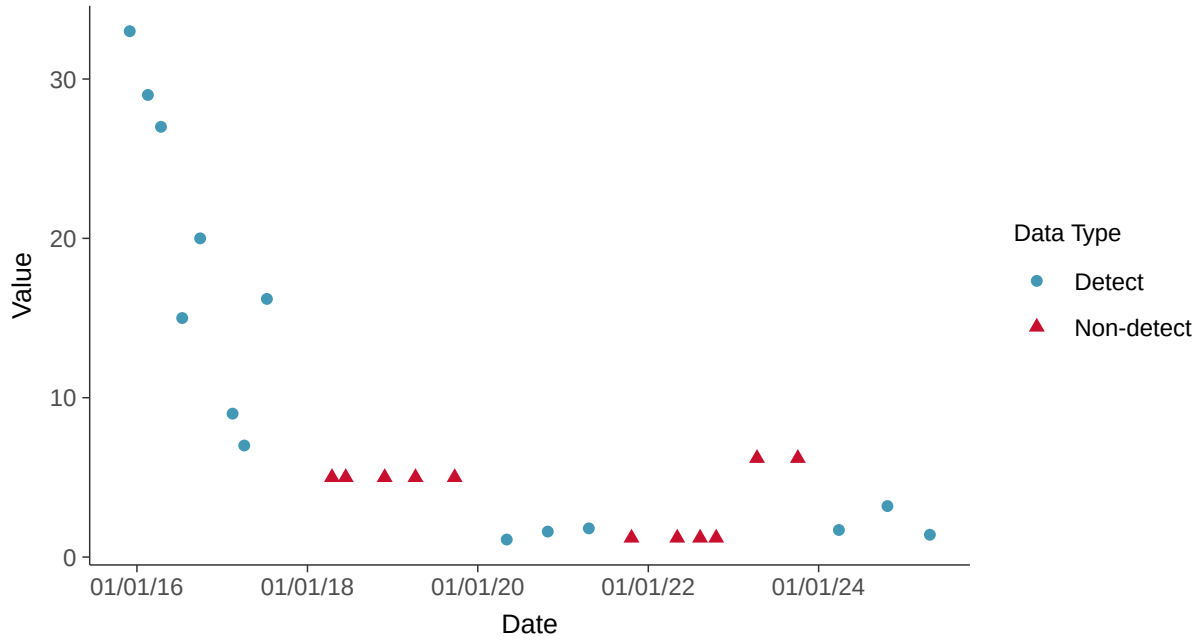


# Appendix IV: Molybdenum, MW-15010

ID: 02_2_119

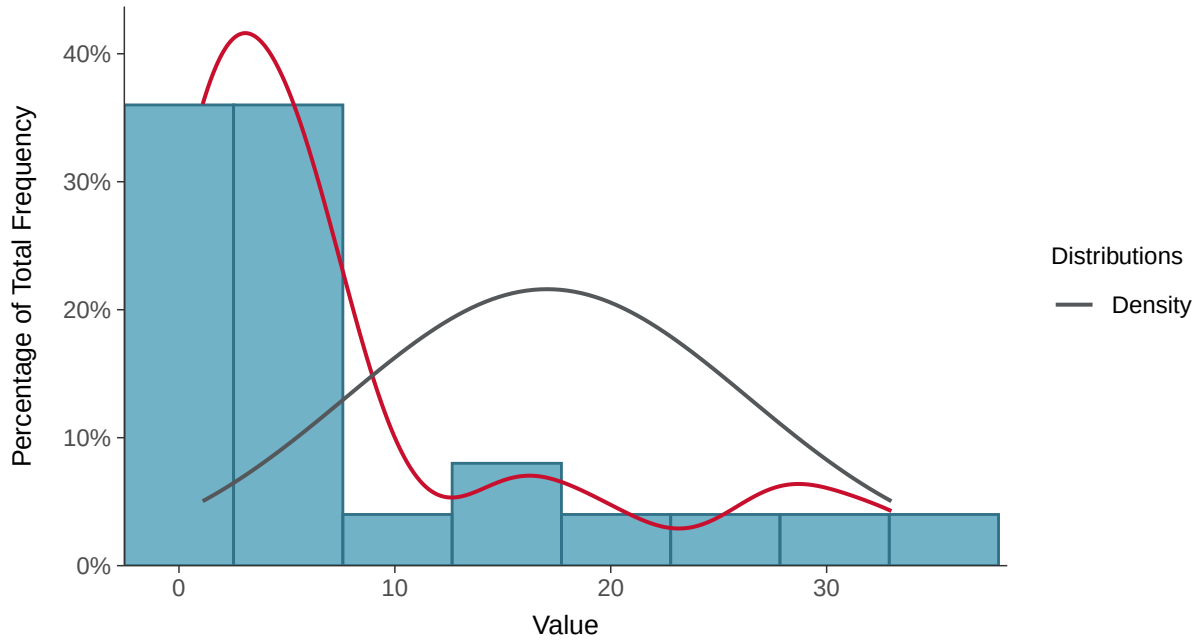
**Scatter Plot**

Molybdenum, MW-15010 (ug/L)



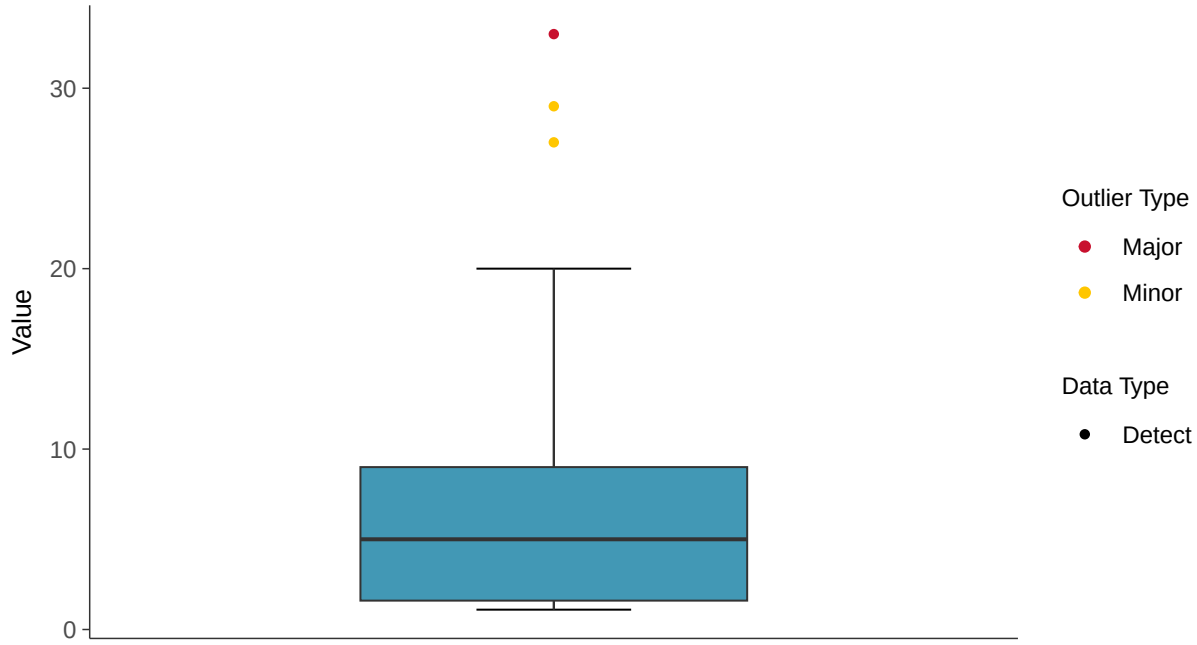

**Histogram**

Molybdenum, MW-15010 (ug/L)



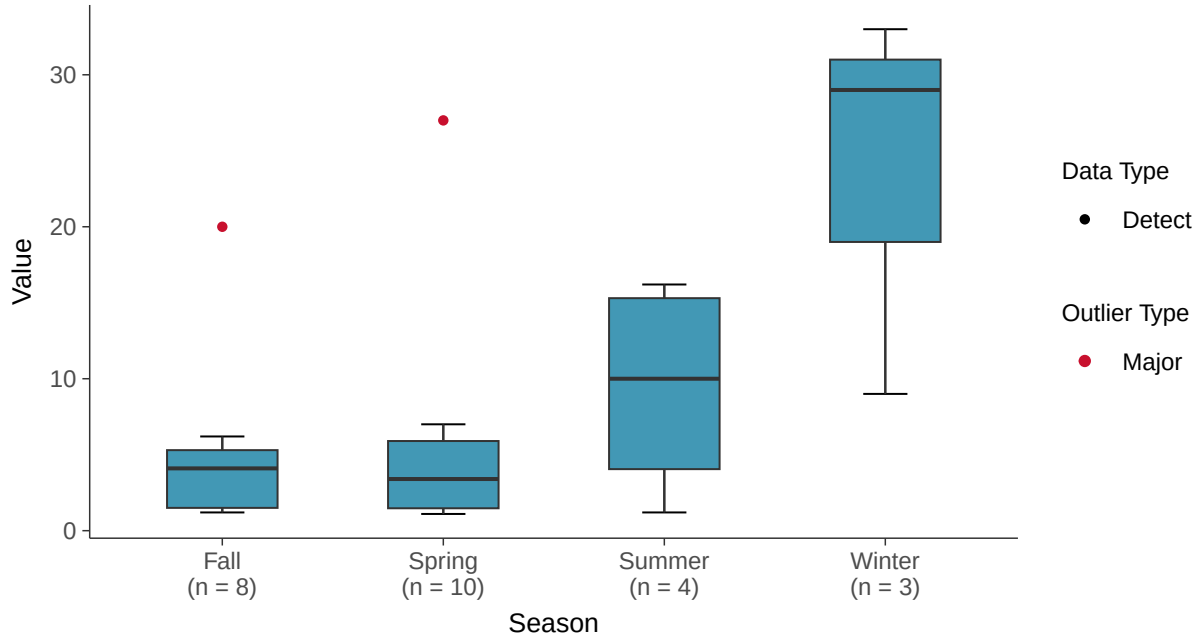
## Boxplot

Molybdenum, MW-15010 (ug/L)



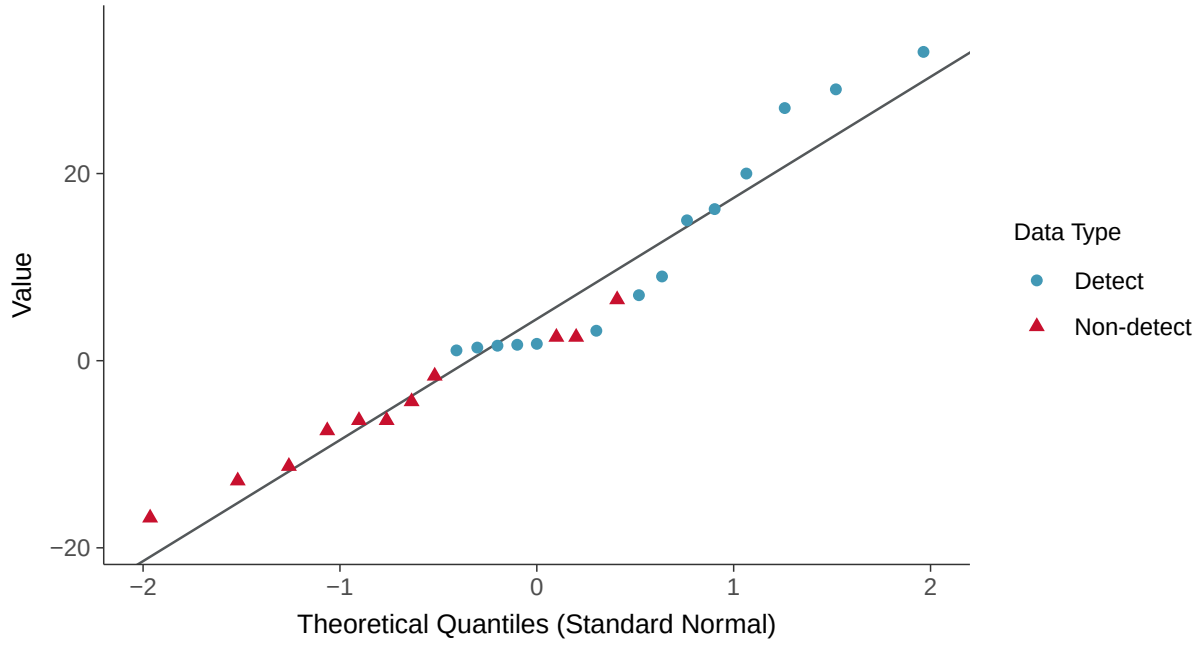

## Boxplot by Season

Molybdenum, MW-15010 (ug/L)



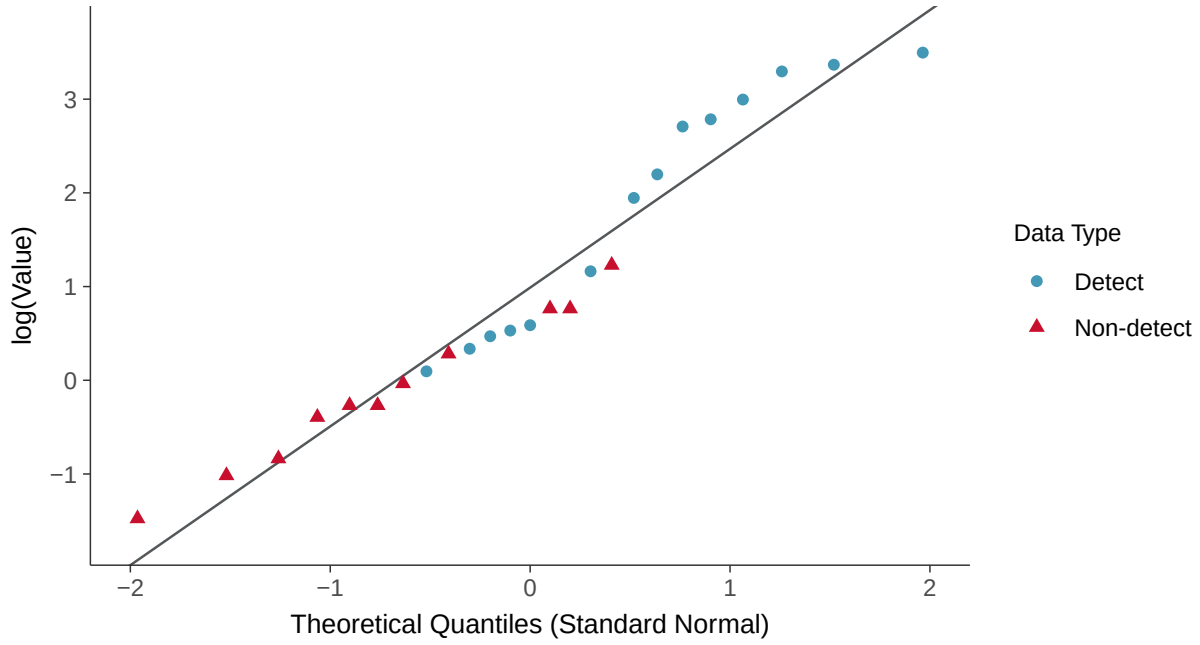
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15010 (ug/L)



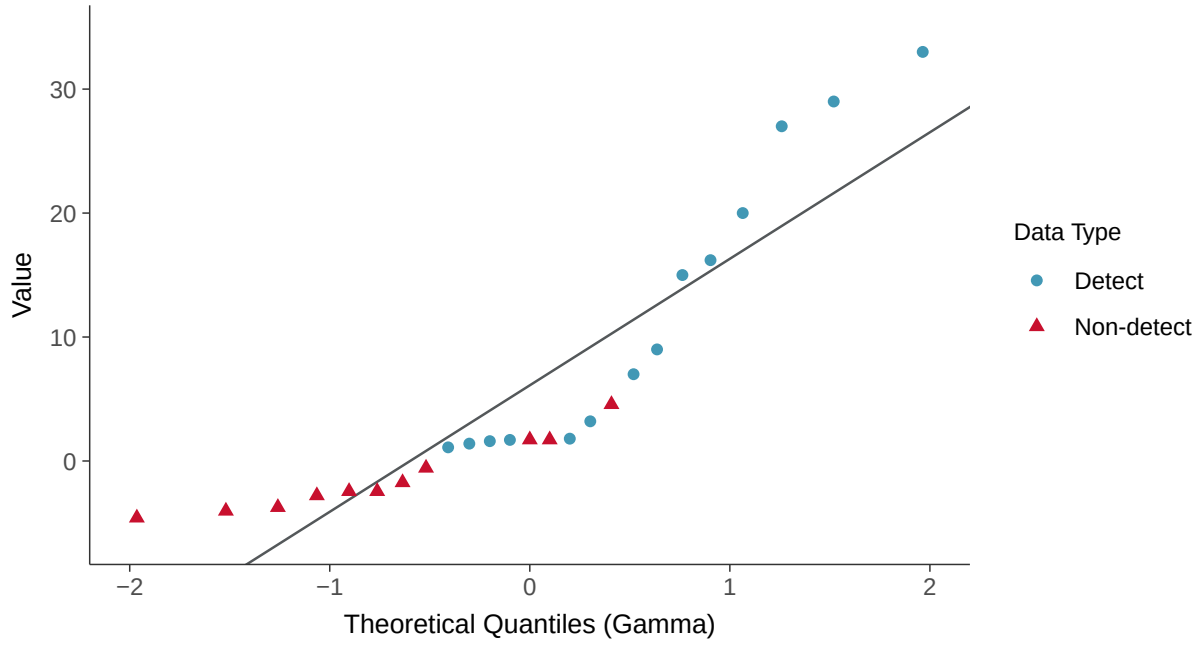

**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15010 (ug/L)



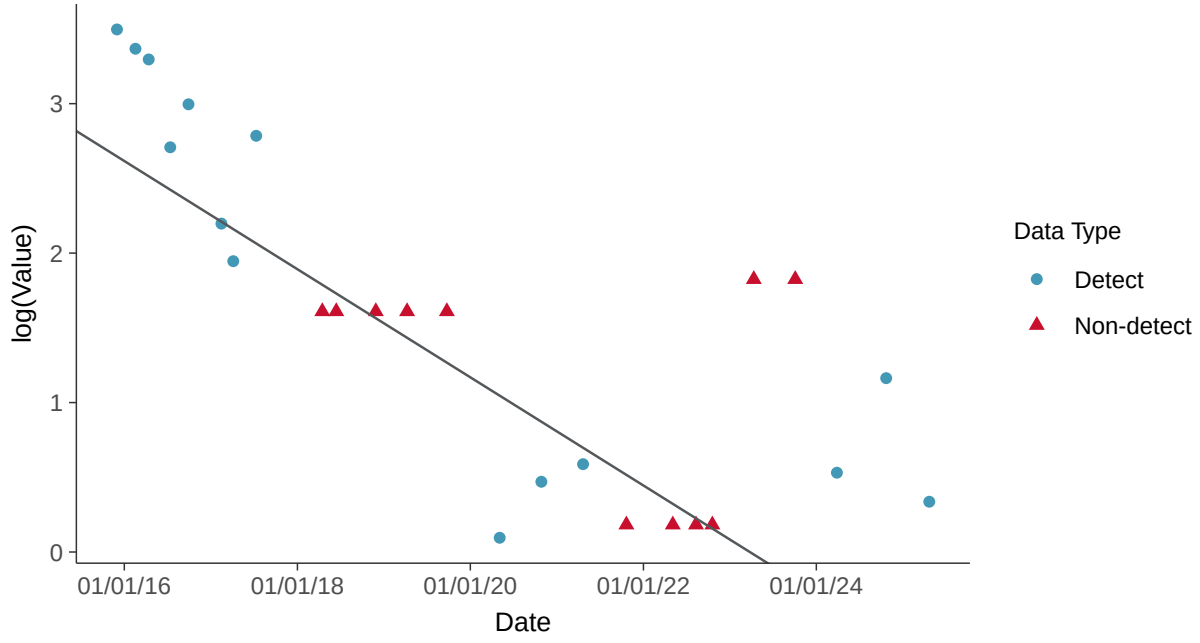
## Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15010 (ug/L)



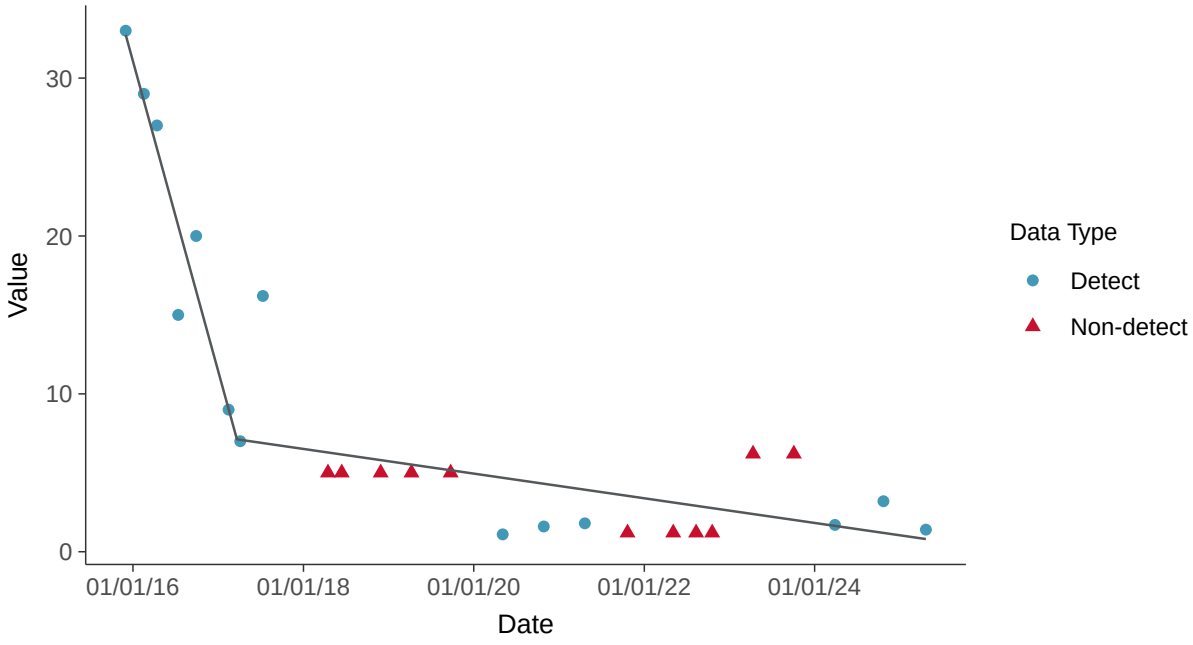

## Trend Regression: Lognormal MLE

Molybdenum, MW-15010 (ug/L)



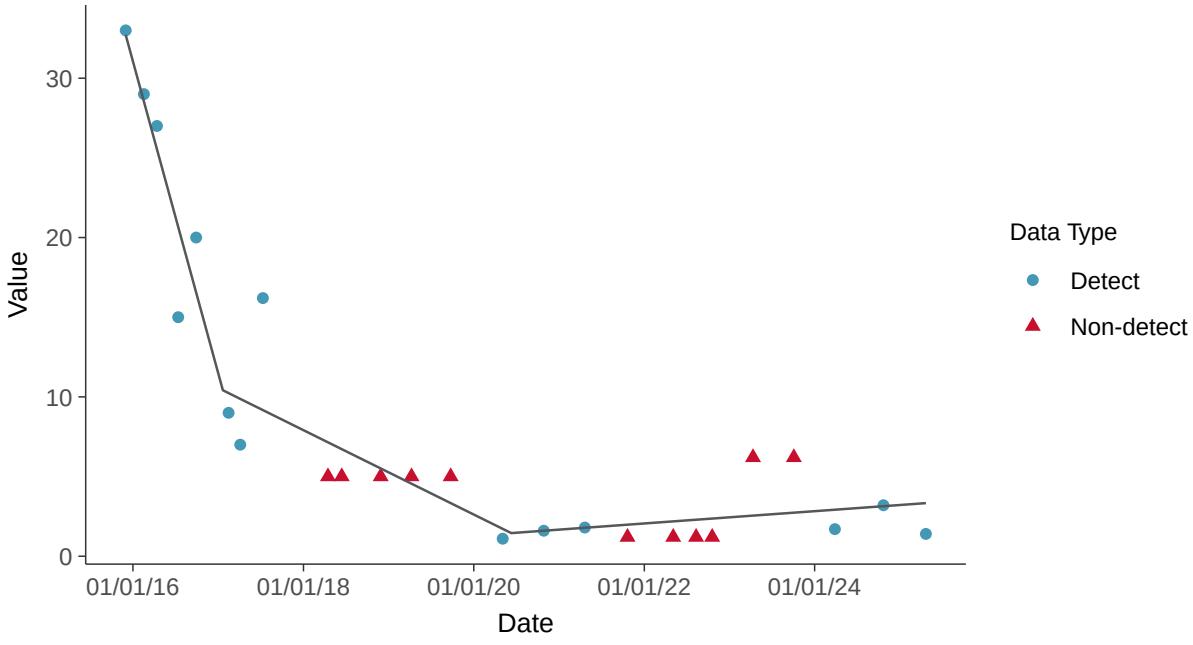
**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15010 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-15010 (ug/L)

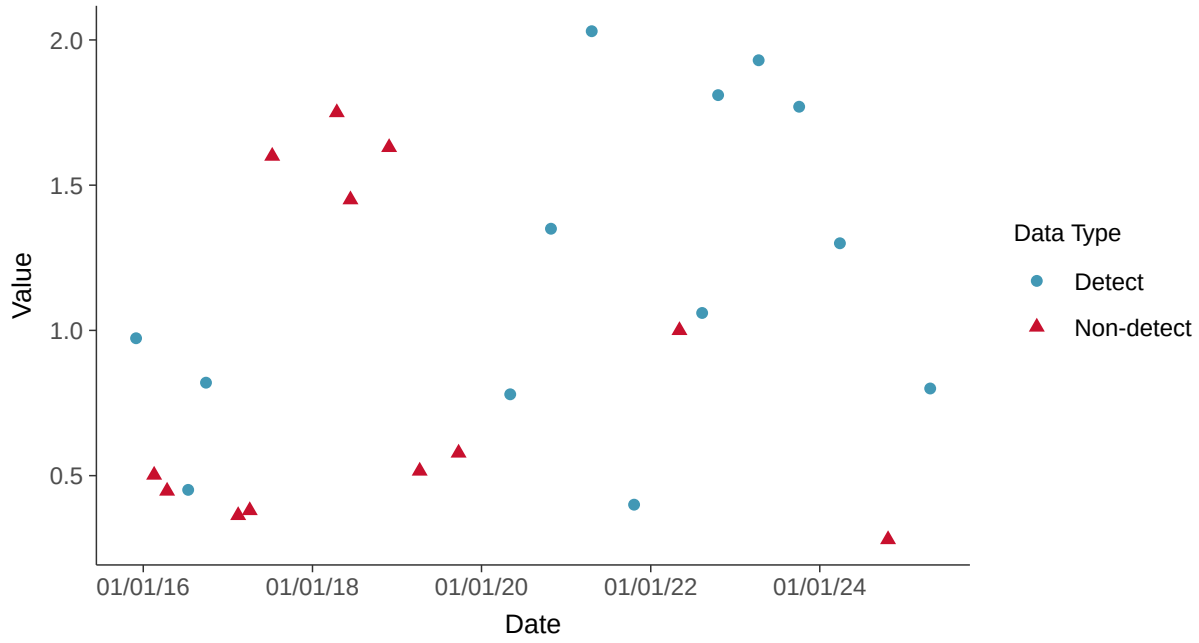


## Appendix IV: Radium-226+228, MW-15010

ID: 02_2_125

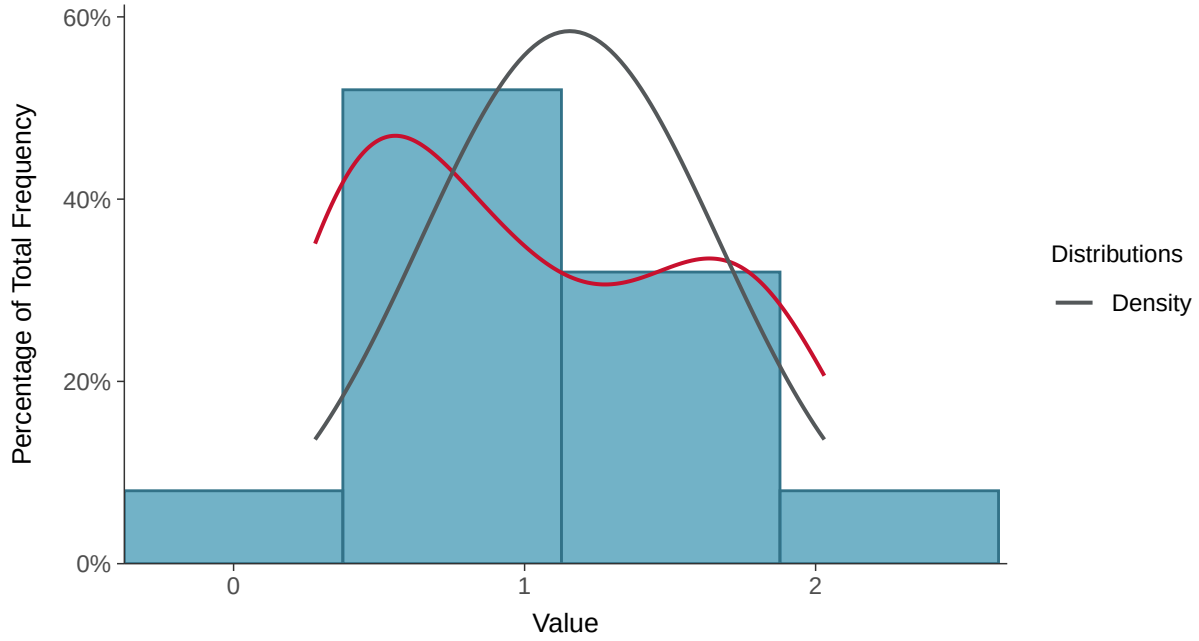
**Scatter Plot**

Radium-226+228, MW-15010 (pCi/L)



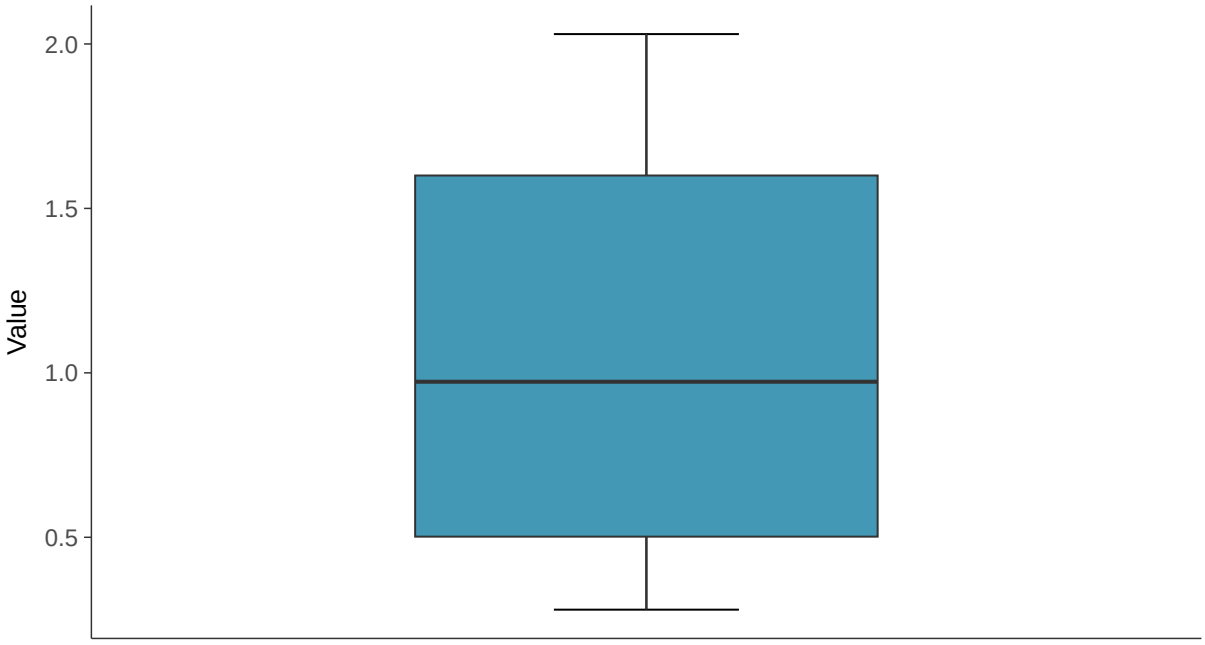

**Histogram**

Radium-226+228, MW-15010 (pCi/L)



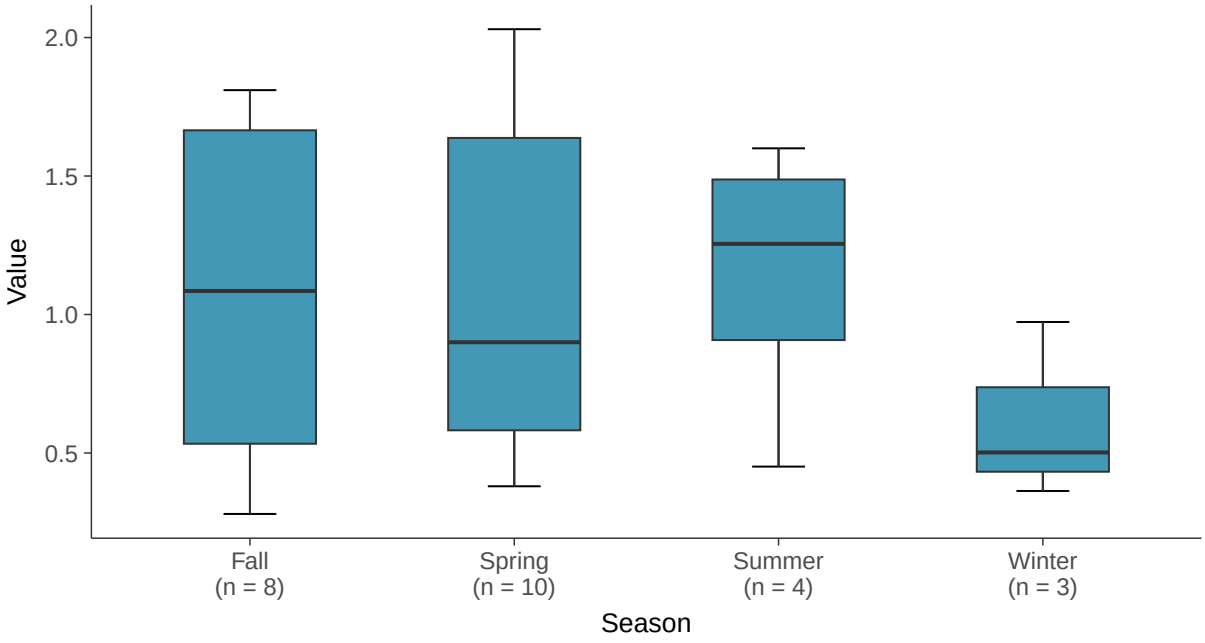
**Boxplot**

Radium-226+228, MW-15010 (pCi/L)



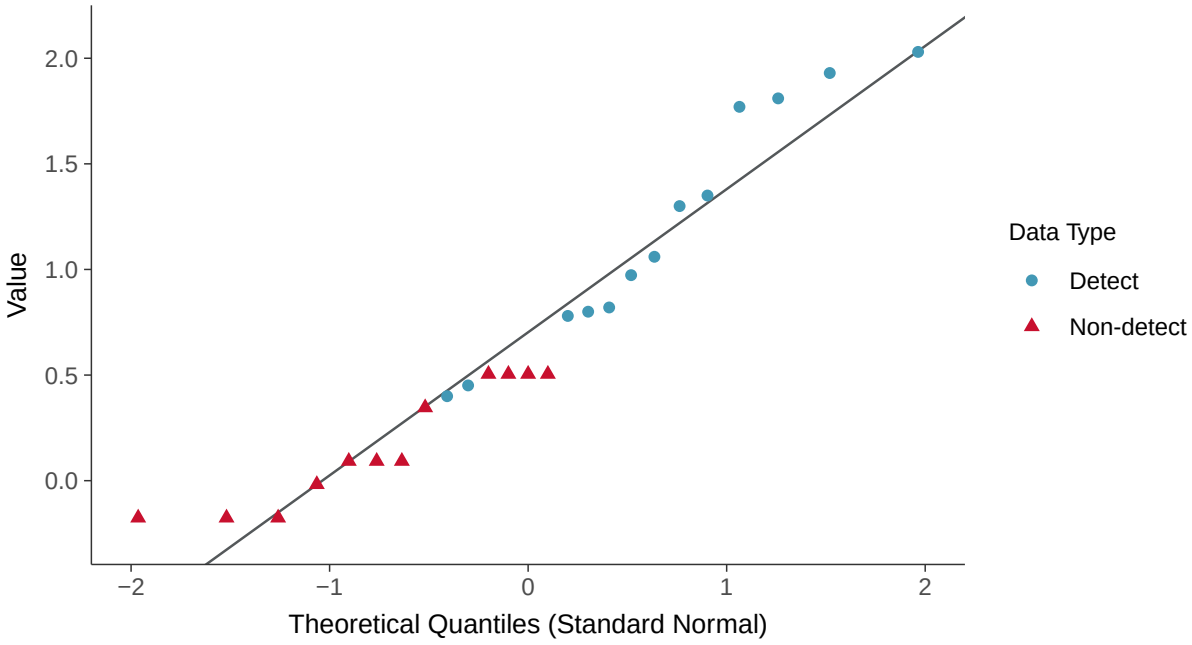

**Boxplot by Season**

Radium-226+228, MW-15010 (pCi/L)



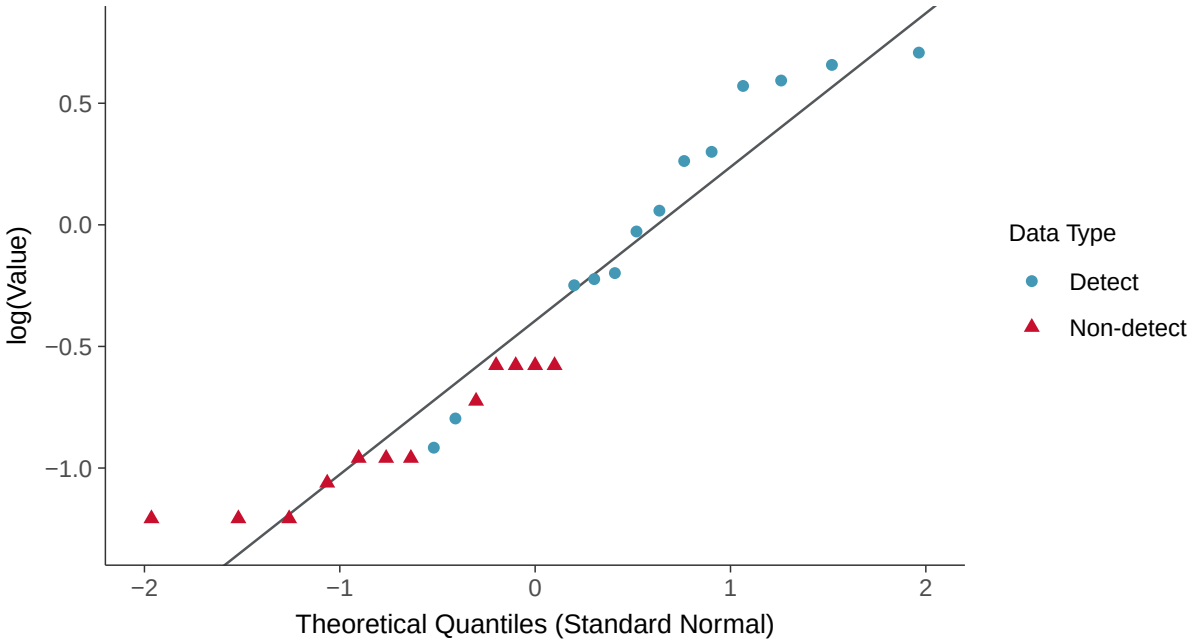
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15010 (pCi/L)



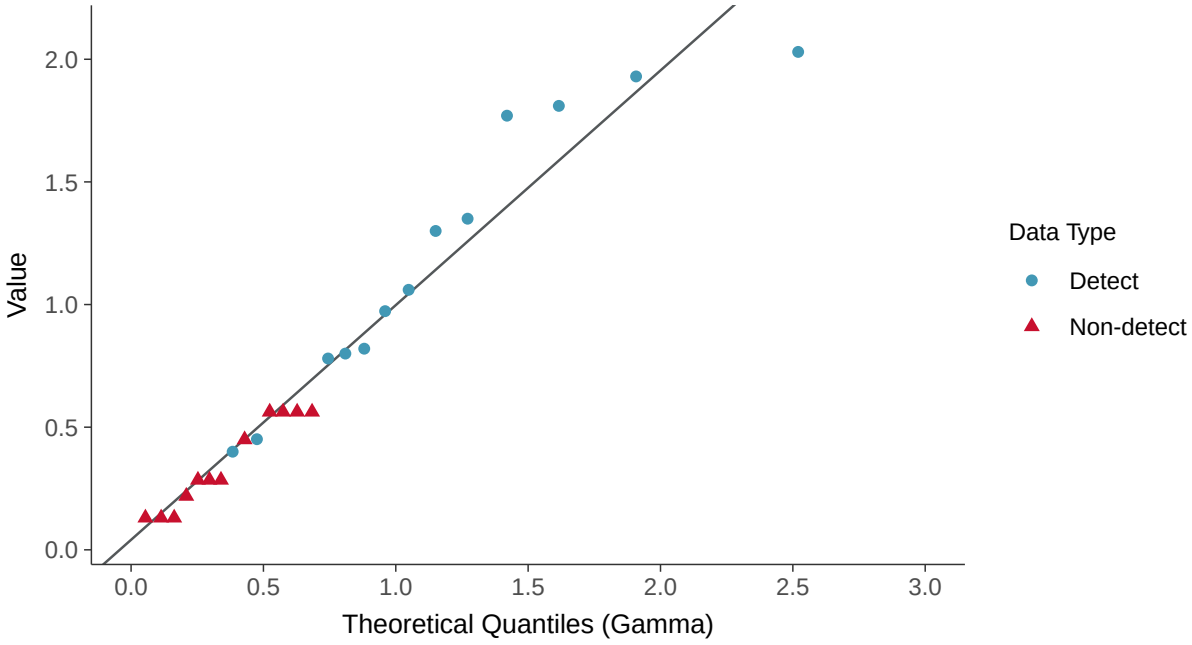

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15010 (pCi/L)



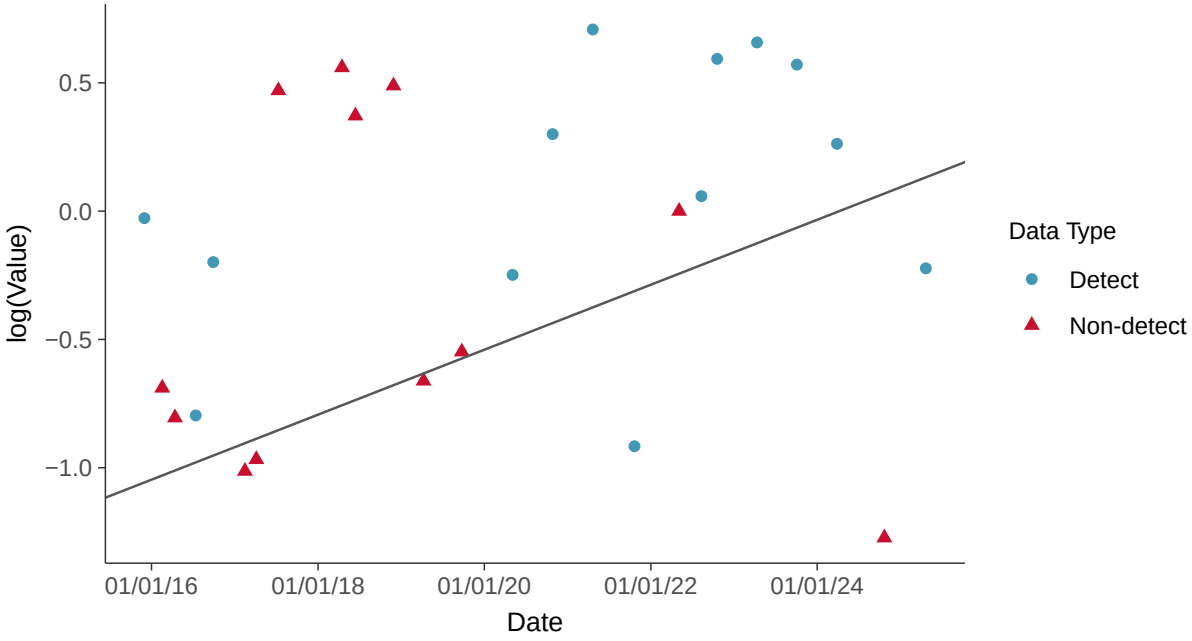
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15010 (pCi/L)



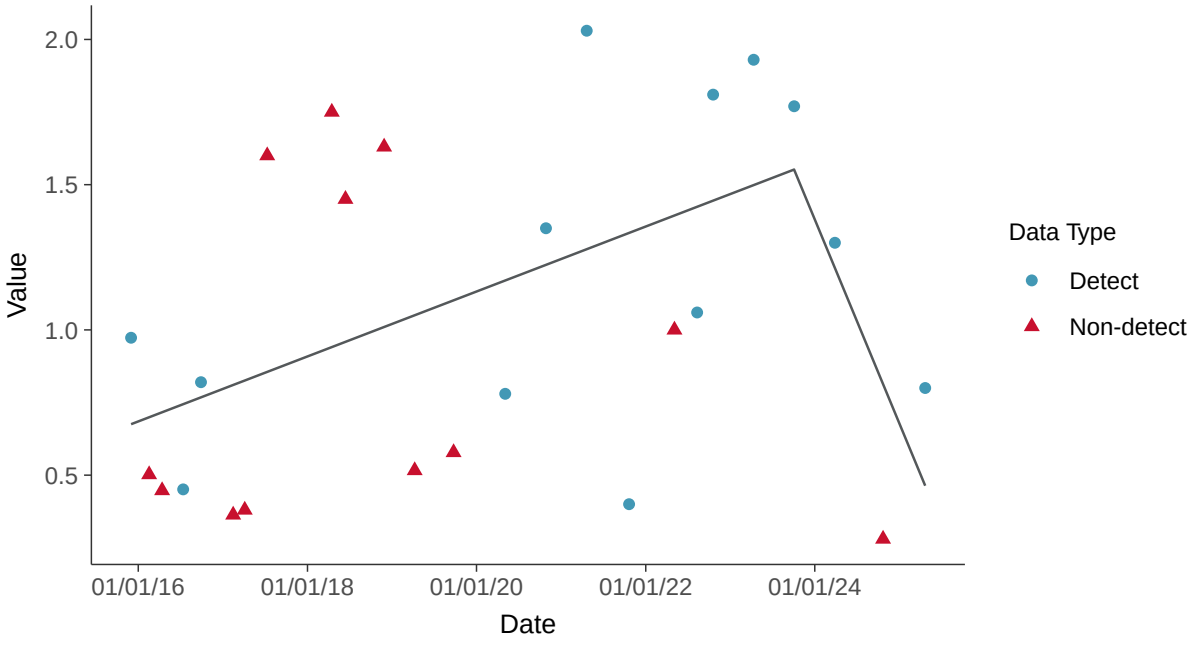

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15010 (pCi/L)



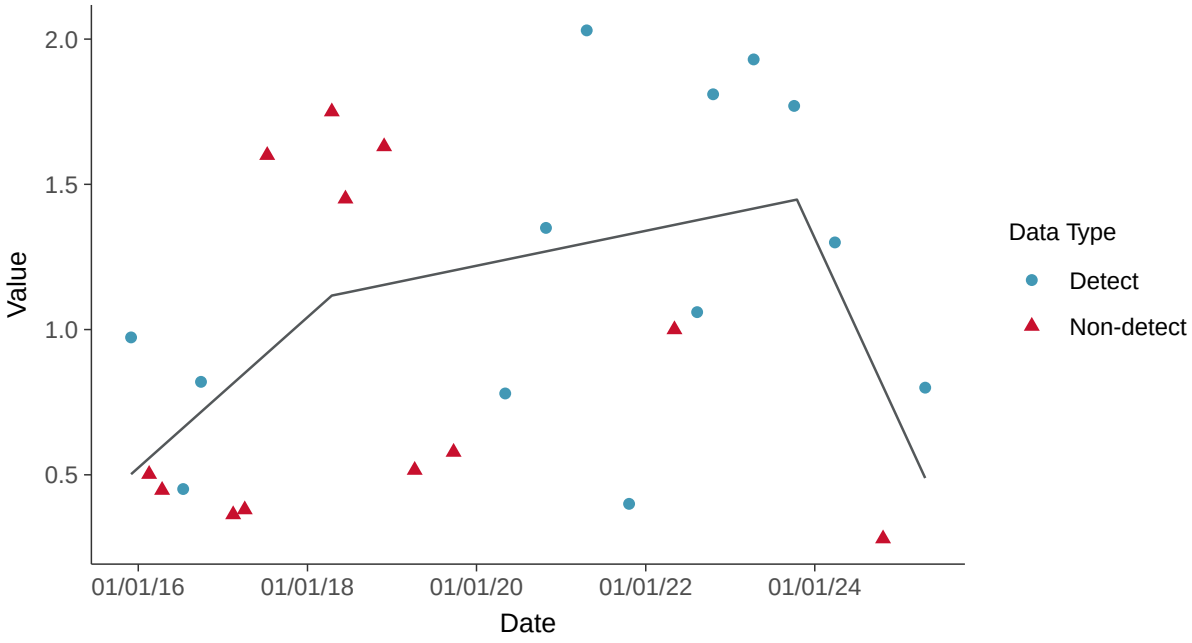
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15010 (pCi/L)



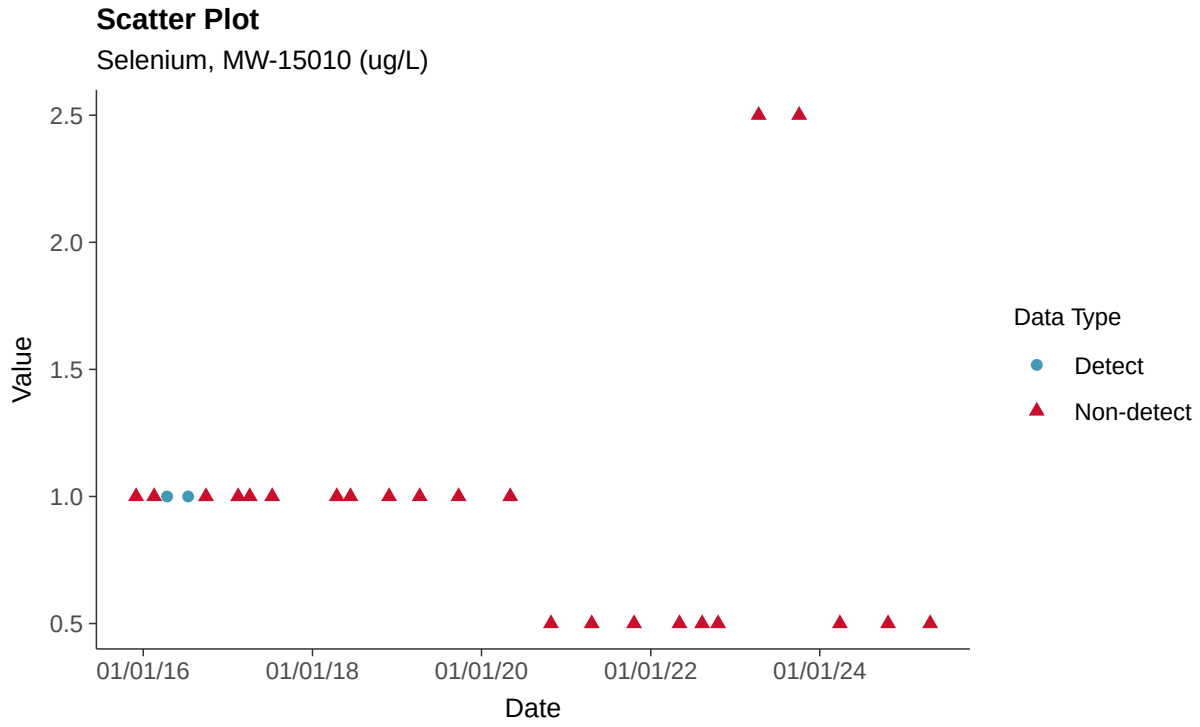

**Trend Regression: Piecewise Linear-Linear-Linear**

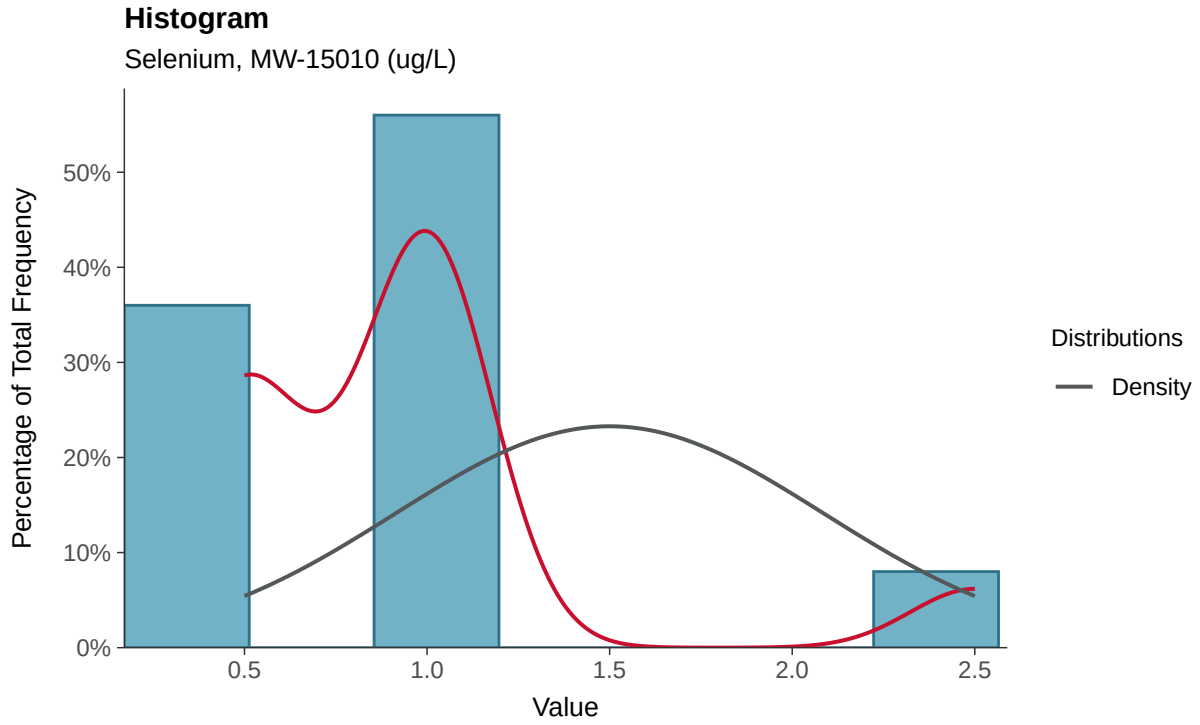
Radium-226+228, MW-15010 (pCi/L)



## Appendix IV: Selenium, MW-15010

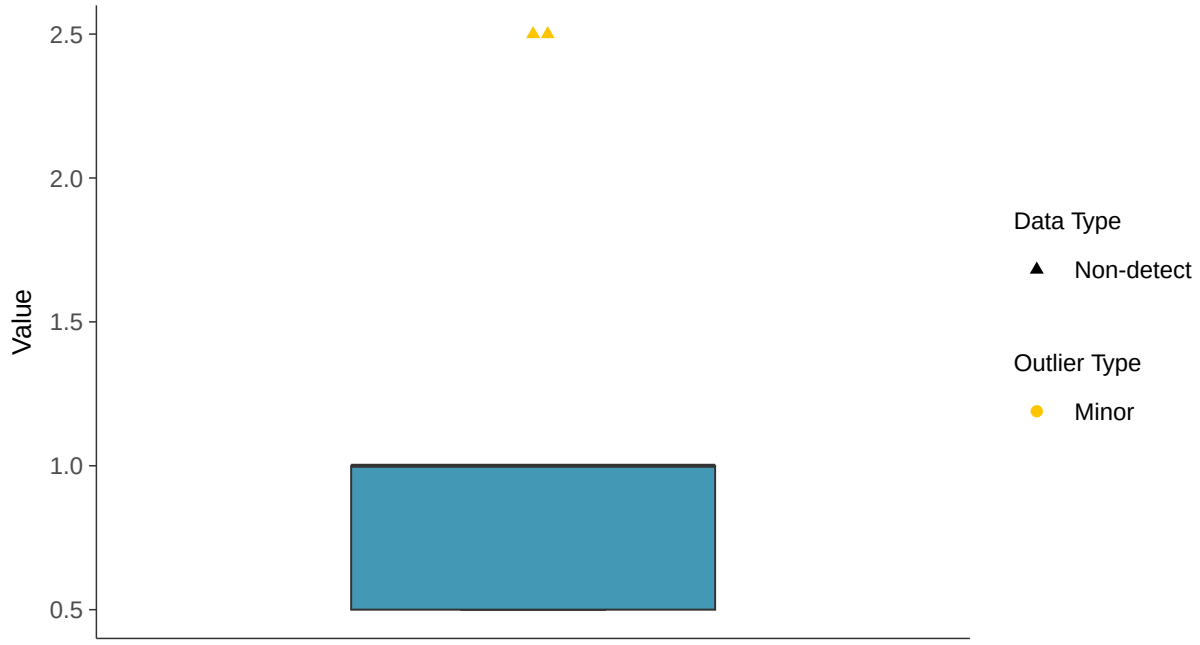
ID: 02_2_127



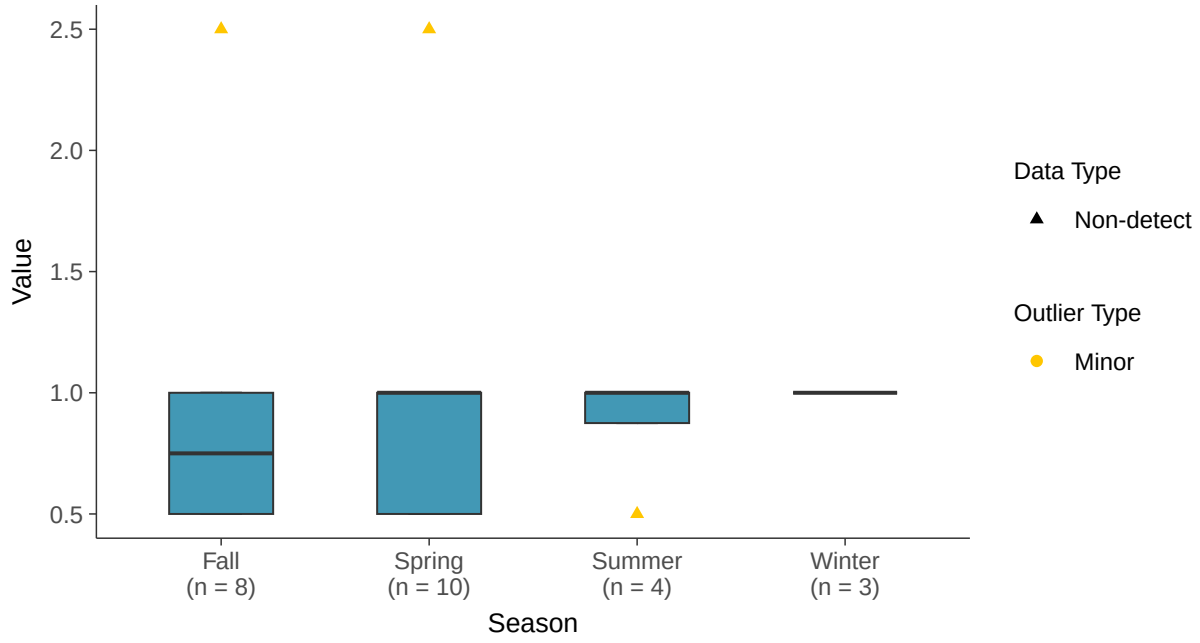
## Boxplot

Selenium, MW-15010 (ug/L)



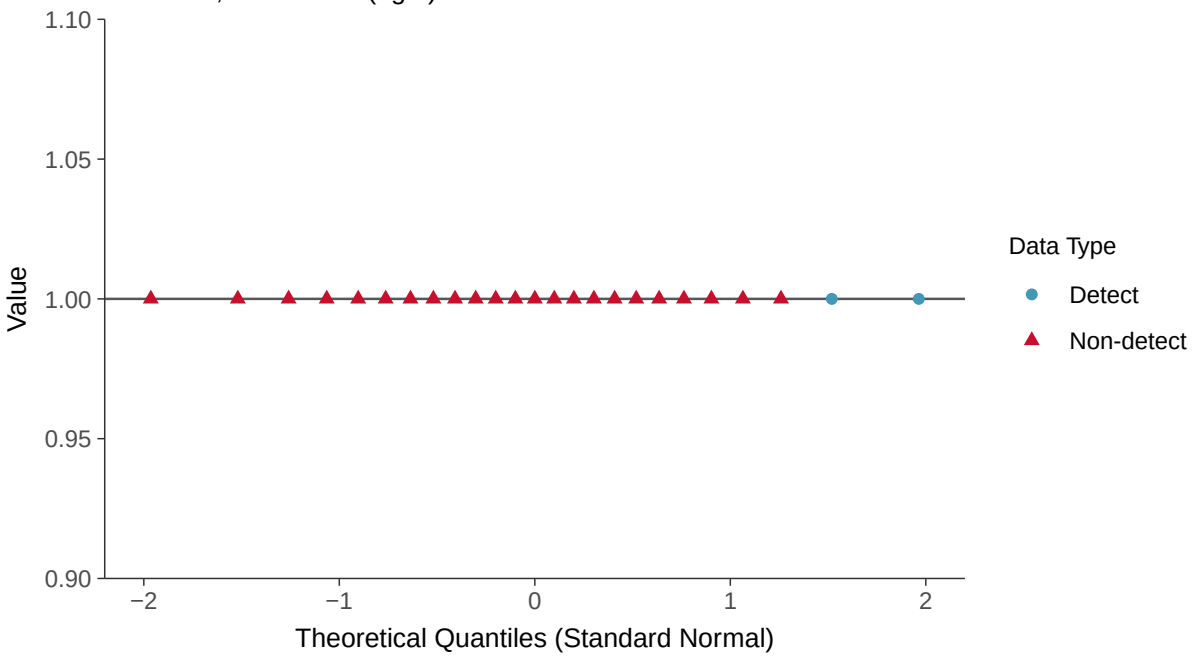

## Boxplot by Season

Selenium, MW-15010 (ug/L)



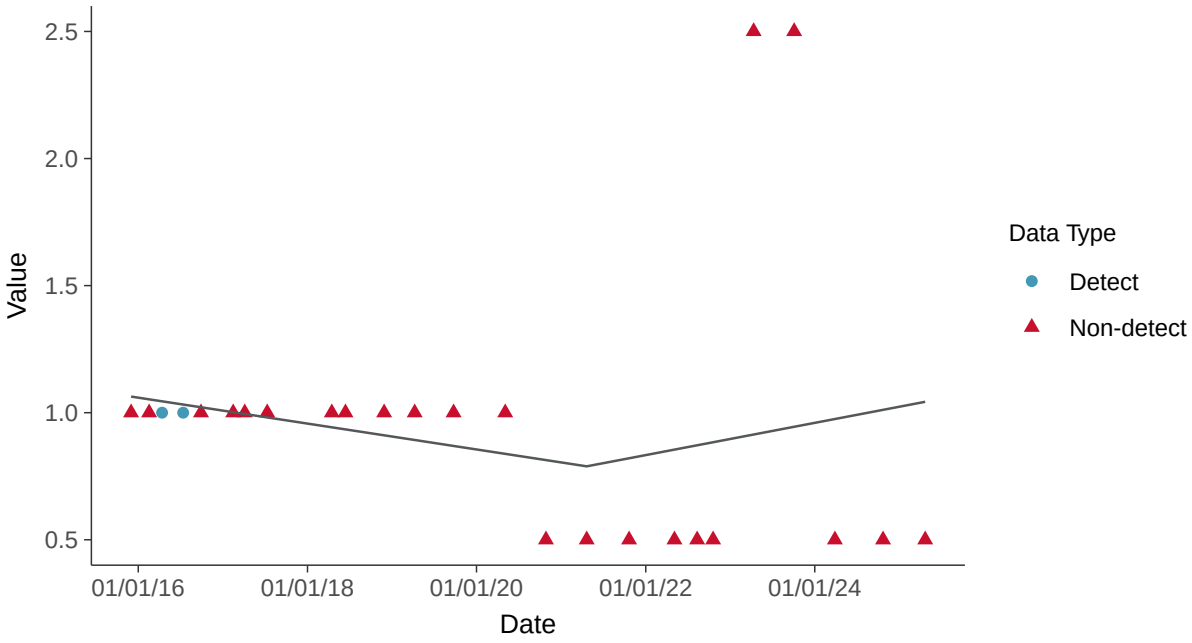
## Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15010 (ug/L)



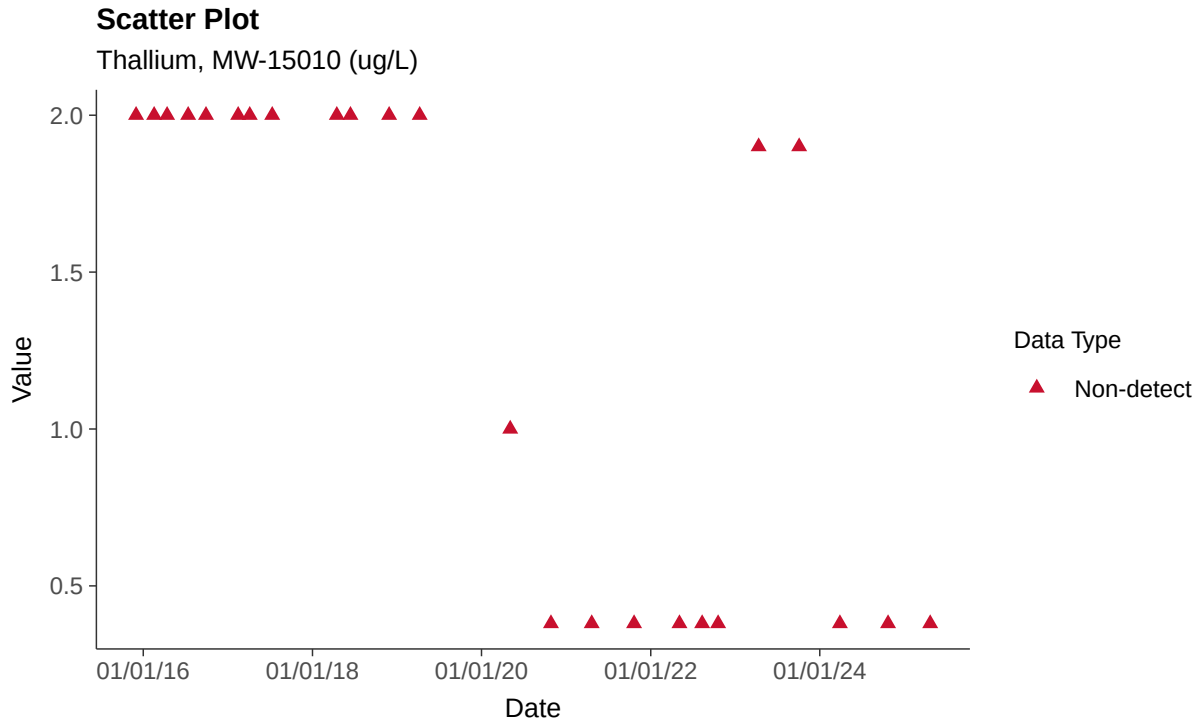

## Trend Regression: Piecewise Linear-Linear

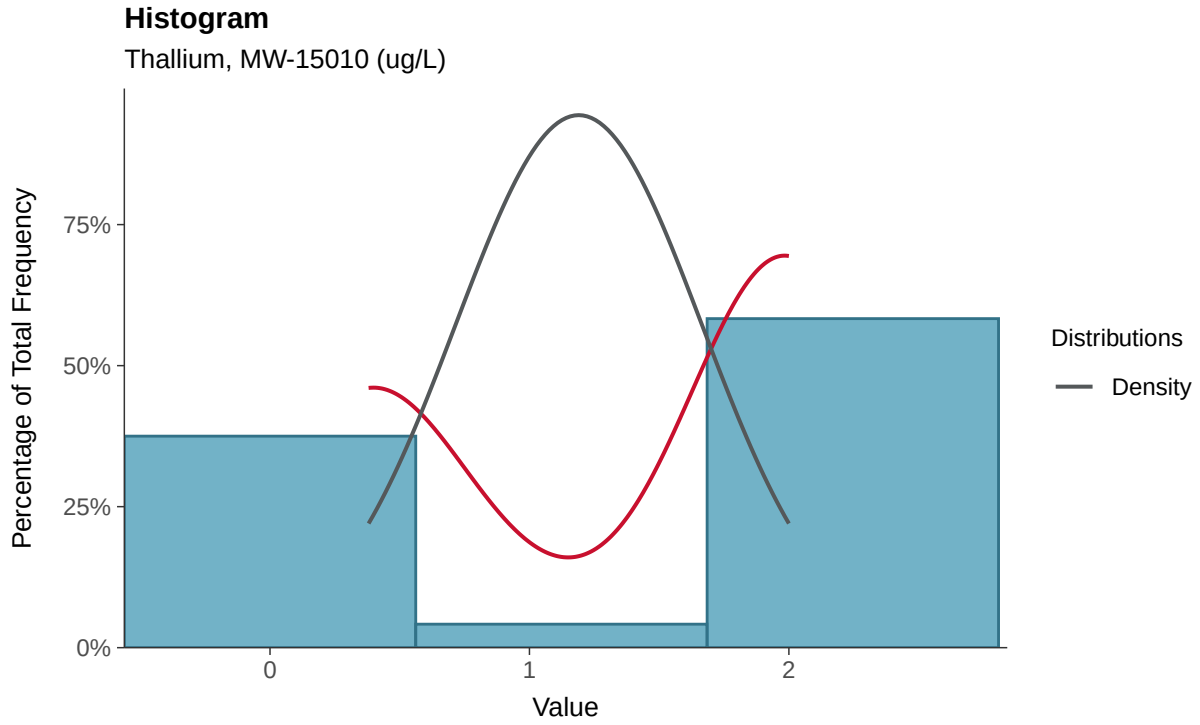
Selenium, MW-15010 (ug/L)



## Appendix IV: Thallium, MW-15010

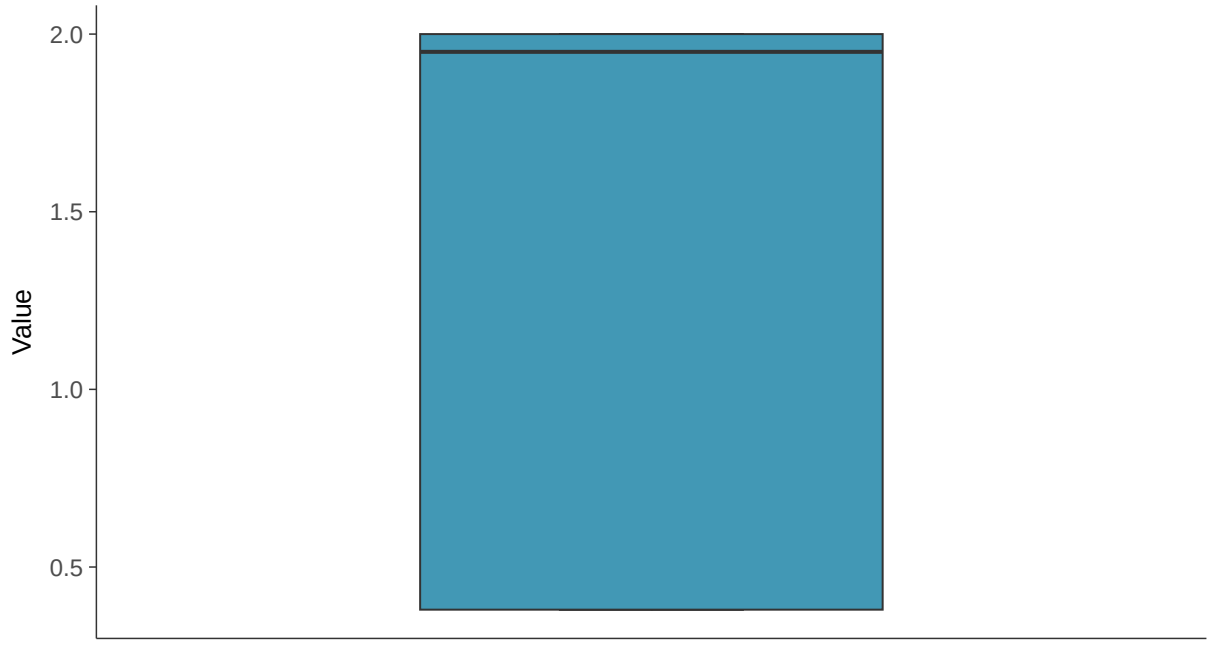
ID: 02_2_131



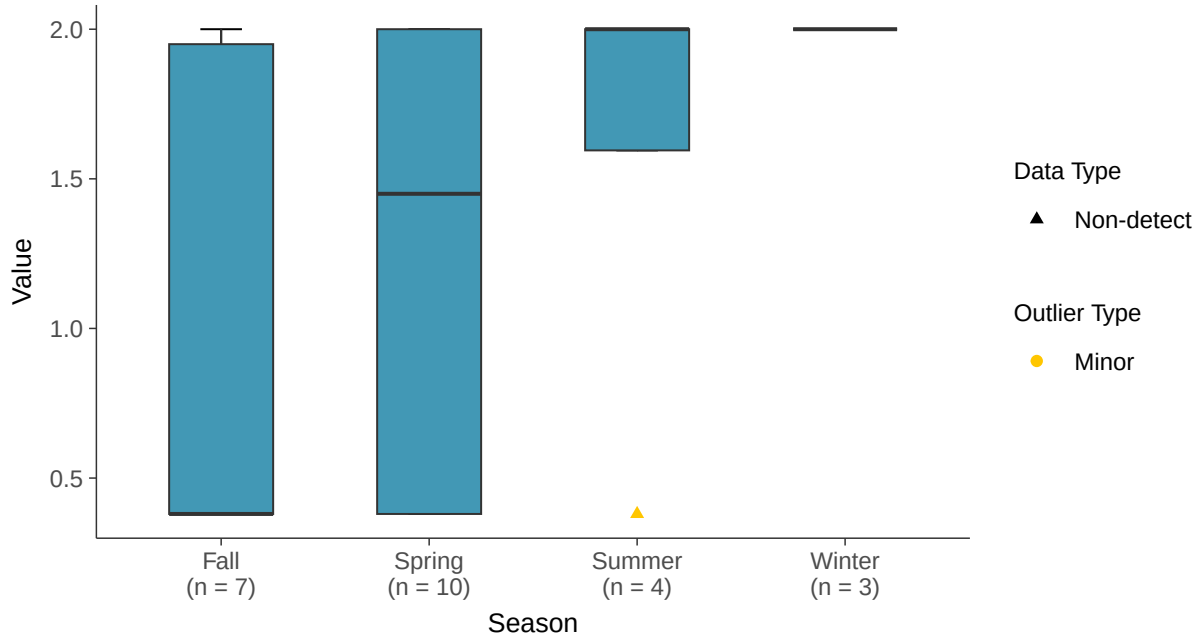
**Boxplot**

Thallium, MW-15010 (ug/L)



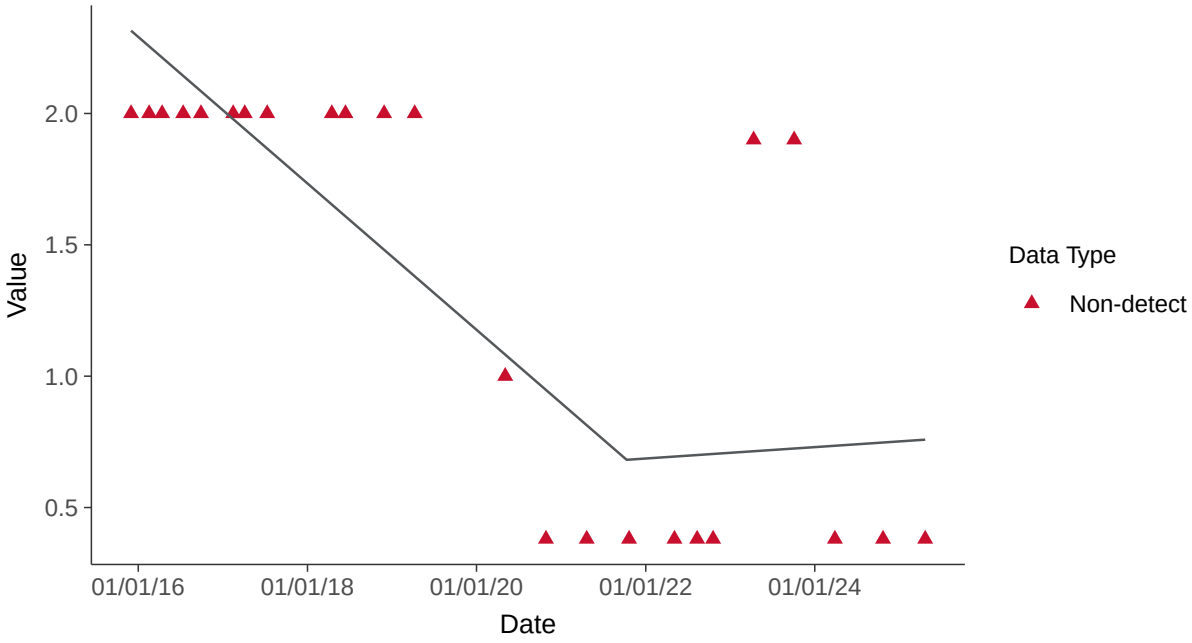

**Boxplot by Season**

Thallium, MW-15010 (ug/L)



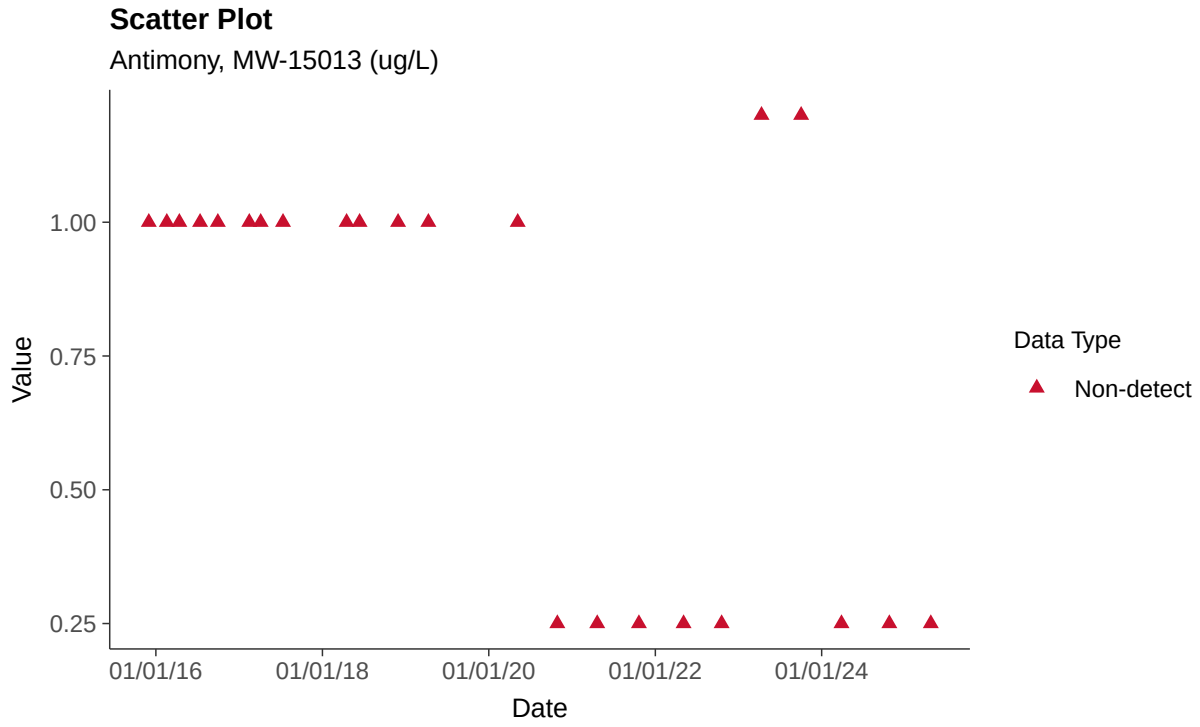
**Trend Regression: Piecewise Linear-Linear**

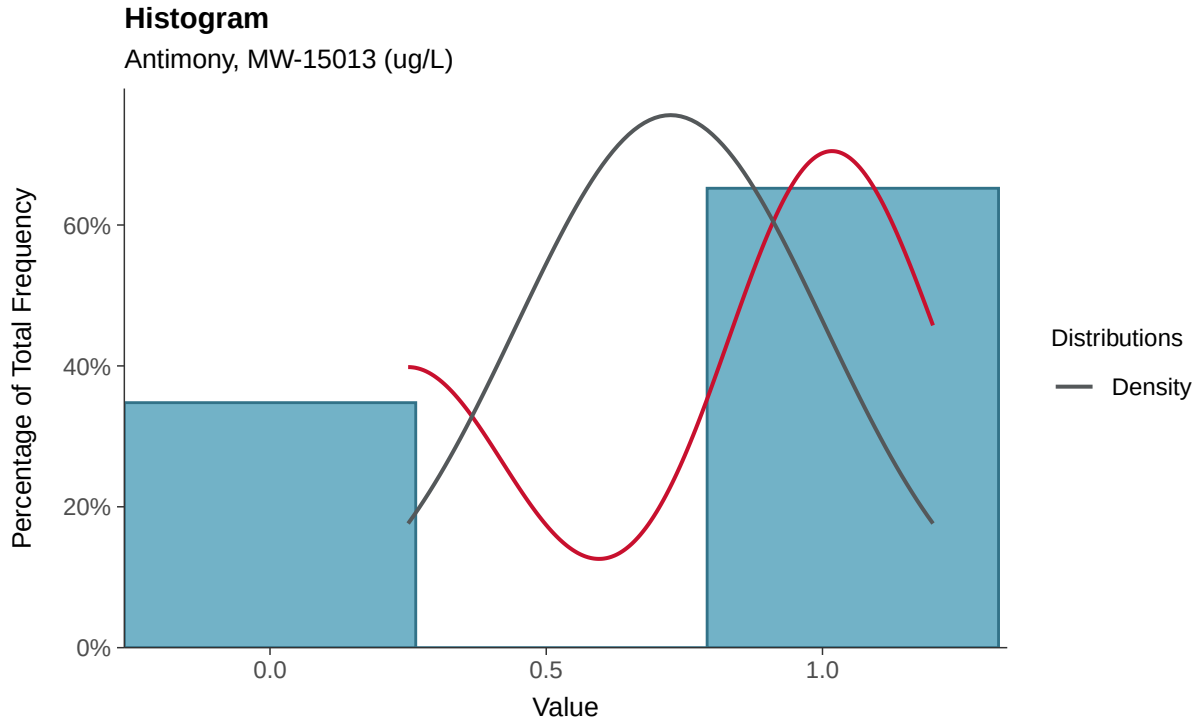
Thallium, MW-15010 (ug/L)



## Appendix IV: Antimony, MW-15013

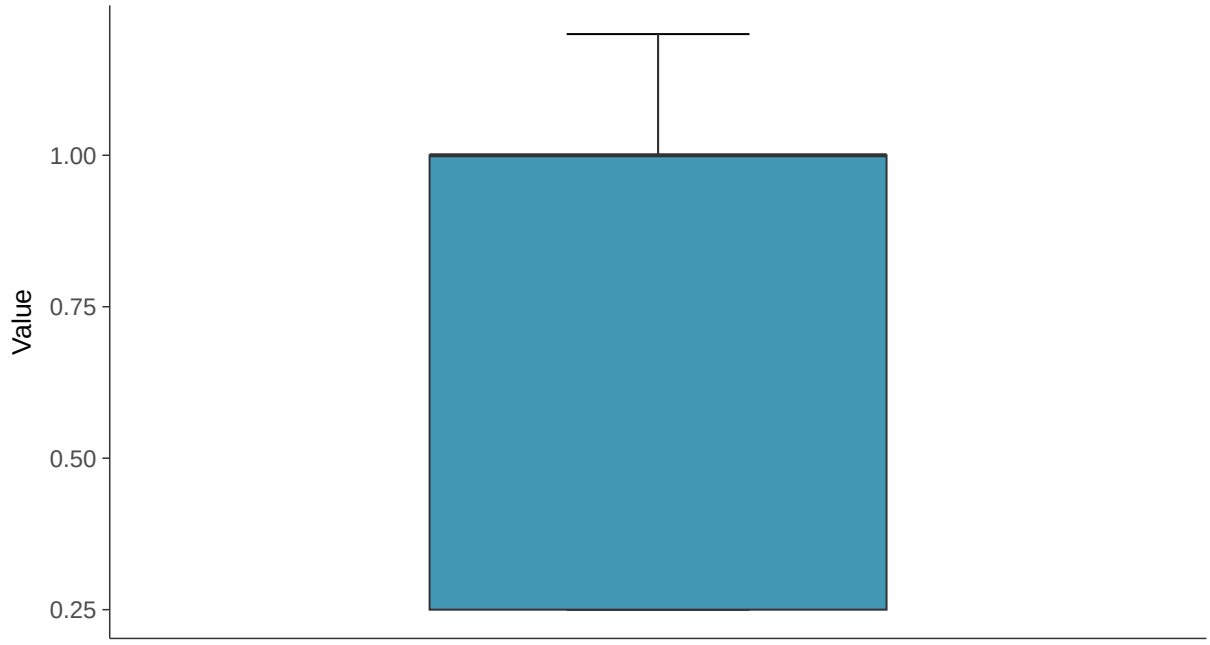
ID: 03_2_101



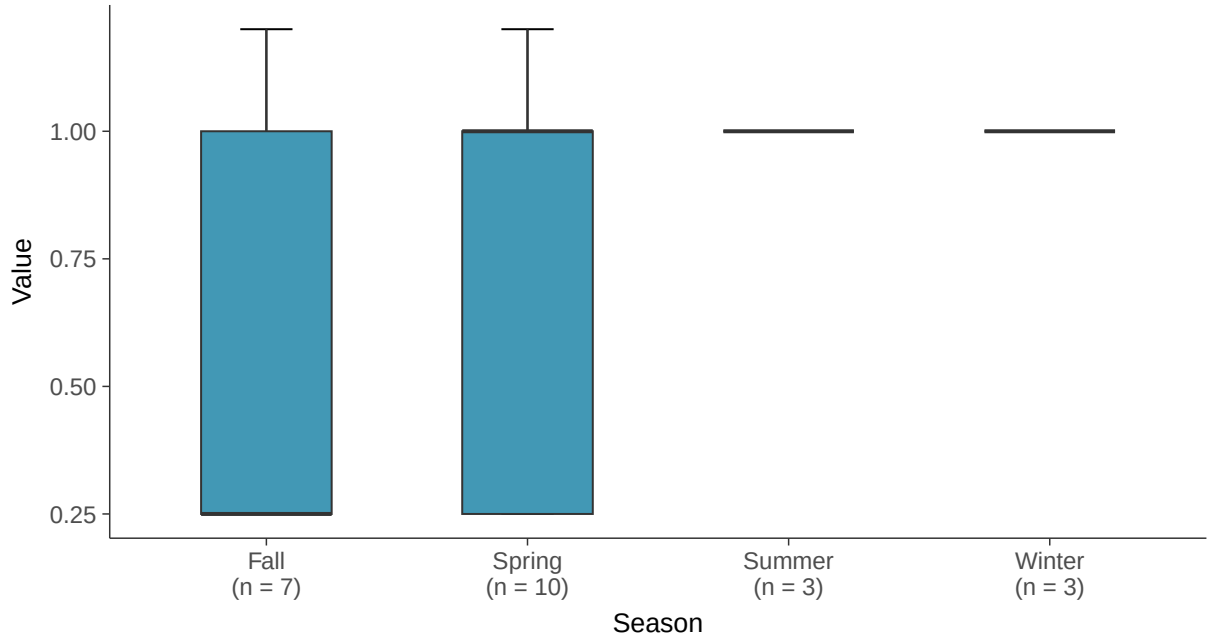
**Boxplot**

Antimony, MW-15013 (ug/L)



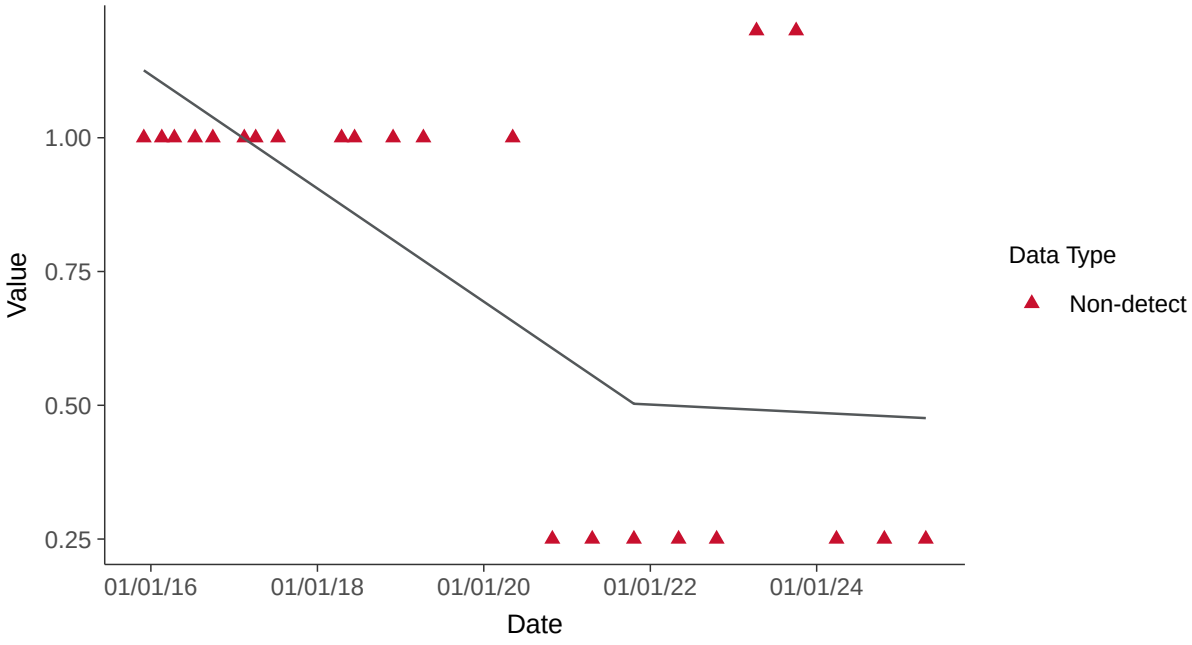

**Boxplot by Season**

Antimony, MW-15013 (ug/L)



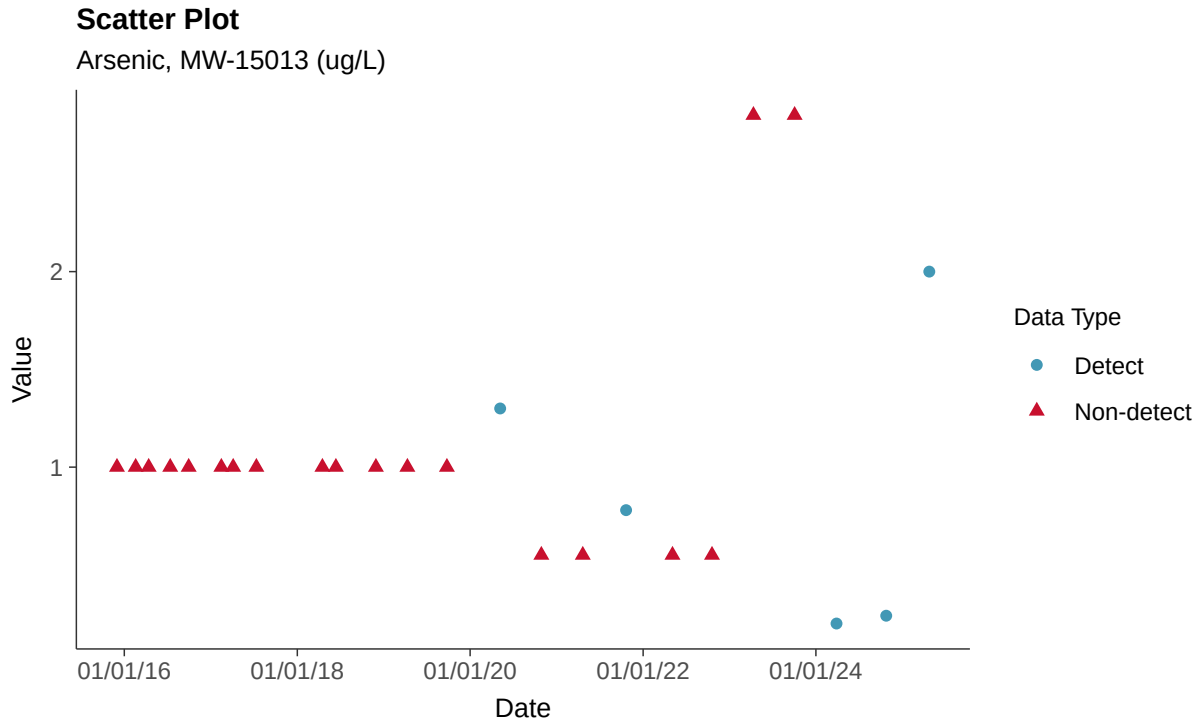
**Trend Regression: Piecewise Linear-Linear**

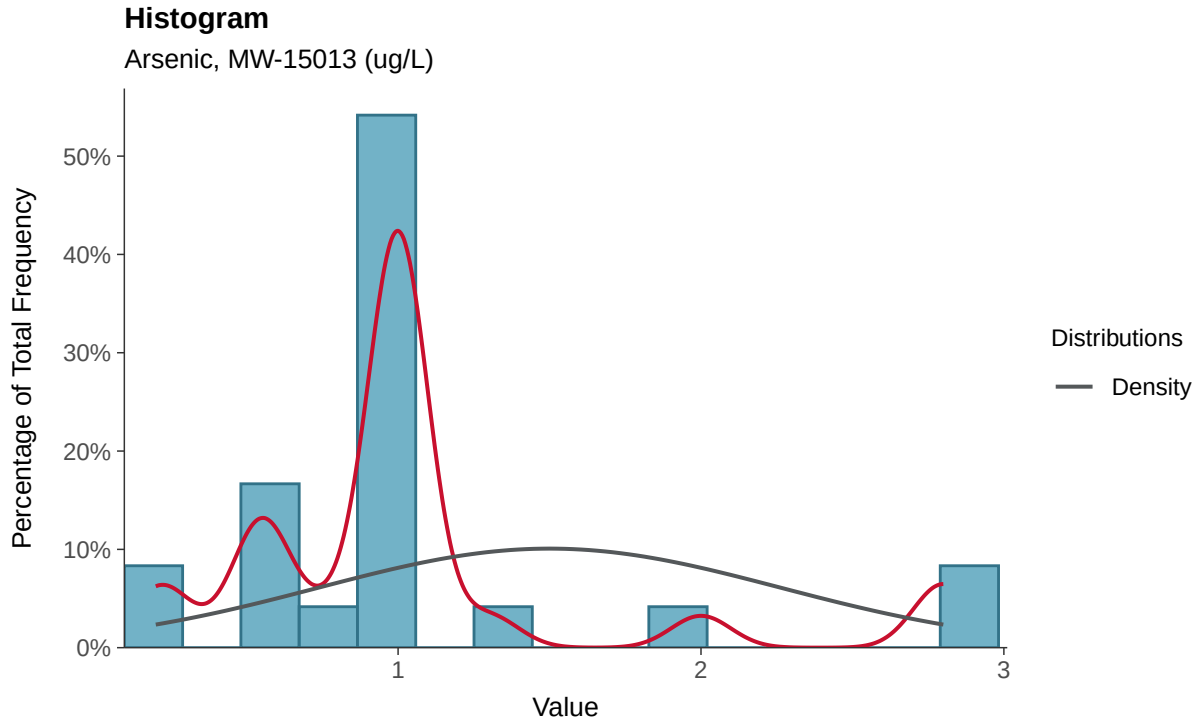
Antimony, MW-15013 (ug/L)



## Appendix IV: Arsenic, MW-15013

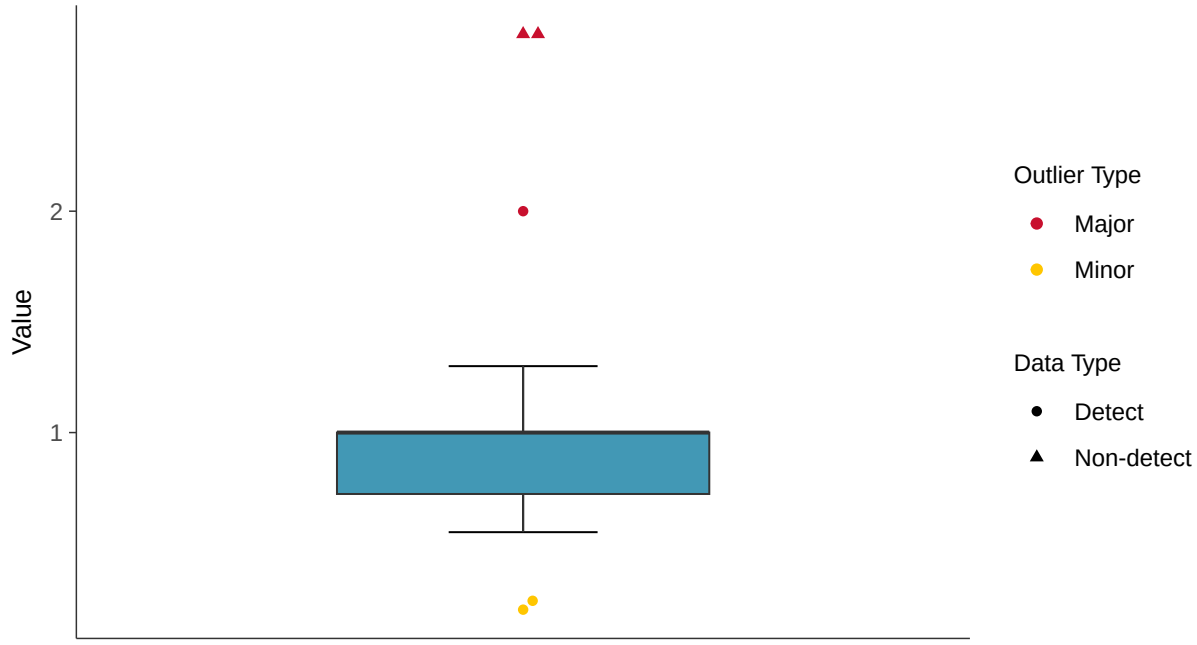
ID: 03_2_102



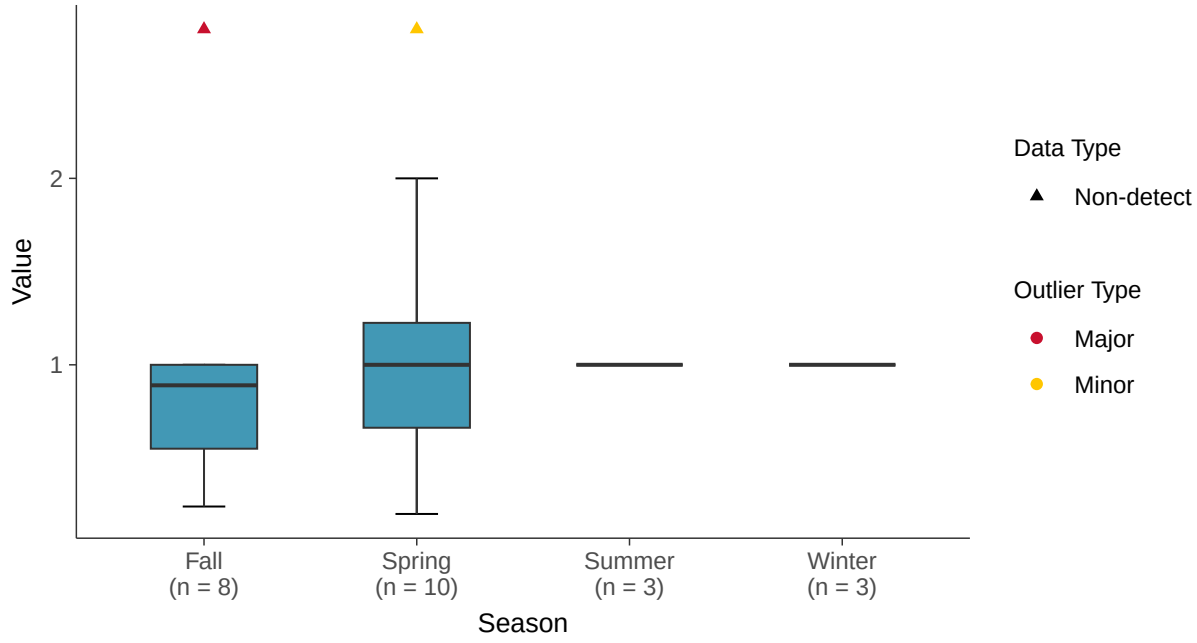
## Boxplot

Arsenic, MW-15013 (ug/L)



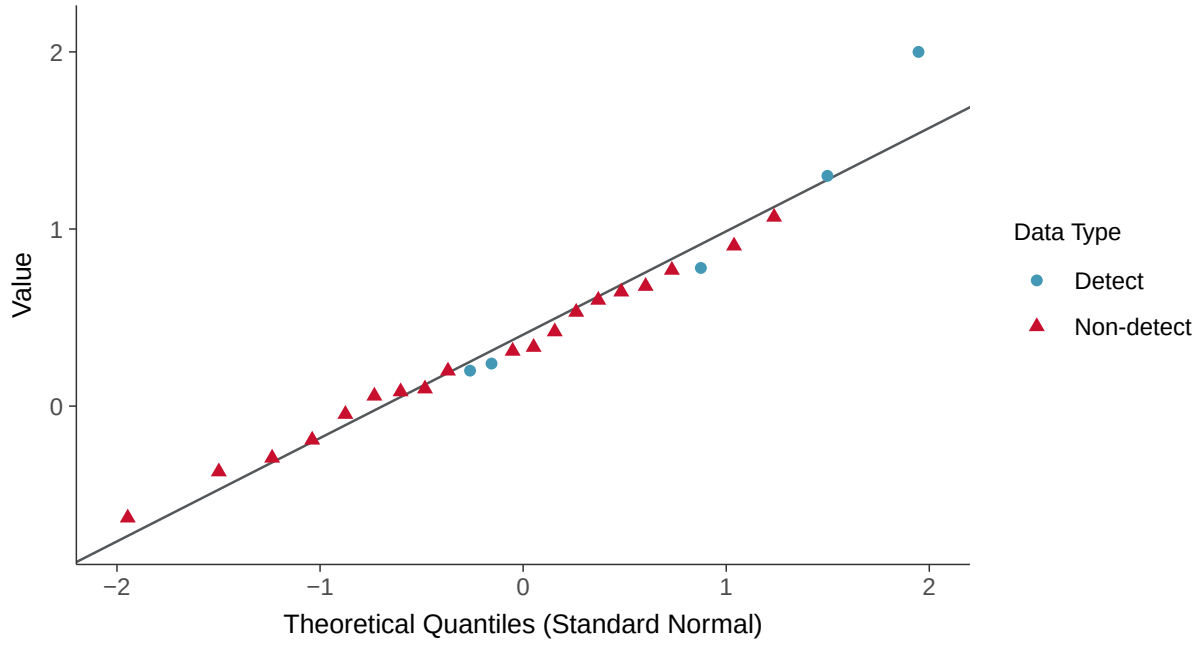

## Boxplot by Season

Arsenic, MW-15013 (ug/L)



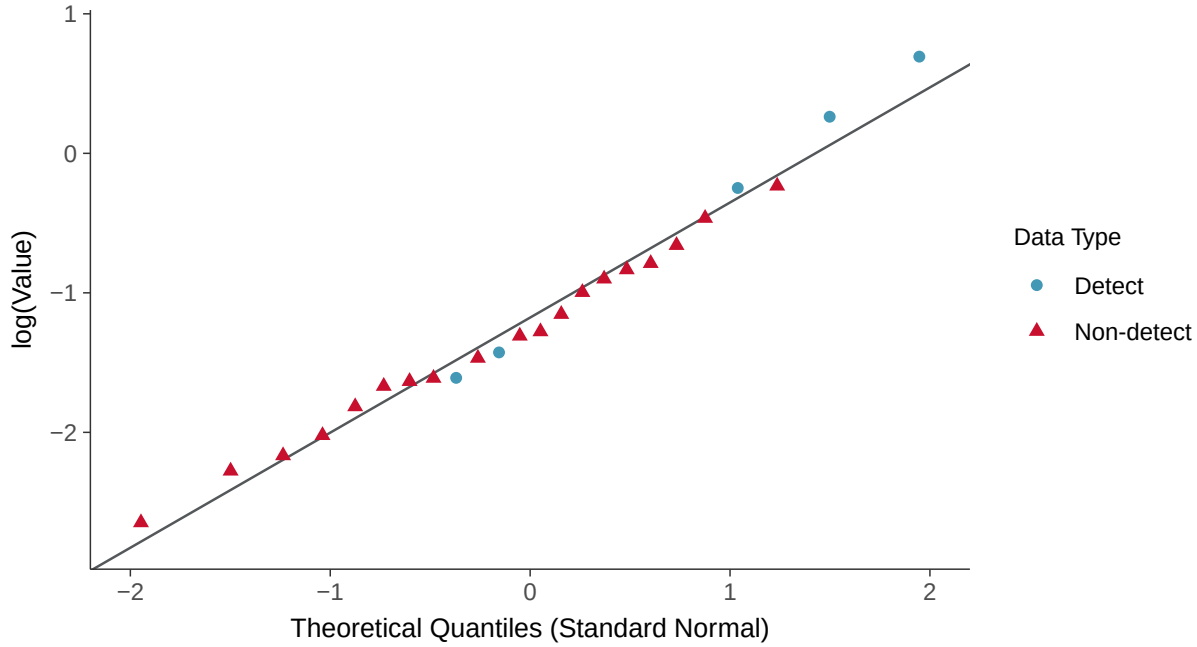
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15013 (ug/L)



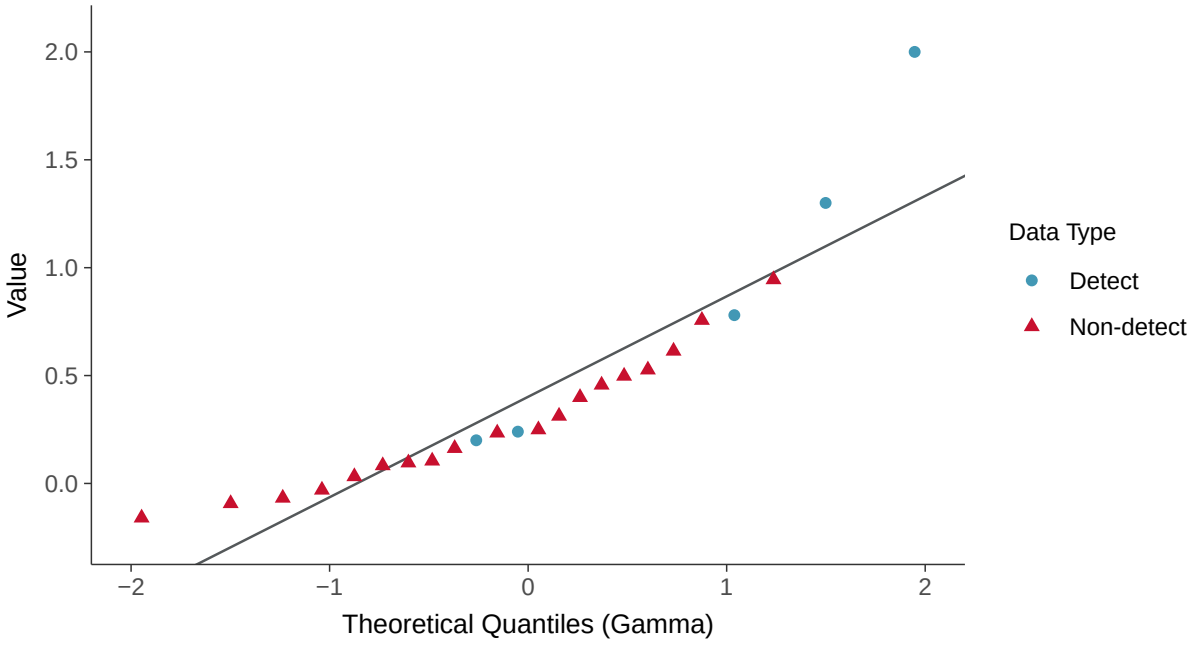

**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15013 (ug/L)



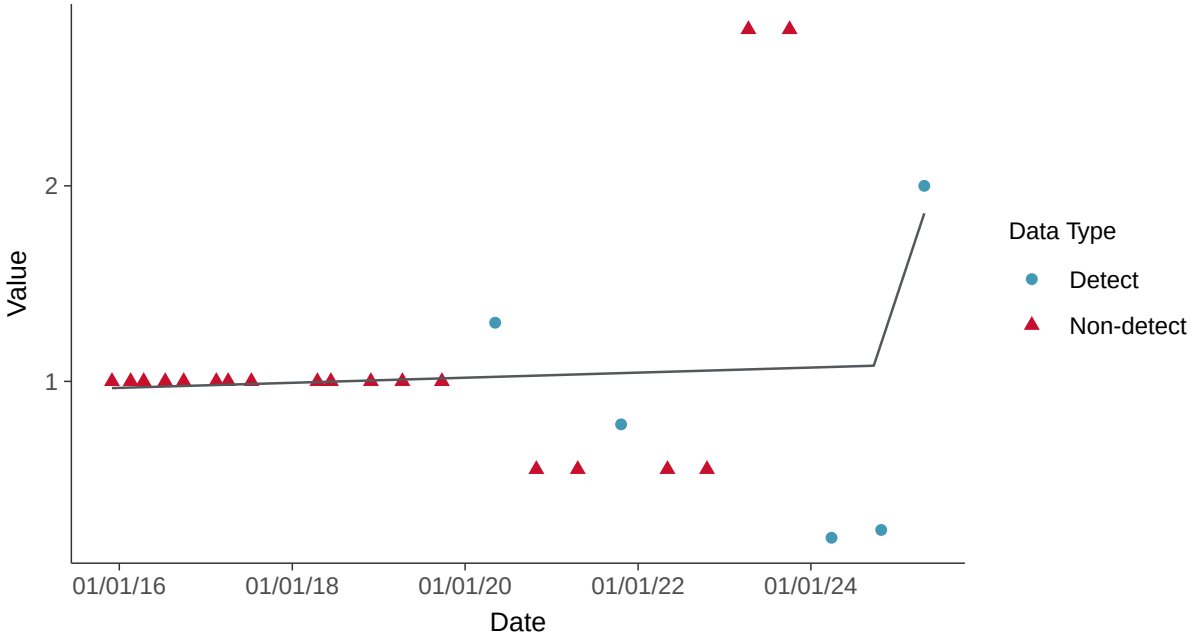
**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15013 (ug/L)



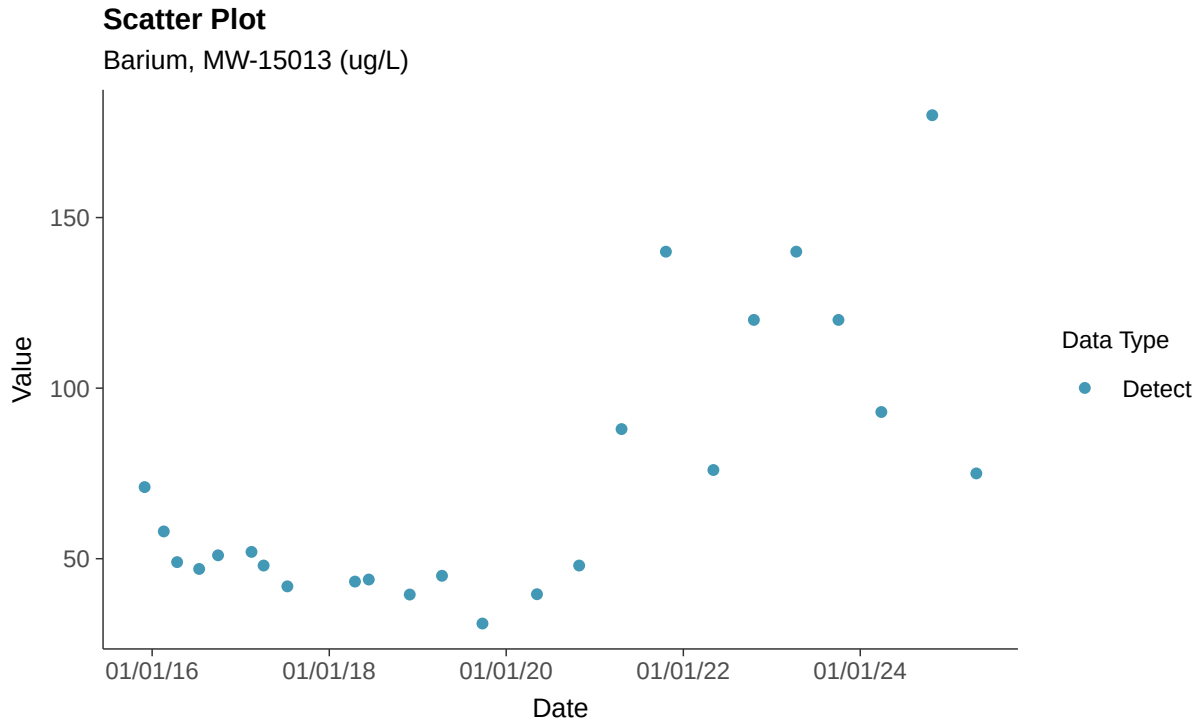

**Trend Regression: Piecewise Linear-Linear**

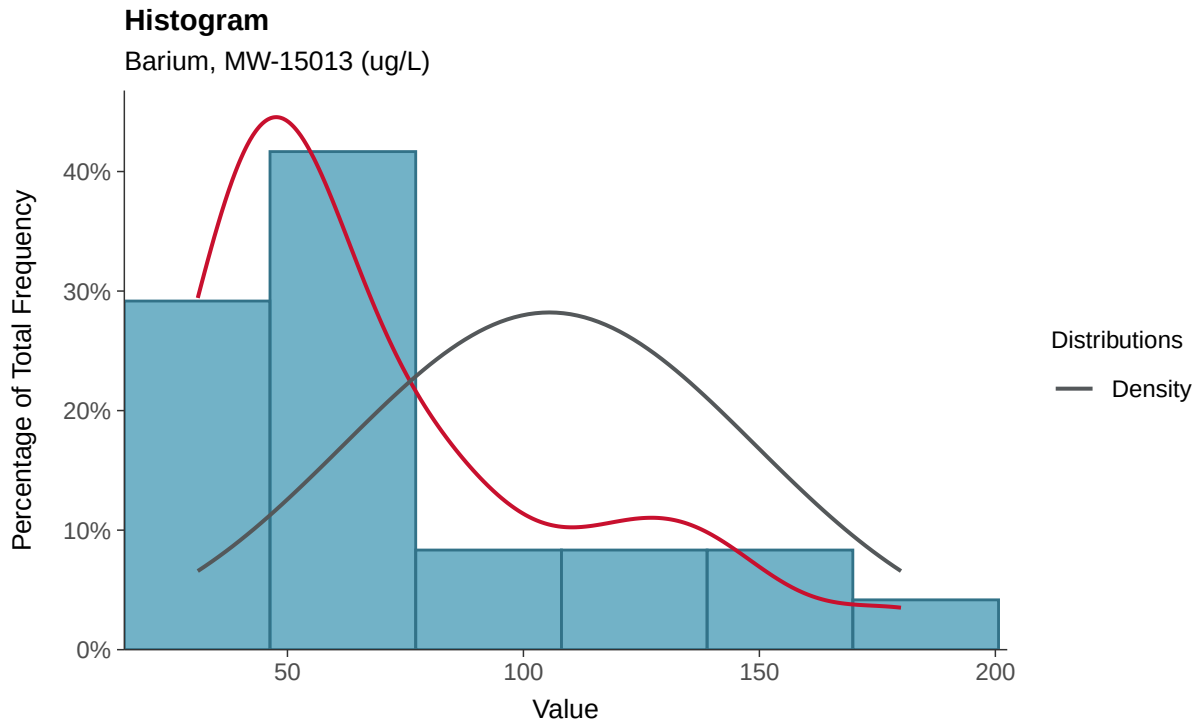
Arsenic, MW-15013 (ug/L)



# Appendix IV: Barium, MW-15013

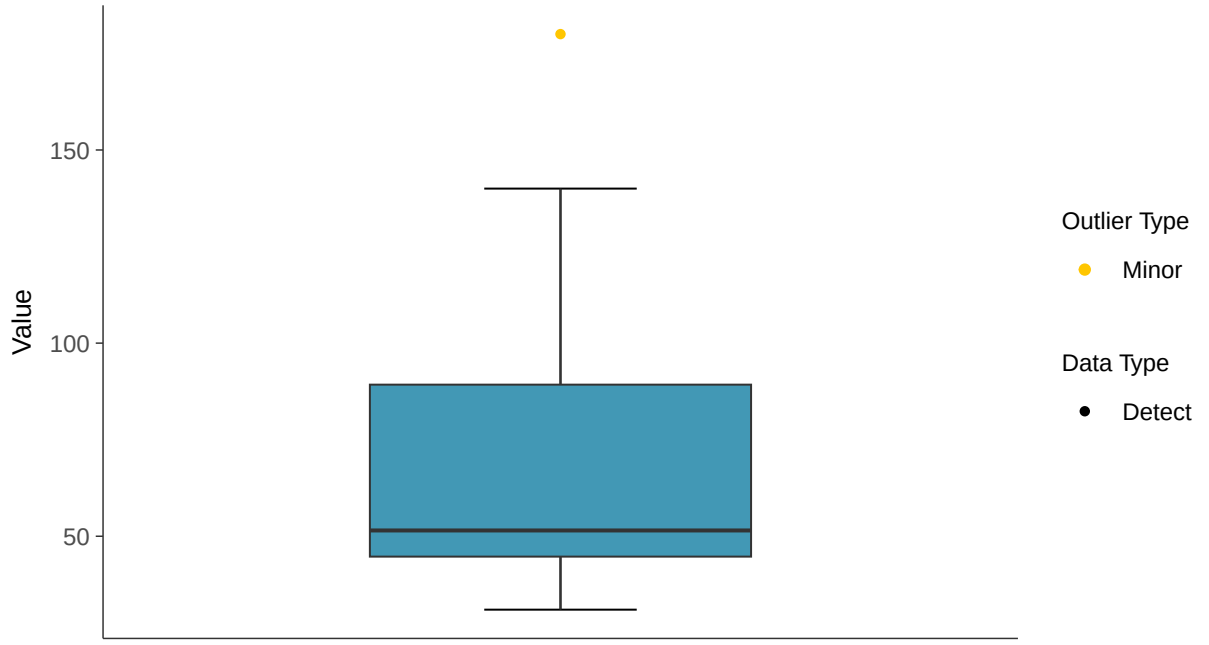
ID: 03_2_103



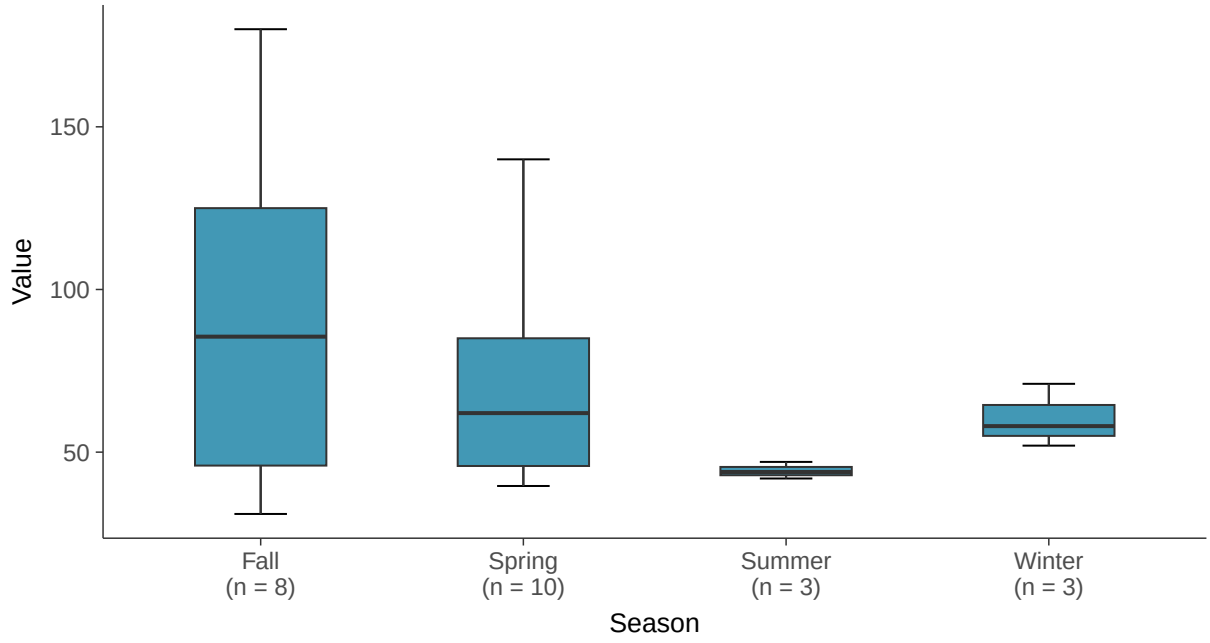
## Boxplot

Barium, MW-15013 (ug/L)



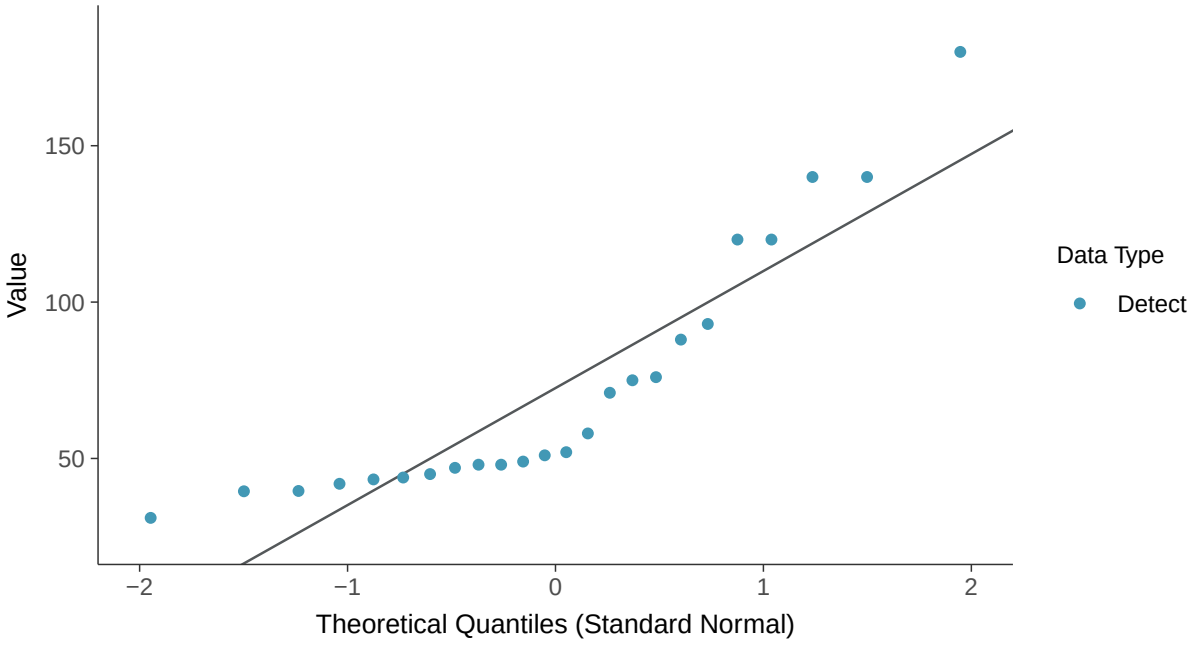

## Boxplot by Season

Barium, MW-15013 (ug/L)



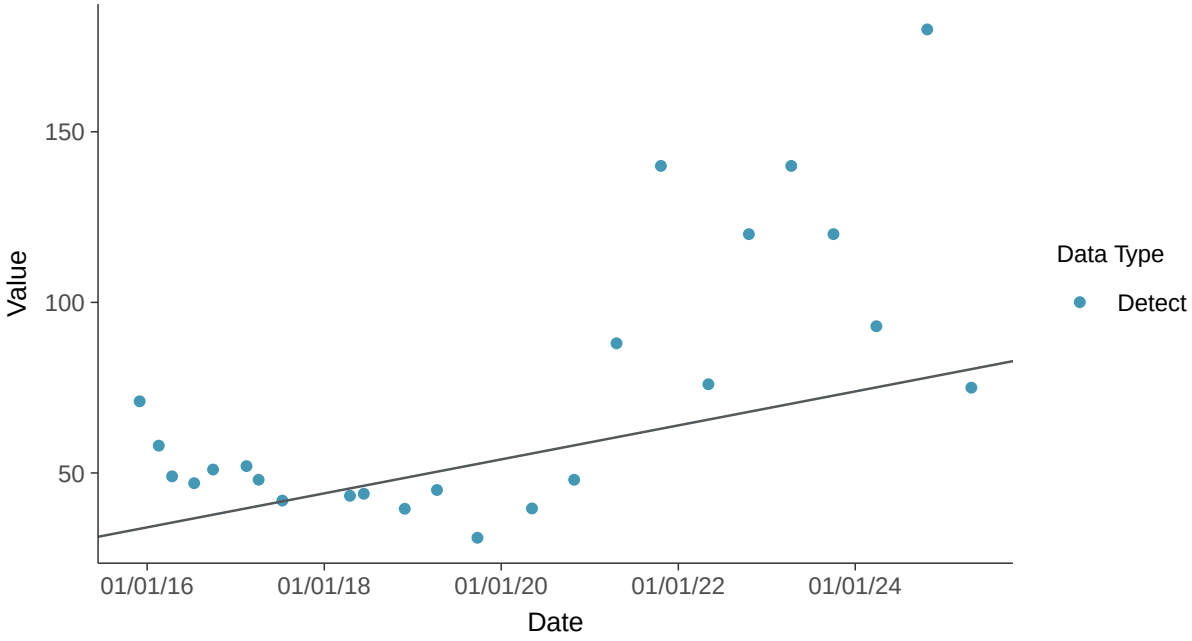
**Normal Q-Q plot**

Barium, MW-15013 (ug/L)



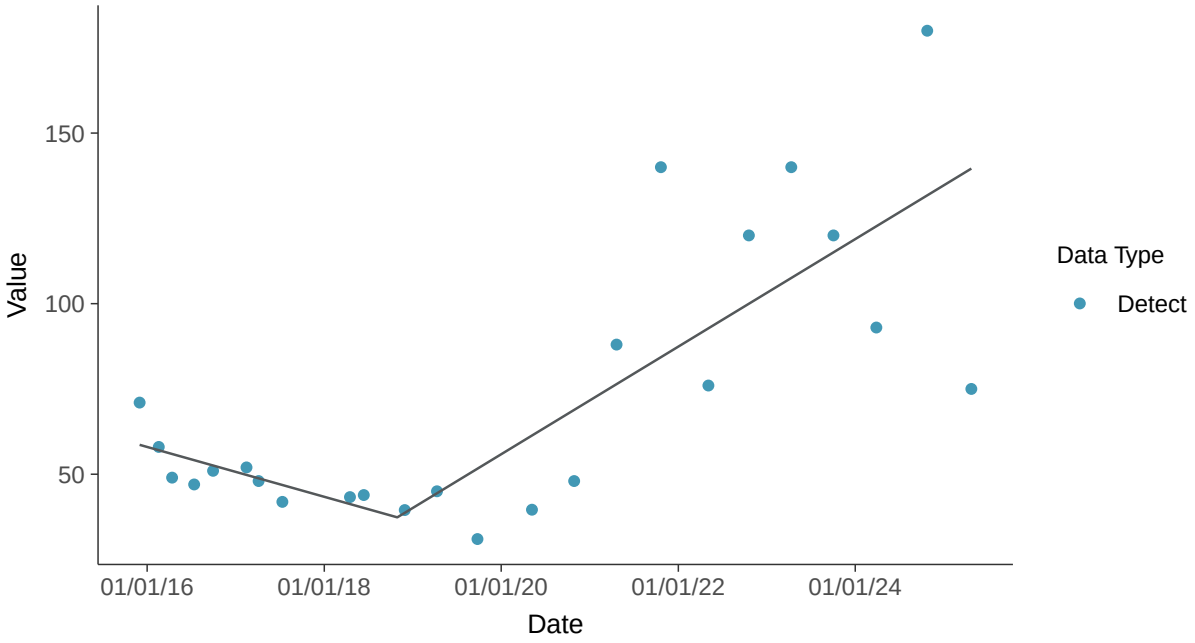

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15013 (ug/L)



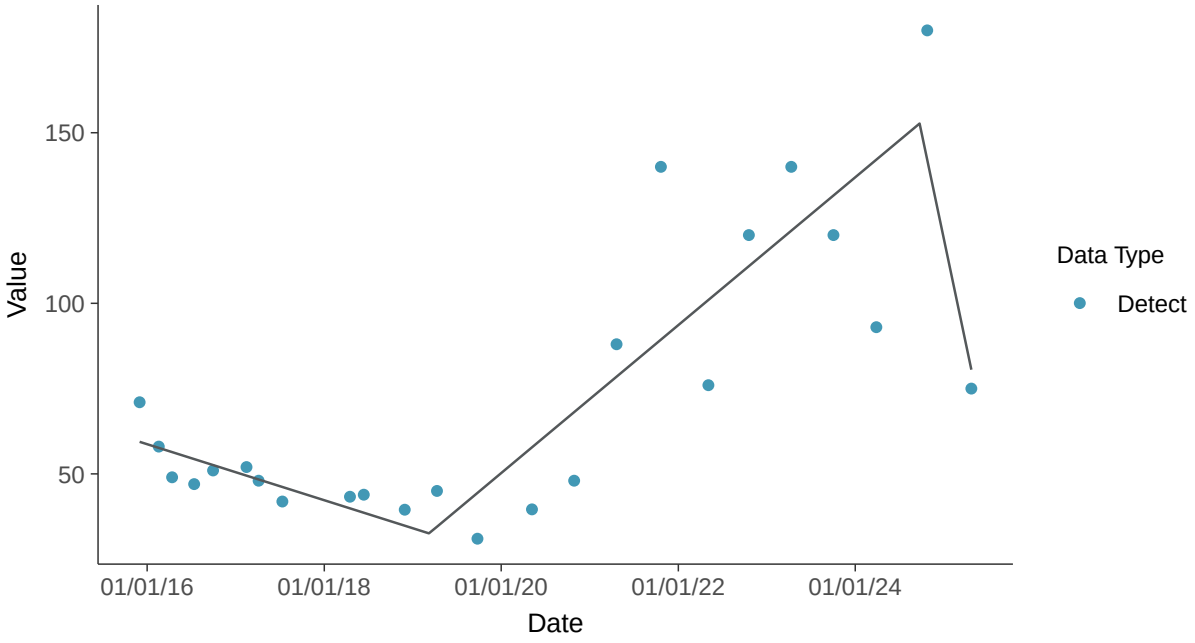
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15013 (ug/L)



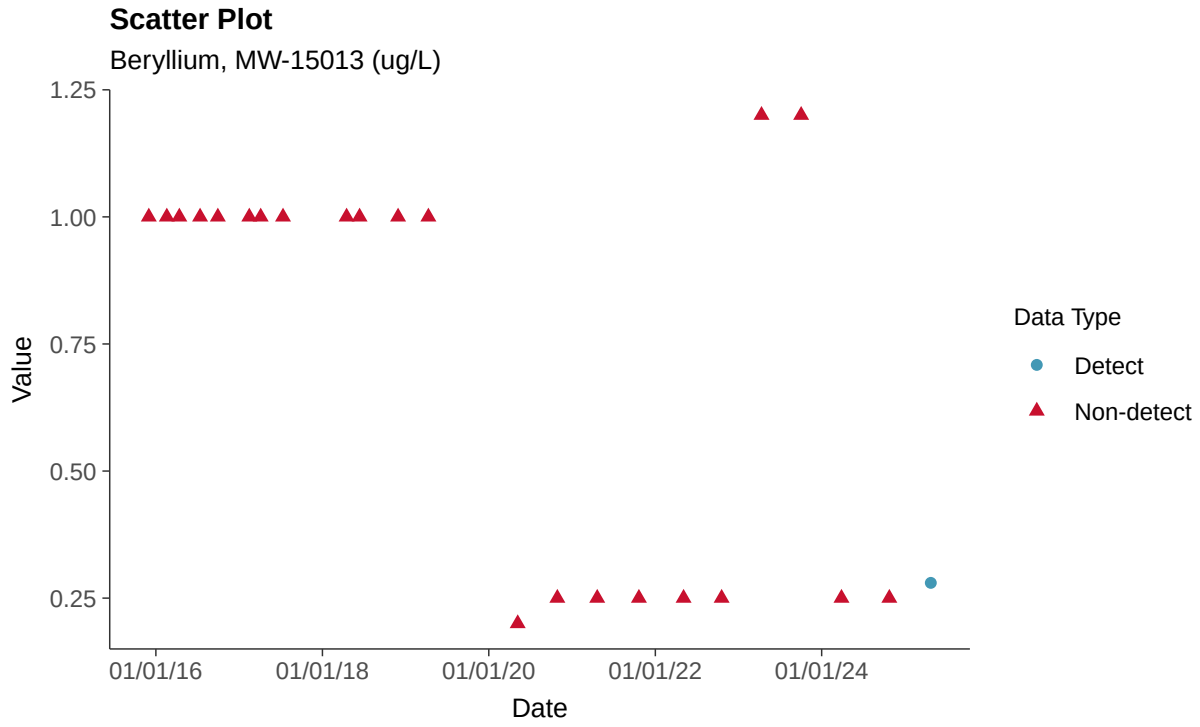

**Trend Regression: Piecewise Linear-Linear-Linear**

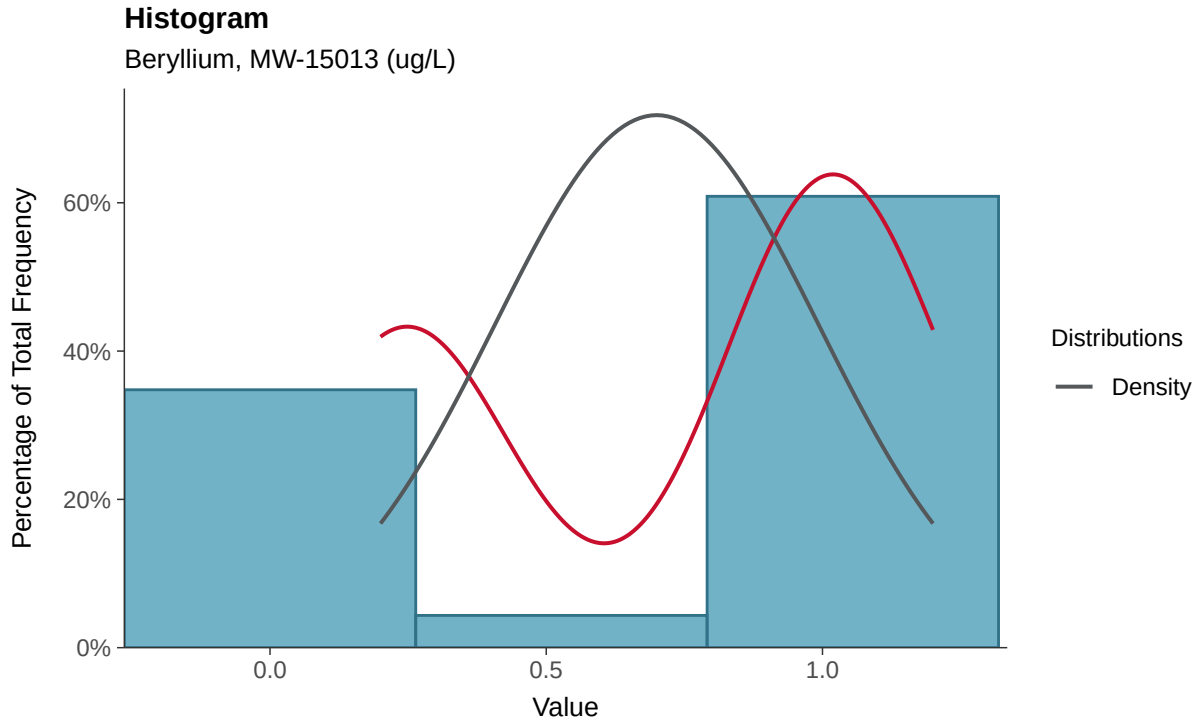
Barium, MW-15013 (ug/L)



## Appendix IV: Beryllium, MW-15013

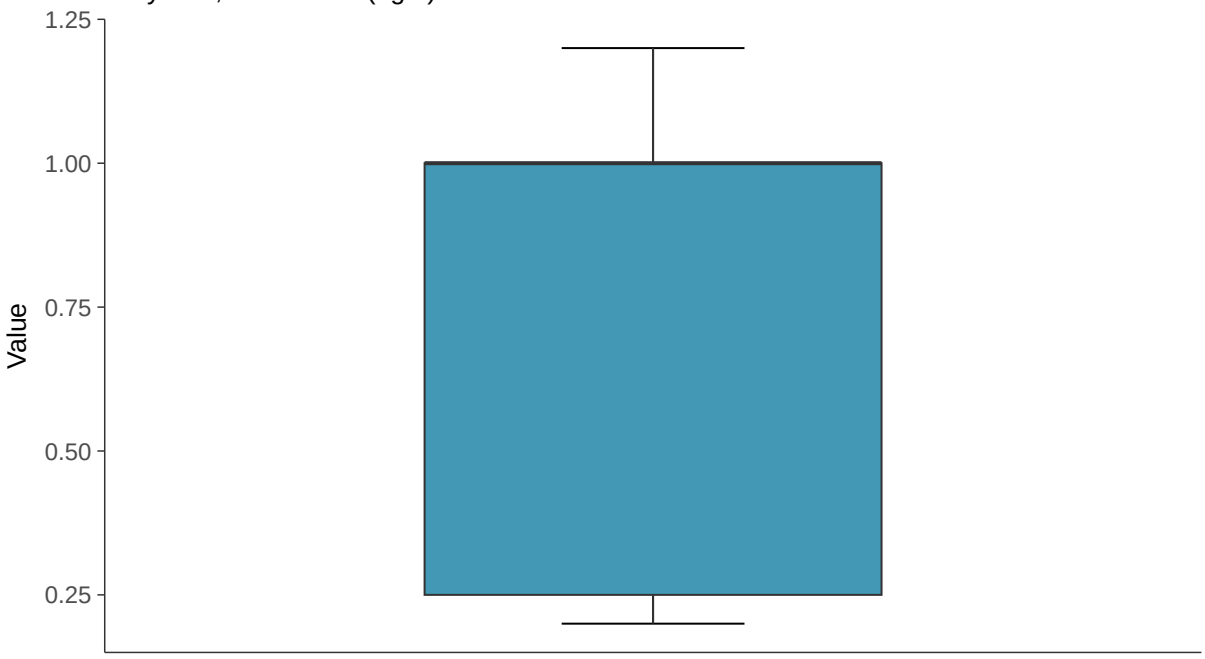
ID: 03_2_104



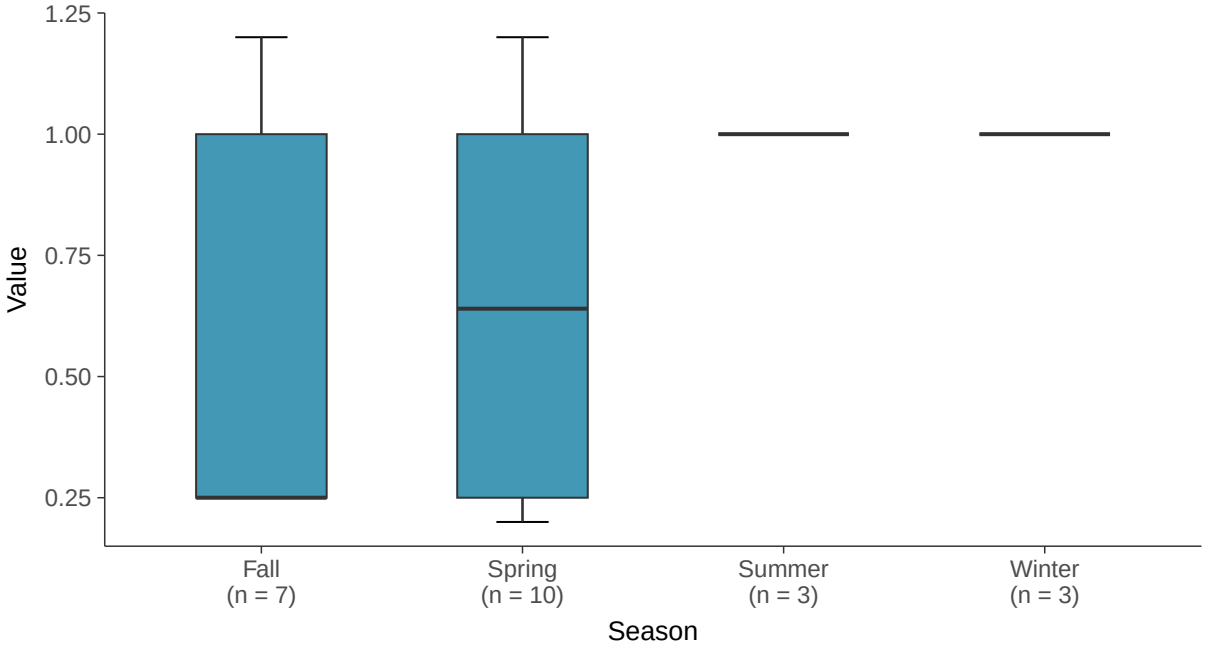
**Boxplot**

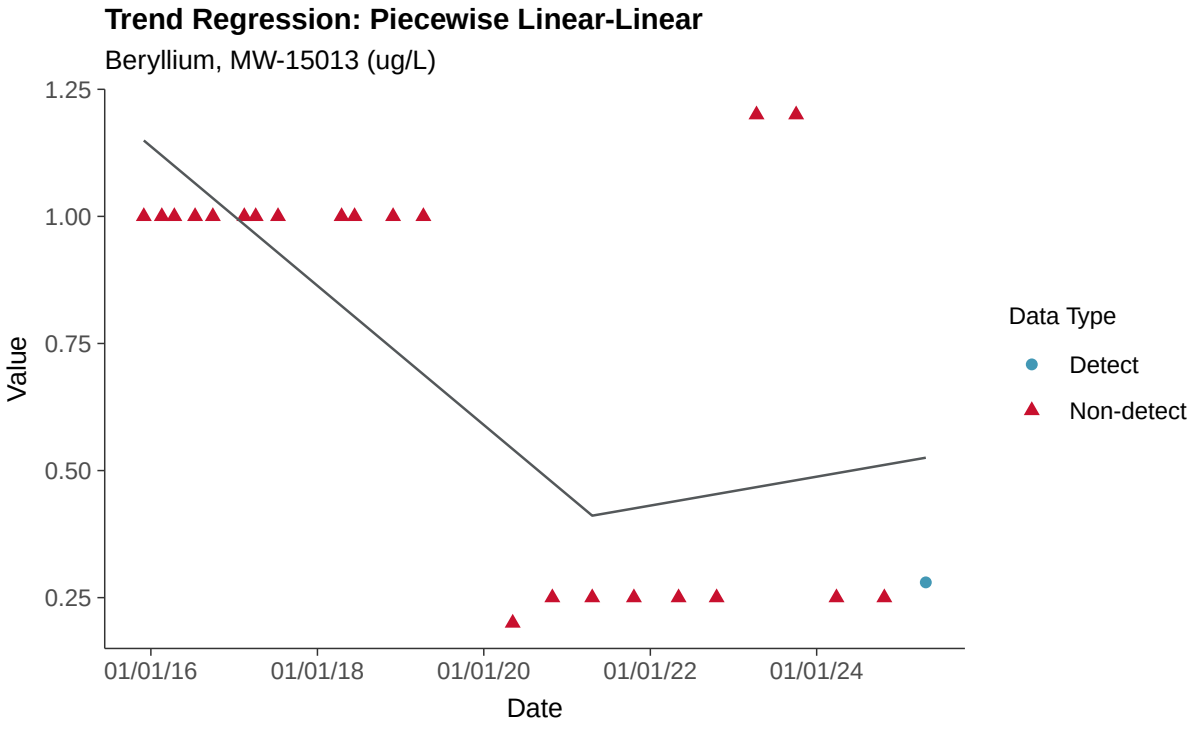
Beryllium, MW-15013 (ug/L)




**Boxplot by Season**

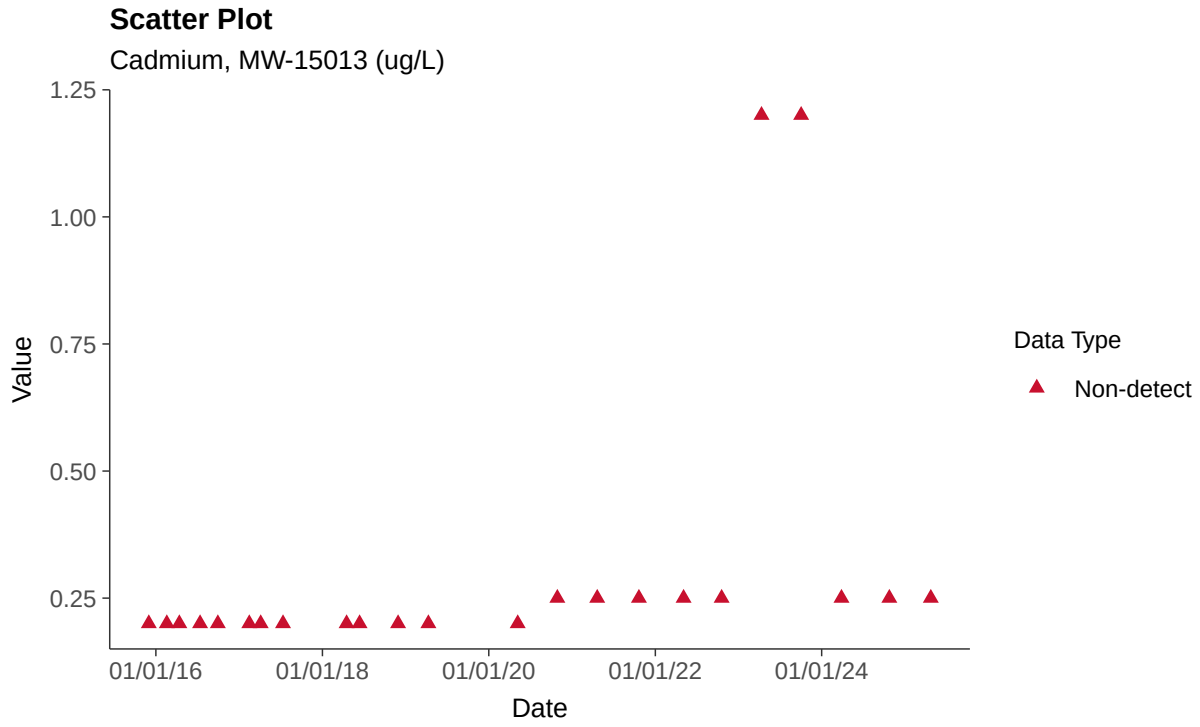
Beryllium, MW-15013 (ug/L)

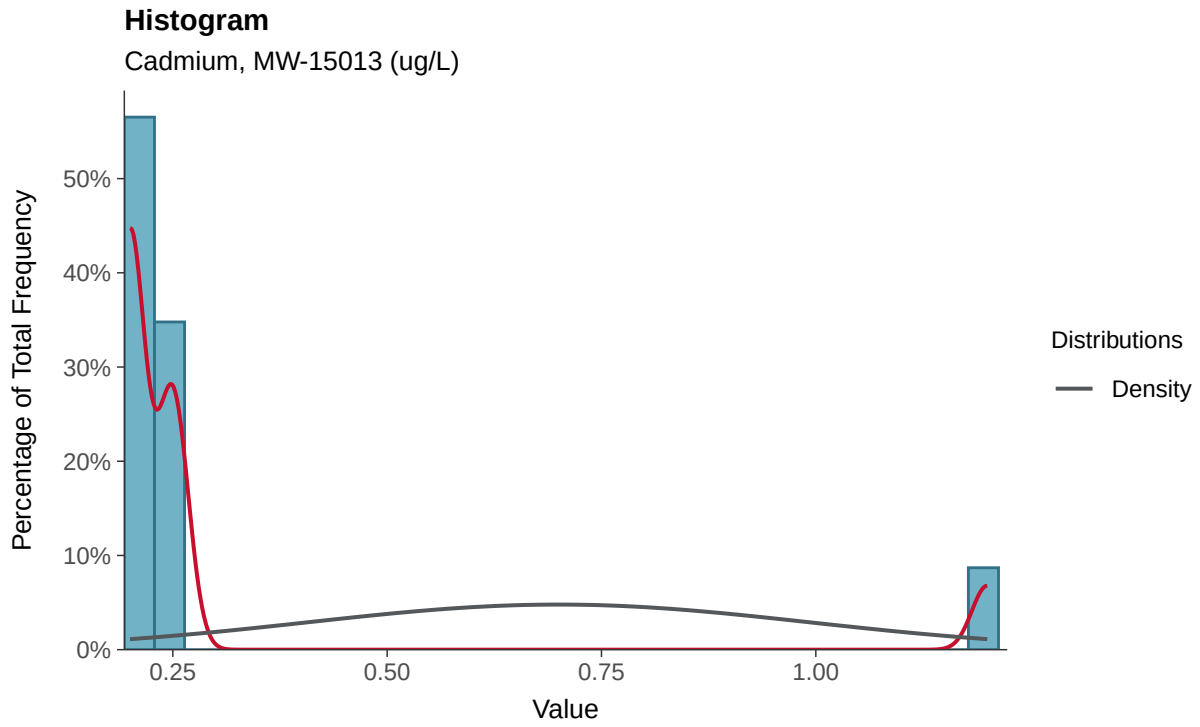



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15013 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15013

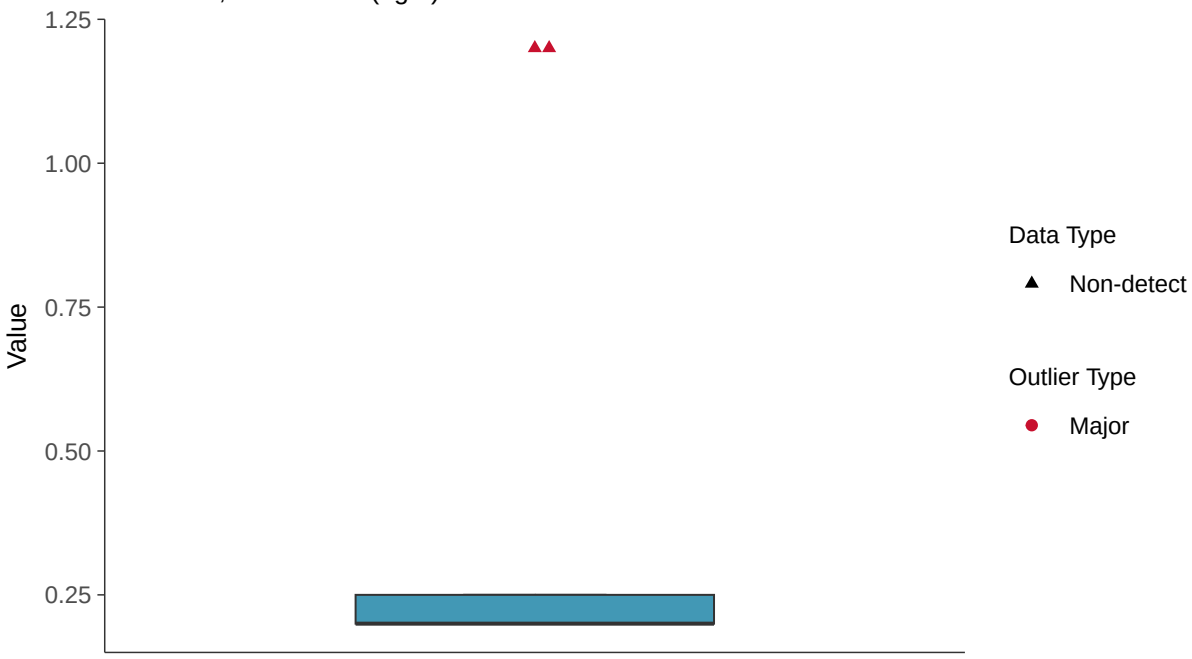
ID: 03_2_106



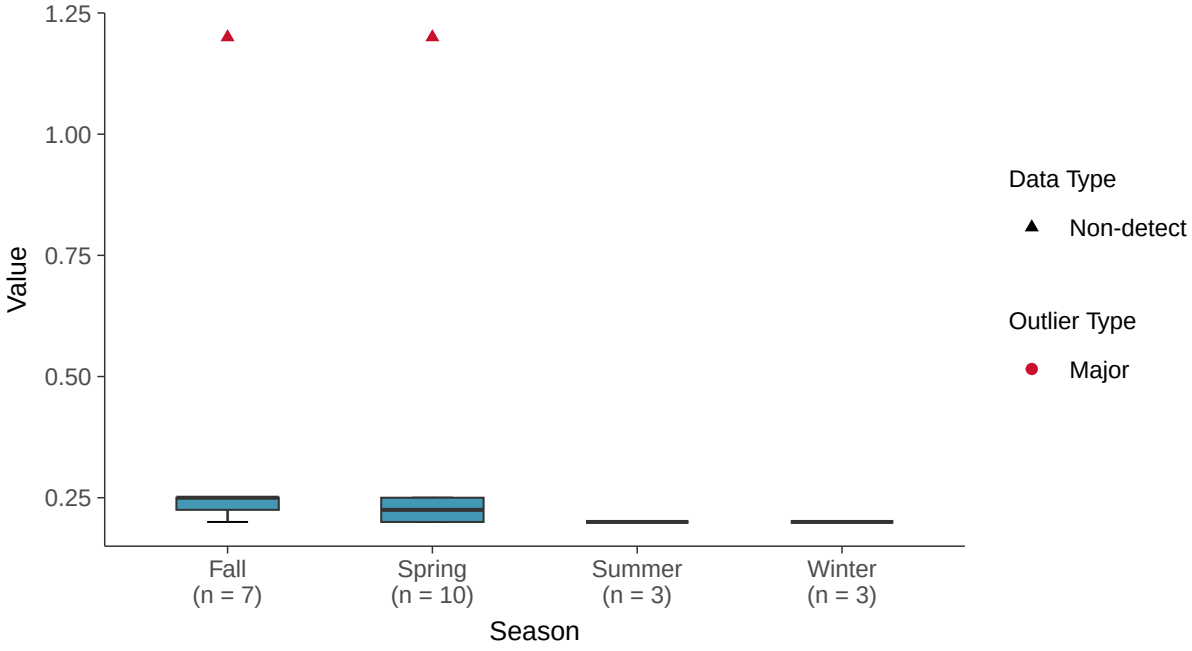
## Boxplot

Cadmium, MW-15013 (ug/L)



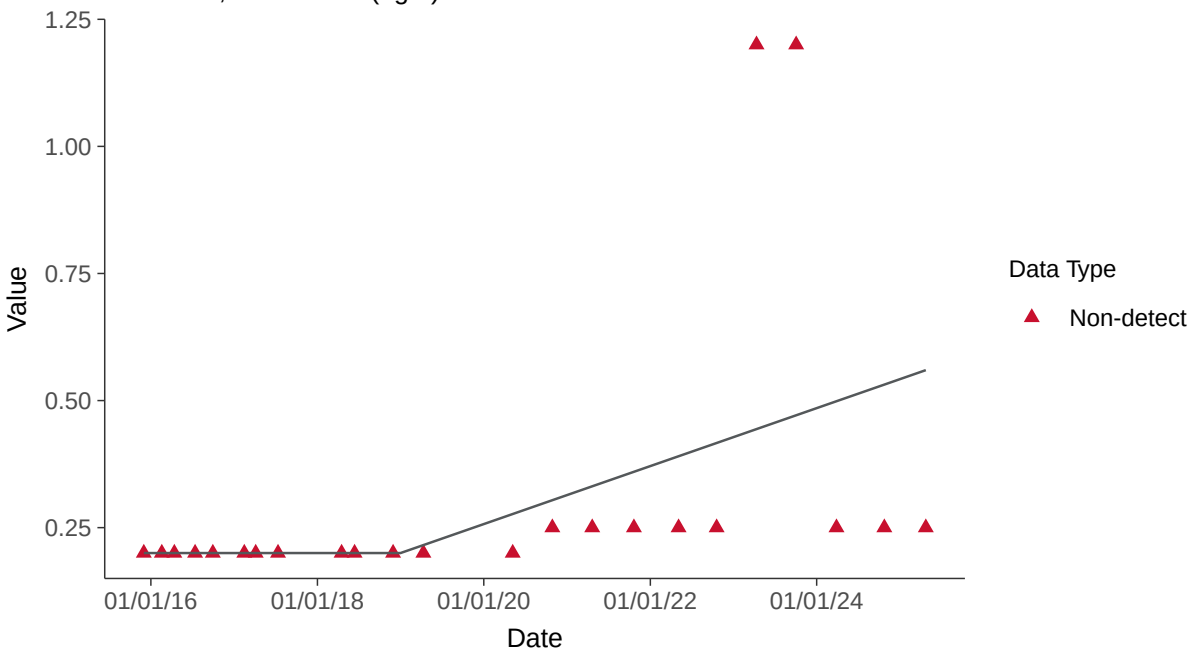

## Boxplot by Season

Cadmium, MW-15013 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15013 (ug/L)

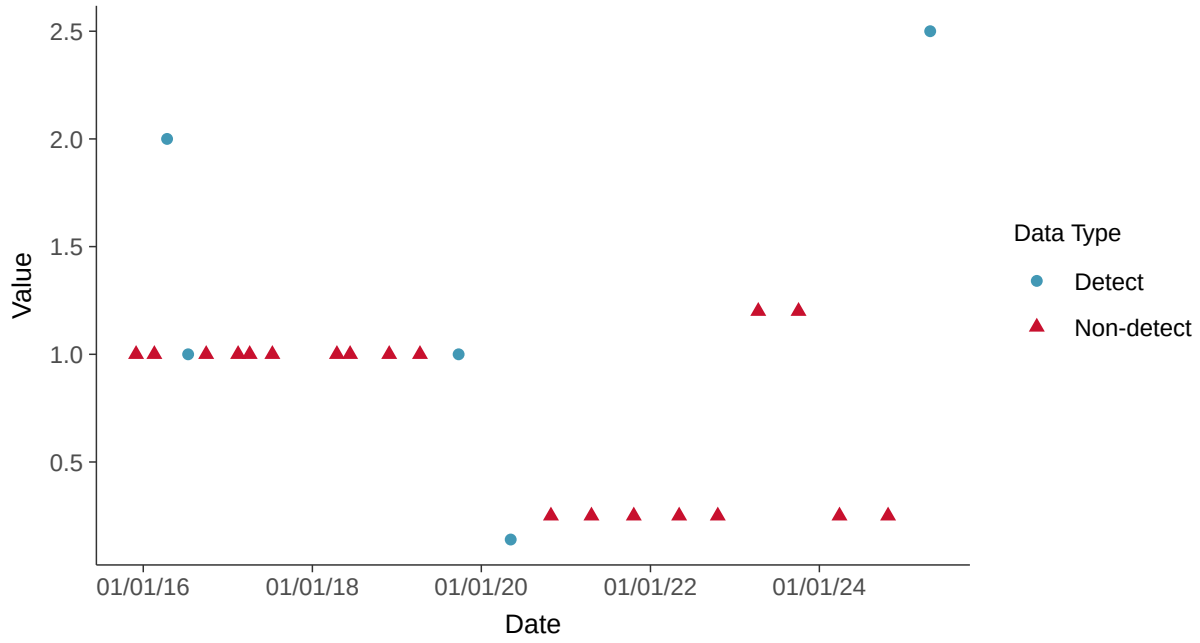


## Appendix IV: Chromium, MW-15013

ID: 03_2_109

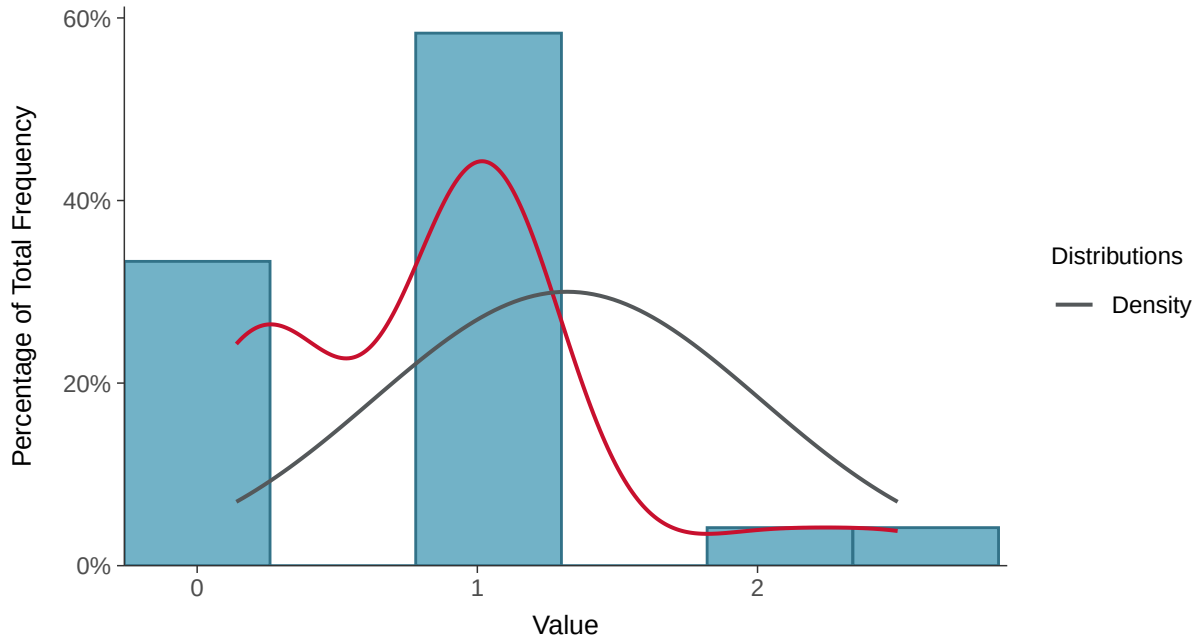
**Scatter Plot**

Chromium, MW-15013 (ug/L)



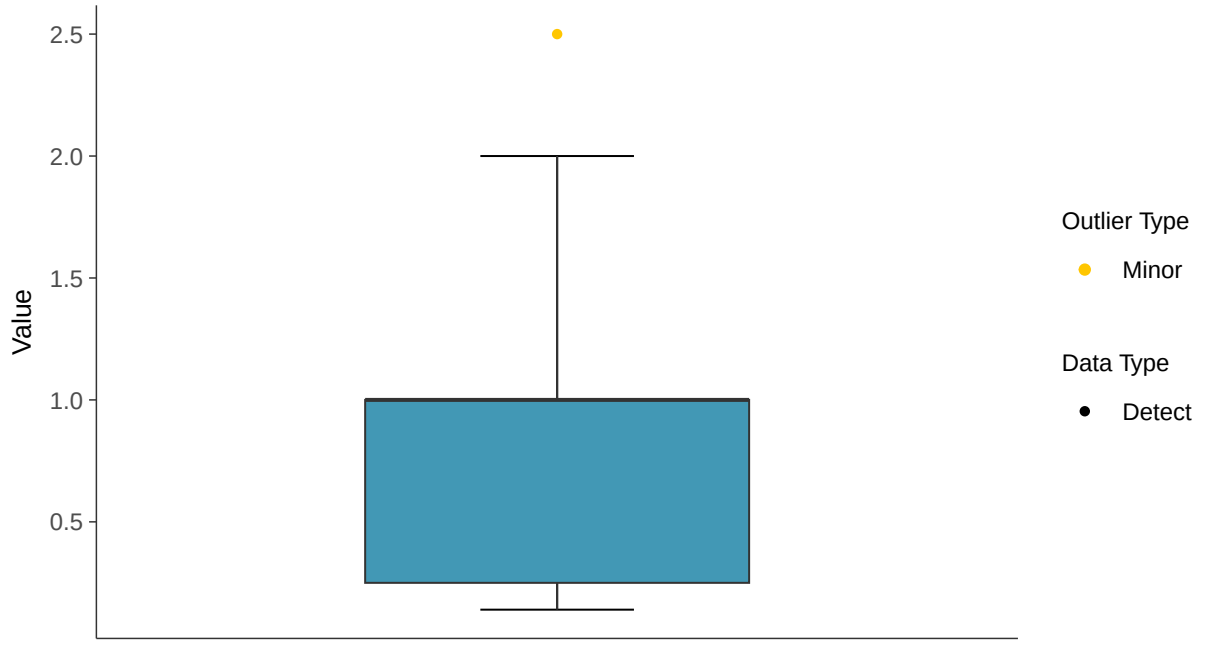

**Histogram**

Chromium, MW-15013 (ug/L)



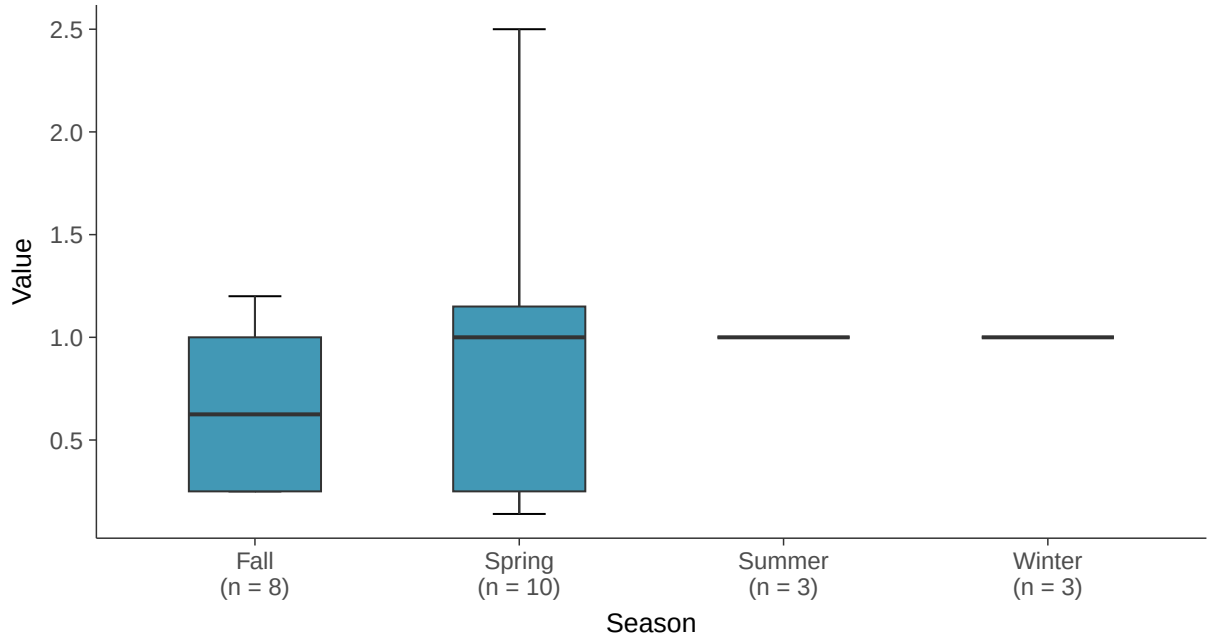
## Boxplot

Chromium, MW-15013 (ug/L)



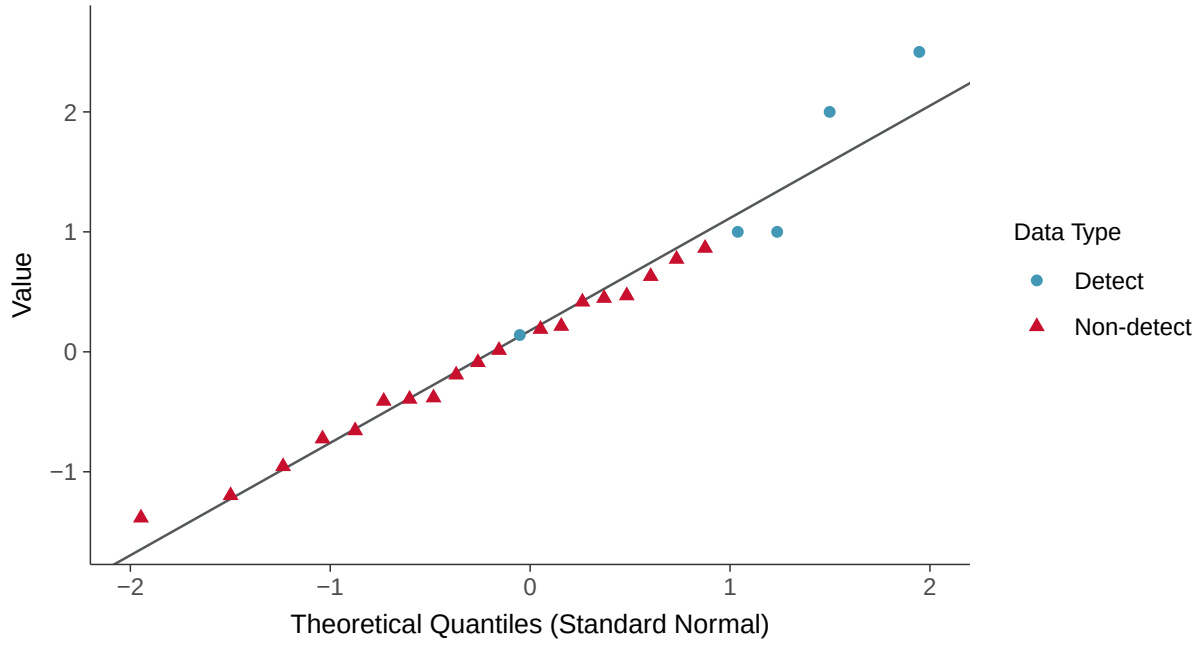

## Boxplot by Season

Chromium, MW-15013 (ug/L)



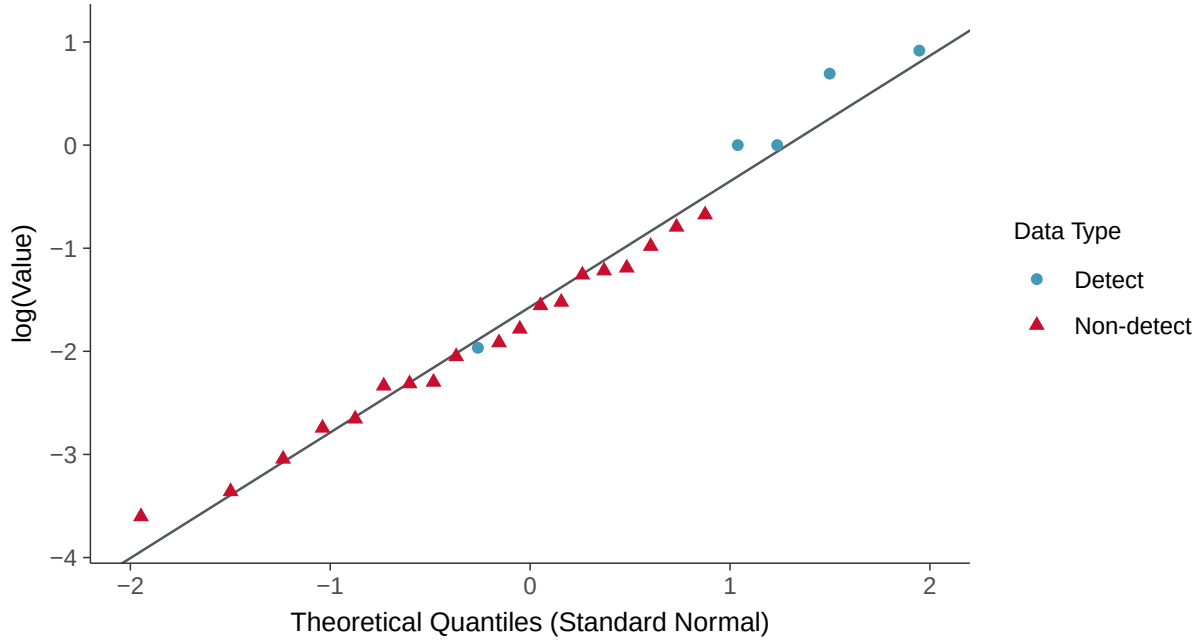
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15013 (ug/L)



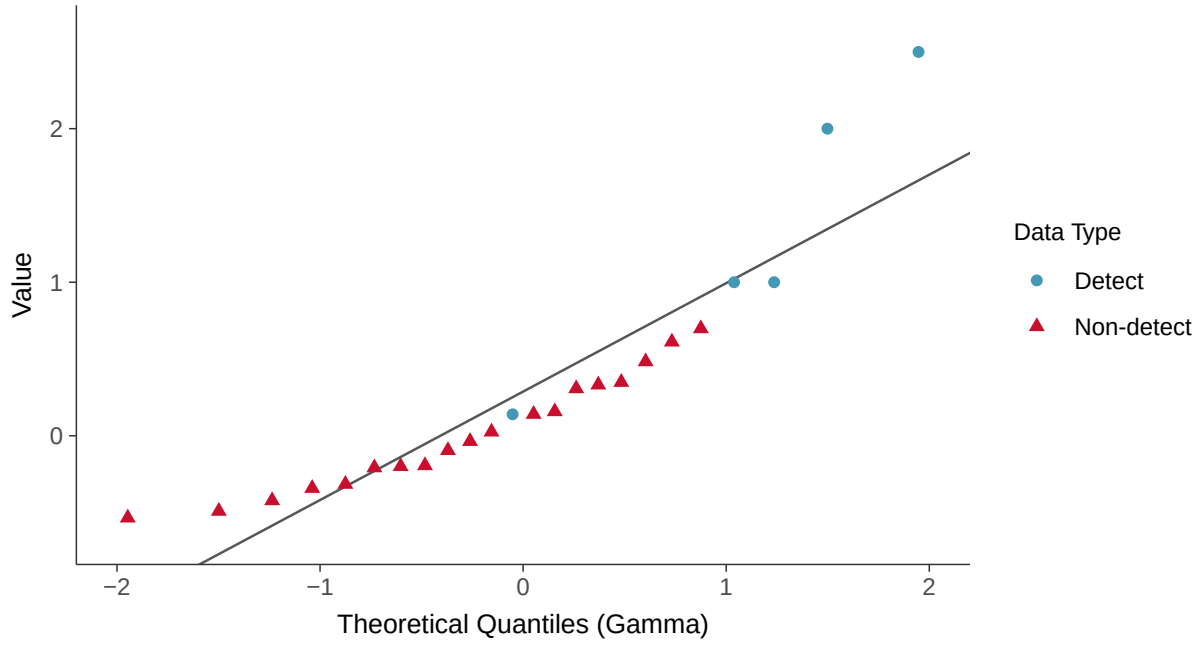

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15013 (ug/L)



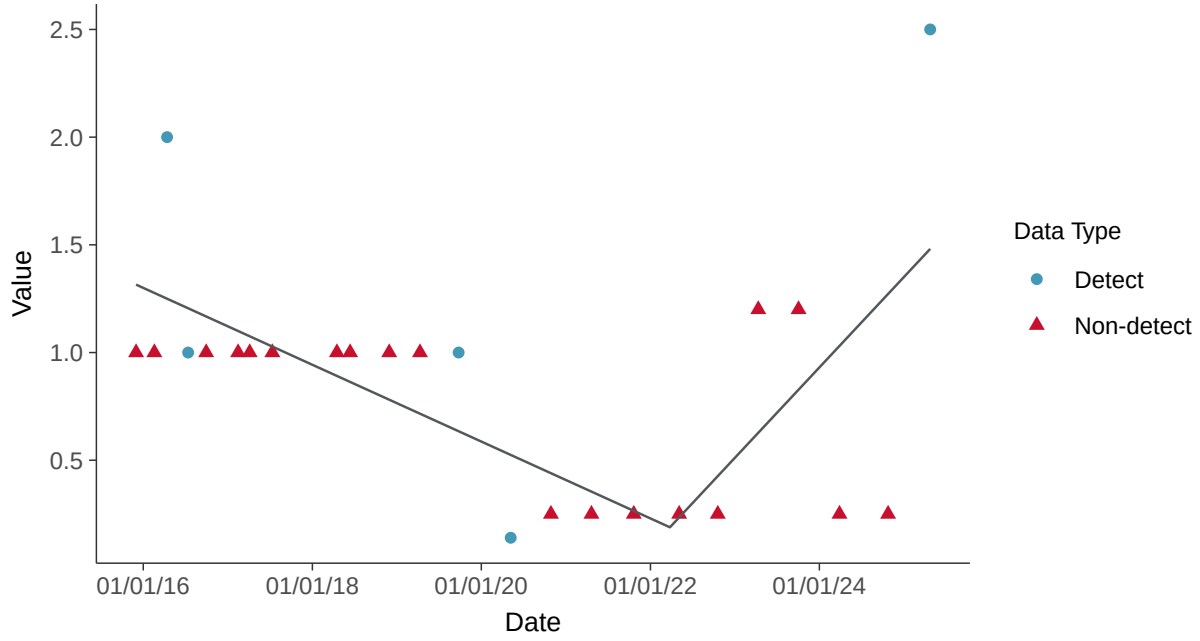
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15013 (ug/L)



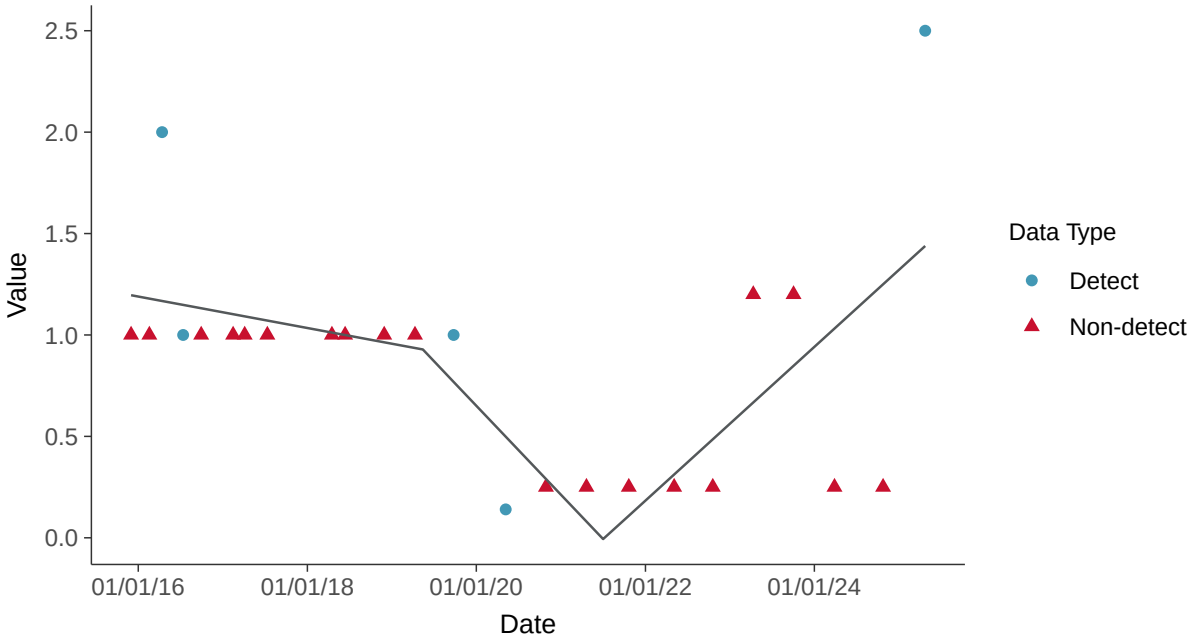

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15013 (ug/L)



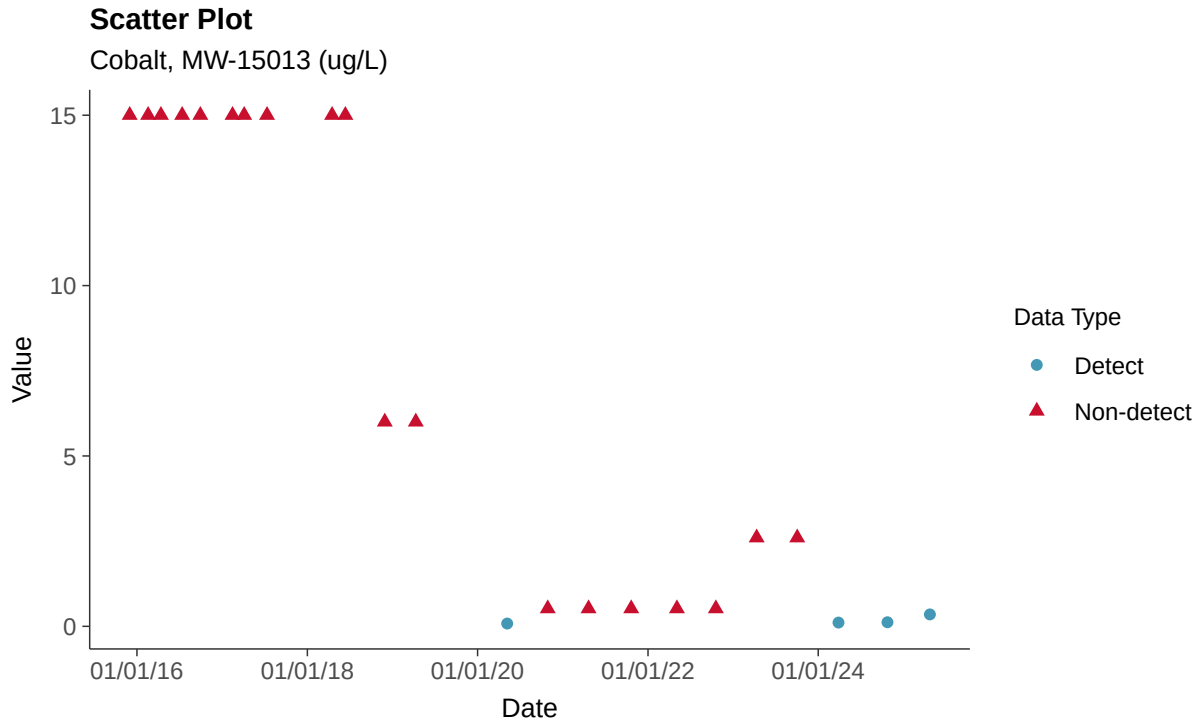
**Trend Regression: Piecewise Linear-Linear-Linear**

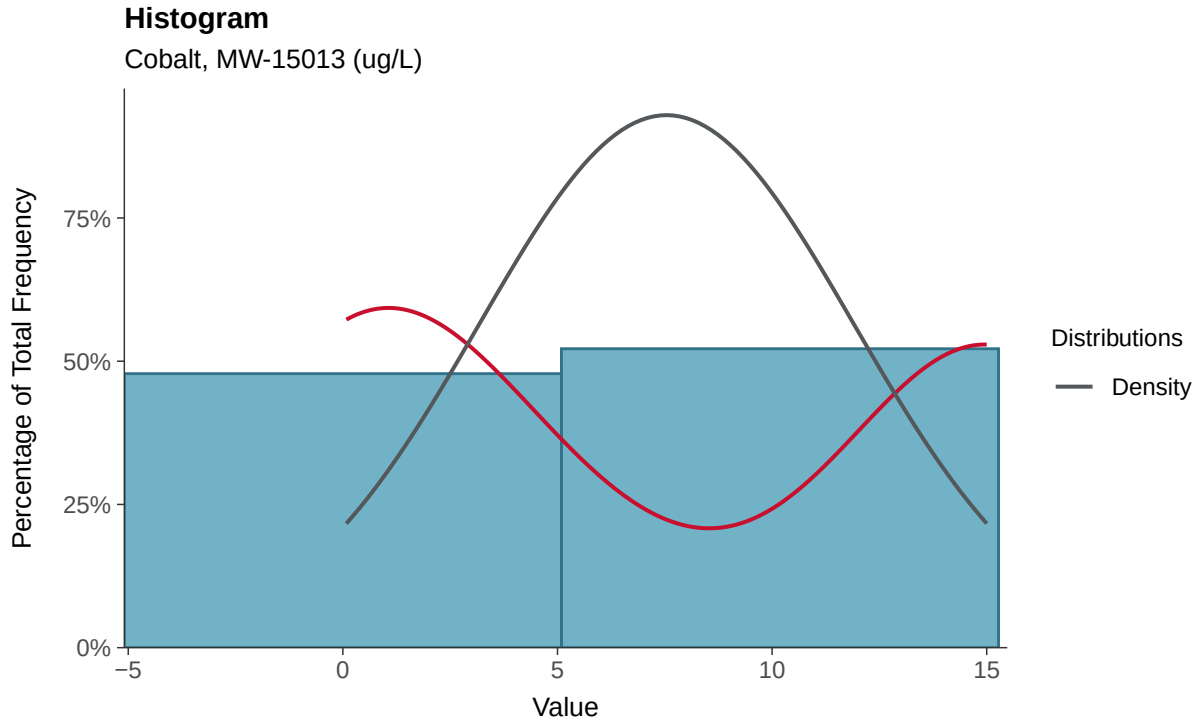
Chromium, MW-15013 (ug/L)



## Appendix IV: Cobalt, MW-15013

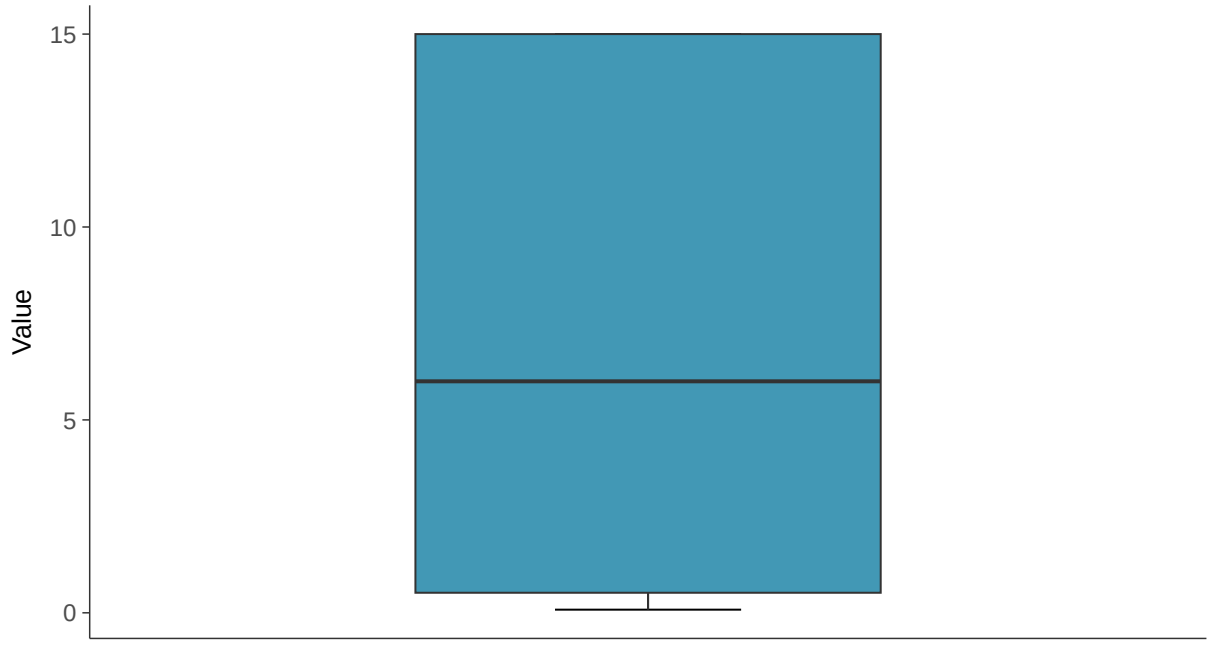
ID: 03_2_110



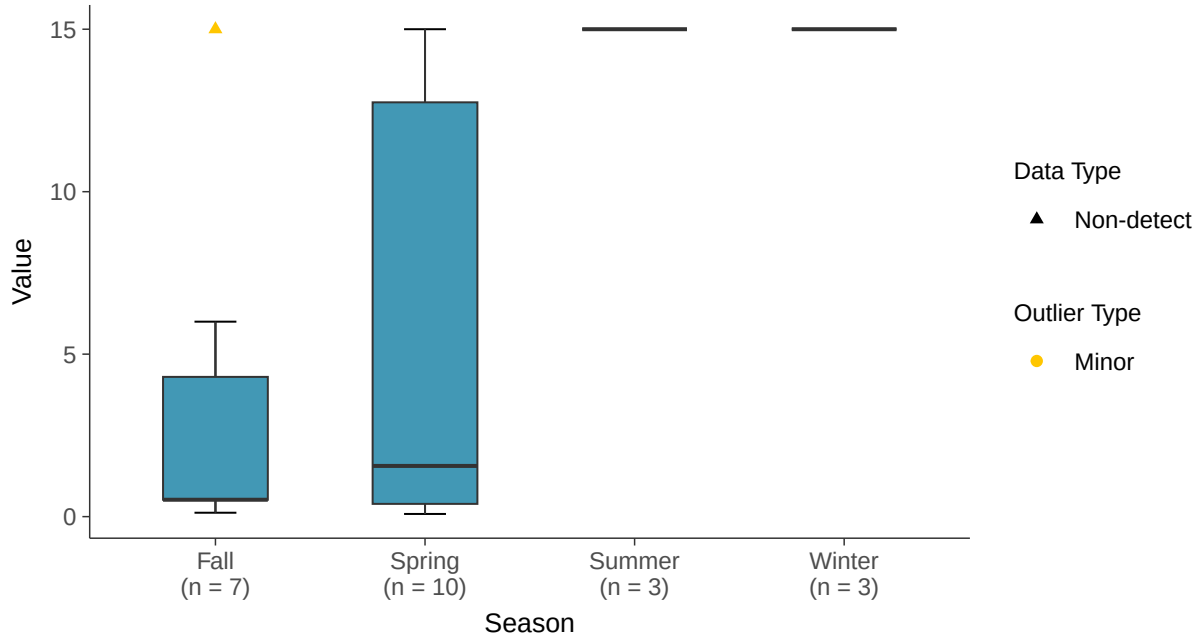
**Boxplot**

Cobalt, MW-15013 (ug/L)



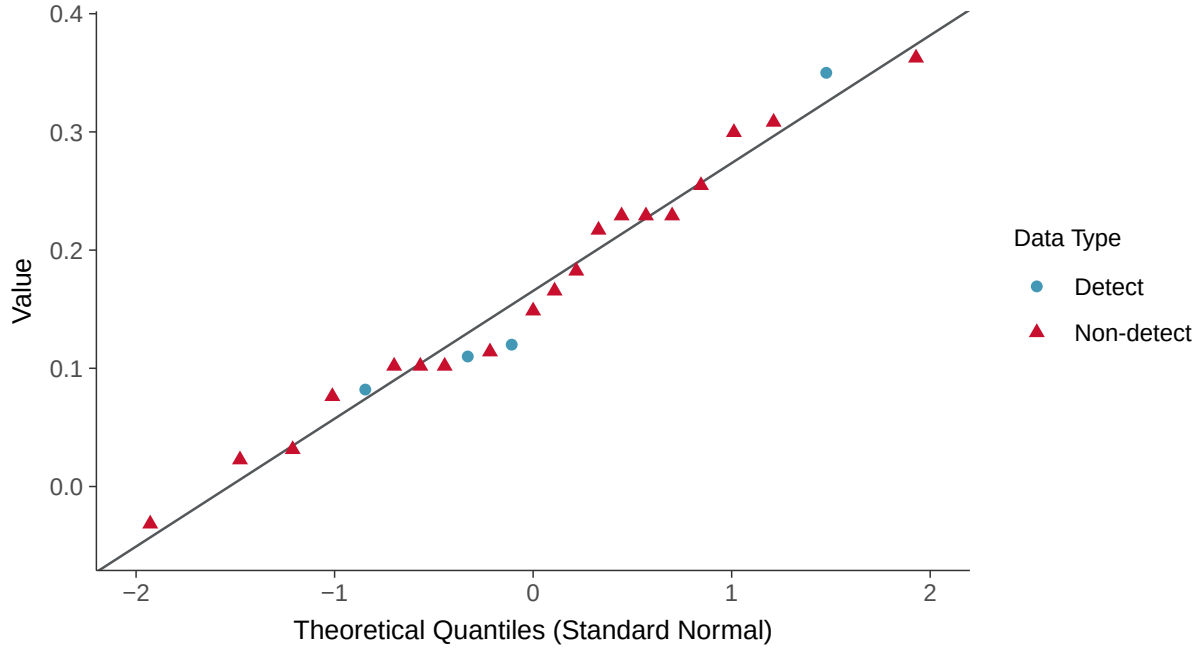

**Boxplot by Season**

Cobalt, MW-15013 (ug/L)



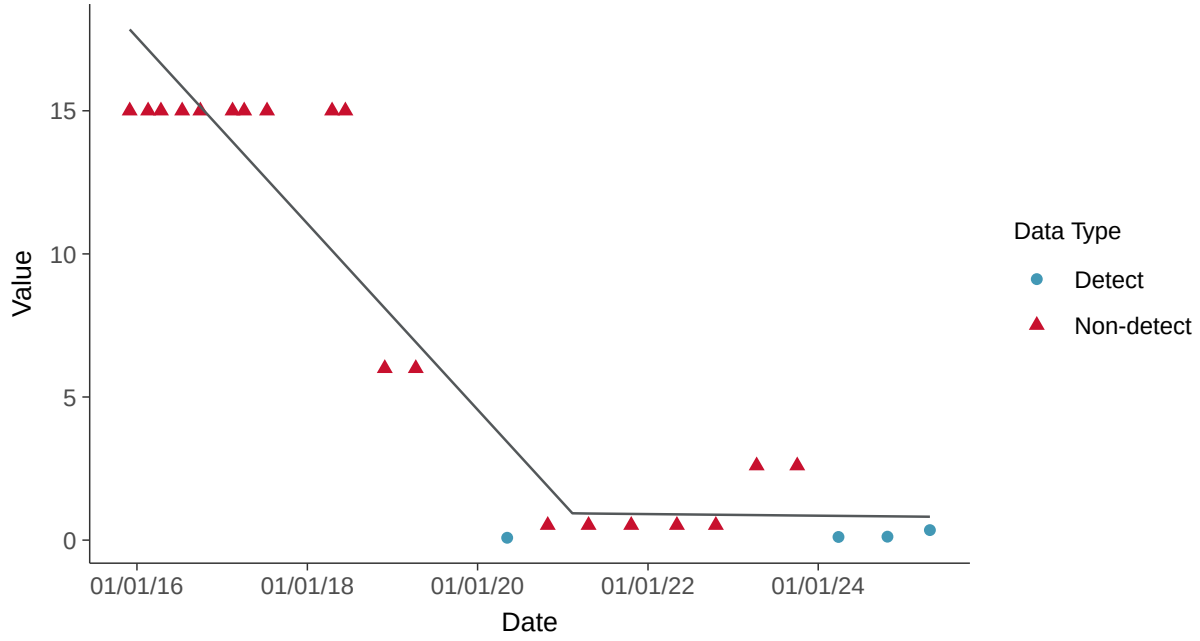
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15013 (ug/L)



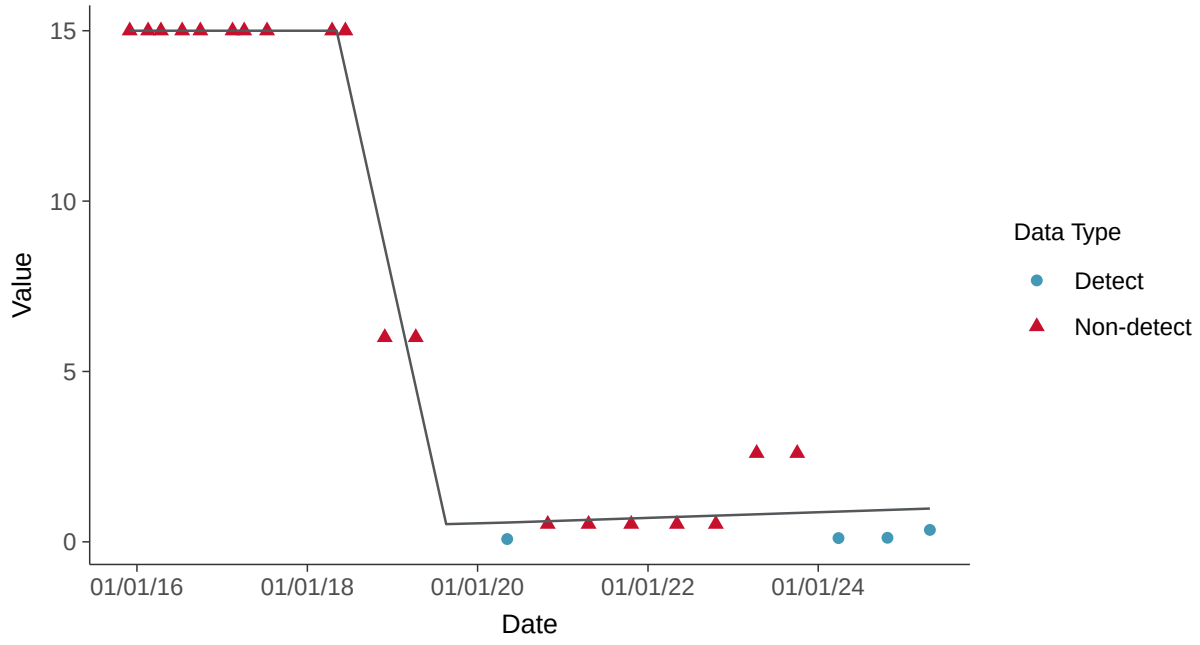

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15013 (ug/L)



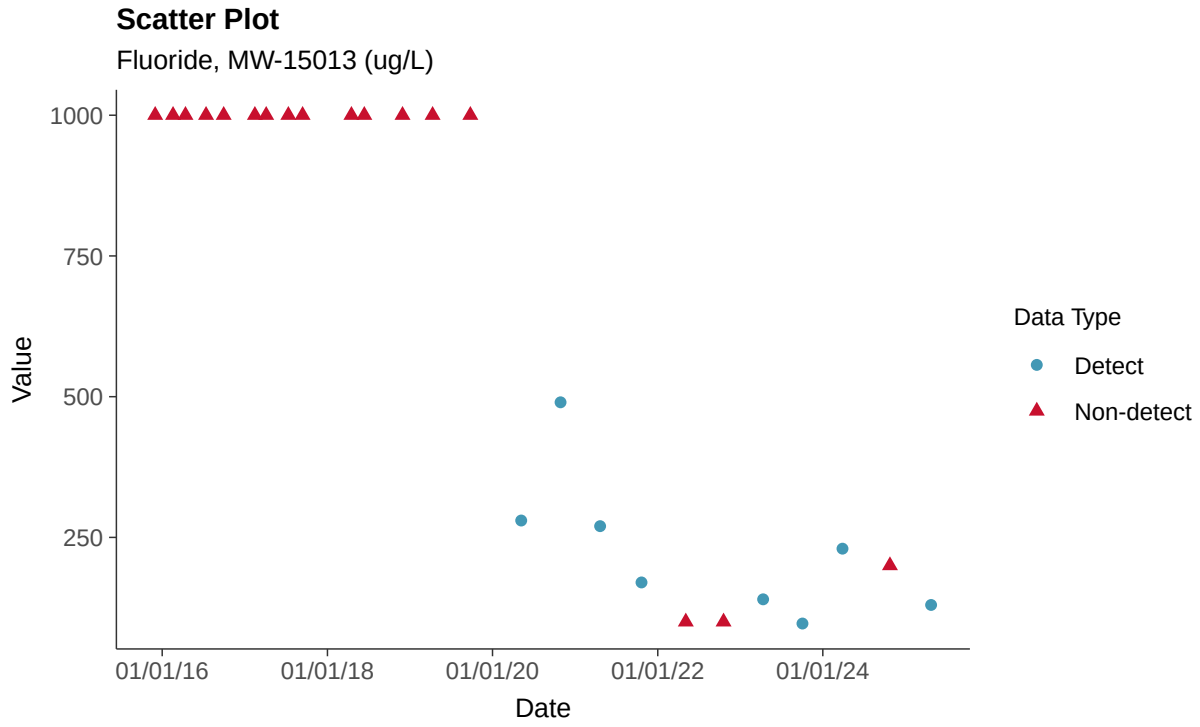
**Trend Regression: Piecewise Linear-Linear-Linear**

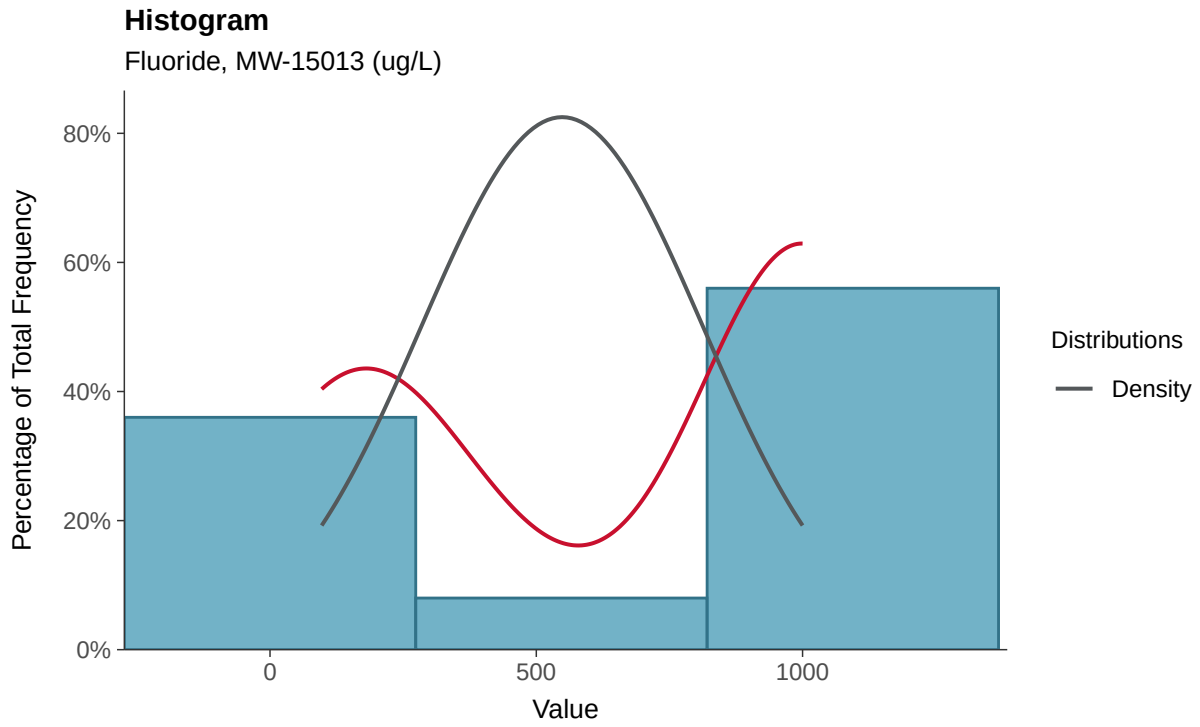
Cobalt, MW-15013 (ug/L)



## Appendix IV: Fluoride, MW-15013

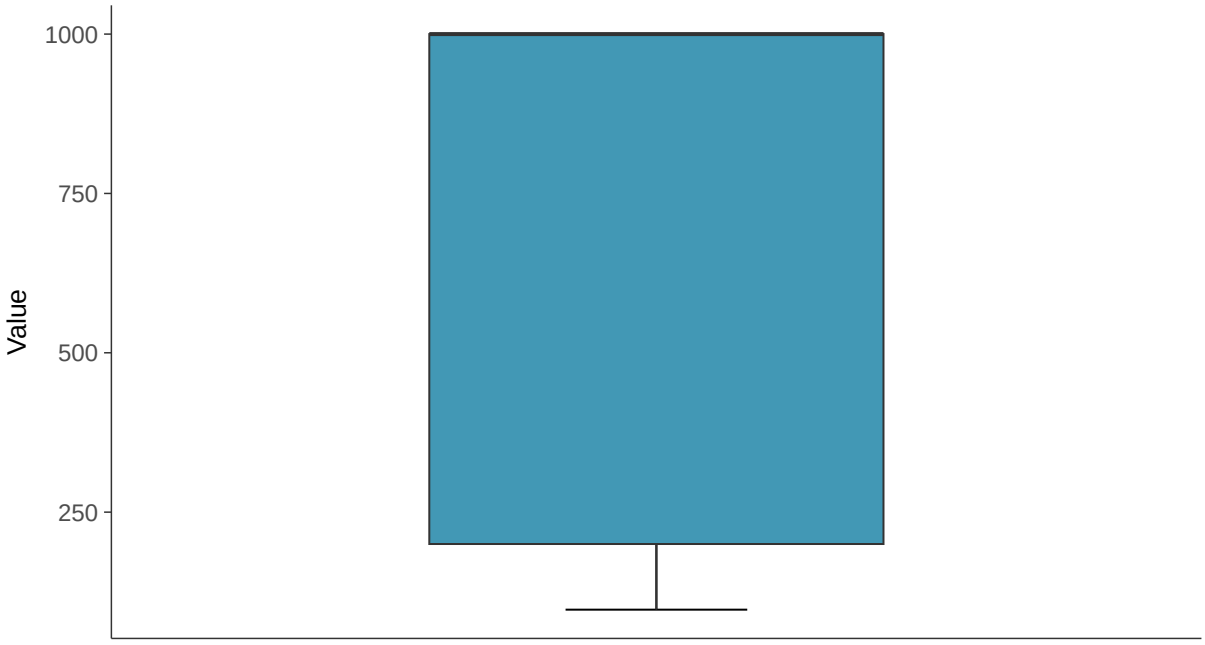
ID: 03_2_114



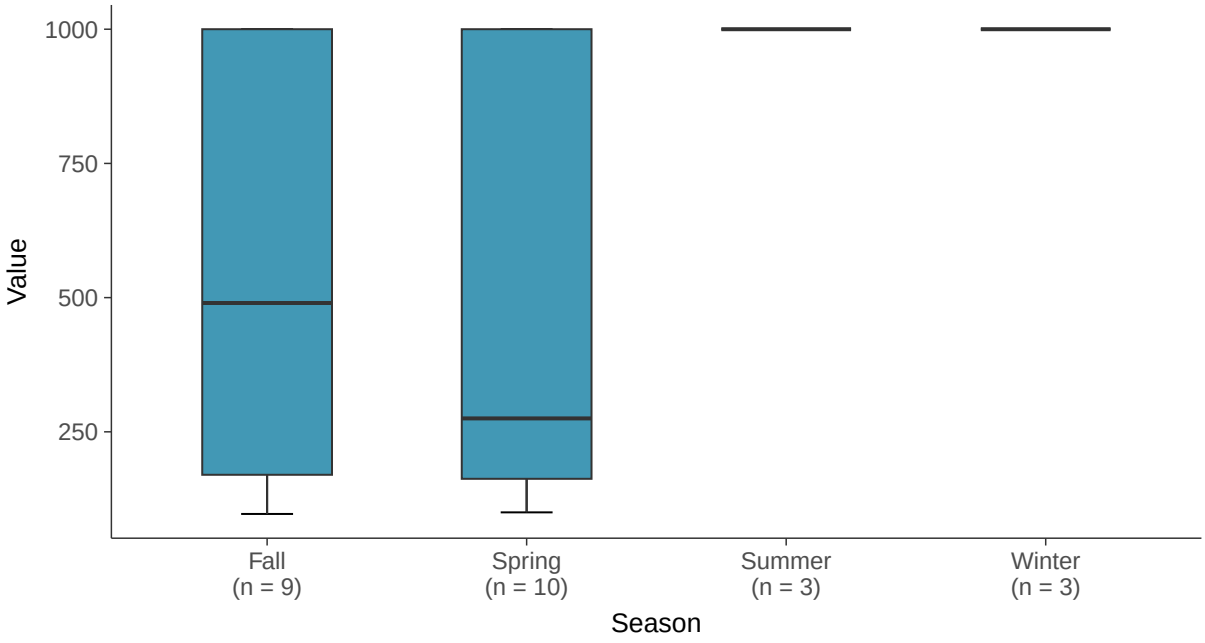
**Boxplot**

Fluoride, MW-15013 (ug/L)



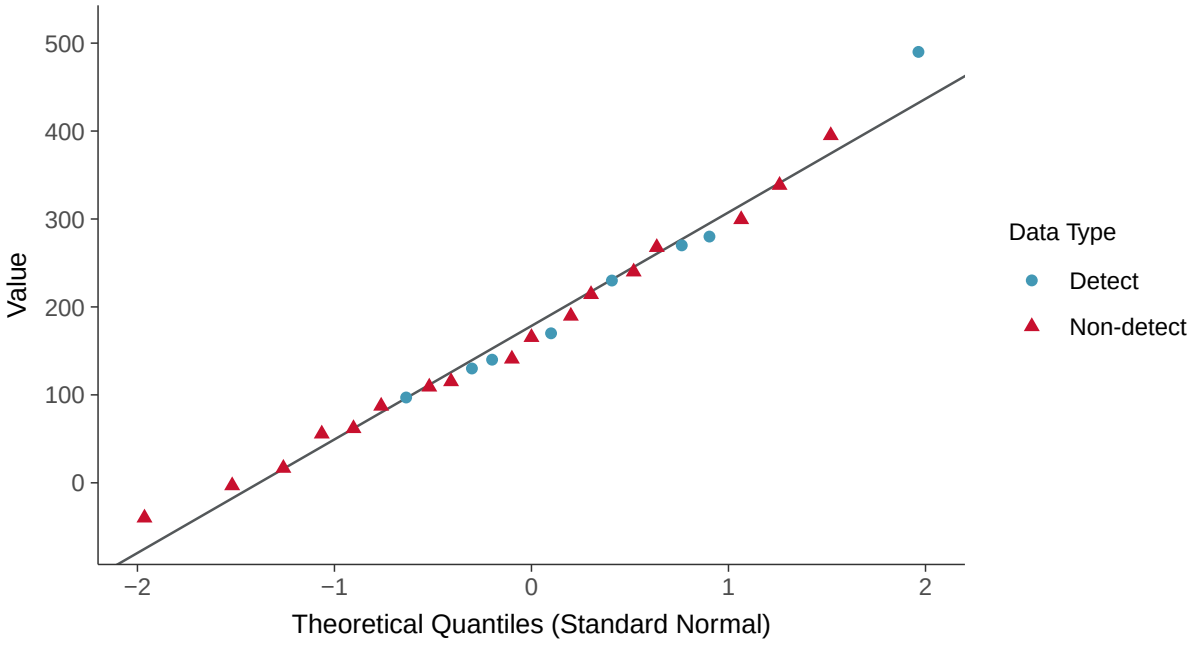

**Boxplot by Season**

Fluoride, MW-15013 (ug/L)



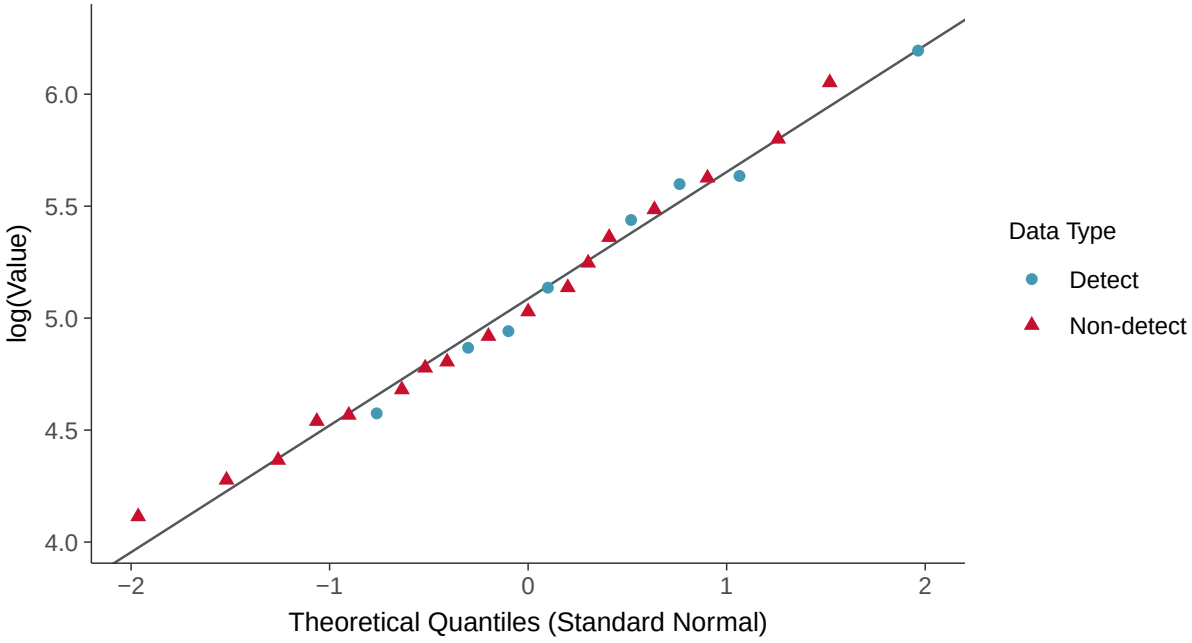
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15013 (ug/L)



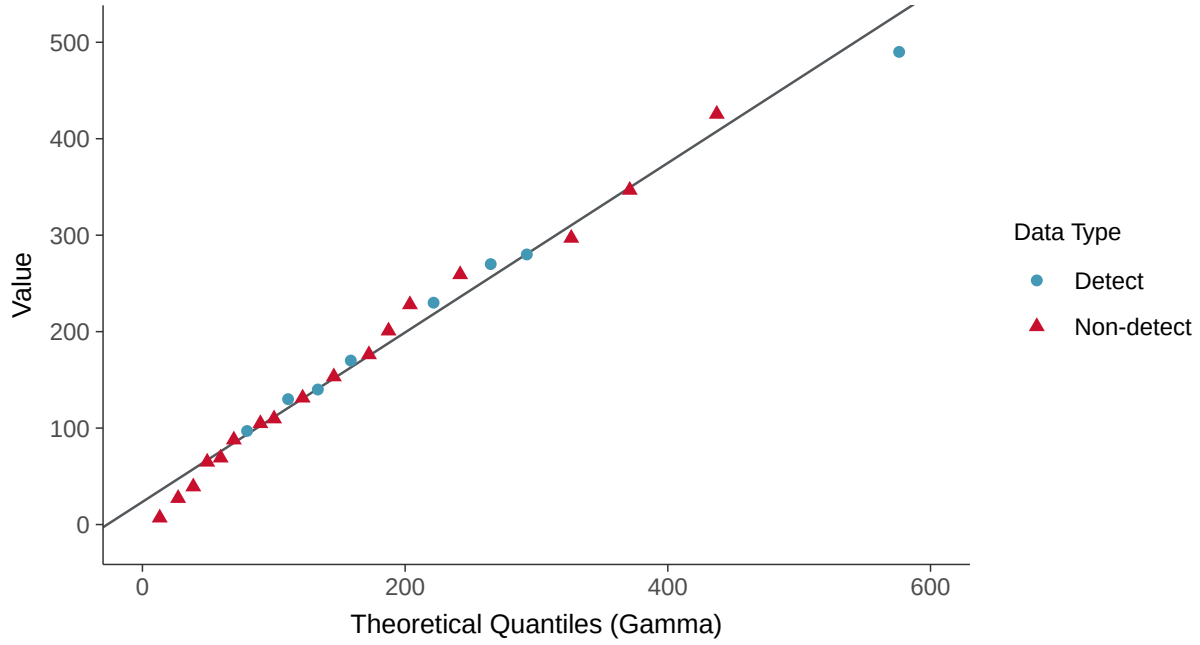

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15013 (ug/L)



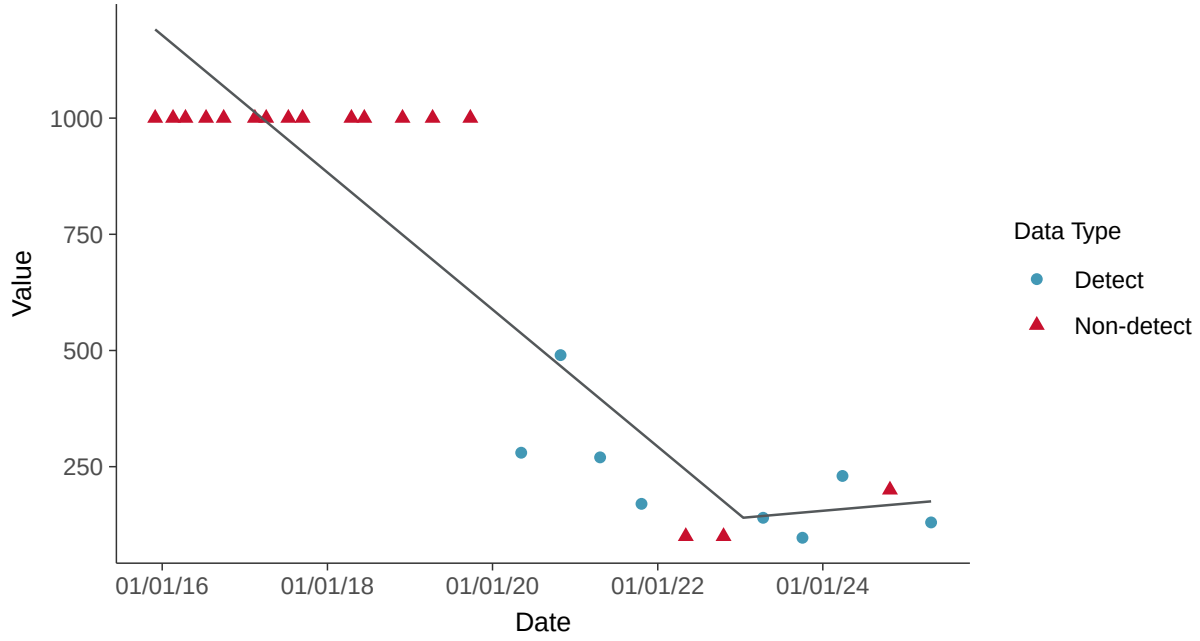
## Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15013 (ug/L)



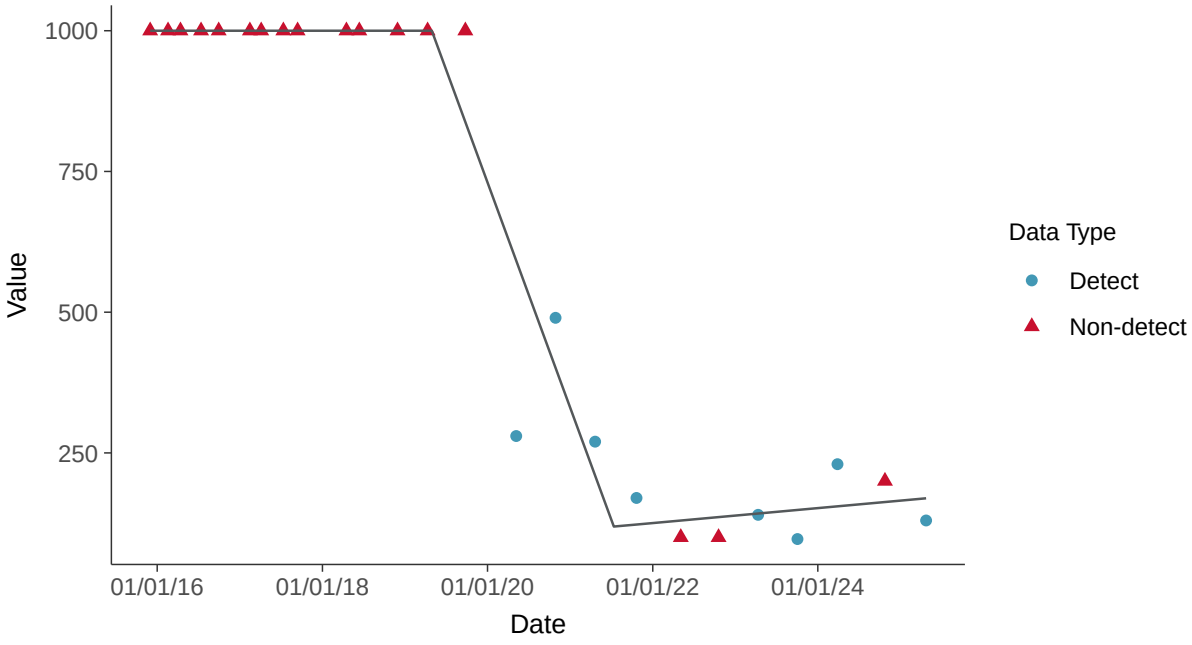

## Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15013 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Fluoride, MW-15013 (ug/L)

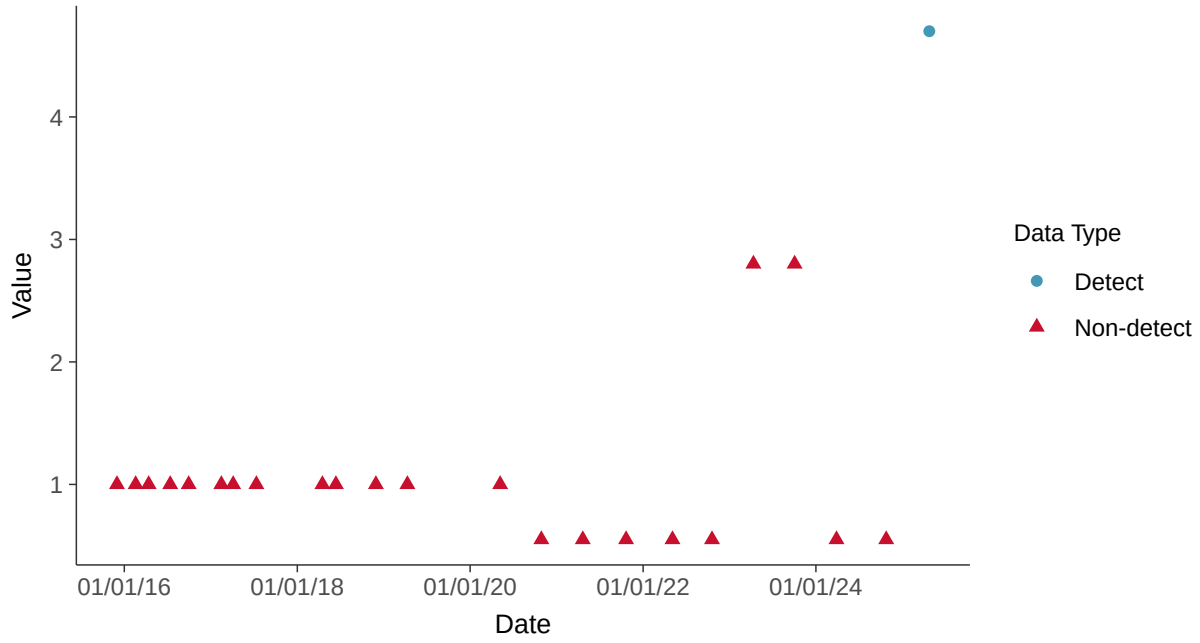


## Appendix IV: Lead, MW-15013

ID: 03_2_116

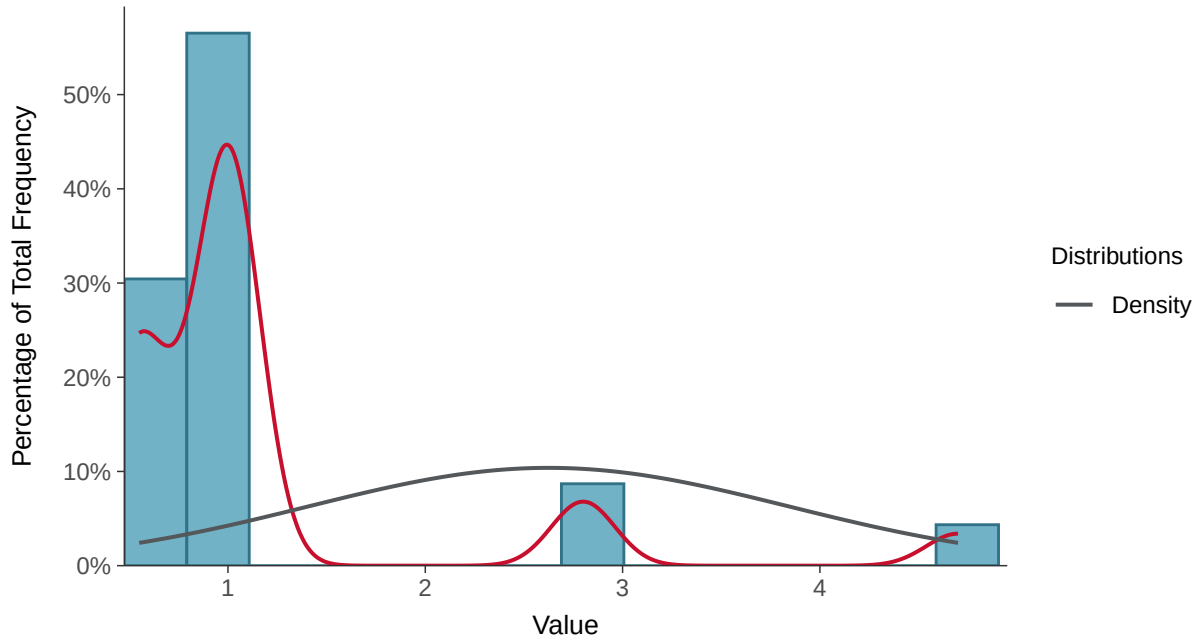
**Scatter Plot**

Lead, MW-15013 (ug/L)



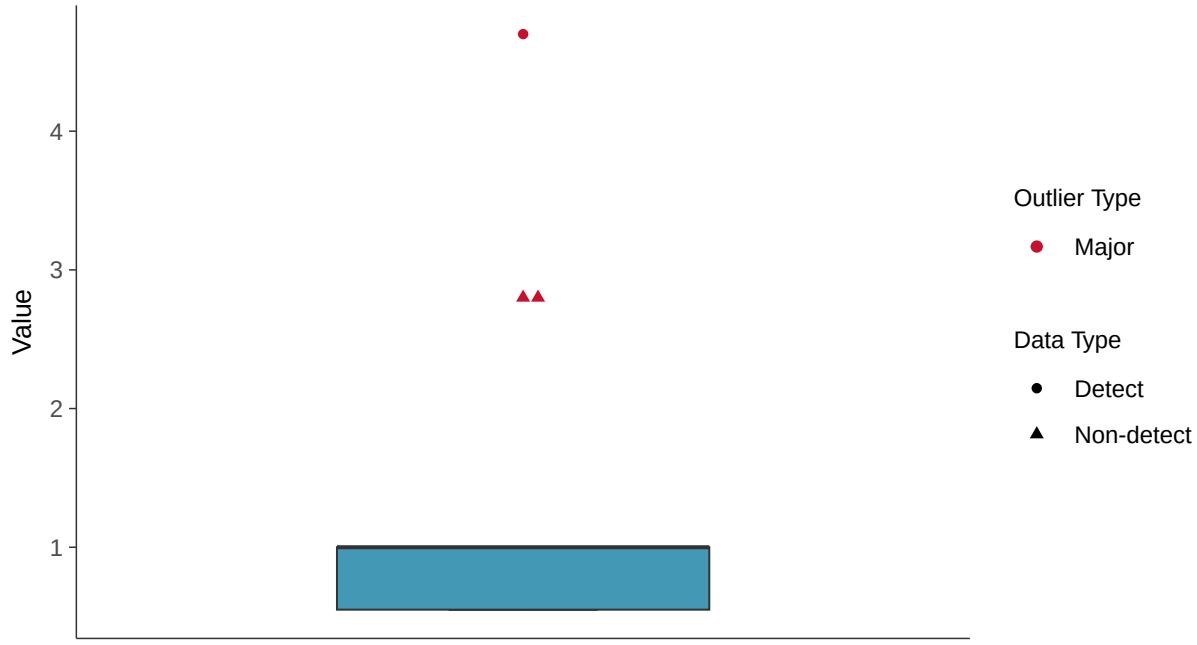

**Histogram**

Lead, MW-15013 (ug/L)



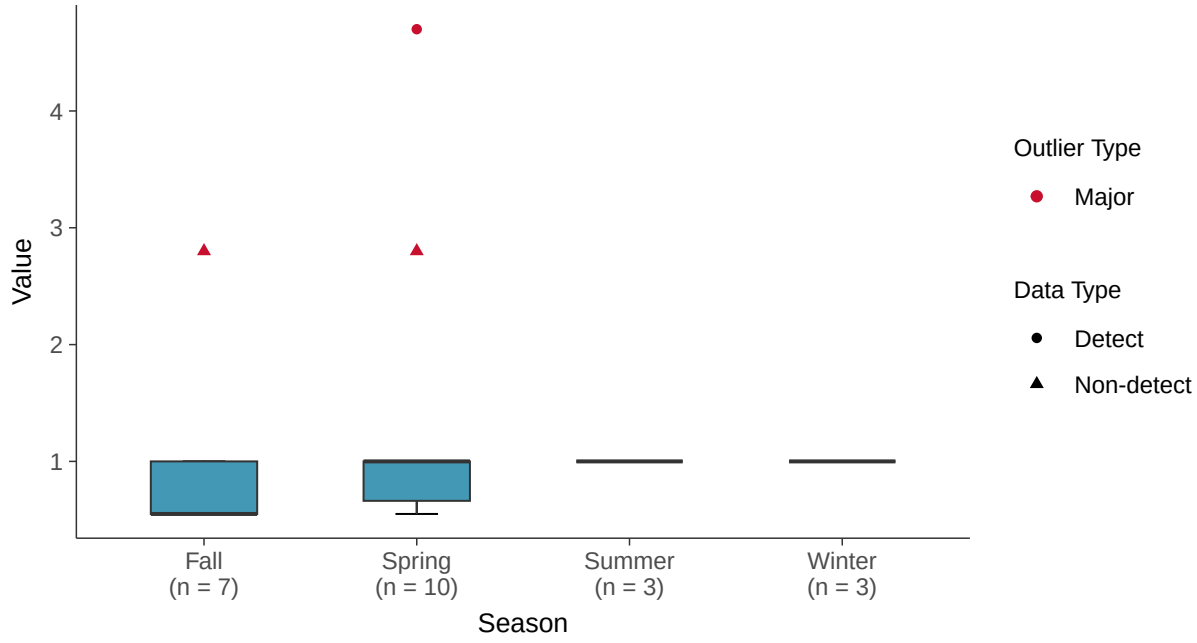
## Boxplot

Lead, MW-15013 (ug/L)



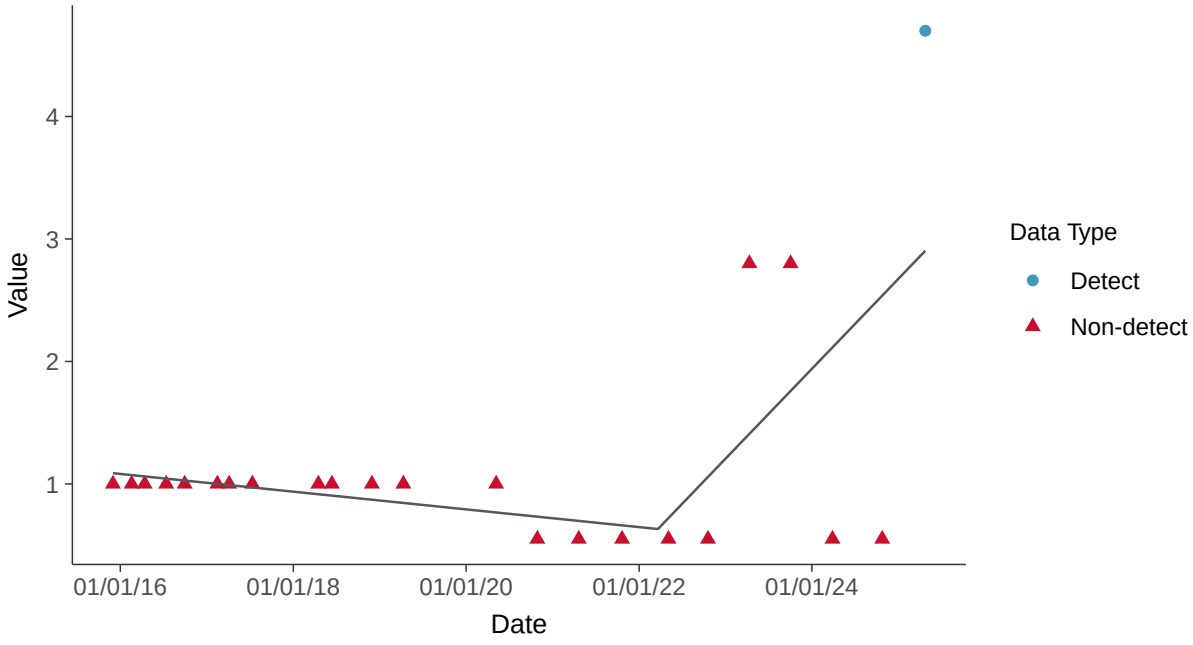

## Boxplot by Season

Lead, MW-15013 (ug/L)



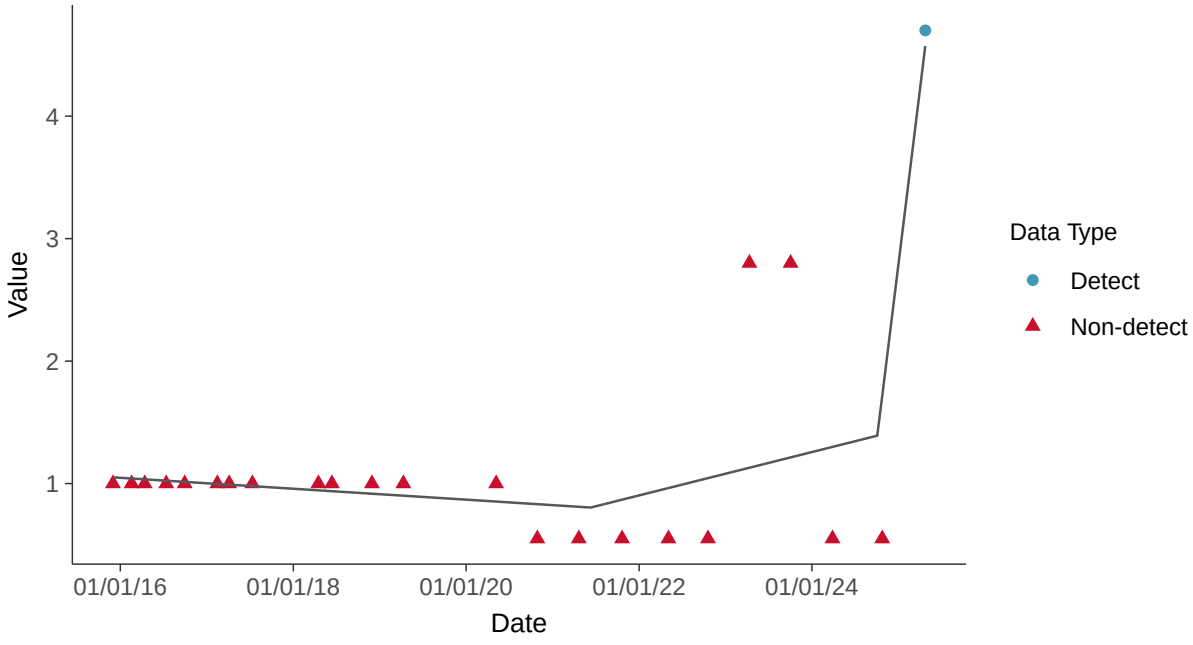
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15013 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Lead, MW-15013 (ug/L)

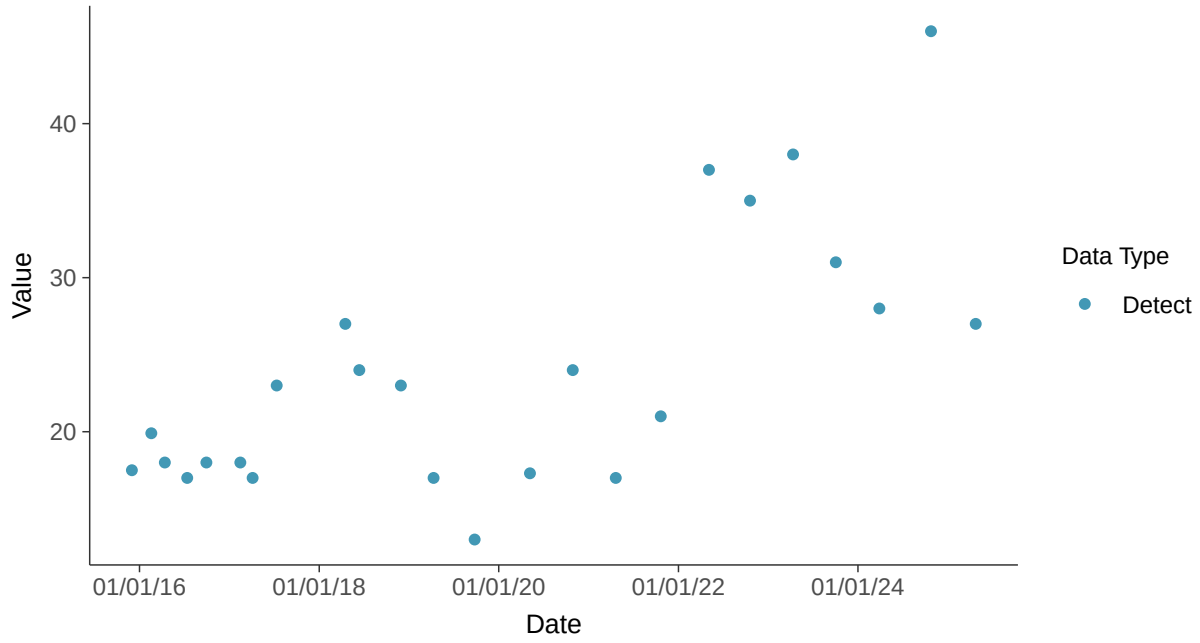


# Appendix IV: Lithium, MW-15013

ID: 03_2_117

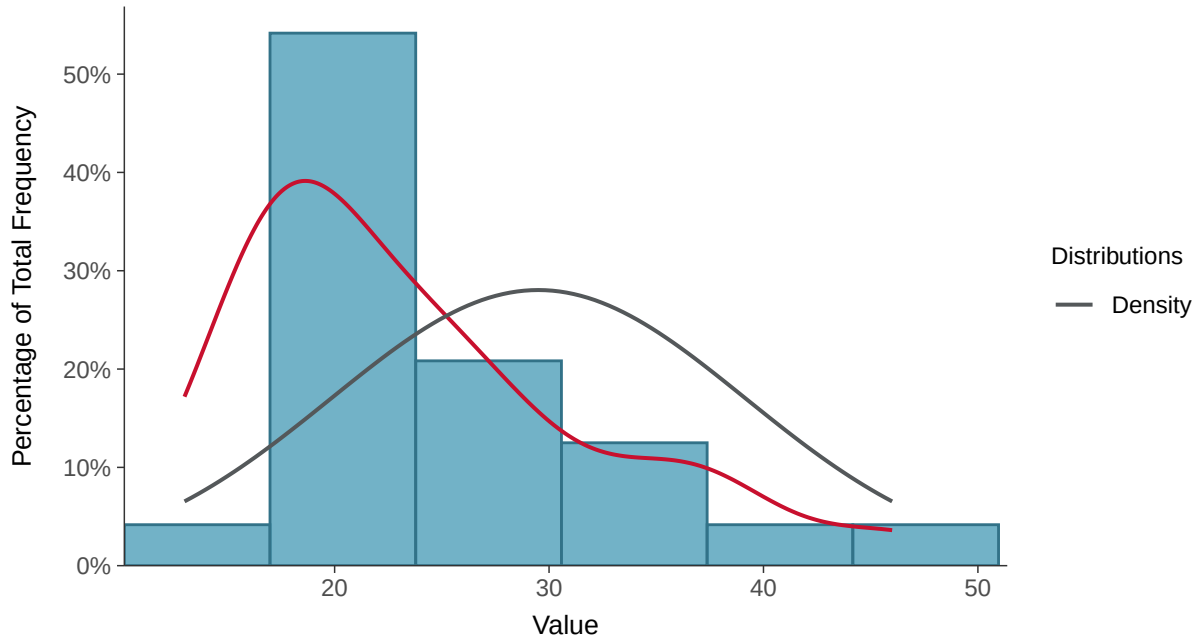
**Scatter Plot**

Lithium, MW-15013 (ug/L)



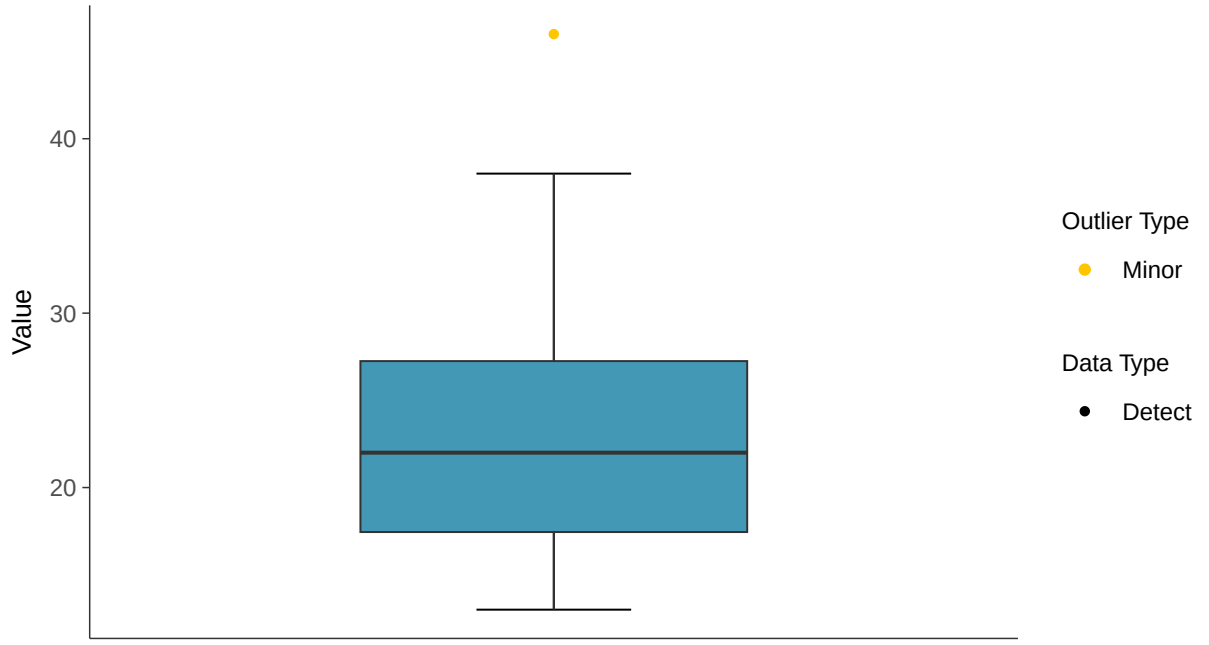

**Histogram**

Lithium, MW-15013 (ug/L)



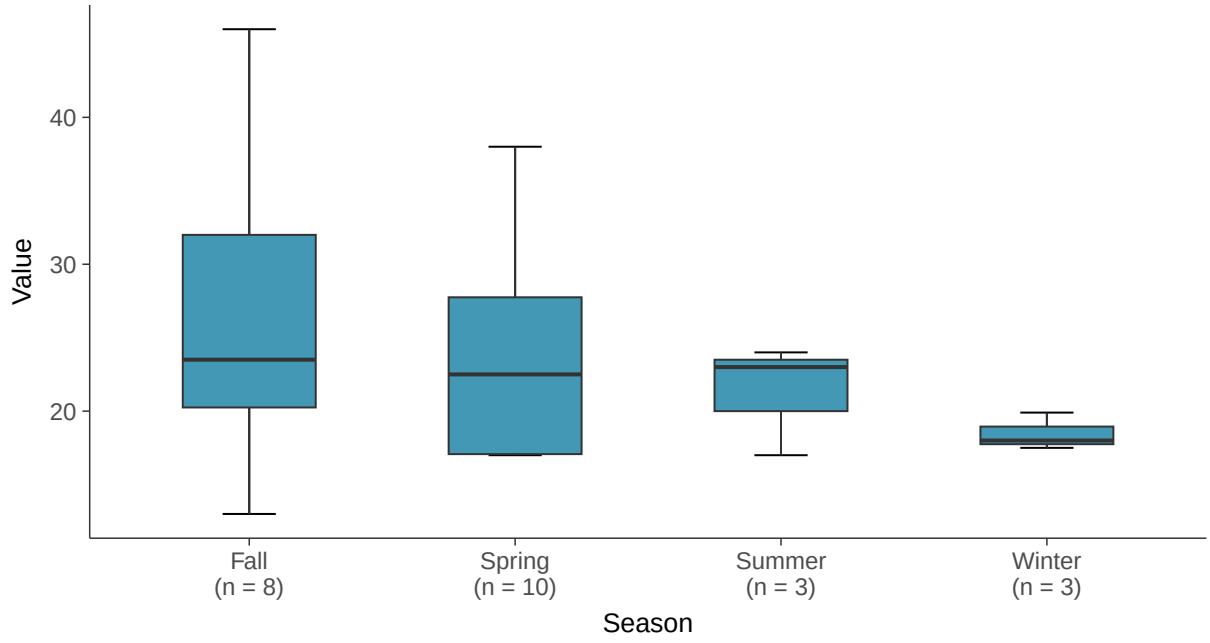
**Boxplot**

Lithium, MW-15013 (ug/L)



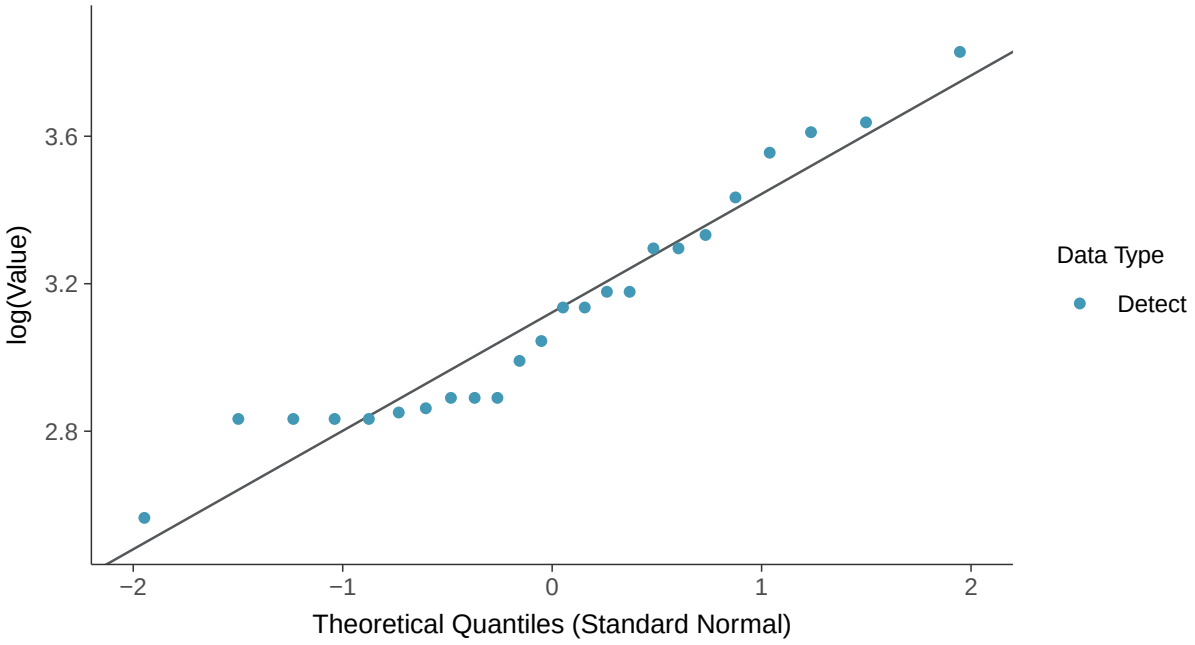

**Boxplot by Season**

Lithium, MW-15013 (ug/L)



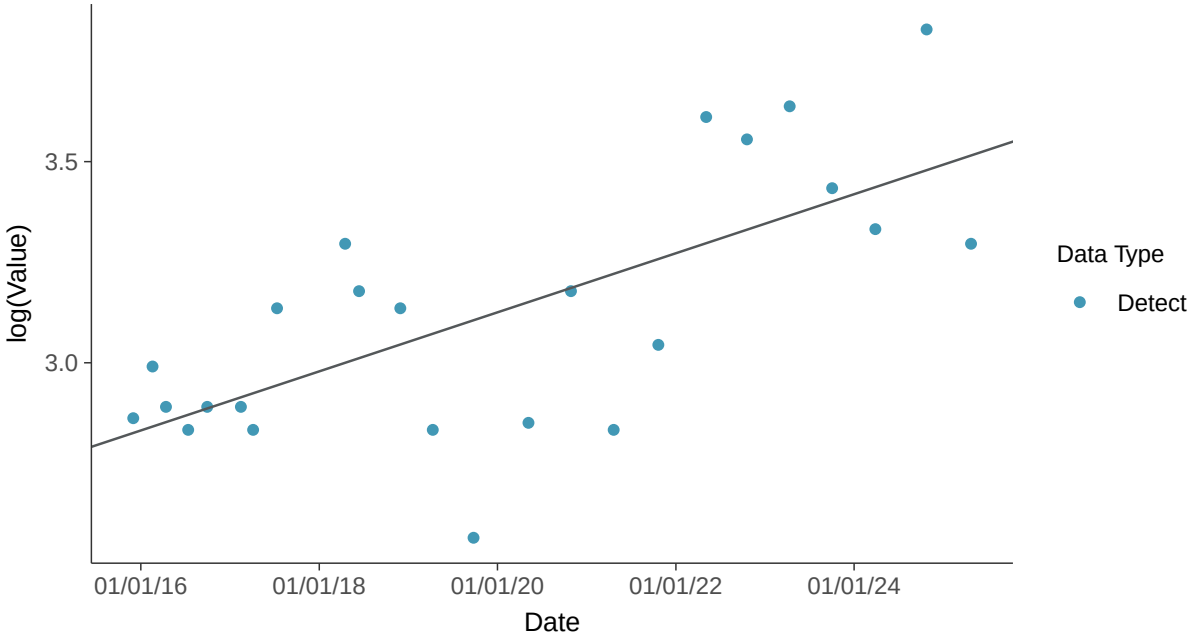
**Lognormal Q-Q plot**

Lithium, MW-15013 (ug/L)



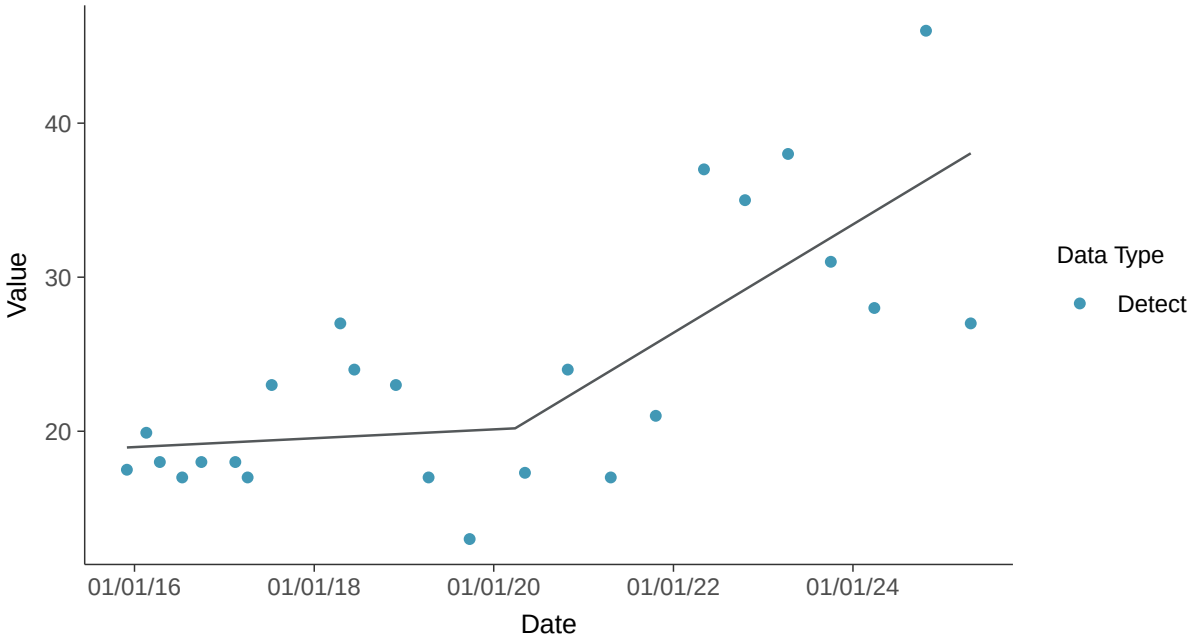

**Trend Regression: Lognormal MLE**

Lithium, MW-15013 (ug/L)



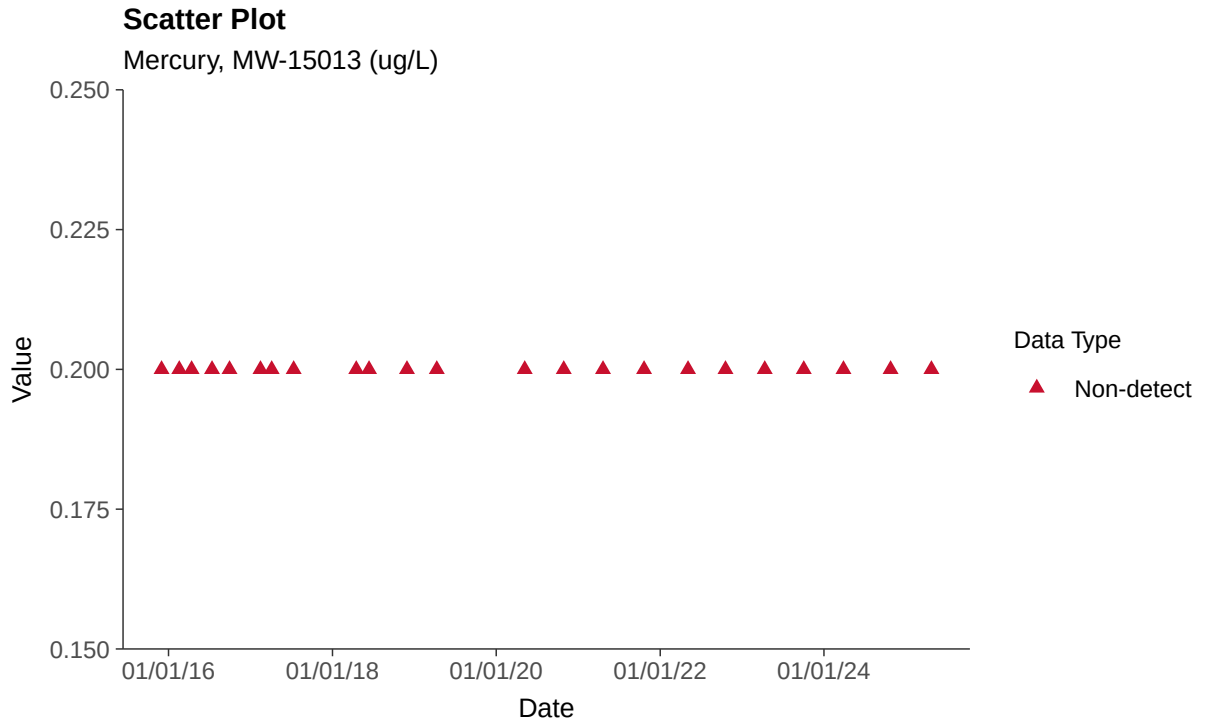
**Trend Regression: Piecewise Linear-Linear**

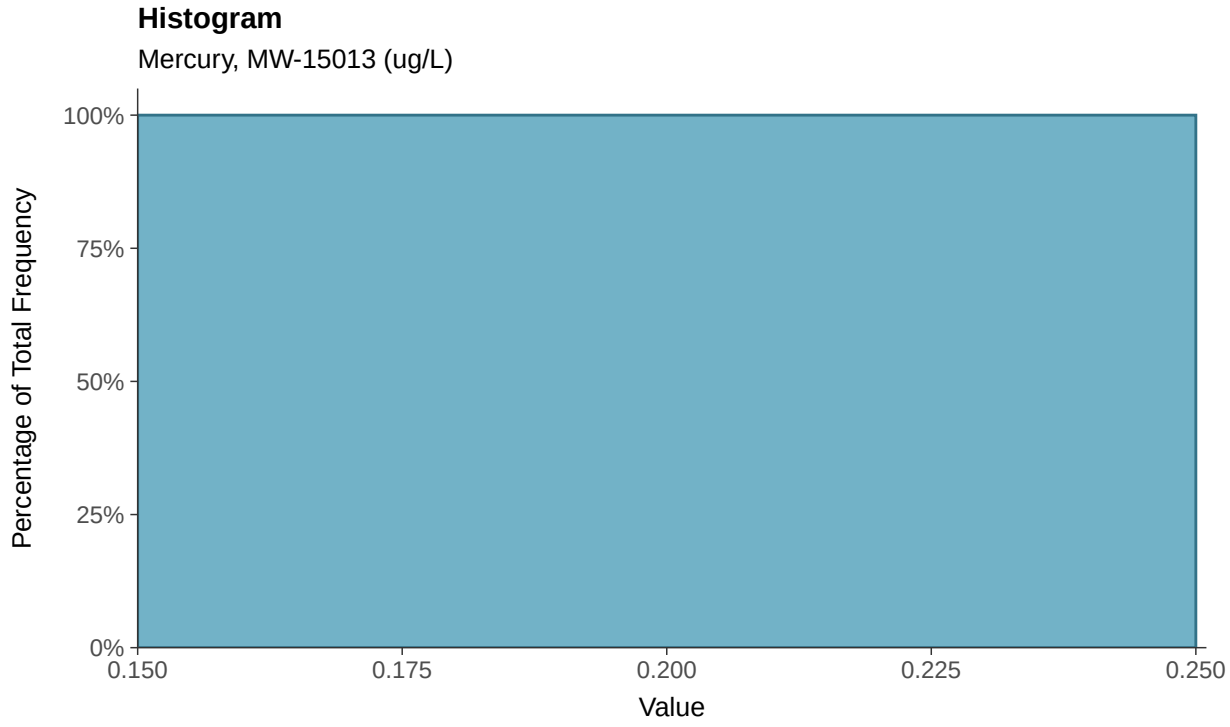
Lithium, MW-15013 (ug/L)



## Appendix IV: Mercury, MW-15013

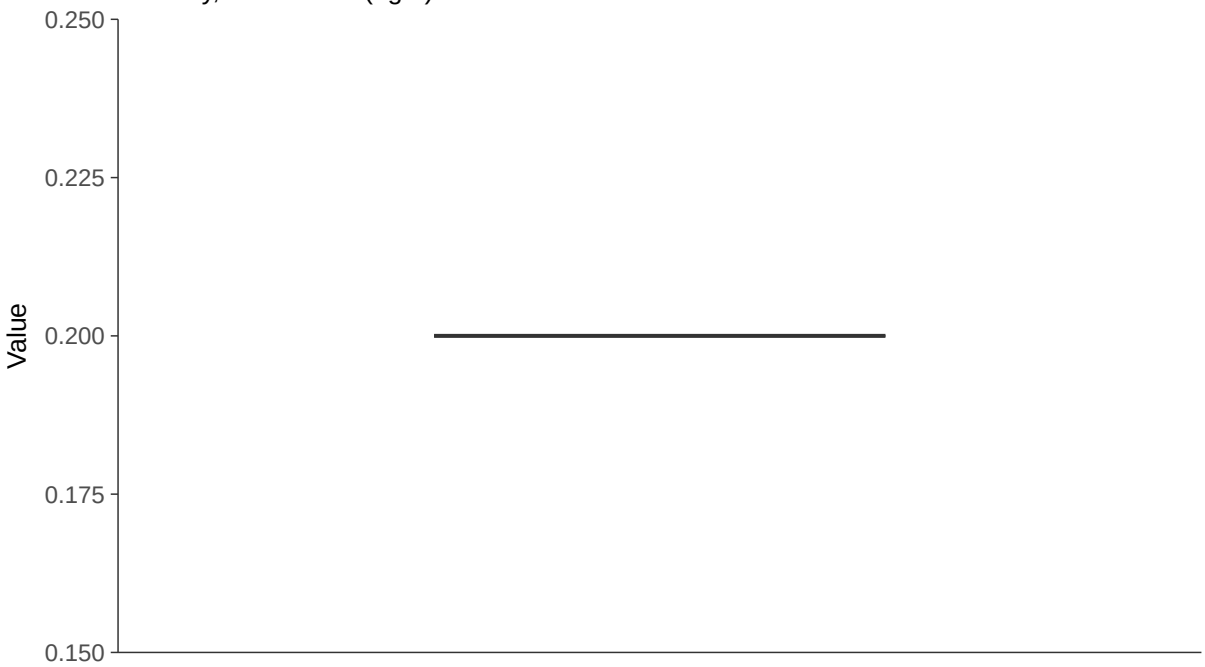
ID: 03_2_118



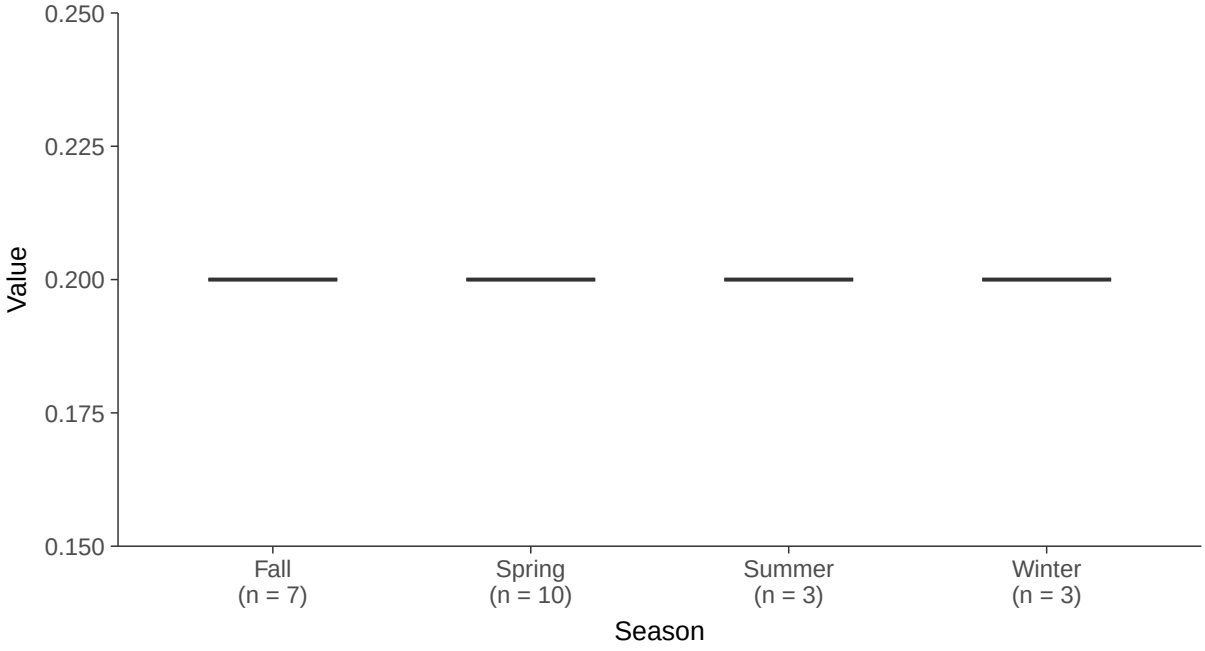
**Boxplot**

Mercury, MW-15013 (ug/L)



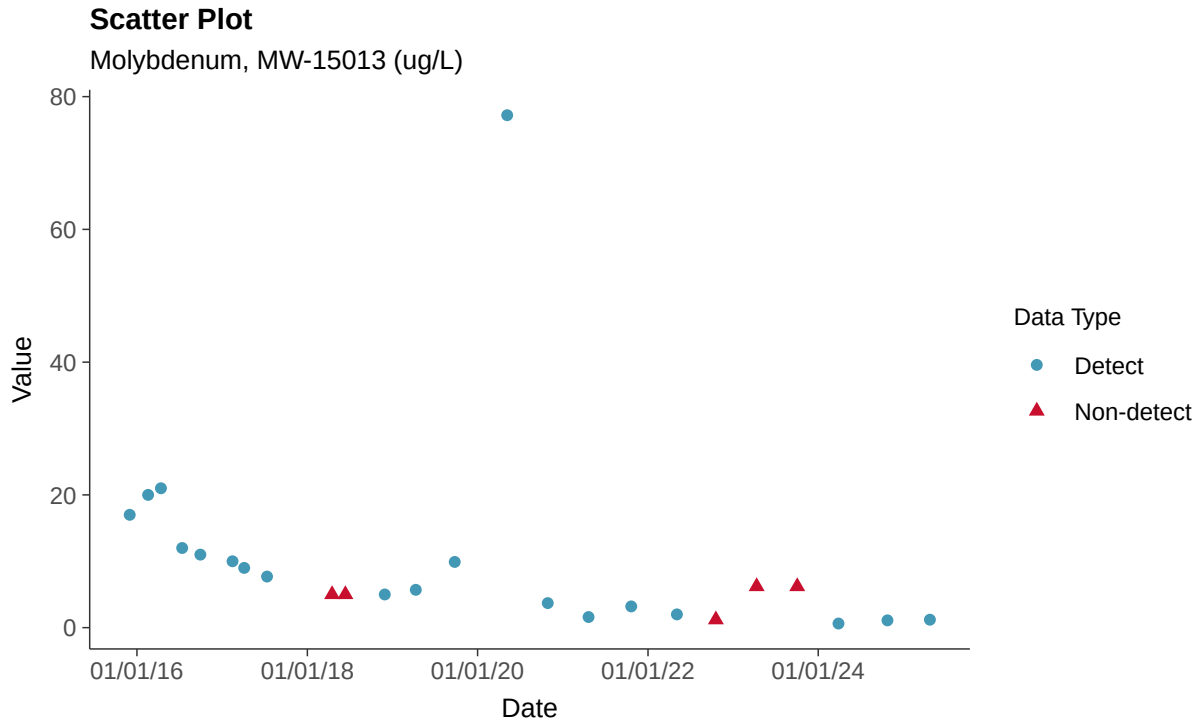

**Boxplot by Season**

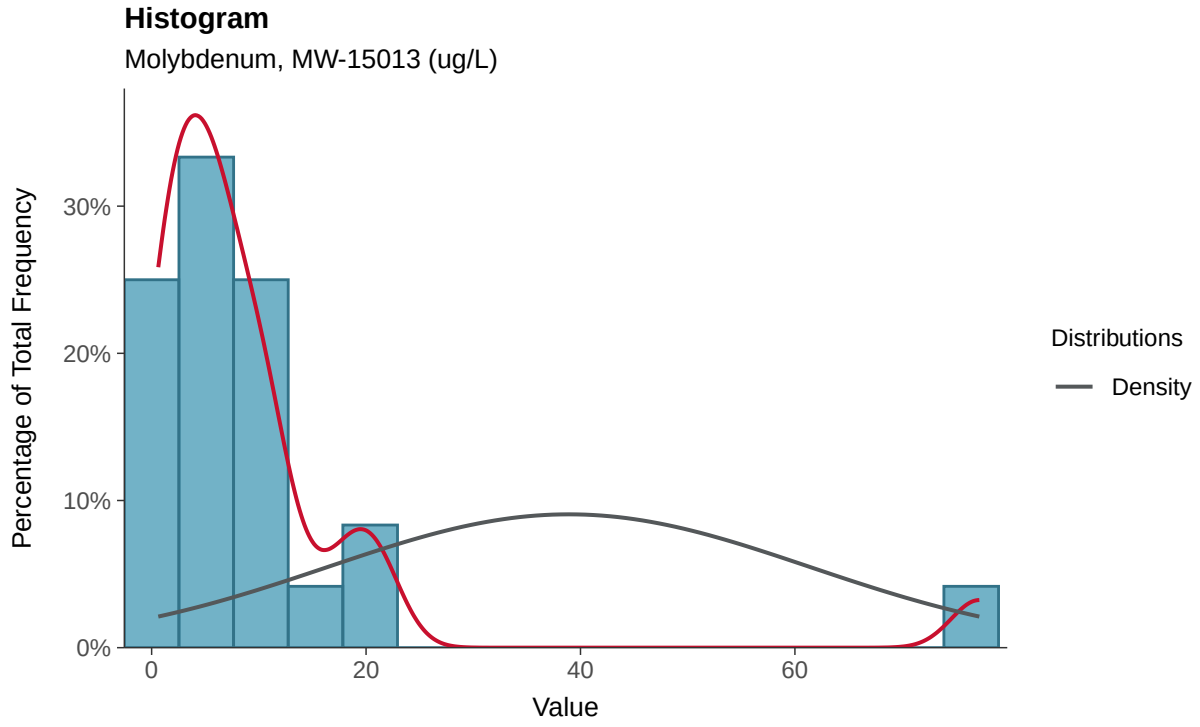
Mercury, MW-15013 (ug/L)



# Appendix IV: Molybdenum, MW-15013

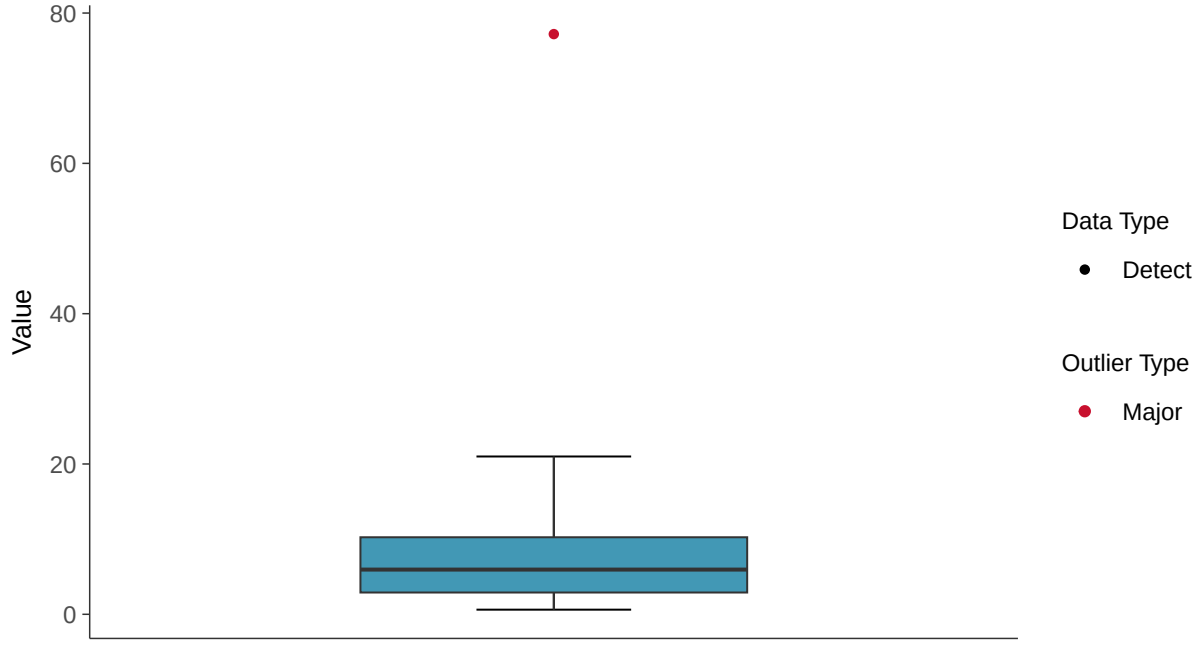
ID: 03_2_119



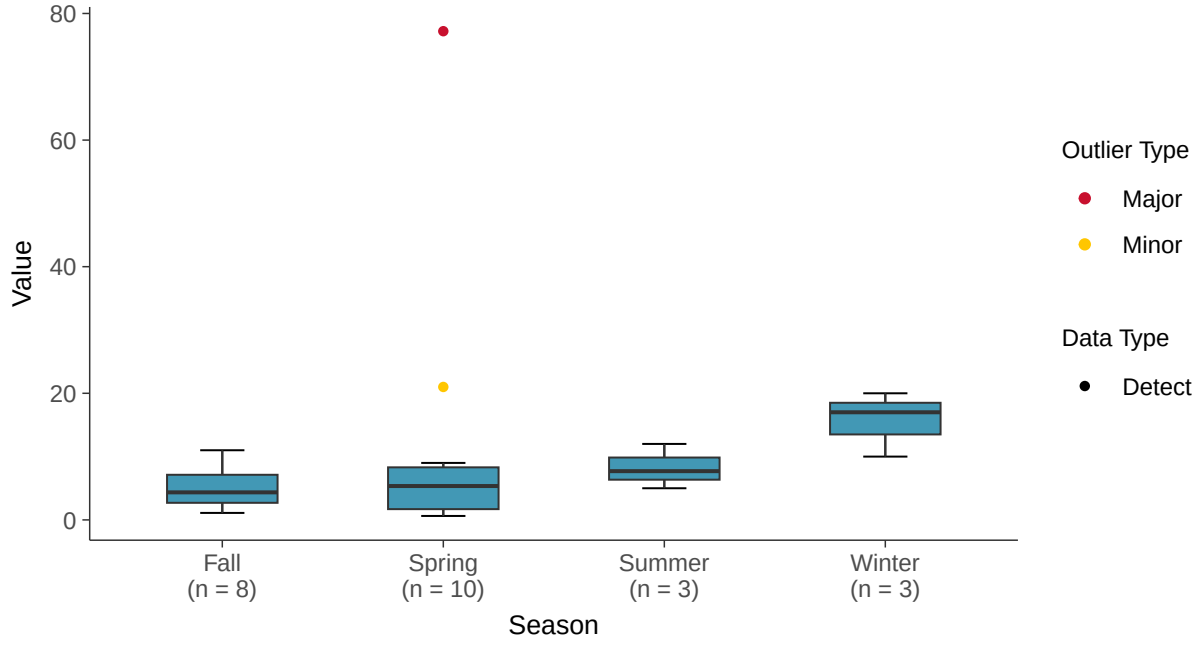
## Boxplot

Molybdenum, MW-15013 (ug/L)



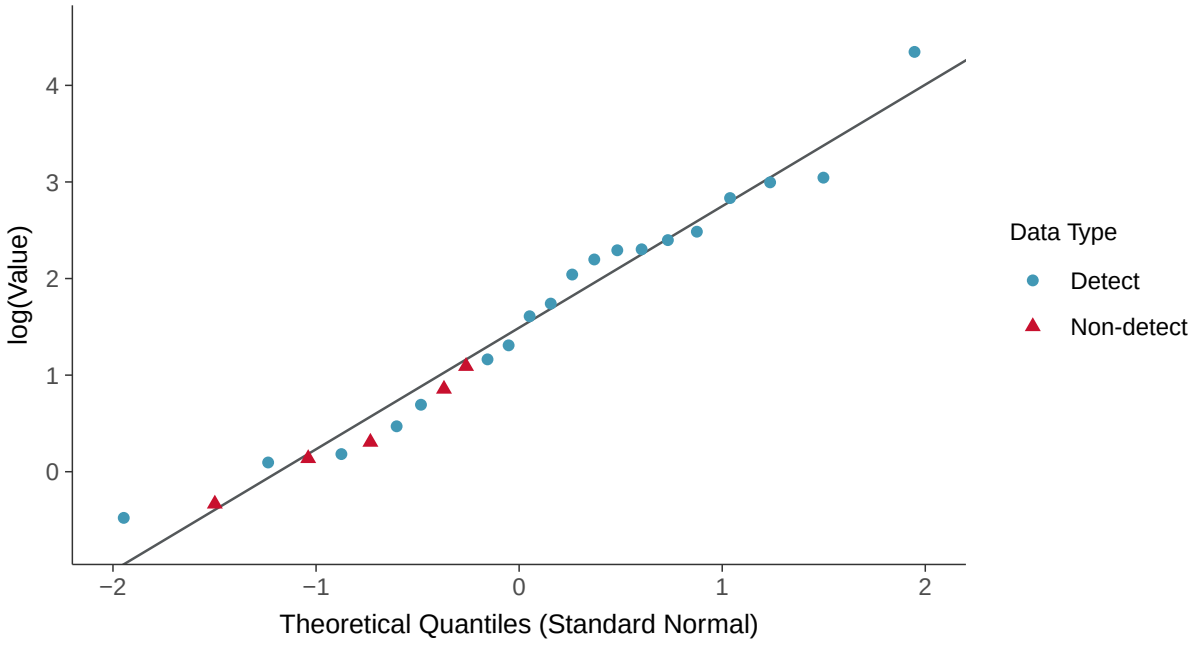

## Boxplot by Season

Molybdenum, MW-15013 (ug/L)



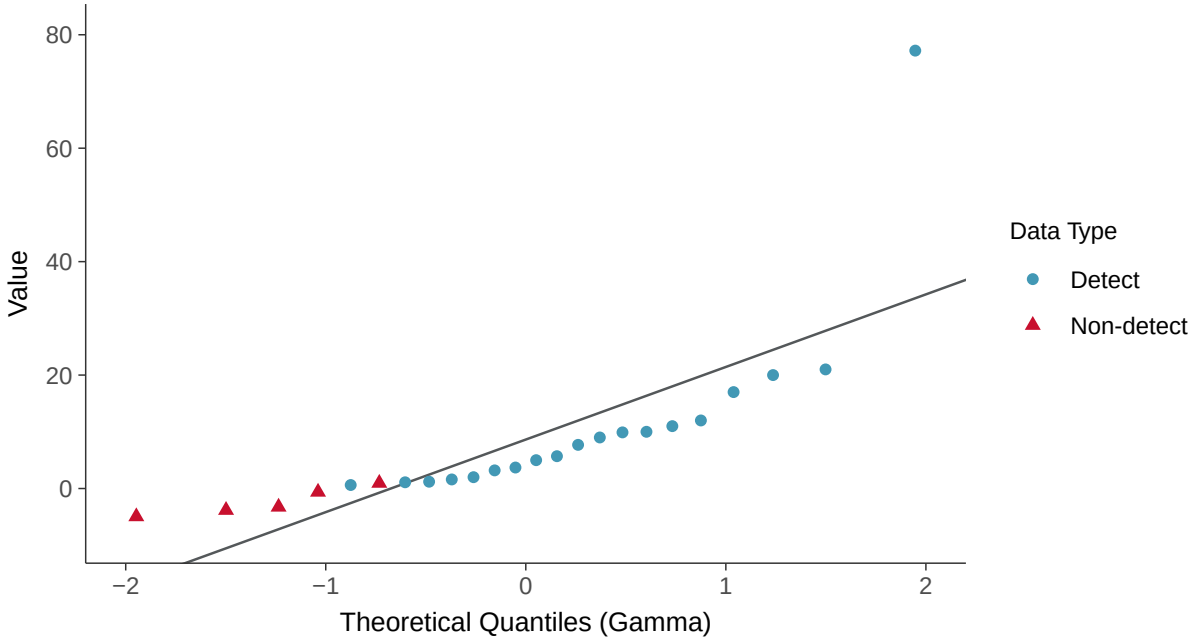
**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15013 (ug/L)



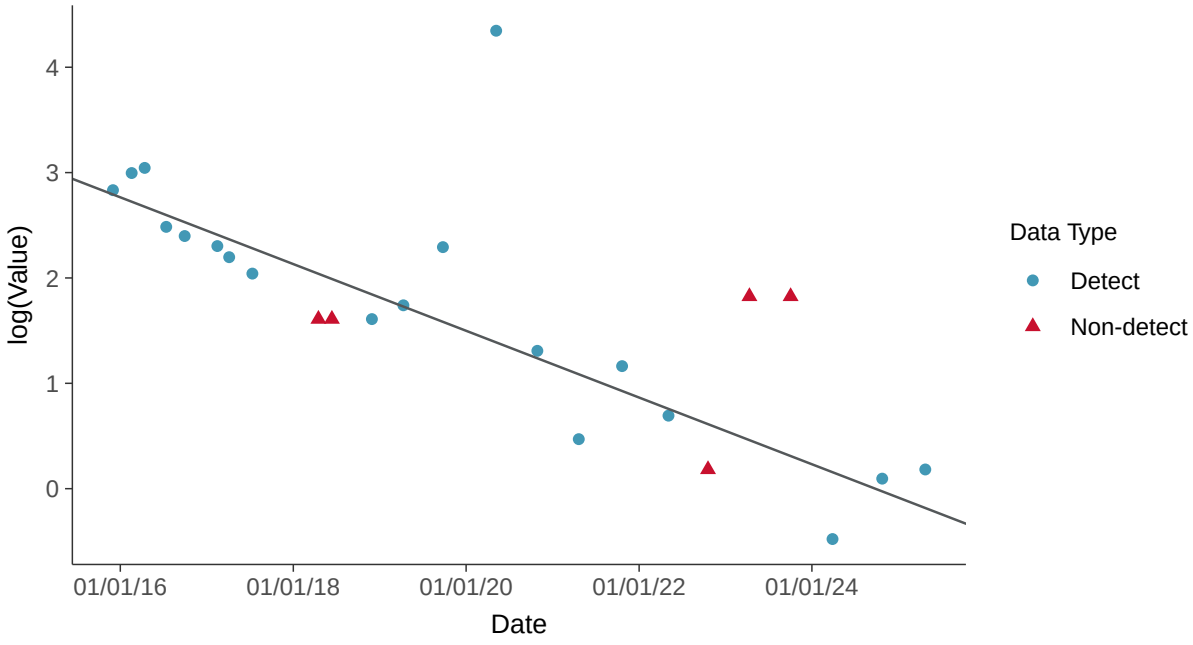

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15013 (ug/L)



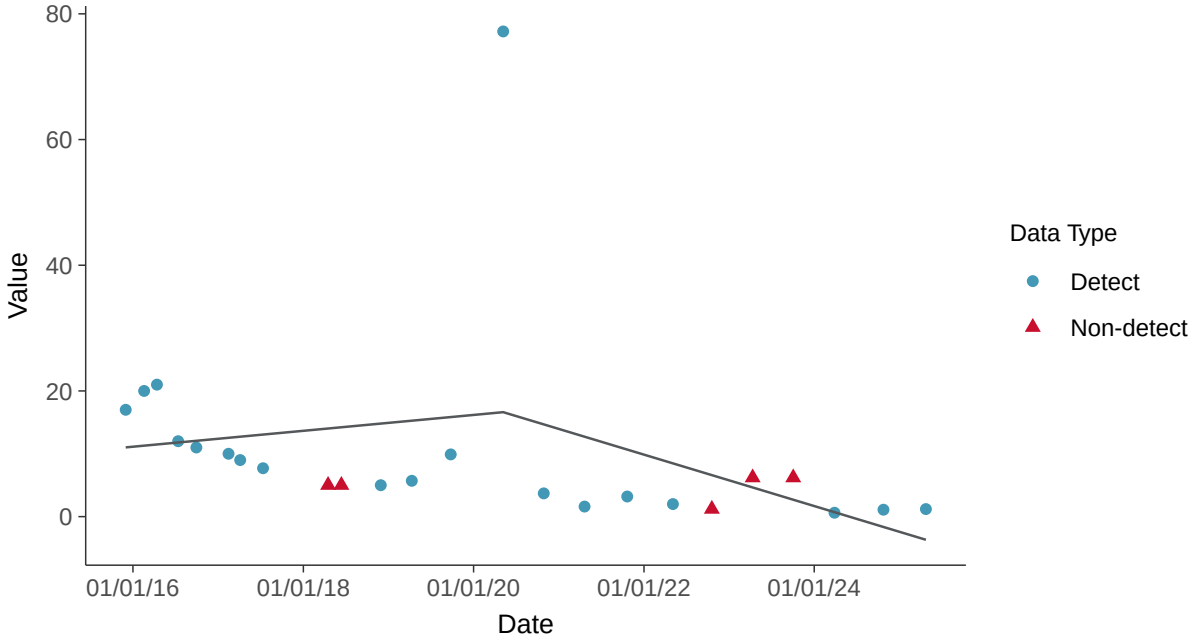
## Trend Regression: Lognormal MLE

Molybdenum, MW-15013 (ug/L)



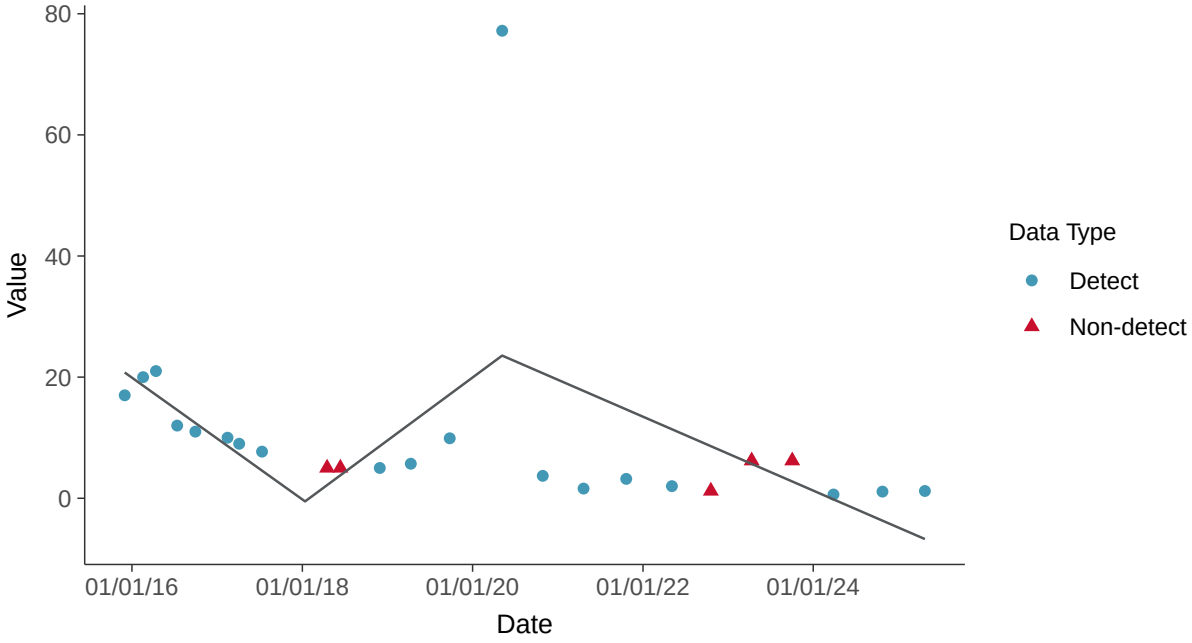

## Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15013 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-15013 (ug/L)

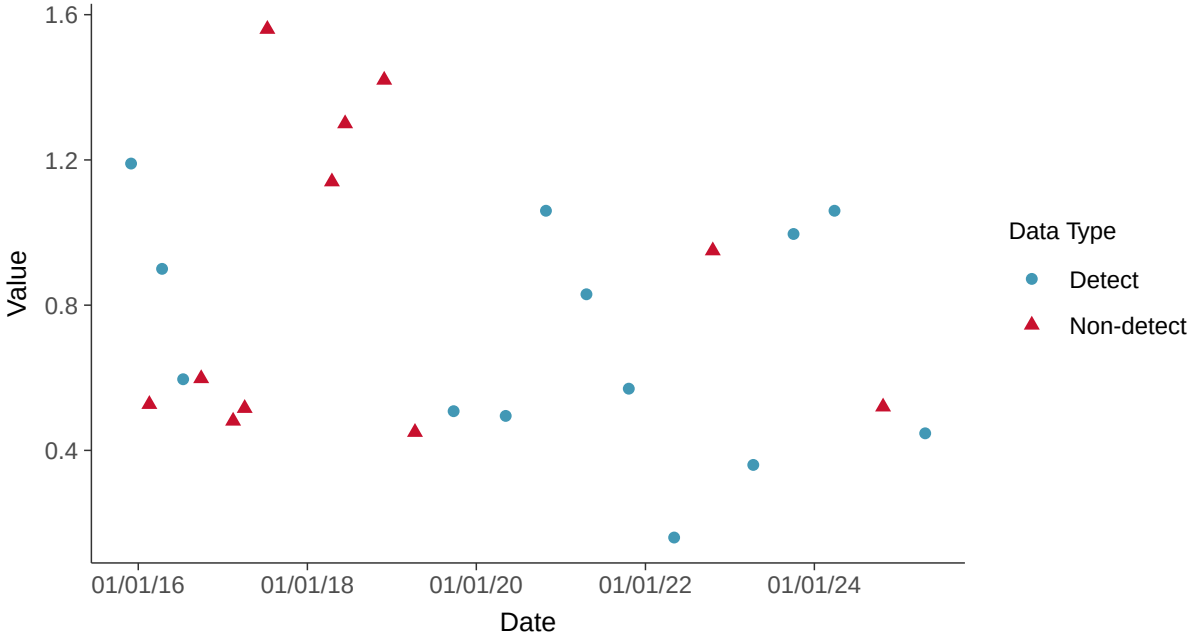


## Appendix IV: Radium-226+228, MW-15013

ID: 03_2_125

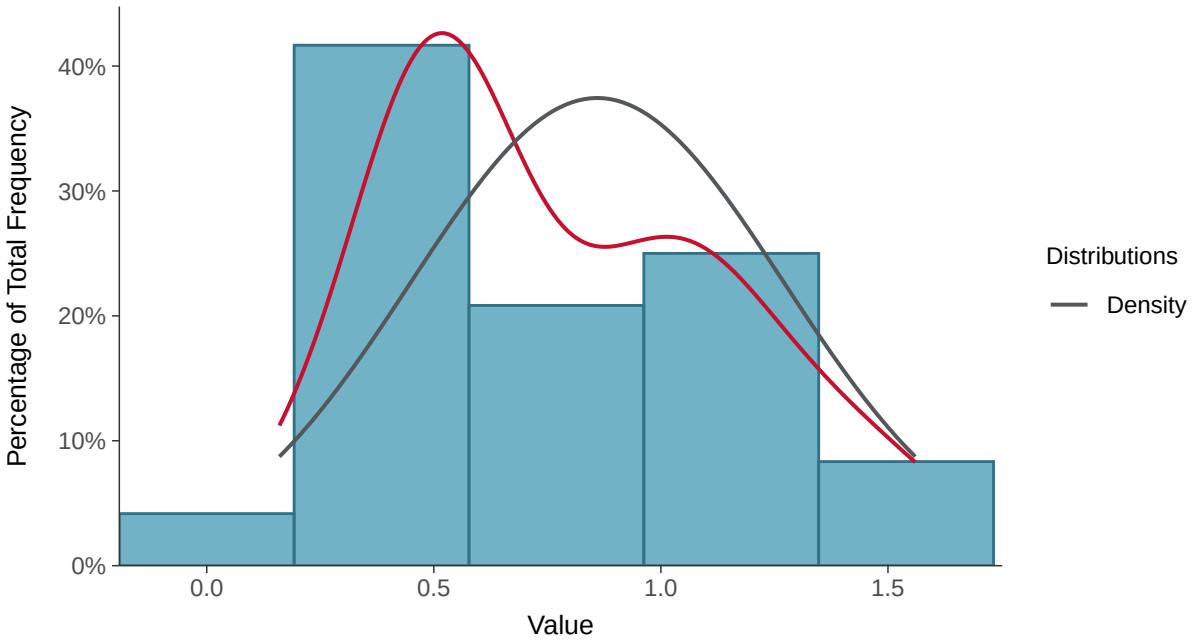
**Scatter Plot**

Radium-226+228, MW-15013 (pCi/L)



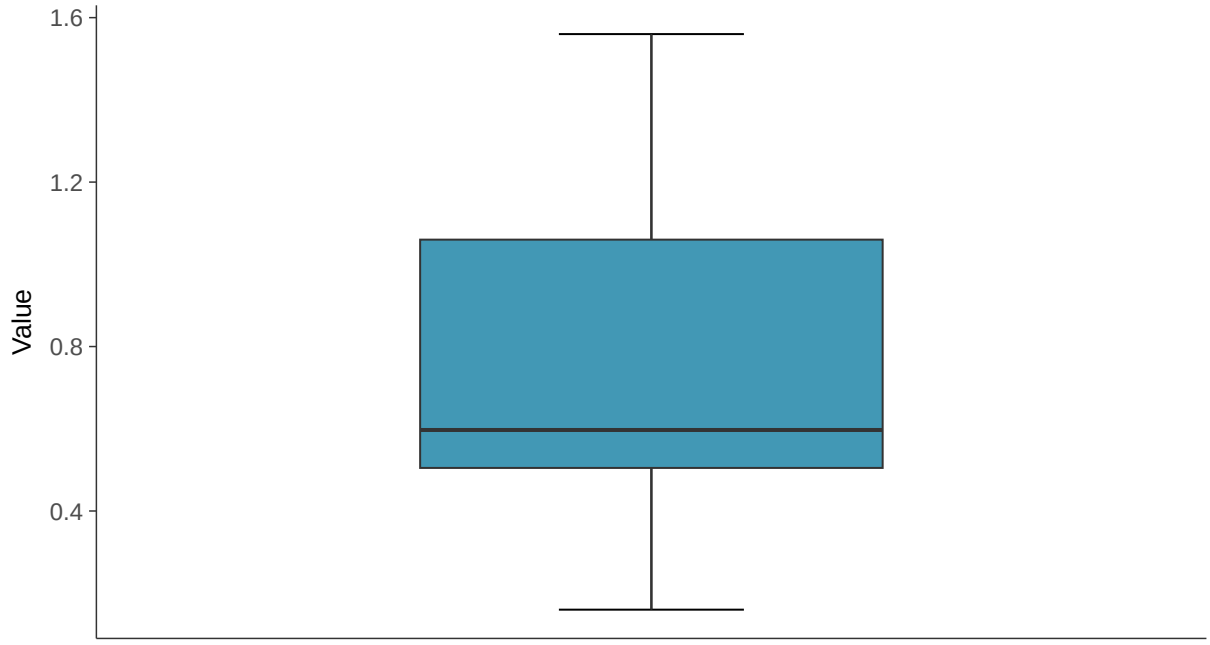

**Histogram**

Radium-226+228, MW-15013 (pCi/L)



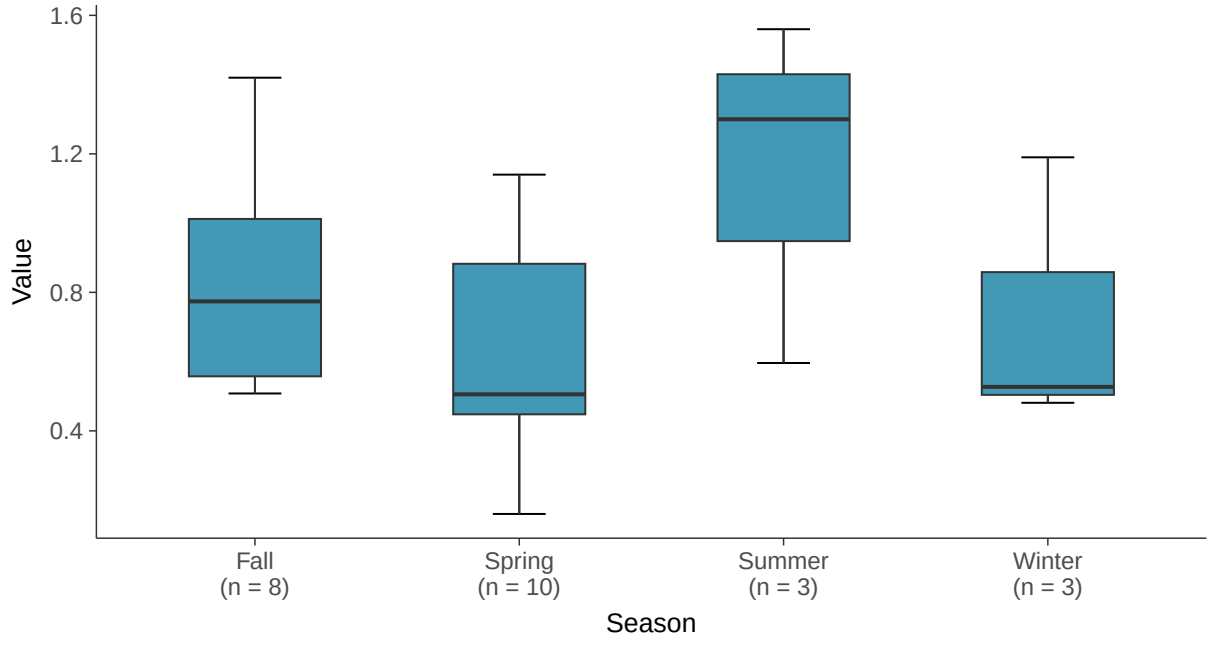
## Boxplot

Radium-226+228, MW-15013 (pCi/L)



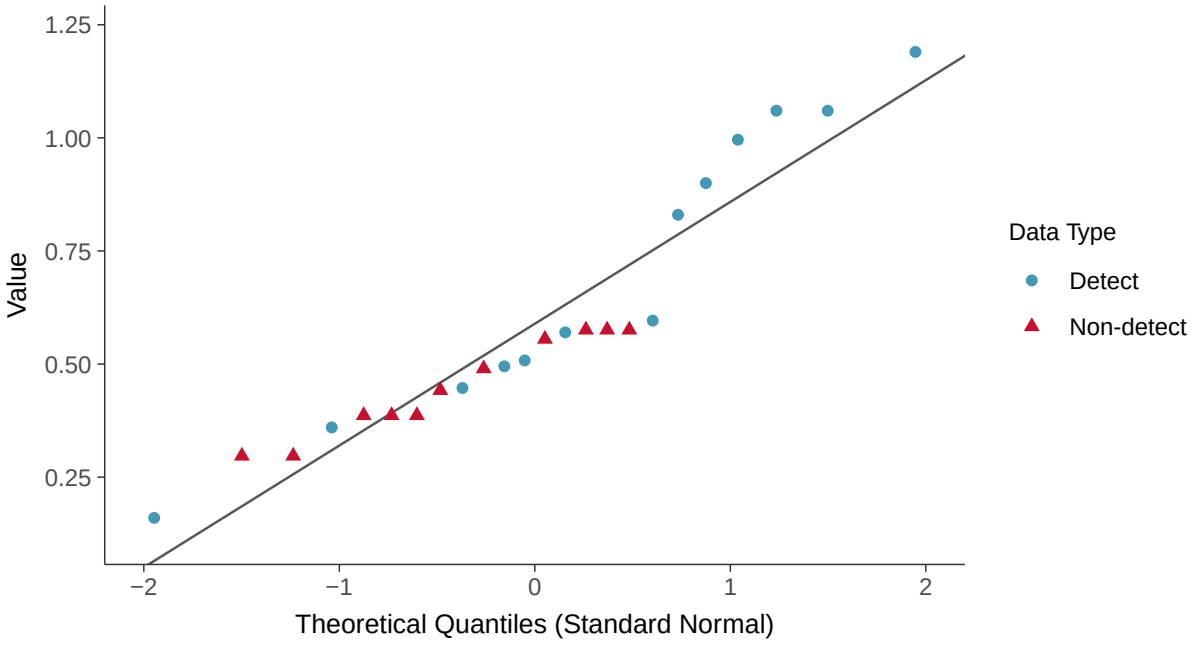

## Boxplot by Season

Radium-226+228, MW-15013 (pCi/L)



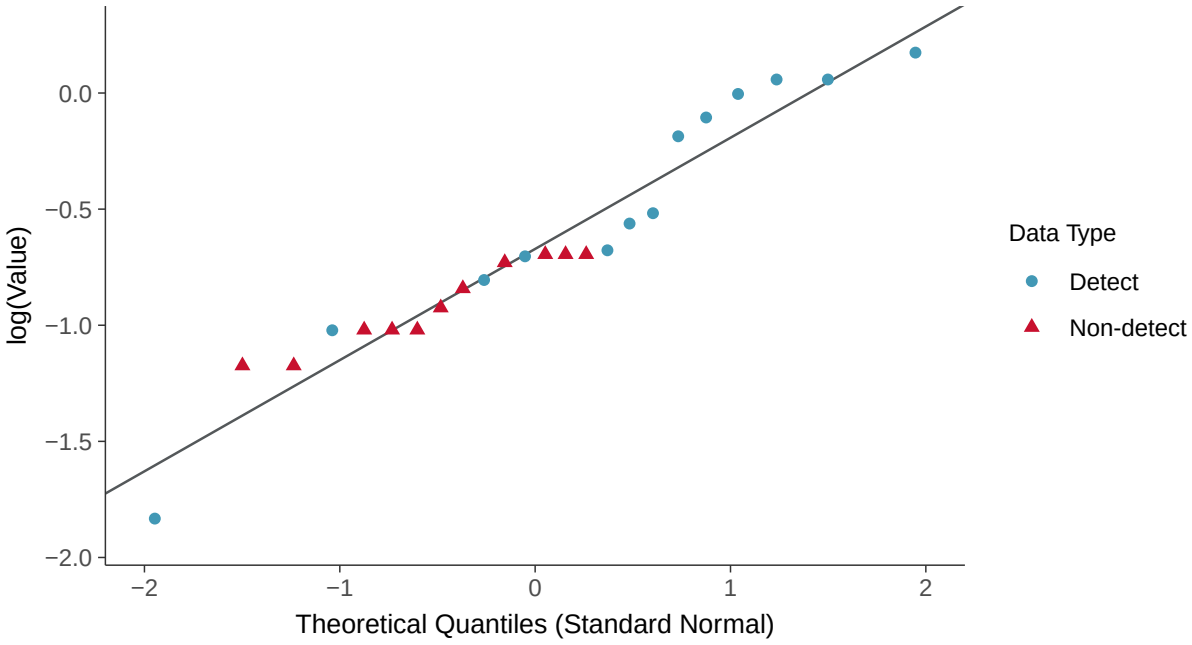
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15013 (pCi/L)



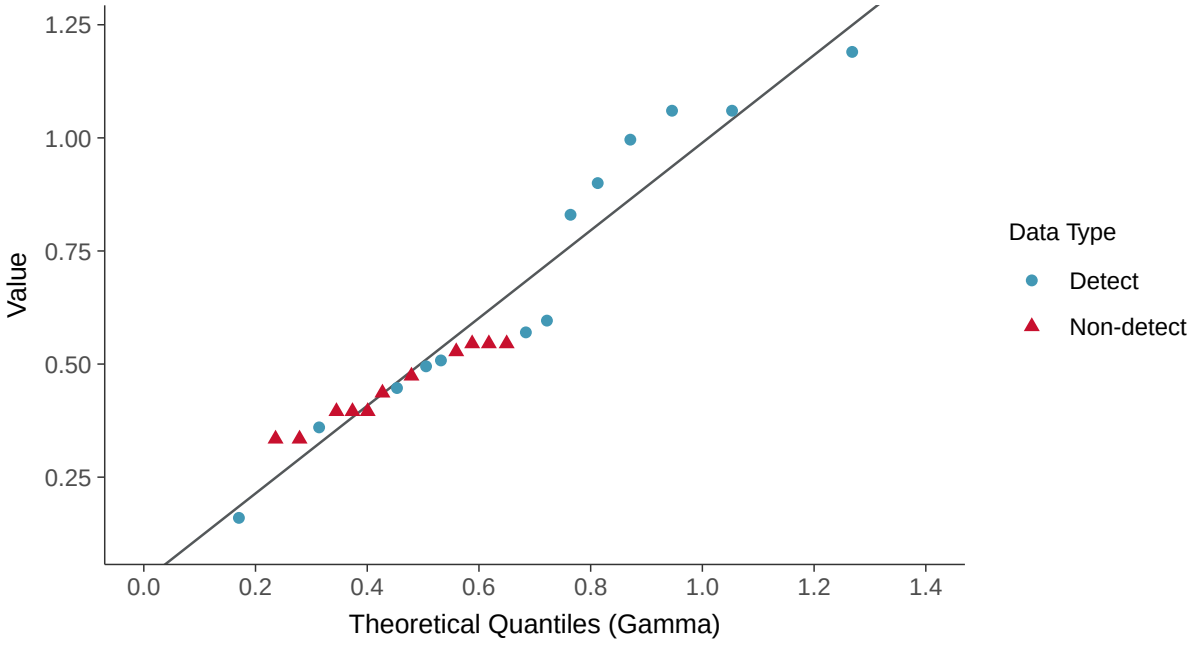

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15013 (pCi/L)



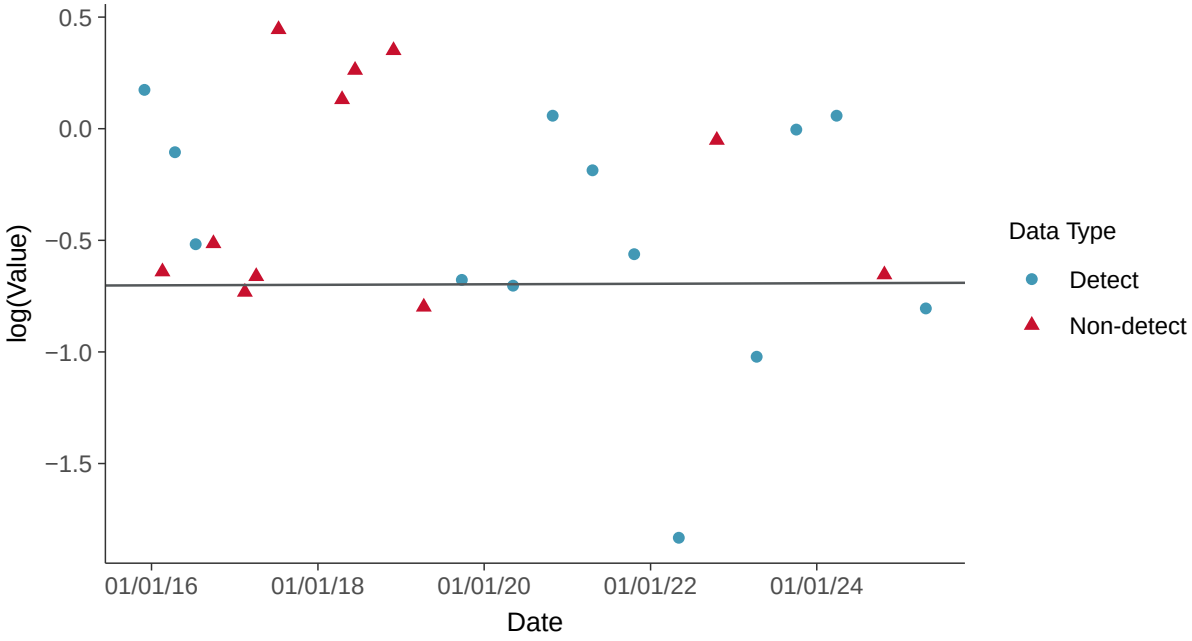
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15013 (pCi/L)



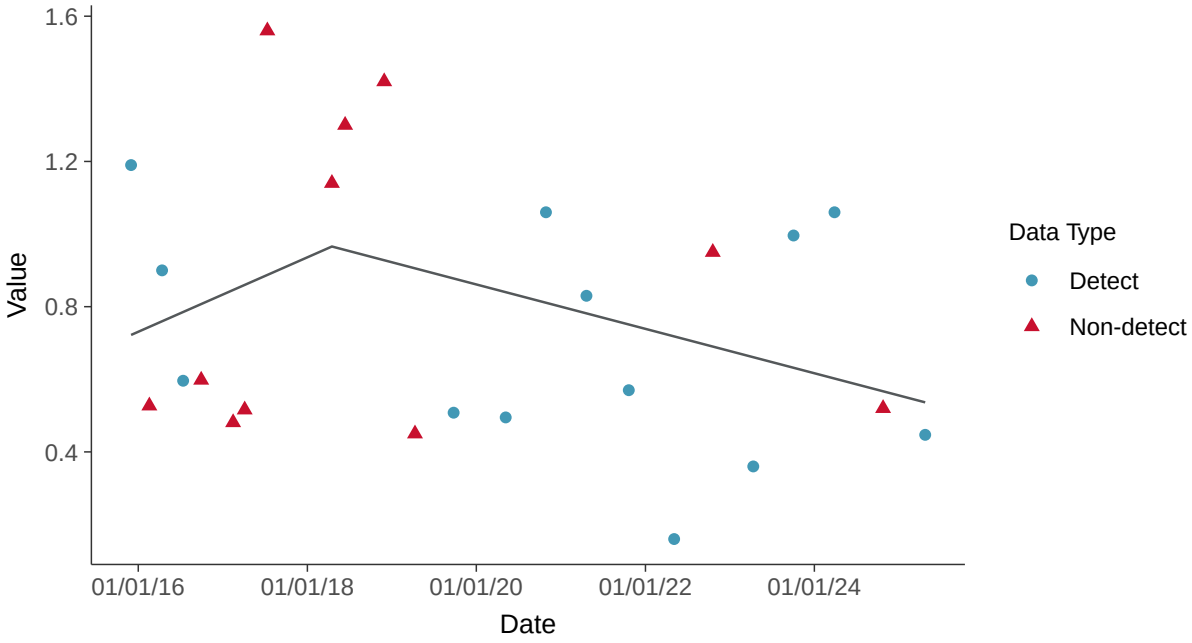

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15013 (pCi/L)



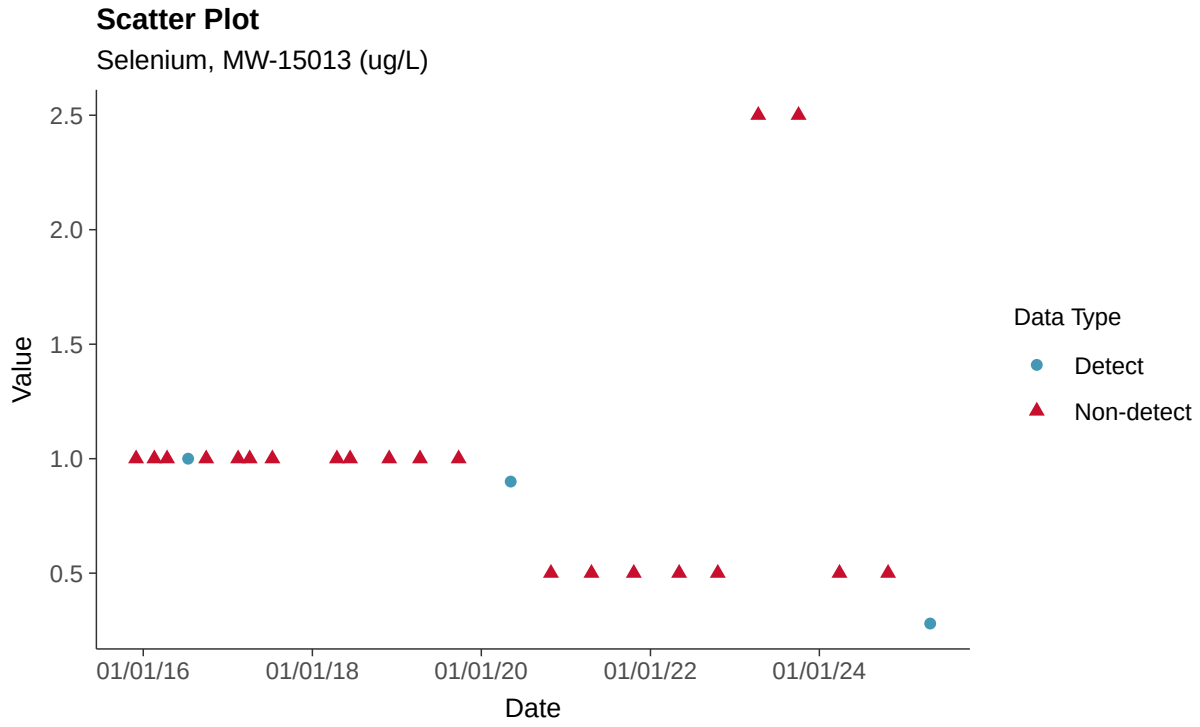
**Trend Regression: Piecewise Linear-Linear**

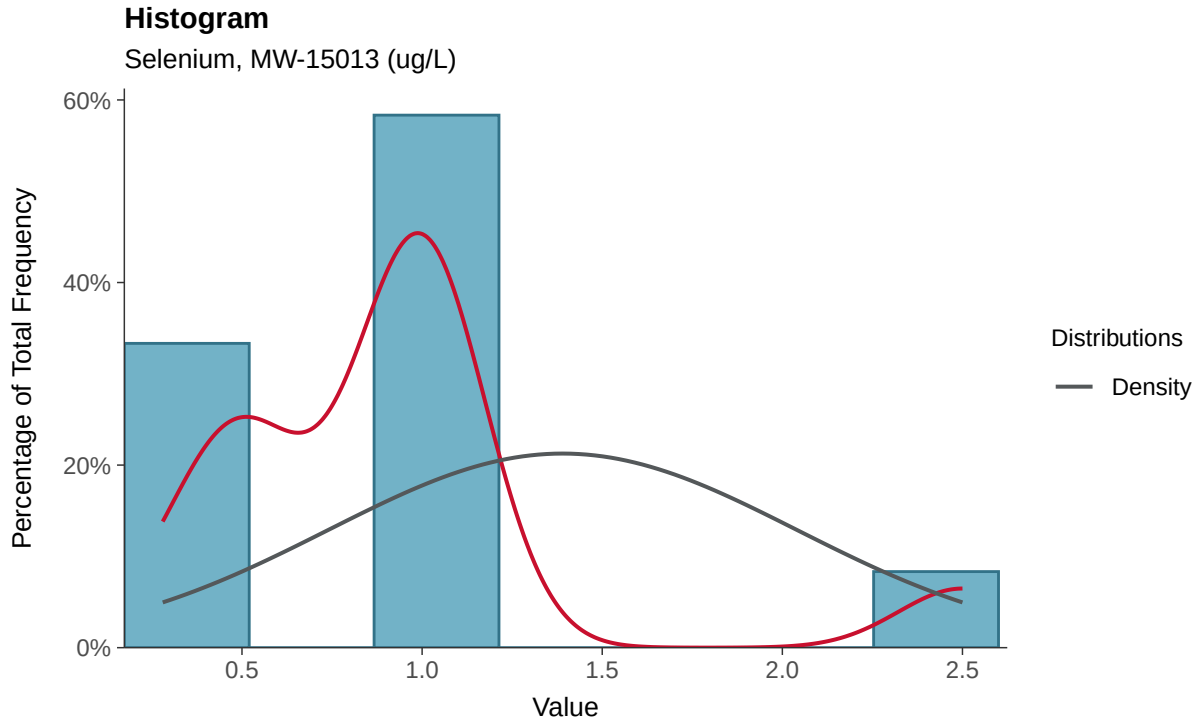
Radium-226+228, MW-15013 (pCi/L)



# Appendix IV: Selenium, MW-15013

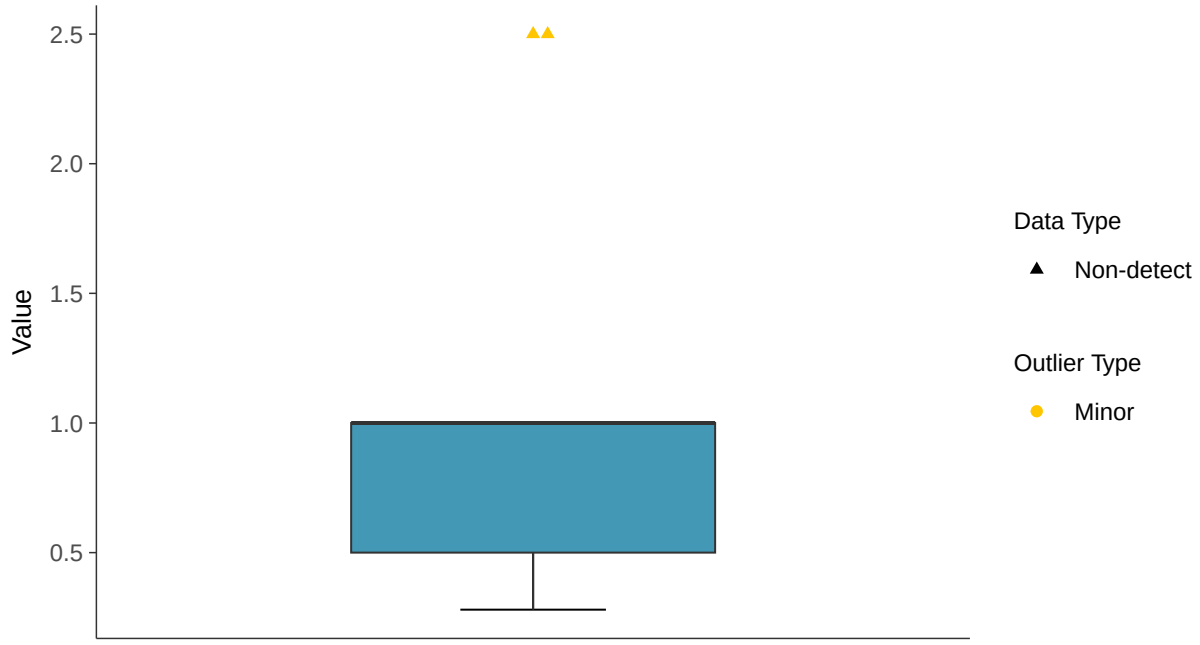
ID: 03_2_127



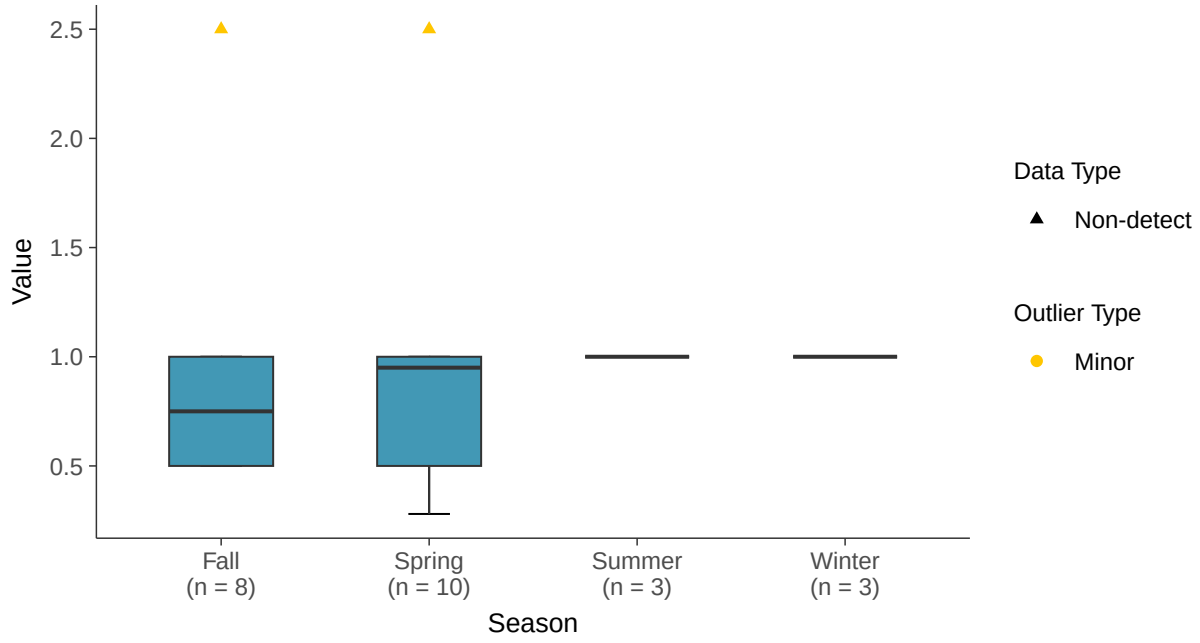
## Boxplot

Selenium, MW-15013 (ug/L)



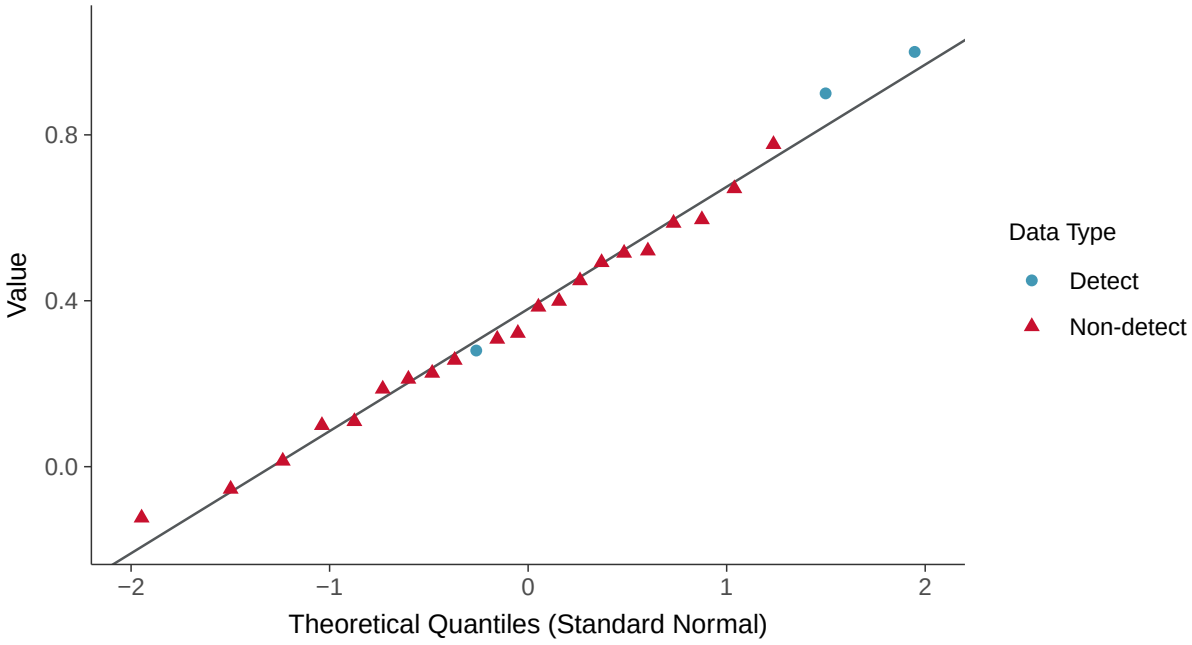

## Boxplot by Season

Selenium, MW-15013 (ug/L)



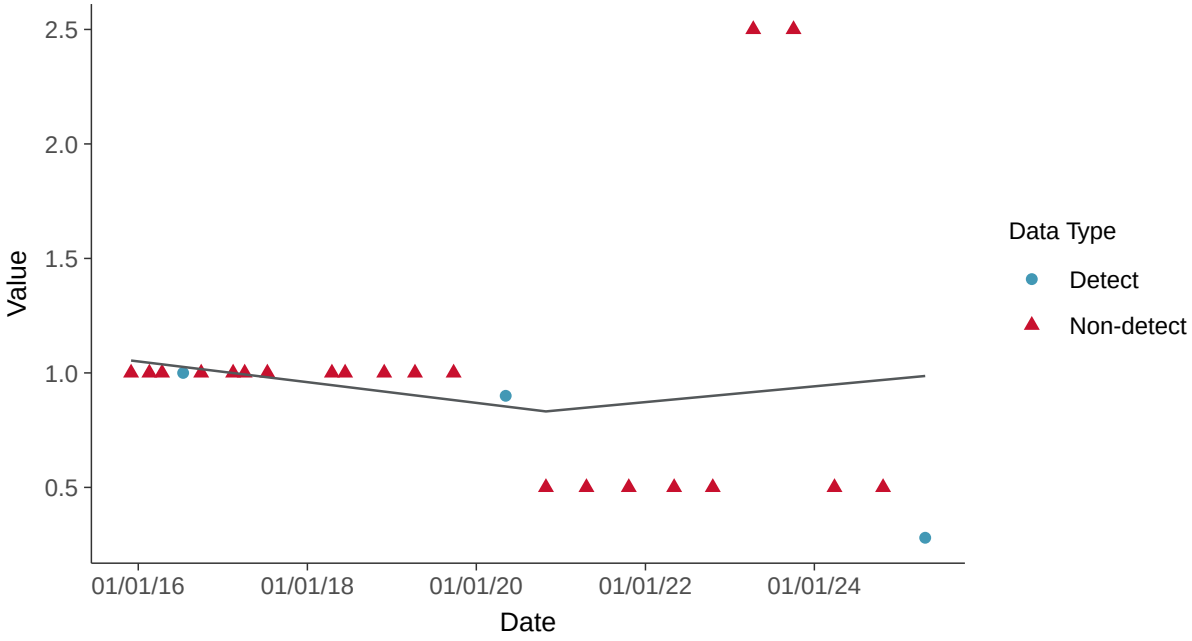
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15013 (ug/L)



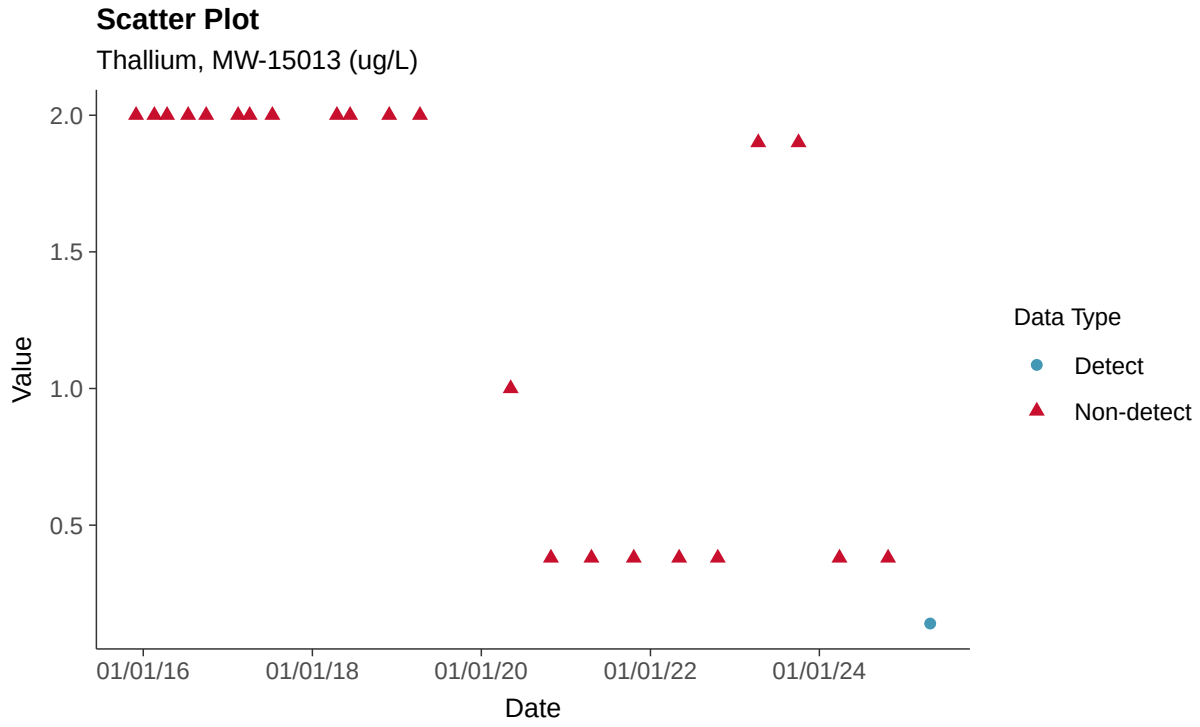

**Trend Regression: Piecewise Linear-Linear**

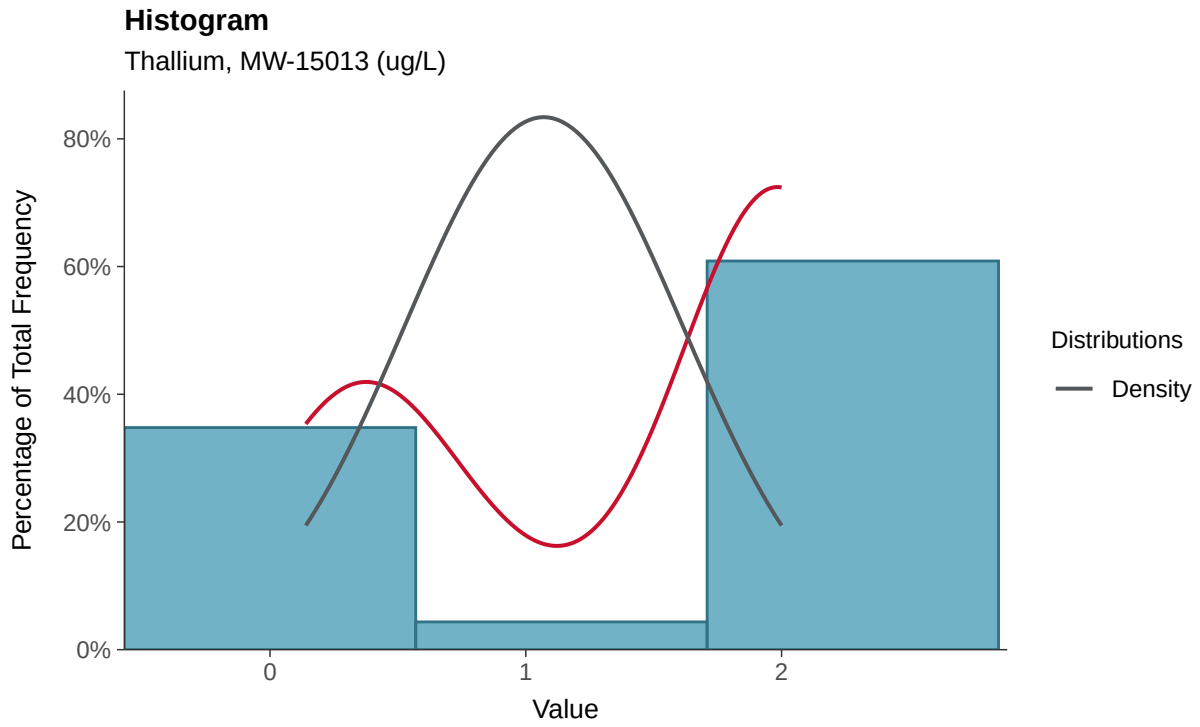
Selenium, MW-15013 (ug/L)



## Appendix IV: Thallium, MW-15013

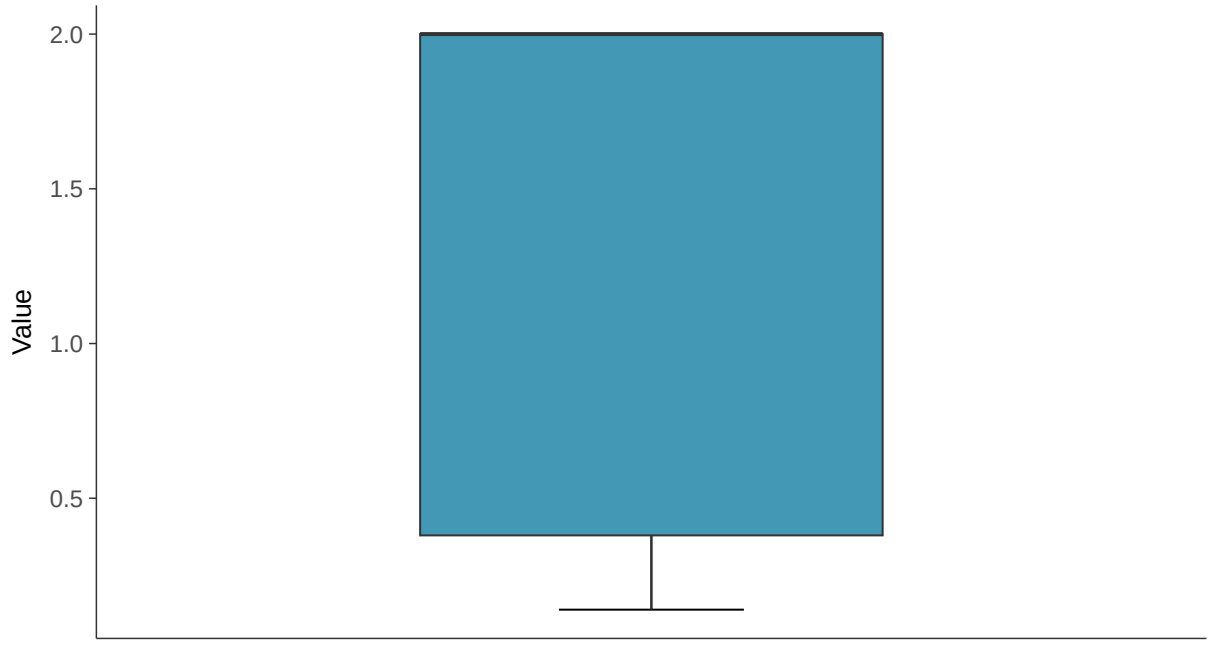
ID: 03_2_131



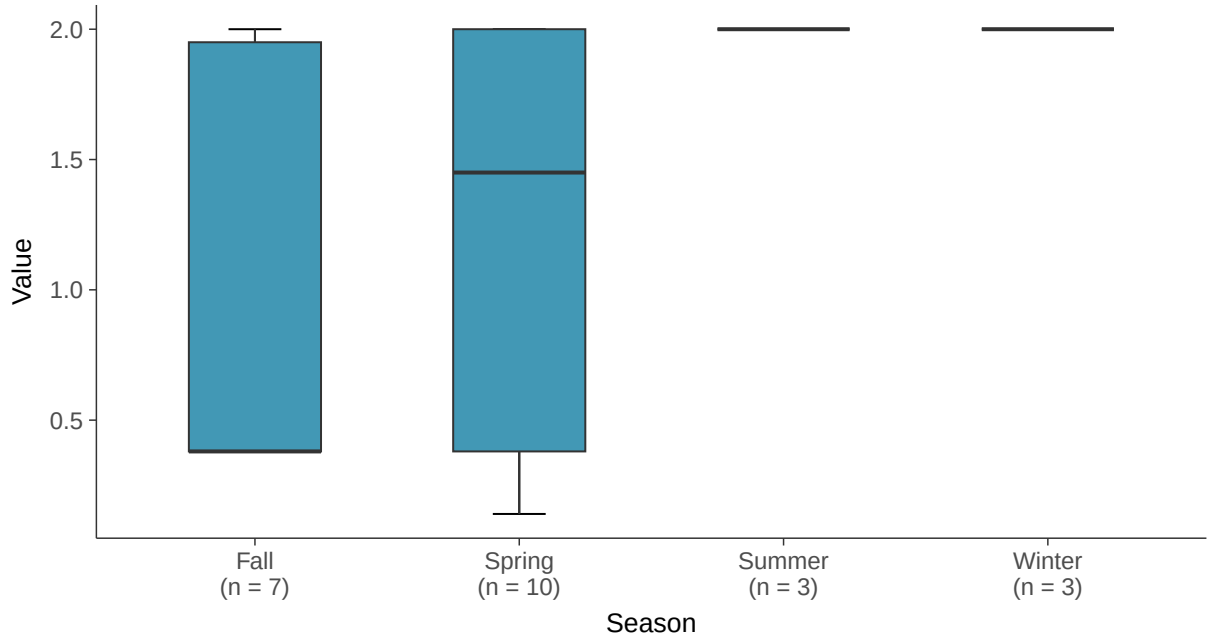
**Boxplot**

Thallium, MW-15013 (ug/L)



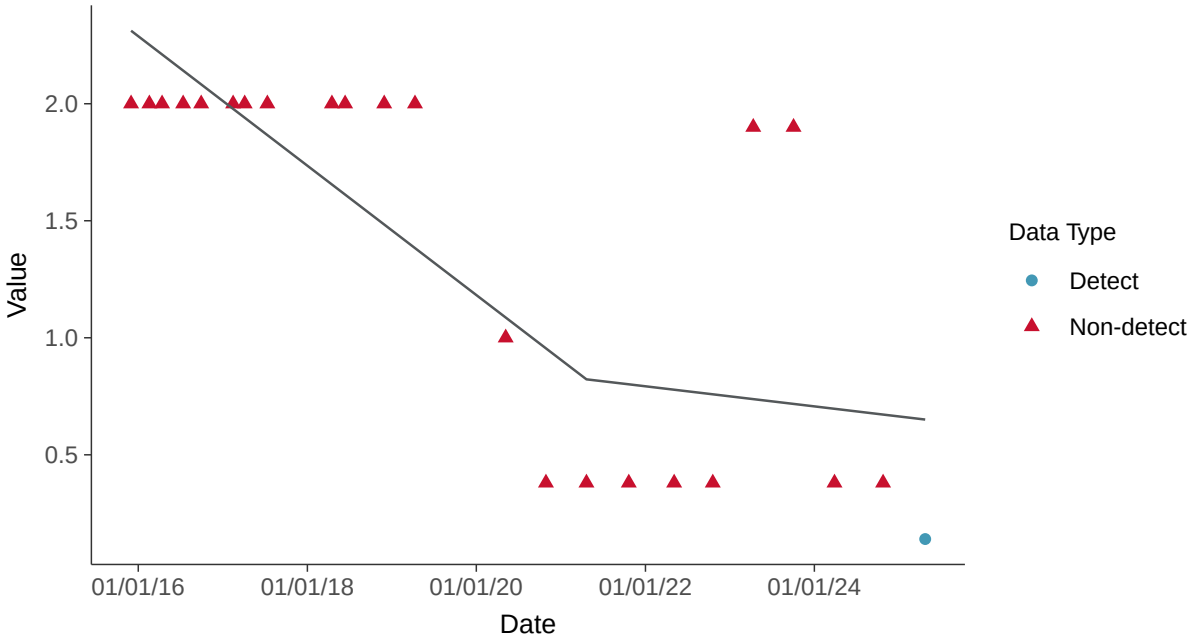

**Boxplot by Season**

Thallium, MW-15013 (ug/L)



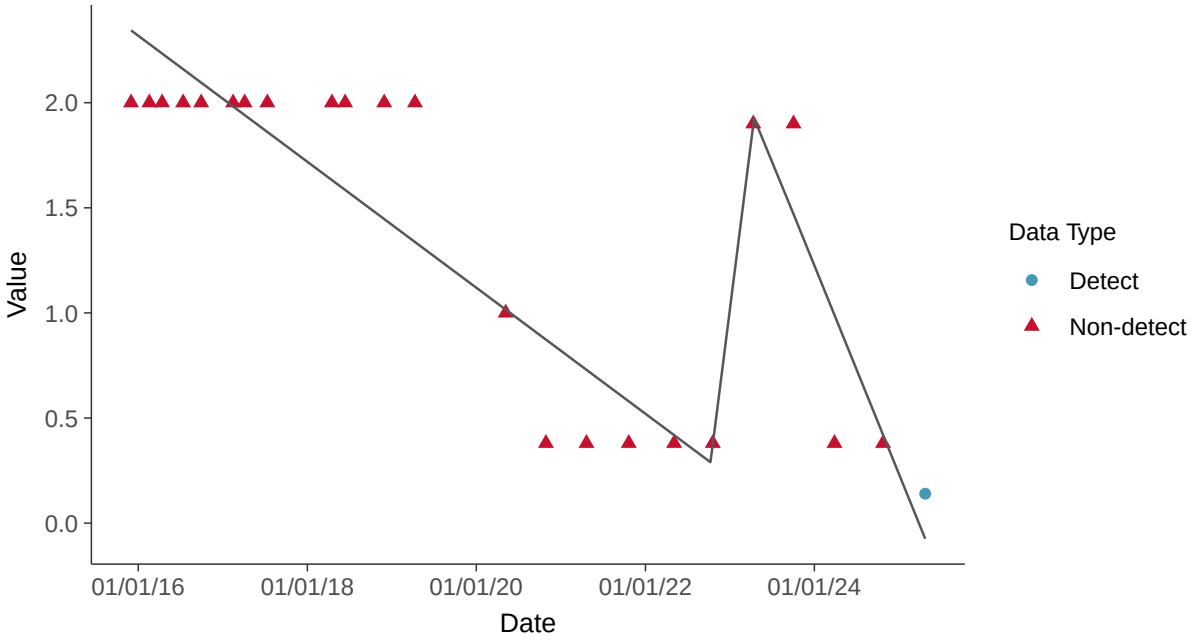
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15013 (ug/L)



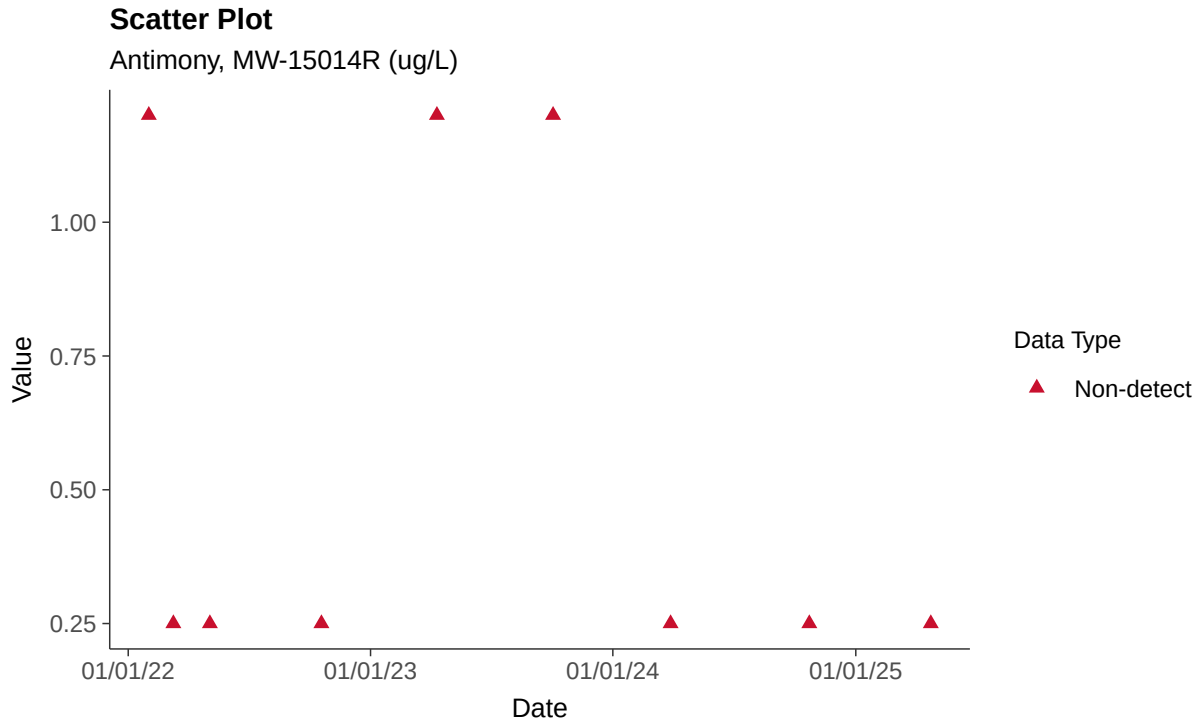

**Trend Regression: Piecewise Linear-Linear-Linear**

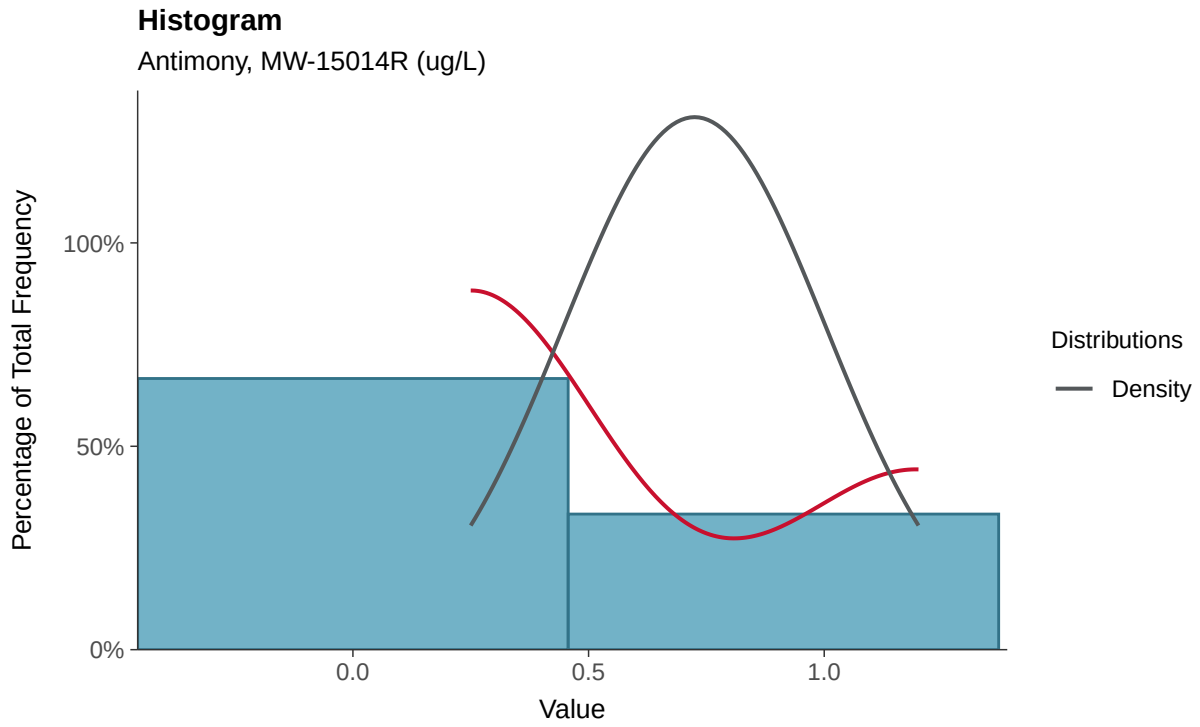
Thallium, MW-15013 (ug/L)



## Appendix IV: Antimony, MW-15014R

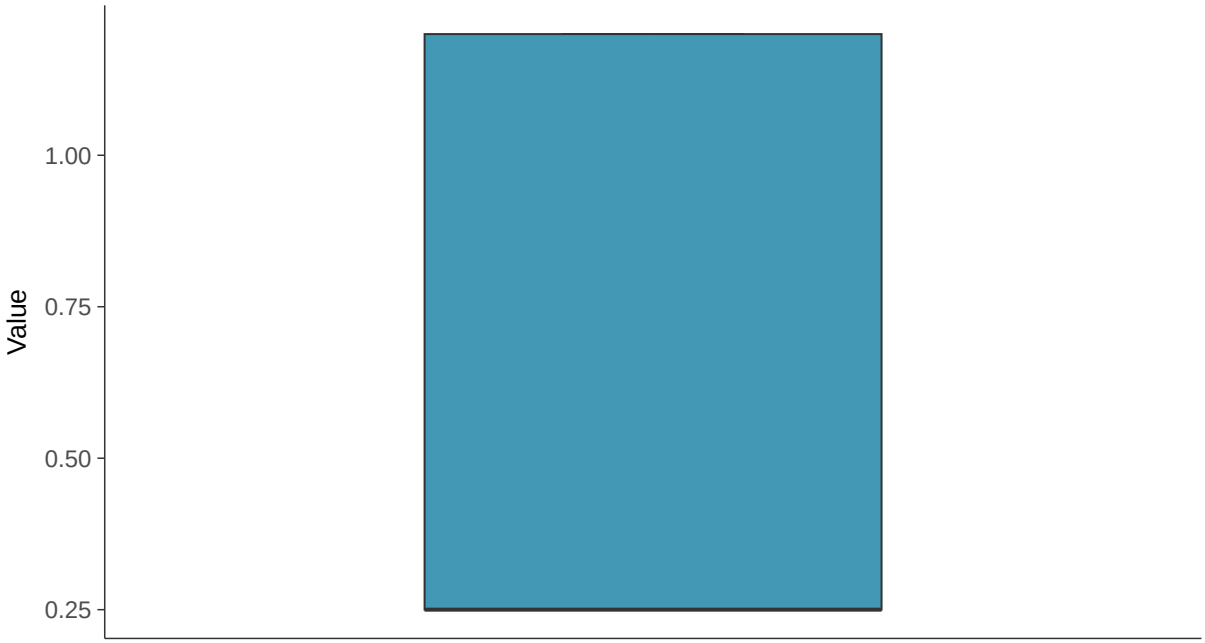
ID: 04_2_101



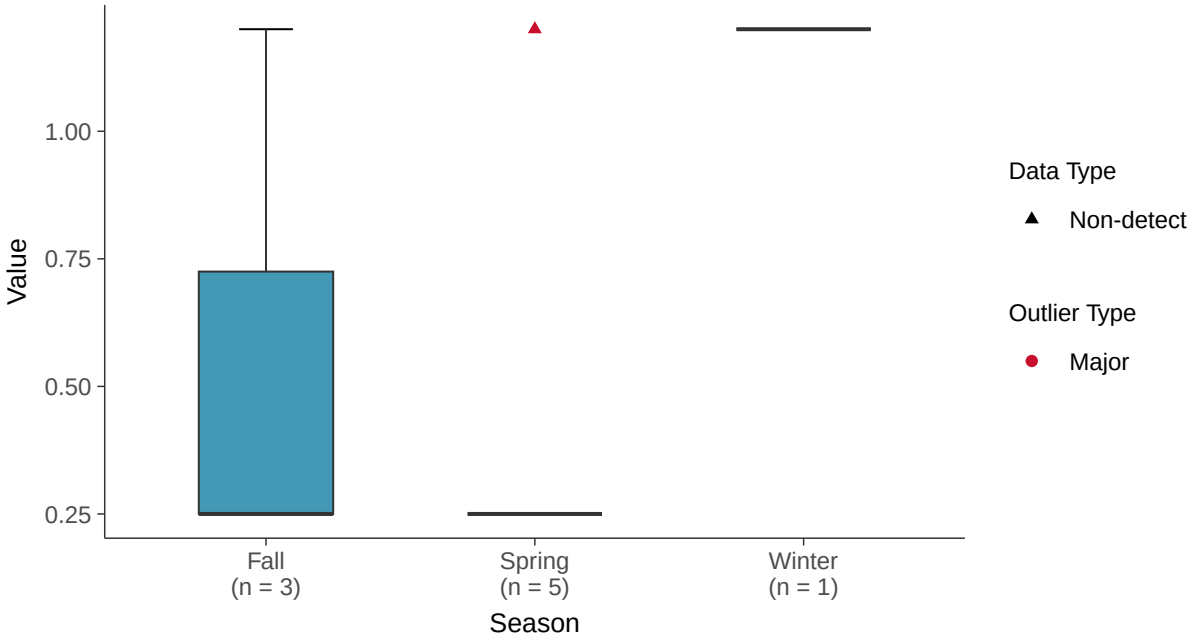
## Boxplot

Antimony, MW-15014R (ug/L)



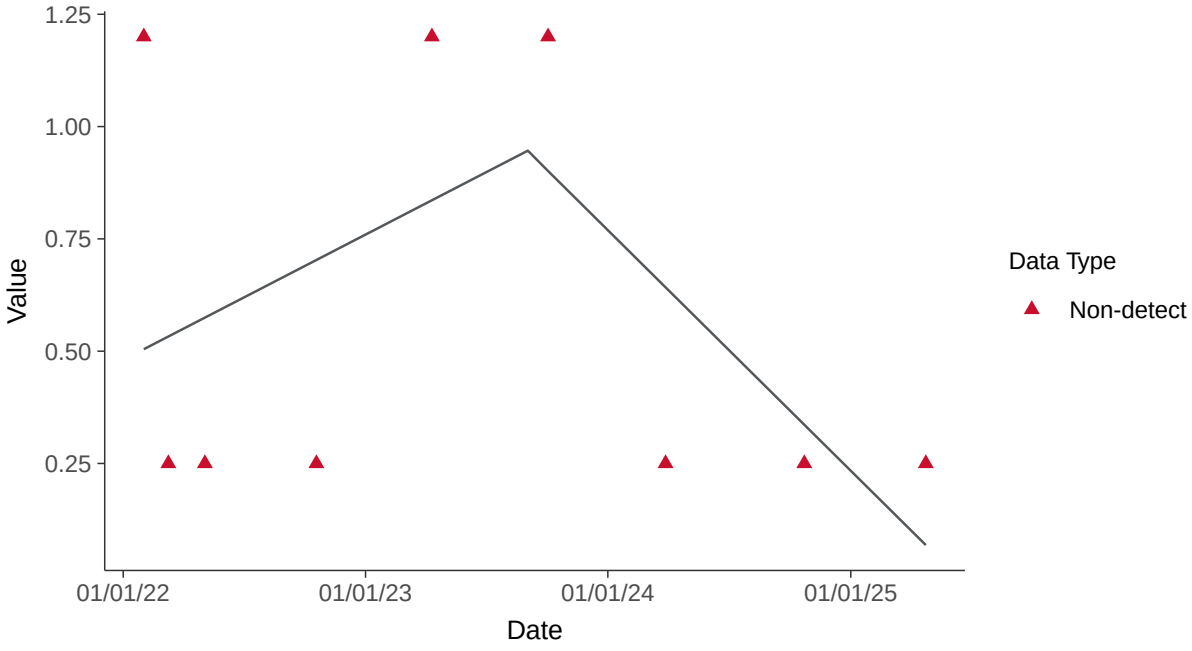

## Boxplot by Season

Antimony, MW-15014R (ug/L)



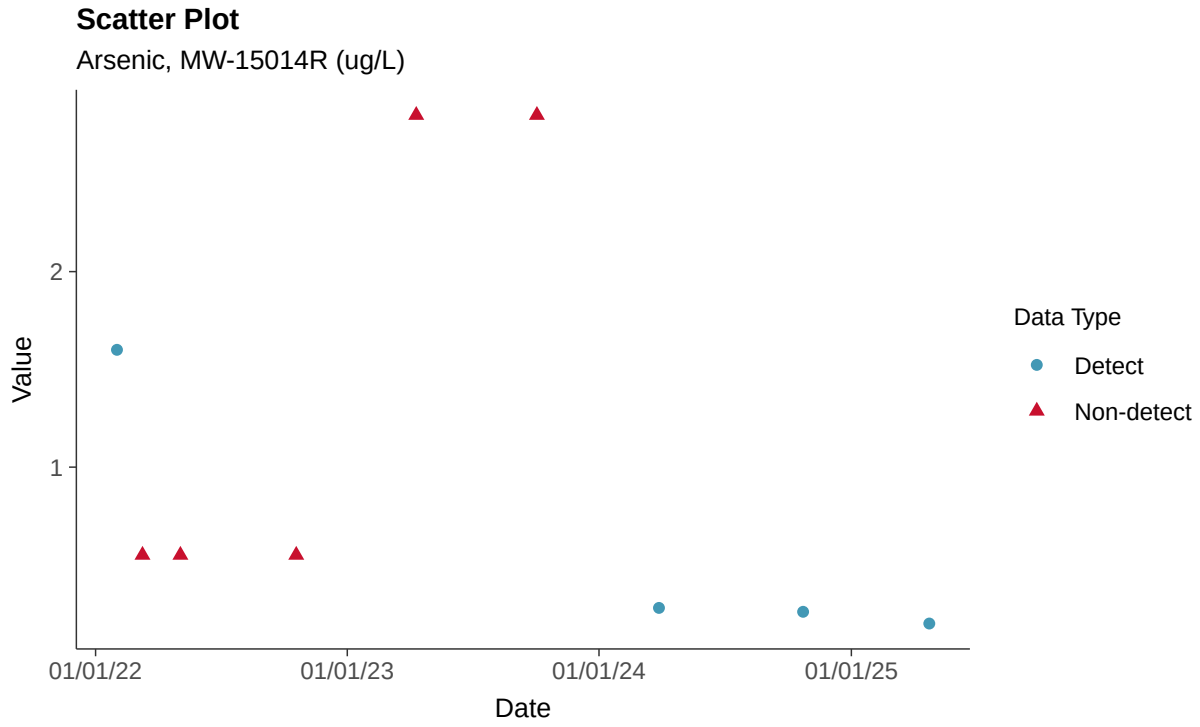
**Trend Regression: Piecewise Linear-Linear**

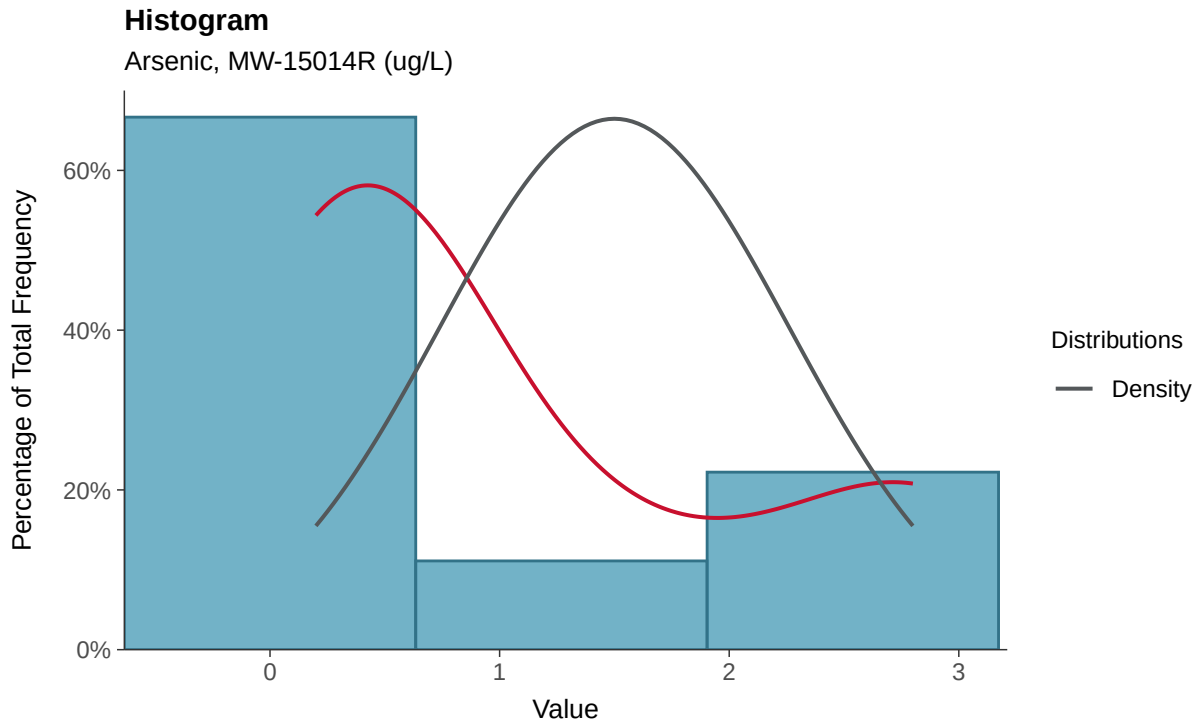
Antimony, MW-15014R (ug/L)



## Appendix IV: Arsenic, MW-15014R

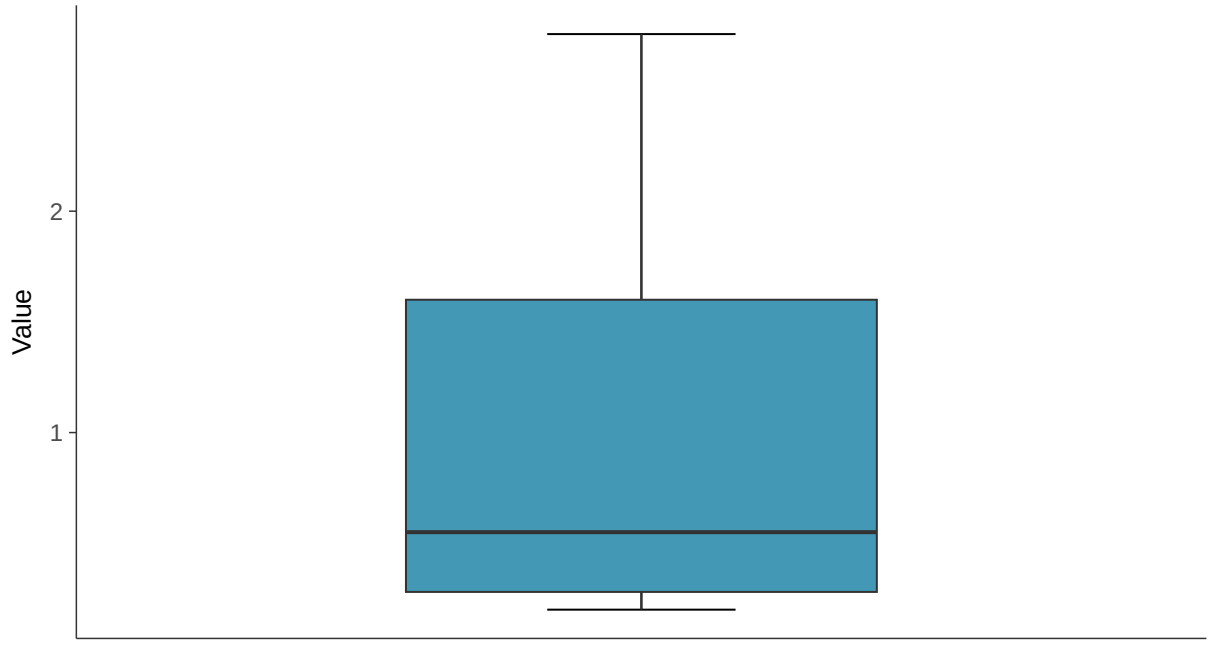
ID: 04_2_102



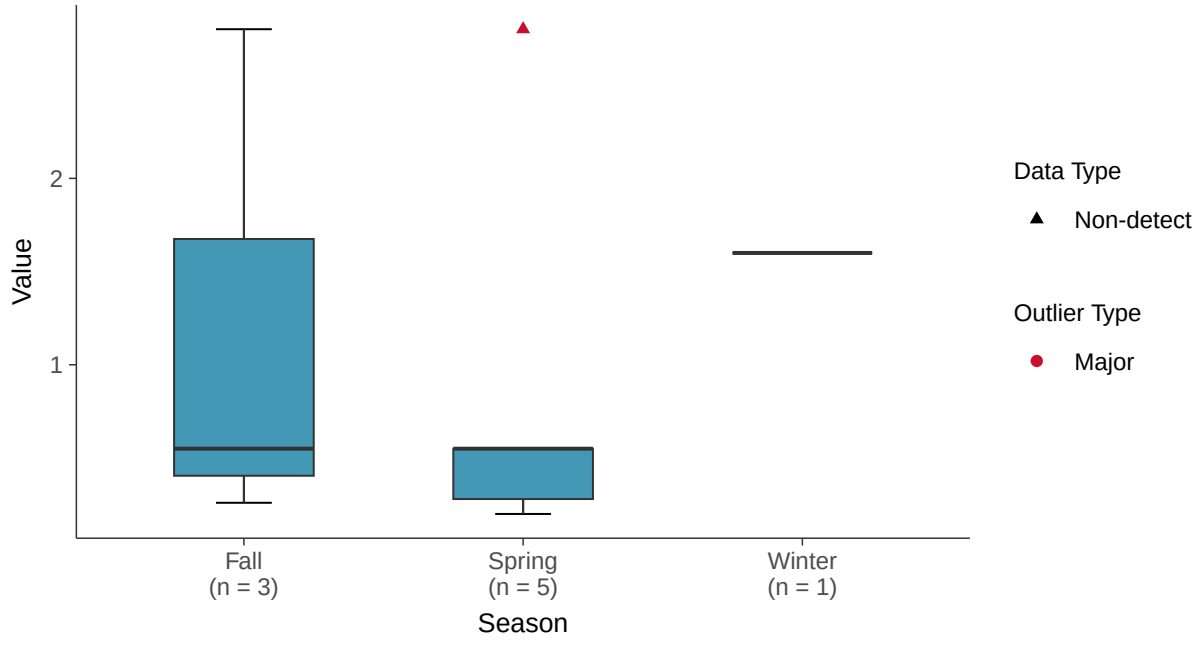
## Boxplot

Arsenic, MW-15014R (ug/L)



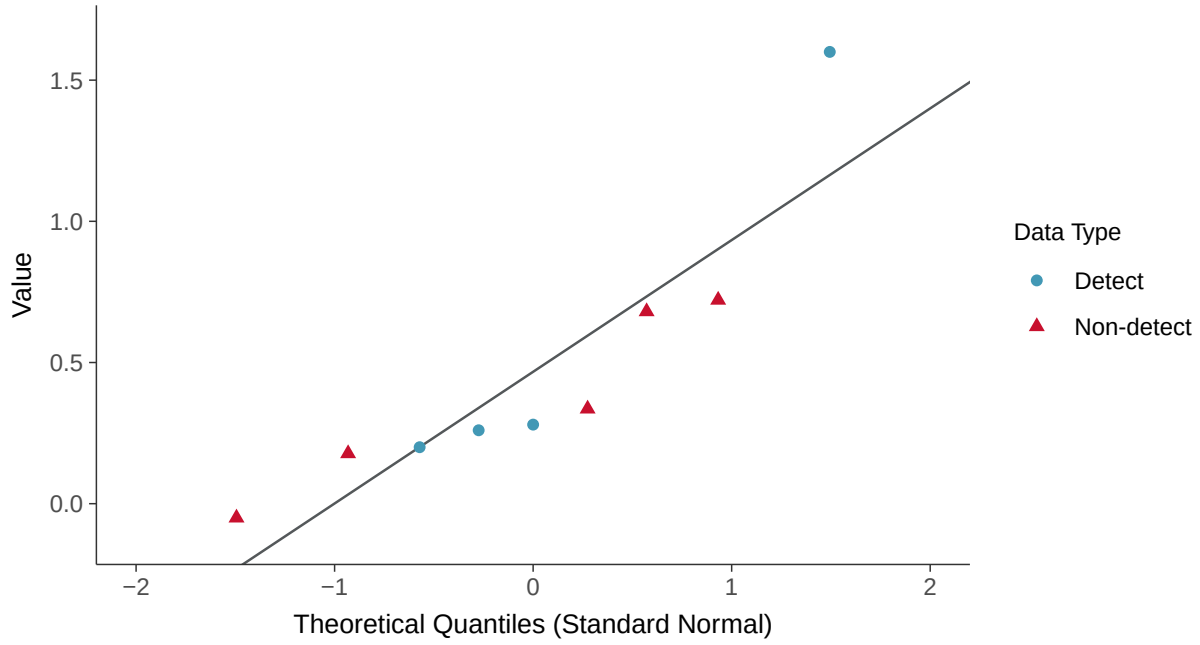

## Boxplot by Season

Arsenic, MW-15014R (ug/L)



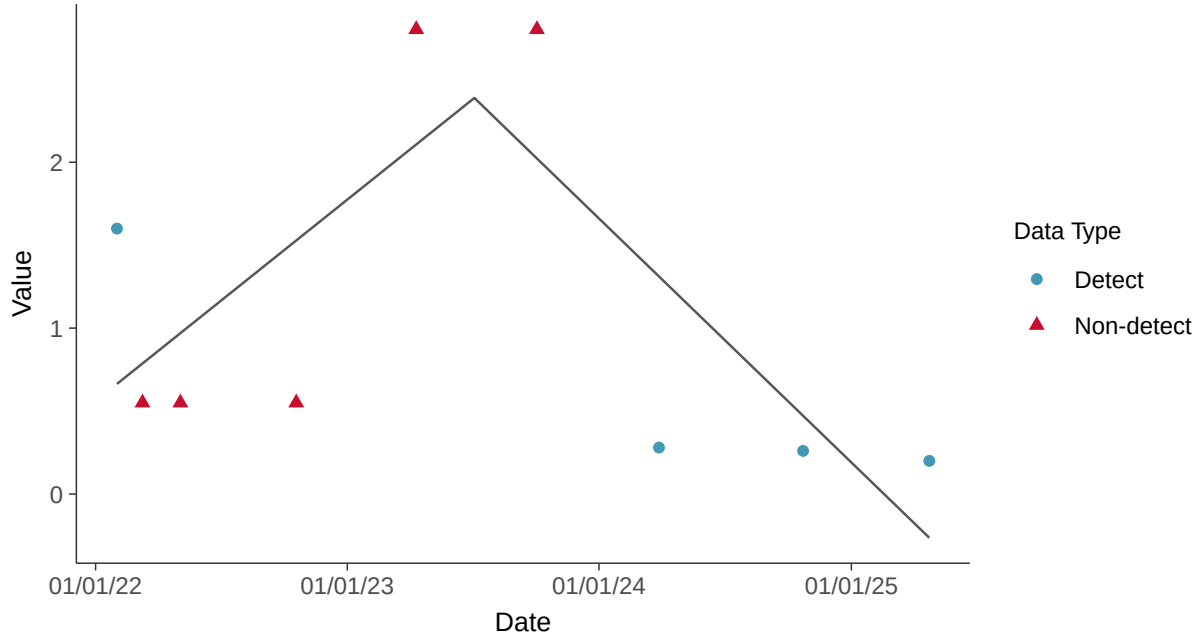
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15014R (ug/L)



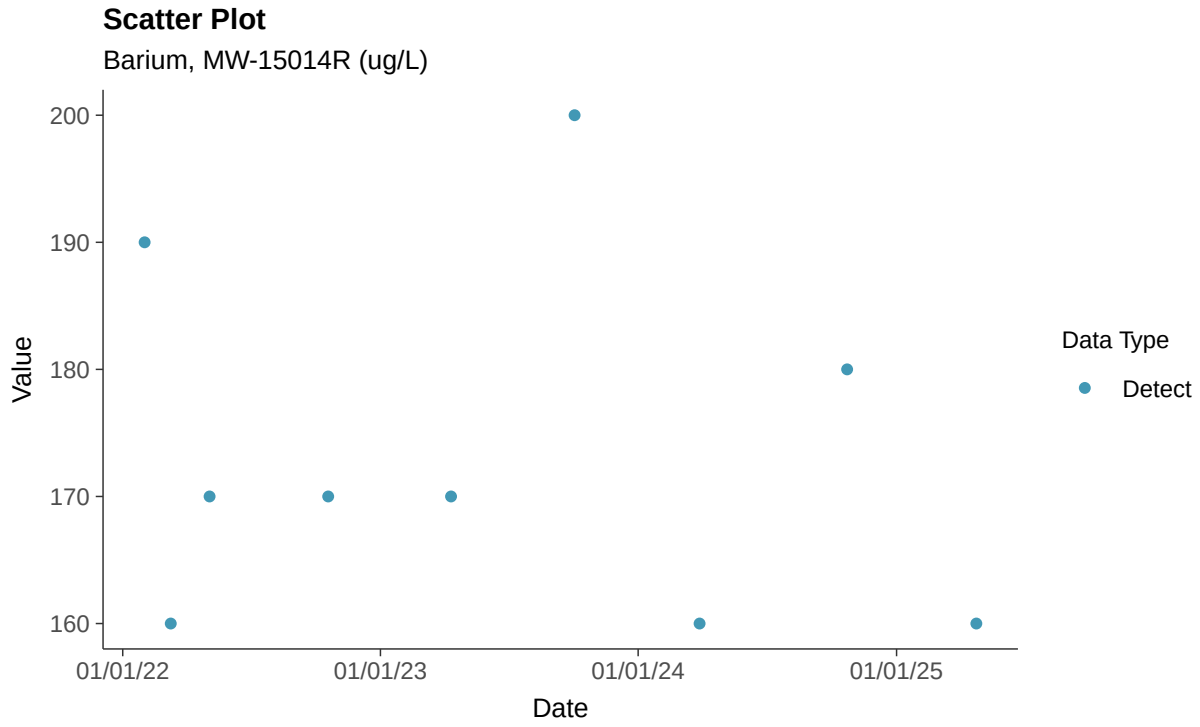

**Trend Regression: Piecewise Linear-Linear**

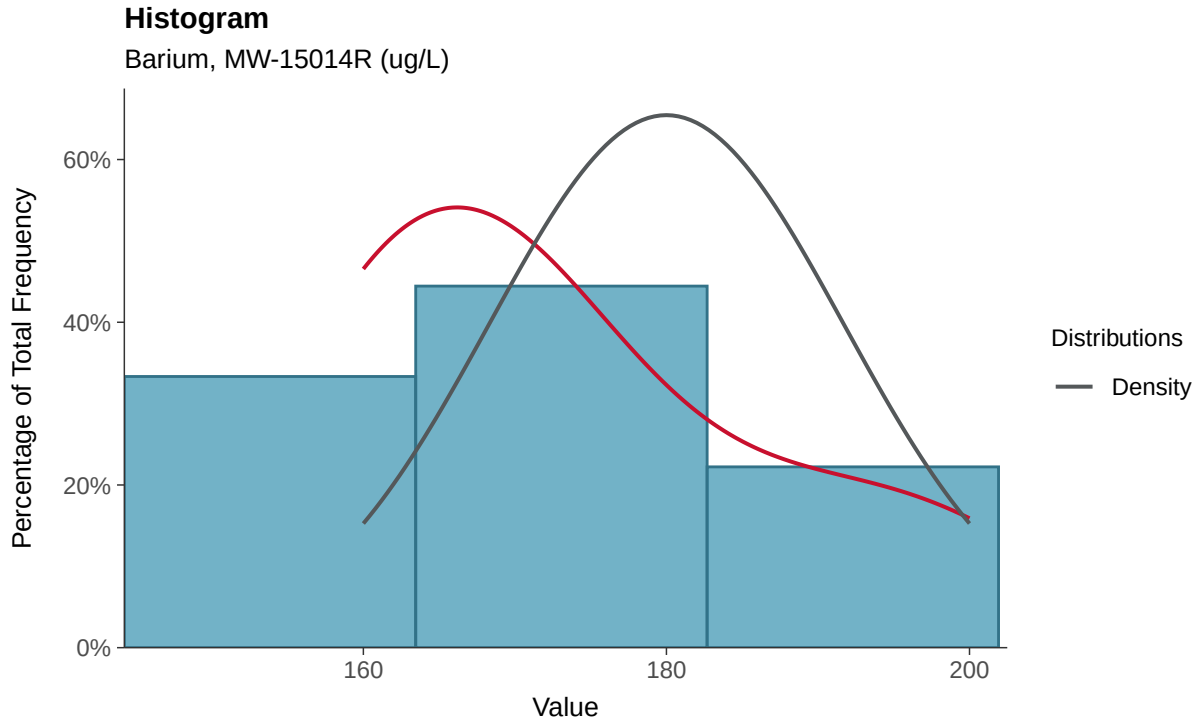
Arsenic, MW-15014R (ug/L)



## Appendix IV: Barium, MW-15014R

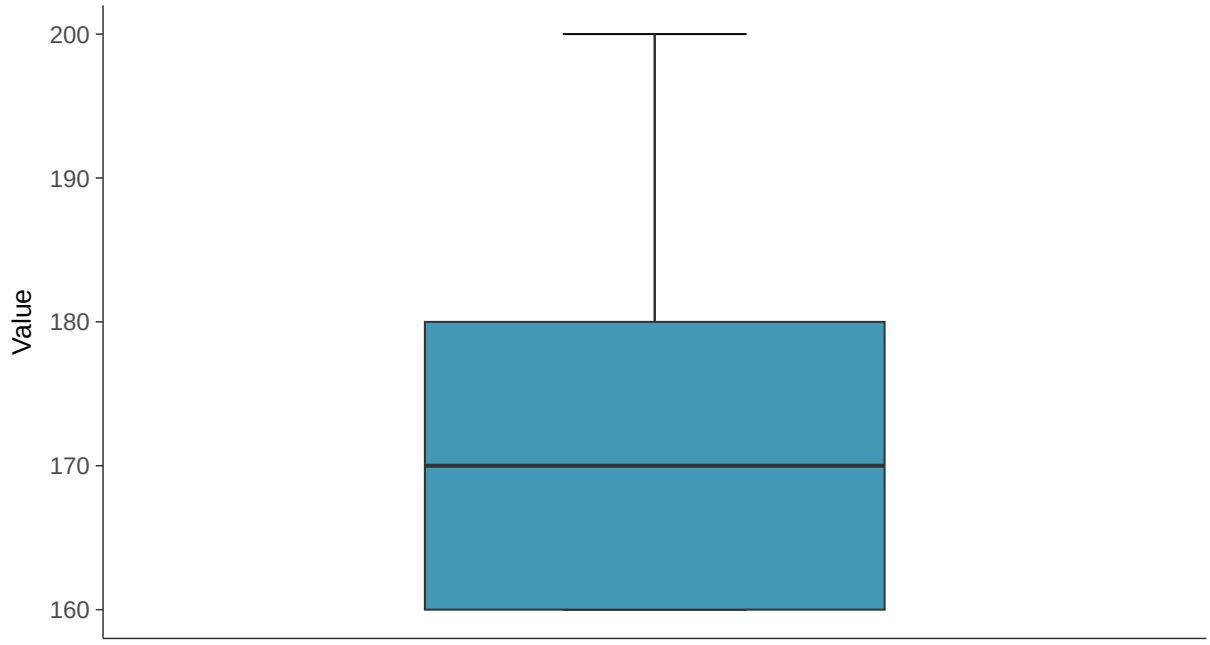
ID: 04_2_103



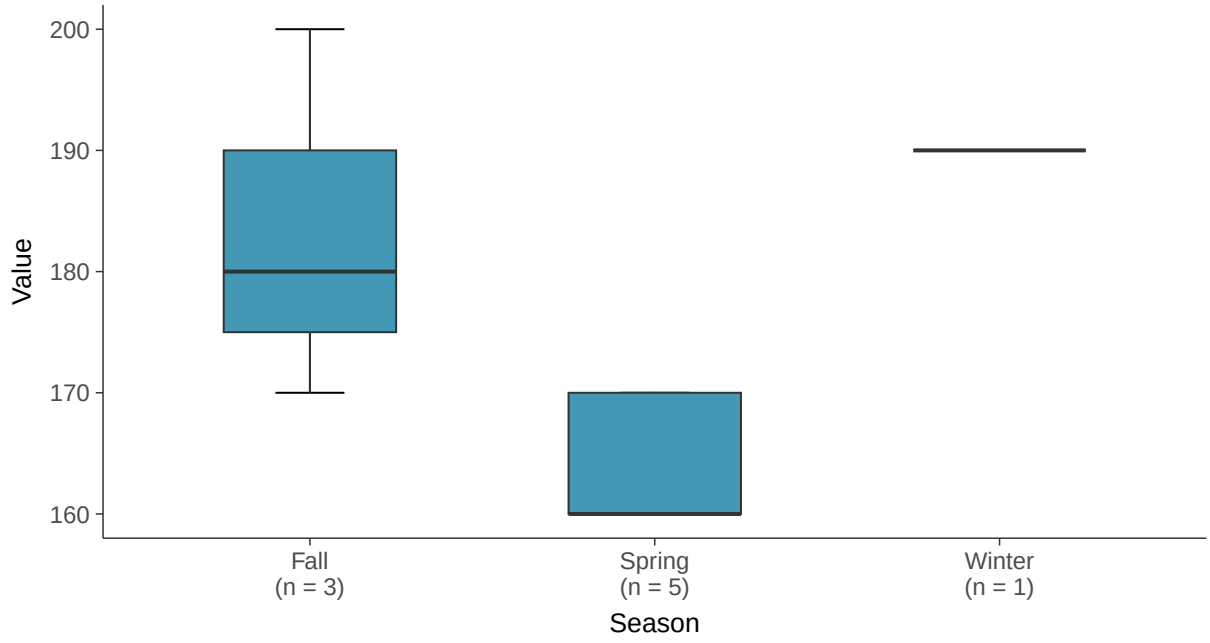
**Boxplot**

Barium, MW-15014R (ug/L)



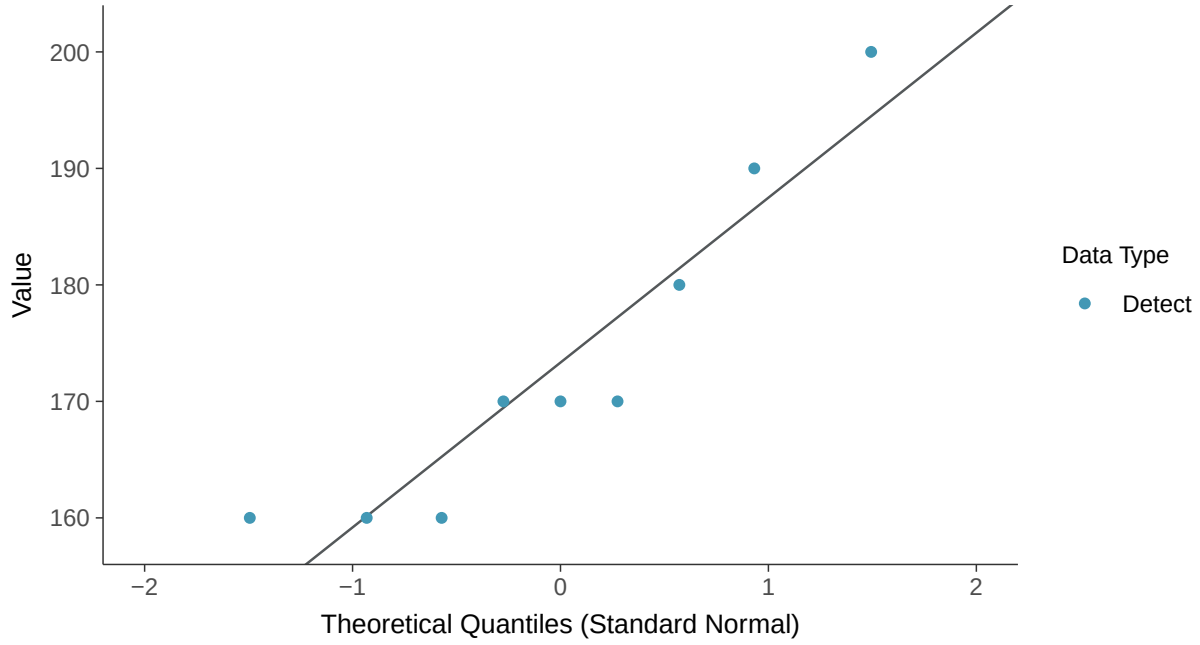

**Boxplot by Season**

Barium, MW-15014R (ug/L)



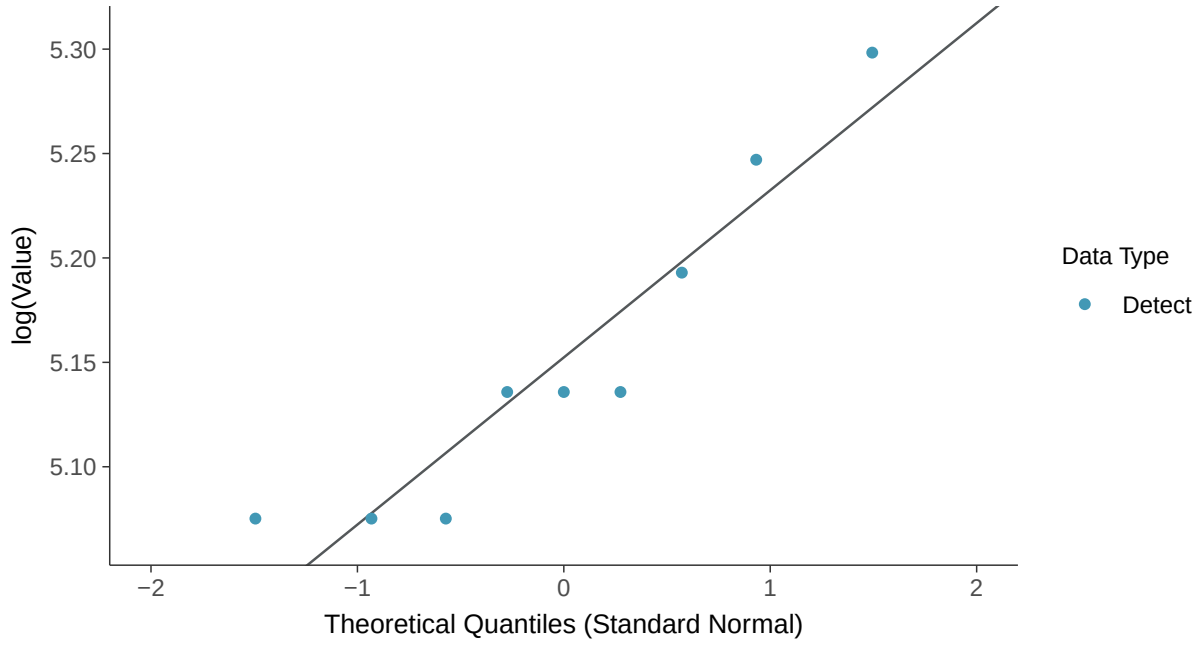
**Normal Q-Q plot**

Barium, MW-15014R (ug/L)



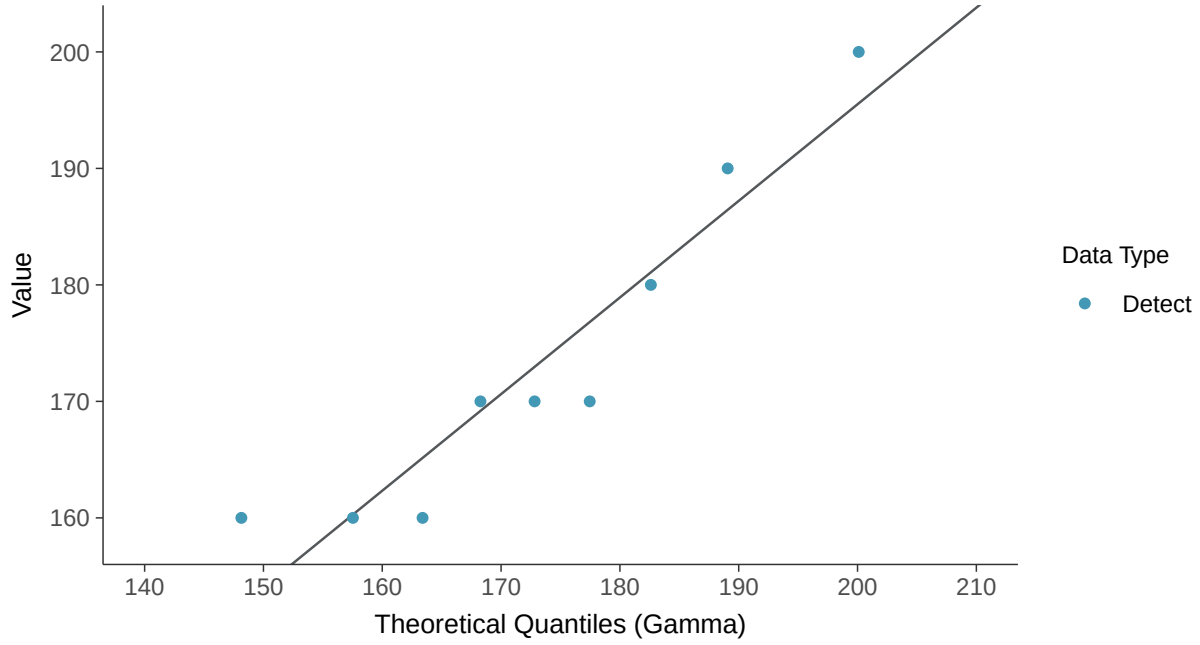

**Lognormal Q-Q plot**

Barium, MW-15014R (ug/L)



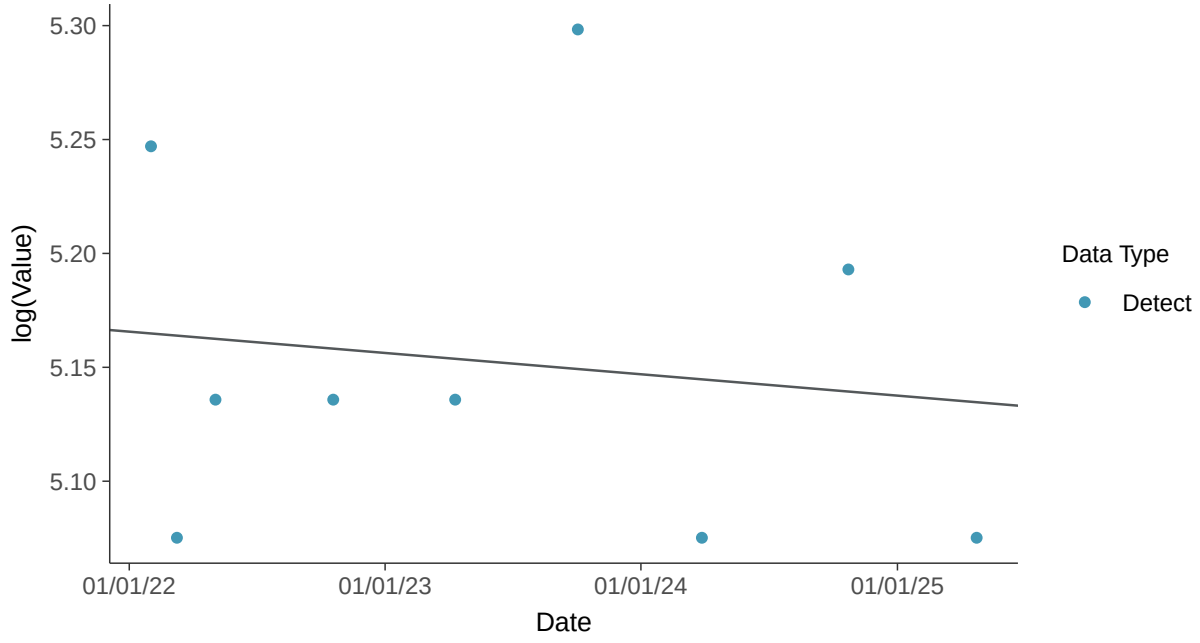
**Gamma Q-Q plot**

Barium, MW-15014R (ug/L)



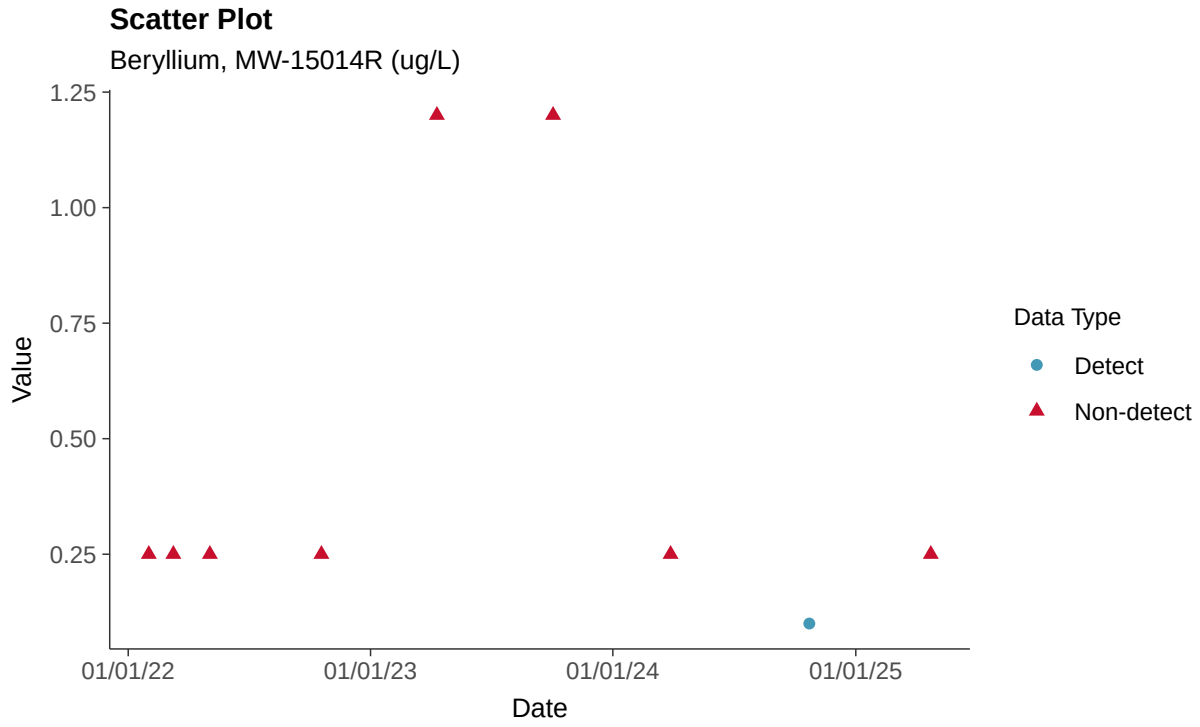

**Trend Regression: Lognormal MLE**

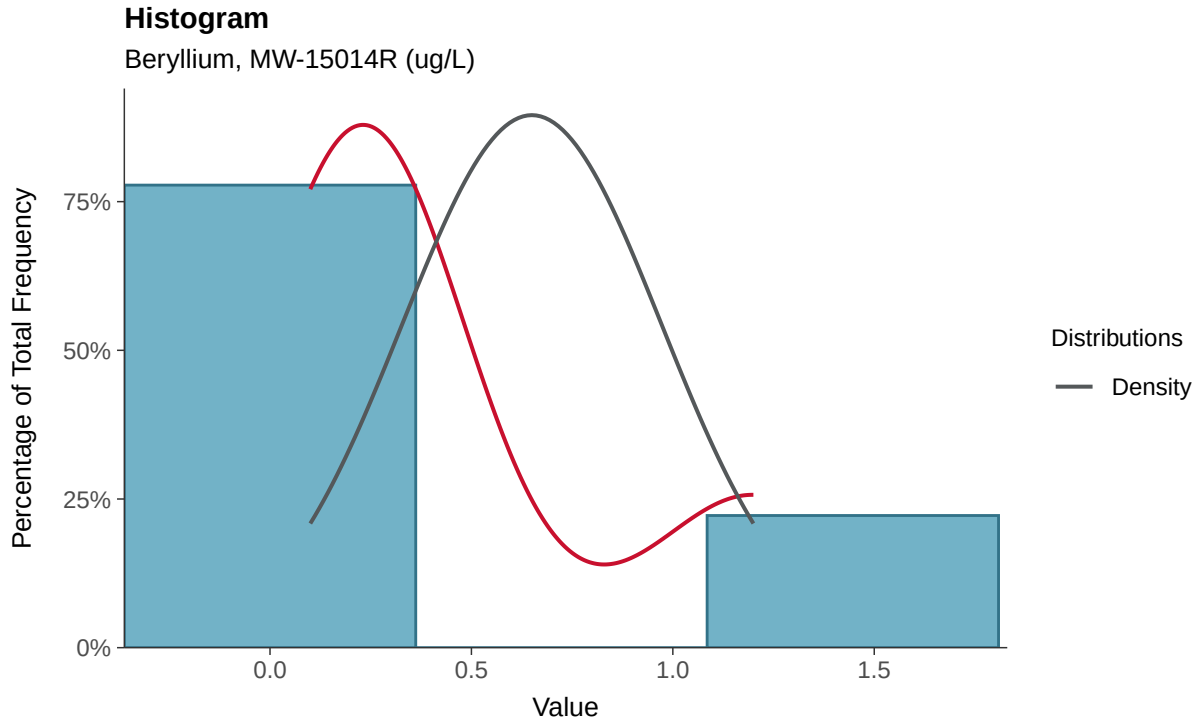
Barium, MW-15014R (ug/L)



## Appendix IV: Beryllium, MW-15014R

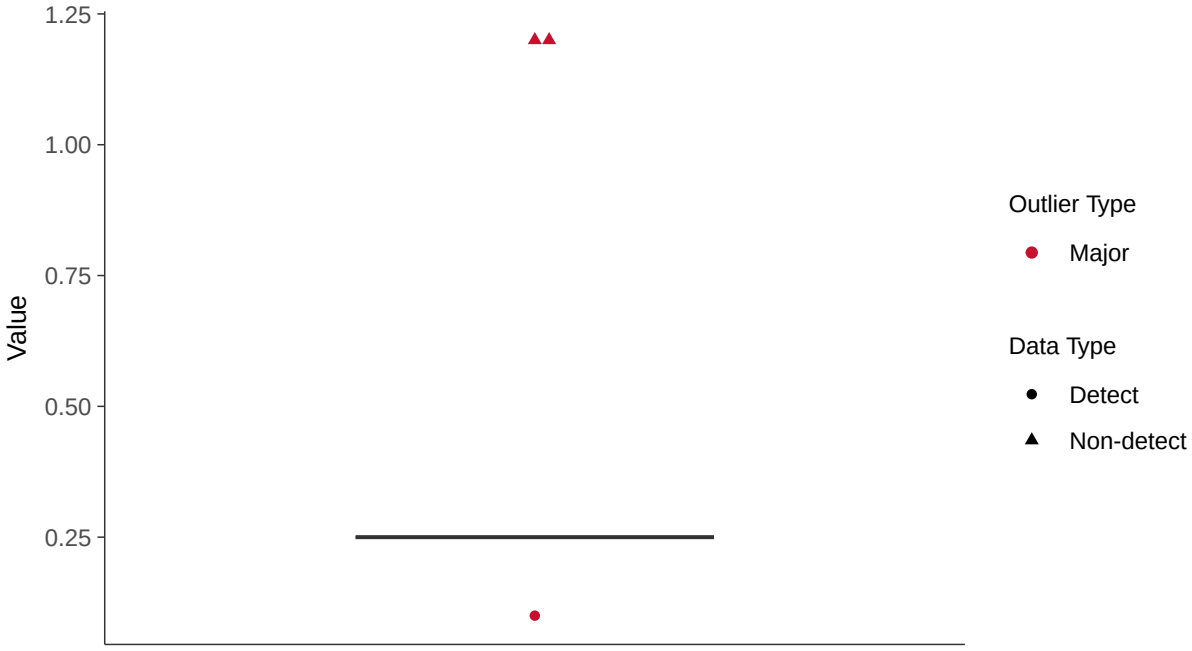
ID: 04_2_104



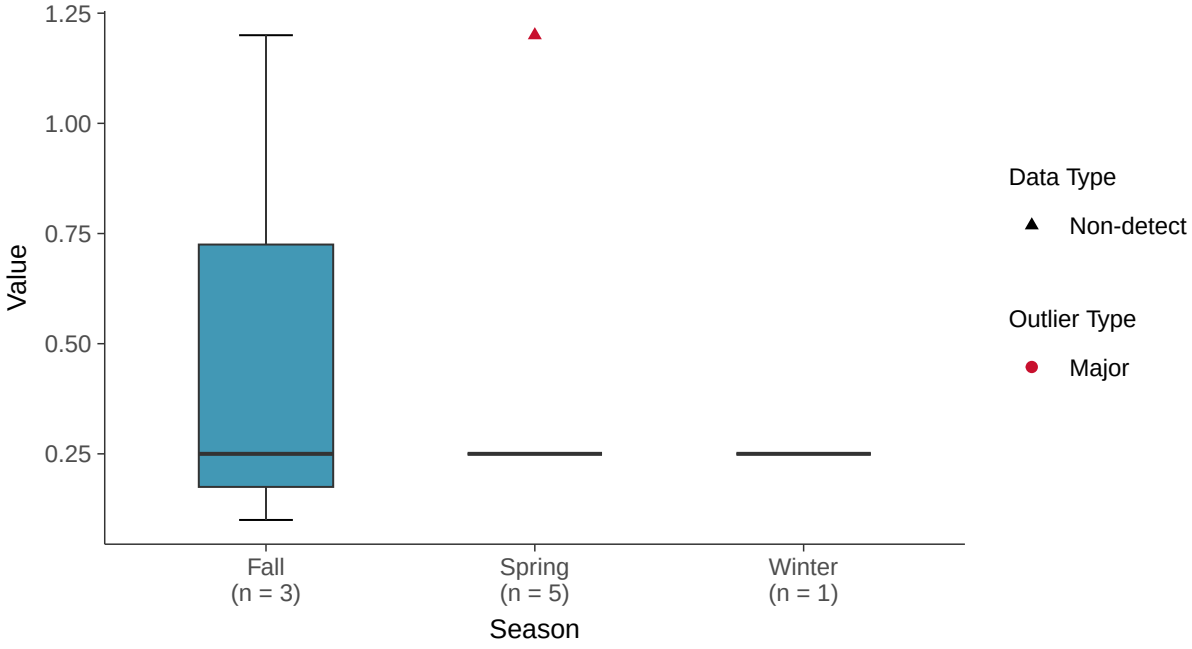
## Boxplot

Beryllium, MW-15014R (ug/L)



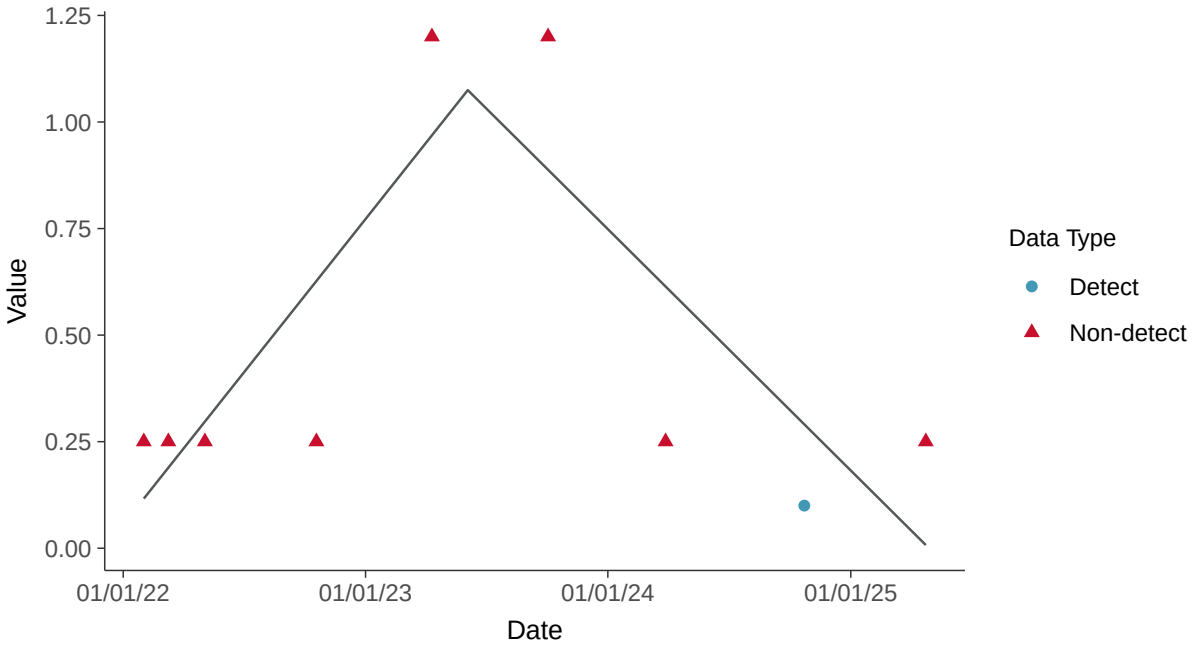

## Boxplot by Season

Beryllium, MW-15014R (ug/L)



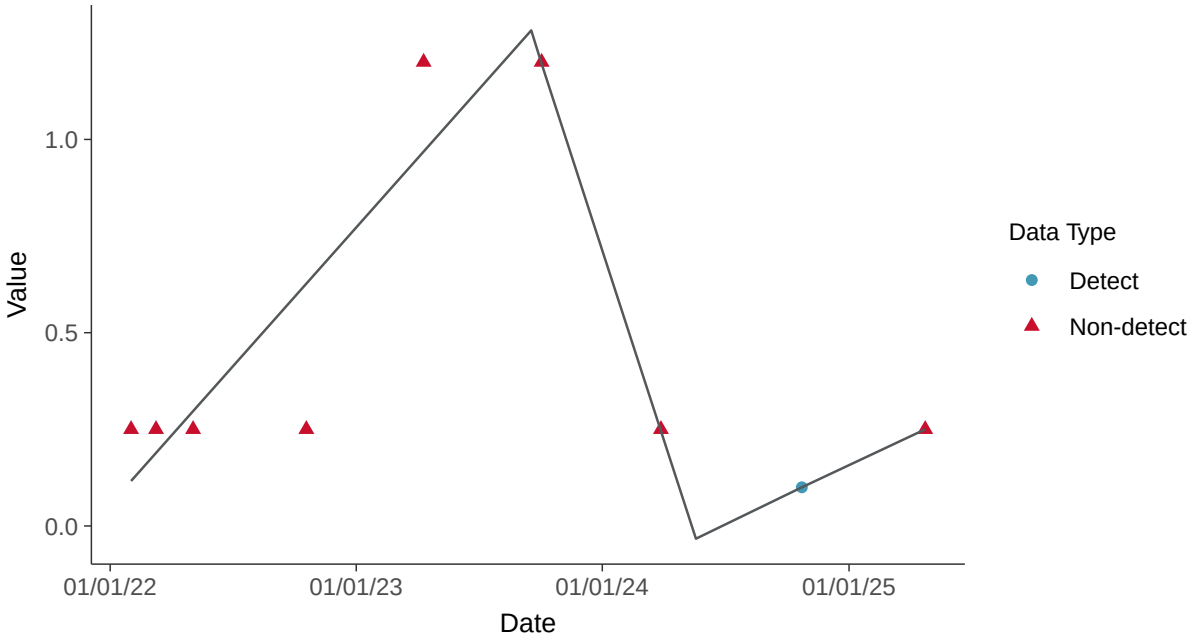
**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-15014R (ug/L)



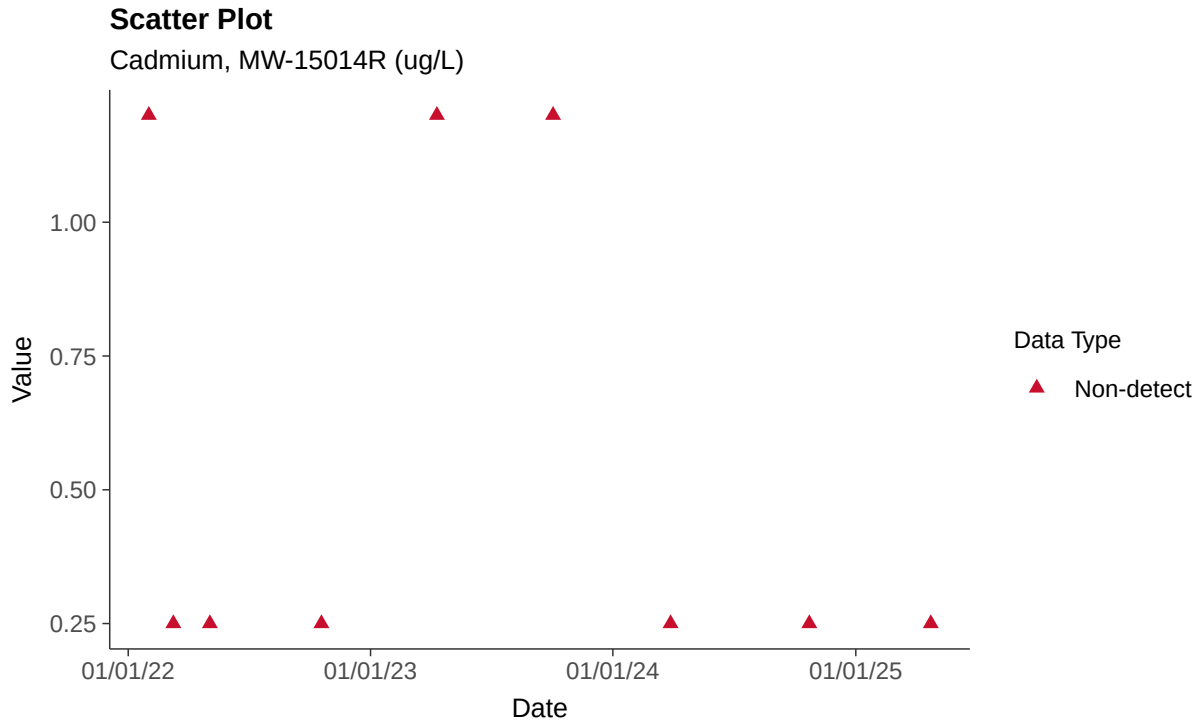

**Trend Regression: Piecewise Linear-Linear-Linear**

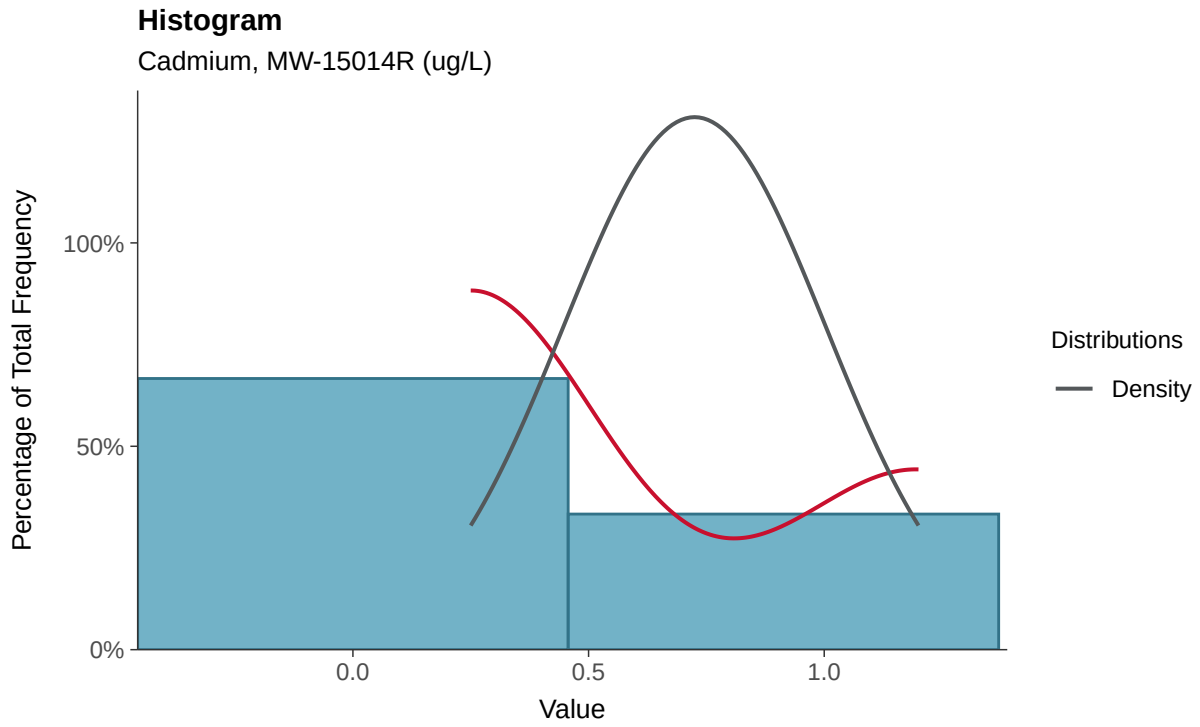
Beryllium, MW-15014R (ug/L)



## Appendix IV: Cadmium, MW-15014R

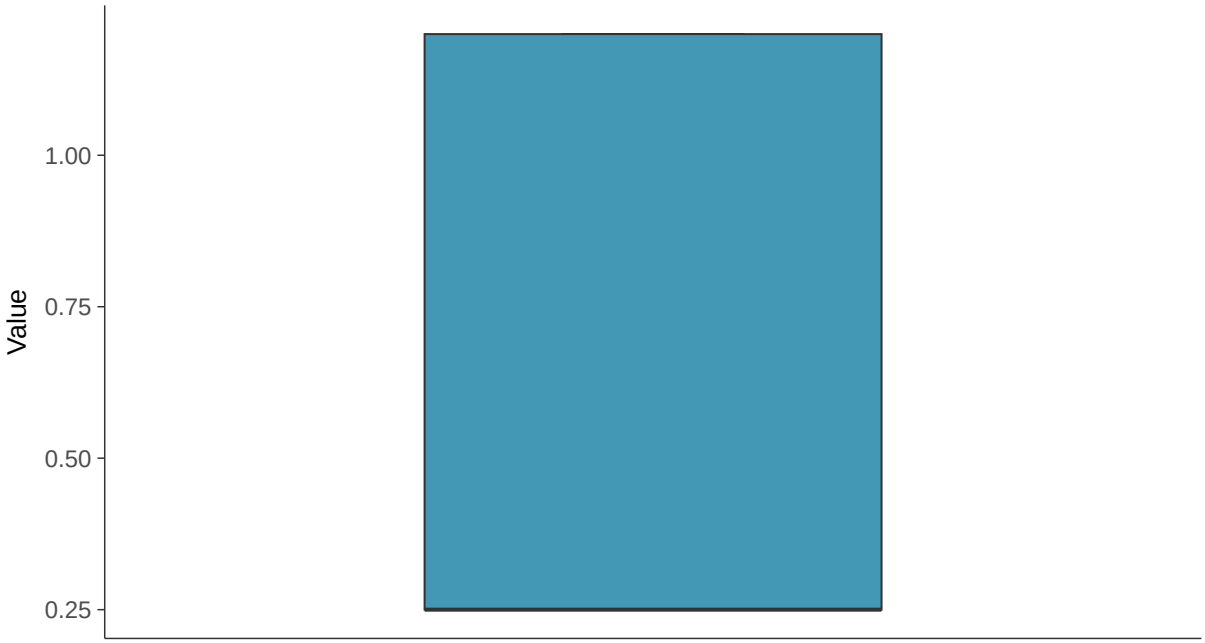
ID: 04_2_106



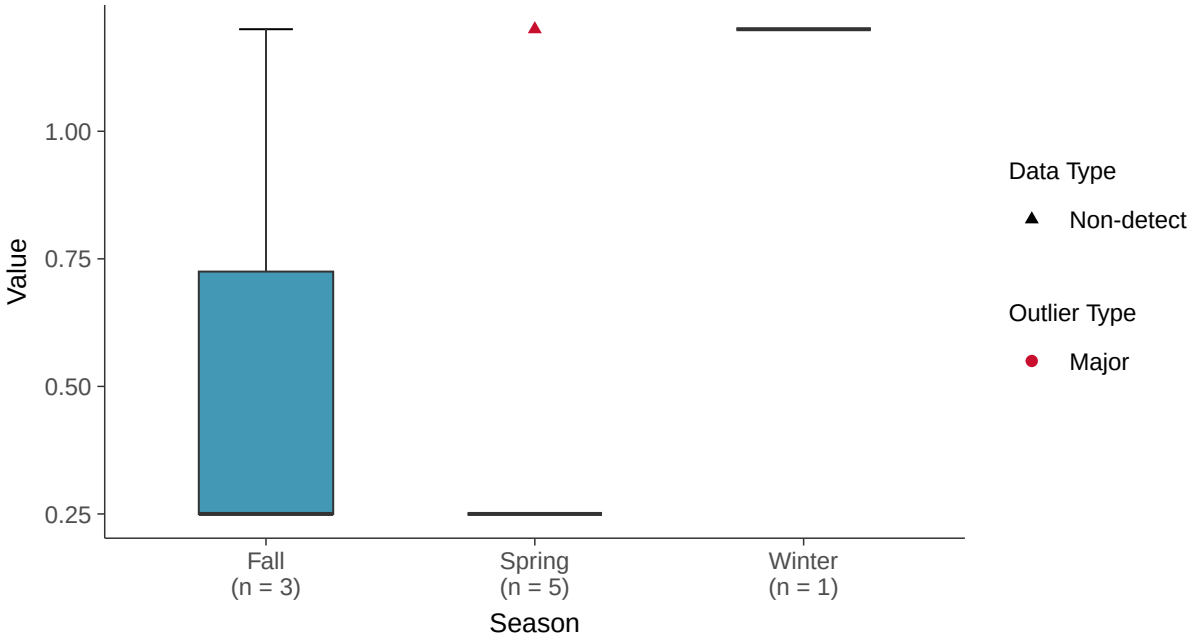
## Boxplot

Cadmium, MW-15014R (ug/L)



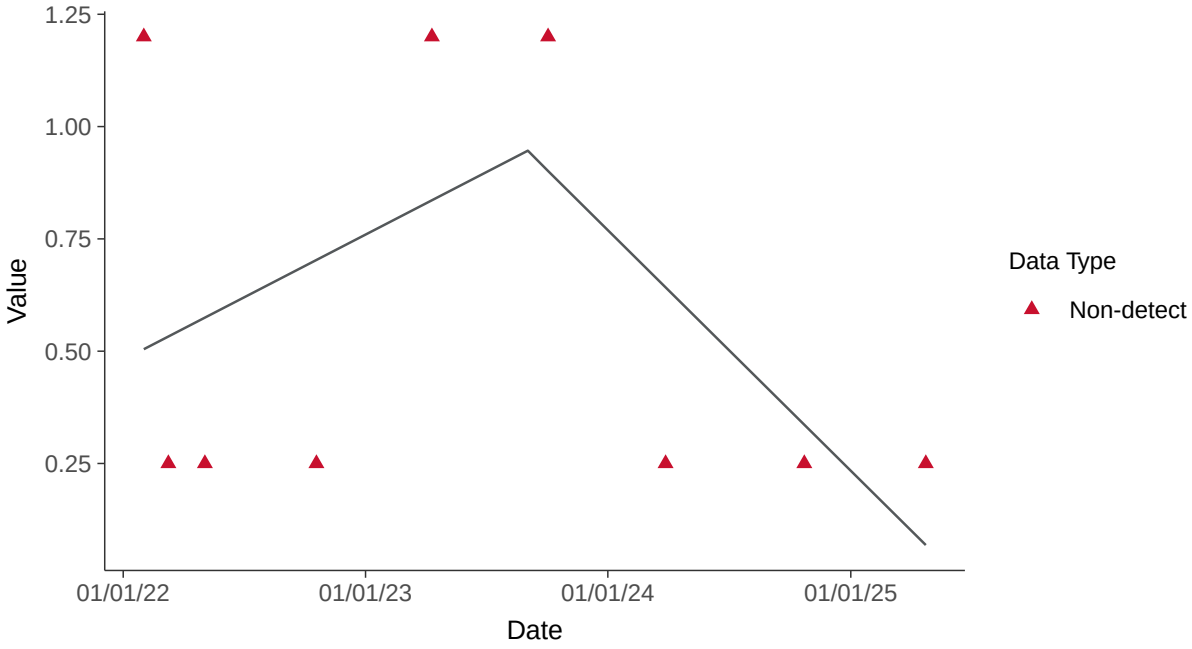

## Boxplot by Season

Cadmium, MW-15014R (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15014R (ug/L)

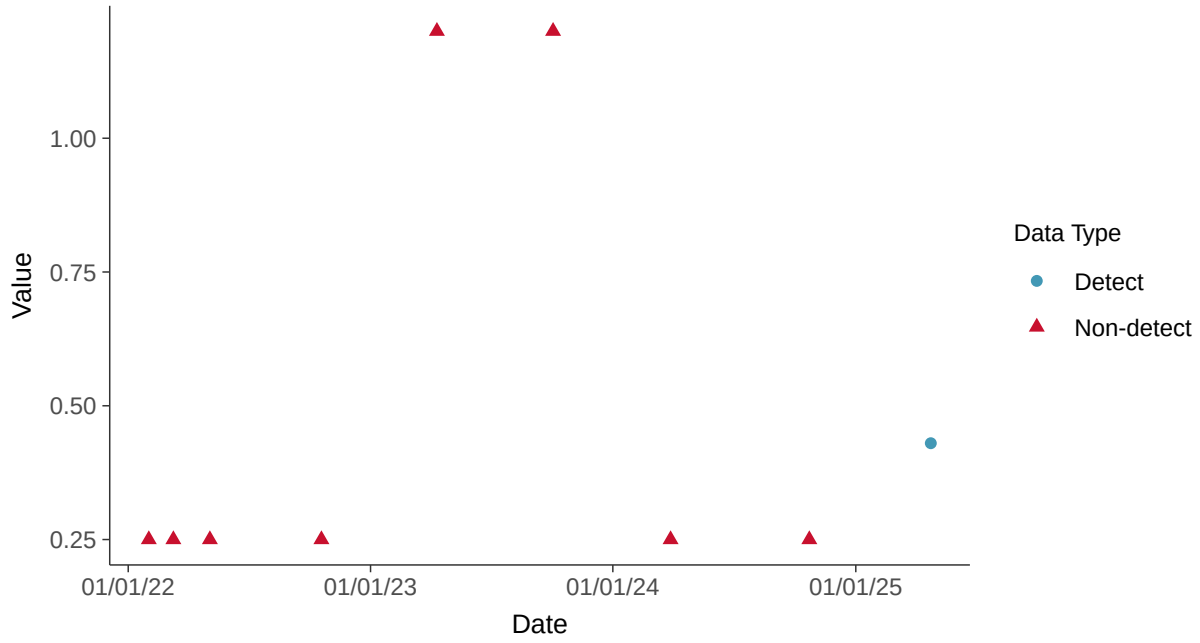


# Appendix IV: Chromium, MW-15014R

ID: 04_2_109

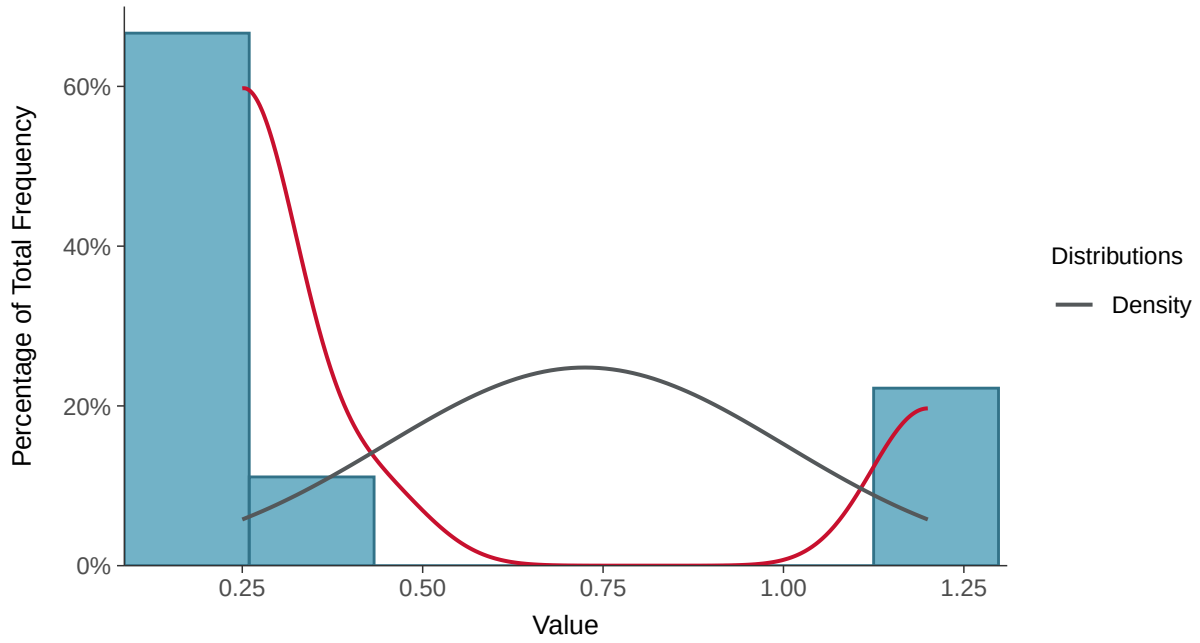
**Scatter Plot**

Chromium, MW-15014R (ug/L)



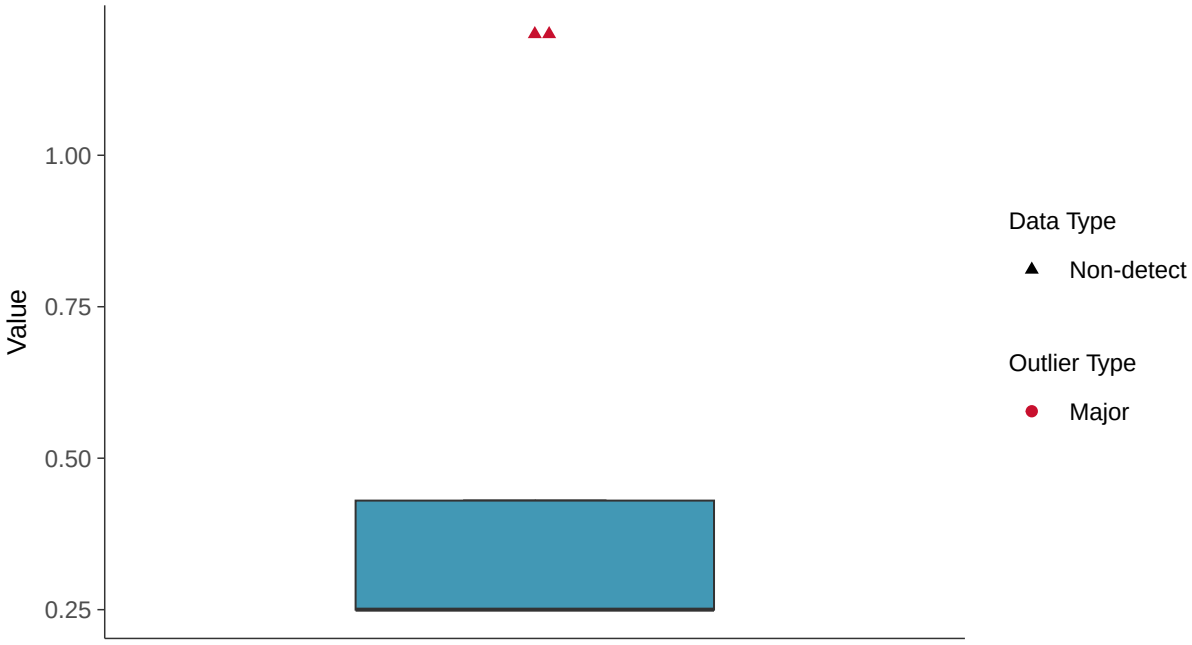

**Histogram**

Chromium, MW-15014R (ug/L)



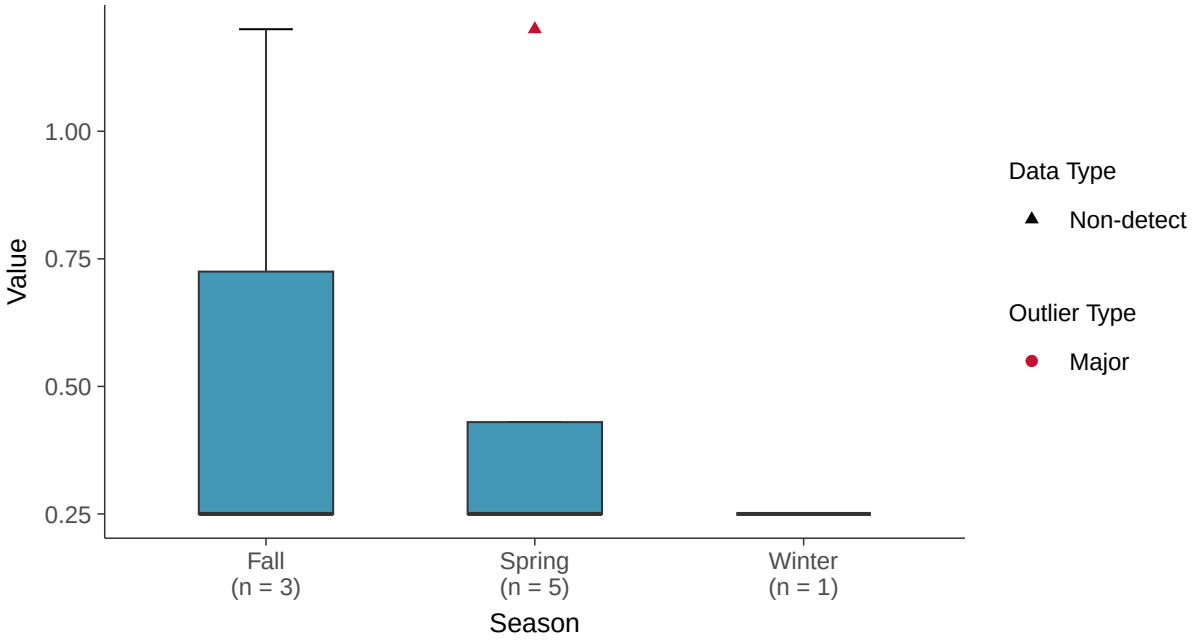
## Boxplot

Chromium, MW-15014R (ug/L)



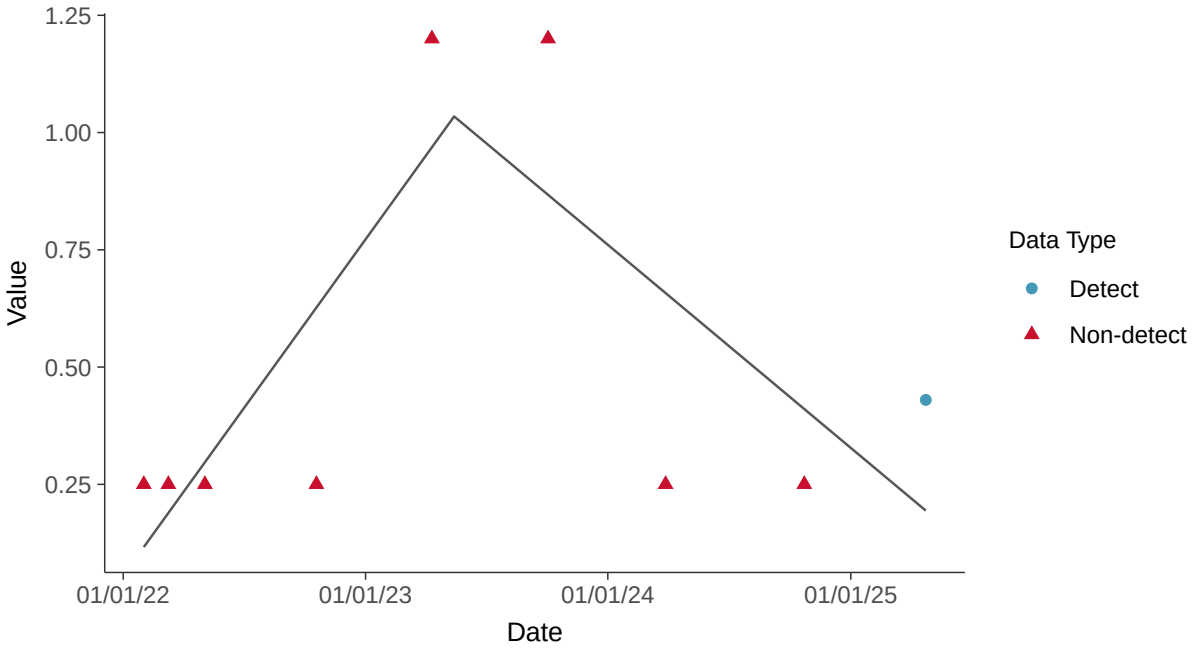

## Boxplot by Season

Chromium, MW-15014R (ug/L)



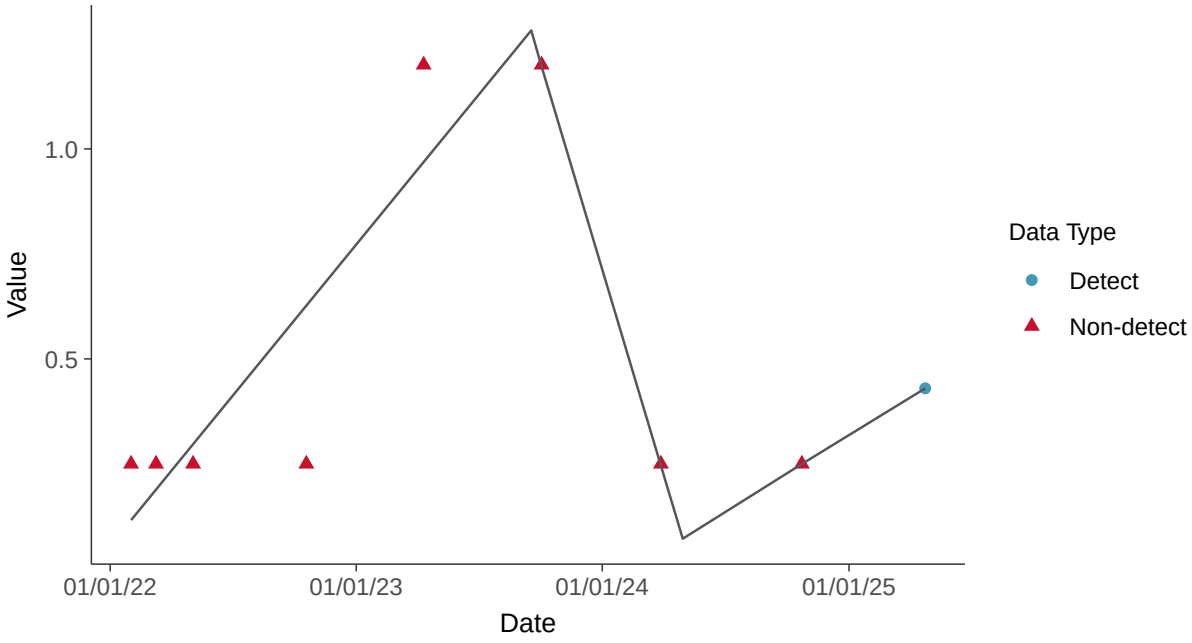
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15014R (ug/L)



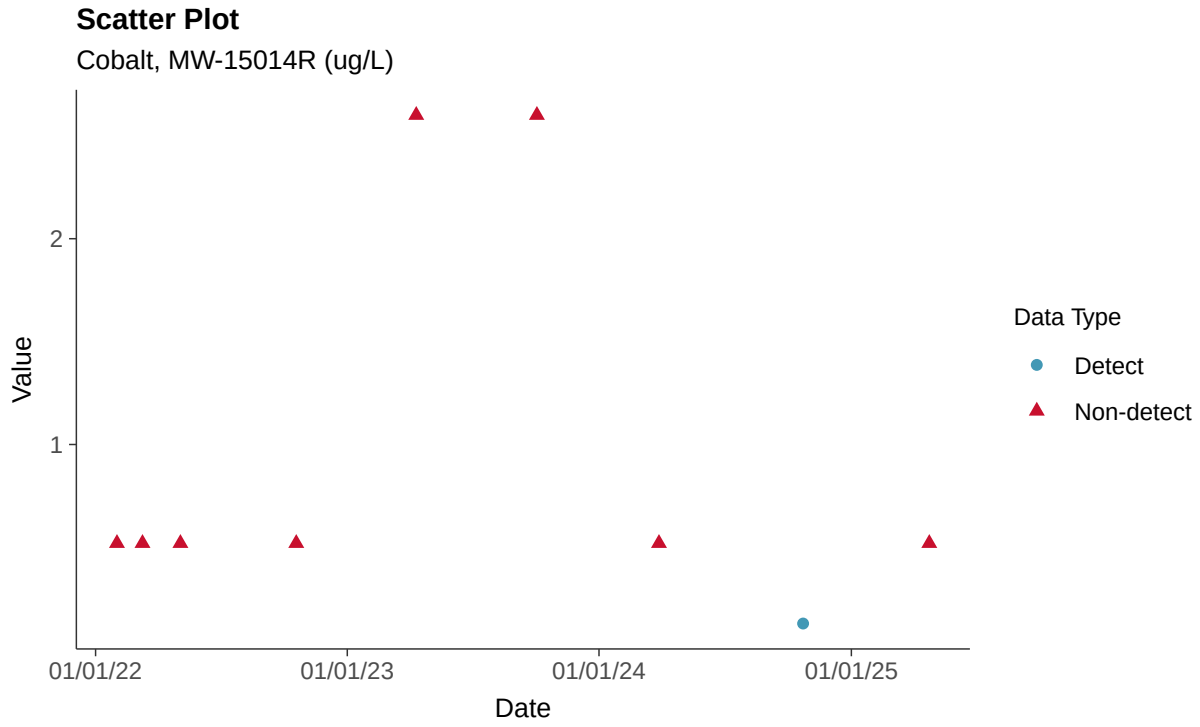

**Trend Regression: Piecewise Linear-Linear-Linear**

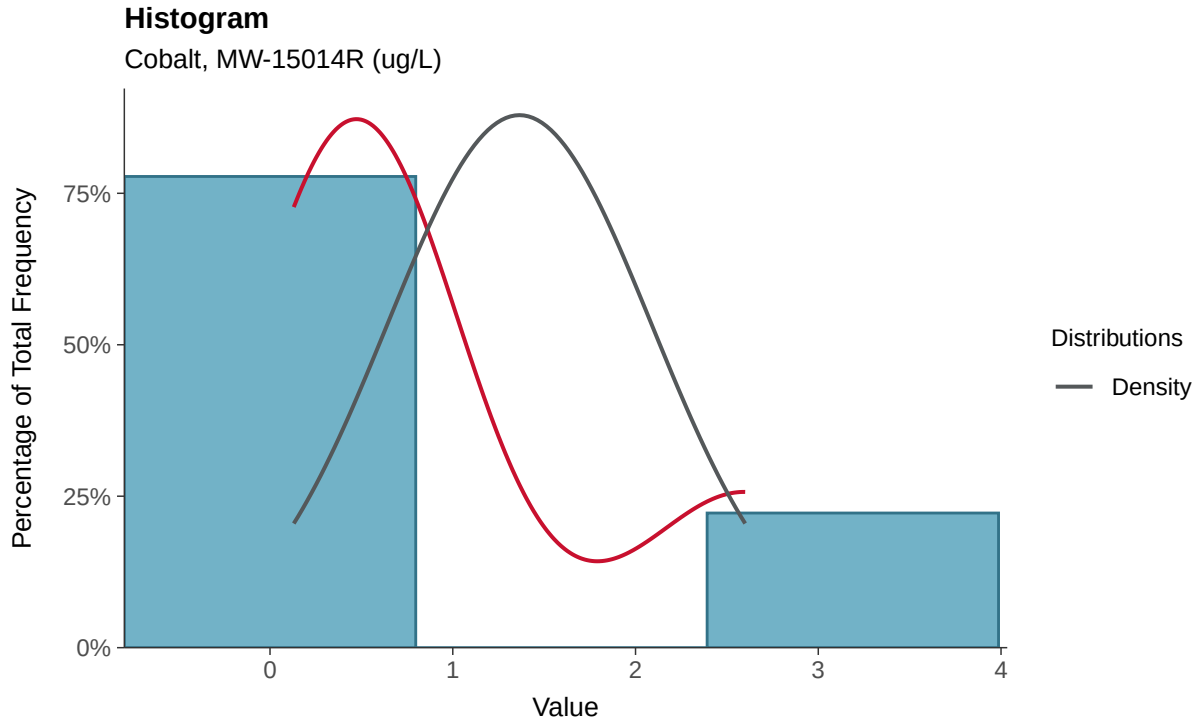
Chromium, MW-15014R (ug/L)



## Appendix IV: Cobalt, MW-15014R

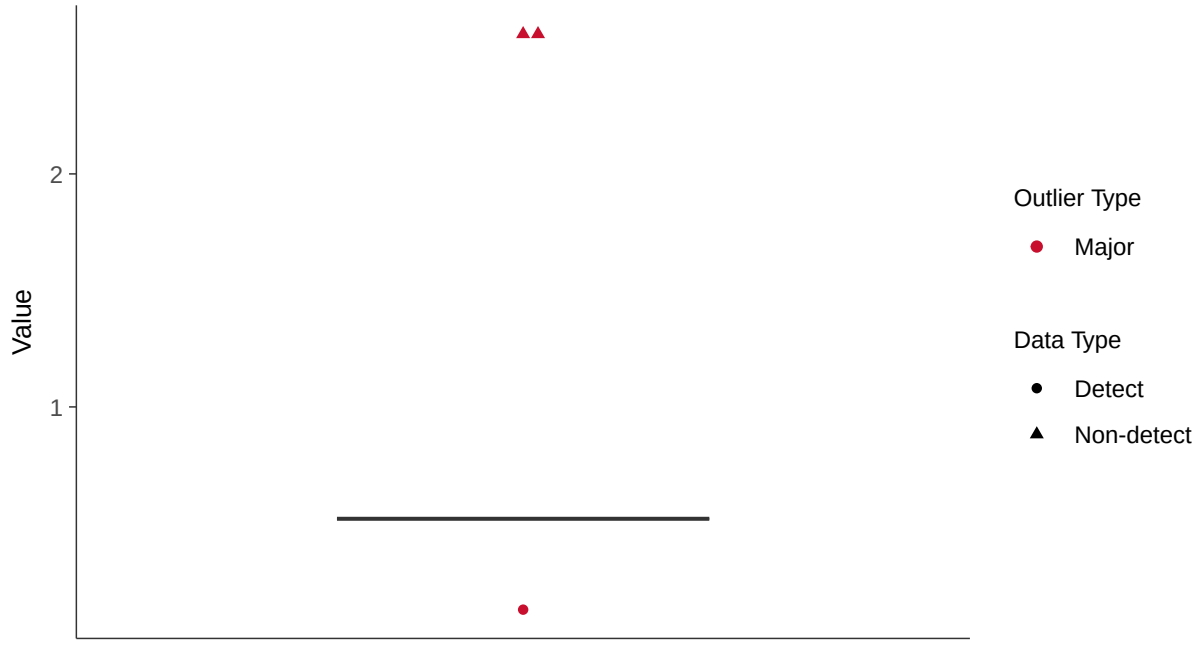
ID: 04_2_110



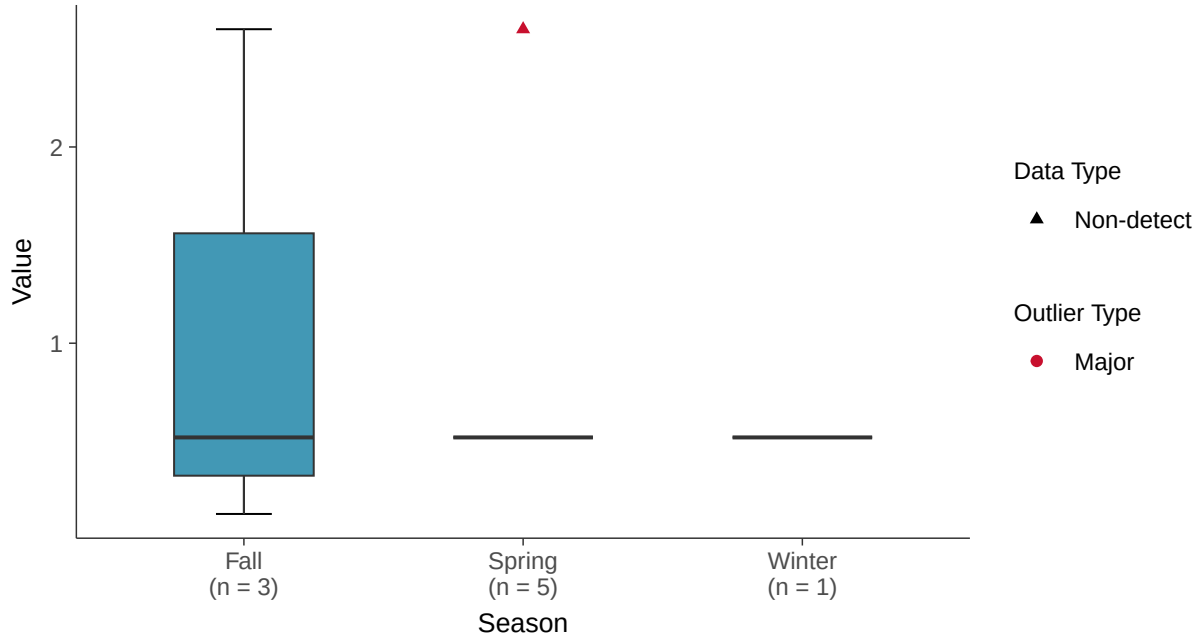
## Boxplot

Cobalt, MW-15014R (ug/L)



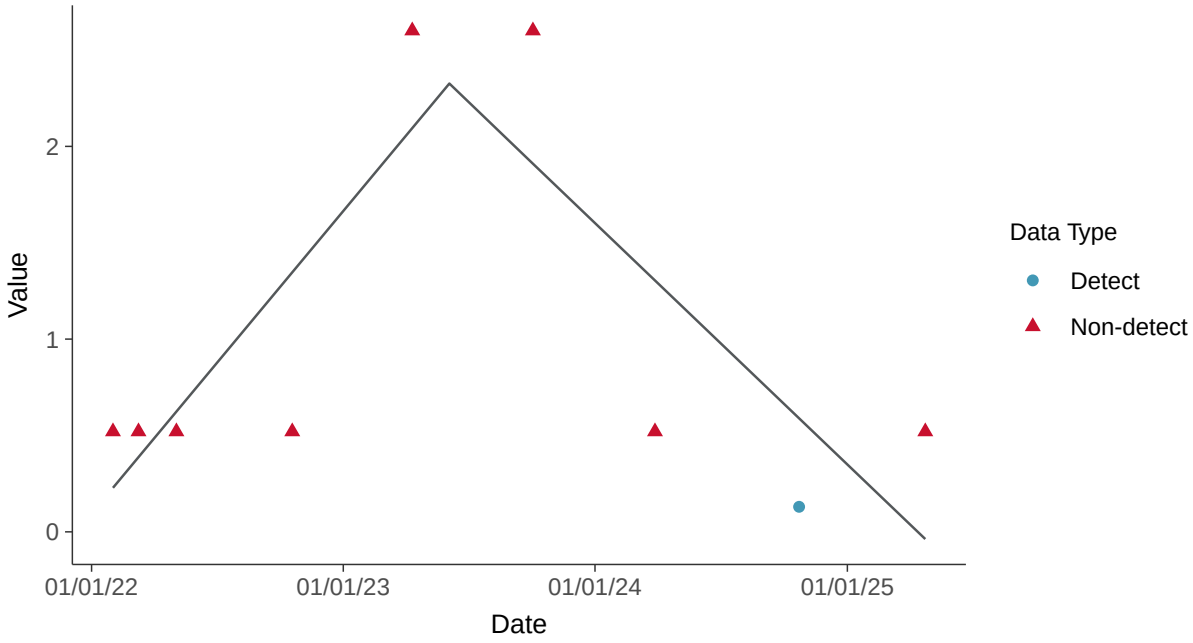

## Boxplot by Season

Cobalt, MW-15014R (ug/L)



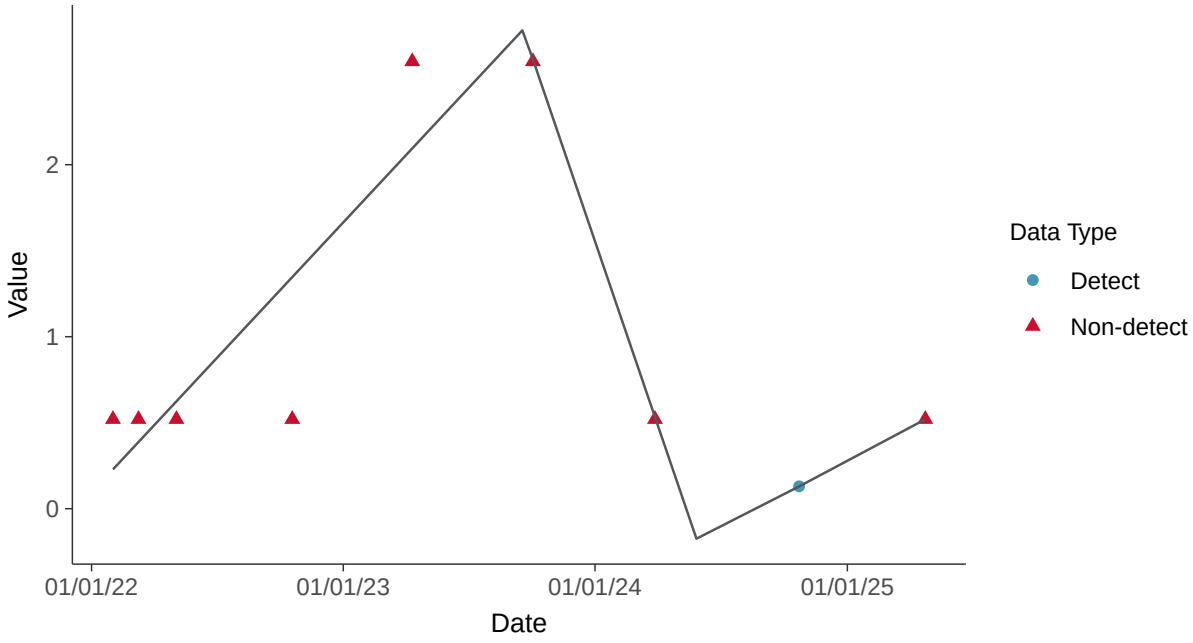
**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15014R (ug/L)



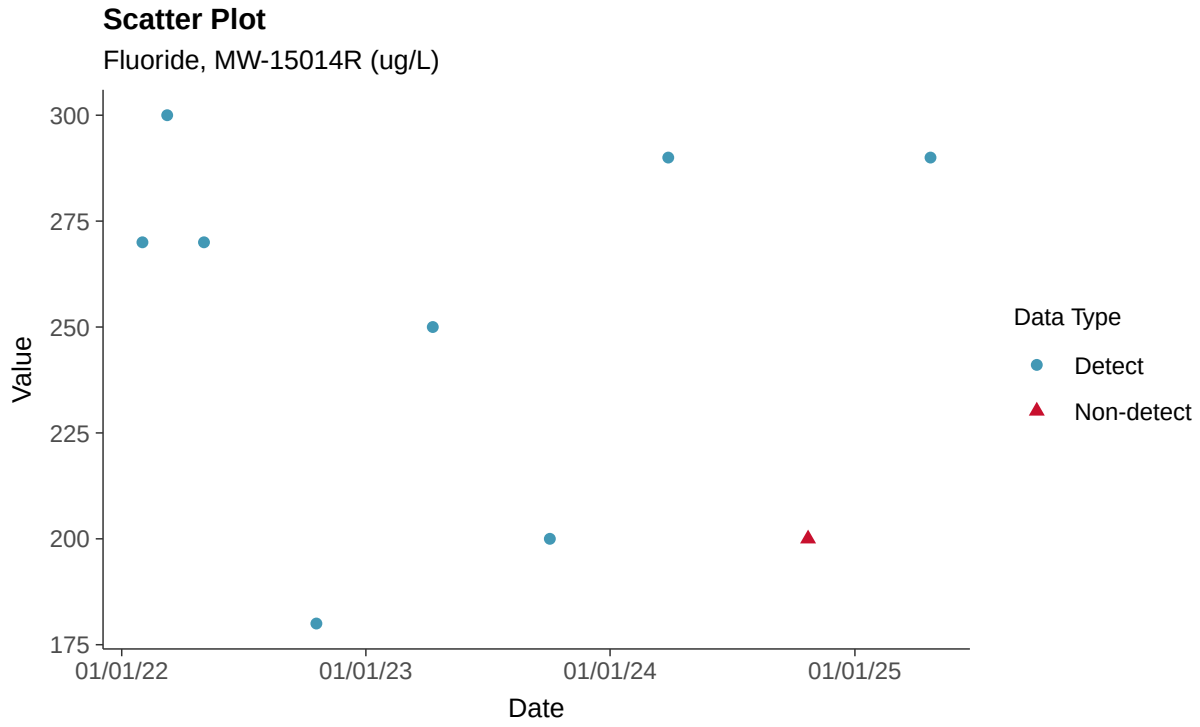

**Trend Regression: Piecewise Linear-Linear-Linear**

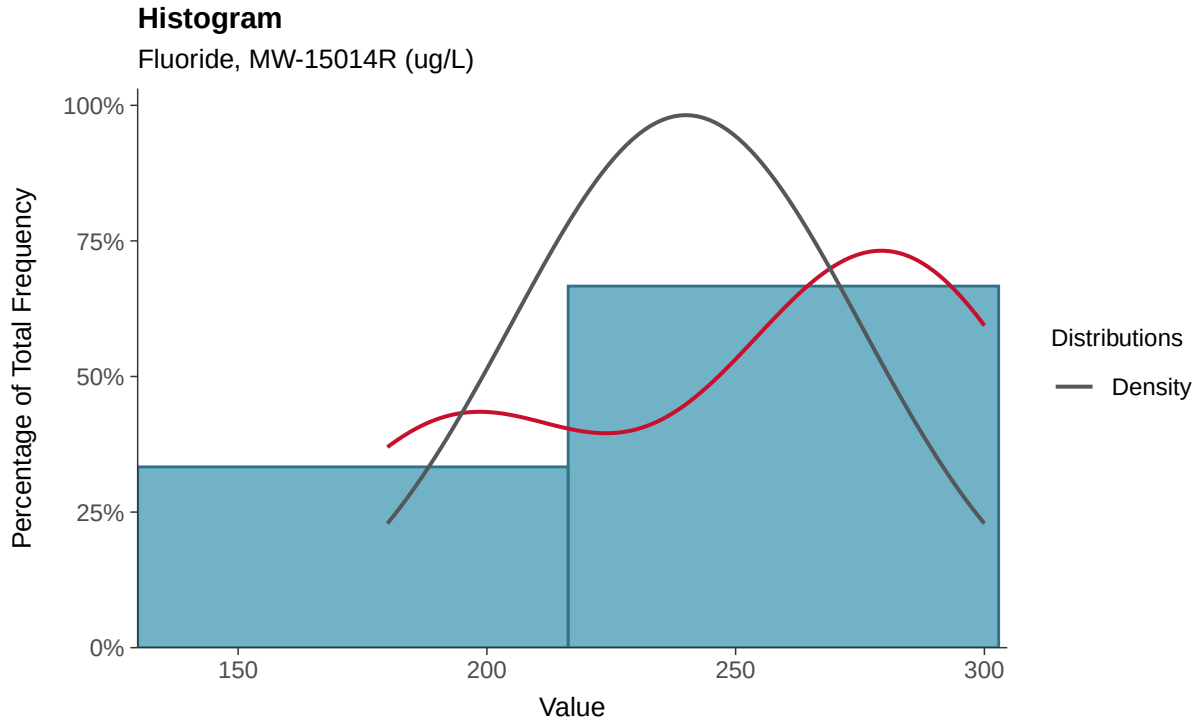
Cobalt, MW-15014R (ug/L)



# Appendix IV: Fluoride, MW-15014R

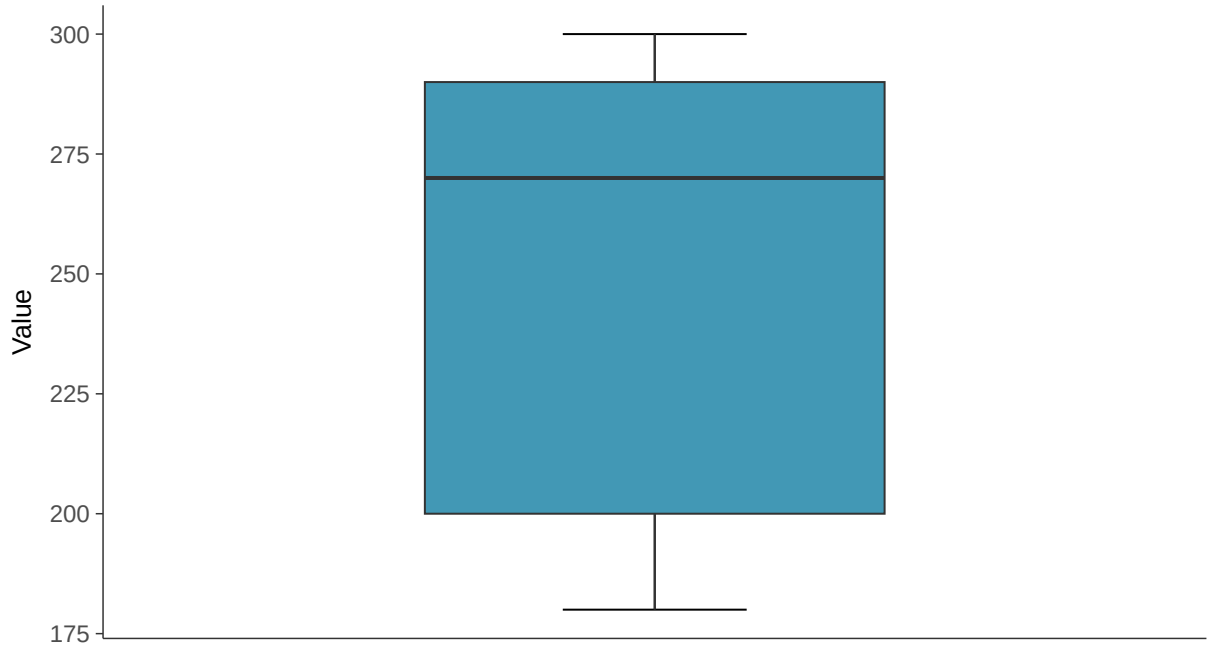
ID: 04_2_114



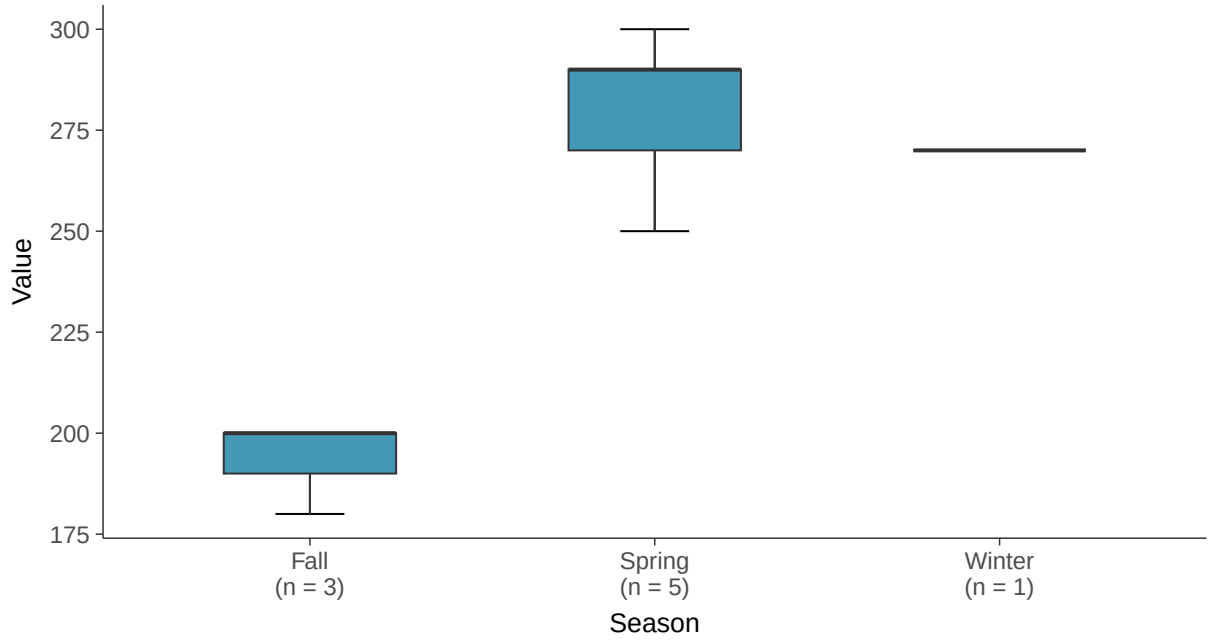
**Boxplot**

Fluoride, MW-15014R (ug/L)



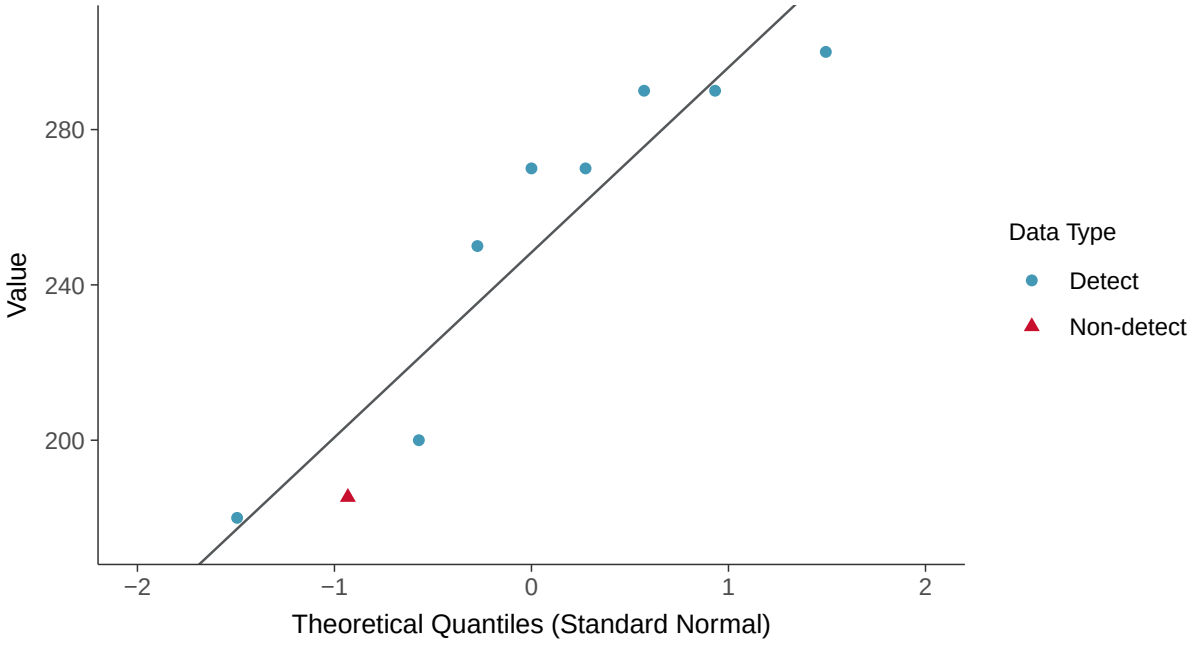

**Boxplot by Season**

Fluoride, MW-15014R (ug/L)



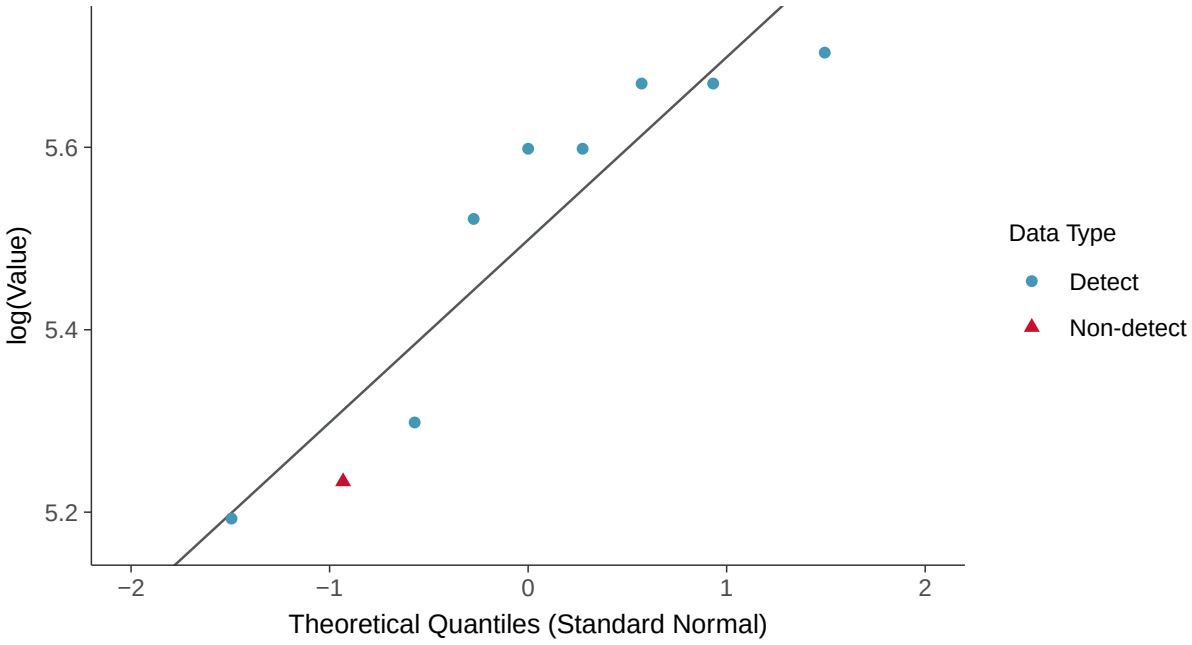
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15014R (ug/L)



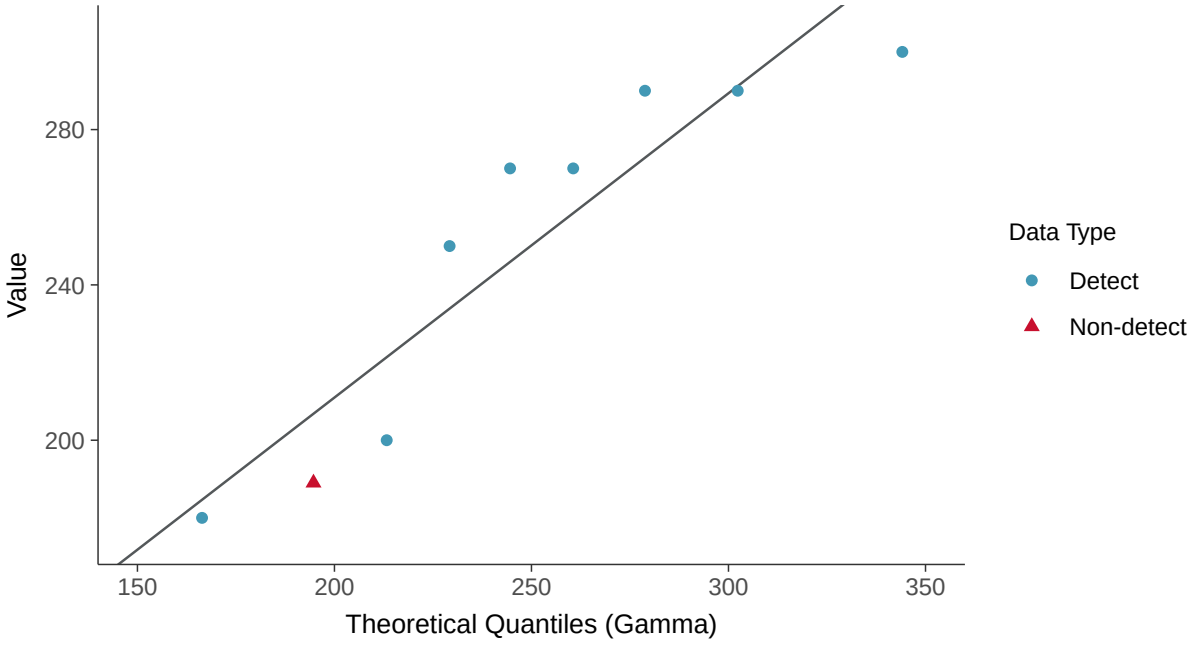

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15014R (ug/L)



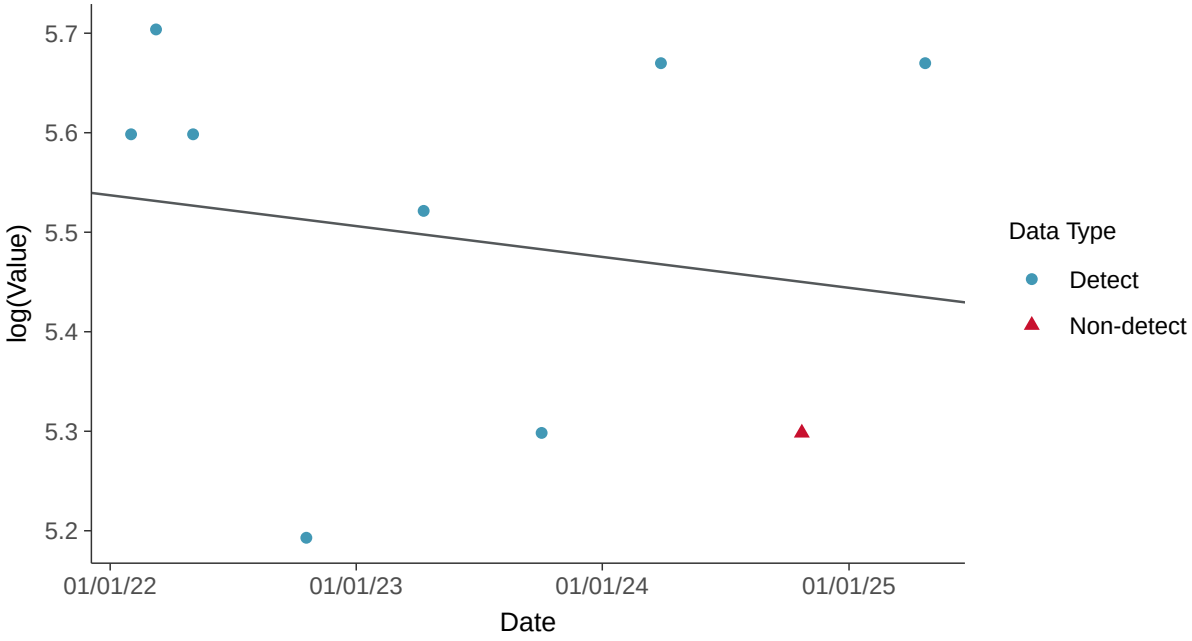
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15014R (ug/L)



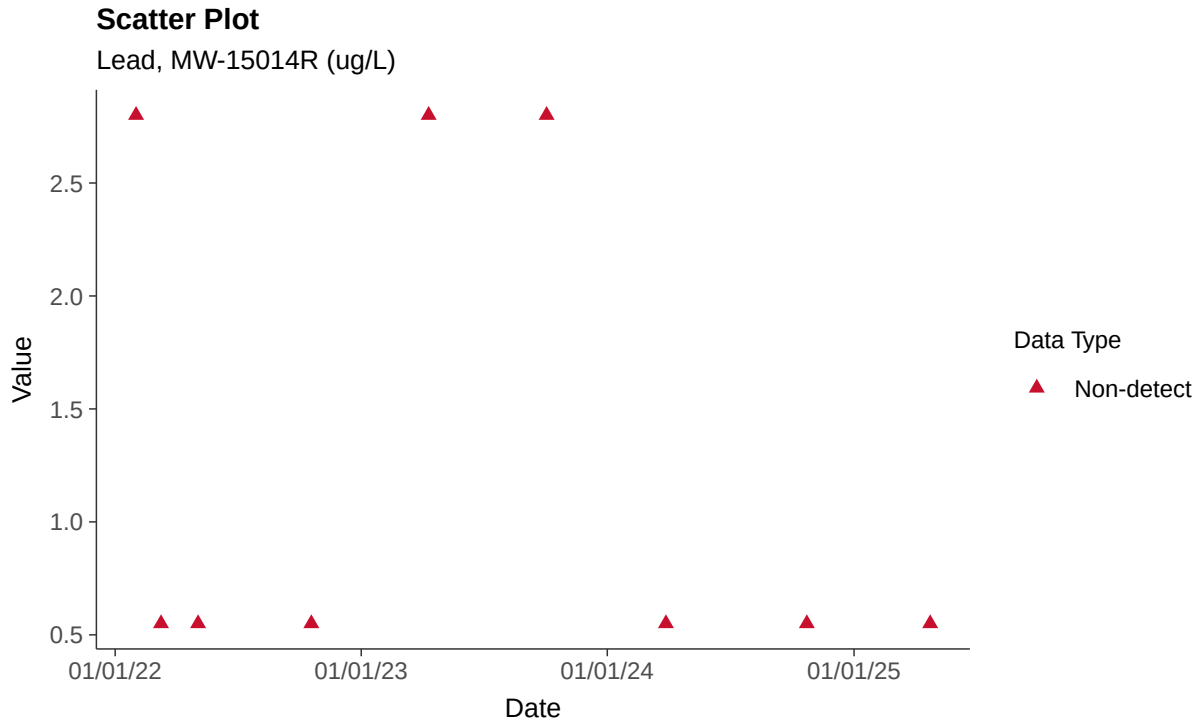

**Trend Regression: Lognormal MLE**

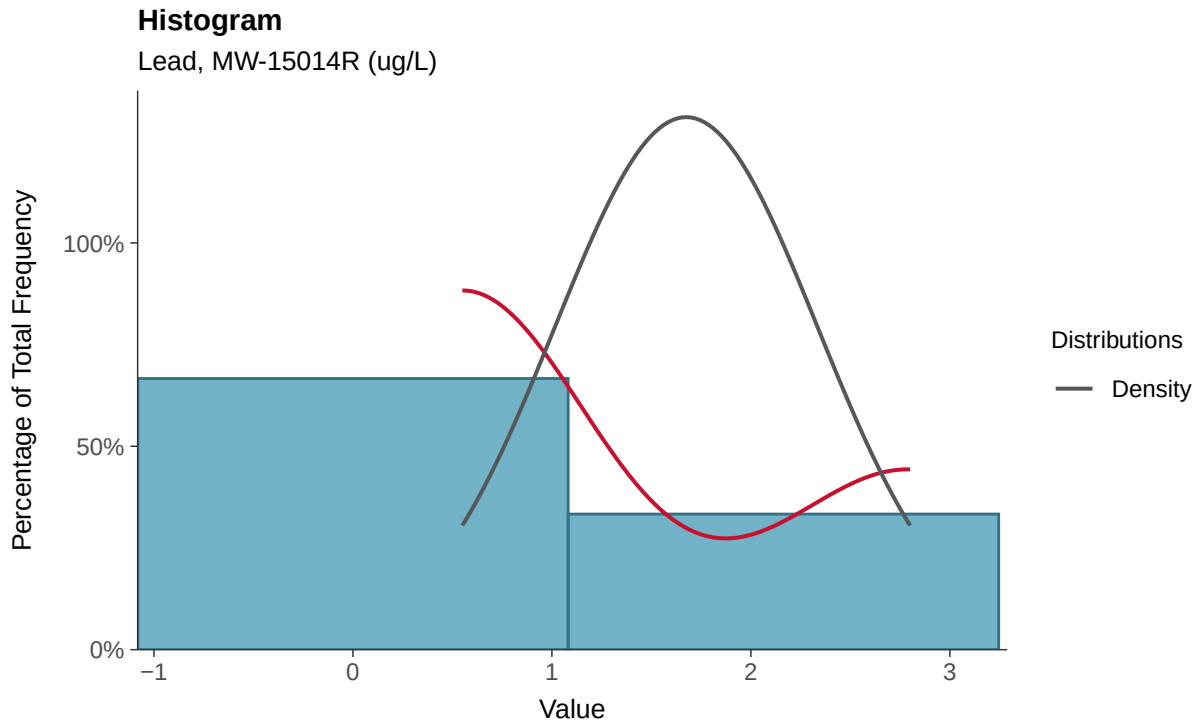
Fluoride, MW-15014R (ug/L)



## Appendix IV: Lead, MW-15014R

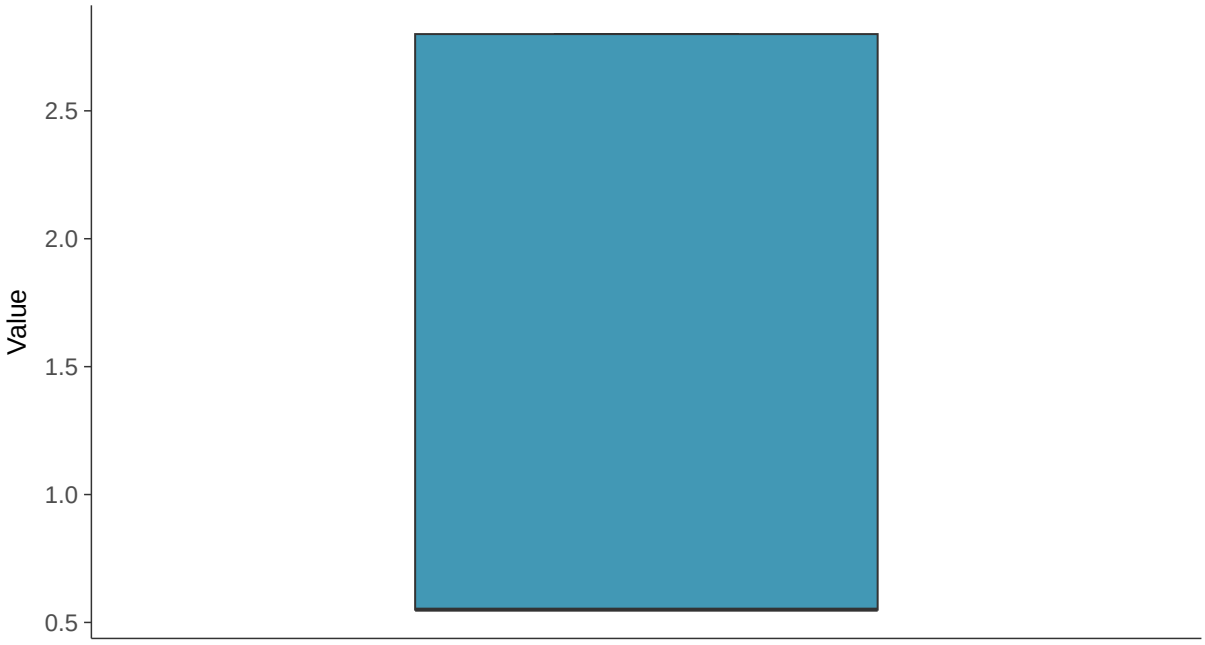
ID: 04_2_116



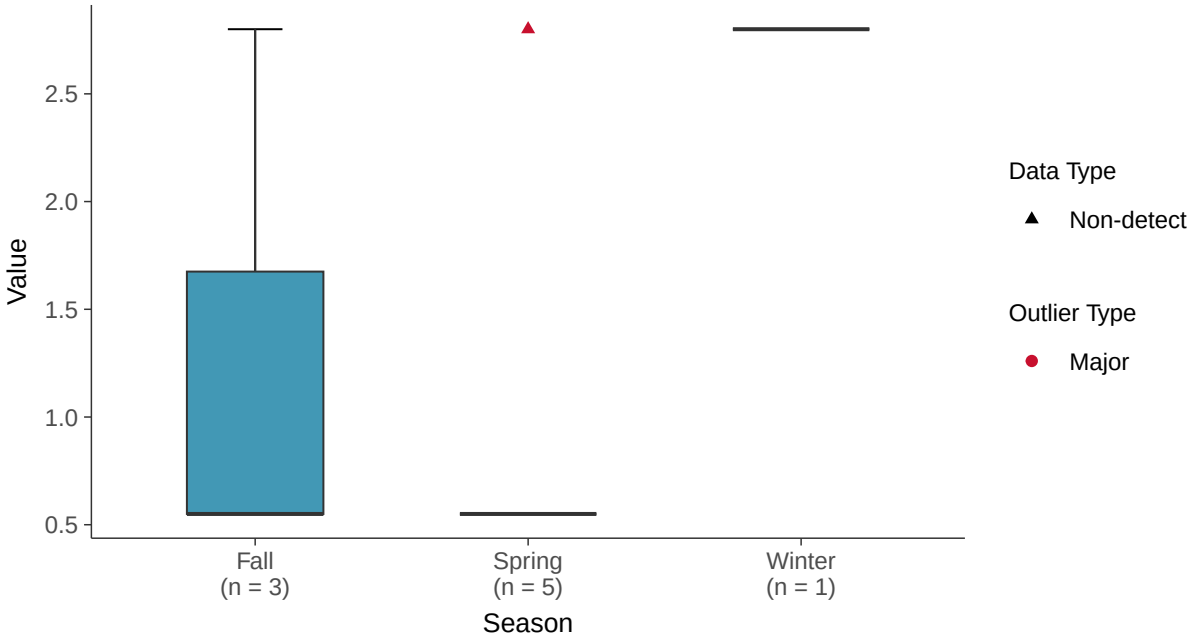
## Boxplot

Lead, MW-15014R (ug/L)



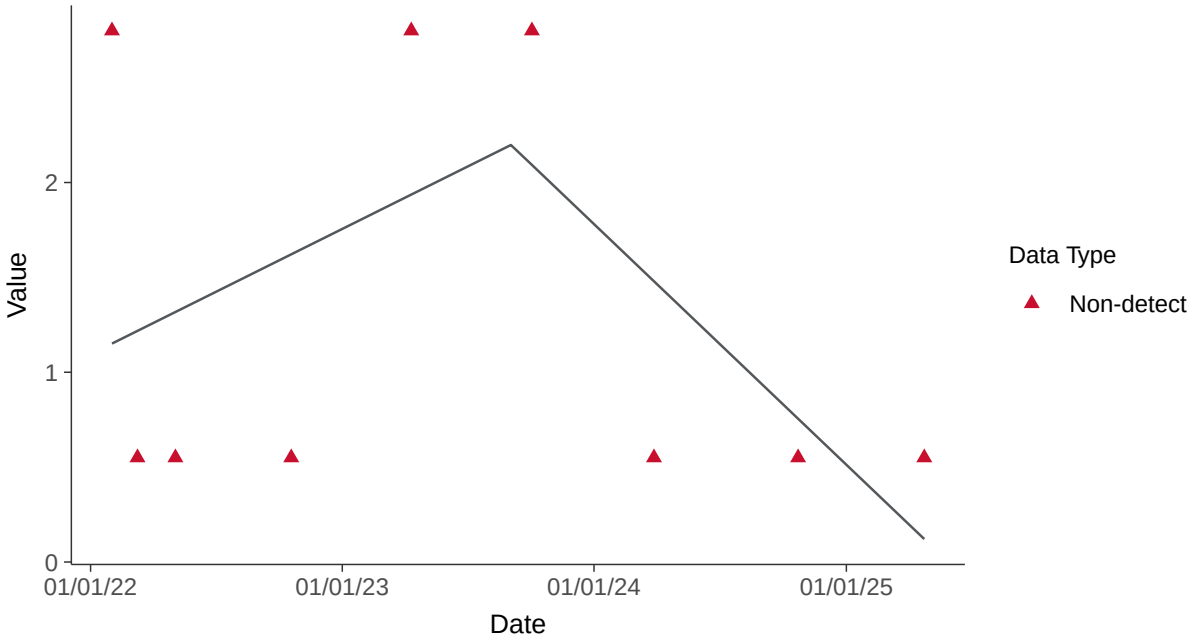

## Boxplot by Season

Lead, MW-15014R (ug/L)



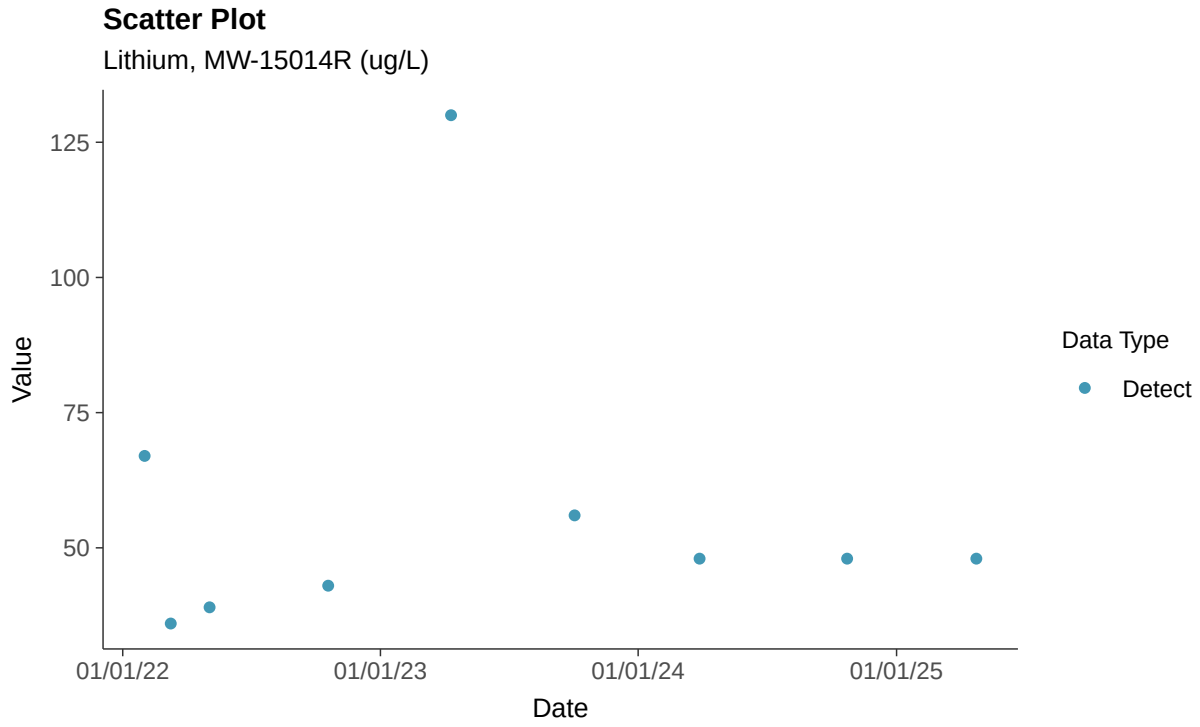
**Trend Regression: Piecewise Linear-Linear**

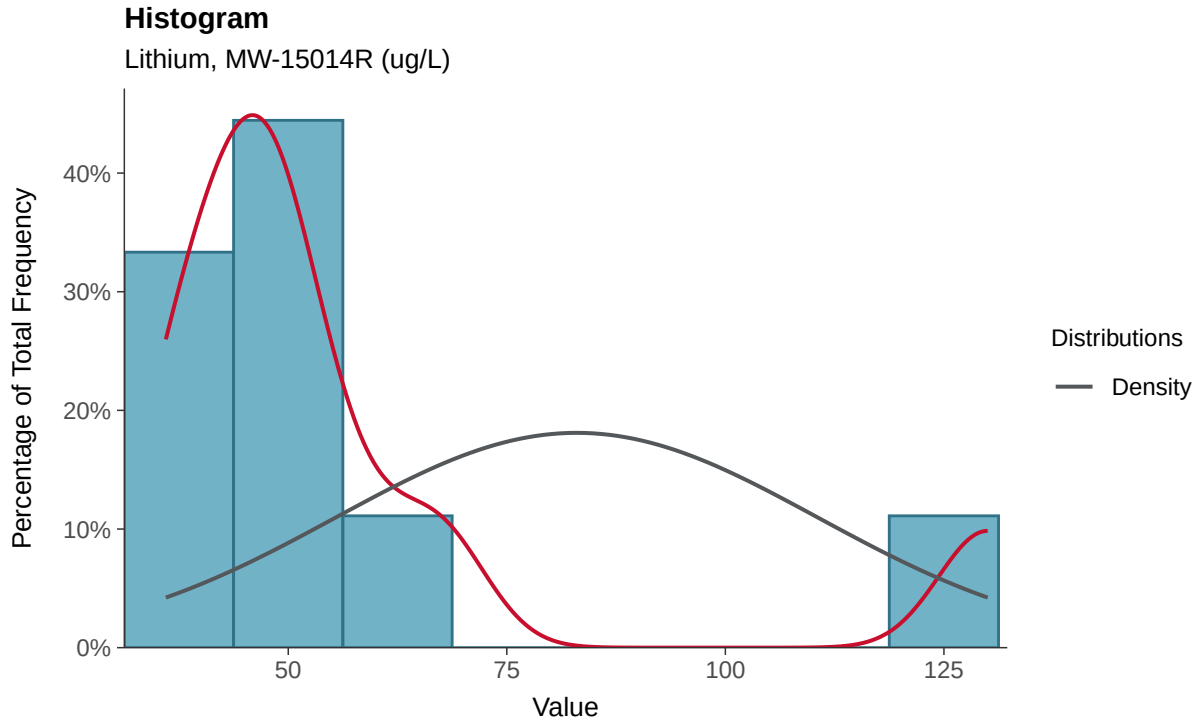
Lead, MW-15014R (ug/L)



# Appendix IV: Lithium, MW-15014R

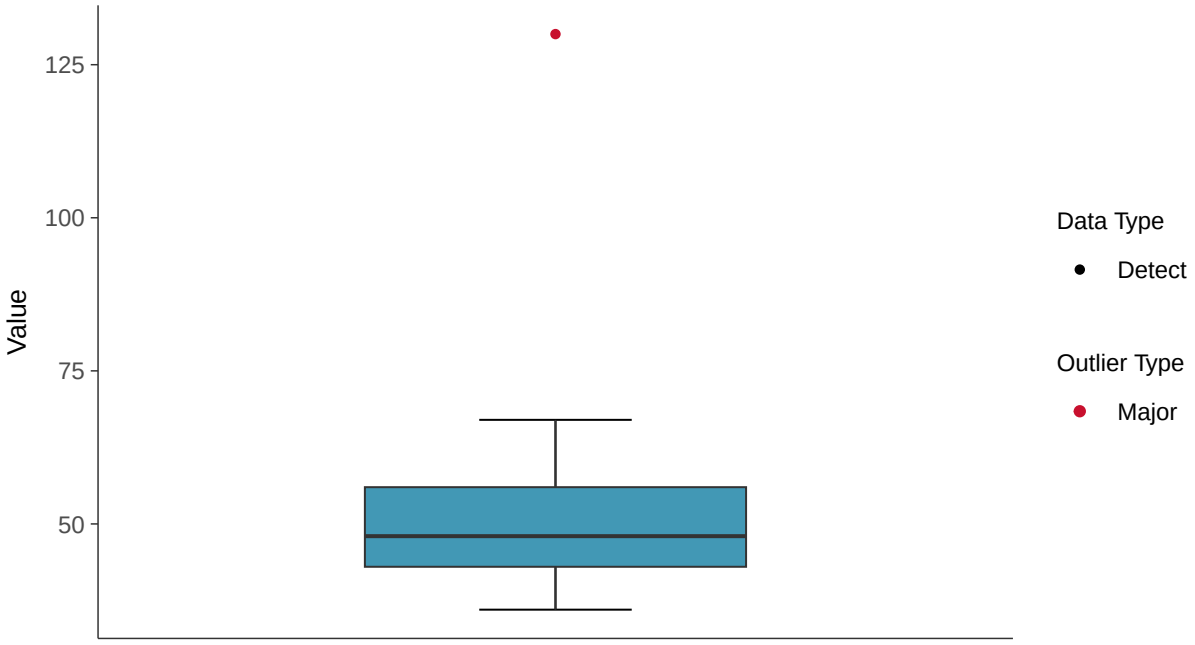
ID: 04_2_117



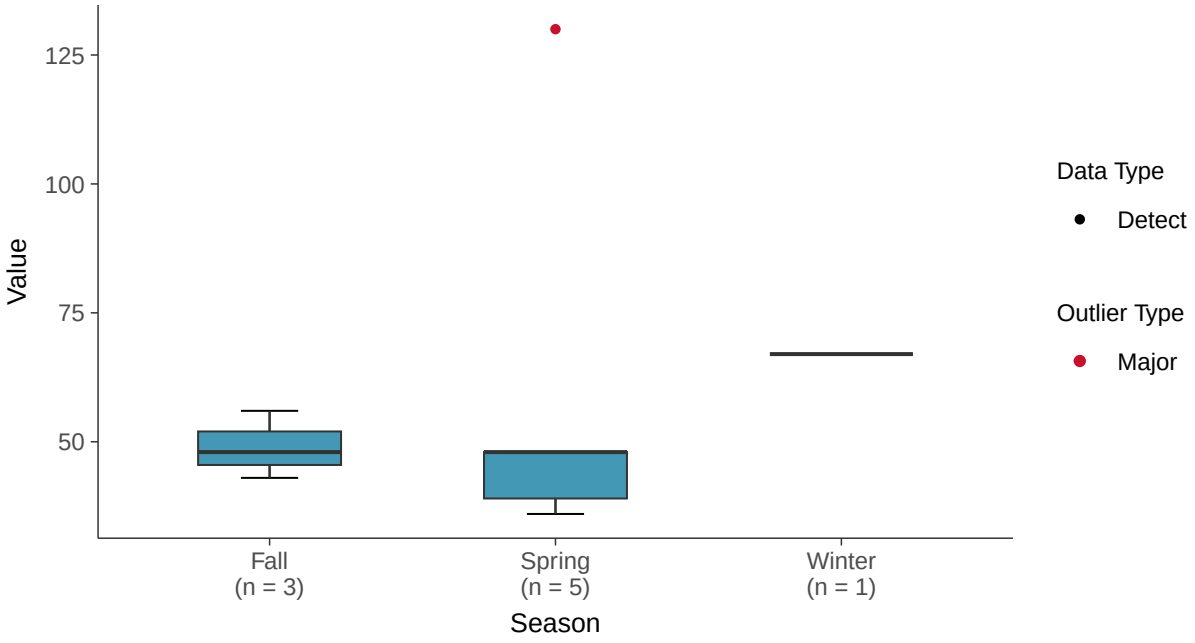
## Boxplot

Lithium, MW-15014R (ug/L)



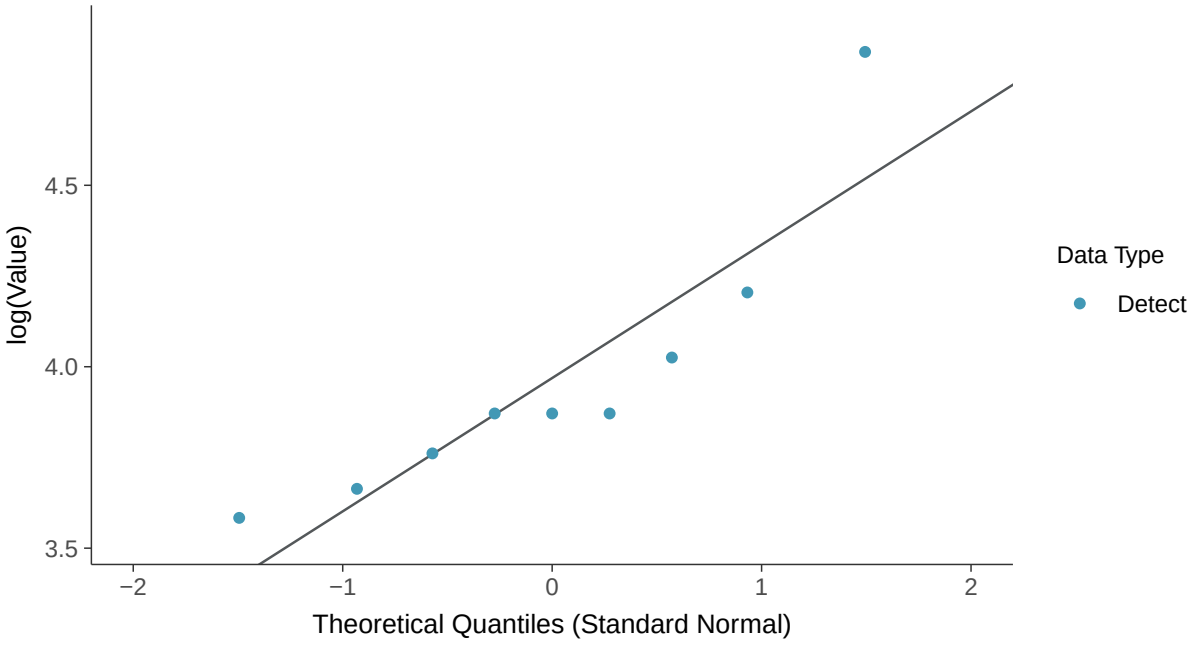

## Boxplot by Season

Lithium, MW-15014R (ug/L)



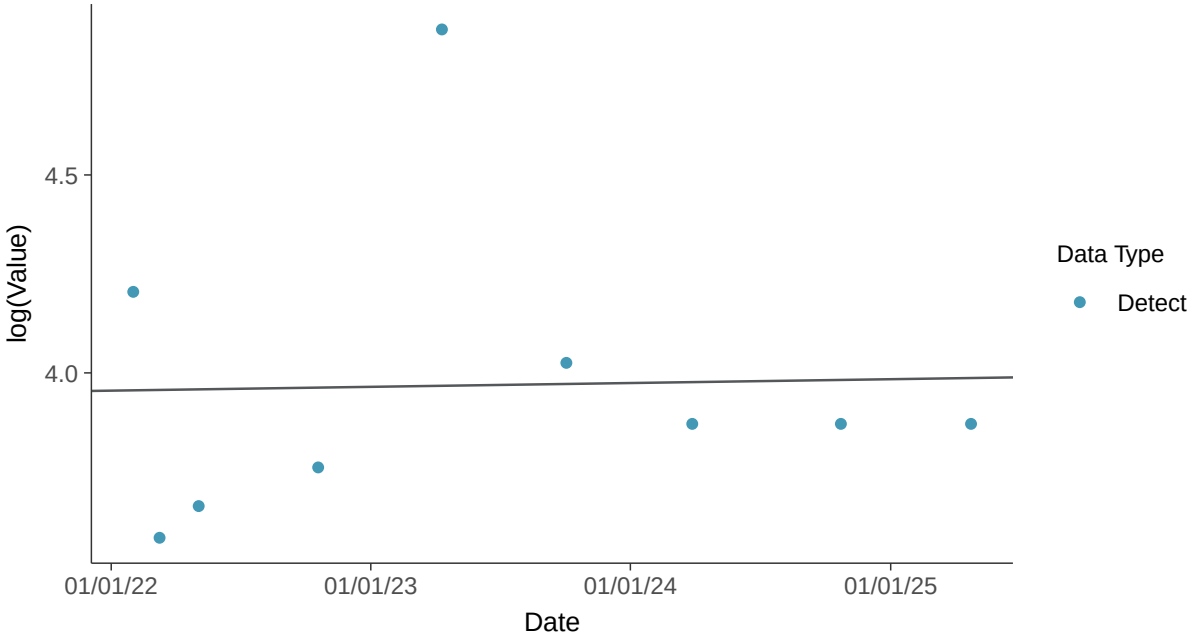
**Lognormal Q-Q plot**

Lithium, MW-15014R (ug/L)



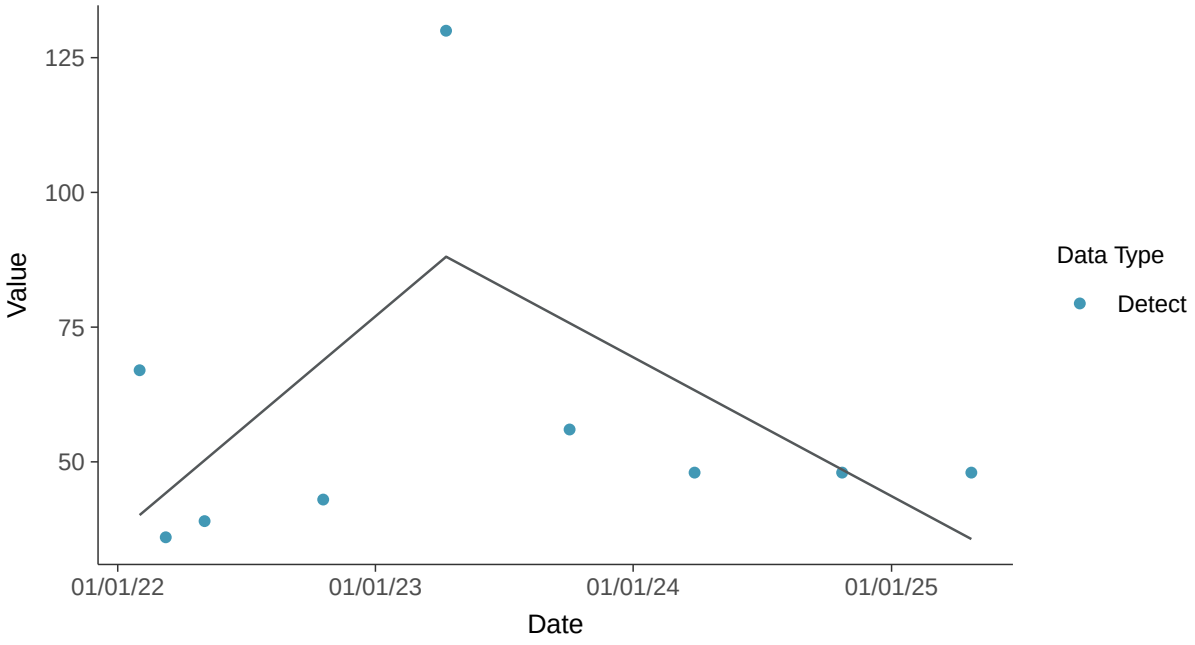

**Trend Regression: Lognormal MLE**

Lithium, MW-15014R (ug/L)



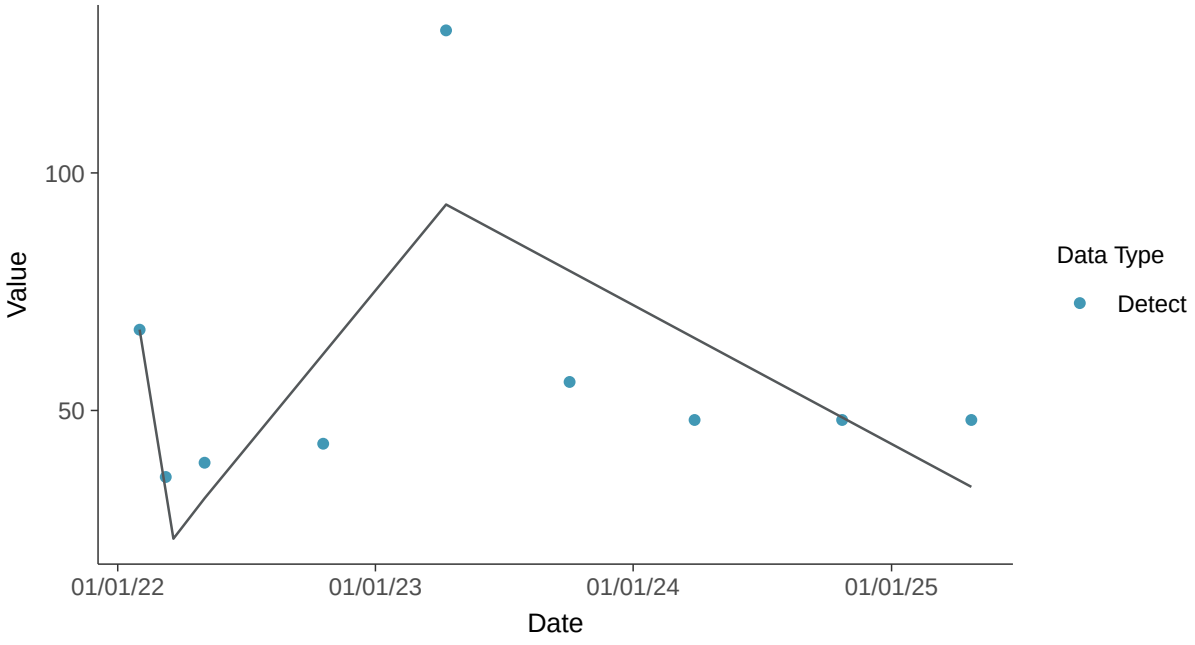
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15014R (ug/L)



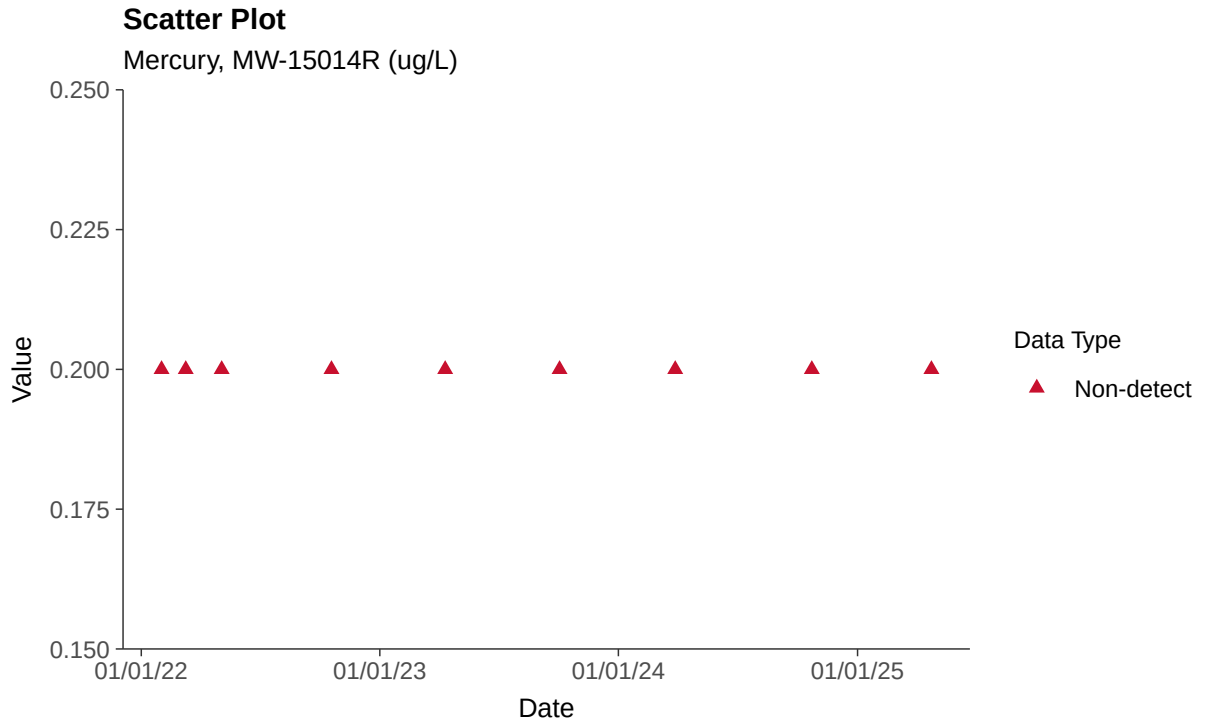

**Trend Regression: Piecewise Linear-Linear-Linear**

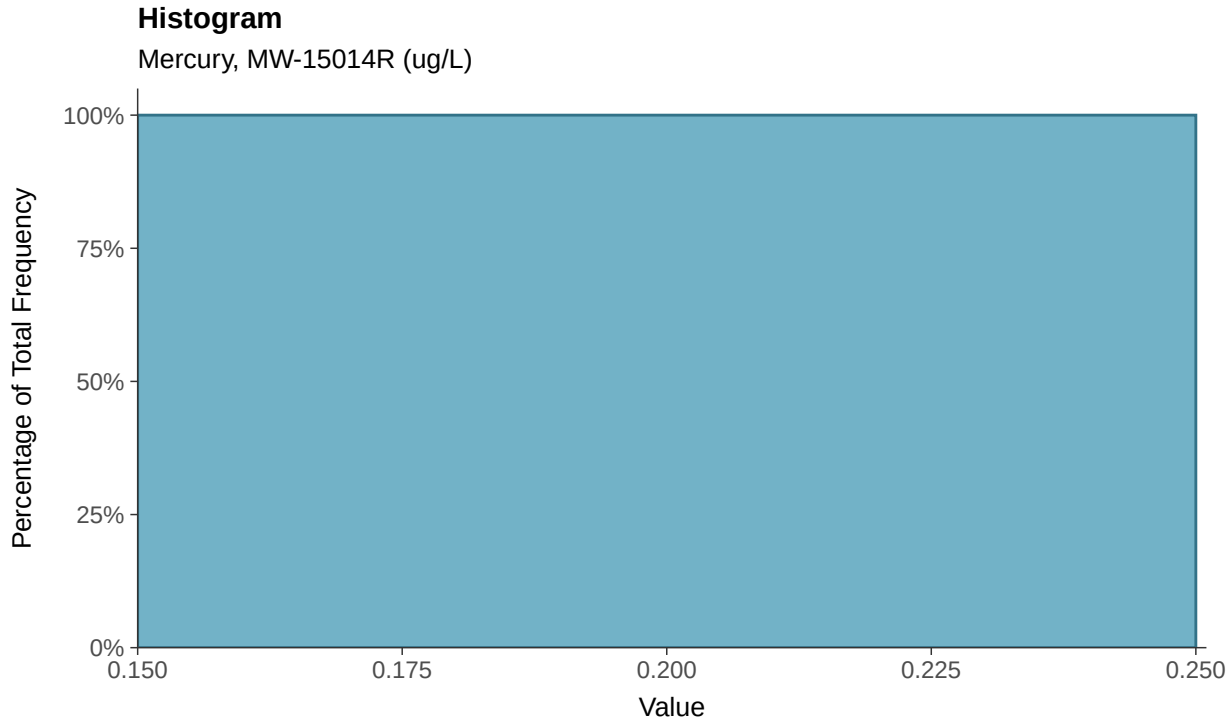
Lithium, MW-15014R (ug/L)



## Appendix IV: Mercury, MW-15014R

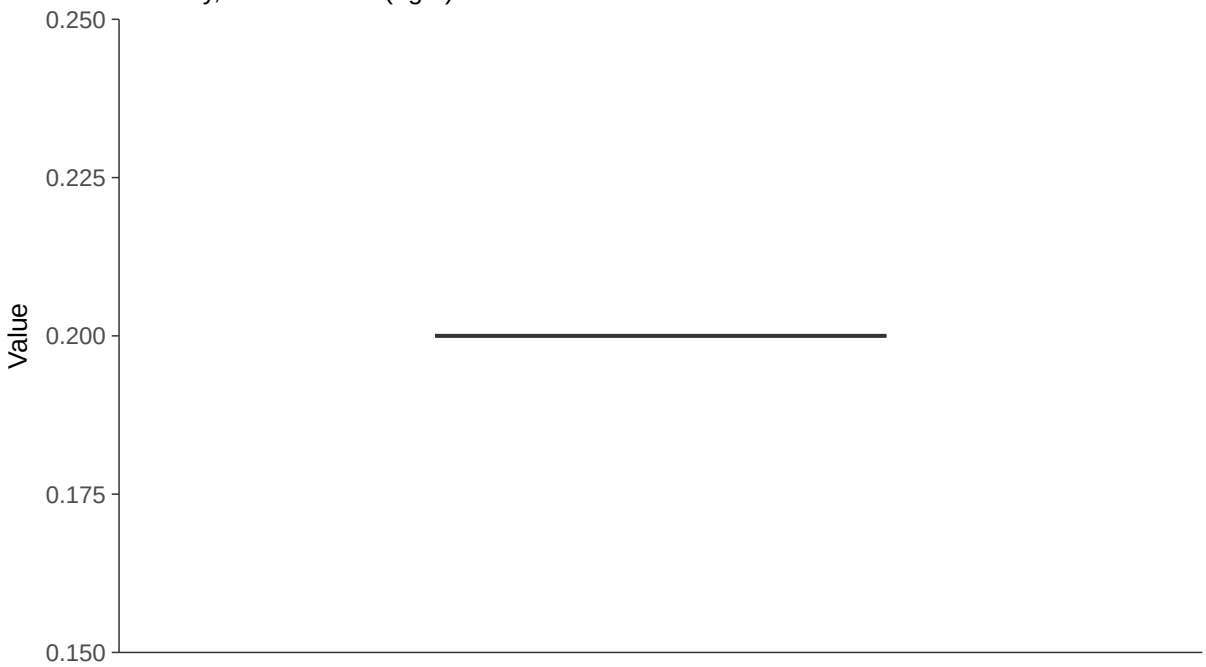
ID: 04_2_118



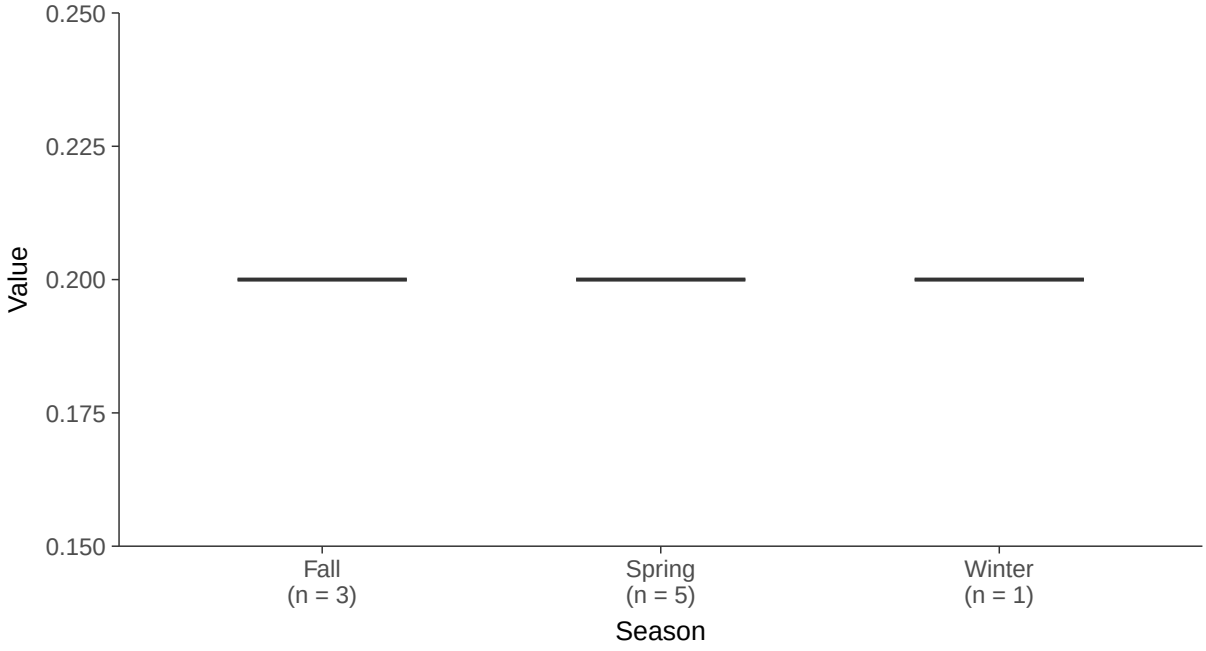
**Boxplot**

Mercury, MW-15014R (ug/L)




**Boxplot by Season**

Mercury, MW-15014R (ug/L)

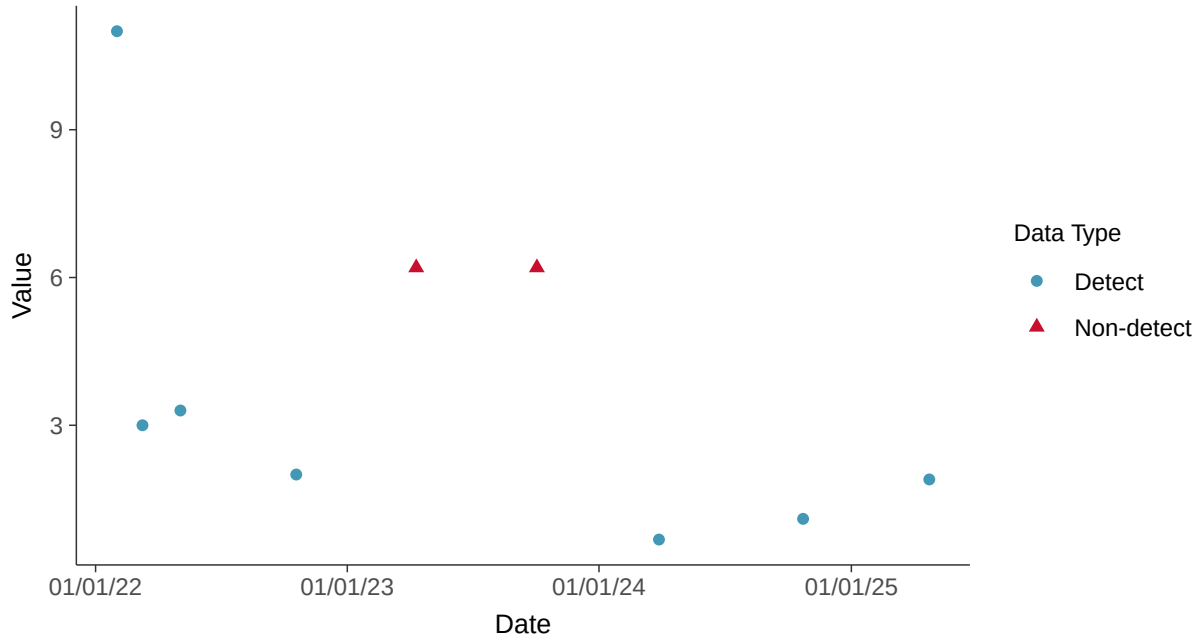


# Appendix IV: Molybdenum, MW-15014R

ID: 04_2_119

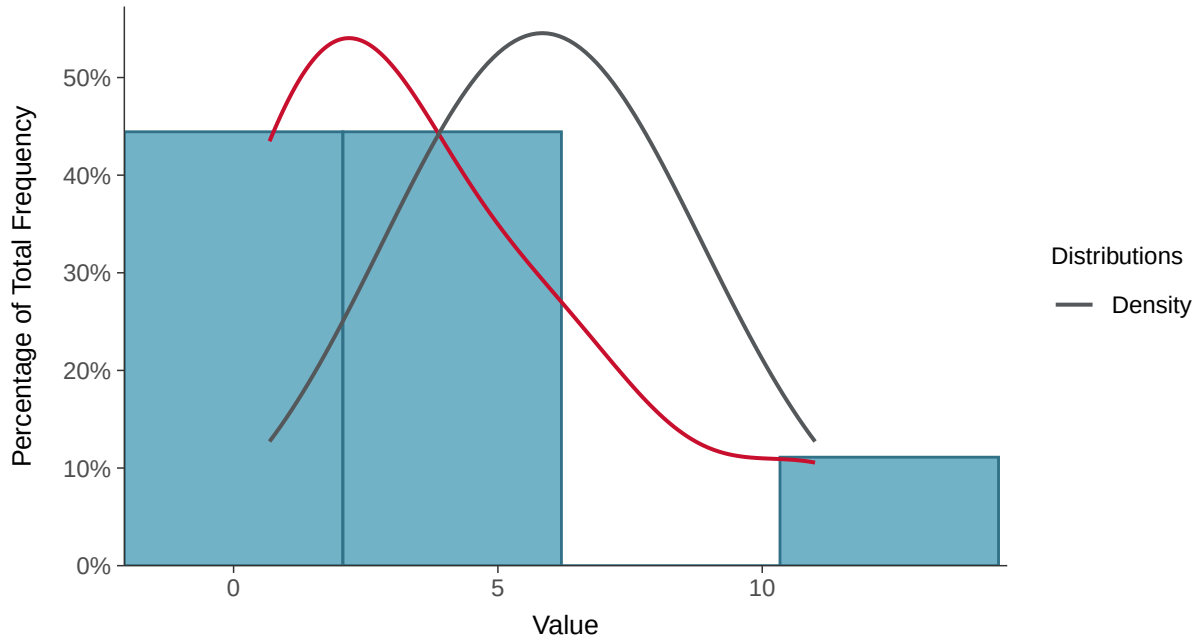
**Scatter Plot**

Molybdenum, MW-15014R (ug/L)



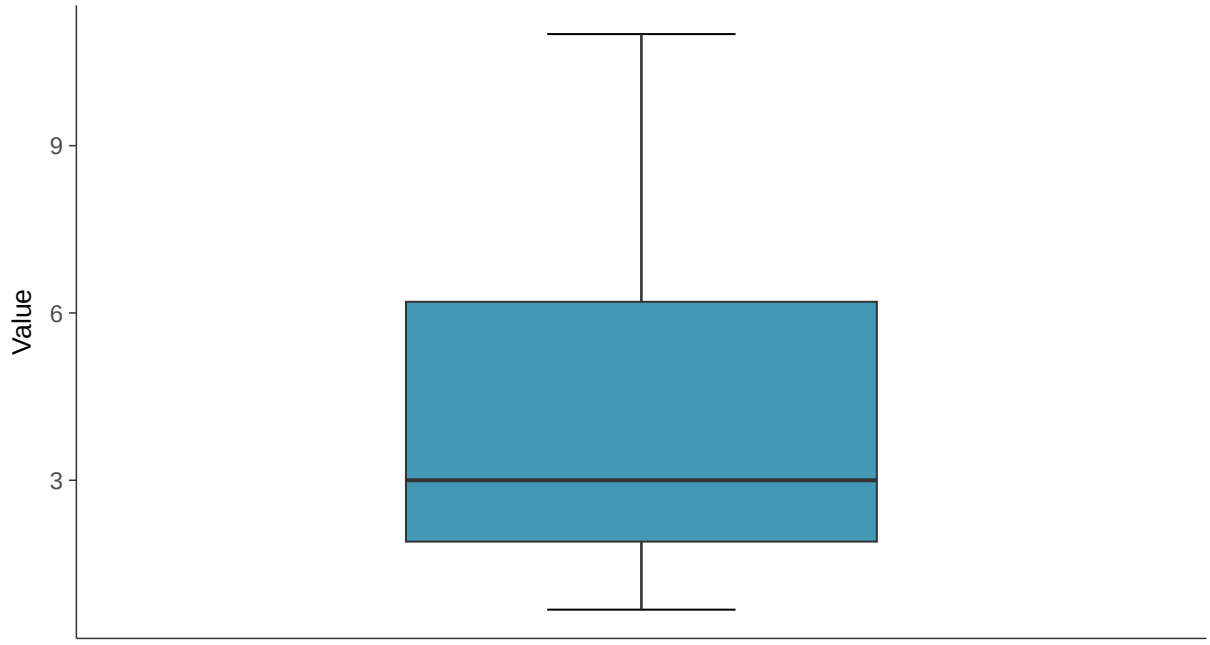

**Histogram**

Molybdenum, MW-15014R (ug/L)



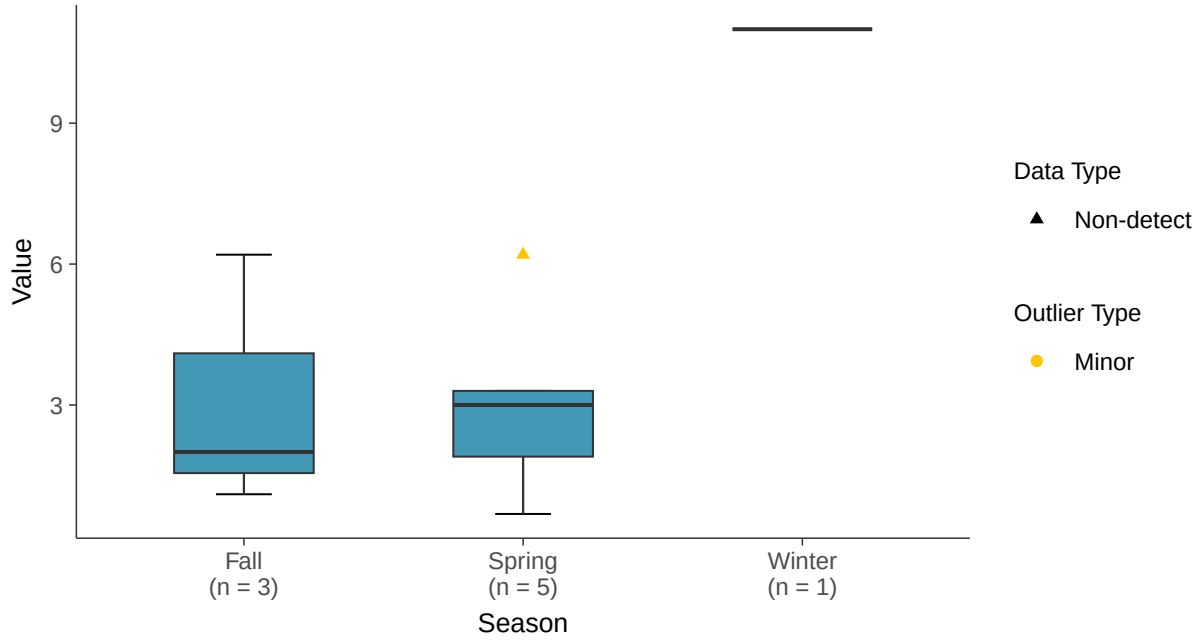
**Boxplot**

Molybdenum, MW-15014R (ug/L)



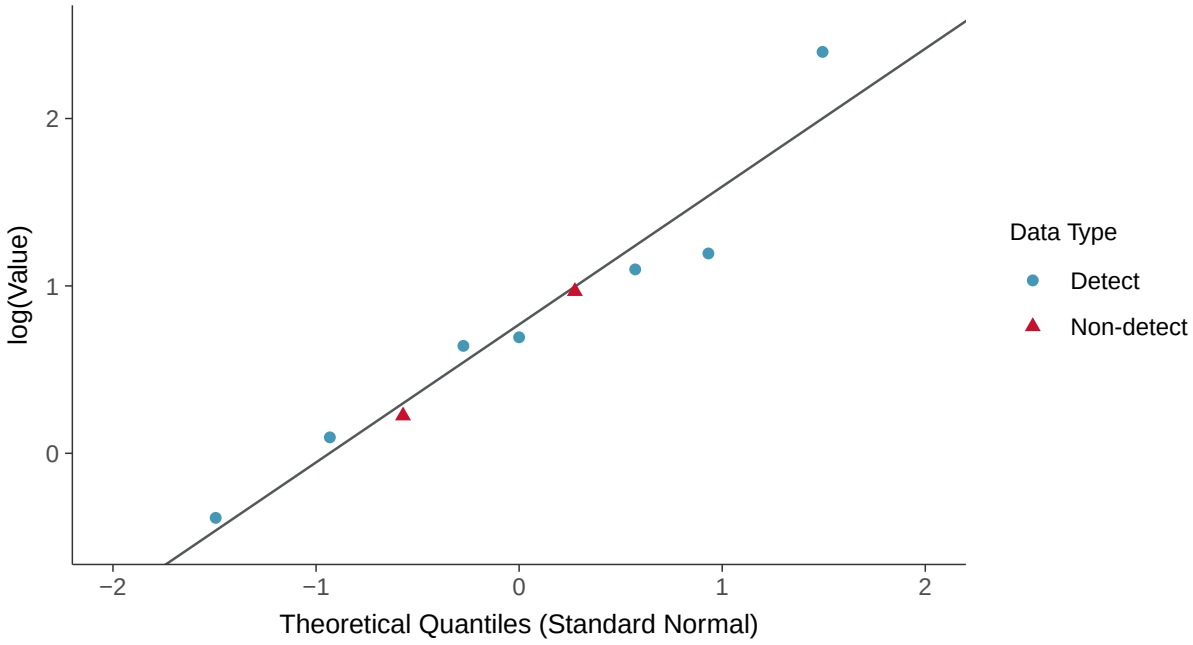

**Boxplot by Season**

Molybdenum, MW-15014R (ug/L)



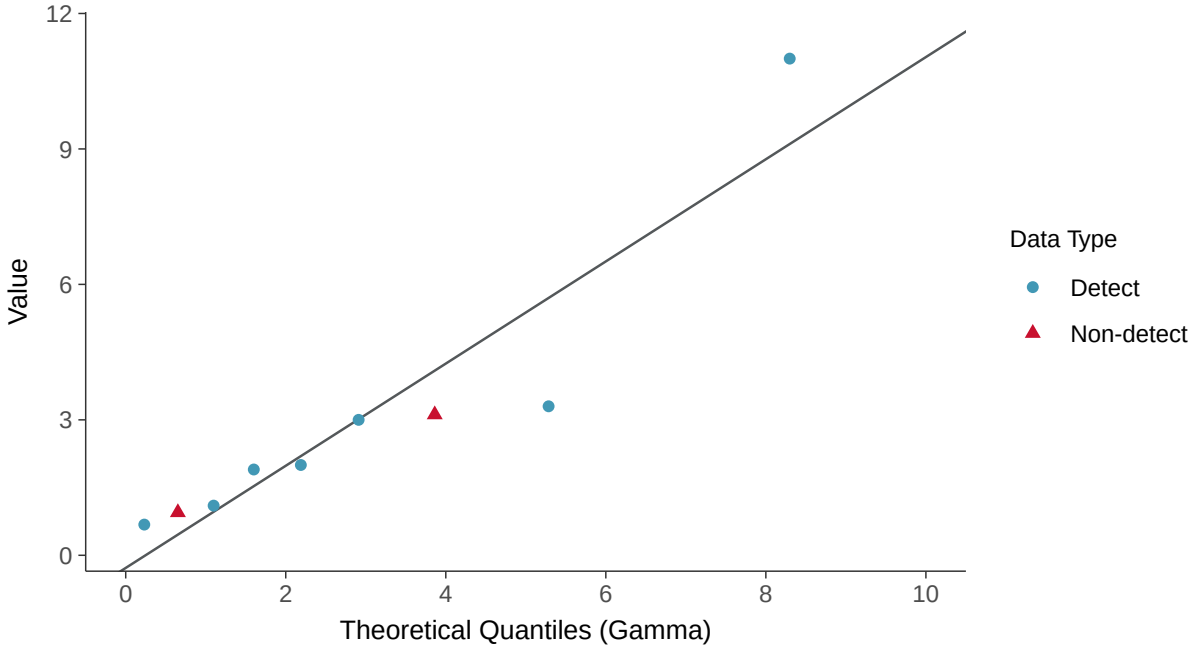
**Lognormal Q-Q plot using ROS Imputed Estimates**

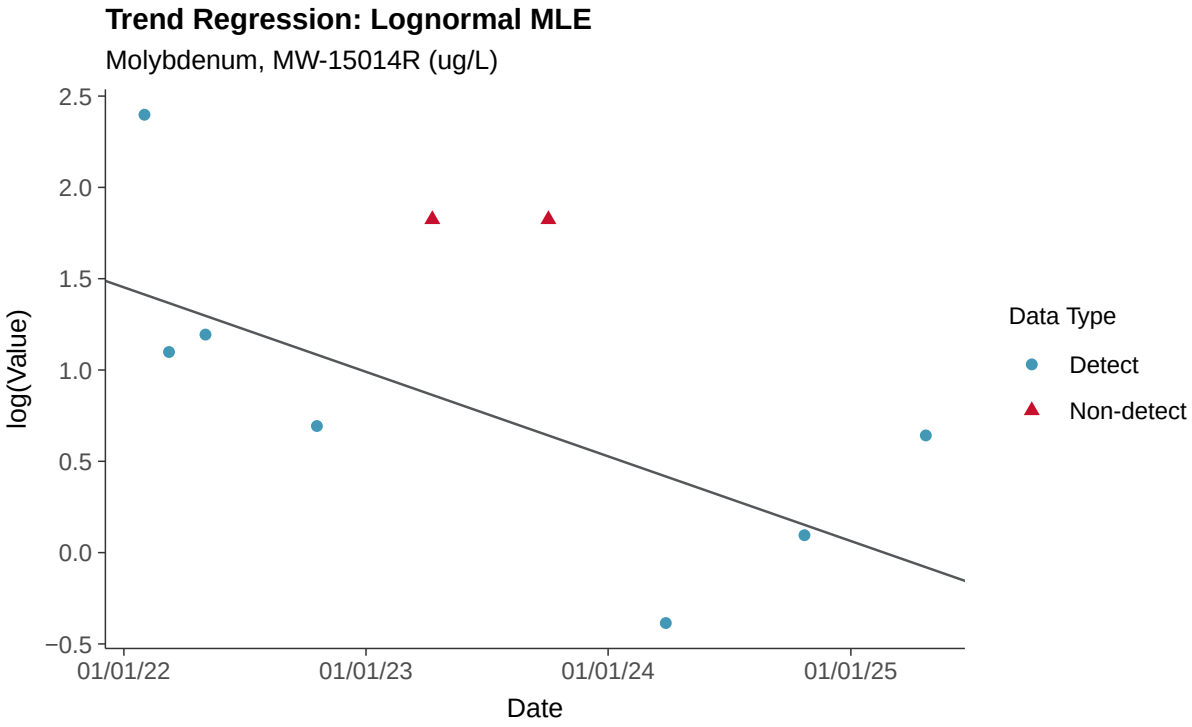
Molybdenum, MW-15014R (ug/L)




**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15014R (ug/L)



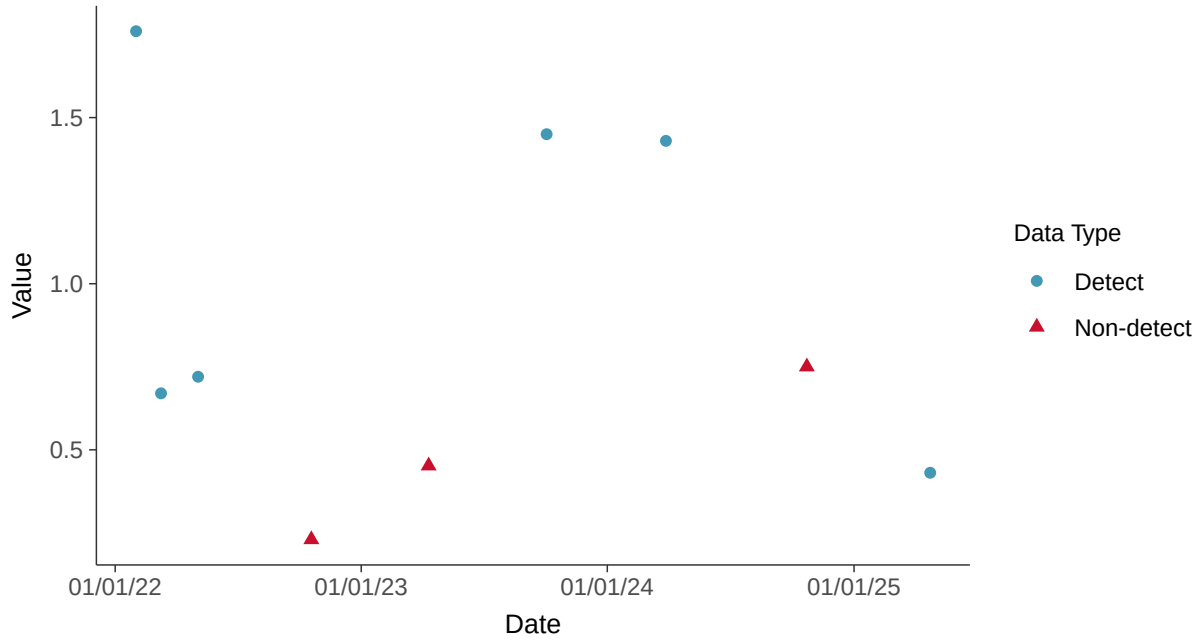

Trend Regression: Lognormal MLE
Molybdenum, MW-15014R (ug/L)
log(Value)
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

## Appendix IV: Radium-226+228, MW-15014R

ID: 04_2_125

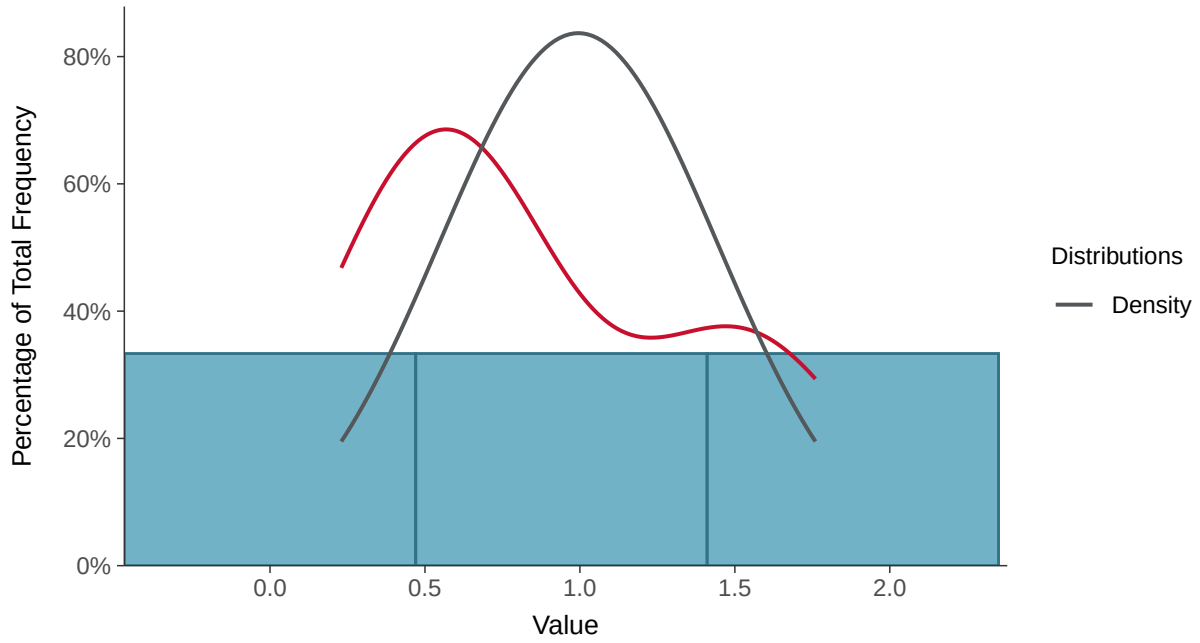
**Scatter Plot**

Radium-226+228, MW-15014R (pCi/L)



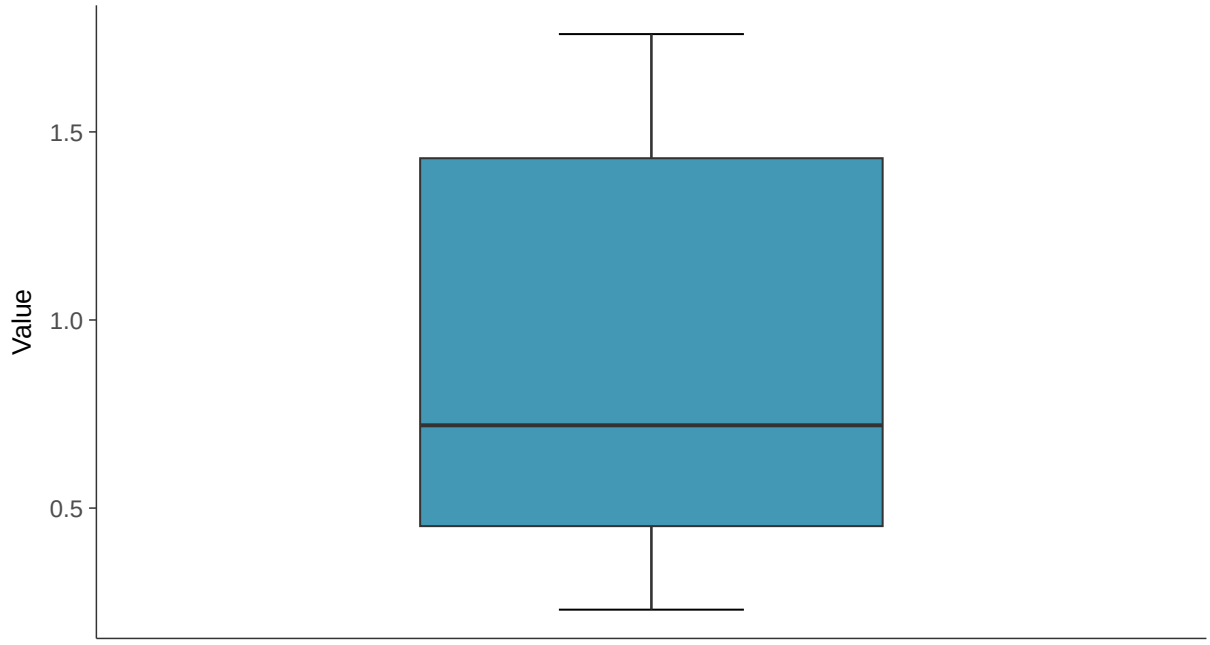

**Histogram**

Radium-226+228, MW-15014R (pCi/L)



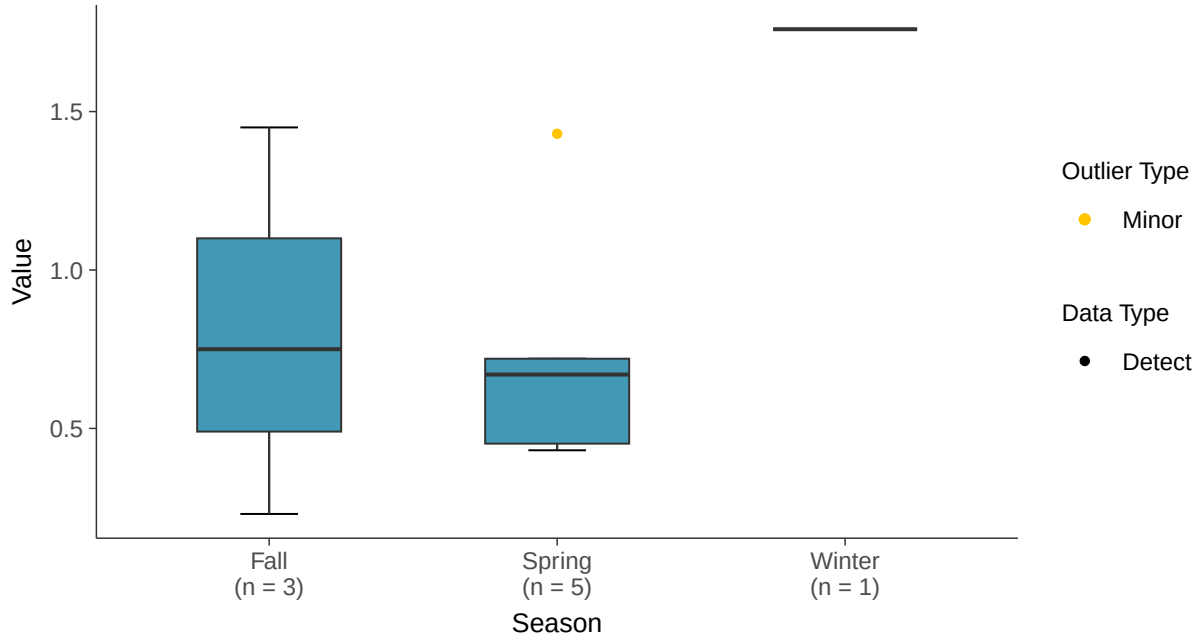
## Boxplot

Radium-226+228, MW-15014R (pCi/L)



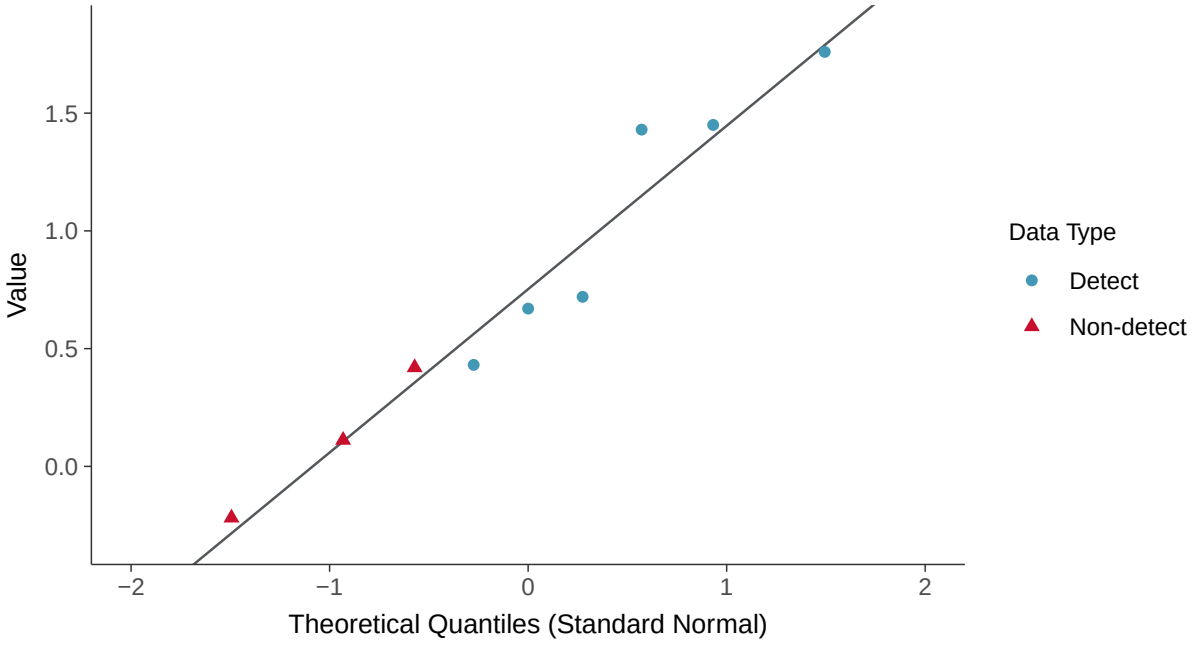

## Boxplot by Season

Radium-226+228, MW-15014R (pCi/L)



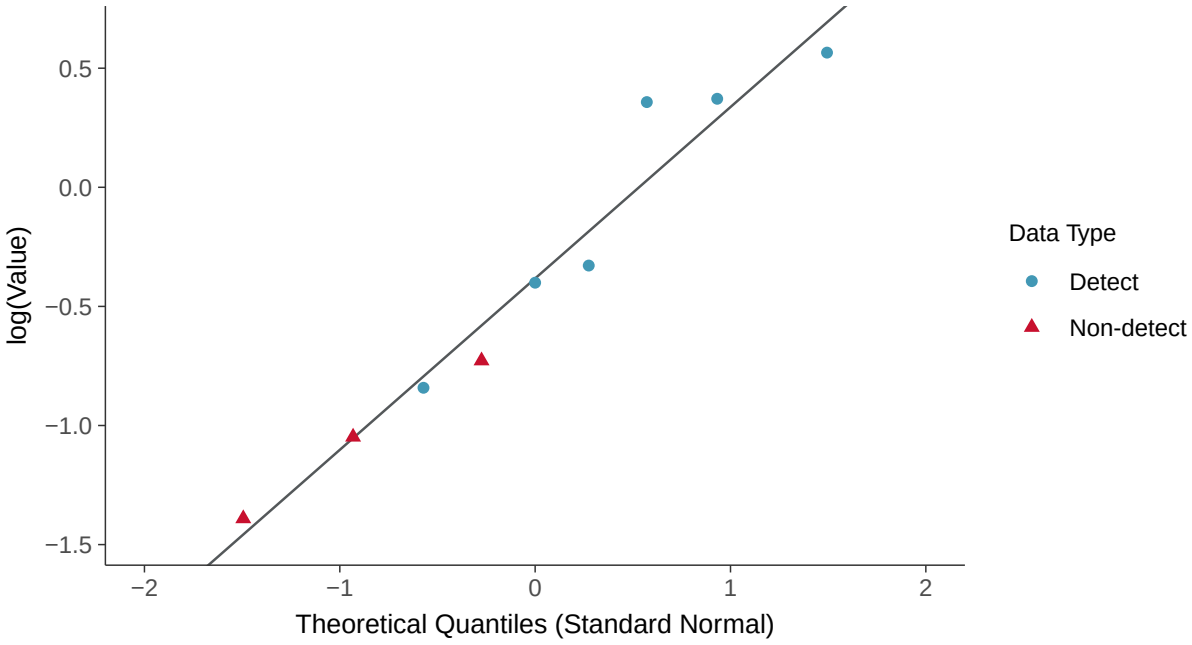
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15014R (pCi/L)



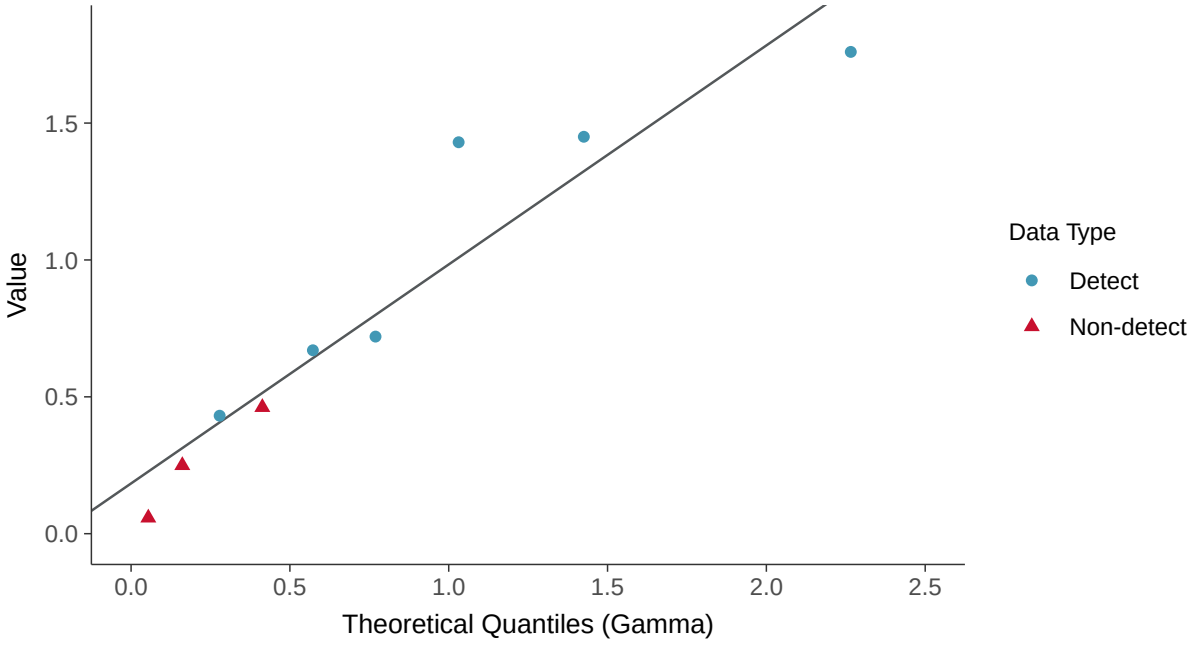

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15014R (pCi/L)



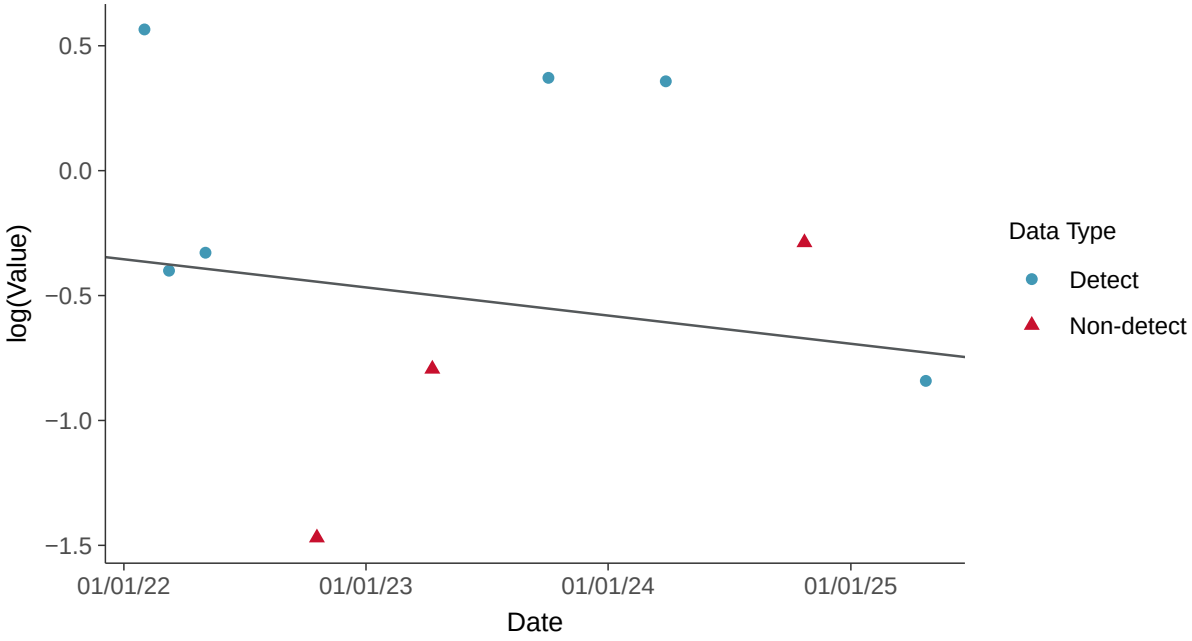
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15014R (pCi/L)



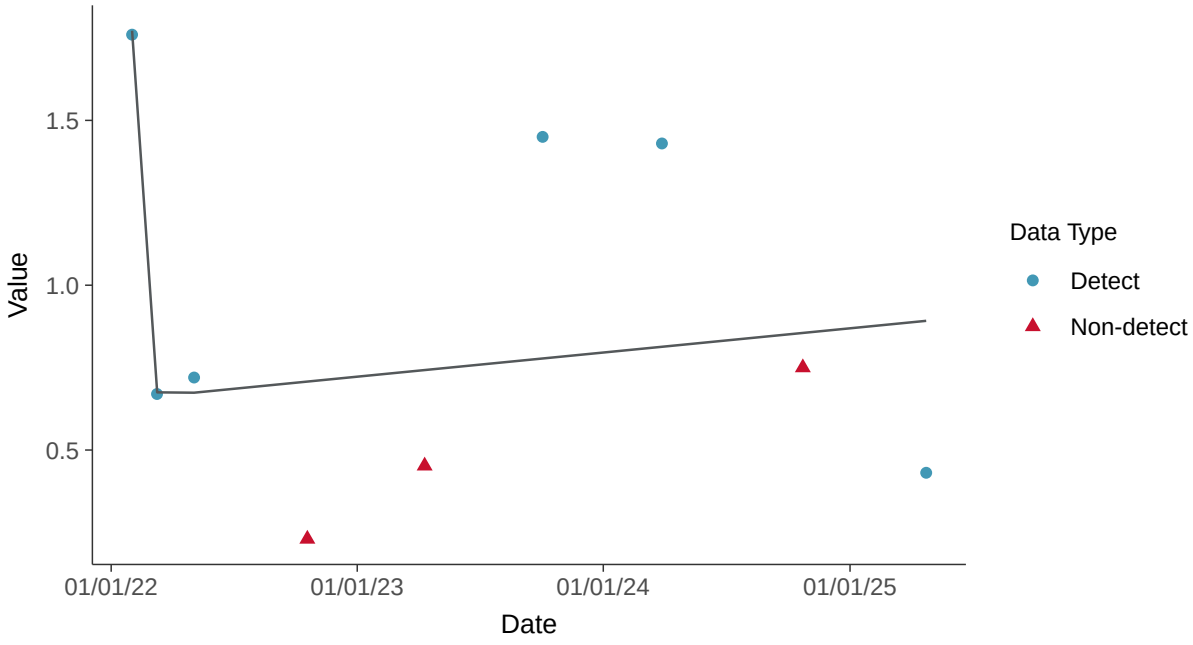

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15014R (pCi/L)



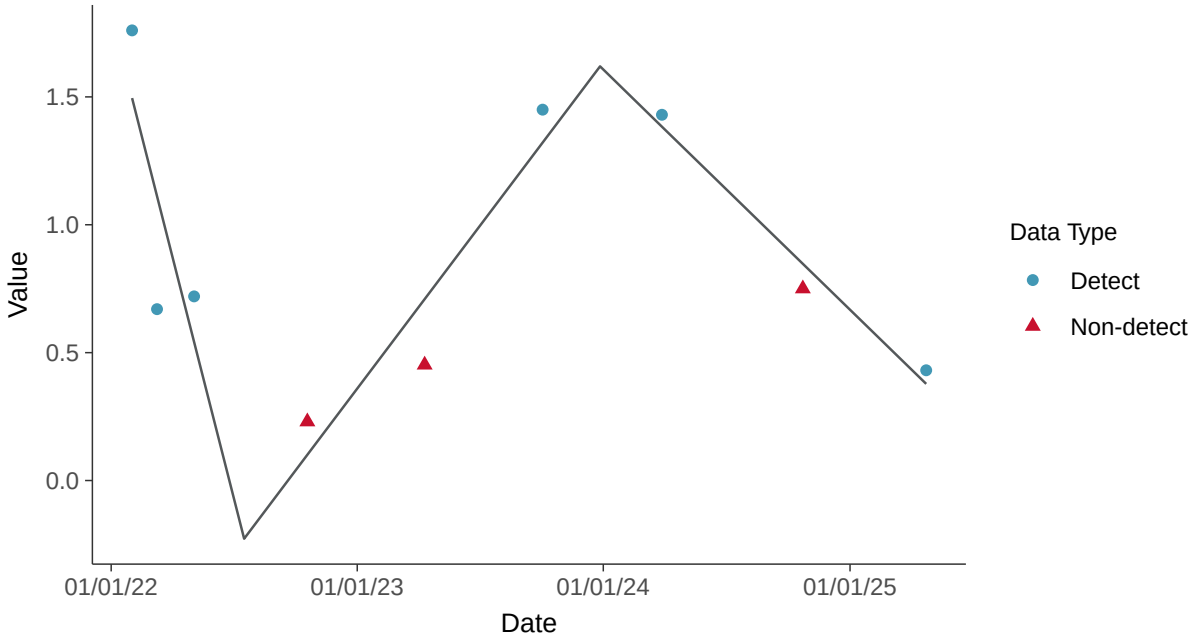
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15014R (pCi/L)



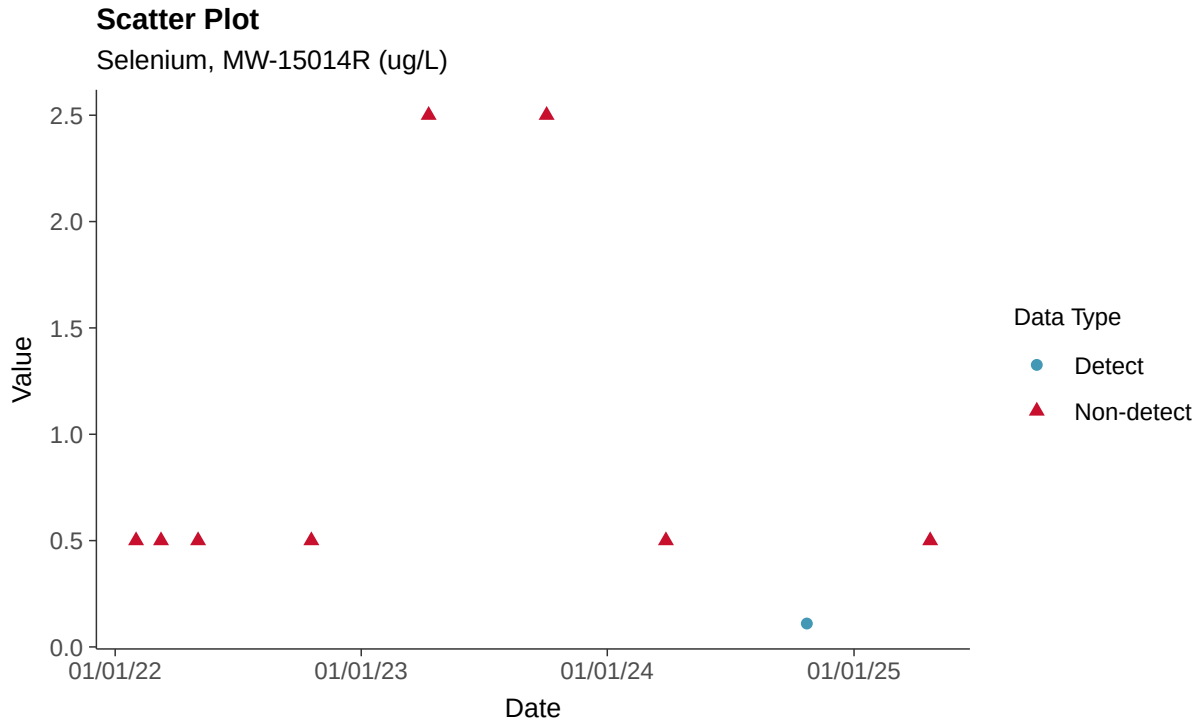

**Trend Regression: Piecewise Linear-Linear-Linear**

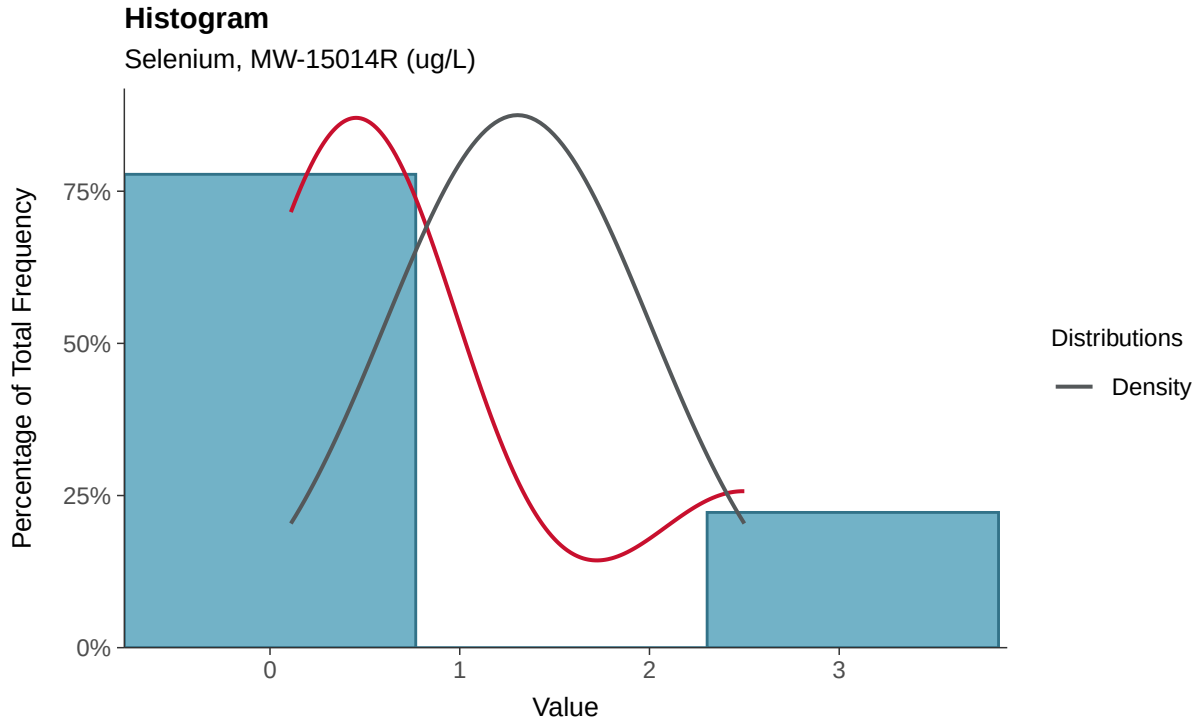
Radium-226+228, MW-15014R (pCi/L)



## Appendix IV: Selenium, MW-15014R

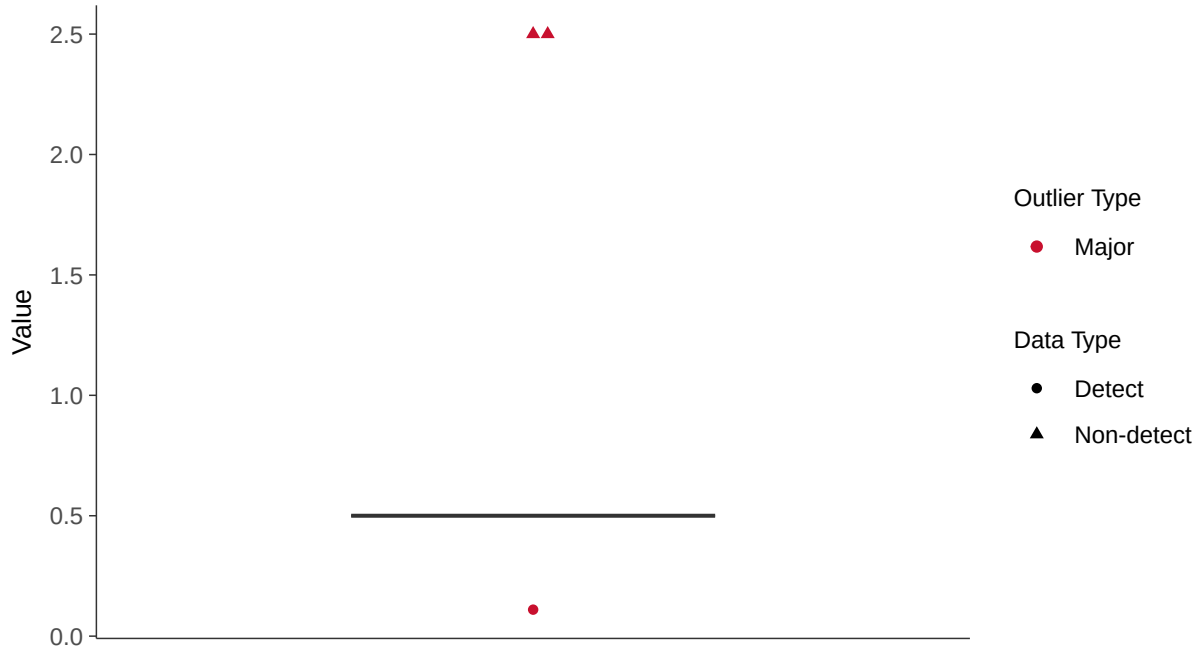
ID: 04_2_127



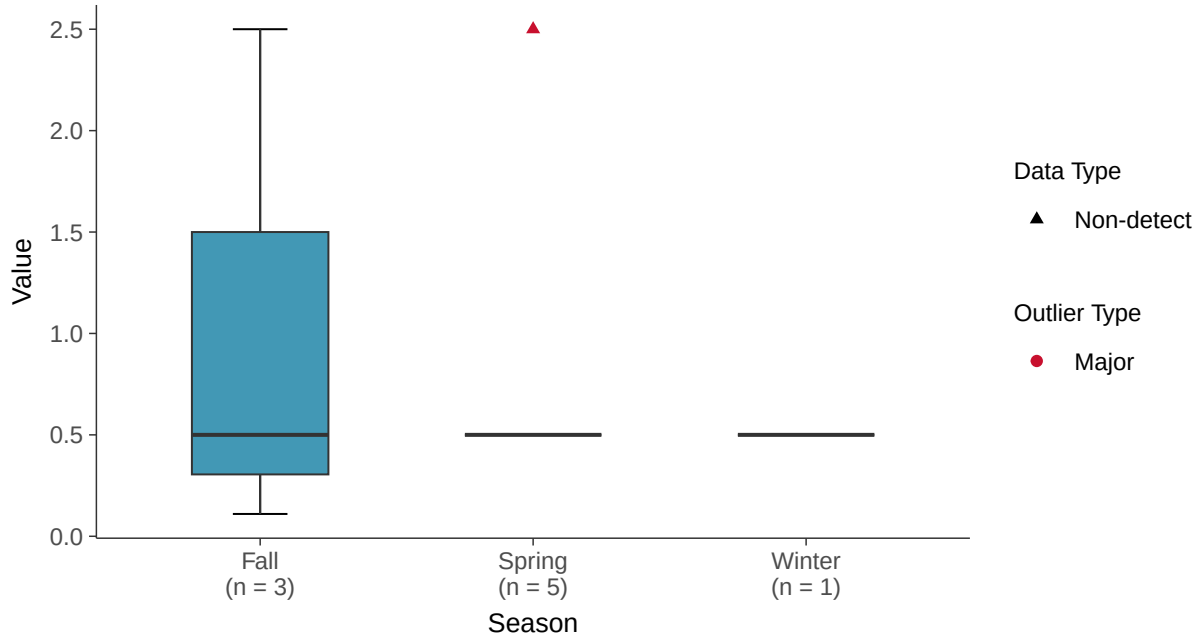
## Boxplot

Selenium, MW-15014R (ug/L)



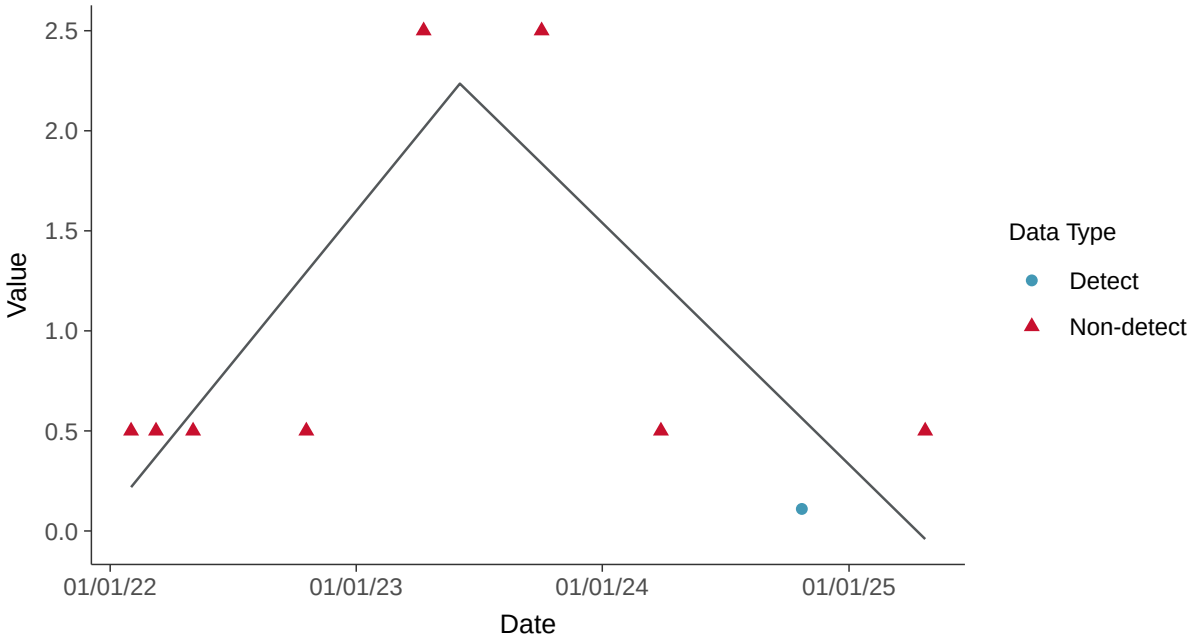

## Boxplot by Season

Selenium, MW-15014R (ug/L)



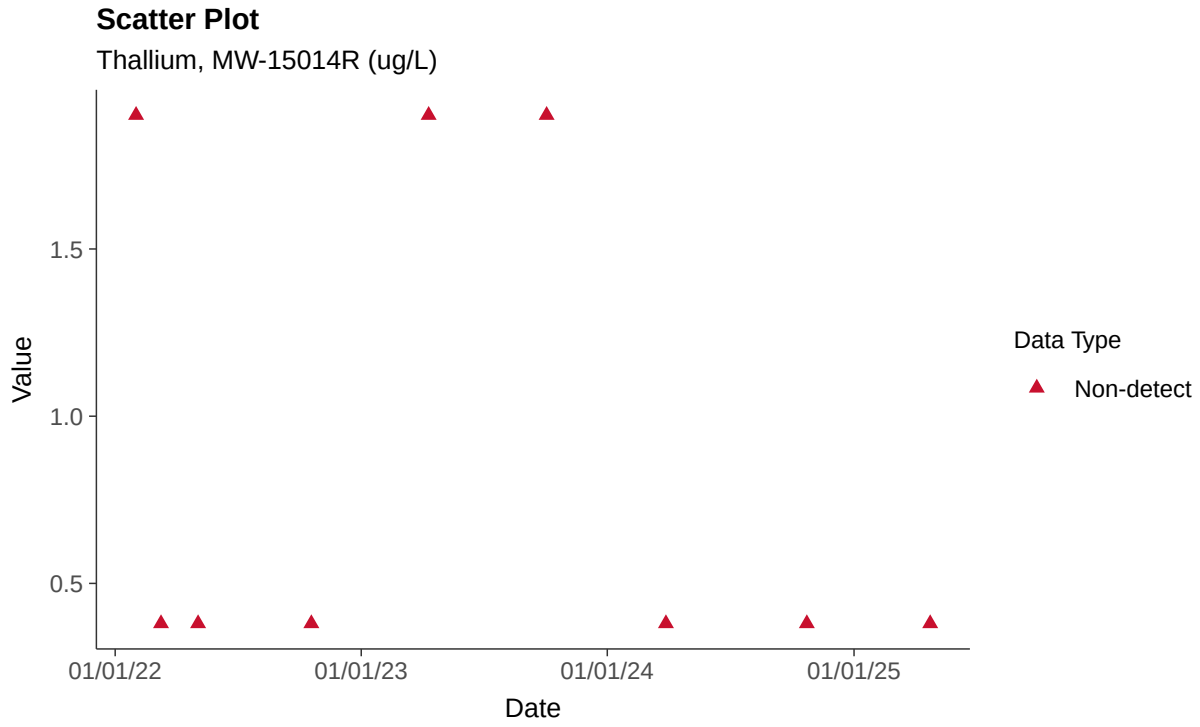
**Trend Regression: Piecewise Linear-Linear**

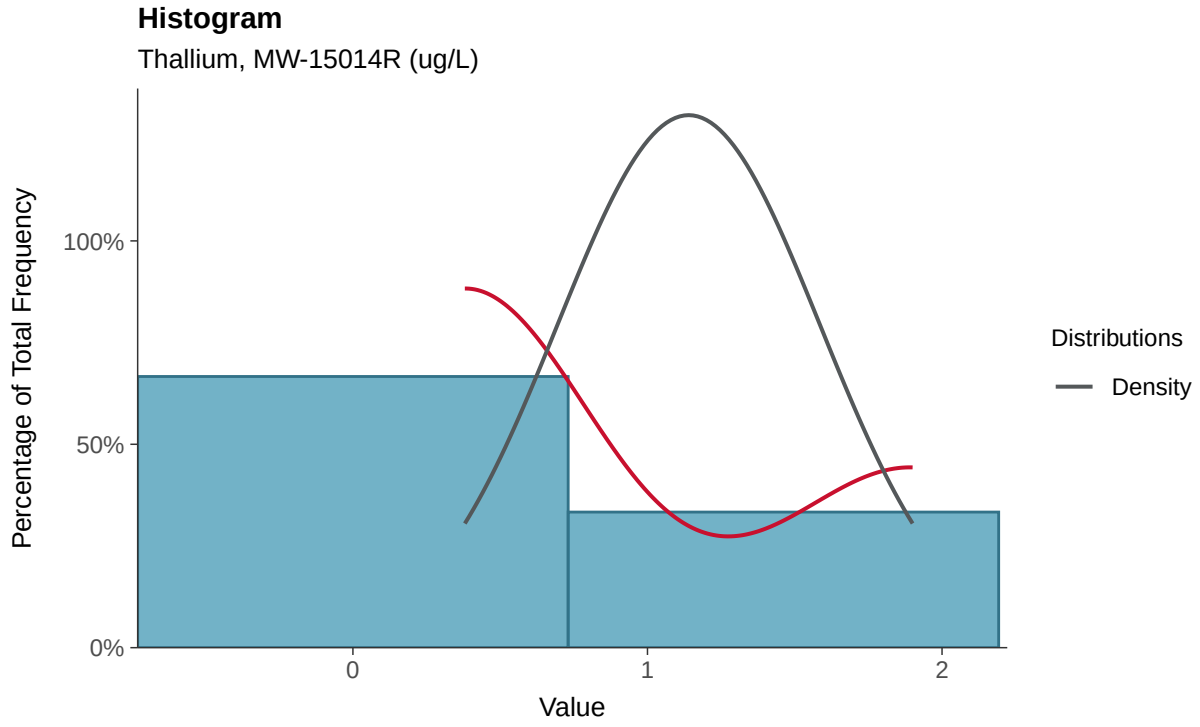
Selenium, MW-15014R (ug/L)



## Appendix IV: Thallium, MW-15014R

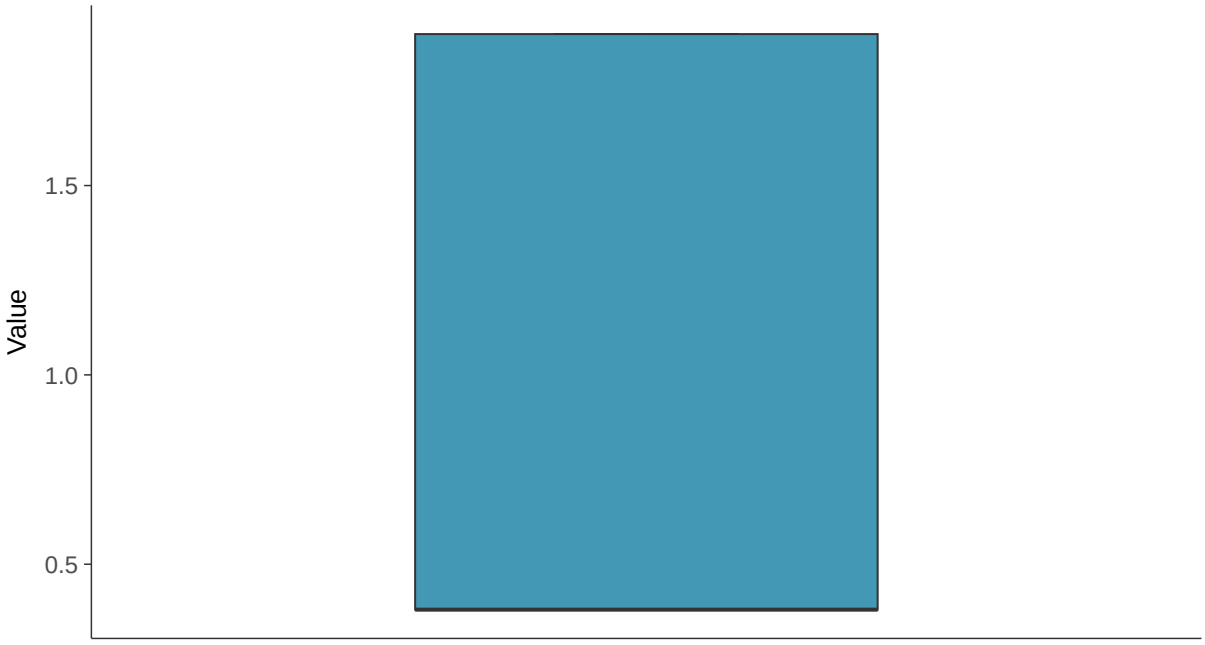
ID: 04_2_131



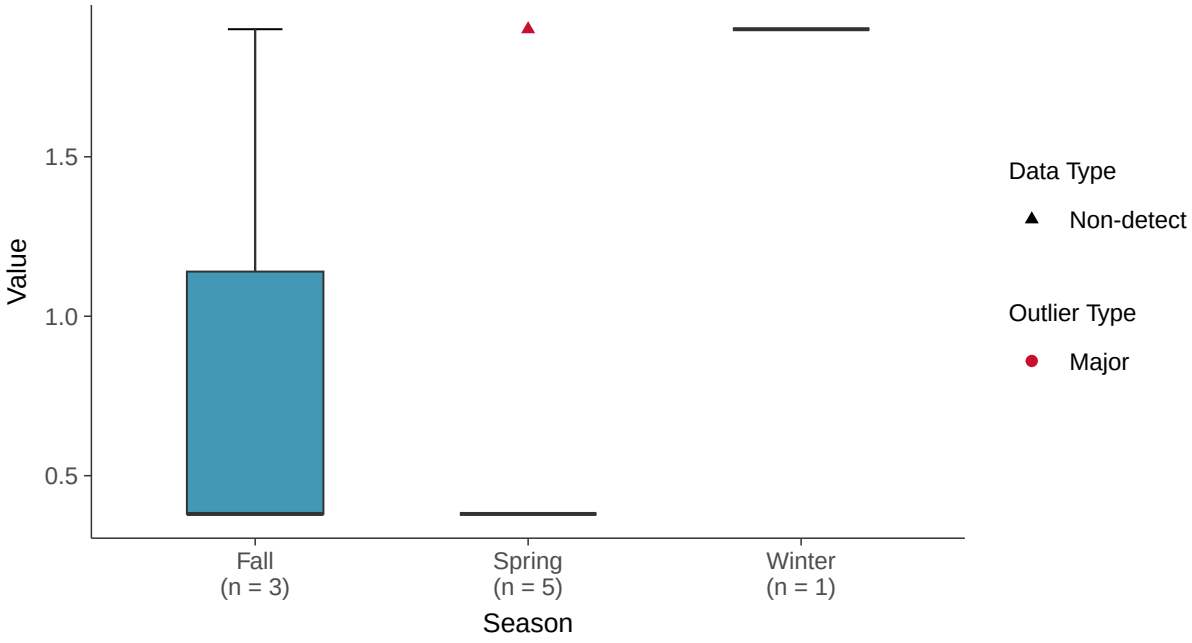
## Boxplot

Thallium, MW-15014R (ug/L)



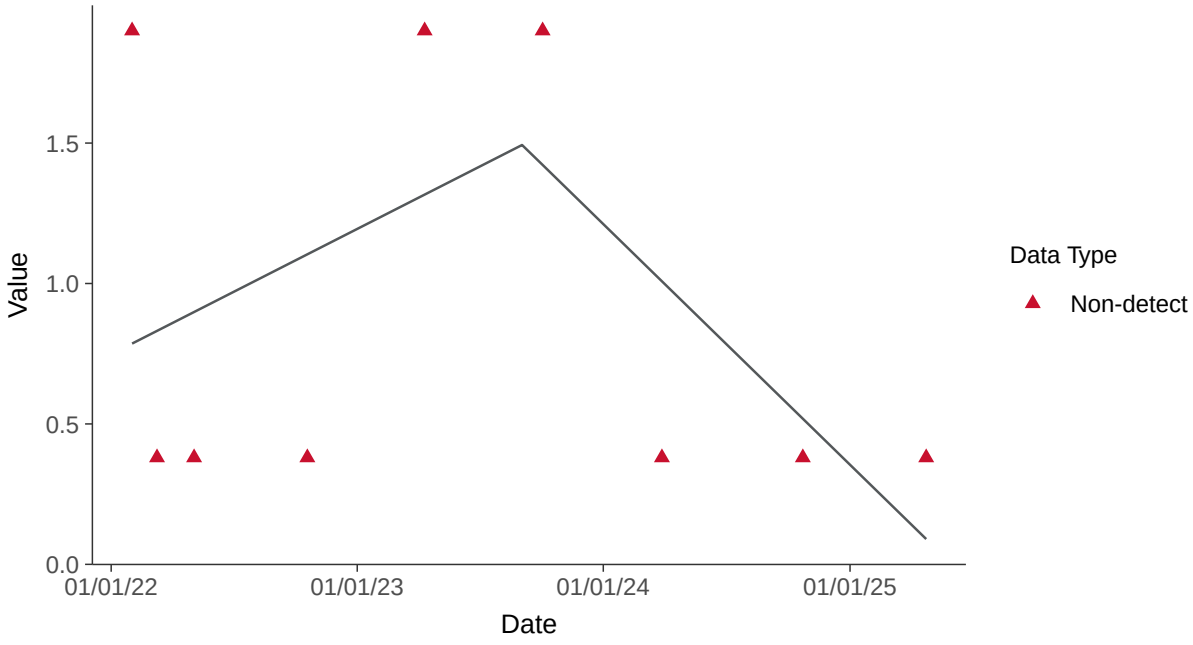

## Boxplot by Season

Thallium, MW-15014R (ug/L)



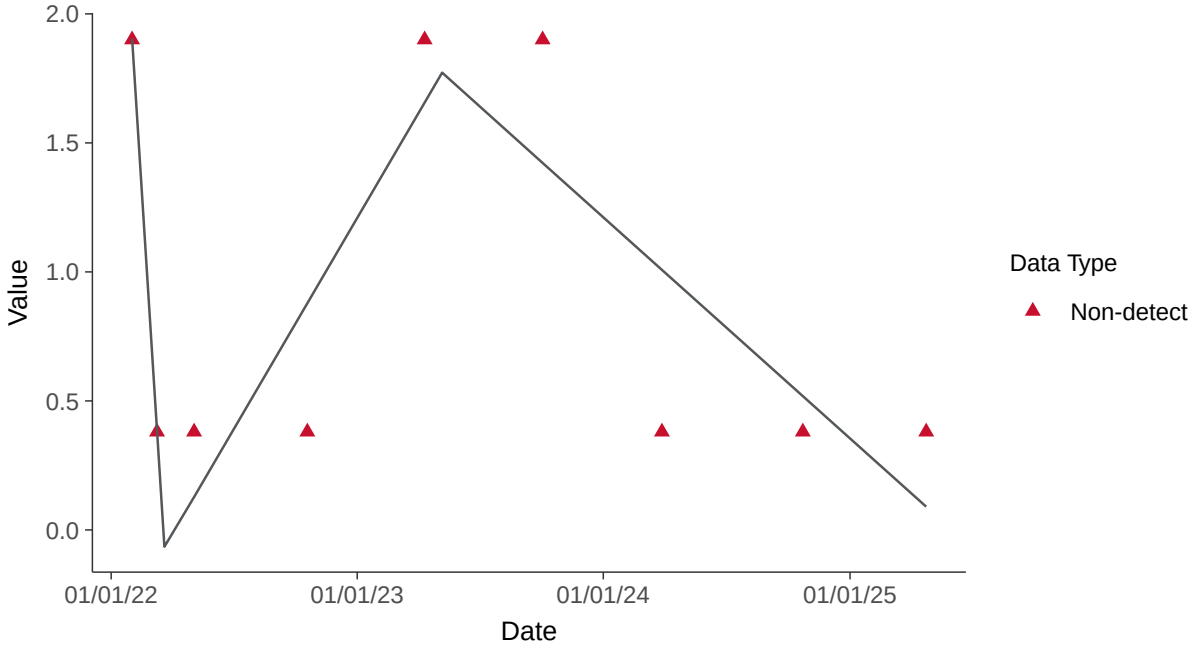
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15014R (ug/L)



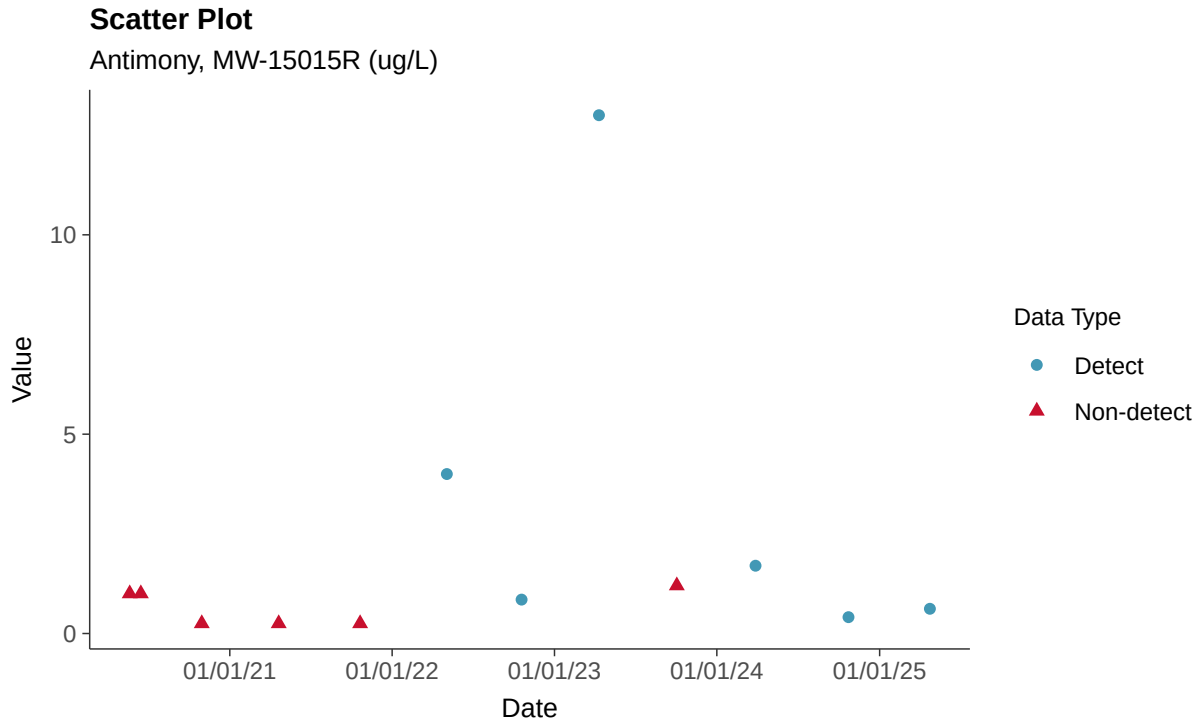

**Trend Regression: Piecewise Linear-Linear-Linear**

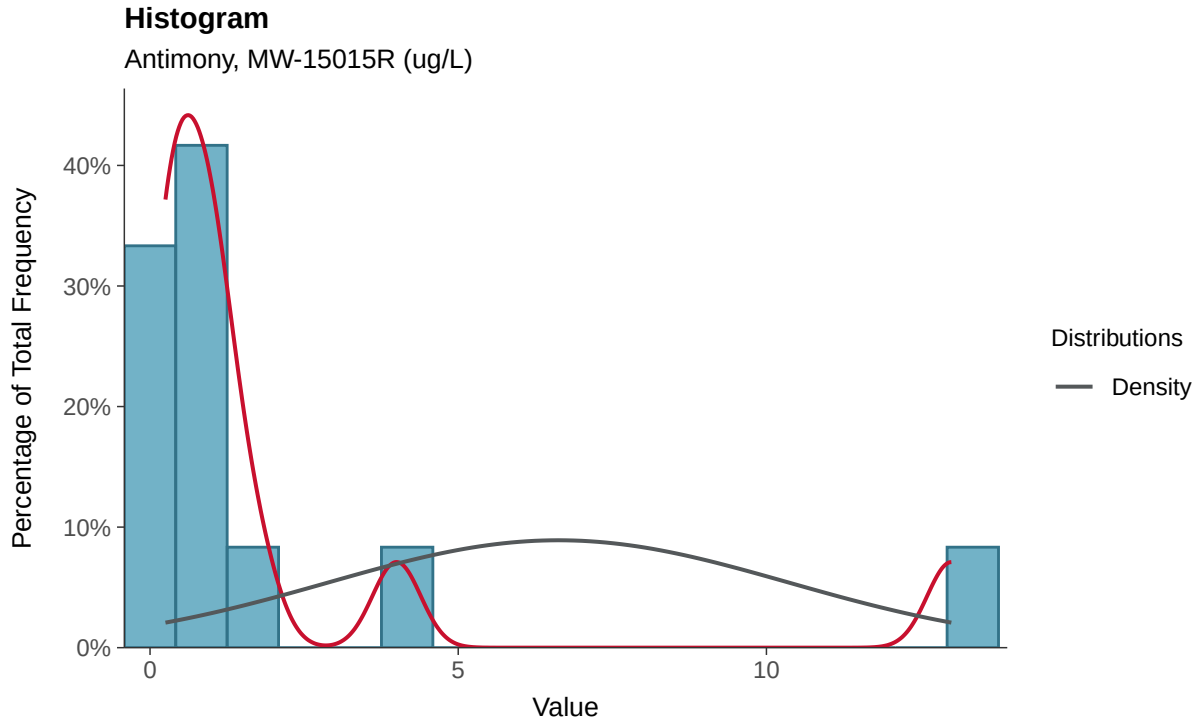
Thallium, MW-15014R (ug/L)



## Appendix IV: Antimony, MW-15015R

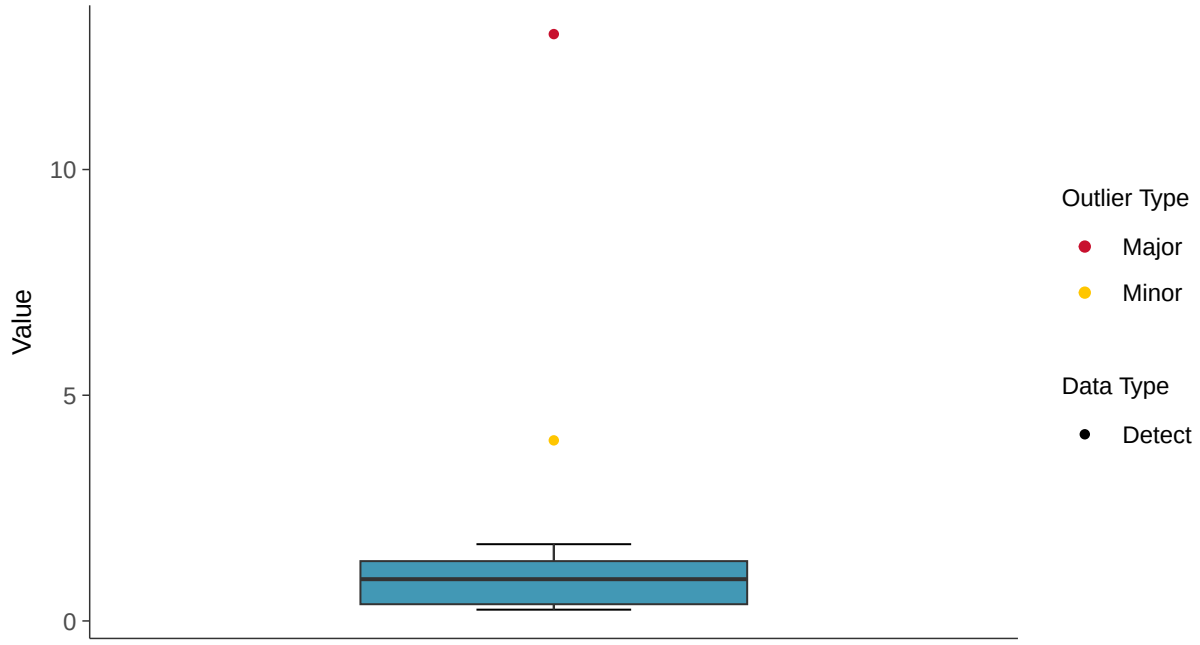
ID: 05_2_101



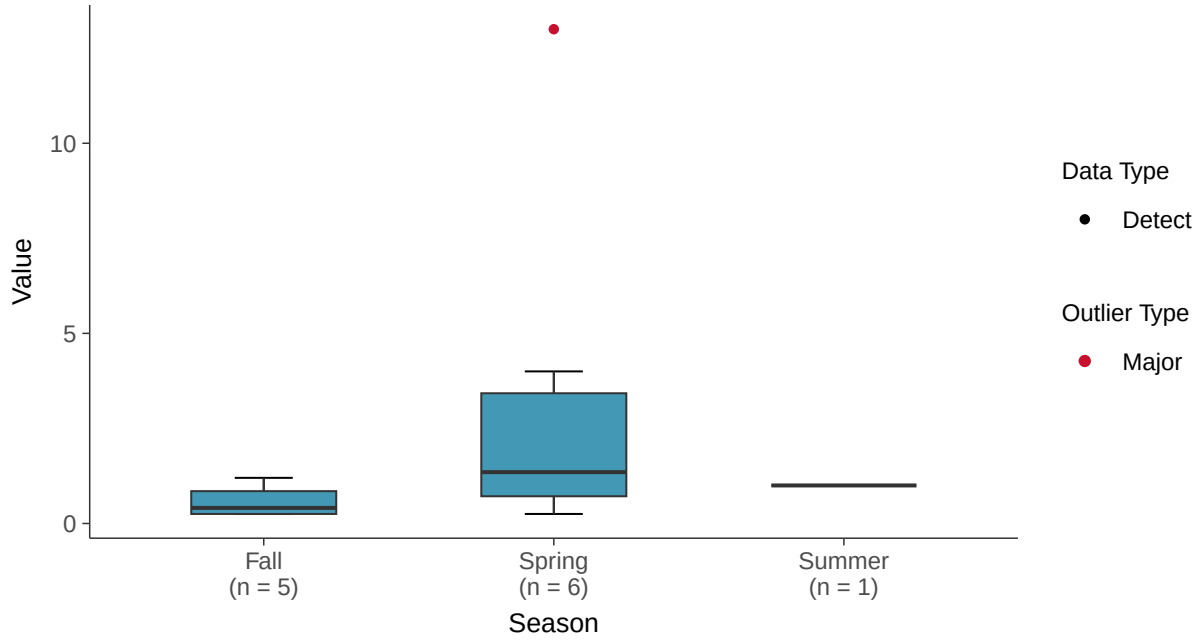
## Boxplot

Antimony, MW-15015R (ug/L)



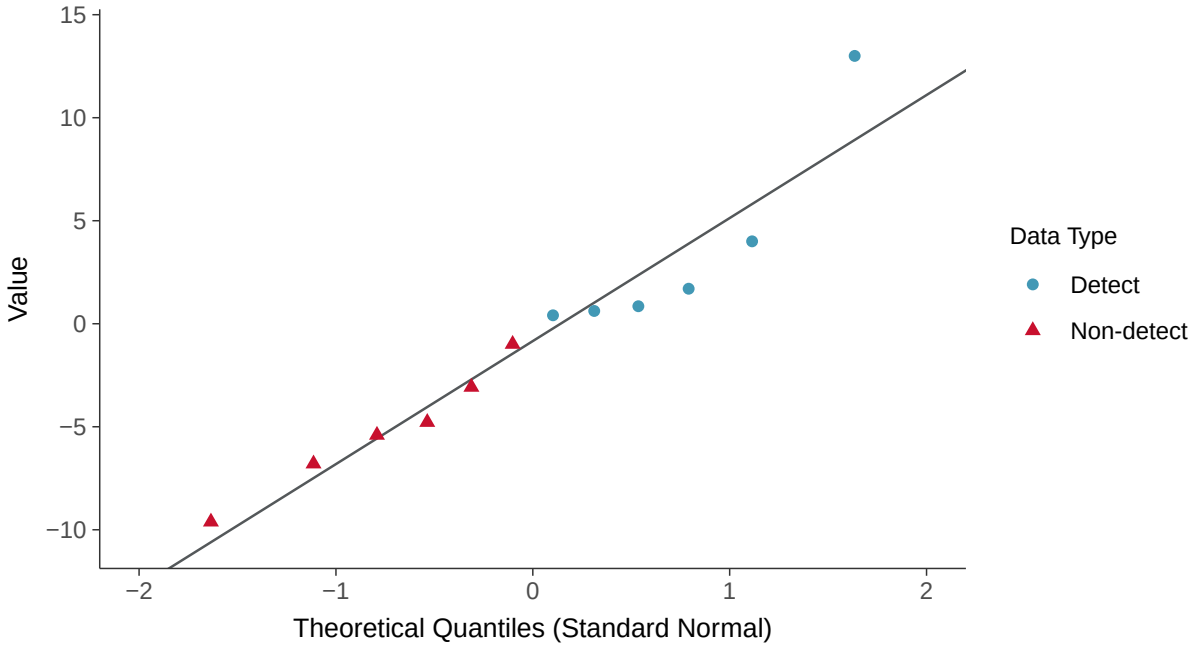

## Boxplot by Season

Antimony, MW-15015R (ug/L)



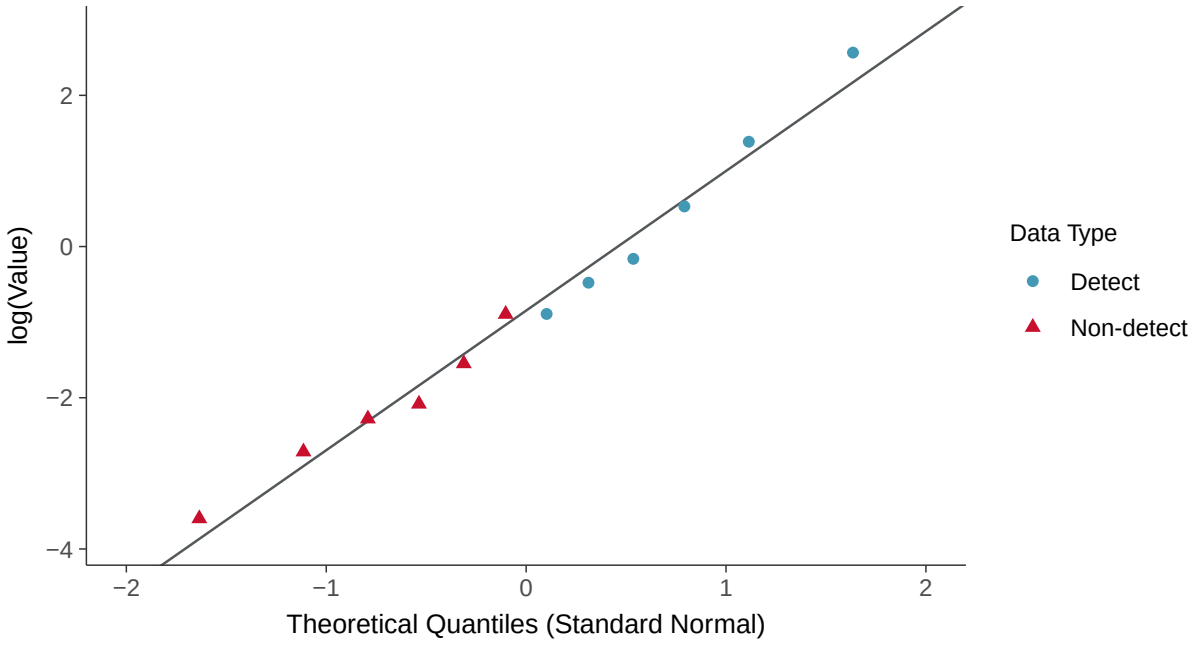
**Normal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-15015R (ug/L)



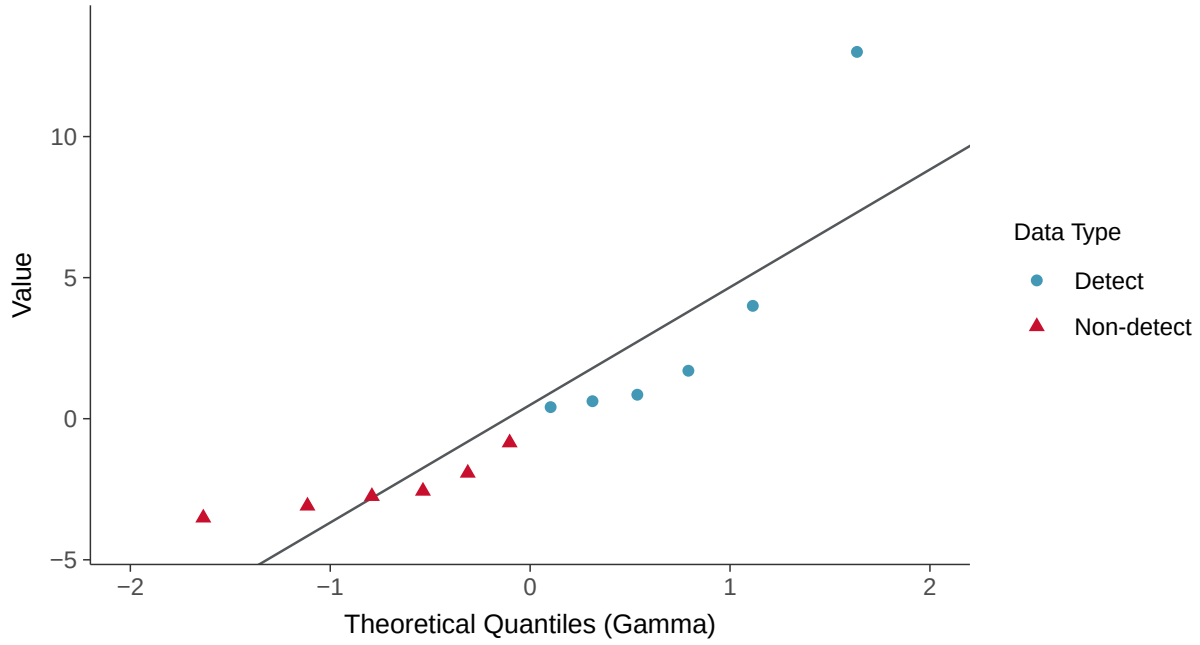

**Lognormal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-15015R (ug/L)



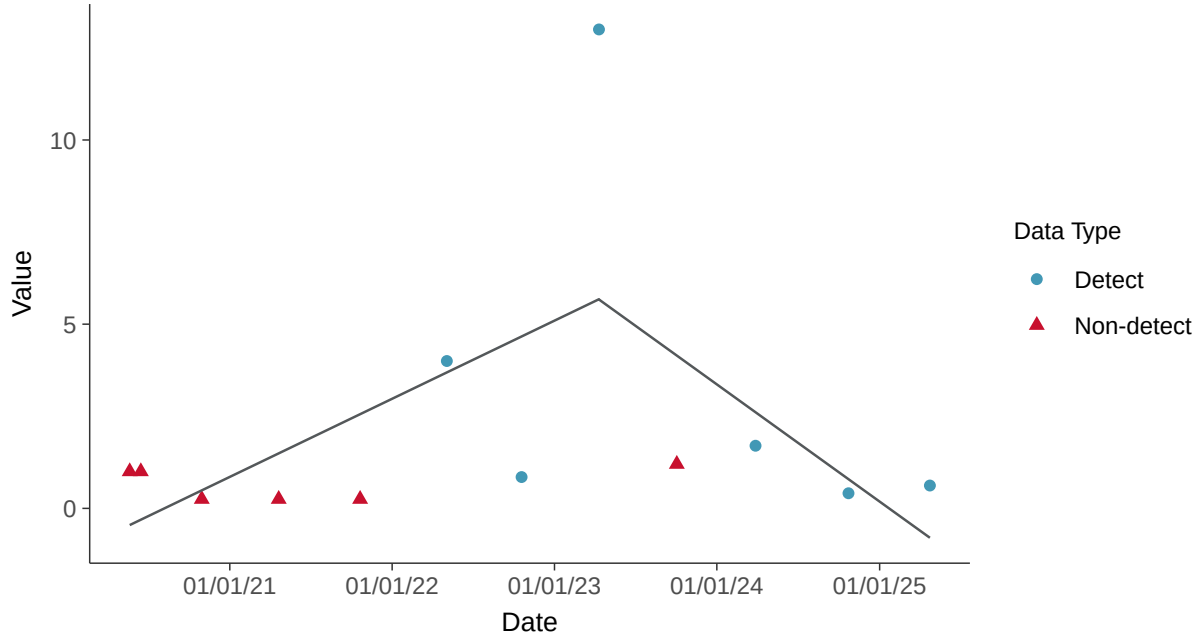
**Gamma Q-Q plot using ROS Imputed Estimates**

Antimony, MW-15015R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15015R (ug/L)

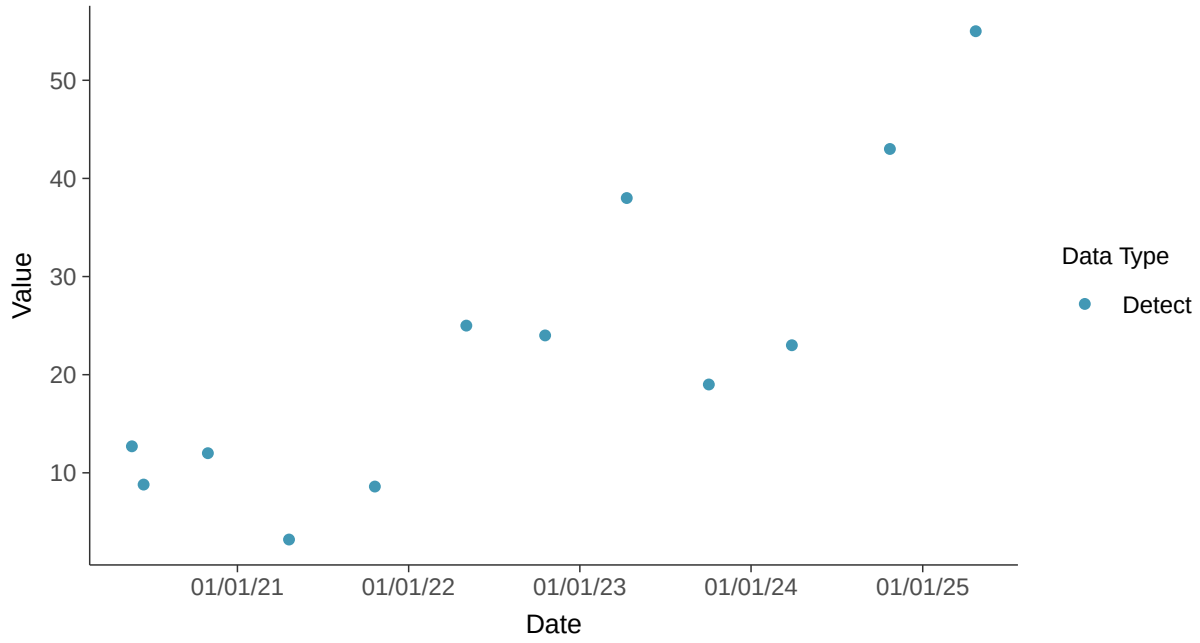


## Appendix IV: Arsenic, MW-15015R

ID: 05_2_102

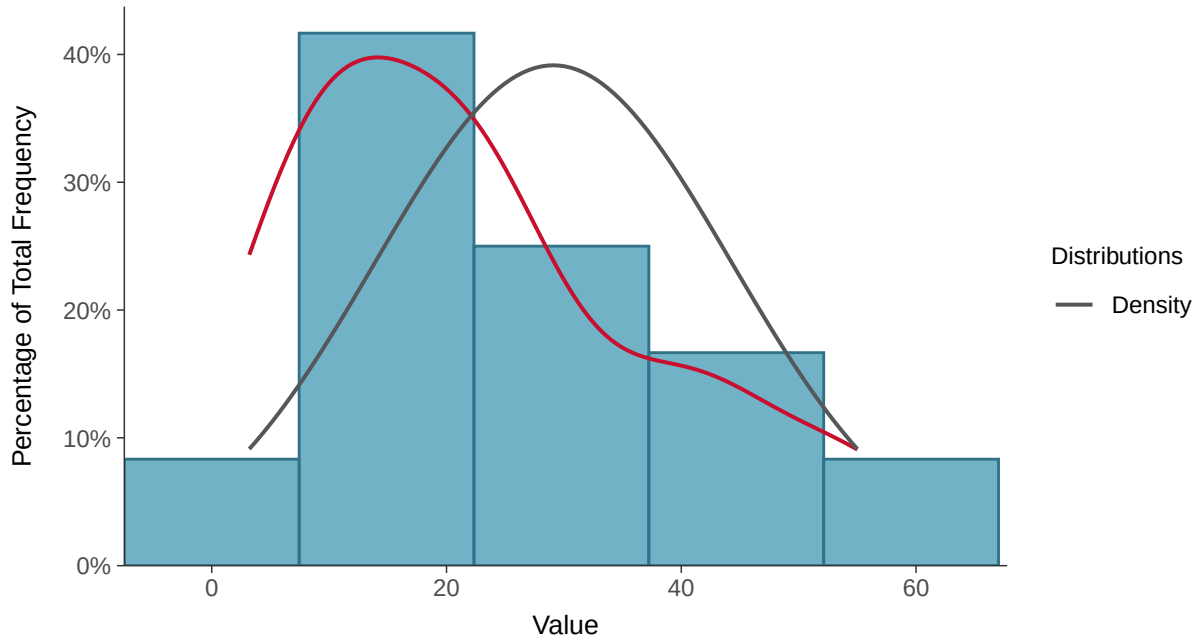
**Scatter Plot**

Arsenic, MW-15015R (ug/L)



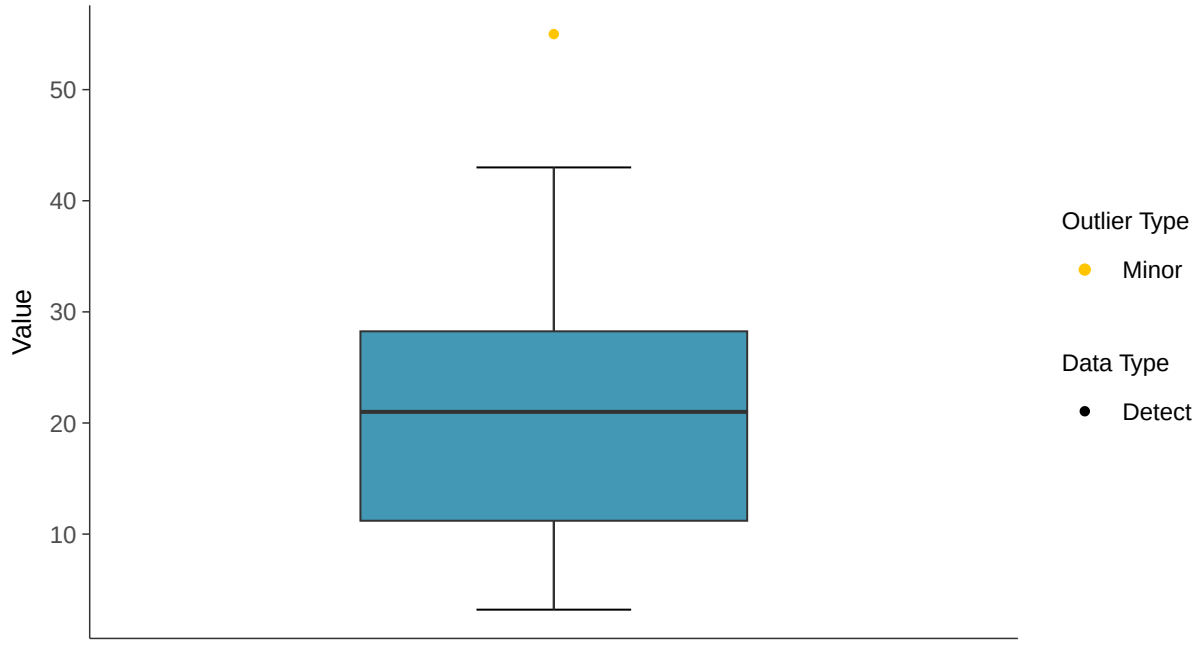

**Histogram**

Arsenic, MW-15015R (ug/L)



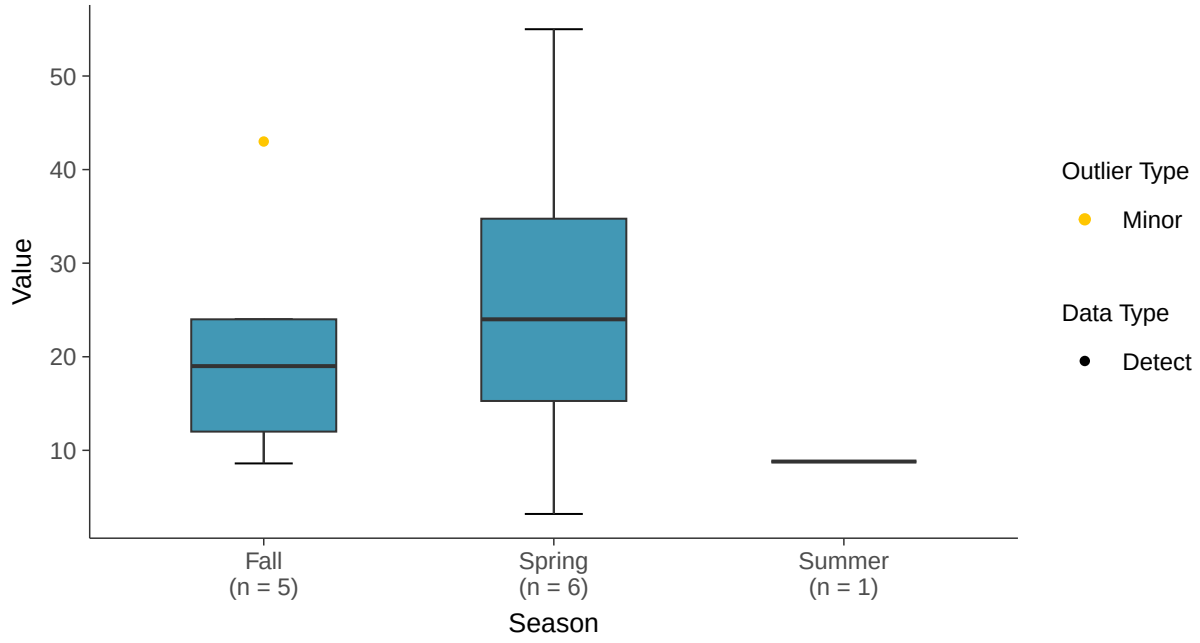
## Boxplot

Arsenic, MW-15015R (ug/L)



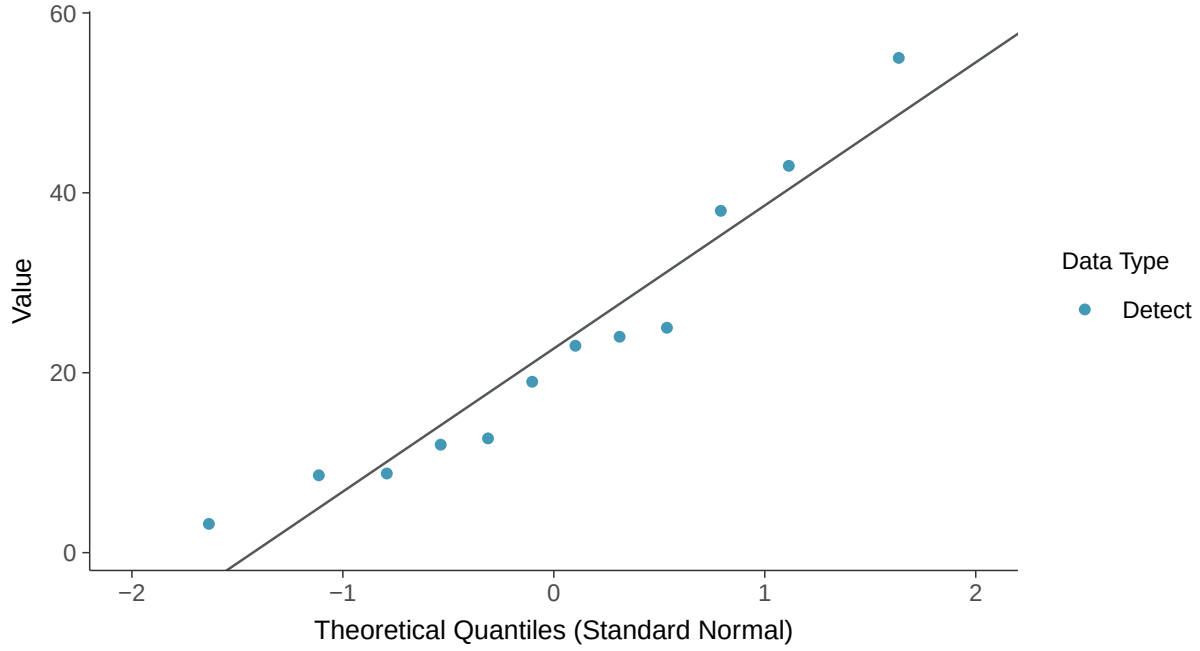

## Boxplot by Season

Arsenic, MW-15015R (ug/L)



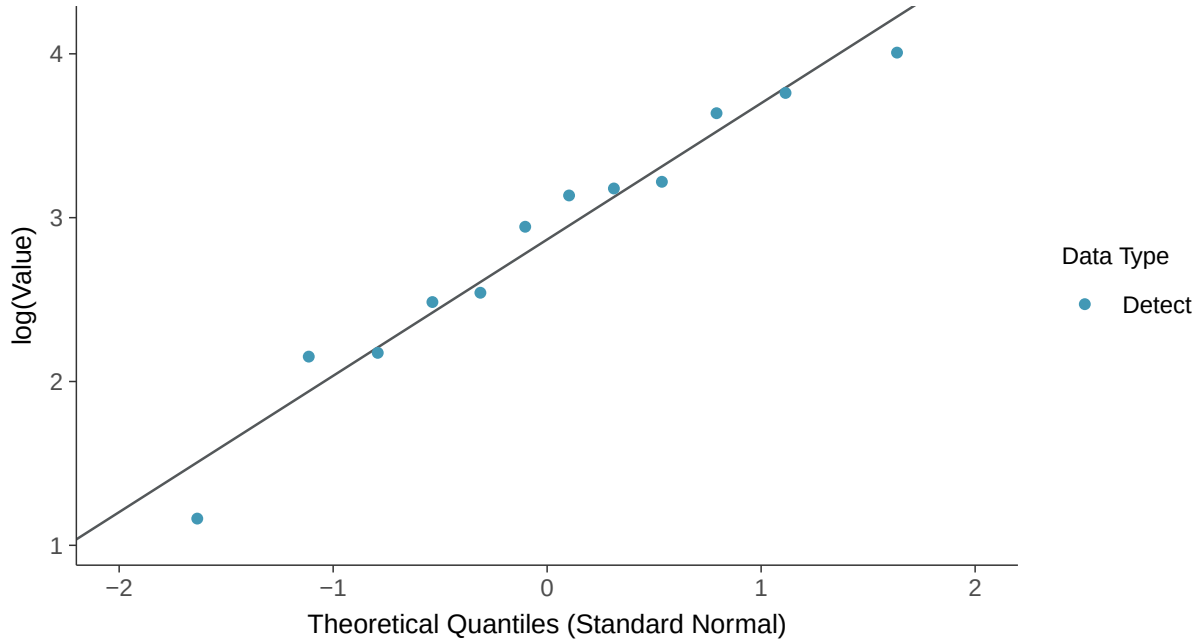
**Normal Q-Q plot**

Arsenic, MW-15015R (ug/L)



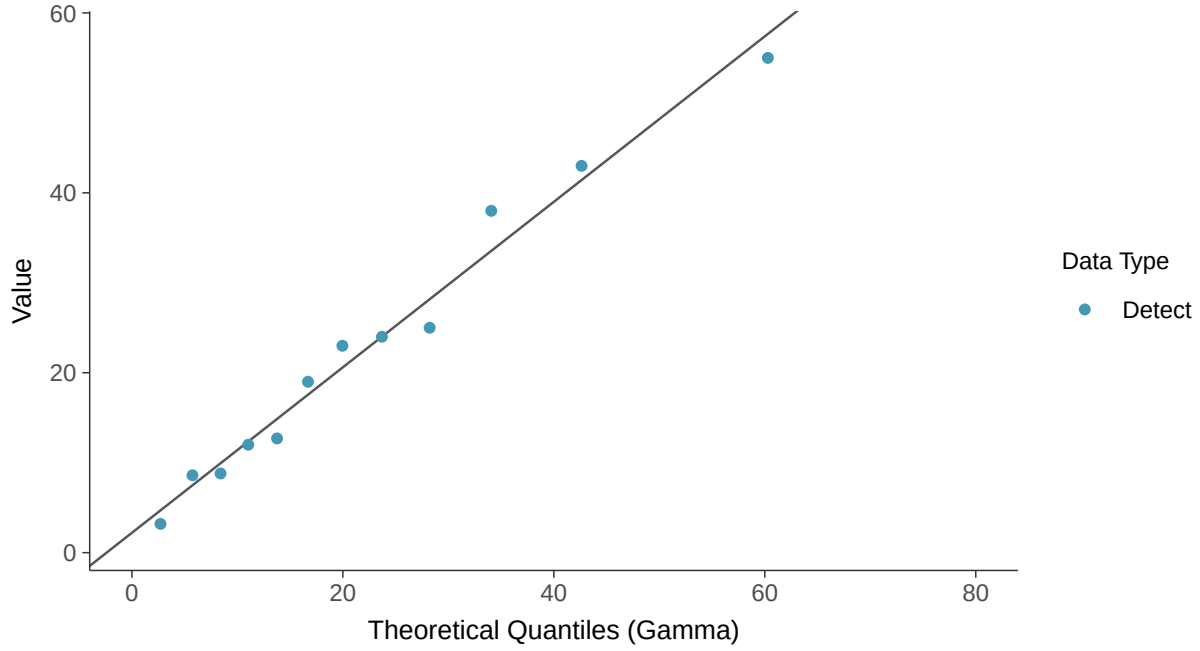

**Lognormal Q-Q plot**

Arsenic, MW-15015R (ug/L)



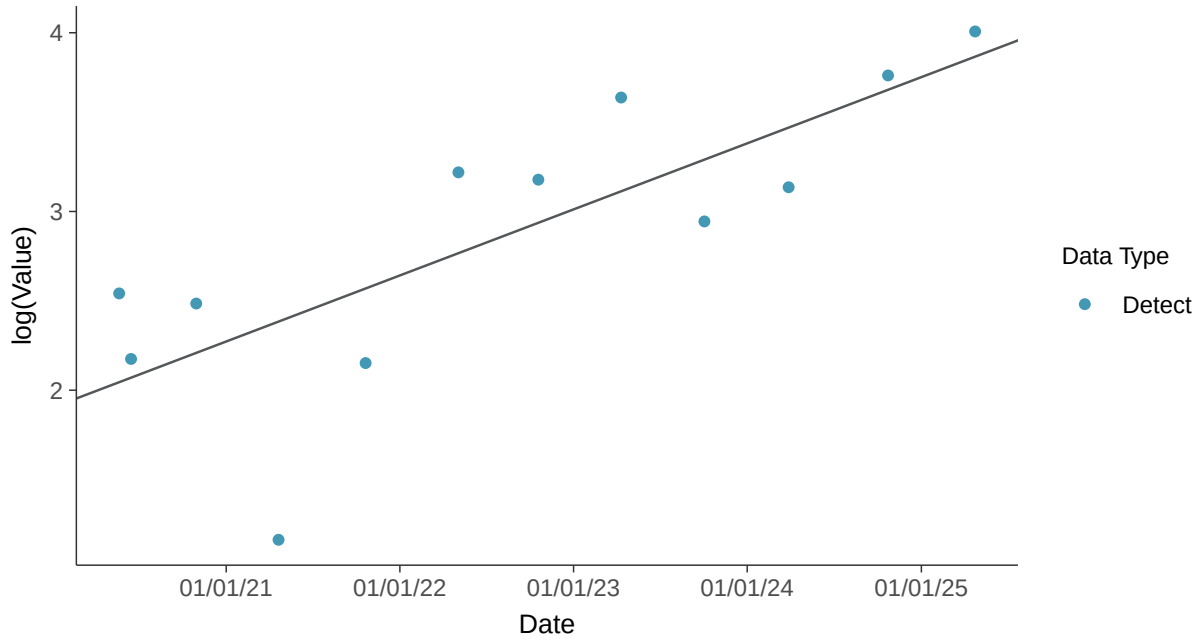
**Gamma Q-Q plot**

Arsenic, MW-15015R (ug/L)



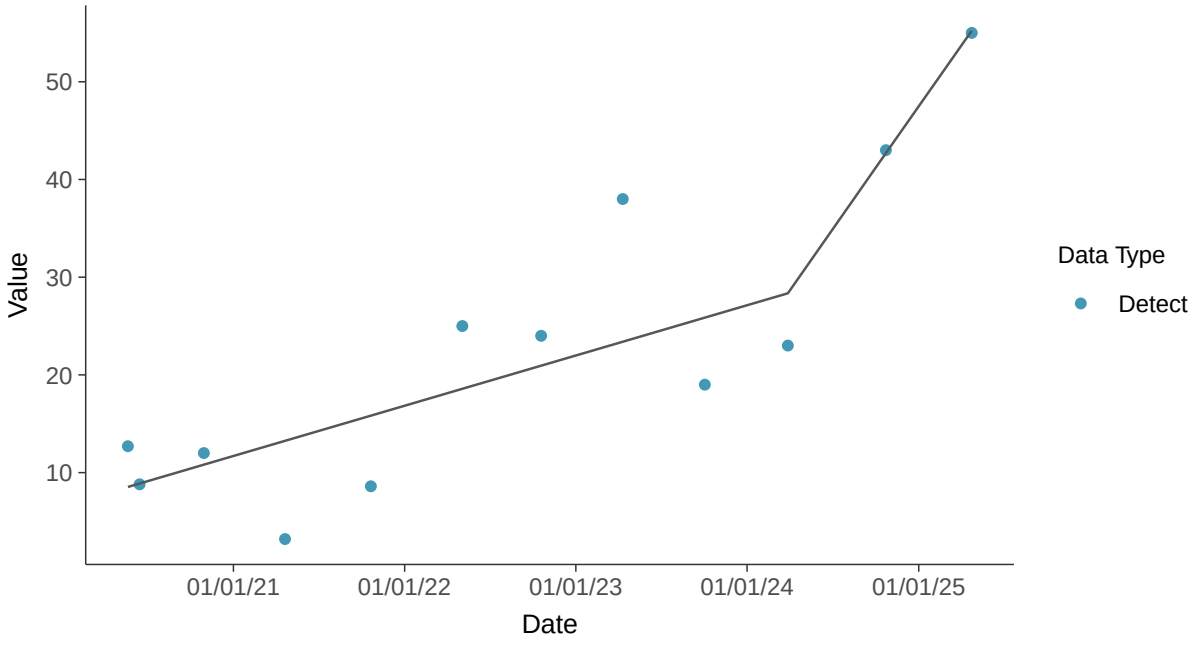

**Trend Regression: Lognormal MLE**

Arsenic, MW-15015R (ug/L)



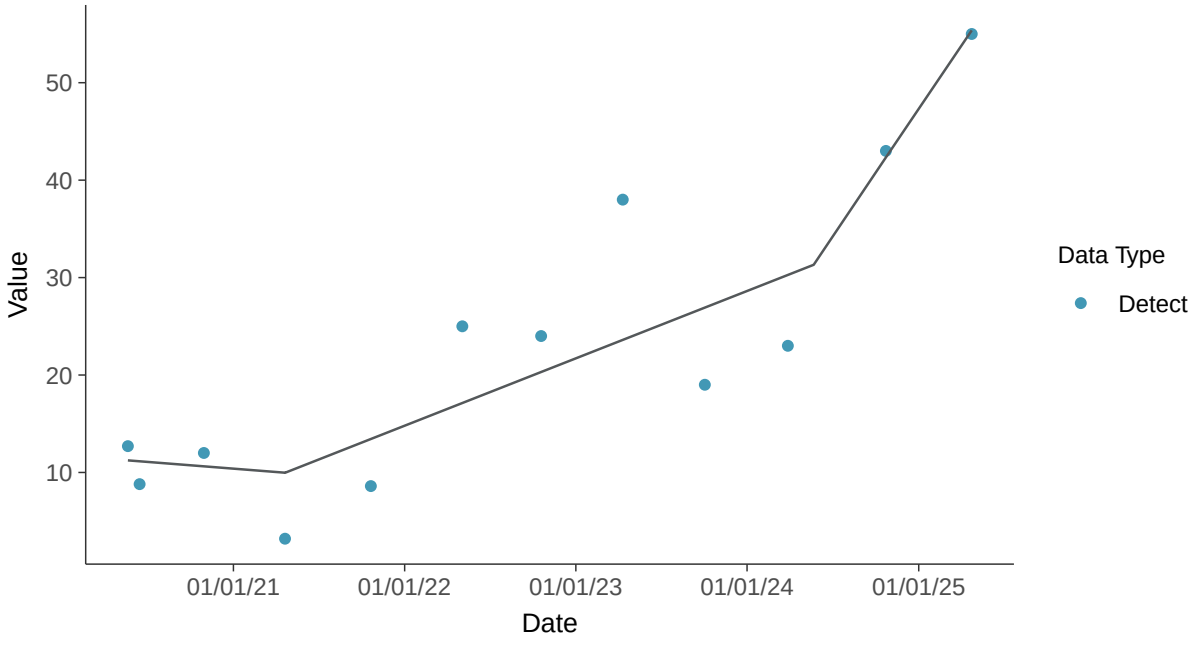
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15015R (ug/L)



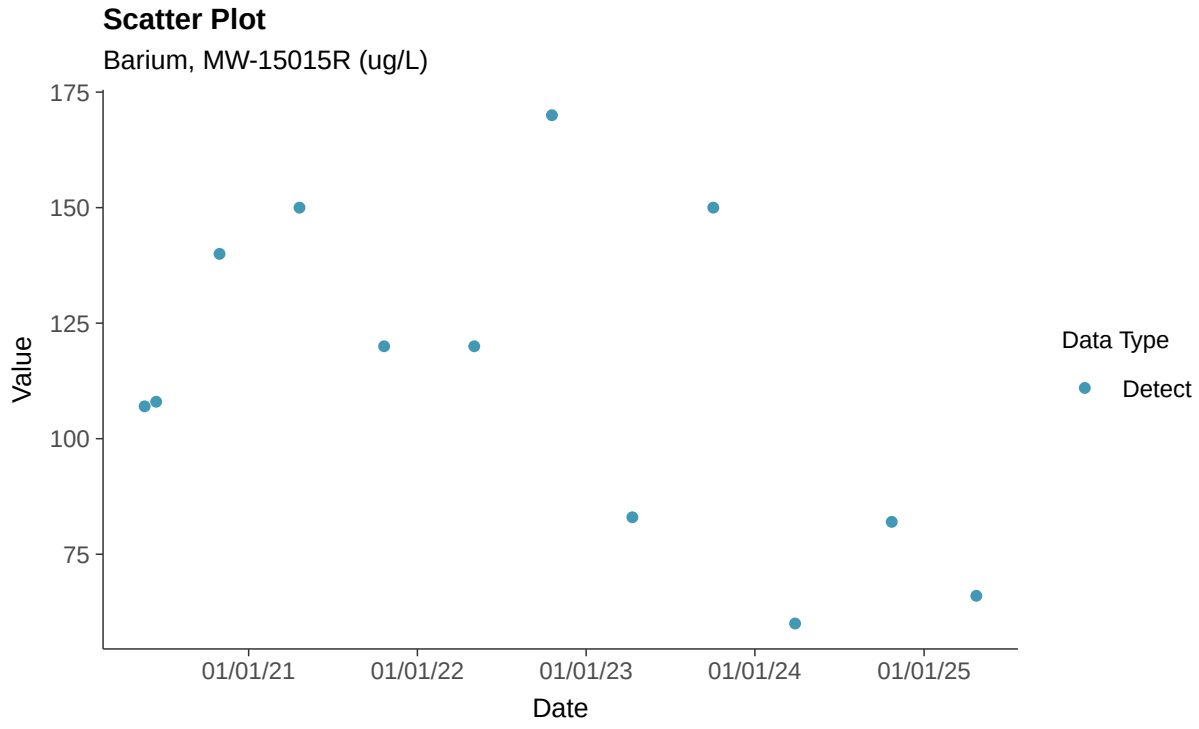

**Trend Regression: Piecewise Linear-Linear-Linear**

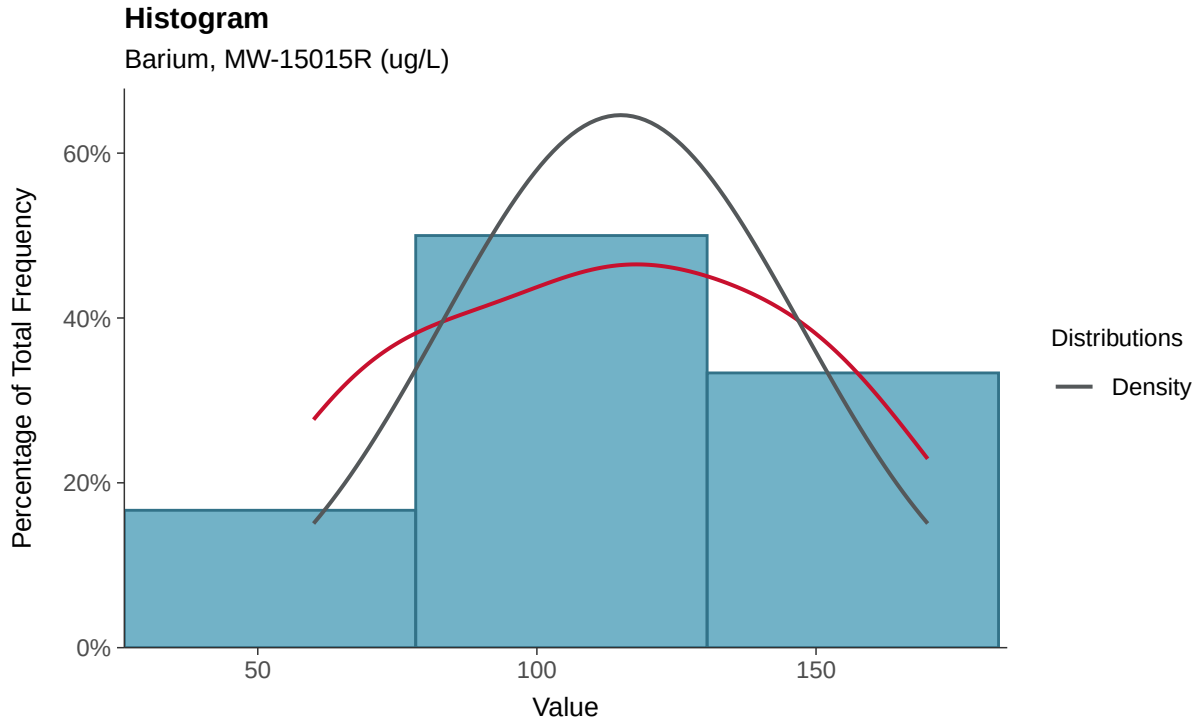
Arsenic, MW-15015R (ug/L)



## Appendix IV: Barium, MW-15015R

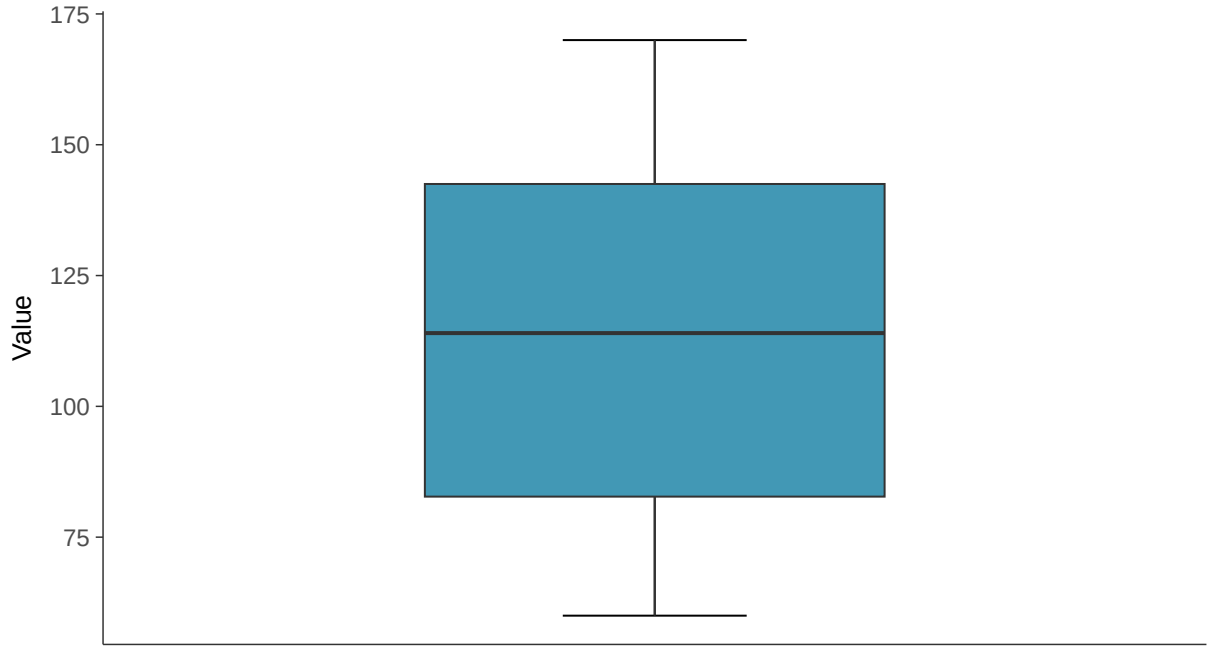
ID: 05_2_103



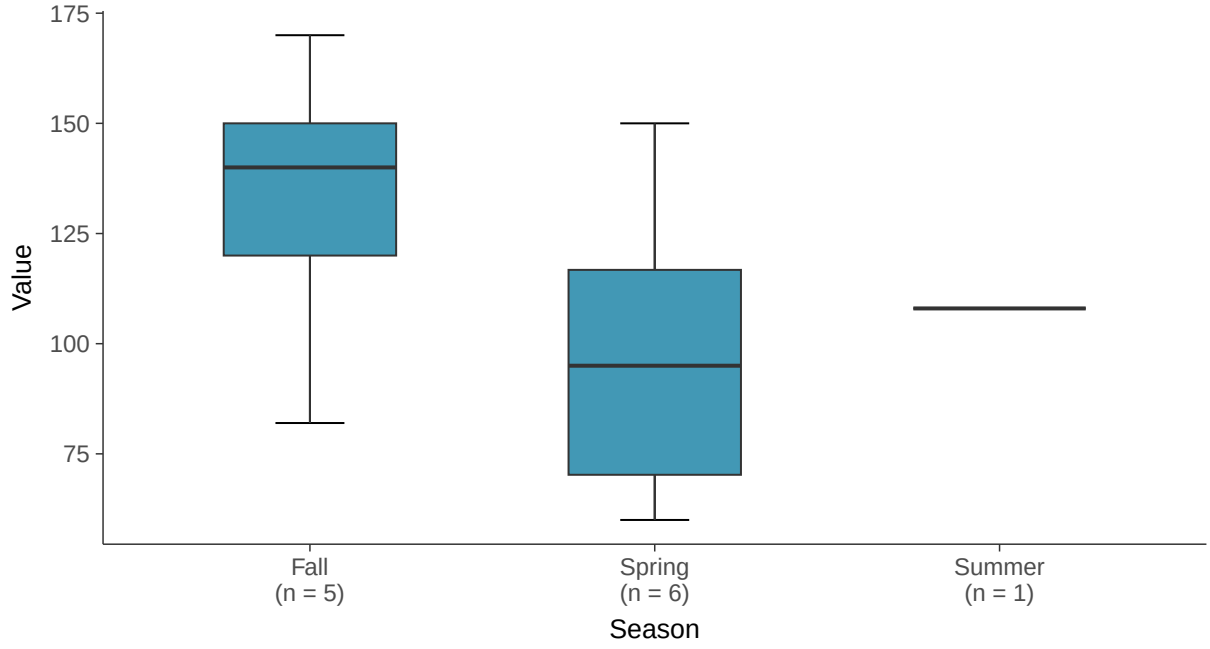
**Boxplot**

Barium, MW-15015R (ug/L)



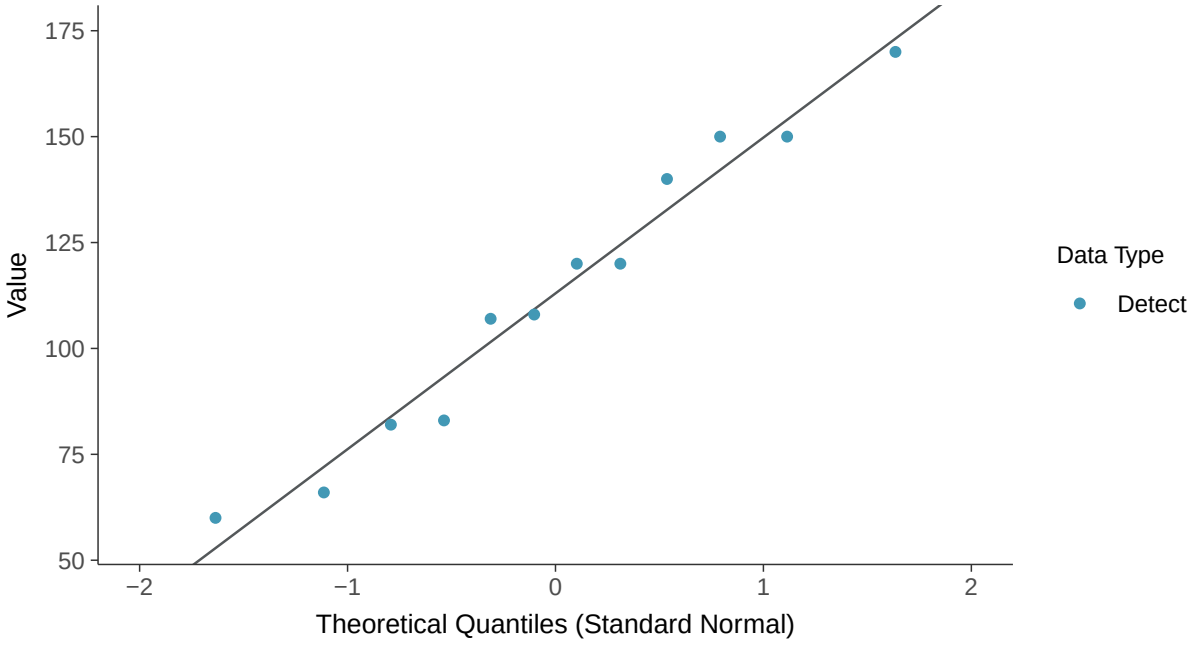

**Boxplot by Season**

Barium, MW-15015R (ug/L)



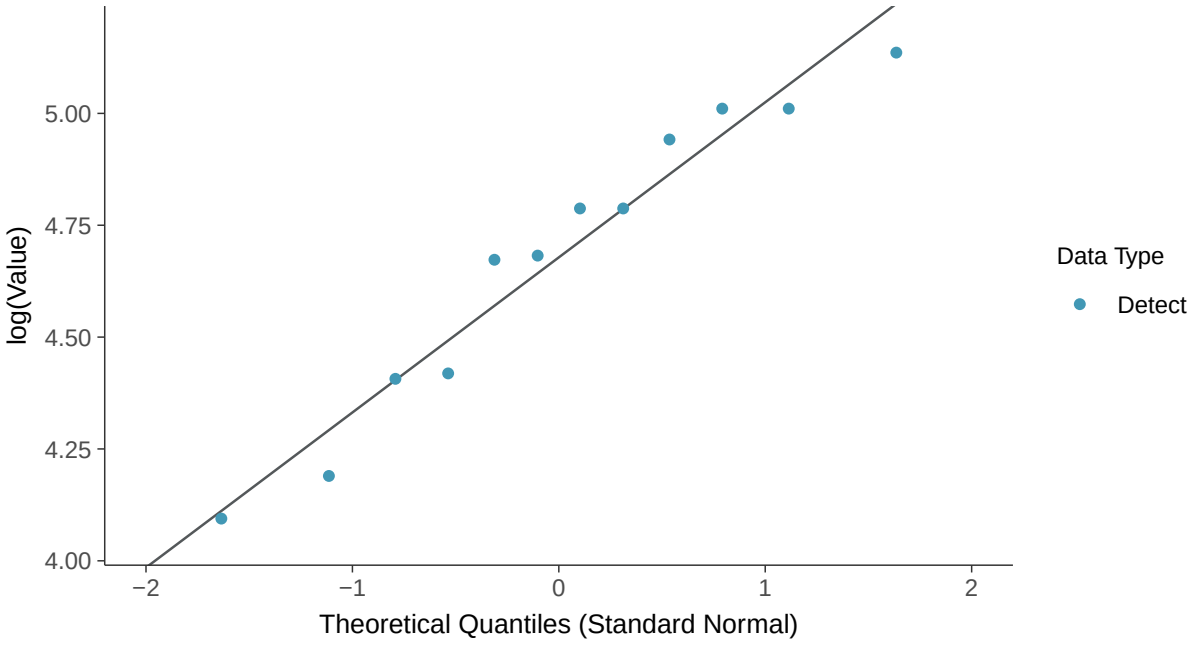
**Normal Q-Q plot**

Barium, MW-15015R (ug/L)



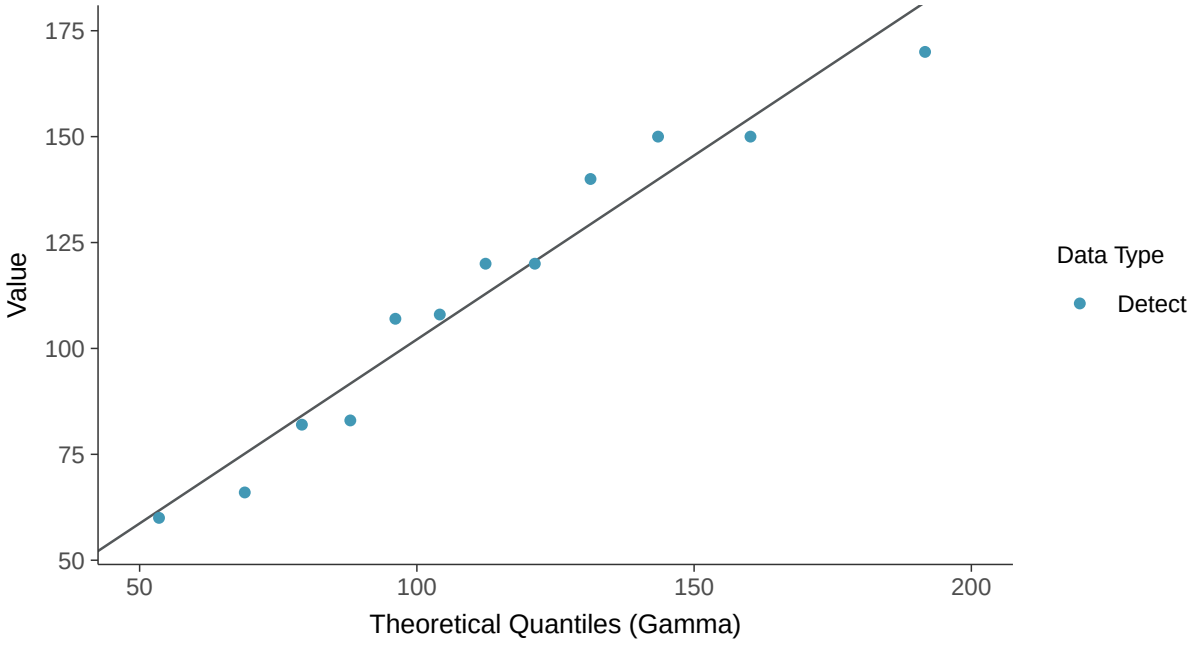

**Lognormal Q-Q plot**

Barium, MW-15015R (ug/L)



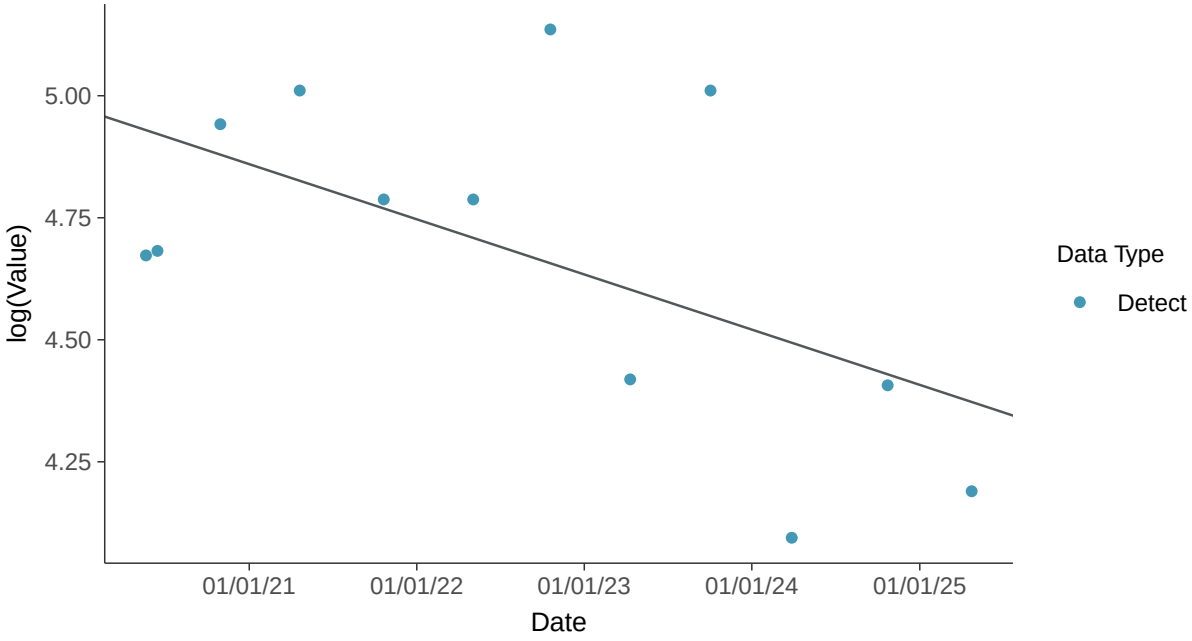
**Gamma Q-Q plot**

Barium, MW-15015R (ug/L)



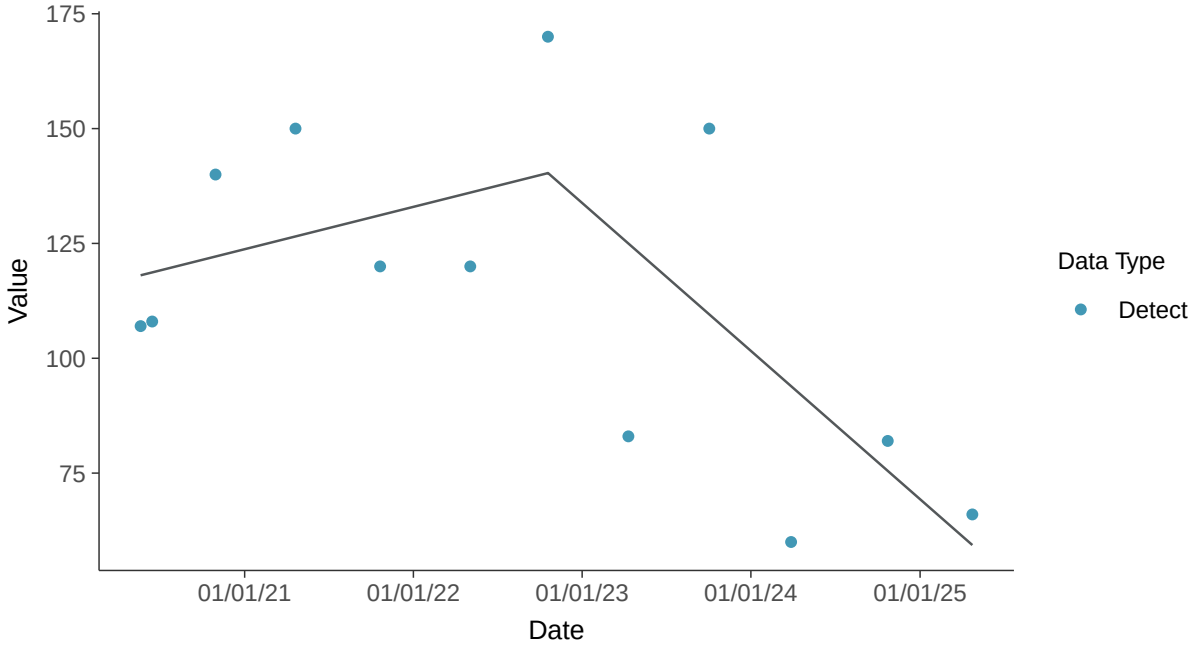

**Trend Regression: Lognormal MLE**

Barium, MW-15015R (ug/L)



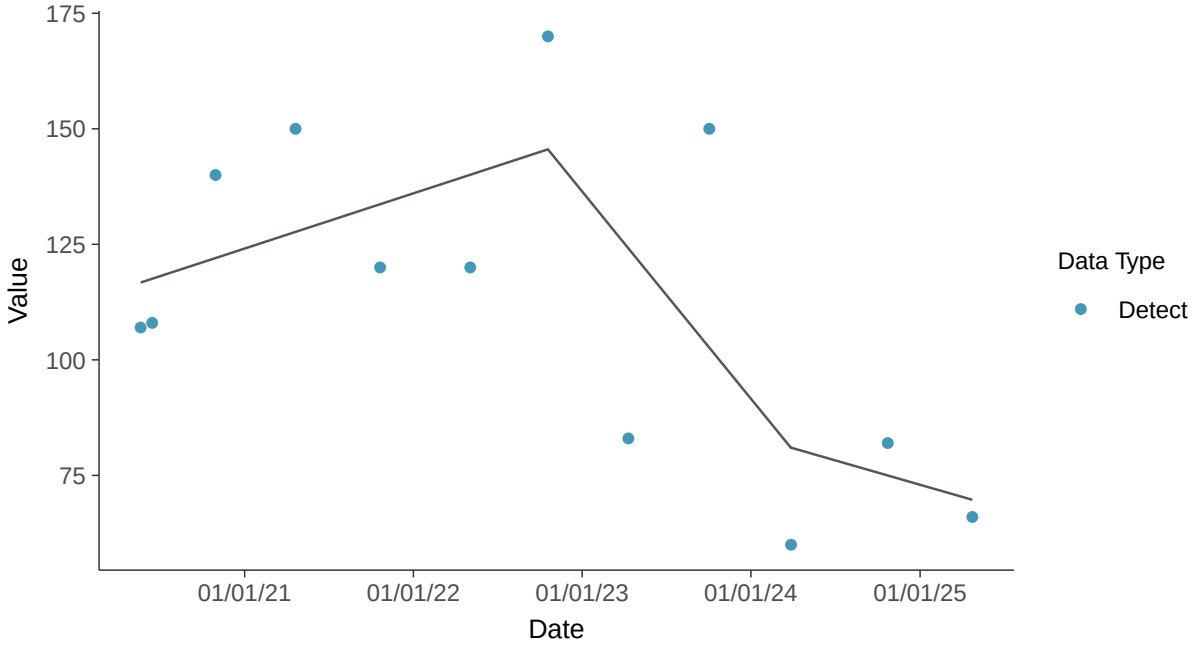
## Trend Regression: Piecewise Linear-Linear

Barium, MW-15015R (ug/L)



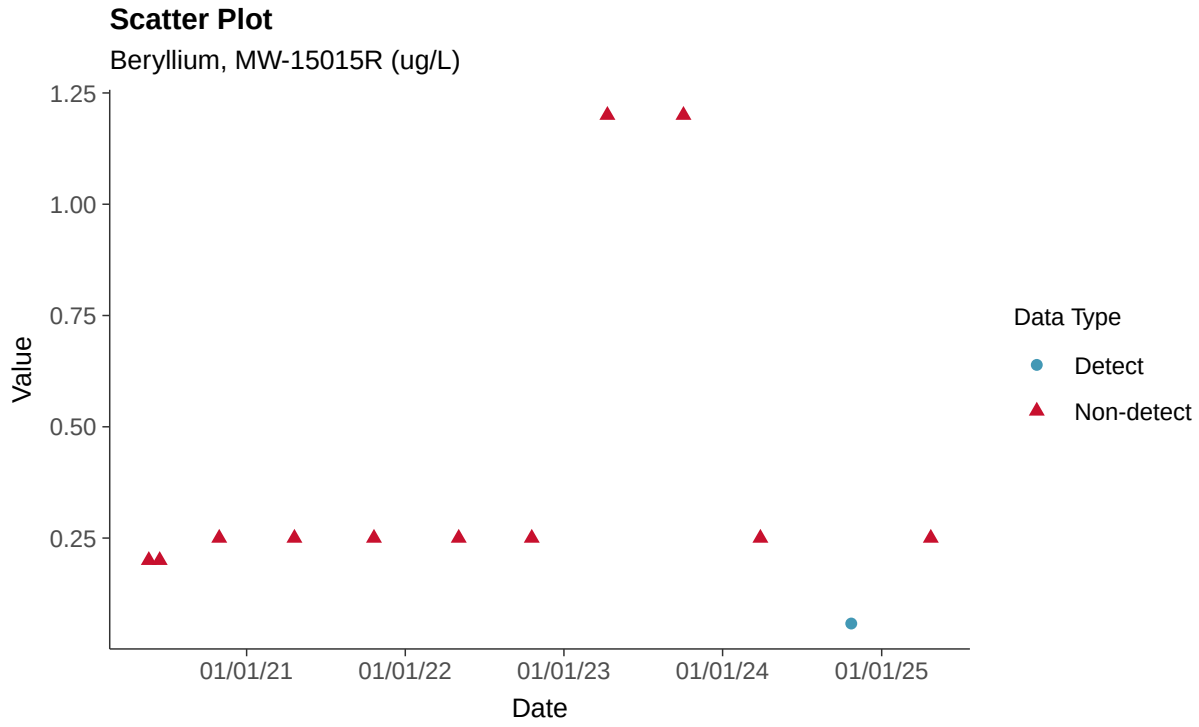

## Trend Regression: Piecewise Linear-Linear-Linear

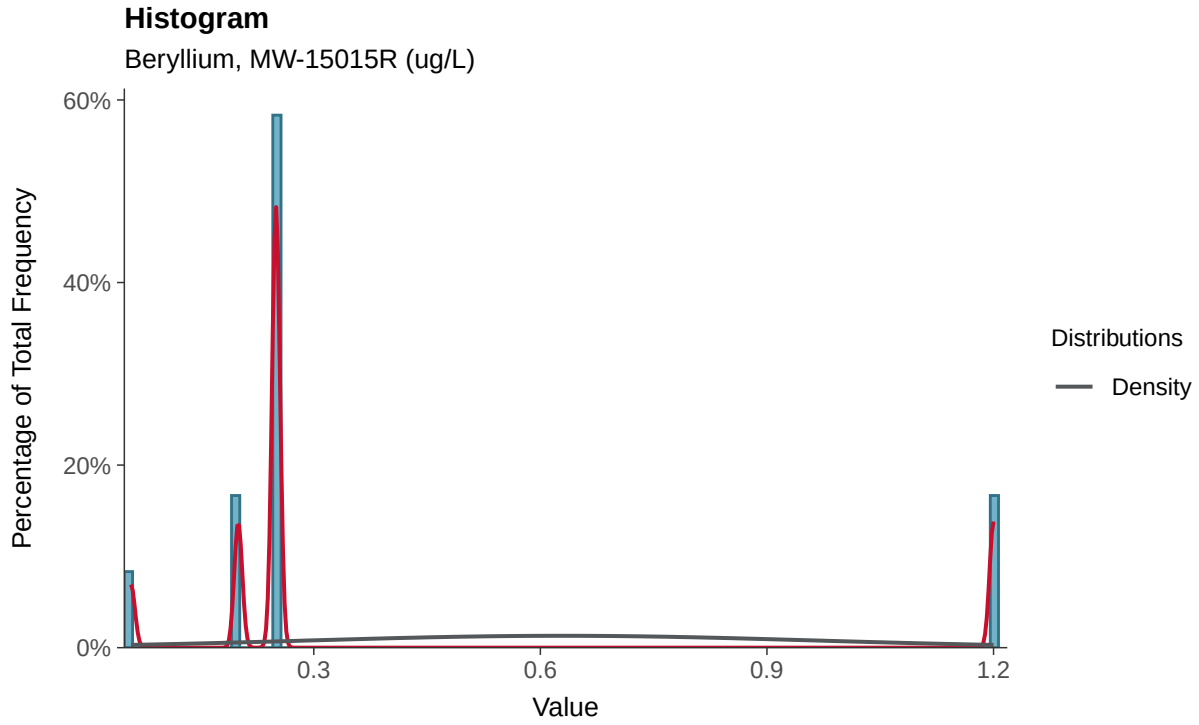
Barium, MW-15015R (ug/L)



## Appendix IV: Beryllium, MW-15015R

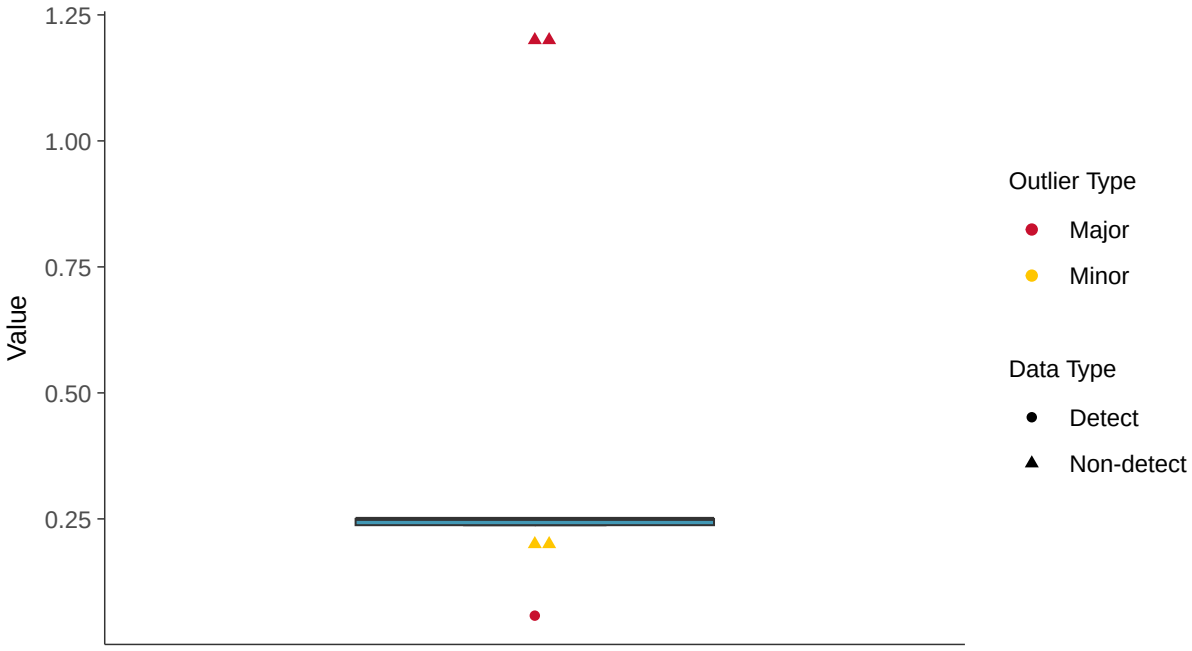
ID: 05_2_104



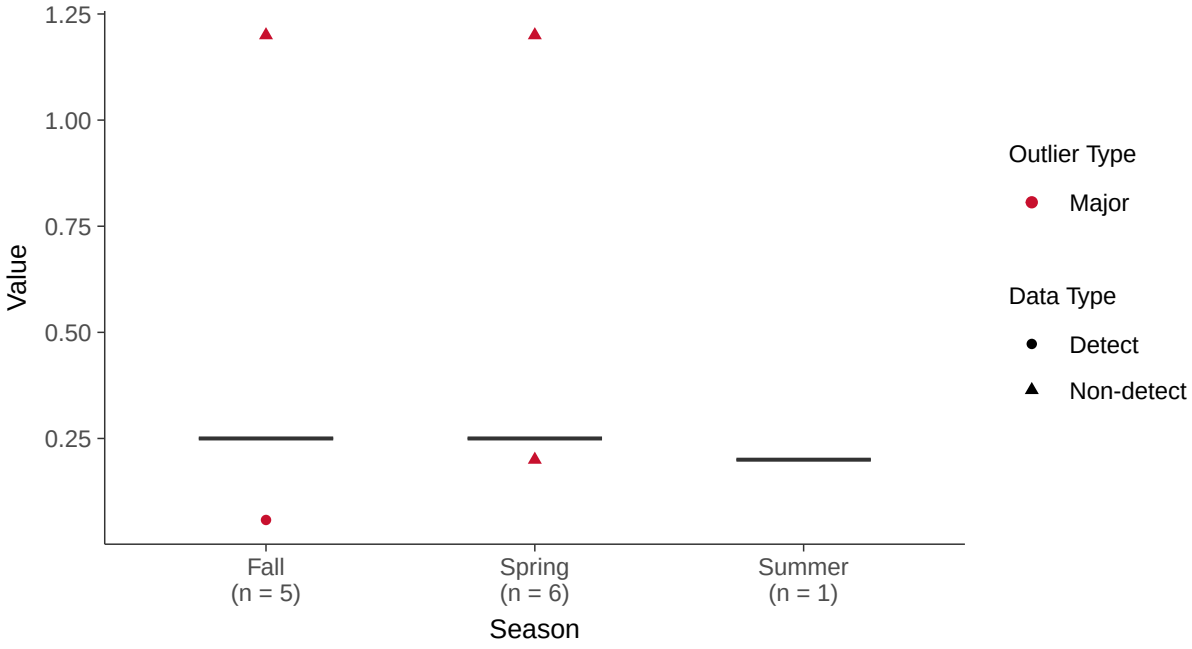
## Boxplot

Beryllium, MW-15015R (ug/L)



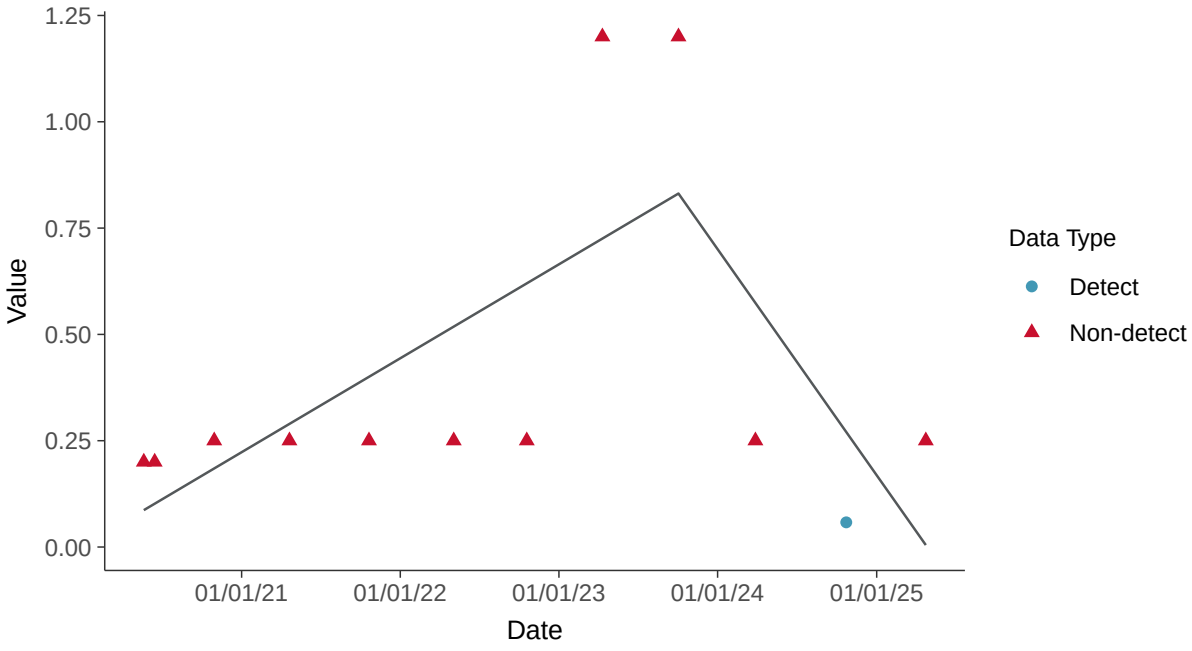

## Boxplot by Season

Beryllium, MW-15015R (ug/L)



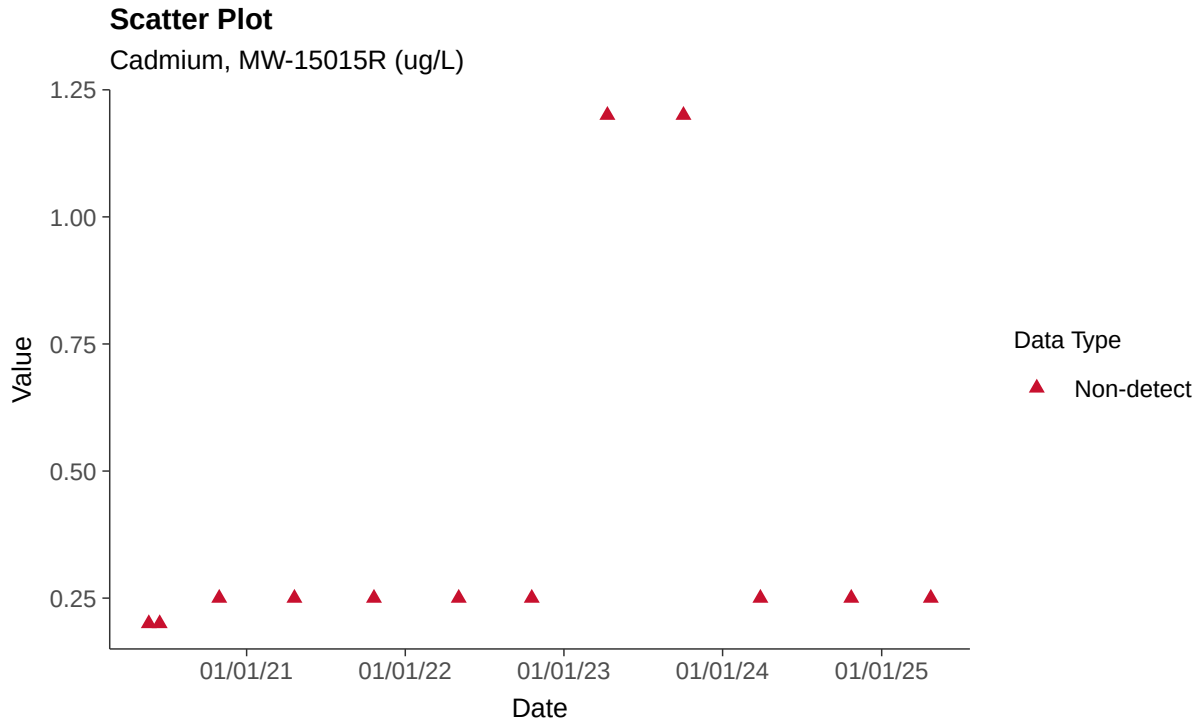
**Trend Regression: Piecewise Linear-Linear**

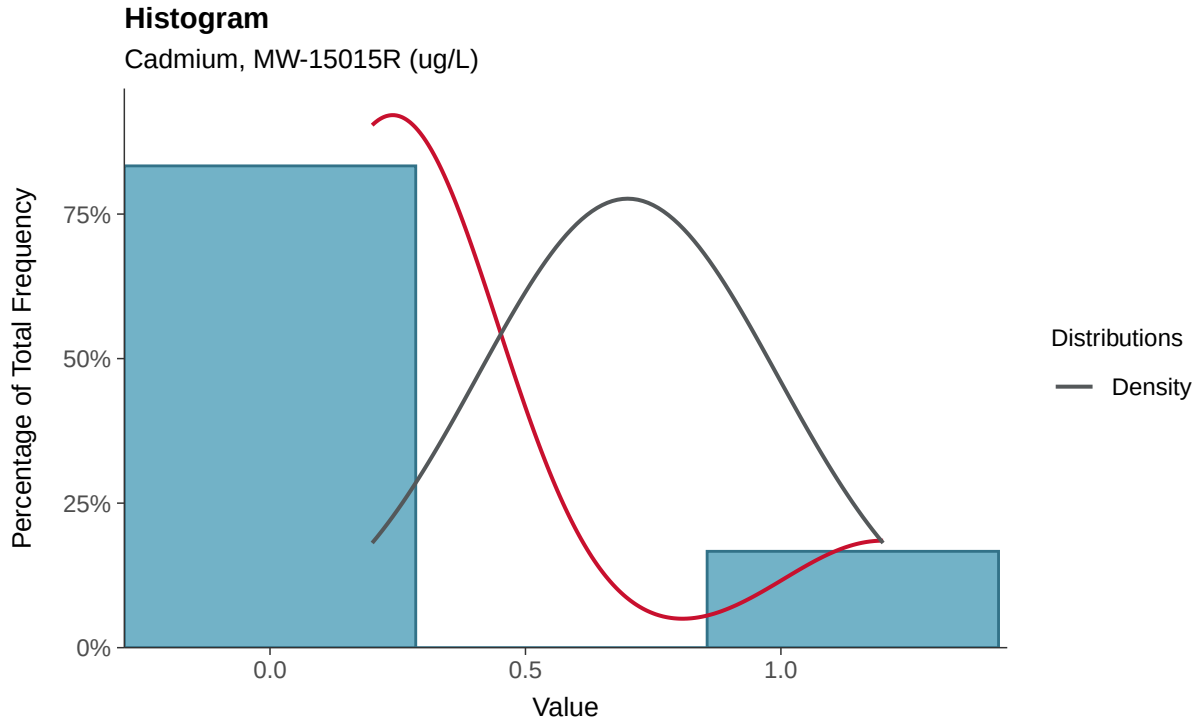
Beryllium, MW-15015R (ug/L)



## Appendix IV: Cadmium, MW-15015R

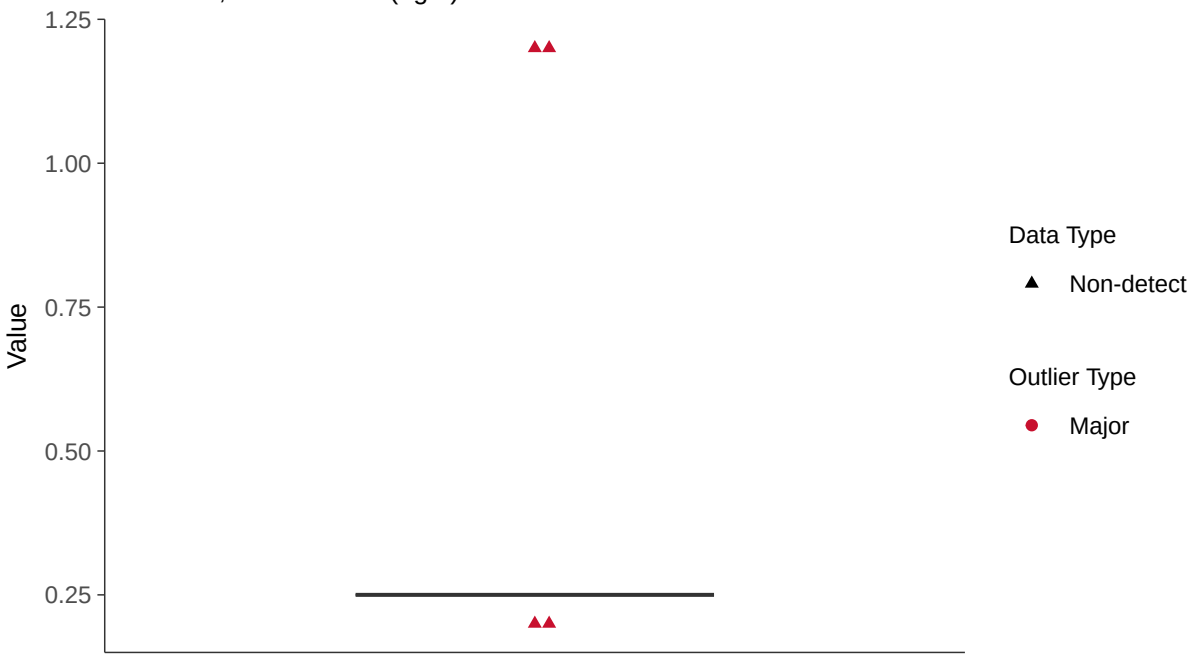
ID: 05_2_106



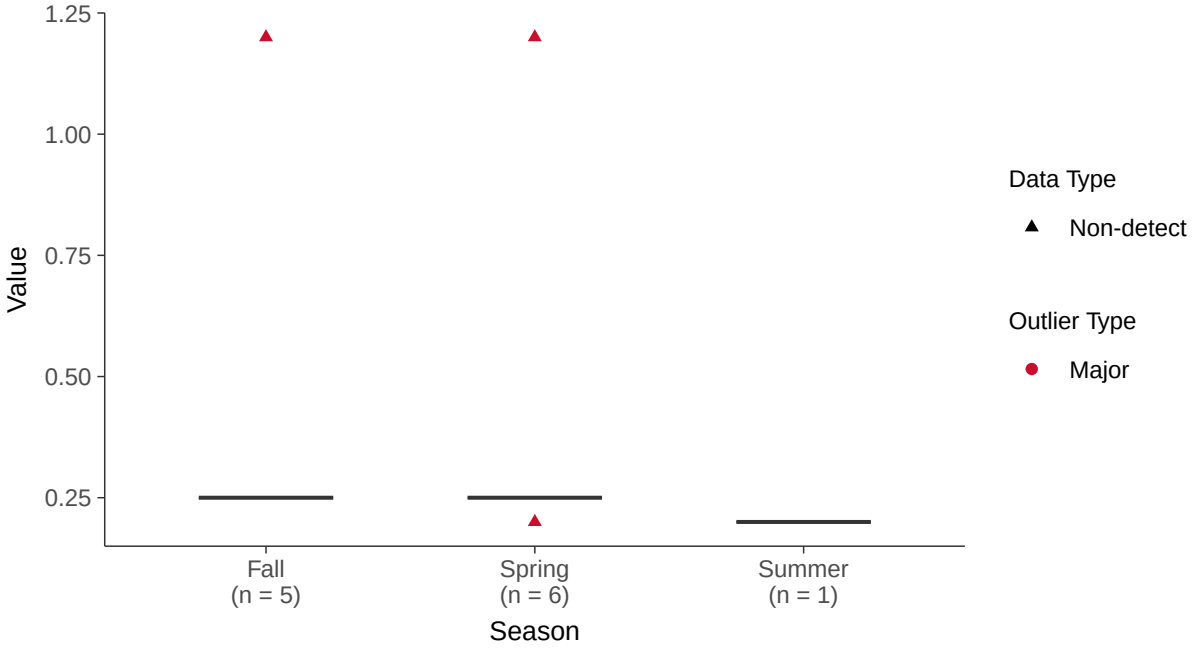
## Boxplot

Cadmium, MW-15015R (ug/L)



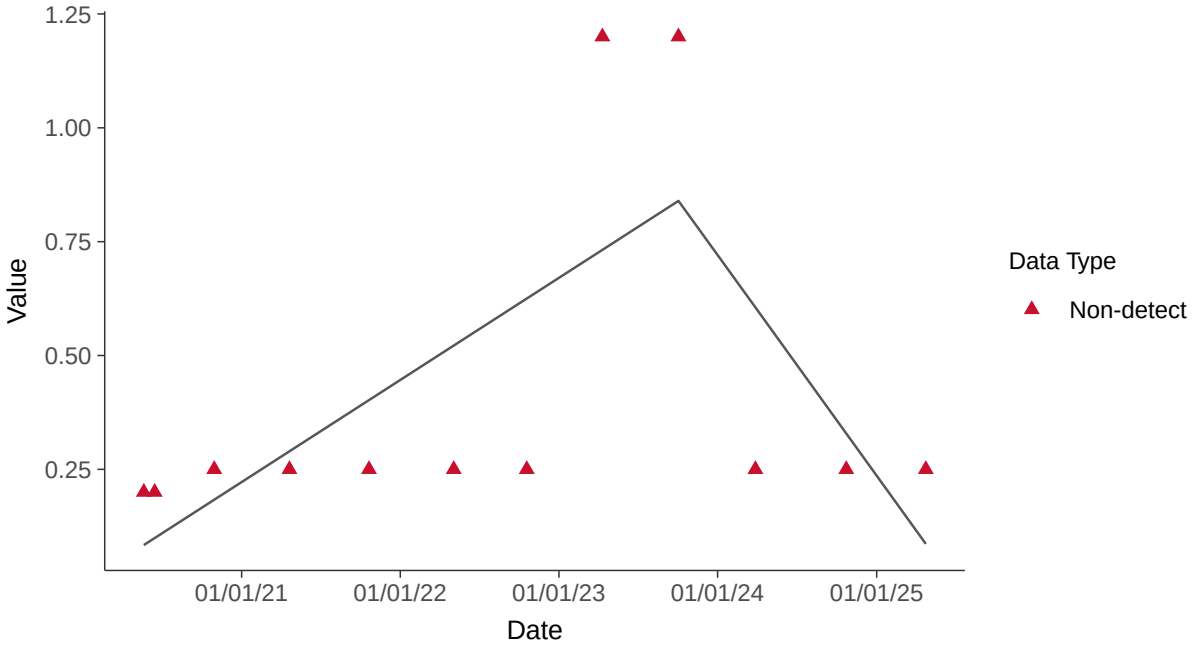

## Boxplot by Season

Cadmium, MW-15015R (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15015R (ug/L)

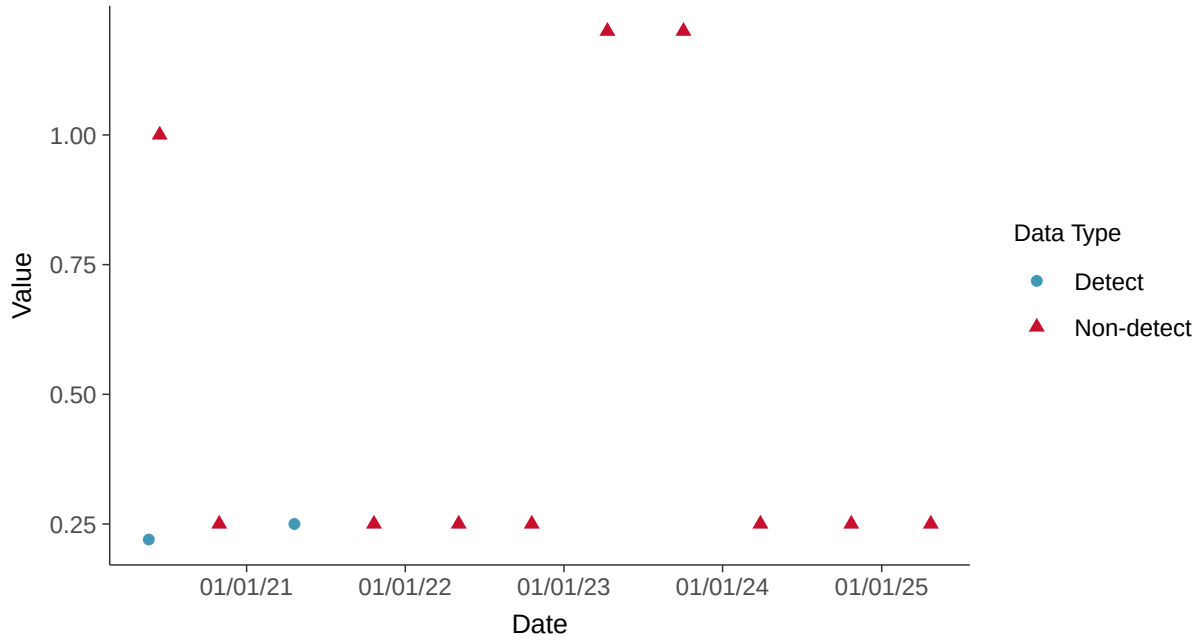


## Appendix IV: Chromium, MW-15015R

ID: 05_2_109

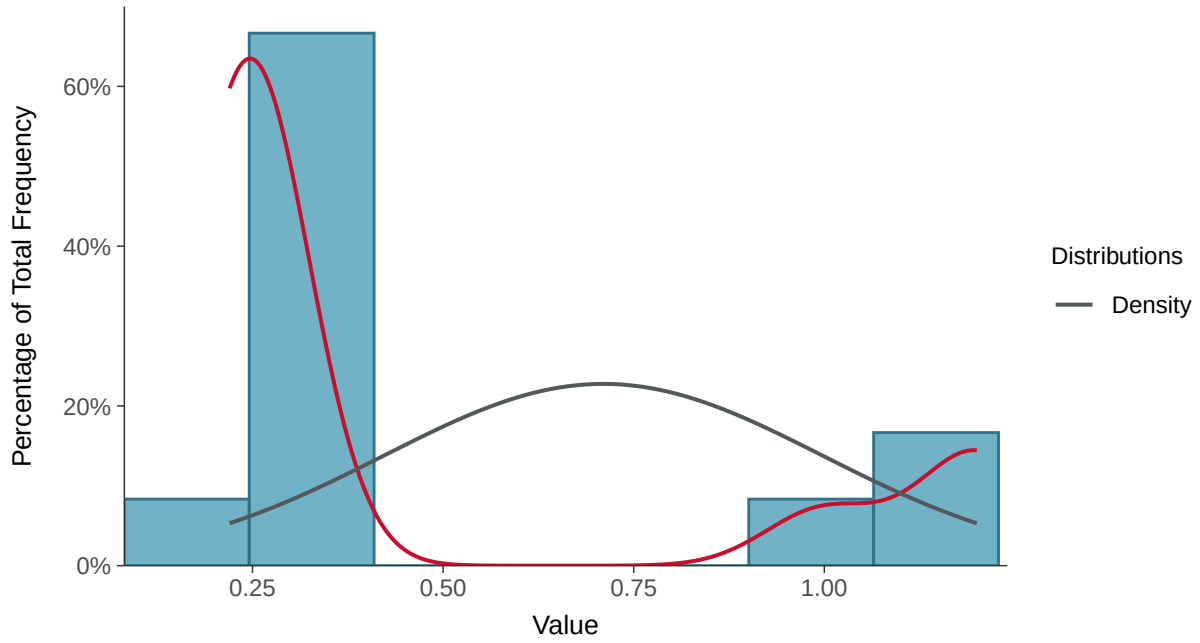
**Scatter Plot**

Chromium, MW-15015R (ug/L)



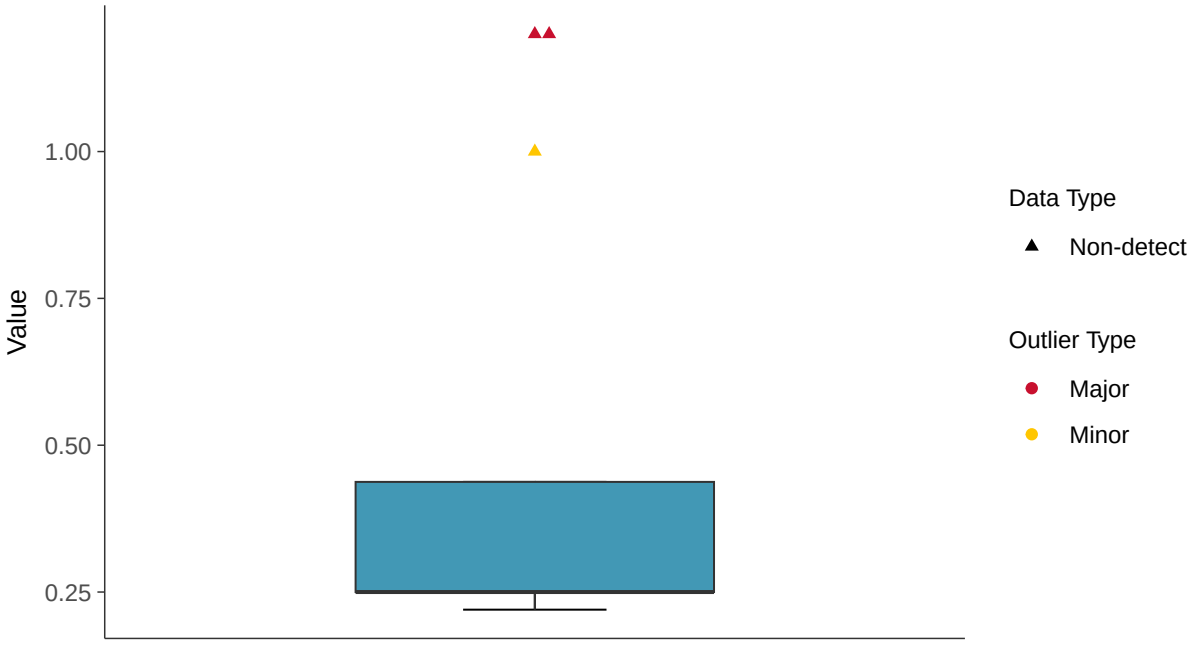

**Histogram**

Chromium, MW-15015R (ug/L)



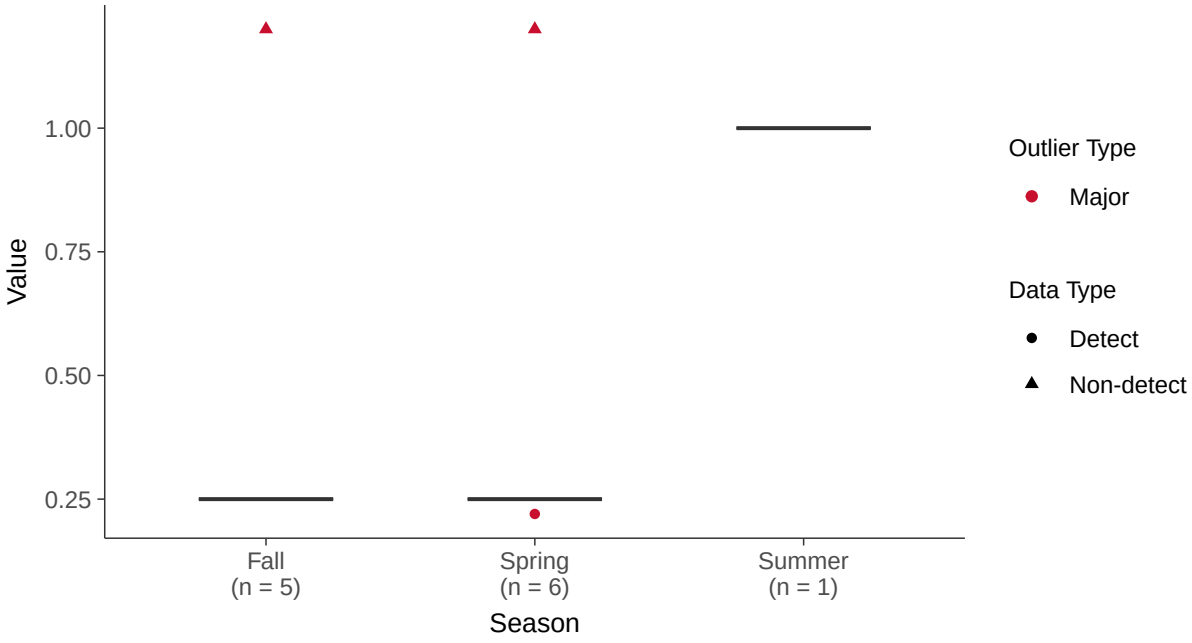
## Boxplot

Chromium, MW-15015R (ug/L)



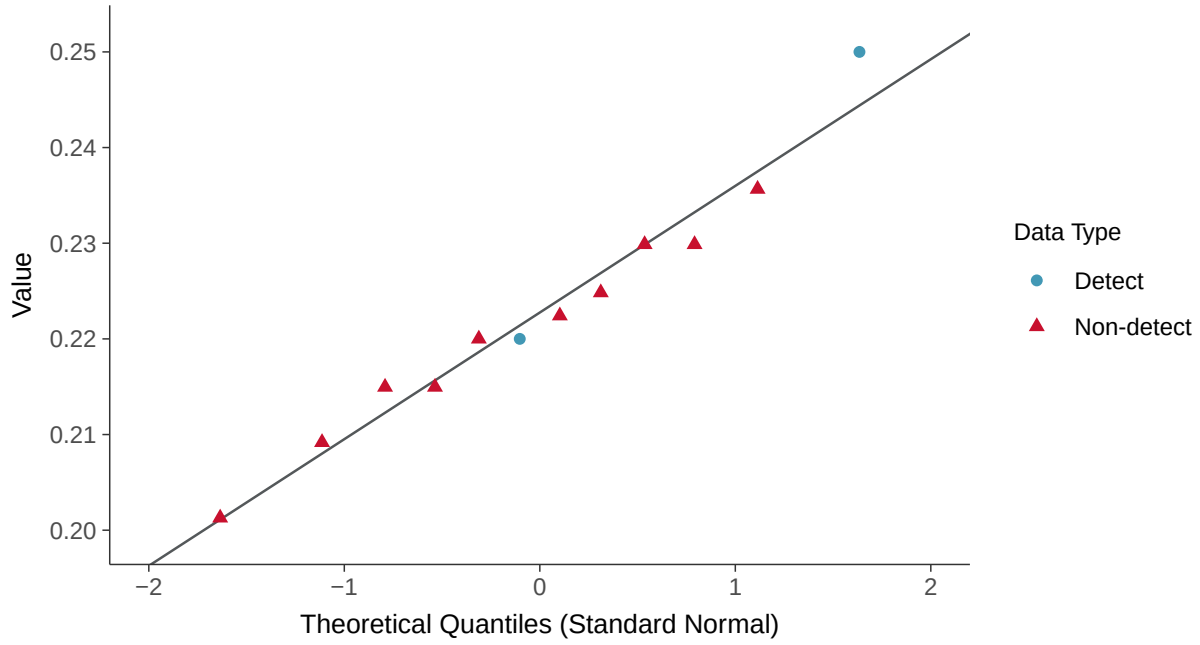

## Boxplot by Season

Chromium, MW-15015R (ug/L)



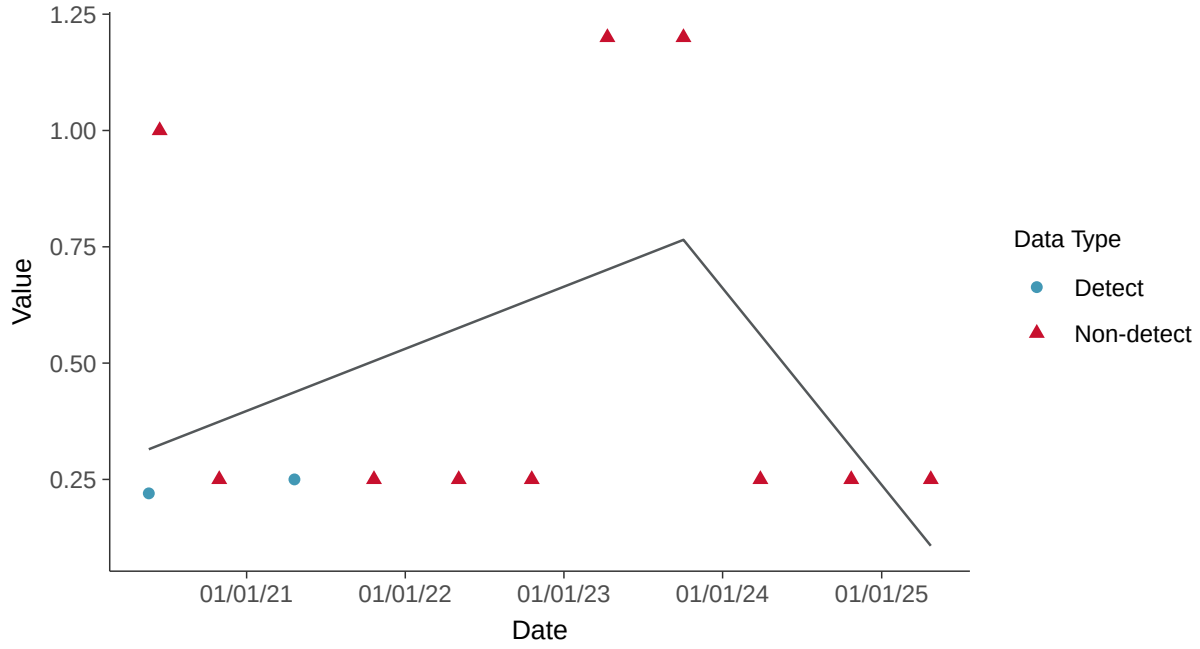
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15015R (ug/L)



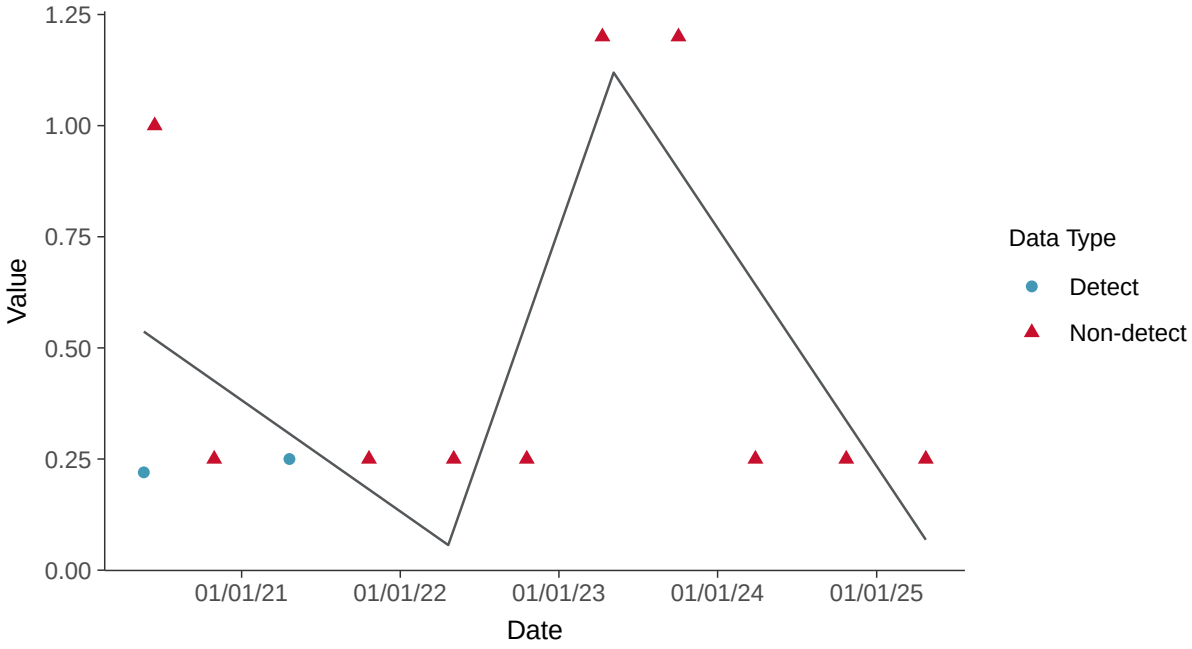

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15015R (ug/L)



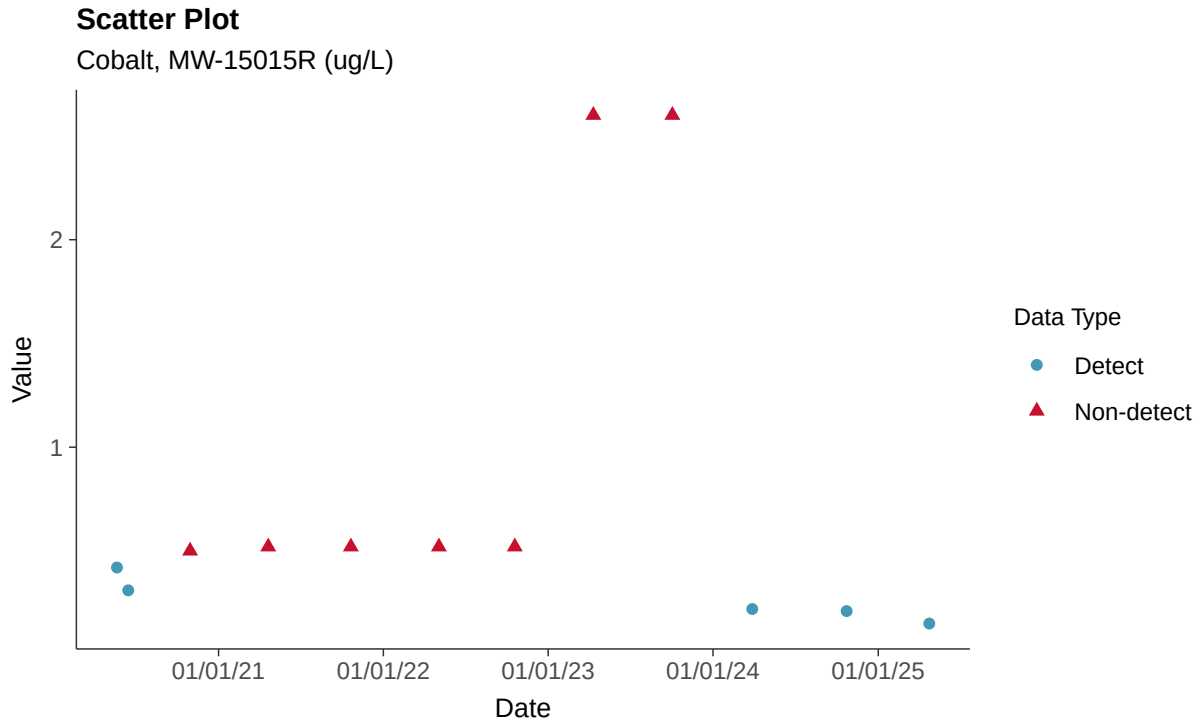
**Trend Regression: Piecewise Linear-Linear-Linear**

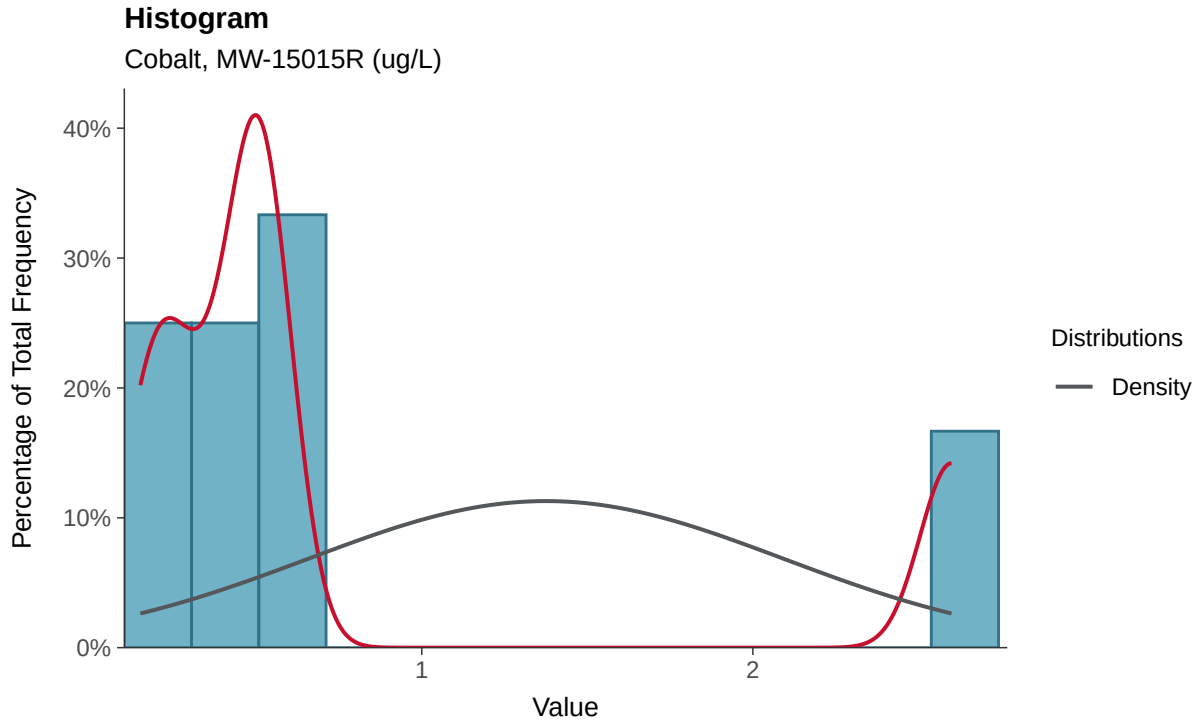
Chromium, MW-15015R (ug/L)



## Appendix IV: Cobalt, MW-15015R

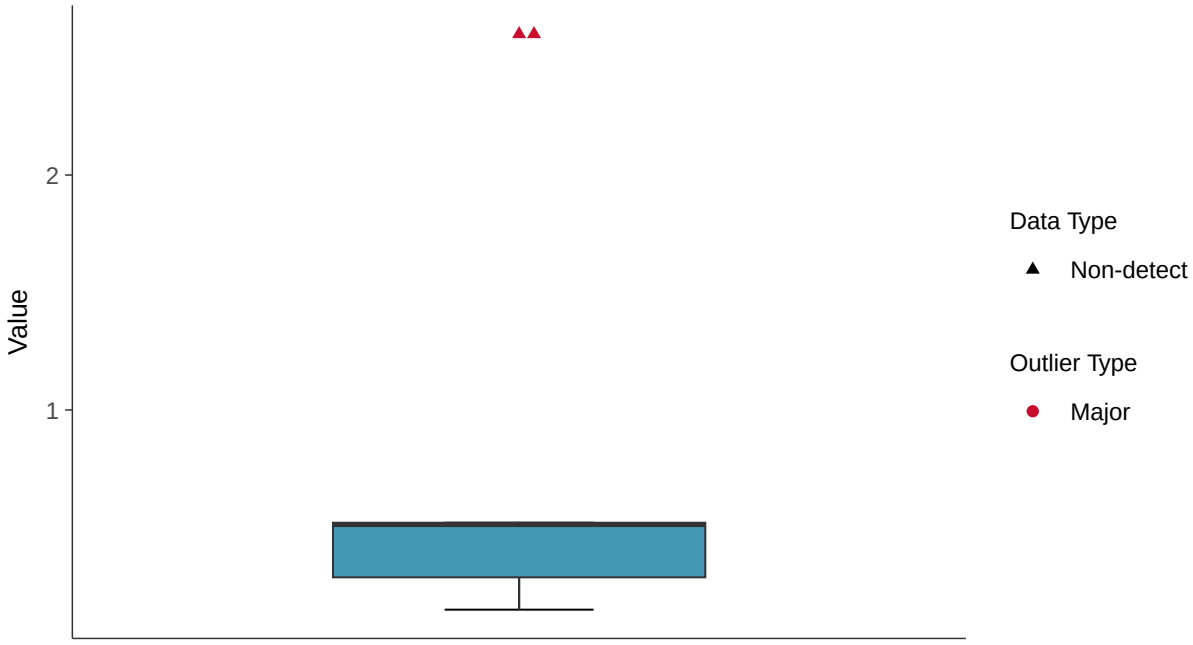
ID: 05_2_110



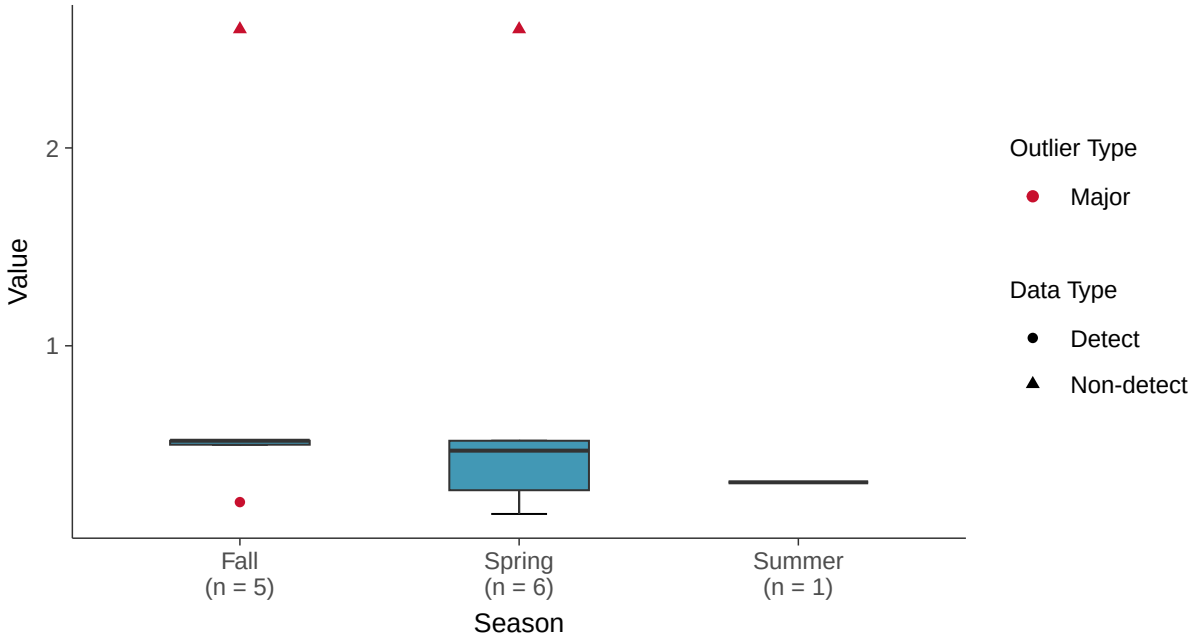
## Boxplot

Cobalt, MW-15015R (ug/L)



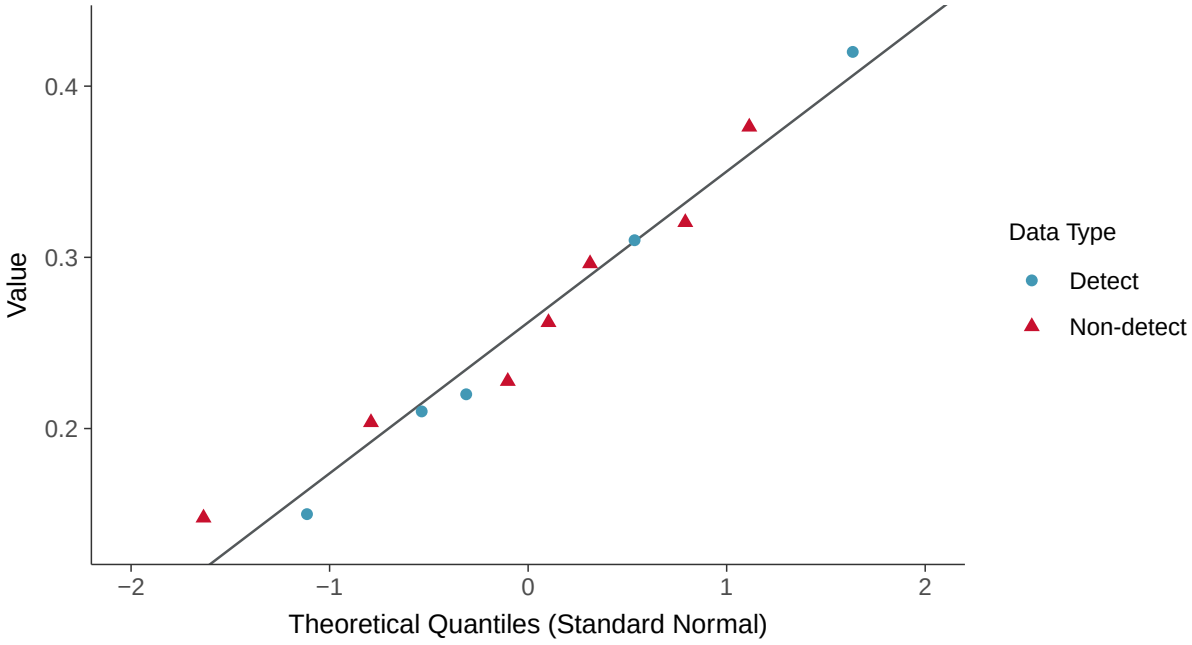

## Boxplot by Season

Cobalt, MW-15015R (ug/L)



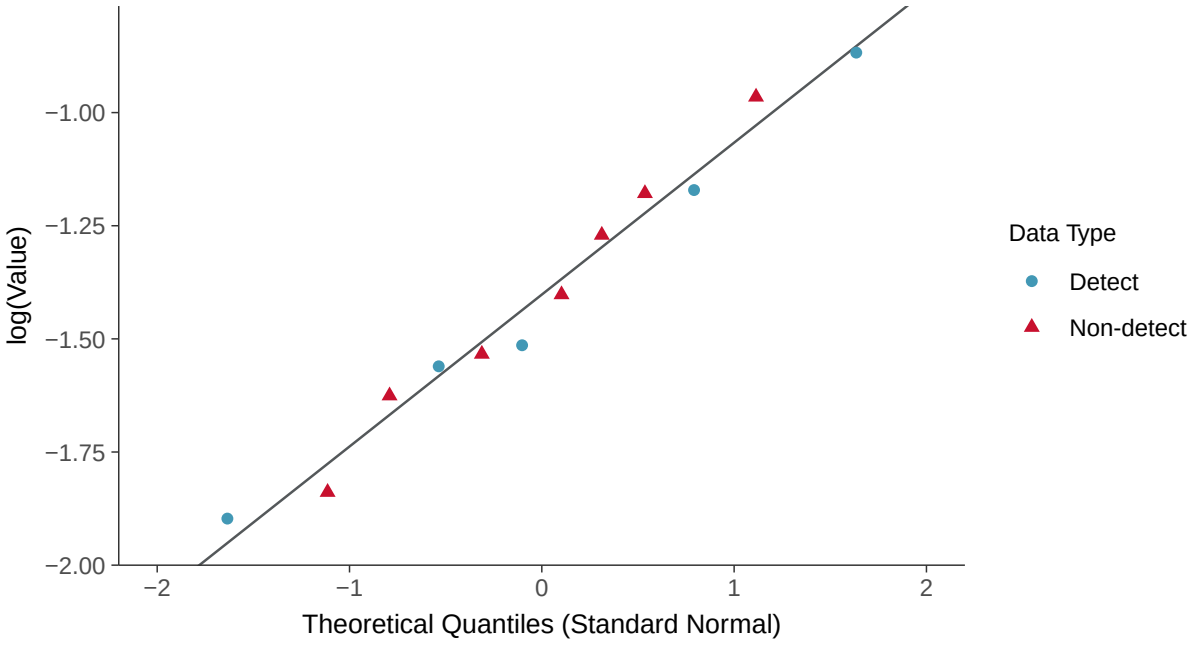
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15015R (ug/L)



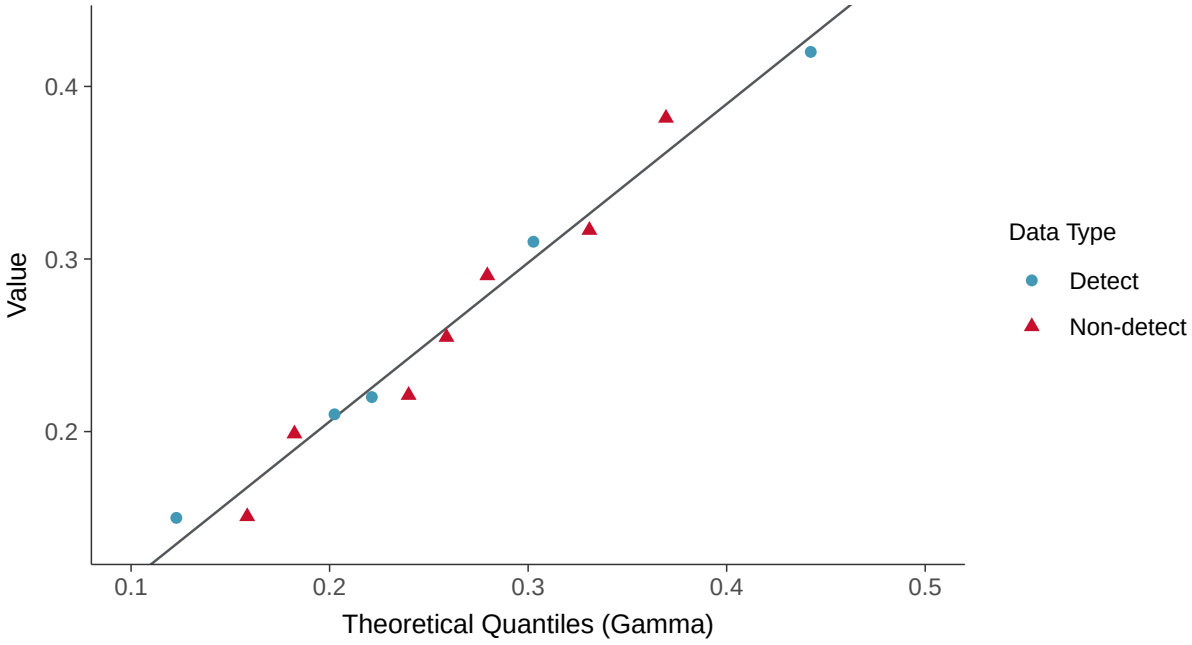

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15015R (ug/L)



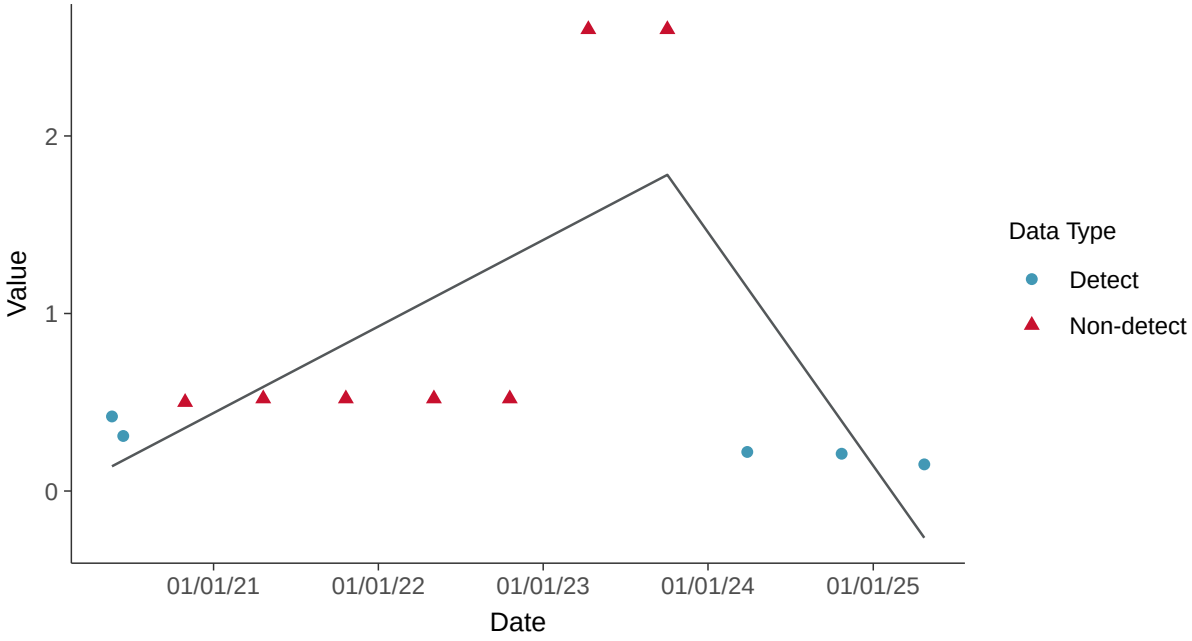
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15015R (ug/L)



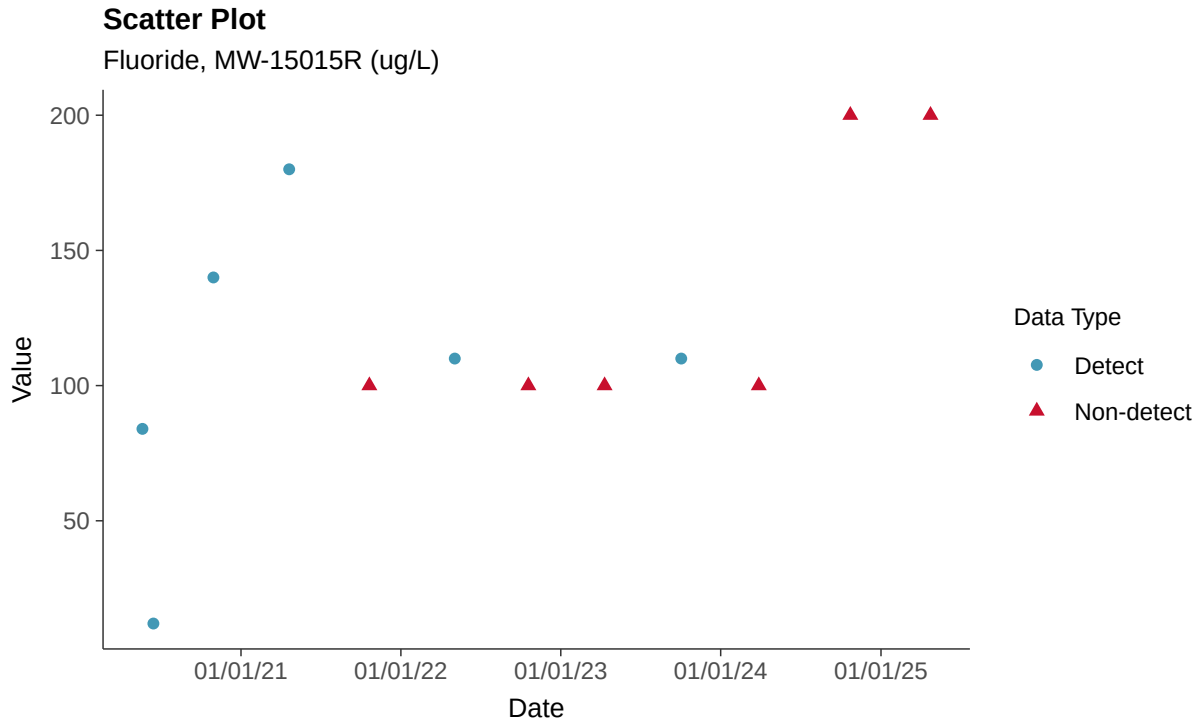

**Trend Regression: Piecewise Linear-Linear**

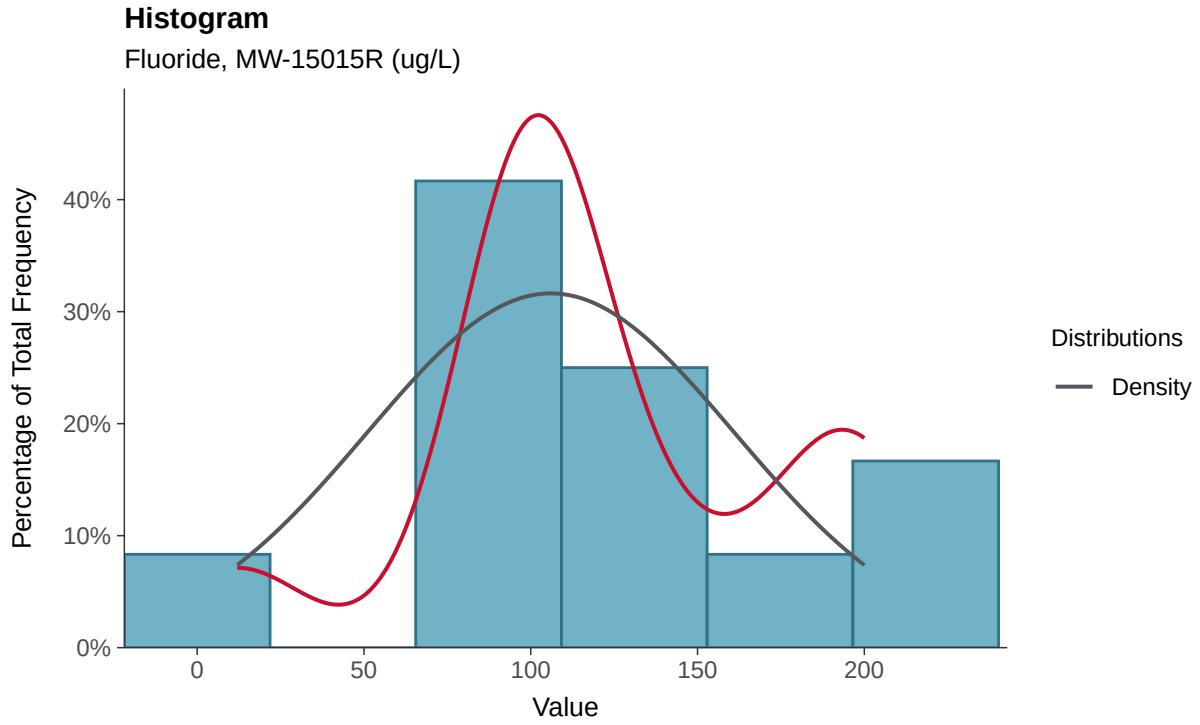
Cobalt, MW-15015R (ug/L)



## Appendix IV: Fluoride, MW-15015R

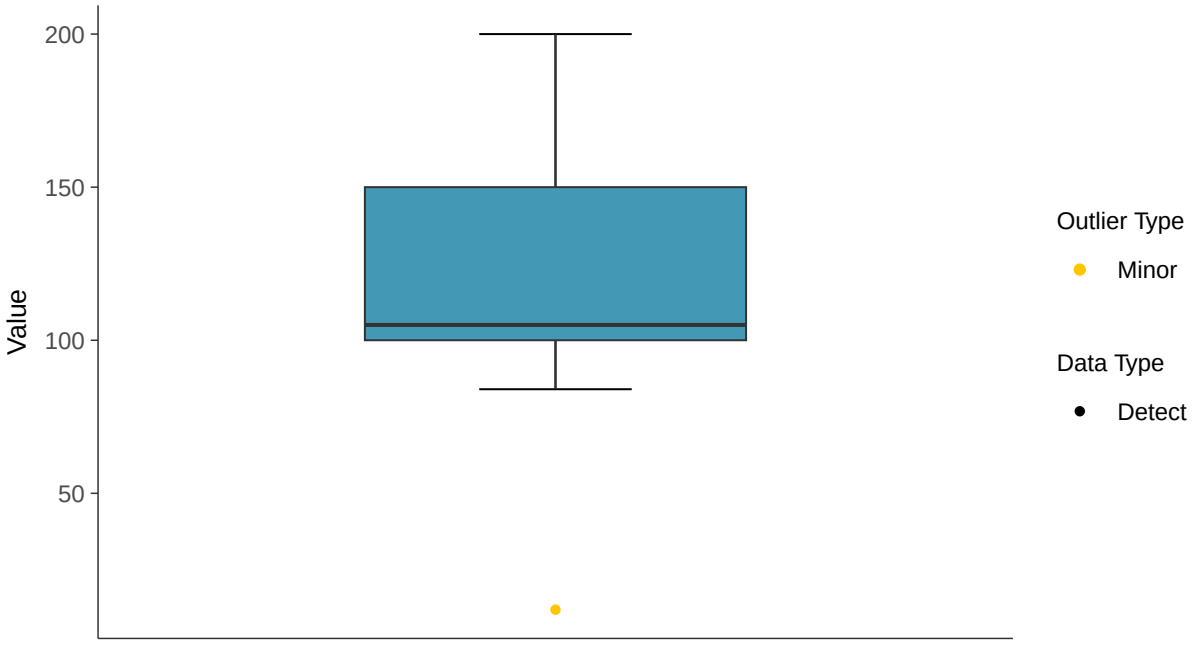
ID: 05_2_114



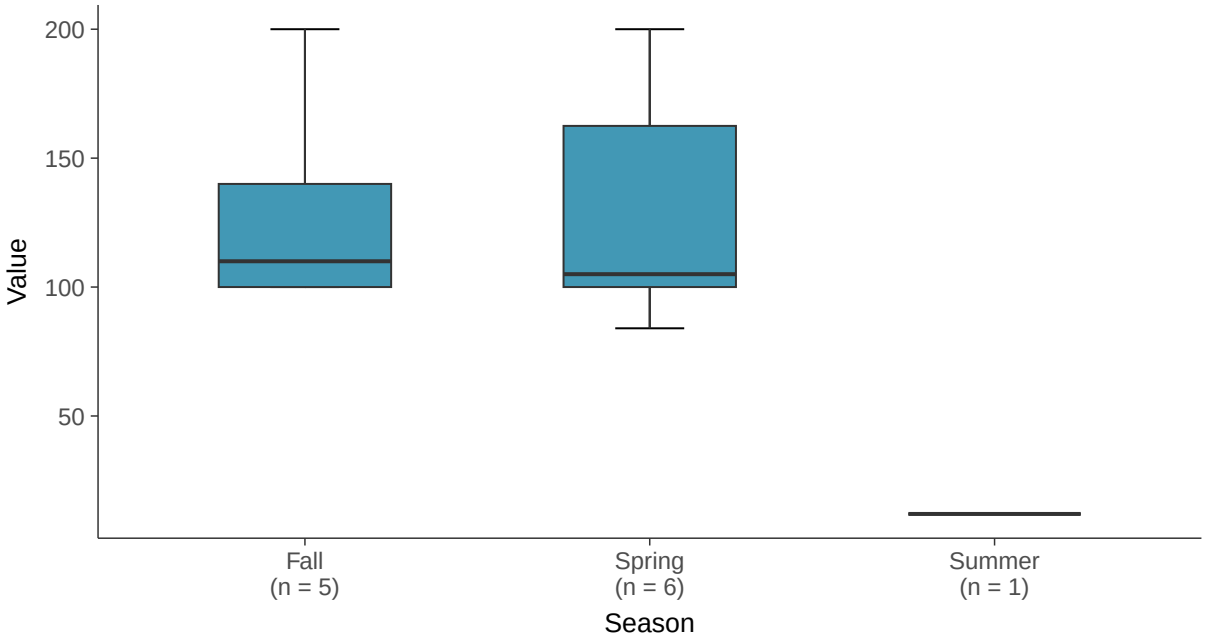
## Boxplot

Fluoride, MW-15015R (ug/L)



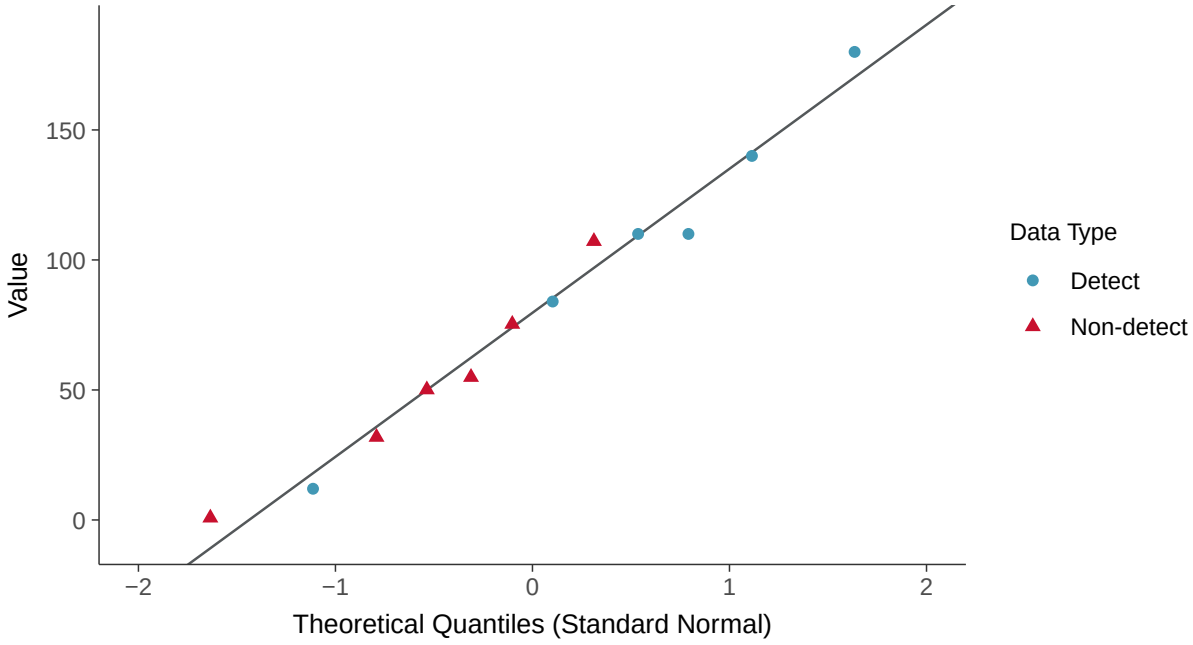

## Boxplot by Season

Fluoride, MW-15015R (ug/L)



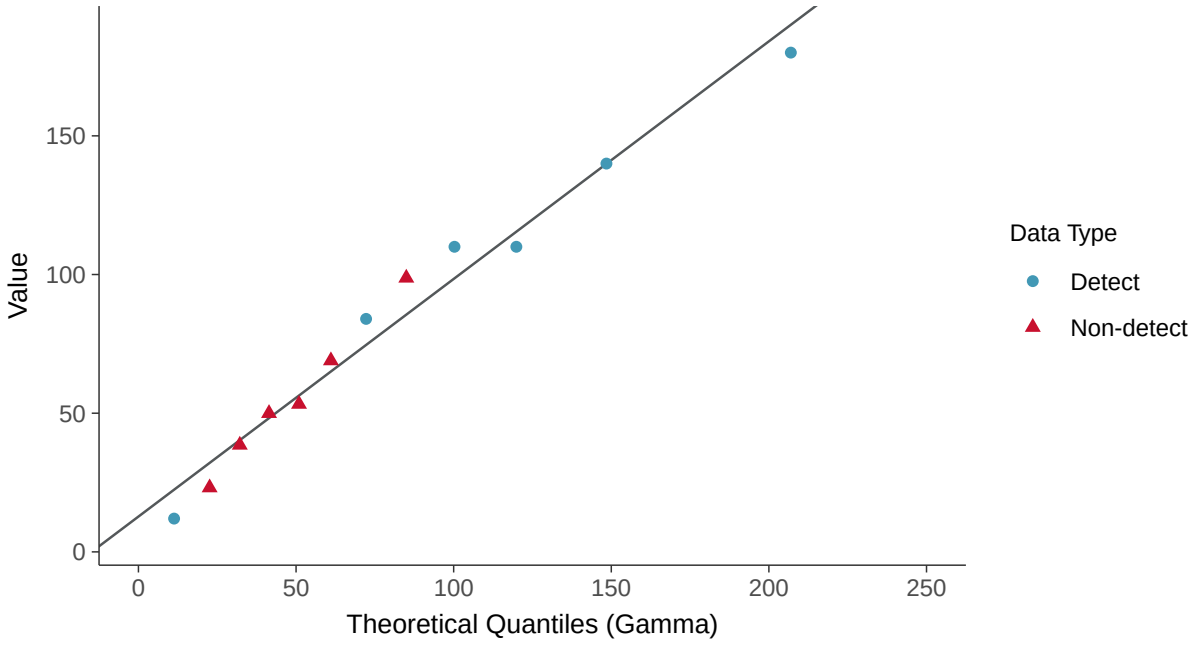
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15015R (ug/L)



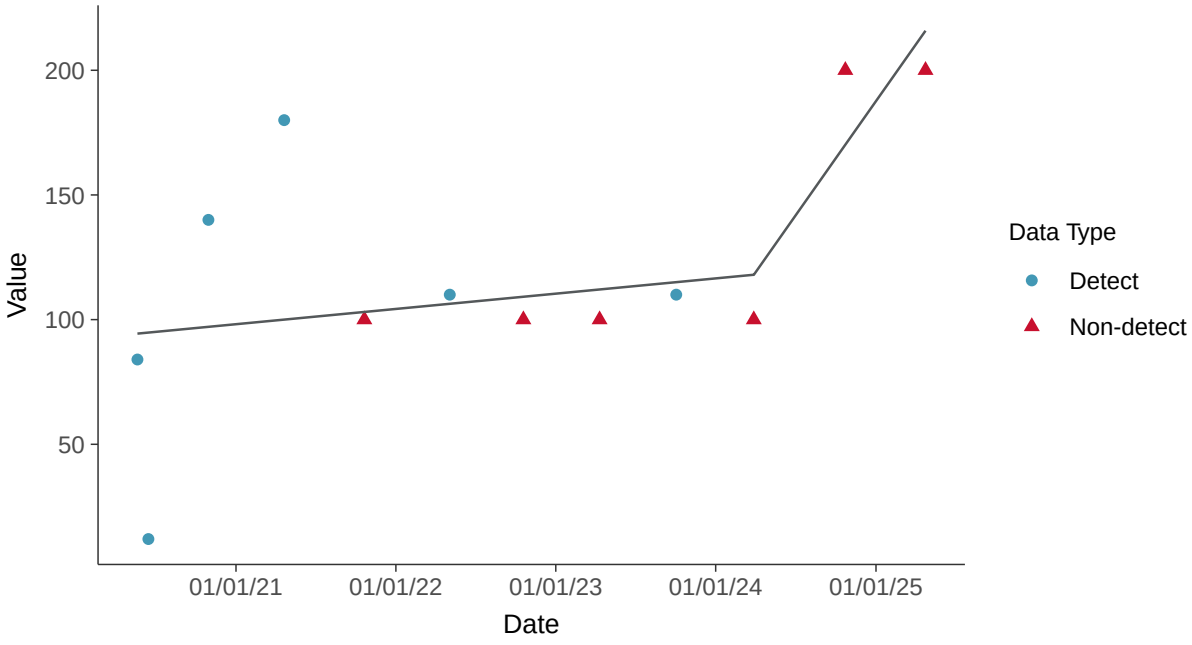

**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15015R (ug/L)



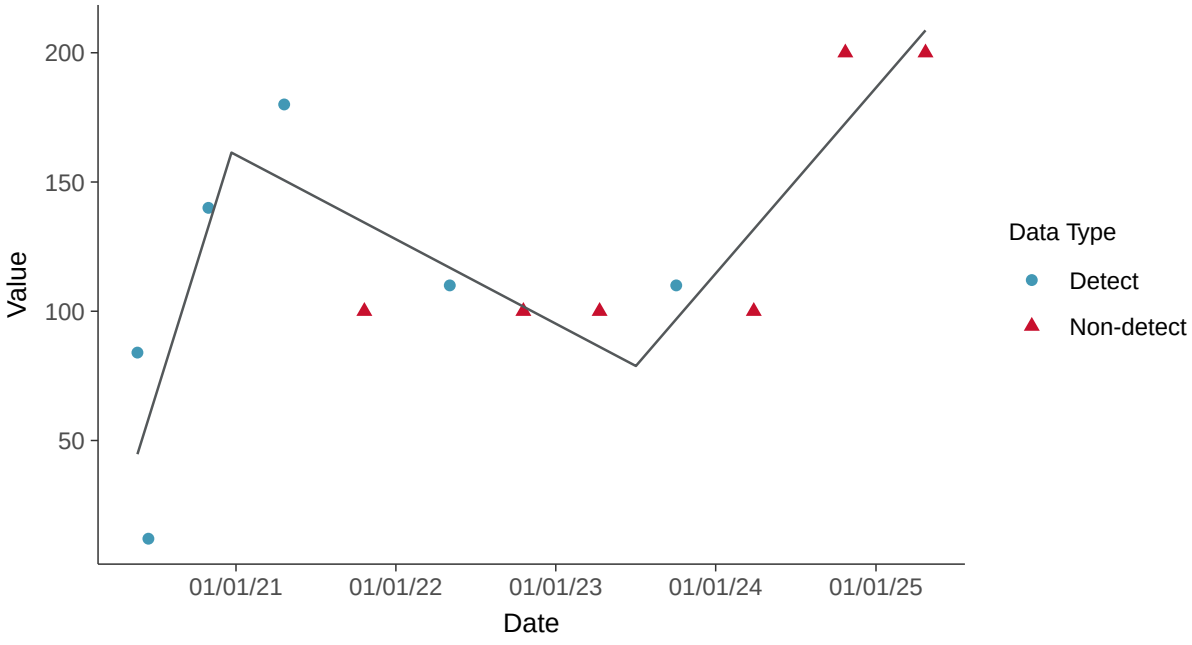
## Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15015R (ug/L)



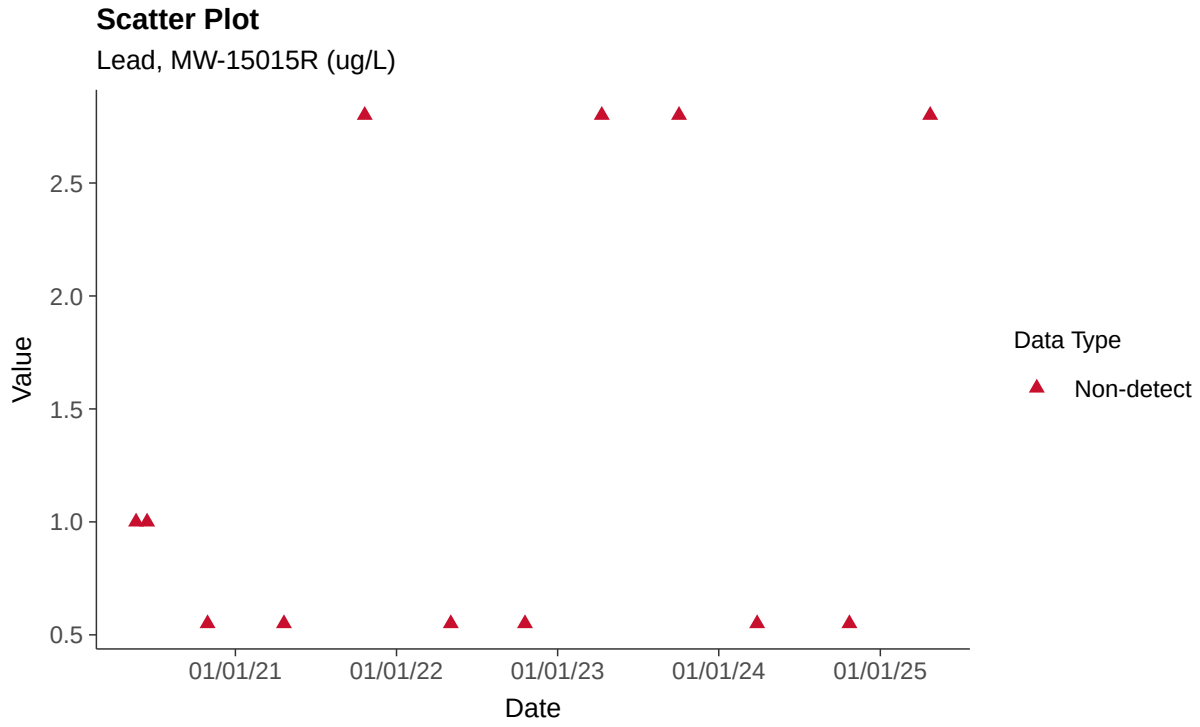

## Trend Regression: Piecewise Linear-Linear-Linear

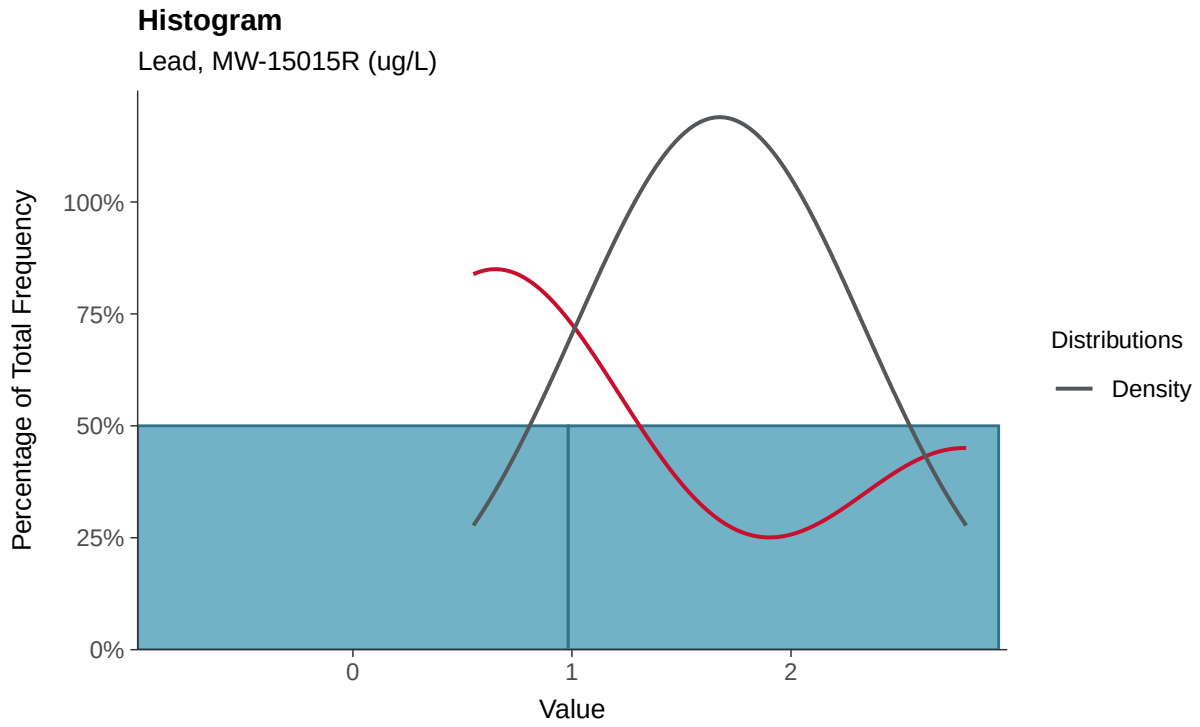
Fluoride, MW-15015R (ug/L)



## Appendix IV: Lead, MW-15015R

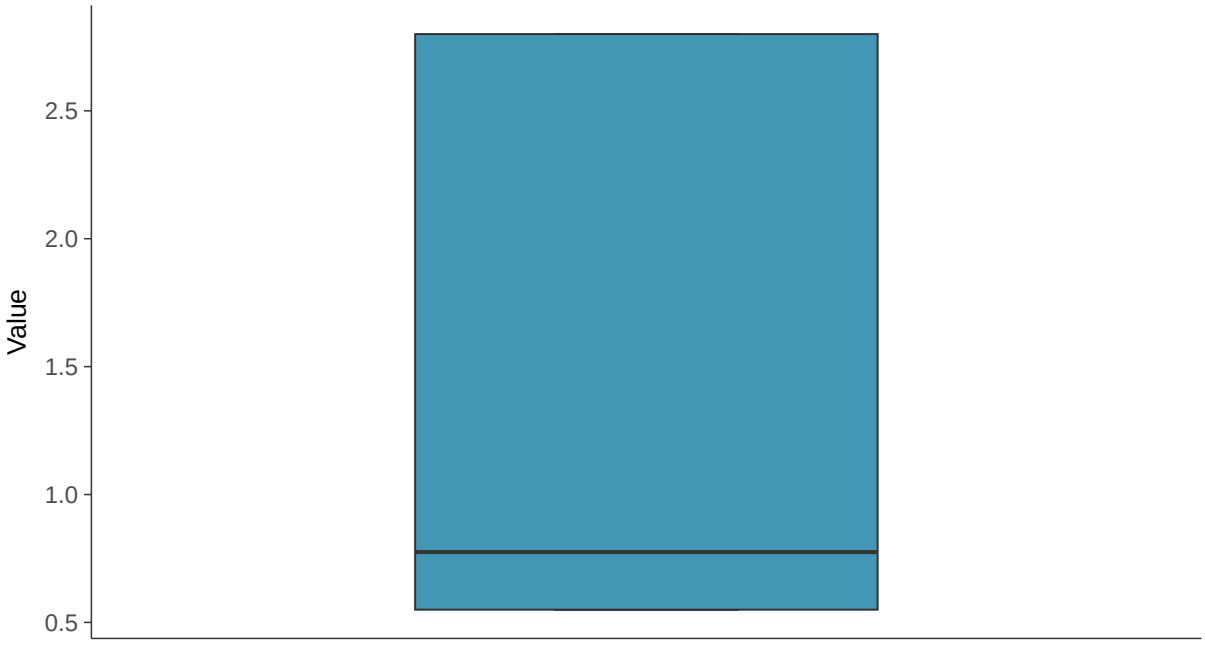
ID: 05_2_116



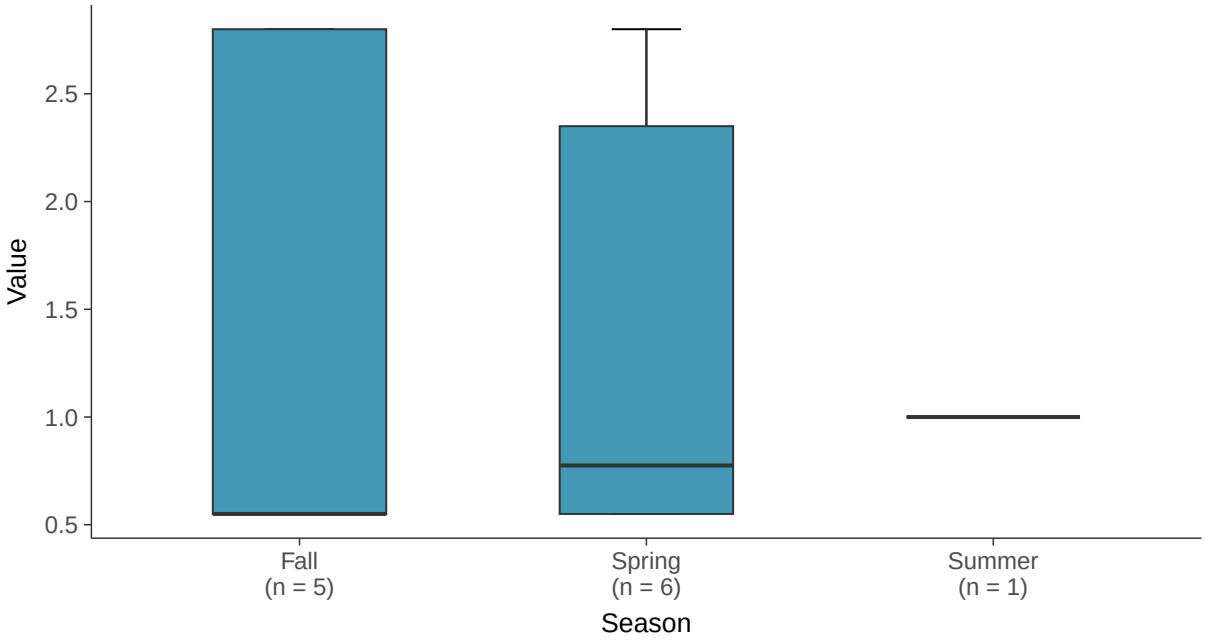
**Boxplot**

Lead, MW-15015R (ug/L)




**Boxplot by Season**

Lead, MW-15015R (ug/L)

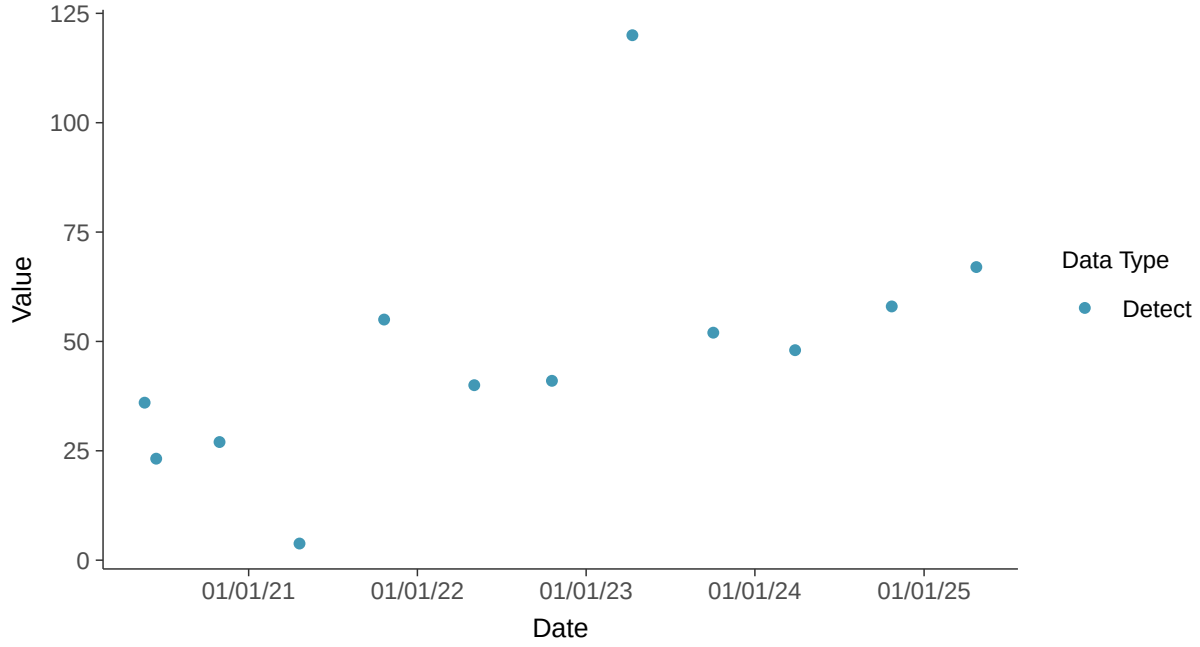


## Appendix IV: Lithium, MW-15015R

ID: 05_2_117

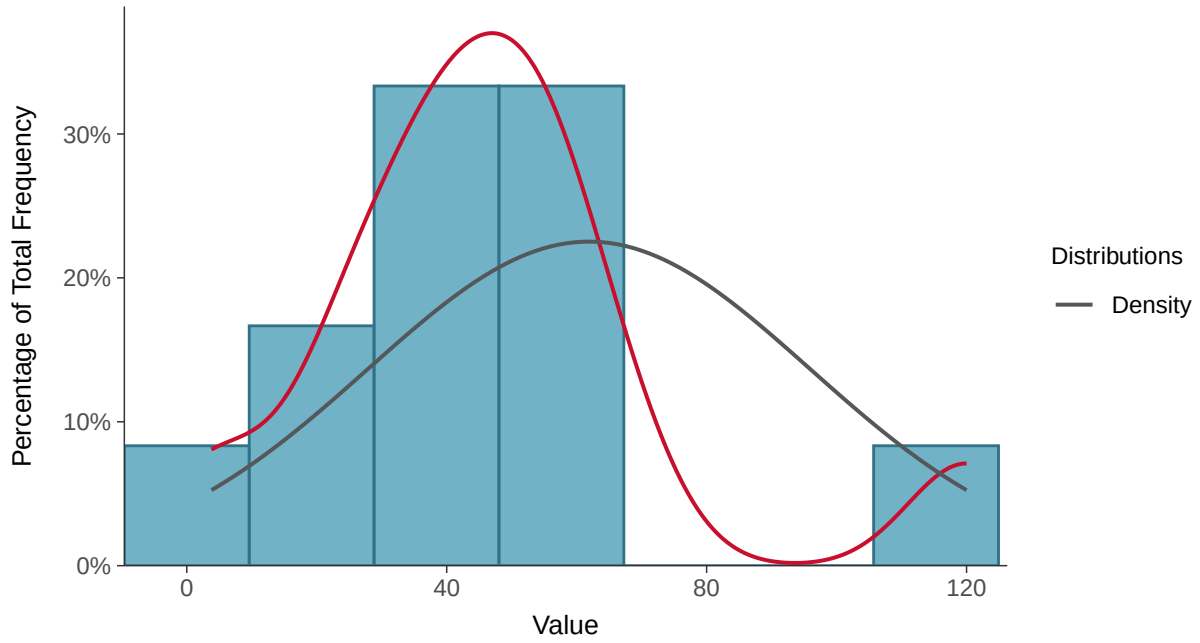
**Scatter Plot**

Lithium, MW-15015R (ug/L)



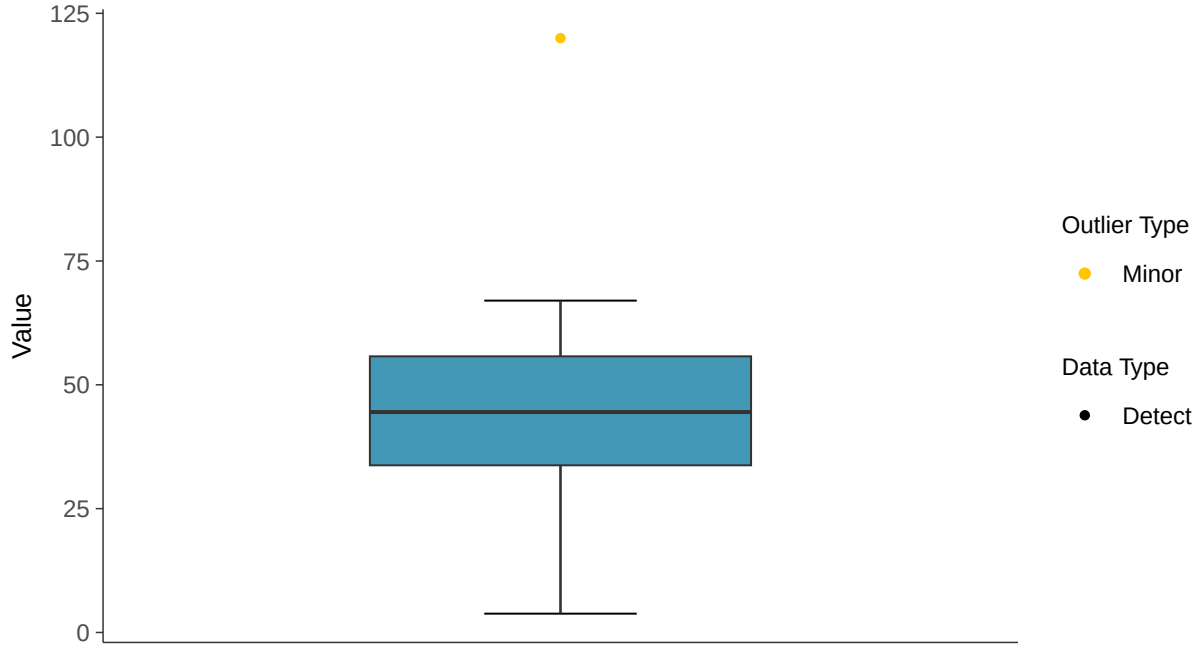

**Histogram**

Lithium, MW-15015R (ug/L)



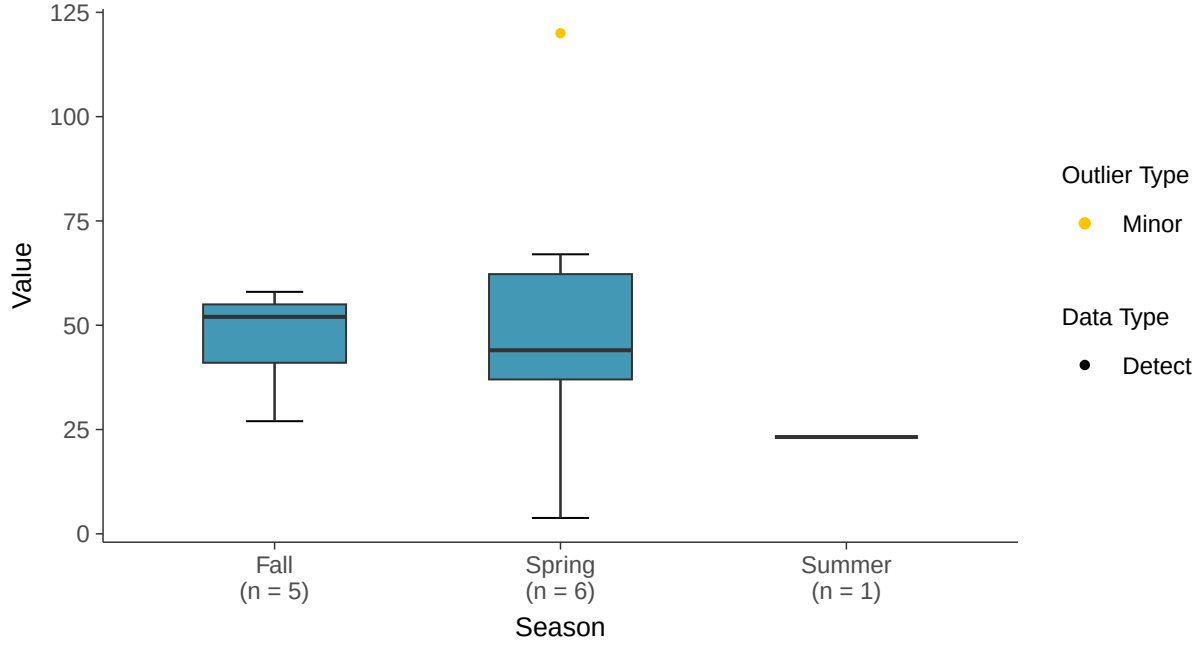
## Boxplot

Lithium, MW-15015R (ug/L)



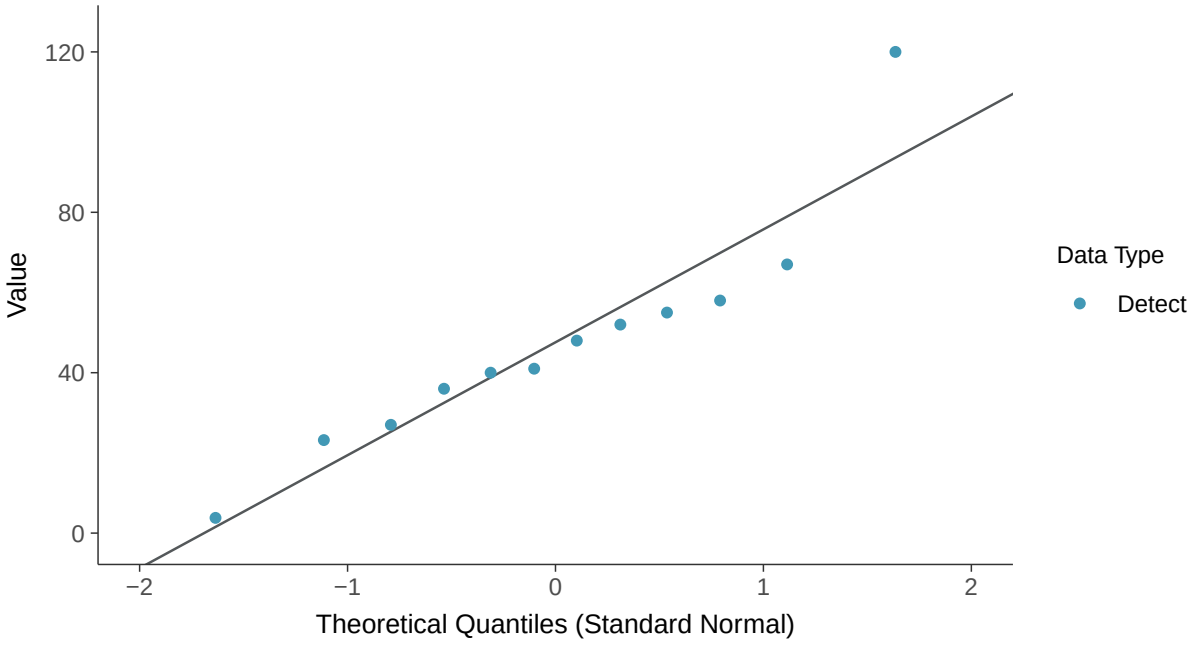

## Boxplot by Season

Lithium, MW-15015R (ug/L)



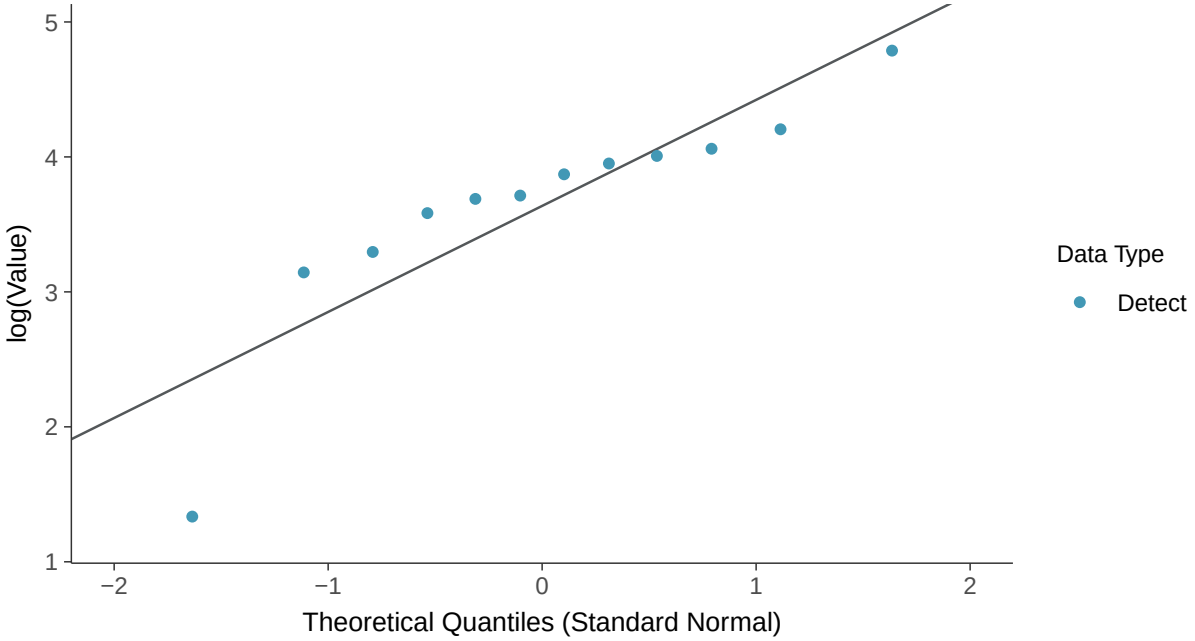
**Normal Q-Q plot**

Lithium, MW-15015R (ug/L)



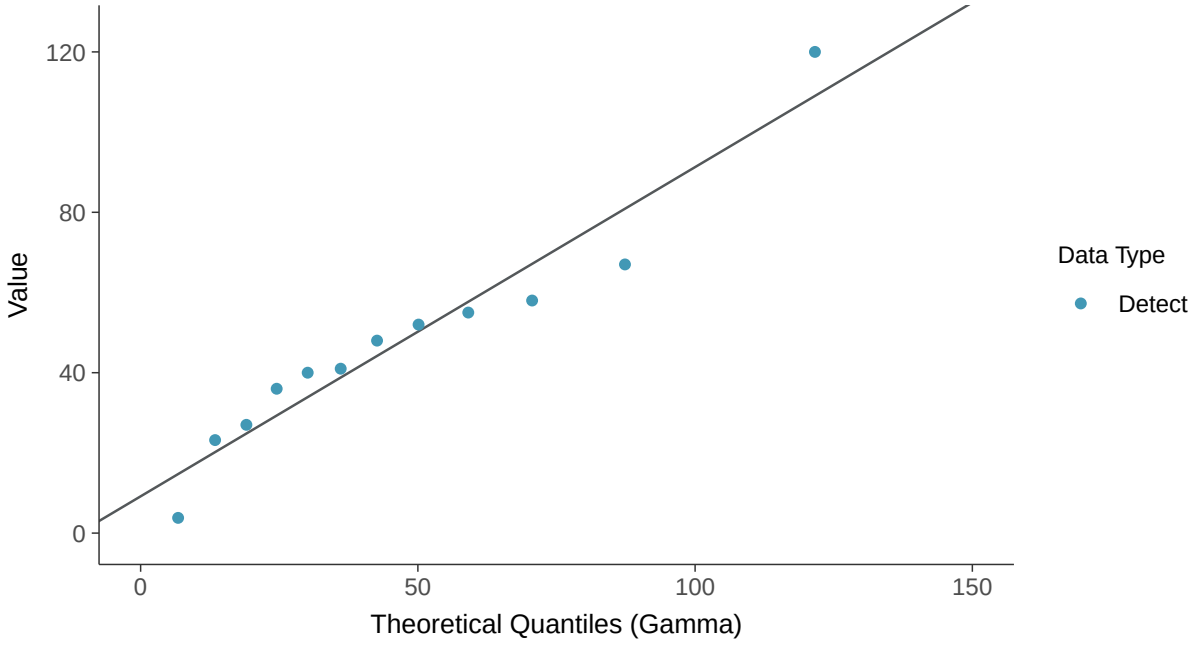

**Lognormal Q-Q plot**

Lithium, MW-15015R (ug/L)



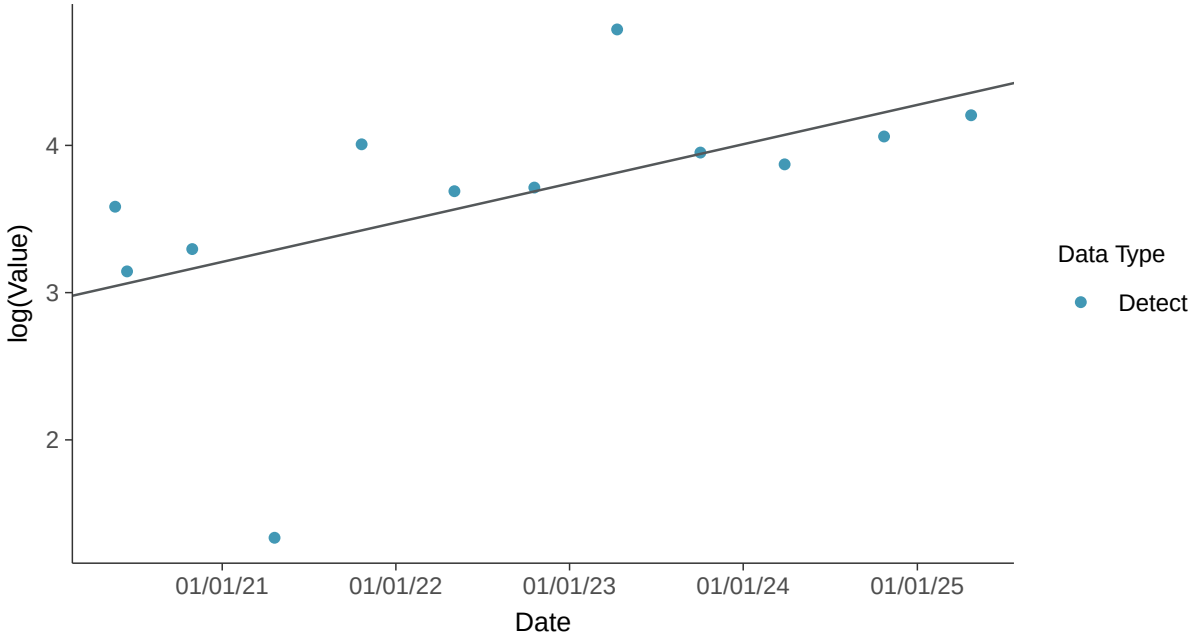
**Gamma Q-Q plot**

Lithium, MW-15015R (ug/L)



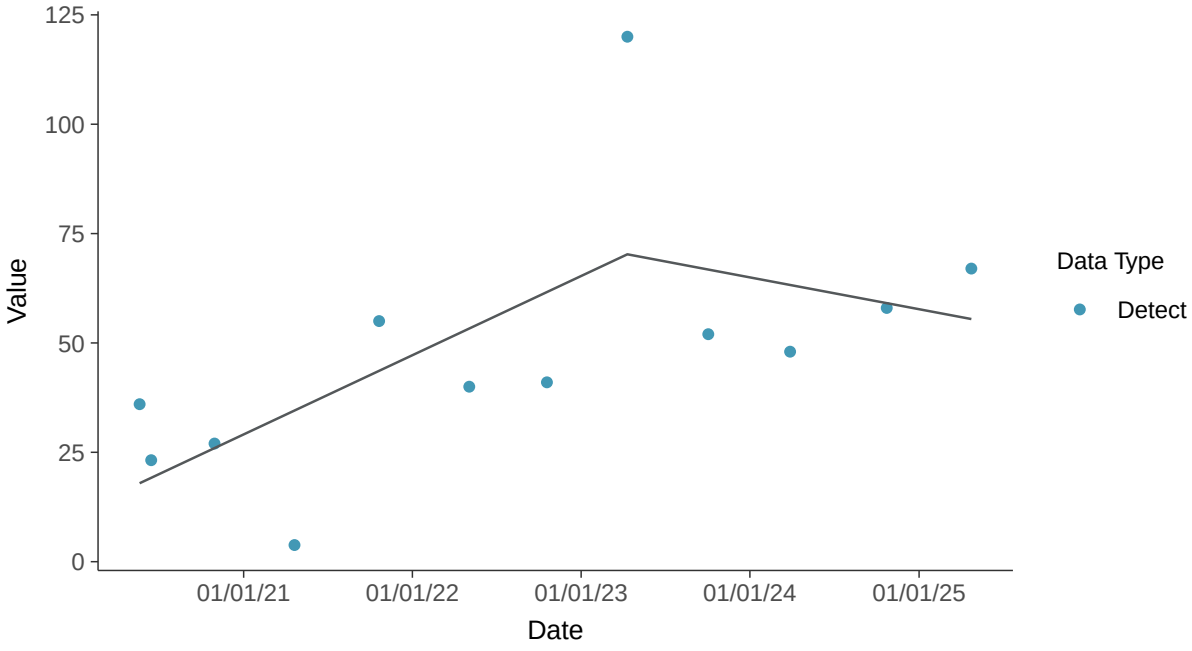

**Trend Regression: Lognormal MLE**

Lithium, MW-15015R (ug/L)



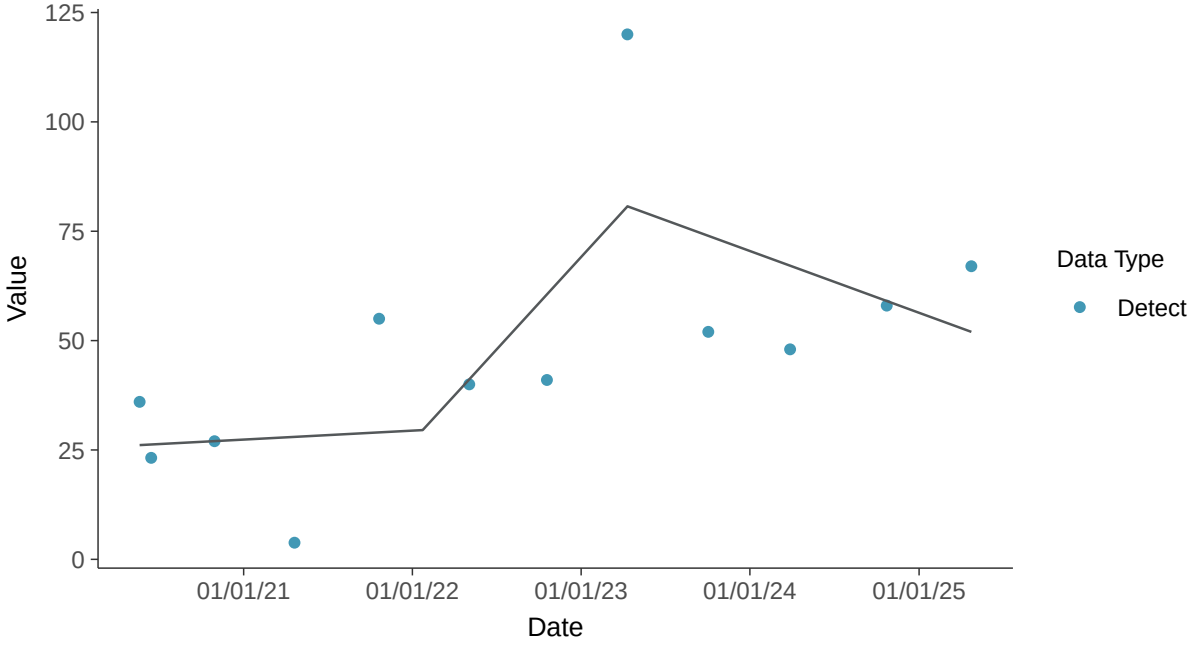
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15015R (ug/L)



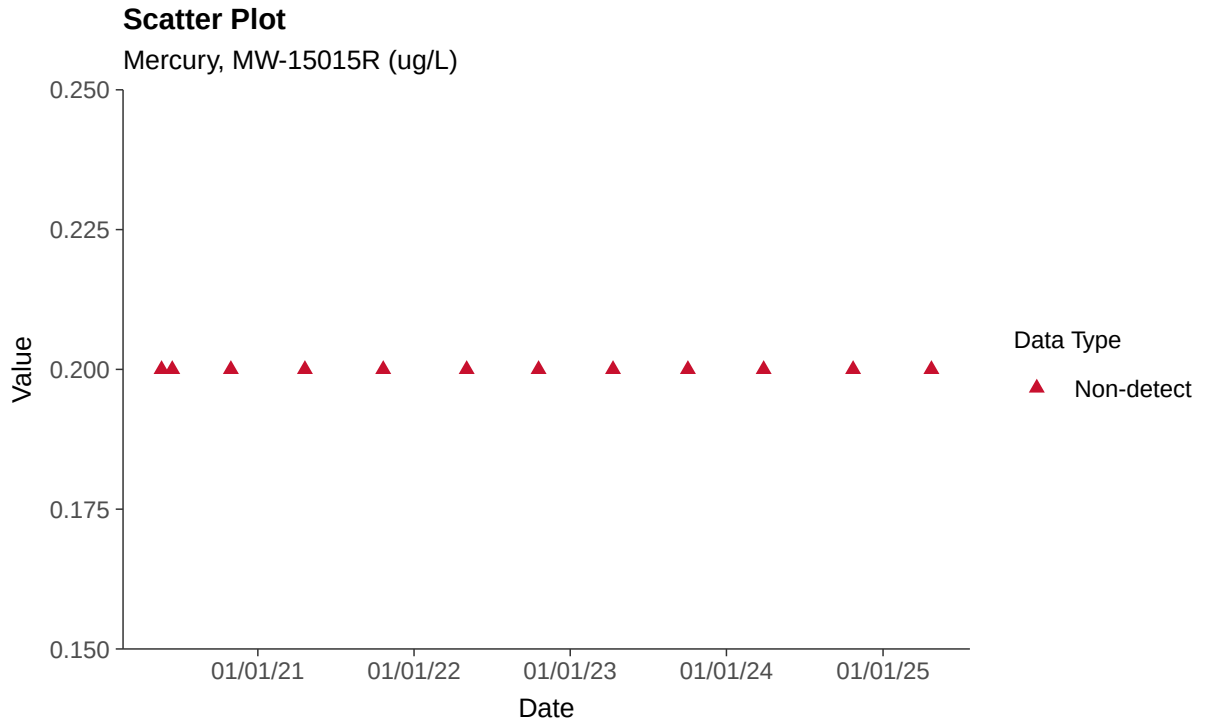

**Trend Regression: Piecewise Linear-Linear-Linear**

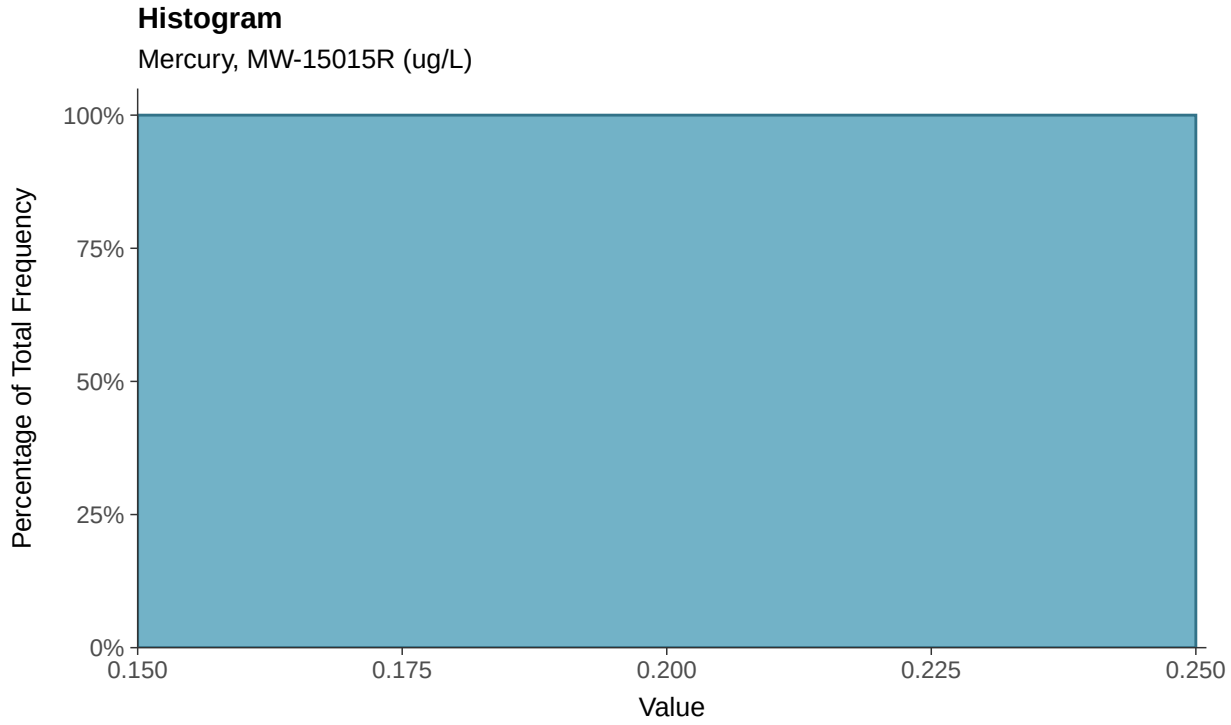
Lithium, MW-15015R (ug/L)



## Appendix IV: Mercury, MW-15015R

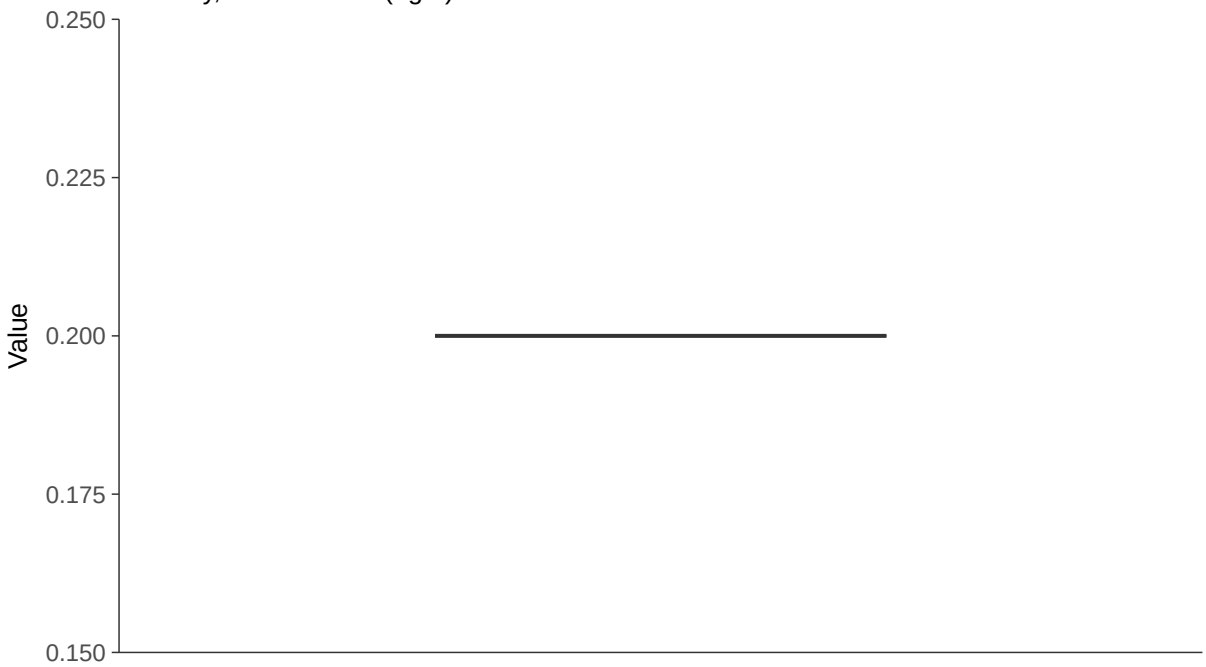
ID: 05_2_118



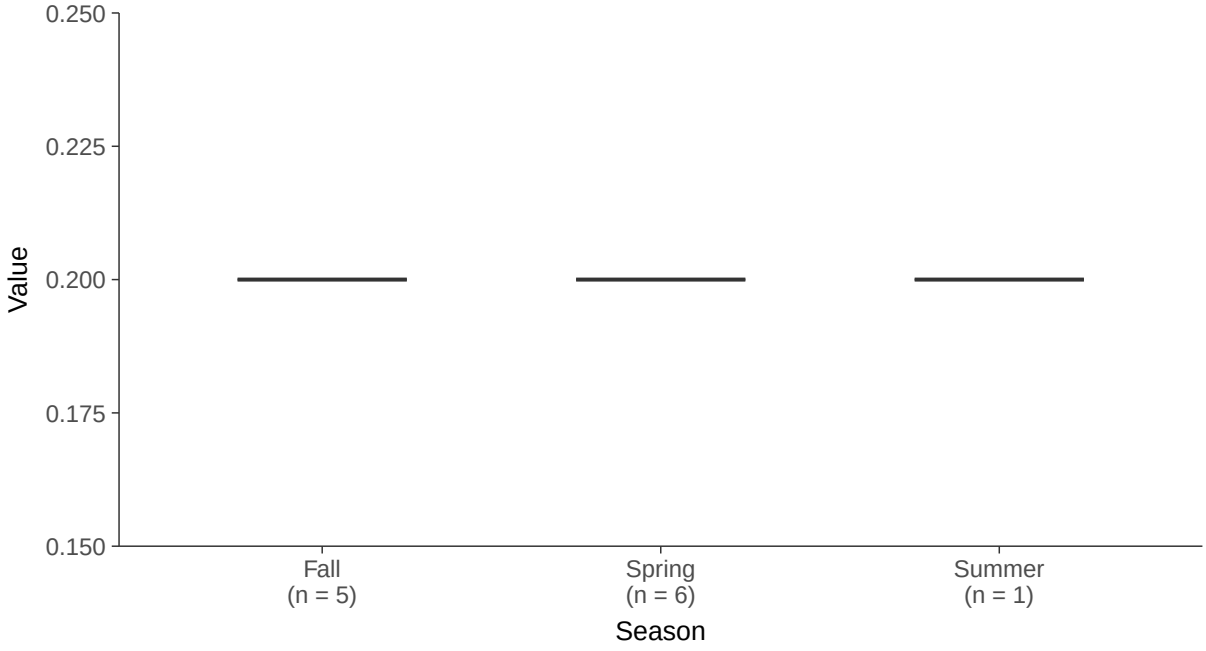
**Boxplot**

Mercury, MW-15015R (ug/L)




**Boxplot by Season**

Mercury, MW-15015R (ug/L)

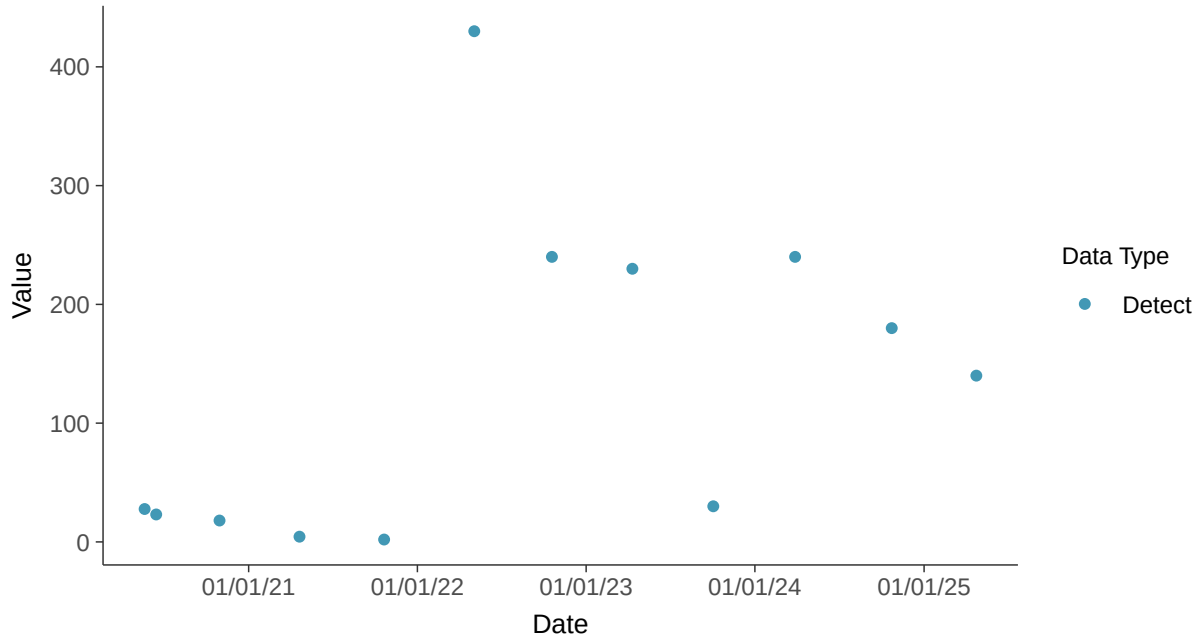


## Appendix IV: Molybdenum, MW-15015R

ID: 05_2_119

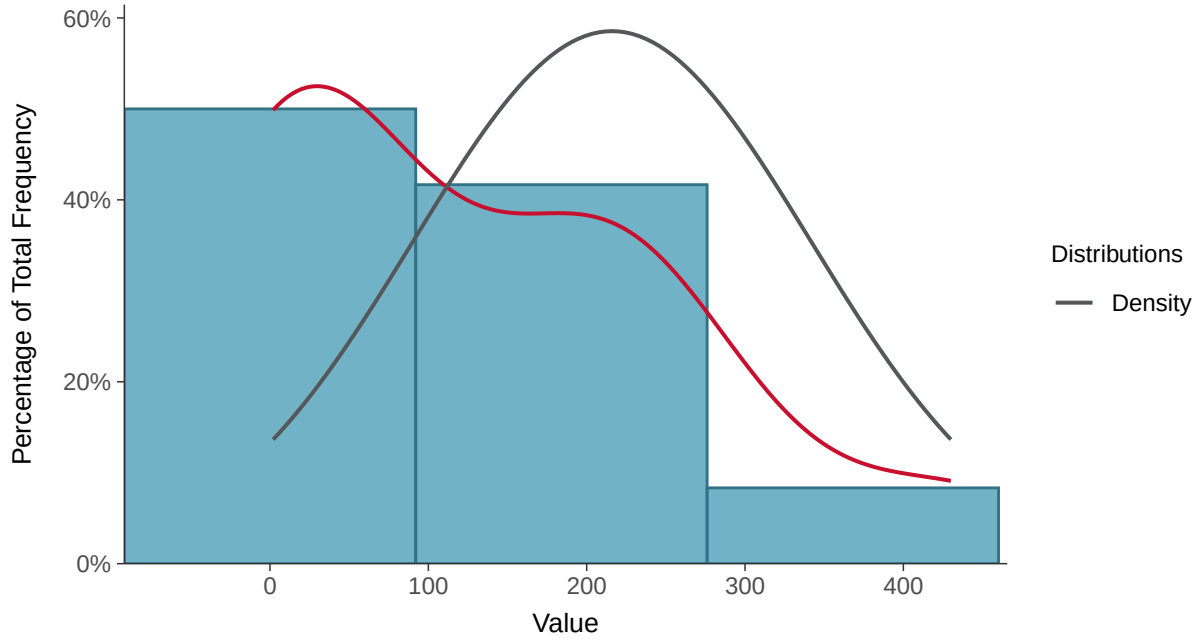
**Scatter Plot**

Molybdenum, MW-15015R (ug/L)



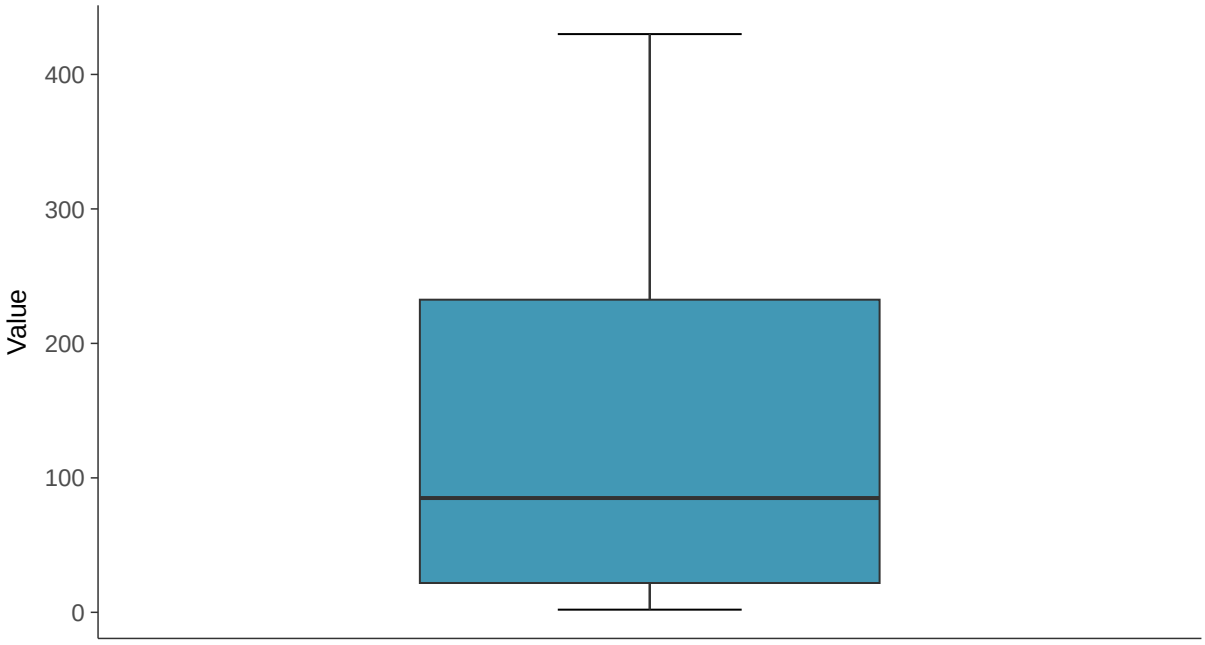

**Histogram**

Molybdenum, MW-15015R (ug/L)



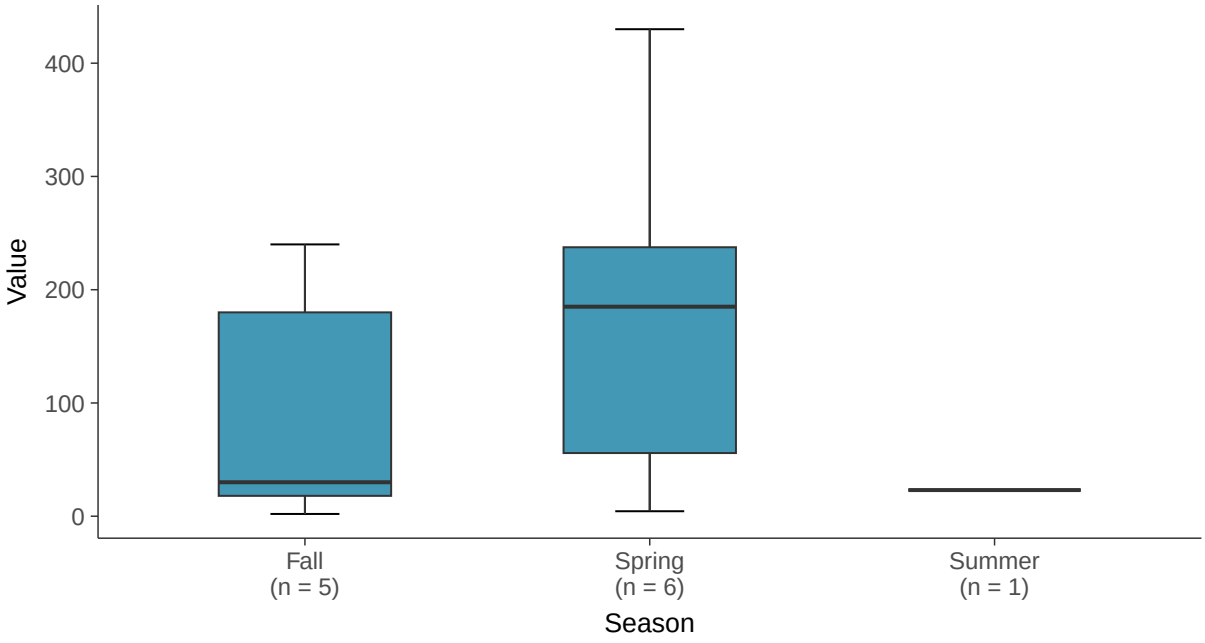
**Boxplot**

Molybdenum, MW-15015R (ug/L)



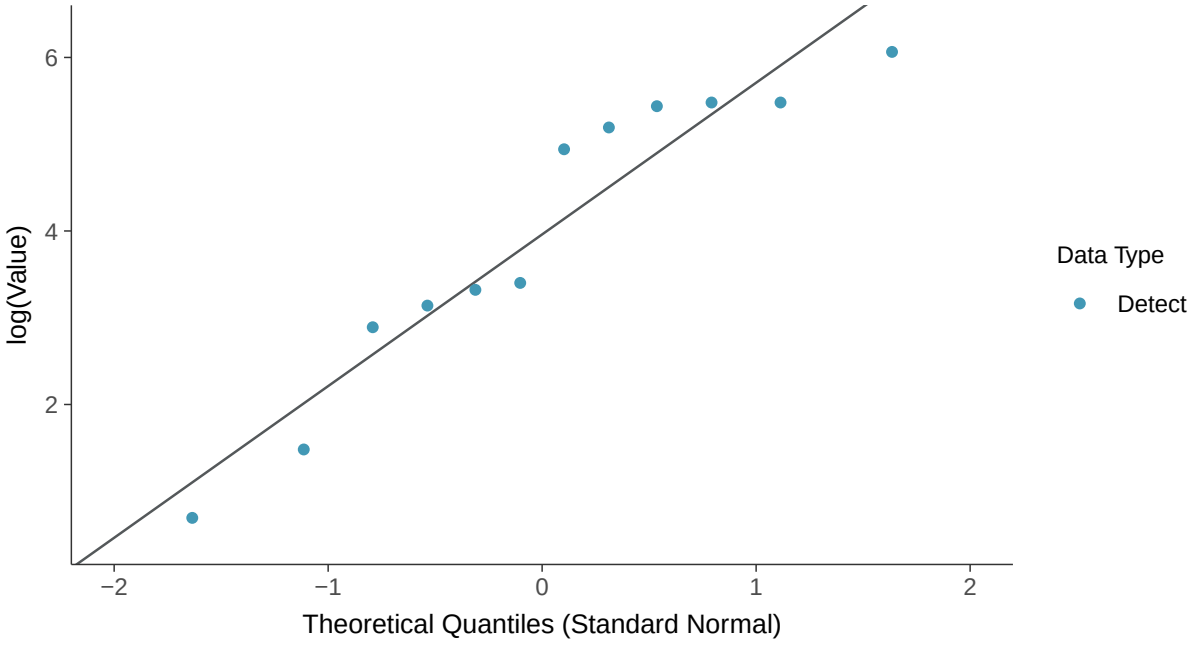

**Boxplot by Season**

Molybdenum, MW-15015R (ug/L)



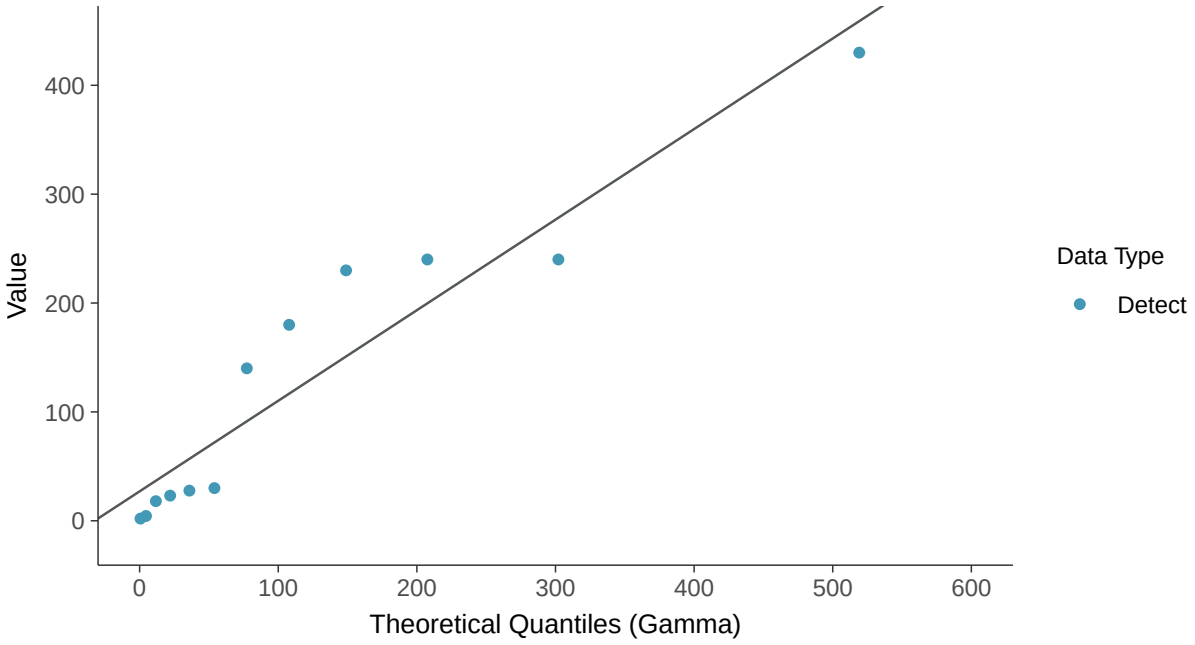
**Lognormal Q-Q plot**

Molybdenum, MW-15015R (ug/L)



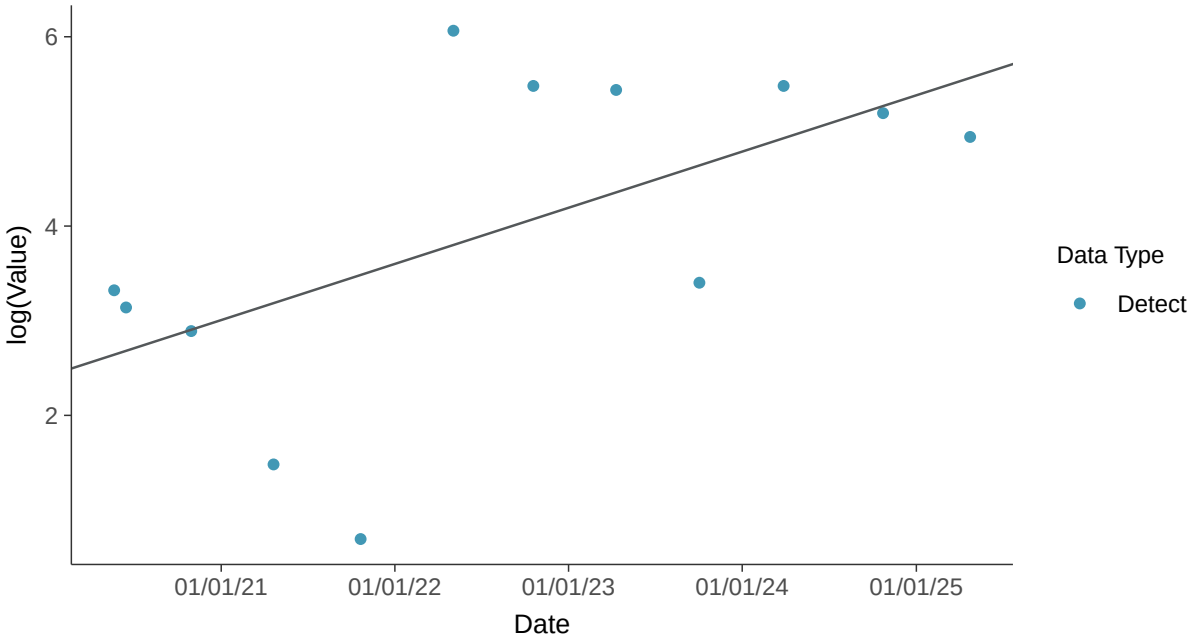

**Gamma Q-Q plot**

Molybdenum, MW-15015R (ug/L)



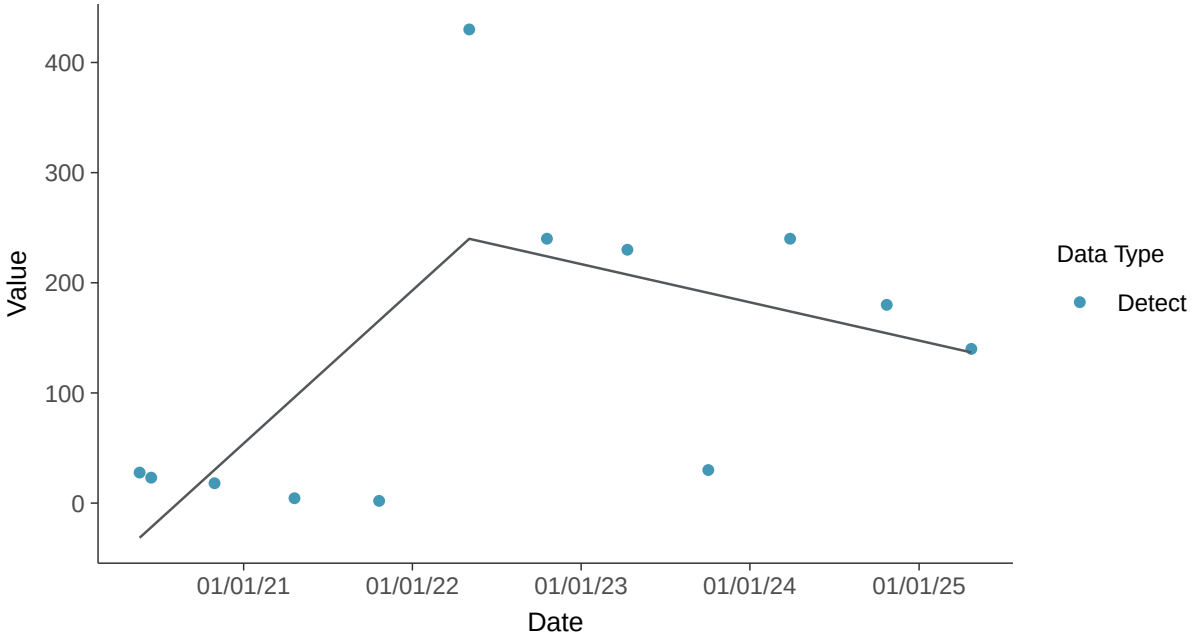
**Trend Regression: Lognormal MLE**

Molybdenum, MW-15015R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15015R (ug/L)

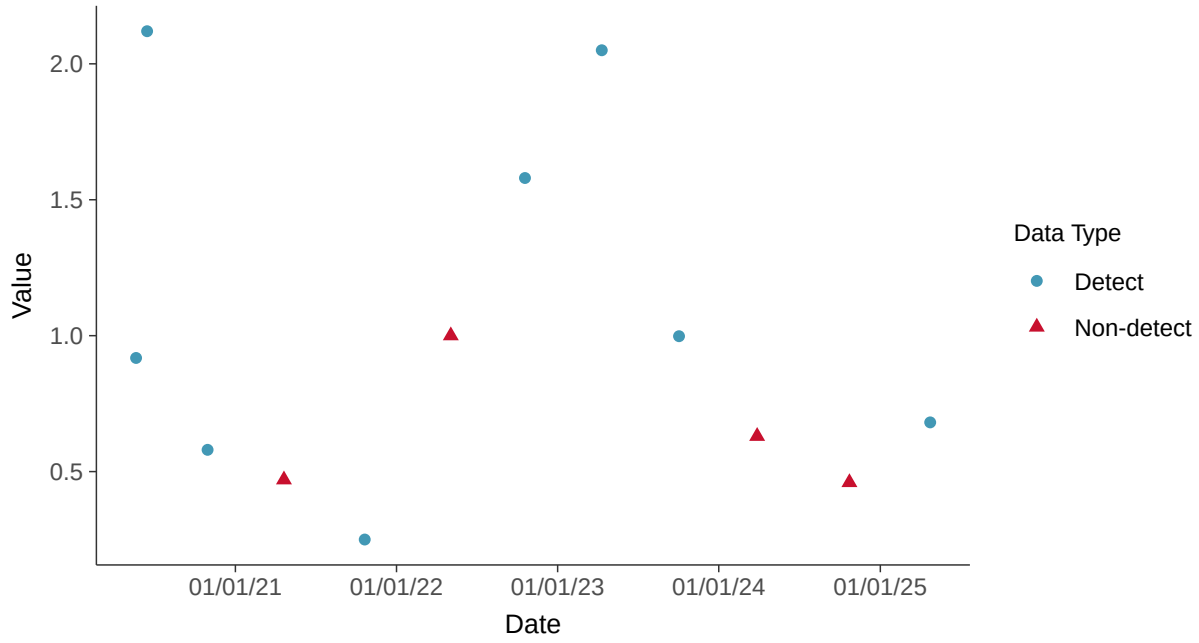


## Appendix IV: Radium-226+228, MW-15015R

ID: 05_2_125

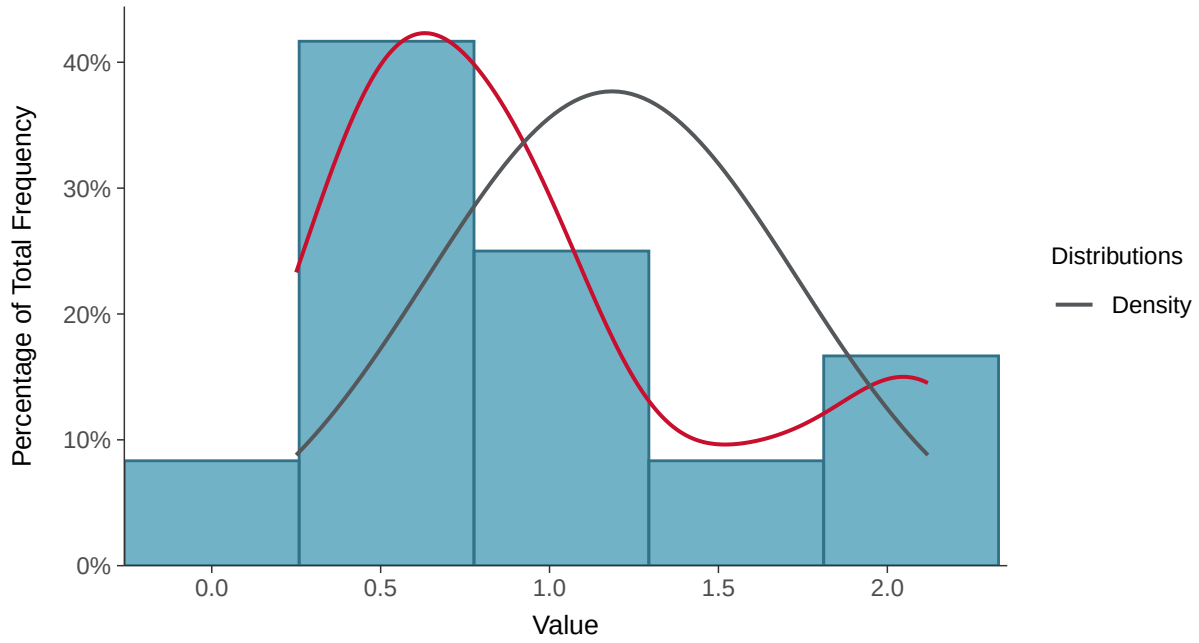
**Scatter Plot**

Radium-226+228, MW-15015R (pCi/L)



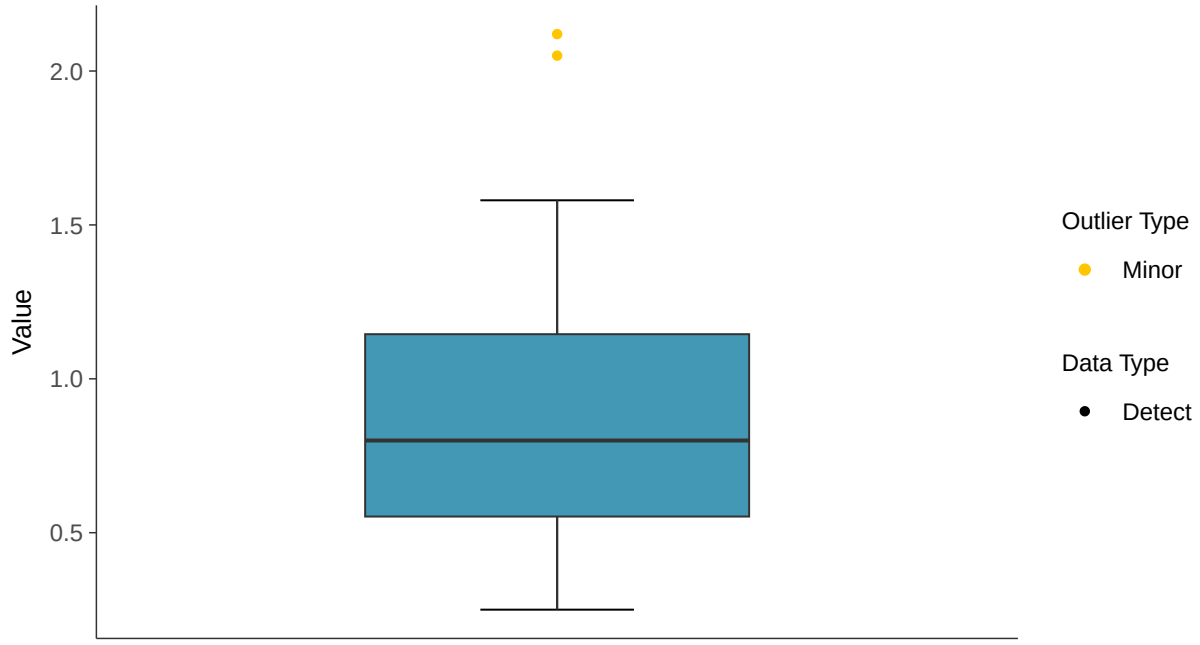

**Histogram**

Radium-226+228, MW-15015R (pCi/L)



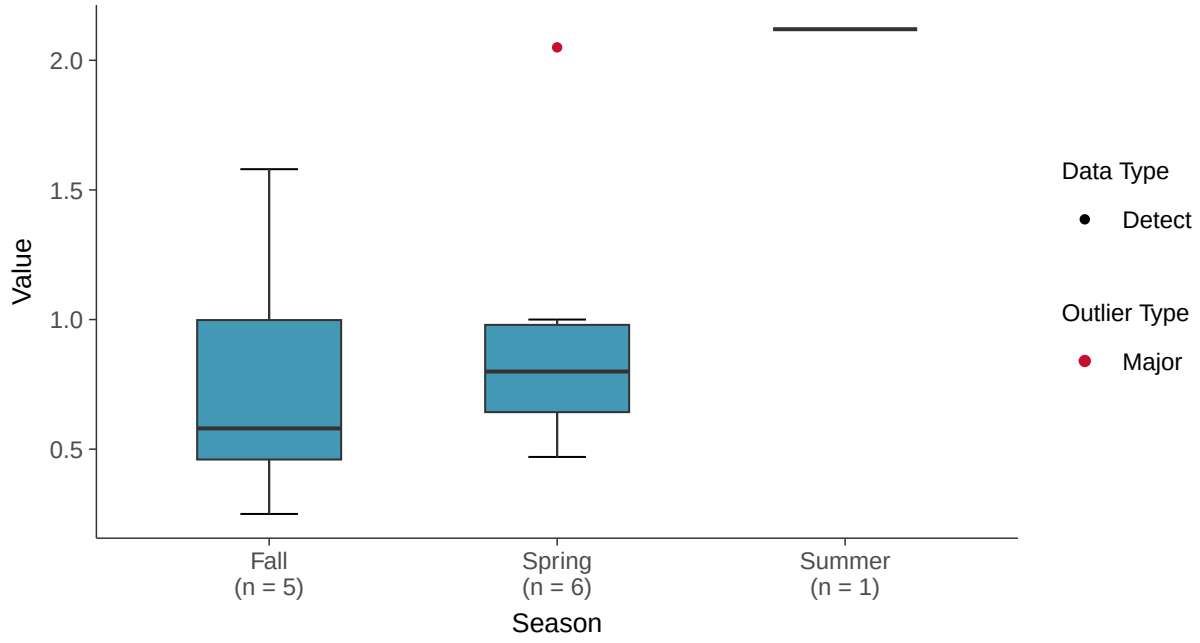
## Boxplot

Radium-226+228, MW-15015R (pCi/L)



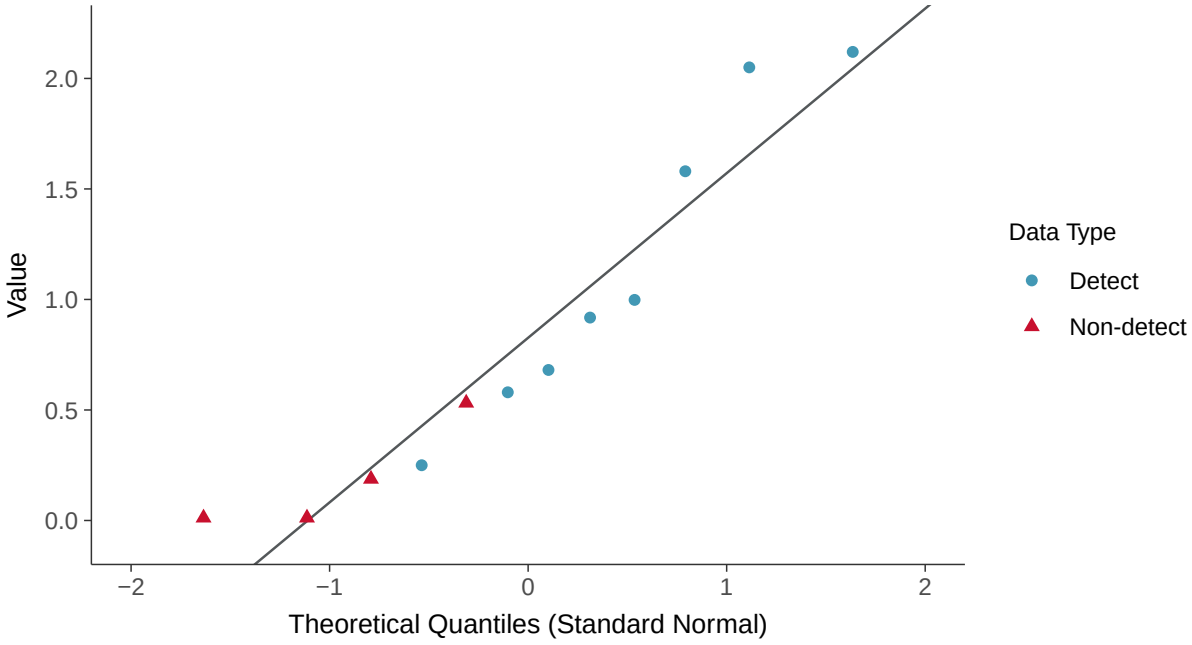

## Boxplot by Season

Radium-226+228, MW-15015R (pCi/L)



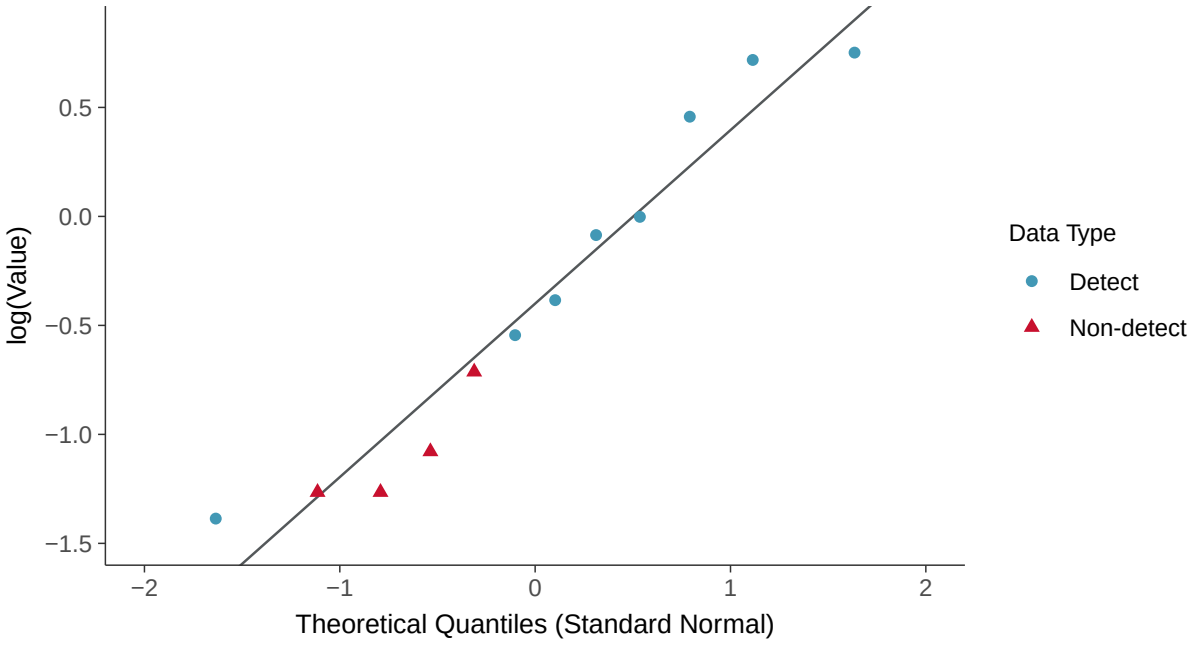
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15015R (pCi/L)



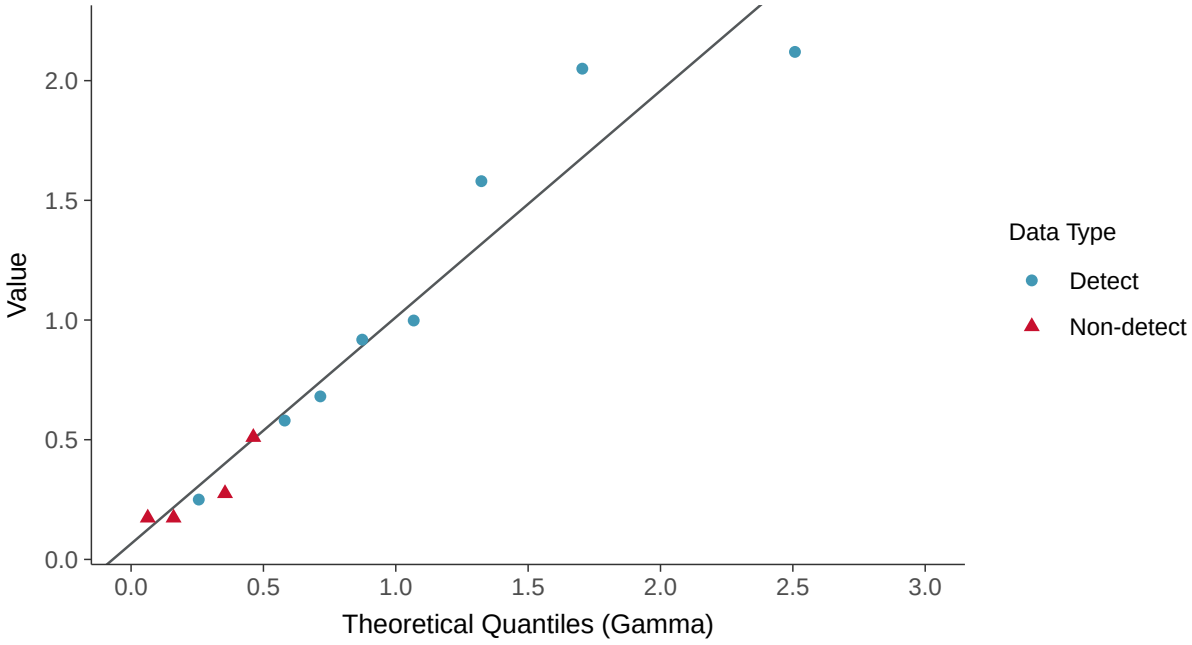

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15015R (pCi/L)



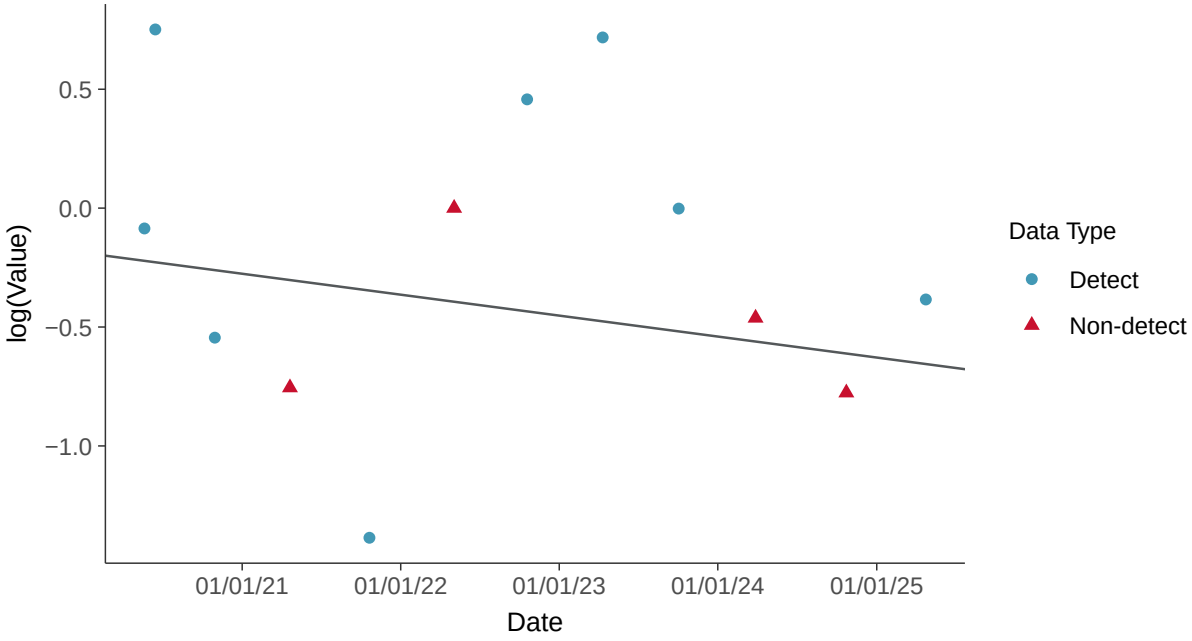
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15015R (pCi/L)



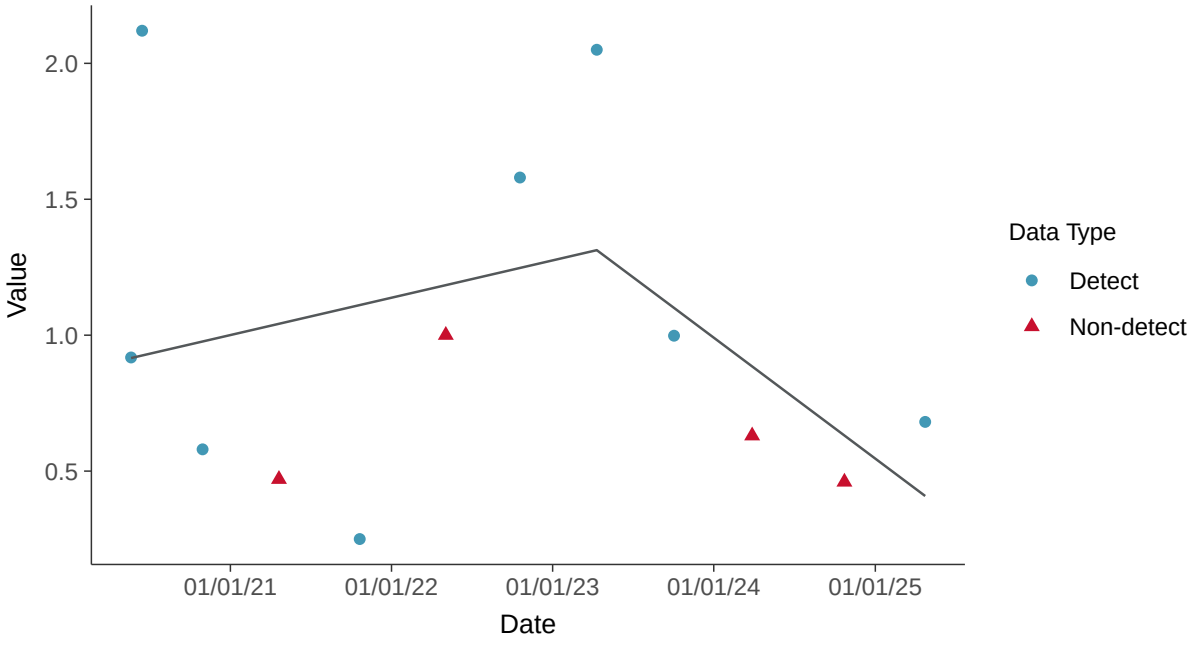

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15015R (pCi/L)



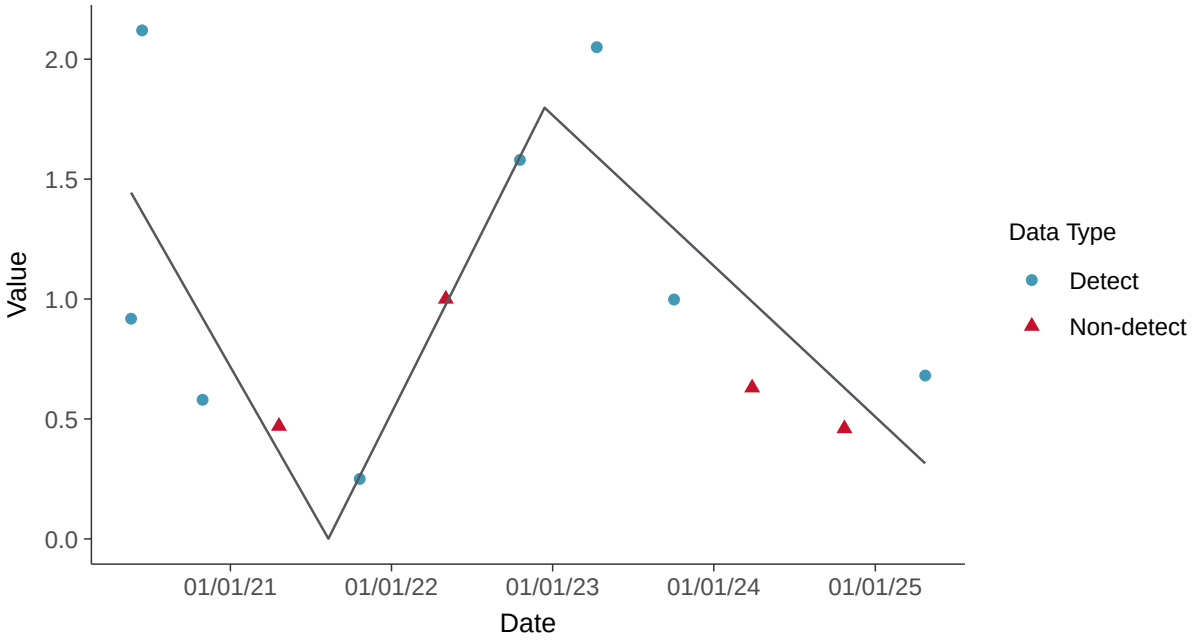
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15015R (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15015R (pCi/L)

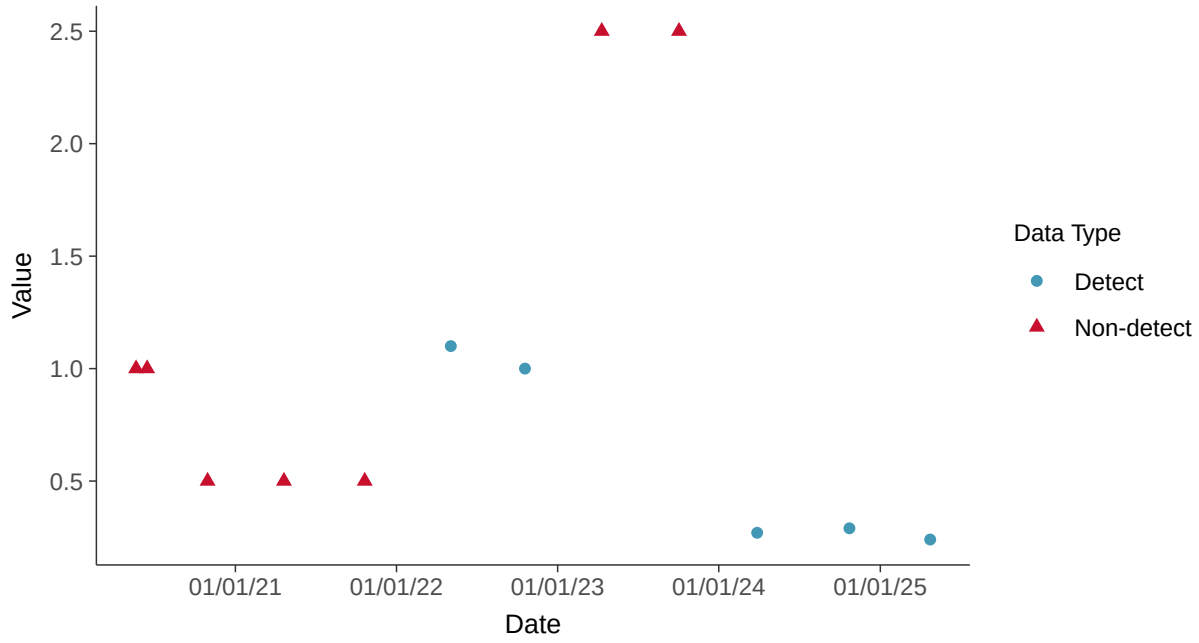


## Appendix IV: Selenium, MW-15015R

ID: 05_2_127

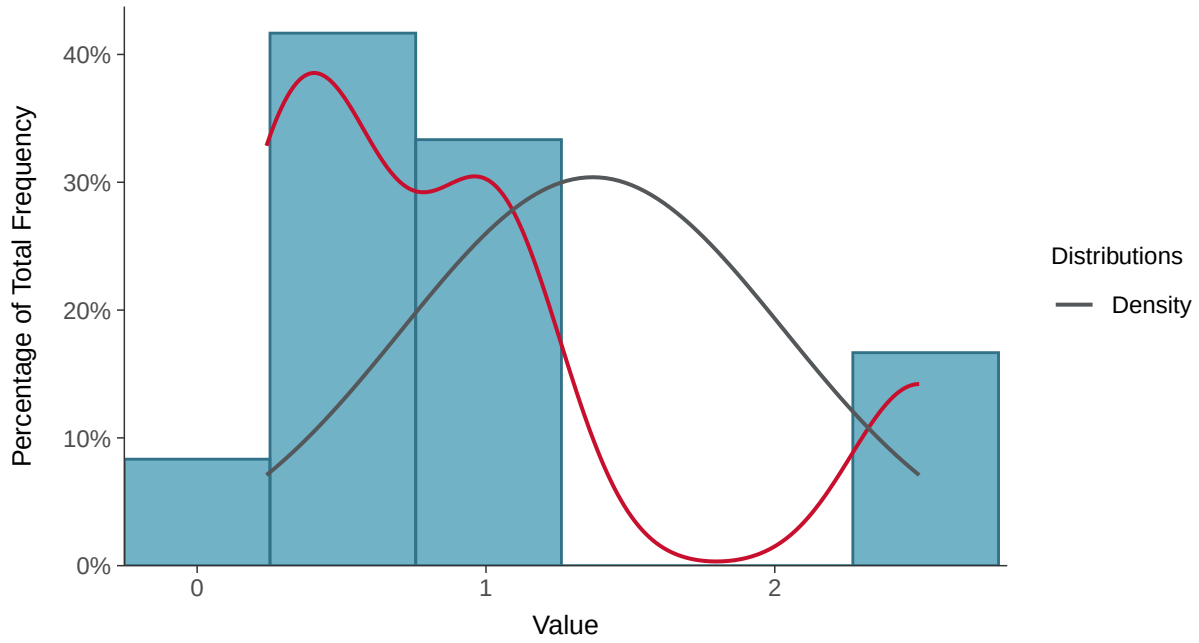
**Scatter Plot**

Selenium, MW-15015R (ug/L)



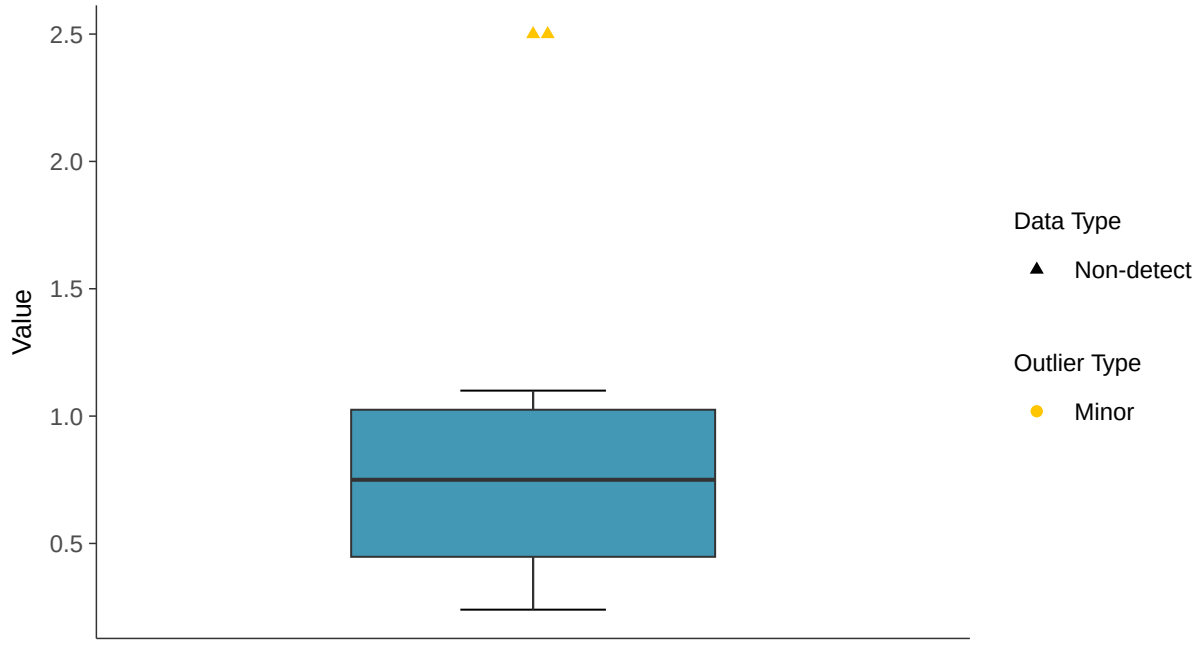

**Histogram**

Selenium, MW-15015R (ug/L)



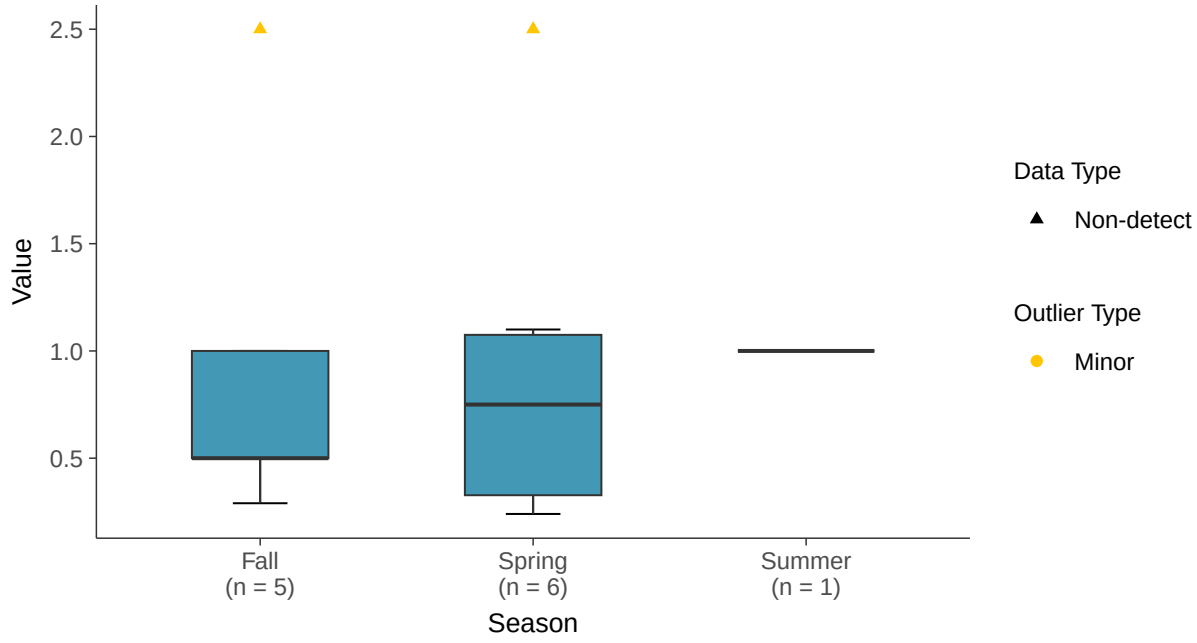
## Boxplot

Selenium, MW-15015R (ug/L)



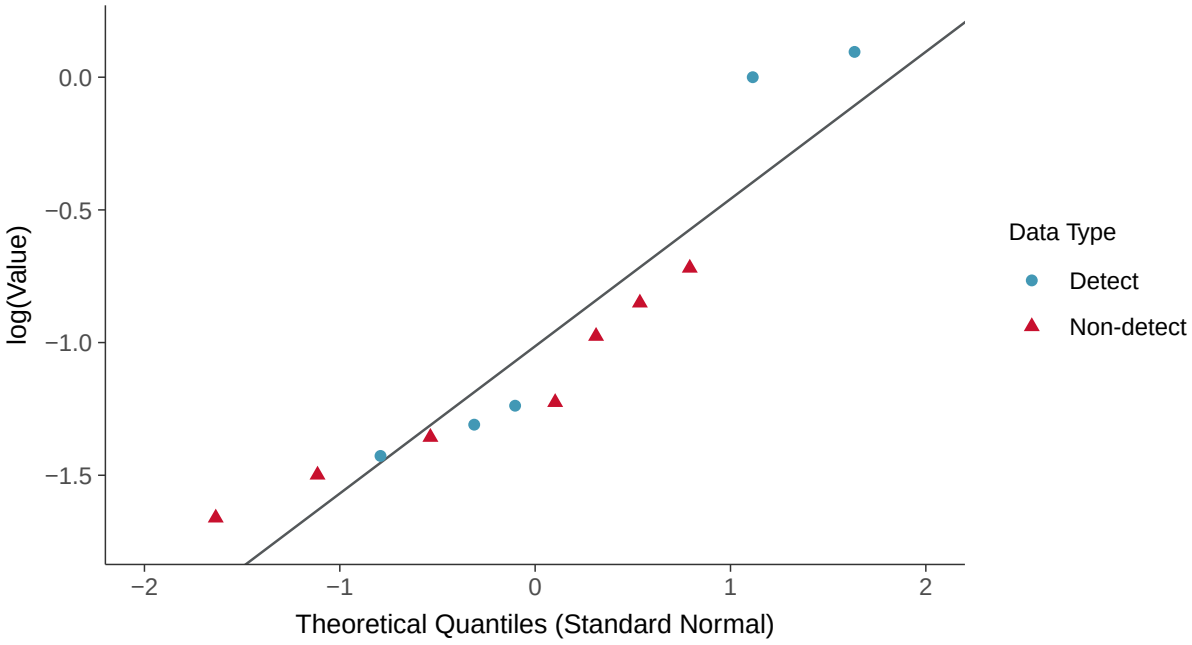

## Boxplot by Season

Selenium, MW-15015R (ug/L)



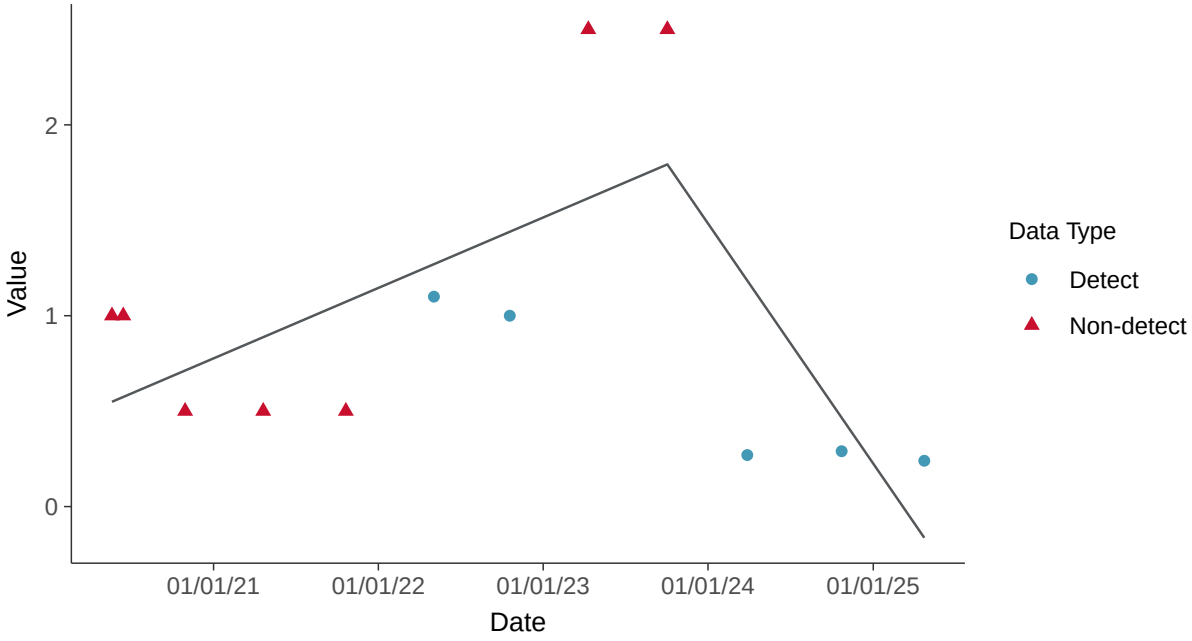
**Lognormal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15015R (ug/L)



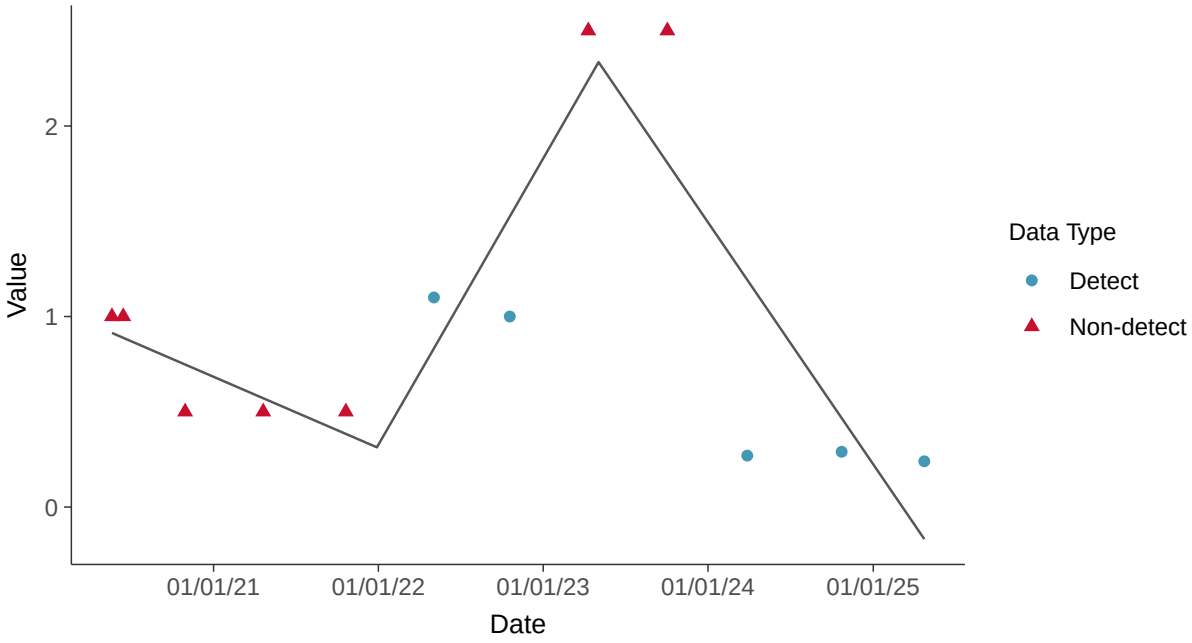

**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15015R (ug/L)



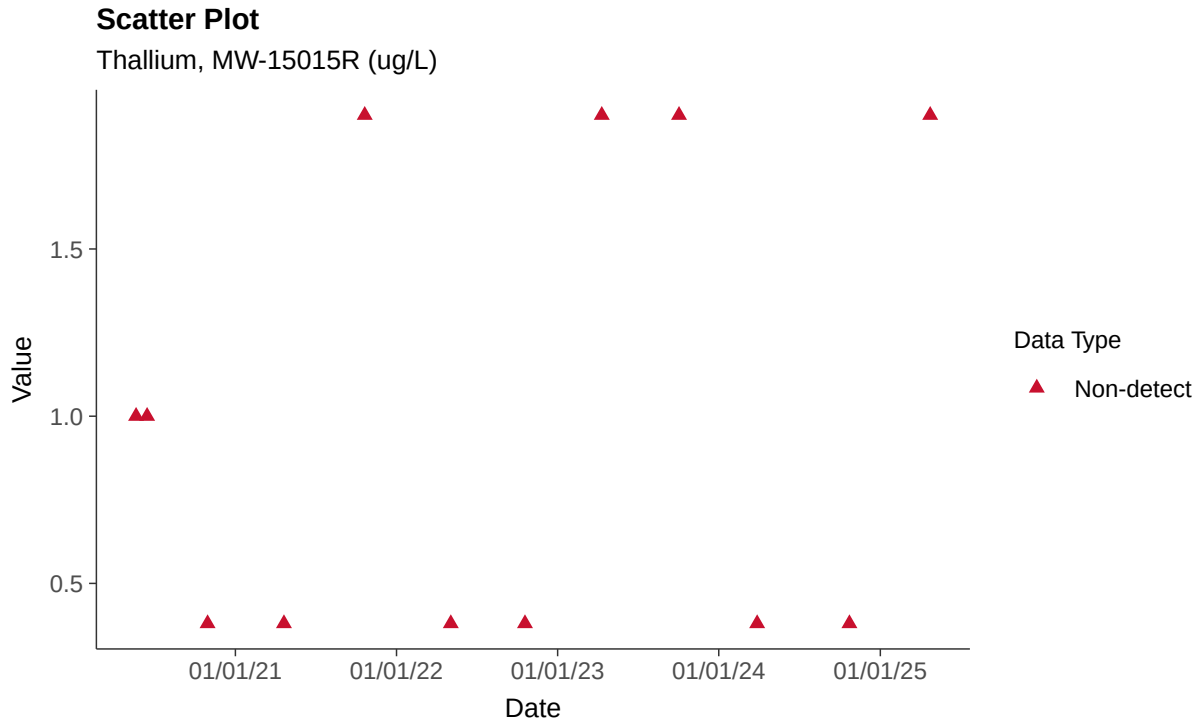
**Trend Regression: Piecewise Linear-Linear-Linear**

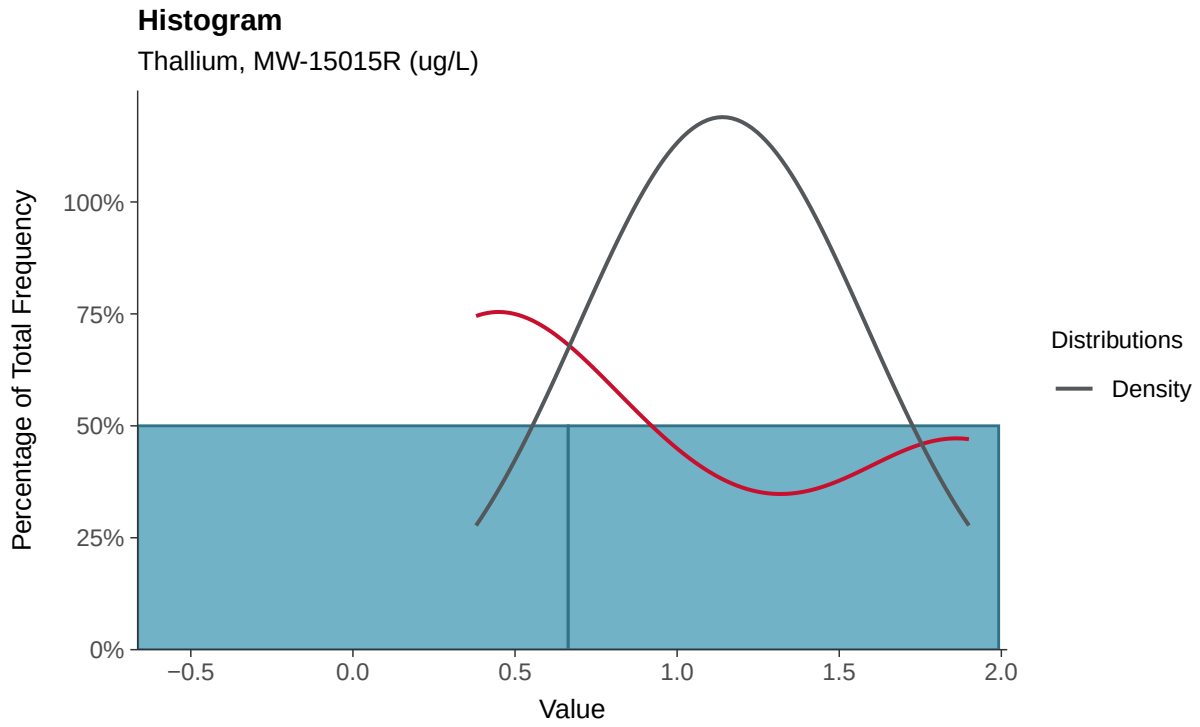
Selenium, MW-15015R (ug/L)



## Appendix IV: Thallium, MW-15015R

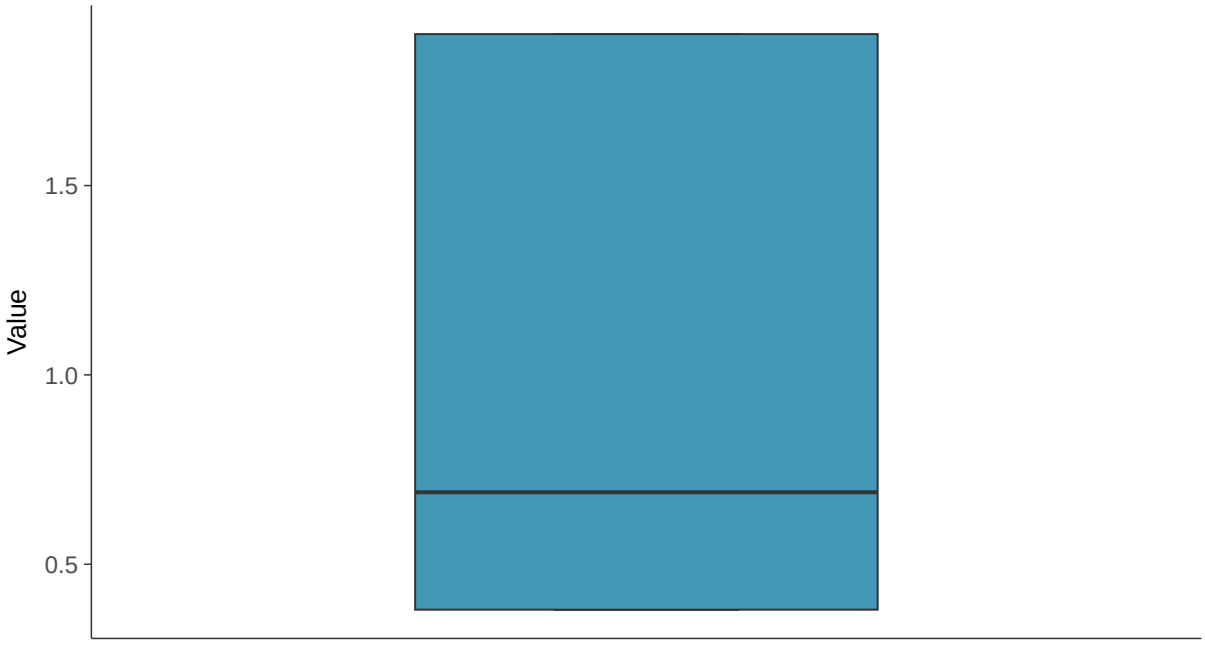
ID: 05_2_131



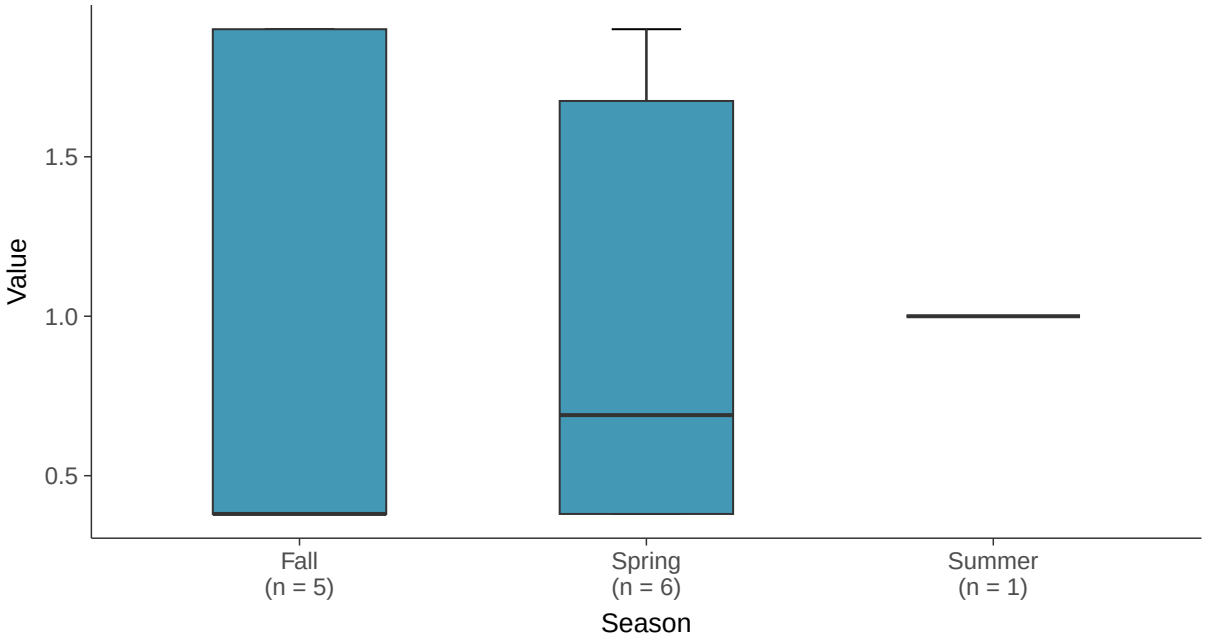
**Boxplot**

Thallium, MW-15015R (ug/L)



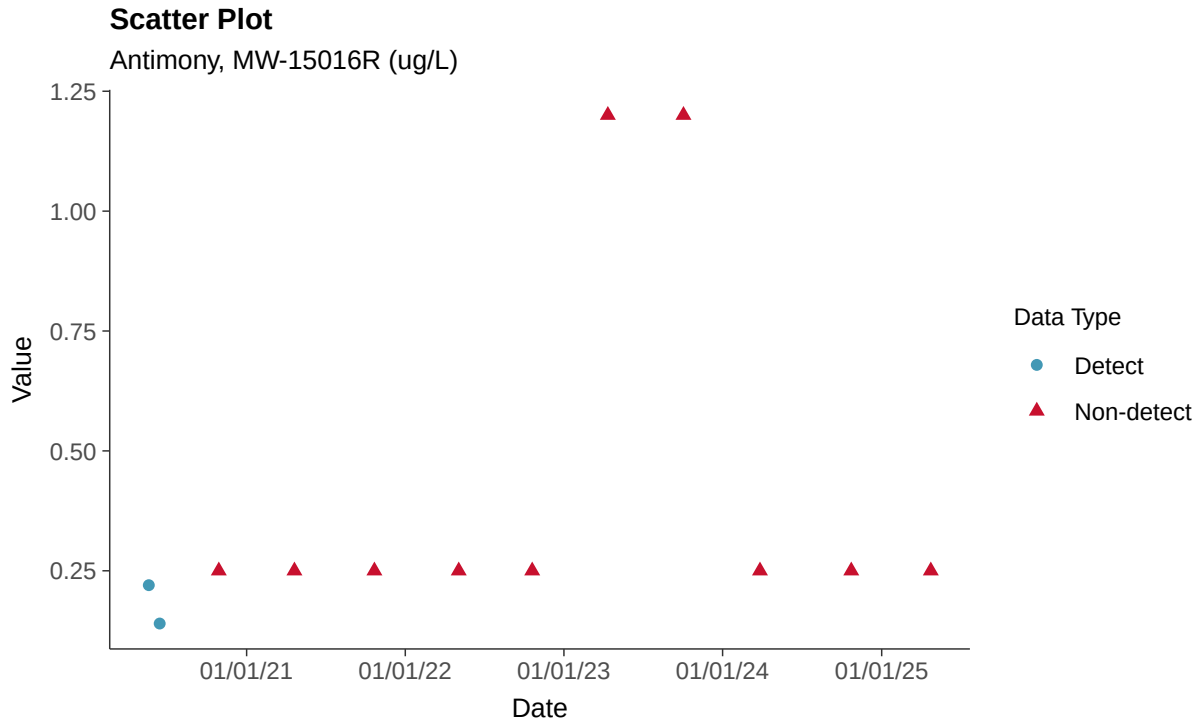

**Boxplot by Season**

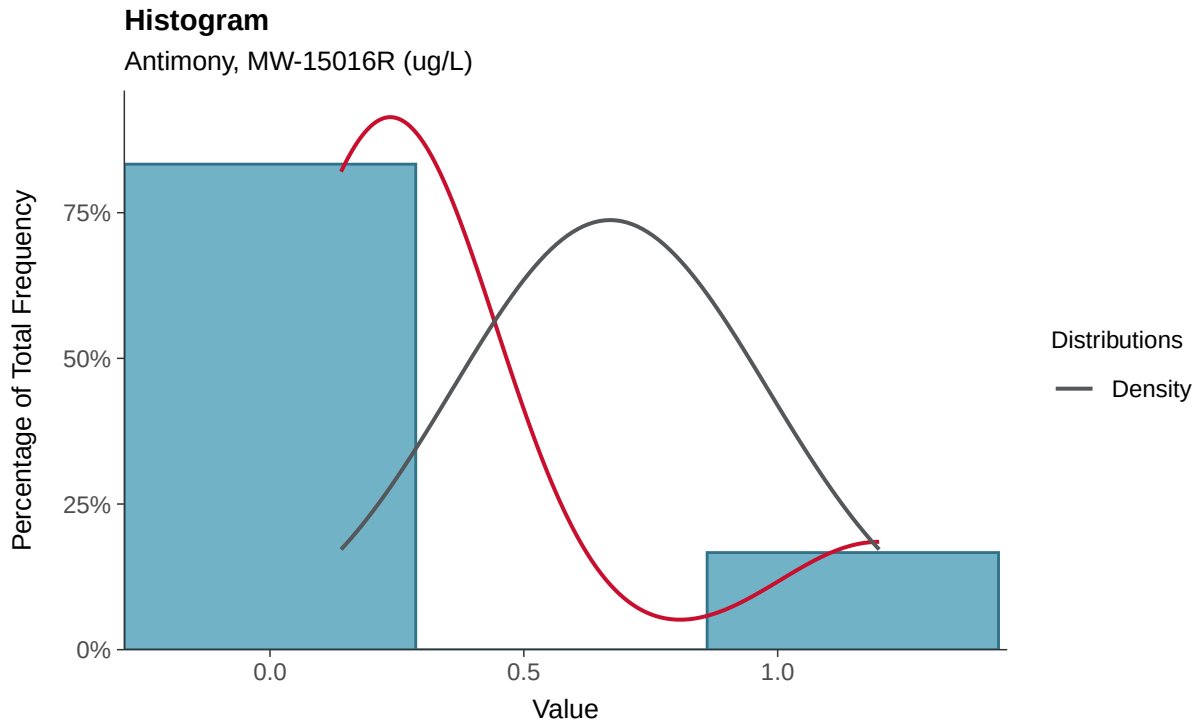
Thallium, MW-15015R (ug/L)



## Appendix IV: Antimony, MW-15016R

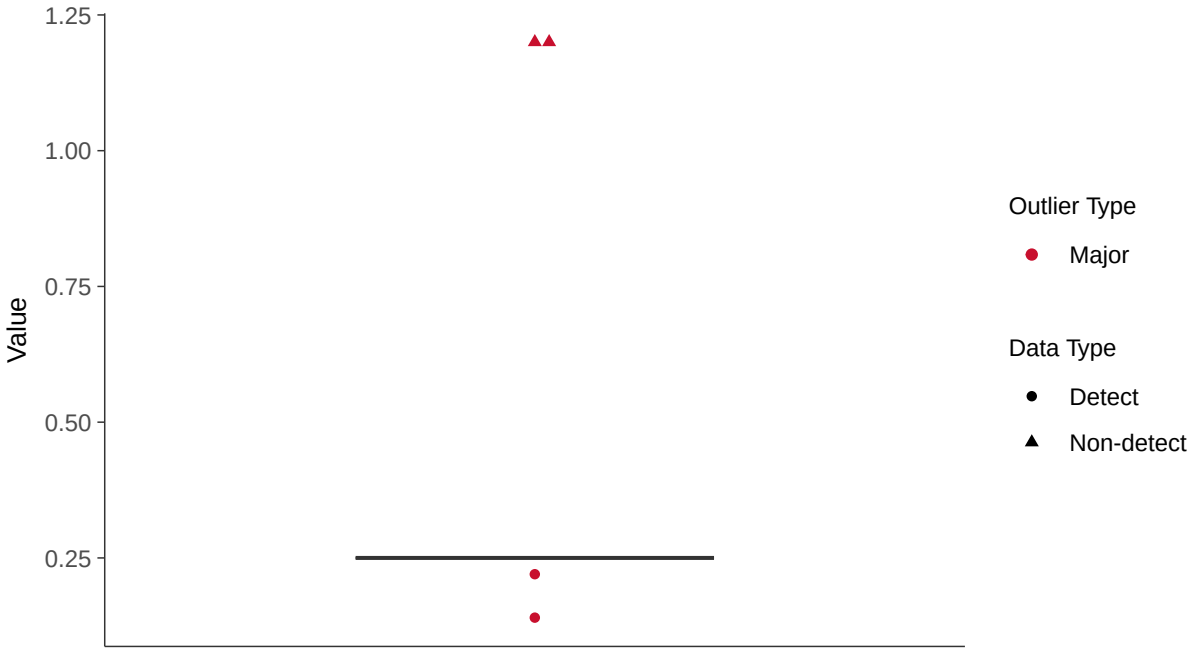
ID: 06_2_101



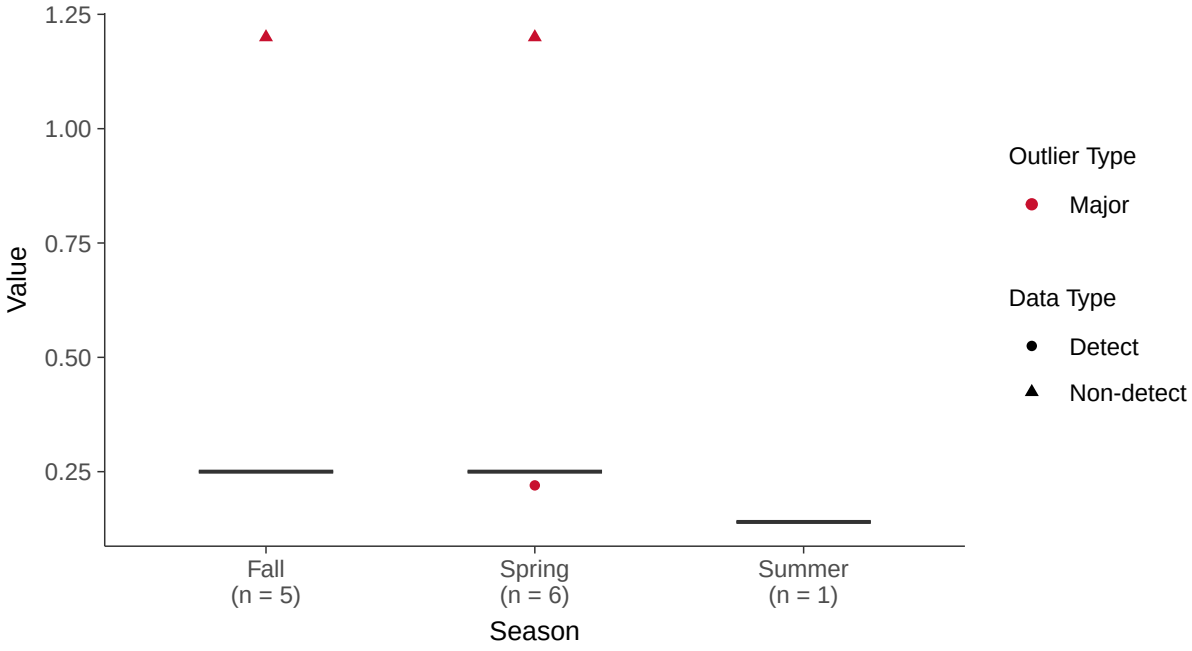
## Boxplot

Antimony, MW-15016R (ug/L)



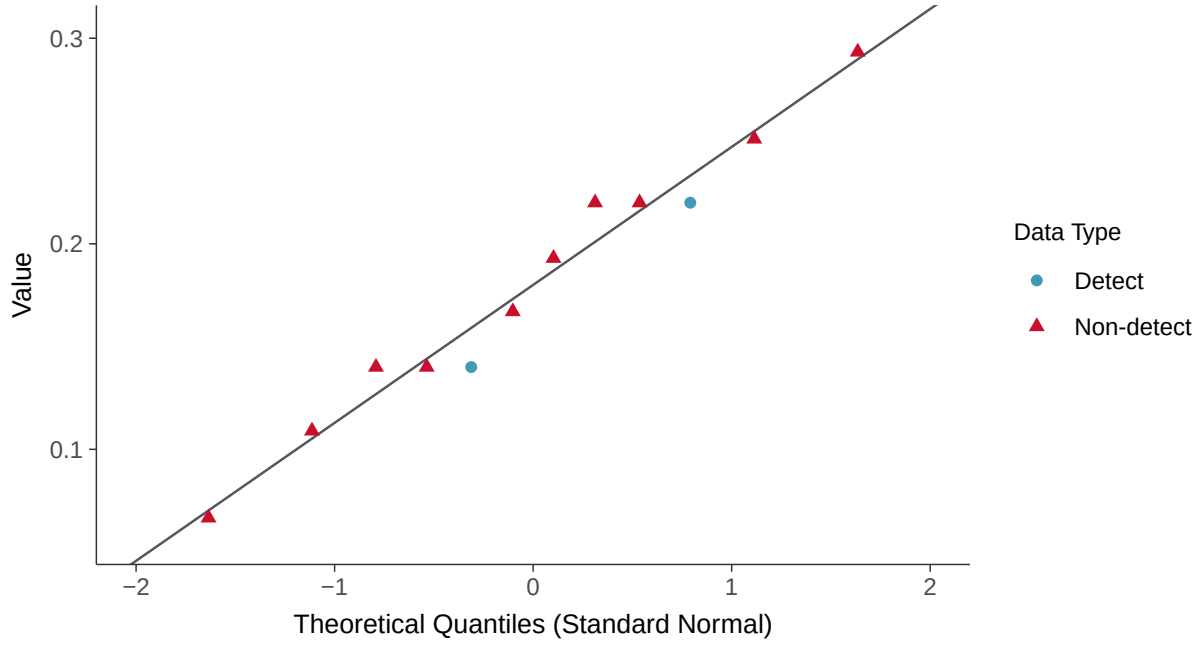

## Boxplot by Season

Antimony, MW-15016R (ug/L)



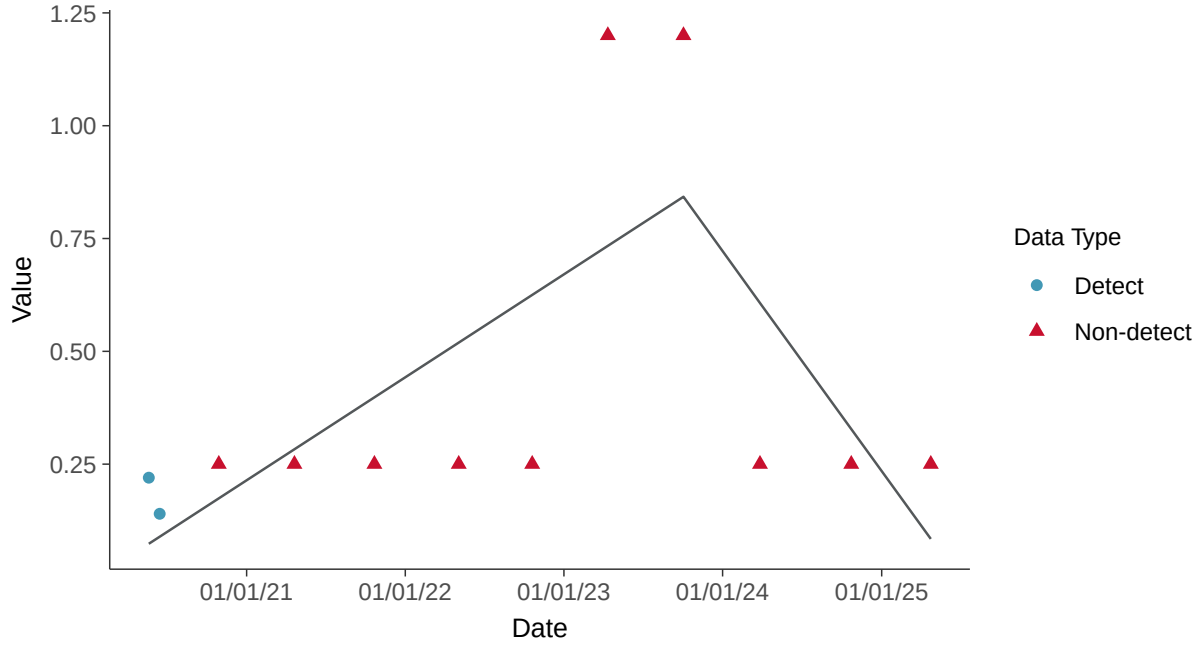
**Normal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-15016R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15016R (ug/L)

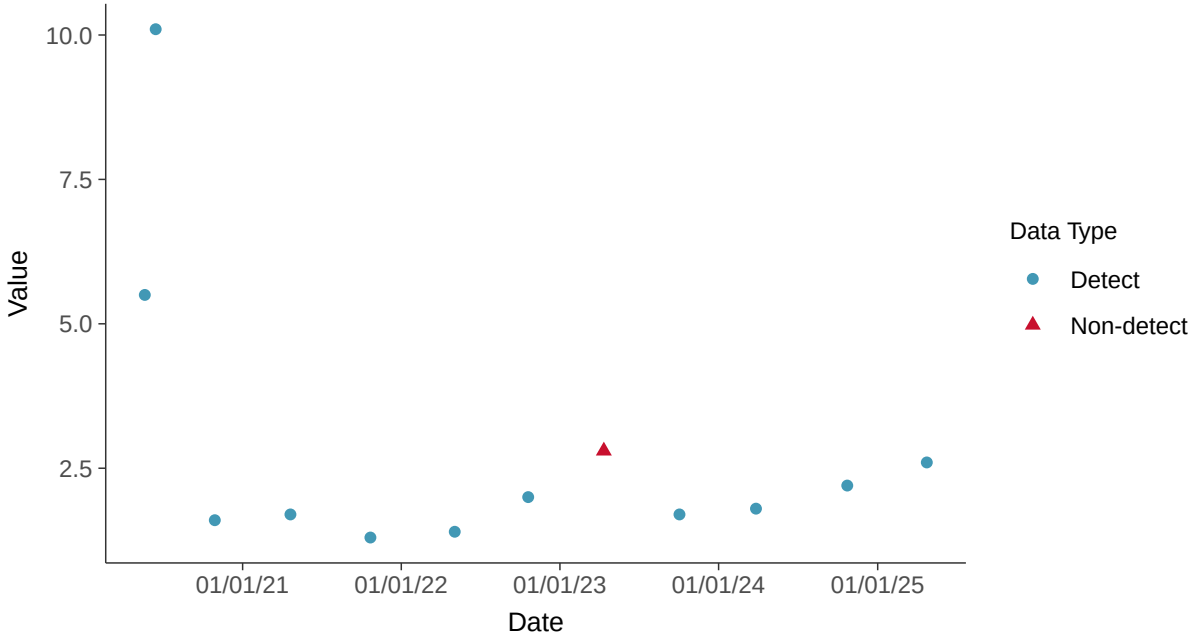


## Appendix IV: Arsenic, MW-15016R

ID: 06_2_102

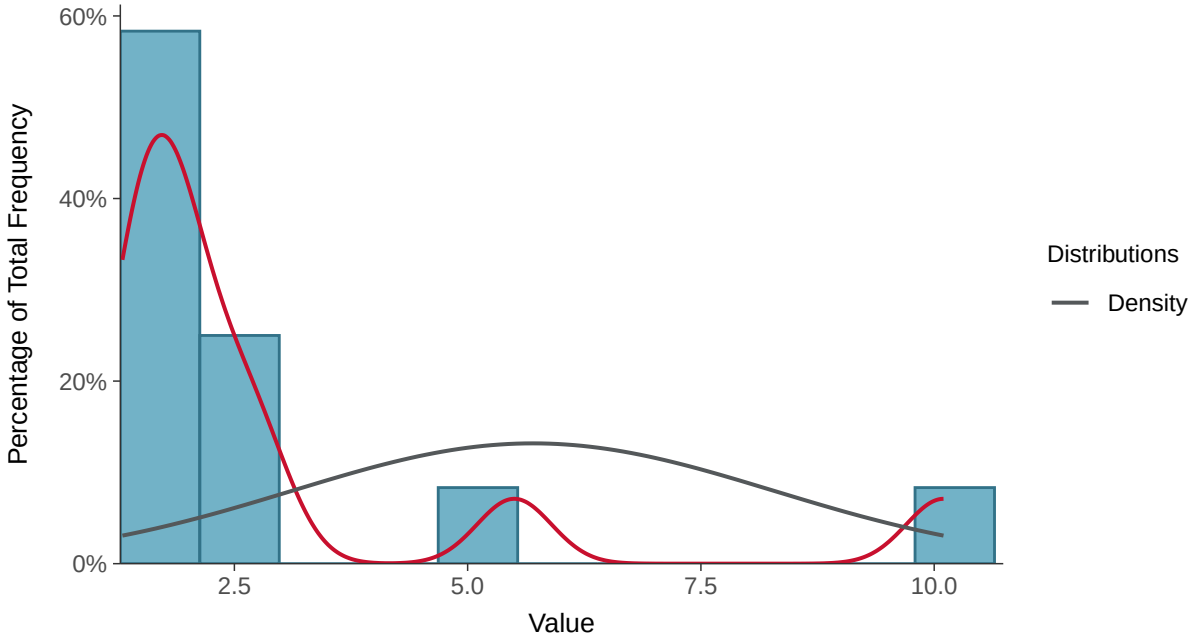
**Scatter Plot**

Arsenic, MW-15016R (ug/L)



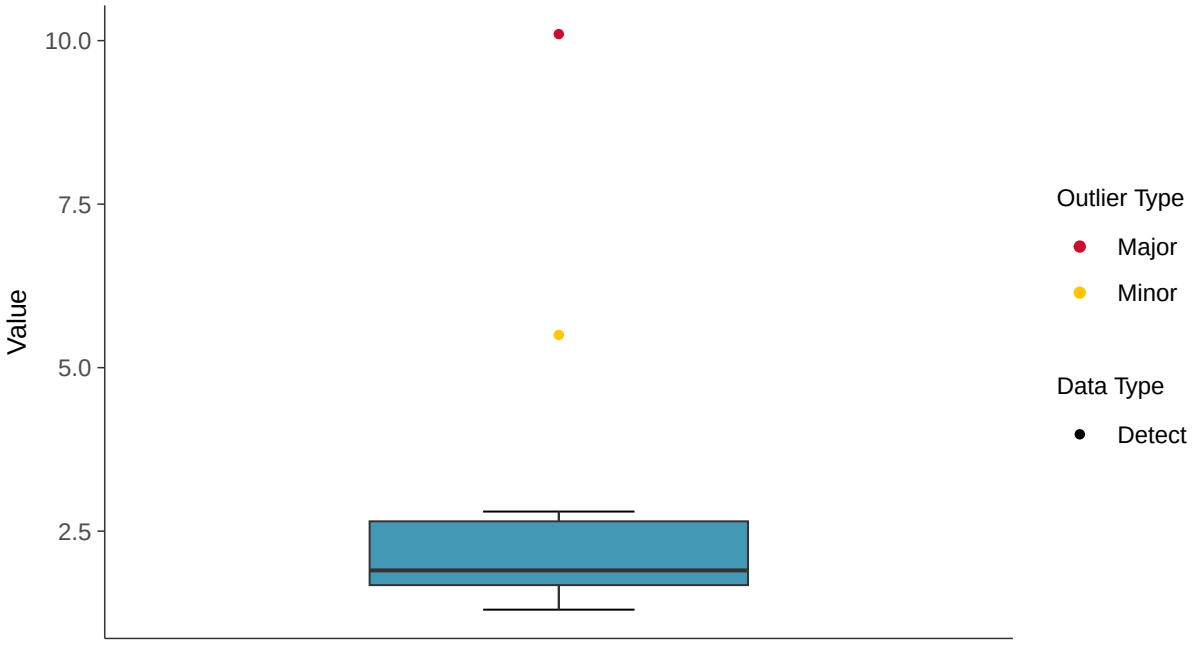

**Histogram**

Arsenic, MW-15016R (ug/L)



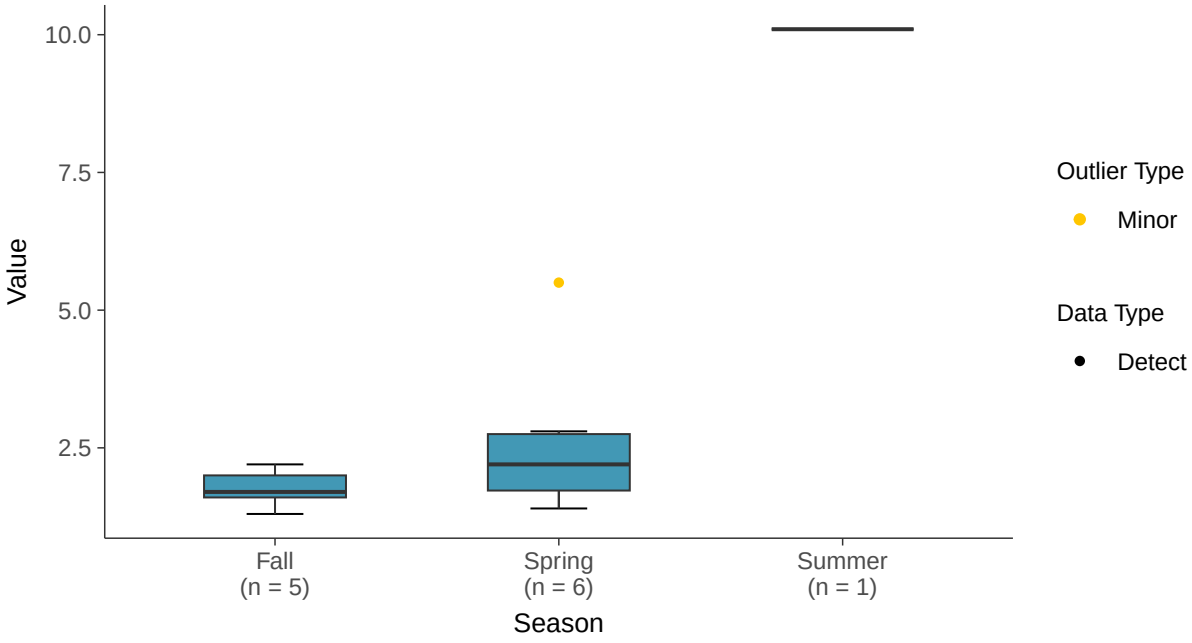
## Boxplot

Arsenic, MW-15016R (ug/L)



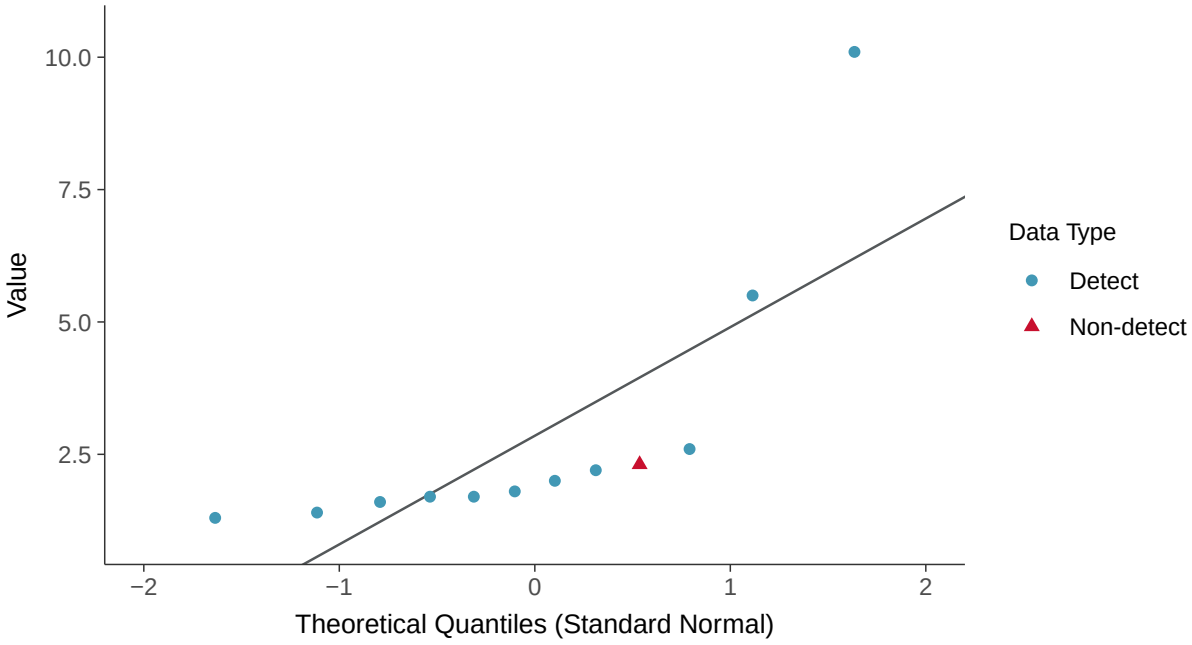

## Boxplot by Season

Arsenic, MW-15016R (ug/L)



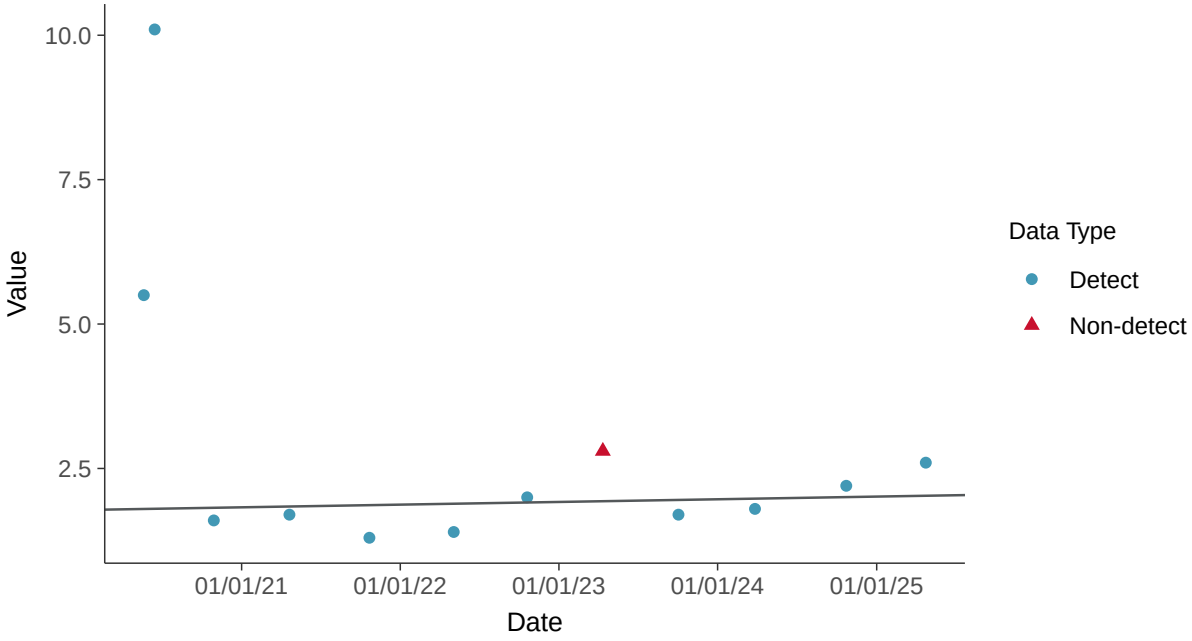
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15016R (ug/L)



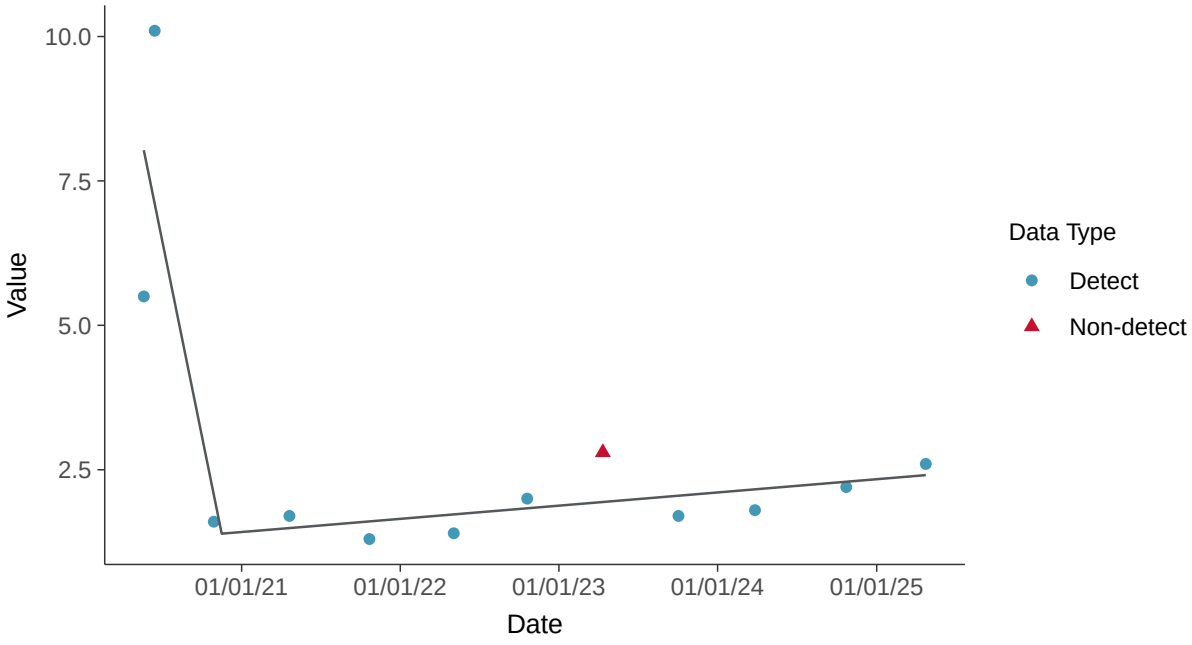

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Arsenic, MW-15016R (ug/L)



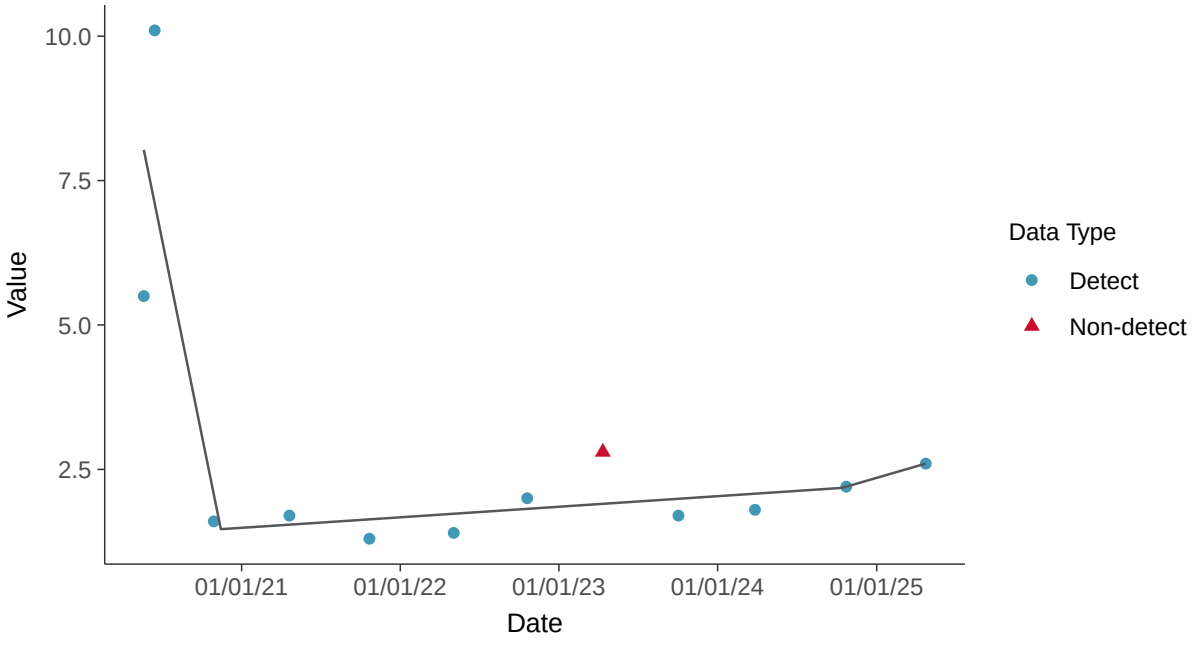
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15016R (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15016R (ug/L)

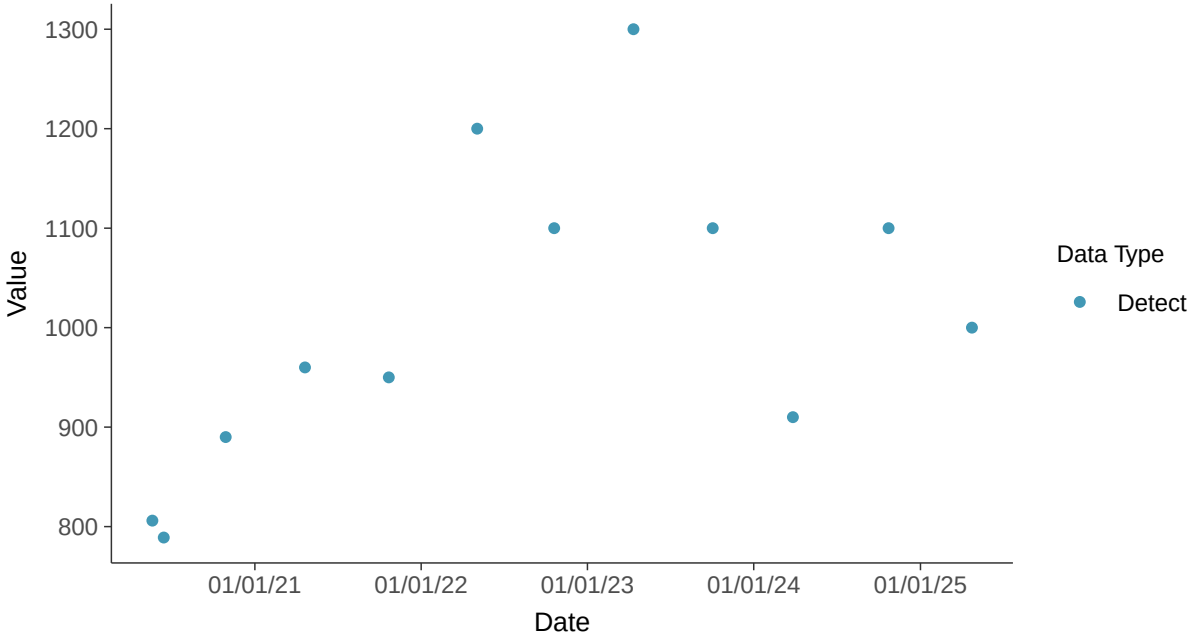


## Appendix IV: Barium, MW-15016R

ID: 06_2_103

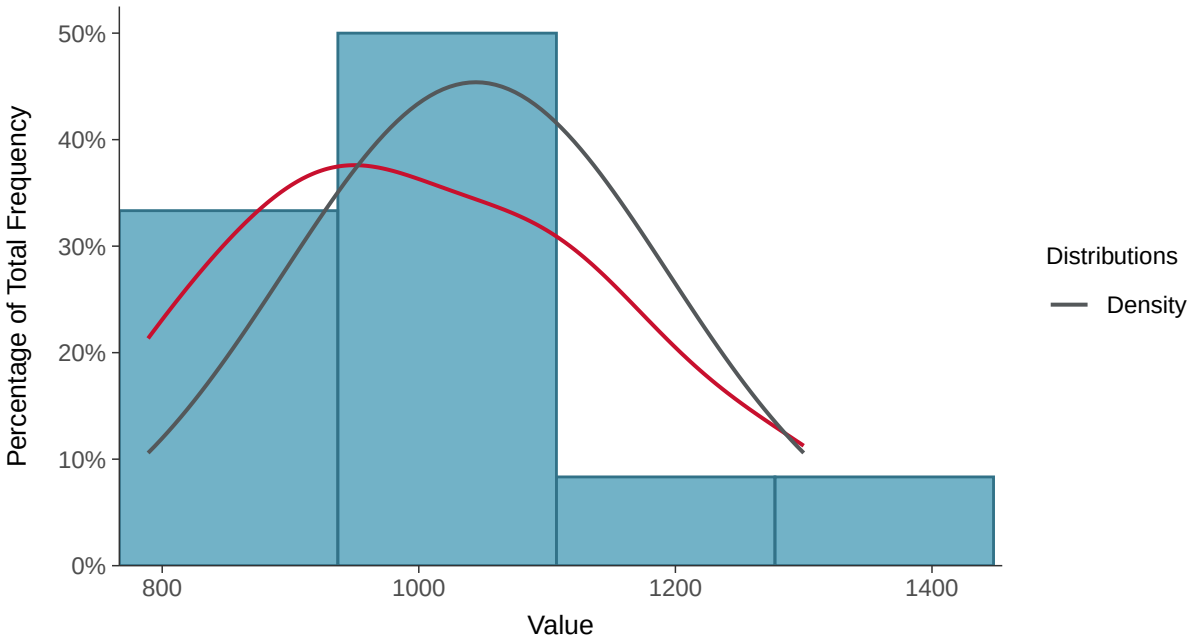
**Scatter Plot**

Barium, MW-15016R (ug/L)



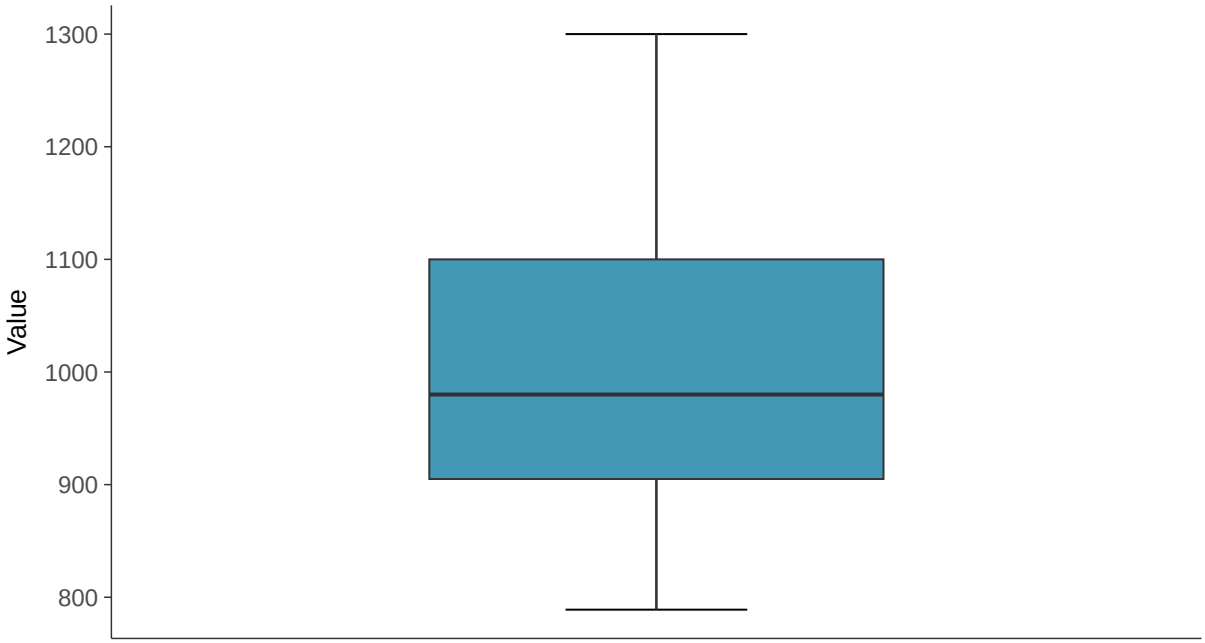

**Histogram**

Barium, MW-15016R (ug/L)



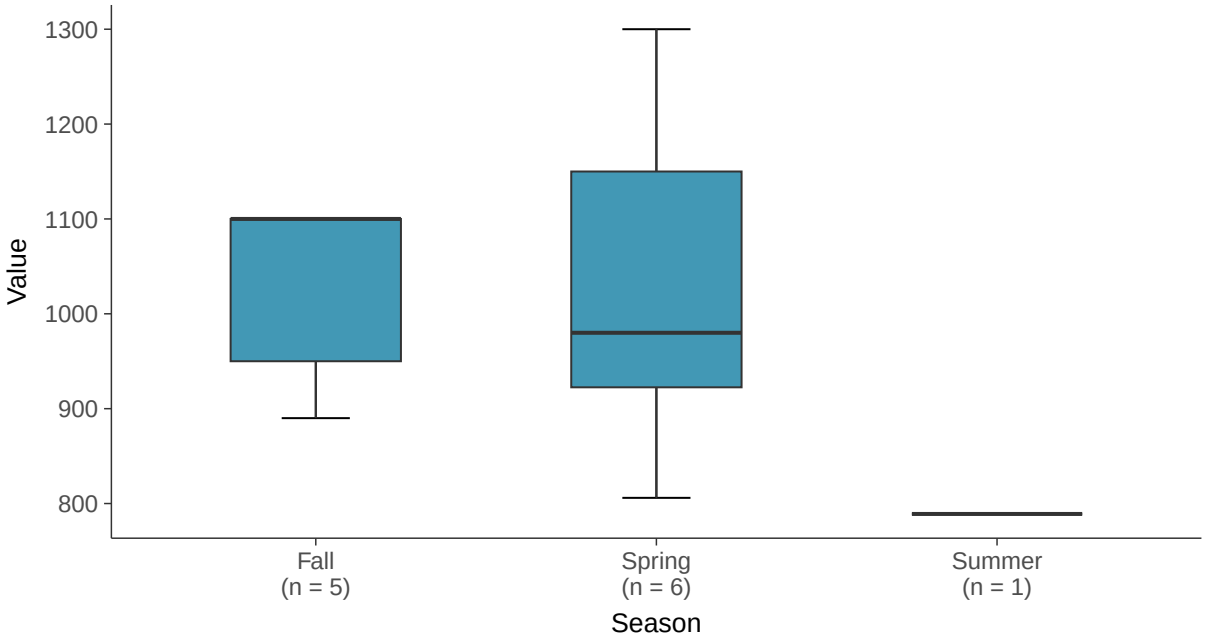
**Boxplot**

Barium, MW-15016R (ug/L)



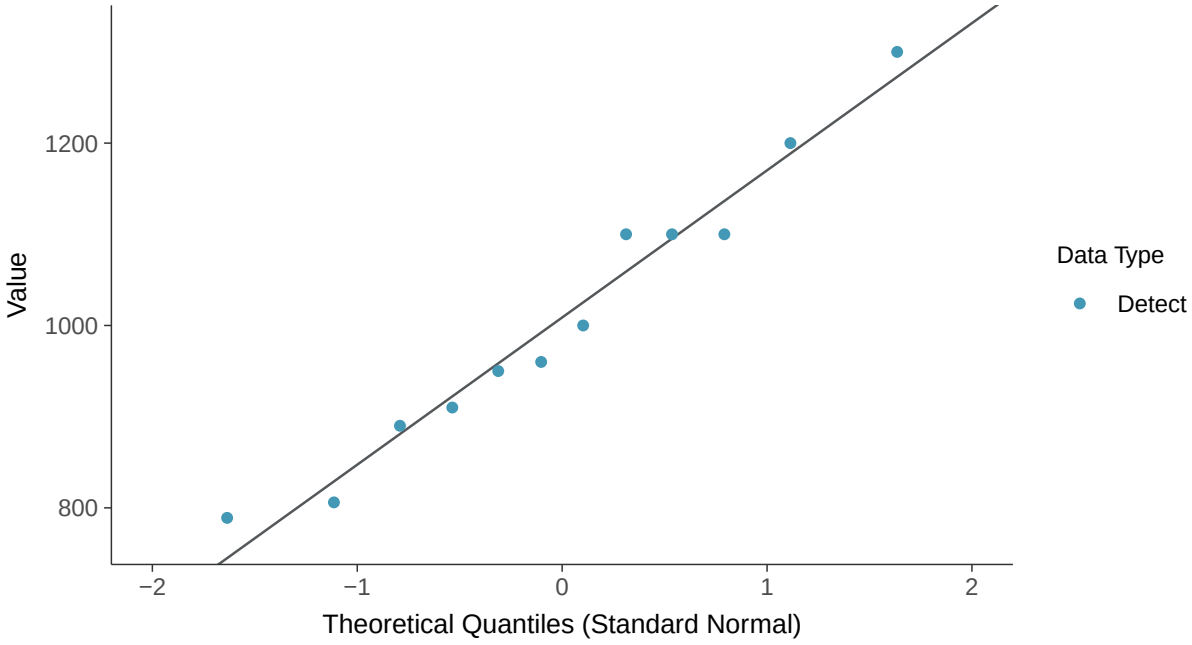

**Boxplot by Season**

Barium, MW-15016R (ug/L)



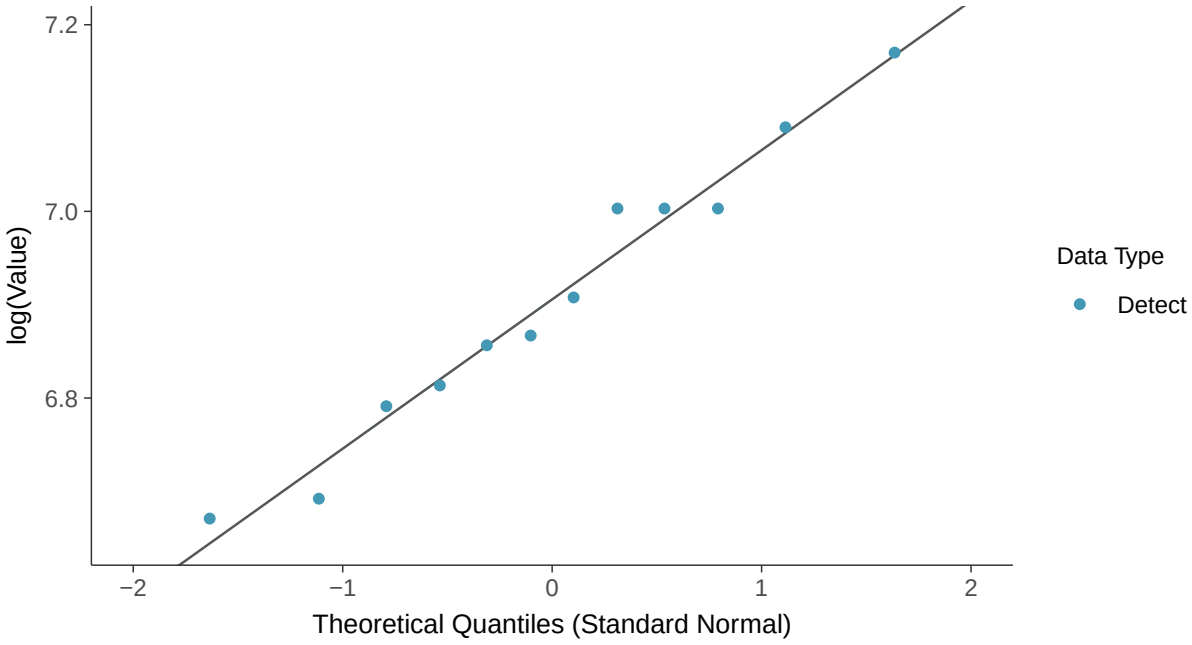
**Normal Q-Q plot**

Barium, MW-15016R (ug/L)



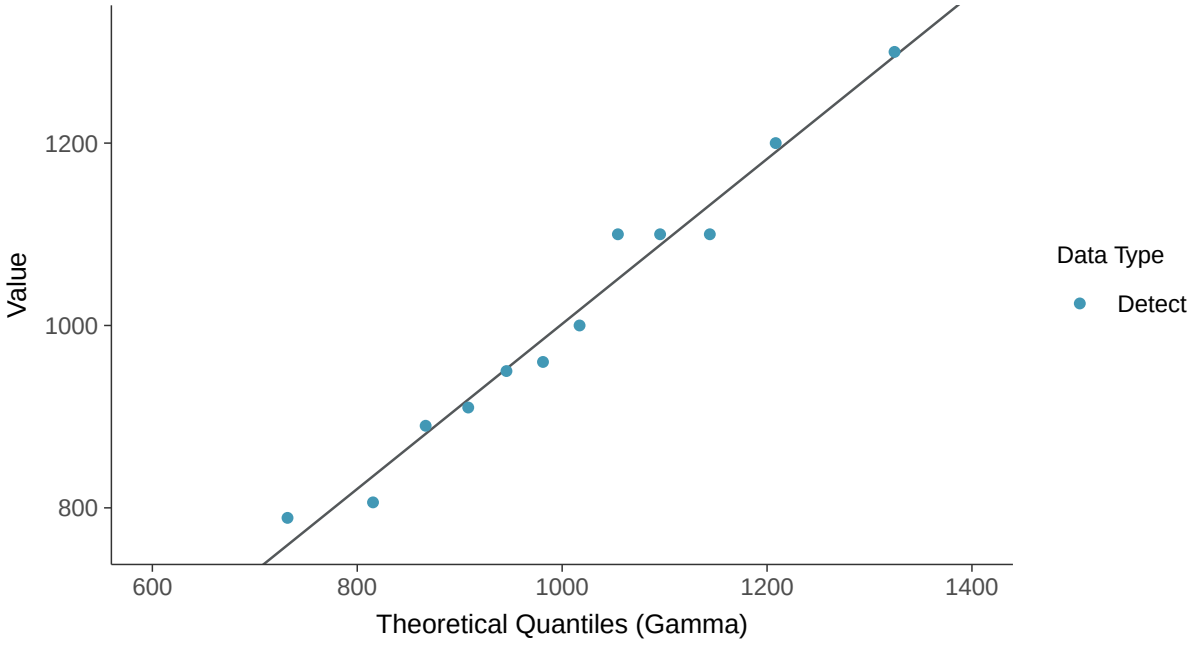

**Lognormal Q-Q plot**

Barium, MW-15016R (ug/L)



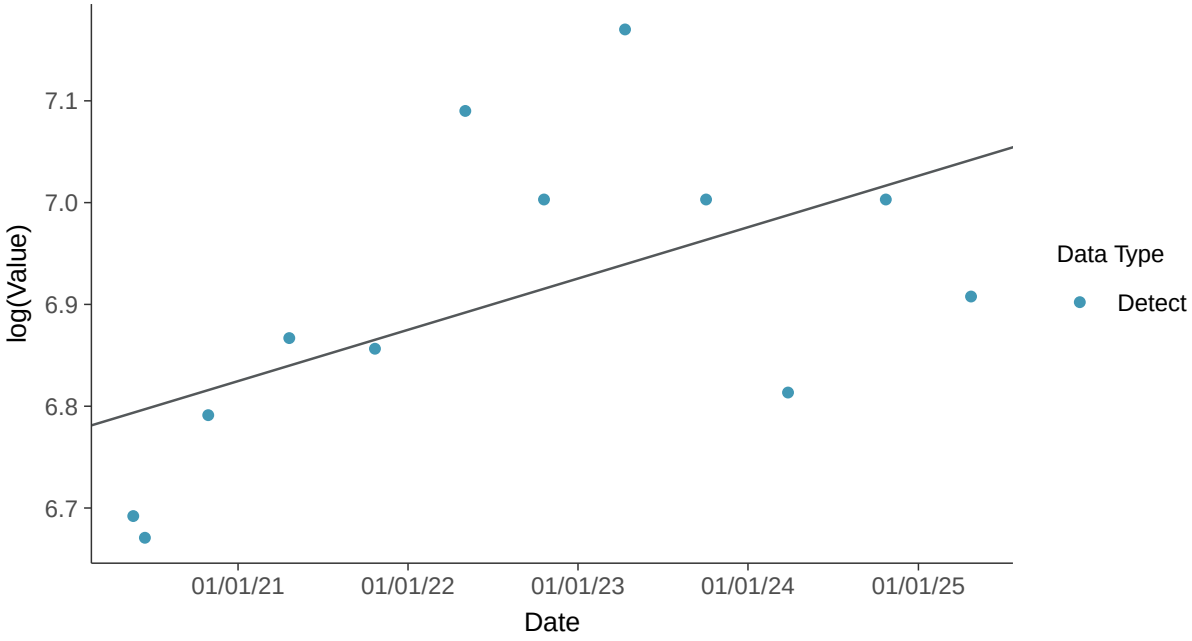
**Gamma Q-Q plot**

Barium, MW-15016R (ug/L)



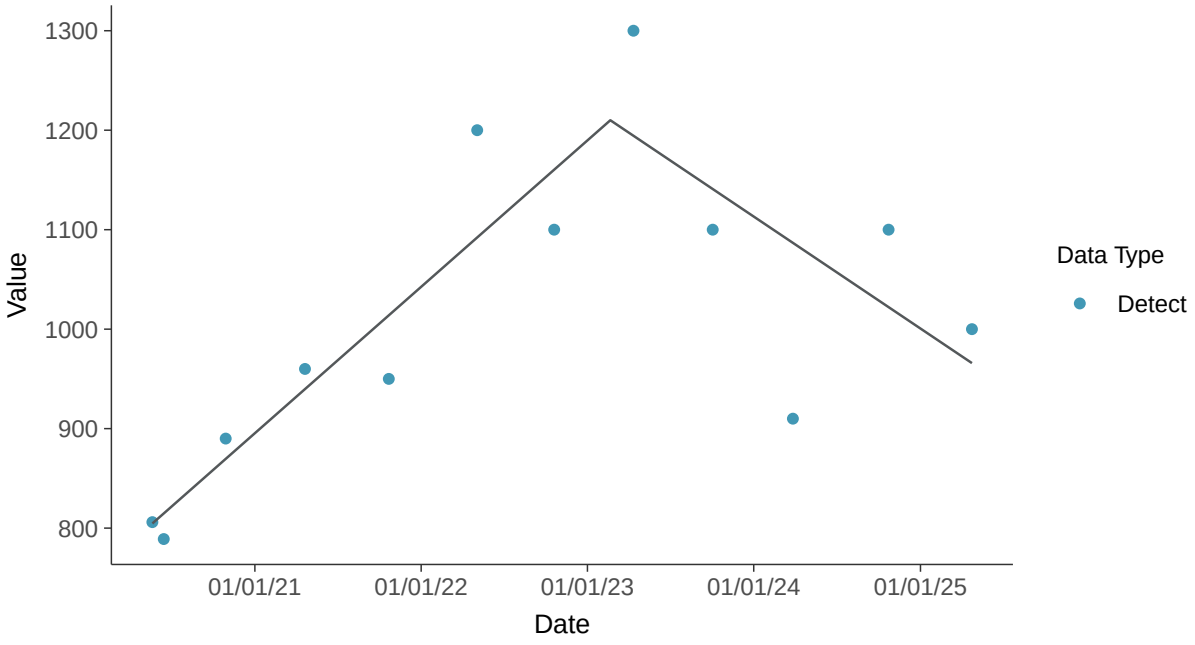

**Trend Regression: Lognormal MLE**

Barium, MW-15016R (ug/L)



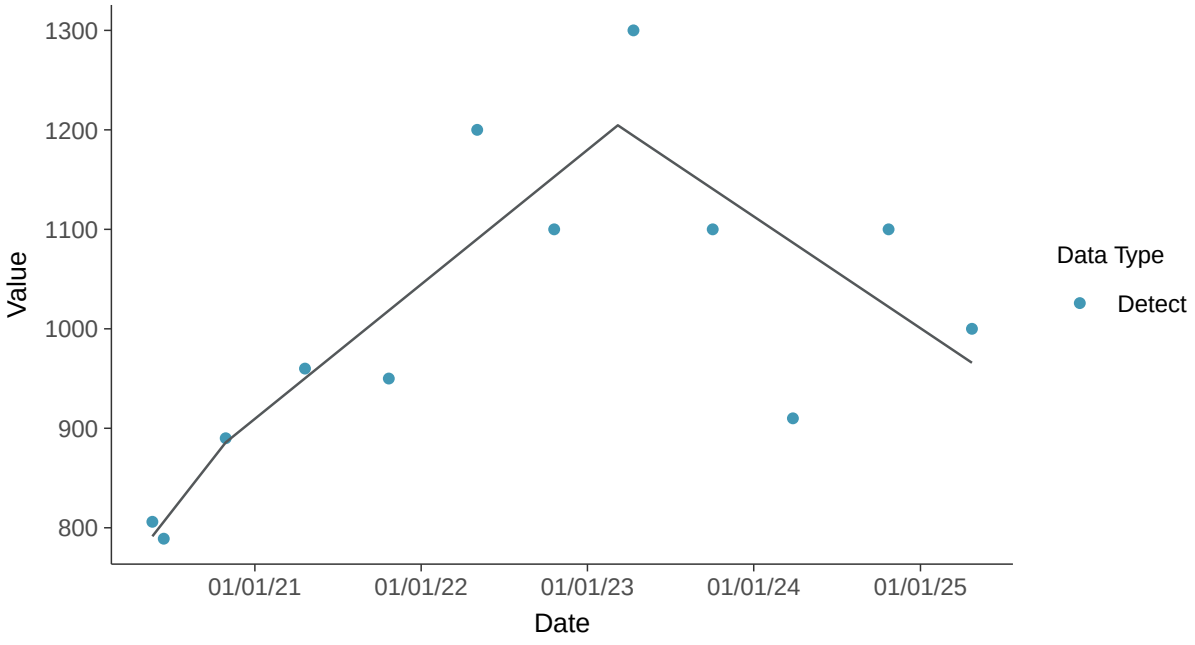
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15016R (ug/L)



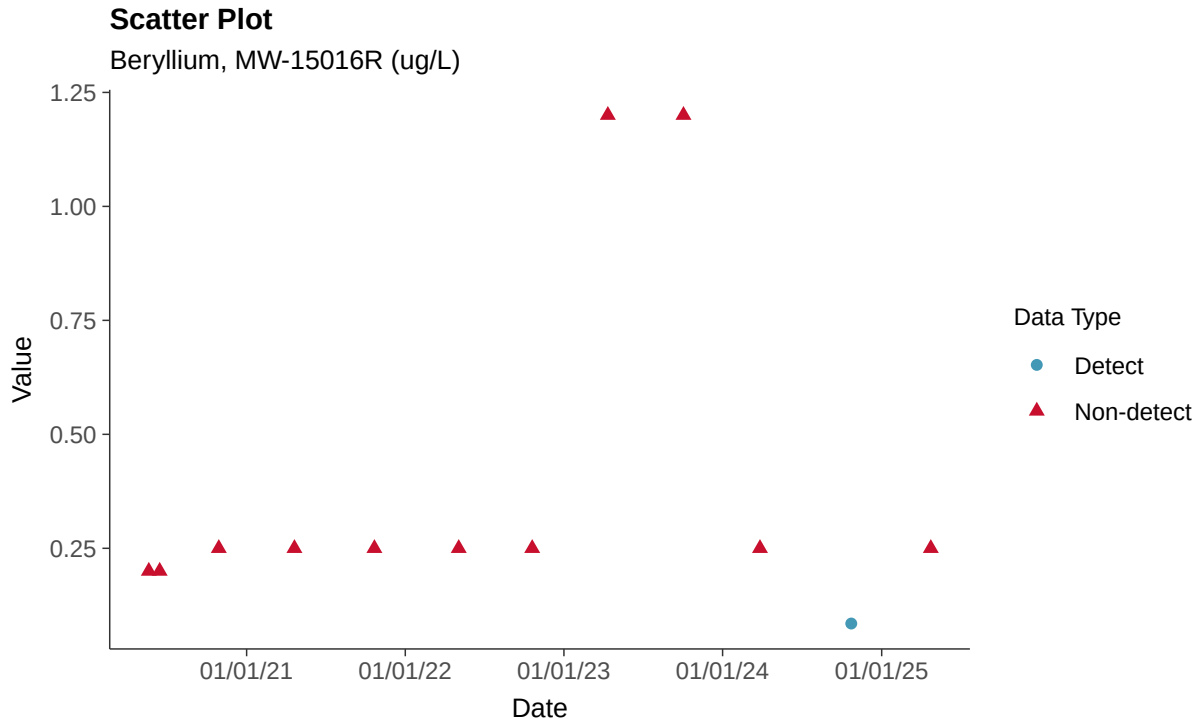

**Trend Regression: Piecewise Linear-Linear-Linear**

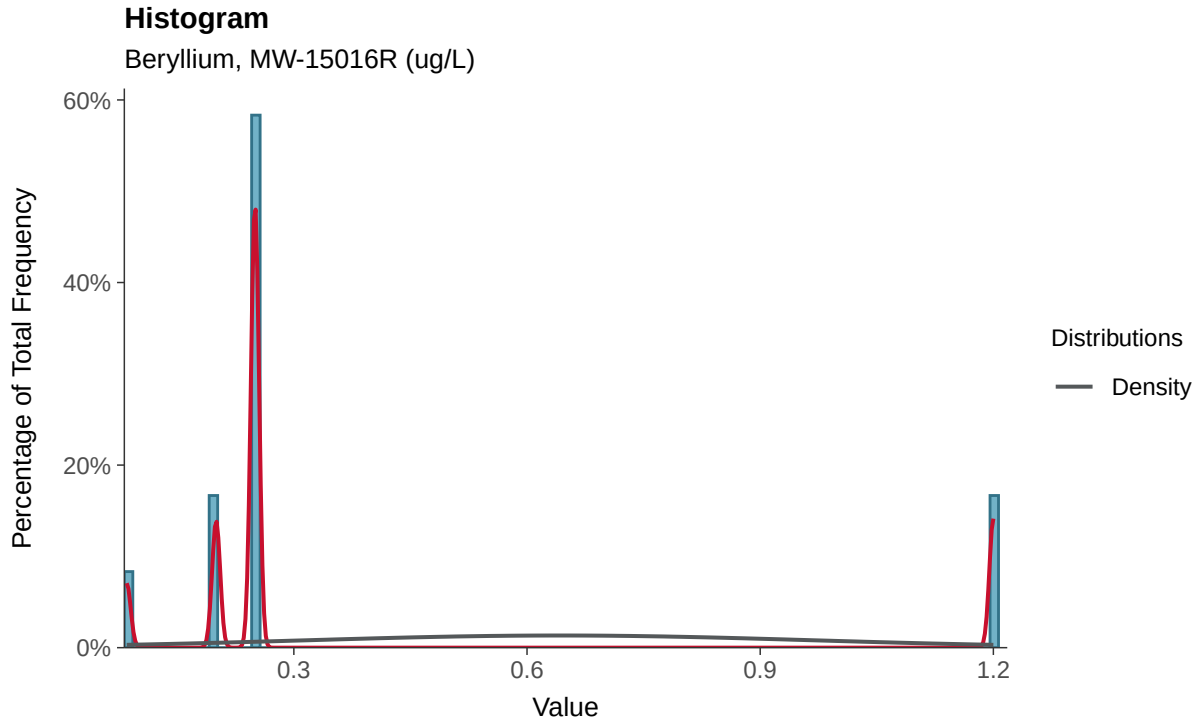
Barium, MW-15016R (ug/L)



## Appendix IV: Beryllium, MW-15016R

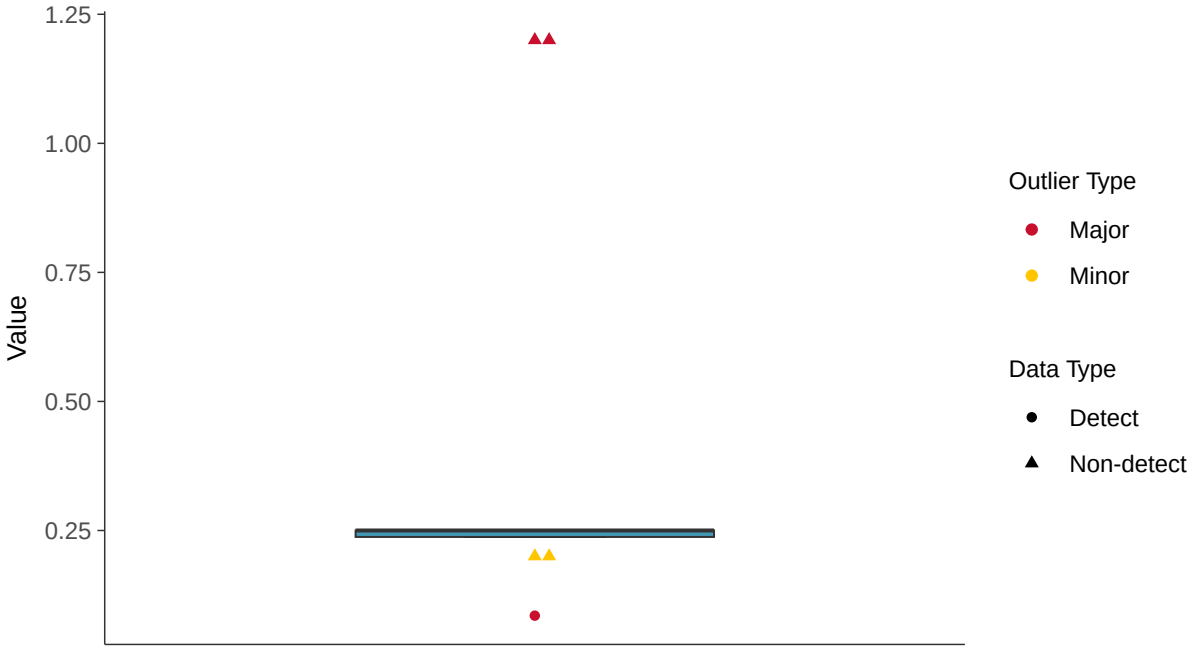
ID: 06_2_104



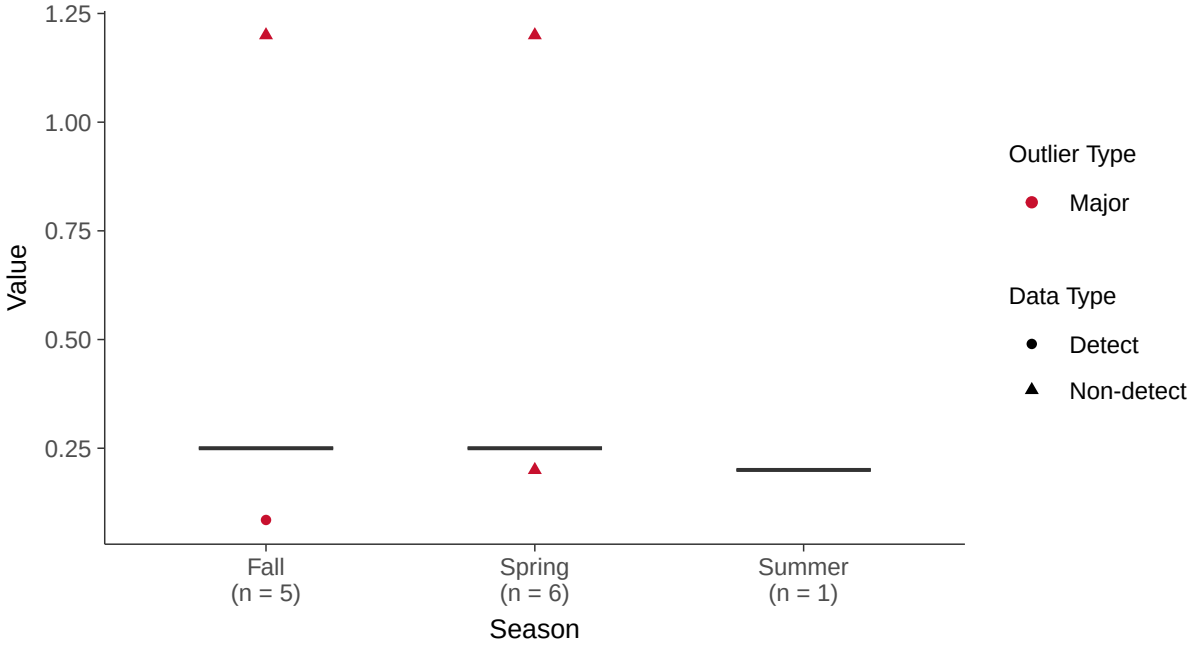
## Boxplot

Beryllium, MW-15016R (ug/L)



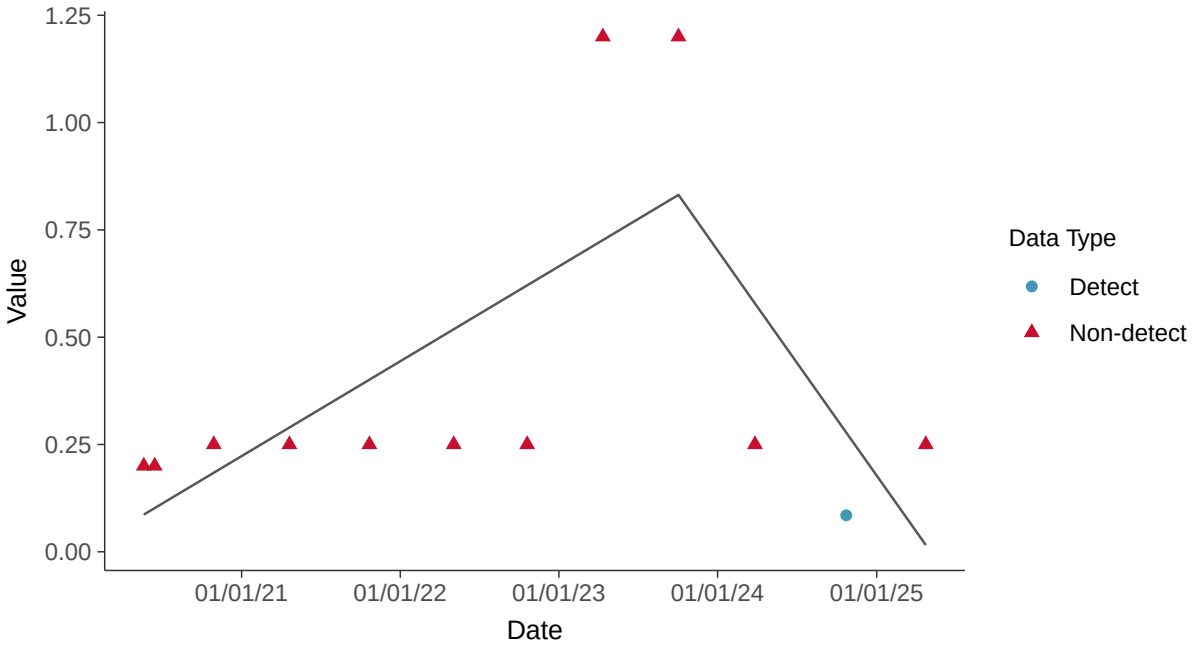

## Boxplot by Season

Beryllium, MW-15016R (ug/L)



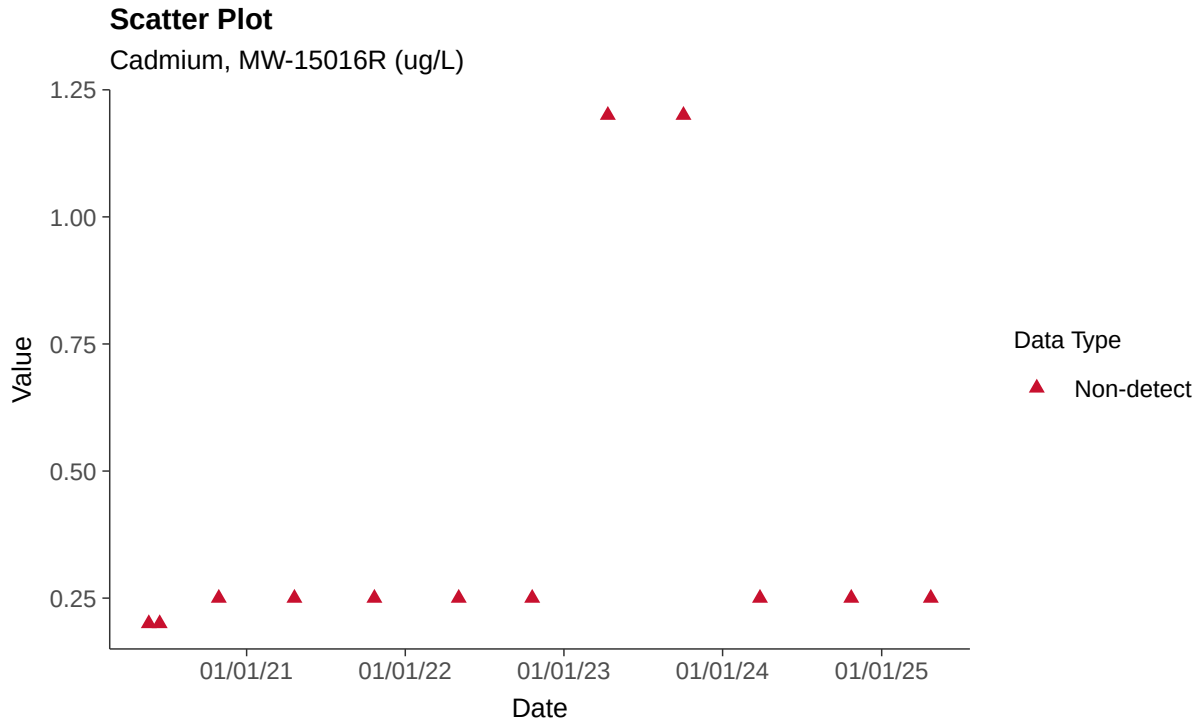
**Trend Regression: Piecewise Linear-Linear**

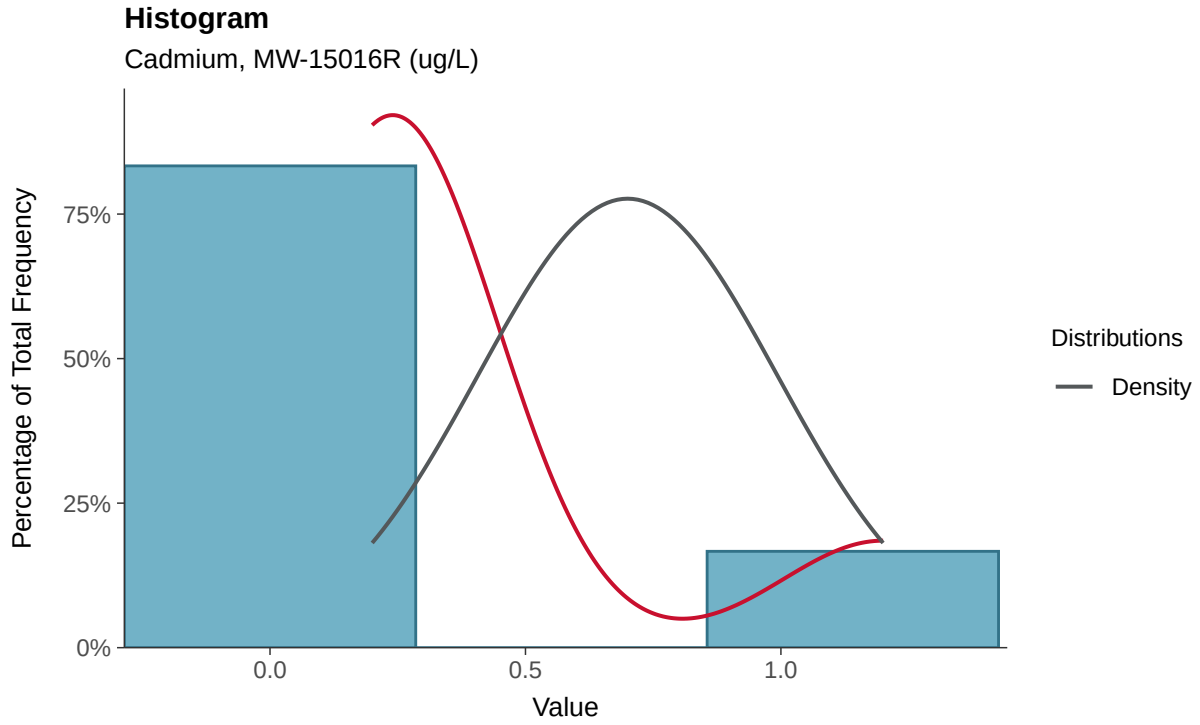
Beryllium, MW-15016R (ug/L)



## Appendix IV: Cadmium, MW-15016R

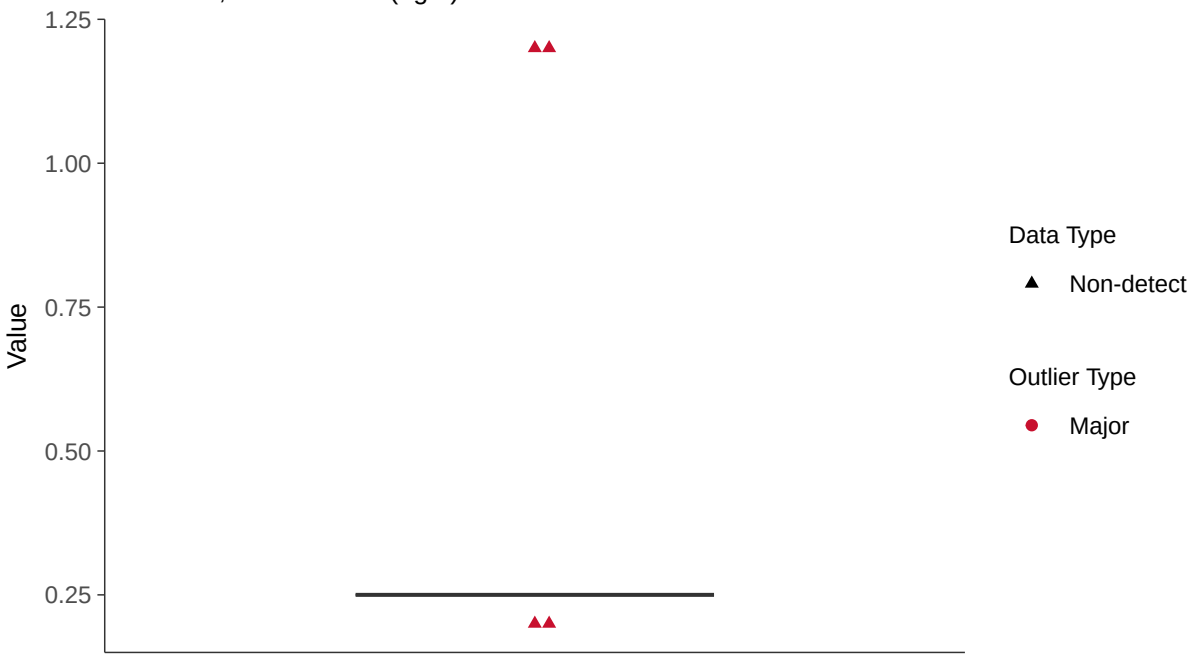
ID: 06_2_106



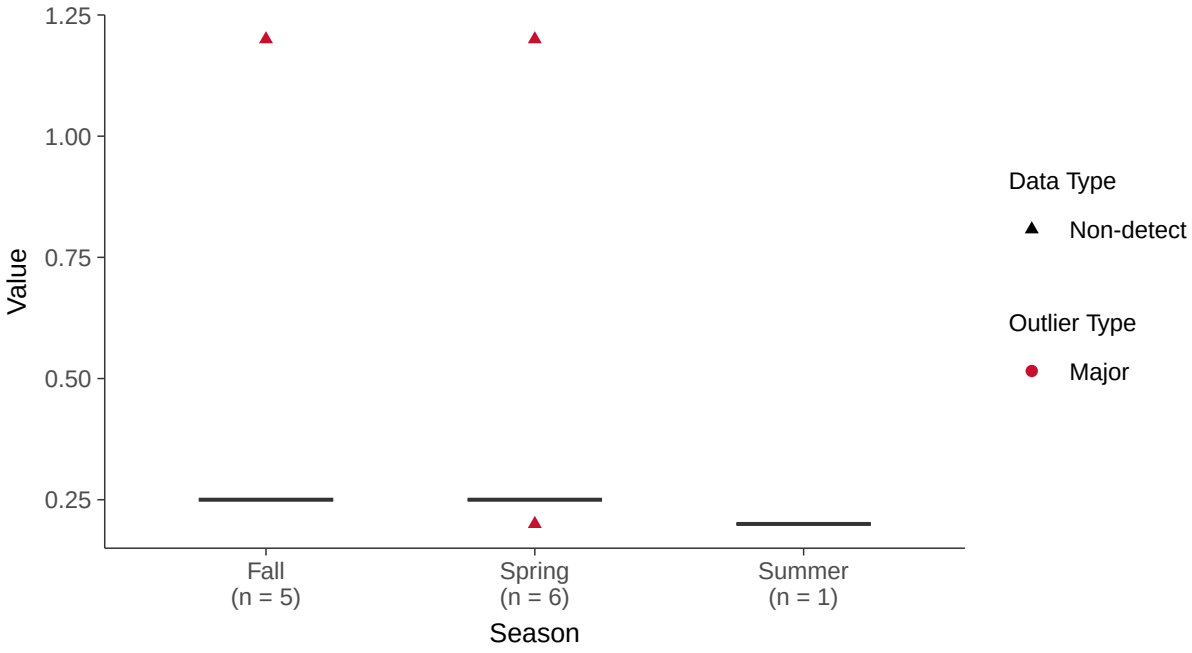
## Boxplot

Cadmium, MW-15016R (ug/L)



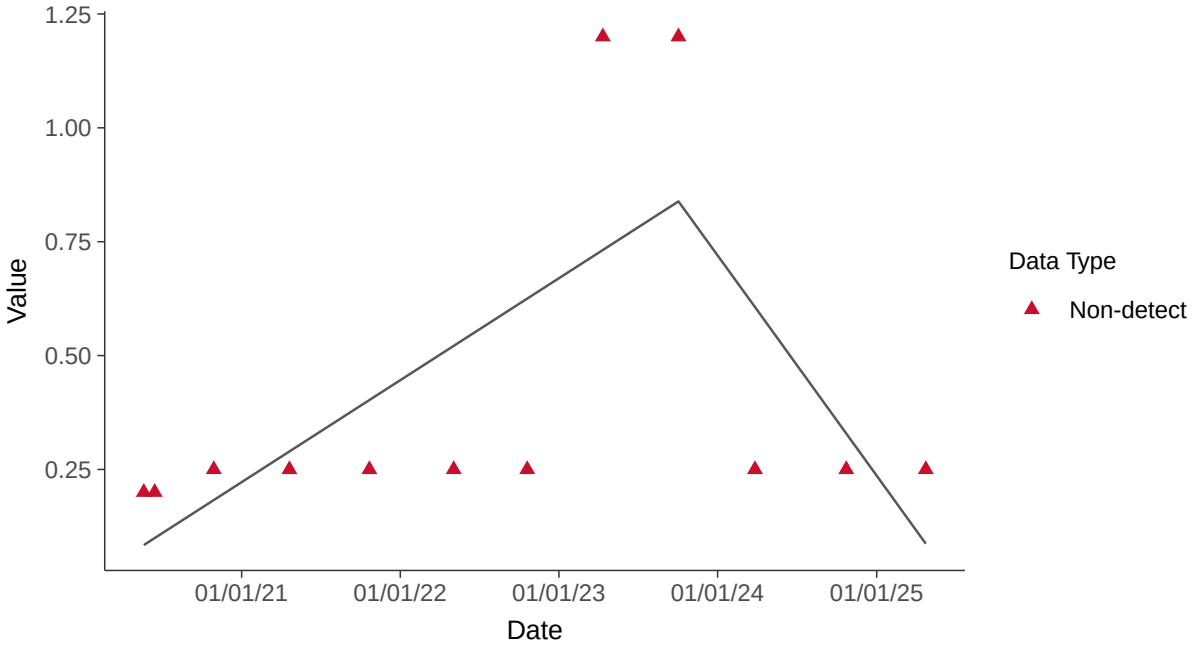

## Boxplot by Season

Cadmium, MW-15016R (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15016R (ug/L)

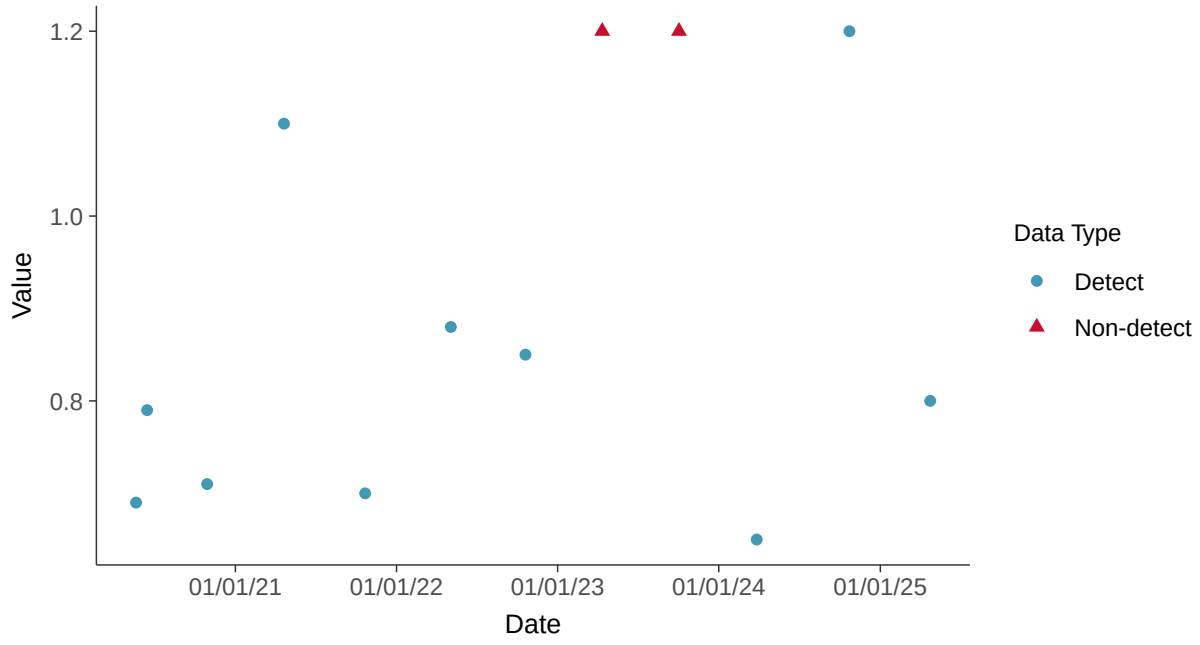


## Appendix IV: Chromium, MW-15016R

ID: 06_2_109

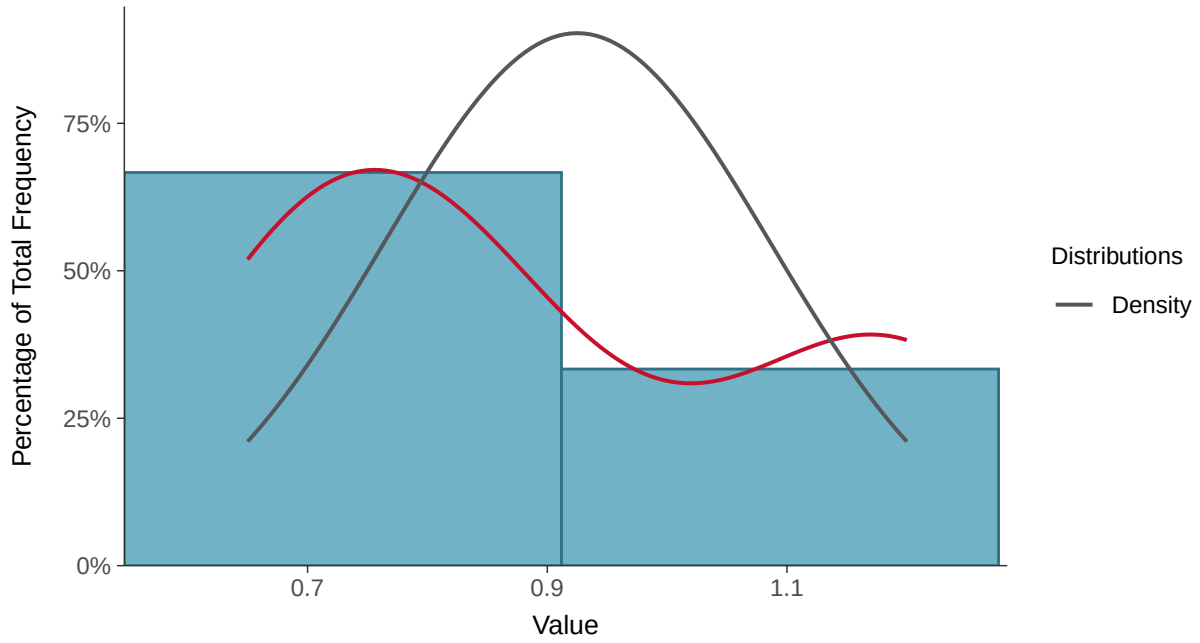
**Scatter Plot**

Chromium, MW-15016R (ug/L)



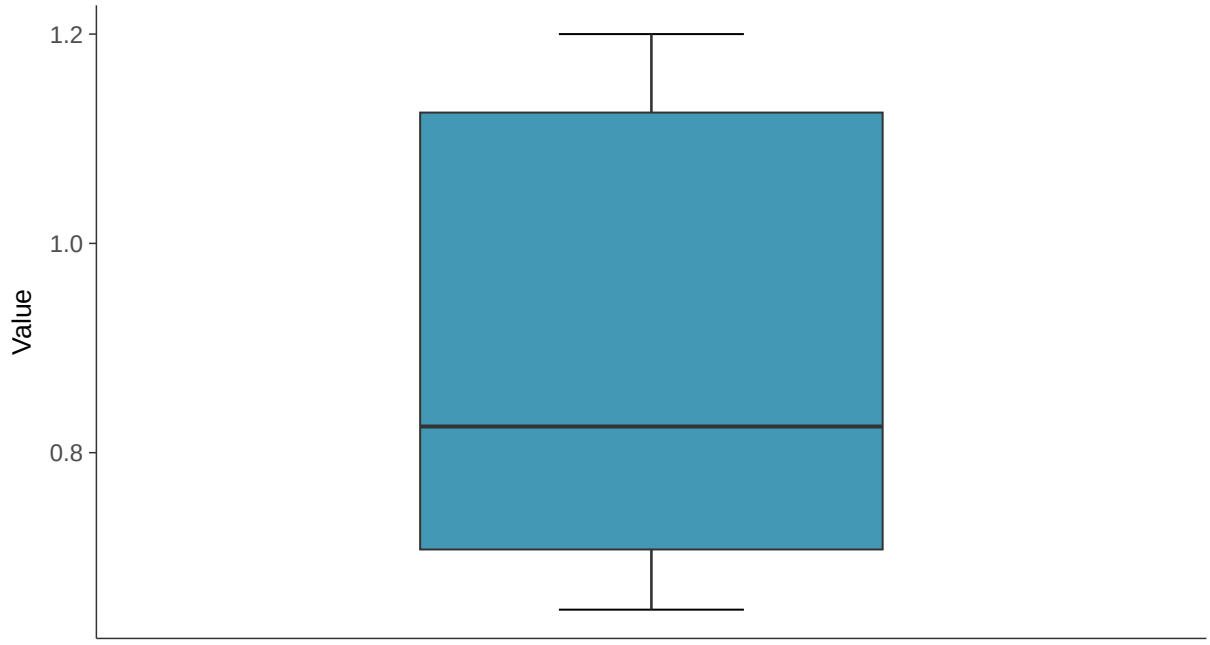

**Histogram**

Chromium, MW-15016R (ug/L)



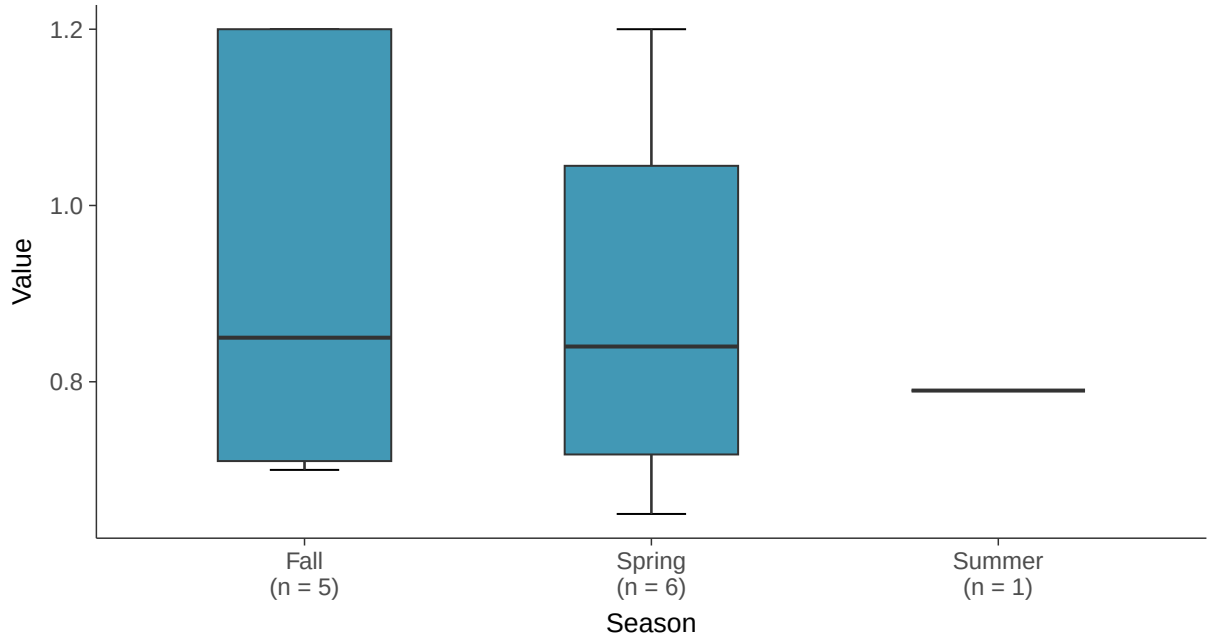
**Boxplot**

Chromium, MW-15016R (ug/L)



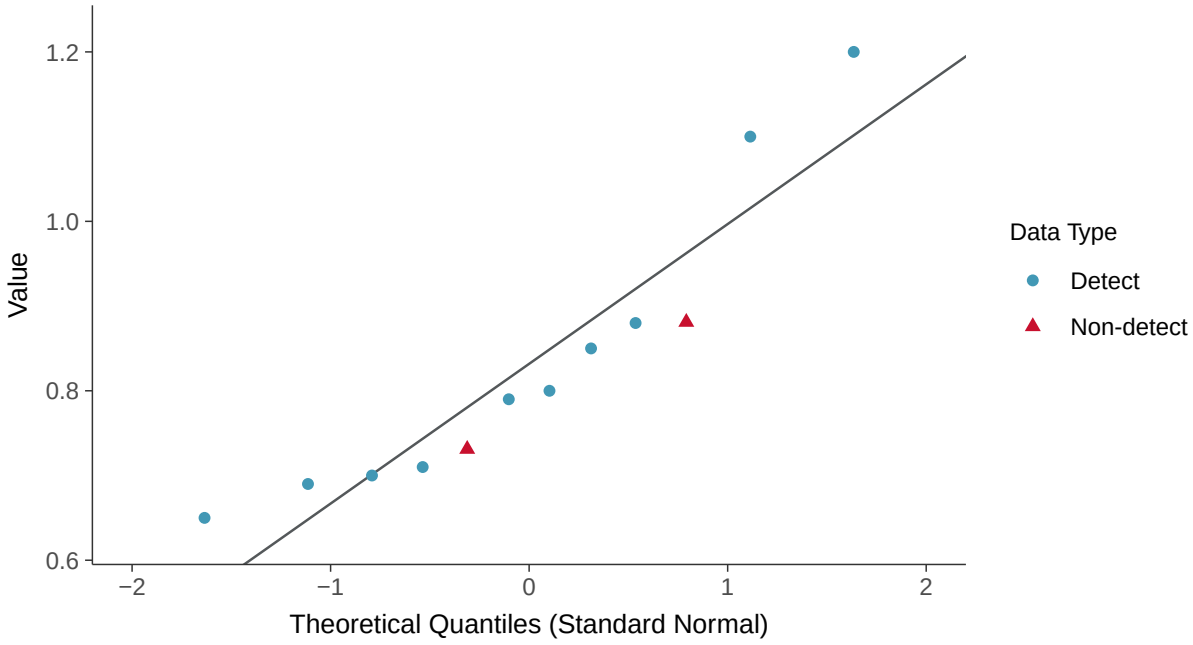

**Boxplot by Season**

Chromium, MW-15016R (ug/L)



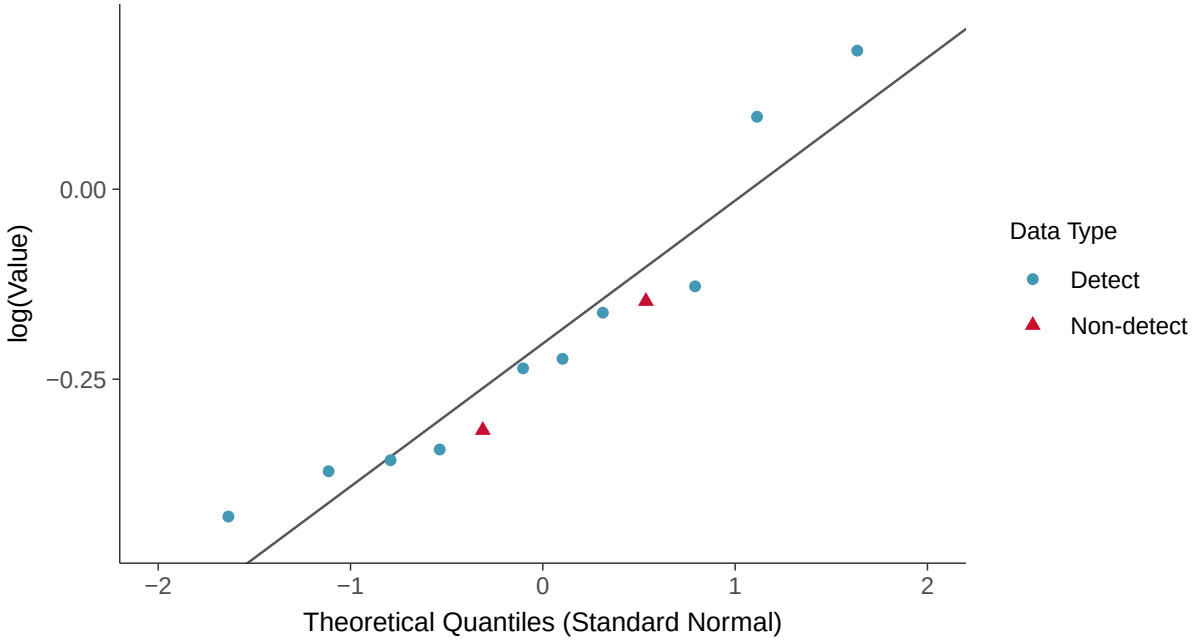
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15016R (ug/L)



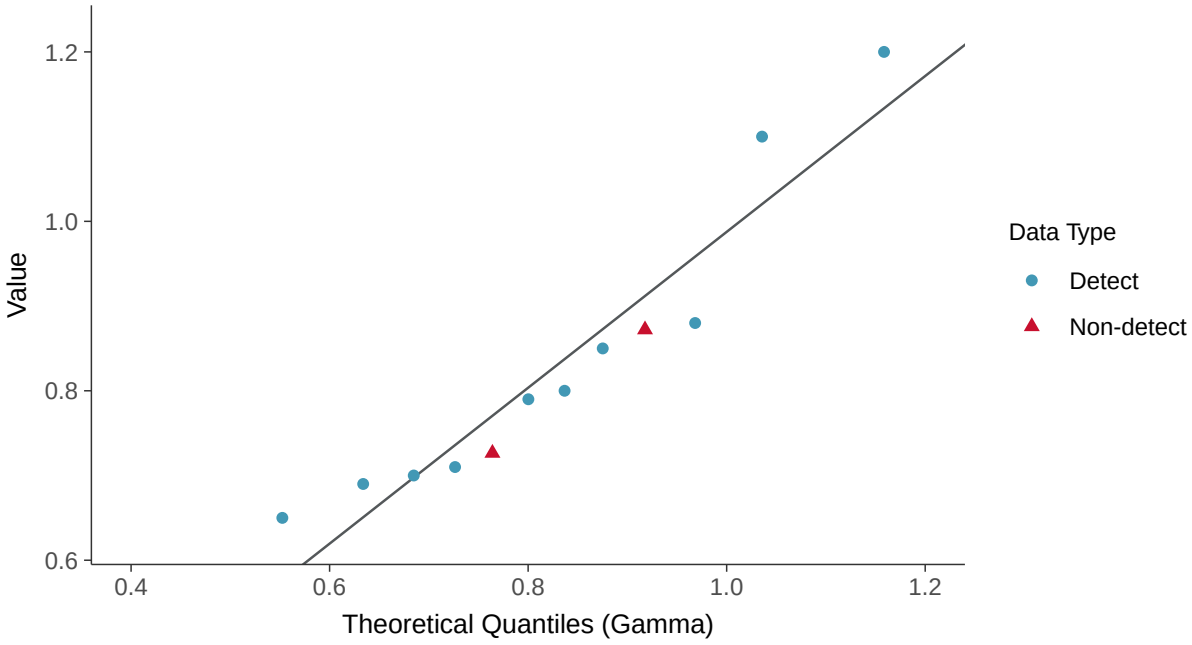

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15016R (ug/L)



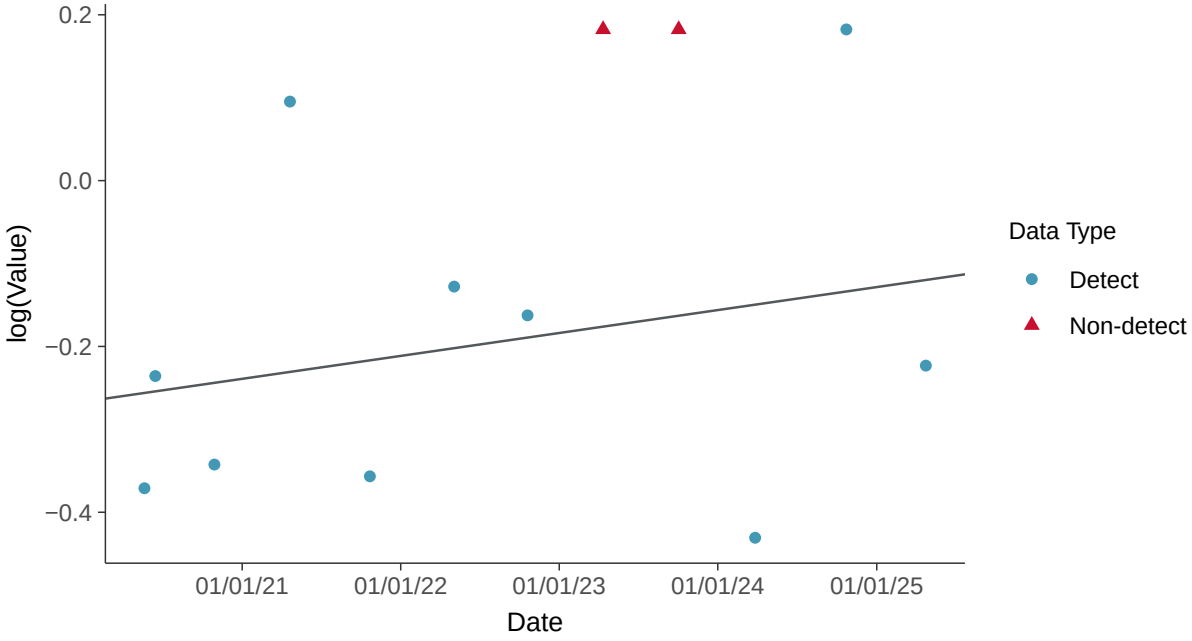
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15016R (ug/L)




**Trend Regression: Lognormal MLE**

Chromium, MW-15016R (ug/L)

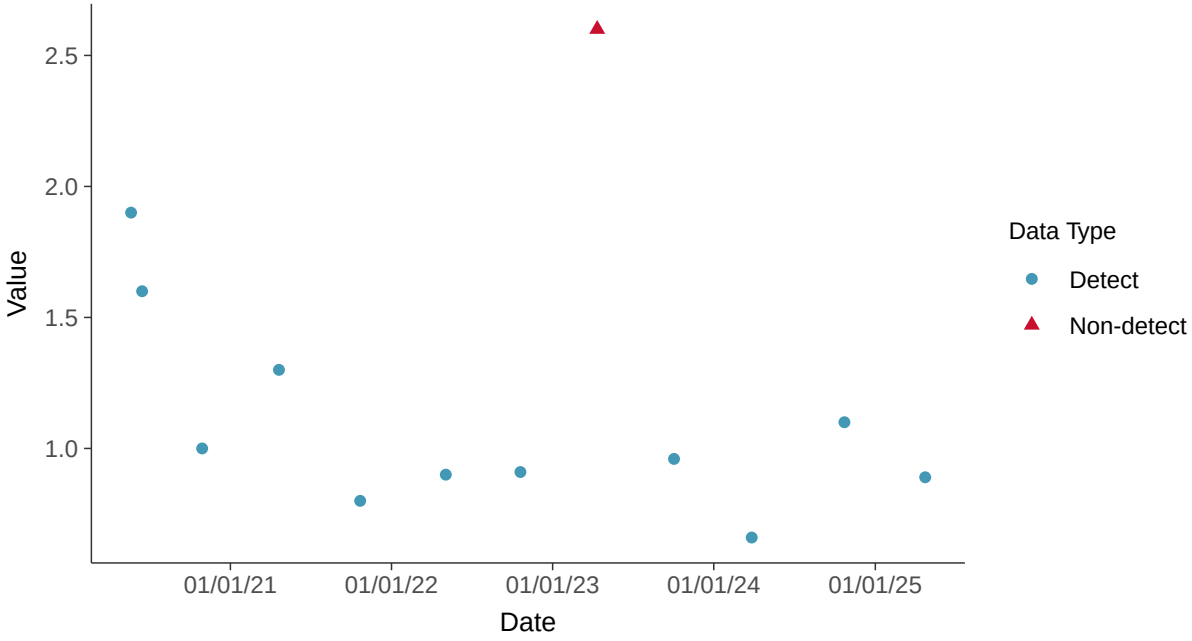


## Appendix IV: Cobalt, MW-15016R

ID: 06_2_110

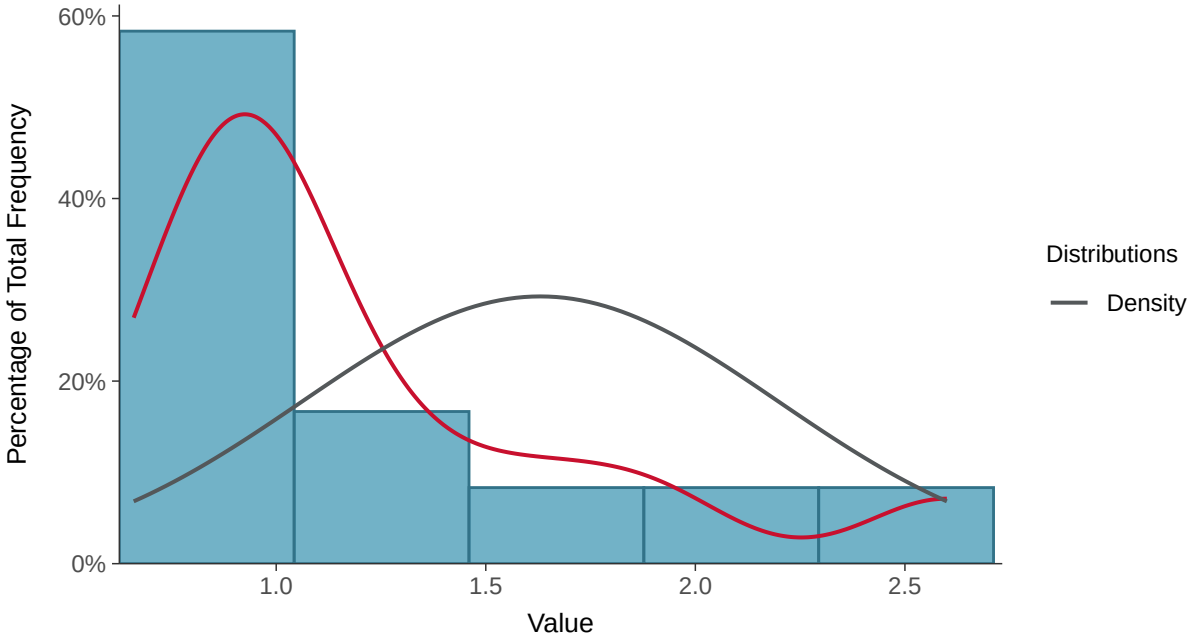
**Scatter Plot**

Cobalt, MW-15016R (ug/L)



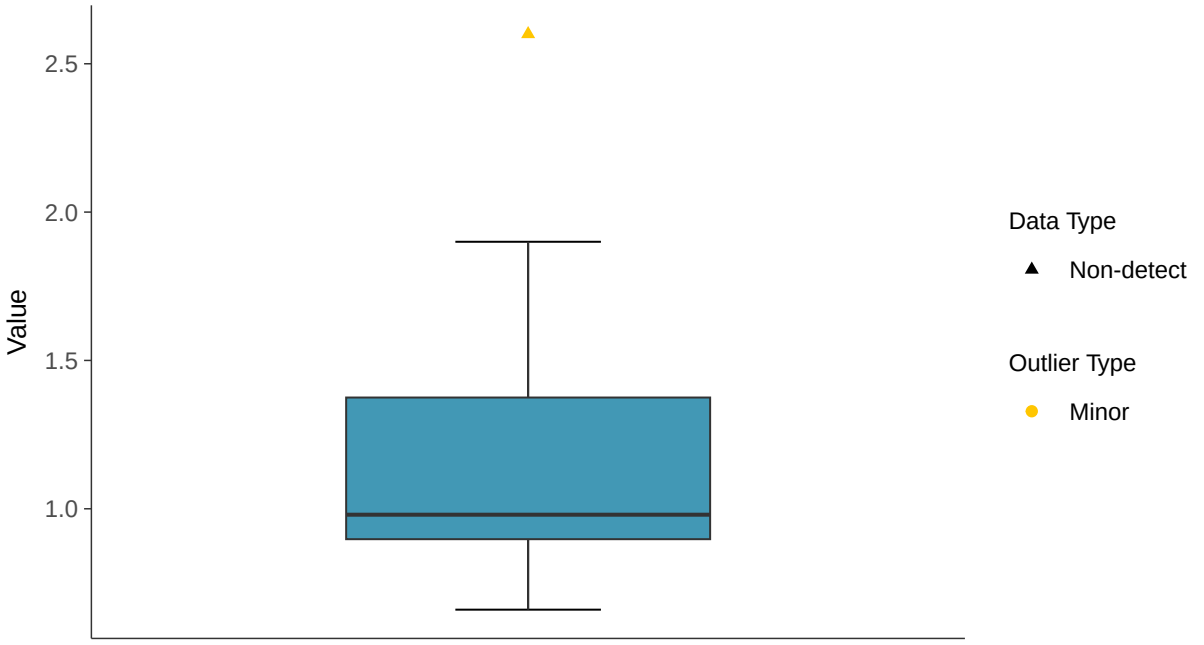

**Histogram**

Cobalt, MW-15016R (ug/L)



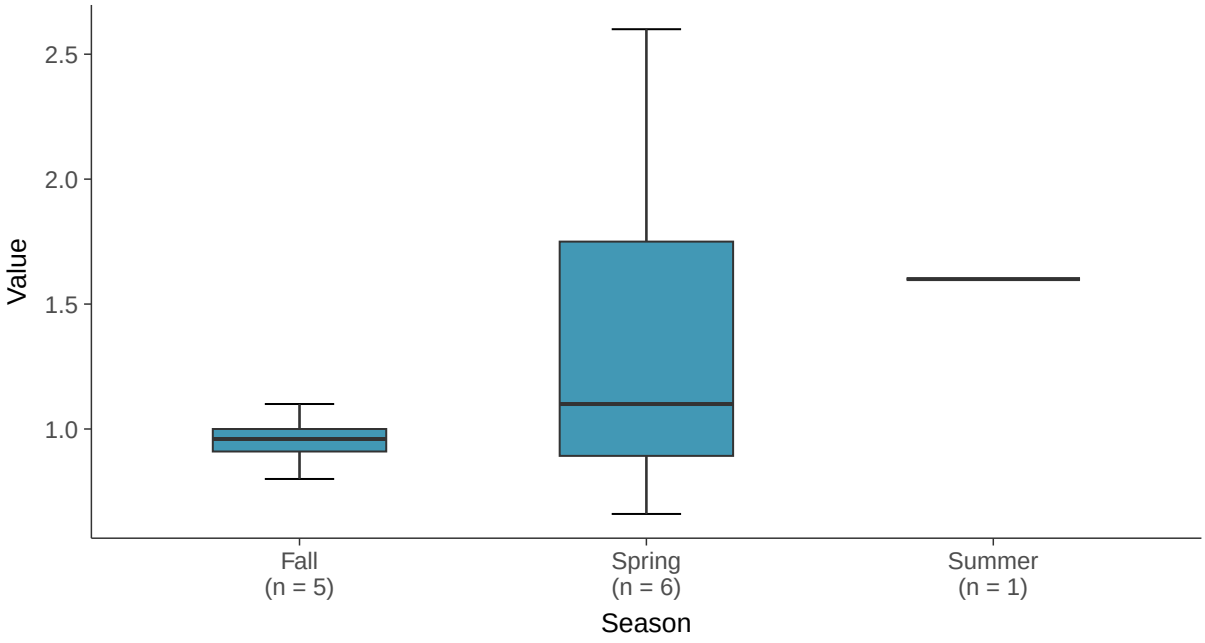
## Boxplot

Cobalt, MW-15016R (ug/L)



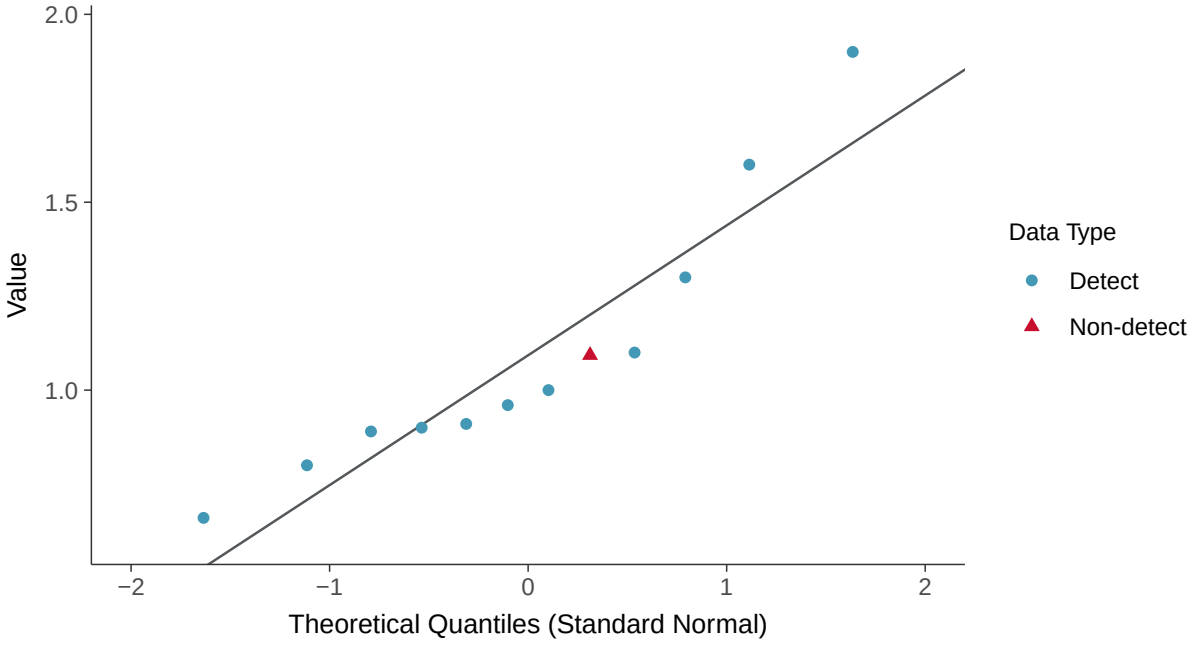

## Boxplot by Season

Cobalt, MW-15016R (ug/L)



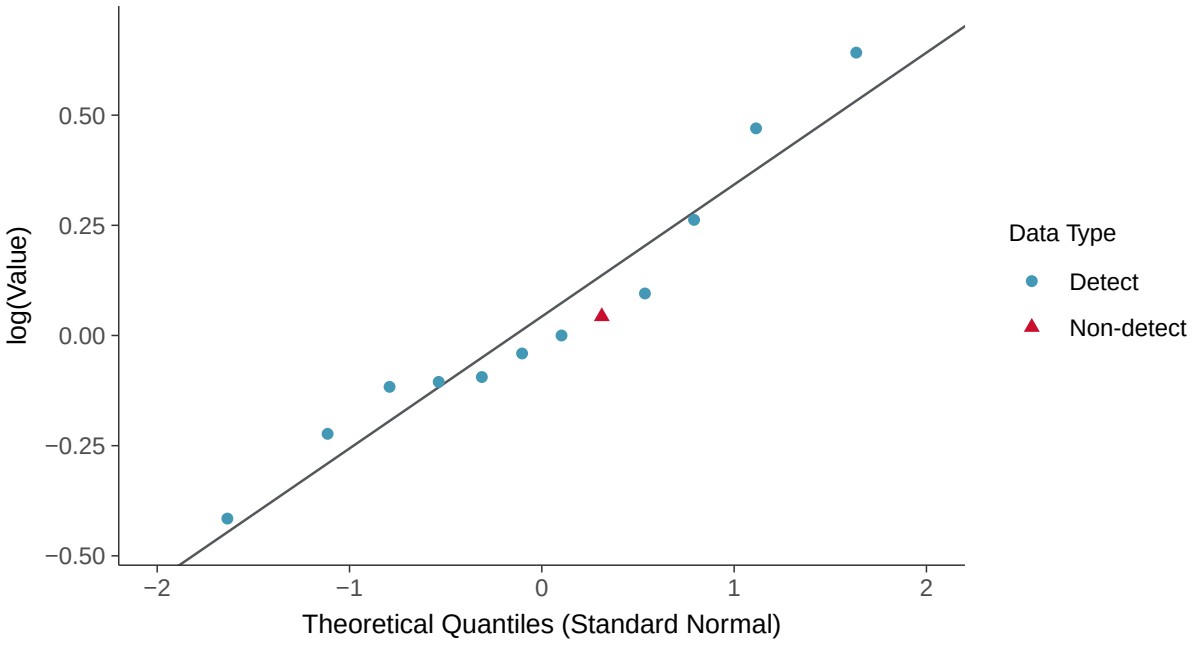
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15016R (ug/L)



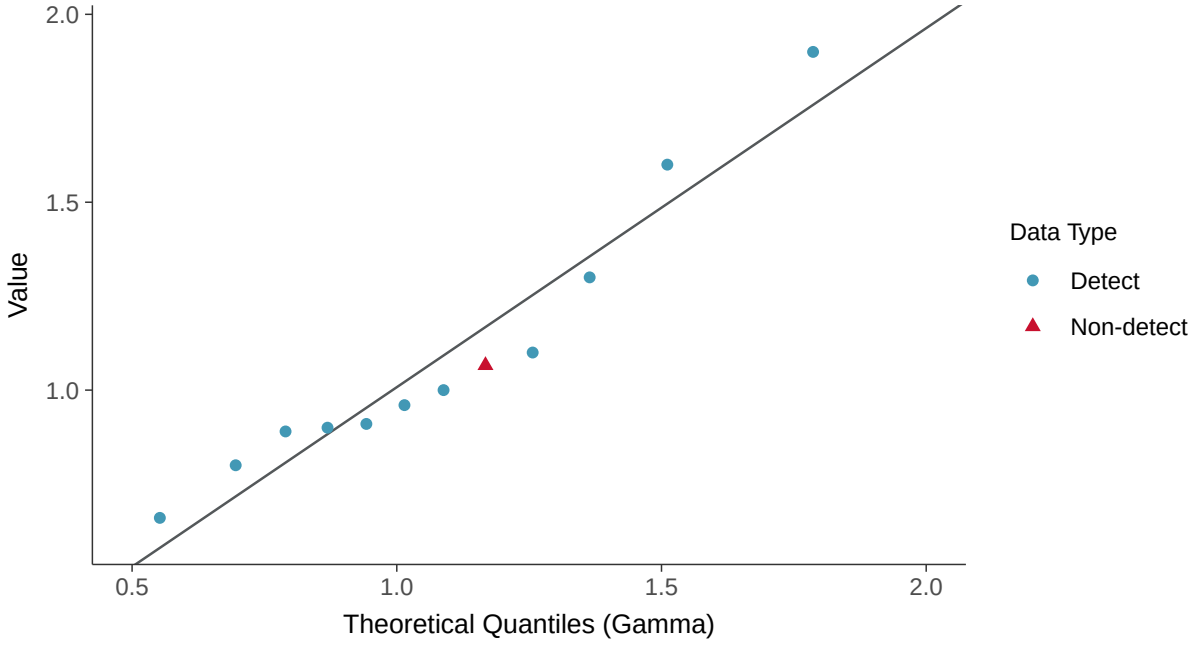

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15016R (ug/L)



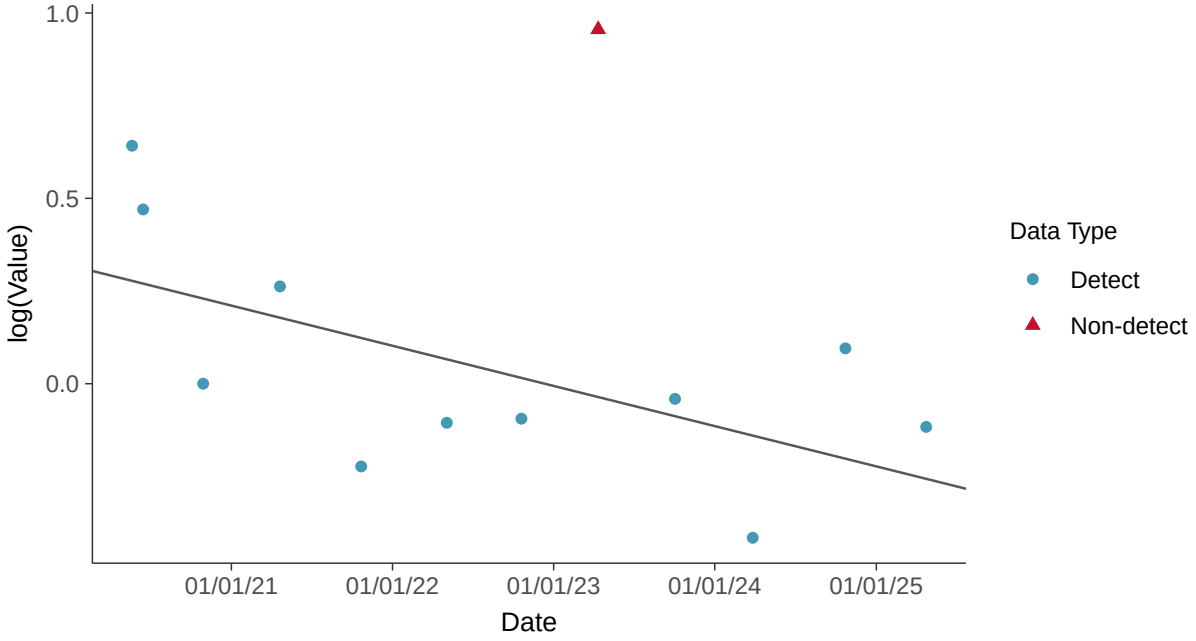
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15016R (ug/L)



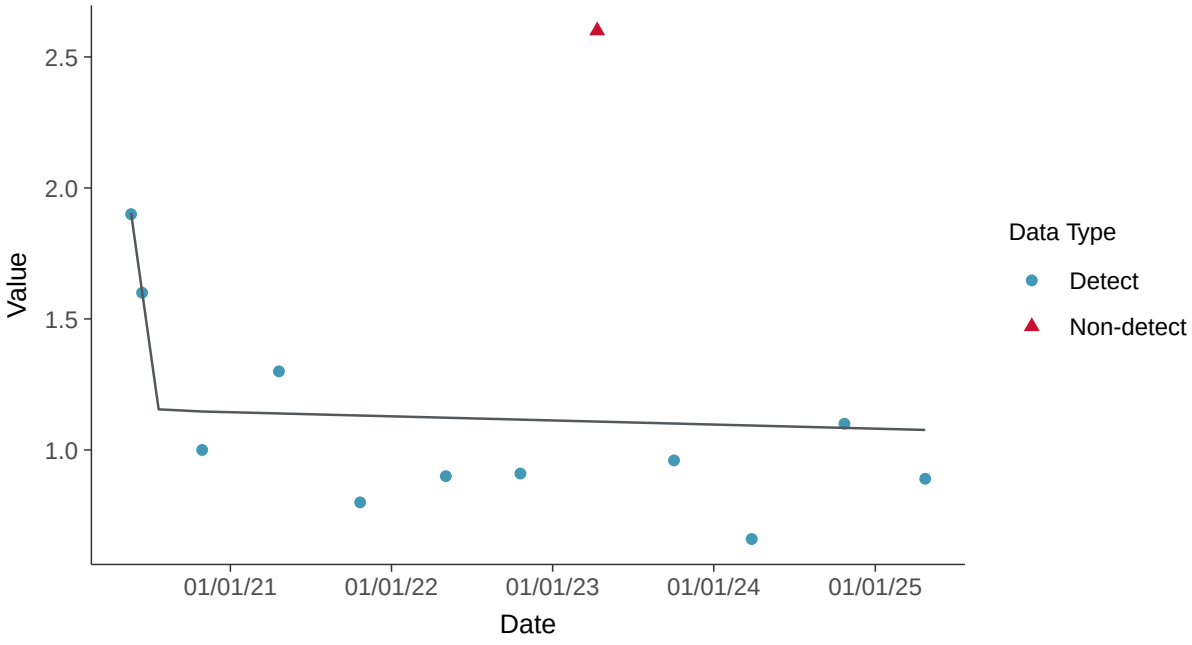

**Trend Regression: Lognormal MLE**

Cobalt, MW-15016R (ug/L)



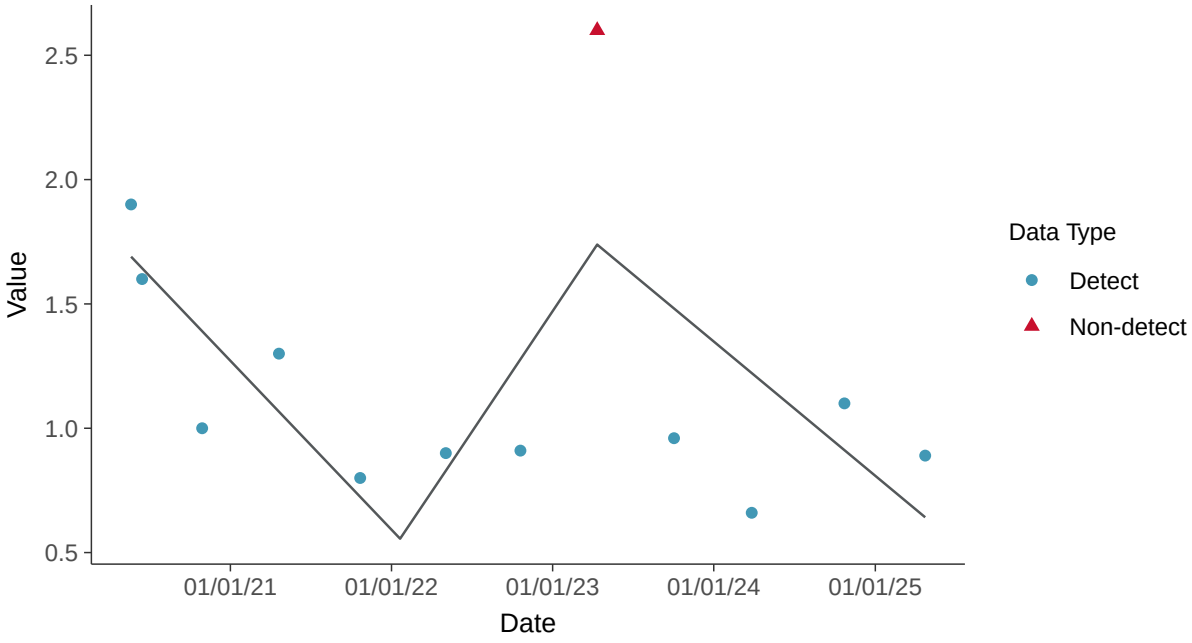
**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15016R (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Cobalt, MW-15016R (ug/L)

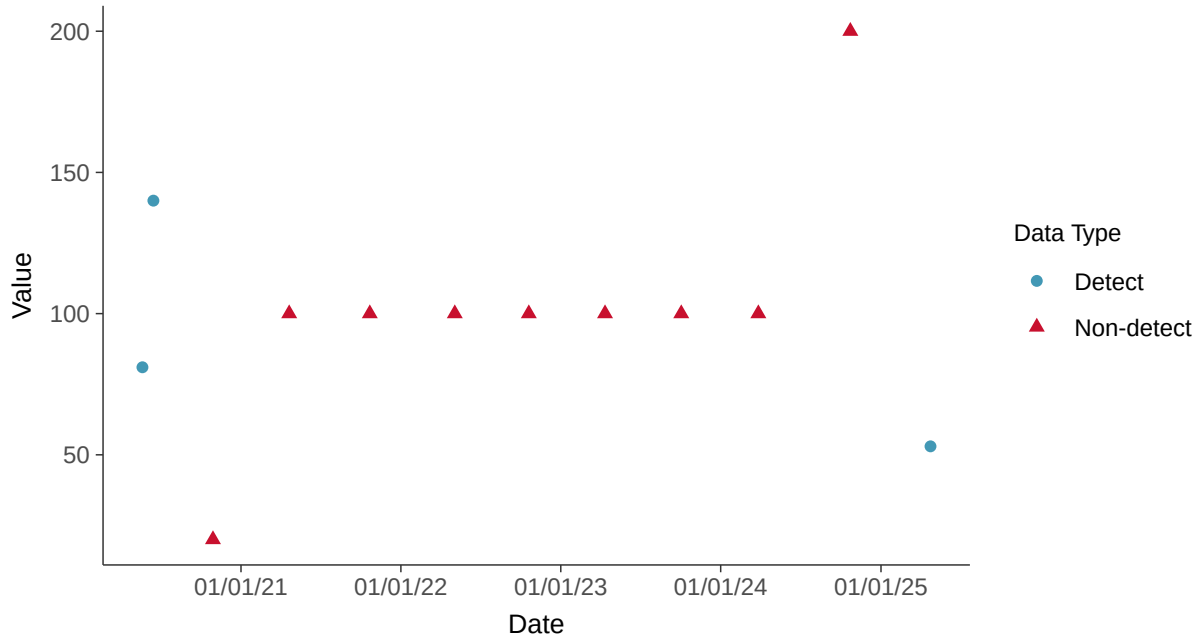


## Appendix IV: Fluoride, MW-15016R

ID: 06_2_114

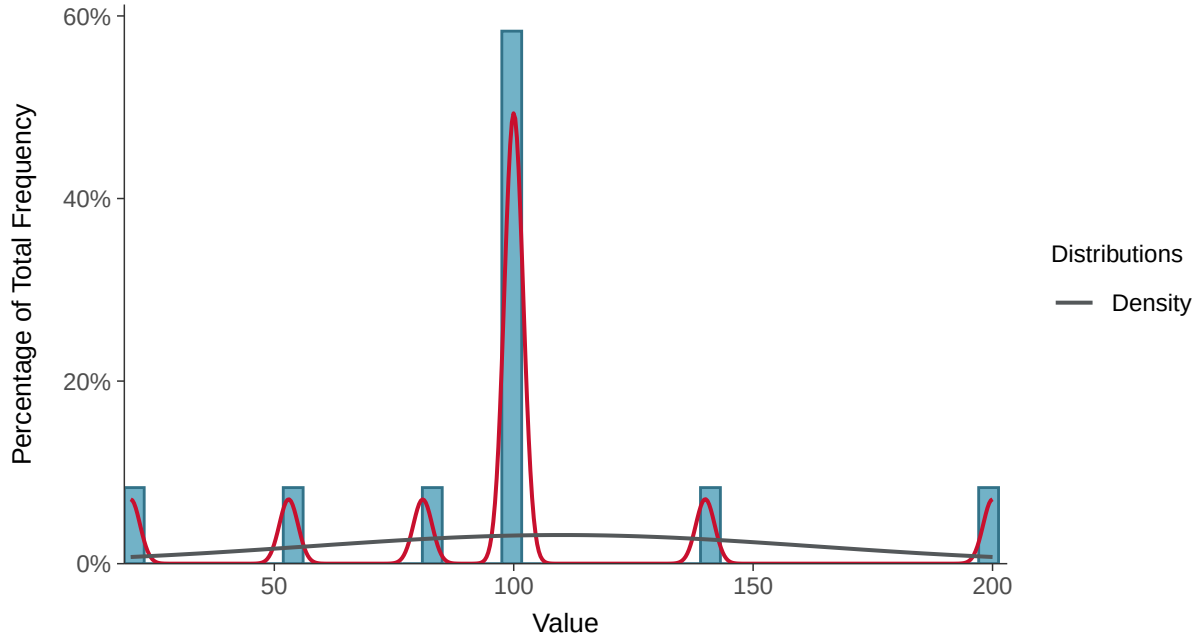
**Scatter Plot**

Fluoride, MW-15016R (ug/L)



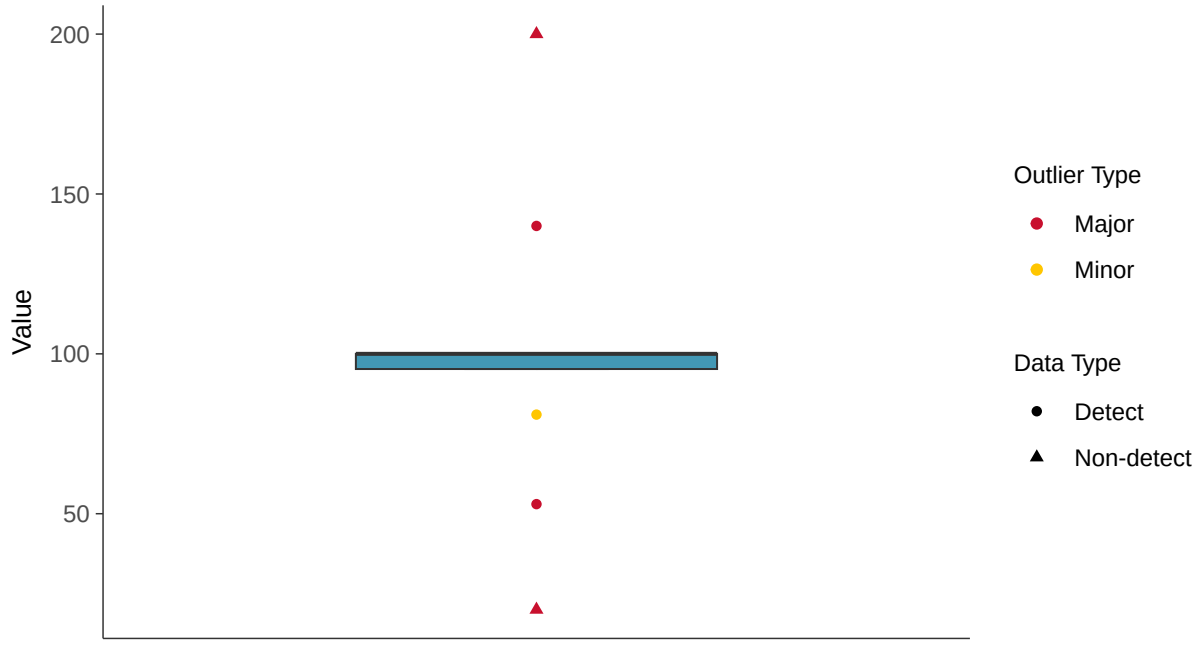

**Histogram**

Fluoride, MW-15016R (ug/L)



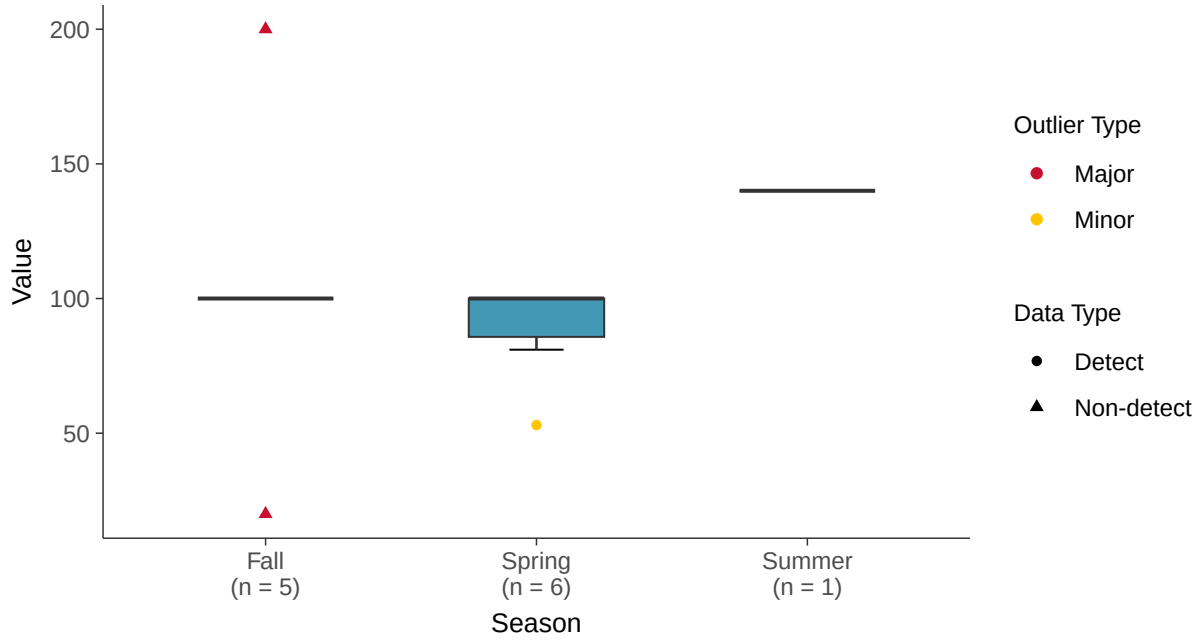
## Boxplot

Fluoride, MW-15016R (ug/L)



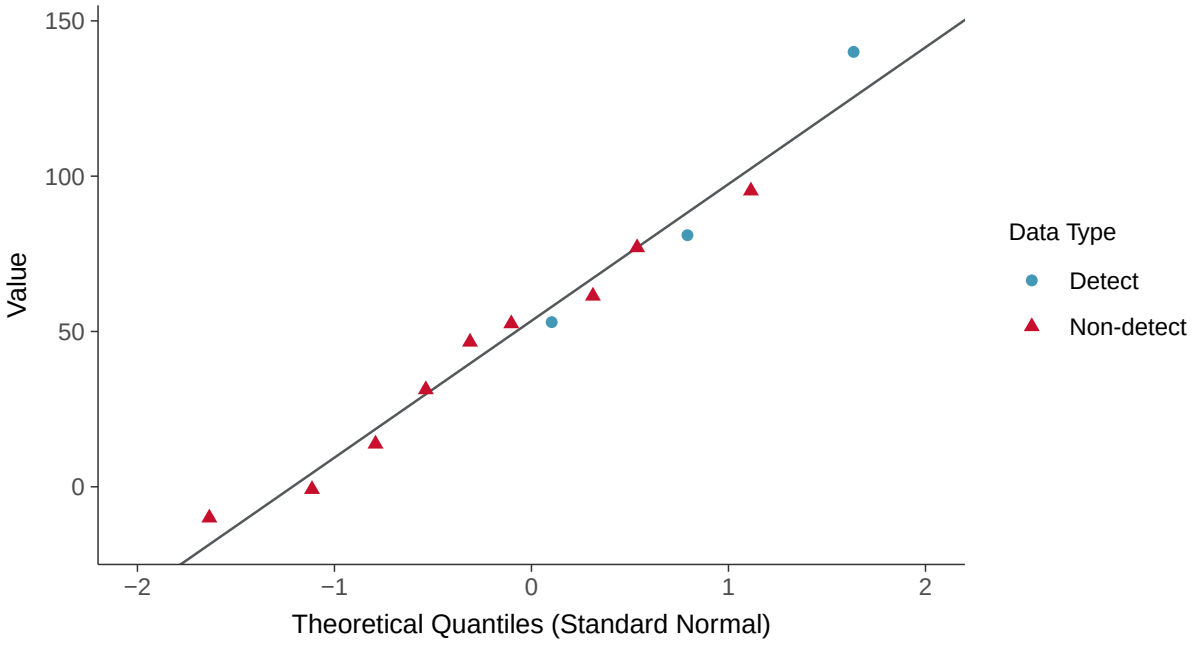

## Boxplot by Season

Fluoride, MW-15016R (ug/L)



**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15016R (ug/L)

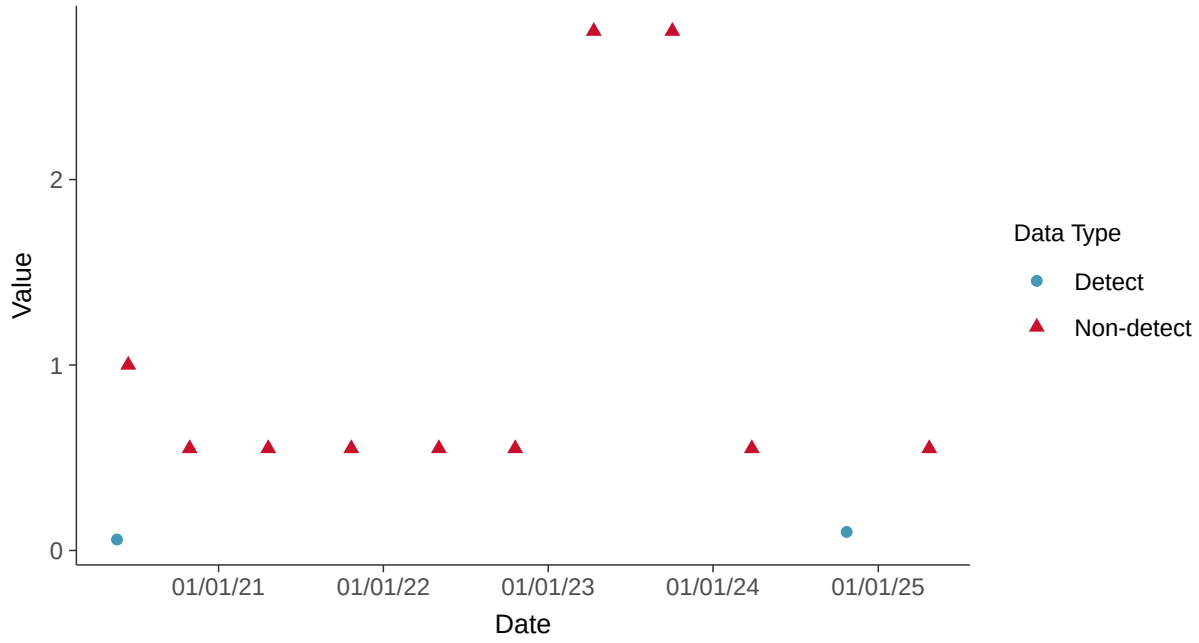


## Appendix IV: Lead, MW-15016R

ID: 06_2_116

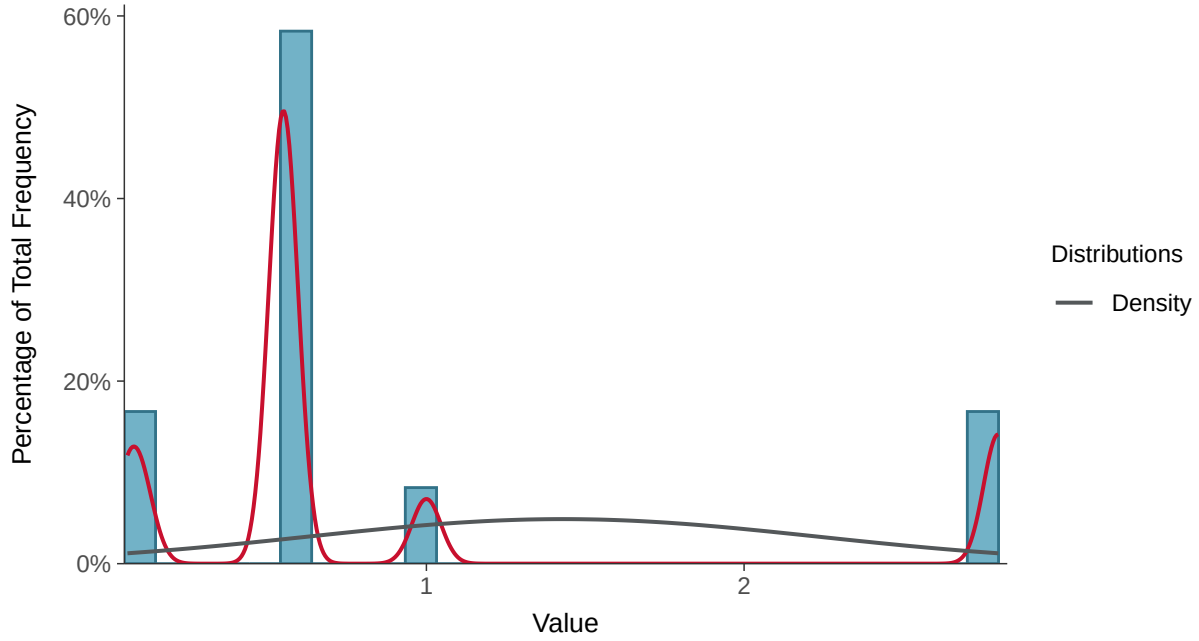
**Scatter Plot**

Lead, MW-15016R (ug/L)



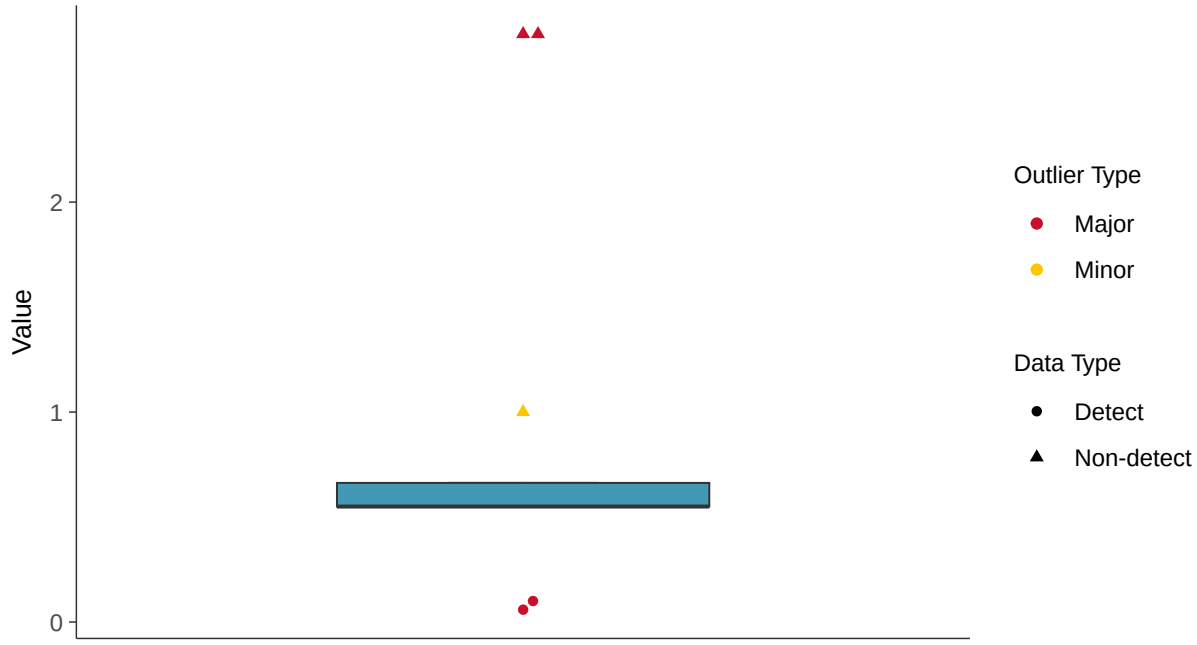

**Histogram**

Lead, MW-15016R (ug/L)



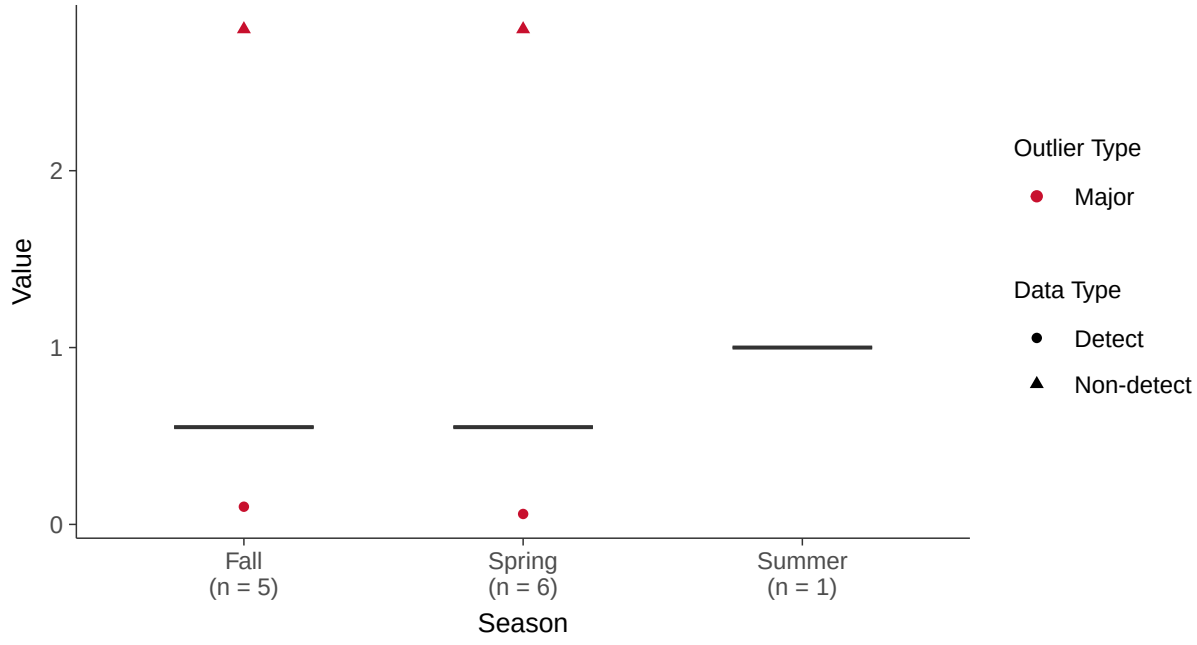
## Boxplot

Lead, MW-15016R (ug/L)



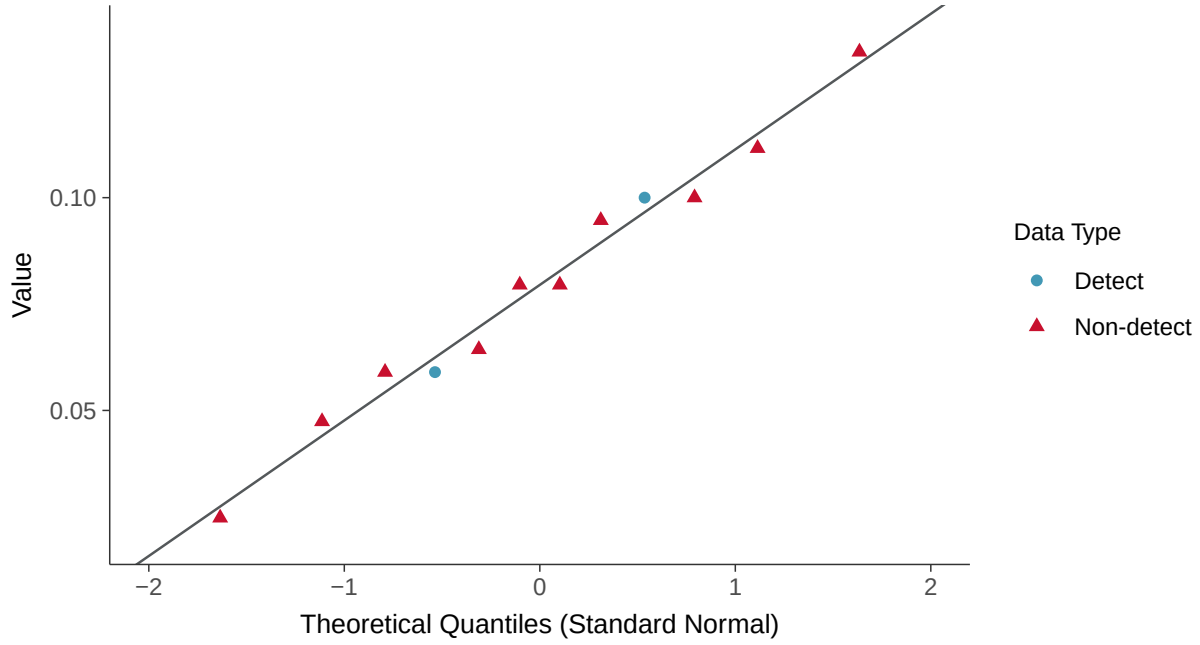

## Boxplot by Season

Lead, MW-15016R (ug/L)



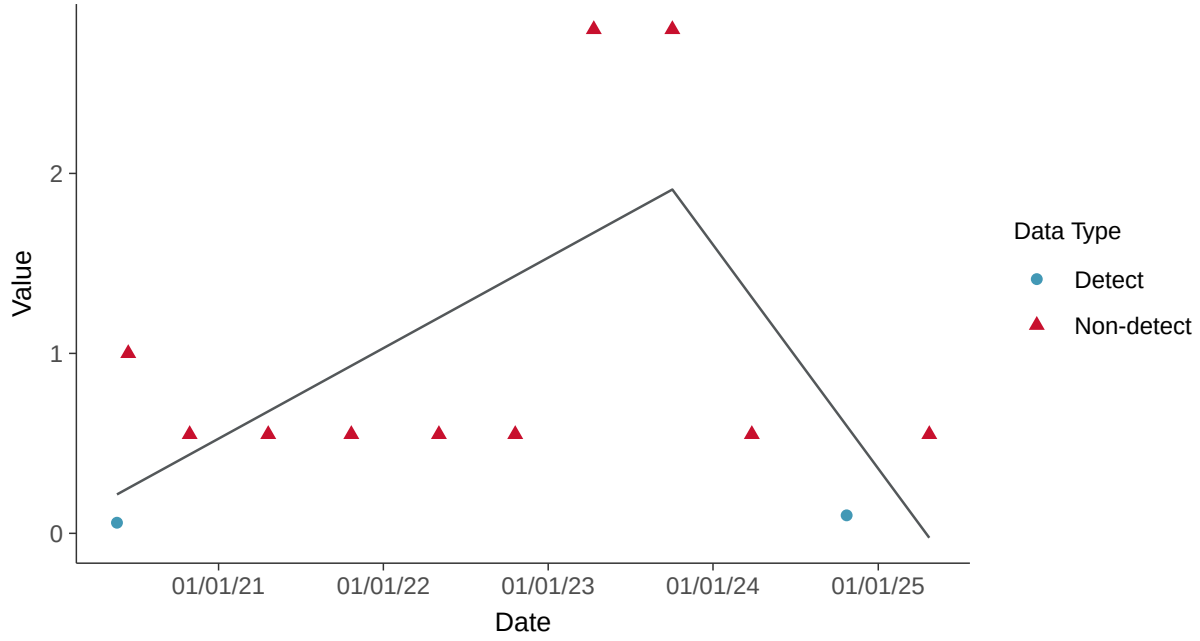
**Normal Q-Q plot using ROS Imputed Estimates**

Lead, MW-15016R (ug/L)



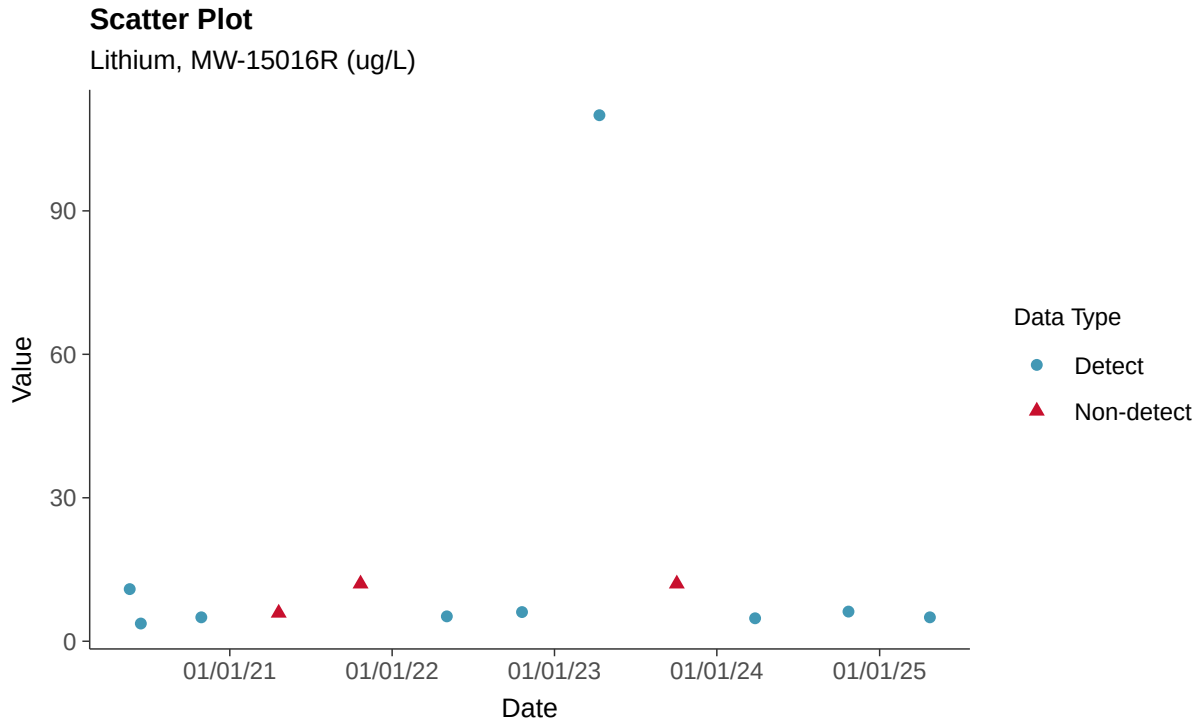

**Trend Regression: Piecewise Linear-Linear**

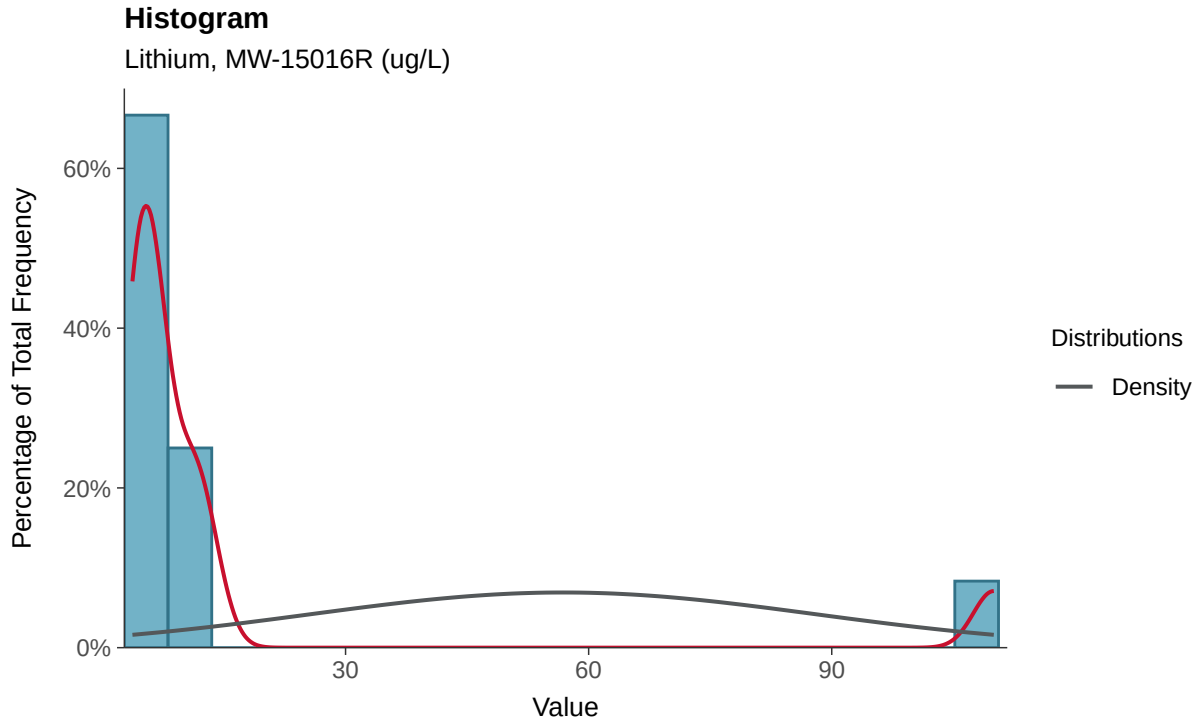
Lead, MW-15016R (ug/L)



## Appendix IV: Lithium, MW-15016R

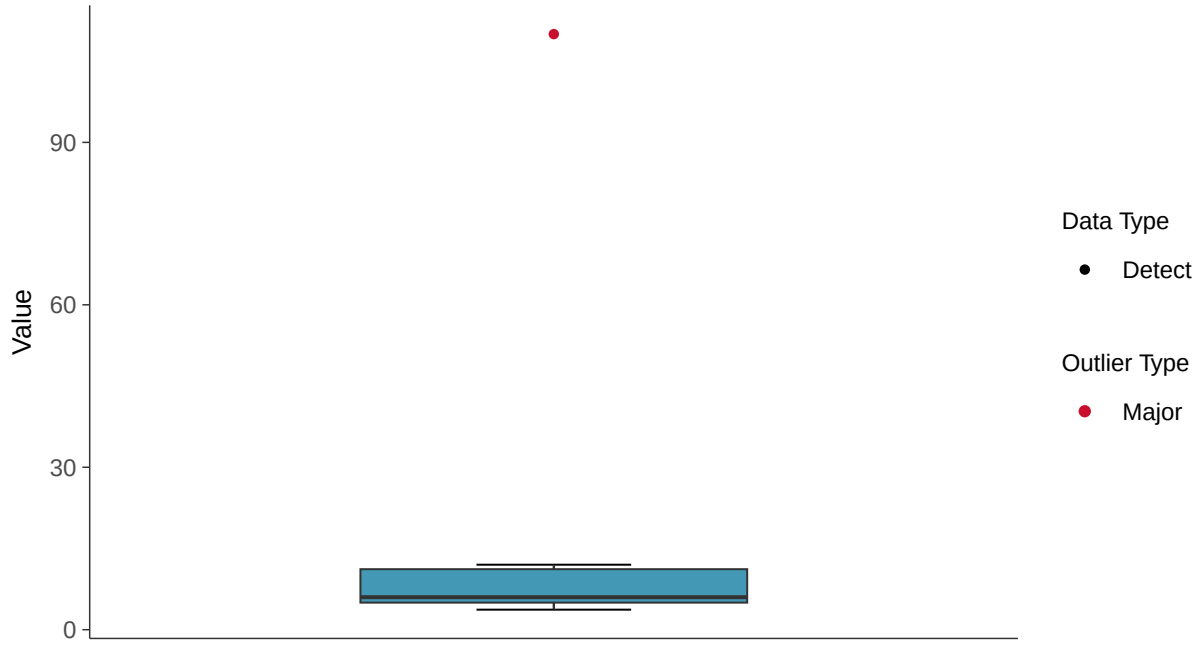
ID: 06_2_117



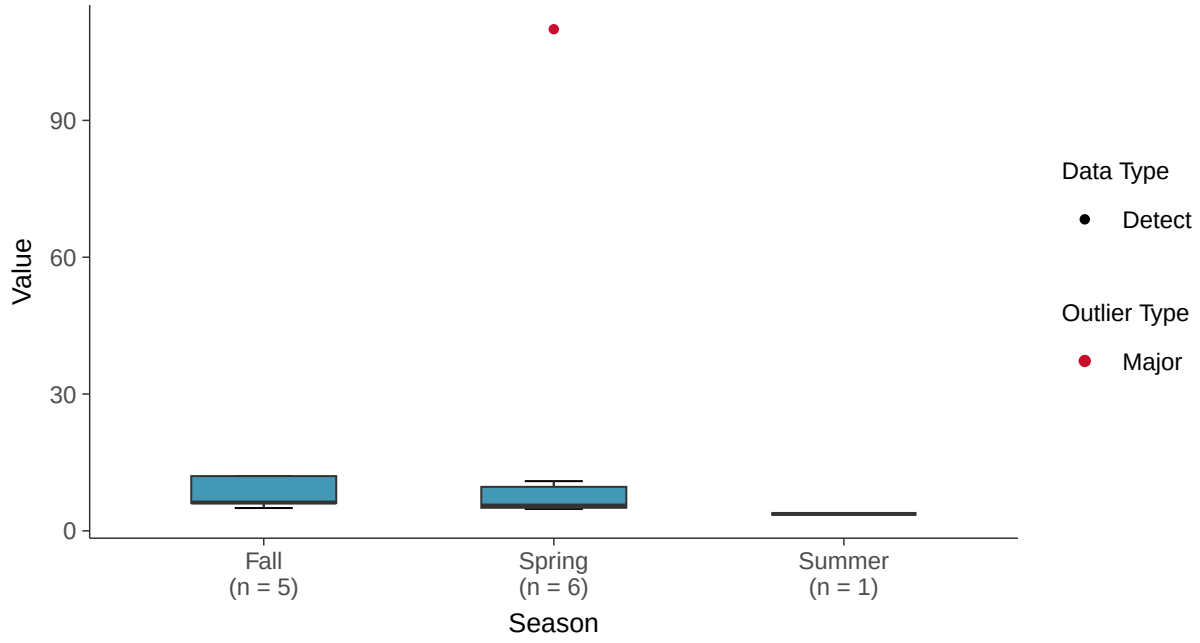
**Boxplot**

Lithium, MW-15016R (ug/L)



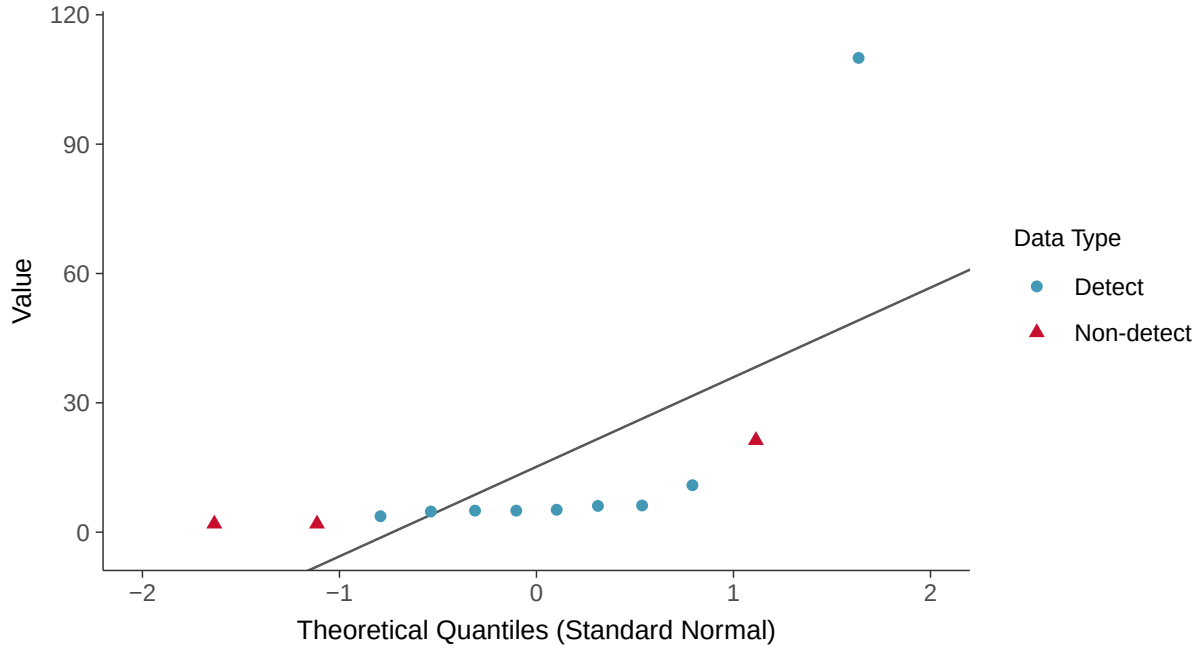

**Boxplot by Season**

Lithium, MW-15016R (ug/L)



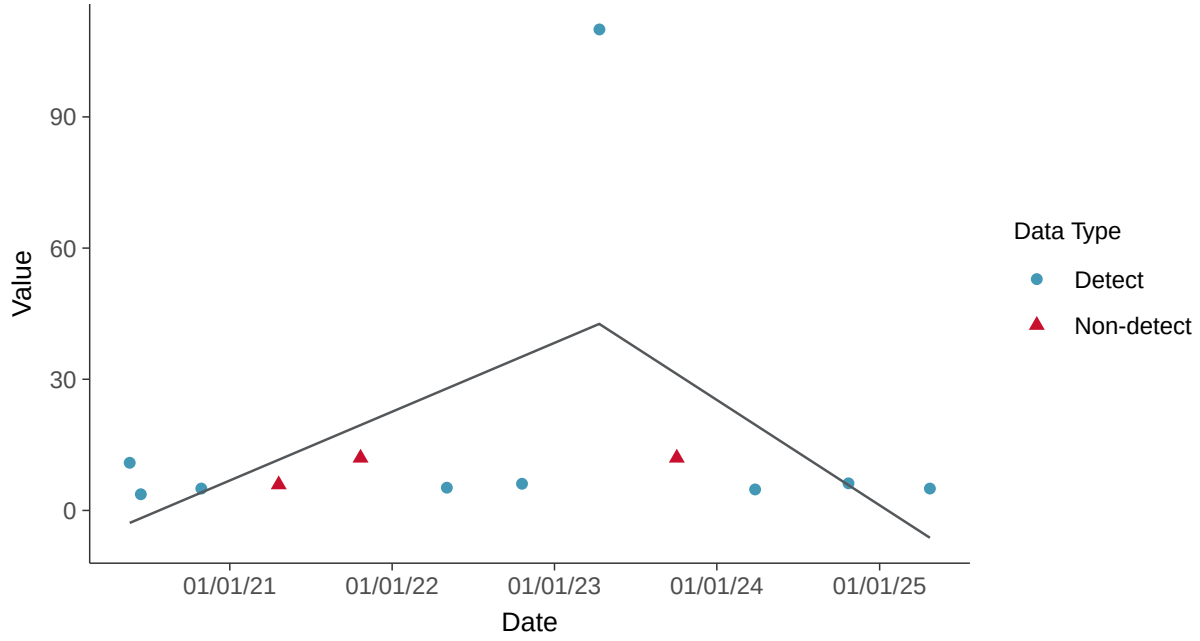
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15016R (ug/L)



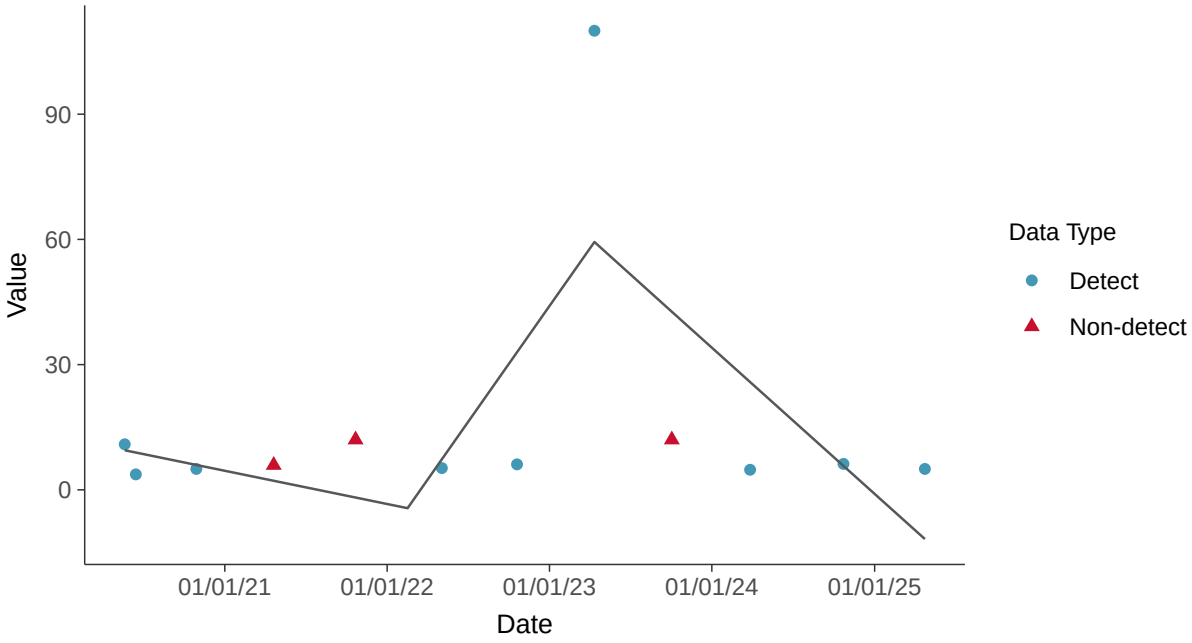

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15016R (ug/L)



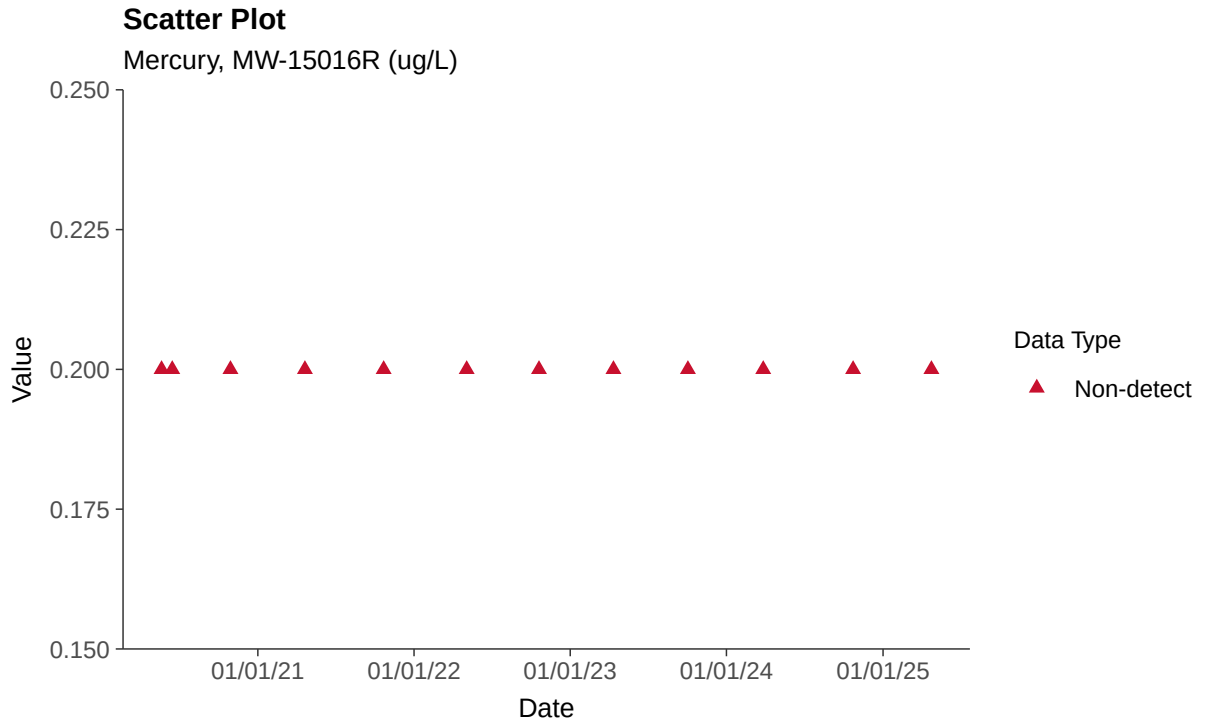
**Trend Regression: Piecewise Linear-Linear-Linear**

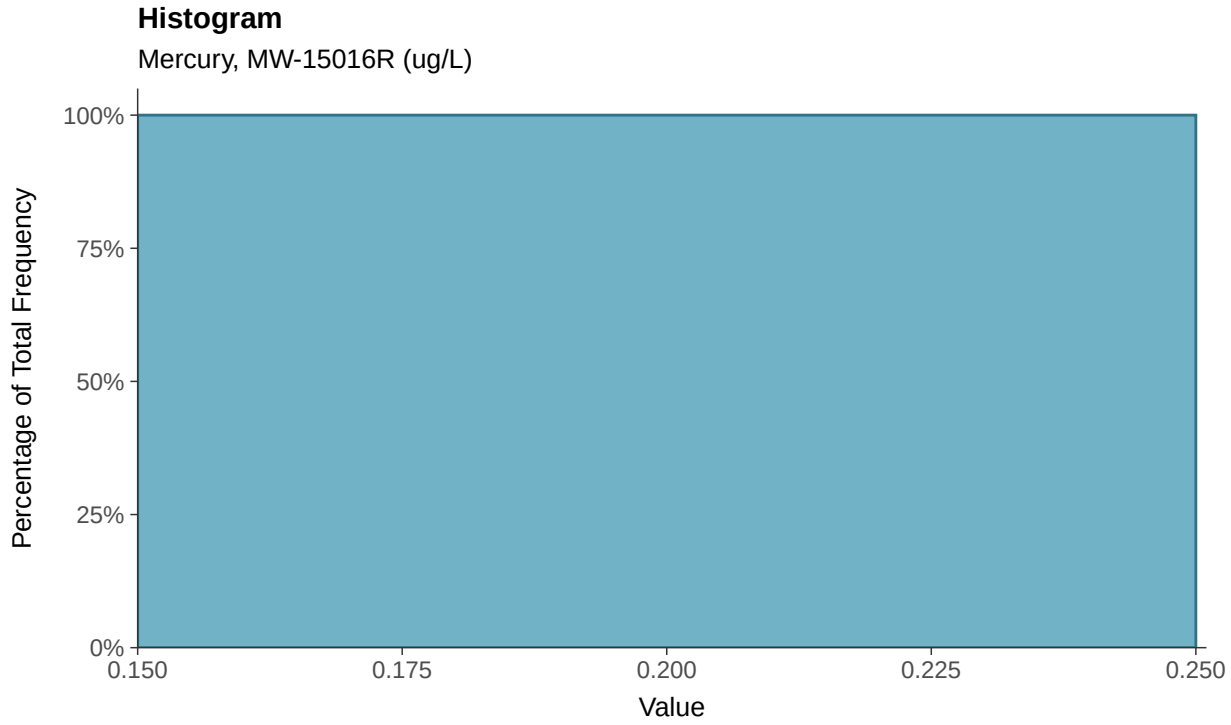
Lithium, MW-15016R (ug/L)



## Appendix IV: Mercury, MW-15016R

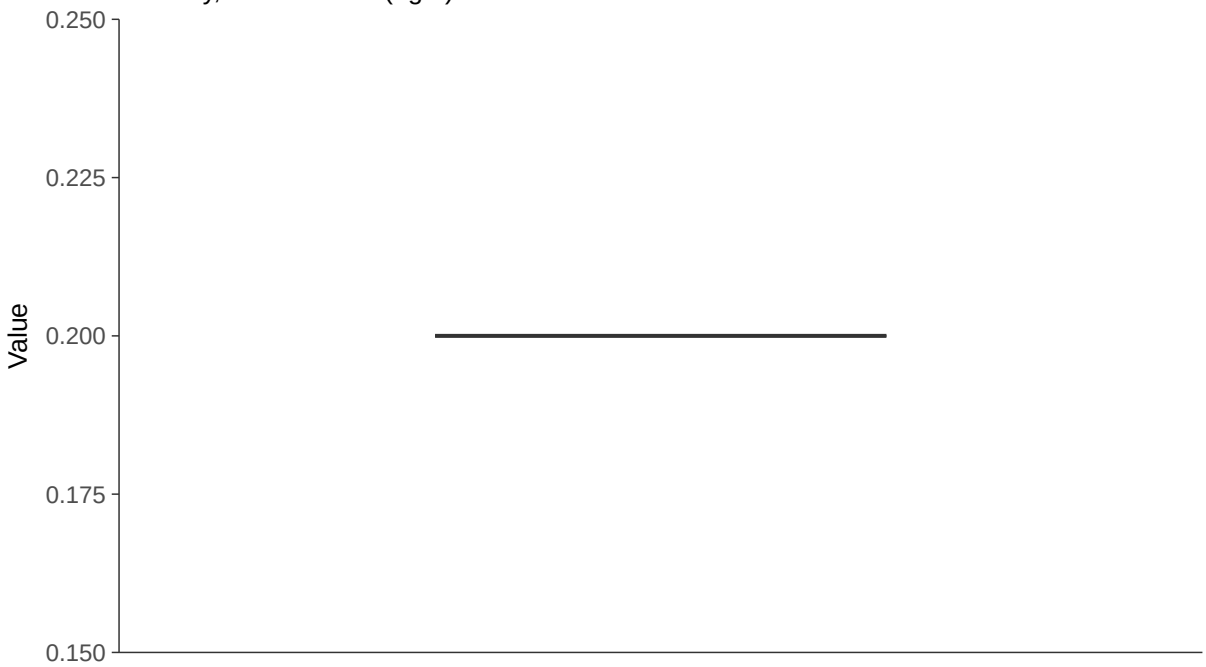
ID: 06_2_118



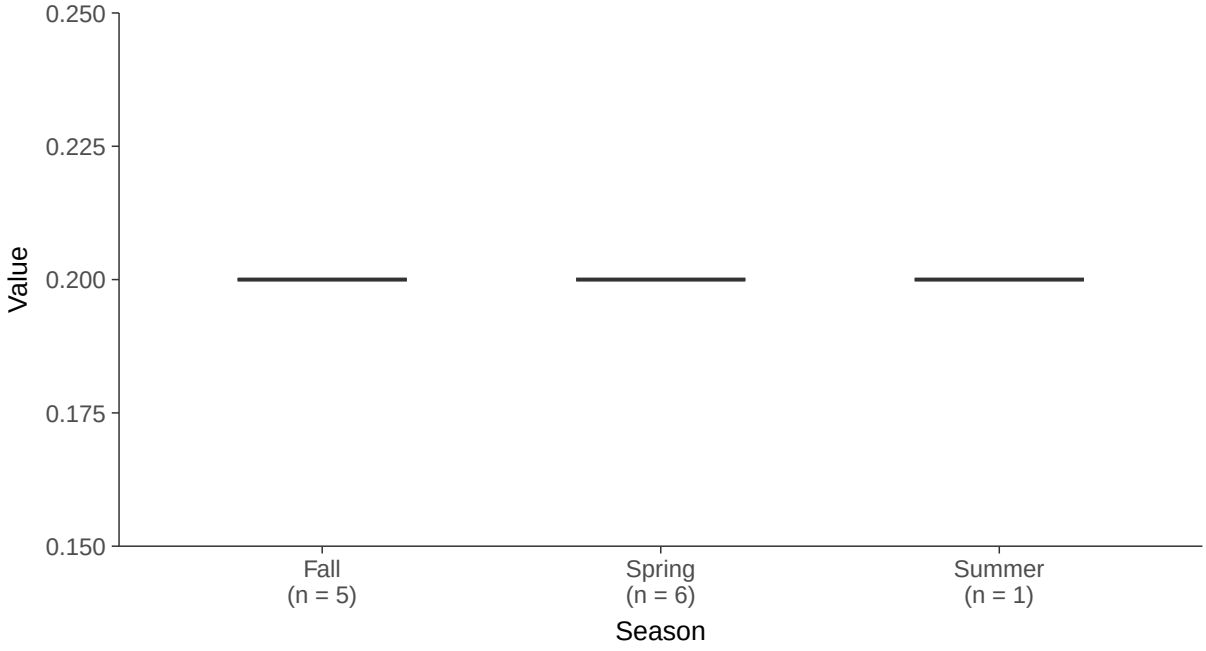
**Boxplot**

Mercury, MW-15016R (ug/L)



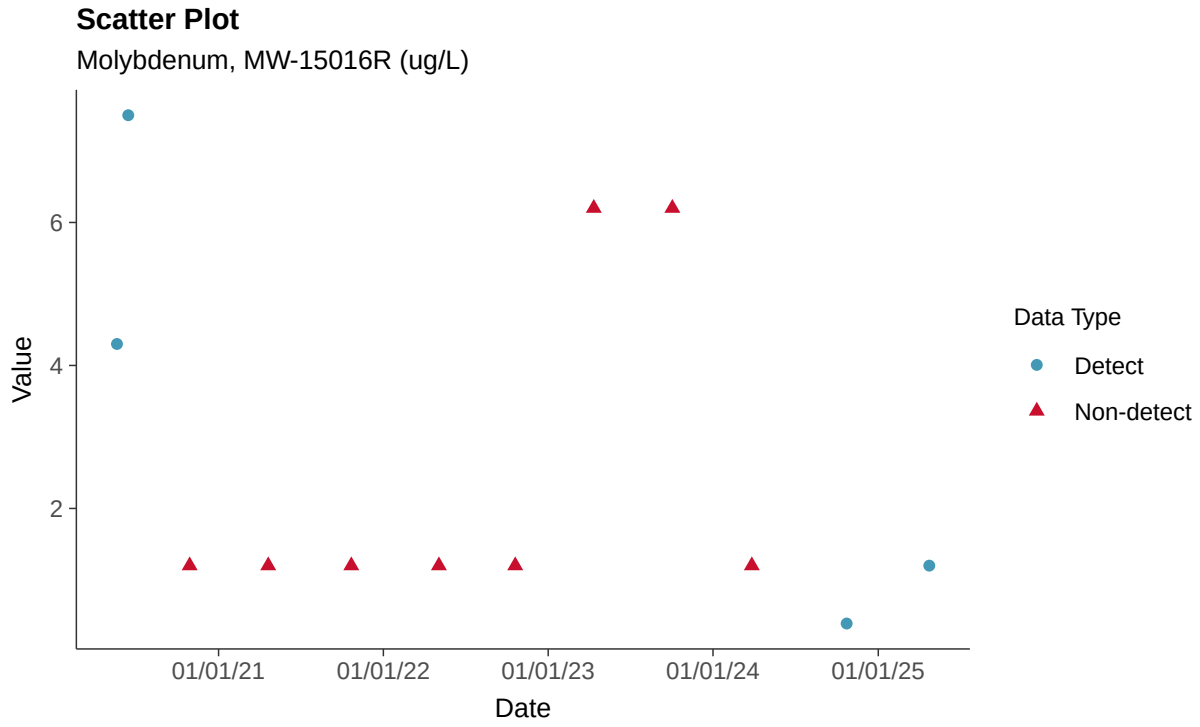

**Boxplot by Season**

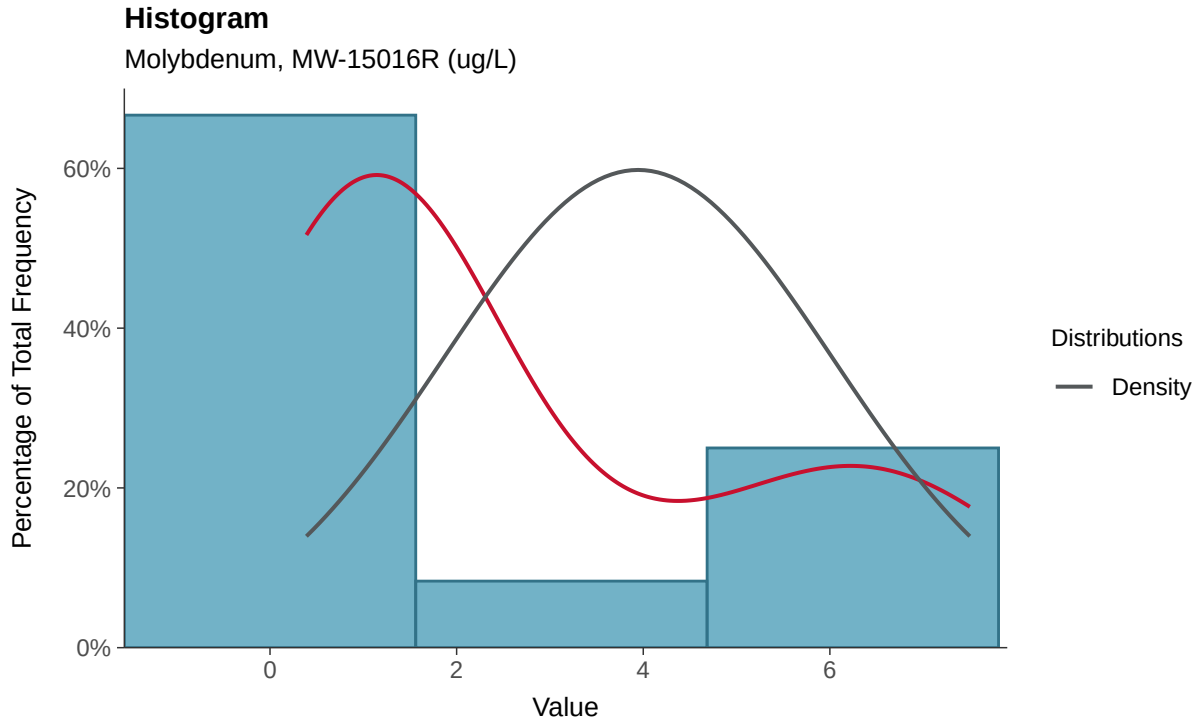
Mercury, MW-15016R (ug/L)



## Appendix IV: Molybdenum, MW-15016R

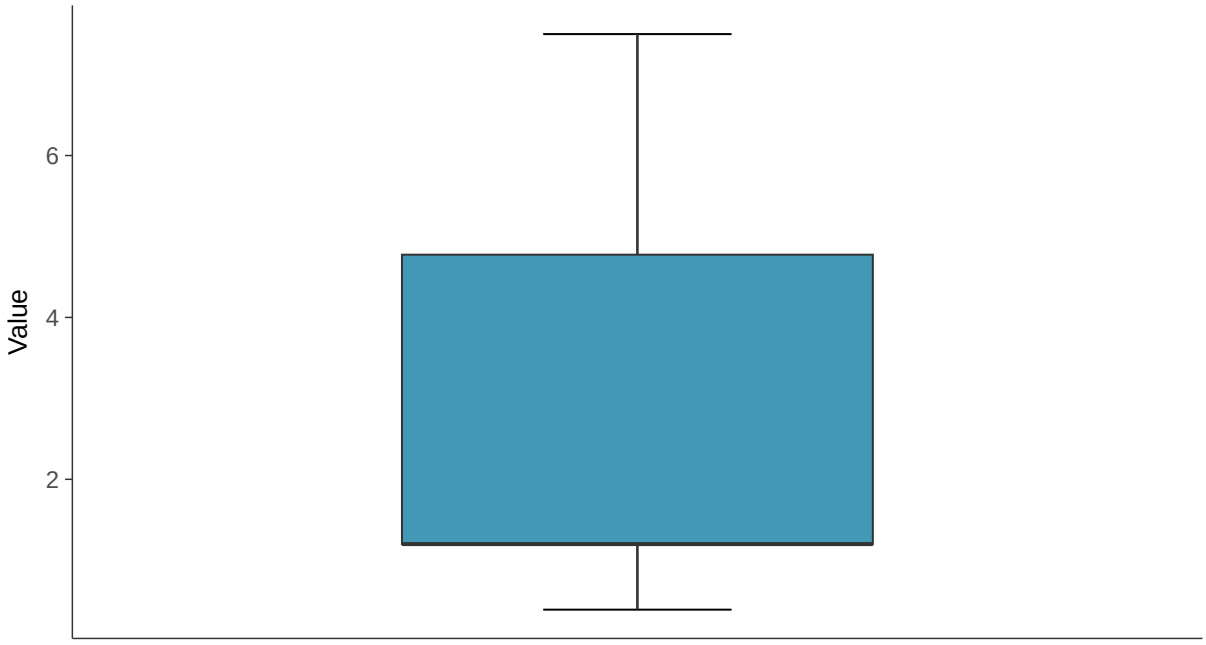
ID: 06_2_119



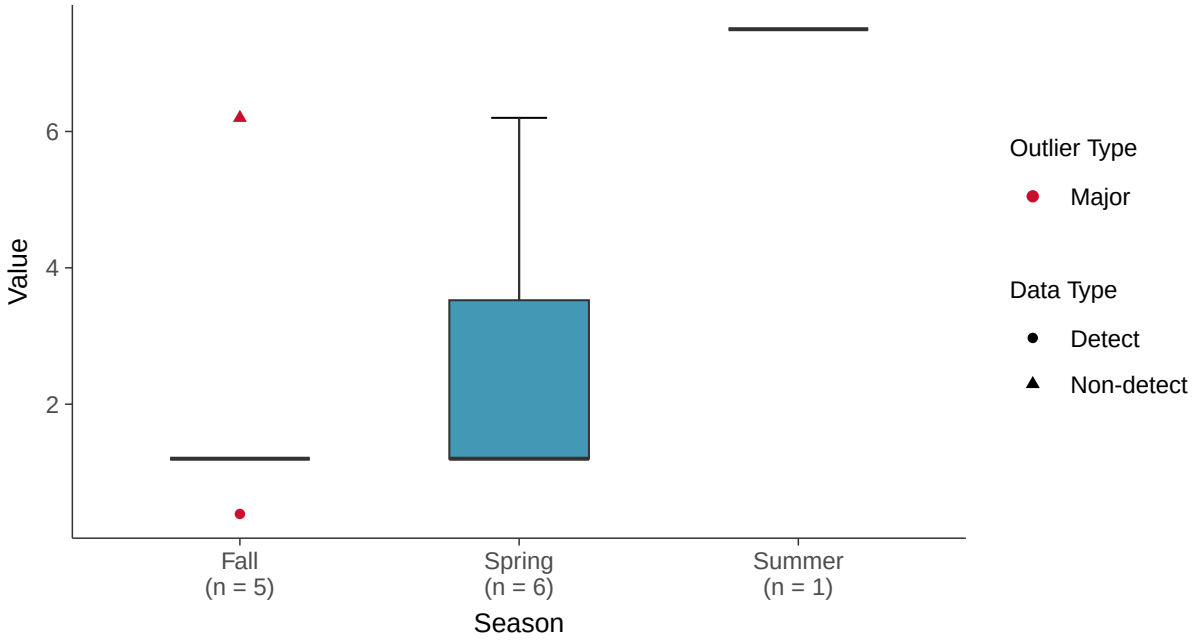
## Boxplot

Molybdenum, MW-15016R (ug/L)



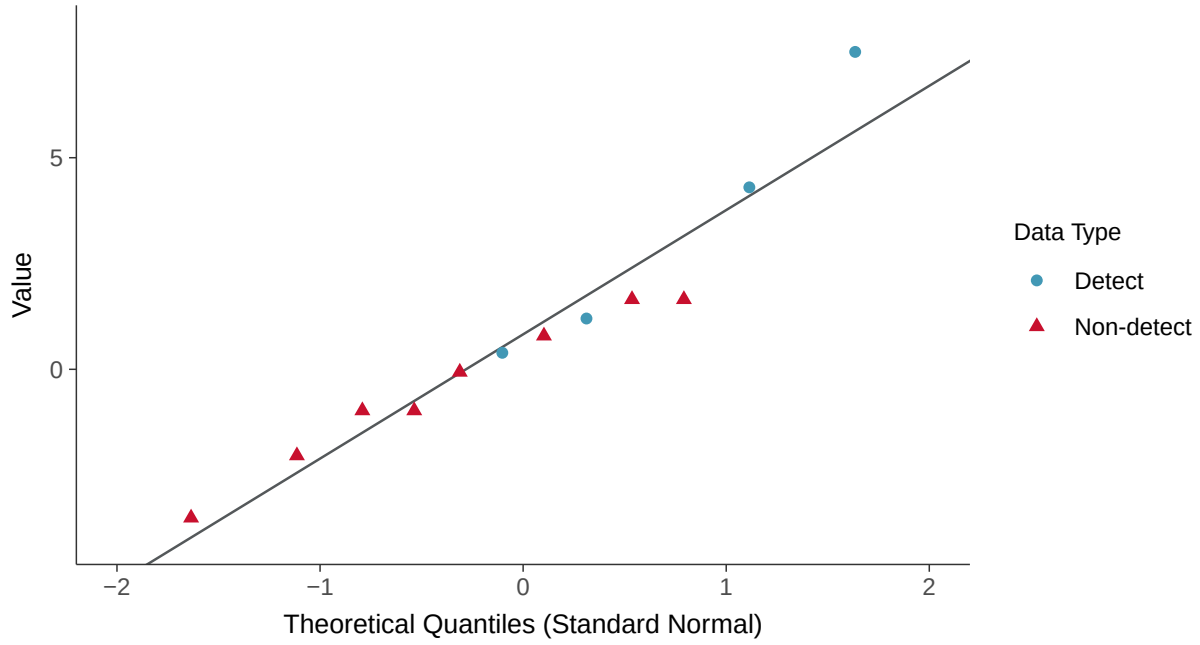

## Boxplot by Season

Molybdenum, MW-15016R (ug/L)



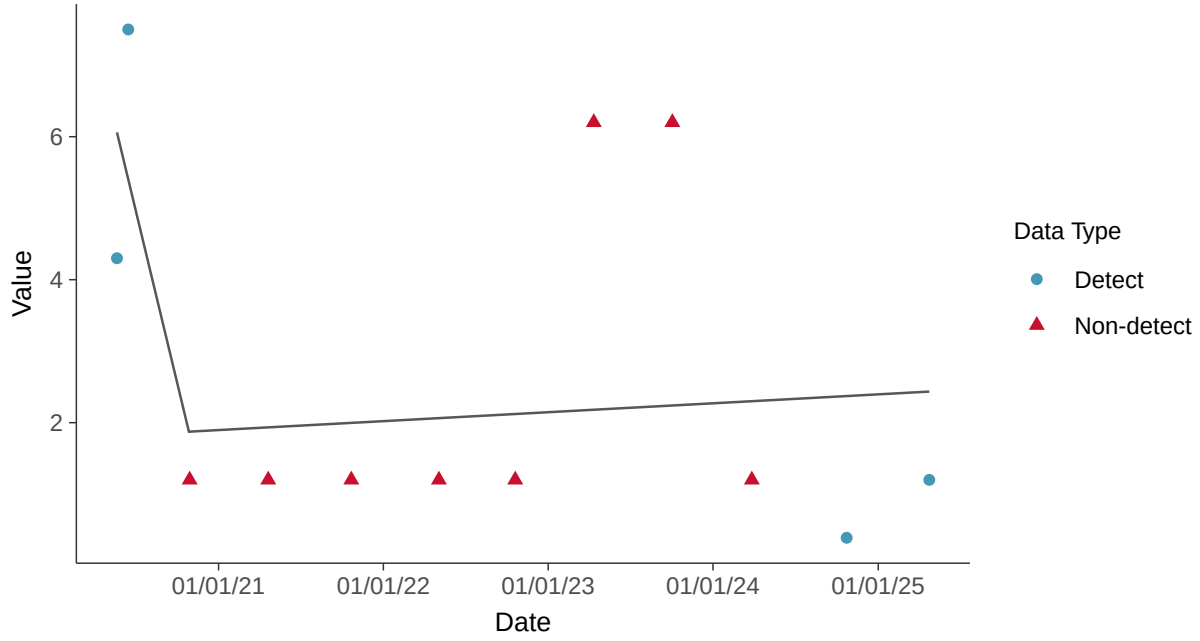
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15016R (ug/L)



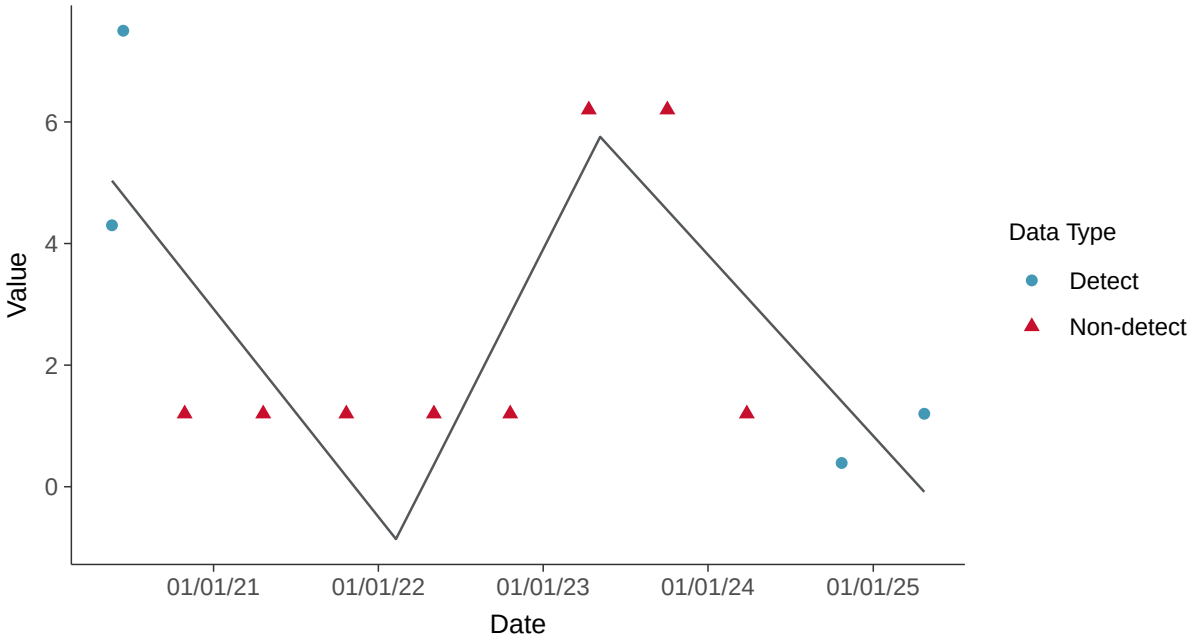

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15016R (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-15016R (ug/L)

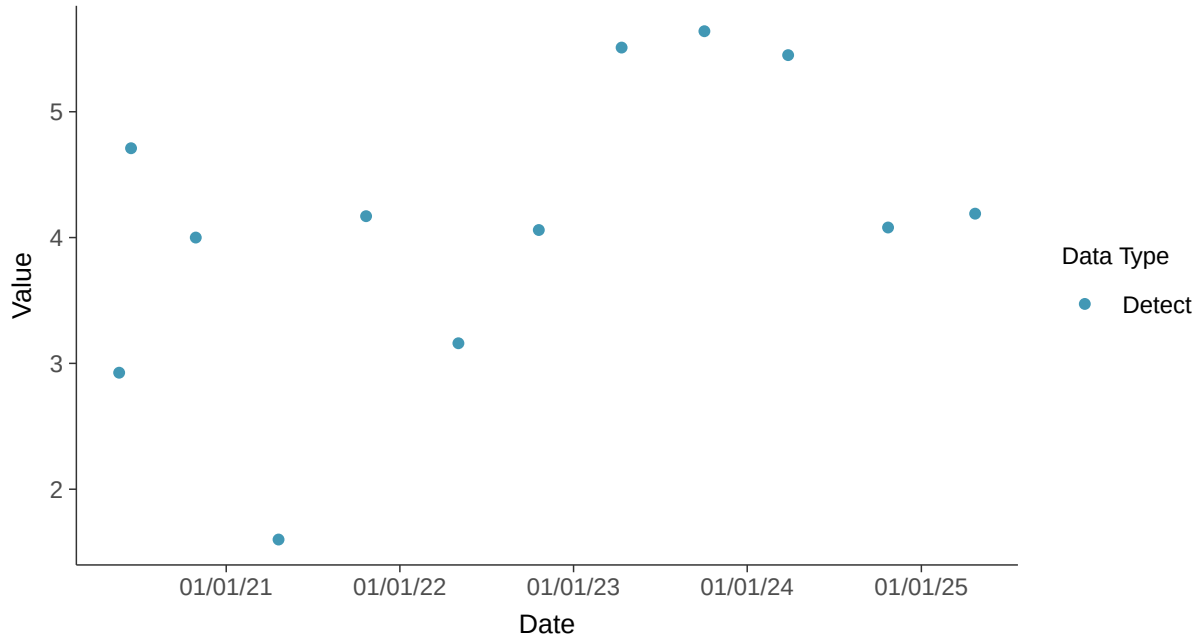


## Appendix IV: Radium-226+228, MW-15016R

ID: 06_2_125

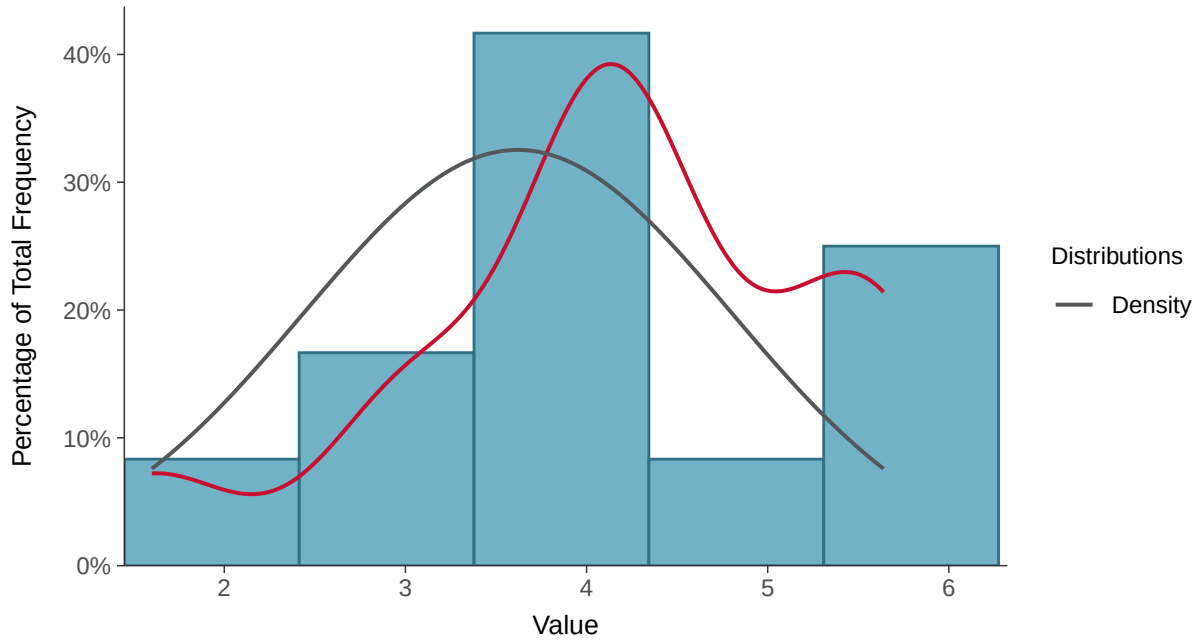
**Scatter Plot**

Radium-226+228, MW-15016R (pCi/L)



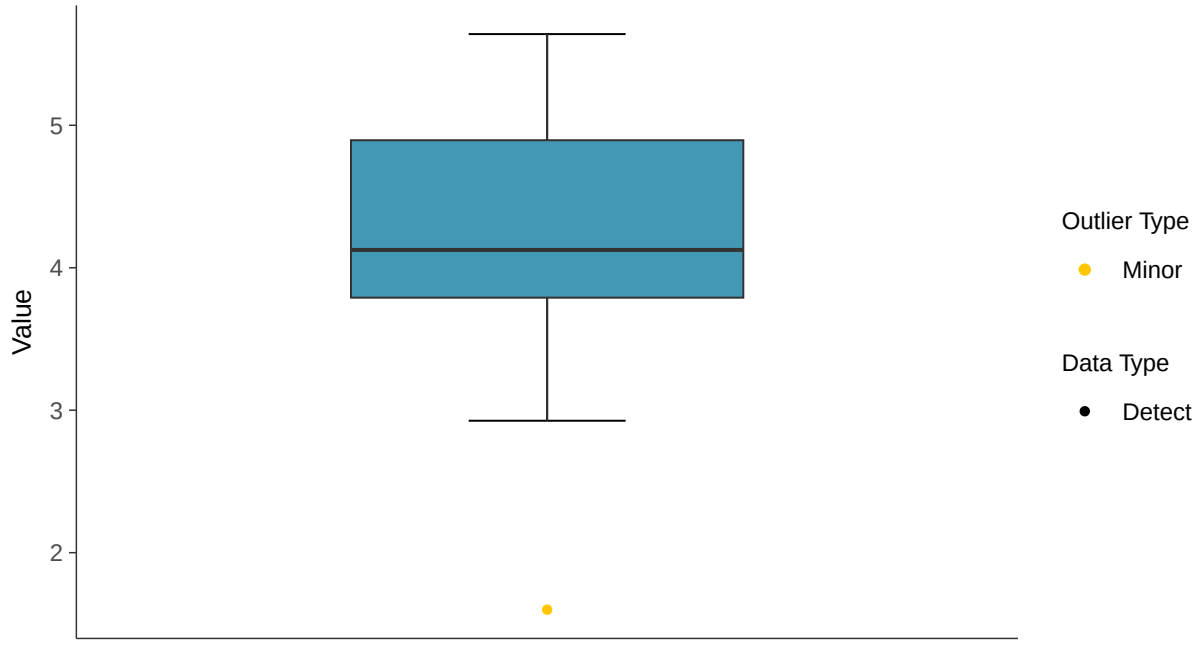

**Histogram**

Radium-226+228, MW-15016R (pCi/L)



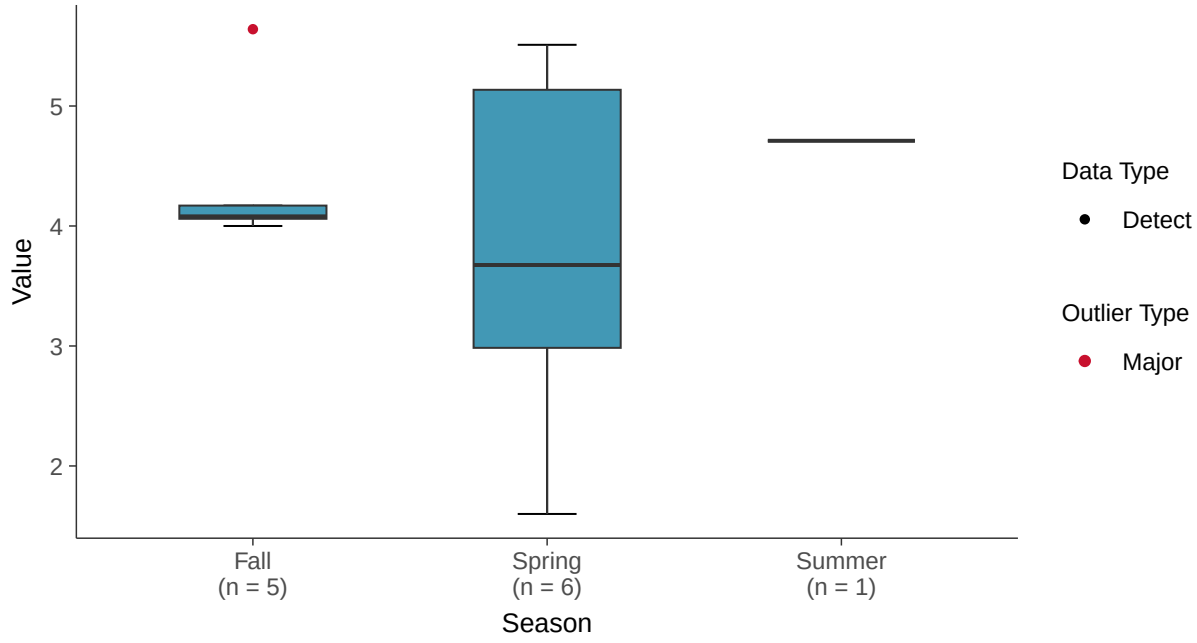
## Boxplot

Radium-226+228, MW-15016R (pCi/L)



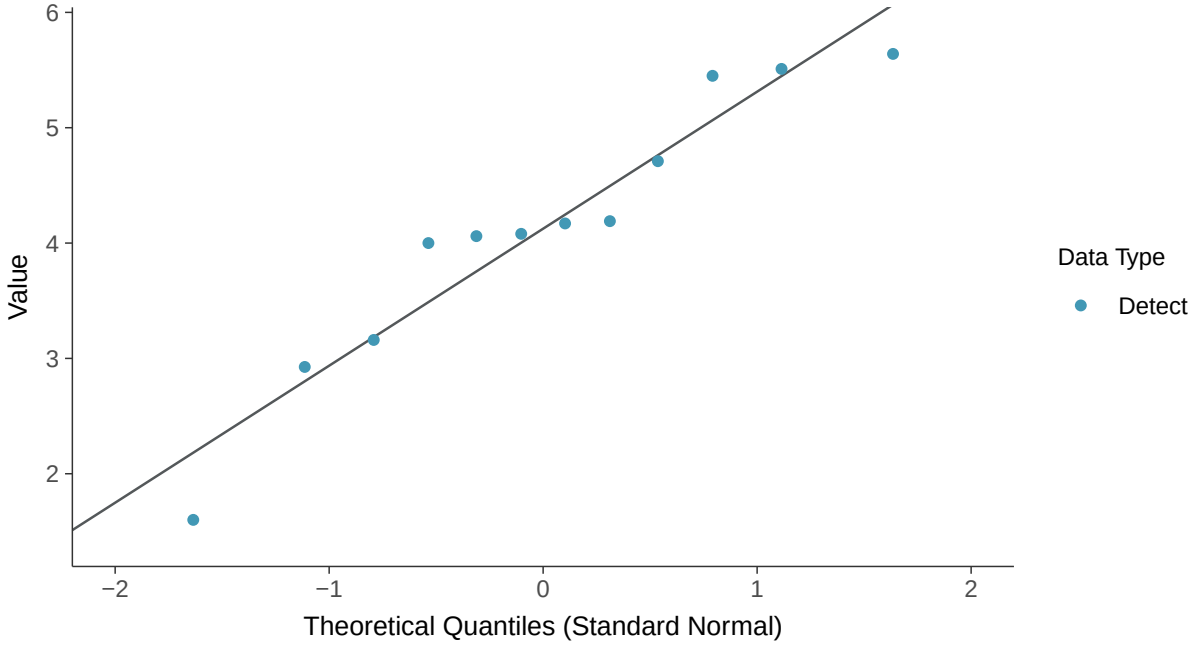

## Boxplot by Season

Radium-226+228, MW-15016R (pCi/L)



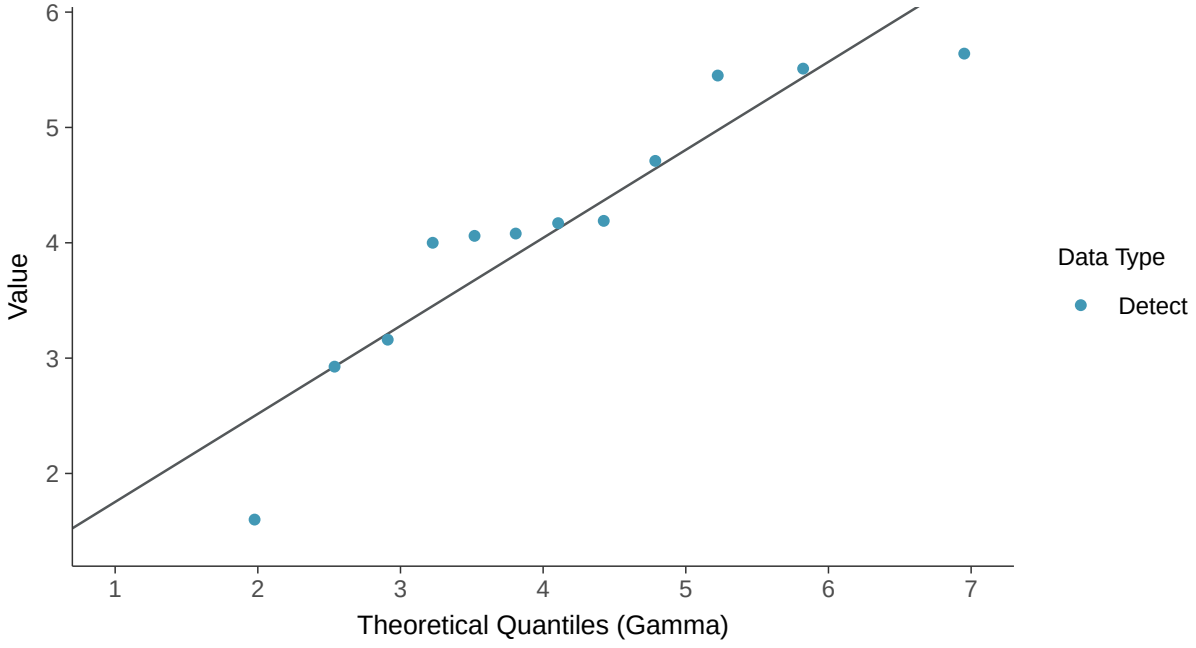
**Normal Q-Q plot**

Radium-226+228, MW-15016R (pCi/L)



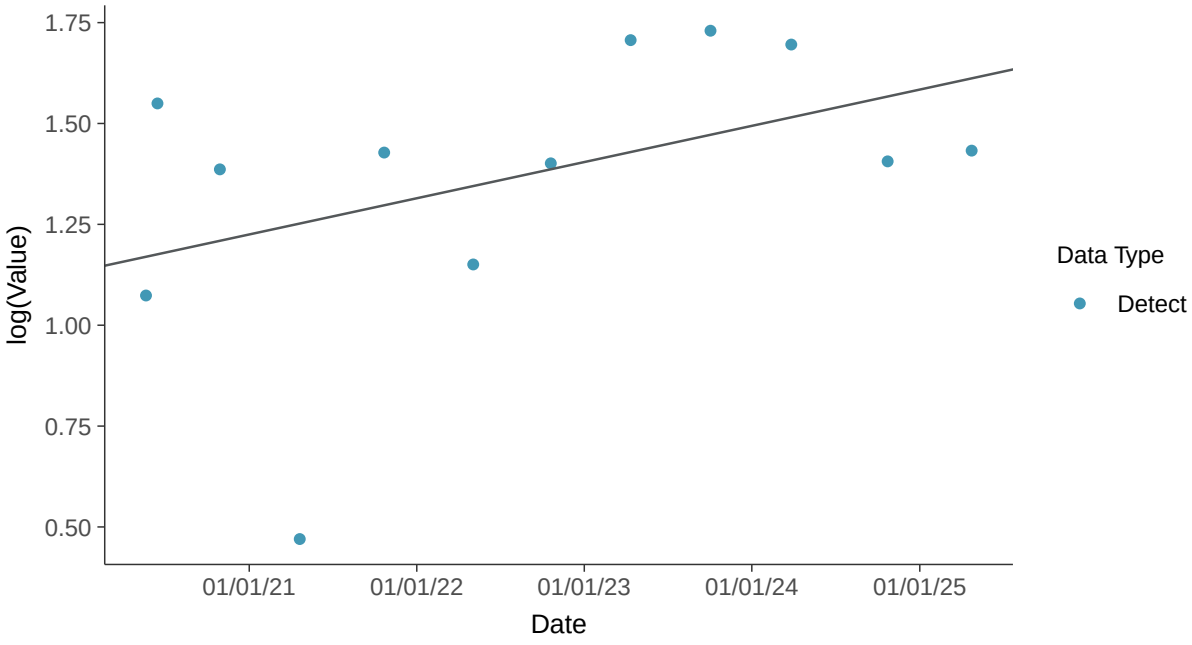

**Gamma Q-Q plot**

Radium-226+228, MW-15016R (pCi/L)



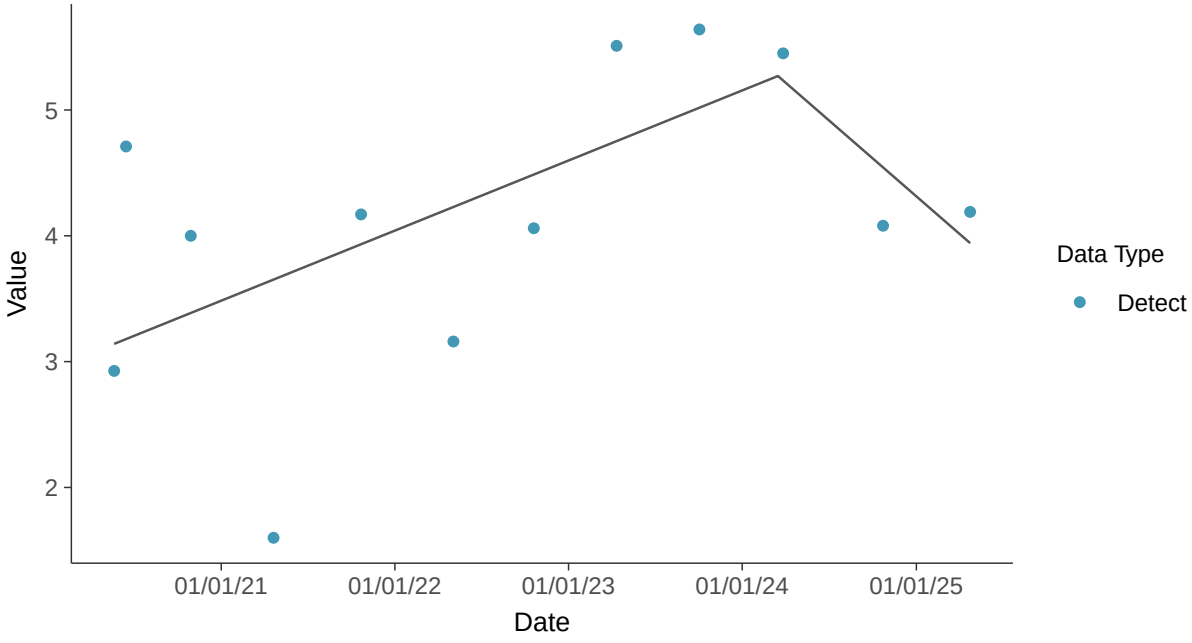
**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15016R (pCi/L)



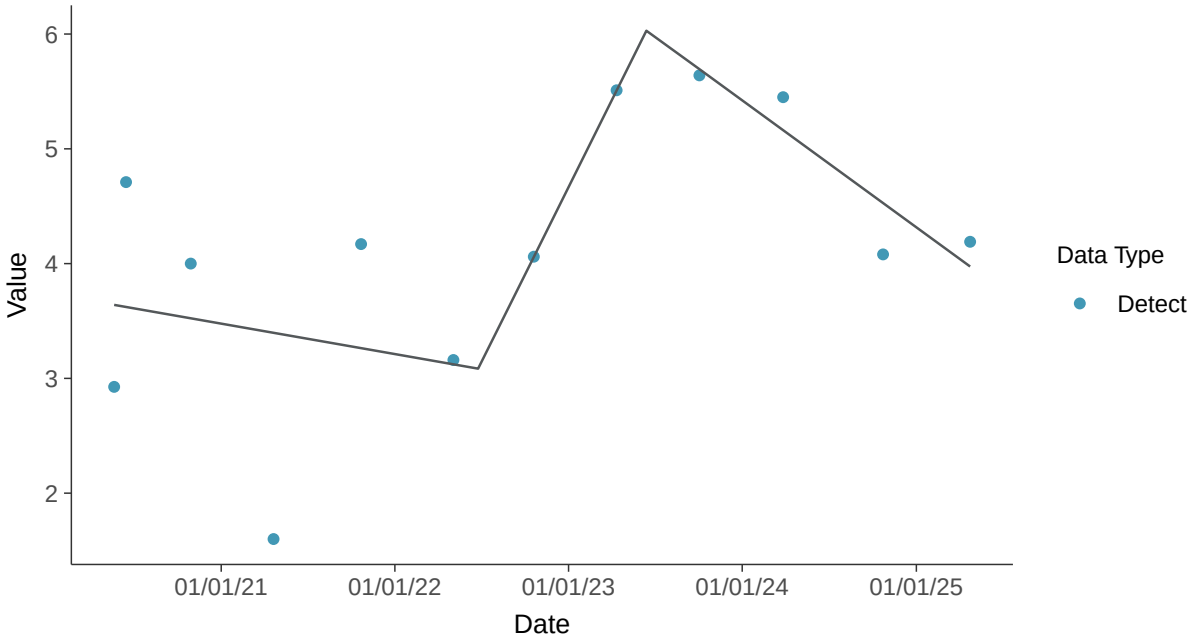

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15016R (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15016R (pCi/L)

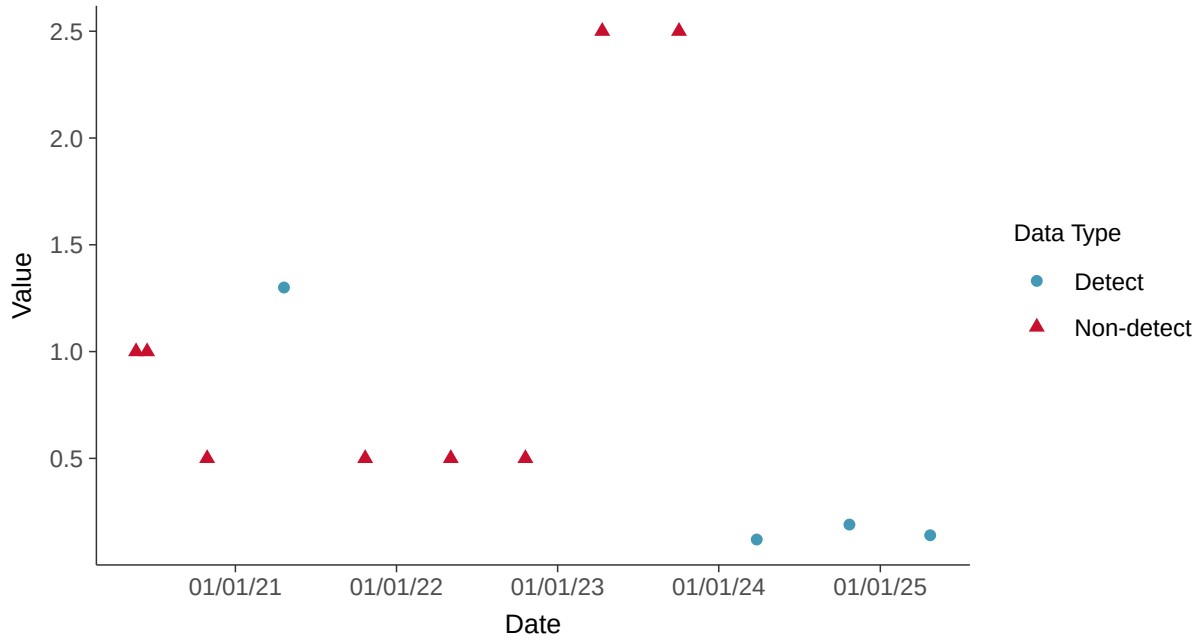


## Appendix IV: Selenium, MW-15016R

ID: 06_2_127

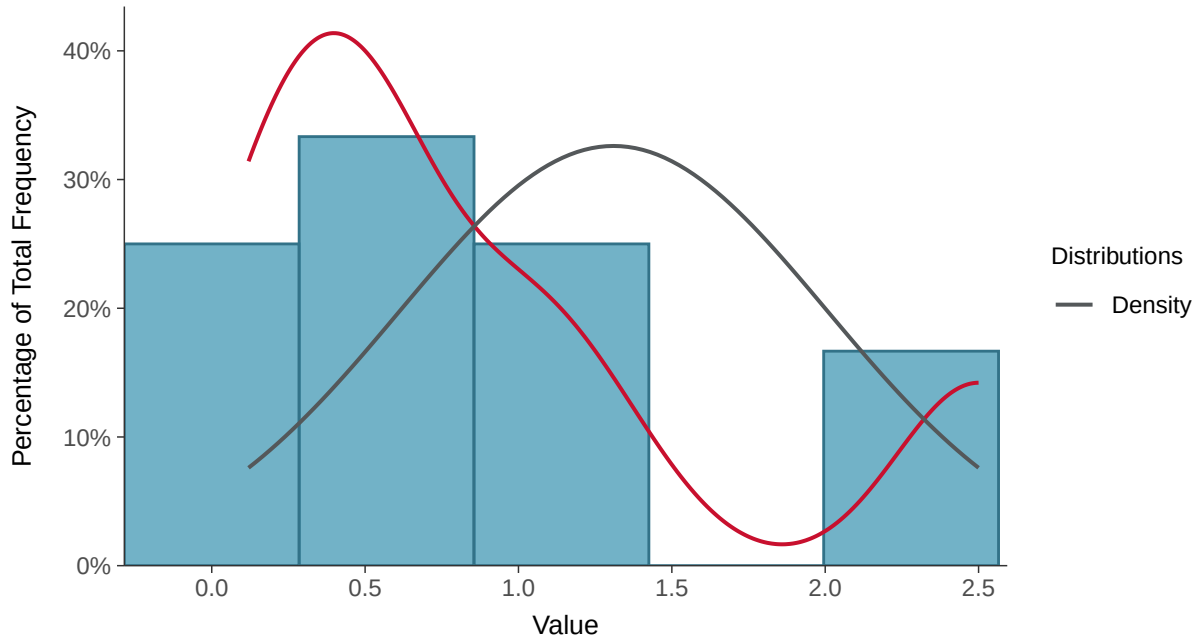
**Scatter Plot**

Selenium, MW-15016R (ug/L)



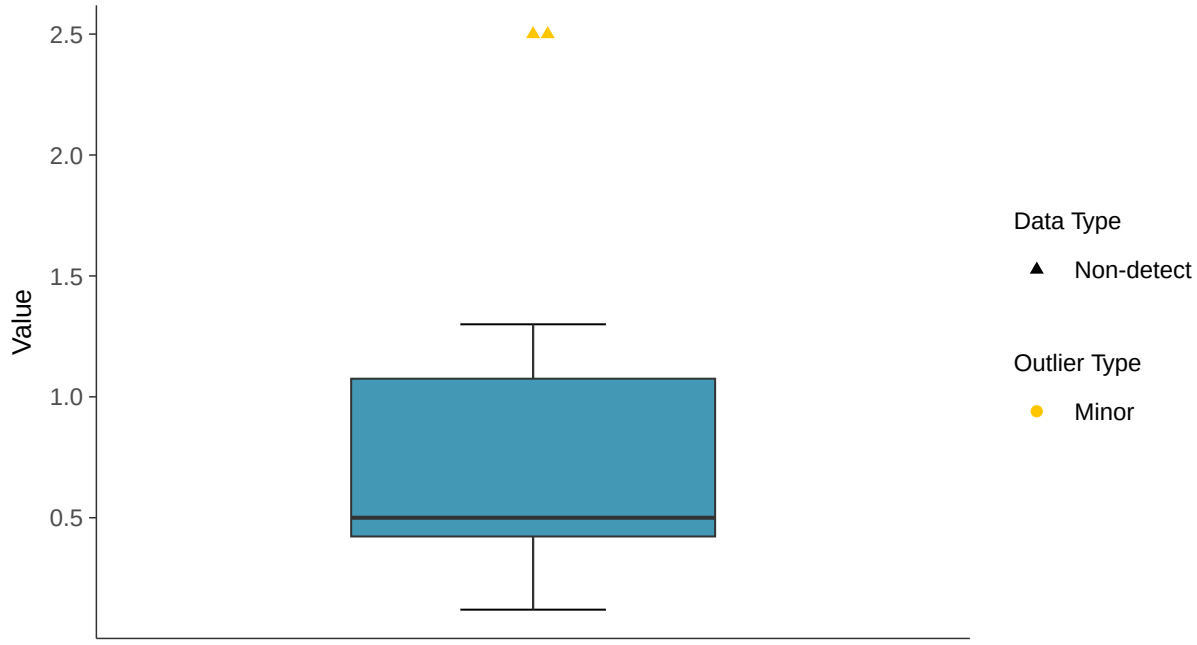

**Histogram**

Selenium, MW-15016R (ug/L)



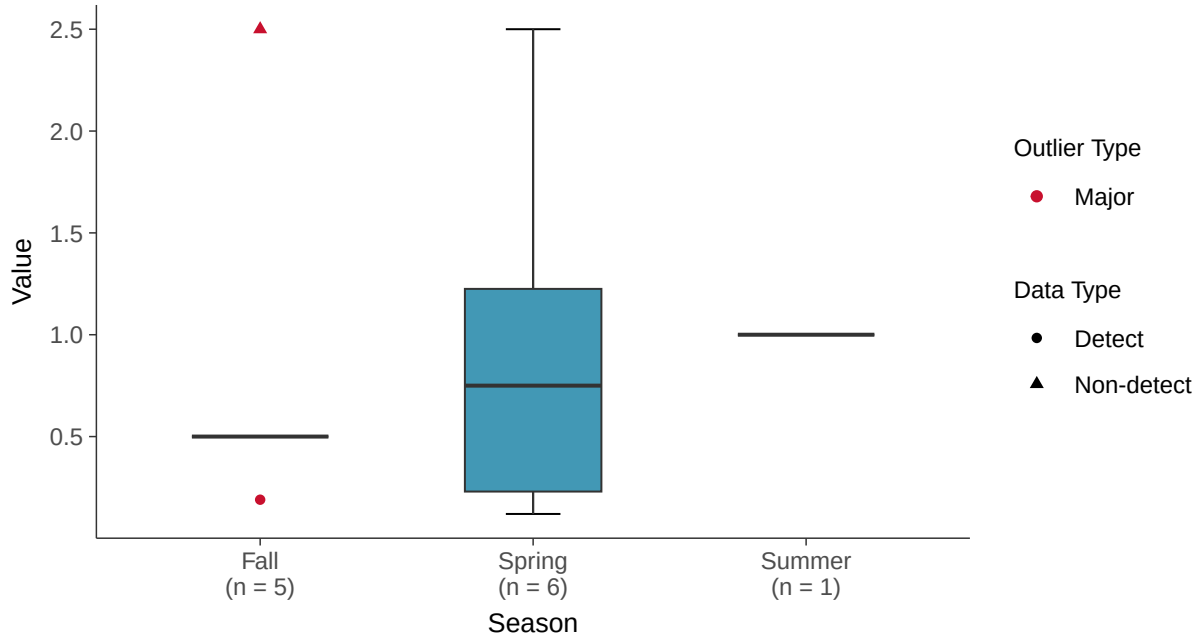
## Boxplot

Selenium, MW-15016R (ug/L)



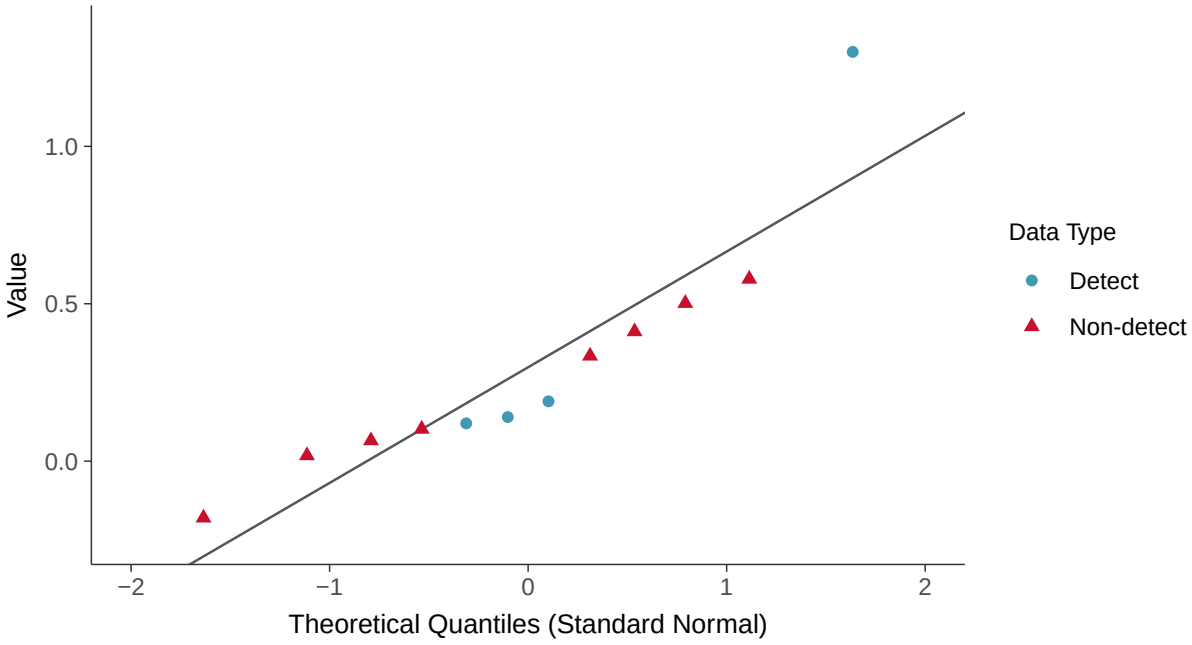

## Boxplot by Season

Selenium, MW-15016R (ug/L)



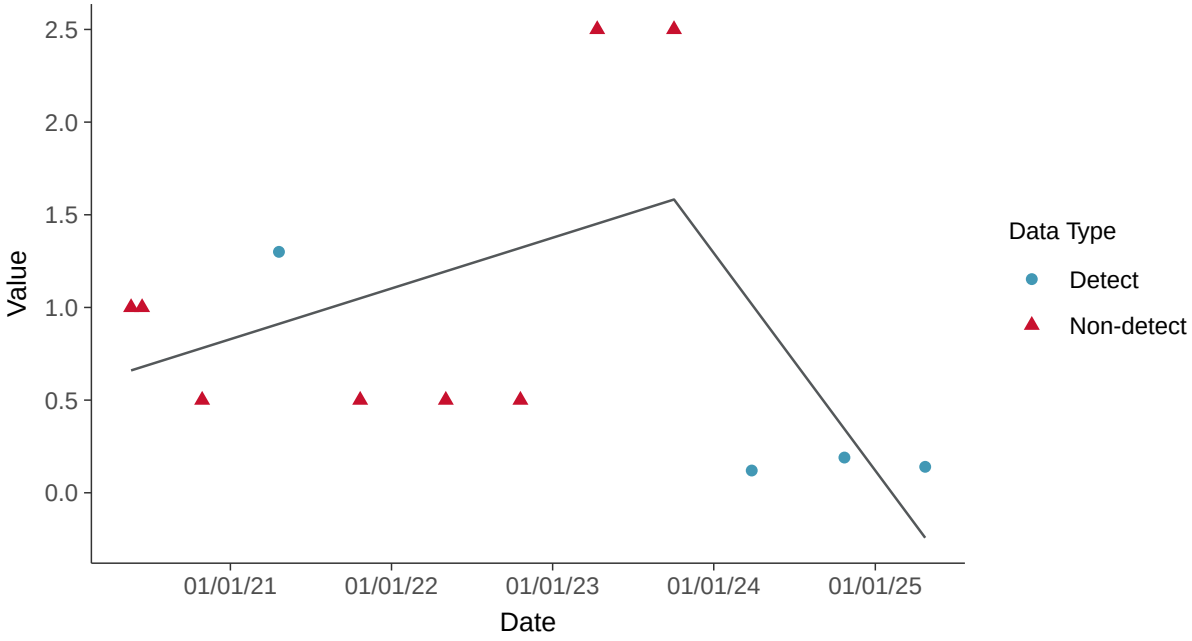
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15016R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15016R (ug/L)

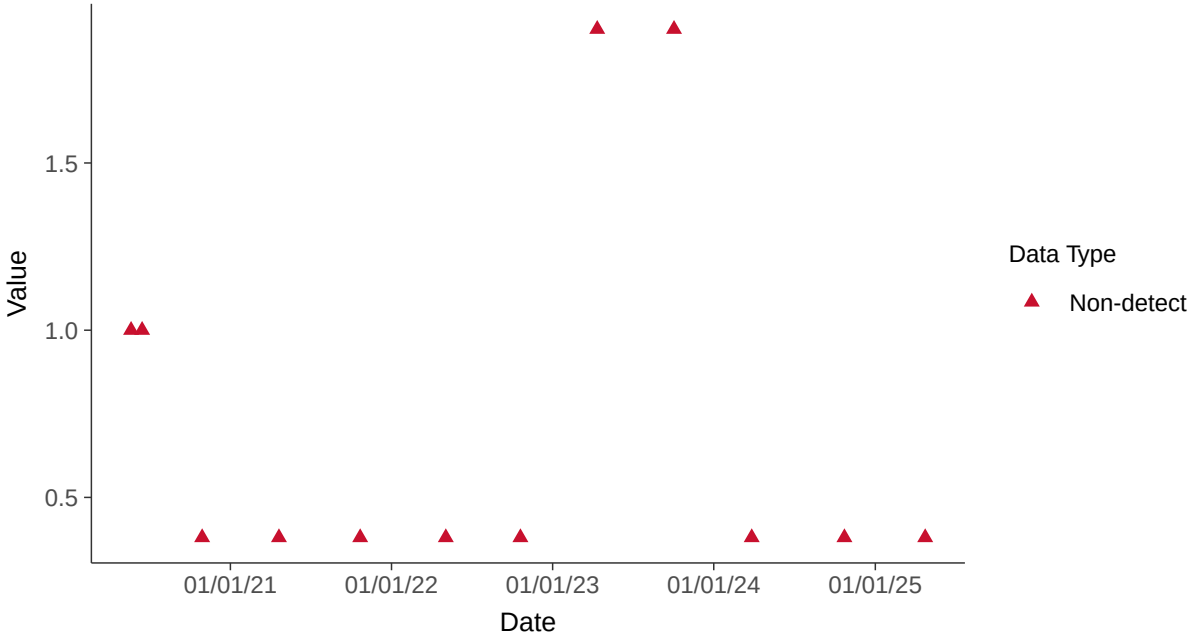


## Appendix IV: Thallium, MW-15016R

ID: 06_2_131

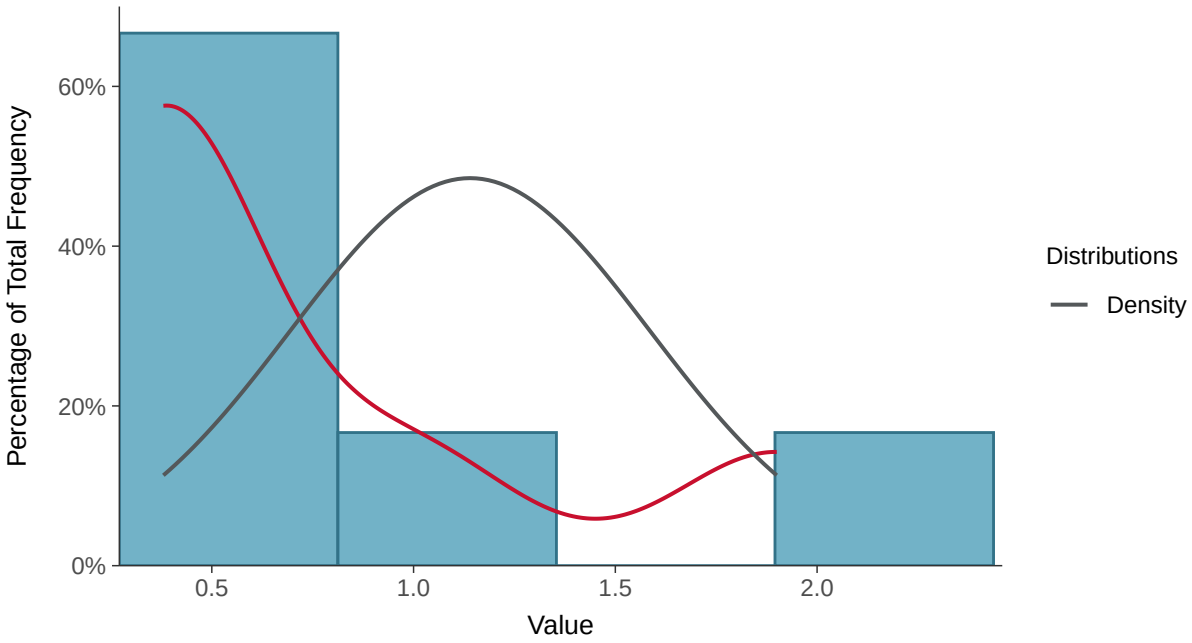
**Scatter Plot**

Thallium, MW-15016R (ug/L)



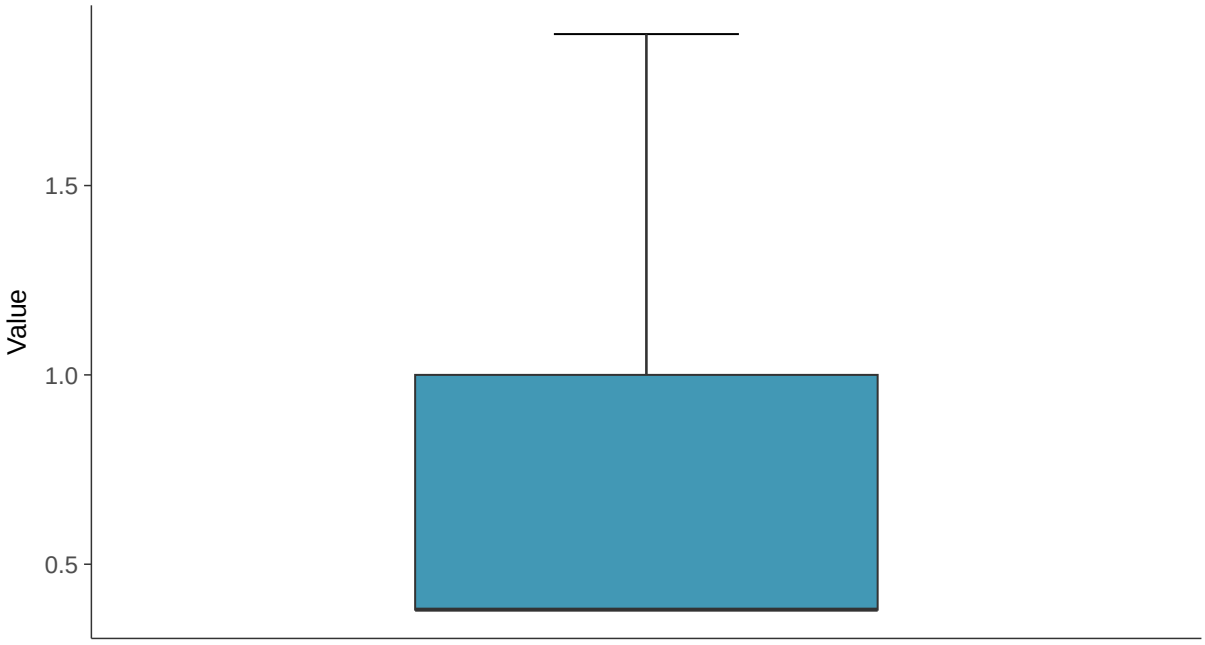

**Histogram**

Thallium, MW-15016R (ug/L)



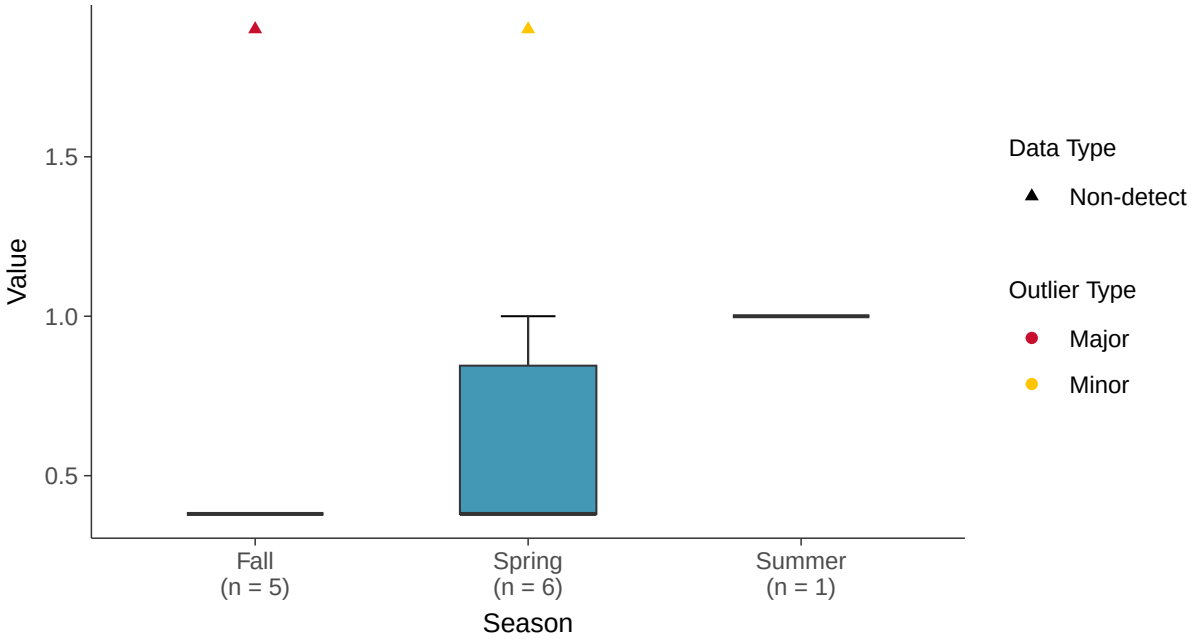
## Boxplot

Thallium, MW-15016R (ug/L)



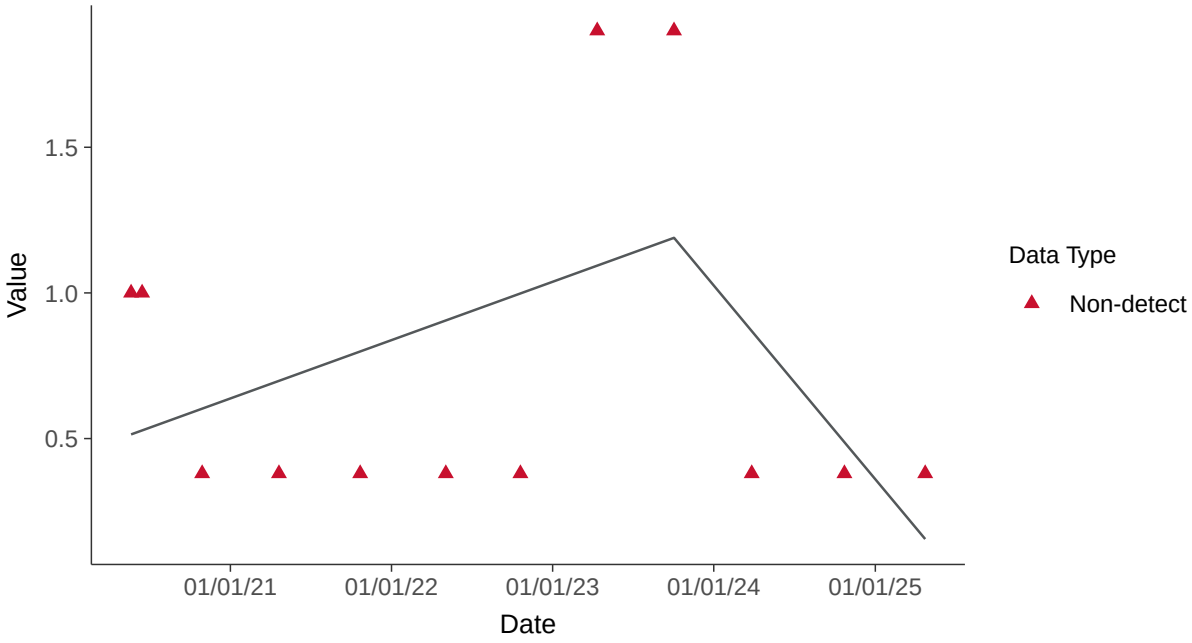

## Boxplot by Season

Thallium, MW-15016R (ug/L)



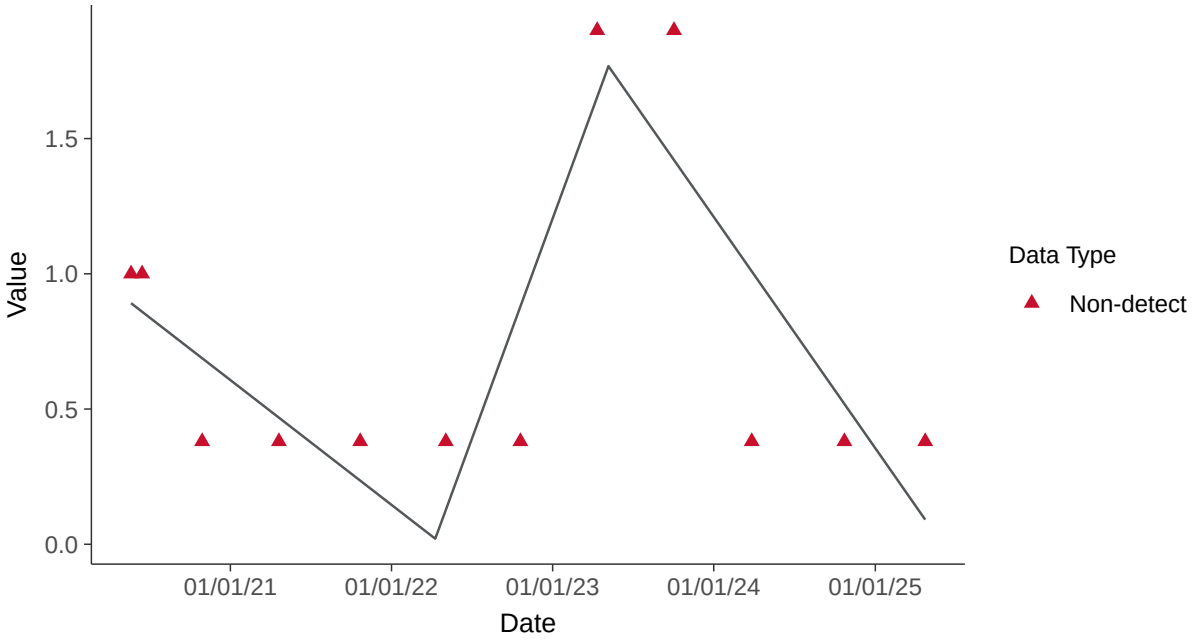
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15016R (ug/L)



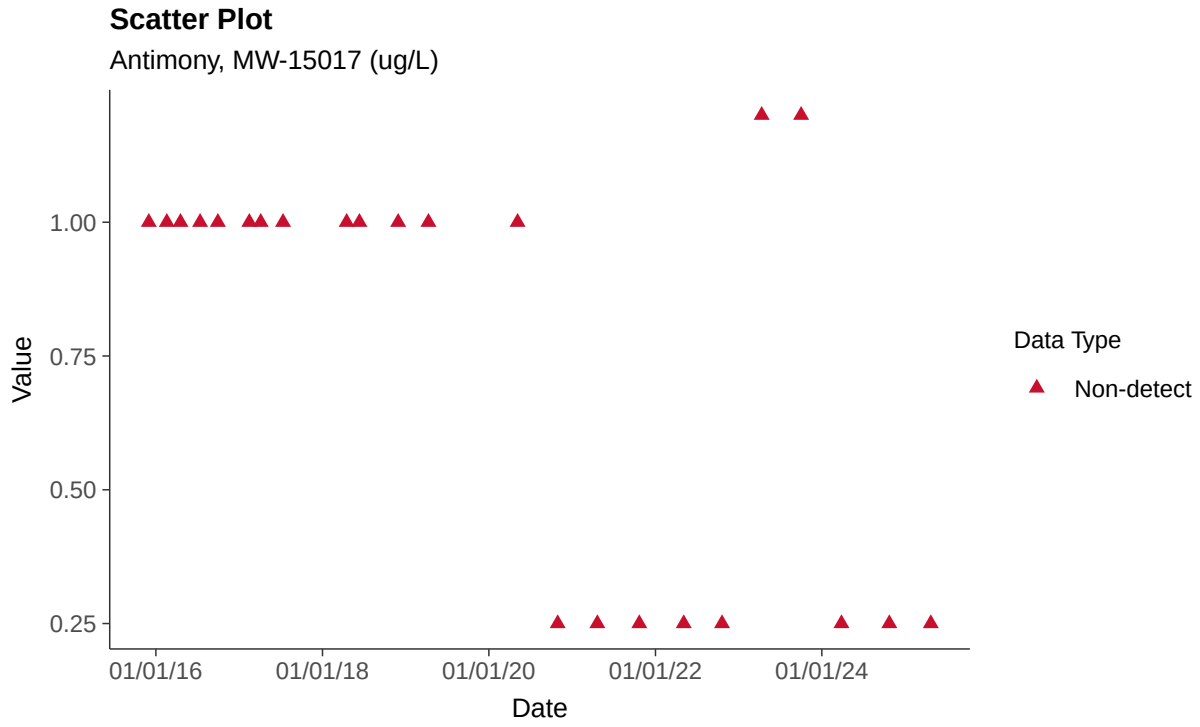

**Trend Regression: Piecewise Linear-Linear-Linear**

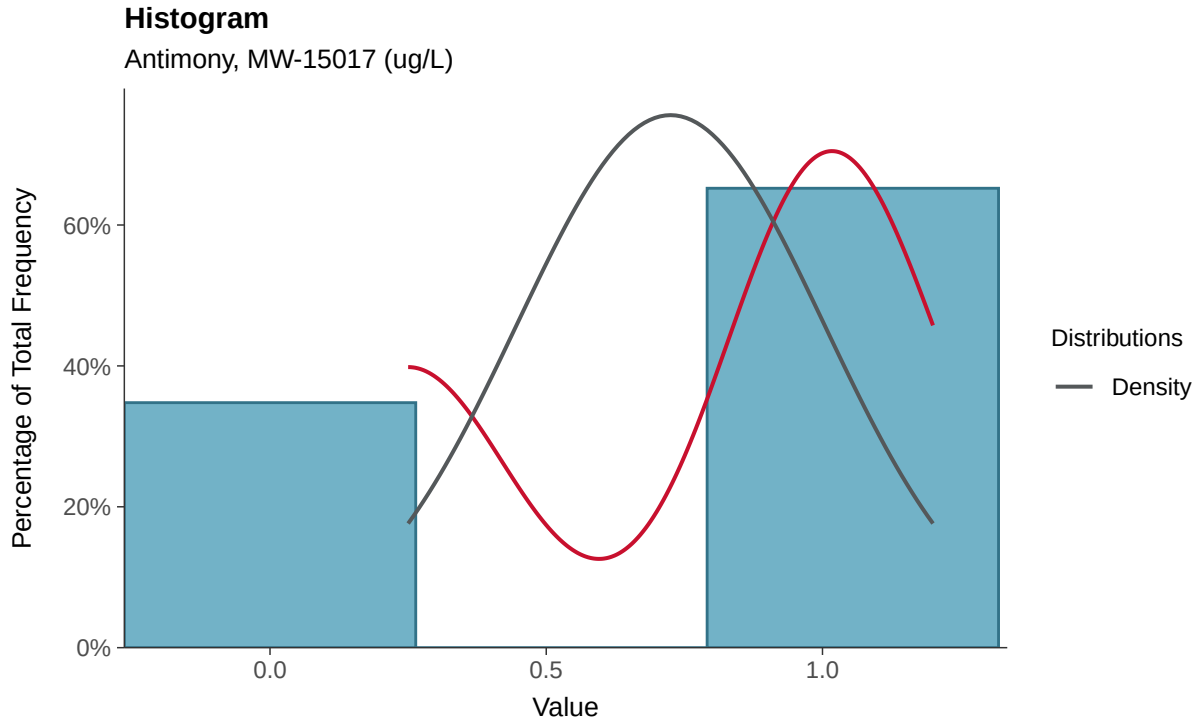
Thallium, MW-15016R (ug/L)



## Appendix IV: Antimony, MW-15017

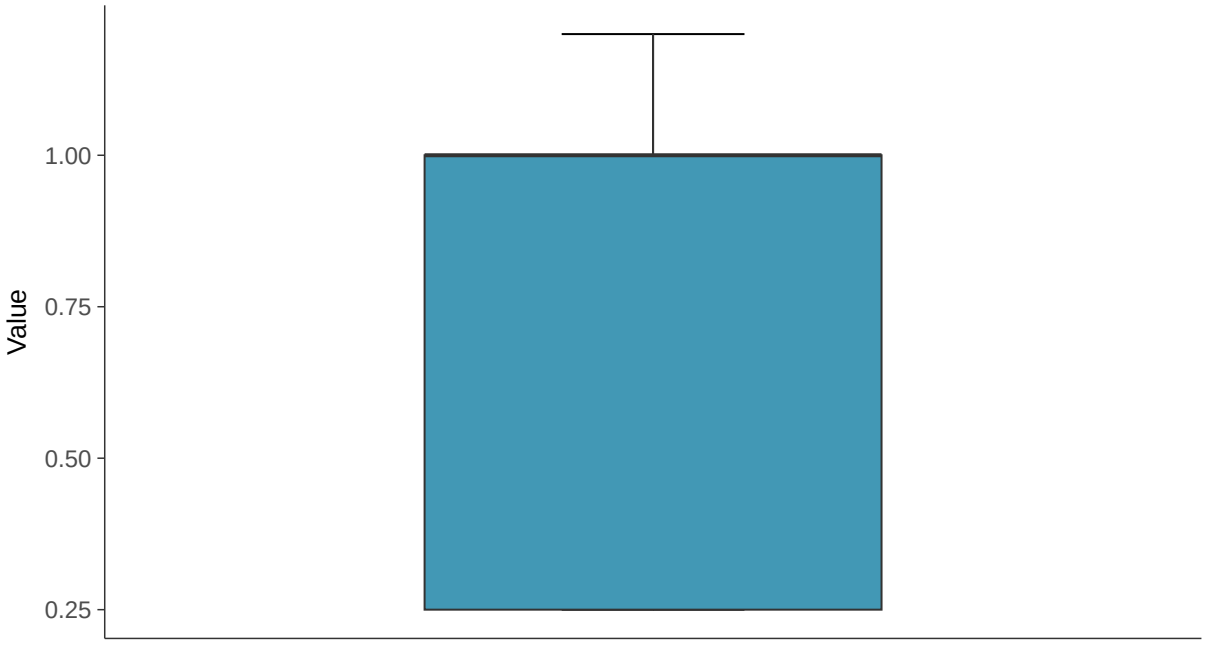
ID: 07_2_101



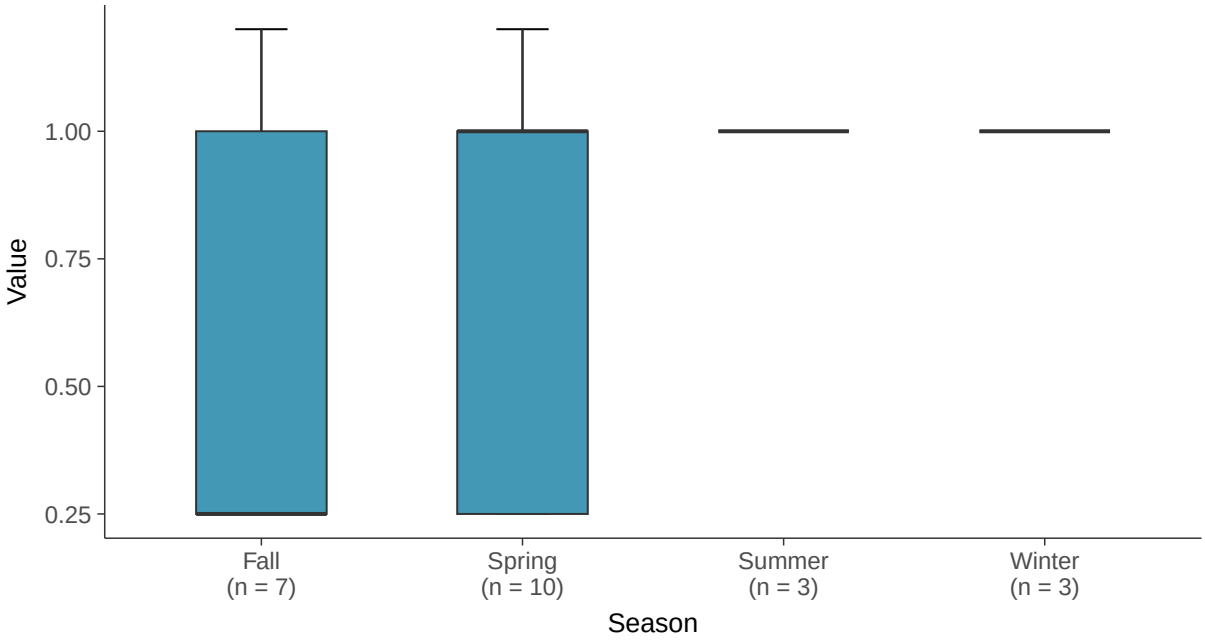
**Boxplot**

Antimony, MW-15017 (ug/L)



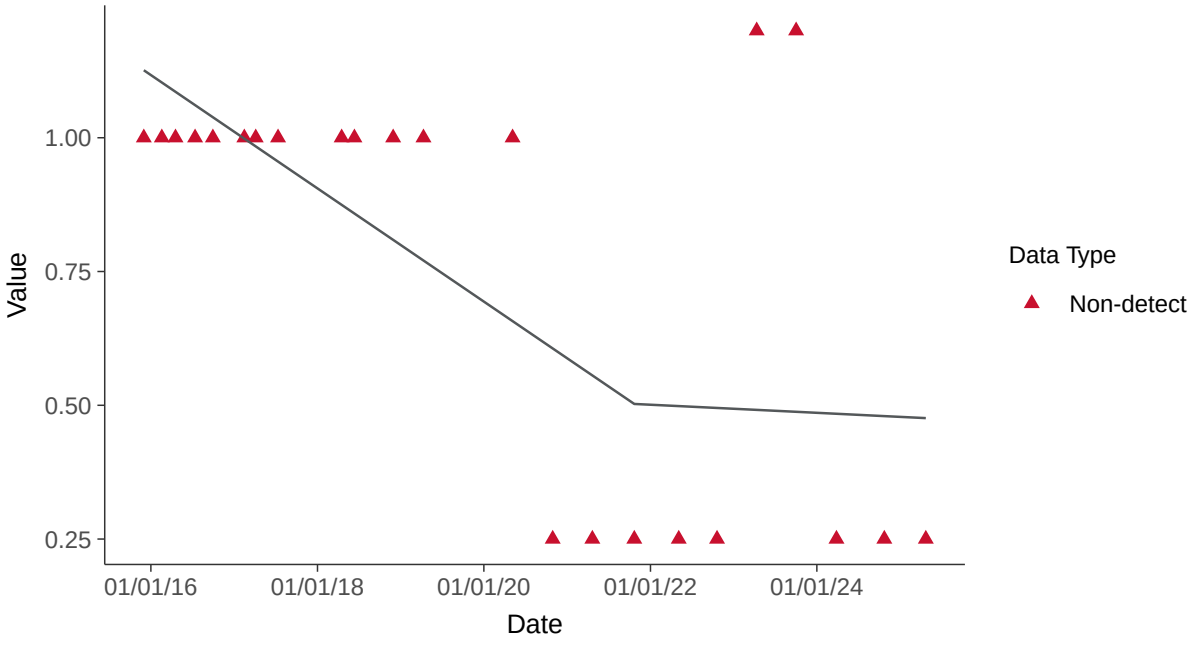

**Boxplot by Season**

Antimony, MW-15017 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15017 (ug/L)

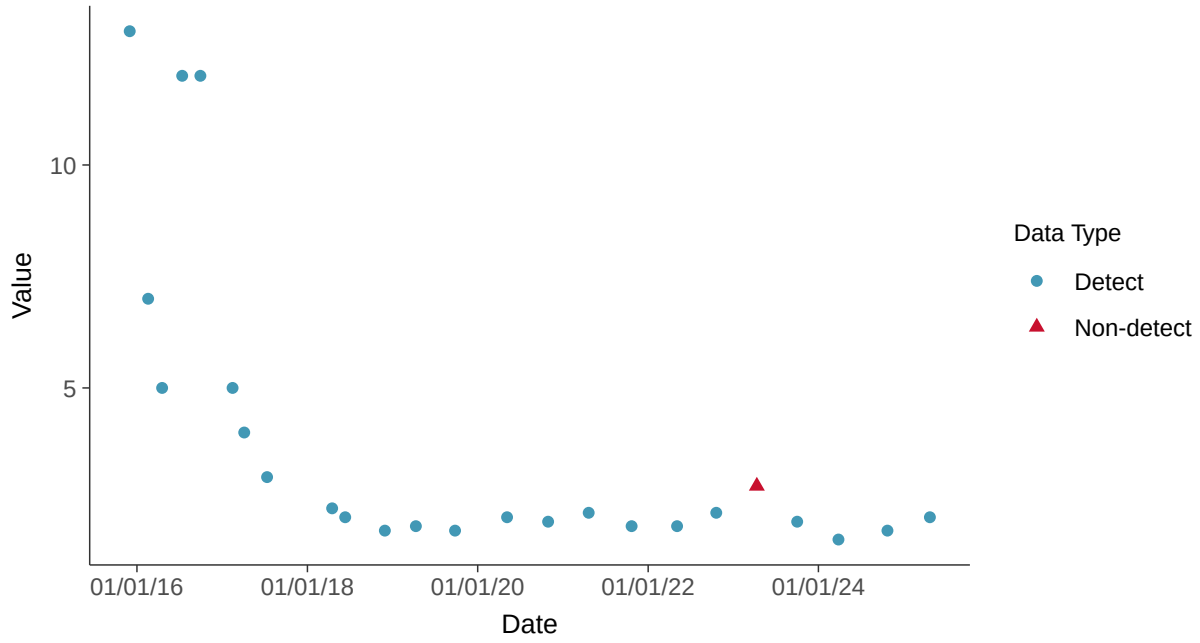


# Appendix IV: Arsenic, MW-15017

ID: 07_2_102

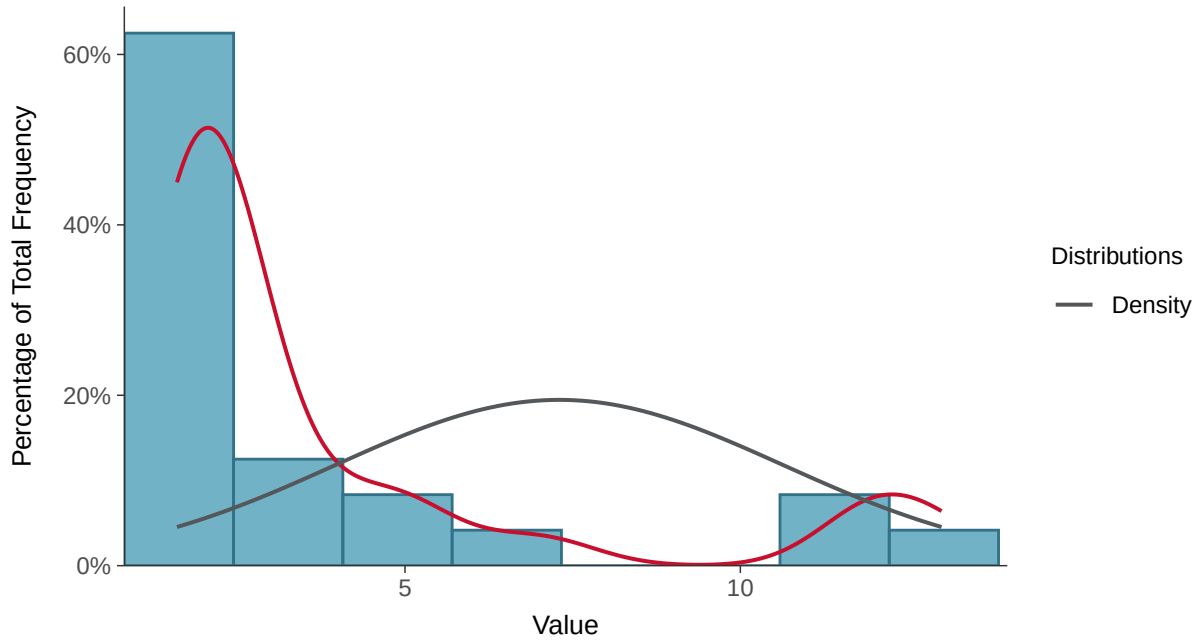
**Scatter Plot**

Arsenic, MW-15017 (ug/L)



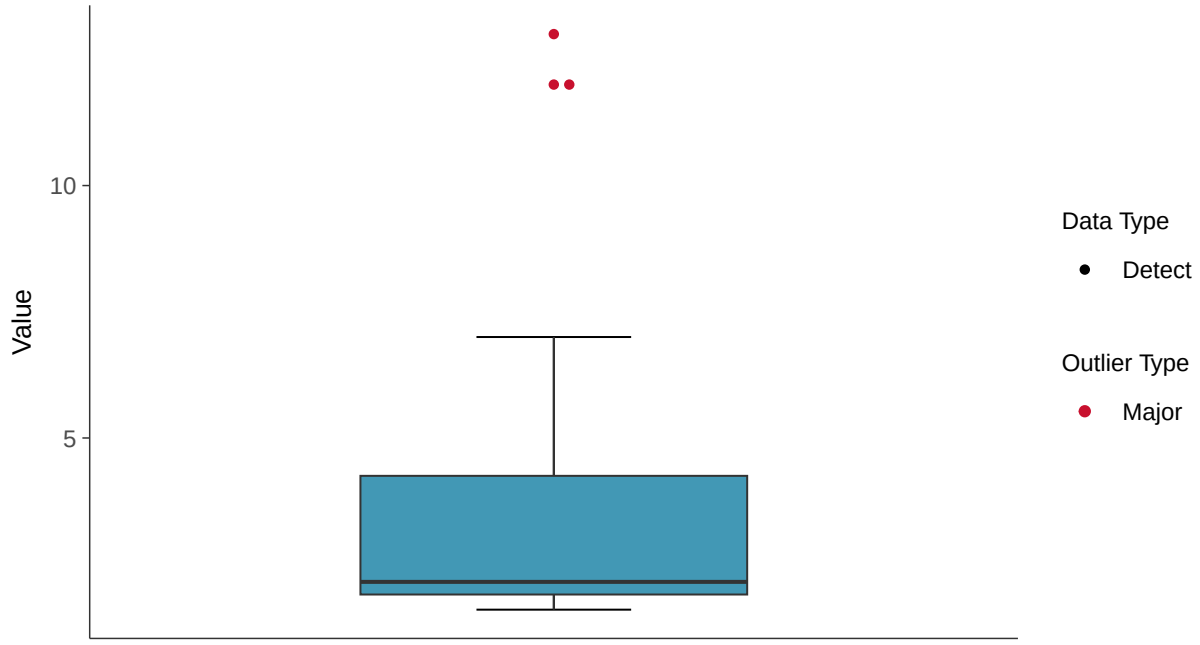

**Histogram**

Arsenic, MW-15017 (ug/L)



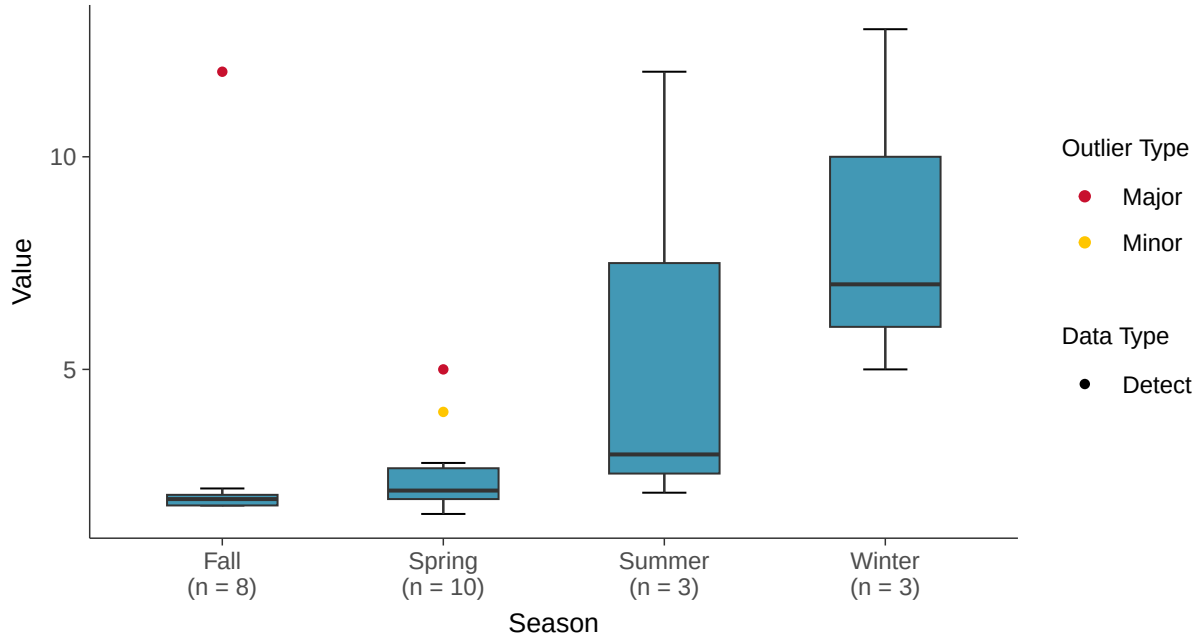
## Boxplot

Arsenic, MW-15017 (ug/L)



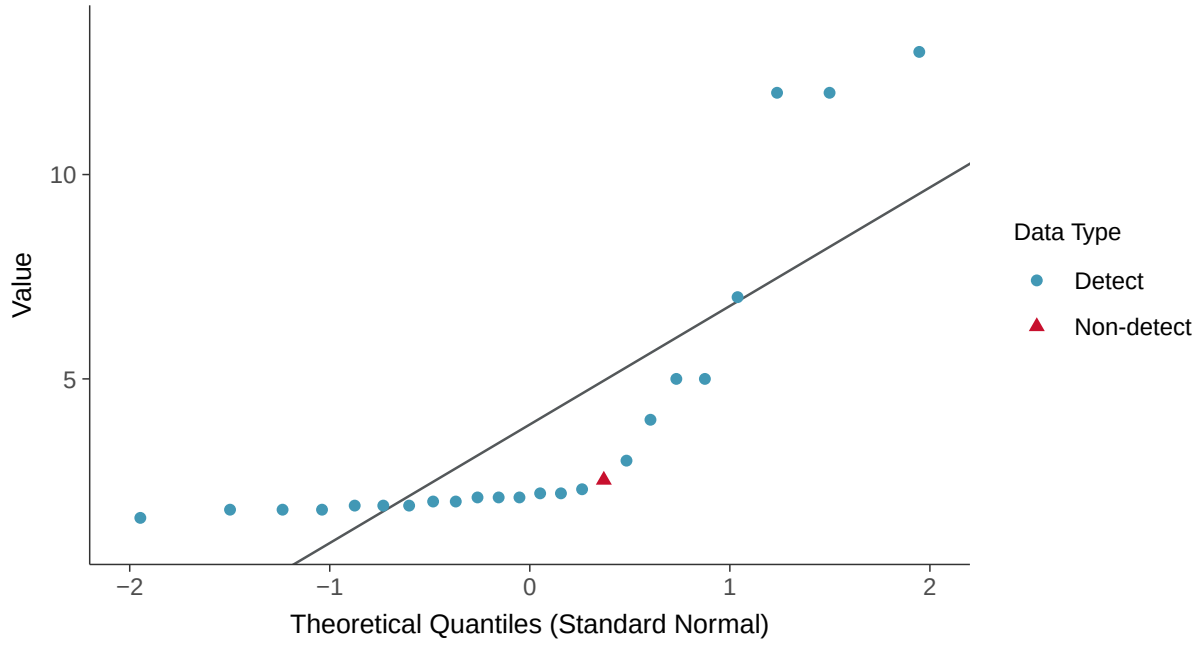

## Boxplot by Season

Arsenic, MW-15017 (ug/L)



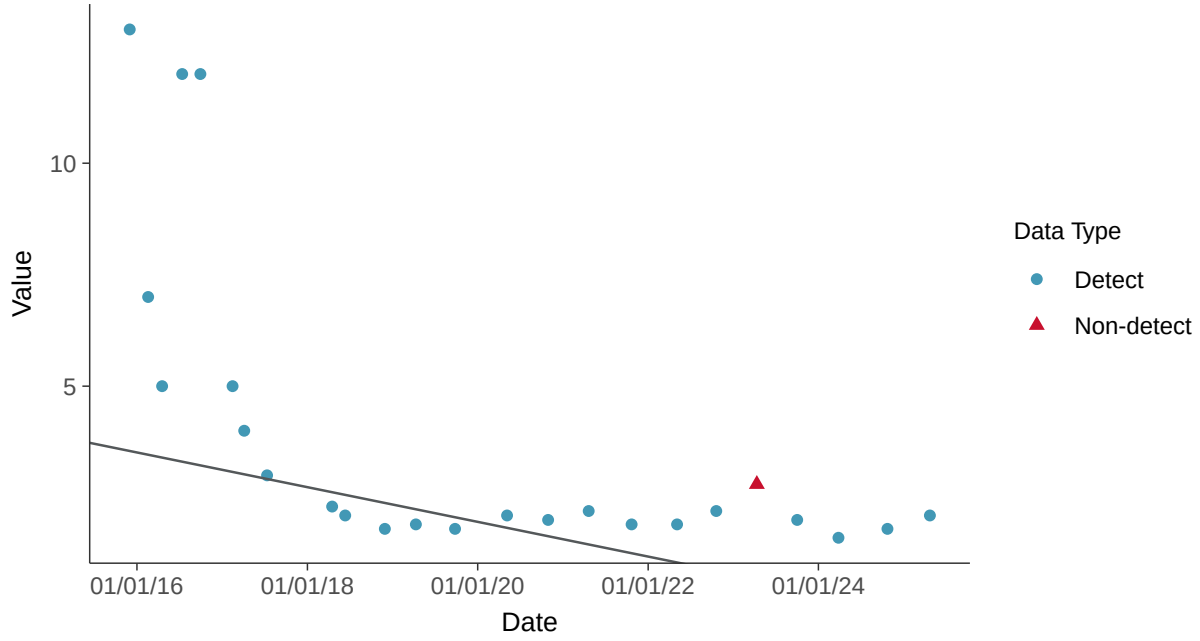
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15017 (ug/L)



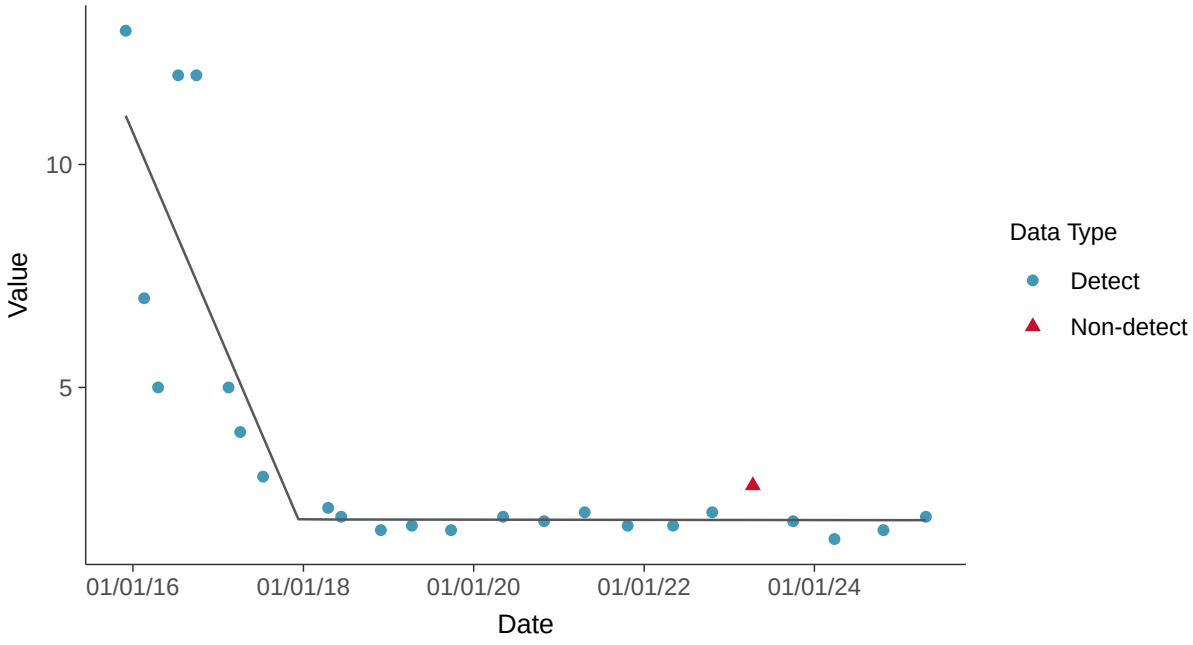

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Arsenic, MW-15017 (ug/L)



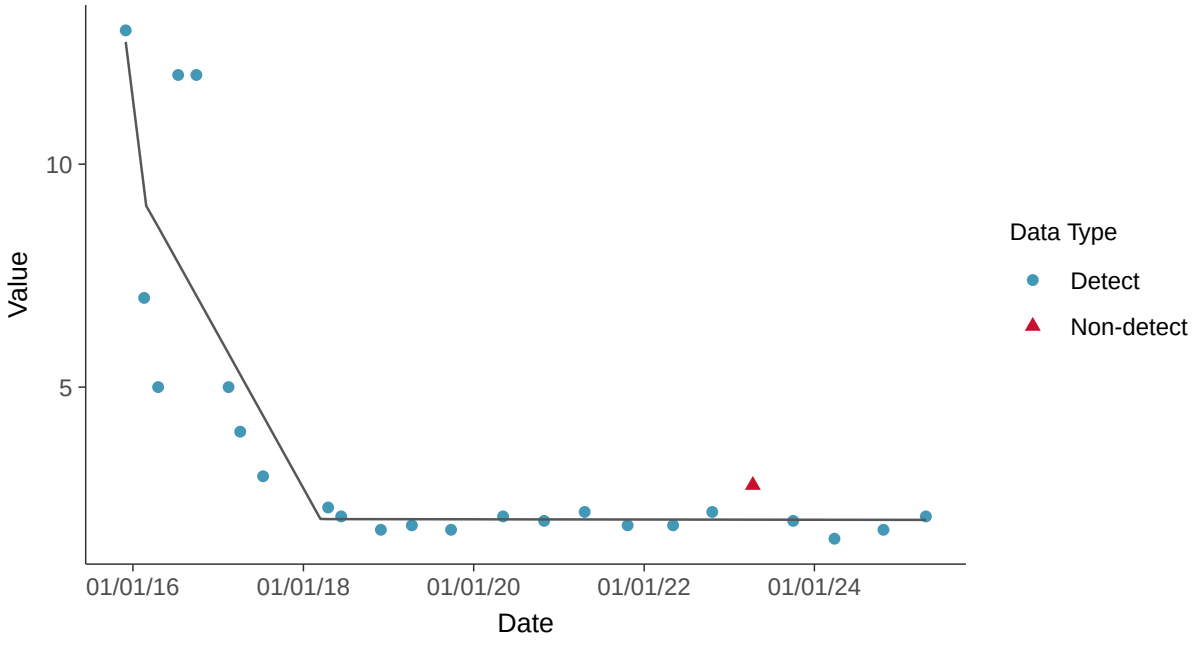
## Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15017 (ug/L)




## Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15017 (ug/L)

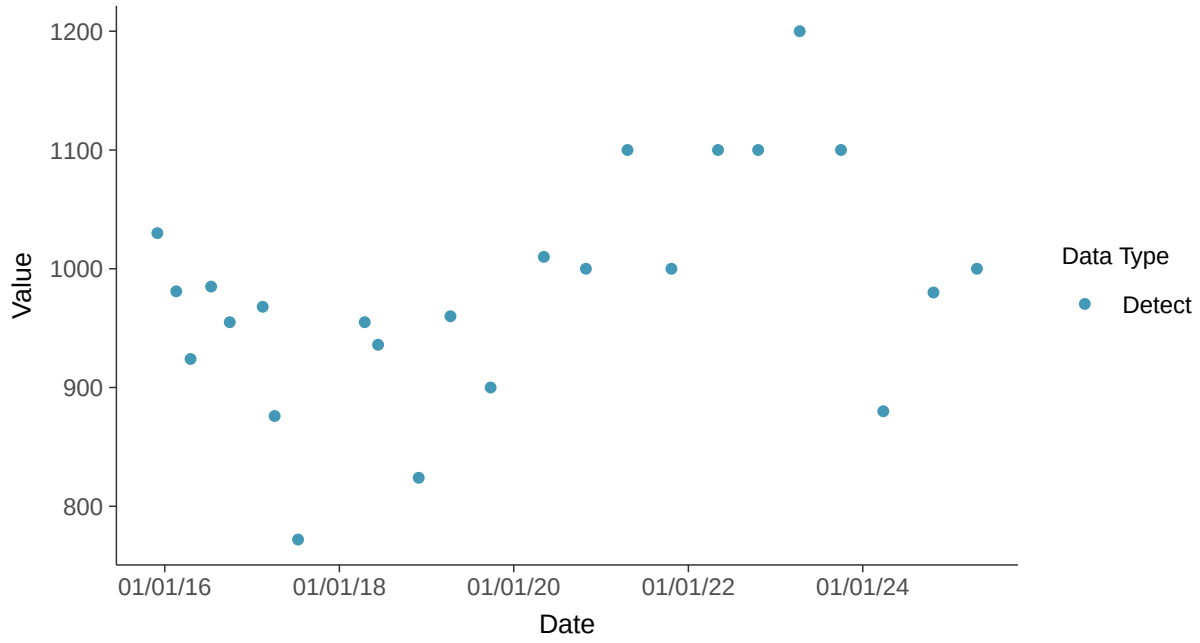


## Appendix IV: Barium, MW-15017

ID: 07_2_103

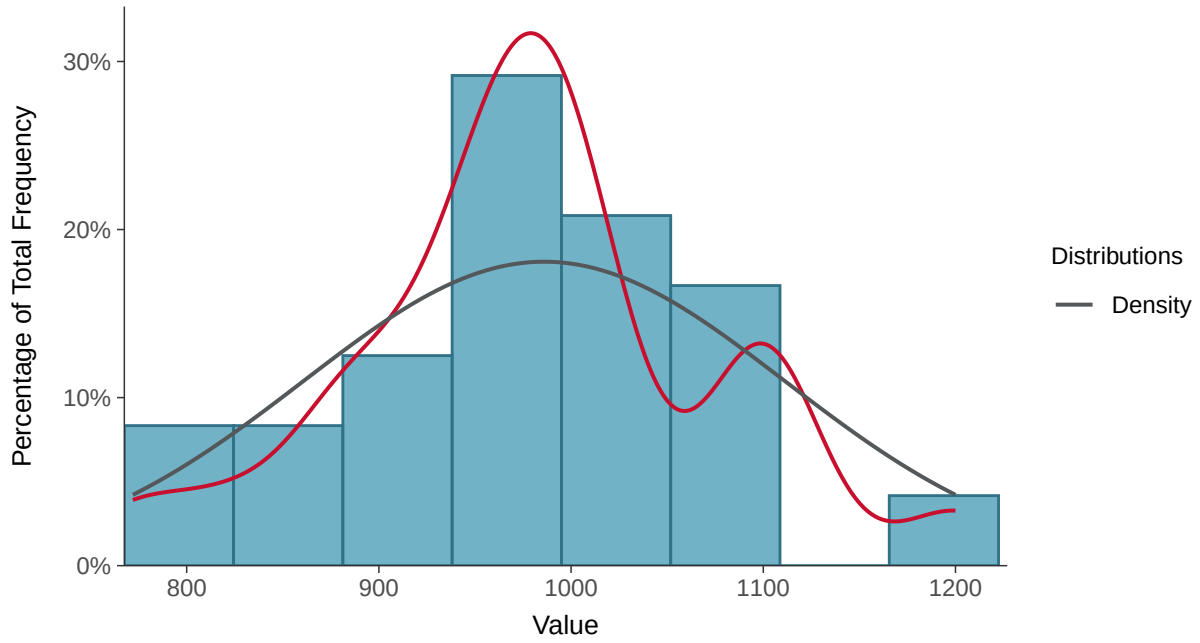
**Scatter Plot**

Barium, MW-15017 (ug/L)



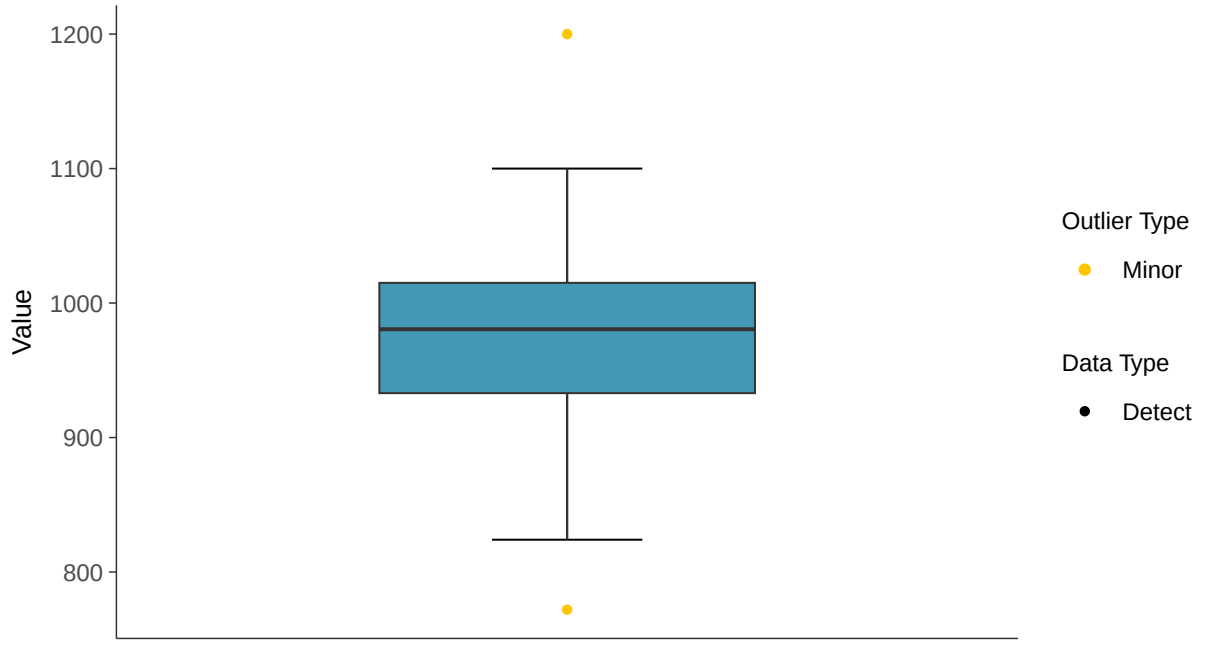

**Histogram**

Barium, MW-15017 (ug/L)



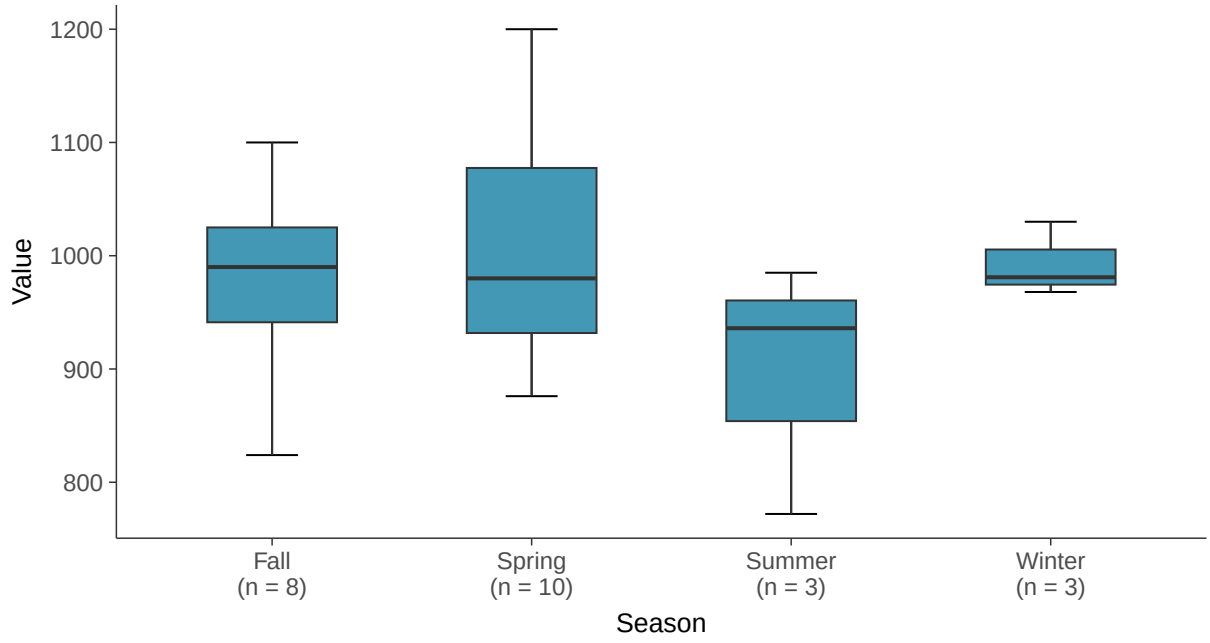
**Boxplot**

Barium, MW-15017 (ug/L)



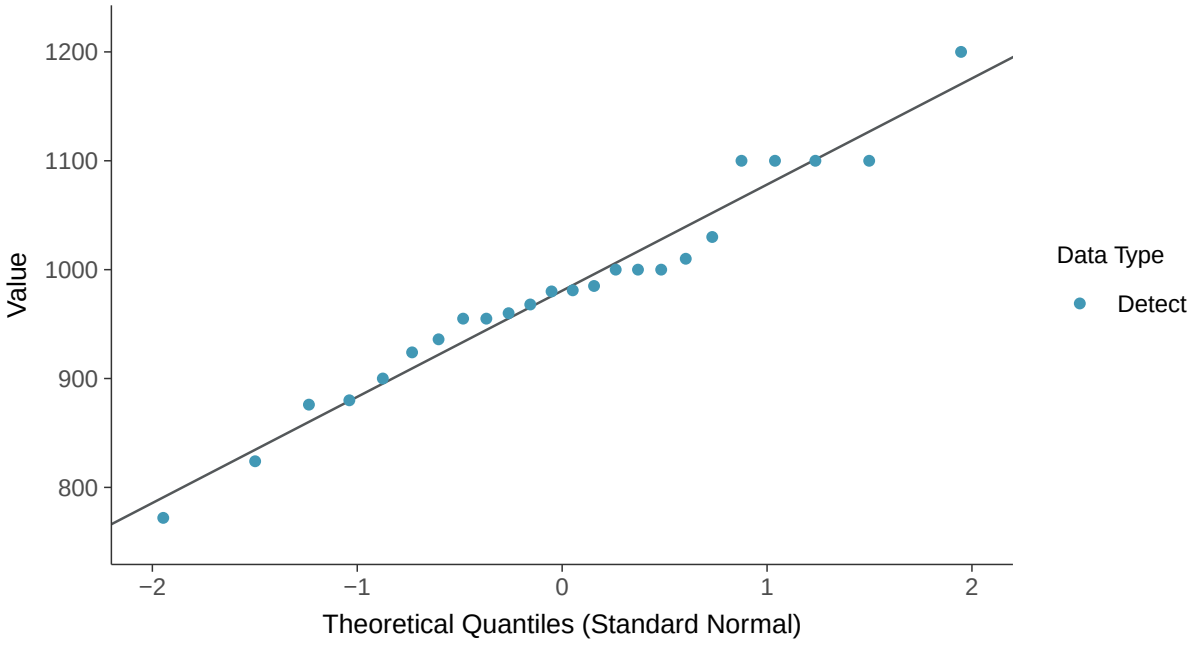

**Boxplot by Season**

Barium, MW-15017 (ug/L)



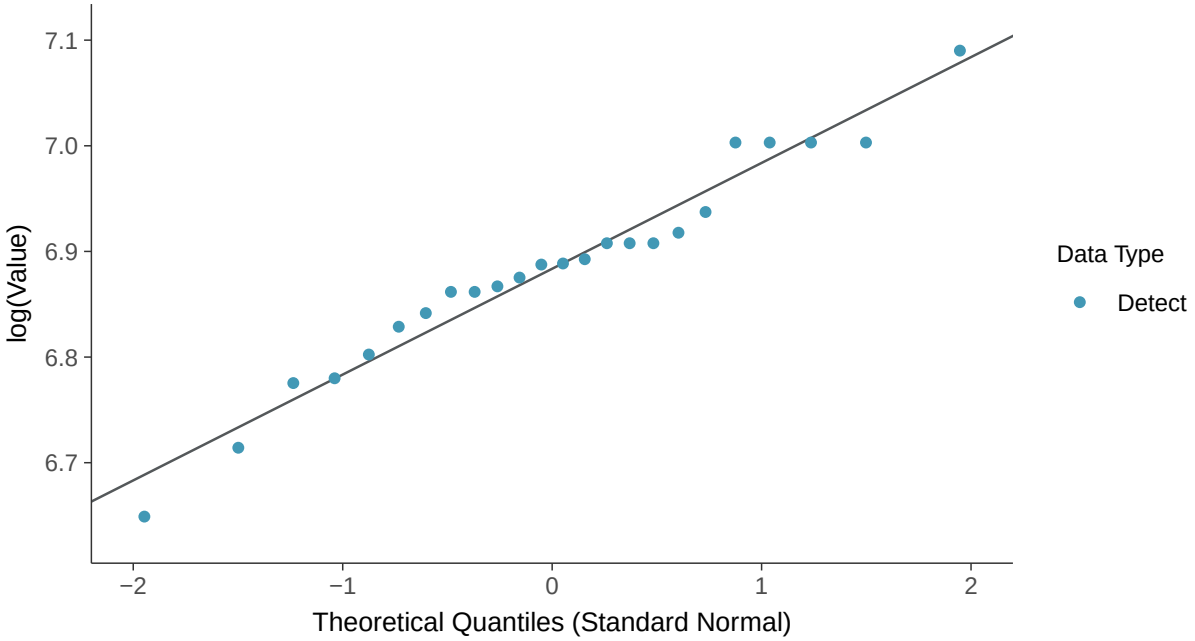
**Normal Q-Q plot**

Barium, MW-15017 (ug/L)



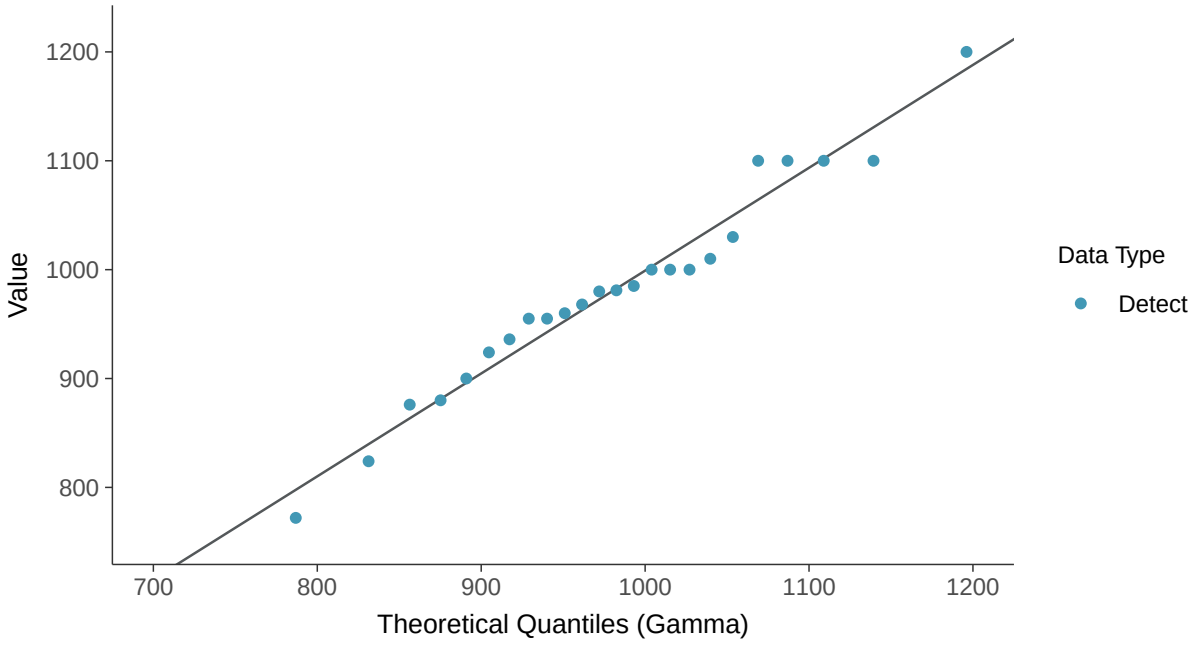

**Lognormal Q-Q plot**

Barium, MW-15017 (ug/L)



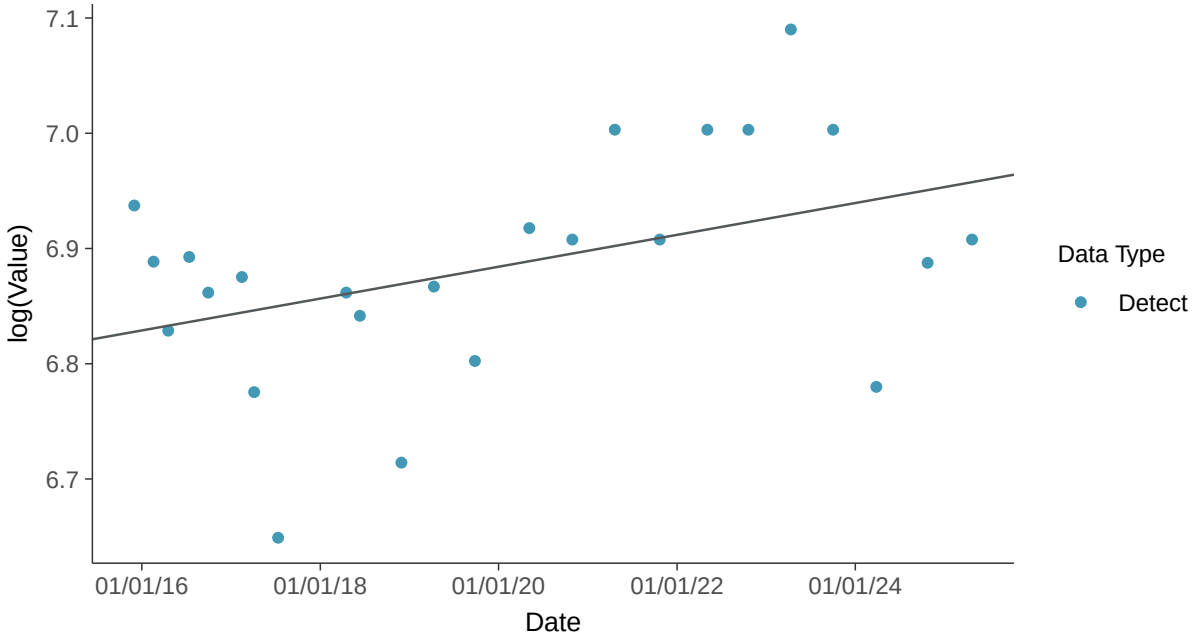
**Gamma Q-Q plot**

Barium, MW-15017 (ug/L)



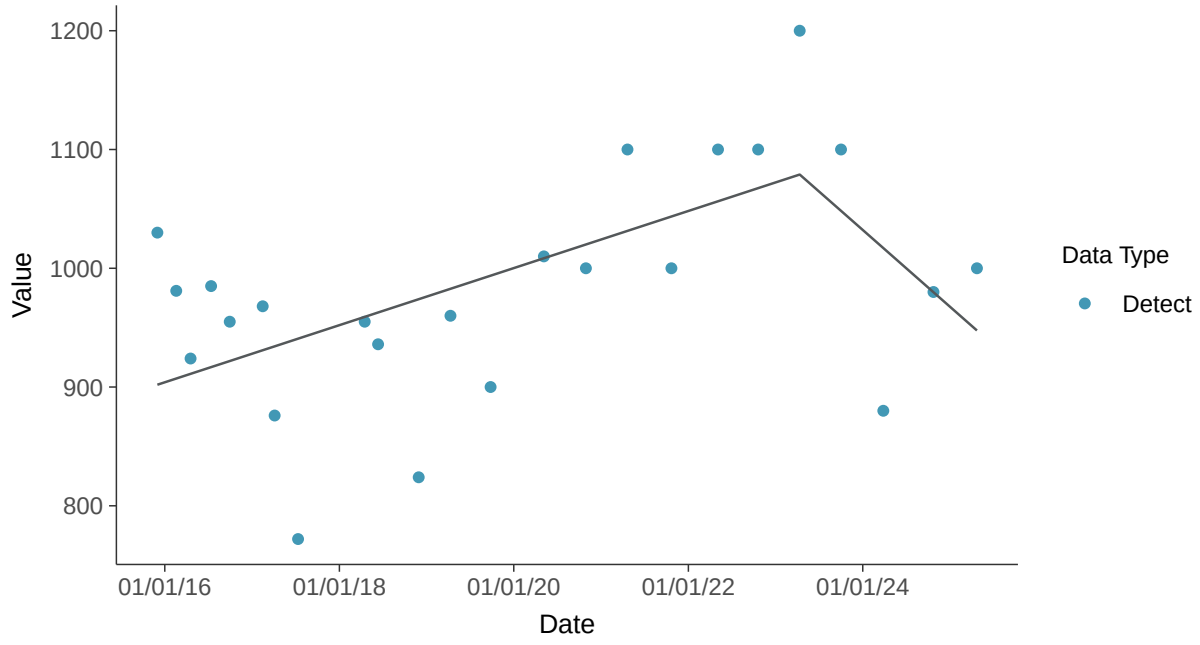

**Trend Regression: Lognormal MLE**

Barium, MW-15017 (ug/L)



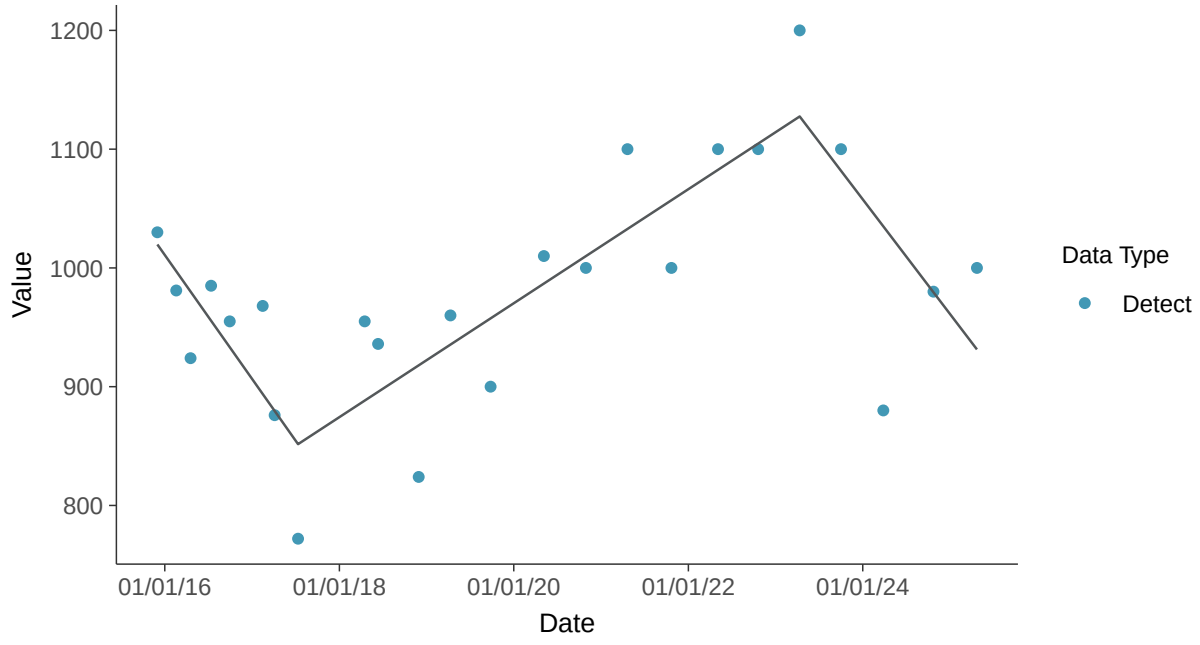
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15017 (ug/L)



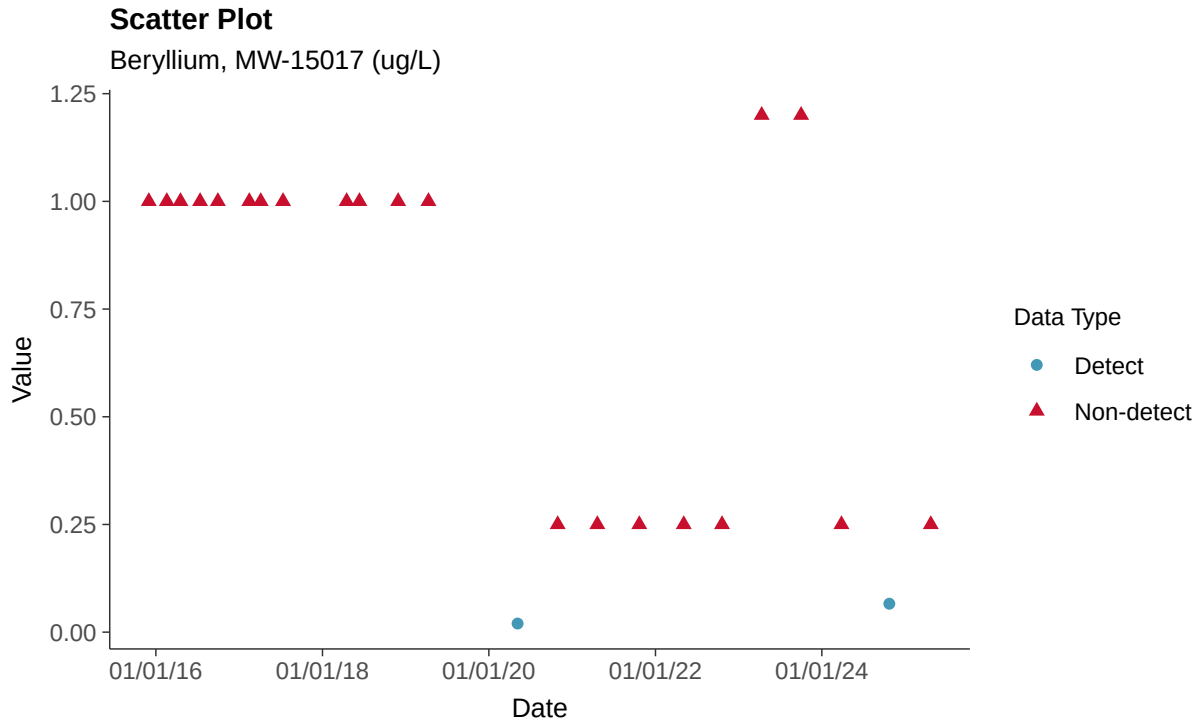

**Trend Regression: Piecewise Linear-Linear-Linear**

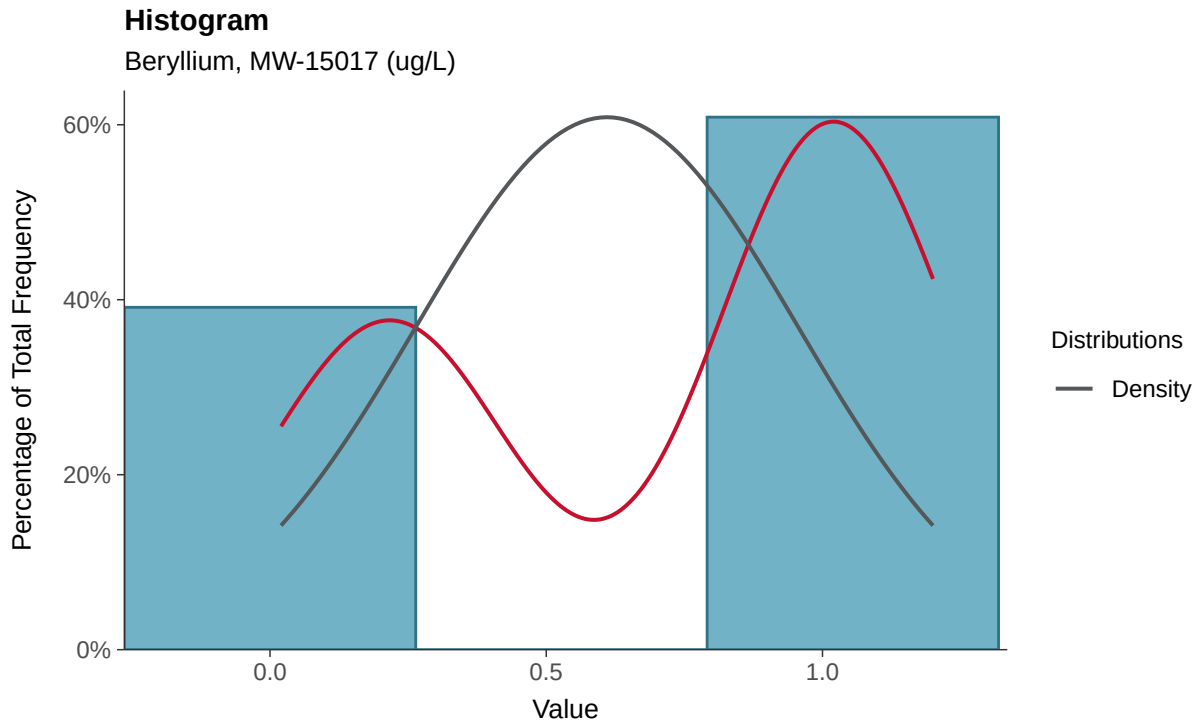
Barium, MW-15017 (ug/L)



## Appendix IV: Beryllium, MW-15017

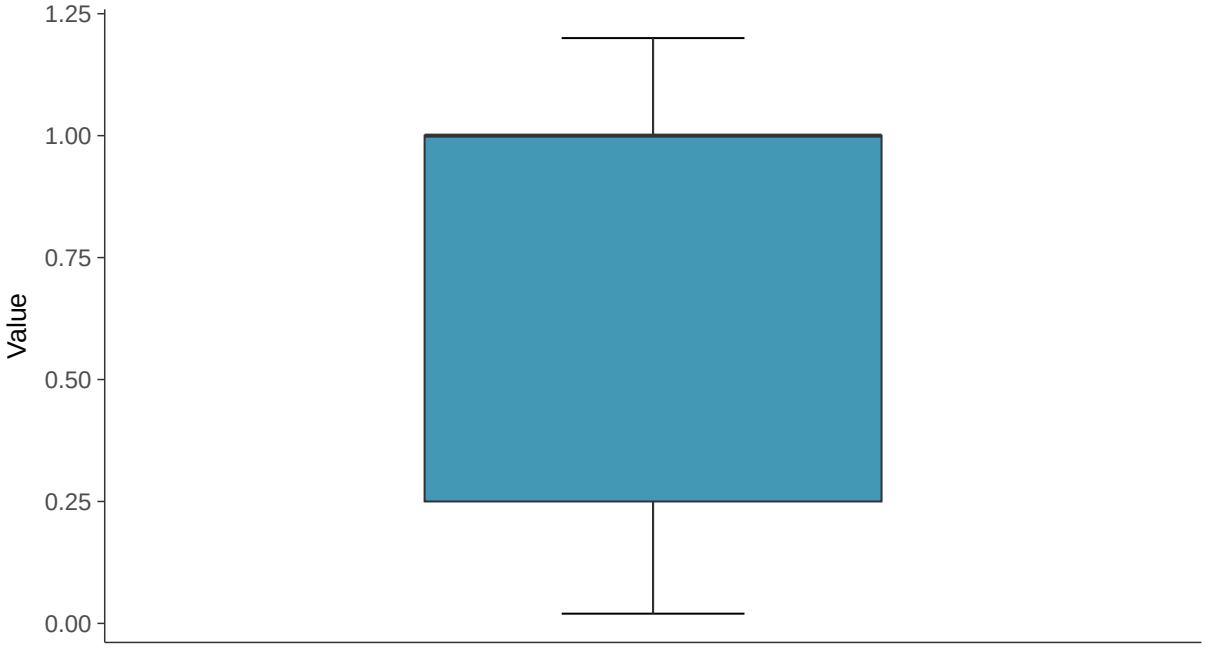
ID: 07_2_104



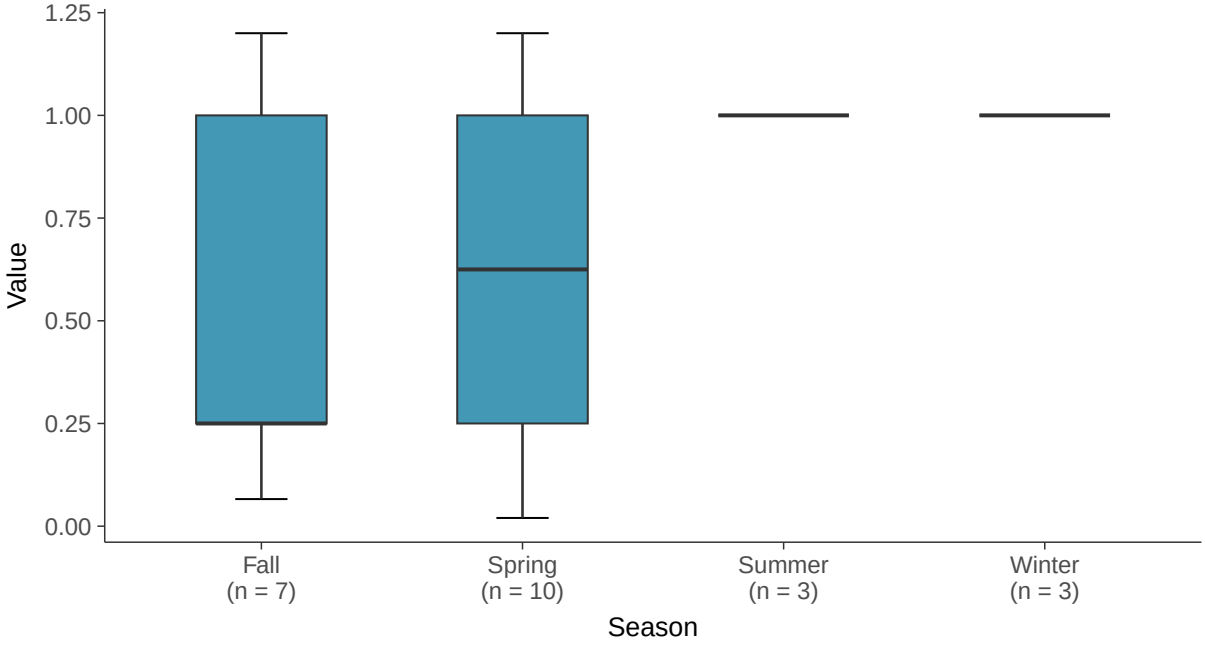
**Boxplot**

Beryllium, MW-15017 (ug/L)



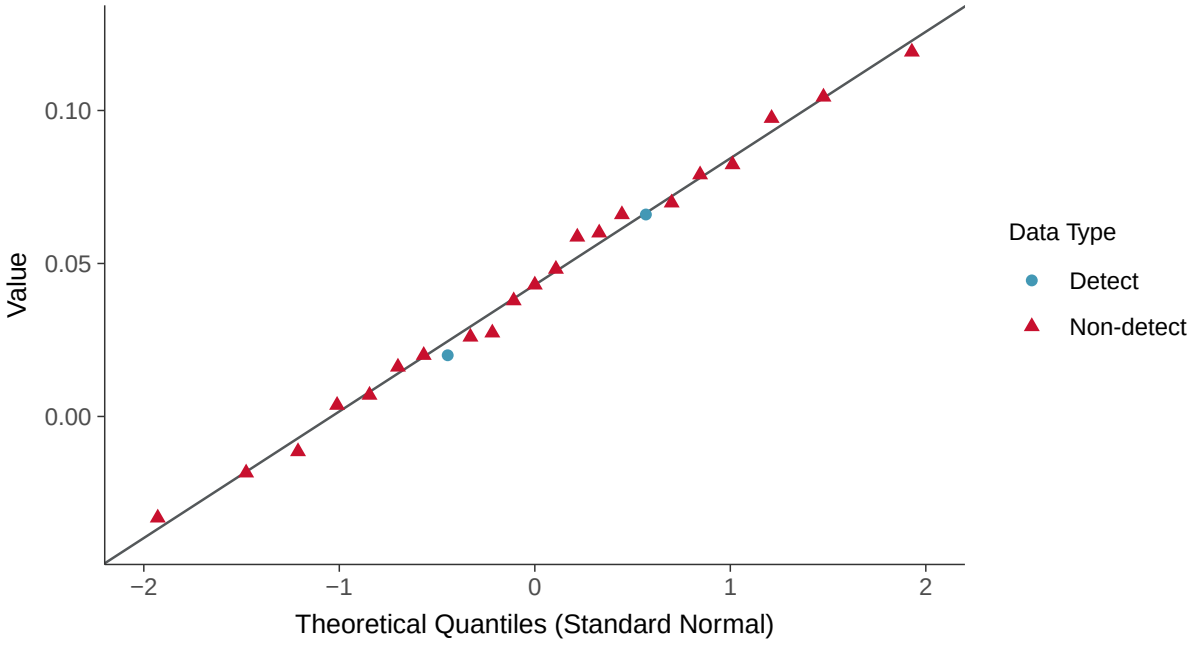

**Boxplot by Season**

Beryllium, MW-15017 (ug/L)



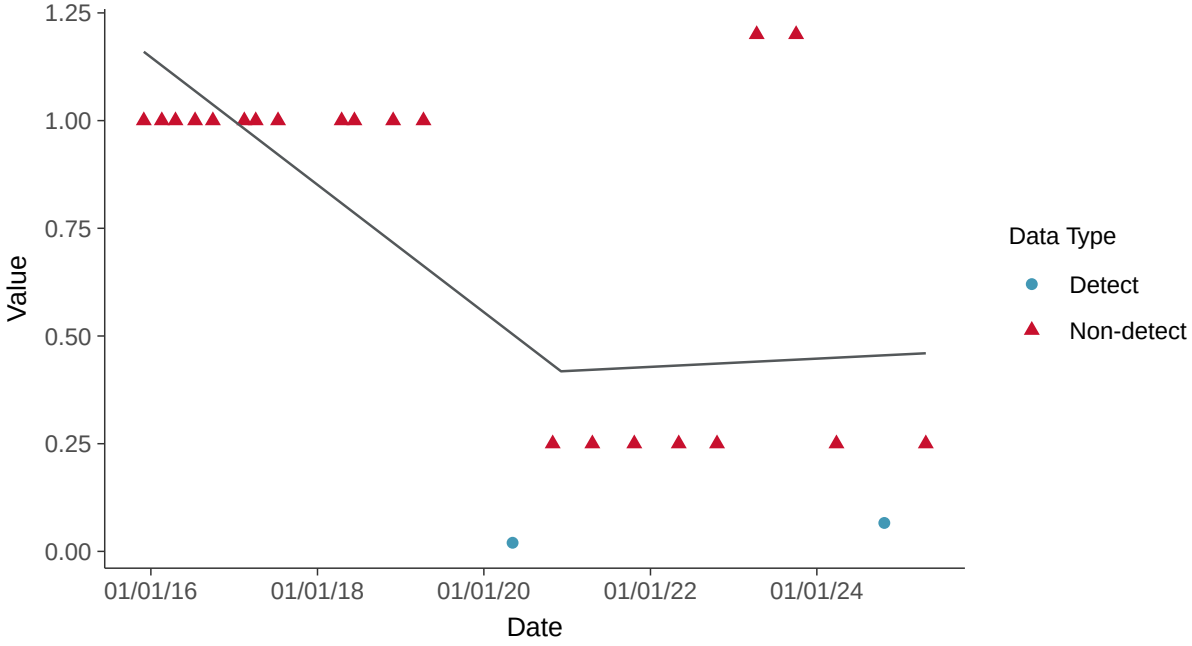
**Normal Q-Q plot using ROS Imputed Estimates**

Beryllium, MW-15017 (ug/L)



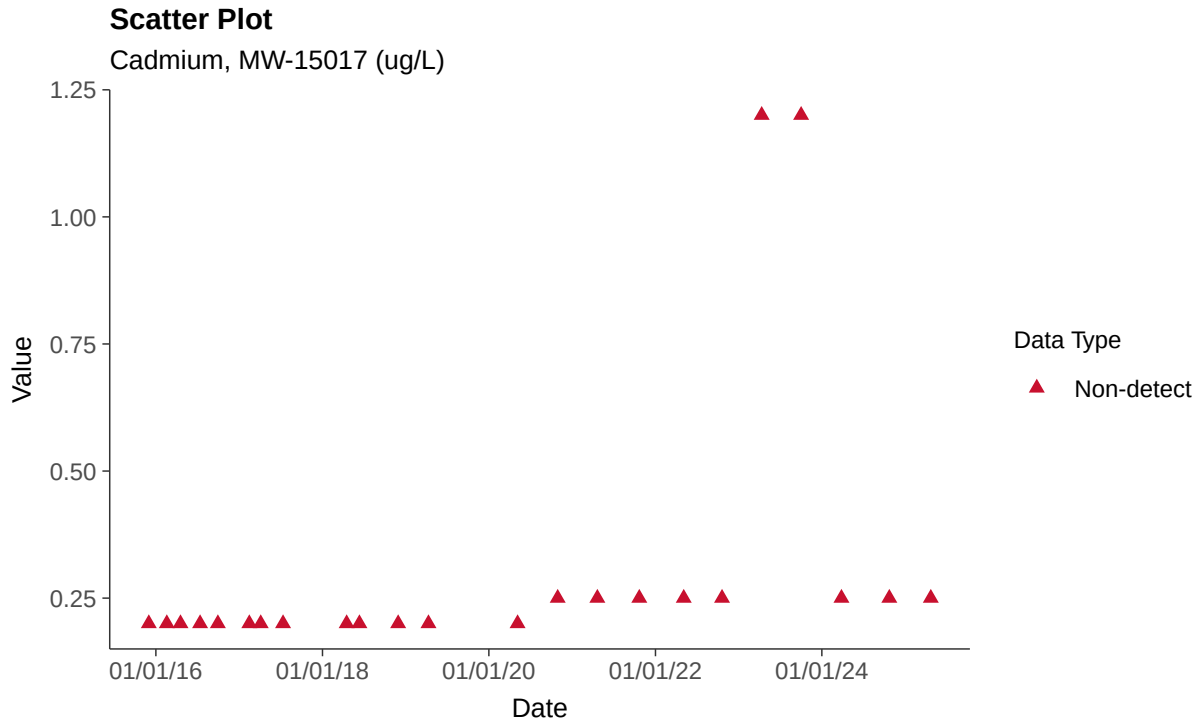

**Trend Regression: Piecewise Linear-Linear**

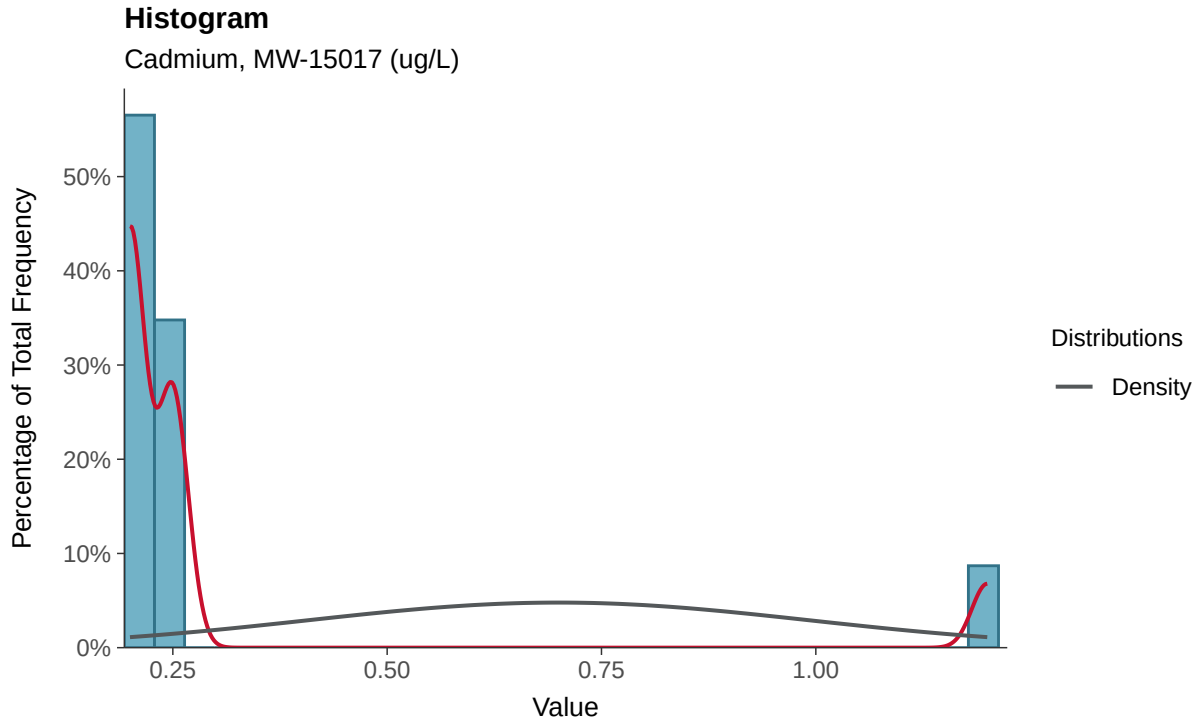
Beryllium, MW-15017 (ug/L)



## Appendix IV: Cadmium, MW-15017

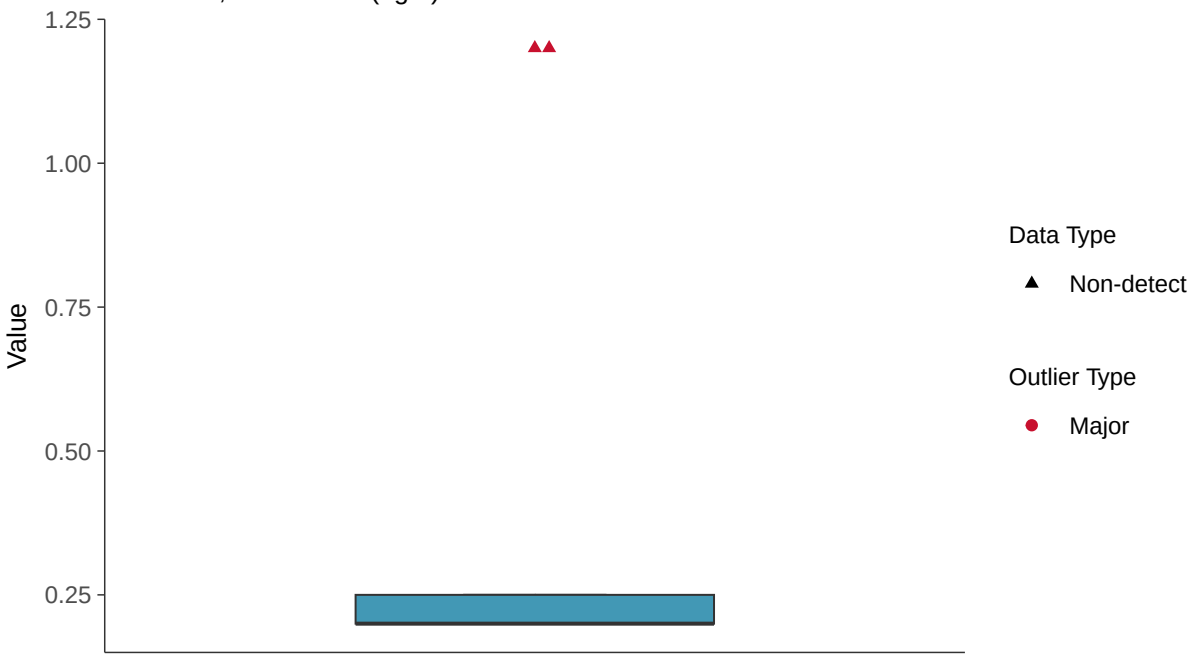
ID: 07_2_106



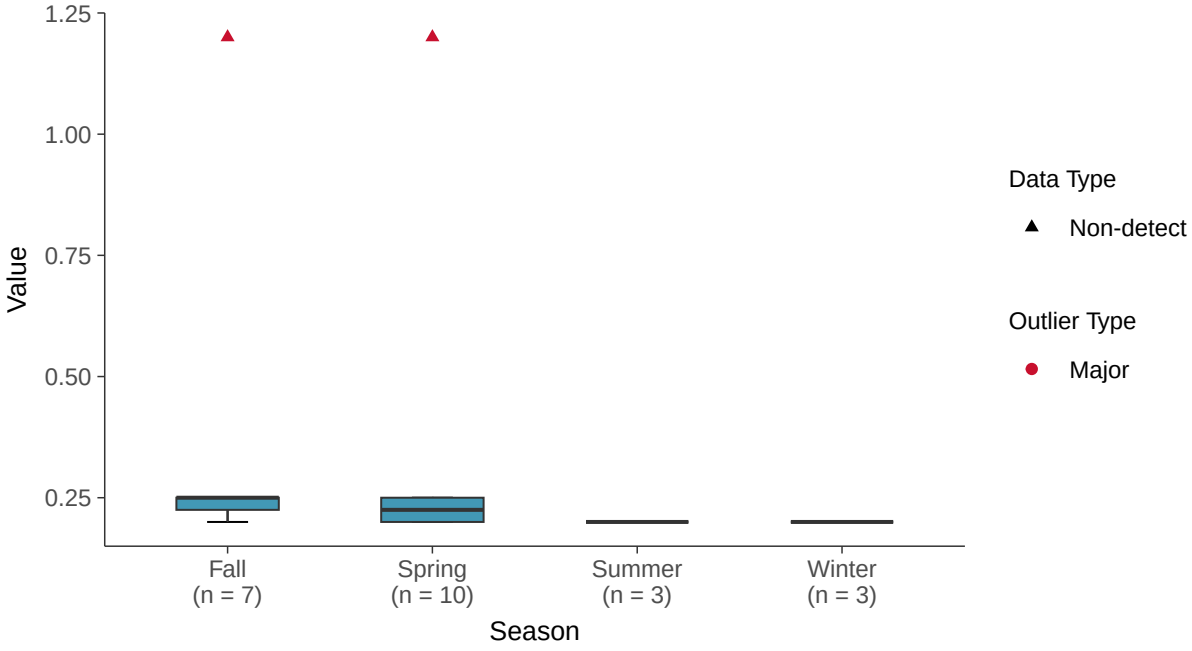
## Boxplot

Cadmium, MW-15017 (ug/L)



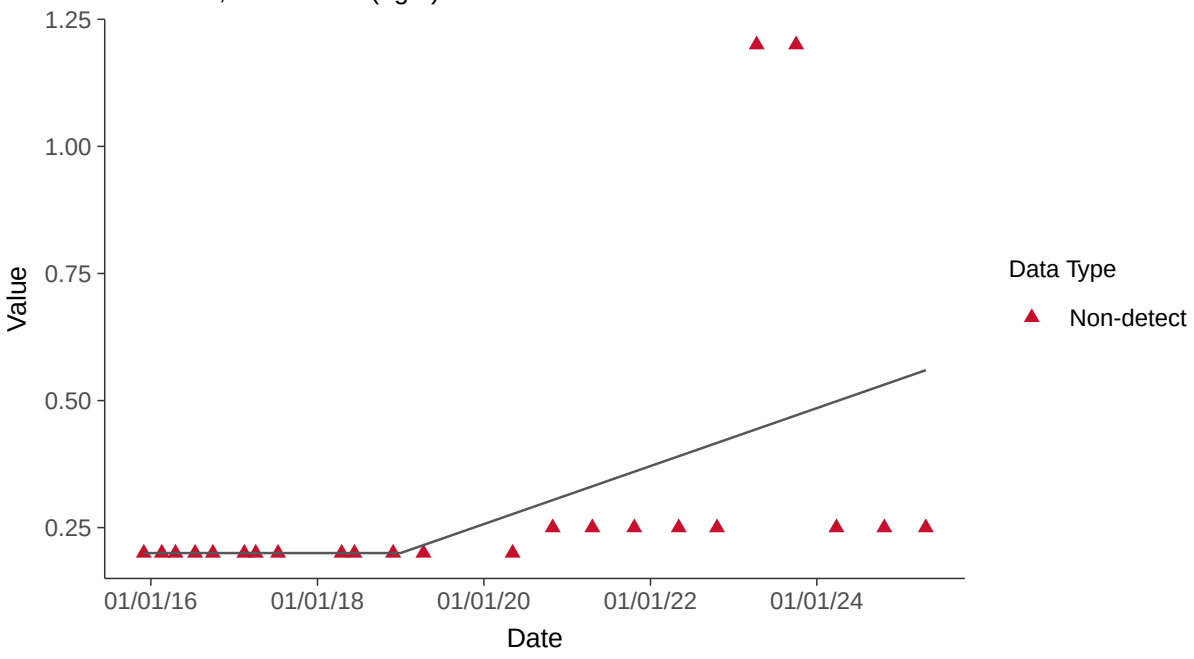

## Boxplot by Season

Cadmium, MW-15017 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15017 (ug/L)

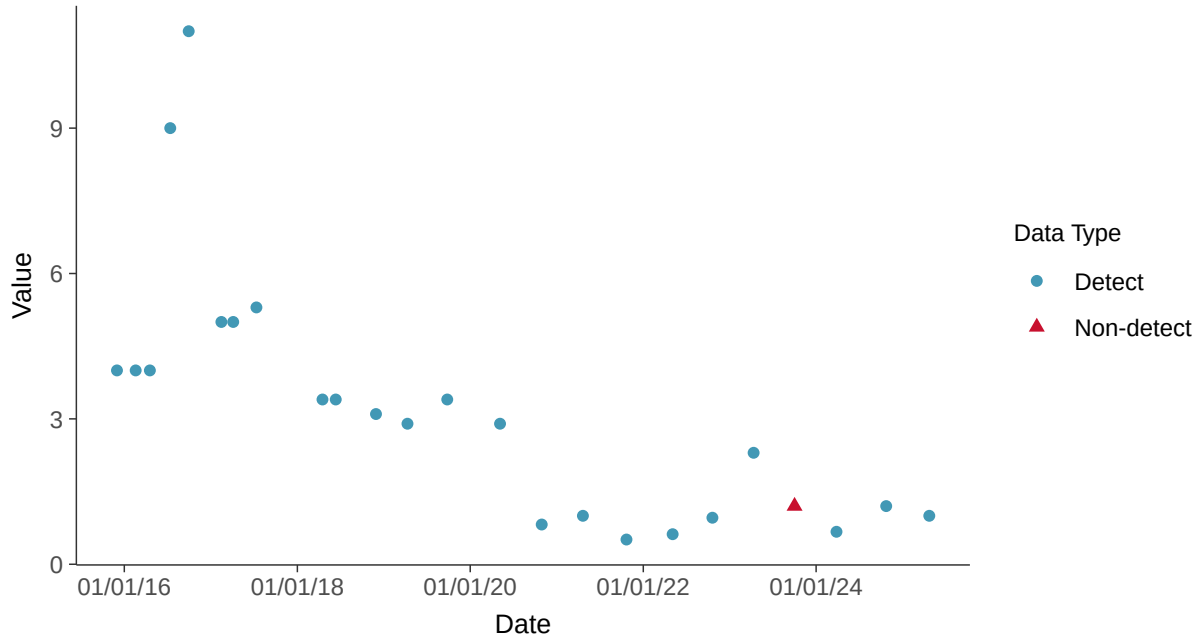


## Appendix IV: Chromium, MW-15017

ID: 07_2_109

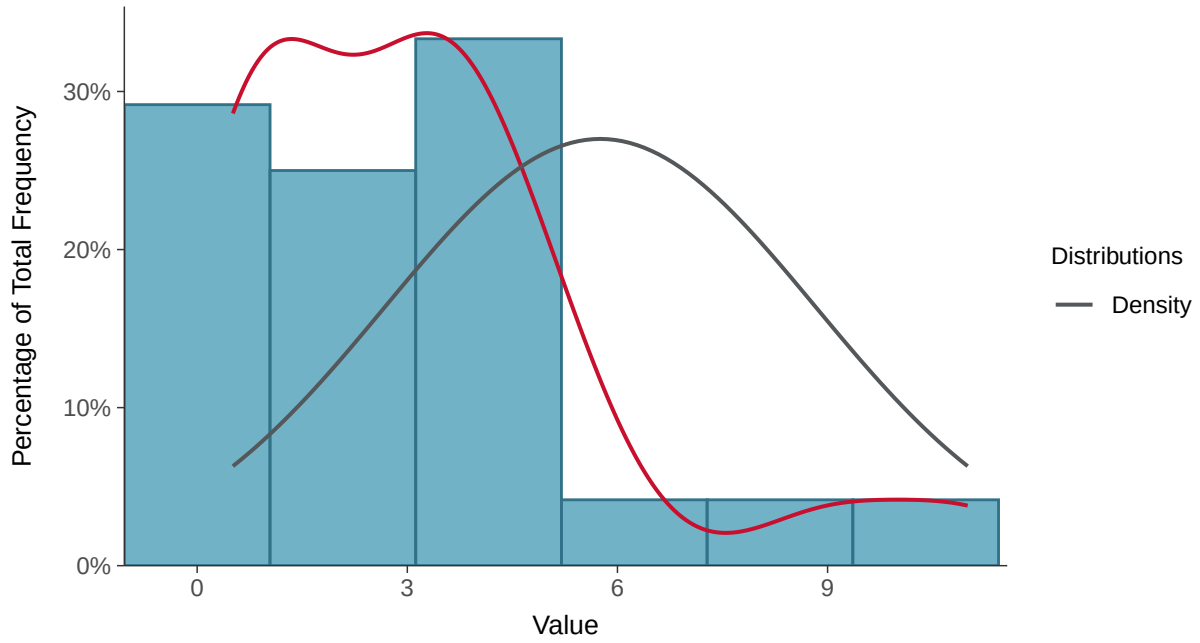
**Scatter Plot**

Chromium, MW-15017 (ug/L)



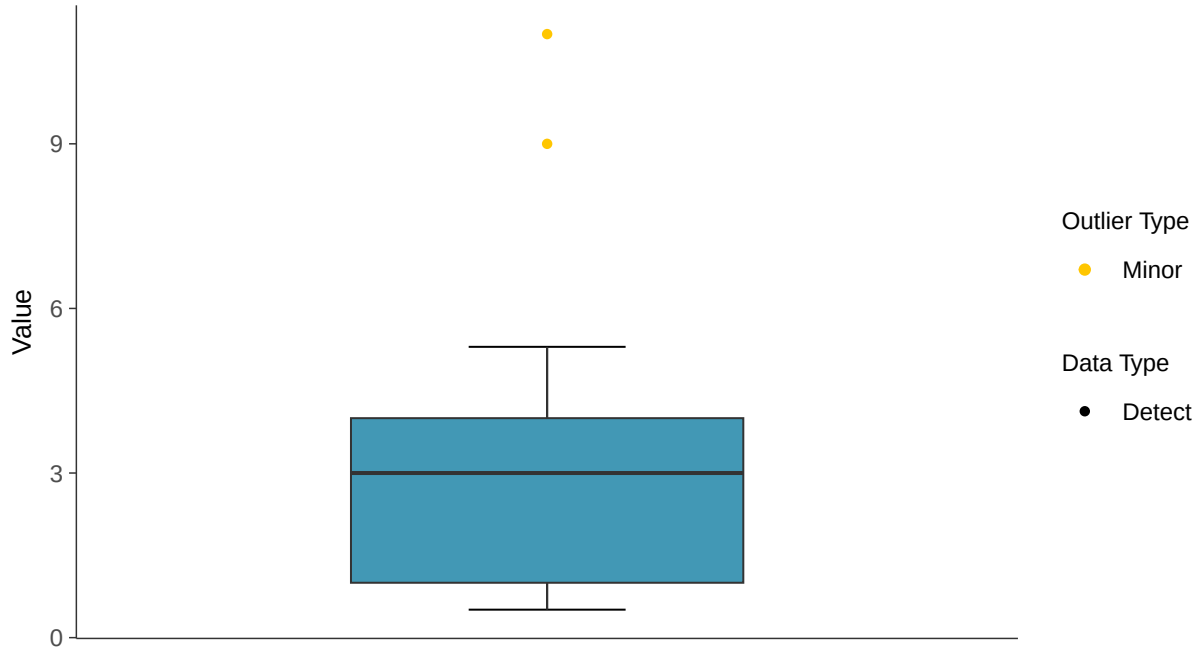

**Histogram**

Chromium, MW-15017 (ug/L)



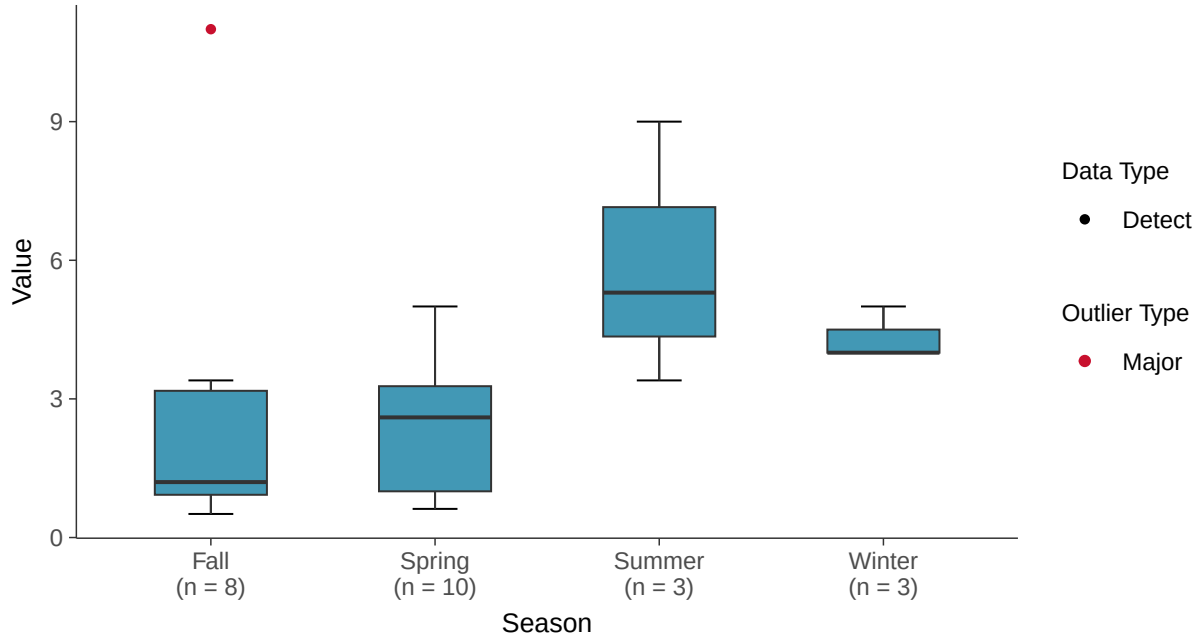
## Boxplot

Chromium, MW-15017 (ug/L)



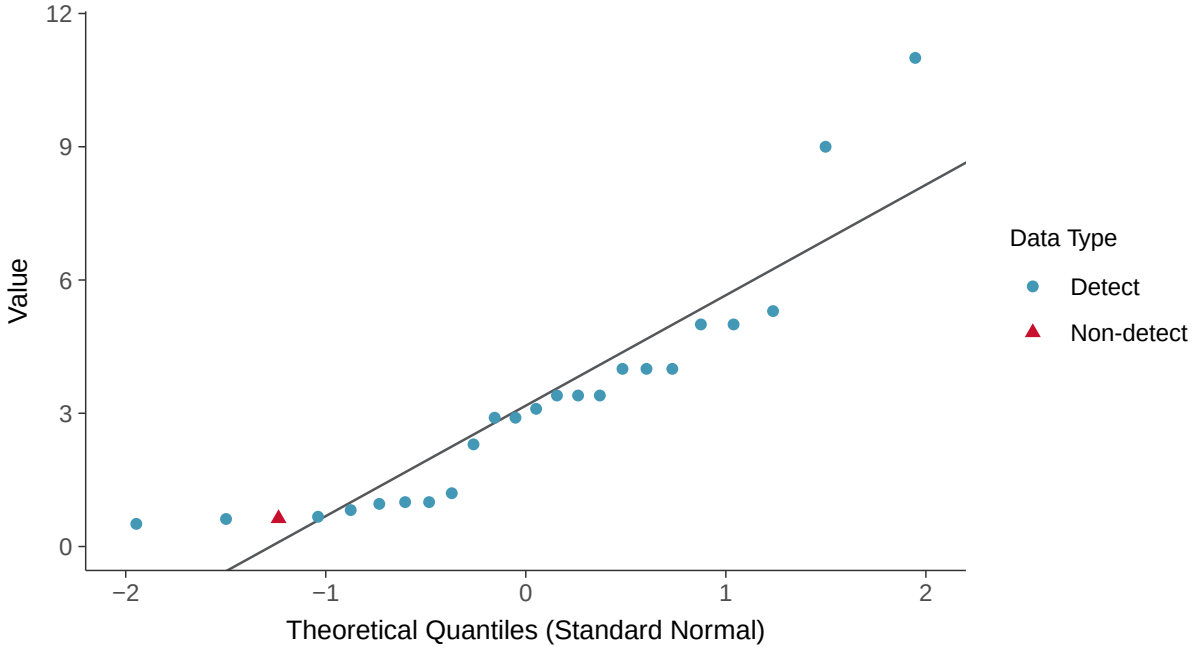

## Boxplot by Season

Chromium, MW-15017 (ug/L)



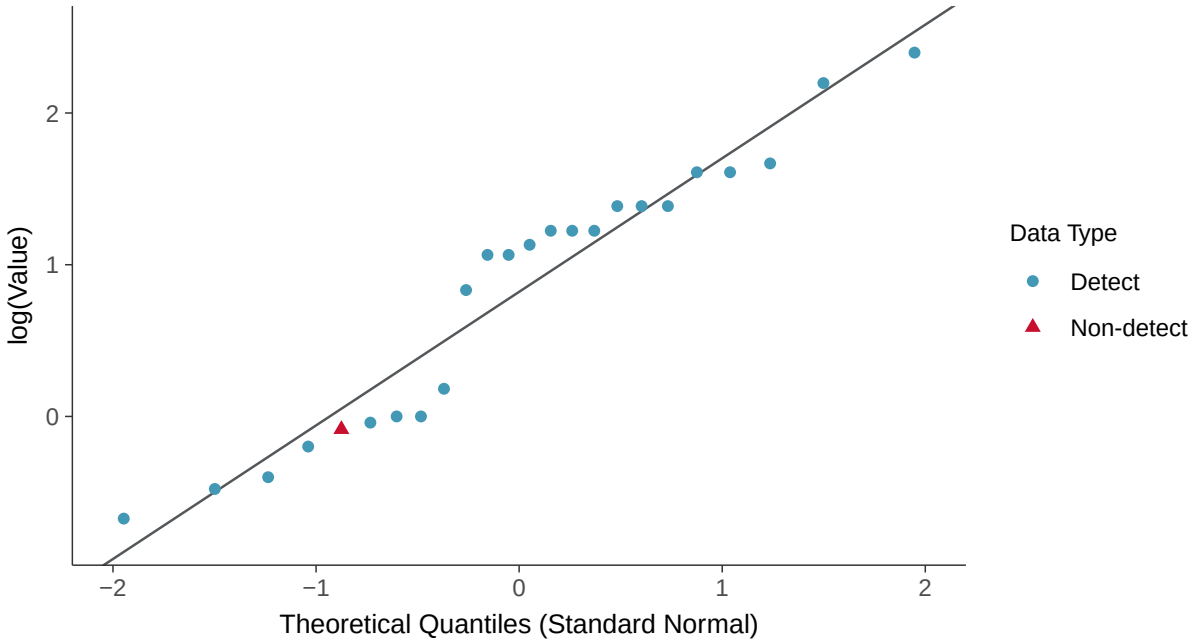
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15017 (ug/L)



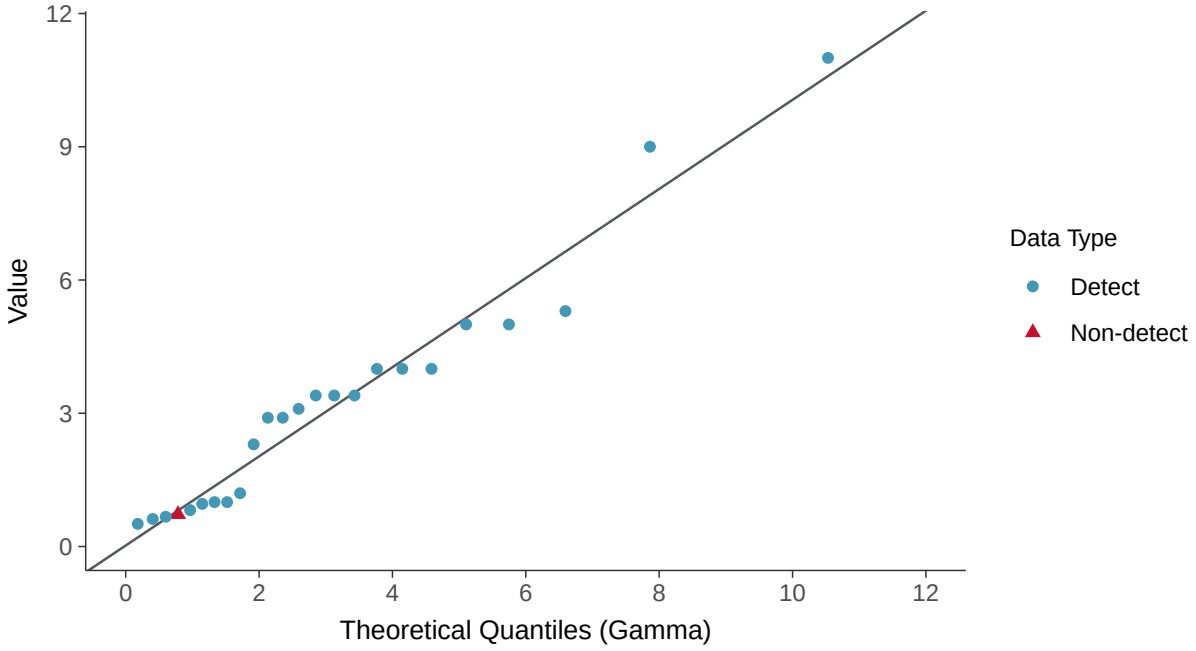

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15017 (ug/L)



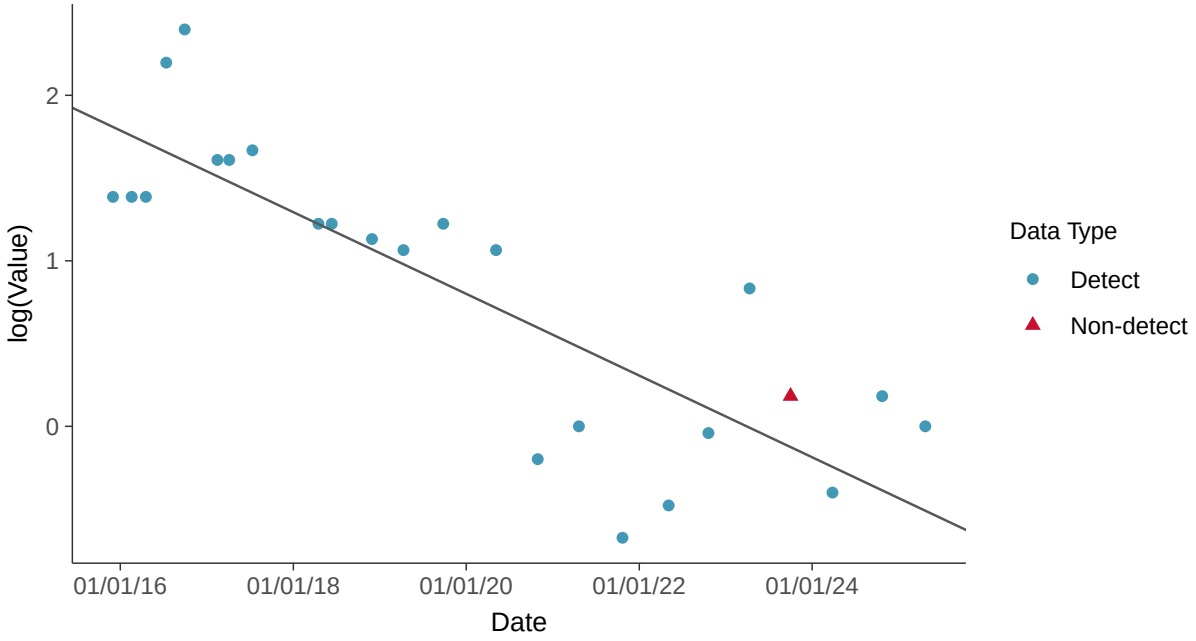
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15017 (ug/L)



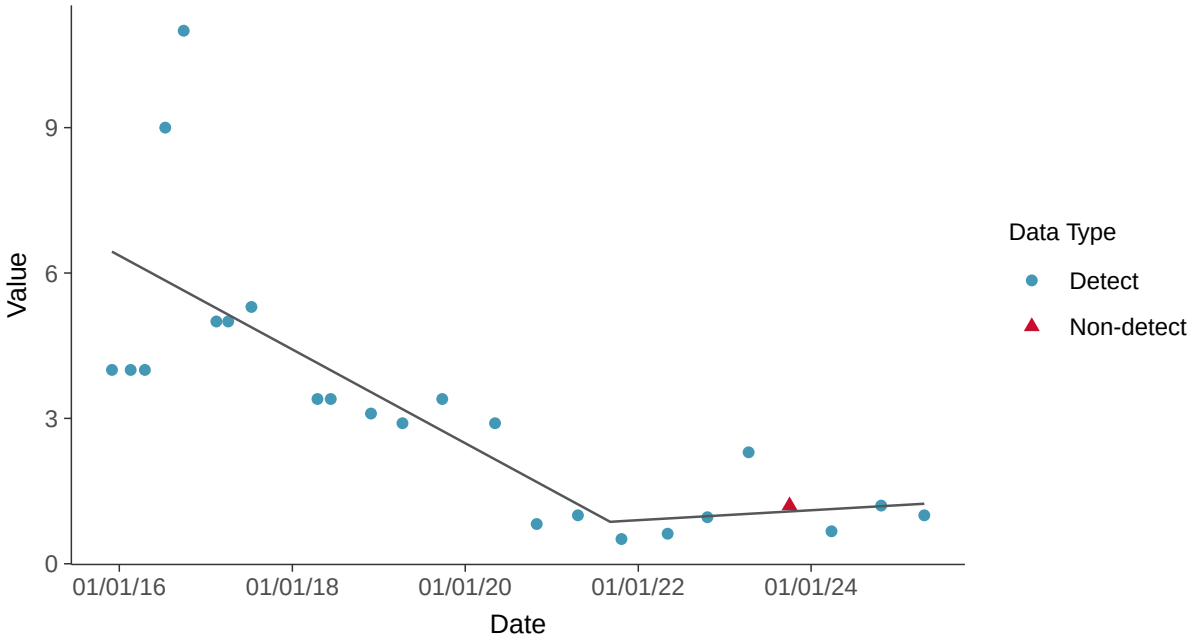

**Trend Regression: Lognormal MLE**

Chromium, MW-15017 (ug/L)



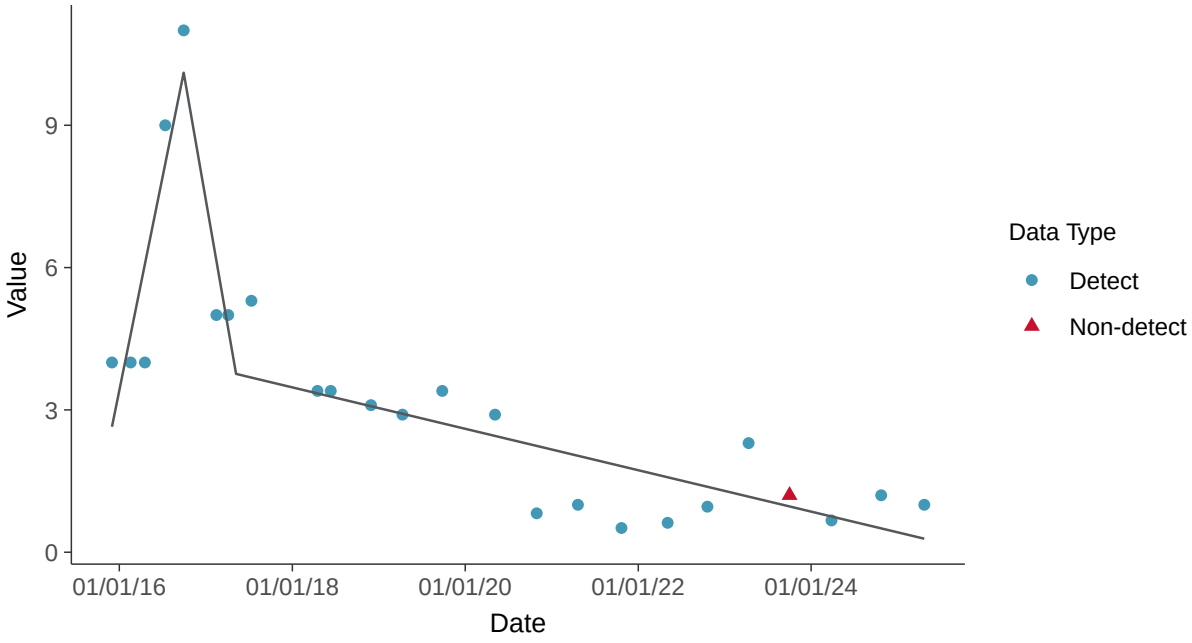
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15017 (ug/L)



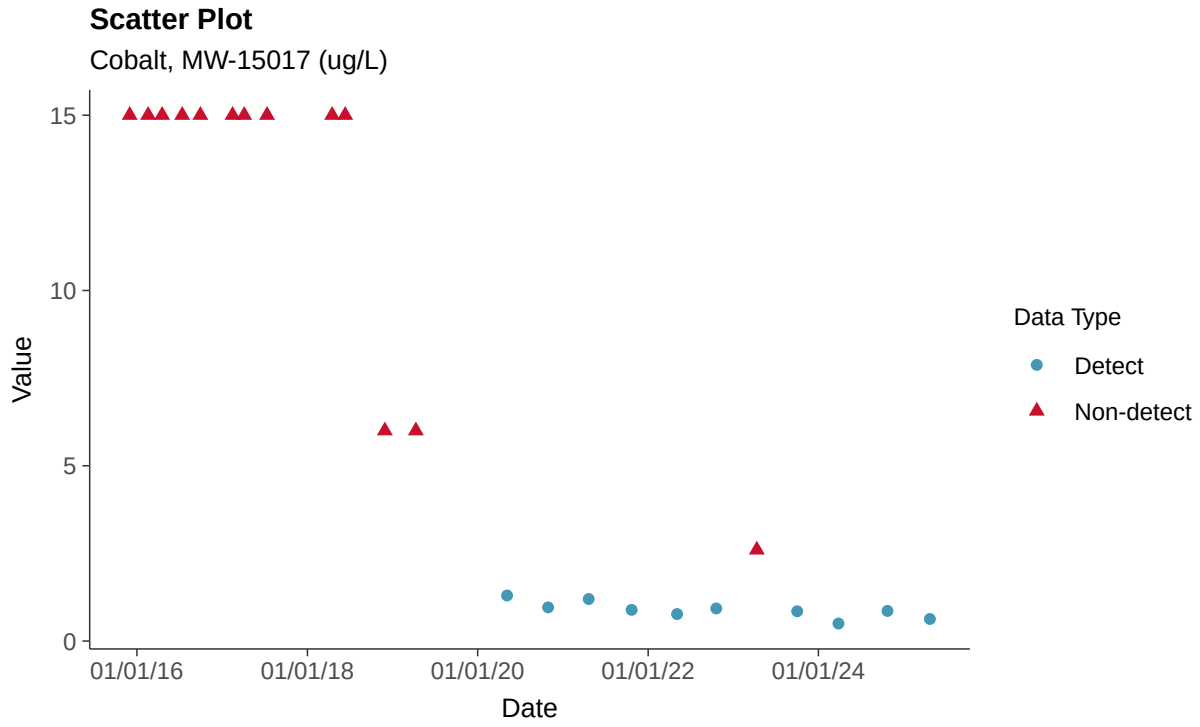

**Trend Regression: Piecewise Linear-Linear-Linear**

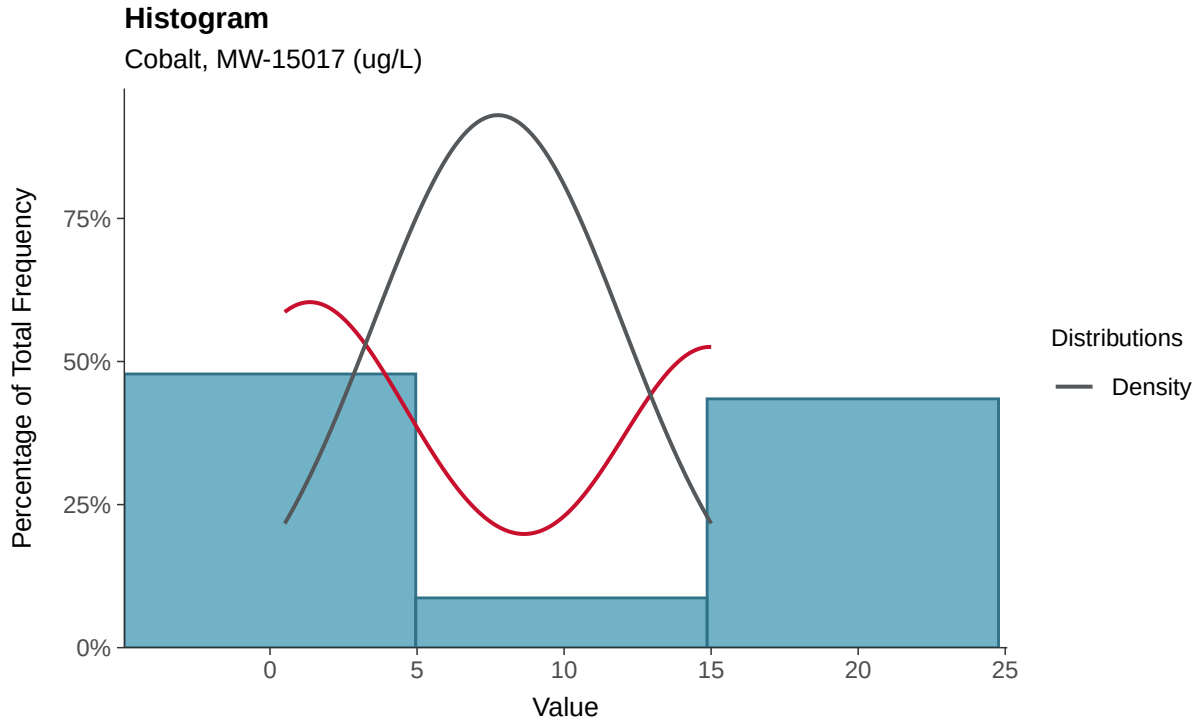
Chromium, MW-15017 (ug/L)



## Appendix IV: Cobalt, MW-15017

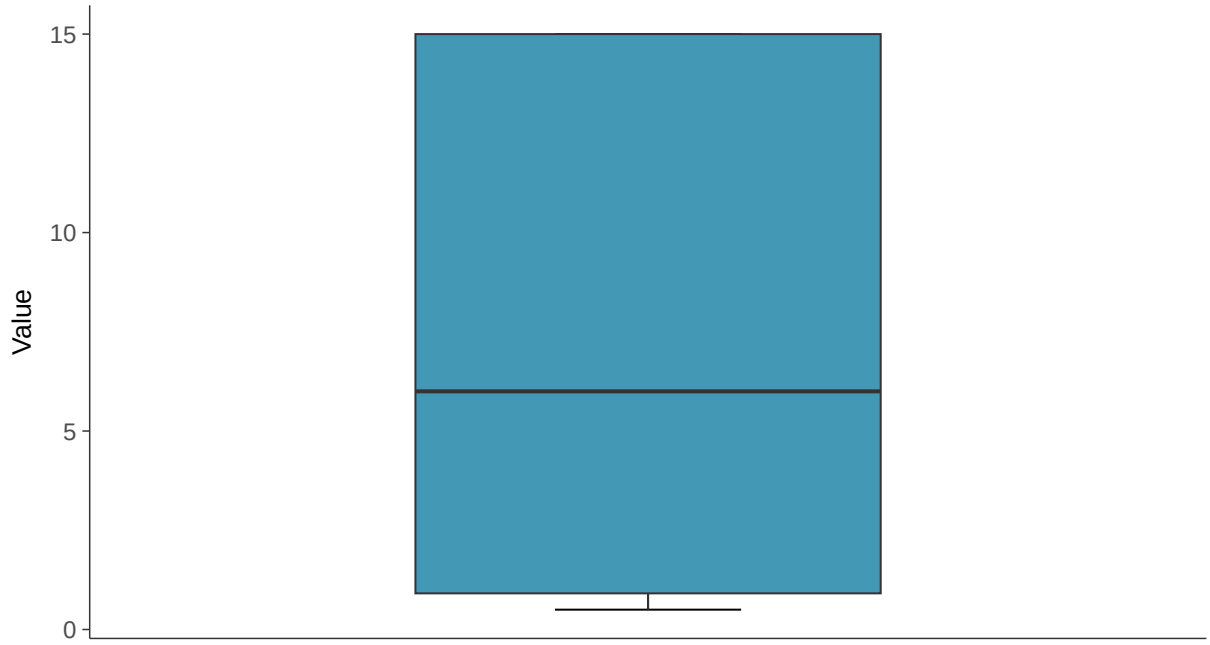
ID: 07_2_110



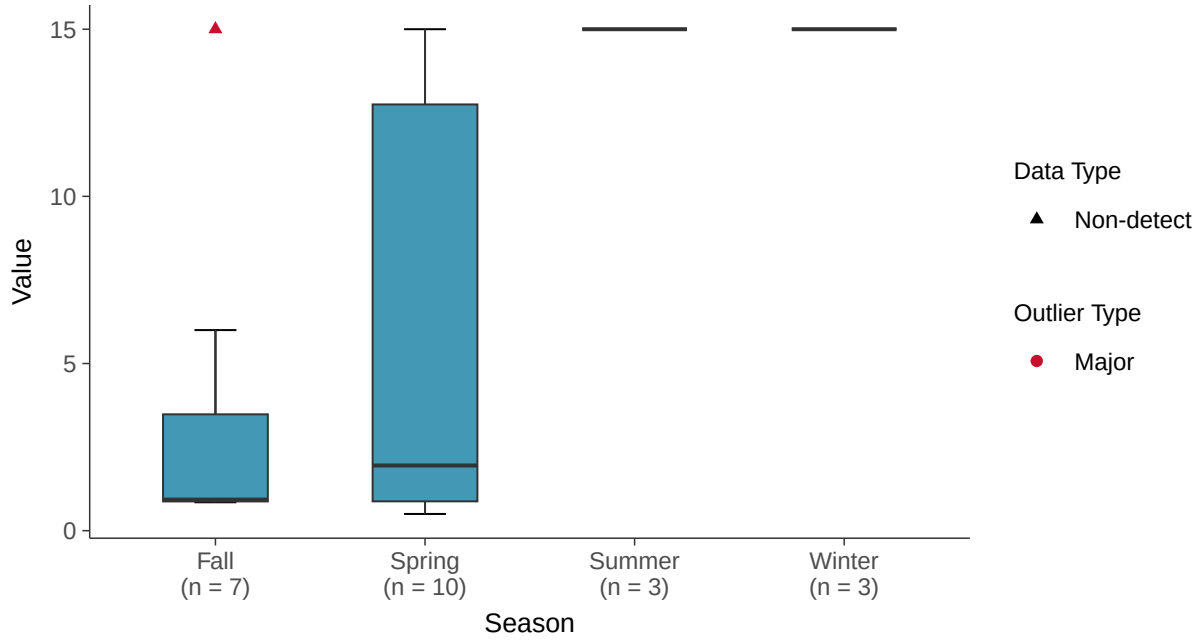
**Boxplot**

Cobalt, MW-15017 (ug/L)



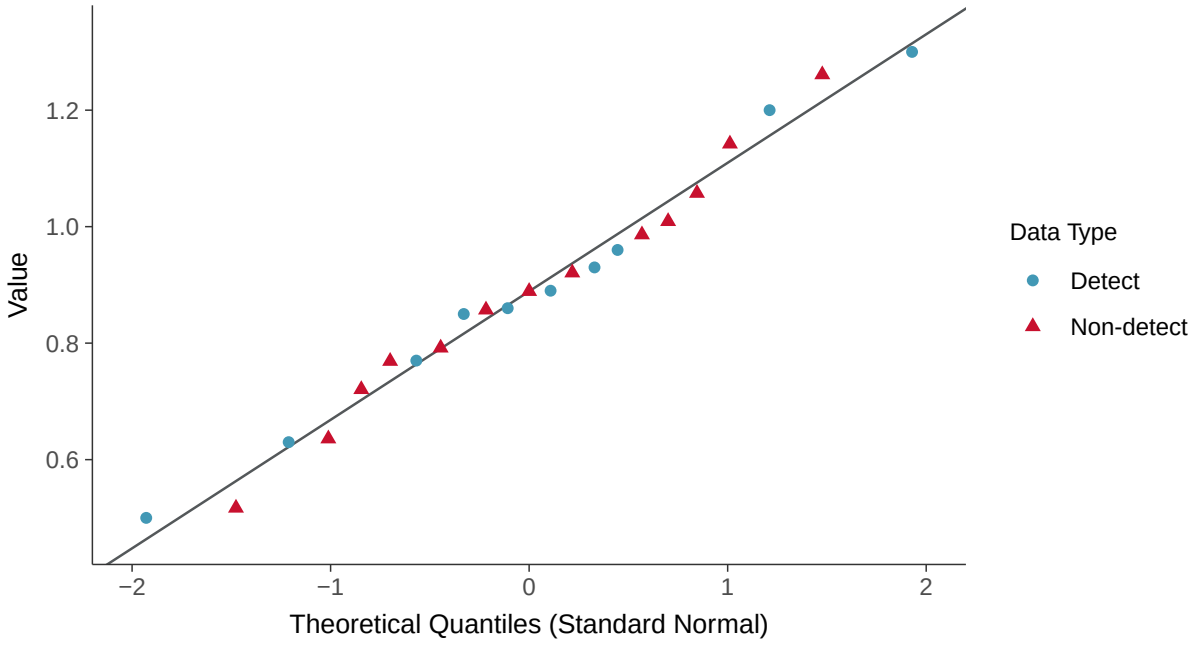

**Boxplot by Season**

Cobalt, MW-15017 (ug/L)



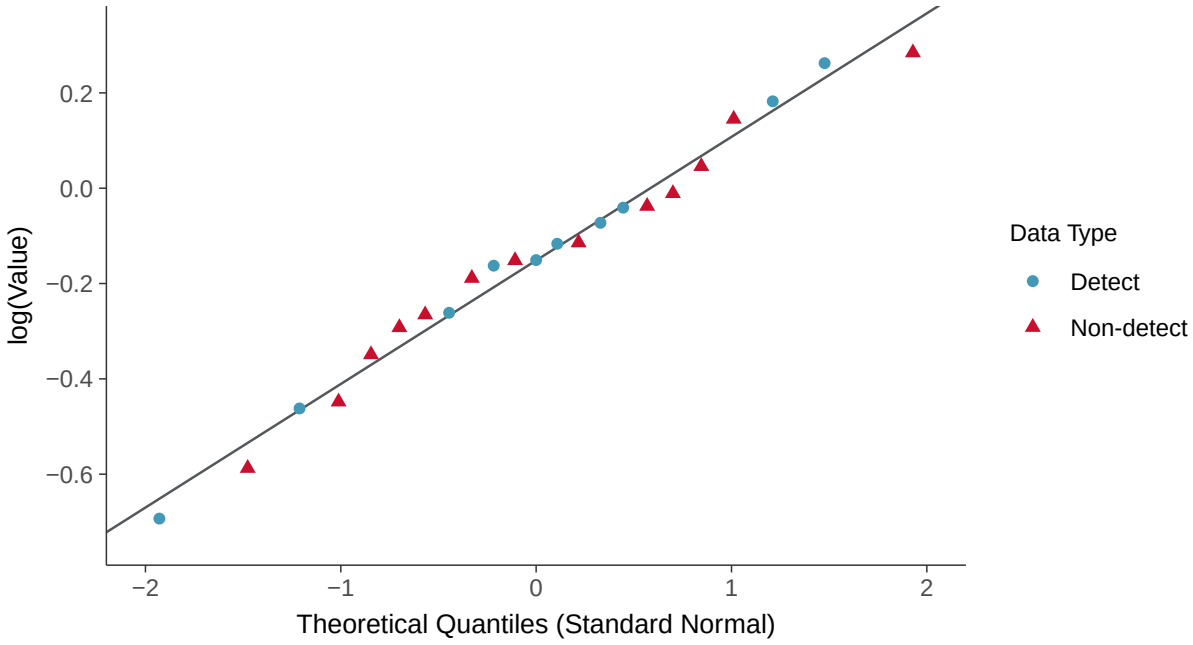
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15017 (ug/L)



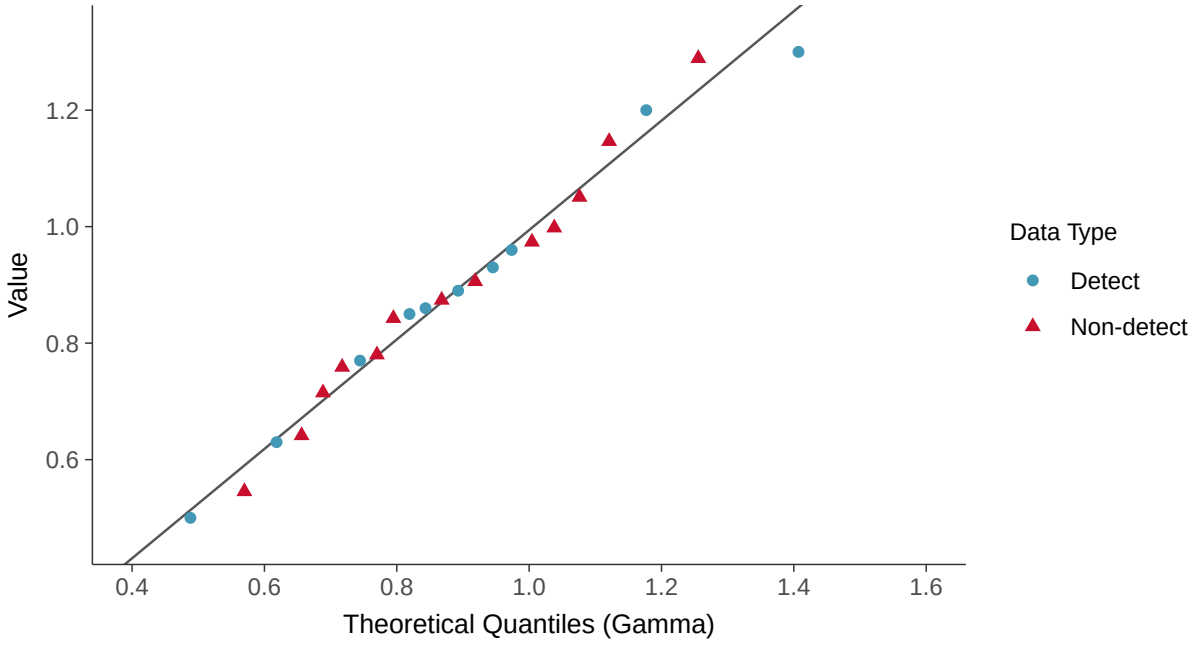

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15017 (ug/L)



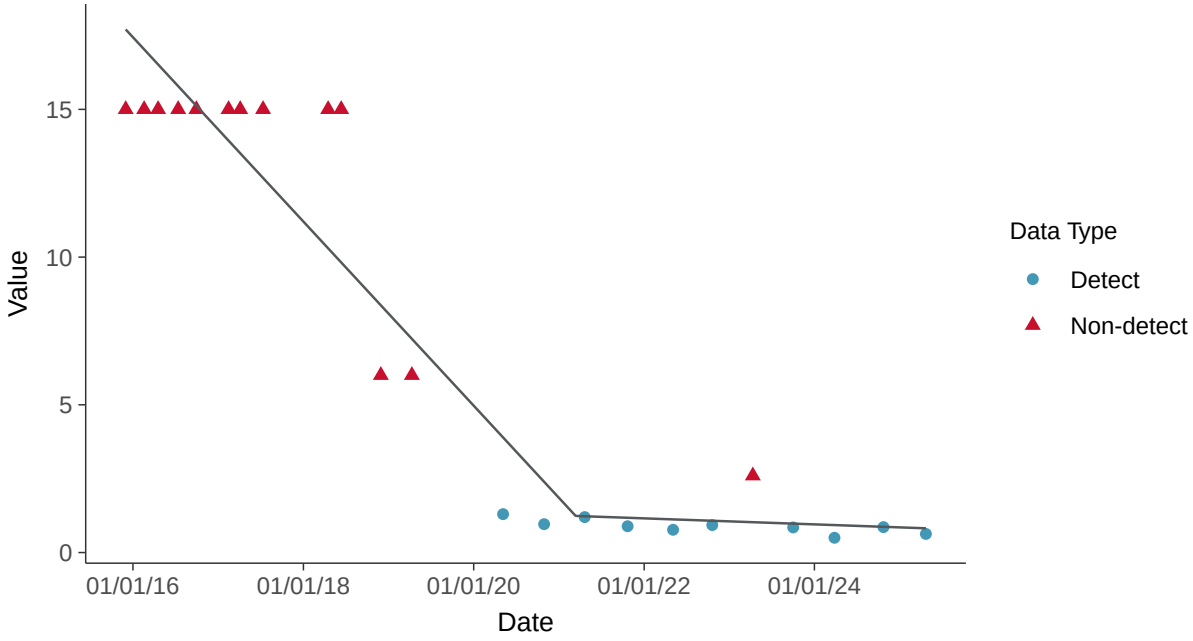
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15017 (ug/L)



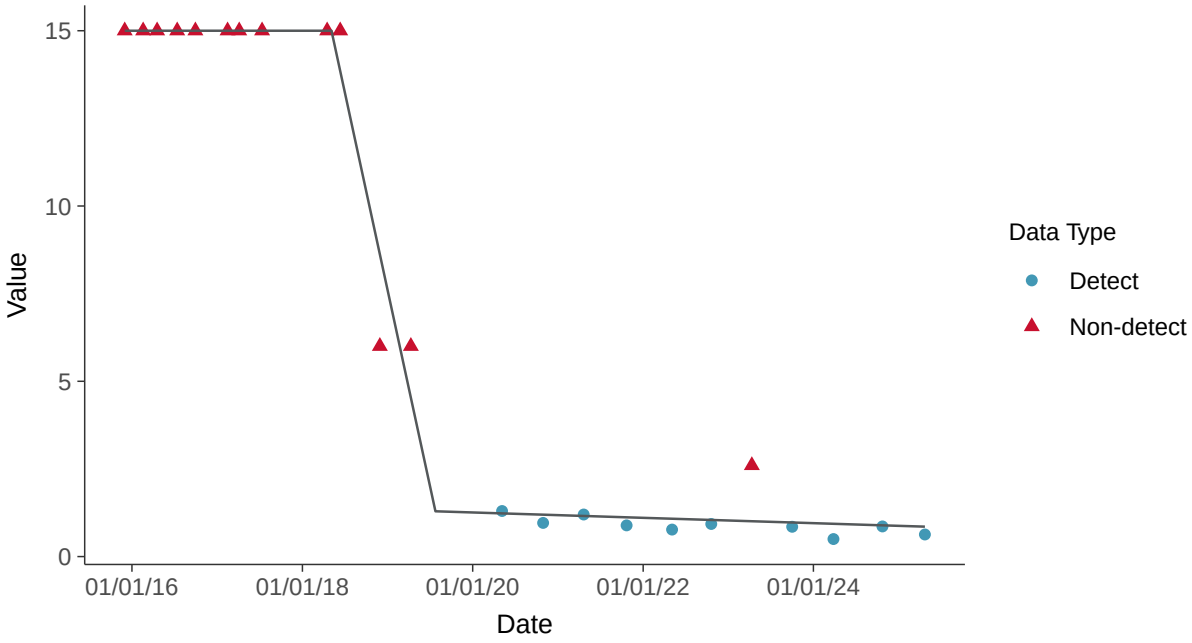

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15017 (ug/L)



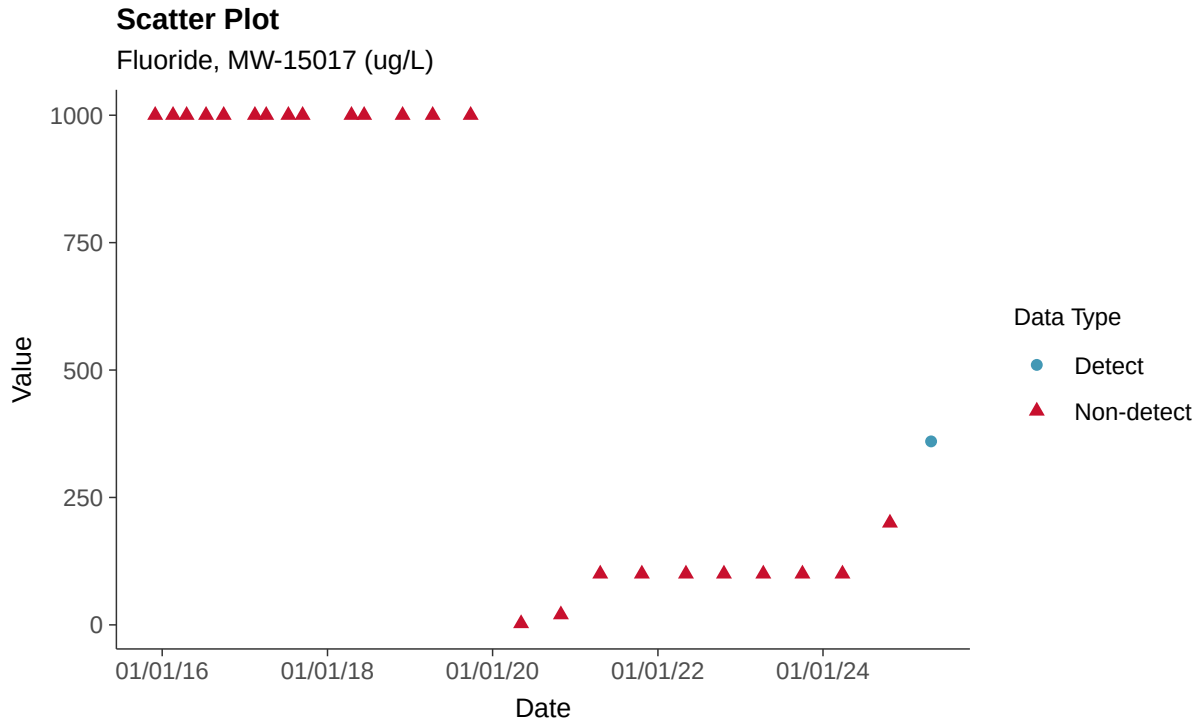
**Trend Regression: Piecewise Linear-Linear-Linear**

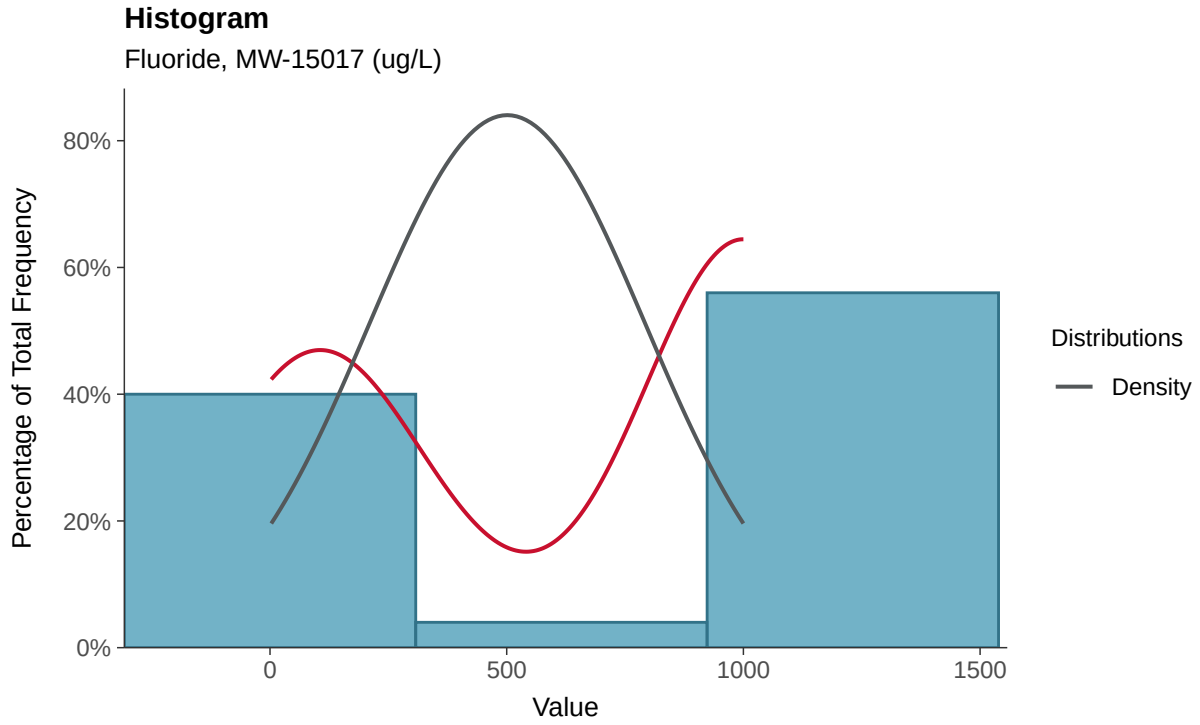
Cobalt, MW-15017 (ug/L)



# Appendix IV: Fluoride, MW-15017

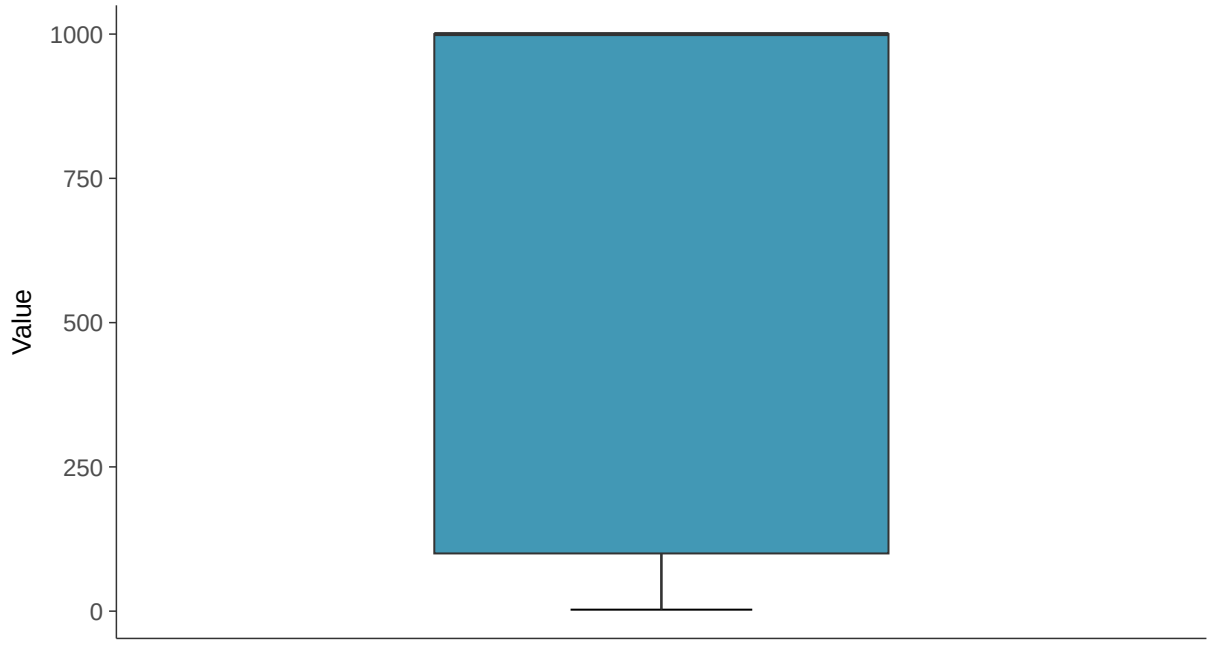
ID: 07_2_114



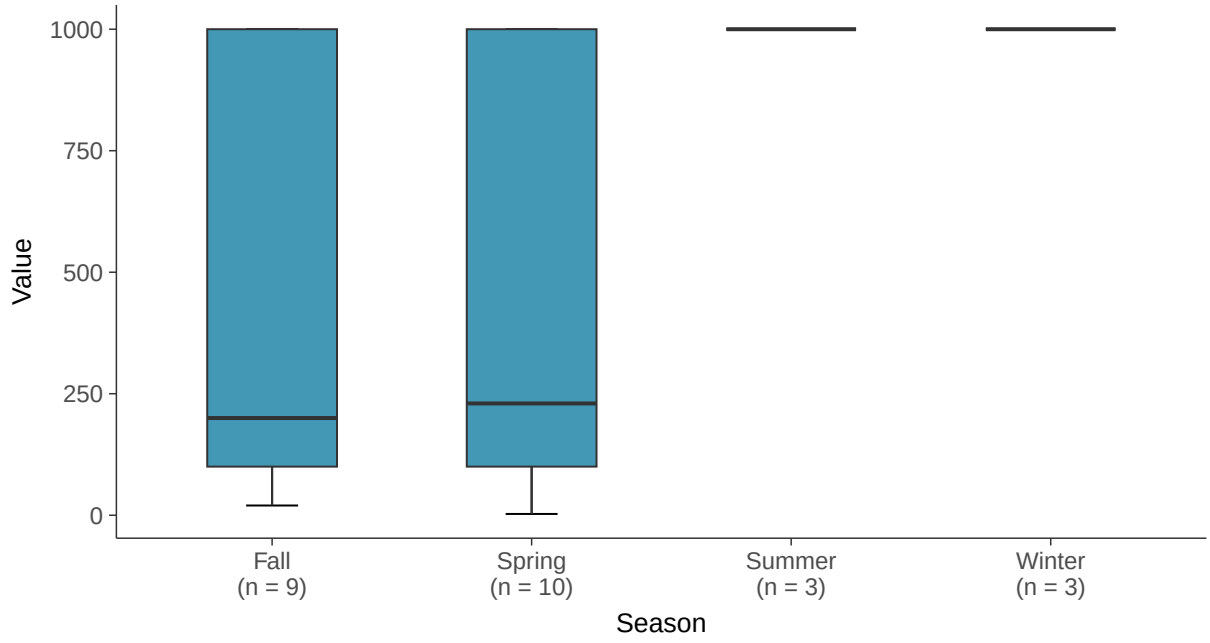
**Boxplot**

Fluoride, MW-15017 (ug/L)



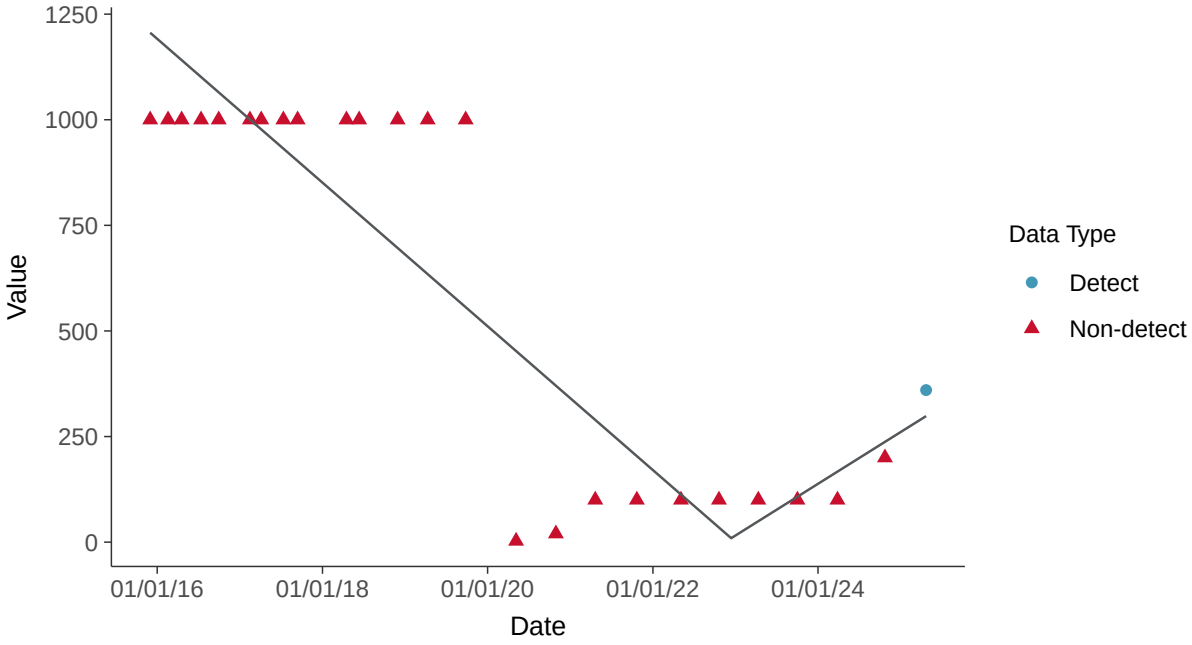

**Boxplot by Season**

Fluoride, MW-15017 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15017 (ug/L)

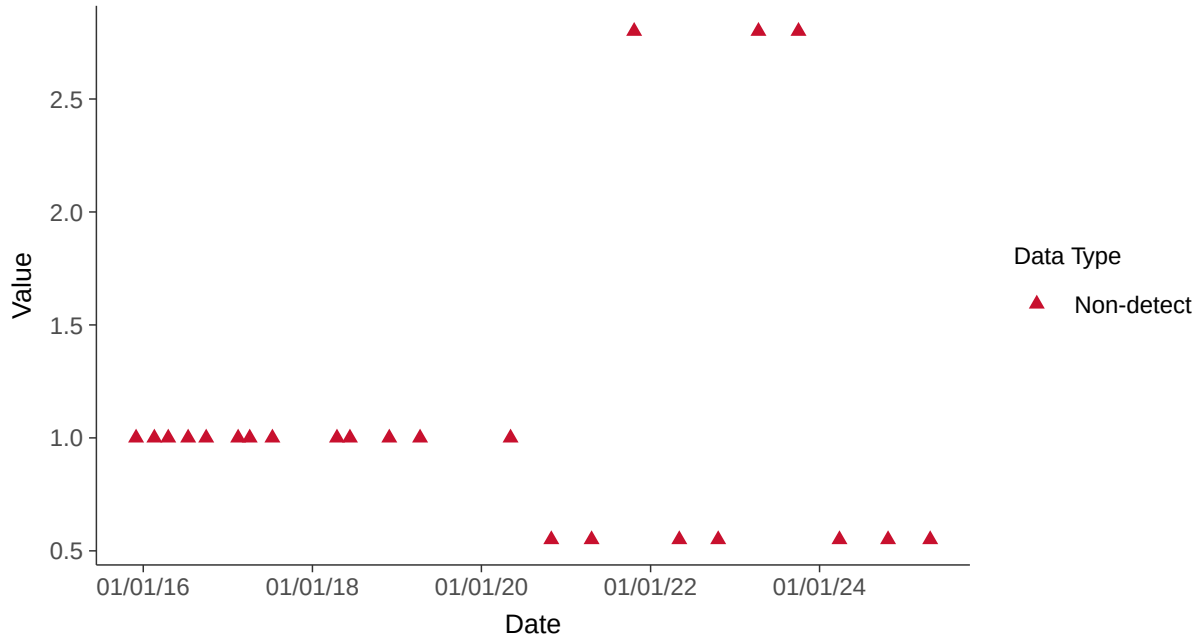


# Appendix IV: Lead, MW-15017

ID: 07_2_116

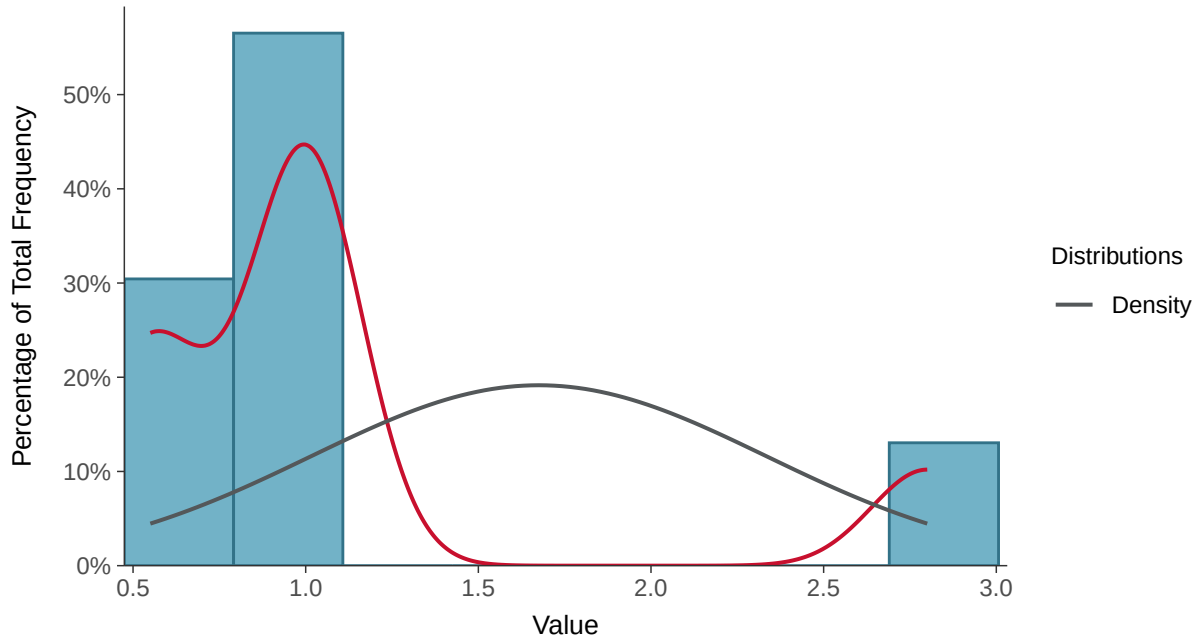
**Scatter Plot**

Lead, MW-15017 (ug/L)



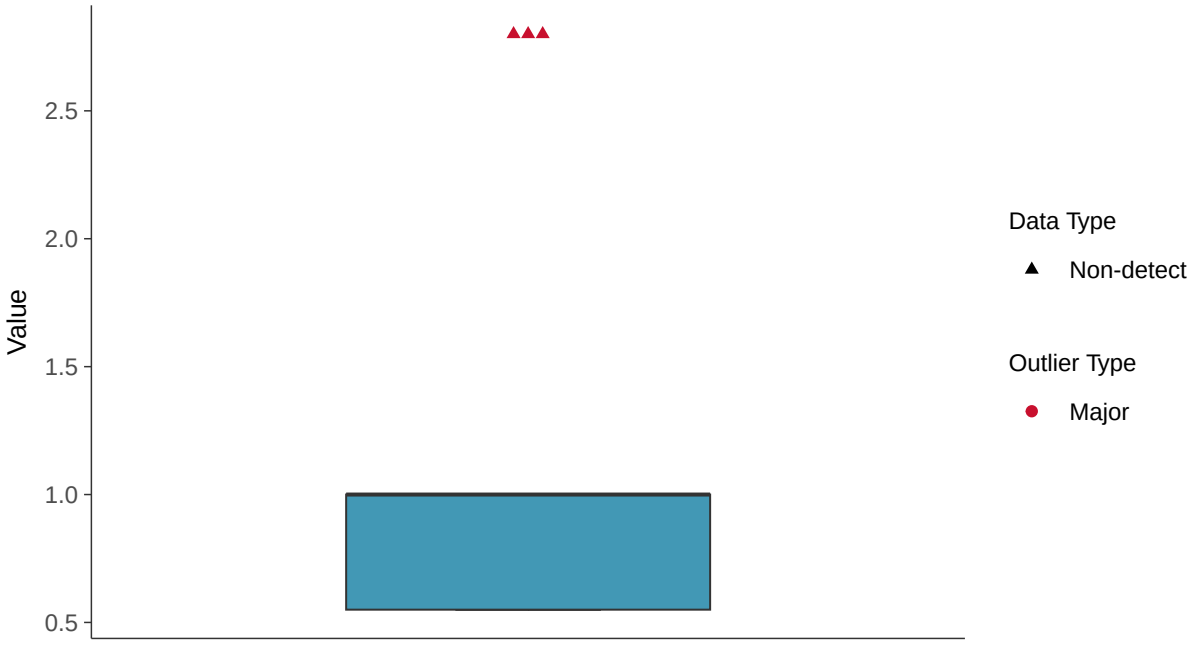

**Histogram**

Lead, MW-15017 (ug/L)



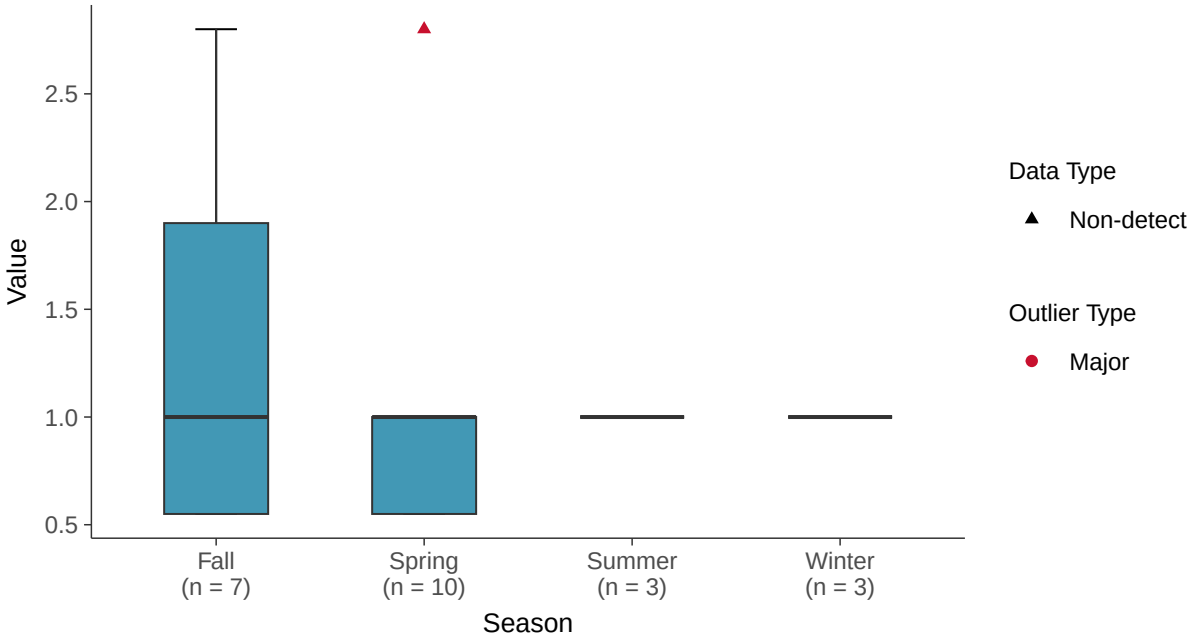
## Boxplot

Lead, MW-15017 (ug/L)



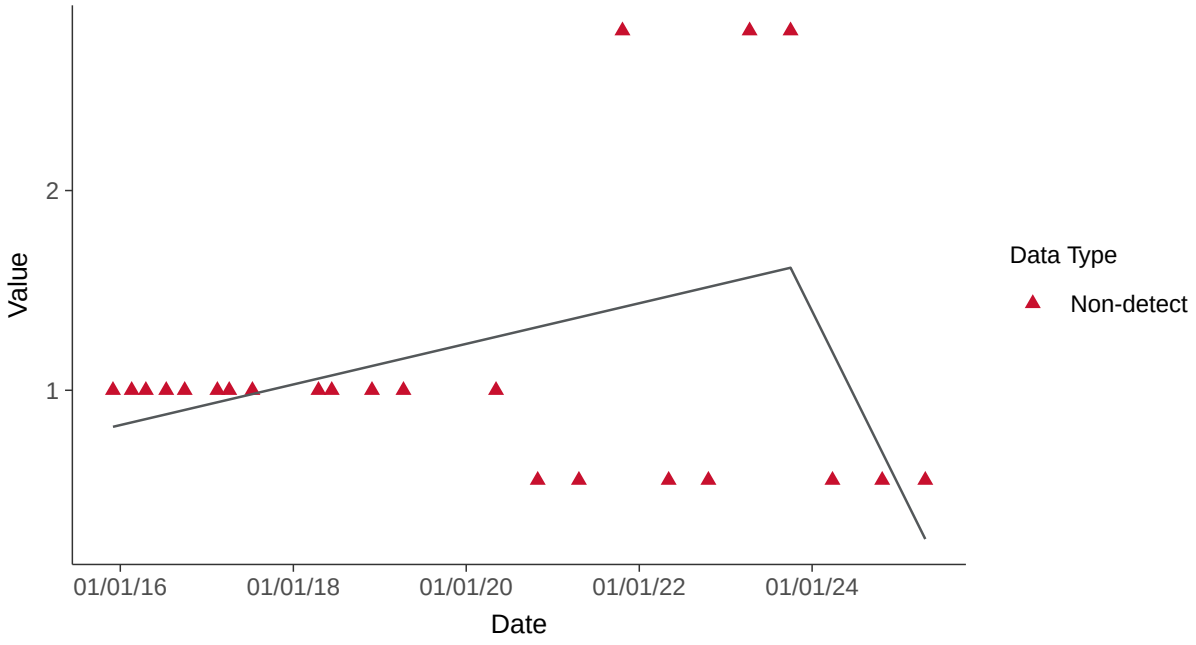

## Boxplot by Season

Lead, MW-15017 (ug/L)



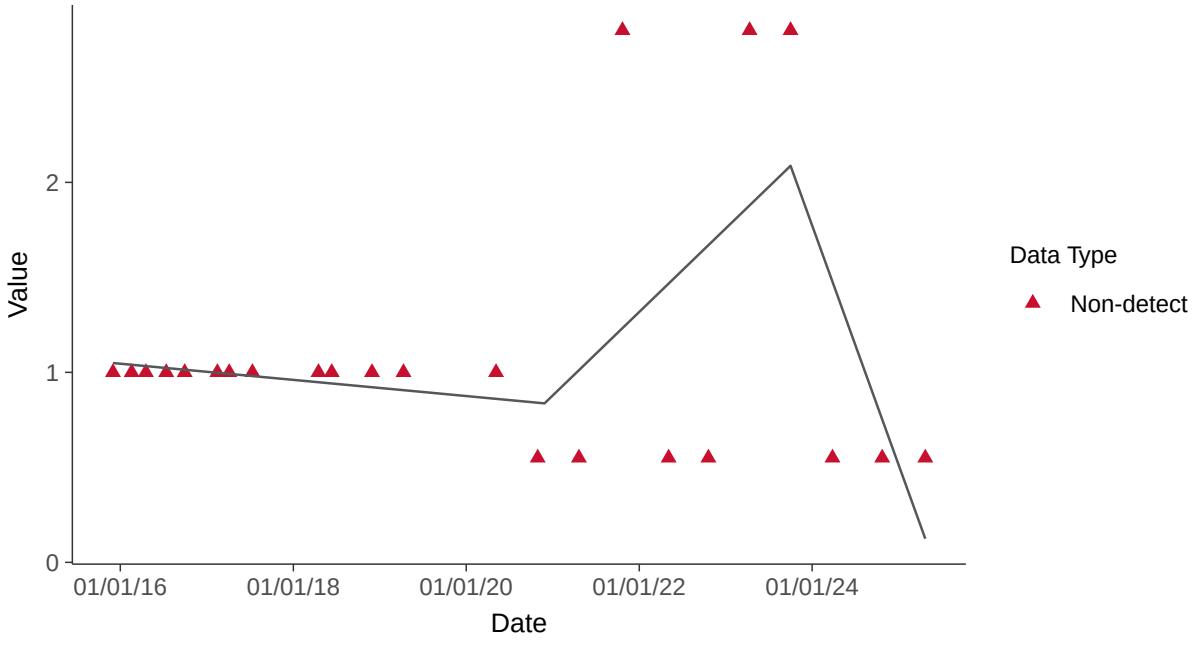
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15017 (ug/L)



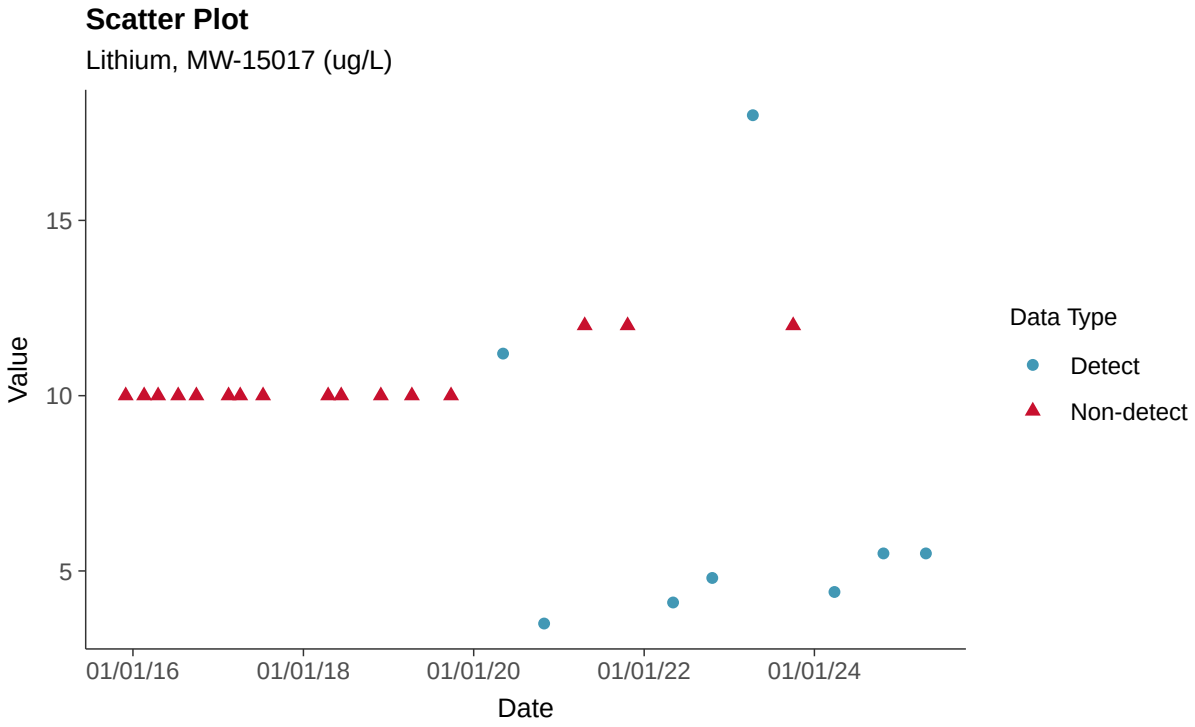

**Trend Regression: Piecewise Linear-Linear-Linear**

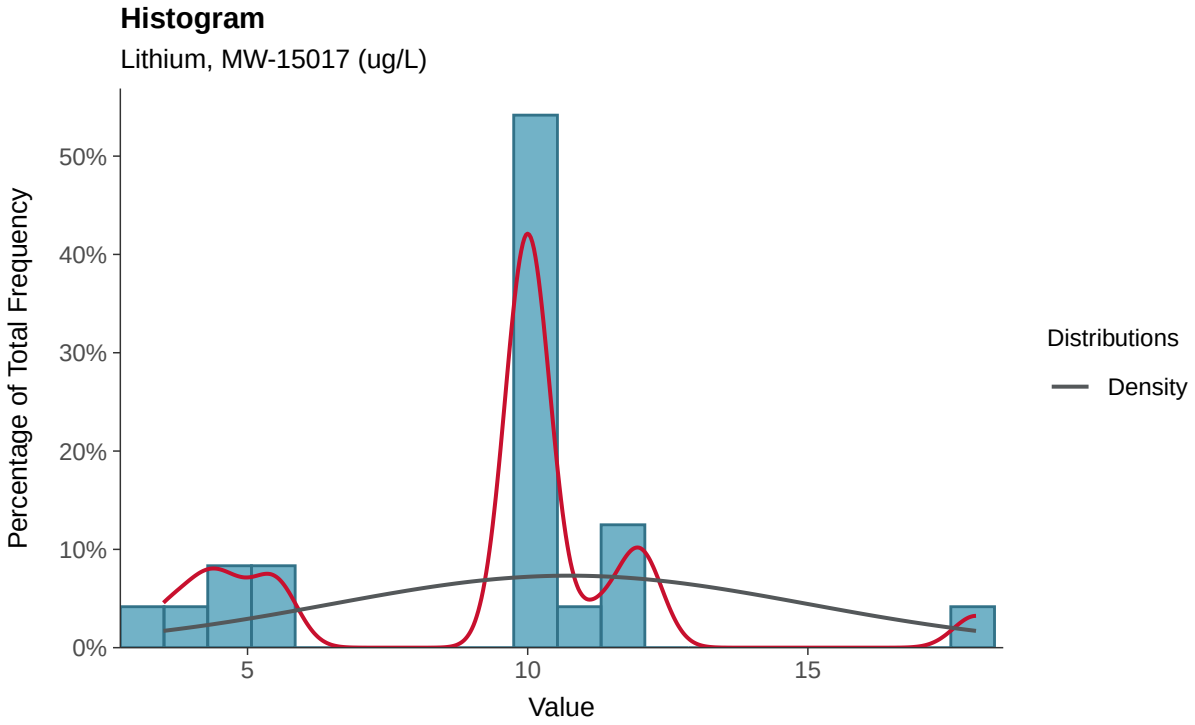
Lead, MW-15017 (ug/L)



## Appendix IV: Lithium, MW-15017

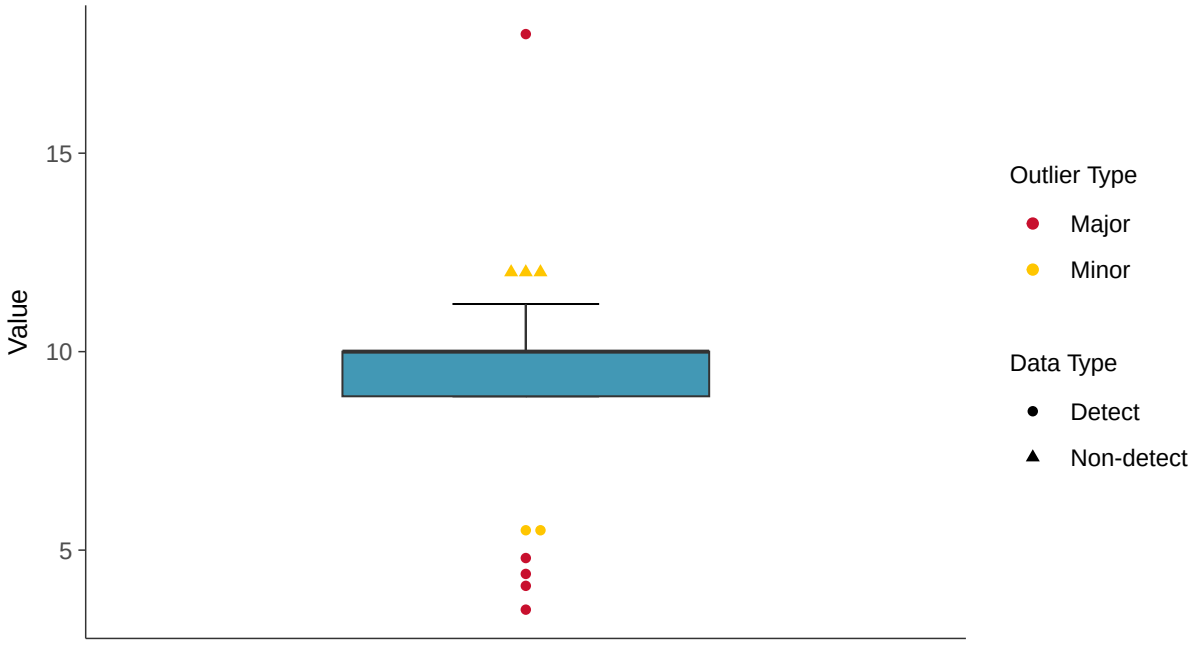
ID: 07_2_117



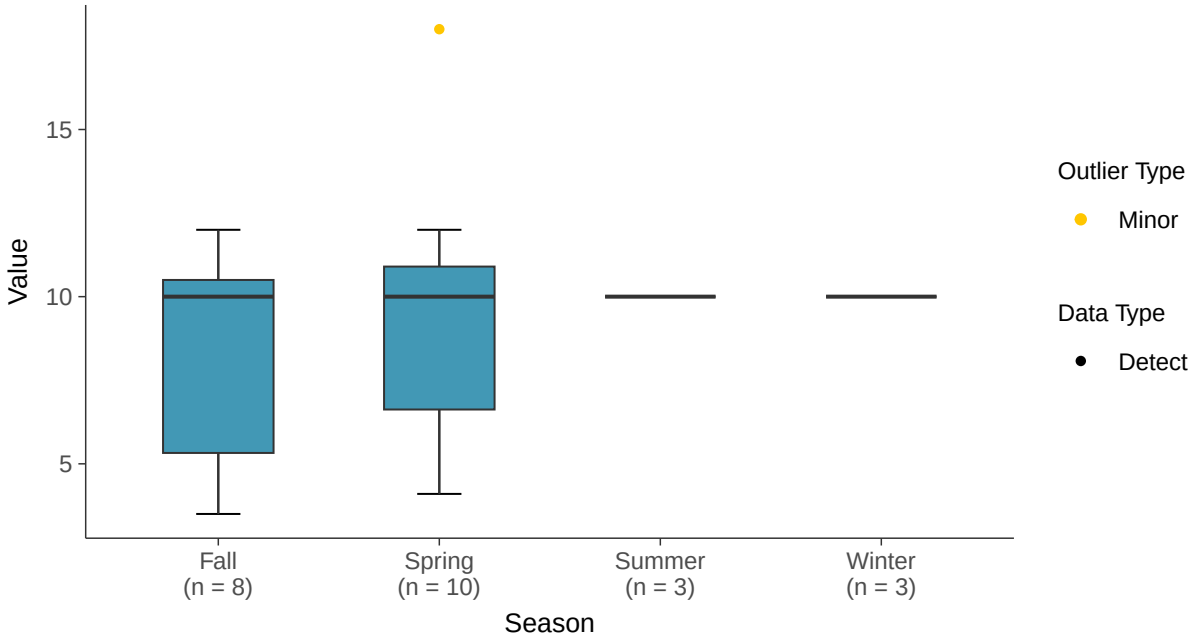
## Boxplot

Lithium, MW-15017 (ug/L)



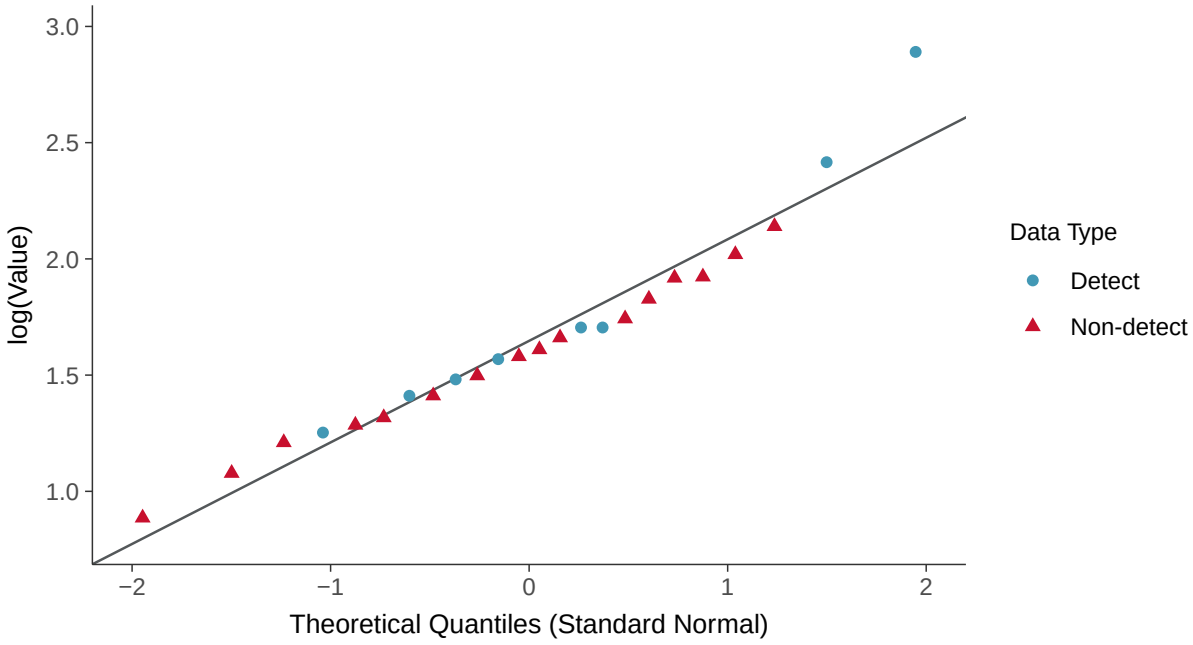

## Boxplot by Season

Lithium, MW-15017 (ug/L)



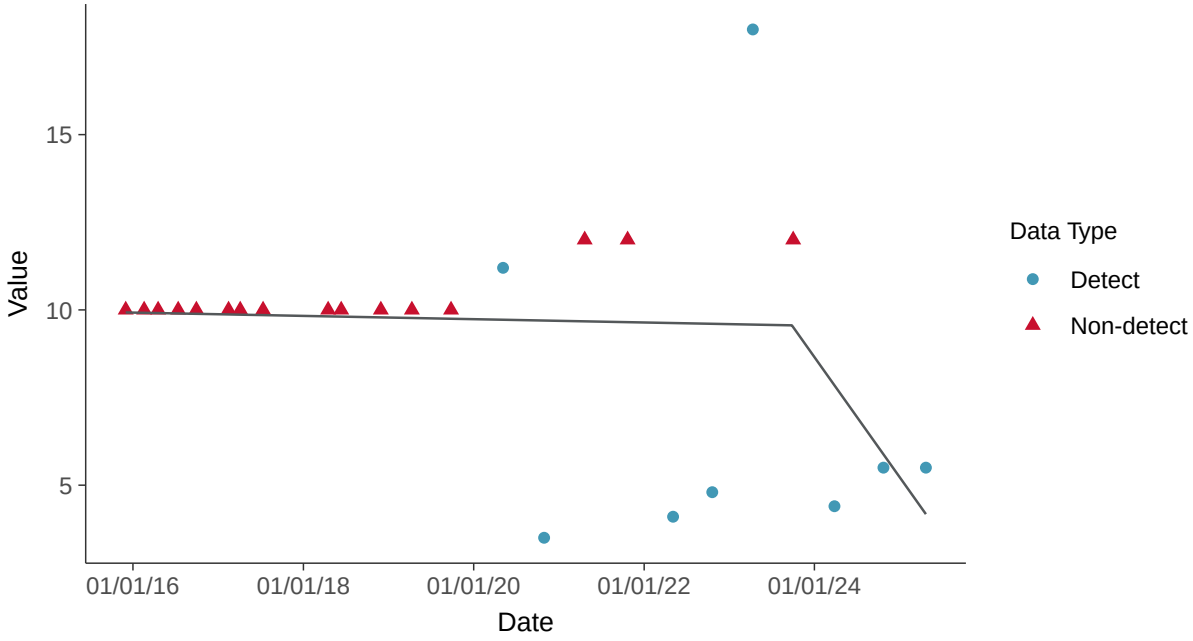
**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15017 (ug/L)



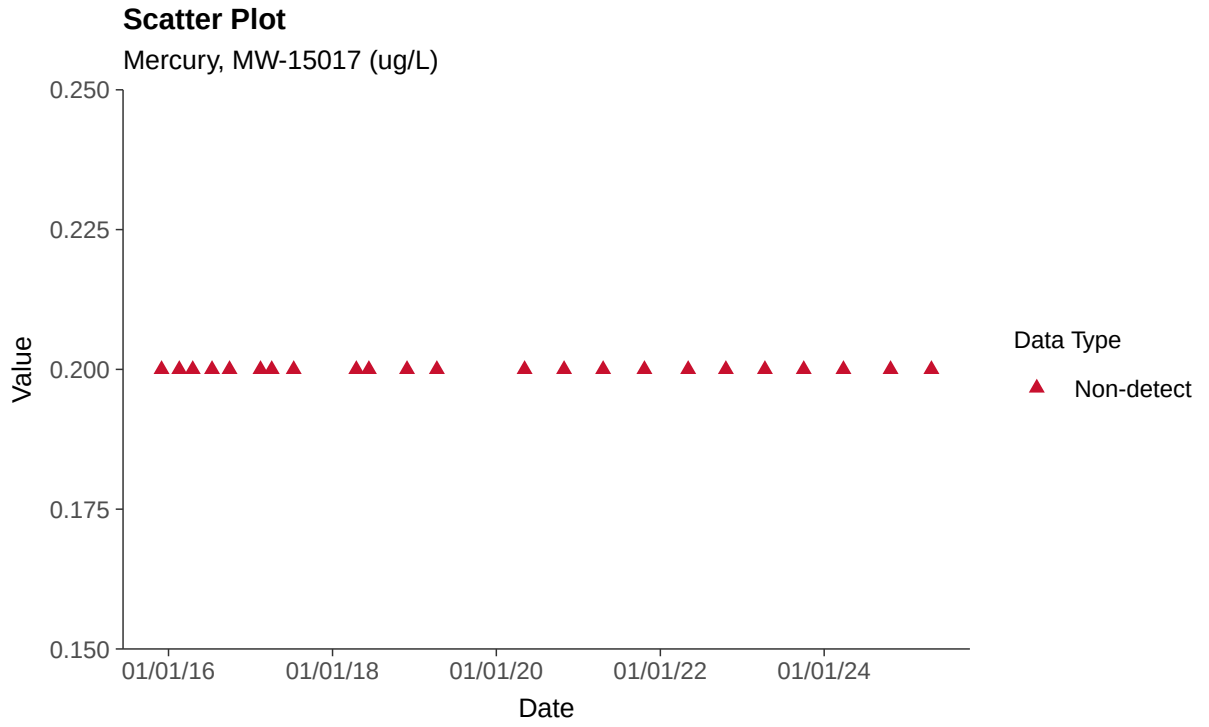

**Trend Regression: Piecewise Linear-Linear**

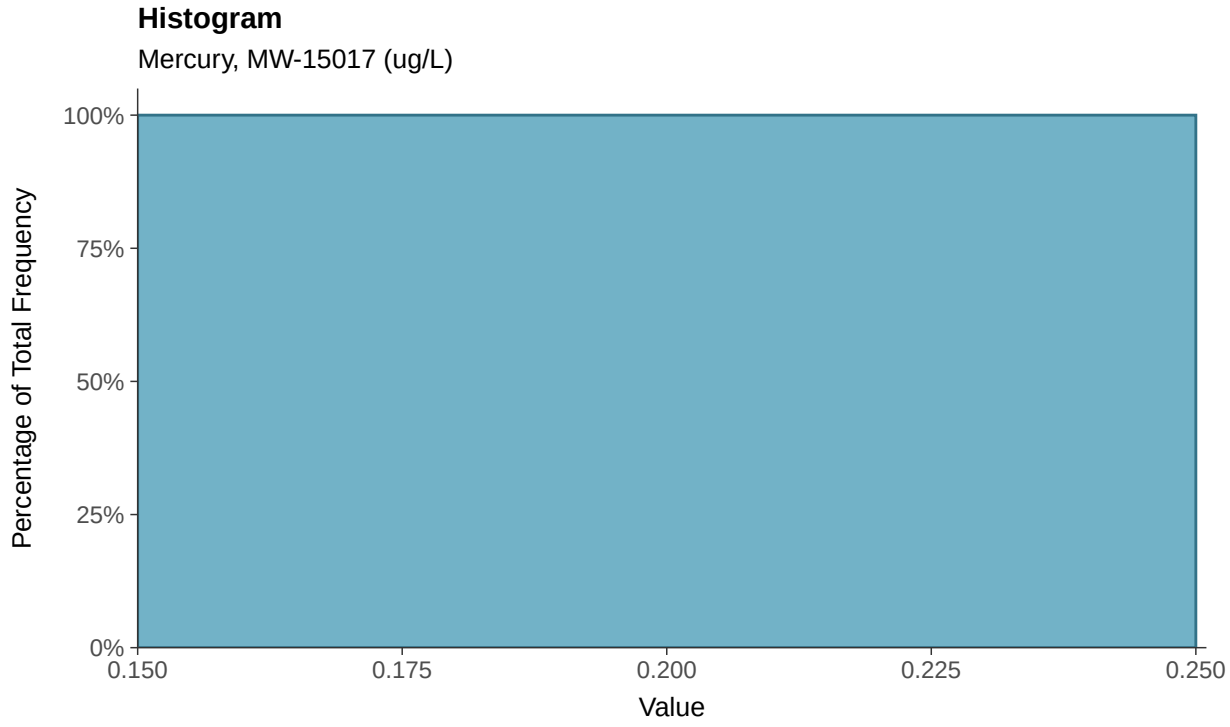
Lithium, MW-15017 (ug/L)



## Appendix IV: Mercury, MW-15017

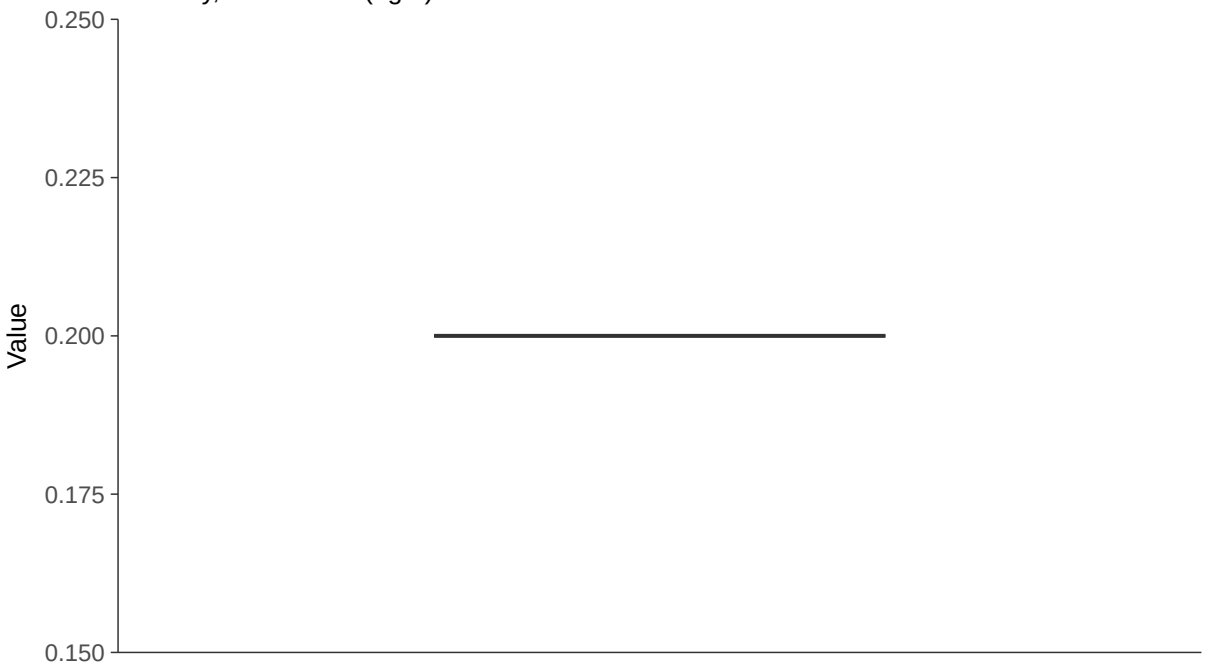
ID: 07_2_118



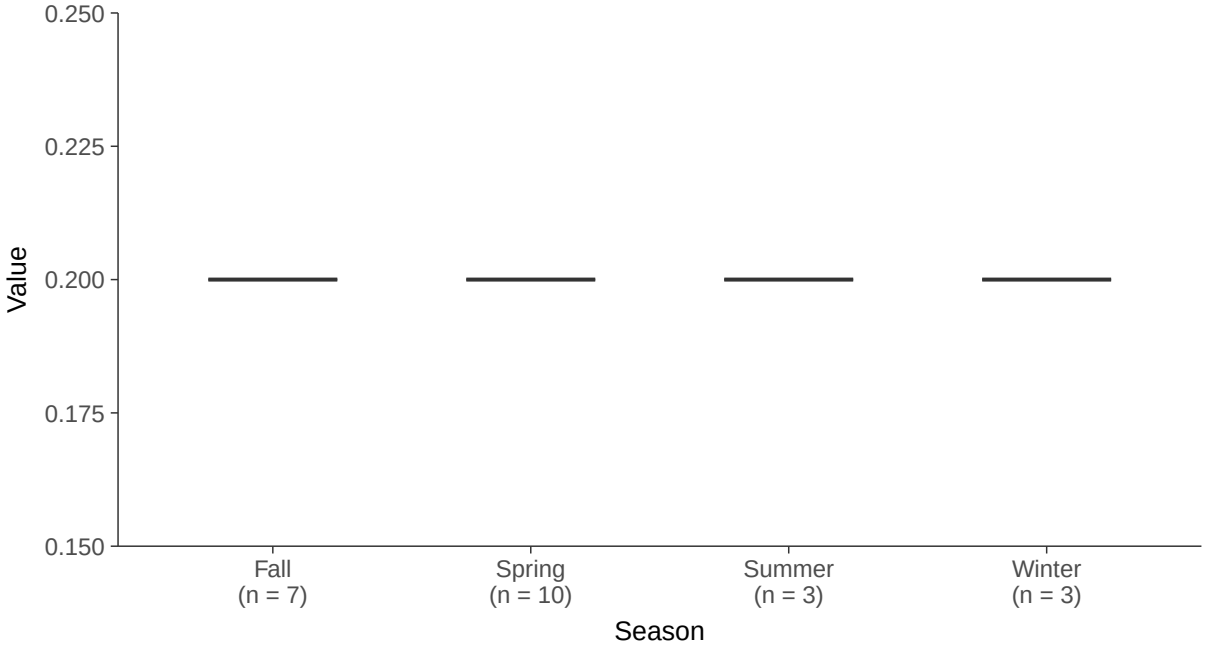
**Boxplot**

Mercury, MW-15017 (ug/L)



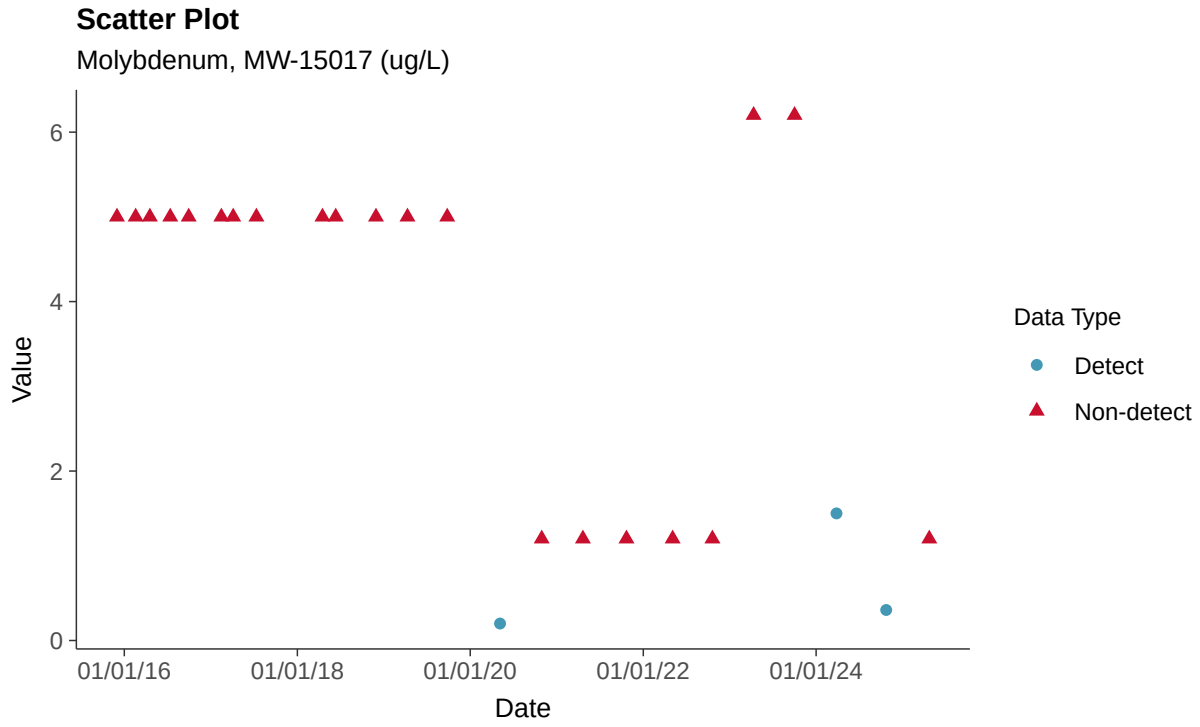

**Boxplot by Season**

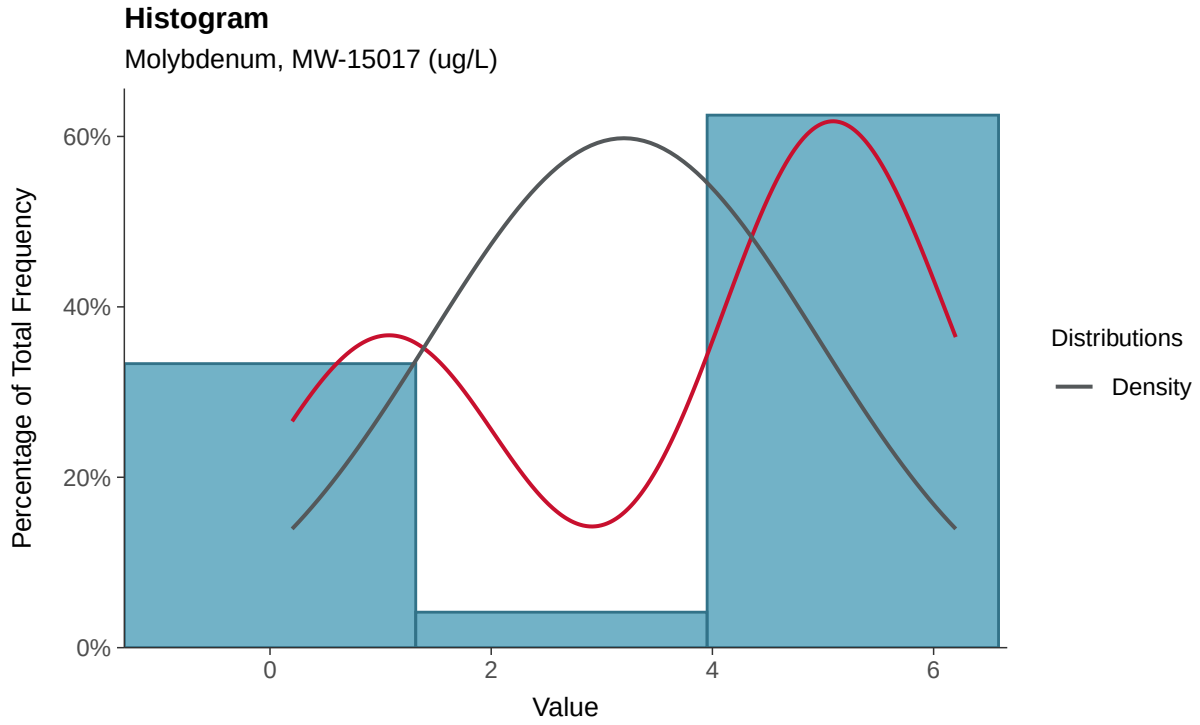
Mercury, MW-15017 (ug/L)



## Appendix IV: Molybdenum, MW-15017

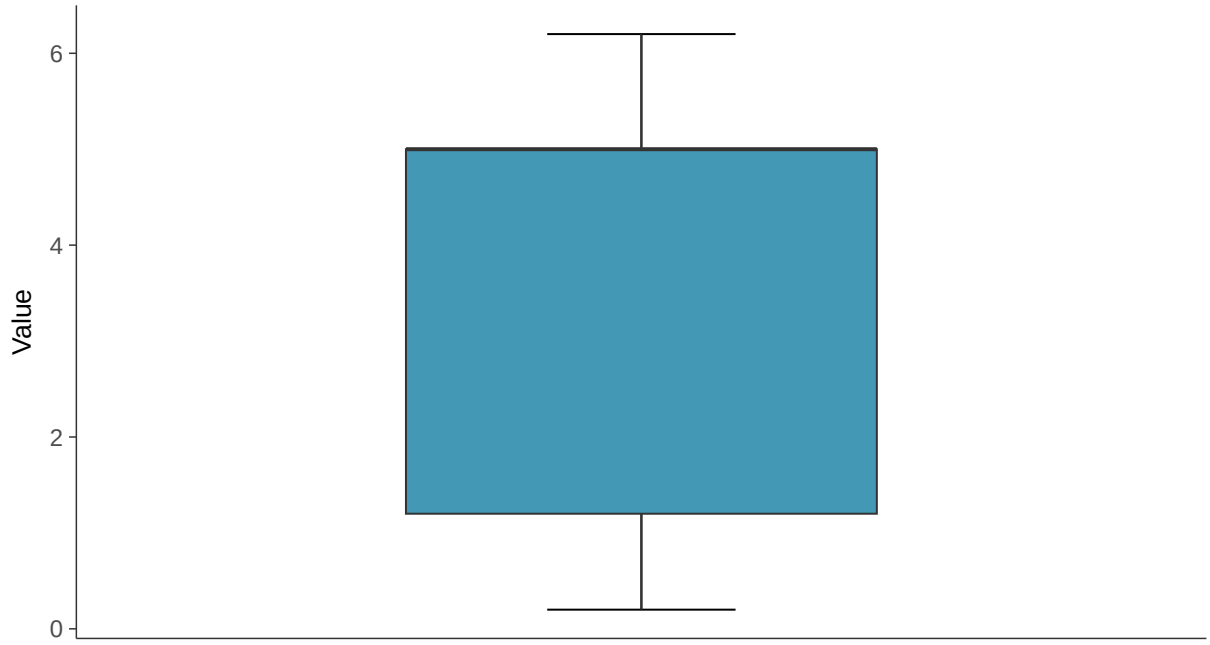
ID: 07_2_119



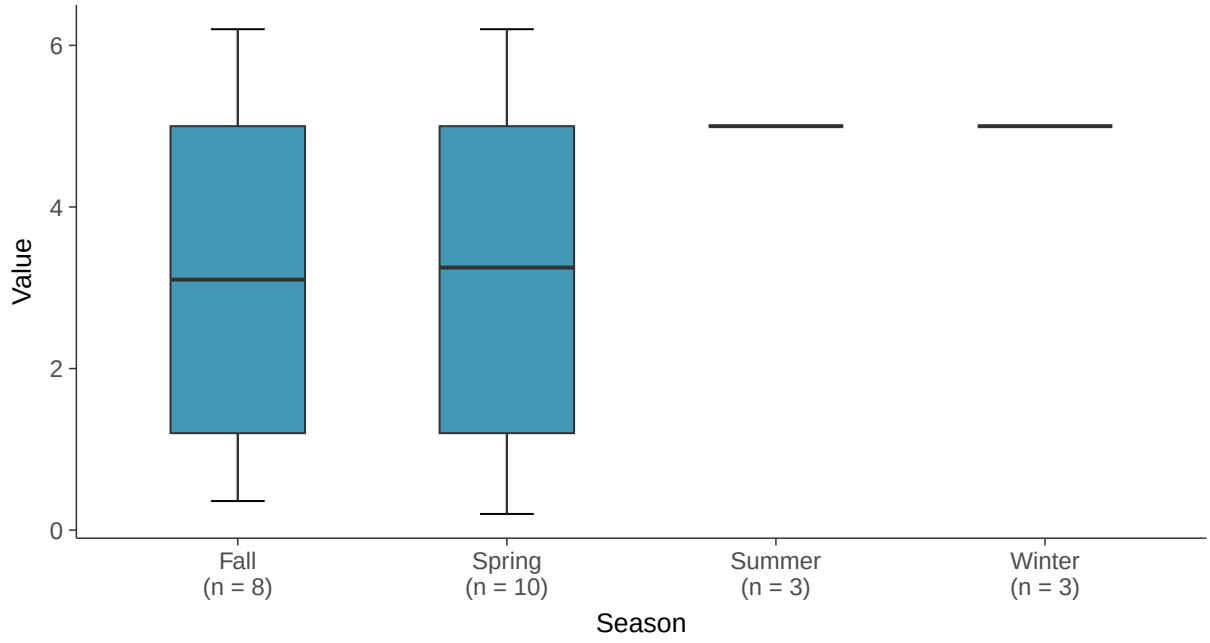
**Boxplot**

Molybdenum, MW-15017 (ug/L)



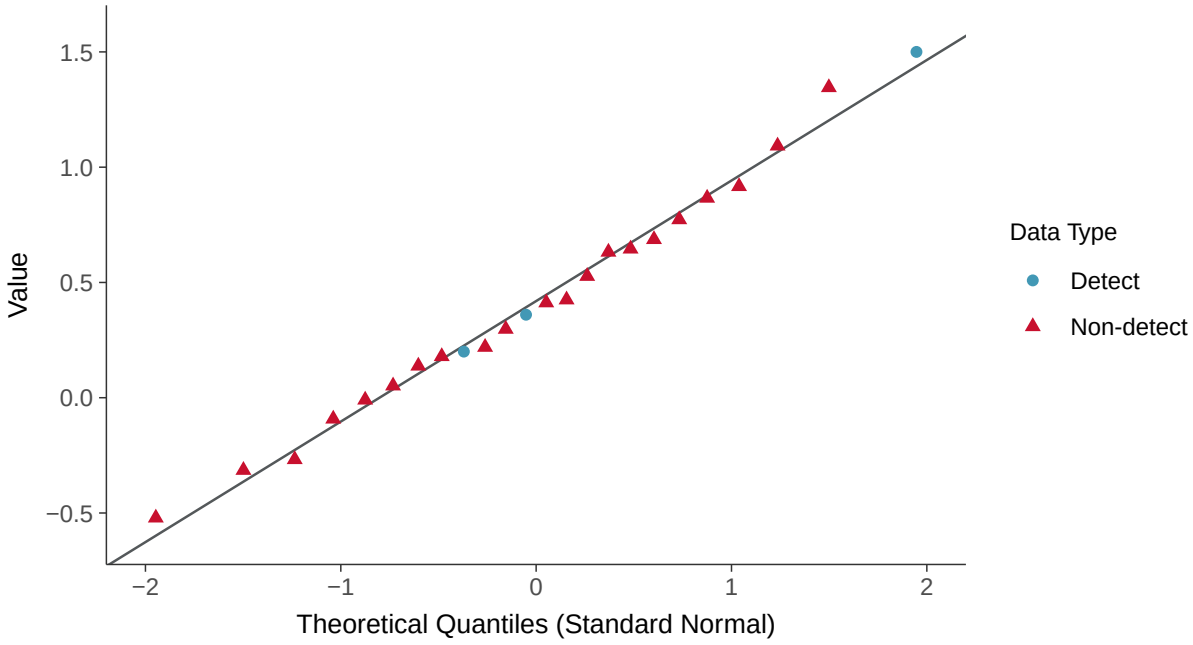

**Boxplot by Season**

Molybdenum, MW-15017 (ug/L)



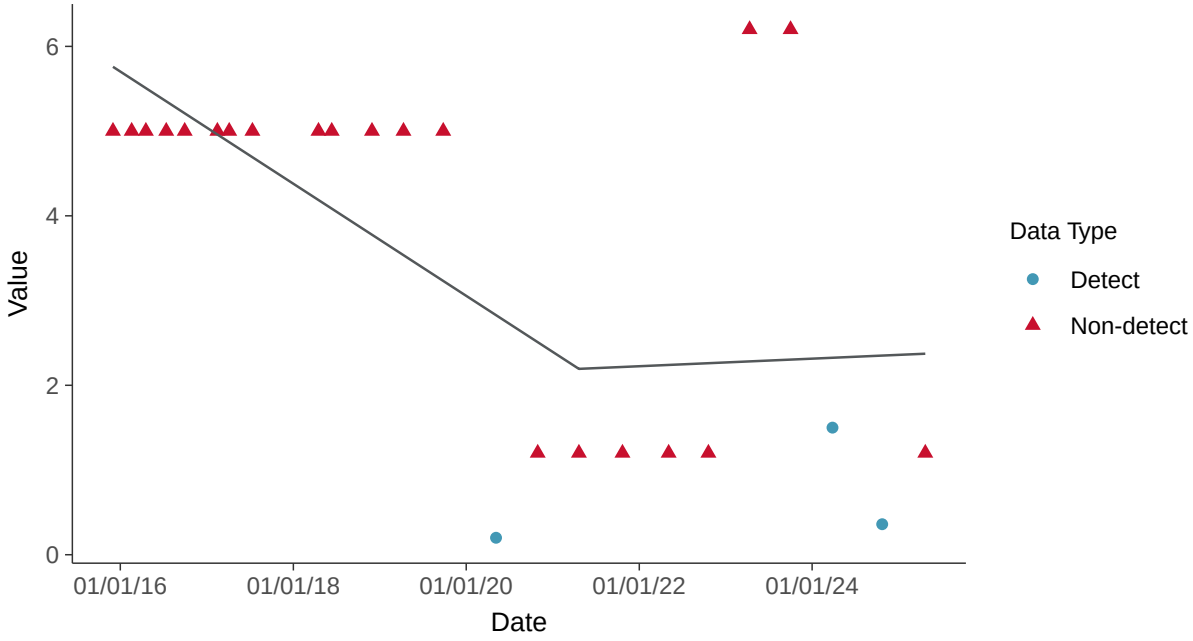
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15017 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15017 (ug/L)

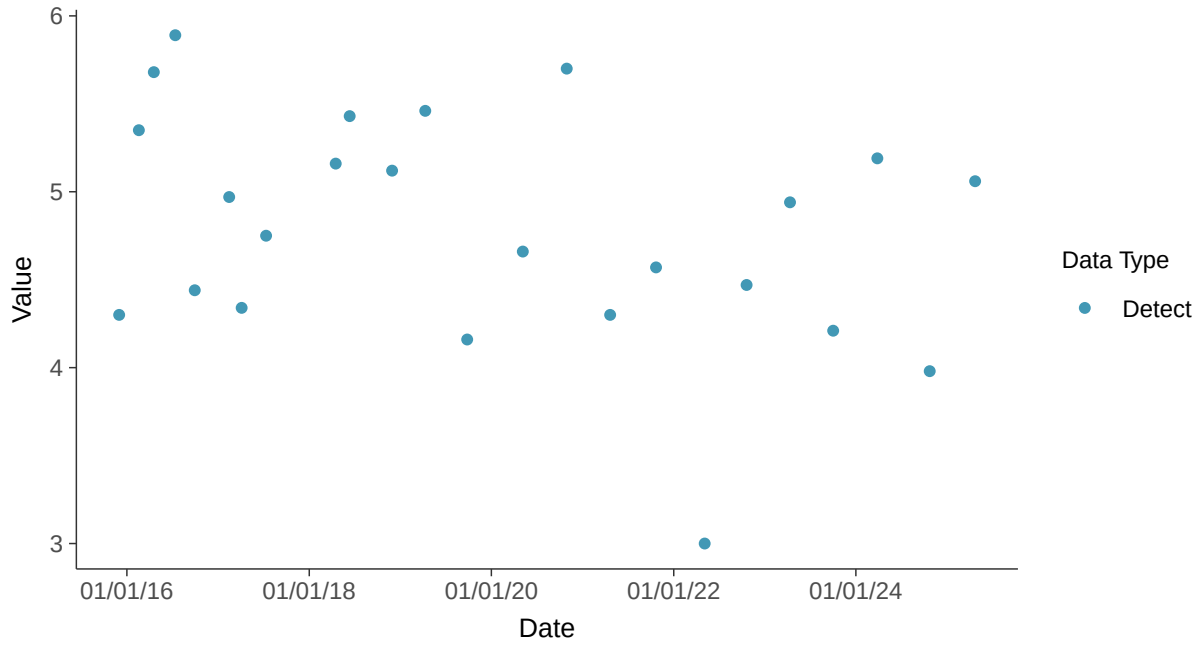


## Appendix IV: Radium-226+228, MW-15017

ID: 07_2_125

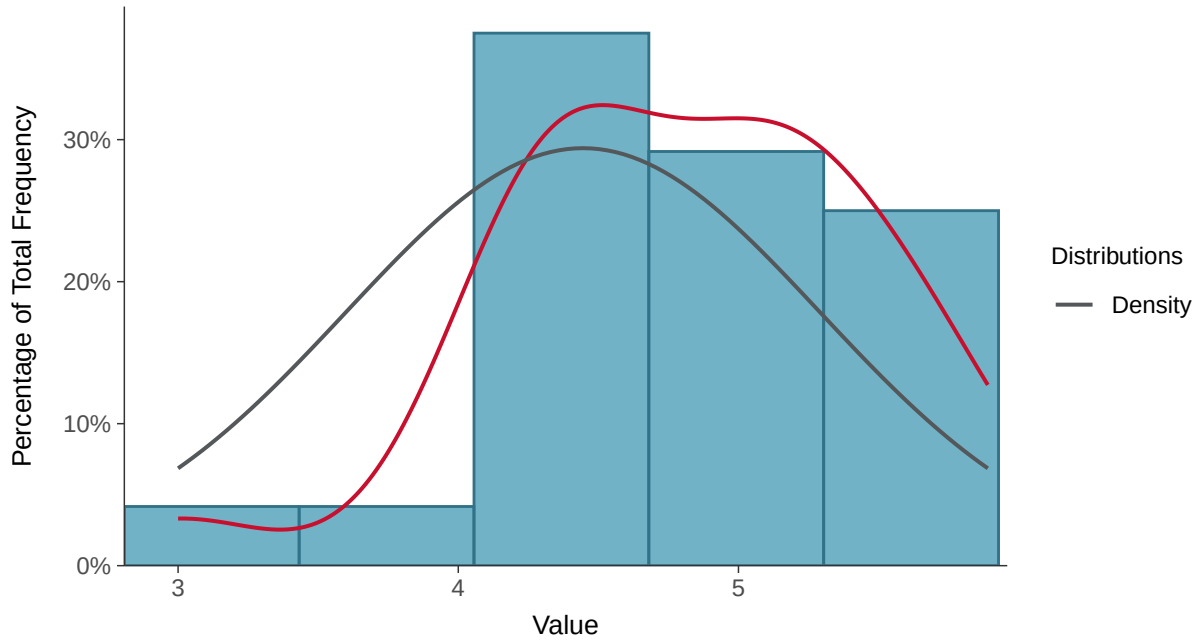
**Scatter Plot**

Radium-226+228, MW-15017 (pCi/L)



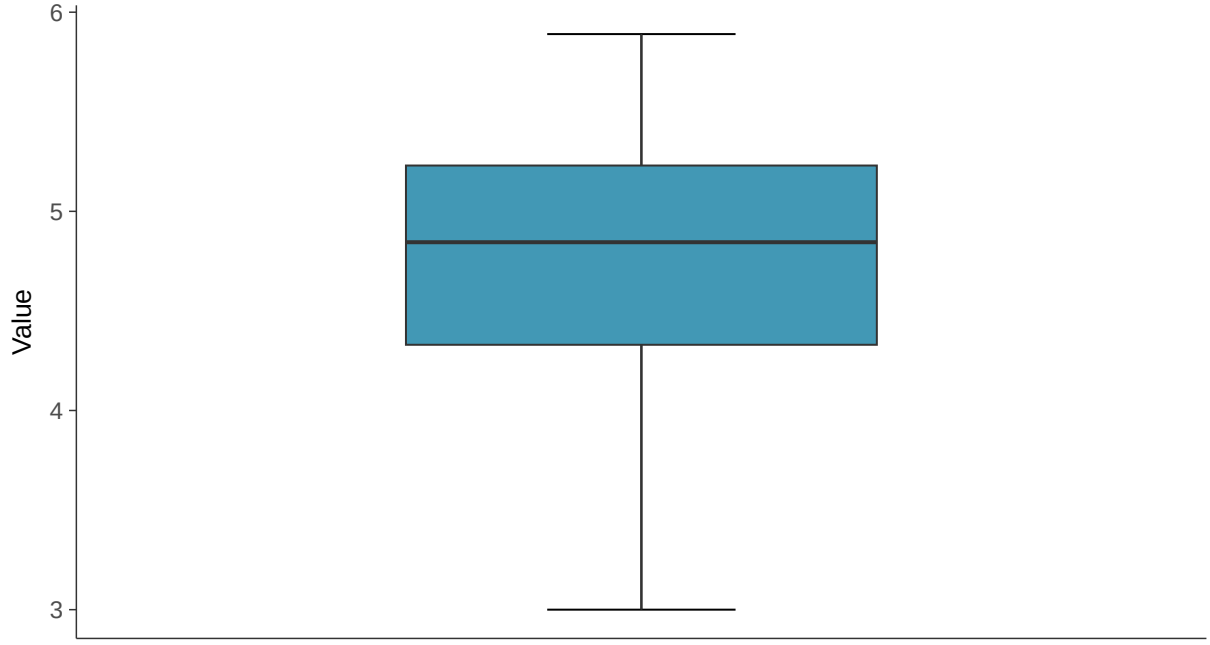

**Histogram**

Radium-226+228, MW-15017 (pCi/L)



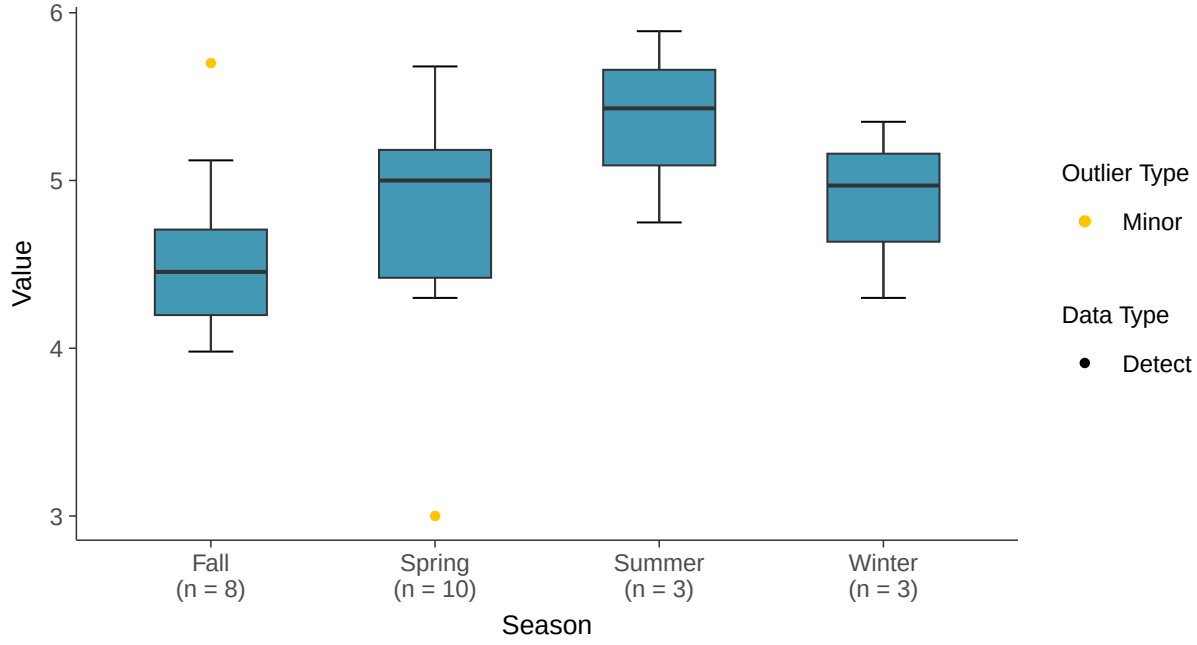
## Boxplot

Radium-226+228, MW-15017 (pCi/L)



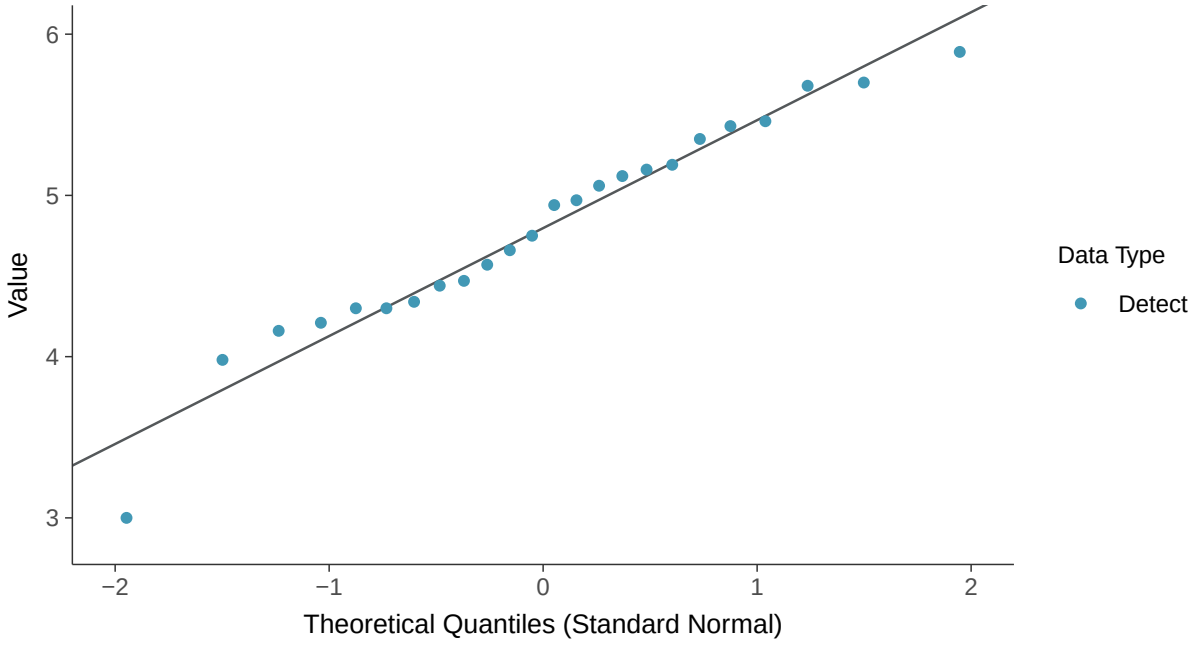

## Boxplot by Season

Radium-226+228, MW-15017 (pCi/L)



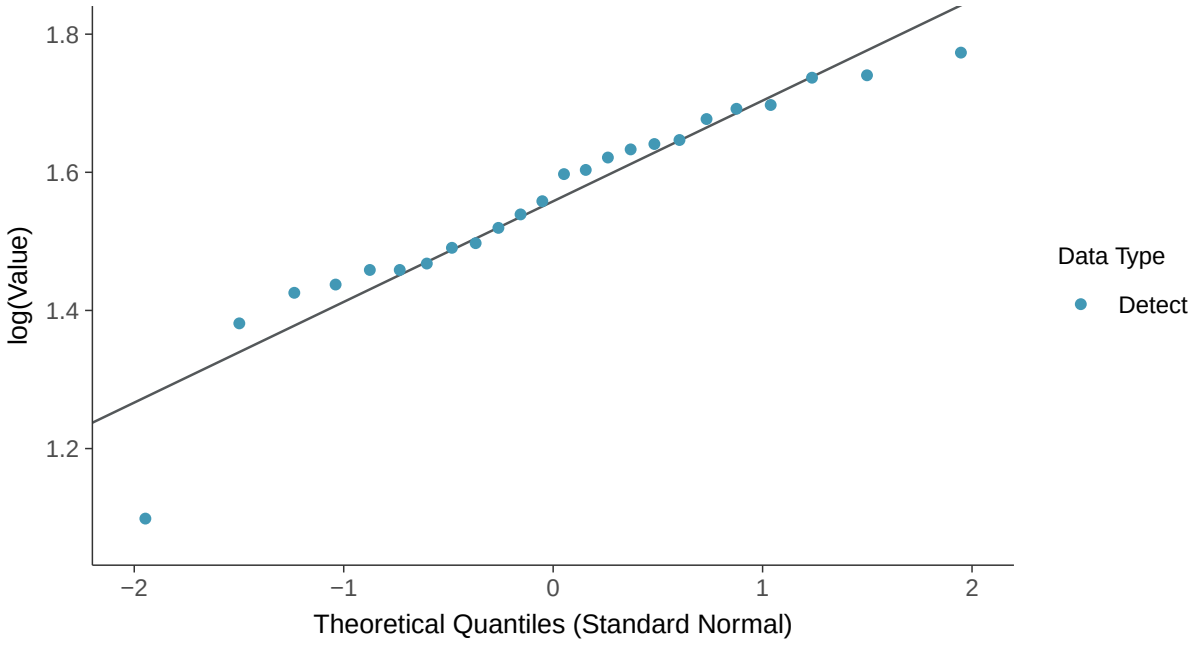
**Normal Q-Q plot**

Radium-226+228, MW-15017 (pCi/L)



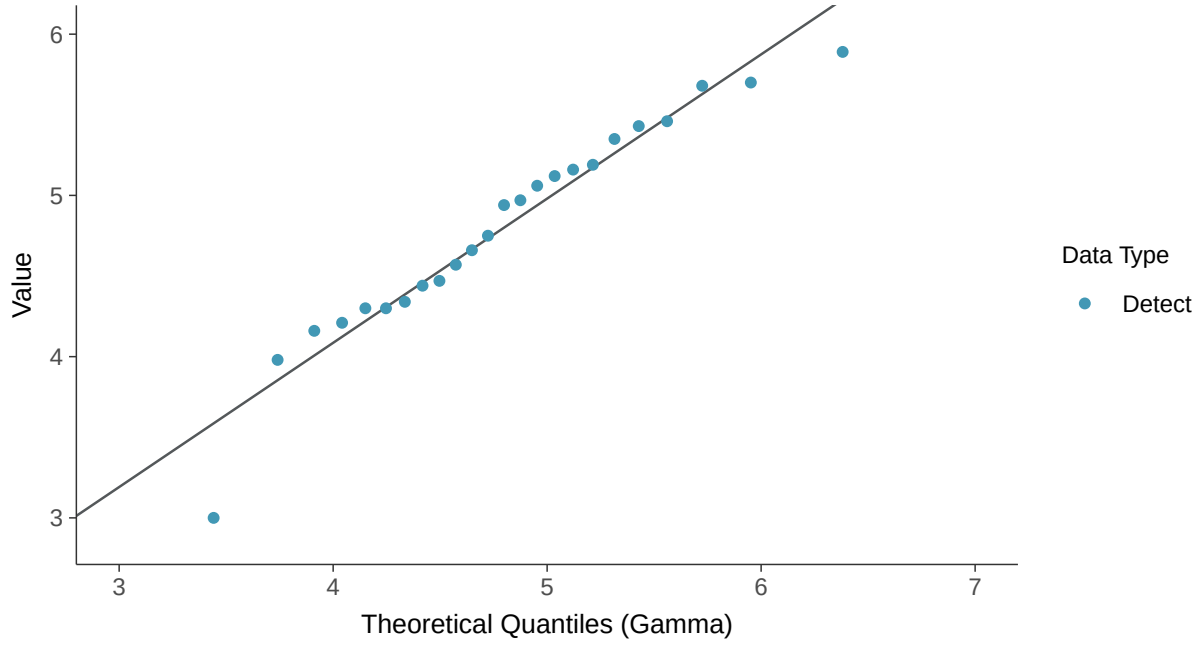

**Lognormal Q-Q plot**

Radium-226+228, MW-15017 (pCi/L)



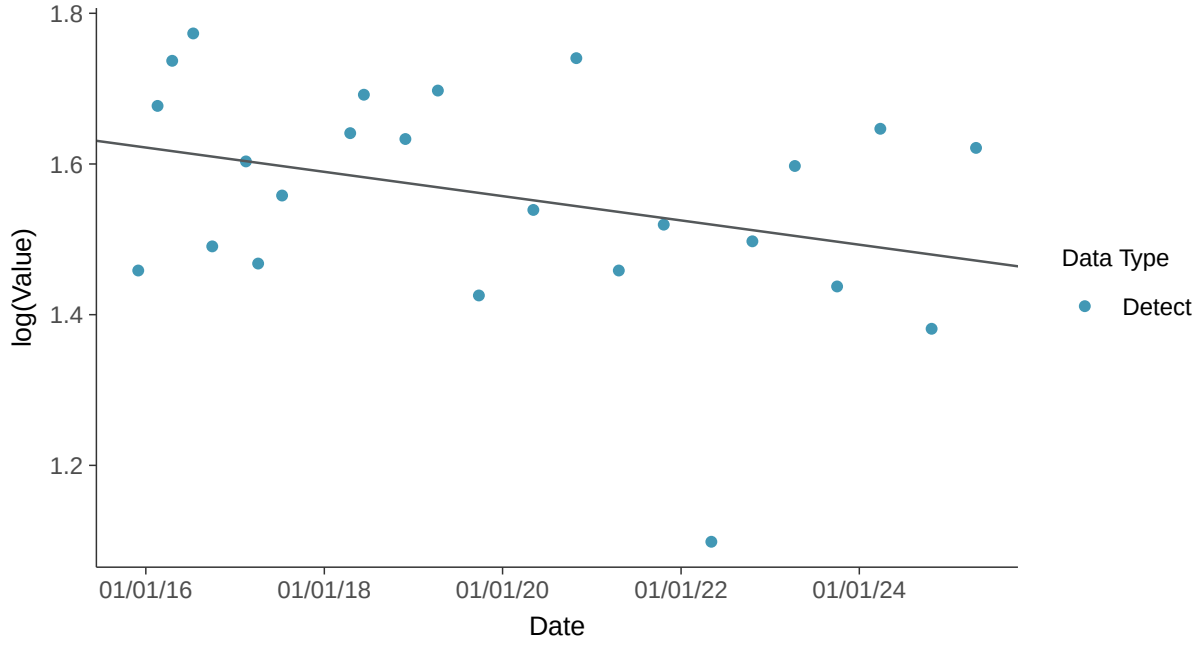
**Gamma Q-Q plot**

Radium-226+228, MW-15017 (pCi/L)



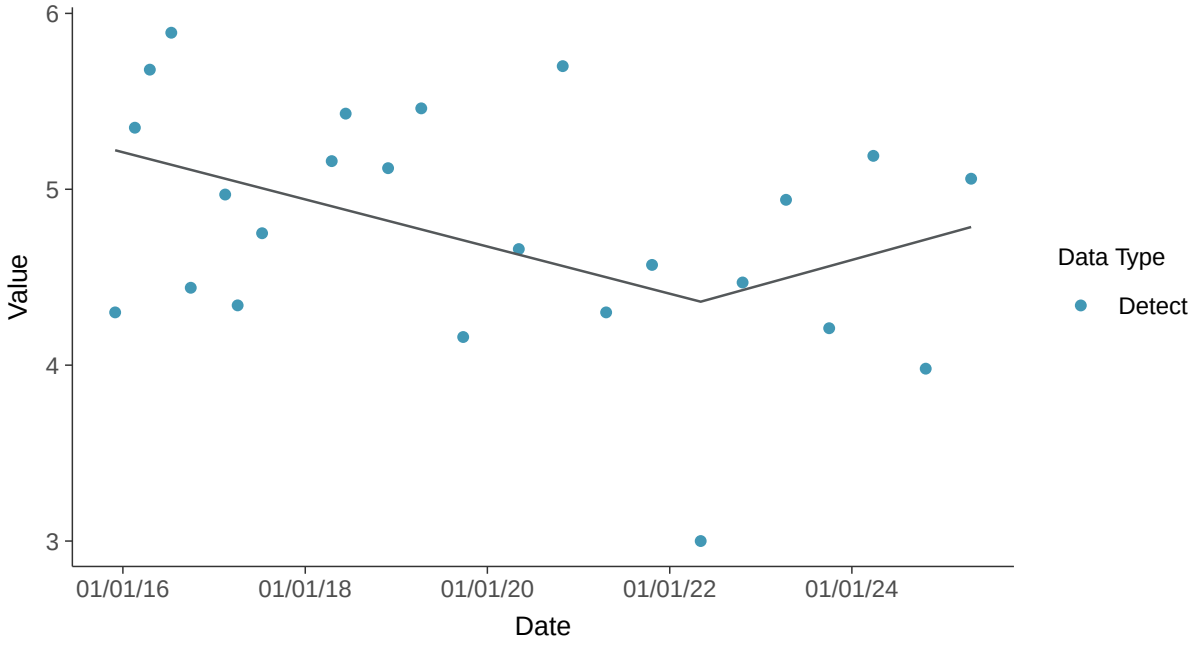

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15017 (pCi/L)



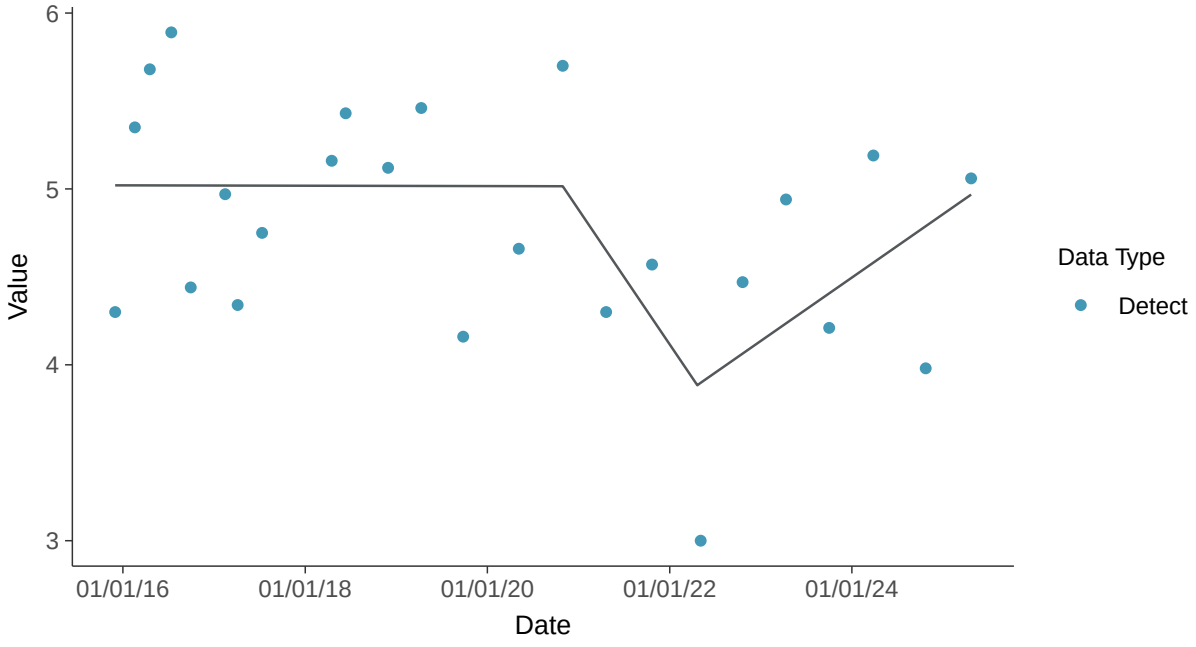
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15017 (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15017 (pCi/L)

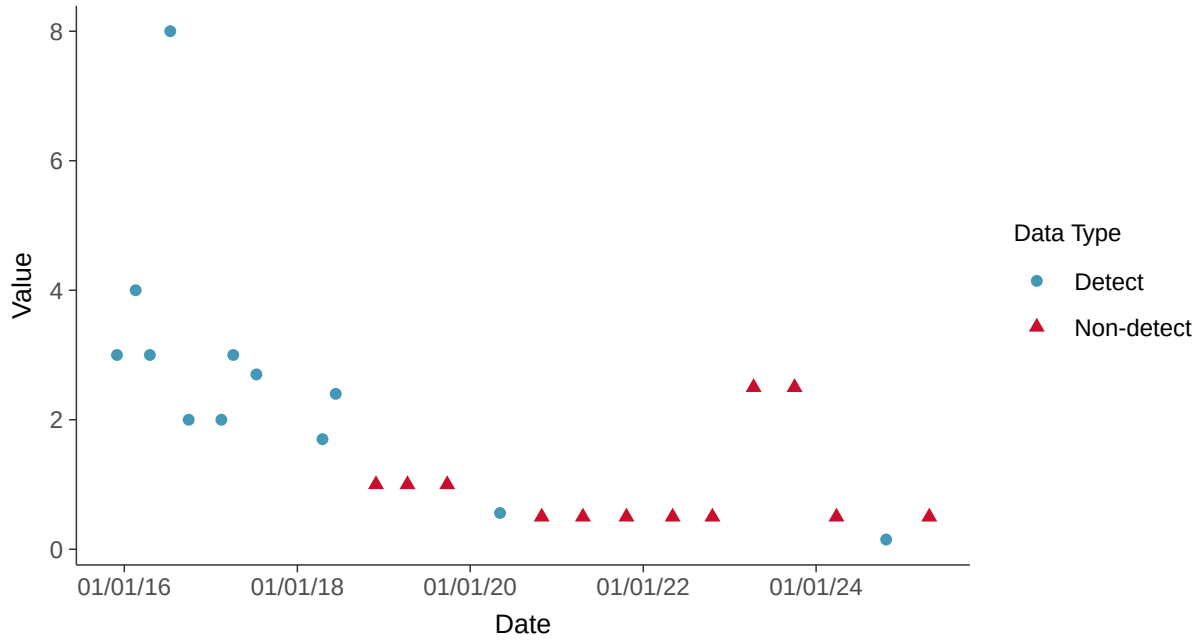


# Appendix IV: Selenium, MW-15017

ID: 07_2_127

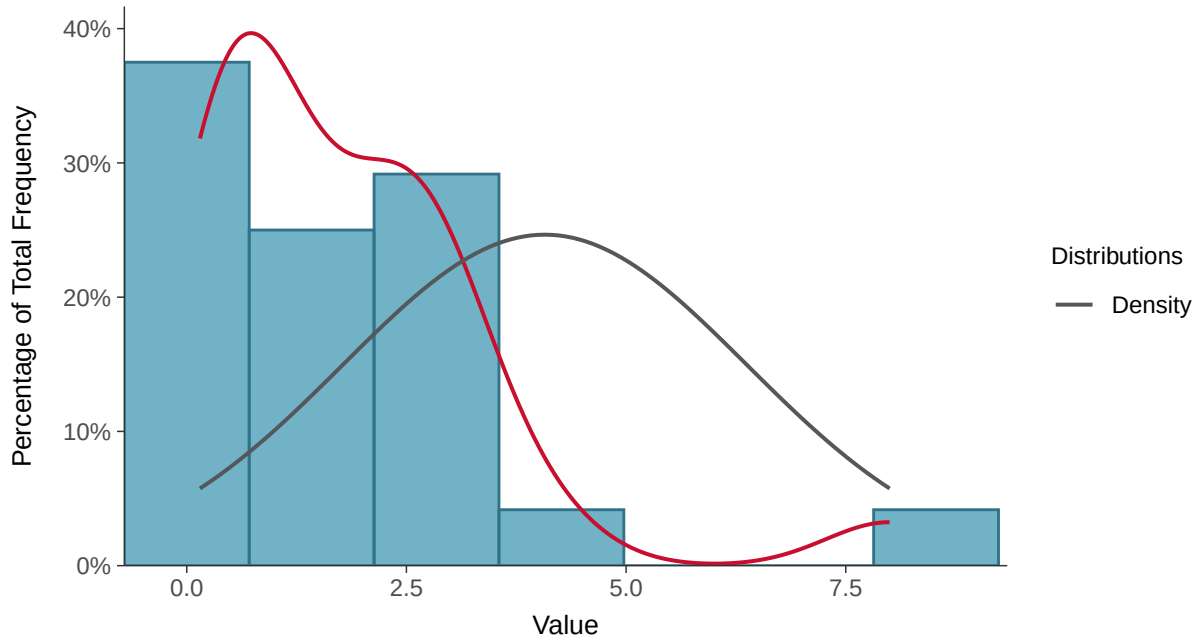
**Scatter Plot**

Selenium, MW-15017 (ug/L)



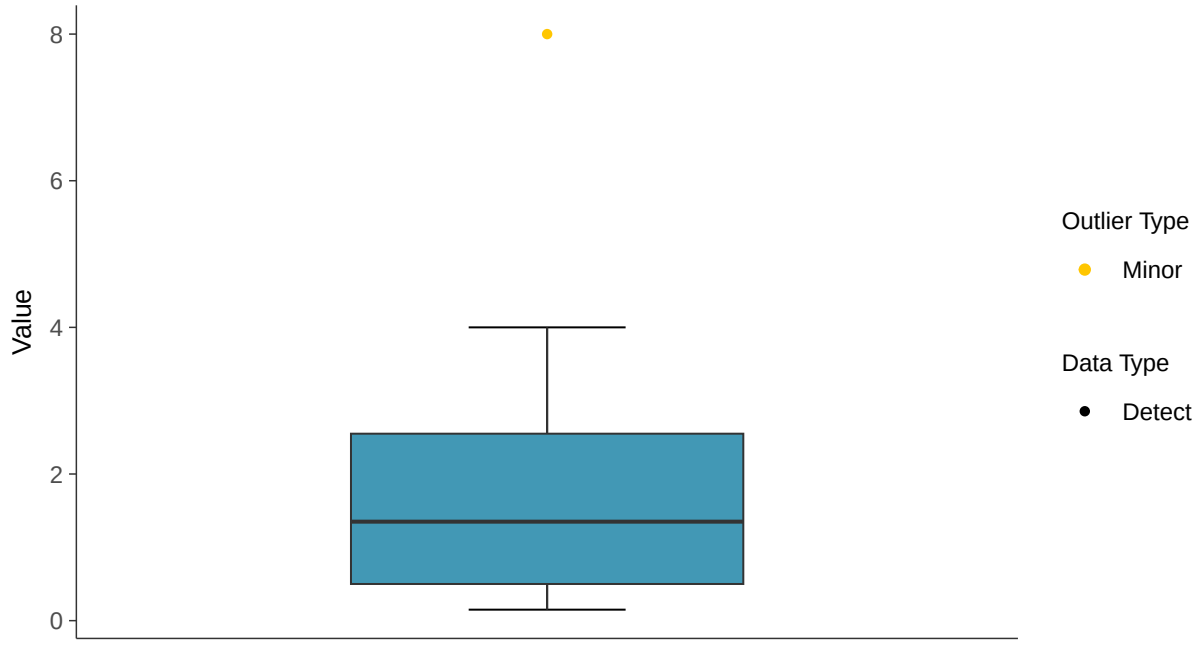

**Histogram**

Selenium, MW-15017 (ug/L)



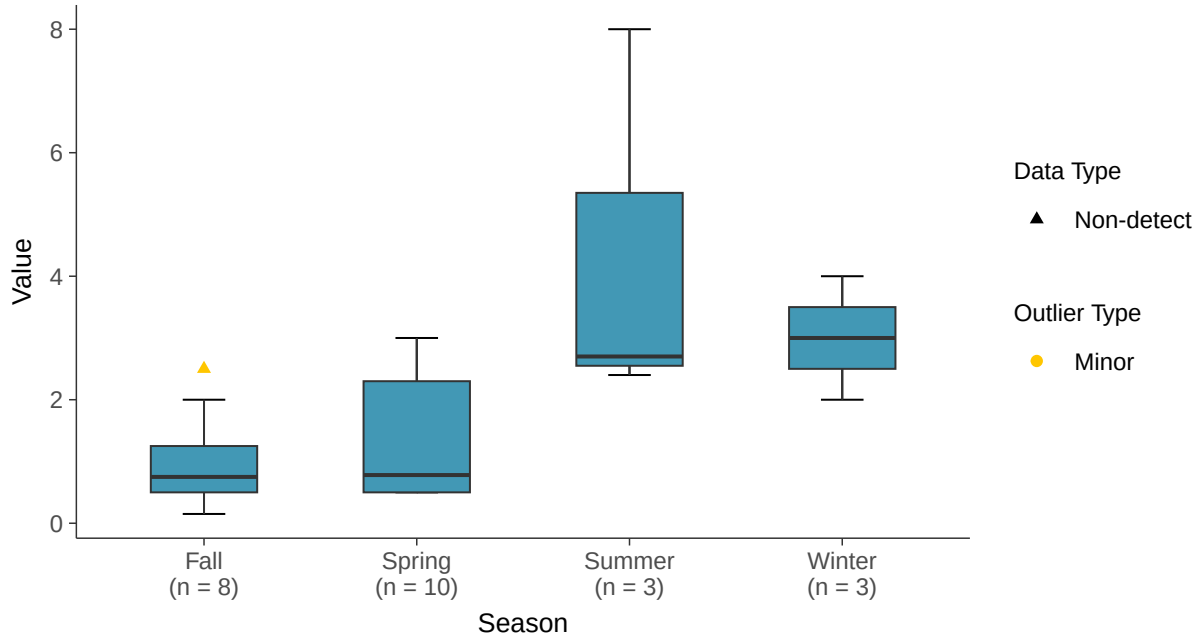
**Boxplot**

Selenium, MW-15017 (ug/L)



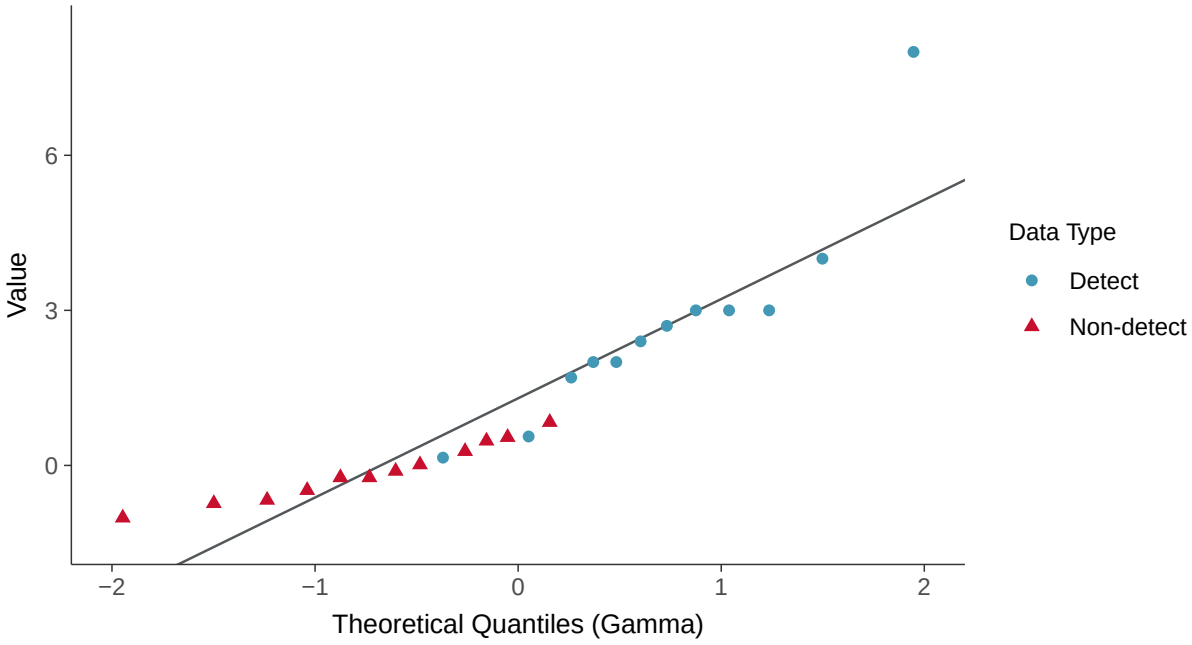

**Boxplot by Season**

Selenium, MW-15017 (ug/L)



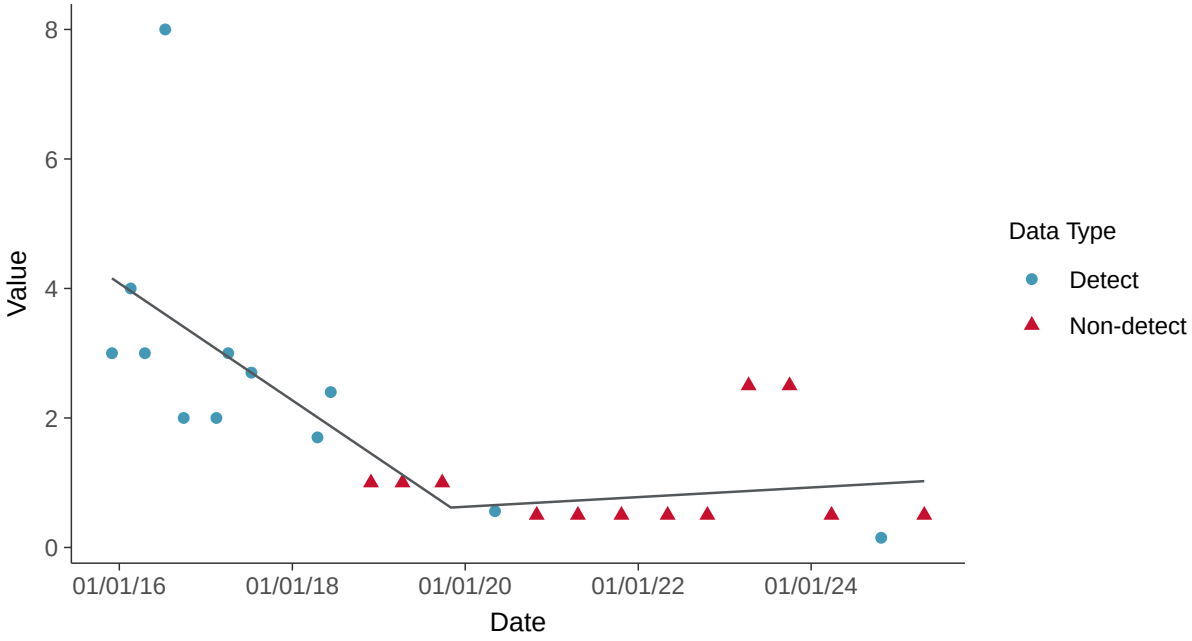
**Gamma Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15017 (ug/L)



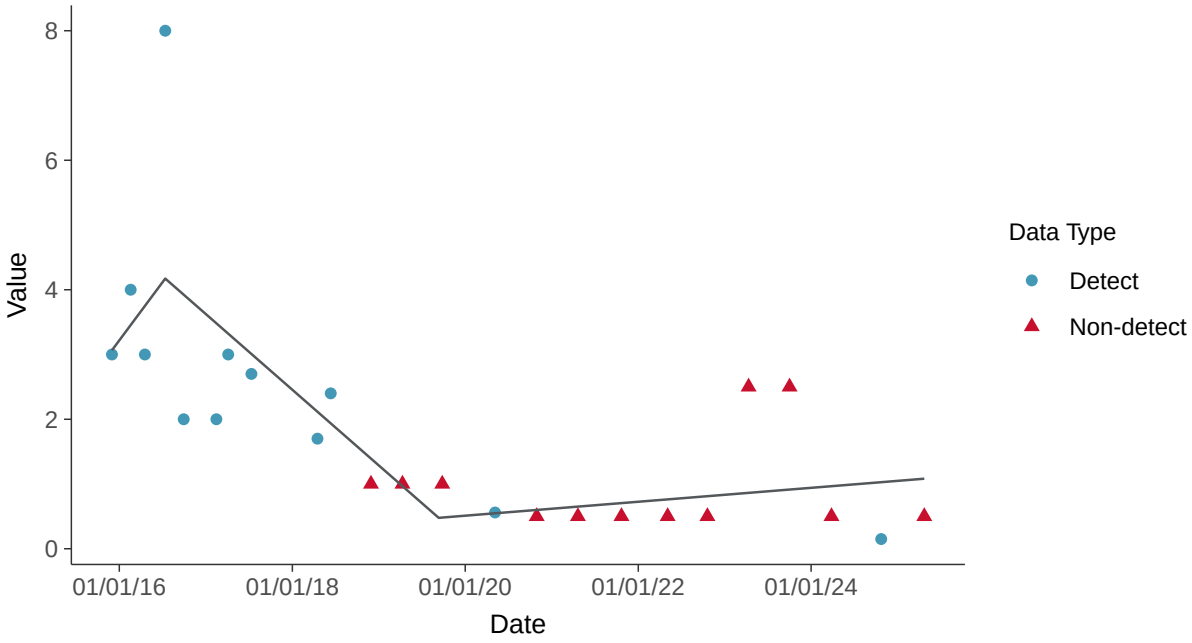

**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15017 (ug/L)



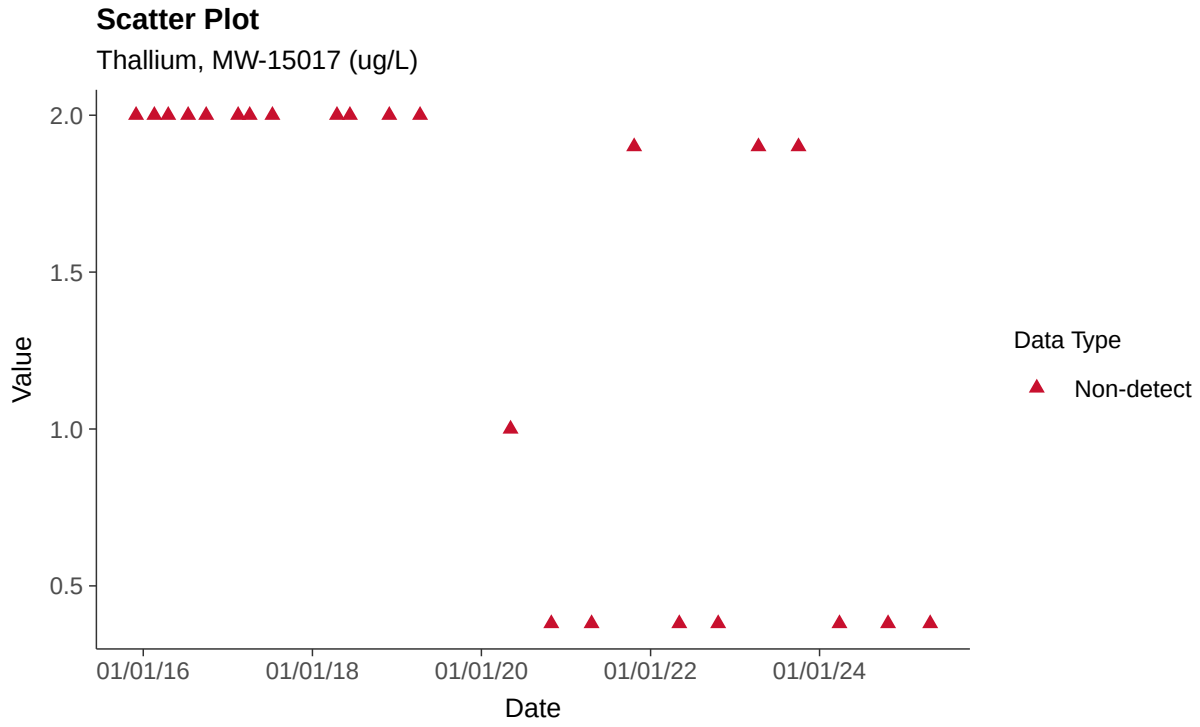
**Trend Regression: Piecewise Linear-Linear-Linear**

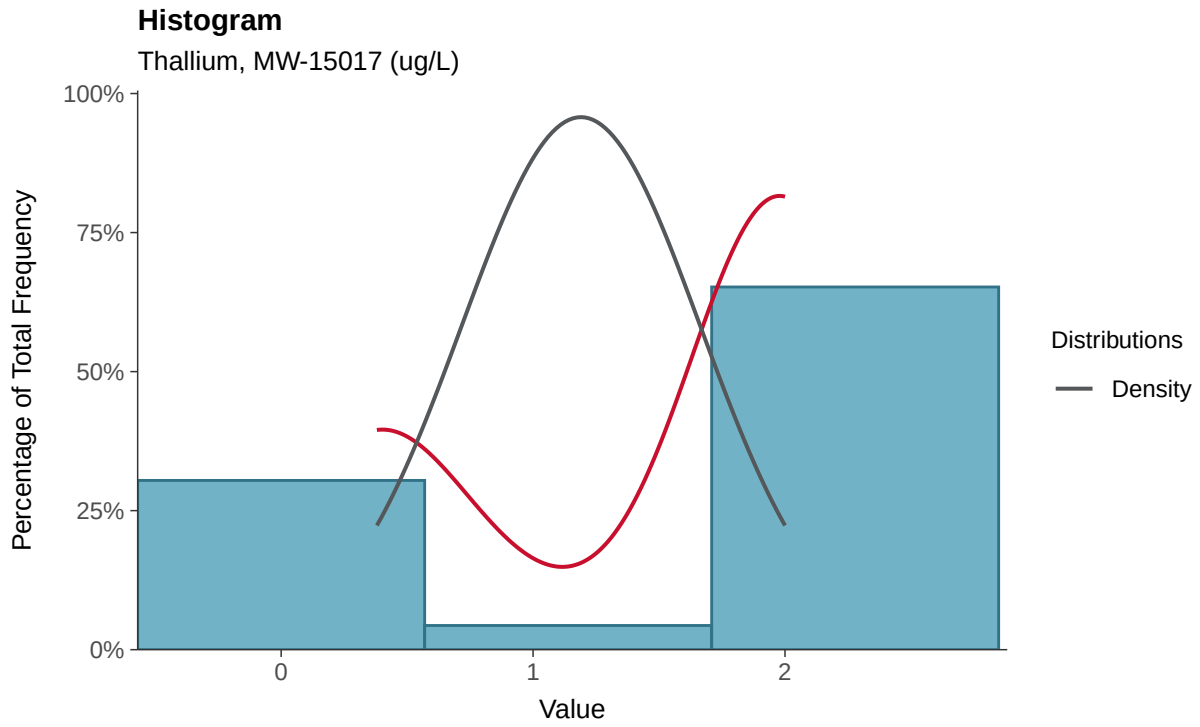
Selenium, MW-15017 (ug/L)



## Appendix IV: Thallium, MW-15017

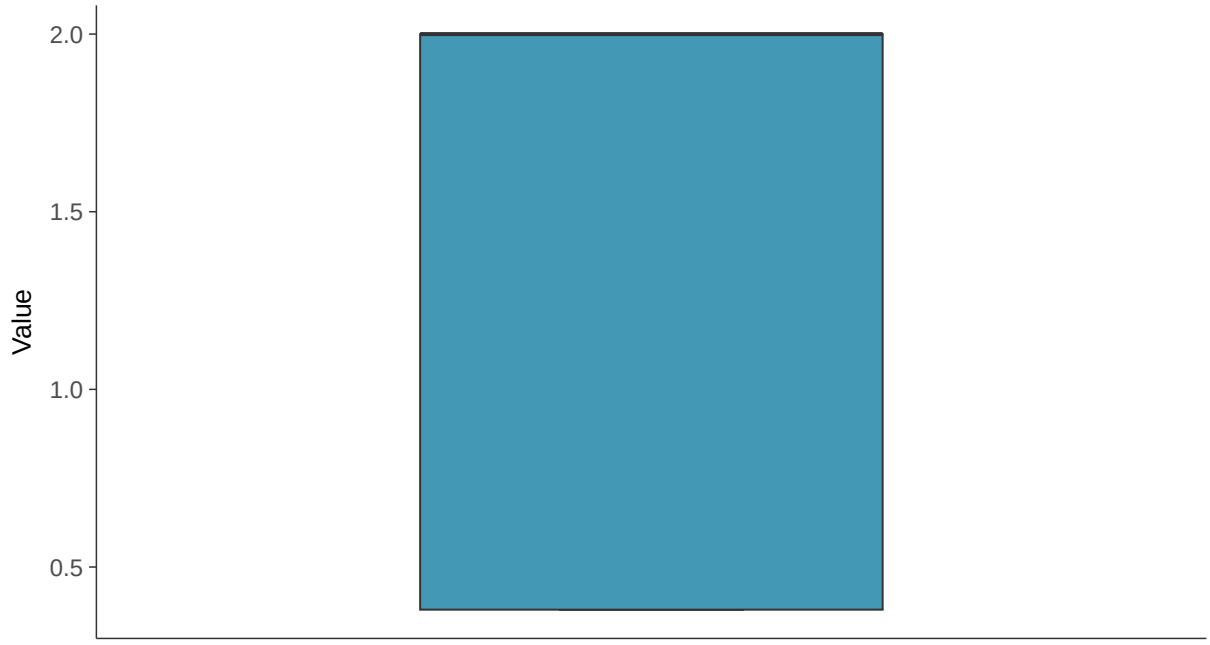
ID: 07_2_131



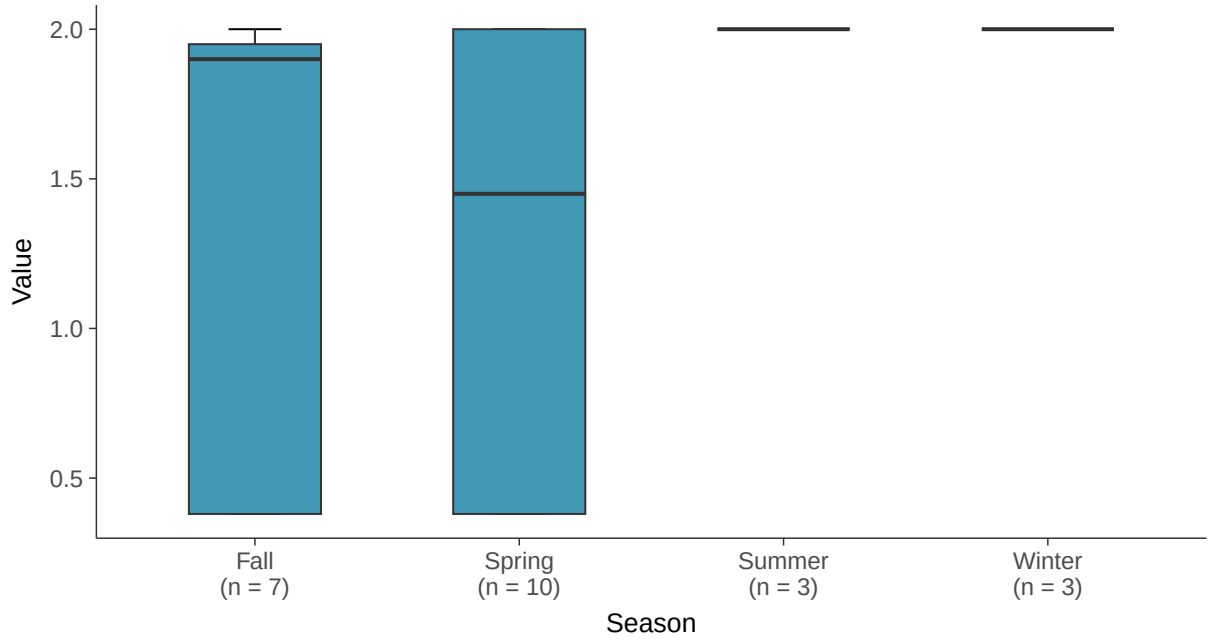
**Boxplot**

Thallium, MW-15017 (ug/L)



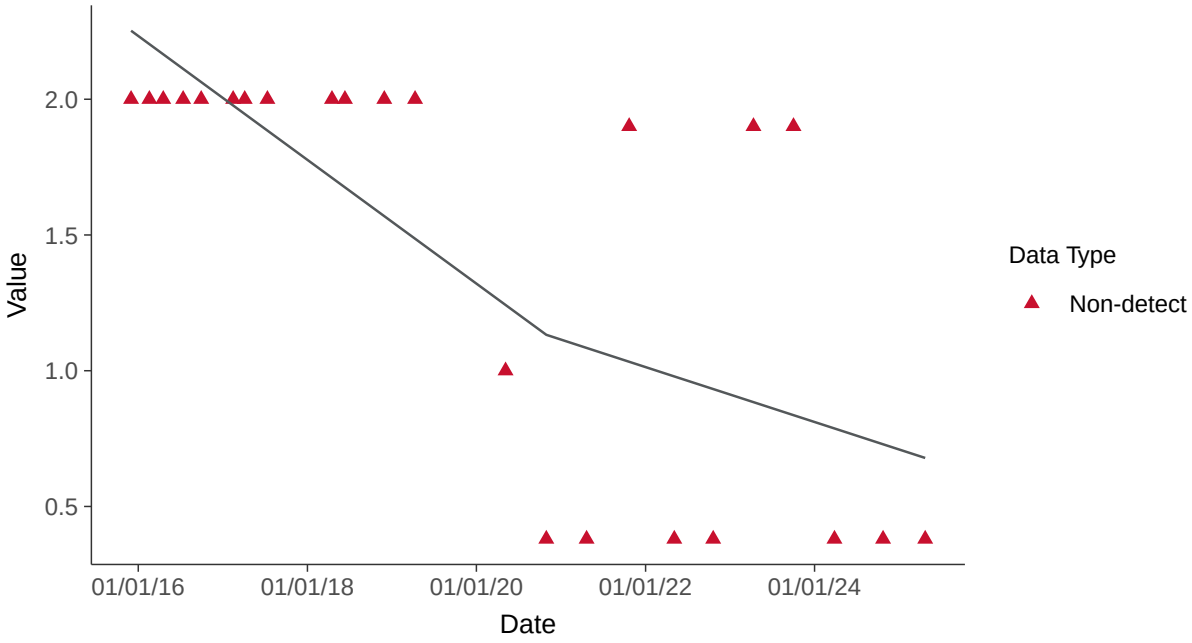

**Boxplot by Season**

Thallium, MW-15017 (ug/L)



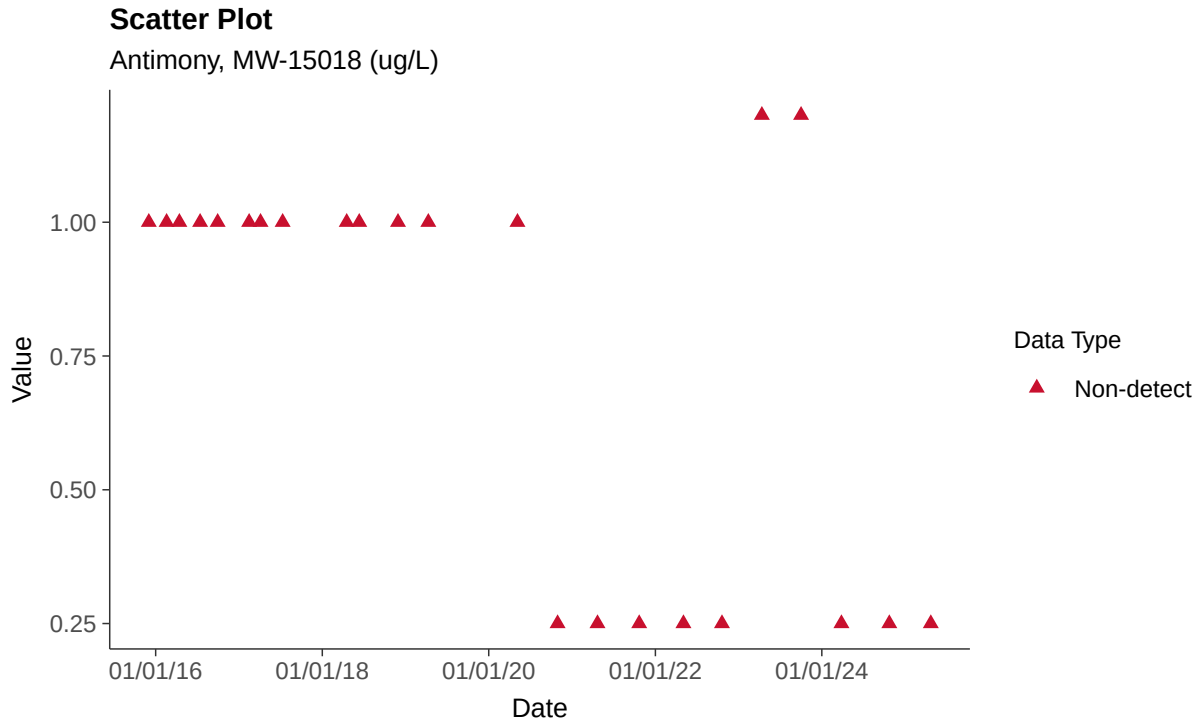
**Trend Regression: Piecewise Linear-Linear**

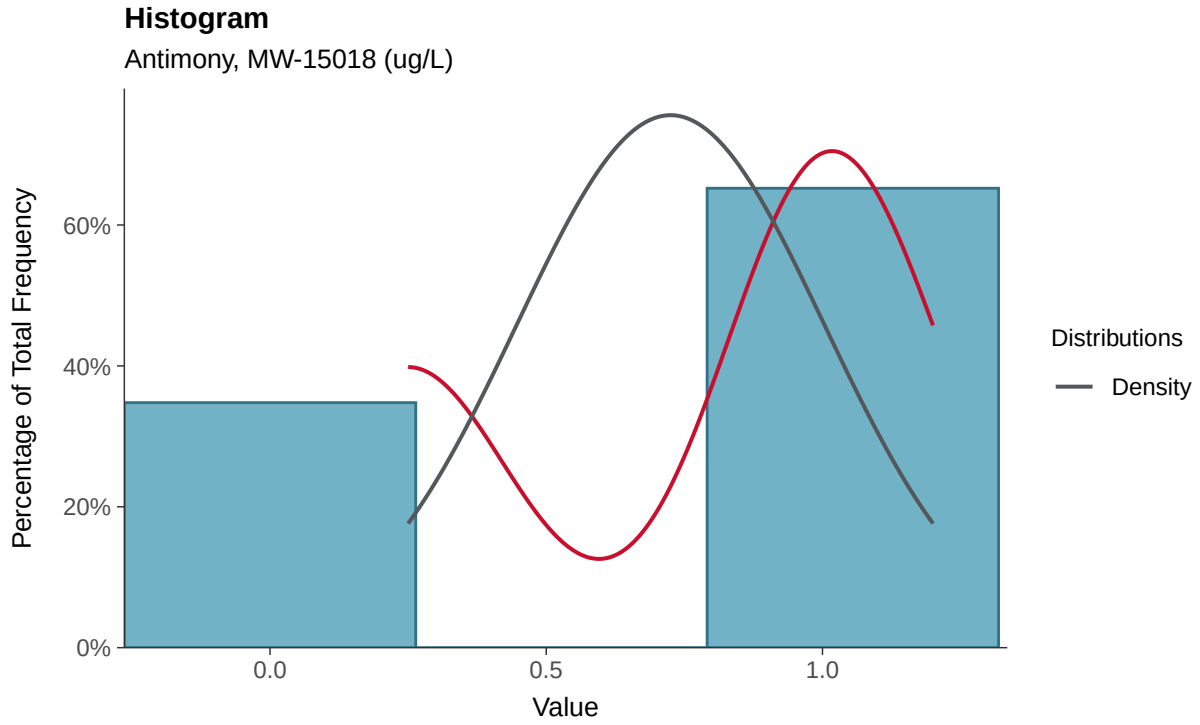
Thallium, MW-15017 (ug/L)



## Appendix IV: Antimony, MW-15018

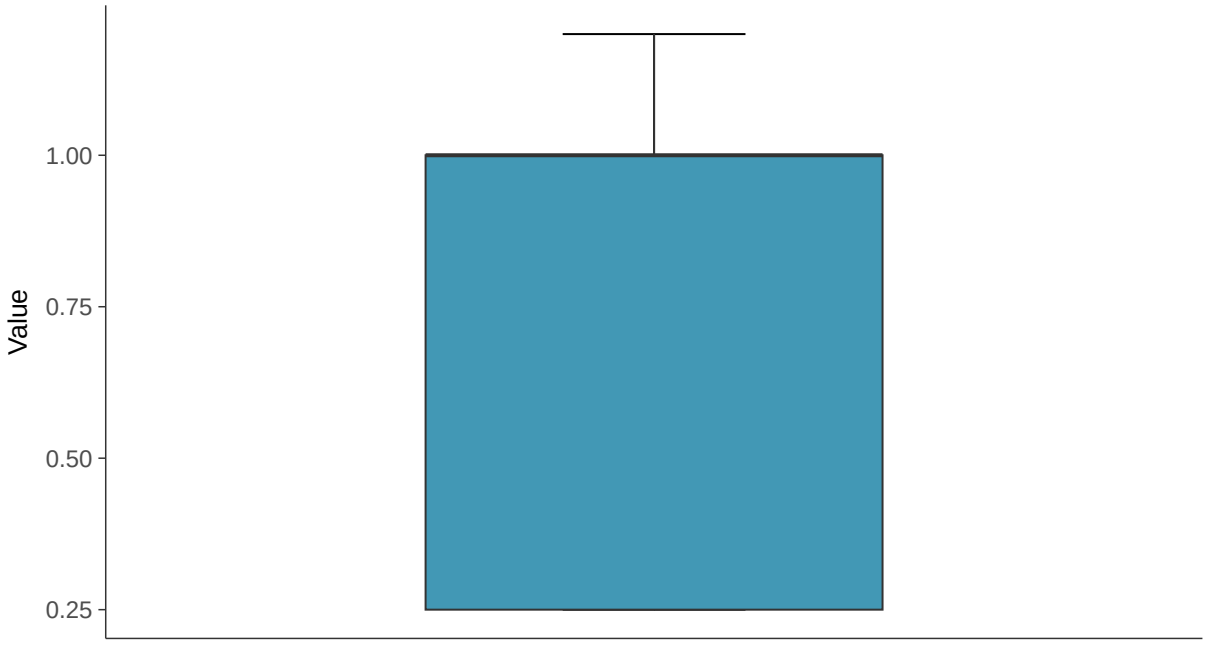
ID: 08_2_101



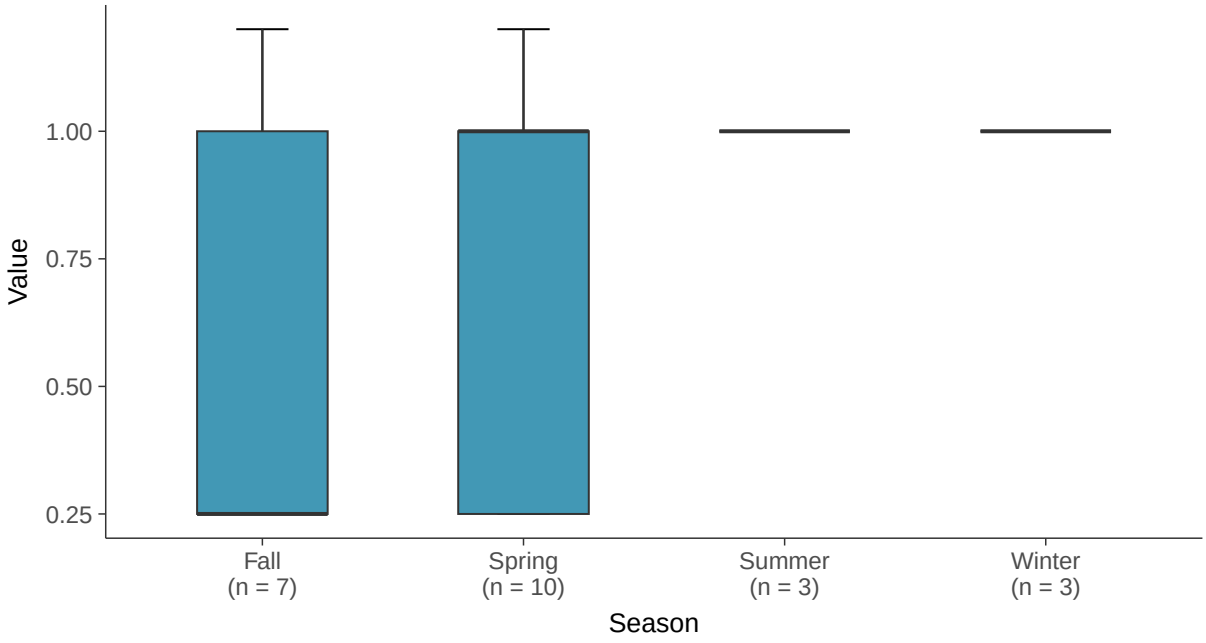
**Boxplot**

Antimony, MW-15018 (ug/L)



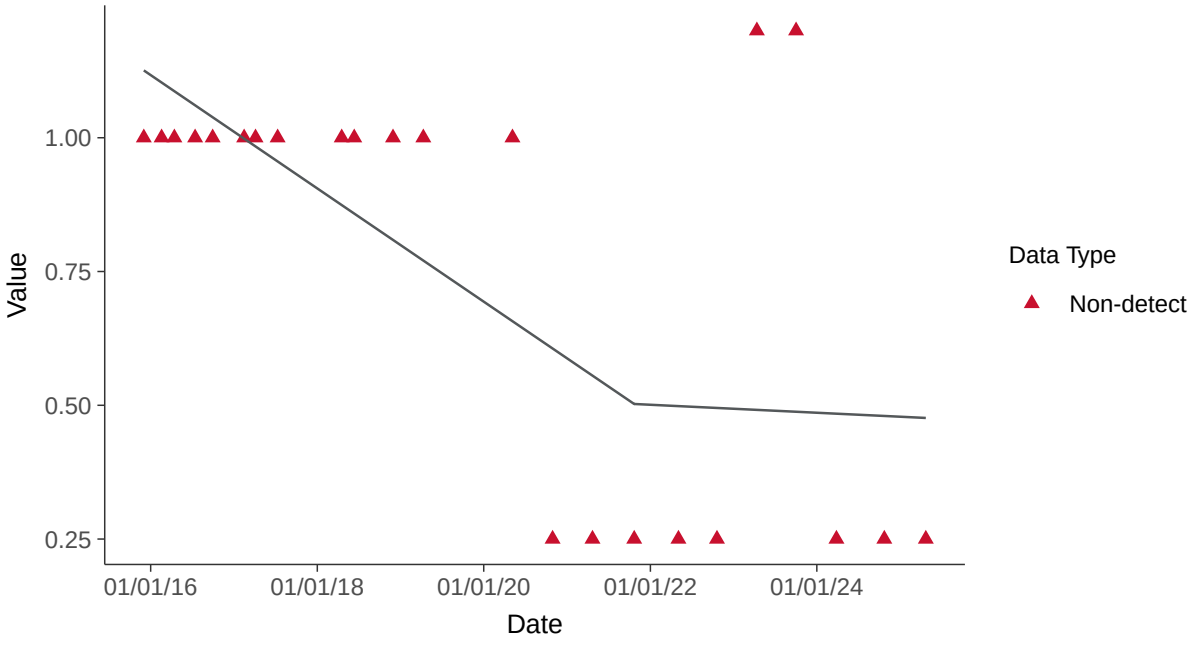

**Boxplot by Season**

Antimony, MW-15018 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15018 (ug/L)

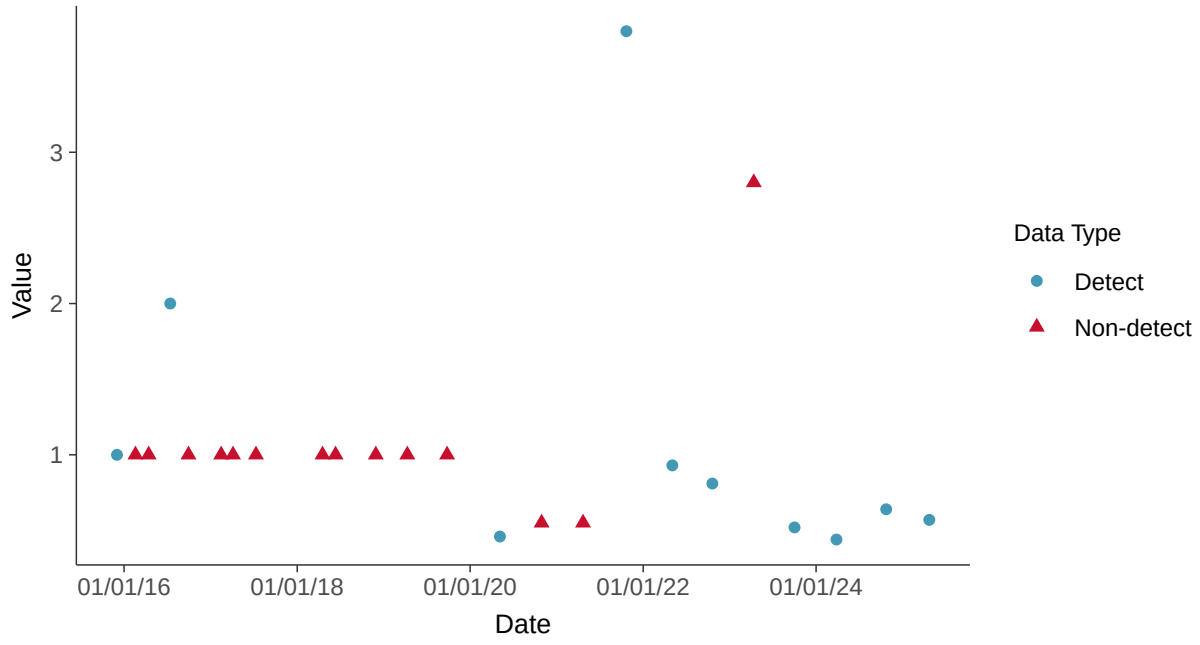


## Appendix IV: Arsenic, MW-15018

ID: 08_2_102

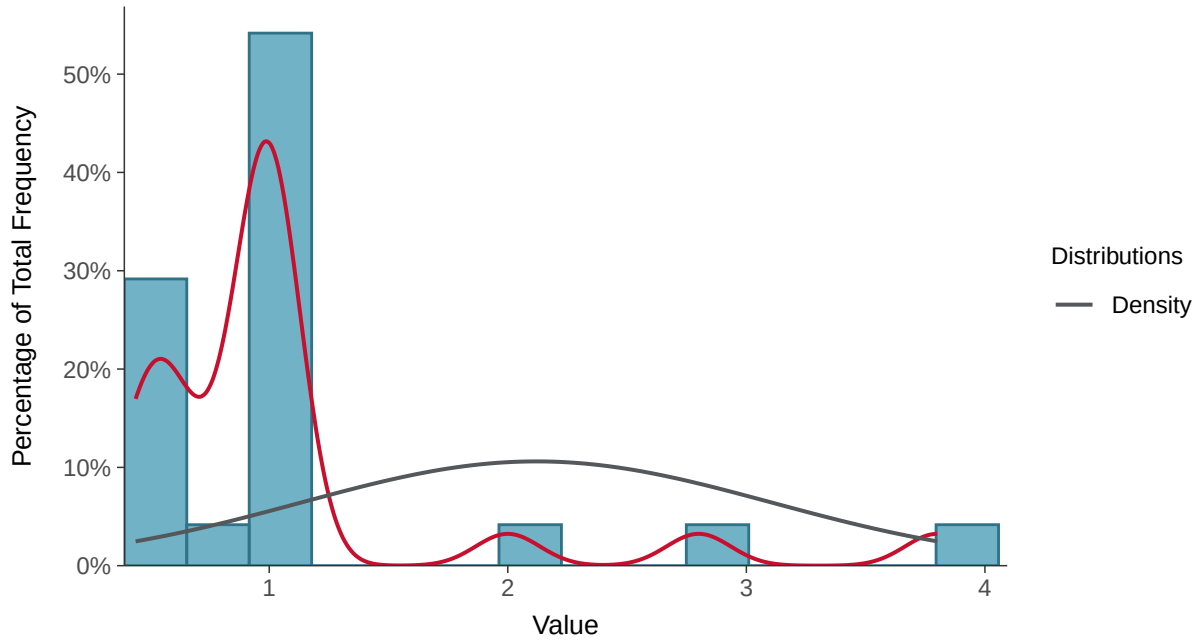
**Scatter Plot**

Arsenic, MW-15018 (ug/L)



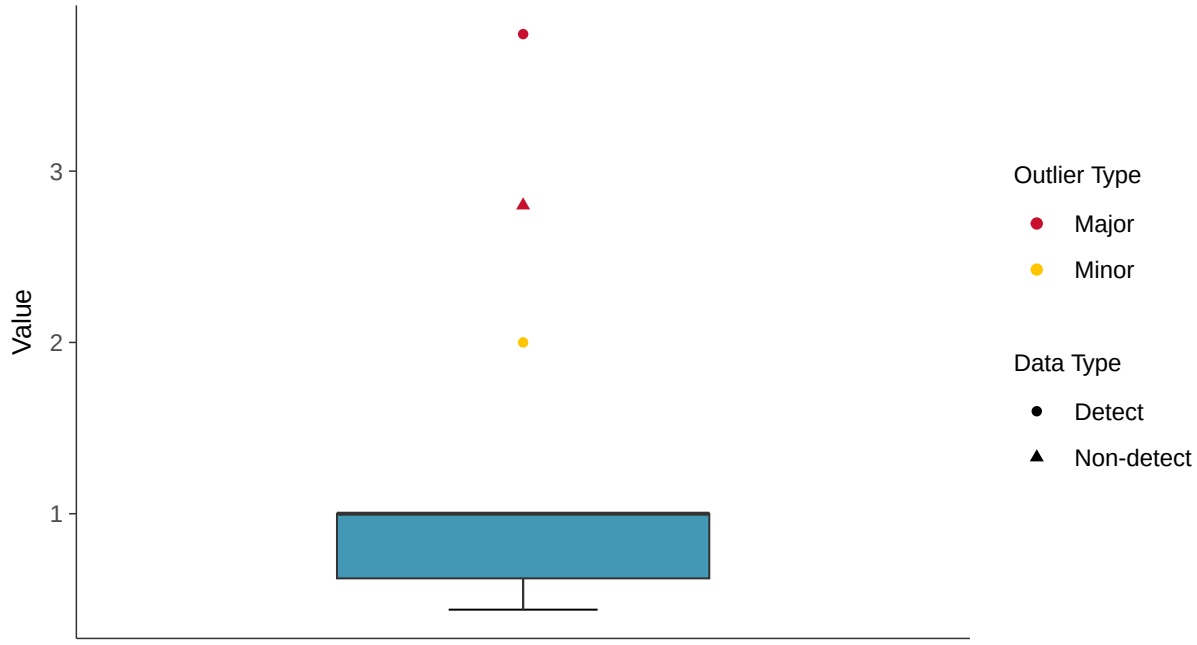

**Histogram**

Arsenic, MW-15018 (ug/L)



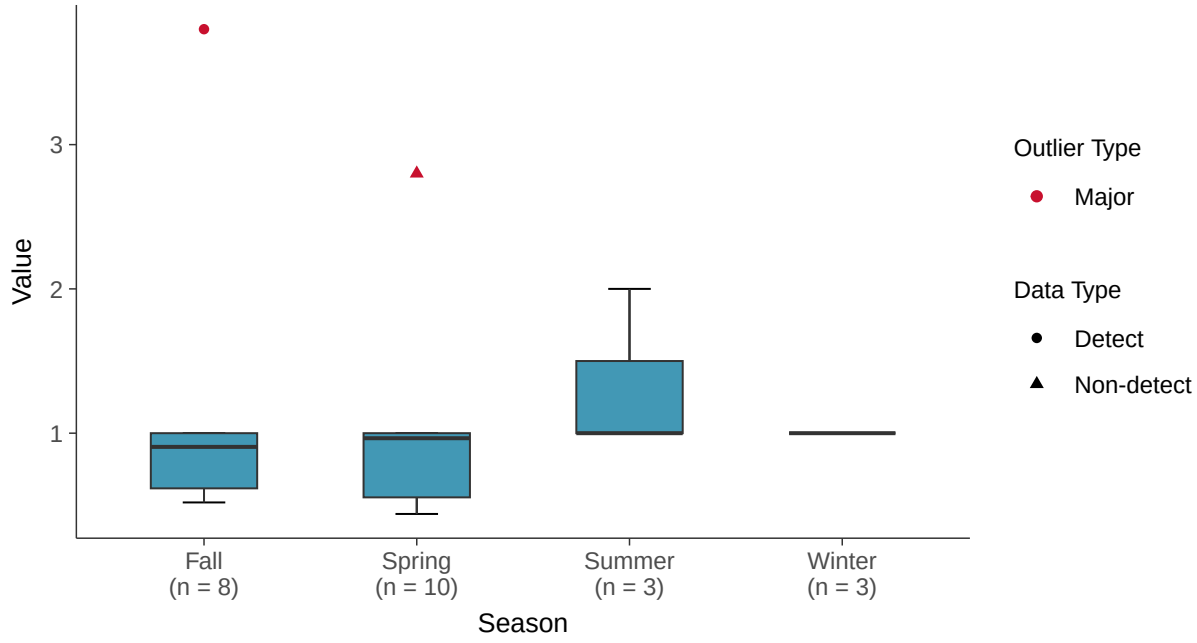
## Boxplot

Arsenic, MW-15018 (ug/L)



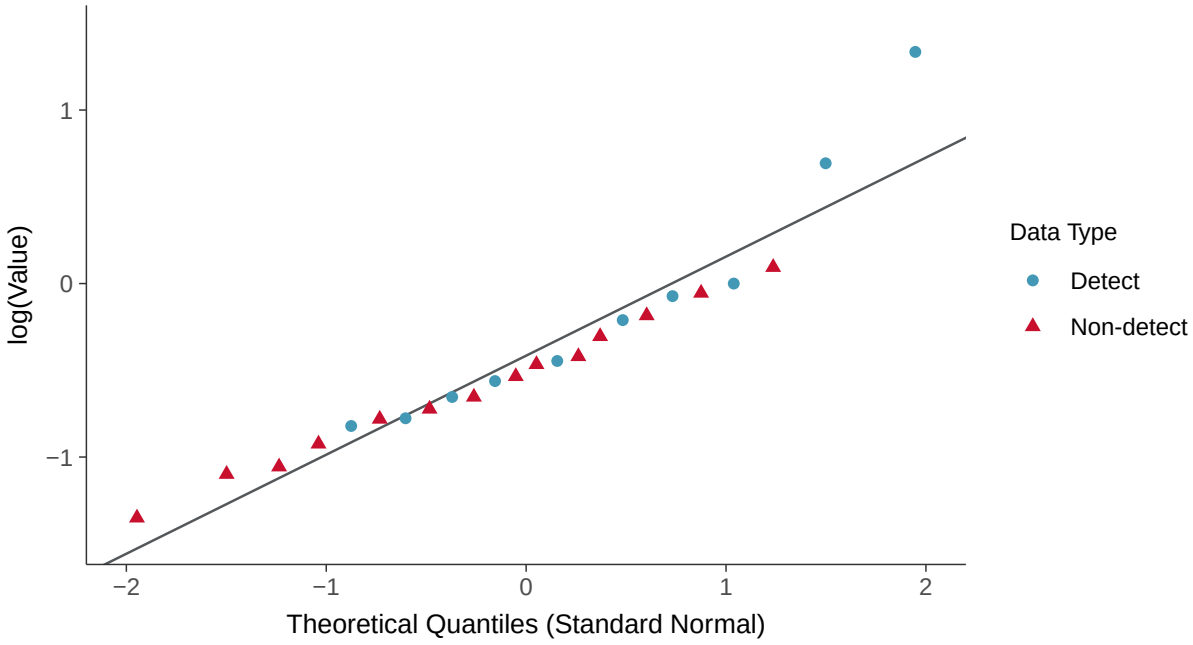

## Boxplot by Season

Arsenic, MW-15018 (ug/L)



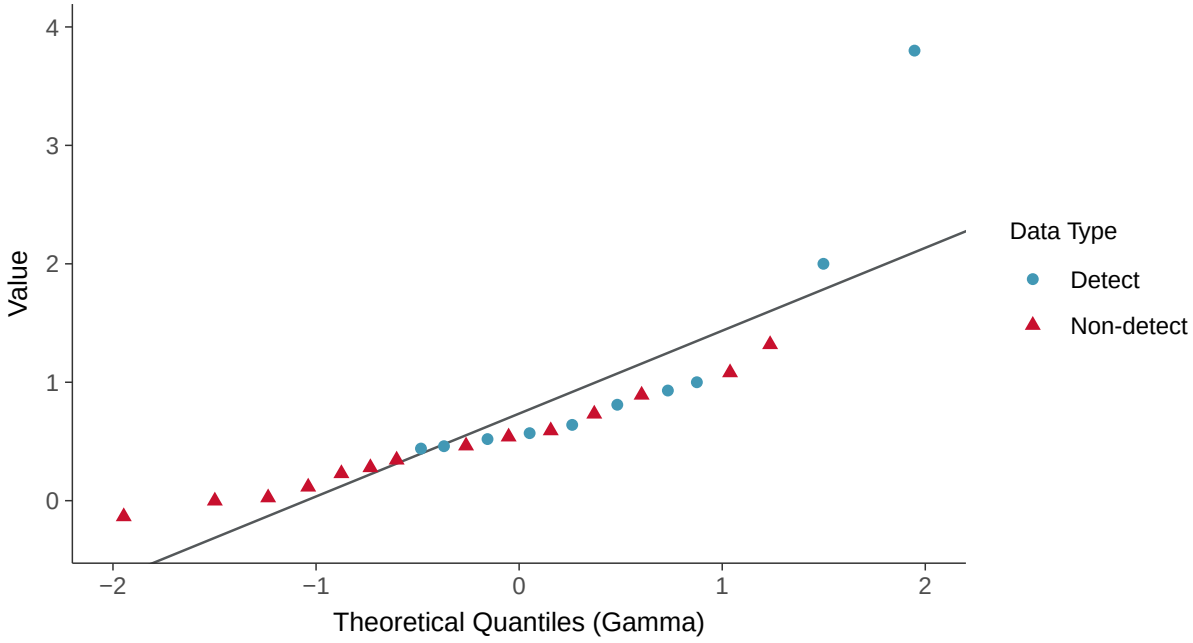
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15018 (ug/L)



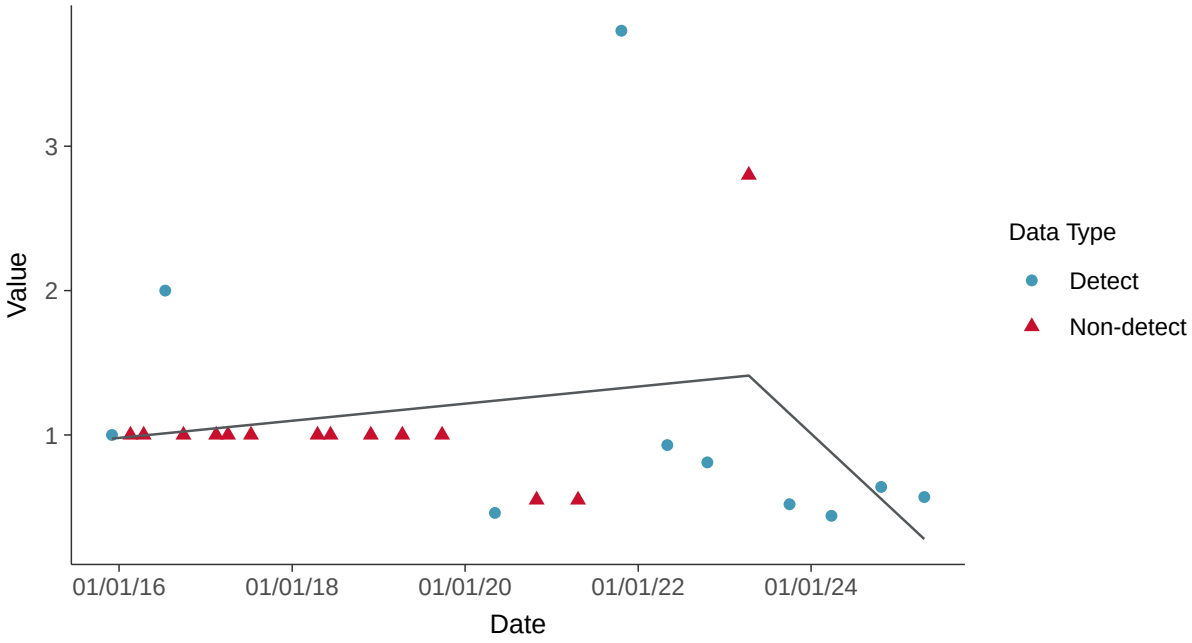

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15018 (ug/L)



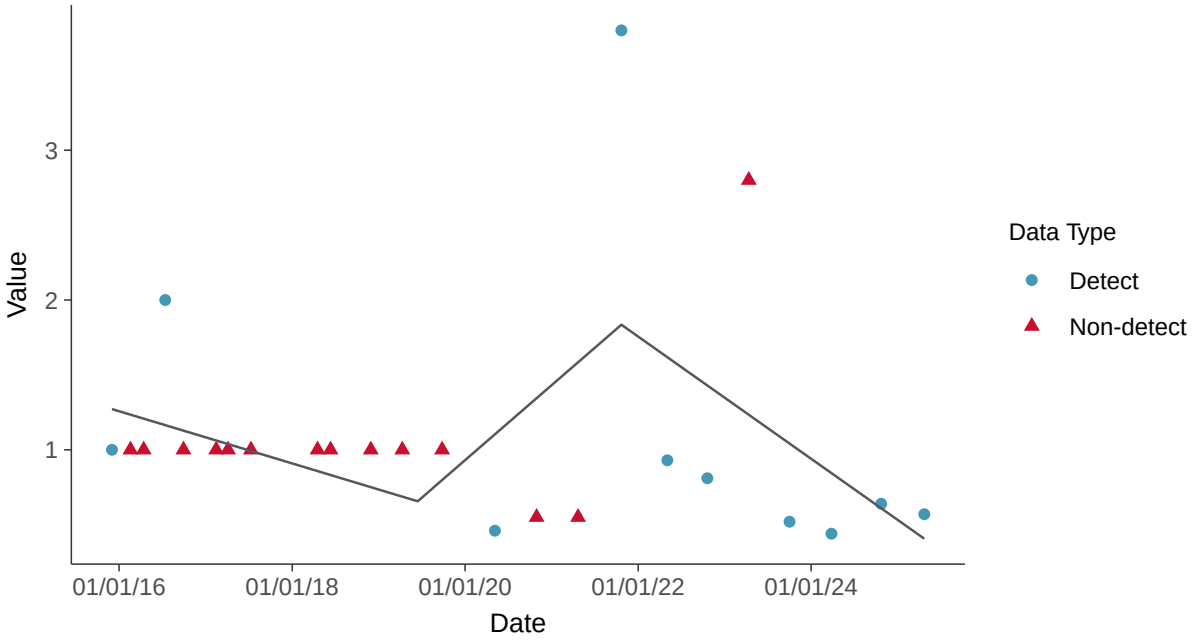
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15018 (ug/L)



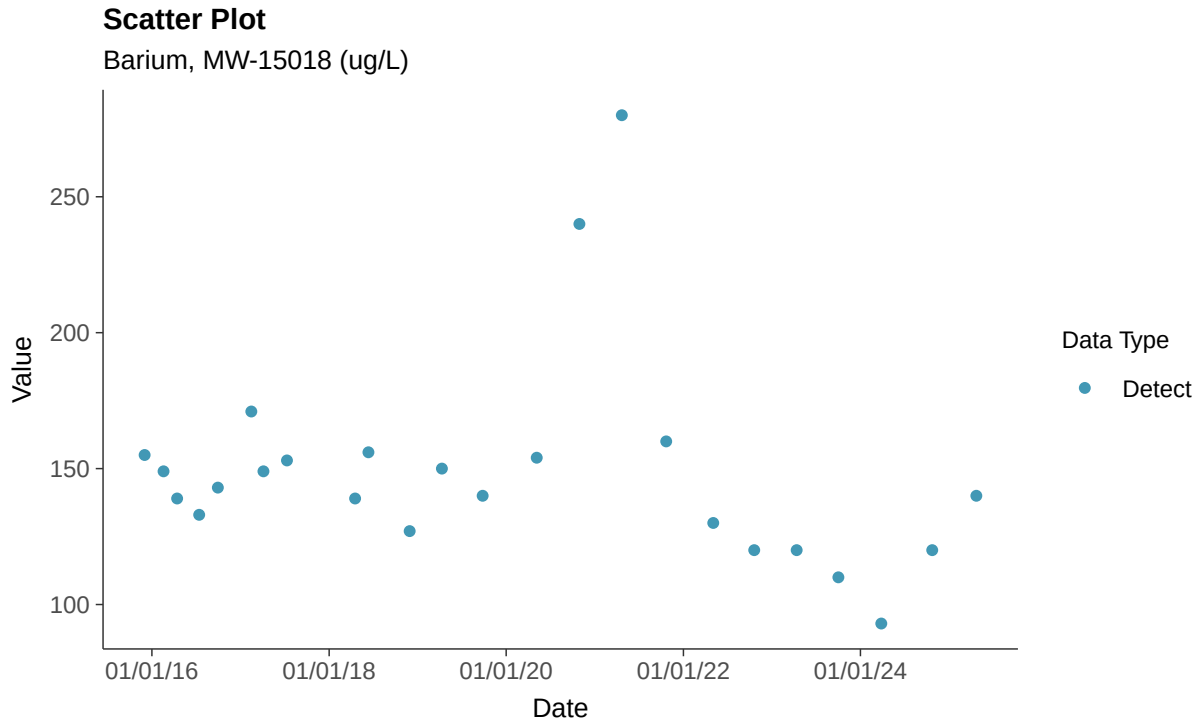

**Trend Regression: Piecewise Linear-Linear-Linear**

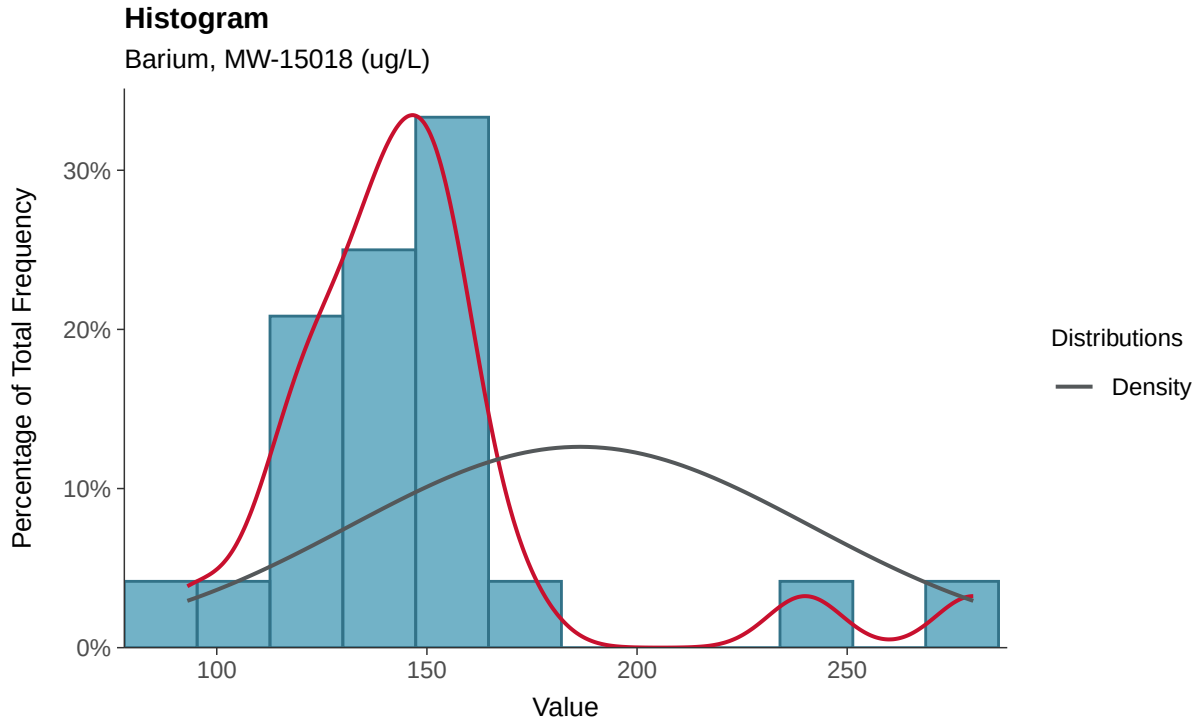
Arsenic, MW-15018 (ug/L)



## Appendix IV: Barium, MW-15018

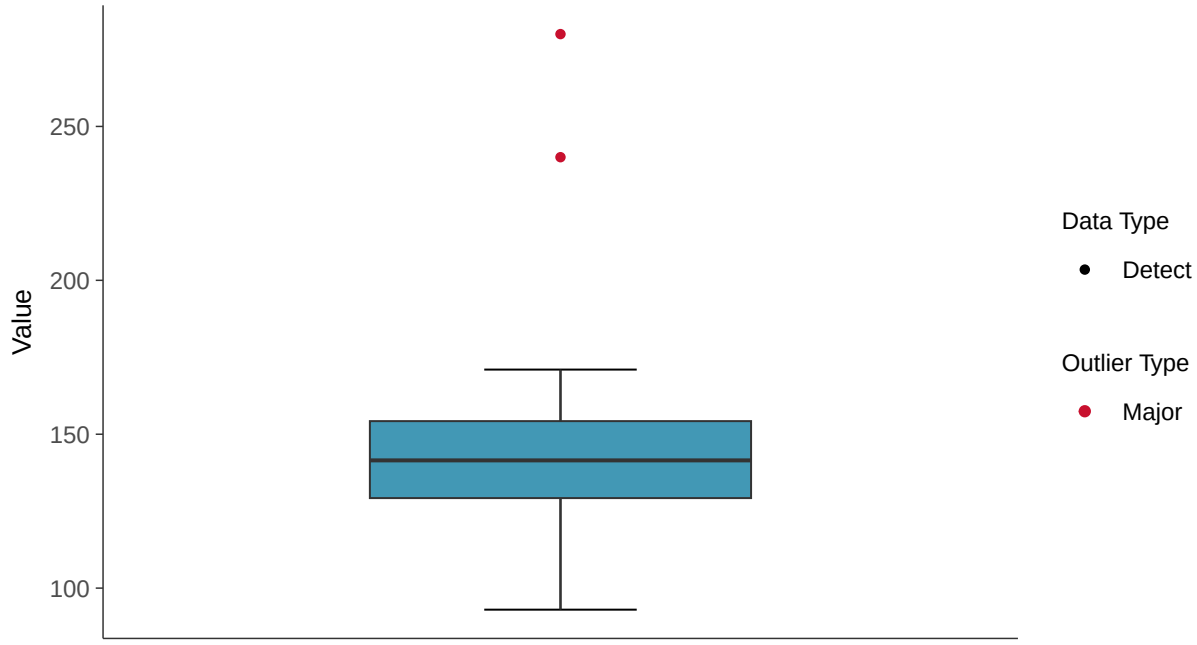
ID: 08_2_103



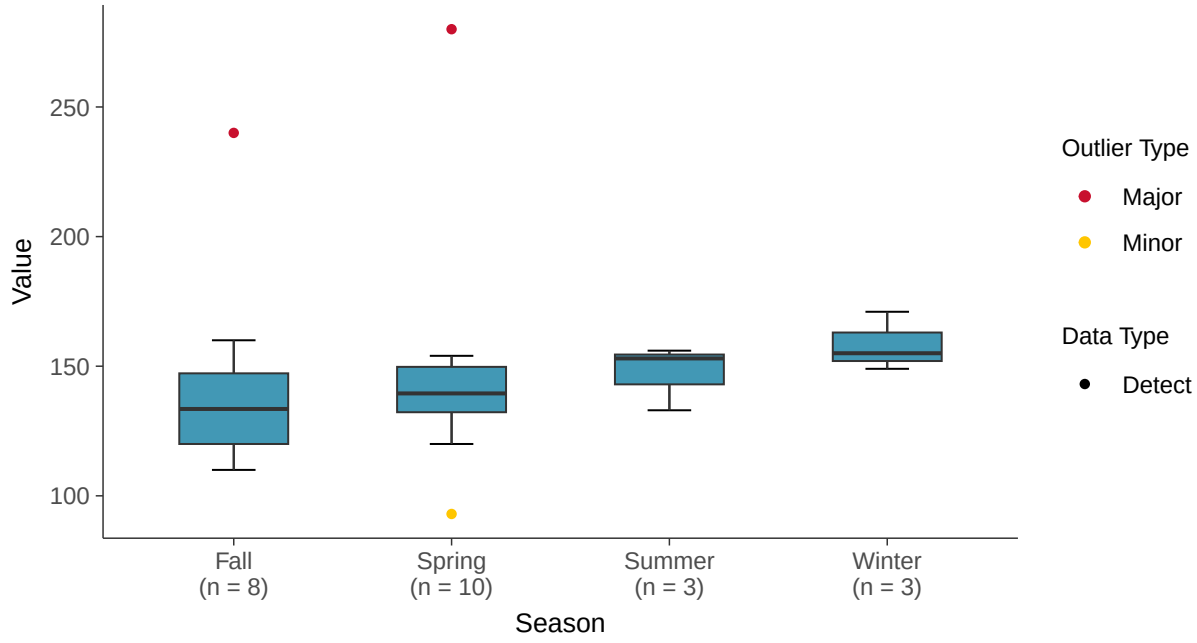
## Boxplot

Barium, MW-15018 (ug/L)



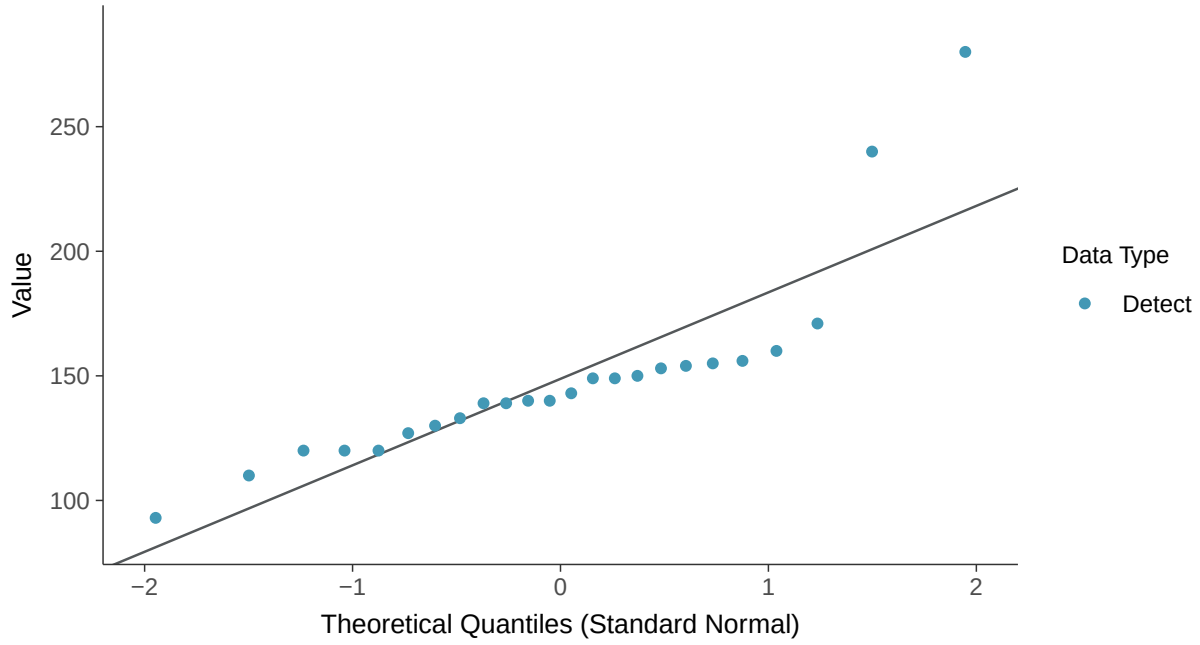

## Boxplot by Season

Barium, MW-15018 (ug/L)



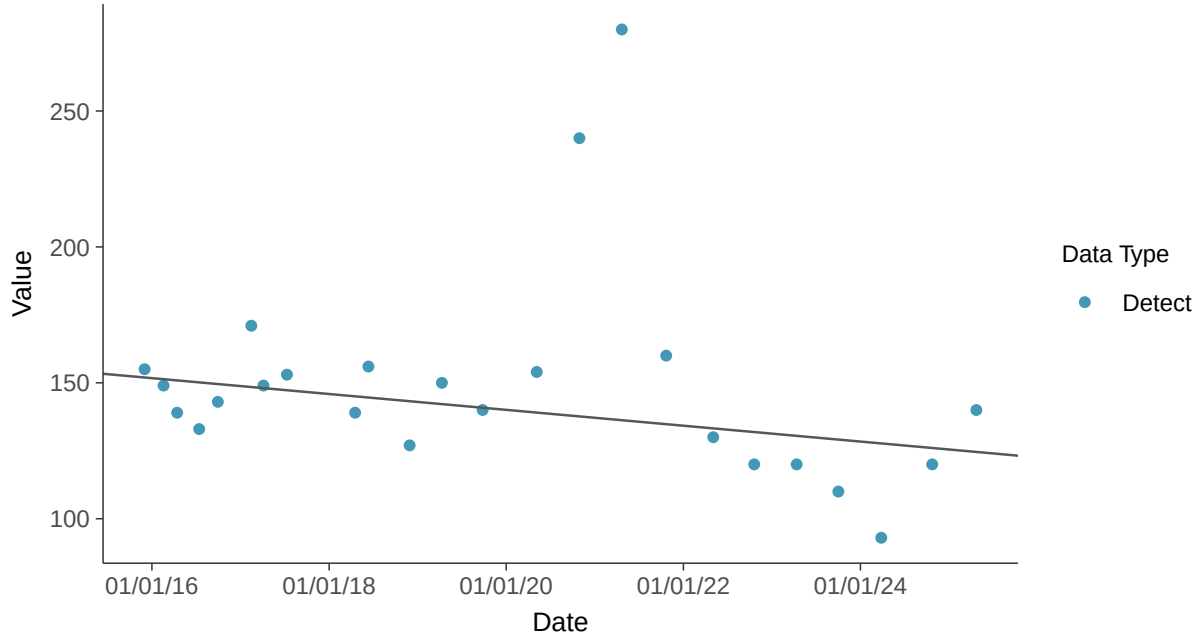
**Normal Q-Q plot**

Barium, MW-15018 (ug/L)



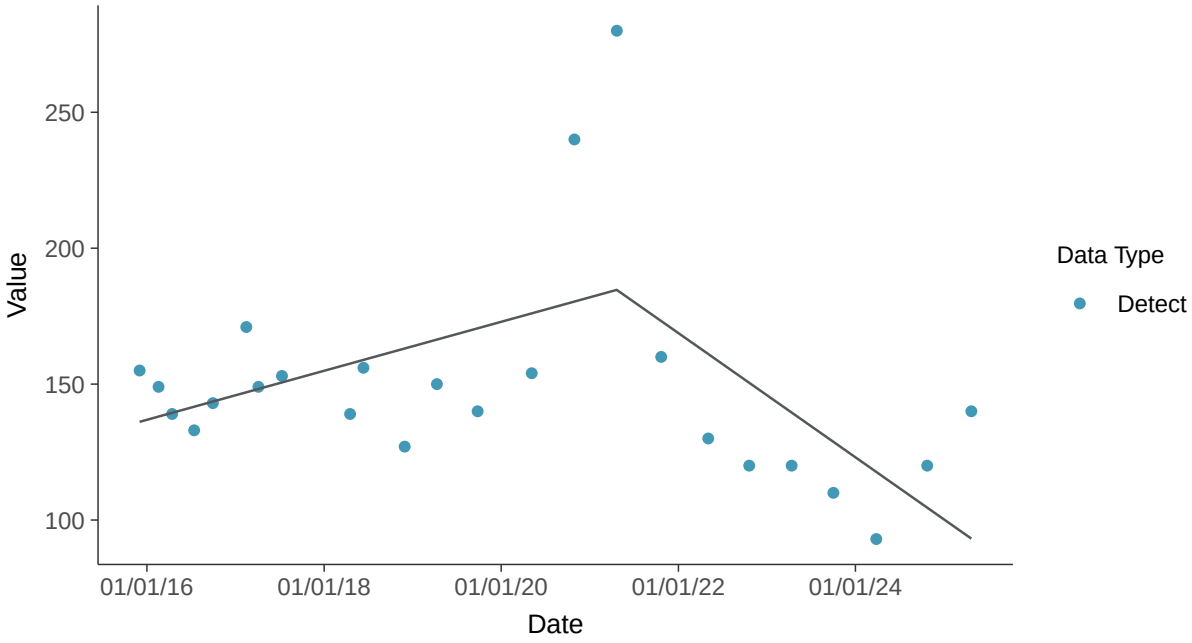

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15018 (ug/L)



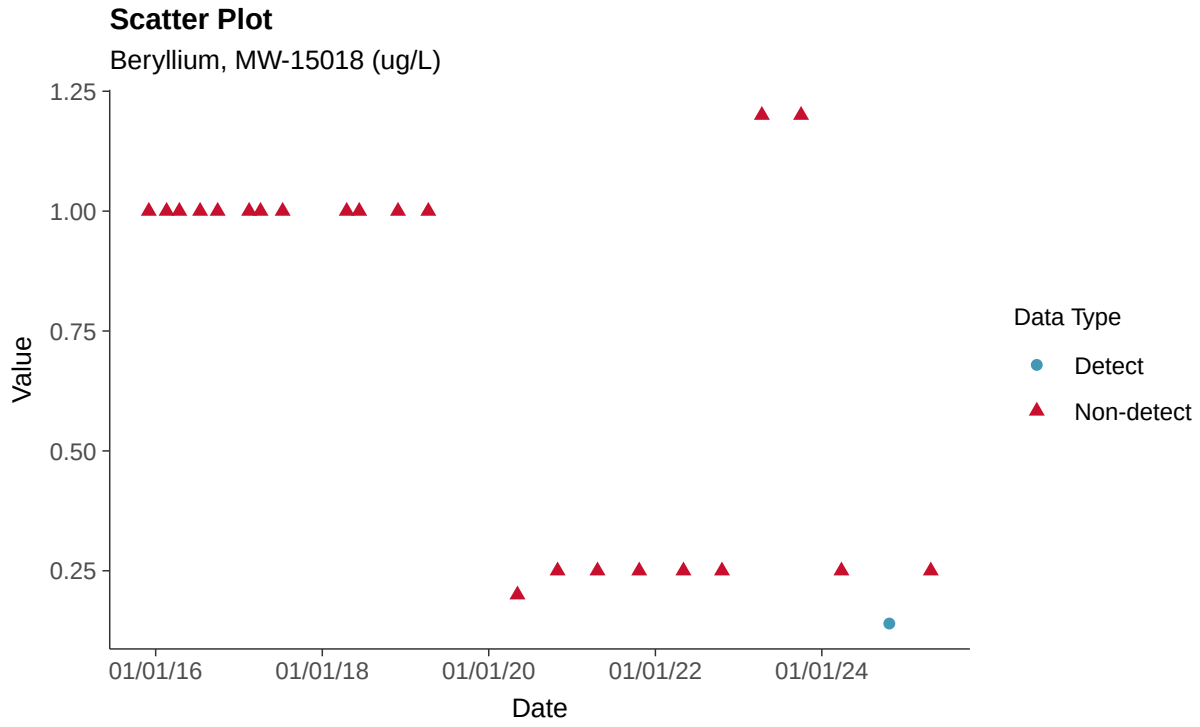
**Trend Regression: Piecewise Linear-Linear**

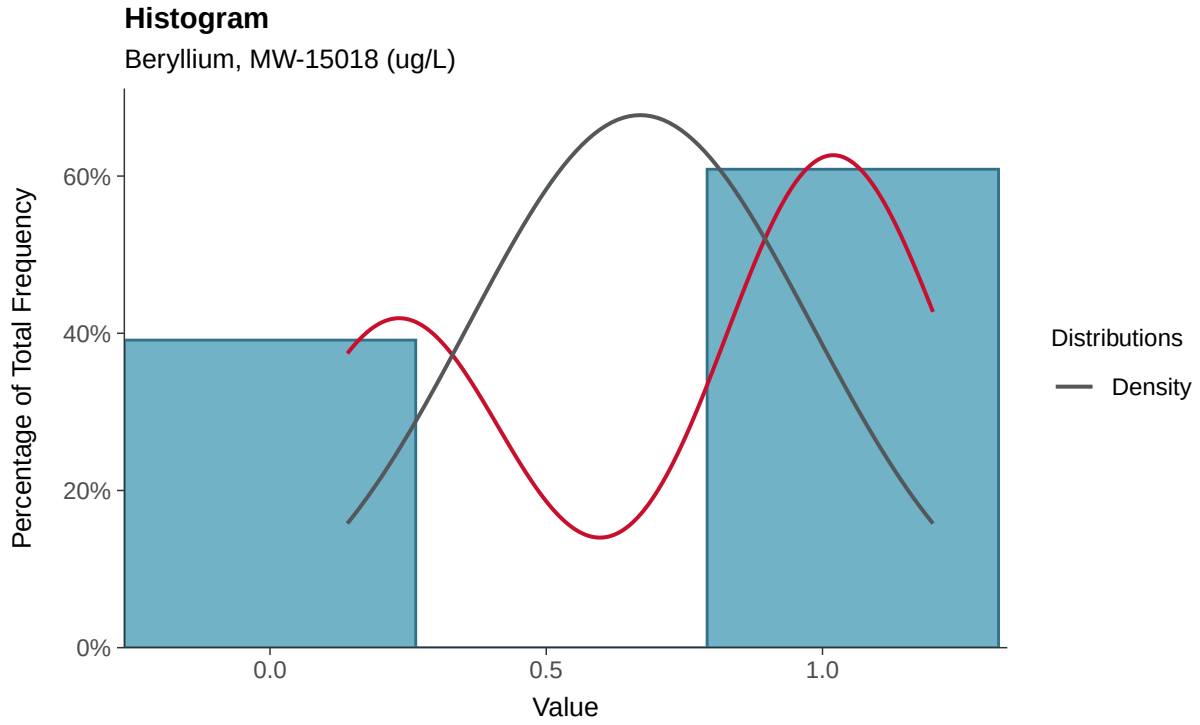
Barium, MW-15018 (ug/L)



## Appendix IV: Beryllium, MW-15018

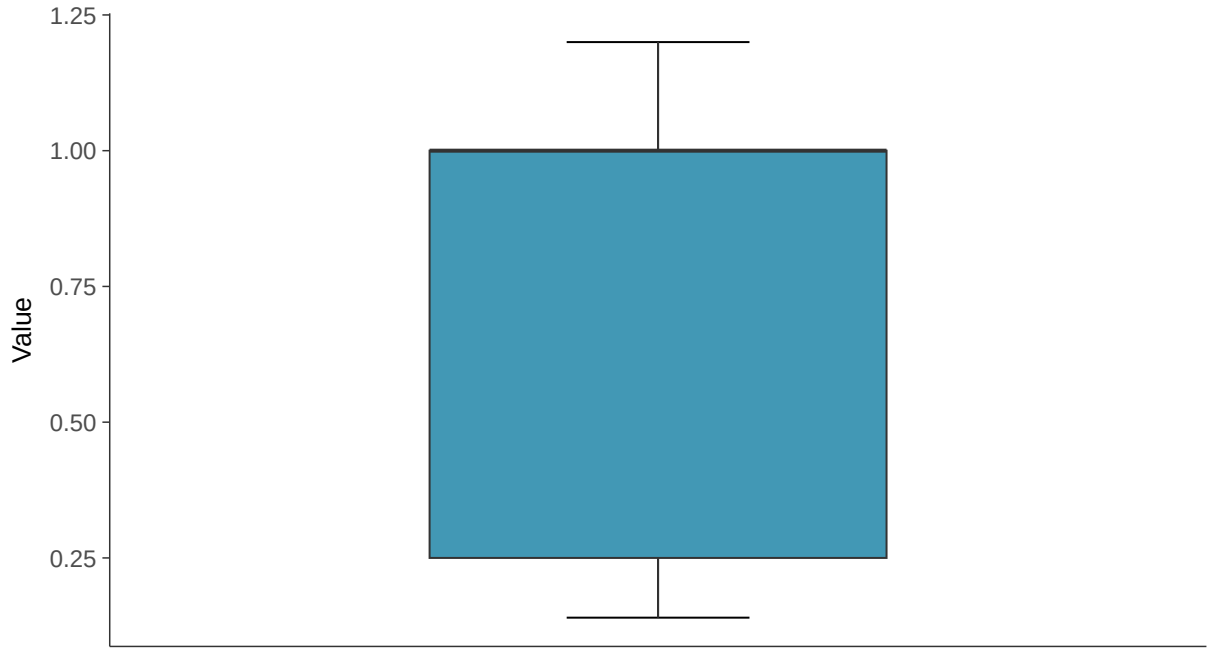
ID: 08_2_104



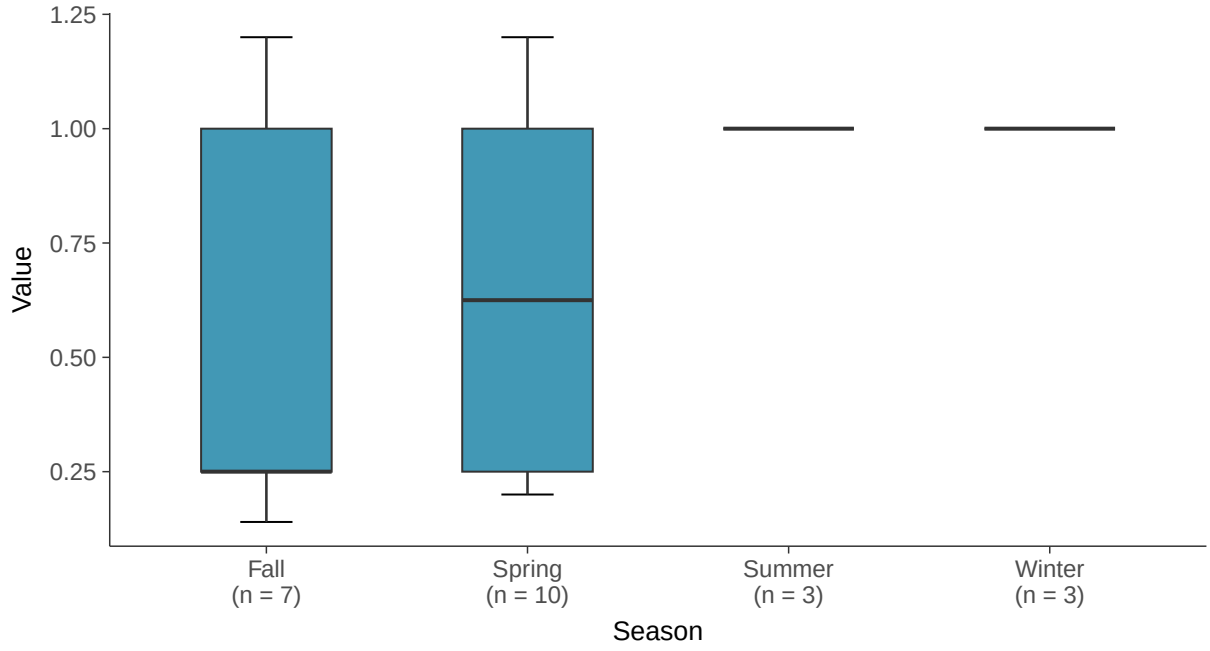
**Boxplot**

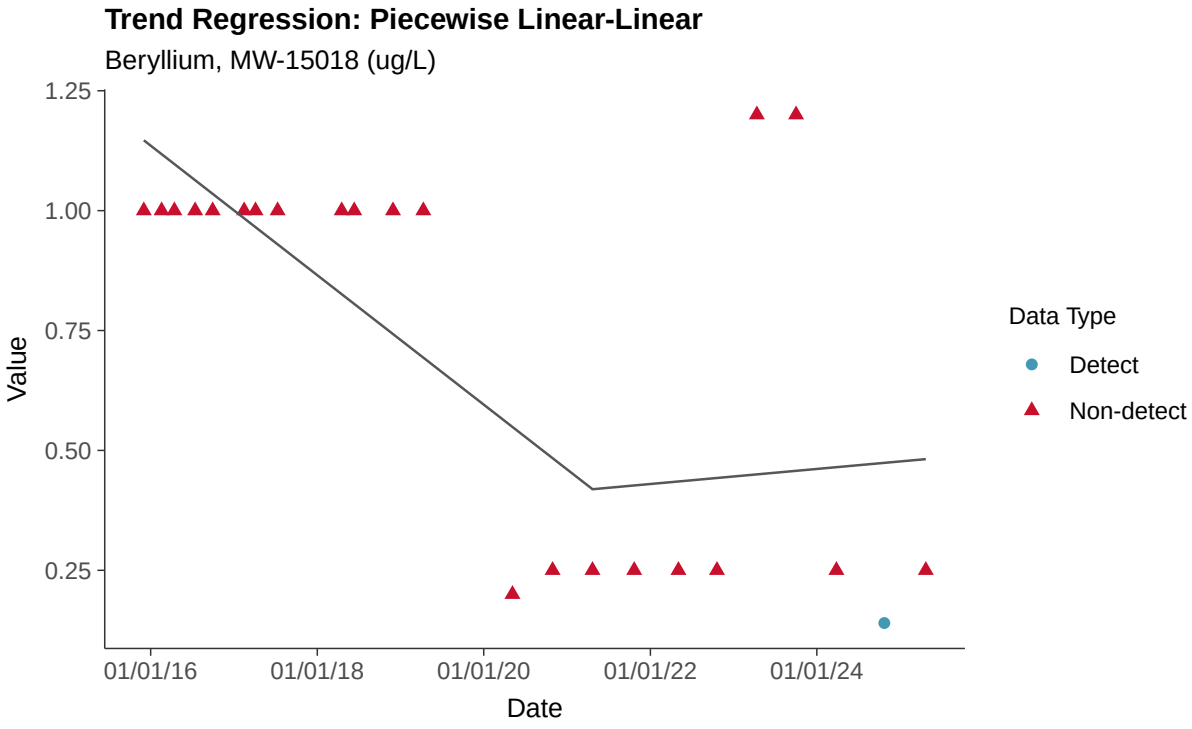
Beryllium, MW-15018 (ug/L)




**Boxplot by Season**

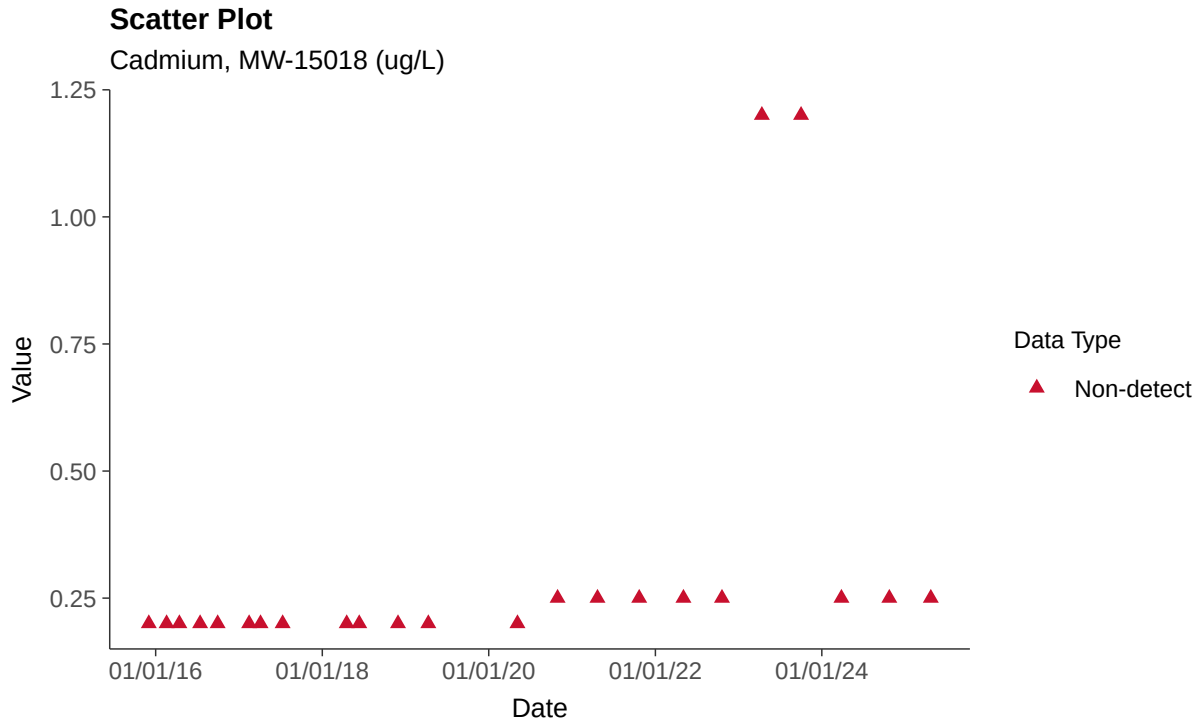
Beryllium, MW-15018 (ug/L)

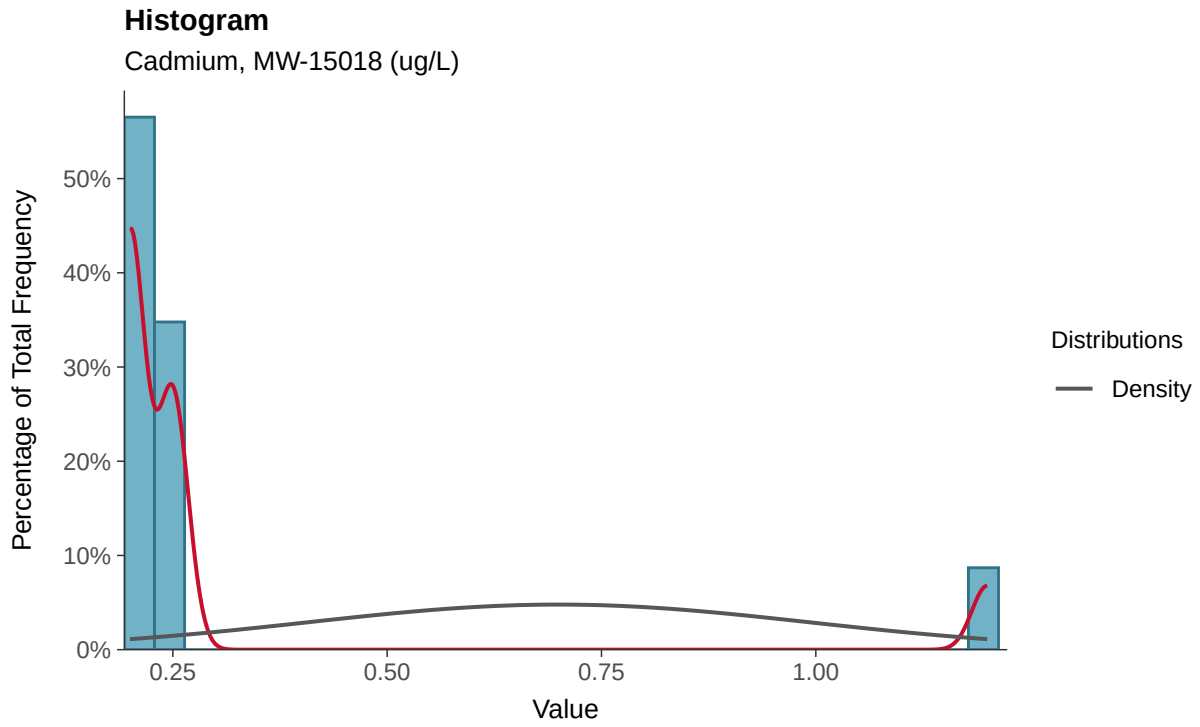



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15018 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15018

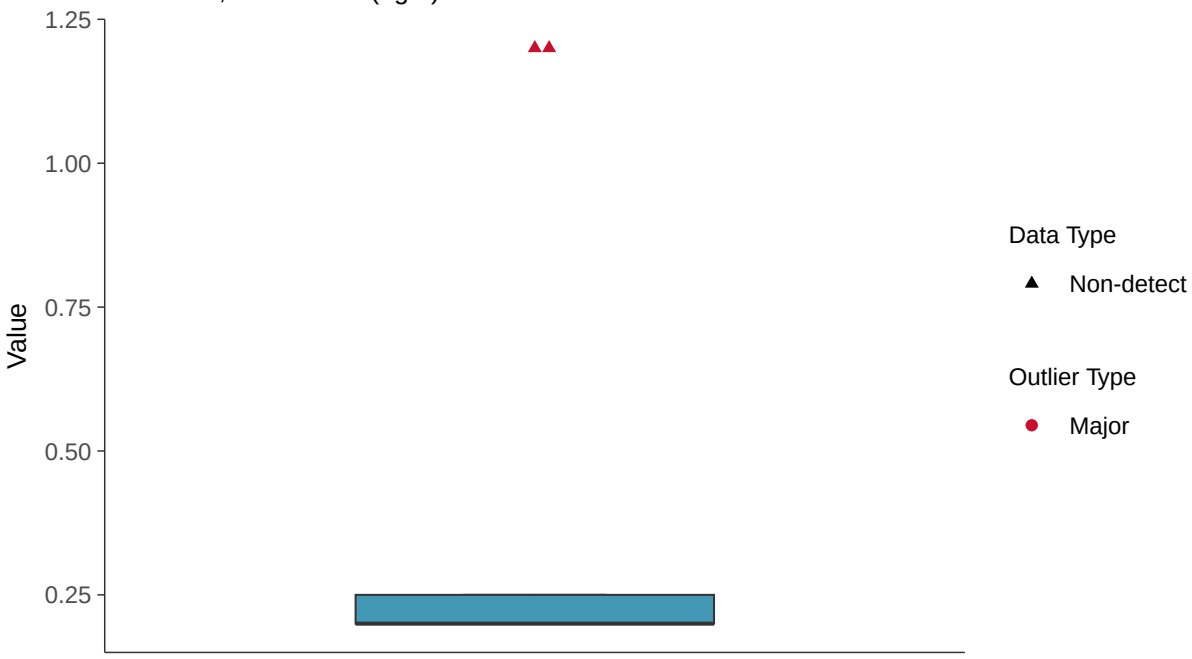
ID: 08_2_106



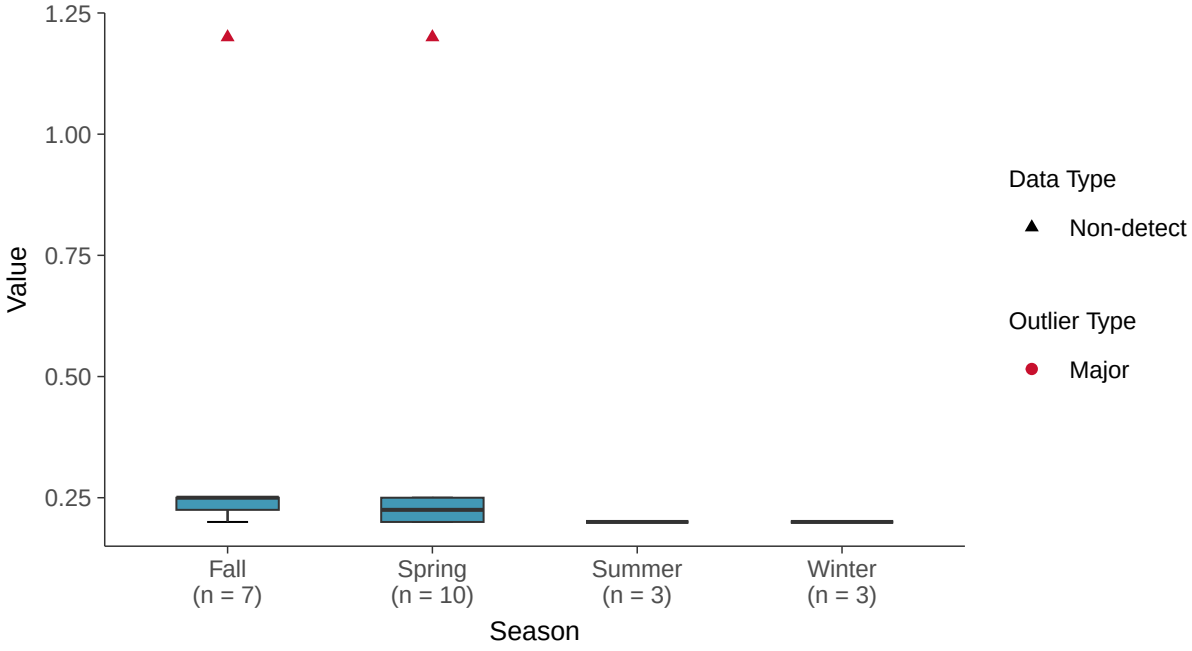
## Boxplot

Cadmium, MW-15018 (ug/L)



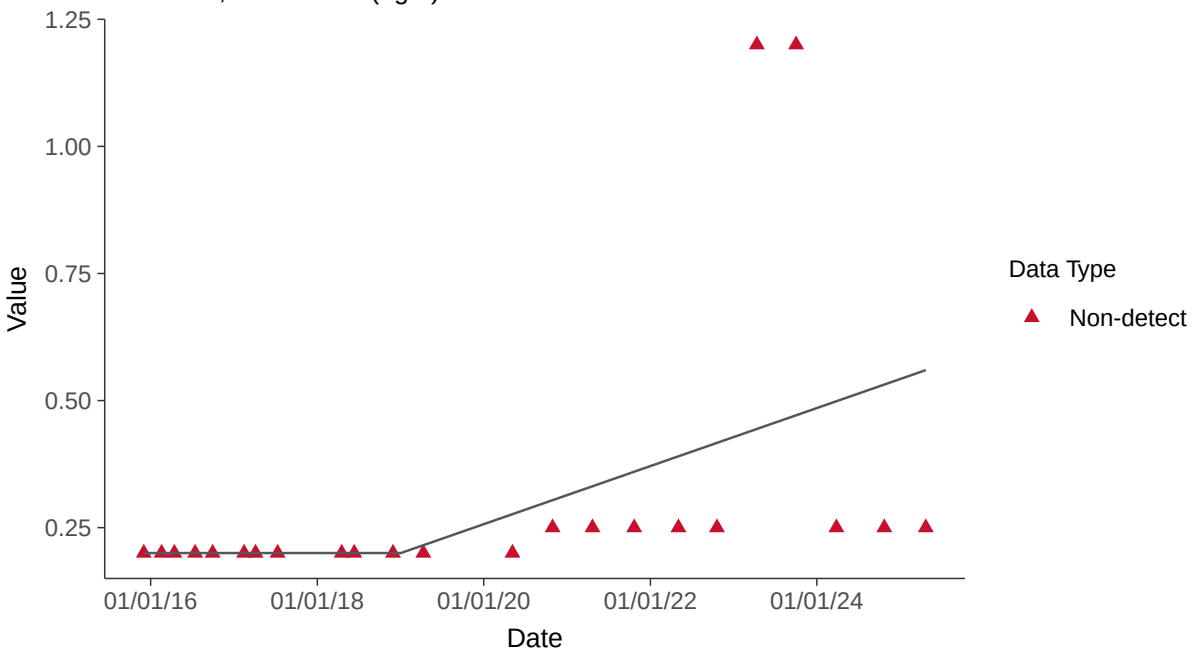

## Boxplot by Season

Cadmium, MW-15018 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15018 (ug/L)

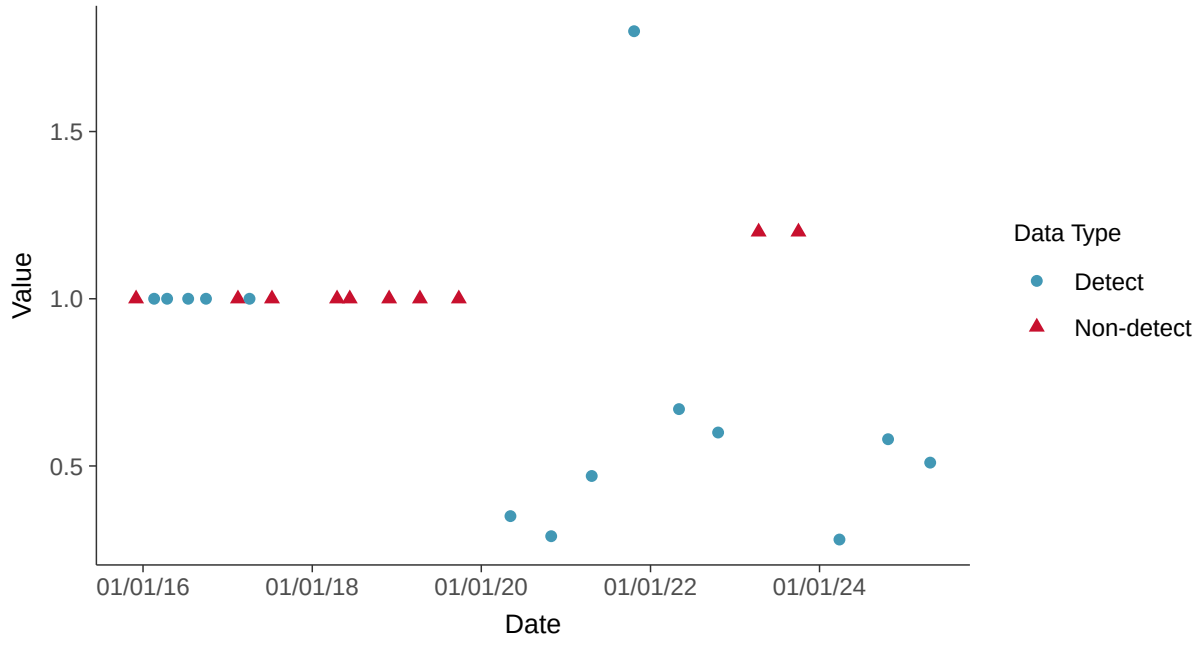


## Appendix IV: Chromium, MW-15018

ID: 08_2_109

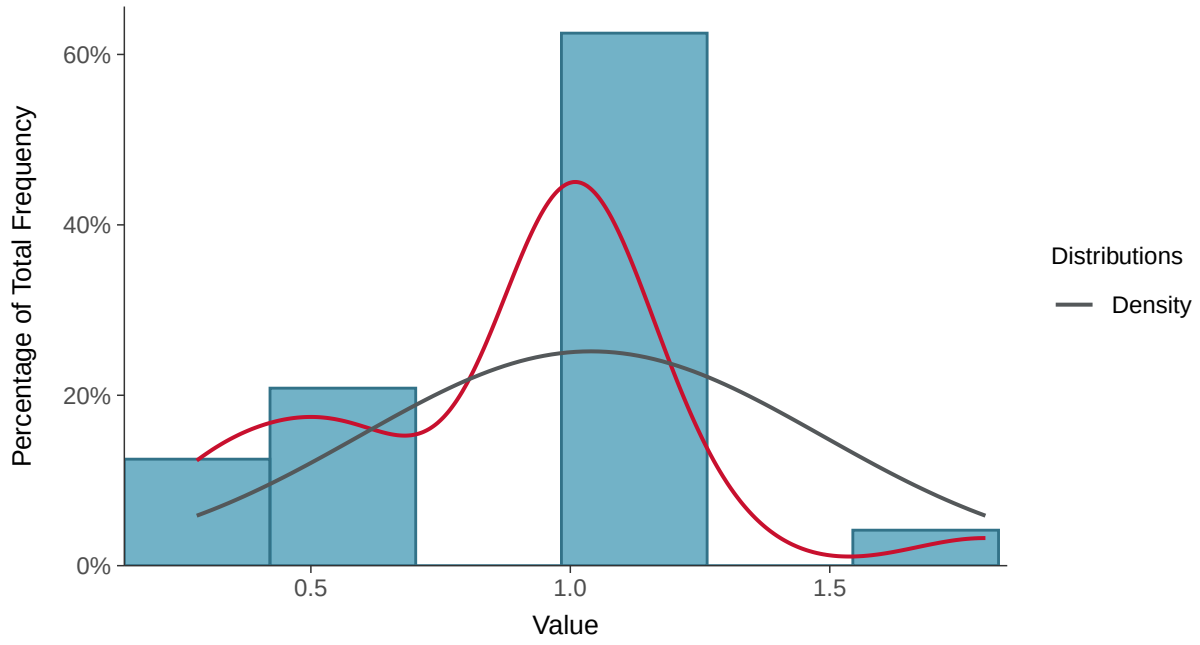
**Scatter Plot**

Chromium, MW-15018 (ug/L)



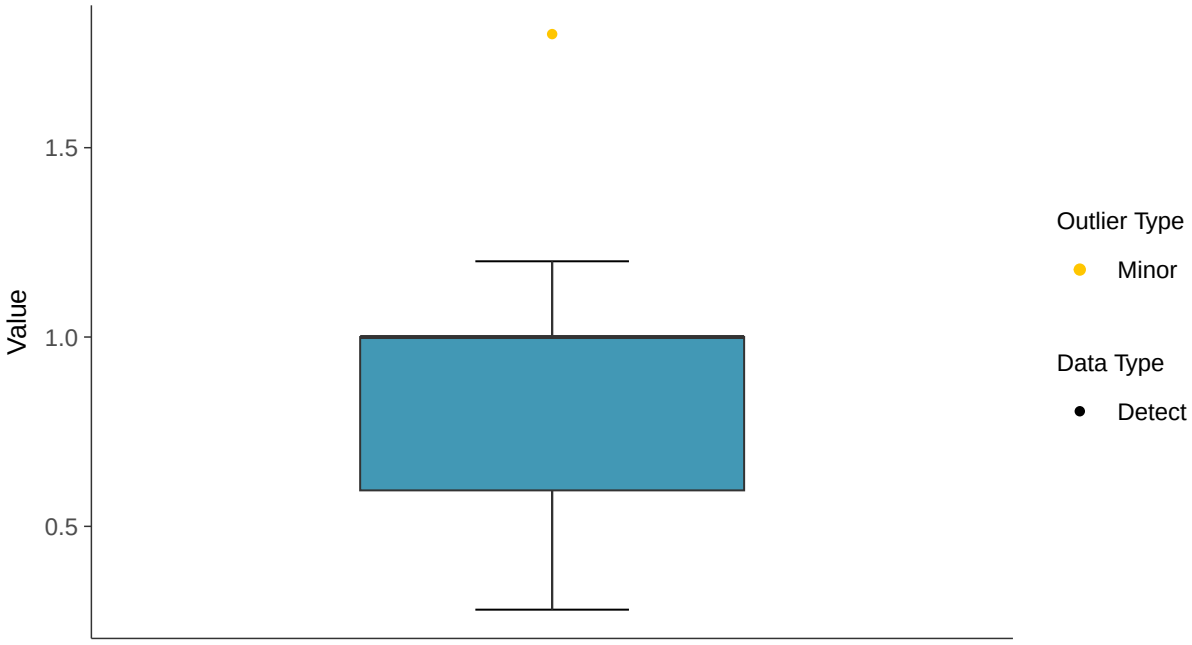

**Histogram**

Chromium, MW-15018 (ug/L)



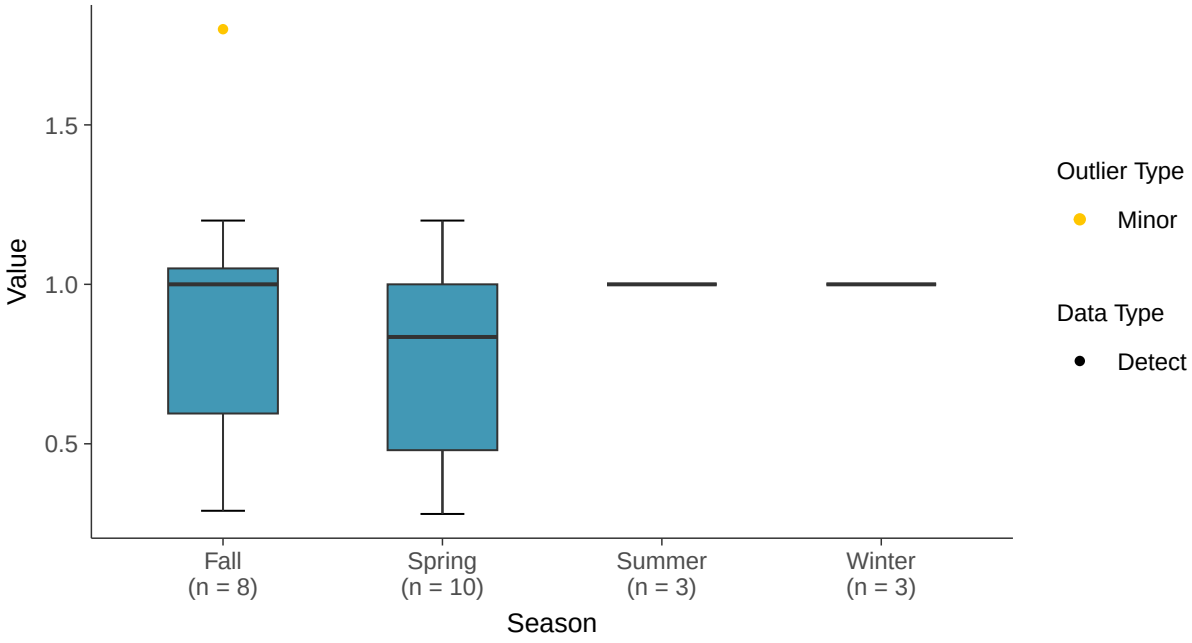
## Boxplot

Chromium, MW-15018 (ug/L)



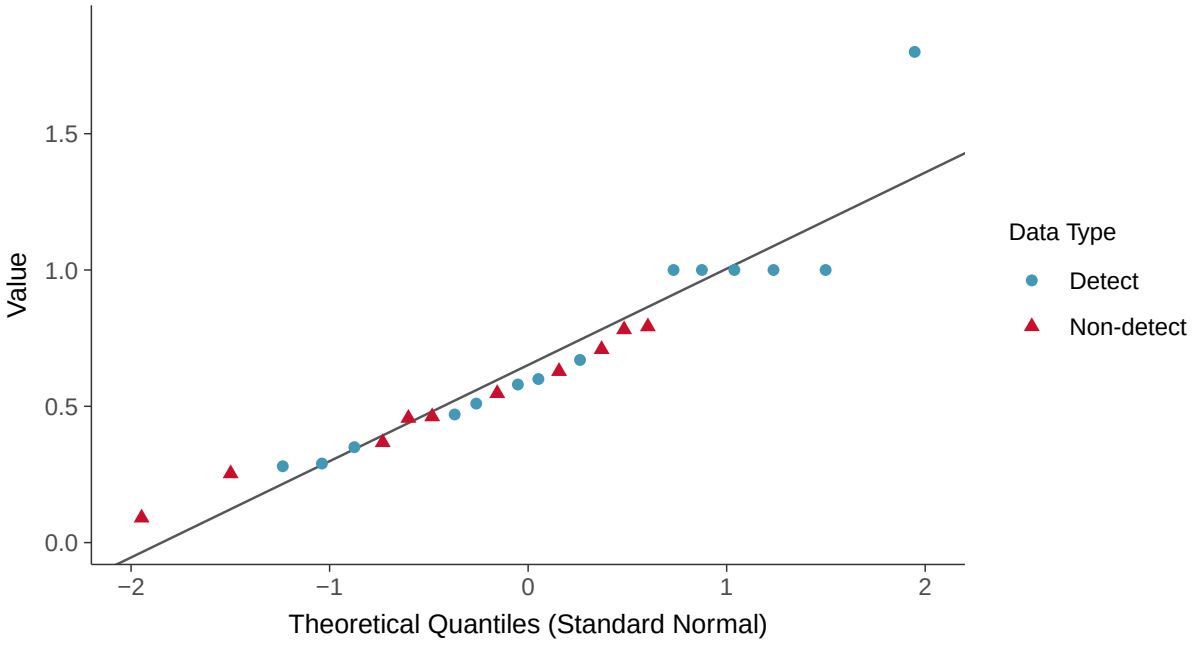

## Boxplot by Season

Chromium, MW-15018 (ug/L)



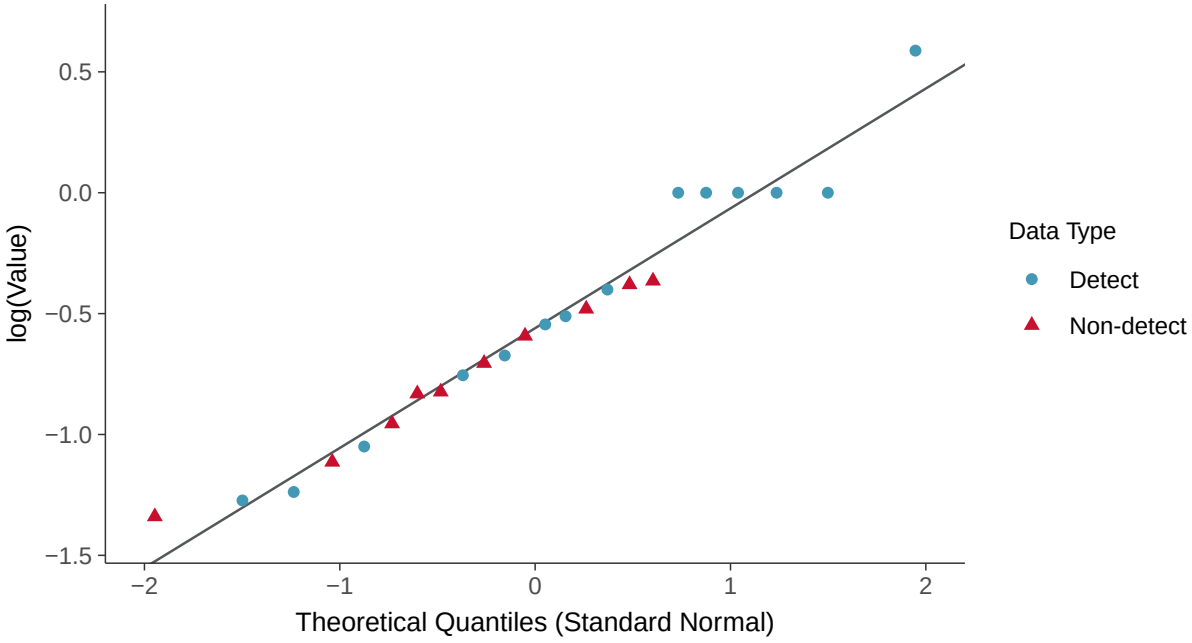
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15018 (ug/L)



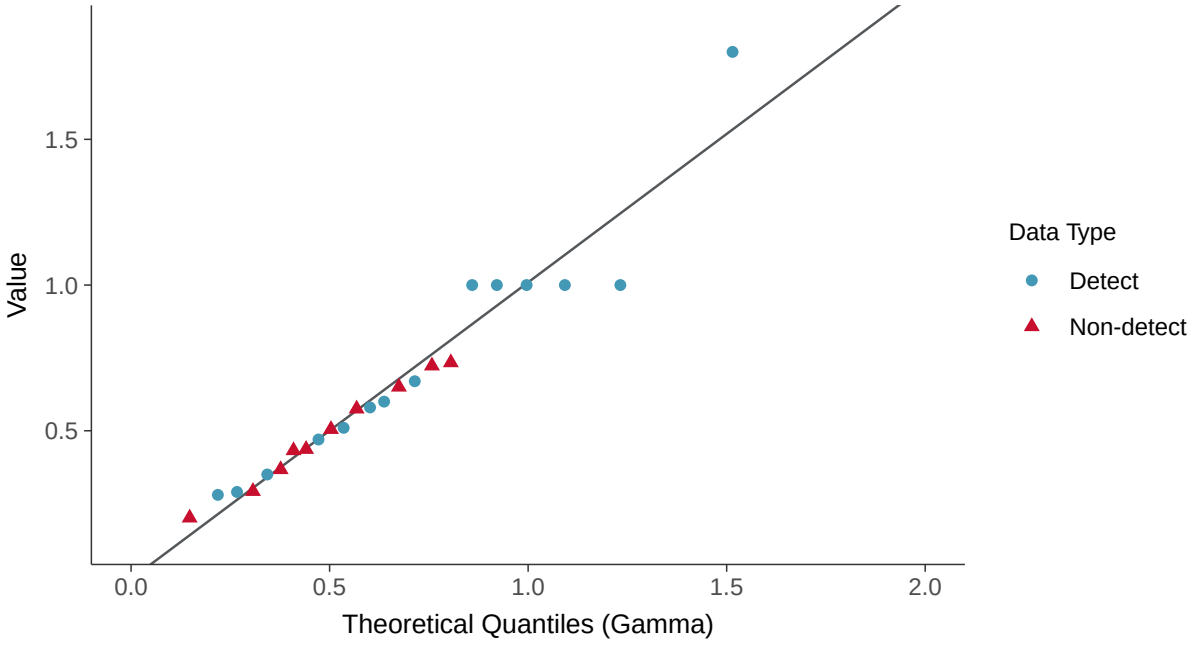

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15018 (ug/L)



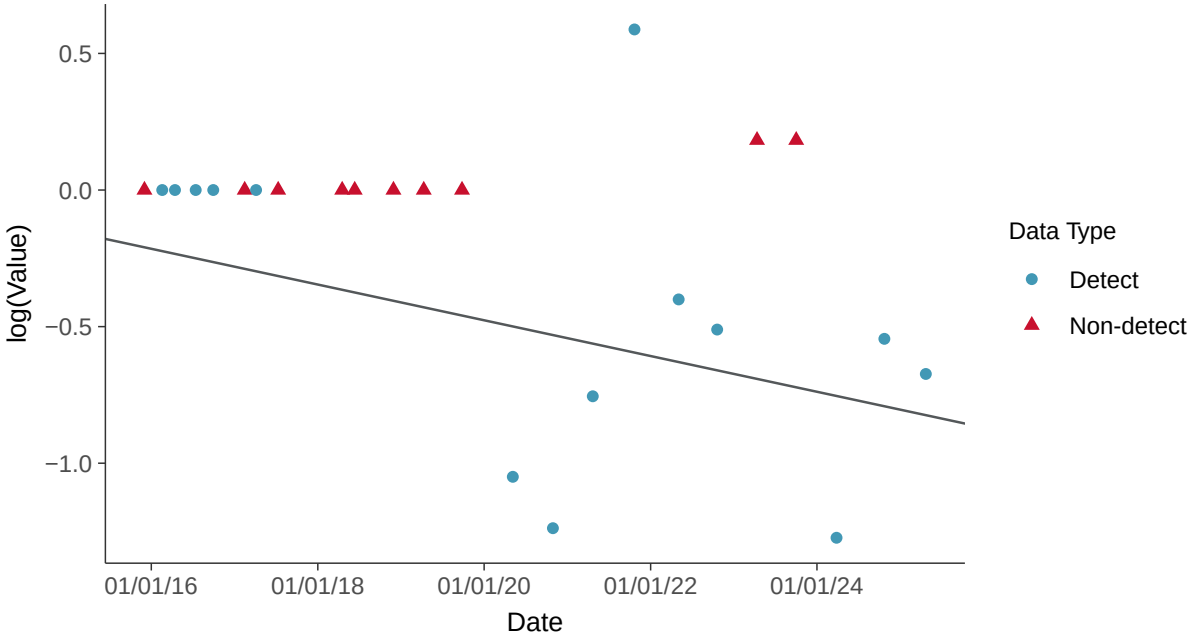
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15018 (ug/L)



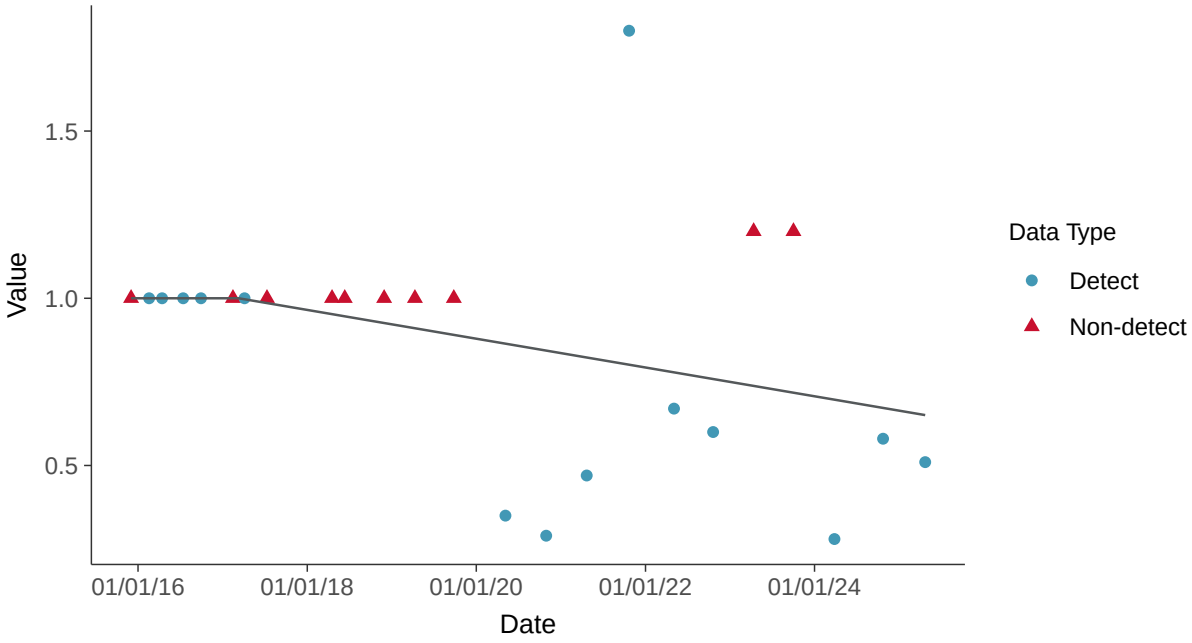

**Trend Regression: Lognormal MLE**

Chromium, MW-15018 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15018 (ug/L)

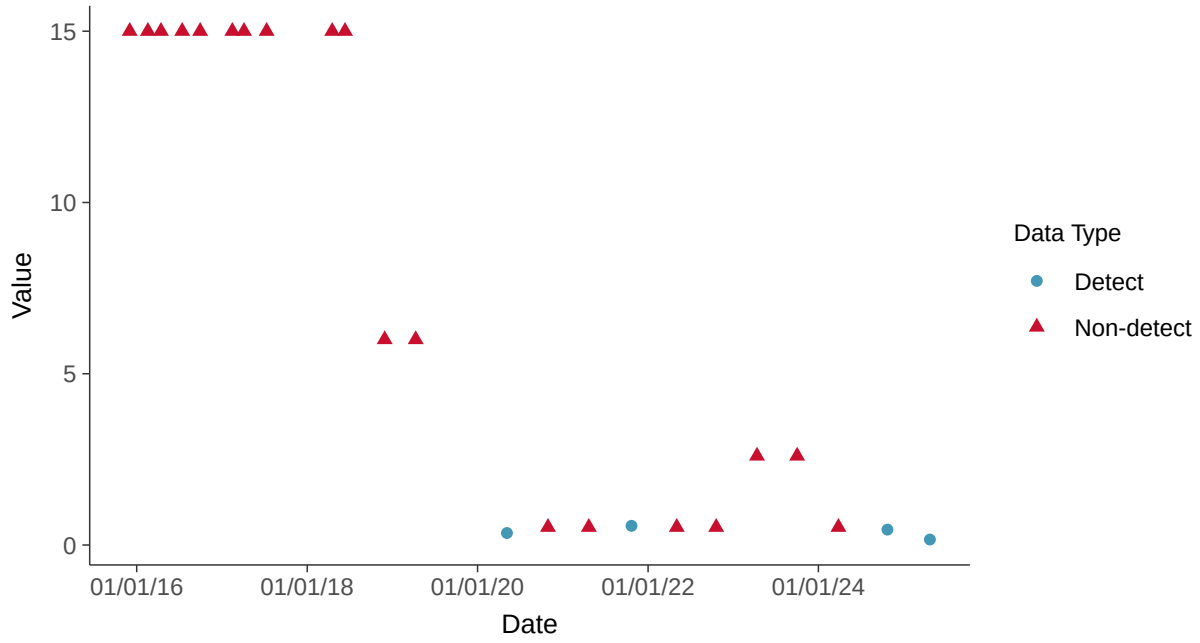


## Appendix IV: Cobalt, MW-15018

ID: 08_2_110

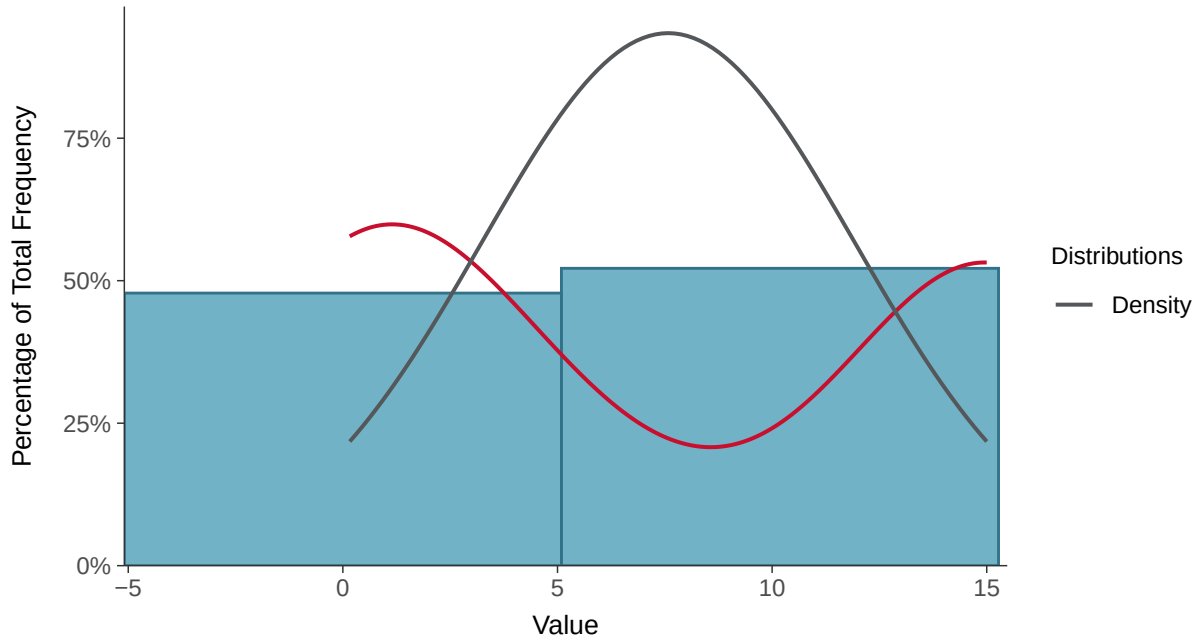
**Scatter Plot**

Cobalt, MW-15018 (ug/L)



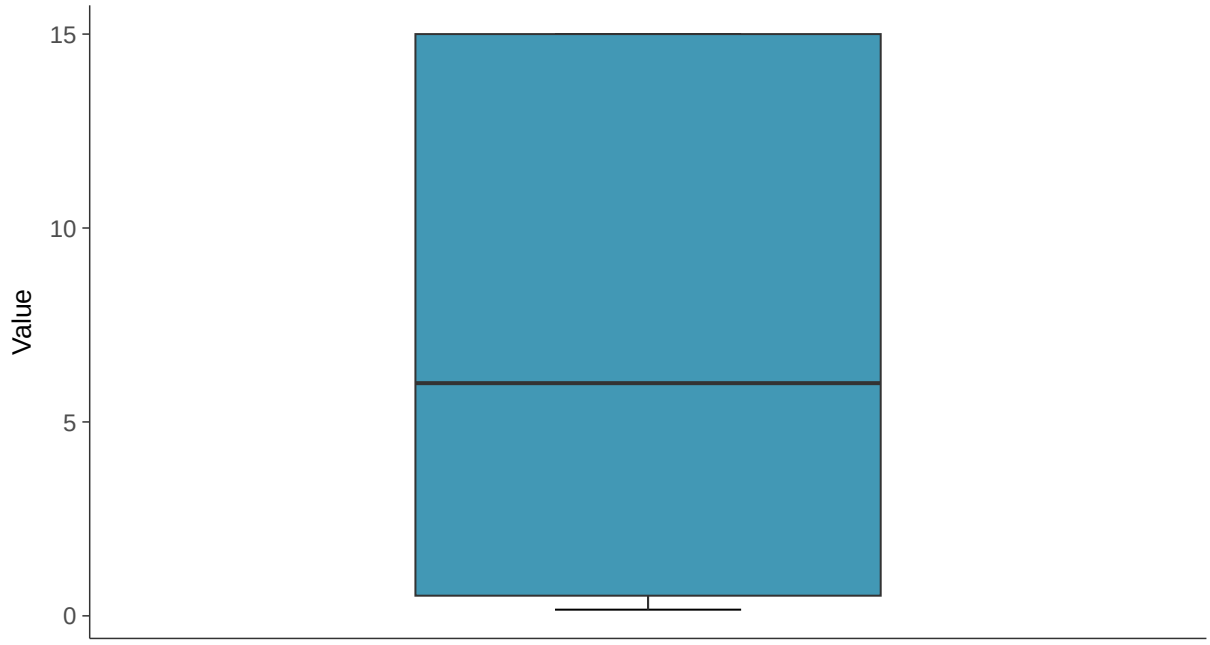

**Histogram**

Cobalt, MW-15018 (ug/L)



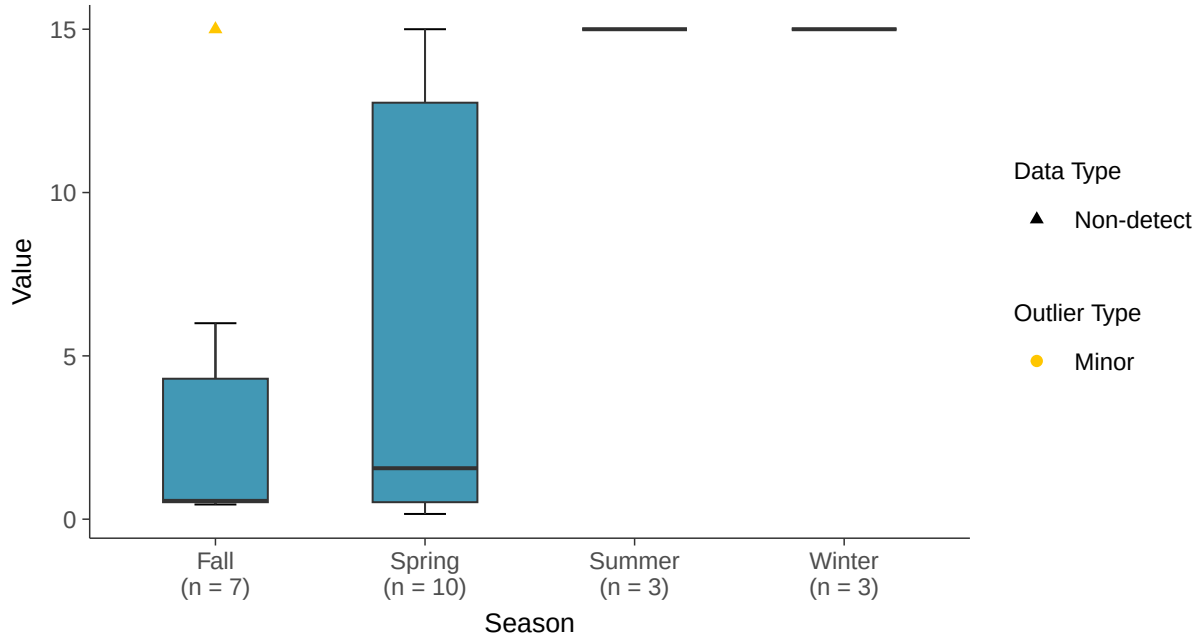
**Boxplot**

Cobalt, MW-15018 (ug/L)



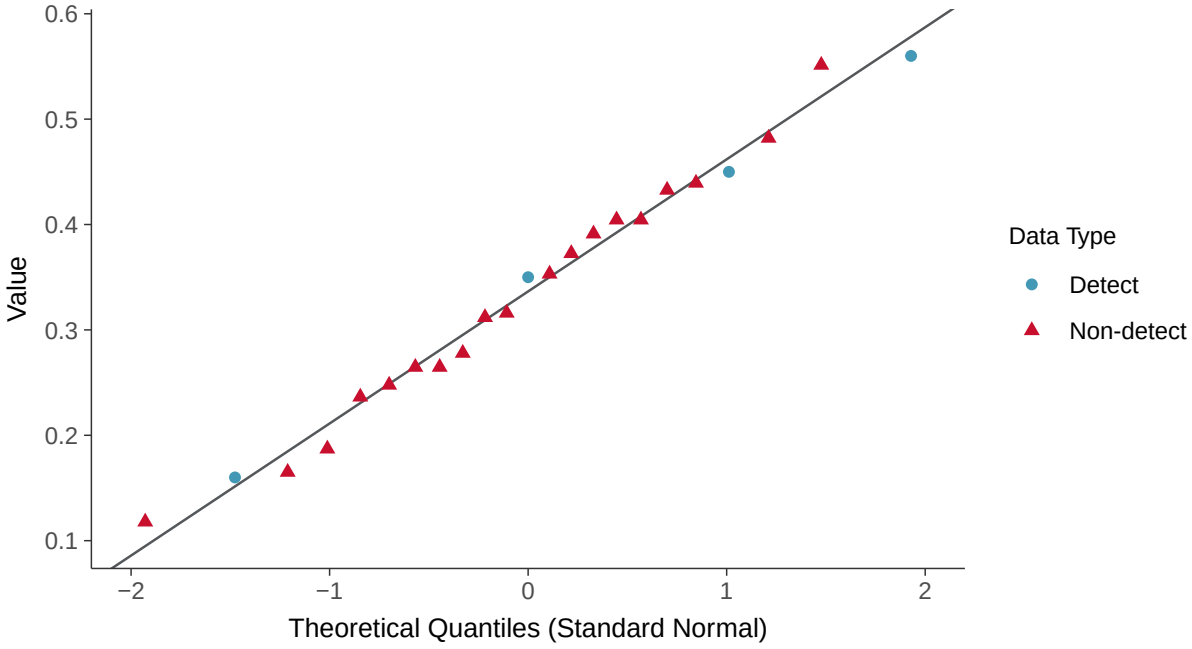

**Boxplot by Season**

Cobalt, MW-15018 (ug/L)



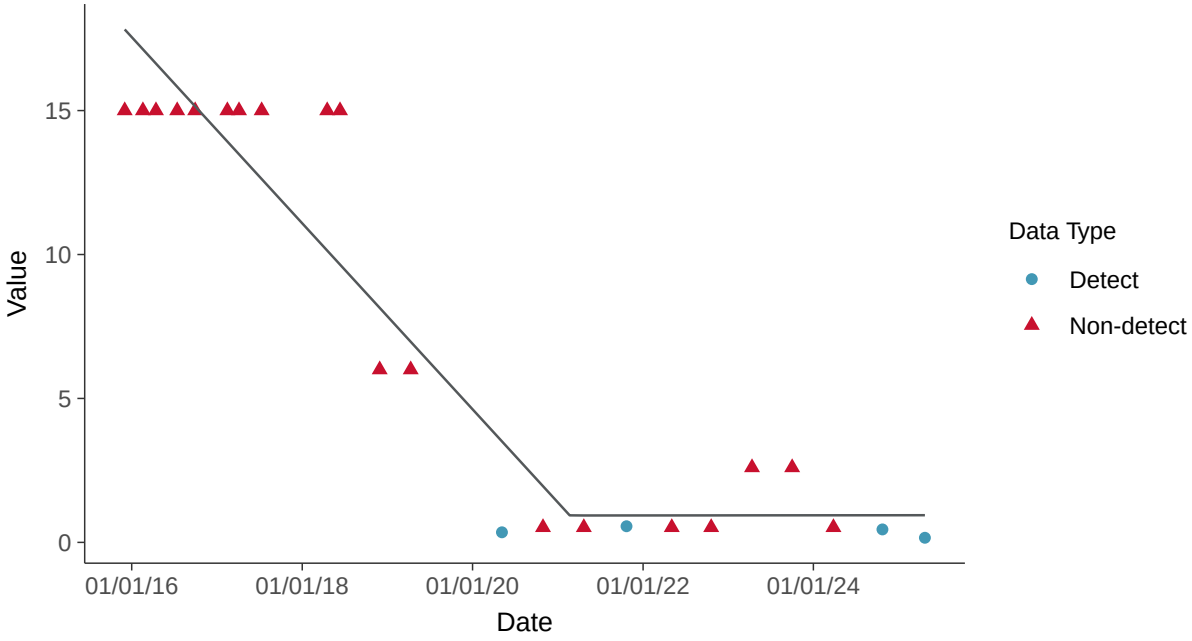
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15018 (ug/L)



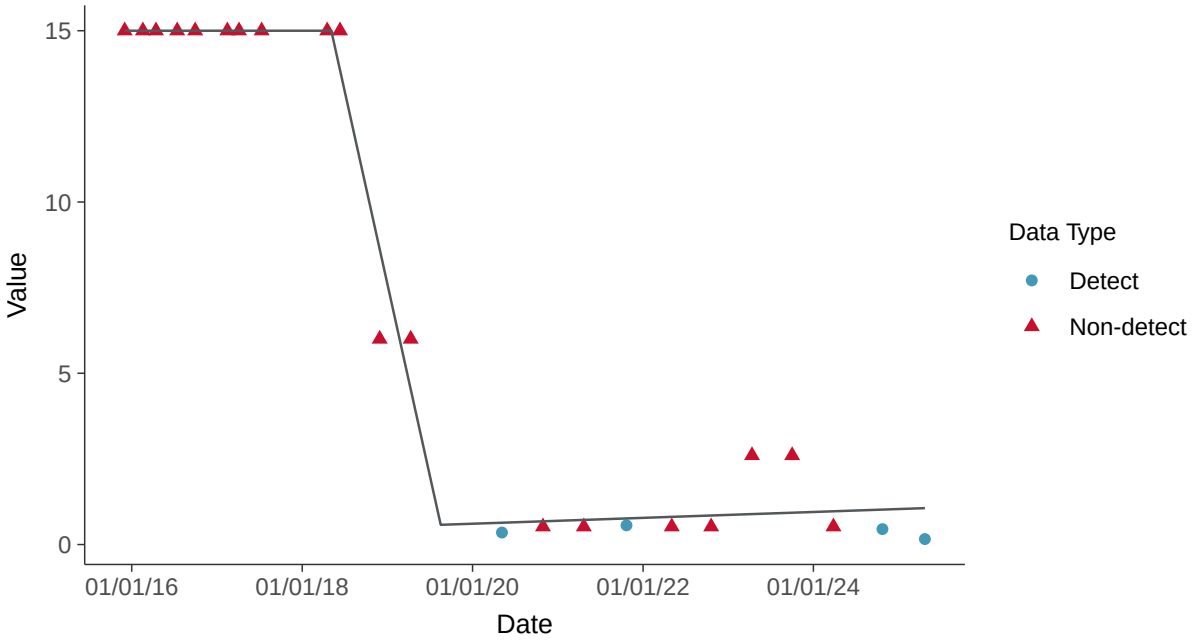

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15018 (ug/L)



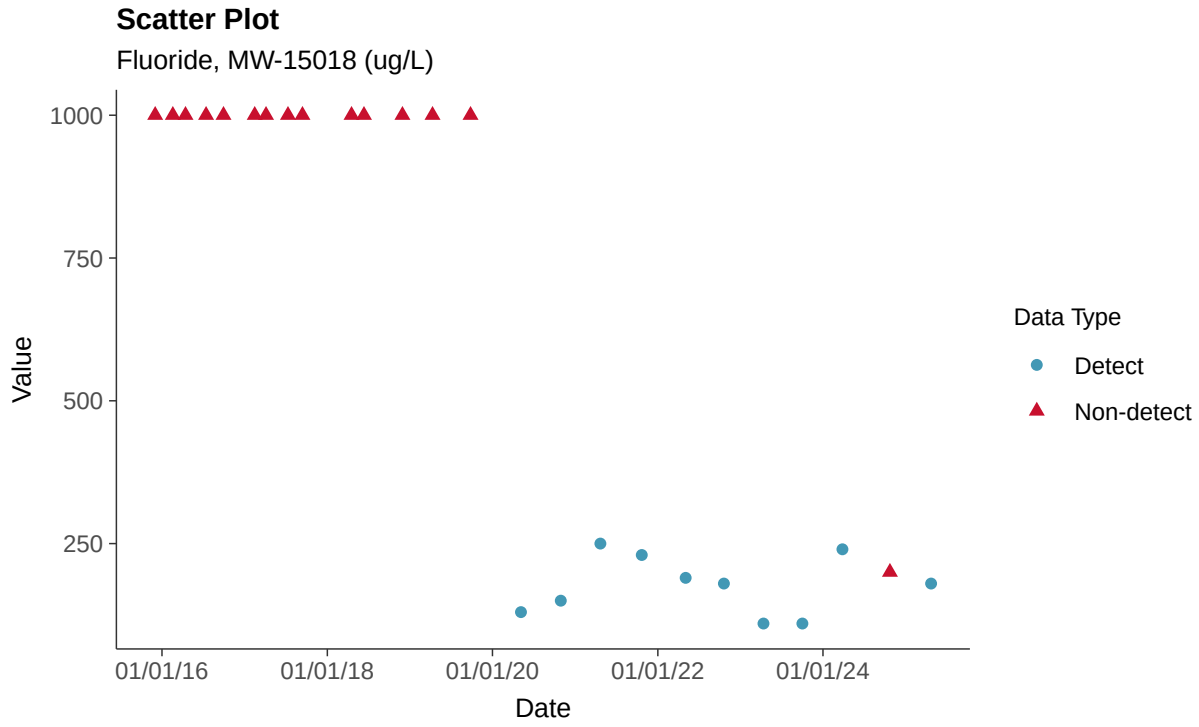
**Trend Regression: Piecewise Linear-Linear-Linear**

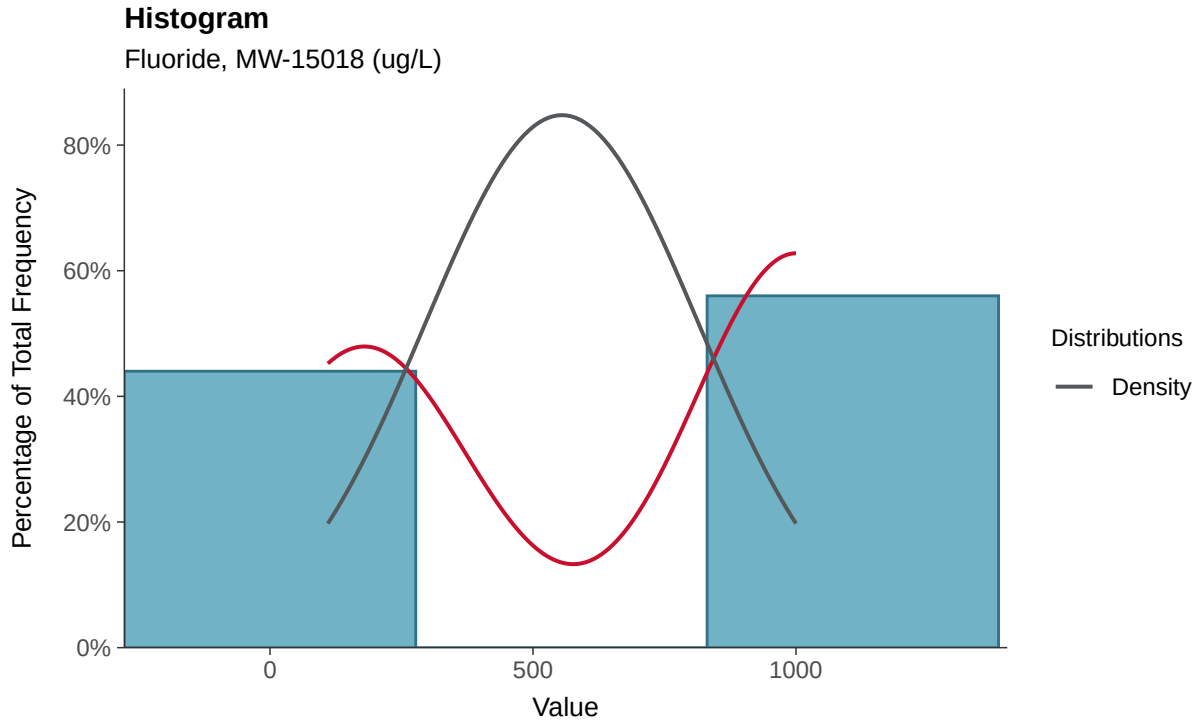
Cobalt, MW-15018 (ug/L)



# Appendix IV: Fluoride, MW-15018

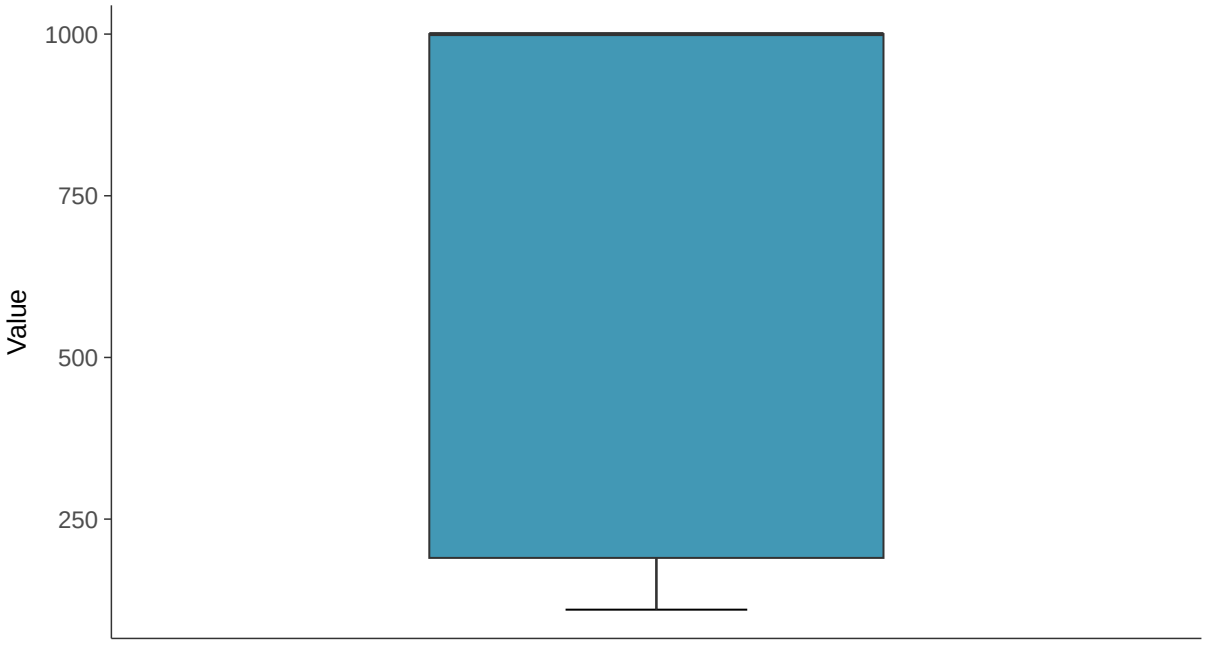
ID: 08_2_114



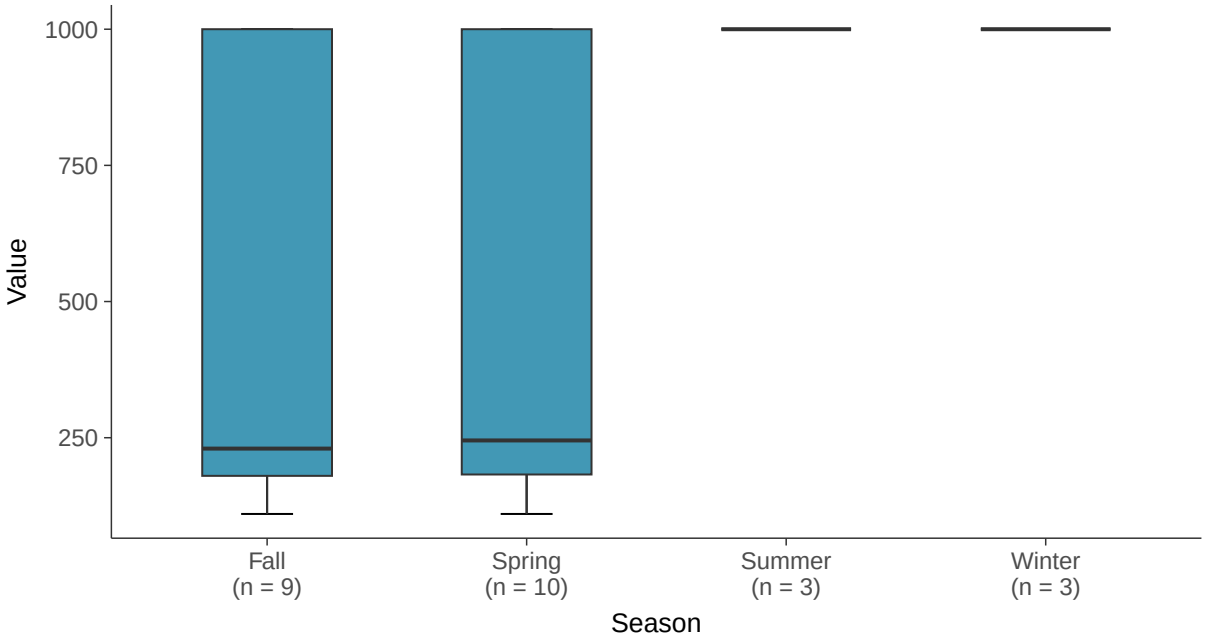
**Boxplot**

Fluoride, MW-15018 (ug/L)



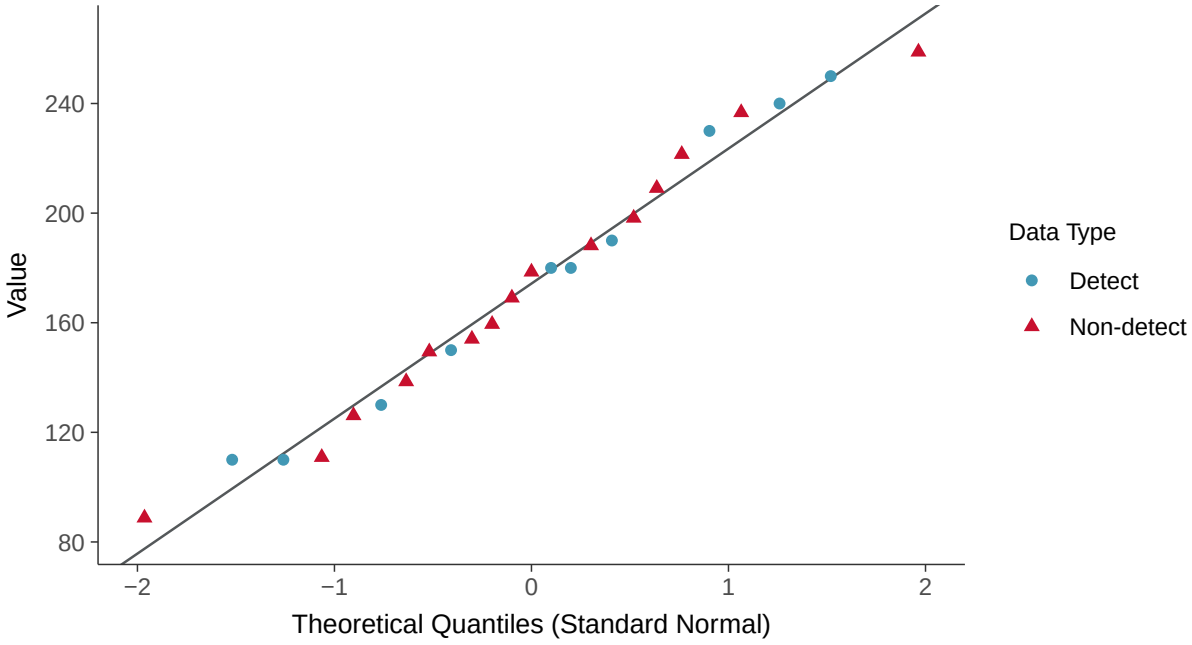

**Boxplot by Season**

Fluoride, MW-15018 (ug/L)



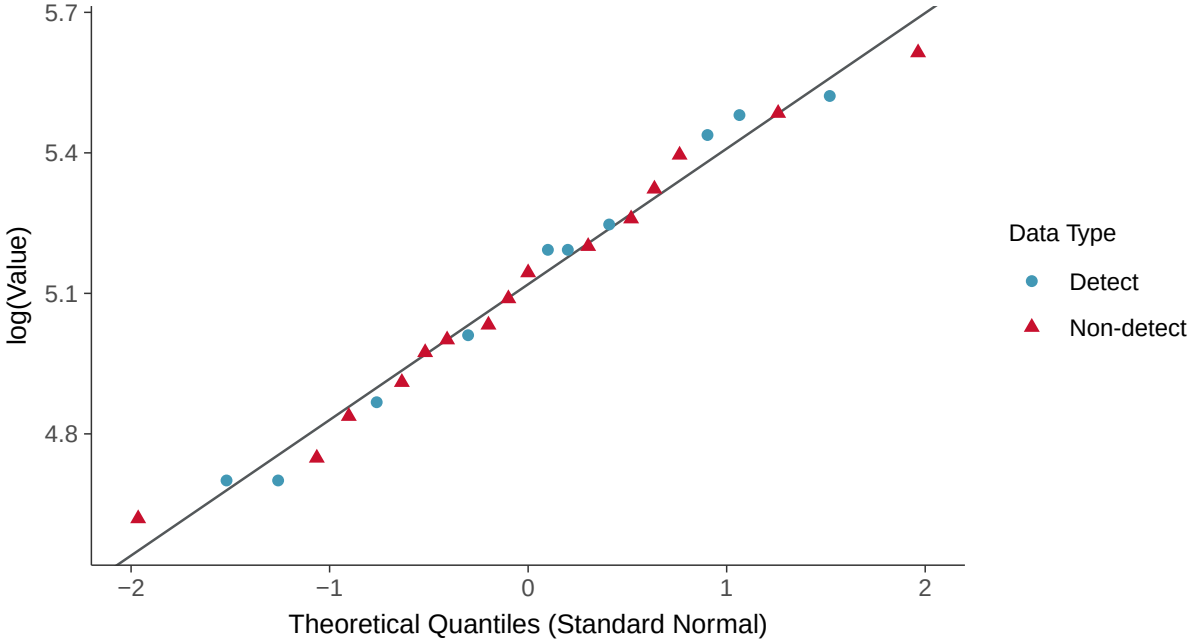
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15018 (ug/L)



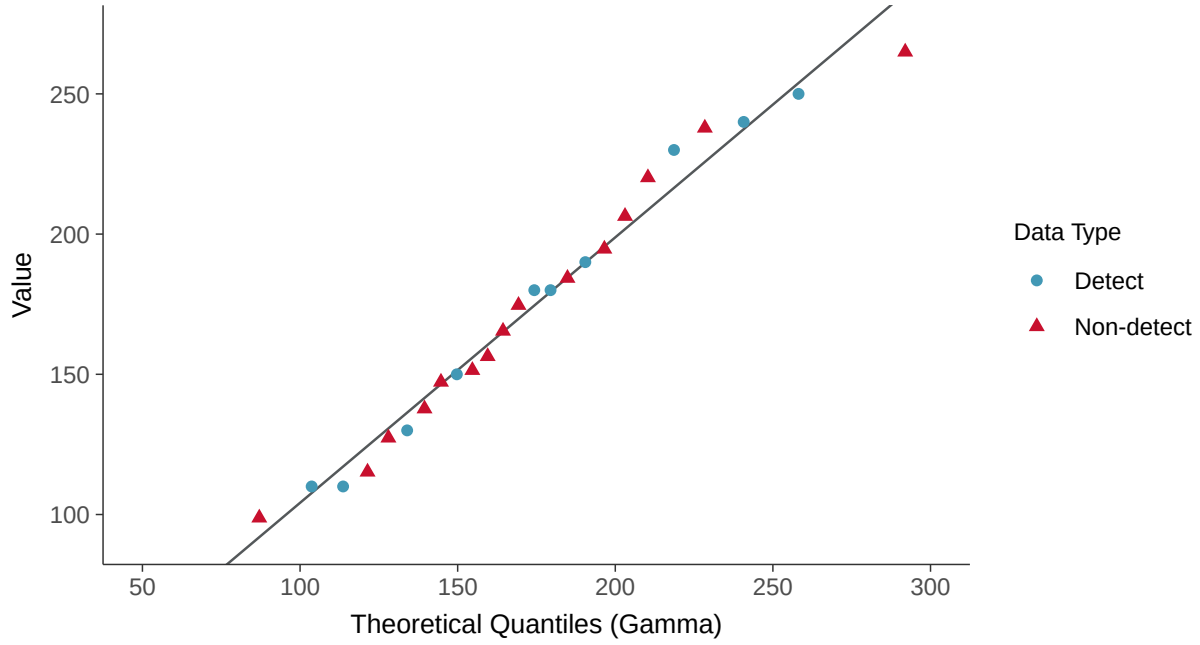

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15018 (ug/L)



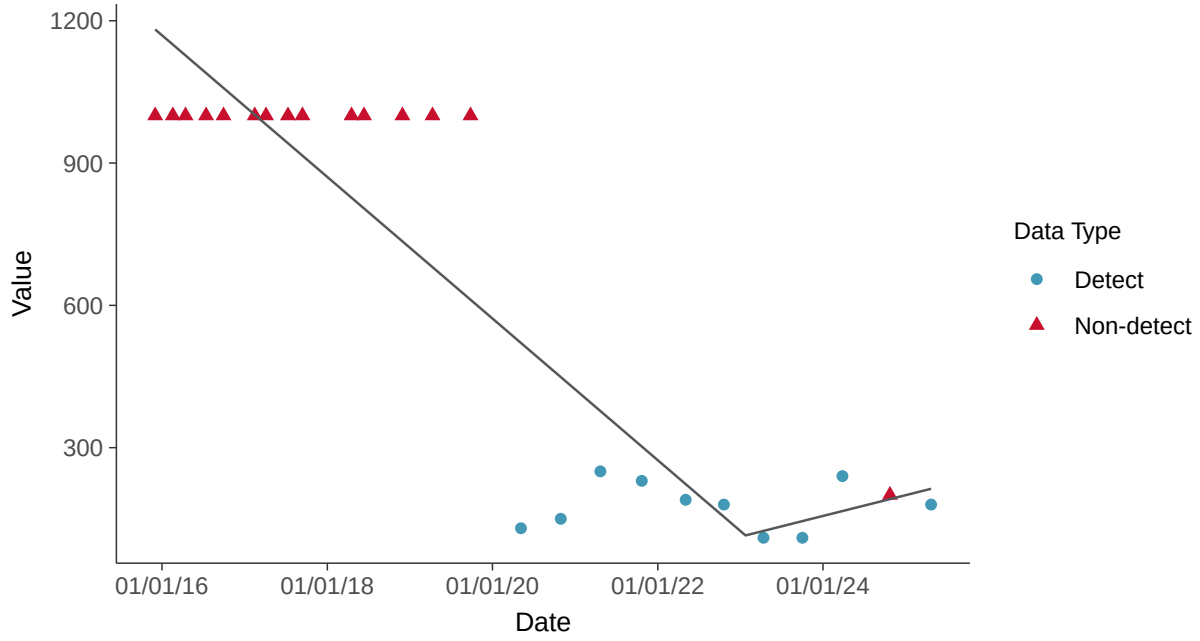
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15018 (ug/L)



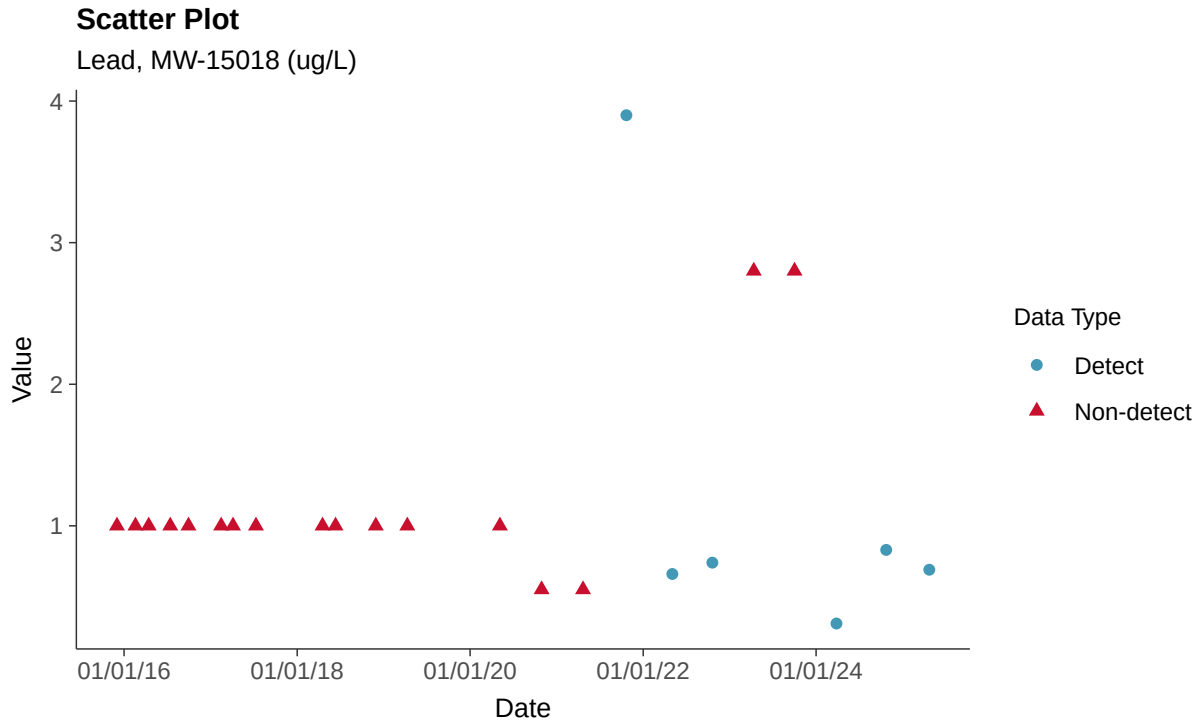

**Trend Regression: Piecewise Linear-Linear**

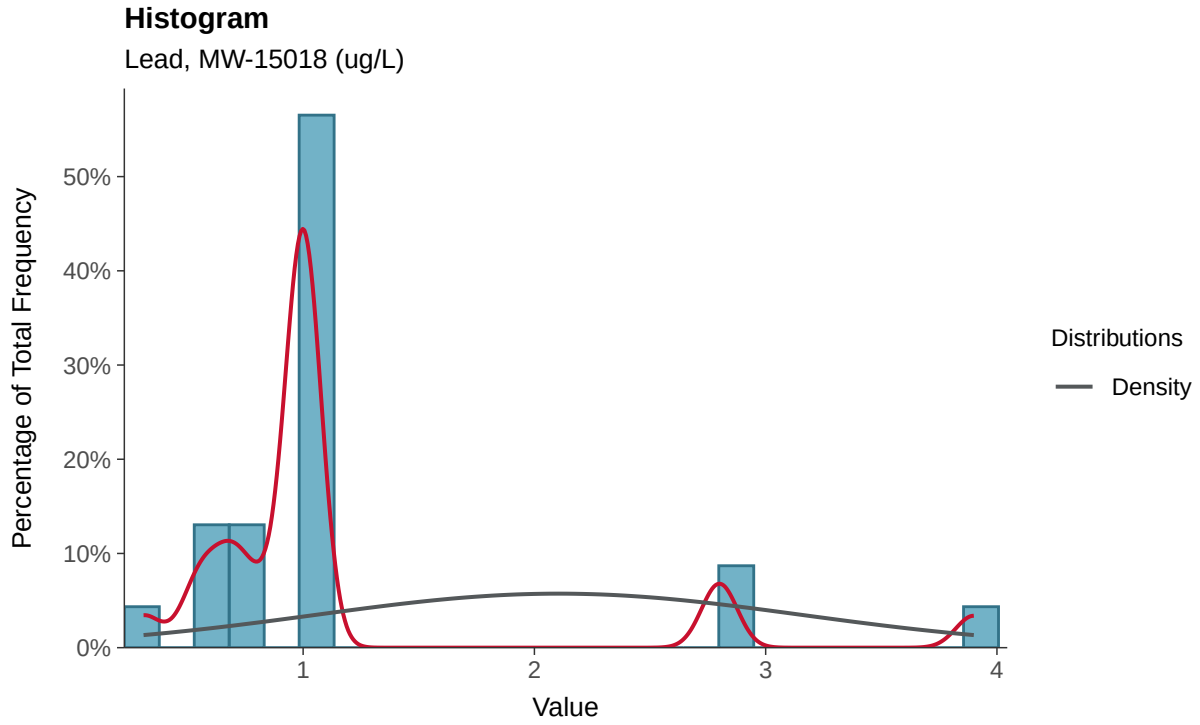
Fluoride, MW-15018 (ug/L)



# Appendix IV: Lead, MW-15018

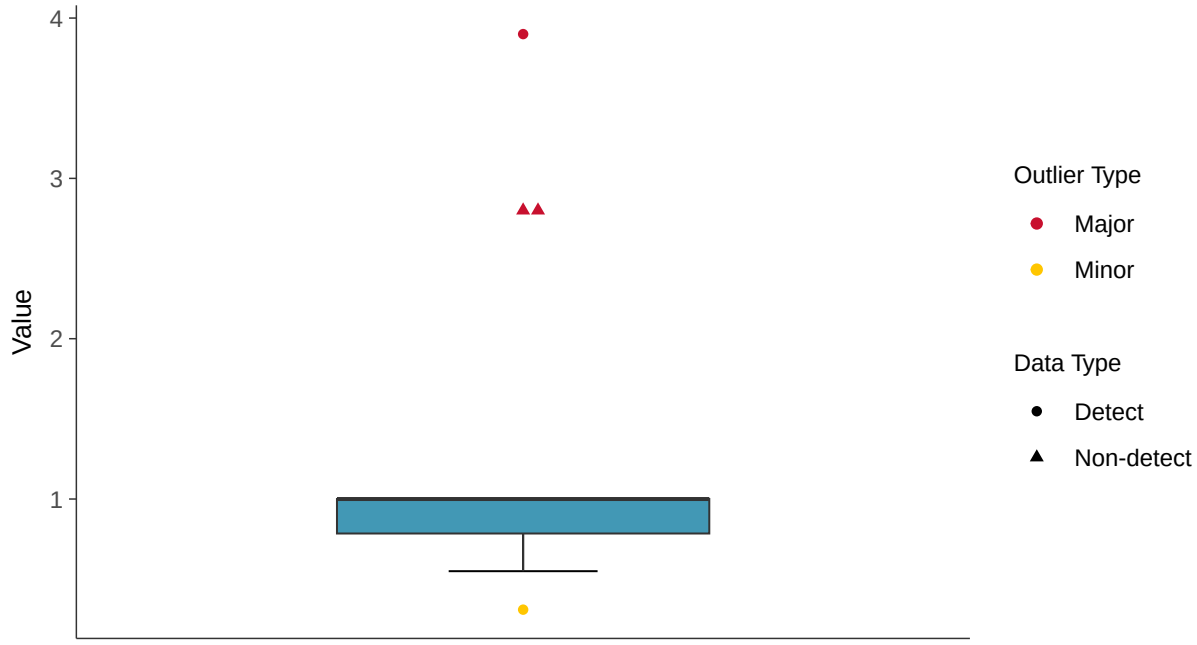
ID: 08_2_116



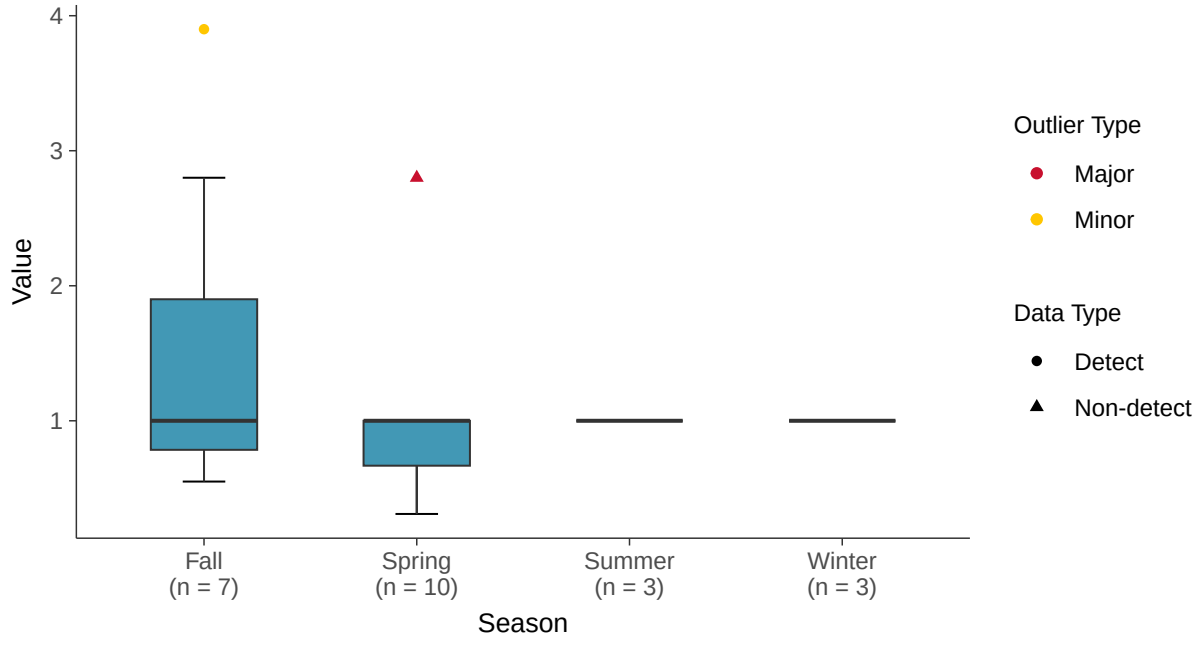
## Boxplot

Lead, MW-15018 (ug/L)



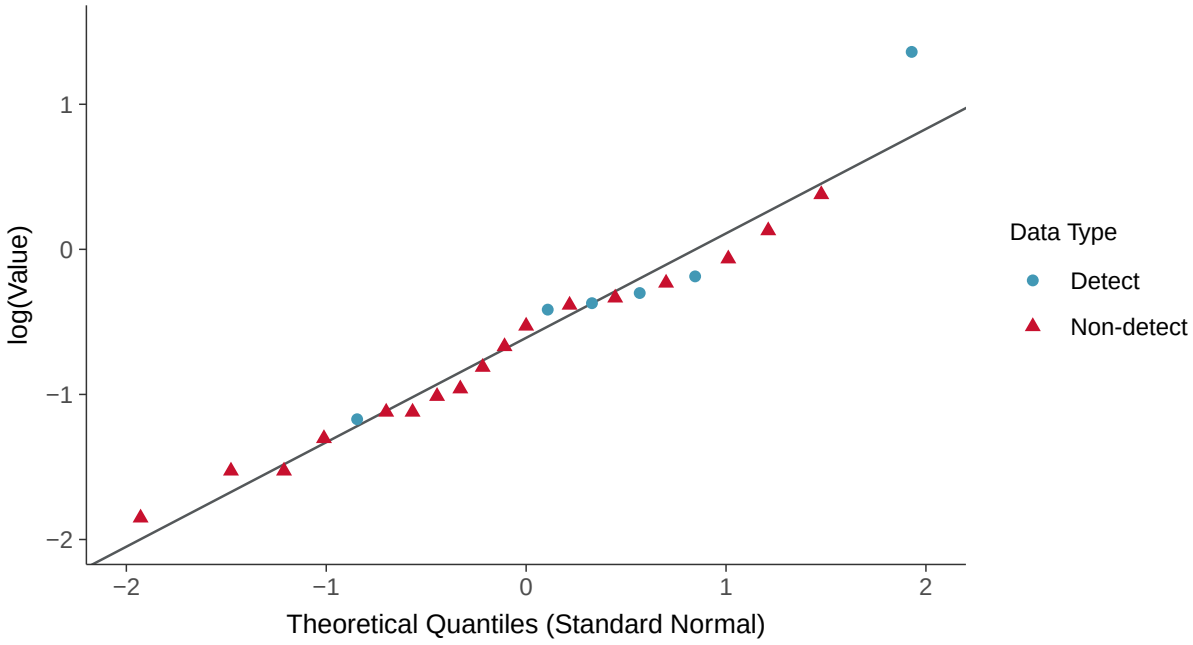

## Boxplot by Season

Lead, MW-15018 (ug/L)



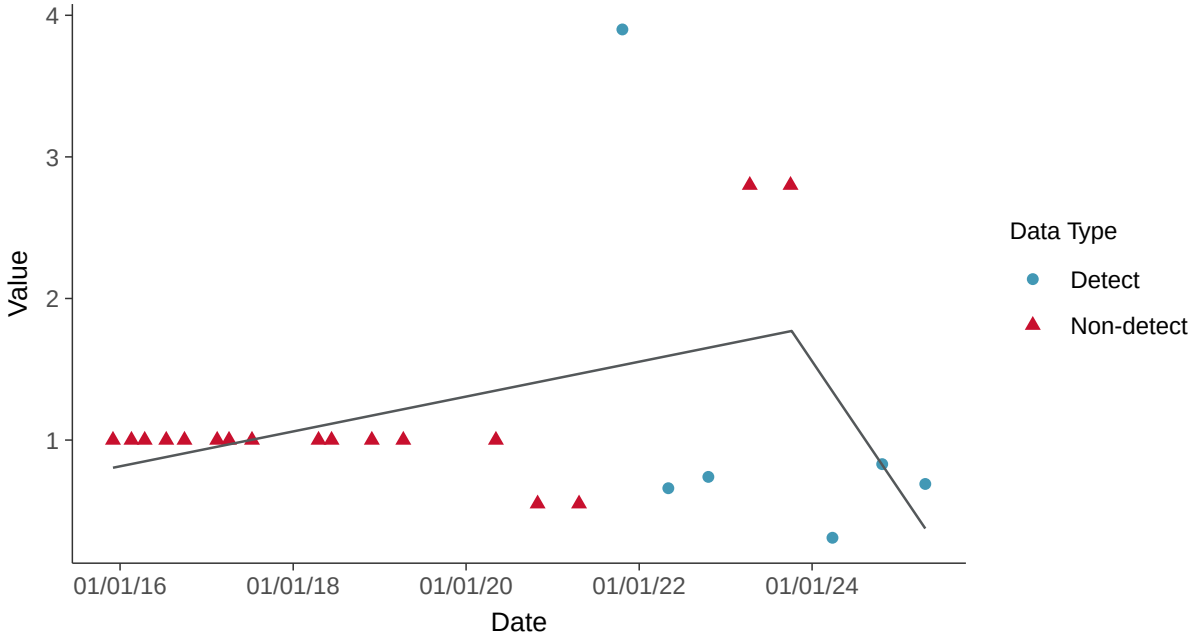
**Lognormal Q-Q plot using ROS Imputed Estimates**

Lead, MW-15018 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15018 (ug/L)

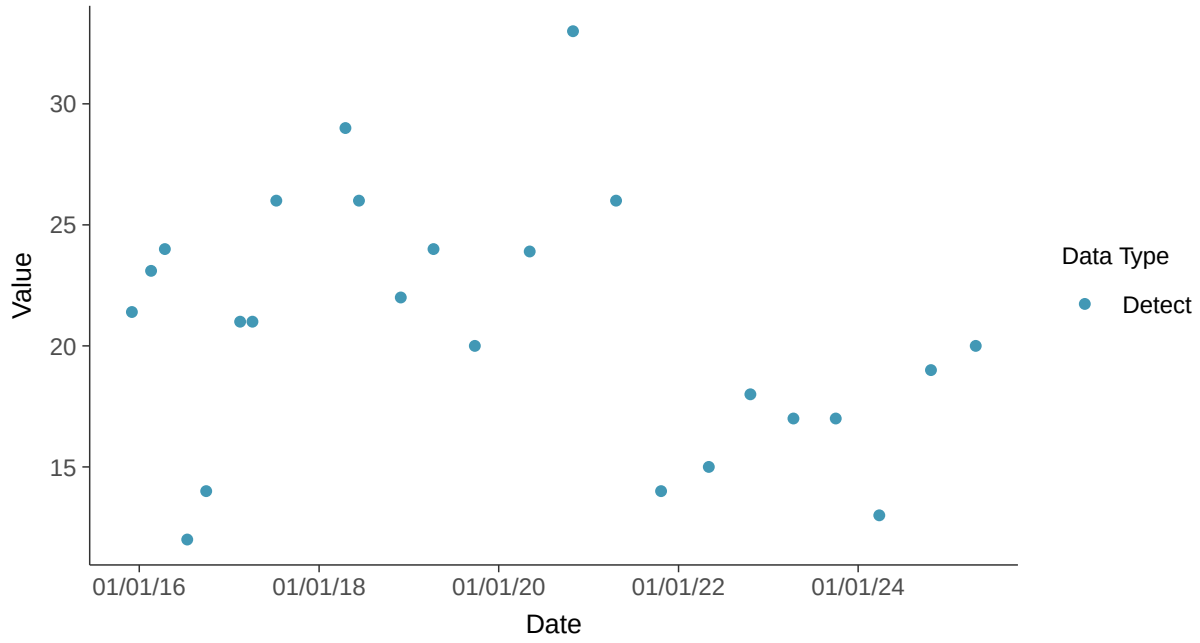


## Appendix IV: Lithium, MW-15018

ID: 08_2_117

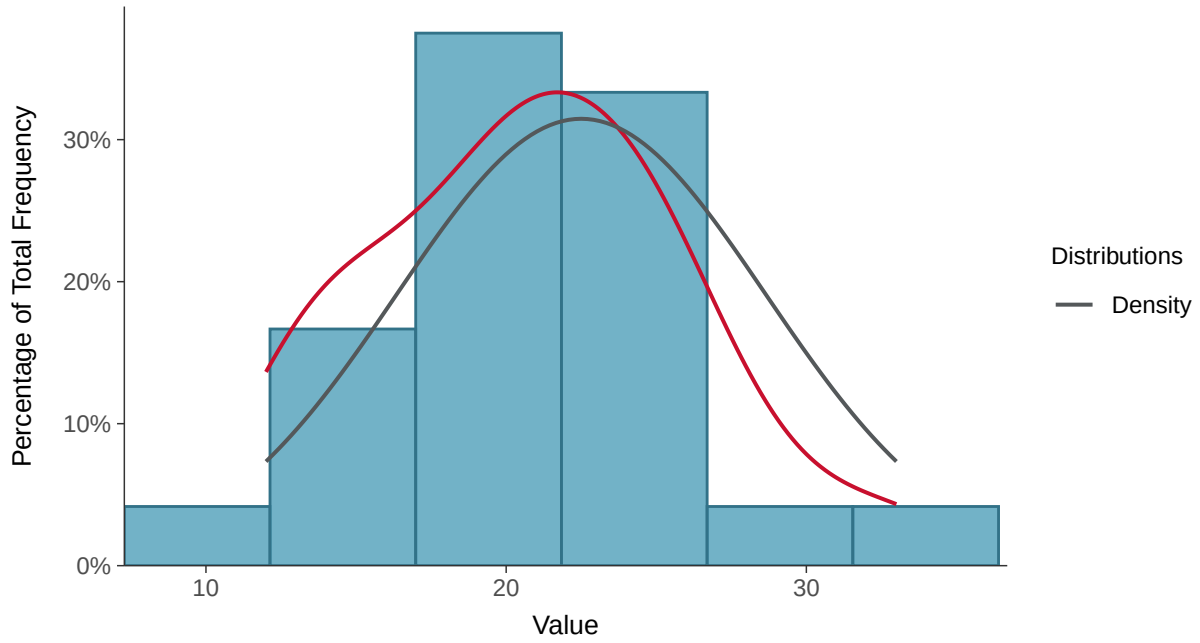
**Scatter Plot**

Lithium, MW-15018 (ug/L)



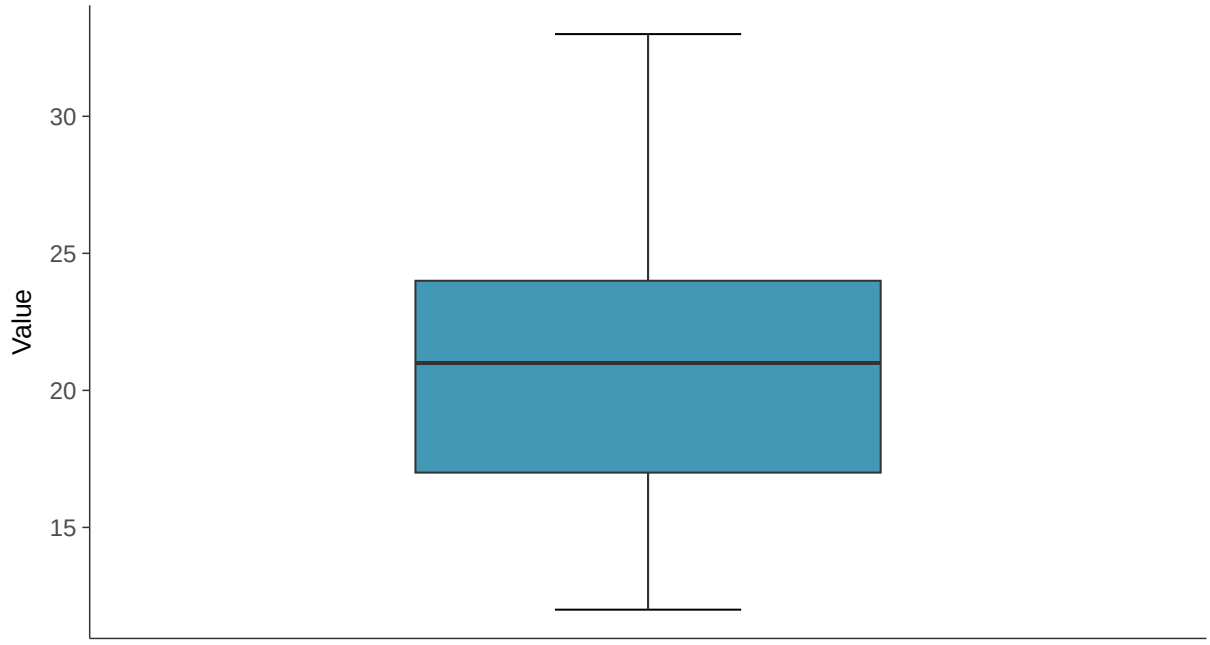

**Histogram**

Lithium, MW-15018 (ug/L)



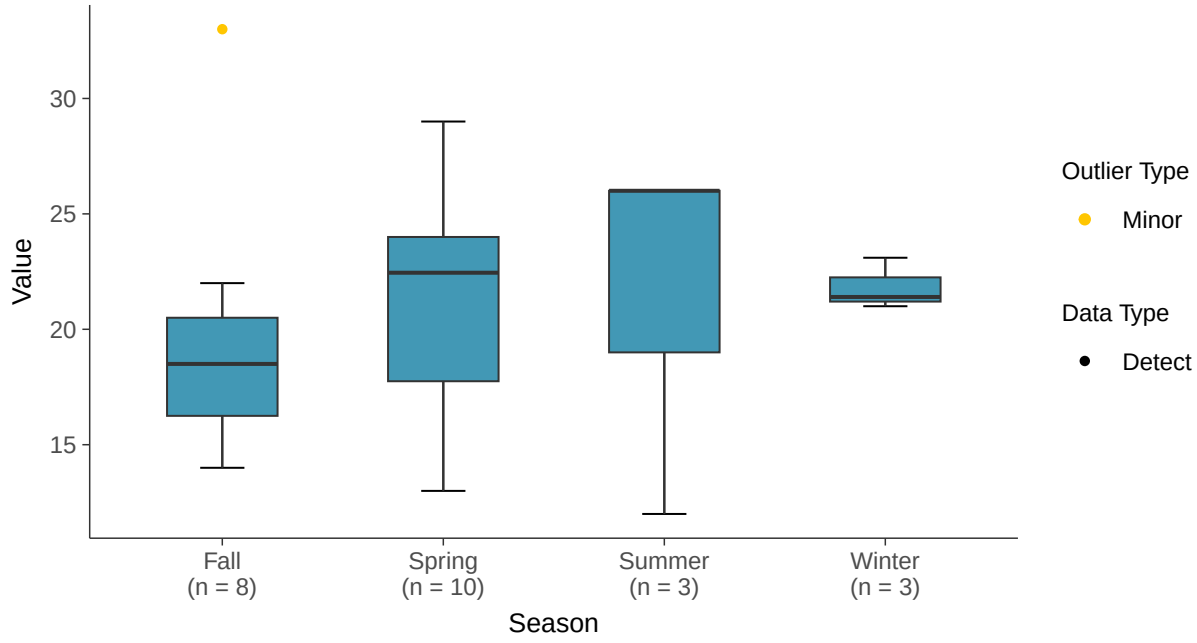
**Boxplot**

Lithium, MW-15018 (ug/L)



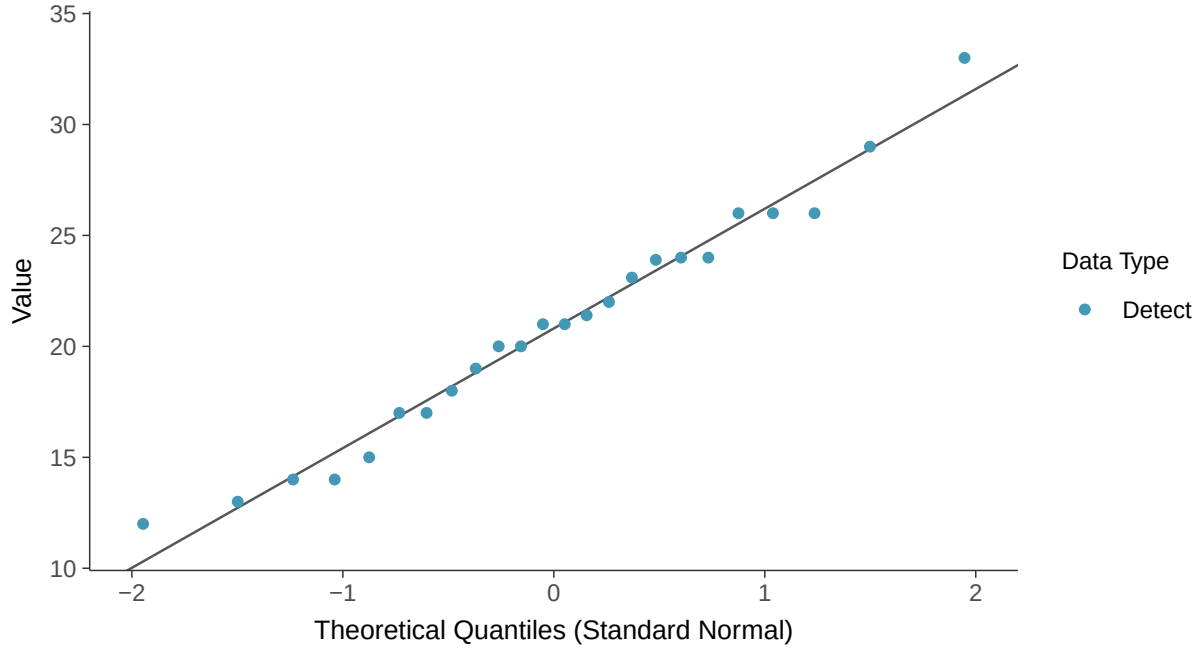

**Boxplot by Season**

Lithium, MW-15018 (ug/L)



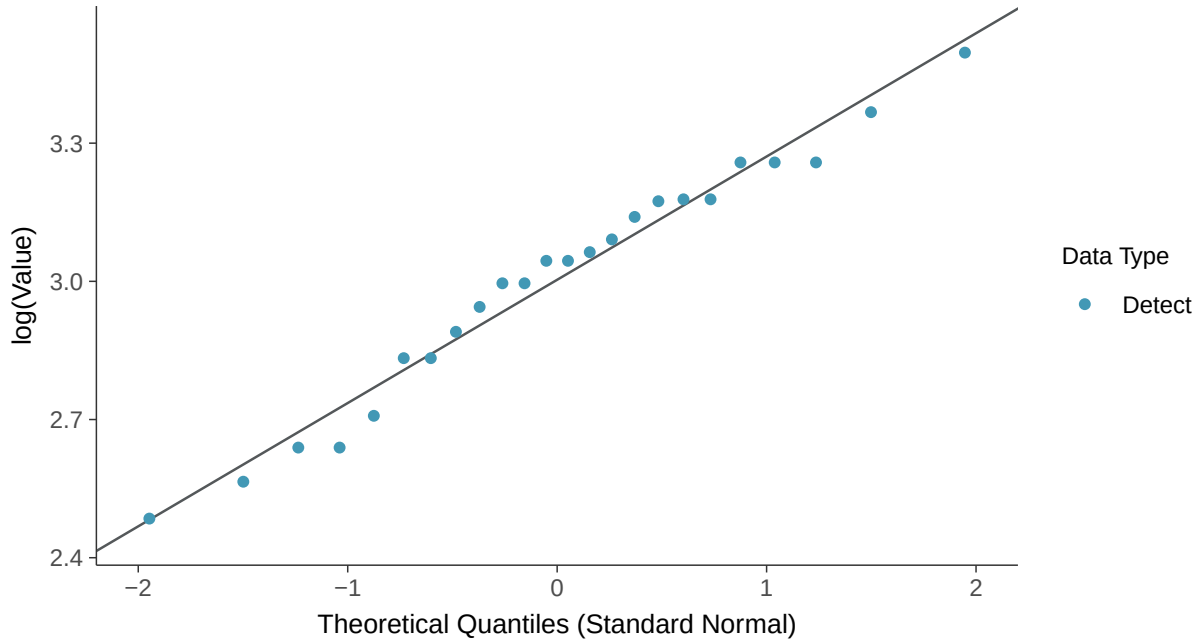
**Normal Q-Q plot**

Lithium, MW-15018 (ug/L)



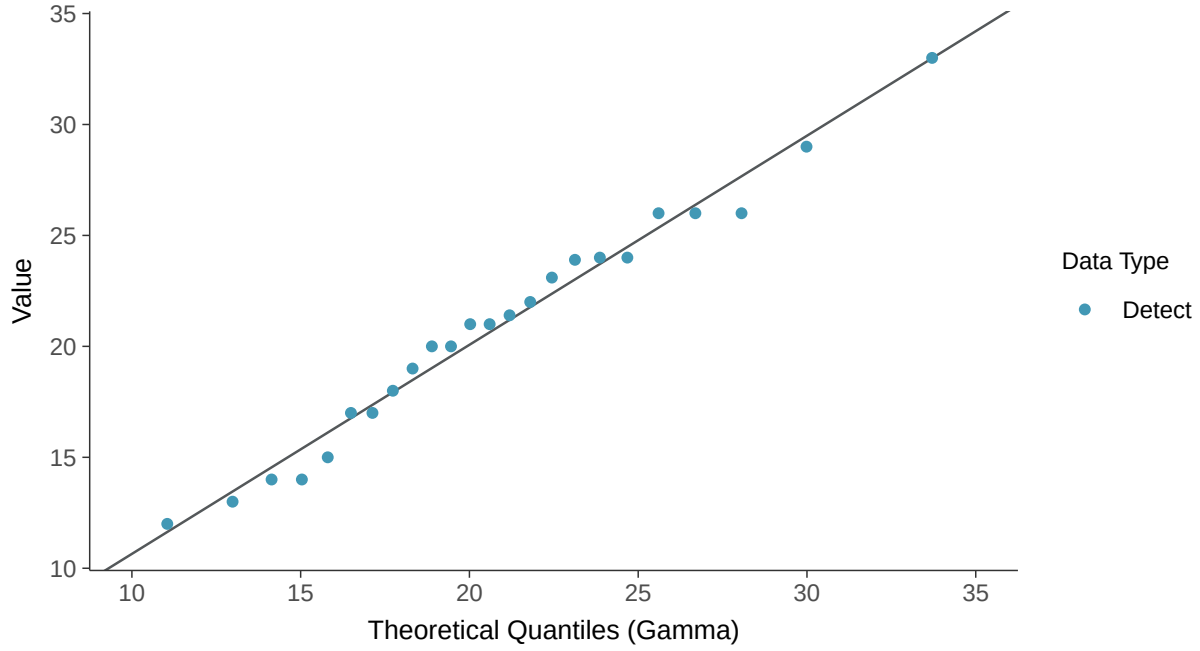

**Lognormal Q-Q plot**

Lithium, MW-15018 (ug/L)



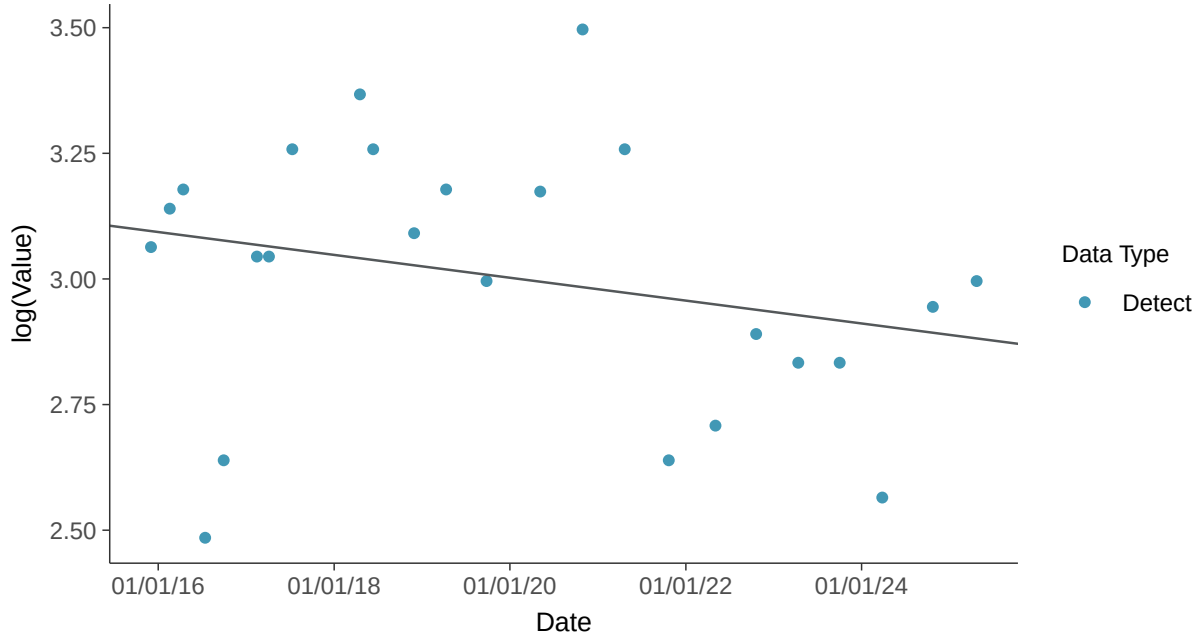
**Gamma Q-Q plot**

Lithium, MW-15018 (ug/L)



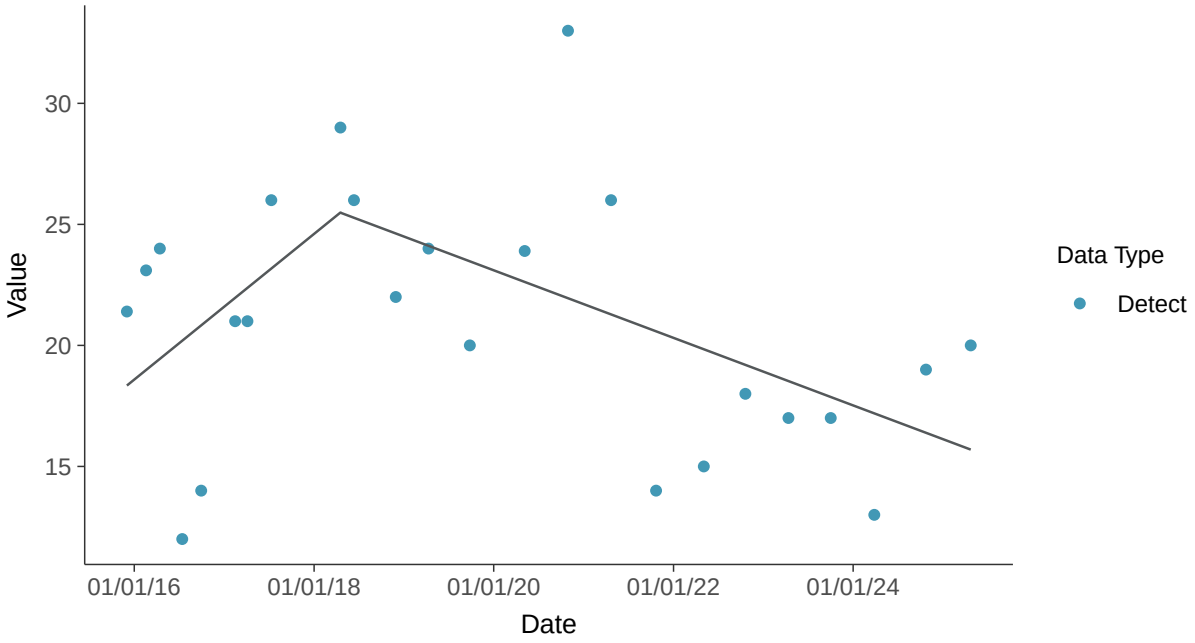

**Trend Regression: Lognormal MLE**

Lithium, MW-15018 (ug/L)



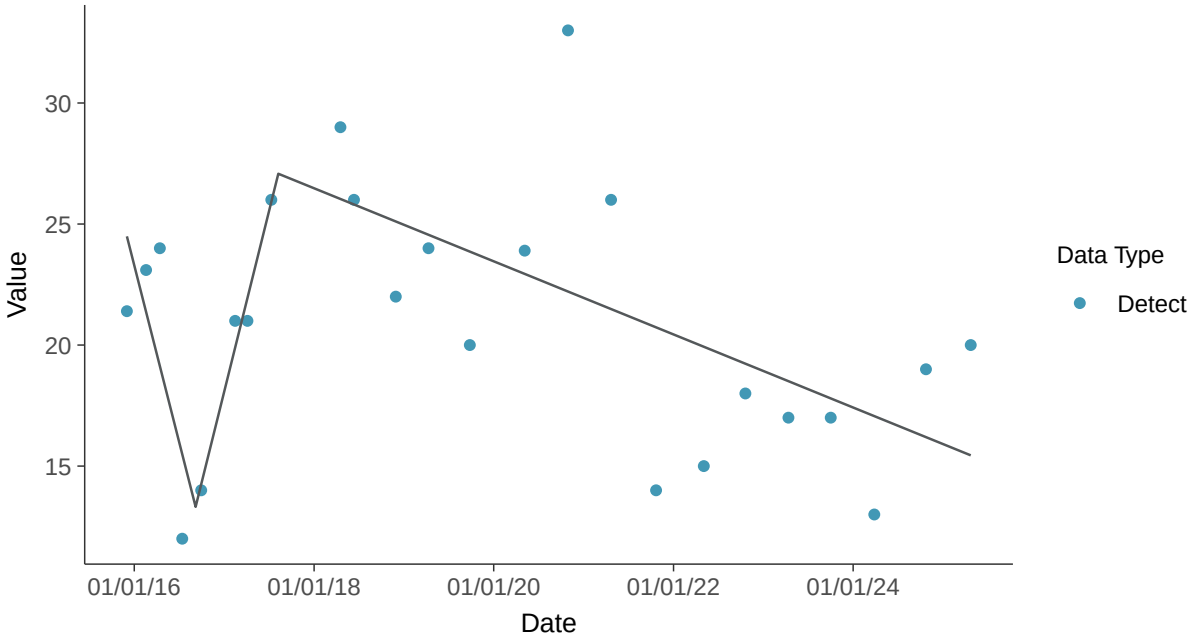
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15018 (ug/L)



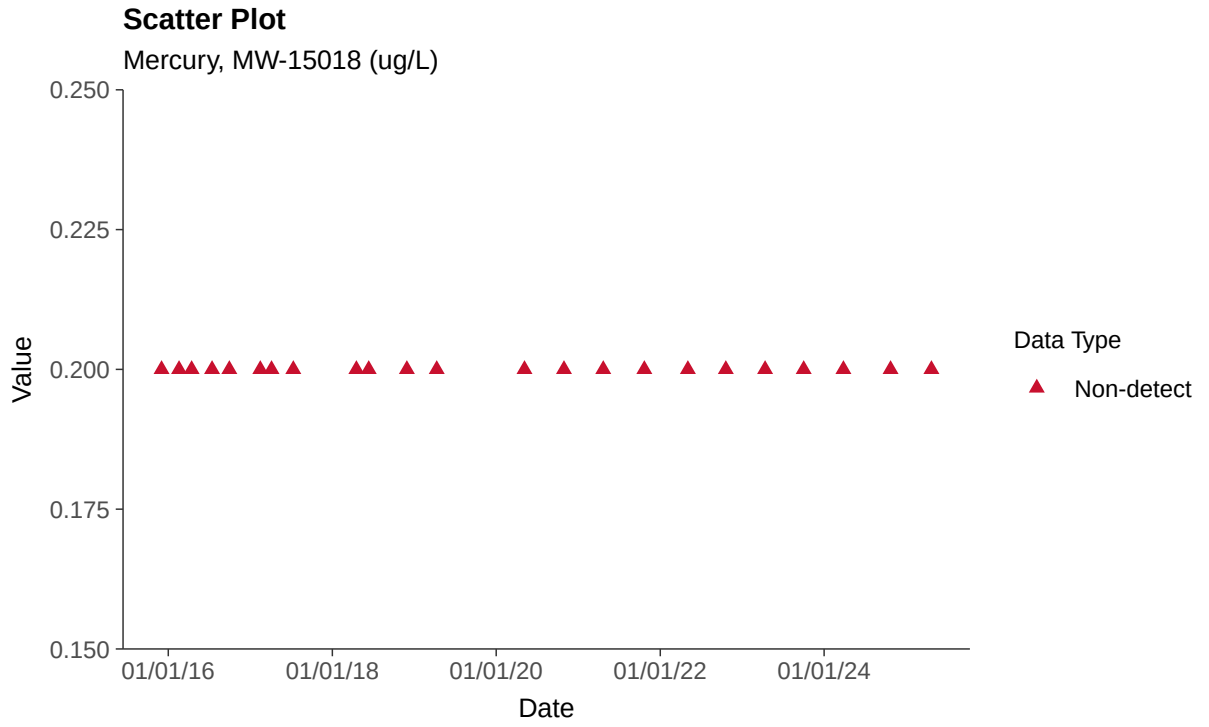

**Trend Regression: Piecewise Linear-Linear-Linear**

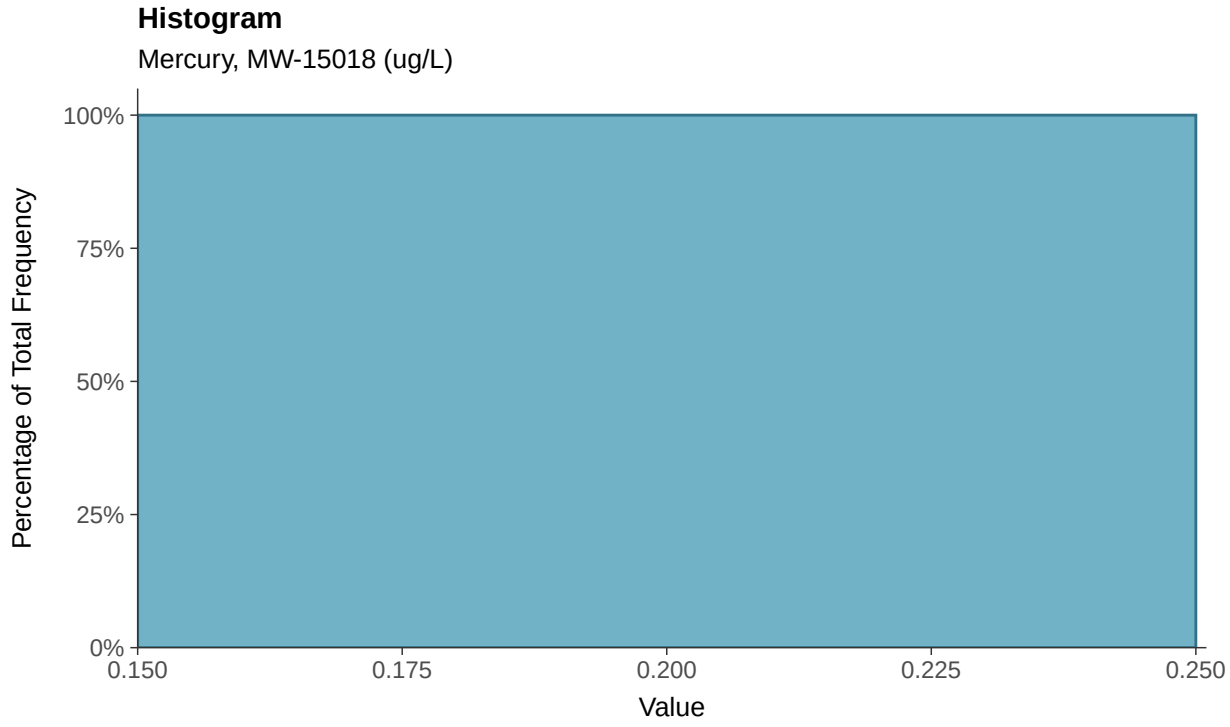
Lithium, MW-15018 (ug/L)



## Appendix IV: Mercury, MW-15018

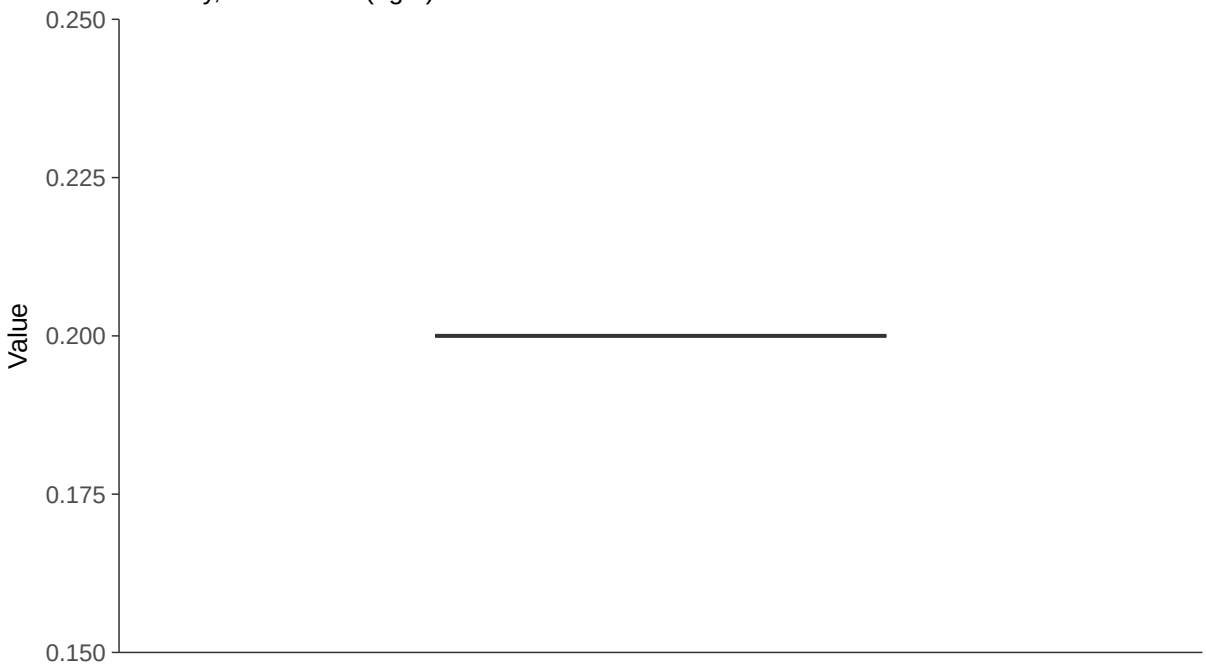
ID: 08_2_118



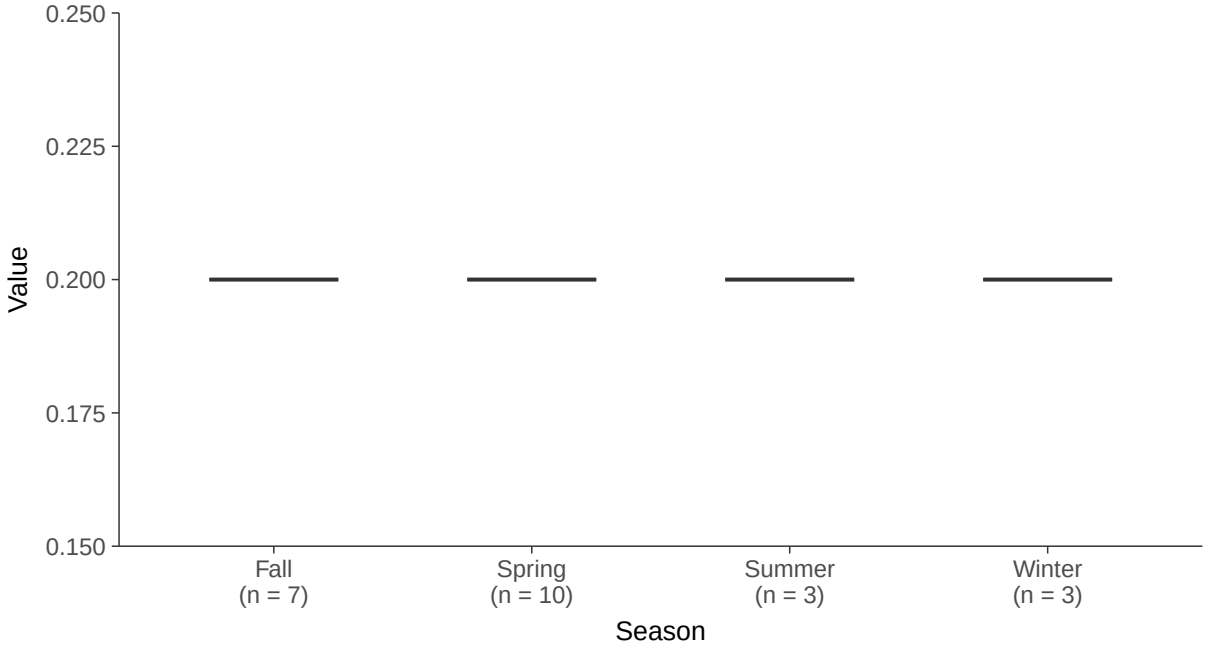
**Boxplot**

Mercury, MW-15018 (ug/L)



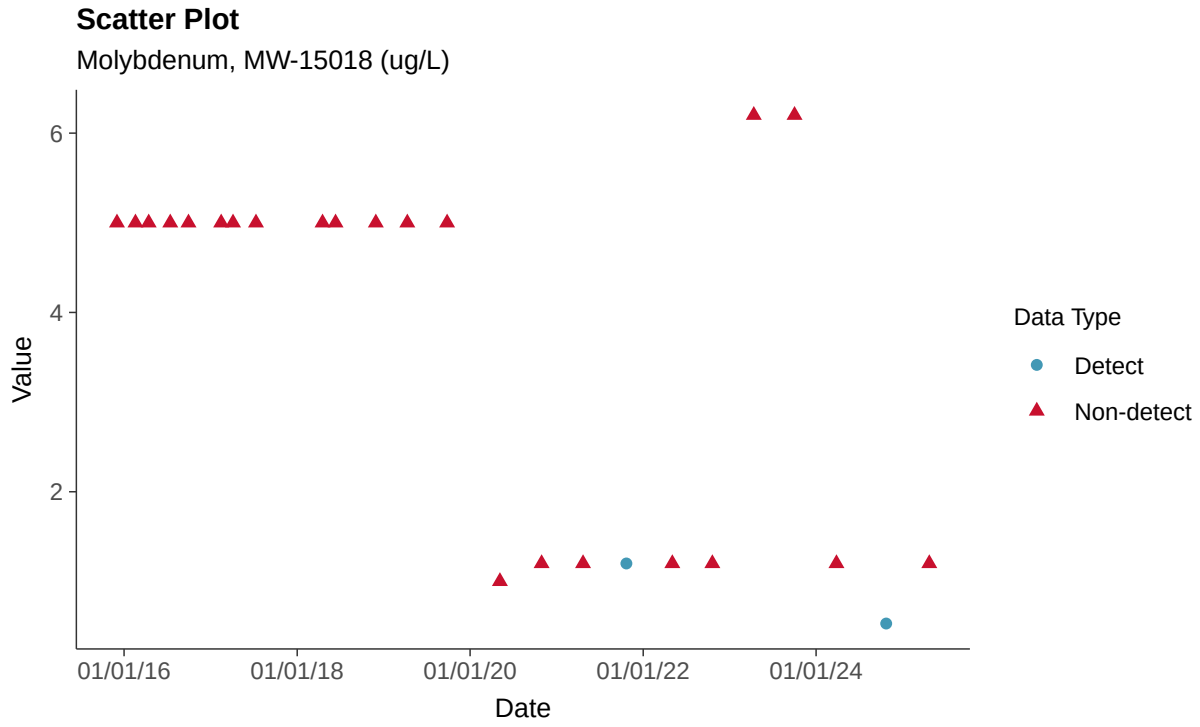

**Boxplot by Season**

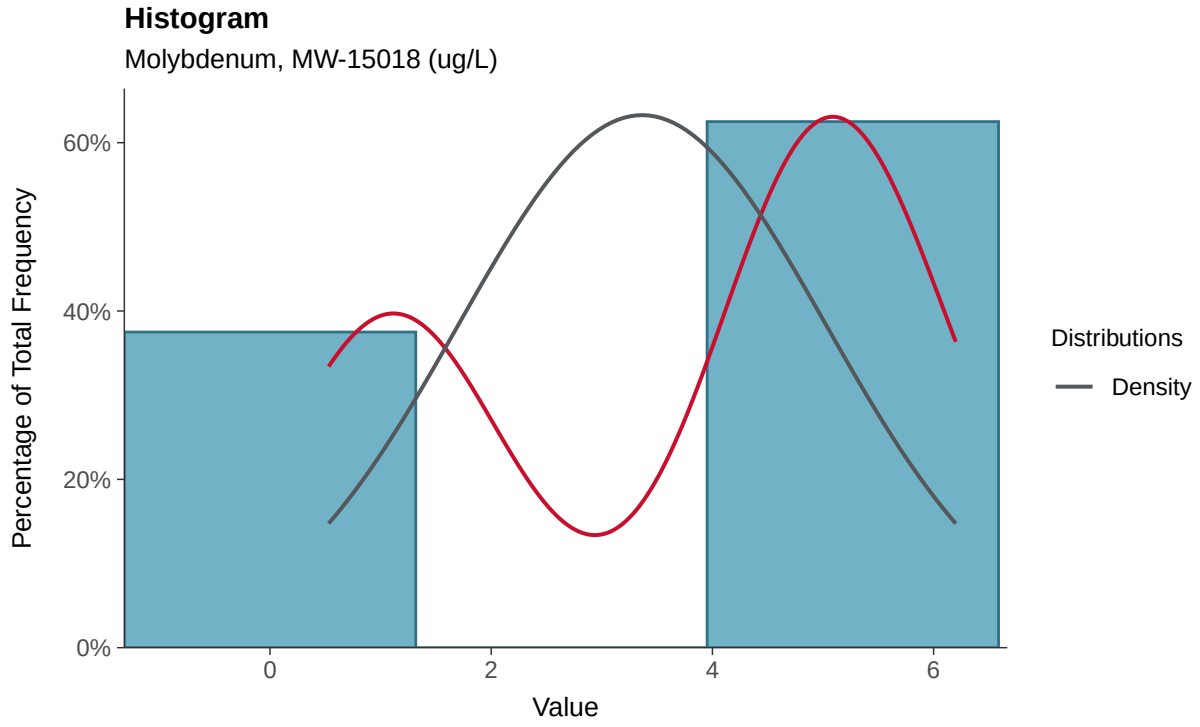
Mercury, MW-15018 (ug/L)



## Appendix IV: Molybdenum, MW-15018

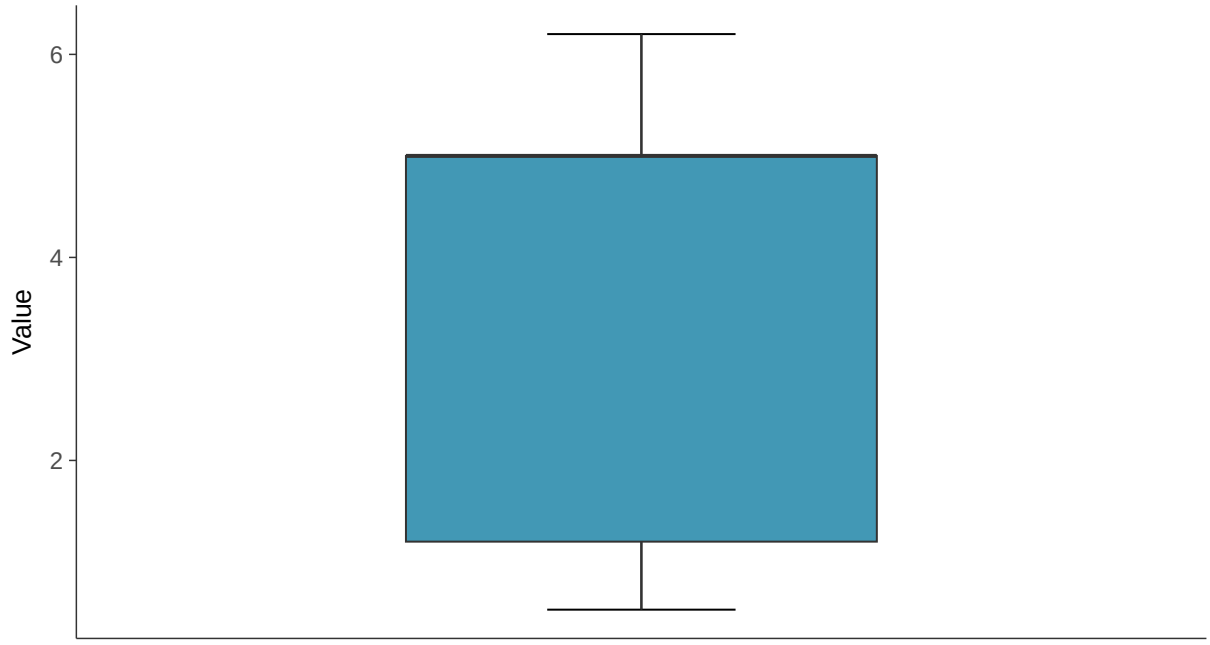
ID: 08_2_119



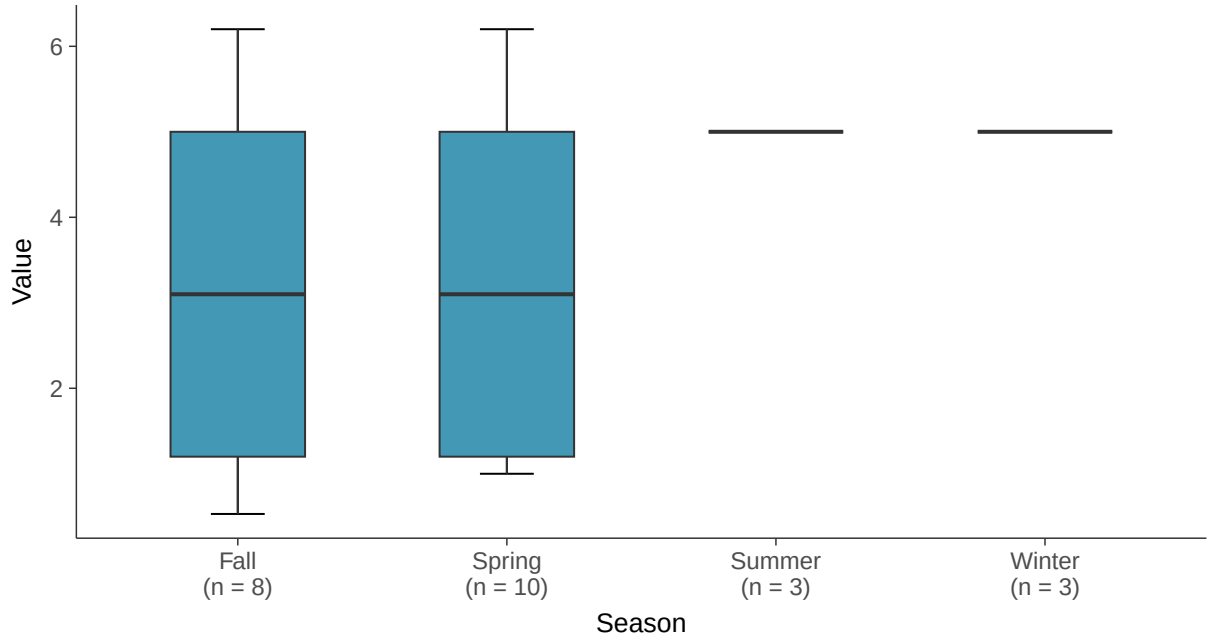
**Boxplot**

Molybdenum, MW-15018 (ug/L)



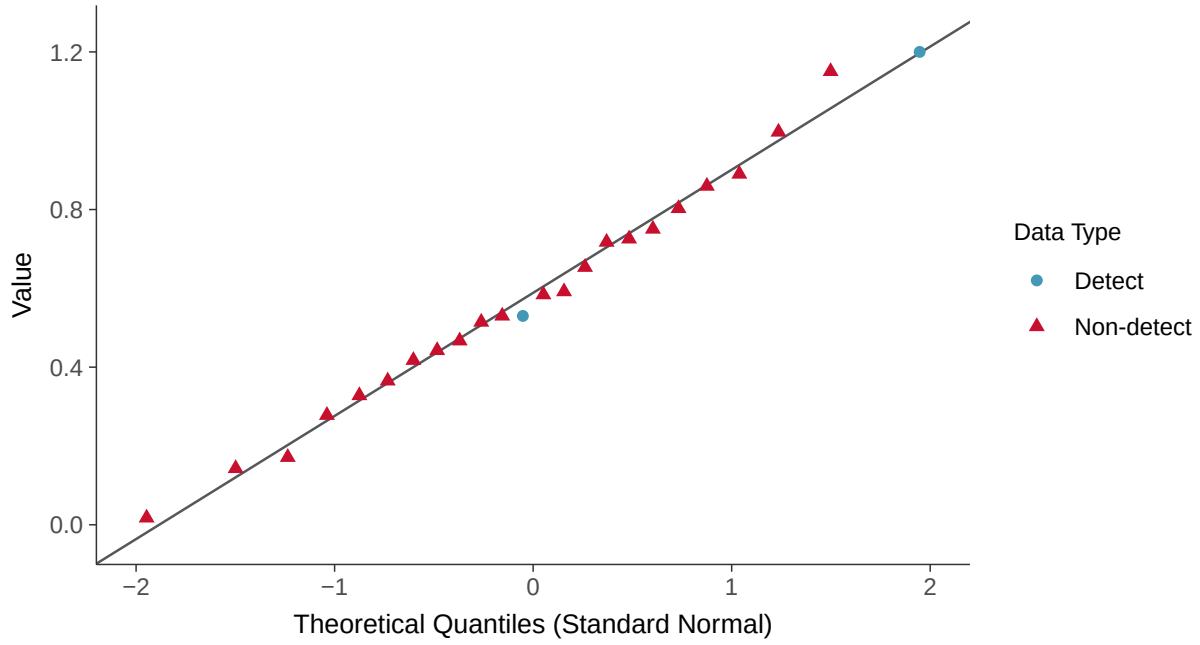

**Boxplot by Season**

Molybdenum, MW-15018 (ug/L)



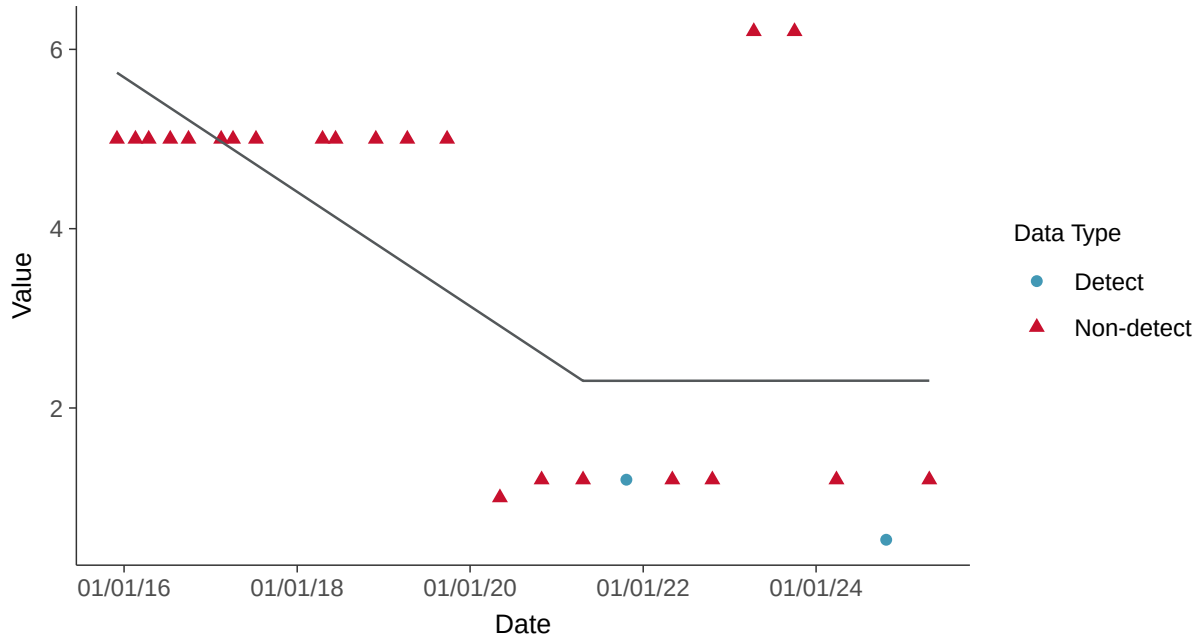
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15018 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15018 (ug/L)

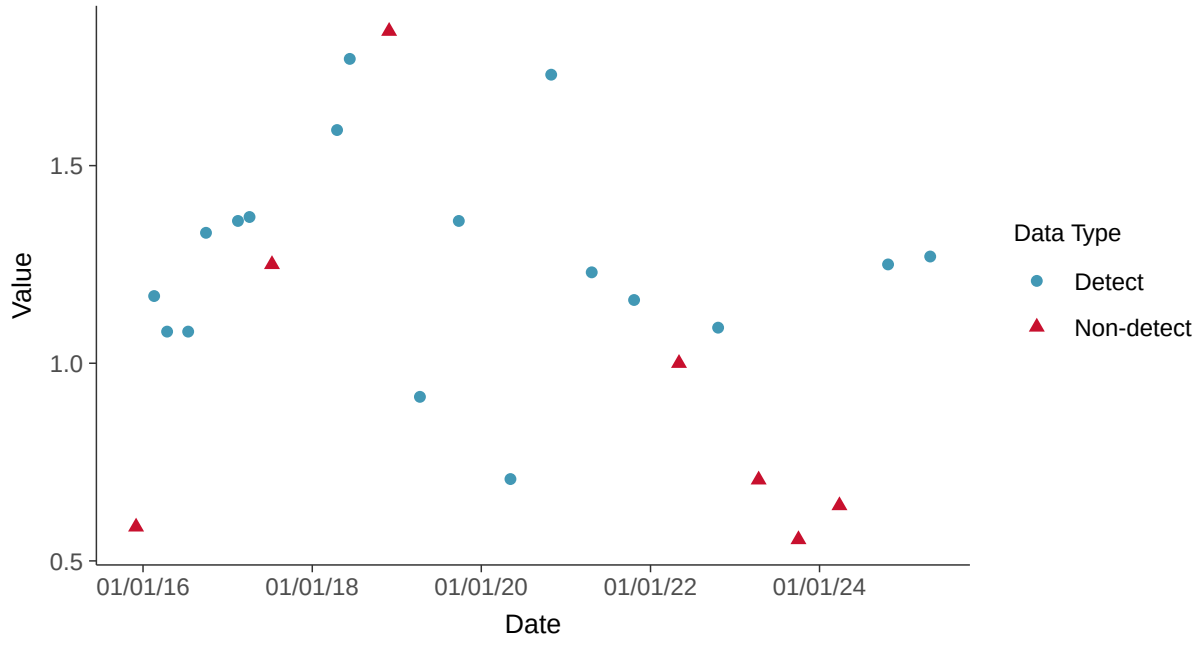


## Appendix IV: Radium-226+228, MW-15018

ID: 08_2_125

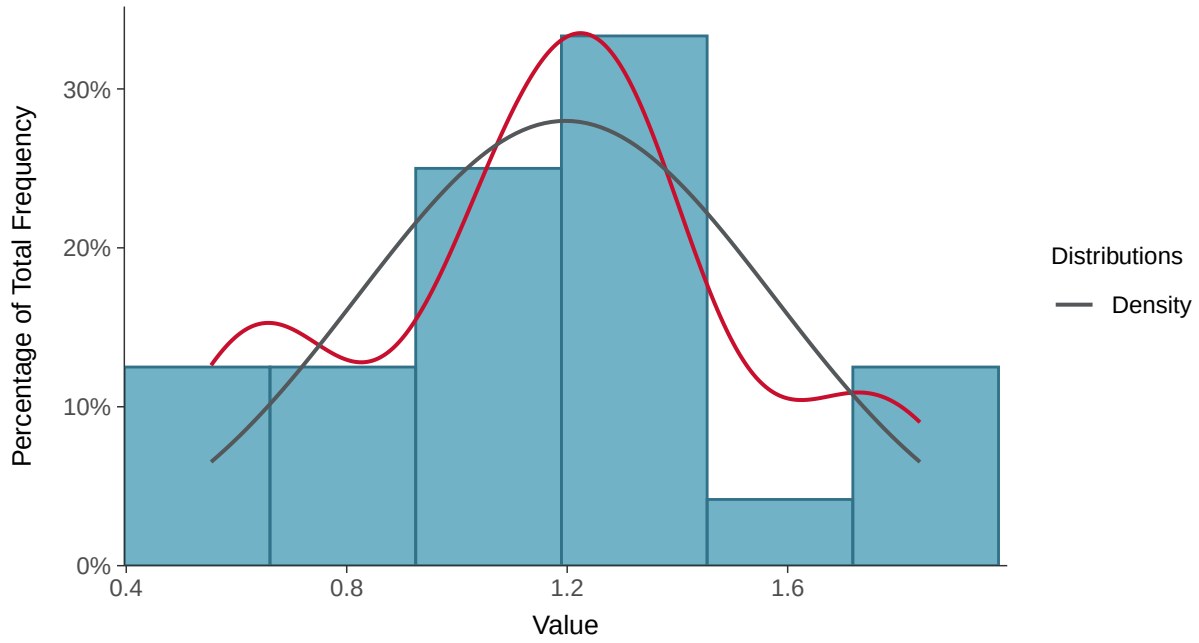
**Scatter Plot**

Radium-226+228, MW-15018 (pCi/L)



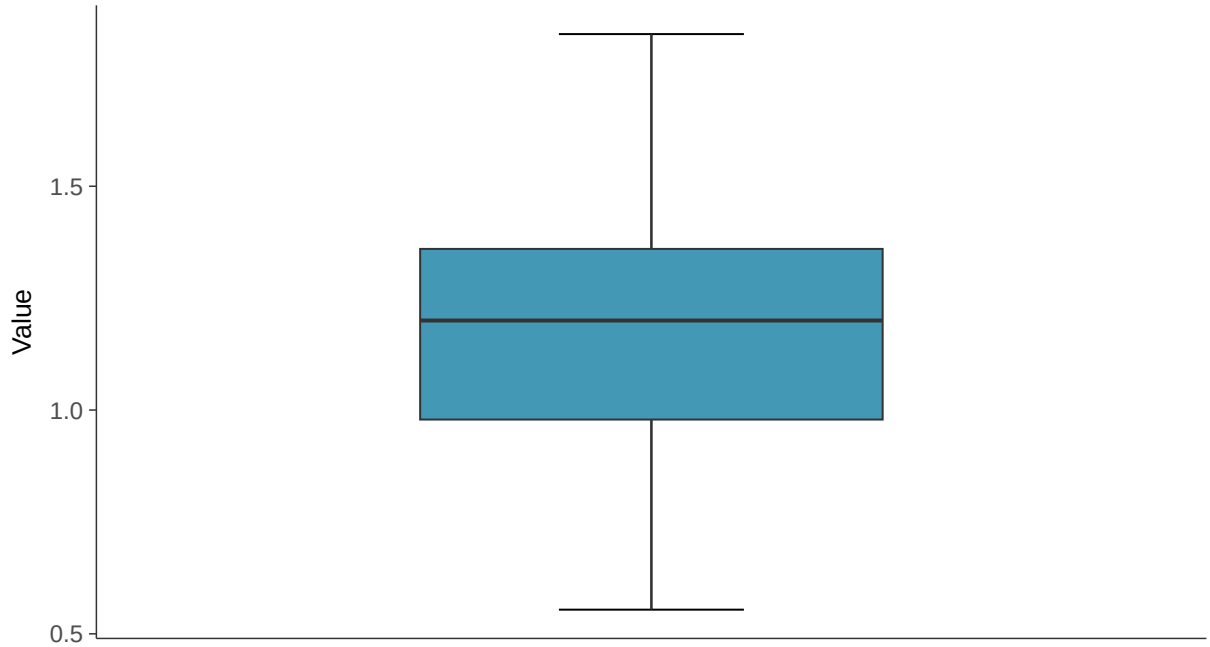

**Histogram**

Radium-226+228, MW-15018 (pCi/L)



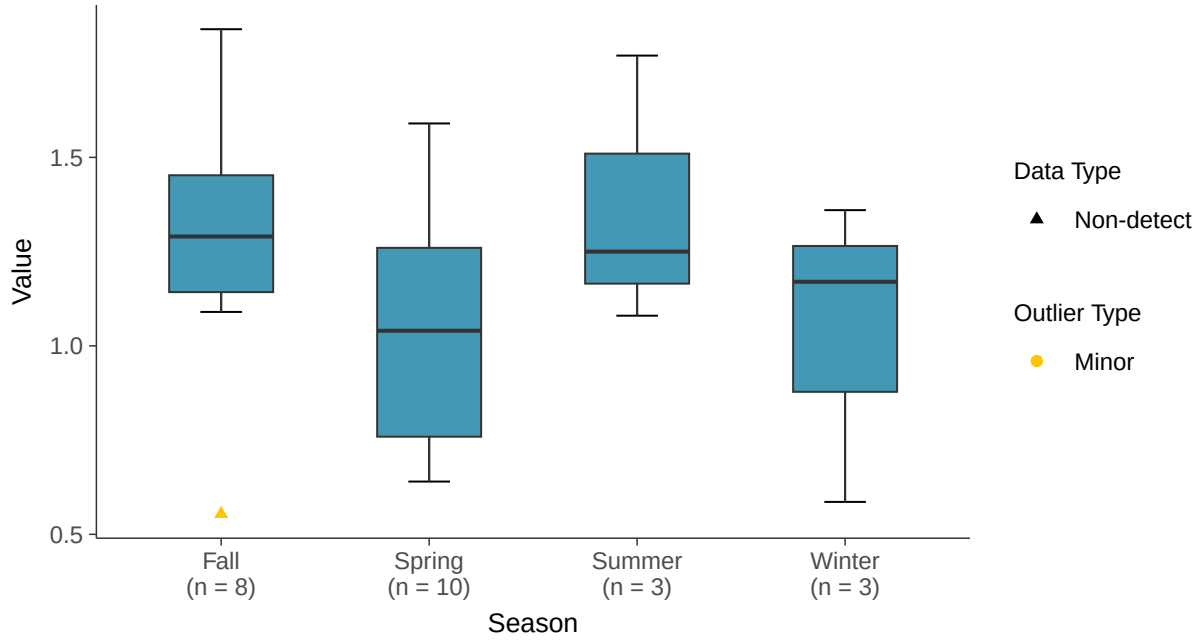
## Boxplot

Radium-226+228, MW-15018 (pCi/L)



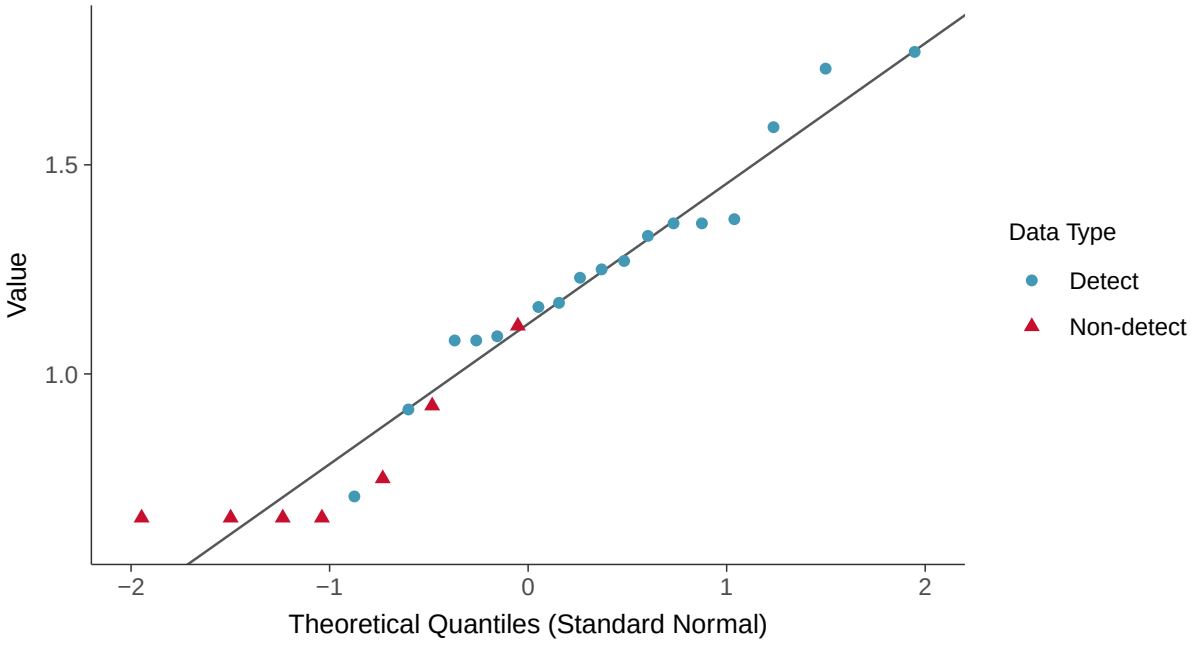

## Boxplot by Season

Radium-226+228, MW-15018 (pCi/L)



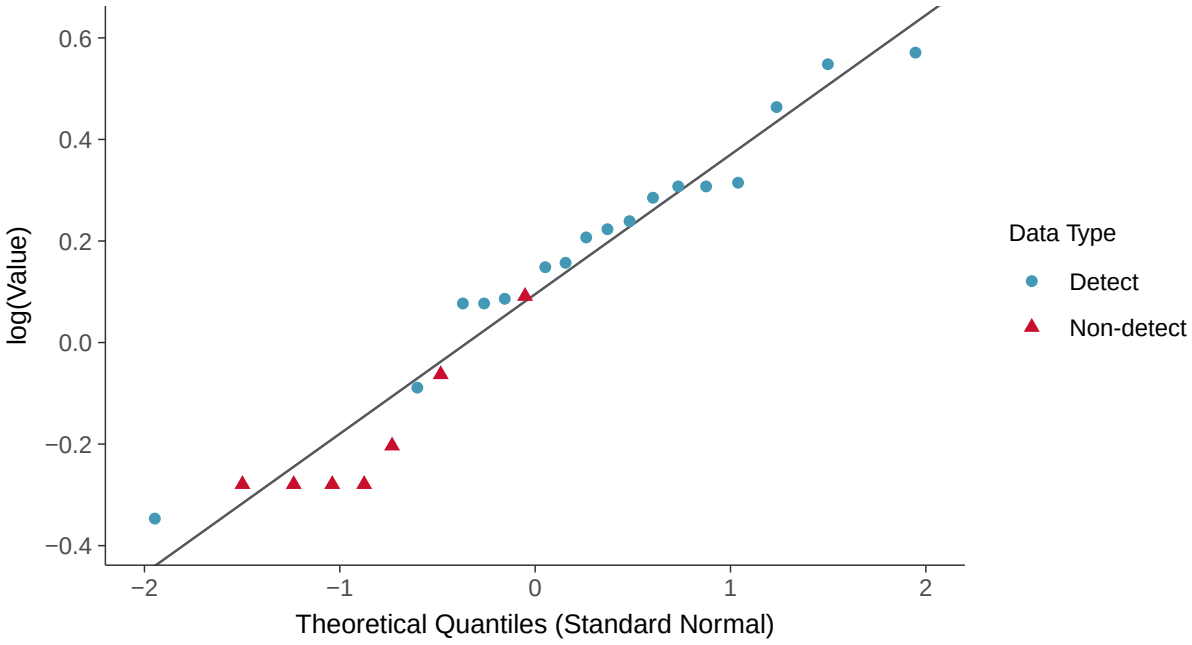
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15018 (pCi/L)



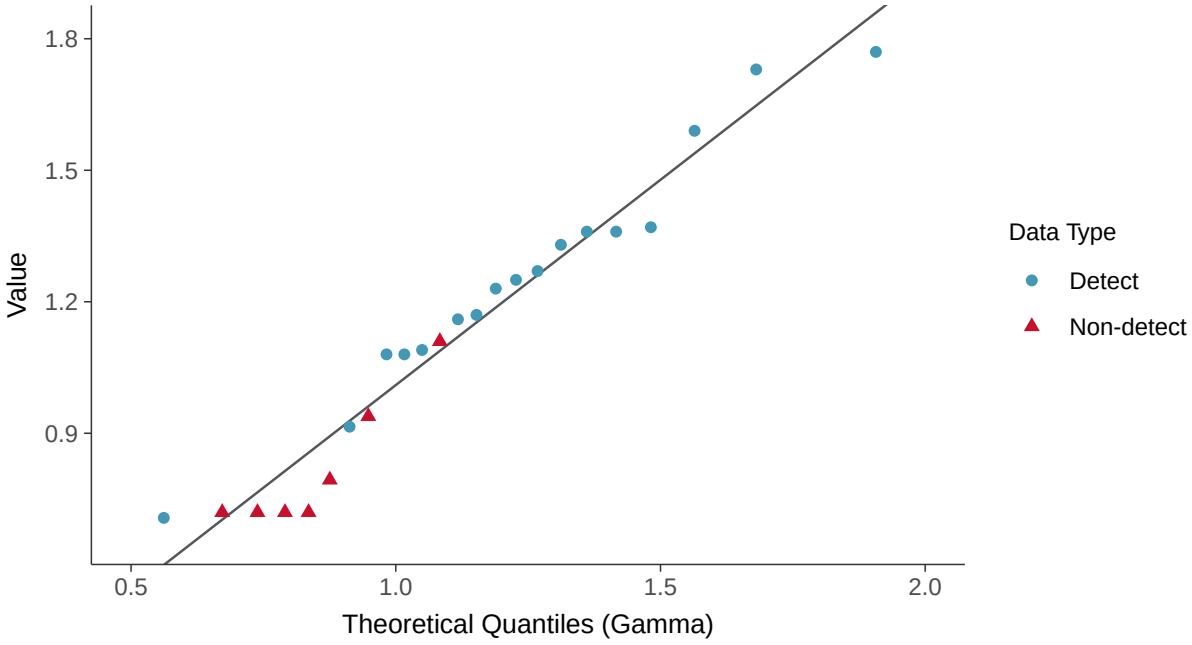

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15018 (pCi/L)



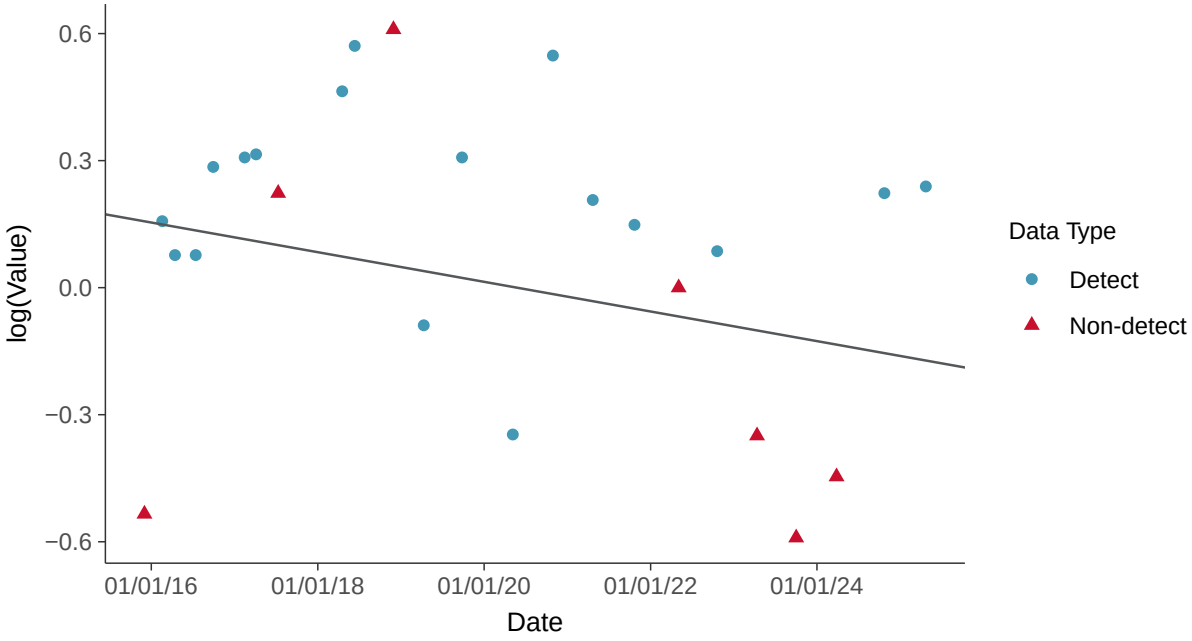
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15018 (pCi/L)



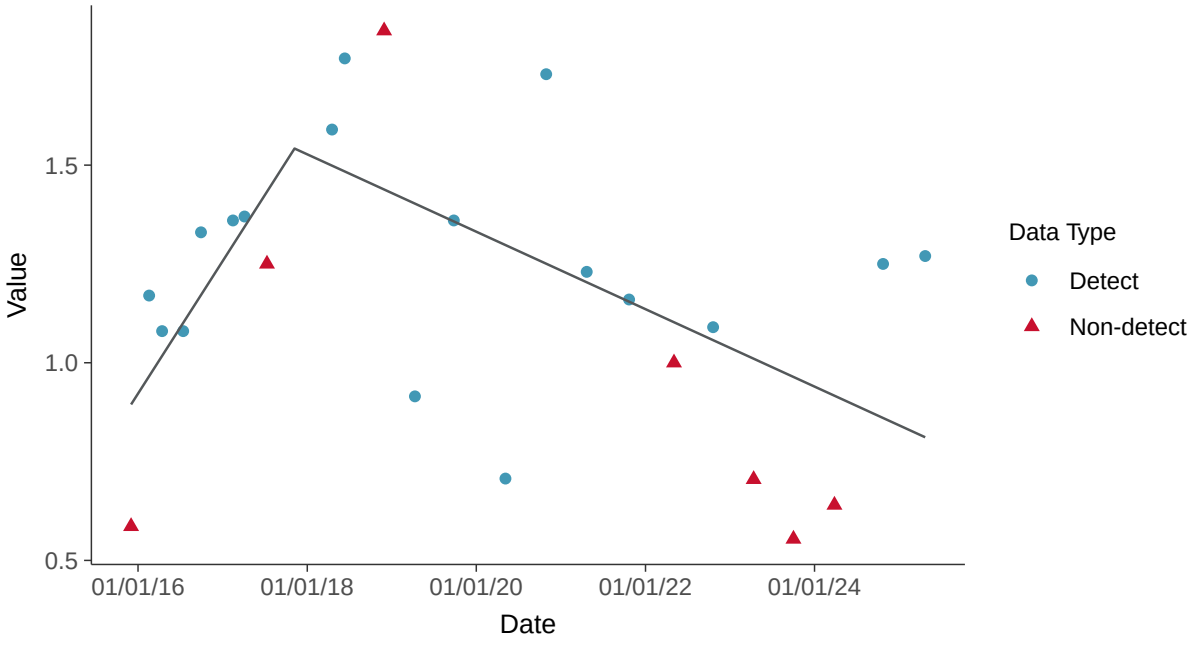

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15018 (pCi/L)



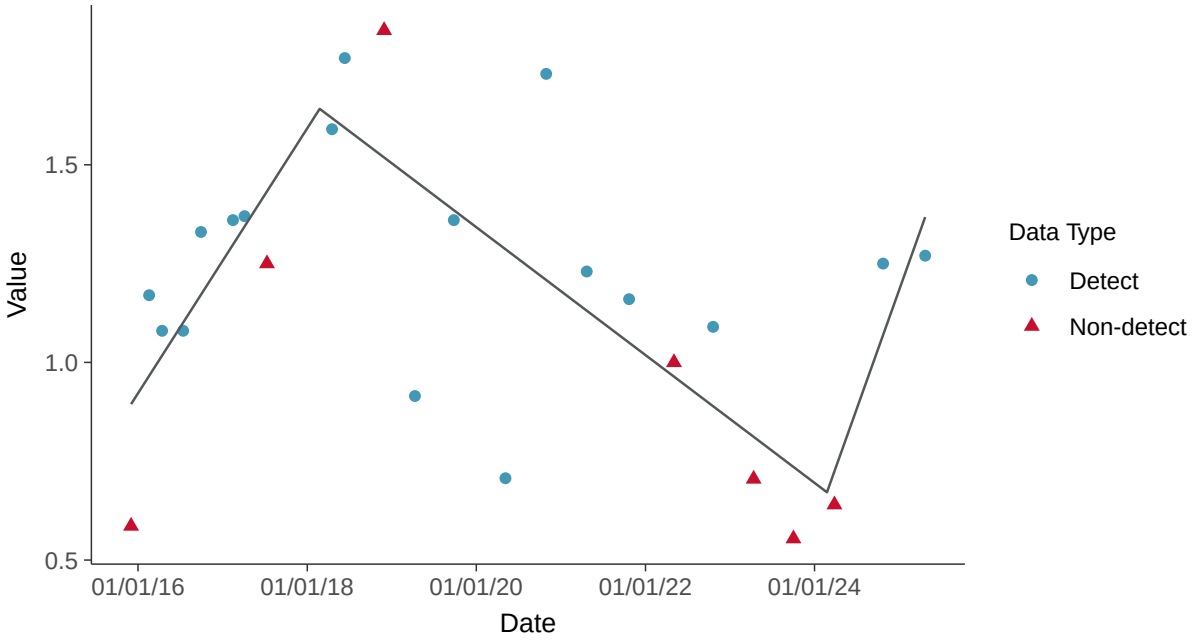
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15018 (pCi/L)



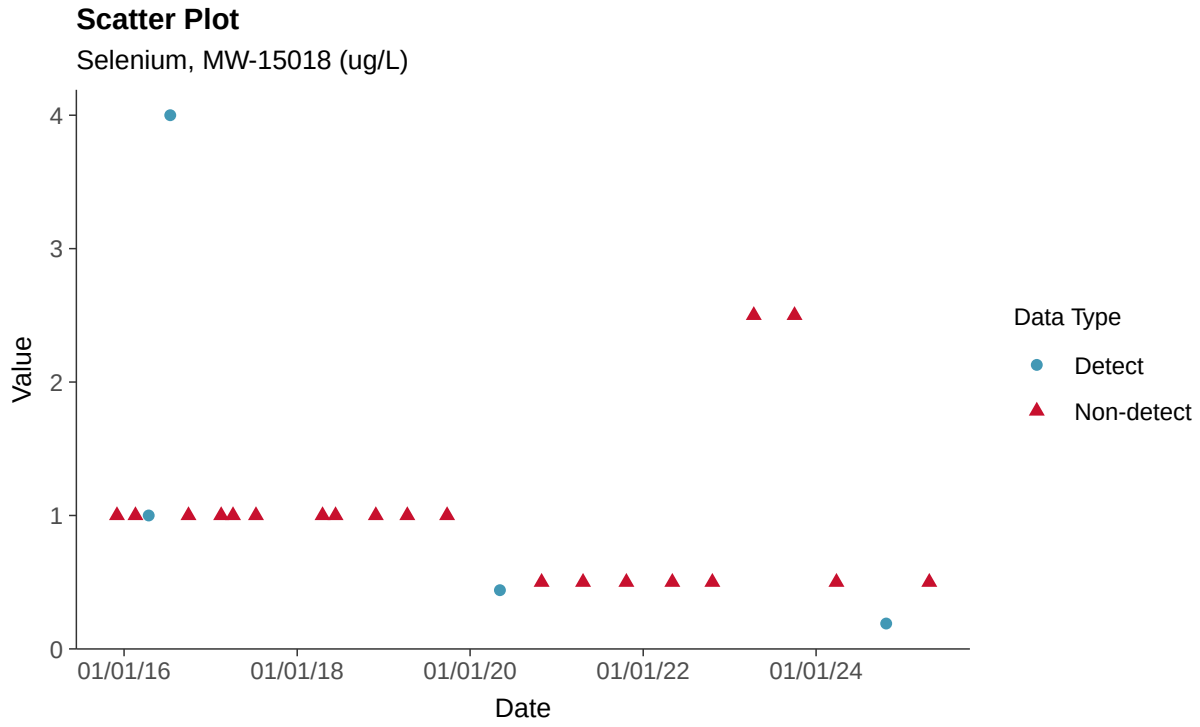

**Trend Regression: Piecewise Linear-Linear-Linear**

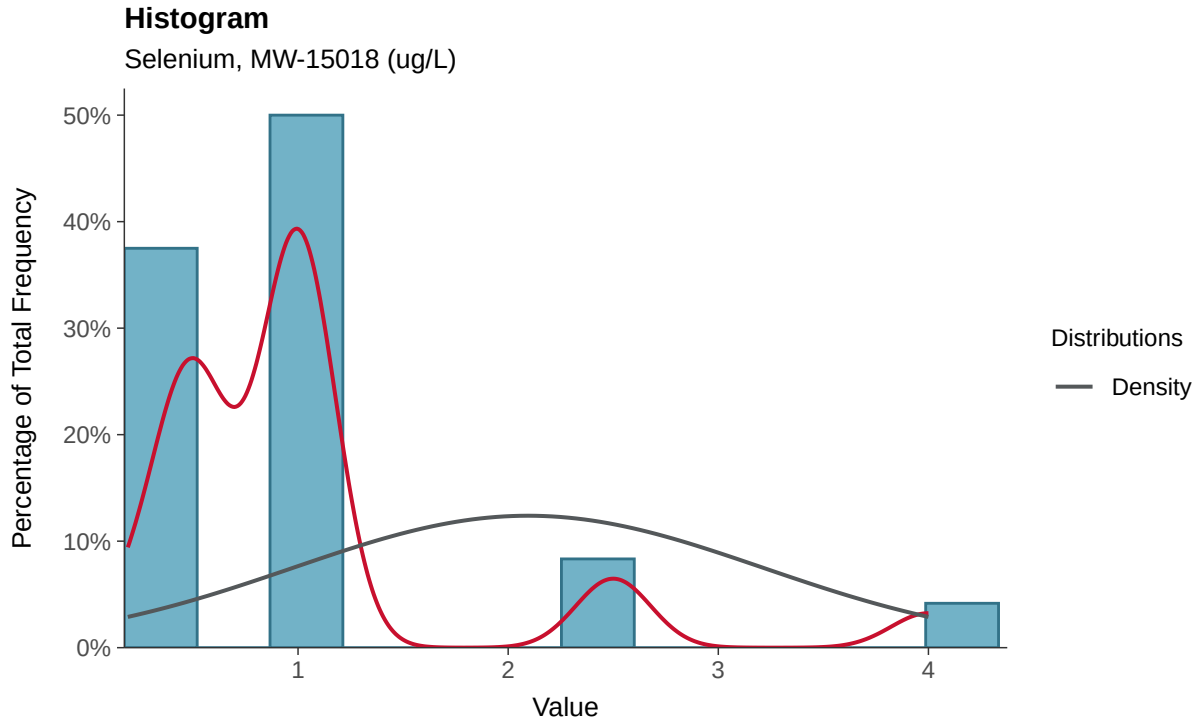
Radium-226+228, MW-15018 (pCi/L)



# Appendix IV: Selenium, MW-15018

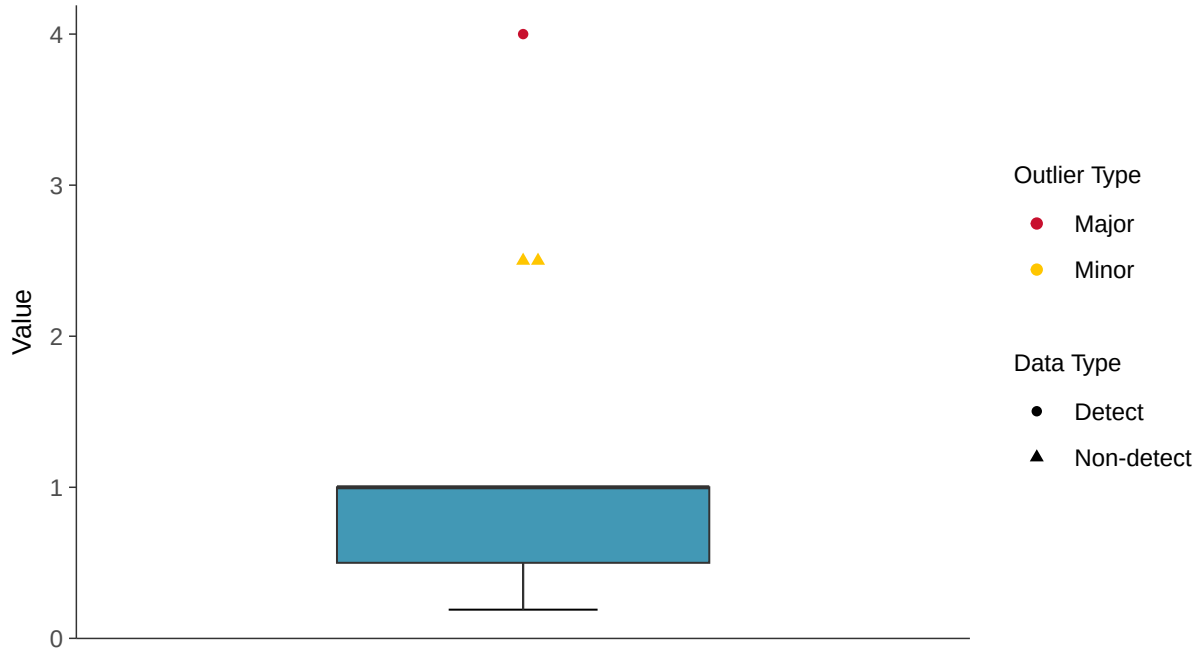
ID: 08_2_127



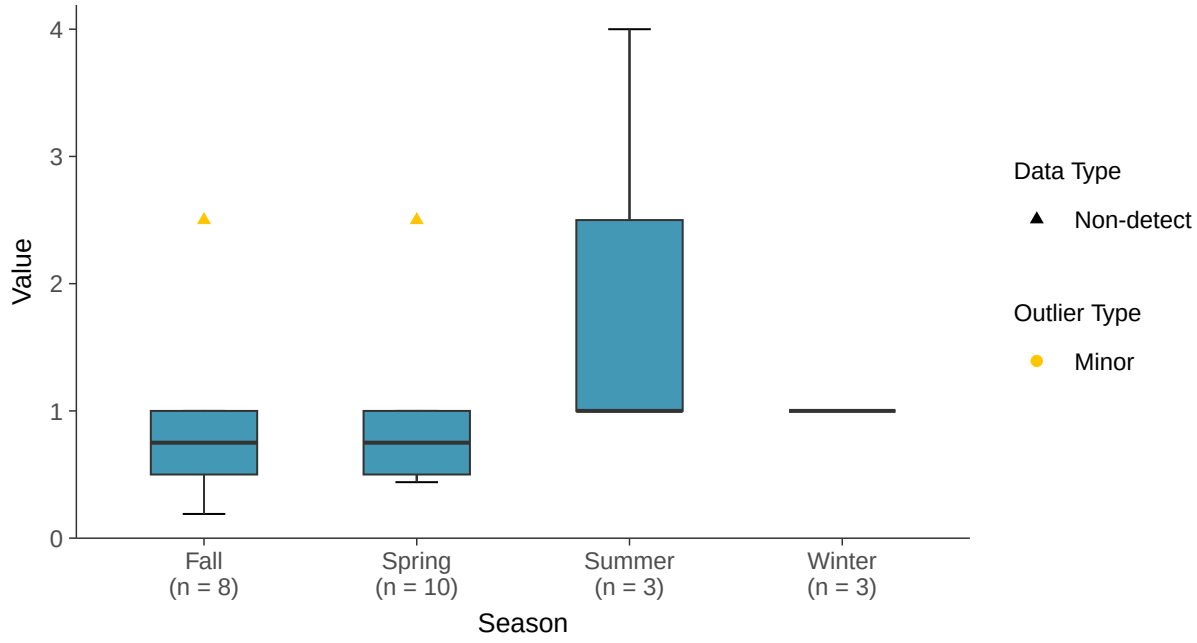
## Boxplot

Selenium, MW-15018 (ug/L)



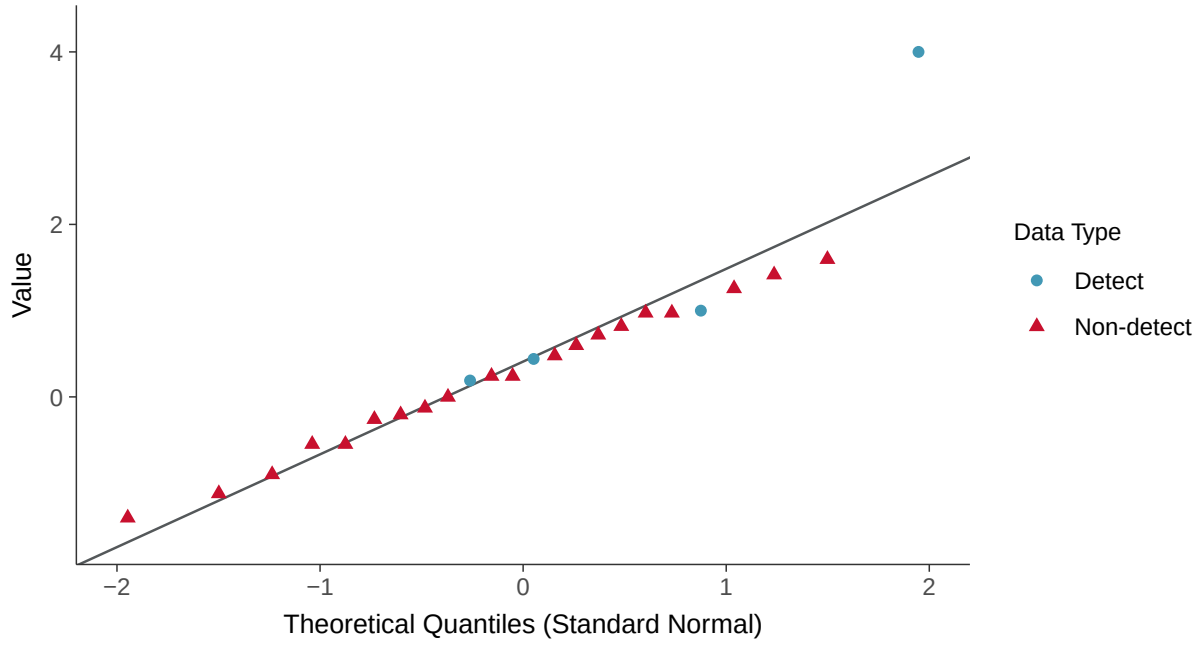

## Boxplot by Season

Selenium, MW-15018 (ug/L)



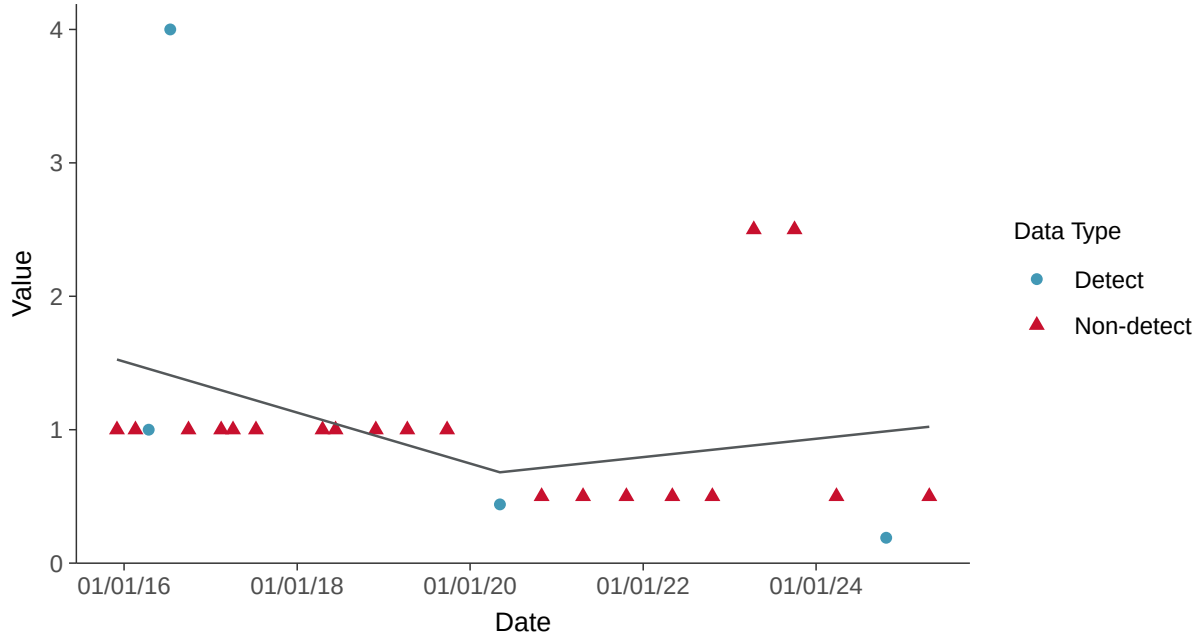
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15018 (ug/L)



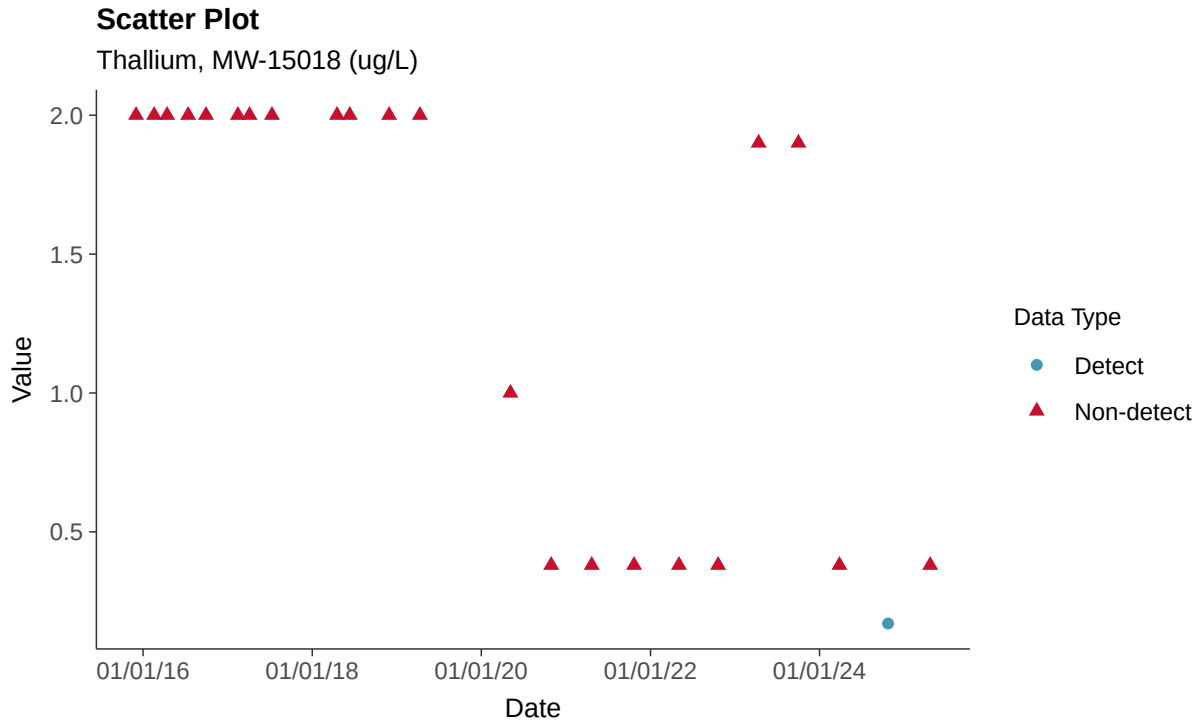

**Trend Regression: Piecewise Linear-Linear**

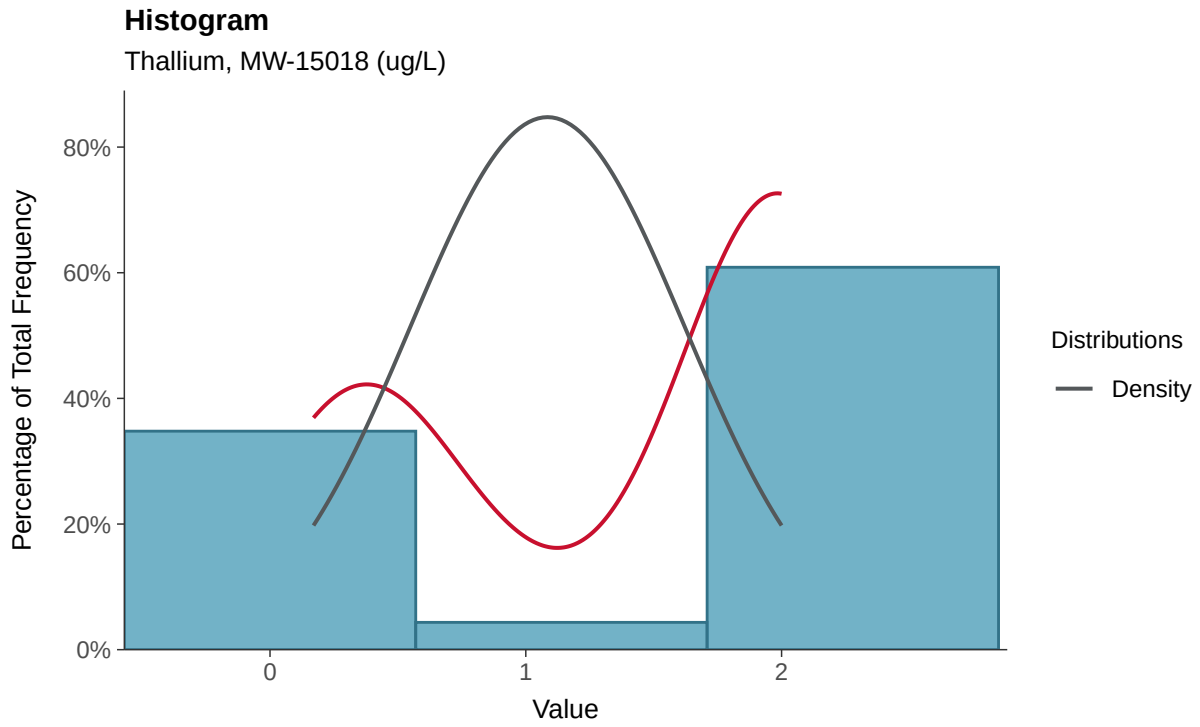
Selenium, MW-15018 (ug/L)



## Appendix IV: Thallium, MW-15018

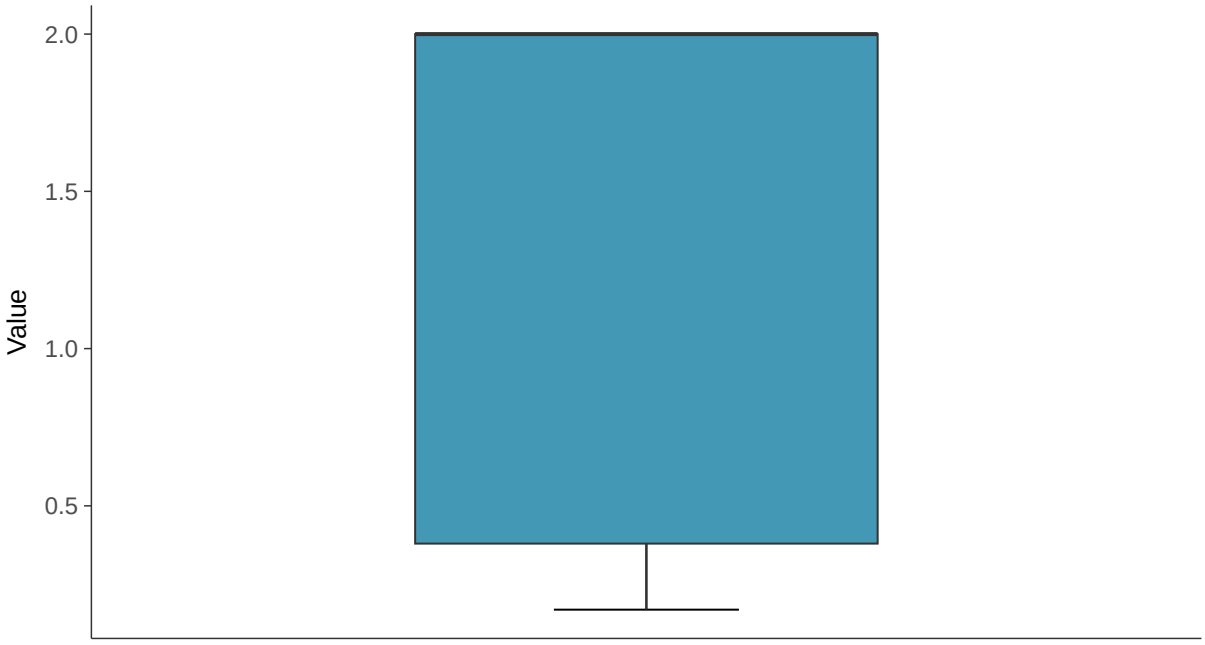
ID: 08_2_131



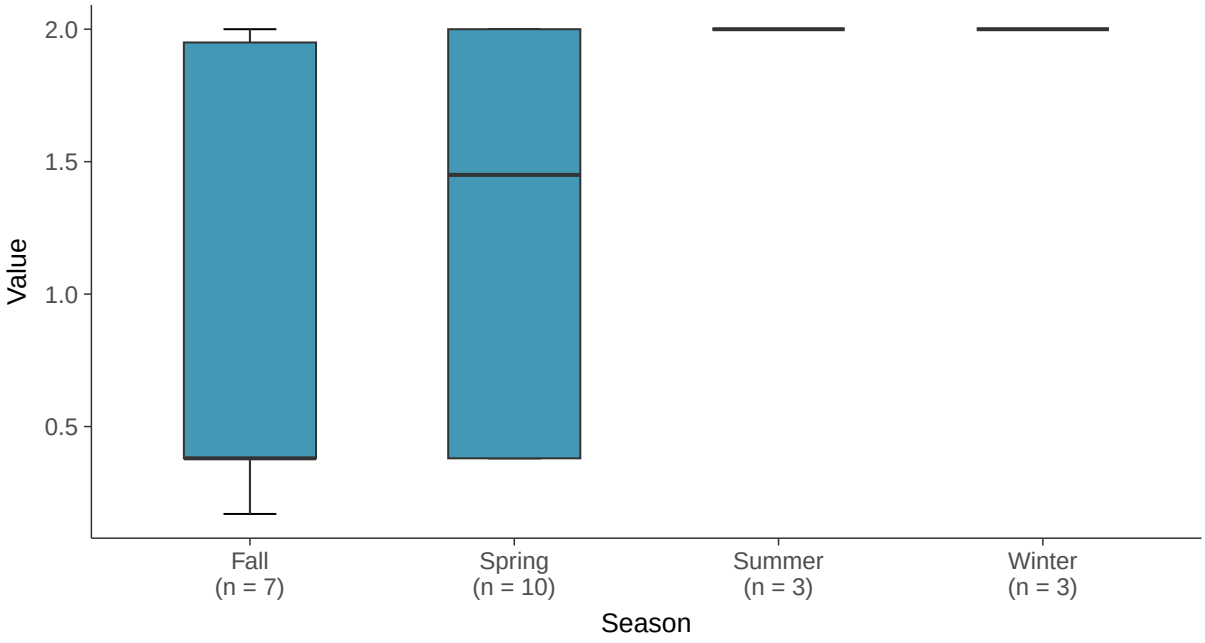
**Boxplot**

Thallium, MW-15018 (ug/L)



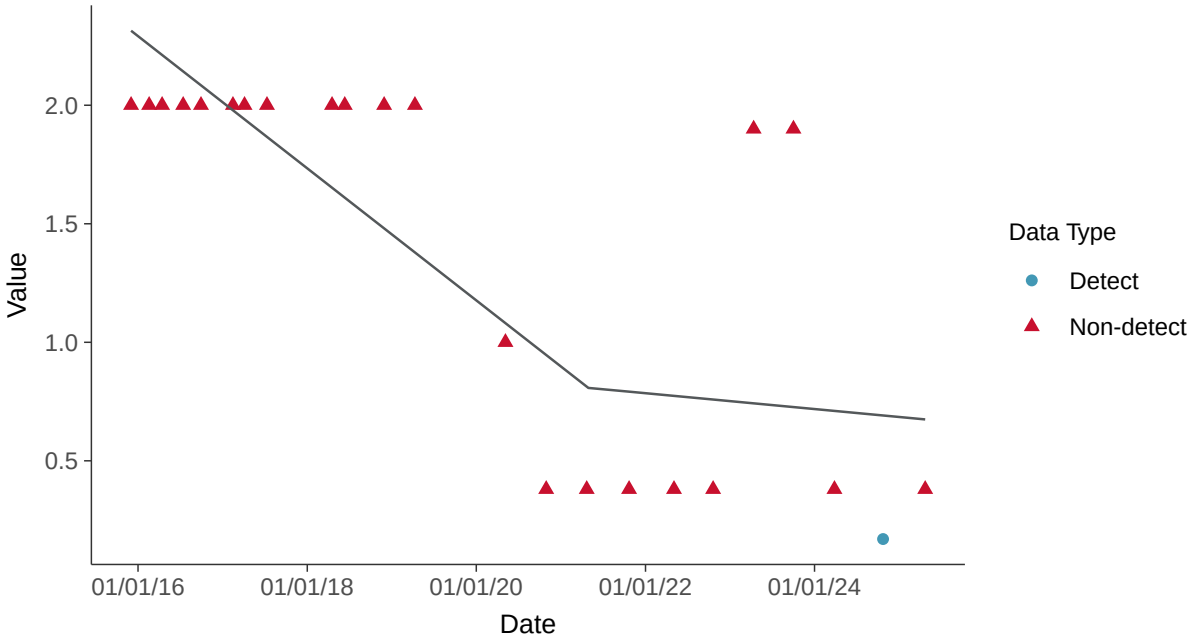

**Boxplot by Season**

Thallium, MW-15018 (ug/L)



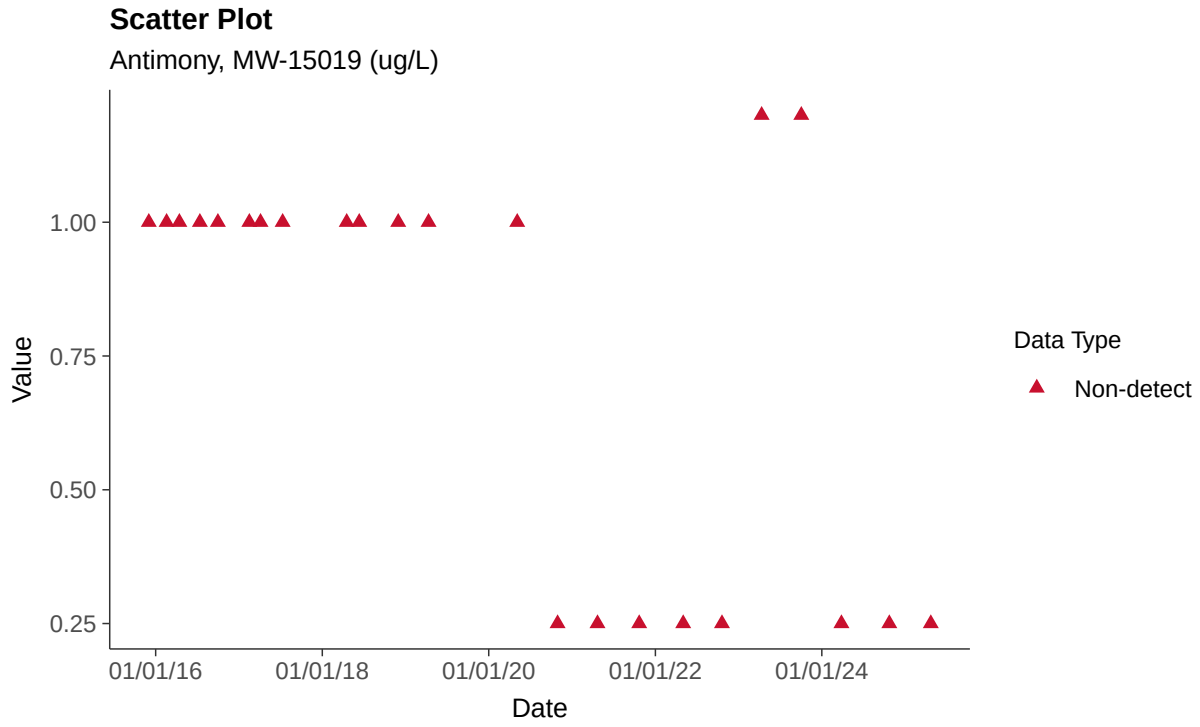
**Trend Regression: Piecewise Linear-Linear**

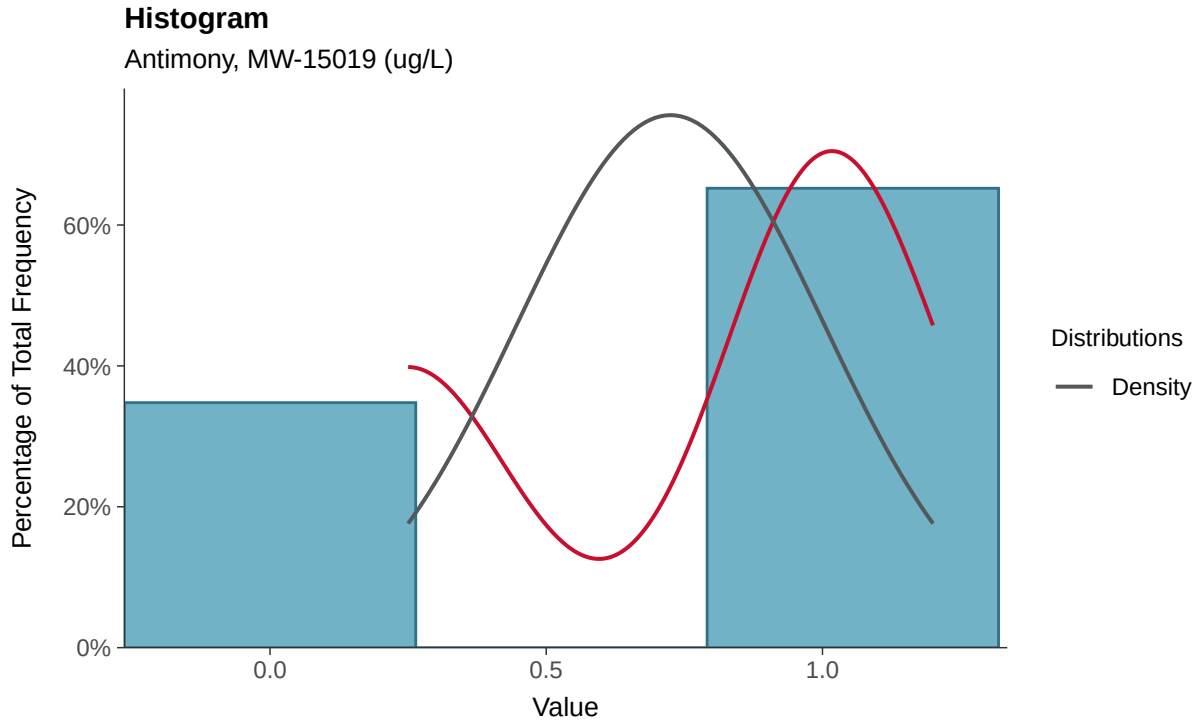
Thallium, MW-15018 (ug/L)



## Appendix IV: Antimony, MW-15019

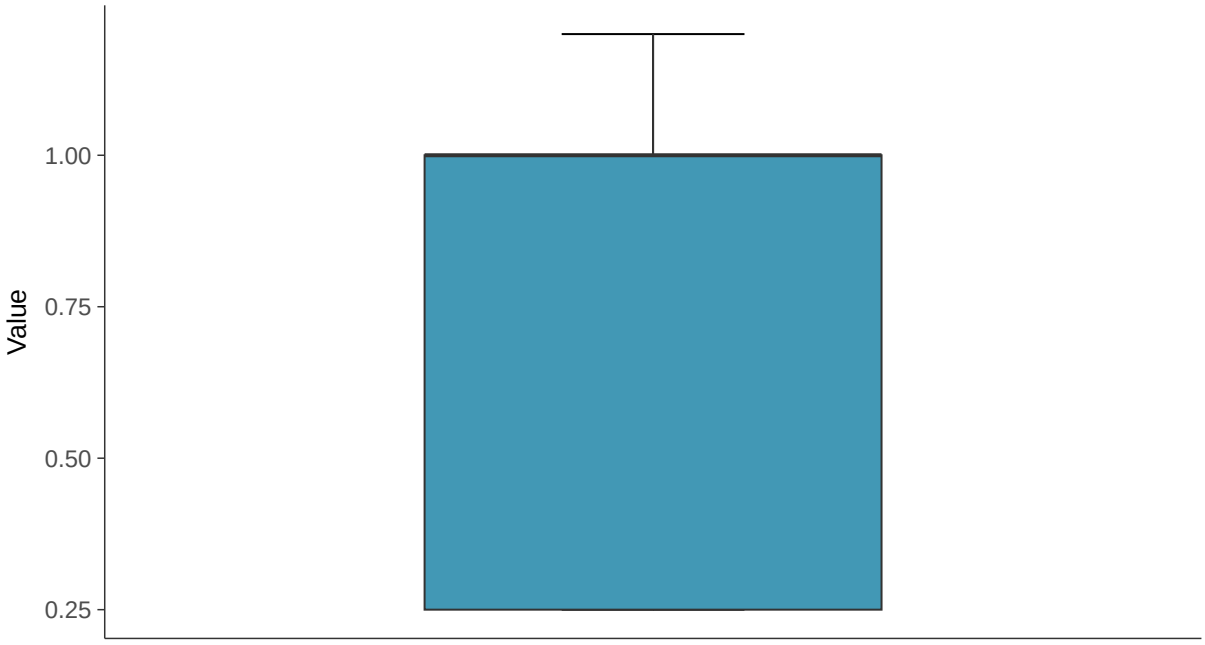
ID: 09_2_101



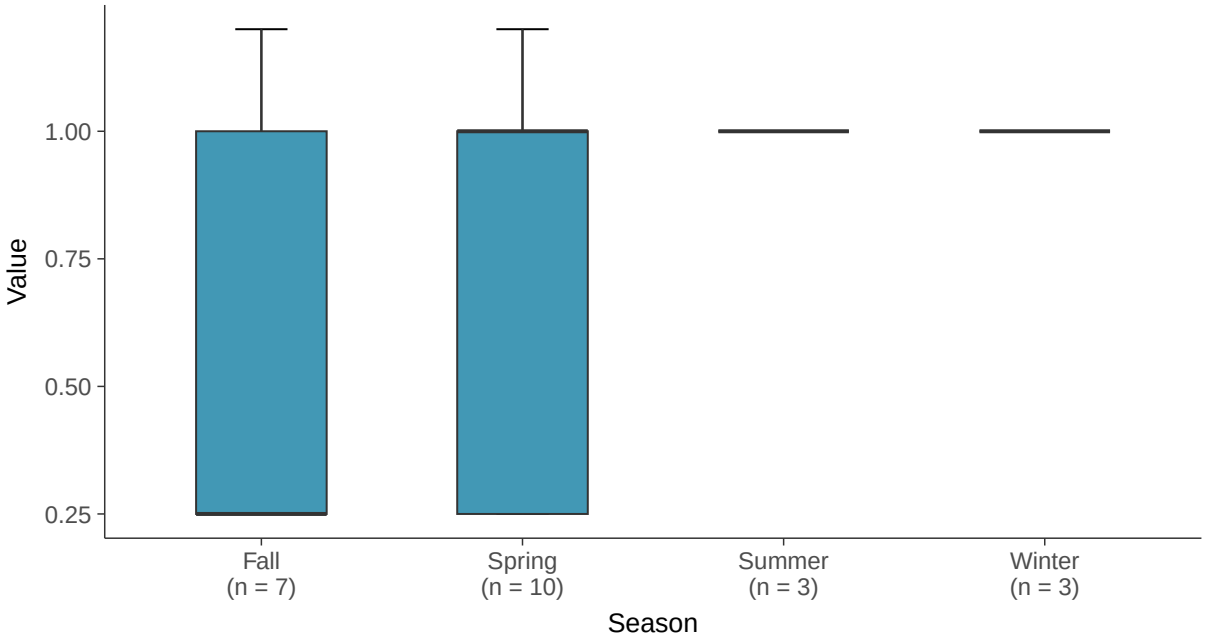
**Boxplot**

Antimony, MW-15019 (ug/L)



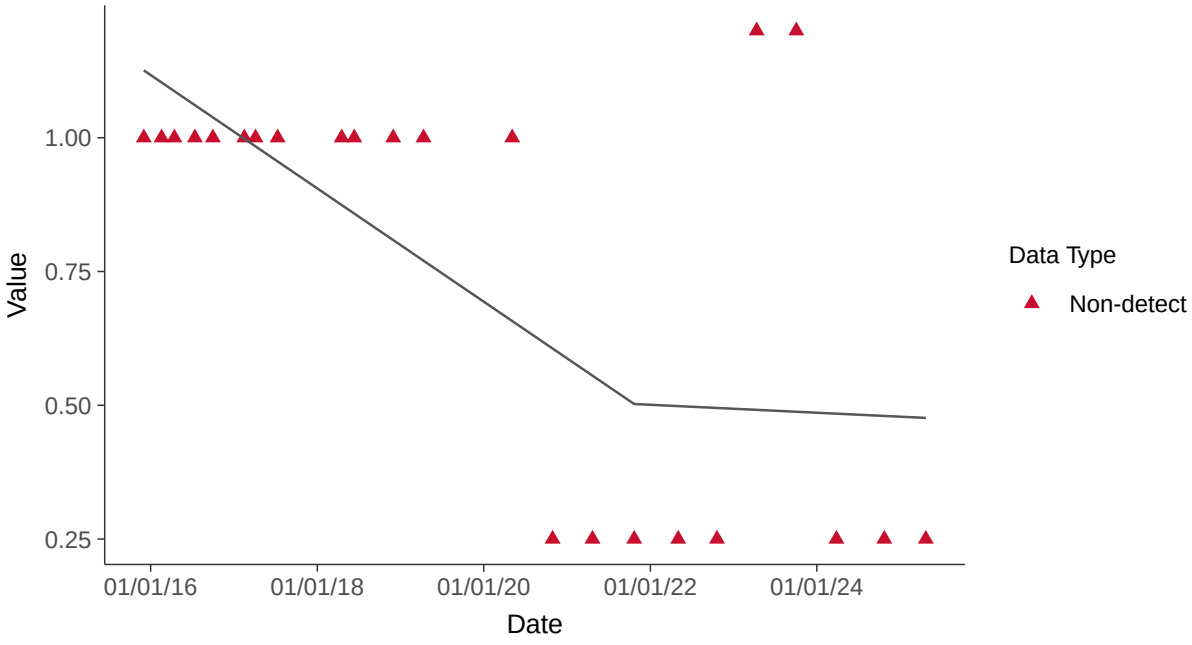

**Boxplot by Season**

Antimony, MW-15019 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15019 (ug/L)

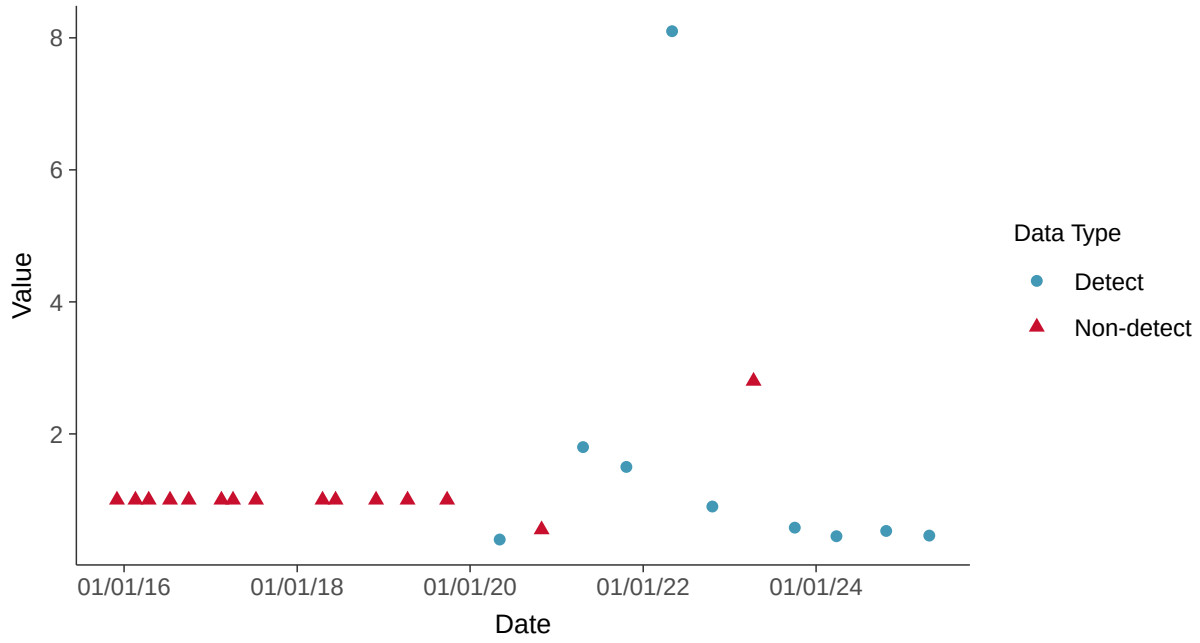


# Appendix IV: Arsenic, MW-15019

ID: 09_2_102

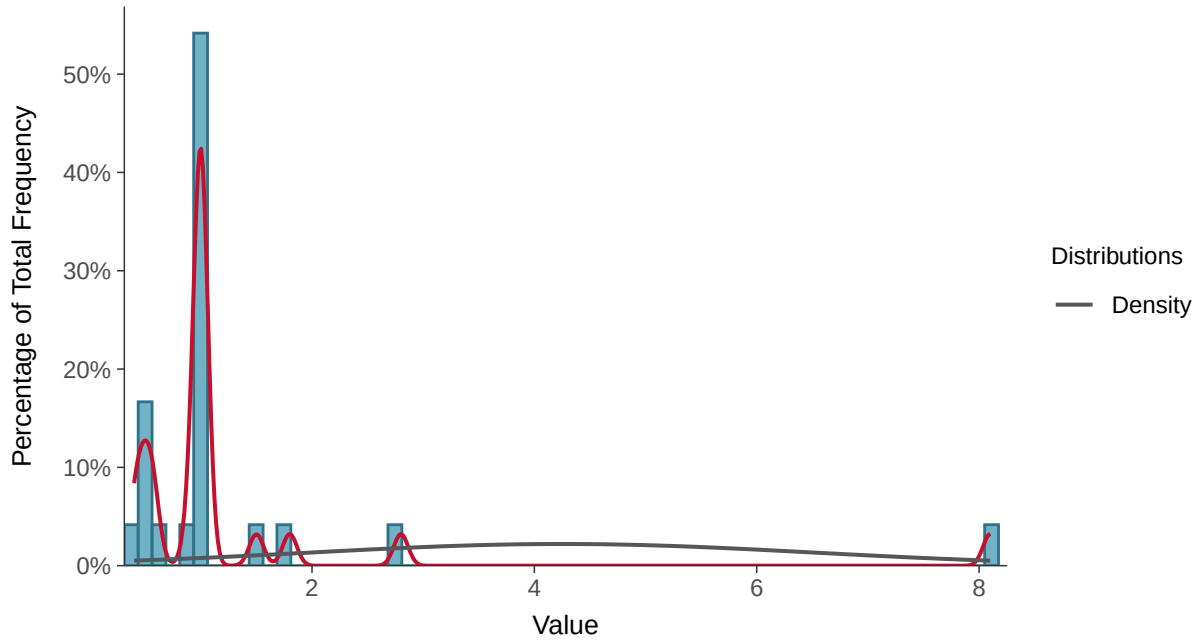
**Scatter Plot**

Arsenic, MW-15019 (ug/L)



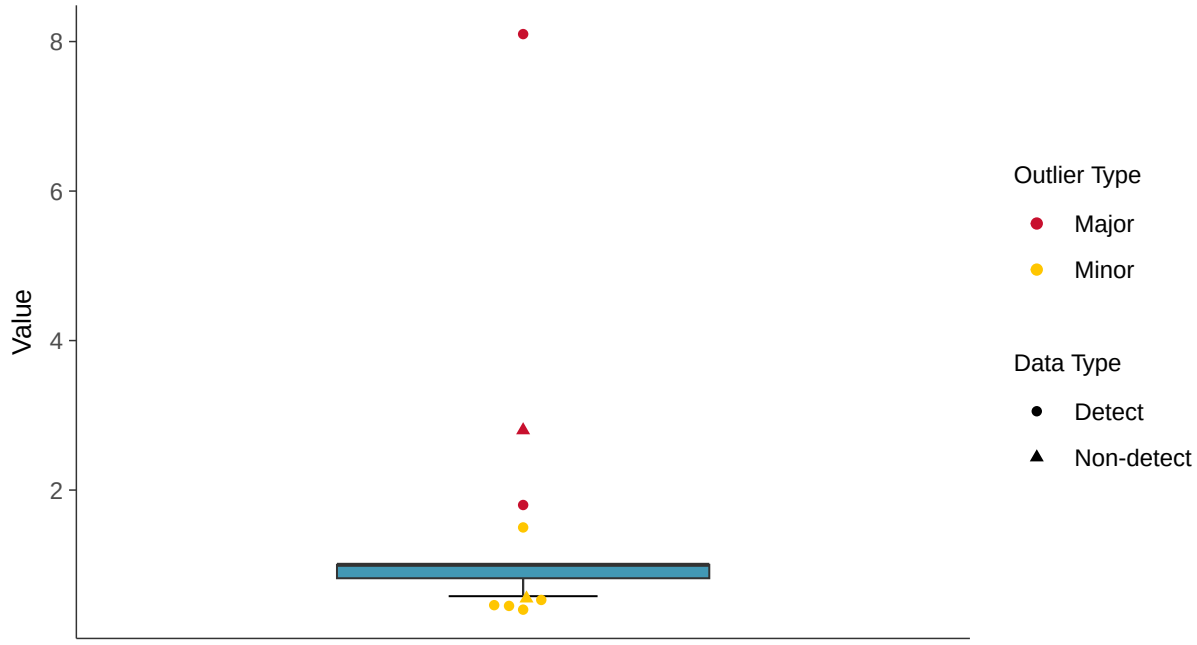

**Histogram**

Arsenic, MW-15019 (ug/L)



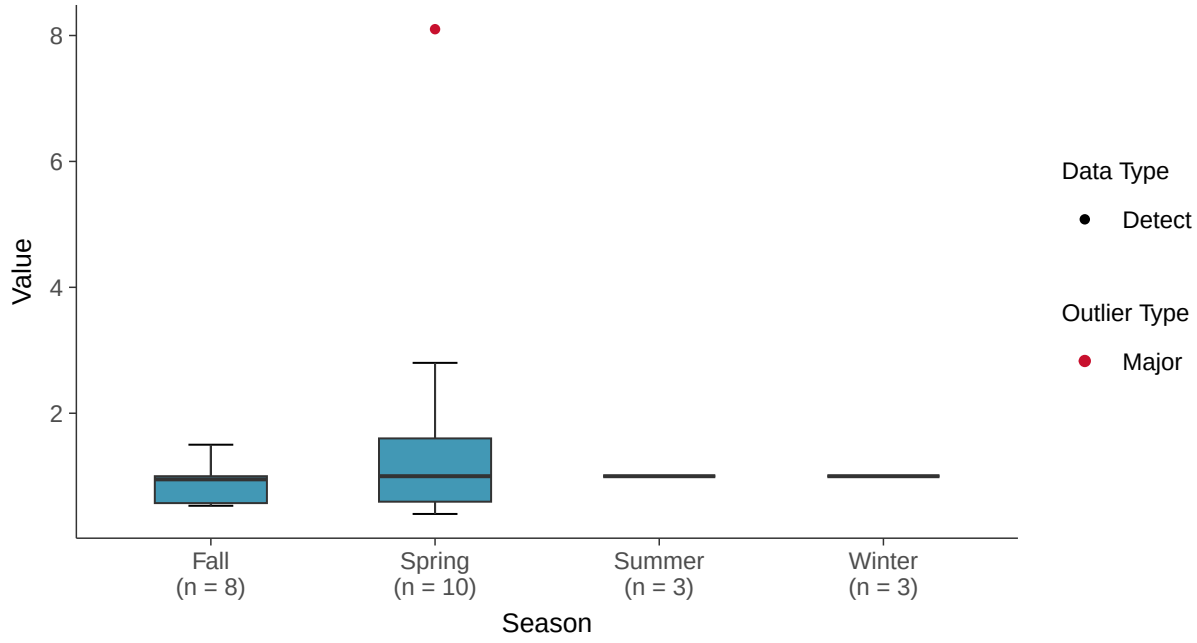
## Boxplot

Arsenic, MW-15019 (ug/L)



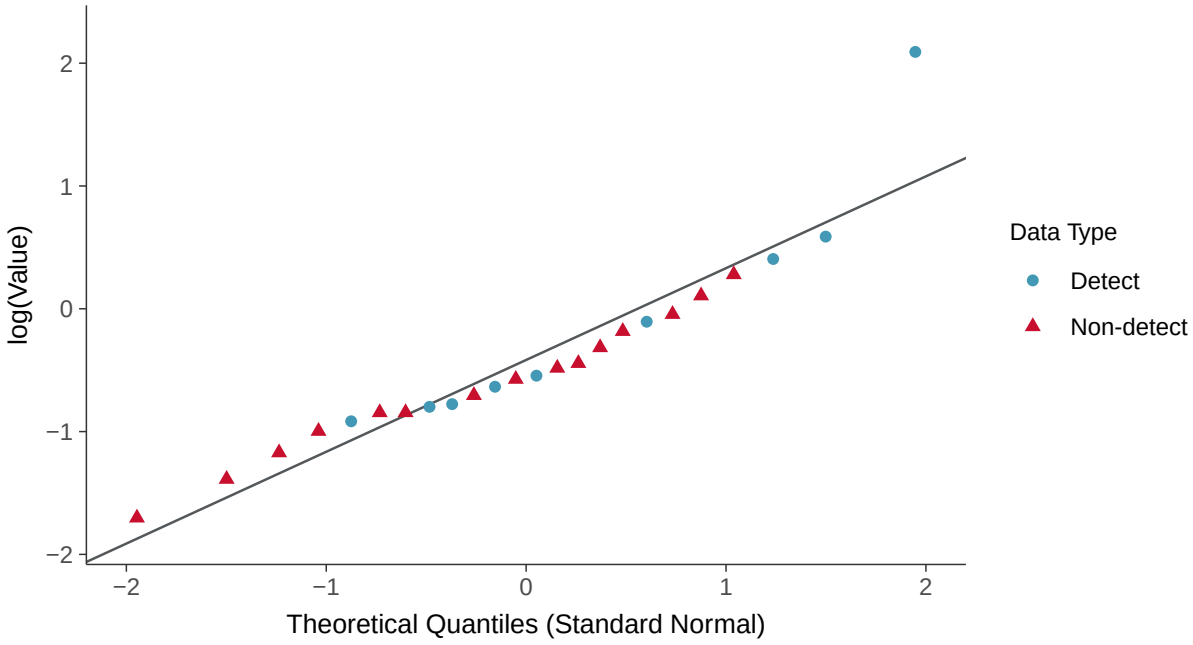

## Boxplot by Season

Arsenic, MW-15019 (ug/L)



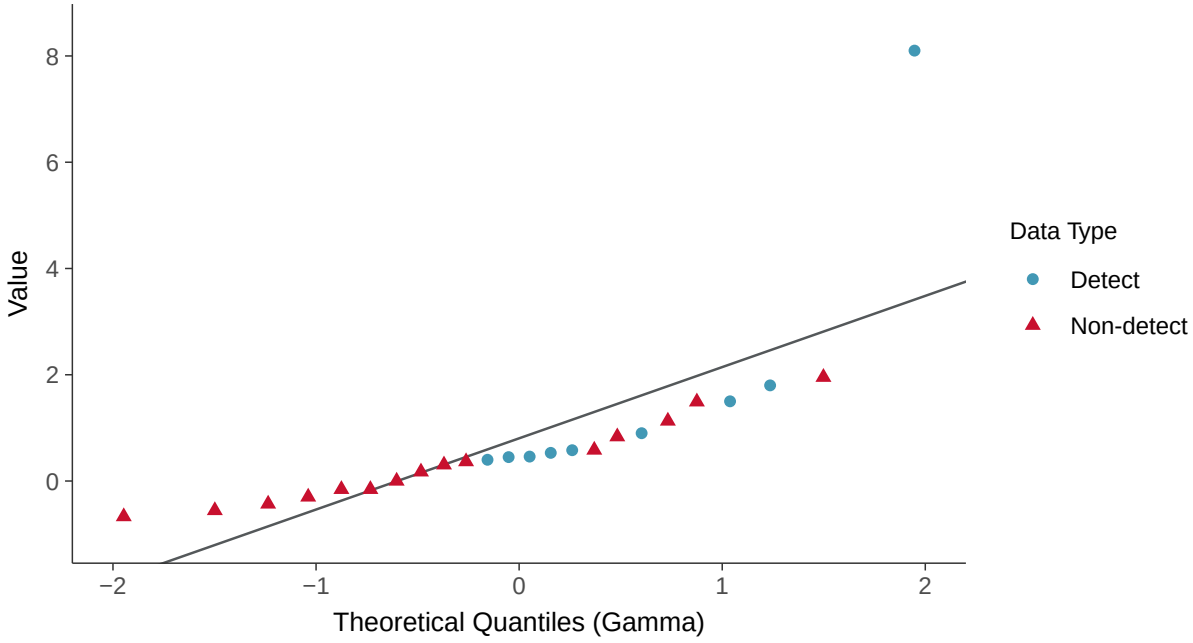
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15019 (ug/L)



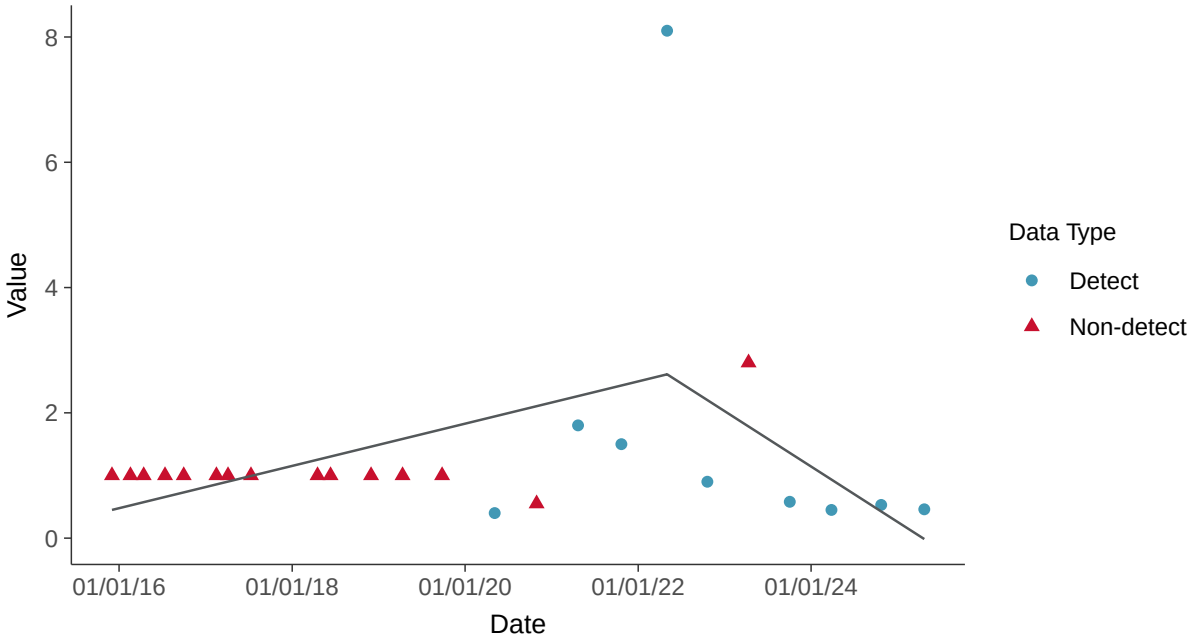

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15019 (ug/L)



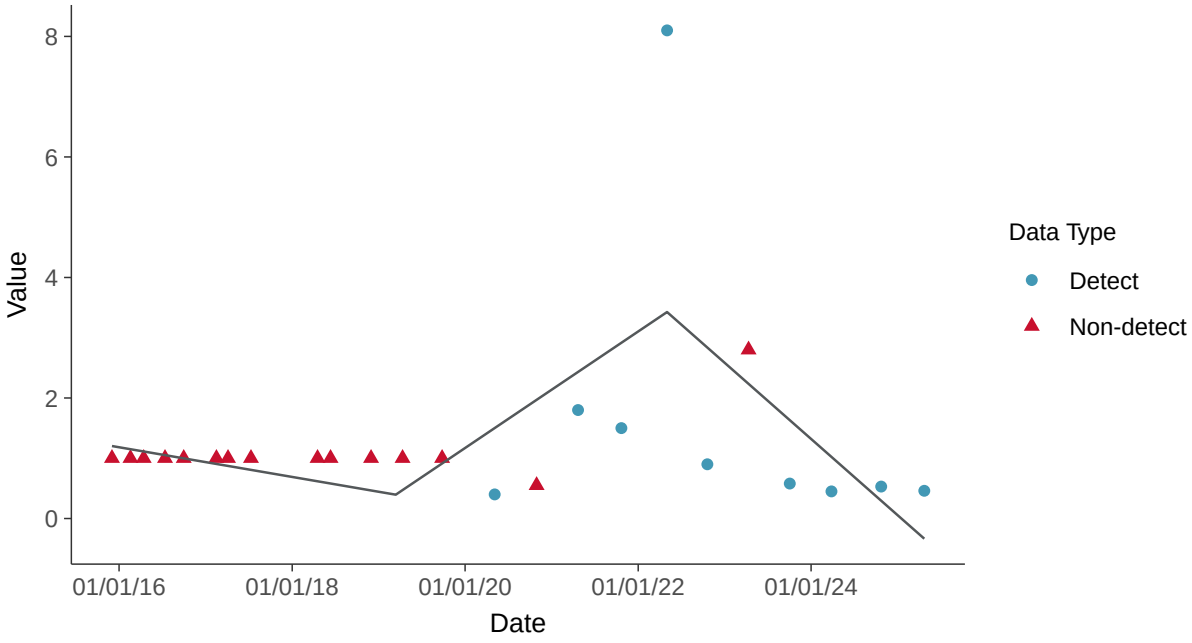
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15019 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15019 (ug/L)

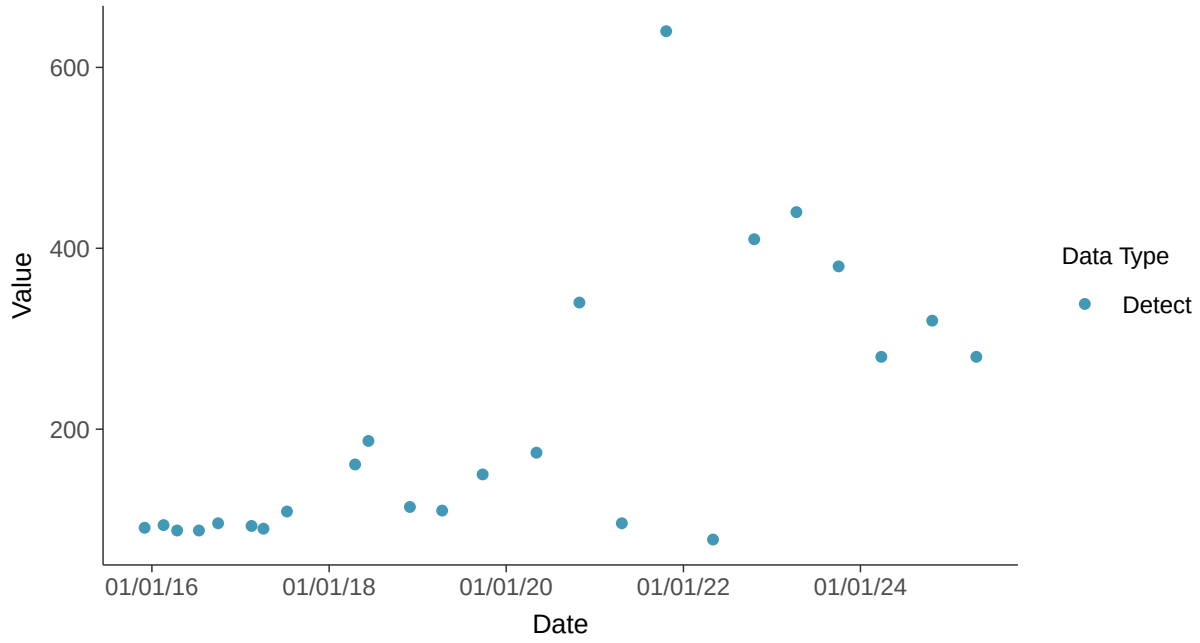


## Appendix IV: Barium, MW-15019

ID: 09_2_103

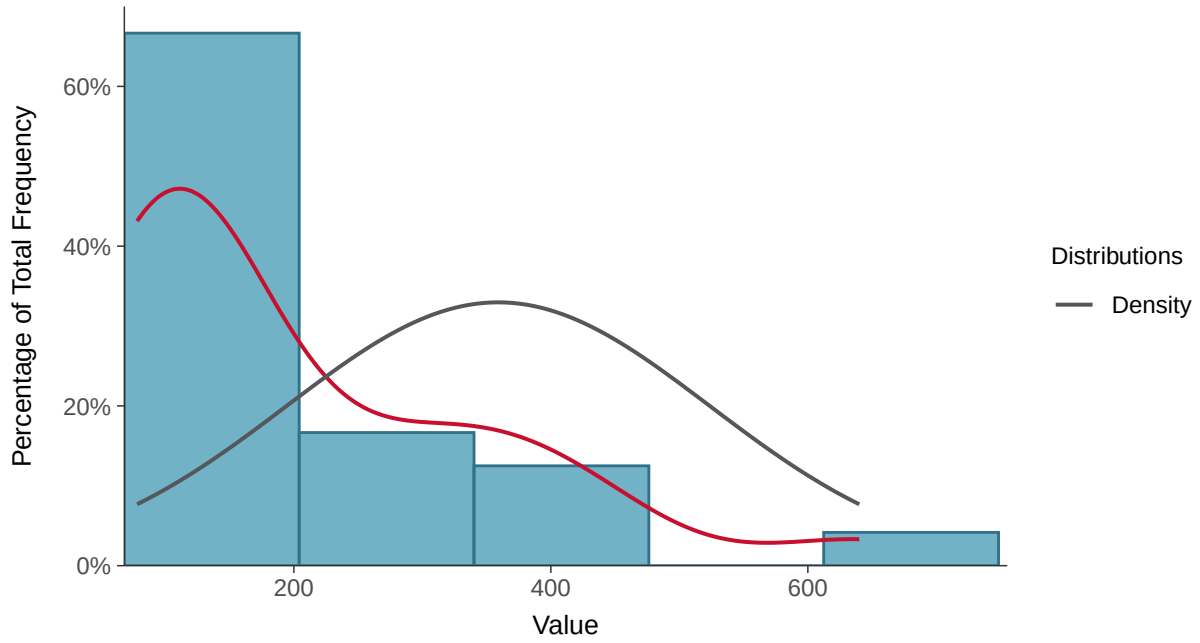
**Scatter Plot**

Barium, MW-15019 (ug/L)



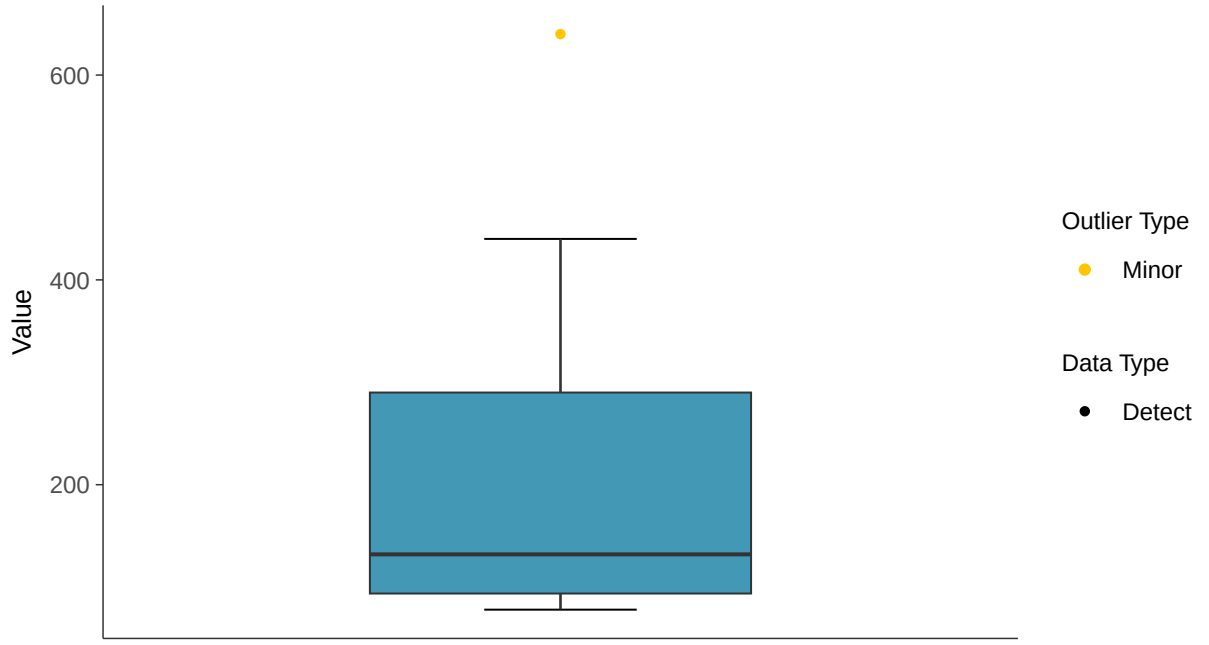

**Histogram**

Barium, MW-15019 (ug/L)



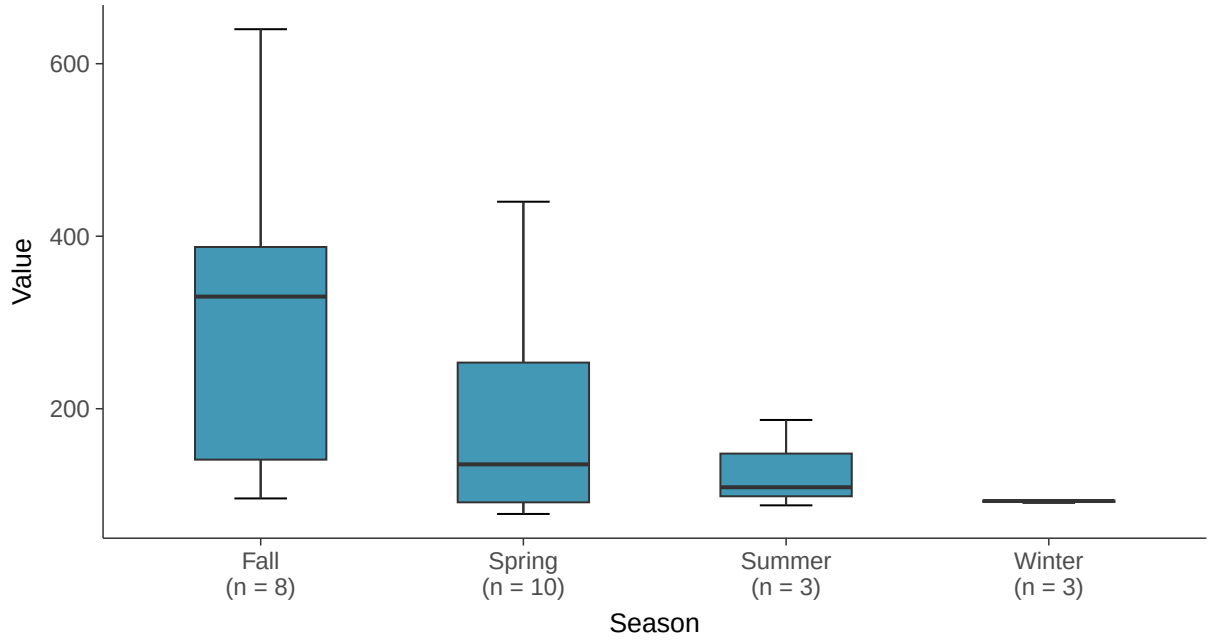
**Boxplot**

Barium, MW-15019 (ug/L)



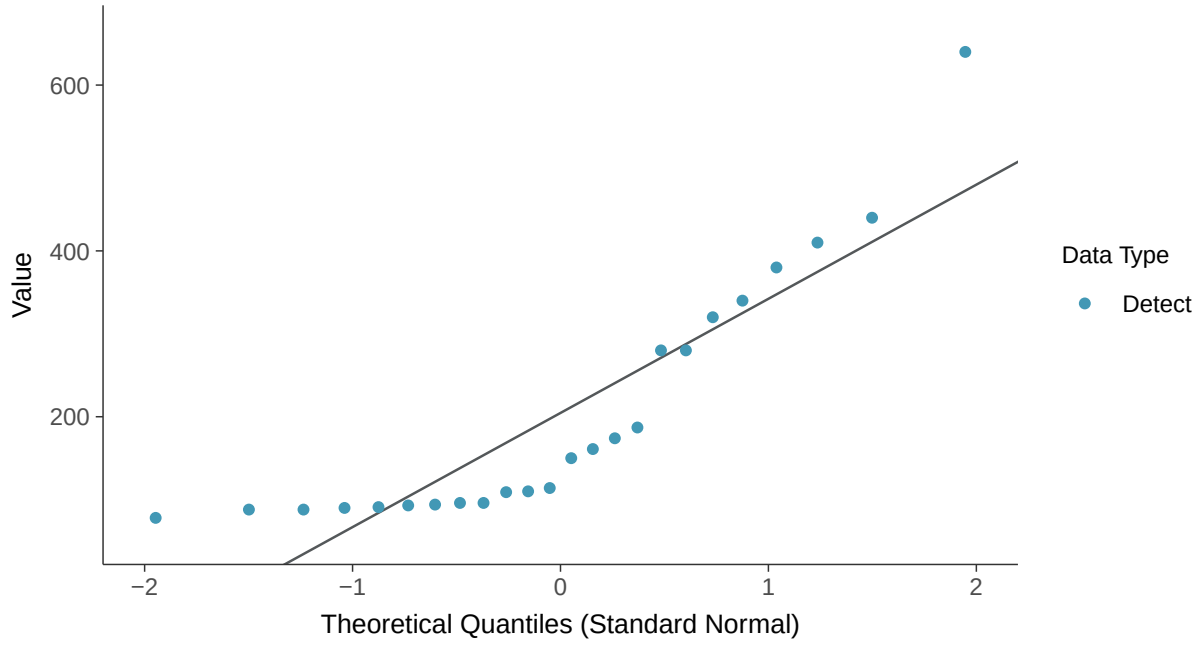

**Boxplot by Season**

Barium, MW-15019 (ug/L)



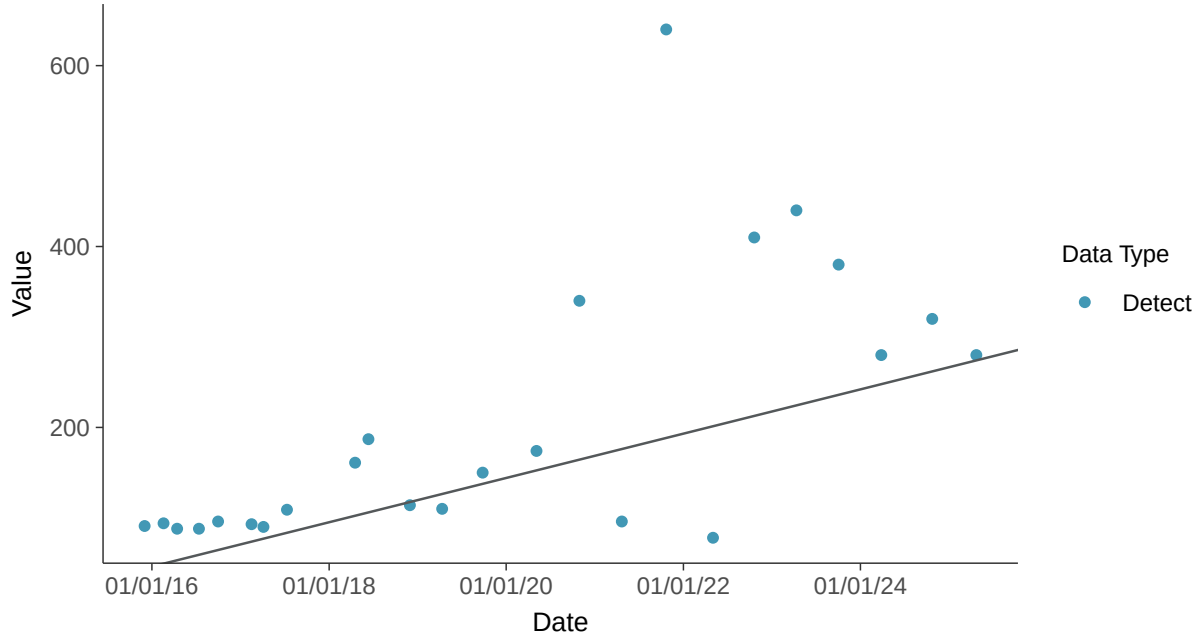
**Normal Q-Q plot**

Barium, MW-15019 (ug/L)



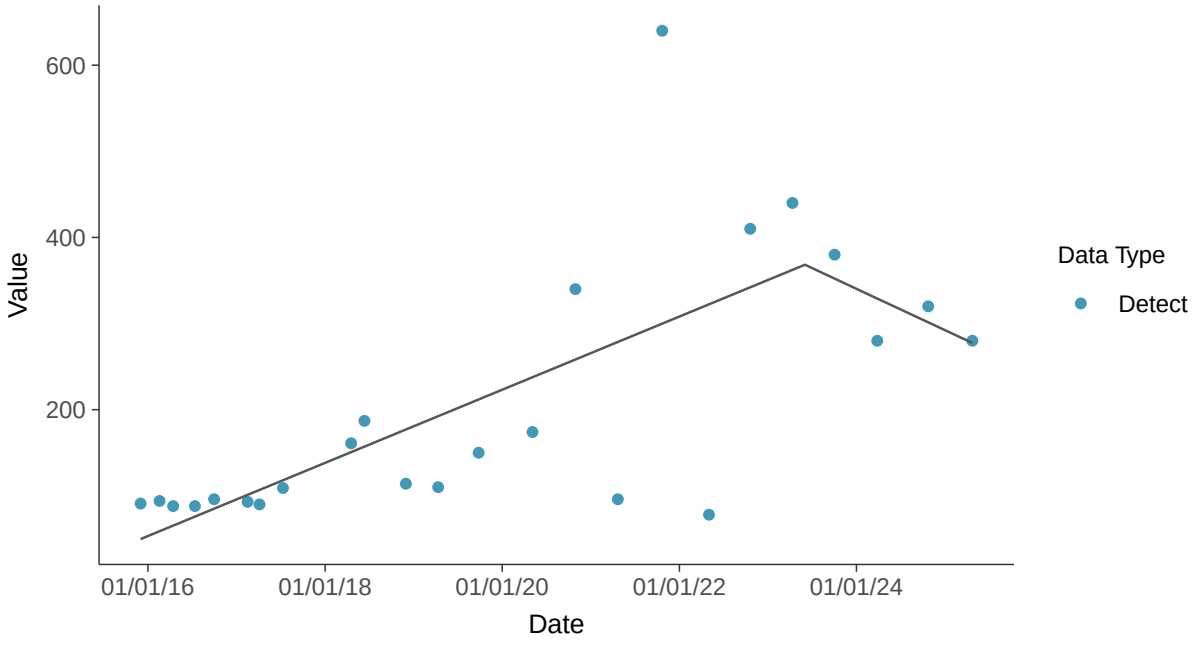

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15019 (ug/L)



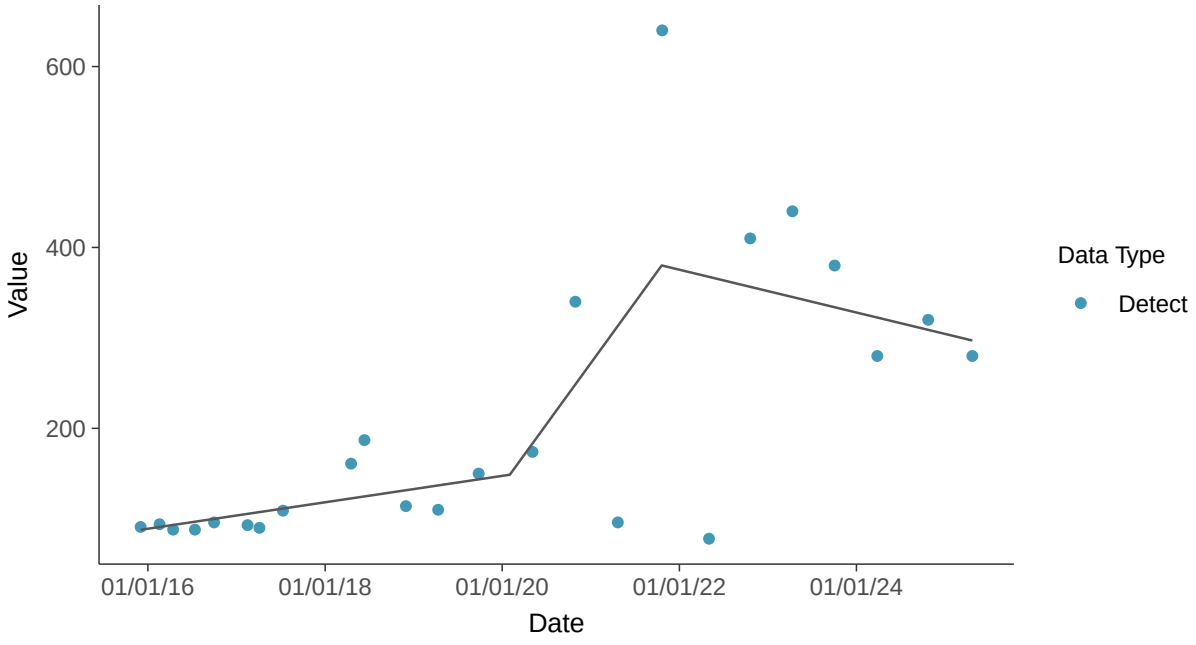
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15019 (ug/L)



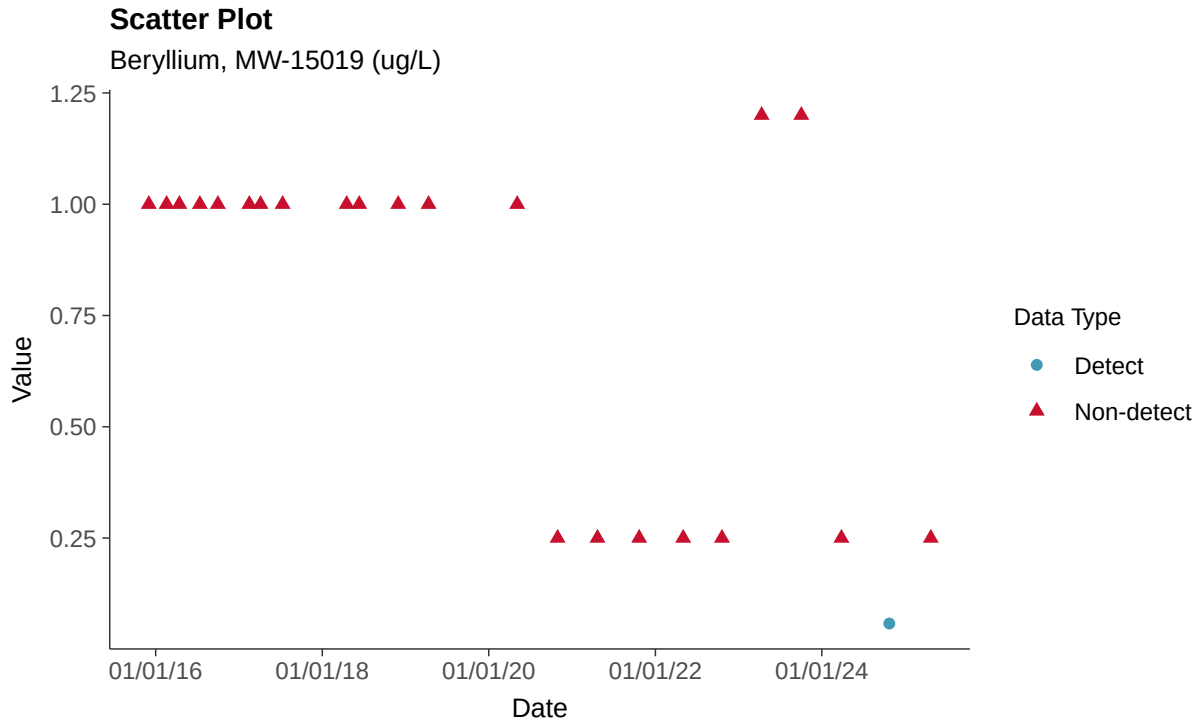

**Trend Regression: Piecewise Linear-Linear-Linear**

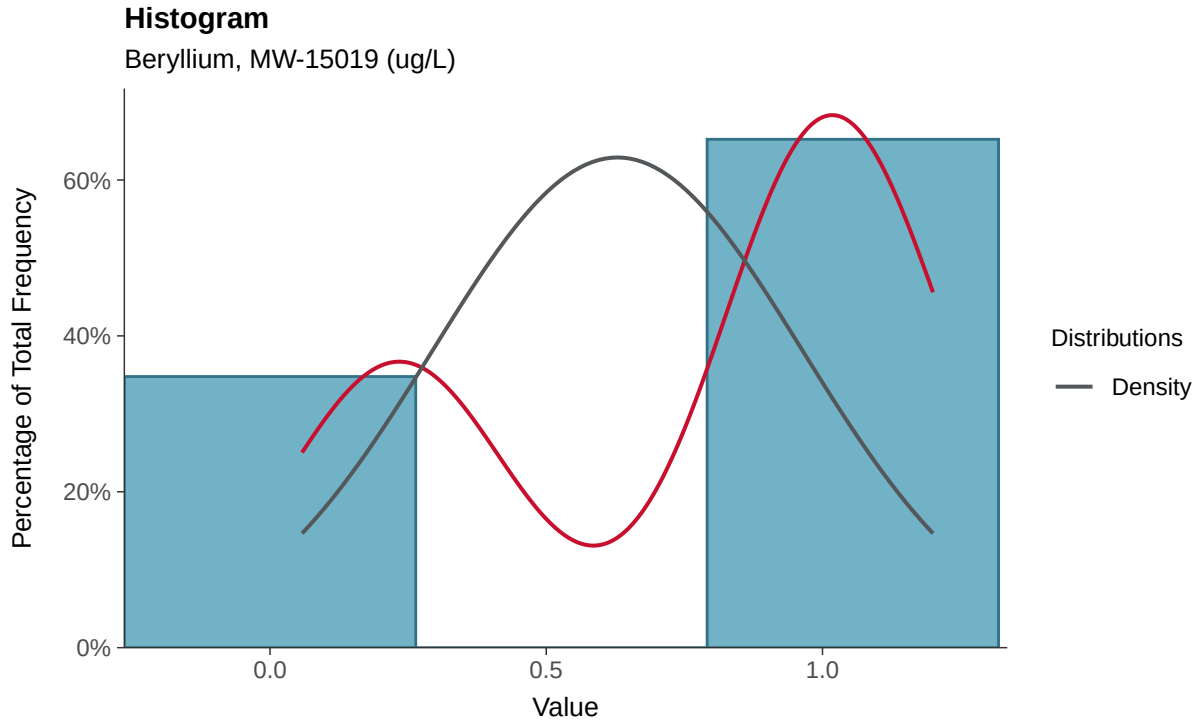
Barium, MW-15019 (ug/L)



## Appendix IV: Beryllium, MW-15019

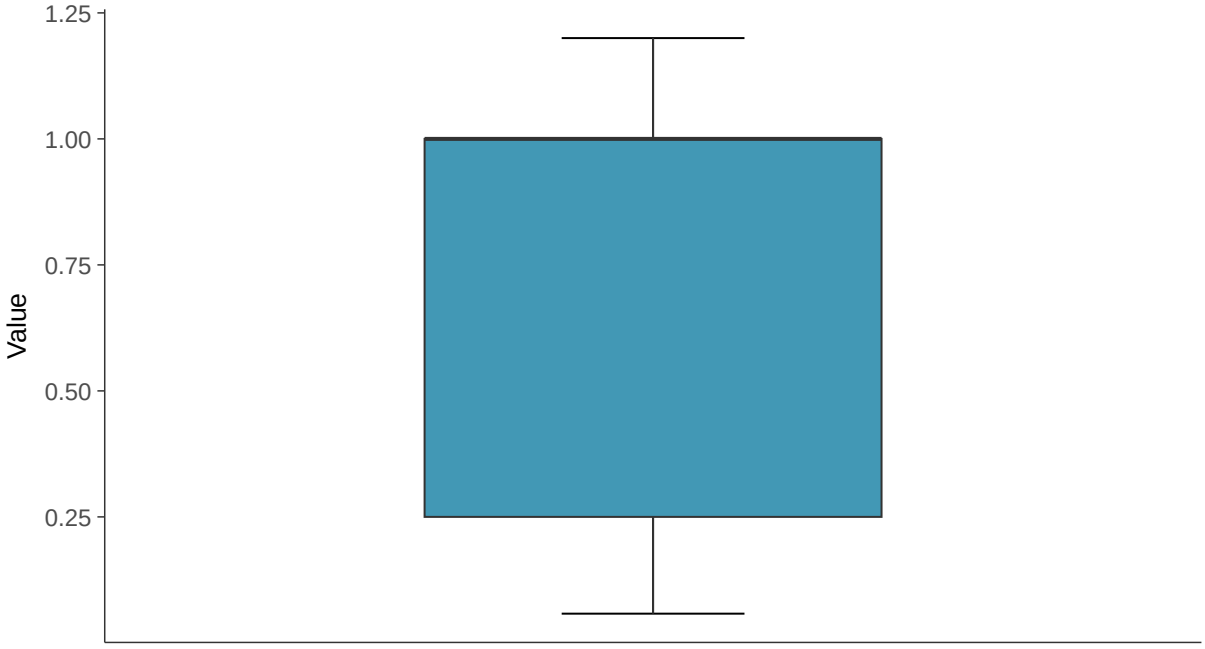
ID: 09_2_104



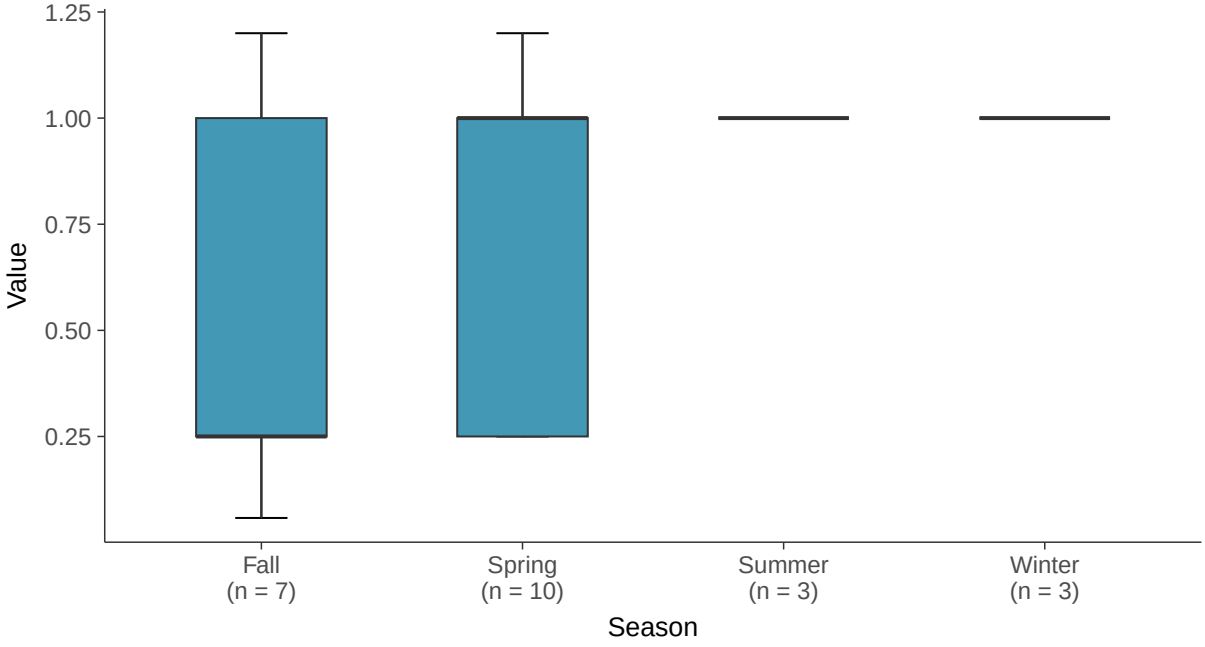
**Boxplot**

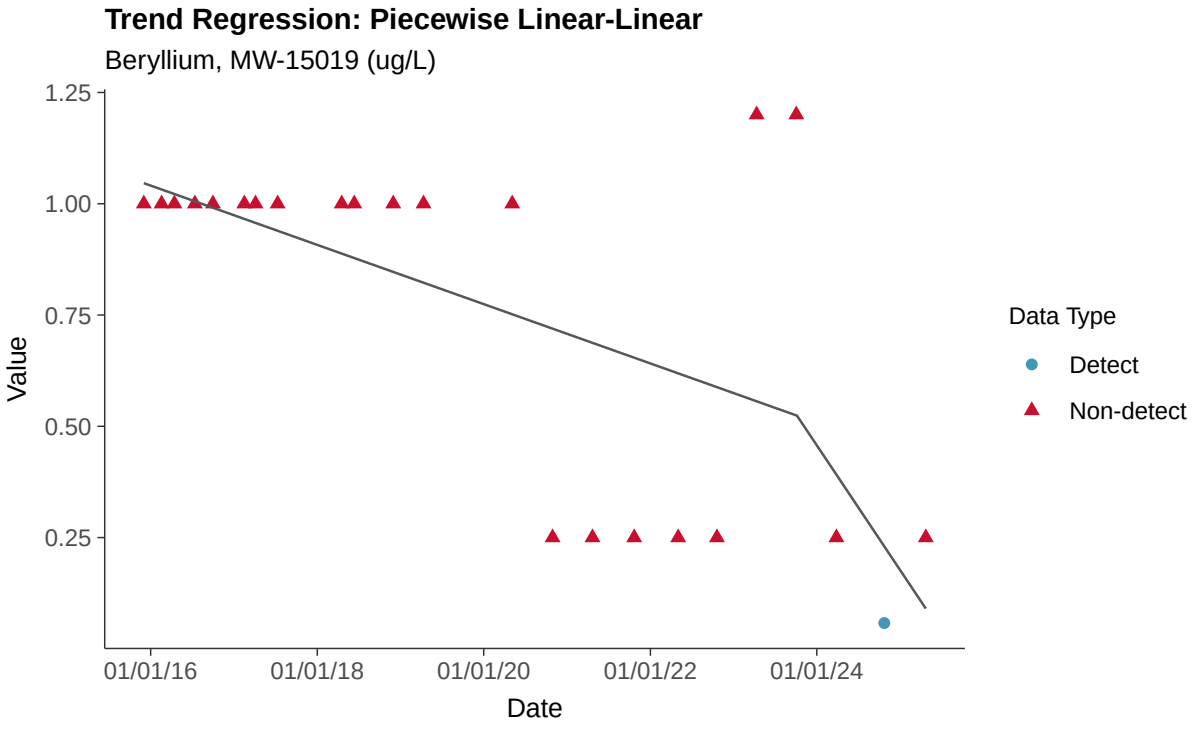
Beryllium, MW-15019 (ug/L)




**Boxplot by Season**

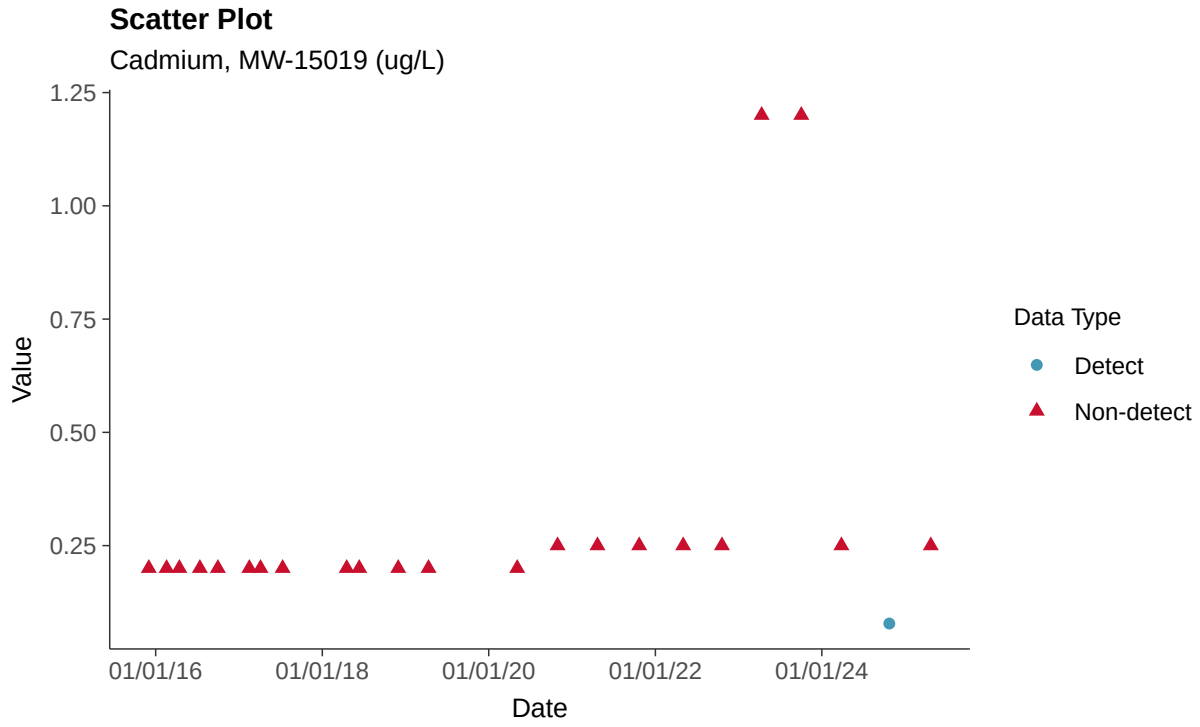
Beryllium, MW-15019 (ug/L)

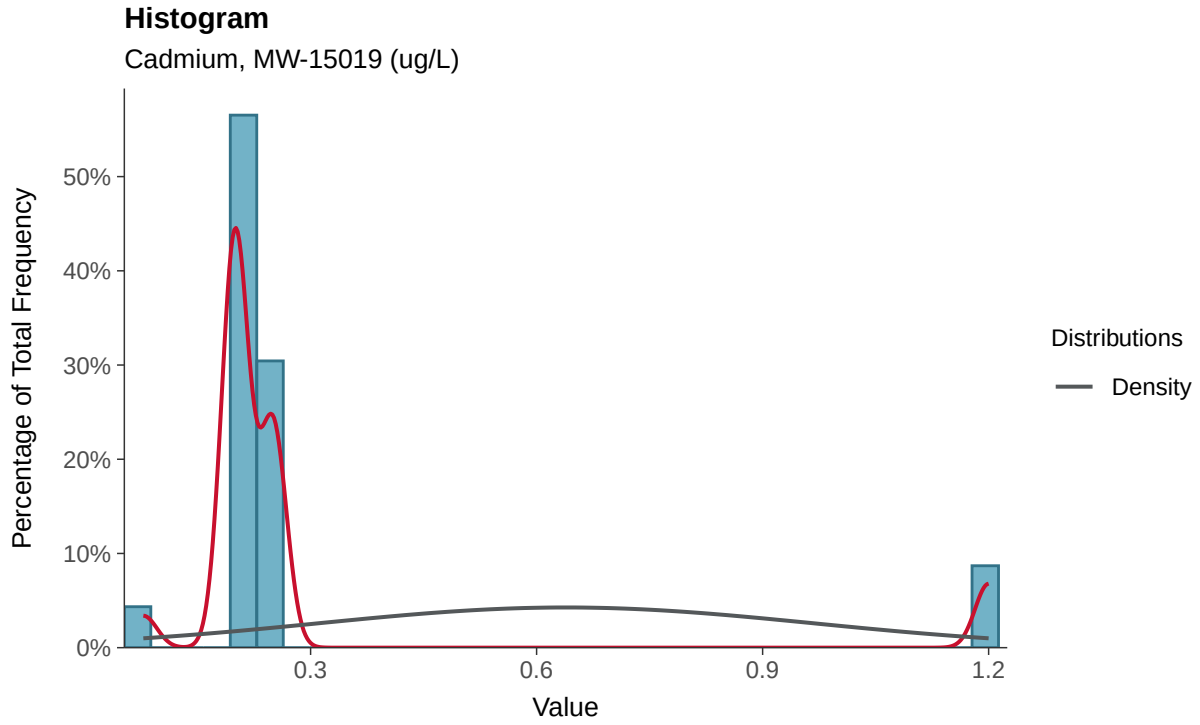



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15019 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15019

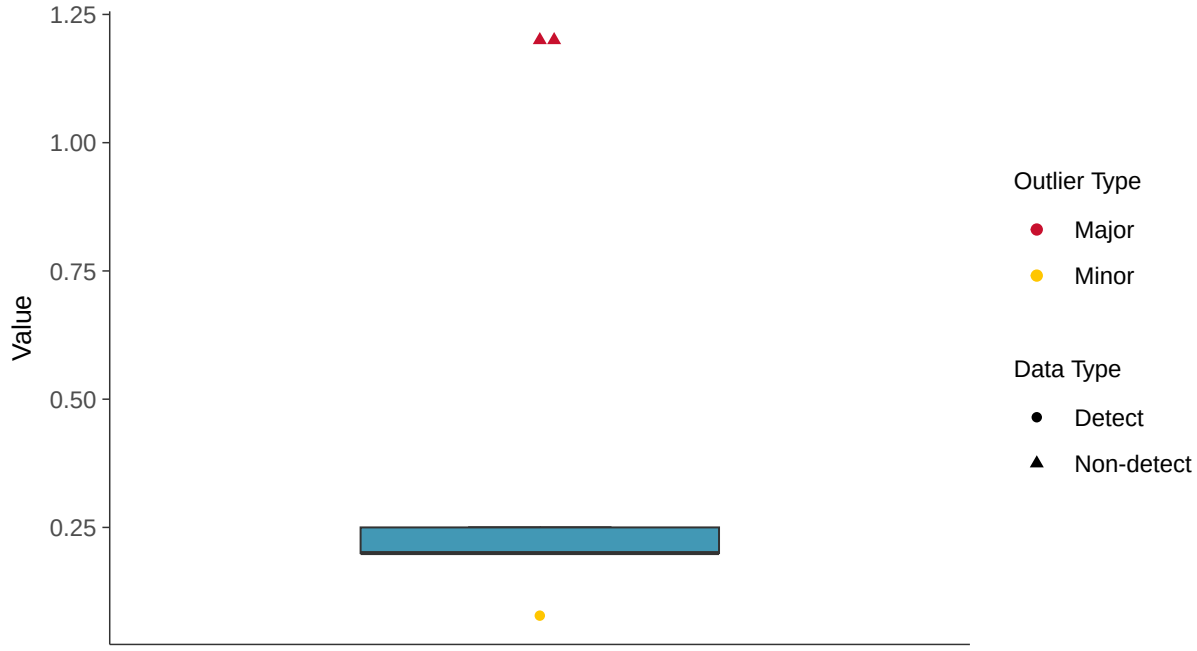
ID: 09_2_106



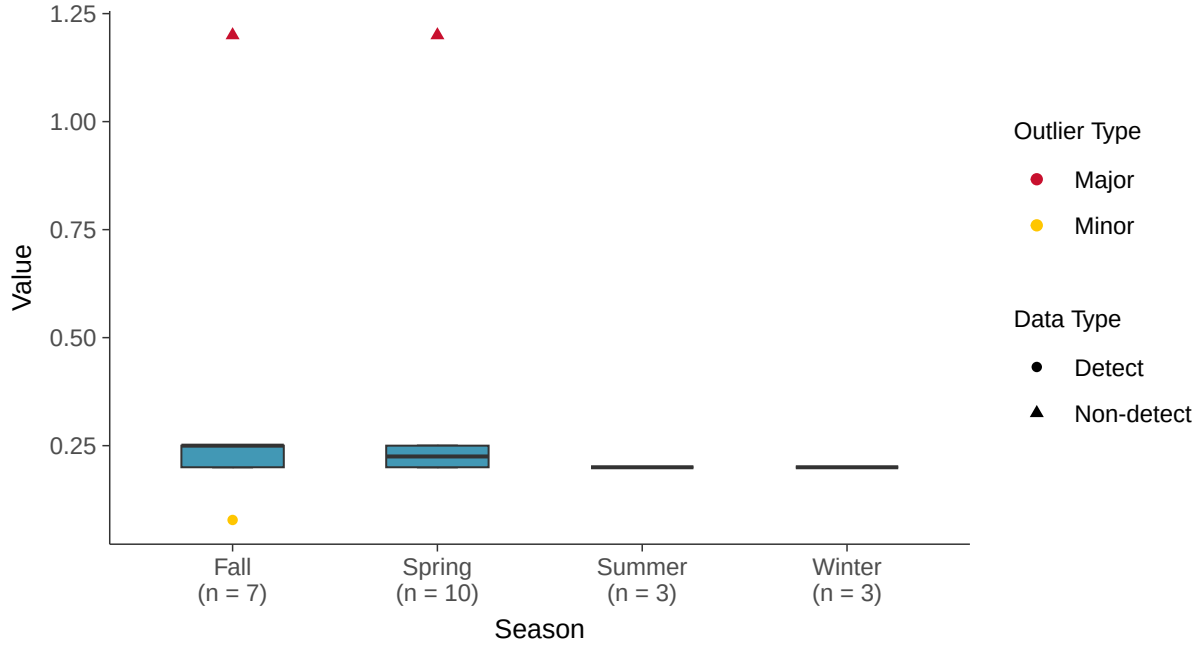
## Boxplot

Cadmium, MW-15019 (ug/L)



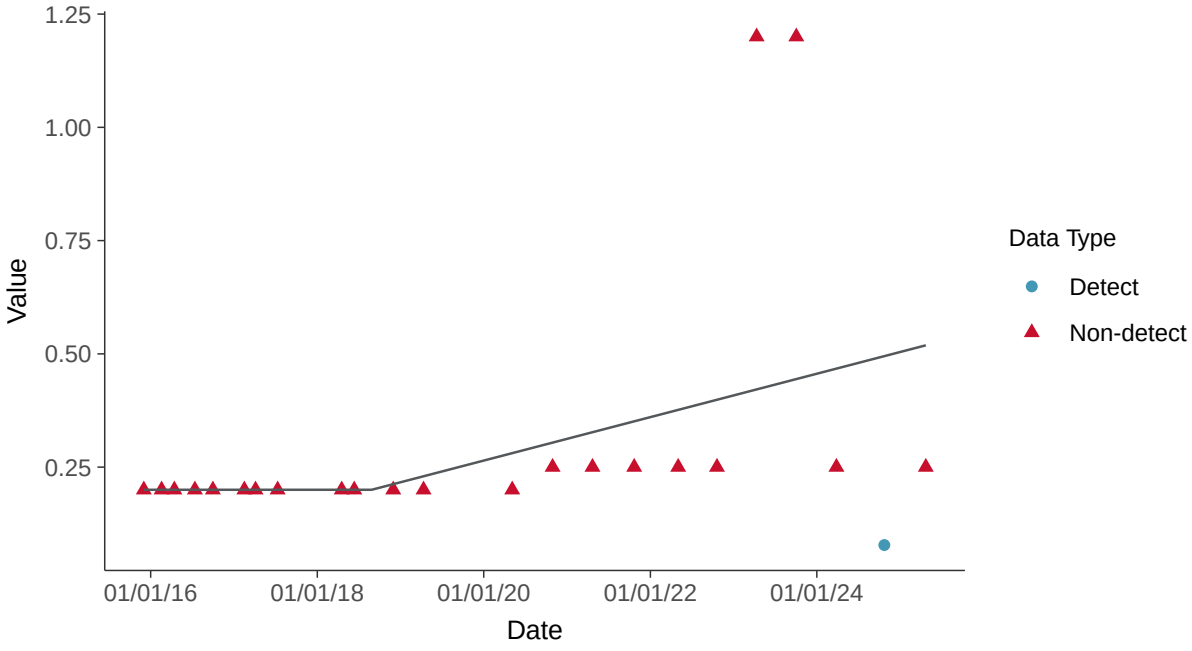

## Boxplot by Season

Cadmium, MW-15019 (ug/L)



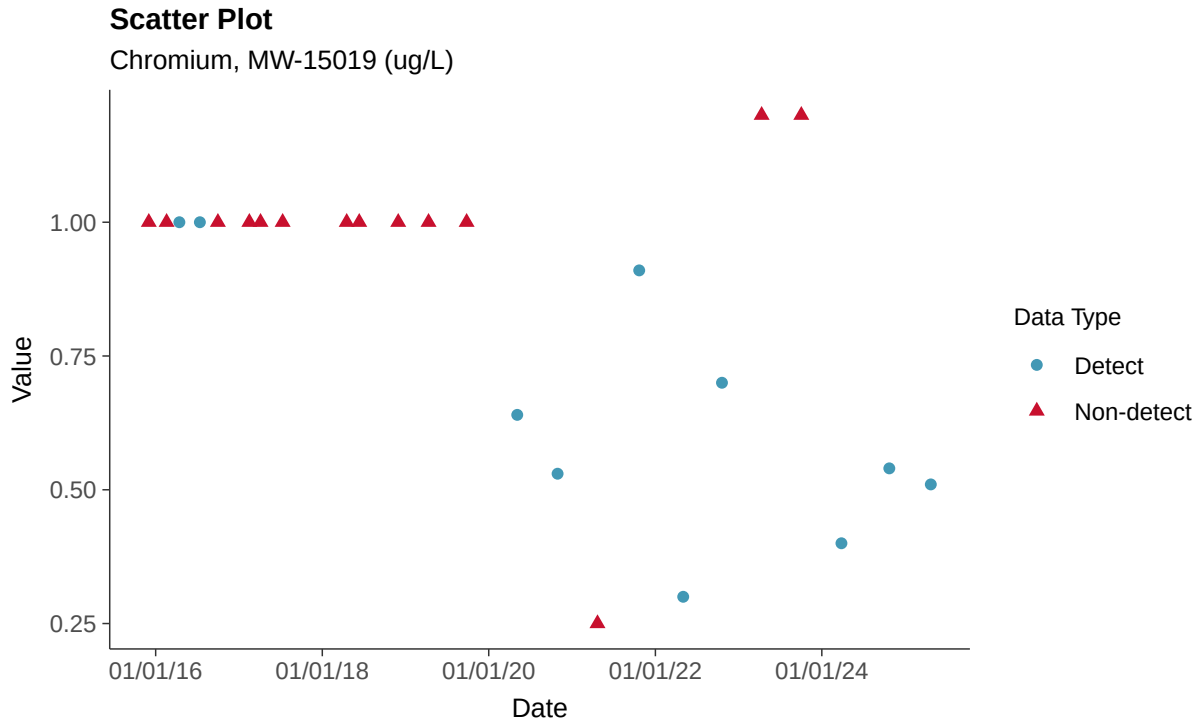
**Trend Regression: Piecewise Linear-Linear**

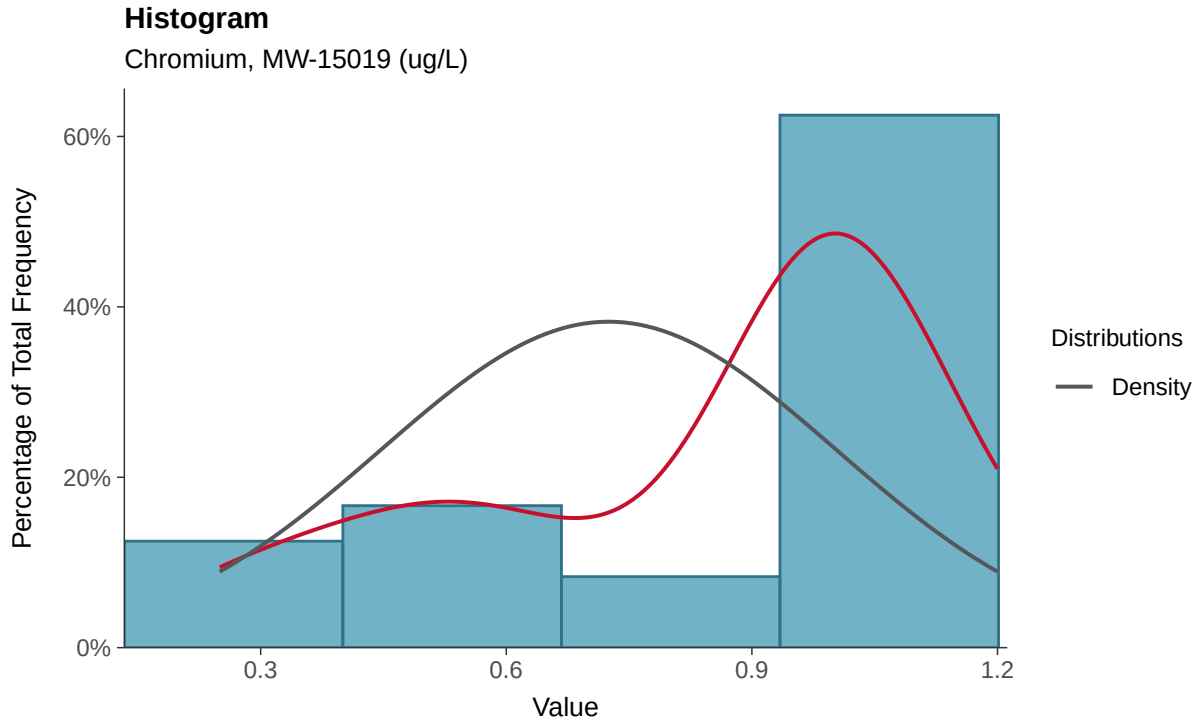
Cadmium, MW-15019 (ug/L)



## Appendix IV: Chromium, MW-15019

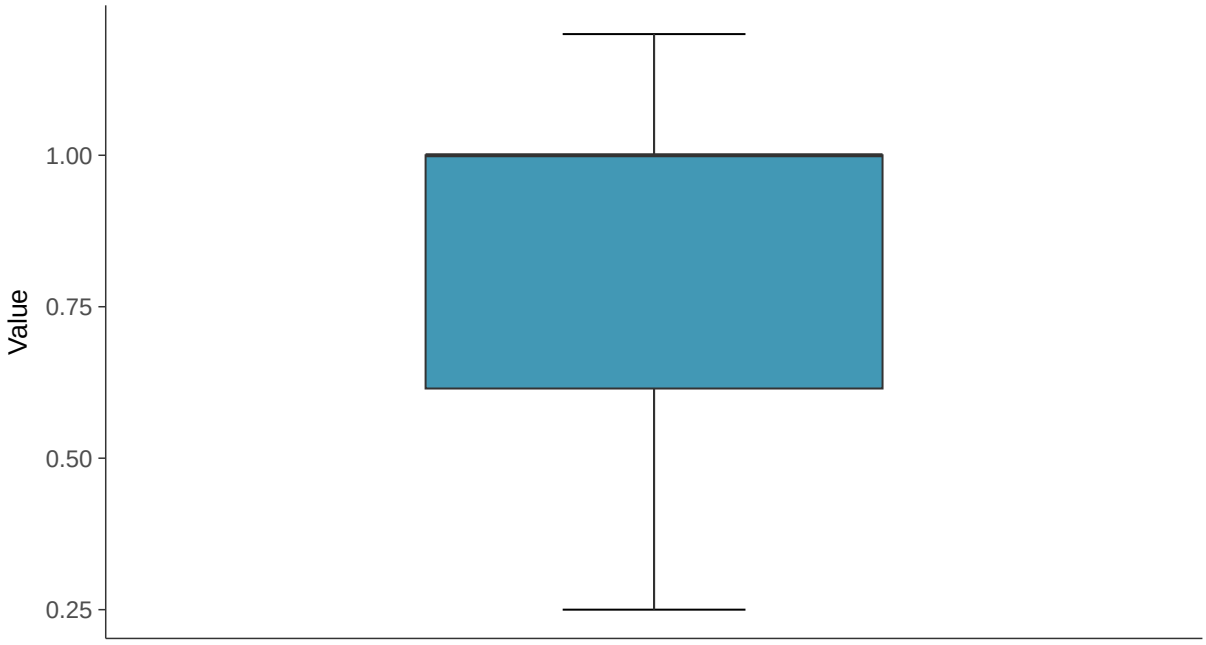
ID: 09_2_109



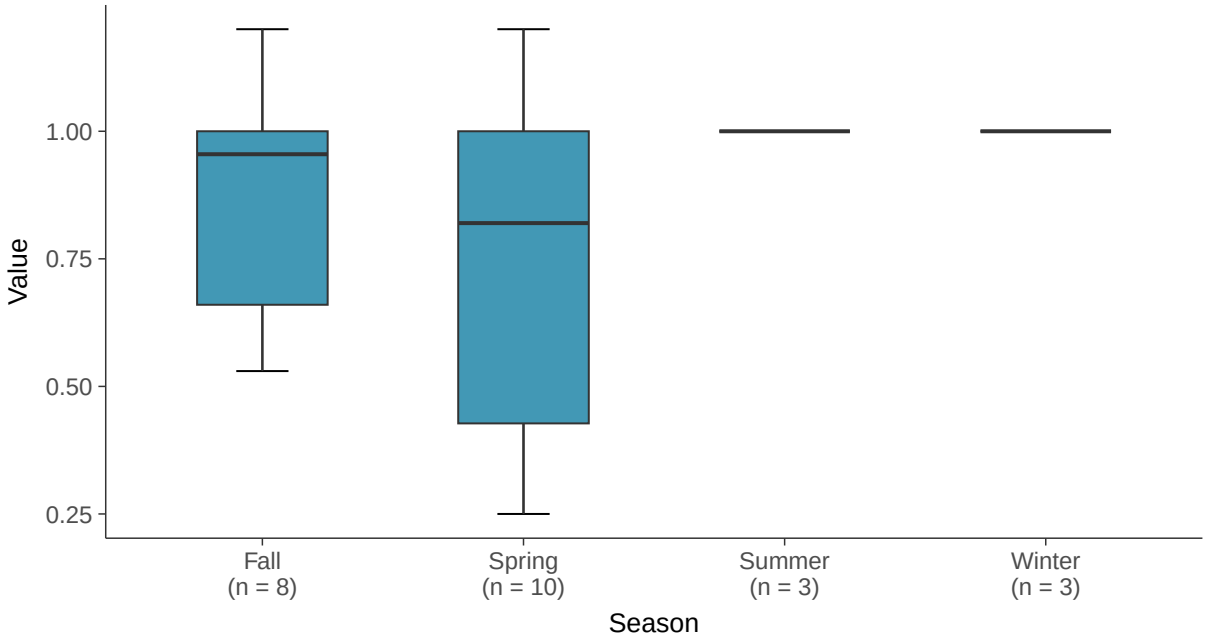
**Boxplot**

Chromium, MW-15019 (ug/L)



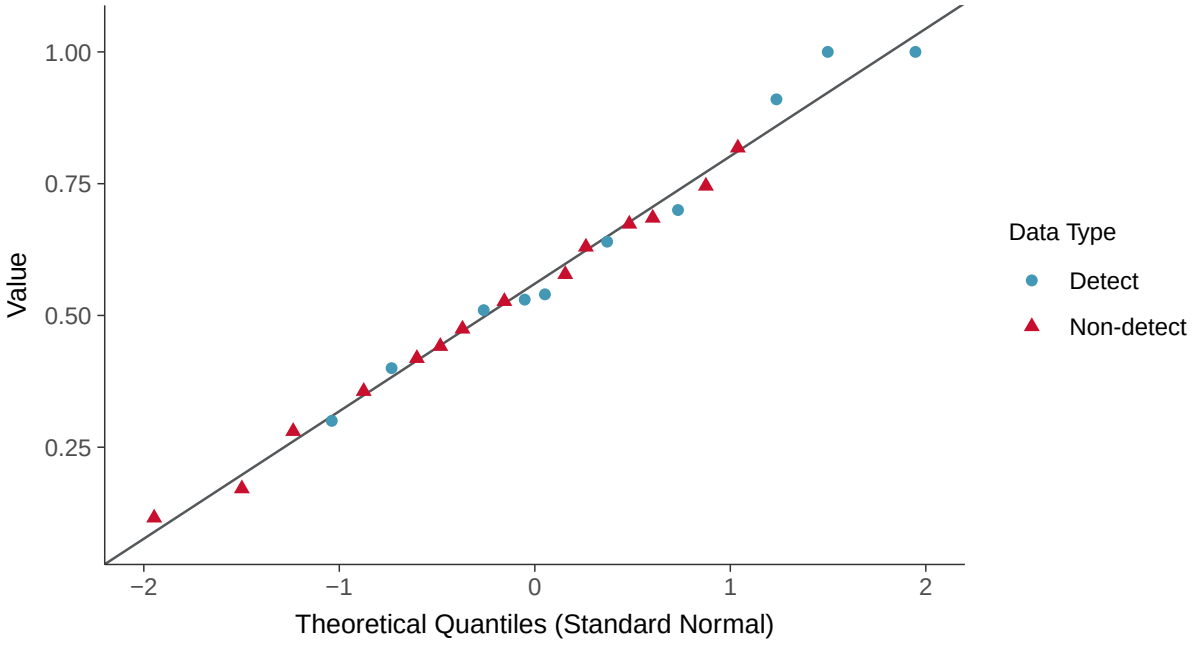

**Boxplot by Season**

Chromium, MW-15019 (ug/L)



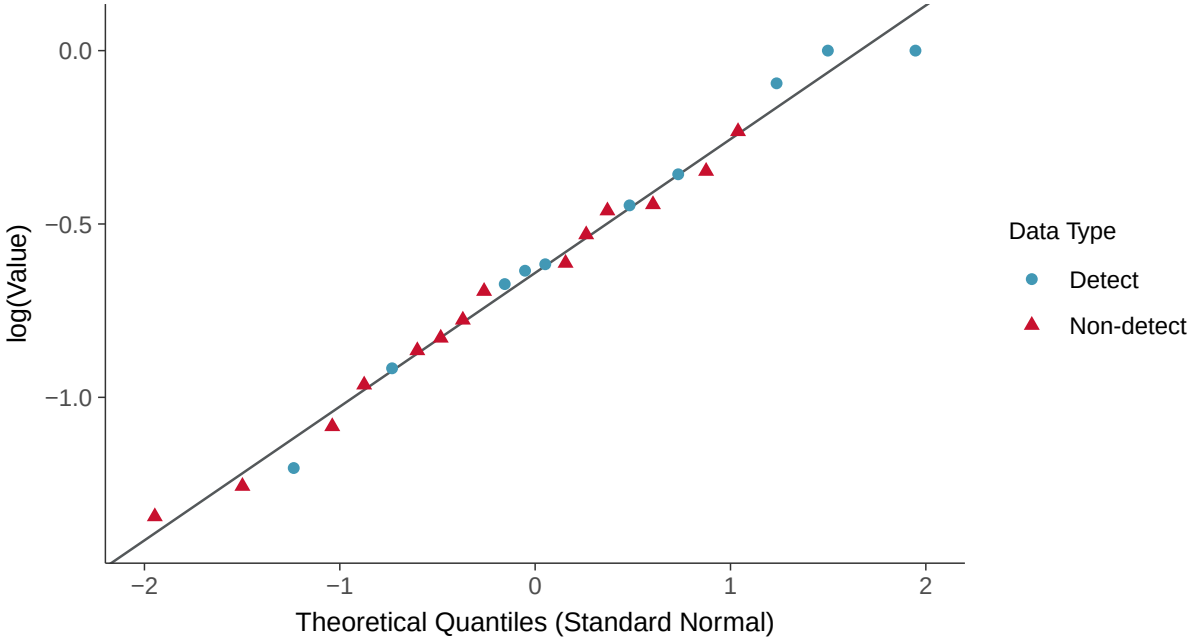
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15019 (ug/L)



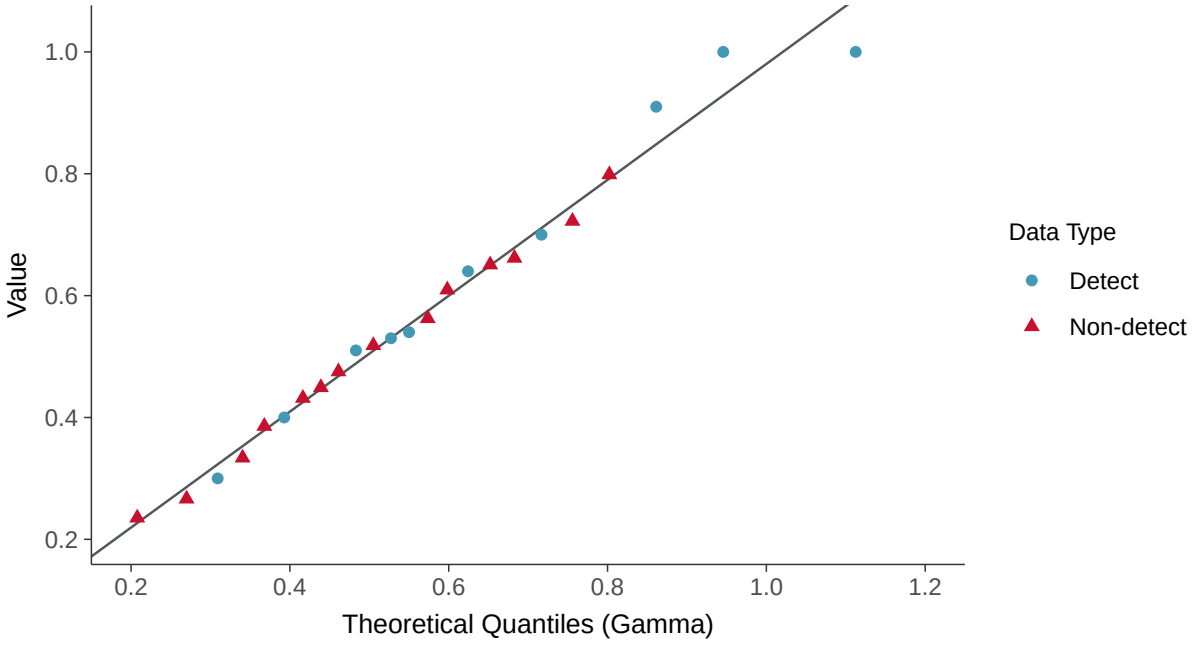

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15019 (ug/L)



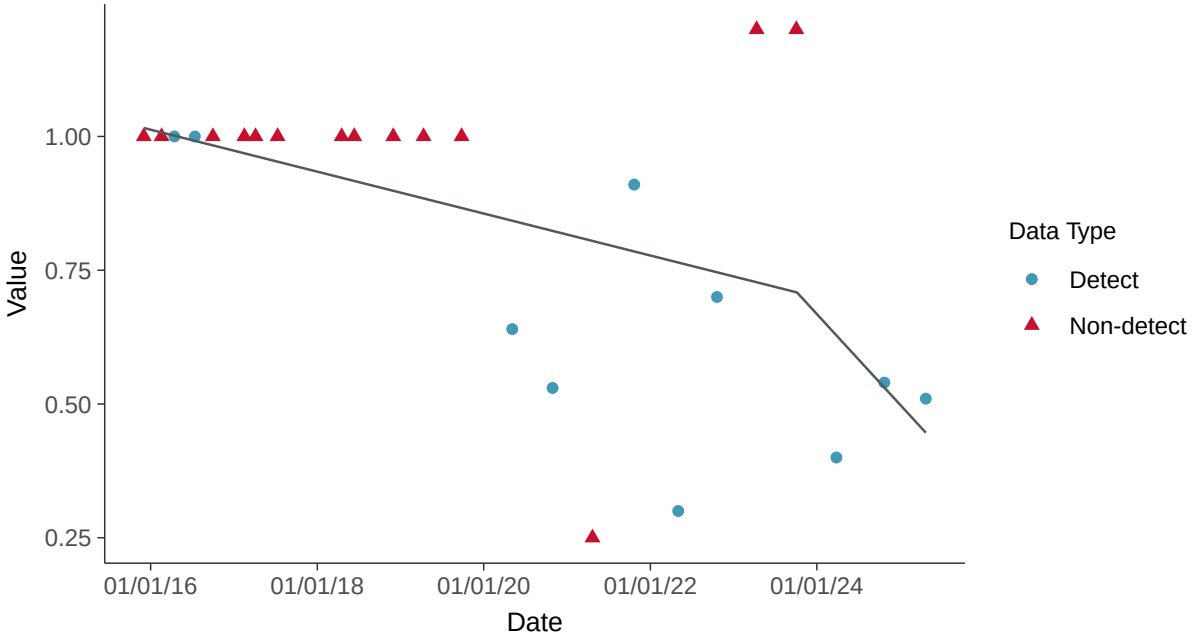
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15019 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15019 (ug/L)

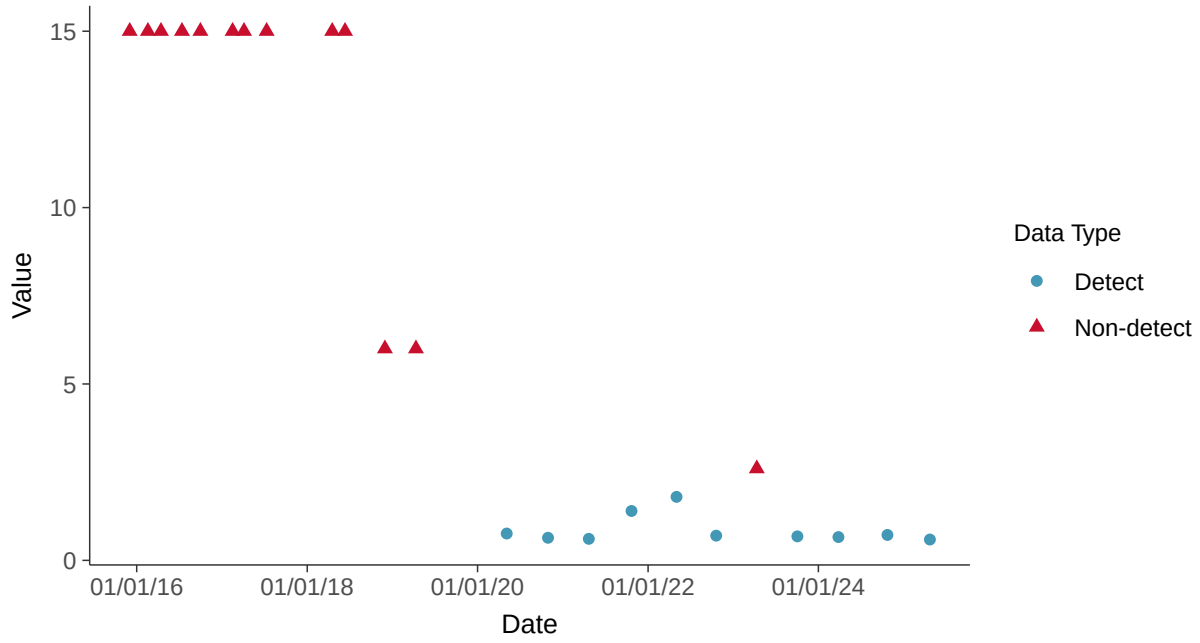


## Appendix IV: Cobalt, MW-15019

ID: 09_2_110

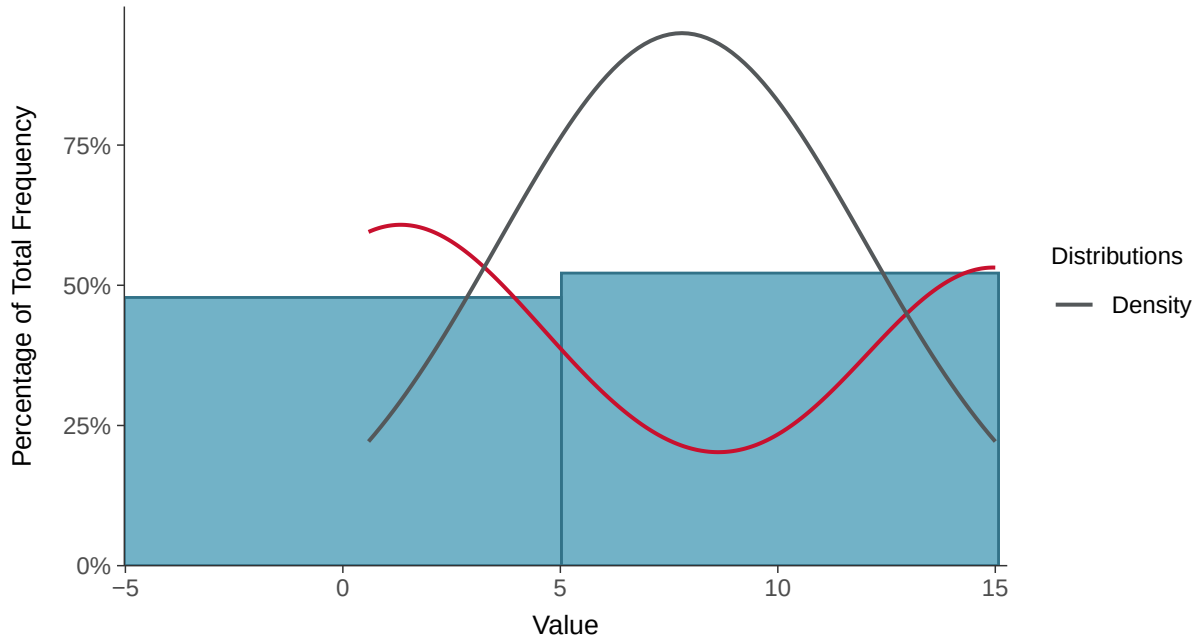
**Scatter Plot**

Cobalt, MW-15019 (ug/L)



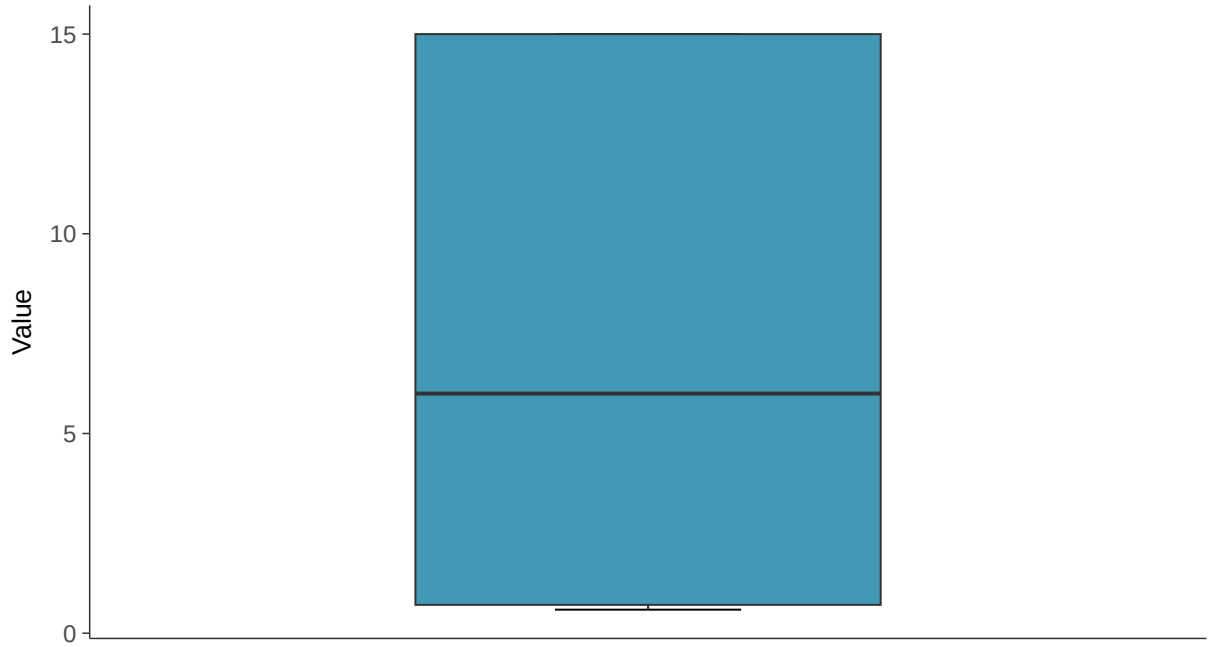

**Histogram**

Cobalt, MW-15019 (ug/L)



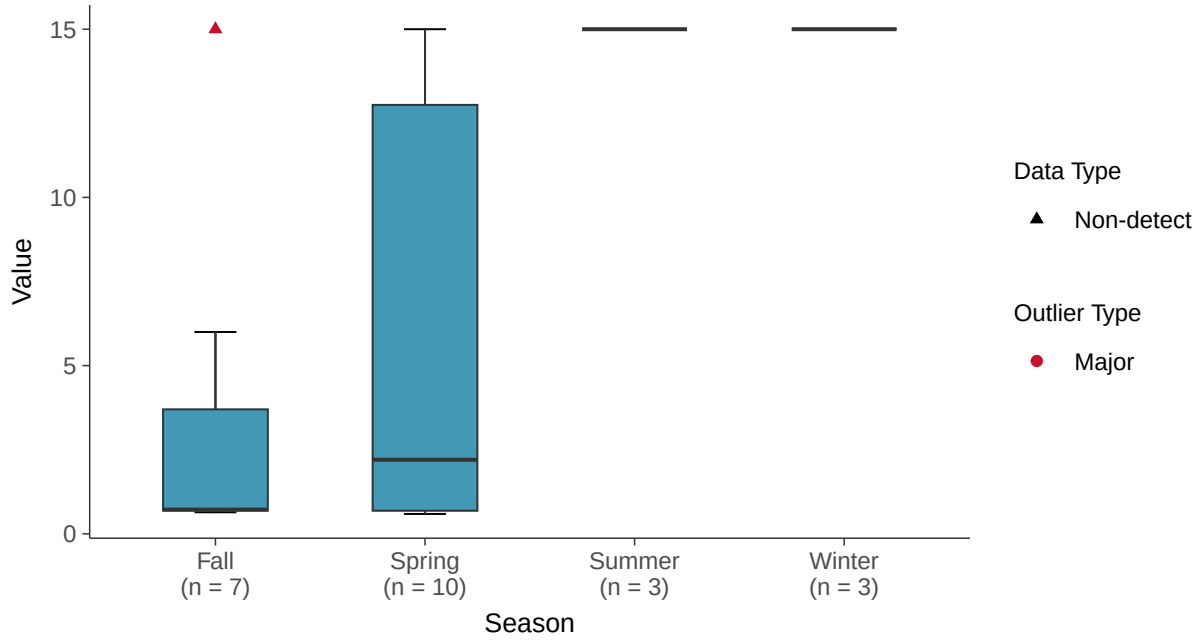
**Boxplot**

Cobalt, MW-15019 (ug/L)



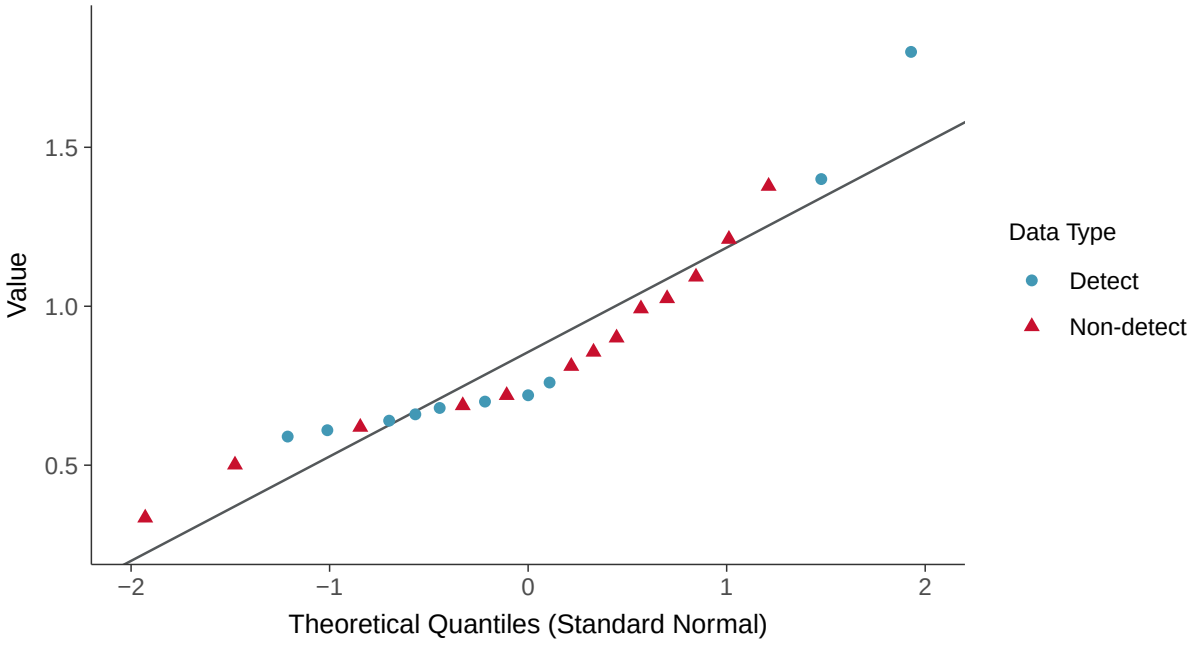

**Boxplot by Season**

Cobalt, MW-15019 (ug/L)



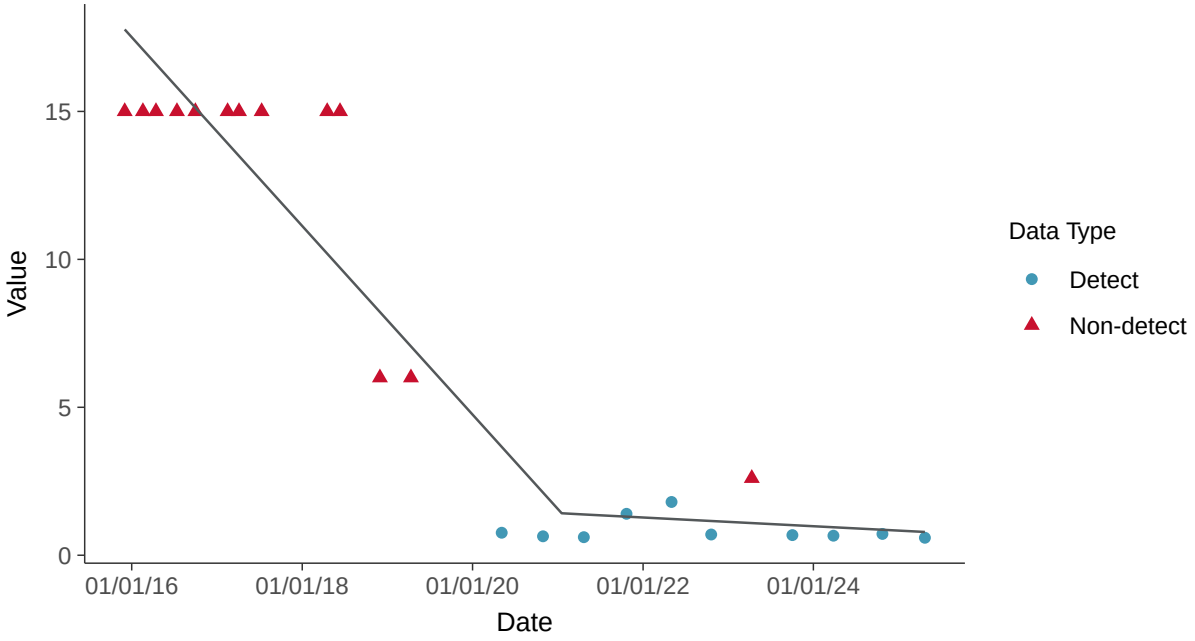
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15019 (ug/L)



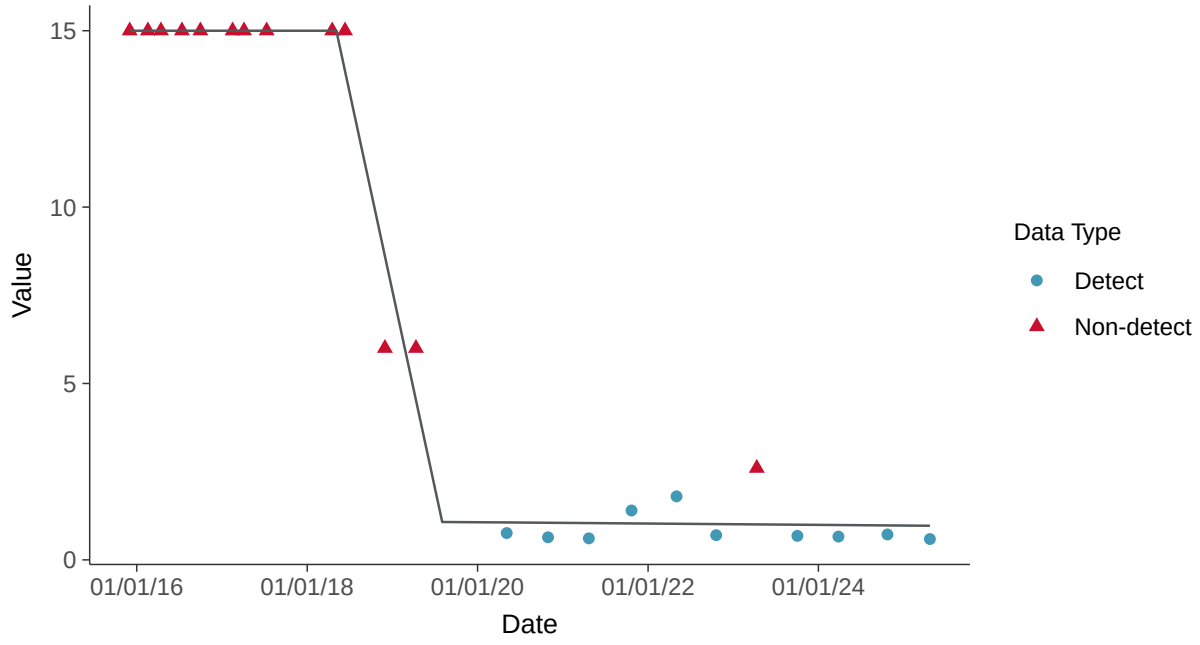

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15019 (ug/L)



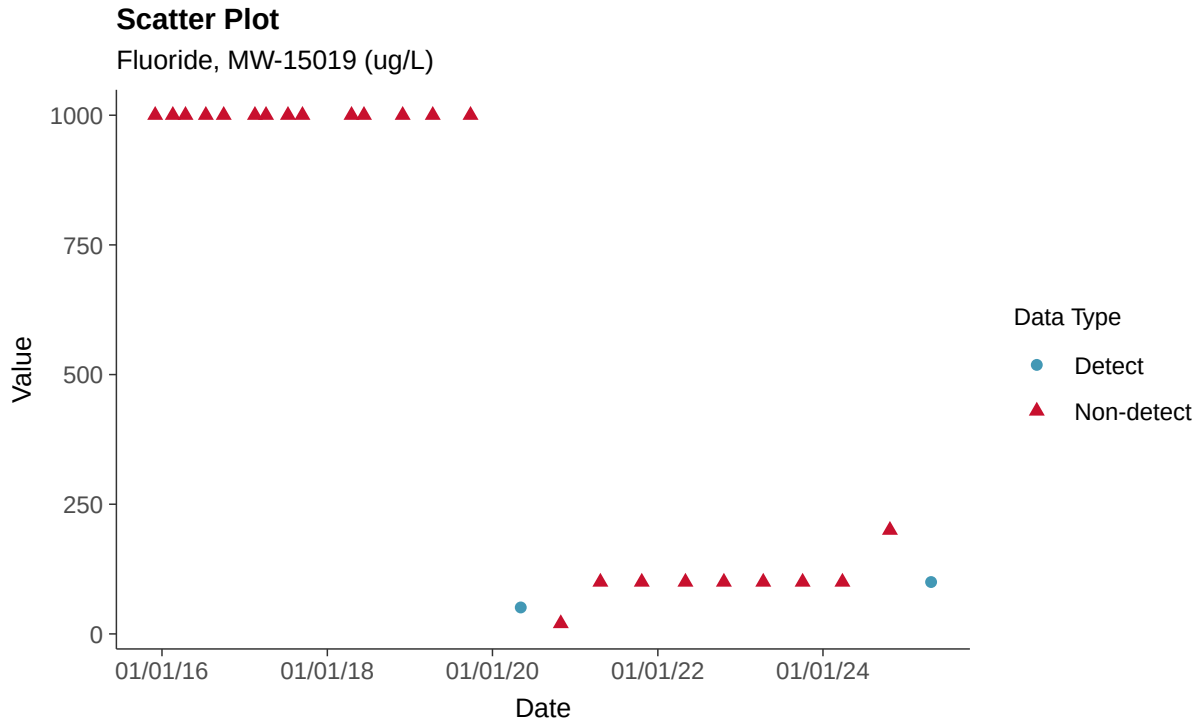
**Trend Regression: Piecewise Linear-Linear-Linear**

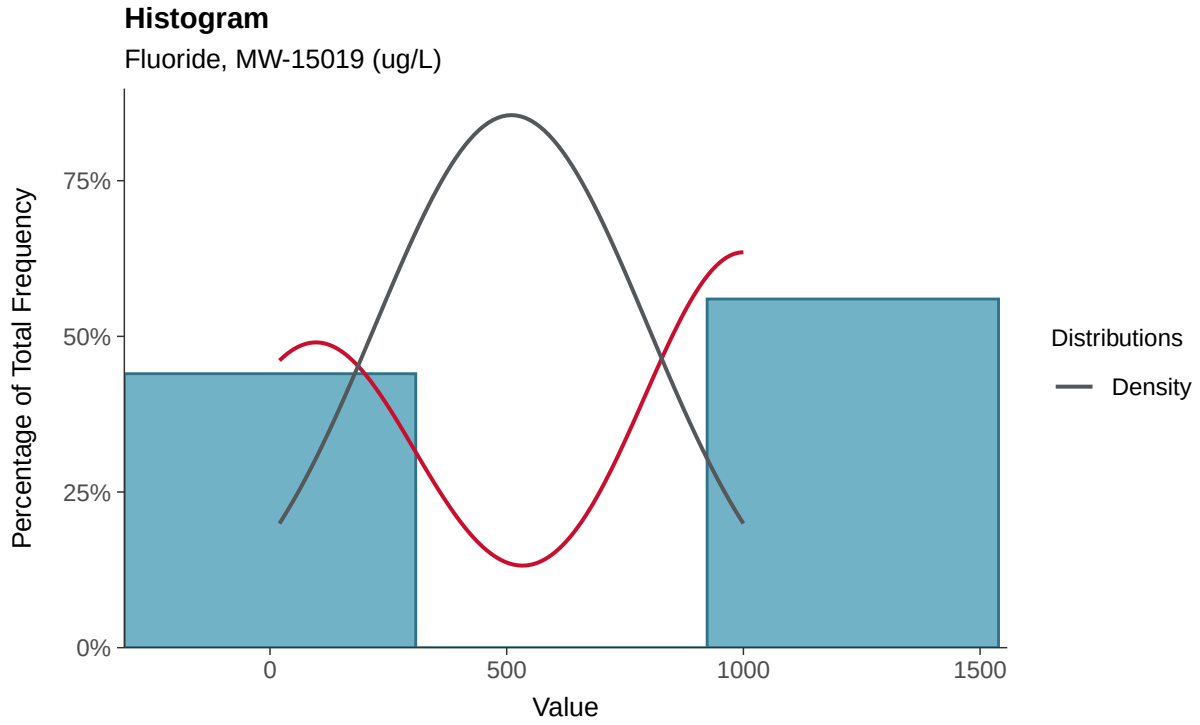
Cobalt, MW-15019 (ug/L)



## Appendix IV: Fluoride, MW-15019

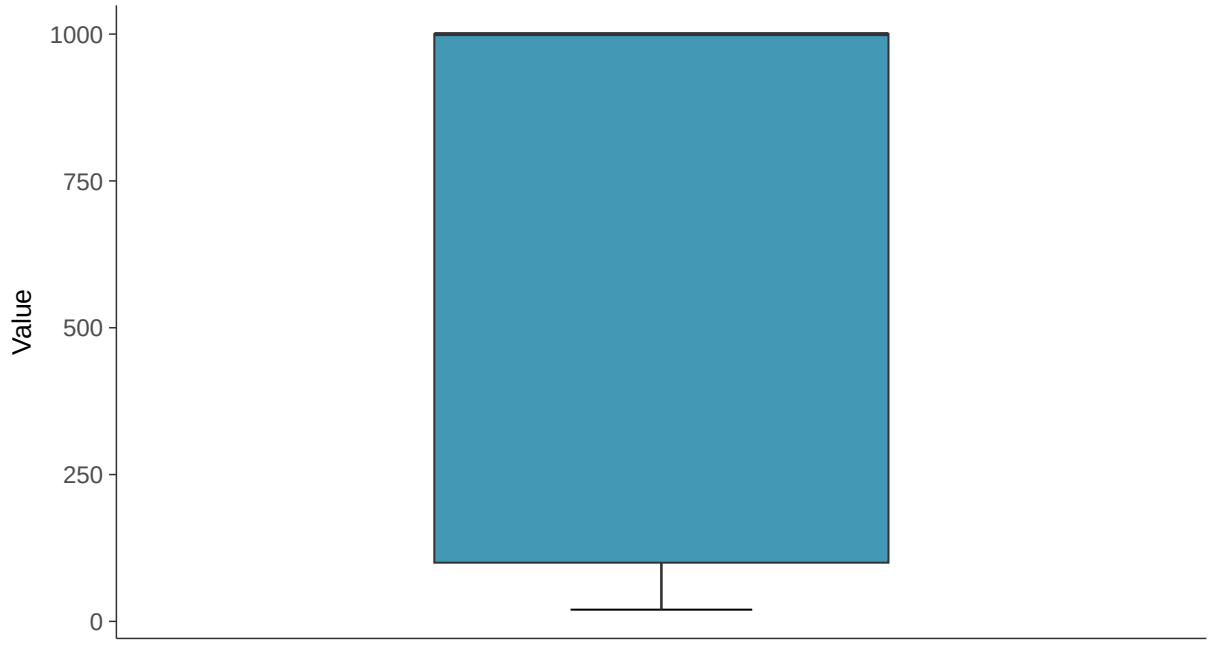
ID: 09_2_114



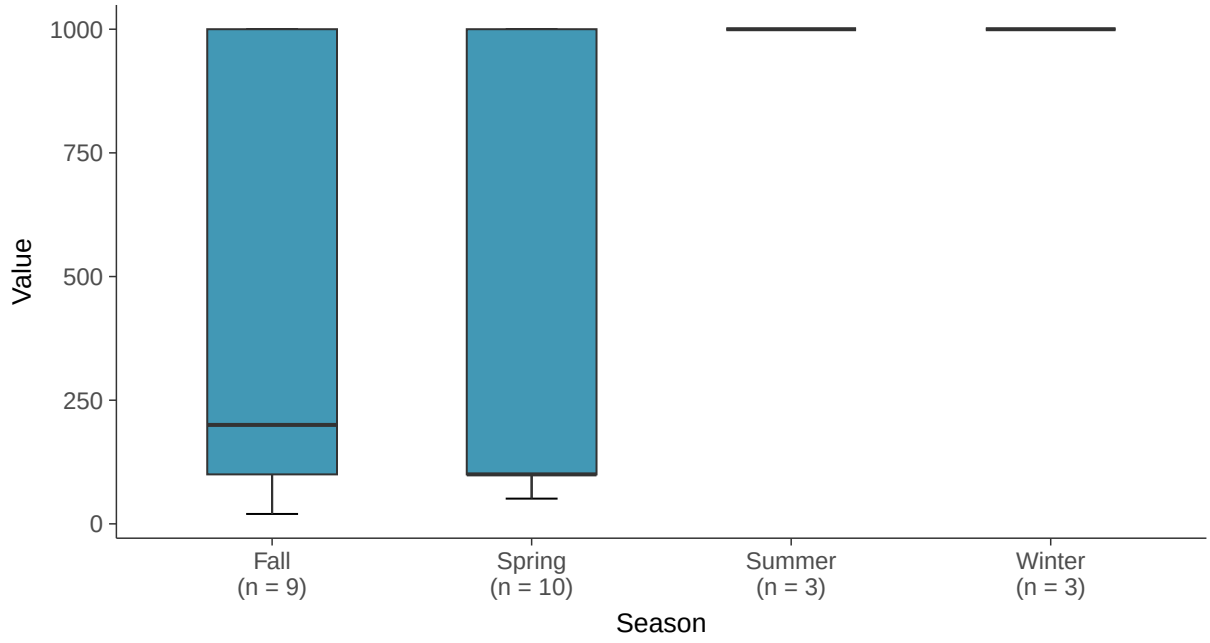
**Boxplot**

Fluoride, MW-15019 (ug/L)



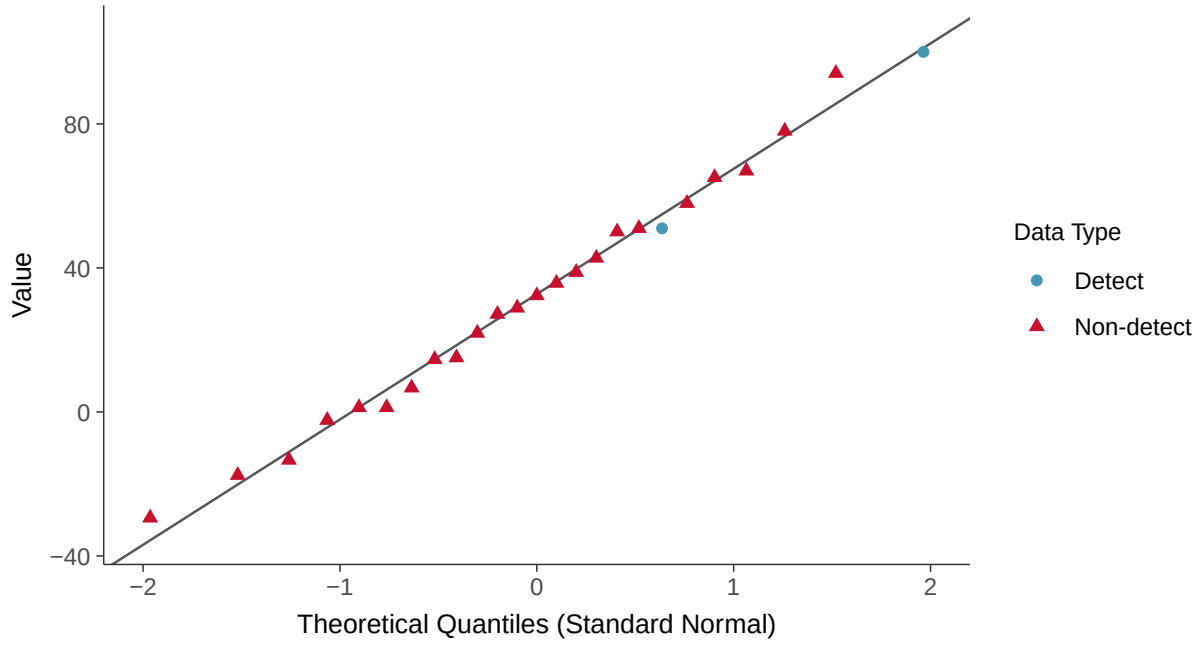

**Boxplot by Season**

Fluoride, MW-15019 (ug/L)



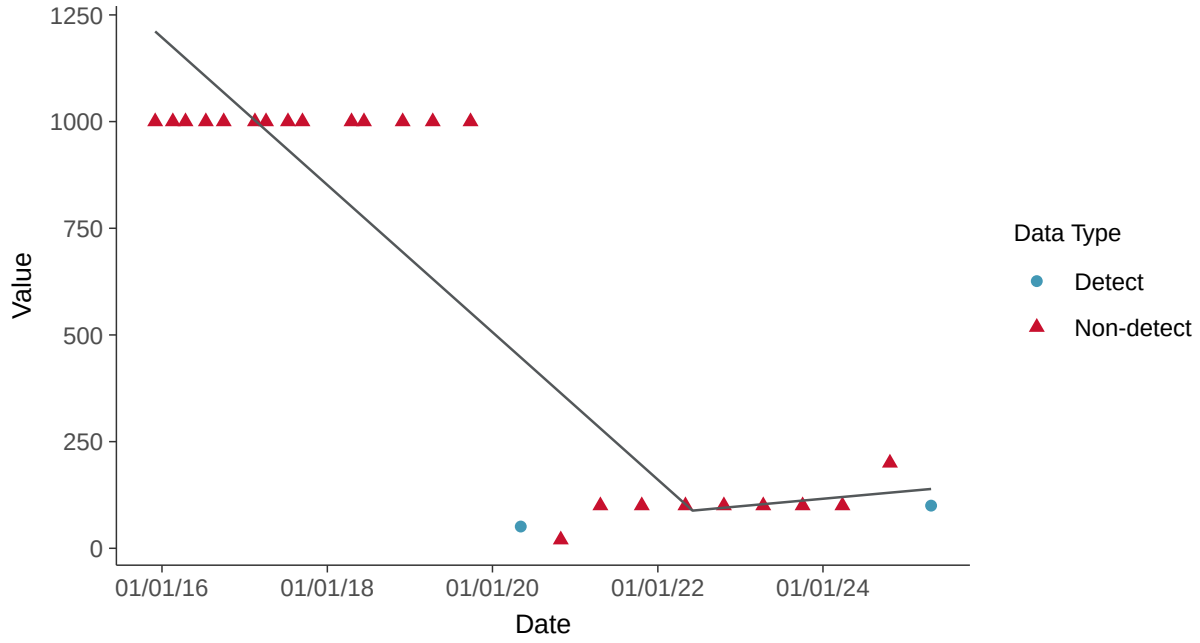
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15019 (ug/L)



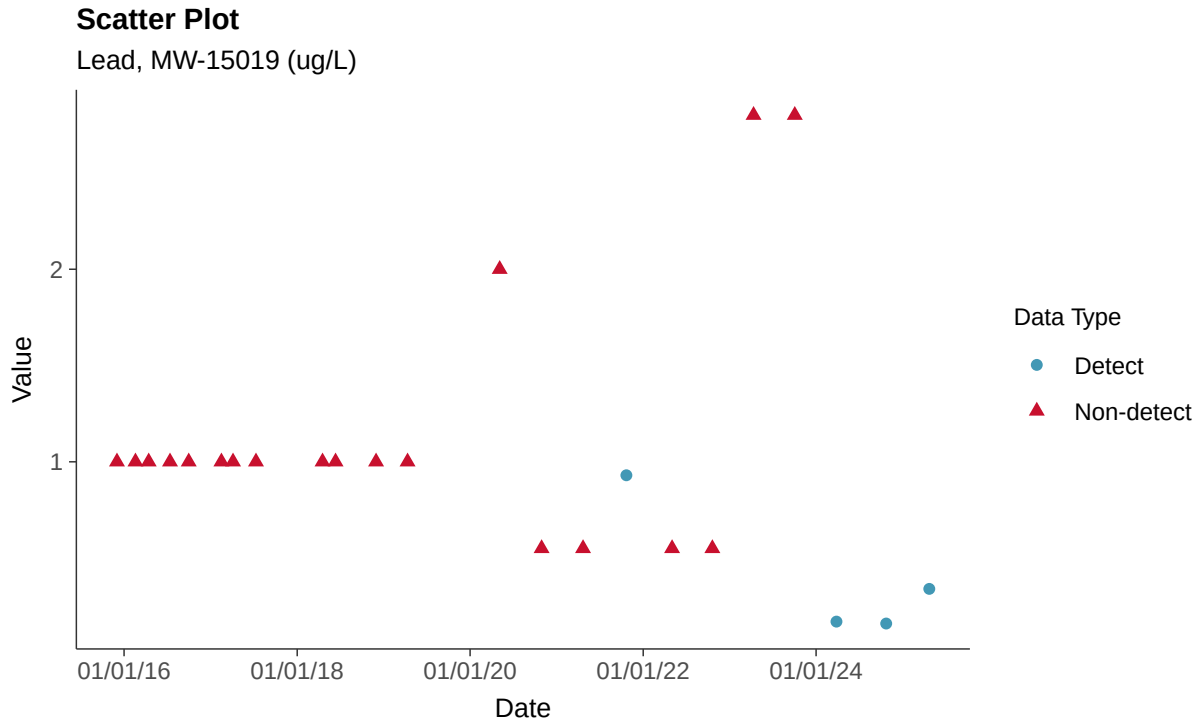

**Trend Regression: Piecewise Linear-Linear**

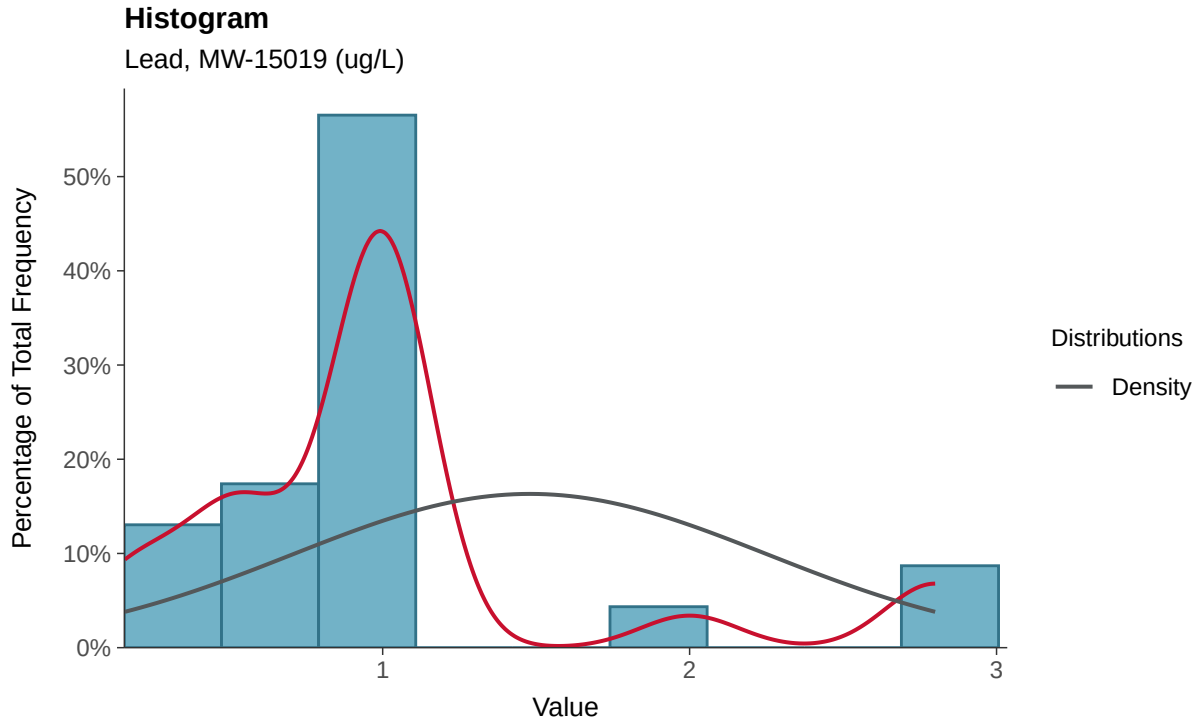
Fluoride, MW-15019 (ug/L)



# Appendix IV: Lead, MW-15019

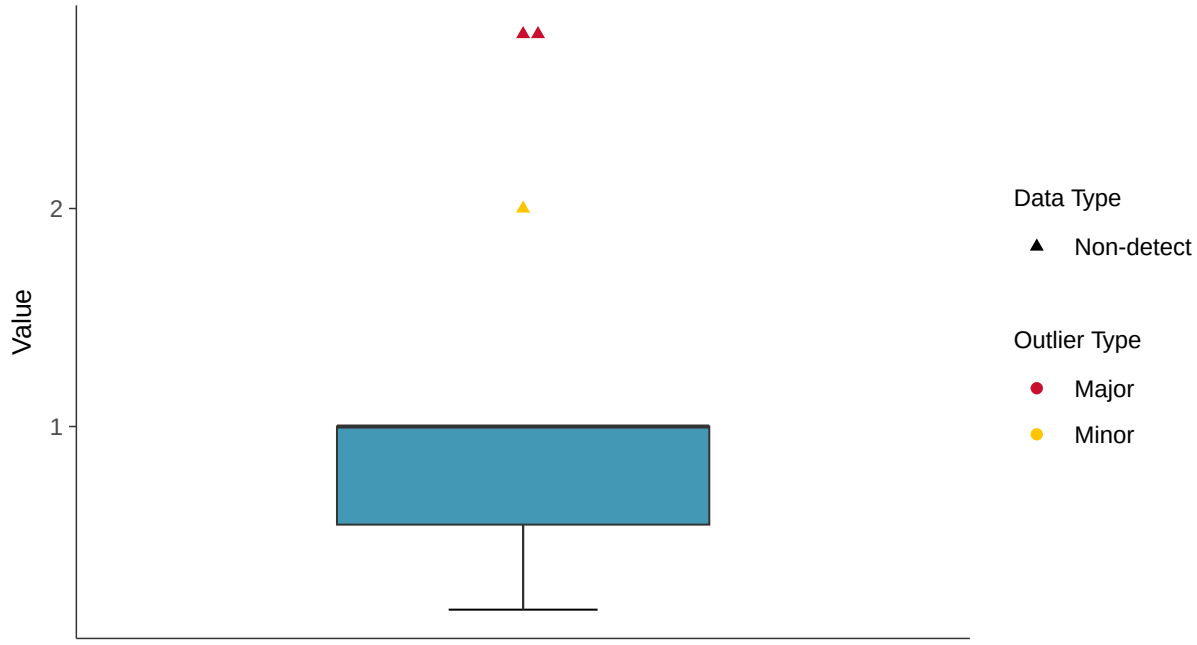
ID: 09_2_116



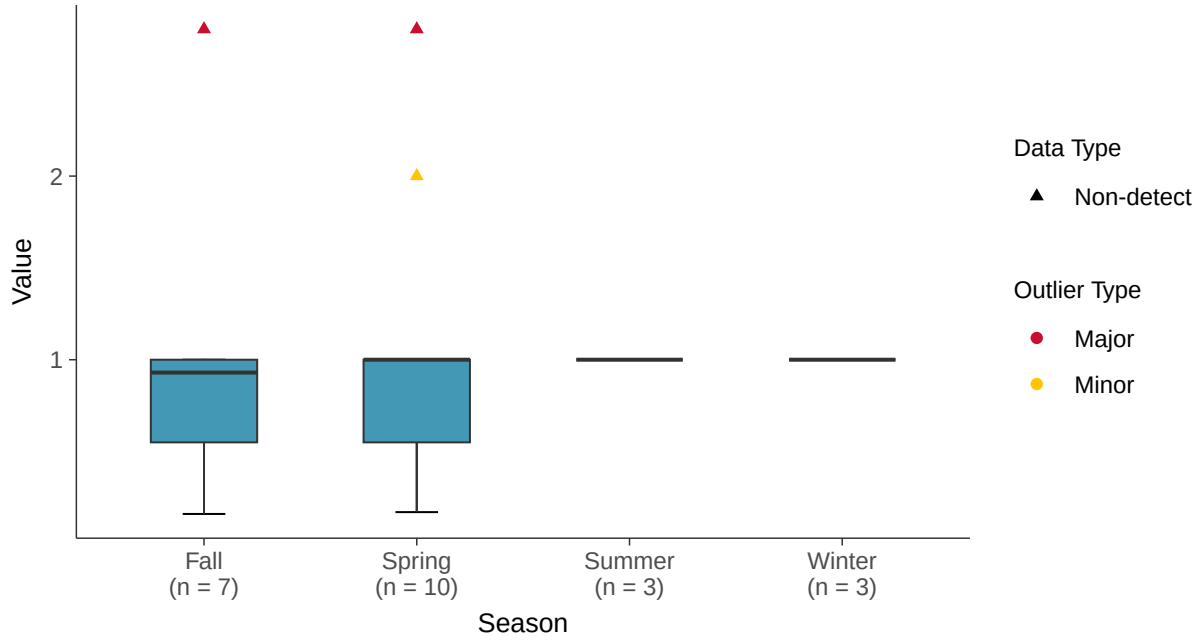
## Boxplot

Lead, MW-15019 (ug/L)



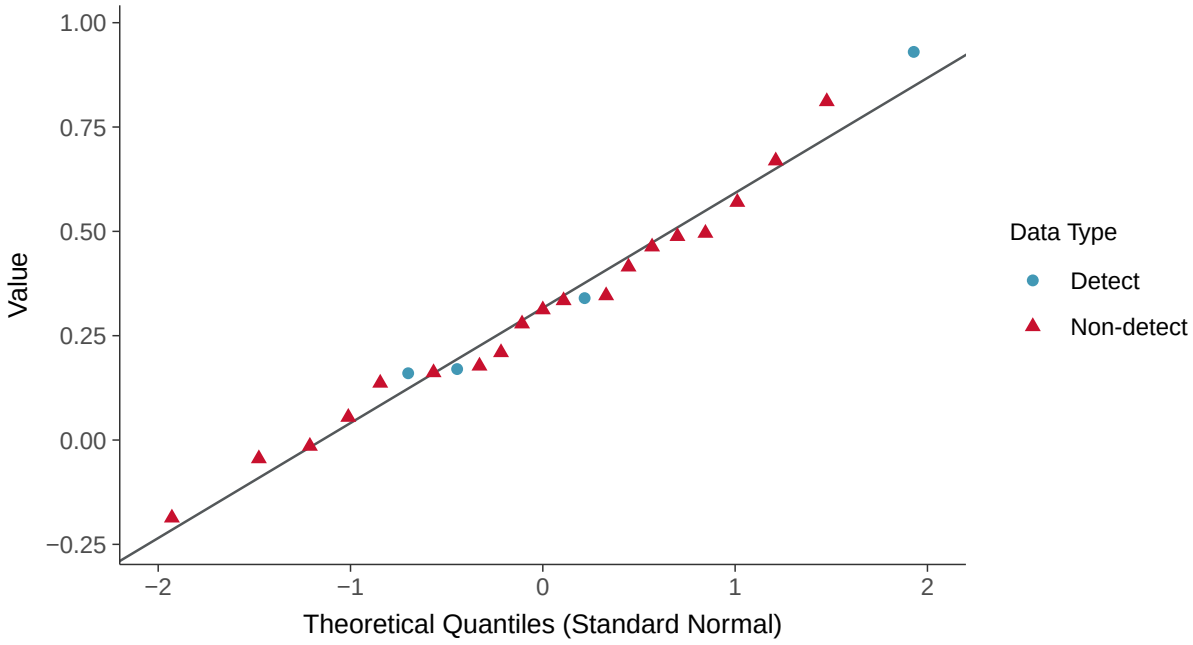

## Boxplot by Season

Lead, MW-15019 (ug/L)



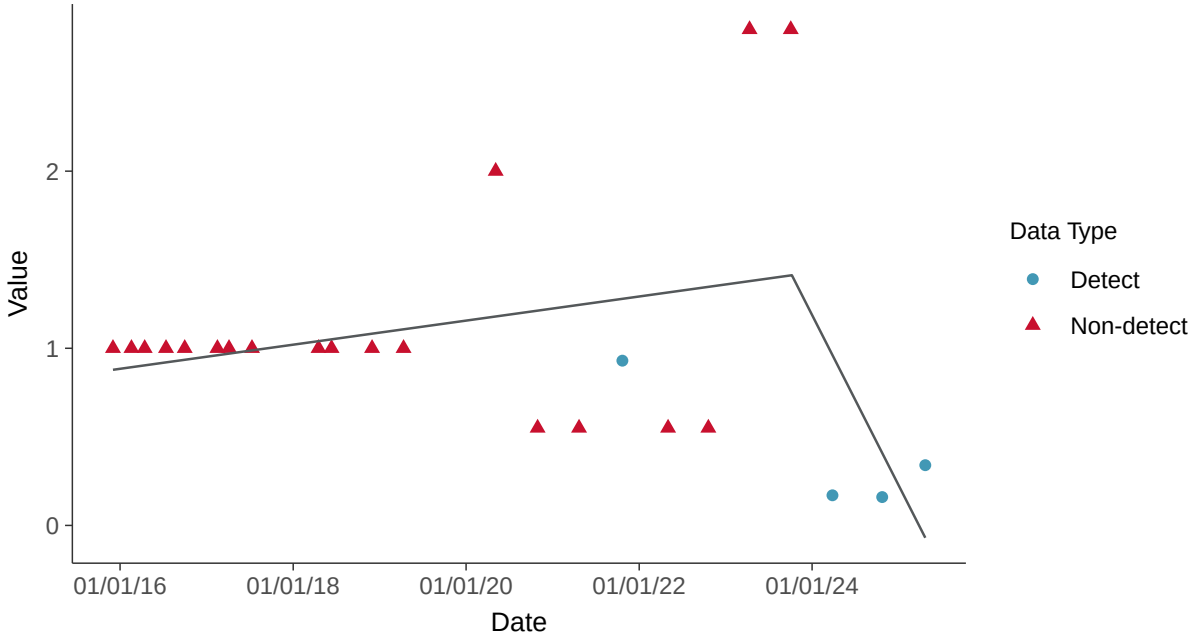
**Normal Q-Q plot using ROS Imputed Estimates**

Lead, MW-15019 (ug/L)



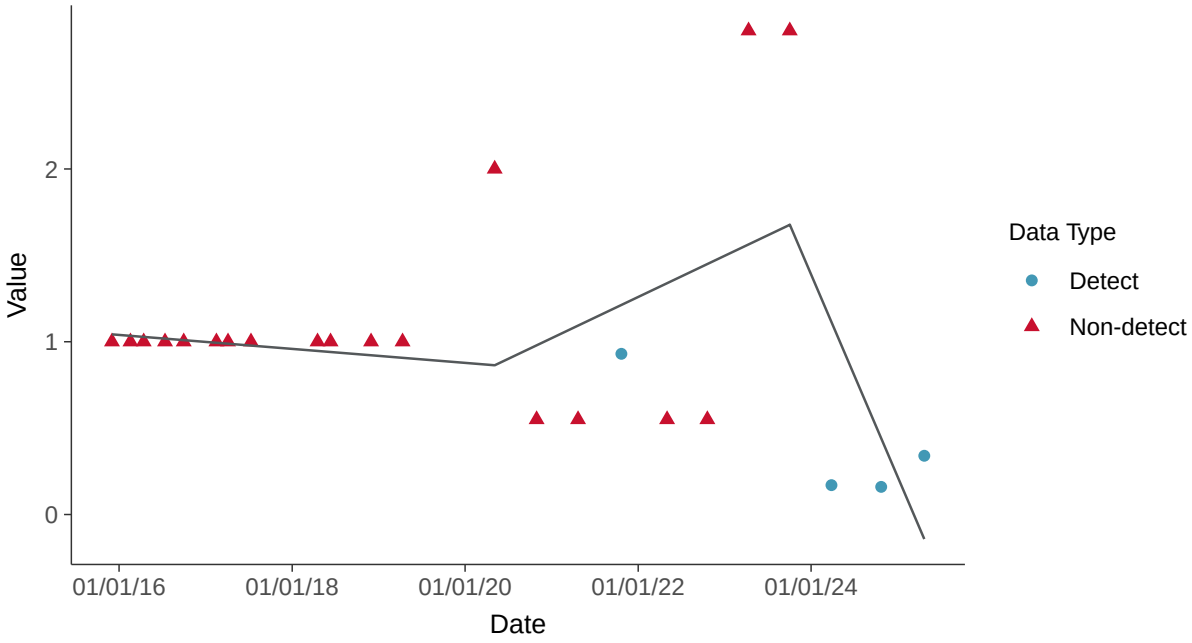

**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15019 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Lead, MW-15019 (ug/L)

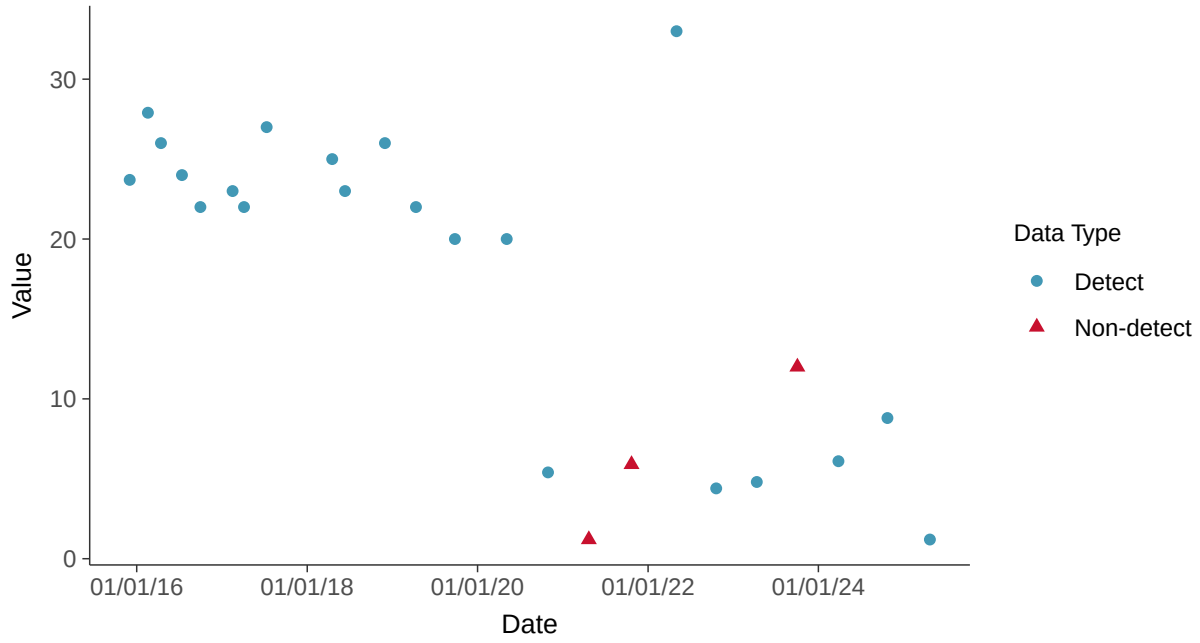


# Appendix IV: Lithium, MW-15019

ID: 09_2_117

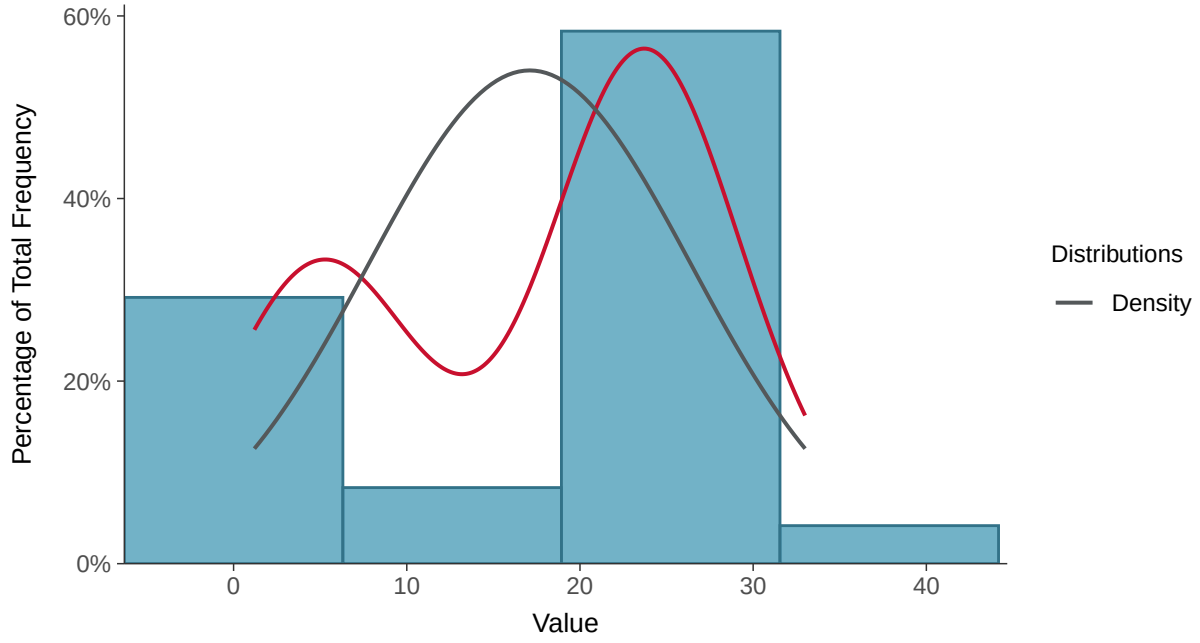
**Scatter Plot**

Lithium, MW-15019 (ug/L)



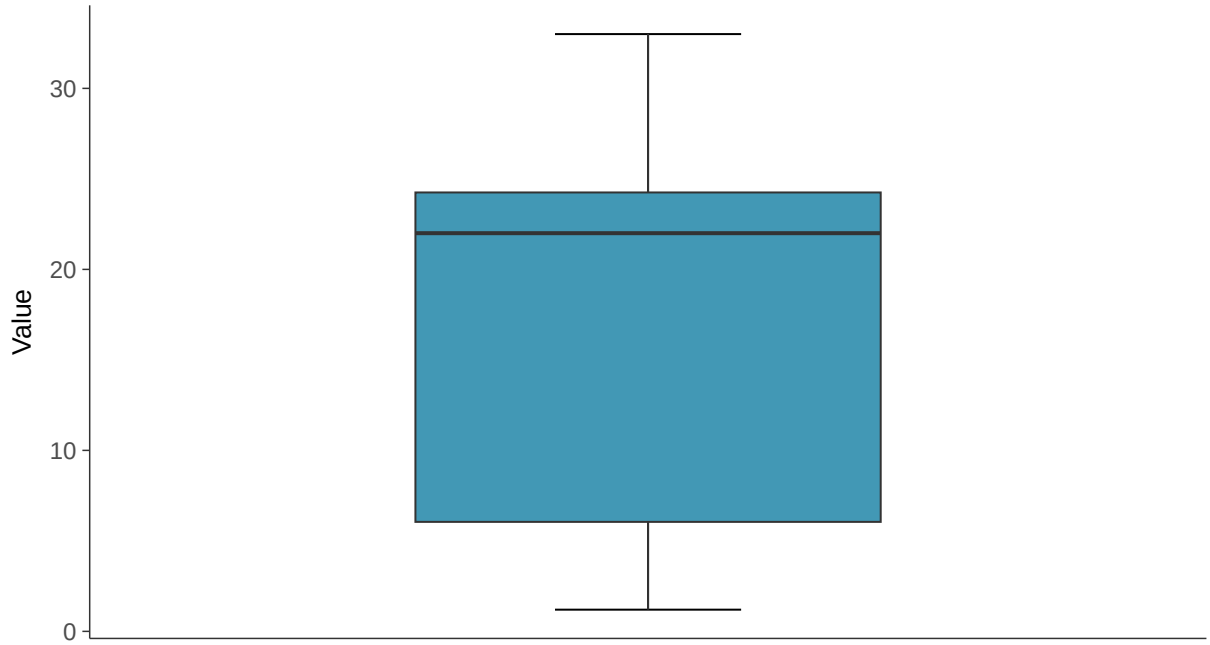

**Histogram**

Lithium, MW-15019 (ug/L)



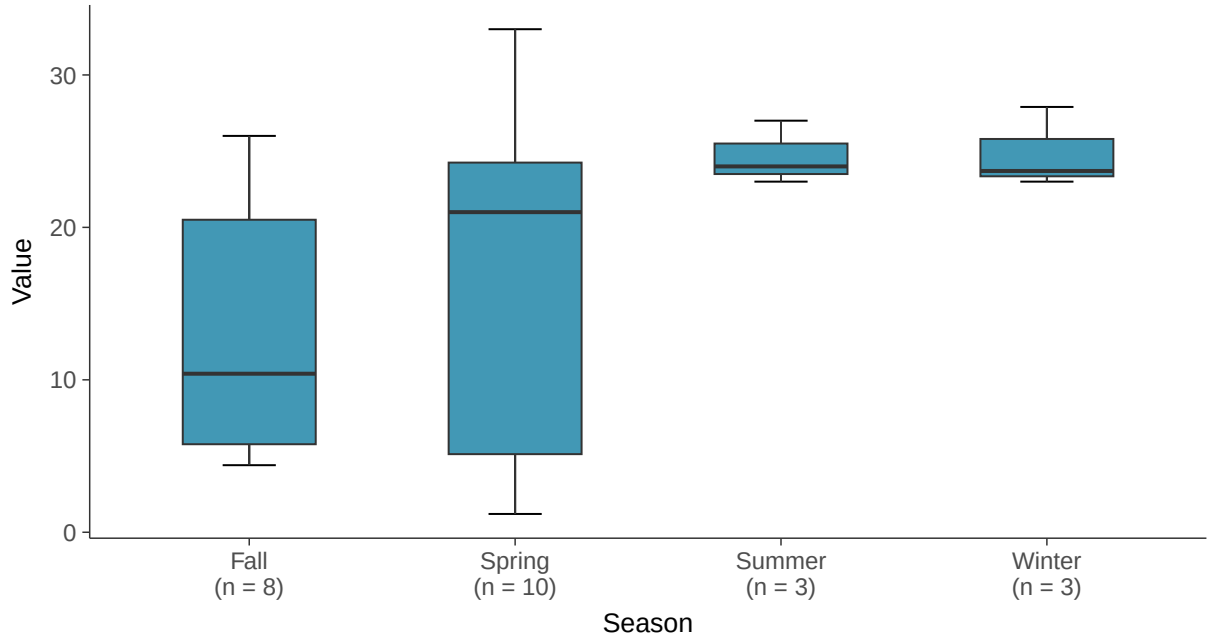
**Boxplot**

Lithium, MW-15019 (ug/L)



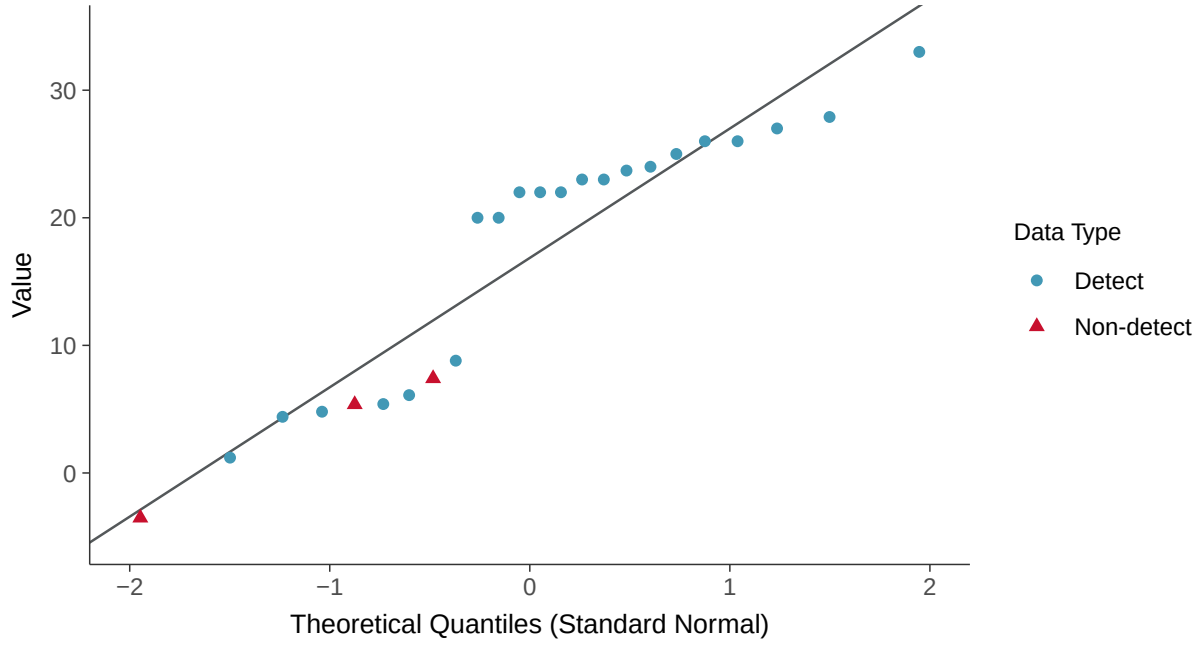

**Boxplot by Season**

Lithium, MW-15019 (ug/L)



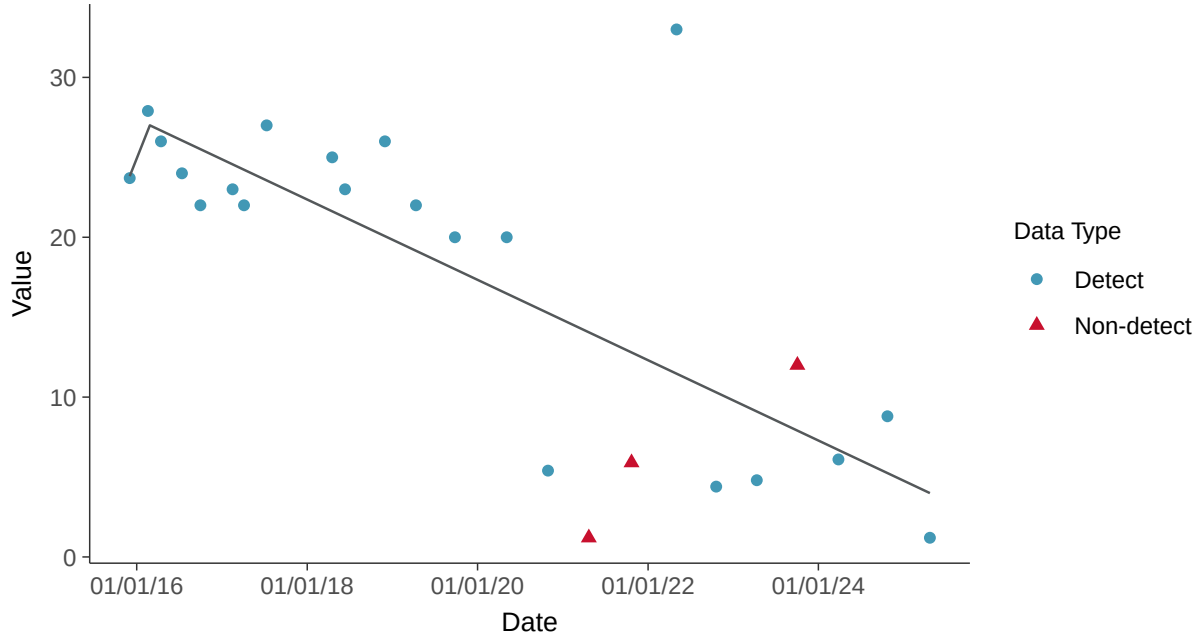
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15019 (ug/L)



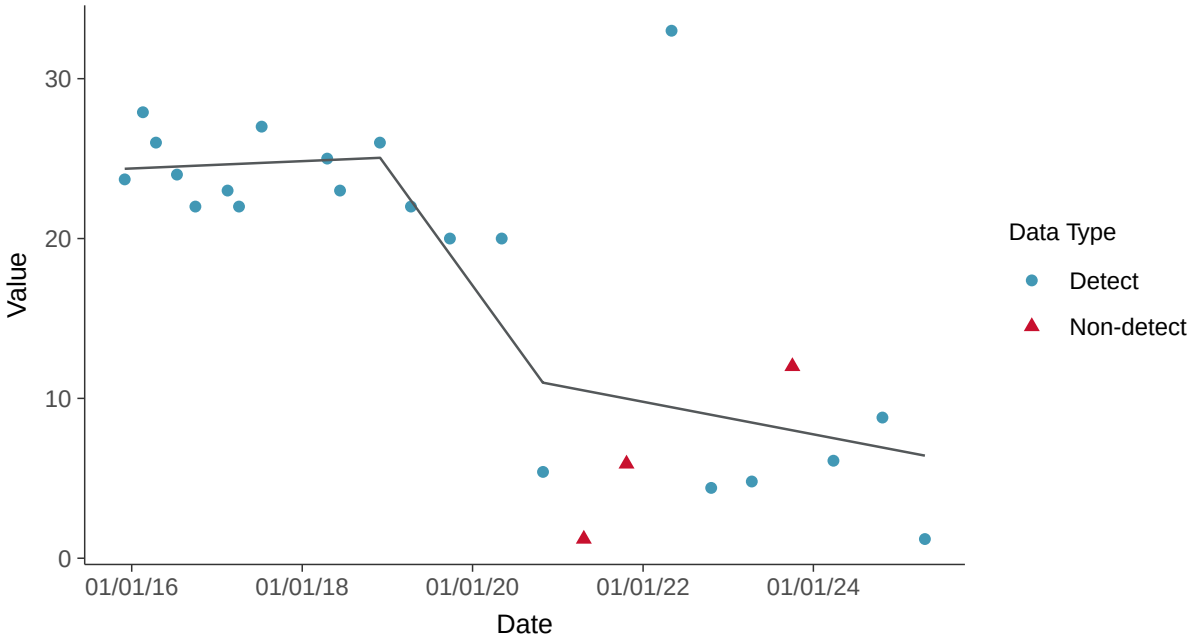

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15019 (ug/L)



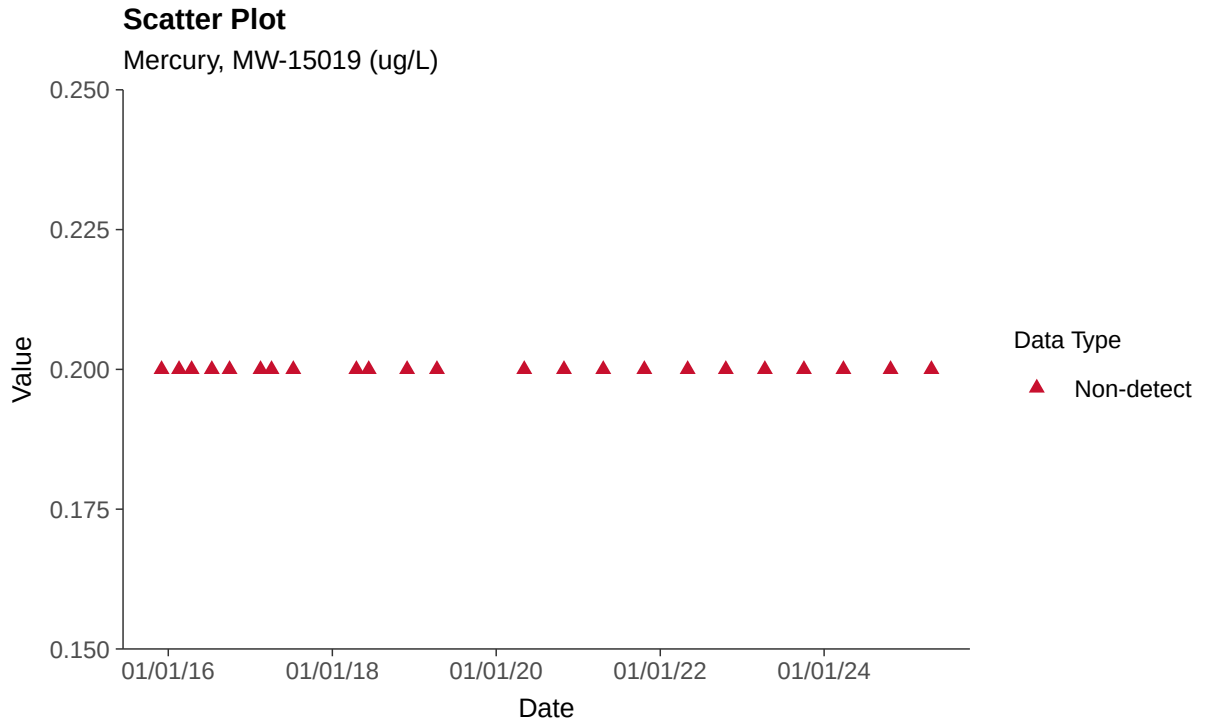
**Trend Regression: Piecewise Linear-Linear-Linear**

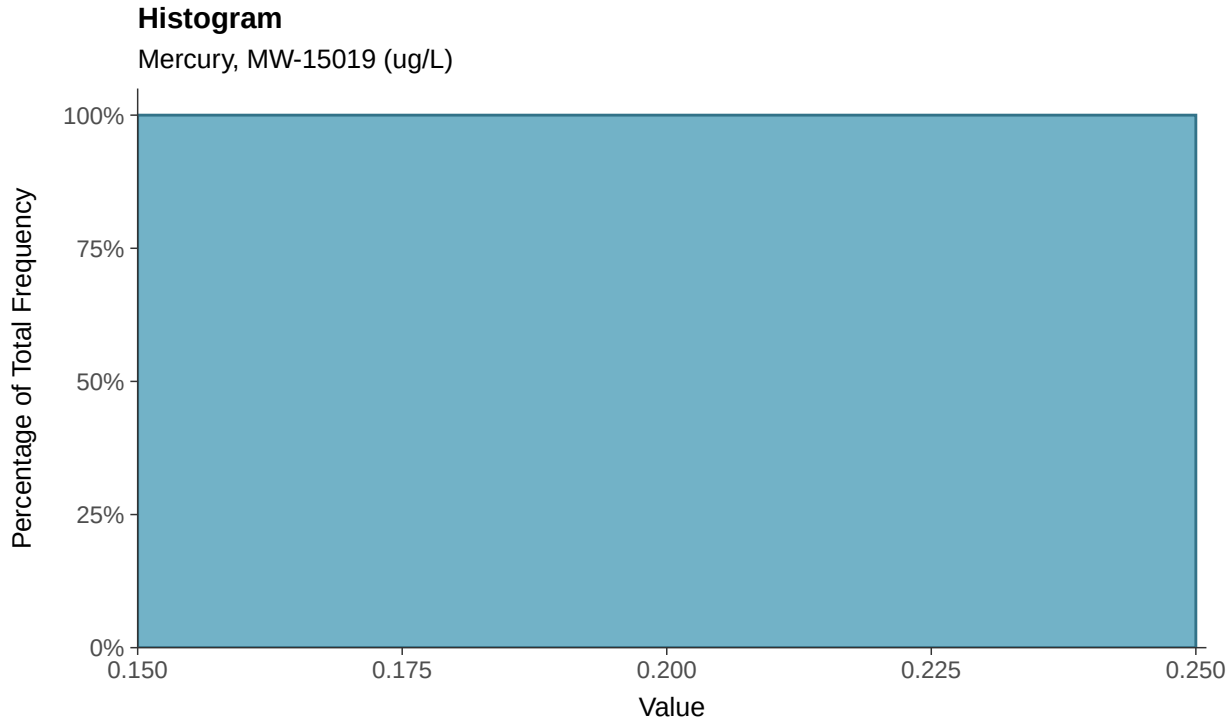
Lithium, MW-15019 (ug/L)



## Appendix IV: Mercury, MW-15019

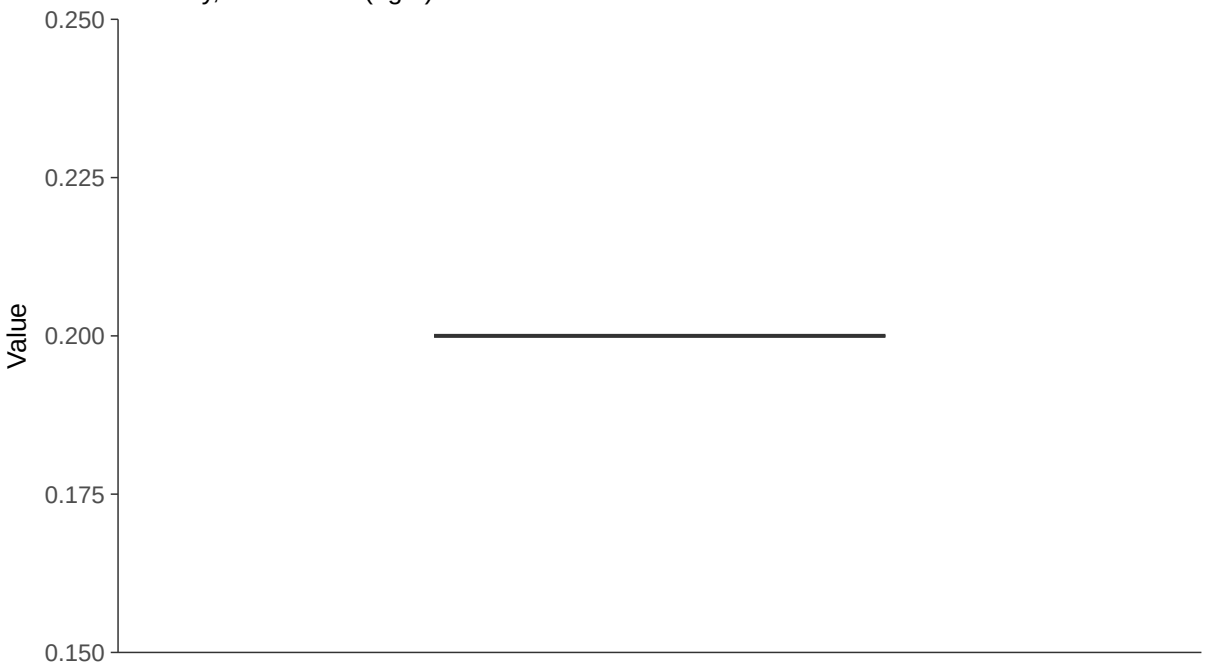
ID: 09_2_118



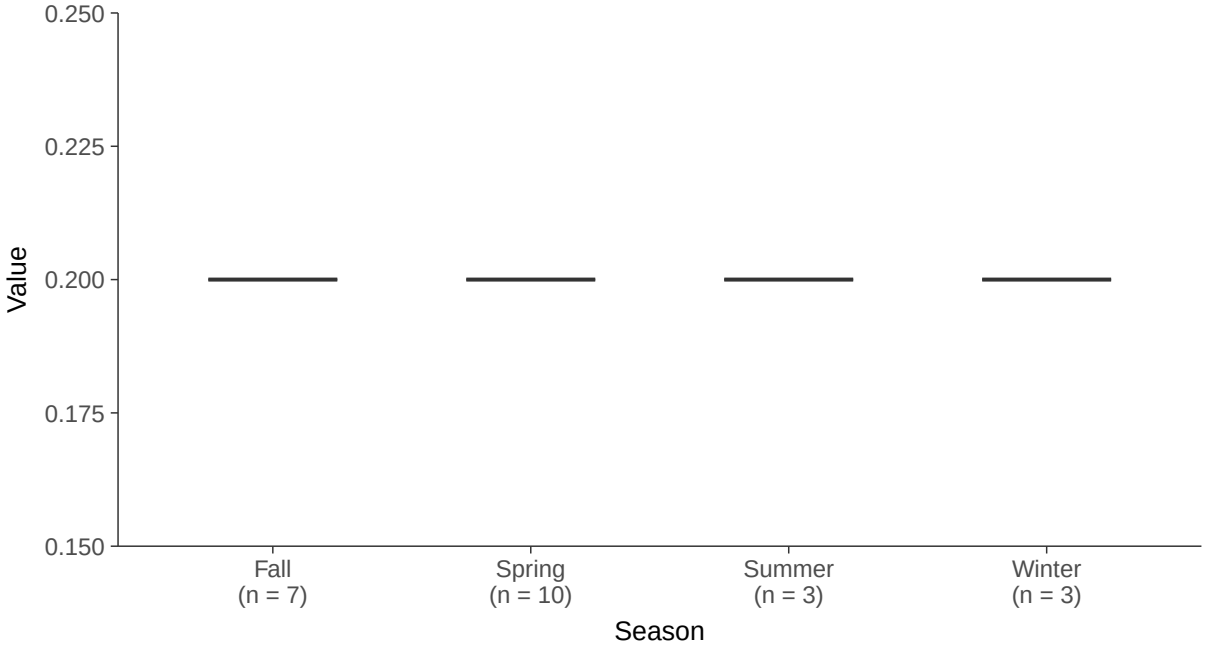
**Boxplot**

Mercury, MW-15019 (ug/L)



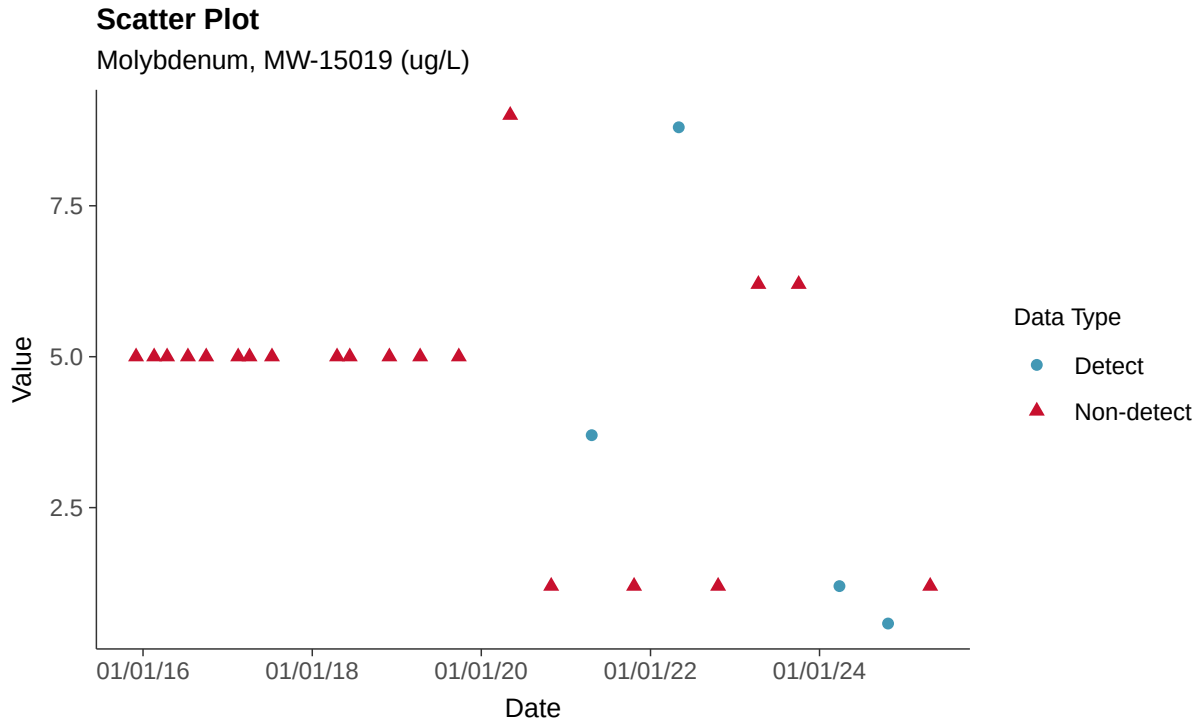

**Boxplot by Season**

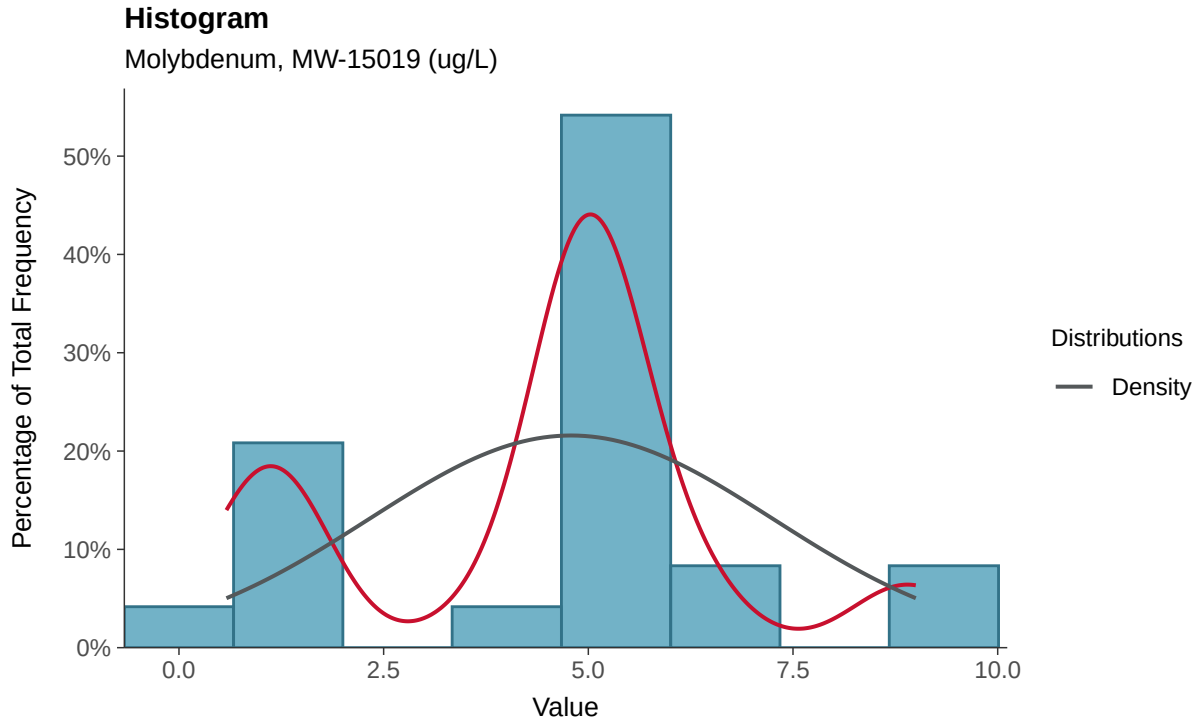
Mercury, MW-15019 (ug/L)



# Appendix IV: Molybdenum, MW-15019

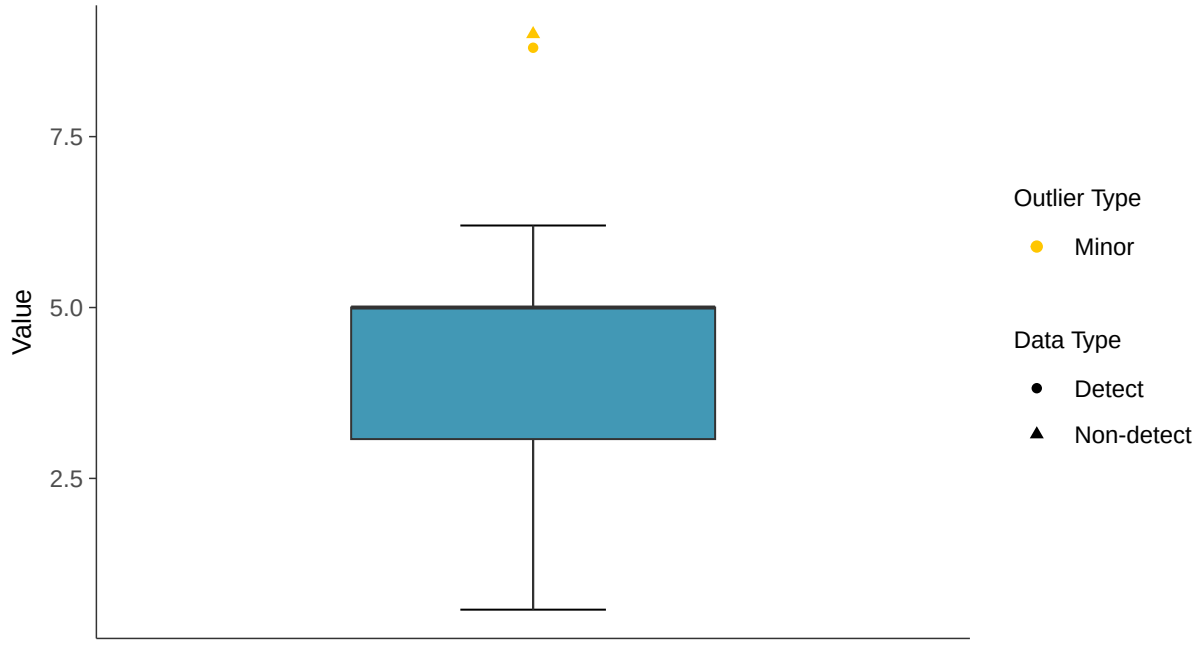
ID: 09_2_119



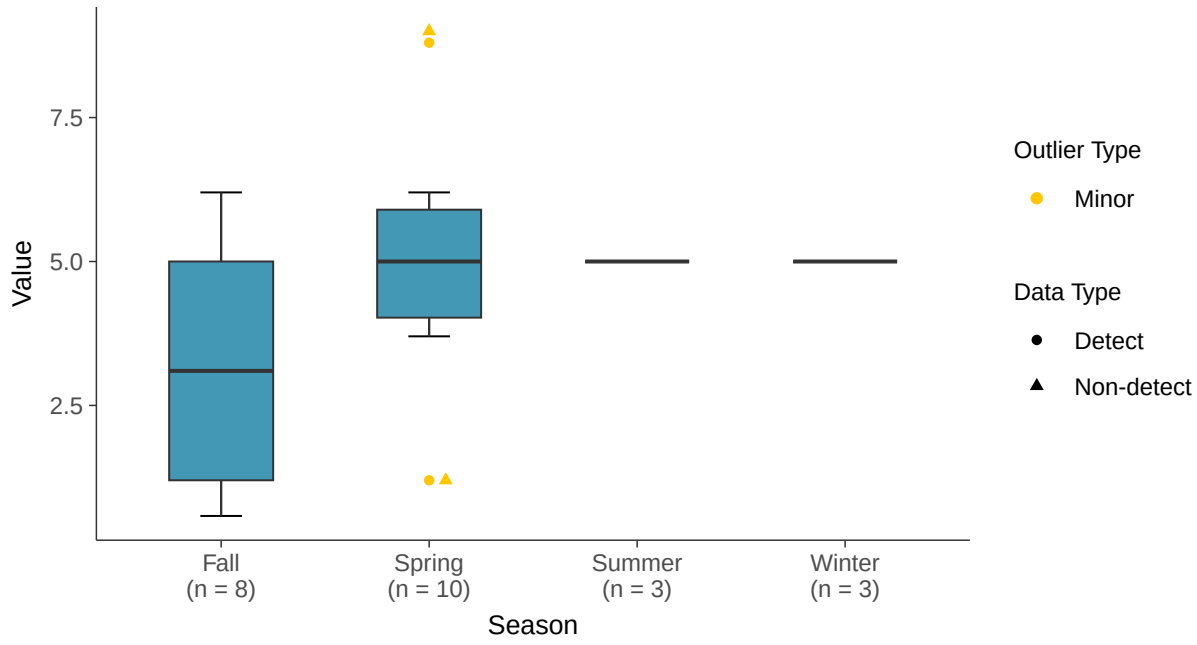
## Boxplot

Molybdenum, MW-15019 (ug/L)



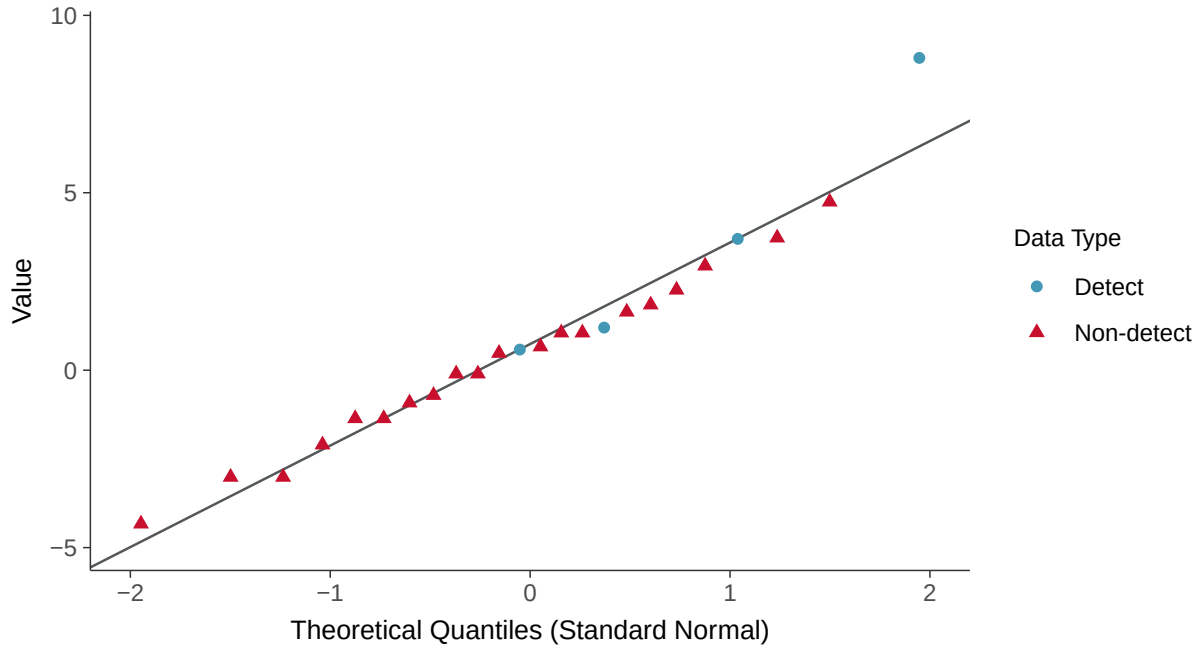

## Boxplot by Season

Molybdenum, MW-15019 (ug/L)



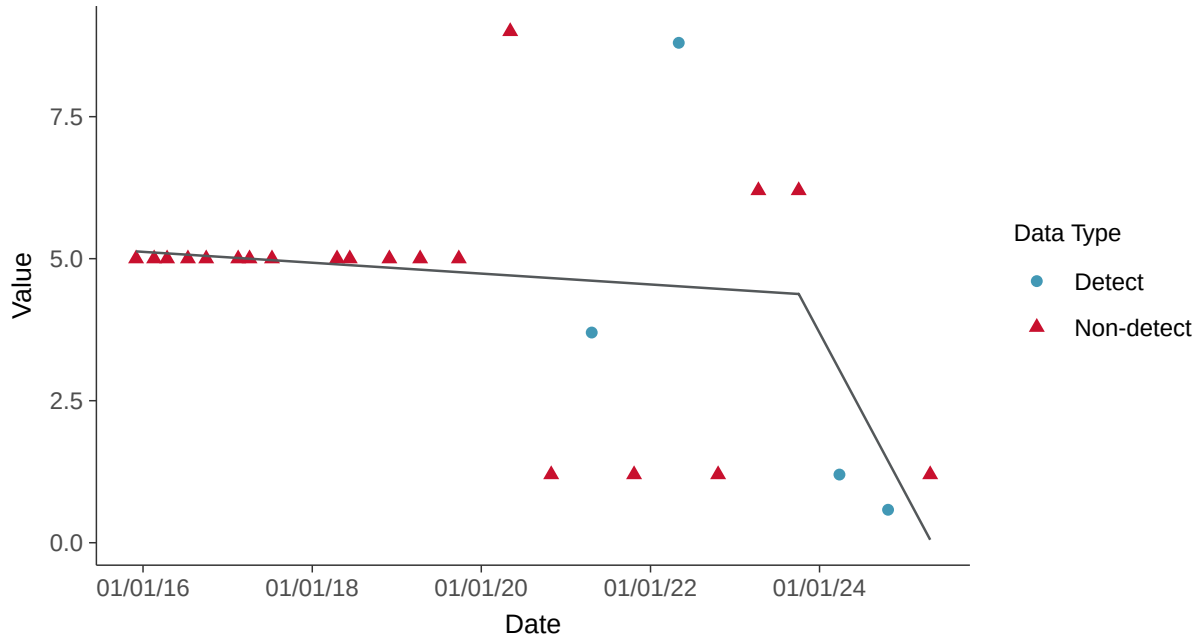
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15019 (ug/L)



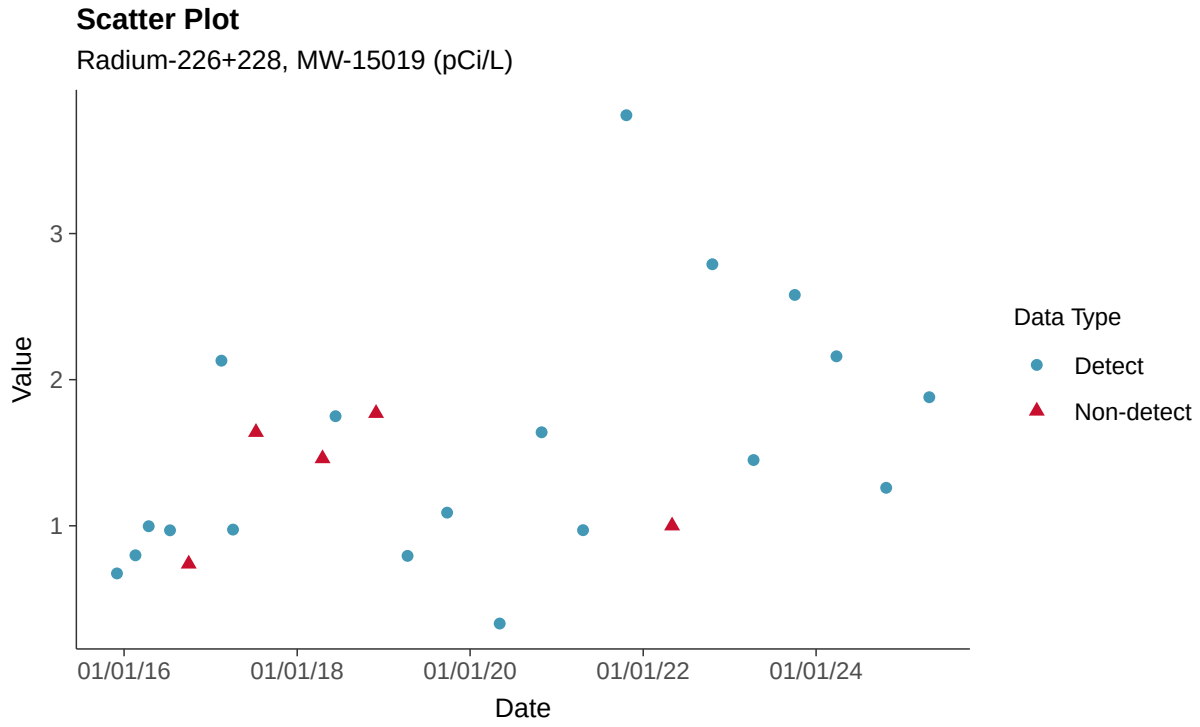

**Trend Regression: Piecewise Linear-Linear**

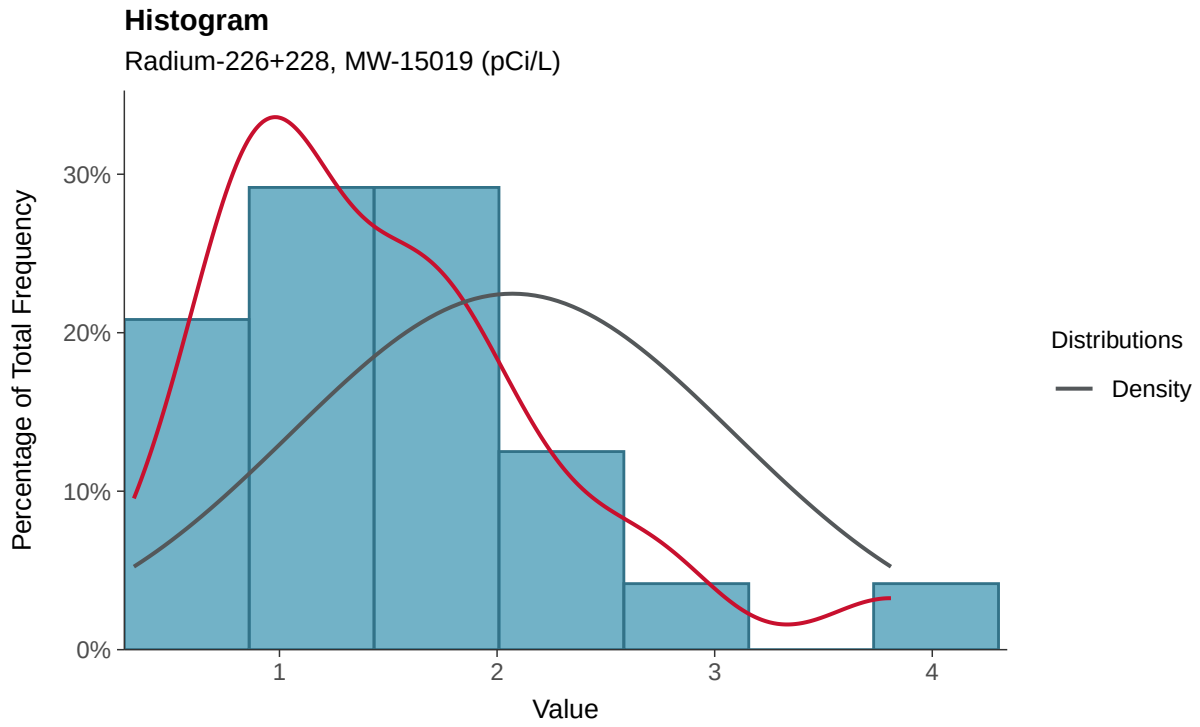
Molybdenum, MW-15019 (ug/L)



## Appendix IV: Radium-226+228, MW-15019

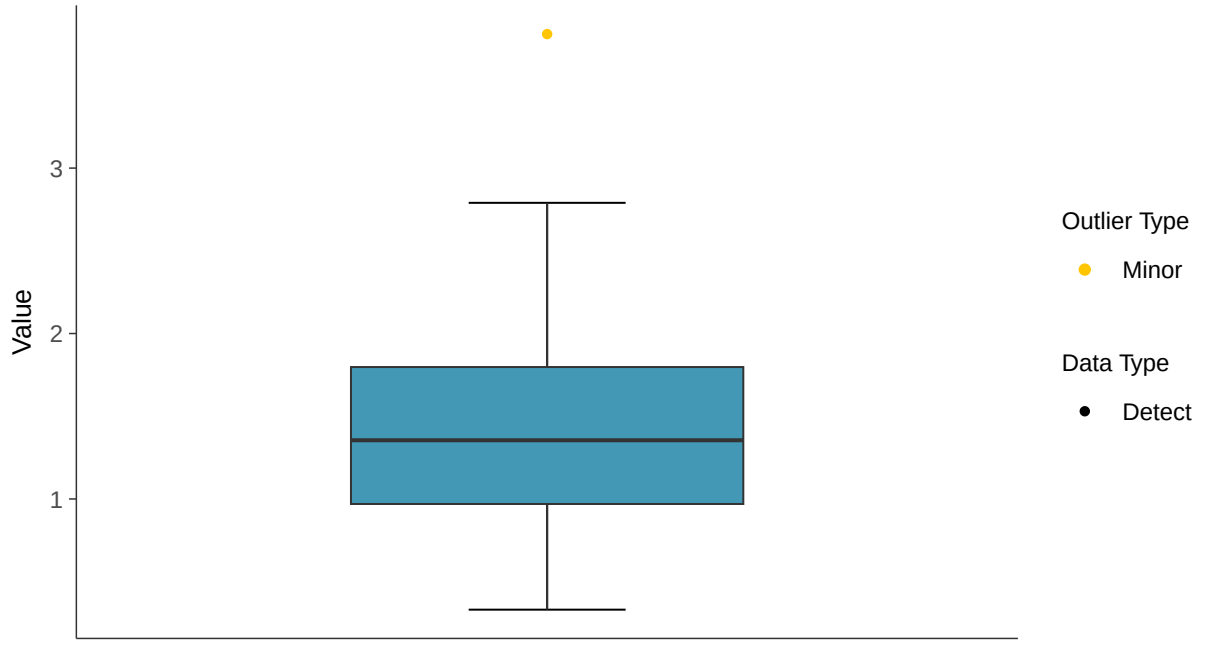
ID: 09_2_125



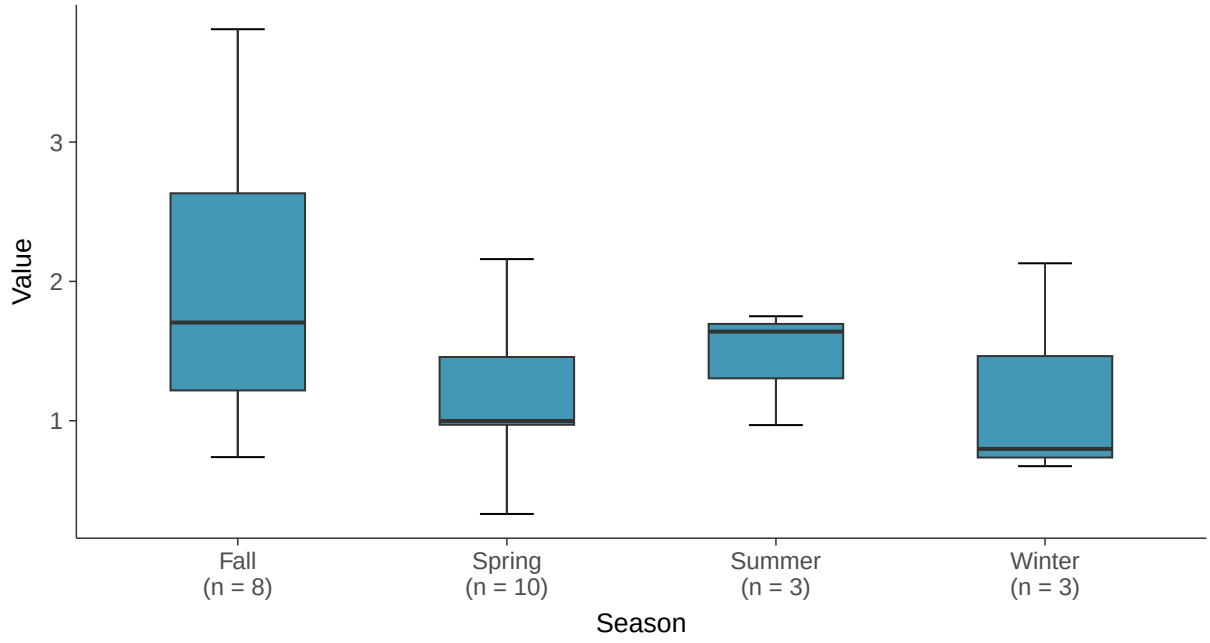
## Boxplot

Radium-226+228, MW-15019 (pCi/L)



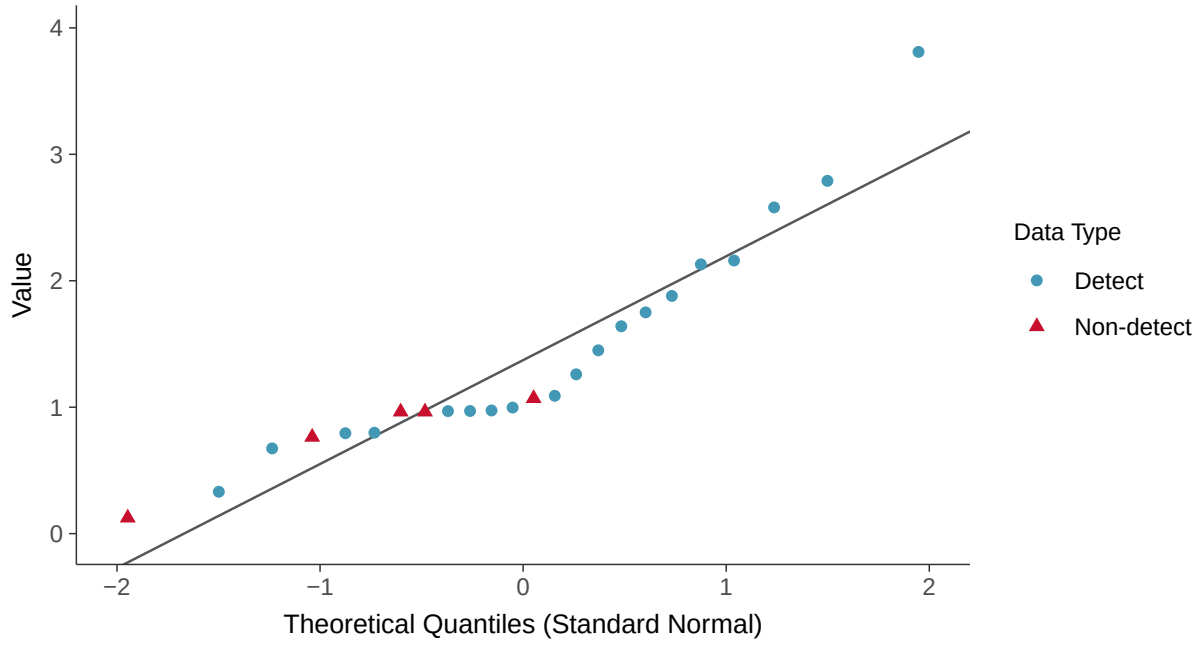

## Boxplot by Season

Radium-226+228, MW-15019 (pCi/L)



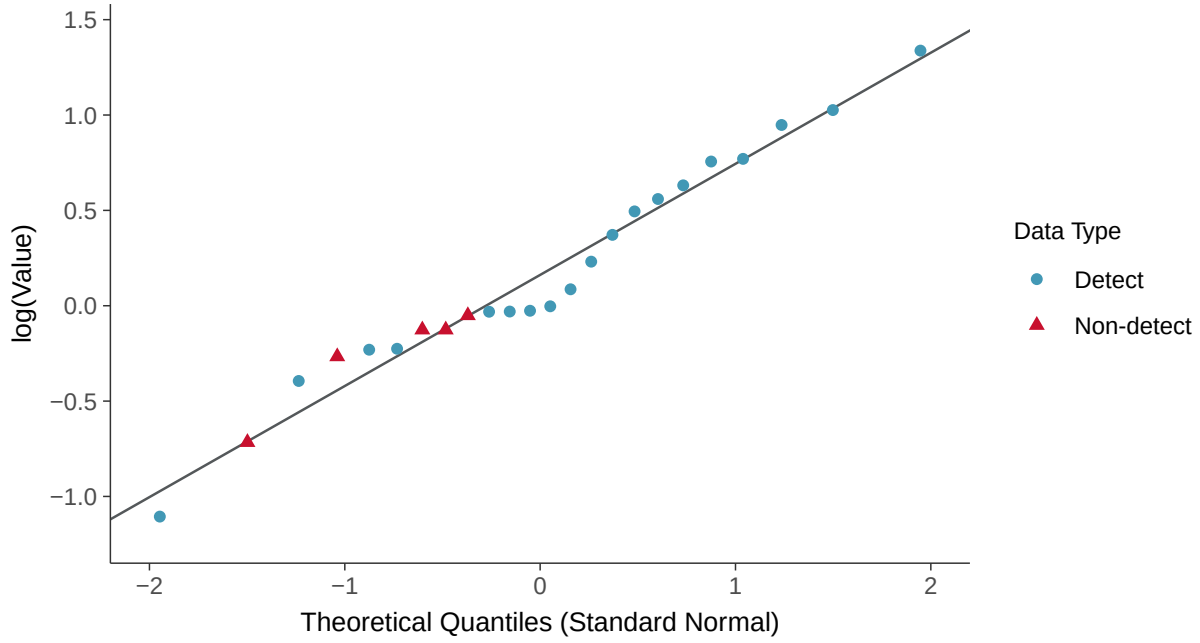
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15019 (pCi/L)



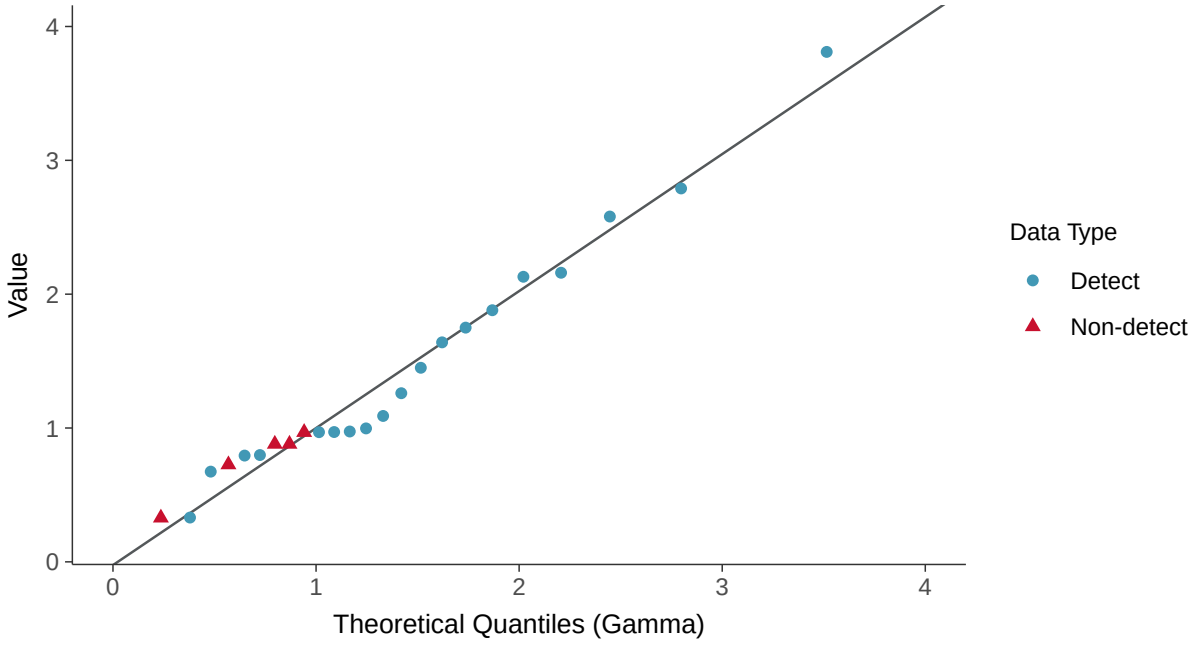

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15019 (pCi/L)



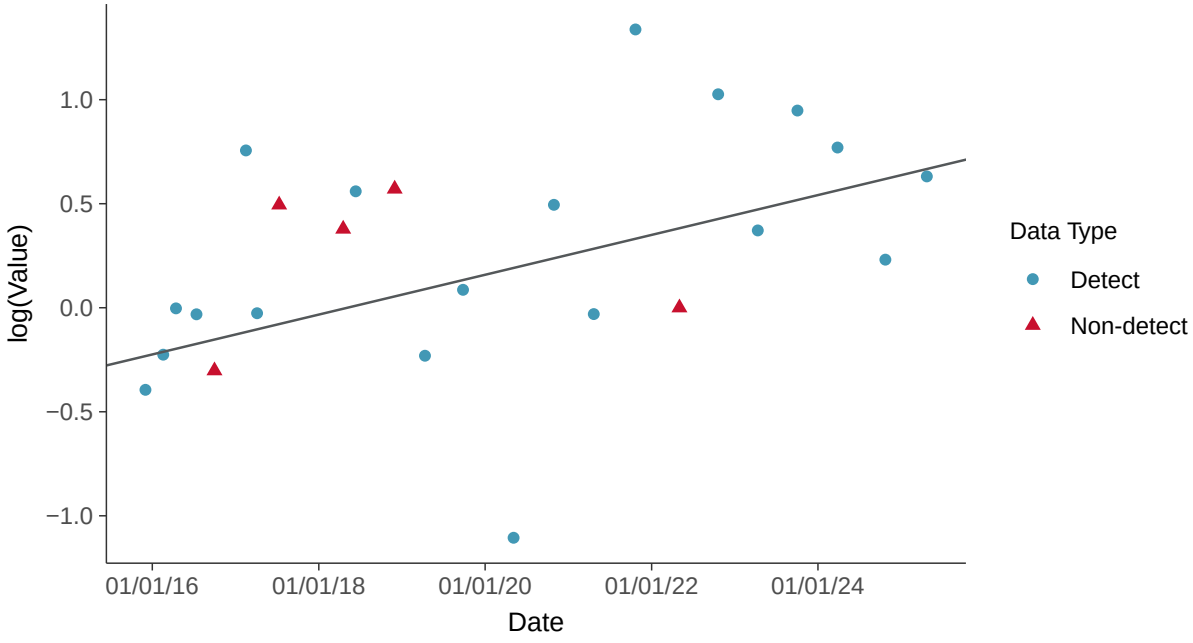
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15019 (pCi/L)



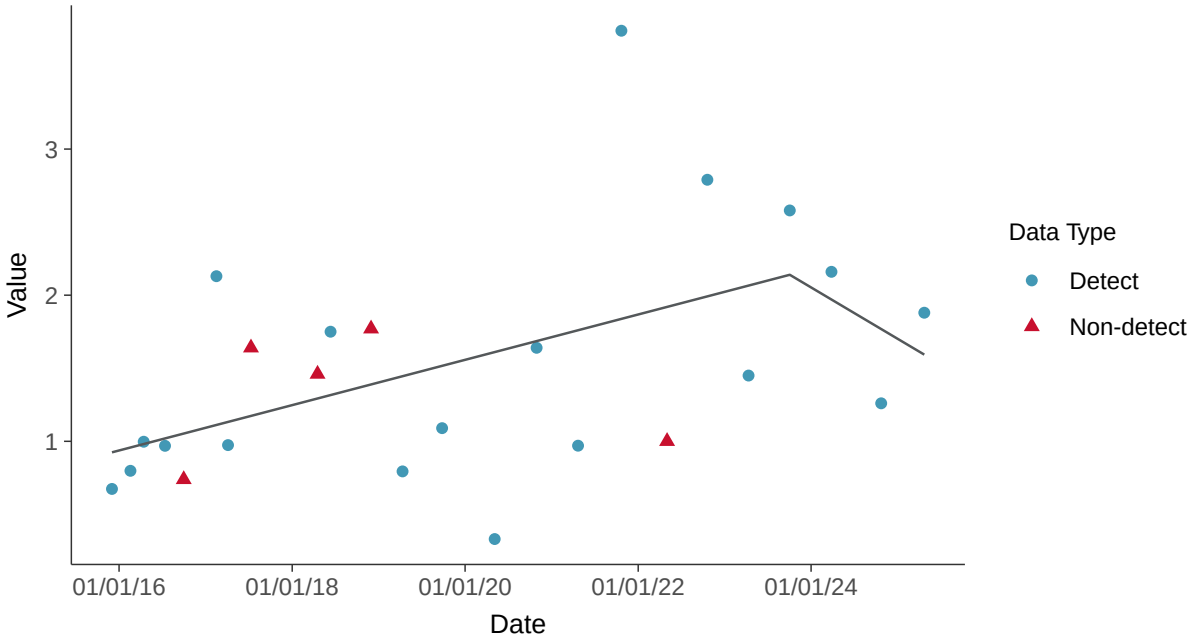

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15019 (pCi/L)



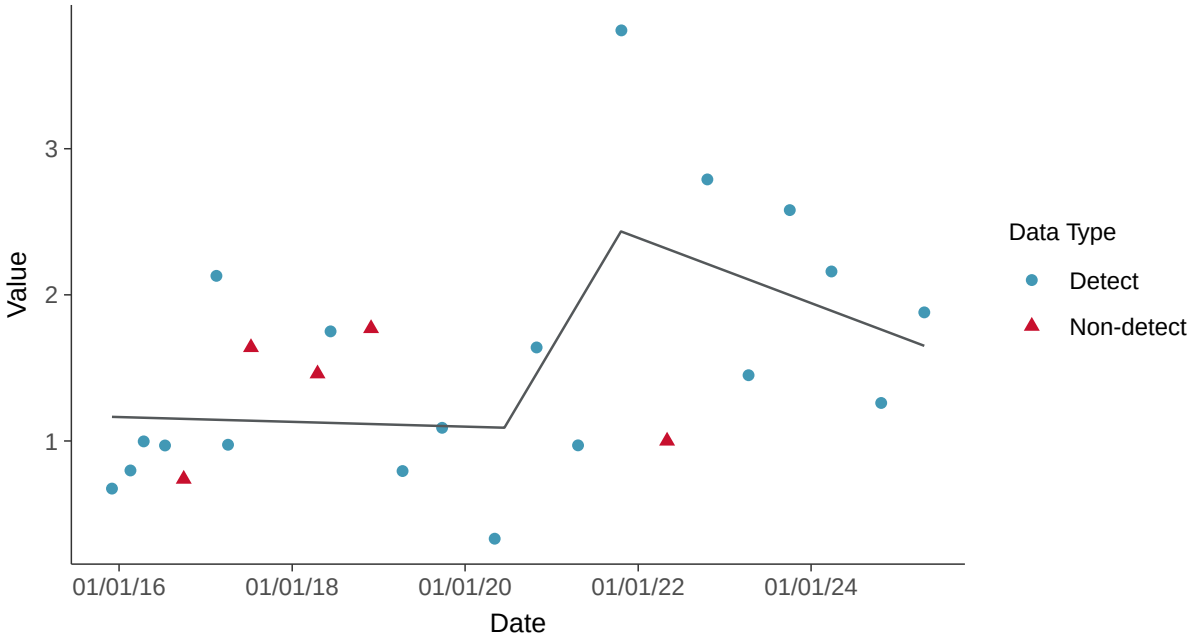
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15019 (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15019 (pCi/L)

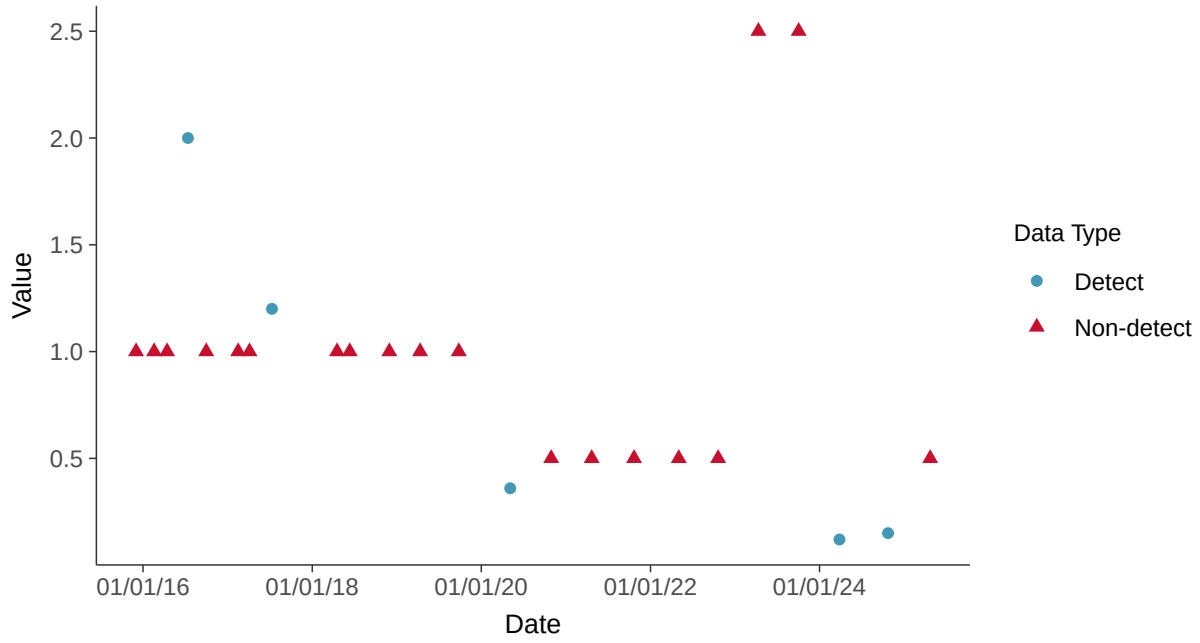


## Appendix IV: Selenium, MW-15019

ID: 09_2_127

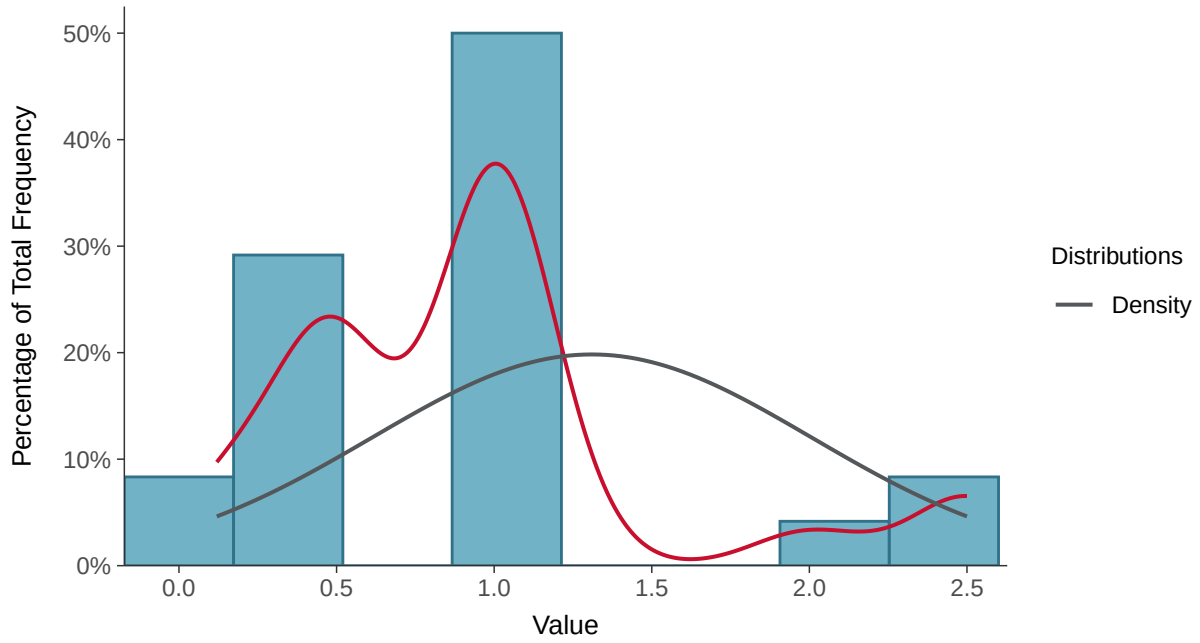
**Scatter Plot**

Selenium, MW-15019 (ug/L)



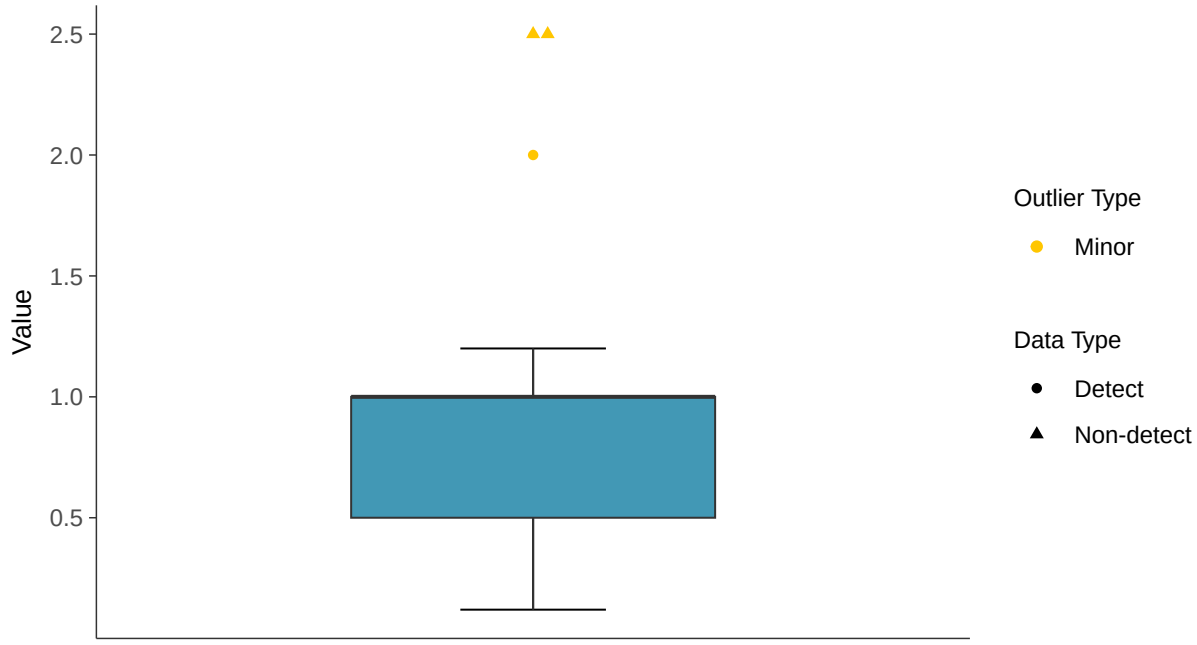

**Histogram**

Selenium, MW-15019 (ug/L)



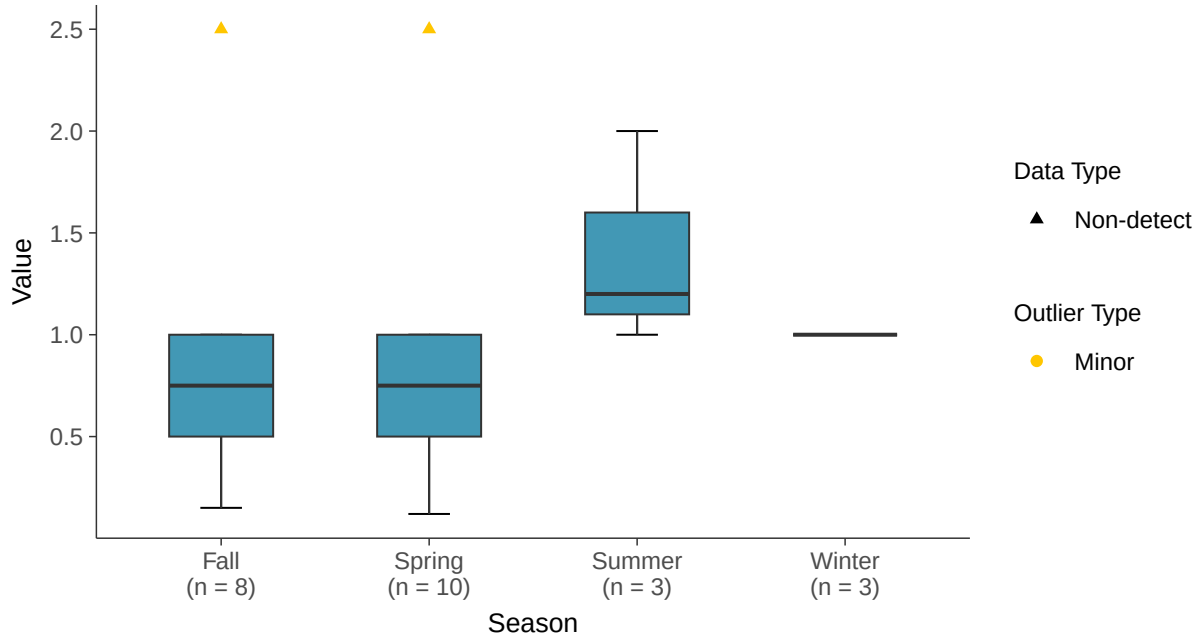
## Boxplot

Selenium, MW-15019 (ug/L)



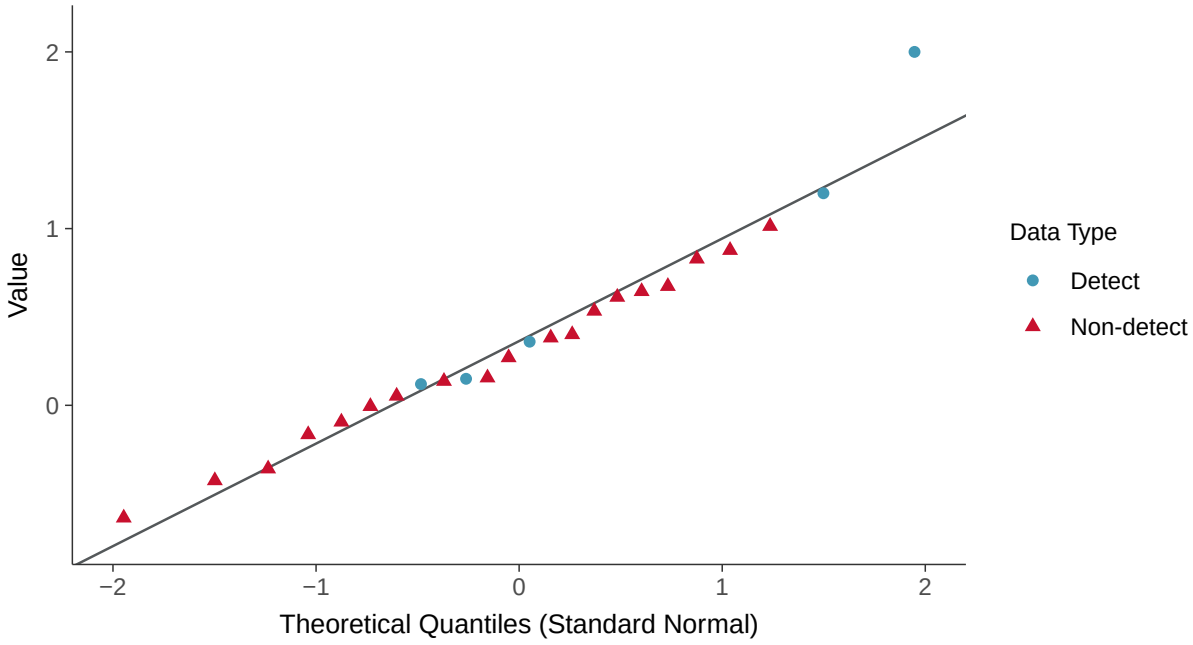

## Boxplot by Season

Selenium, MW-15019 (ug/L)



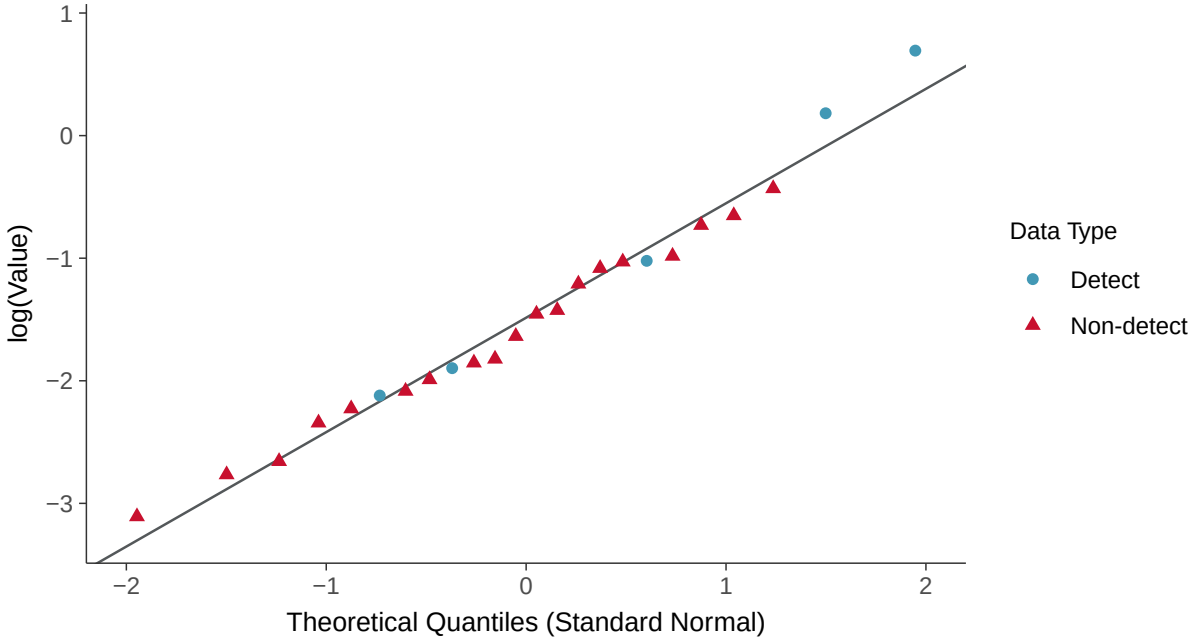
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15019 (ug/L)



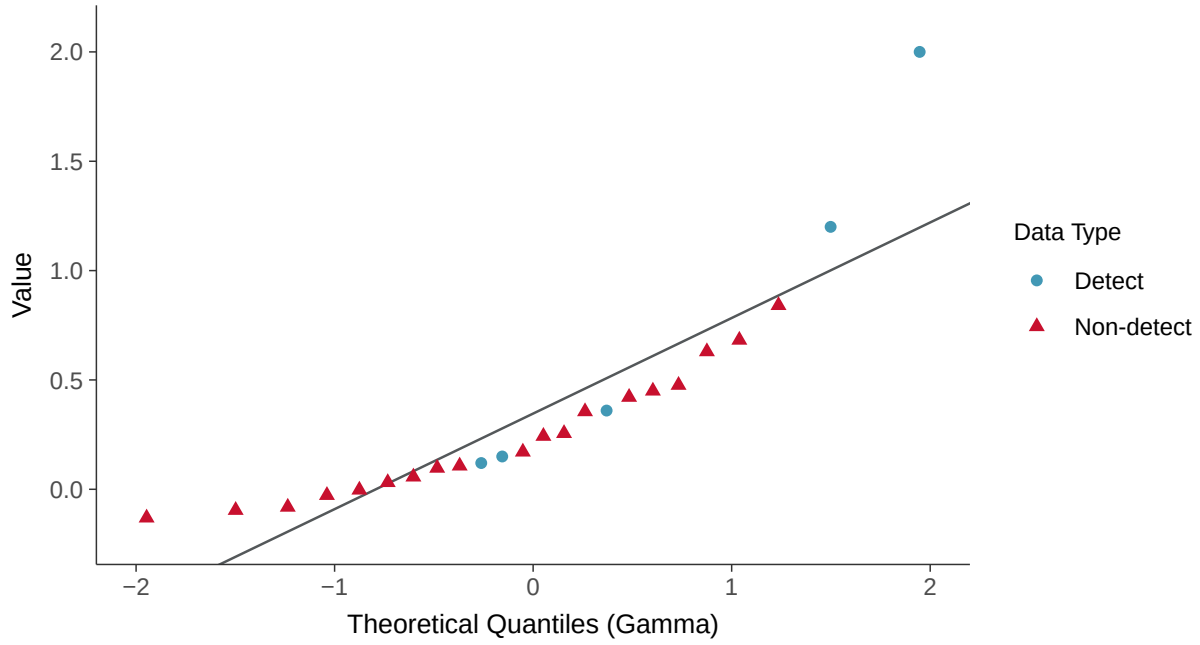

**Lognormal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15019 (ug/L)



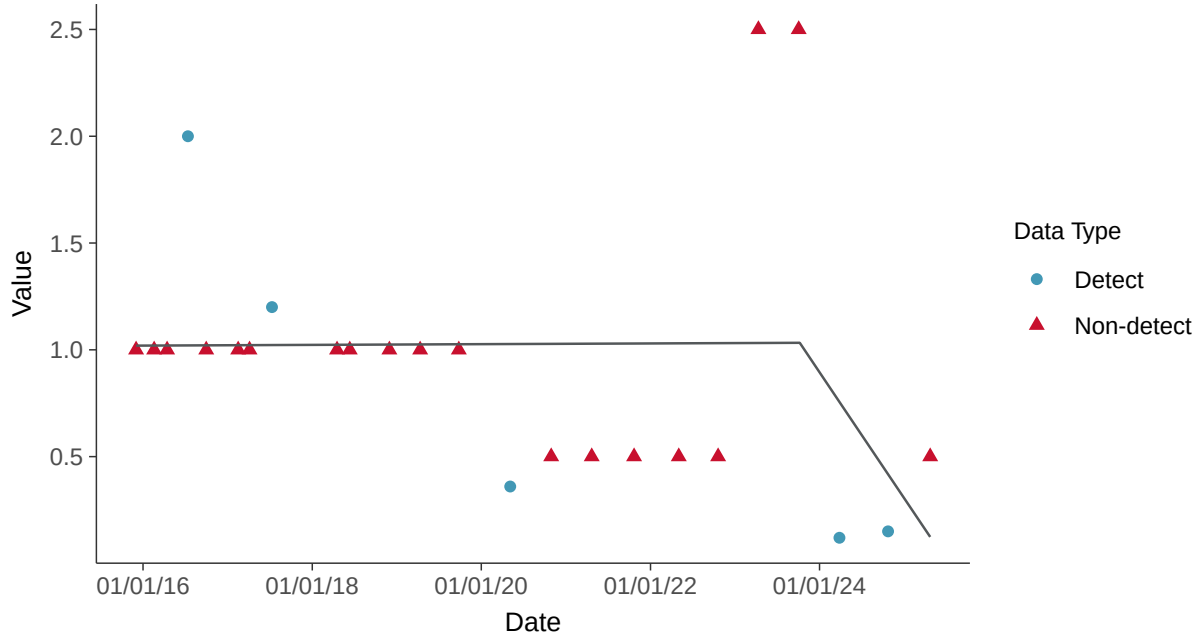
**Gamma Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15019 (ug/L)



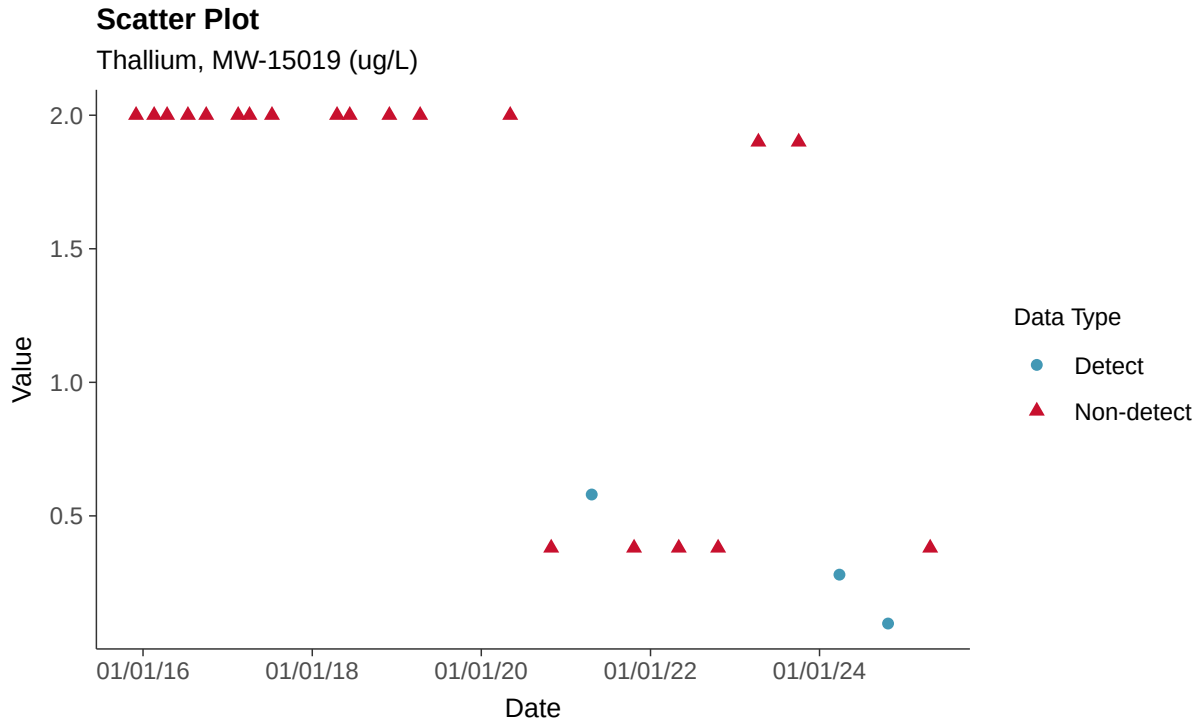

**Trend Regression: Piecewise Linear-Linear**

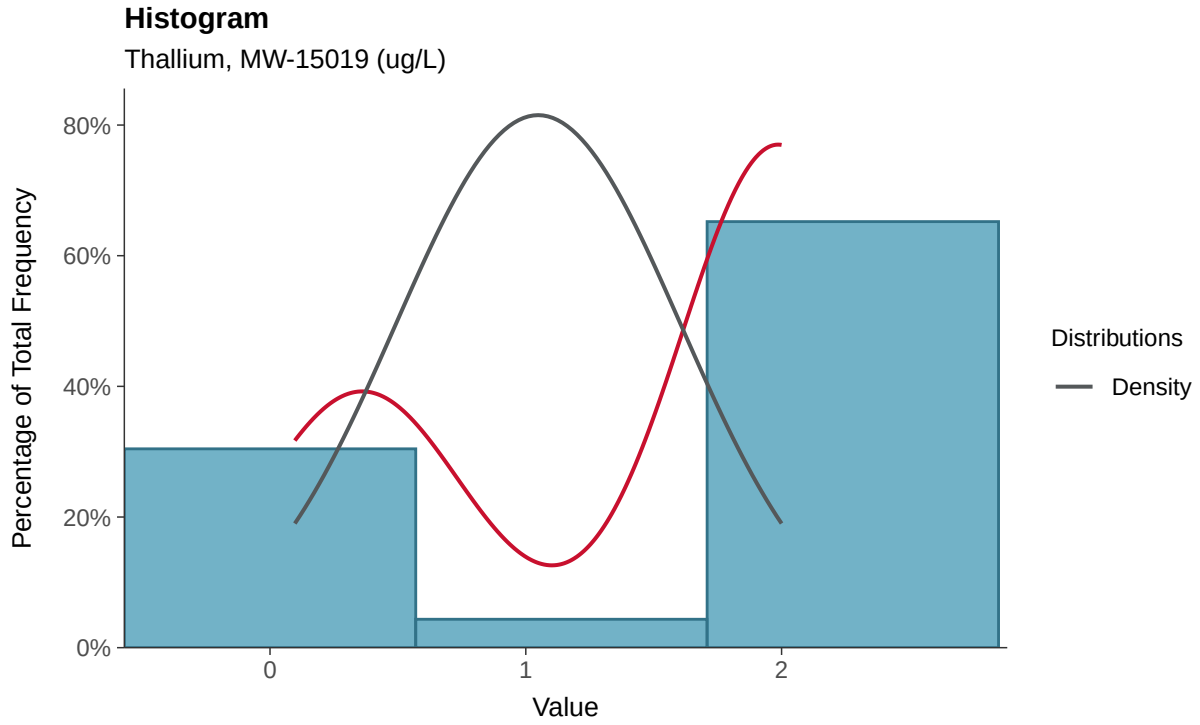
Selenium, MW-15019 (ug/L)



## Appendix IV: Thallium, MW-15019

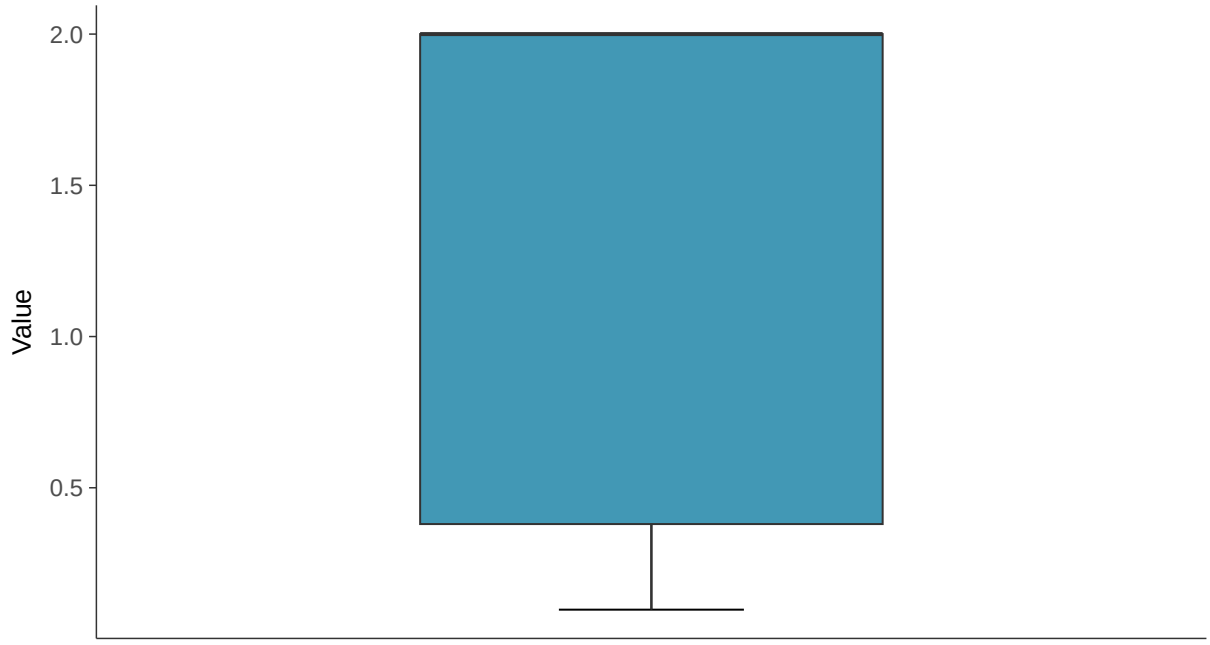
ID: 09_2_131



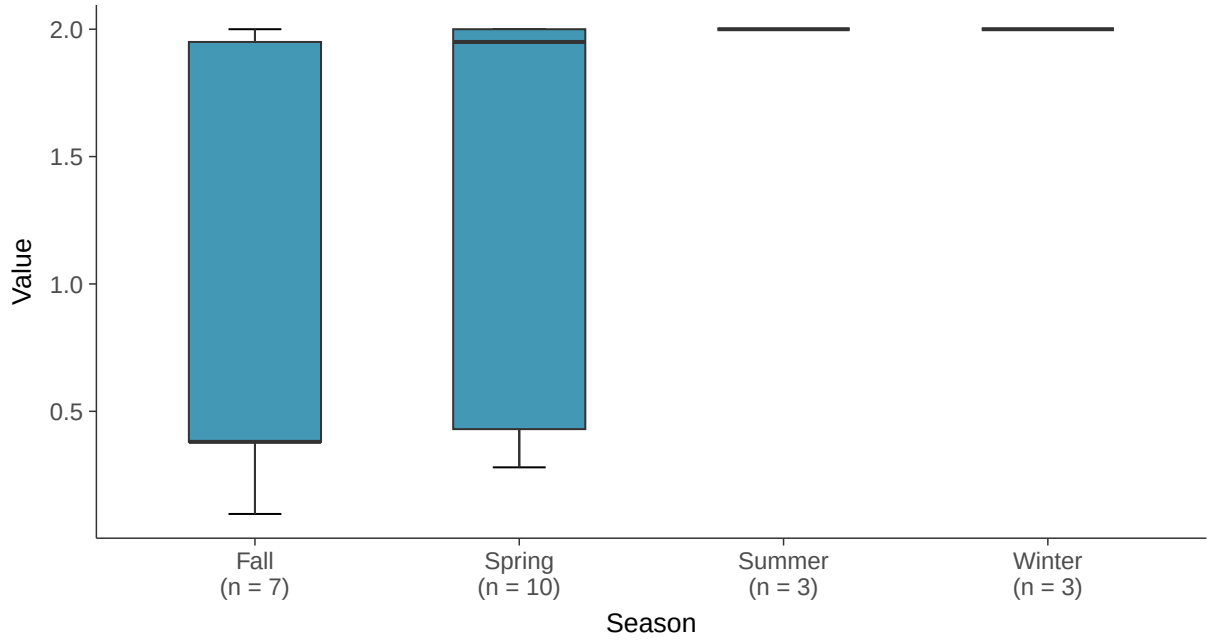
**Boxplot**

Thallium, MW-15019 (ug/L)



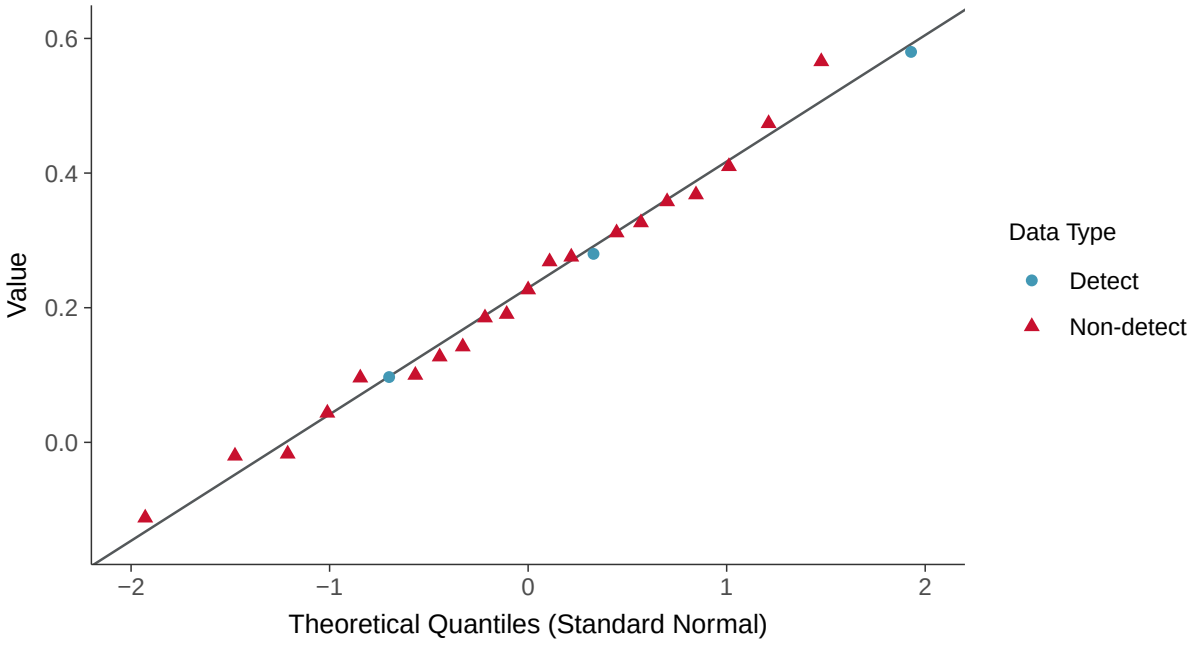

**Boxplot by Season**

Thallium, MW-15019 (ug/L)



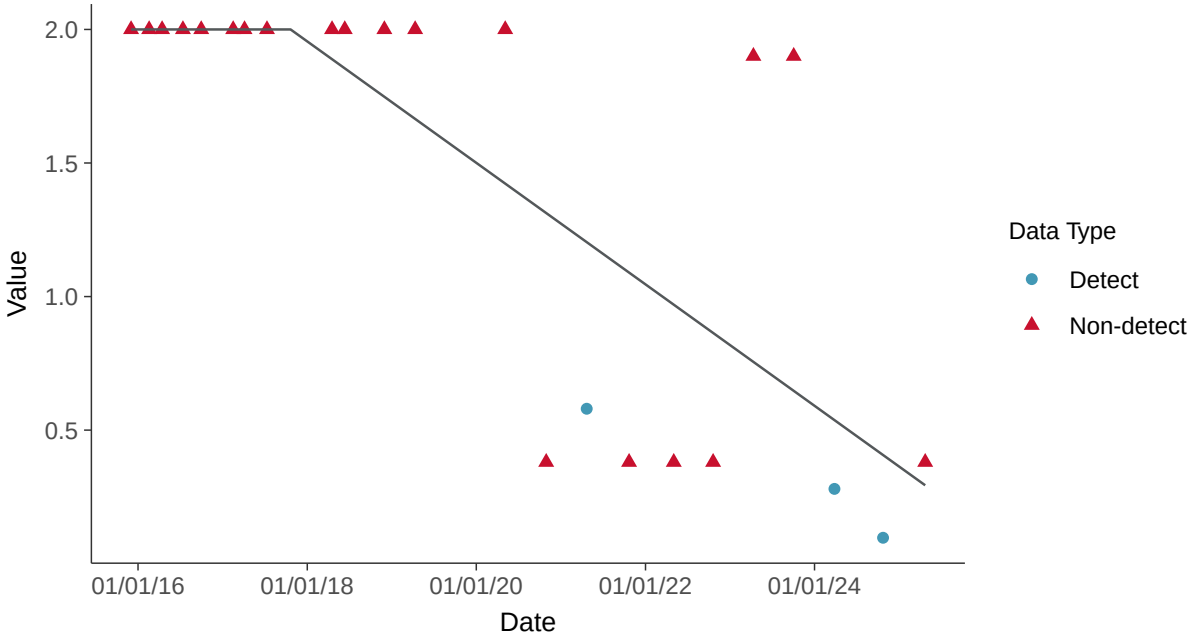
**Normal Q-Q plot using ROS Imputed Estimates**

Thallium, MW-15019 (ug/L)



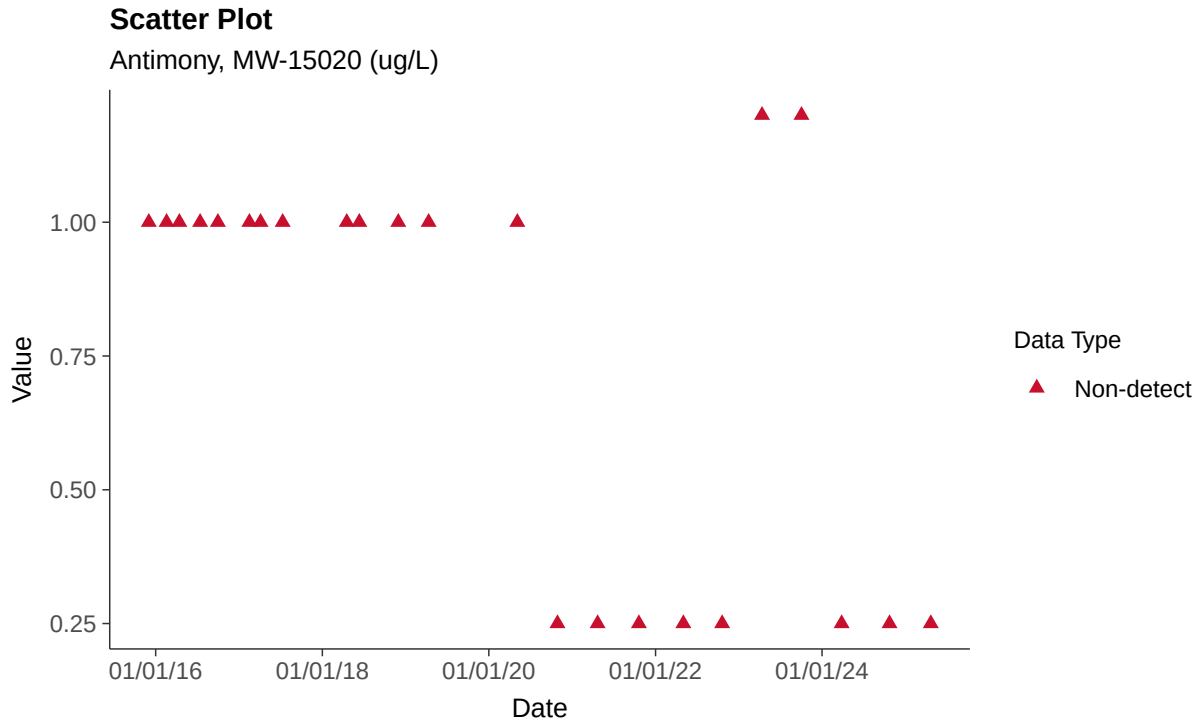

**Trend Regression: Piecewise Linear-Linear**

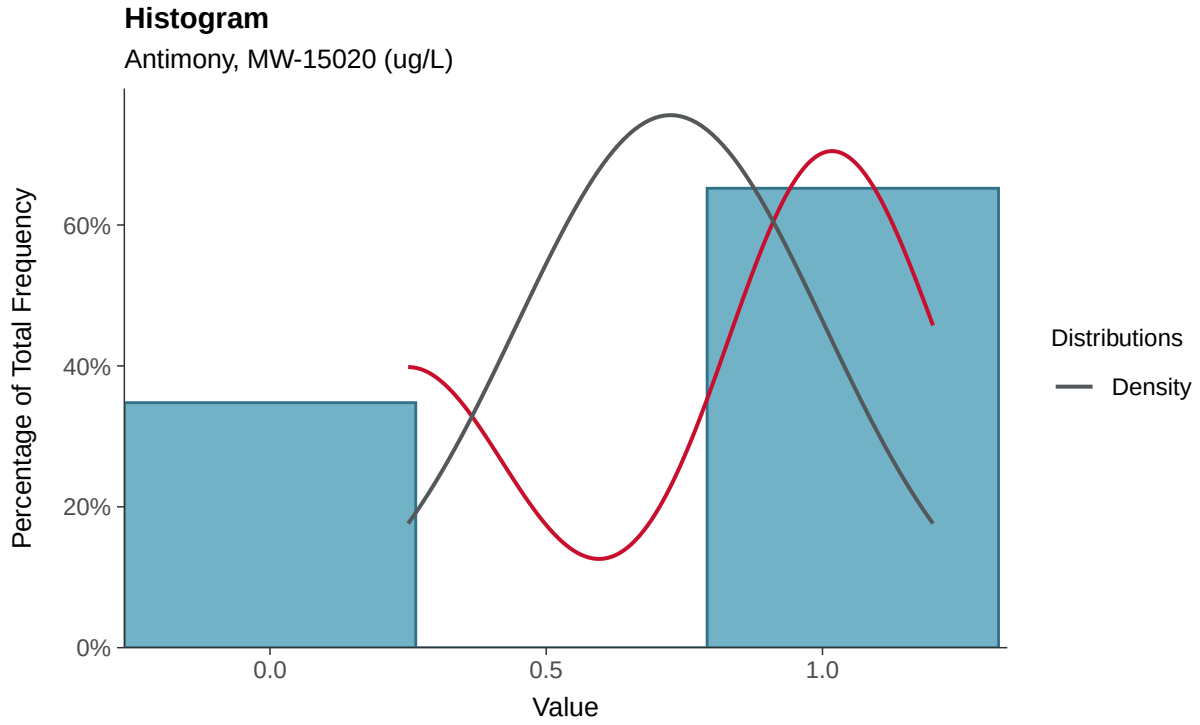
Thallium, MW-15019 (ug/L)



## Appendix IV: Antimony, MW-15020

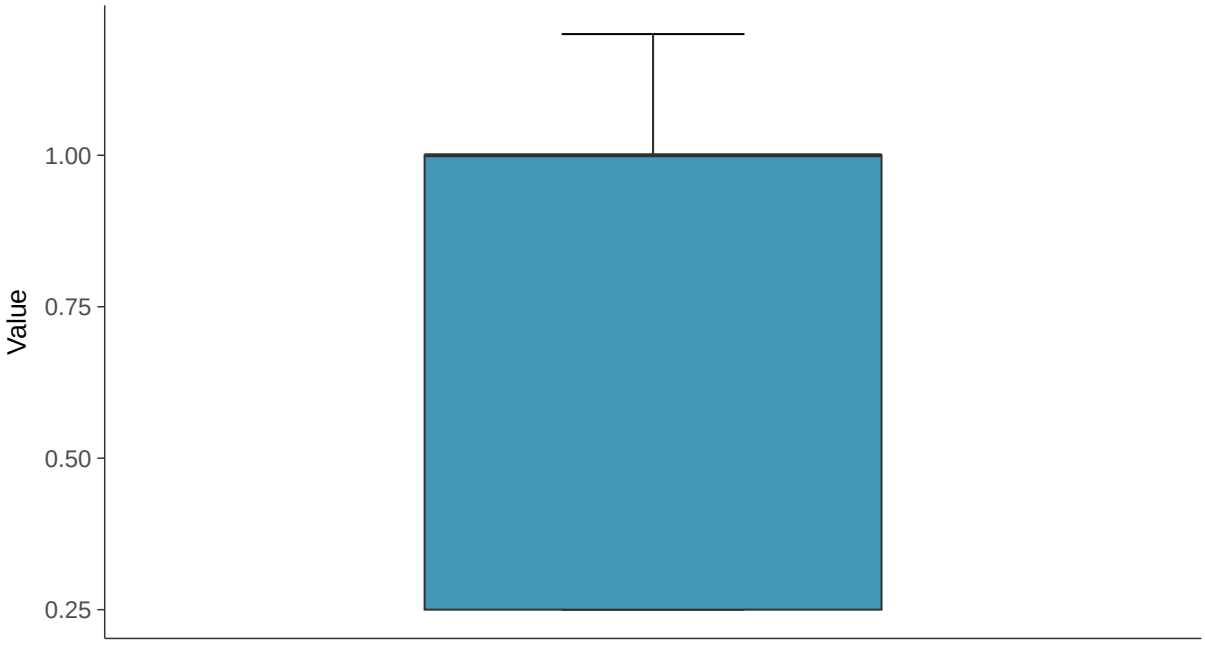
ID: 10_2_101



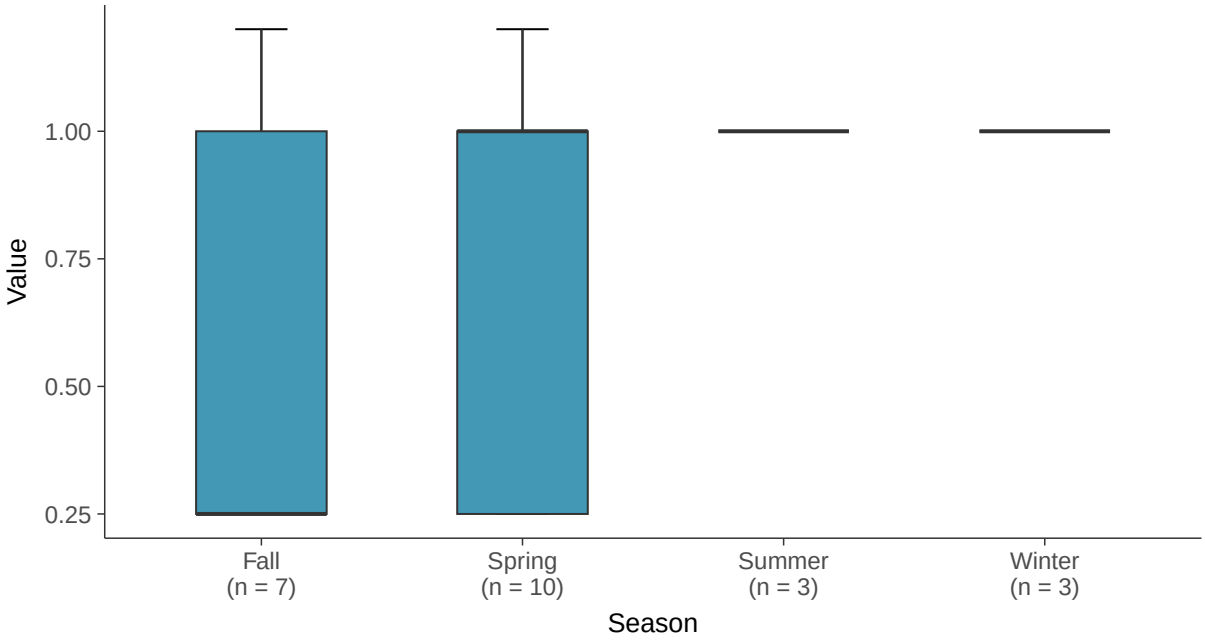
**Boxplot**

Antimony, MW-15020 (ug/L)



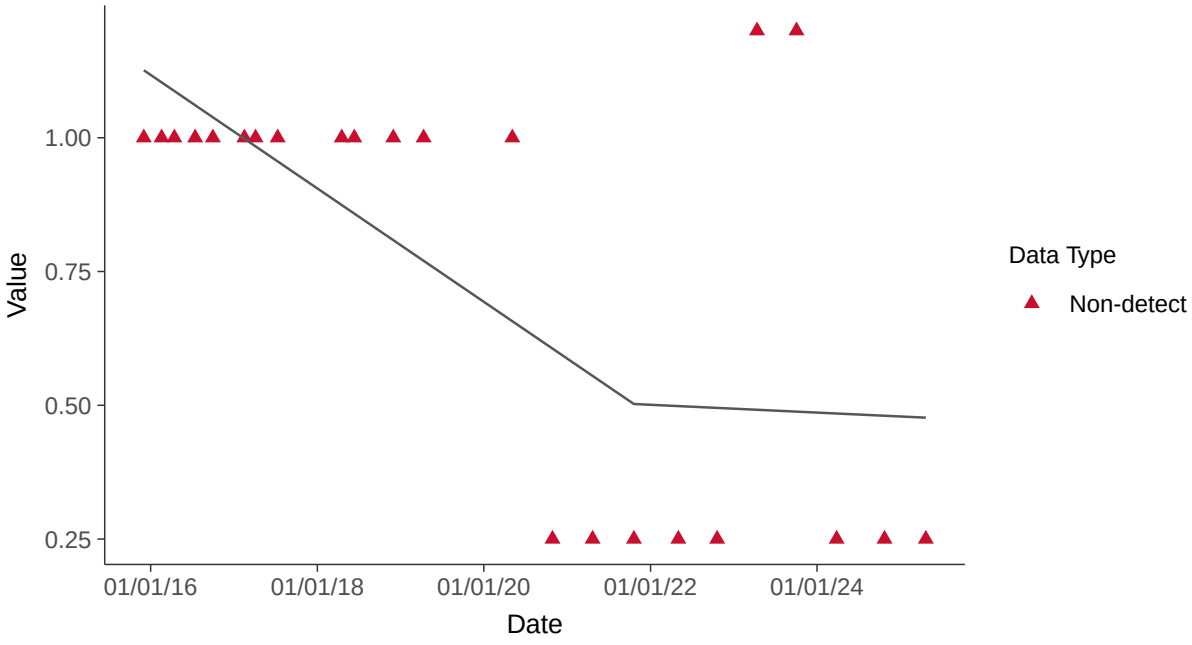

**Boxplot by Season**

Antimony, MW-15020 (ug/L)



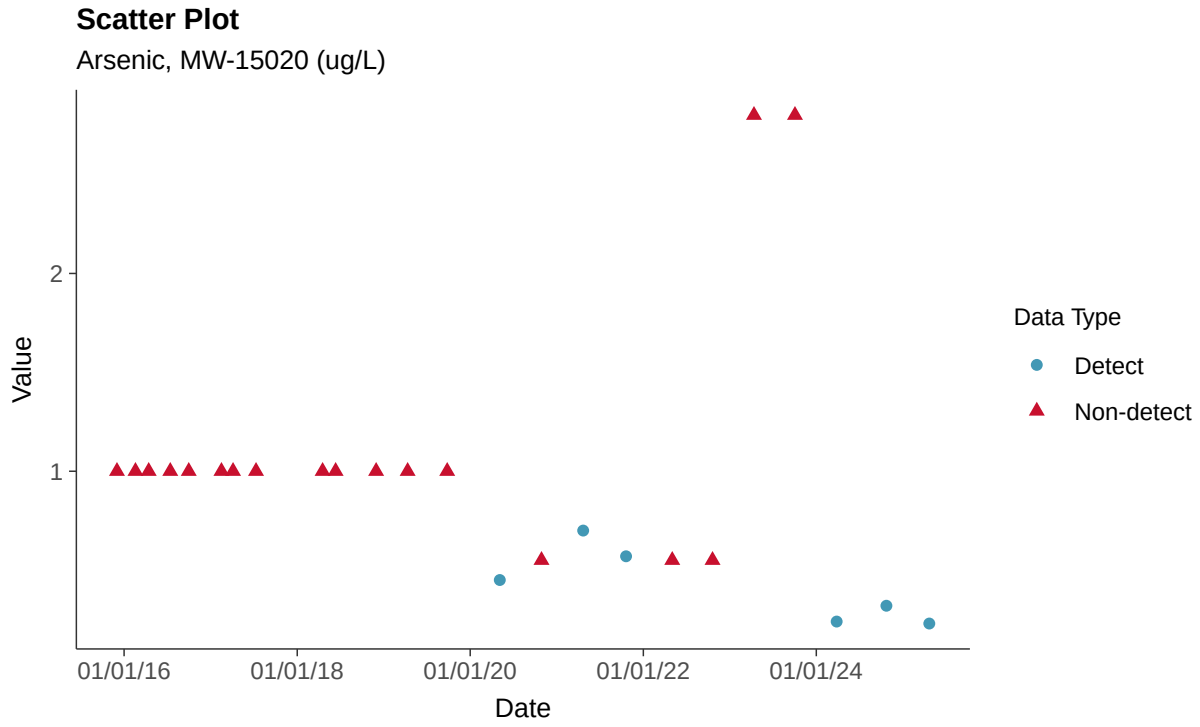
**Trend Regression: Piecewise Linear-Linear**

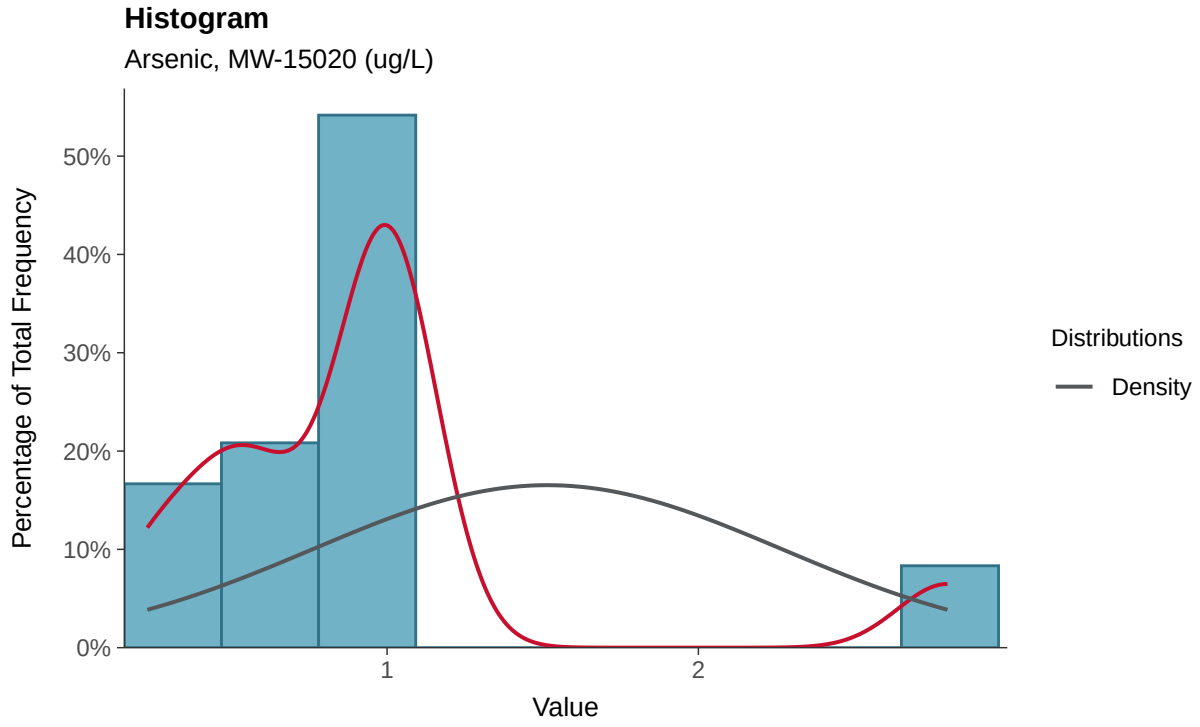
Antimony, MW-15020 (ug/L)



## Appendix IV: Arsenic, MW-15020

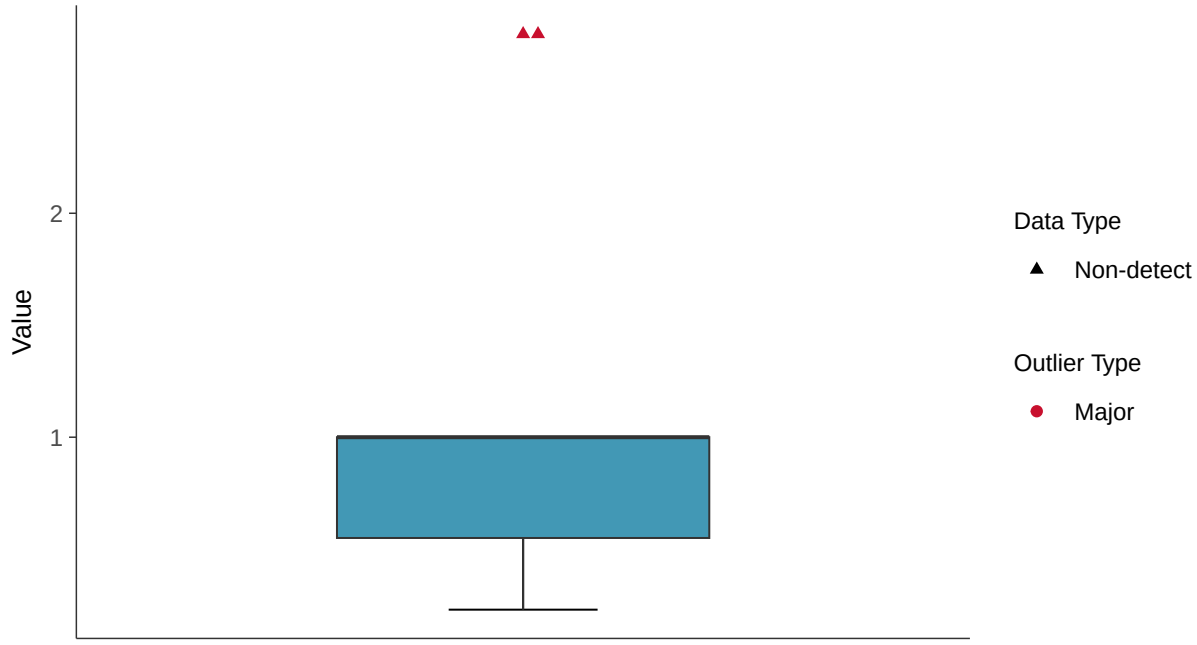
ID: 10_2_102



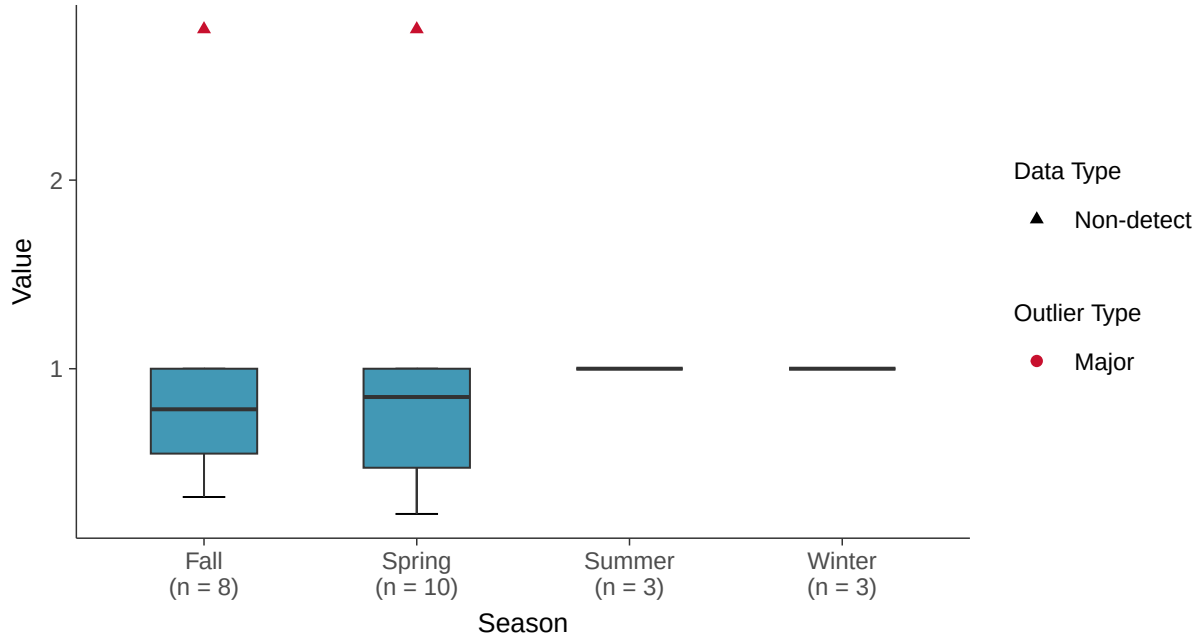
**Boxplot**

Arsenic, MW-15020 (ug/L)



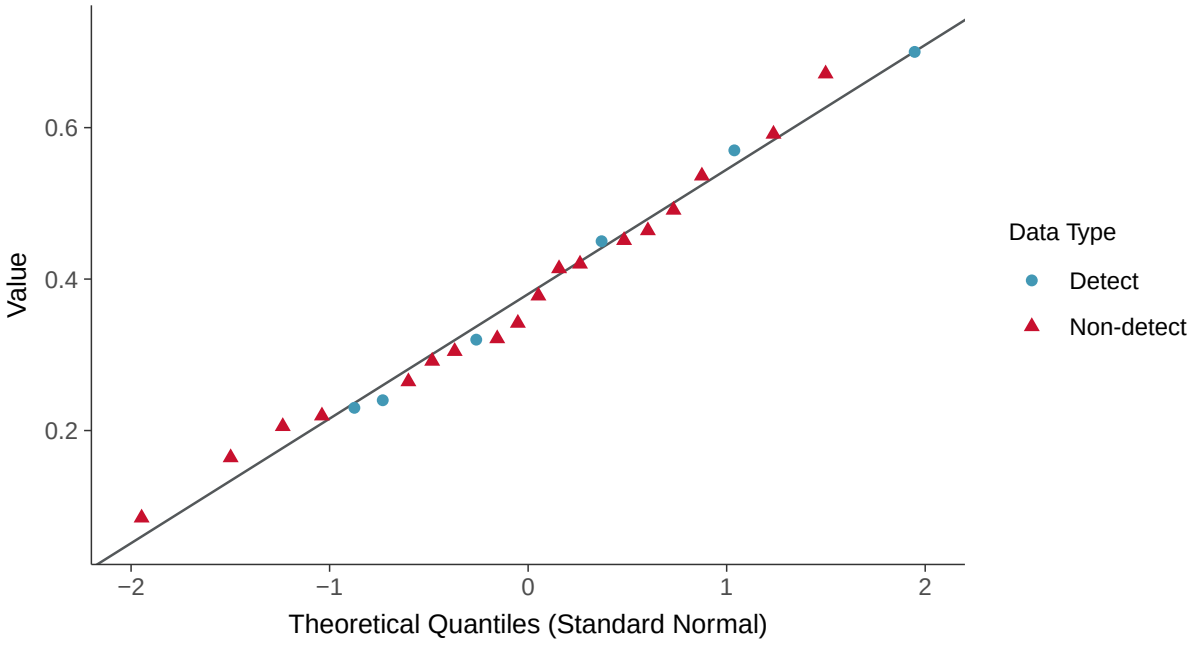

**Boxplot by Season**

Arsenic, MW-15020 (ug/L)



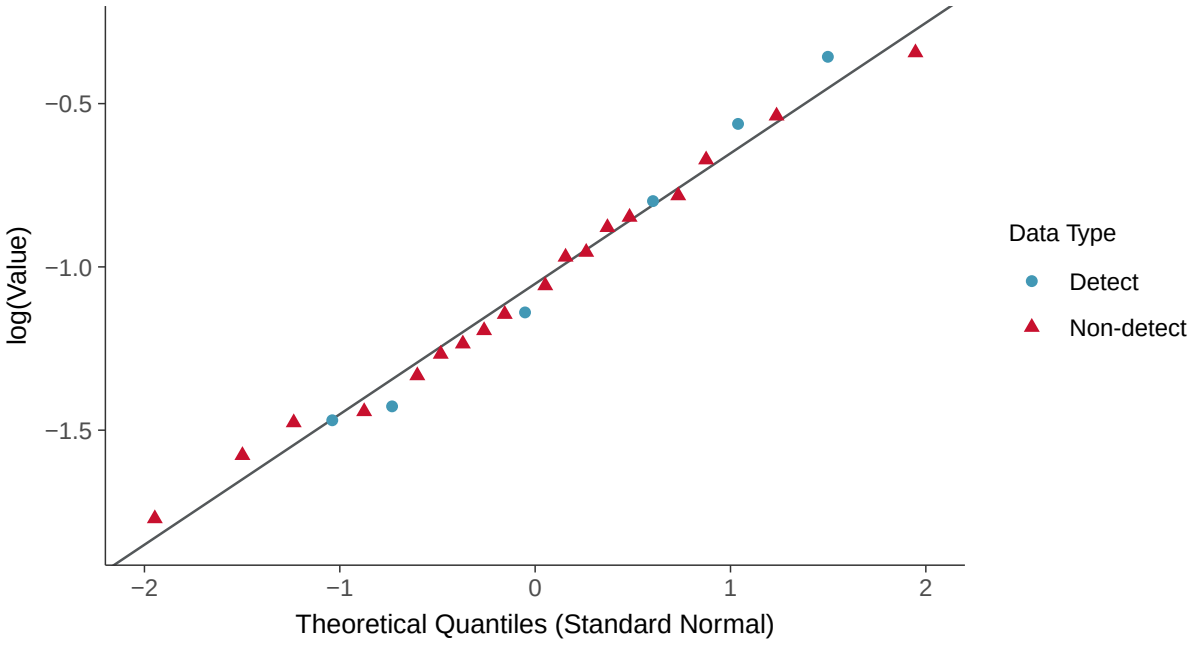
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15020 (ug/L)



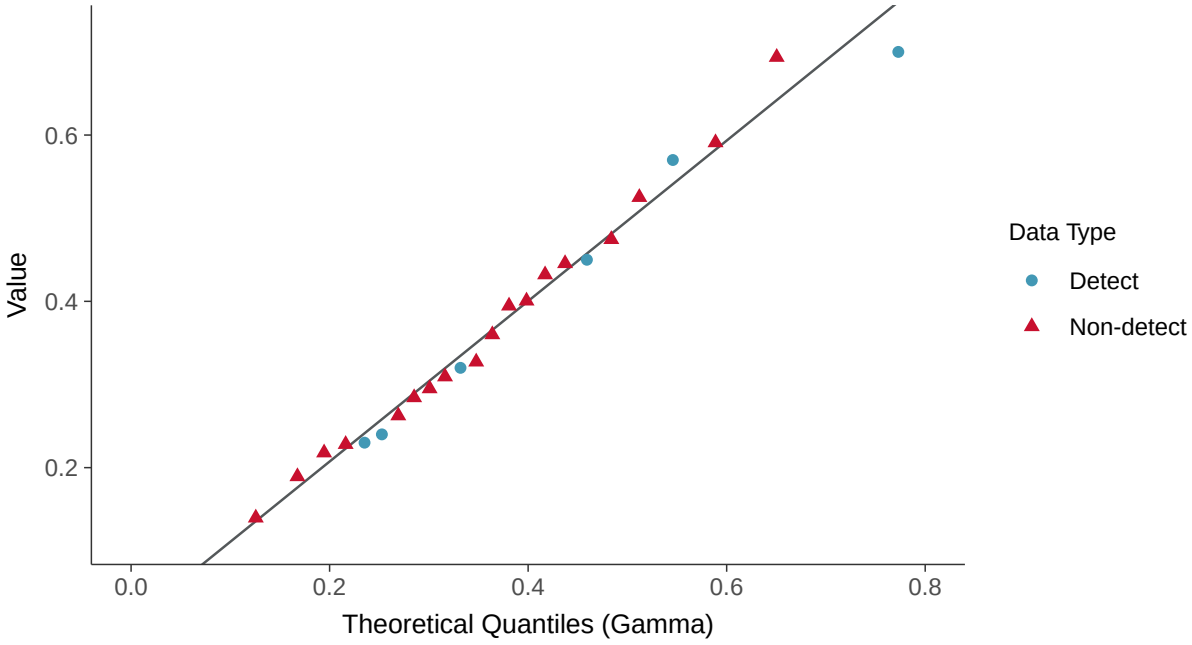

**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15020 (ug/L)



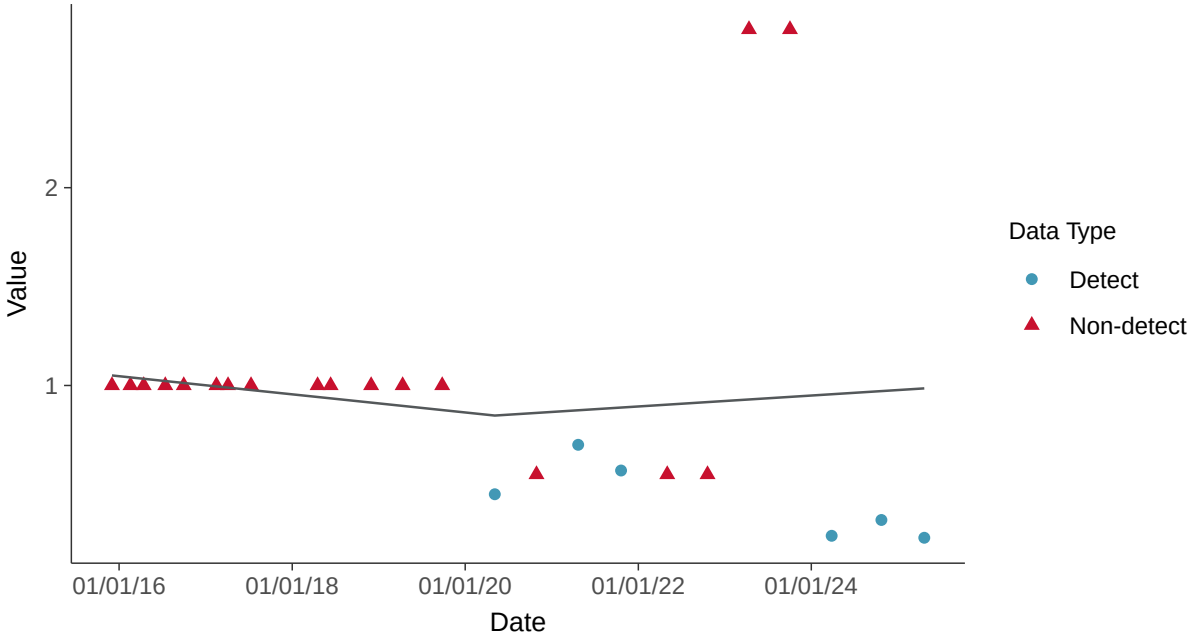
**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15020 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15020 (ug/L)

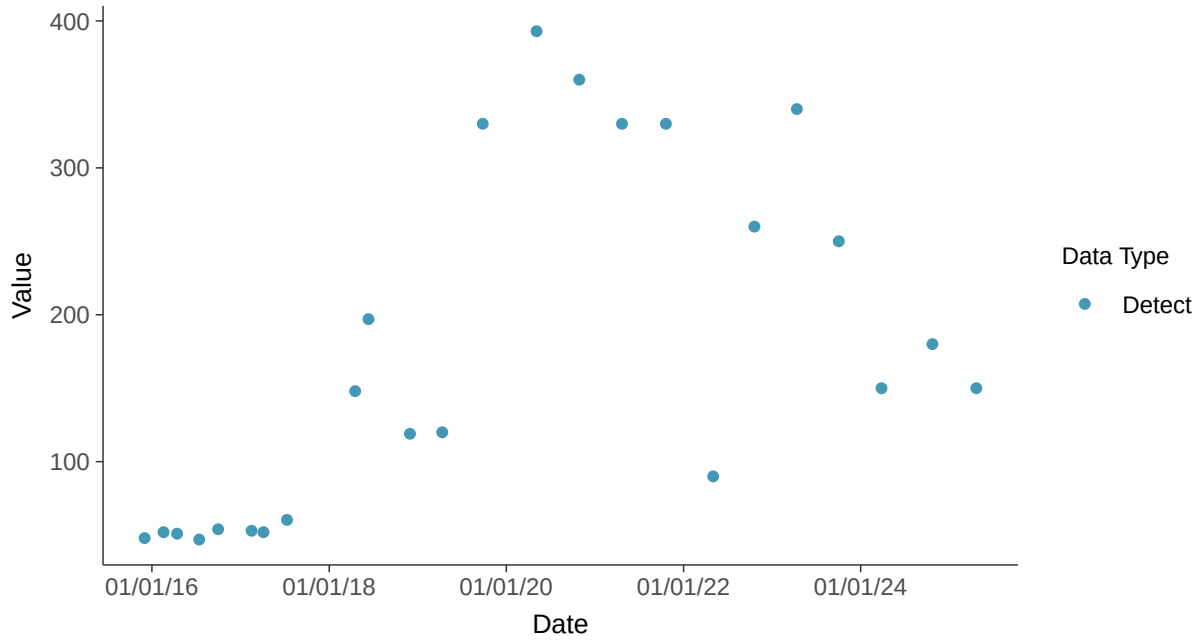


## Appendix IV: Barium, MW-15020

ID: 10_2_103

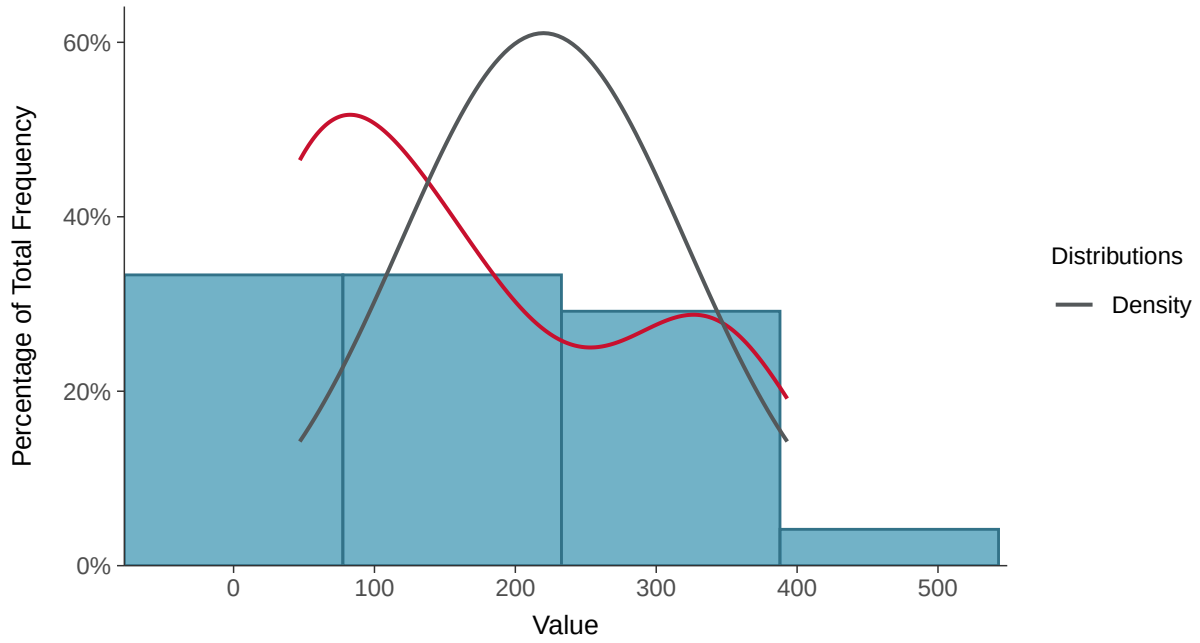
**Scatter Plot**

Barium, MW-15020 (ug/L)



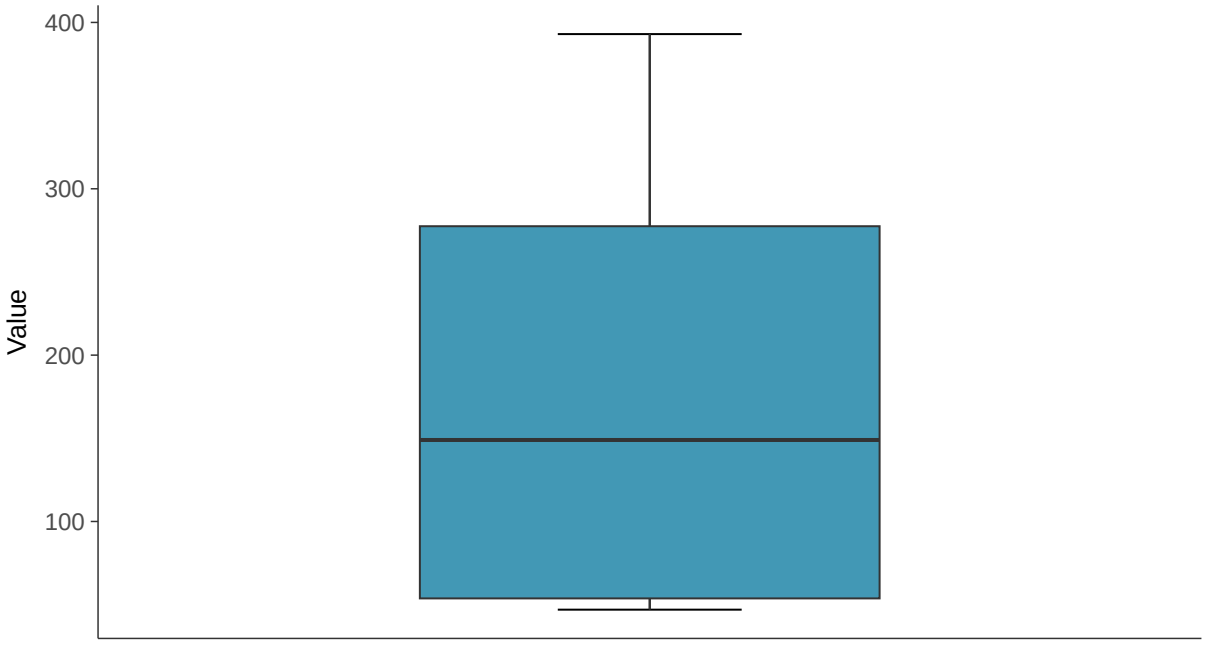

**Histogram**

Barium, MW-15020 (ug/L)



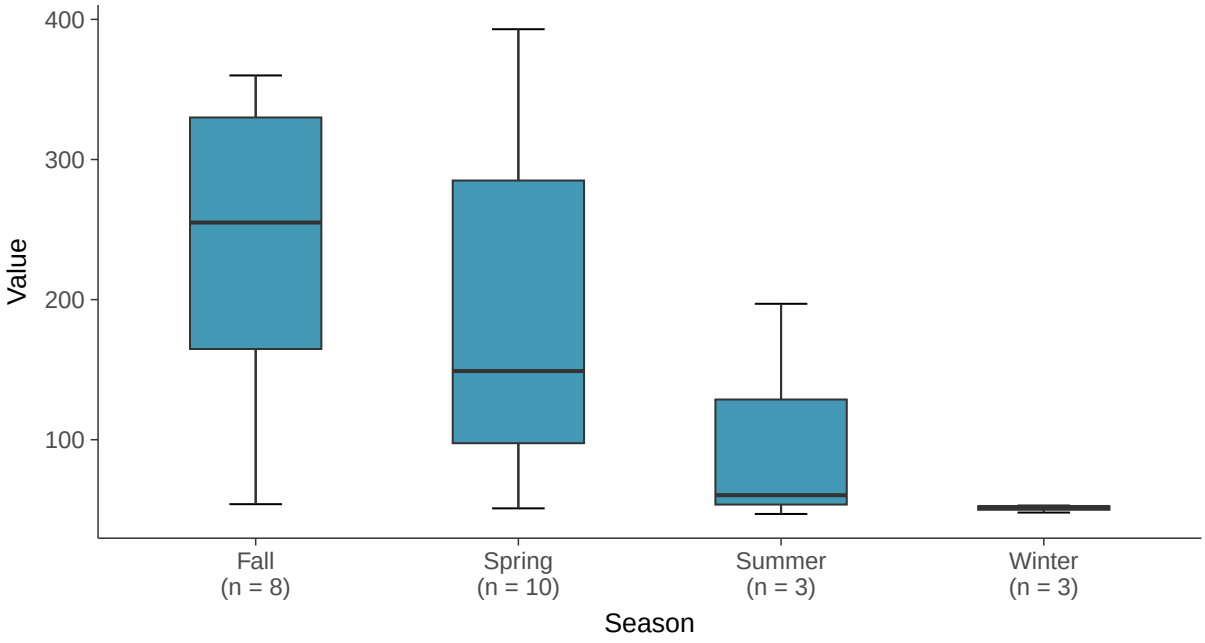
**Boxplot**

Barium, MW-15020 (ug/L)



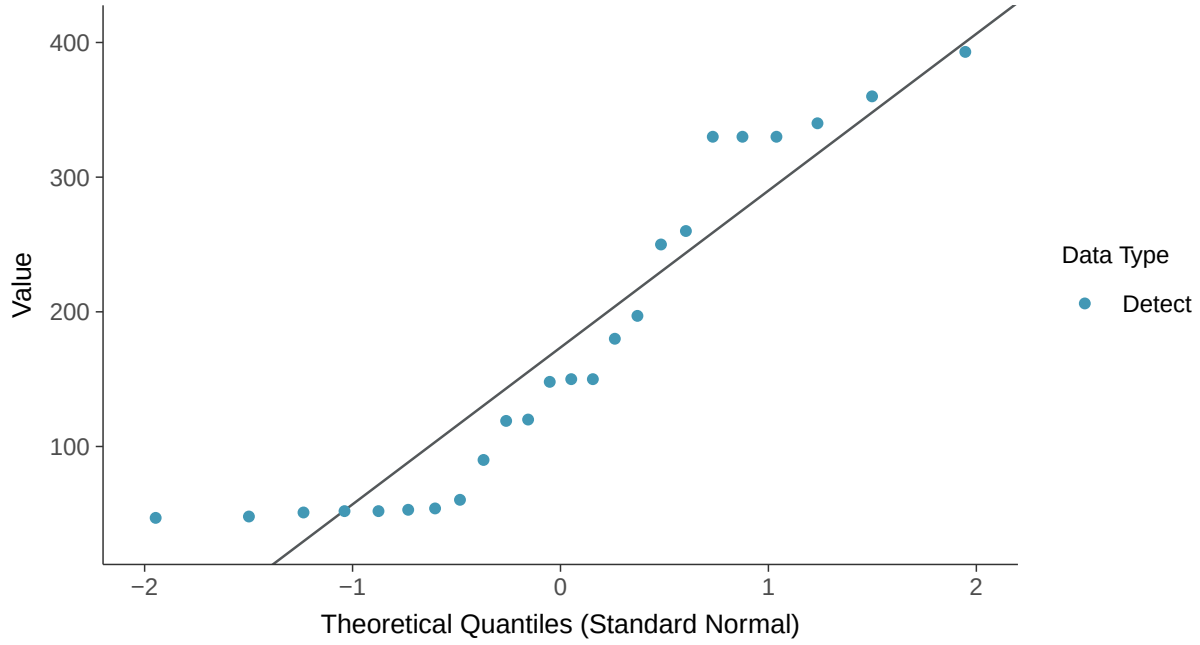

**Boxplot by Season**

Barium, MW-15020 (ug/L)



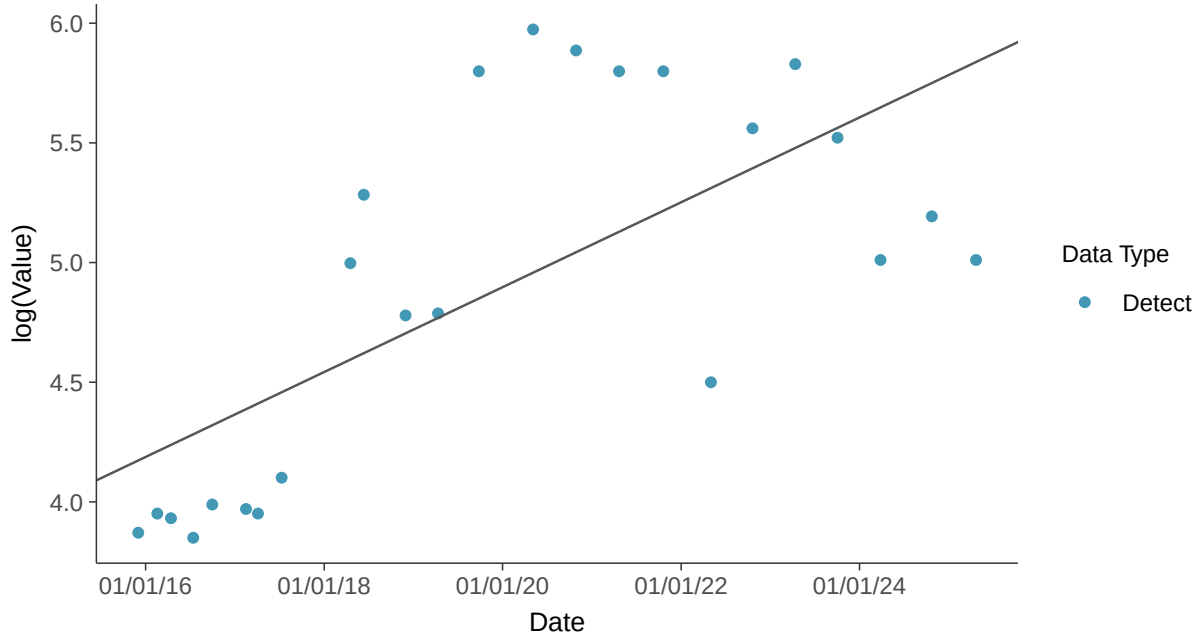
**Normal Q-Q plot**

Barium, MW-15020 (ug/L)



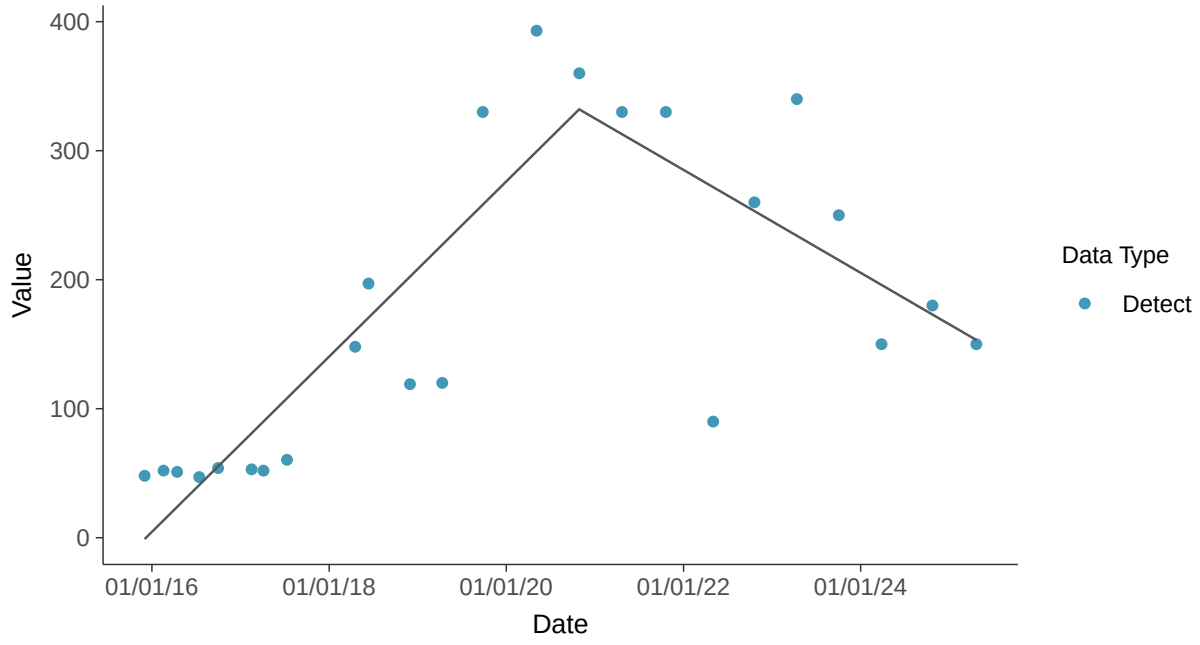

**Trend Regression: Lognormal MLE**

Barium, MW-15020 (ug/L)



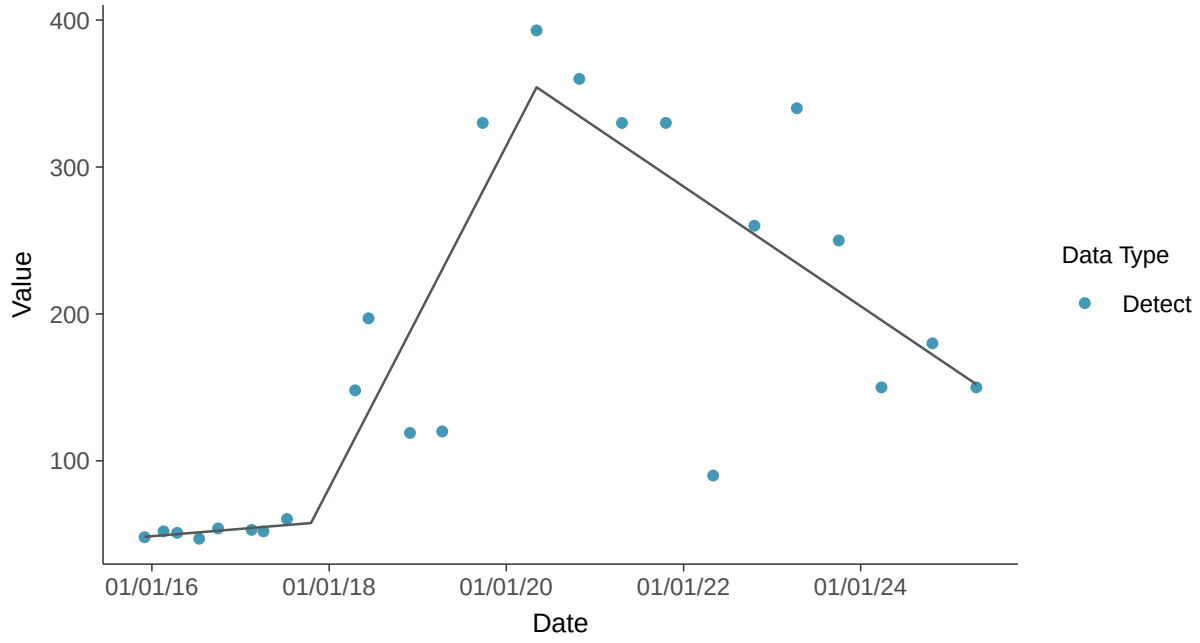
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15020 (ug/L)



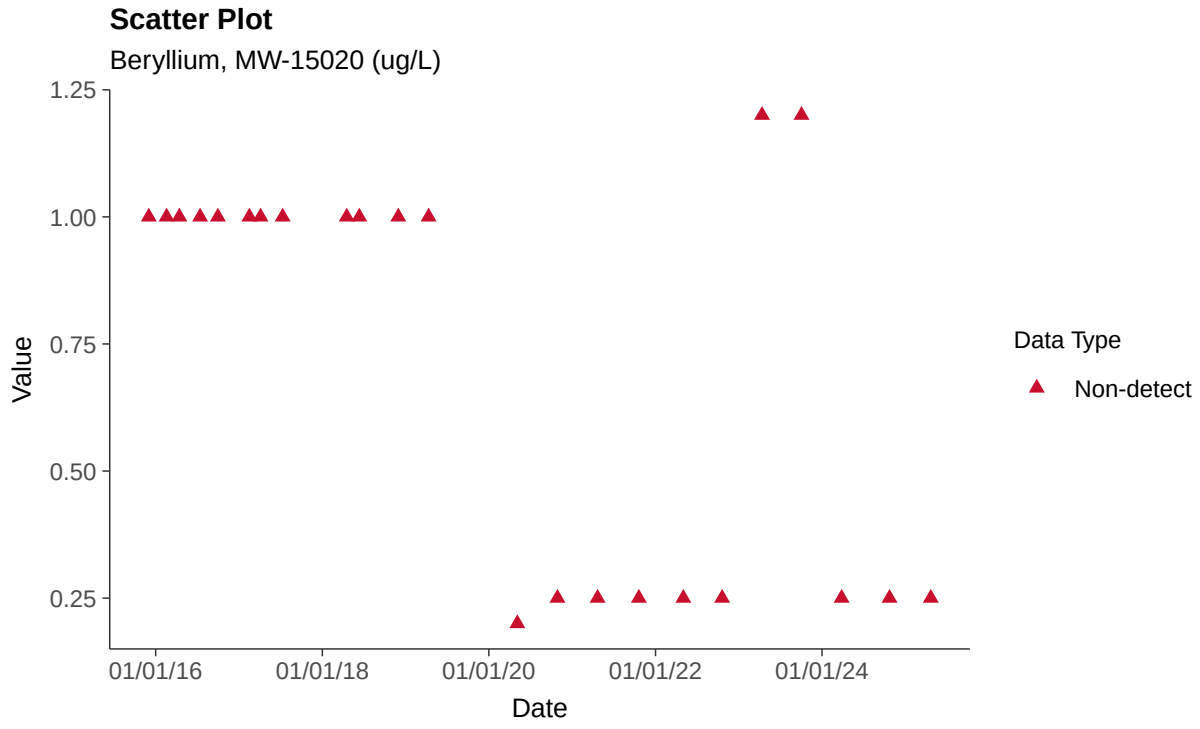

**Trend Regression: Piecewise Linear-Linear-Linear**

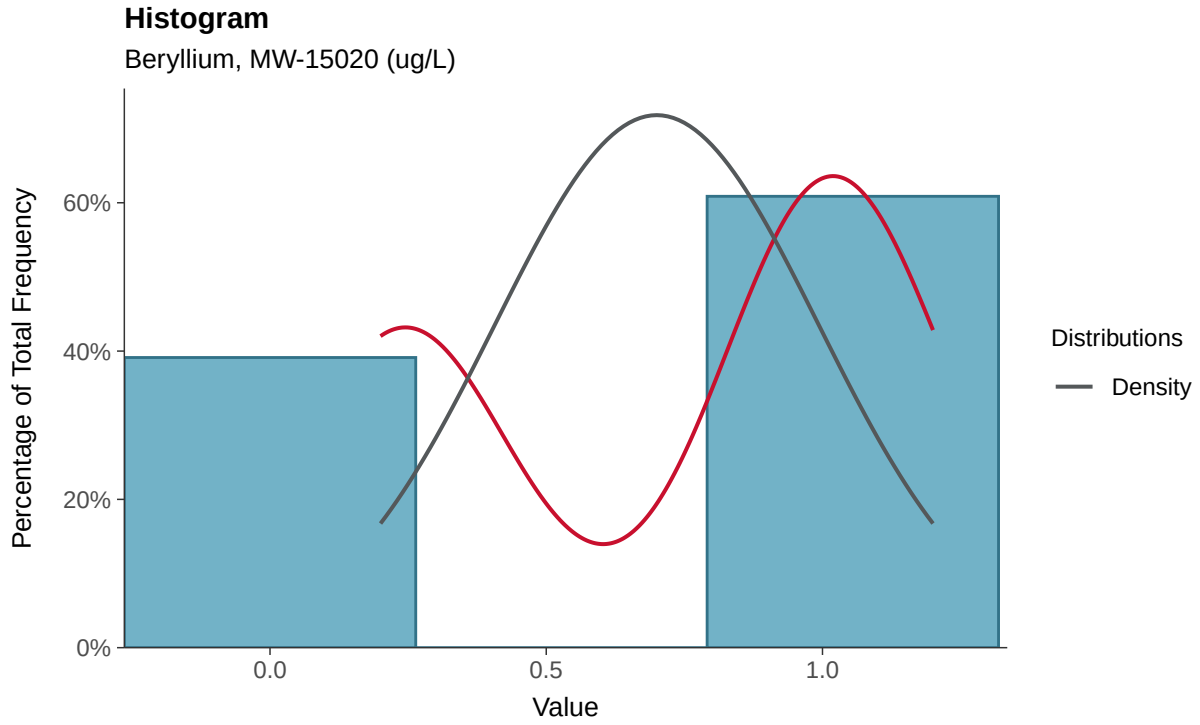
Barium, MW-15020 (ug/L)



## Appendix IV: Beryllium, MW-15020

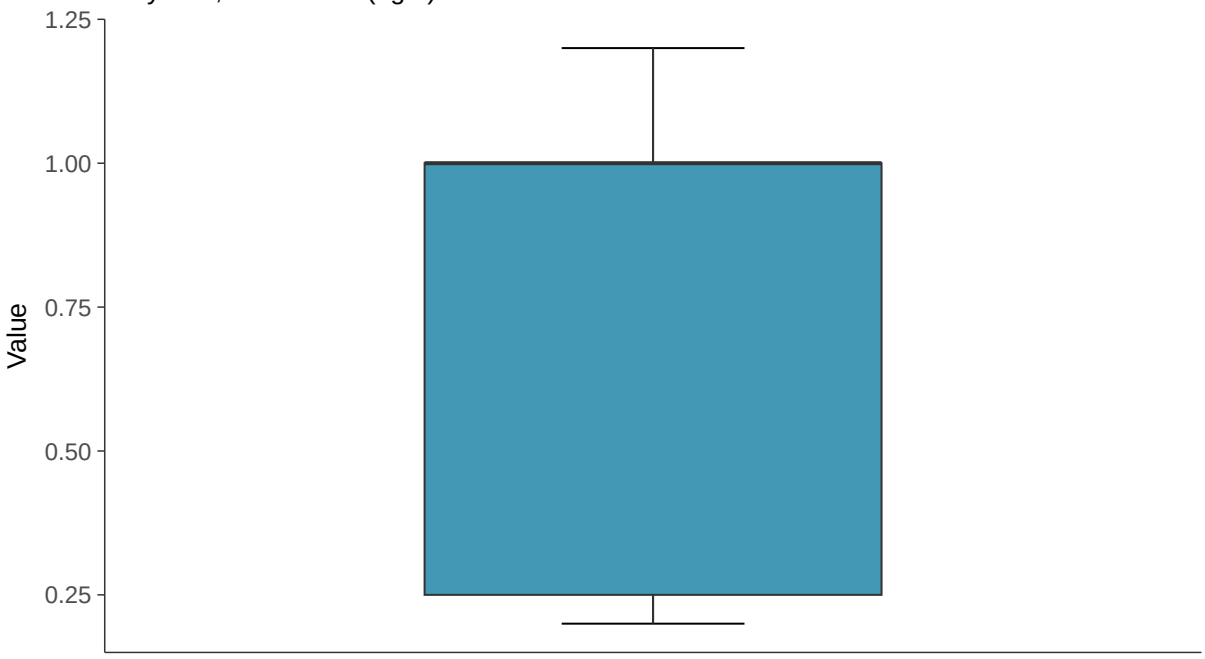
ID: 10_2_104



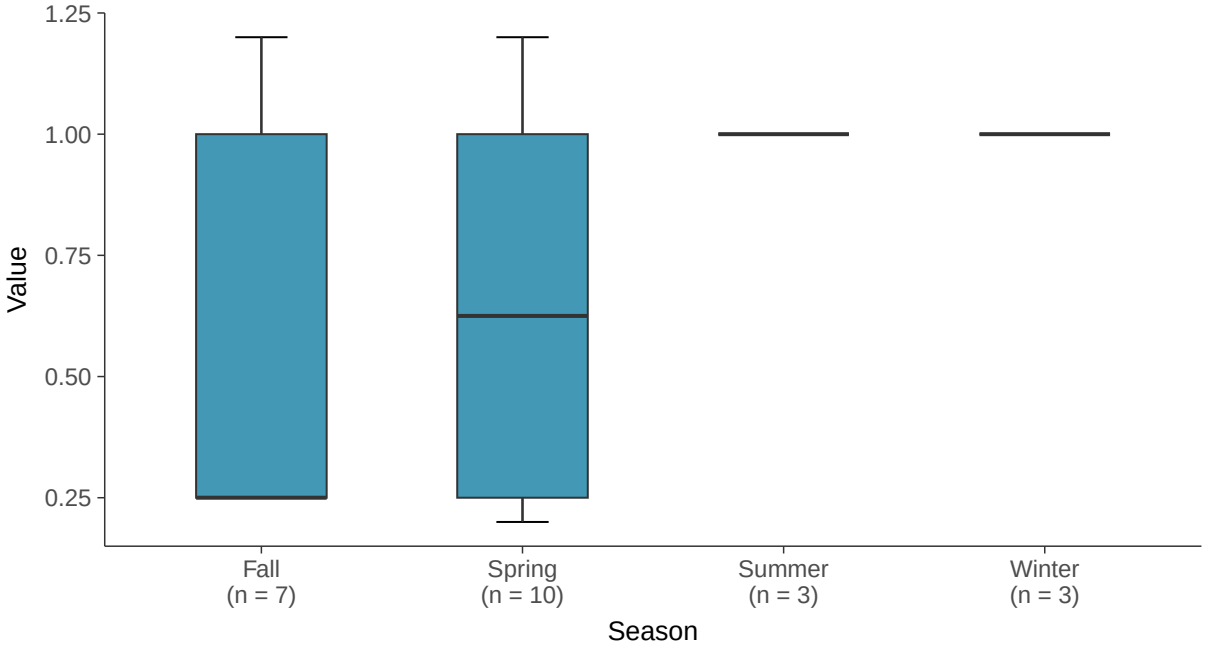
**Boxplot**

Beryllium, MW-15020 (ug/L)



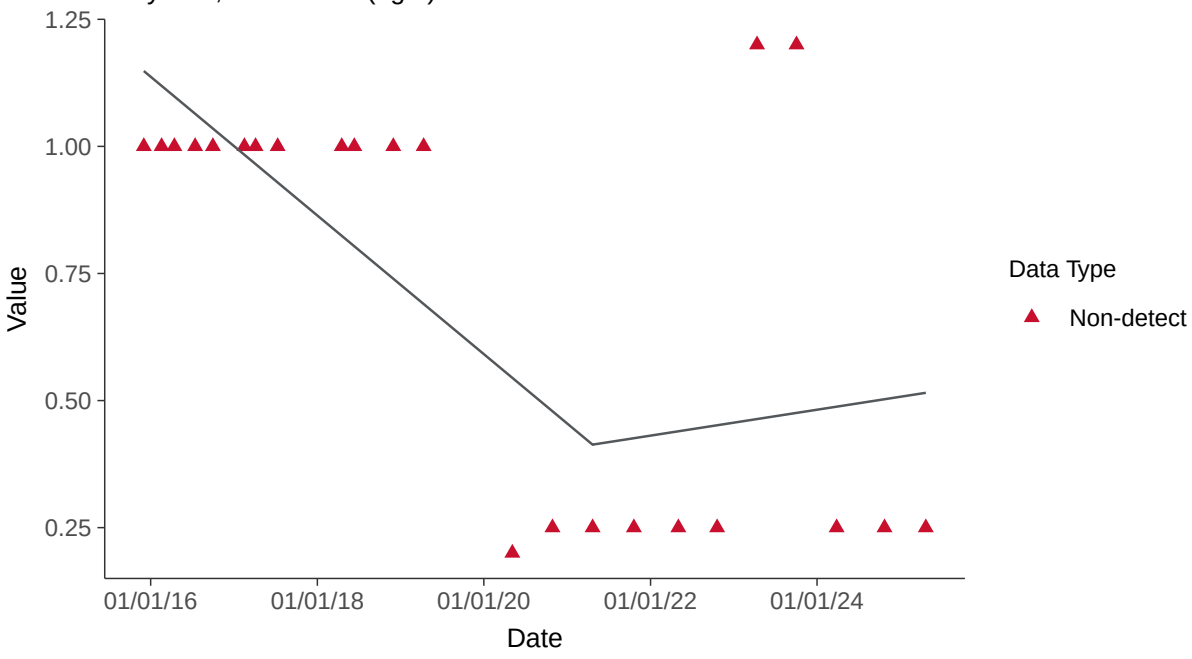

**Boxplot by Season**

Beryllium, MW-15020 (ug/L)



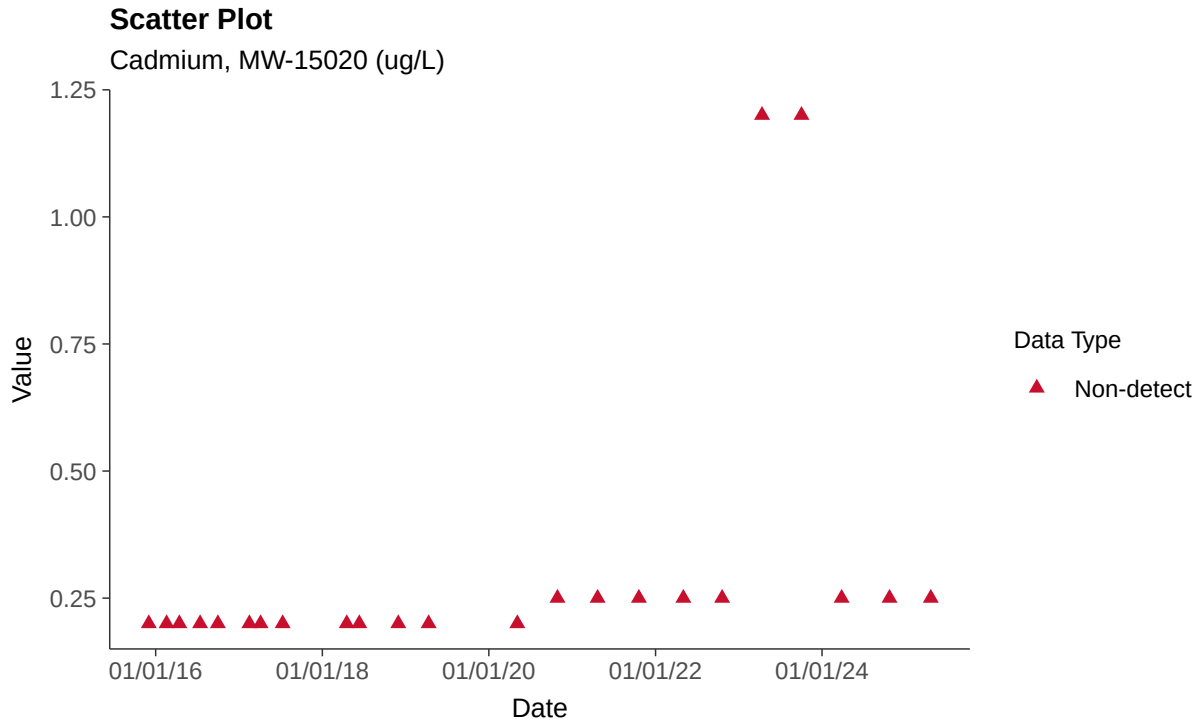
**Trend Regression: Piecewise Linear-Linear**

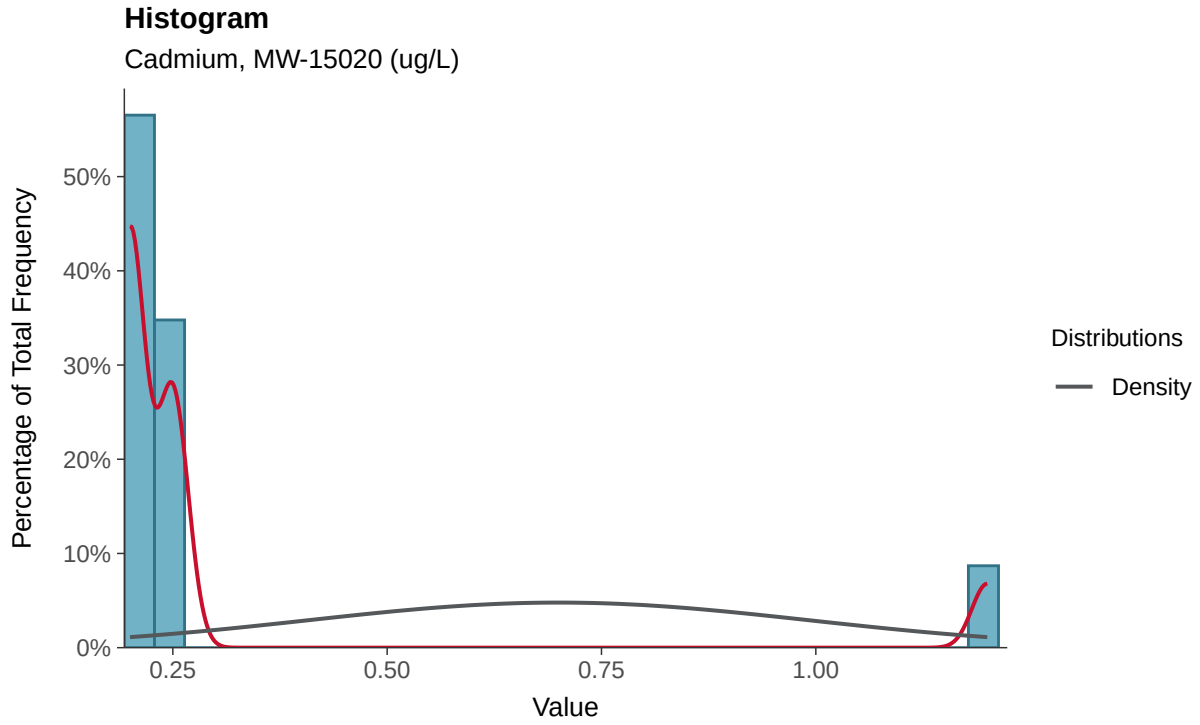
Beryllium, MW-15020 (ug/L)



## Appendix IV: Cadmium, MW-15020

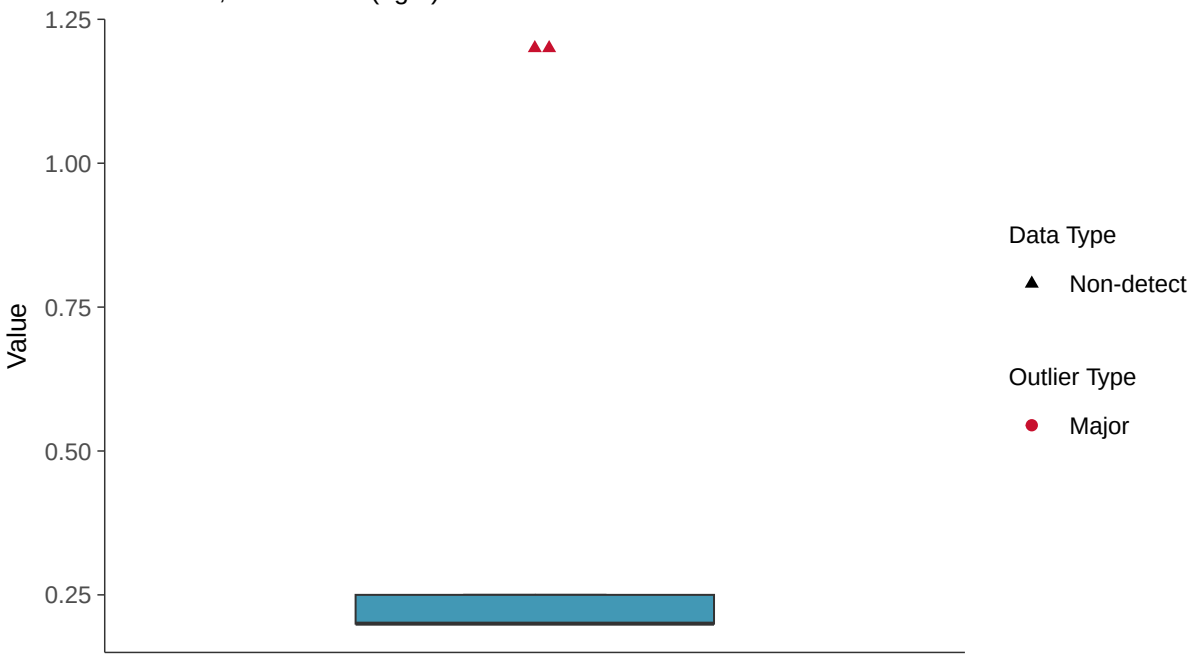
ID: 10_2_106



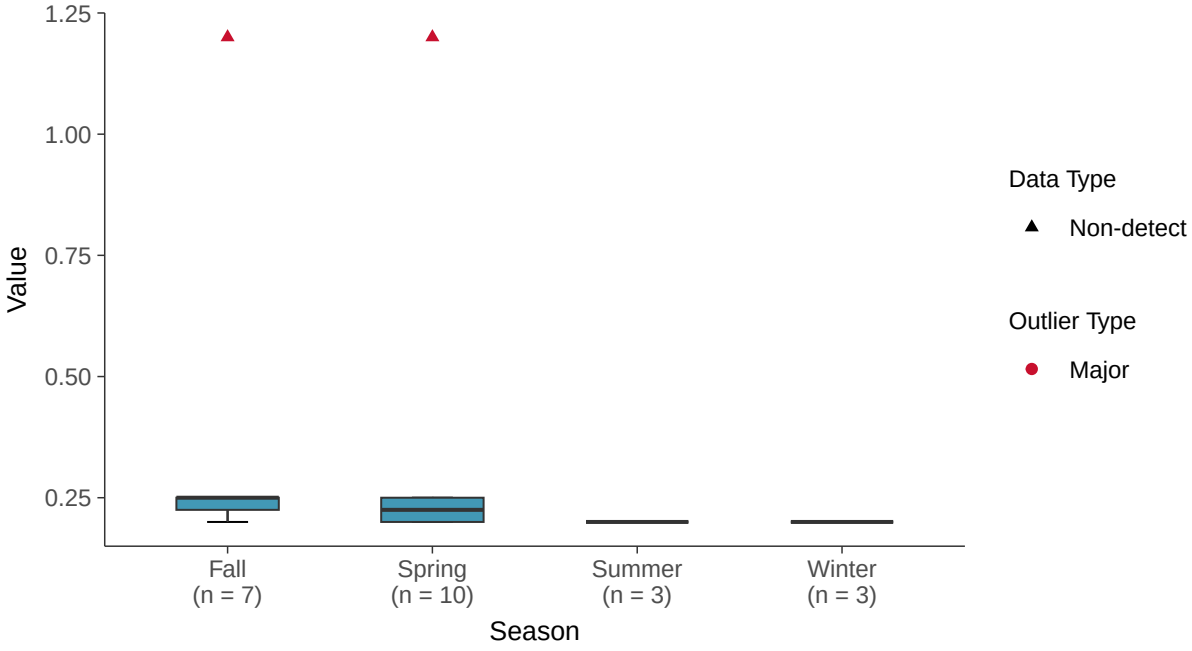
## Boxplot

Cadmium, MW-15020 (ug/L)



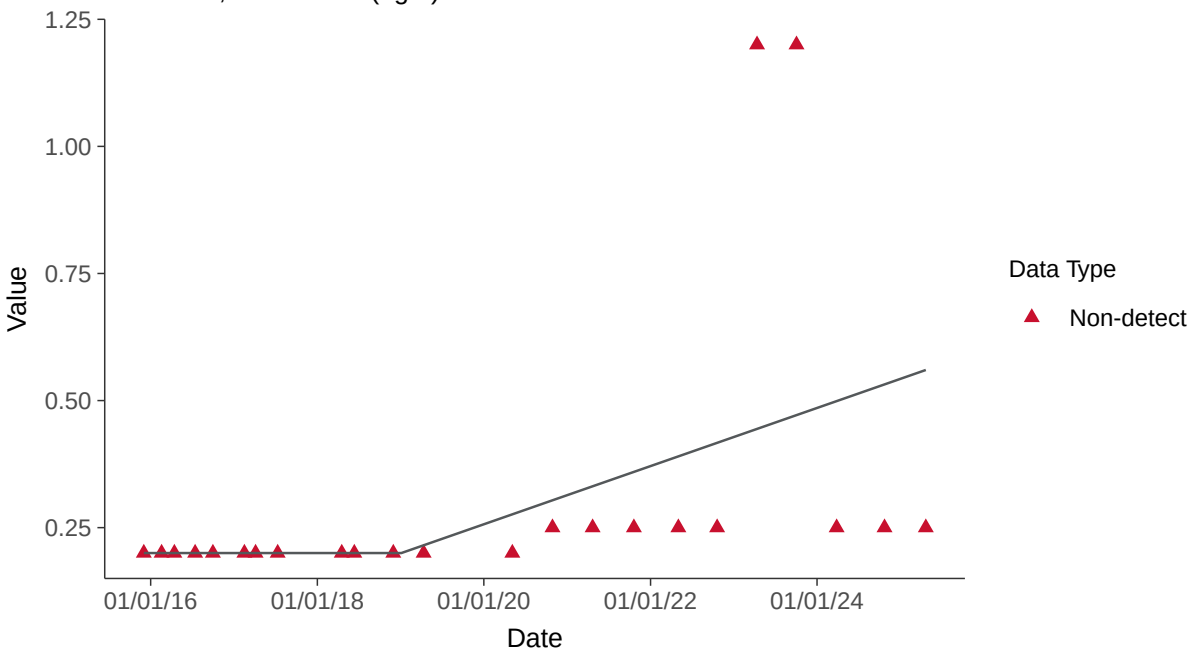

## Boxplot by Season

Cadmium, MW-15020 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15020 (ug/L)

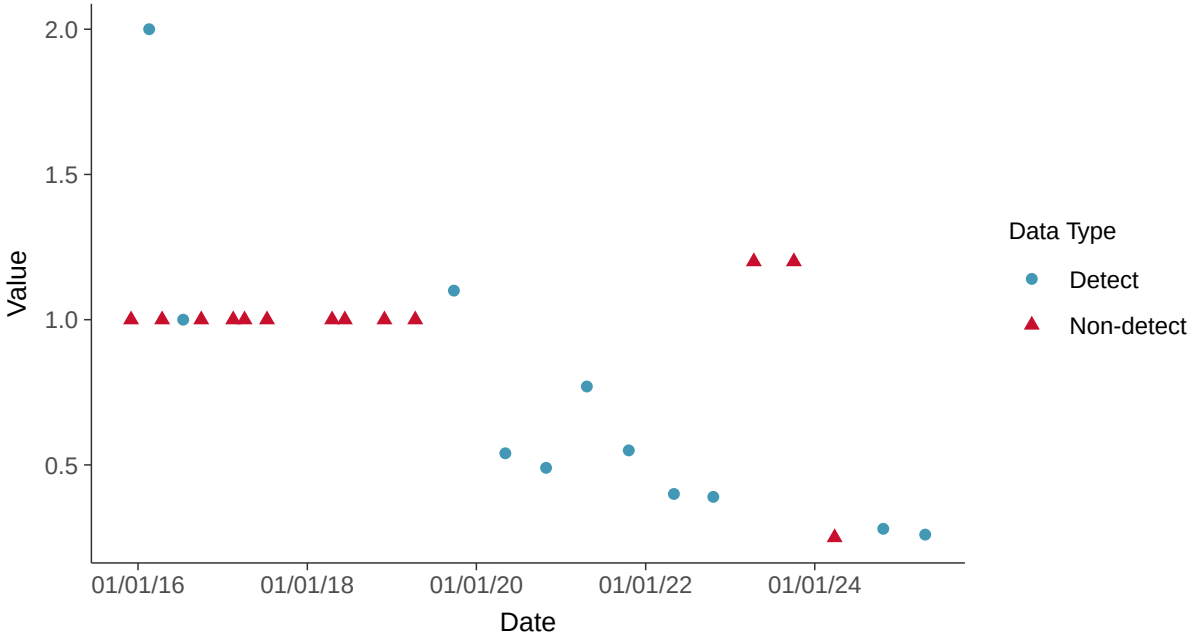


## Appendix IV: Chromium, MW-15020

ID: 10_2_109

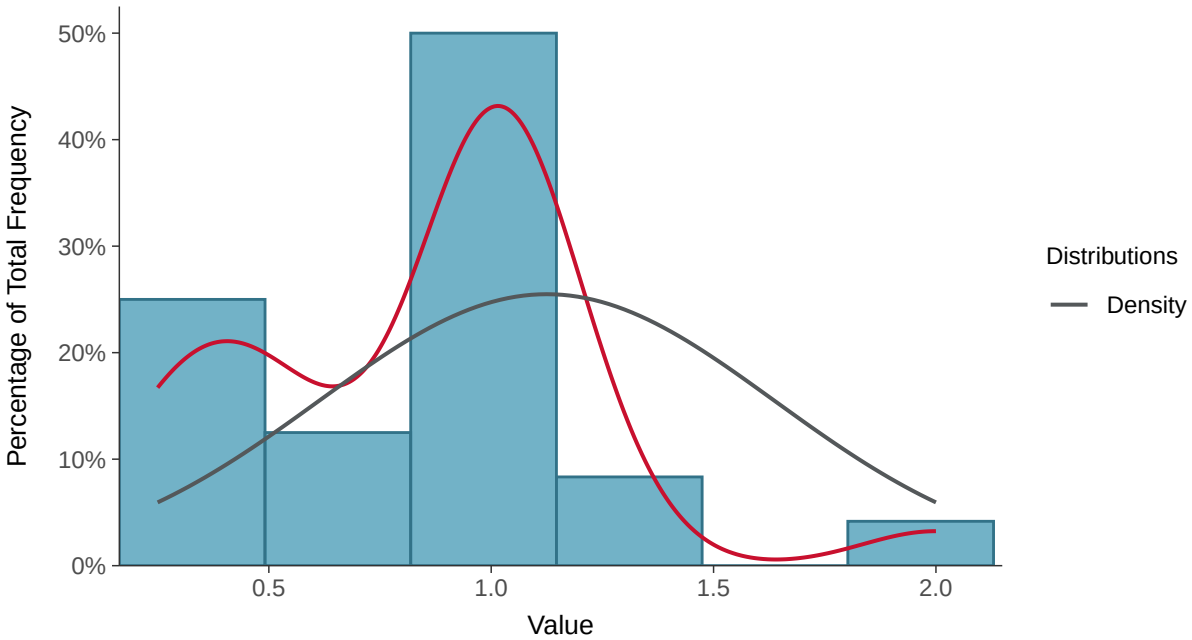
**Scatter Plot**

Chromium, MW-15020 (ug/L)



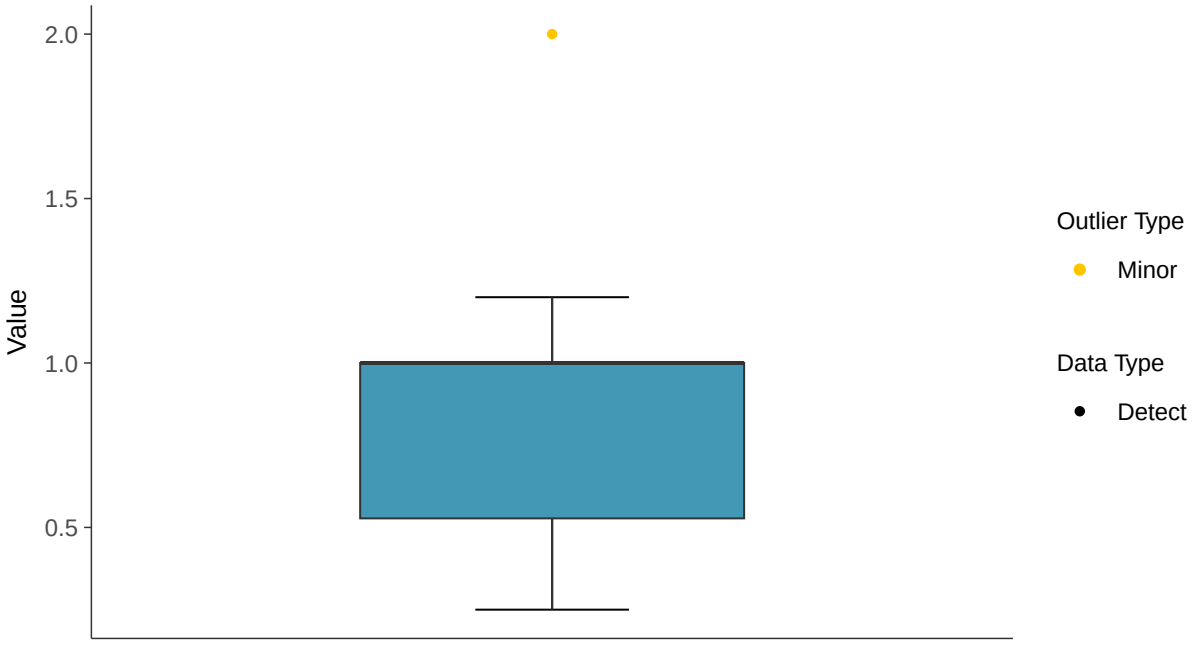

**Histogram**

Chromium, MW-15020 (ug/L)



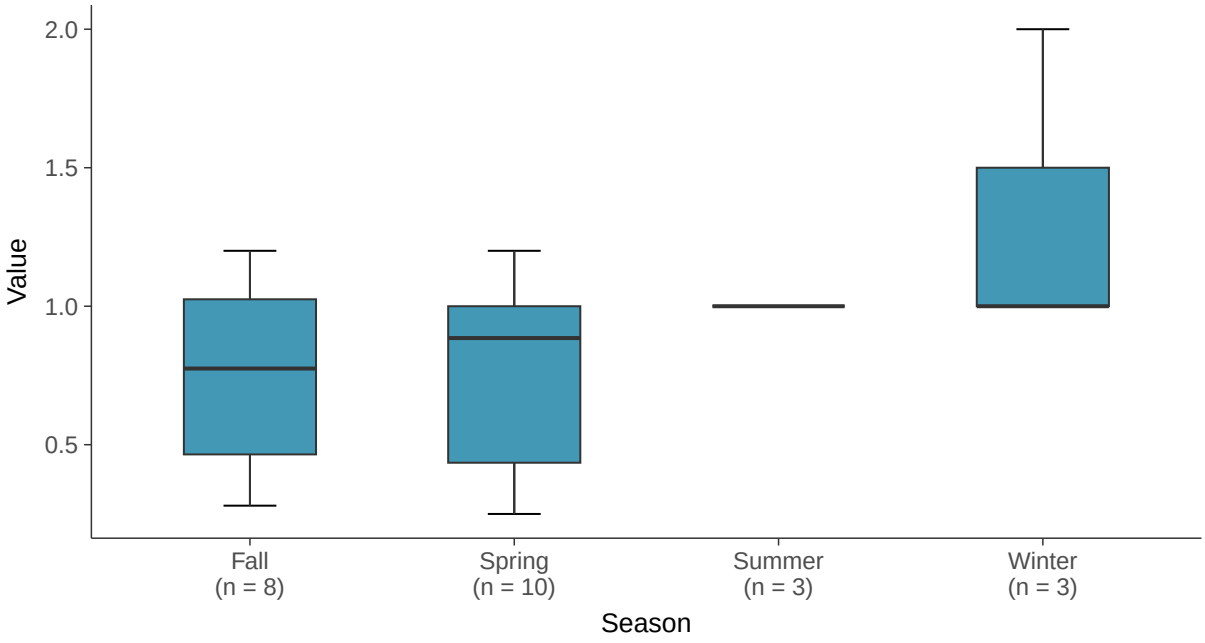
## Boxplot

Chromium, MW-15020 (ug/L)



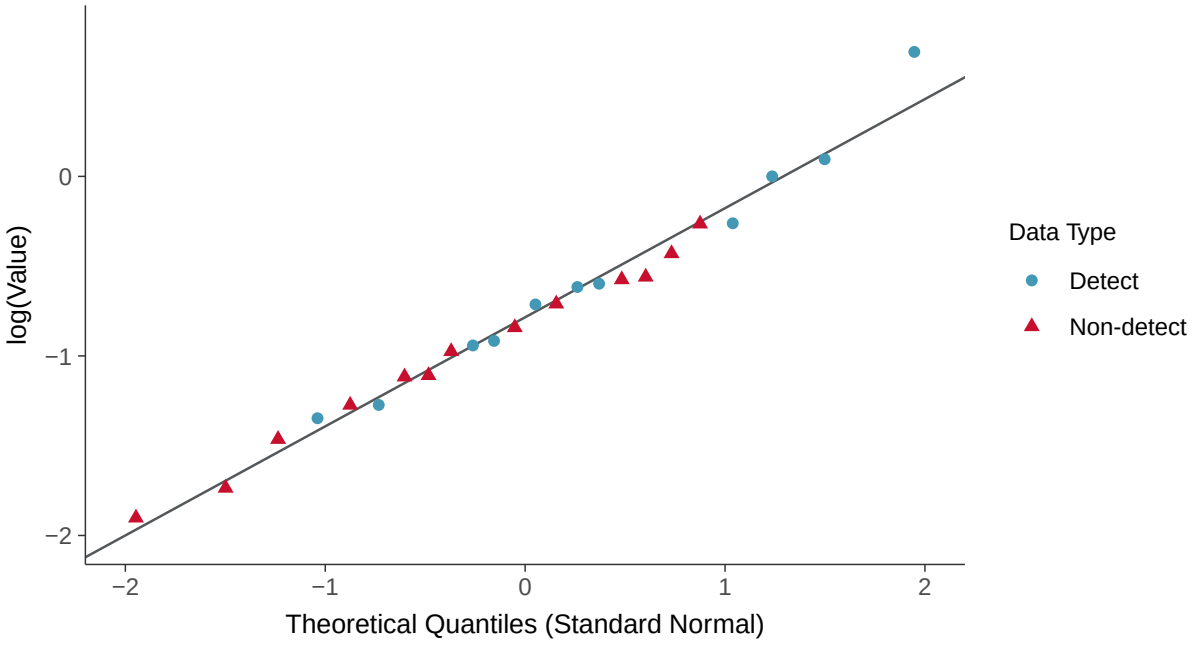

## Boxplot by Season

Chromium, MW-15020 (ug/L)



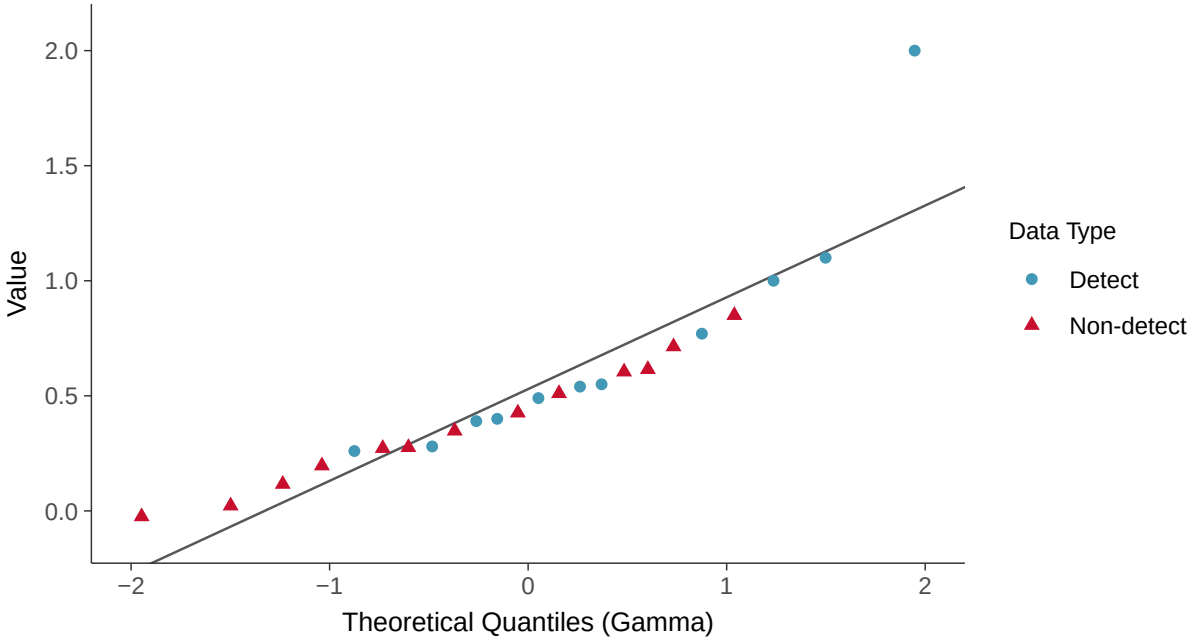
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15020 (ug/L)



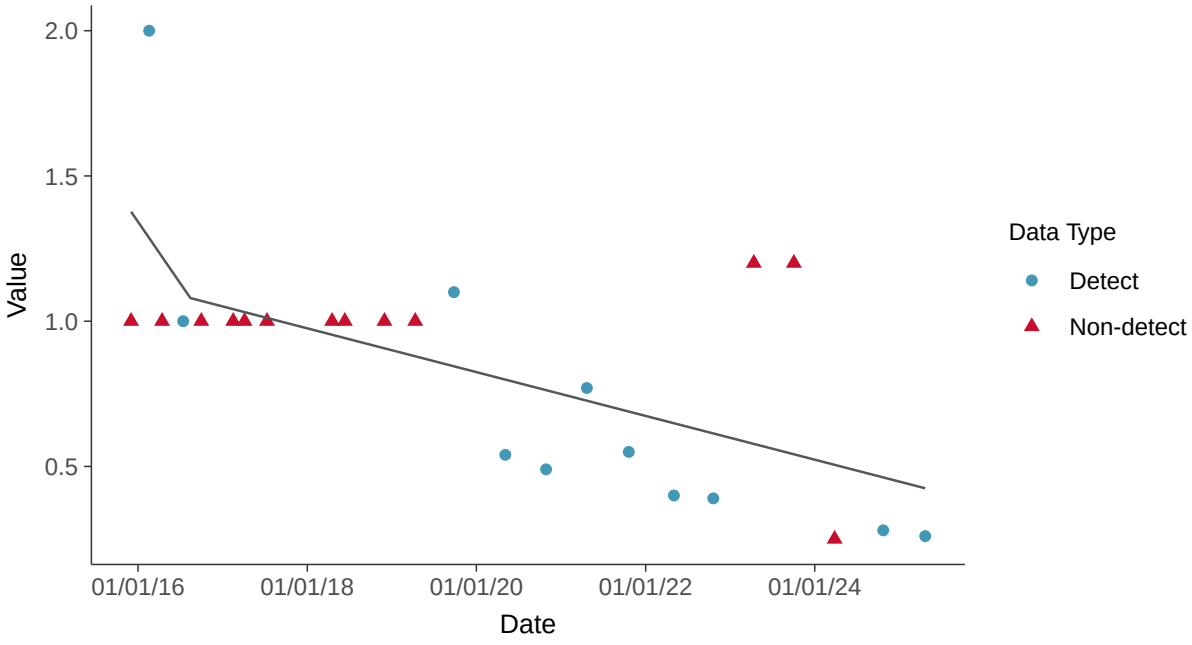

**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15020 (ug/L)



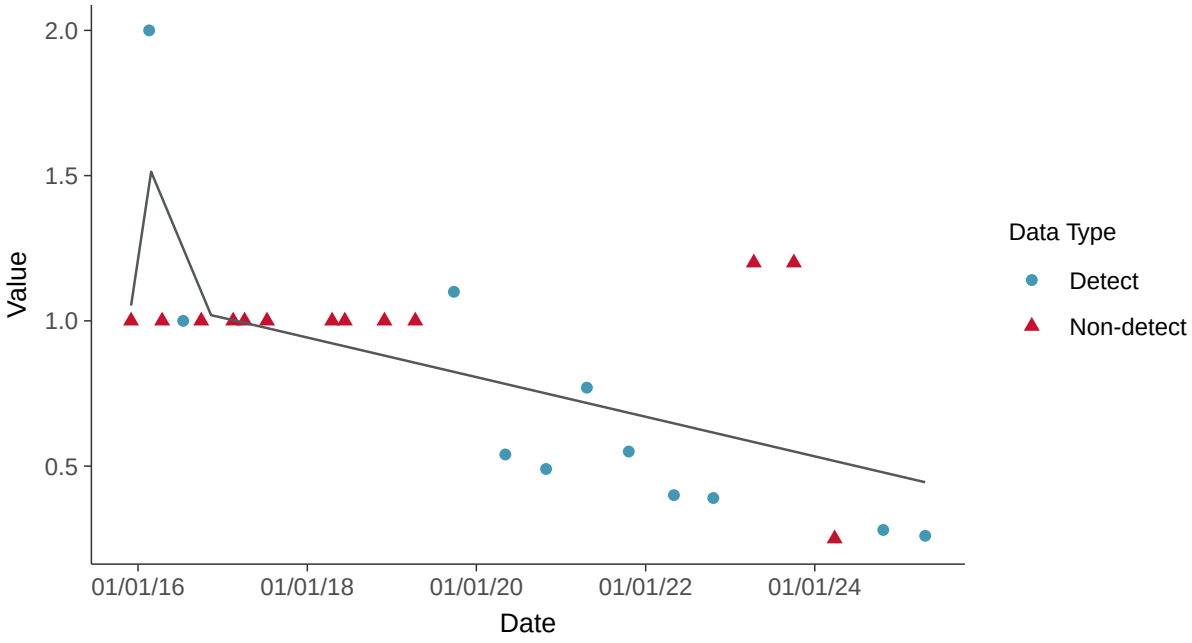
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15020 (ug/L)



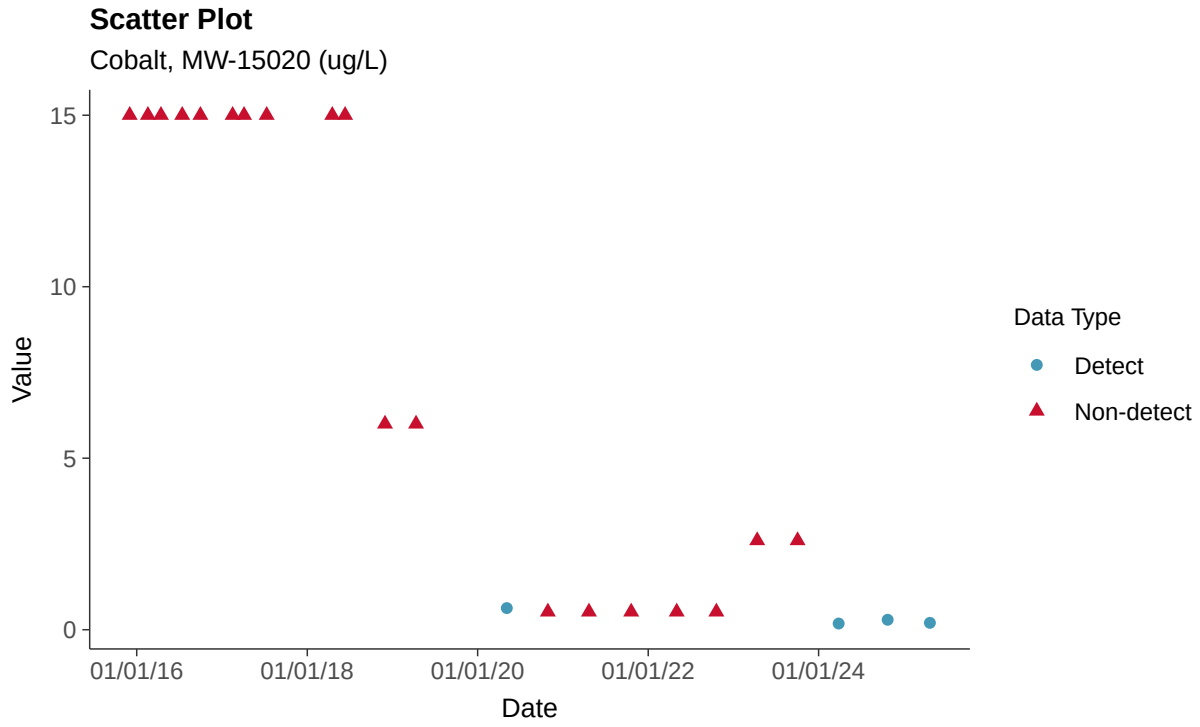

**Trend Regression: Piecewise Linear-Linear-Linear**

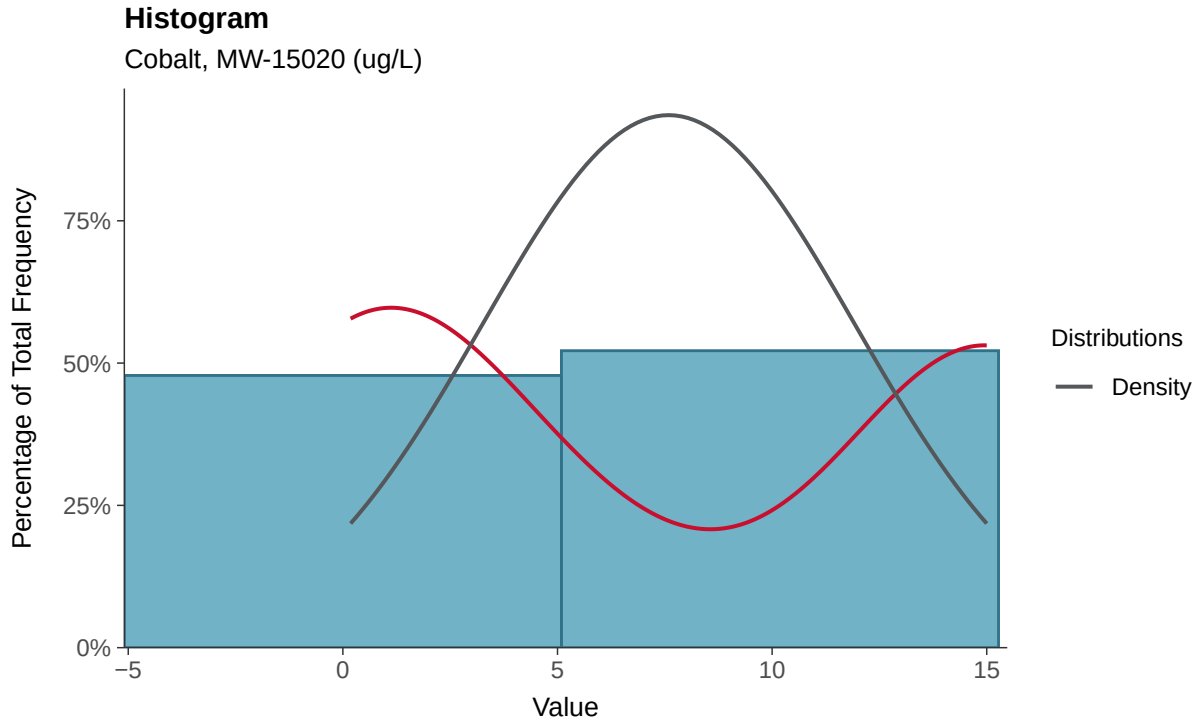
Chromium, MW-15020 (ug/L)



## Appendix IV: Cobalt, MW-15020

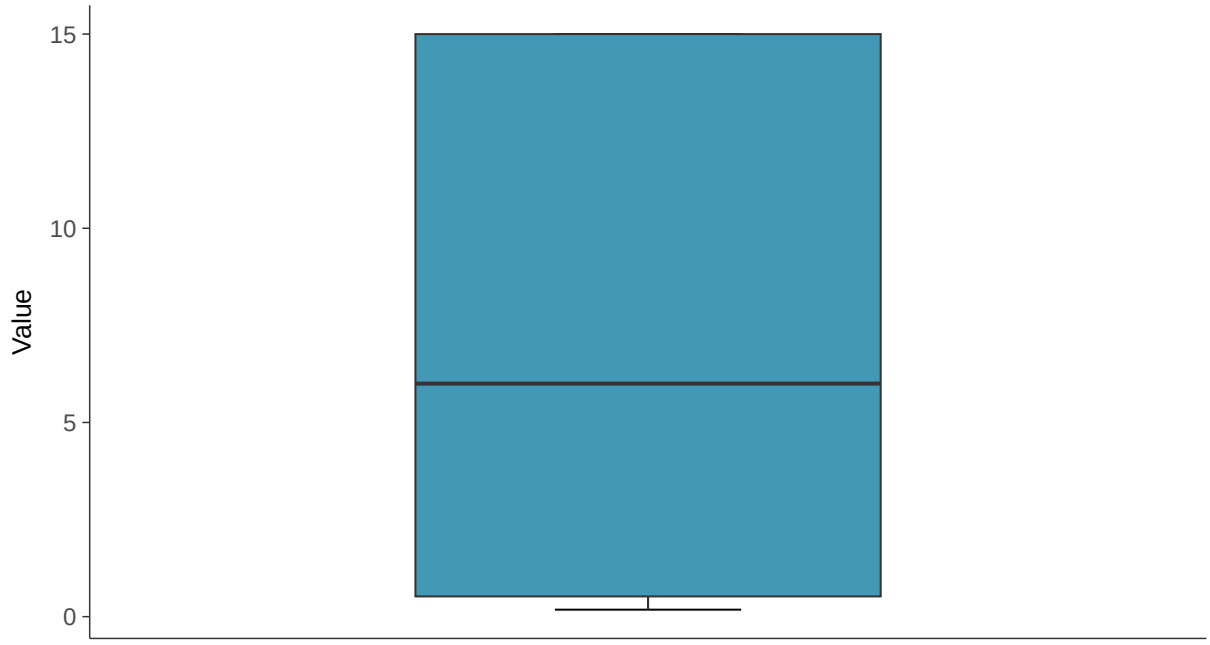
ID: 10_2_110



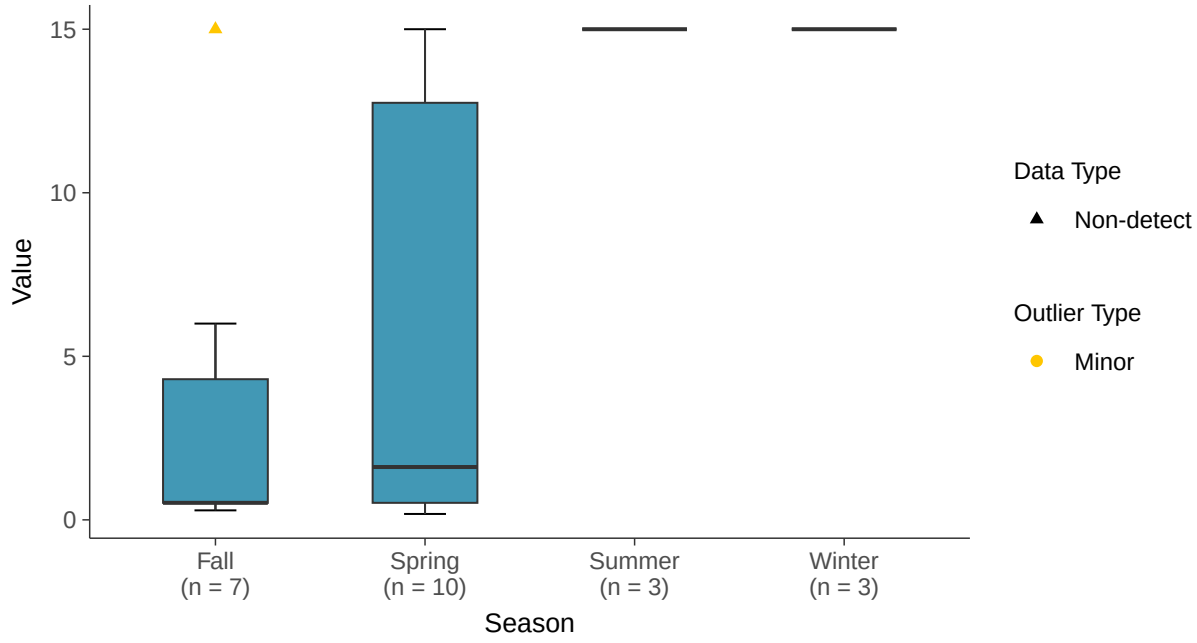
**Boxplot**

Cobalt, MW-15020 (ug/L)



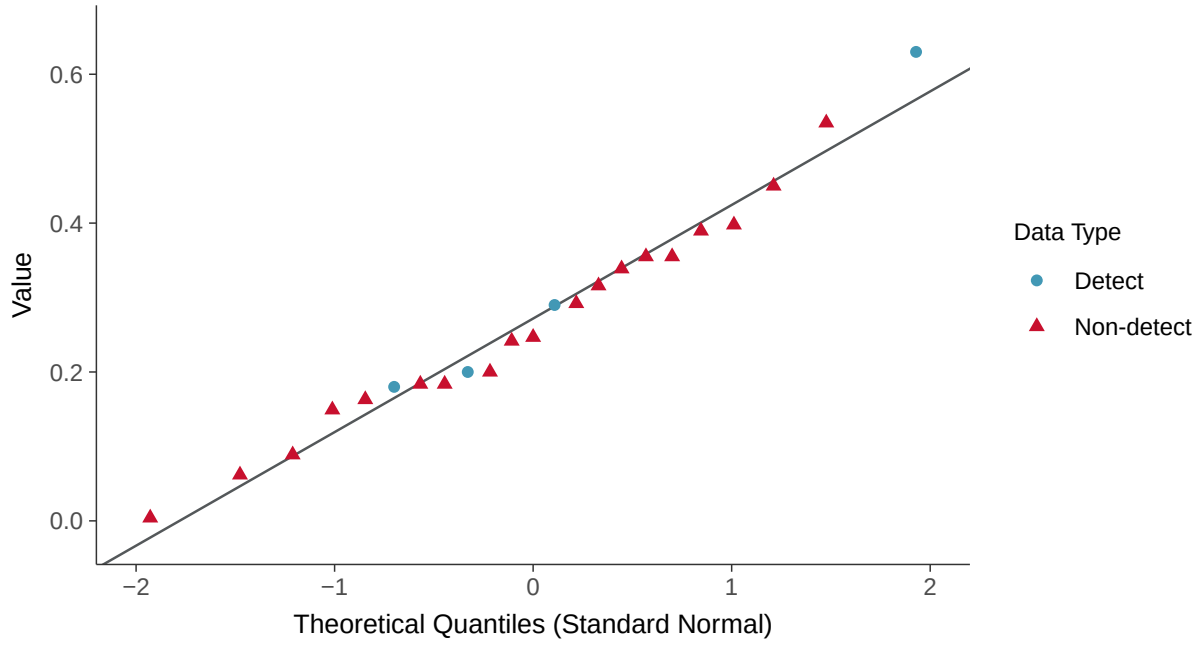

**Boxplot by Season**

Cobalt, MW-15020 (ug/L)



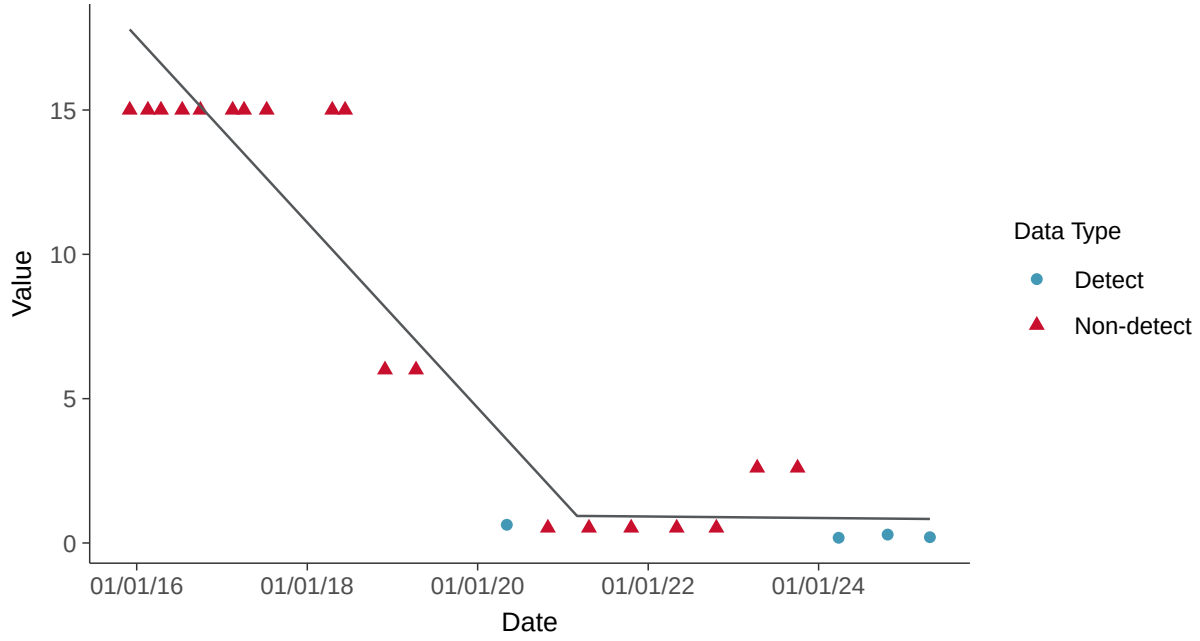
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15020 (ug/L)



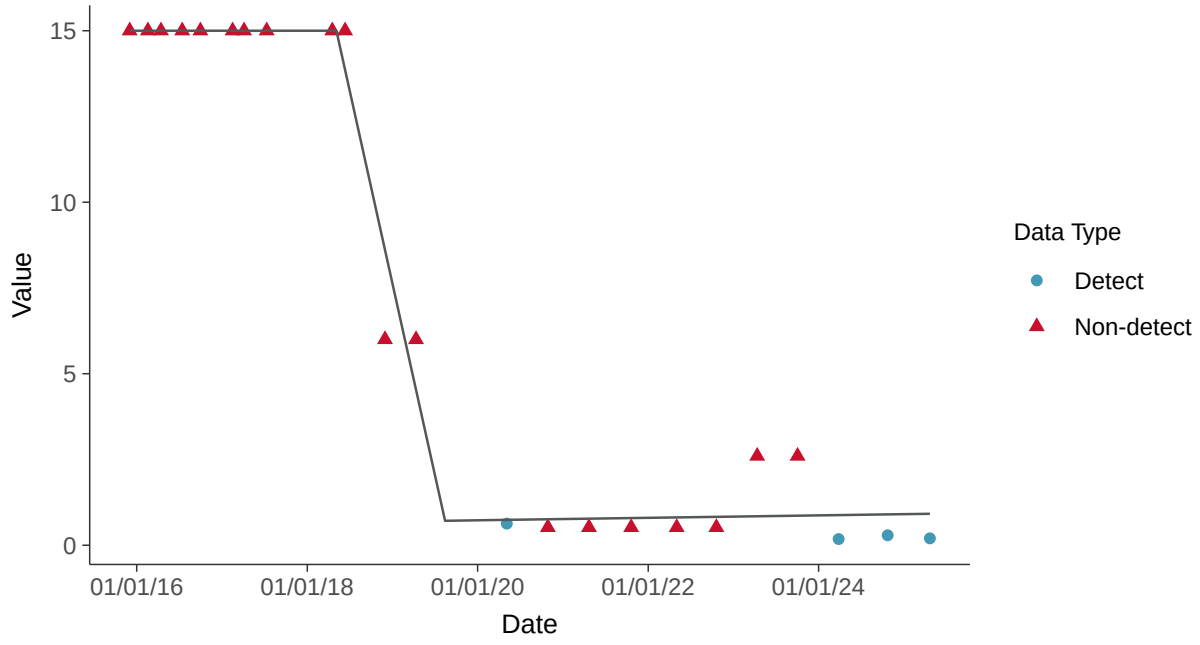

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15020 (ug/L)



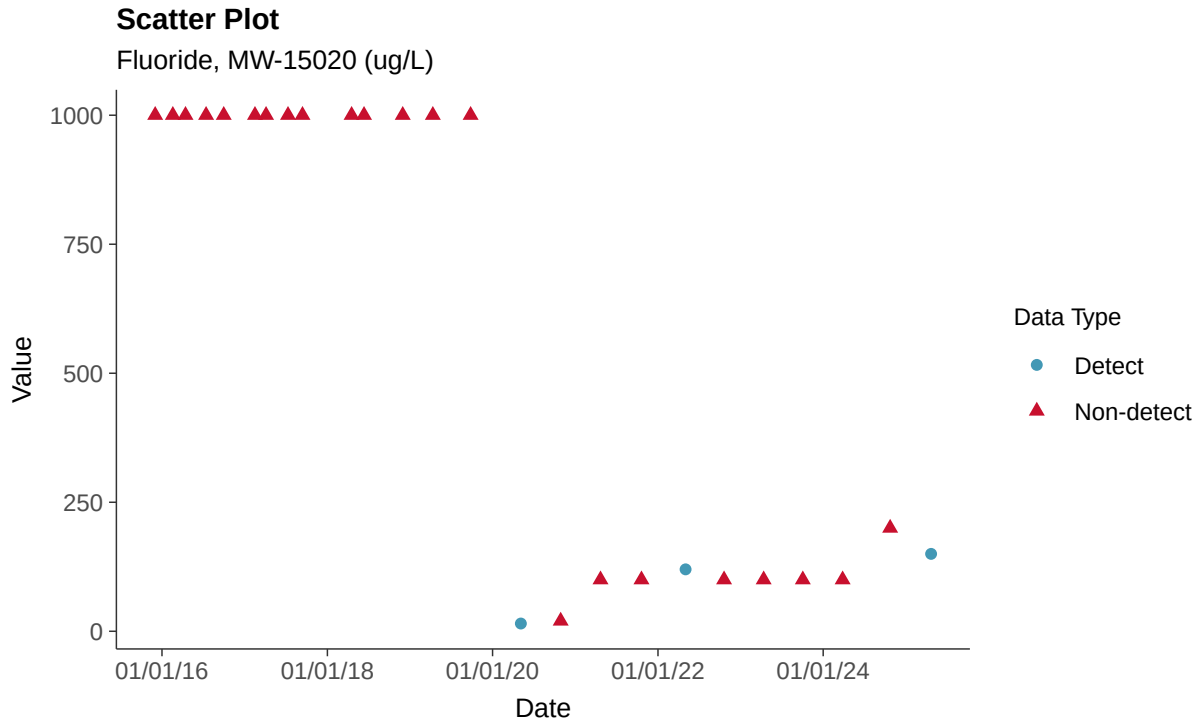
**Trend Regression: Piecewise Linear-Linear-Linear**

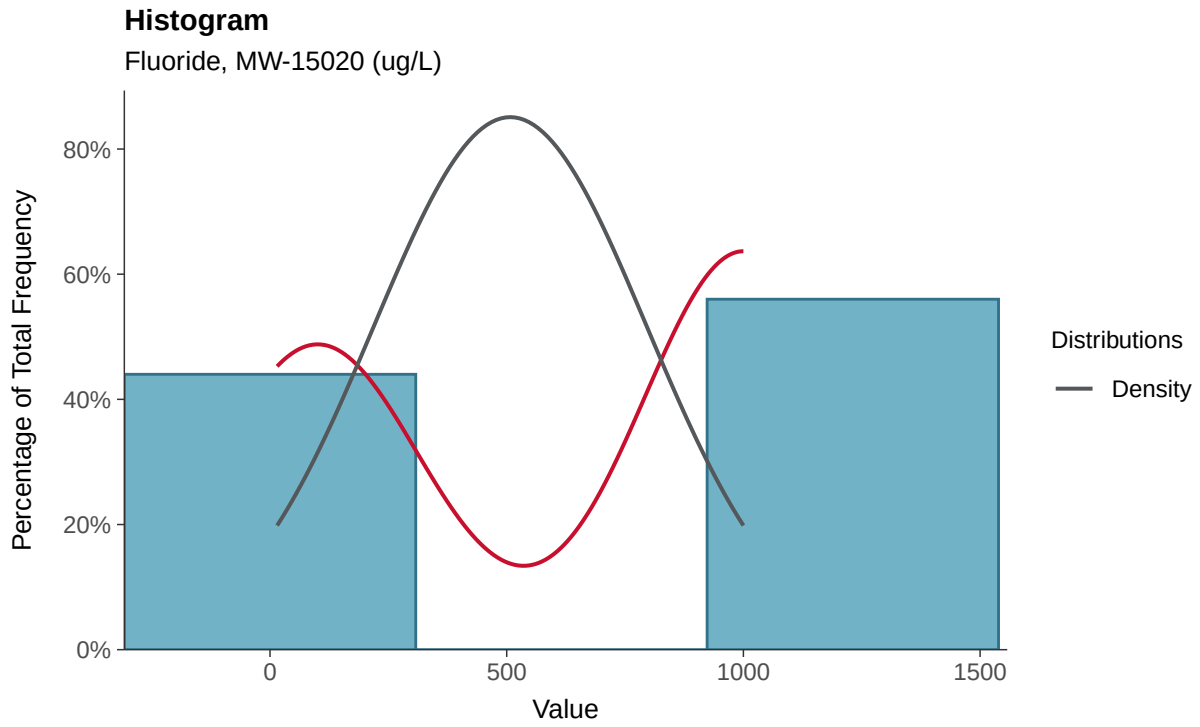
Cobalt, MW-15020 (ug/L)



## Appendix IV: Fluoride, MW-15020

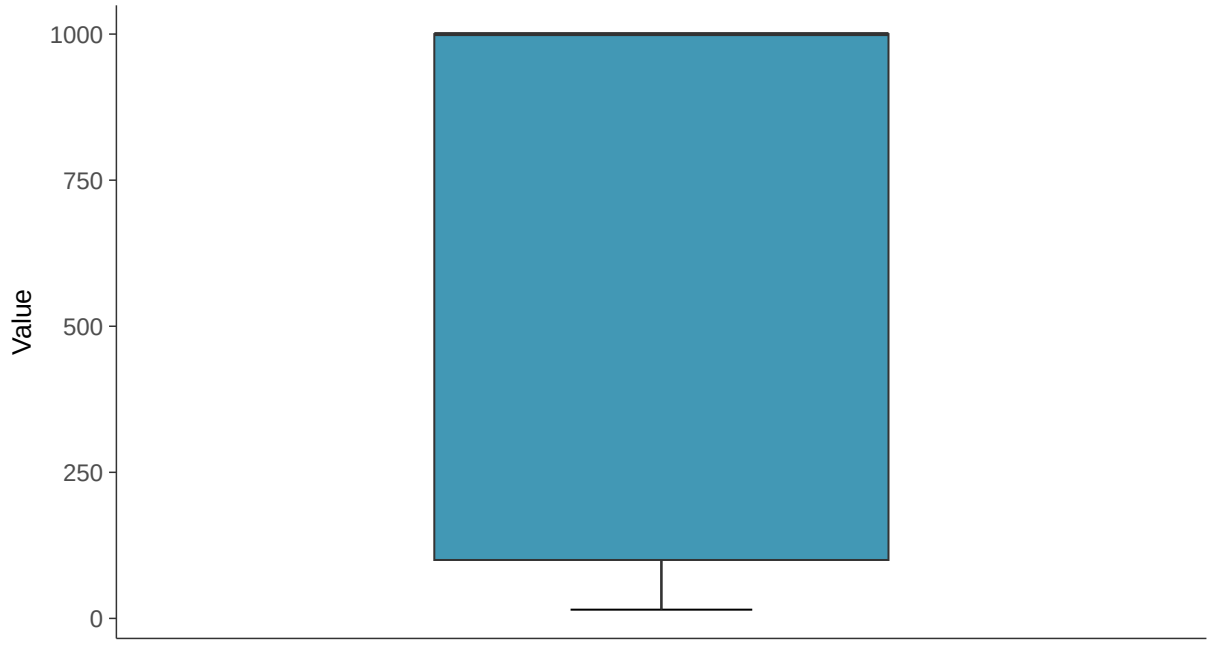
ID: 10_2_114



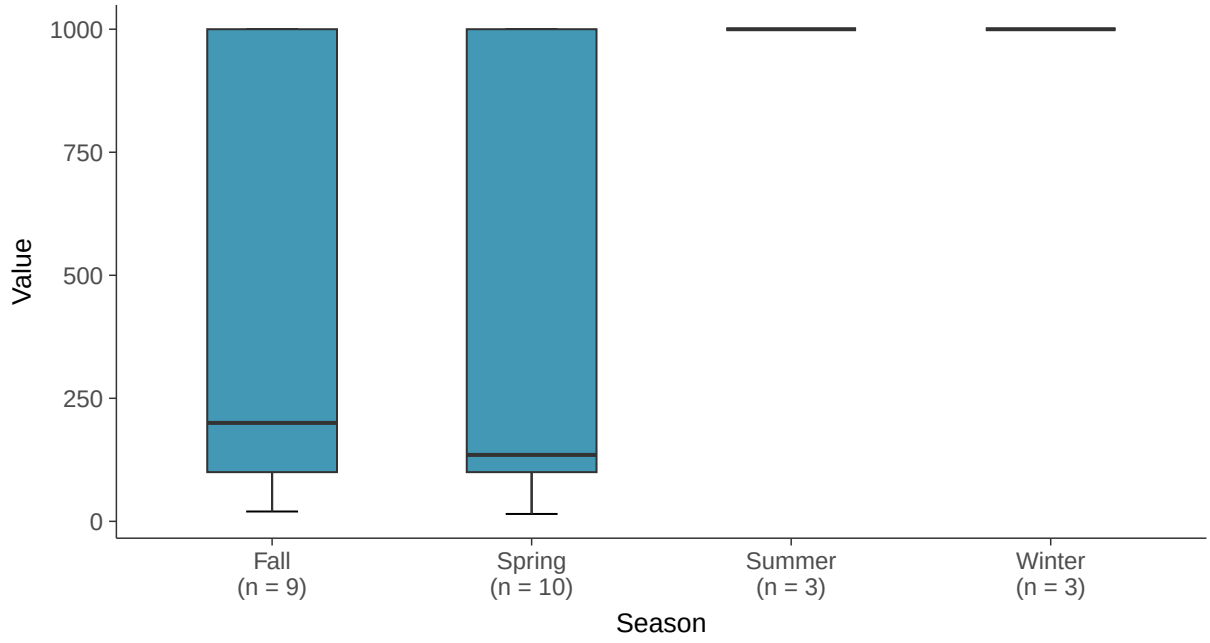
**Boxplot**

Fluoride, MW-15020 (ug/L)



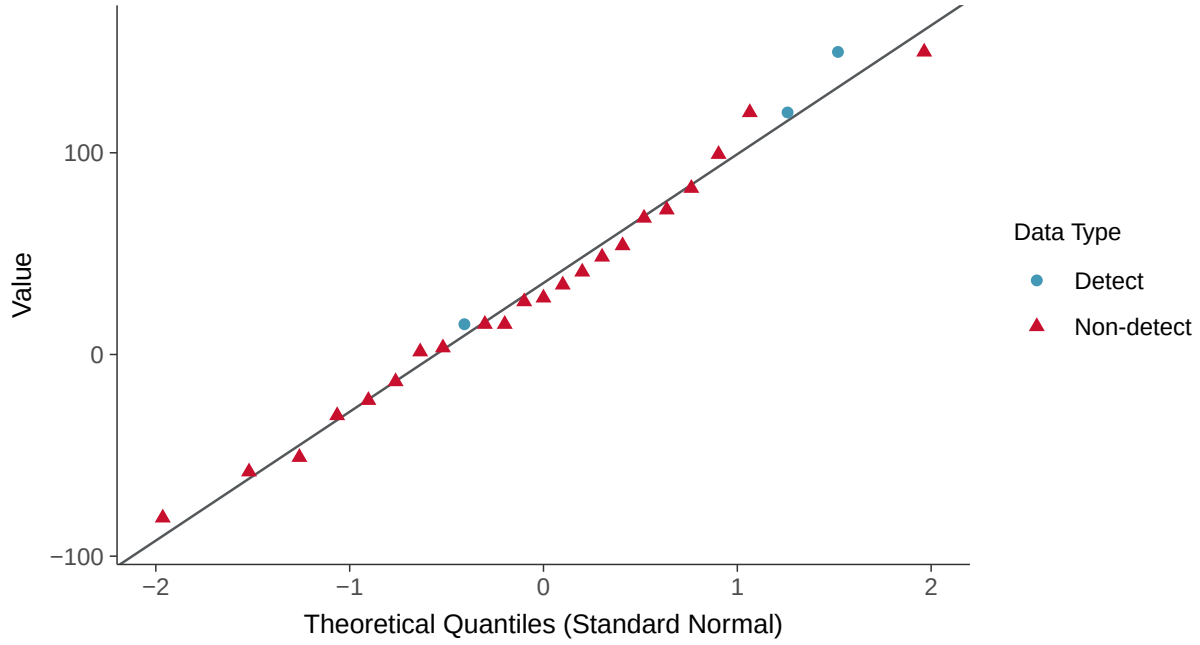

**Boxplot by Season**

Fluoride, MW-15020 (ug/L)



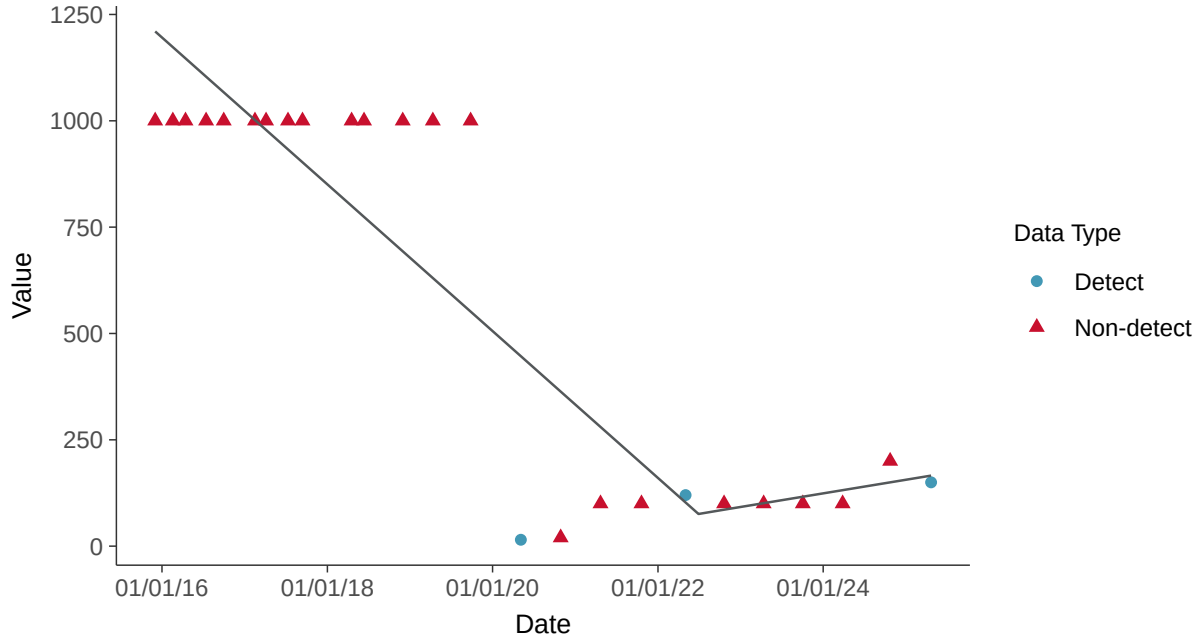
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15020 (ug/L)



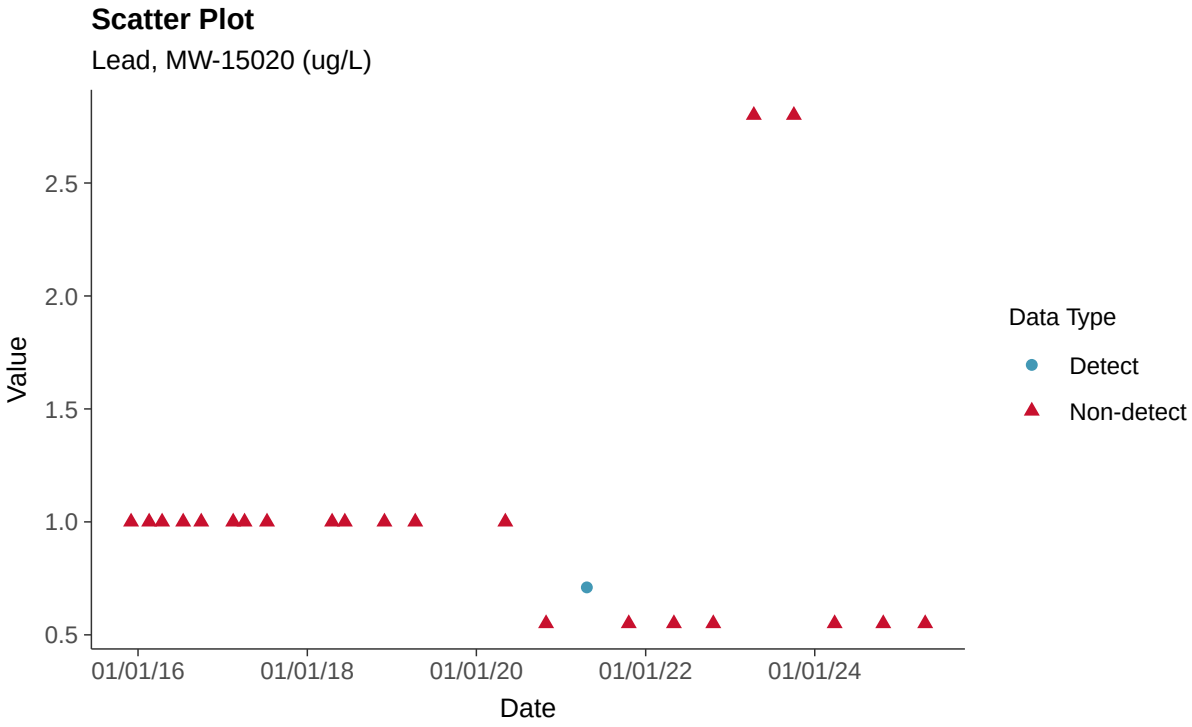

**Trend Regression: Piecewise Linear-Linear**

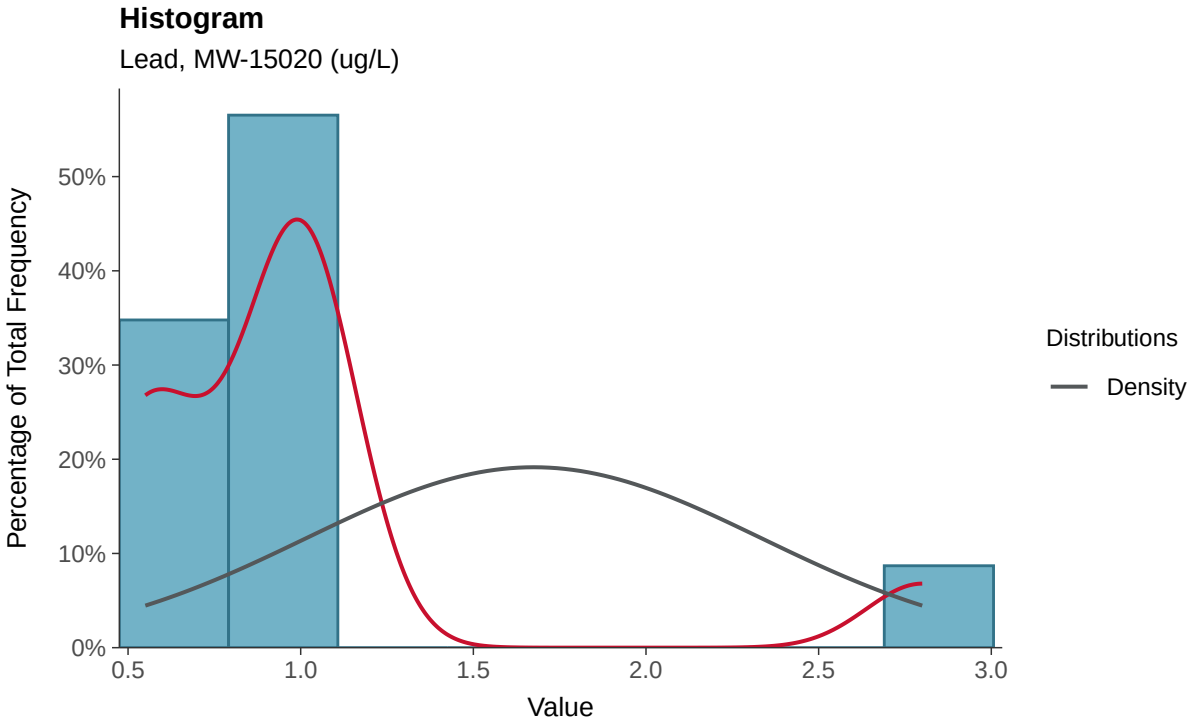
Fluoride, MW-15020 (ug/L)



## Appendix IV: Lead, MW-15020

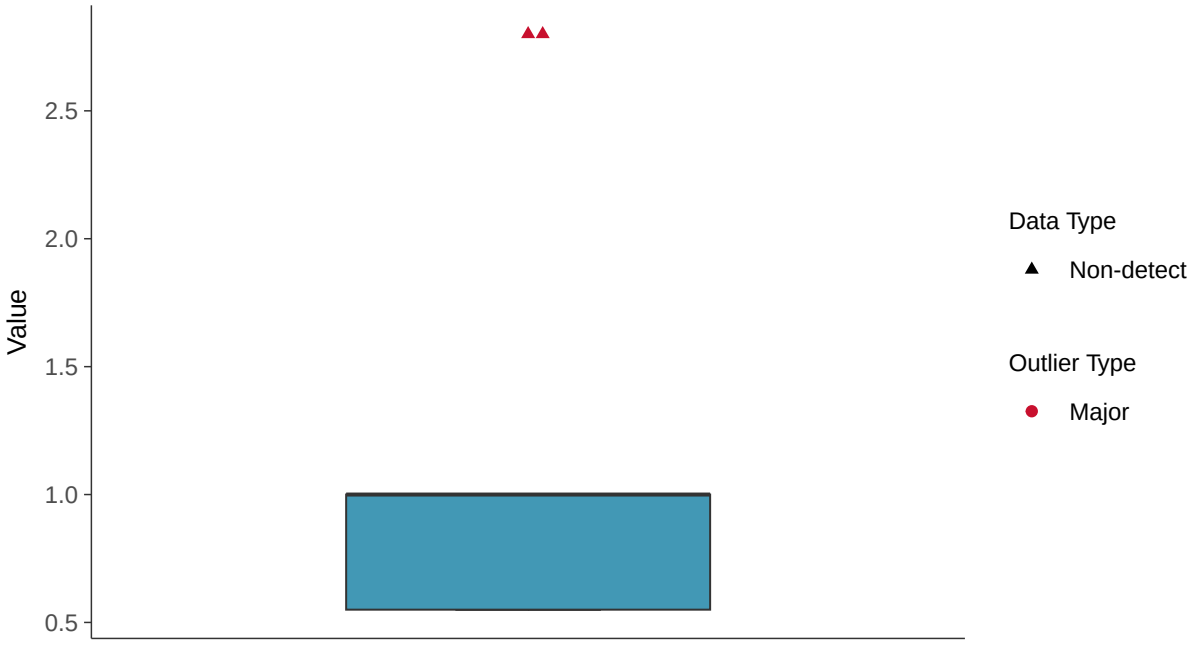
ID: 10_2_116



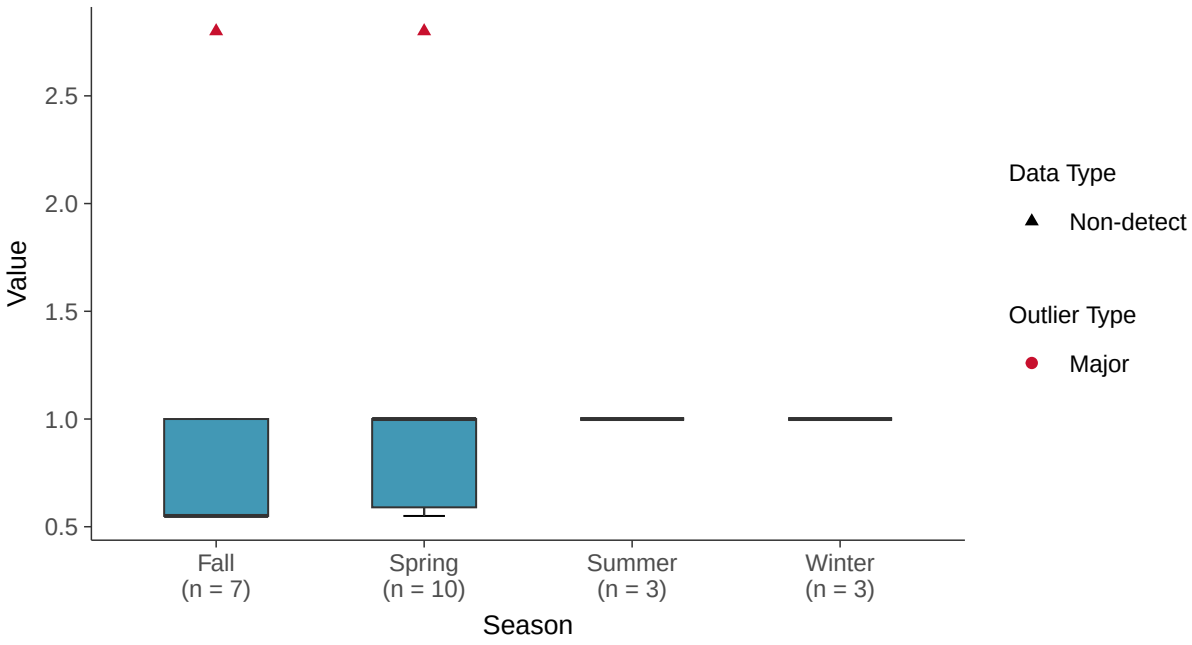
## Boxplot

Lead, MW-15020 (ug/L)



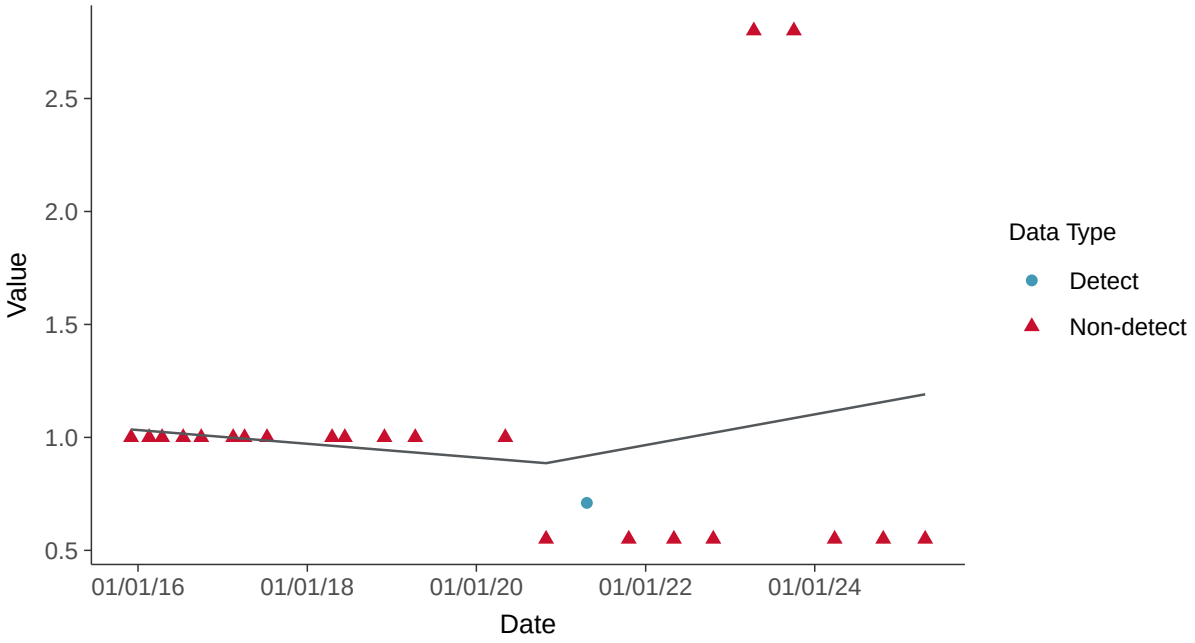

## Boxplot by Season

Lead, MW-15020 (ug/L)



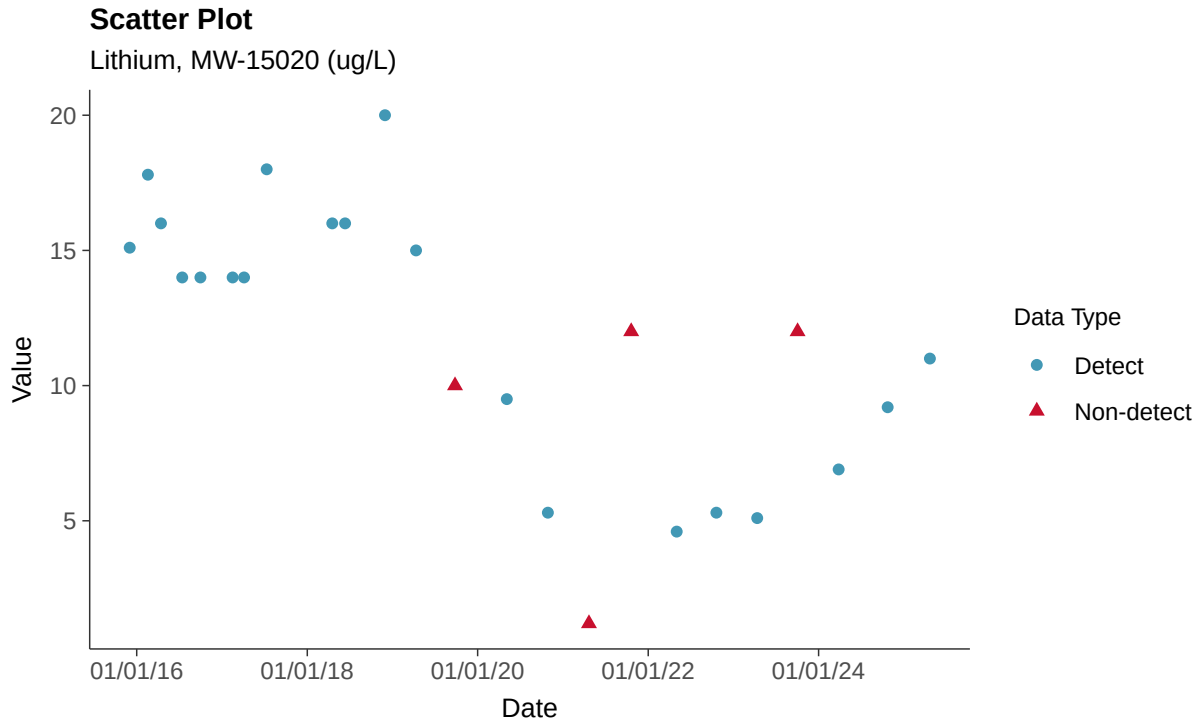
**Trend Regression: Piecewise Linear-Linear**

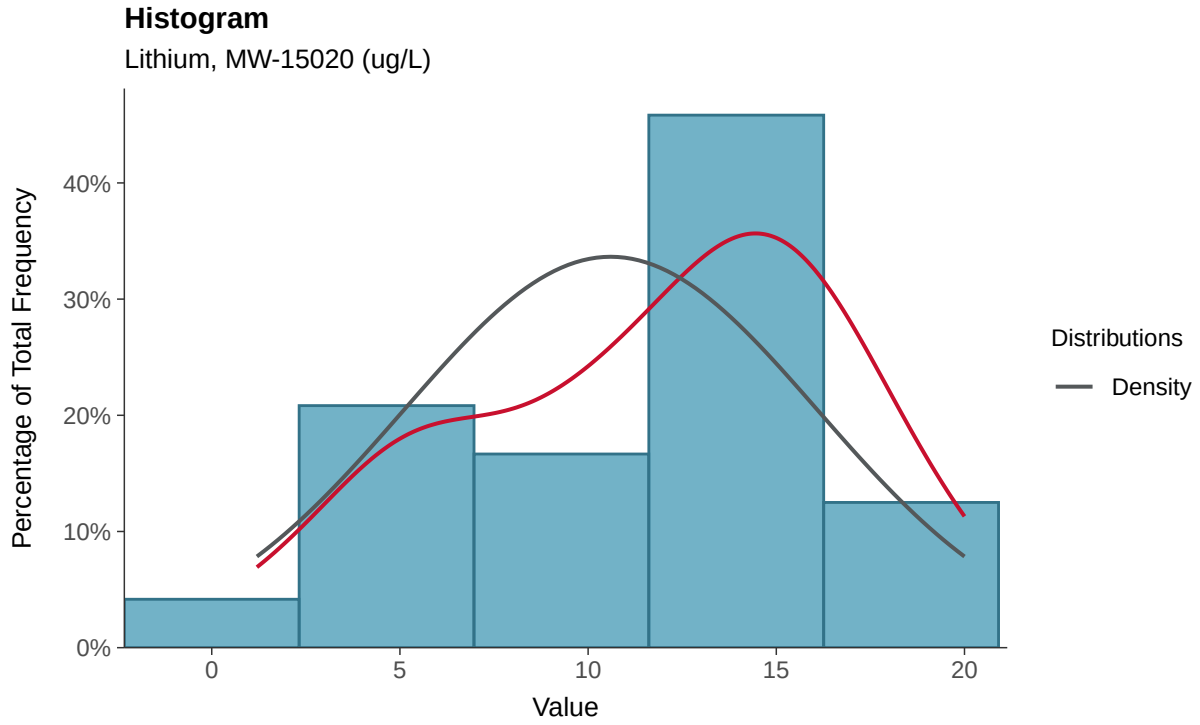
Lead, MW-15020 (ug/L)



## Appendix IV: Lithium, MW-15020

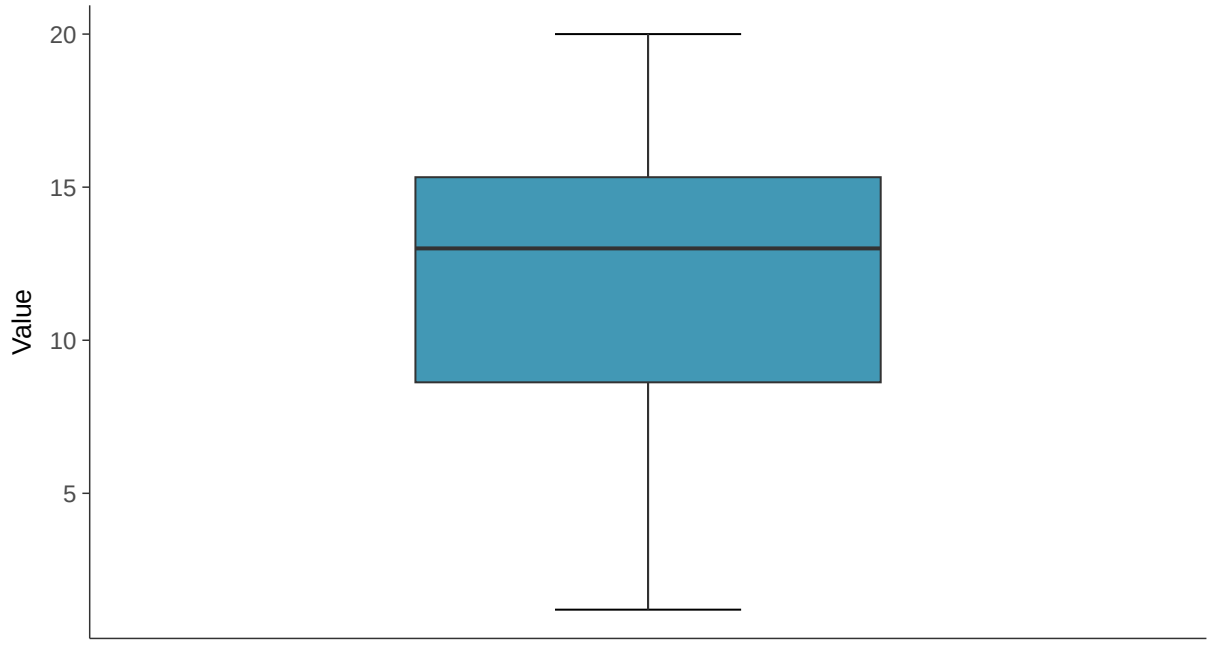
ID: 10_2_117



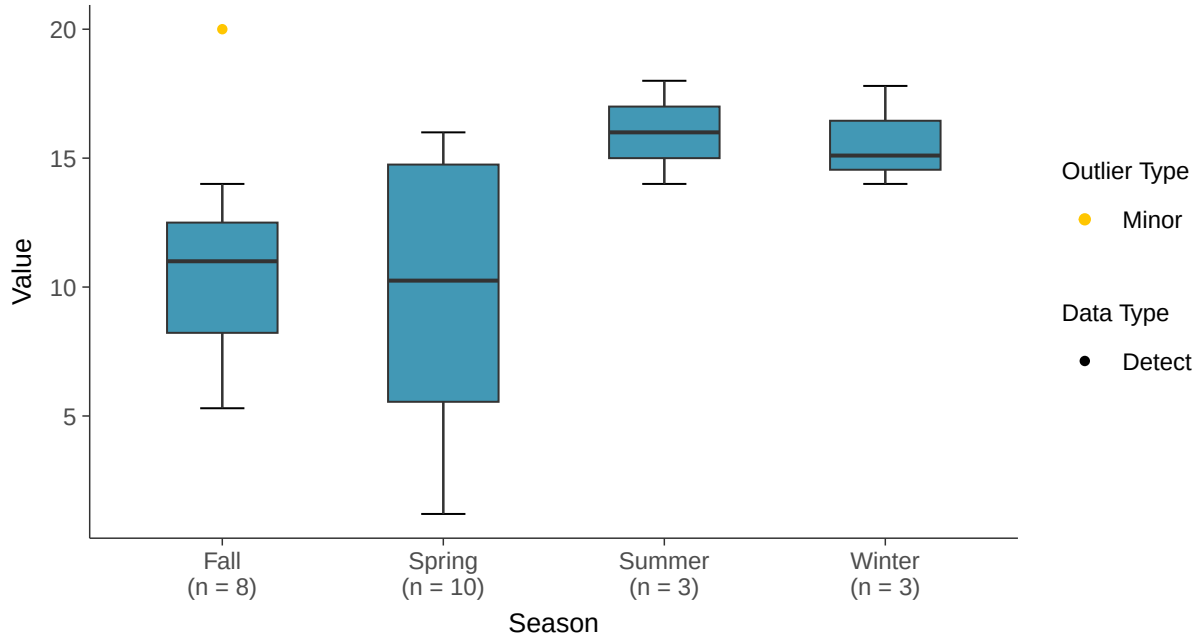
**Boxplot**

Lithium, MW-15020 (ug/L)



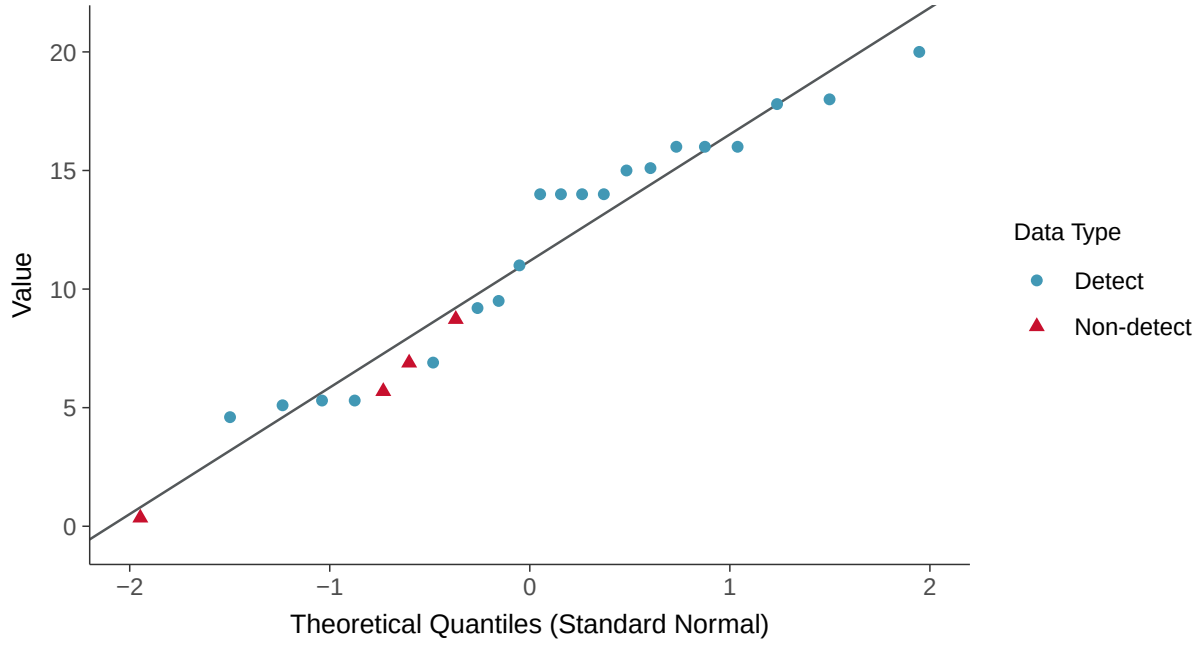

**Boxplot by Season**

Lithium, MW-15020 (ug/L)



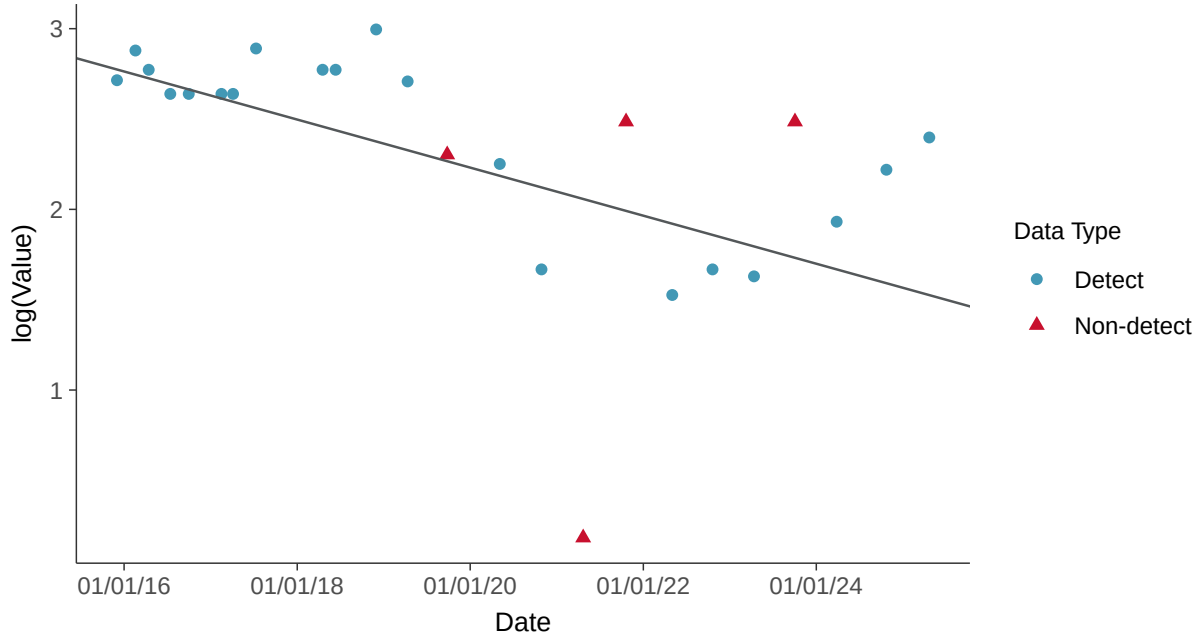
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15020 (ug/L)



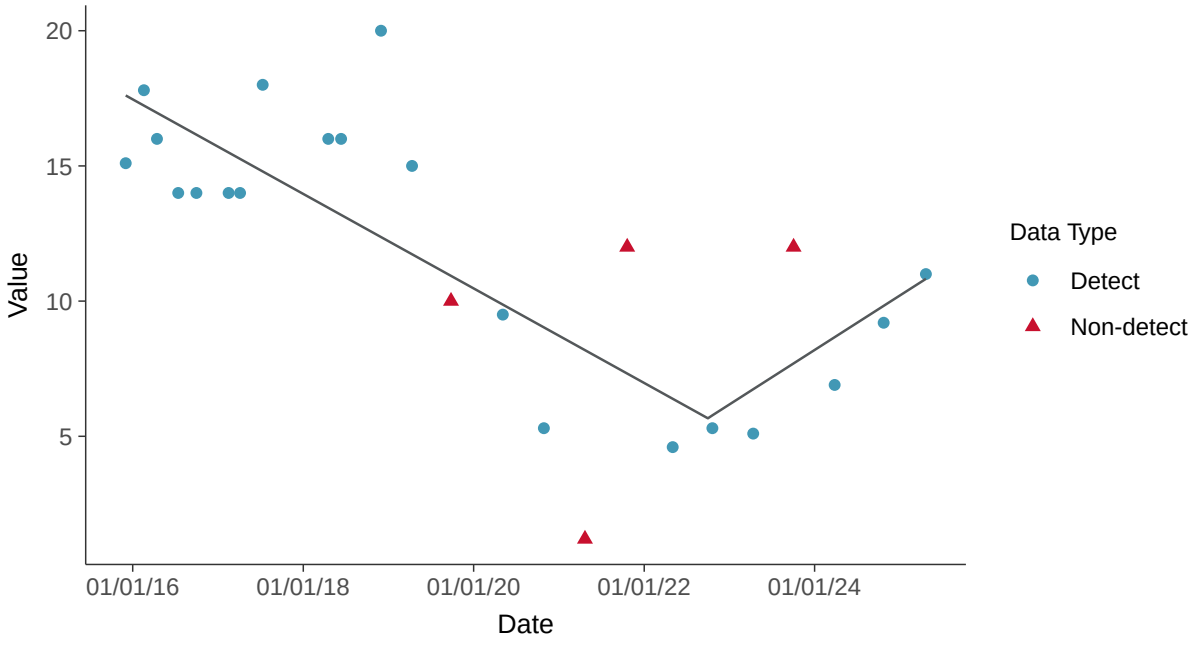

**Trend Regression: Lognormal MLE**

Lithium, MW-15020 (ug/L)



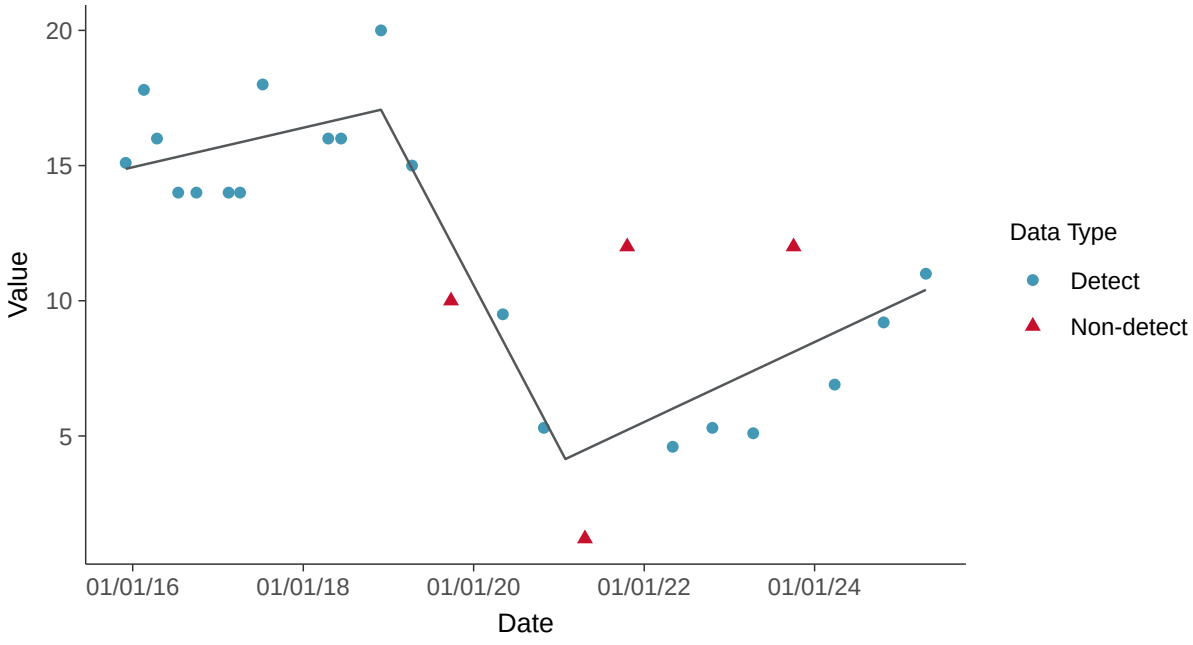
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15020 (ug/L)



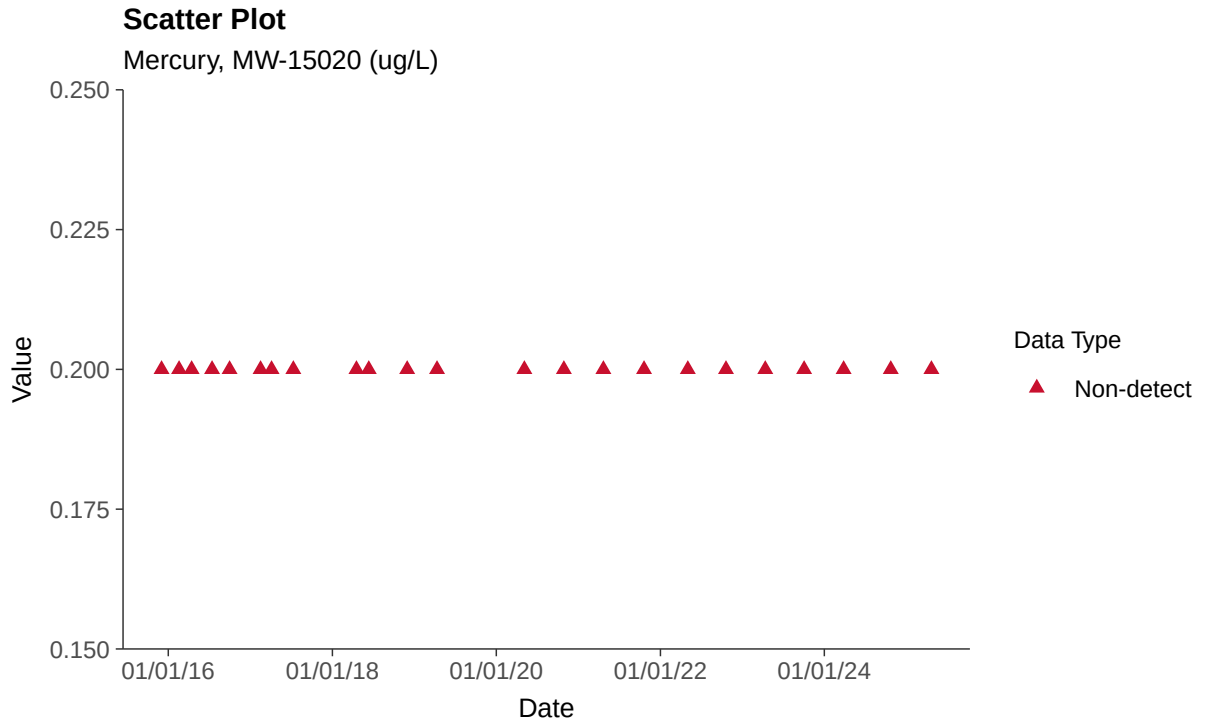

**Trend Regression: Piecewise Linear-Linear-Linear**

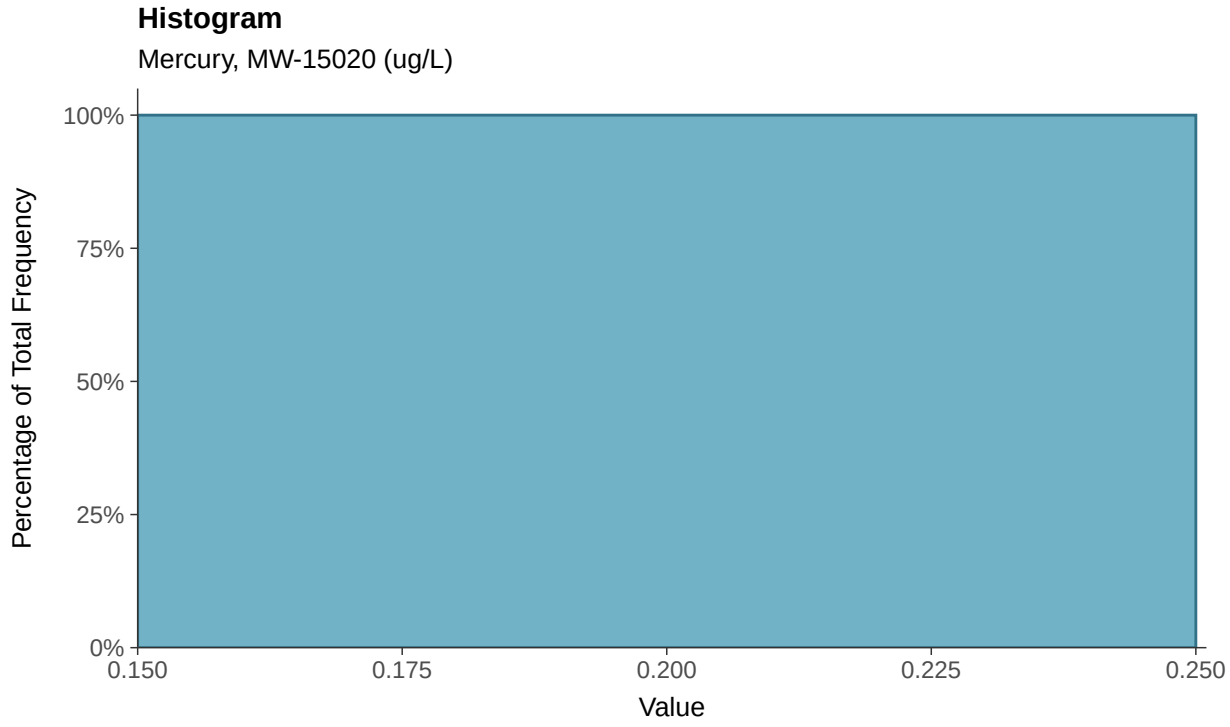
Lithium, MW-15020 (ug/L)



## Appendix IV: Mercury, MW-15020

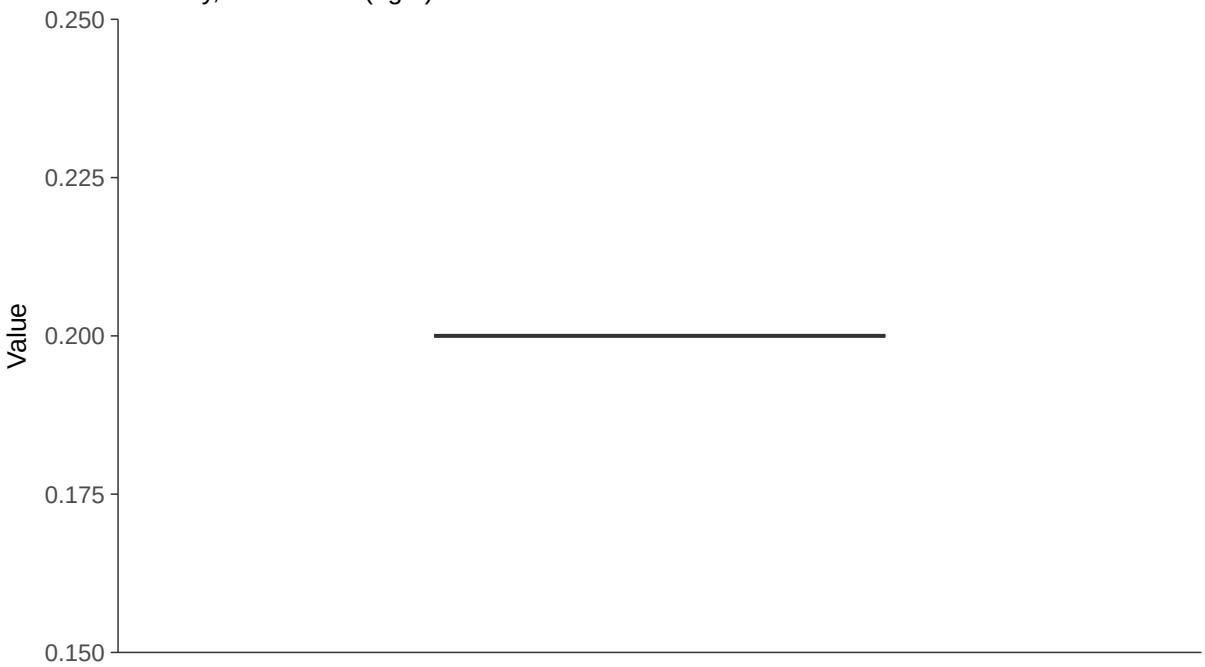
ID: 10_2_118



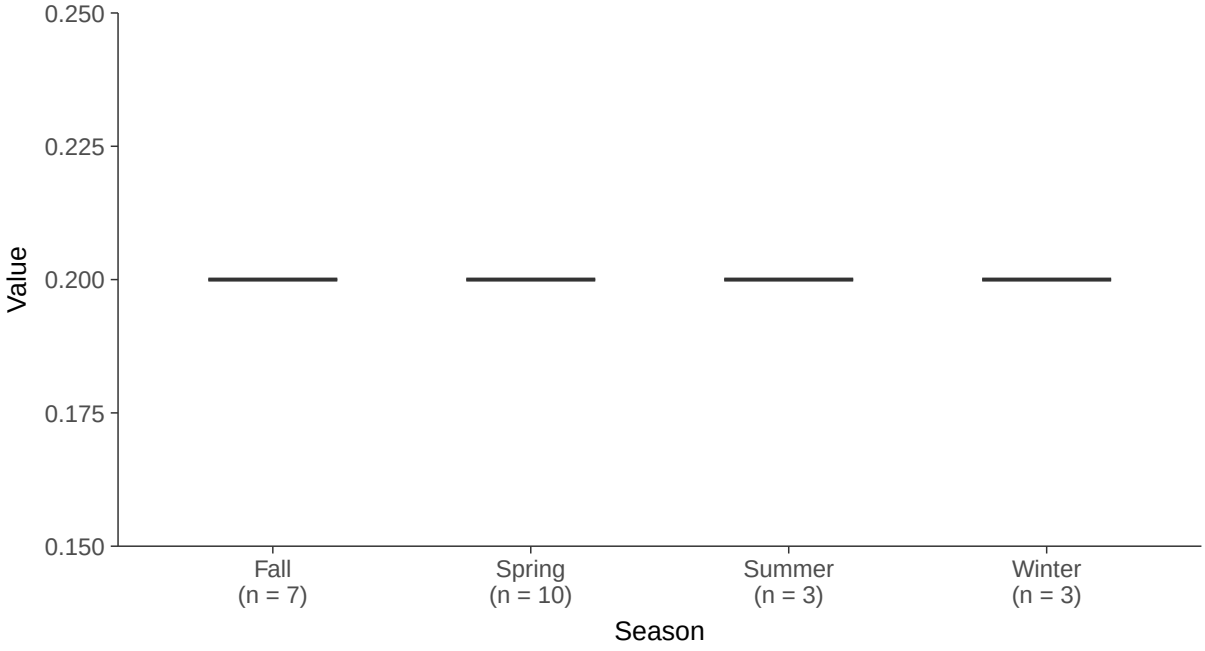
**Boxplot**

Mercury, MW-15020 (ug/L)



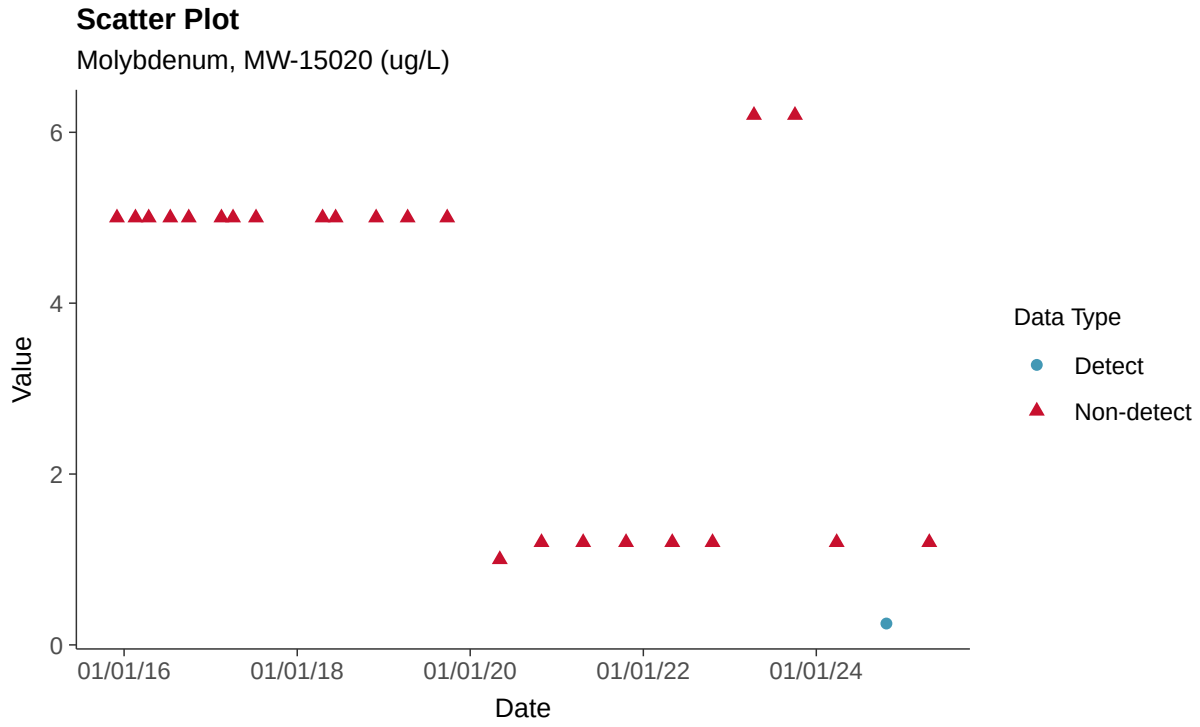

**Boxplot by Season**

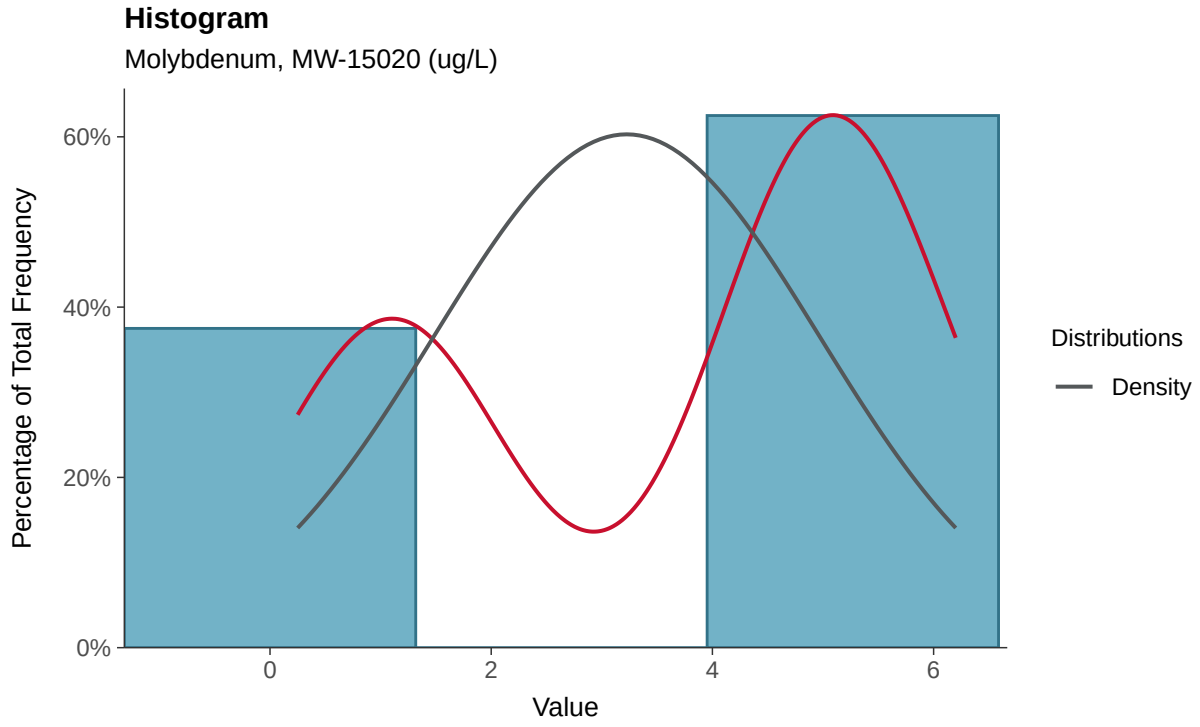
Mercury, MW-15020 (ug/L)



## Appendix IV: Molybdenum, MW-15020

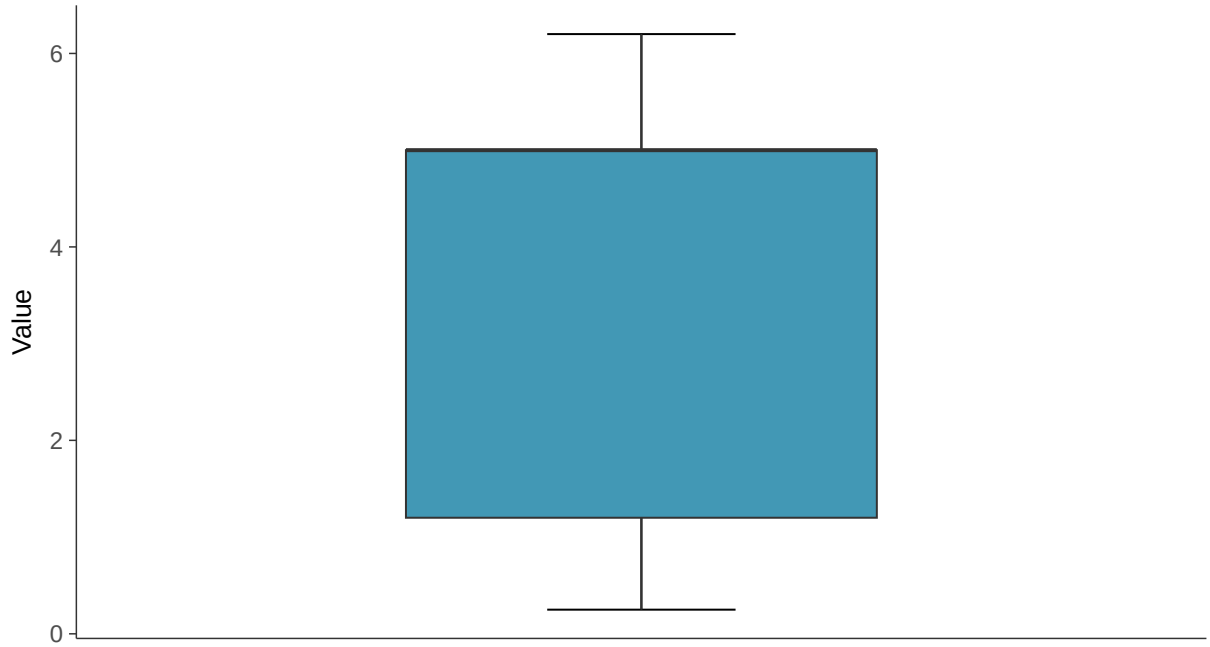
ID: 10_2_119



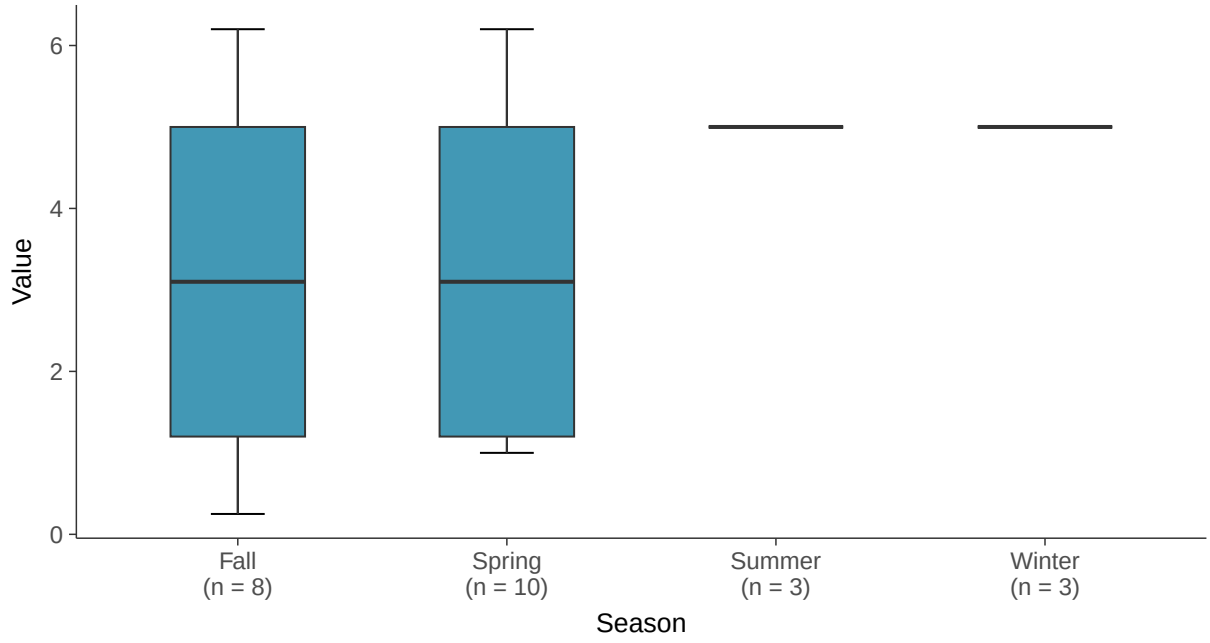
**Boxplot**

Molybdenum, MW-15020 (ug/L)



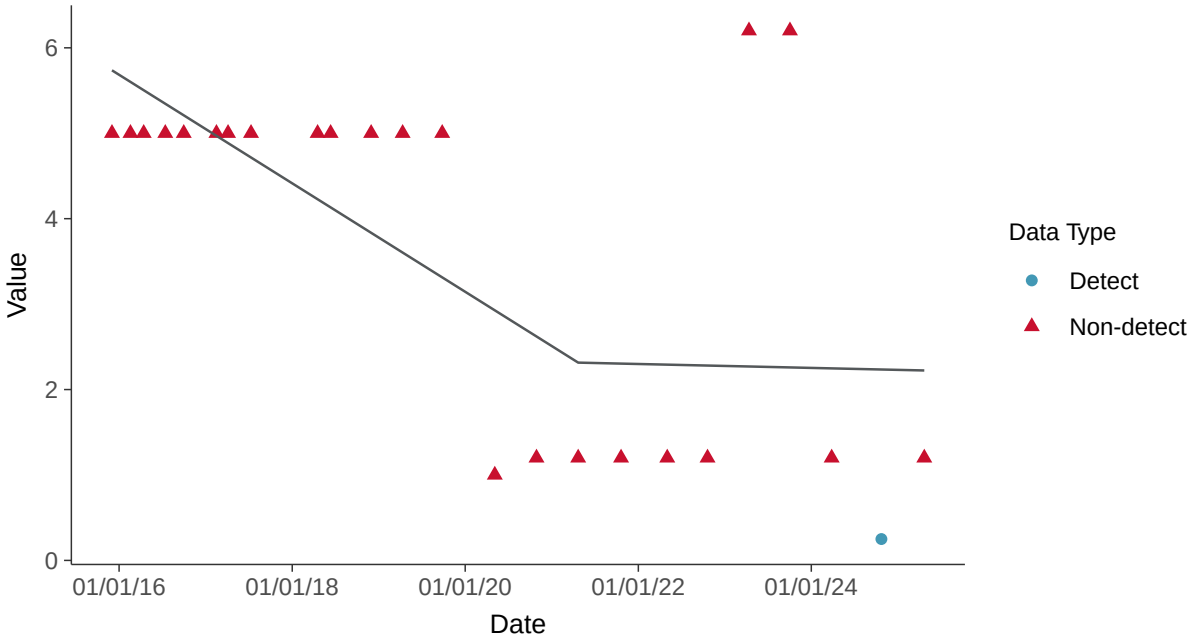

**Boxplot by Season**

Molybdenum, MW-15020 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15020 (ug/L)

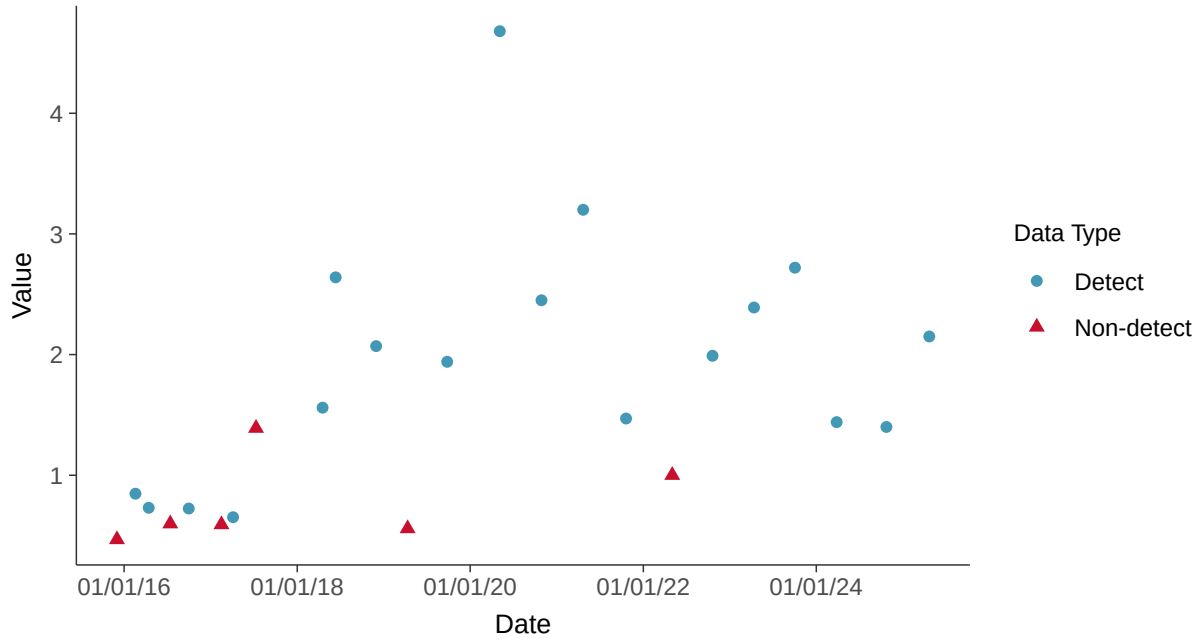


## Appendix IV: Radium-226+228, MW-15020

ID: 10_2_125

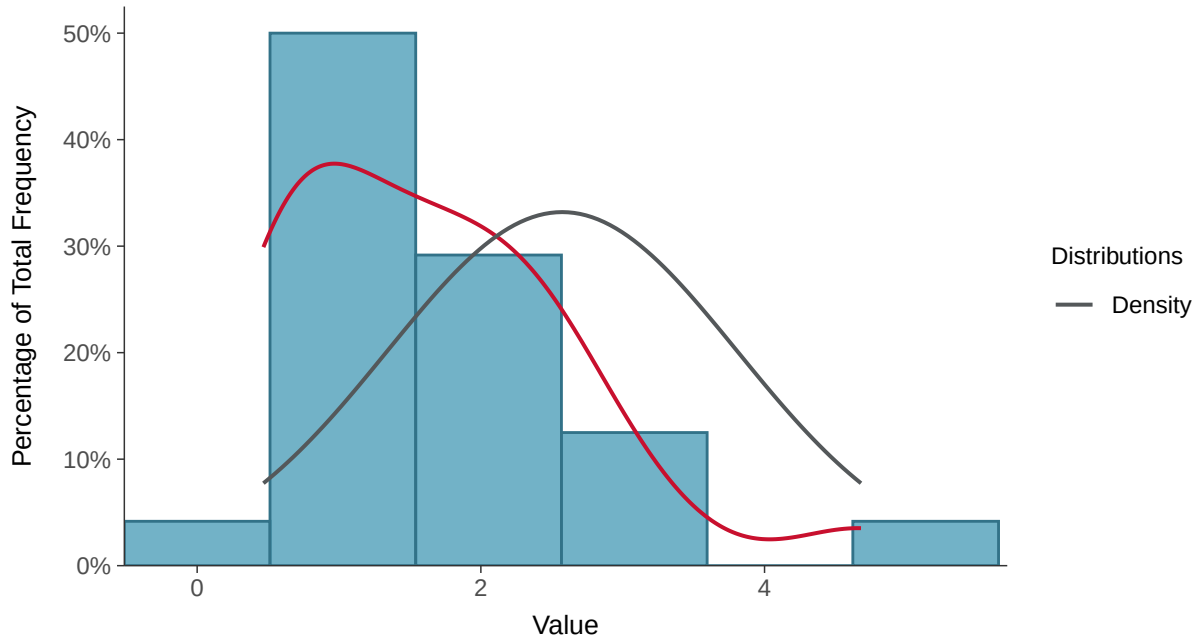
**Scatter Plot**

Radium-226+228, MW-15020 (pCi/L)



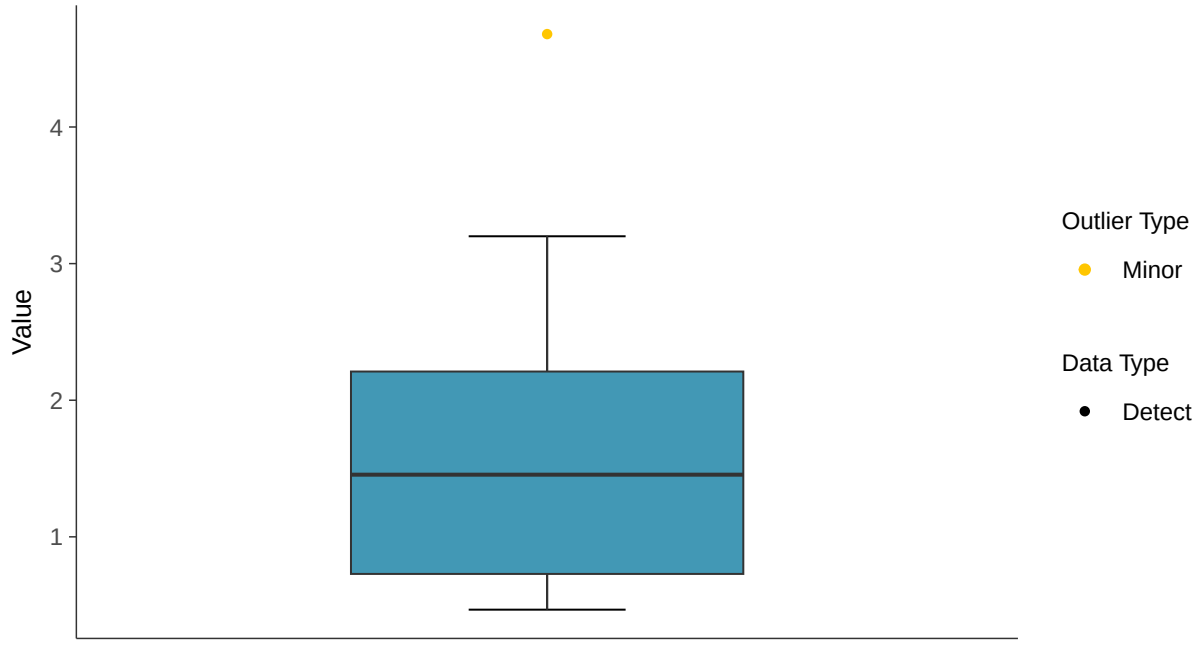

**Histogram**

Radium-226+228, MW-15020 (pCi/L)



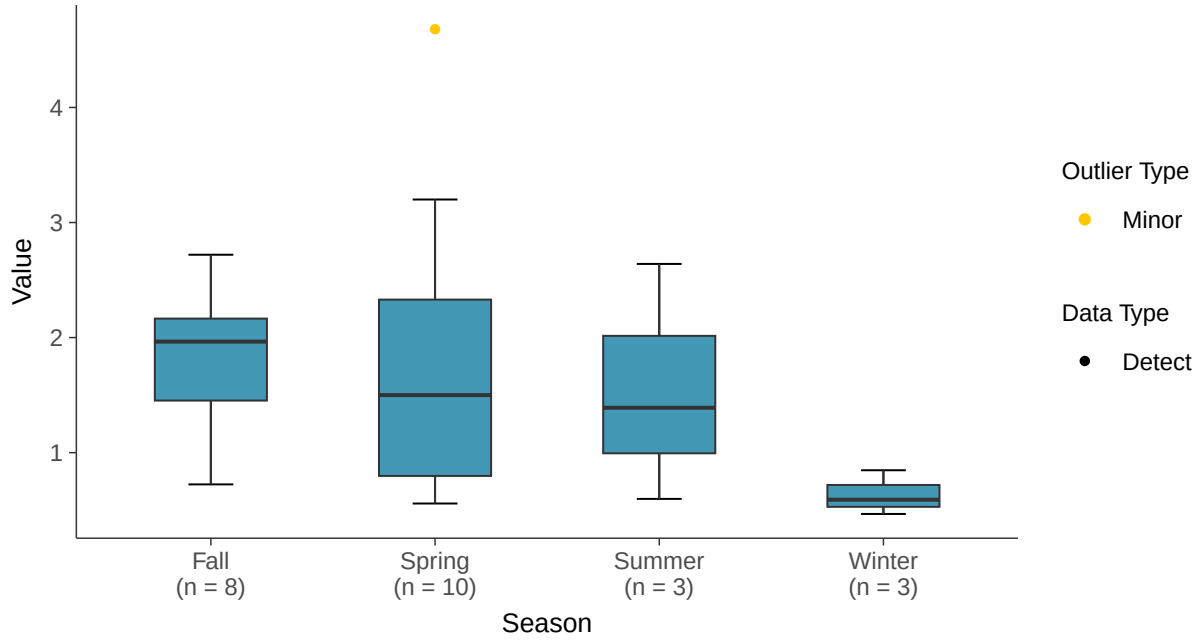
## Boxplot

Radium-226+228, MW-15020 (pCi/L)



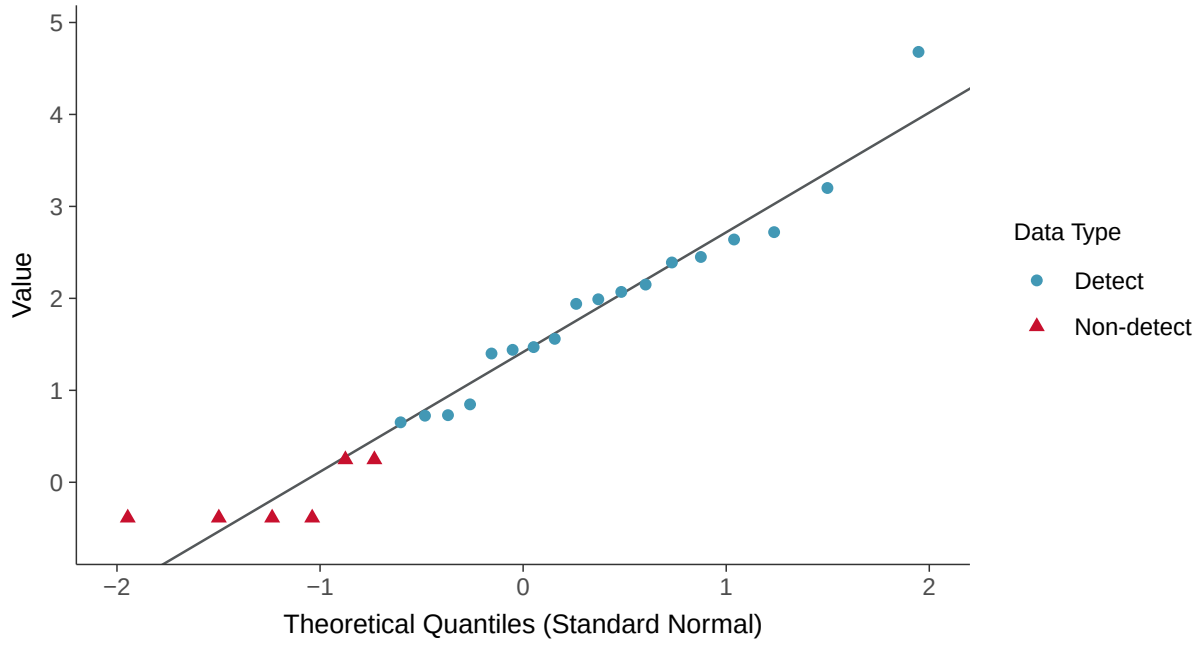

## Boxplot by Season

Radium-226+228, MW-15020 (pCi/L)



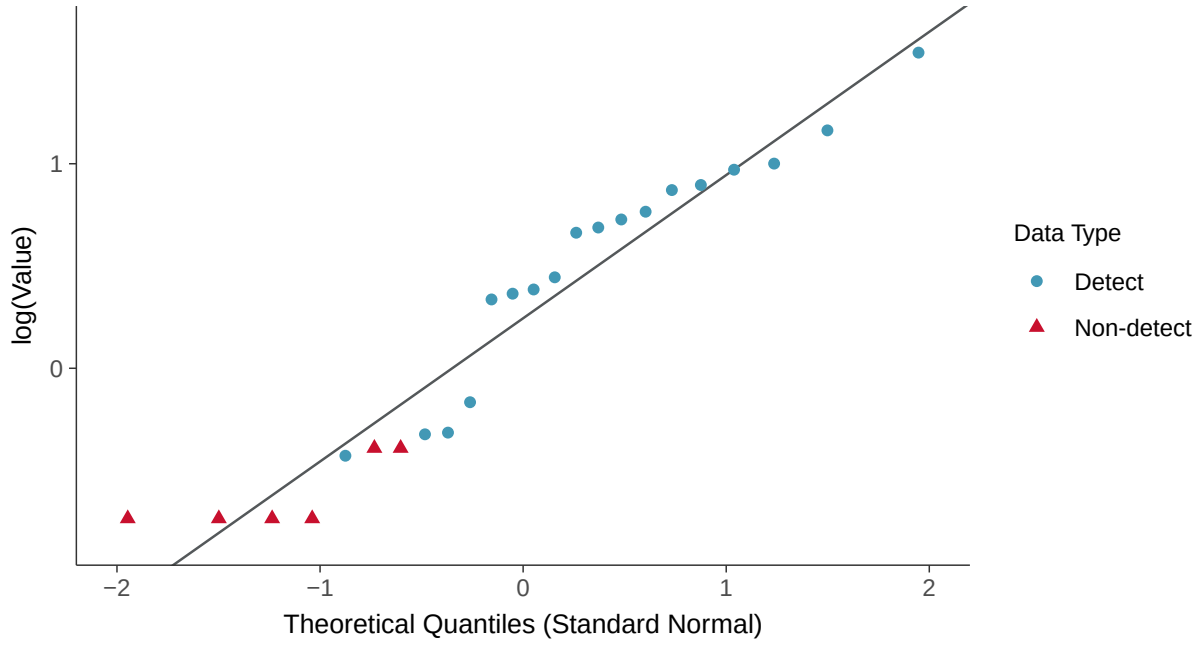
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15020 (pCi/L)



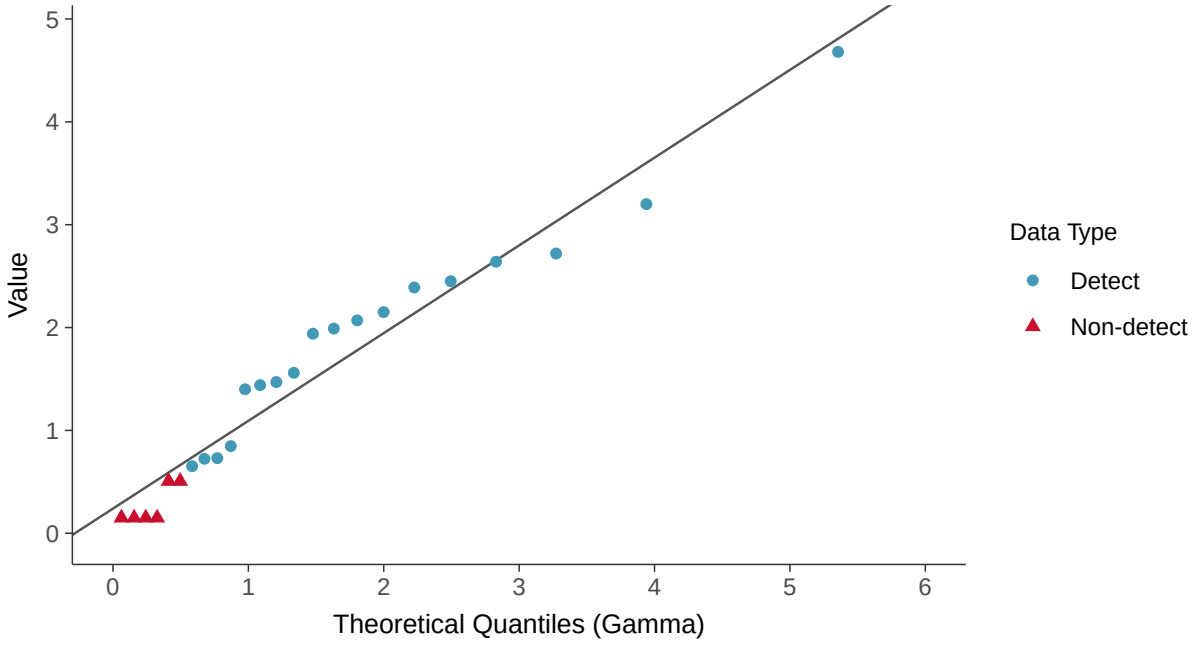

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15020 (pCi/L)



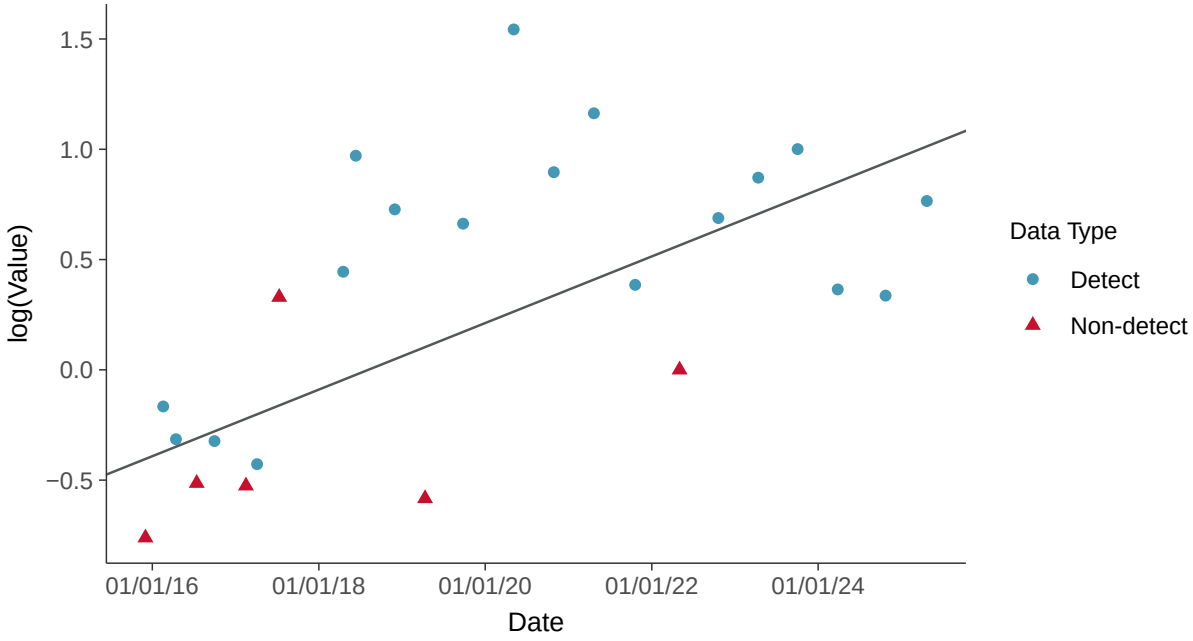
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15020 (pCi/L)



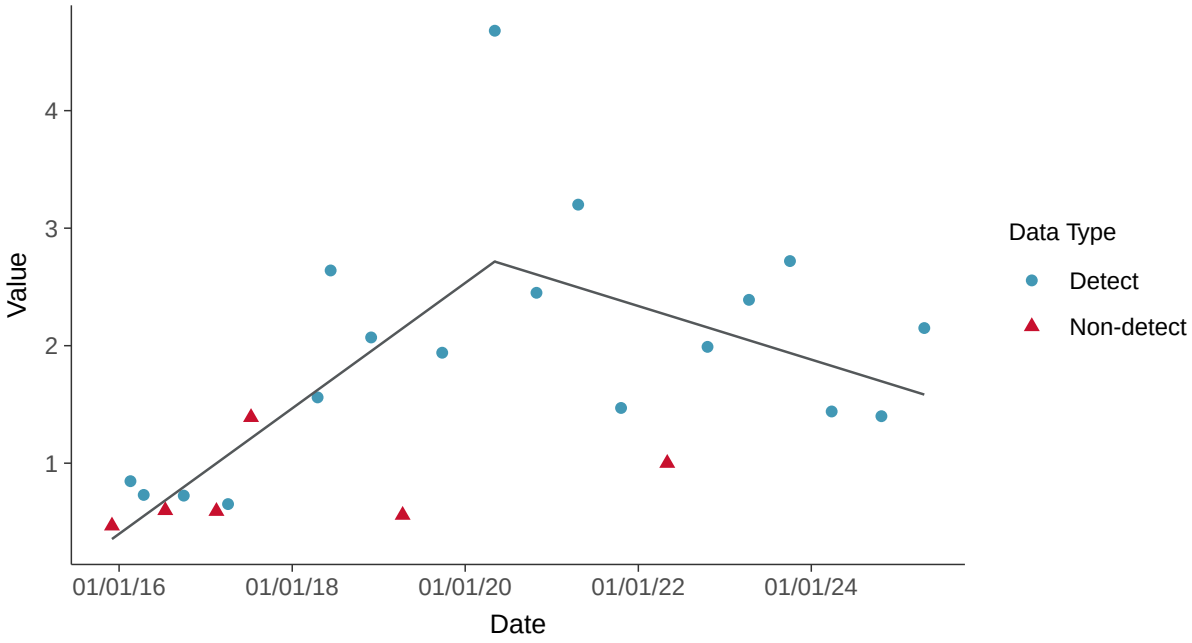

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15020 (pCi/L)



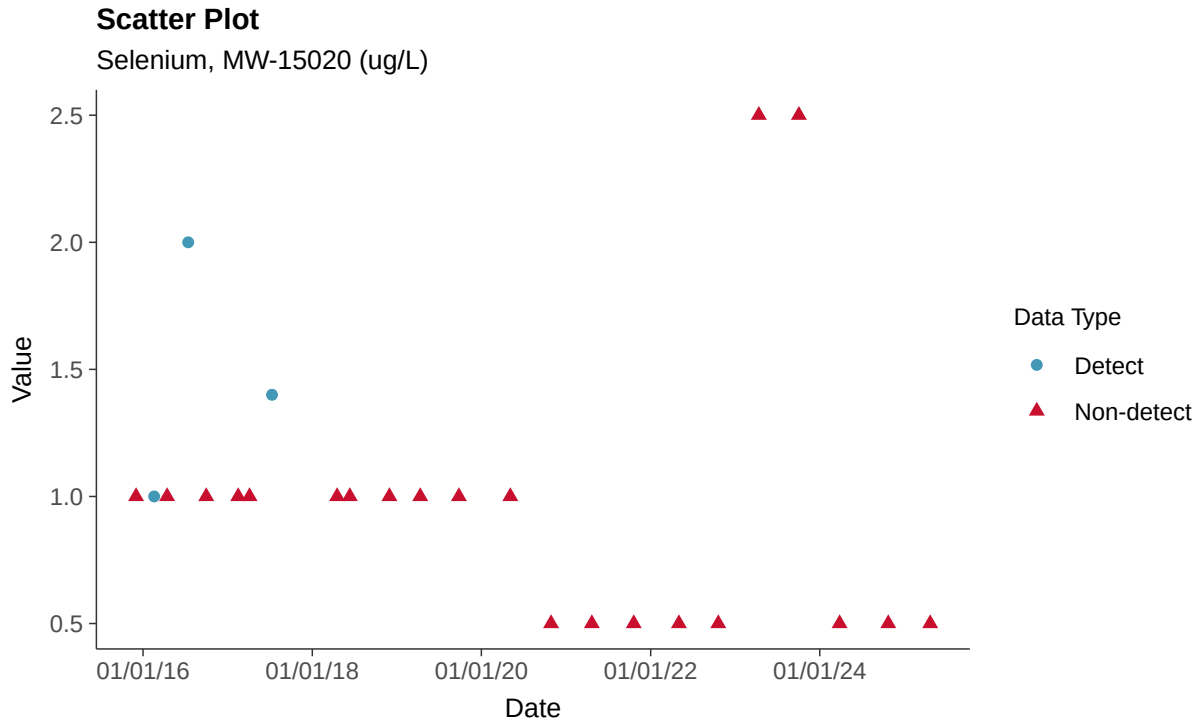
**Trend Regression: Piecewise Linear-Linear**

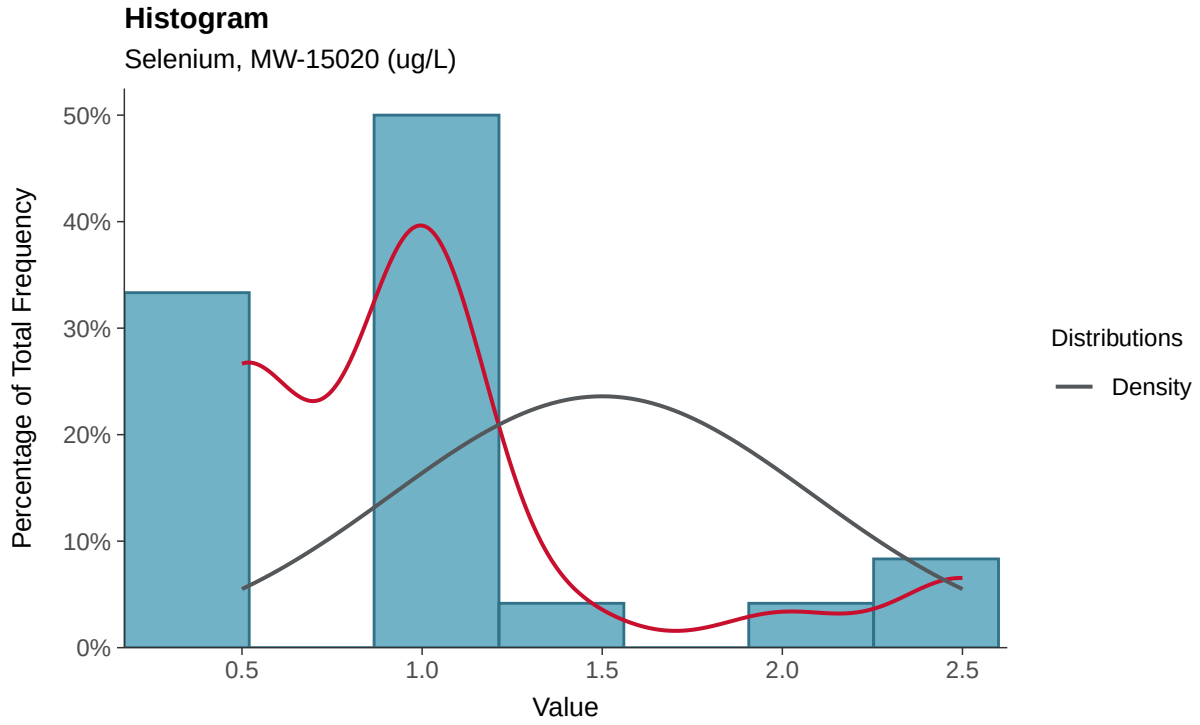
Radium-226+228, MW-15020 (pCi/L)



## Appendix IV: Selenium, MW-15020

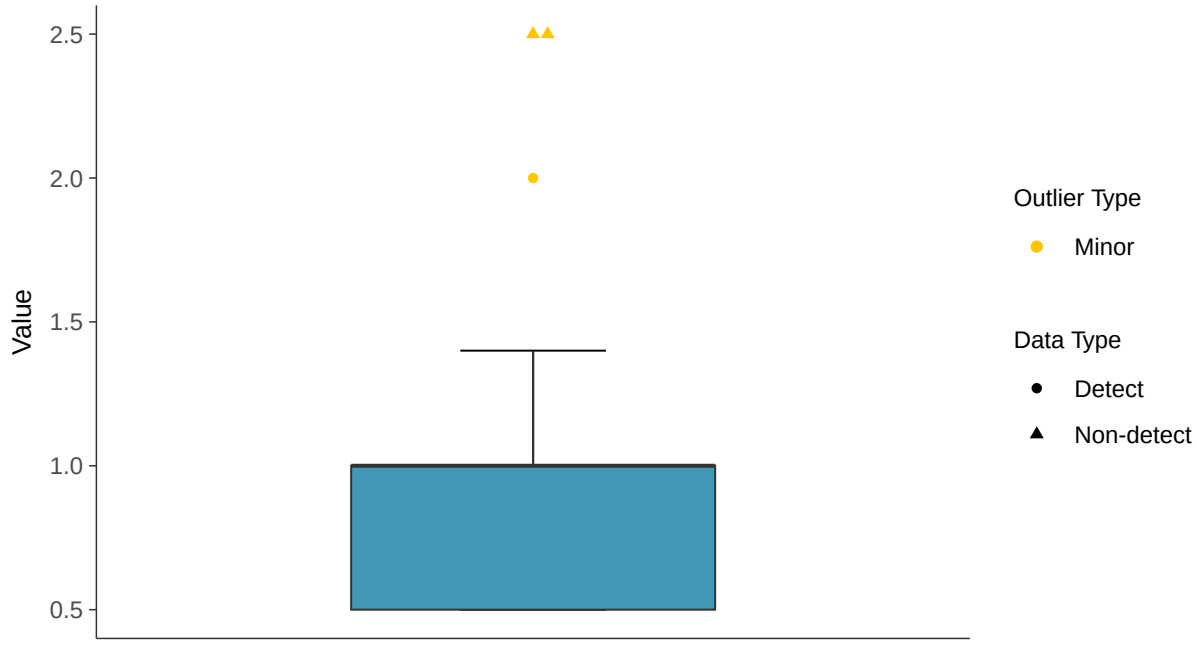
ID: 10_2_127



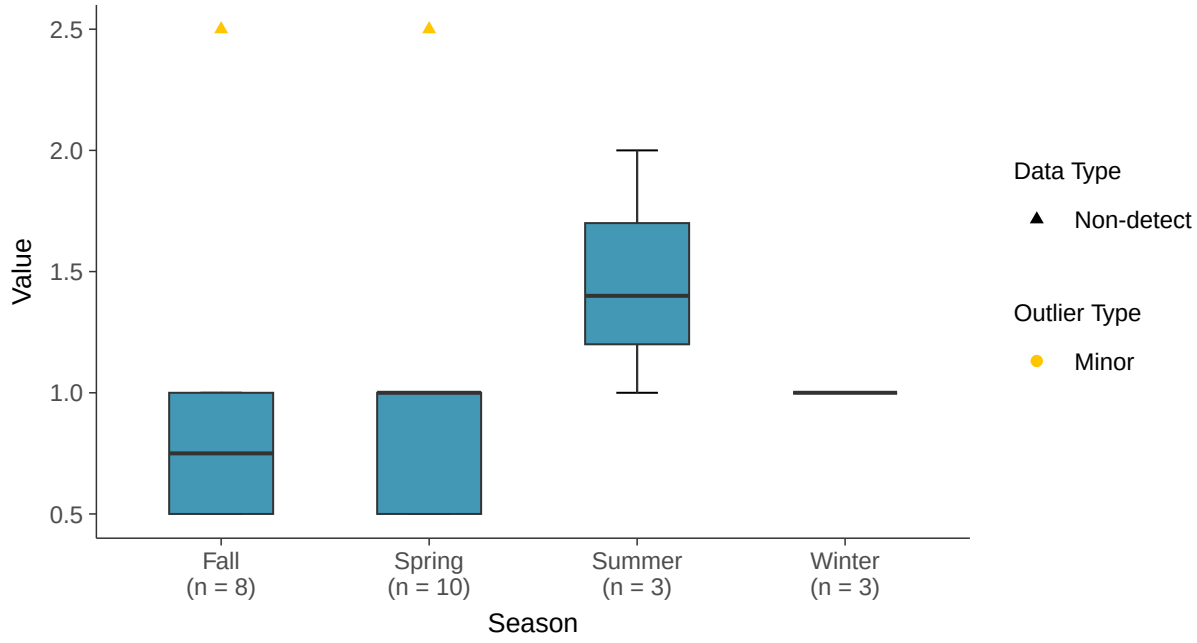
## Boxplot

Selenium, MW-15020 (ug/L)



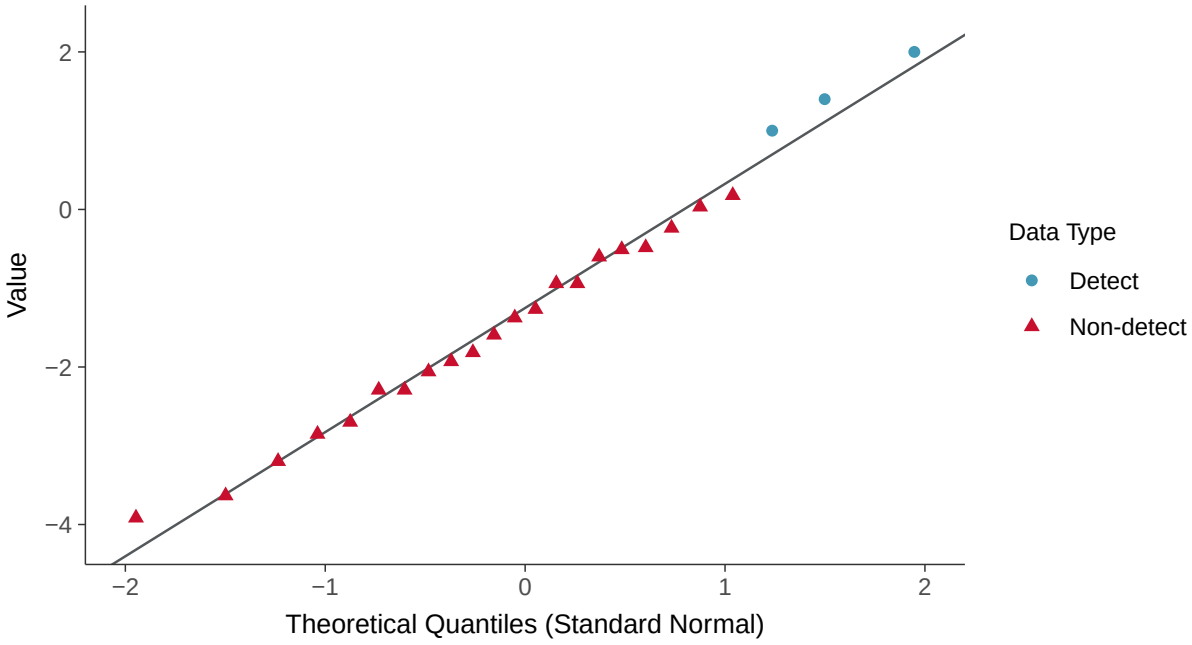

## Boxplot by Season

Selenium, MW-15020 (ug/L)



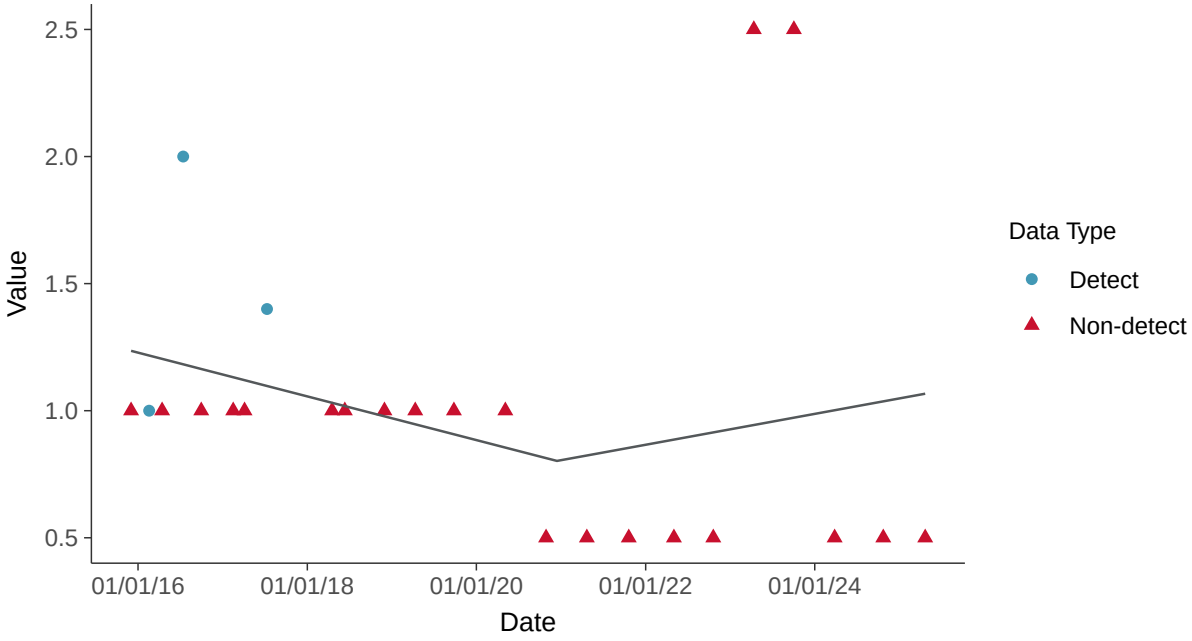
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15020 (ug/L)



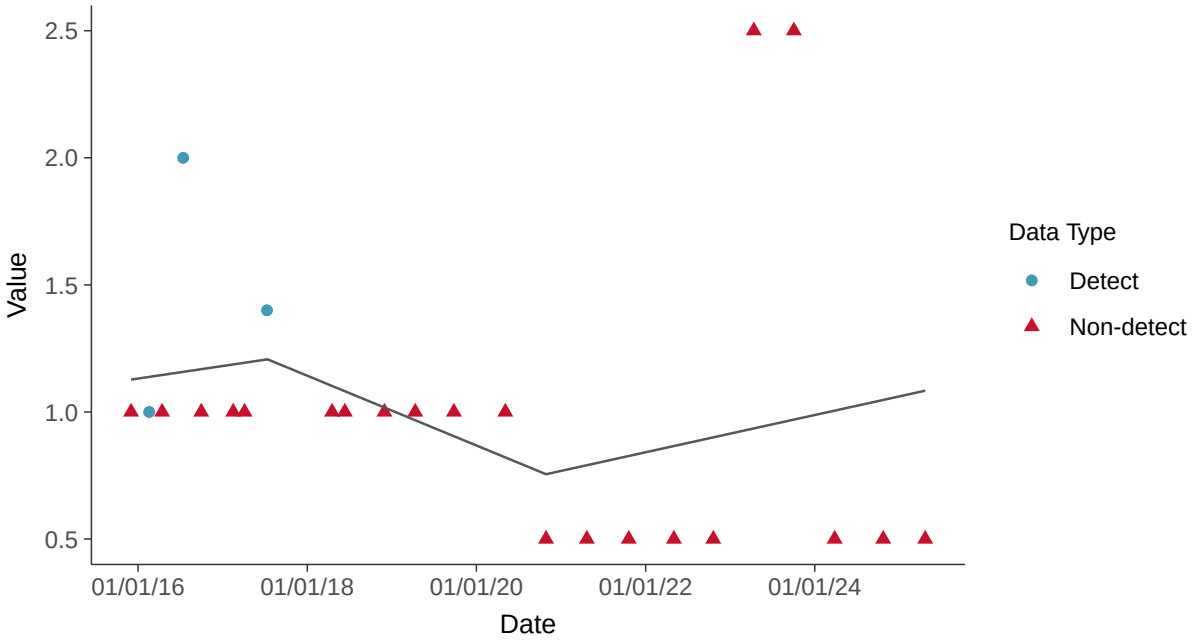

**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15020 (ug/L)



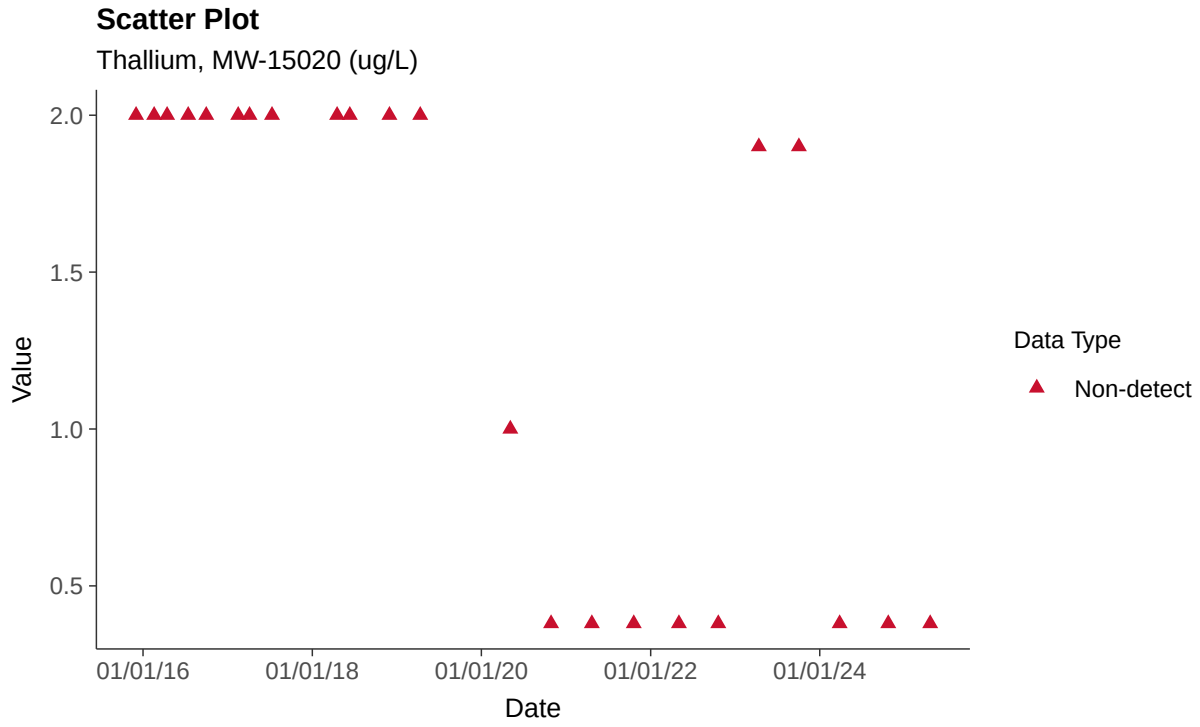
**Trend Regression: Piecewise Linear-Linear-Linear**

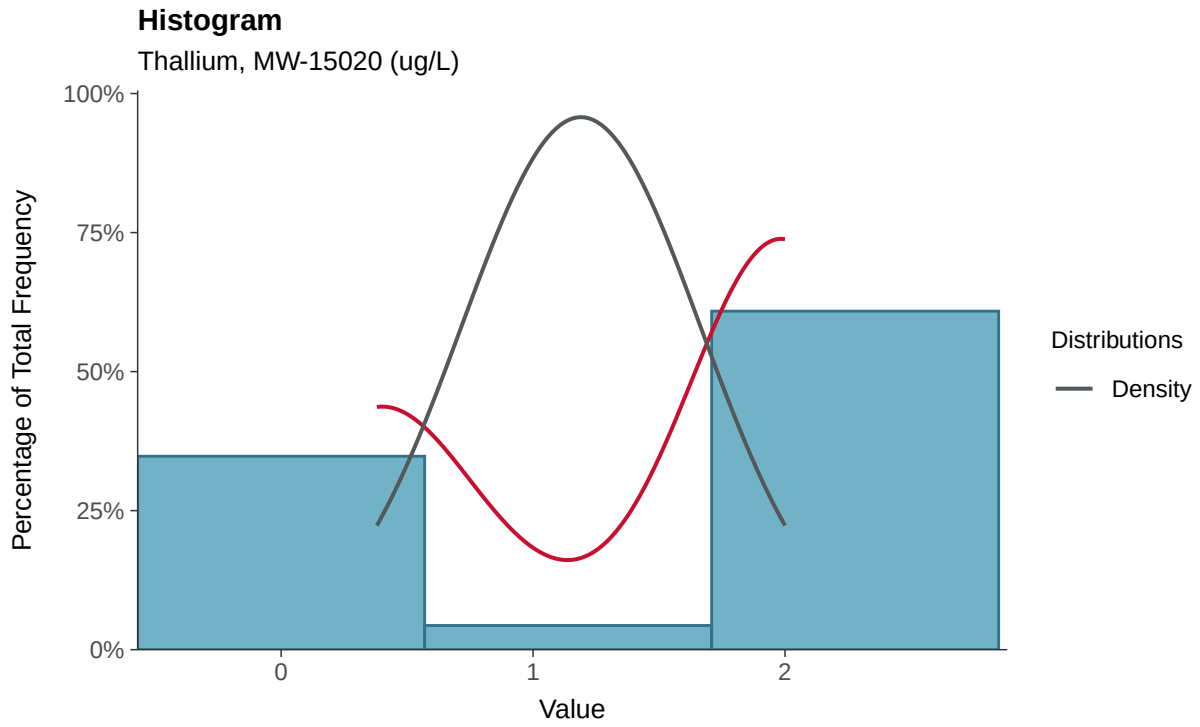
Selenium, MW-15020 (ug/L)



## Appendix IV: Thallium, MW-15020

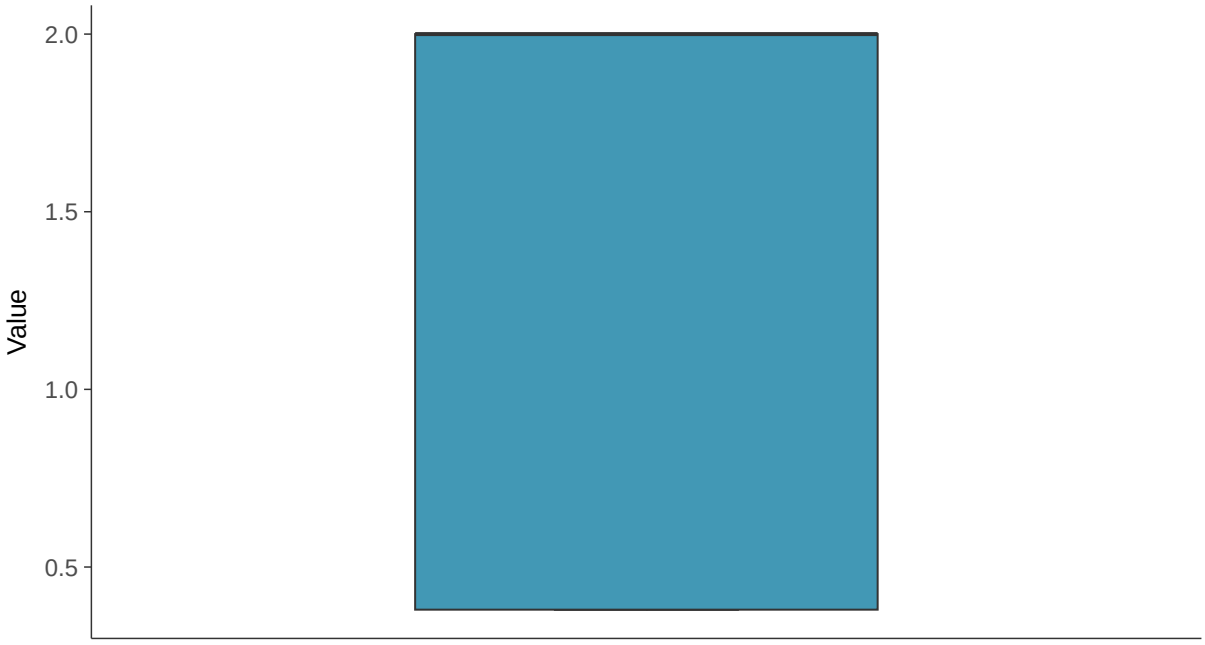
ID: 10_2_131



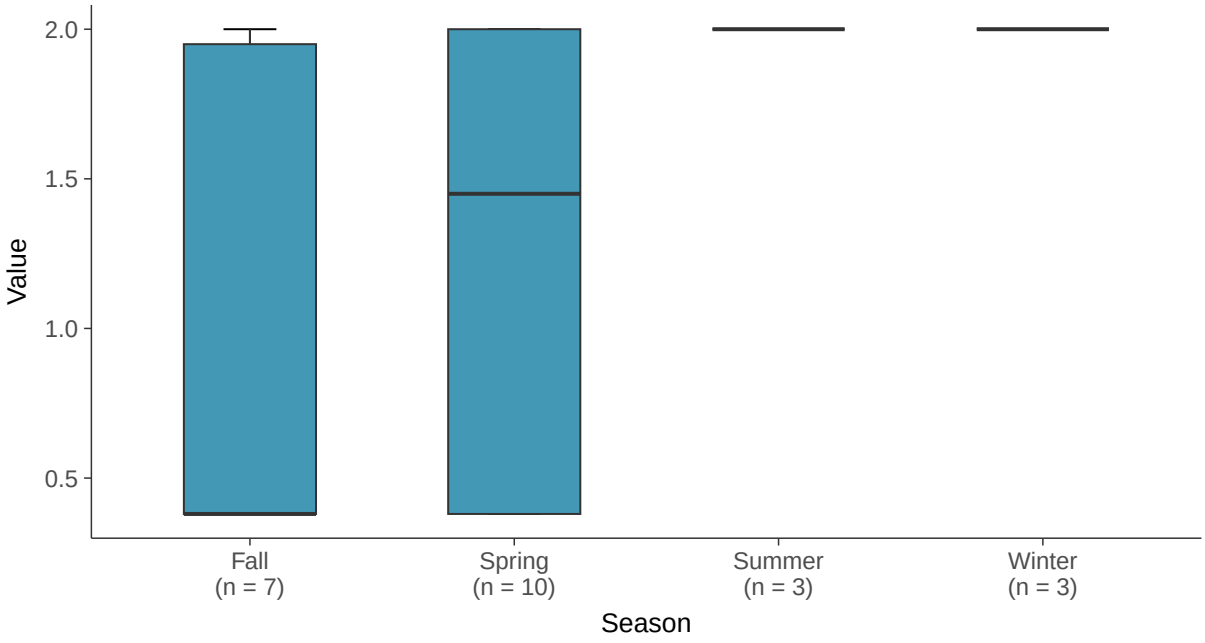
**Boxplot**

Thallium, MW-15020 (ug/L)



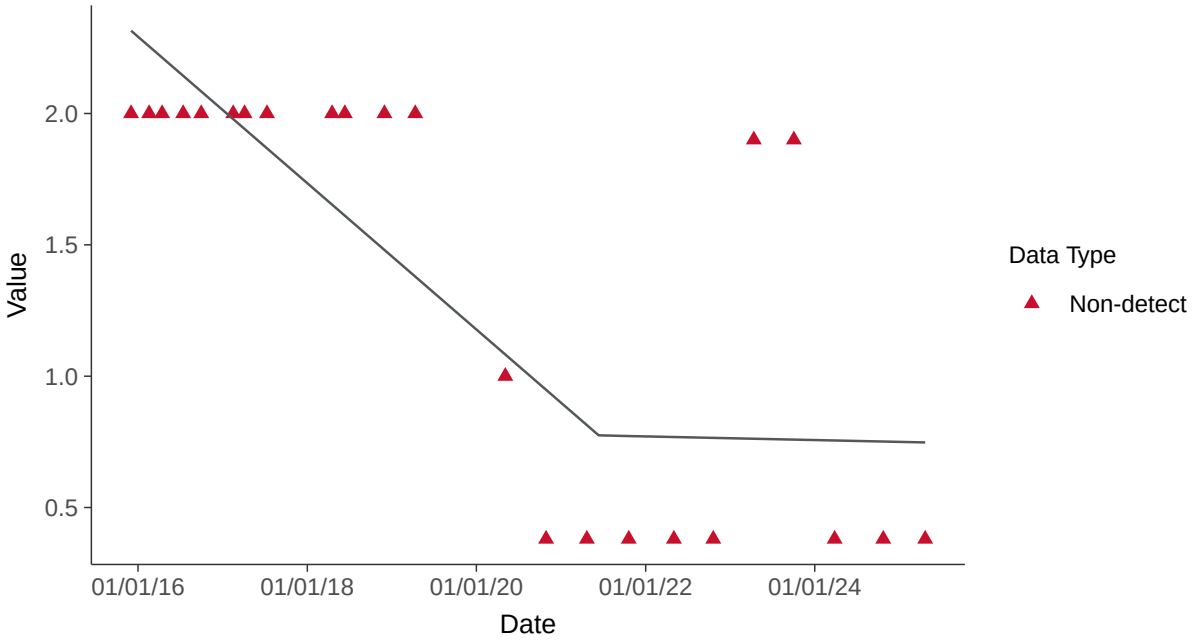

**Boxplot by Season**

Thallium, MW-15020 (ug/L)



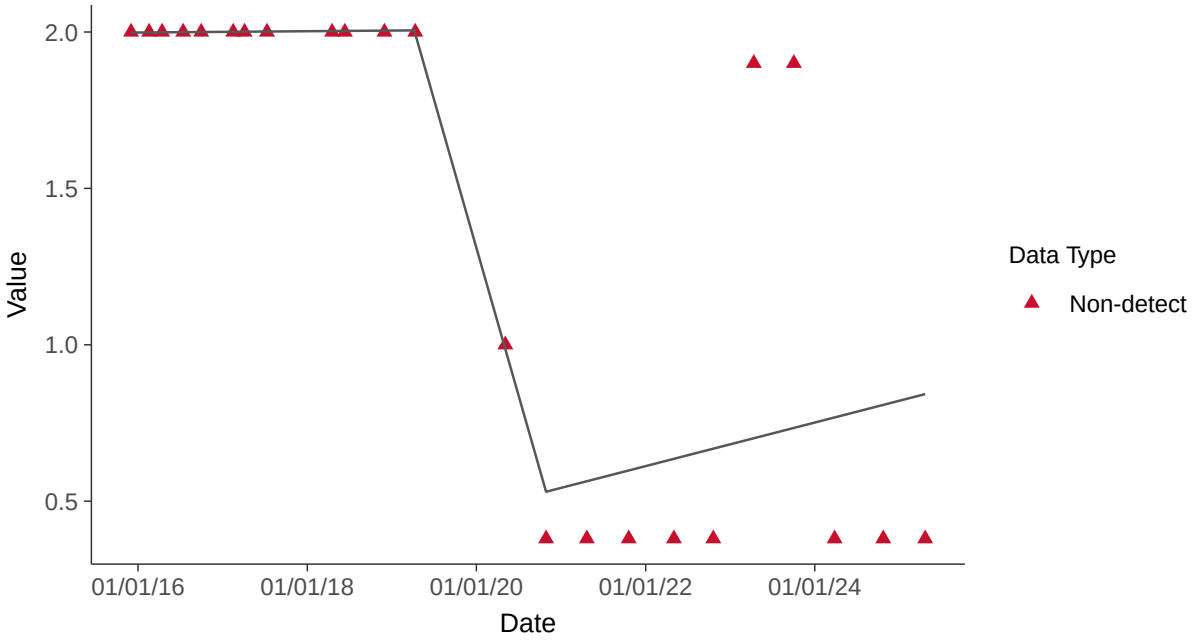
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15020 (ug/L)



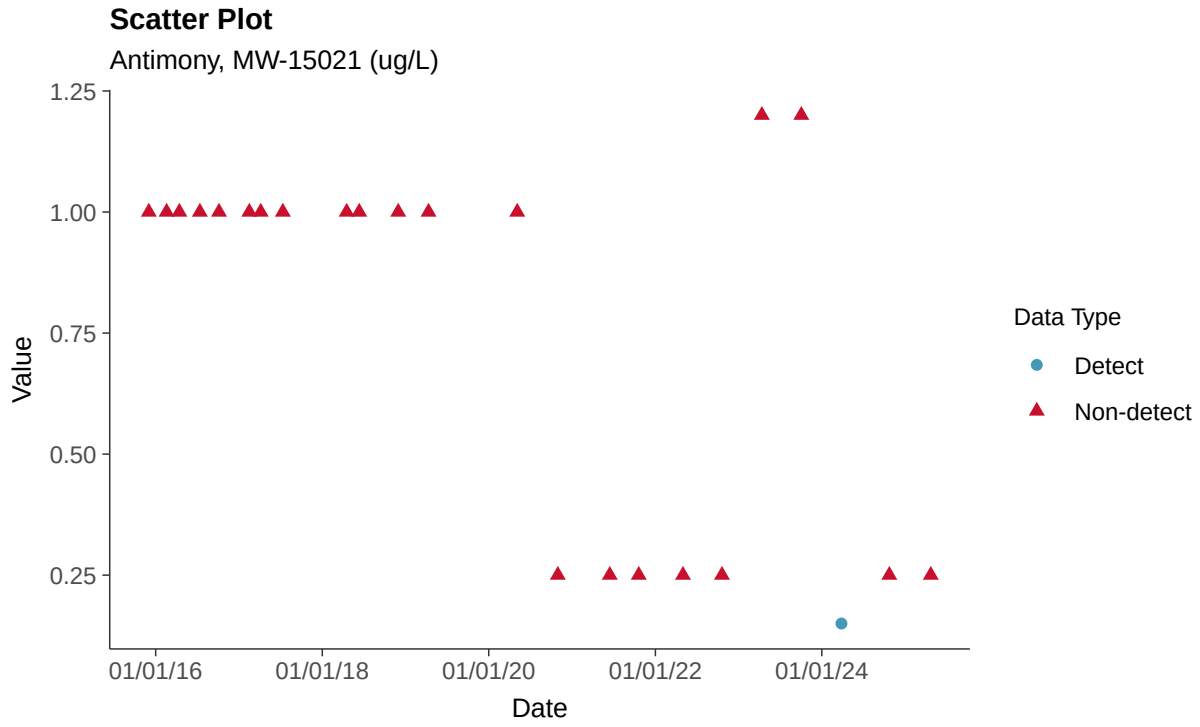

**Trend Regression: Piecewise Linear-Linear-Linear**

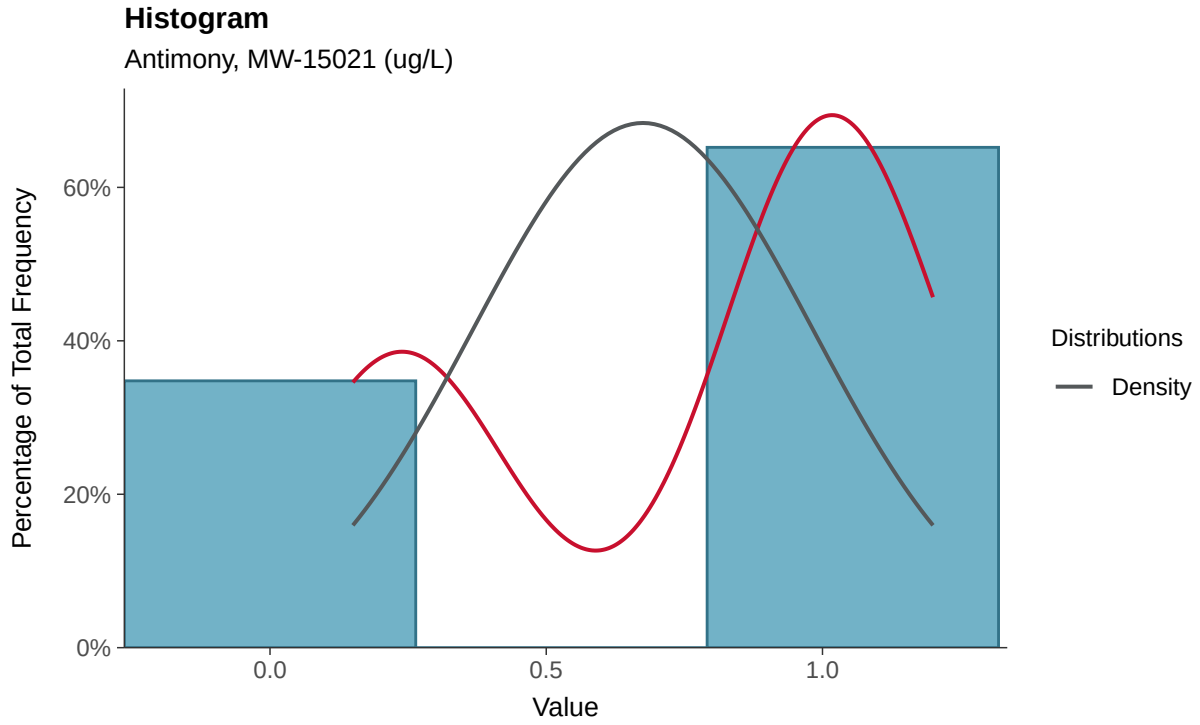
Thallium, MW-15020 (ug/L)



## Appendix IV: Antimony, MW-15021

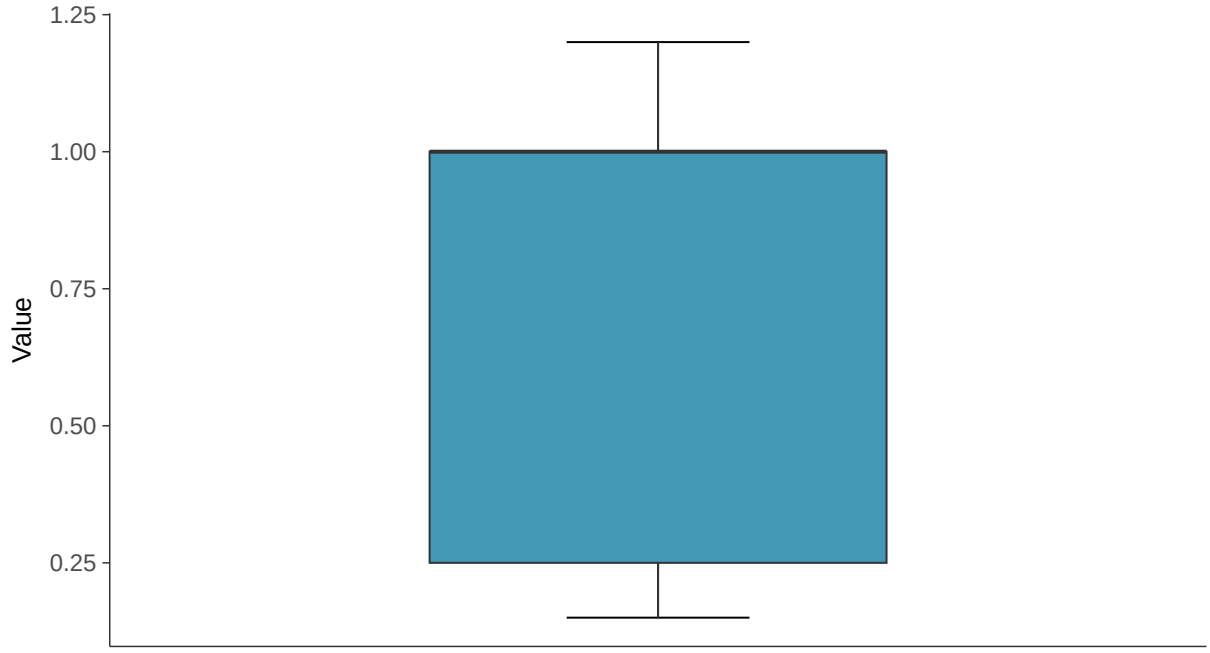
ID: 11_2_101



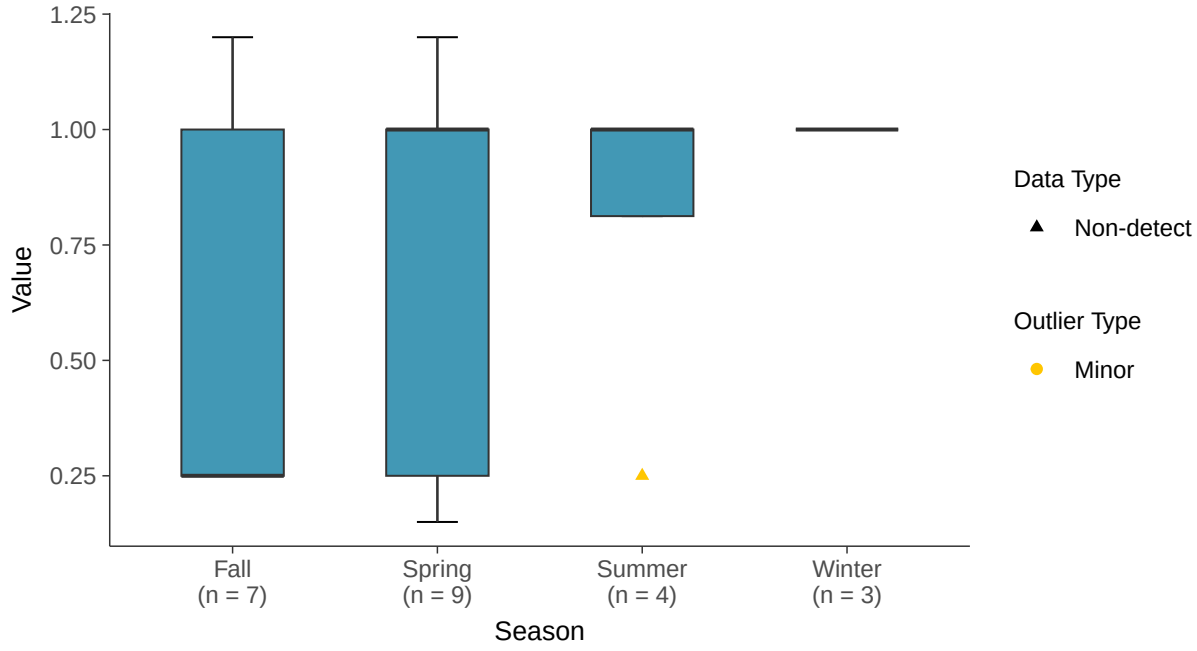
## Boxplot

Antimony, MW-15021 (ug/L)



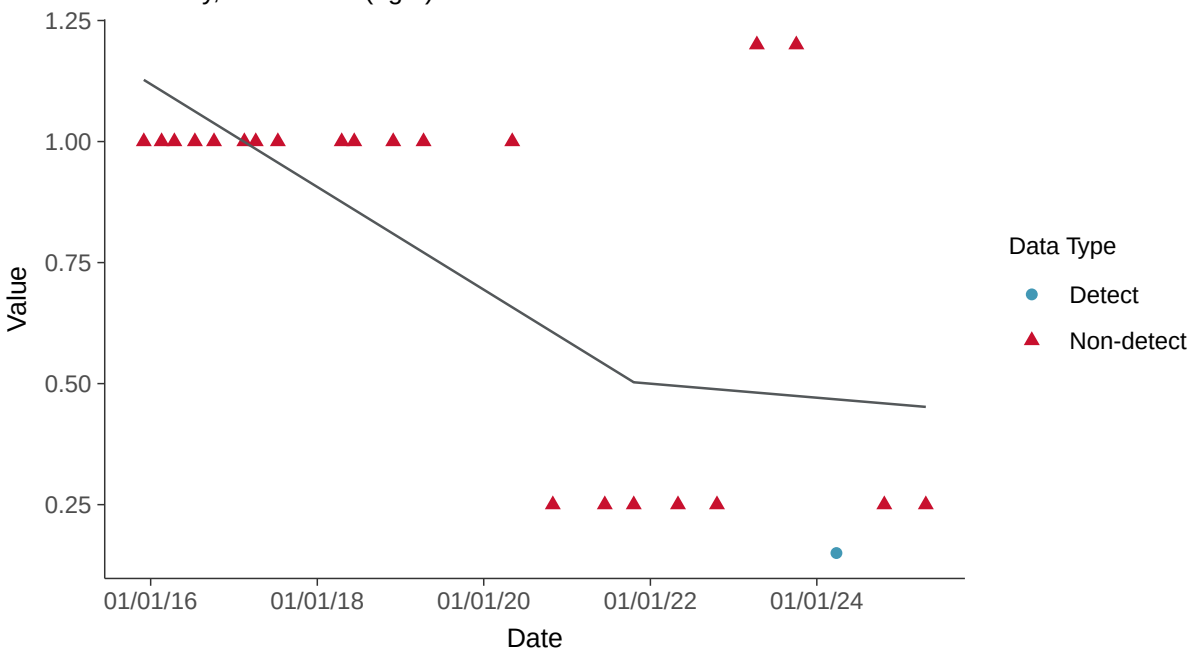

## Boxplot by Season

Antimony, MW-15021 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15021 (ug/L)

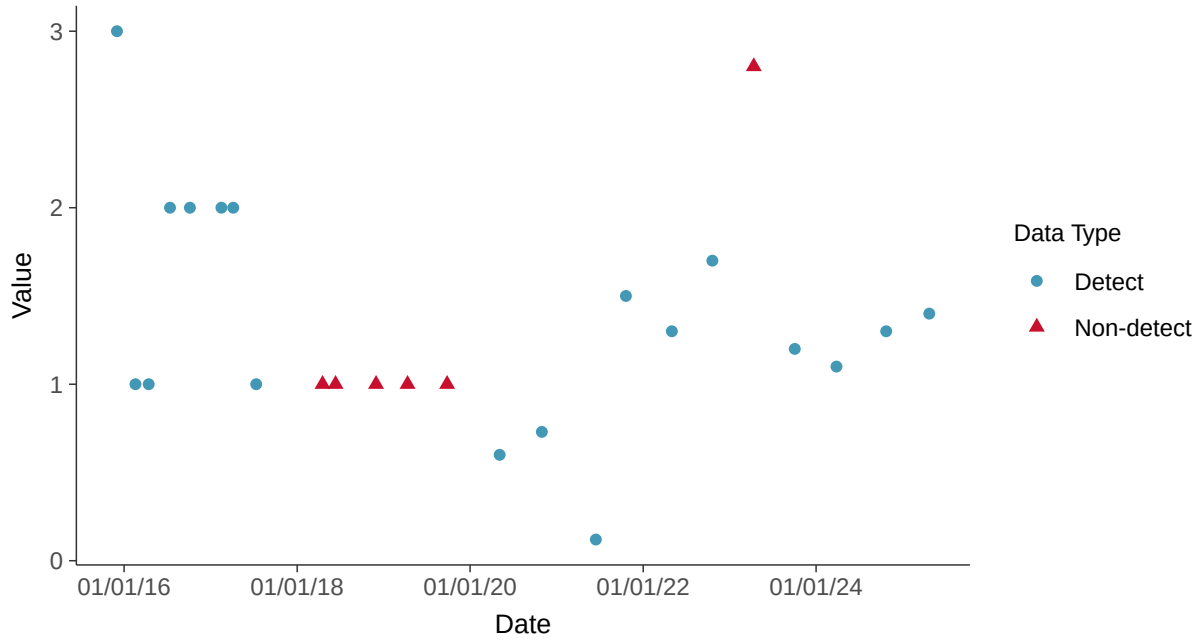


## Appendix IV: Arsenic, MW-15021

ID: 11_2_102

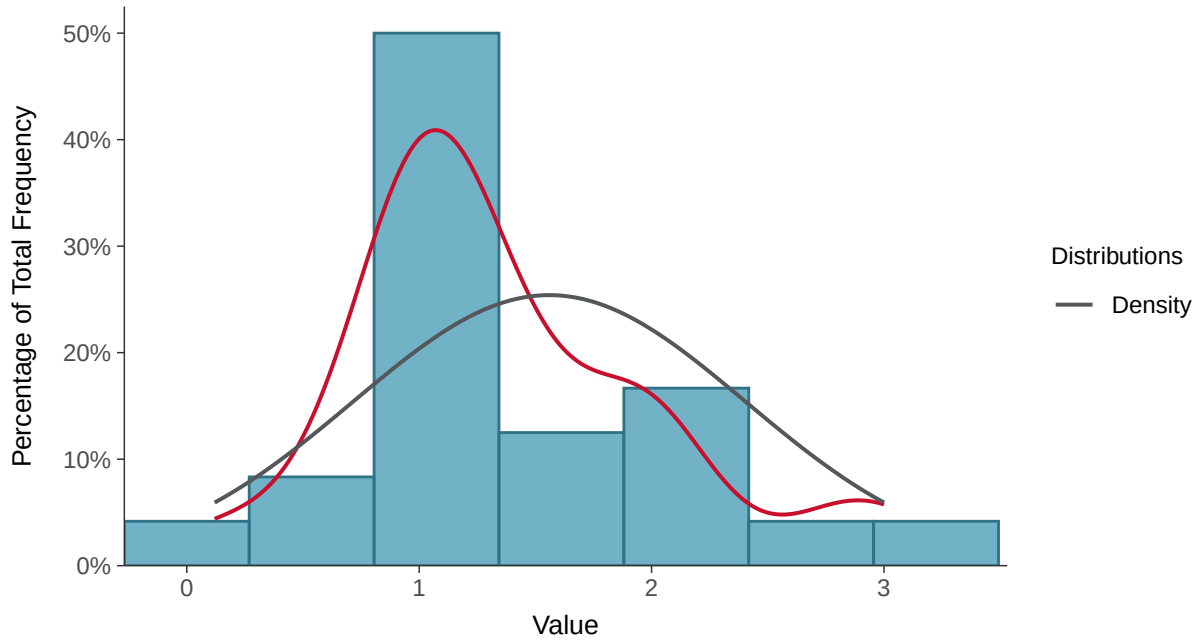
**Scatter Plot**

Arsenic, MW-15021 (ug/L)



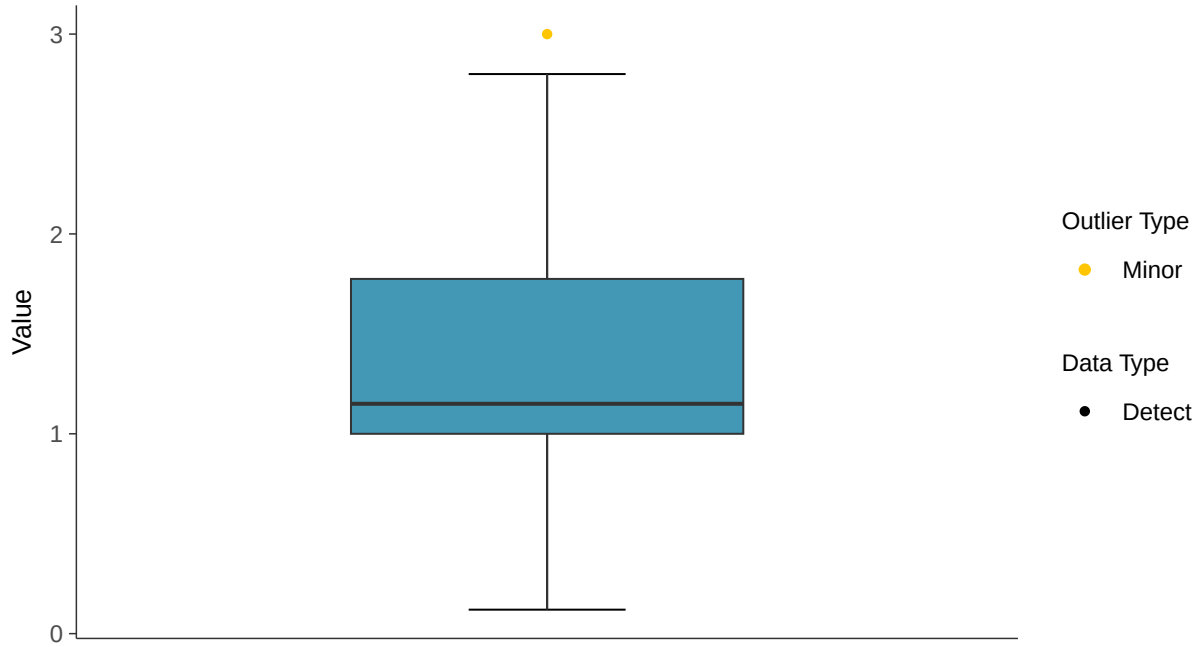

**Histogram**

Arsenic, MW-15021 (ug/L)



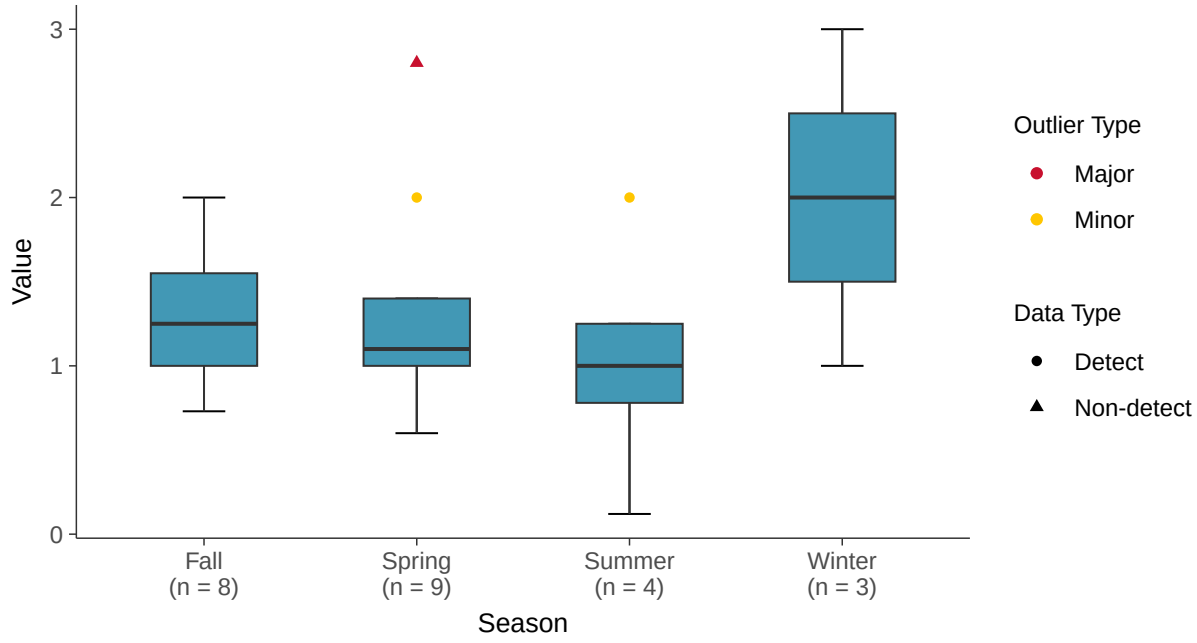
## Boxplot

Arsenic, MW-15021 (ug/L)



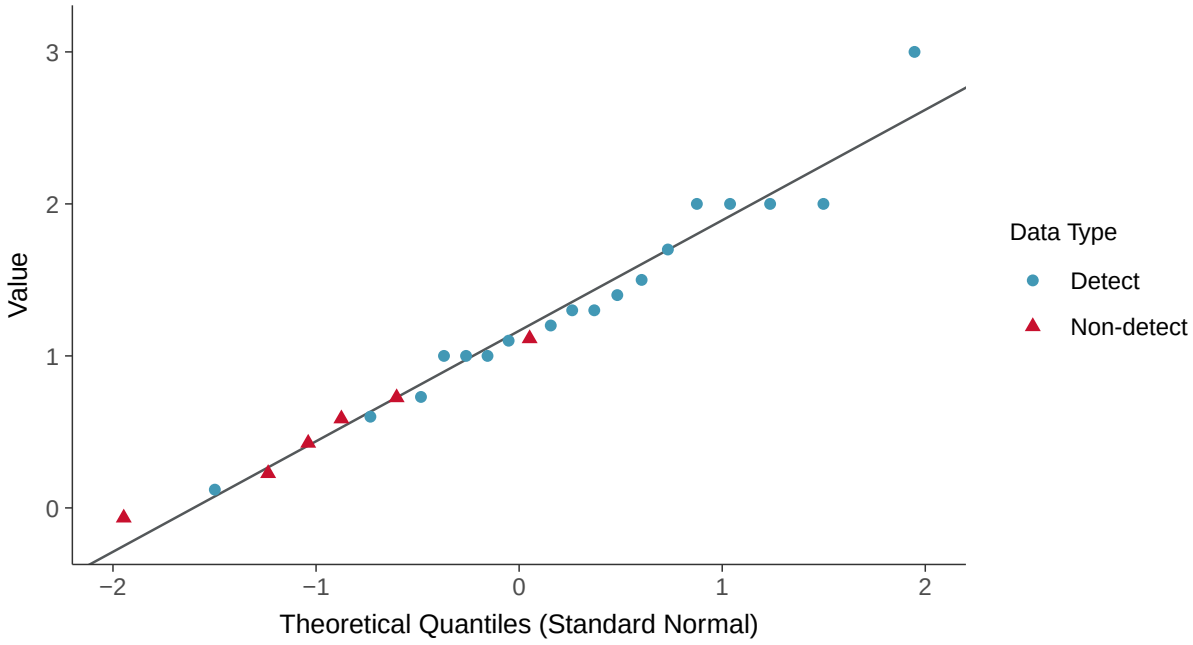

## Boxplot by Season

Arsenic, MW-15021 (ug/L)



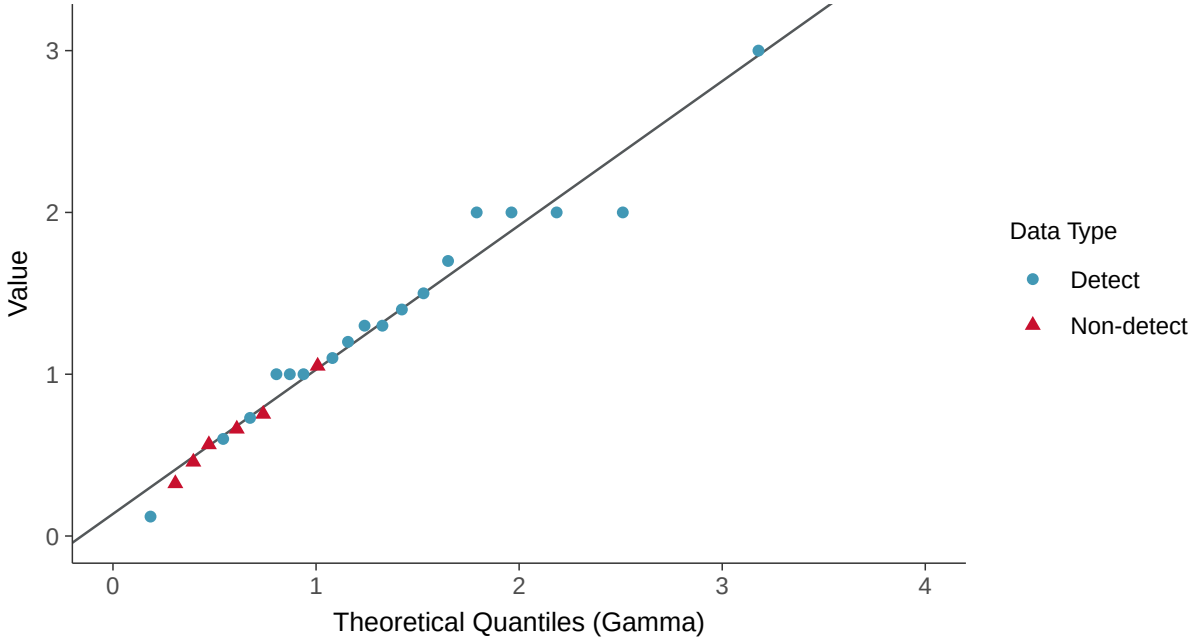
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15021 (ug/L)



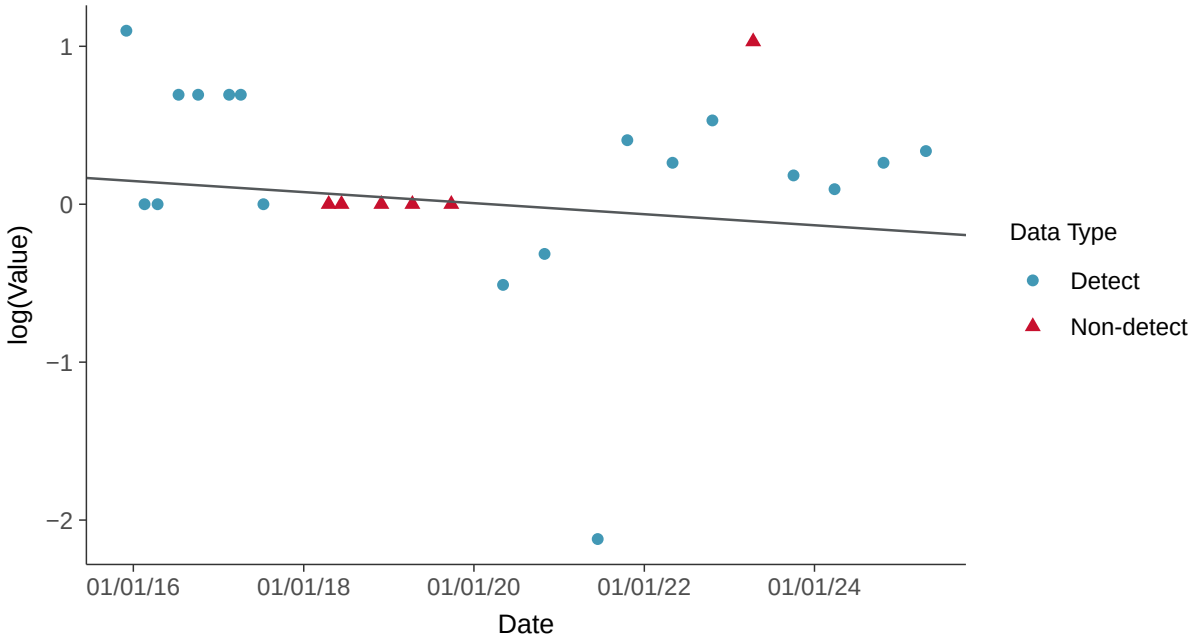

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15021 (ug/L)



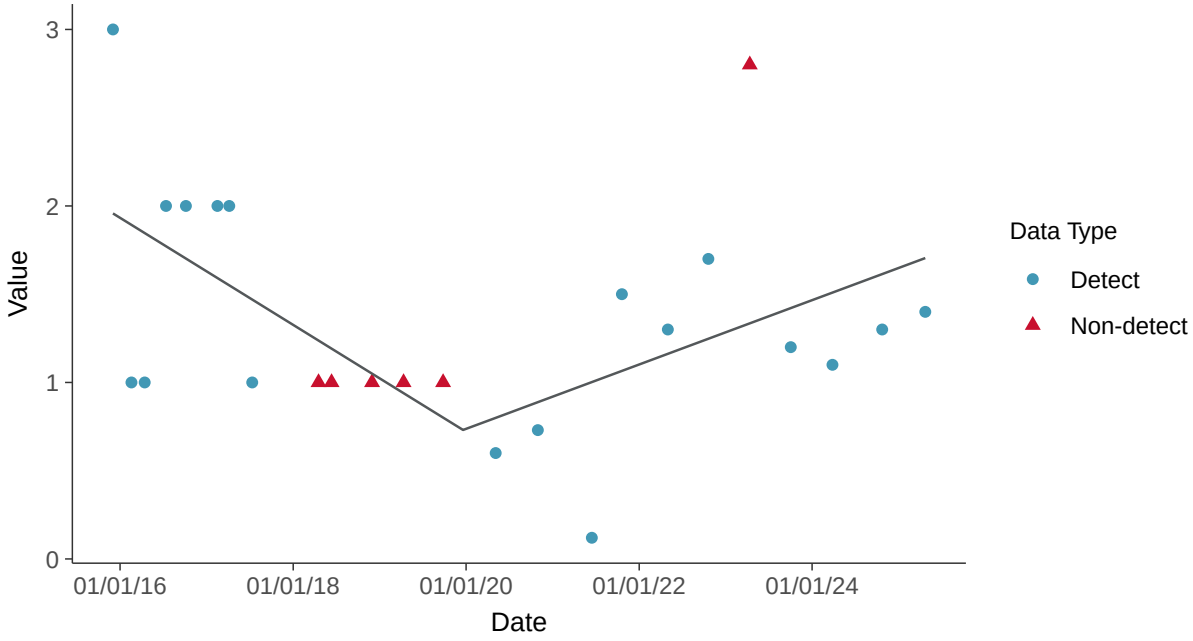
**Trend Regression: Lognormal MLE**

Arsenic, MW-15021 (ug/L)



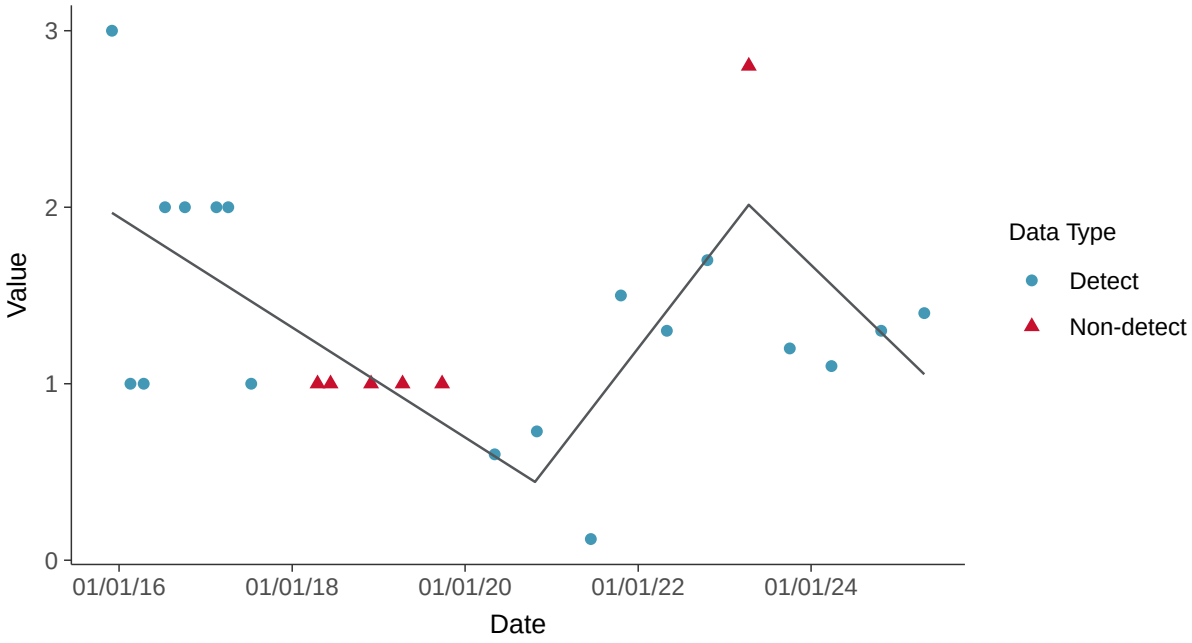

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15021 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15021 (ug/L)

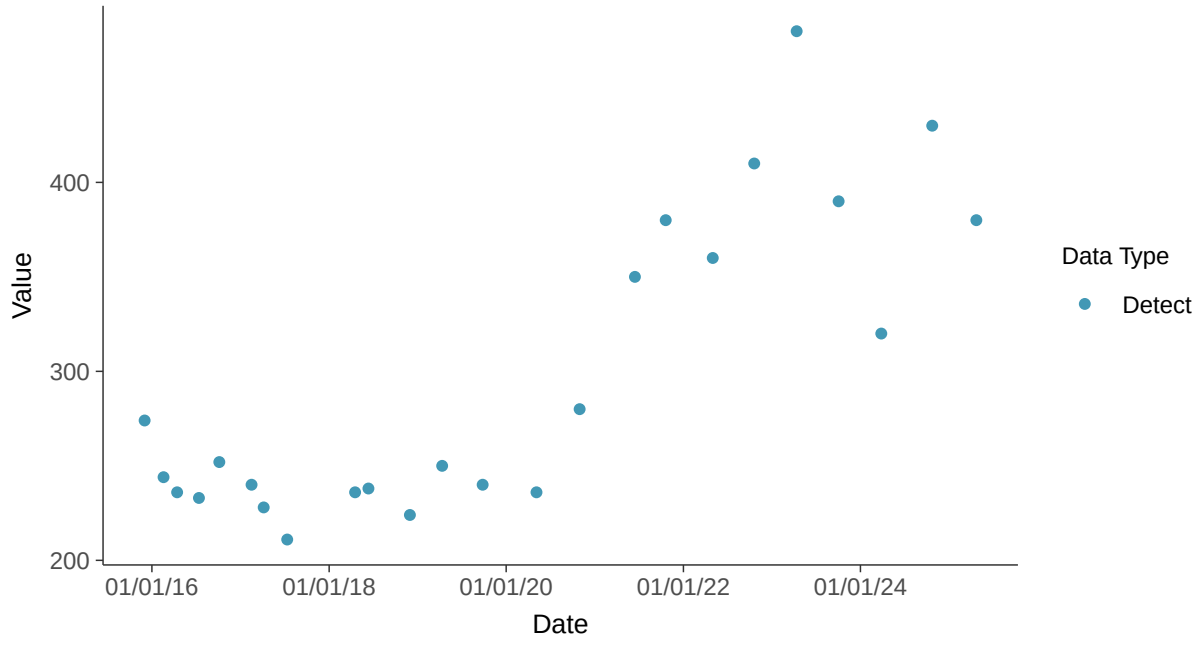


## Appendix IV: Barium, MW-15021

ID: 11_2_103

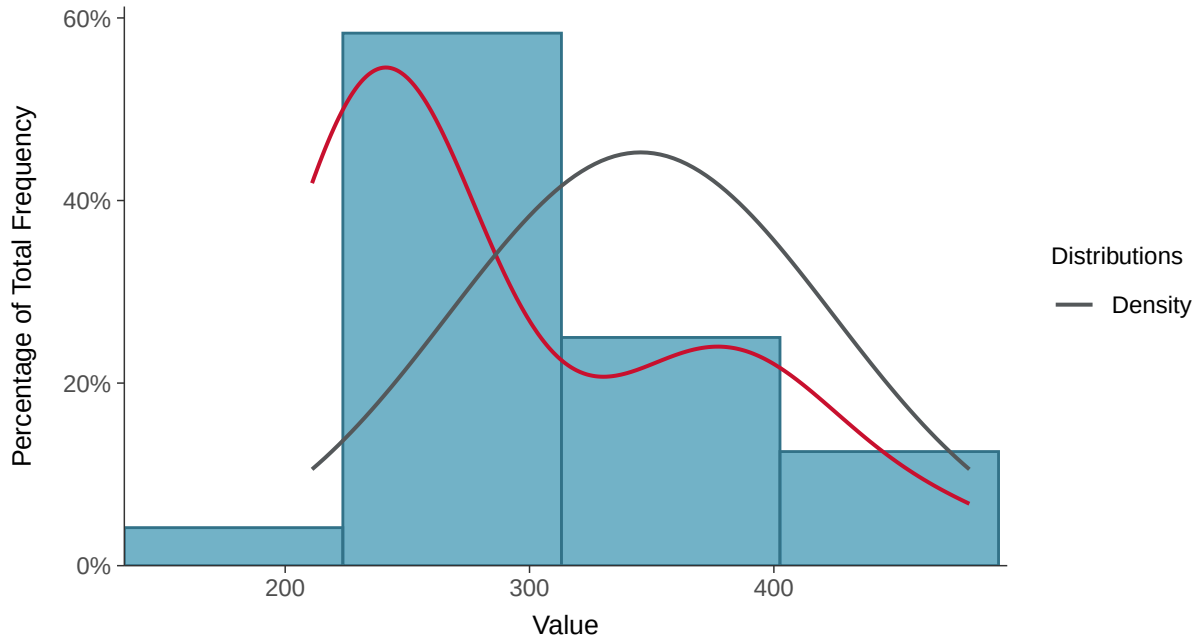
**Scatter Plot**

Barium, MW-15021 (ug/L)



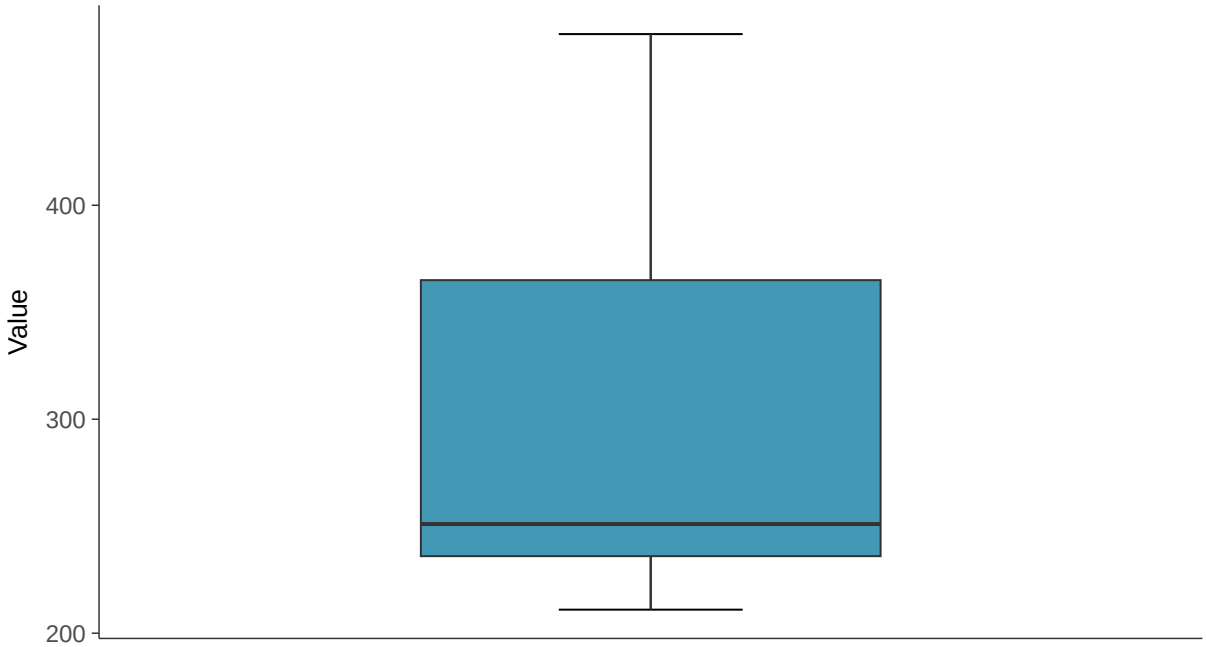

**Histogram**

Barium, MW-15021 (ug/L)



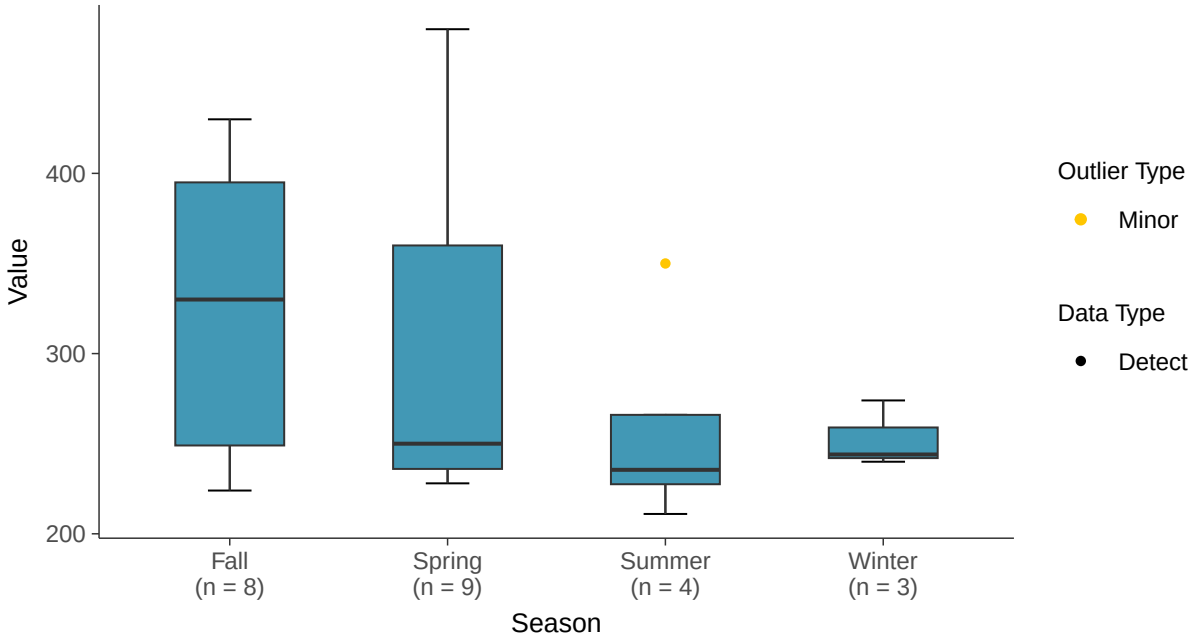
**Boxplot**

Barium, MW-15021 (ug/L)



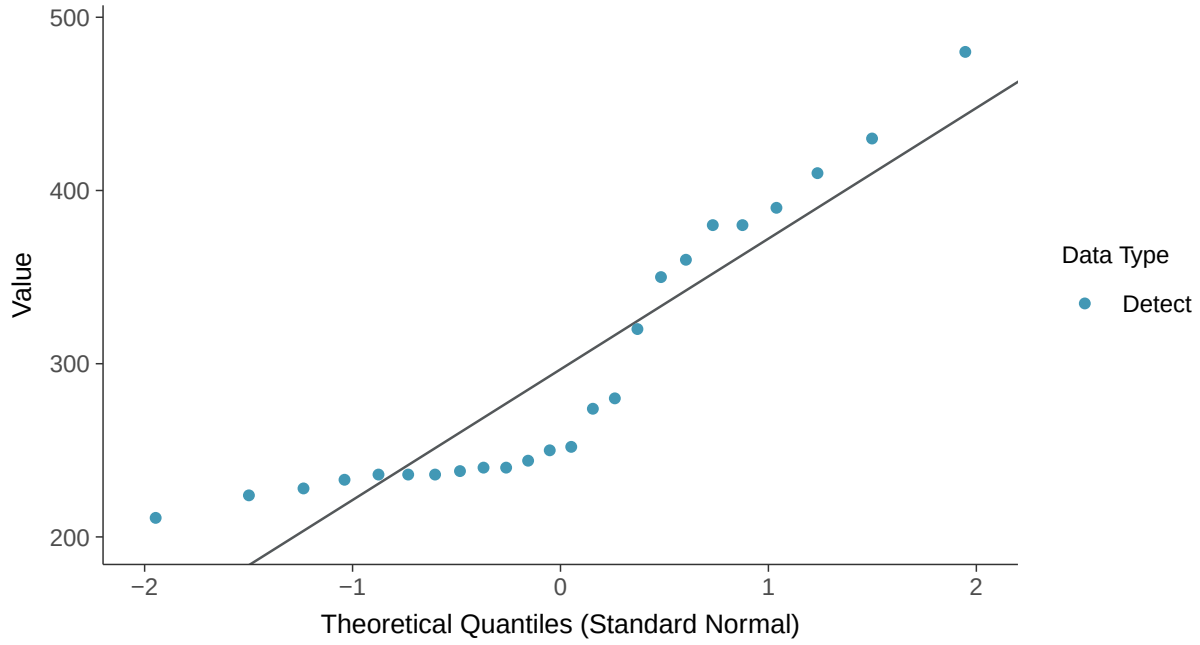

**Boxplot by Season**

Barium, MW-15021 (ug/L)



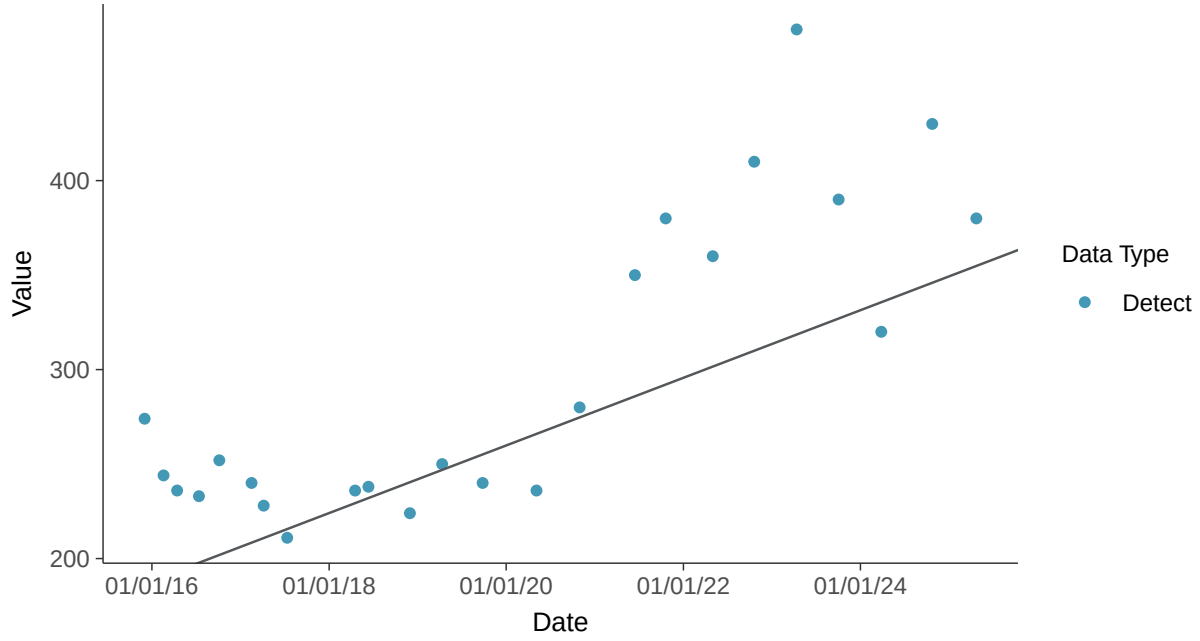
**Normal Q-Q plot**

Barium, MW-15021 (ug/L)



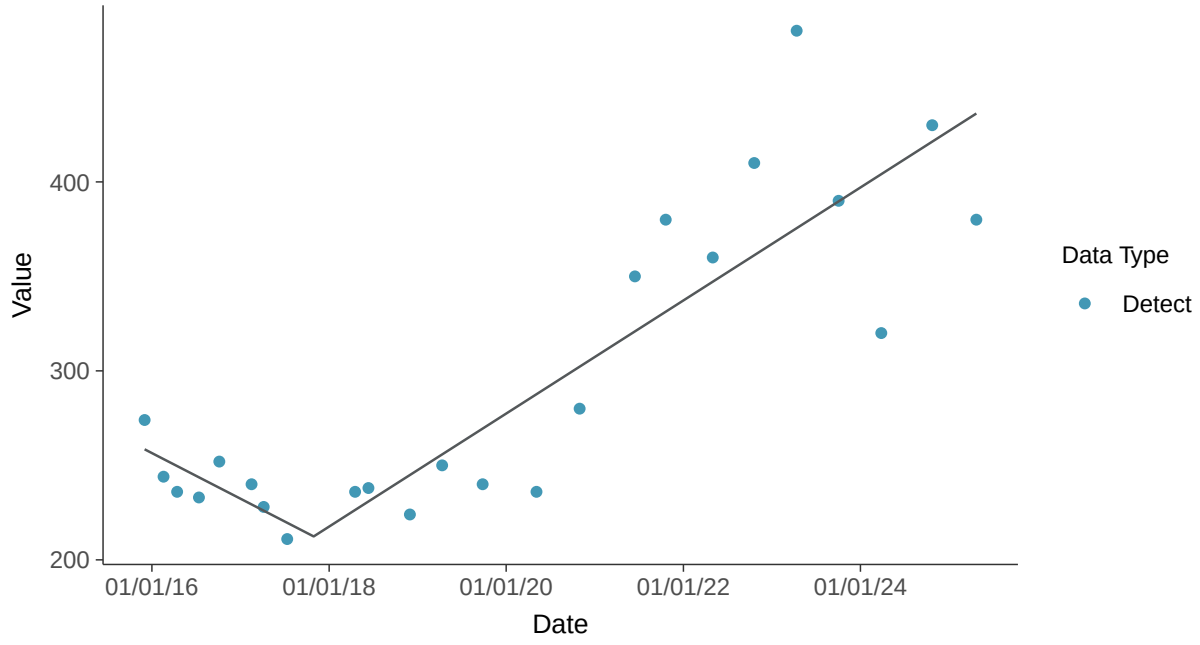

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15021 (ug/L)



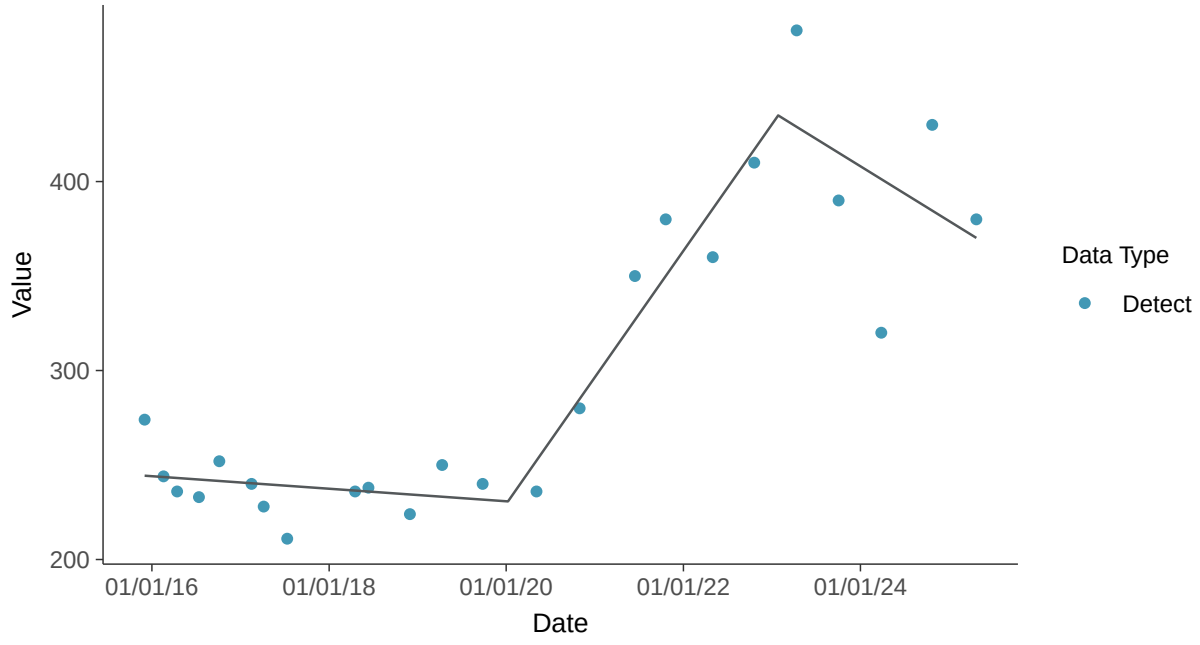
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15021 (ug/L)



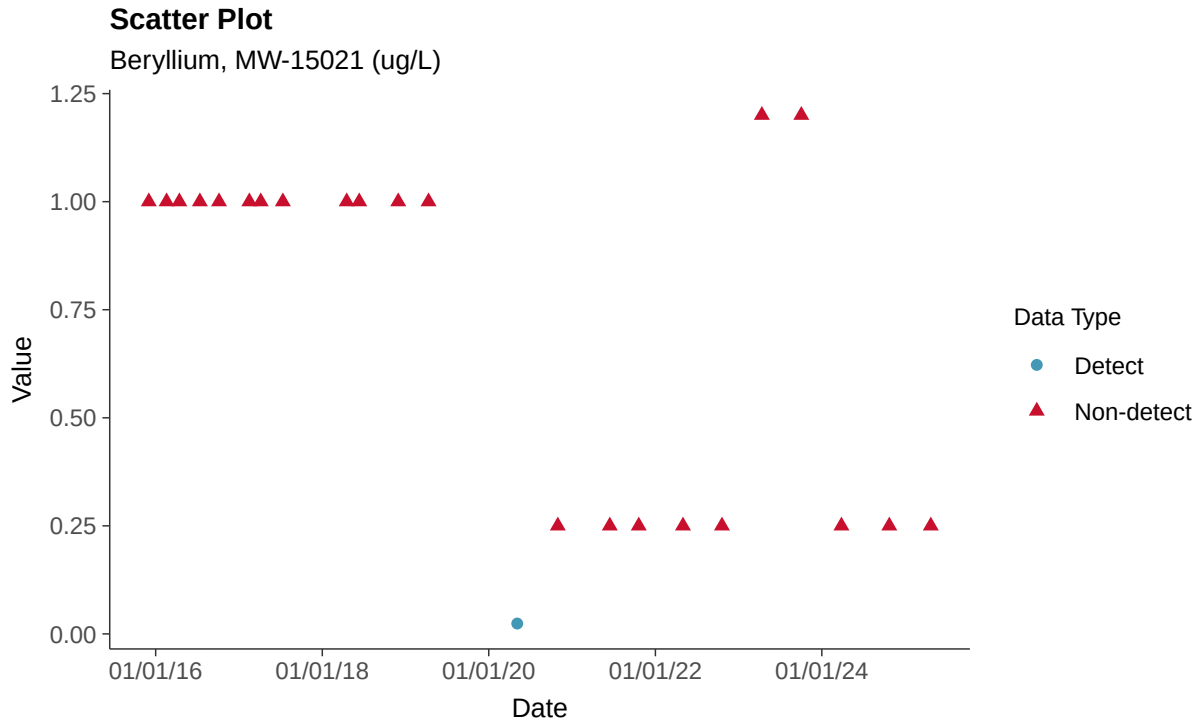

**Trend Regression: Piecewise Linear-Linear-Linear**

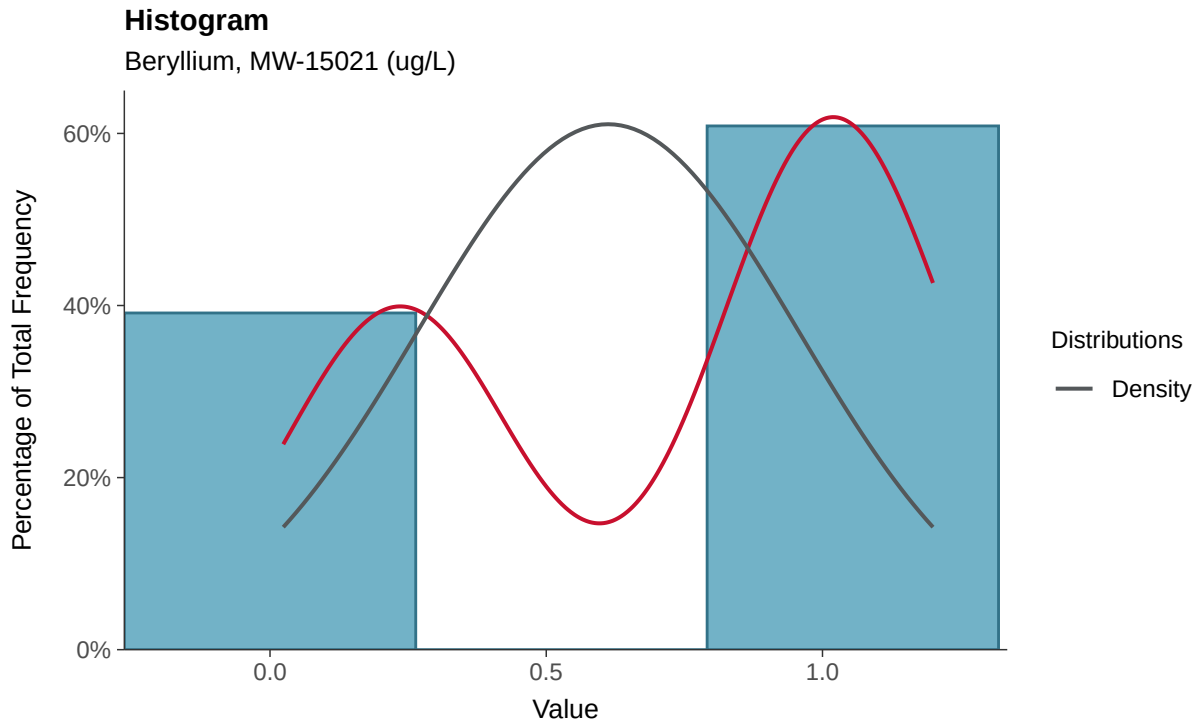
Barium, MW-15021 (ug/L)



## Appendix IV: Beryllium, MW-15021

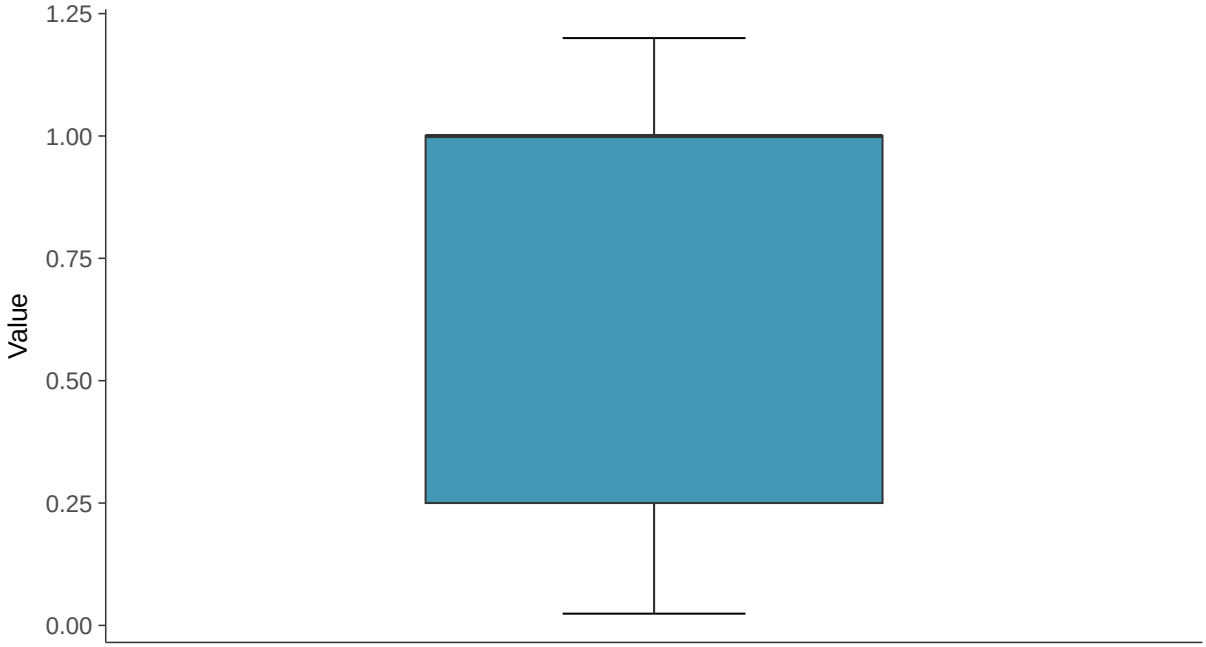
ID: 11_2_104



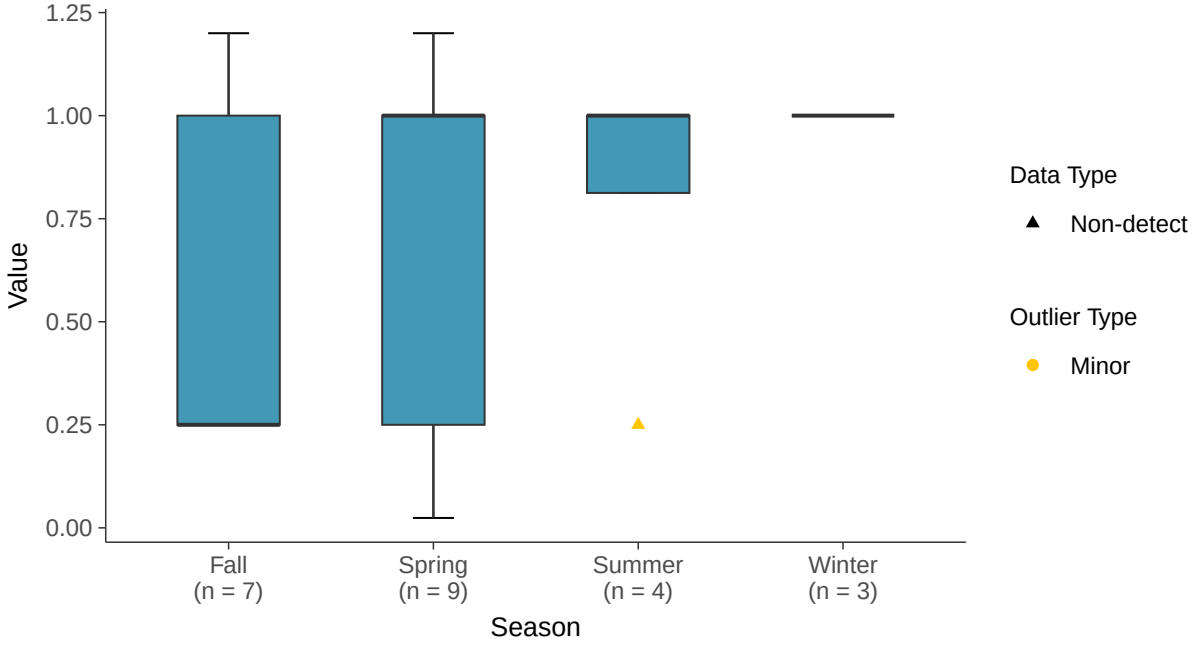
## Boxplot

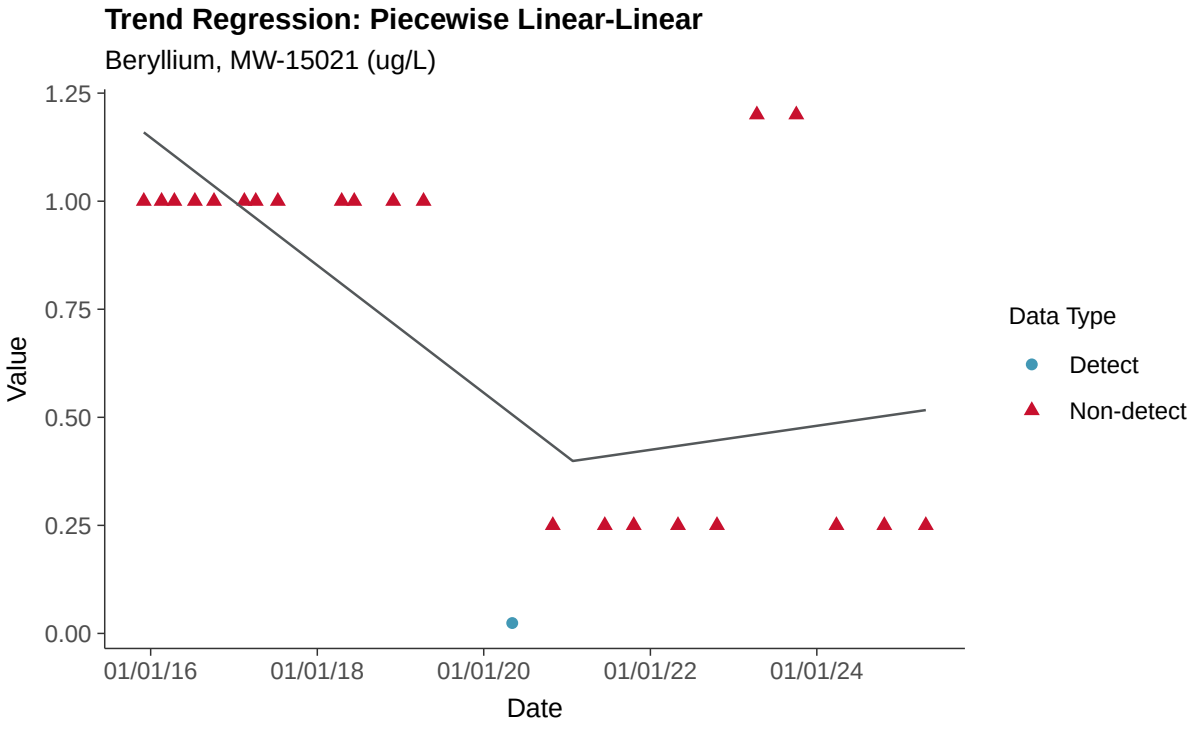
Beryllium, MW-15021 (ug/L)




## Boxplot by Season

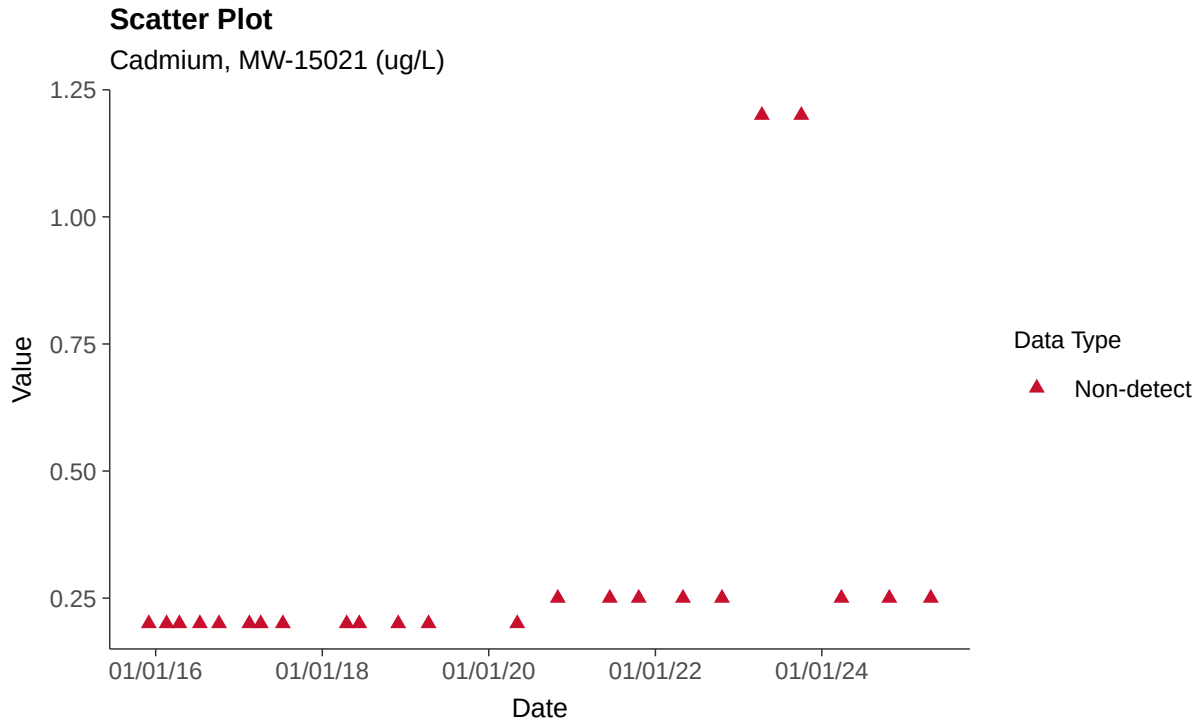
Beryllium, MW-15021 (ug/L)

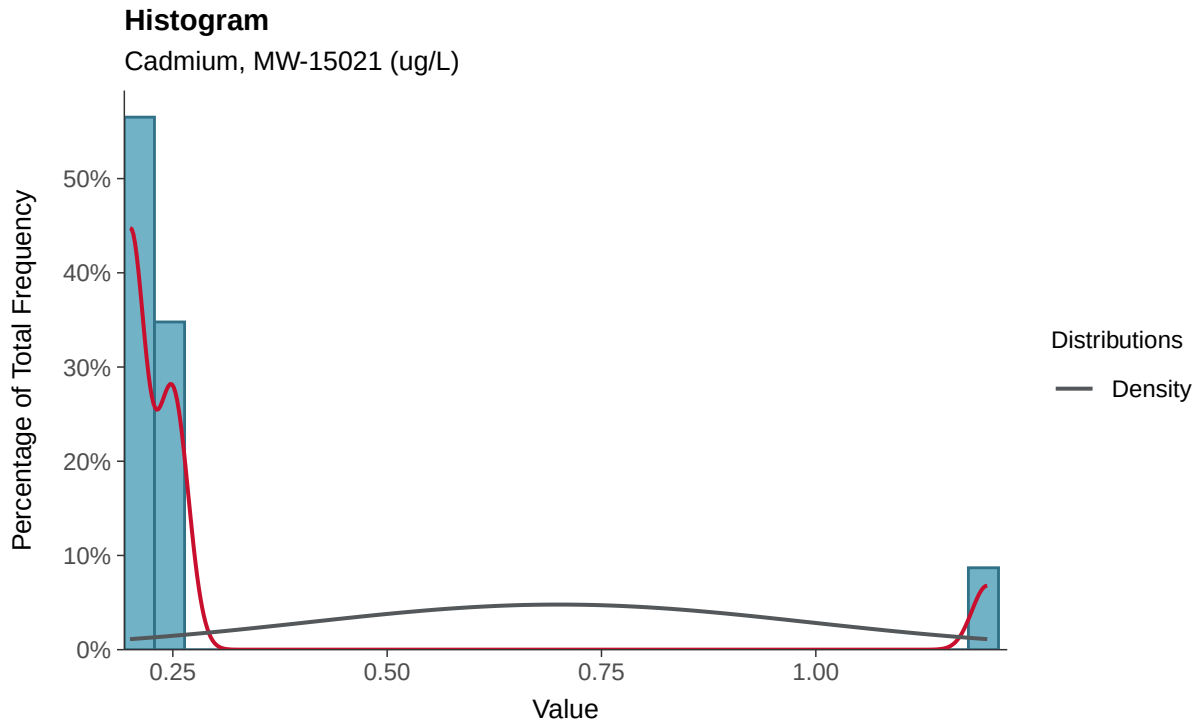



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15021 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
0.00
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15021

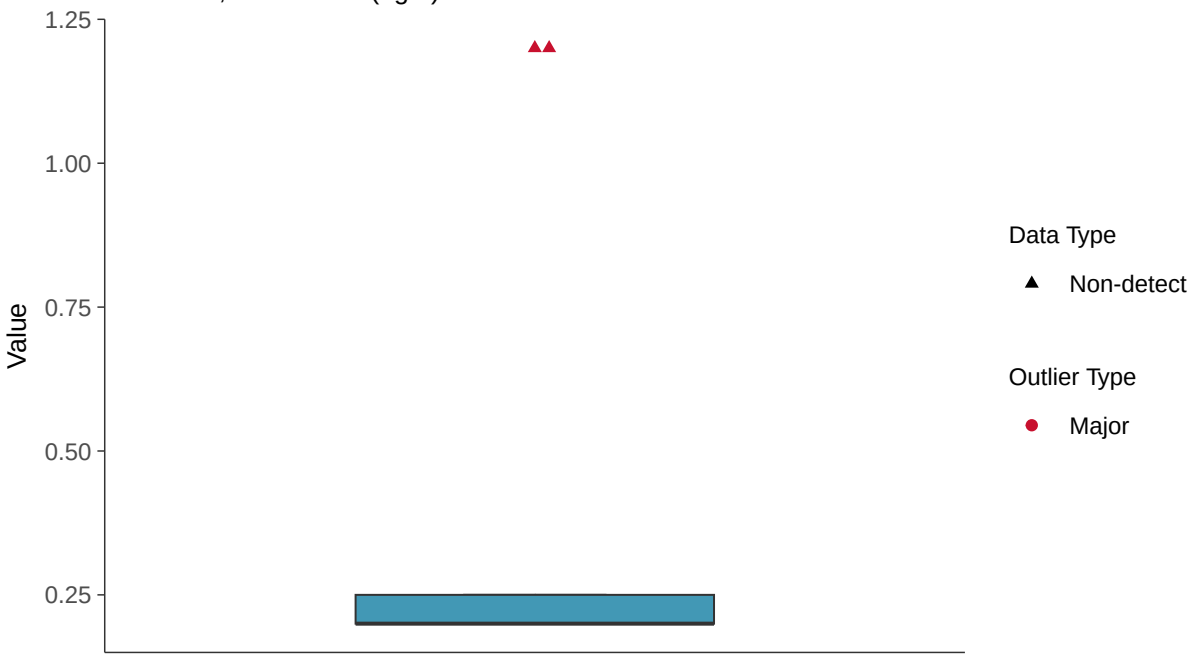
ID: 11_2_106



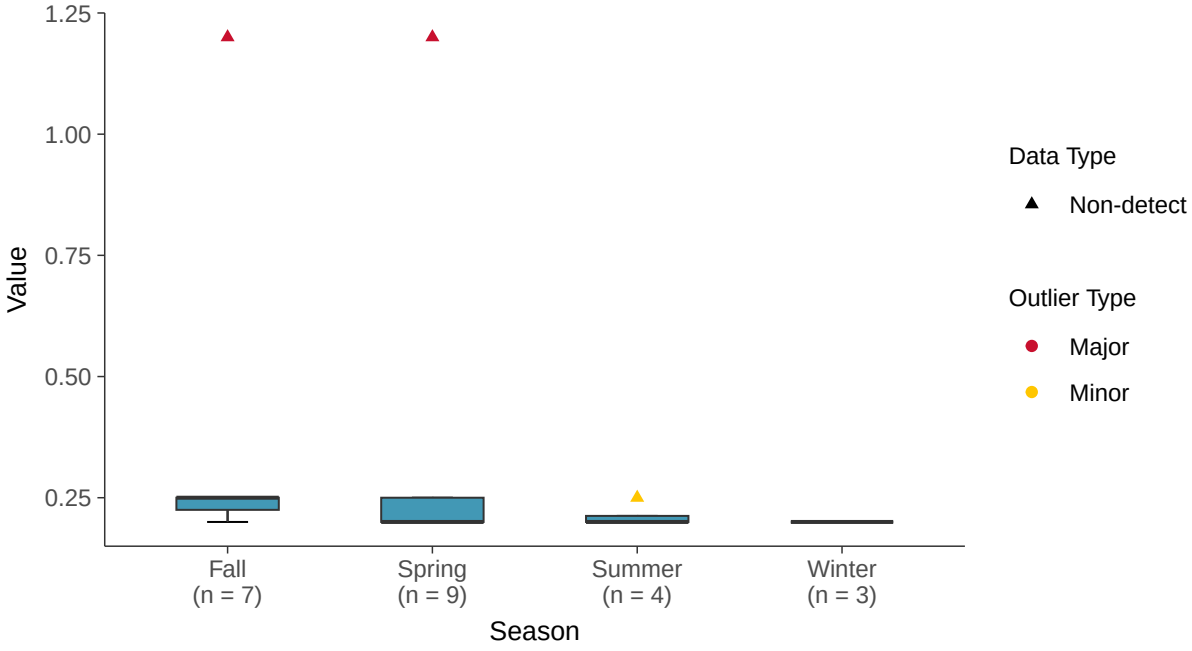
## Boxplot

Cadmium, MW-15021 (ug/L)



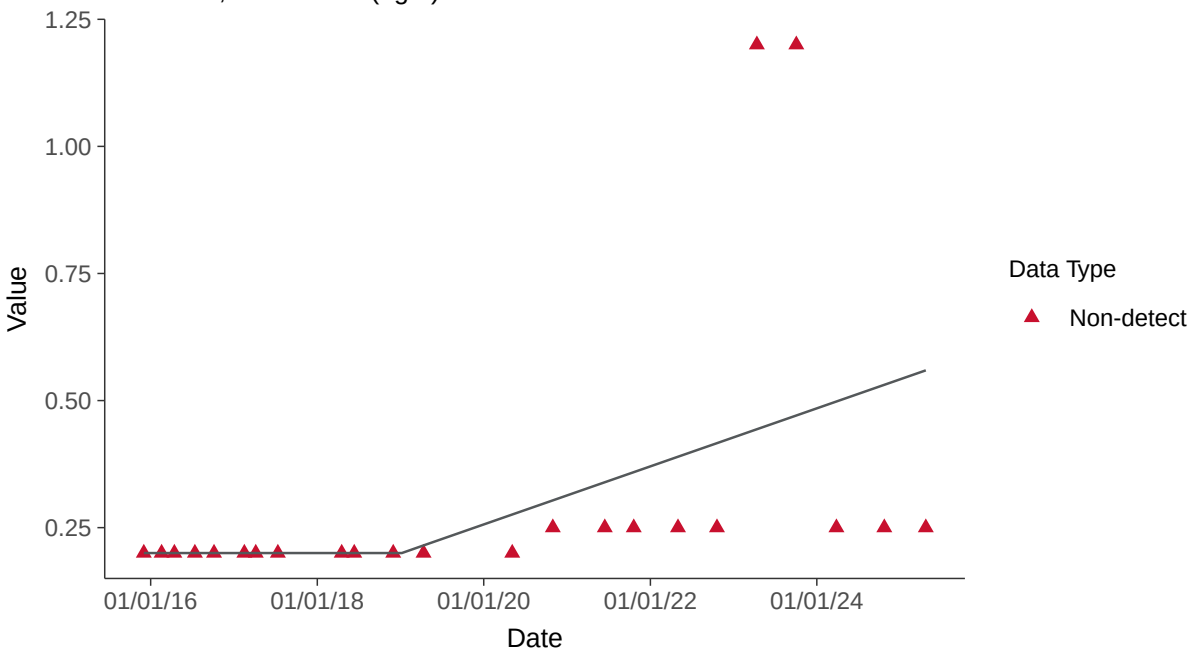

## Boxplot by Season

Cadmium, MW-15021 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15021 (ug/L)

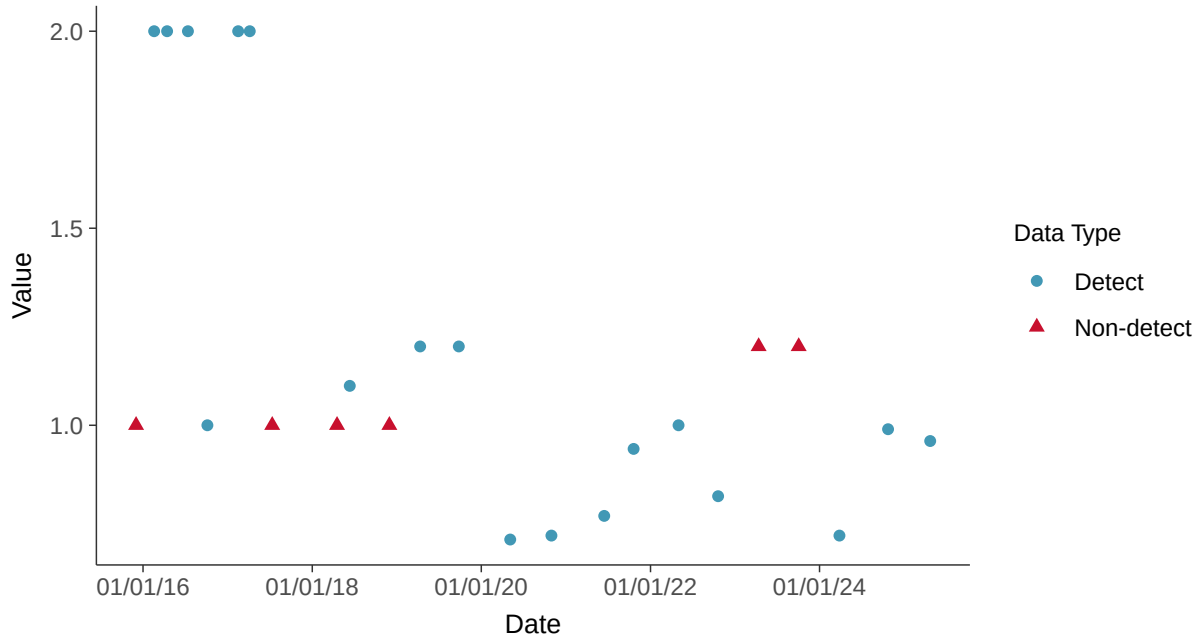


## Appendix IV: Chromium, MW-15021

ID: 11_2_109

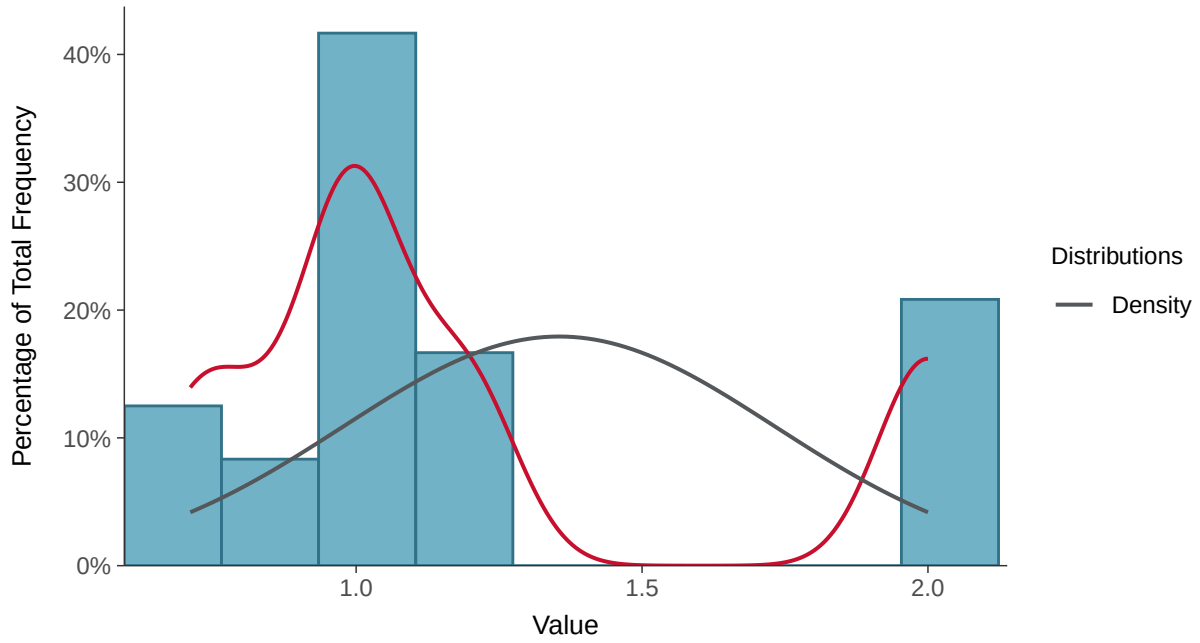
**Scatter Plot**

Chromium, MW-15021 (ug/L)



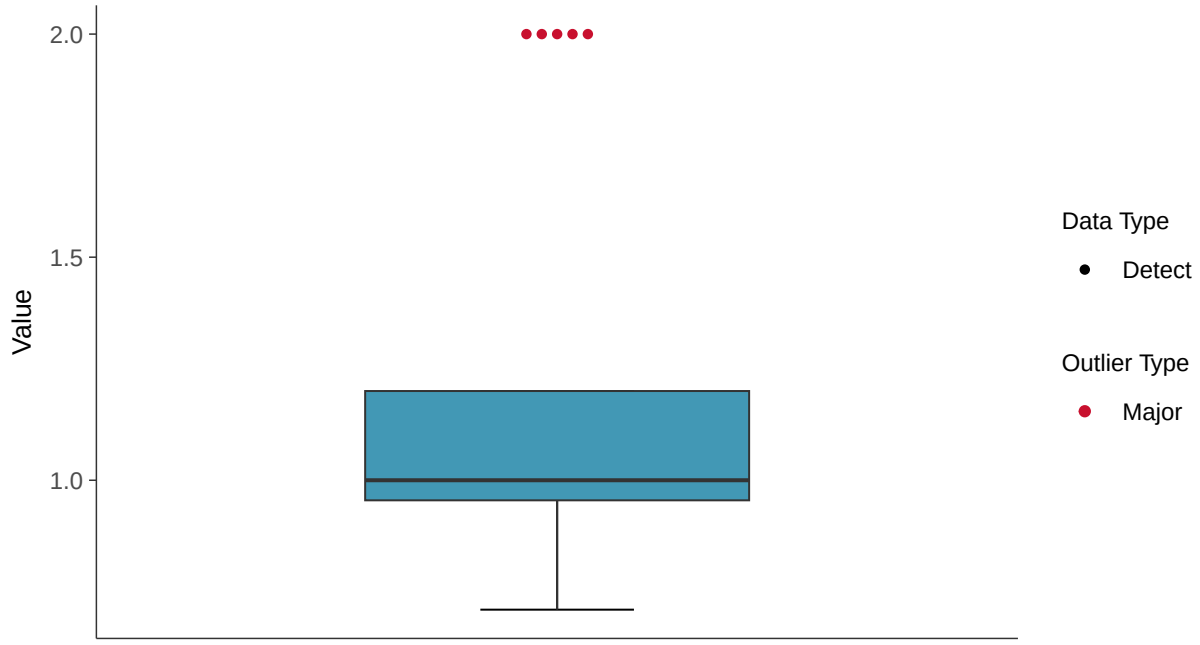

**Histogram**

Chromium, MW-15021 (ug/L)



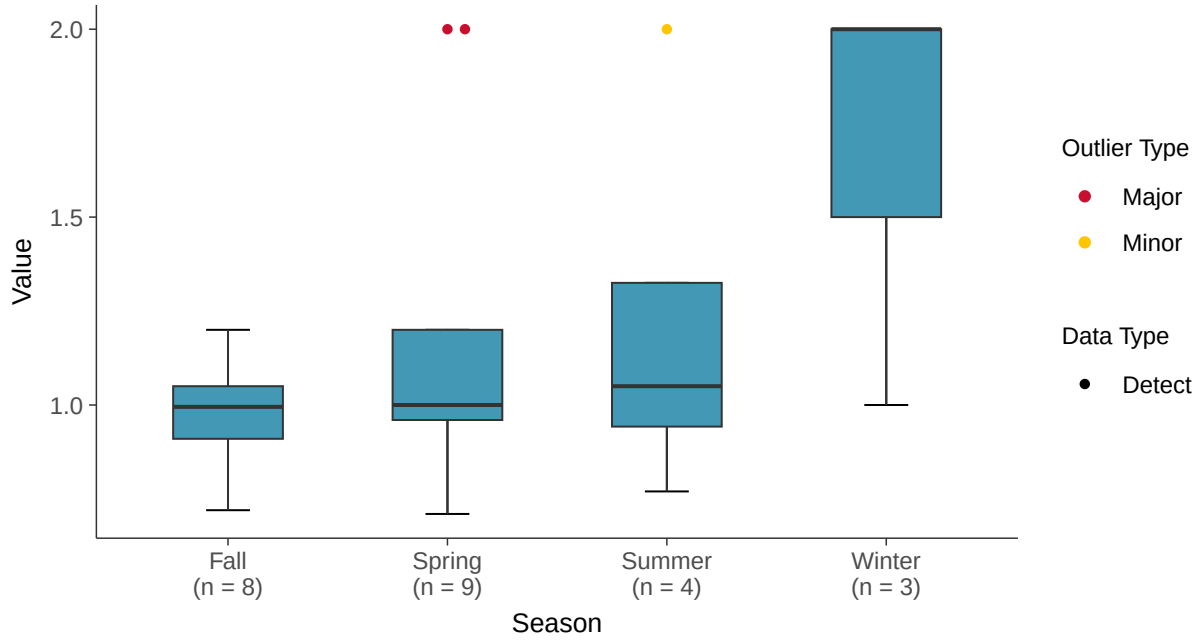
## Boxplot

Chromium, MW-15021 (ug/L)



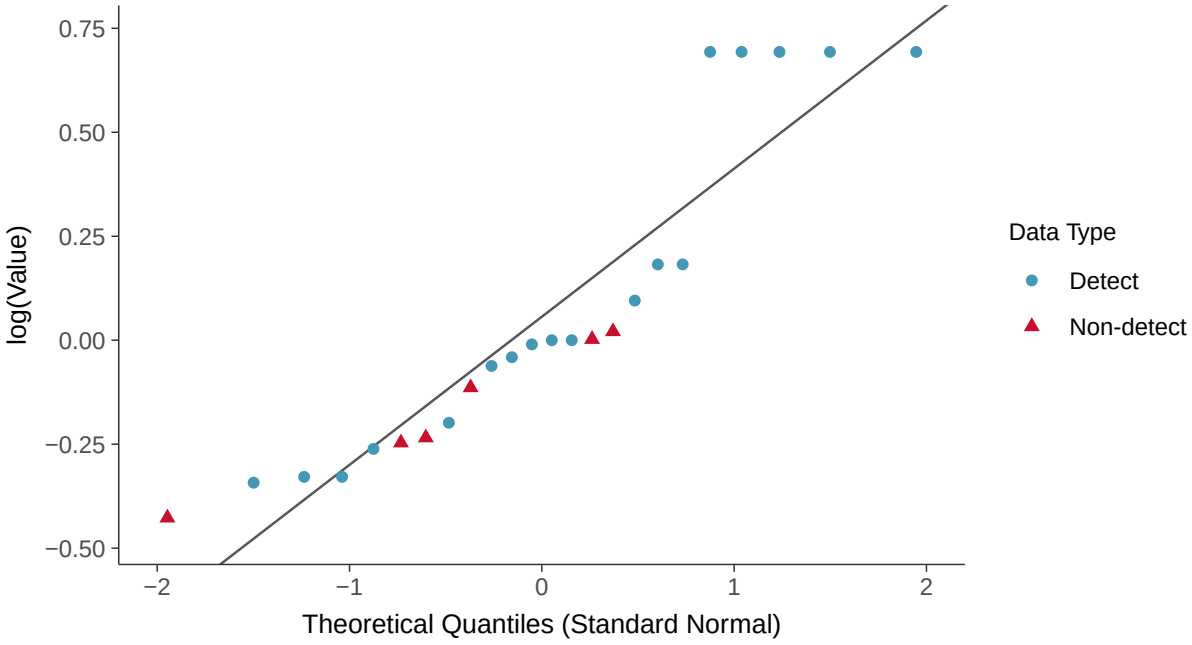

## Boxplot by Season

Chromium, MW-15021 (ug/L)



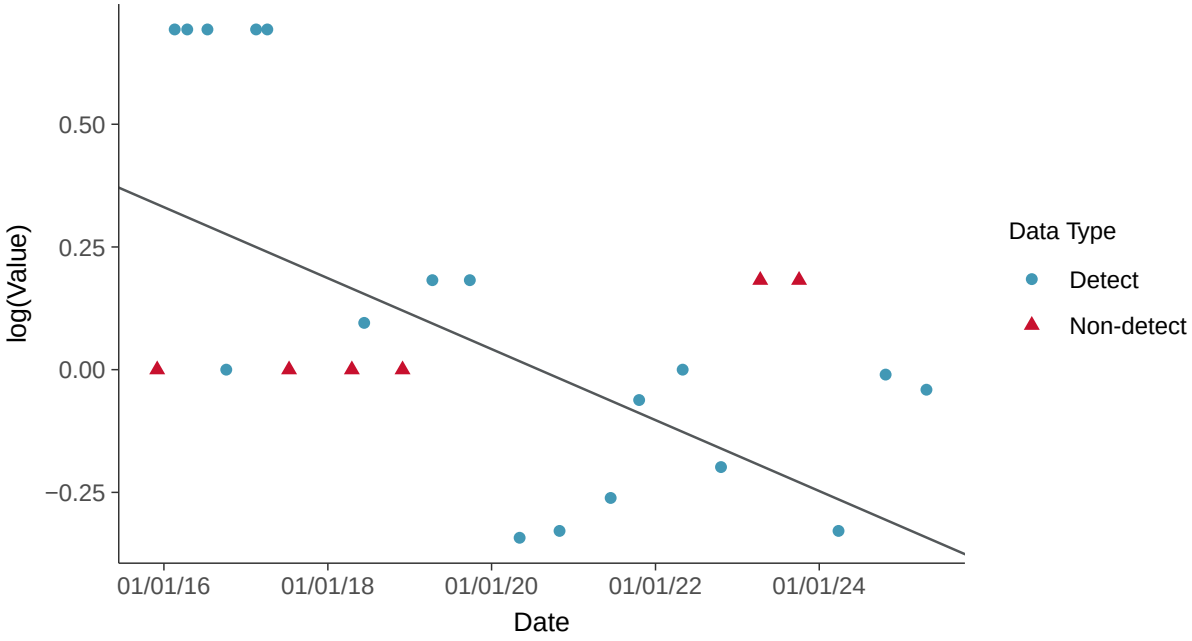
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15021 (ug/L)



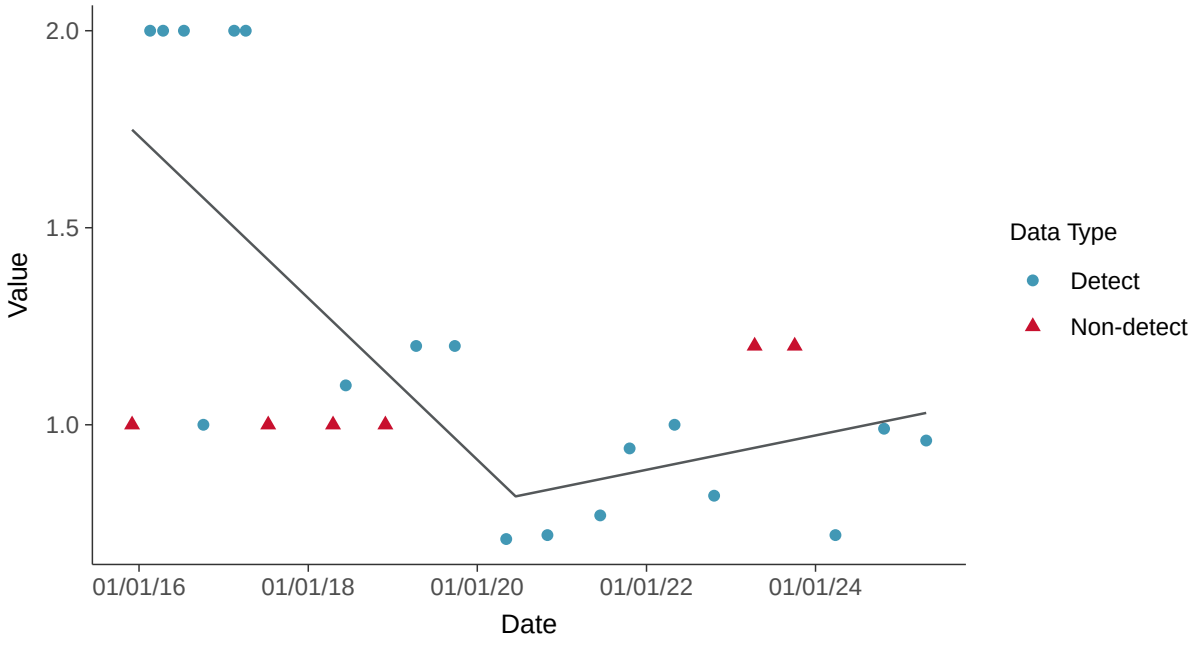

**Trend Regression: Lognormal MLE**

Chromium, MW-15021 (ug/L)



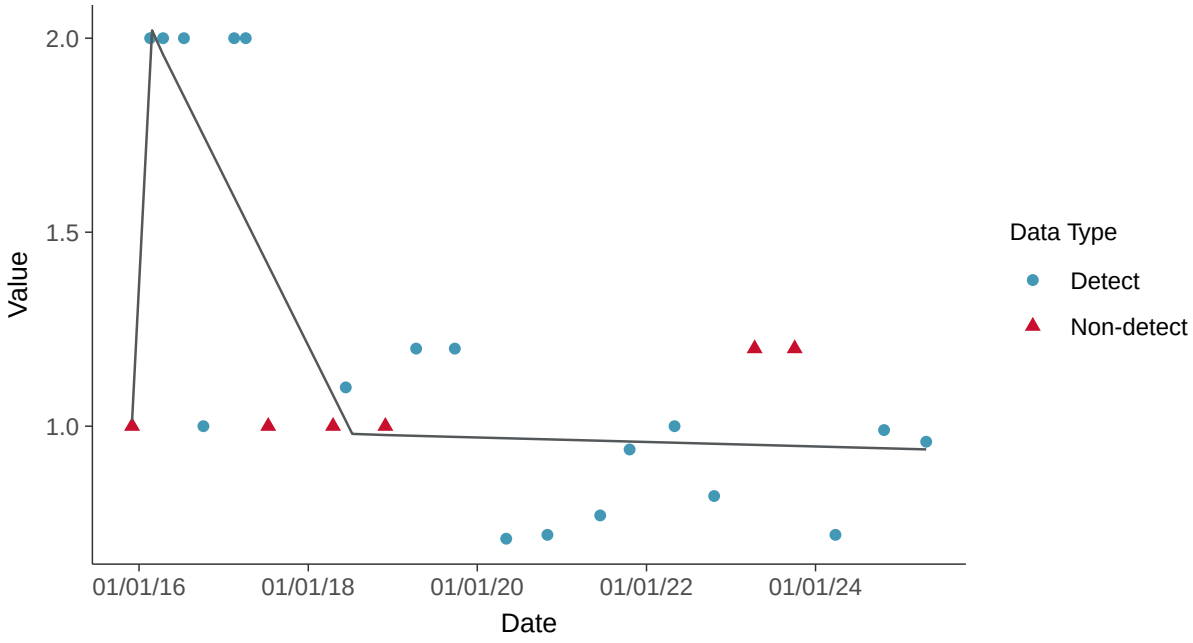
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15021 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Chromium, MW-15021 (ug/L)

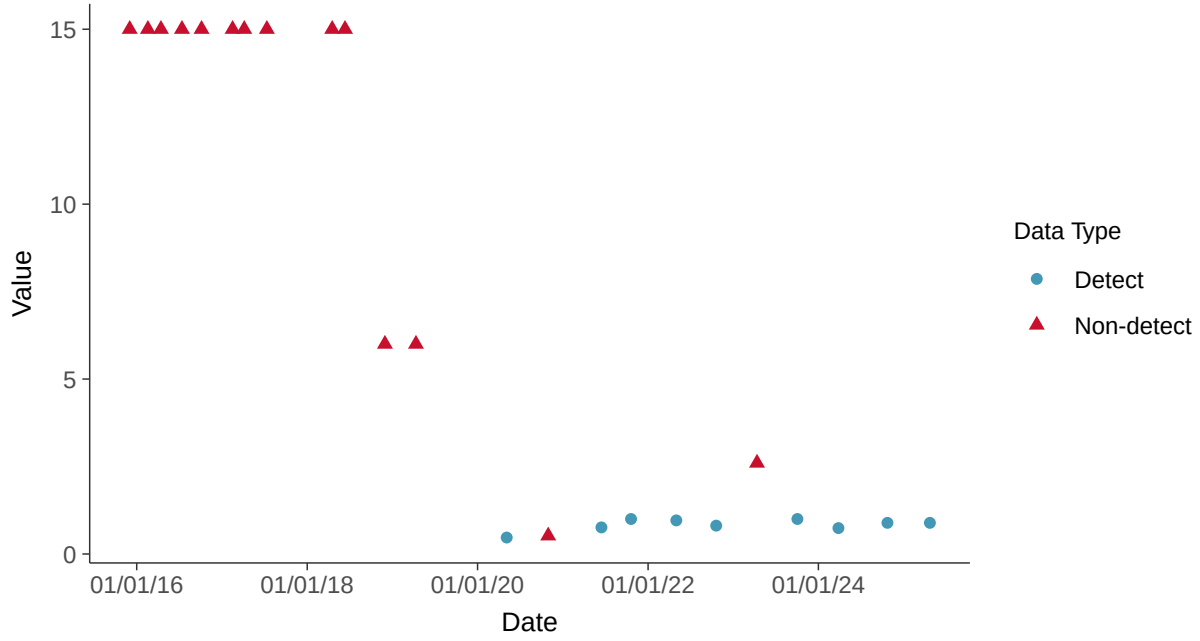


## Appendix IV: Cobalt, MW-15021

ID: 11_2_110

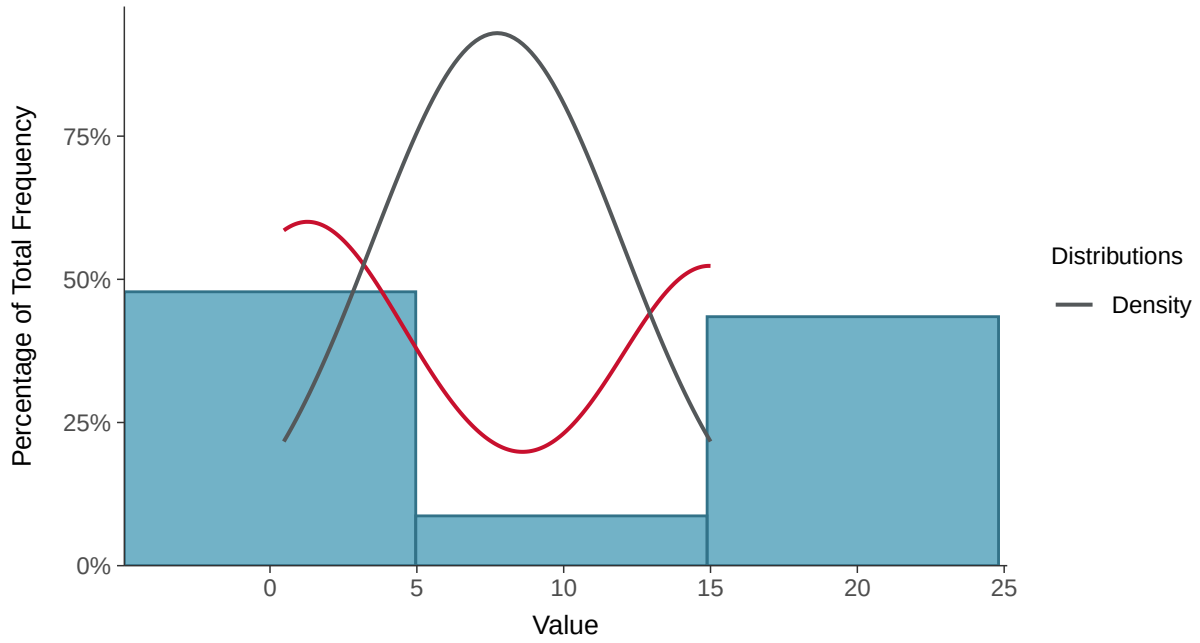
**Scatter Plot**

Cobalt, MW-15021 (ug/L)



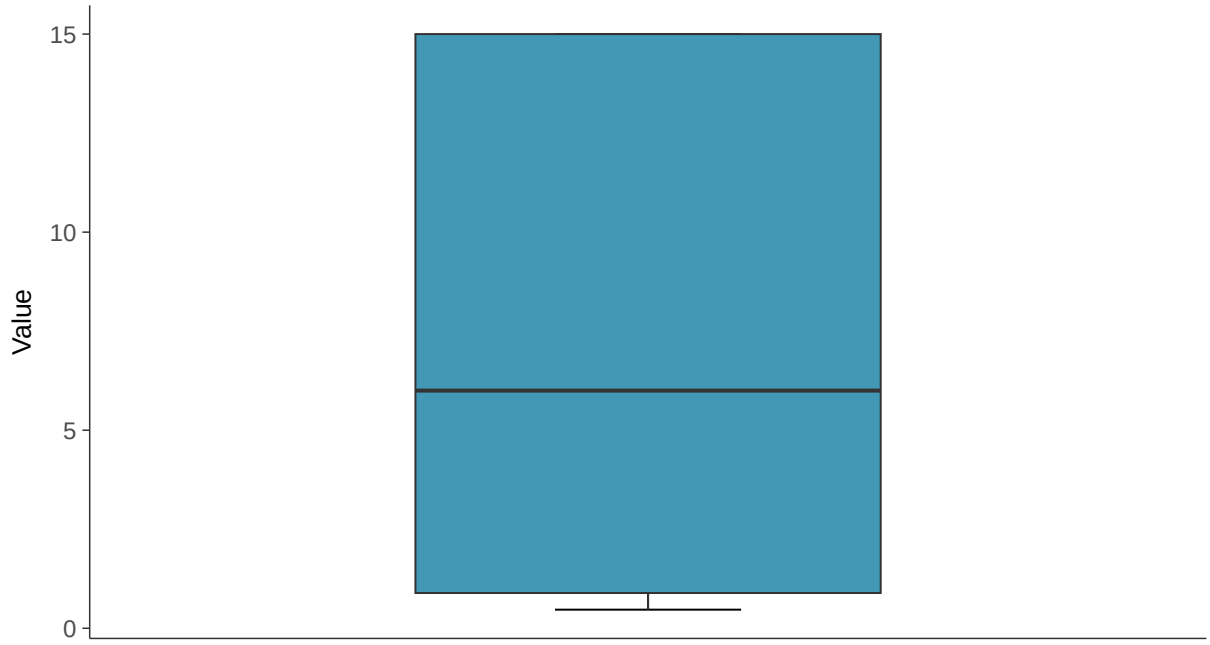

**Histogram**

Cobalt, MW-15021 (ug/L)



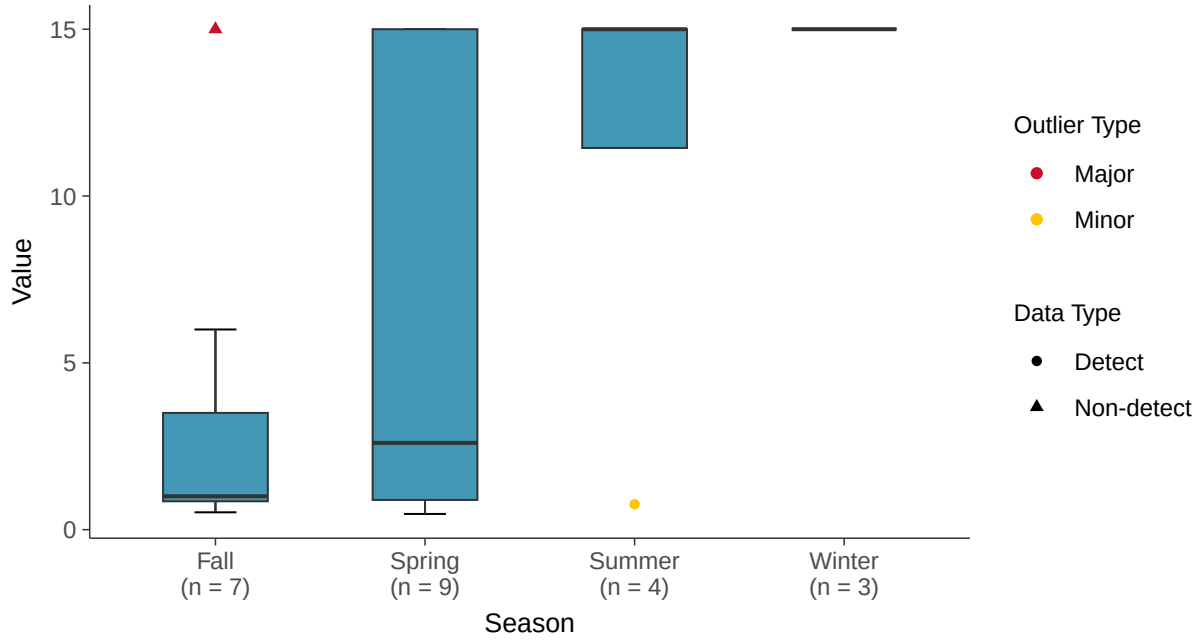
**Boxplot**

Cobalt, MW-15021 (ug/L)



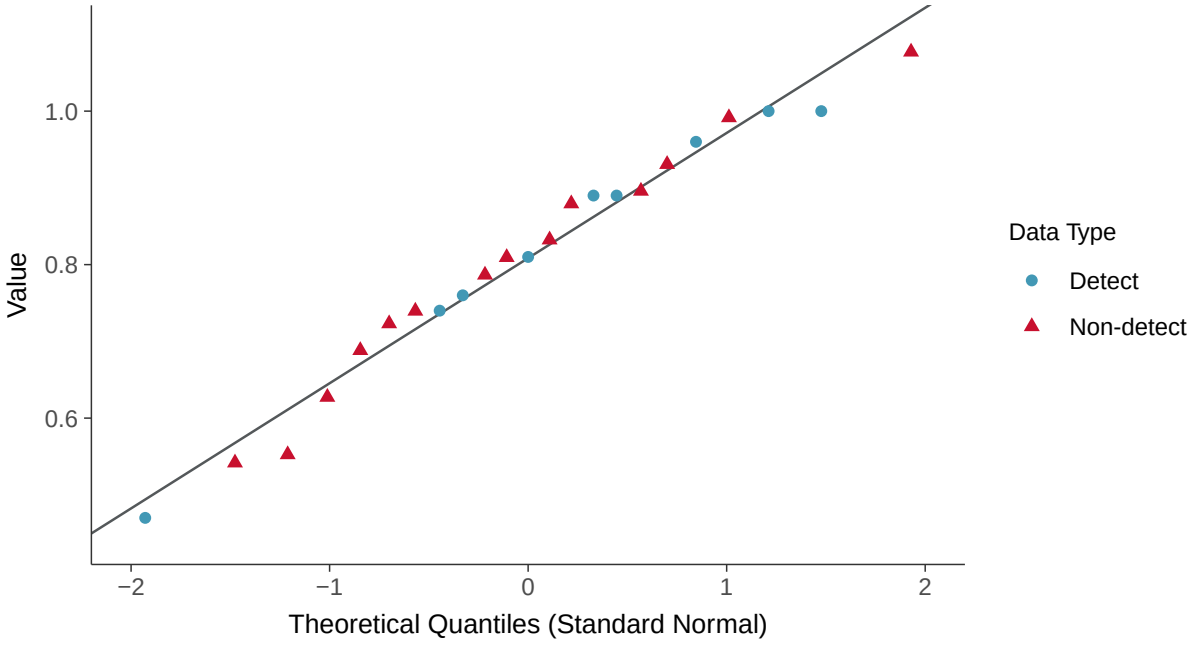

**Boxplot by Season**

Cobalt, MW-15021 (ug/L)



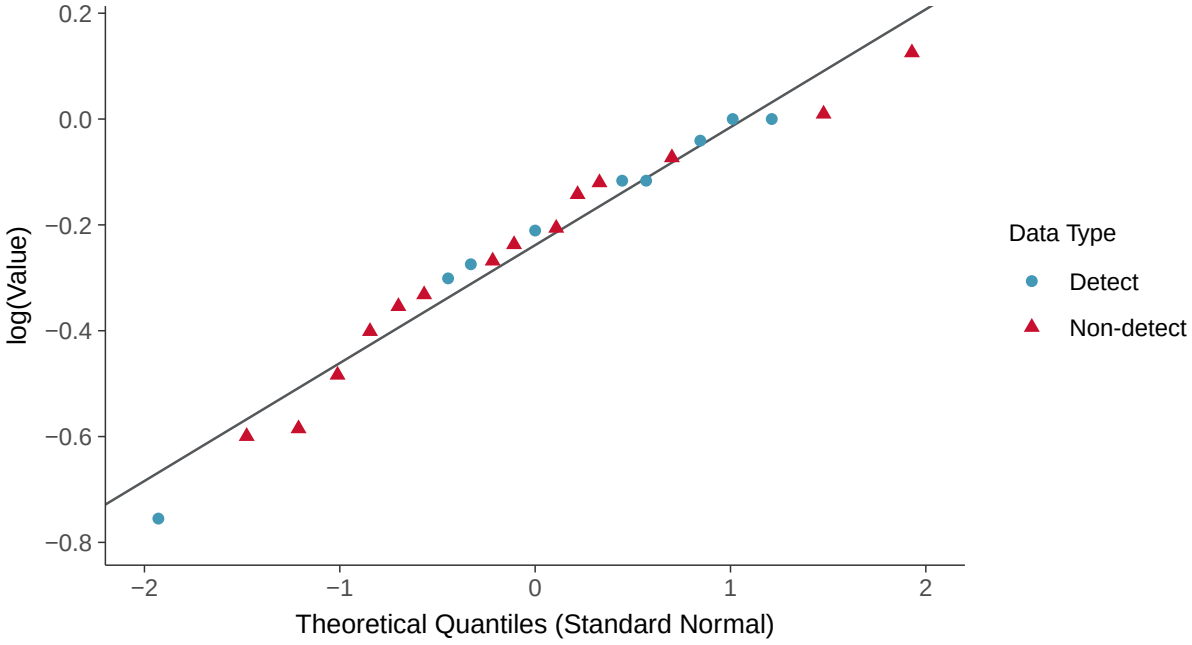
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15021 (ug/L)



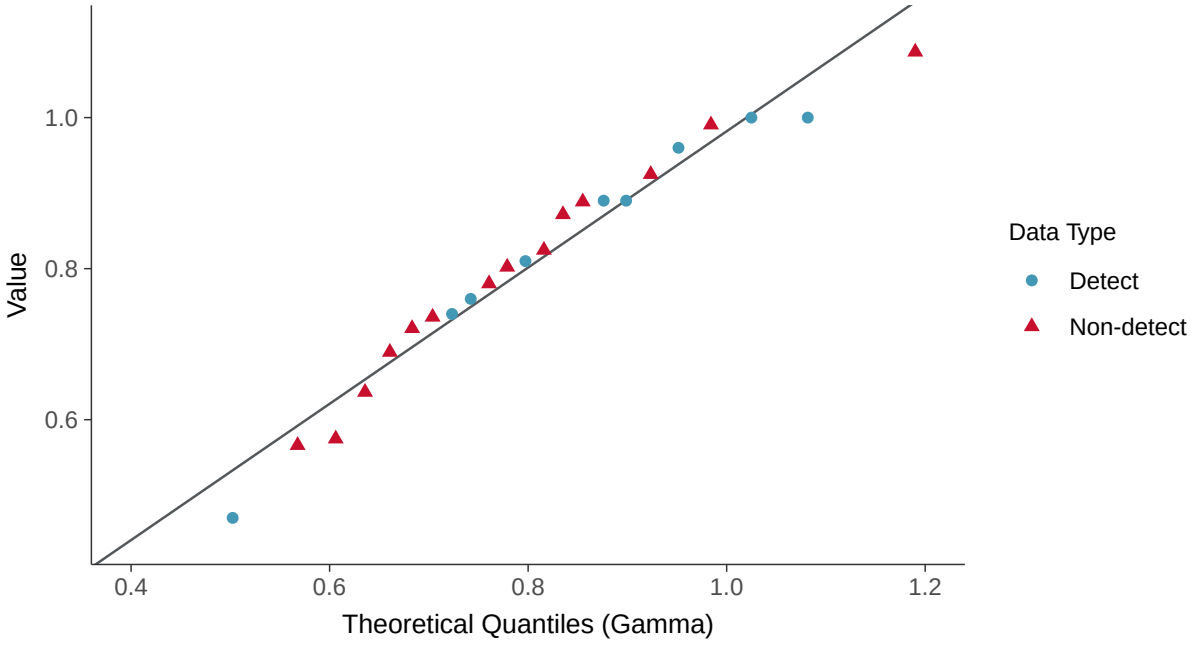

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15021 (ug/L)



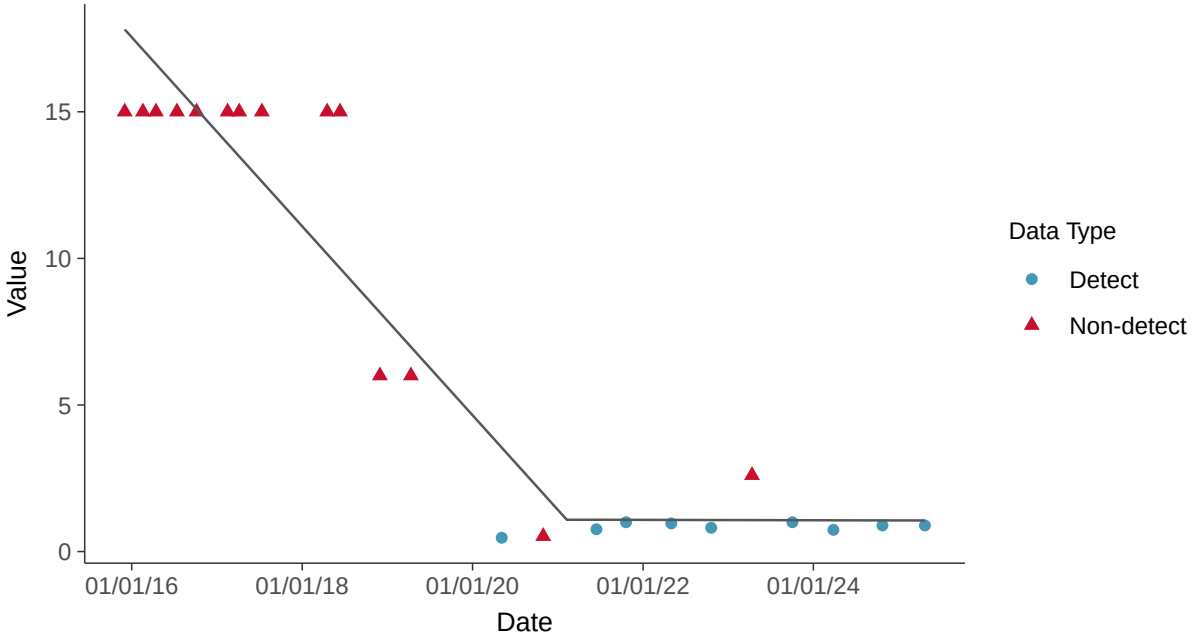
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15021 (ug/L)



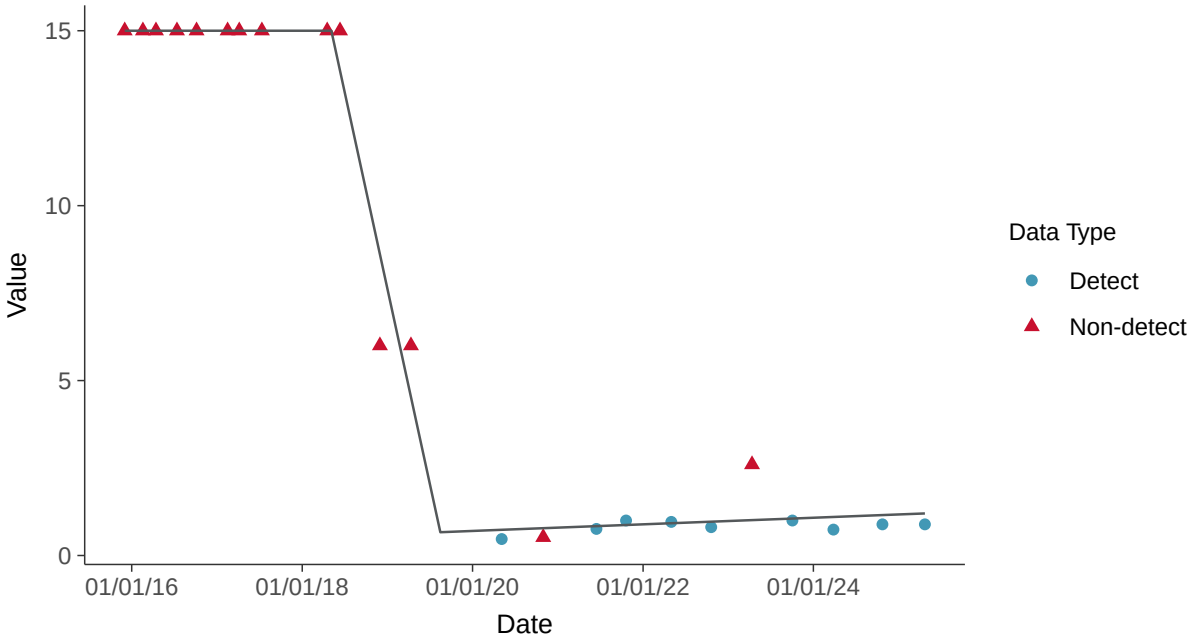

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15021 (ug/L)



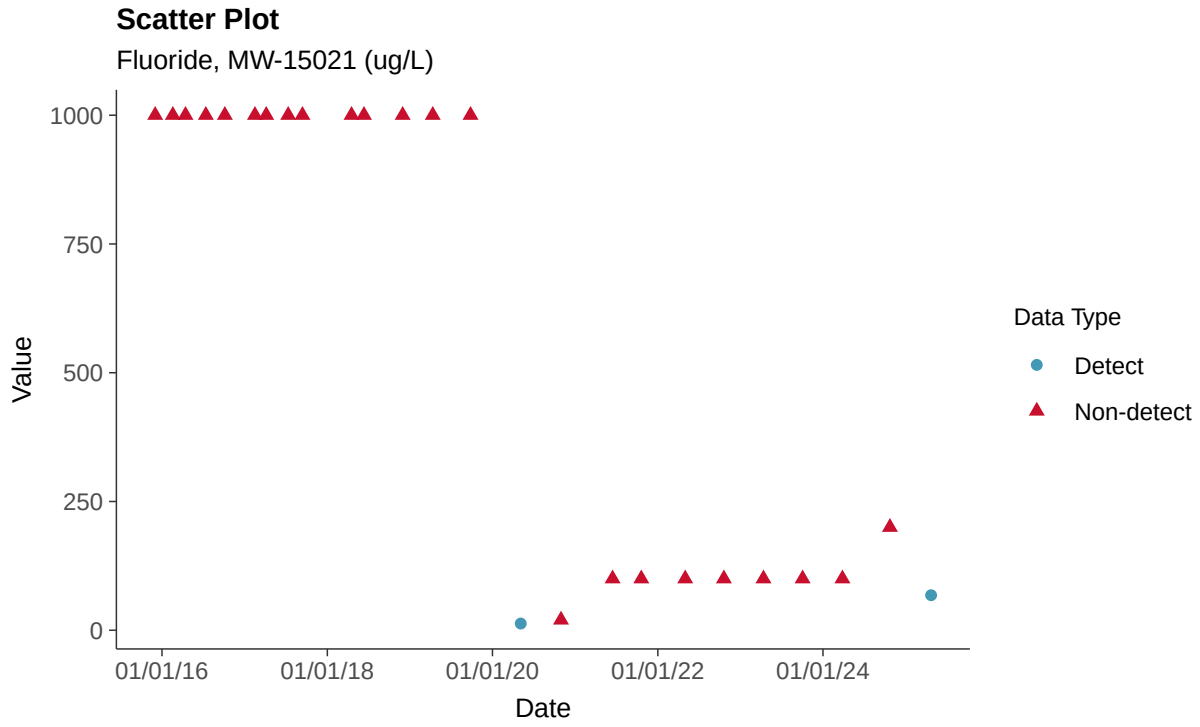
**Trend Regression: Piecewise Linear-Linear-Linear**

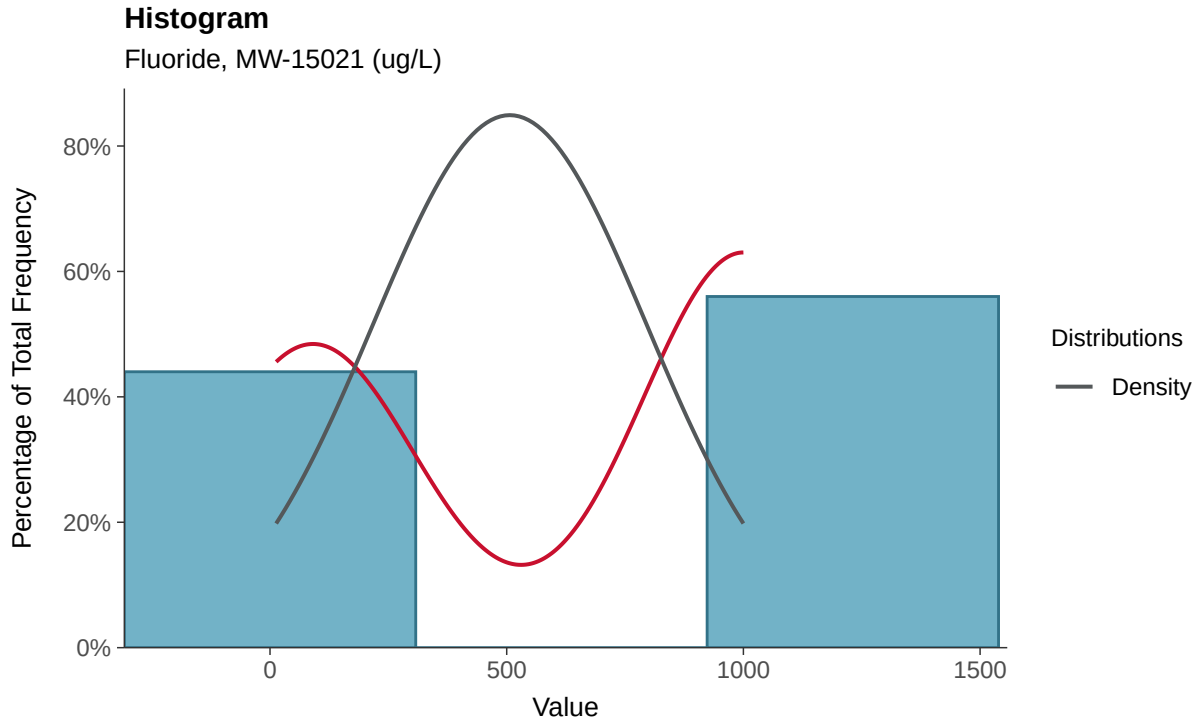
Cobalt, MW-15021 (ug/L)



## Appendix IV: Fluoride, MW-15021

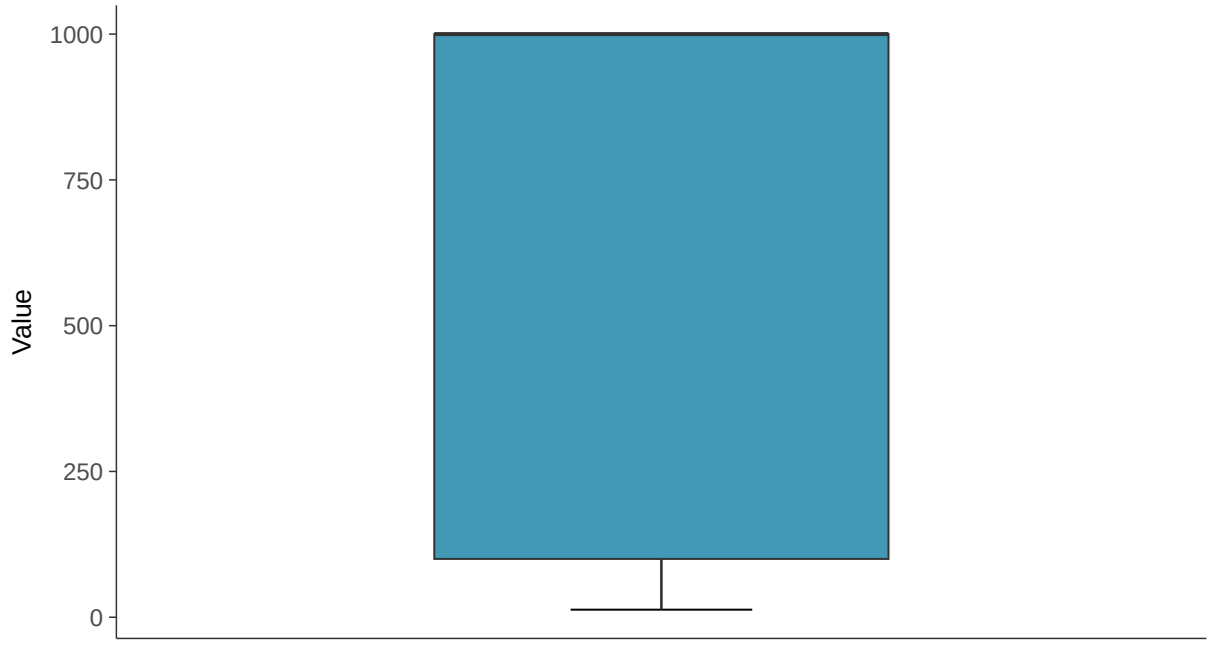
ID: 11_2_114



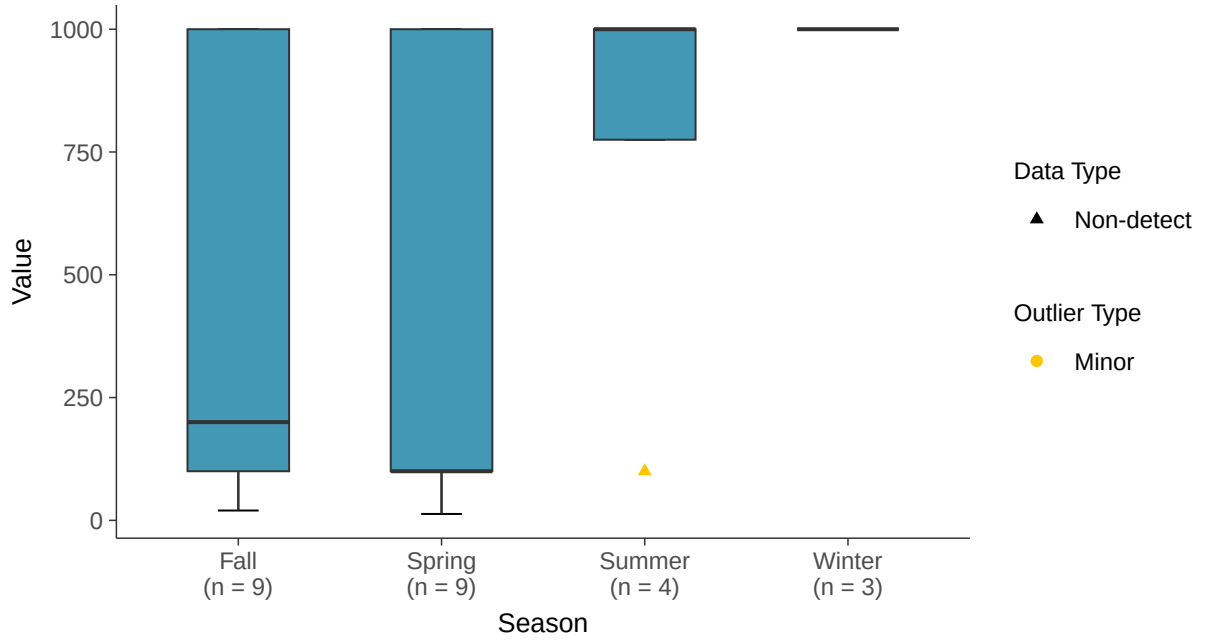
**Boxplot**

Fluoride, MW-15021 (ug/L)



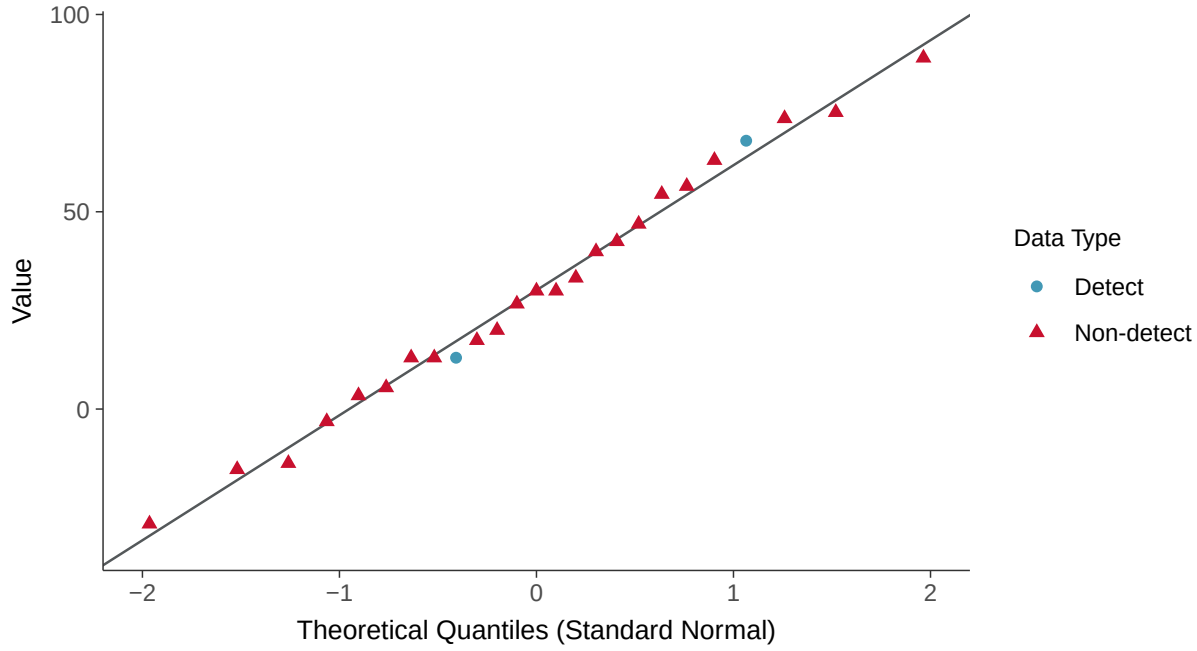

**Boxplot by Season**

Fluoride, MW-15021 (ug/L)



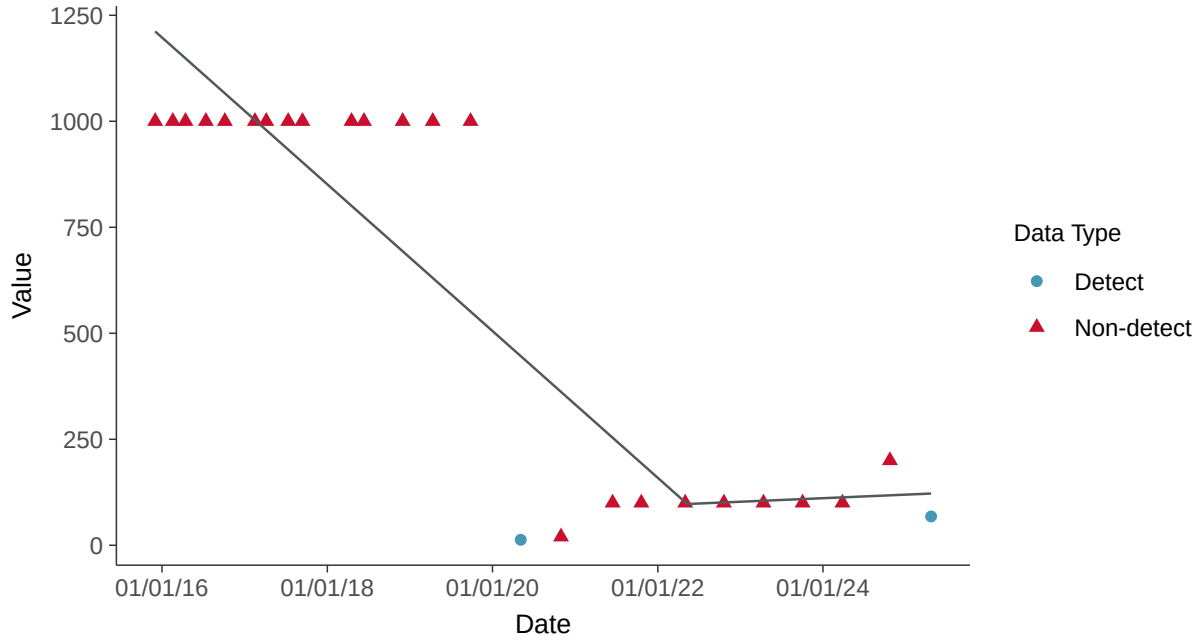
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15021 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15021 (ug/L)

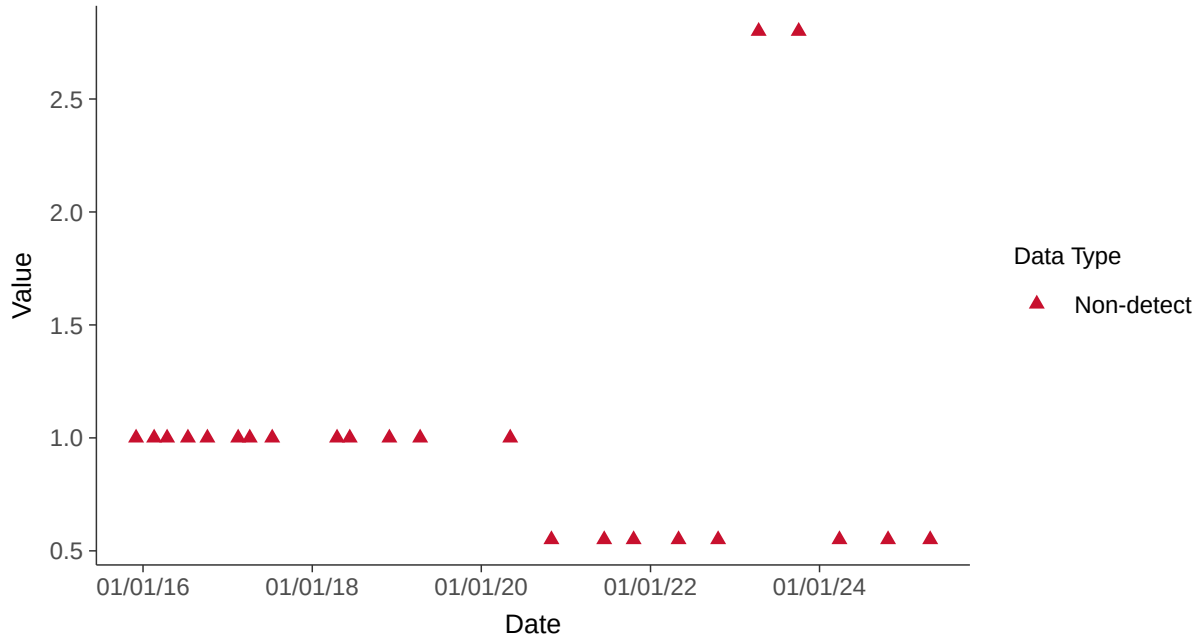


# Appendix IV: Lead, MW-15021

ID: 11_2_116

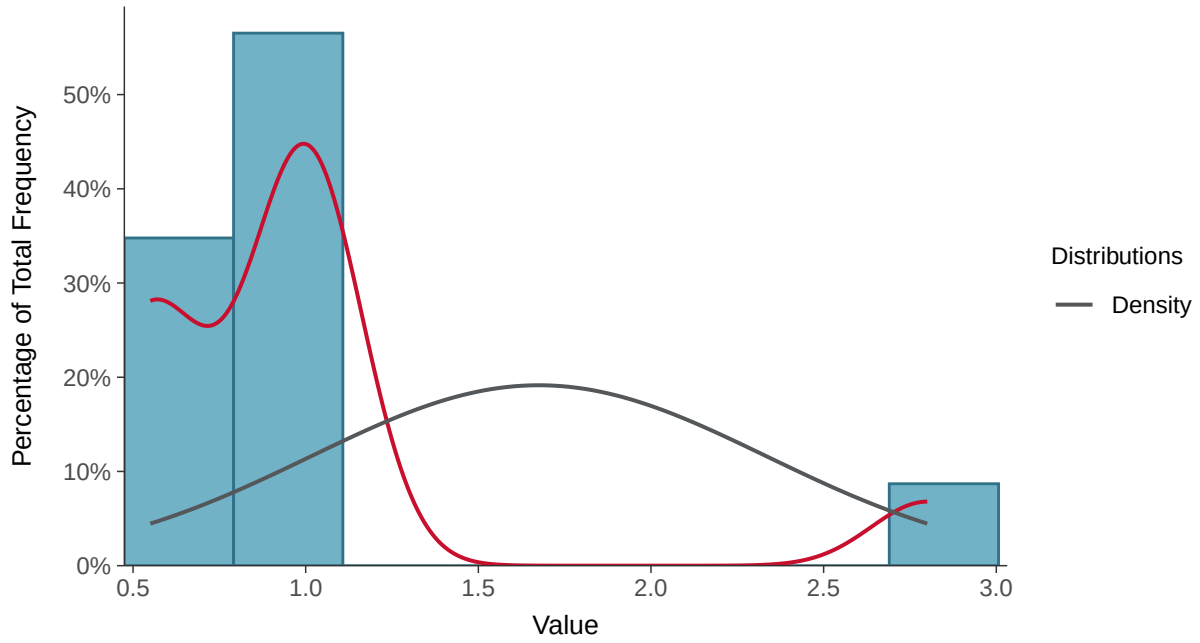
**Scatter Plot**

Lead, MW-15021 (ug/L)



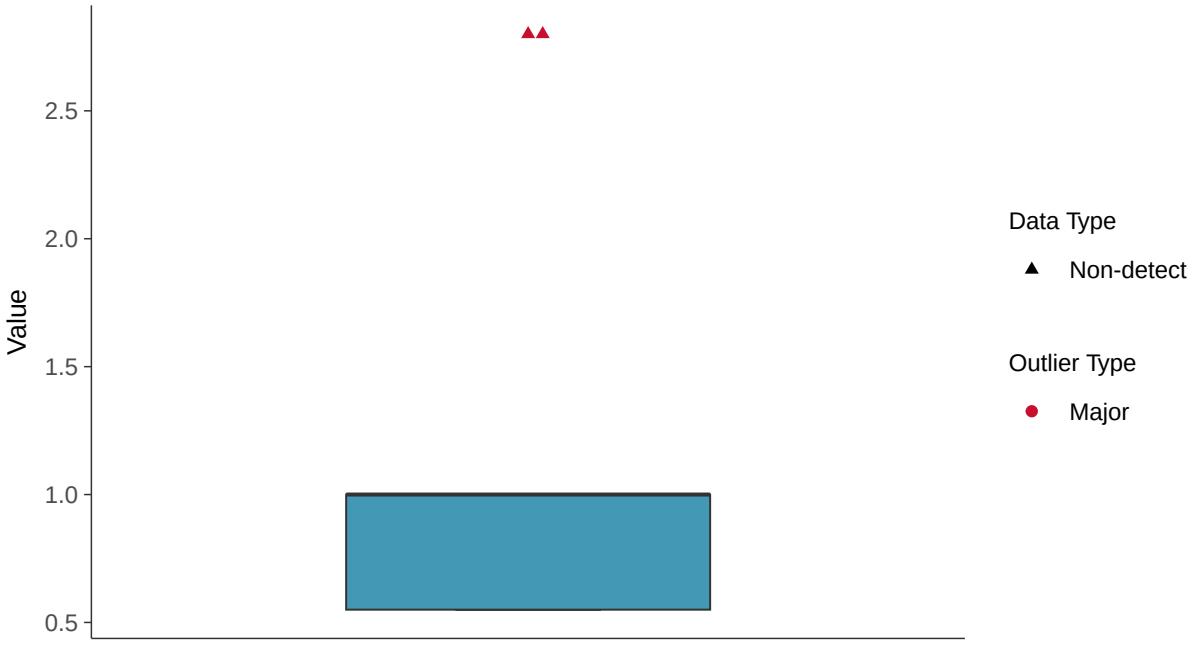

**Histogram**

Lead, MW-15021 (ug/L)



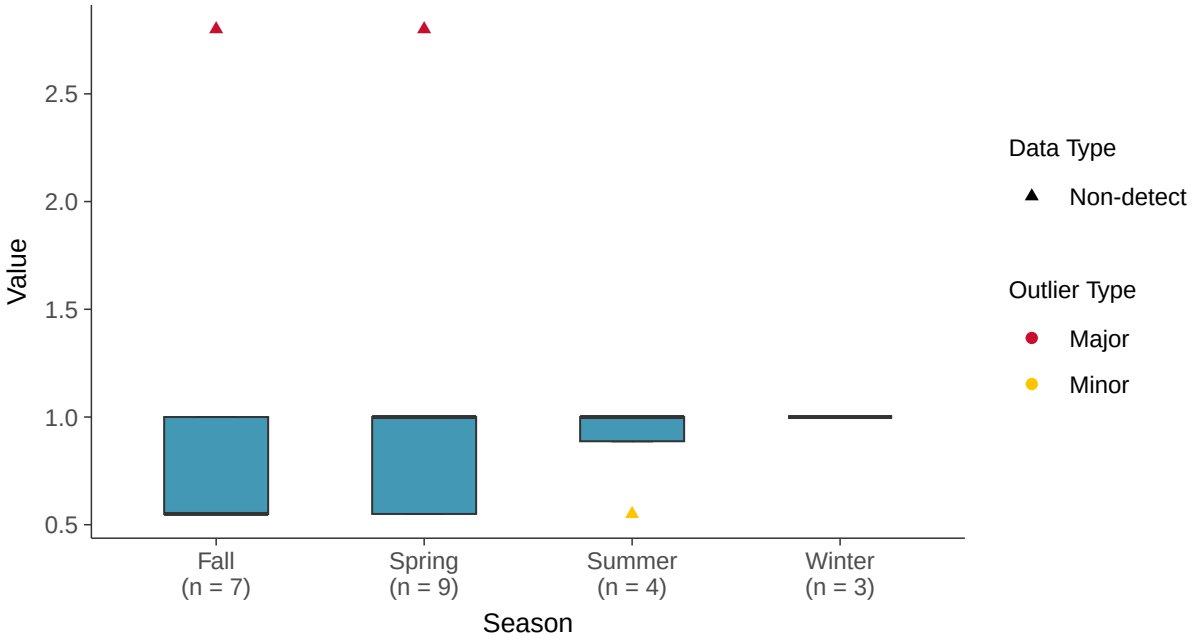
## Boxplot

Lead, MW-15021 (ug/L)



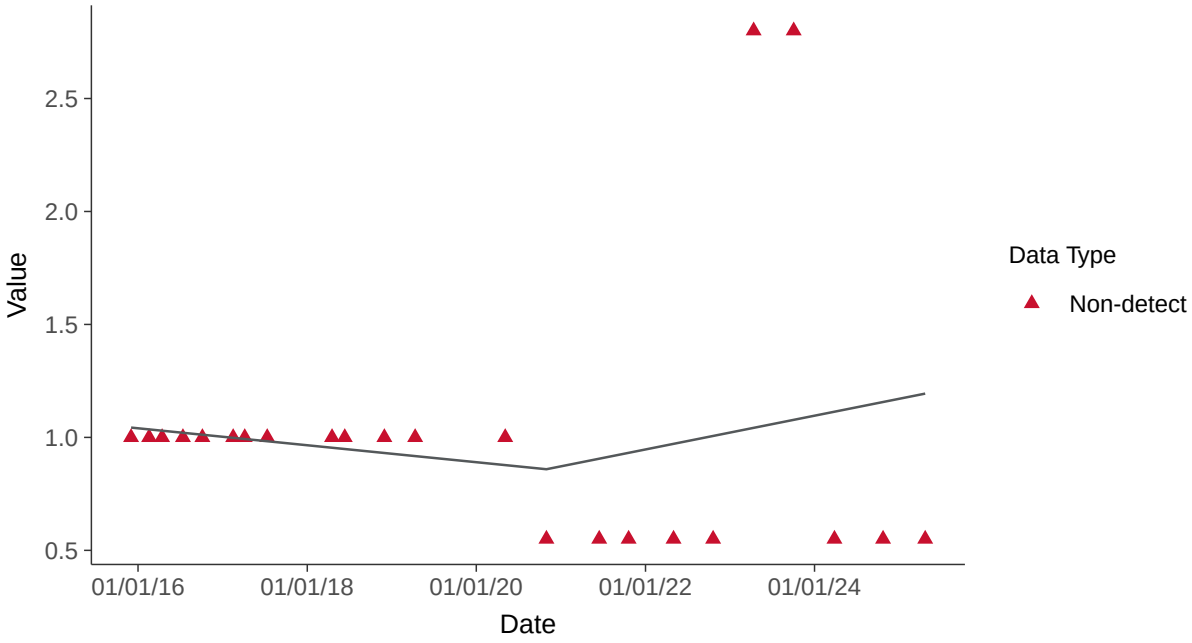

## Boxplot by Season

Lead, MW-15021 (ug/L)



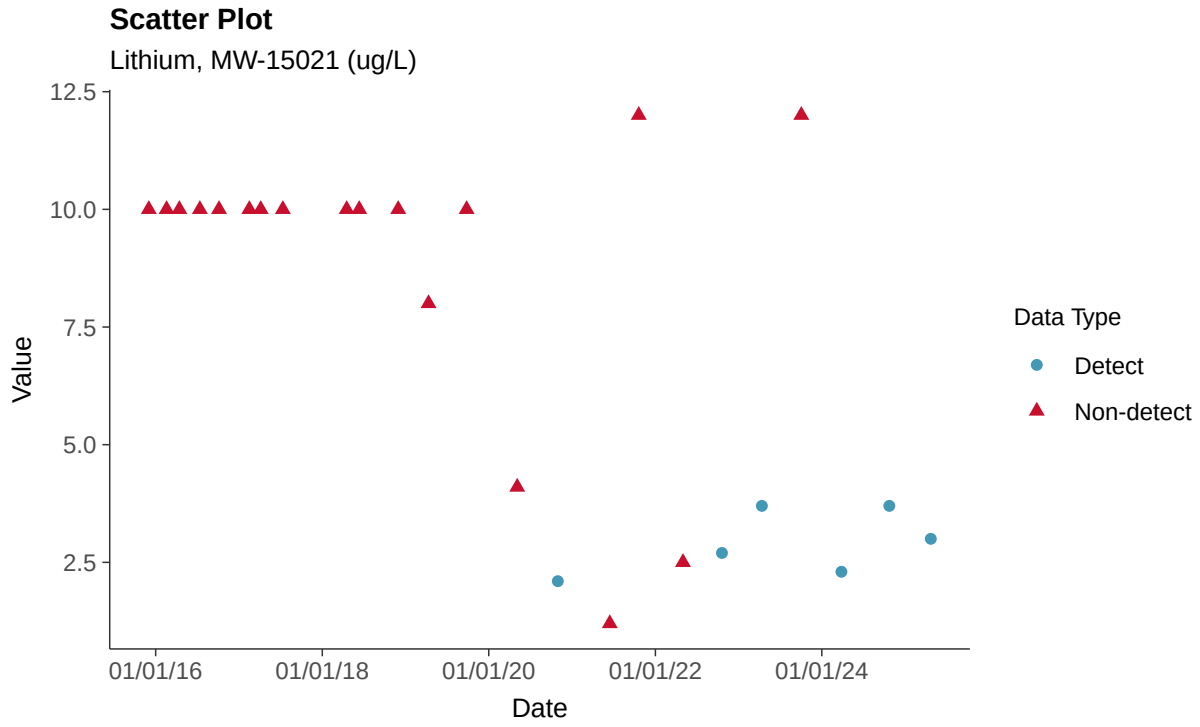
**Trend Regression: Piecewise Linear-Linear**

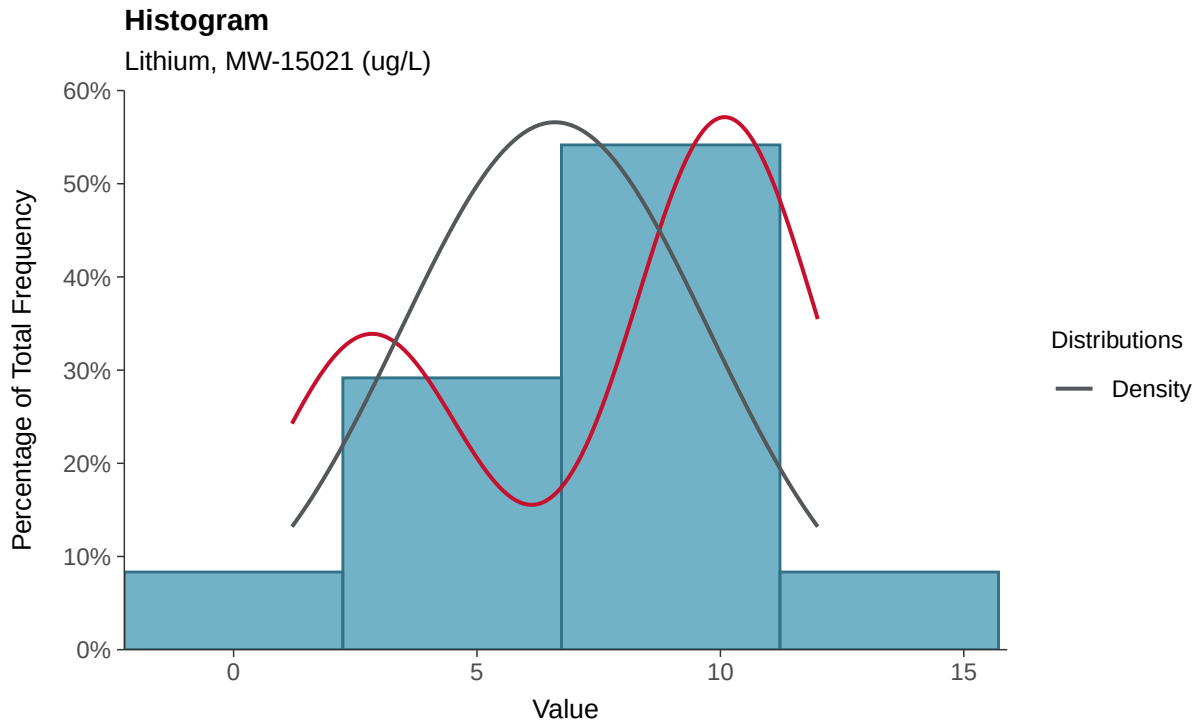
Lead, MW-15021 (ug/L)



## Appendix IV: Lithium, MW-15021

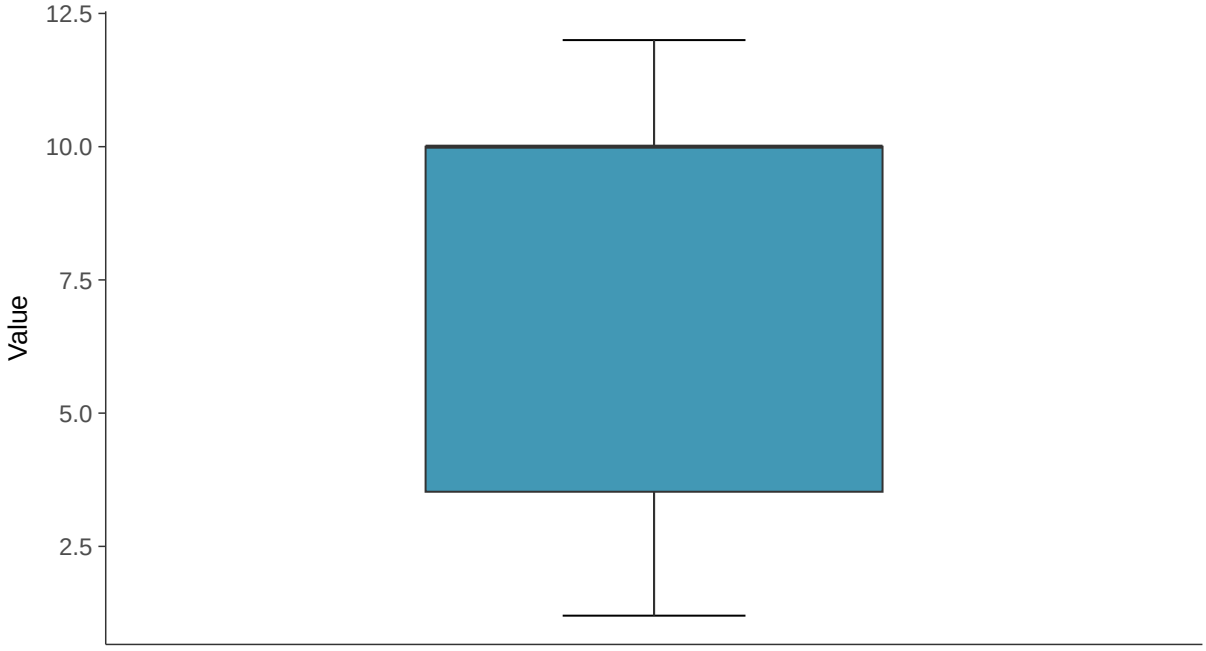
ID: 11_2_117



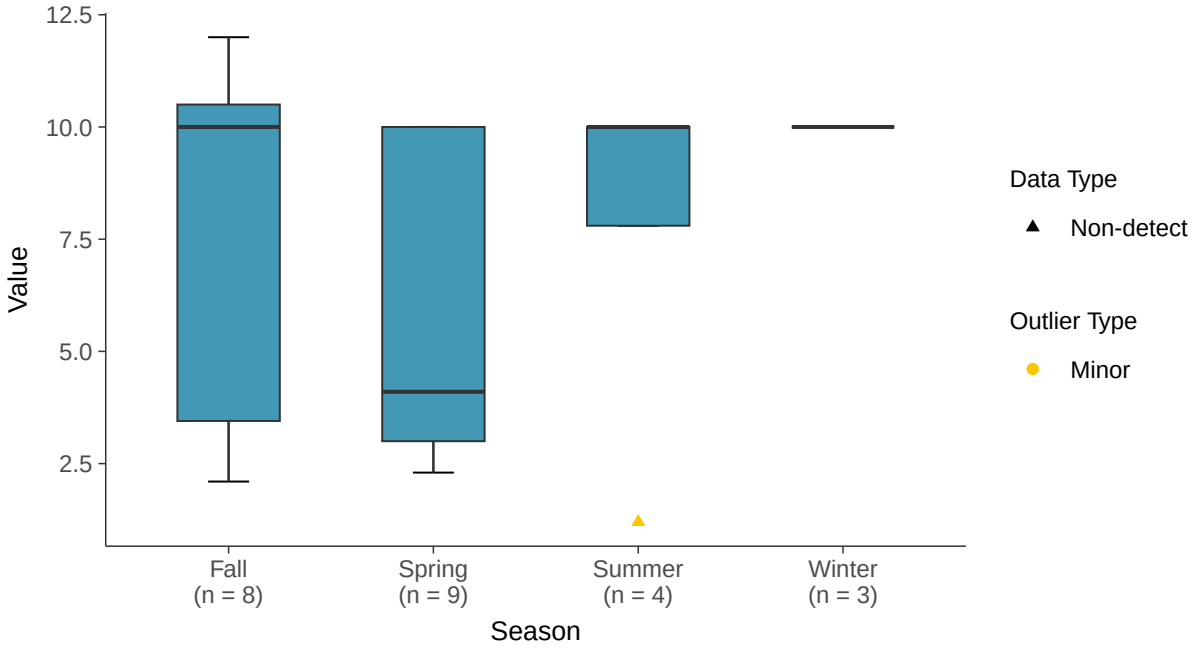
## Boxplot

Lithium, MW-15021 (ug/L)



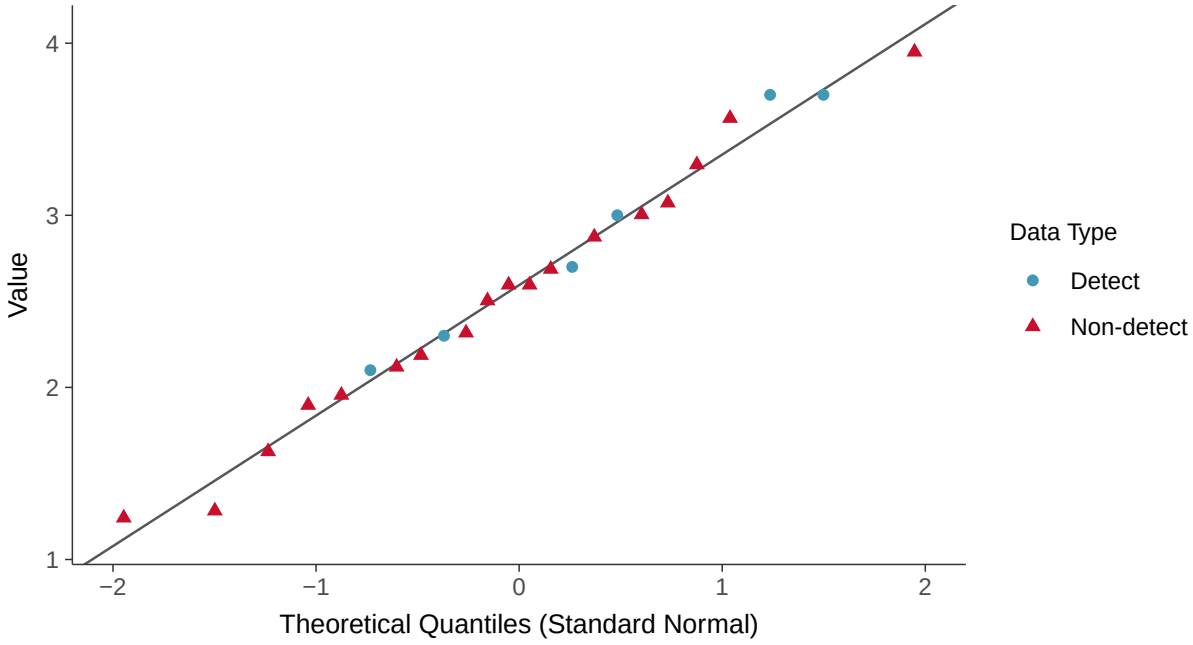

## Boxplot by Season

Lithium, MW-15021 (ug/L)



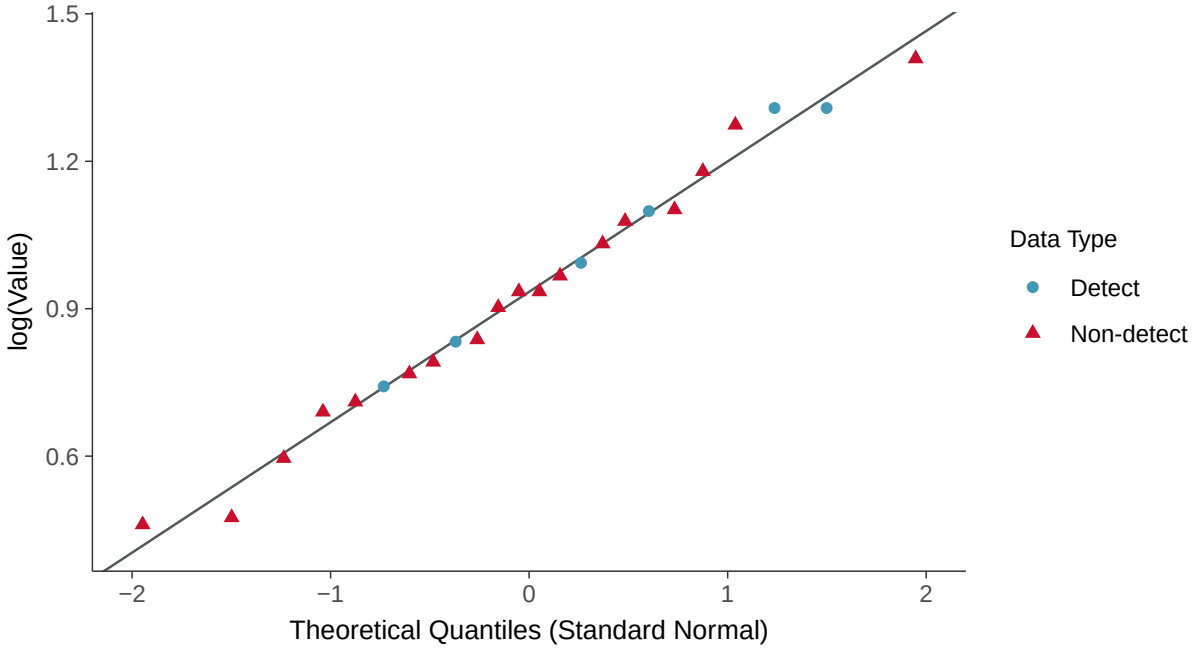
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15021 (ug/L)



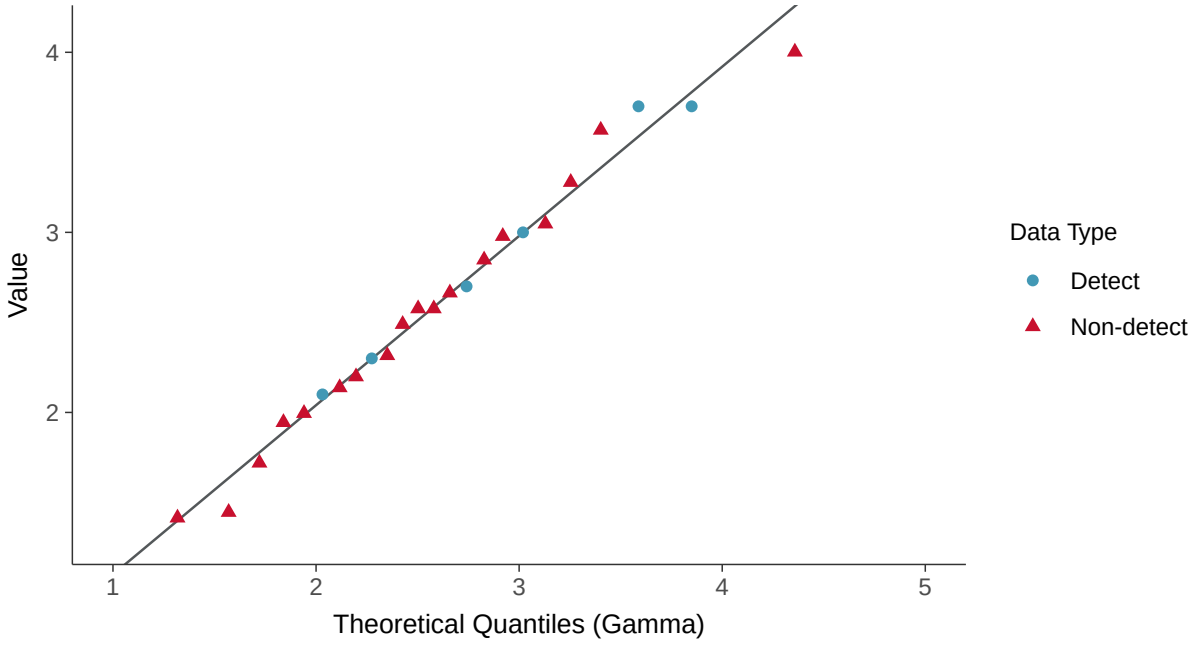

**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15021 (ug/L)



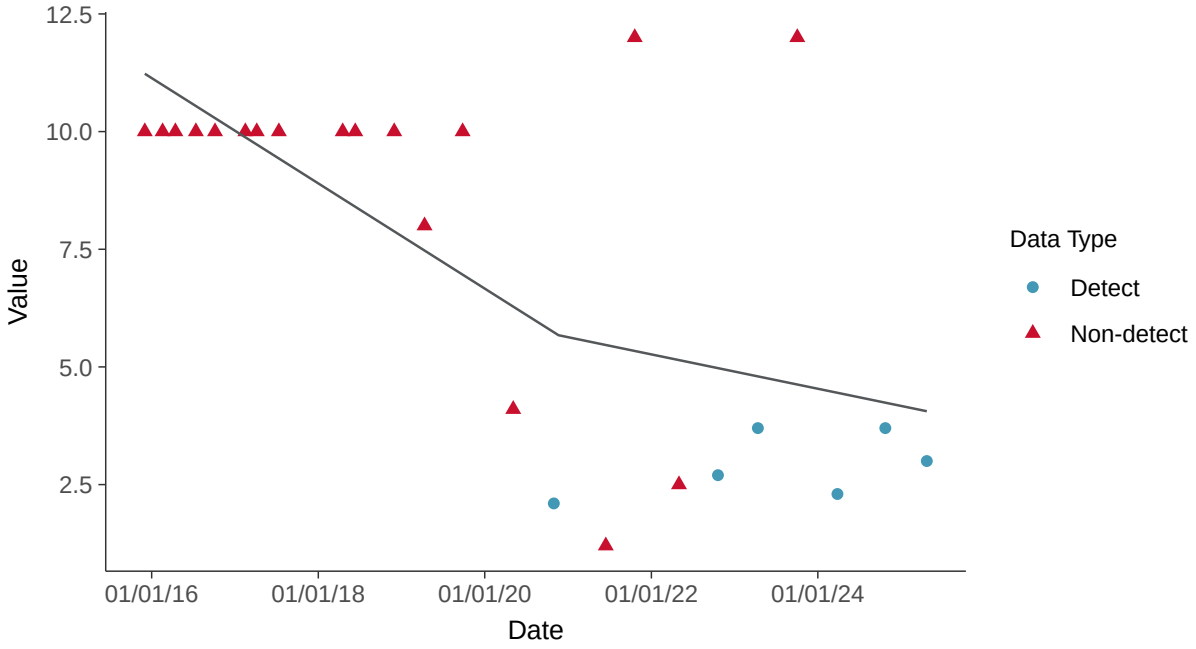
**Gamma Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15021 (ug/L)



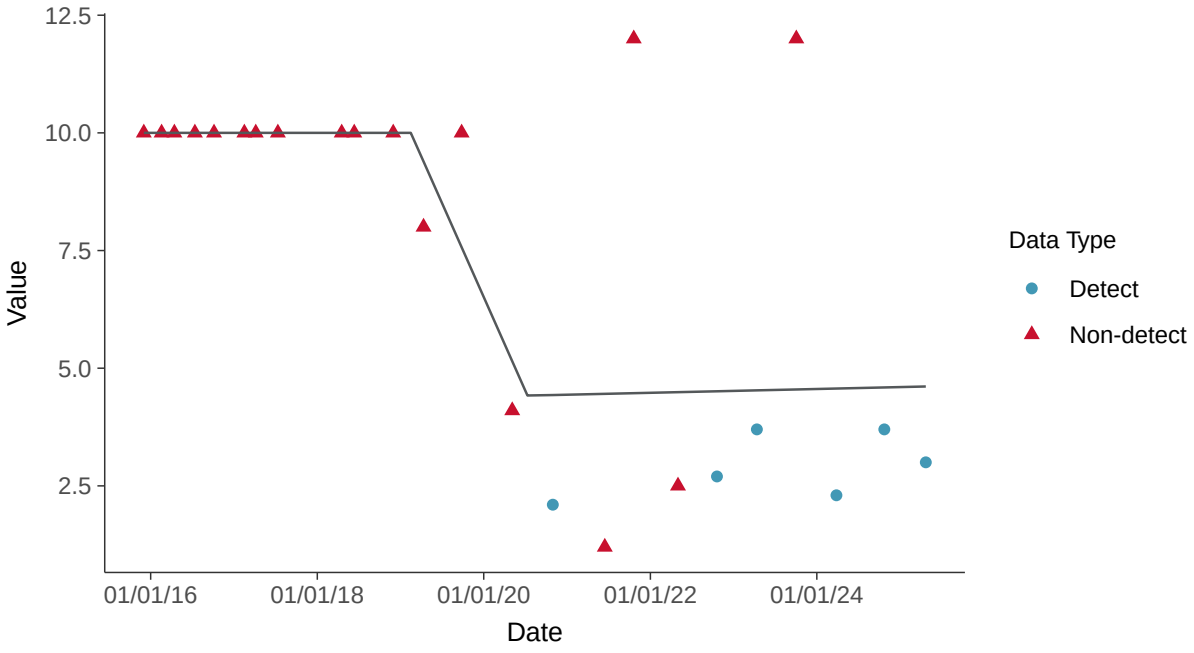

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15021 (ug/L)



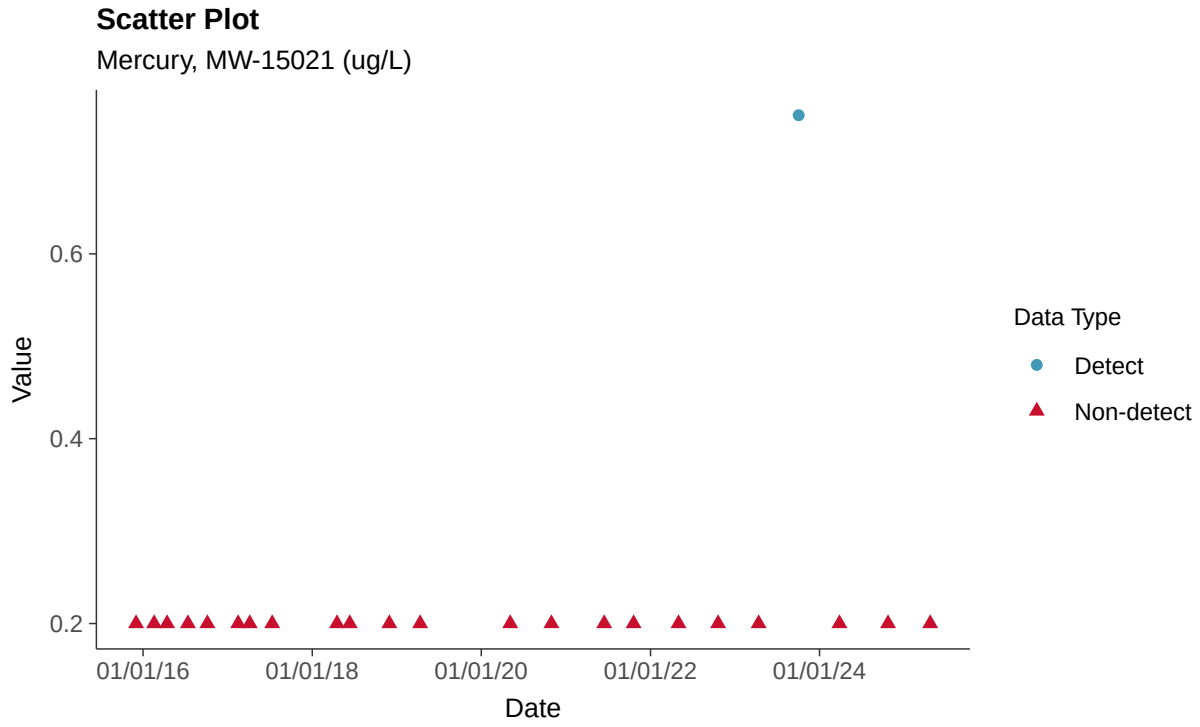
**Trend Regression: Piecewise Linear-Linear-Linear**

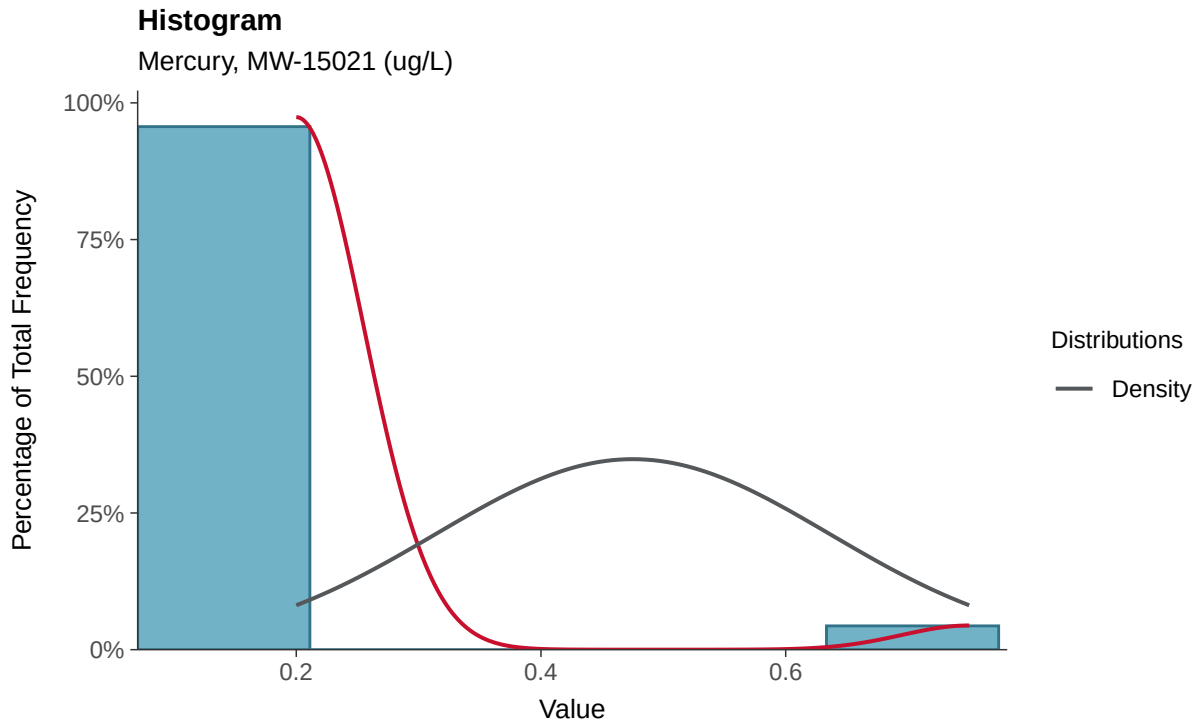
Lithium, MW-15021 (ug/L)



## Appendix IV: Mercury, MW-15021

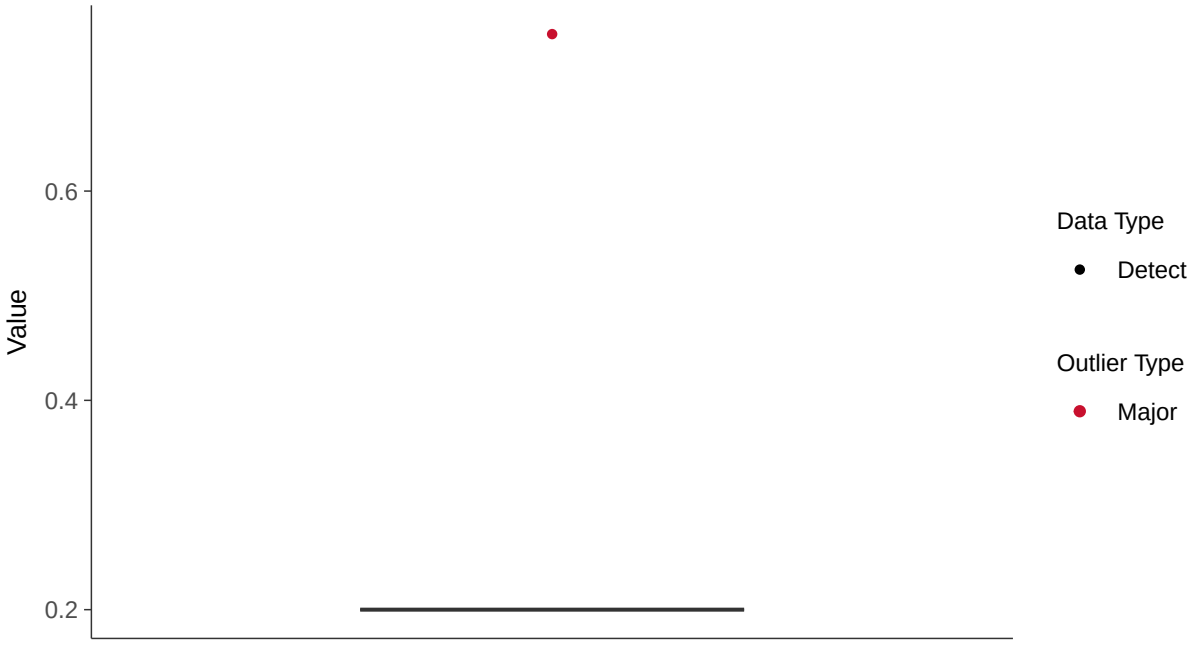
ID: 11_2_118



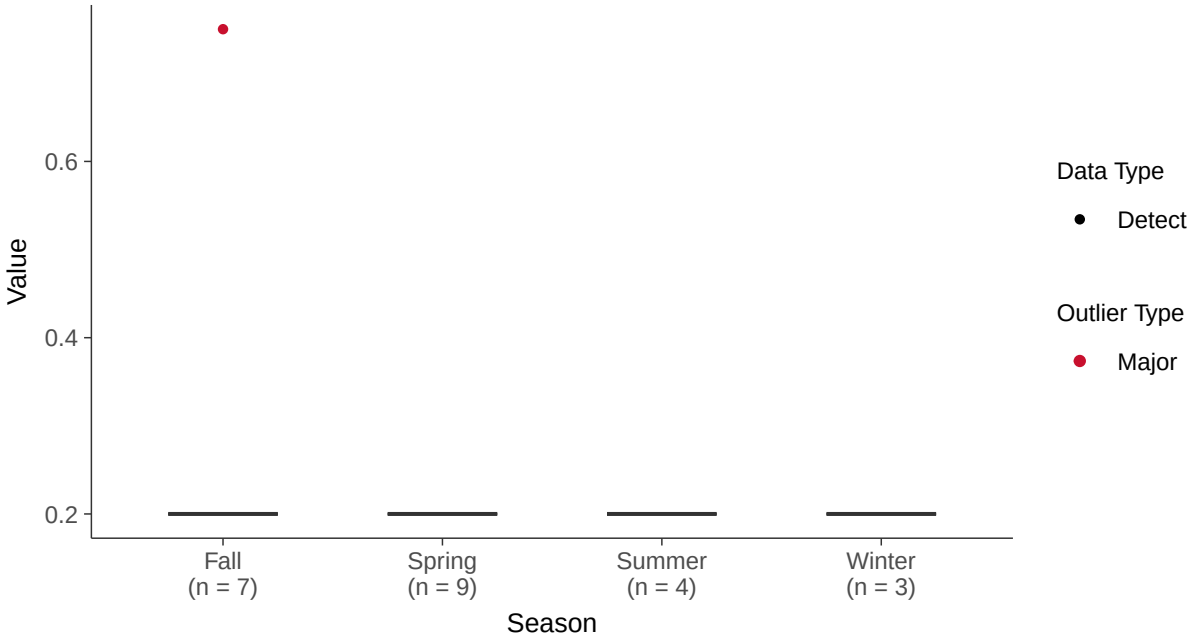
## Boxplot

Mercury, MW-15021 (ug/L)



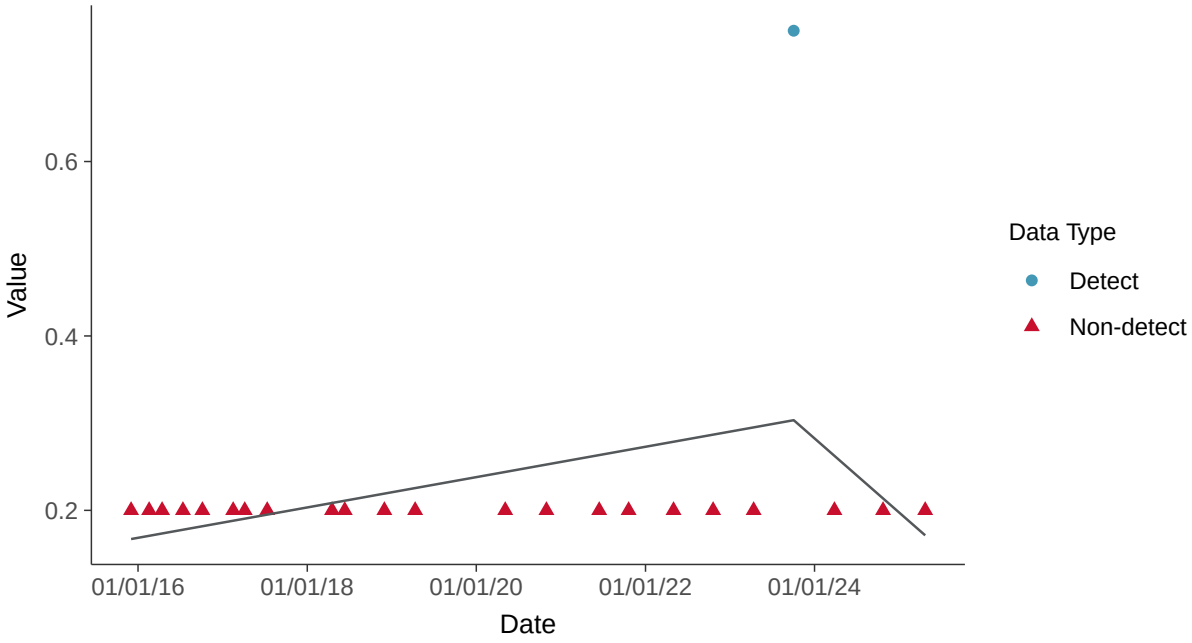

## Boxplot by Season

Mercury, MW-15021 (ug/L)



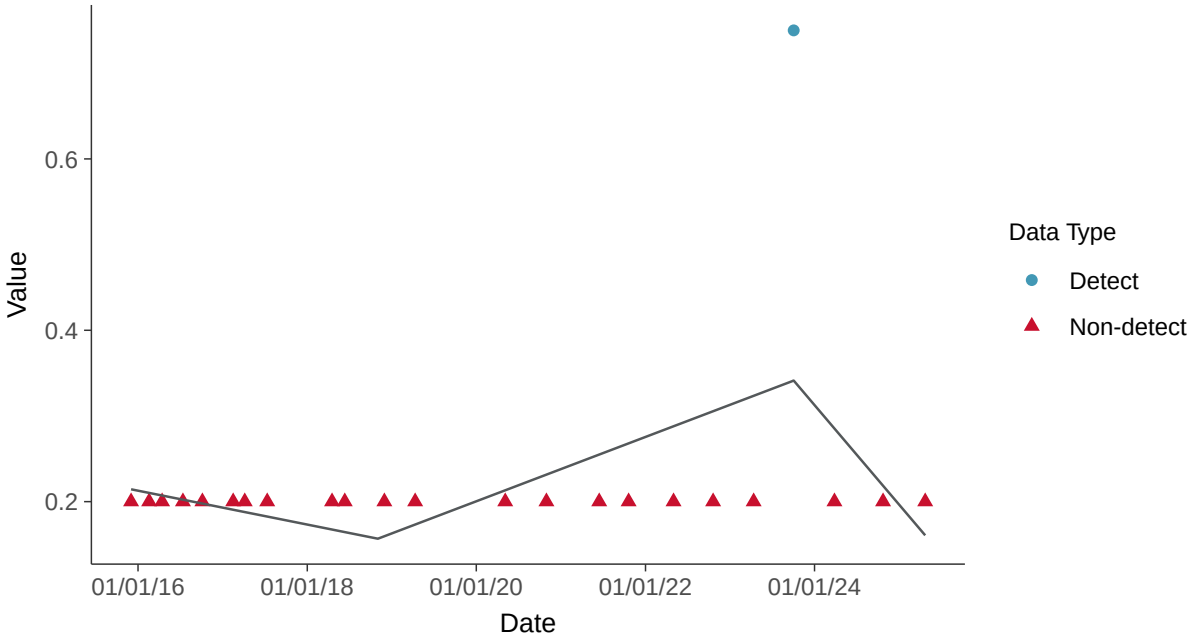
**Trend Regression: Piecewise Linear-Linear**

Mercury, MW-15021 (ug/L)



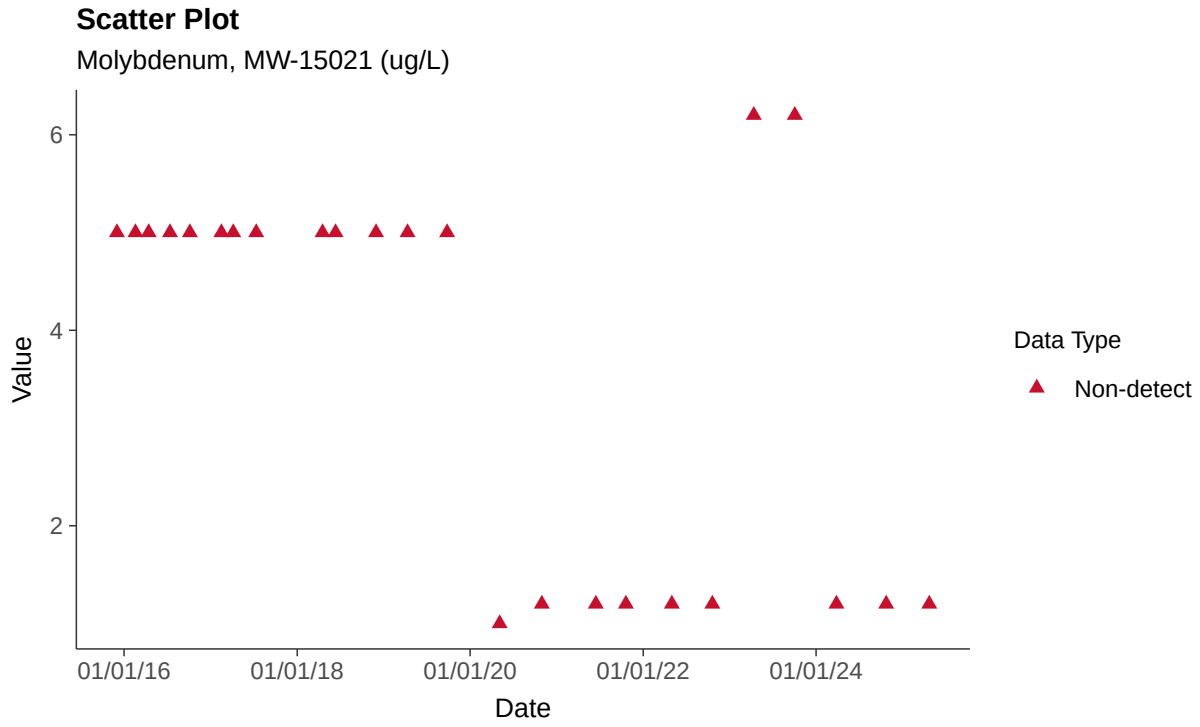

**Trend Regression: Piecewise Linear-Linear-Linear**

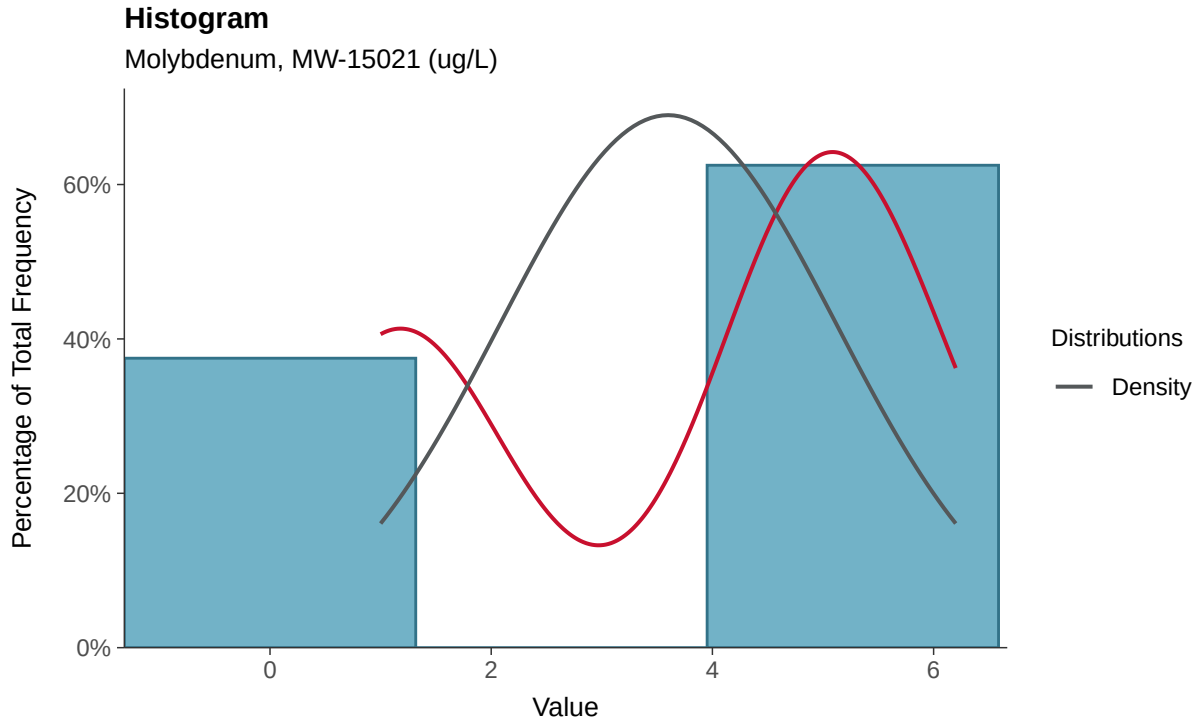
Mercury, MW-15021 (ug/L)



## Appendix IV: Molybdenum, MW-15021

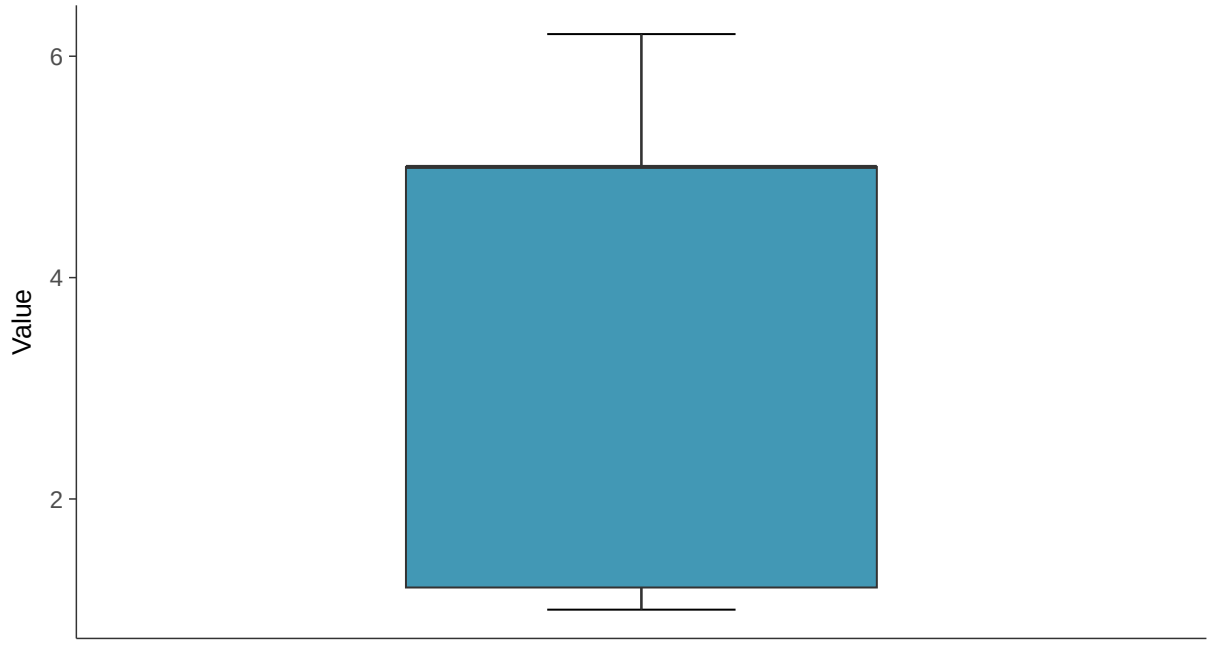
ID: 11_2_119



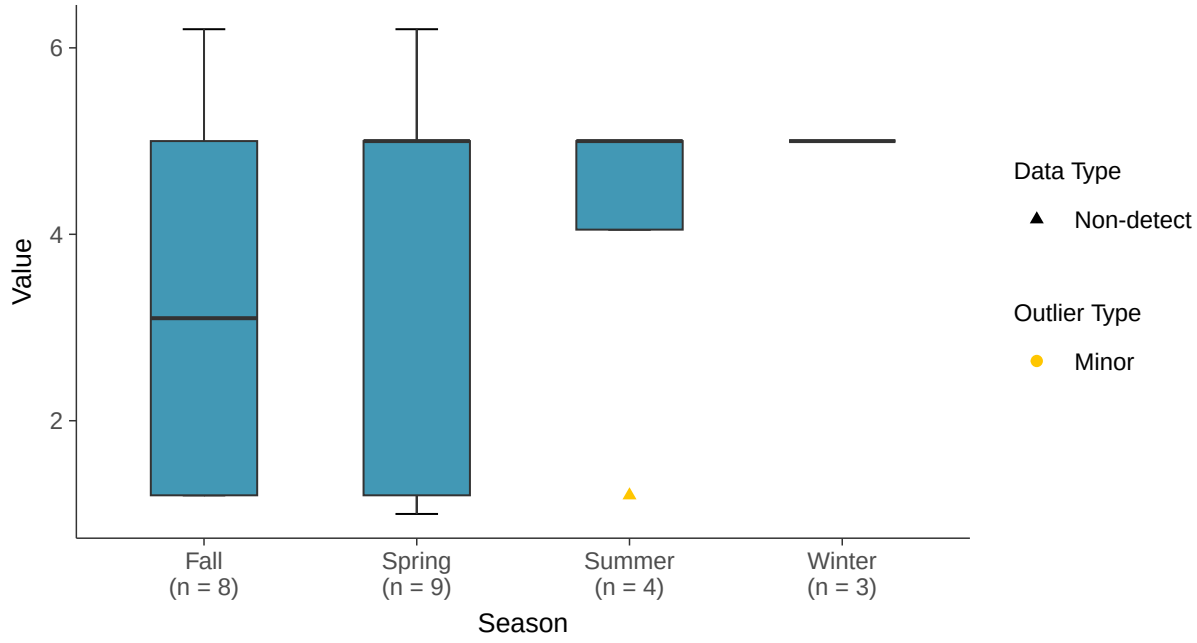
## Boxplot

Molybdenum, MW-15021 (ug/L)



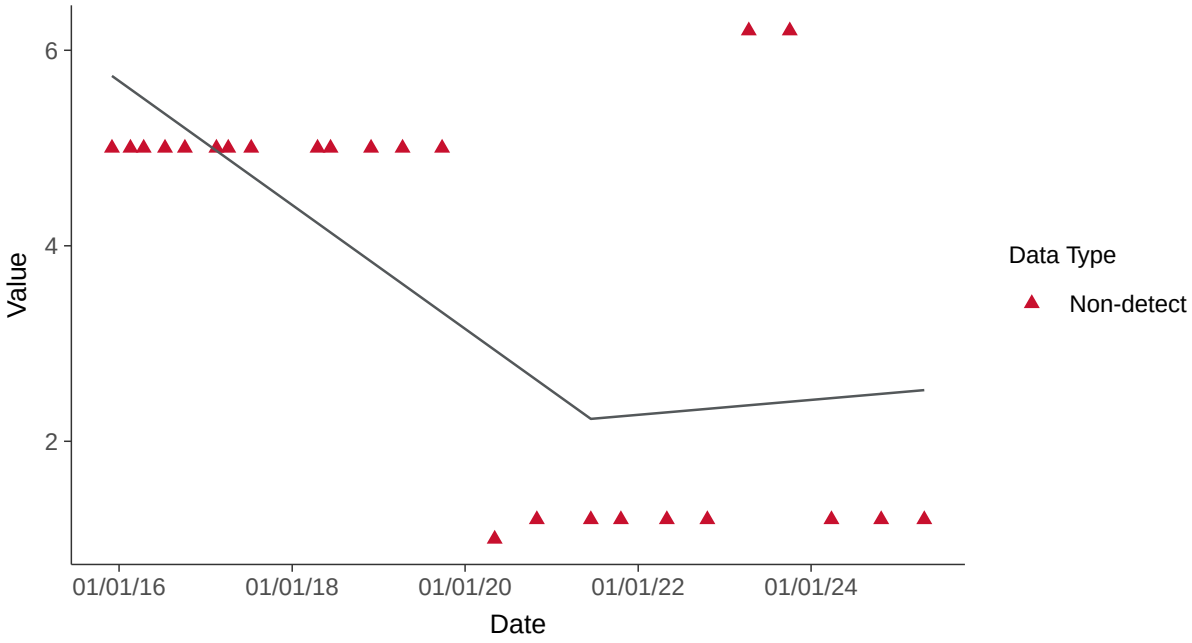

## Boxplot by Season

Molybdenum, MW-15021 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15021 (ug/L)

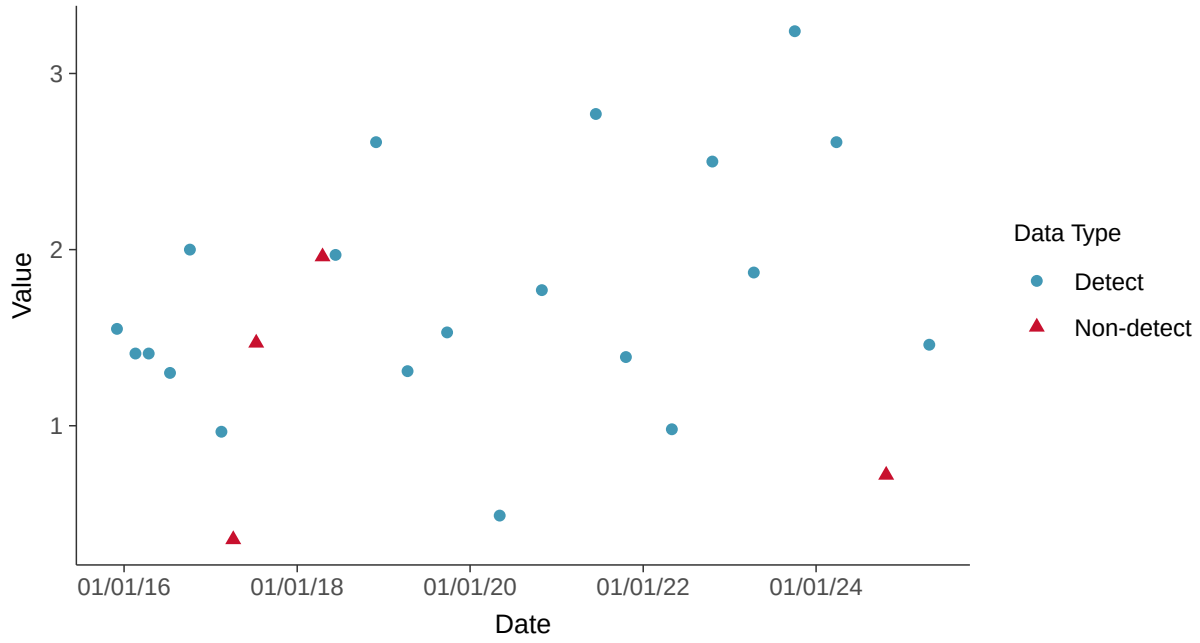


## Appendix IV: Radium-226+228, MW-15021

ID: 11_2_125

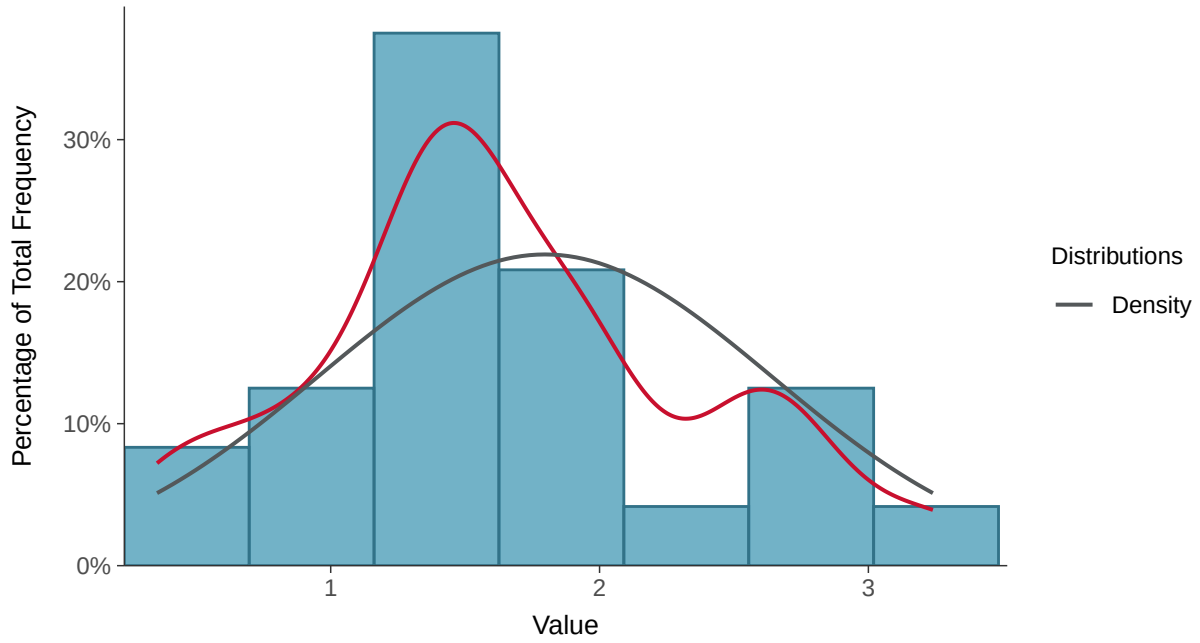
**Scatter Plot**

Radium-226+228, MW-15021 (pCi/L)



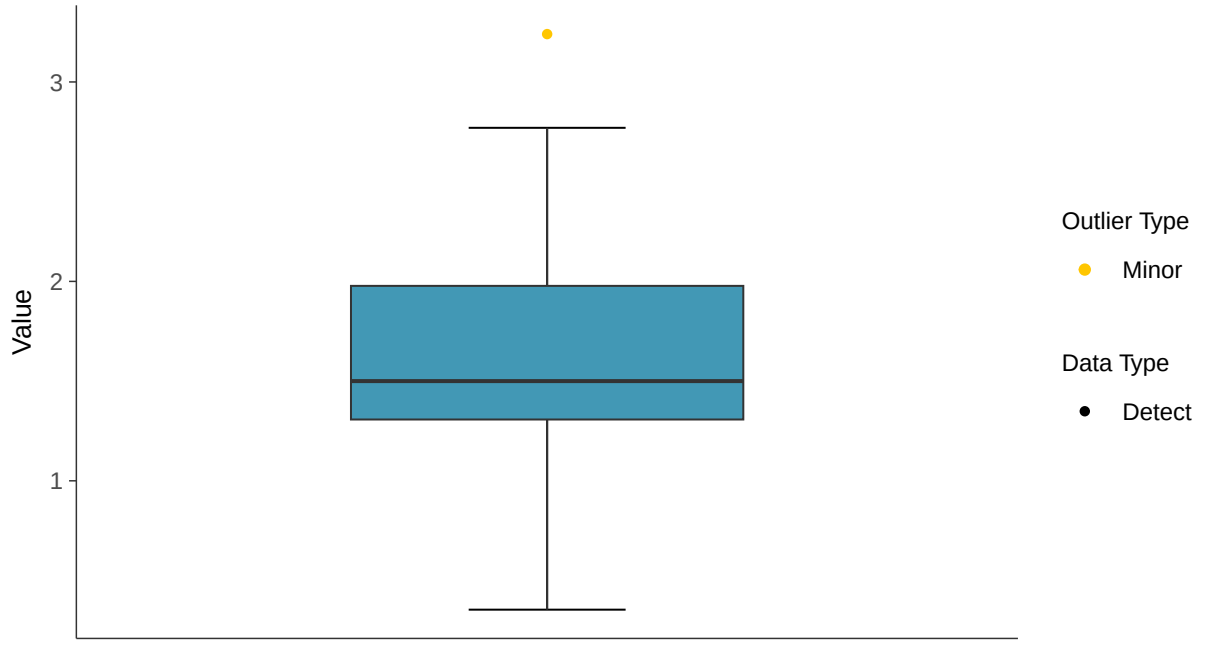

**Histogram**

Radium-226+228, MW-15021 (pCi/L)



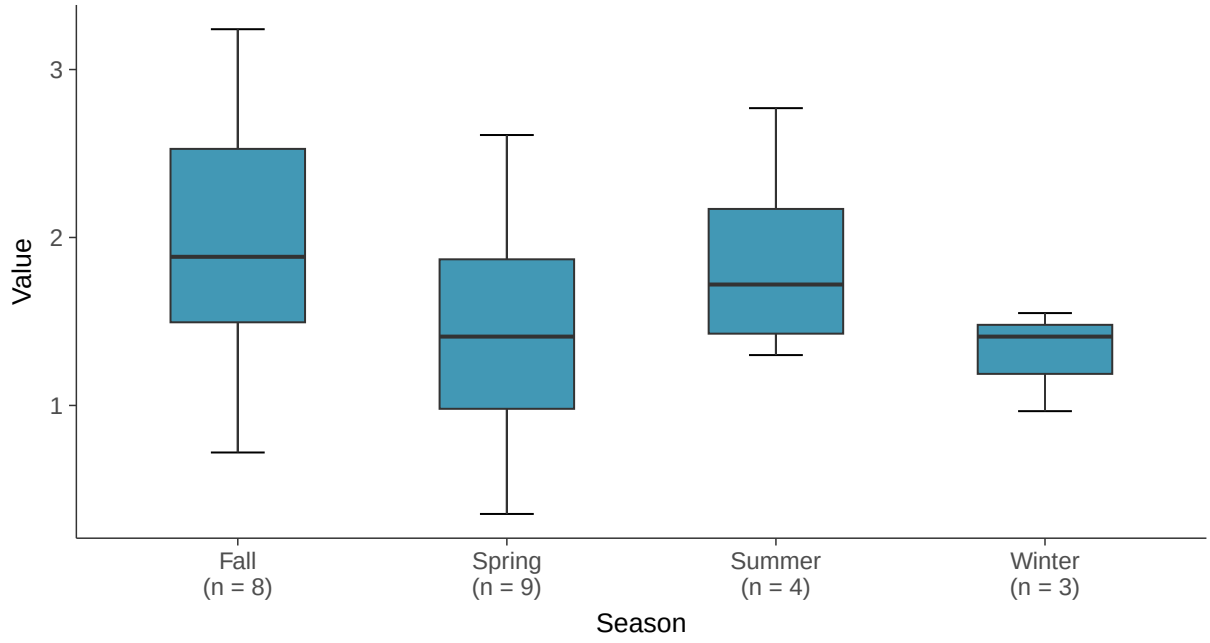
## Boxplot

Radium-226+228, MW-15021 (pCi/L)



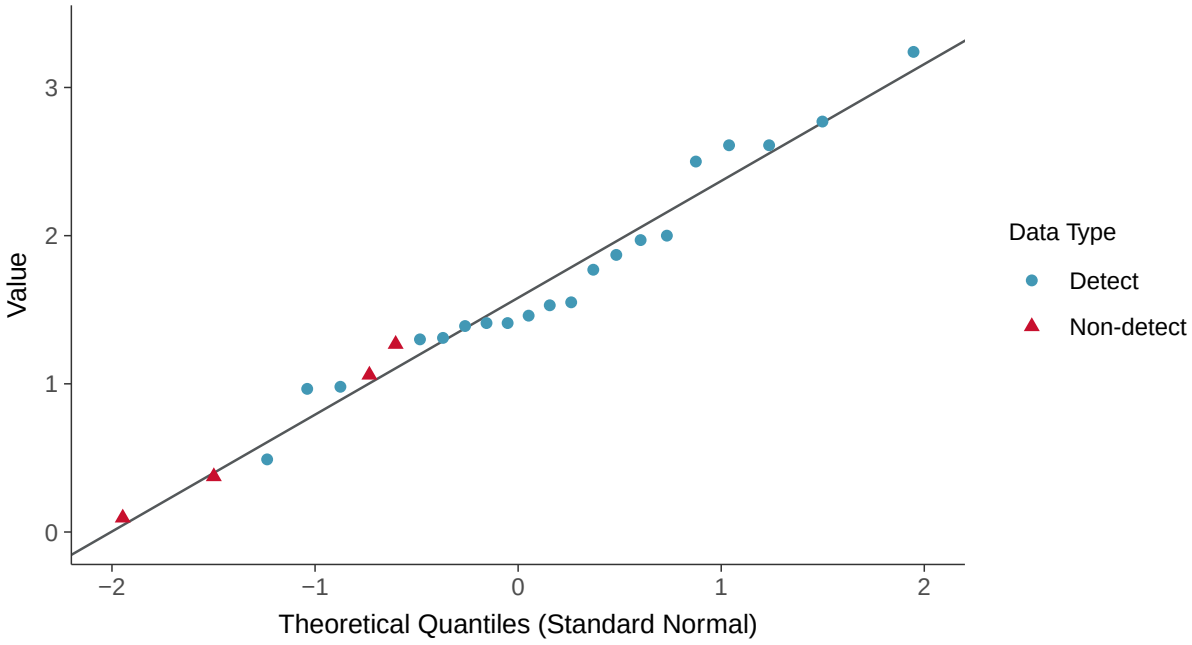

## Boxplot by Season

Radium-226+228, MW-15021 (pCi/L)



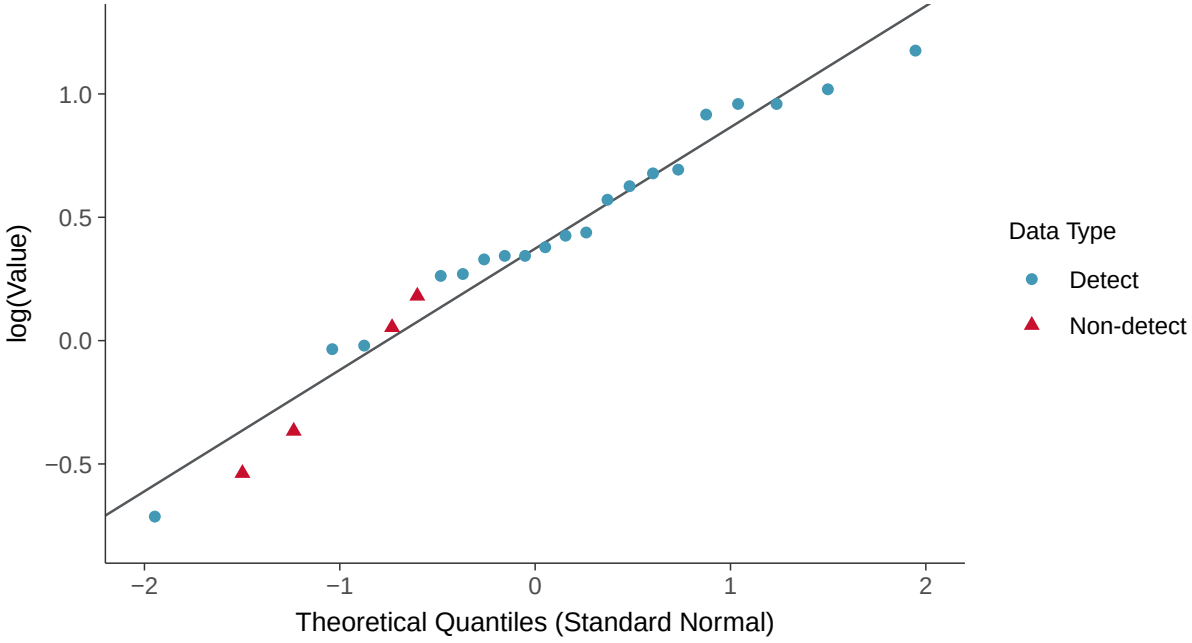
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15021 (pCi/L)



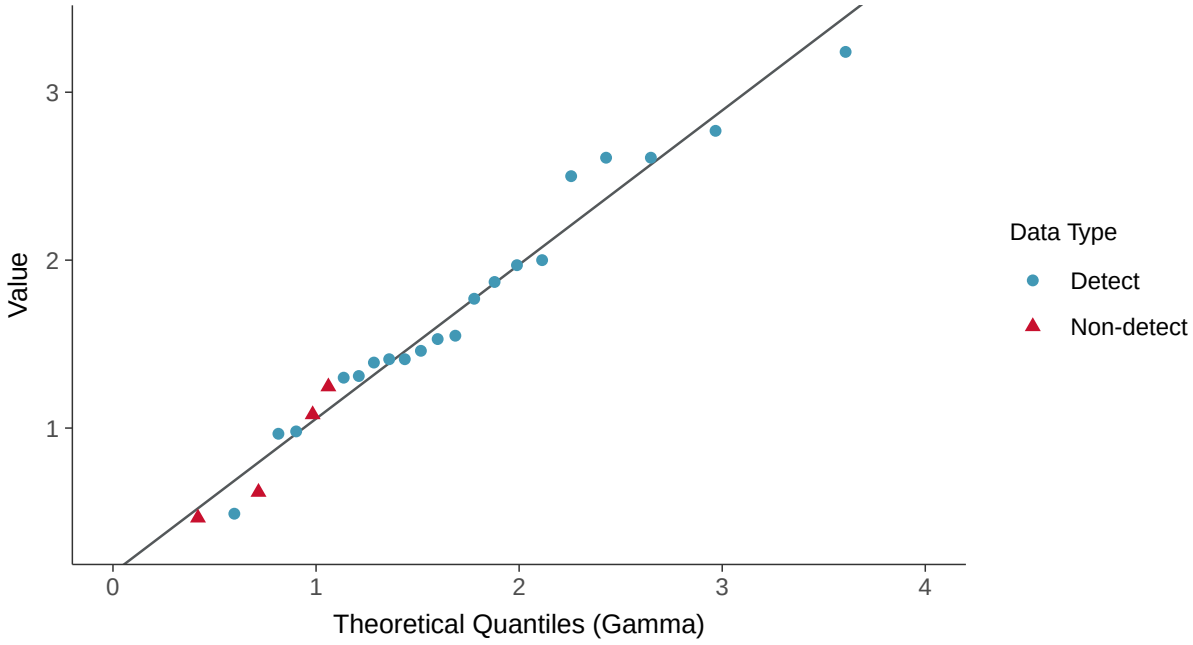

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15021 (pCi/L)



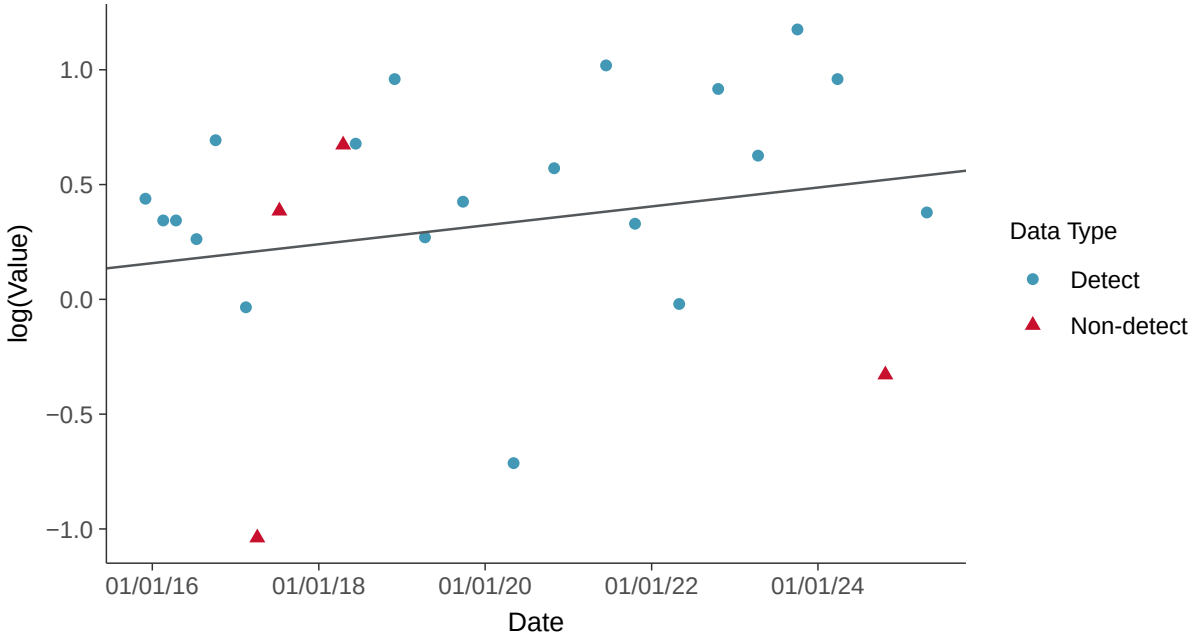
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15021 (pCi/L)



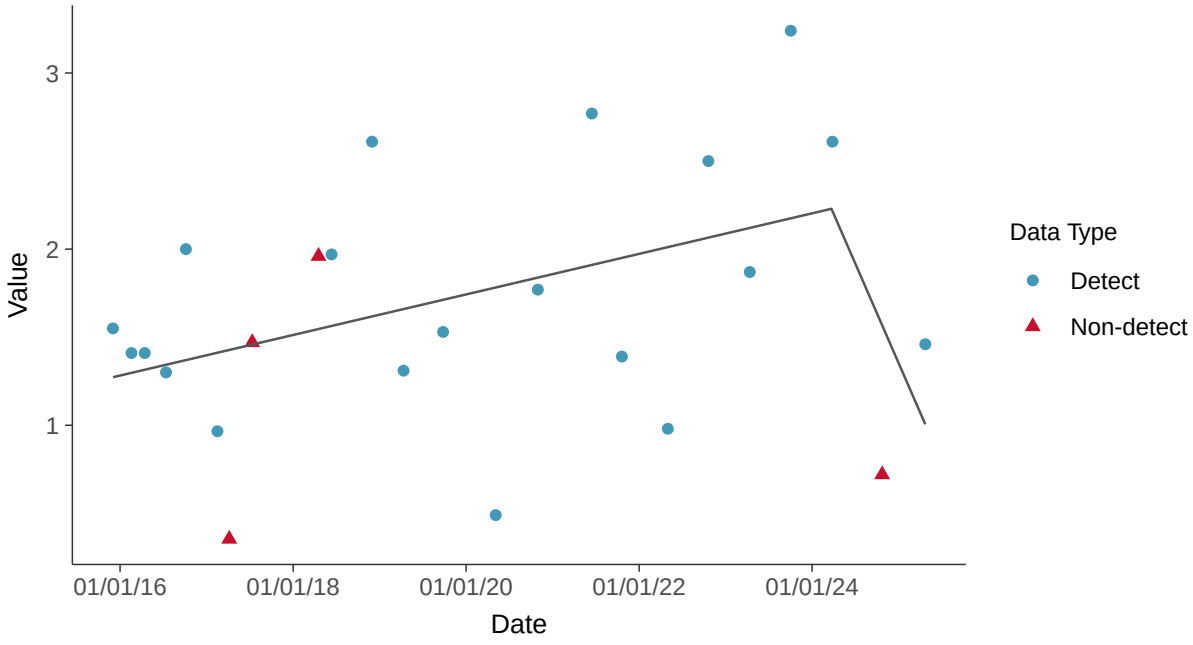

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15021 (pCi/L)



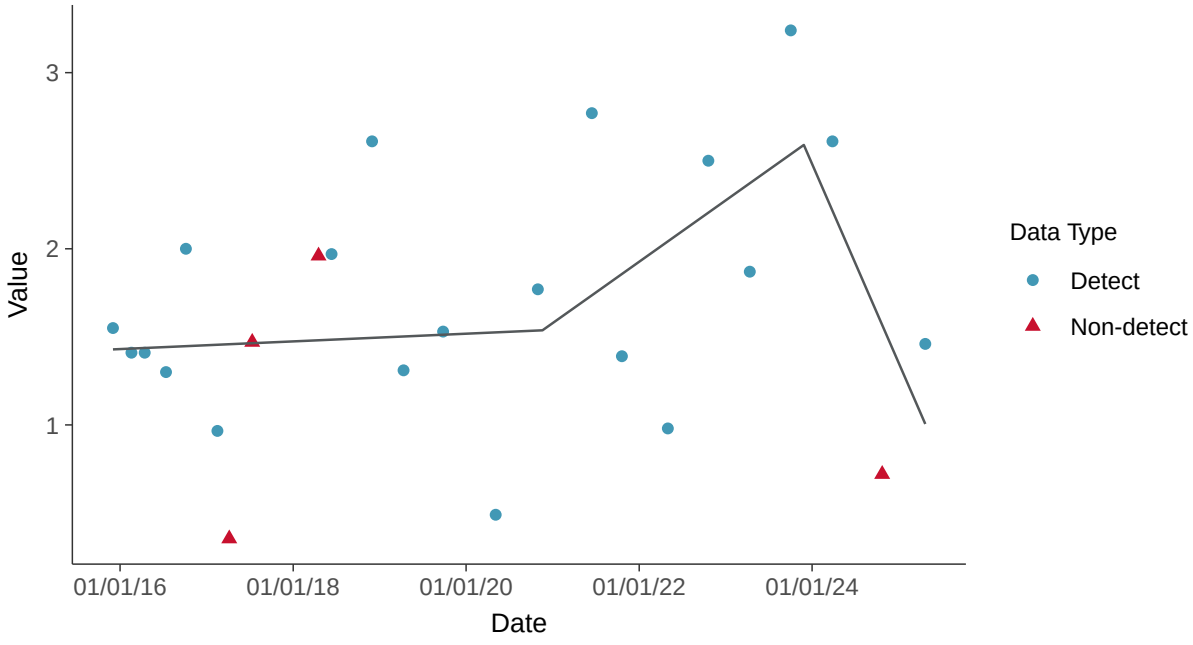
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15021 (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15021 (pCi/L)

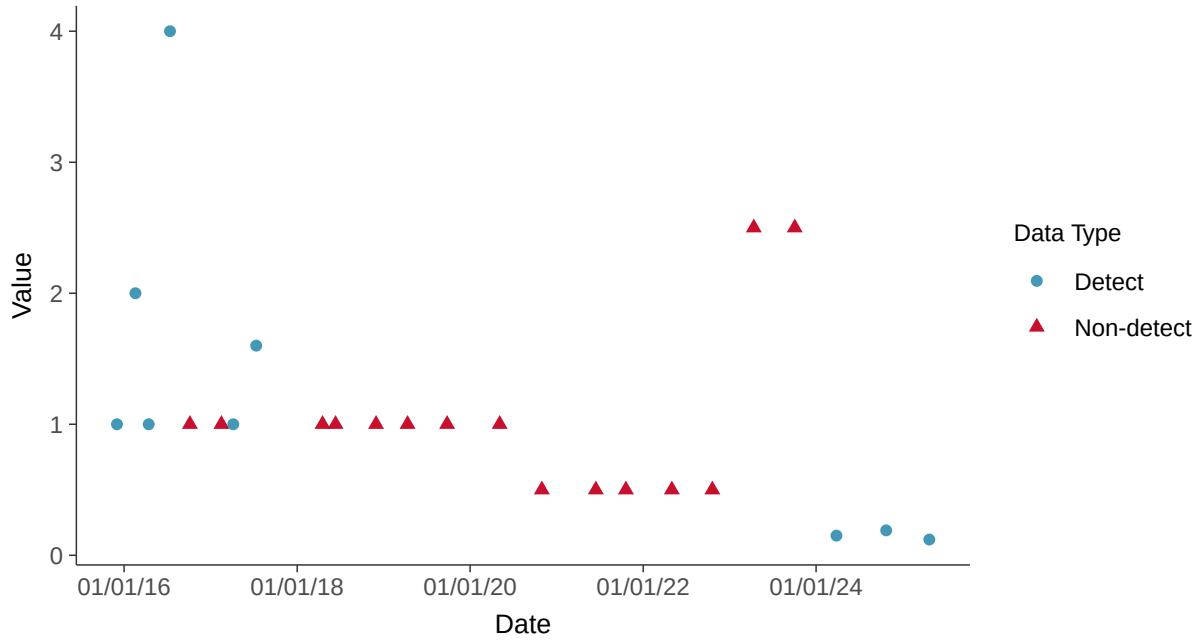


## Appendix IV: Selenium, MW-15021

ID: 11_2_127

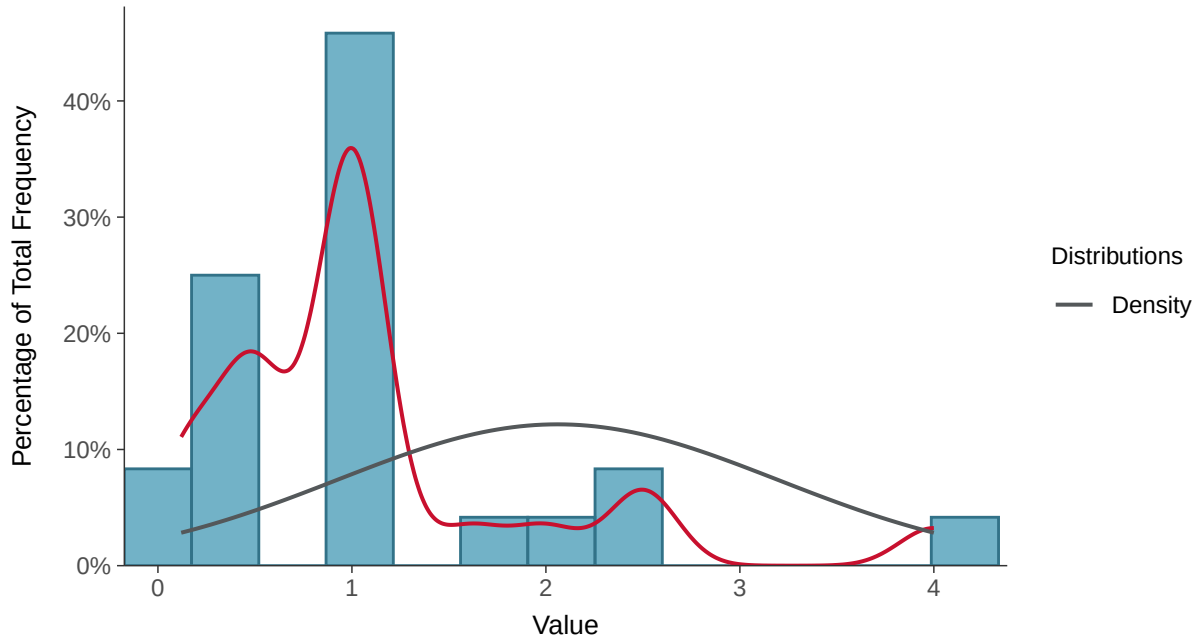
**Scatter Plot**

Selenium, MW-15021 (ug/L)



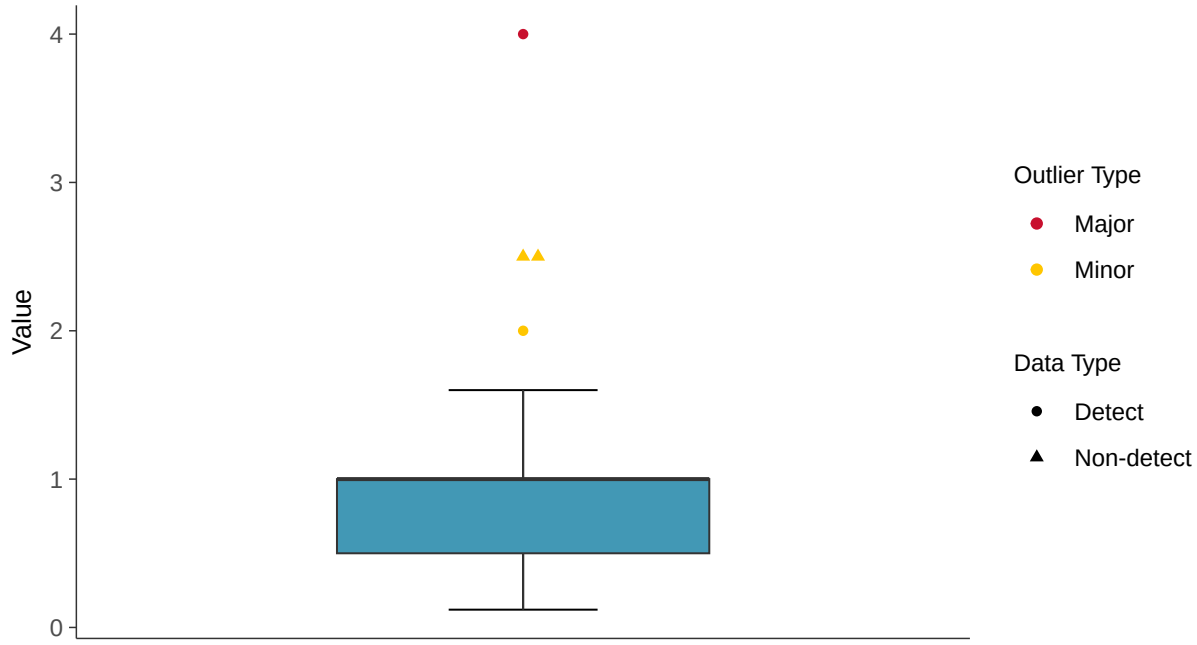

**Histogram**

Selenium, MW-15021 (ug/L)



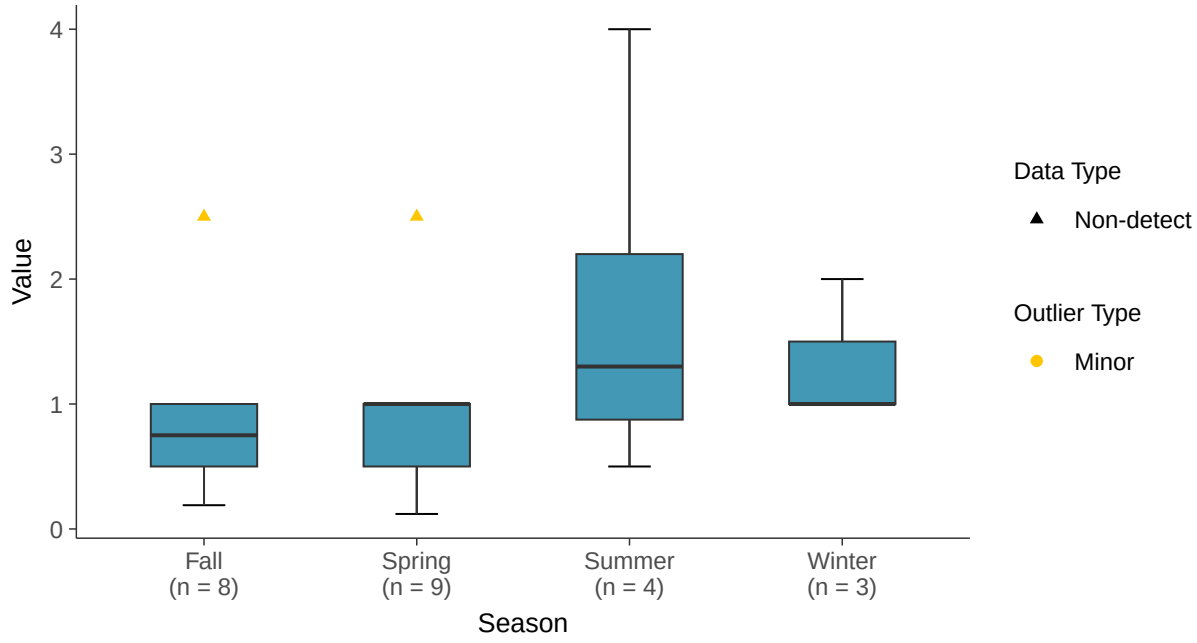
## Boxplot

Selenium, MW-15021 (ug/L)



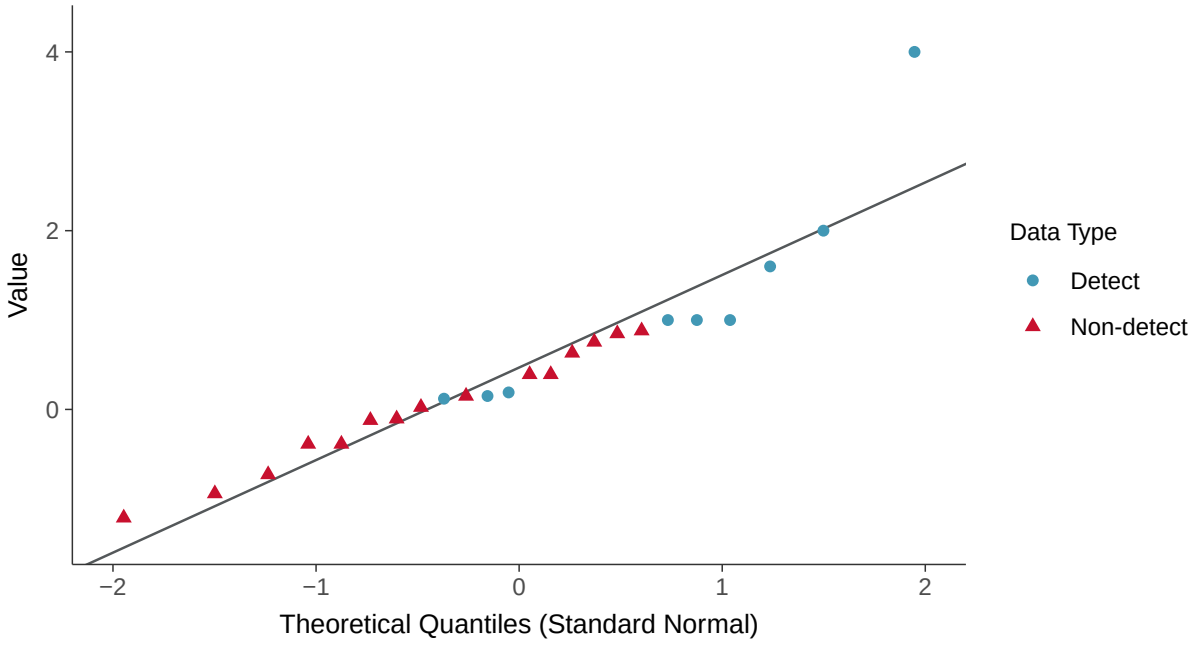

## Boxplot by Season

Selenium, MW-15021 (ug/L)



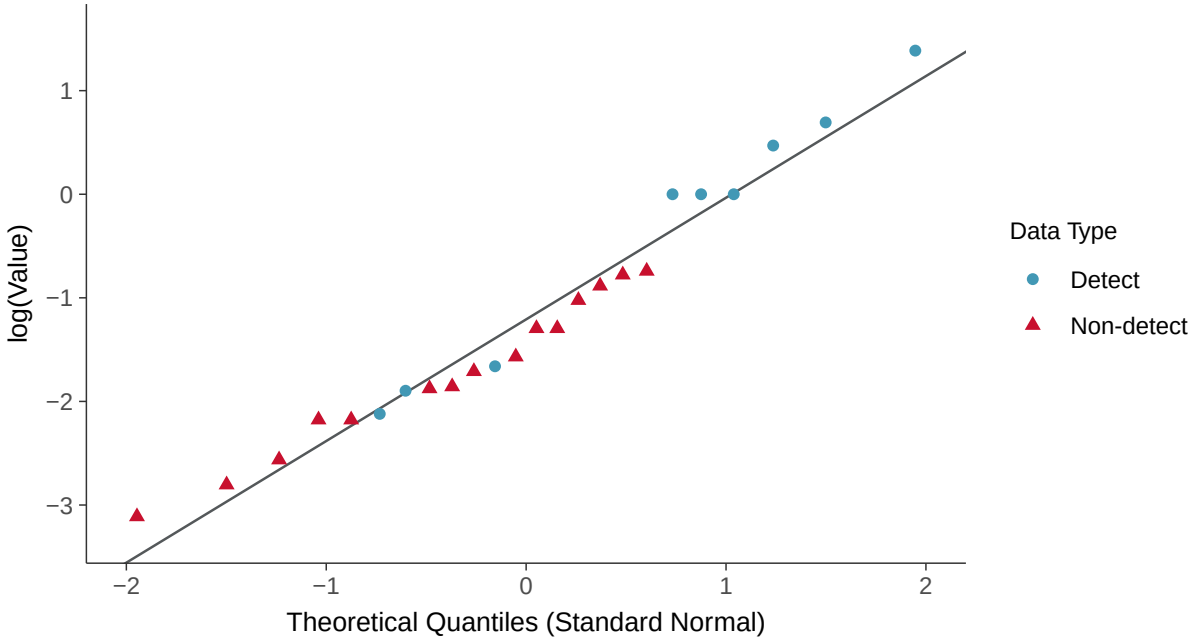
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15021 (ug/L)



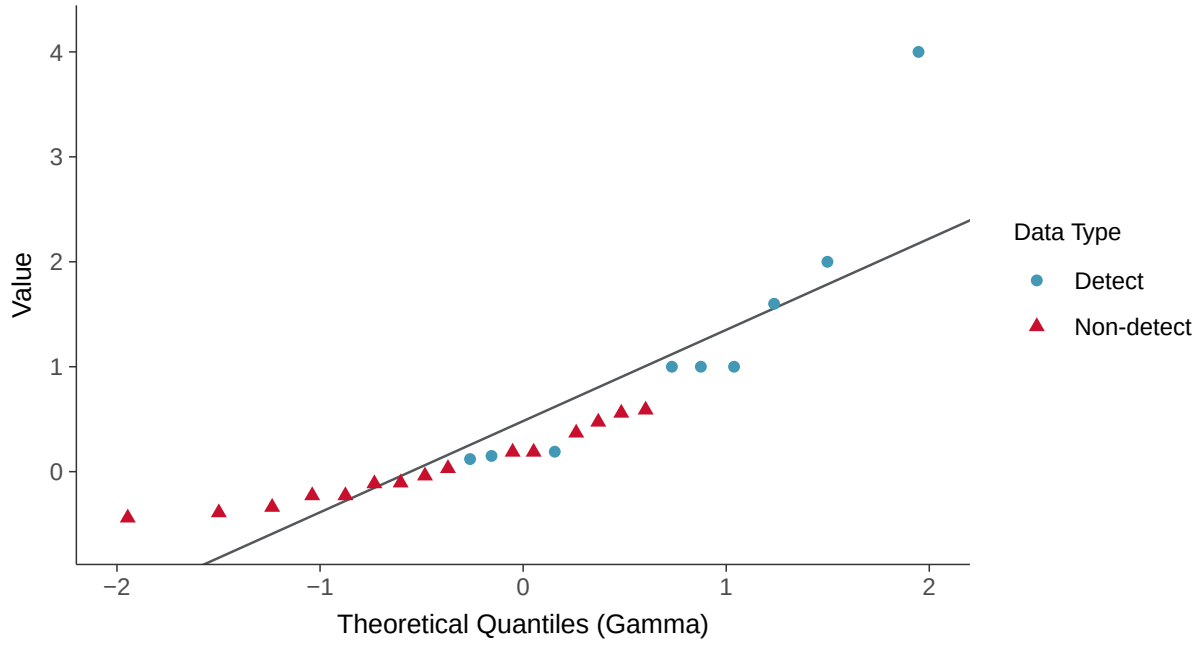

**Lognormal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15021 (ug/L)



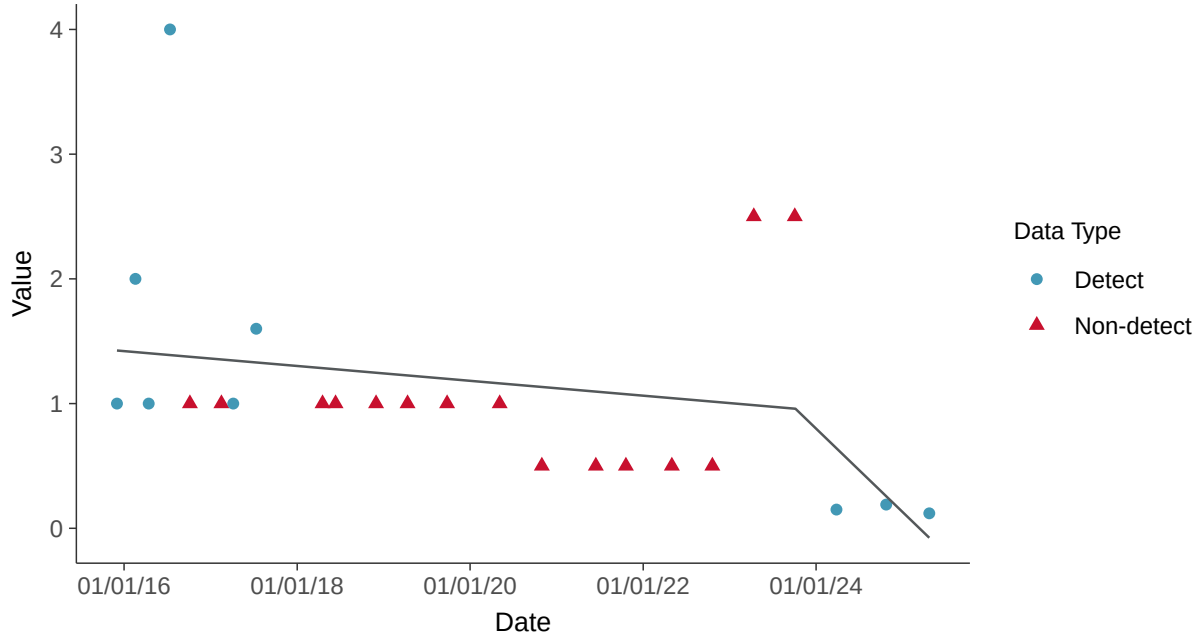
**Gamma Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15021 (ug/L)



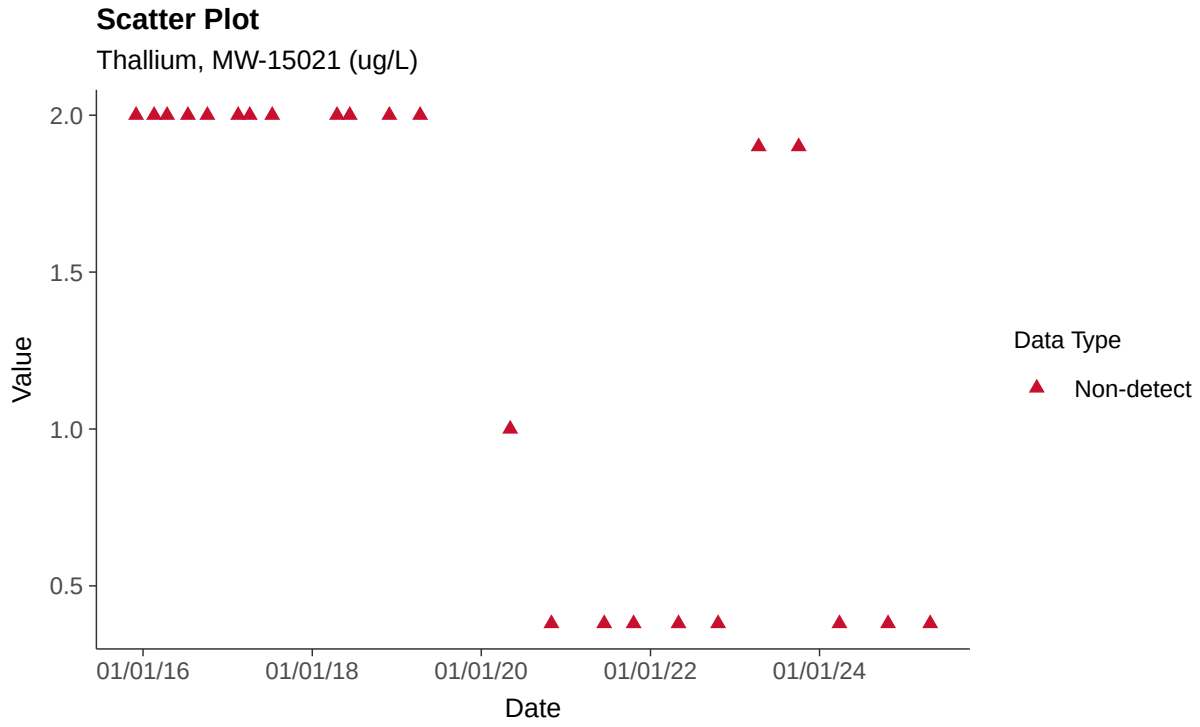

**Trend Regression: Piecewise Linear-Linear**

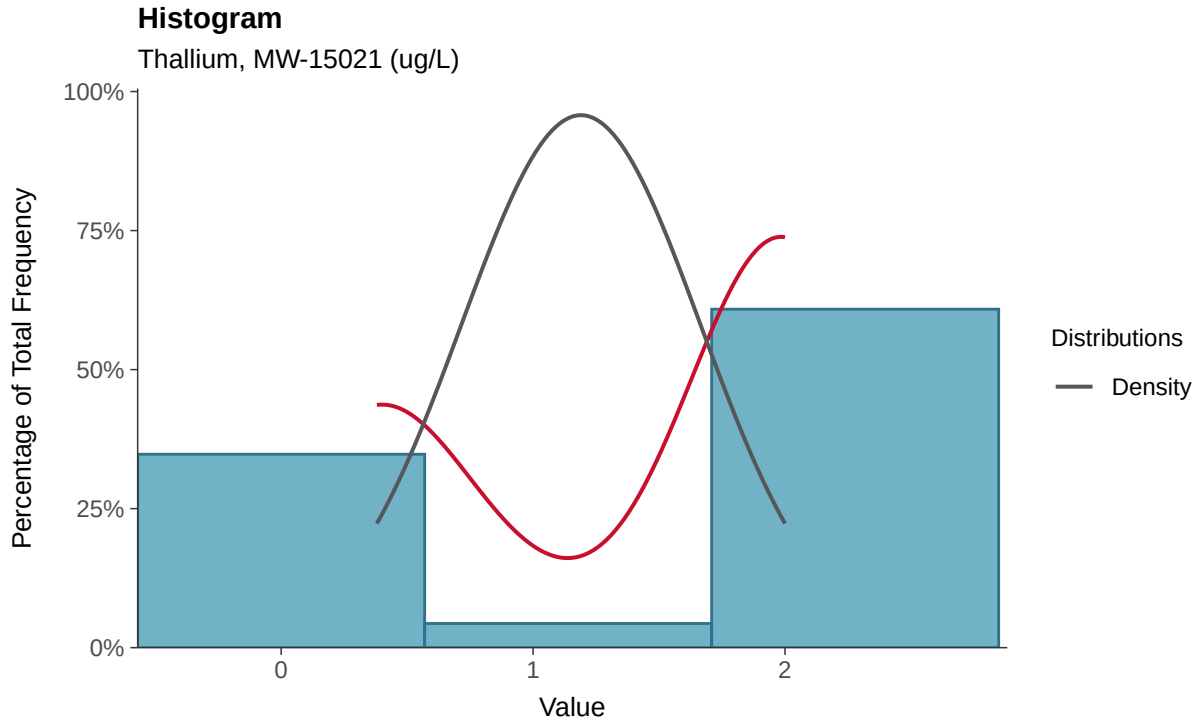
Selenium, MW-15021 (ug/L)



## Appendix IV: Thallium, MW-15021

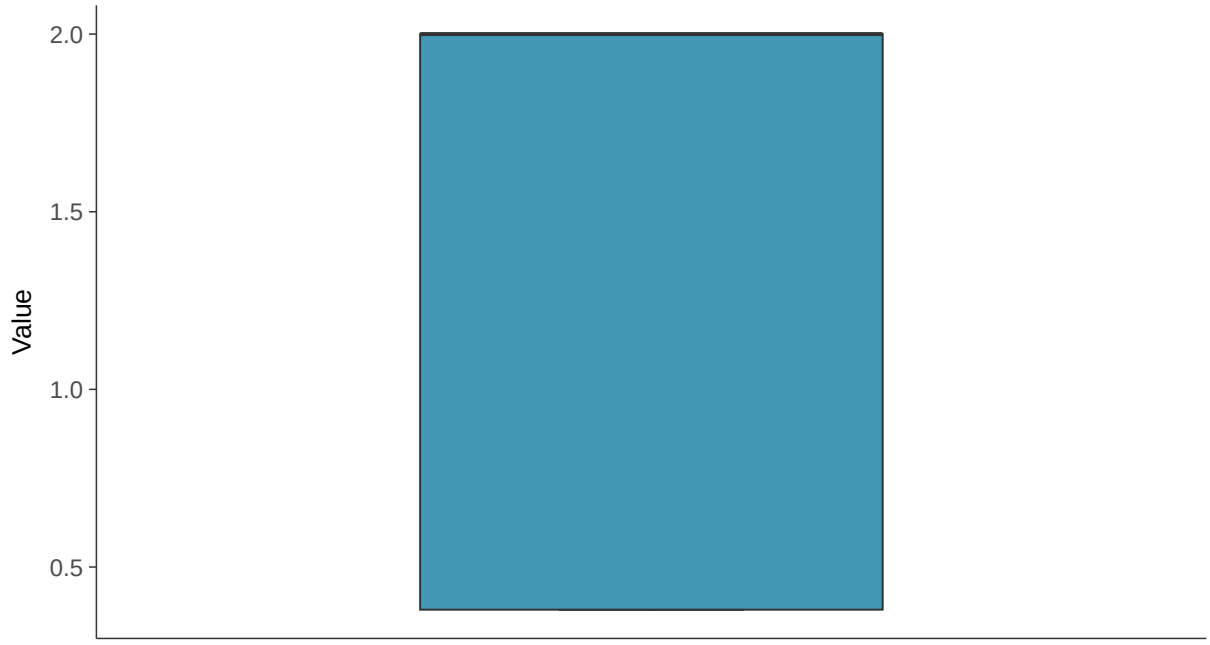
ID: 11_2_131



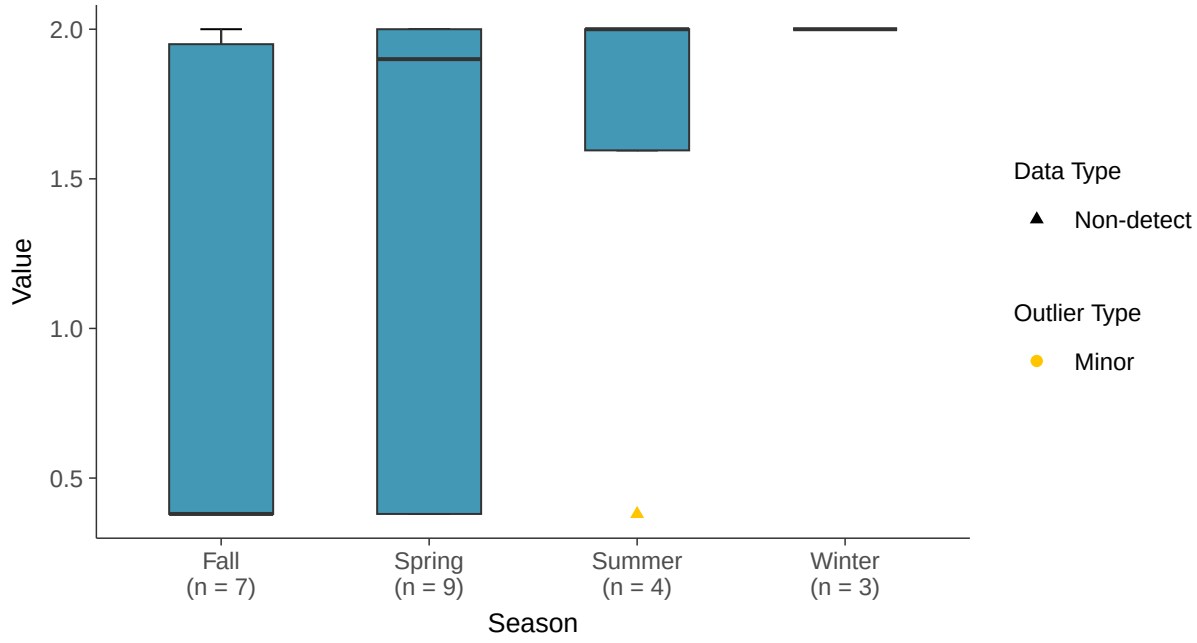
**Boxplot**

Thallium, MW-15021 (ug/L)



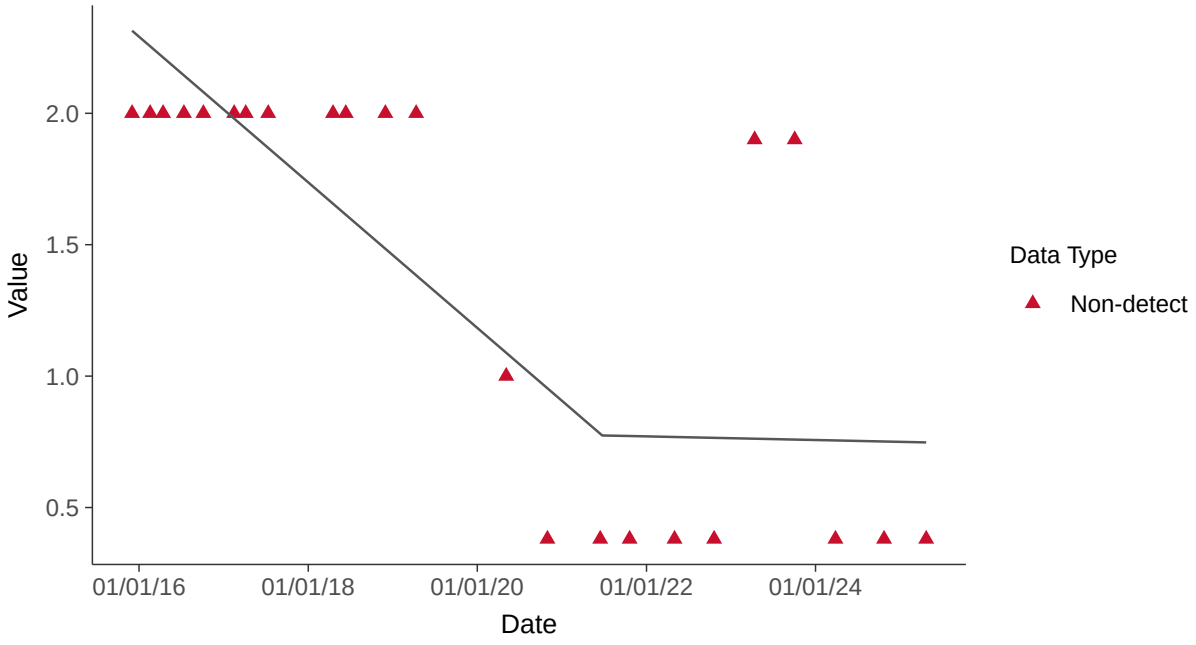

**Boxplot by Season**

Thallium, MW-15021 (ug/L)



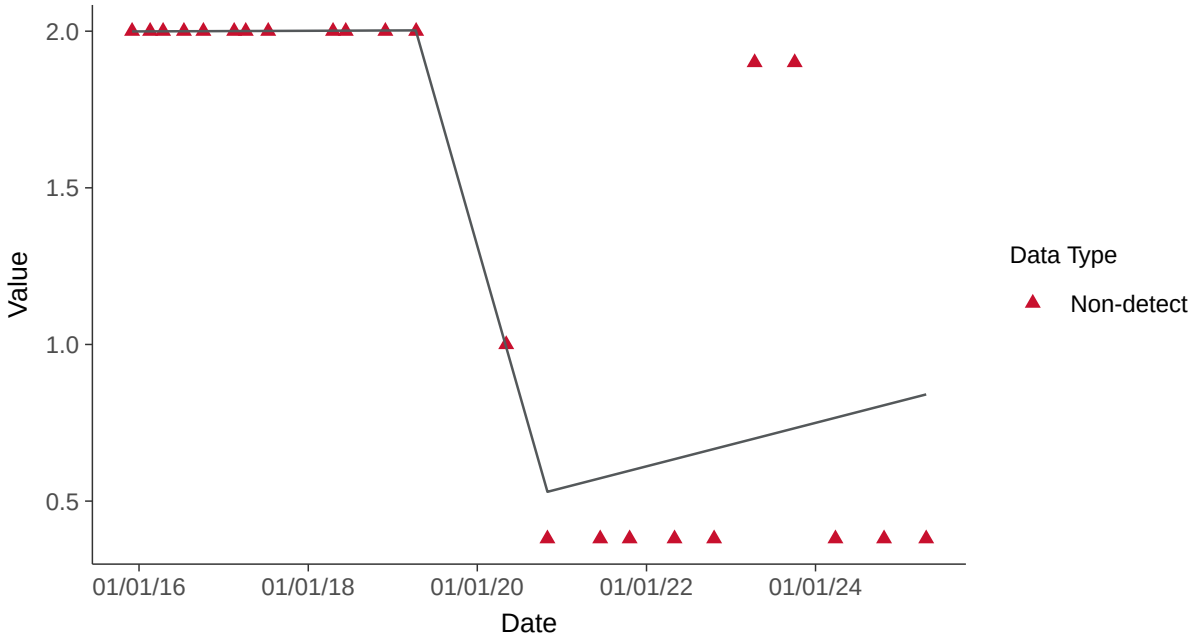
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15021 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Thallium, MW-15021 (ug/L)

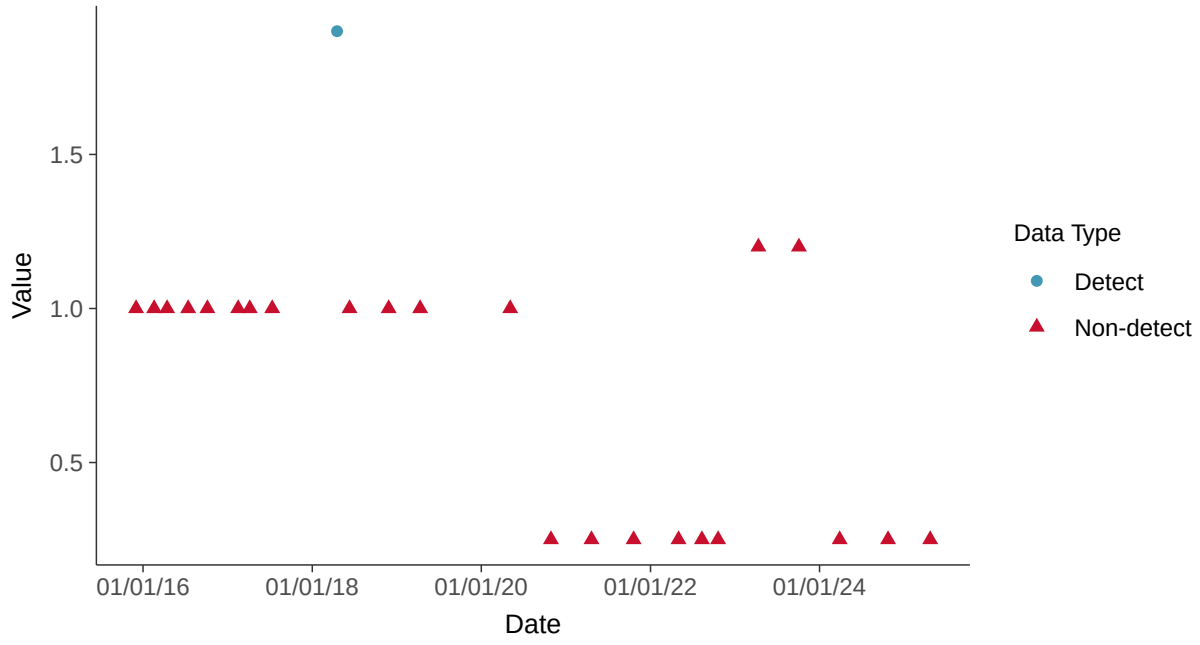


## Appendix IV: Antimony, MW-15022

ID: 12_2_101

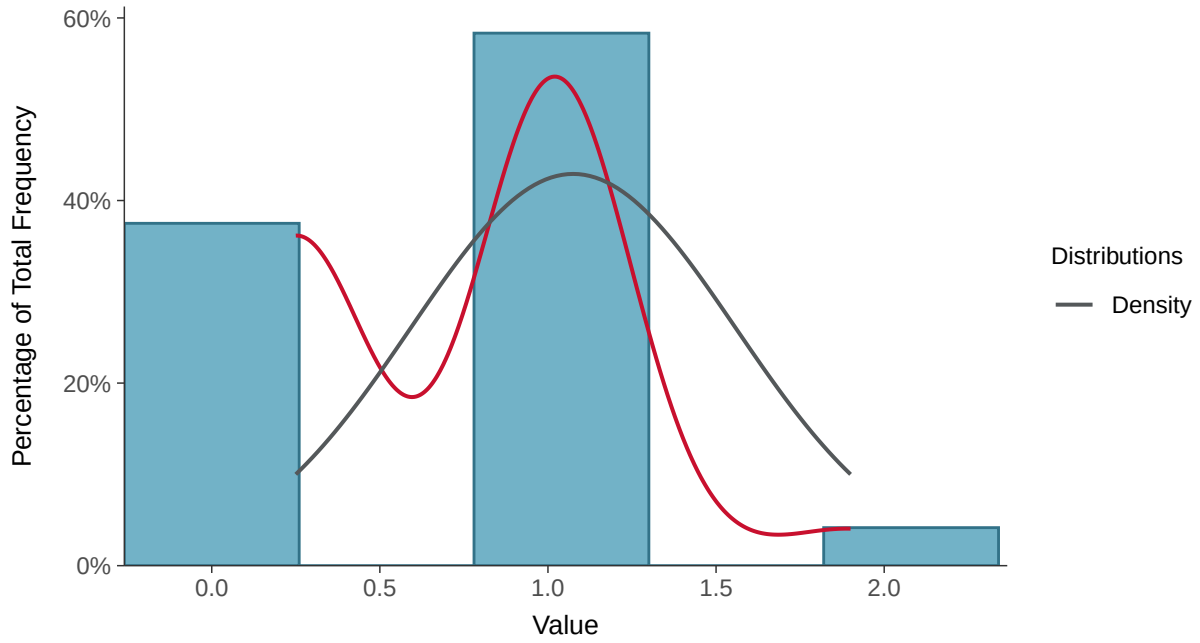
**Scatter Plot**

Antimony, MW-15022 (ug/L)



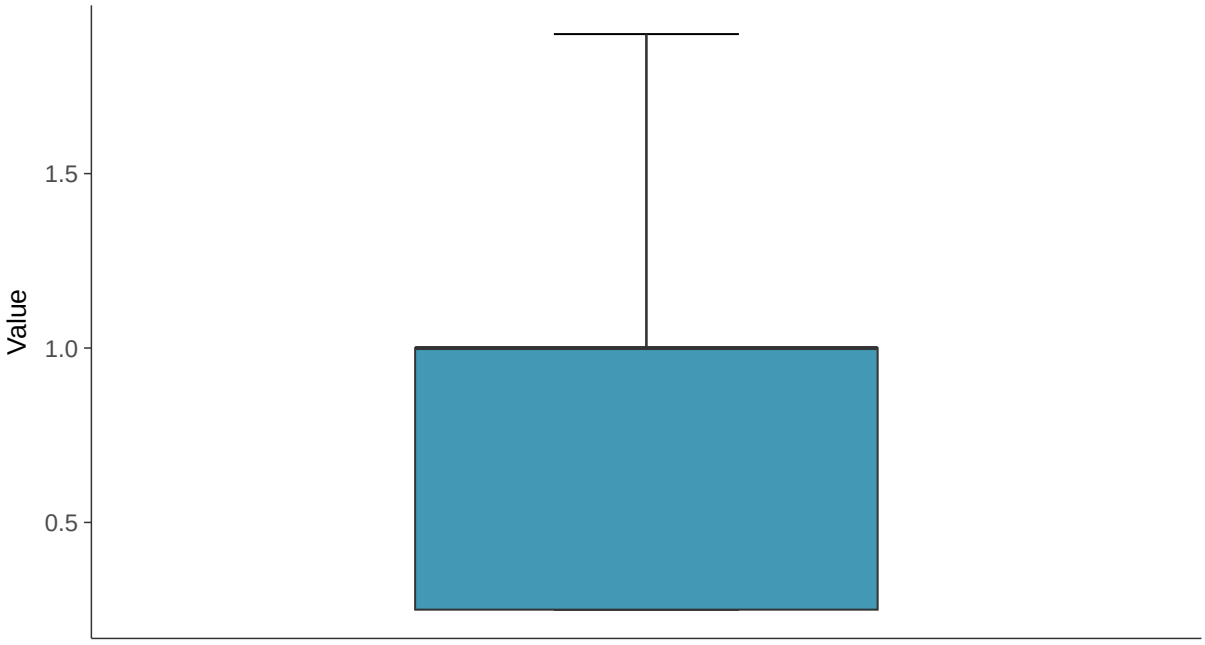

**Histogram**

Antimony, MW-15022 (ug/L)



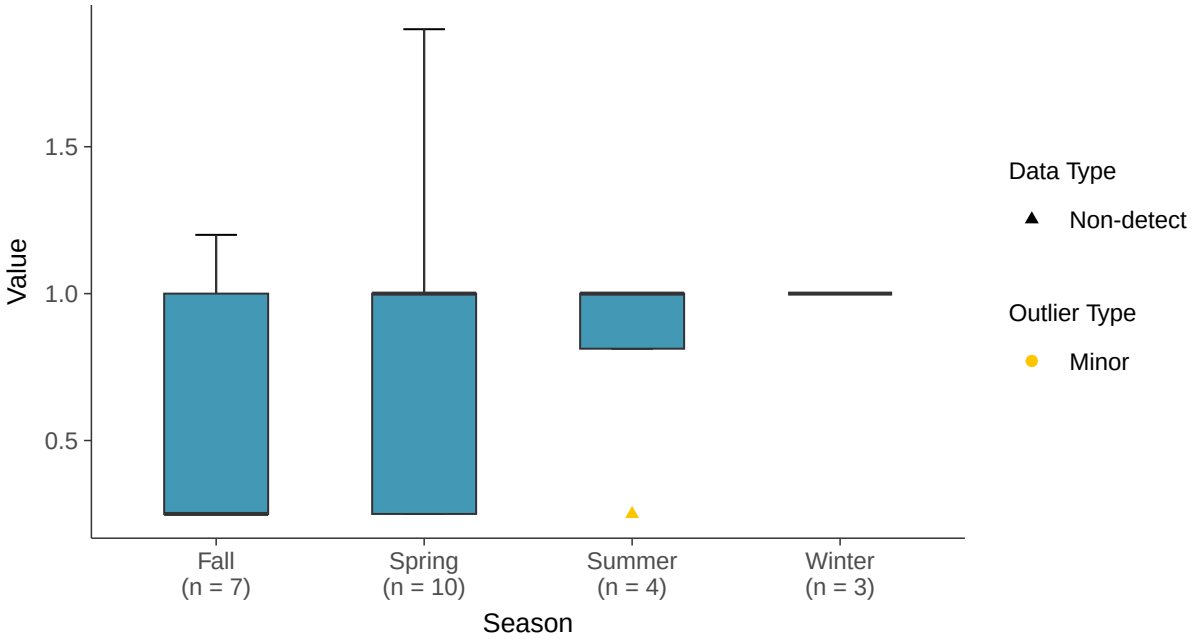
**Boxplot**

Antimony, MW-15022 (ug/L)



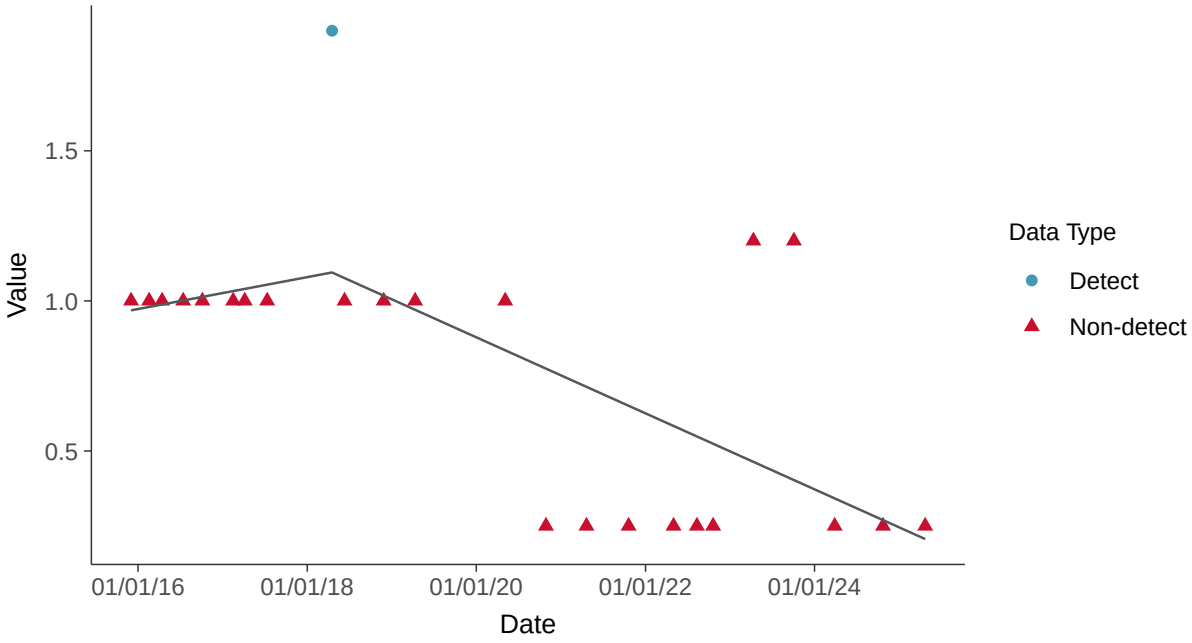

**Boxplot by Season**

Antimony, MW-15022 (ug/L)



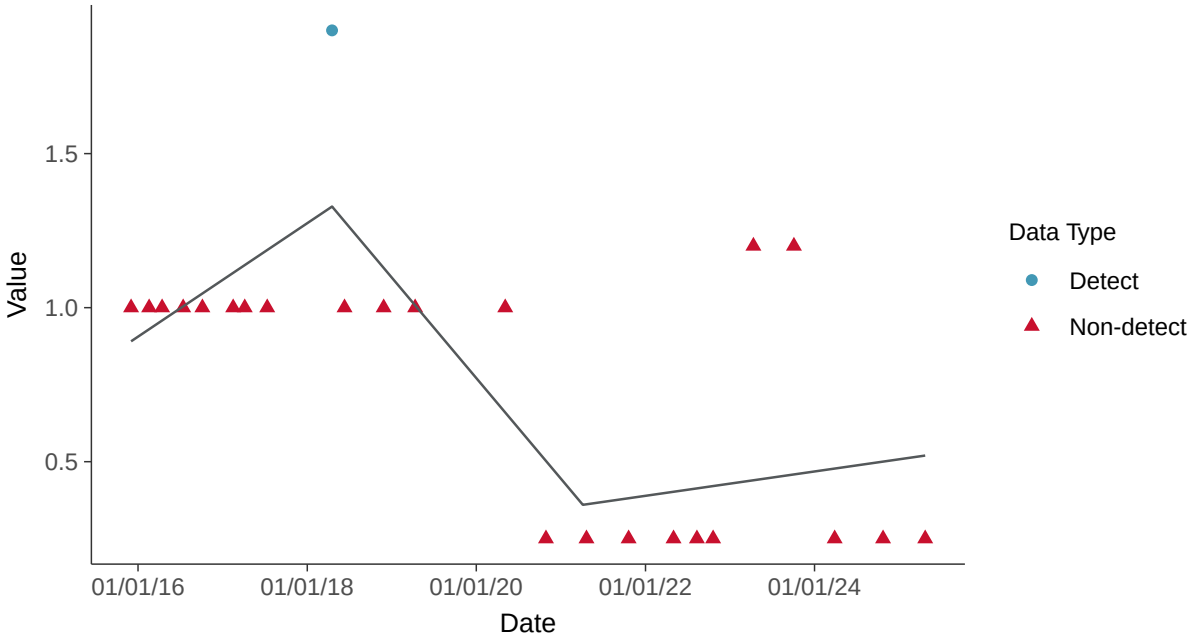
**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15022 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Antimony, MW-15022 (ug/L)

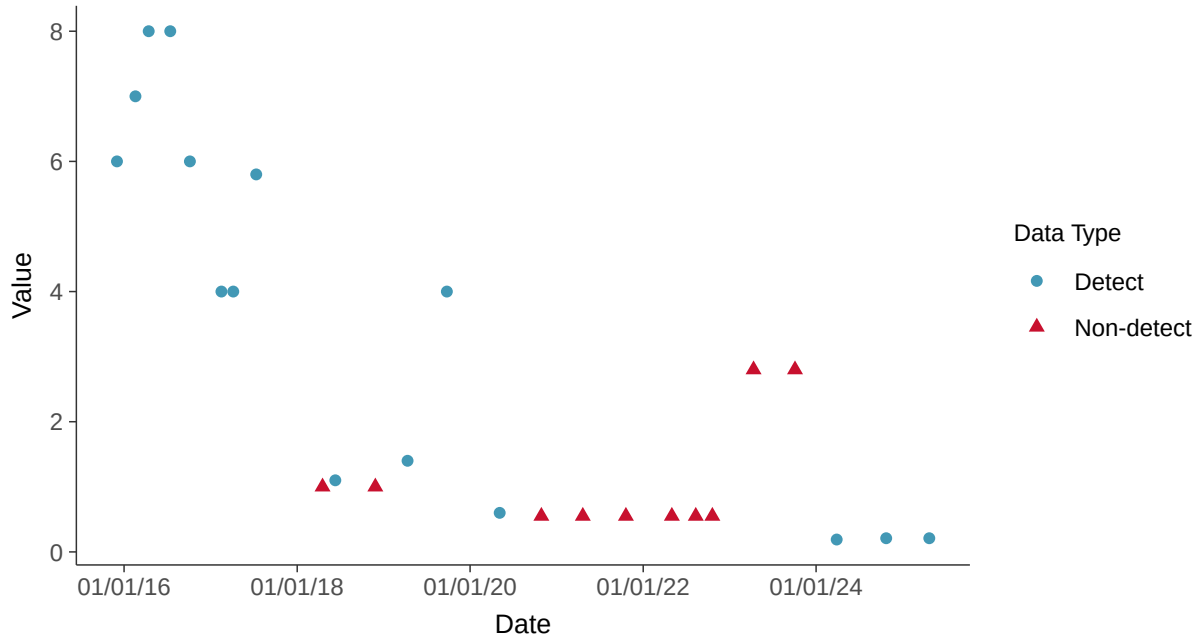


## Appendix IV: Arsenic, MW-15022

ID: 12_2_102

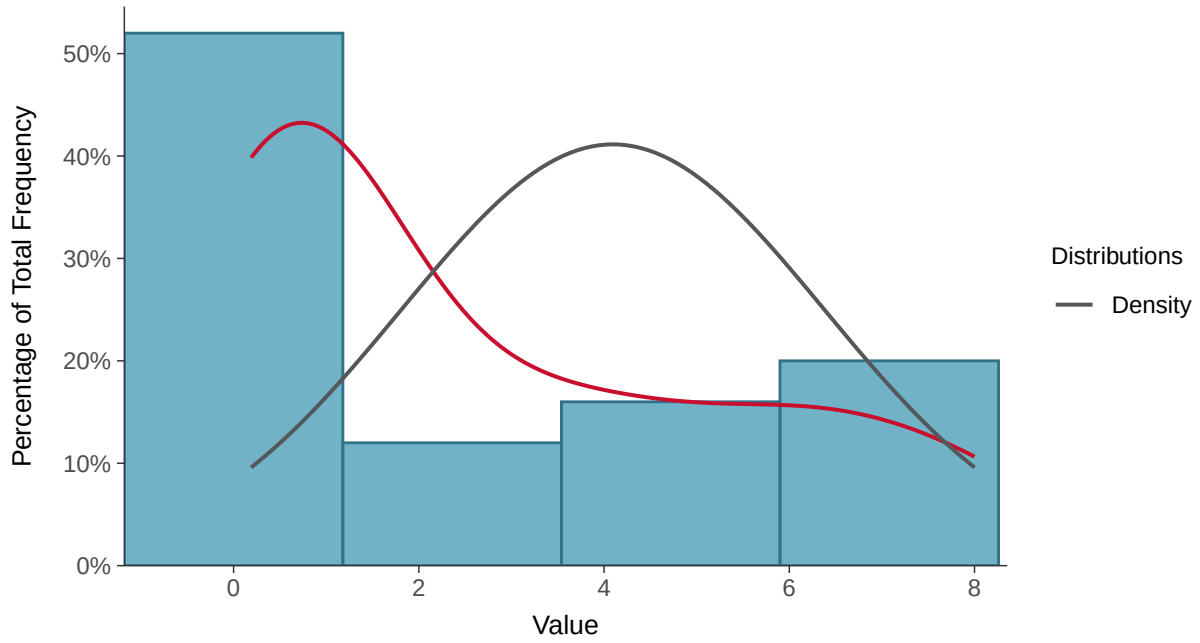
**Scatter Plot**

Arsenic, MW-15022 (ug/L)



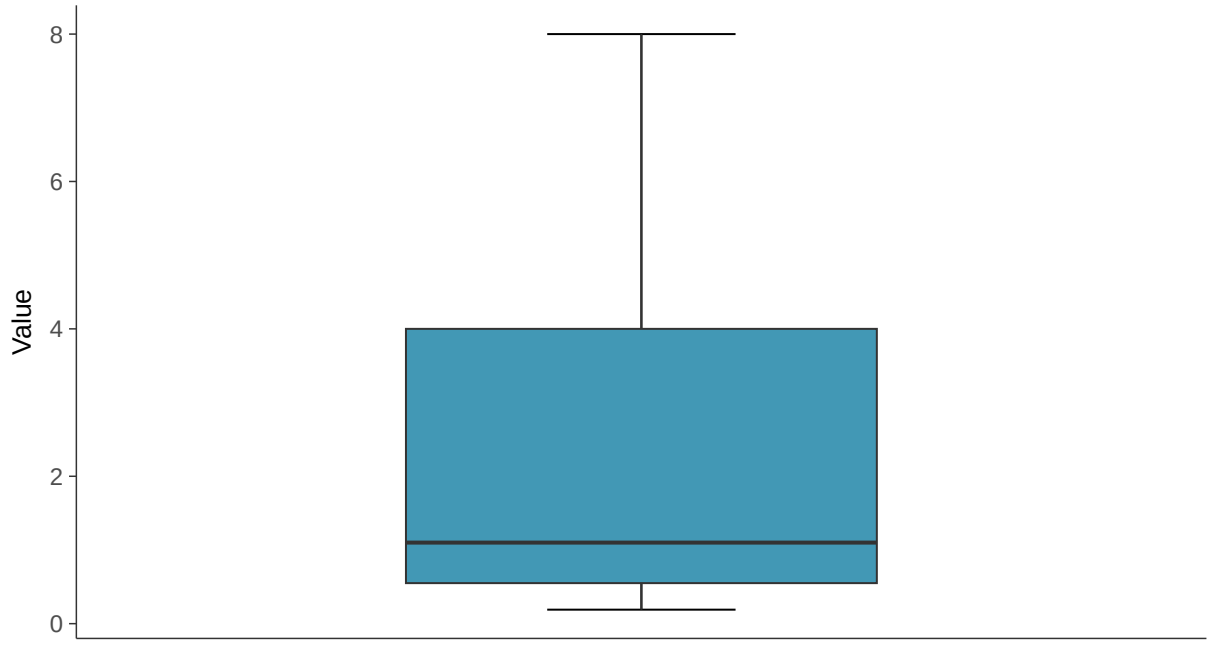

**Histogram**

Arsenic, MW-15022 (ug/L)



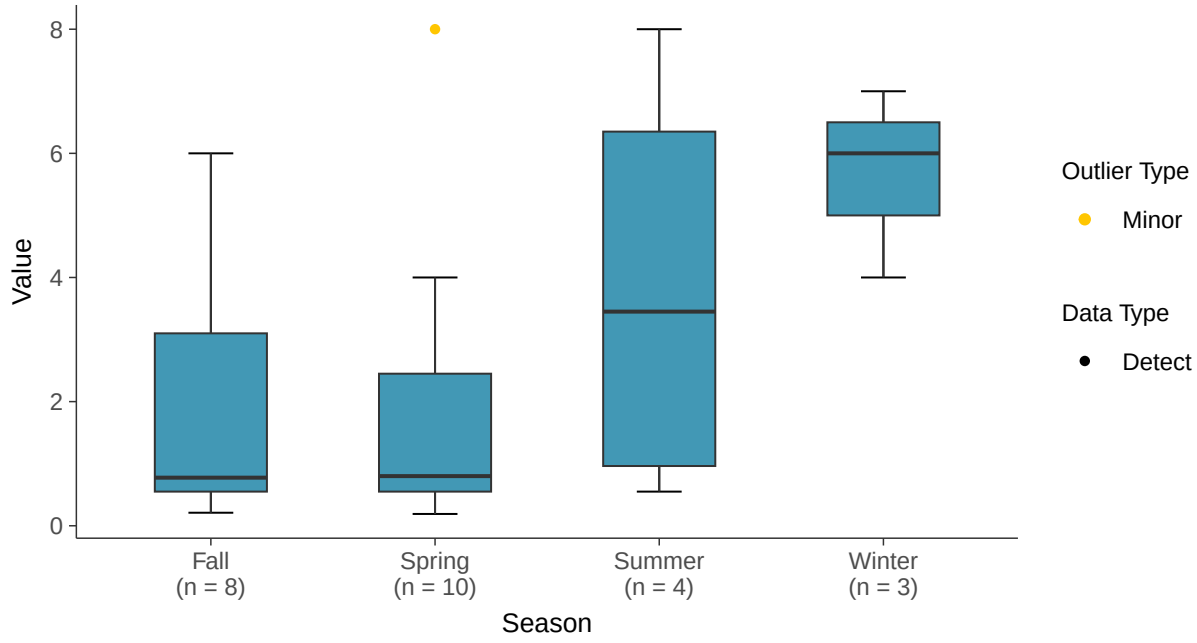
**Boxplot**

Arsenic, MW-15022 (ug/L)



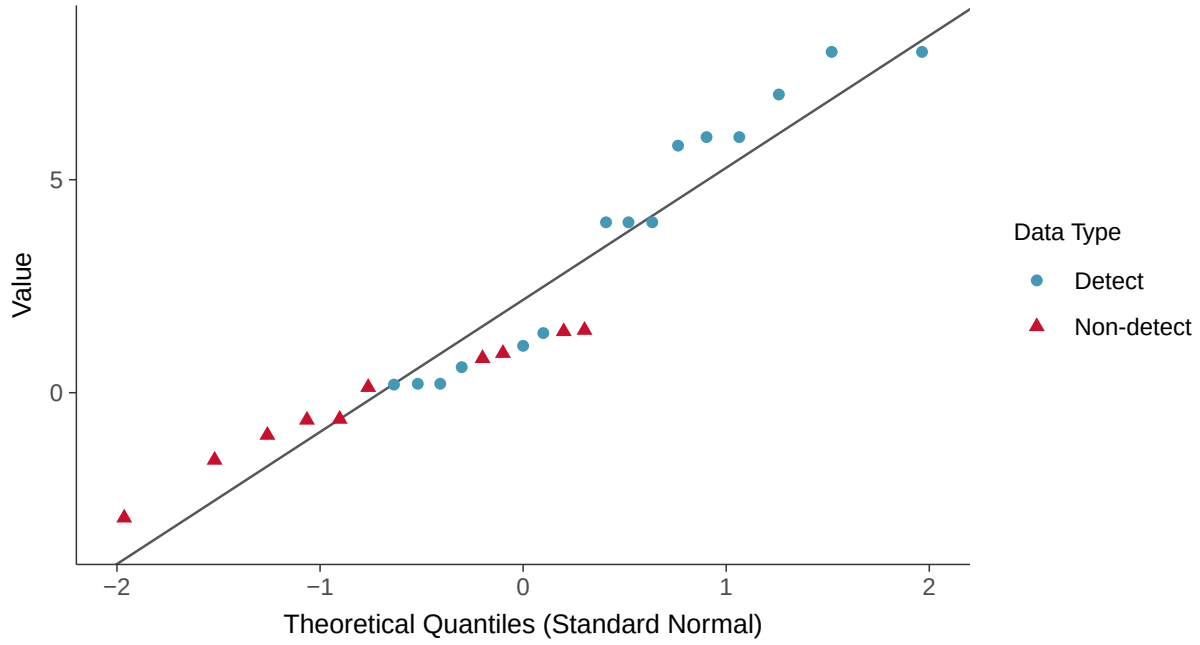

**Boxplot by Season**

Arsenic, MW-15022 (ug/L)



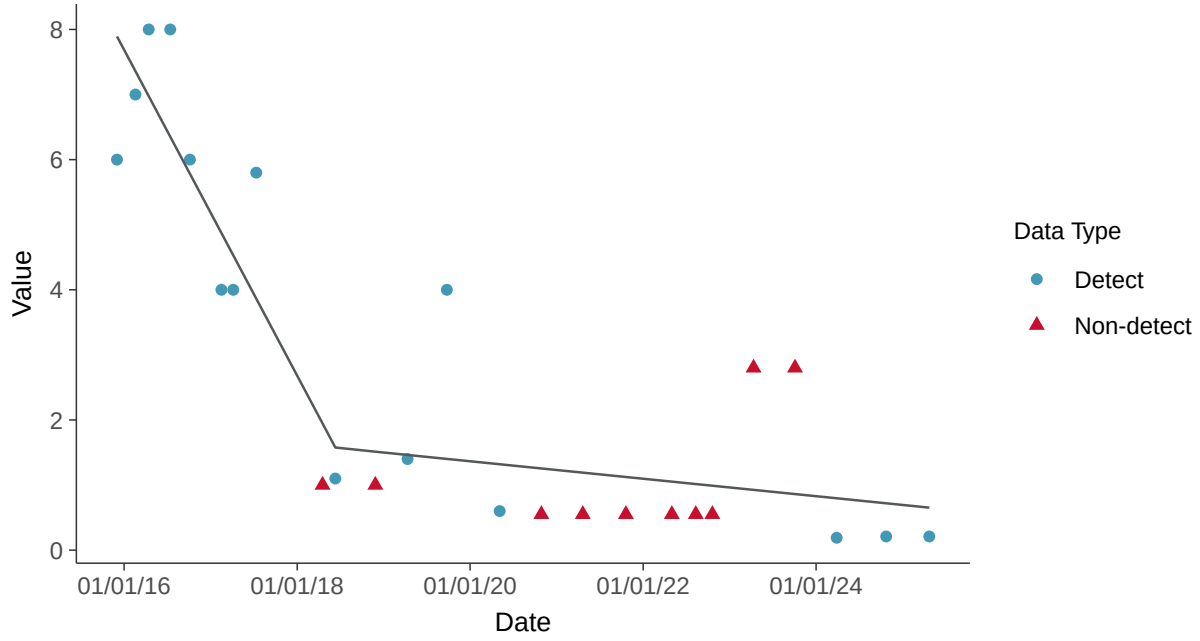
## Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15022 (ug/L)



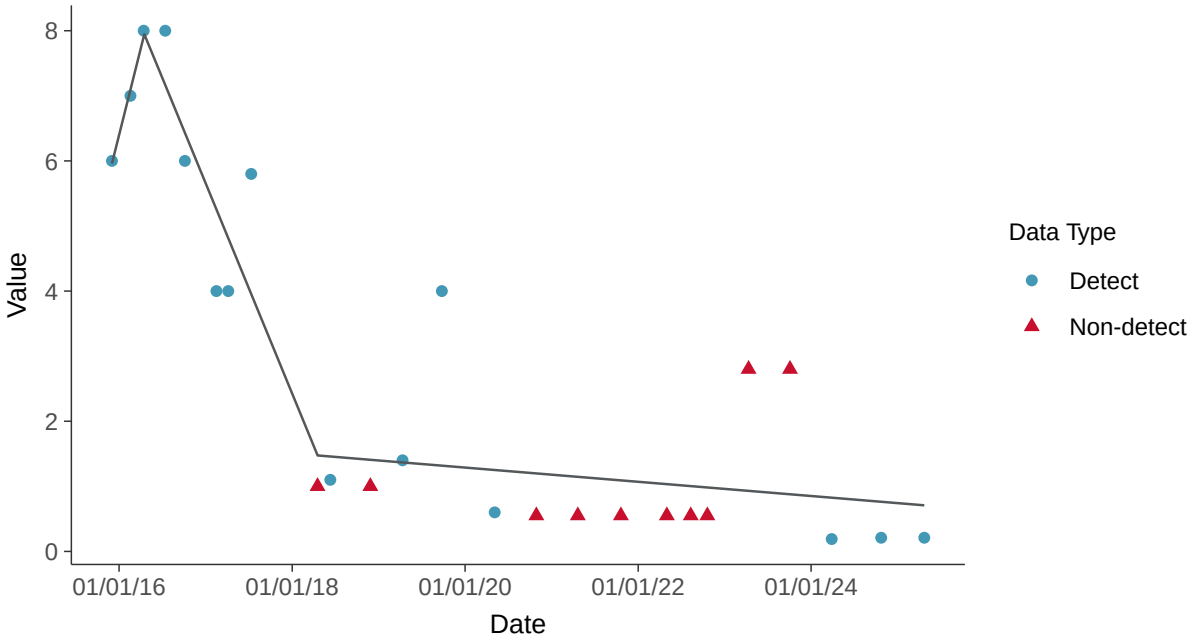

## Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15022 (ug/L)



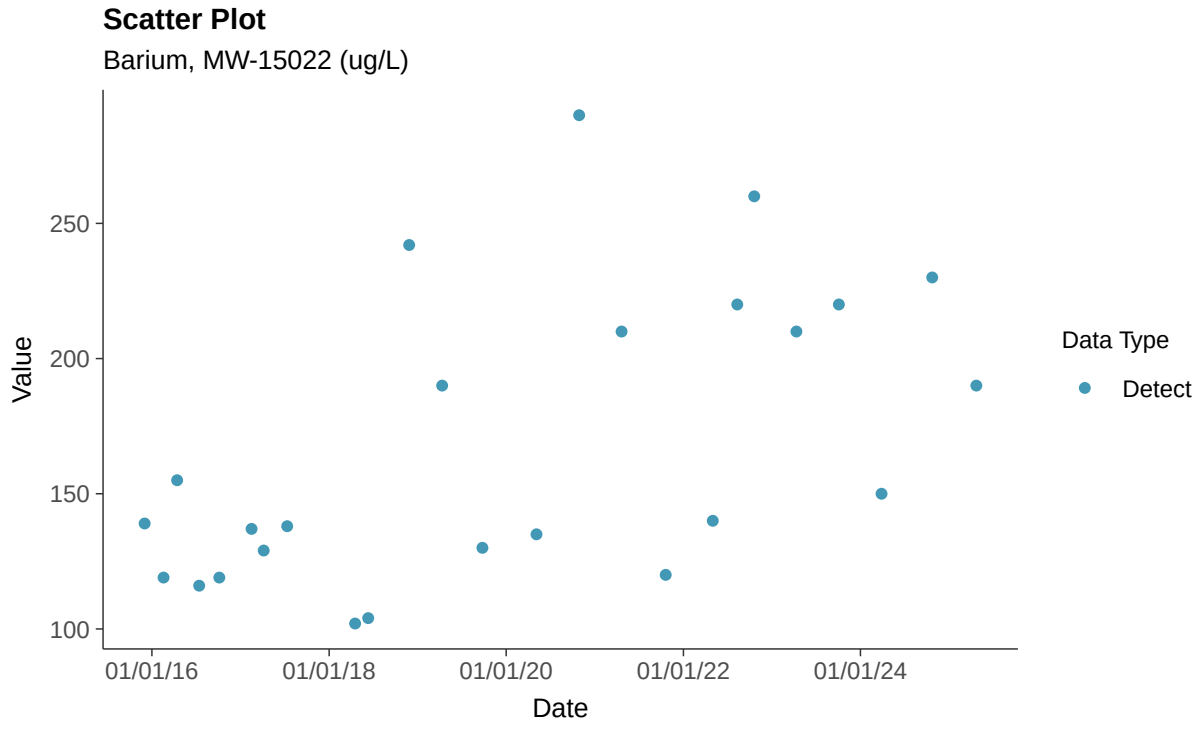
**Trend Regression: Piecewise Linear-Linear-Linear**

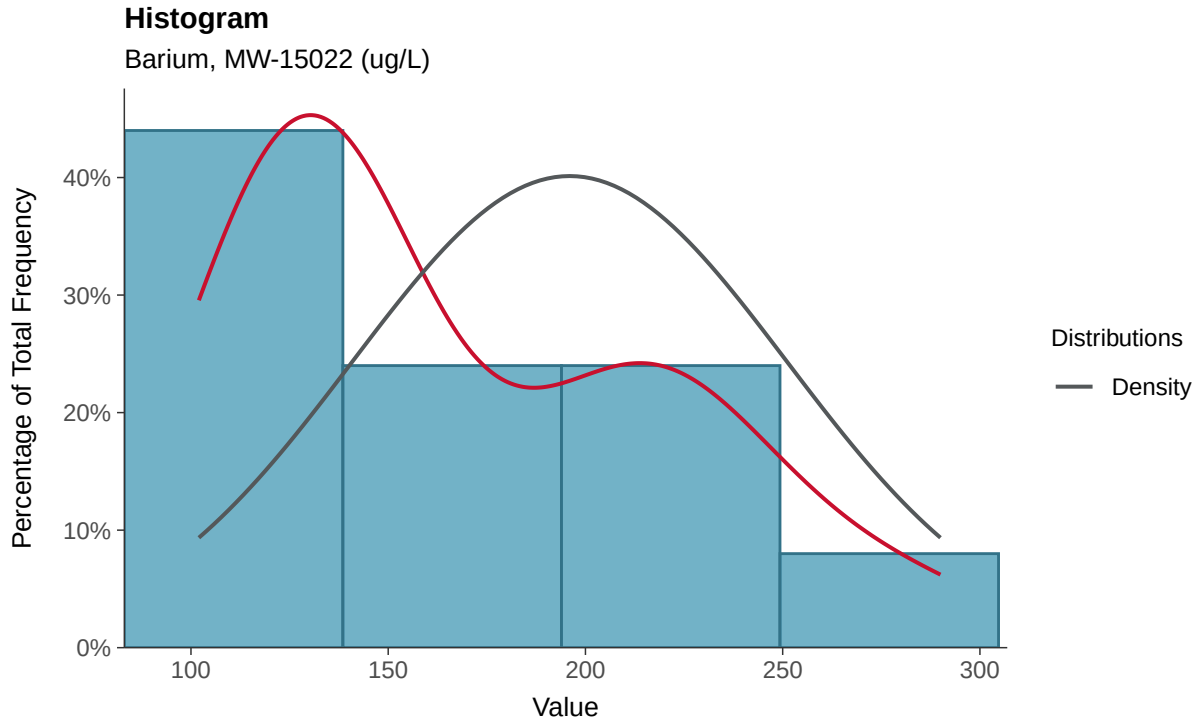
Arsenic, MW-15022 (ug/L)



## Appendix IV: Barium, MW-15022

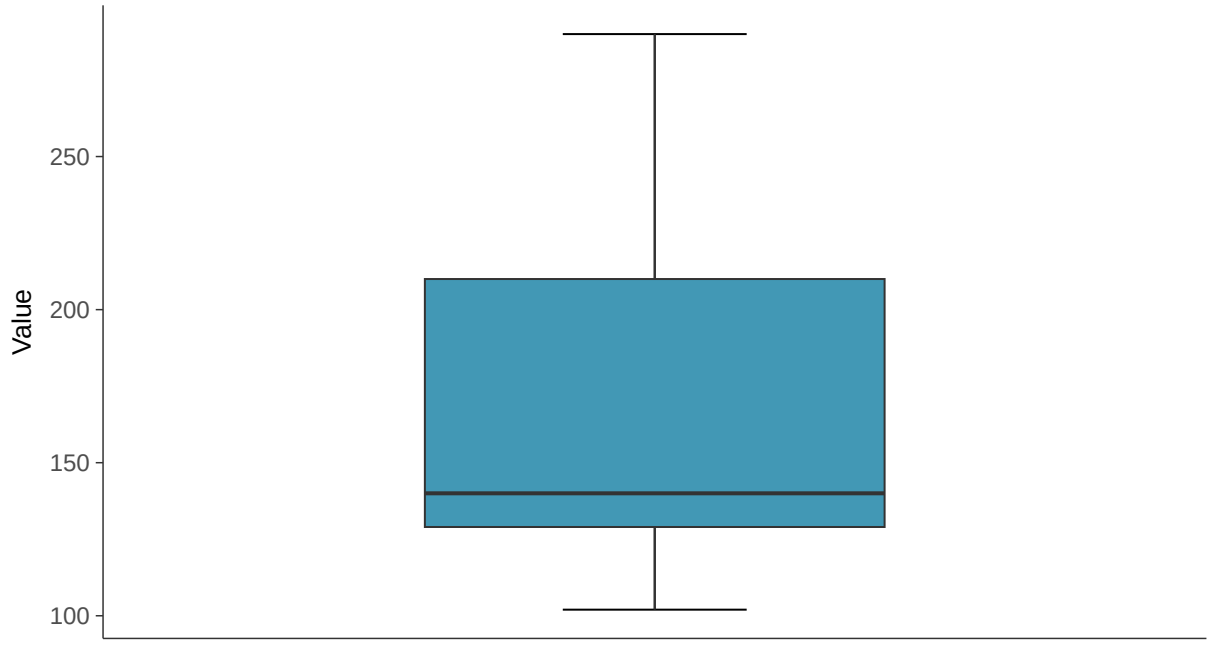
ID: 12_2_103



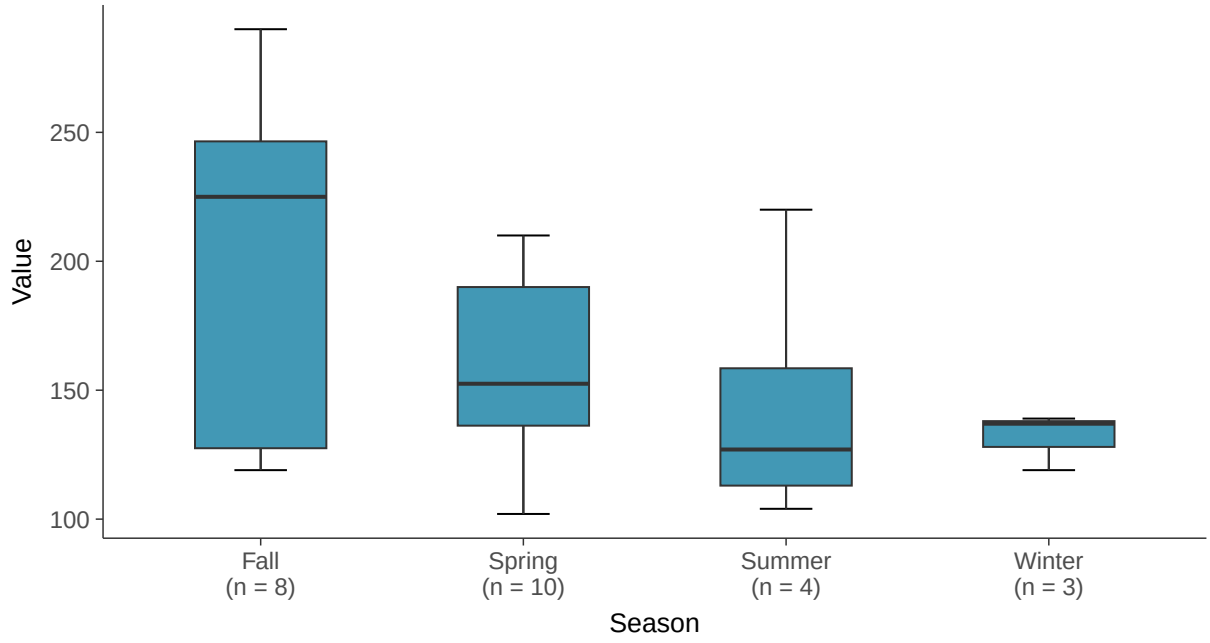
**Boxplot**

Barium, MW-15022 (ug/L)



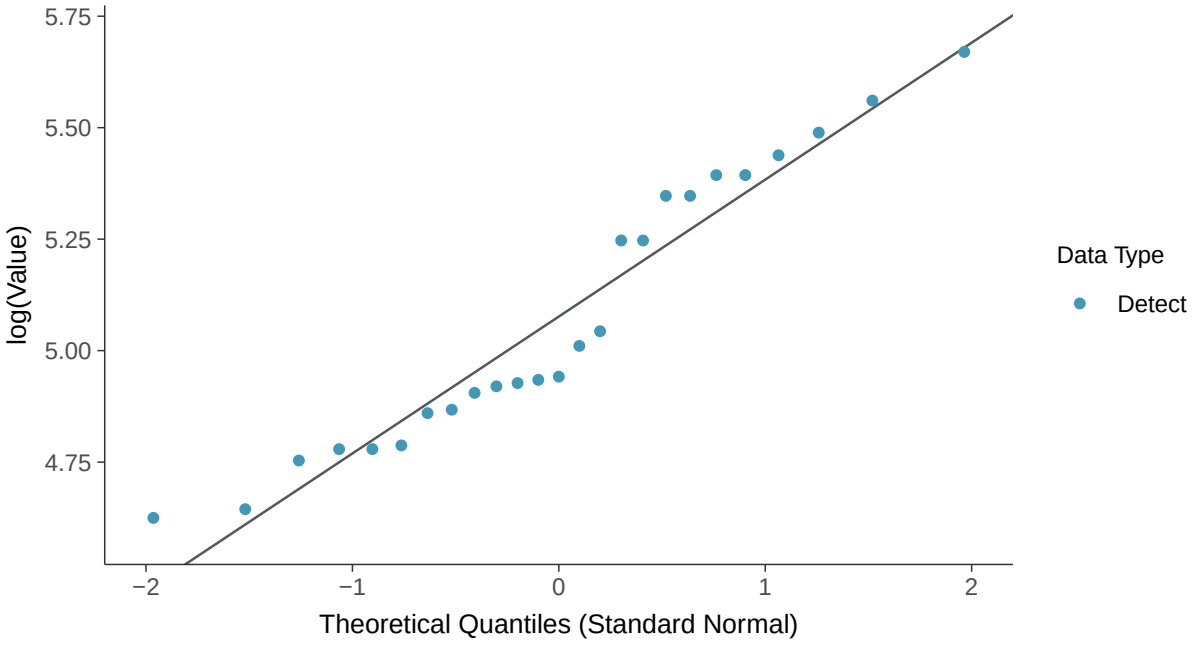

**Boxplot by Season**

Barium, MW-15022 (ug/L)



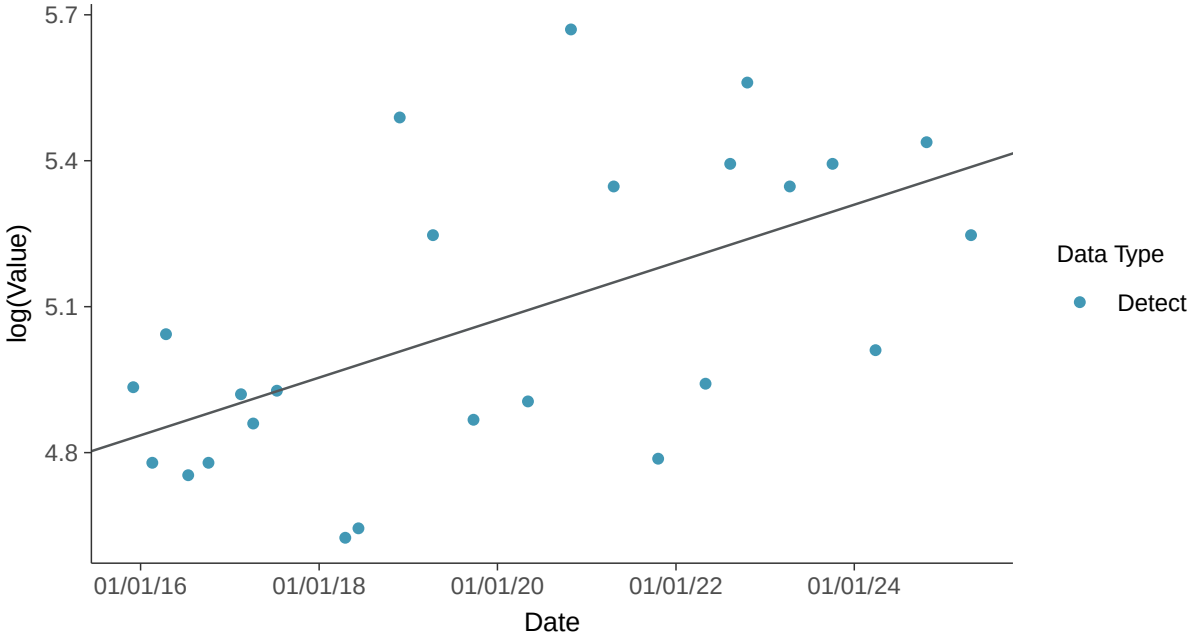
**Lognormal Q-Q plot**

Barium, MW-15022 (ug/L)



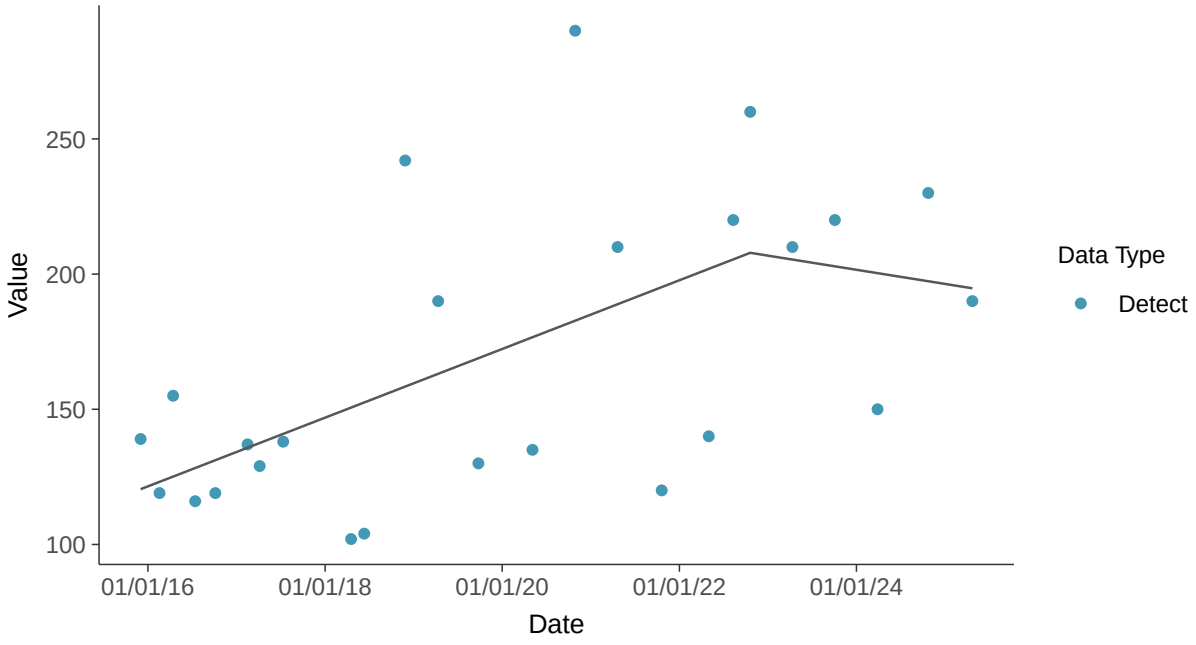

**Trend Regression: Lognormal MLE**

Barium, MW-15022 (ug/L)



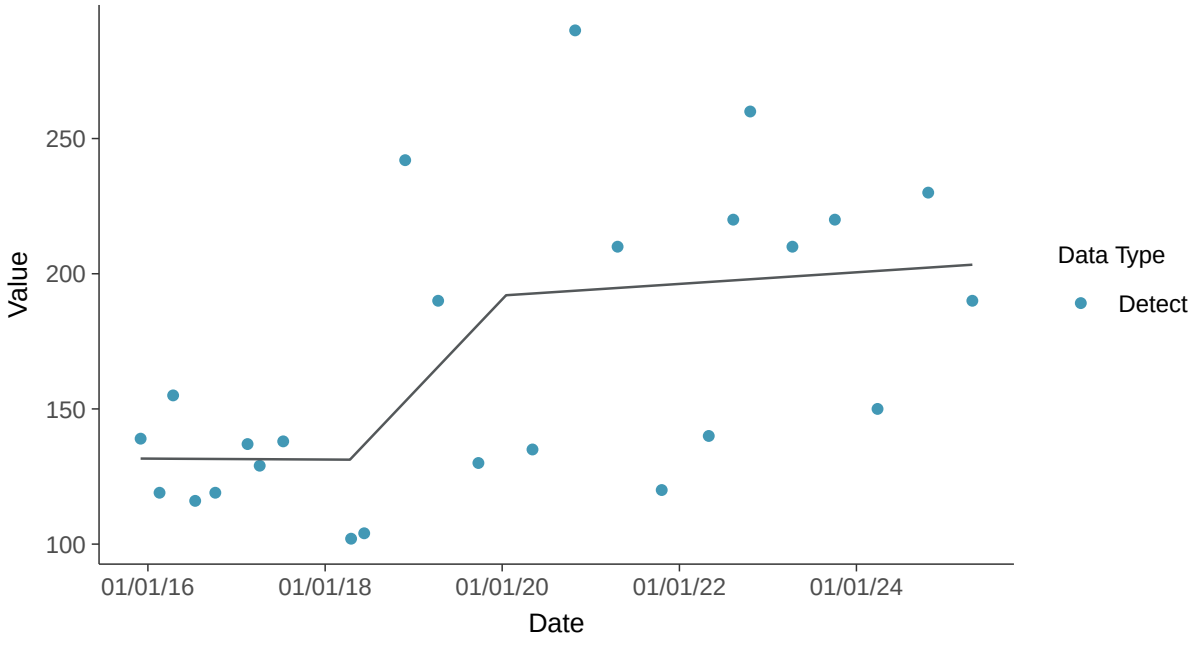
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15022 (ug/L)



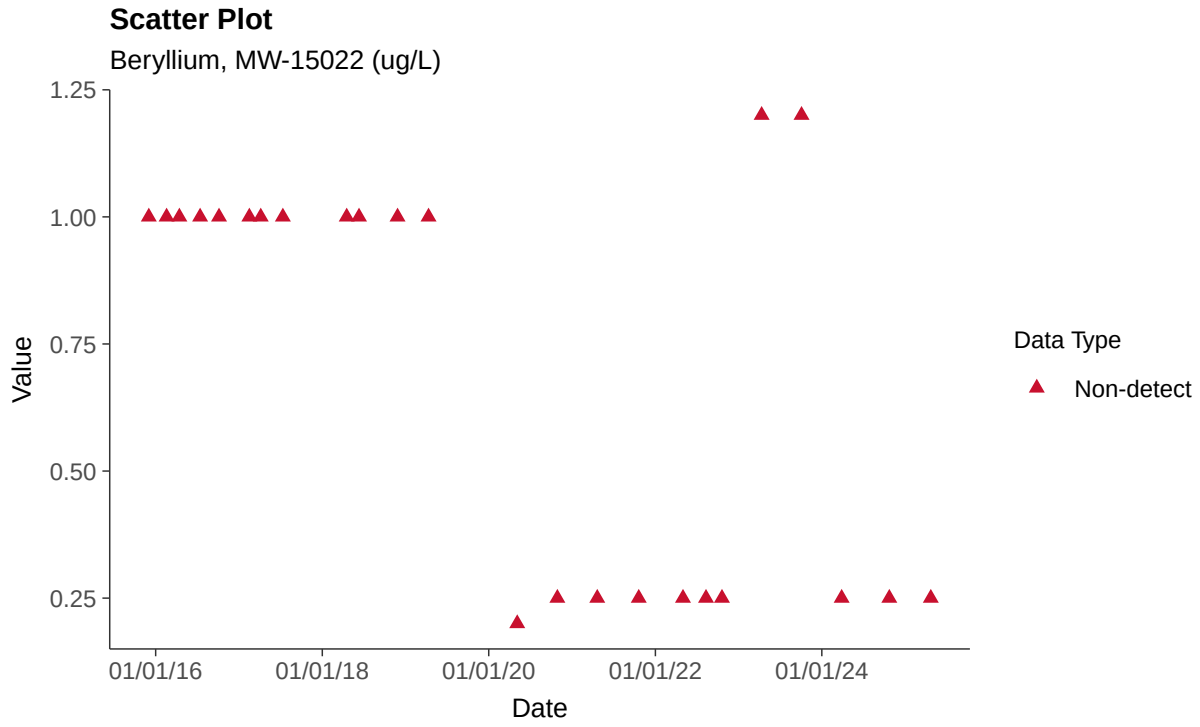

**Trend Regression: Piecewise Linear-Linear-Linear**

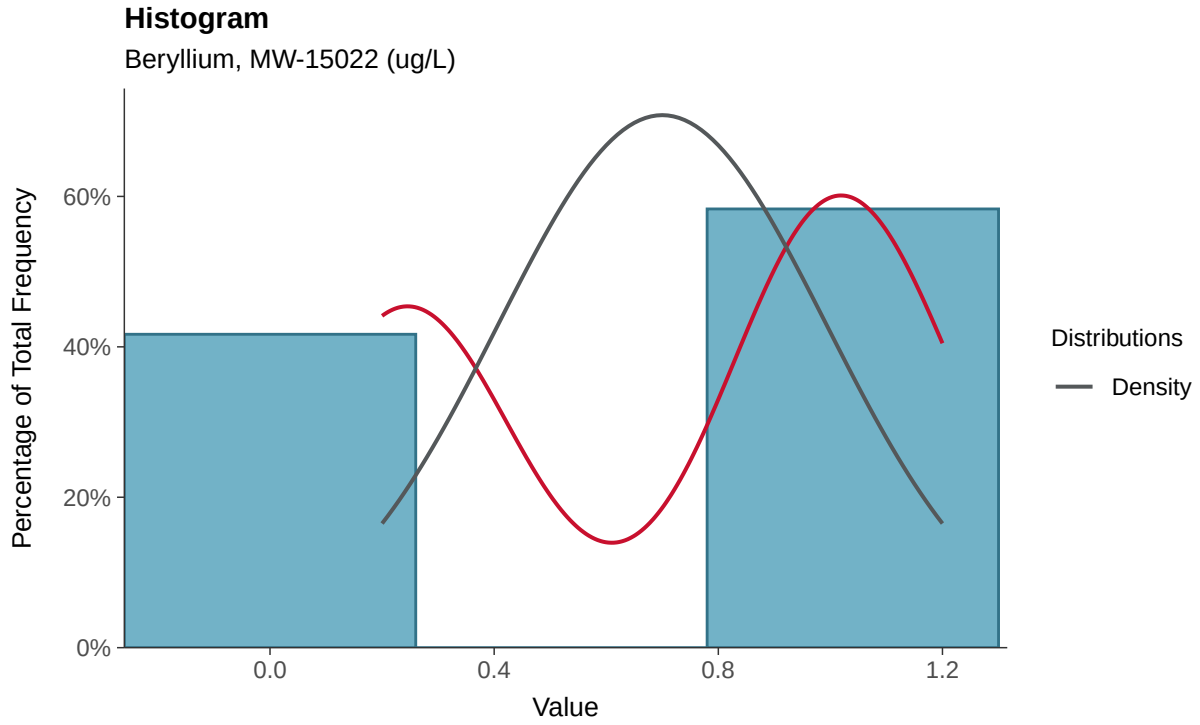
Barium, MW-15022 (ug/L)



## Appendix IV: Beryllium, MW-15022

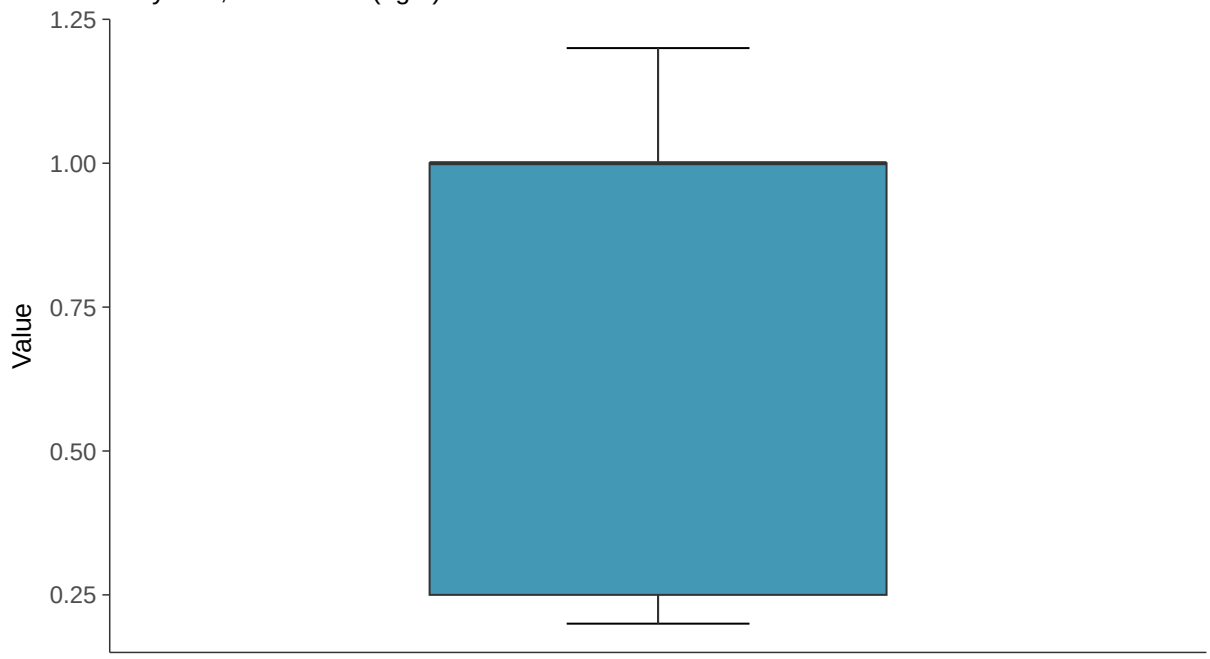
ID: 12_2_104



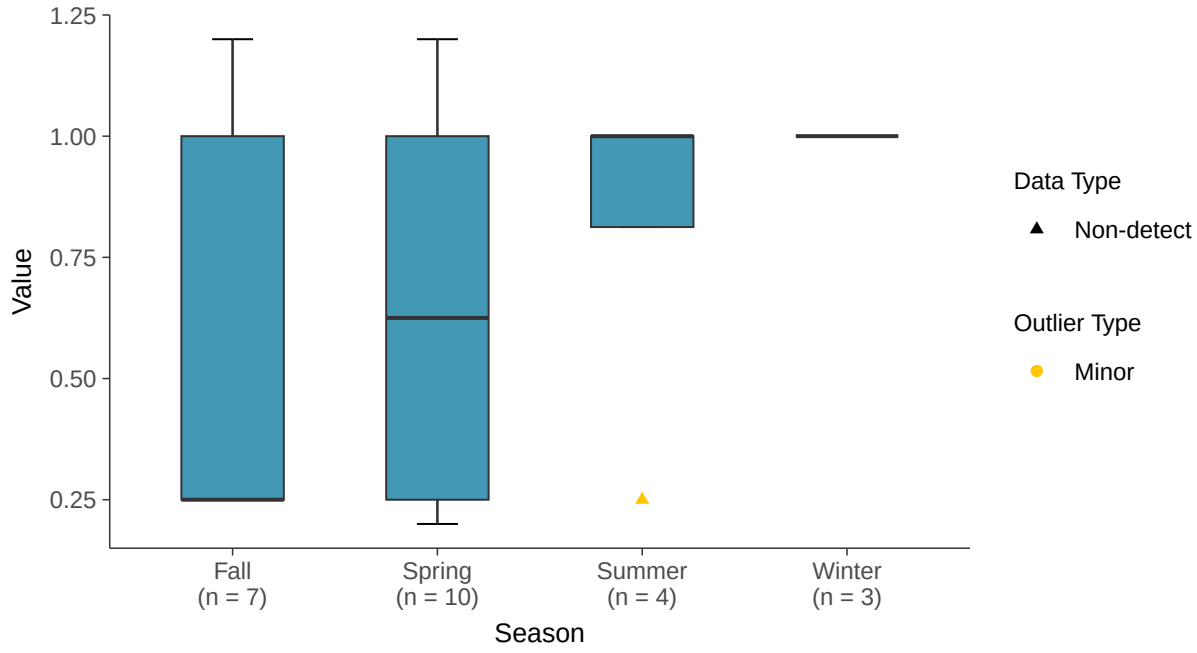
## Boxplot

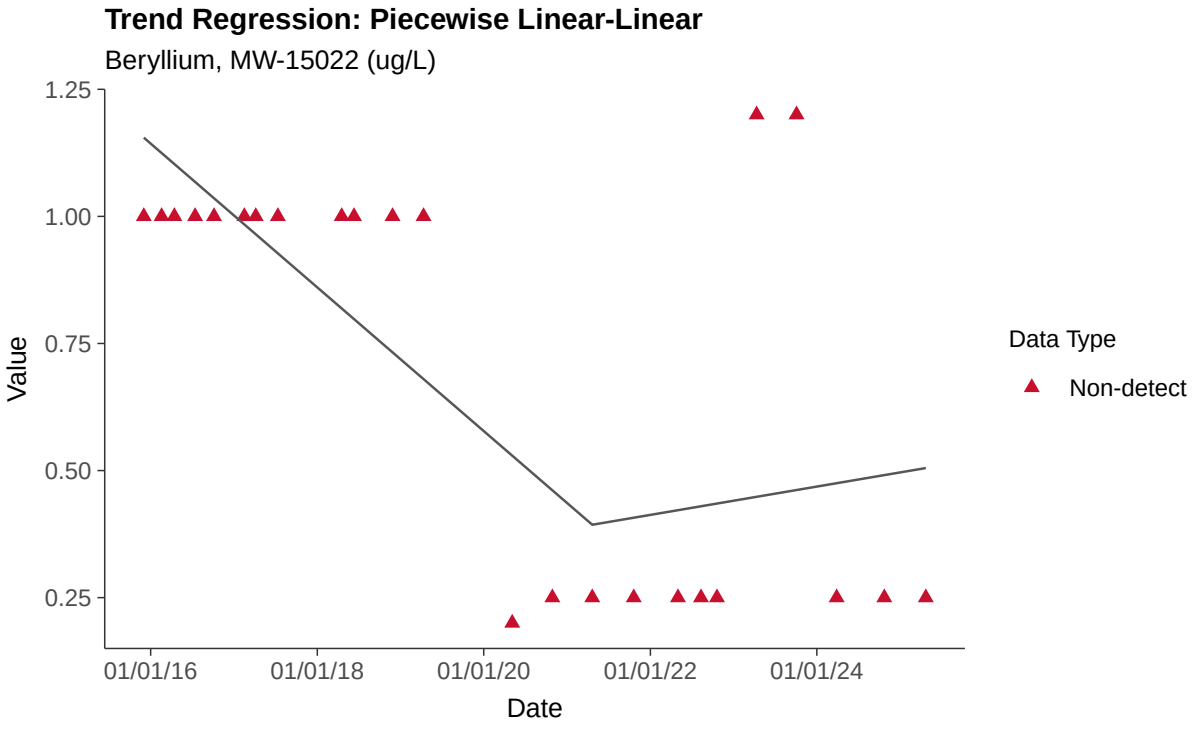
Beryllium, MW-15022 (ug/L)




## Boxplot by Season

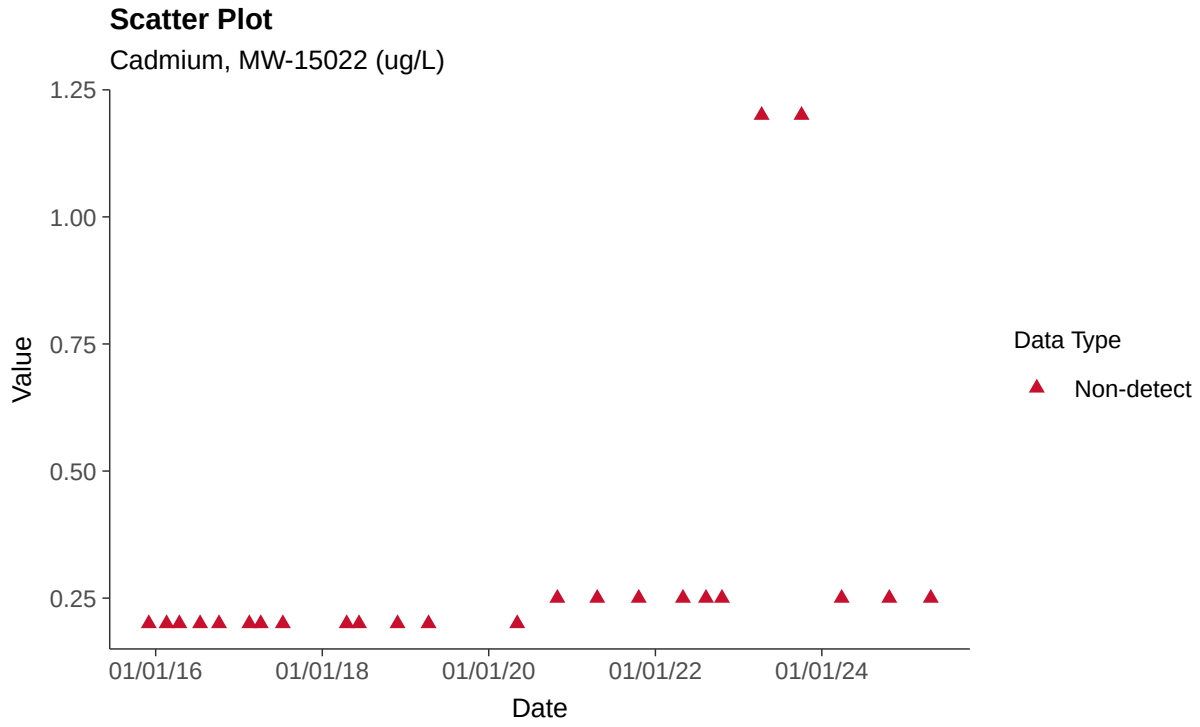
Beryllium, MW-15022 (ug/L)

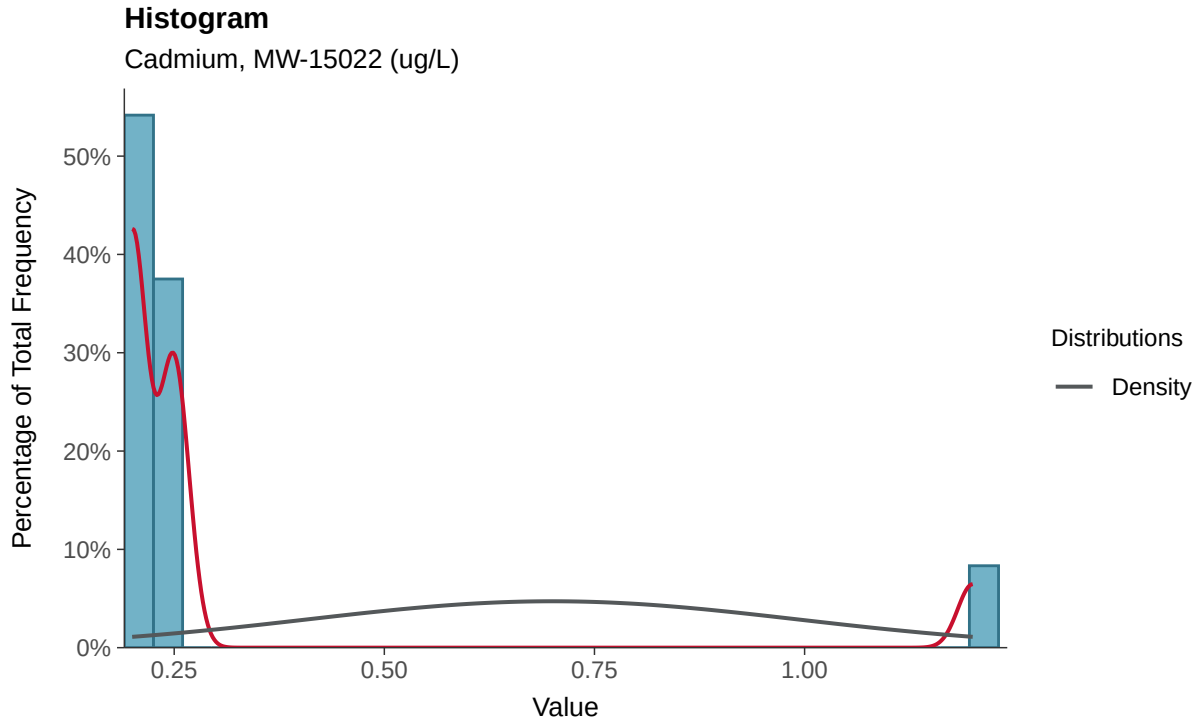



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15022 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
Date
Data Type
Non-detect

## Appendix IV: Cadmium, MW-15022

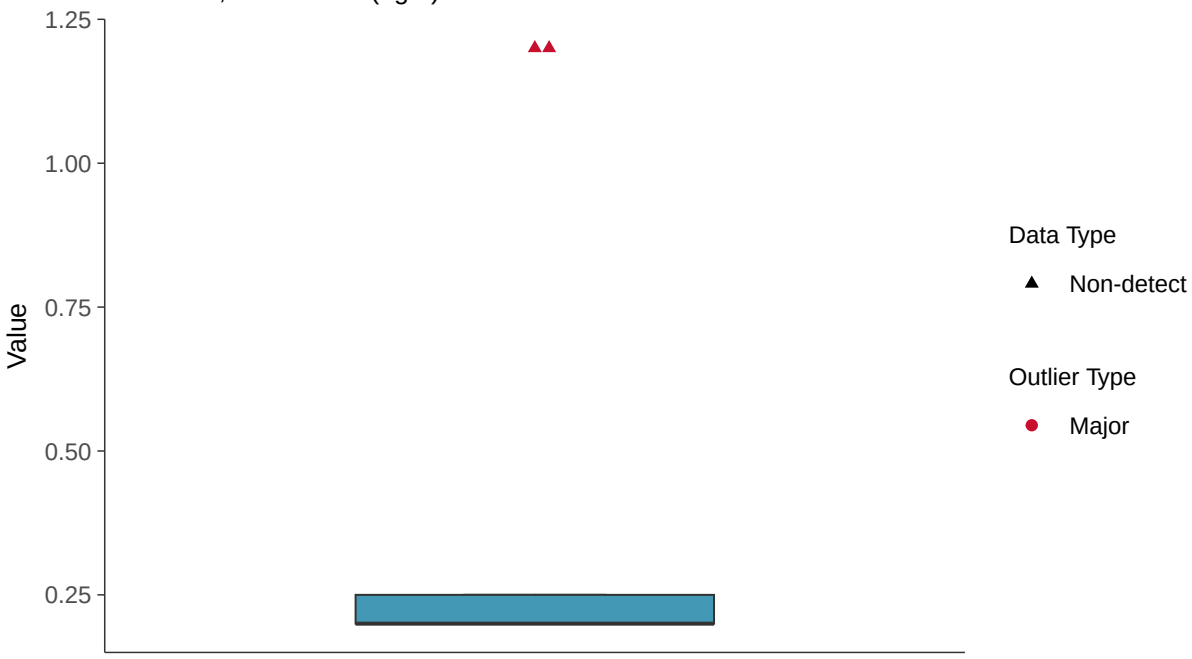
ID: 12_2_106



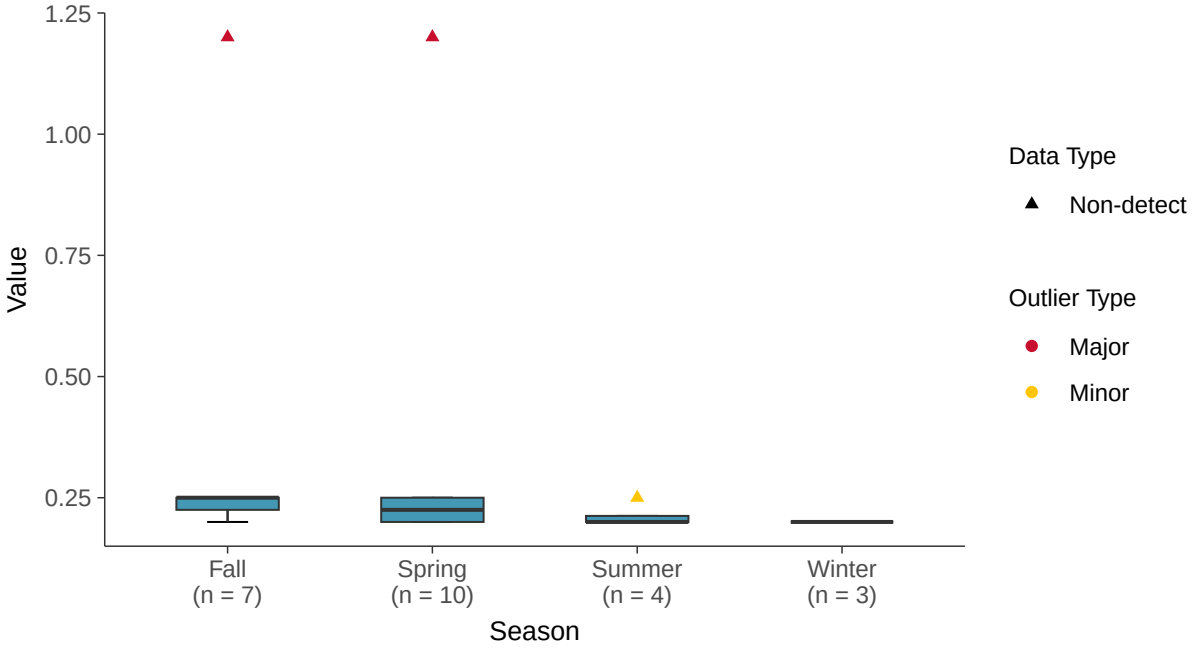
## Boxplot

Cadmium, MW-15022 (ug/L)



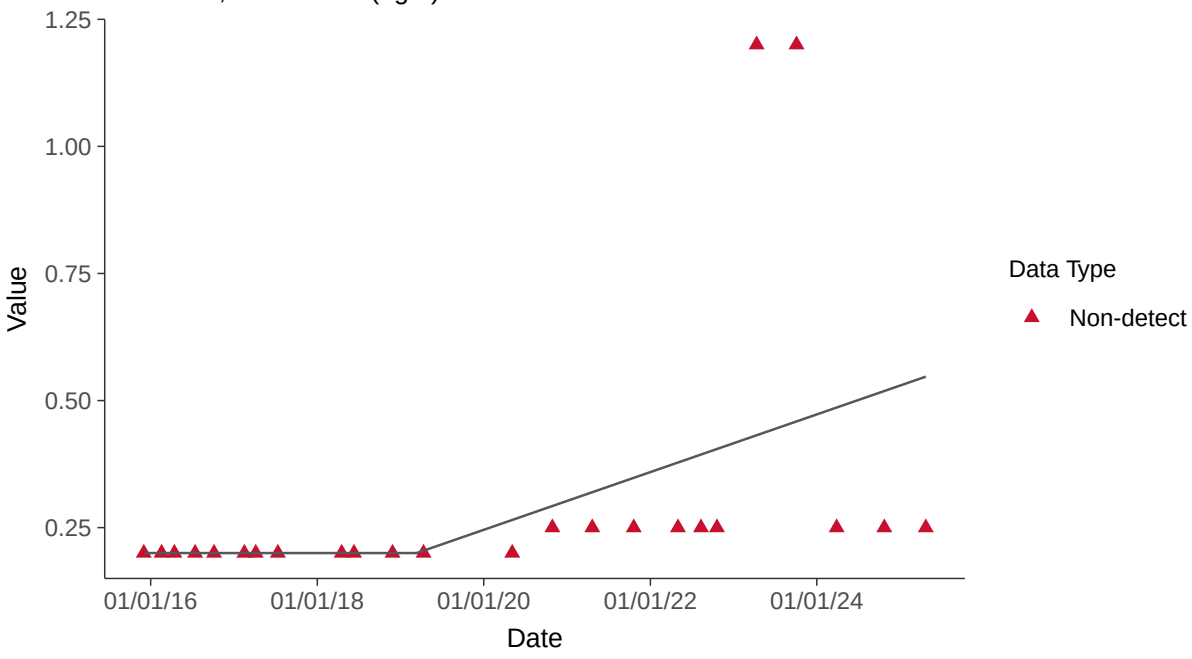

## Boxplot by Season

Cadmium, MW-15022 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15022 (ug/L)

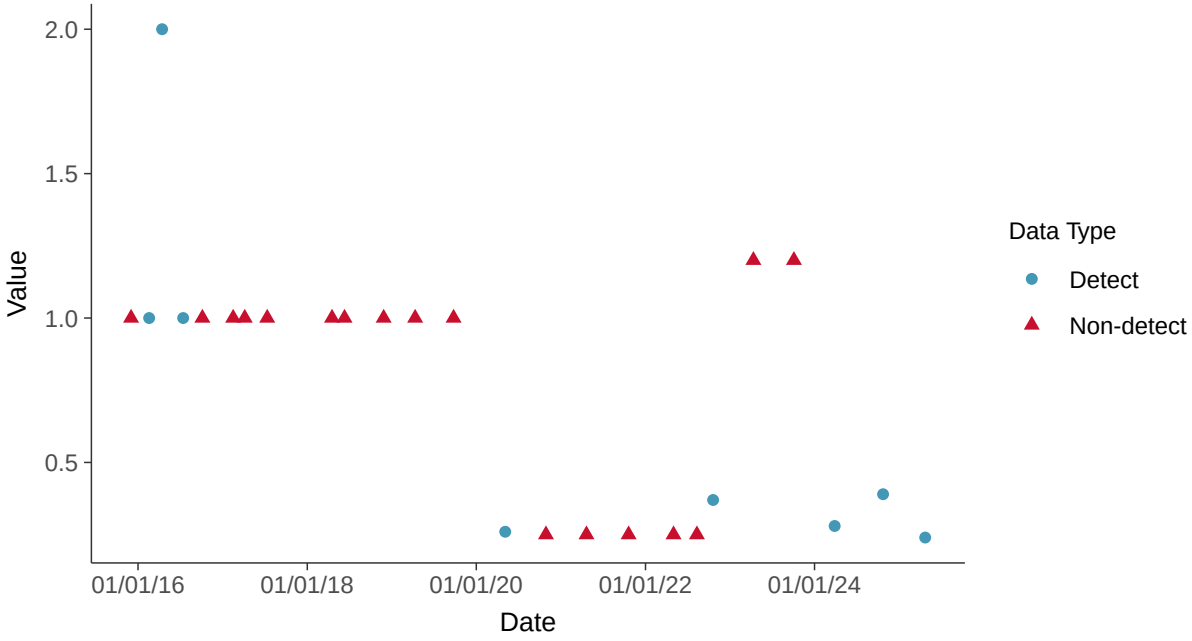


## Appendix IV: Chromium, MW-15022

ID: 12_2_109

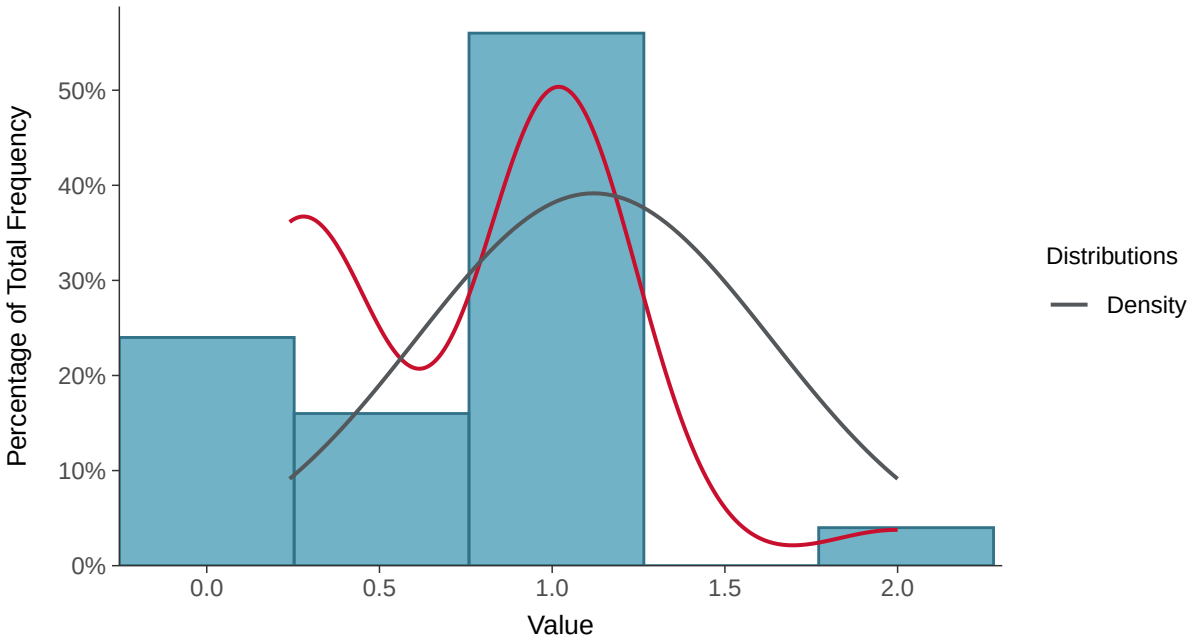
**Scatter Plot**

Chromium, MW-15022 (ug/L)



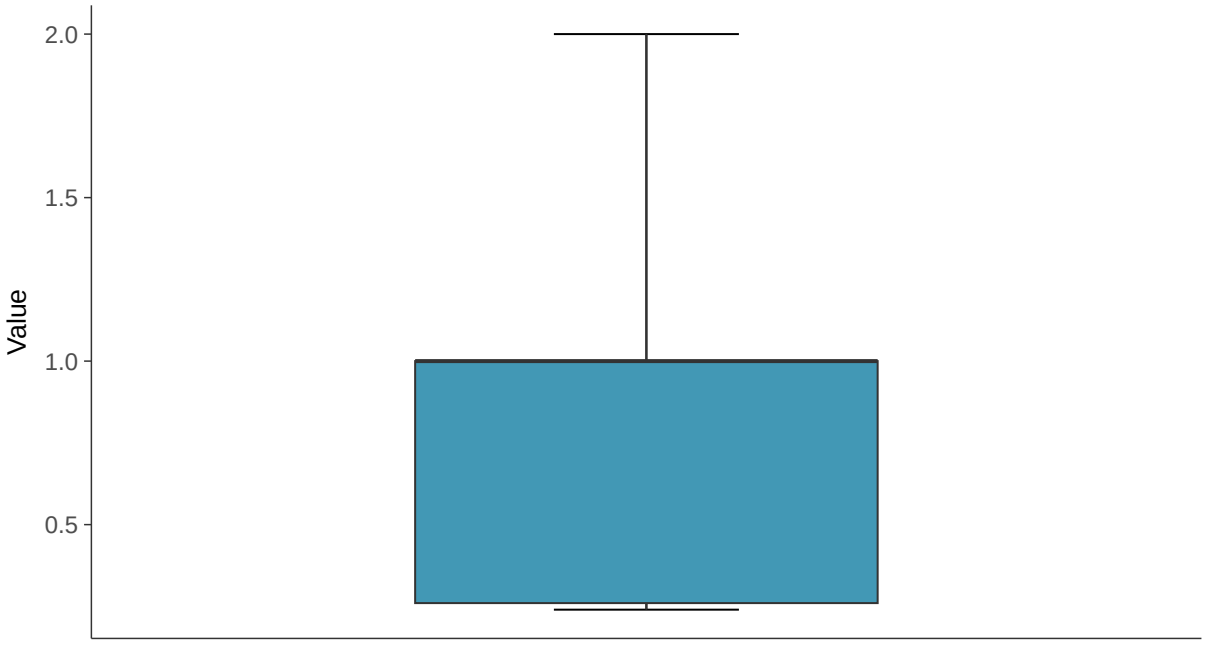

**Histogram**

Chromium, MW-15022 (ug/L)



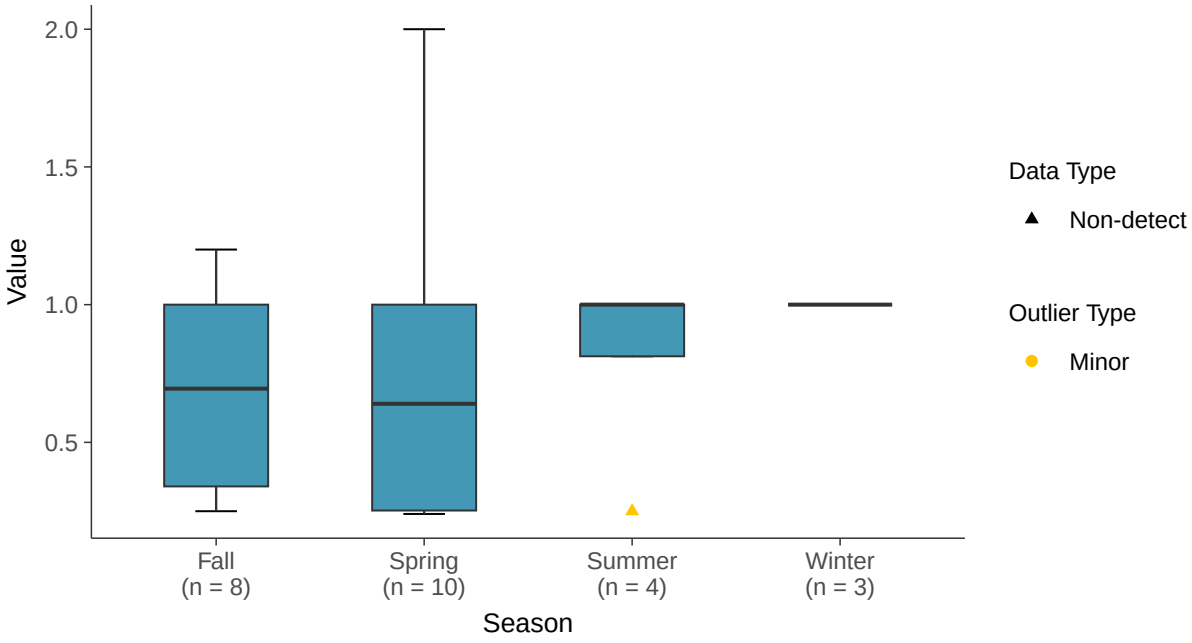
## Boxplot

Chromium, MW-15022 (ug/L)



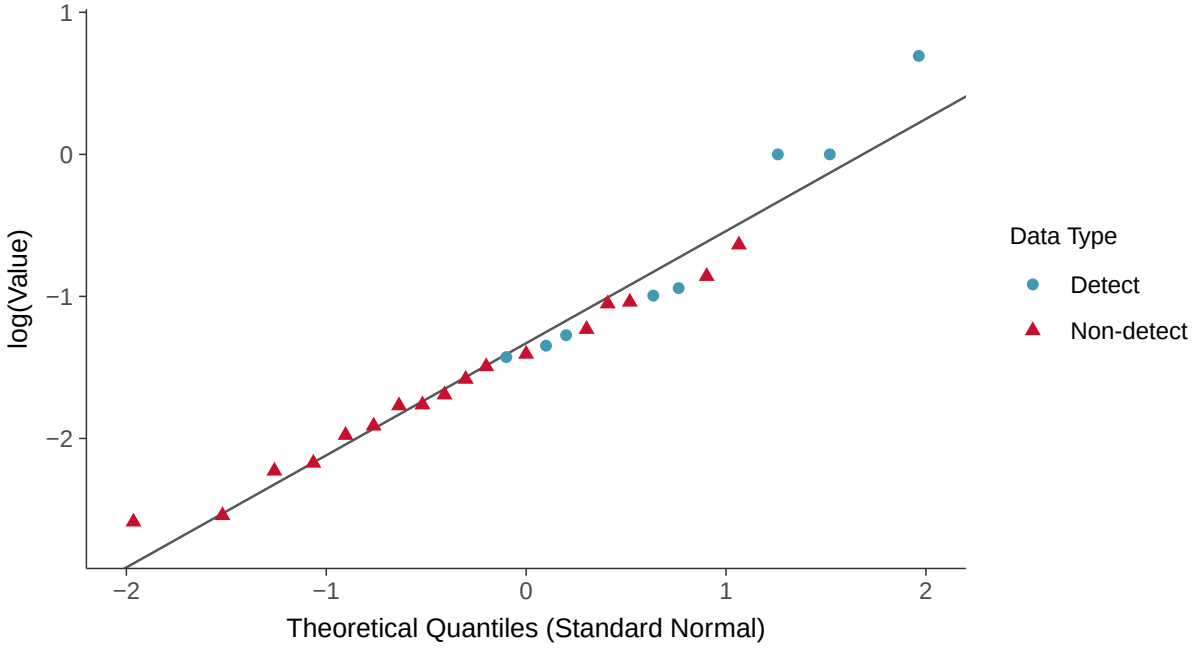

## Boxplot by Season

Chromium, MW-15022 (ug/L)



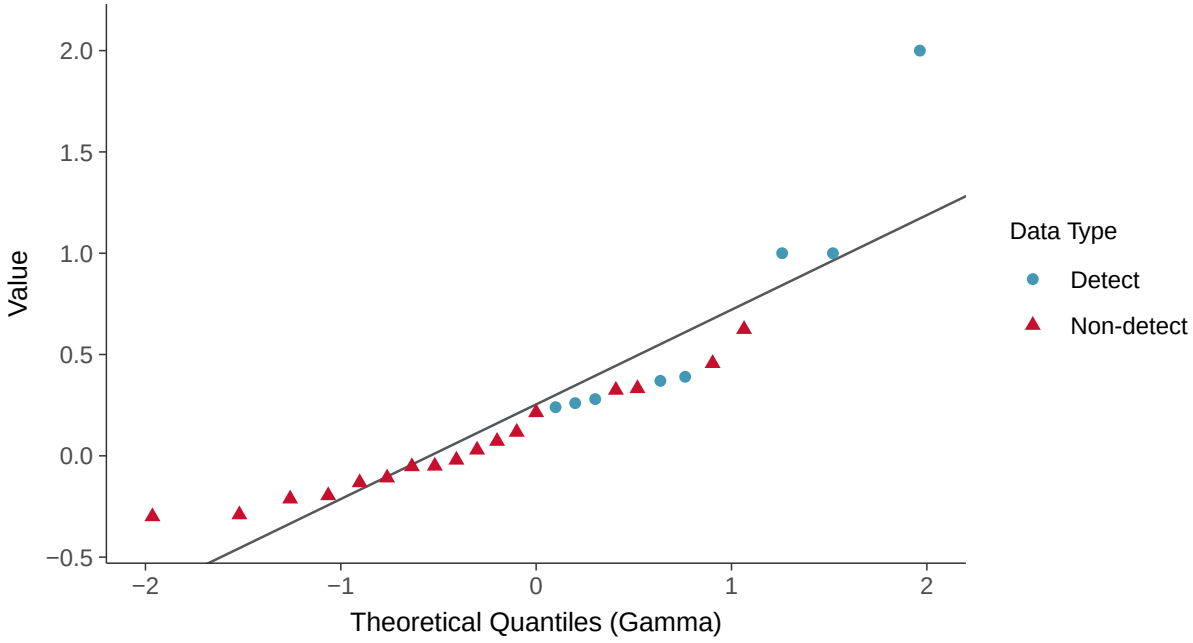
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15022 (ug/L)



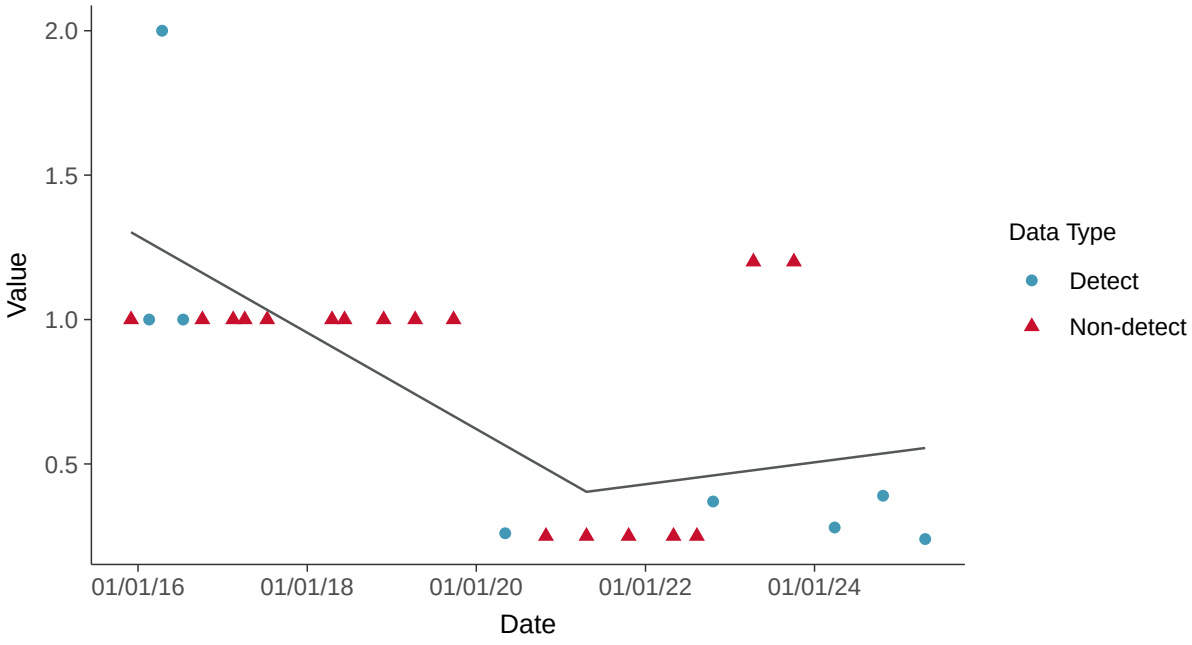

**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15022 (ug/L)



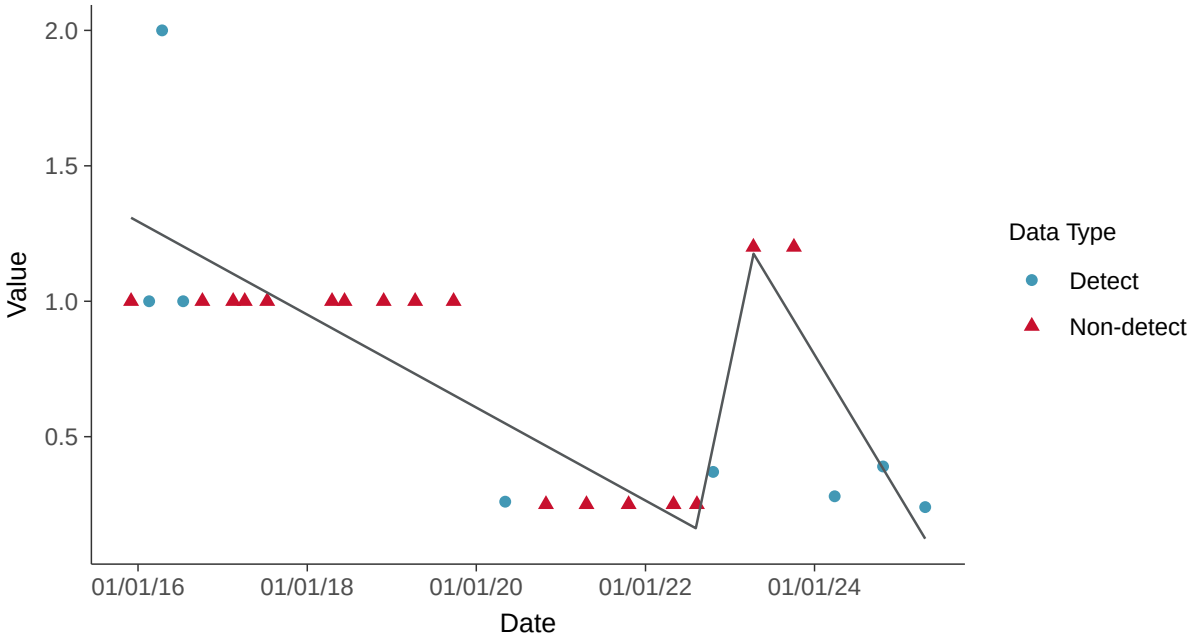
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15022 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Chromium, MW-15022 (ug/L)

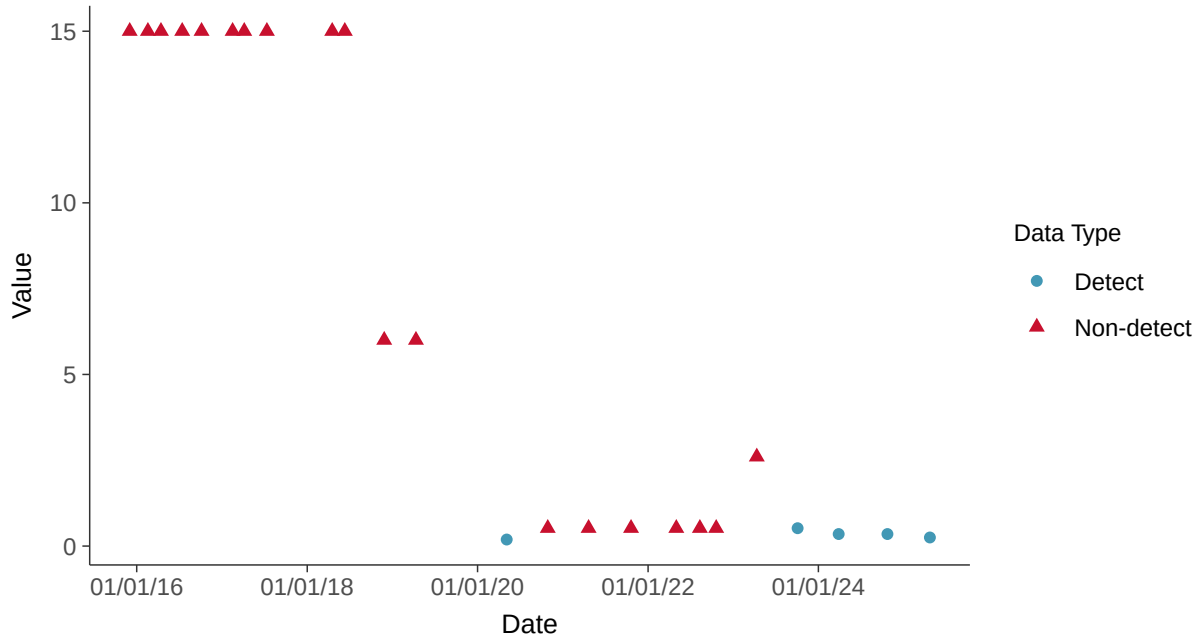


## Appendix IV: Cobalt, MW-15022

ID: 12_2_110

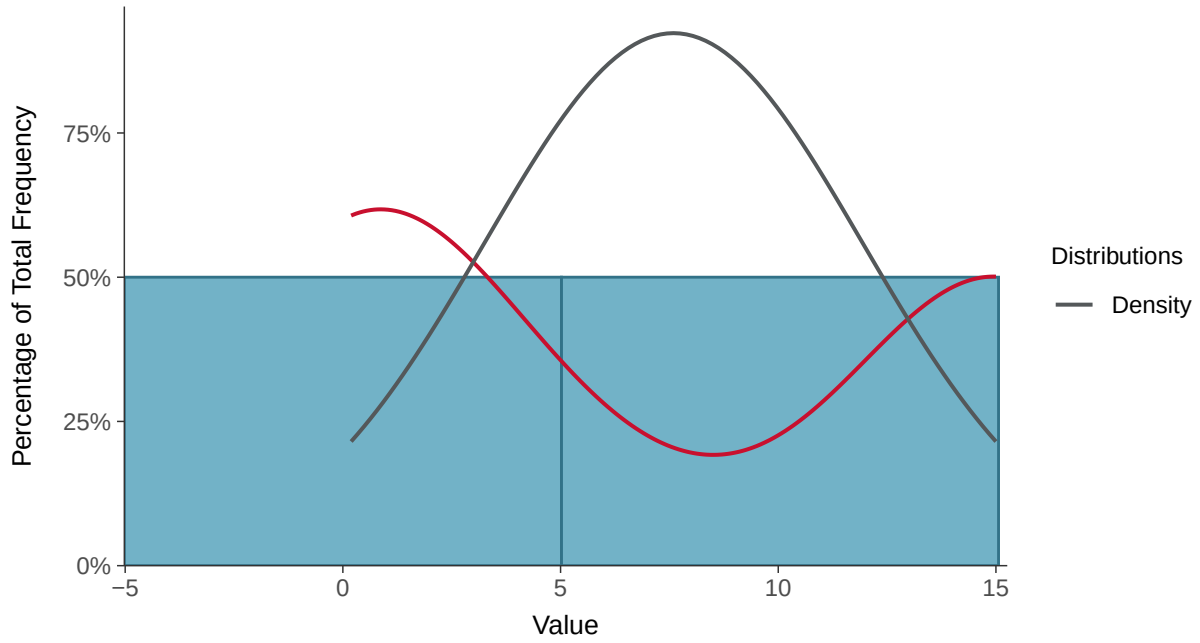
**Scatter Plot**

Cobalt, MW-15022 (ug/L)



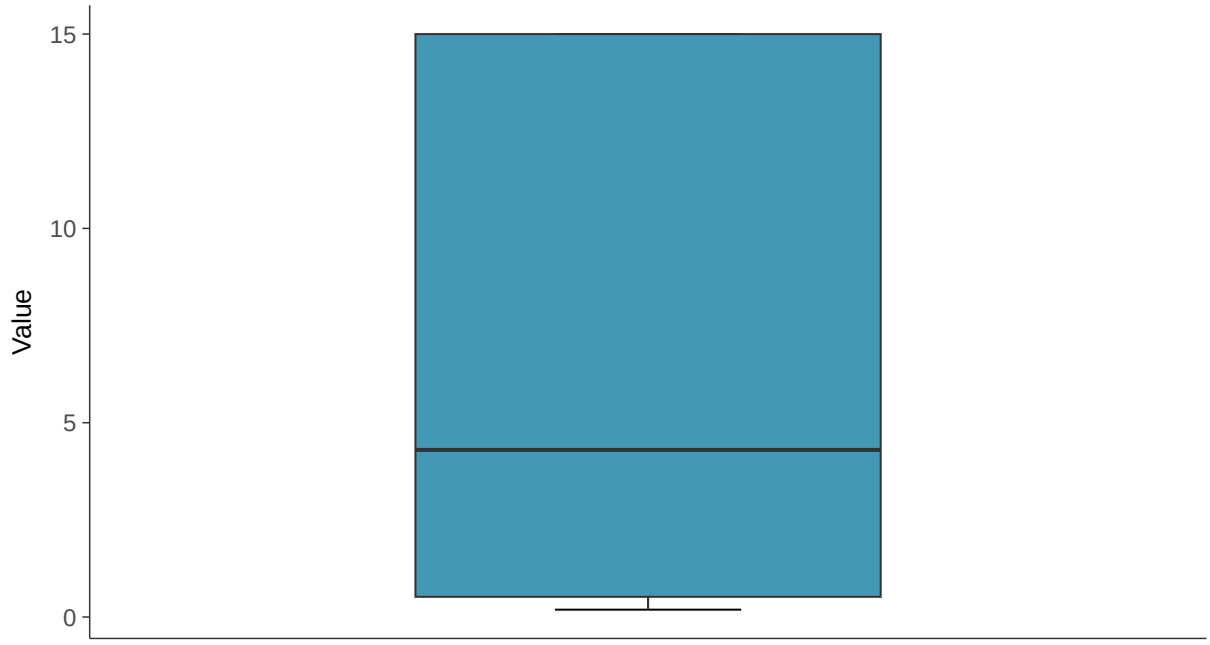

**Histogram**

Cobalt, MW-15022 (ug/L)



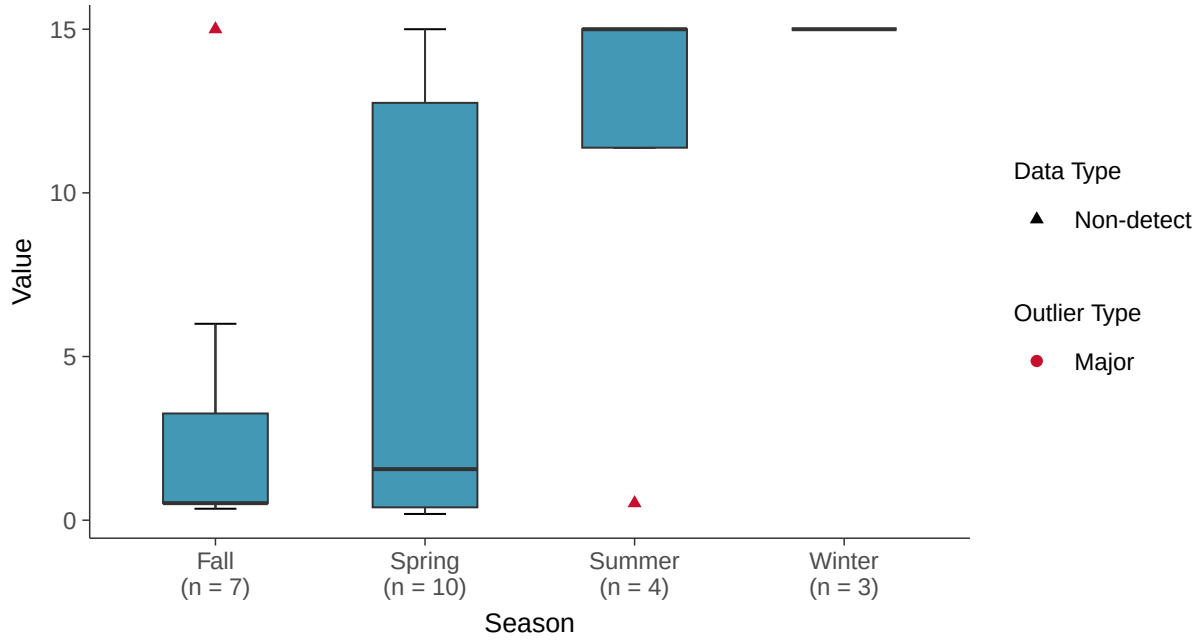
**Boxplot**

Cobalt, MW-15022 (ug/L)



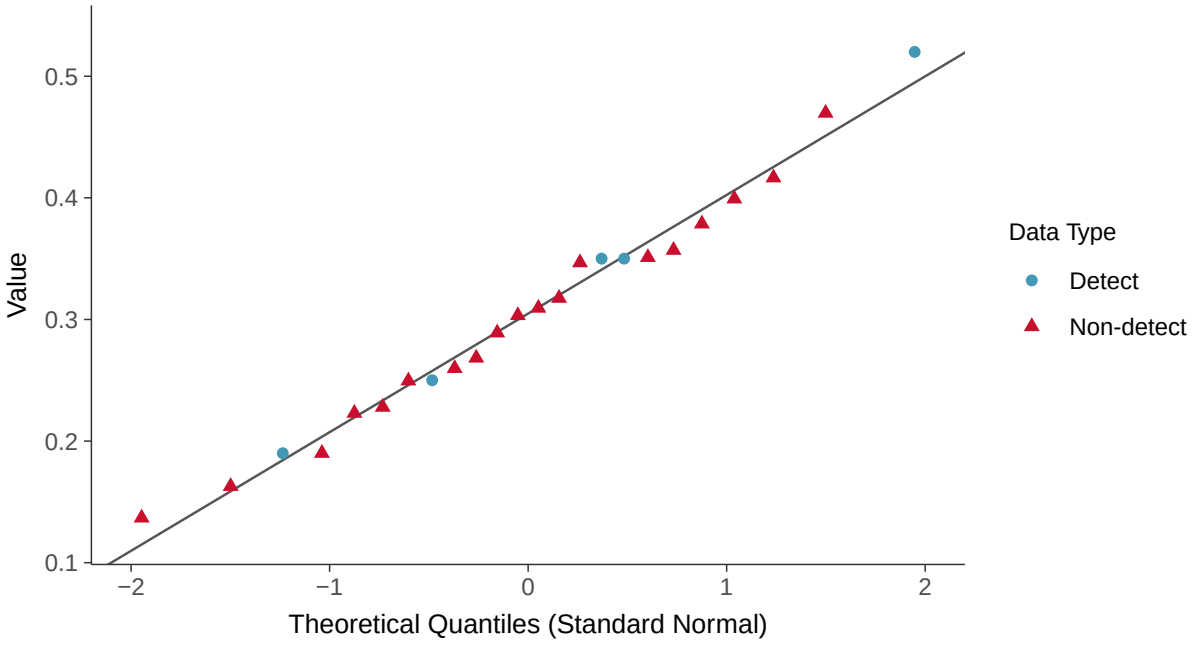

**Boxplot by Season**

Cobalt, MW-15022 (ug/L)



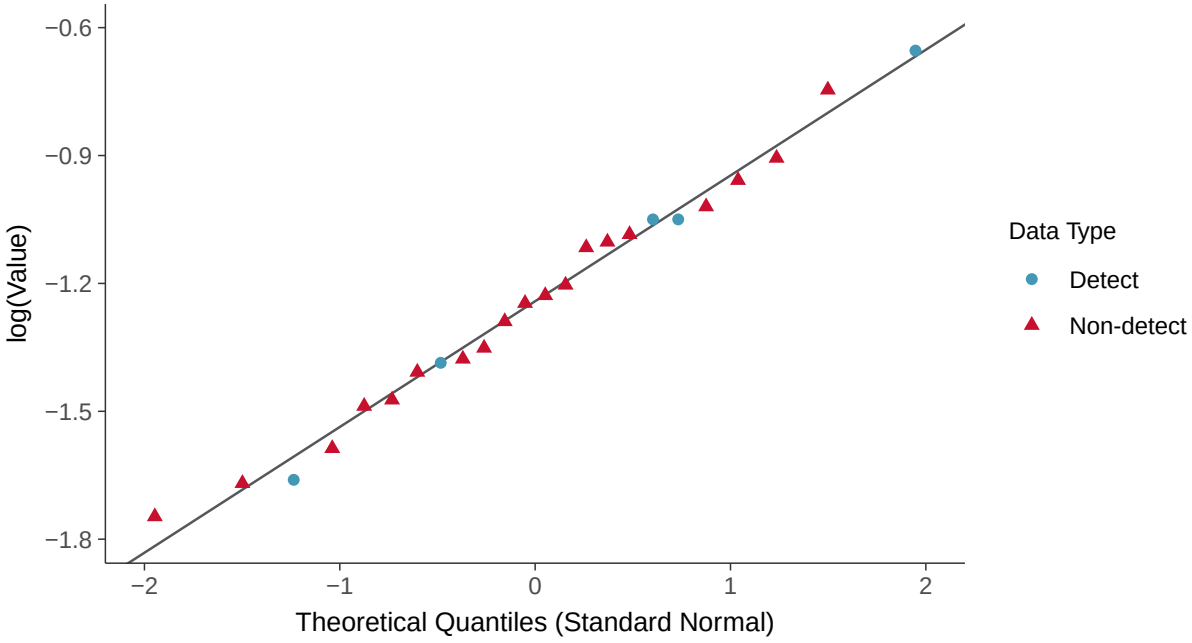
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15022 (ug/L)



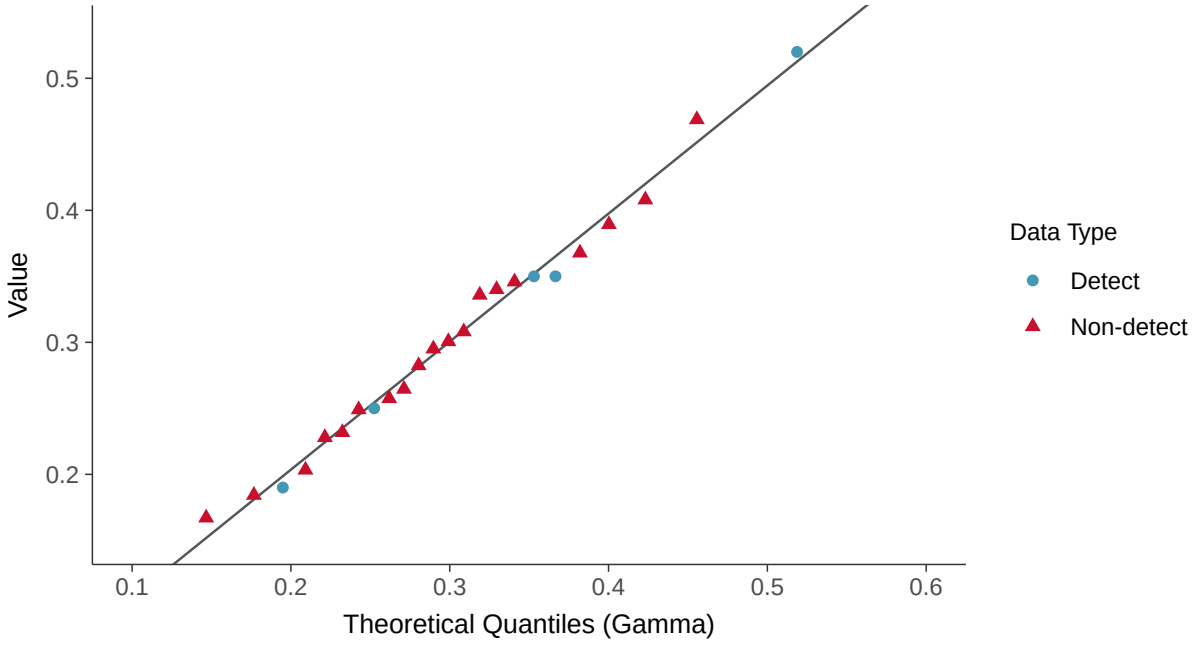

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15022 (ug/L)



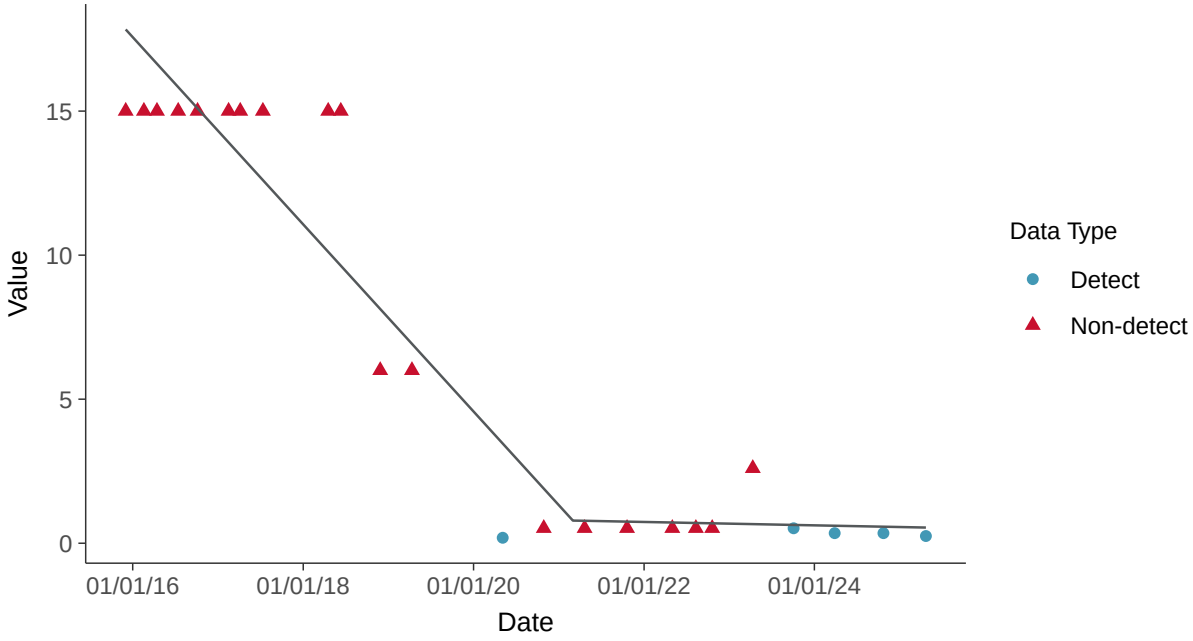
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15022 (ug/L)



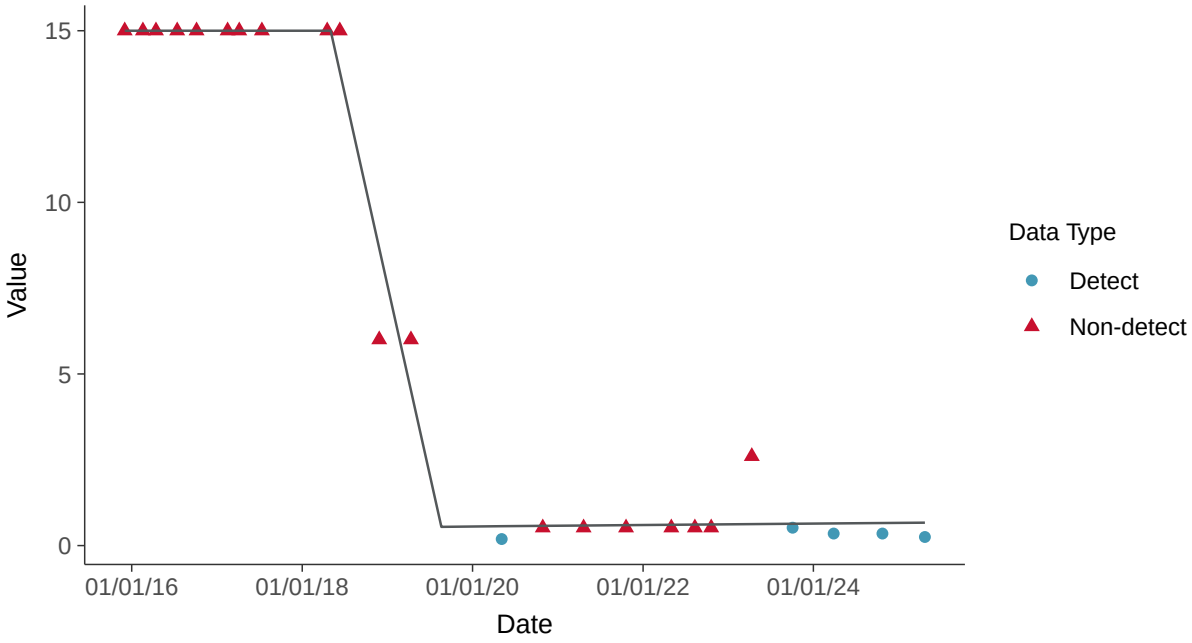

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15022 (ug/L)



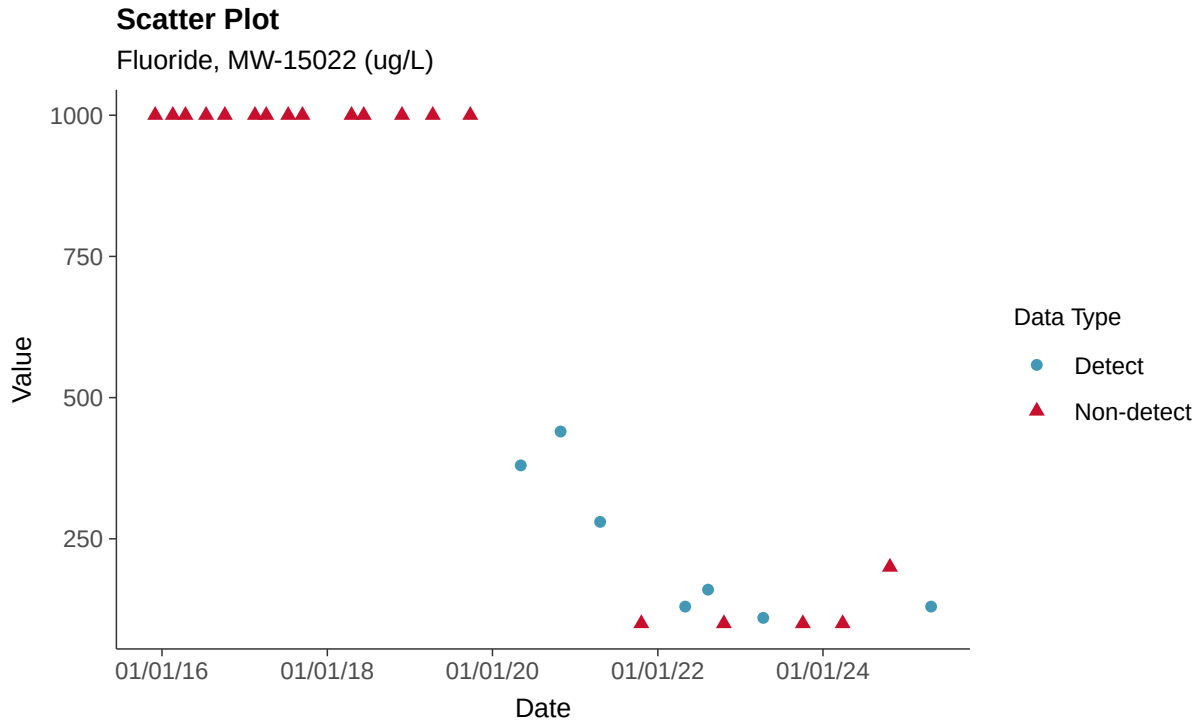
**Trend Regression: Piecewise Linear-Linear-Linear**

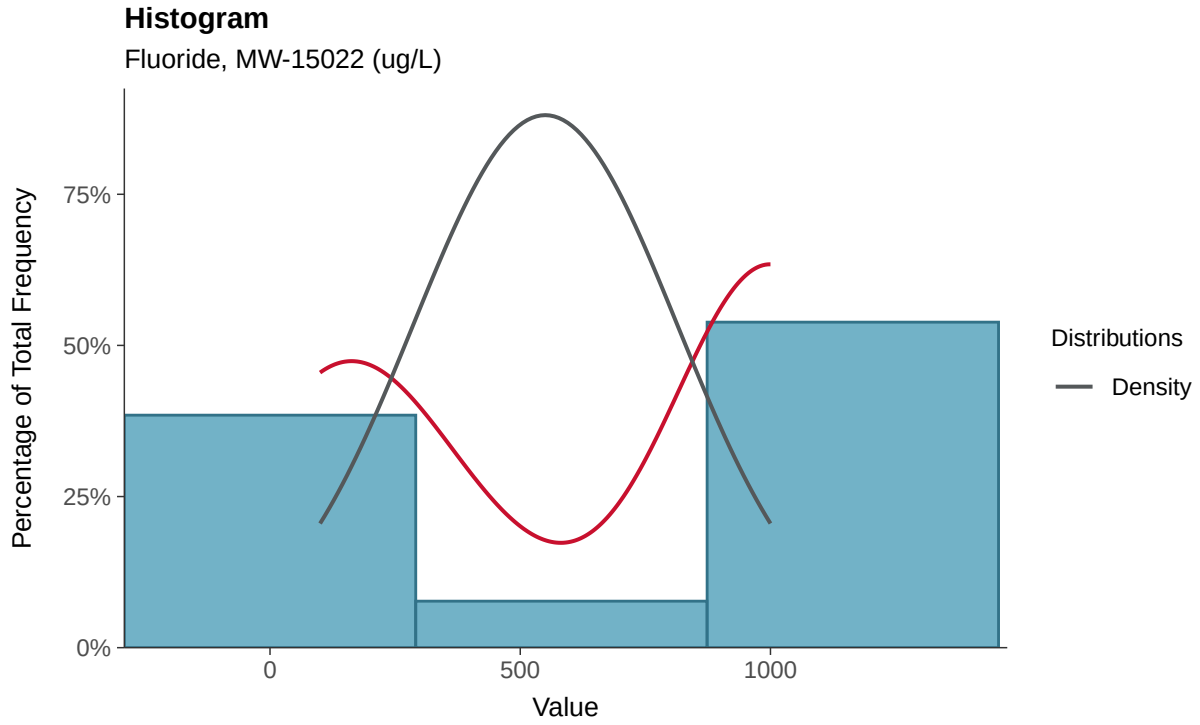
Cobalt, MW-15022 (ug/L)



## Appendix IV: Fluoride, MW-15022

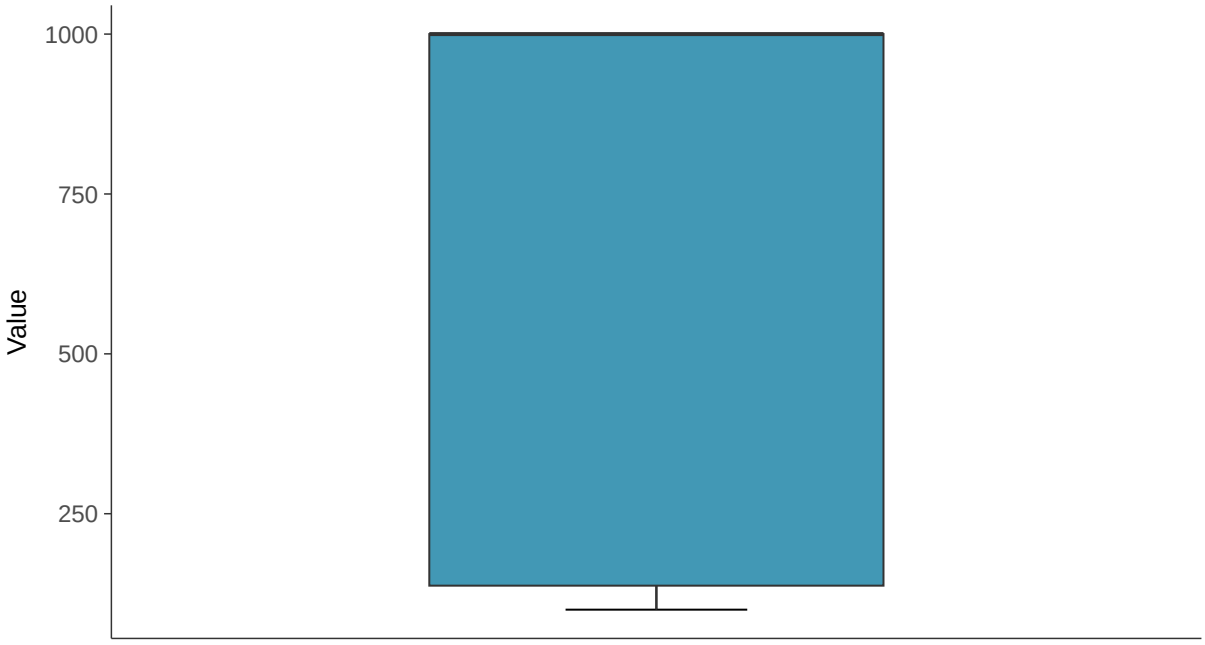
ID: 12_2_114



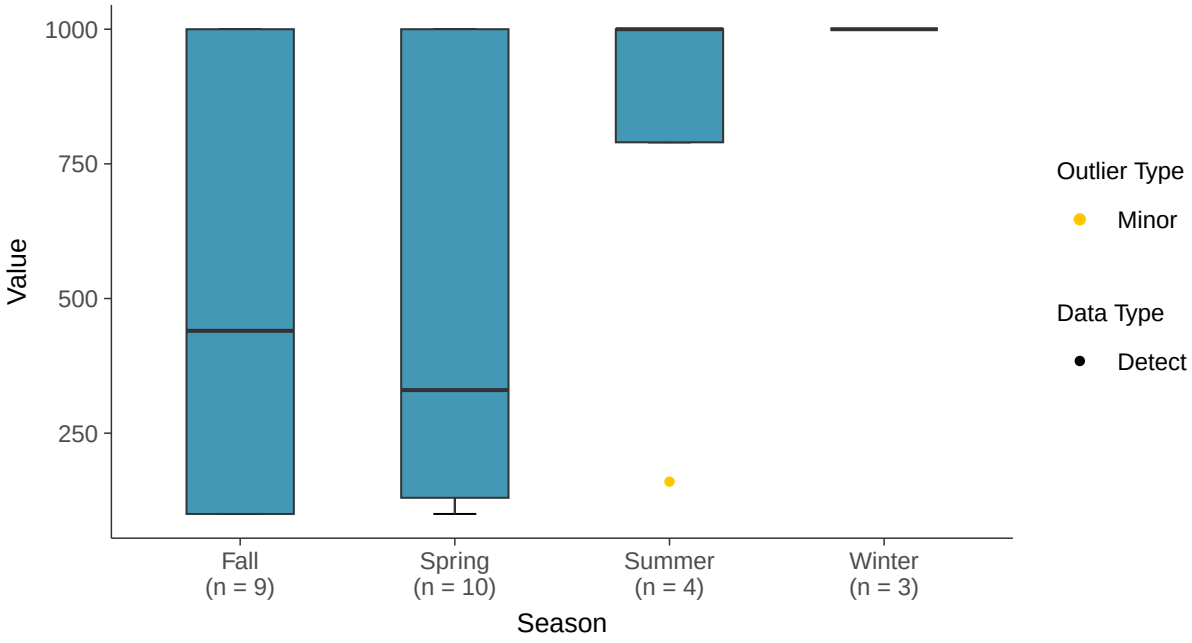
## Boxplot

Fluoride, MW-15022 (ug/L)



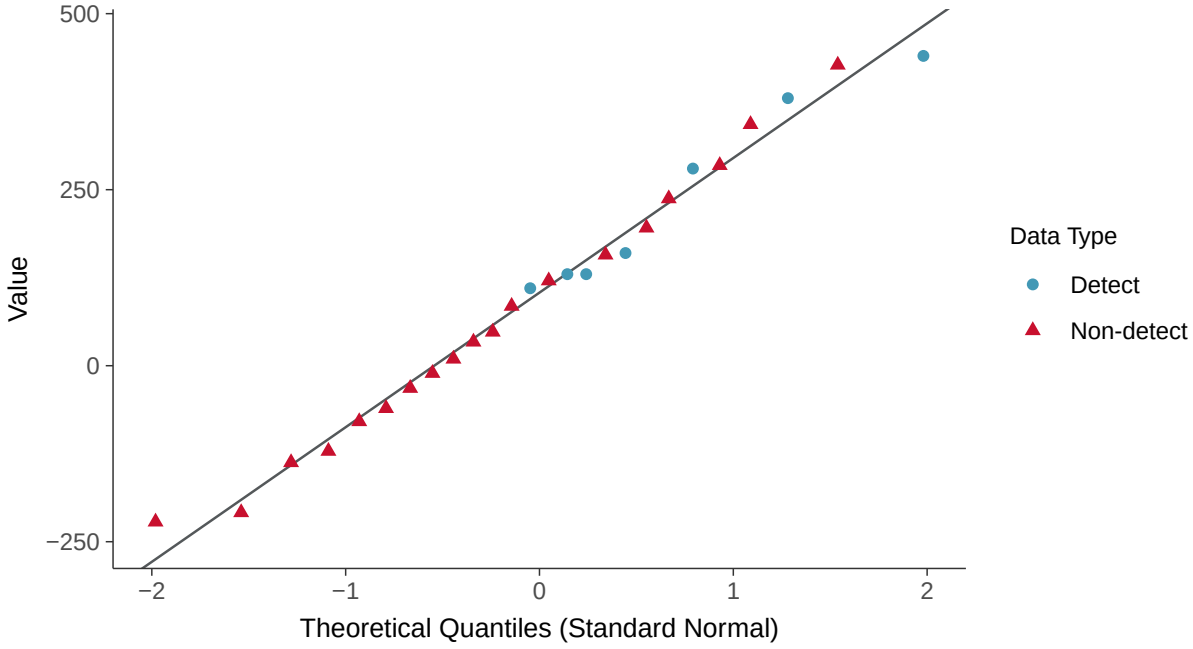

## Boxplot by Season

Fluoride, MW-15022 (ug/L)



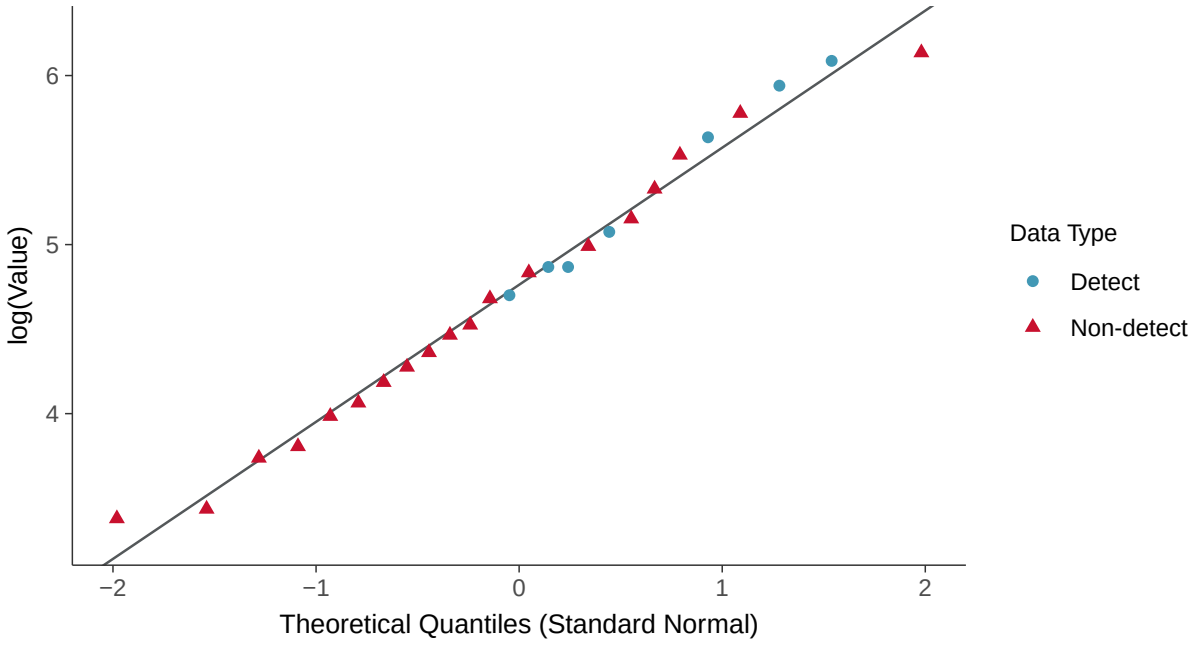
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15022 (ug/L)



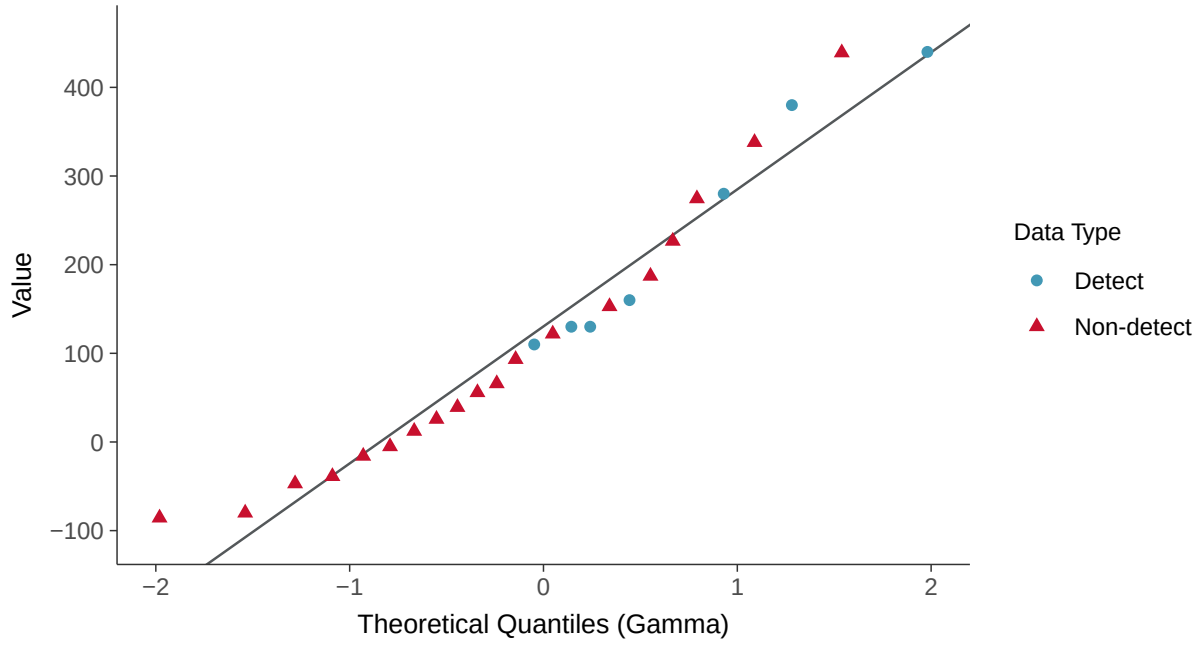

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15022 (ug/L)



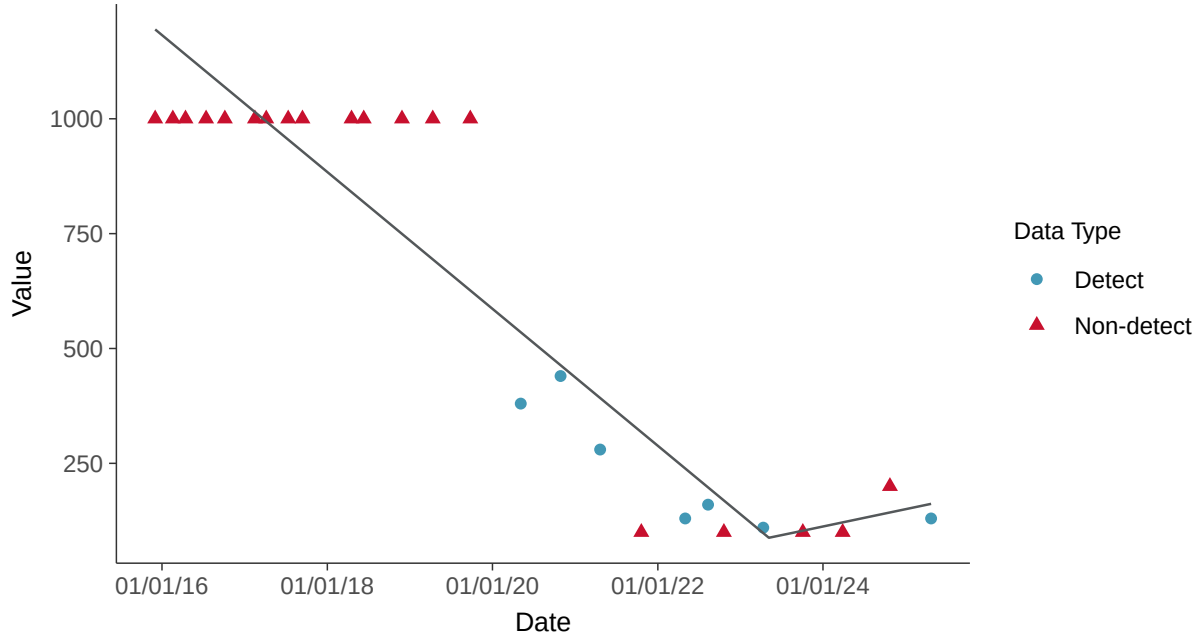
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15022 (ug/L)



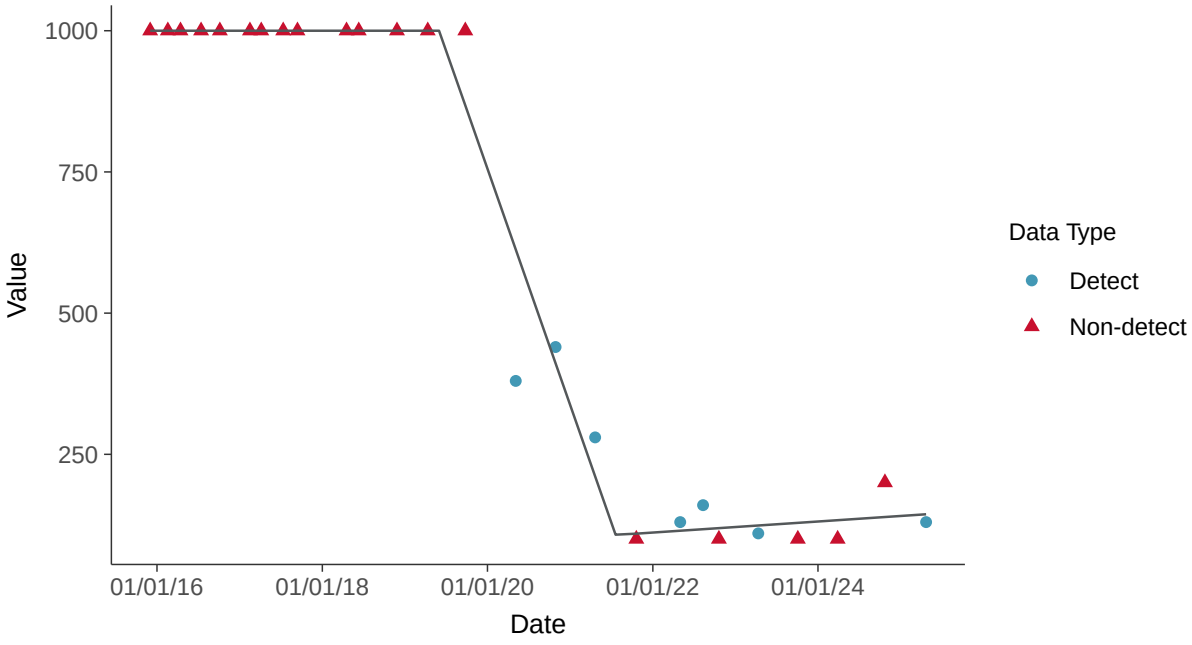

**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15022 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Fluoride, MW-15022 (ug/L)

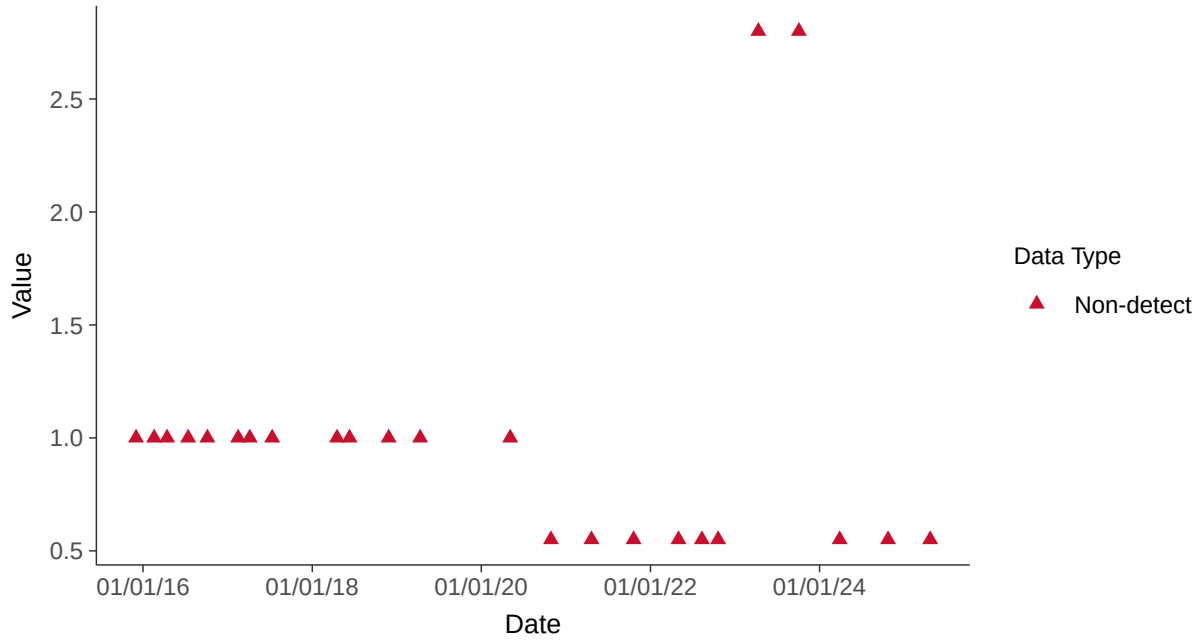


# Appendix IV: Lead, MW-15022

ID: 12_2_116

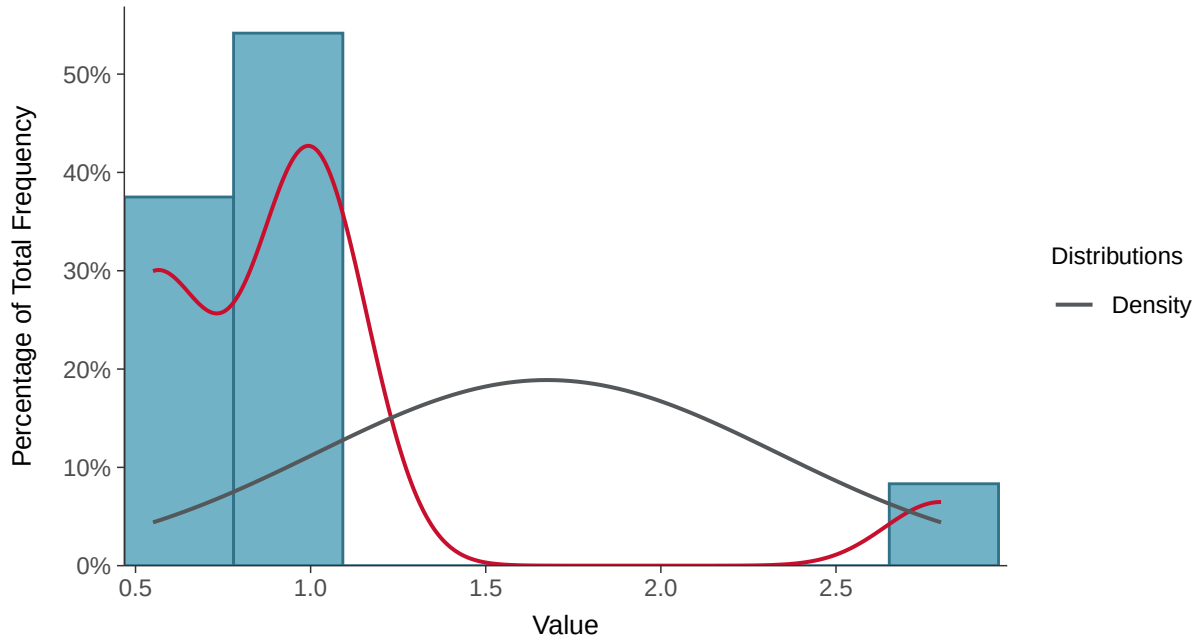
**Scatter Plot**

Lead, MW-15022 (ug/L)



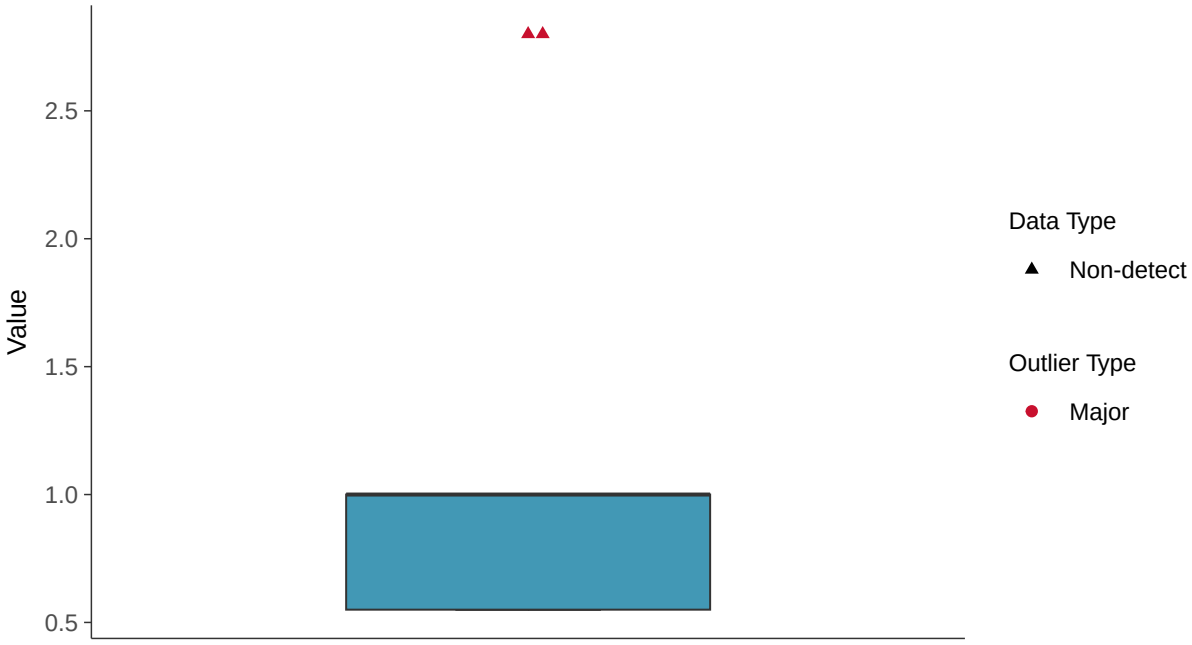

**Histogram**

Lead, MW-15022 (ug/L)



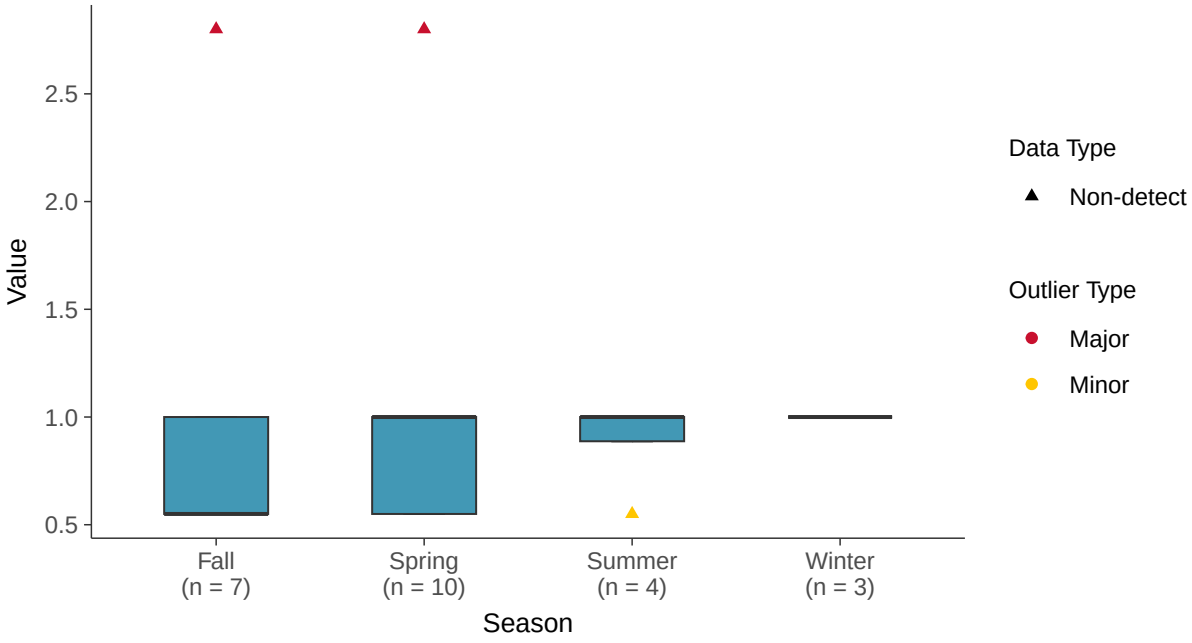
## Boxplot

Lead, MW-15022 (ug/L)



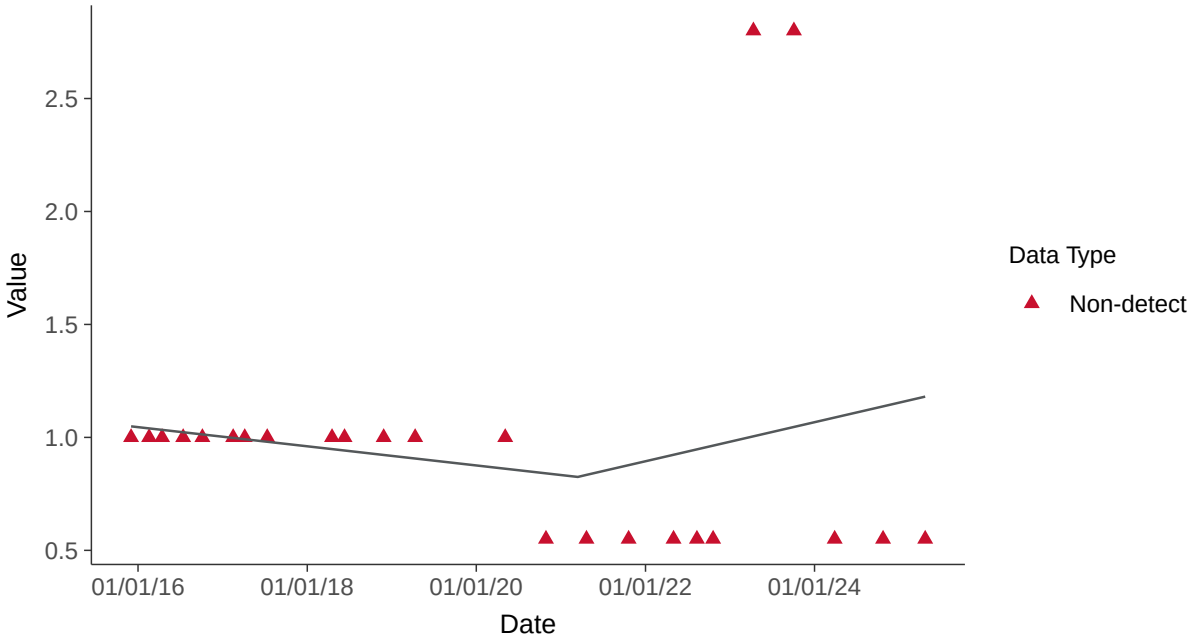

## Boxplot by Season

Lead, MW-15022 (ug/L)



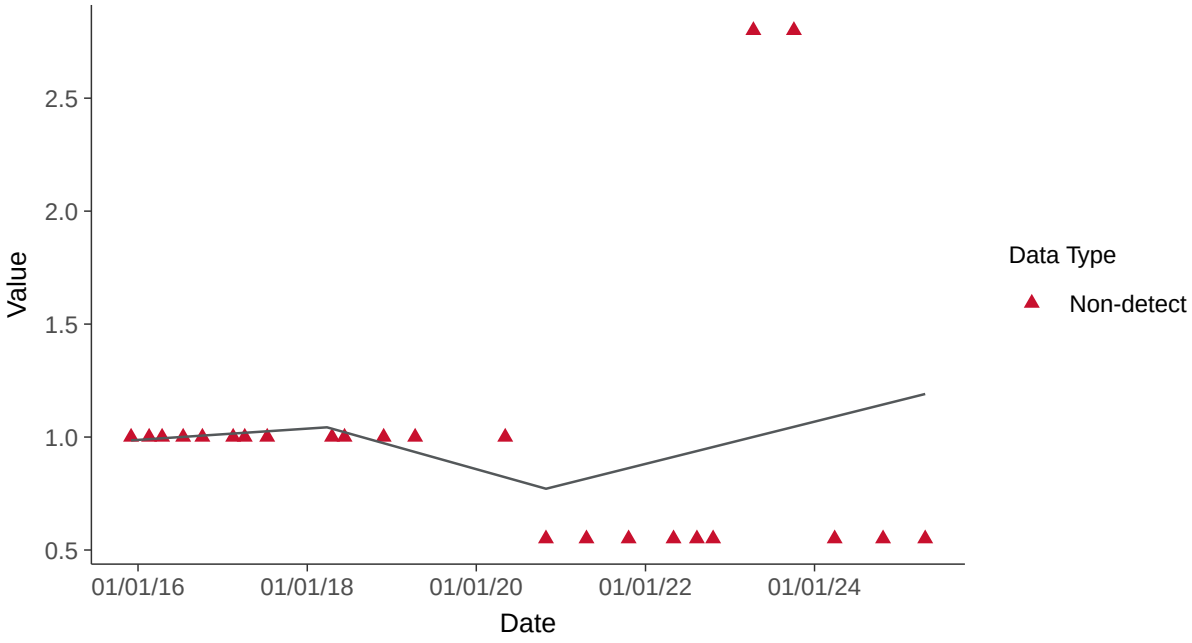
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15022 (ug/L)



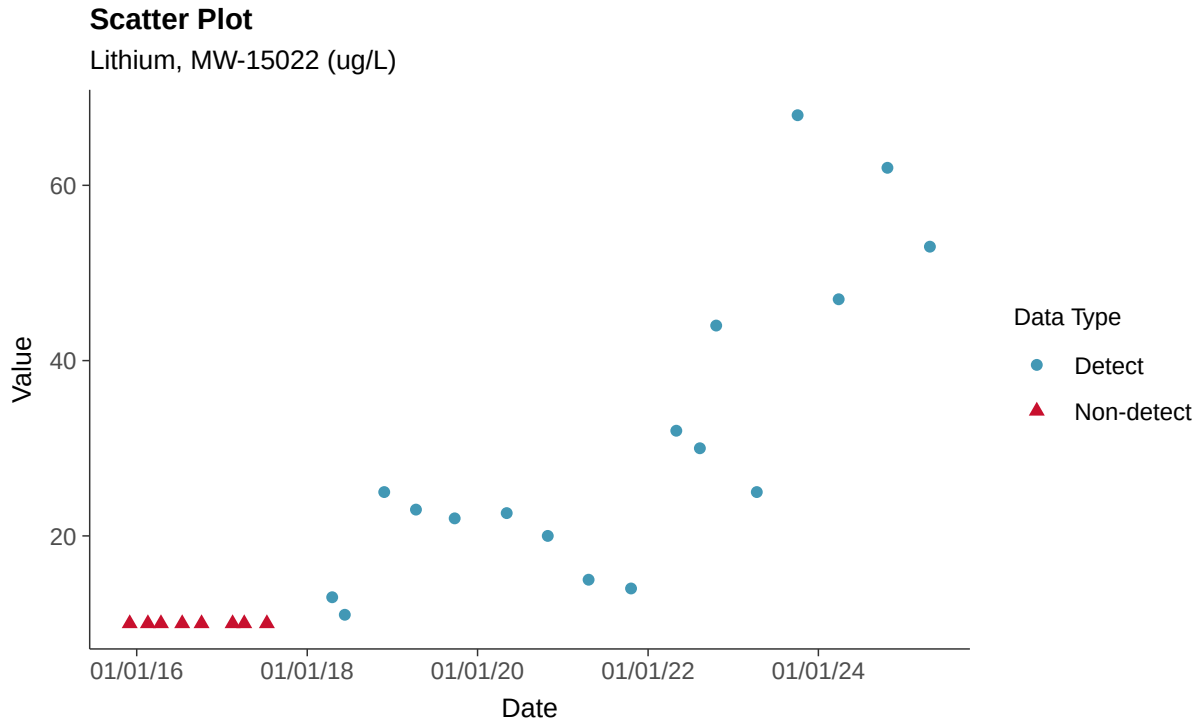

**Trend Regression: Piecewise Linear-Linear-Linear**

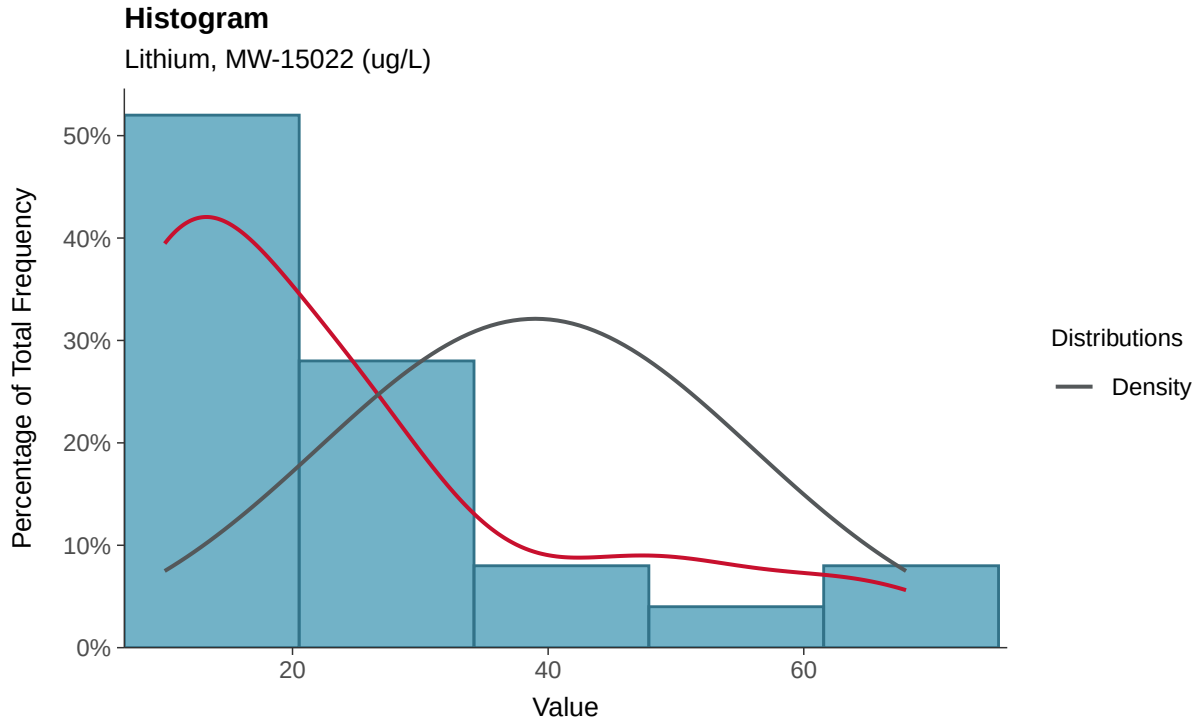
Lead, MW-15022 (ug/L)



## Appendix IV: Lithium, MW-15022

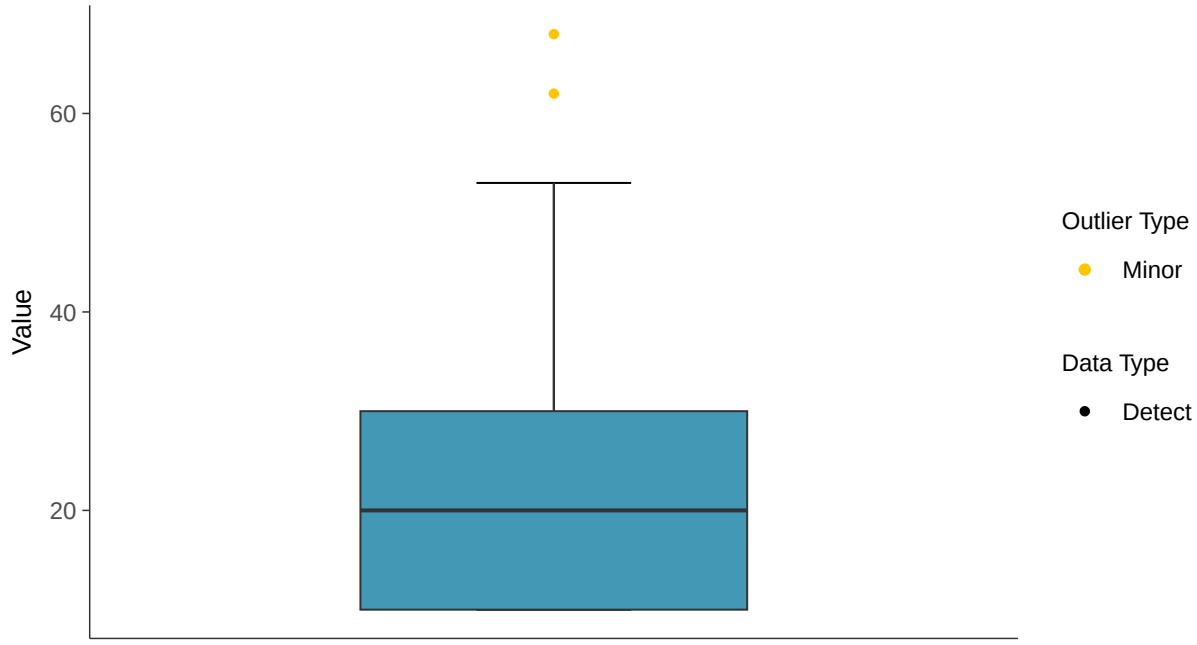
ID: 12_2_117



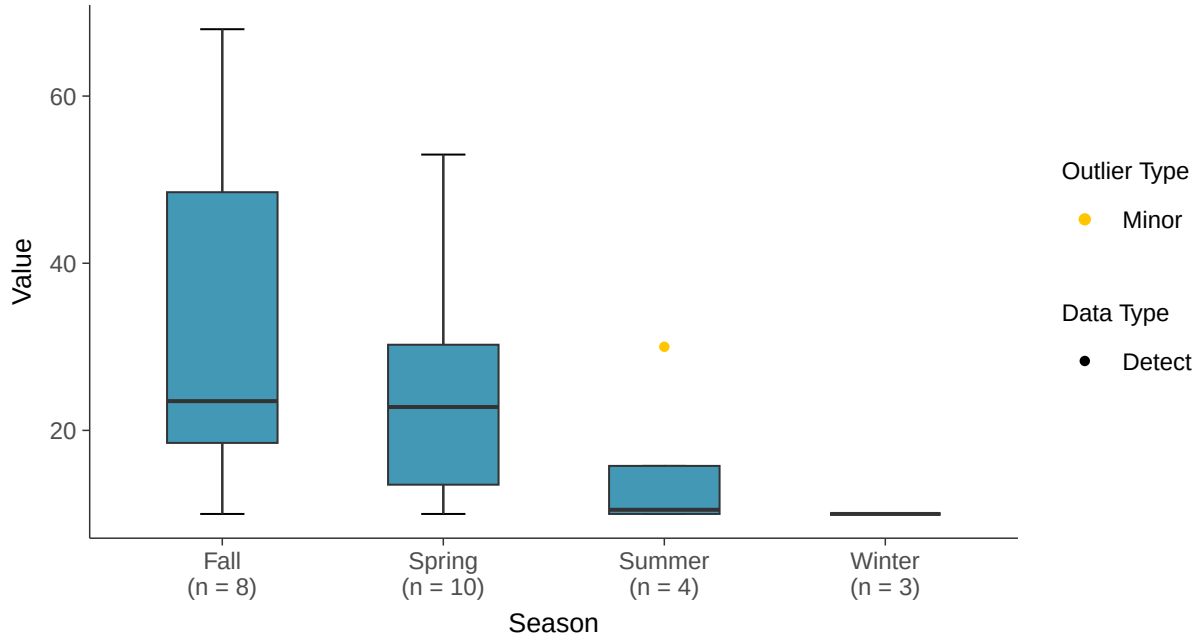
**Boxplot**

Lithium, MW-15022 (ug/L)



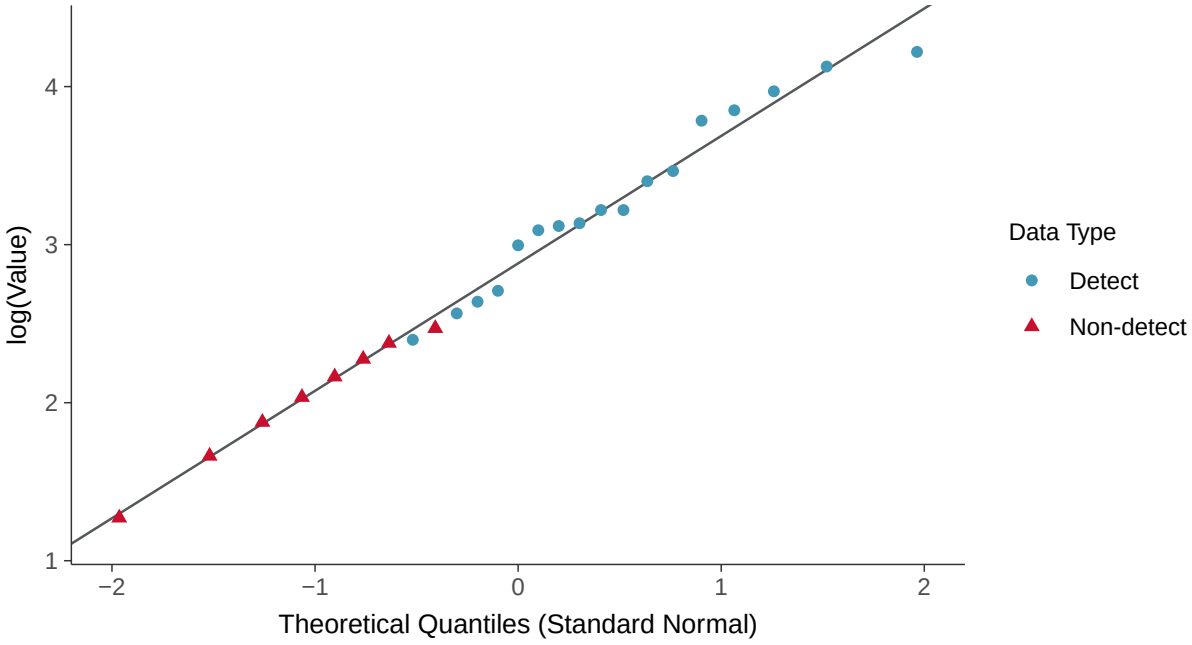

**Boxplot by Season**

Lithium, MW-15022 (ug/L)



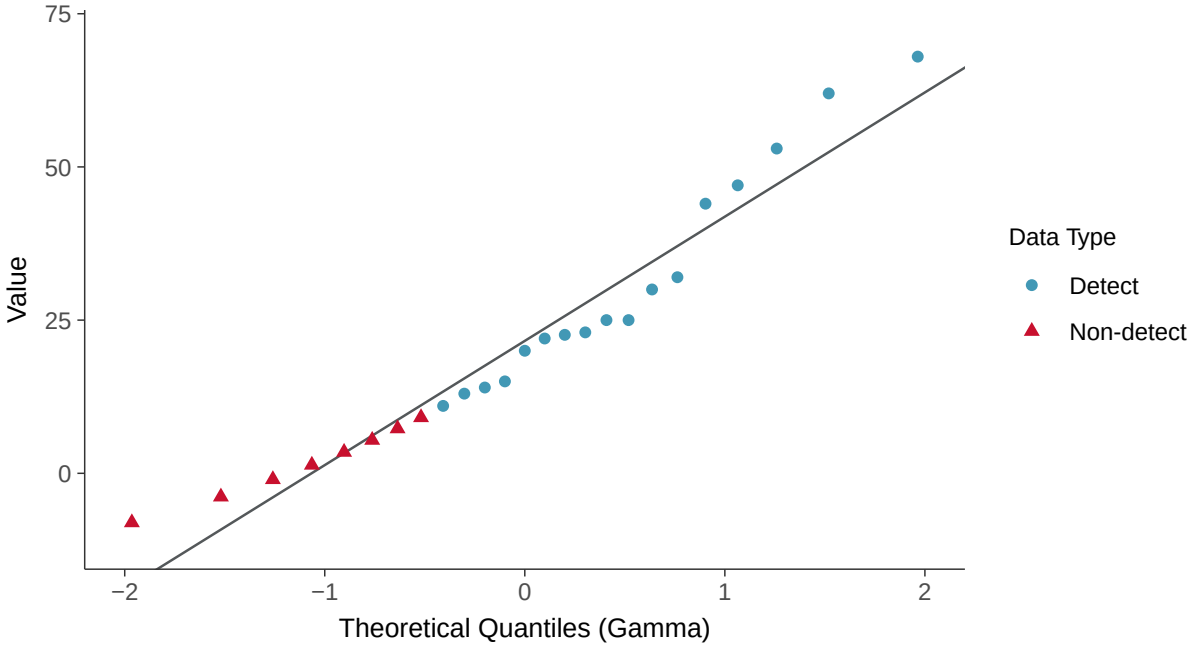
**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15022 (ug/L)



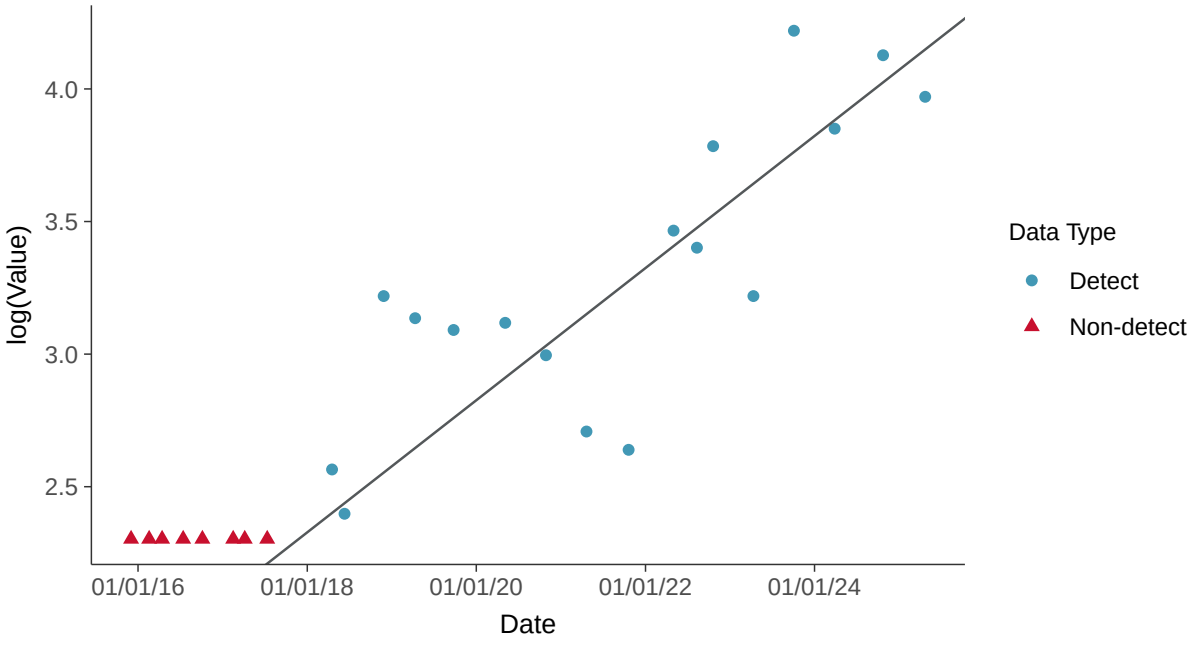

**Gamma Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15022 (ug/L)



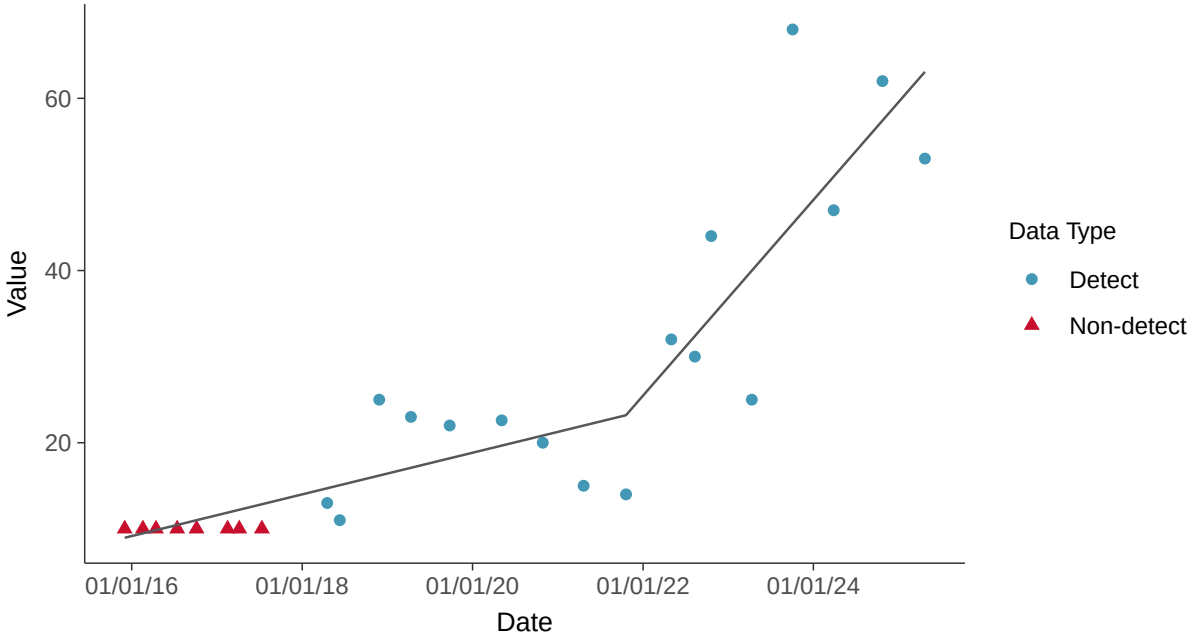
**Trend Regression: Lognormal MLE**

Lithium, MW-15022 (ug/L)



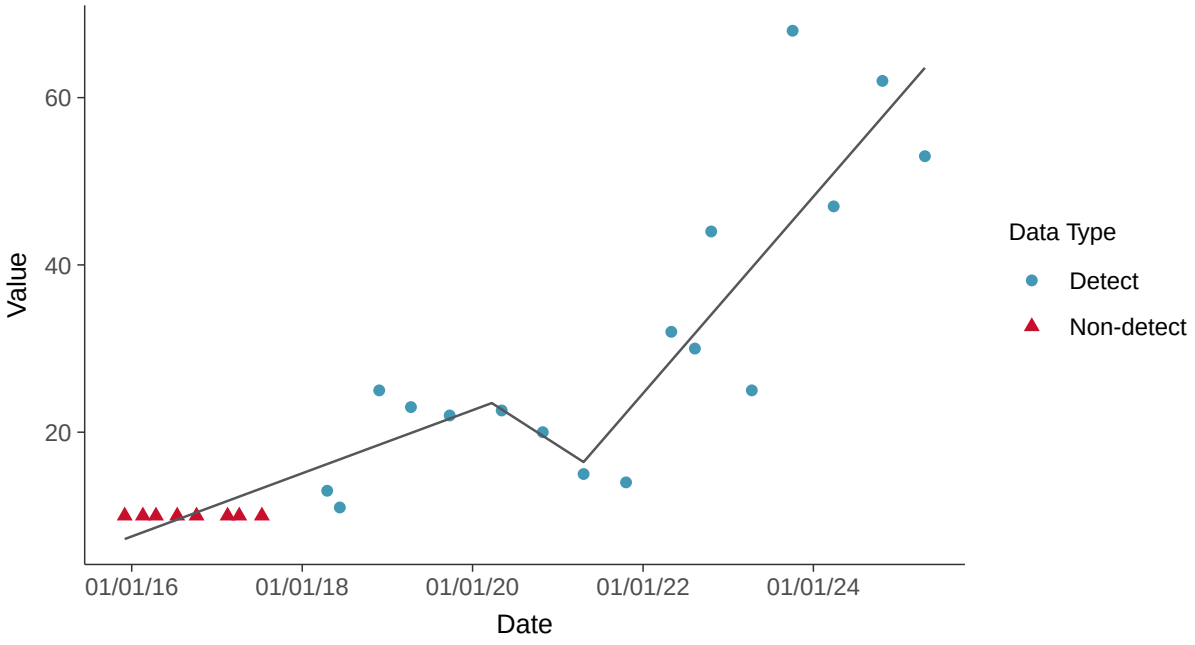

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15022 (ug/L)



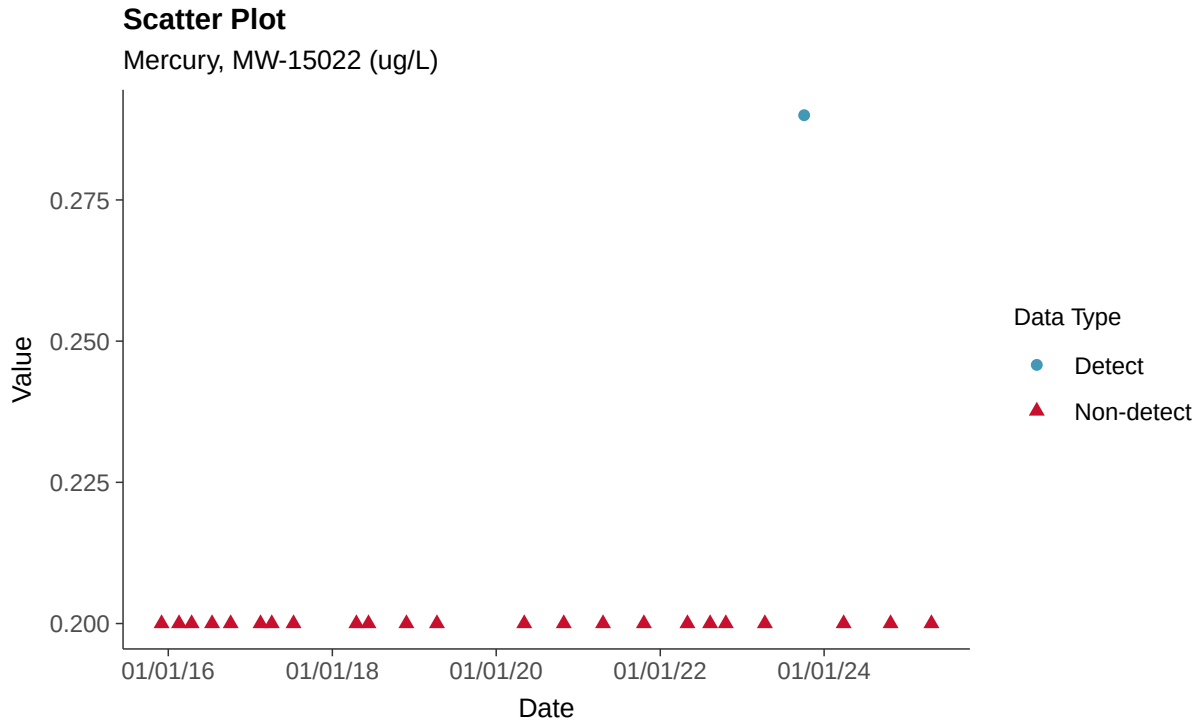
**Trend Regression: Piecewise Linear-Linear-Linear**

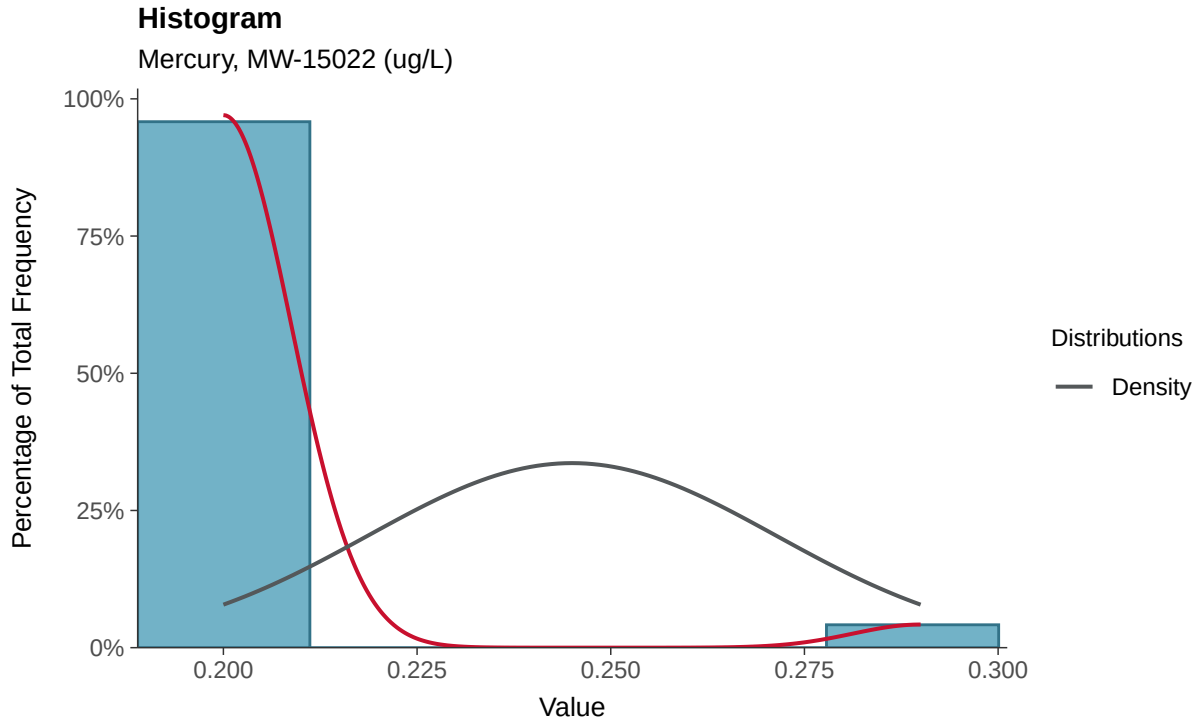
Lithium, MW-15022 (ug/L)



## Appendix IV: Mercury, MW-15022

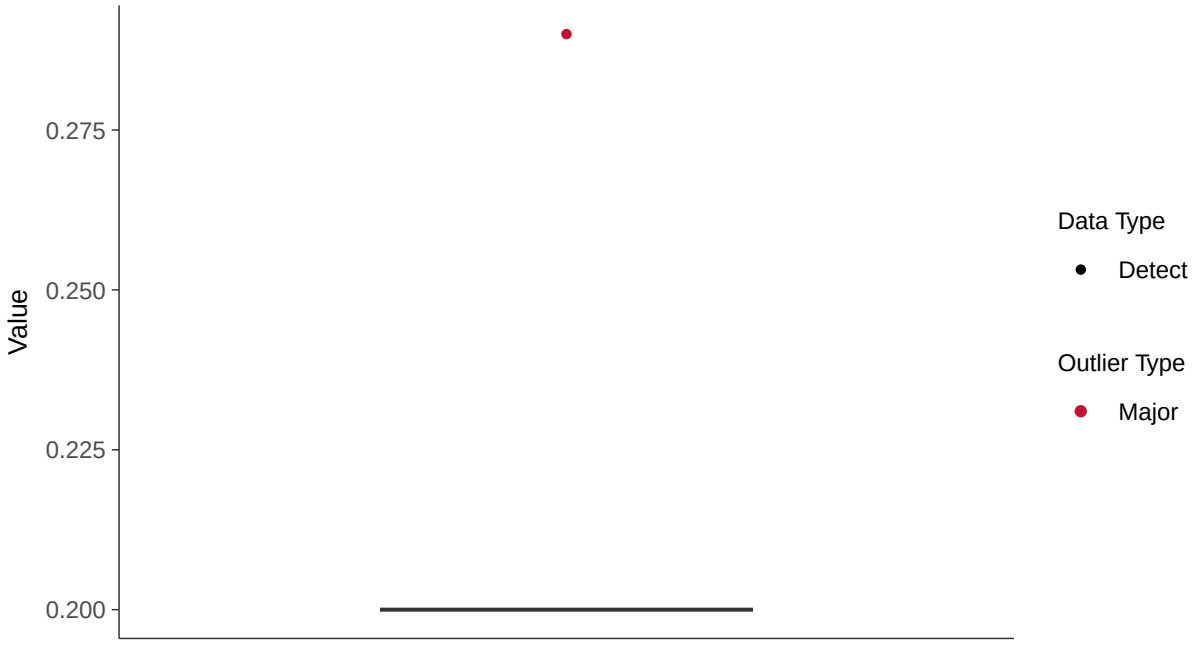
ID: 12_2_118



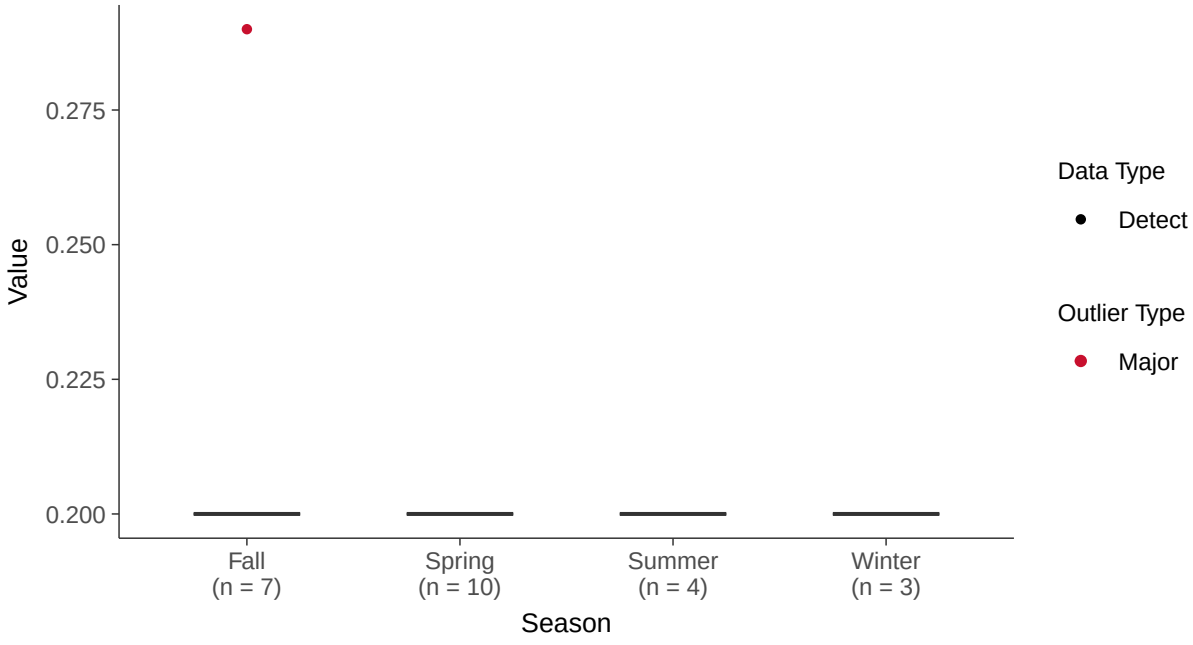
## Boxplot

Mercury, MW-15022 (ug/L)



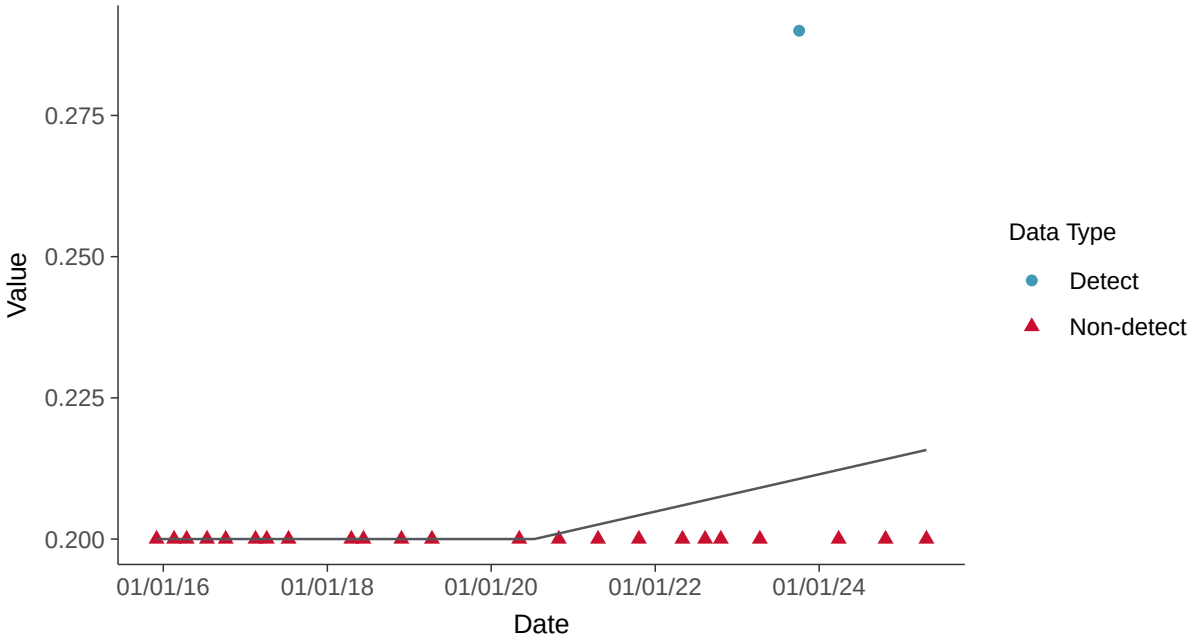

## Boxplot by Season

Mercury, MW-15022 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Mercury, MW-15022 (ug/L)

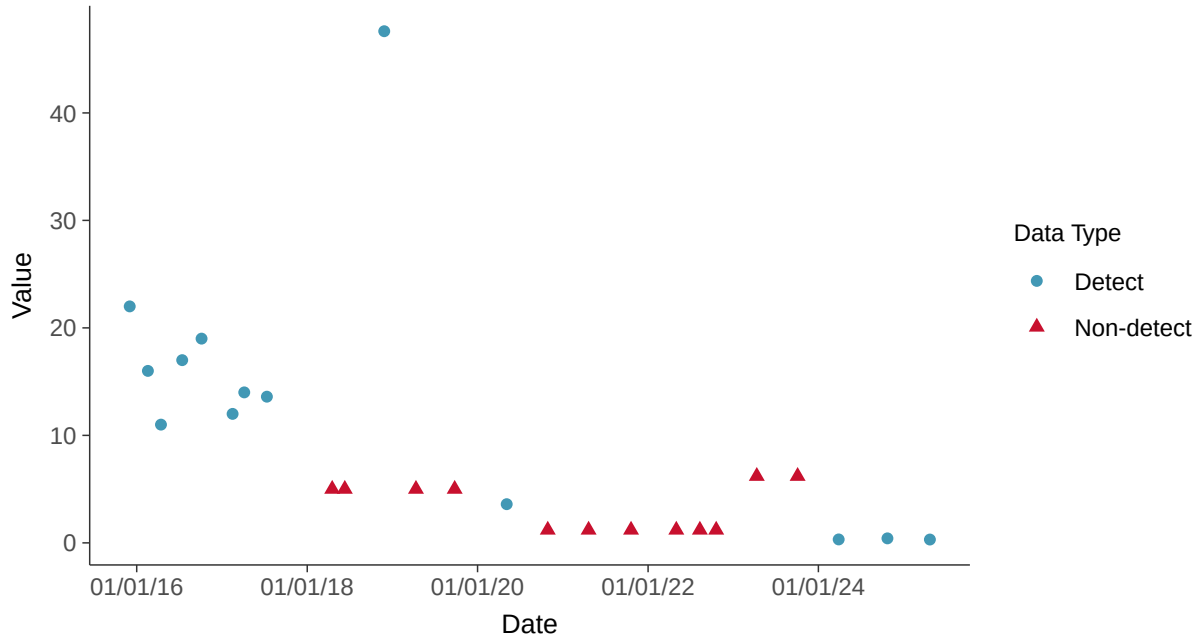


## Appendix IV: Molybdenum, MW-15022

ID: 12_2_119

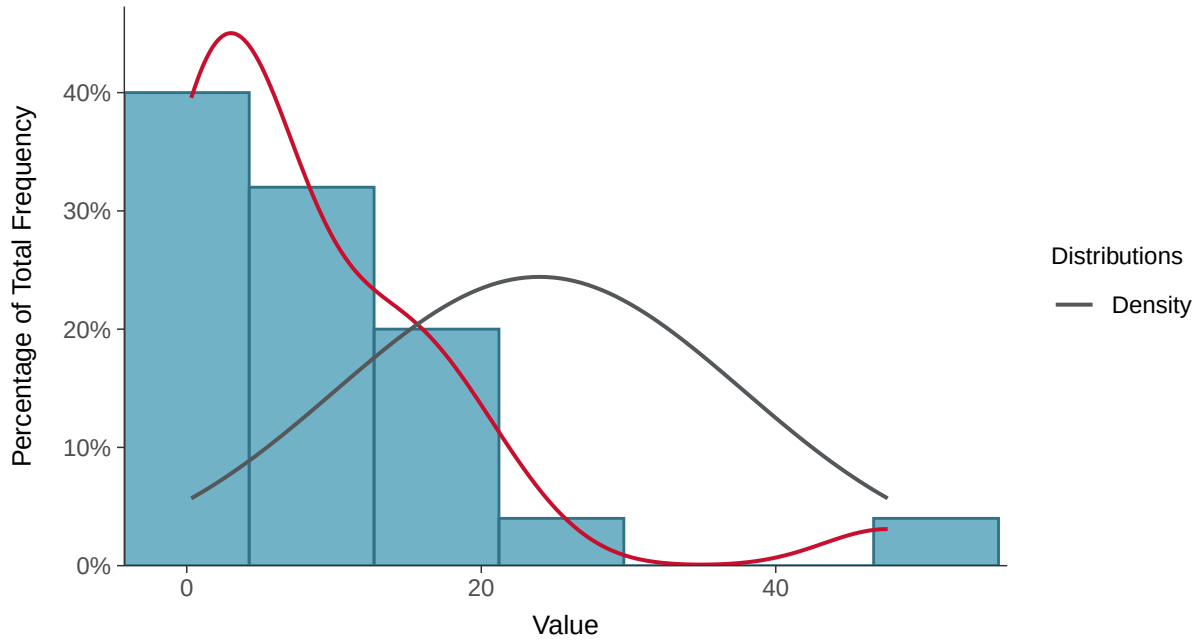
**Scatter Plot**

Molybdenum, MW-15022 (ug/L)



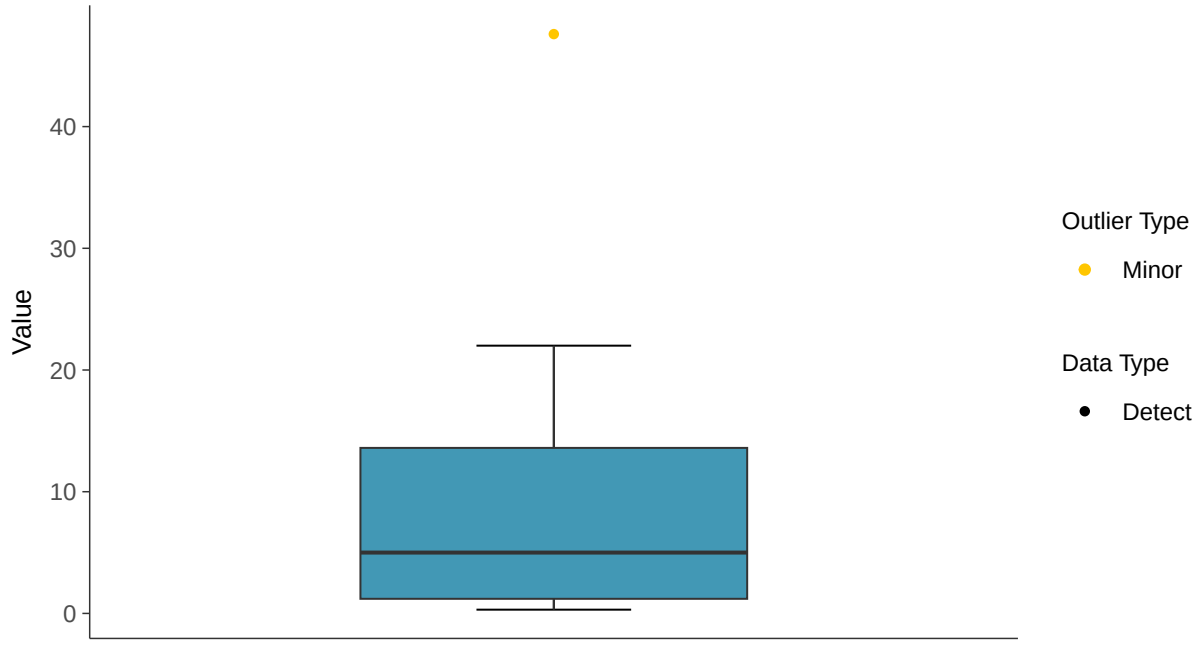

**Histogram**

Molybdenum, MW-15022 (ug/L)



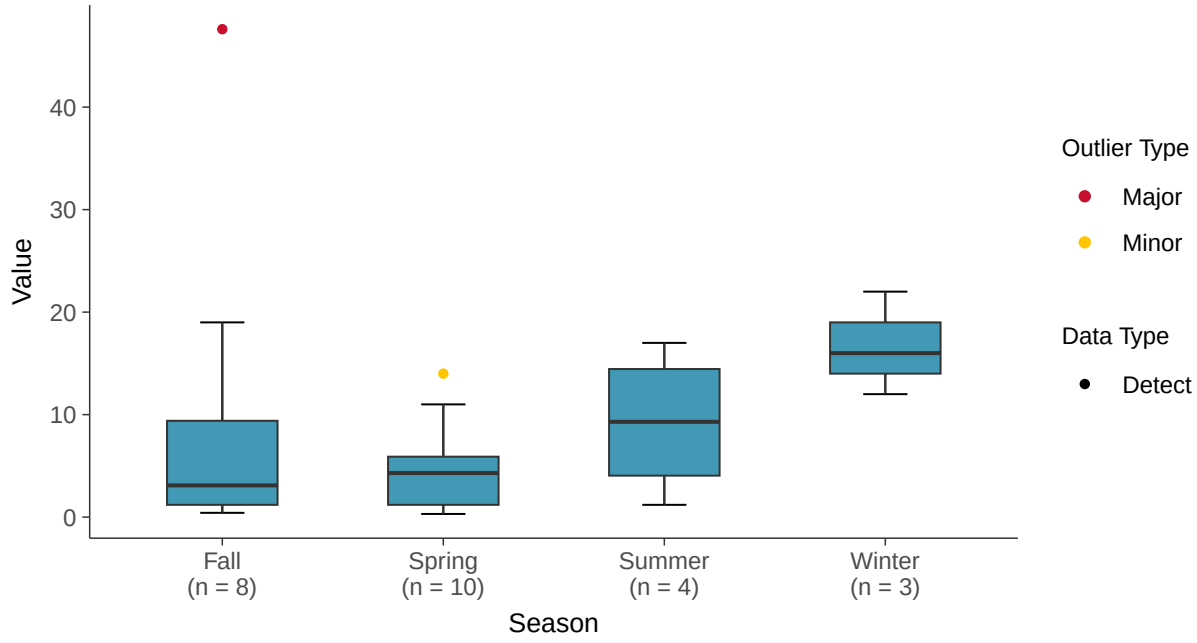
## Boxplot

Molybdenum, MW-15022 (ug/L)



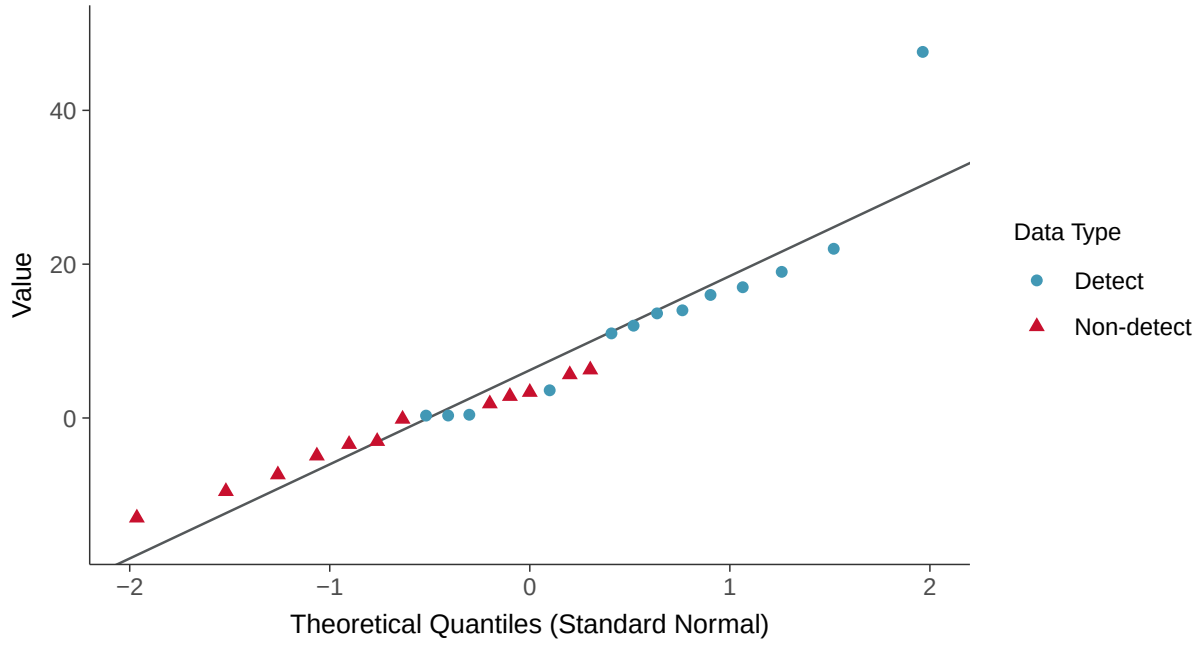

## Boxplot by Season

Molybdenum, MW-15022 (ug/L)



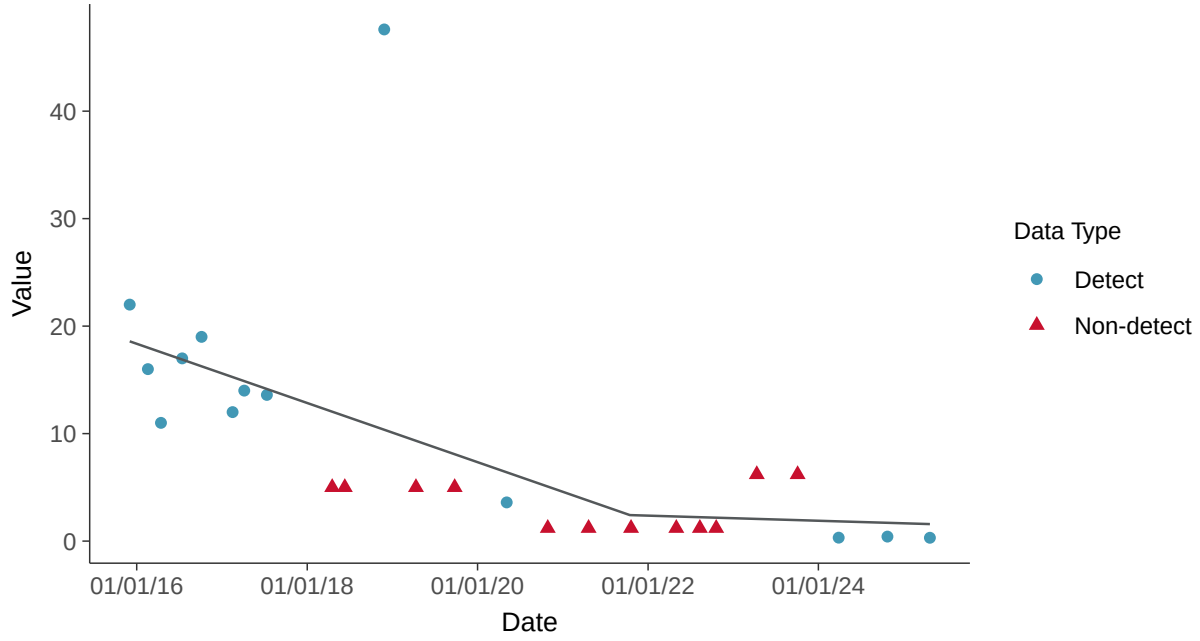
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15022 (ug/L)



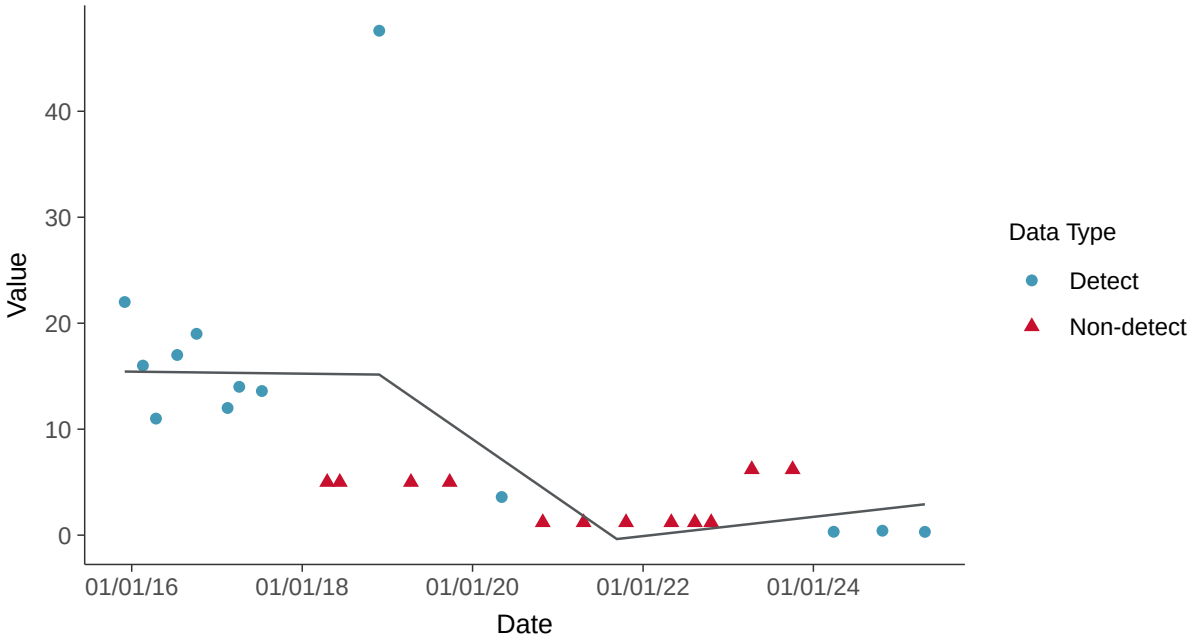

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15022 (ug/L)



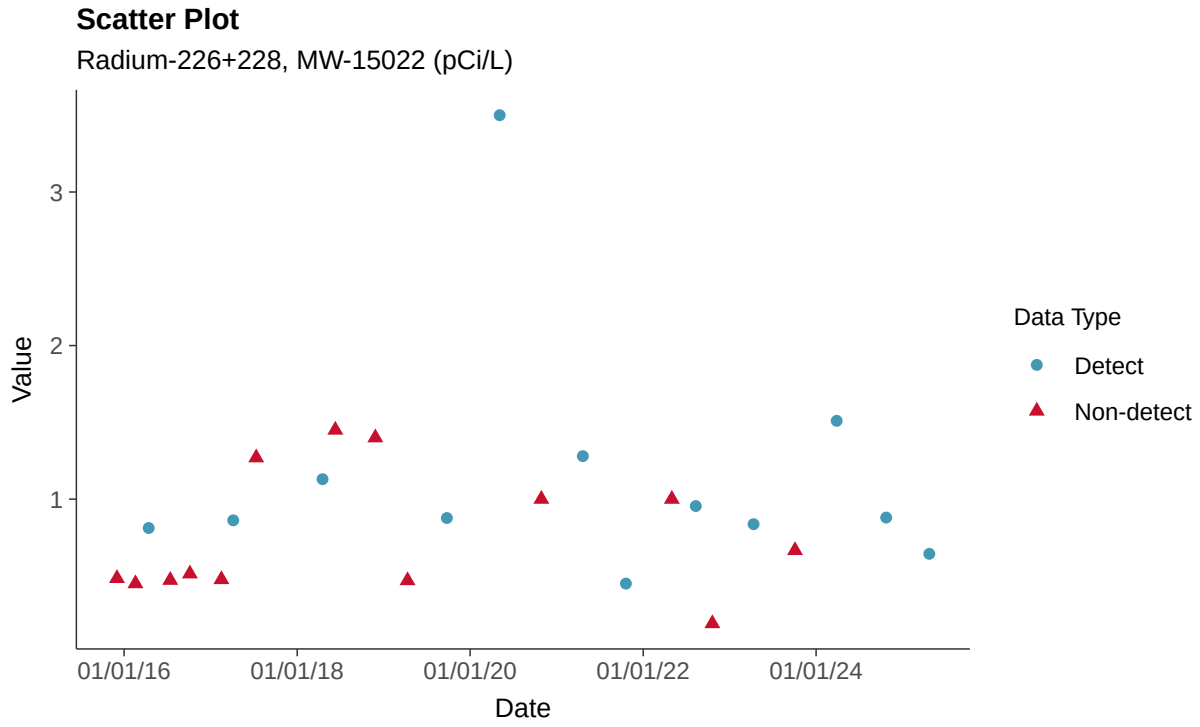
**Trend Regression: Piecewise Linear-Linear-Linear**

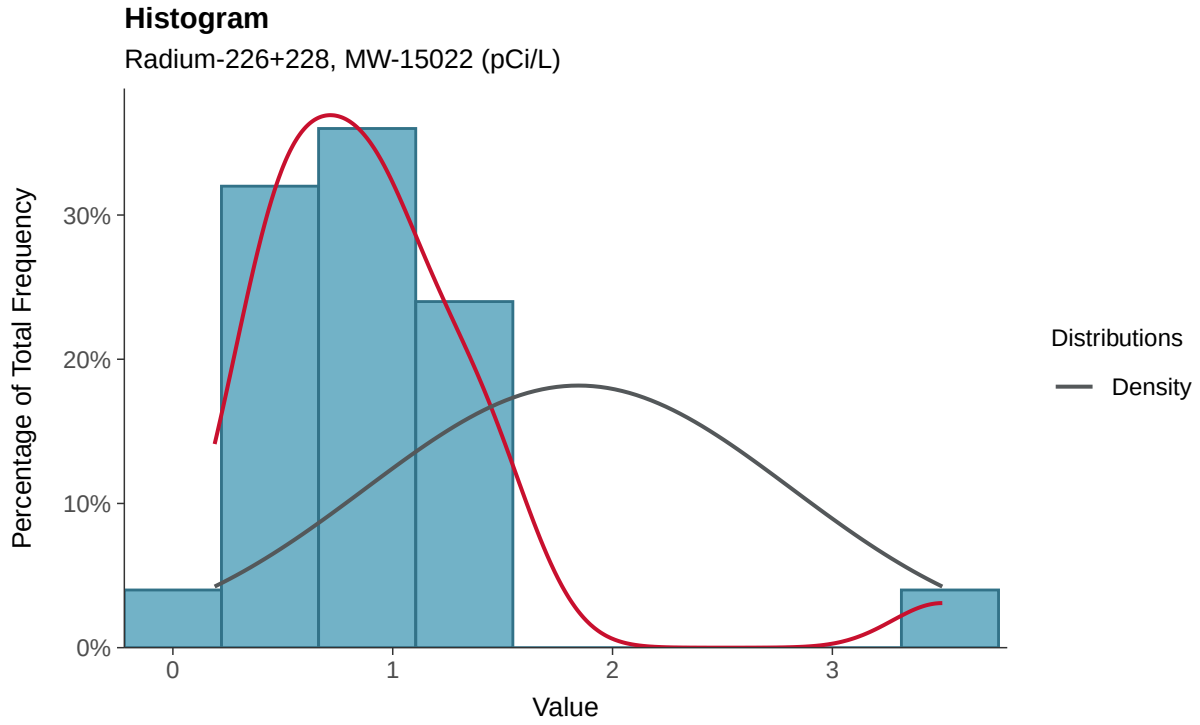
Molybdenum, MW-15022 (ug/L)



## Appendix IV: Radium-226+228, MW-15022

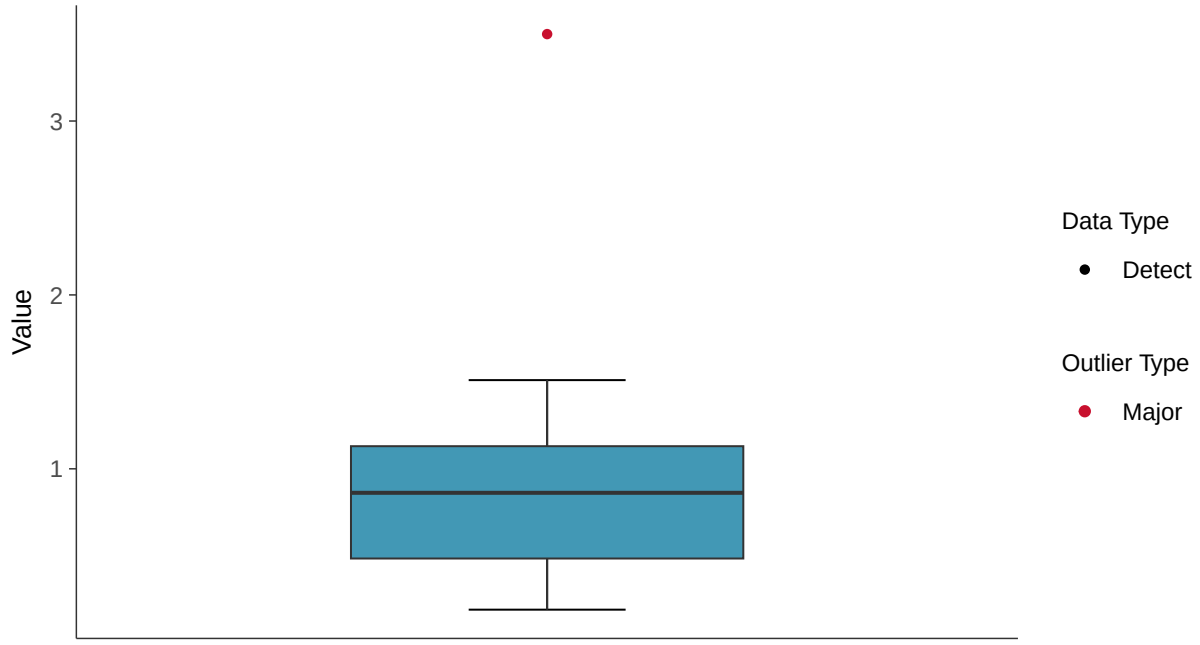
ID: 12_2_125



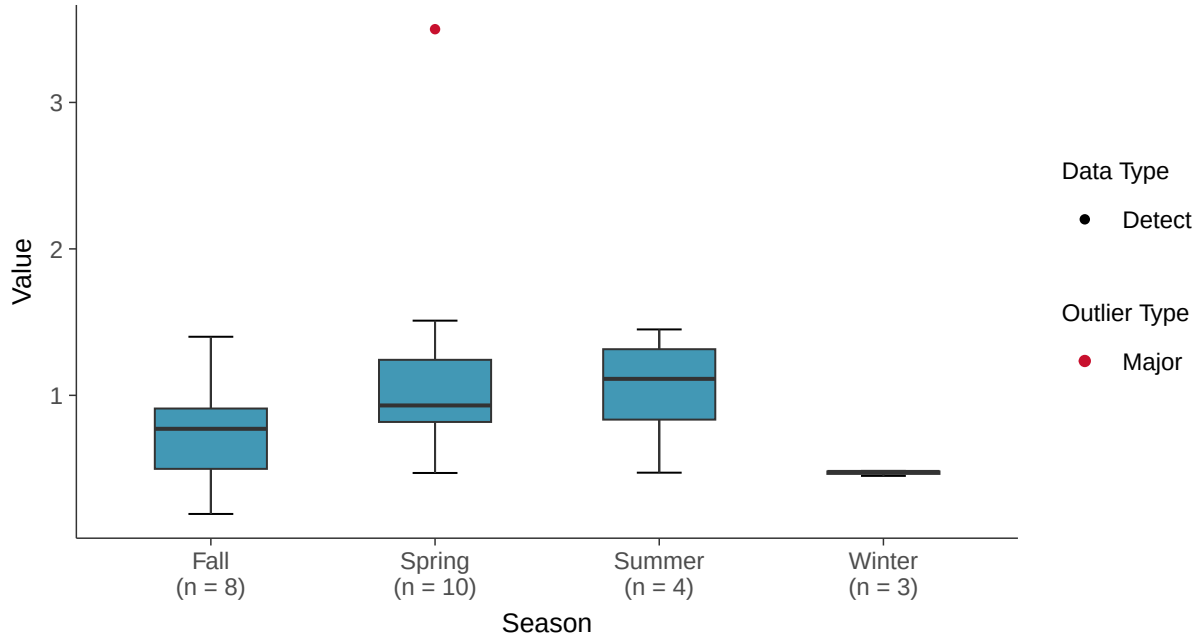
## Boxplot

Radium-226+228, MW-15022 (pCi/L)



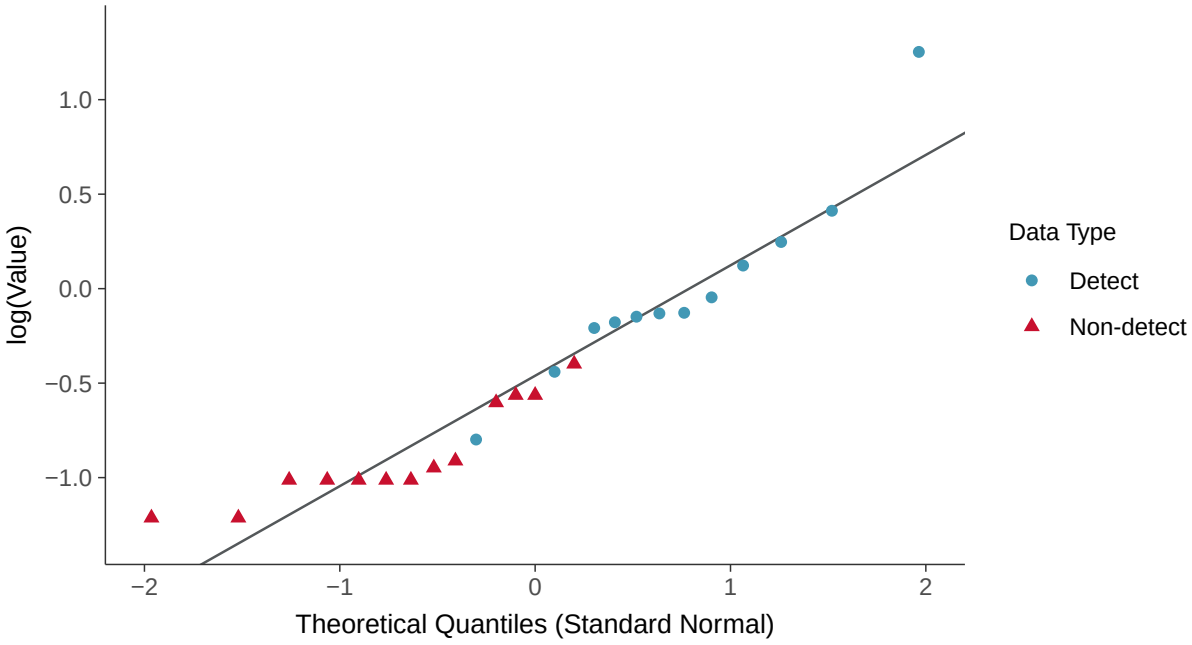

## Boxplot by Season

Radium-226+228, MW-15022 (pCi/L)



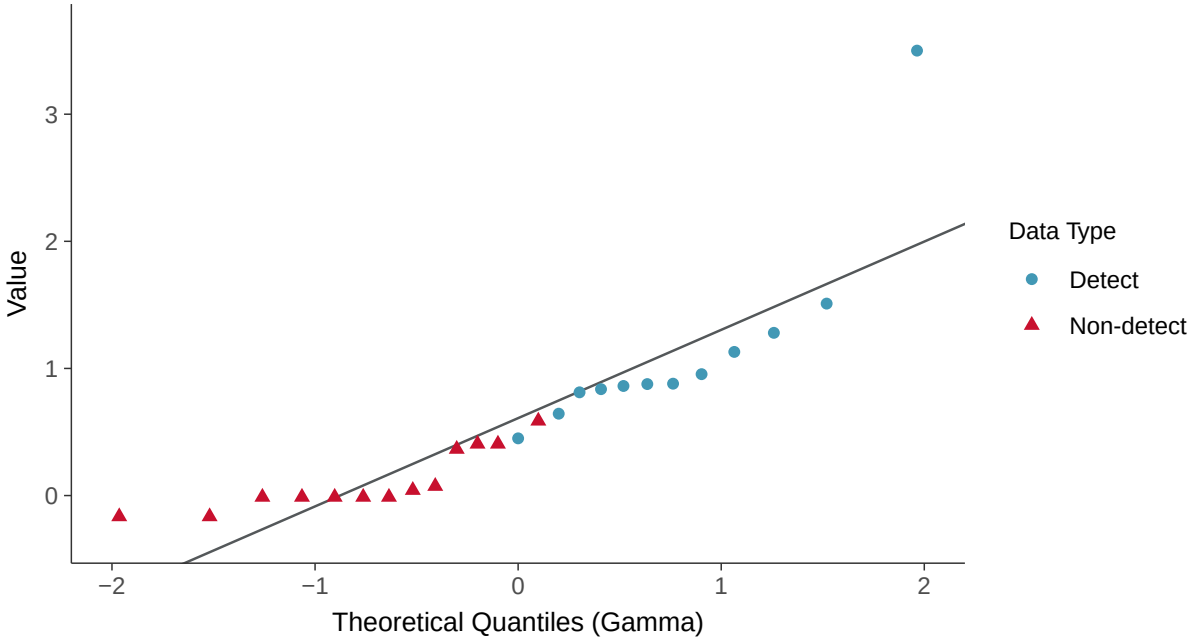
**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15022 (pCi/L)



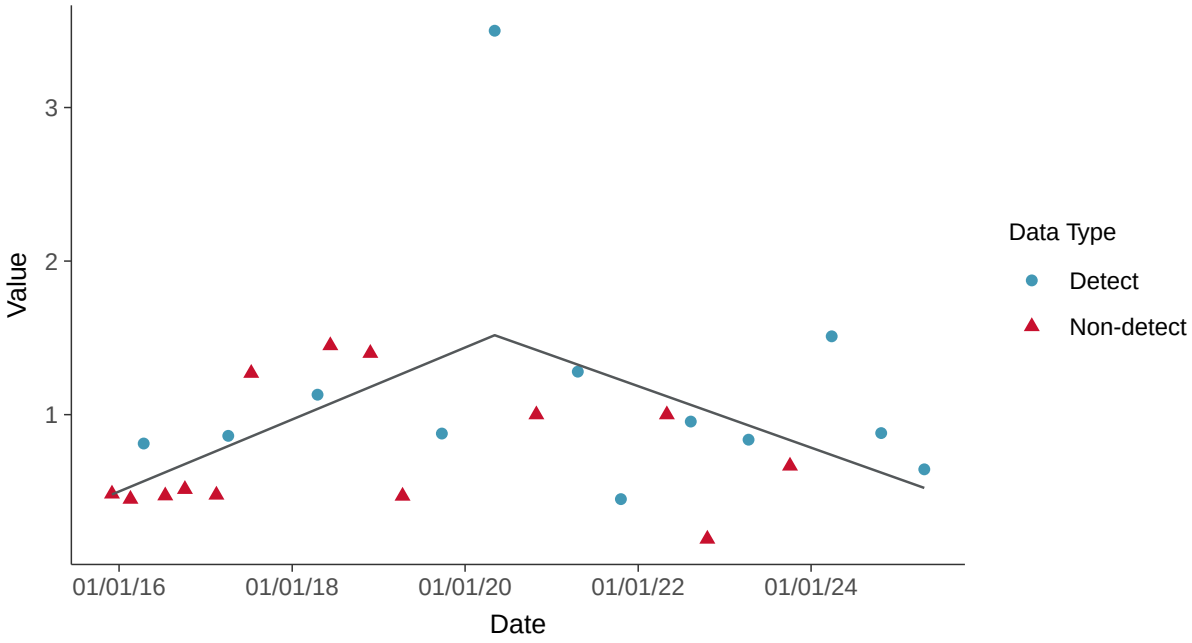

**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15022 (pCi/L)



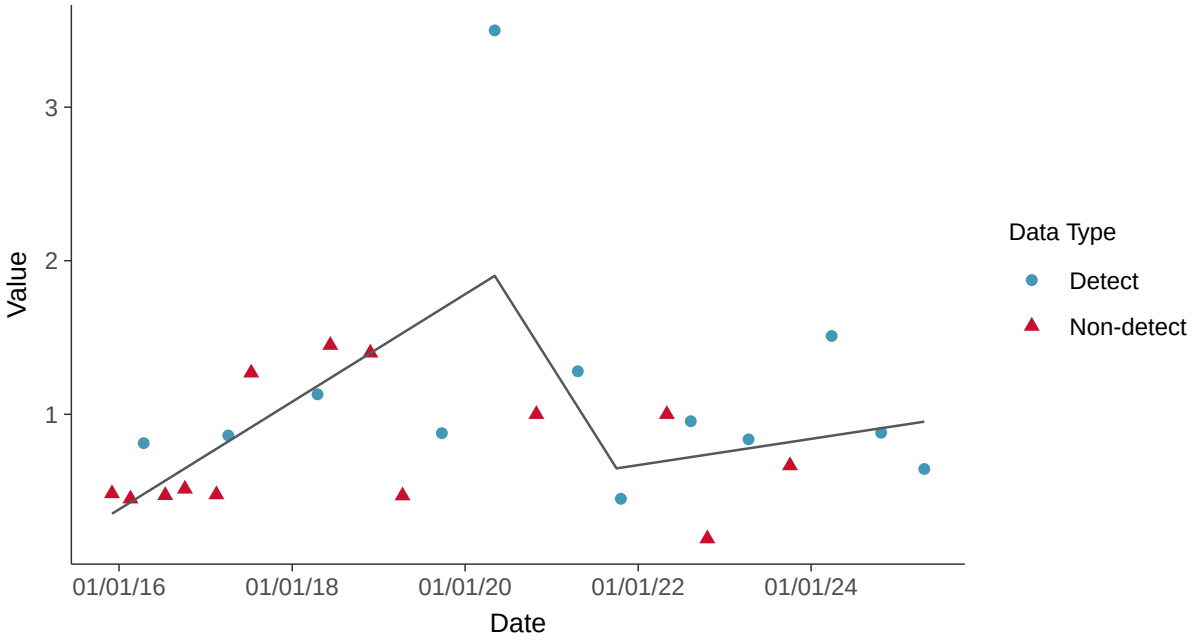
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15022 (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15022 (pCi/L)

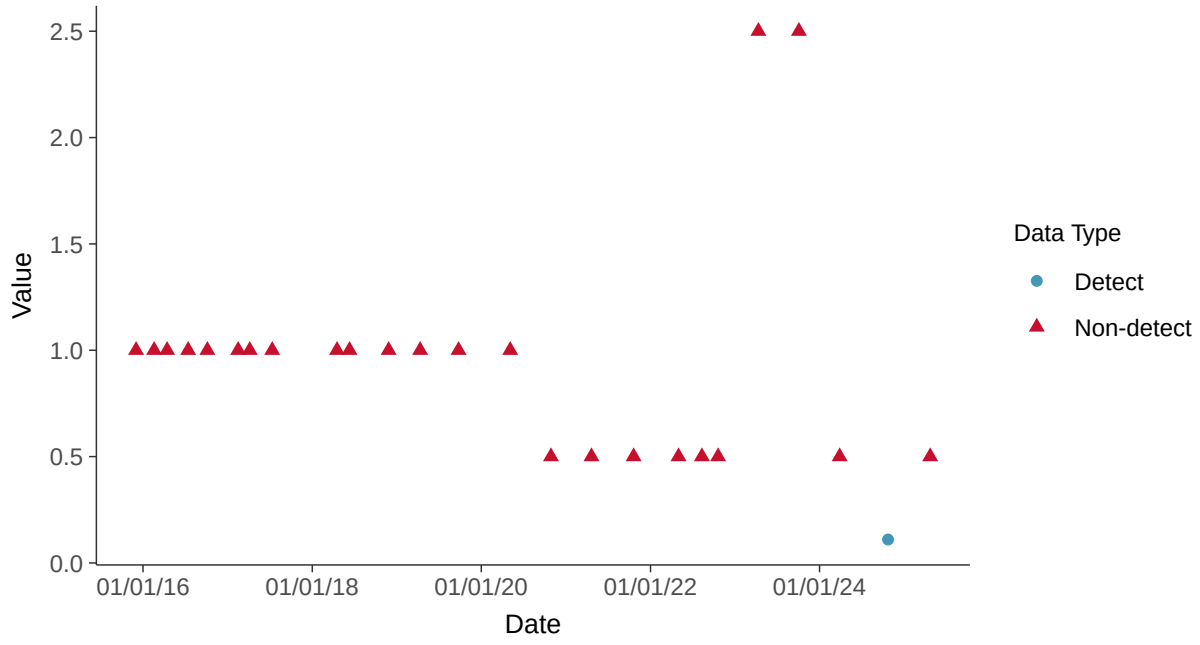


## Appendix IV: Selenium, MW-15022

ID: 12_2_127

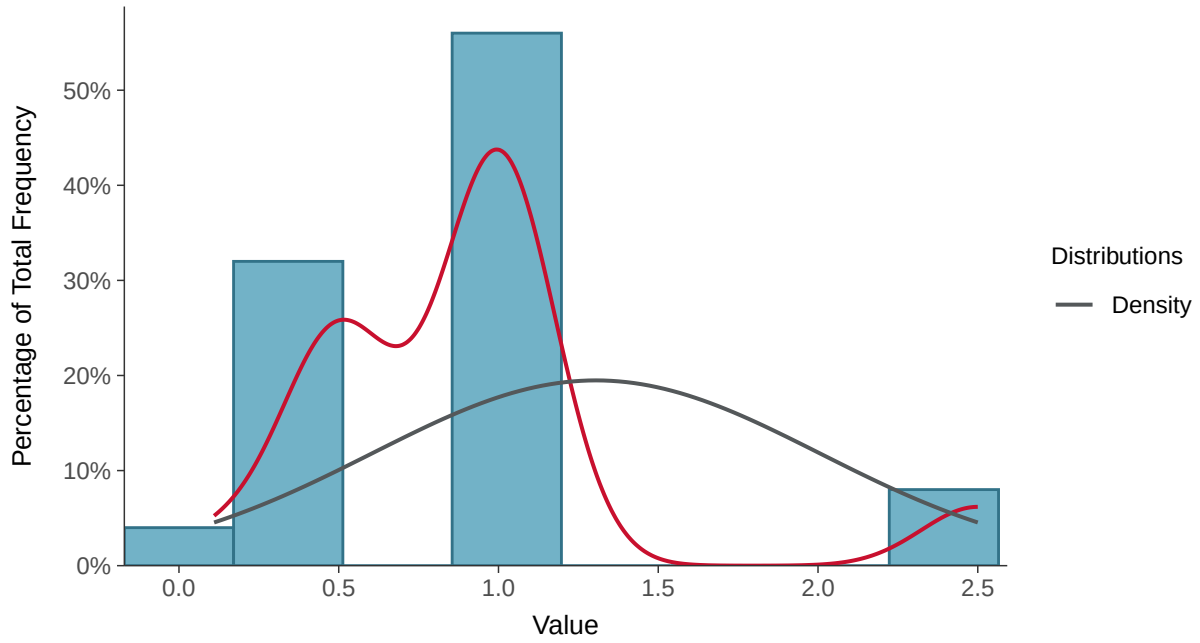
**Scatter Plot**

Selenium, MW-15022 (ug/L)



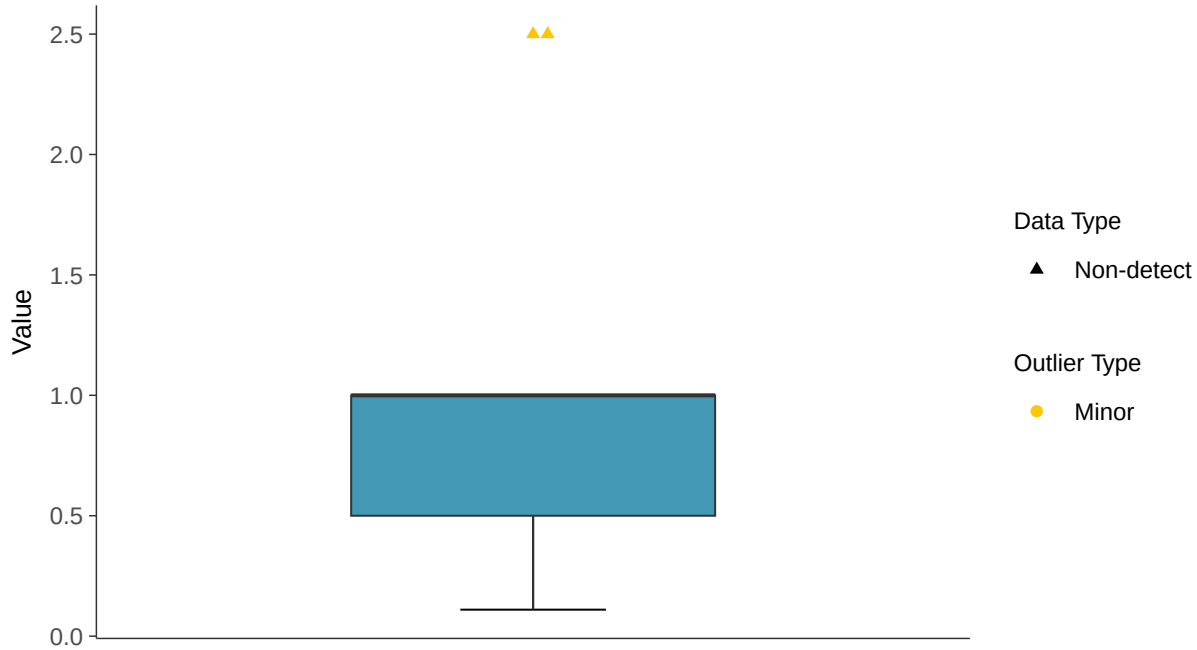

**Histogram**

Selenium, MW-15022 (ug/L)



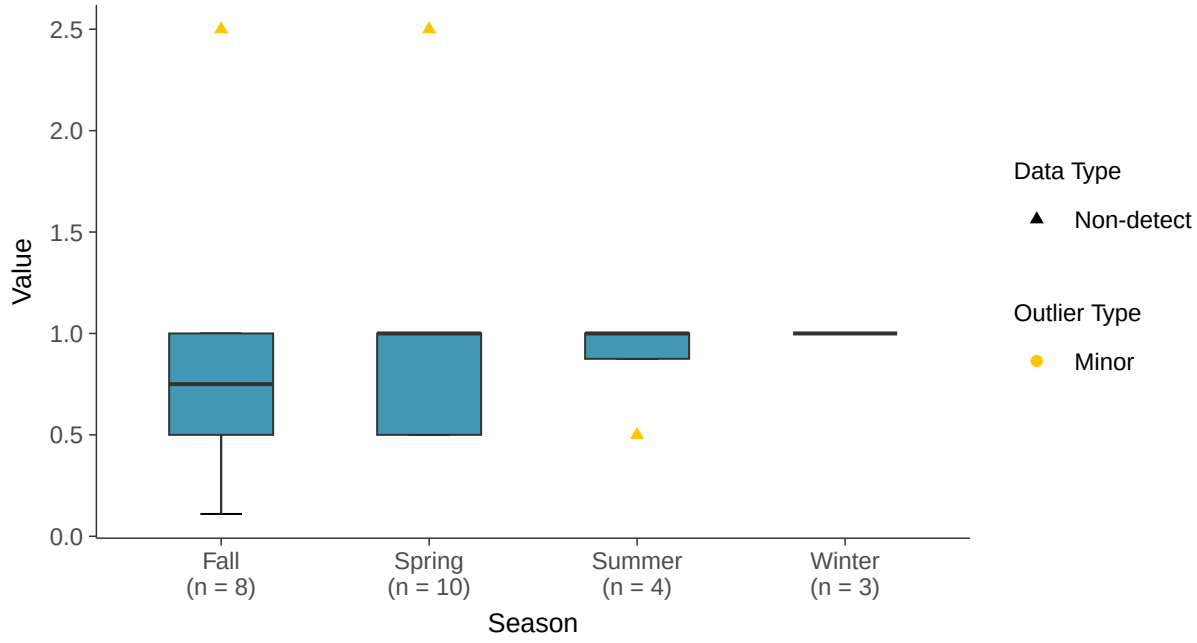
**Boxplot**

Selenium, MW-15022 (ug/L)



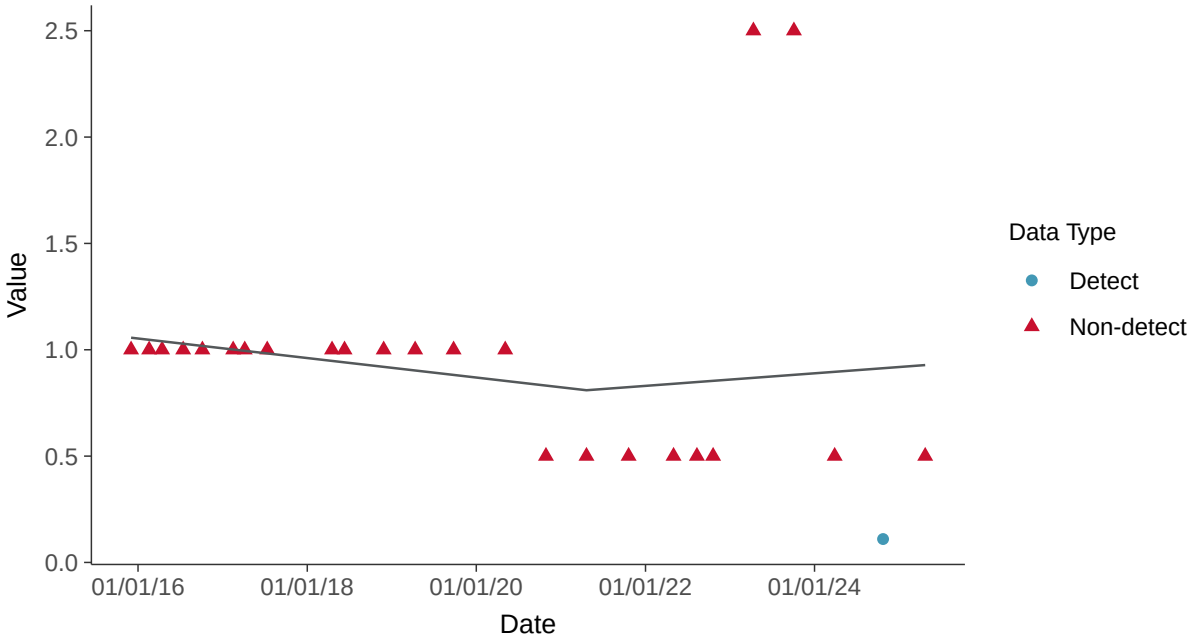

**Boxplot by Season**

Selenium, MW-15022 (ug/L)



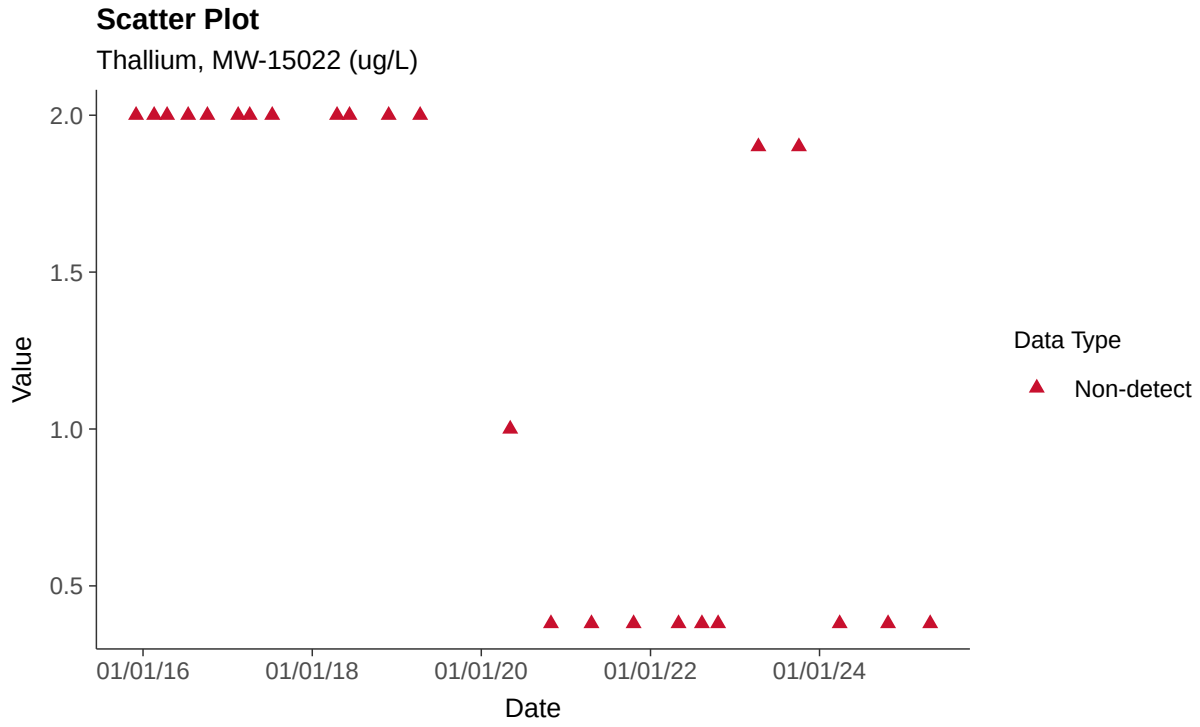
**Trend Regression: Piecewise Linear-Linear**

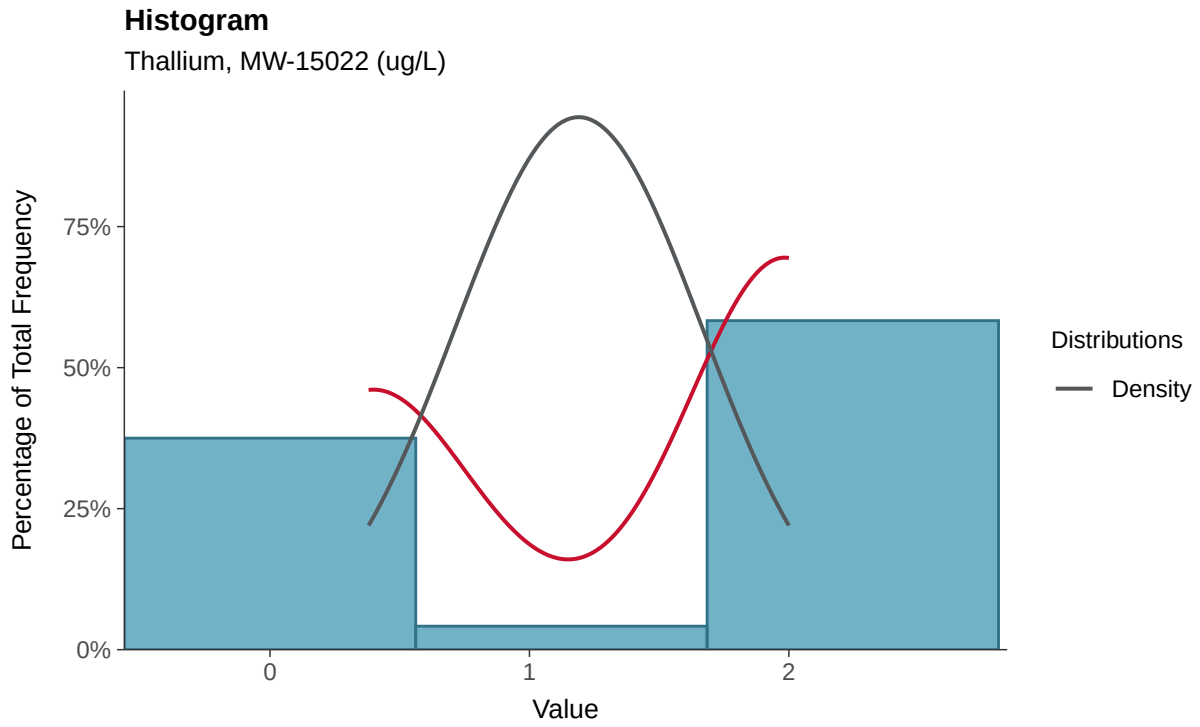
Selenium, MW-15022 (ug/L)



## Appendix IV: Thallium, MW-15022

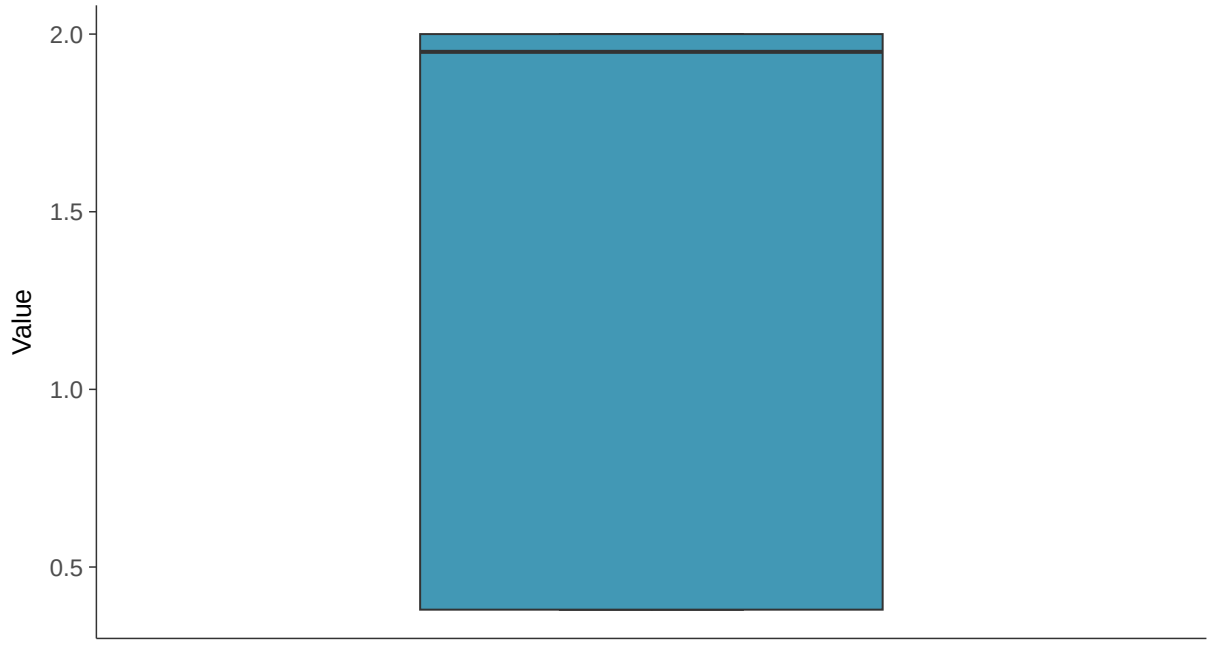
ID: 12_2_131



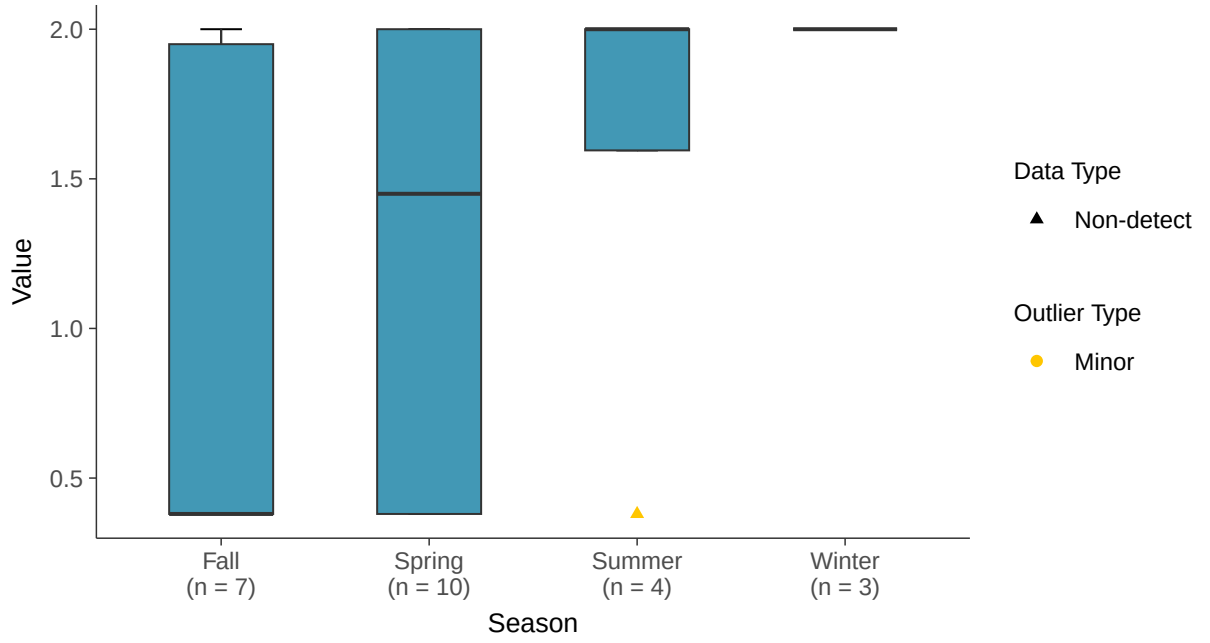
## Boxplot

Thallium, MW-15022 (ug/L)



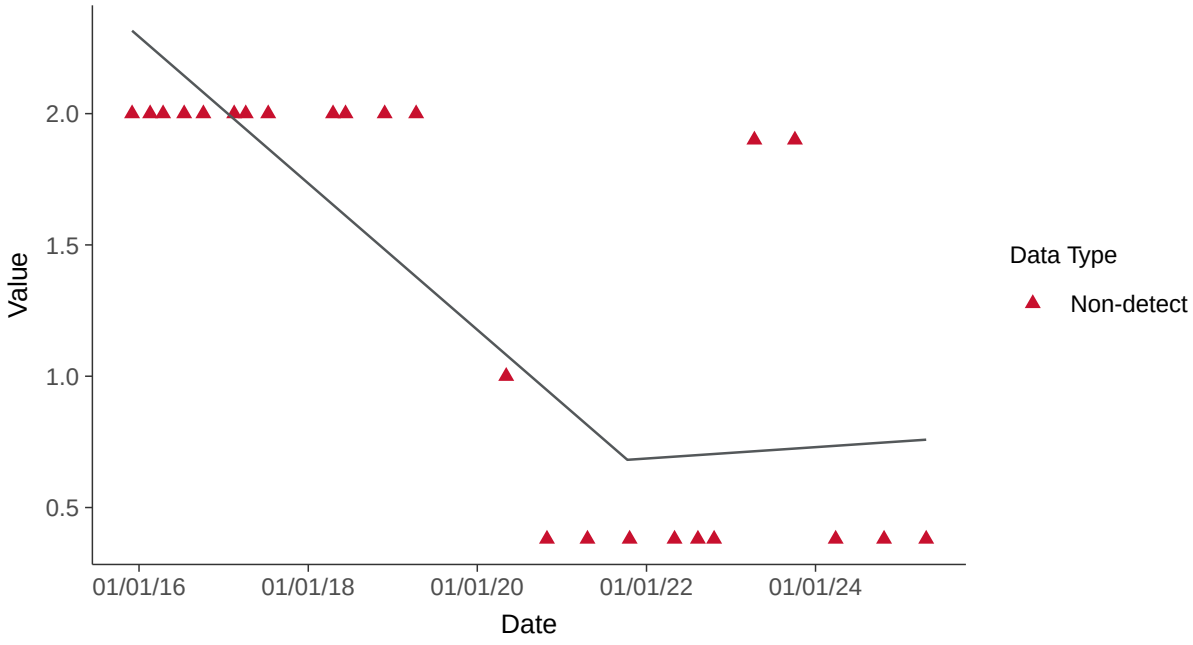

## Boxplot by Season

Thallium, MW-15022 (ug/L)



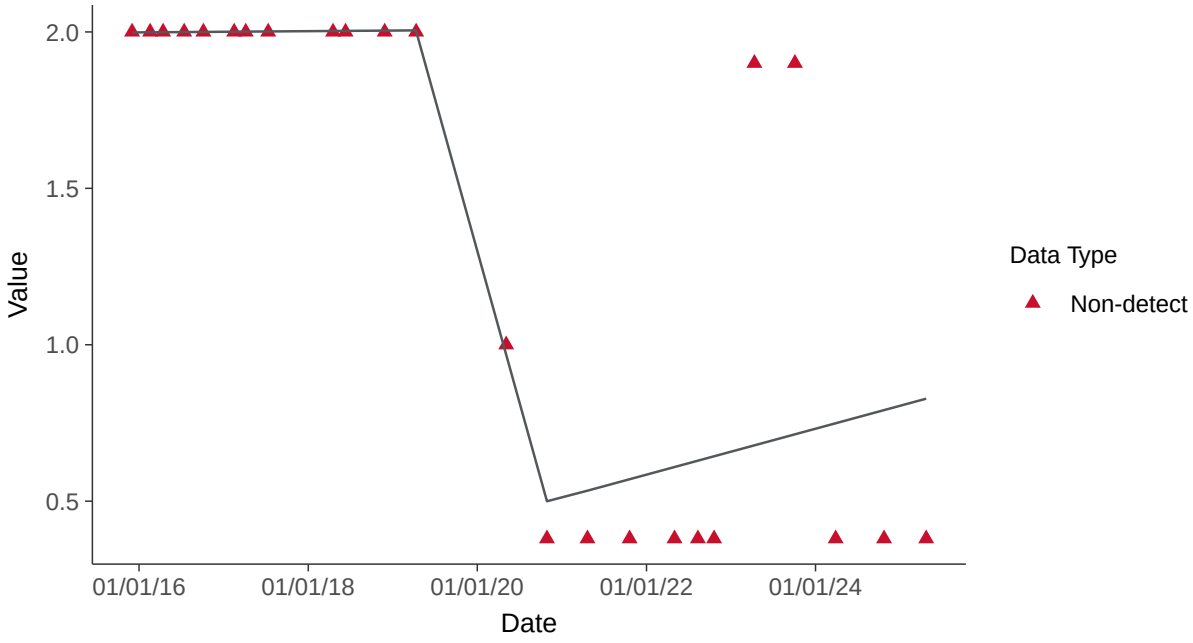
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15022 (ug/L)



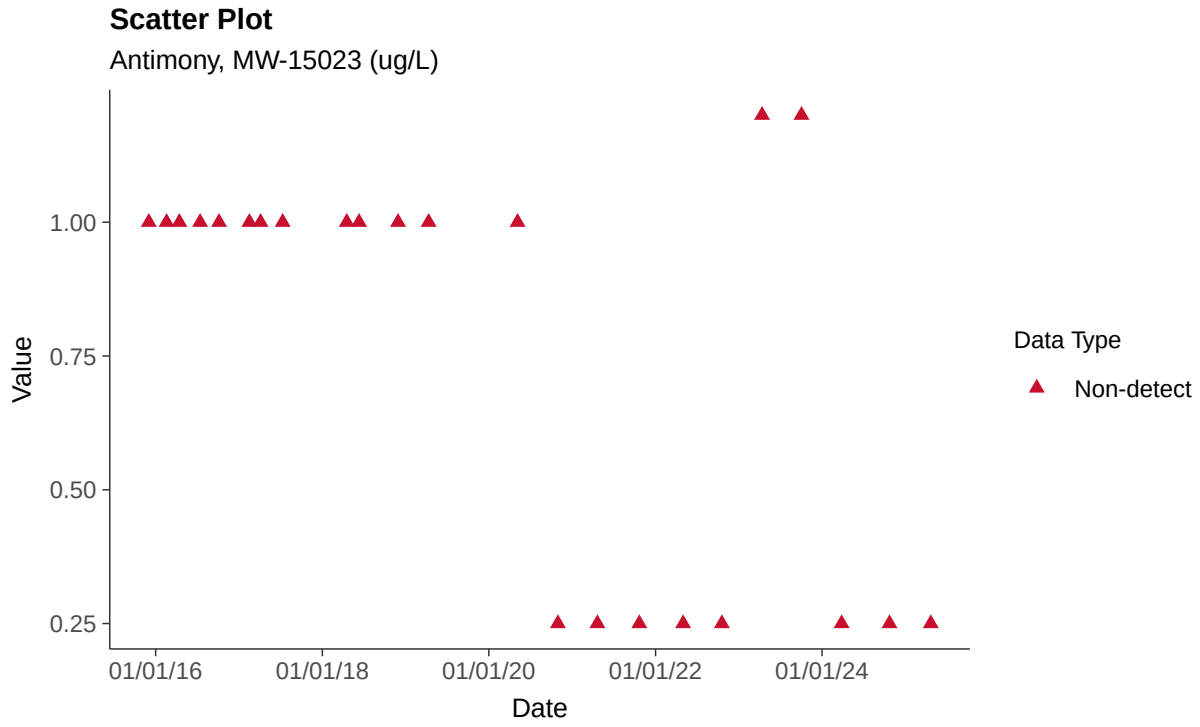

**Trend Regression: Piecewise Linear-Linear-Linear**

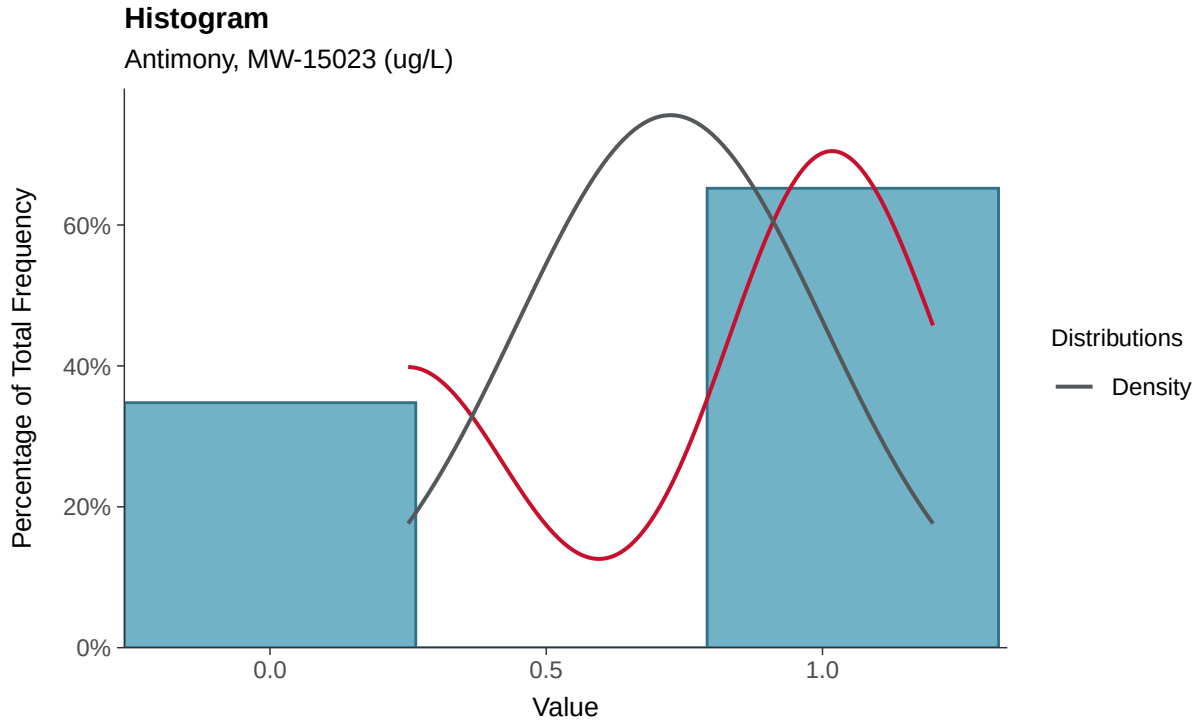
Thallium, MW-15022 (ug/L)



## Appendix IV: Antimony, MW-15023

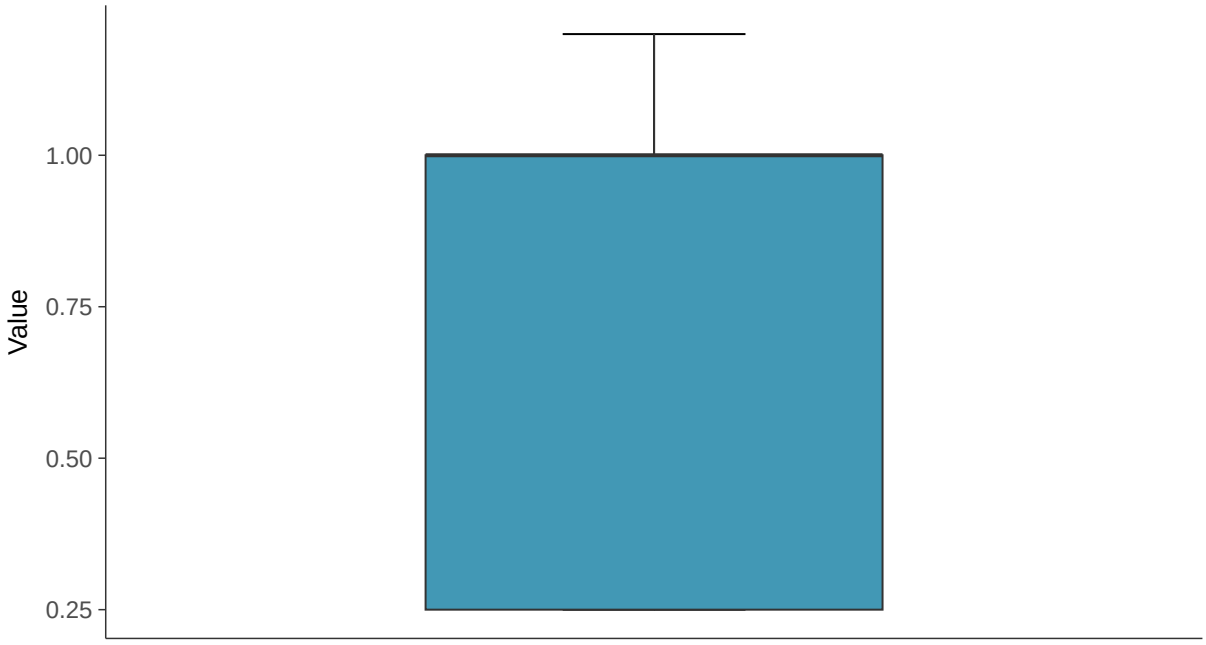
ID: 13_2_101



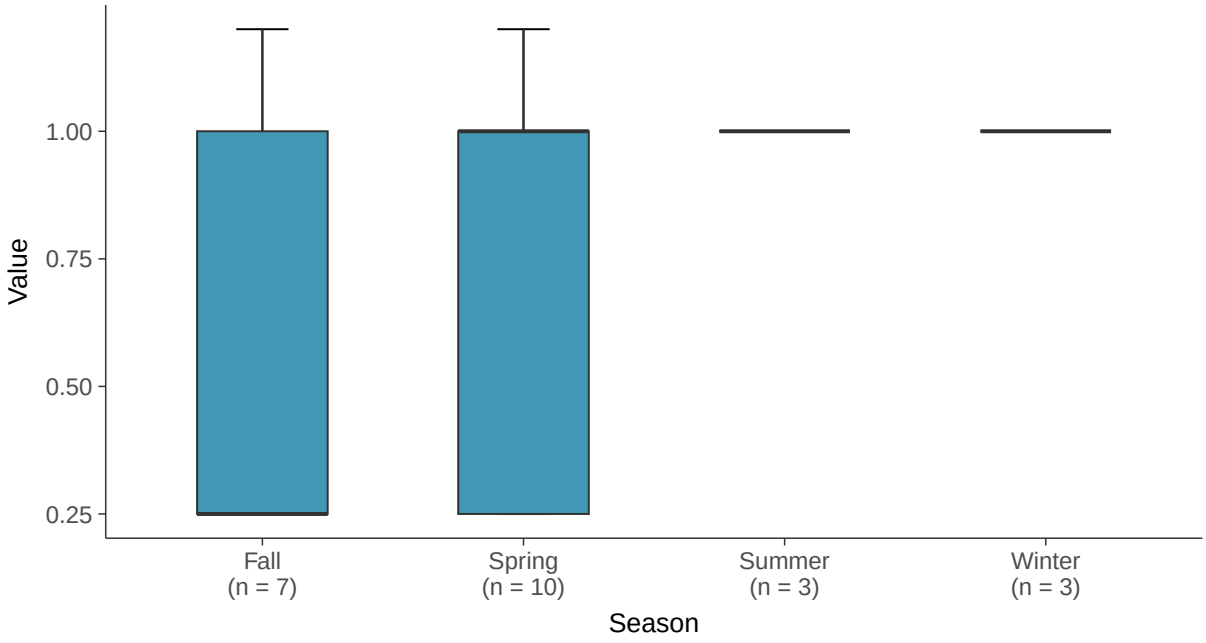
**Boxplot**

Antimony, MW-15023 (ug/L)



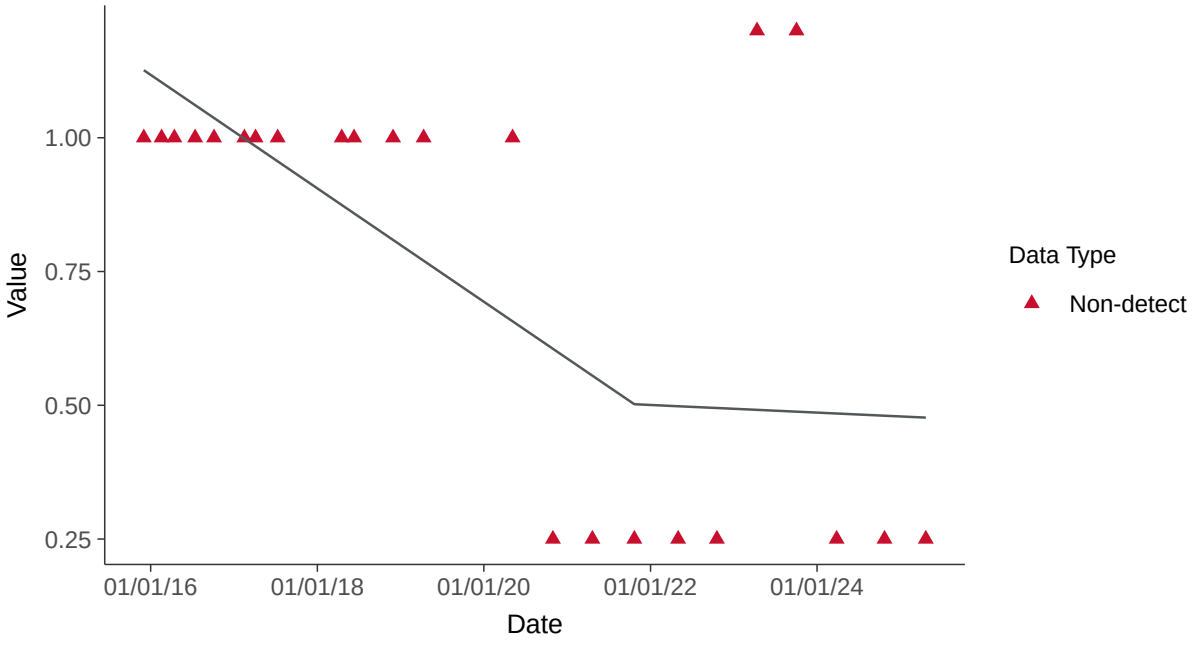

**Boxplot by Season**

Antimony, MW-15023 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15023 (ug/L)

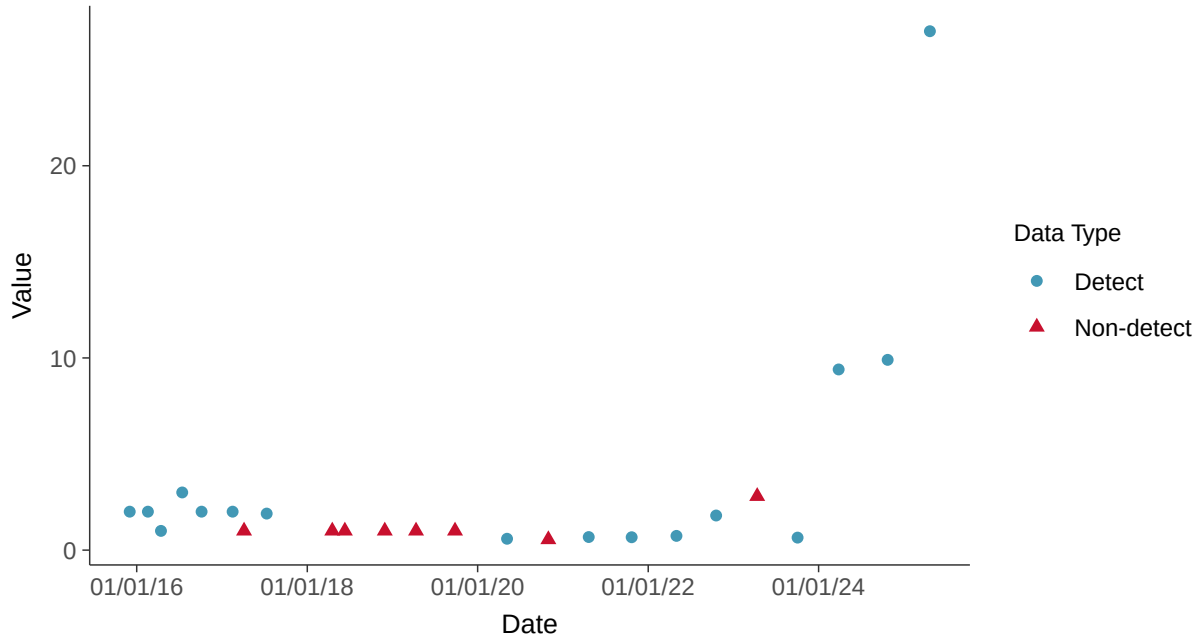


# Appendix IV: Arsenic, MW-15023

ID: 13_2_102

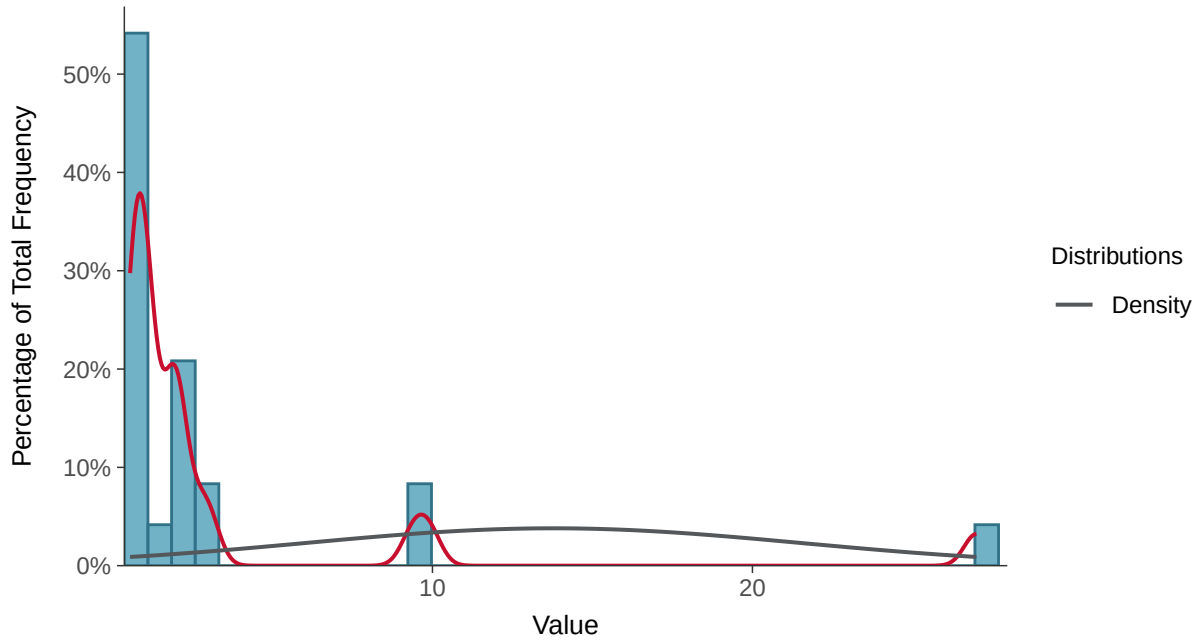
**Scatter Plot**

Arsenic, MW-15023 (ug/L)



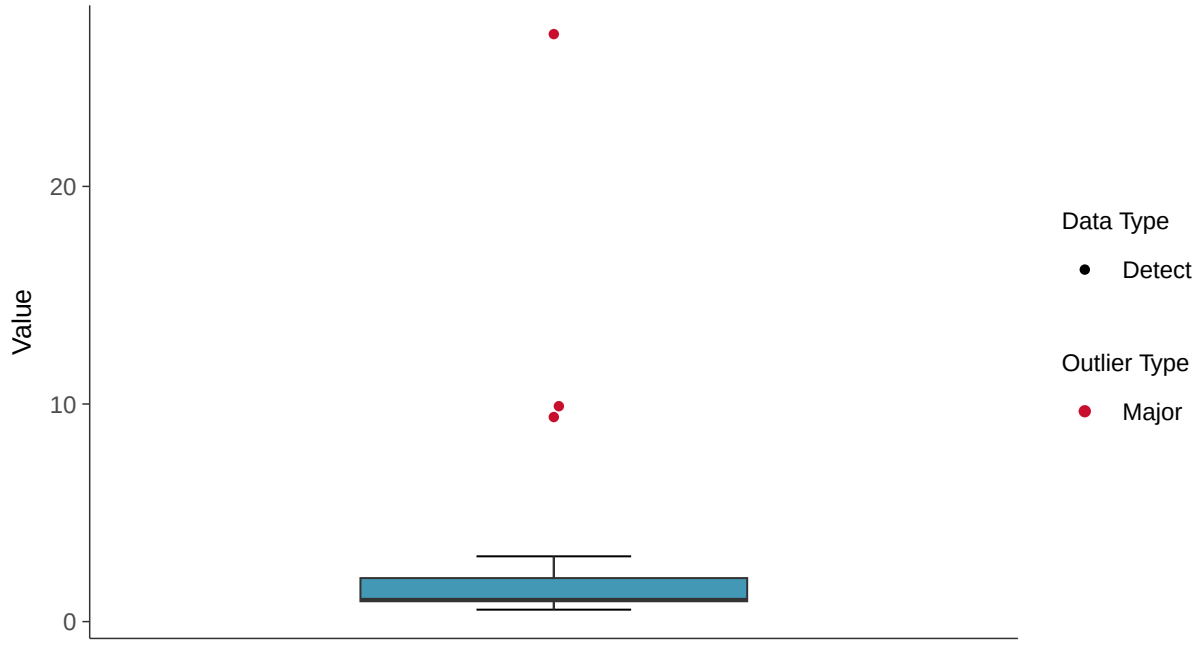

**Histogram**

Arsenic, MW-15023 (ug/L)



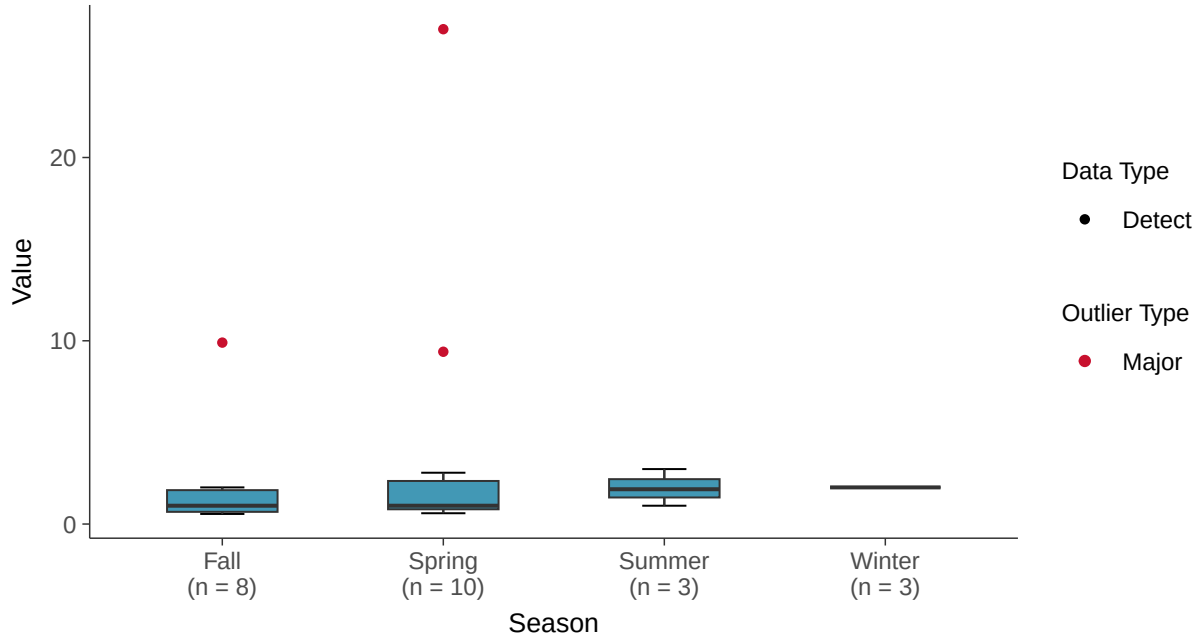
## Boxplot

Arsenic, MW-15023 (ug/L)



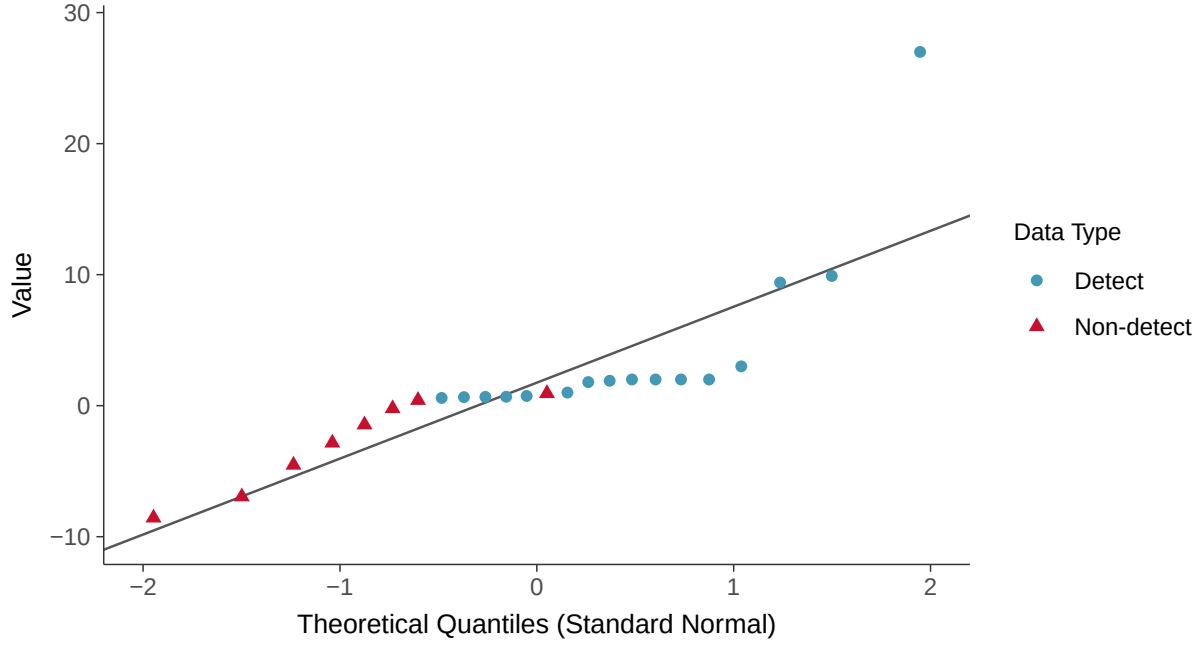

## Boxplot by Season

Arsenic, MW-15023 (ug/L)



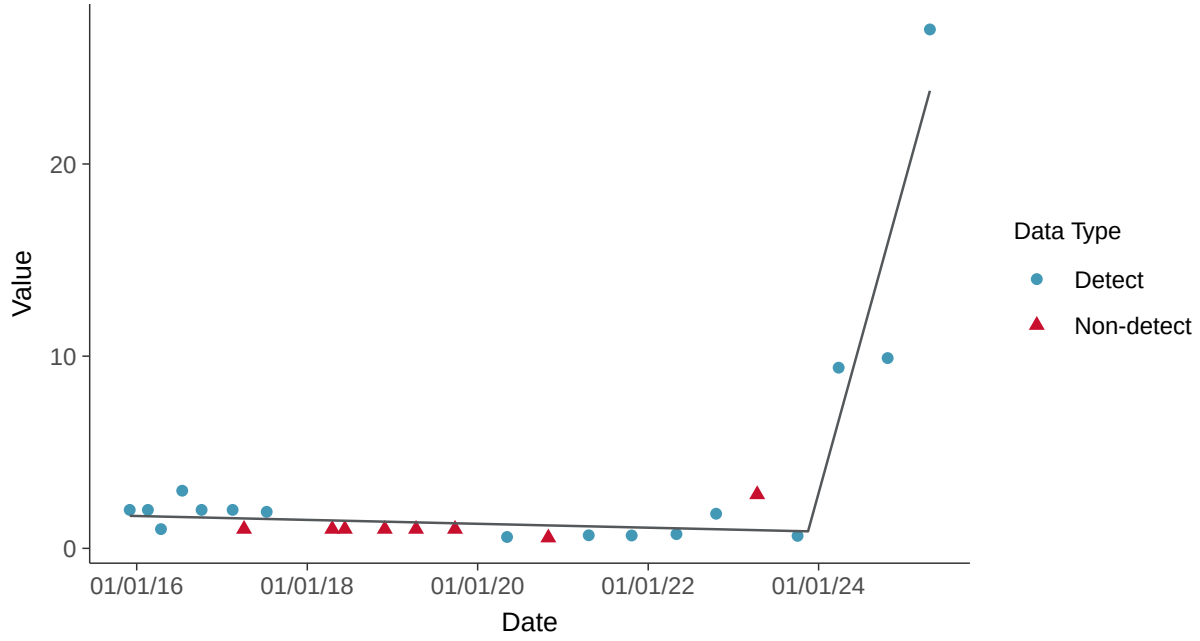
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15023 (ug/L)



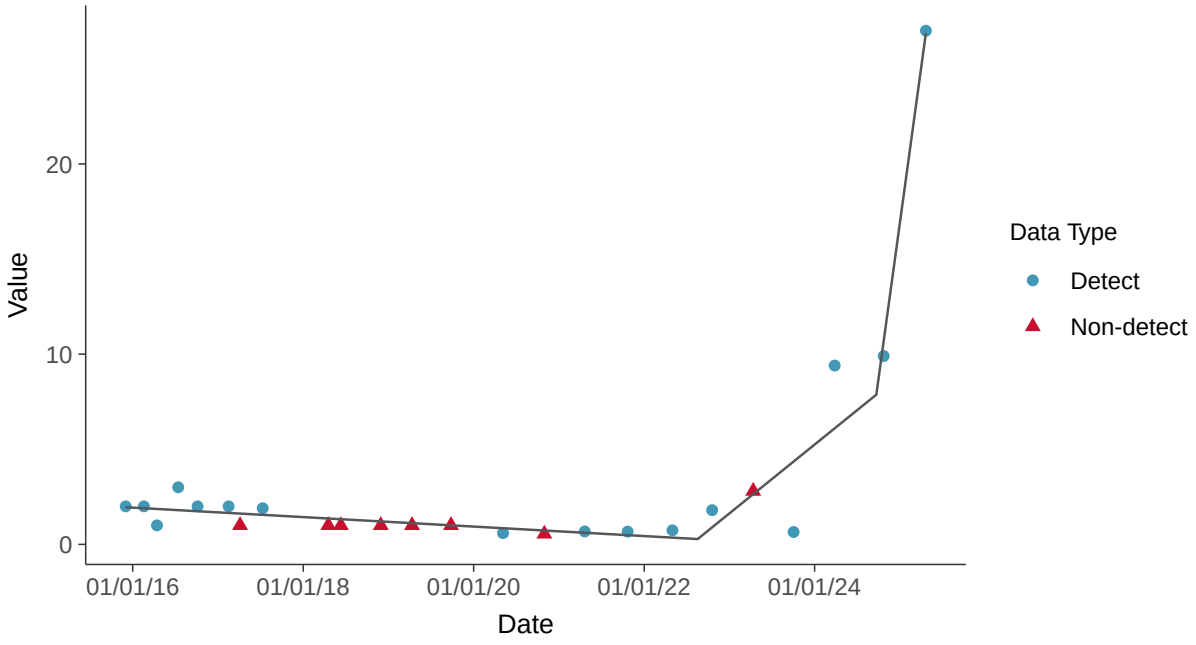

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15023 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15023 (ug/L)

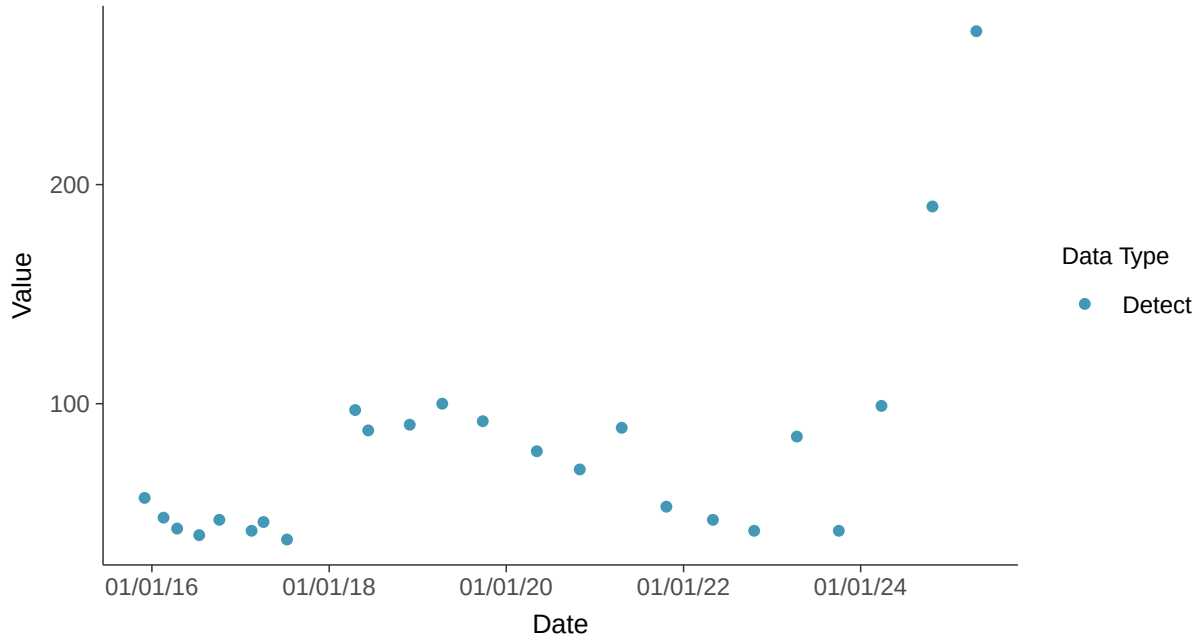


## Appendix IV: Barium, MW-15023

ID: 13_2_103

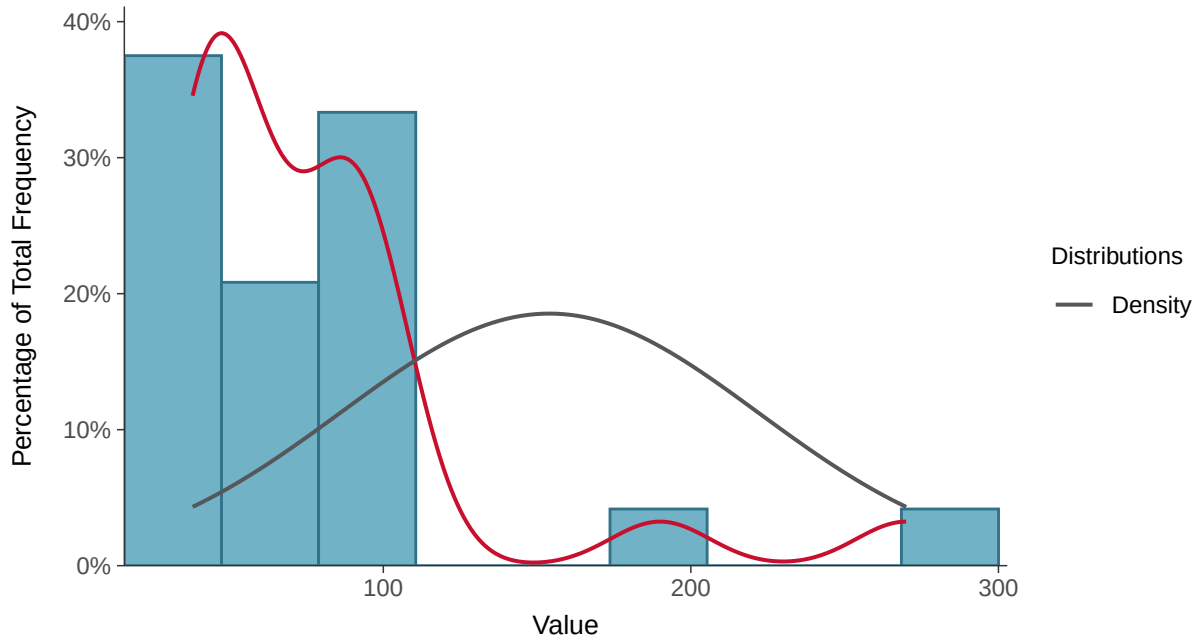
**Scatter Plot**

Barium, MW-15023 (ug/L)



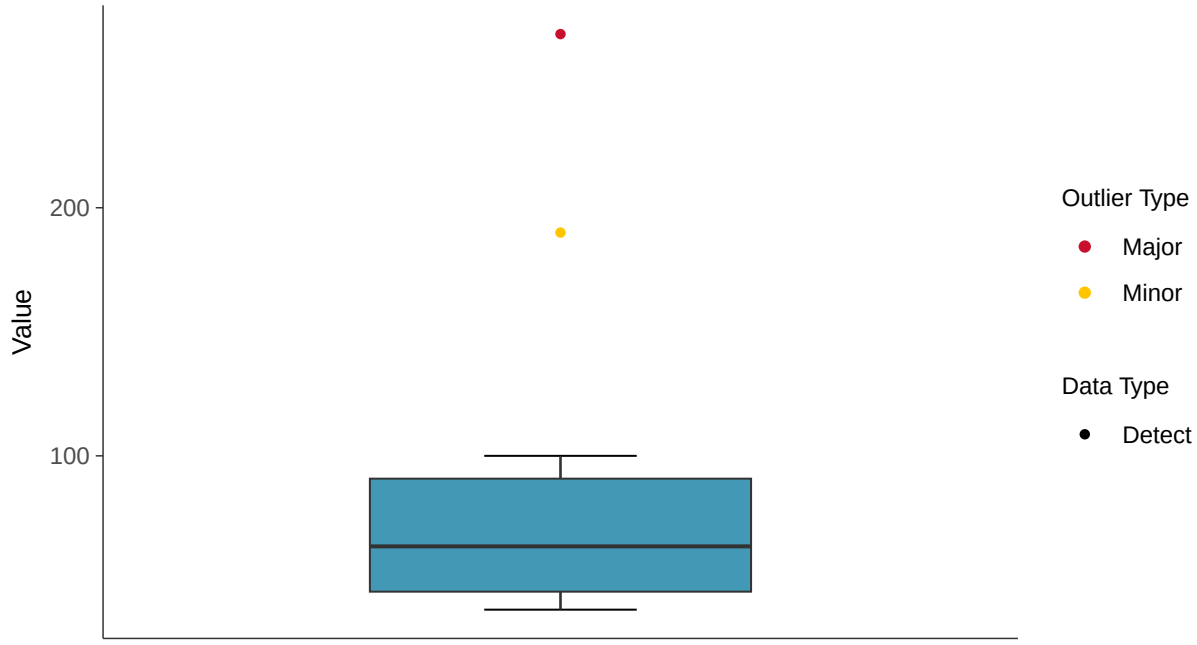

**Histogram**

Barium, MW-15023 (ug/L)



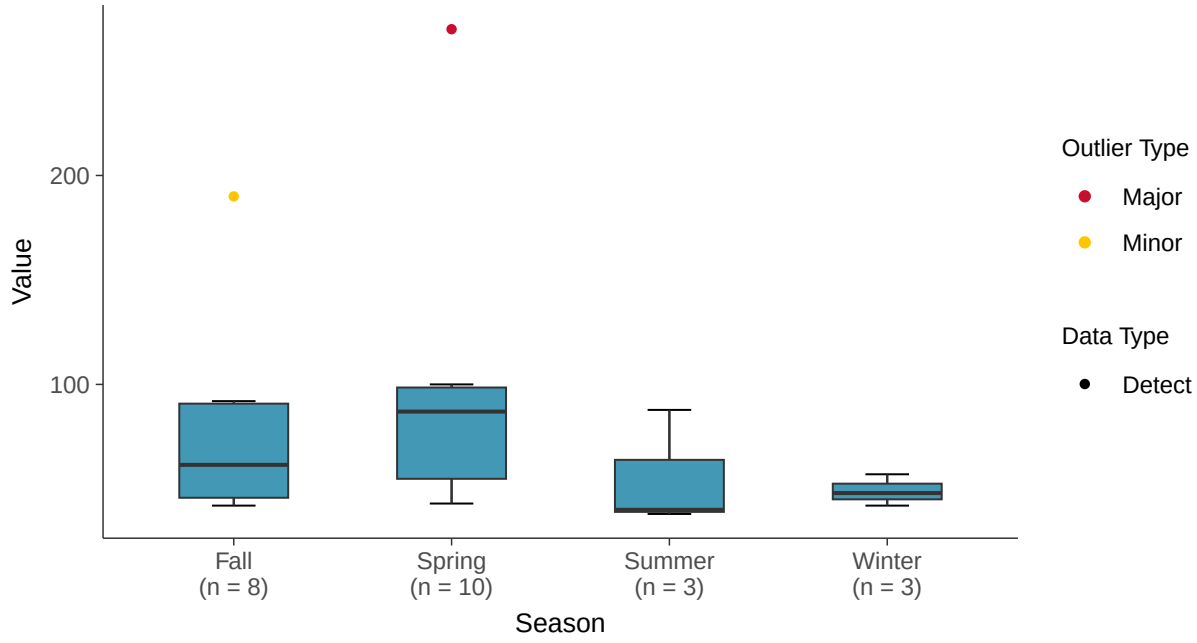
## Boxplot

Barium, MW-15023 (ug/L)



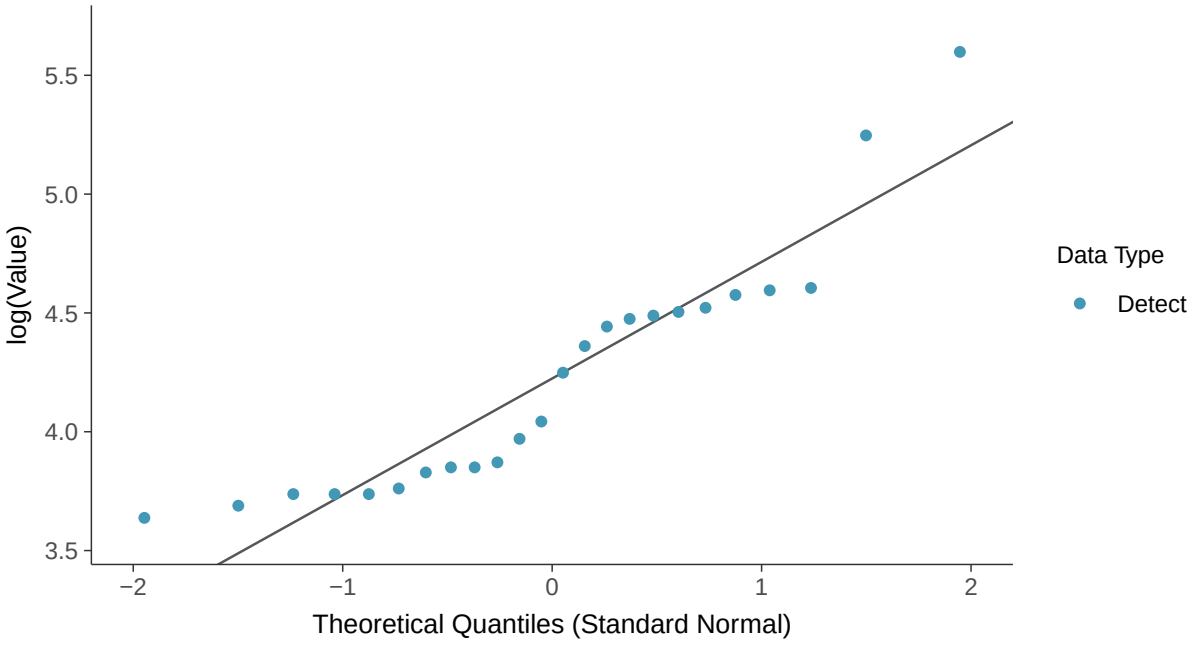

## Boxplot by Season

Barium, MW-15023 (ug/L)



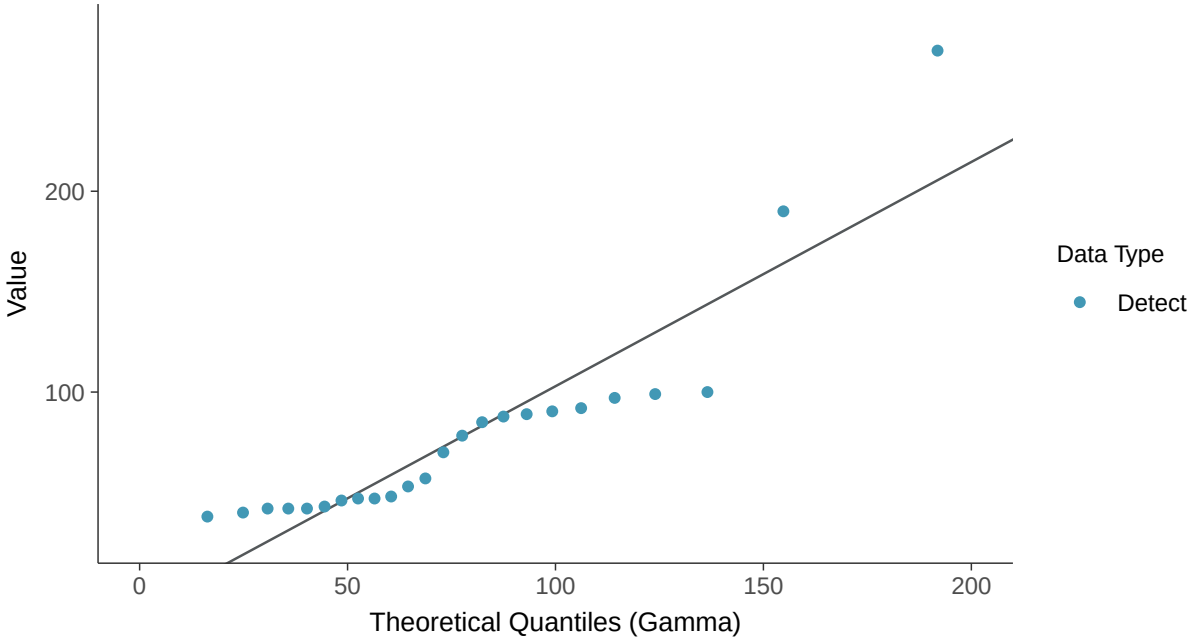
**Lognormal Q-Q plot**

Barium, MW-15023 (ug/L)



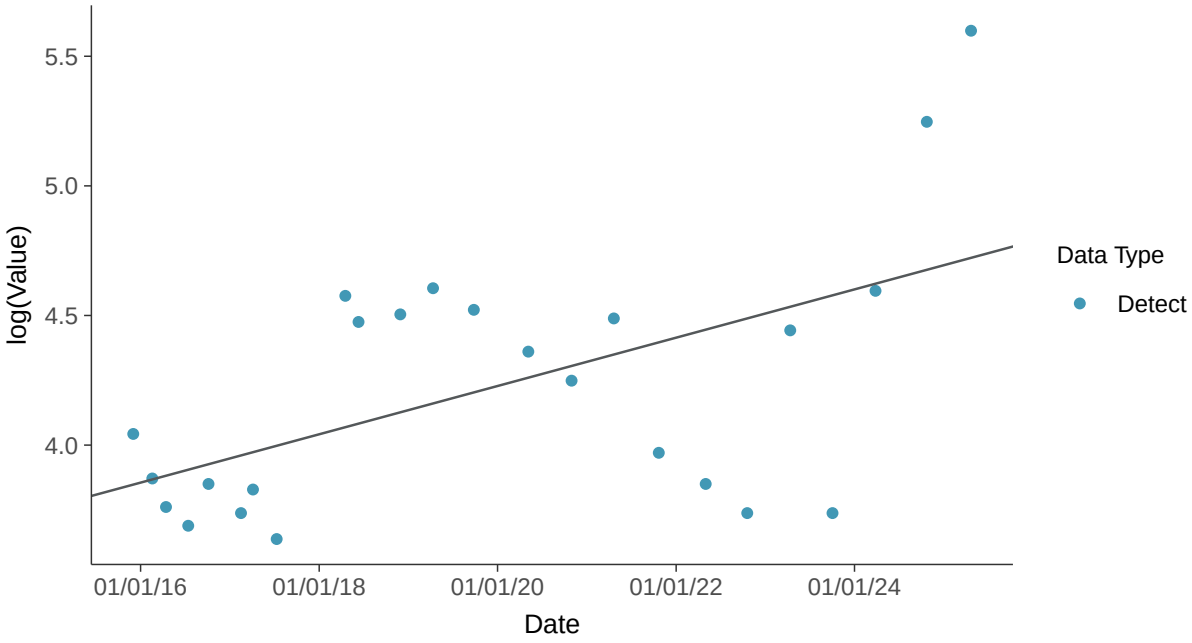

**Gamma Q-Q plot**

Barium, MW-15023 (ug/L)



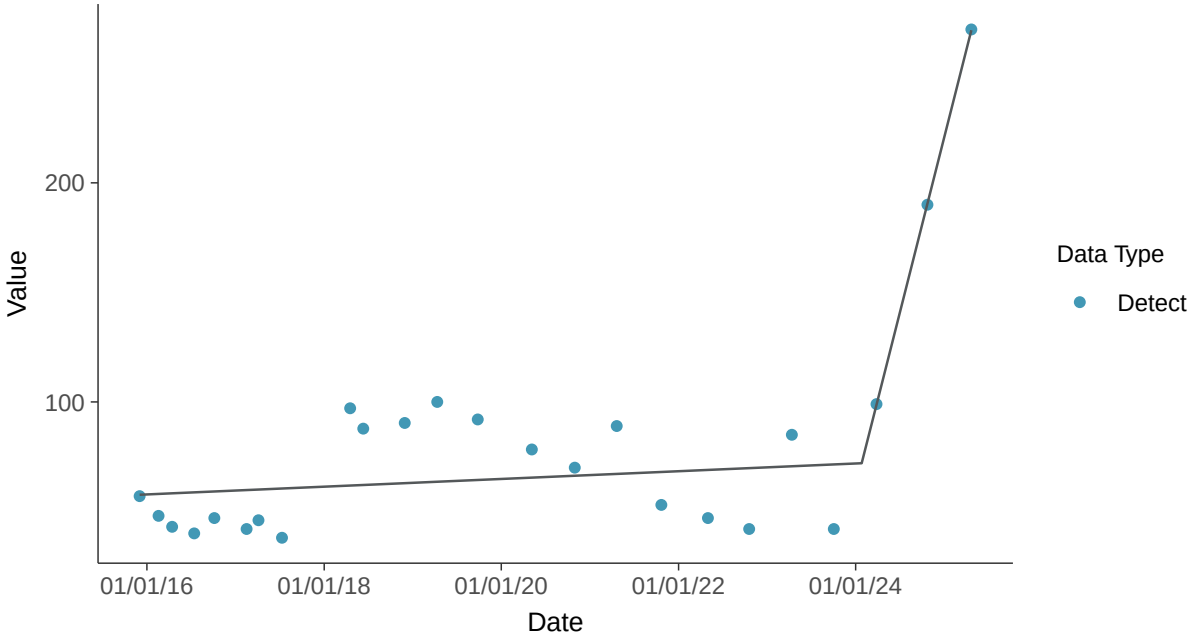
**Trend Regression: Lognormal MLE**

Barium, MW-15023 (ug/L)



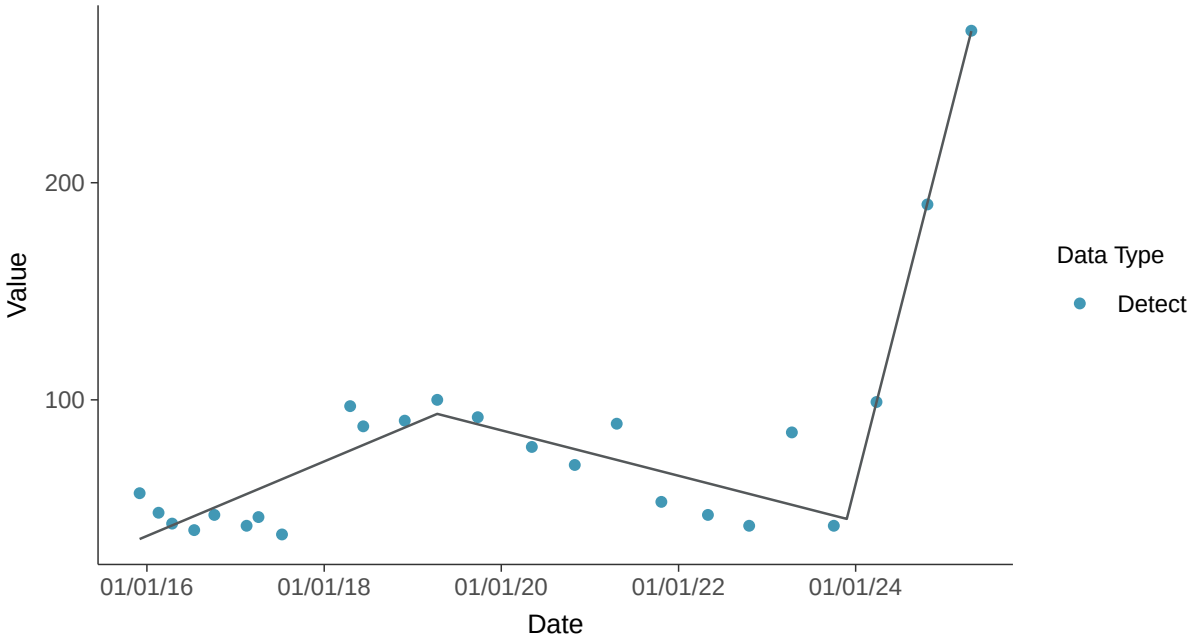

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15023 (ug/L)



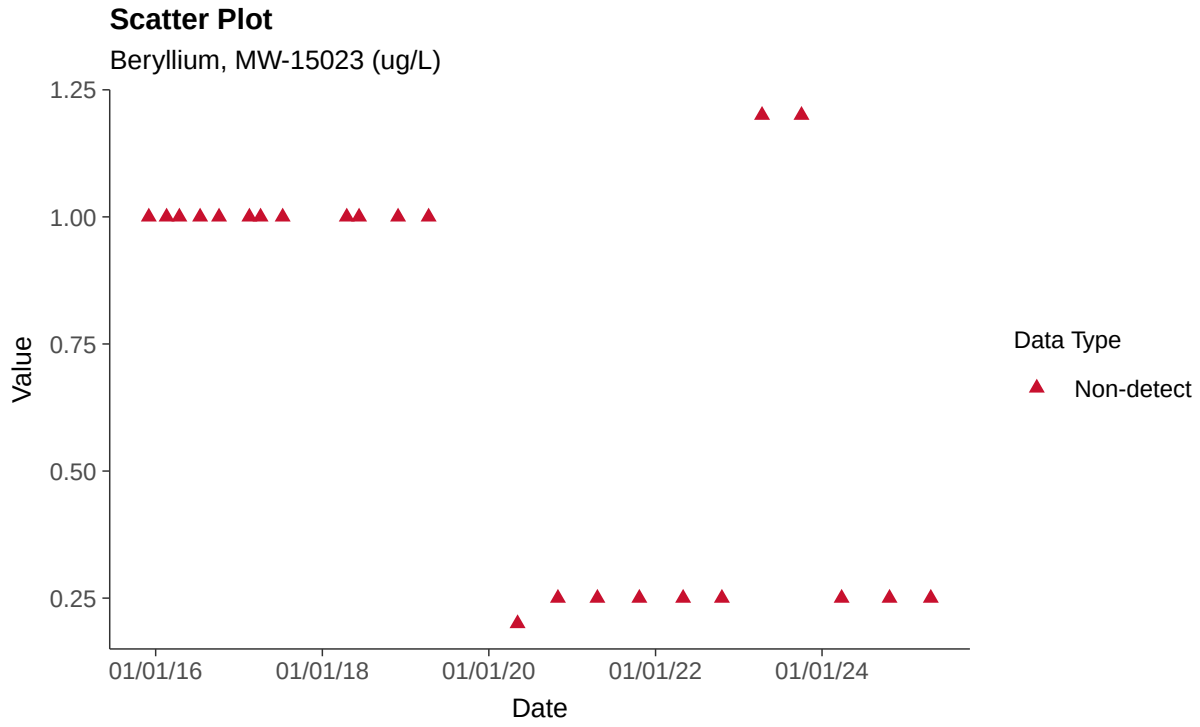
**Trend Regression: Piecewise Linear-Linear-Linear**

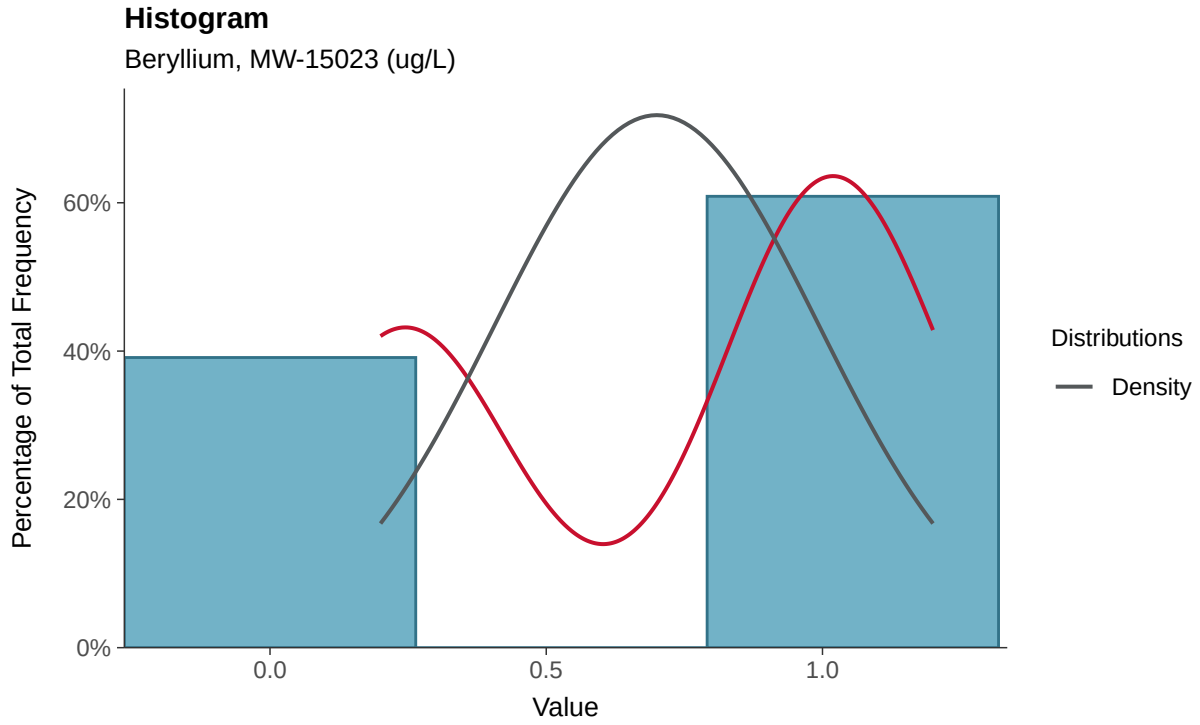
Barium, MW-15023 (ug/L)



## Appendix IV: Beryllium, MW-15023

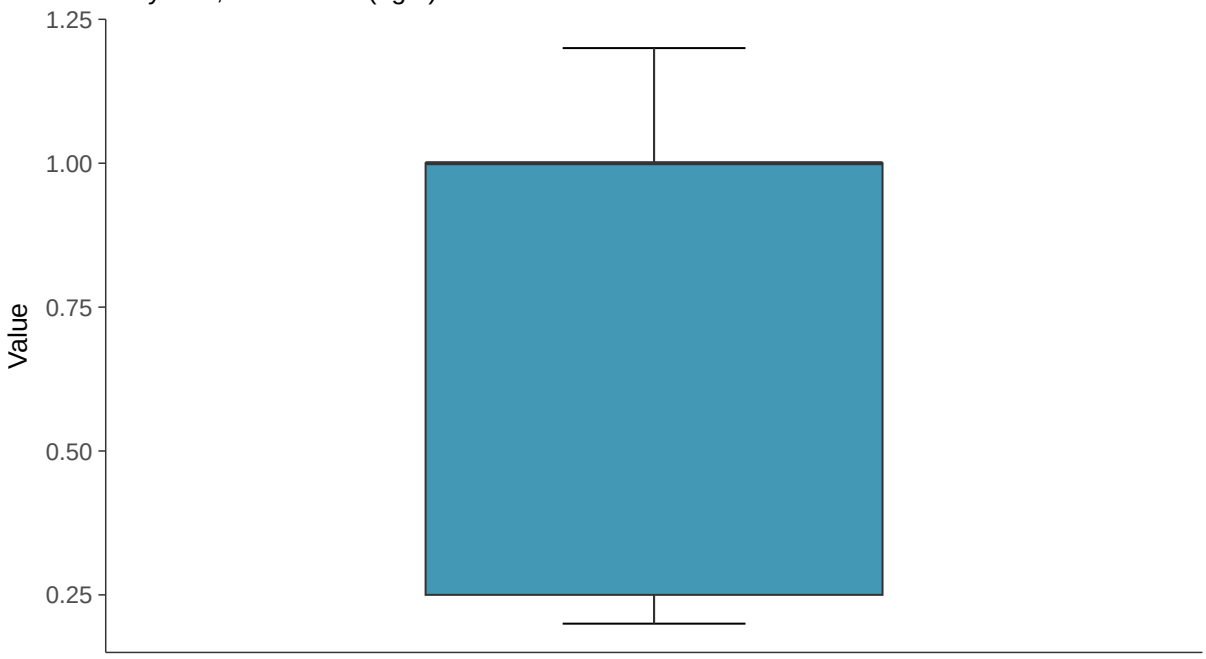
ID: 13_2_104



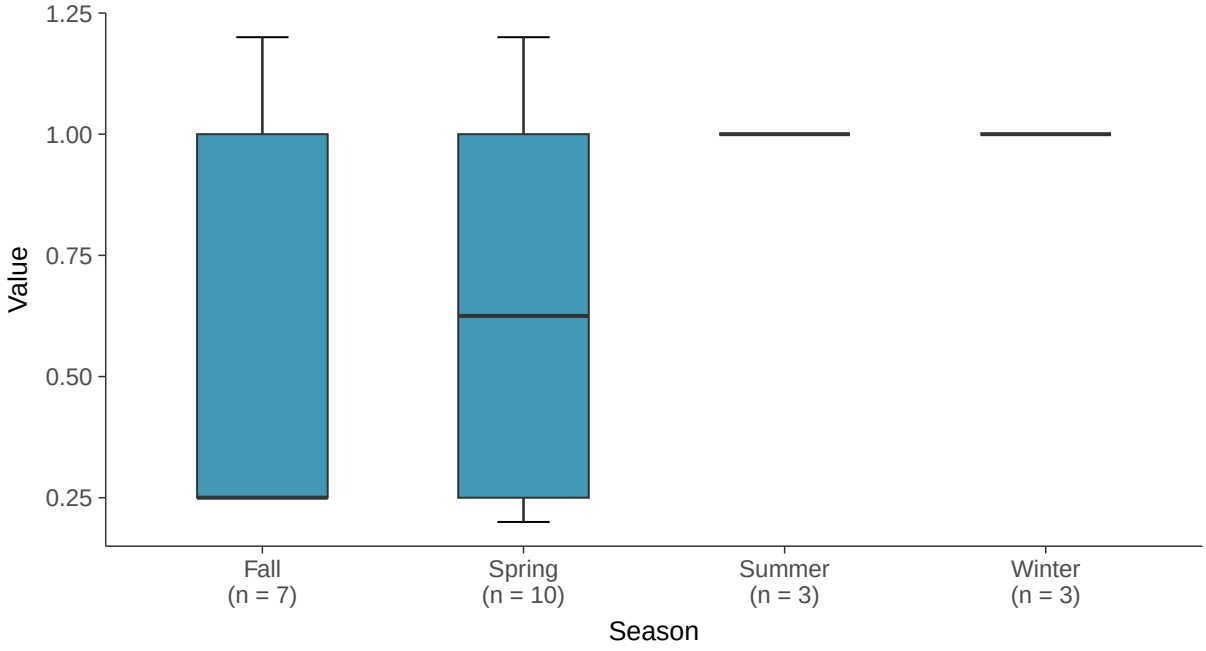
**Boxplot**

Beryllium, MW-15023 (ug/L)



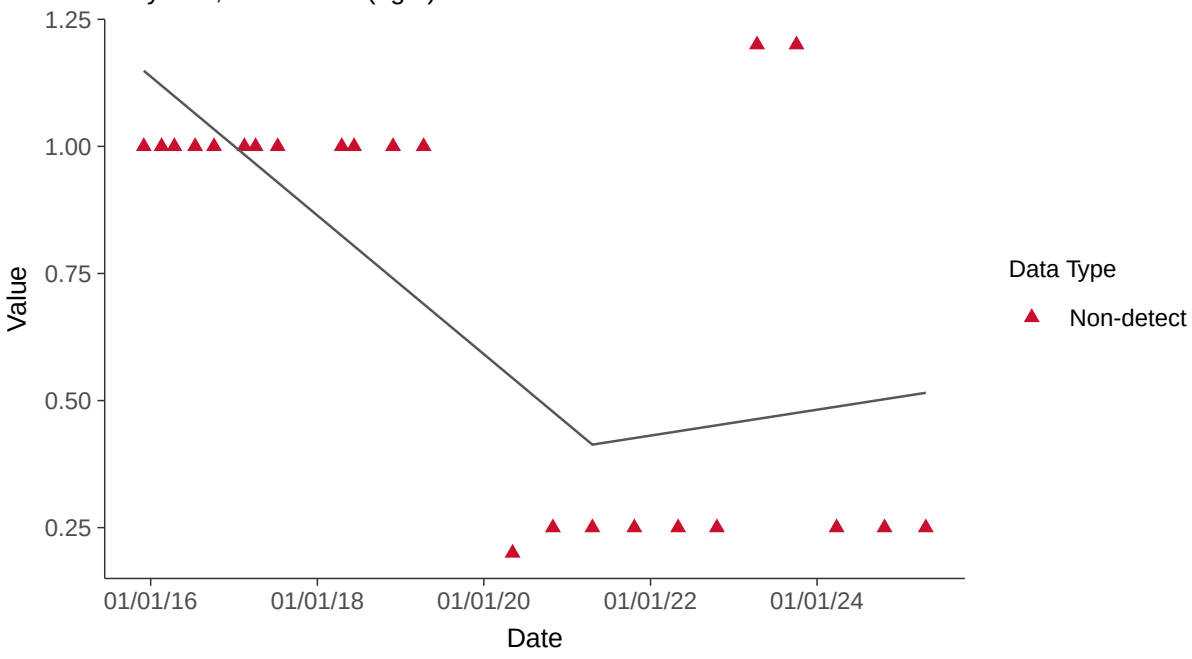

**Boxplot by Season**

Beryllium, MW-15023 (ug/L)



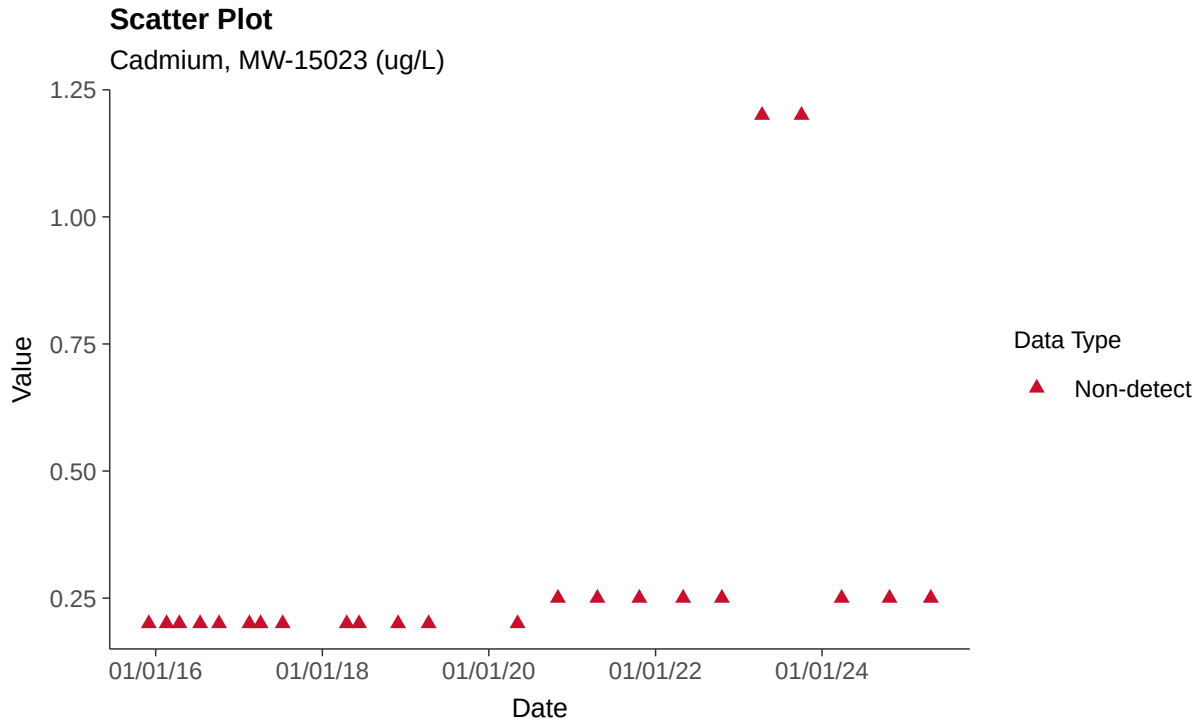
**Trend Regression: Piecewise Linear-Linear**

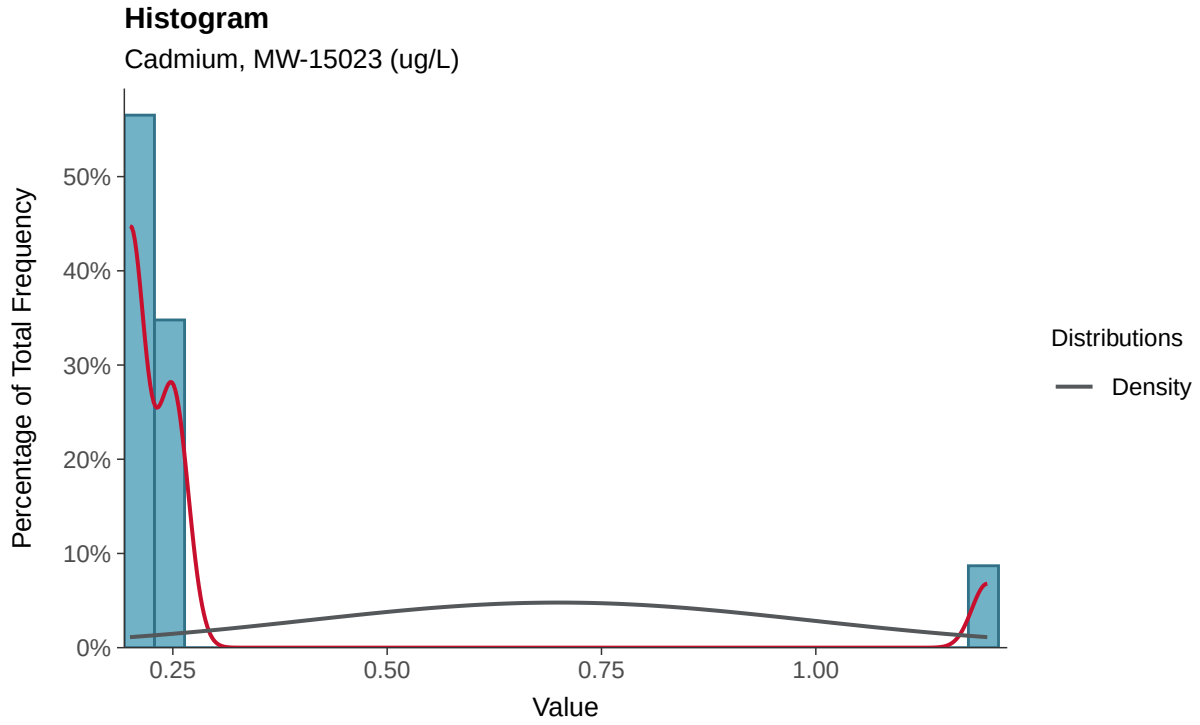
Beryllium, MW-15023 (ug/L)



## Appendix IV: Cadmium, MW-15023

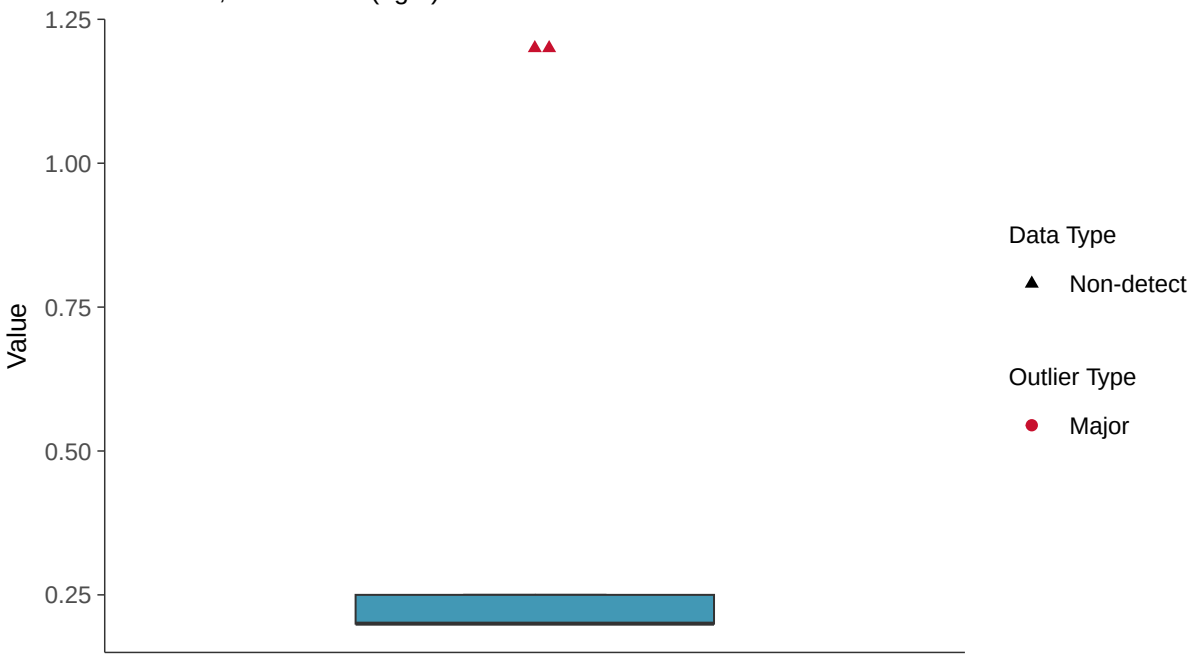
ID: 13_2_106



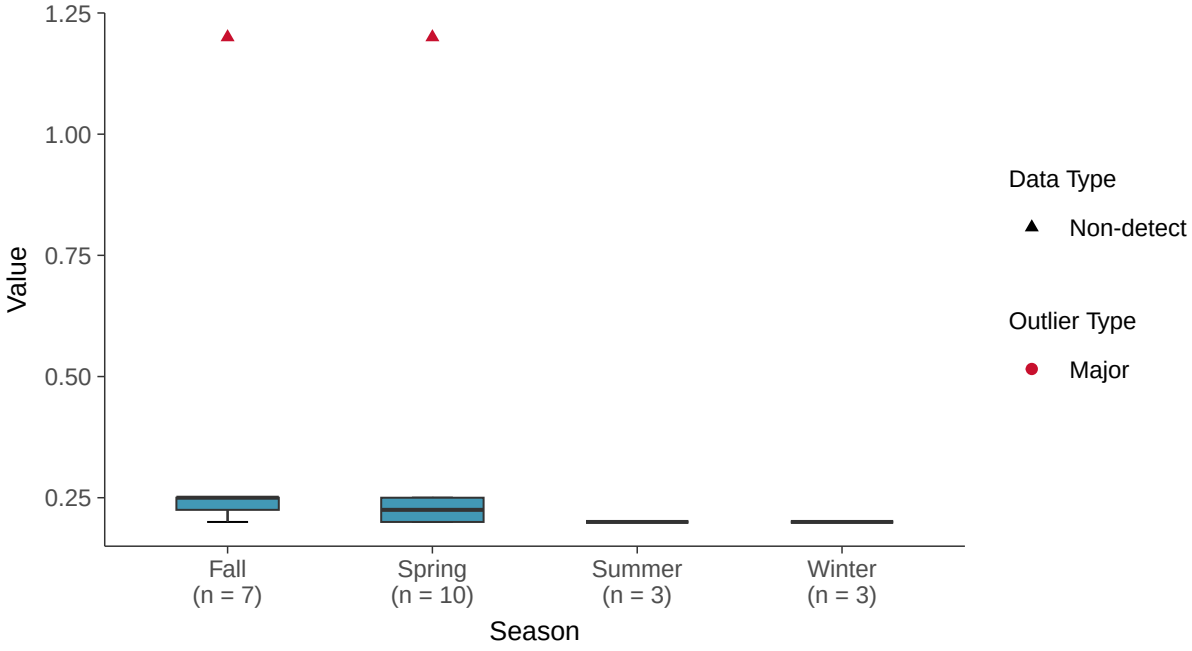
## Boxplot

Cadmium, MW-15023 (ug/L)



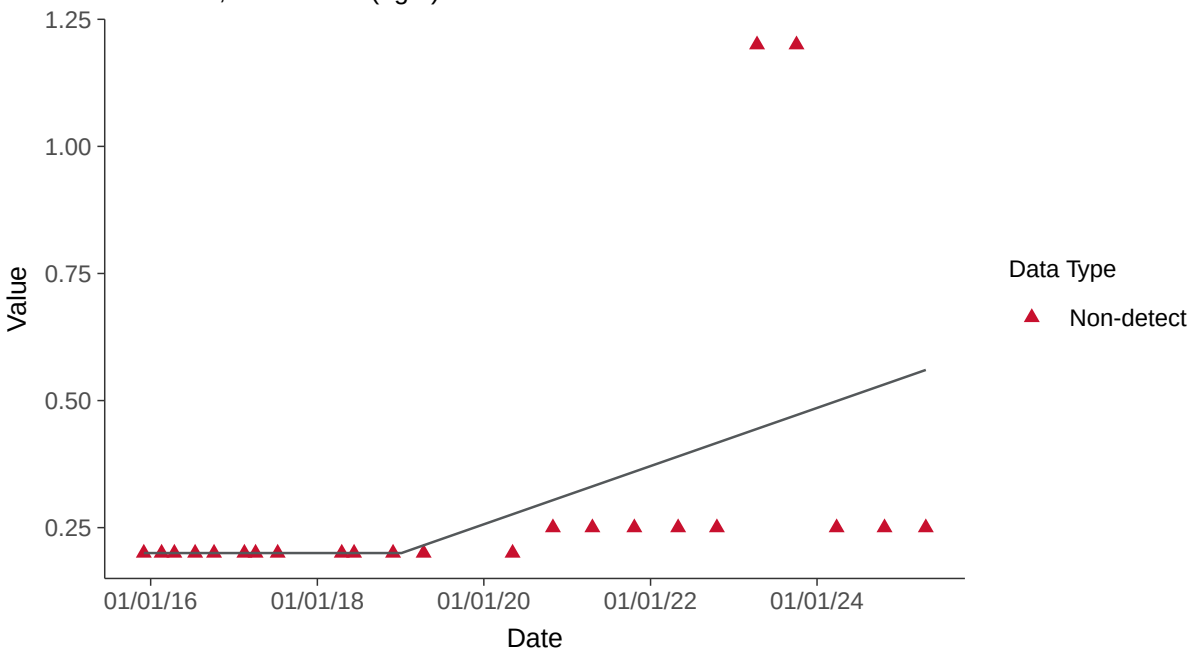

## Boxplot by Season

Cadmium, MW-15023 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15023 (ug/L)

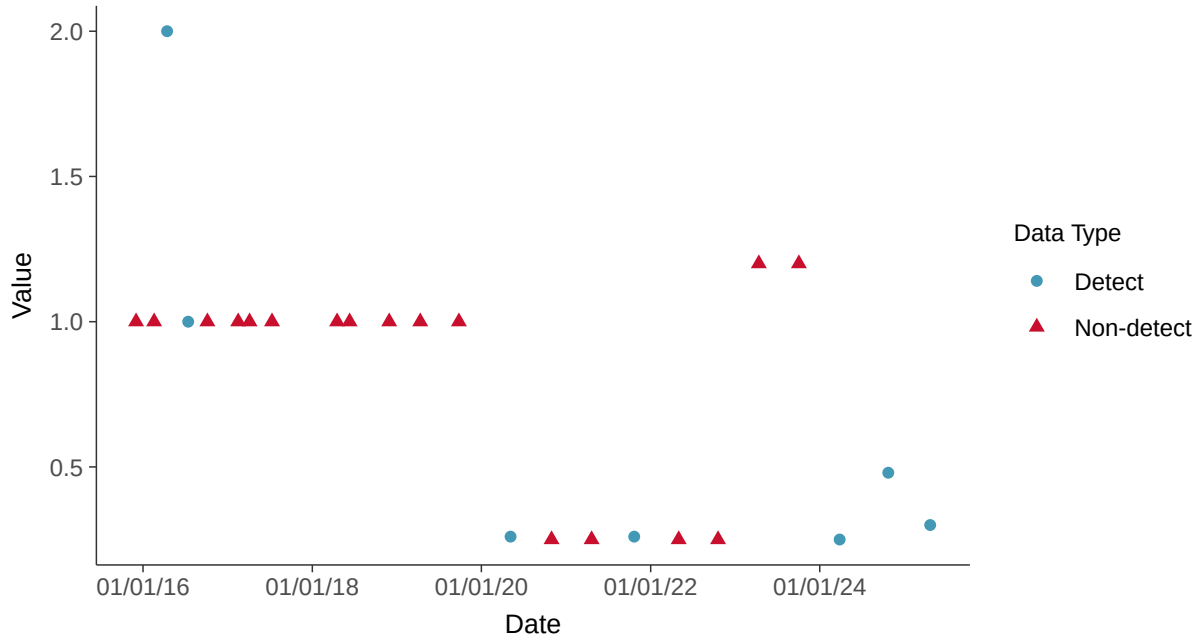


## Appendix IV: Chromium, MW-15023

ID: 13_2_109

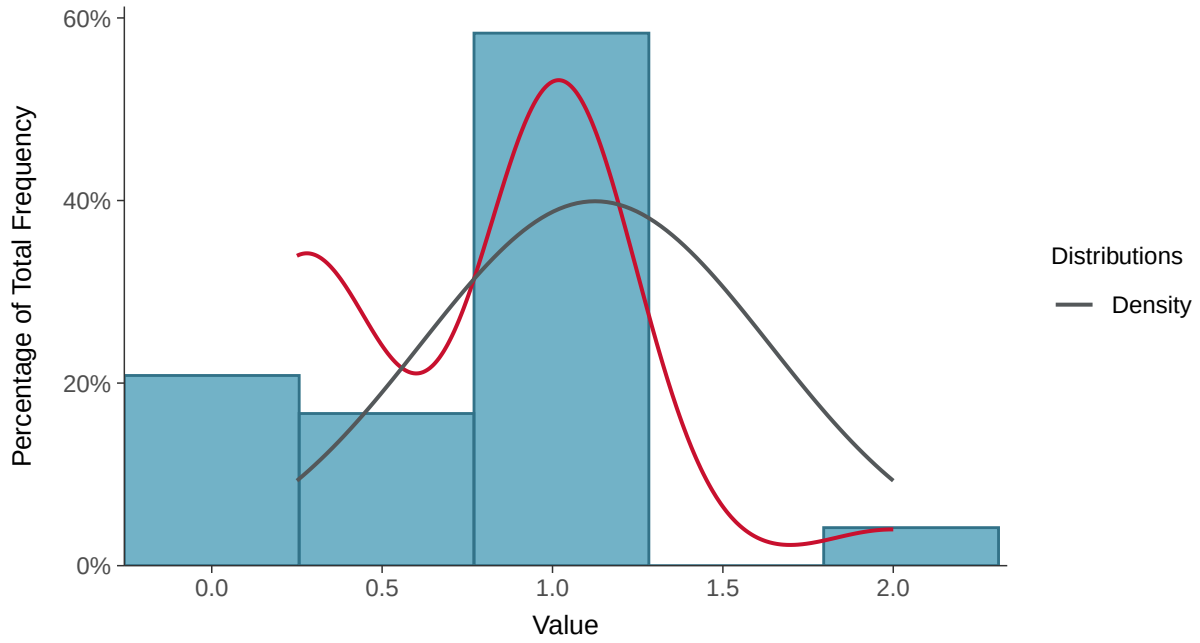
**Scatter Plot**

Chromium, MW-15023 (ug/L)



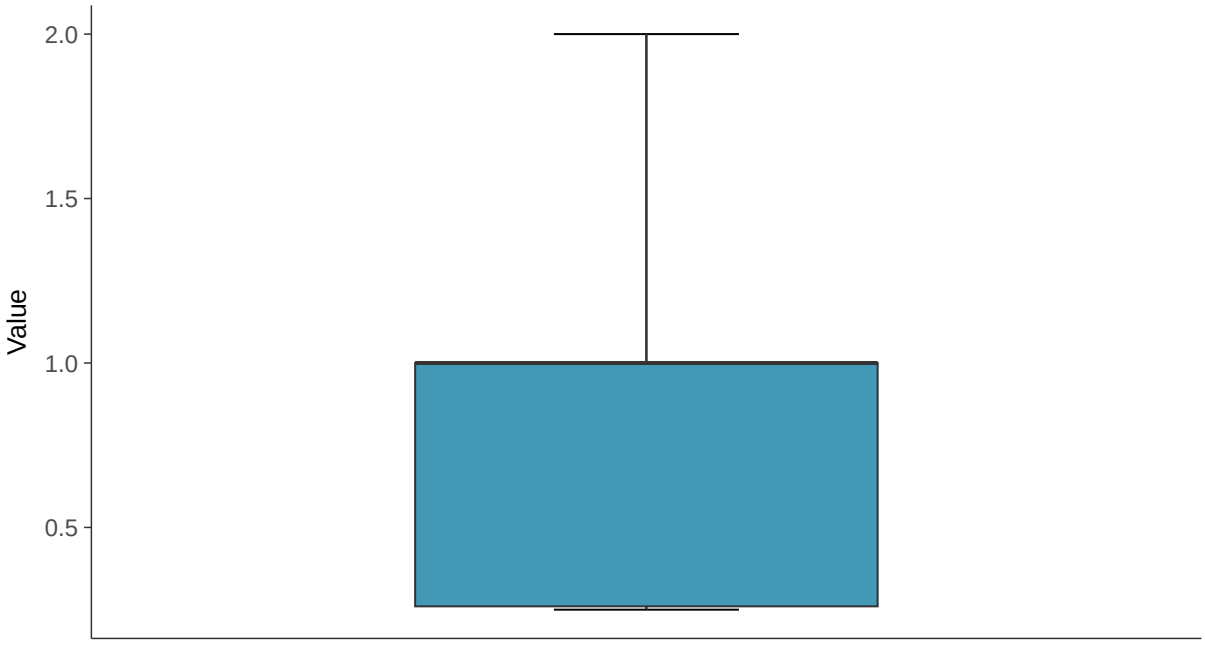

**Histogram**

Chromium, MW-15023 (ug/L)



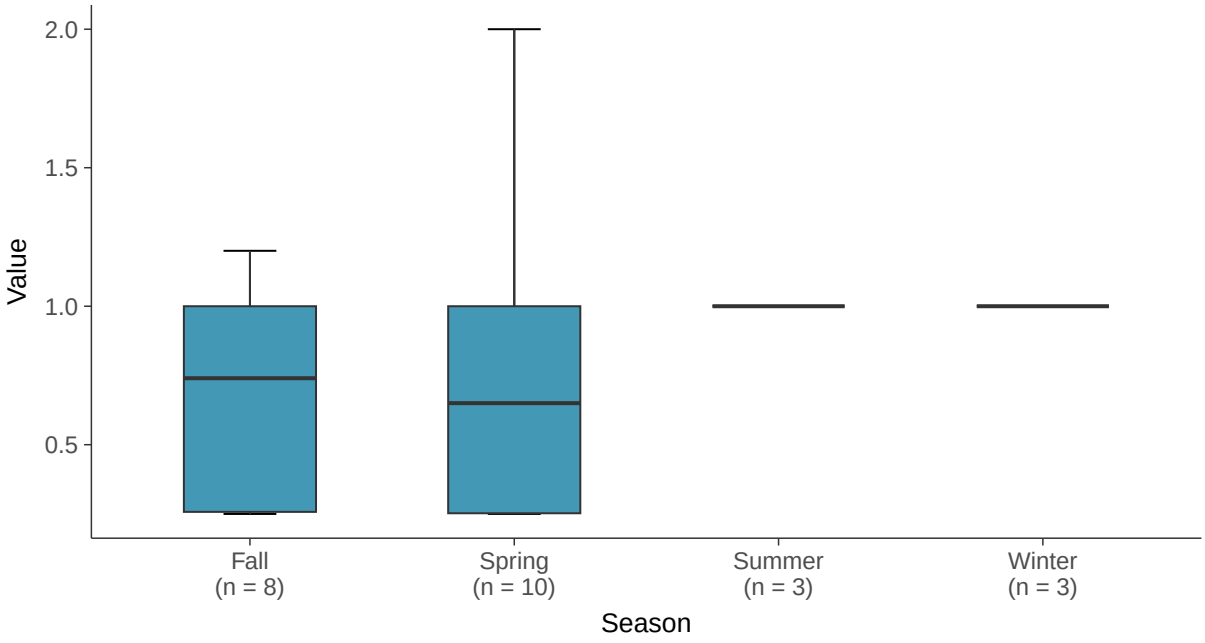
**Boxplot**

Chromium, MW-15023 (ug/L)



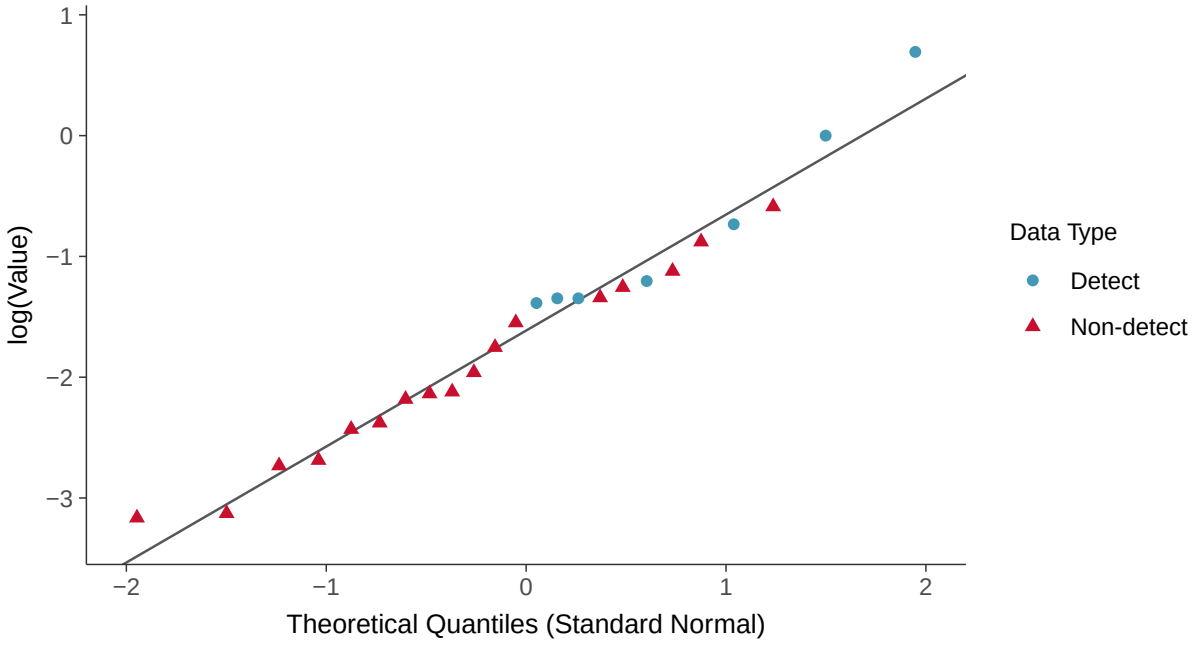

**Boxplot by Season**

Chromium, MW-15023 (ug/L)



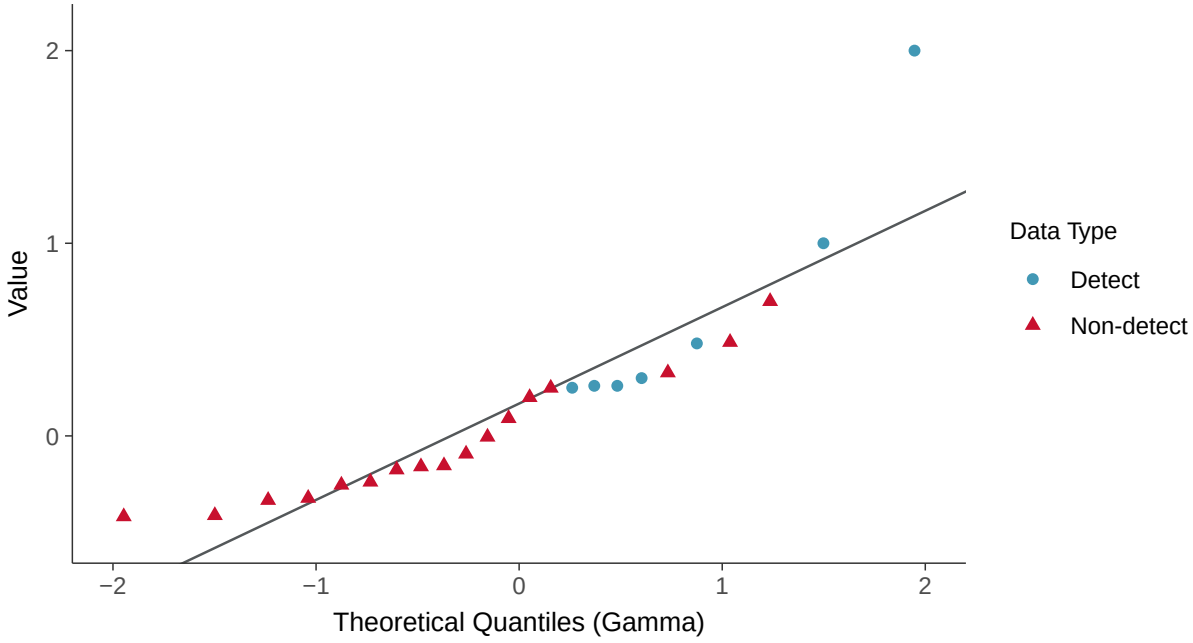
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15023 (ug/L)



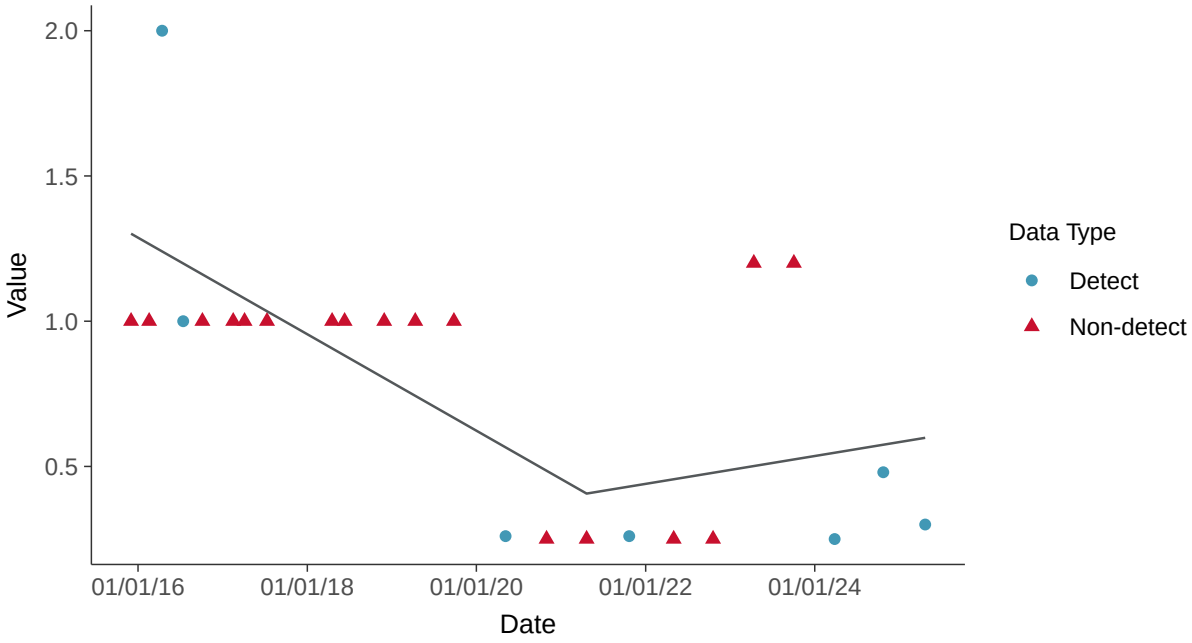

**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15023 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15023 (ug/L)

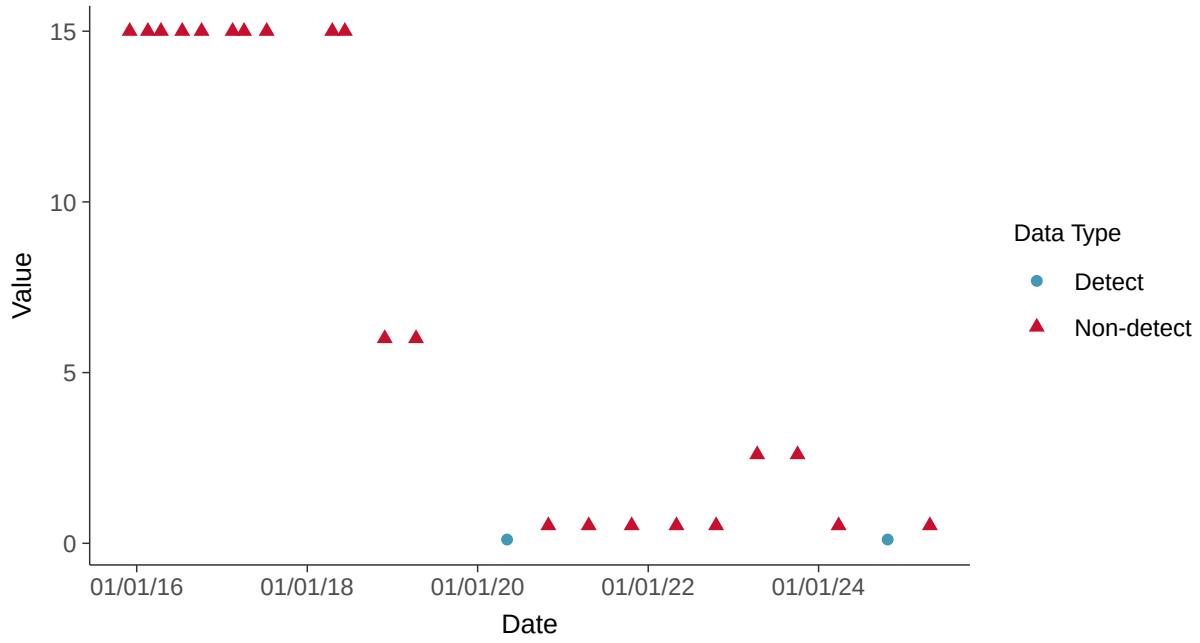


## Appendix IV: Cobalt, MW-15023

ID: 13_2_110

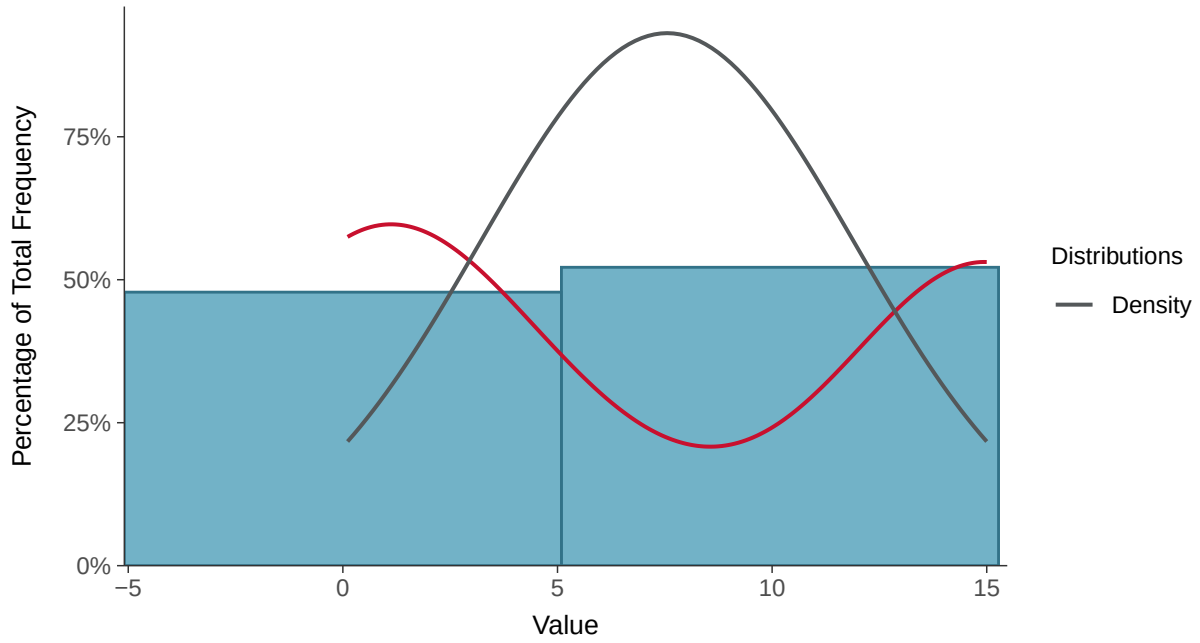
**Scatter Plot**

Cobalt, MW-15023 (ug/L)



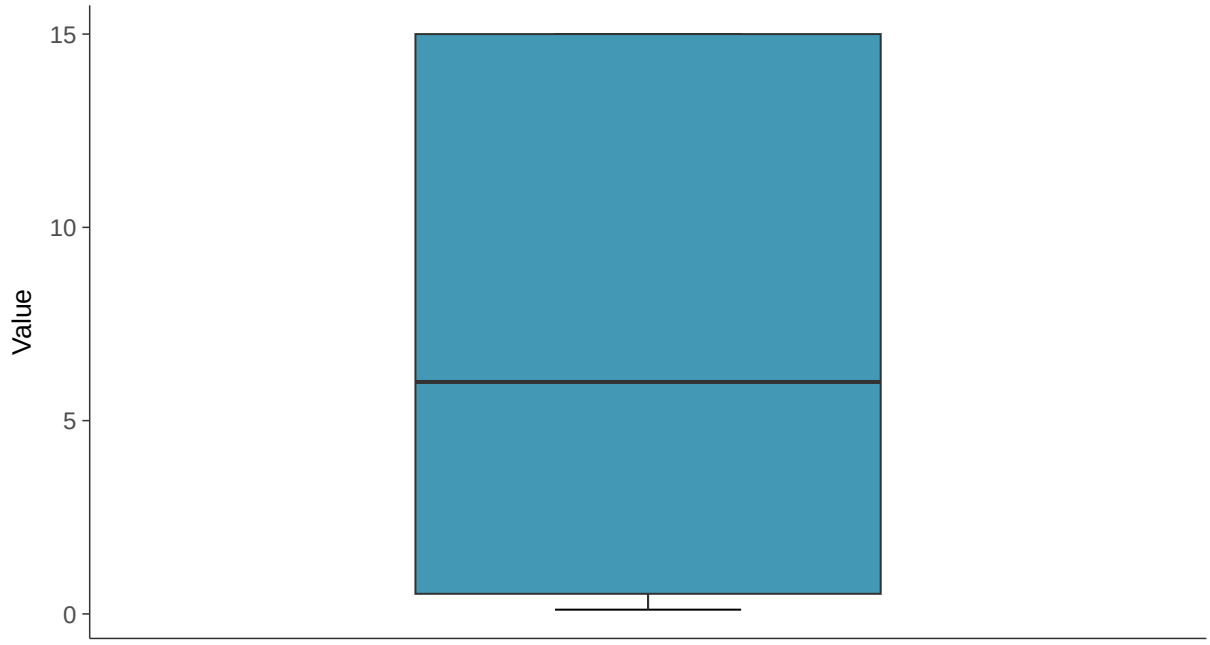

**Histogram**

Cobalt, MW-15023 (ug/L)



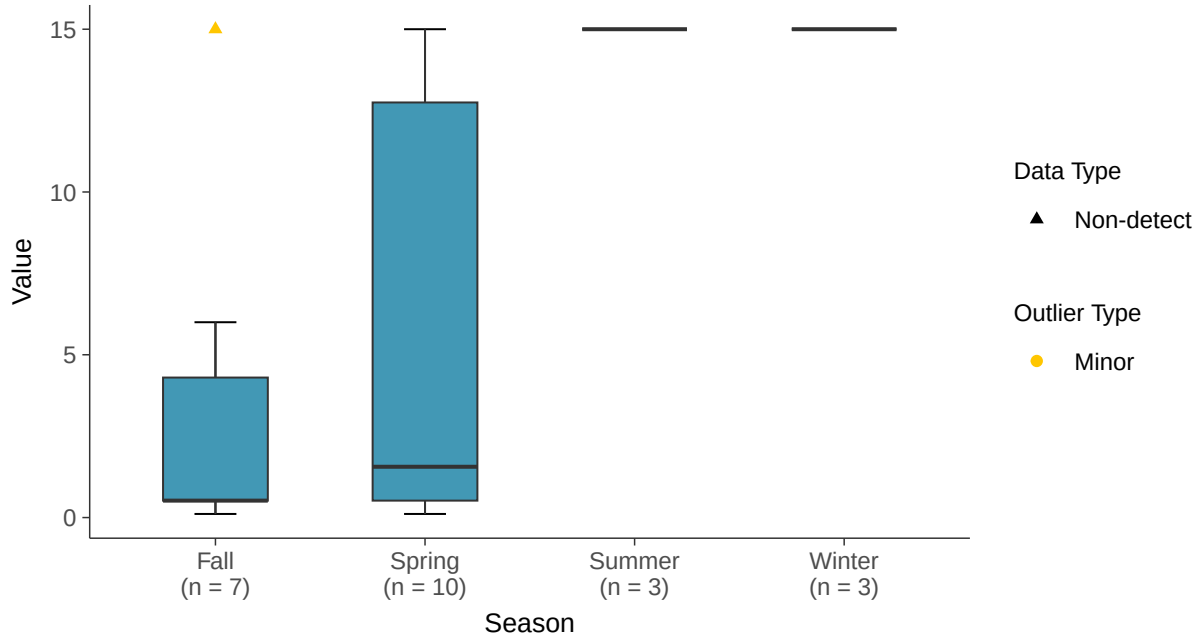
**Boxplot**

Cobalt, MW-15023 (ug/L)



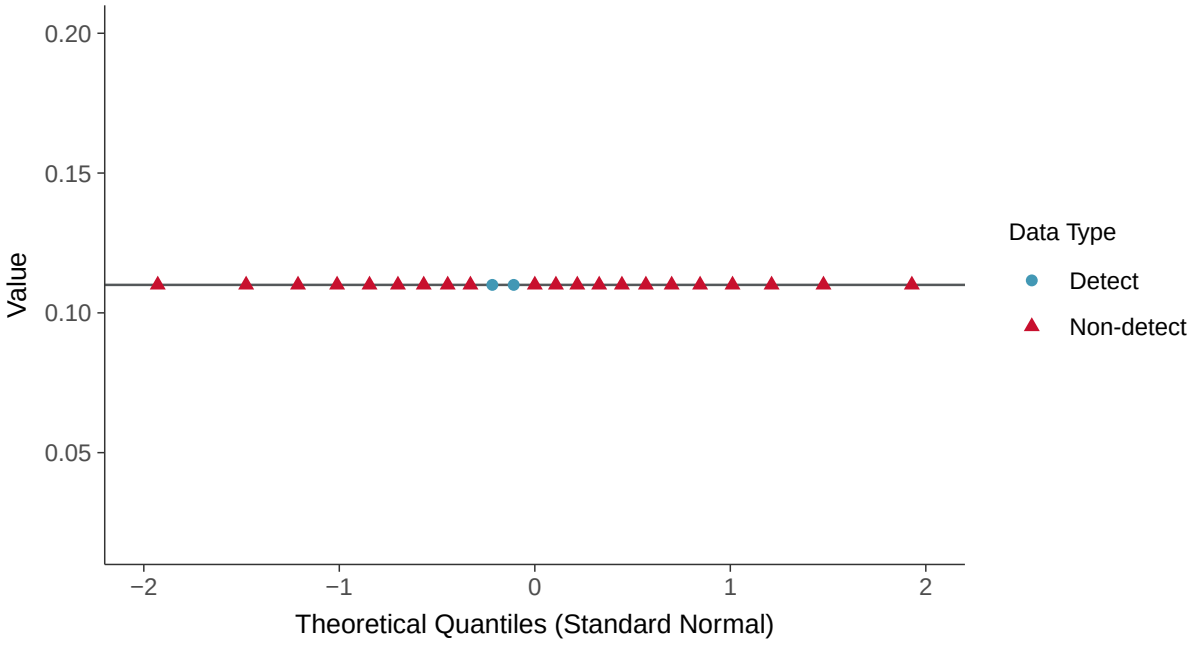

**Boxplot by Season**

Cobalt, MW-15023 (ug/L)



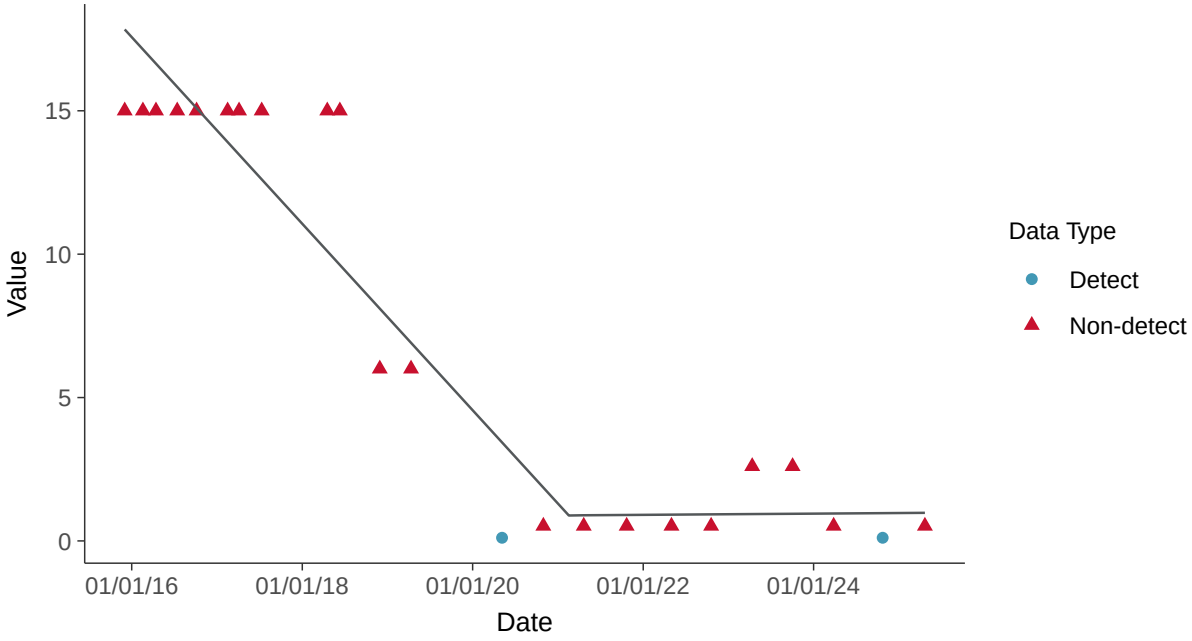
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15023 (ug/L)



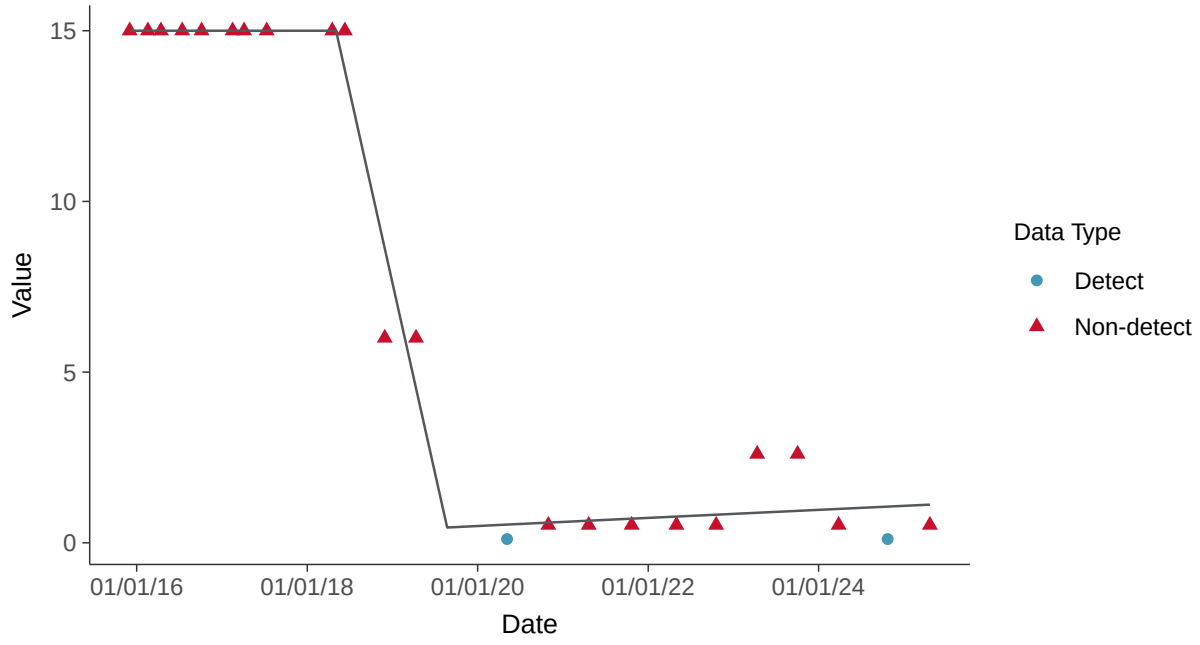

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15023 (ug/L)



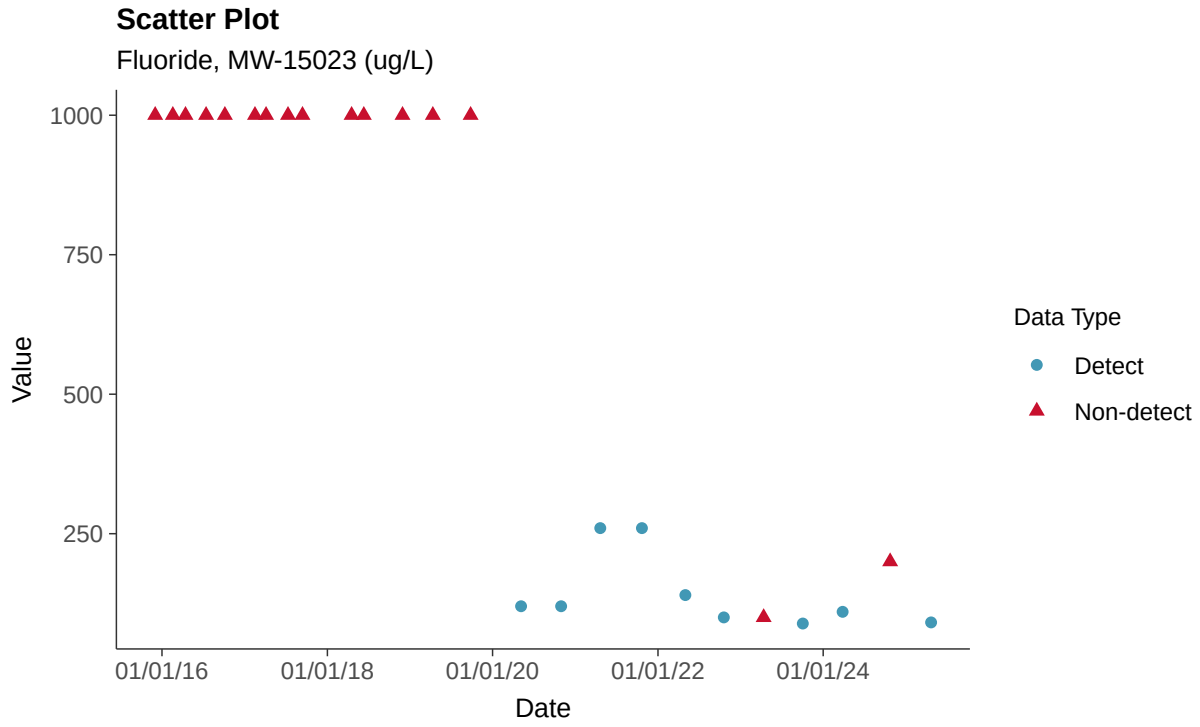
**Trend Regression: Piecewise Linear-Linear-Linear**

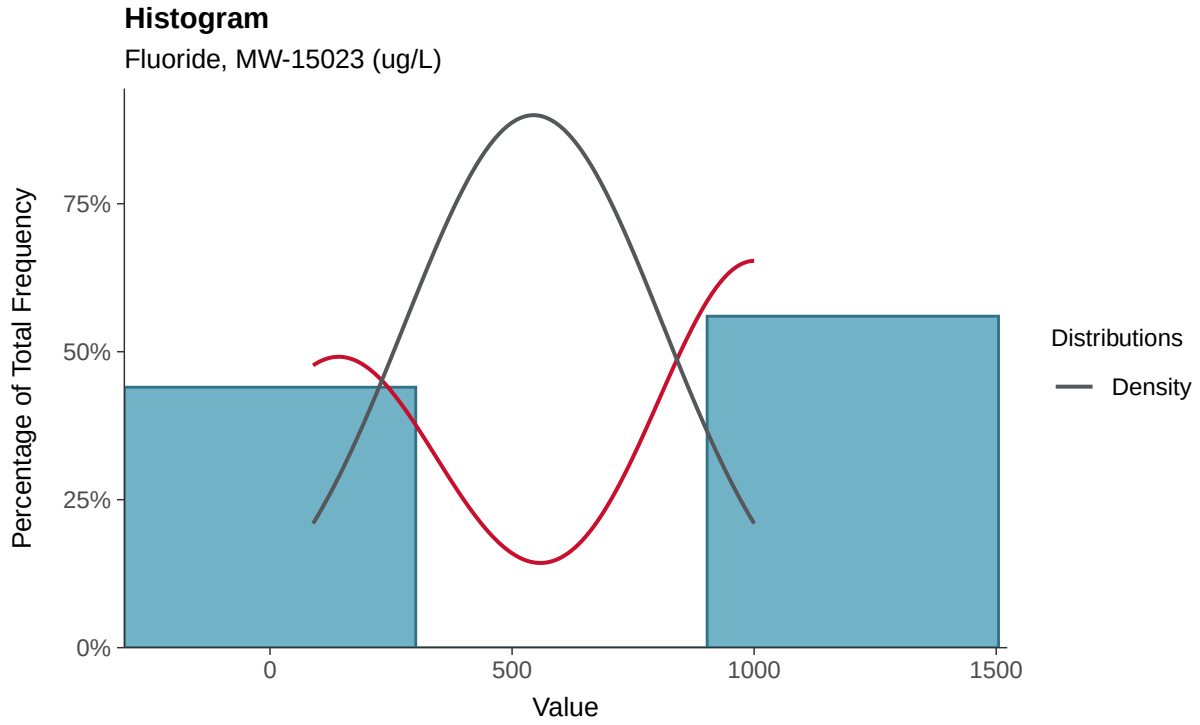
Cobalt, MW-15023 (ug/L)



## Appendix IV: Fluoride, MW-15023

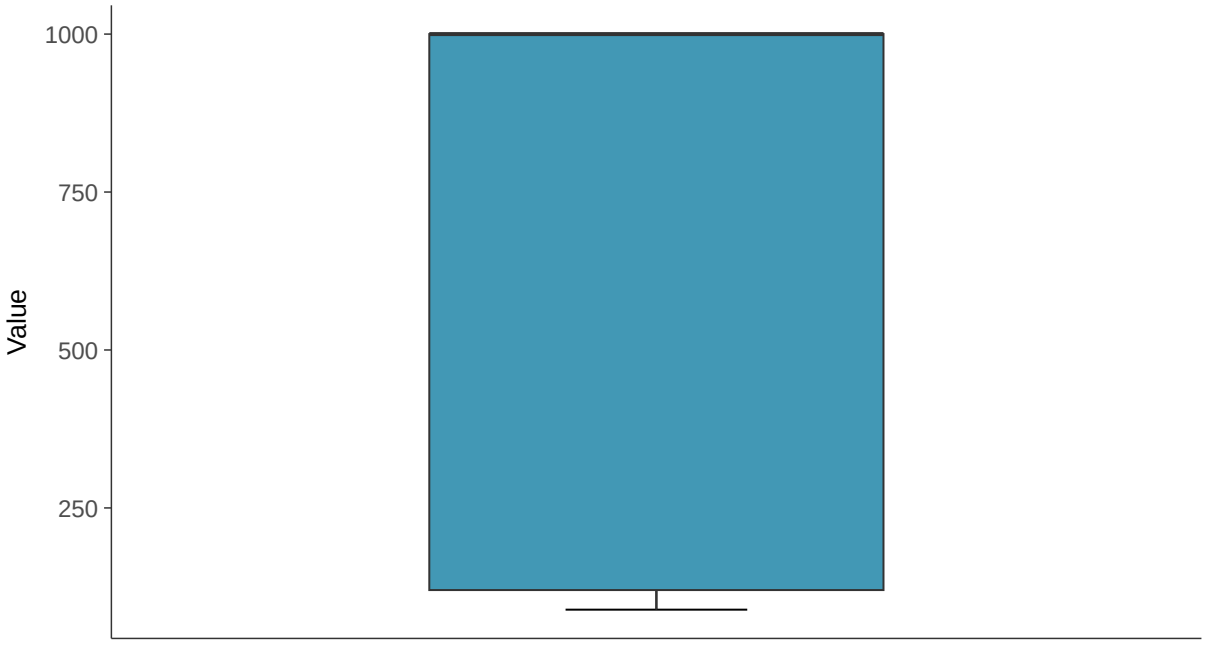
ID: 13_2_114



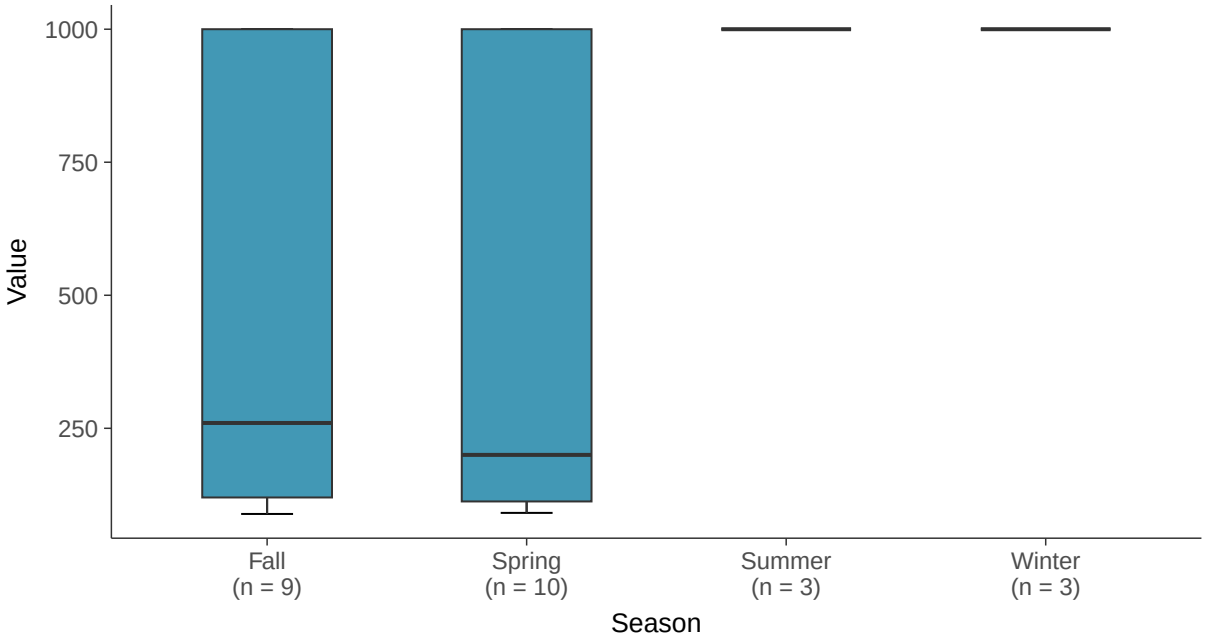
**Boxplot**

Fluoride, MW-15023 (ug/L)



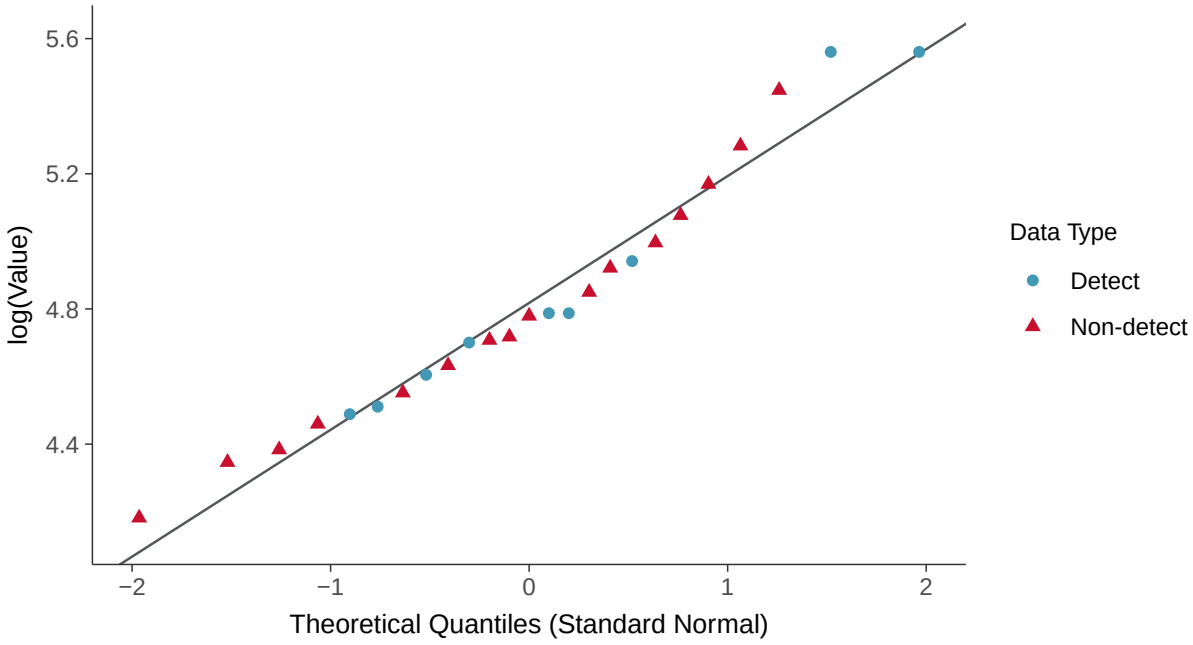

**Boxplot by Season**

Fluoride, MW-15023 (ug/L)



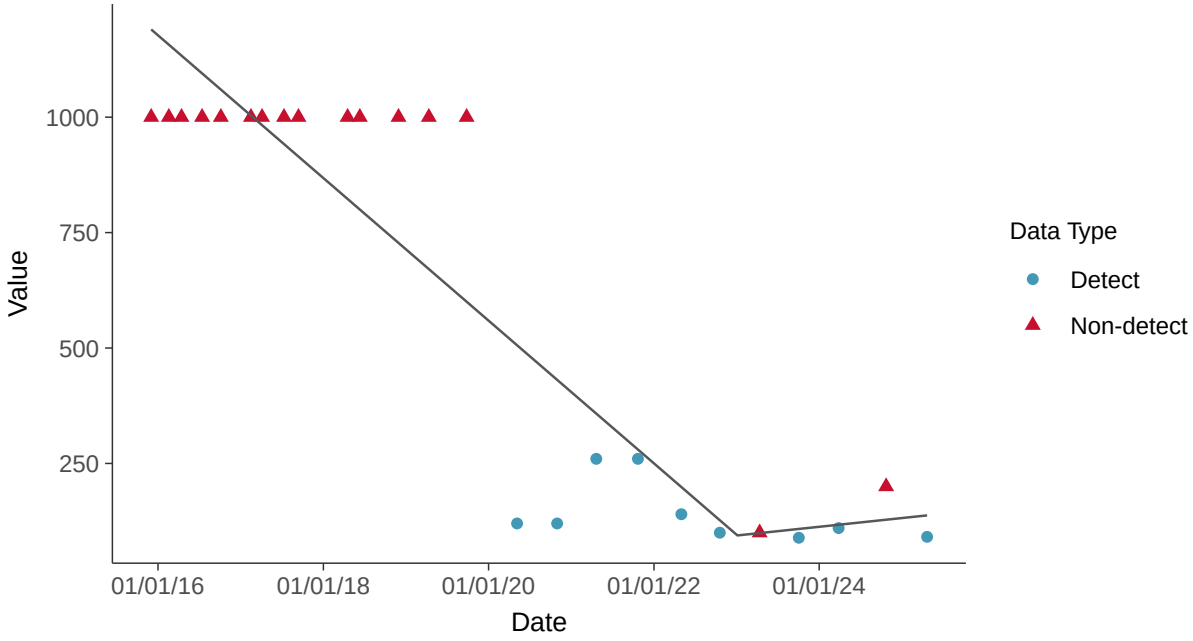
**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15023 (ug/L)



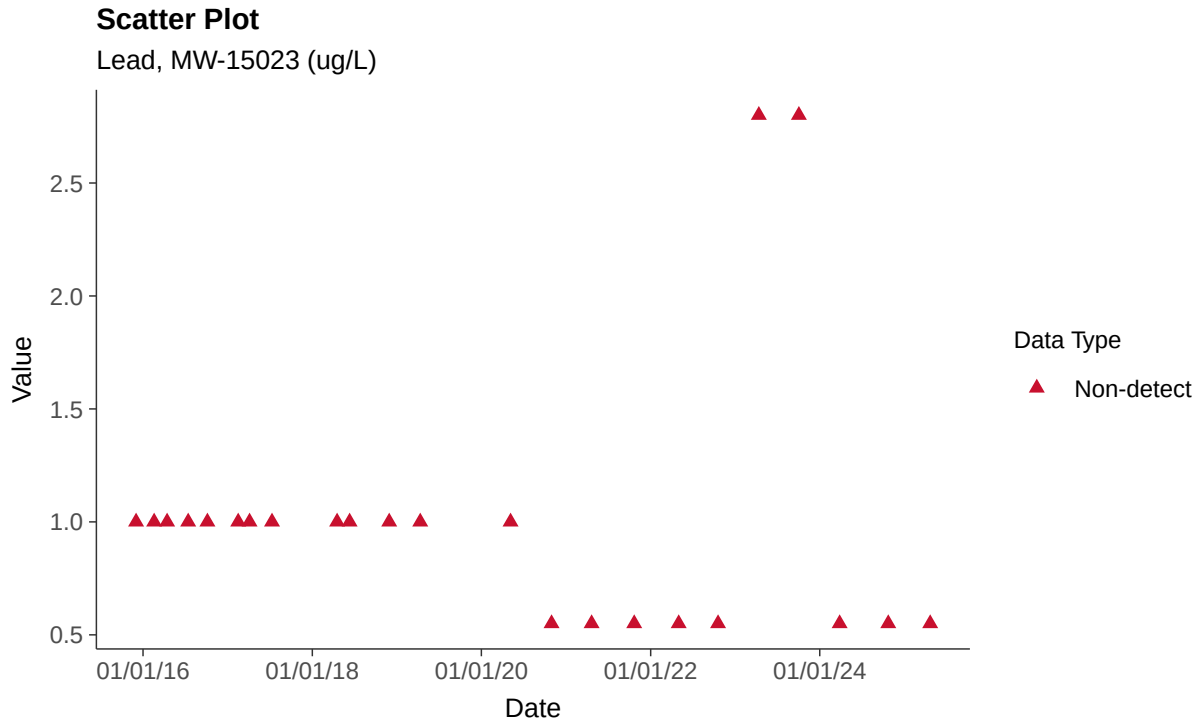

**Trend Regression: Piecewise Linear-Linear**

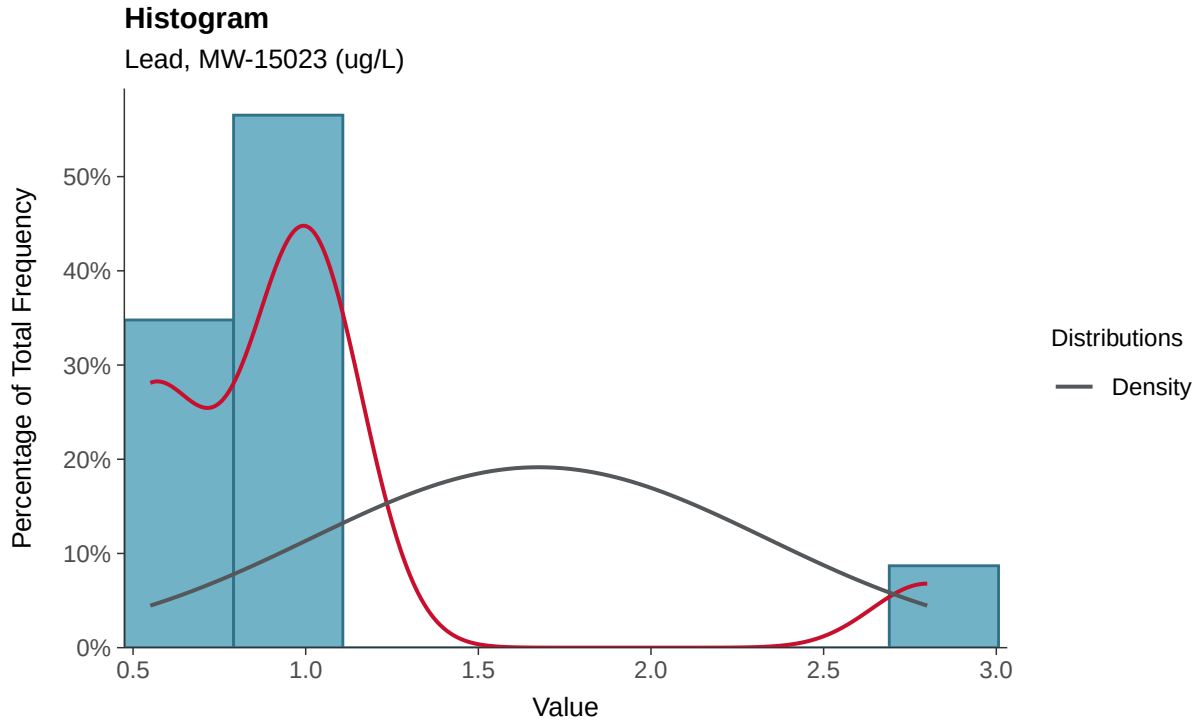
Fluoride, MW-15023 (ug/L)



# Appendix IV: Lead, MW-15023

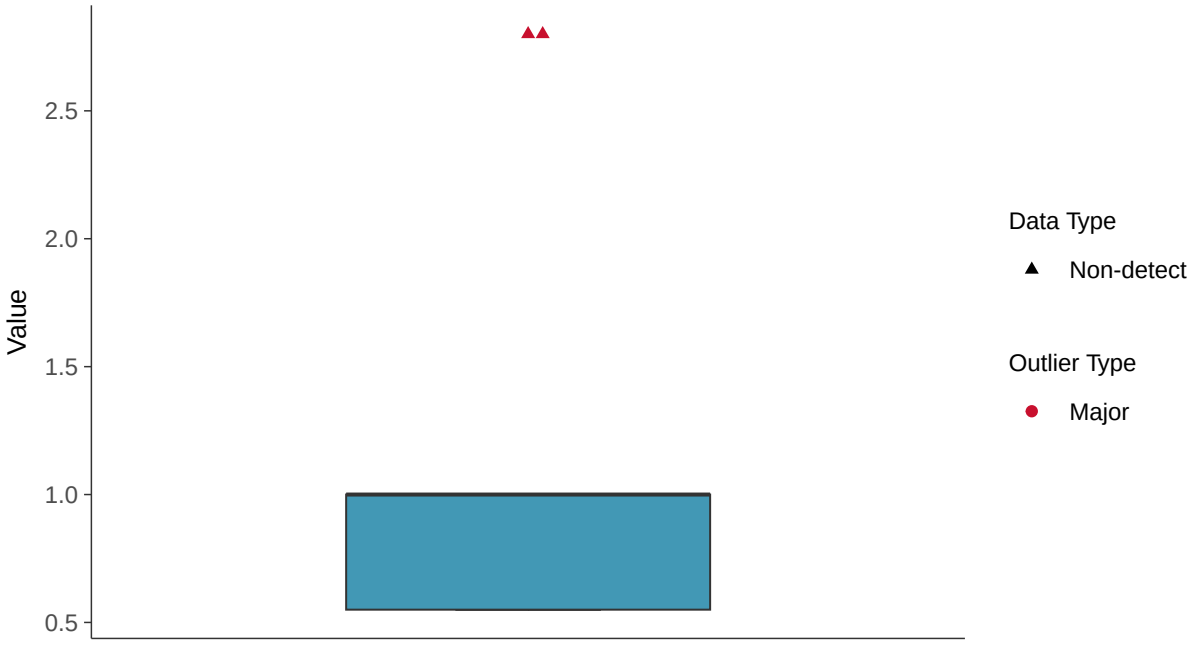
ID: 13_2_116



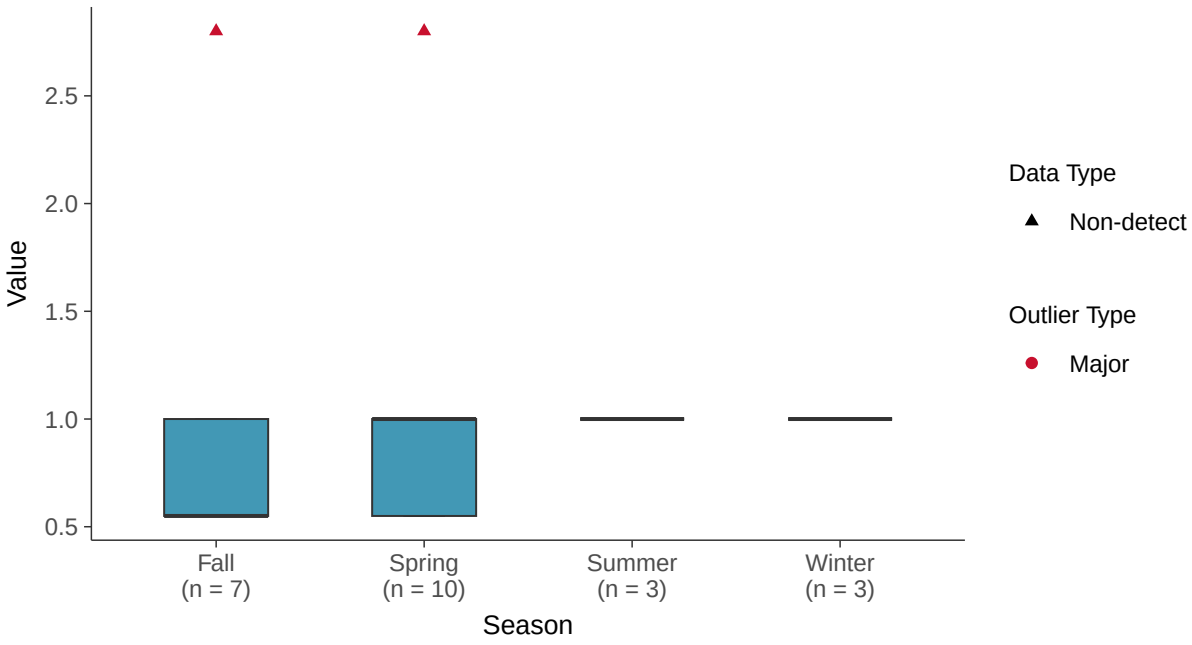
## Boxplot

Lead, MW-15023 (ug/L)



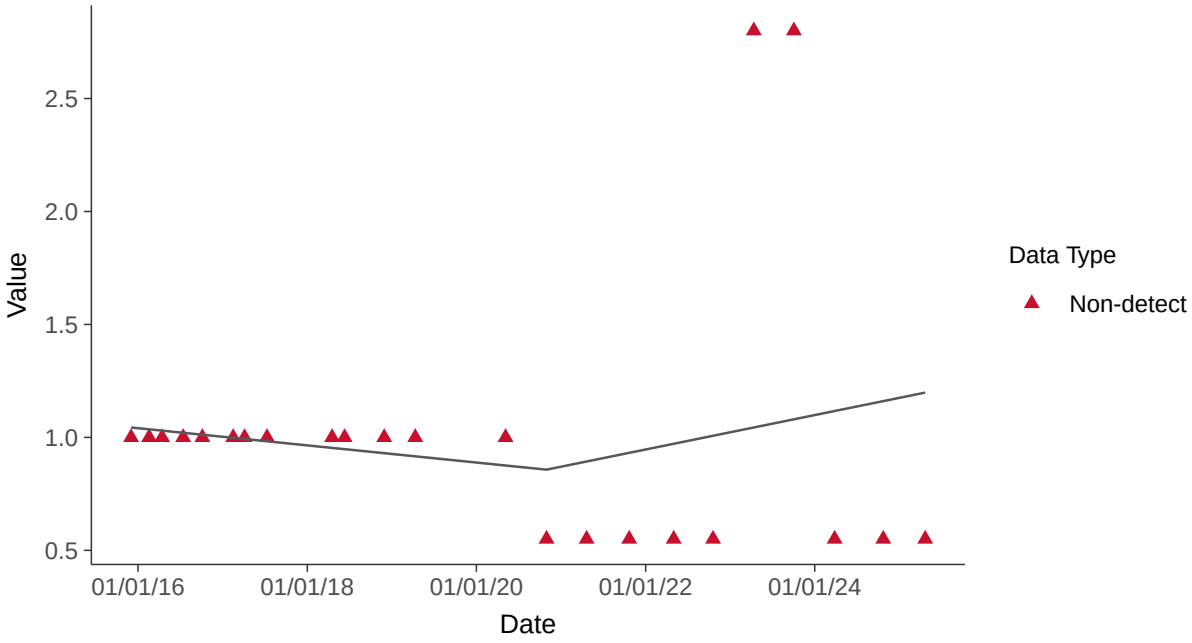

## Boxplot by Season

Lead, MW-15023 (ug/L)



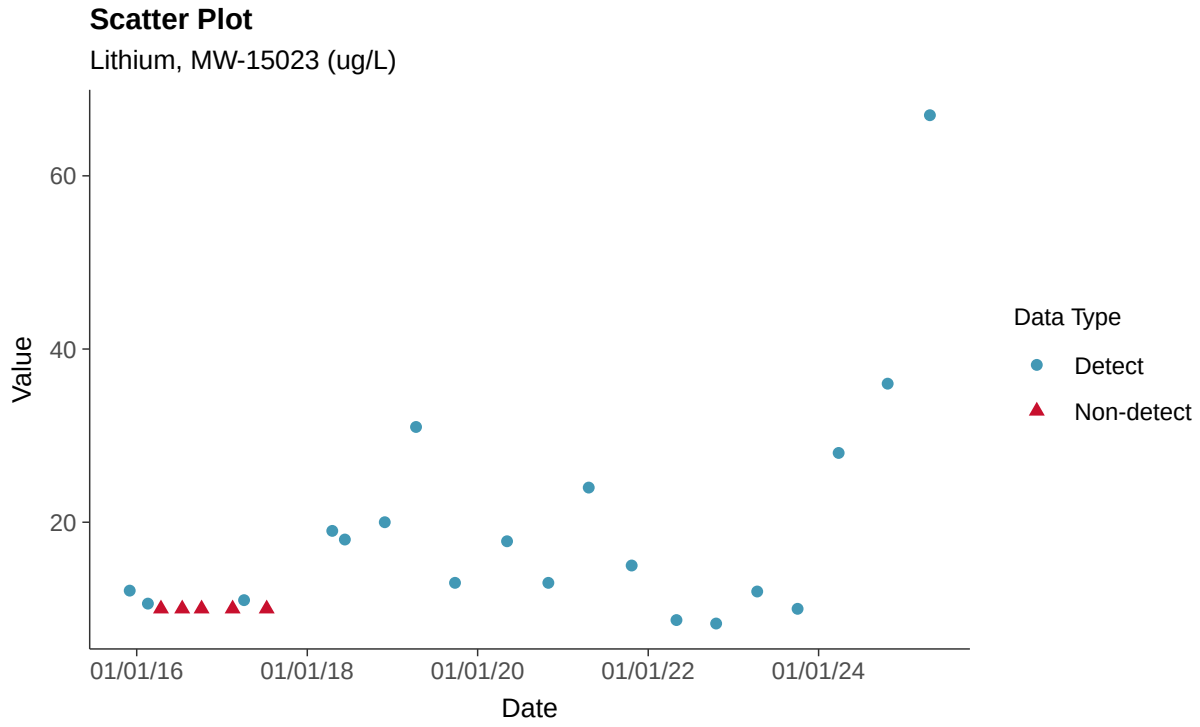
**Trend Regression: Piecewise Linear-Linear**

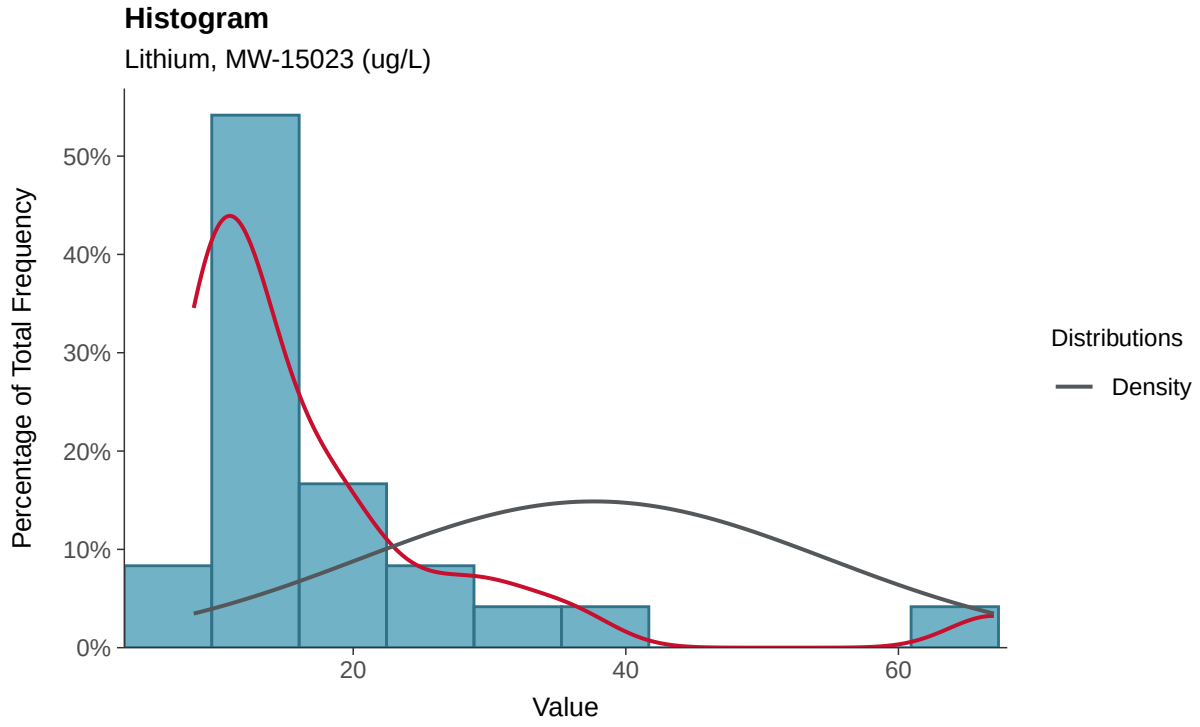
Lead, MW-15023 (ug/L)



## Appendix IV: Lithium, MW-15023

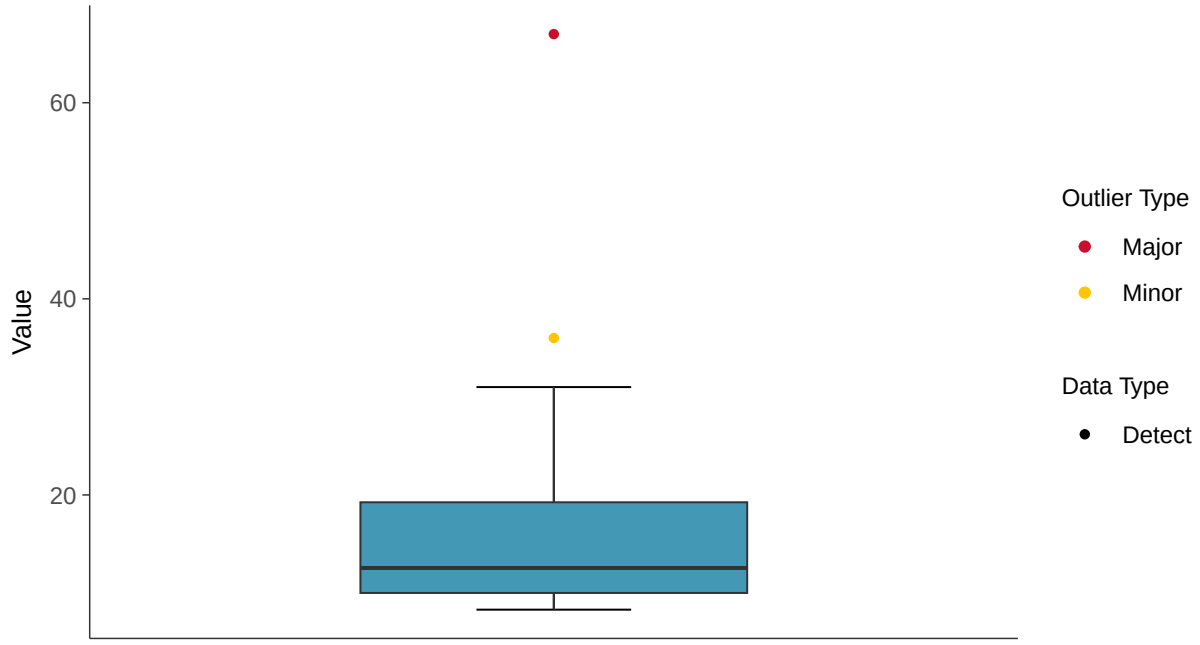
ID: 13_2_117



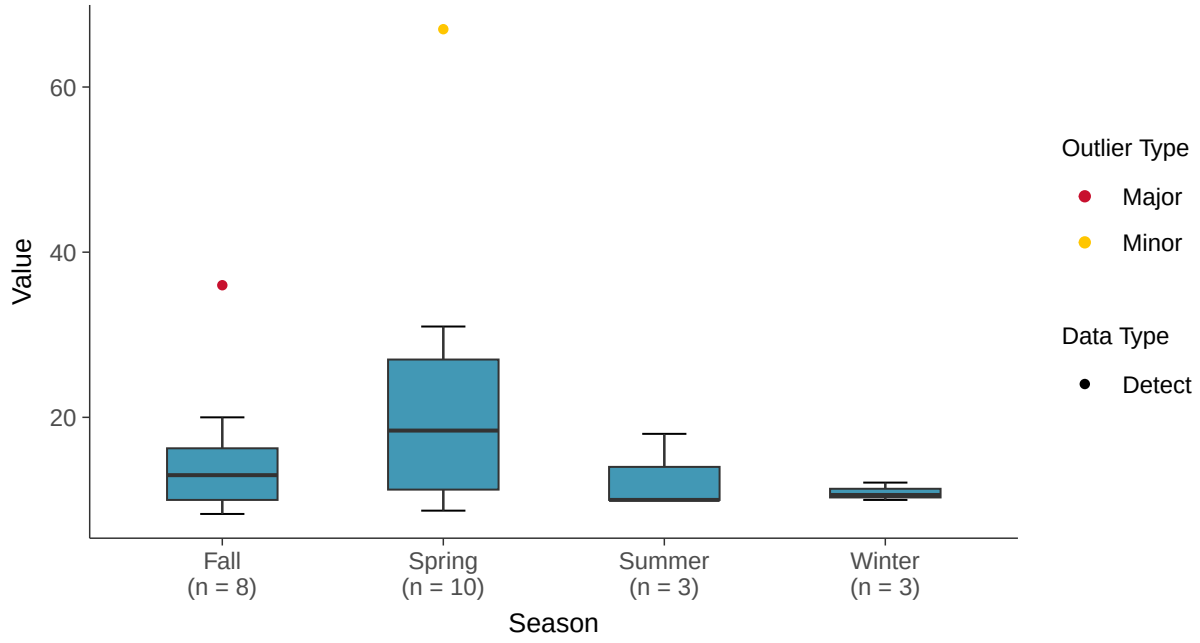
## Boxplot

Lithium, MW-15023 (ug/L)



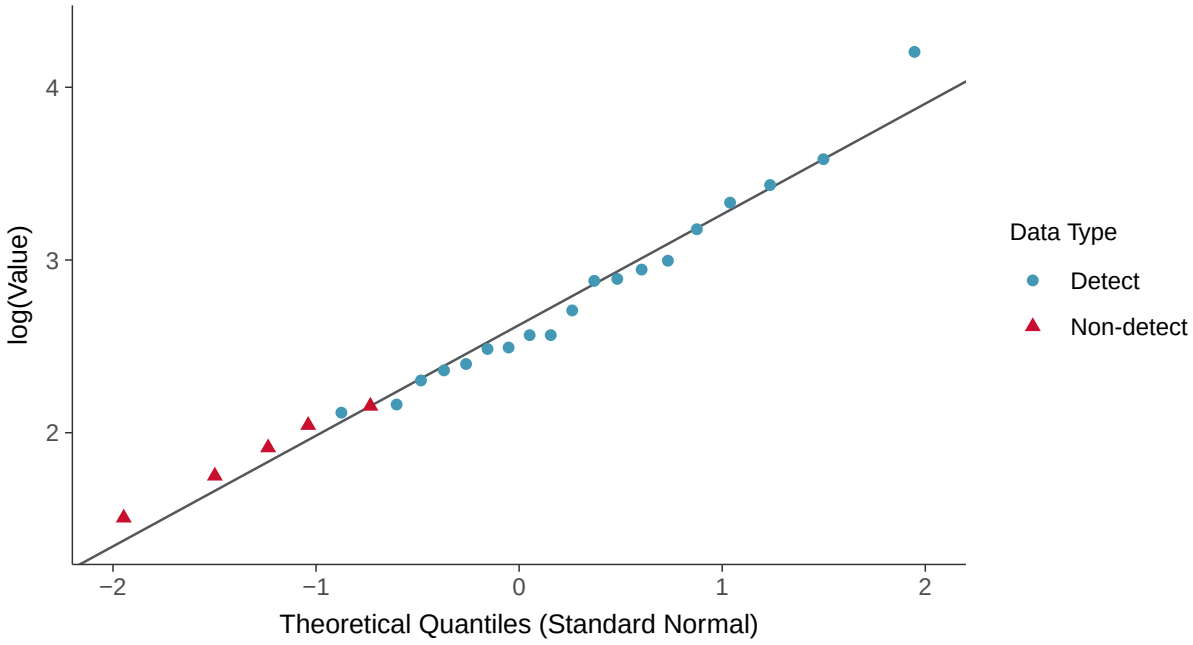

## Boxplot by Season

Lithium, MW-15023 (ug/L)



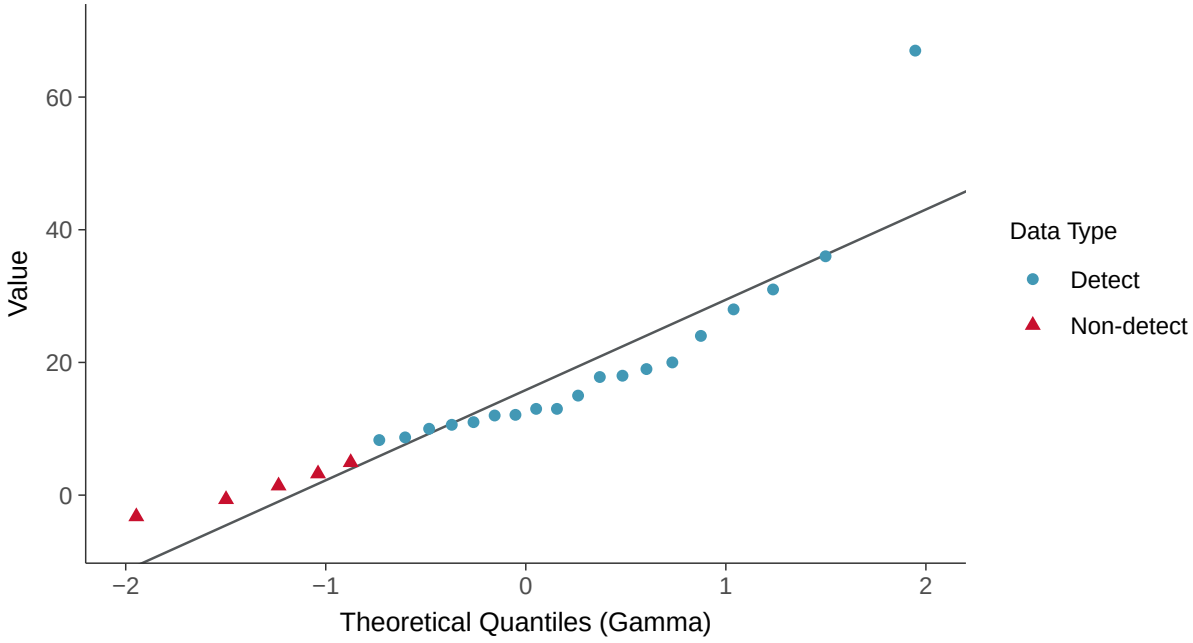
**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15023 (ug/L)



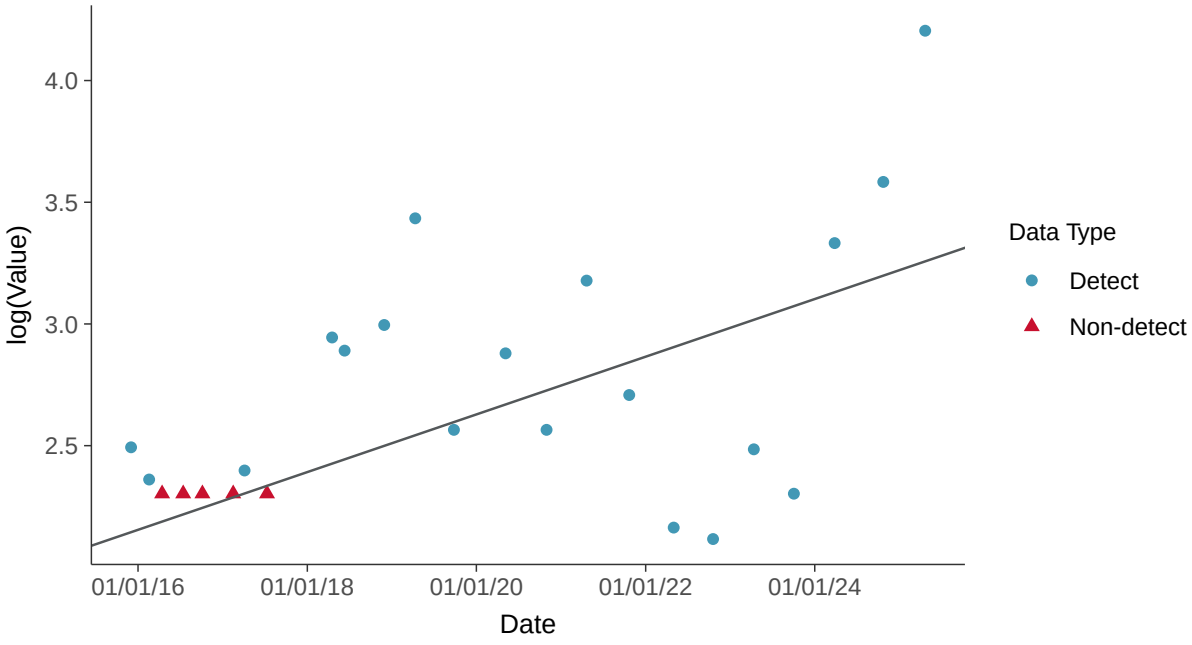

**Gamma Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15023 (ug/L)



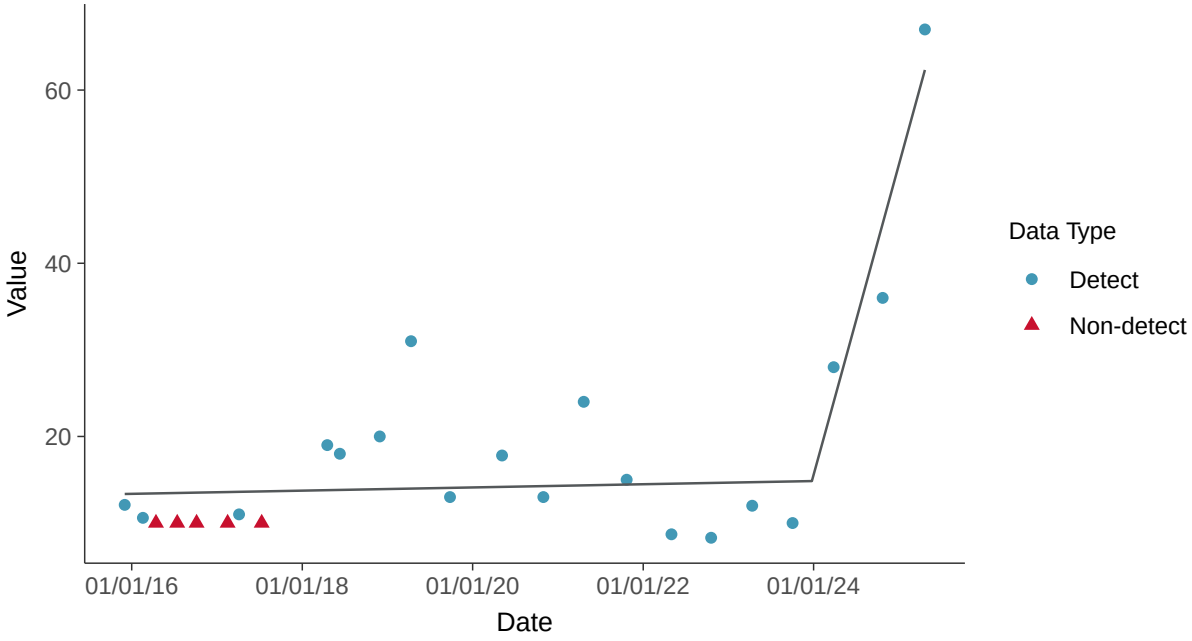
**Trend Regression: Lognormal MLE**

Lithium, MW-15023 (ug/L)



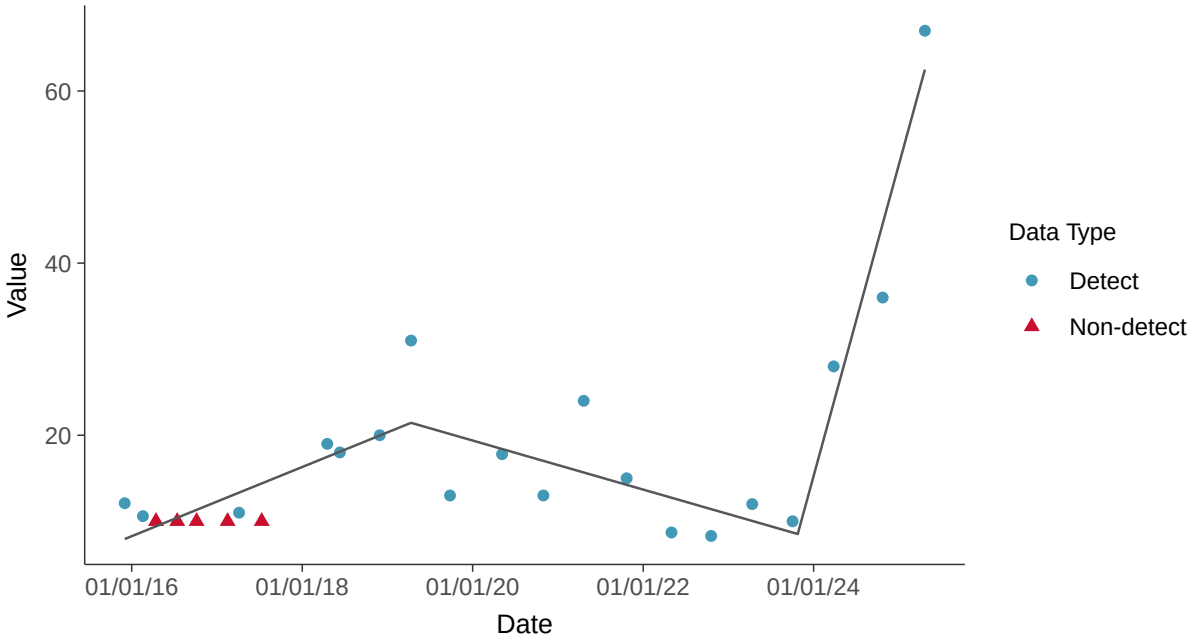

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15023 (ug/L)



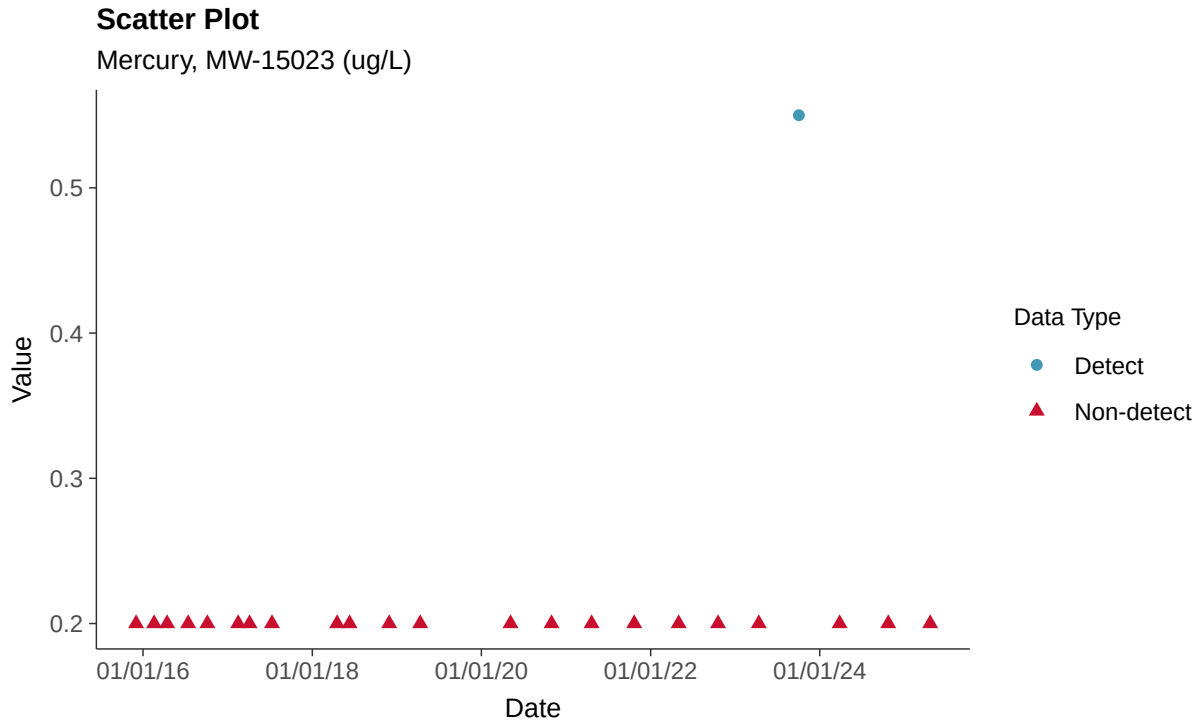
**Trend Regression: Piecewise Linear-Linear-Linear**

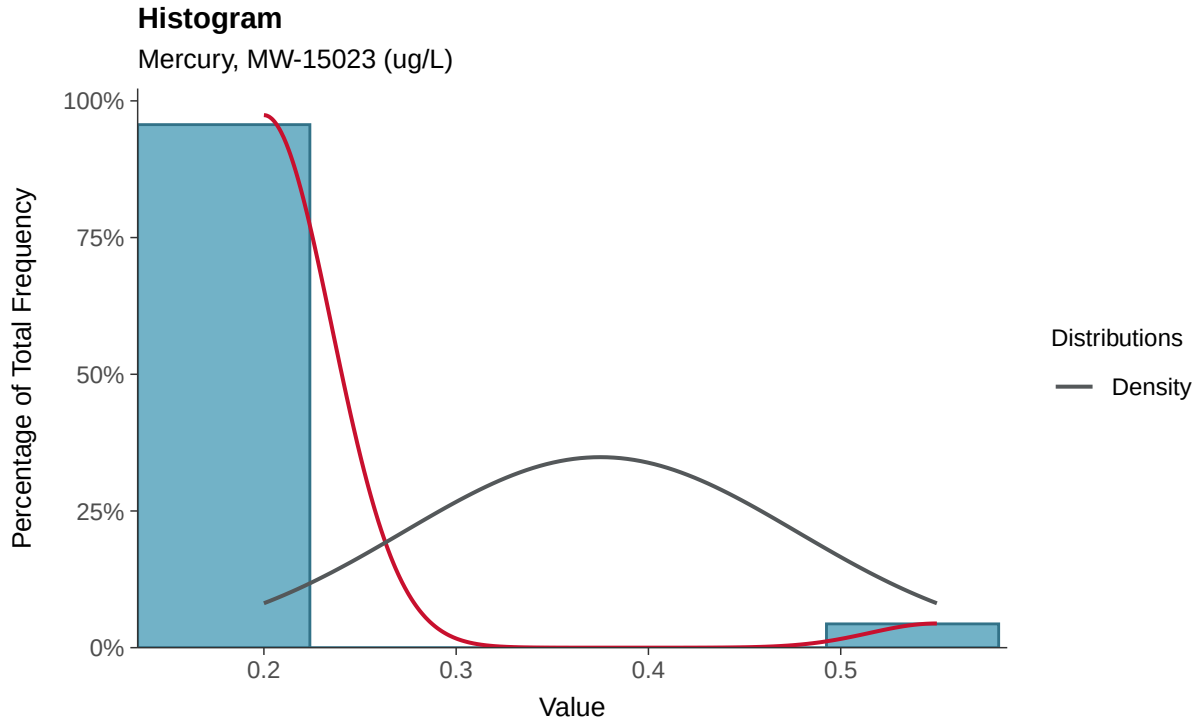
Lithium, MW-15023 (ug/L)



## Appendix IV: Mercury, MW-15023

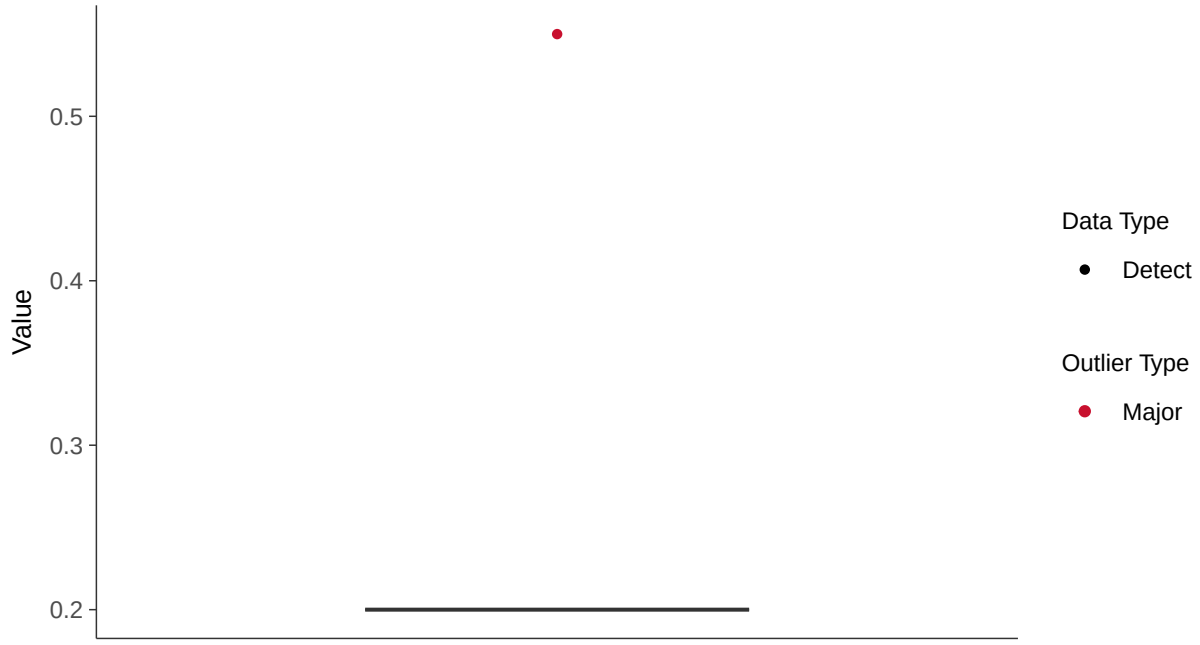
ID: 13_2_118



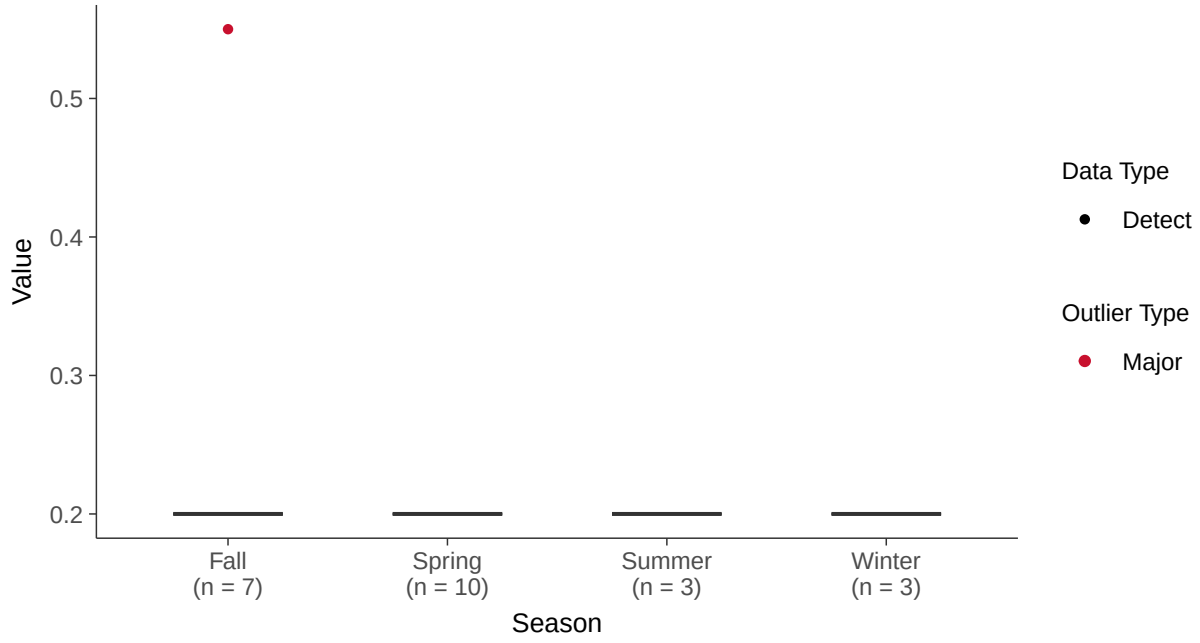
## Boxplot

Mercury, MW-15023 (ug/L)



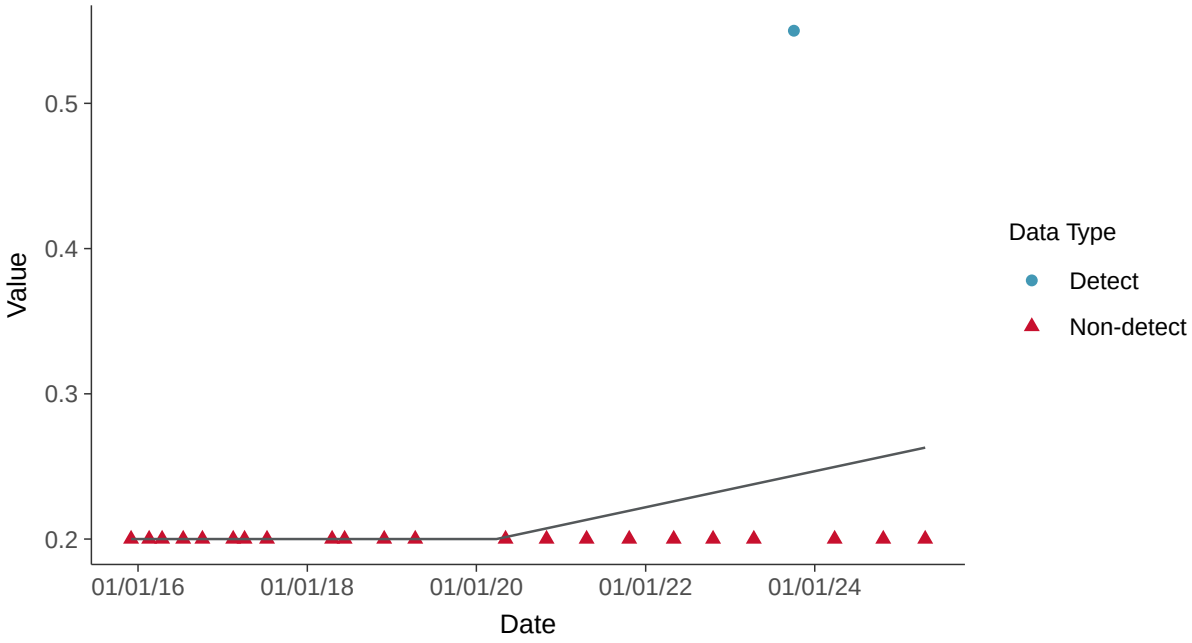

## Boxplot by Season

Mercury, MW-15023 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Mercury, MW-15023 (ug/L)

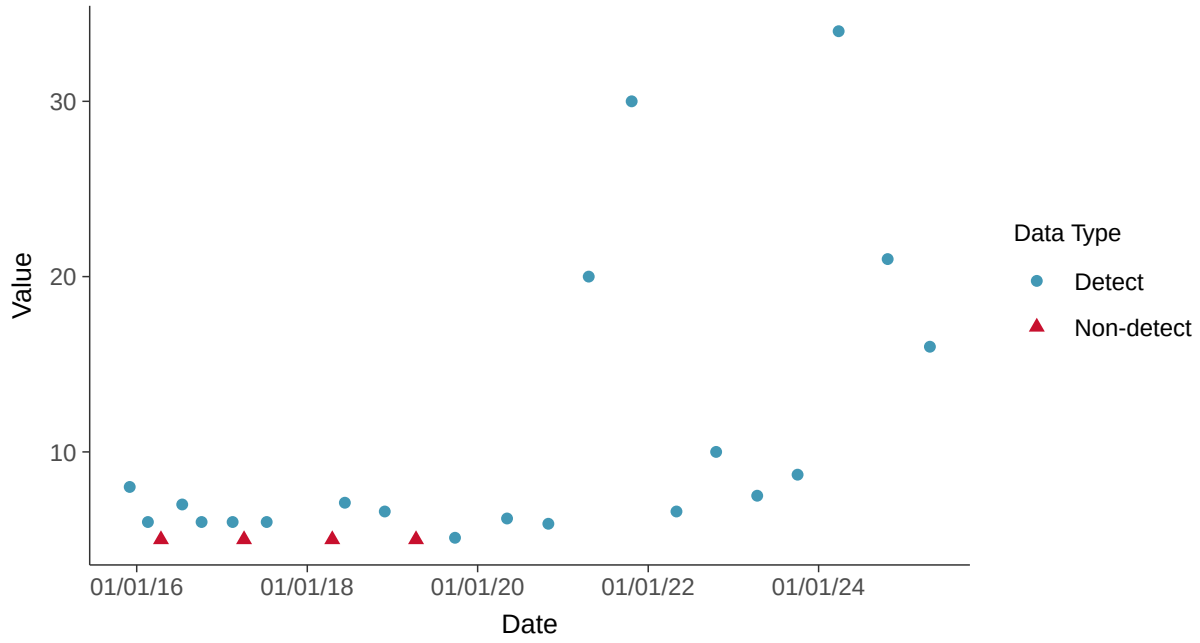


## Appendix IV: Molybdenum, MW-15023

ID: 13_2_119

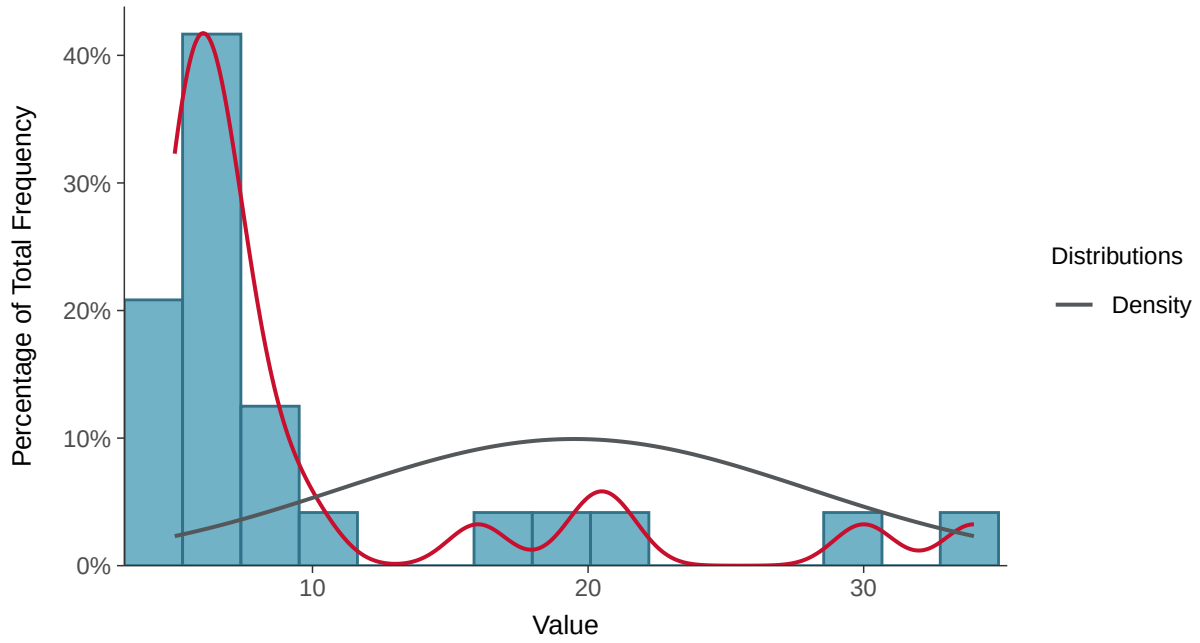
**Scatter Plot**

Molybdenum, MW-15023 (ug/L)



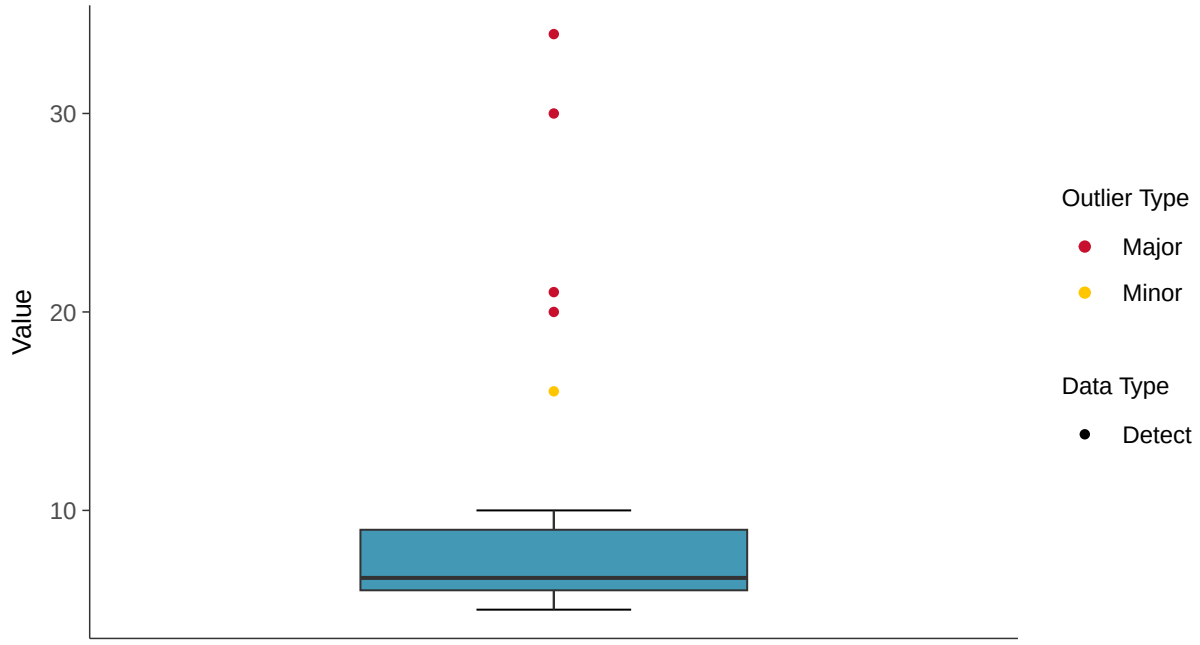

**Histogram**

Molybdenum, MW-15023 (ug/L)



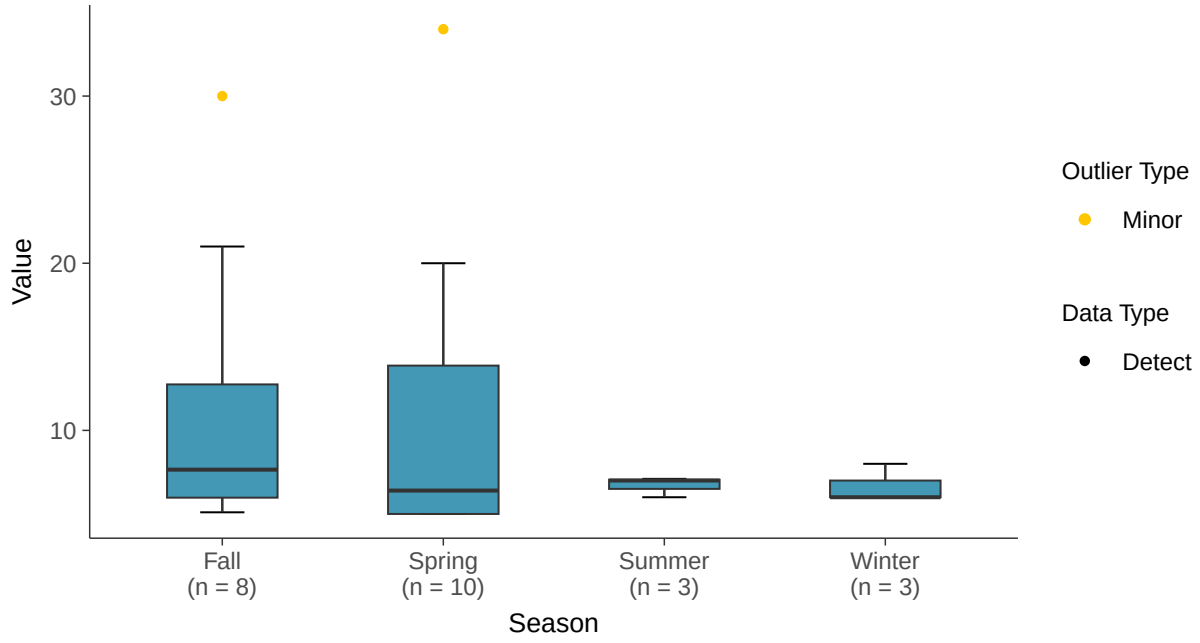
## Boxplot

Molybdenum, MW-15023 (ug/L)



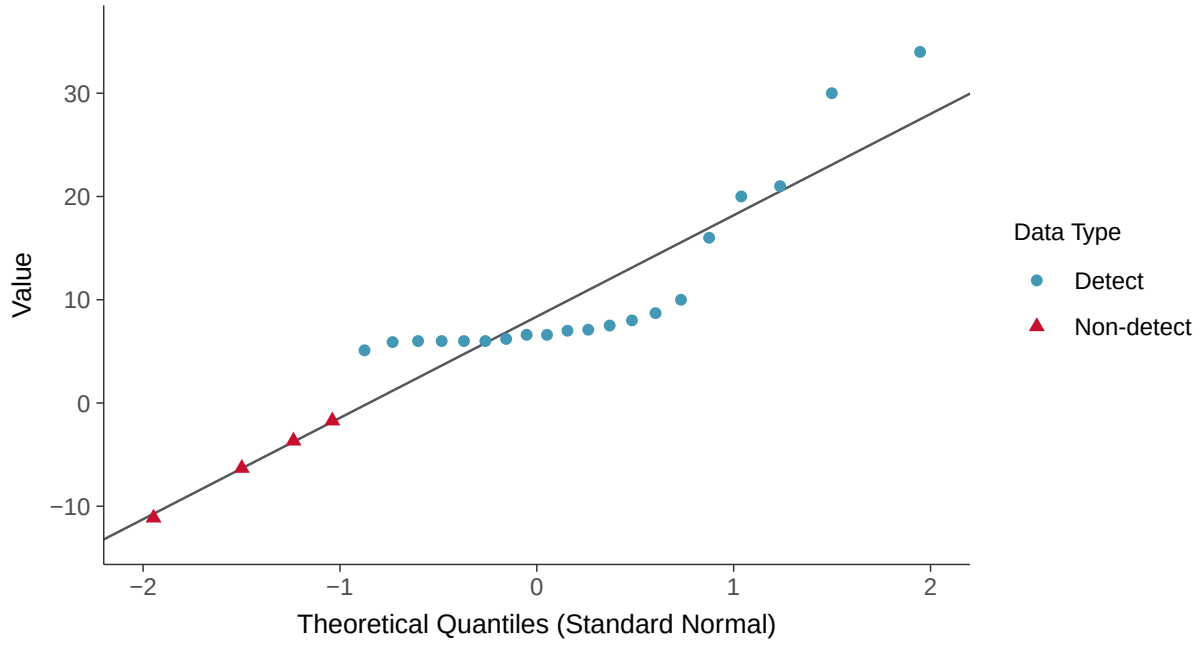

## Boxplot by Season

Molybdenum, MW-15023 (ug/L)



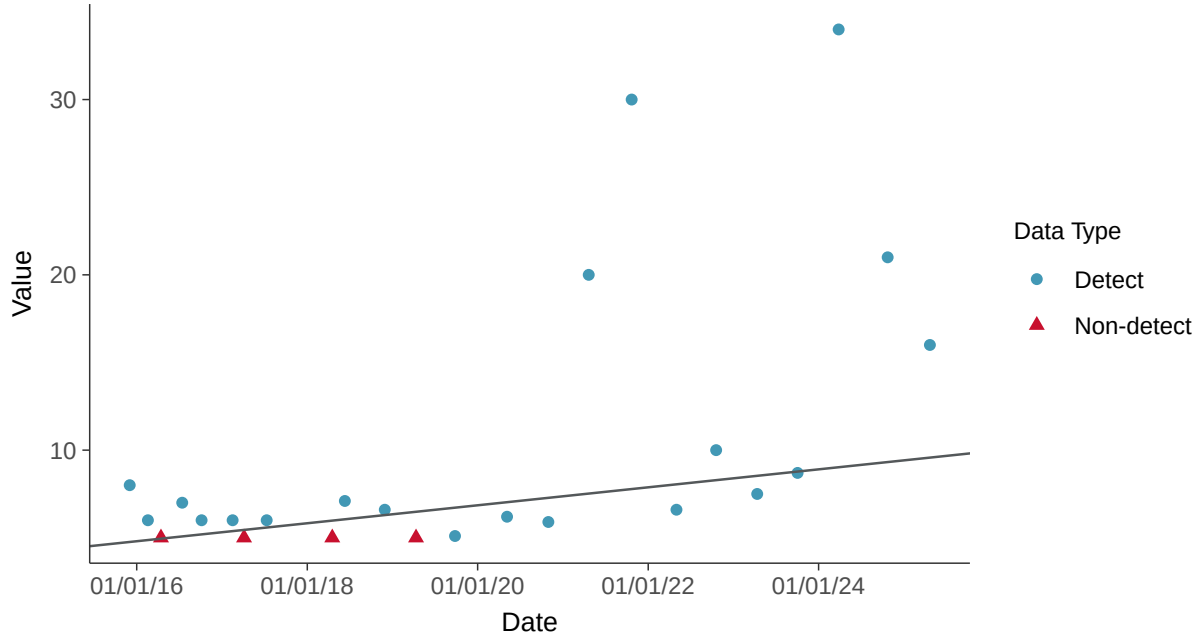
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15023 (ug/L)



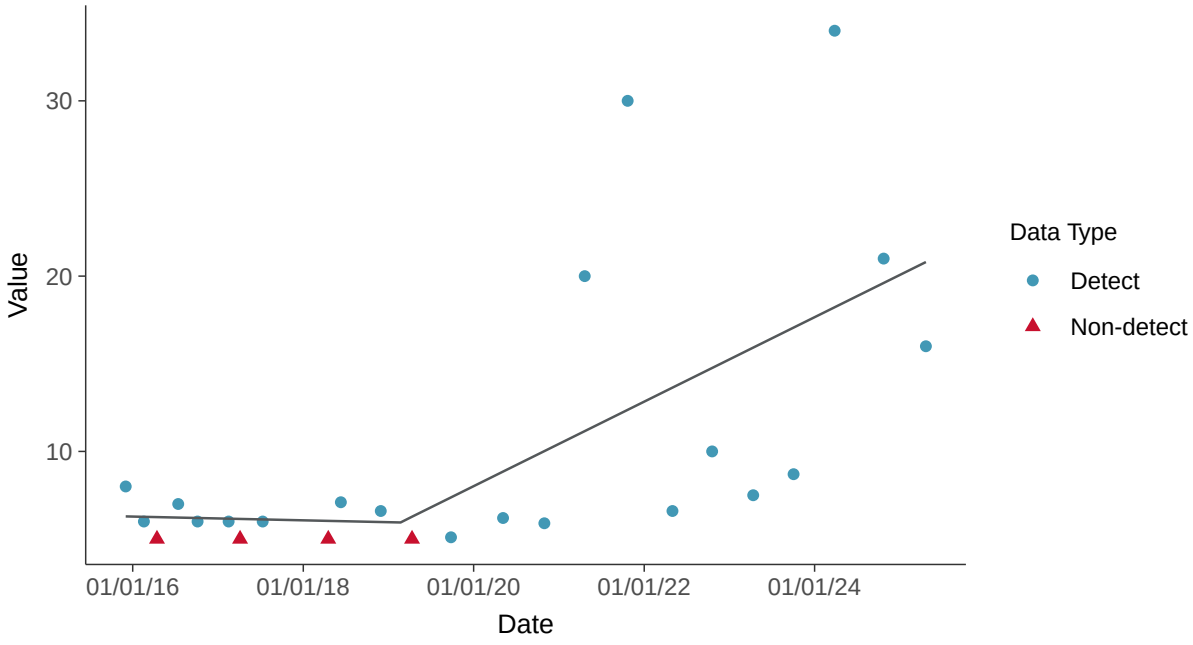

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Molybdenum, MW-15023 (ug/L)



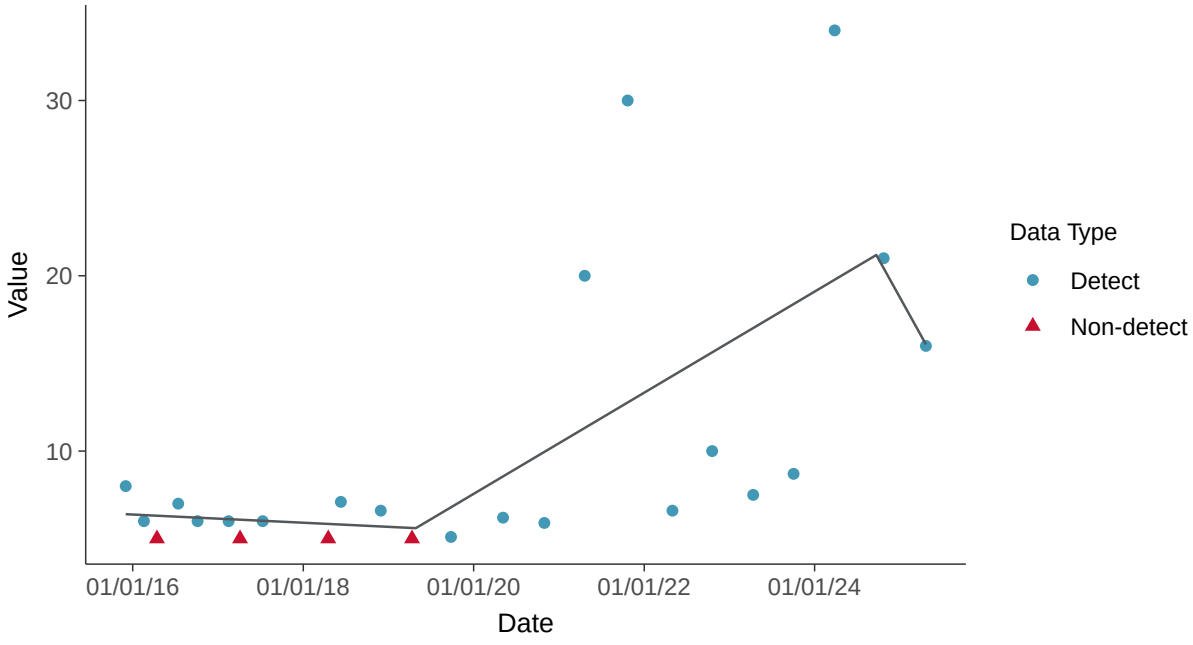
**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15023 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-15023 (ug/L)

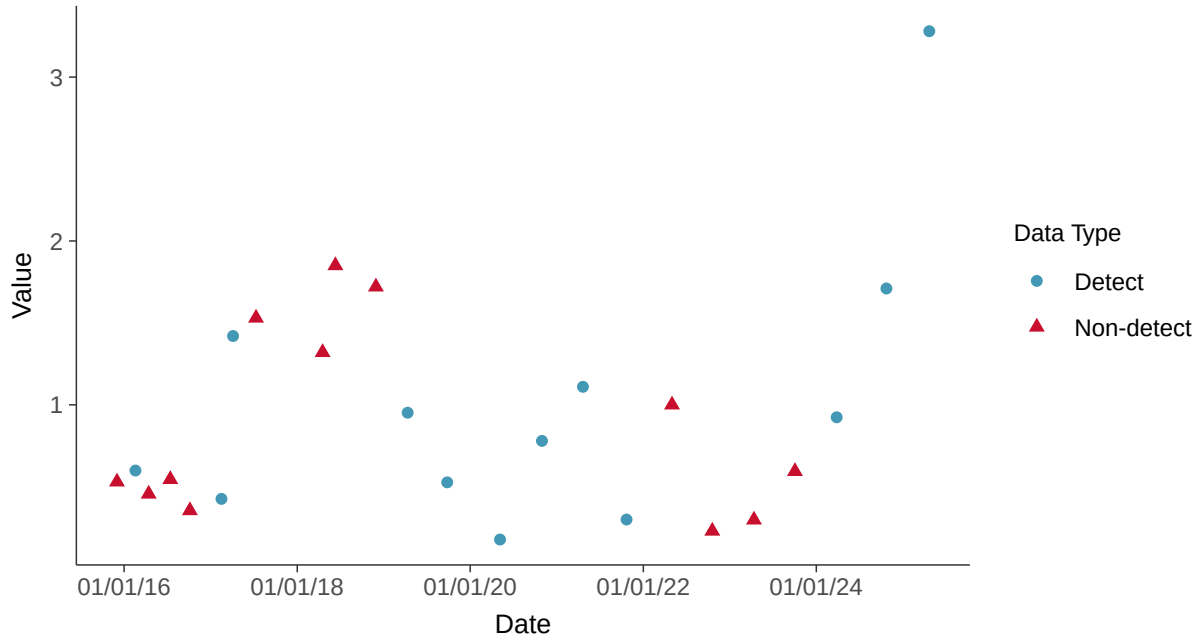


## Appendix IV: Radium-226+228, MW-15023

ID: 13_2_125

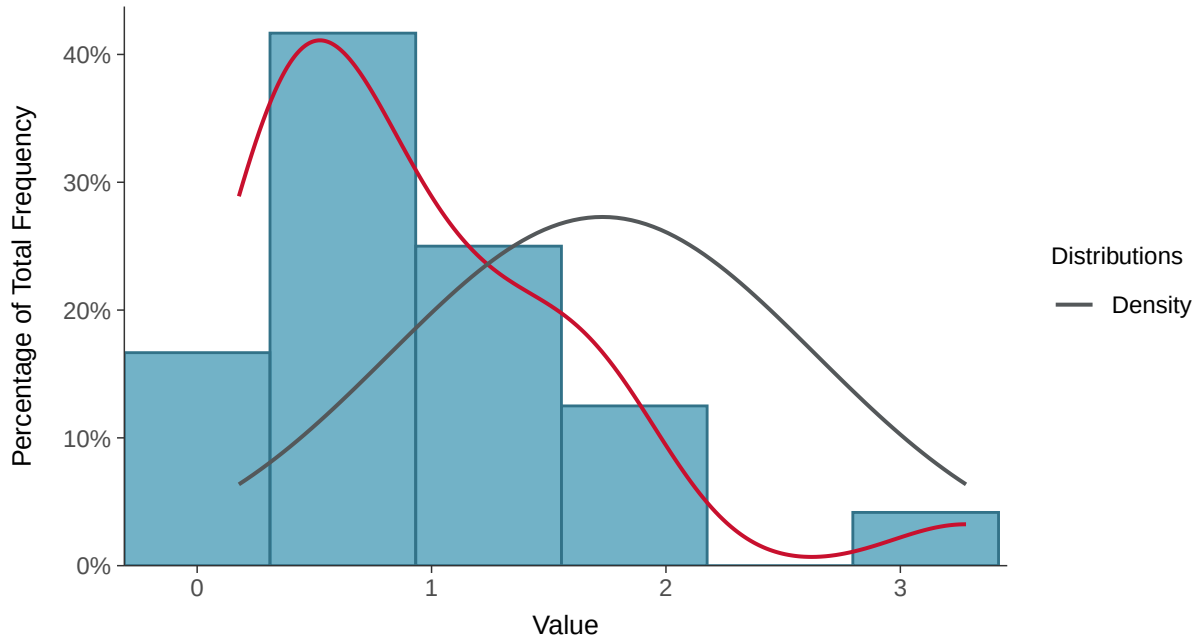
**Scatter Plot**

Radium-226+228, MW-15023 (pCi/L)



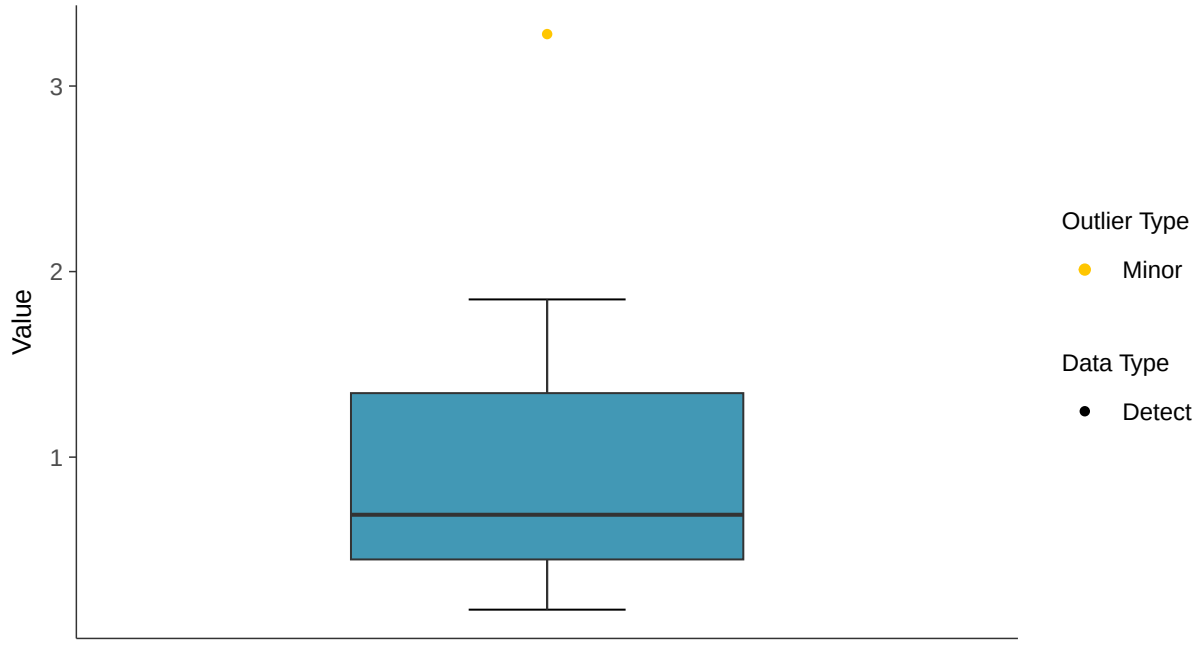

**Histogram**

Radium-226+228, MW-15023 (pCi/L)



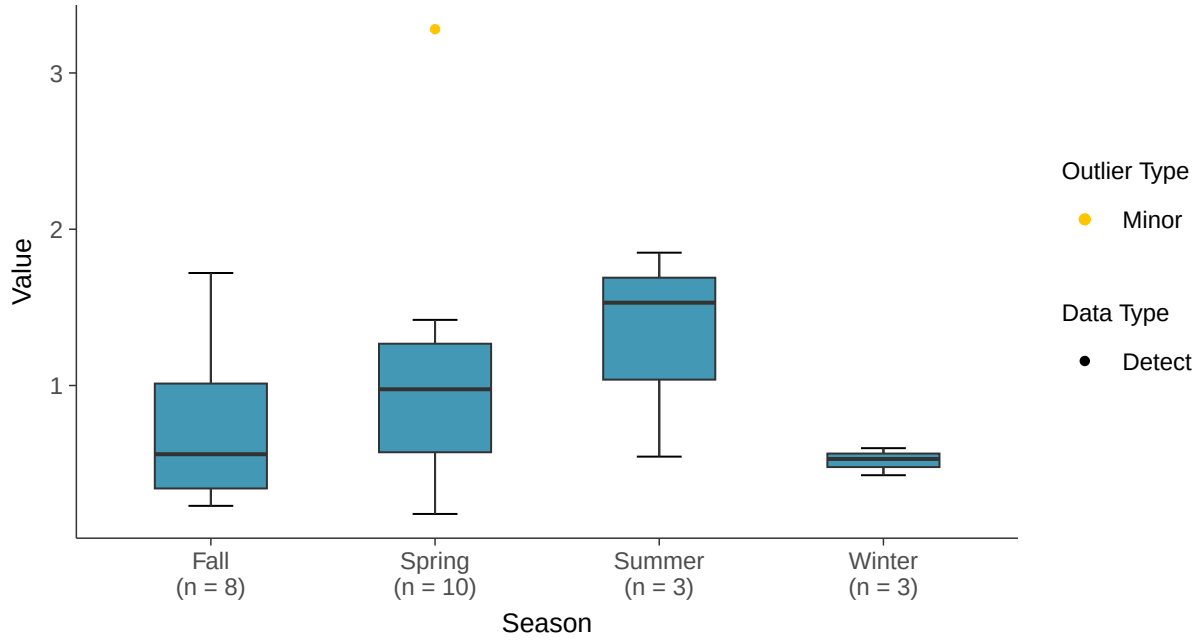
## Boxplot

Radium-226+228, MW-15023 (pCi/L)



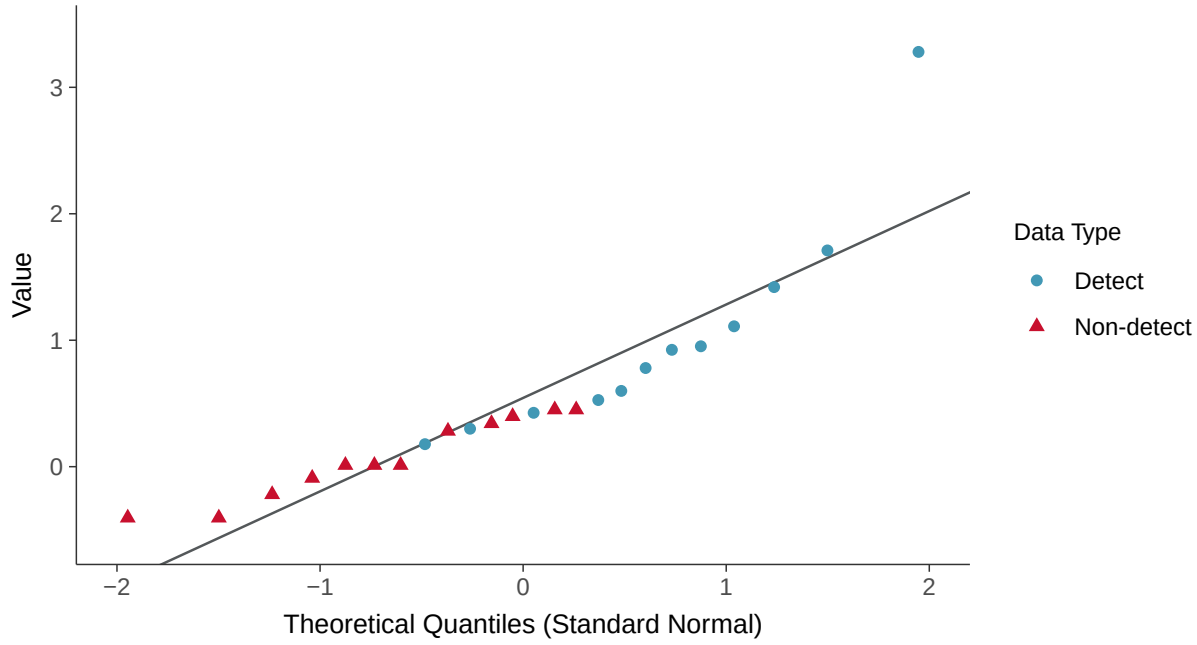

## Boxplot by Season

Radium-226+228, MW-15023 (pCi/L)



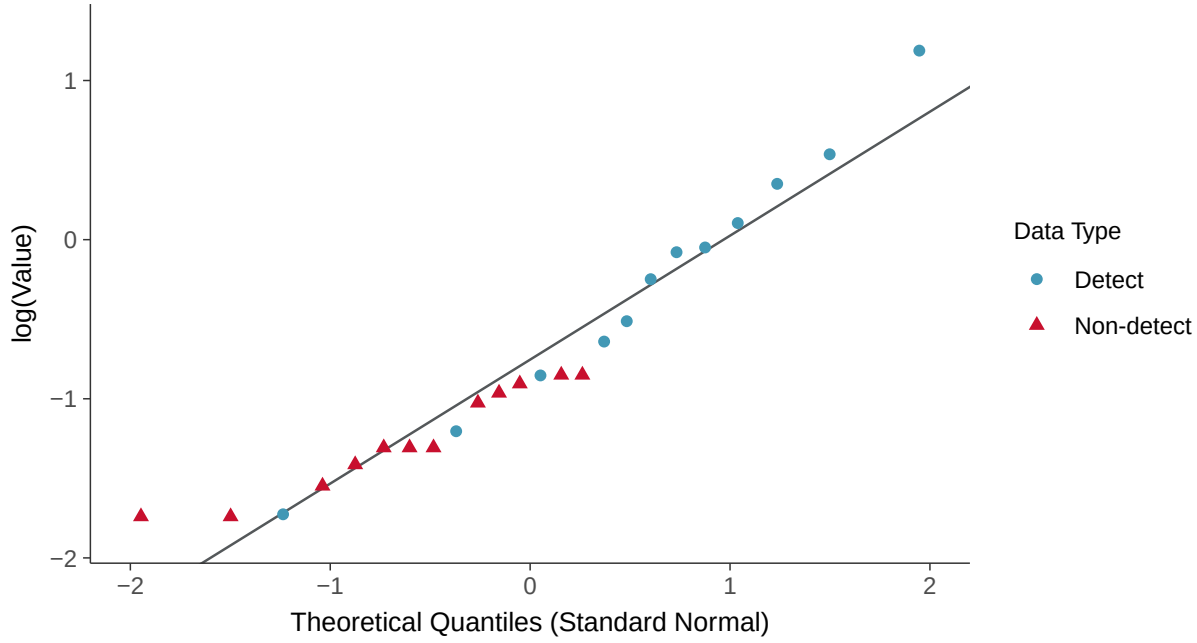
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15023 (pCi/L)



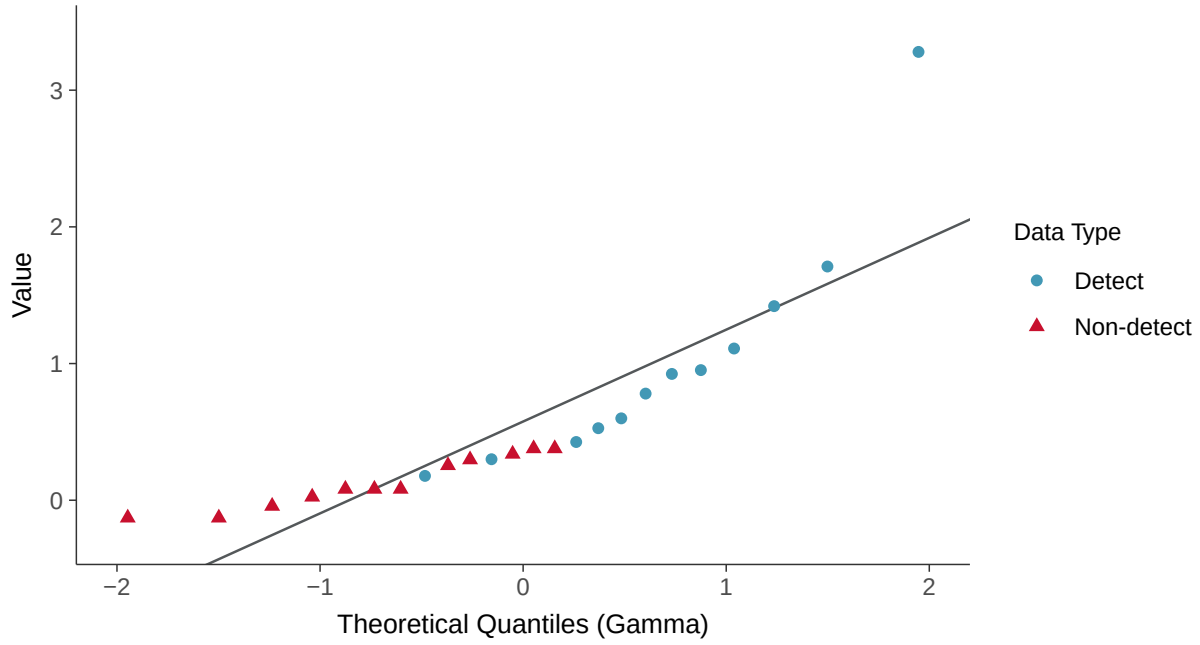

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15023 (pCi/L)



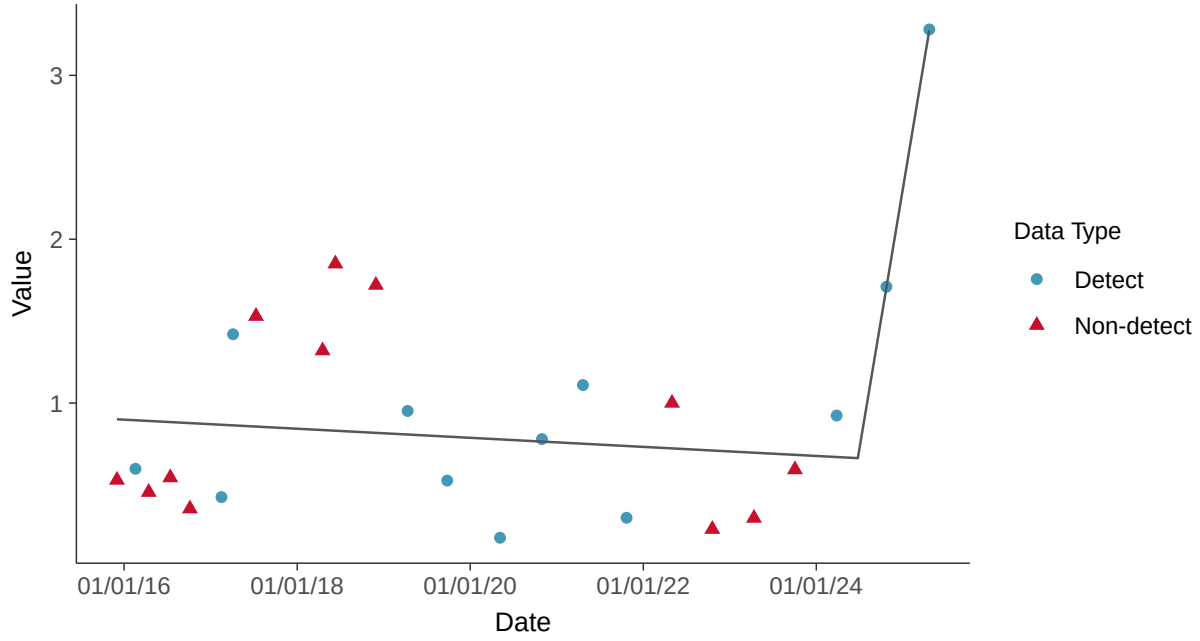
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15023 (pCi/L)



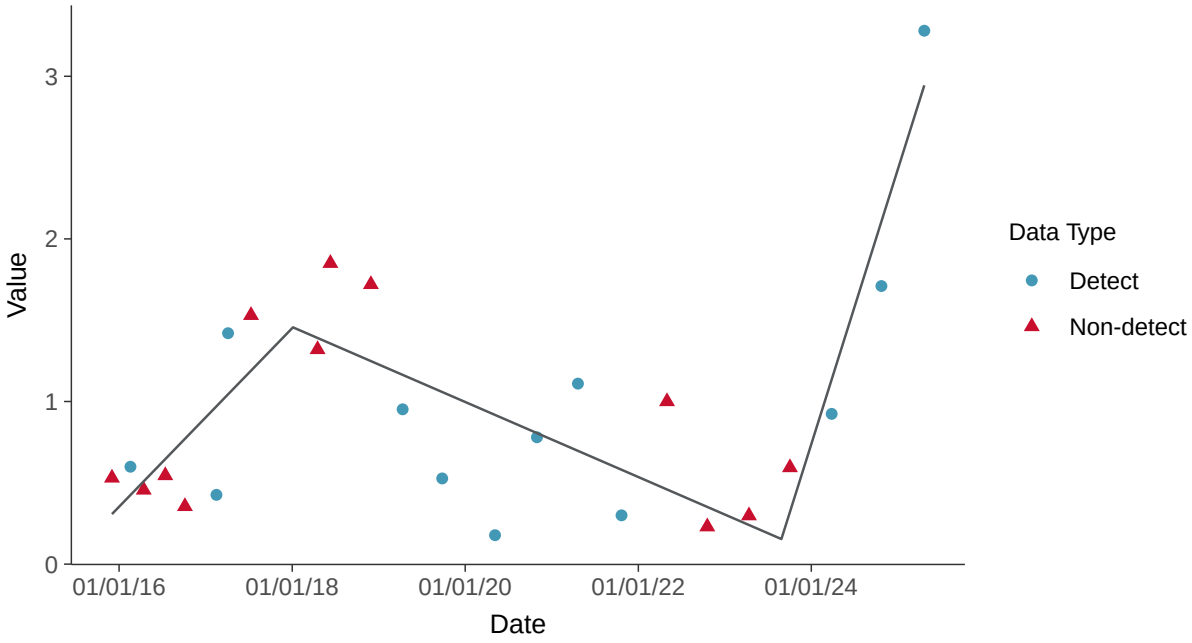

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15023 (pCi/L)



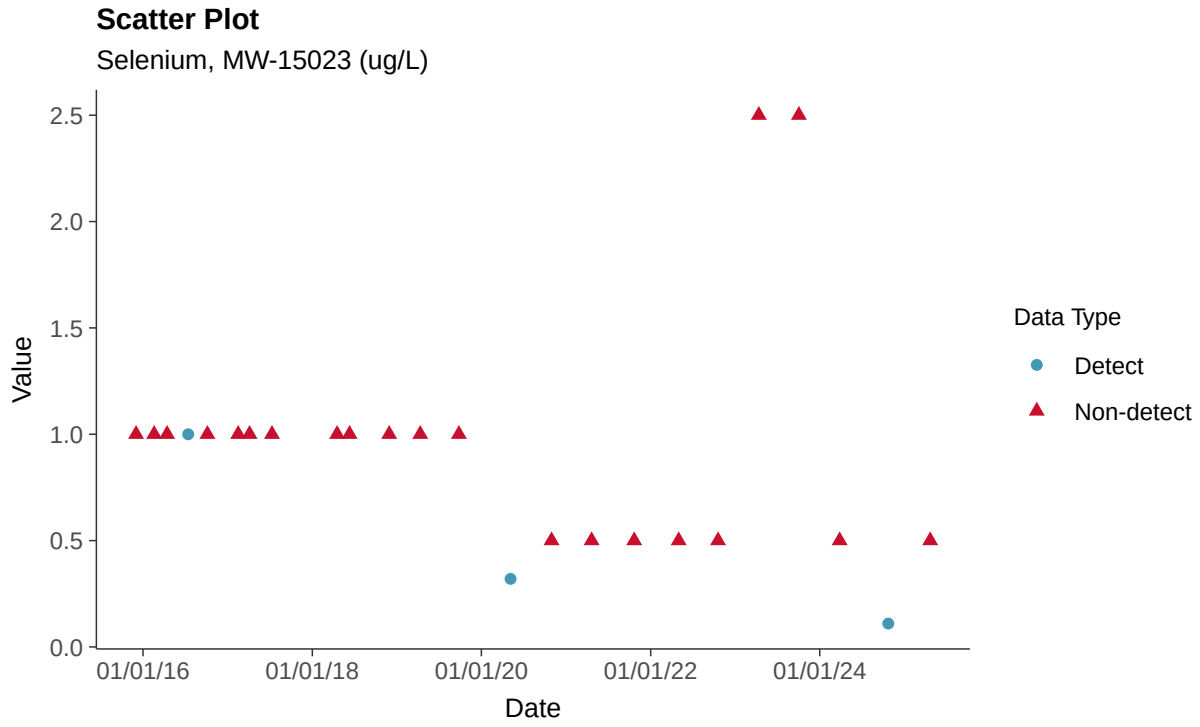
**Trend Regression: Piecewise Linear-Linear-Linear**

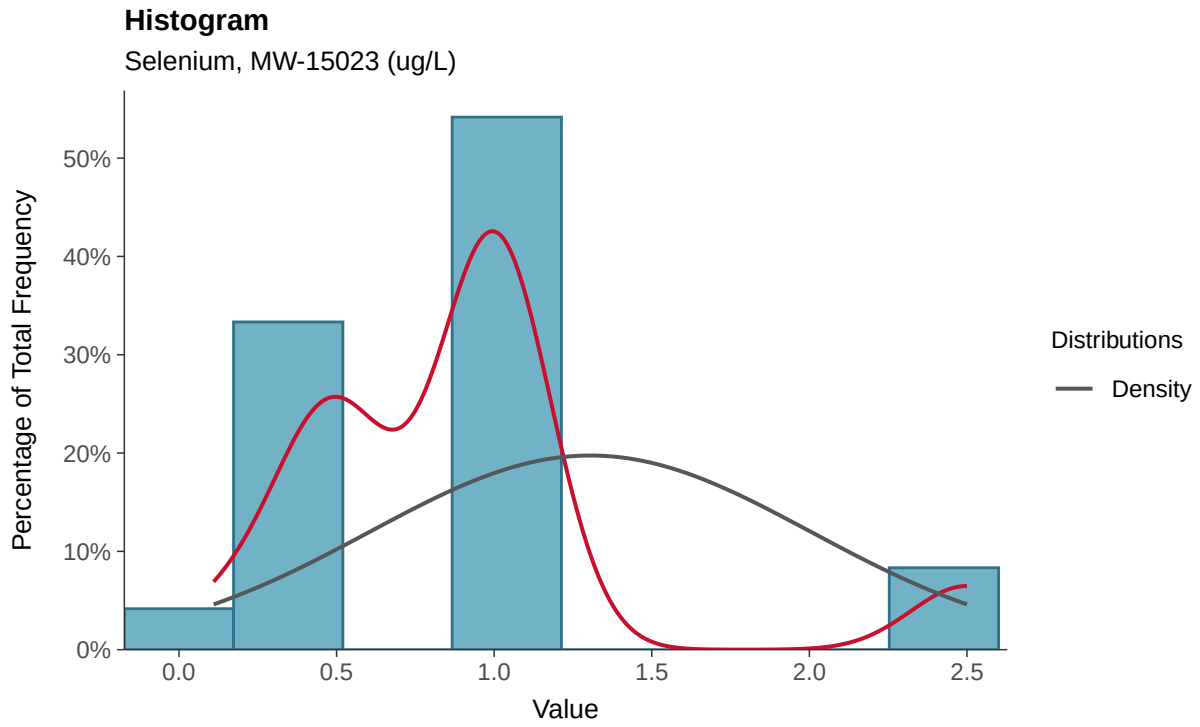
Radium-226+228, MW-15023 (pCi/L)



## Appendix IV: Selenium, MW-15023

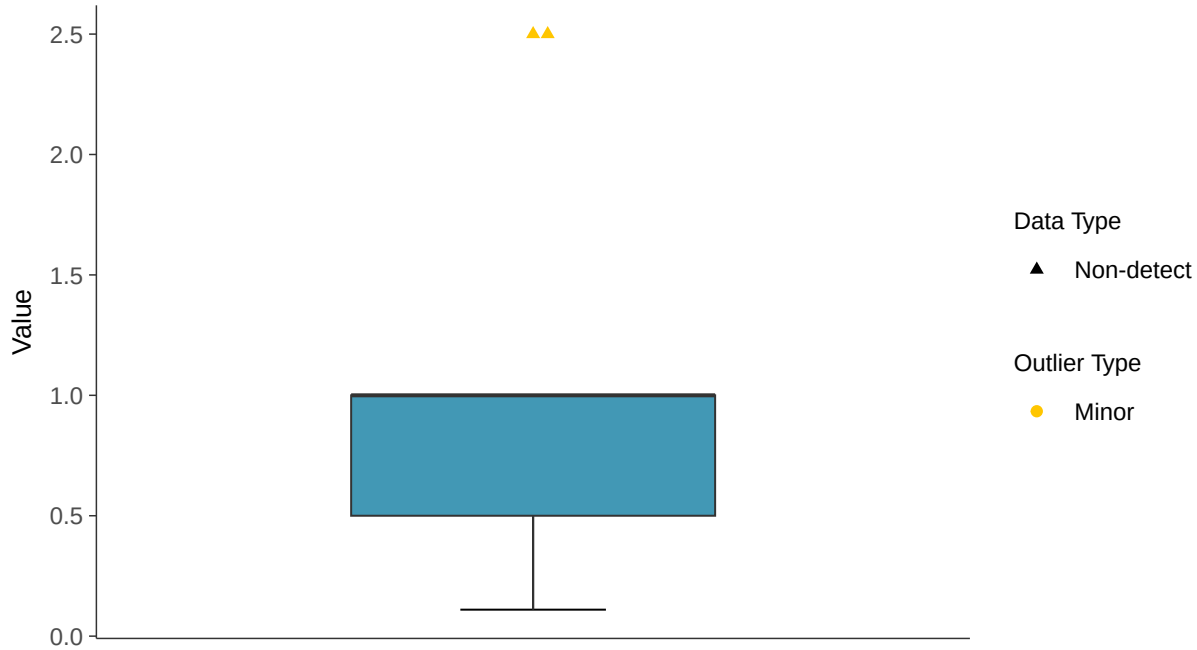
ID: 13_2_127



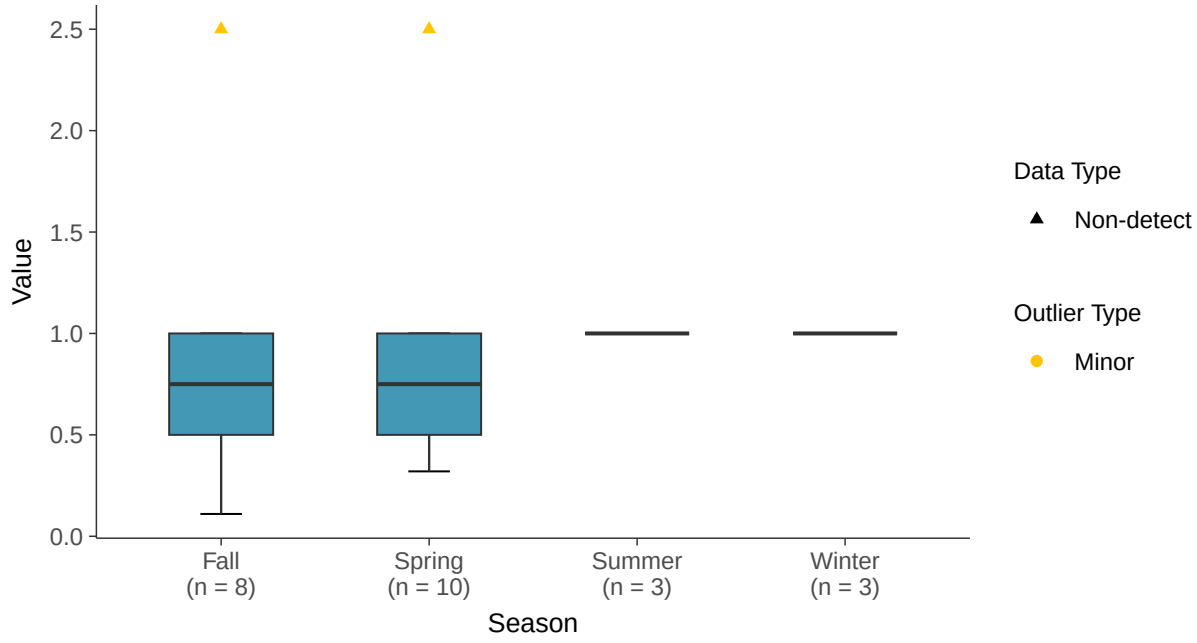
## Boxplot

Selenium, MW-15023 (ug/L)



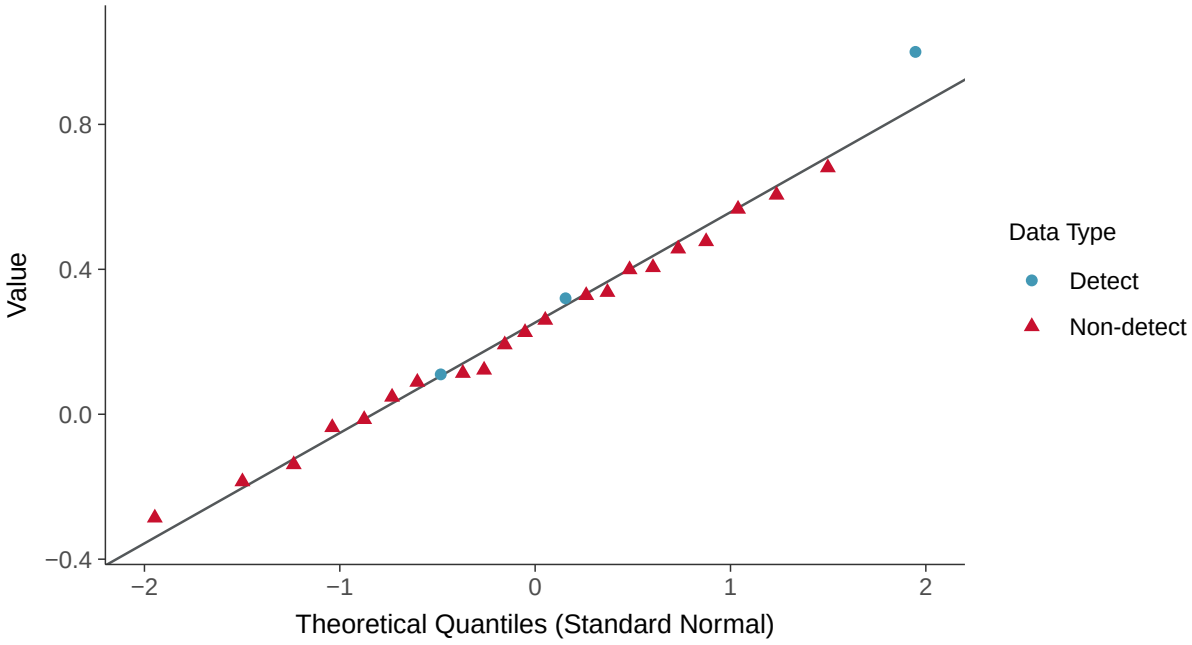

## Boxplot by Season

Selenium, MW-15023 (ug/L)



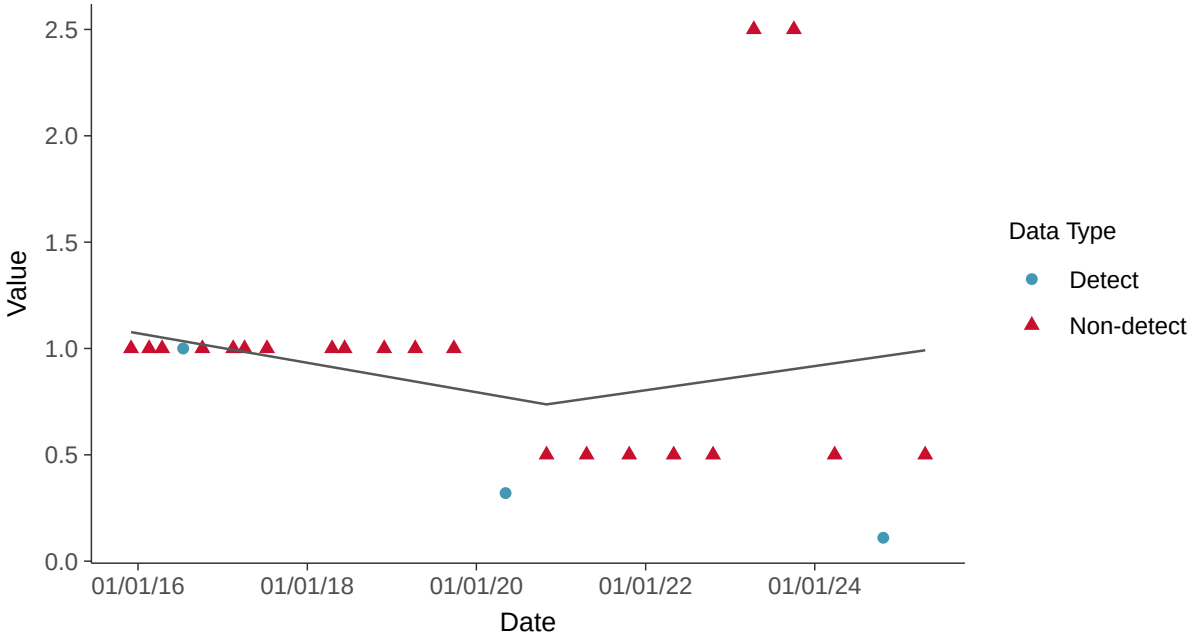
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15023 (ug/L)



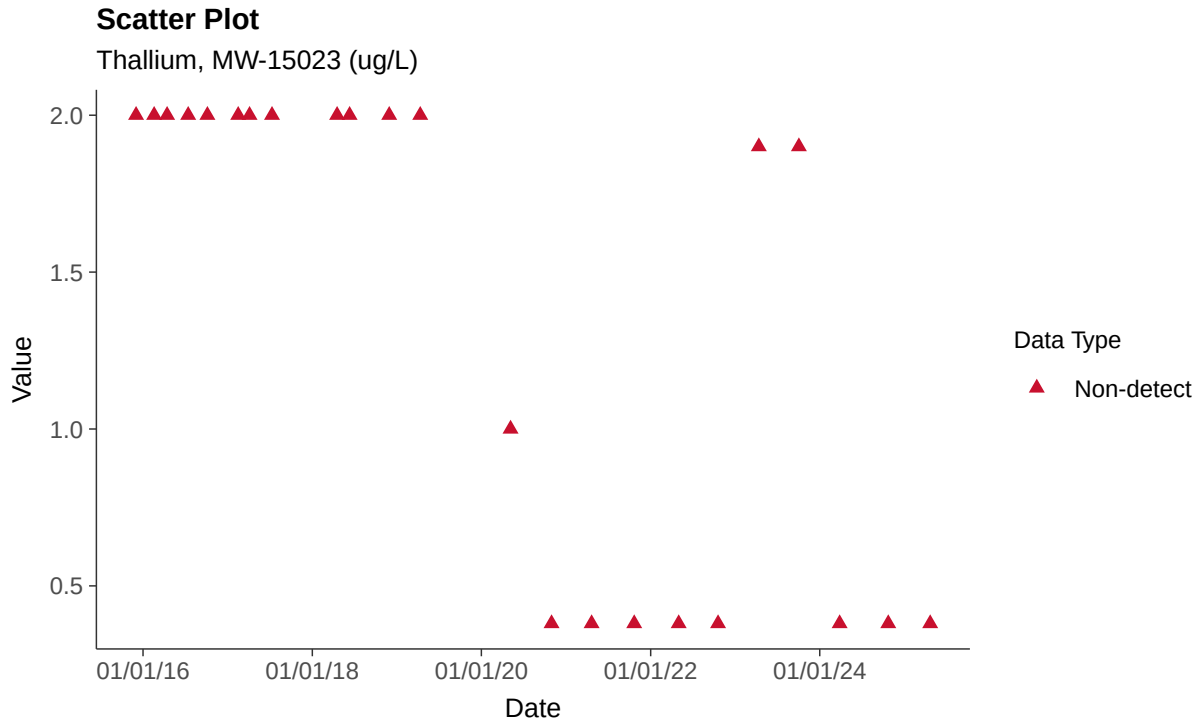

**Trend Regression: Piecewise Linear-Linear**

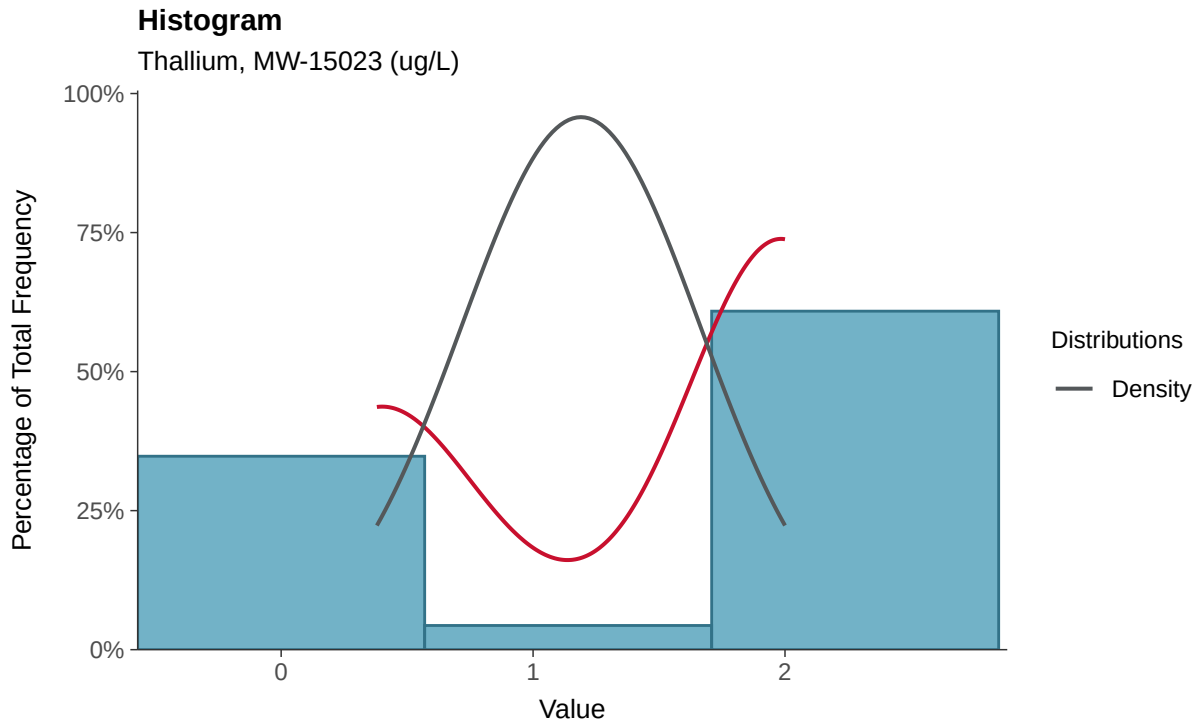
Selenium, MW-15023 (ug/L)



## Appendix IV: Thallium, MW-15023

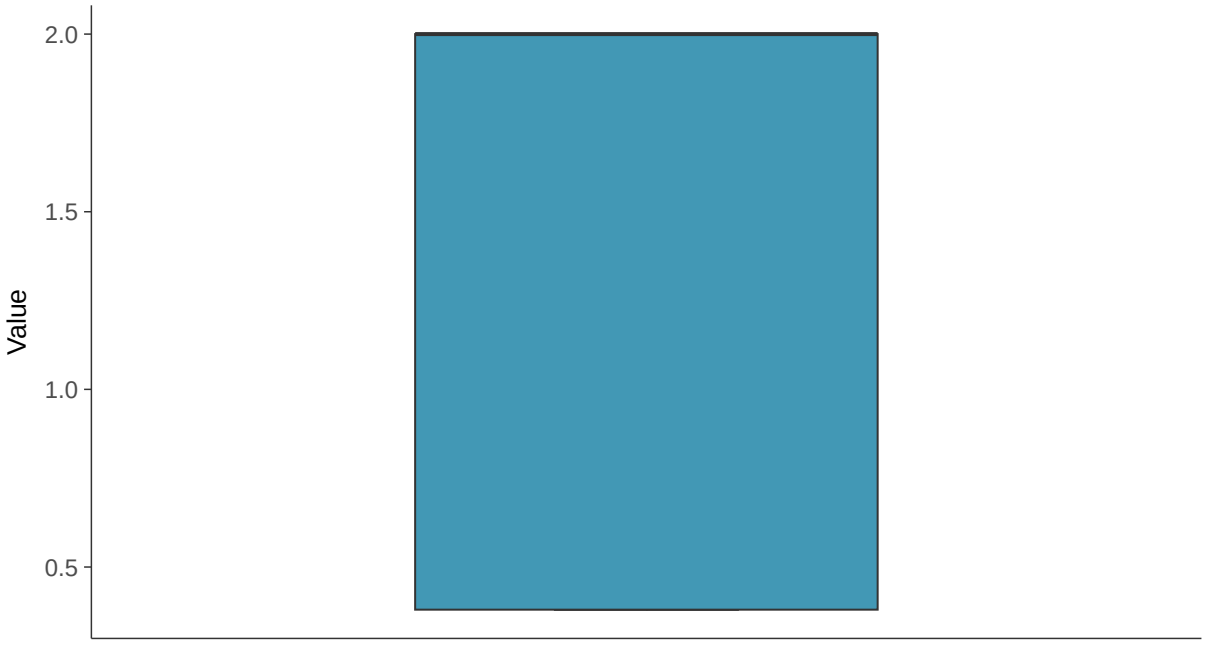
ID: 13_2_131



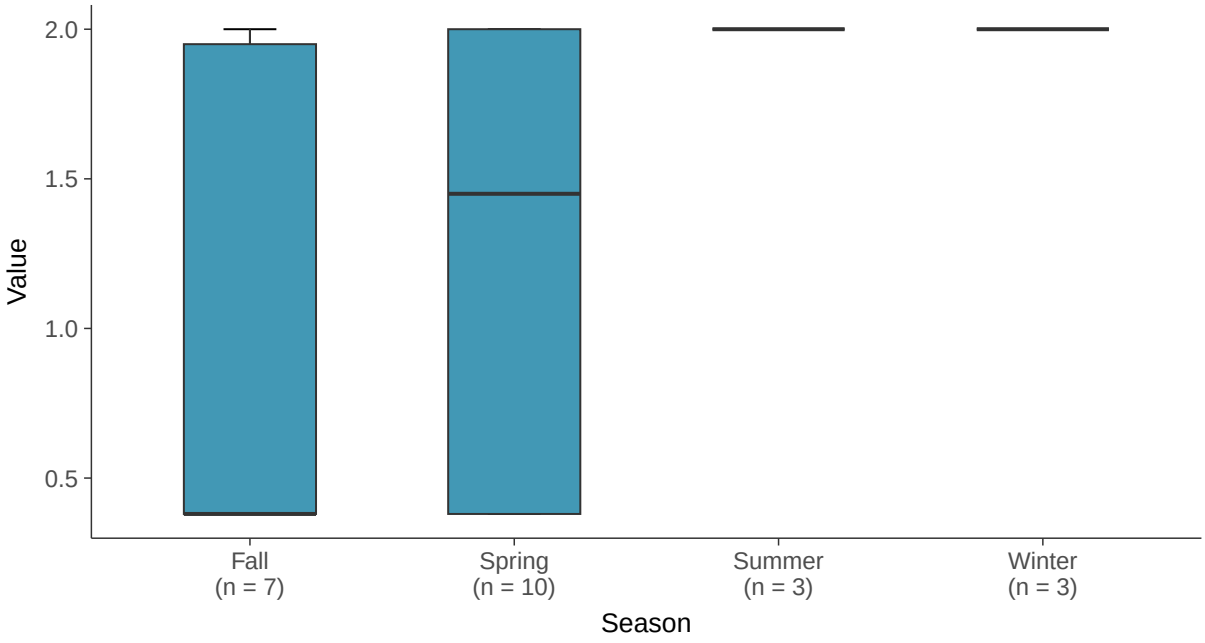
**Boxplot**

Thallium, MW-15023 (ug/L)



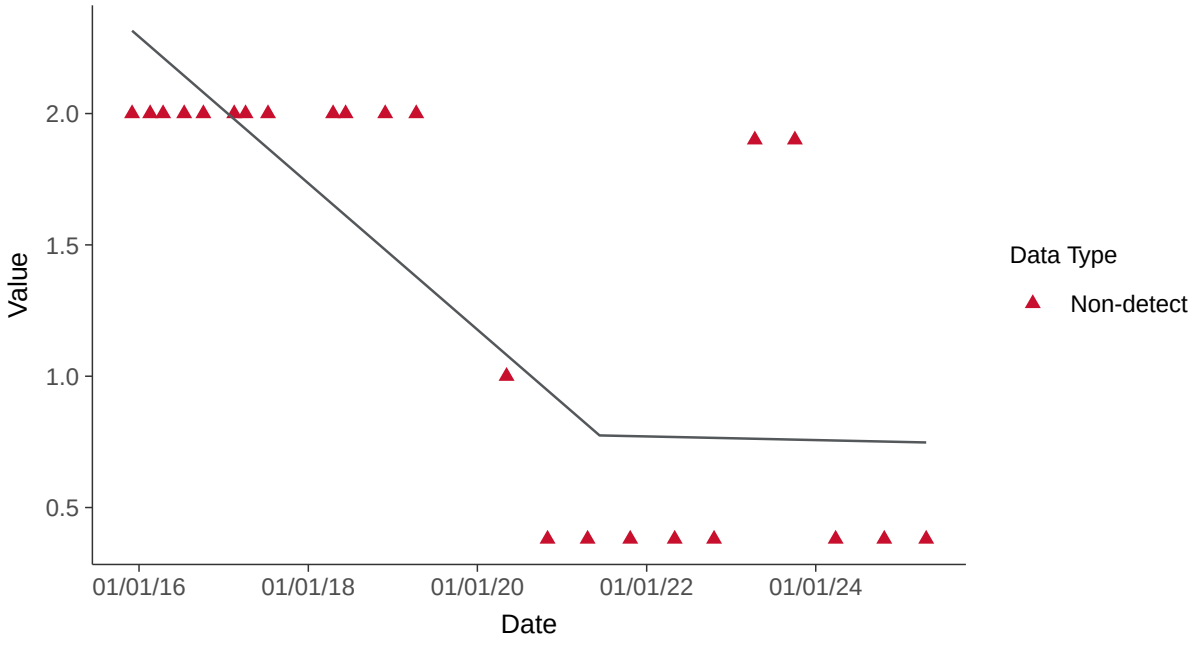

**Boxplot by Season**

Thallium, MW-15023 (ug/L)



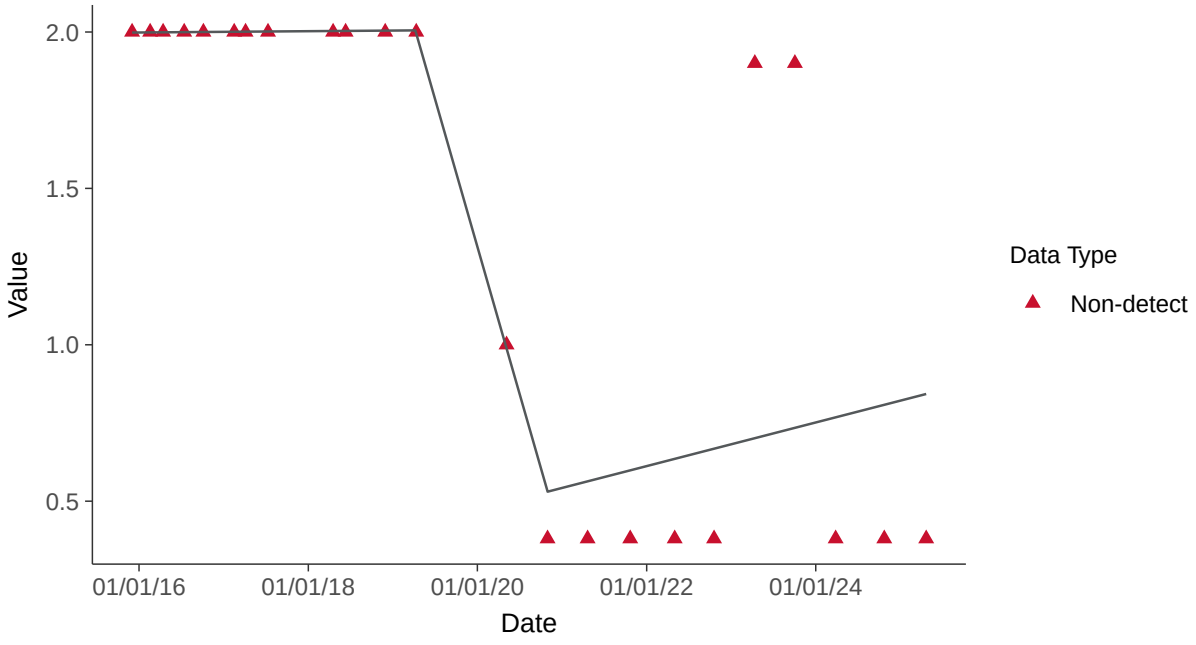
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15023 (ug/L)



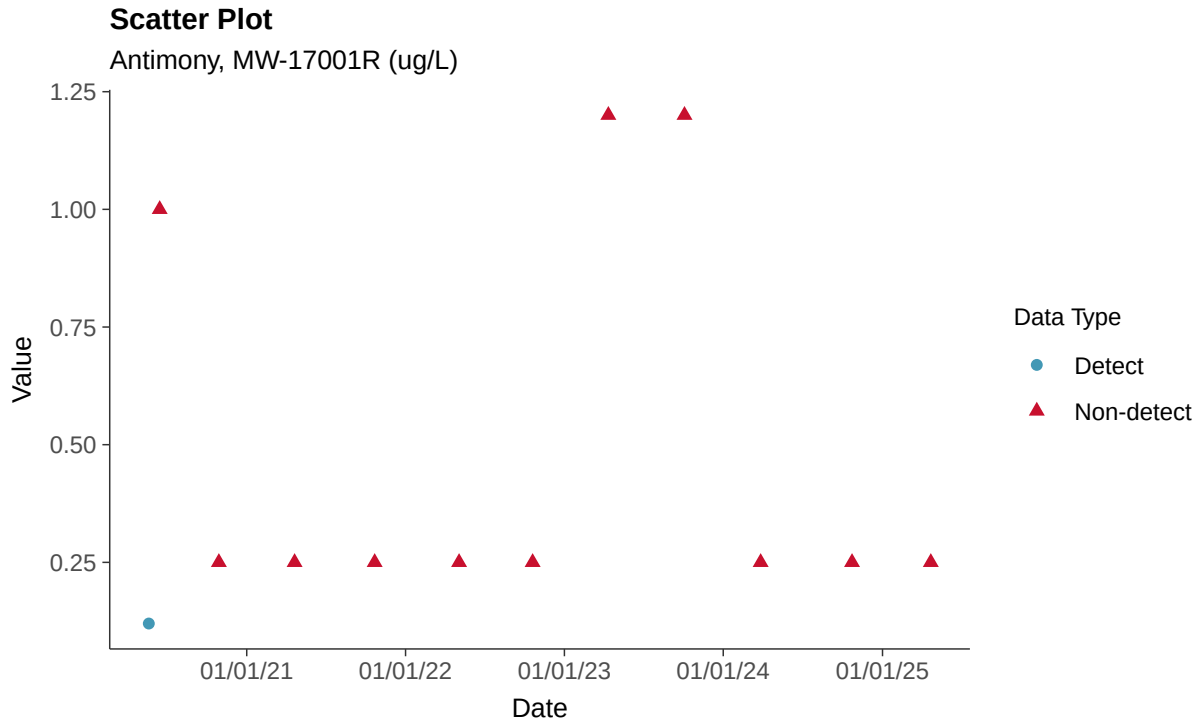

**Trend Regression: Piecewise Linear-Linear-Linear**

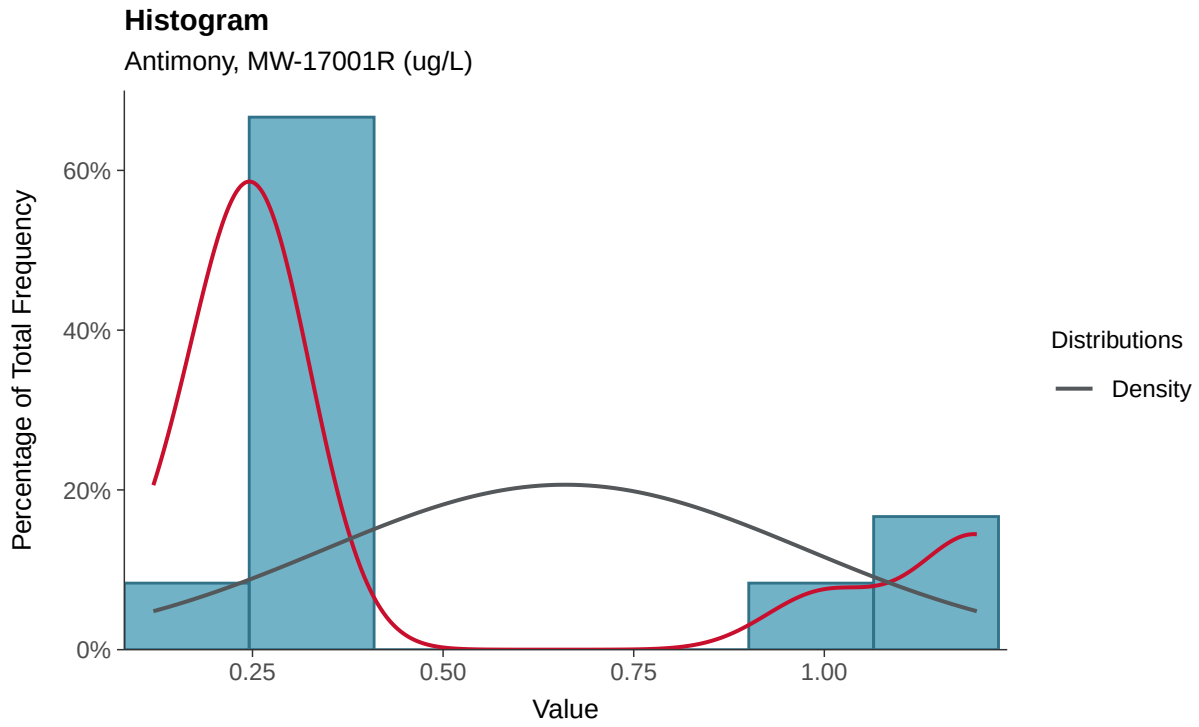
Thallium, MW-15023 (ug/L)



## Appendix IV: Antimony, MW-17001R

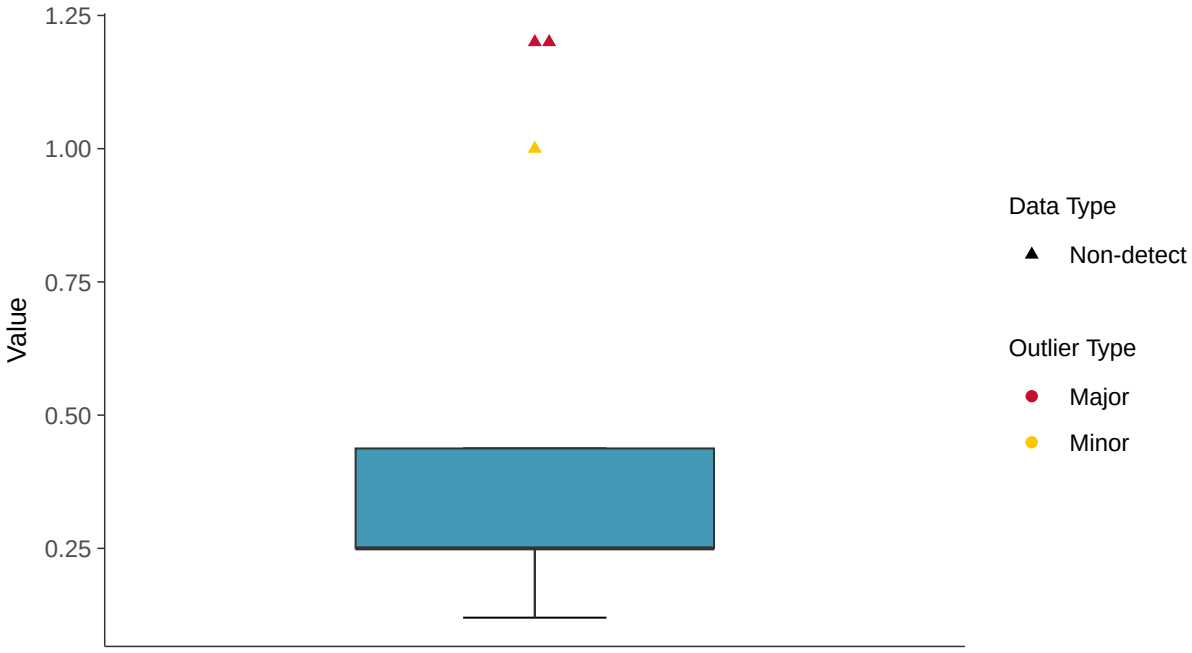
ID: 14_2_101



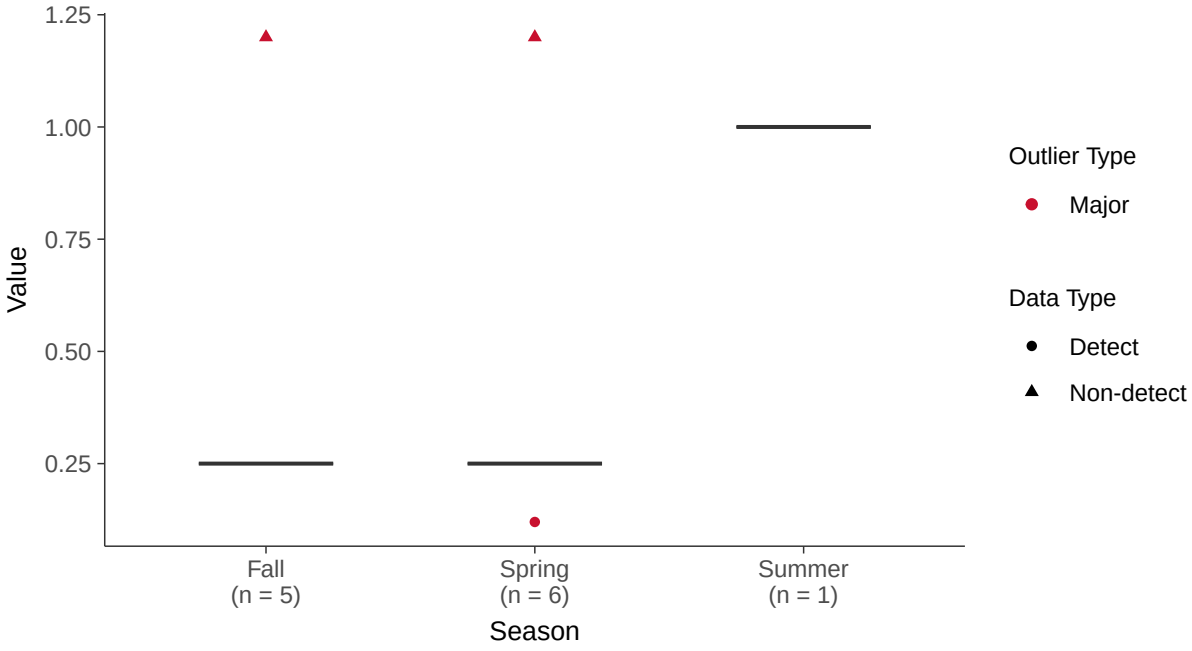
## Boxplot

Antimony, MW-17001R (ug/L)



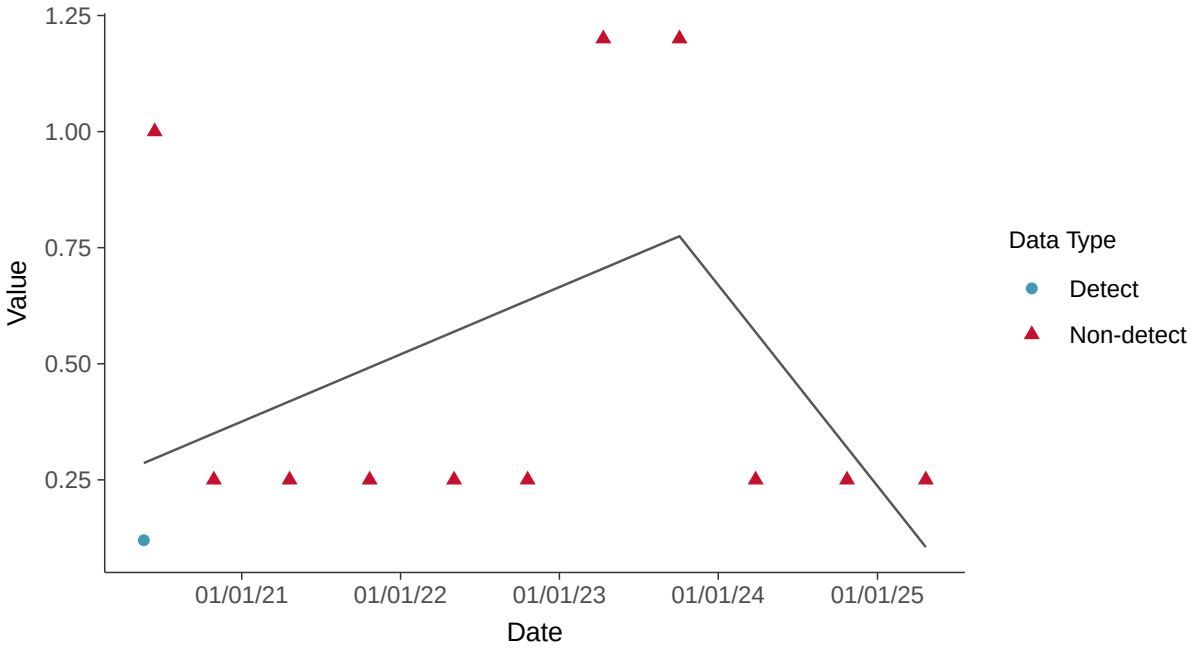

## Boxplot by Season

Antimony, MW-17001R (ug/L)



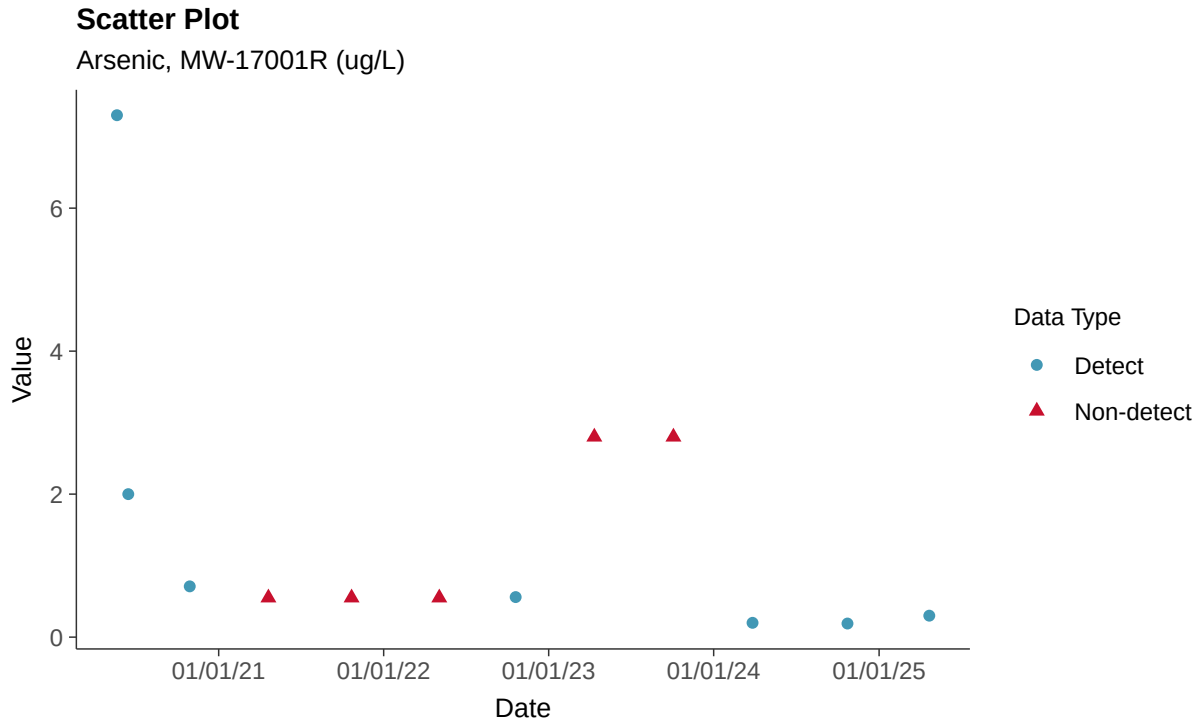
**Trend Regression: Piecewise Linear-Linear**

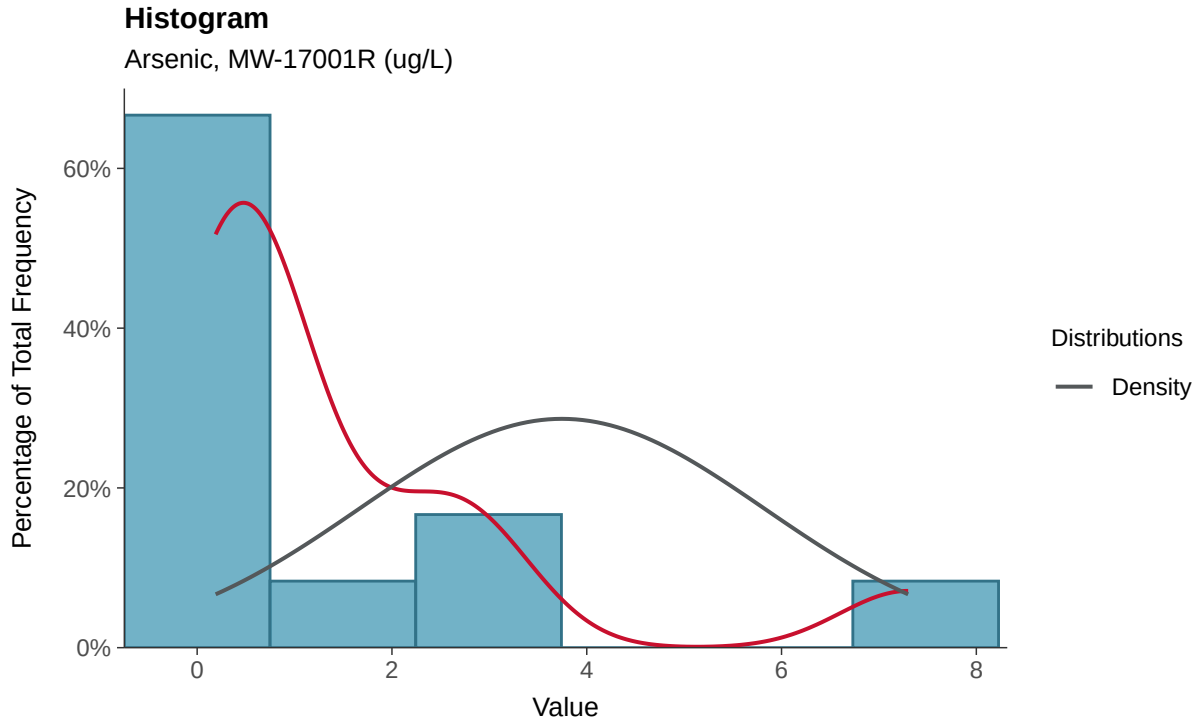
Antimony, MW-17001R (ug/L)



## Appendix IV: Arsenic, MW-17001R

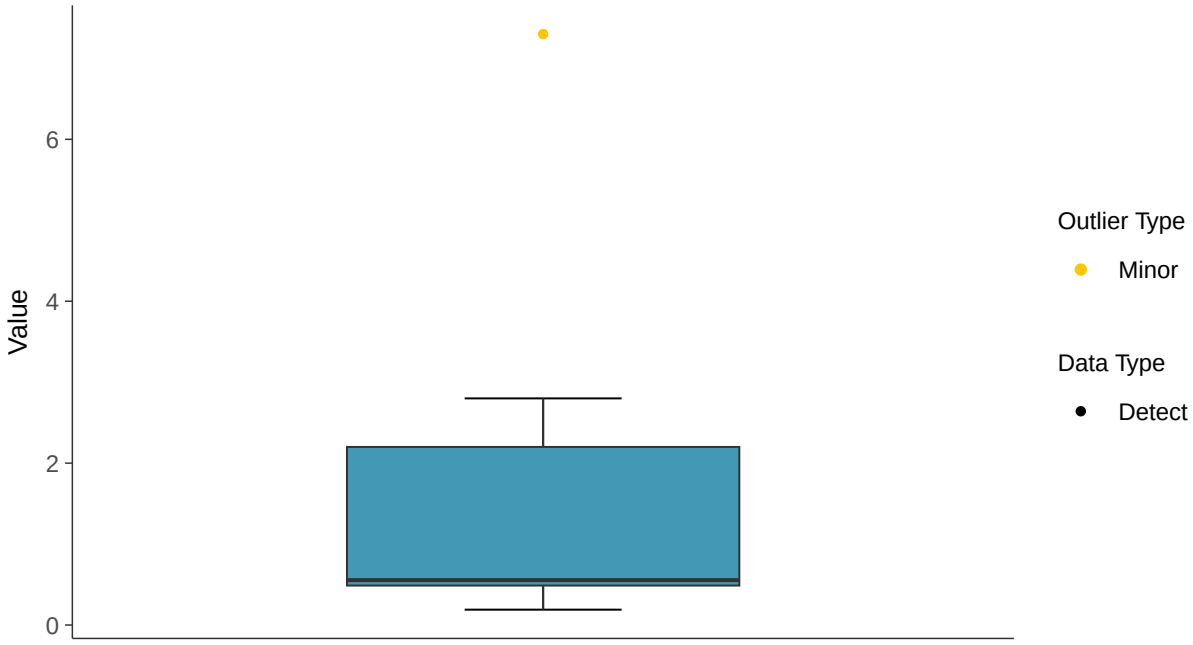
ID: 14_2_102



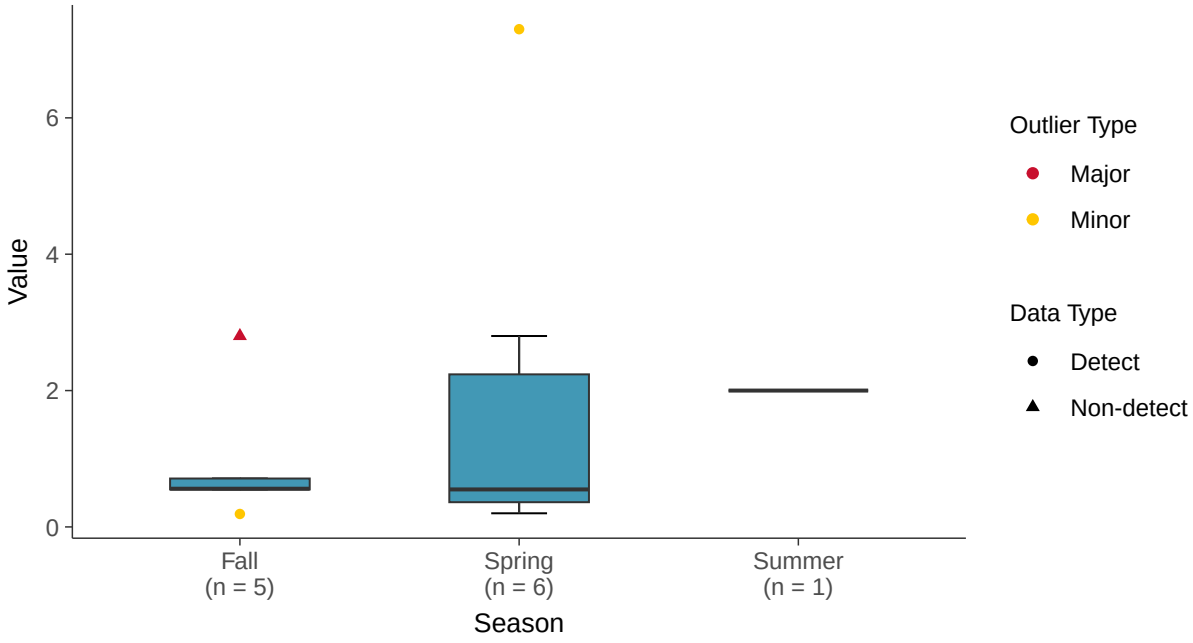
## Boxplot

Arsenic, MW-17001R (ug/L)



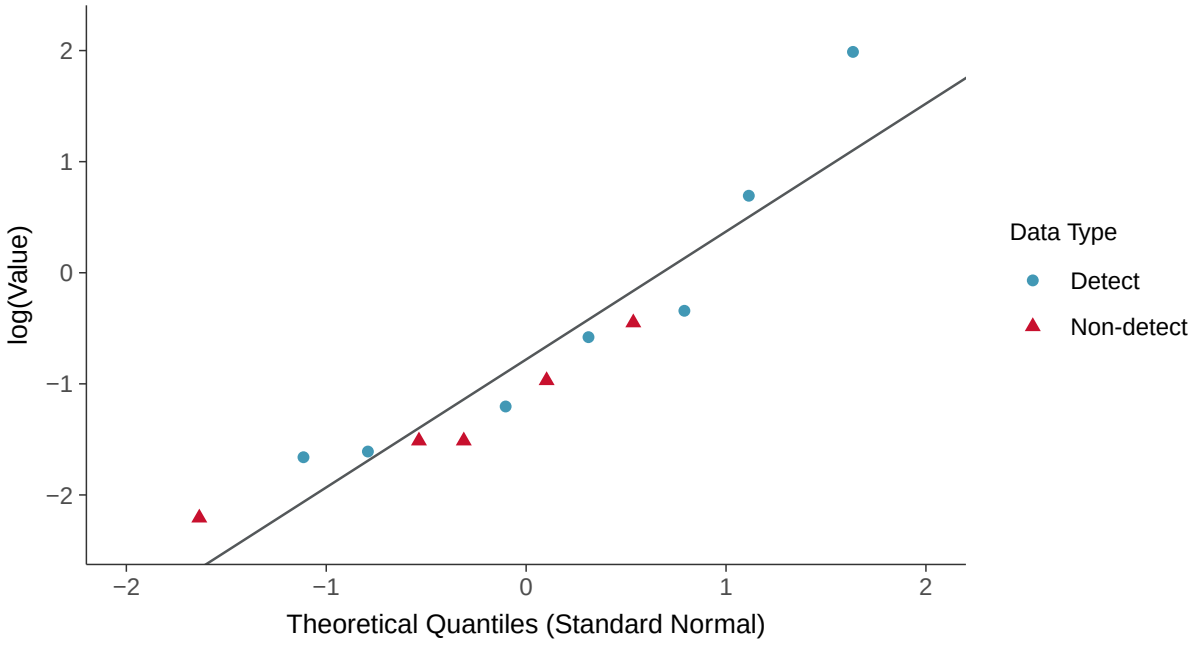

## Boxplot by Season

Arsenic, MW-17001R (ug/L)



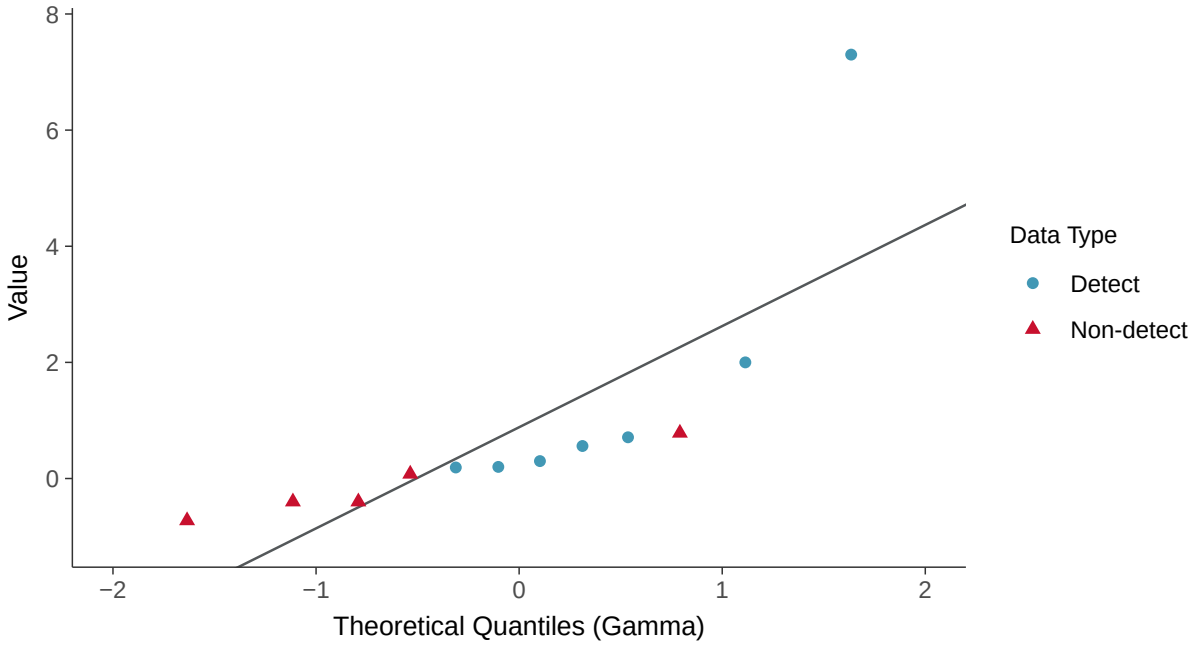
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17001R (ug/L)



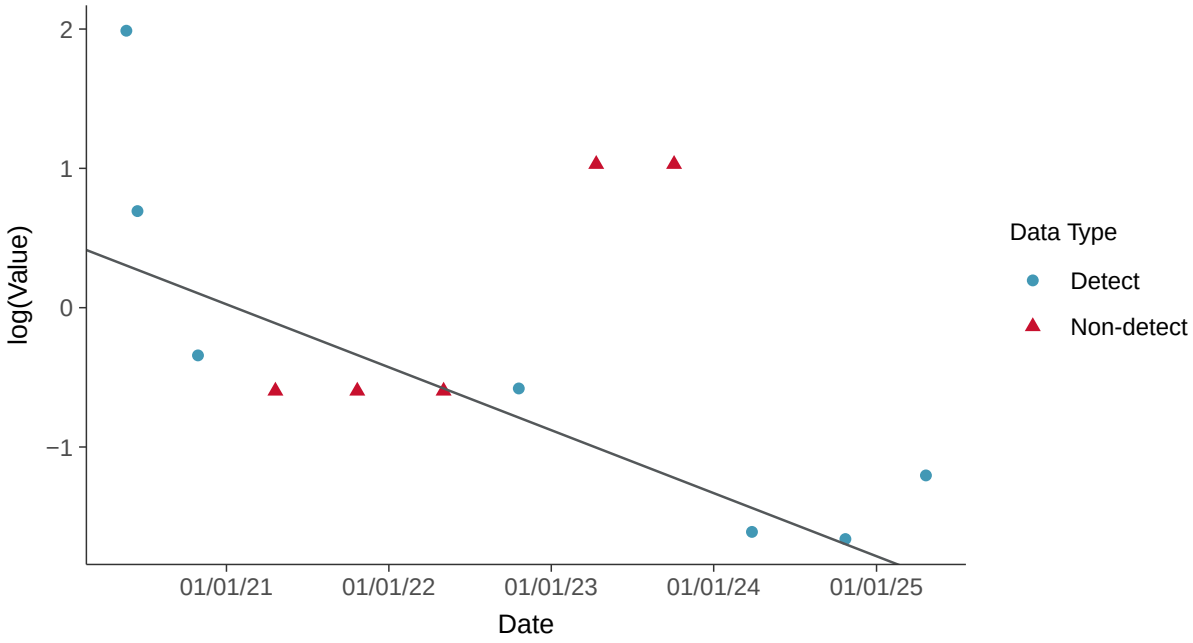

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17001R (ug/L)



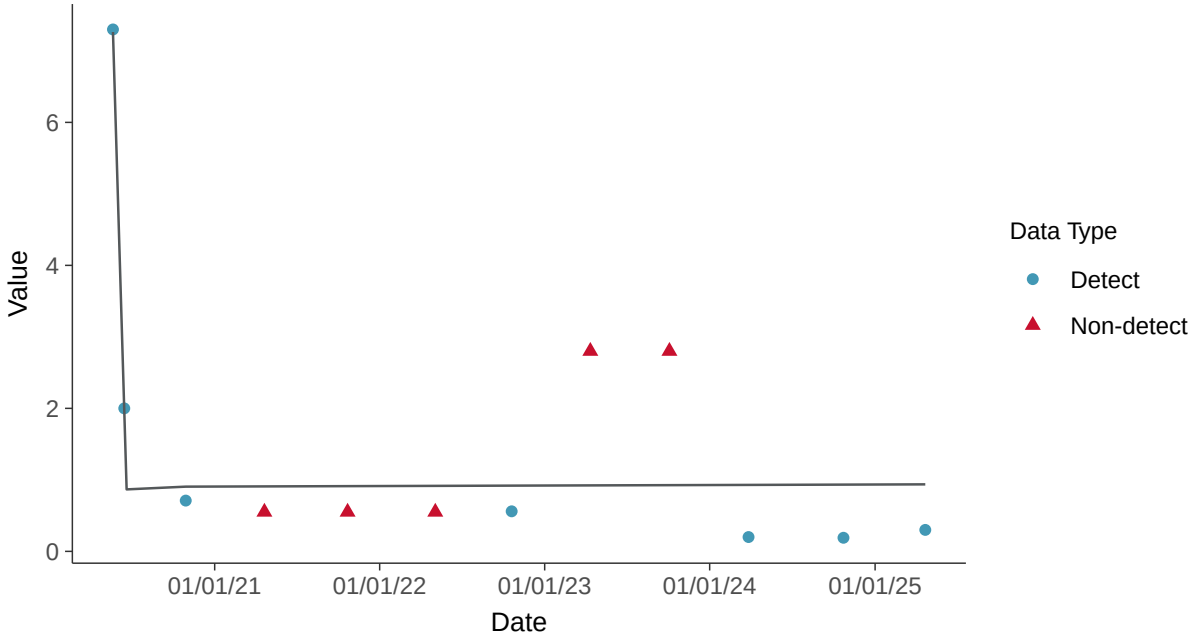
**Trend Regression: Lognormal MLE**

Arsenic, MW-17001R (ug/L)



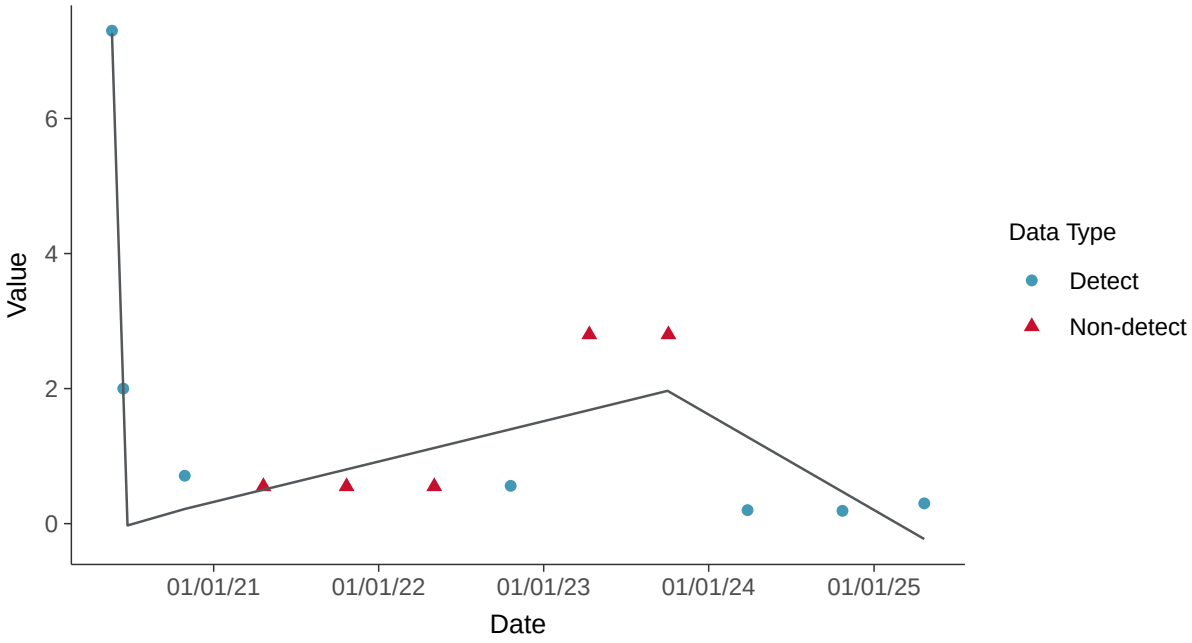

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17001R (ug/L)



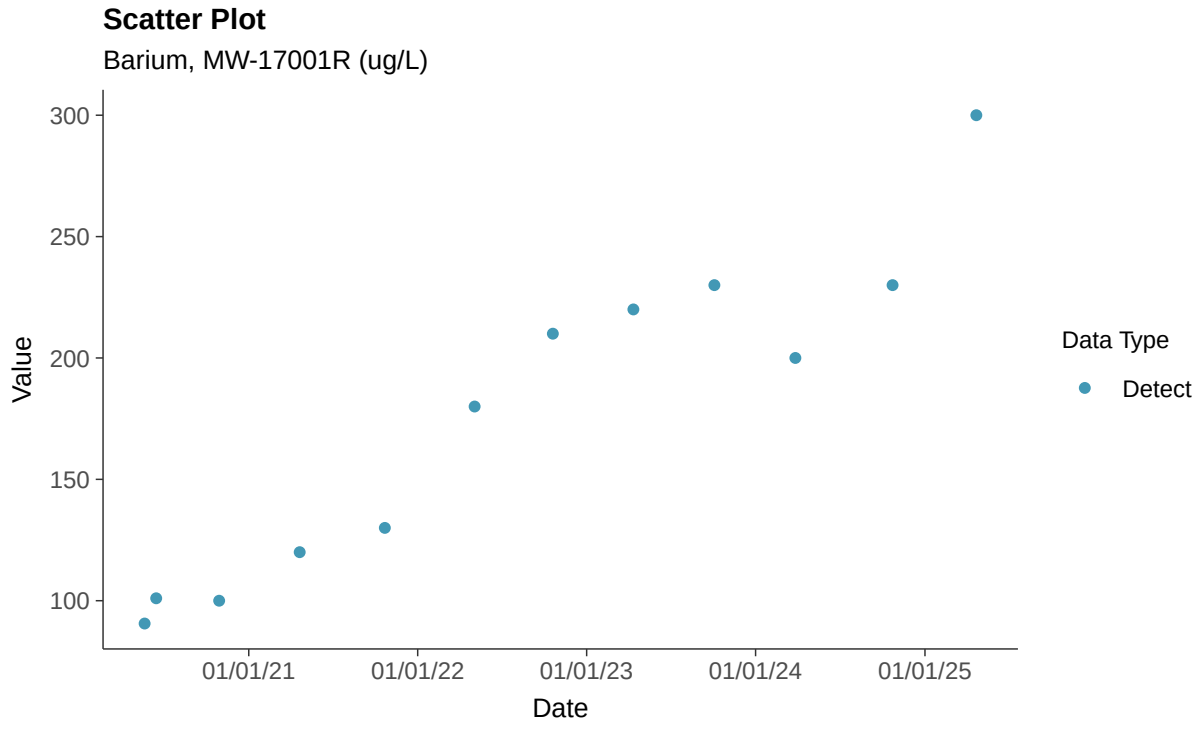
**Trend Regression: Piecewise Linear-Linear-Linear**

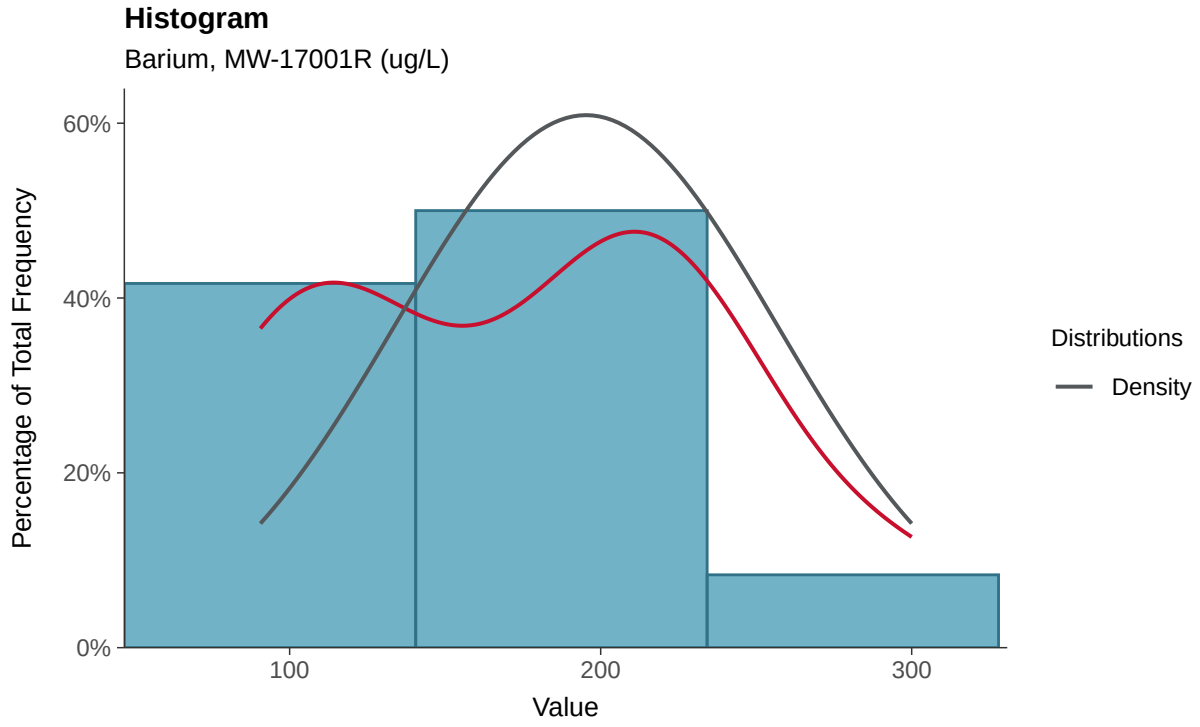
Arsenic, MW-17001R (ug/L)



## Appendix IV: Barium, MW-17001R

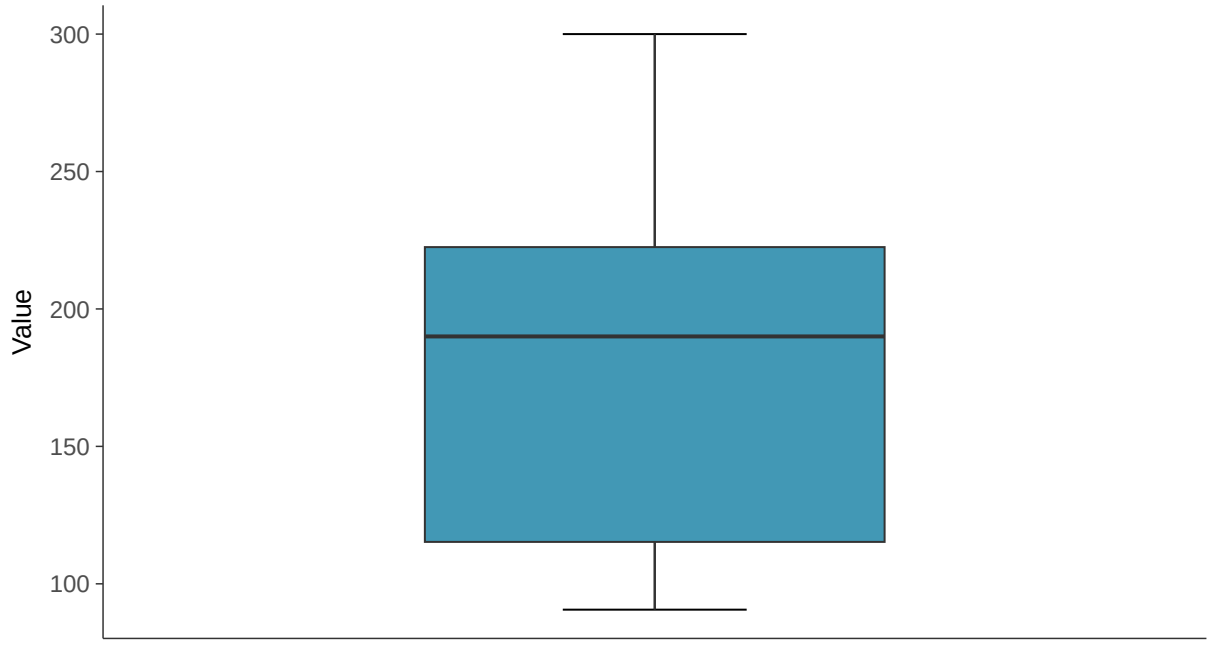
ID: 14_2_103



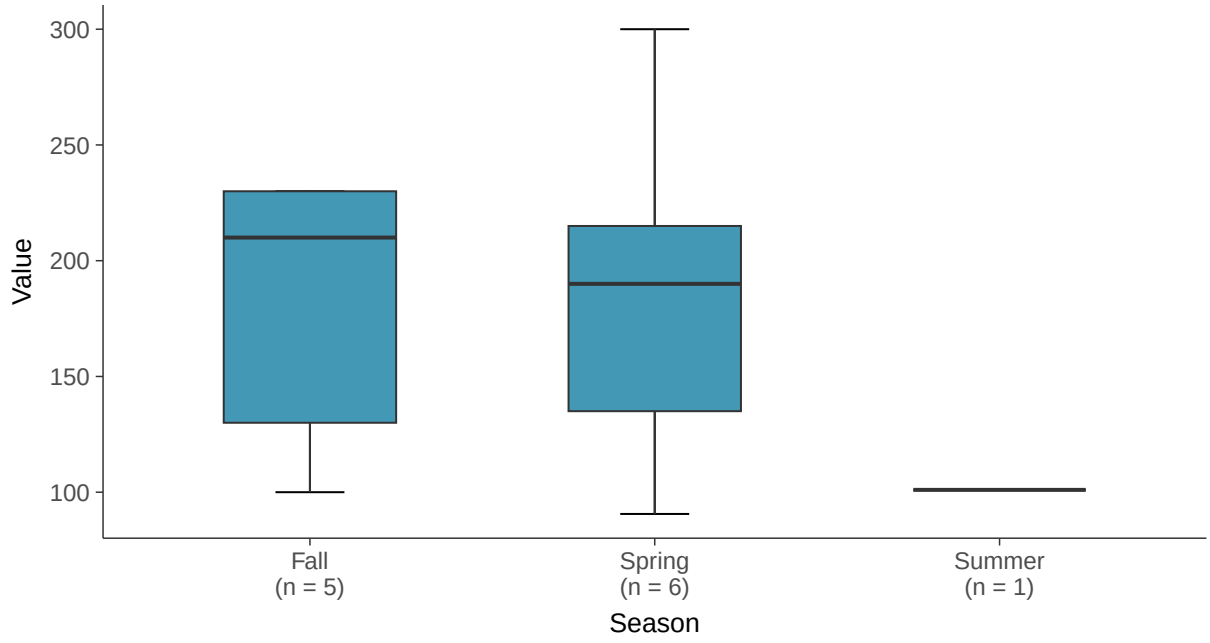
**Boxplot**

Barium, MW-17001R (ug/L)



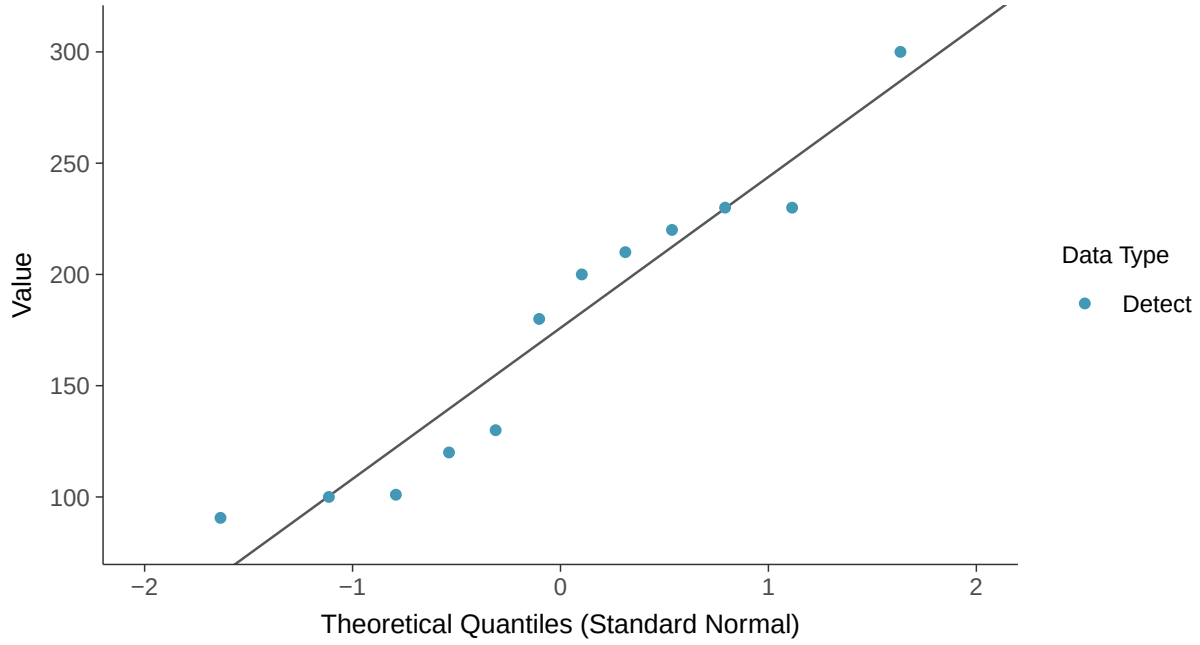

**Boxplot by Season**

Barium, MW-17001R (ug/L)



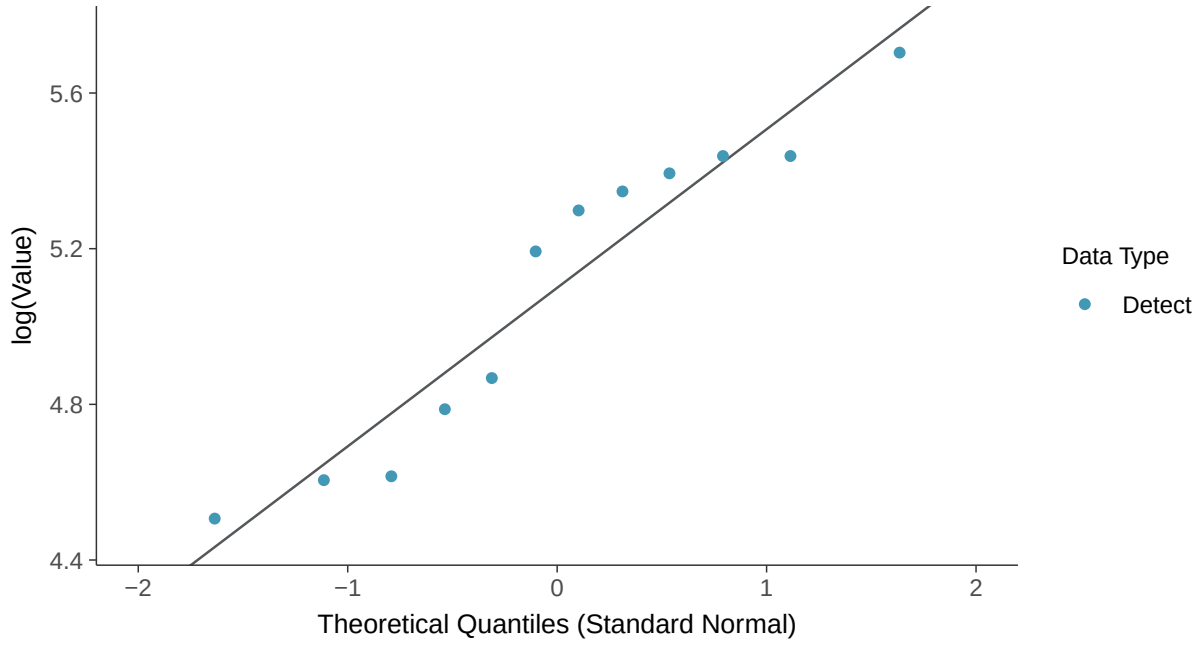
**Normal Q-Q plot**

Barium, MW-17001R (ug/L)



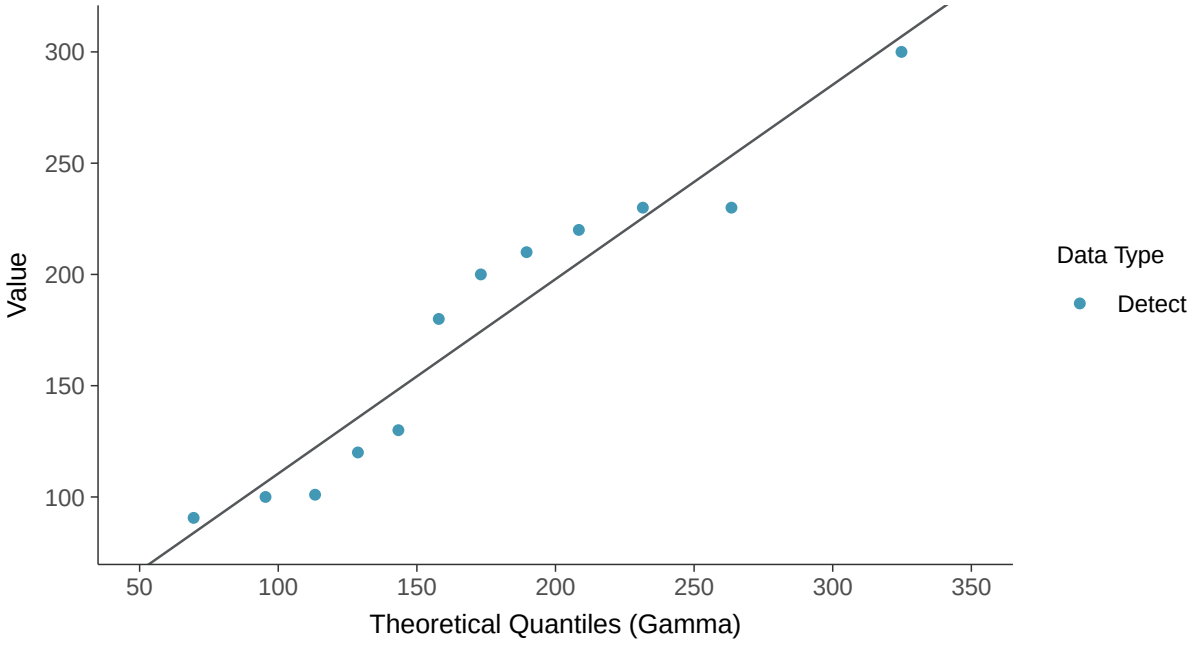

**Lognormal Q-Q plot**

Barium, MW-17001R (ug/L)



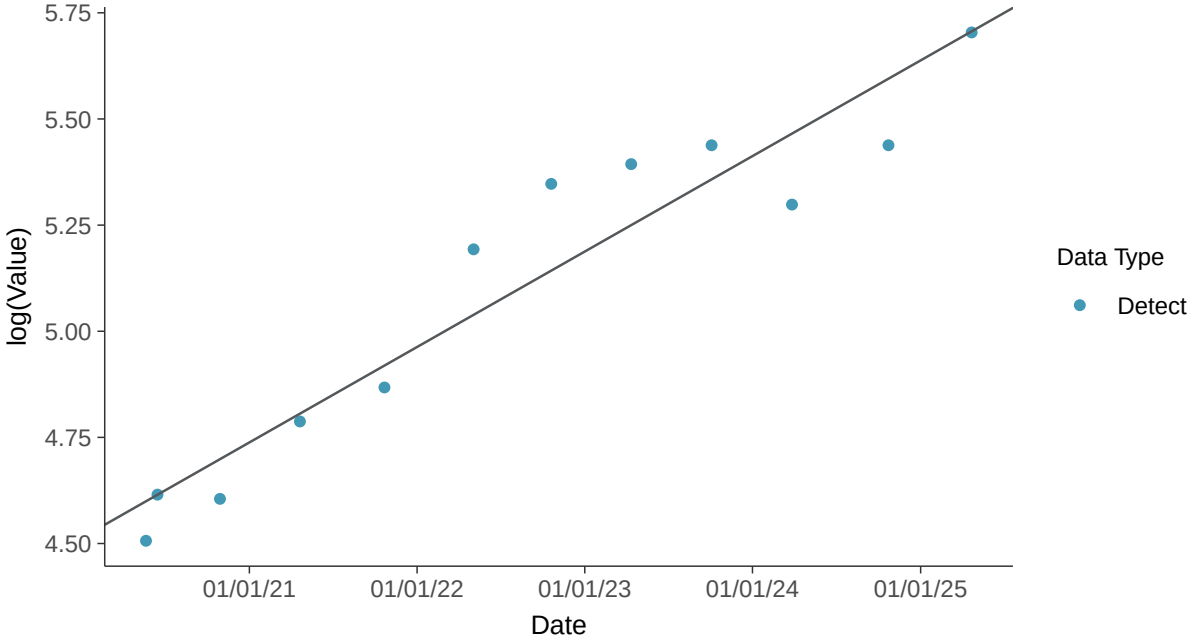
**Gamma Q-Q plot**

Barium, MW-17001R (ug/L)



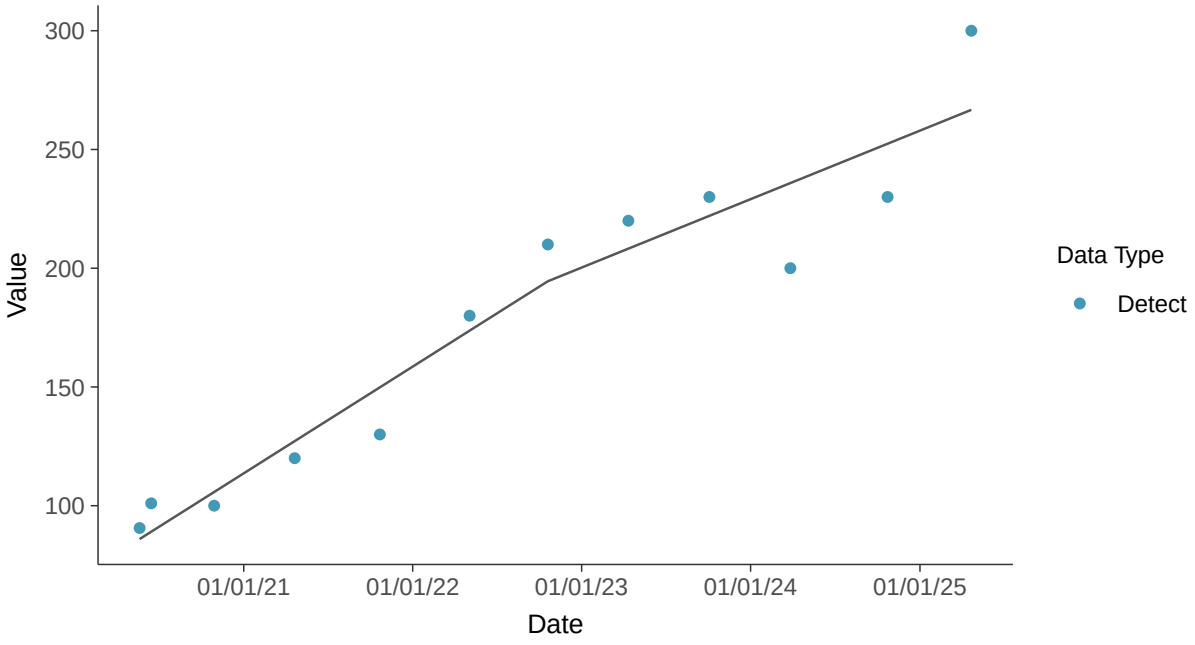

**Trend Regression: Lognormal MLE**

Barium, MW-17001R (ug/L)



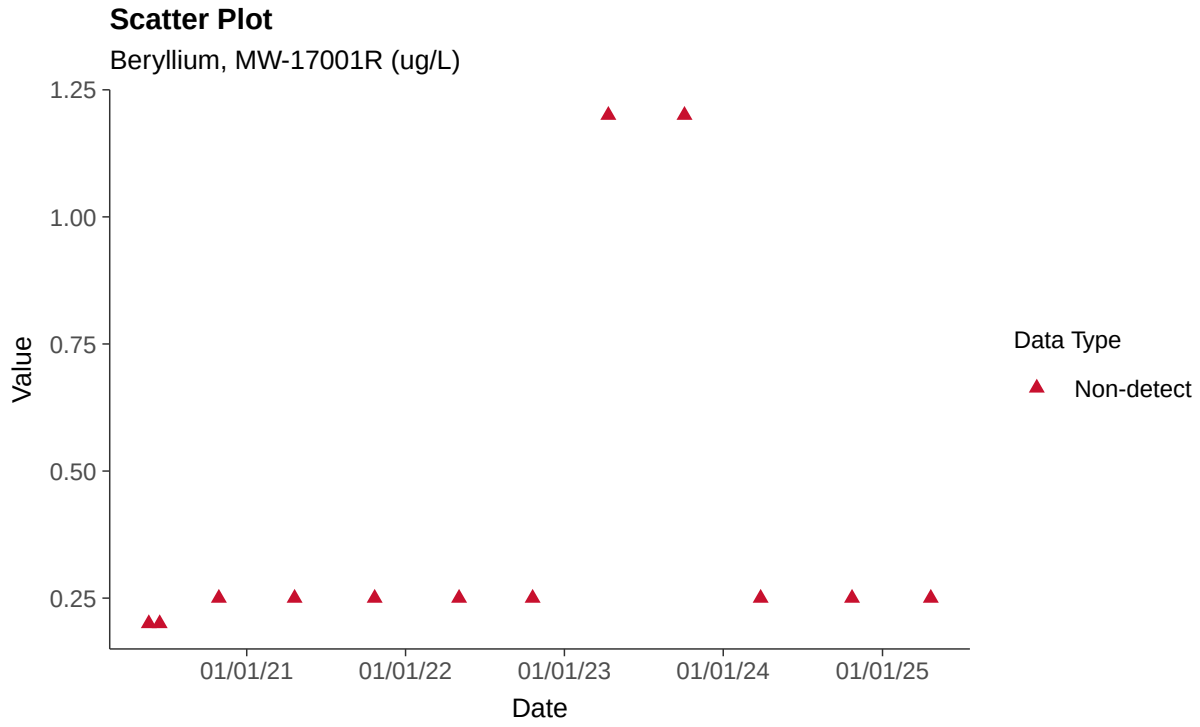
**Trend Regression: Piecewise Linear-Linear**

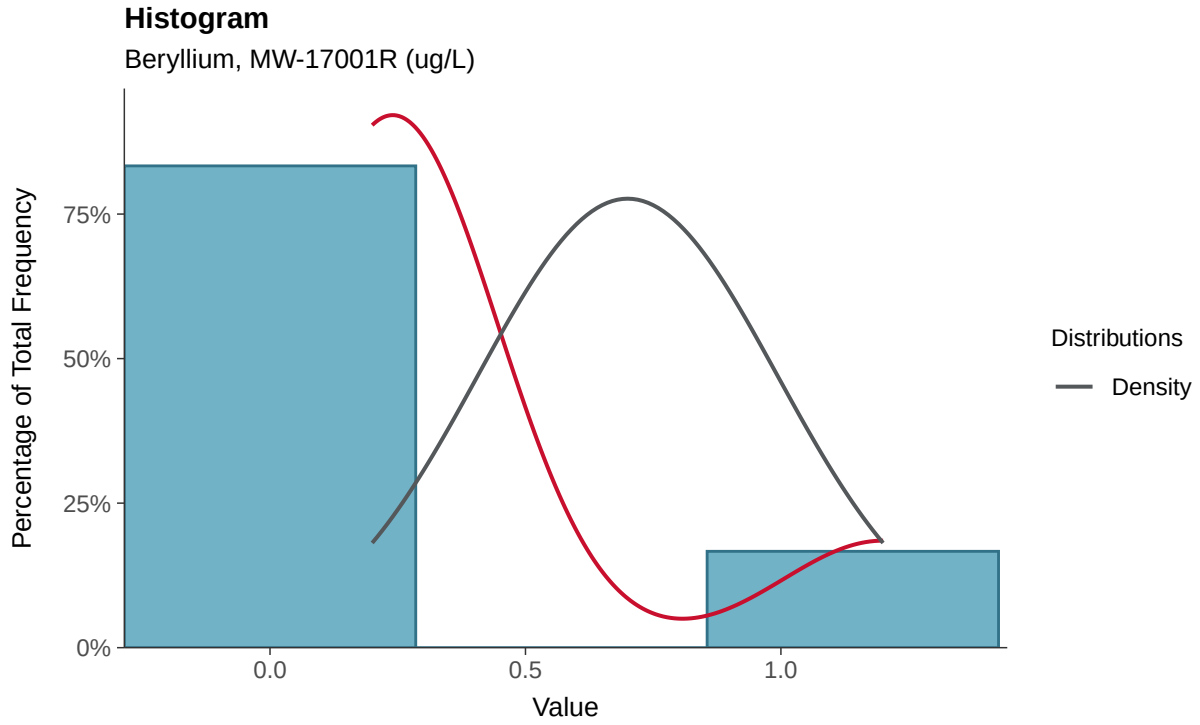
Barium, MW-17001R (ug/L)



## Appendix IV: Beryllium, MW-17001R

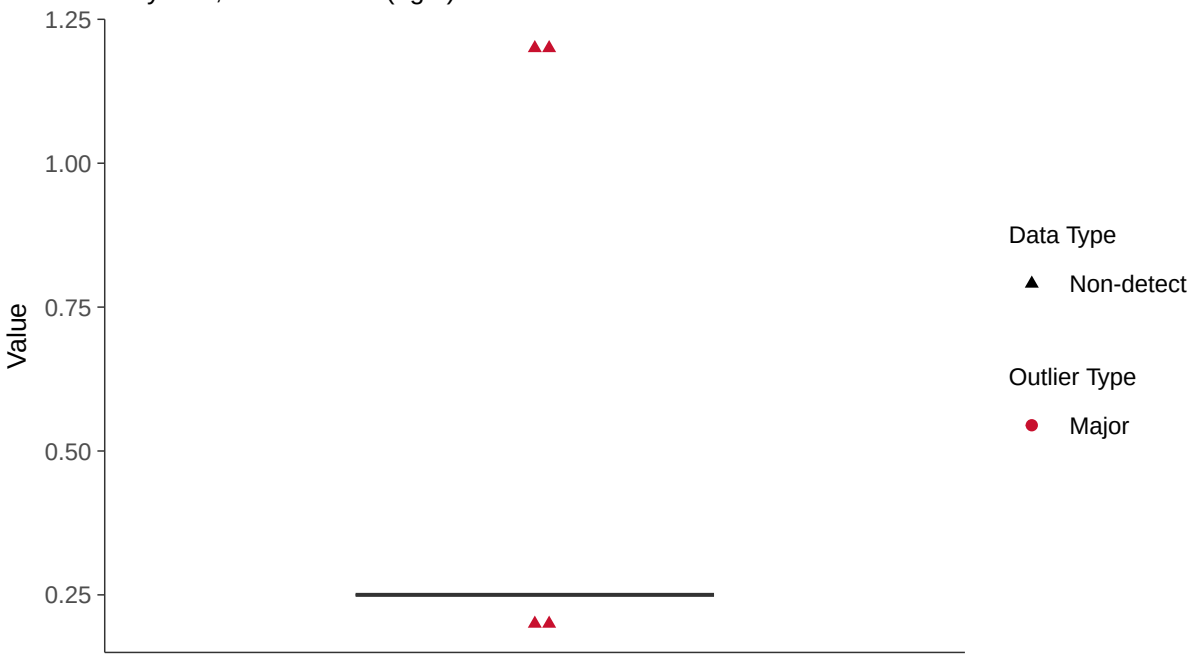
ID: 14_2_104



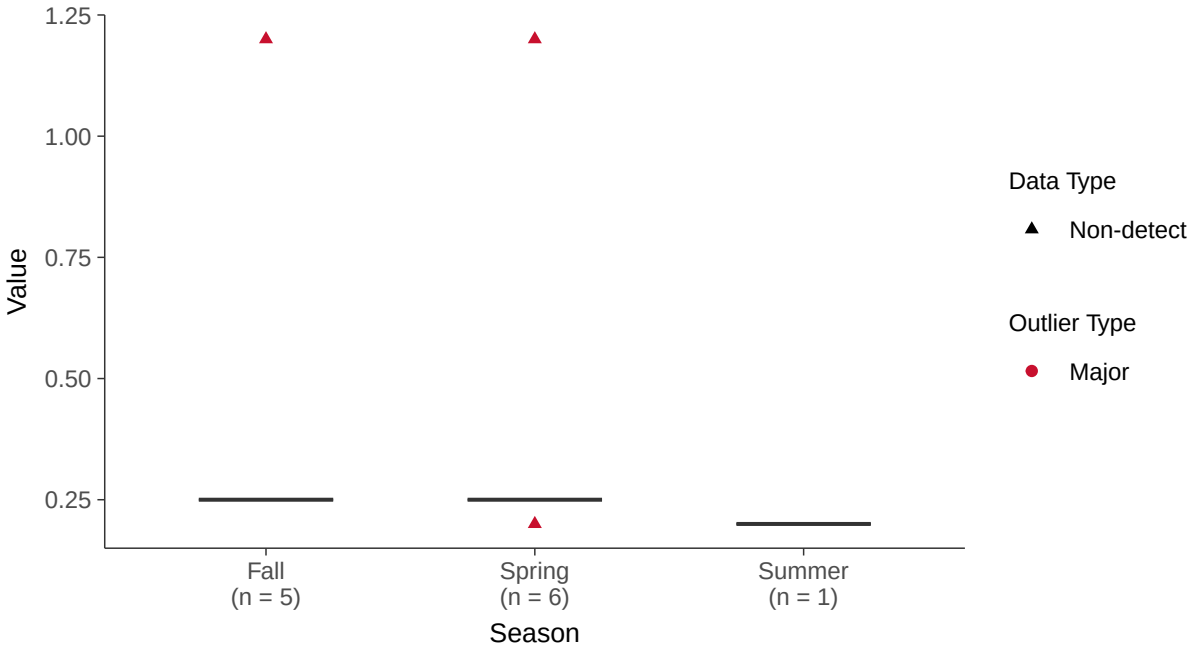
## Boxplot

Beryllium, MW-17001R (ug/L)



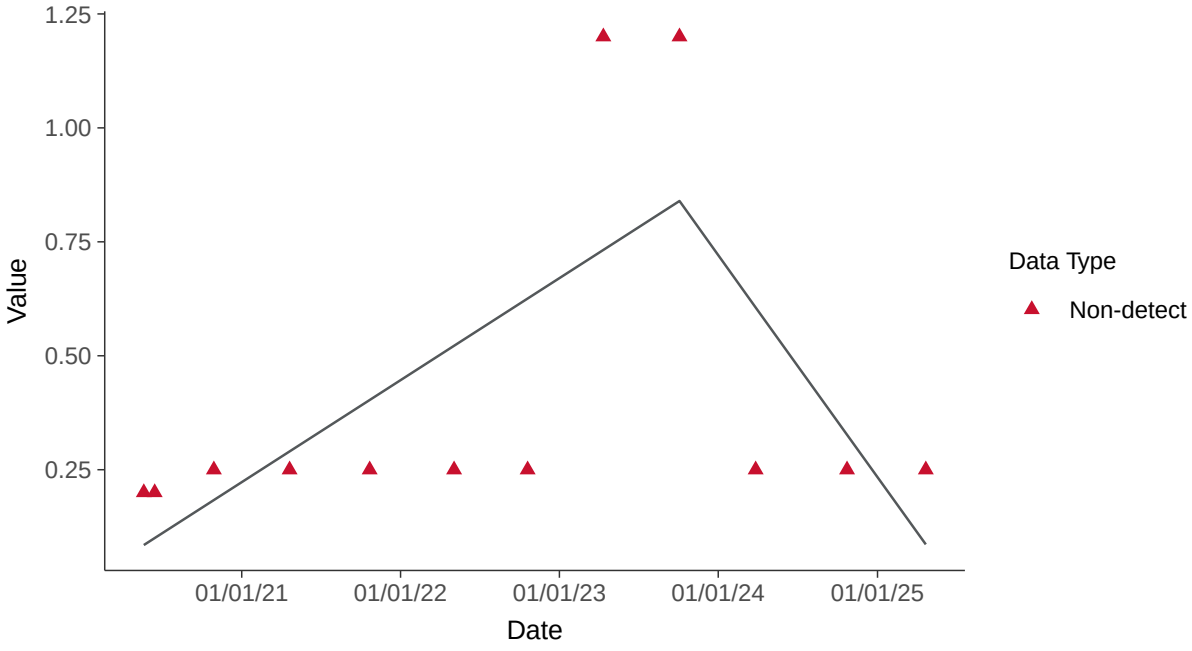

## Boxplot by Season

Beryllium, MW-17001R (ug/L)



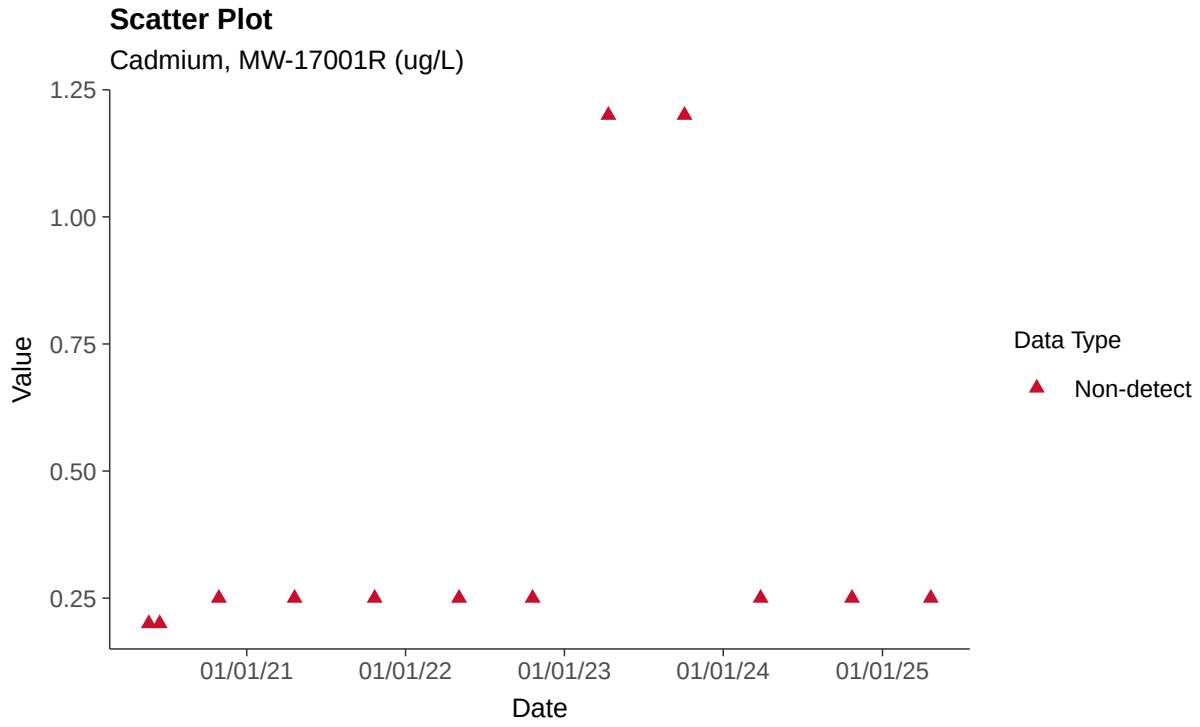
**Trend Regression: Piecewise Linear-Linear**

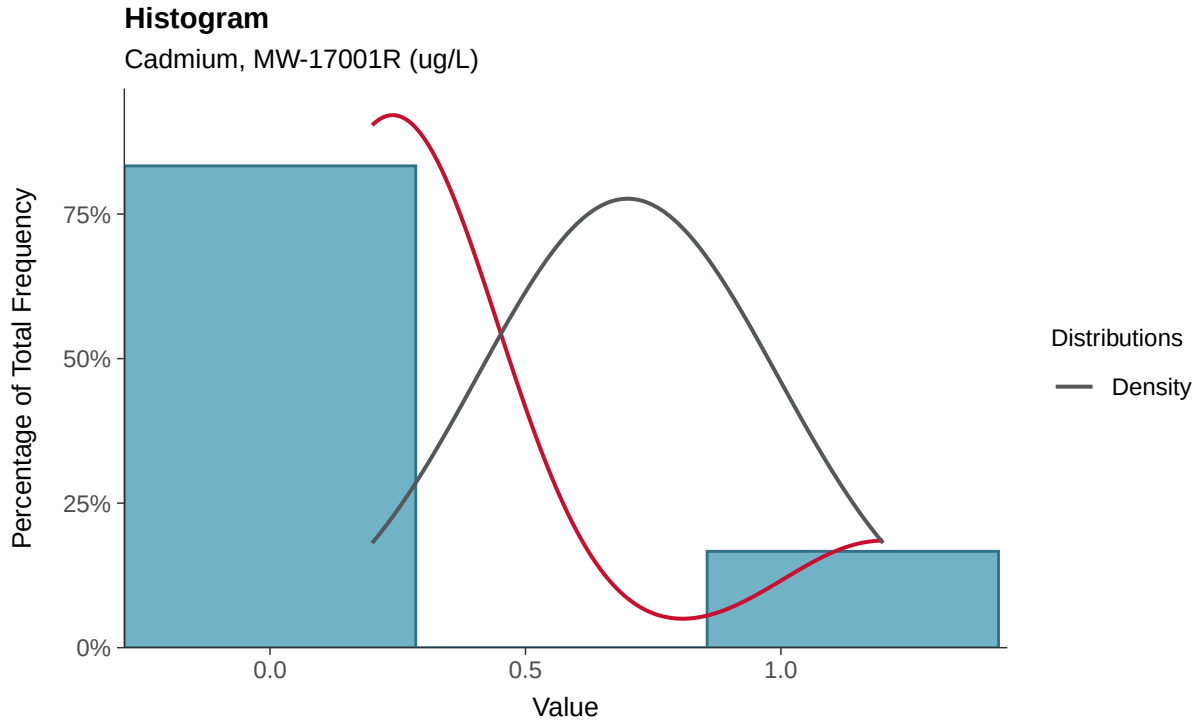
Beryllium, MW-17001R (ug/L)



## Appendix IV: Cadmium, MW-17001R

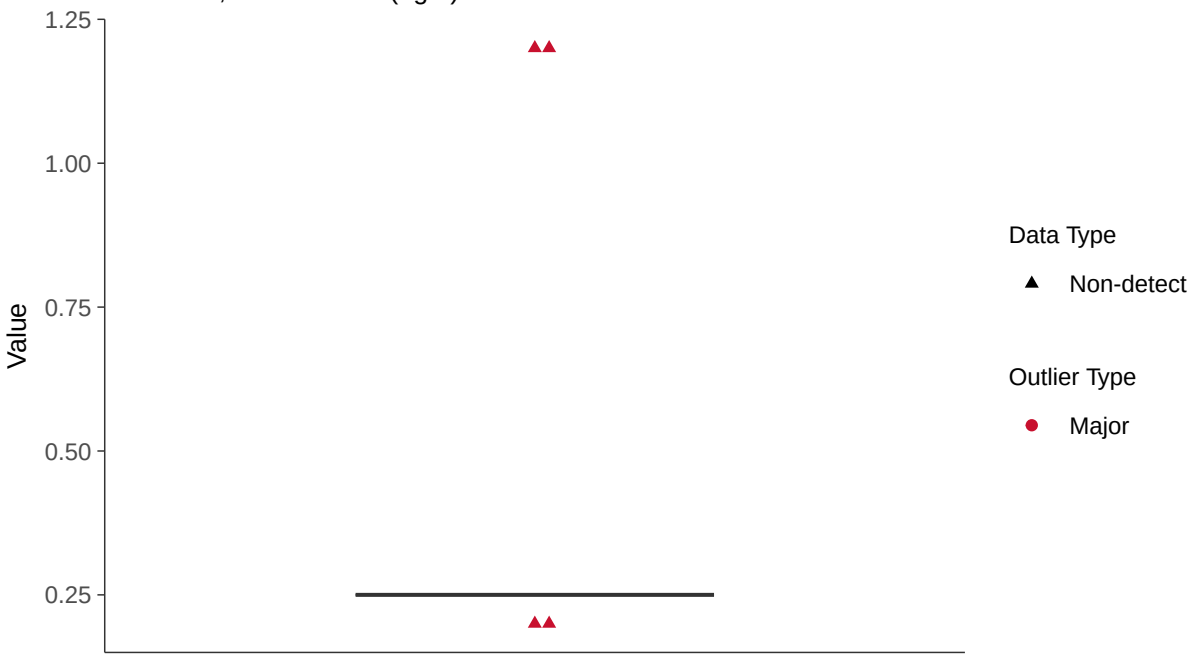
ID: 14_2_106



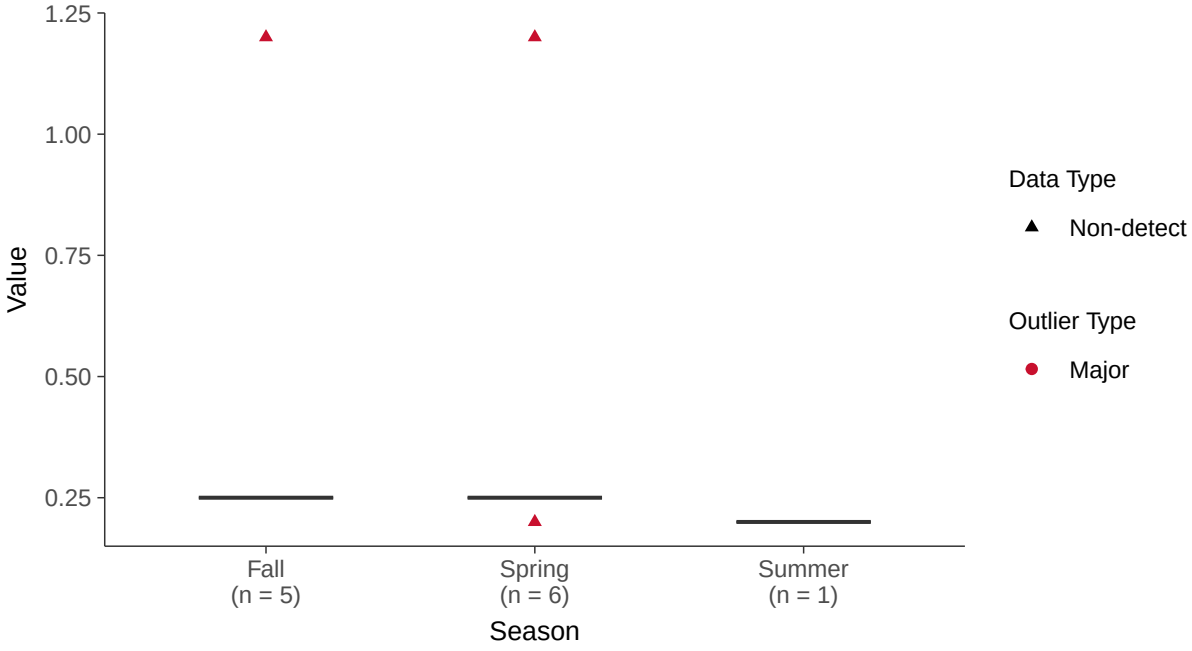
## Boxplot

Cadmium, MW-17001R (ug/L)



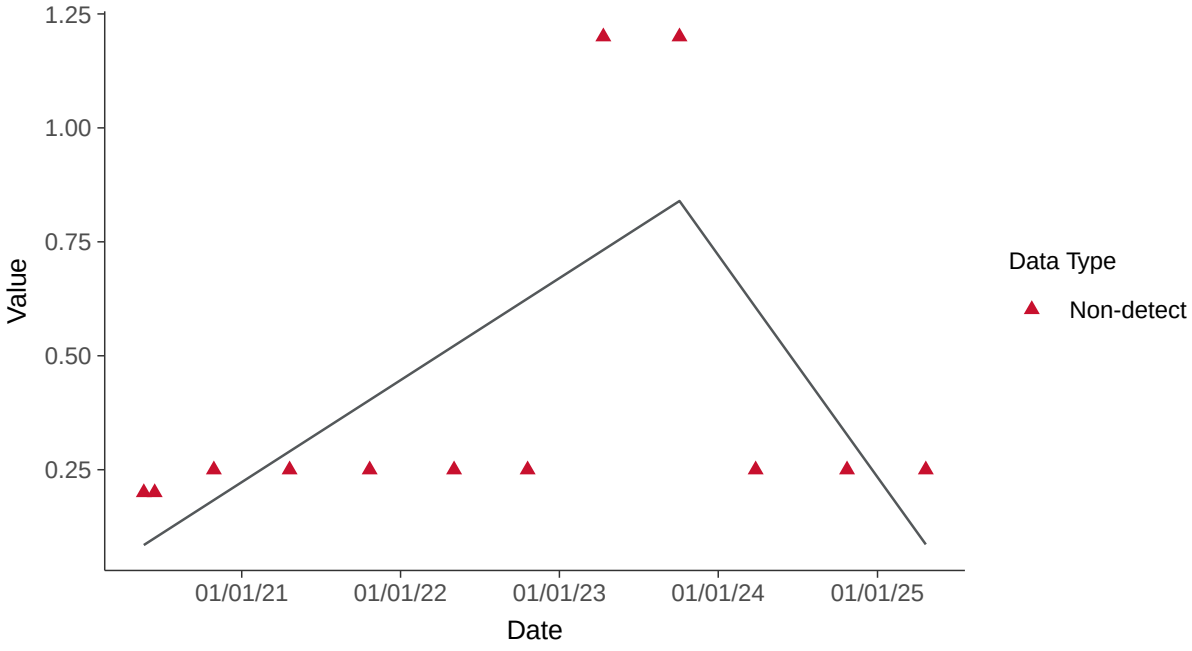

## Boxplot by Season

Cadmium, MW-17001R (ug/L)



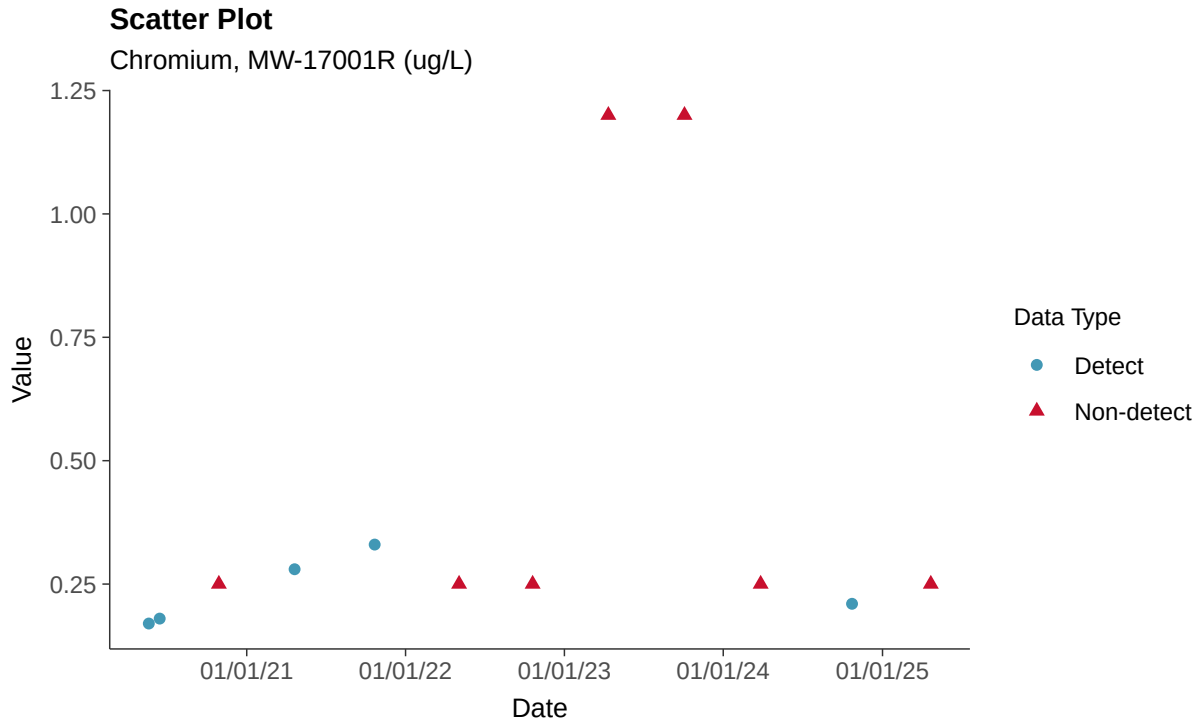
**Trend Regression: Piecewise Linear-Linear**

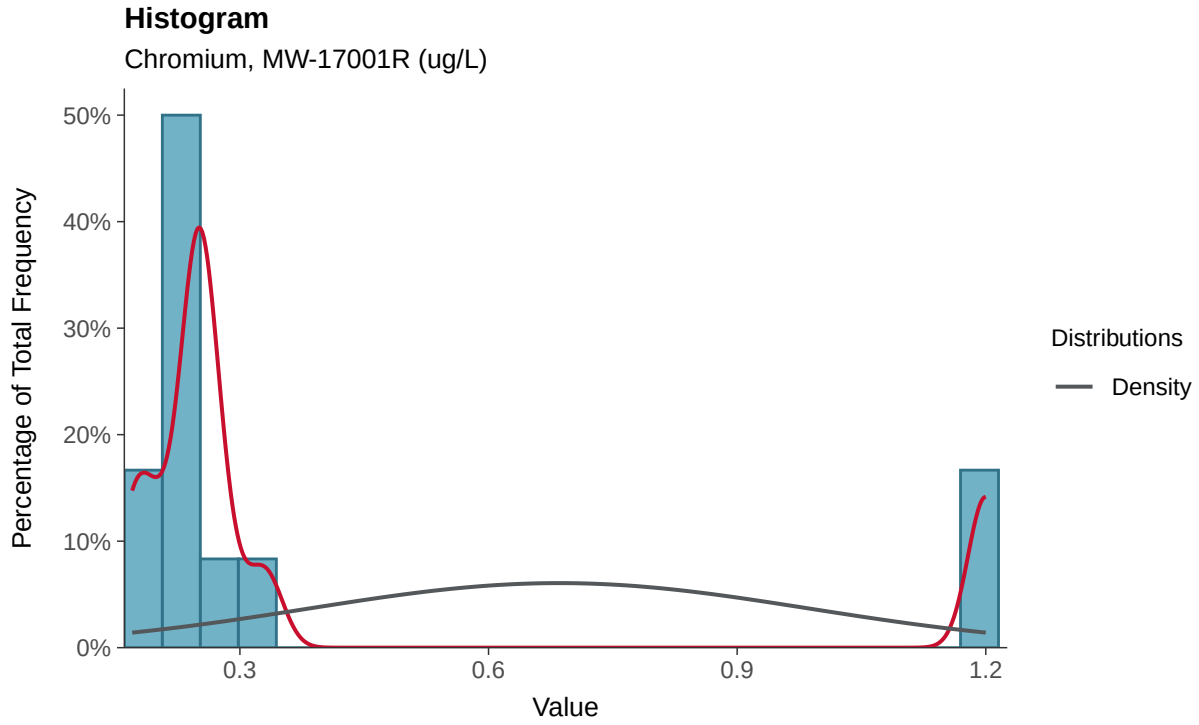
Cadmium, MW-17001R (ug/L)



## Appendix IV: Chromium, MW-17001R

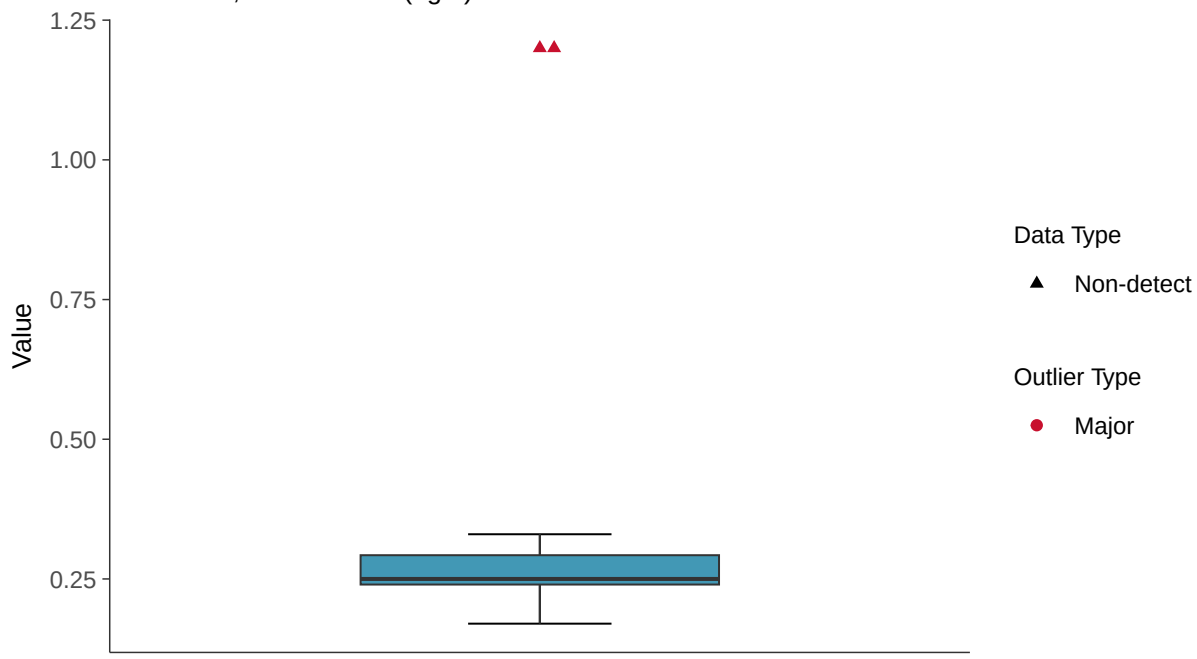
ID: 14_2_109



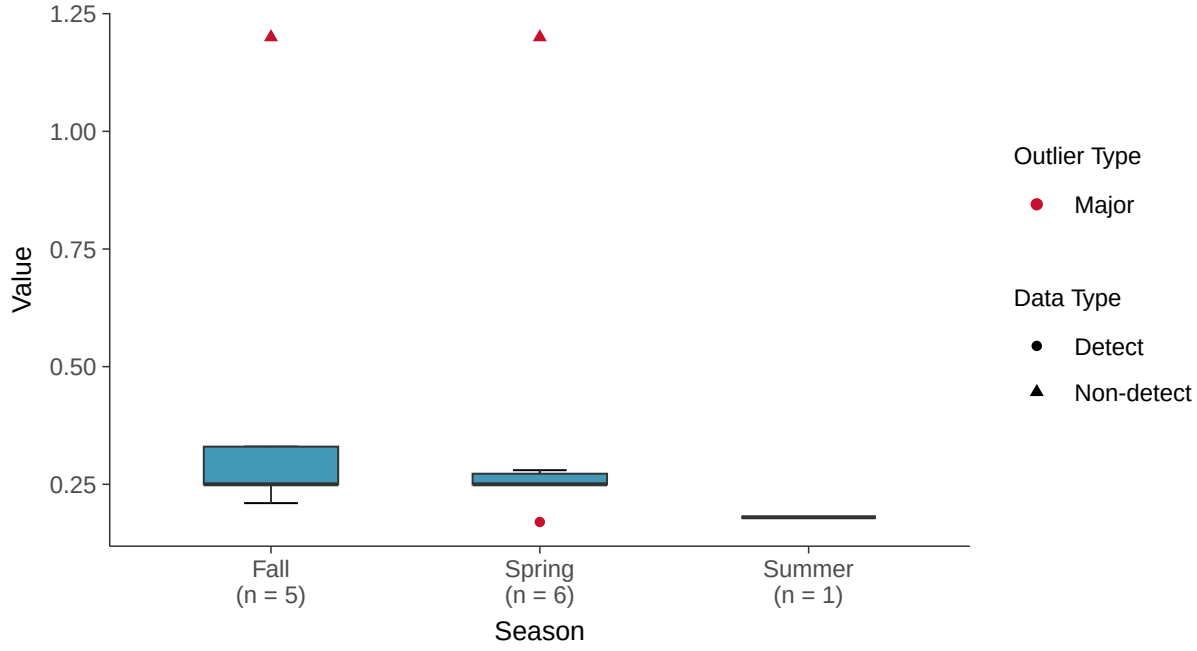
## Boxplot

Chromium, MW-17001R (ug/L)



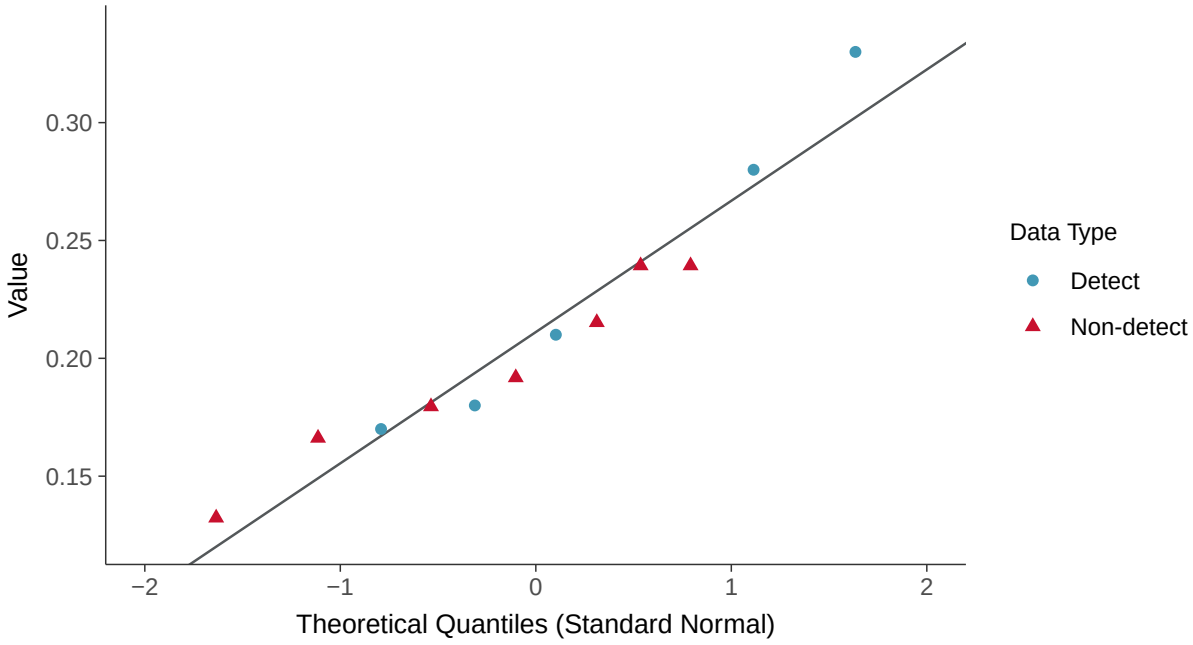

## Boxplot by Season

Chromium, MW-17001R (ug/L)



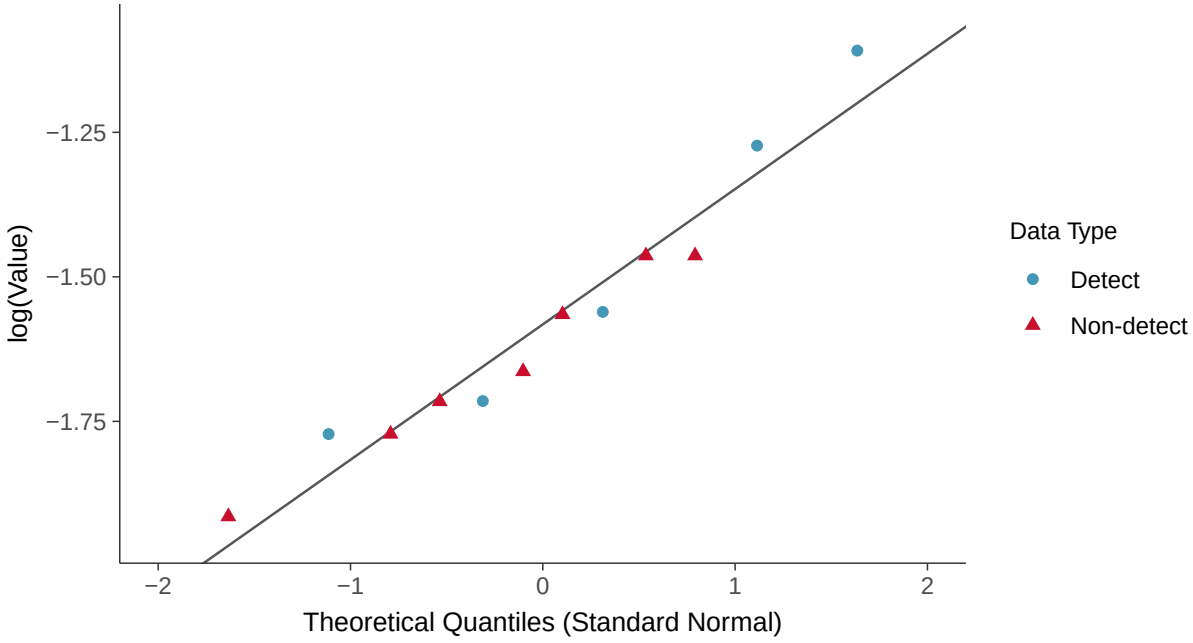
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17001R (ug/L)



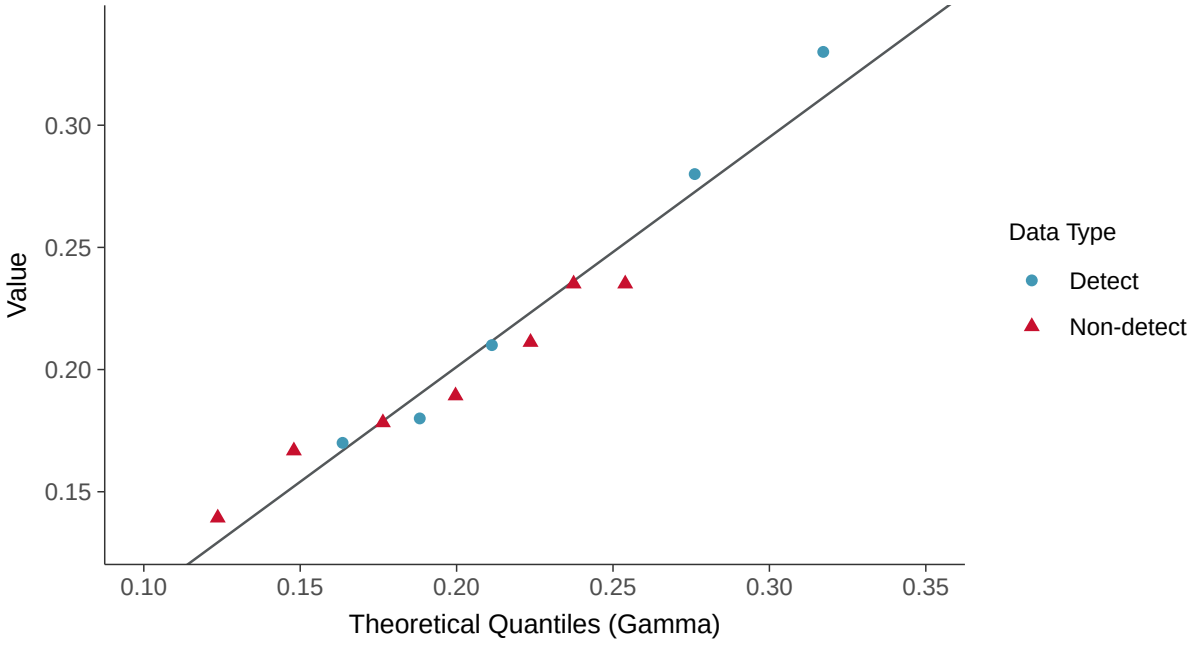

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17001R (ug/L)



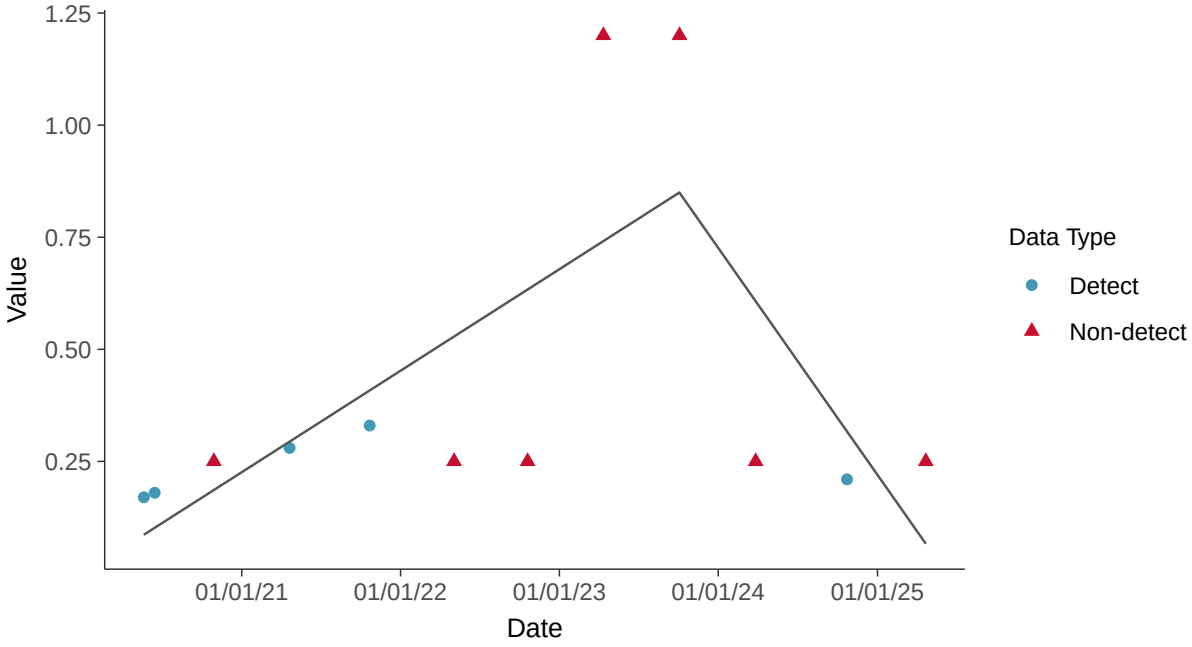
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17001R (ug/L)



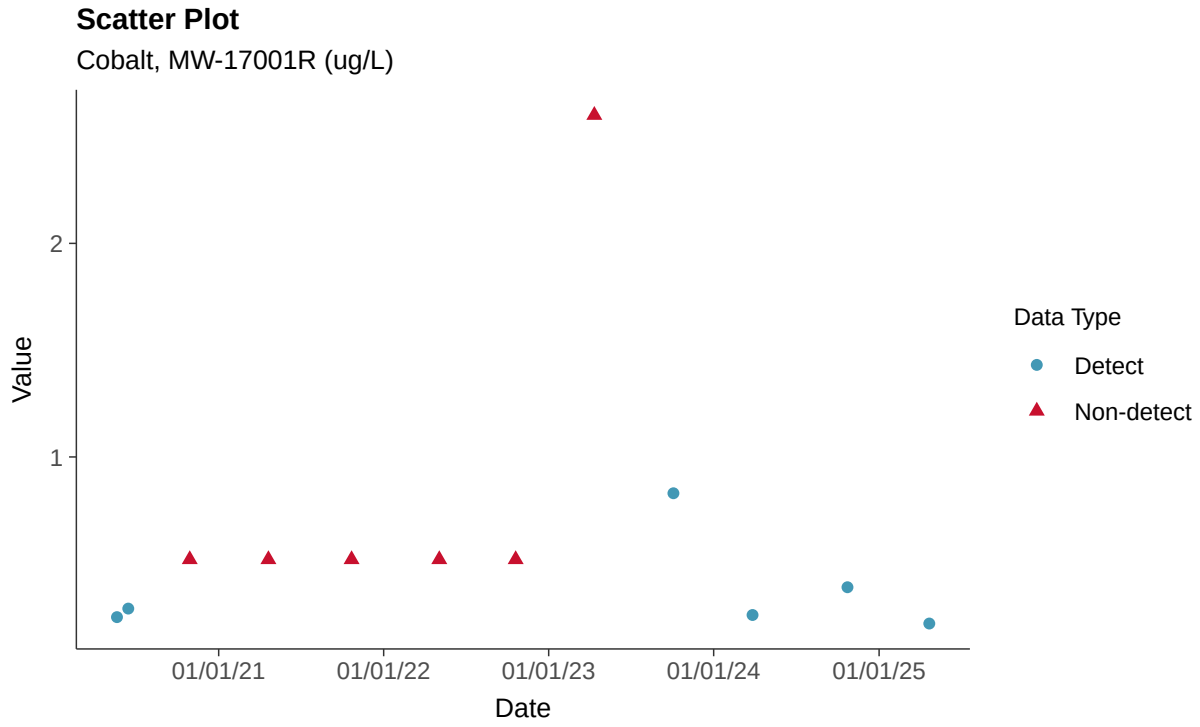

**Trend Regression: Piecewise Linear-Linear**

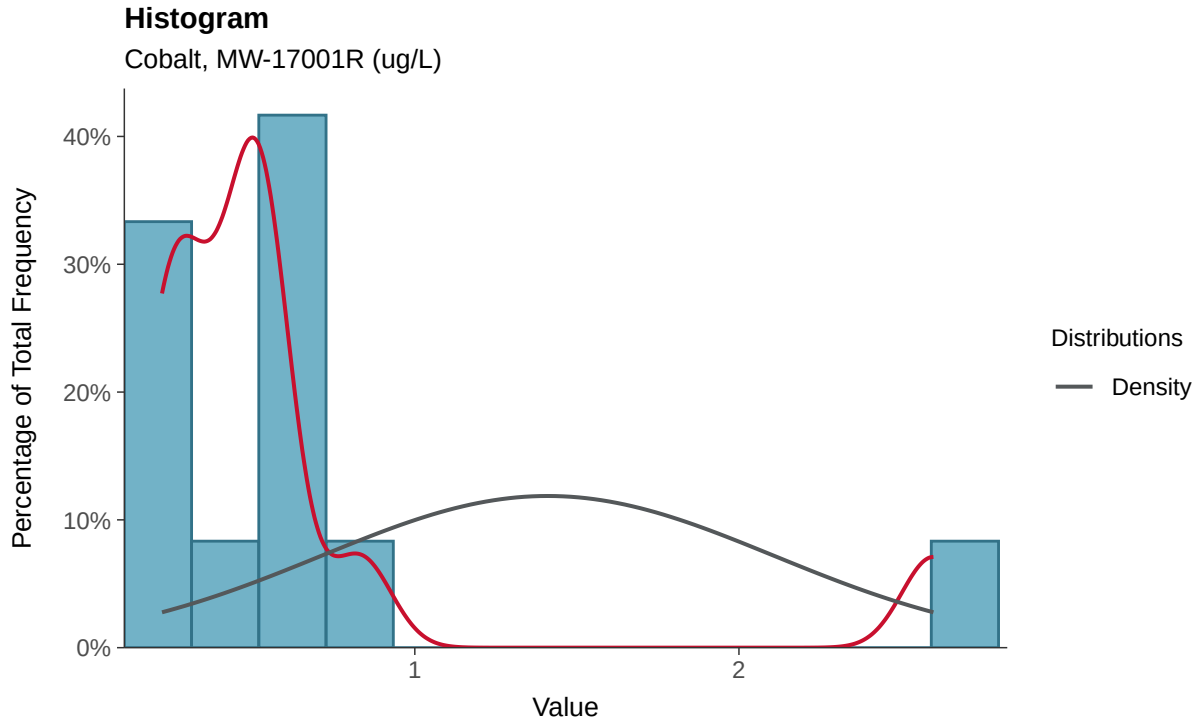
Chromium, MW-17001R (ug/L)



## Appendix IV: Cobalt, MW-17001R

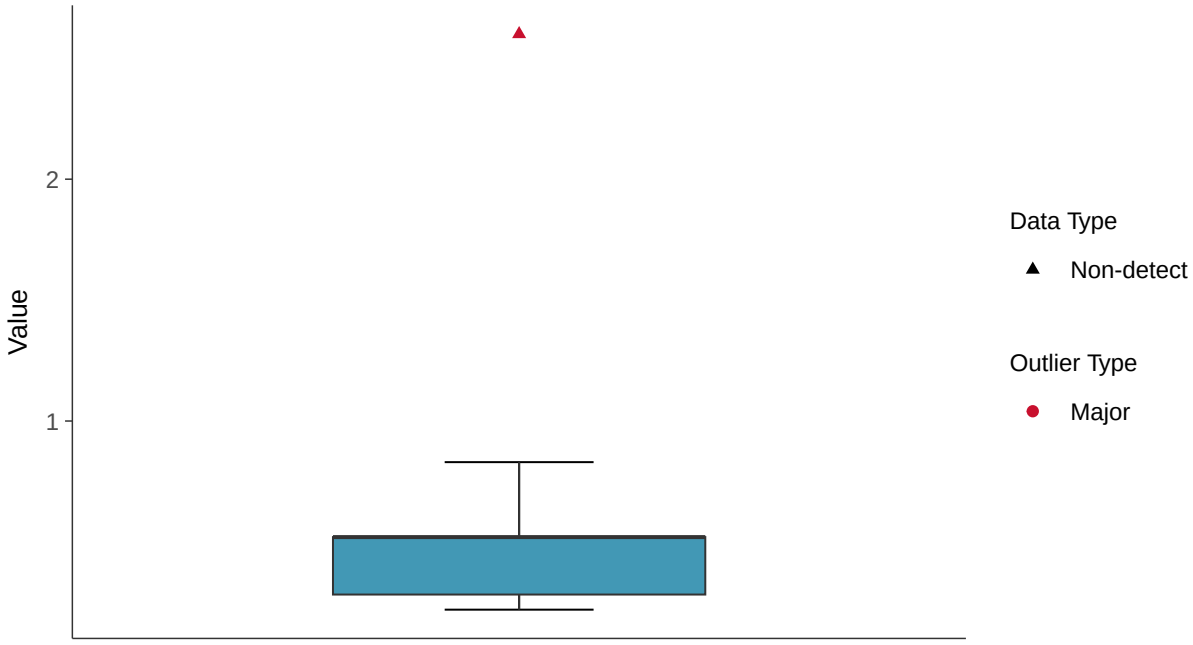
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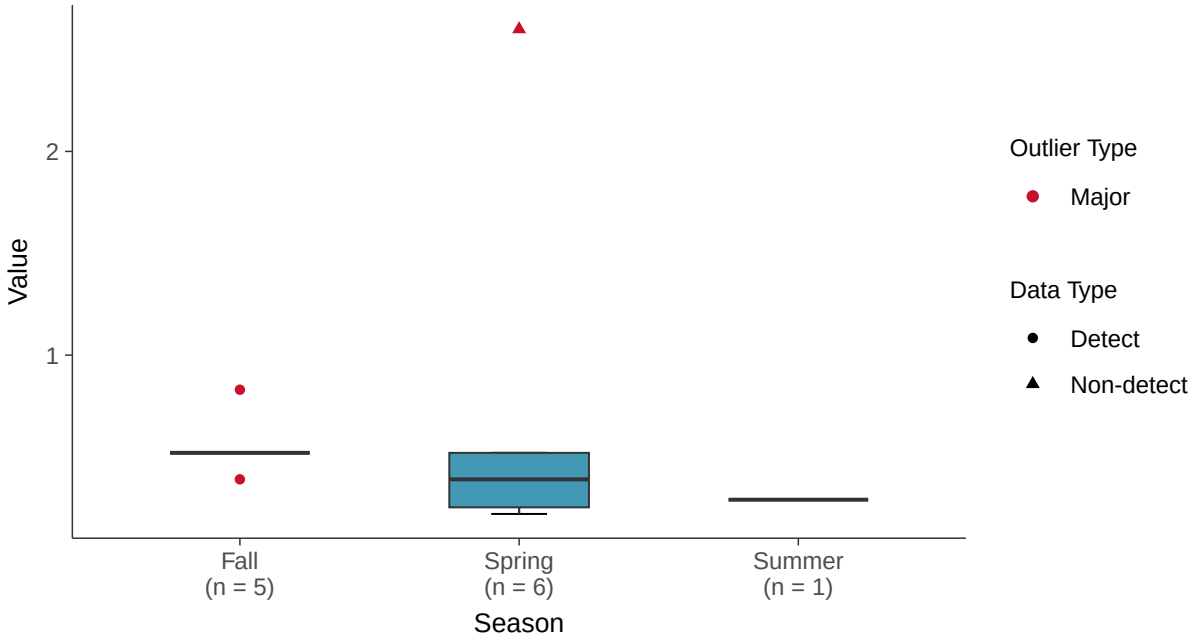
## Boxplot

Cobalt, MW-17001R (ug/L)



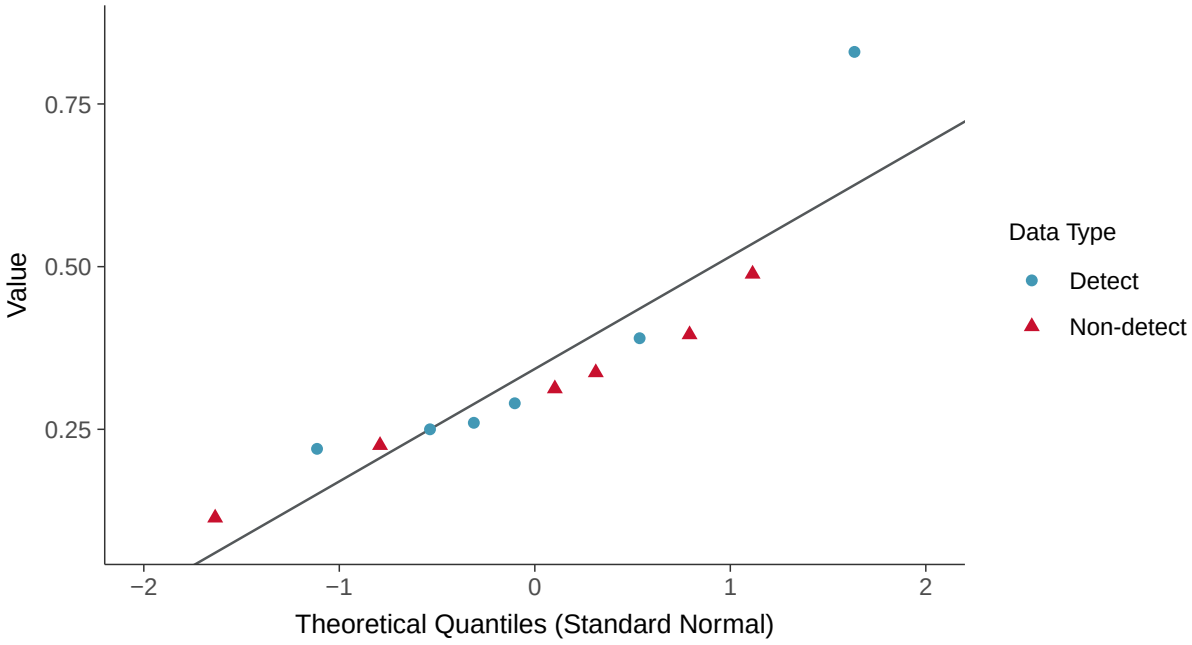

## Boxplot by Season

Cobalt, MW-17001R (ug/L)



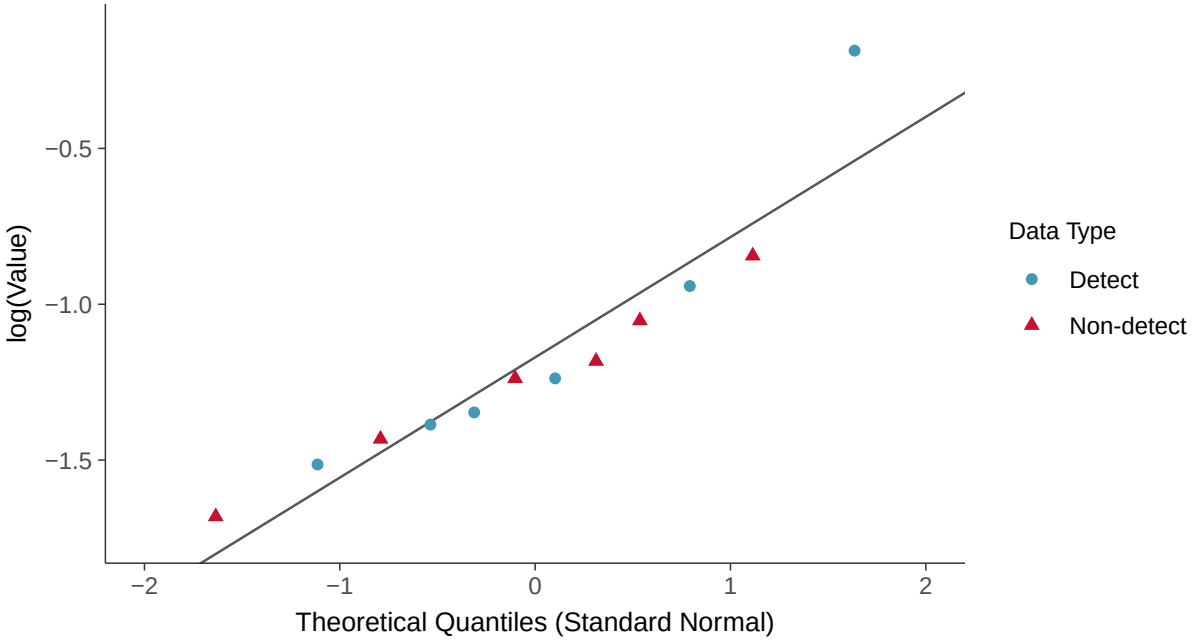
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17001R (ug/L)



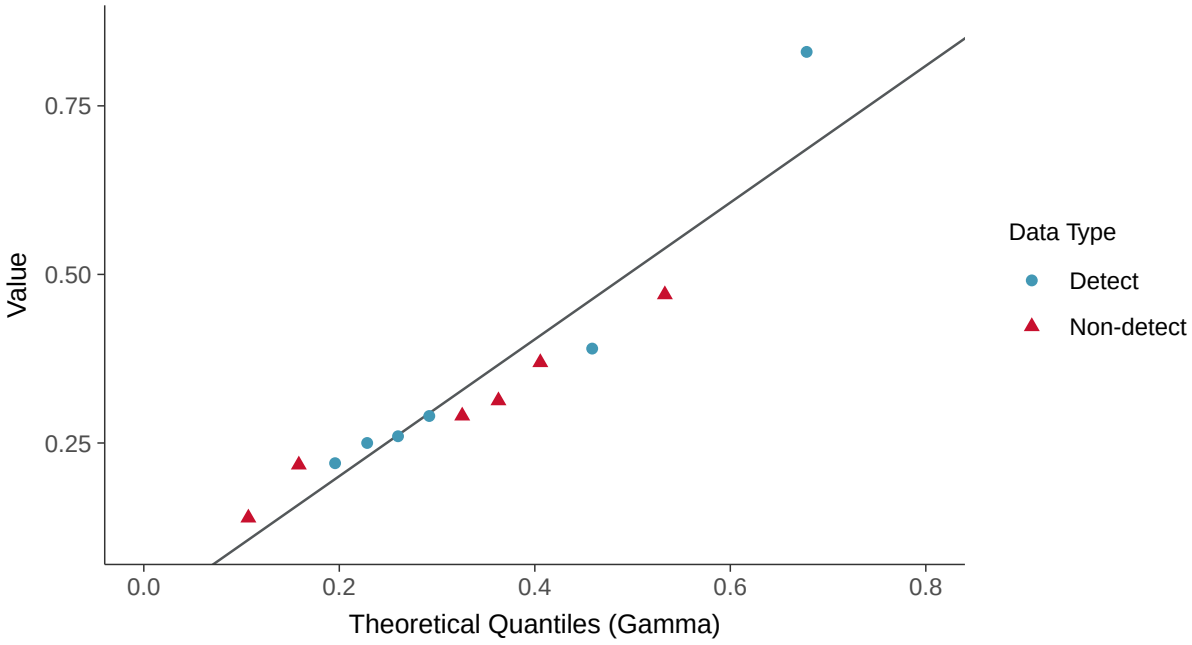

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17001R (ug/L)



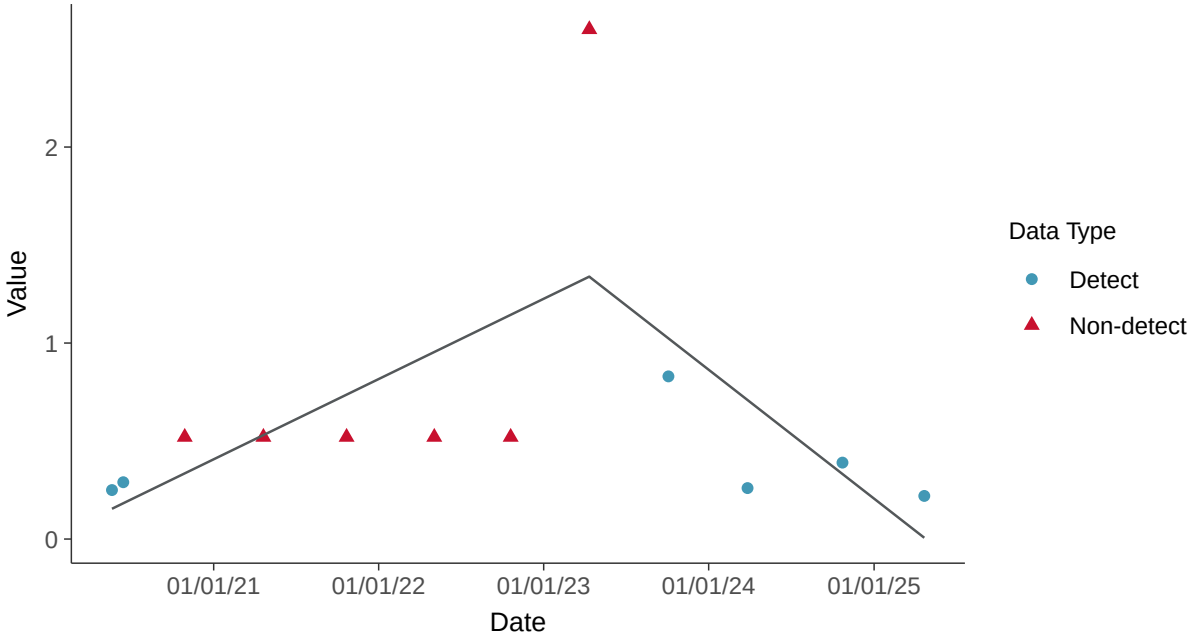
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17001R (ug/L)



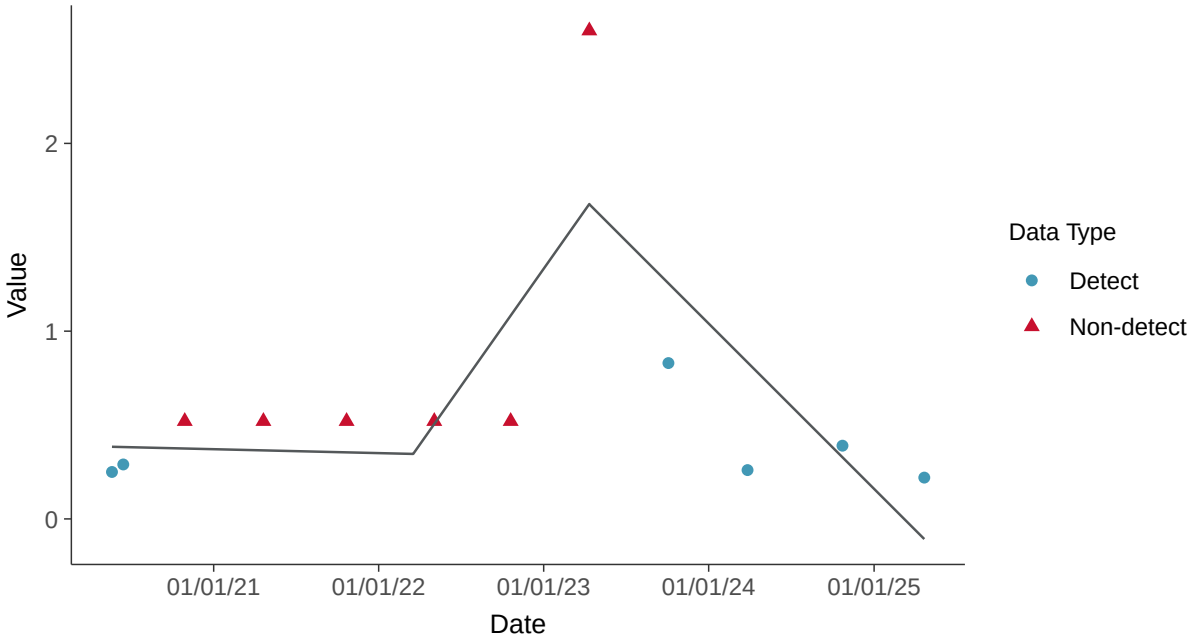

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17001R (ug/L)



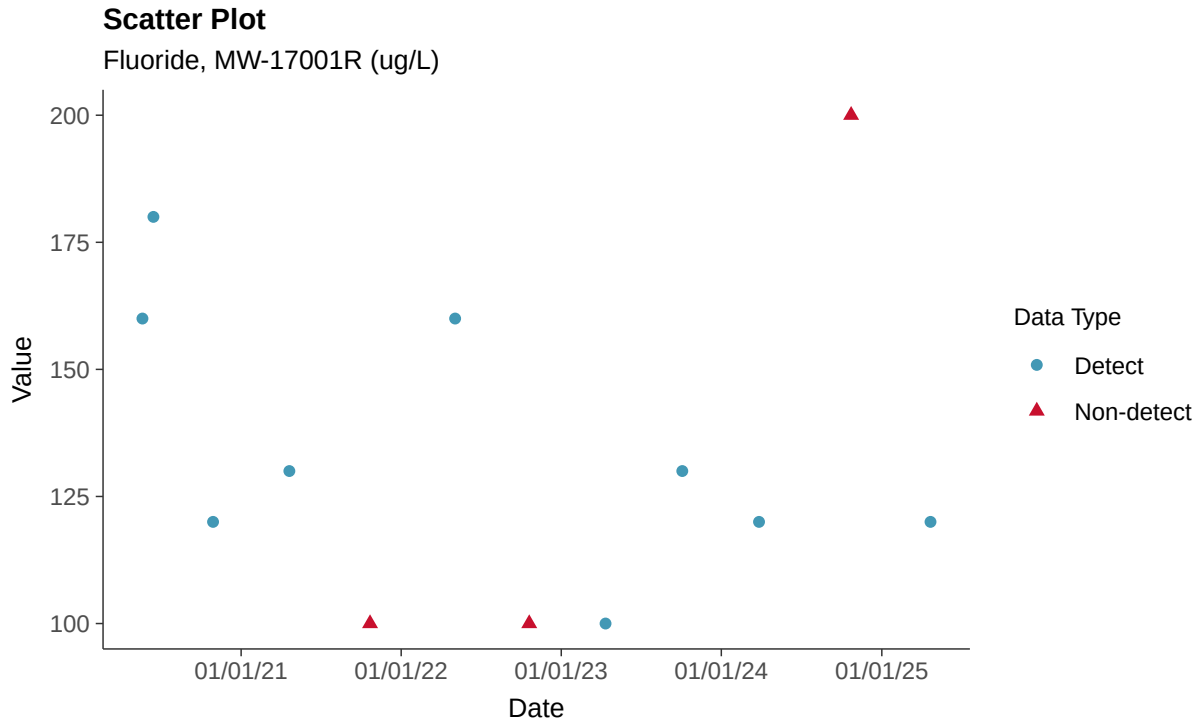
**Trend Regression: Piecewise Linear-Linear-Linear**

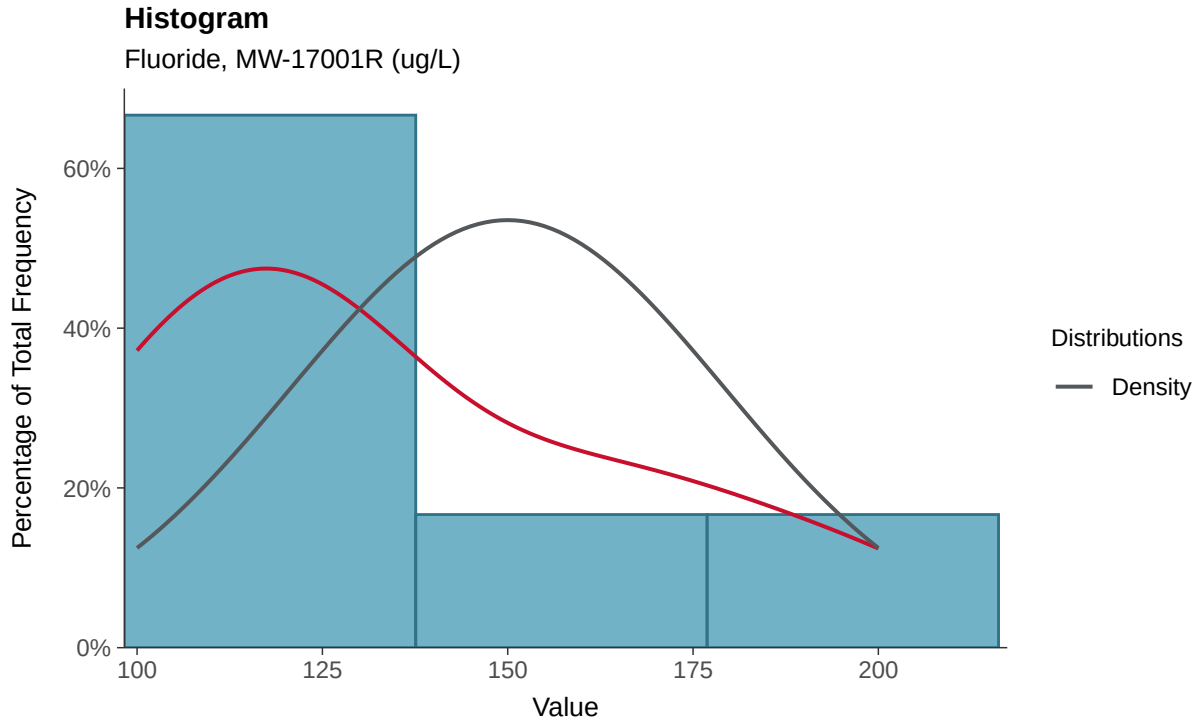
Cobalt, MW-17001R (ug/L)



## Appendix IV: Fluoride, MW-17001R

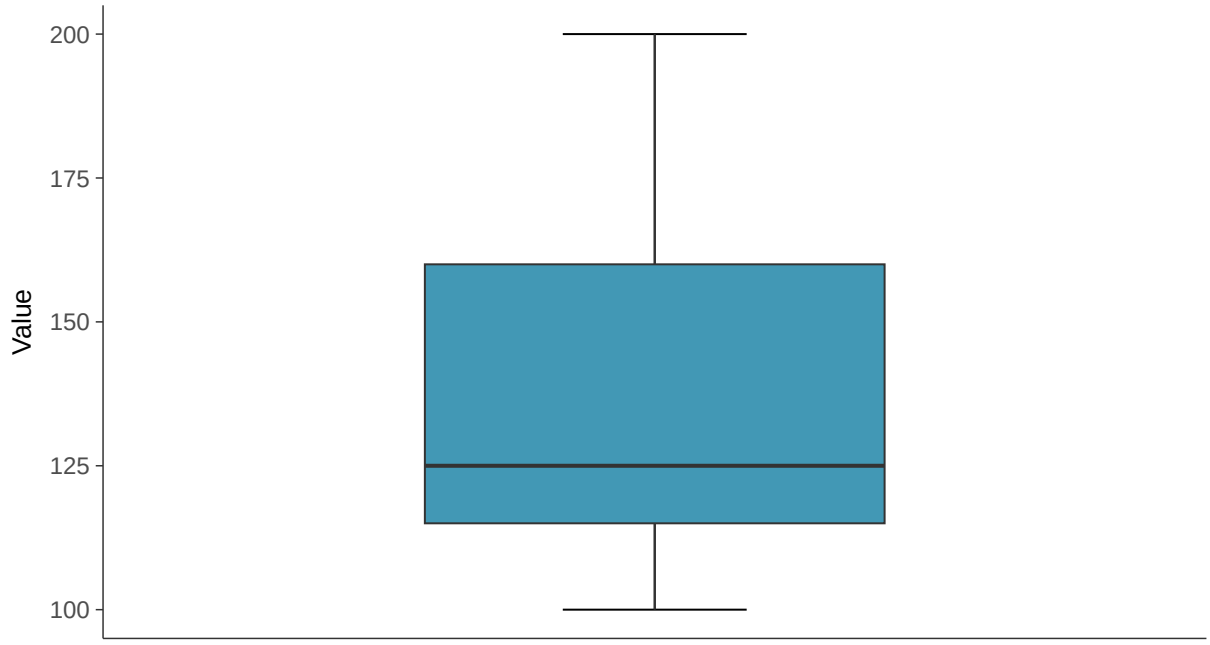
ID: 14_2_114



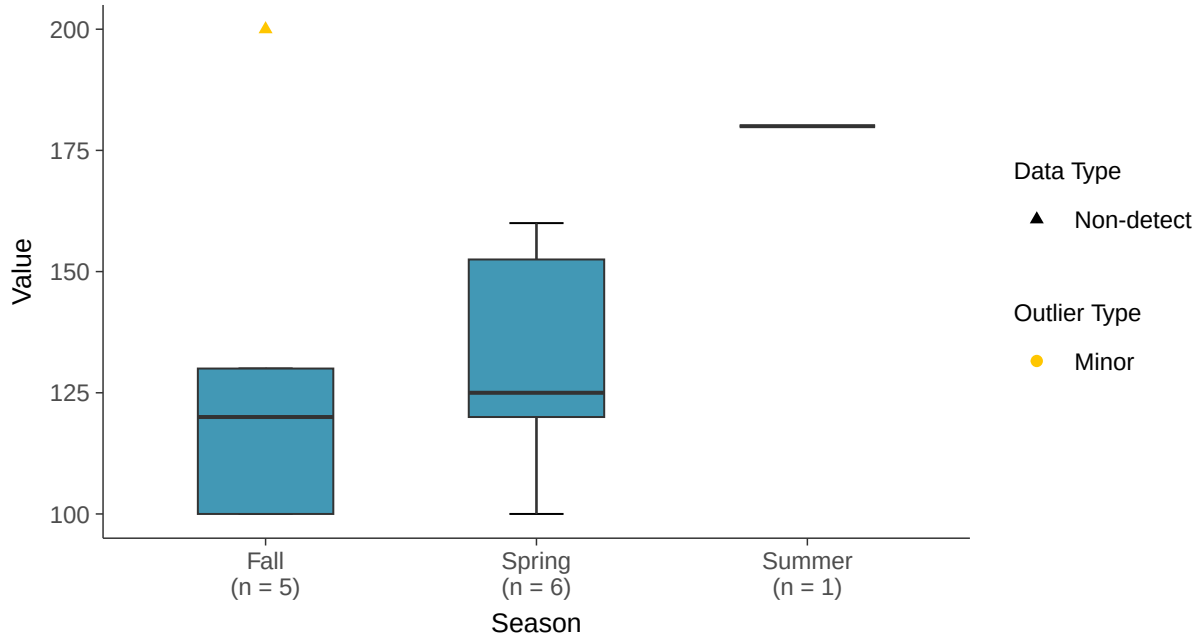
**Boxplot**

Fluoride, MW-17001R (ug/L)



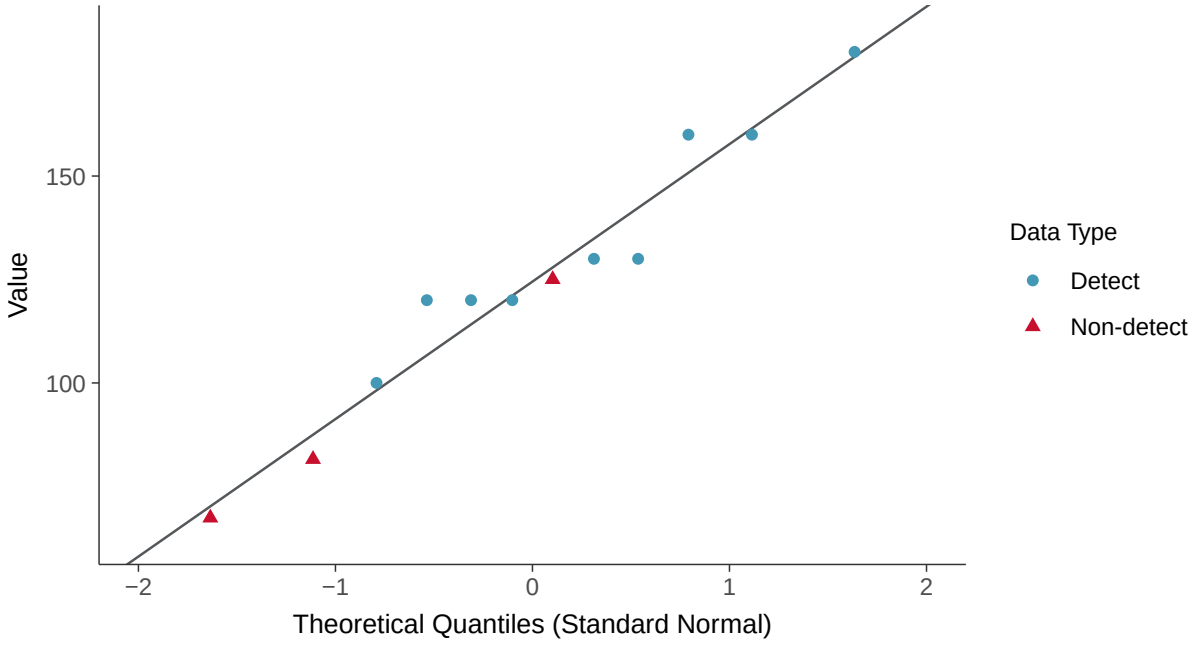

**Boxplot by Season**

Fluoride, MW-17001R (ug/L)



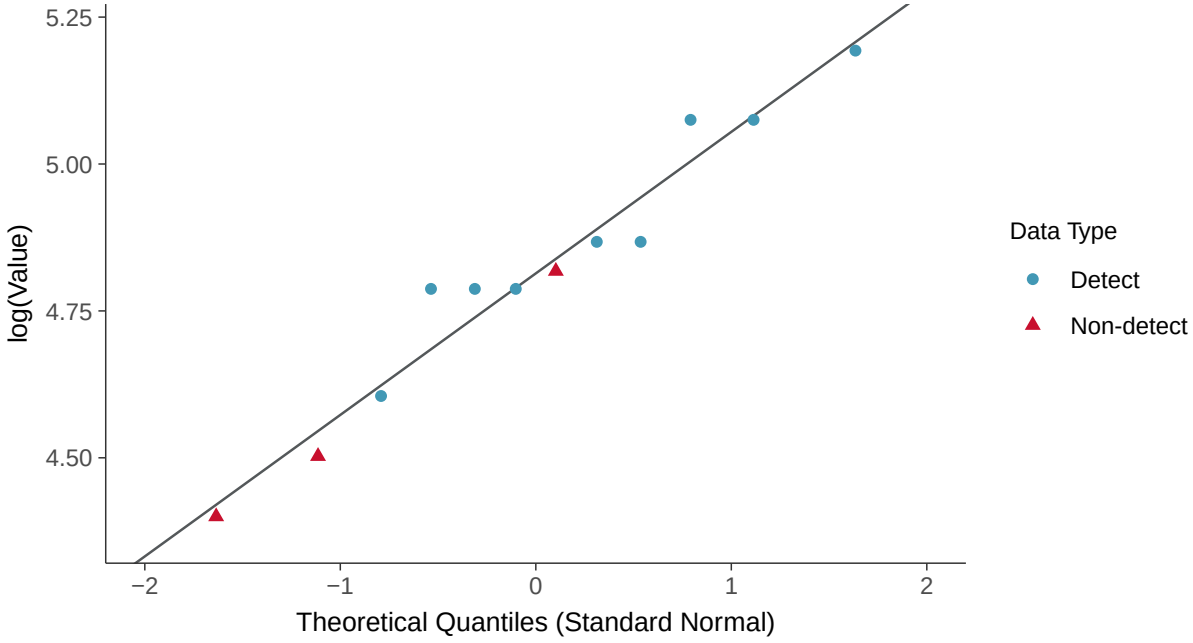
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17001R (ug/L)



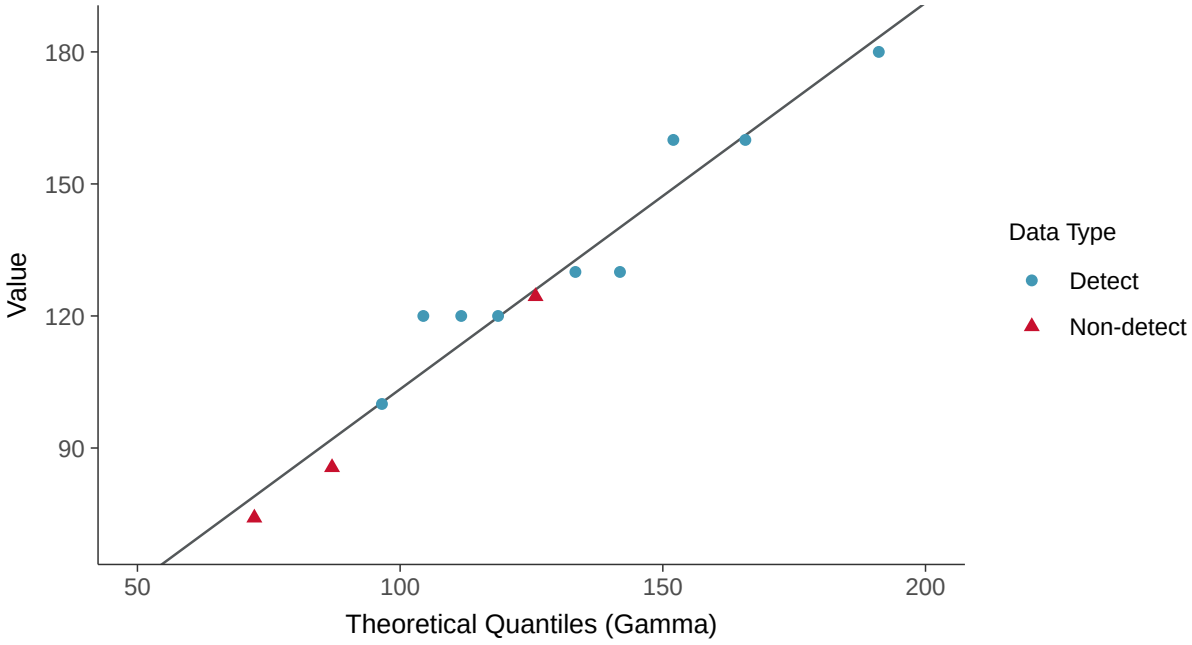

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17001R (ug/L)



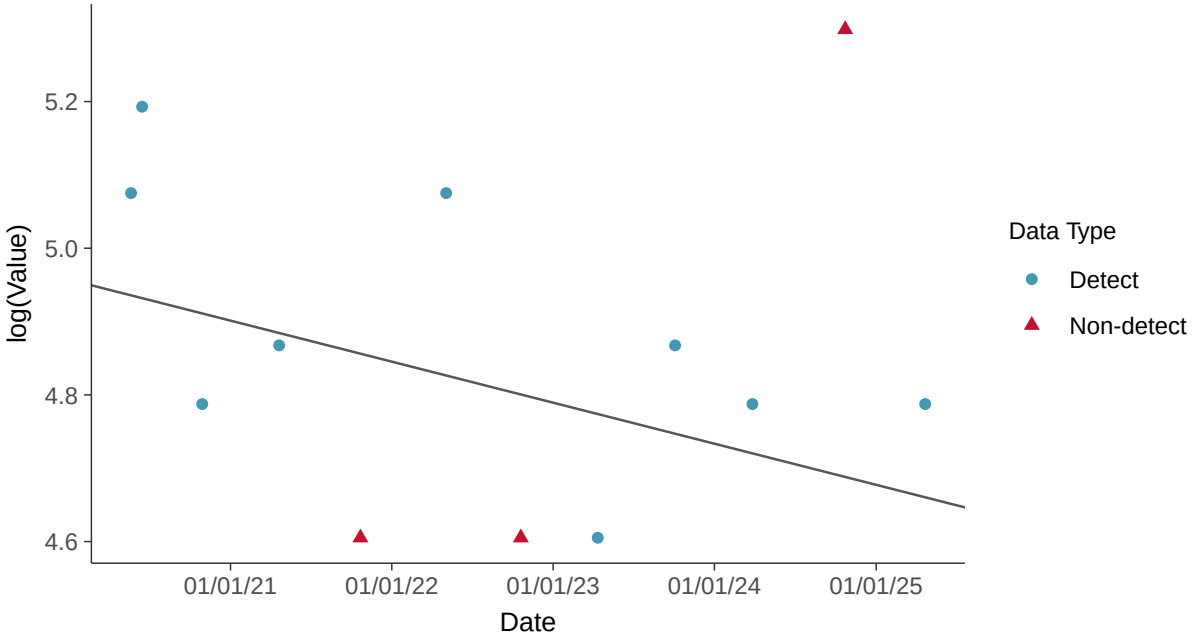
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17001R (ug/L)



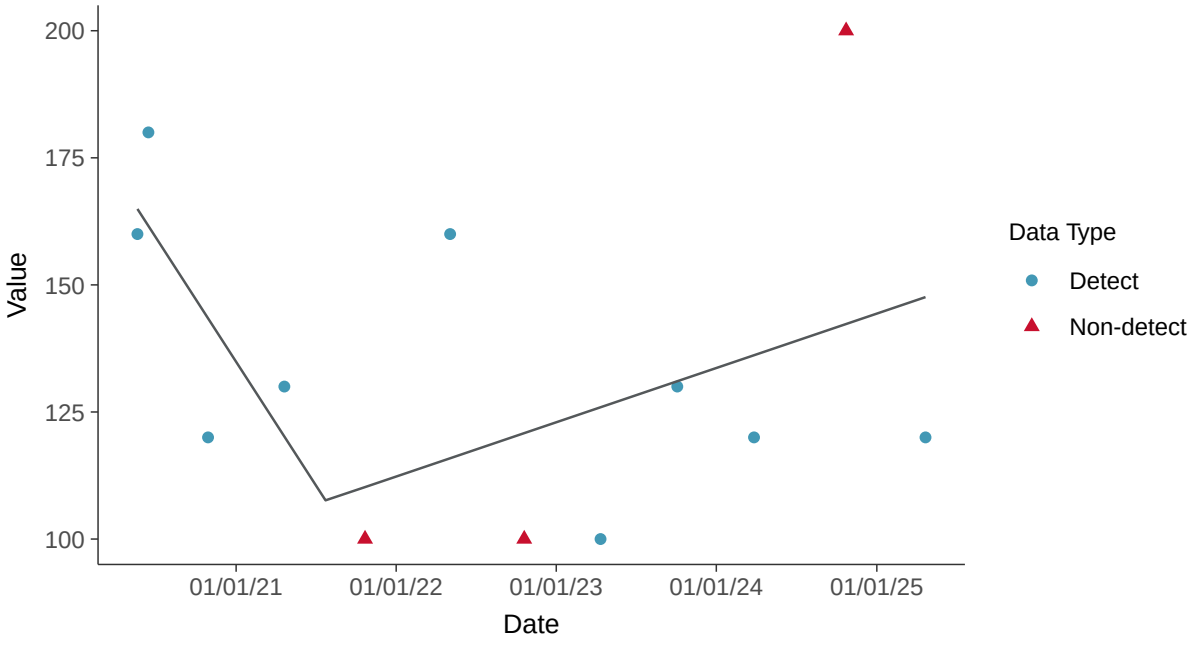

**Trend Regression: Lognormal MLE**

Fluoride, MW-17001R (ug/L)



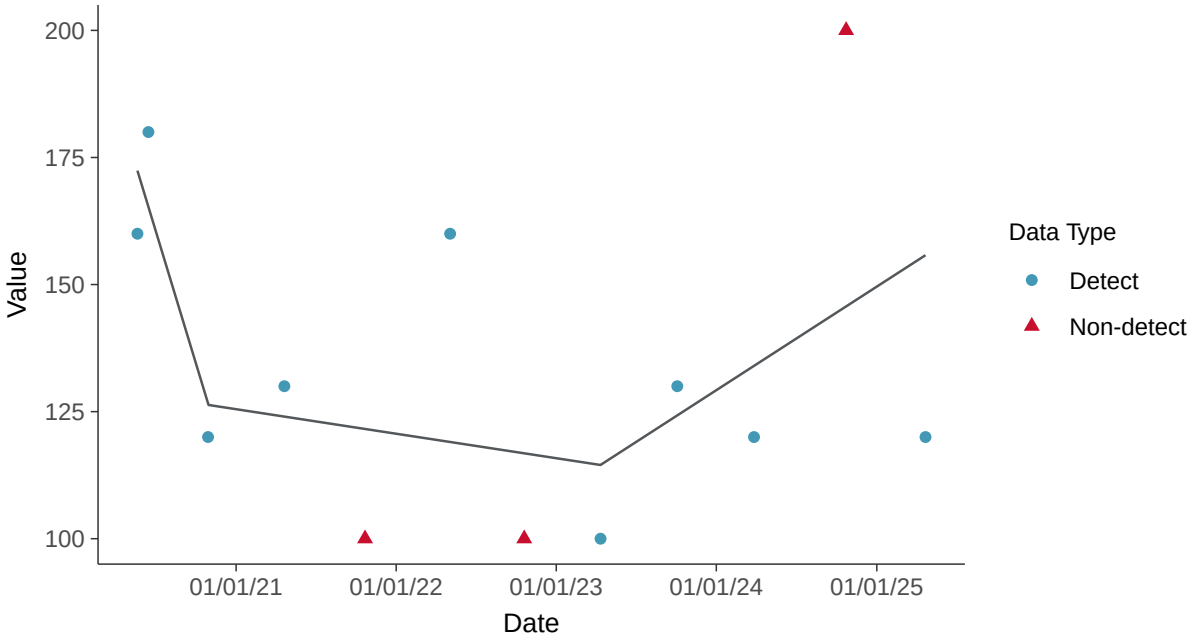
**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-17001R (ug/L)



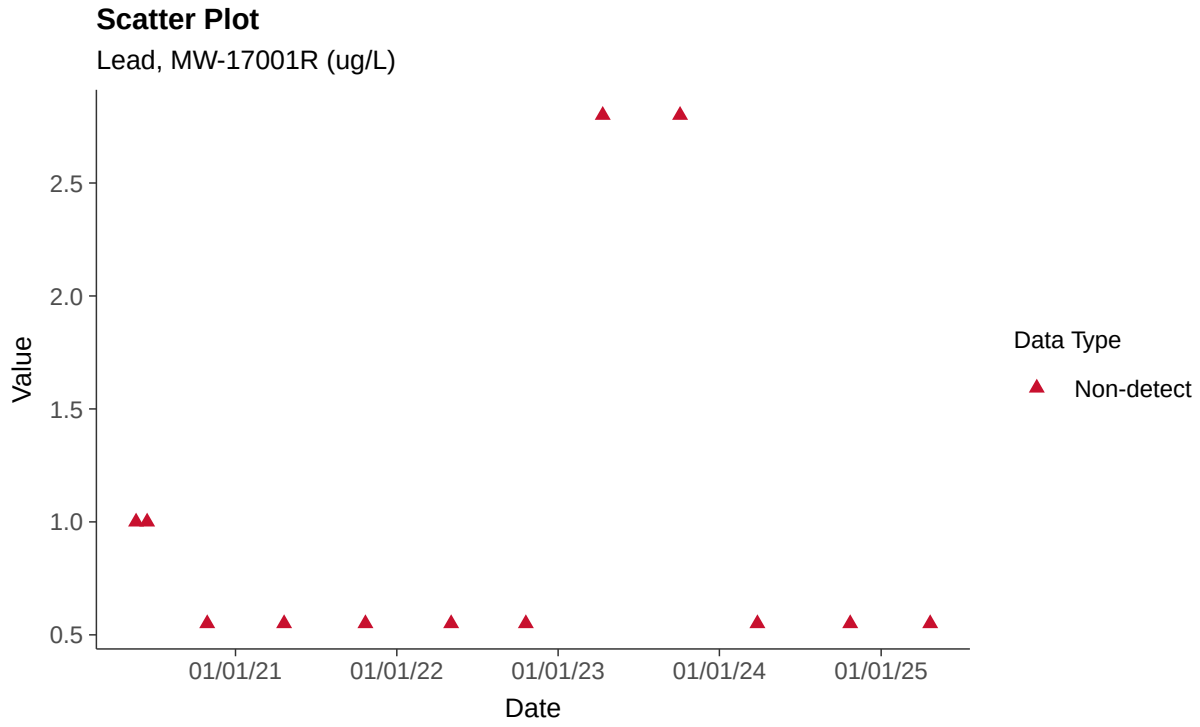

**Trend Regression: Piecewise Linear-Linear-Linear**

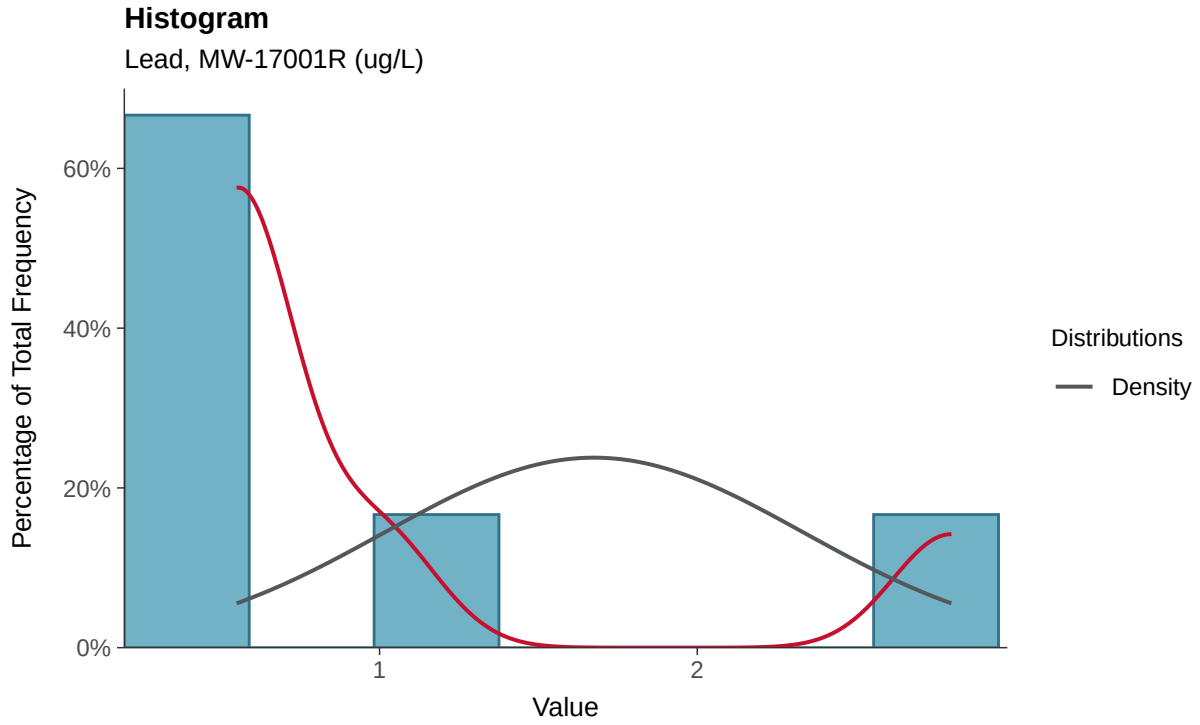
Fluoride, MW-17001R (ug/L)



# Appendix IV: Lead, MW-17001R

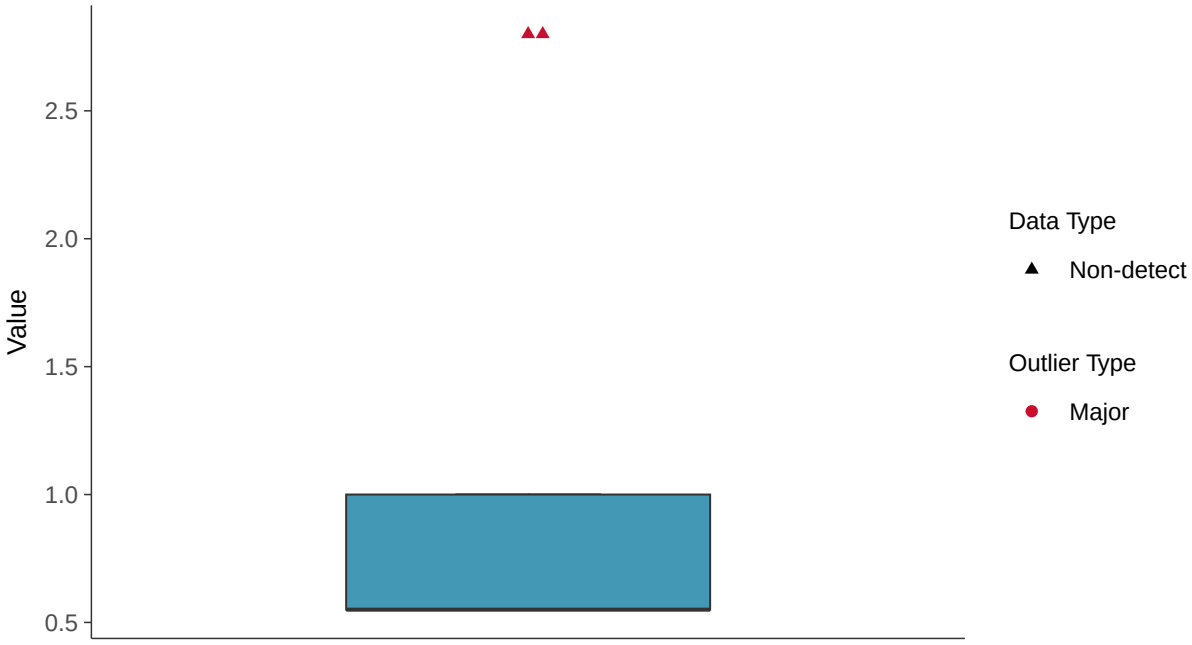
ID: 14_2_116



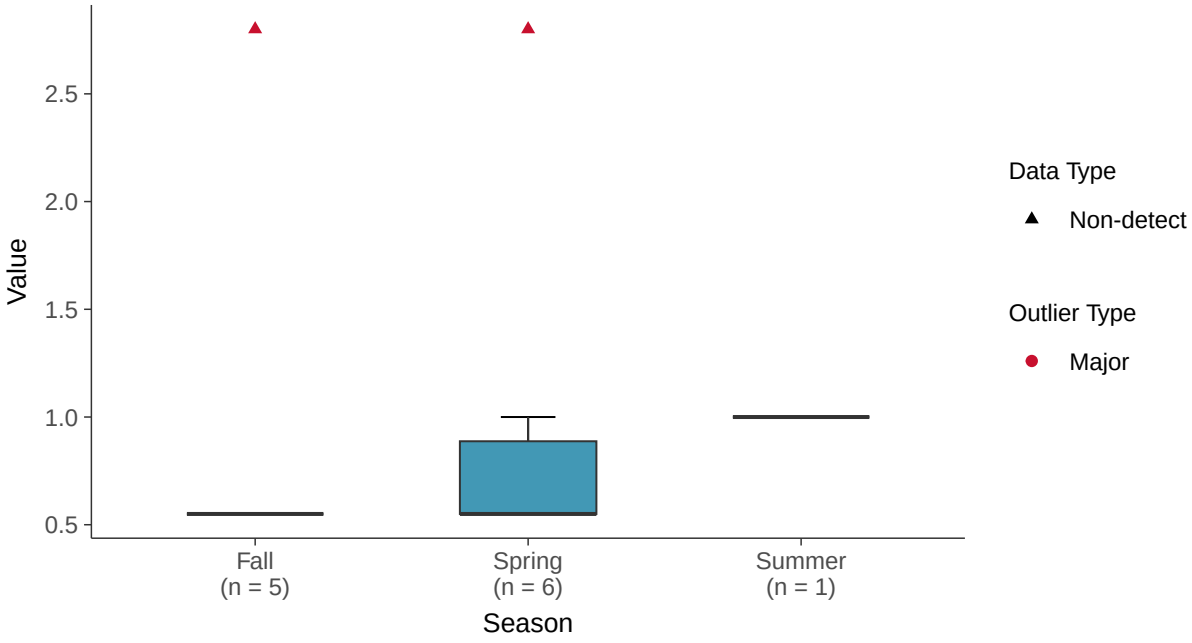
## Boxplot

Lead, MW-17001R (ug/L)



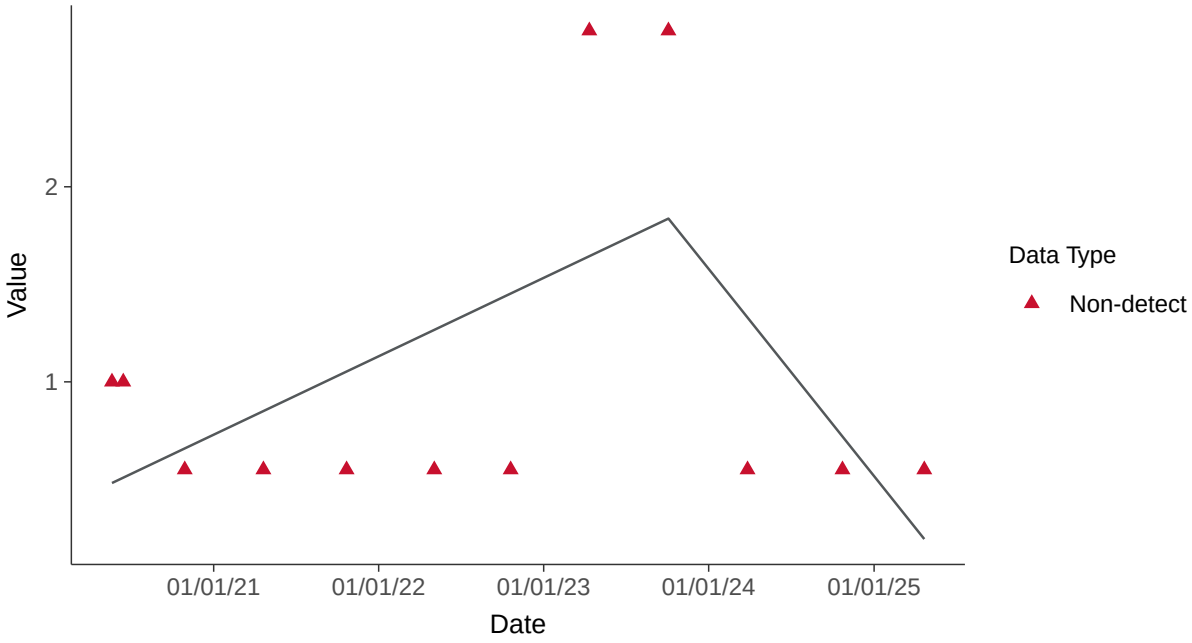

## Boxplot by Season

Lead, MW-17001R (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Lead, MW-17001R (ug/L)

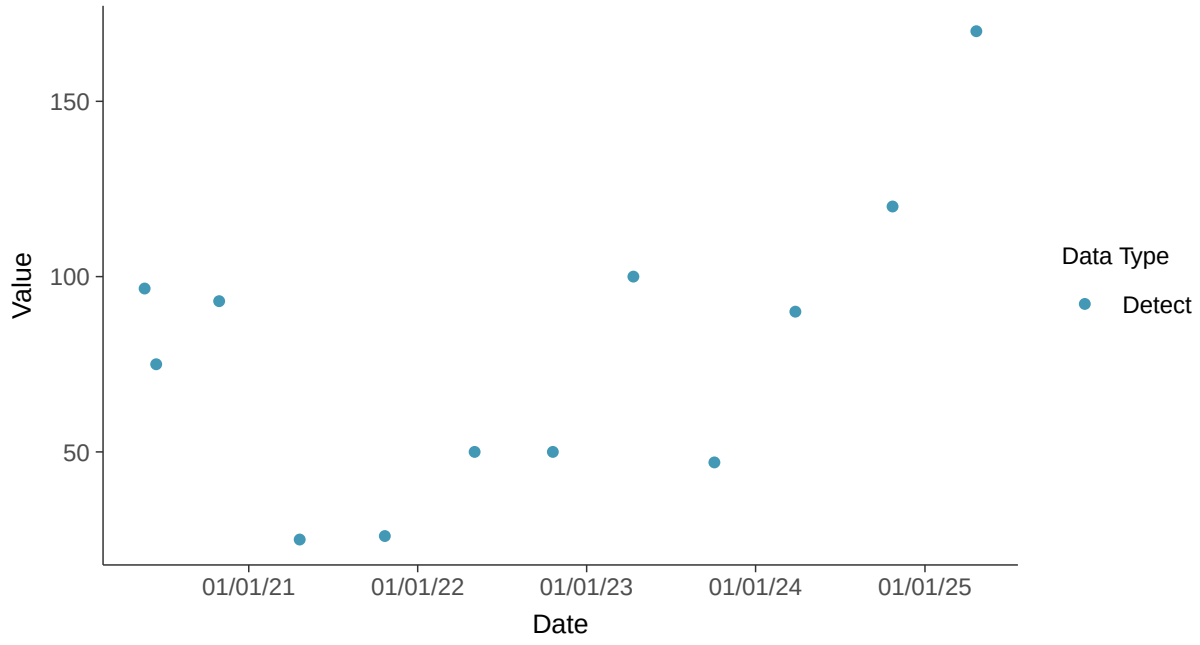


## Appendix IV: Lithium, MW-17001R

ID: 14_2_117

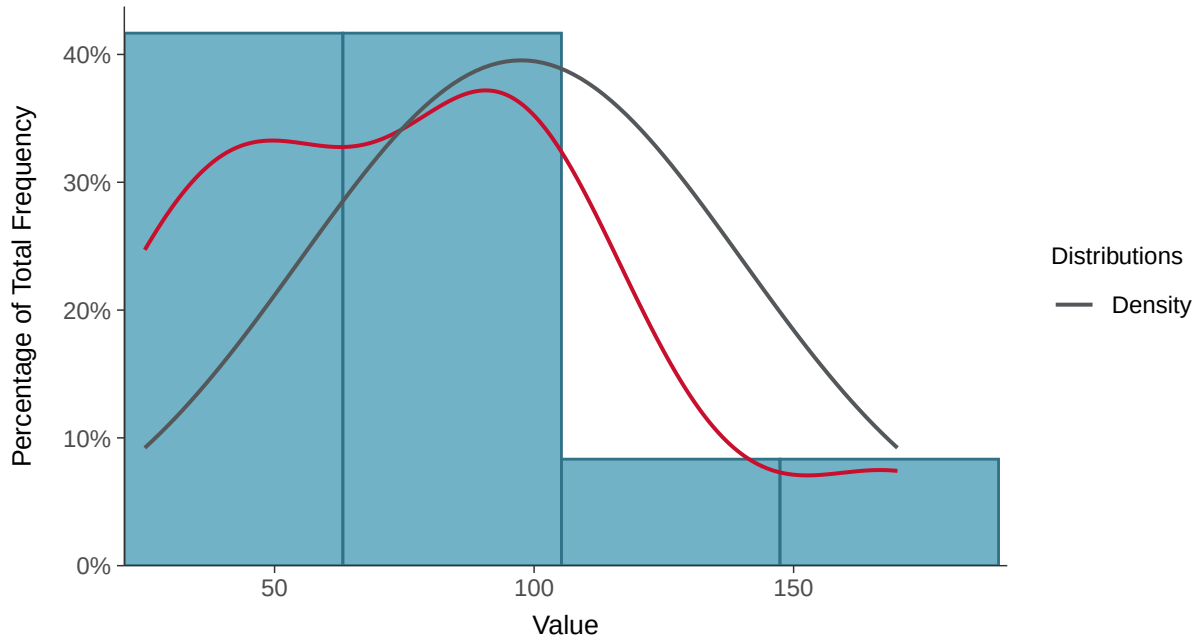
**Scatter Plot**

Lithium, MW-17001R (ug/L)



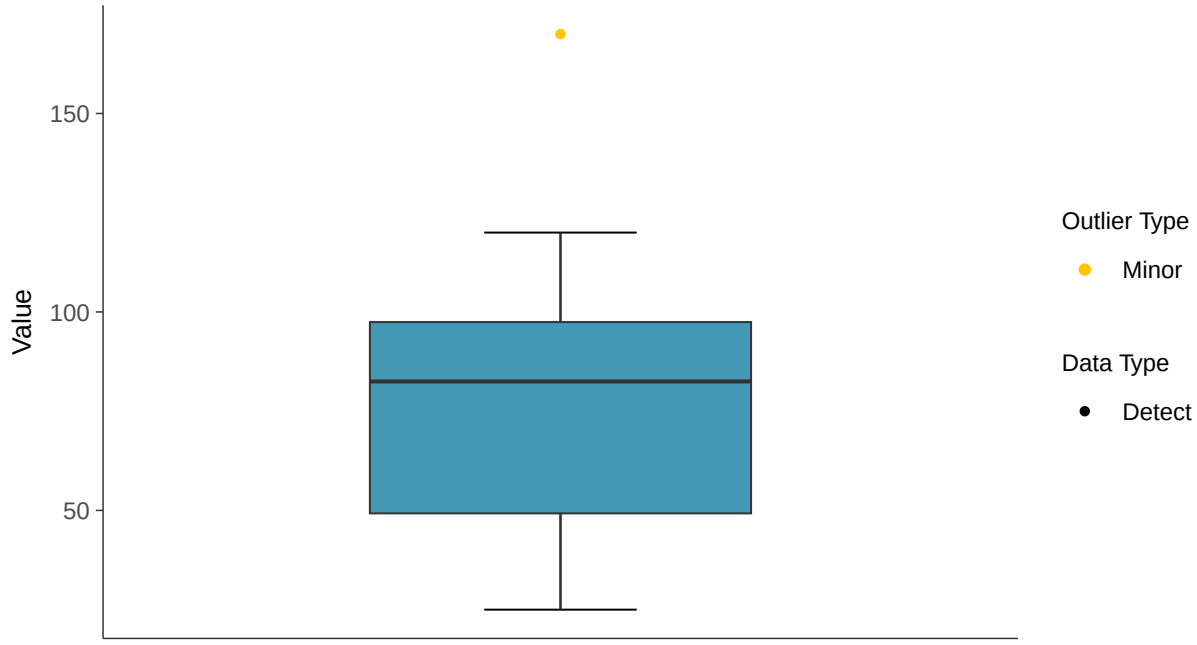

**Histogram**

Lithium, MW-17001R (ug/L)



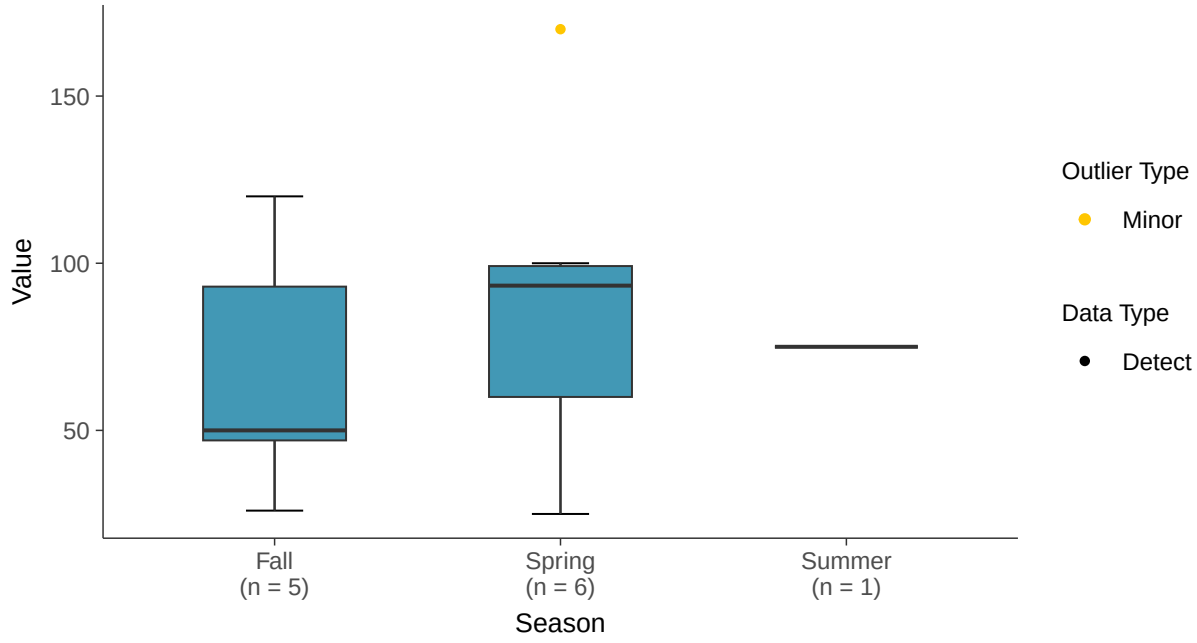
## Boxplot

Lithium, MW-17001R (ug/L)



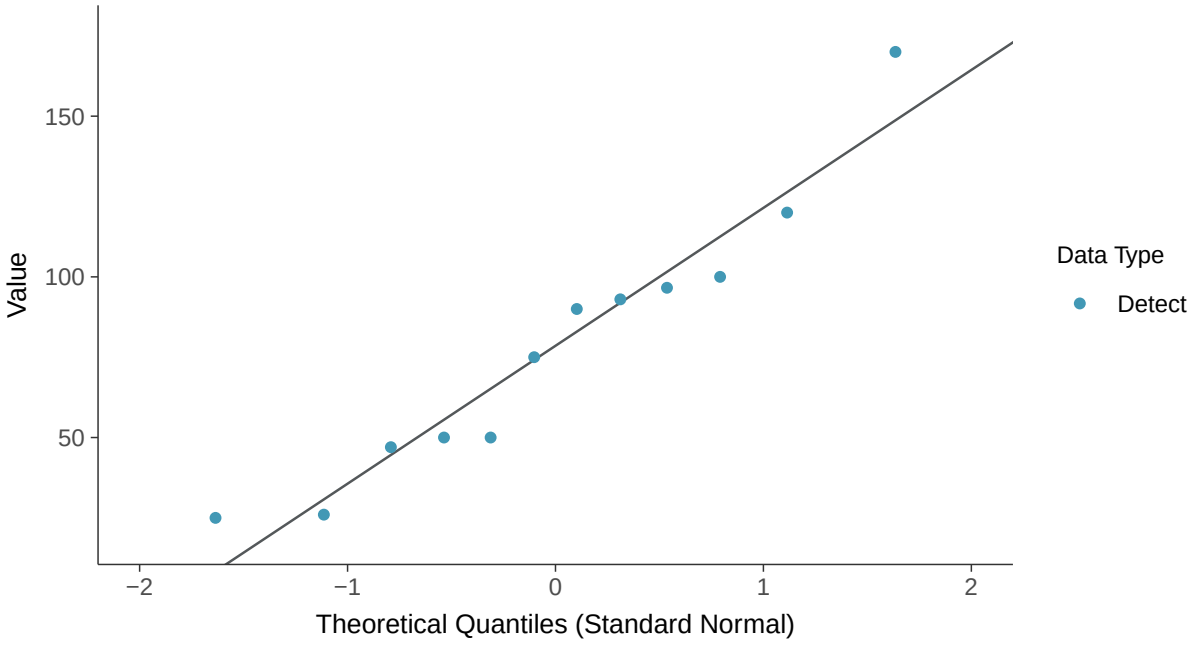

## Boxplot by Season

Lithium, MW-17001R (ug/L)



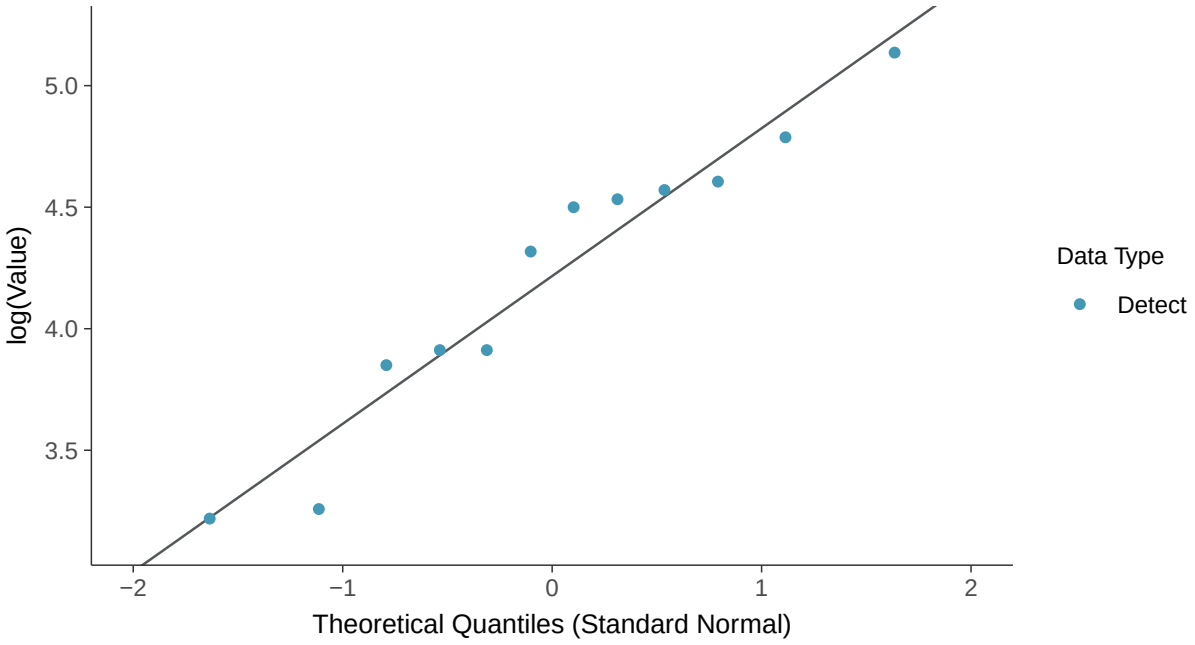
**Normal Q-Q plot**

Lithium, MW-17001R (ug/L)



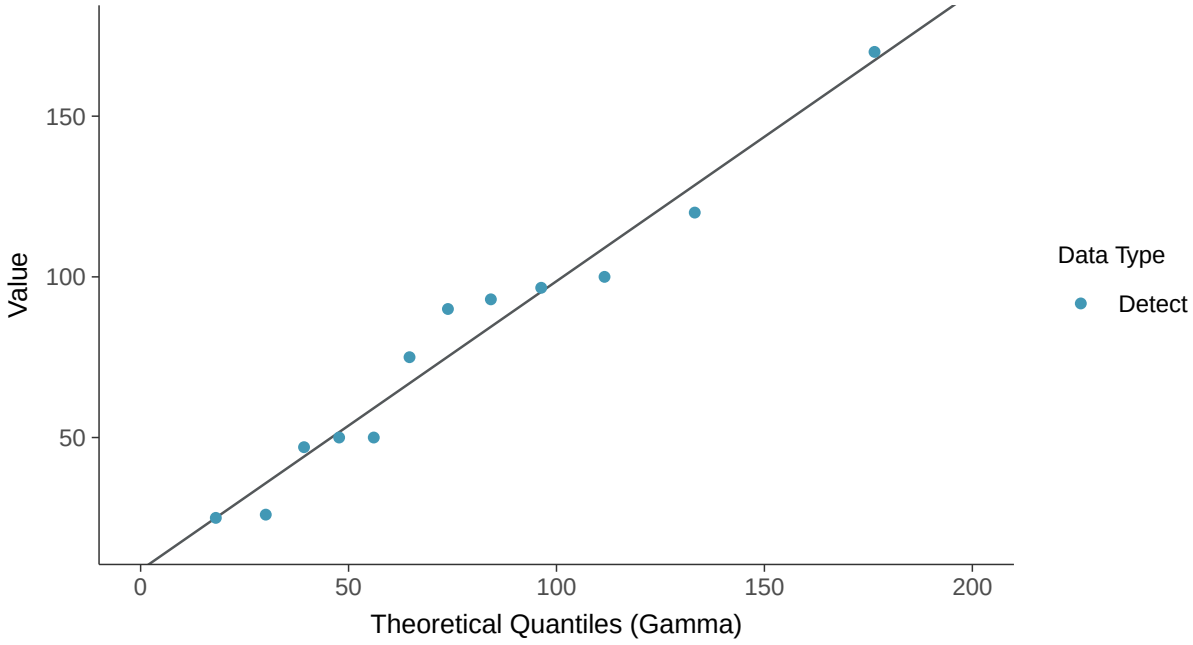

**Lognormal Q-Q plot**

Lithium, MW-17001R (ug/L)



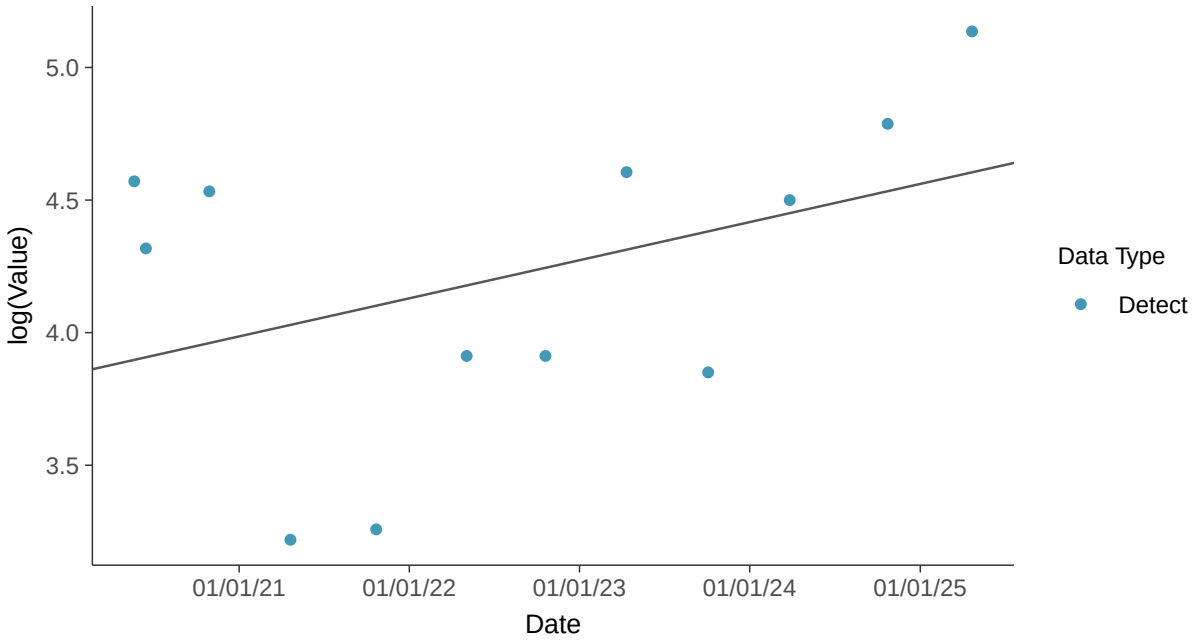
**Gamma Q-Q plot**

Lithium, MW-17001R (ug/L)



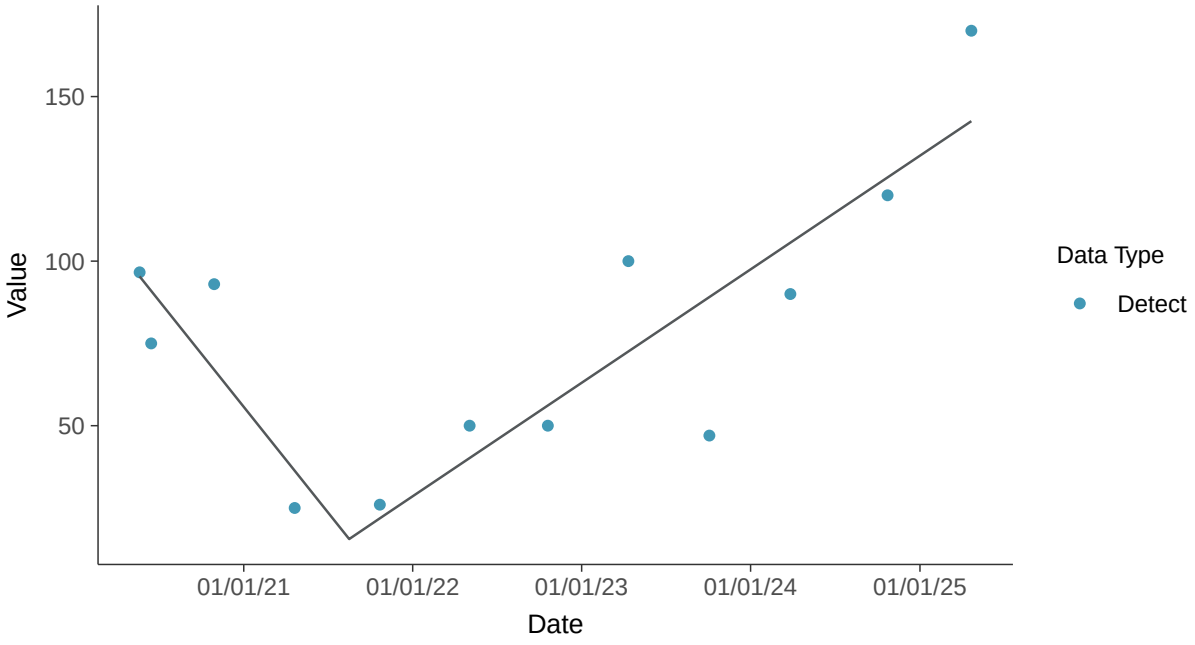

**Trend Regression: Lognormal MLE**

Lithium, MW-17001R (ug/L)



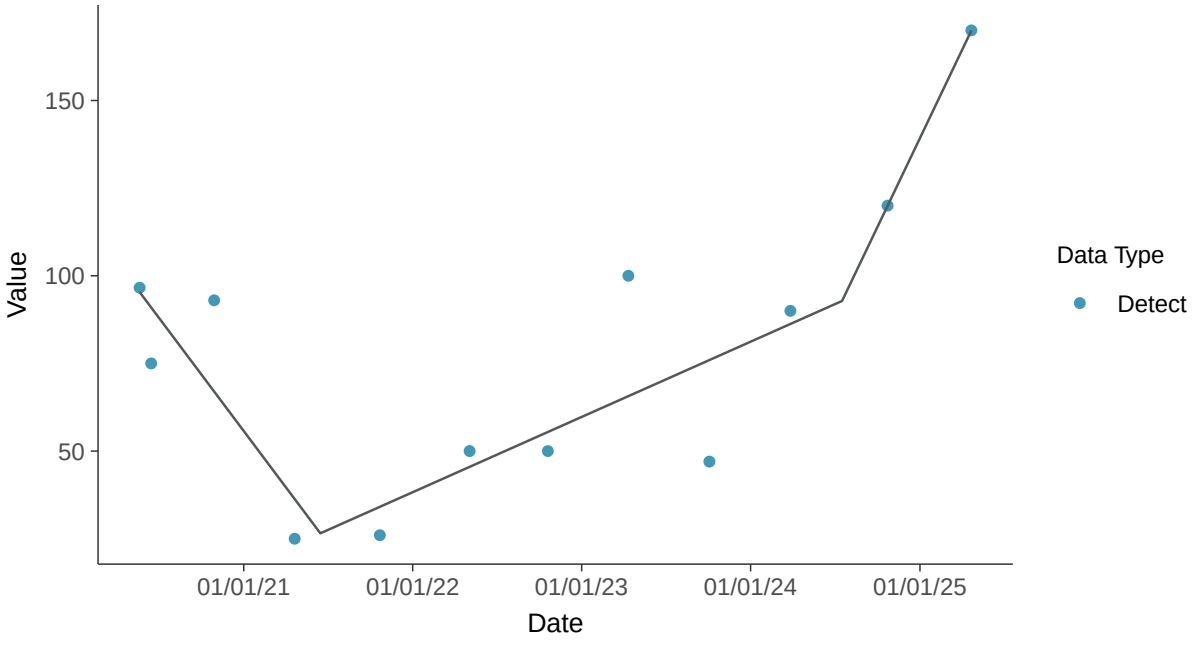
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-17001R (ug/L)



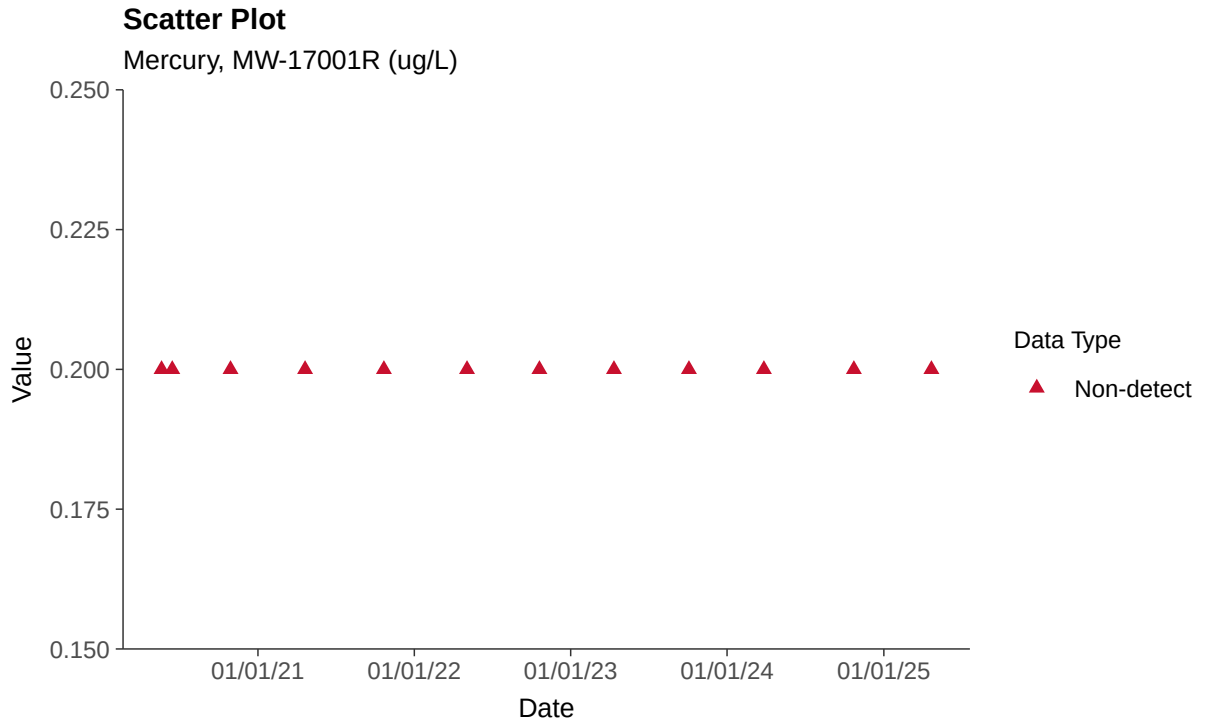

**Trend Regression: Piecewise Linear-Linear-Linear**

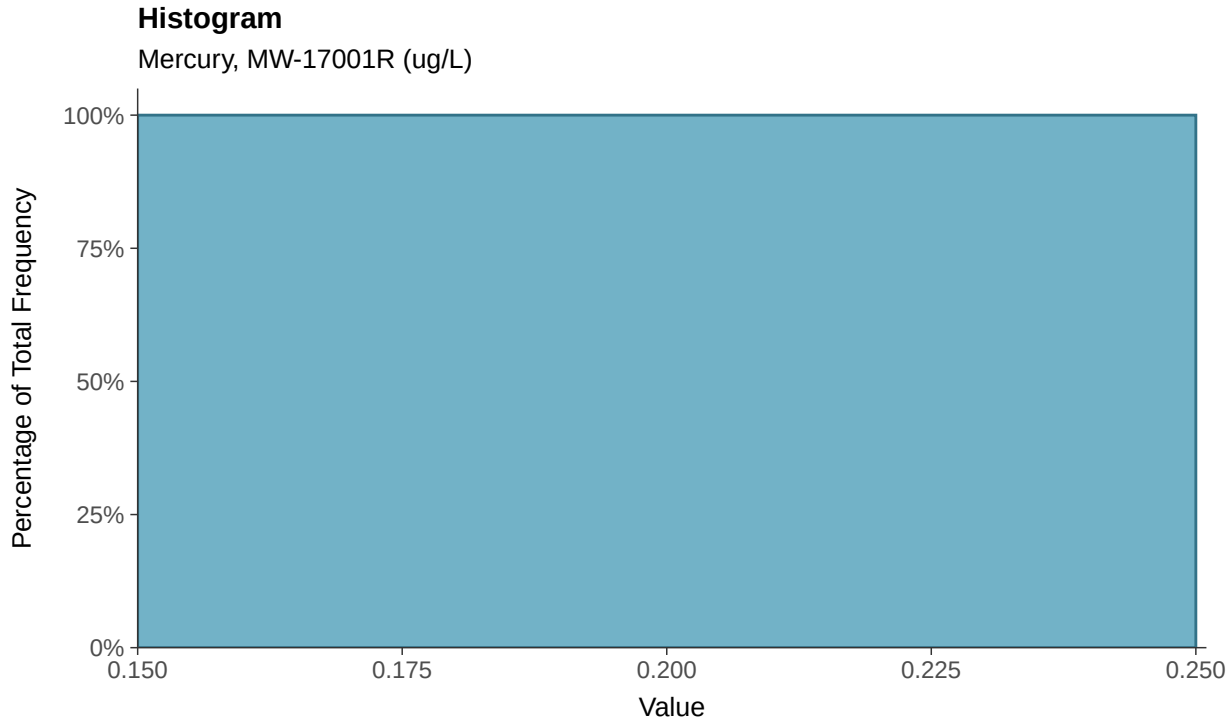
Lithium, MW-17001R (ug/L)



## Appendix IV: Mercury, MW-17001R

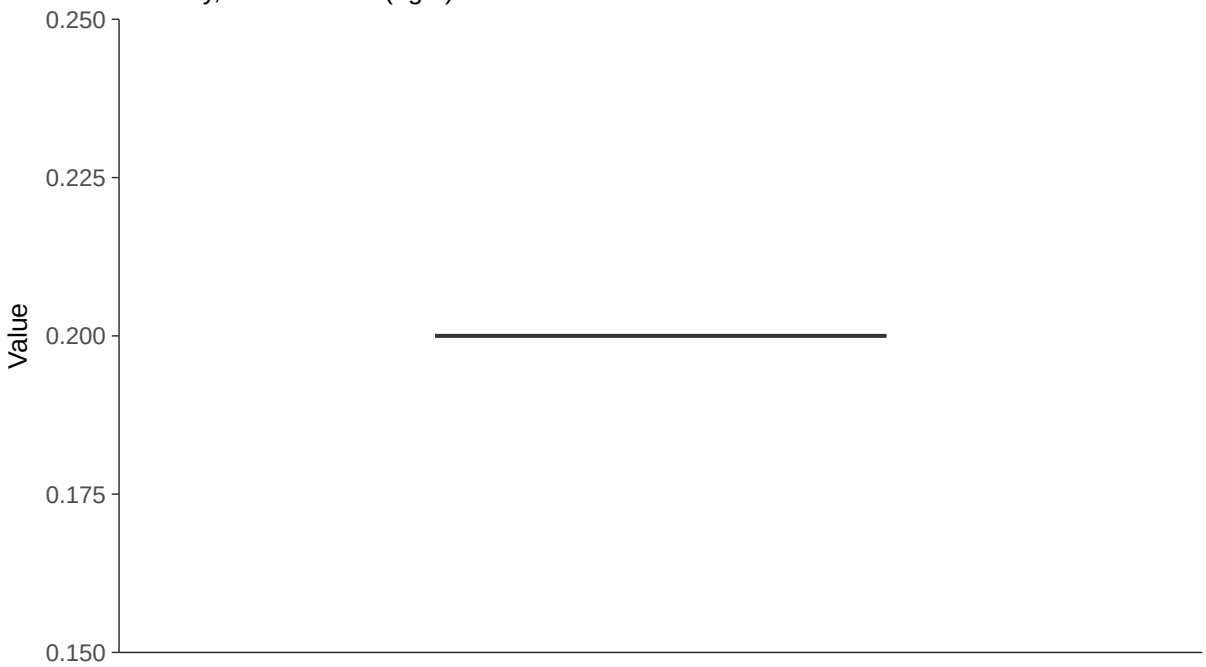
ID: 14_2_118



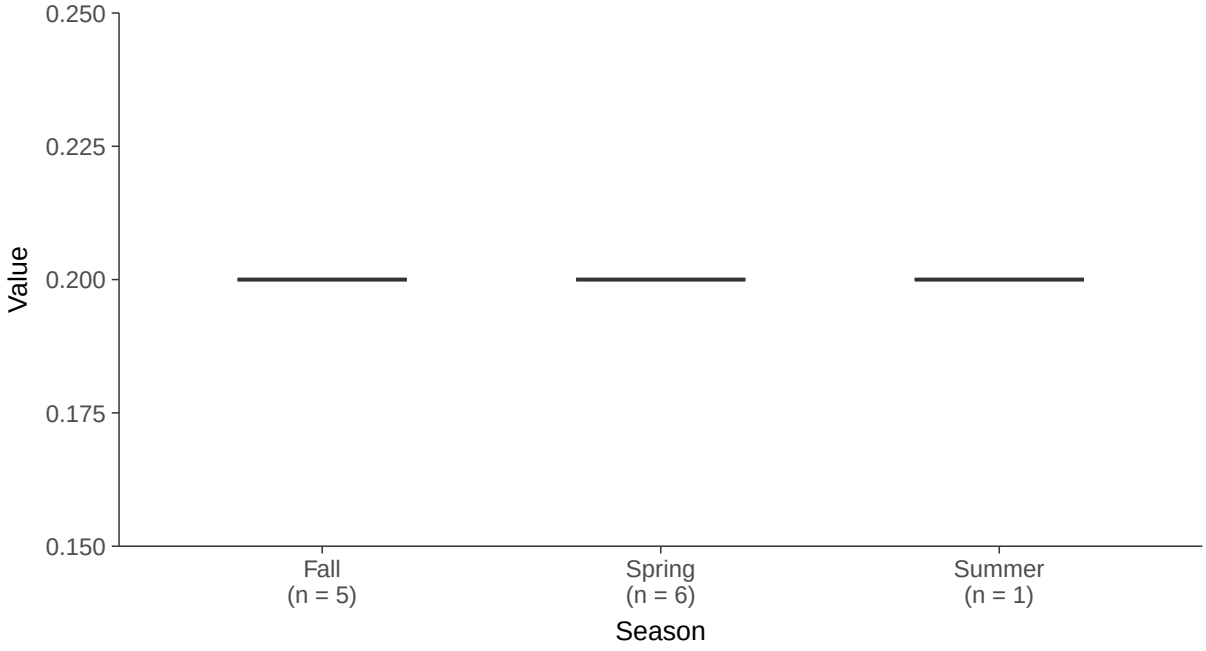
**Boxplot**

Mercury, MW-17001R (ug/L)




**Boxplot by Season**

Mercury, MW-17001R (ug/L)

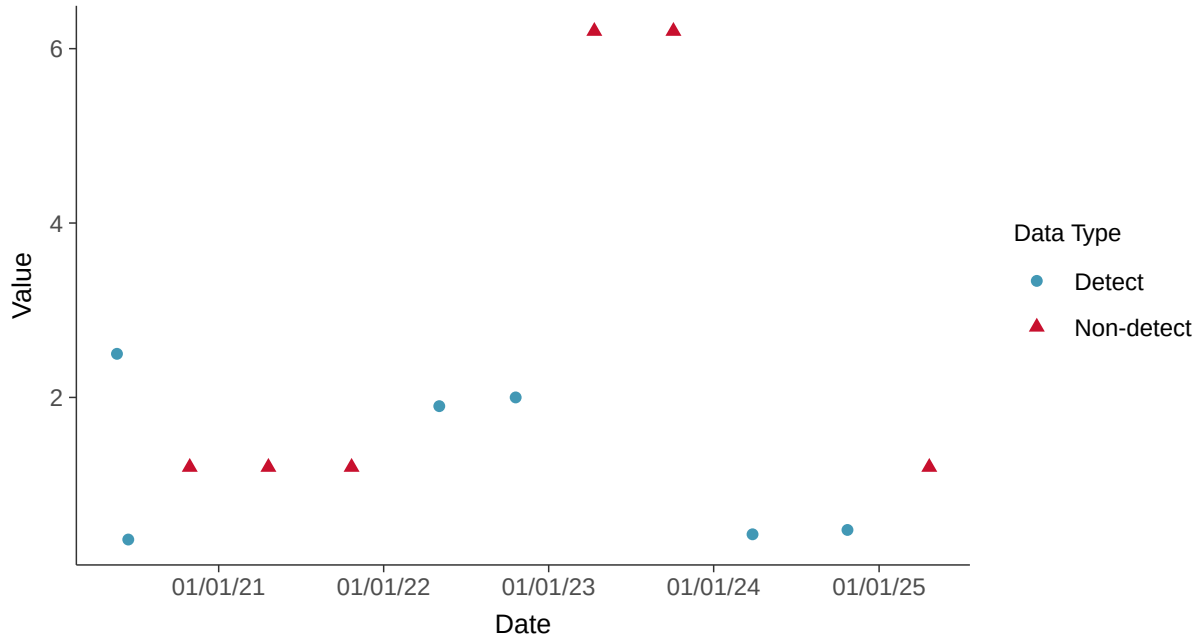


## Appendix IV: Molybdenum, MW-17001R

ID: 14_2_119

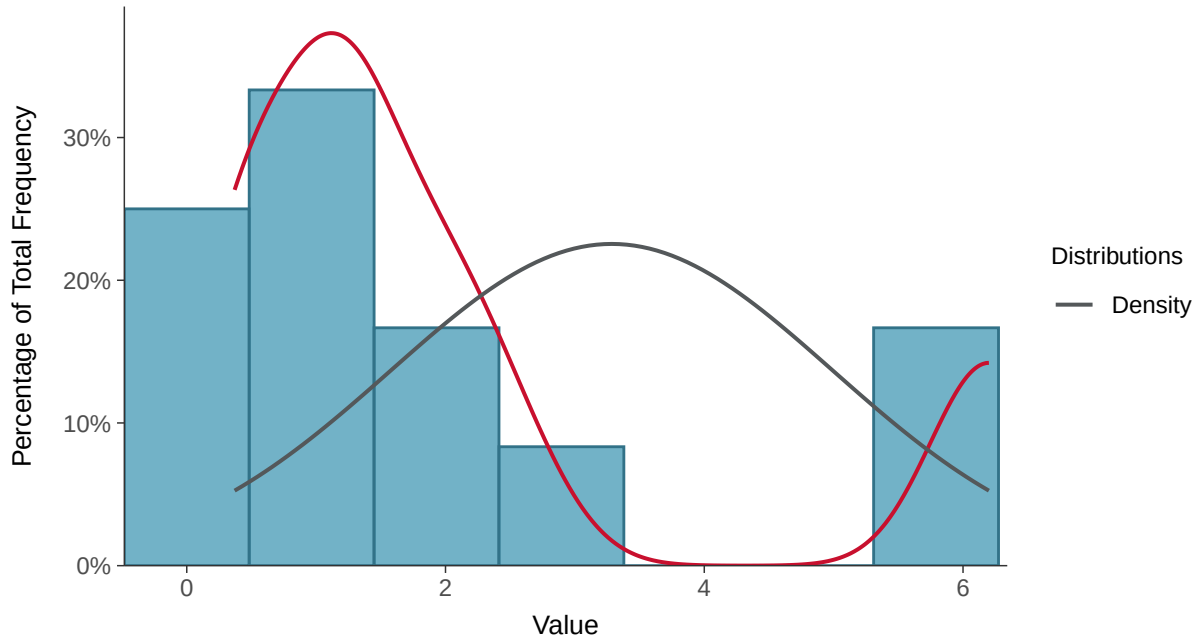
**Scatter Plot**

Molybdenum, MW-17001R (ug/L)



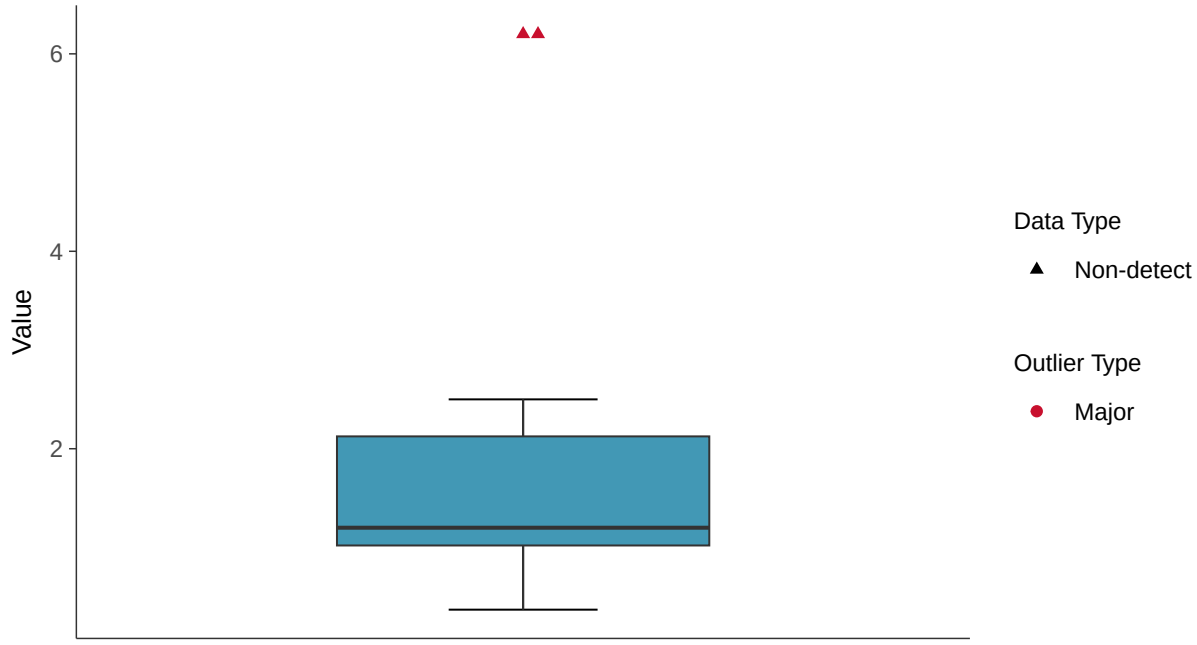

**Histogram**

Molybdenum, MW-17001R (ug/L)



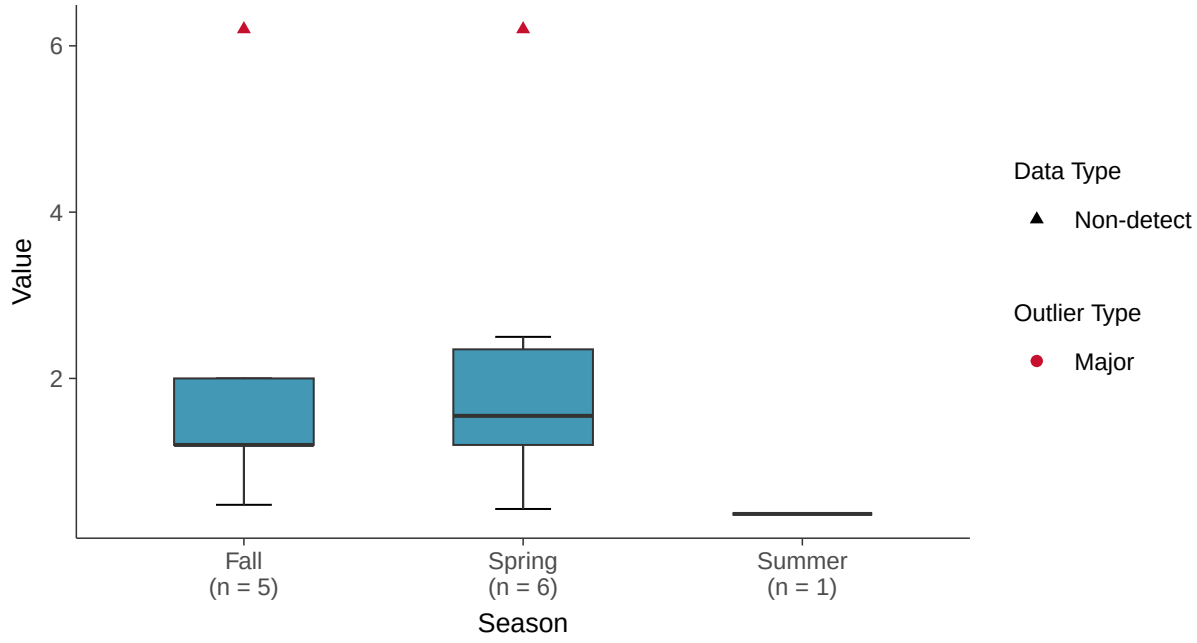
## Boxplot

Molybdenum, MW-17001R (ug/L)



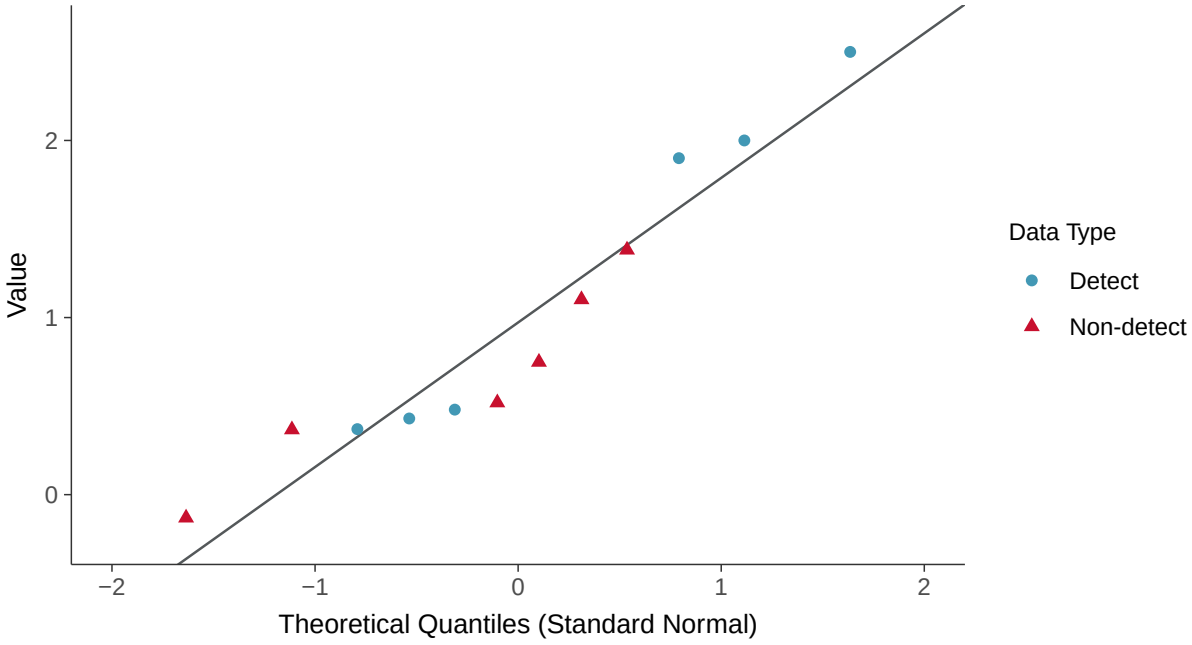

## Boxplot by Season

Molybdenum, MW-17001R (ug/L)



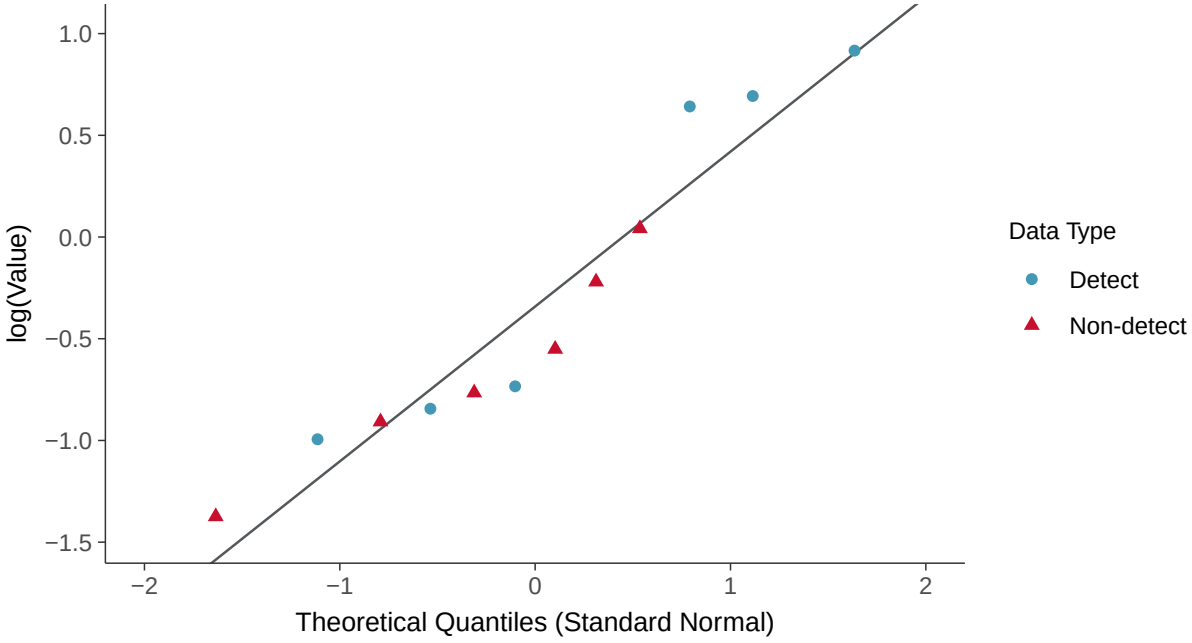
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17001R (ug/L)



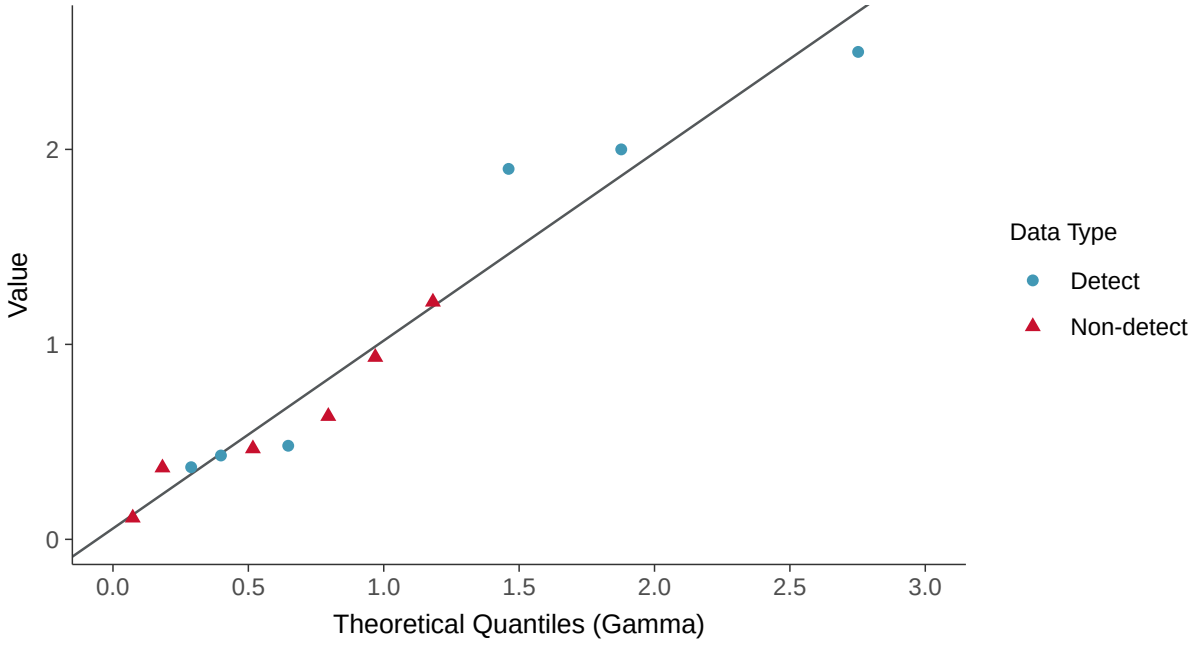

**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17001R (ug/L)



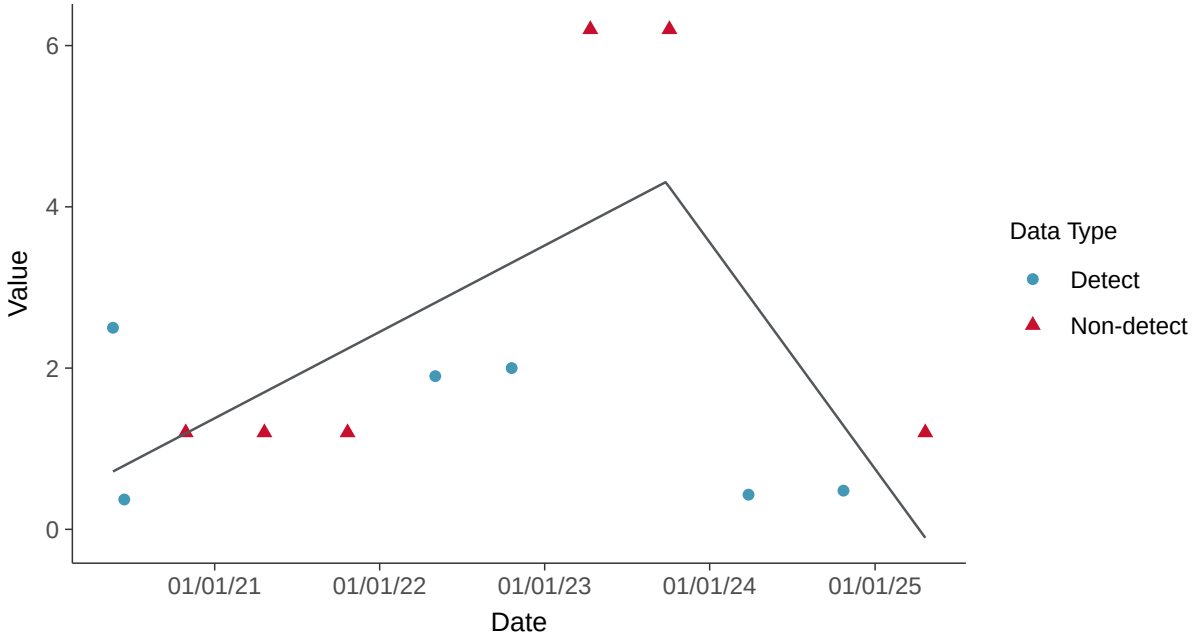
**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17001R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17001R (ug/L)

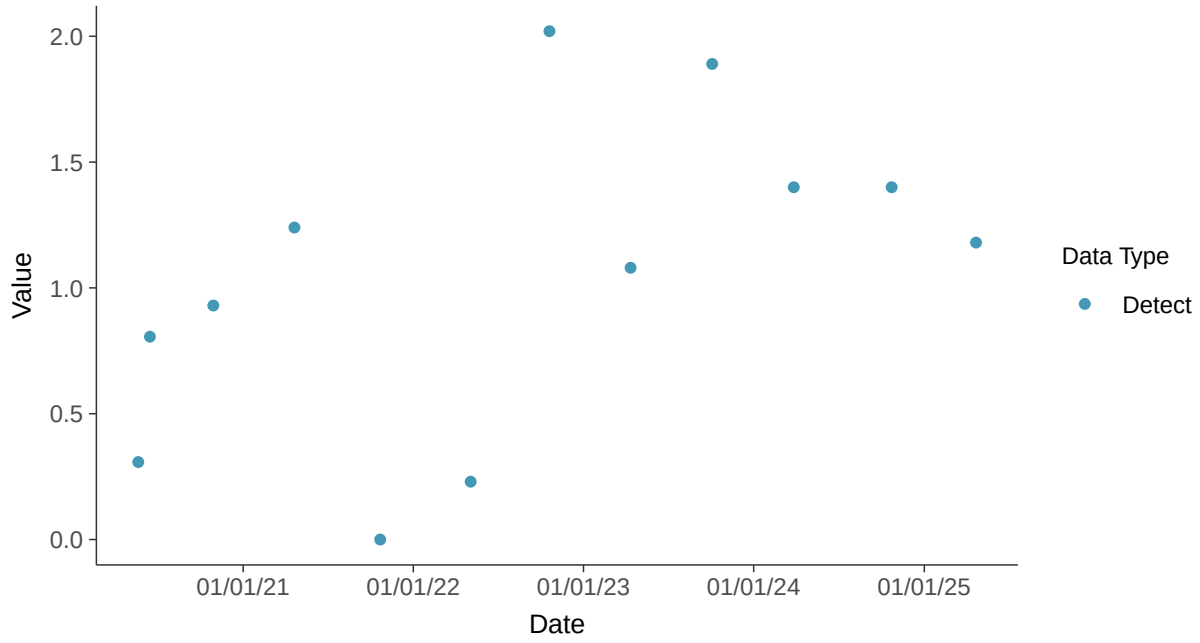


## Appendix IV: Radium-226+228, MW-17001R

ID: 14_2_125

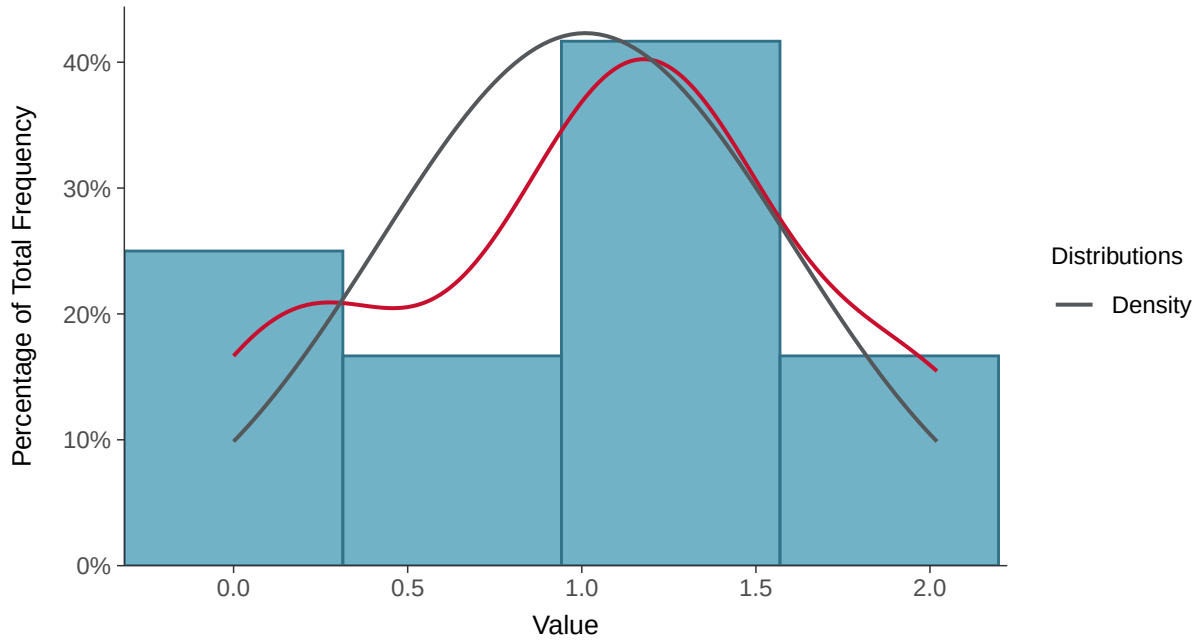
**Scatter Plot**

Radium-226+228, MW-17001R (pCi/L)



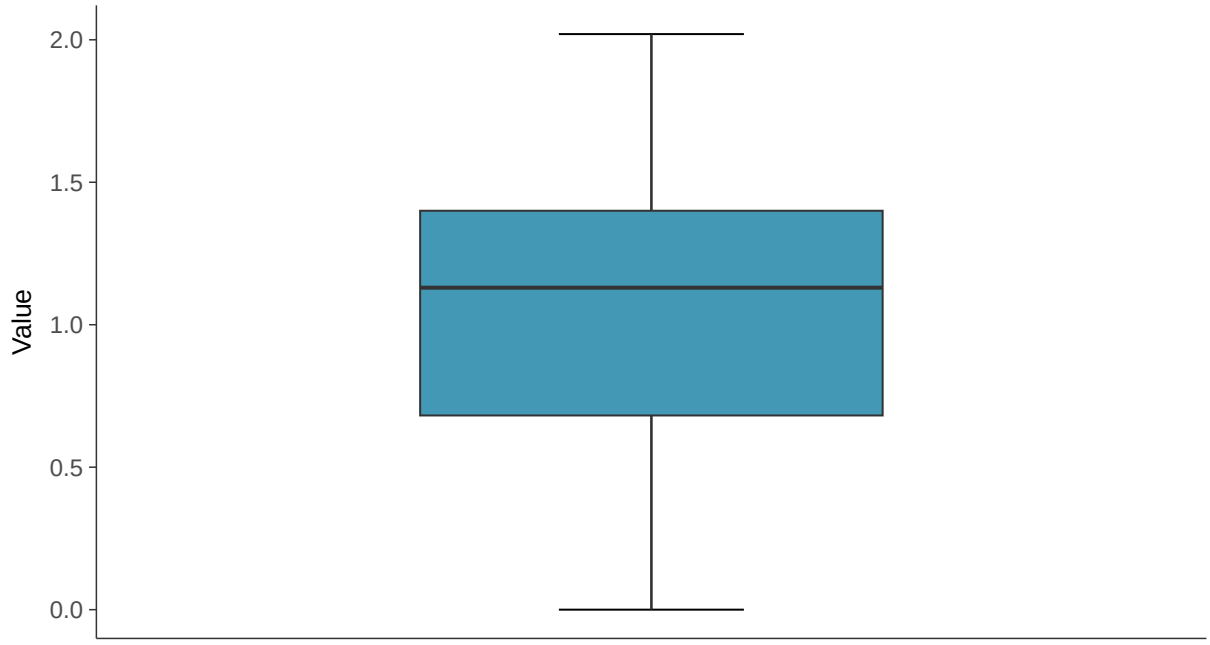

**Histogram**

Radium-226+228, MW-17001R (pCi/L)



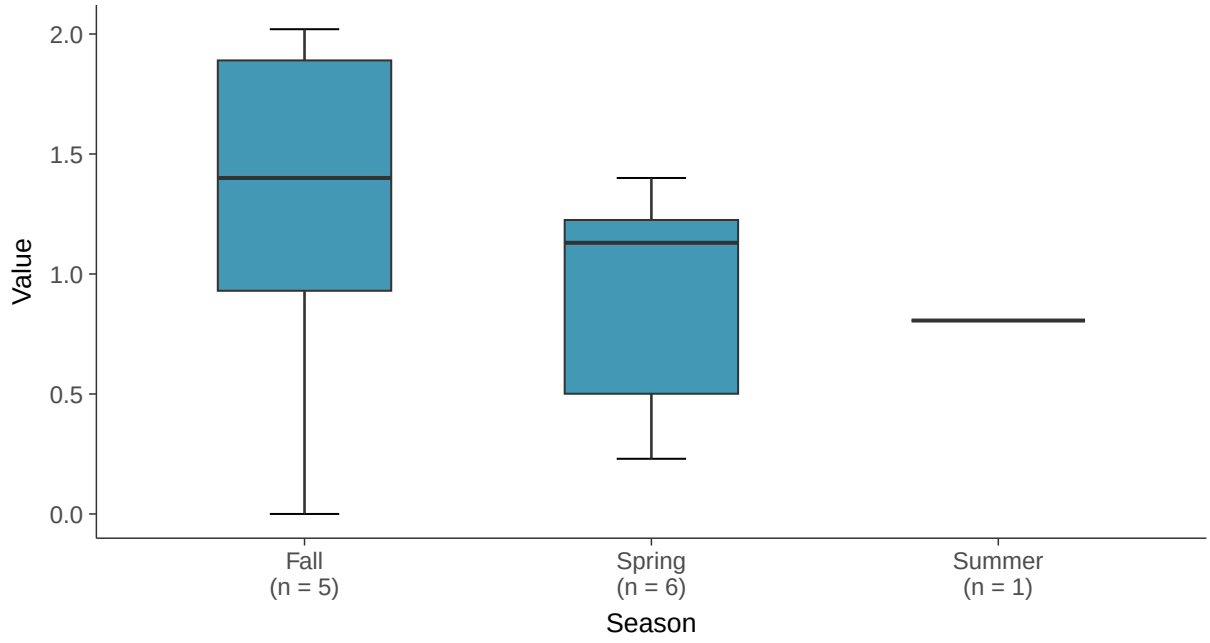
**Boxplot**

Radium-226+228, MW-17001R (pCi/L)



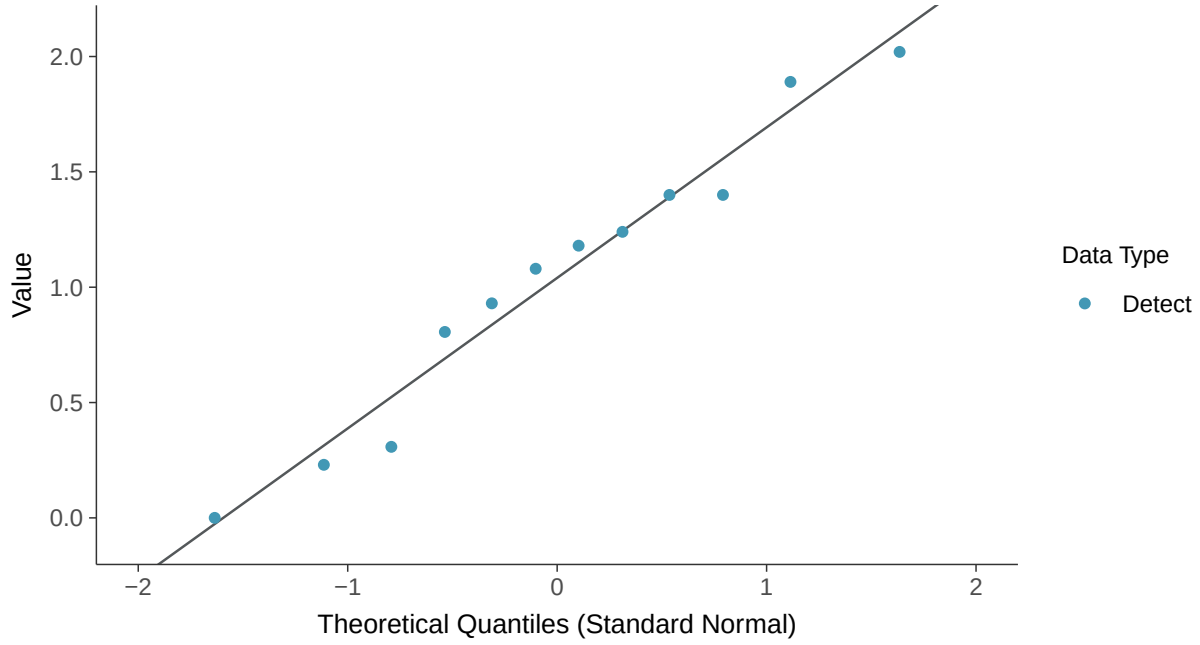

**Boxplot by Season**

Radium-226+228, MW-17001R (pCi/L)



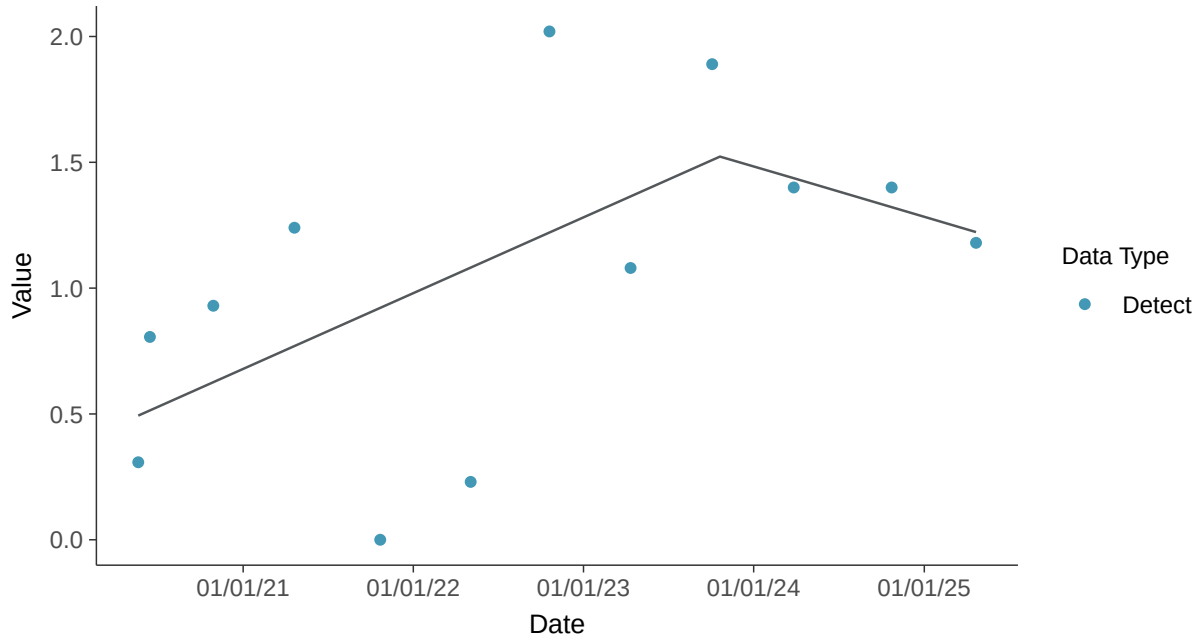
**Normal Q-Q plot**

Radium-226+228, MW-17001R (pCi/L)




**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17001R (pCi/L)

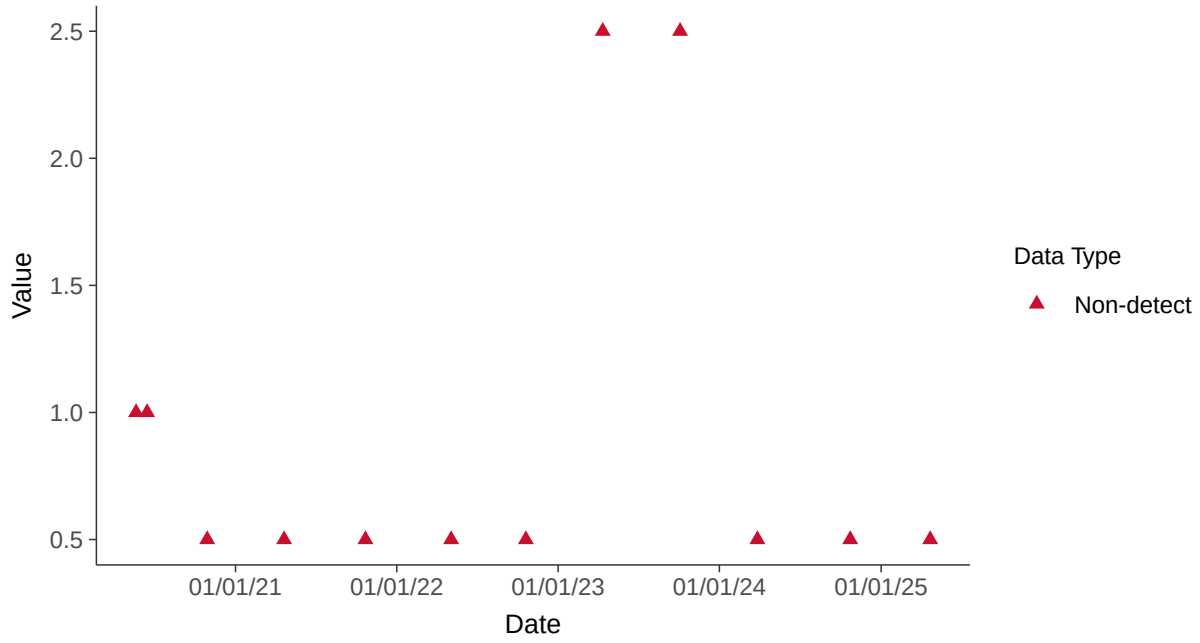


## Appendix IV: Selenium, MW-17001R

ID: 14_2_127

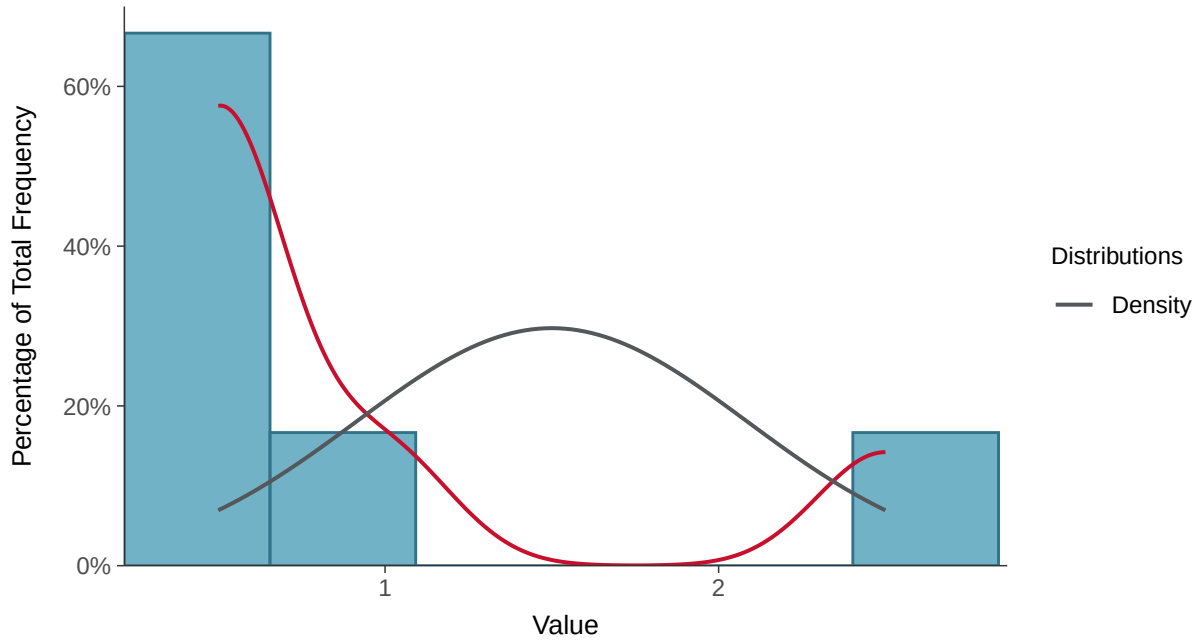
**Scatter Plot**

Selenium, MW-17001R (ug/L)



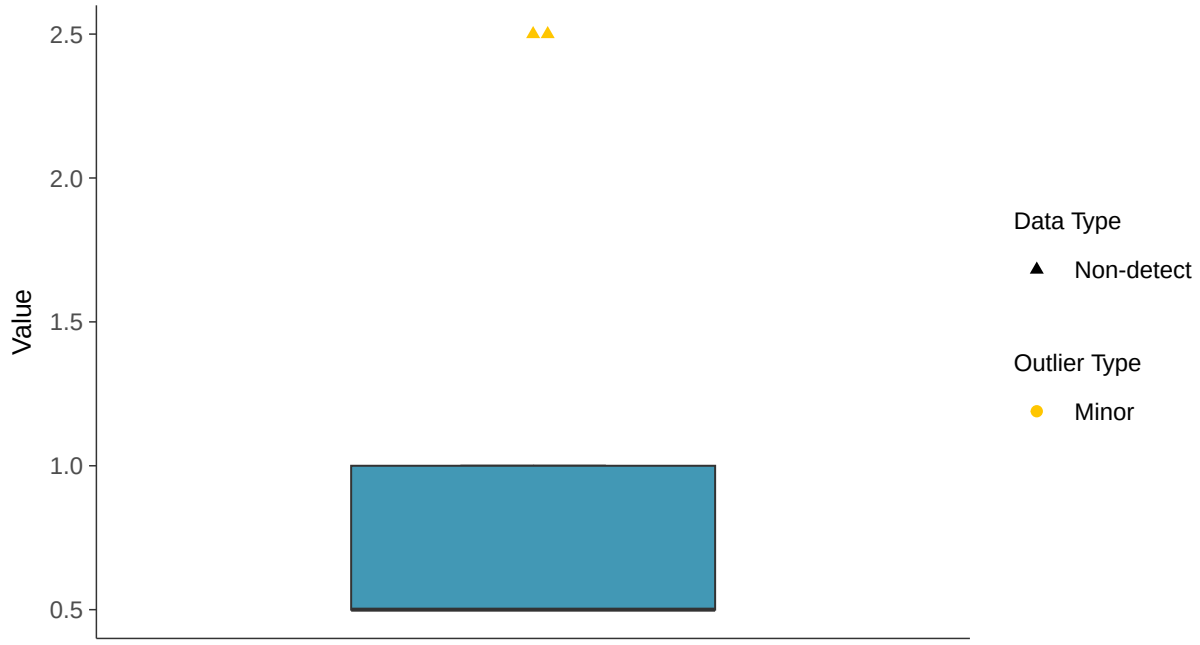

**Histogram**

Selenium, MW-17001R (ug/L)



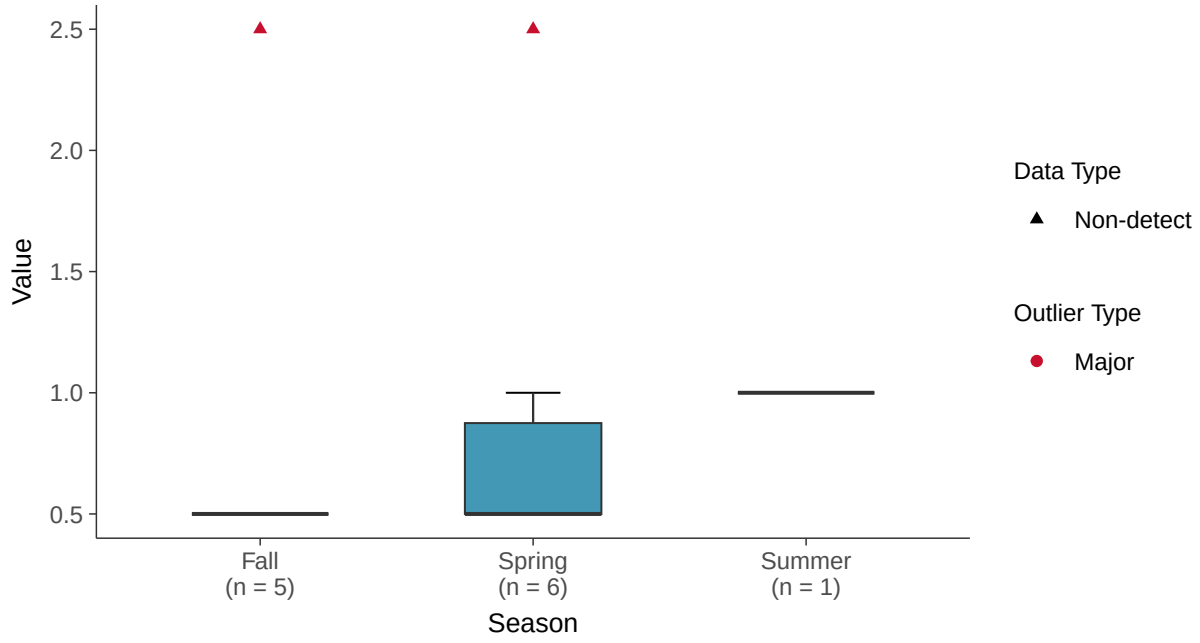
## Boxplot

Selenium, MW-17001R (ug/L)



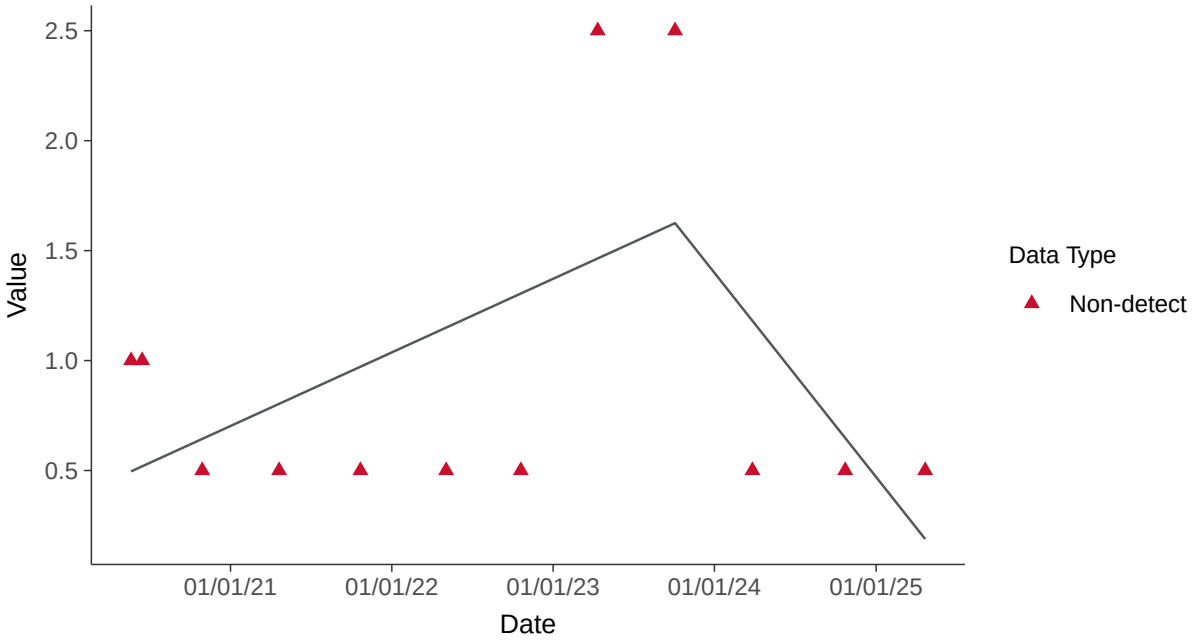

## Boxplot by Season

Selenium, MW-17001R (ug/L)



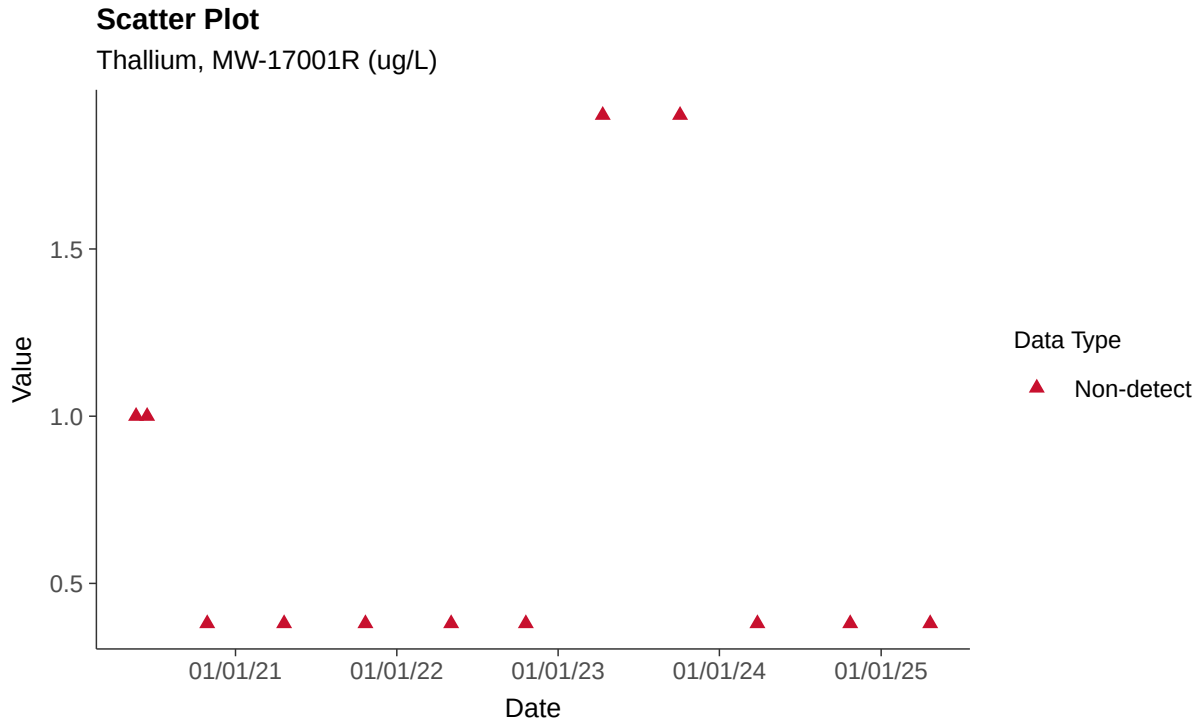
**Trend Regression: Piecewise Linear-Linear**

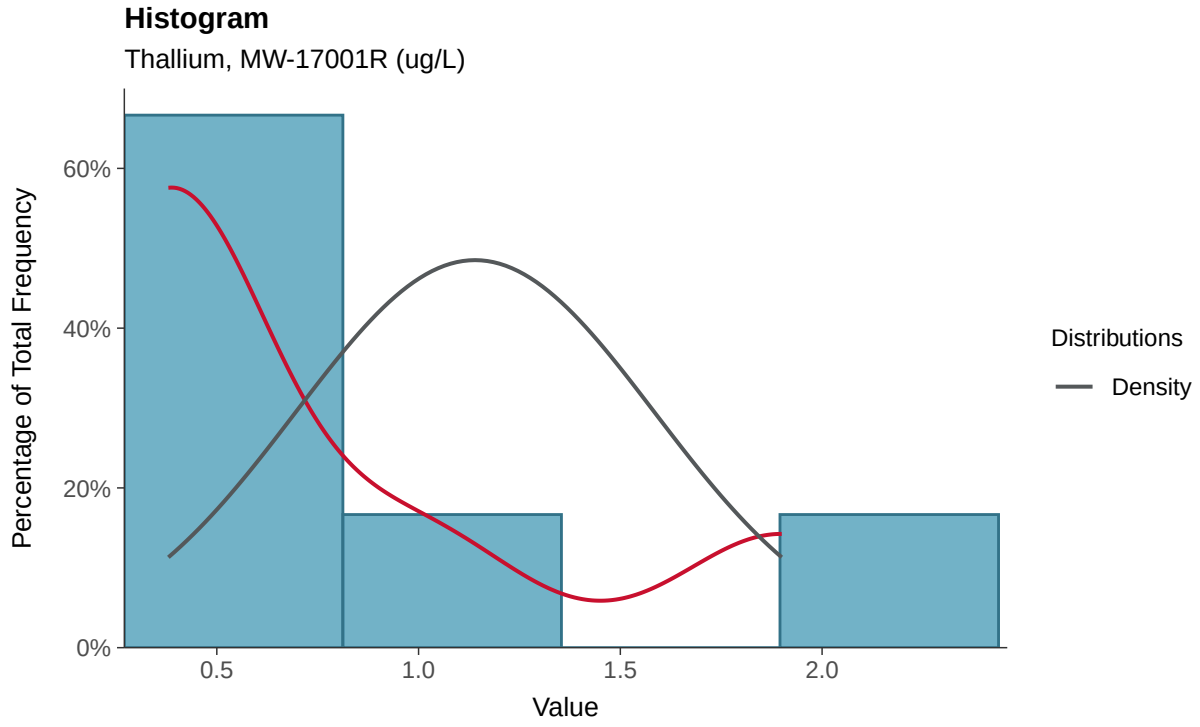
Selenium, MW-17001R (ug/L)



# Appendix IV: Thallium, MW-17001R

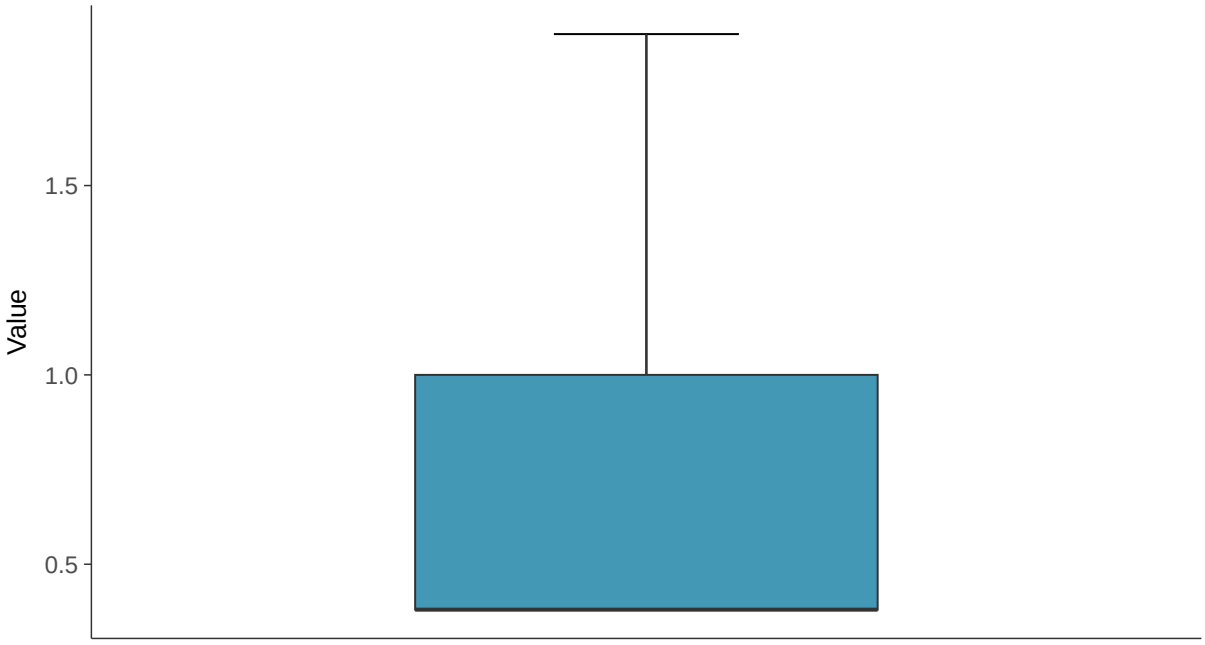
ID: 14_2_131



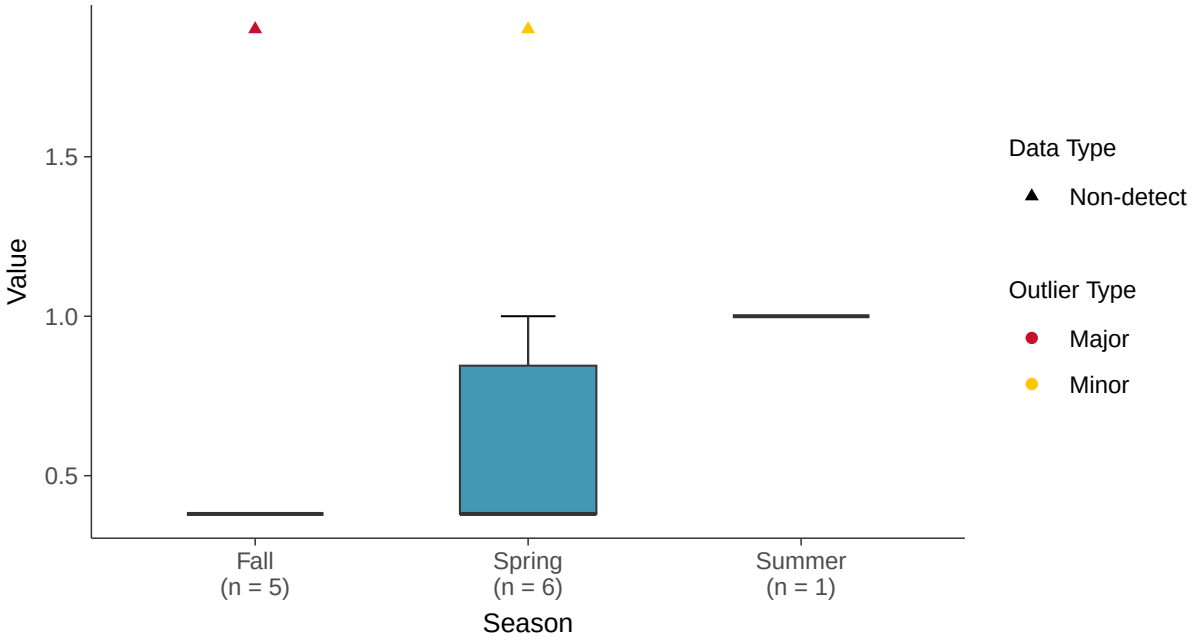
## Boxplot

Thallium, MW-17001R (ug/L)



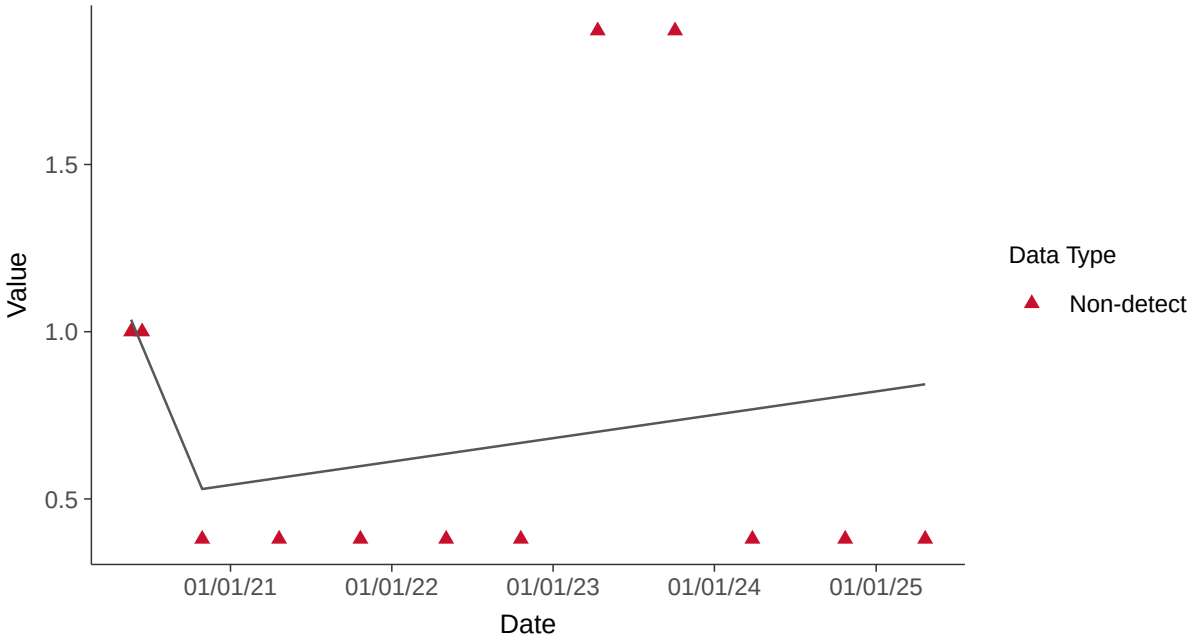

## Boxplot by Season

Thallium, MW-17001R (ug/L)



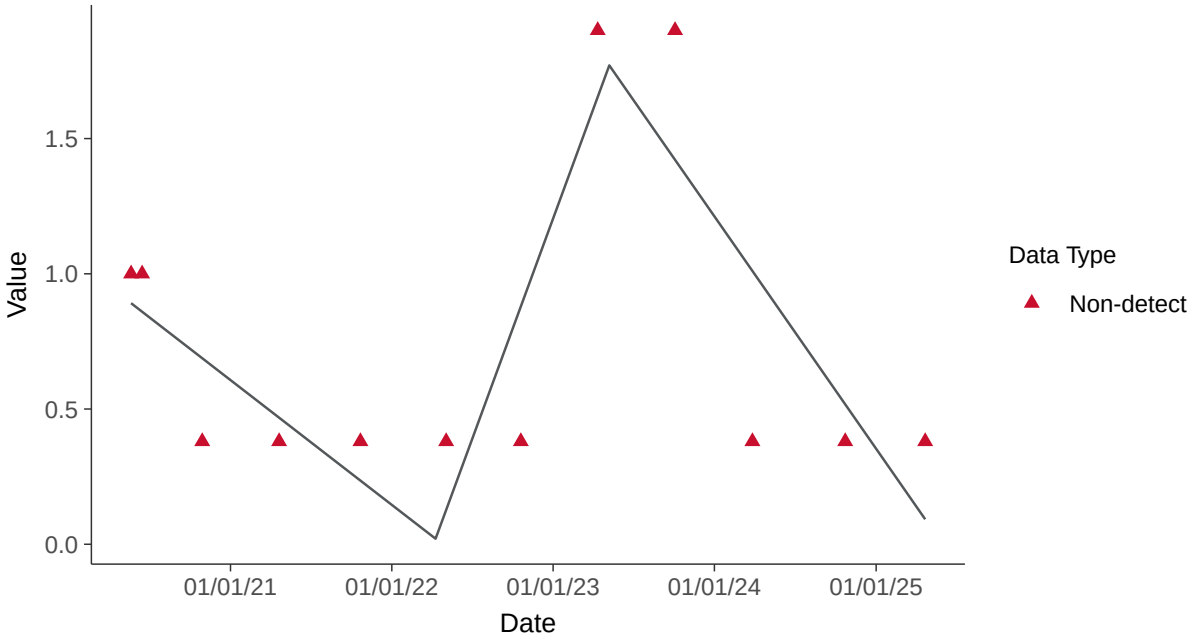
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17001R (ug/L)



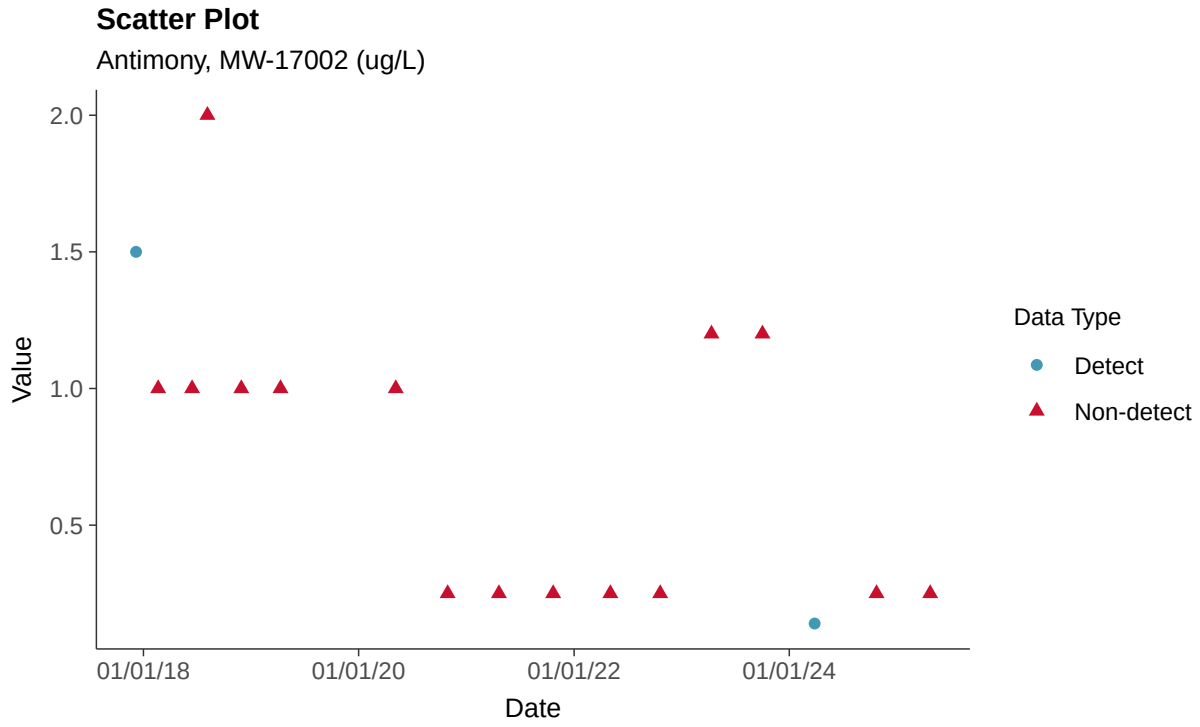

**Trend Regression: Piecewise Linear-Linear-Linear**

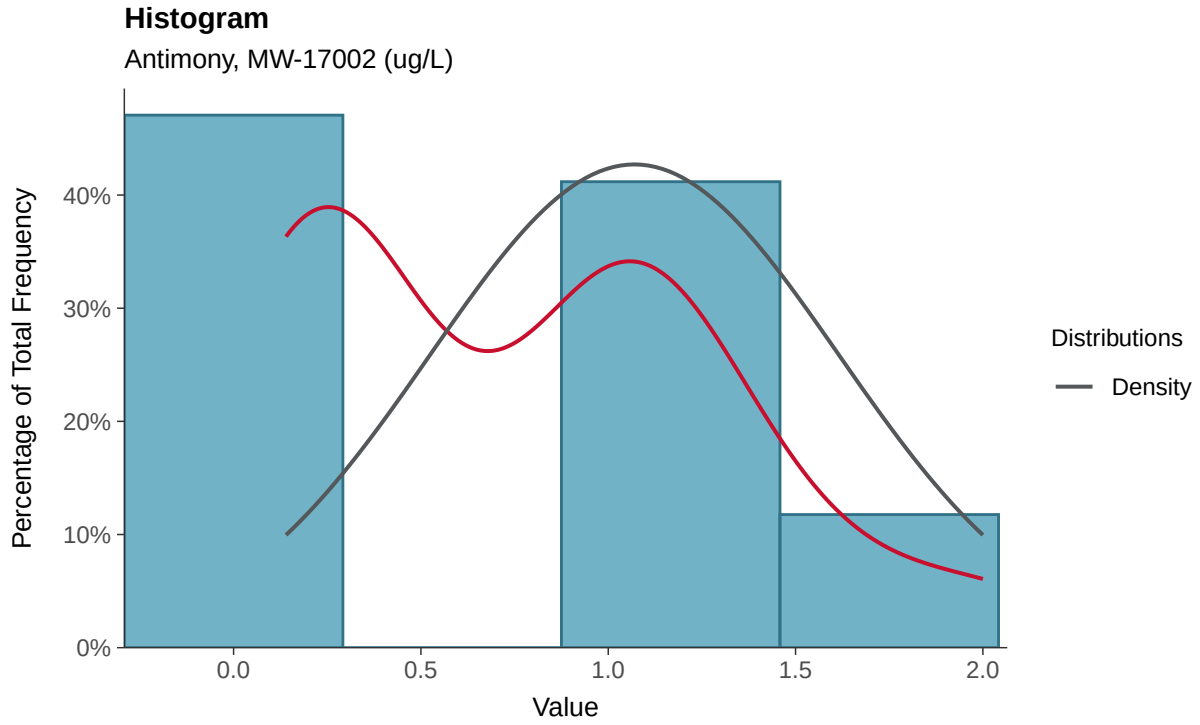
Thallium, MW-17001R (ug/L)



# Appendix IV: Antimony, MW-17002

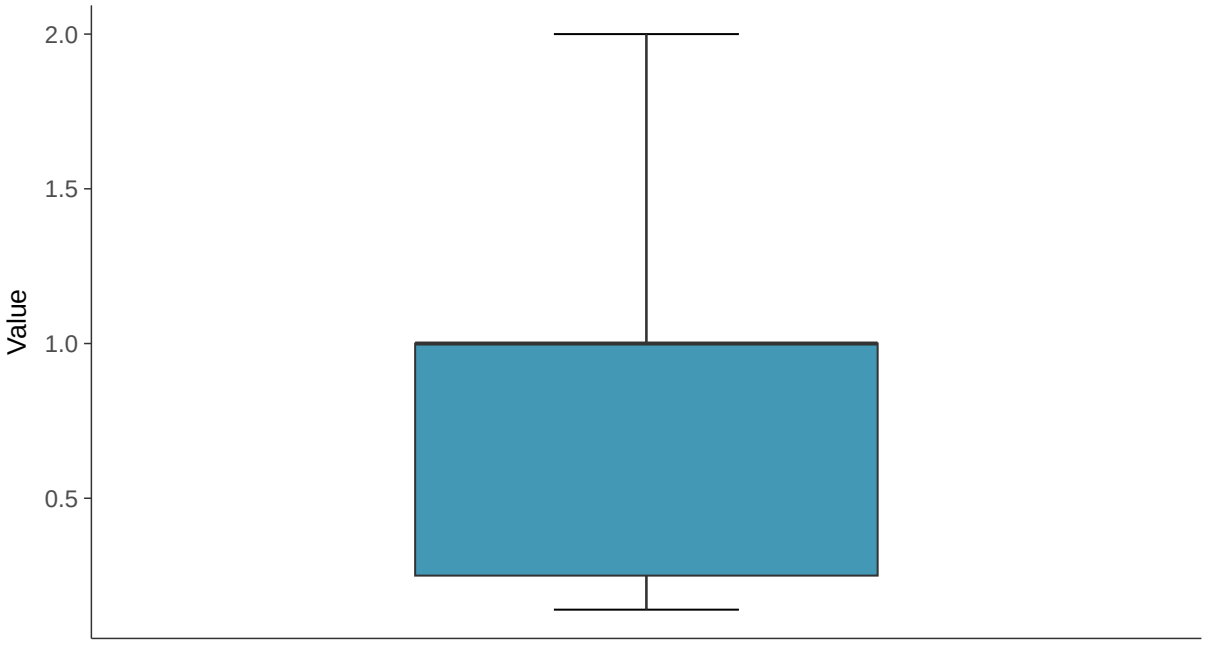
ID: 15_2_101



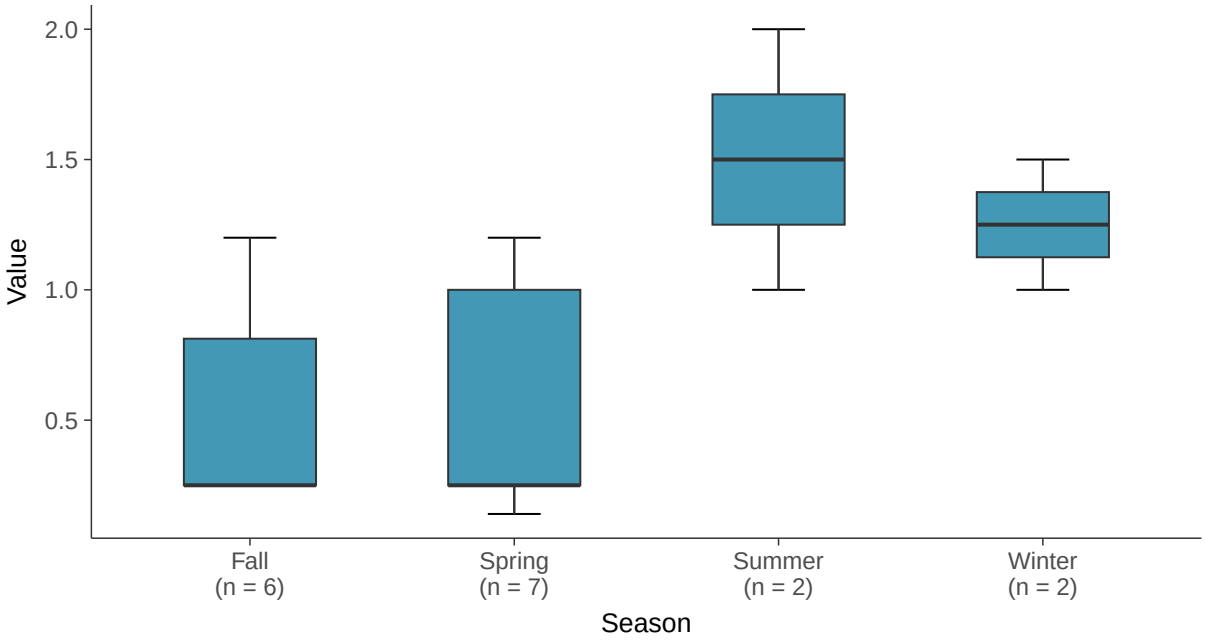
**Boxplot**

Antimony, MW-17002 (ug/L)



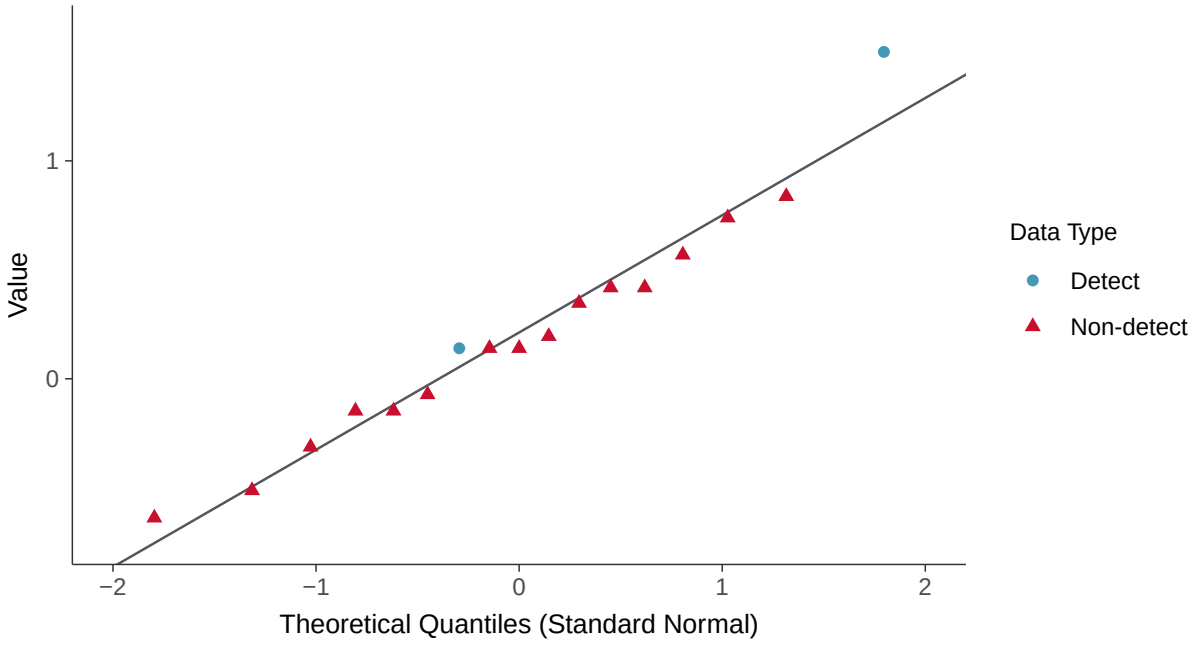

**Boxplot by Season**

Antimony, MW-17002 (ug/L)



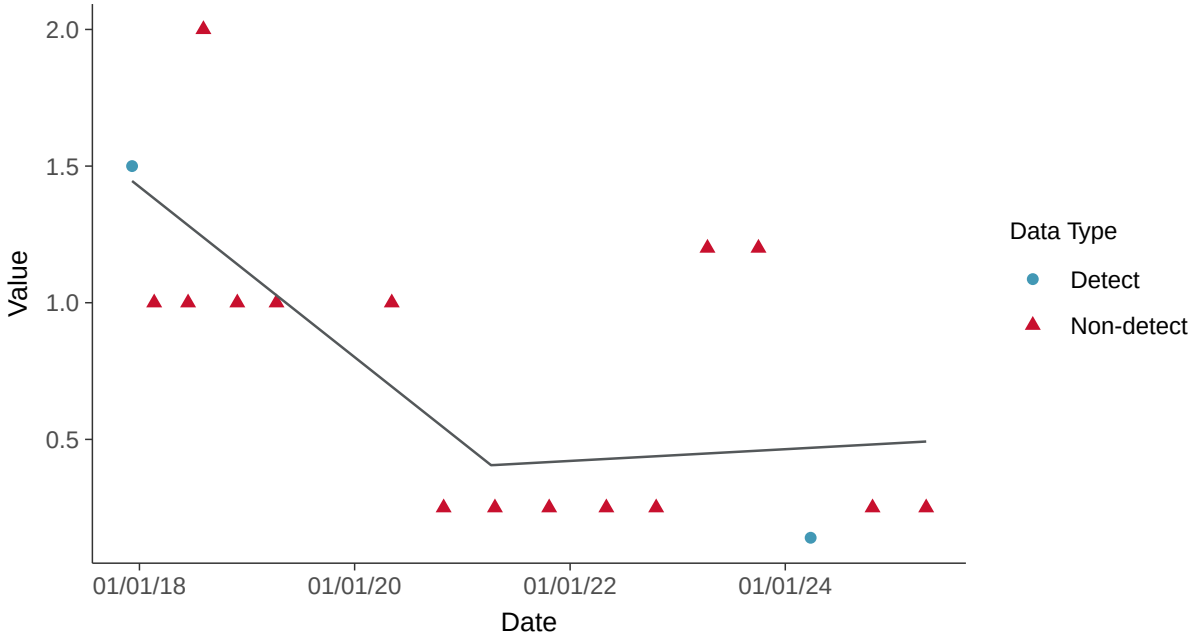
**Normal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-17002 (ug/L)



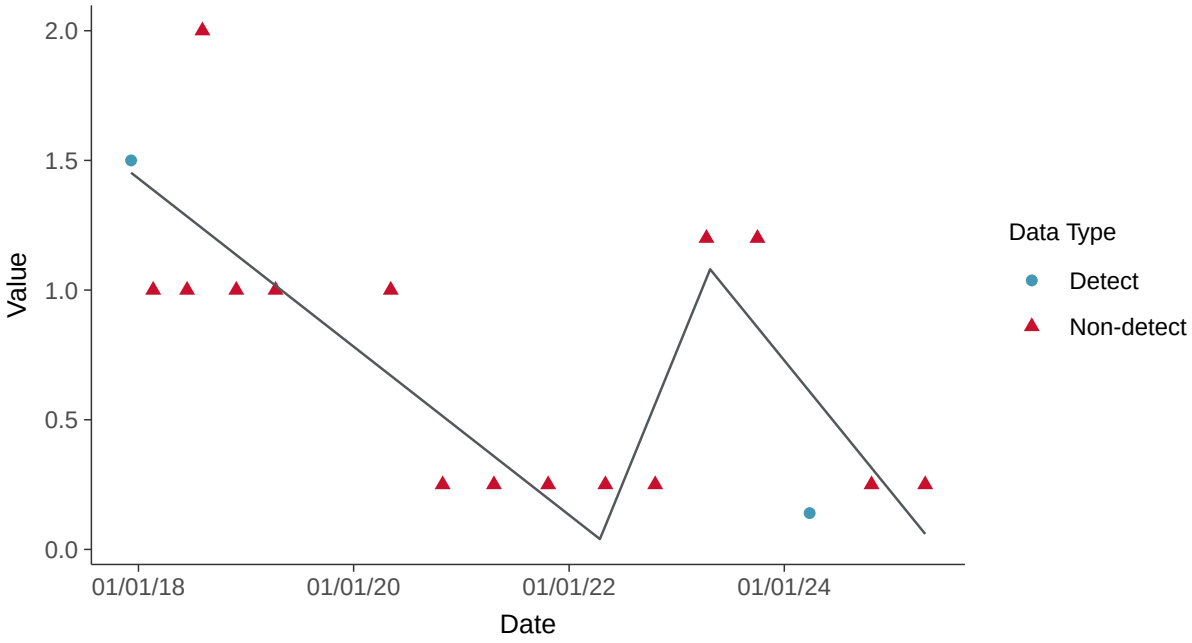

**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17002 (ug/L)



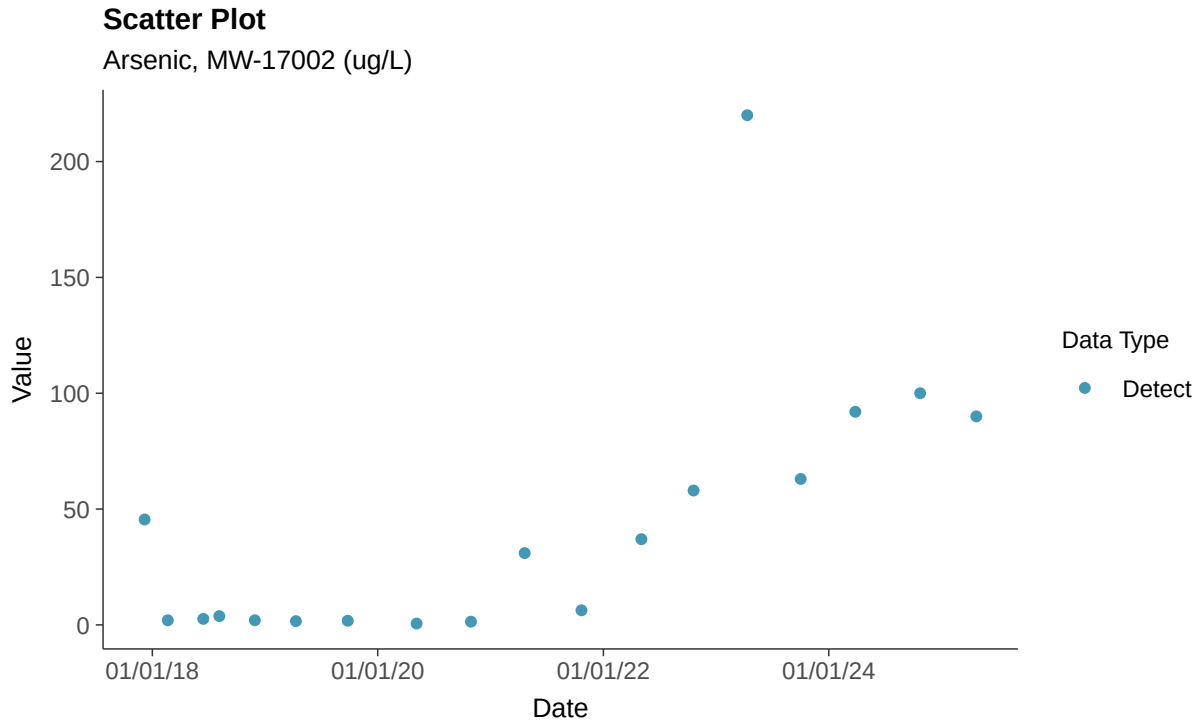
**Trend Regression: Piecewise Linear-Linear-Linear**

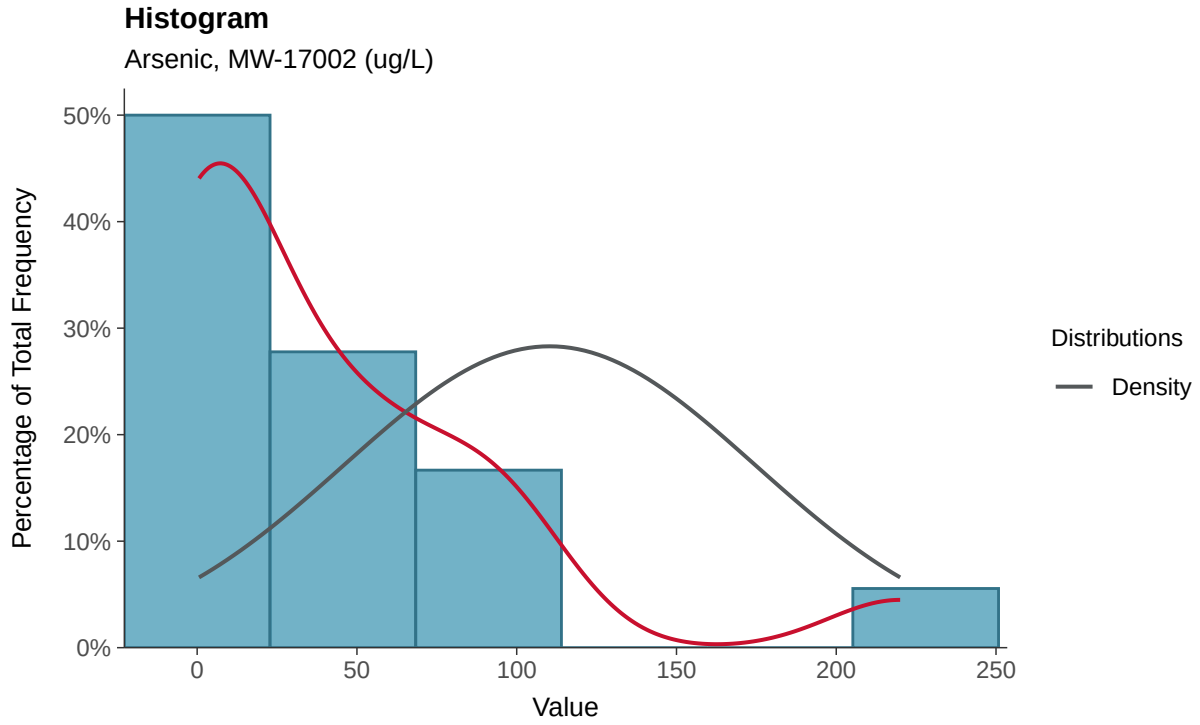
Antimony, MW-17002 (ug/L)



## Appendix IV: Arsenic, MW-17002

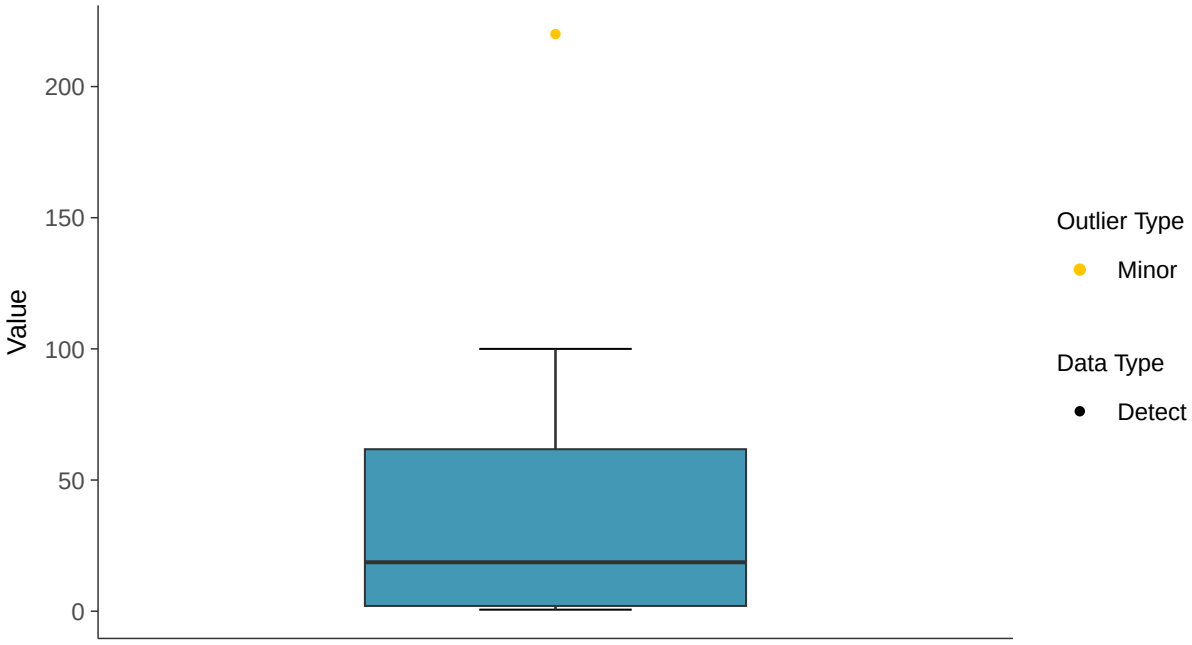
ID: 15_2_102



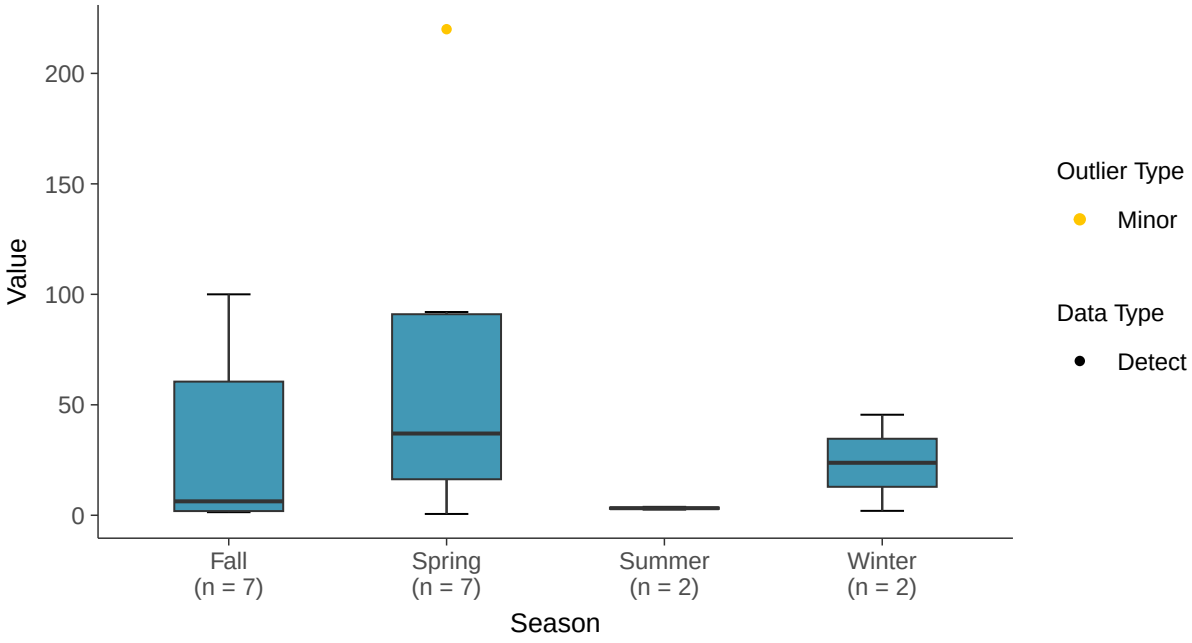
## Boxplot

Arsenic, MW-17002 (ug/L)



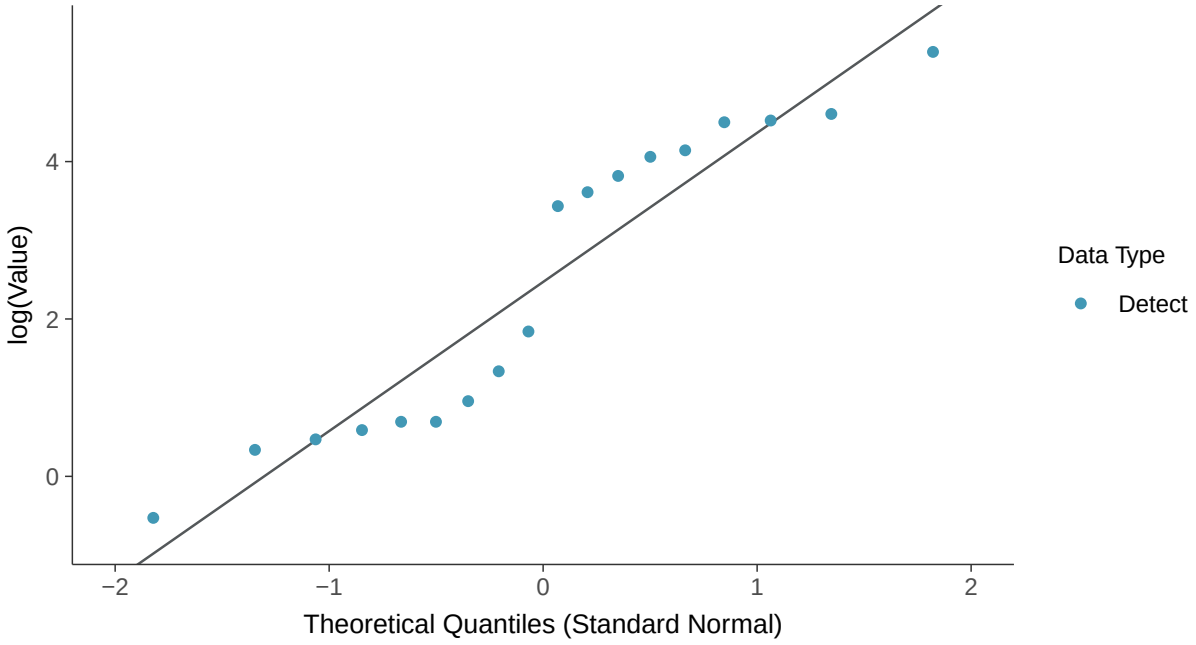

## Boxplot by Season

Arsenic, MW-17002 (ug/L)



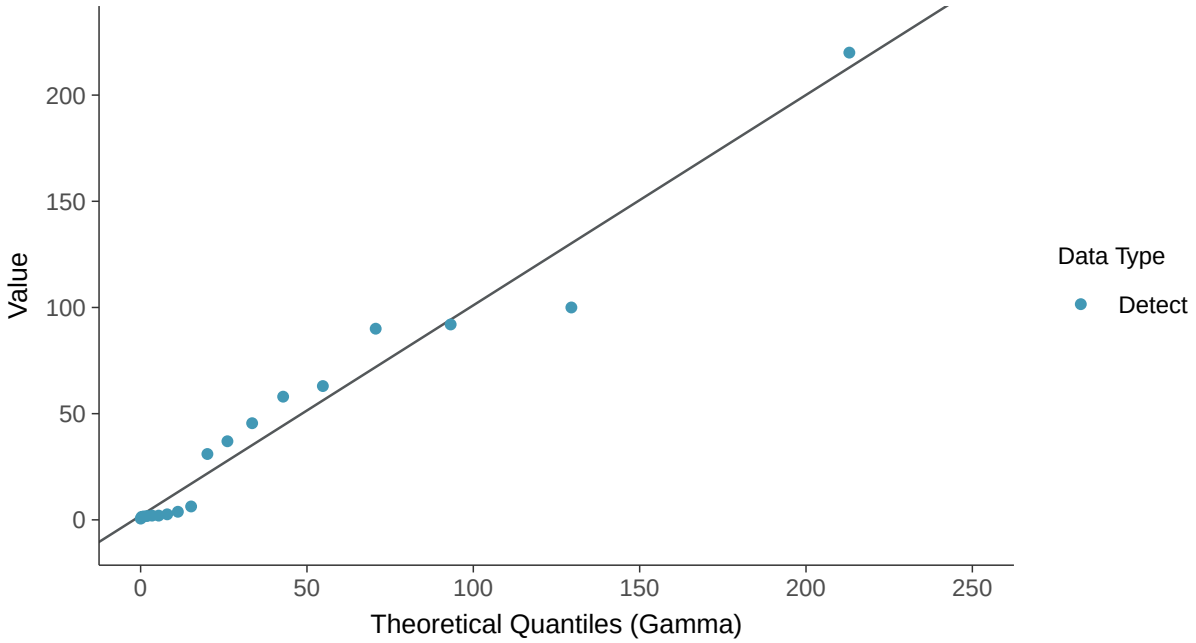
**Lognormal Q-Q plot**

Arsenic, MW-17002 (ug/L)



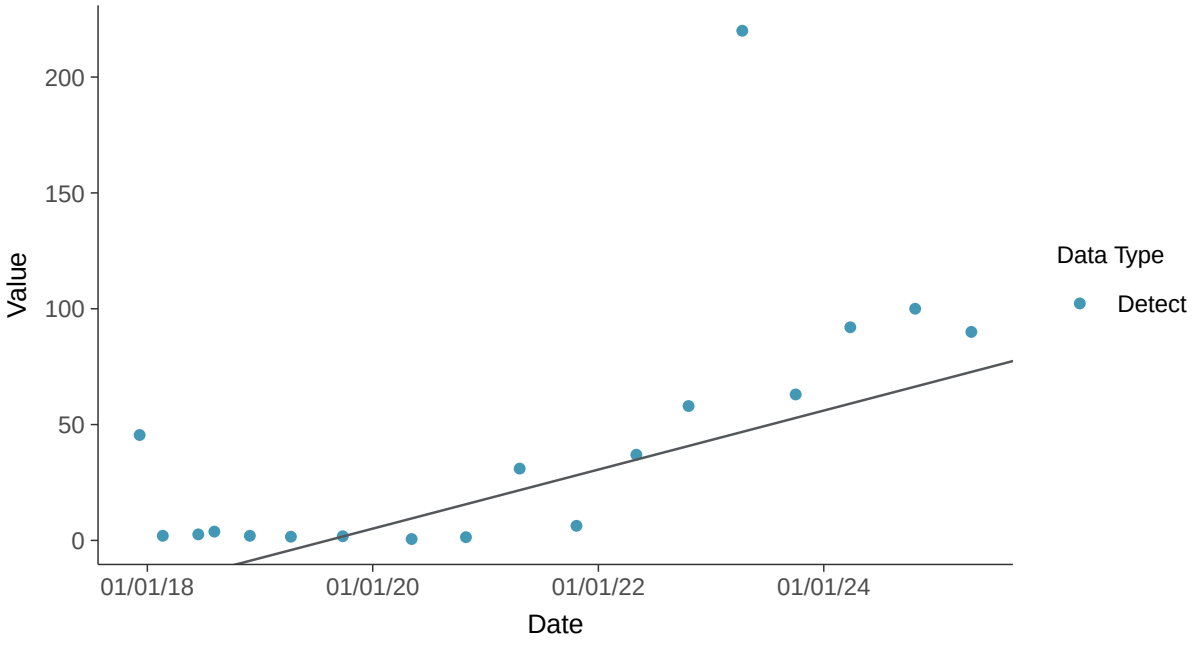

**Gamma Q-Q plot**

Arsenic, MW-17002 (ug/L)



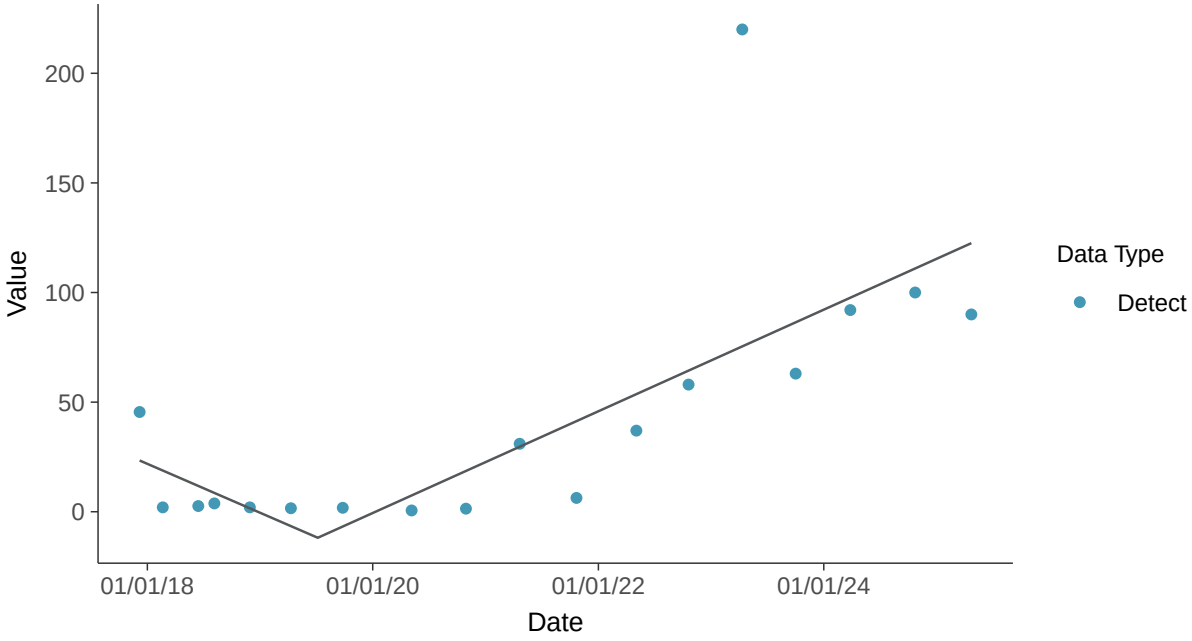
**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Arsenic, MW-17002 (ug/L)



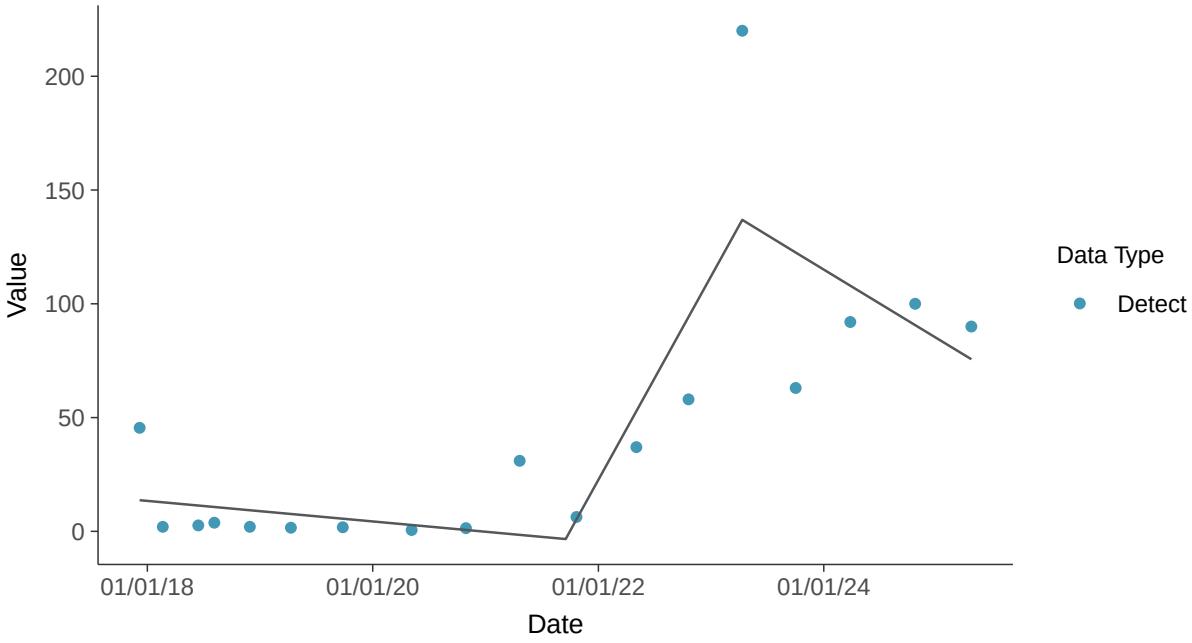

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17002 (ug/L)



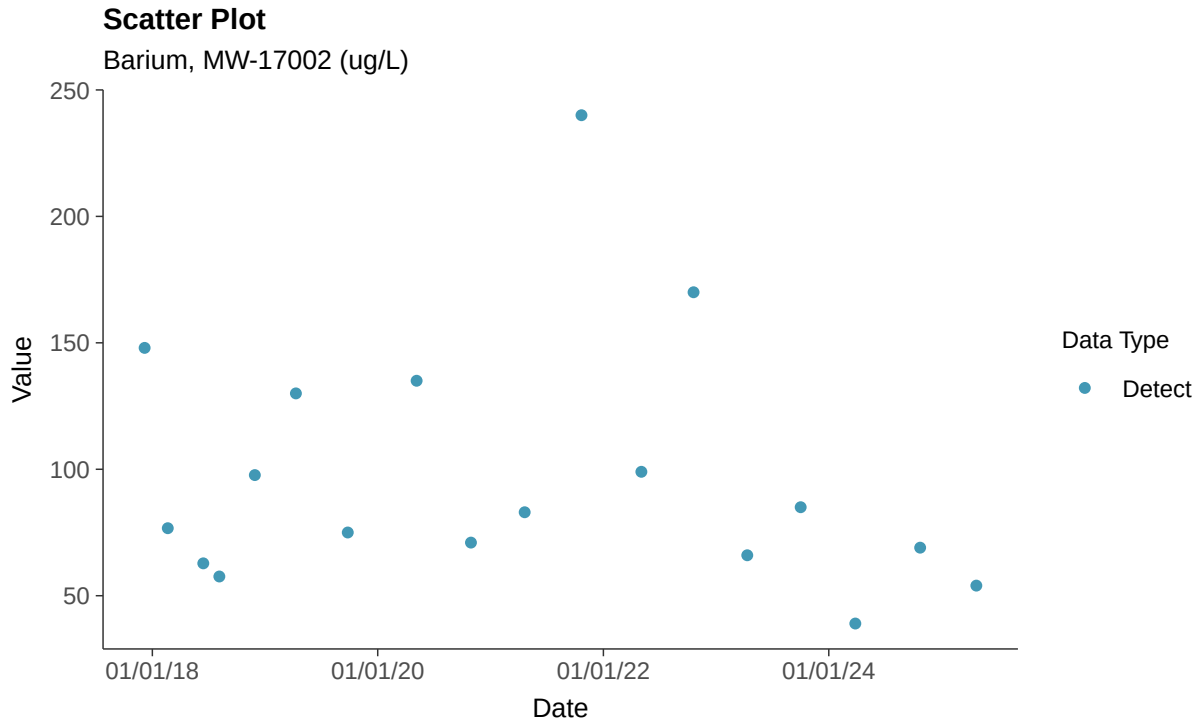
**Trend Regression: Piecewise Linear-Linear-Linear**

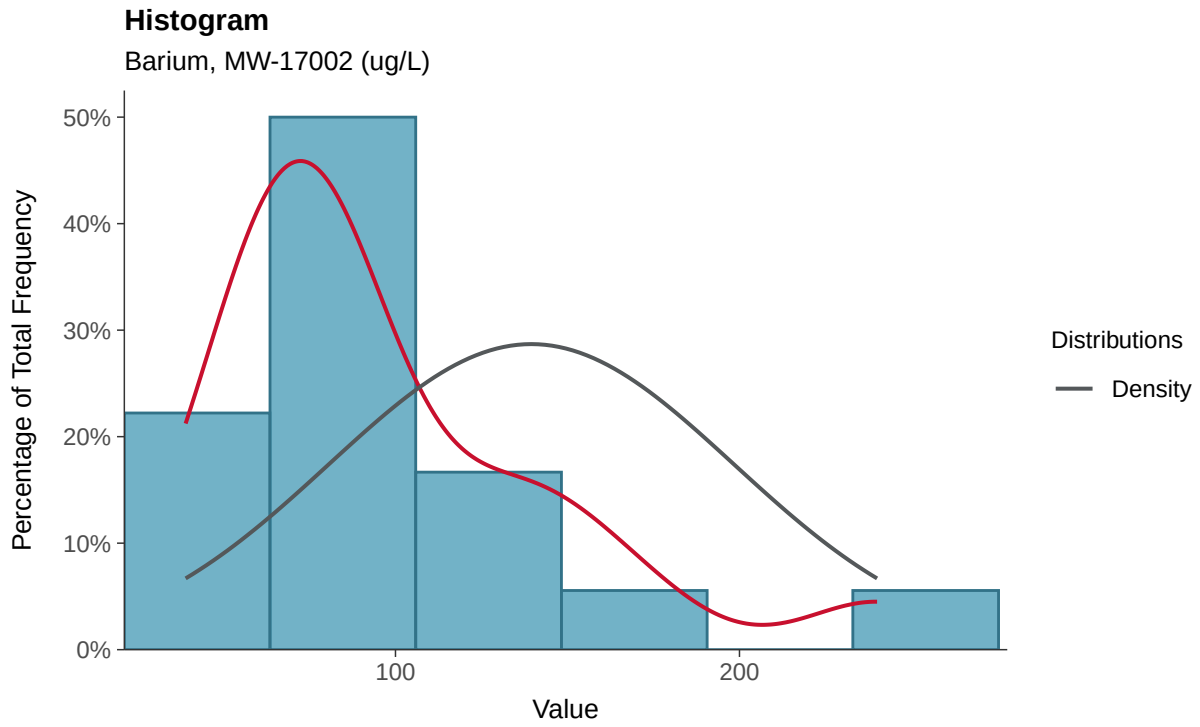
Arsenic, MW-17002 (ug/L)



## Appendix IV: Barium, MW-17002

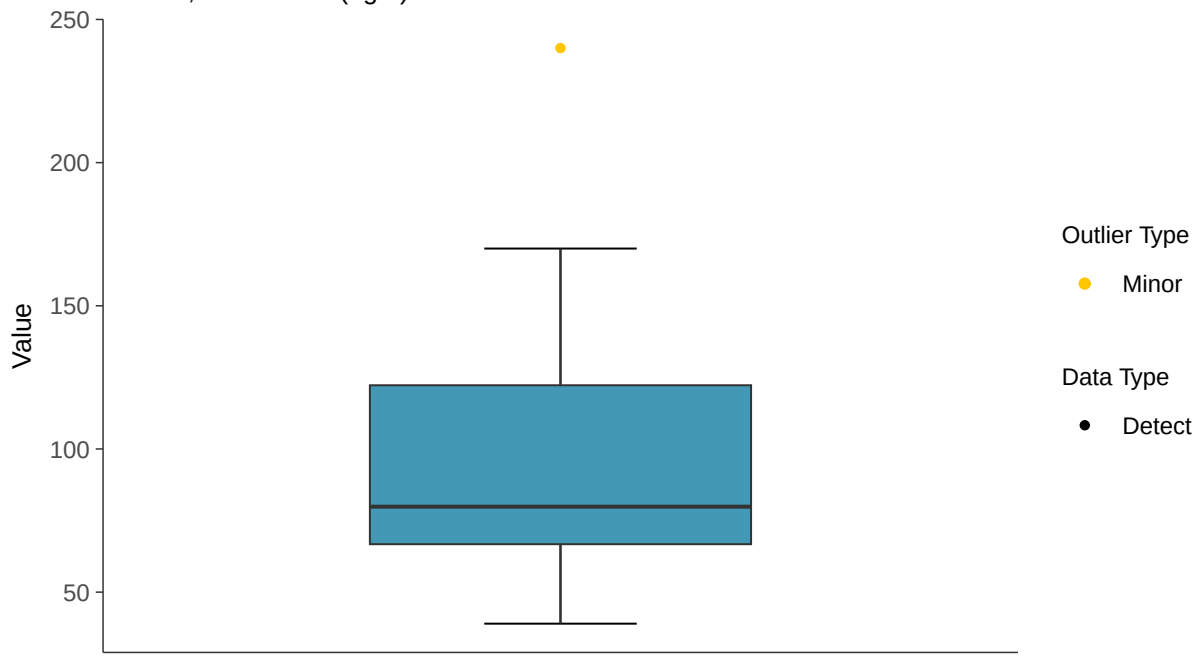
ID: 15_2_103



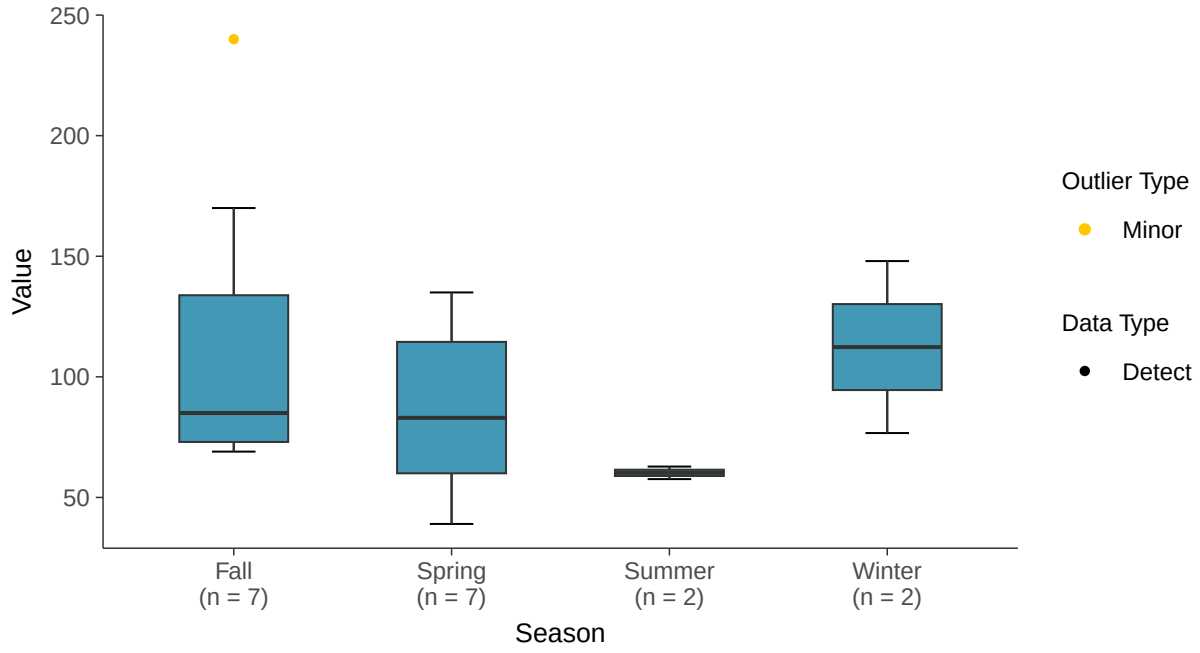
## Boxplot

Barium, MW-17002 (ug/L)



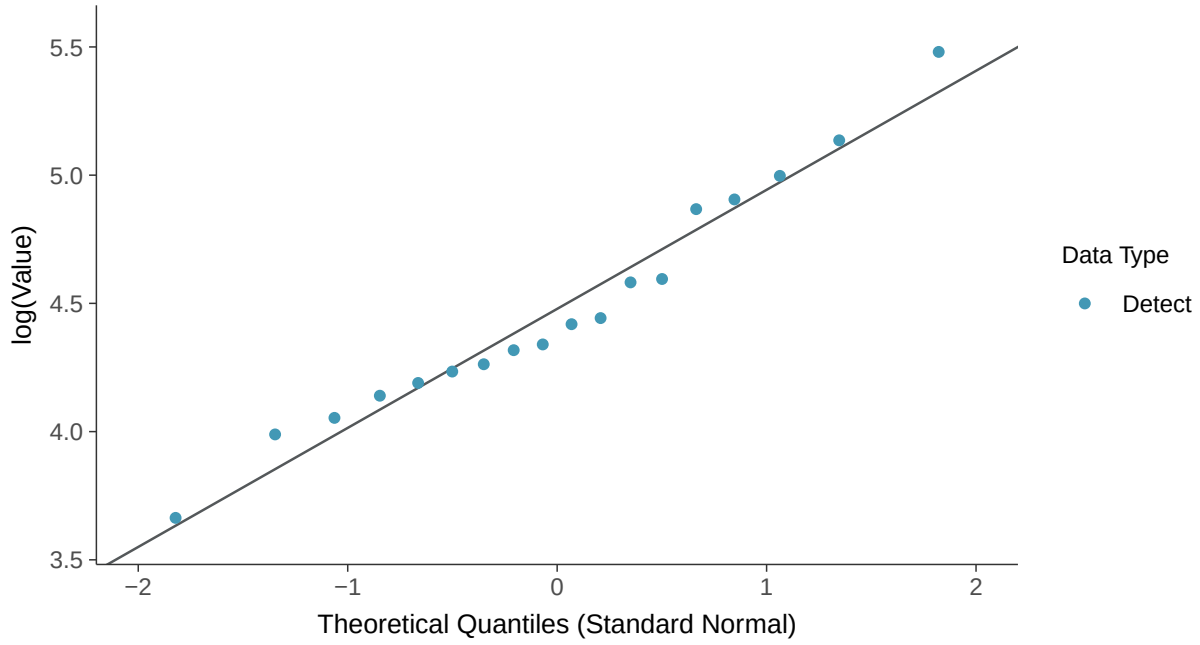

## Boxplot by Season

Barium, MW-17002 (ug/L)



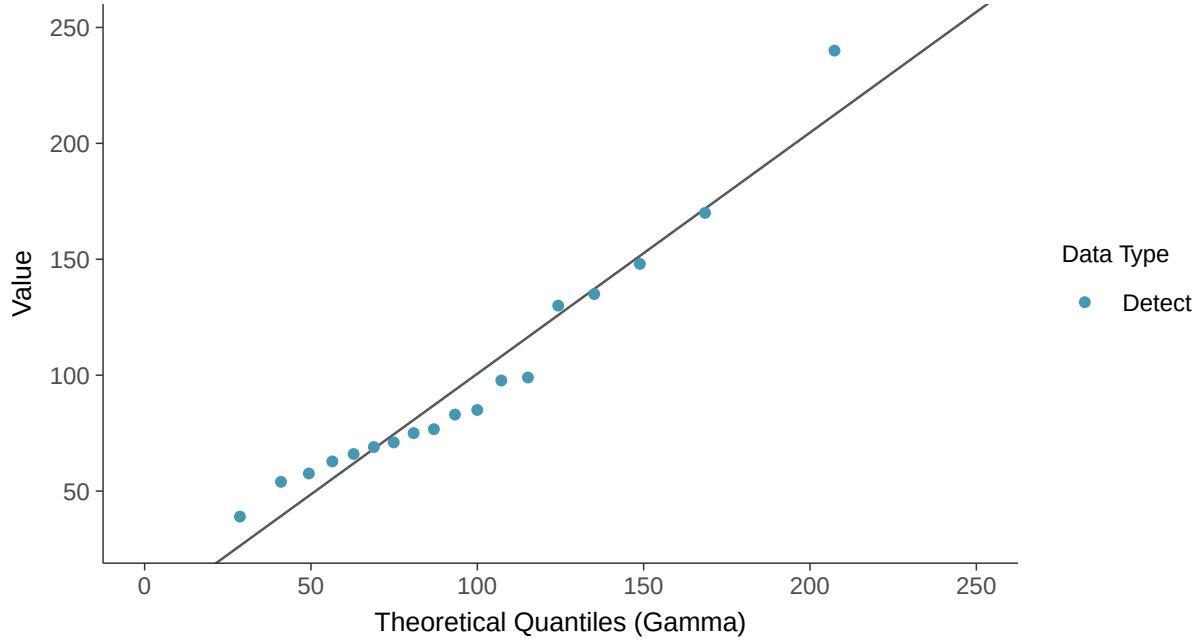
**Lognormal Q-Q plot**

Barium, MW-17002 (ug/L)



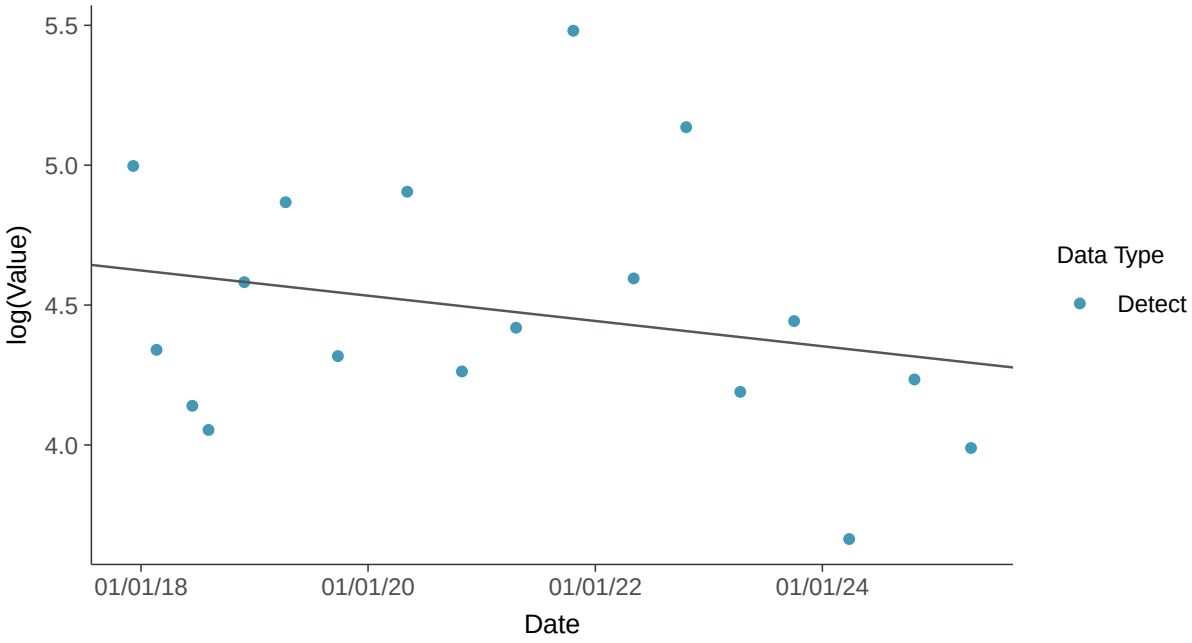

**Gamma Q-Q plot**

Barium, MW-17002 (ug/L)



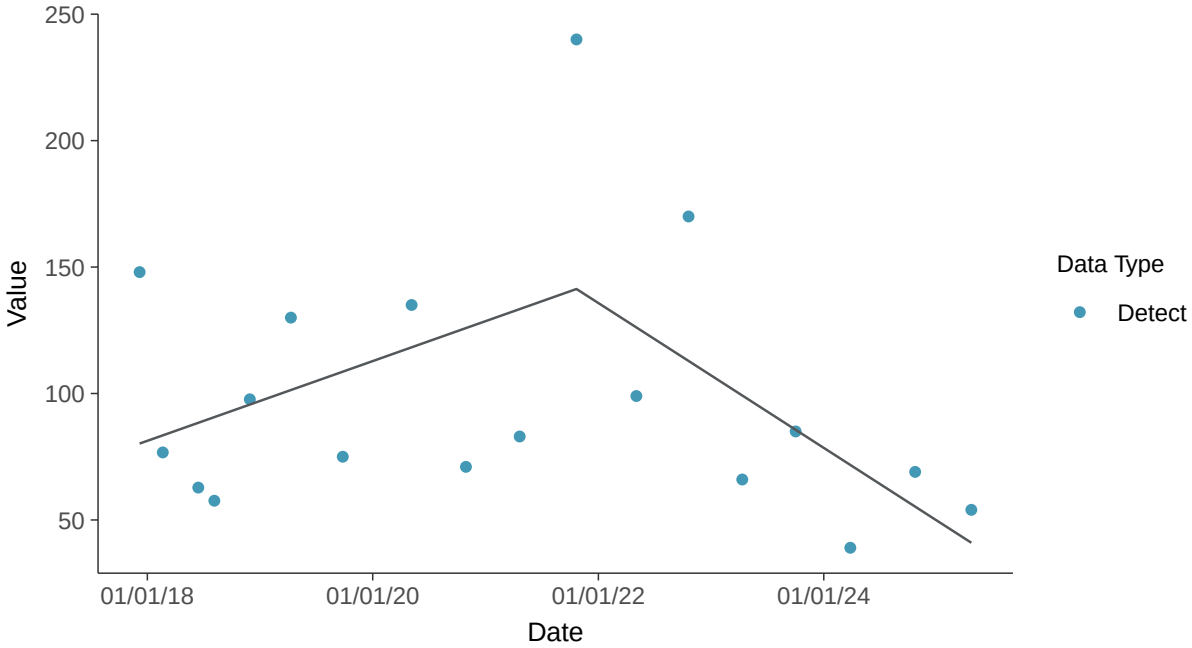
**Trend Regression: Lognormal MLE**

Barium, MW-17002 (ug/L)



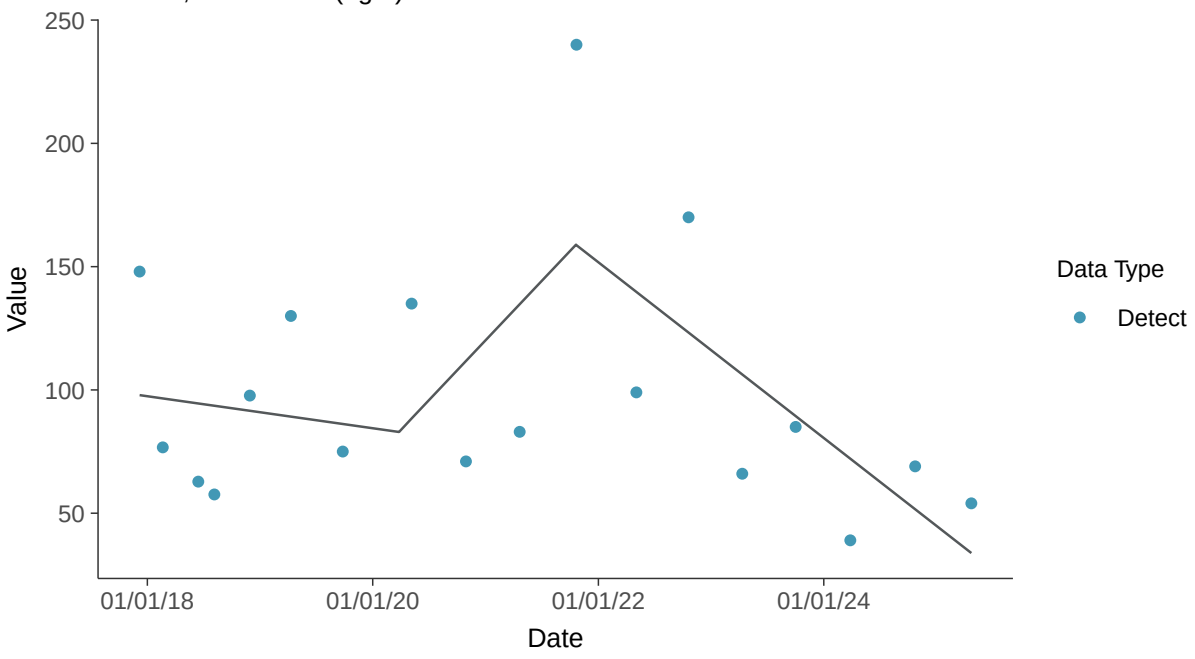

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17002 (ug/L)



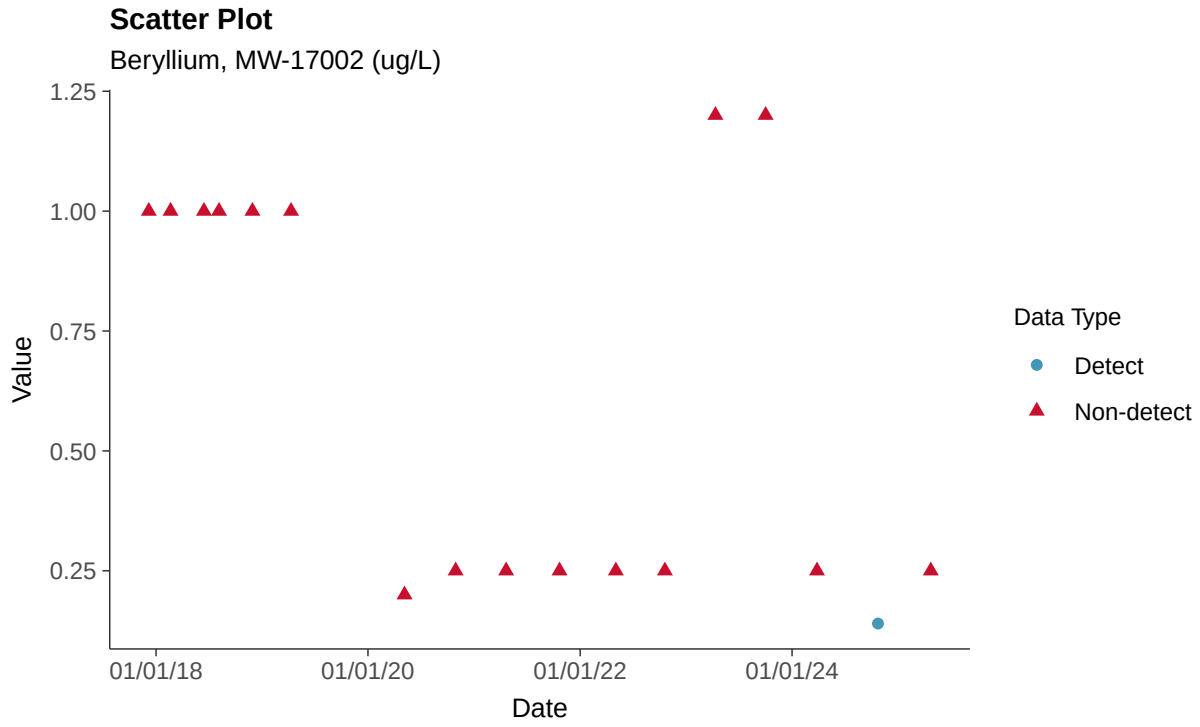
**Trend Regression: Piecewise Linear-Linear-Linear**

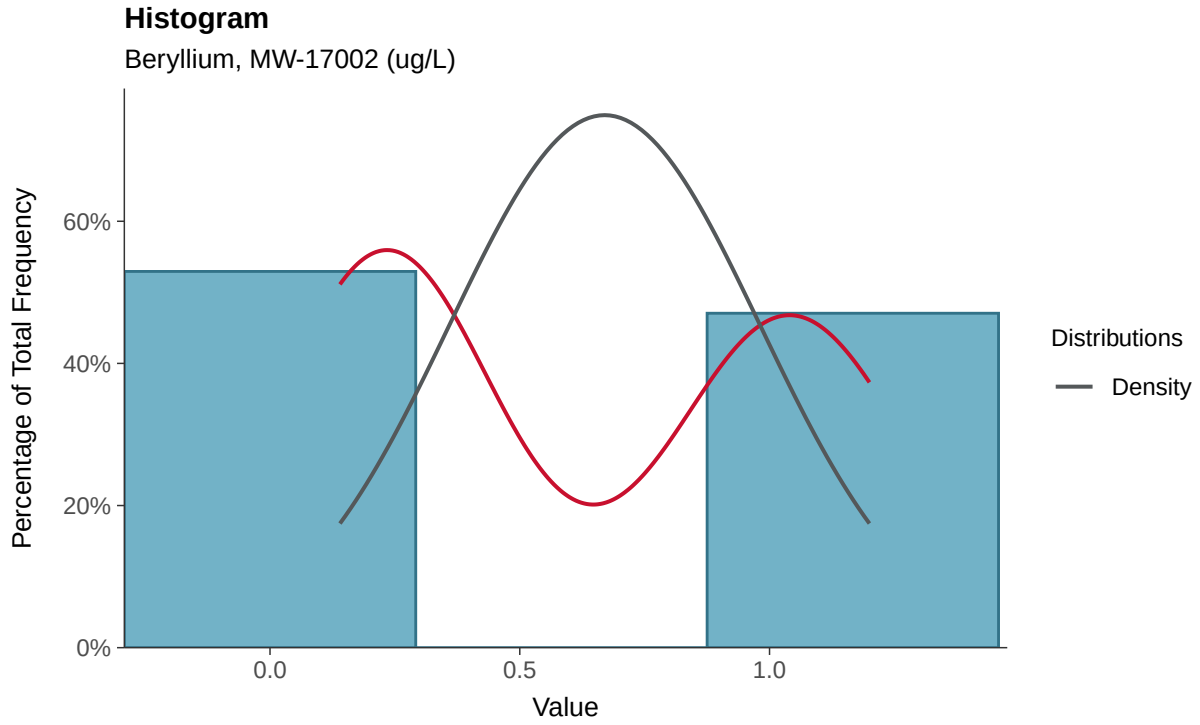
Barium, MW-17002 (ug/L)



## Appendix IV: Beryllium, MW-17002

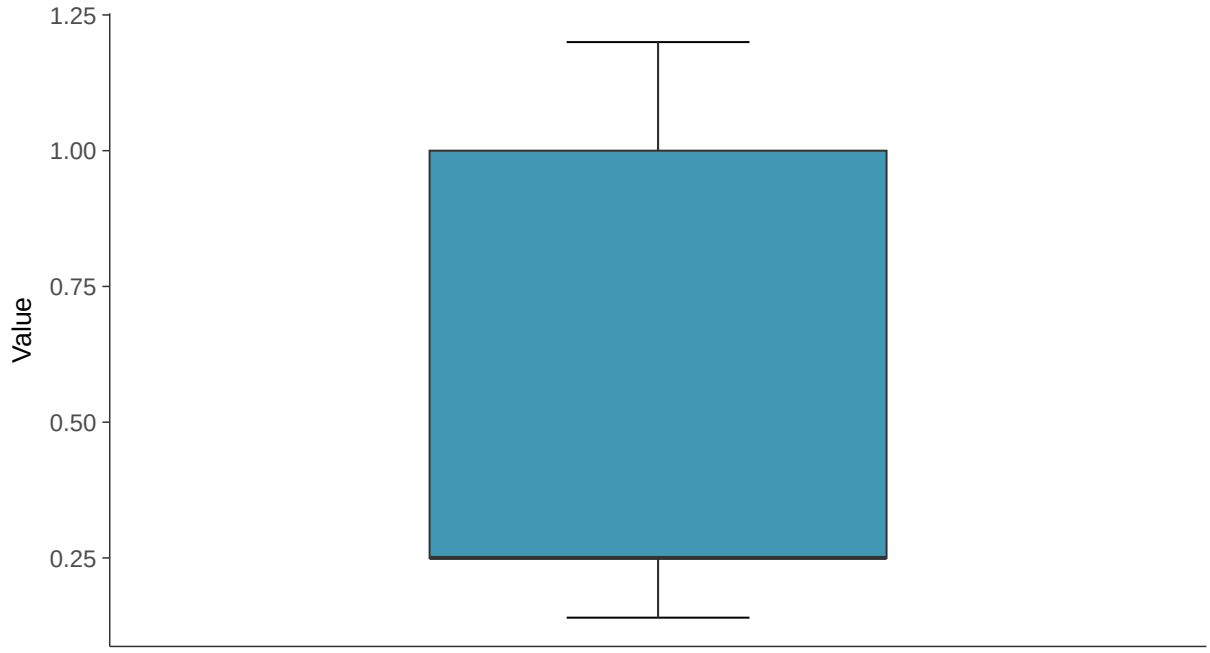
ID: 15_2_104



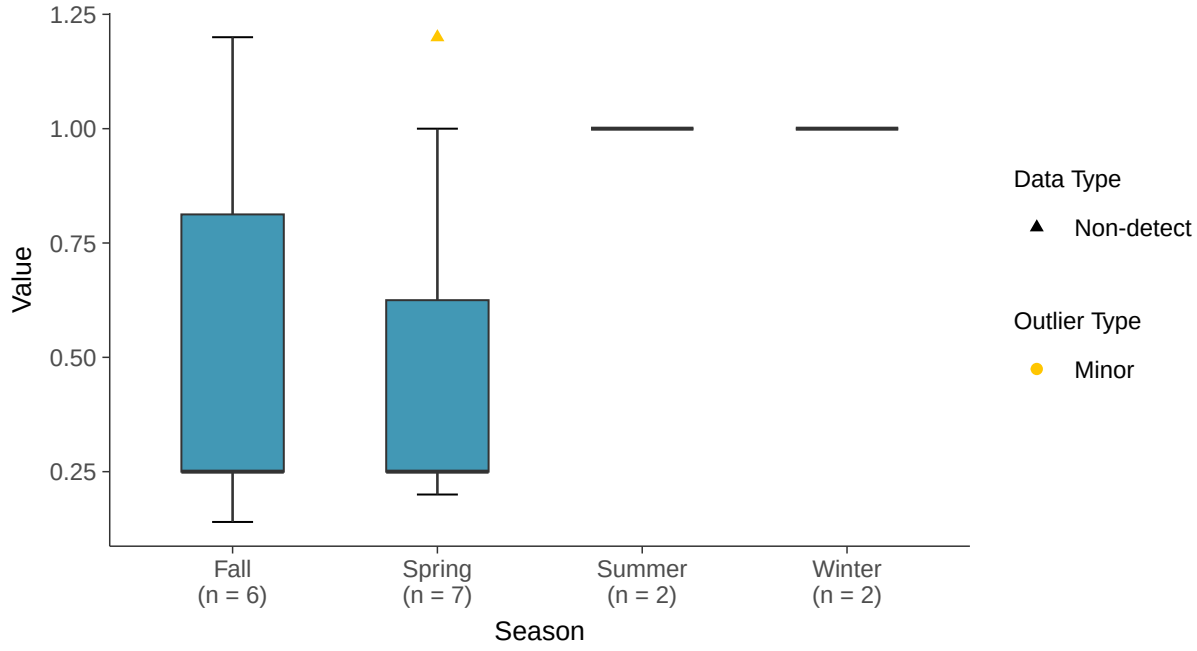
## Boxplot

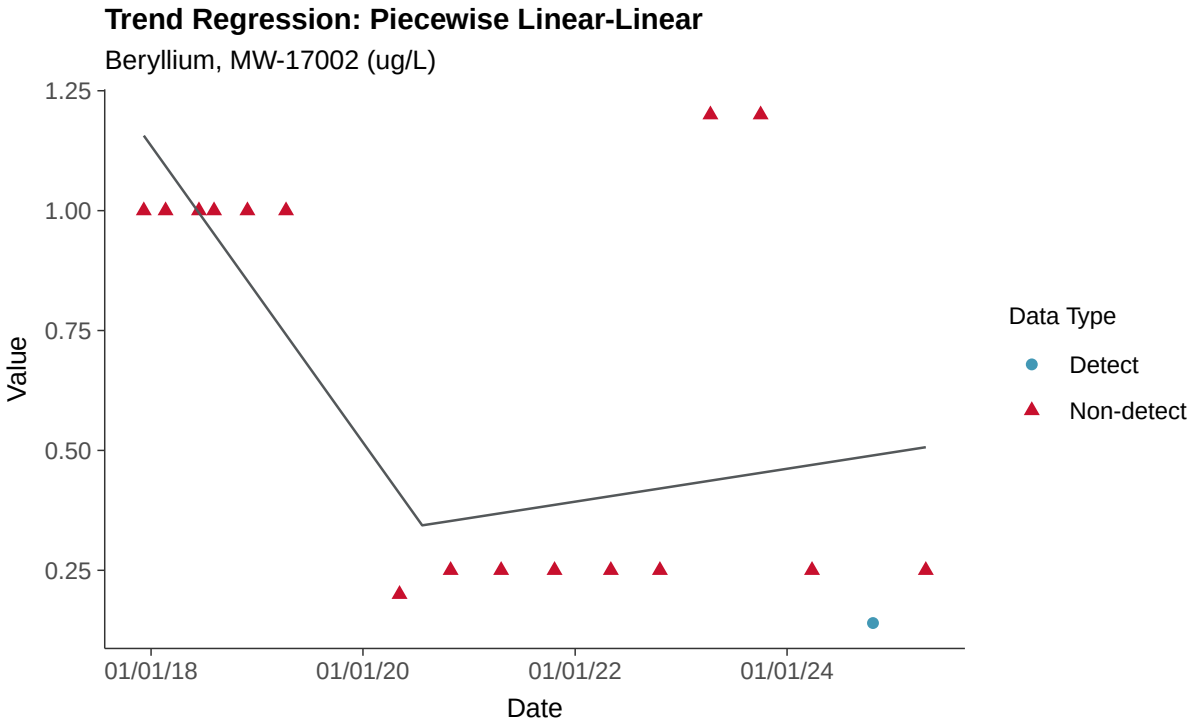
Beryllium, MW-17002 (ug/L)




## Boxplot by Season

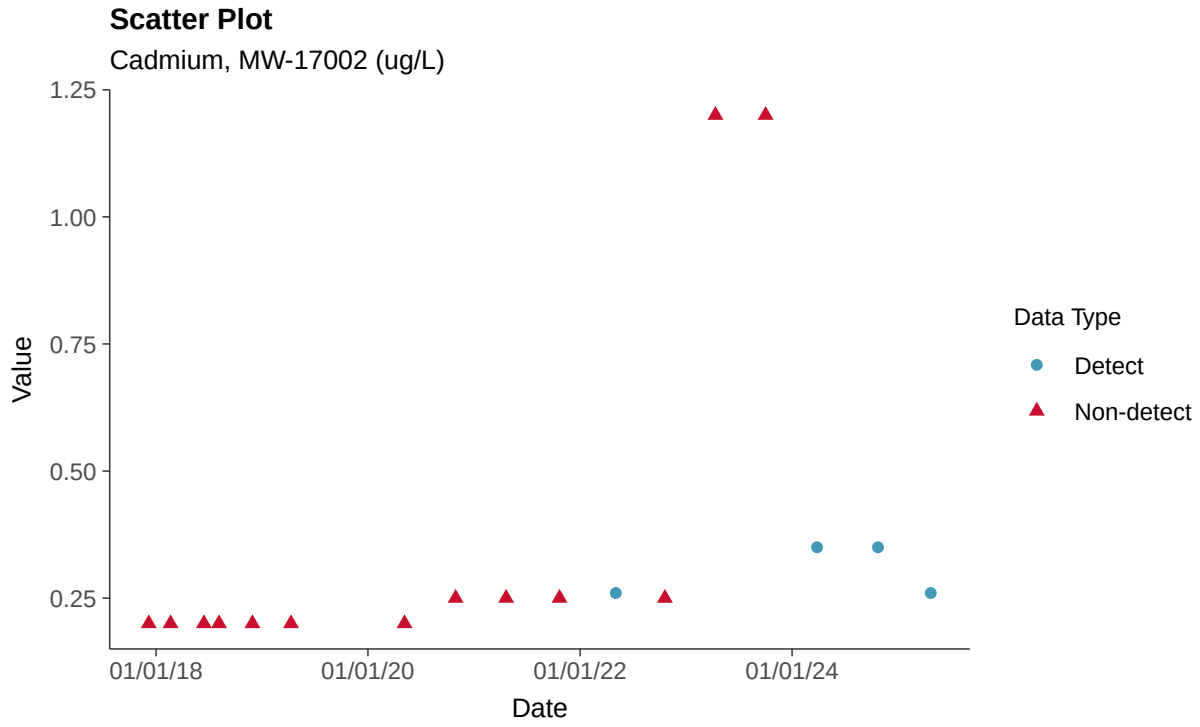
Beryllium, MW-17002 (ug/L)

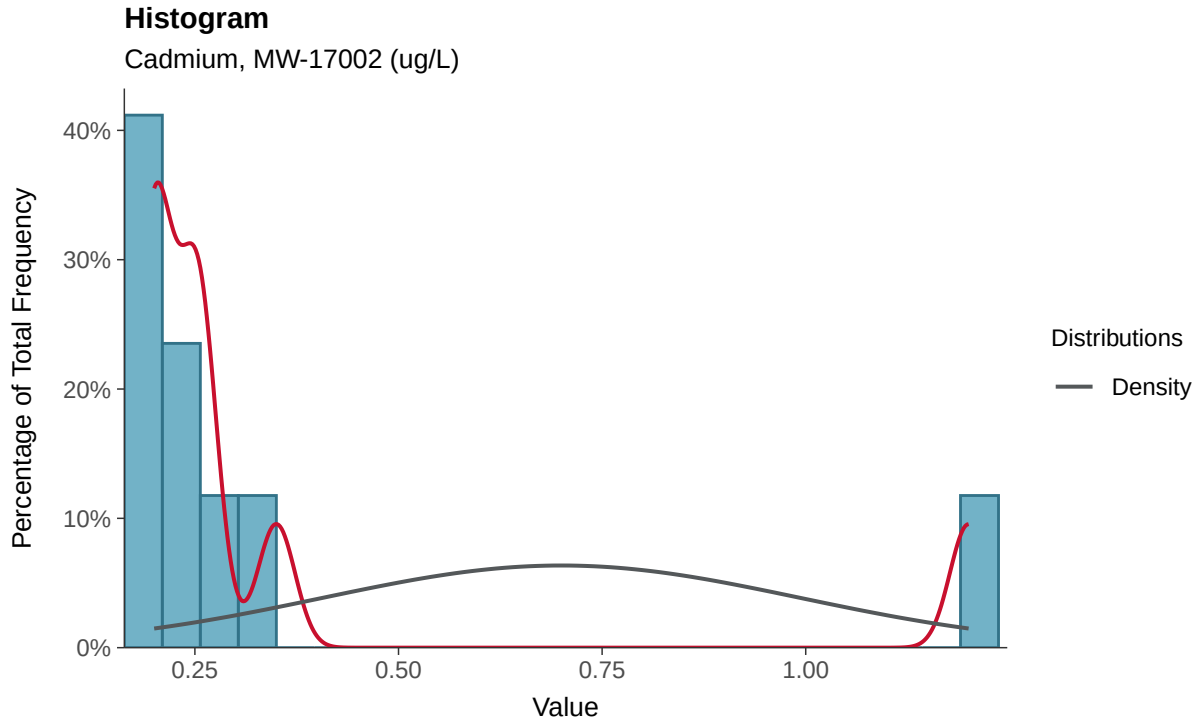



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-17002 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/18
01/01/20
01/01/22
01/01/24
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-17002

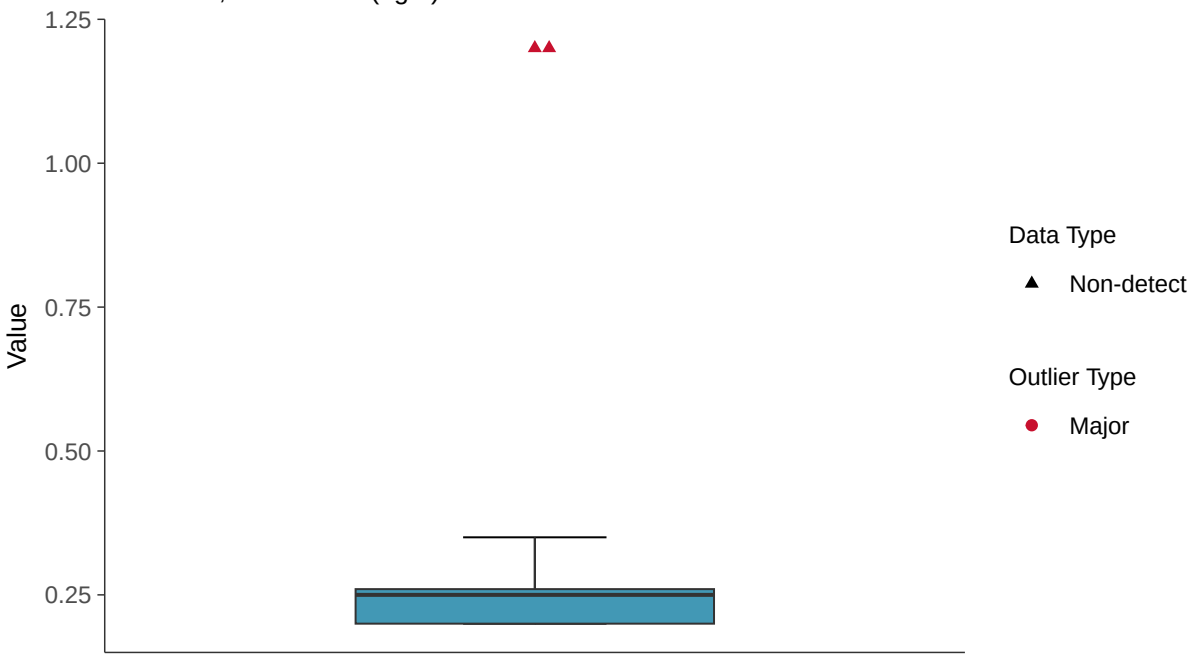
ID: 15_2_106



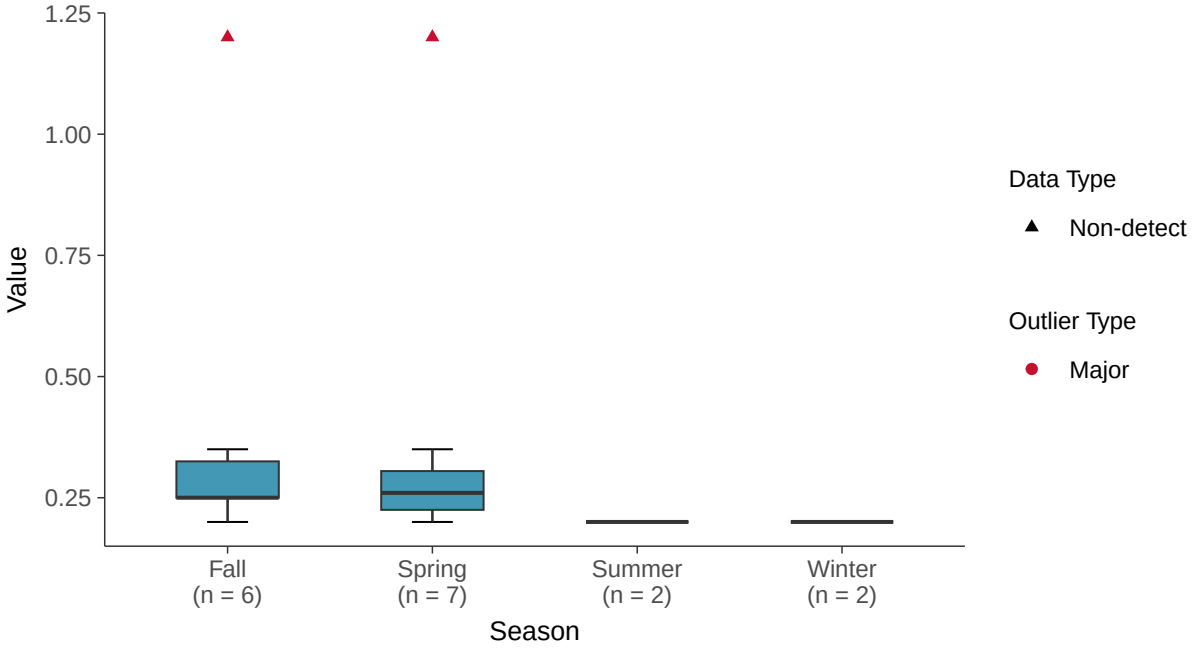
## Boxplot

Cadmium, MW-17002 (ug/L)



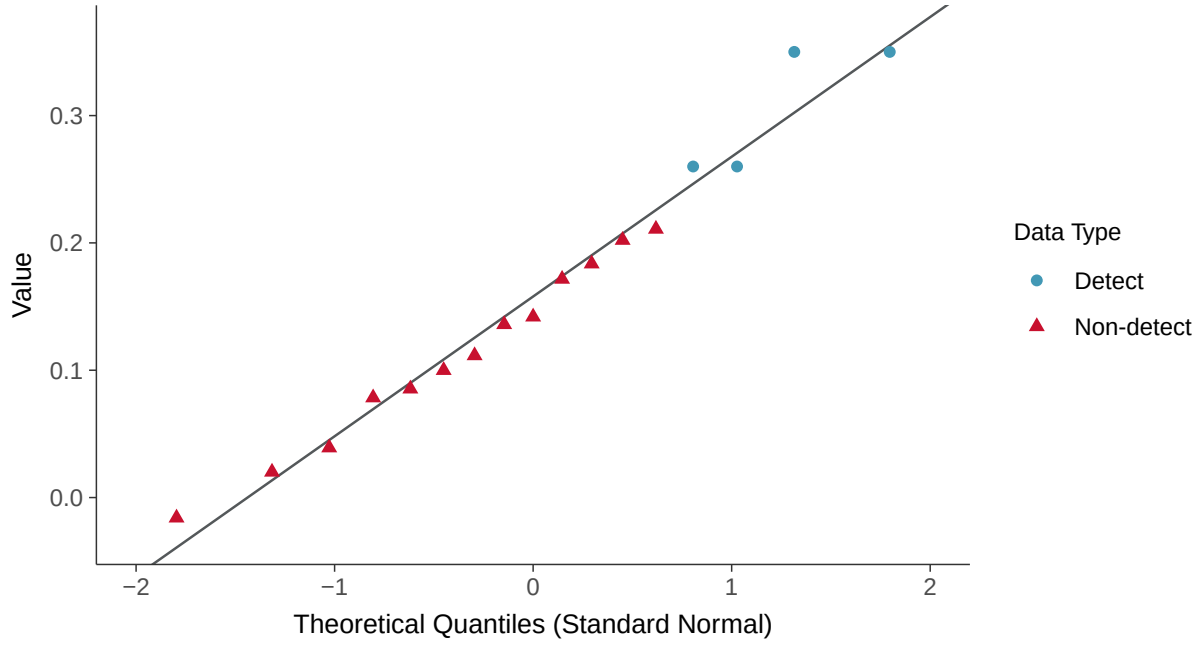

## Boxplot by Season

Cadmium, MW-17002 (ug/L)



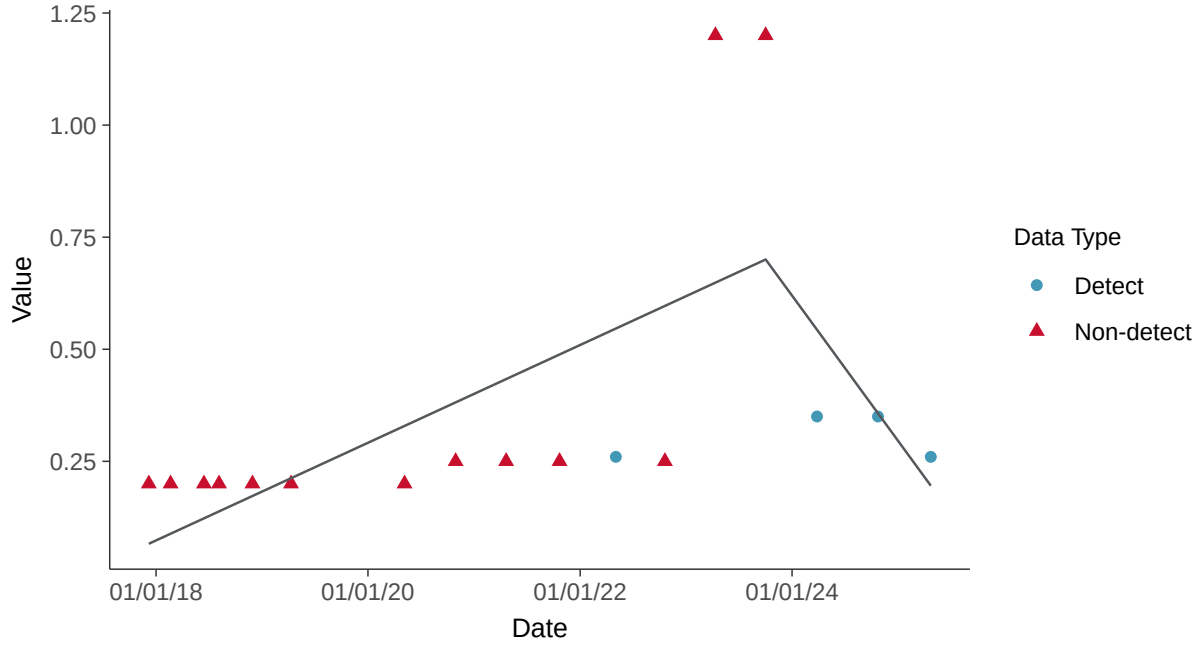
**Normal Q-Q plot using ROS Imputed Estimates**

Cadmium, MW-17002 (ug/L)



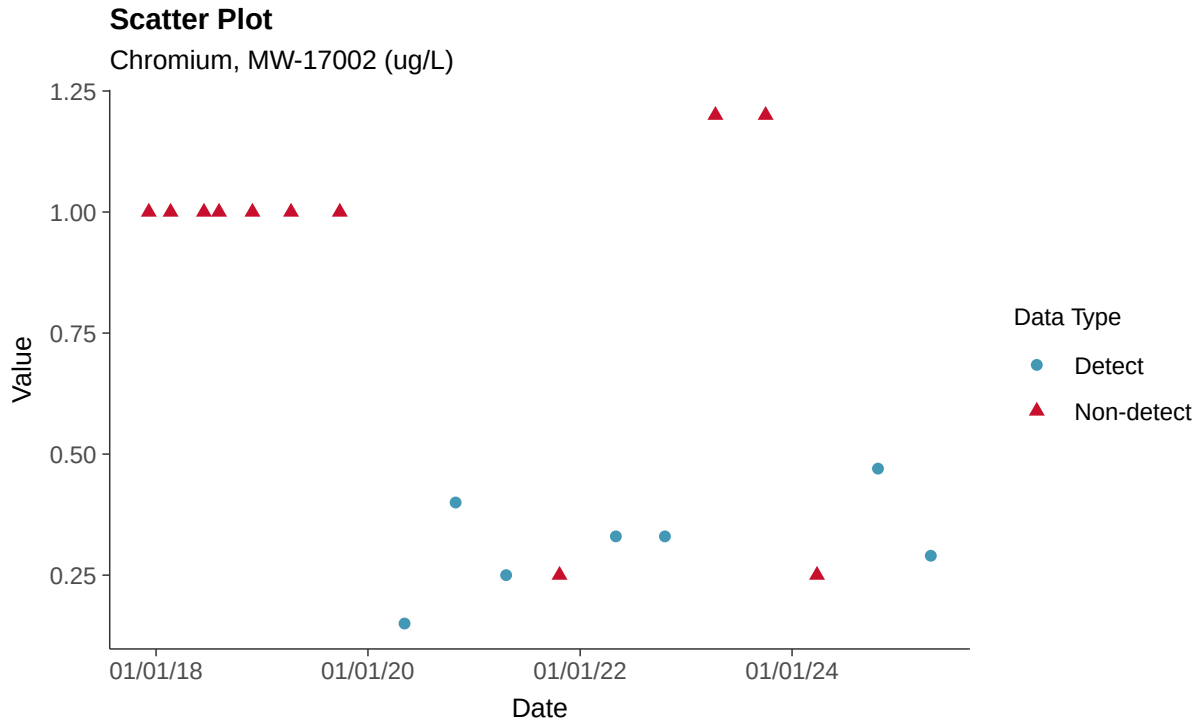

**Trend Regression: Piecewise Linear-Linear**

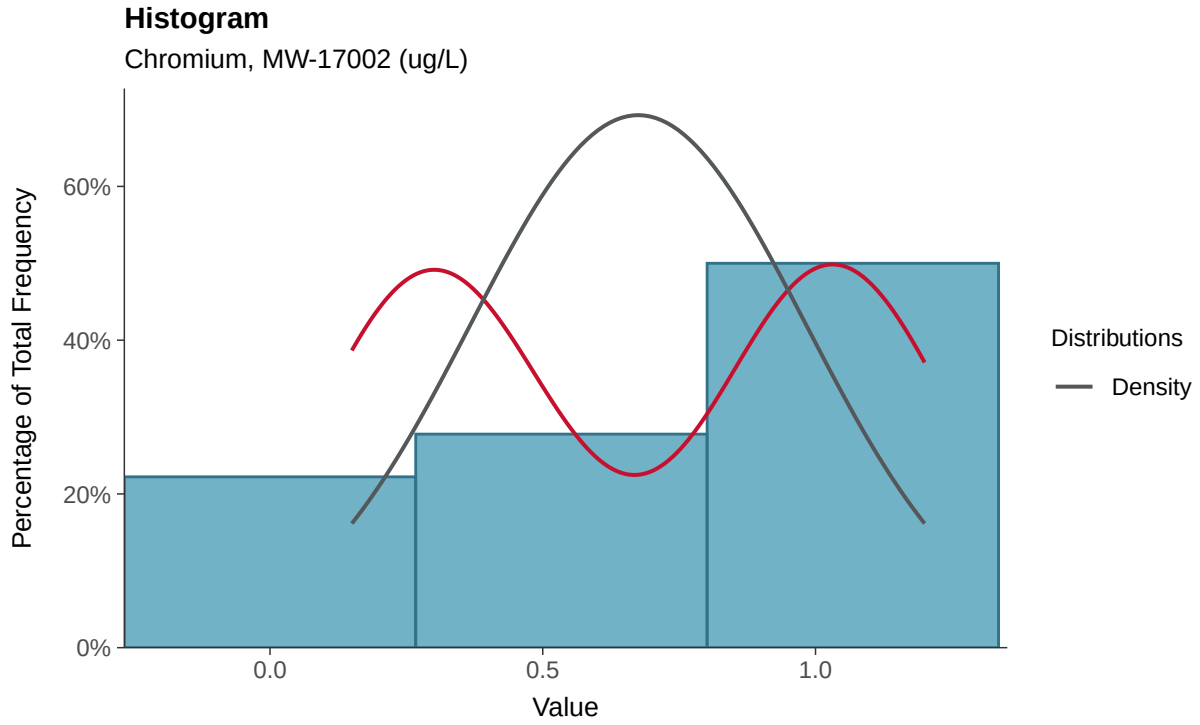
Cadmium, MW-17002 (ug/L)



## Appendix IV: Chromium, MW-17002

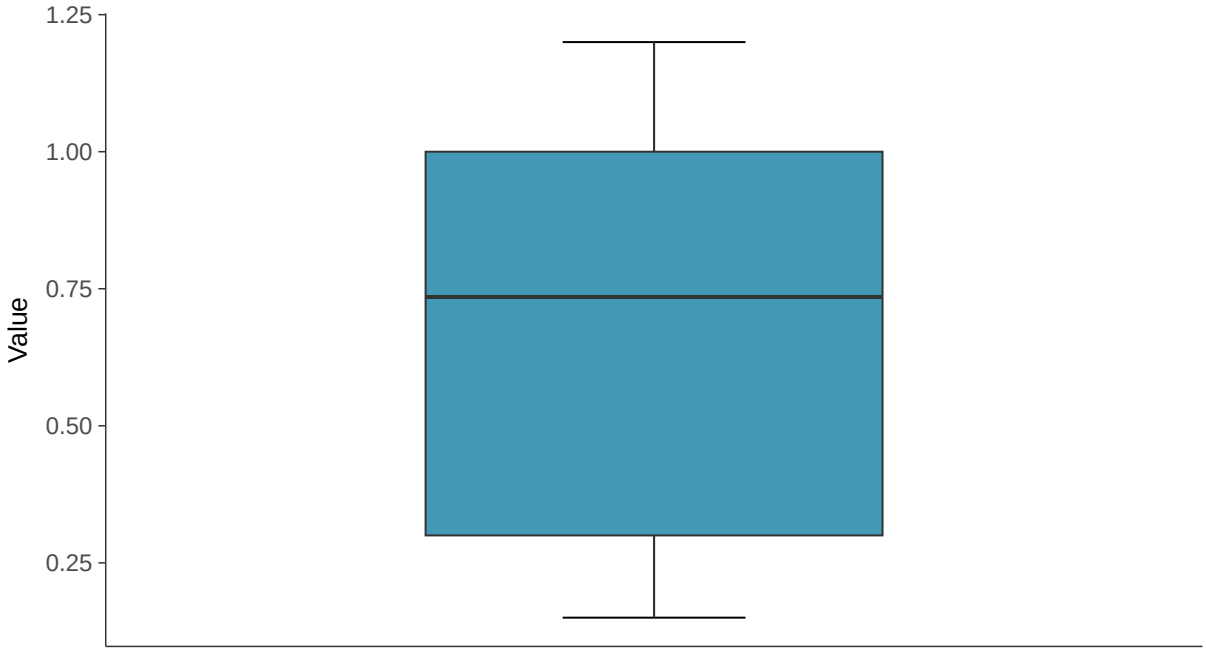
ID: 15_2_109



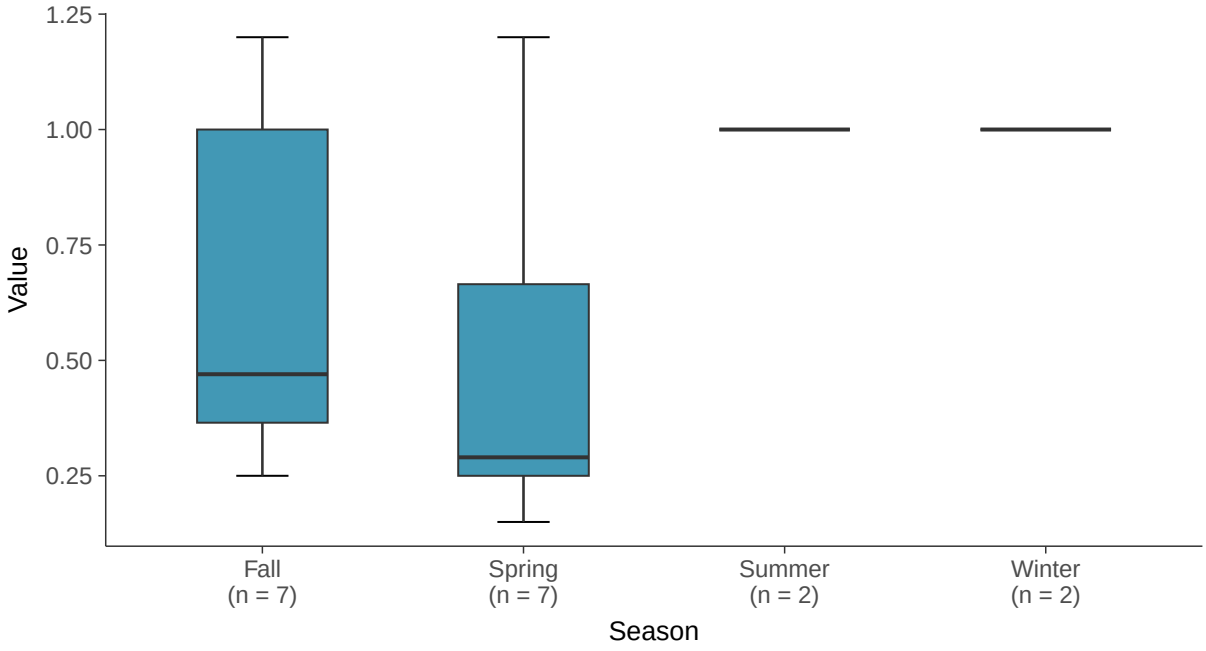
**Boxplot**

Chromium, MW-17002 (ug/L)



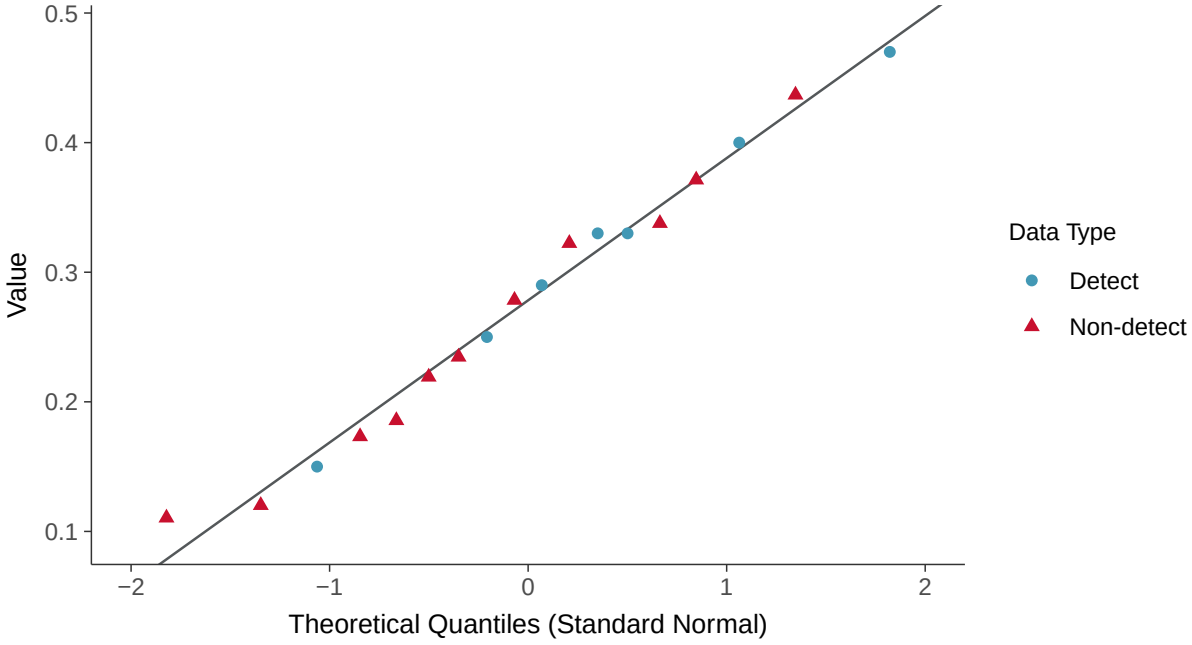

**Boxplot by Season**

Chromium, MW-17002 (ug/L)



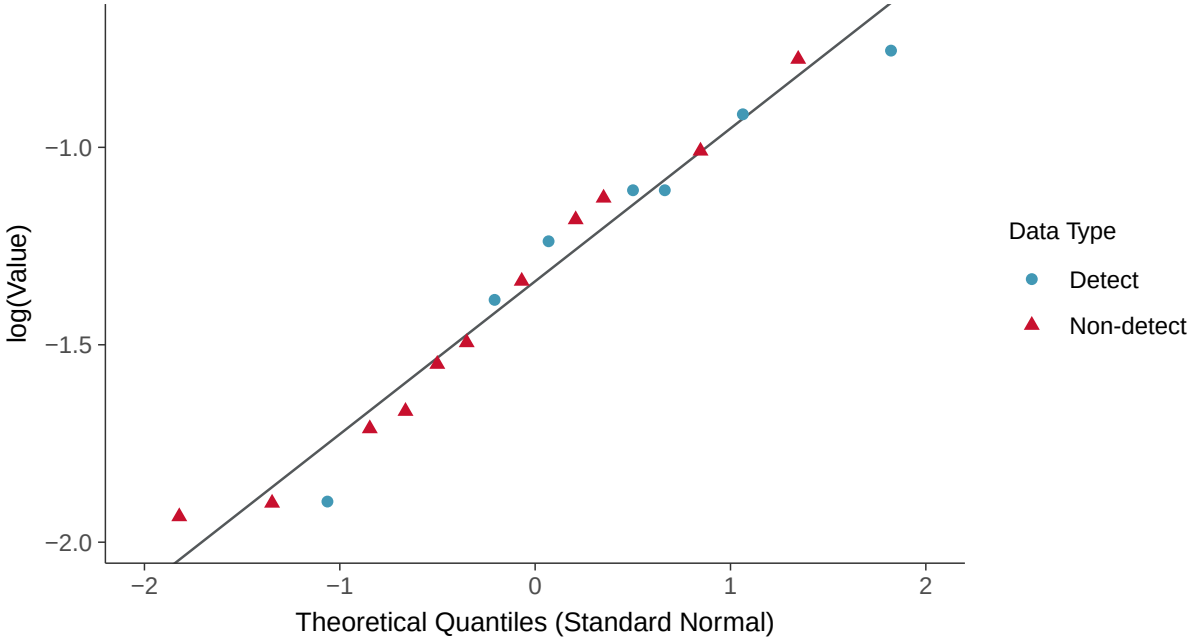
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17002 (ug/L)



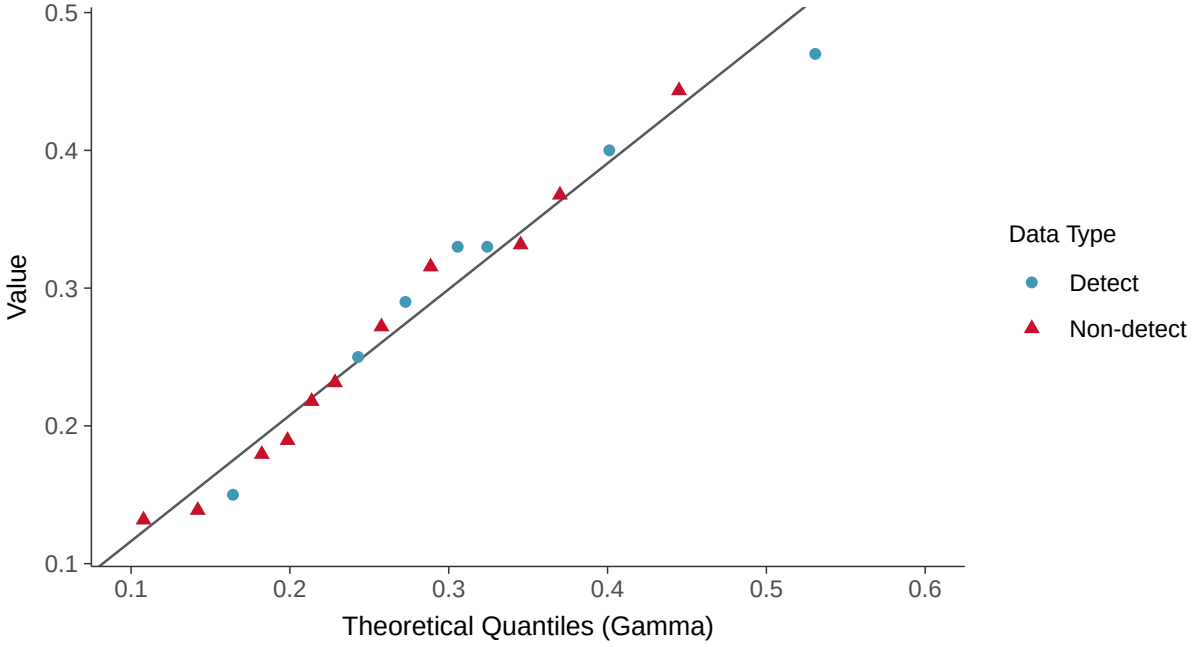

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17002 (ug/L)



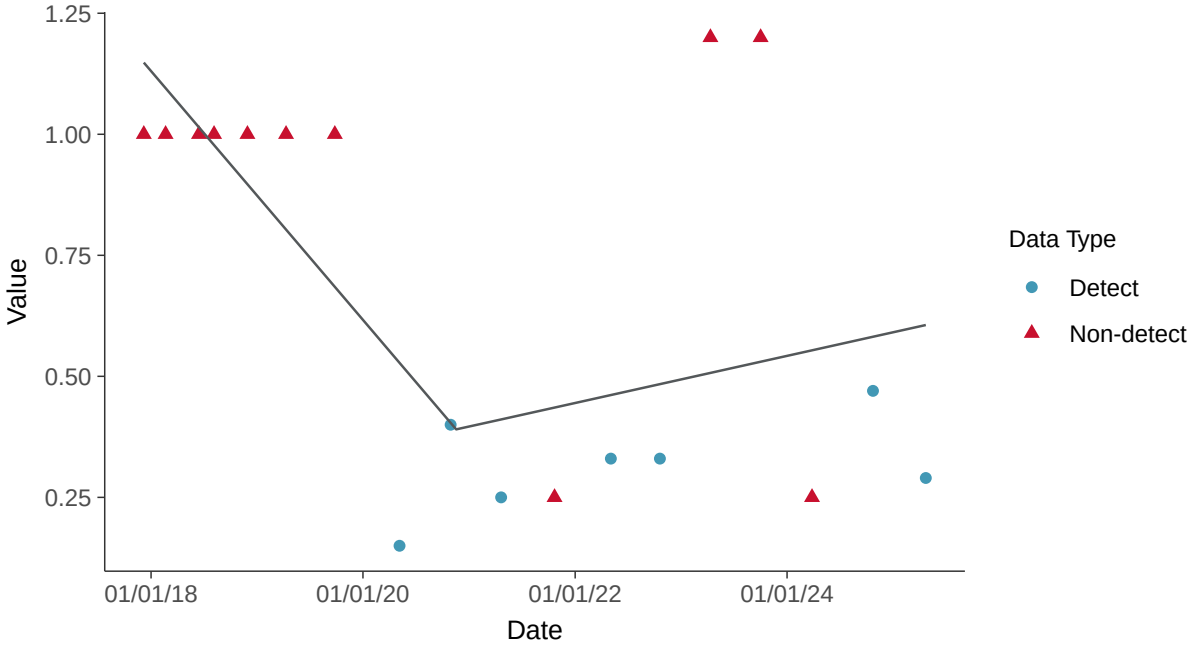
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17002 (ug/L)



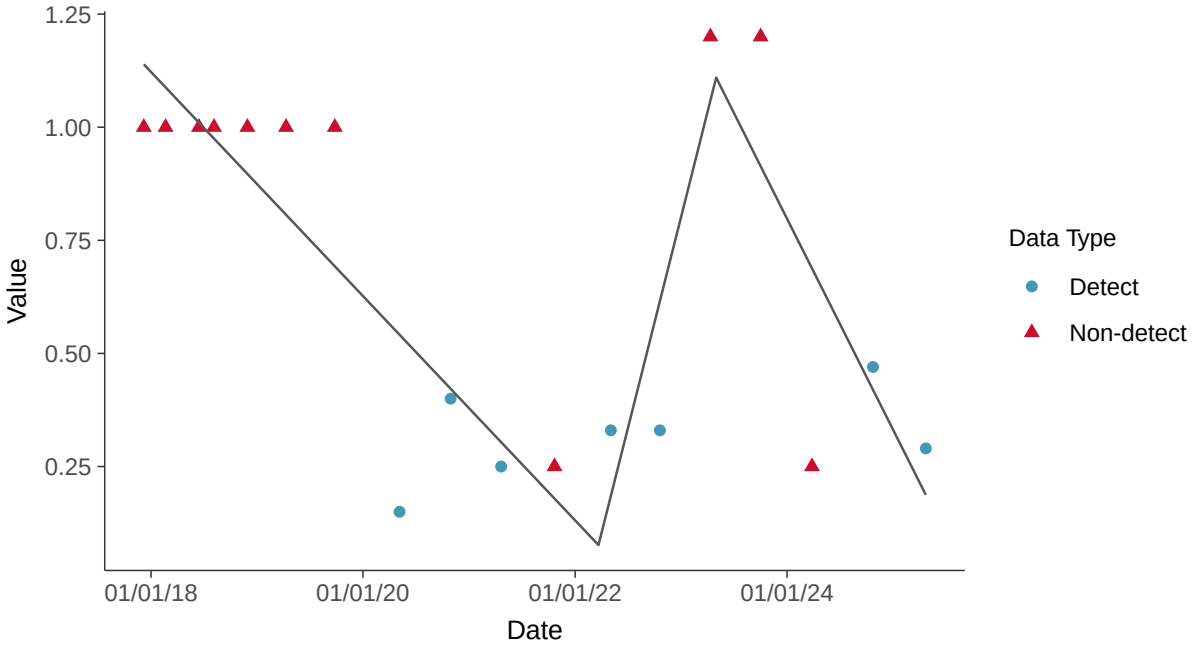

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-17002 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Chromium, MW-17002 (ug/L)

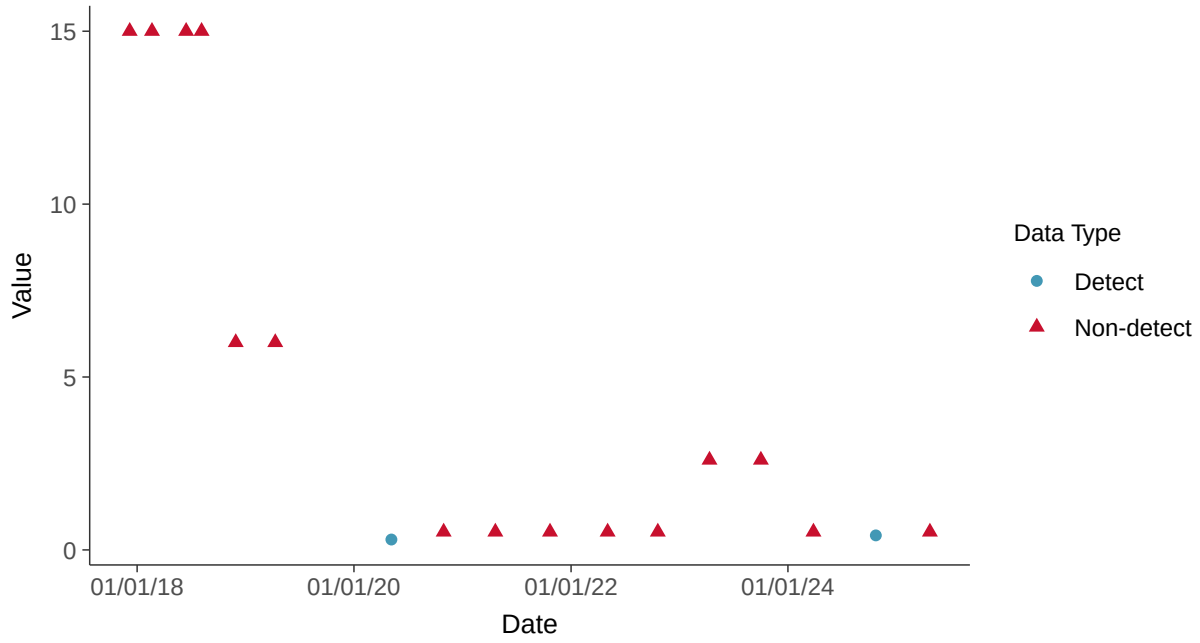


## Appendix IV: Cobalt, MW-17002

ID: 15_2_110

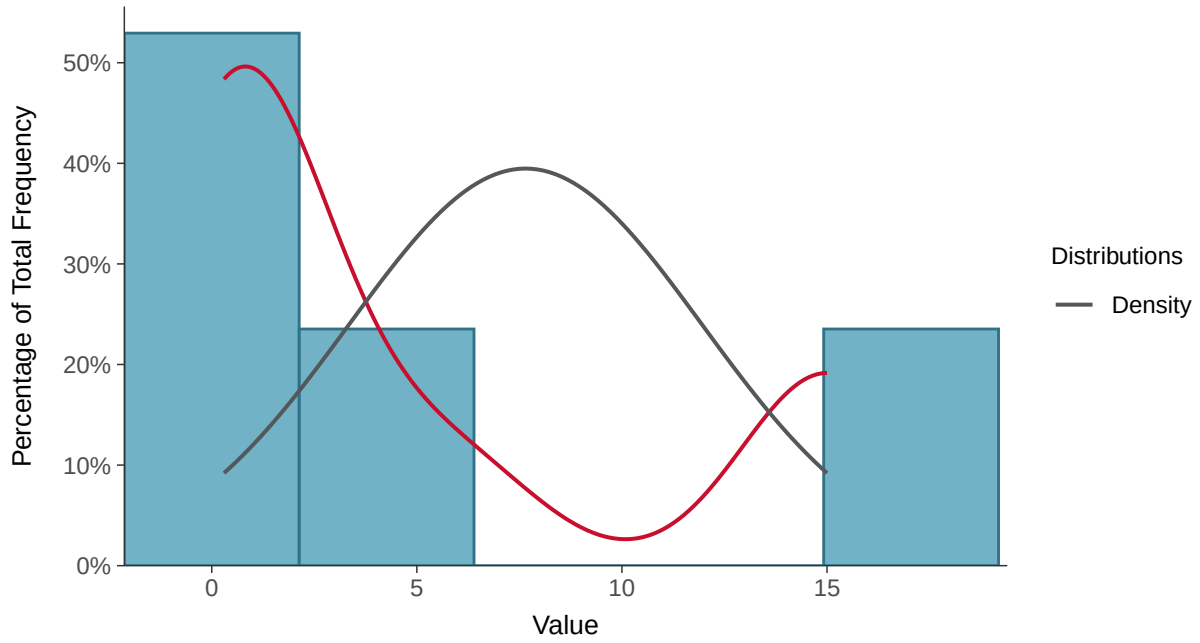
**Scatter Plot**

Cobalt, MW-17002 (ug/L)



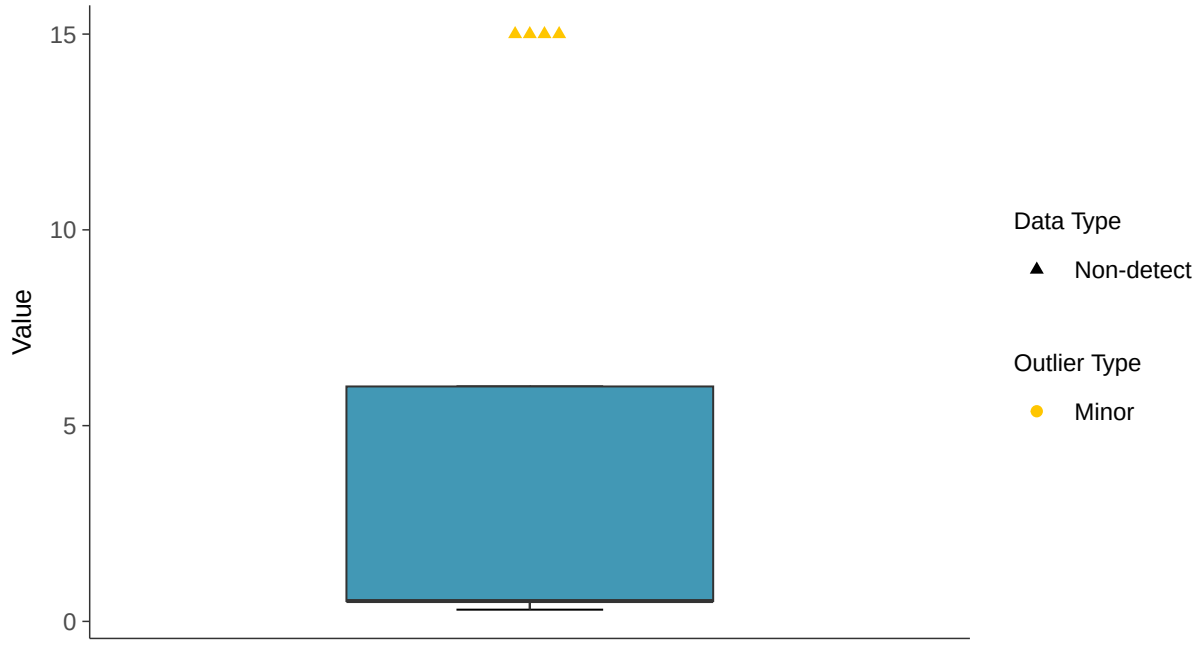

**Histogram**

Cobalt, MW-17002 (ug/L)



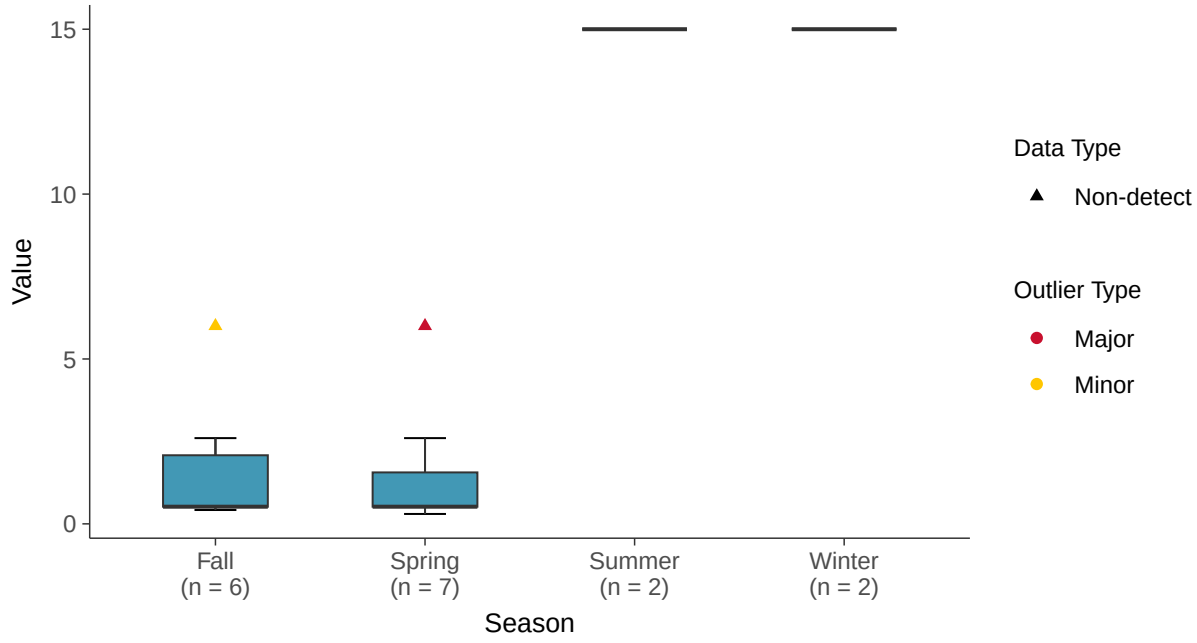
**Boxplot**

Cobalt, MW-17002 (ug/L)



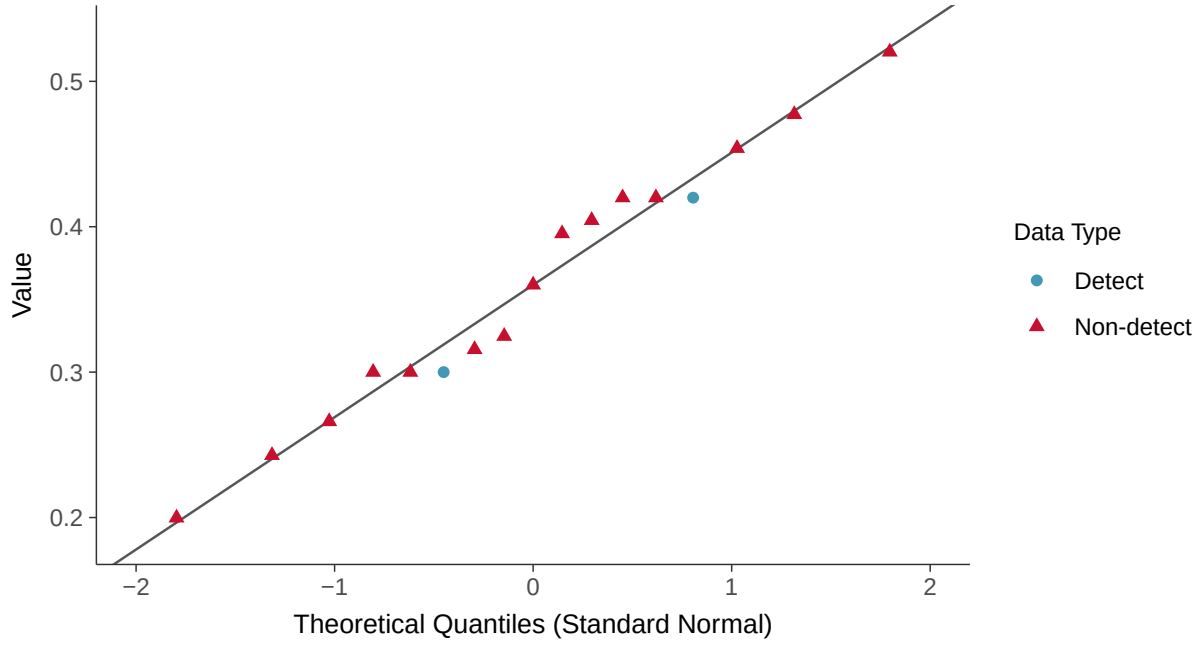

**Boxplot by Season**

Cobalt, MW-17002 (ug/L)



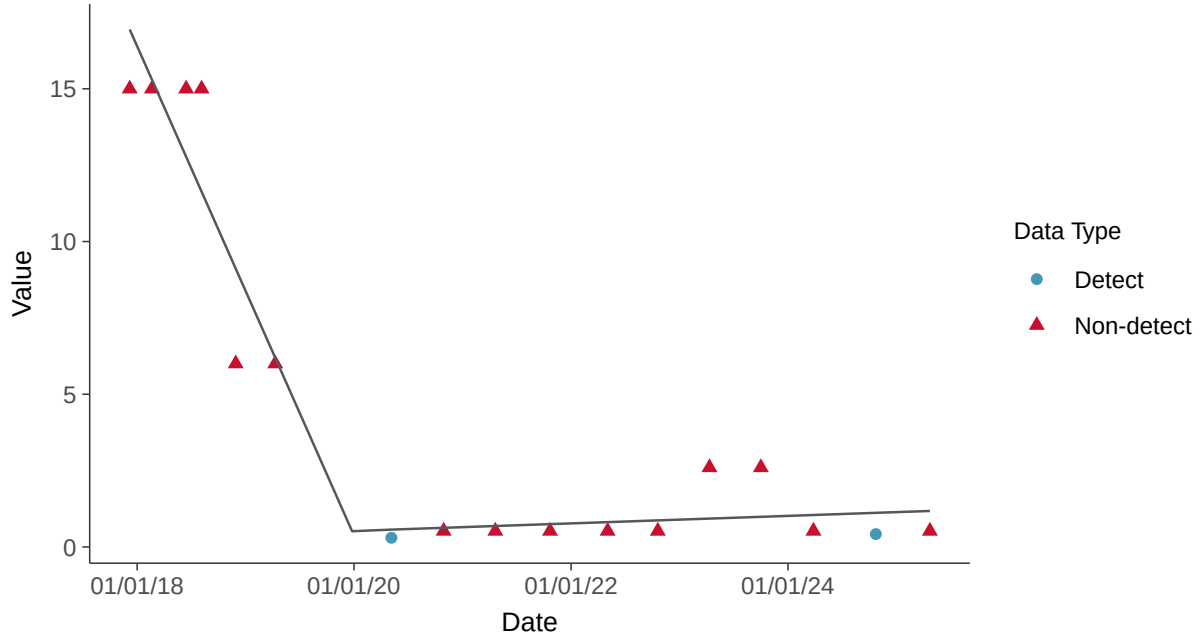
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17002 (ug/L)



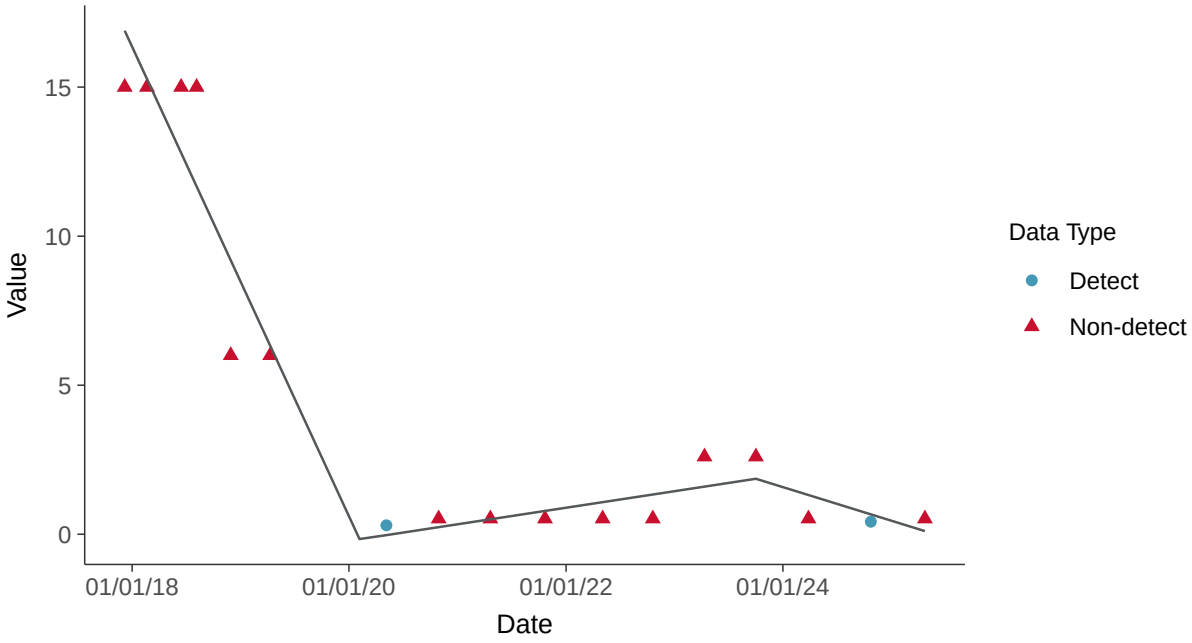

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17002 (ug/L)



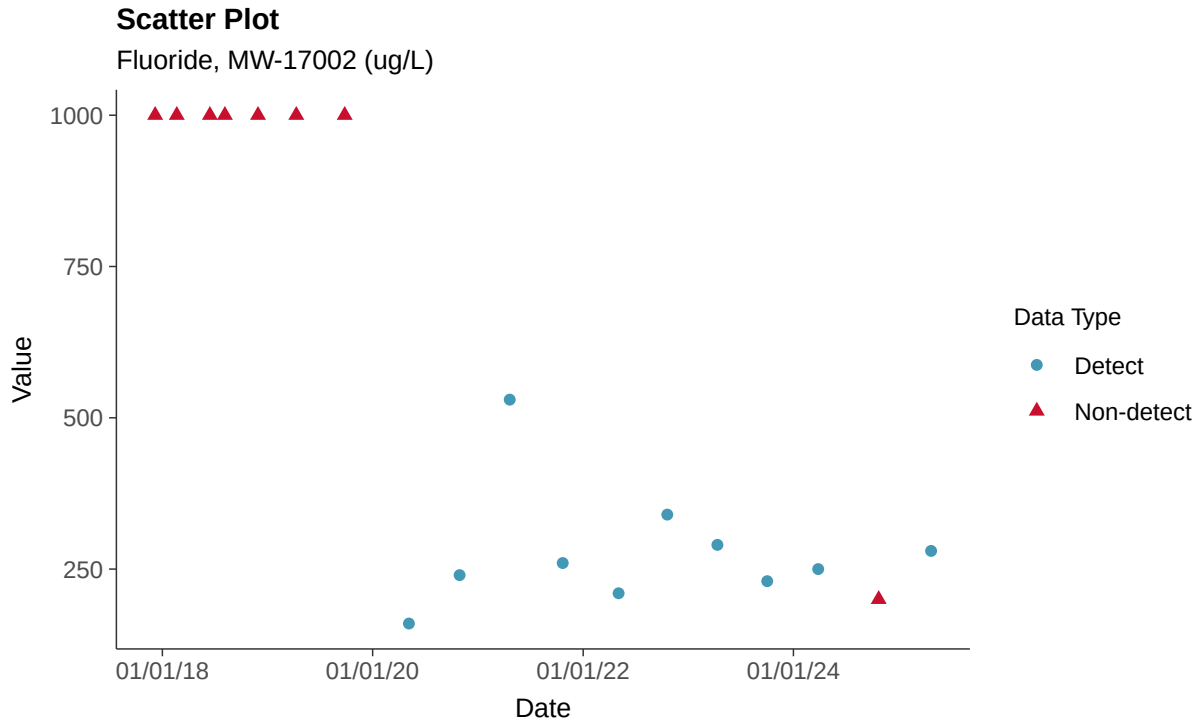
**Trend Regression: Piecewise Linear-Linear-Linear**

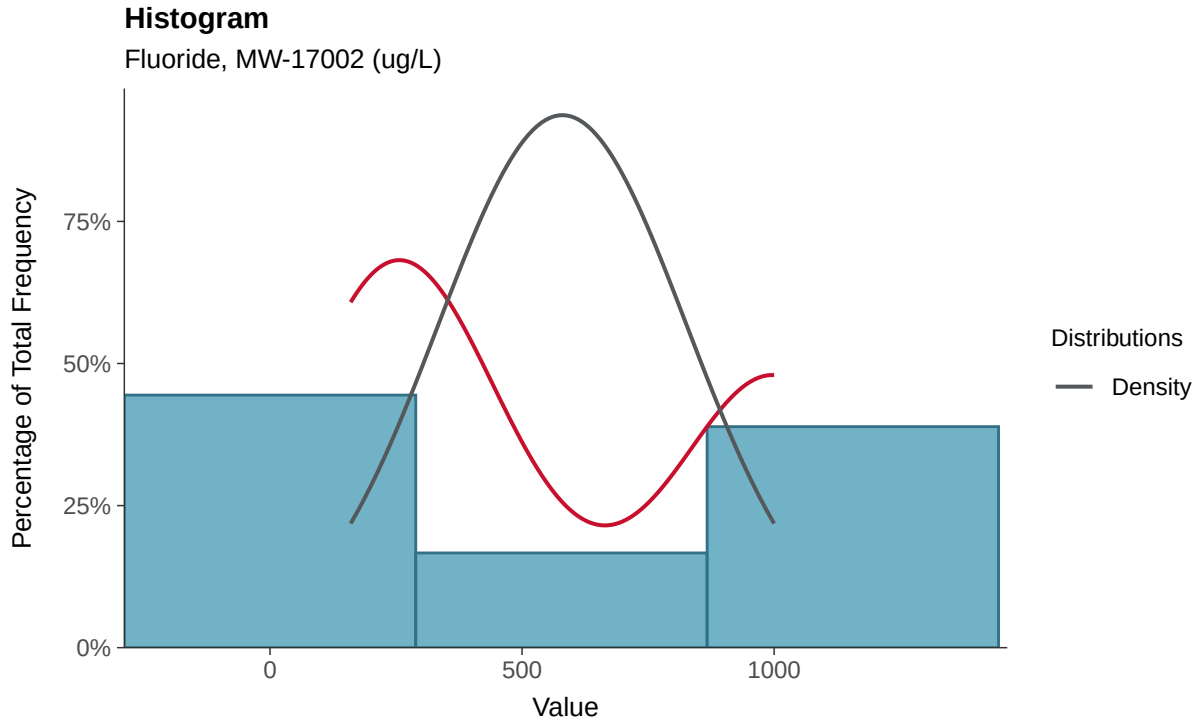
Cobalt, MW-17002 (ug/L)



## Appendix IV: Fluoride, MW-17002

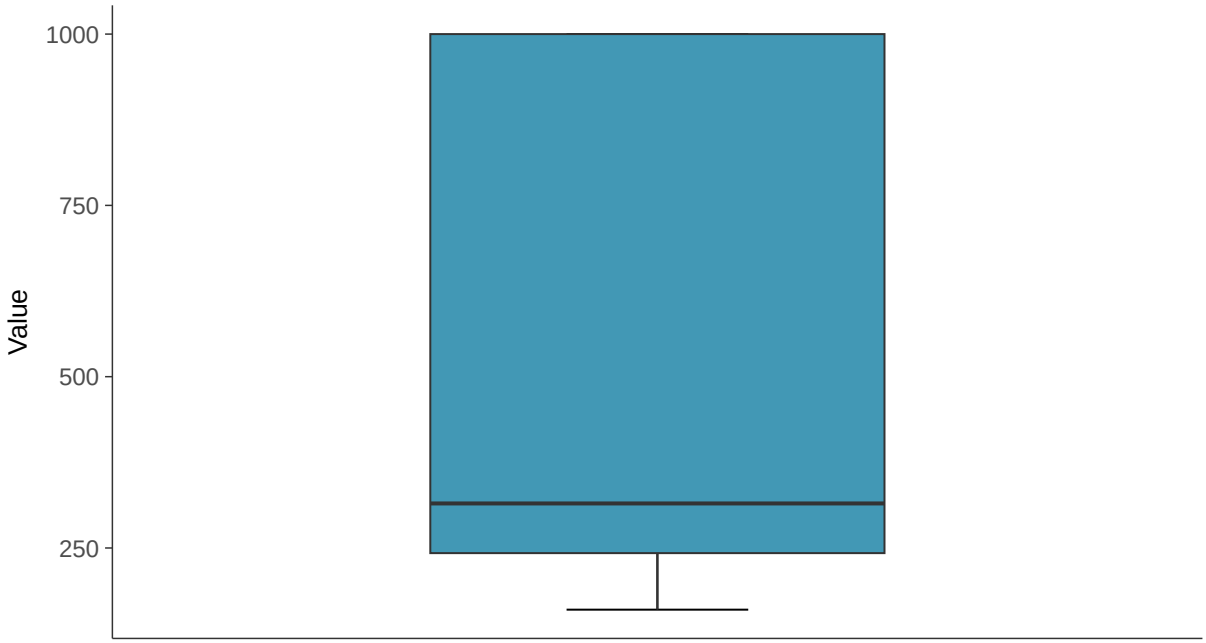
ID: 15_2_114



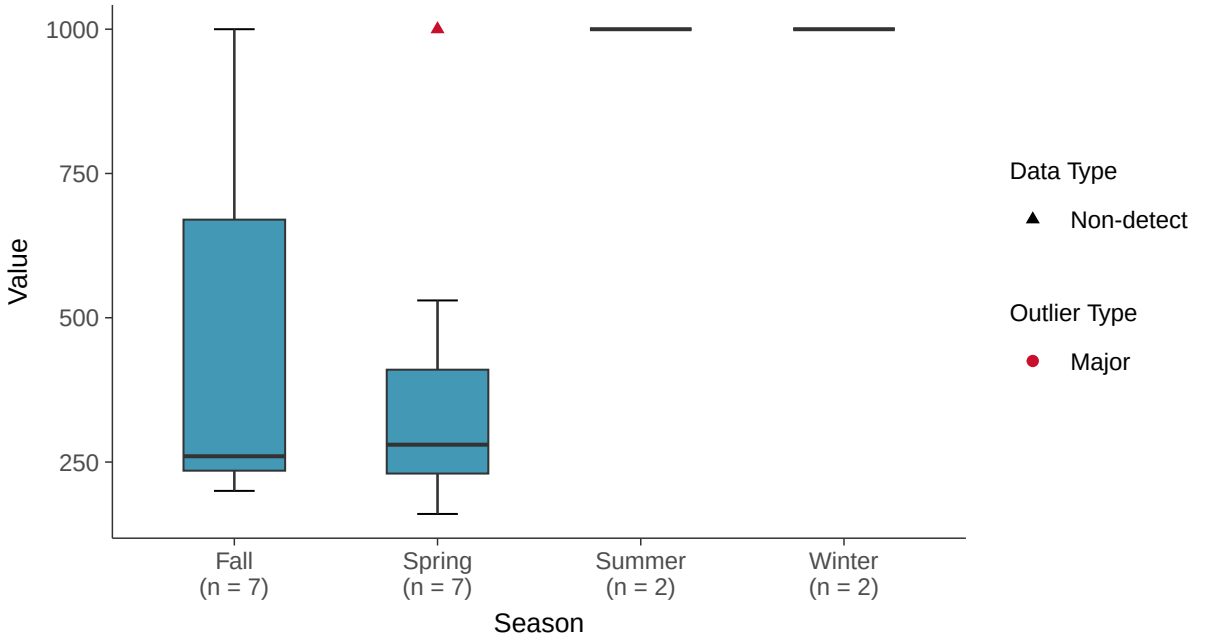
## Boxplot

Fluoride, MW-17002 (ug/L)



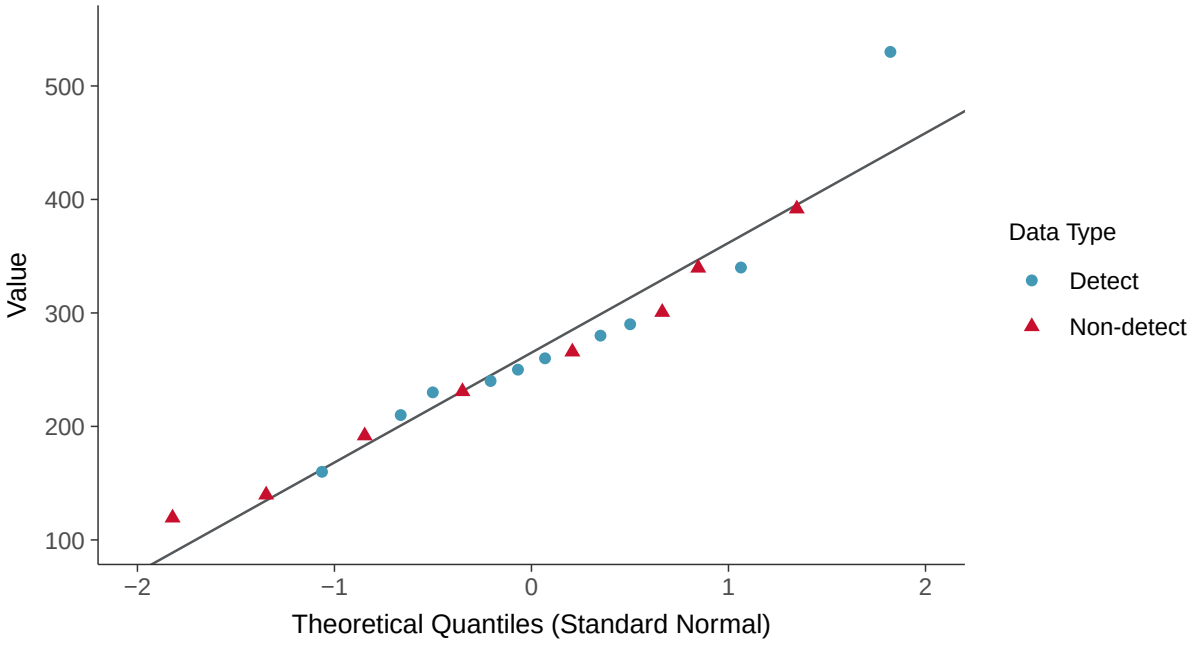

## Boxplot by Season

Fluoride, MW-17002 (ug/L)



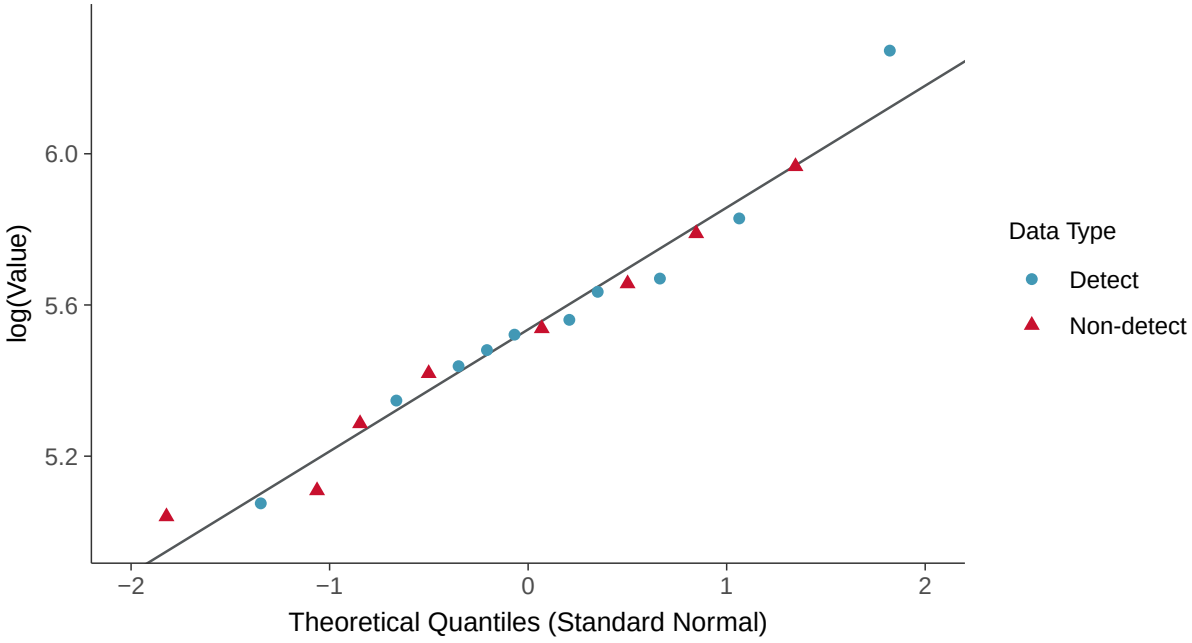
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17002 (ug/L)



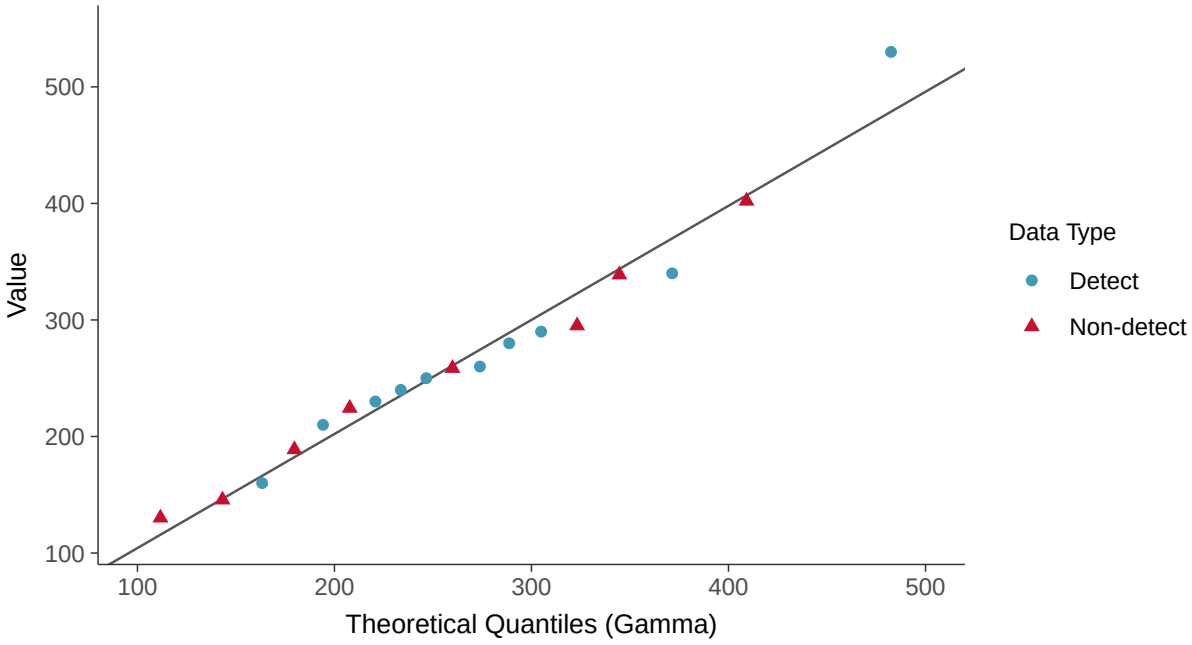

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17002 (ug/L)



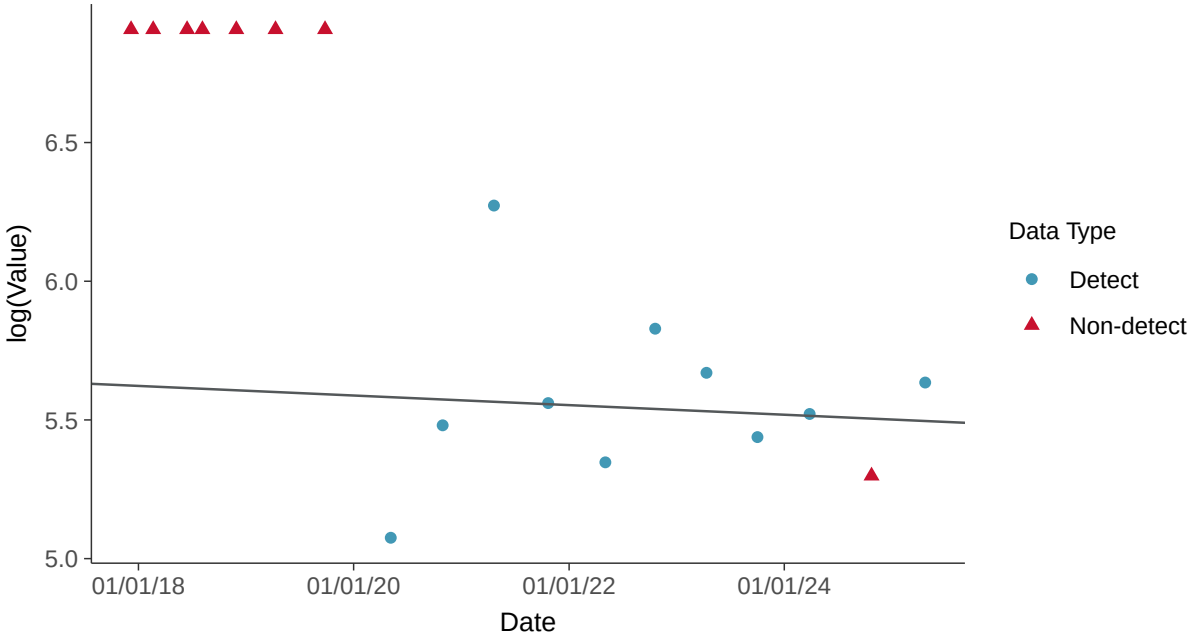
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17002 (ug/L)



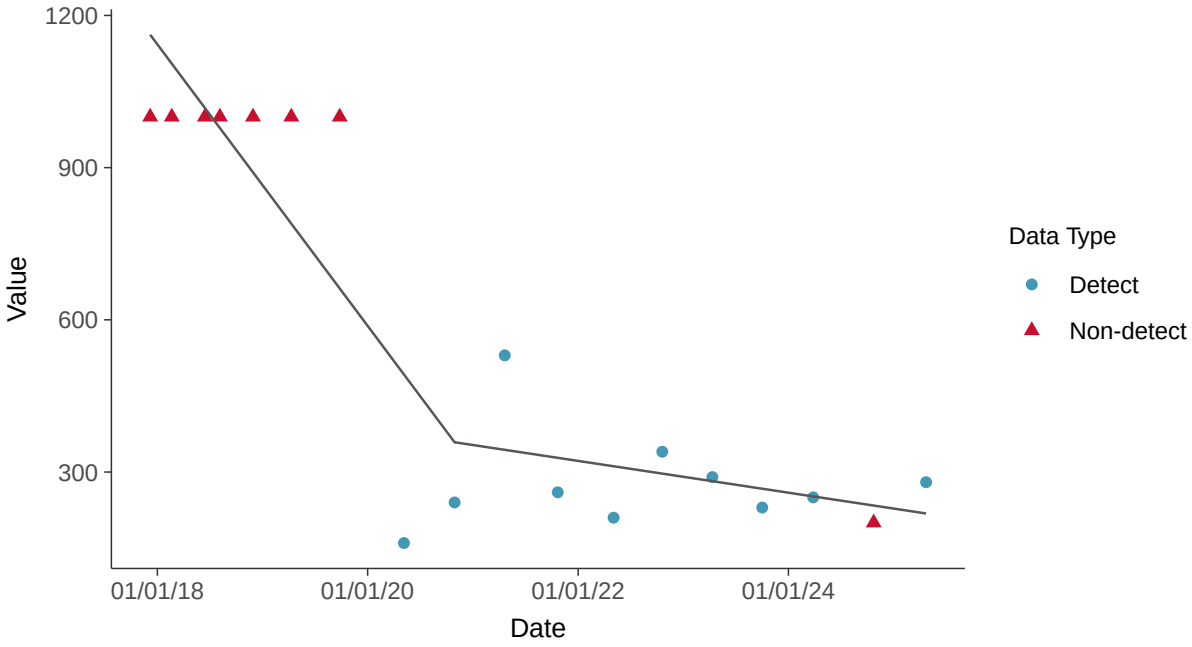

**Trend Regression: Lognormal MLE**

Fluoride, MW-17002 (ug/L)



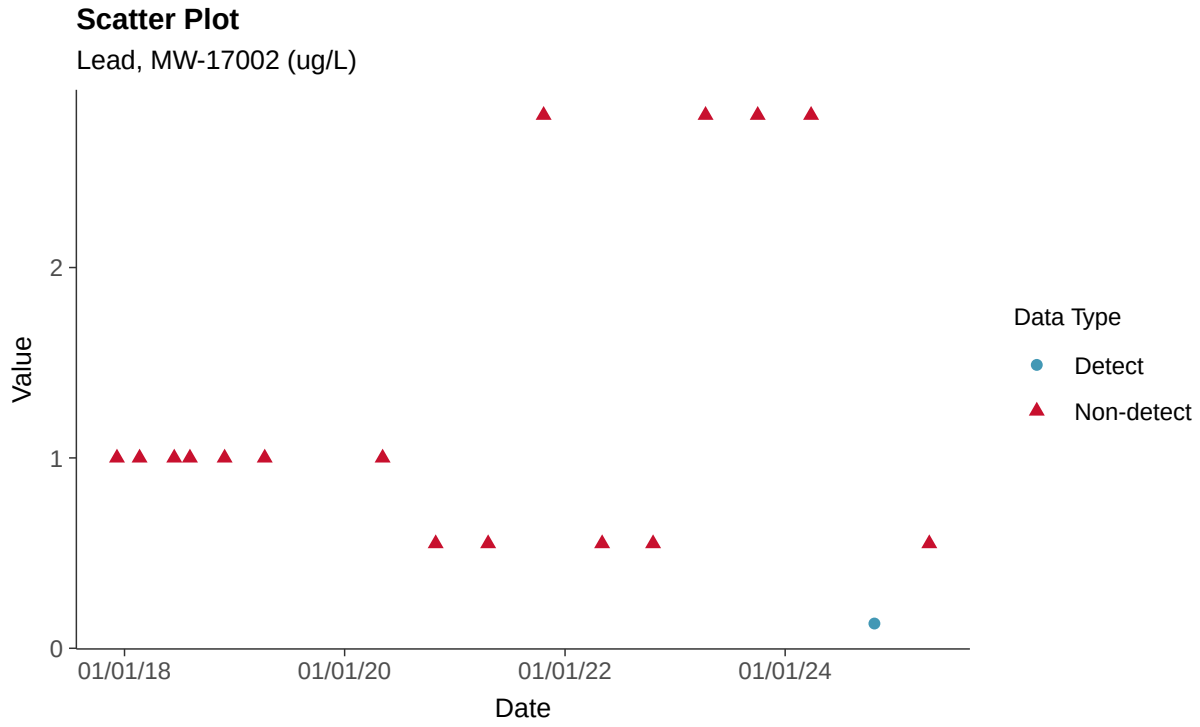
**Trend Regression: Piecewise Linear-Linear**

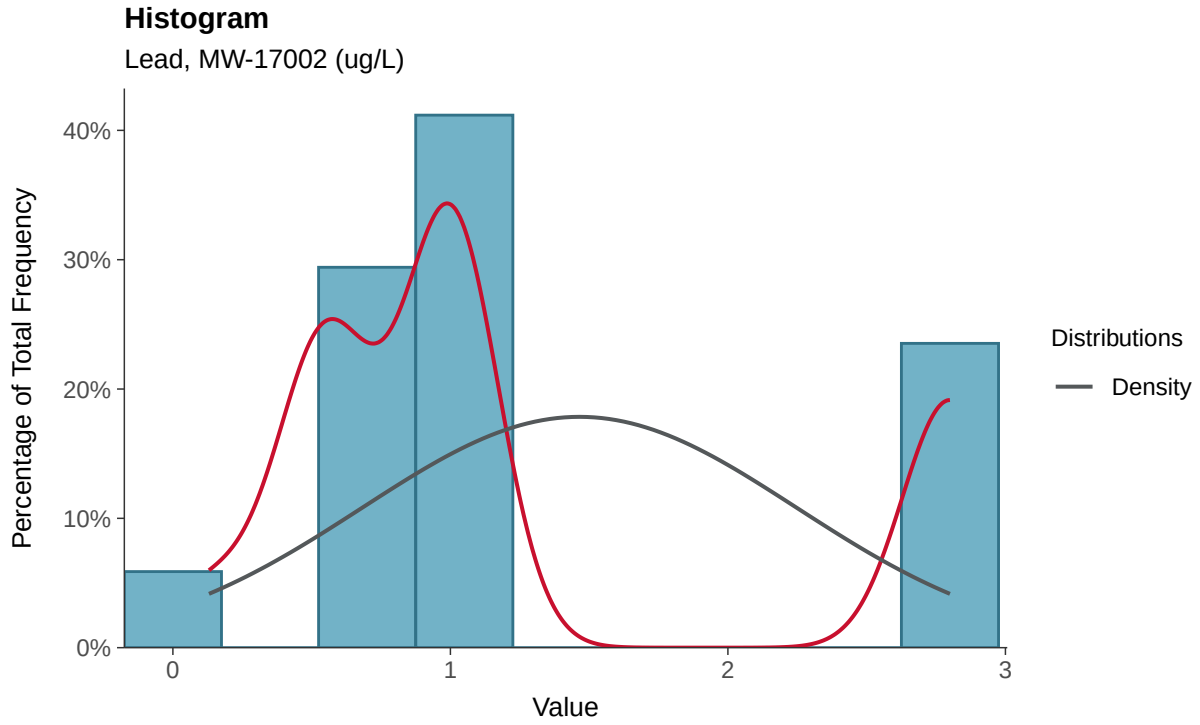
Fluoride, MW-17002 (ug/L)



## Appendix IV: Lead, MW-17002

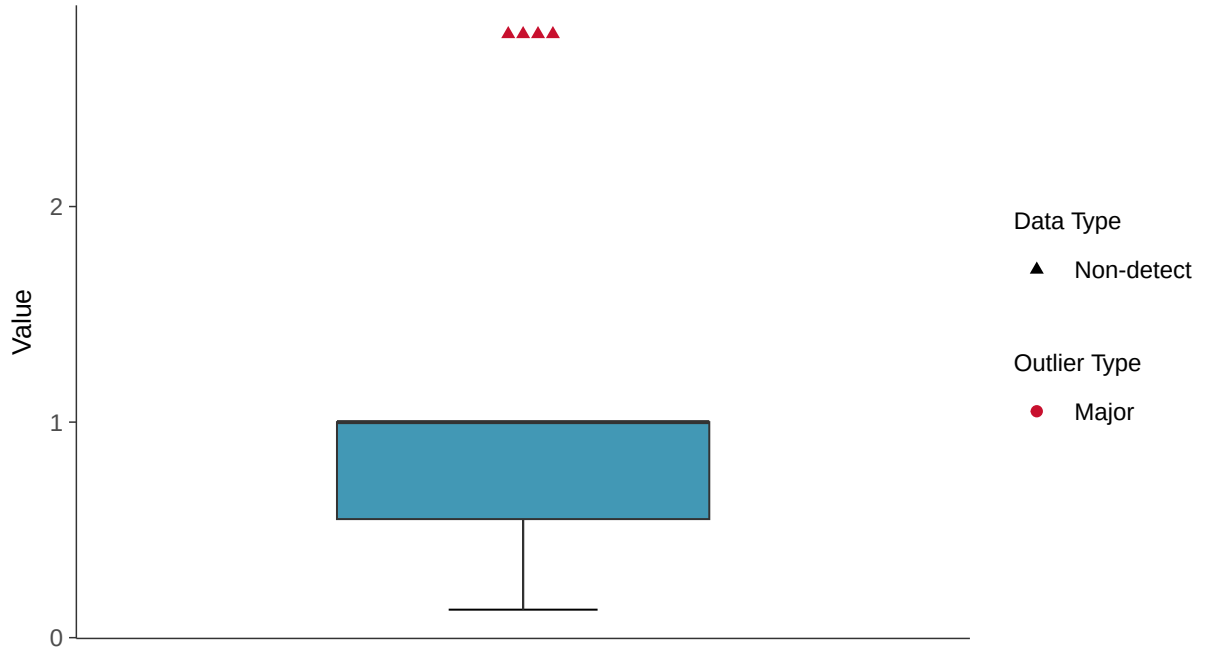
ID: 15_2_116



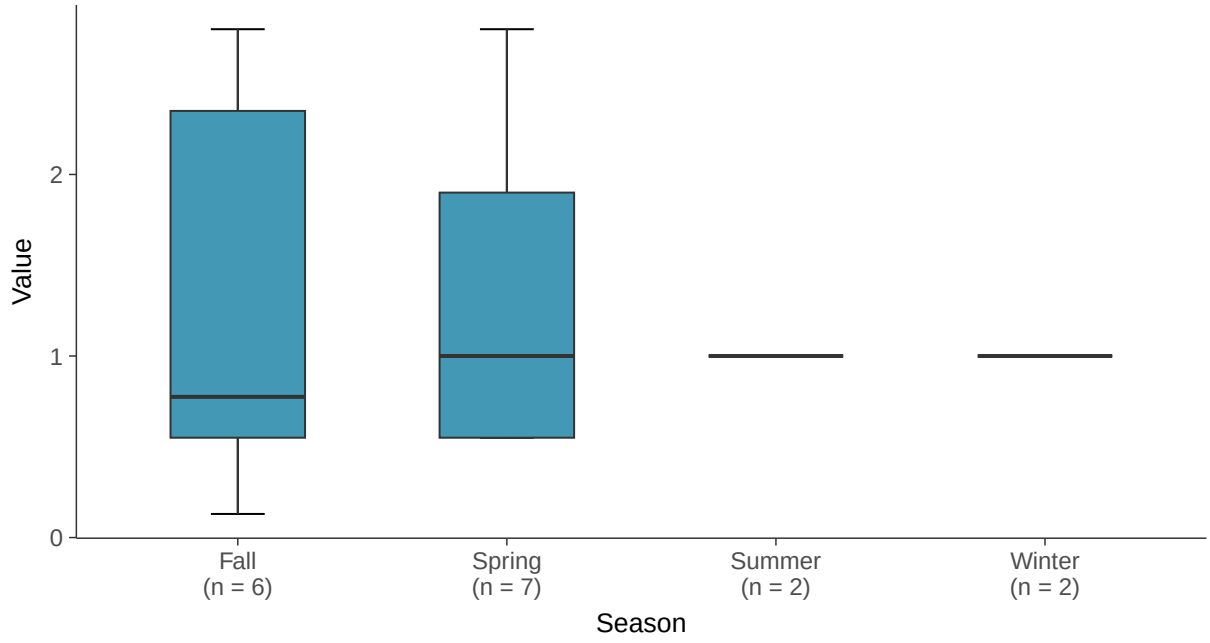
**Boxplot**

Lead, MW-17002 (ug/L)



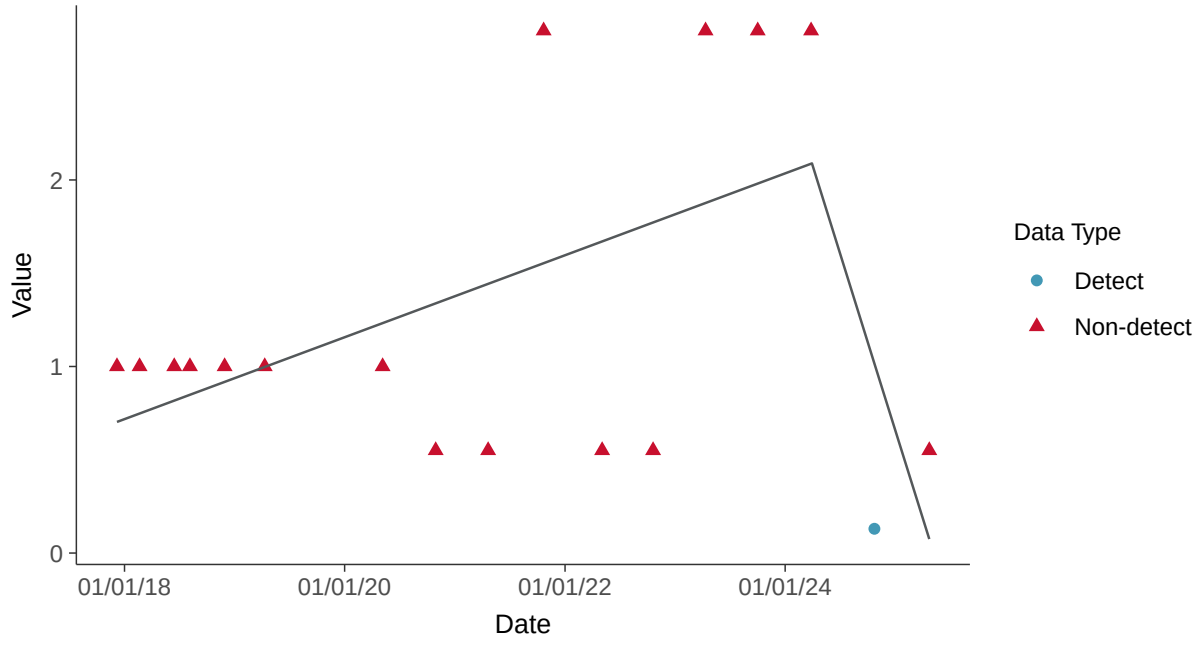

**Boxplot by Season**

Lead, MW-17002 (ug/L)



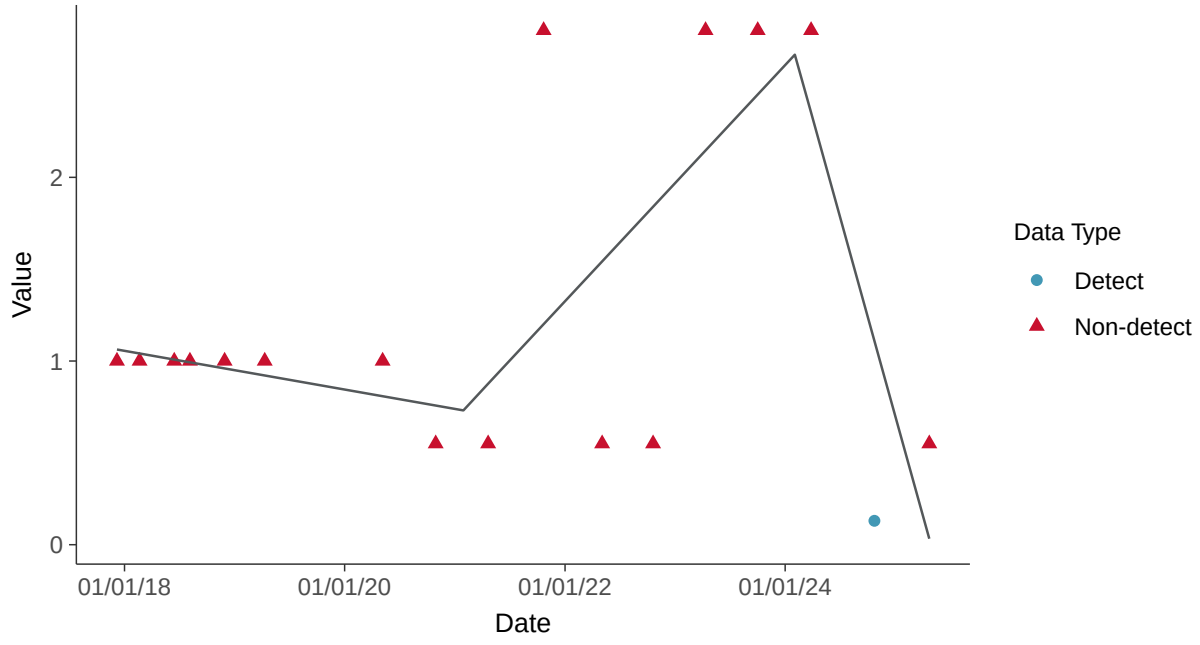
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-17002 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Lead, MW-17002 (ug/L)

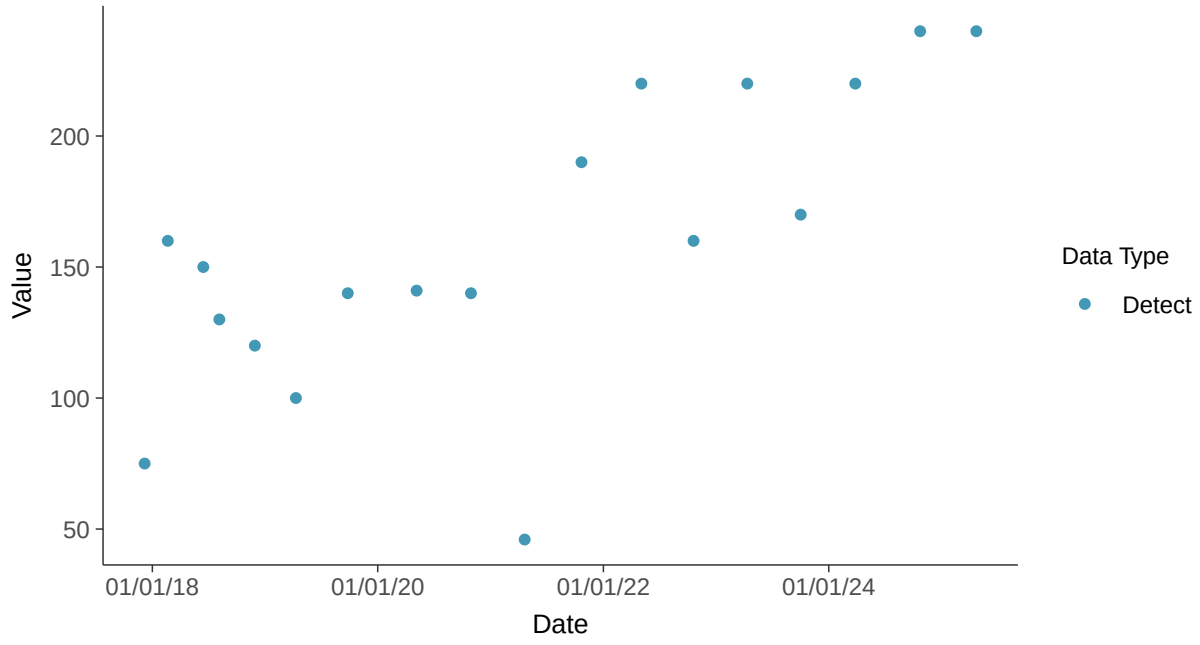


## Appendix IV: Lithium, MW-17002

ID: 15_2_117

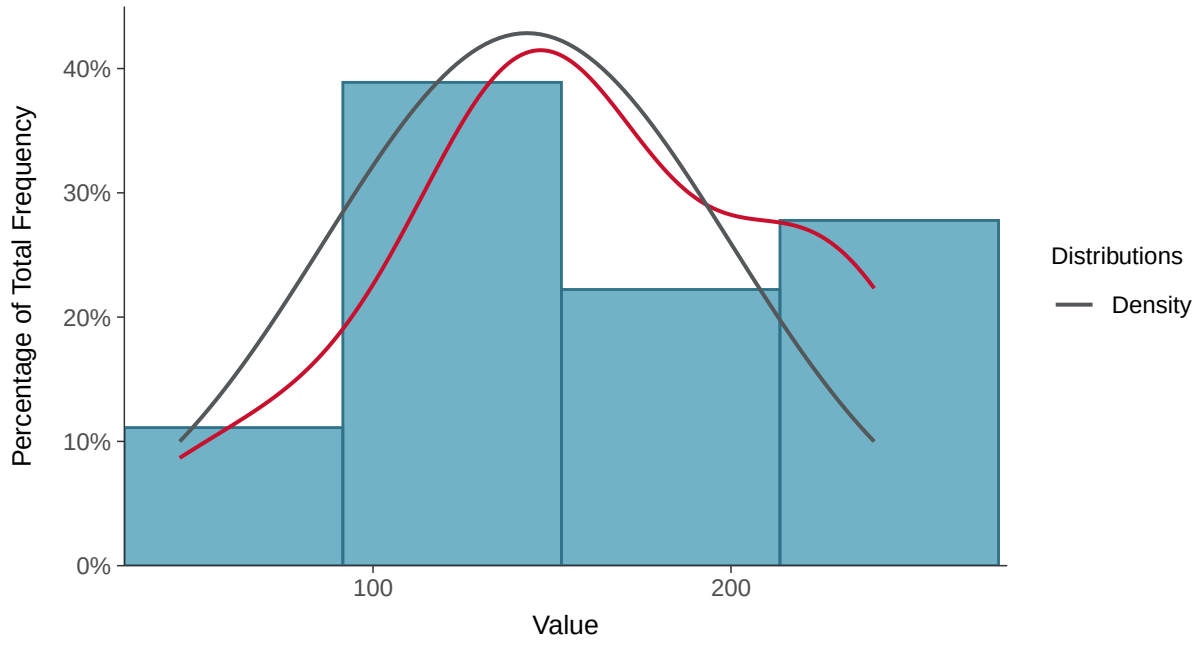
**Scatter Plot**

Lithium, MW-17002 (ug/L)



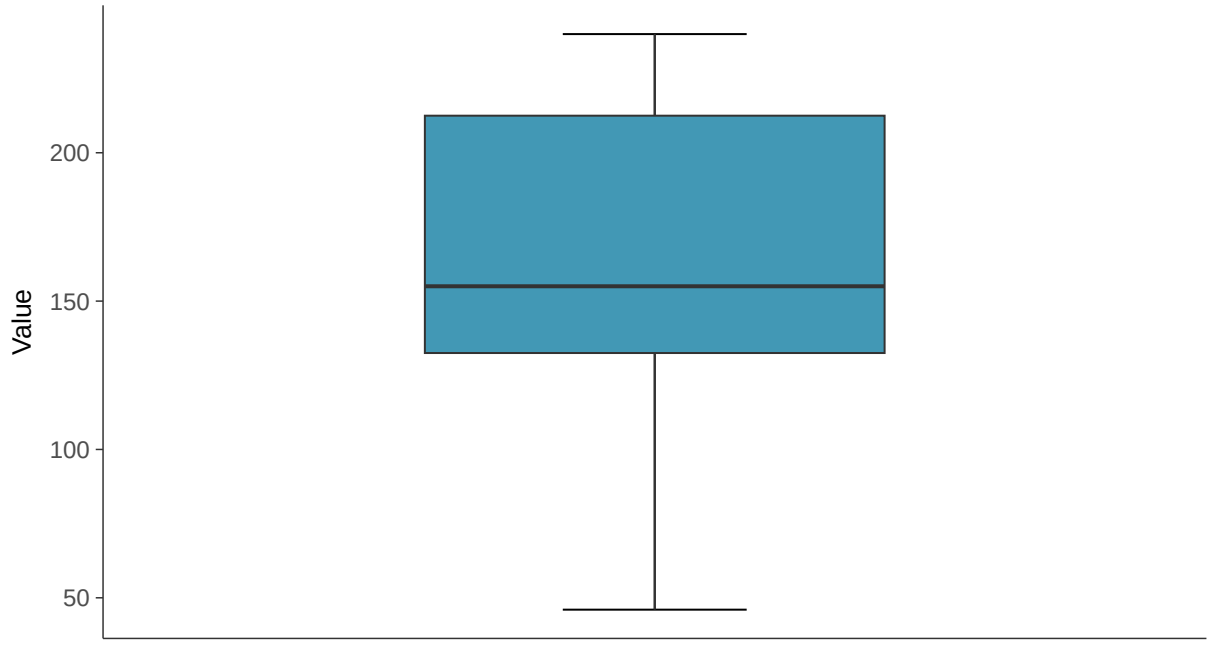

**Histogram**

Lithium, MW-17002 (ug/L)



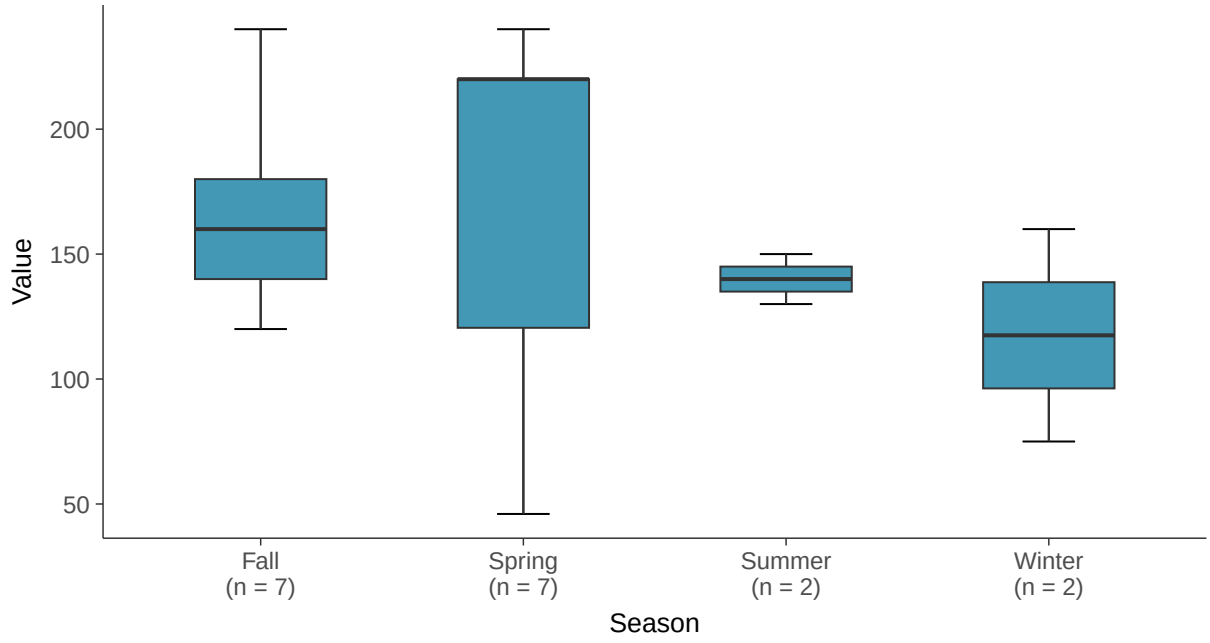
**Boxplot**

Lithium, MW-17002 (ug/L)



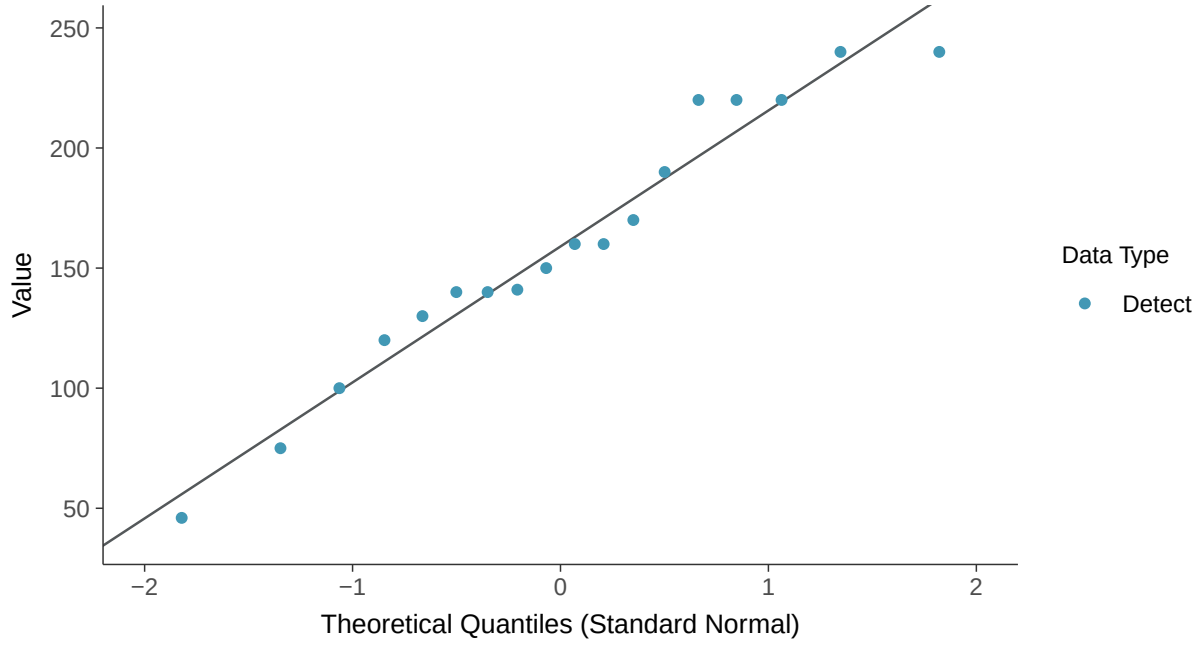

**Boxplot by Season**

Lithium, MW-17002 (ug/L)



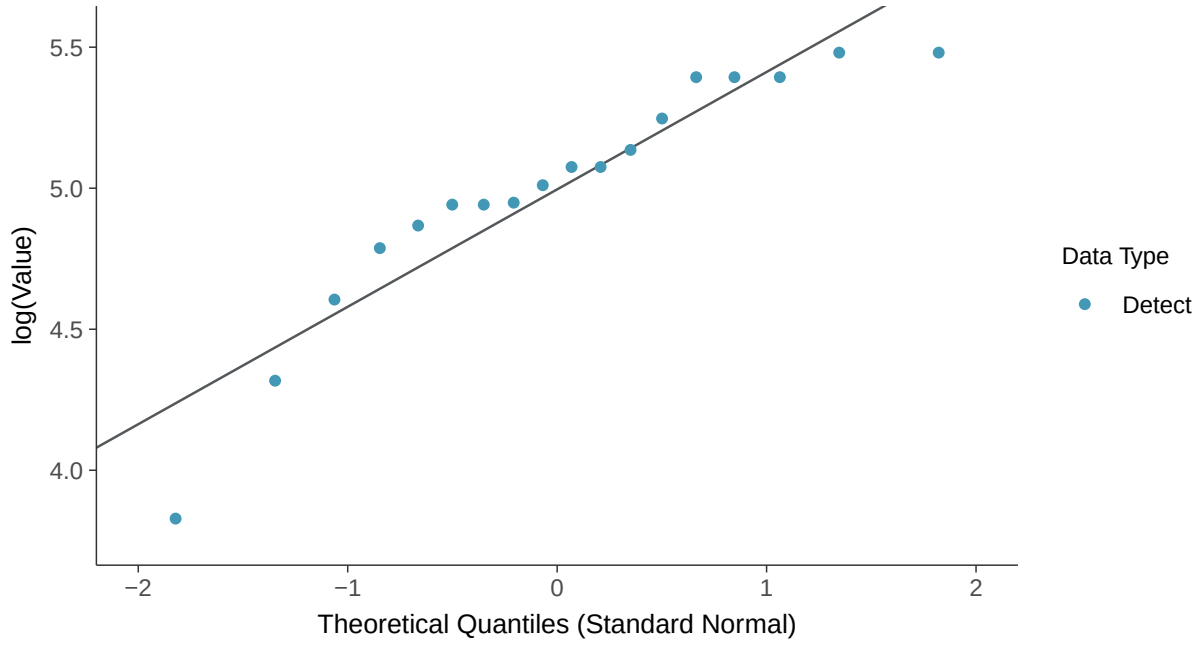
**Normal Q-Q plot**

Lithium, MW-17002 (ug/L)



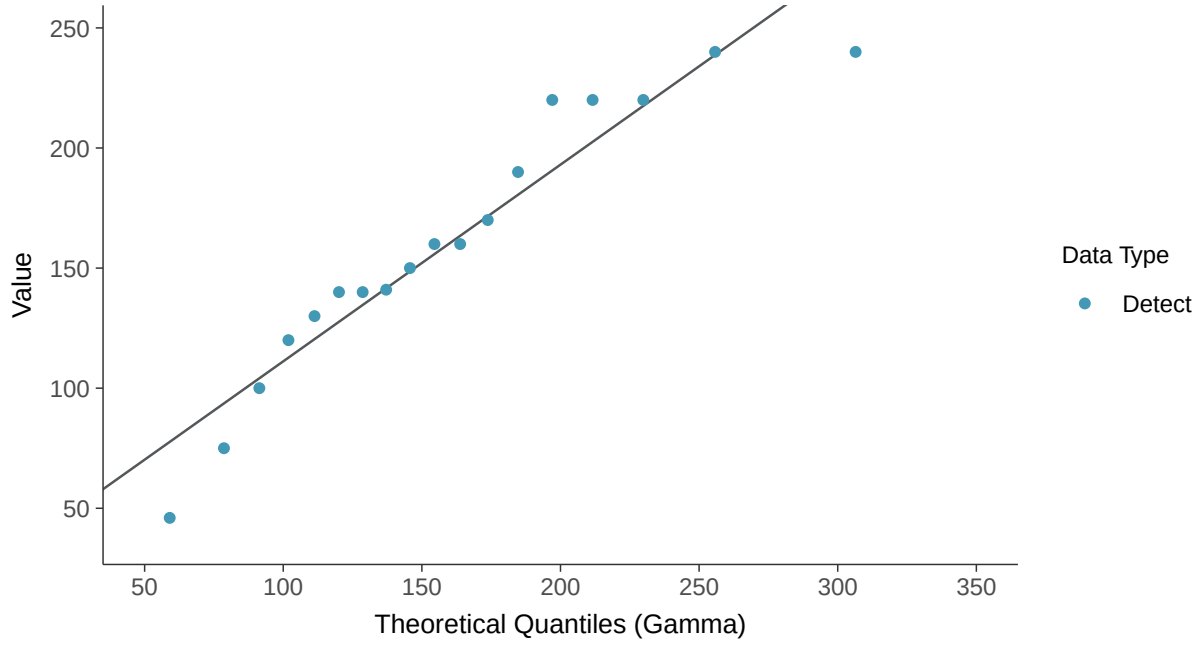

**Lognormal Q-Q plot**

Lithium, MW-17002 (ug/L)



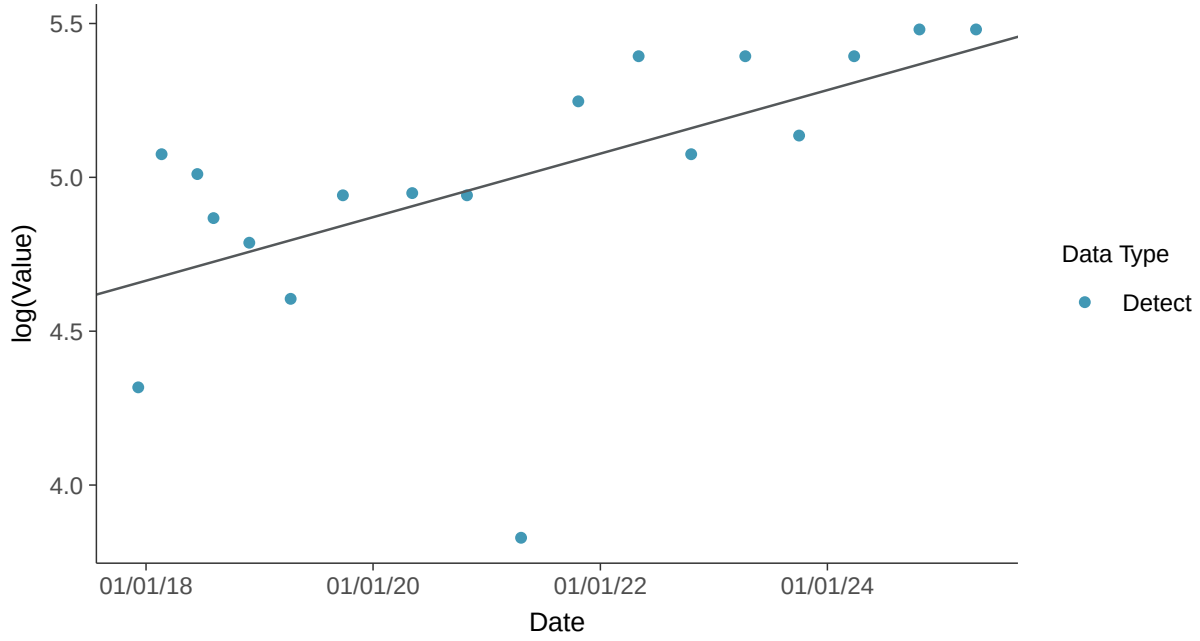
**Gamma Q-Q plot**

Lithium, MW-17002 (ug/L)



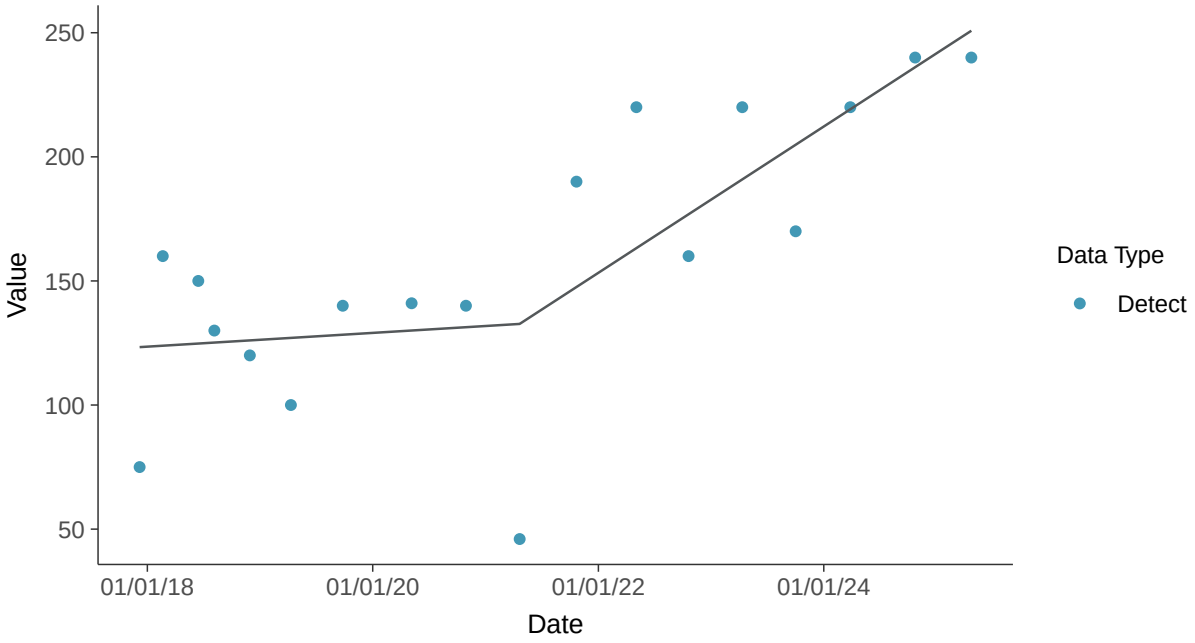

**Trend Regression: Lognormal MLE**

Lithium, MW-17002 (ug/L)



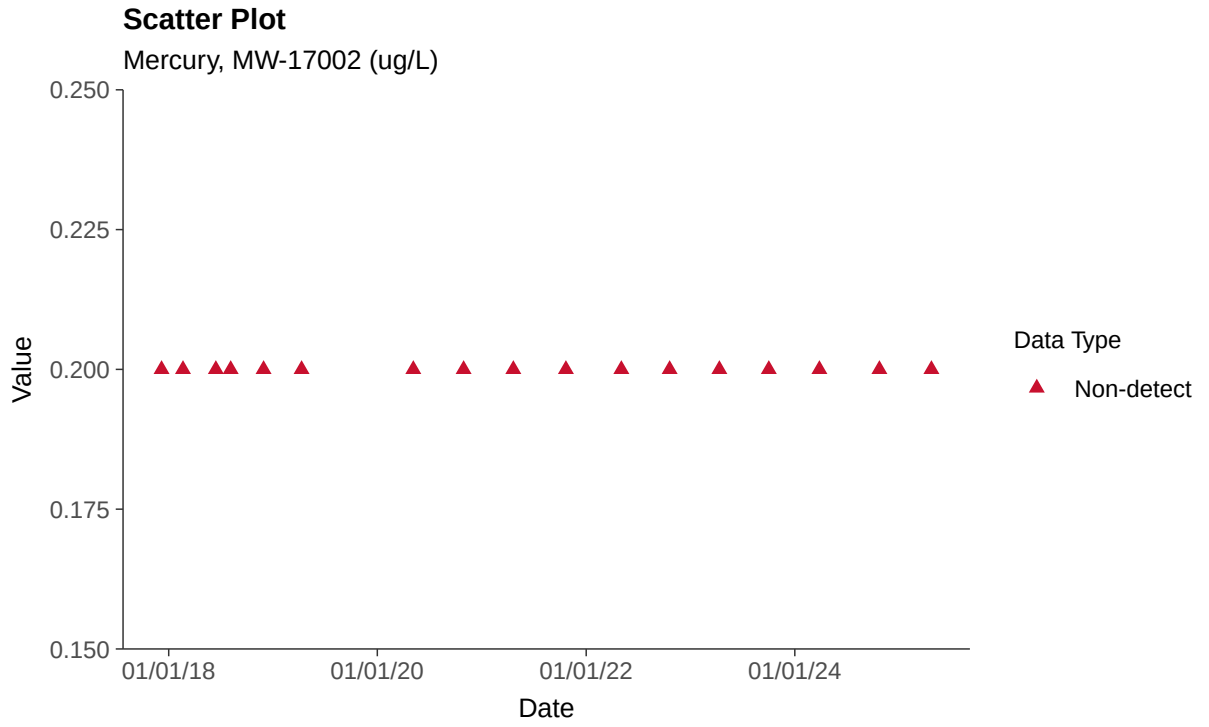
**Trend Regression: Piecewise Linear-Linear**

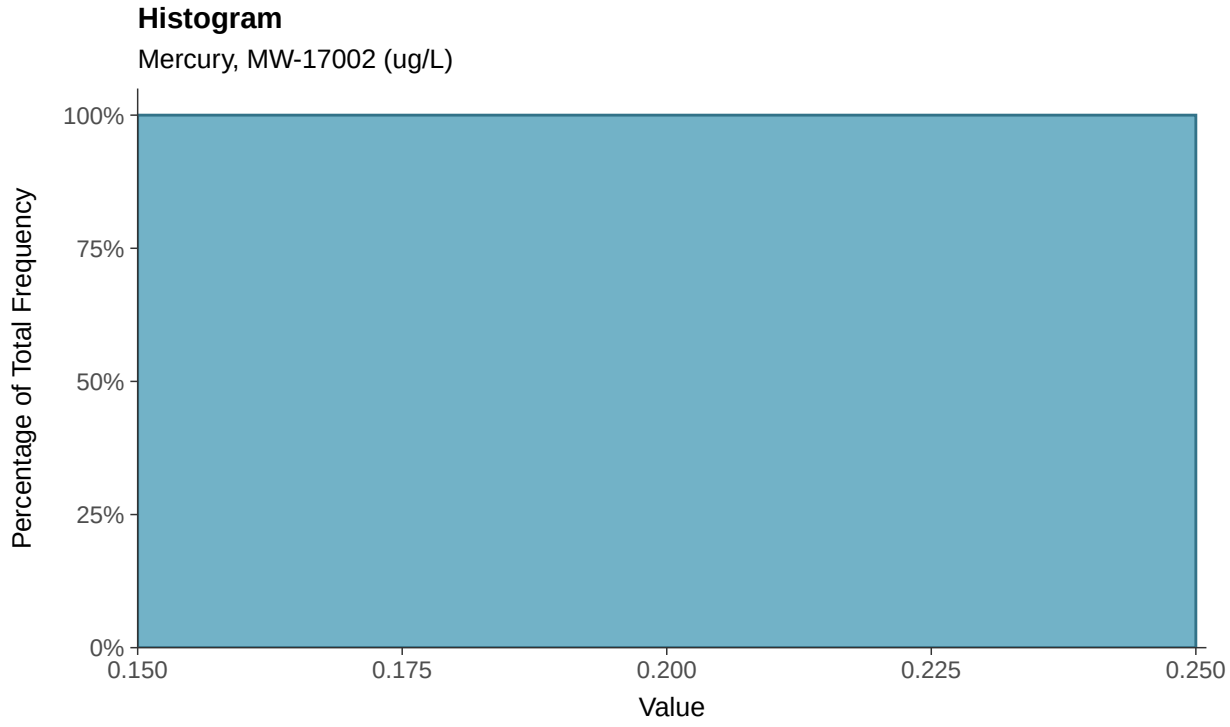
Lithium, MW-17002 (ug/L)



## Appendix IV: Mercury, MW-17002

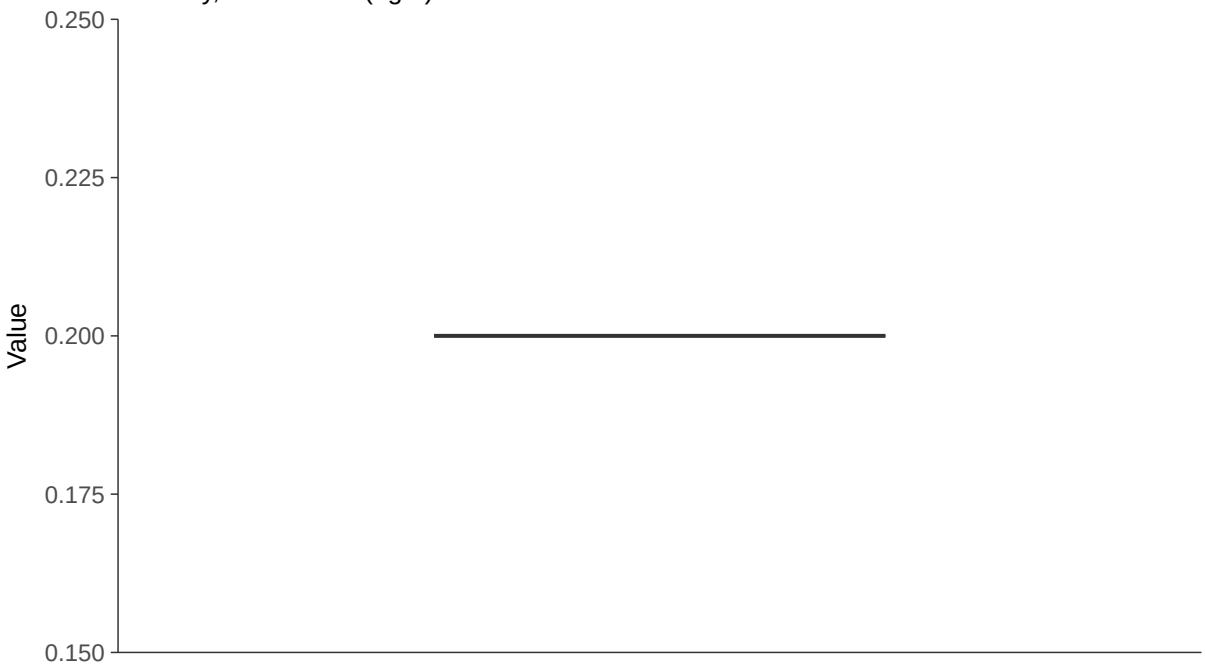
ID: 15_2_118



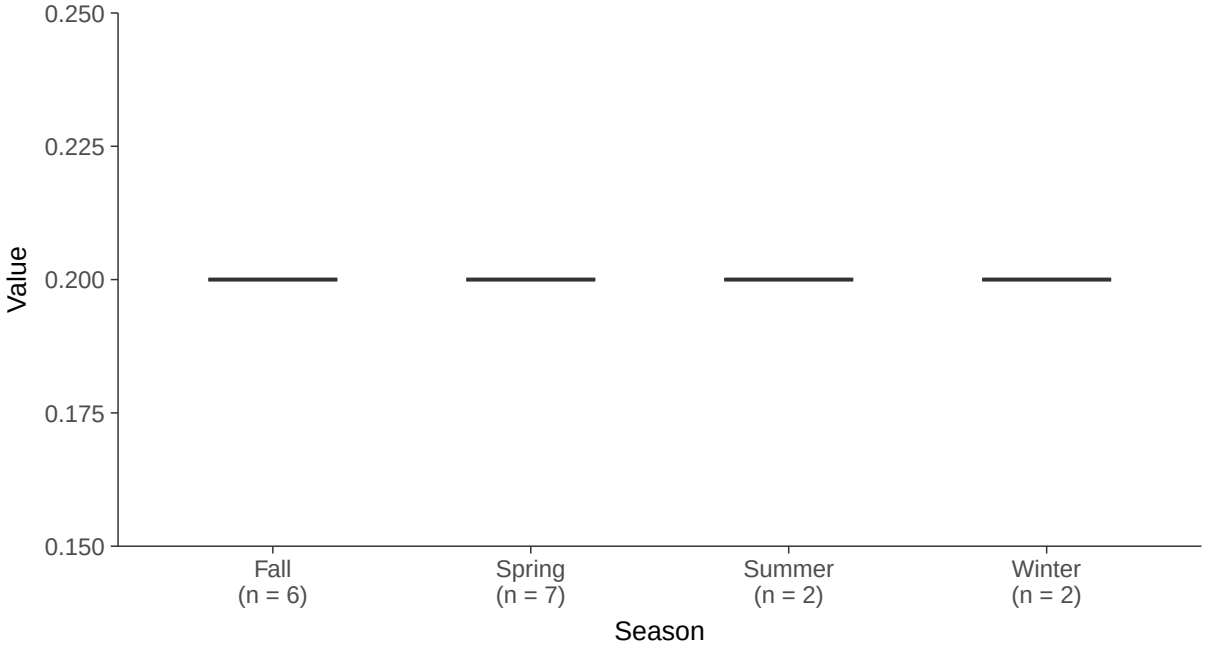
**Boxplot**

Mercury, MW-17002 (ug/L)



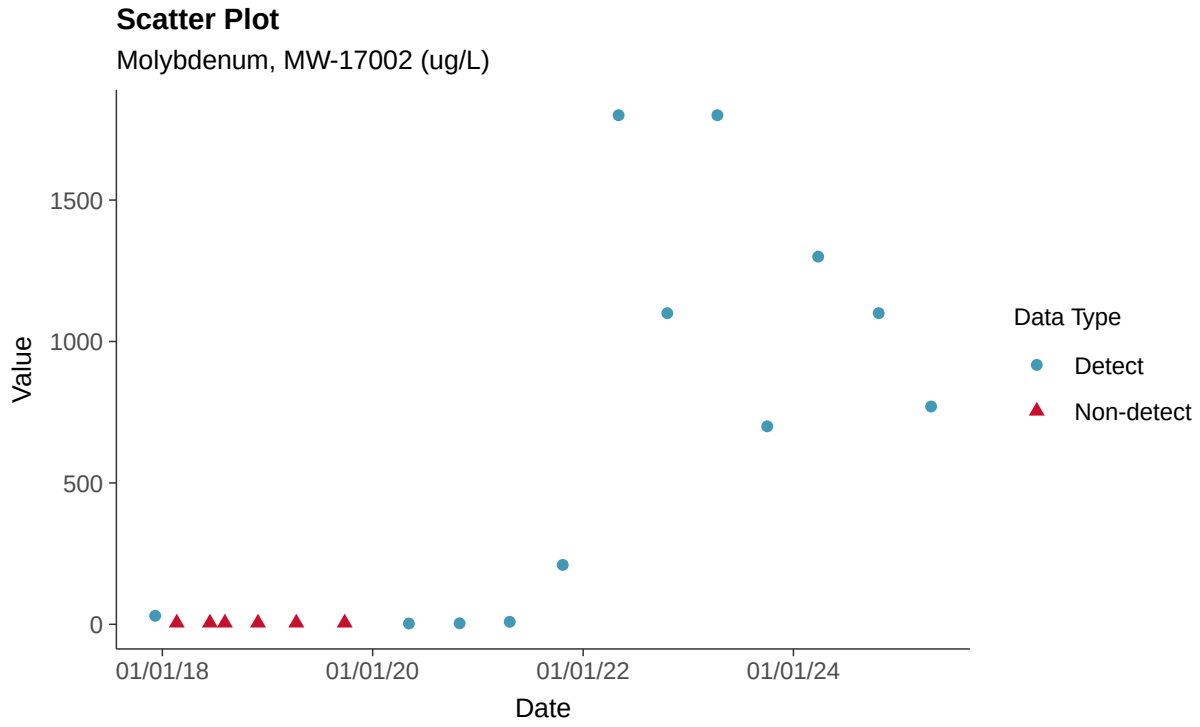

**Boxplot by Season**

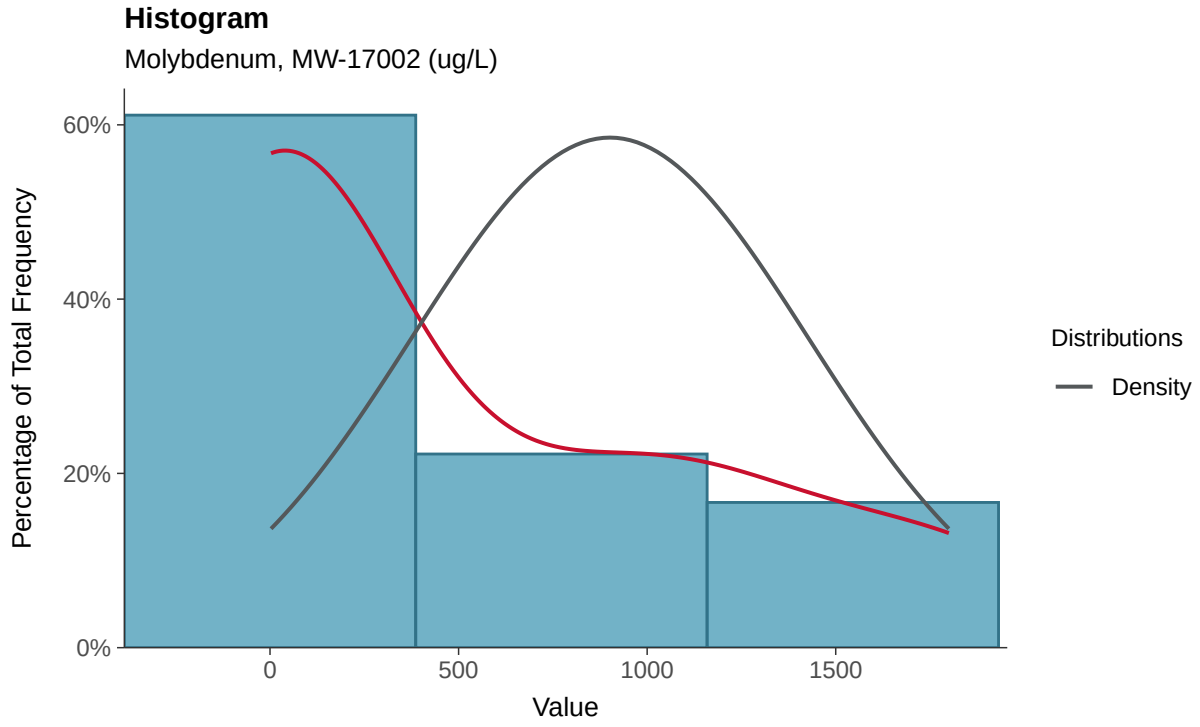
Mercury, MW-17002 (ug/L)



## Appendix IV: Molybdenum, MW-17002

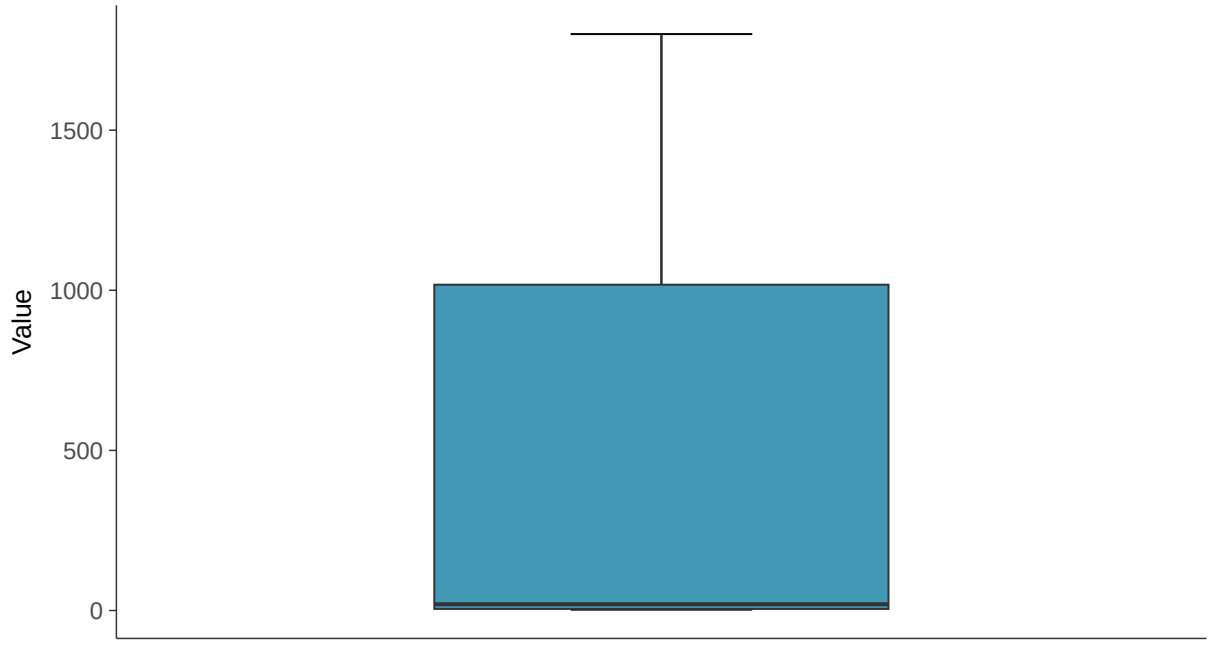
ID: 15_2_119



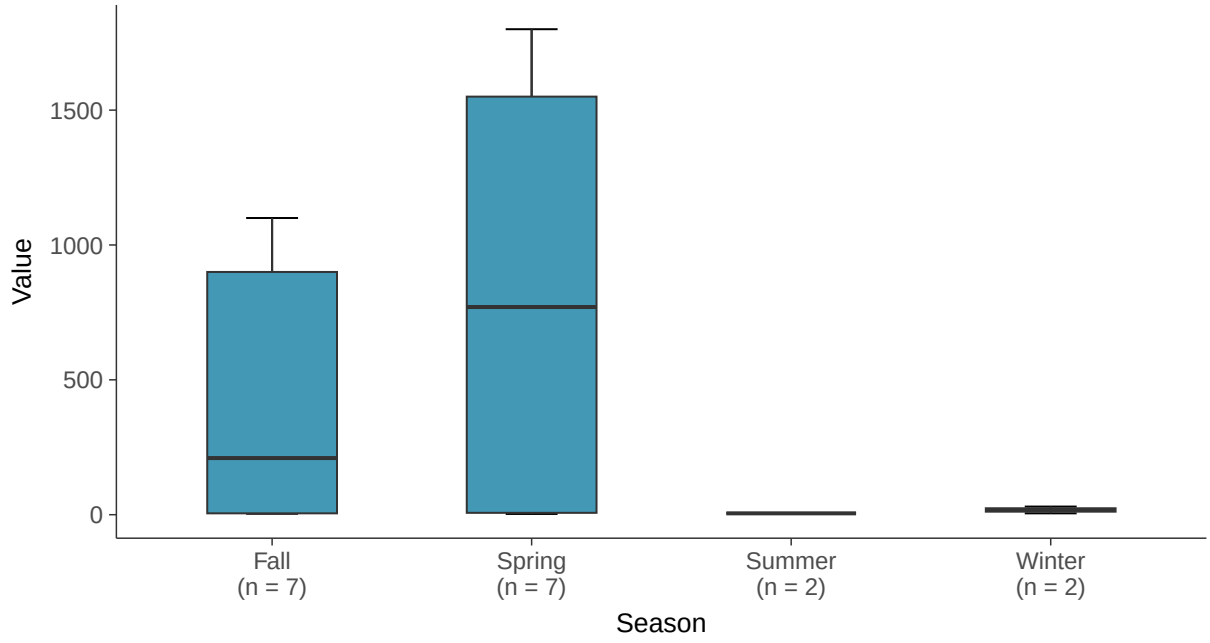
**Boxplot**

Molybdenum, MW-17002 (ug/L)



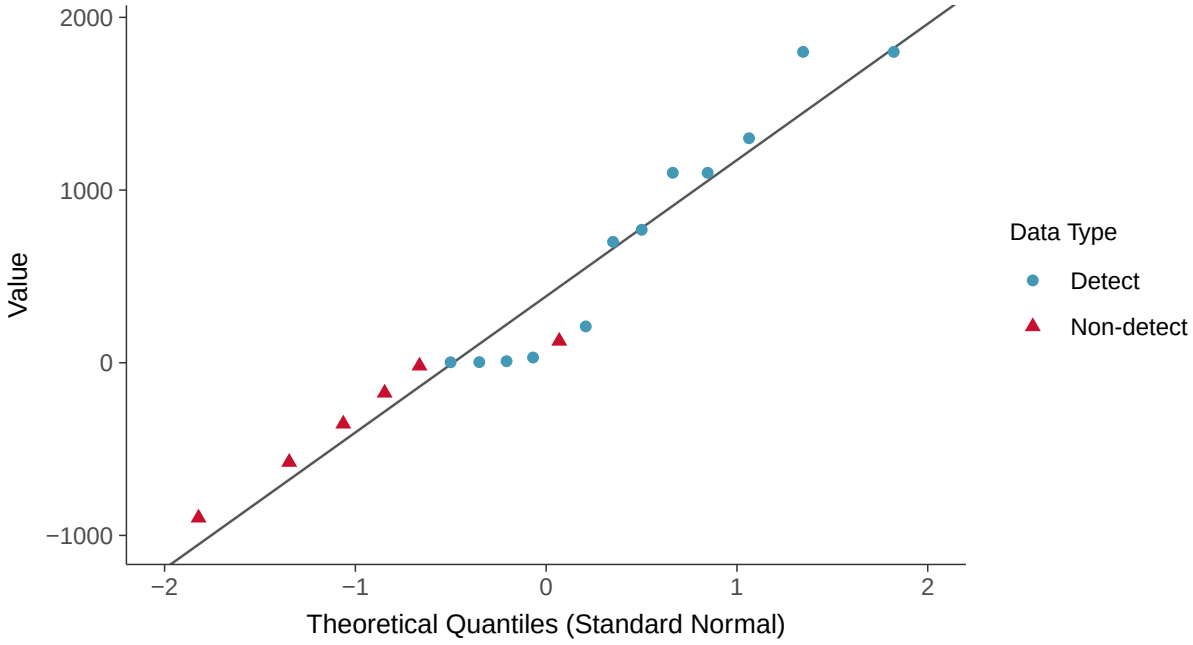

**Boxplot by Season**

Molybdenum, MW-17002 (ug/L)



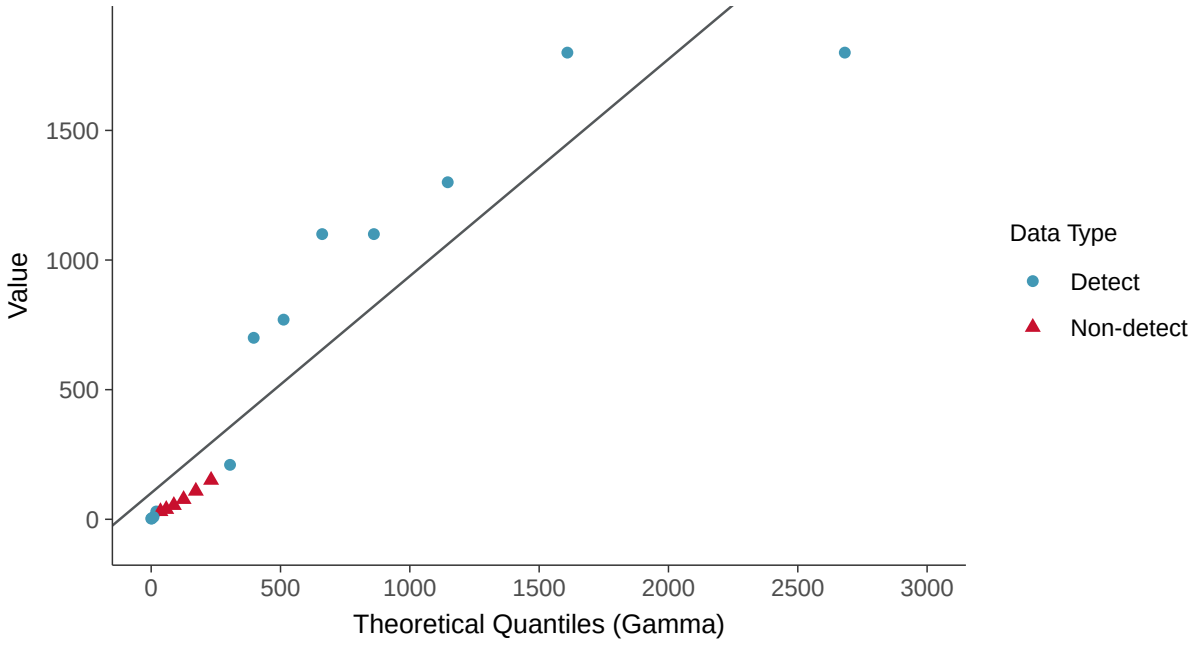
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17002 (ug/L)



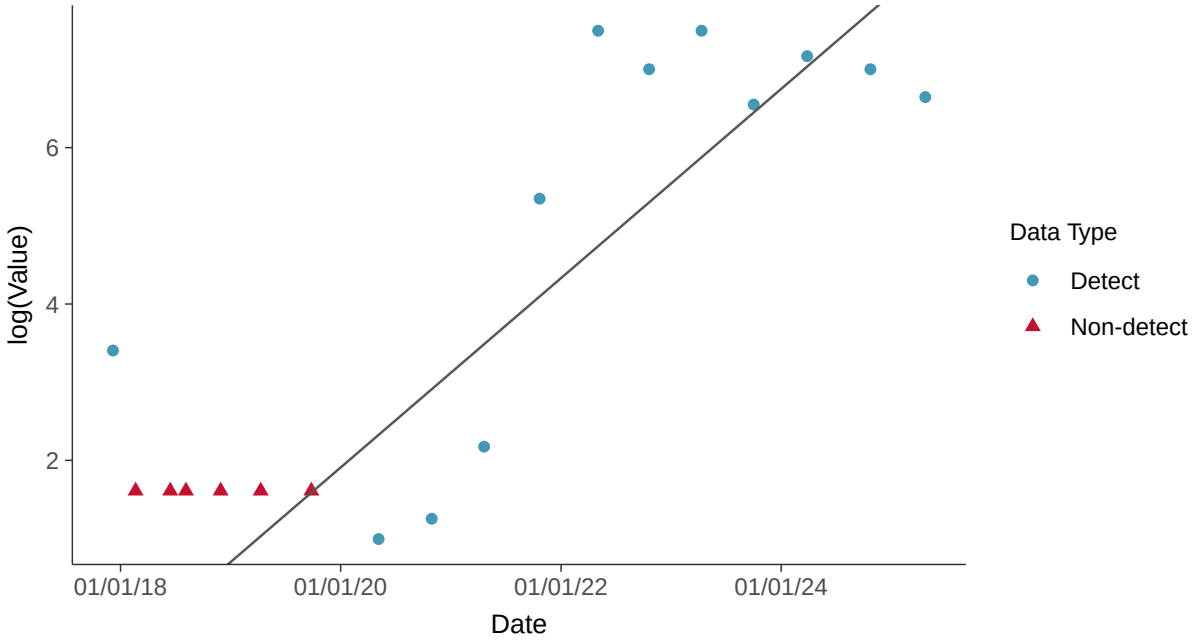

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17002 (ug/L)



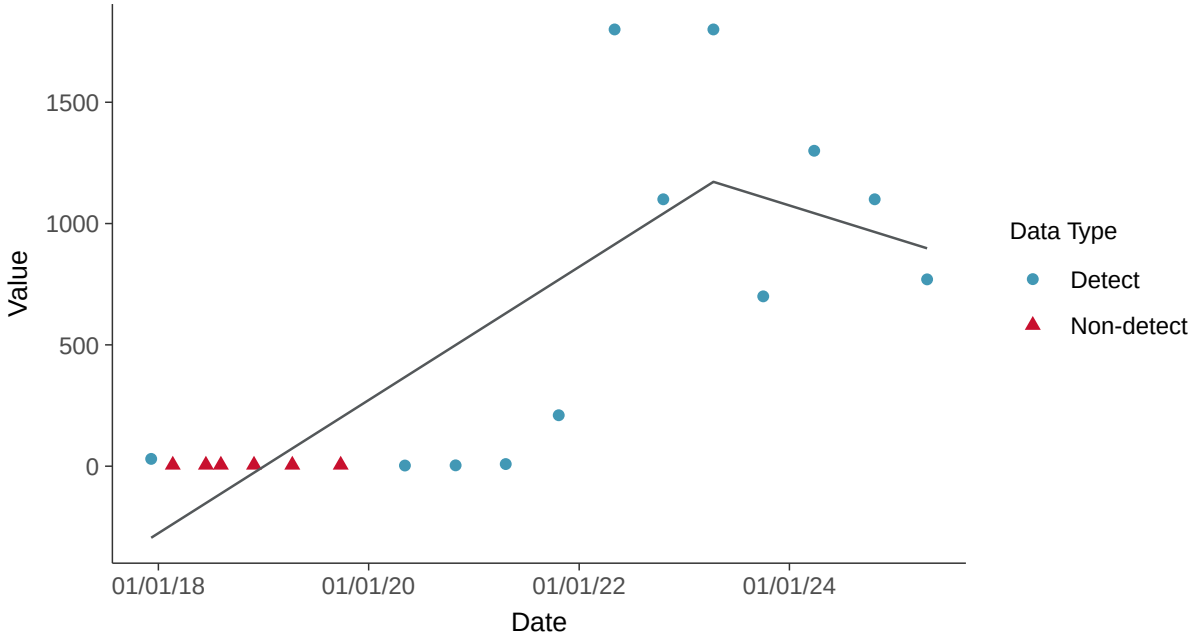
**Trend Regression: Lognormal MLE**

Molybdenum, MW-17002 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17002 (ug/L)

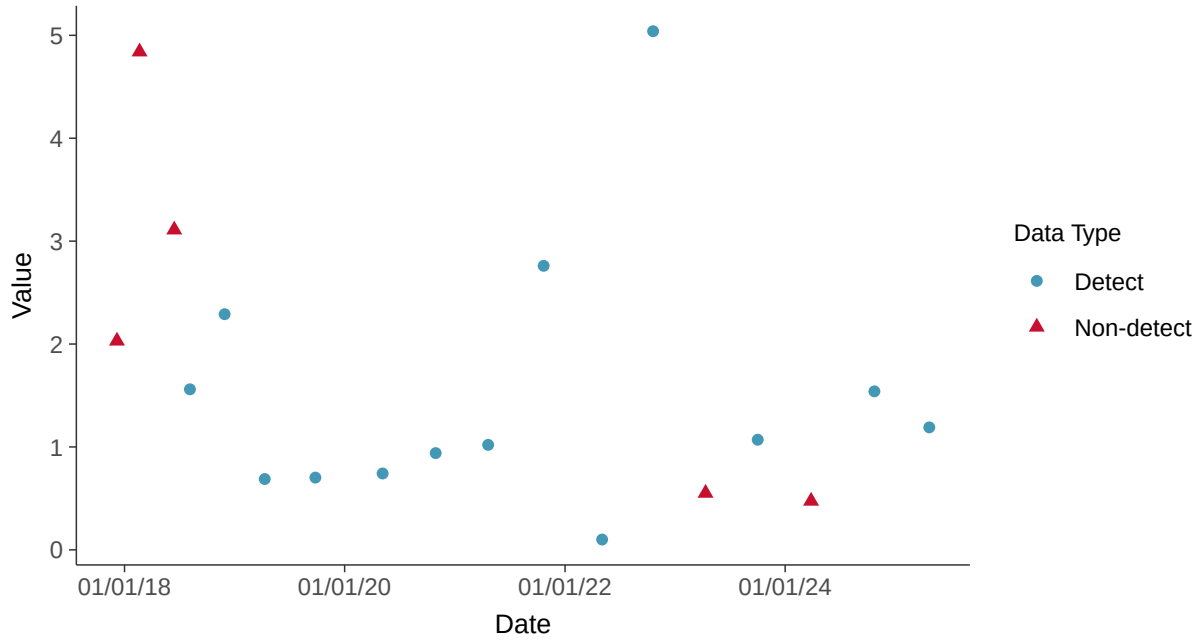


## Appendix IV: Radium-226+228, MW-17002

ID: 15_2_125

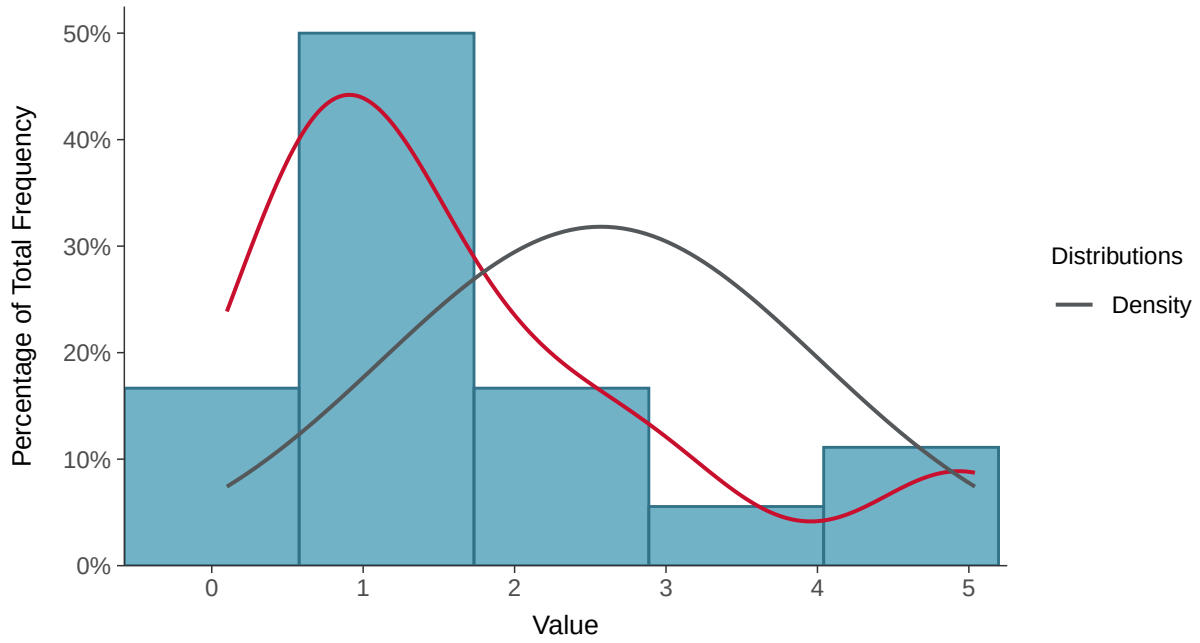
**Scatter Plot**

Radium-226+228, MW-17002 (pCi/L)



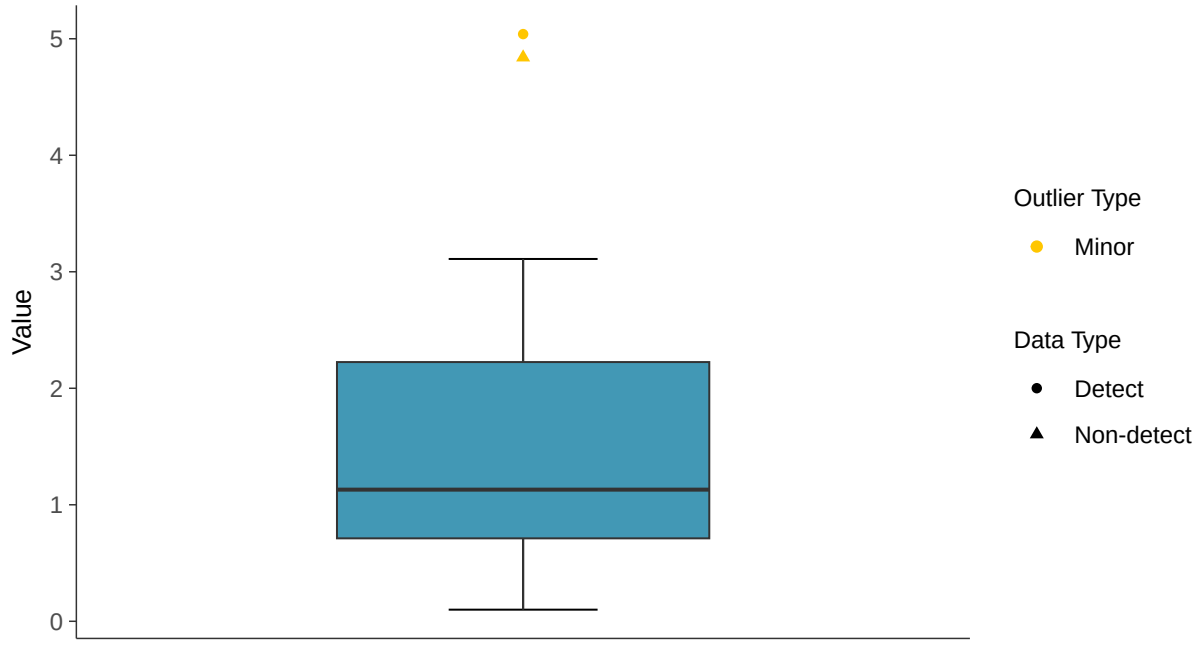

**Histogram**

Radium-226+228, MW-17002 (pCi/L)



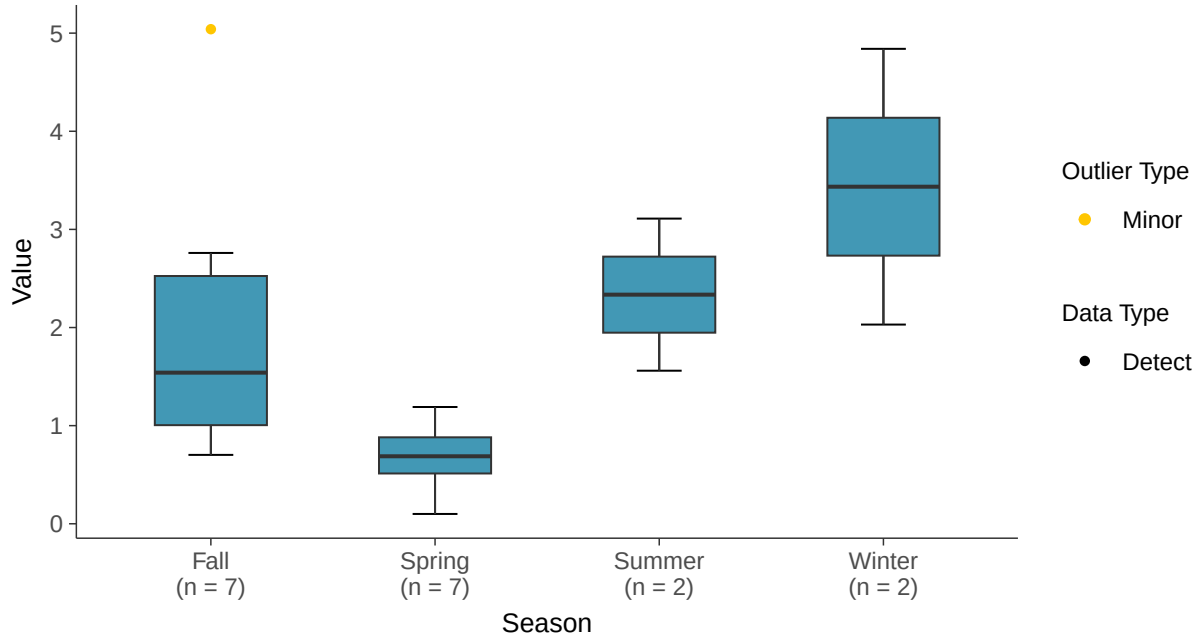
## Boxplot

Radium-226+228, MW-17002 (pCi/L)



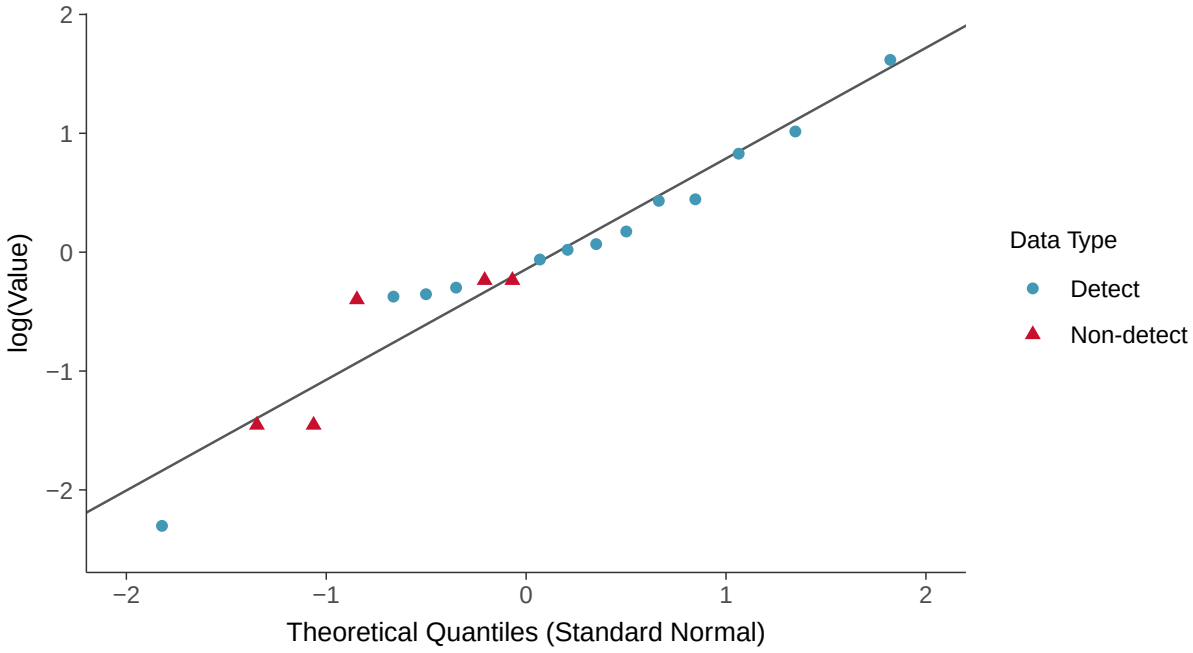

## Boxplot by Season

Radium-226+228, MW-17002 (pCi/L)



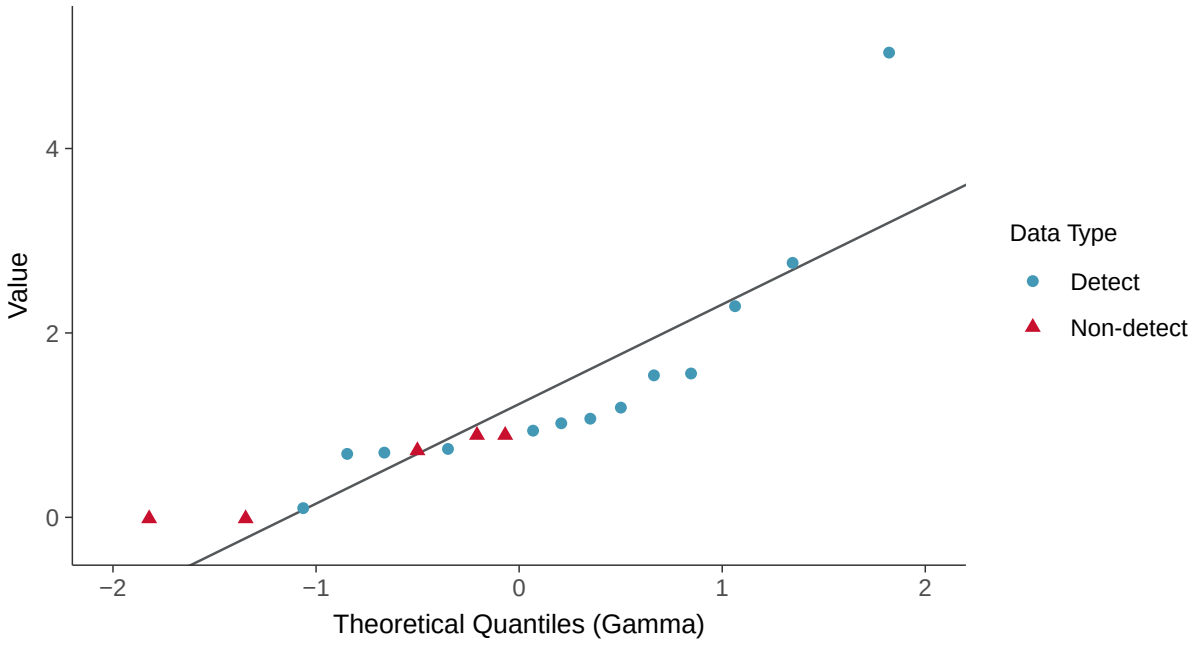
**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17002 (pCi/L)



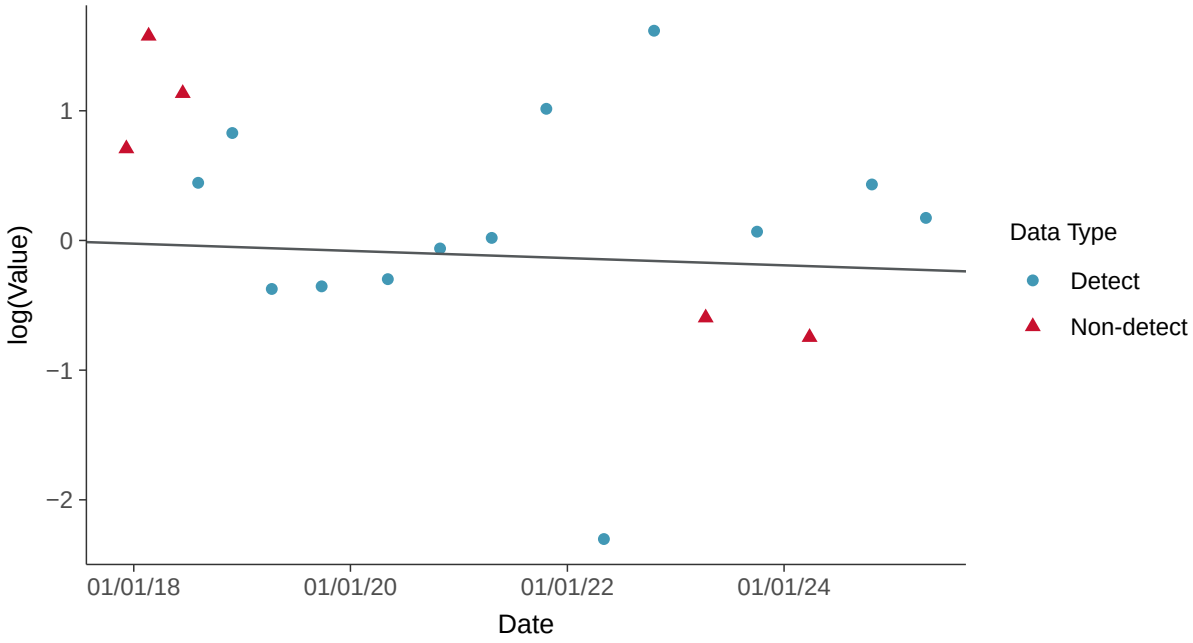

**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17002 (pCi/L)



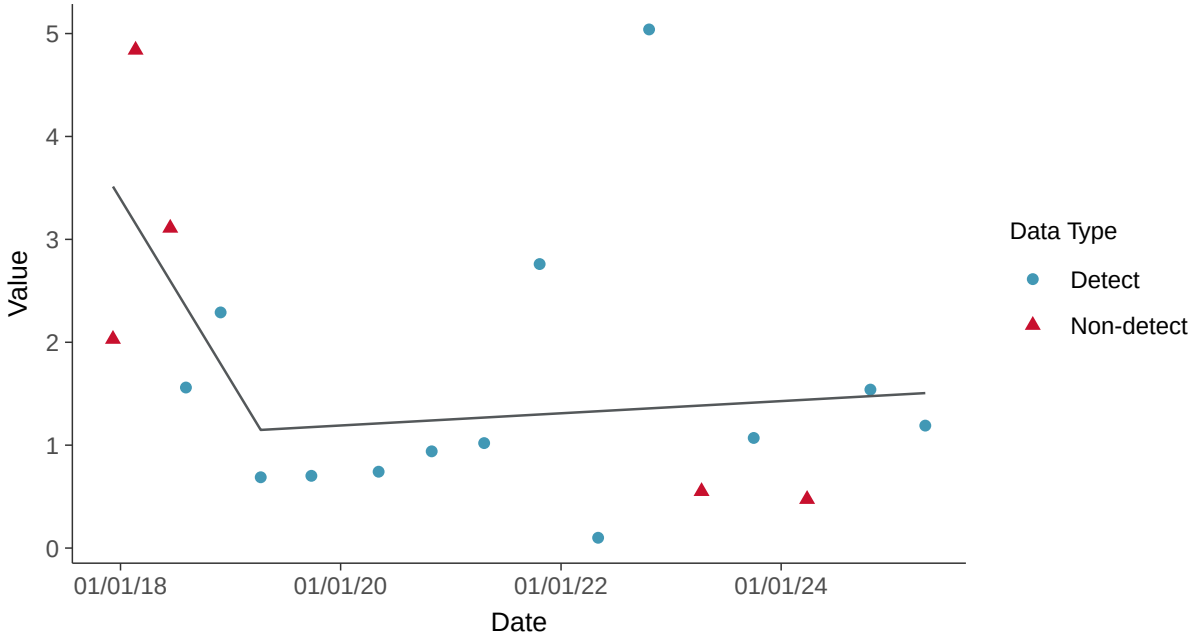
**Trend Regression: Lognormal MLE**

Radium-226+228, MW-17002 (pCi/L)



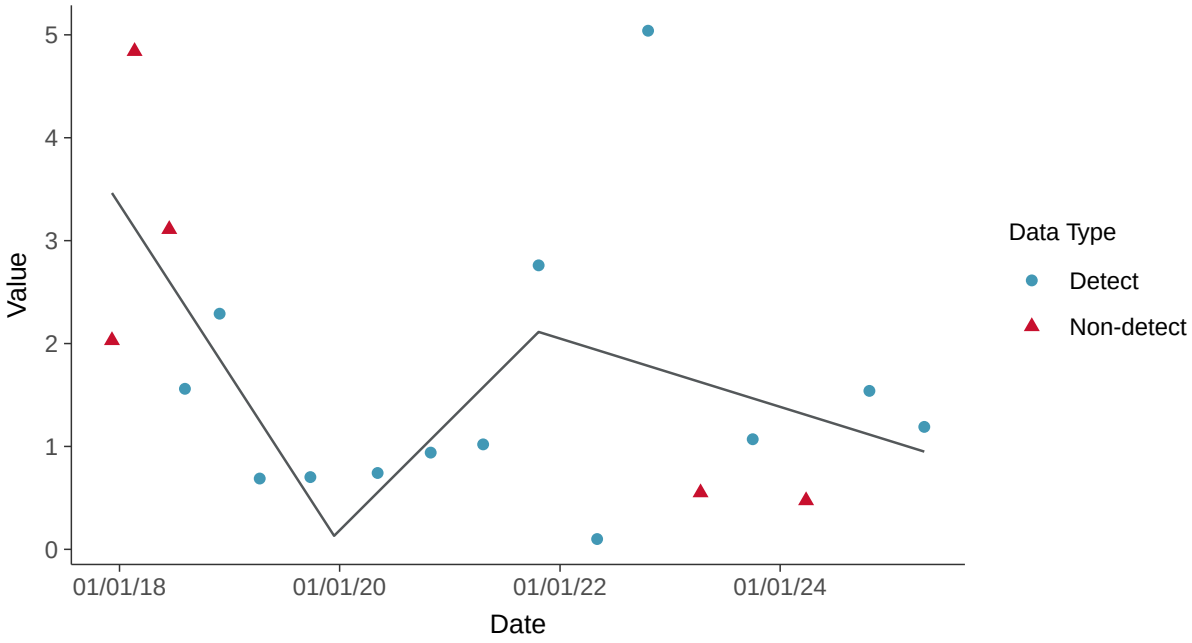

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17002 (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-17002 (pCi/L)

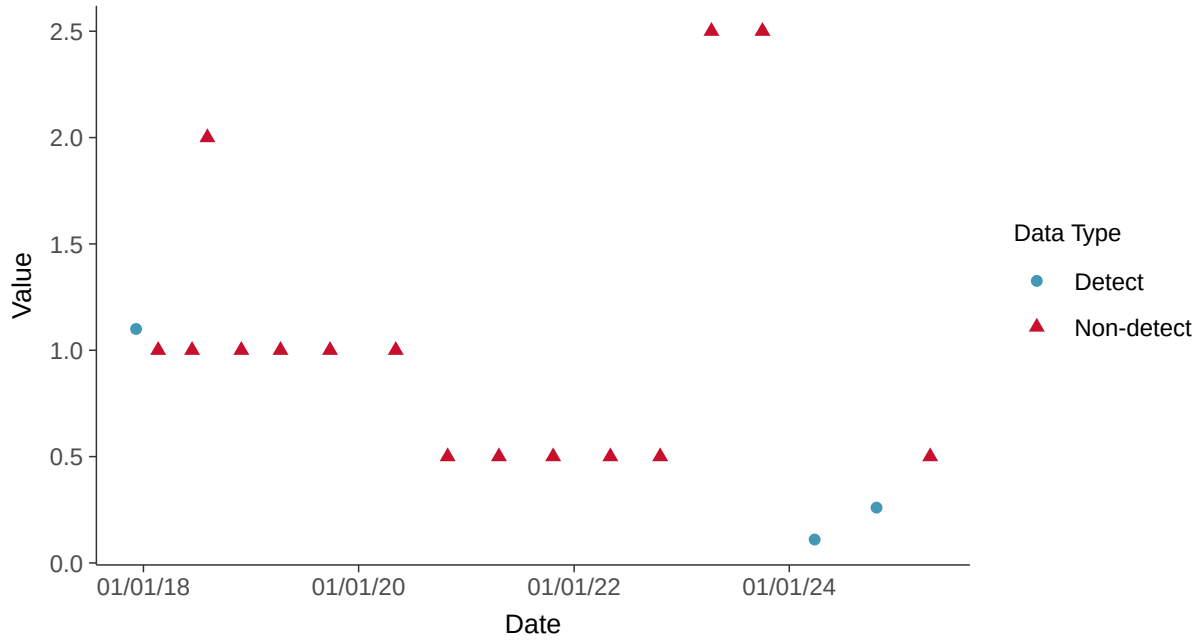


## Appendix IV: Selenium, MW-17002

ID: 15_2_127

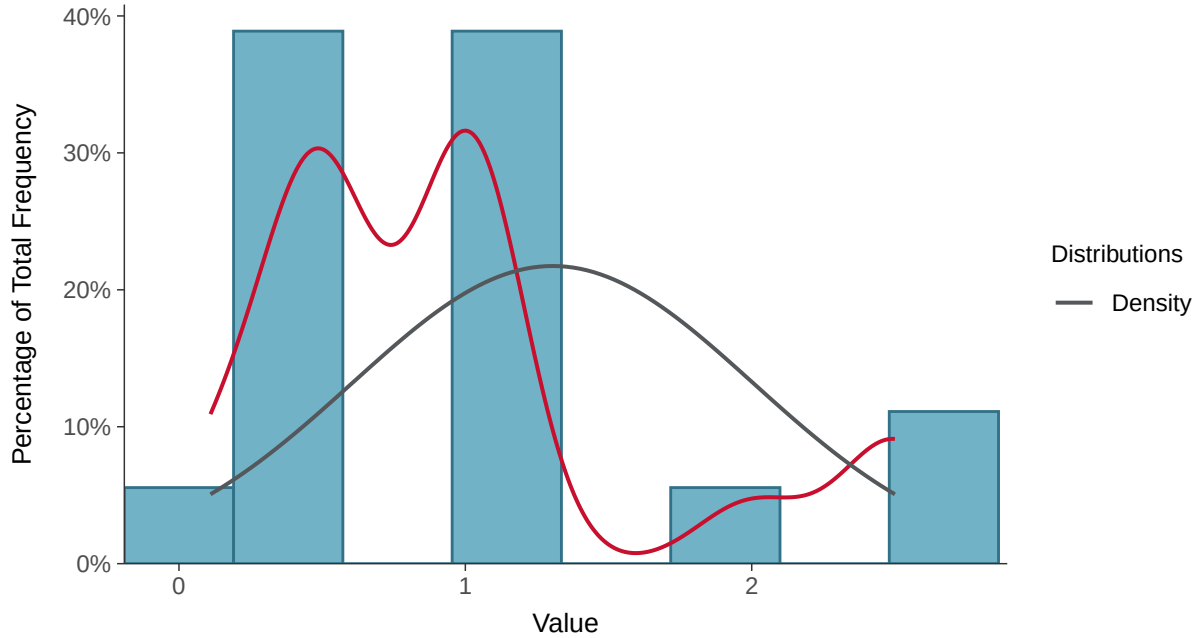
**Scatter Plot**

Selenium, MW-17002 (ug/L)



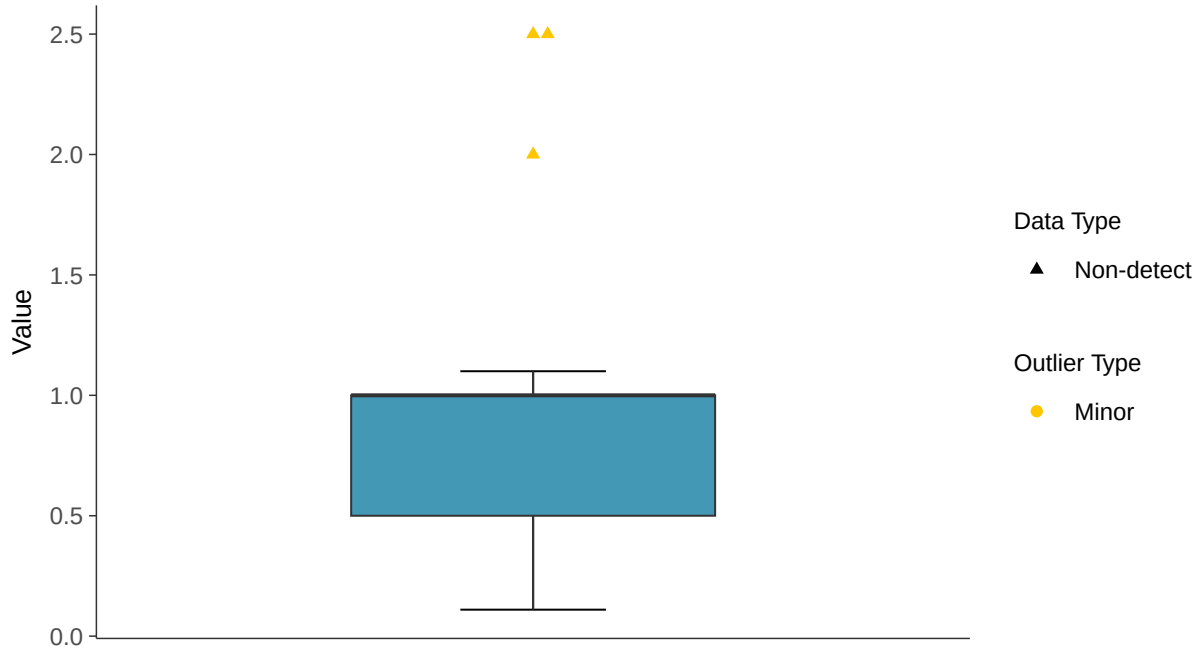

**Histogram**

Selenium, MW-17002 (ug/L)



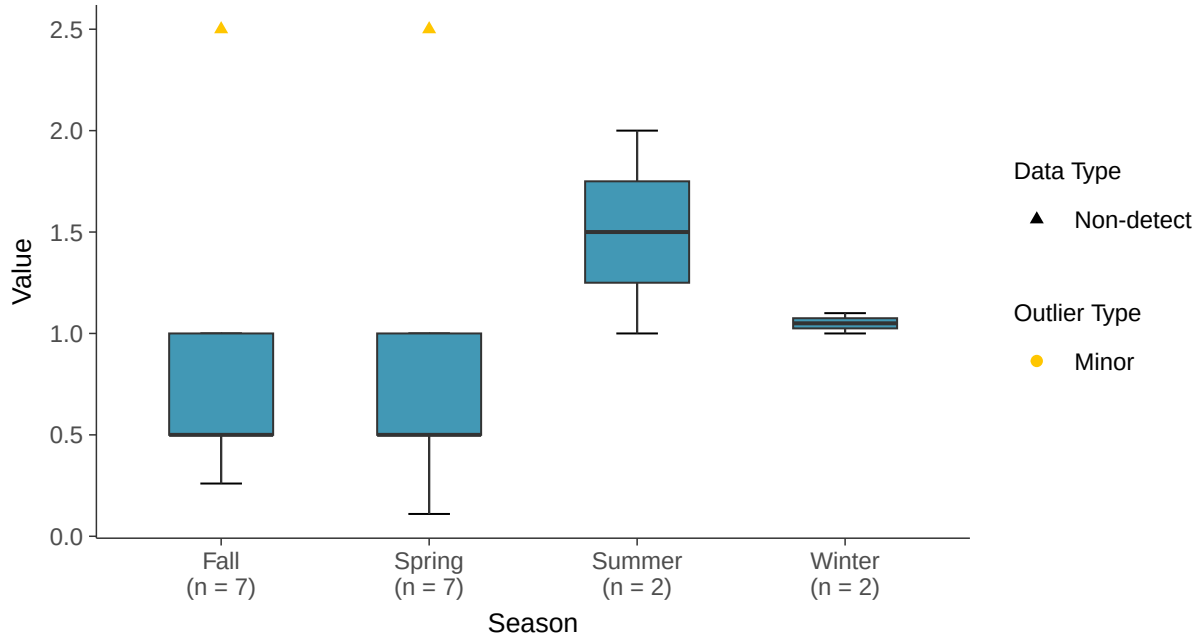
## Boxplot

Selenium, MW-17002 (ug/L)



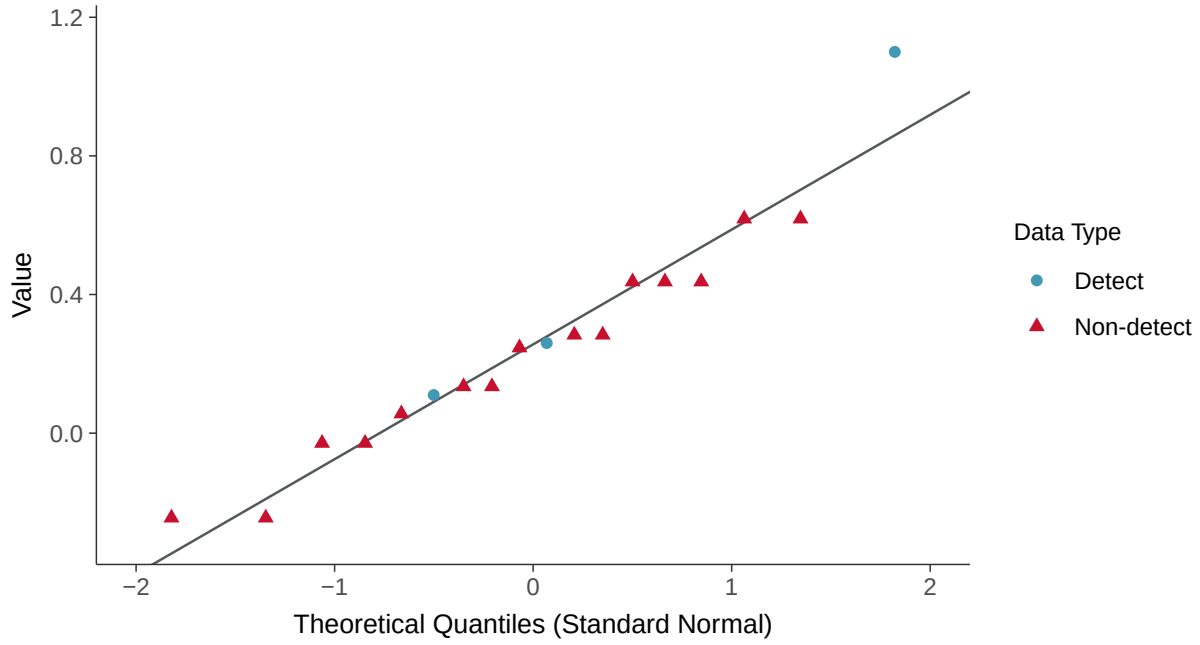

## Boxplot by Season

Selenium, MW-17002 (ug/L)



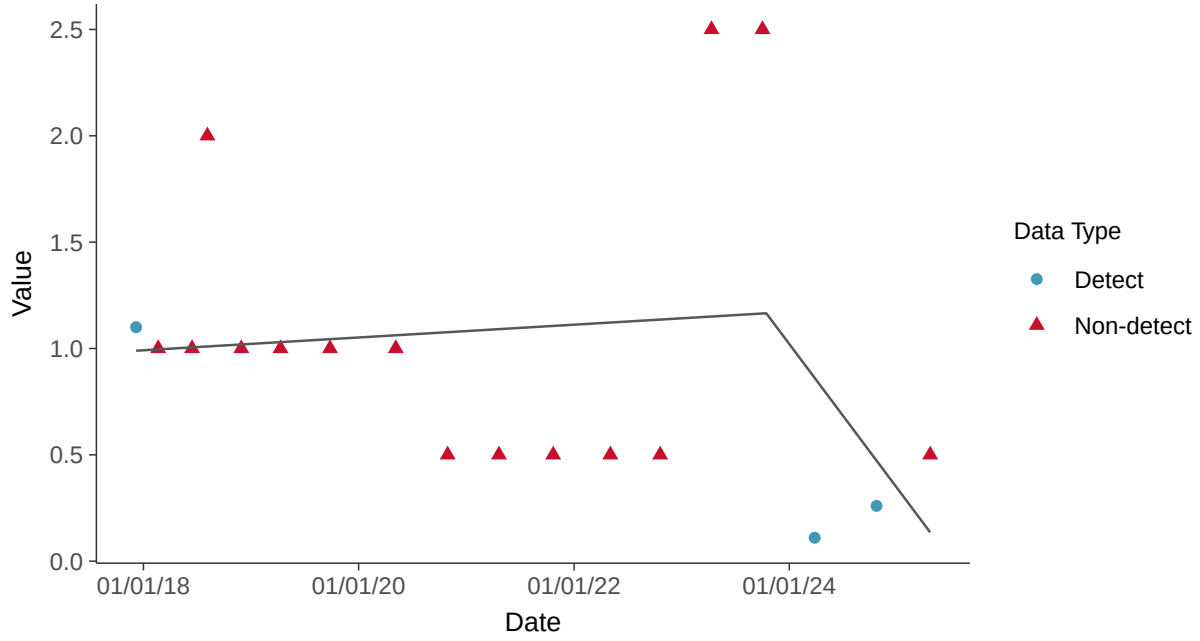
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-17002 (ug/L)



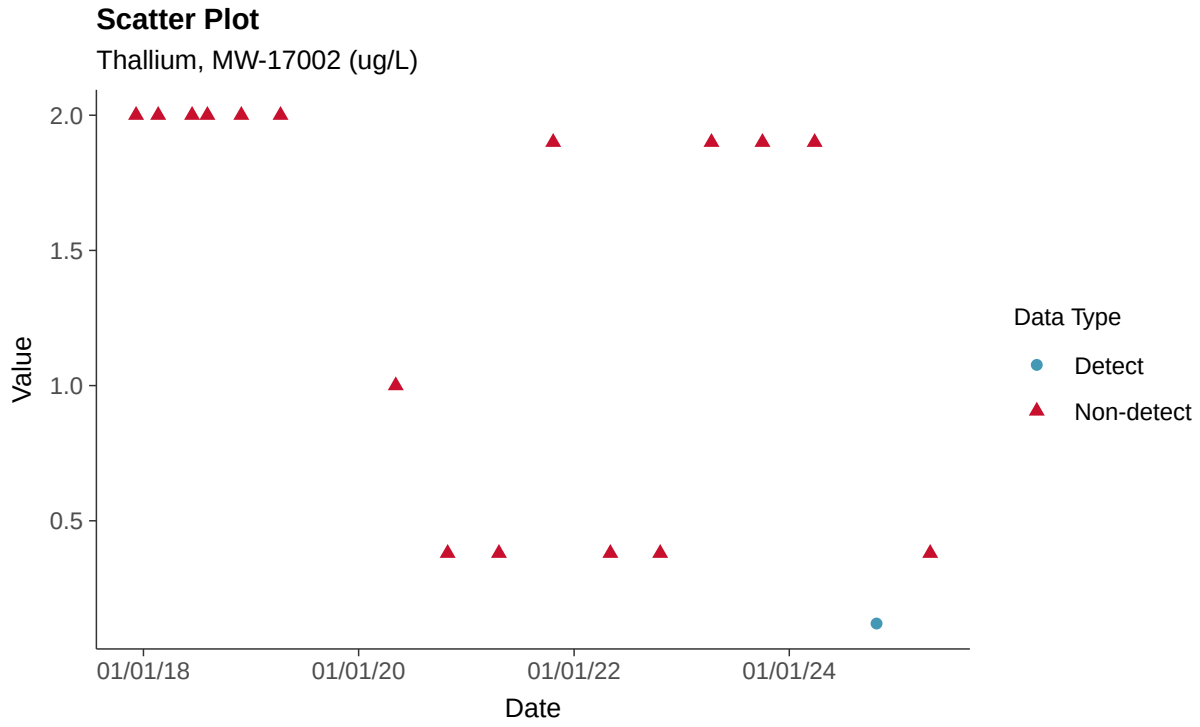

**Trend Regression: Piecewise Linear-Linear**

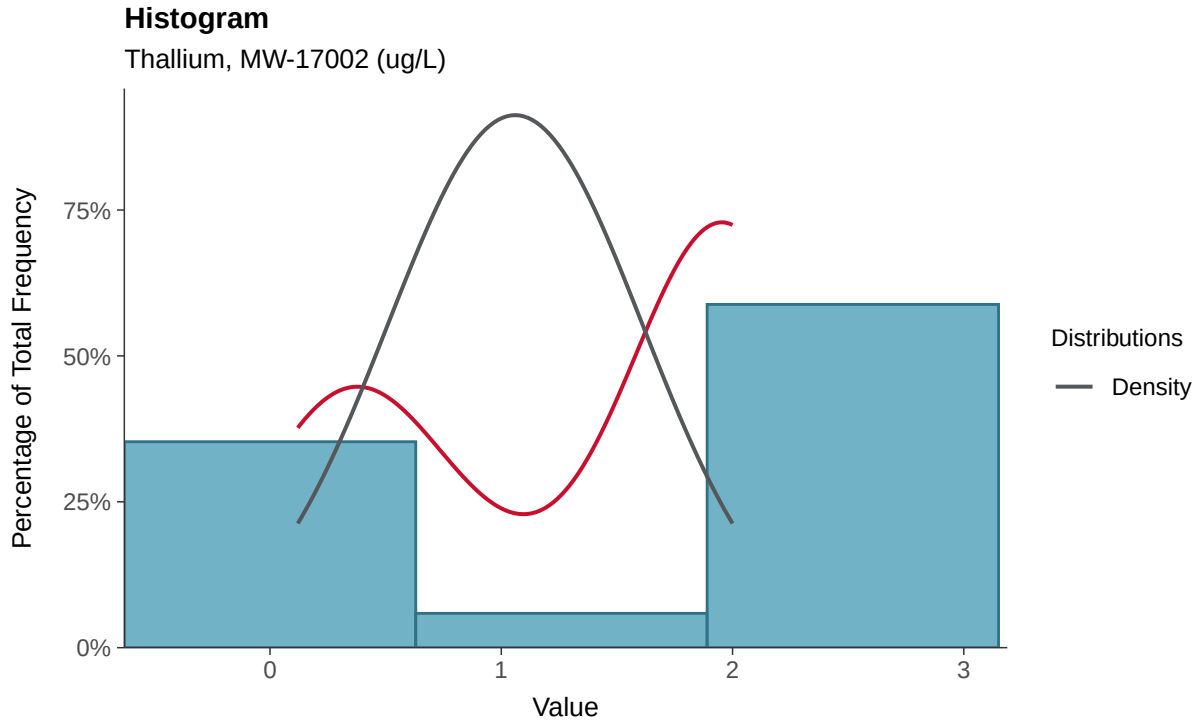
Selenium, MW-17002 (ug/L)



## Appendix IV: Thallium, MW-17002

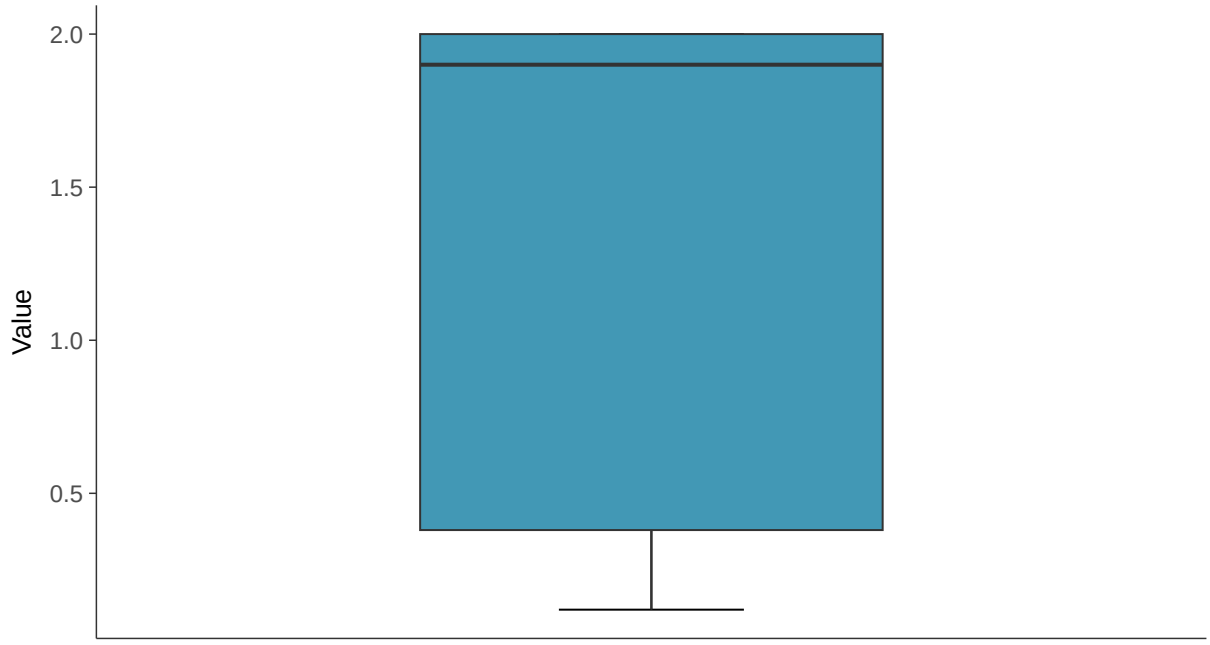
ID: 15_2_131



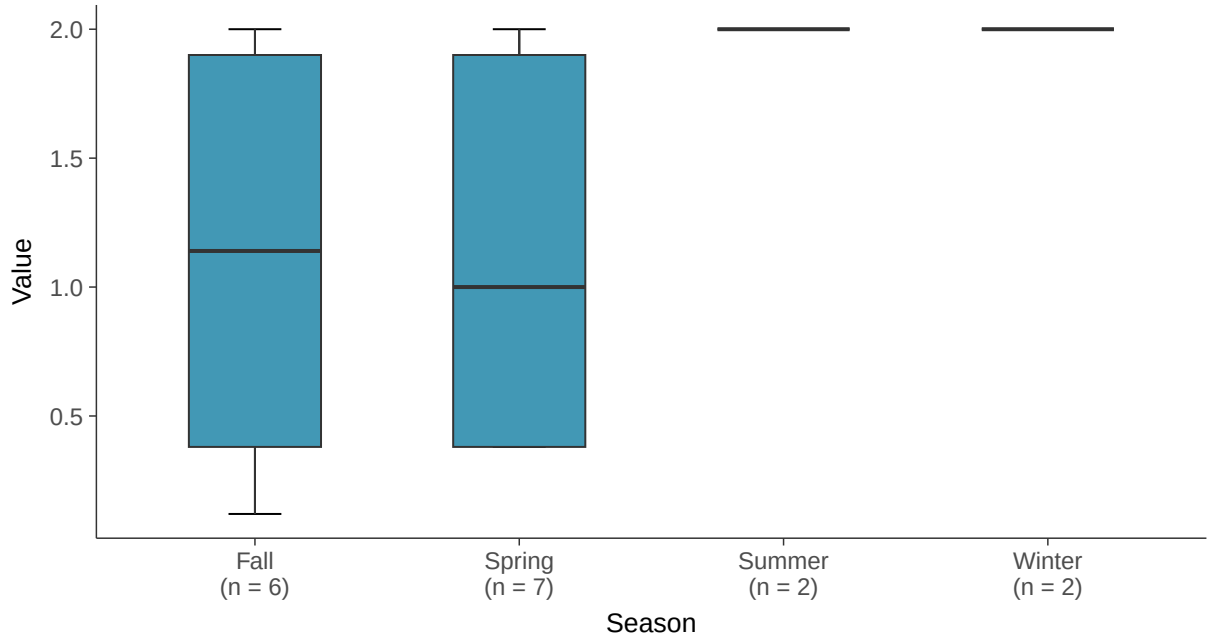
**Boxplot**

Thallium, MW-17002 (ug/L)



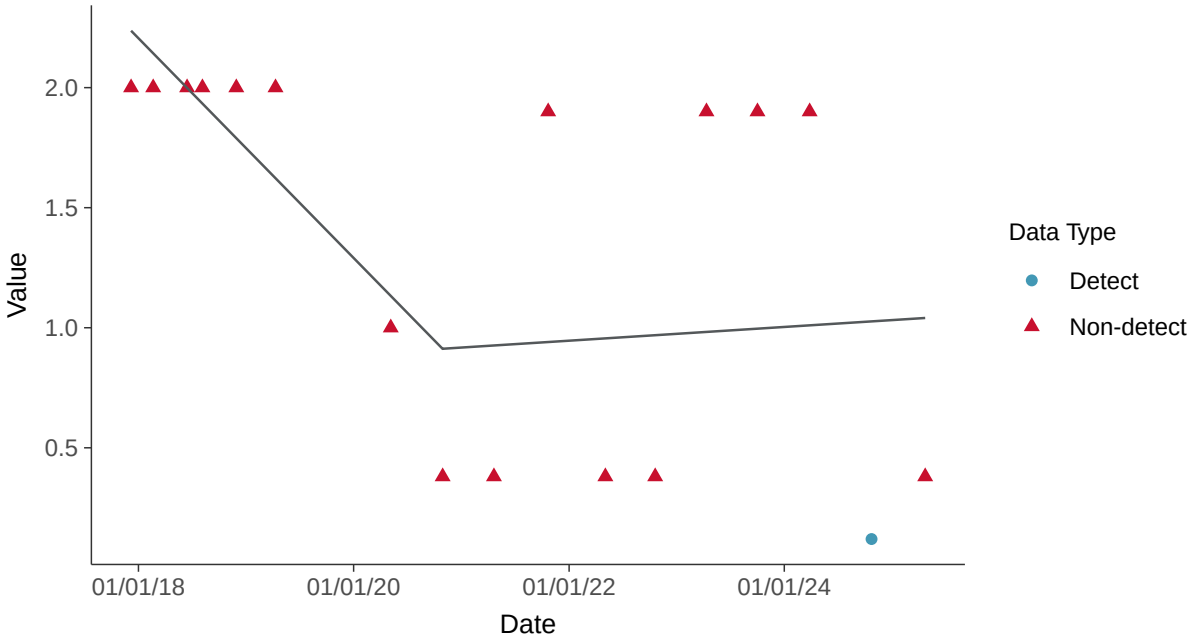

**Boxplot by Season**

Thallium, MW-17002 (ug/L)



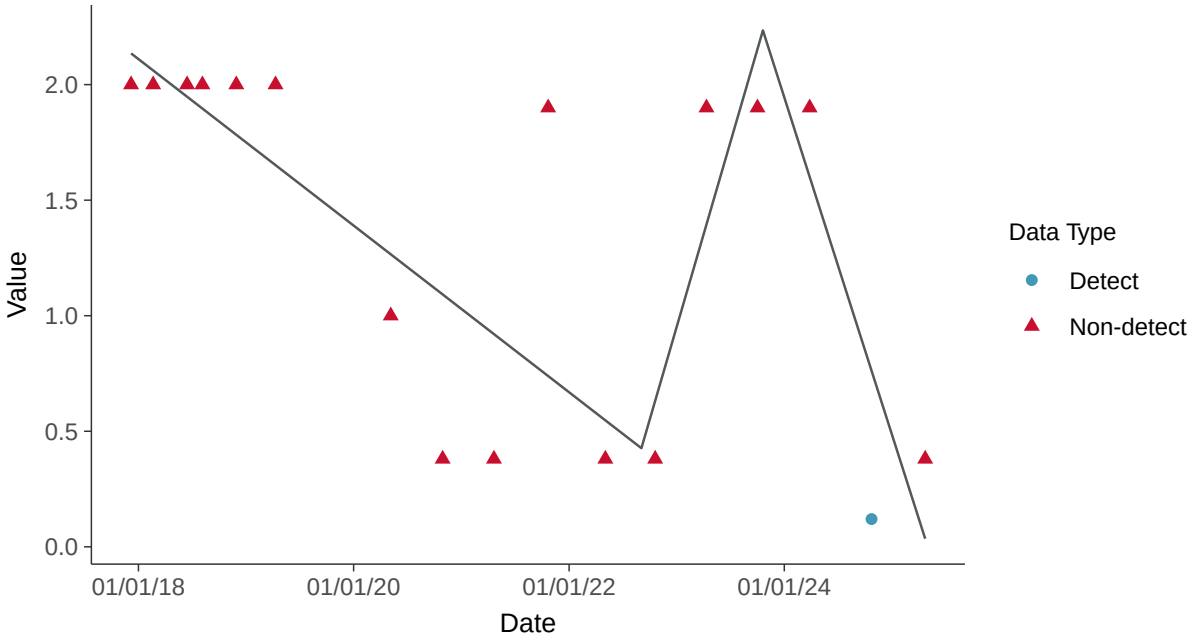
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17002 (ug/L)



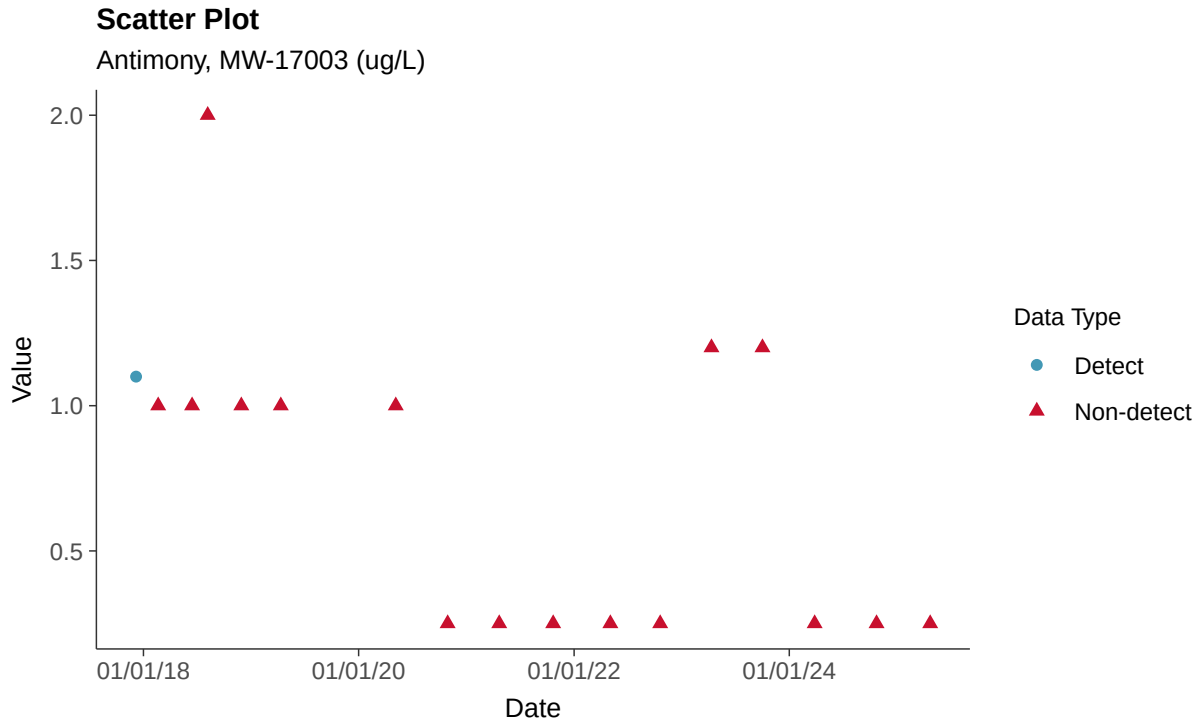

**Trend Regression: Piecewise Linear-Linear-Linear**

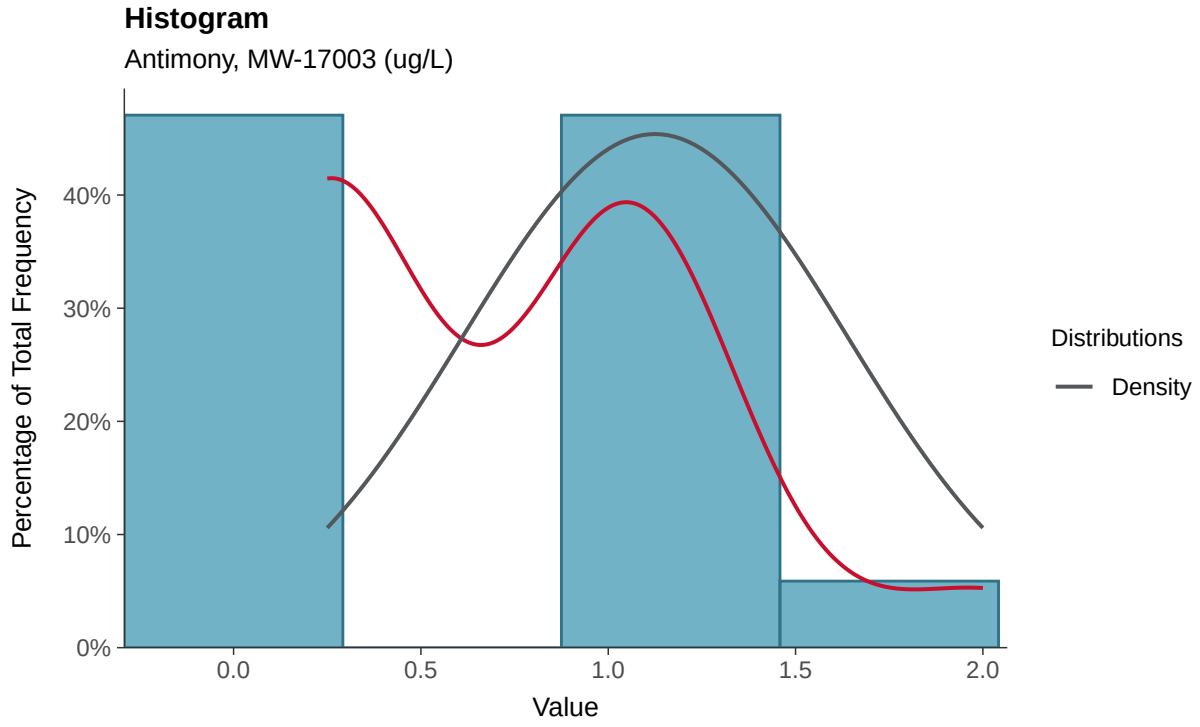
Thallium, MW-17002 (ug/L)



## Appendix IV: Antimony, MW-17003

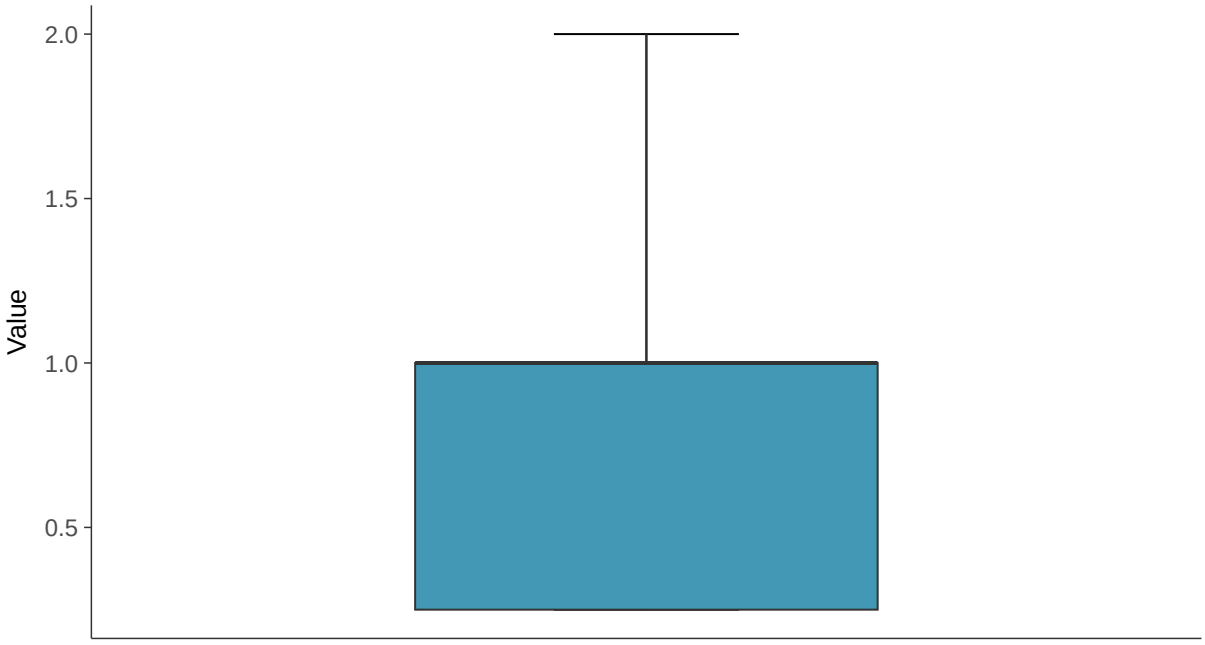
ID: 16_2_101



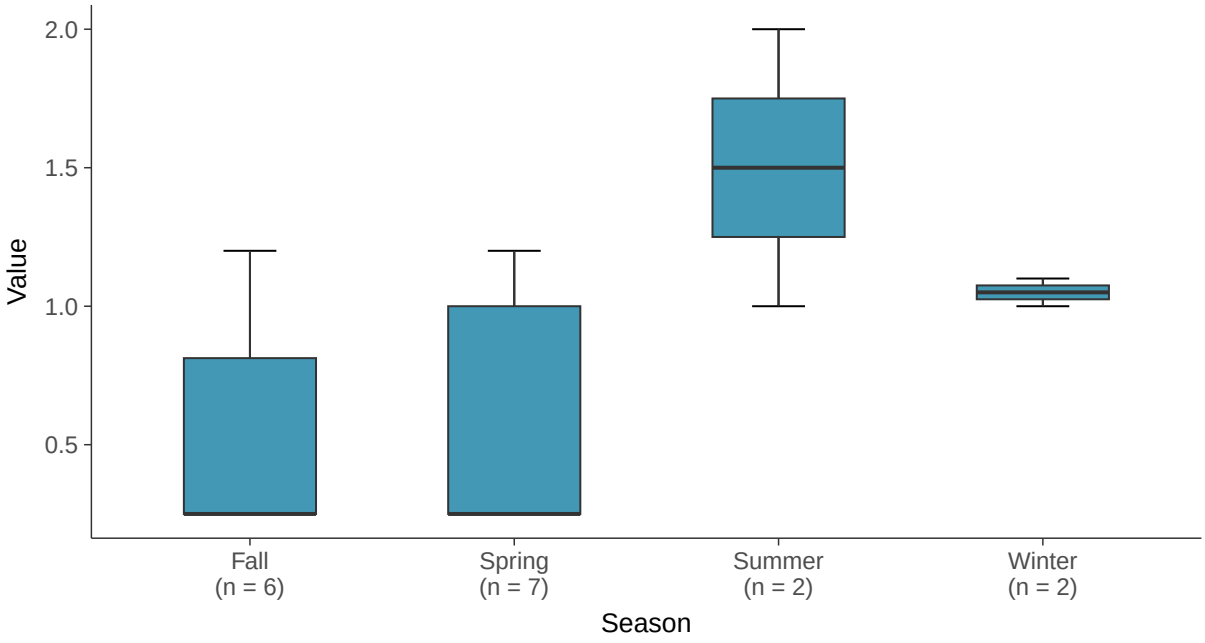
## Boxplot

Antimony, MW-17003 (ug/L)



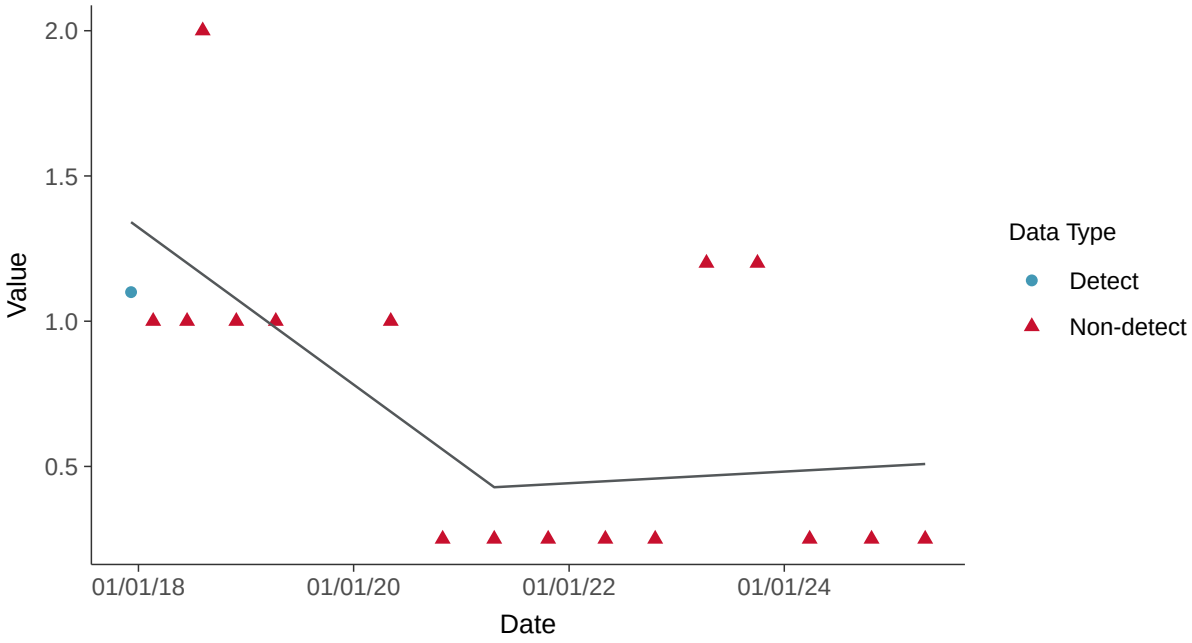

## Boxplot by Season

Antimony, MW-17003 (ug/L)



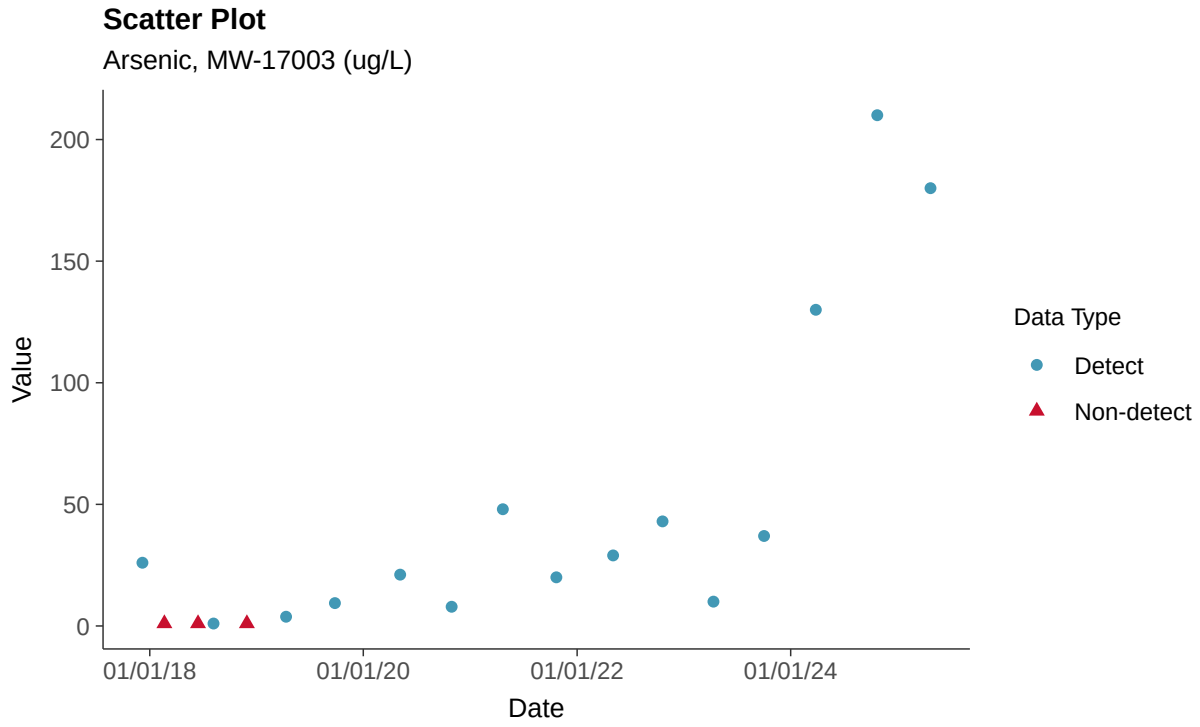
**Trend Regression: Piecewise Linear-Linear**

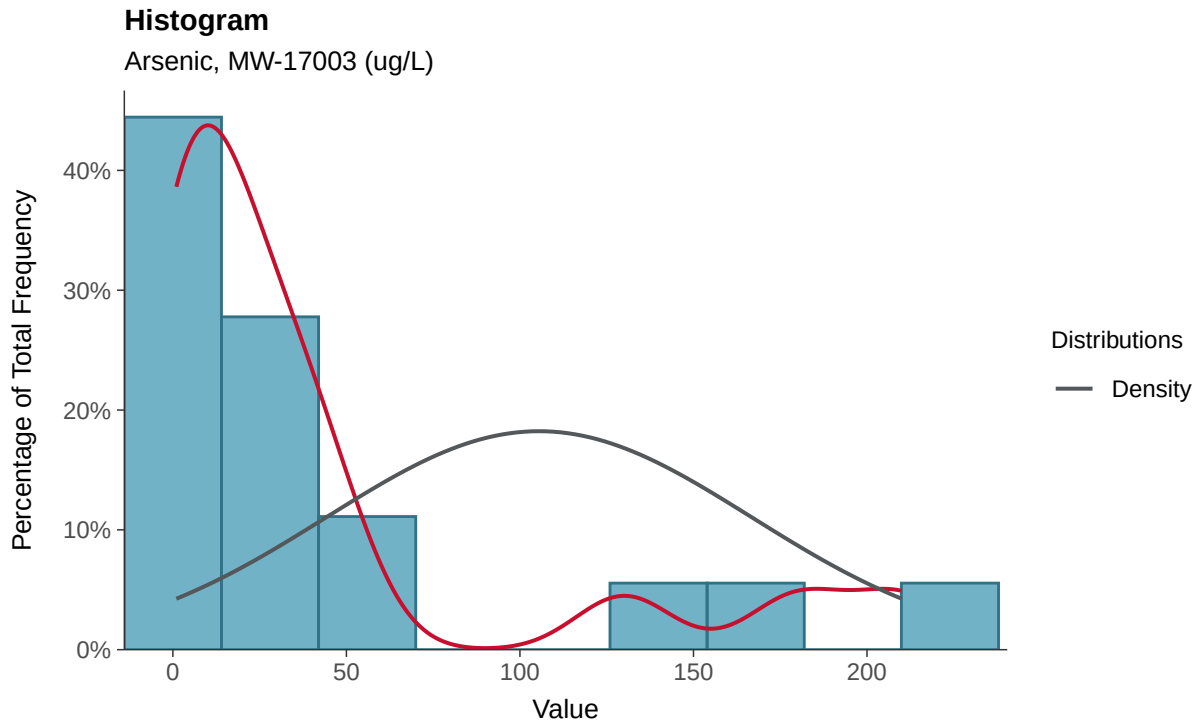
Antimony, MW-17003 (ug/L)



## Appendix IV: Arsenic, MW-17003

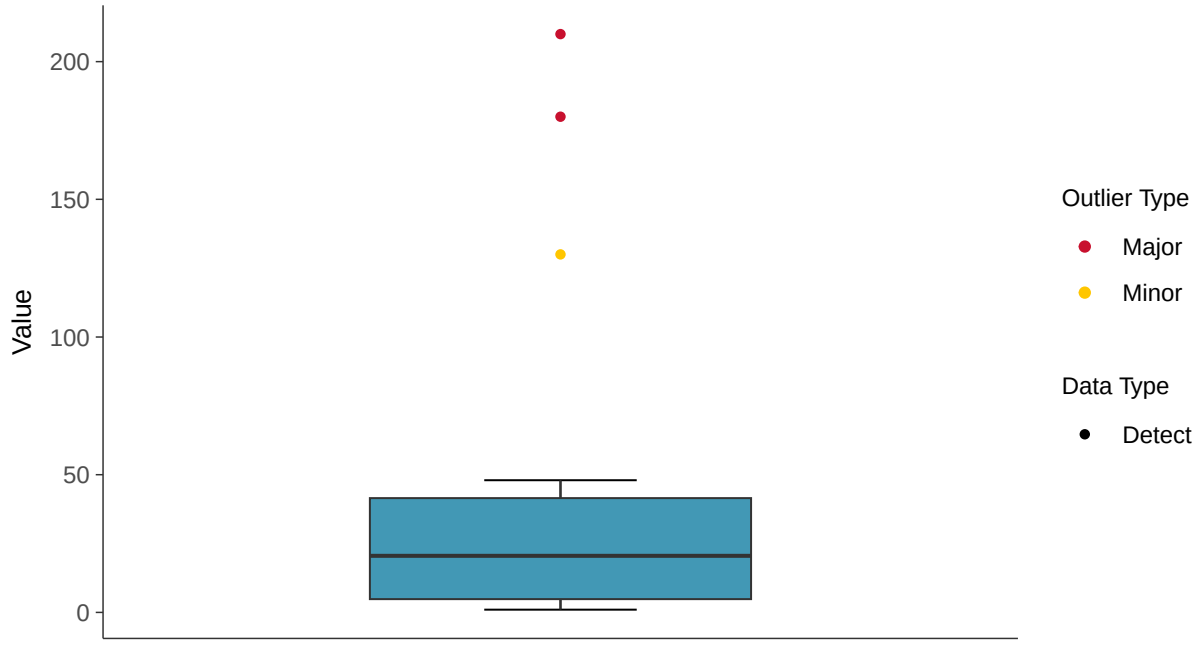
ID: 16_2_102



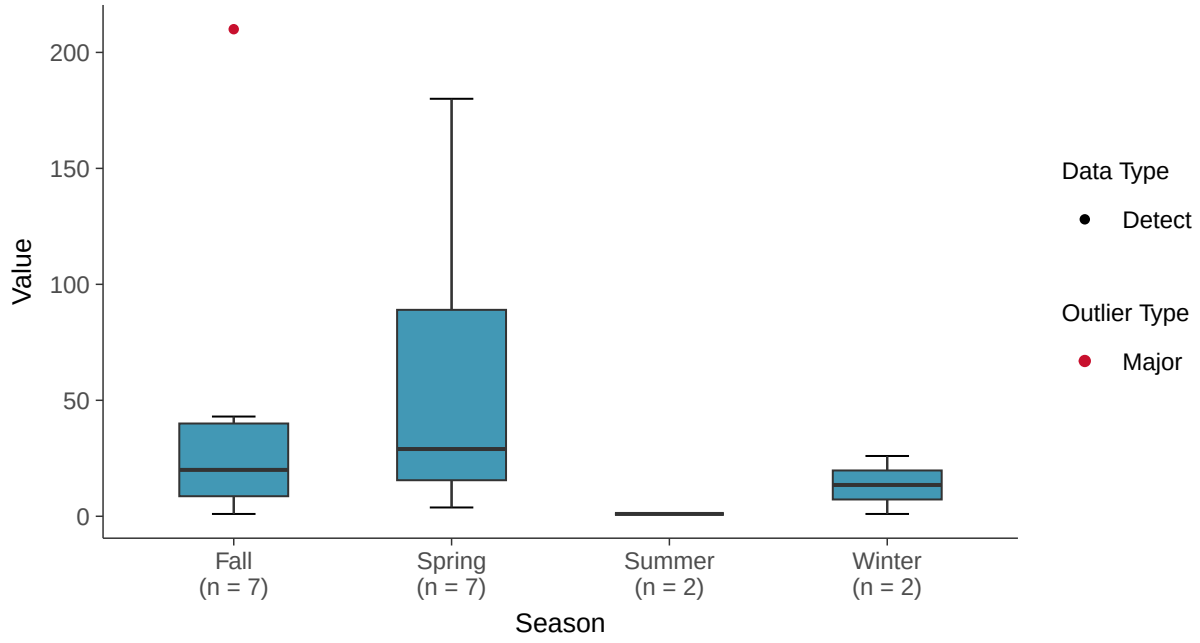
## Boxplot

Arsenic, MW-17003 (ug/L)



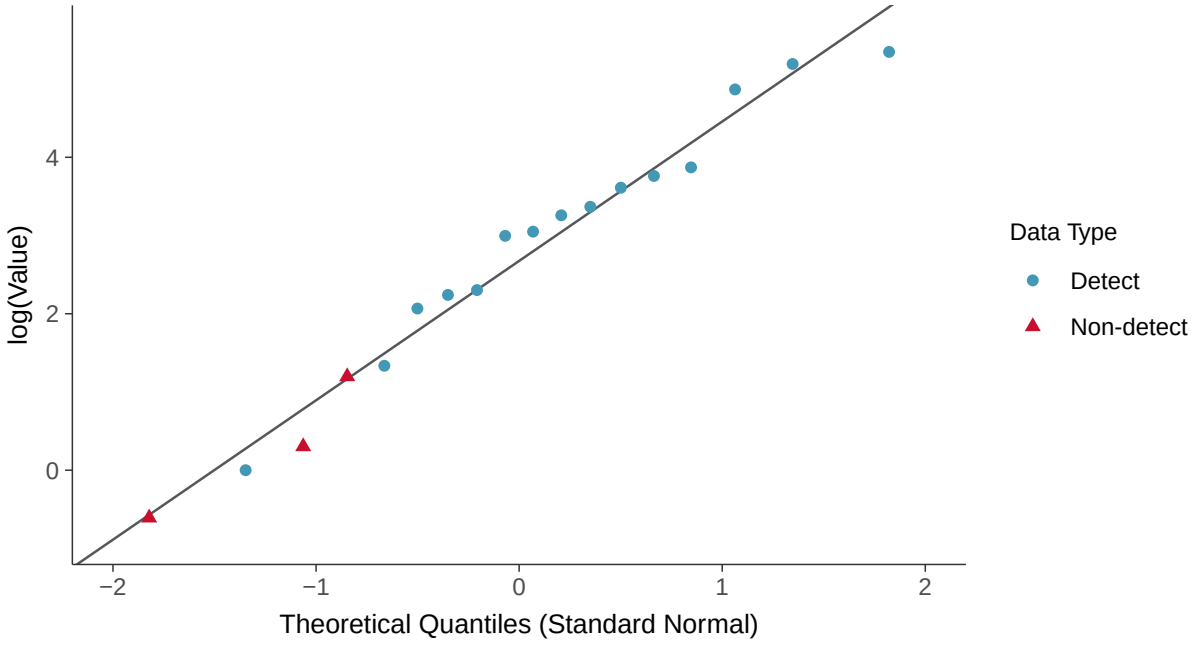

## Boxplot by Season

Arsenic, MW-17003 (ug/L)



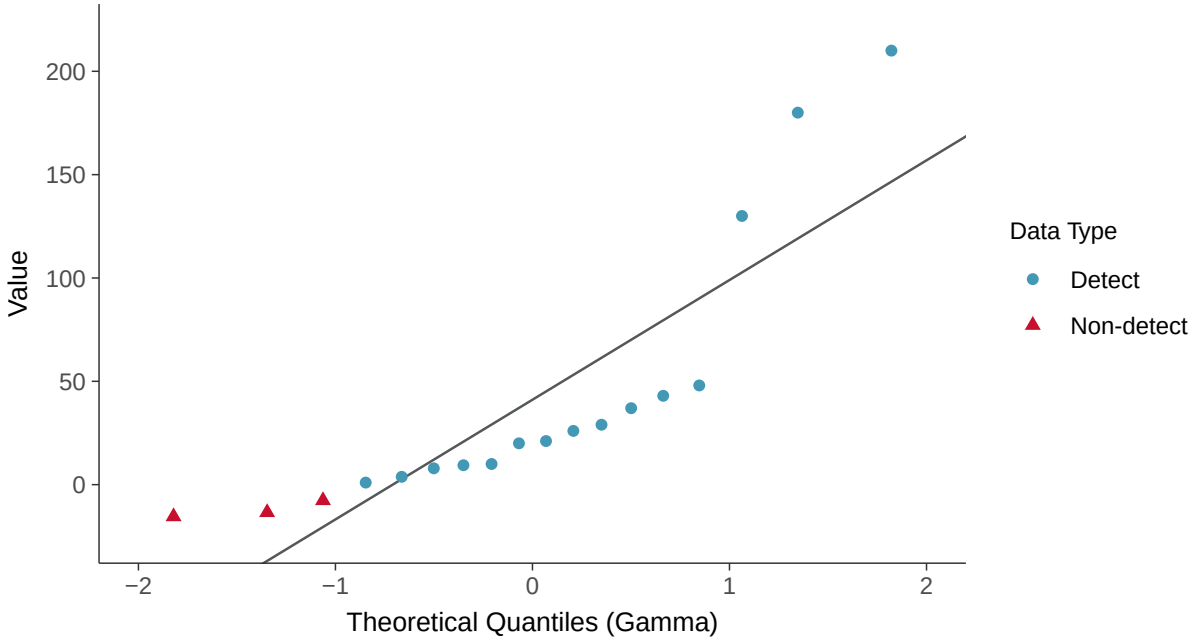
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17003 (ug/L)



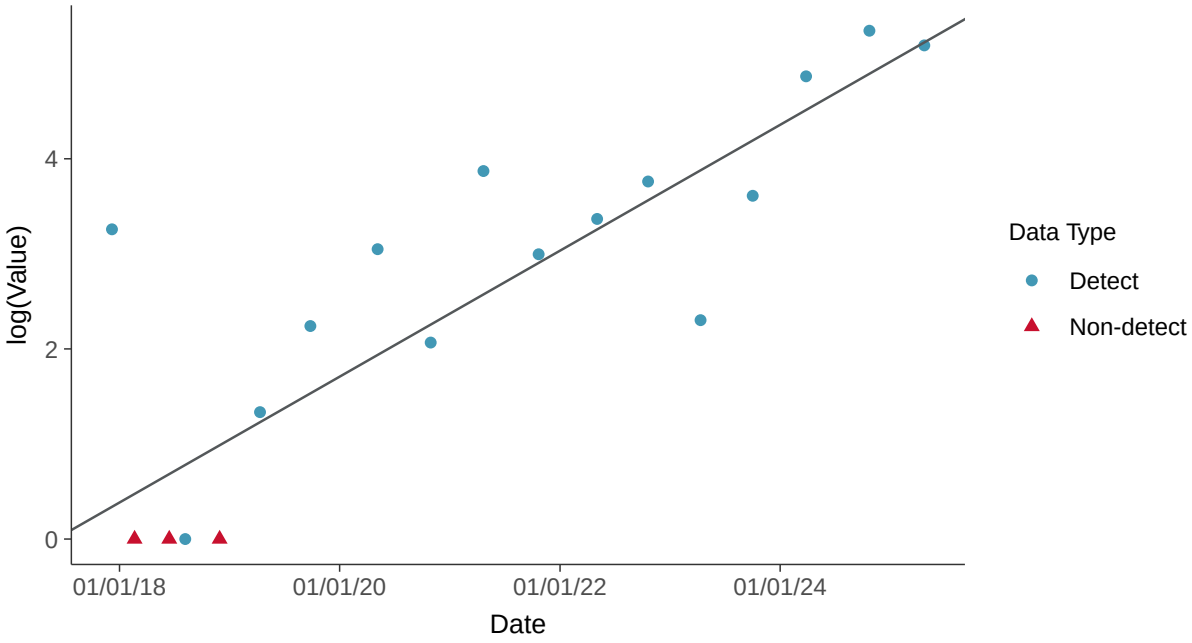

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17003 (ug/L)



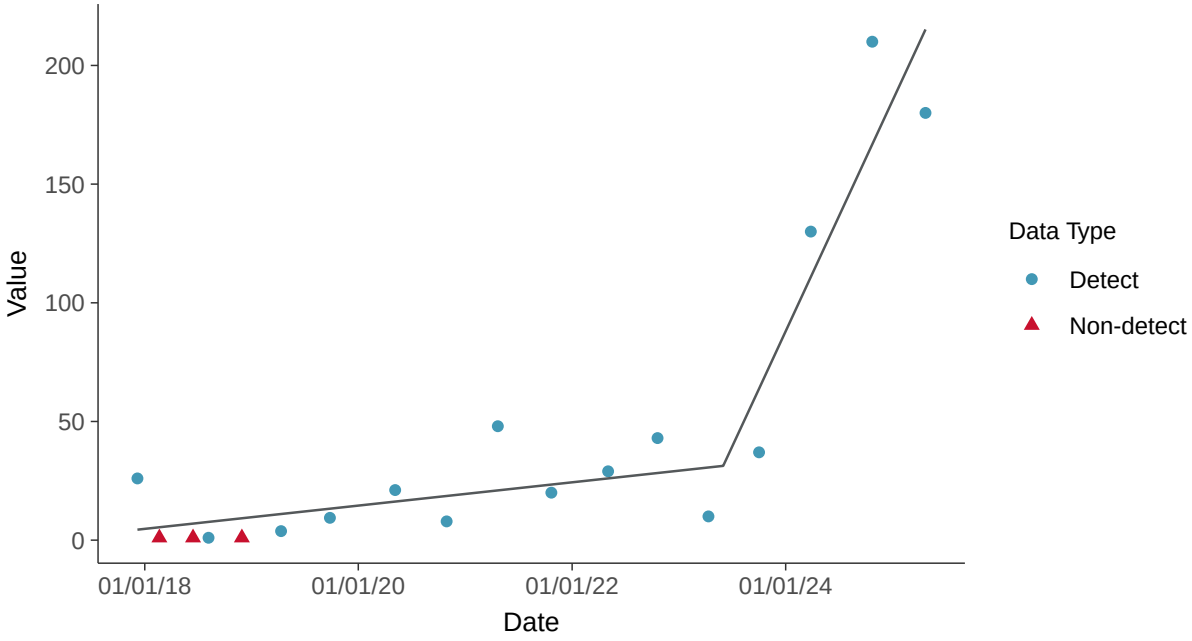
**Trend Regression: Lognormal MLE**

Arsenic, MW-17003 (ug/L)



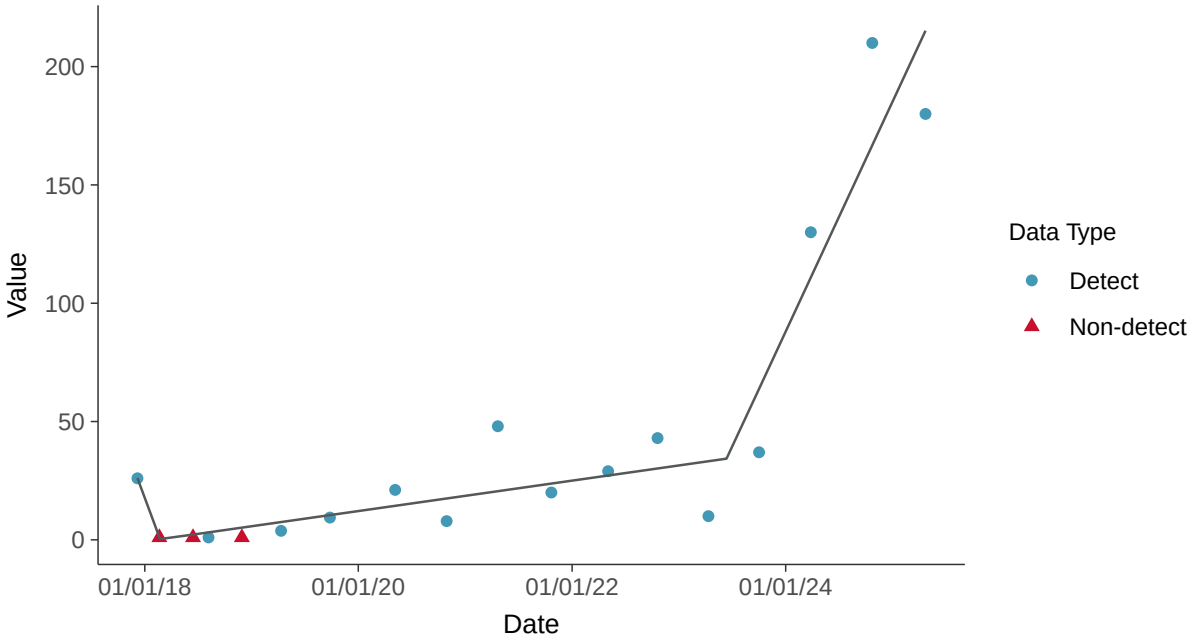

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17003 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-17003 (ug/L)

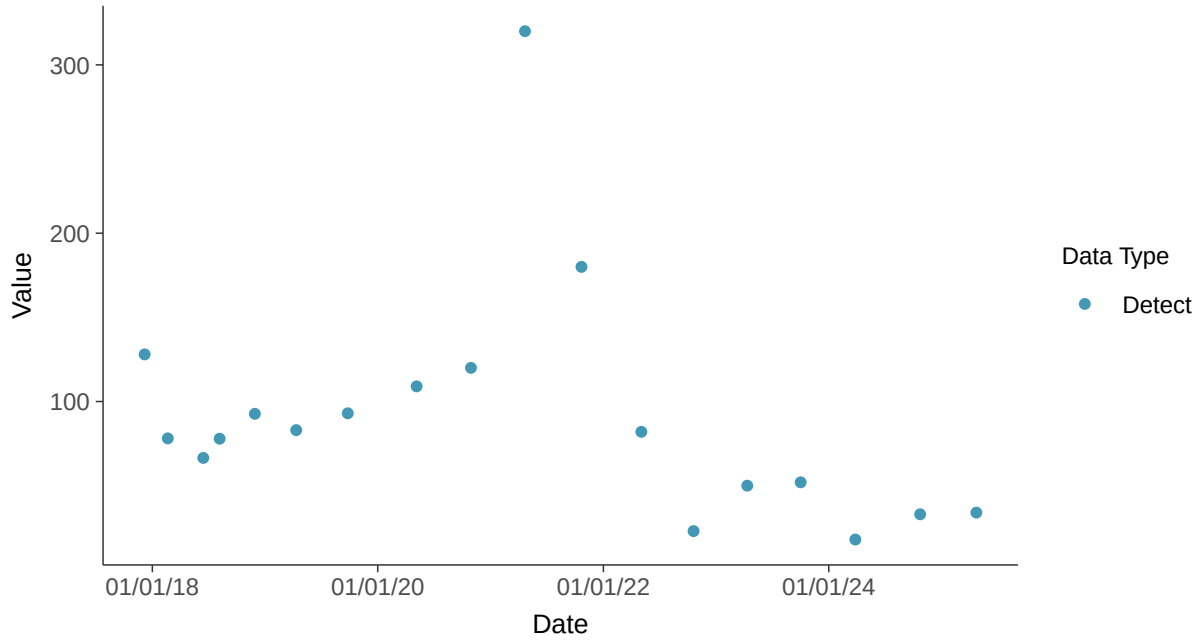


## Appendix IV: Barium, MW-17003

ID: 16_2_103

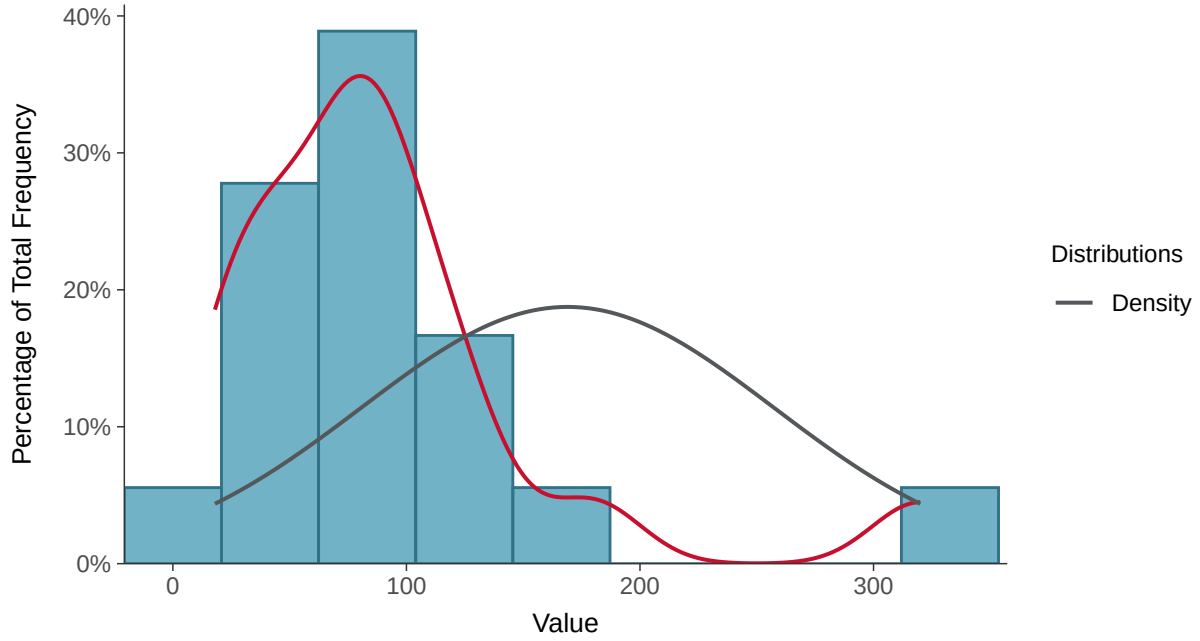
**Scatter Plot**

Barium, MW-17003 (ug/L)



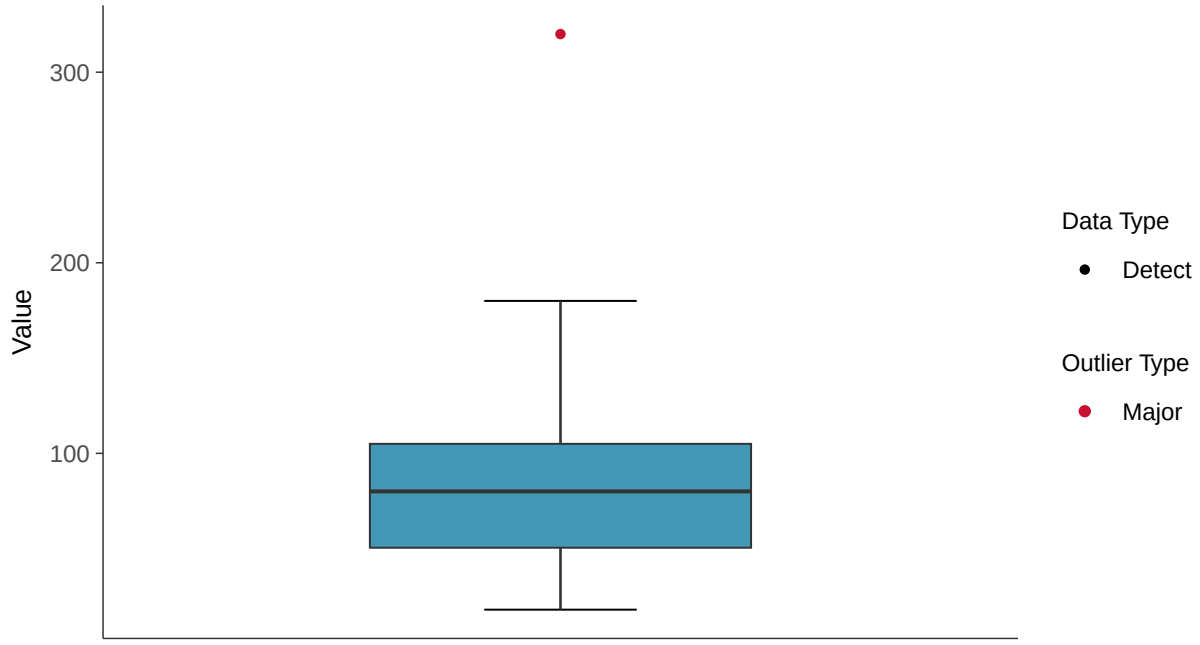

**Histogram**

Barium, MW-17003 (ug/L)



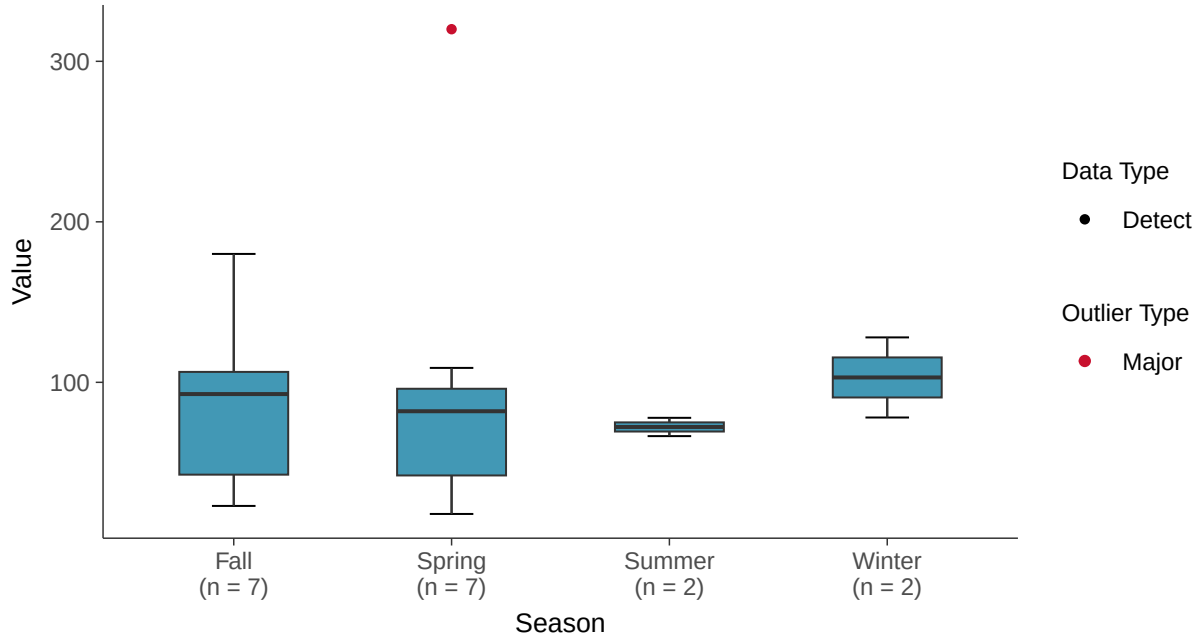
## Boxplot

Barium, MW-17003 (ug/L)



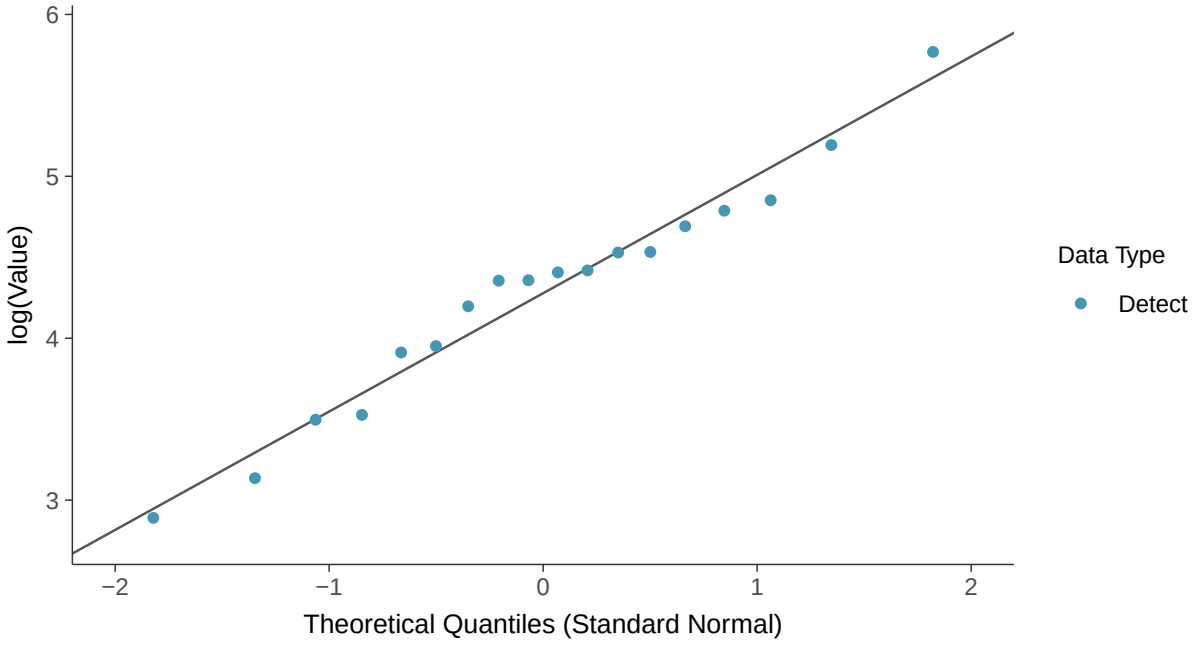

## Boxplot by Season

Barium, MW-17003 (ug/L)



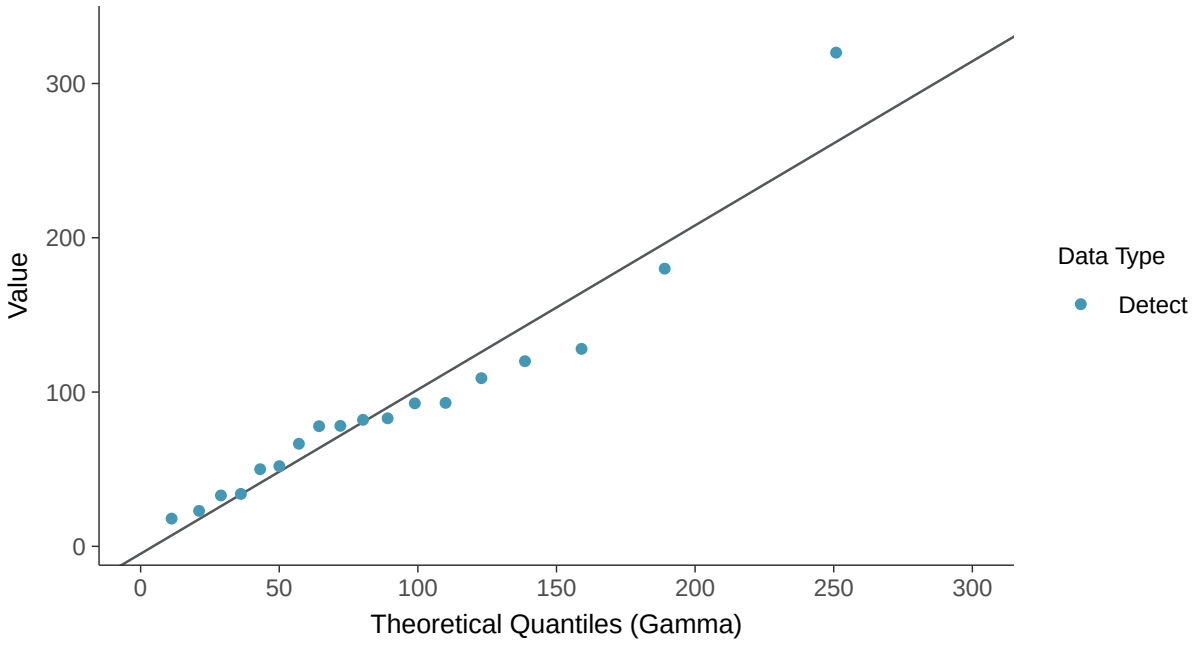
**Lognormal Q-Q plot**

Barium, MW-17003 (ug/L)



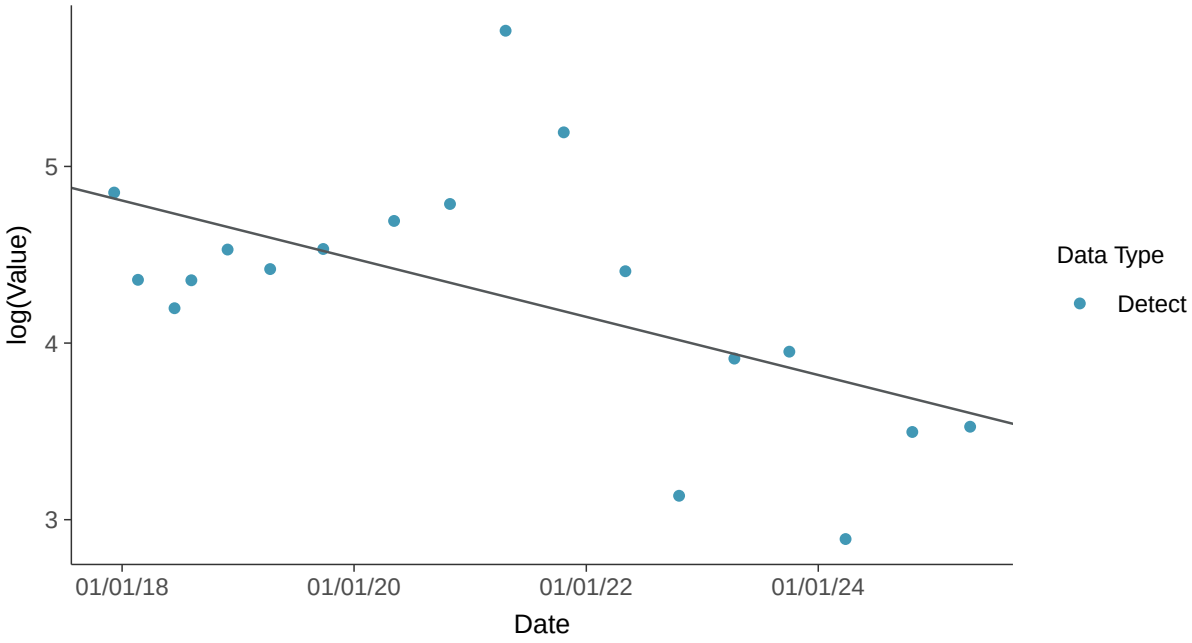

**Gamma Q-Q plot**

Barium, MW-17003 (ug/L)



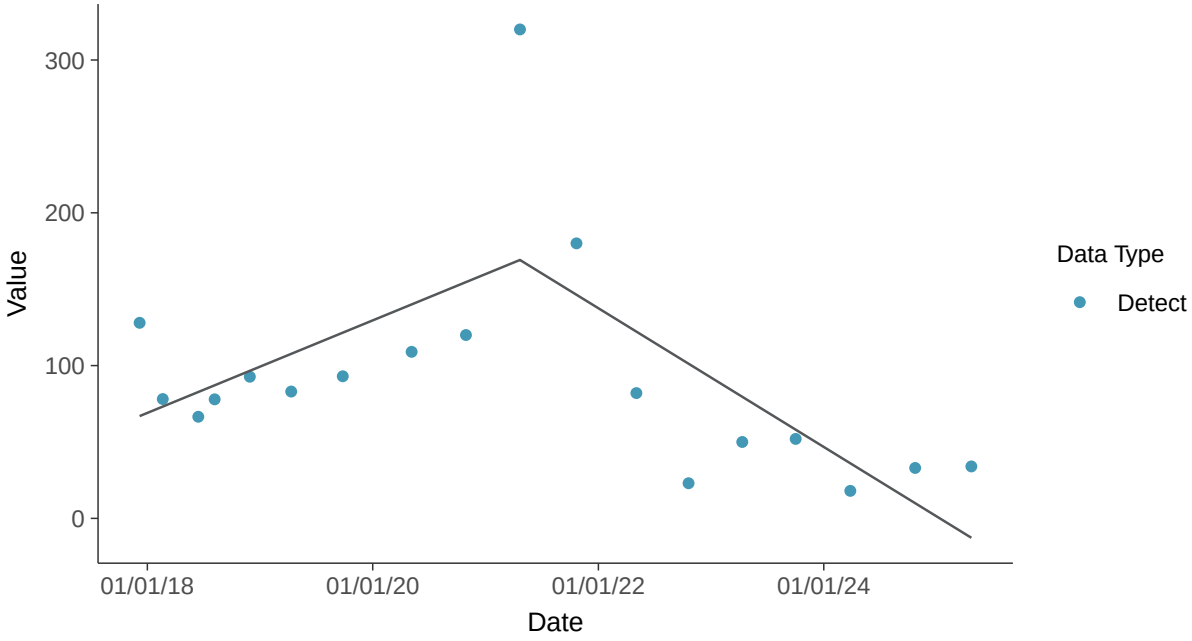
**Trend Regression: Lognormal MLE**

Barium, MW-17003 (ug/L)



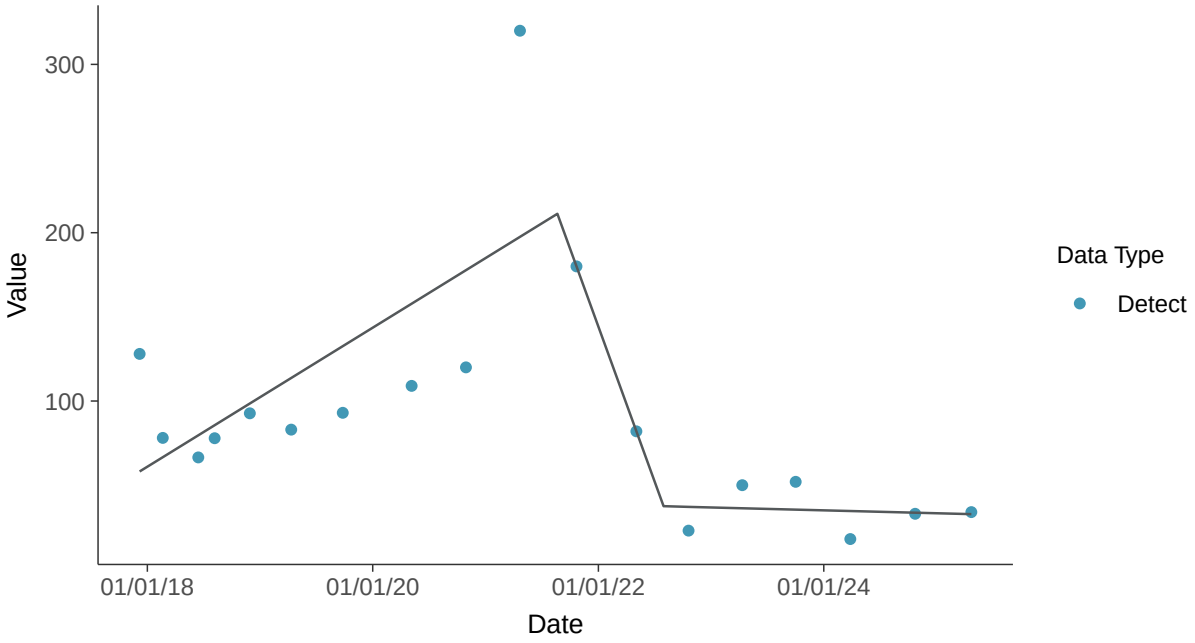

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17003 (ug/L)



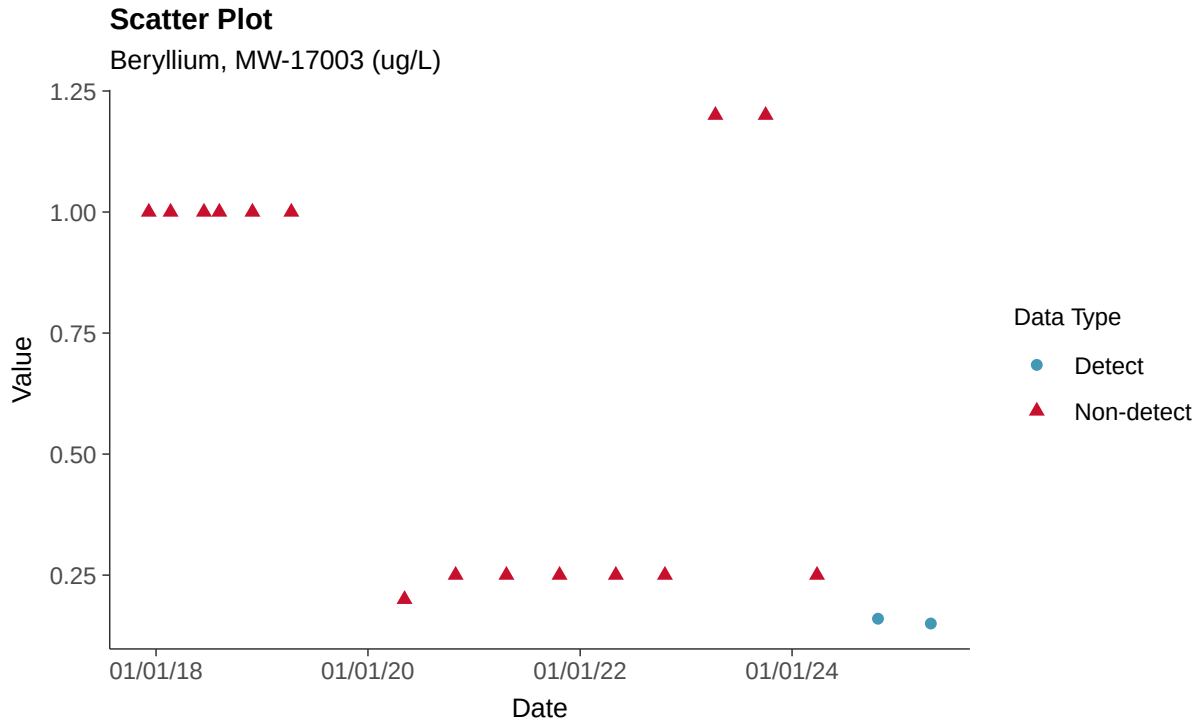
**Trend Regression: Piecewise Linear-Linear-Linear**

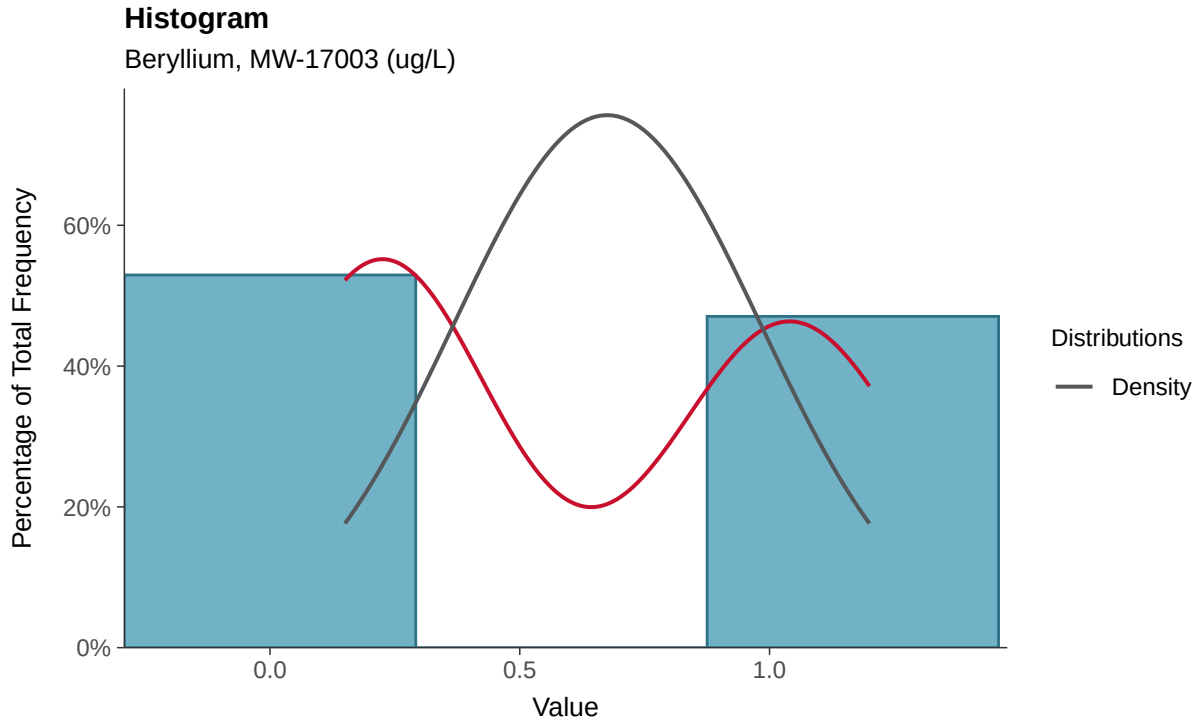
Barium, MW-17003 (ug/L)



## Appendix IV: Beryllium, MW-17003

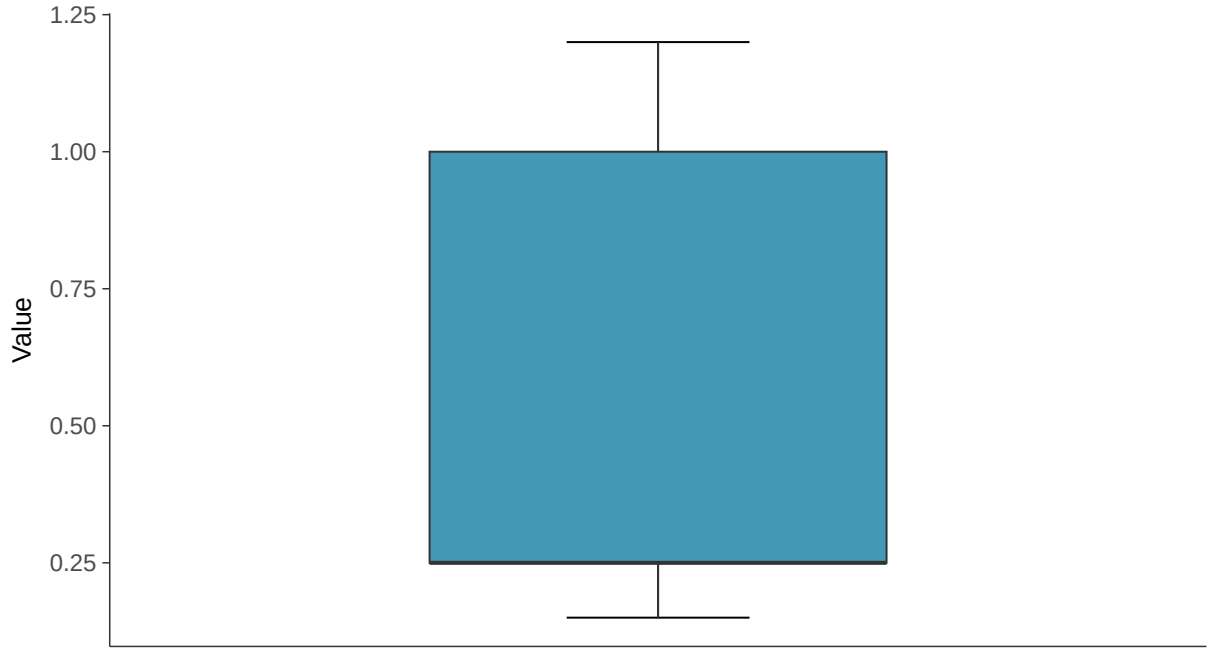
ID: 16_2_104



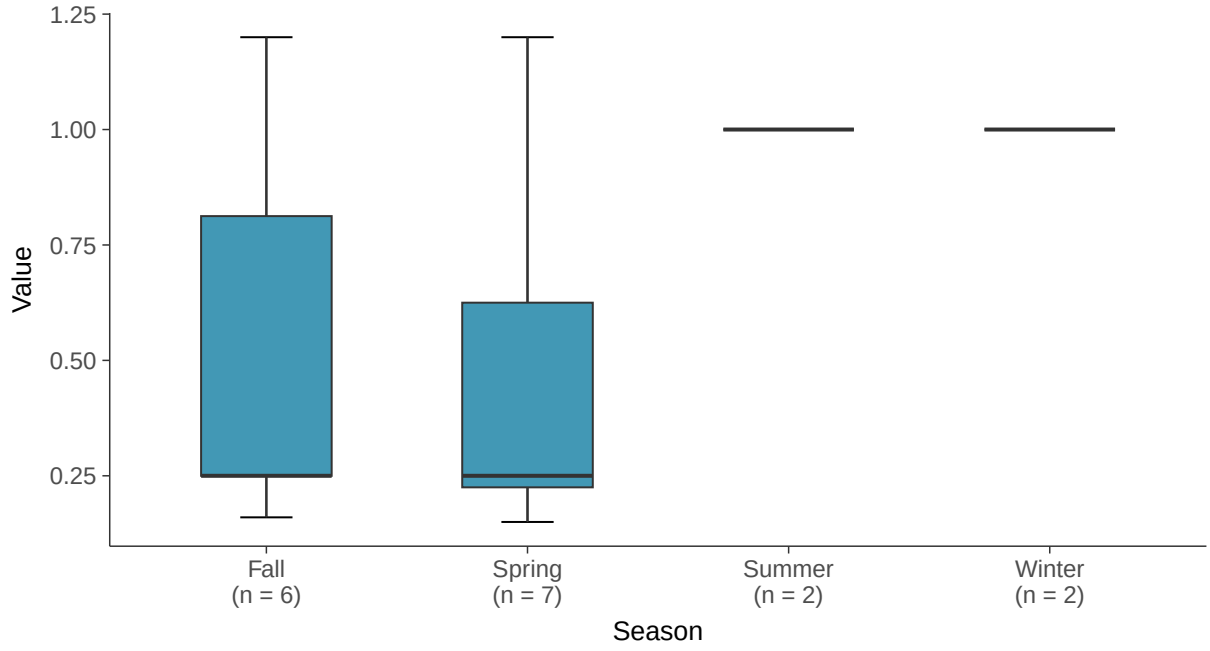
**Boxplot**

Beryllium, MW-17003 (ug/L)



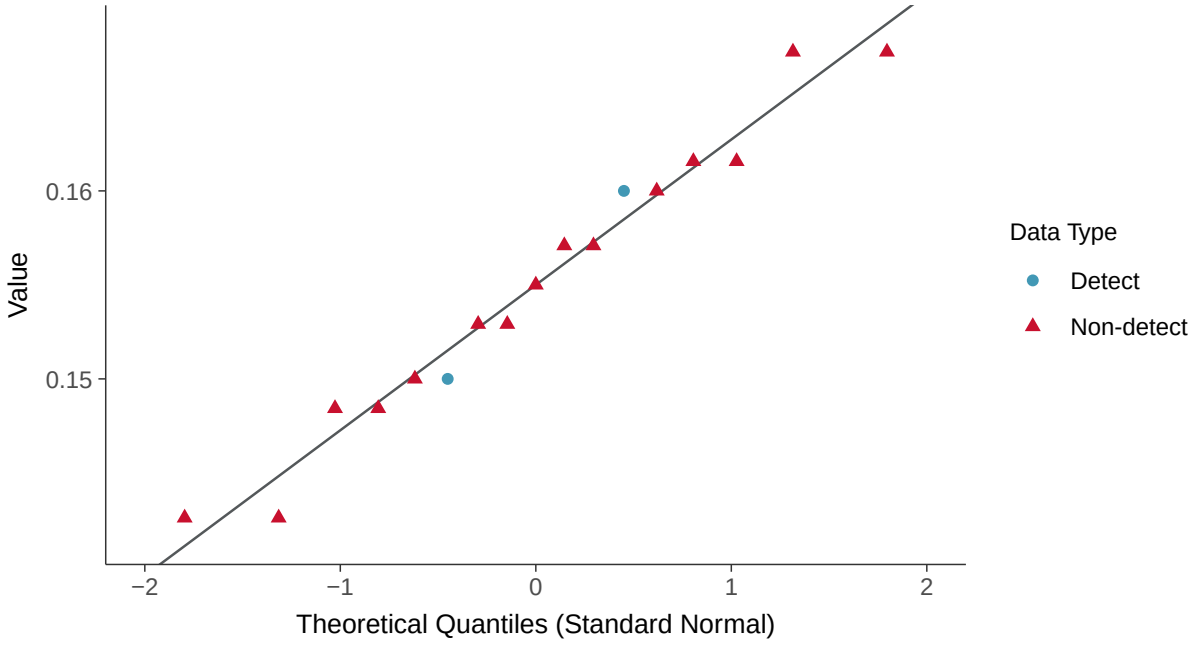

**Boxplot by Season**

Beryllium, MW-17003 (ug/L)



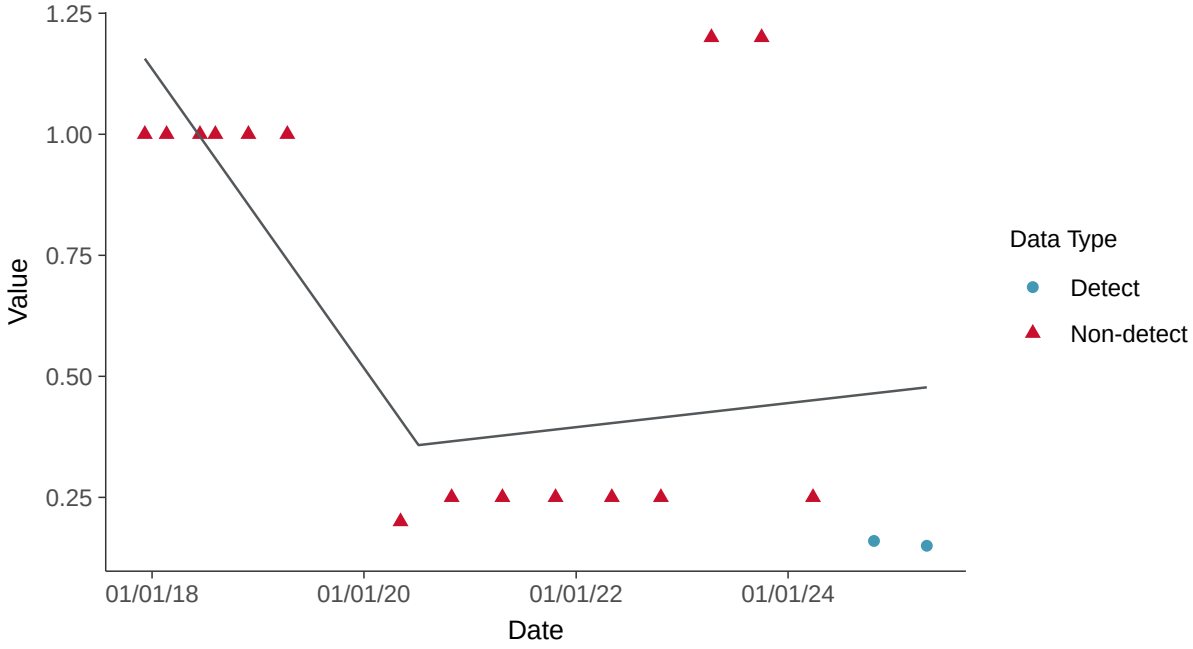
**Normal Q-Q plot using ROS Imputed Estimates**

Beryllium, MW-17003 (ug/L)



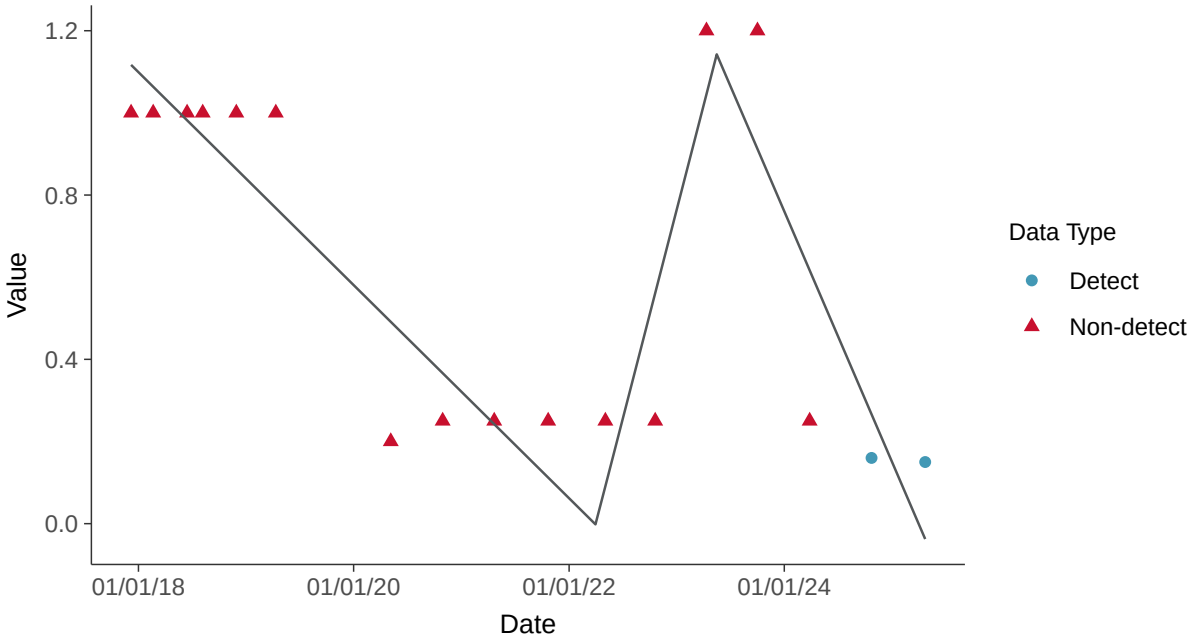

**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-17003 (ug/L)



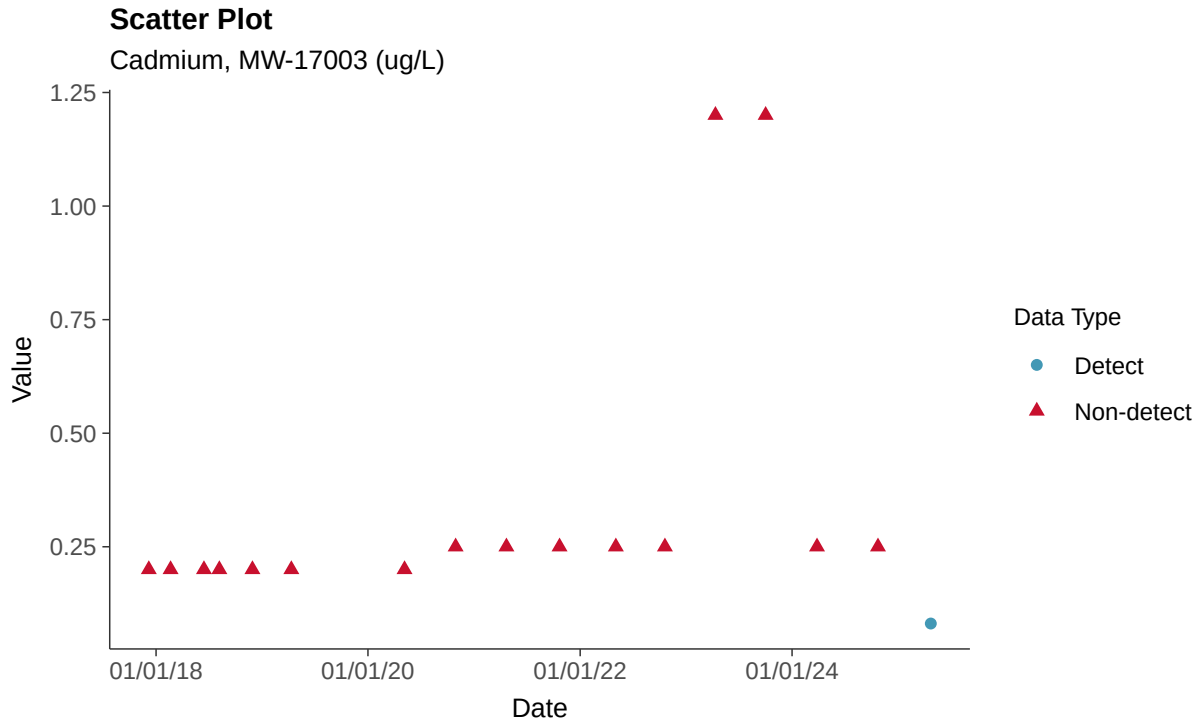
**Trend Regression: Piecewise Linear-Linear-Linear**

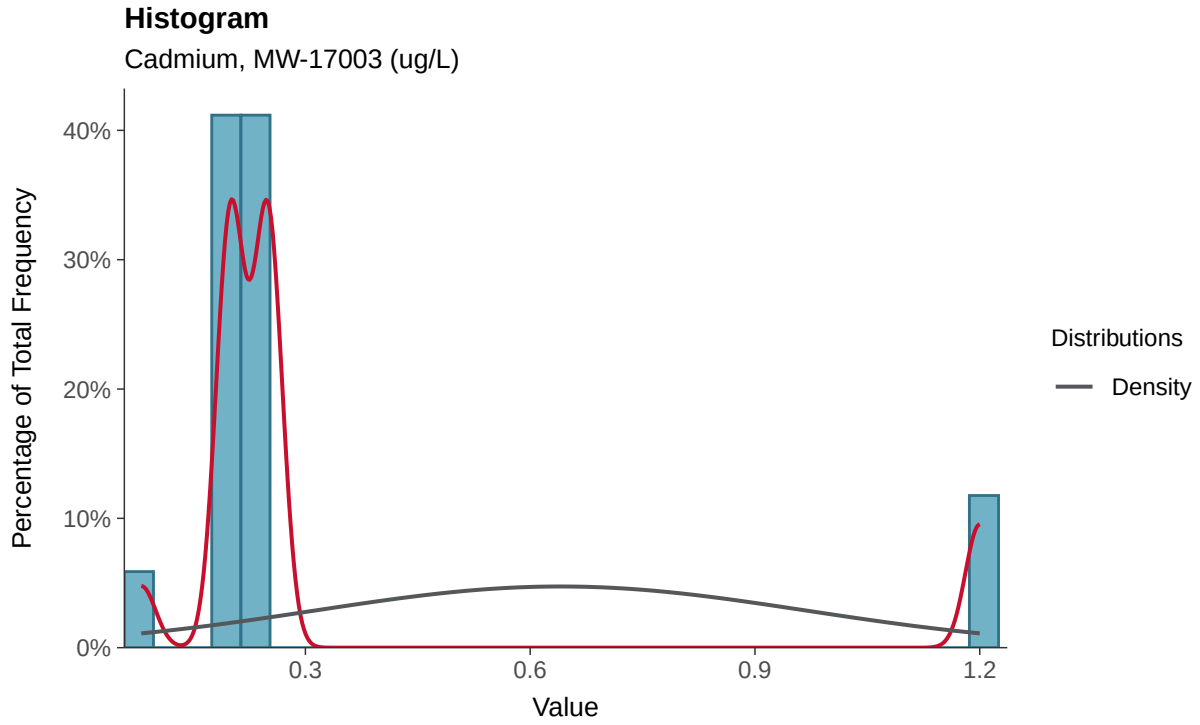
Beryllium, MW-17003 (ug/L)



## Appendix IV: Cadmium, MW-17003

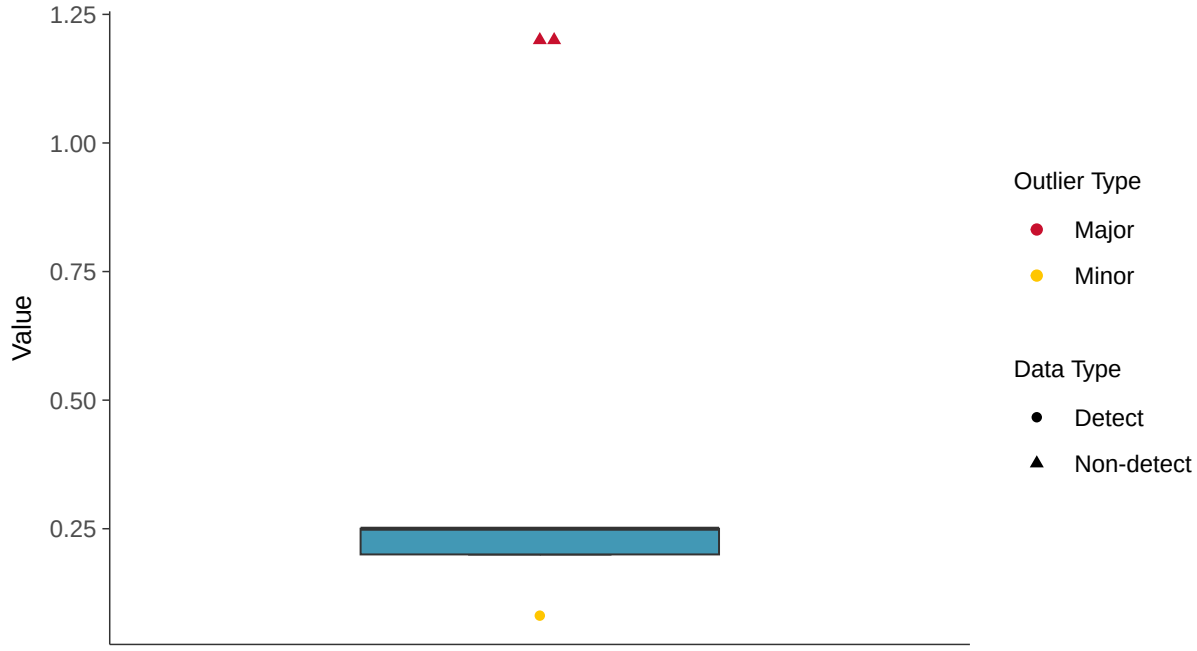
ID: 16_2_106



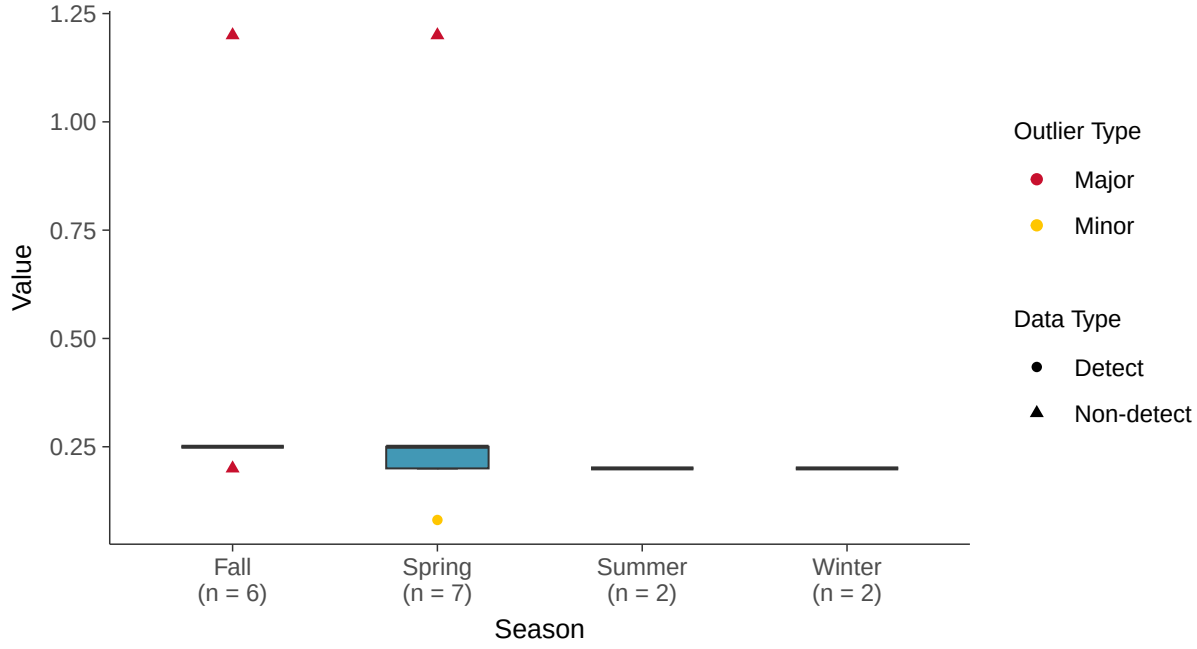
## Boxplot

Cadmium, MW-17003 (ug/L)



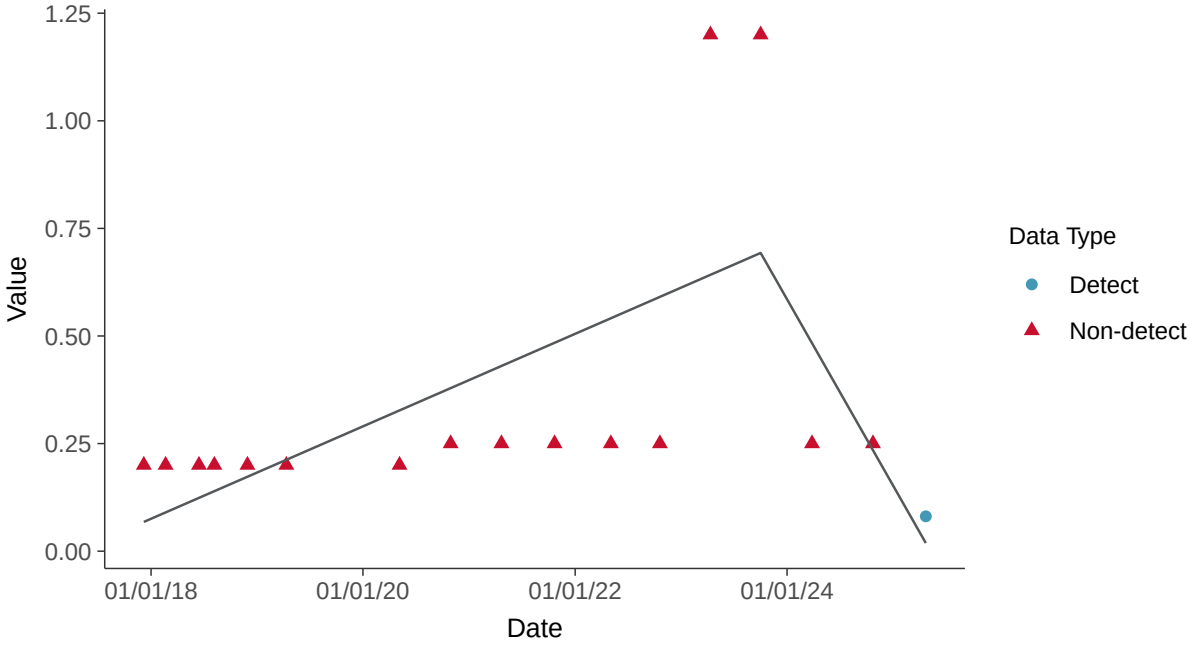

## Boxplot by Season

Cadmium, MW-17003 (ug/L)



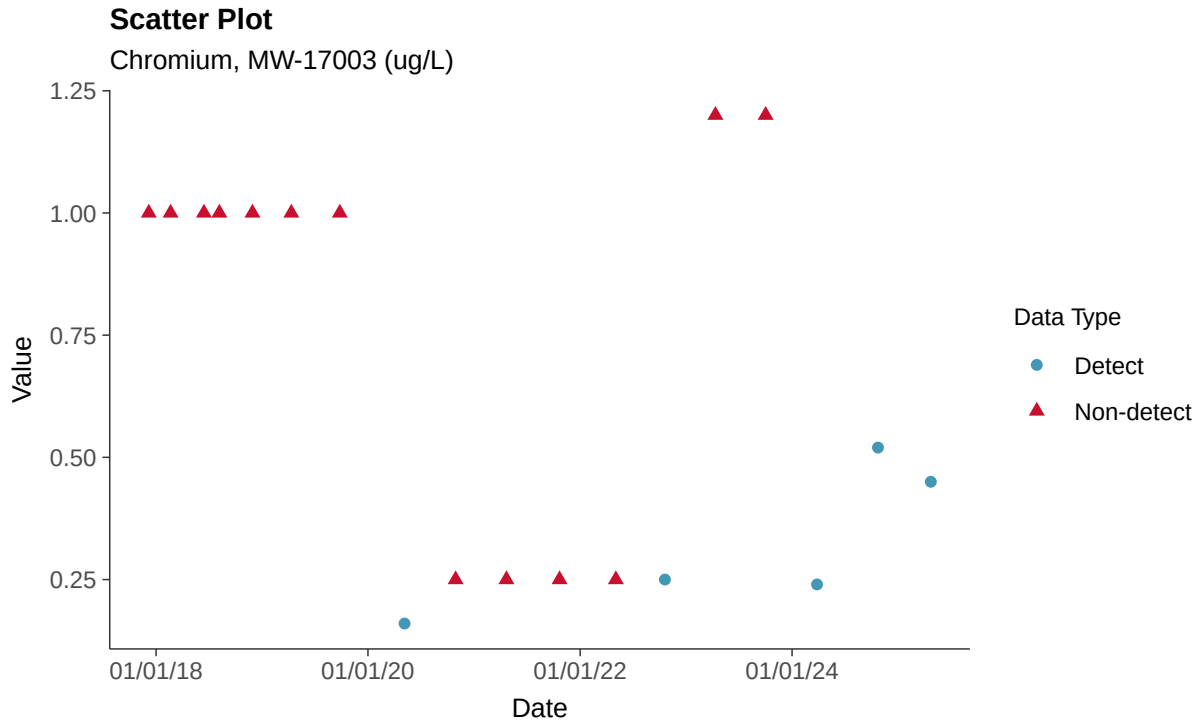
**Trend Regression: Piecewise Linear-Linear**

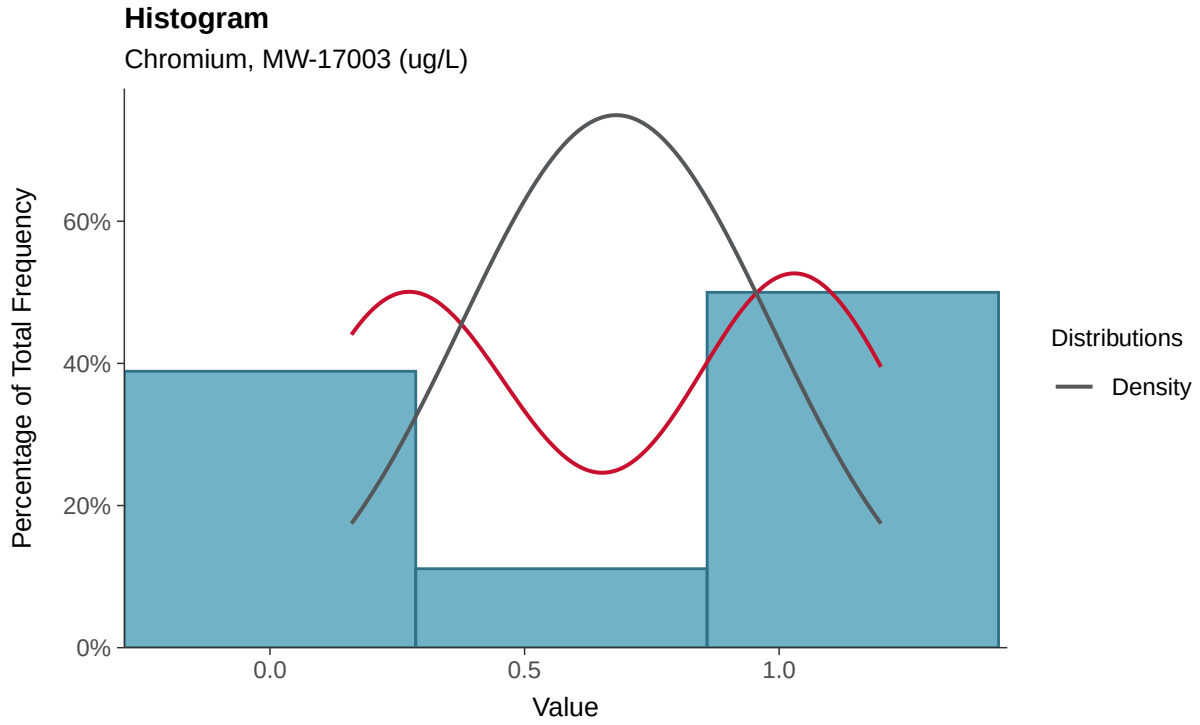
Cadmium, MW-17003 (ug/L)



## Appendix IV: Chromium, MW-17003

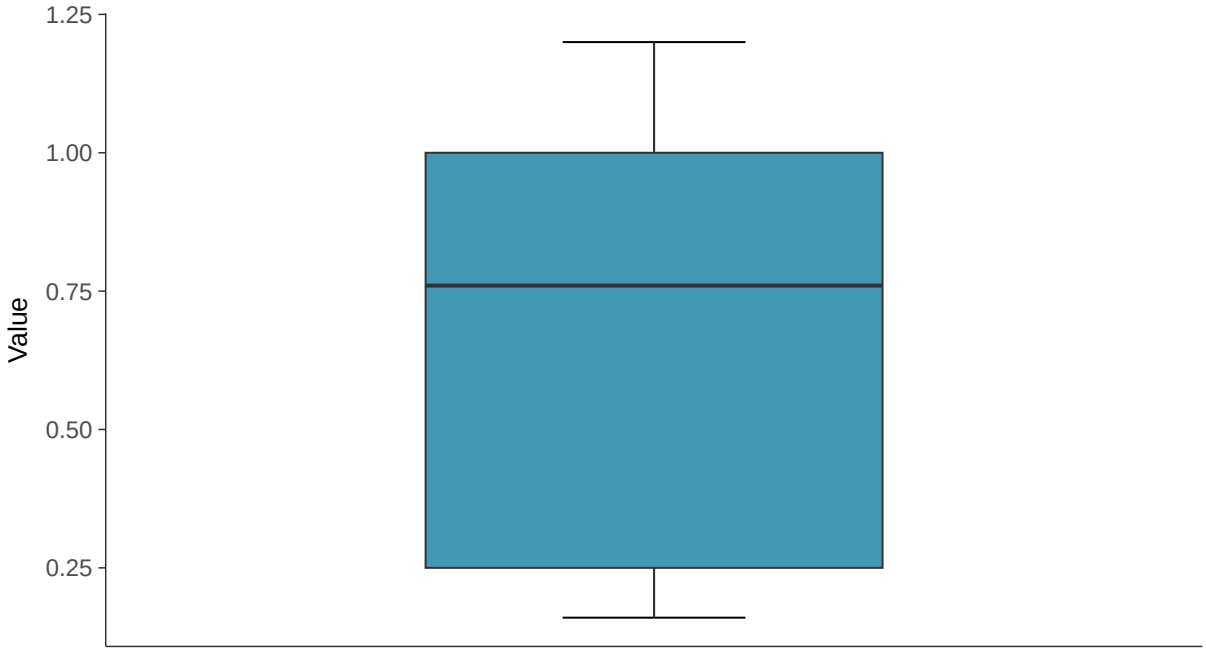
ID: 16_2_109



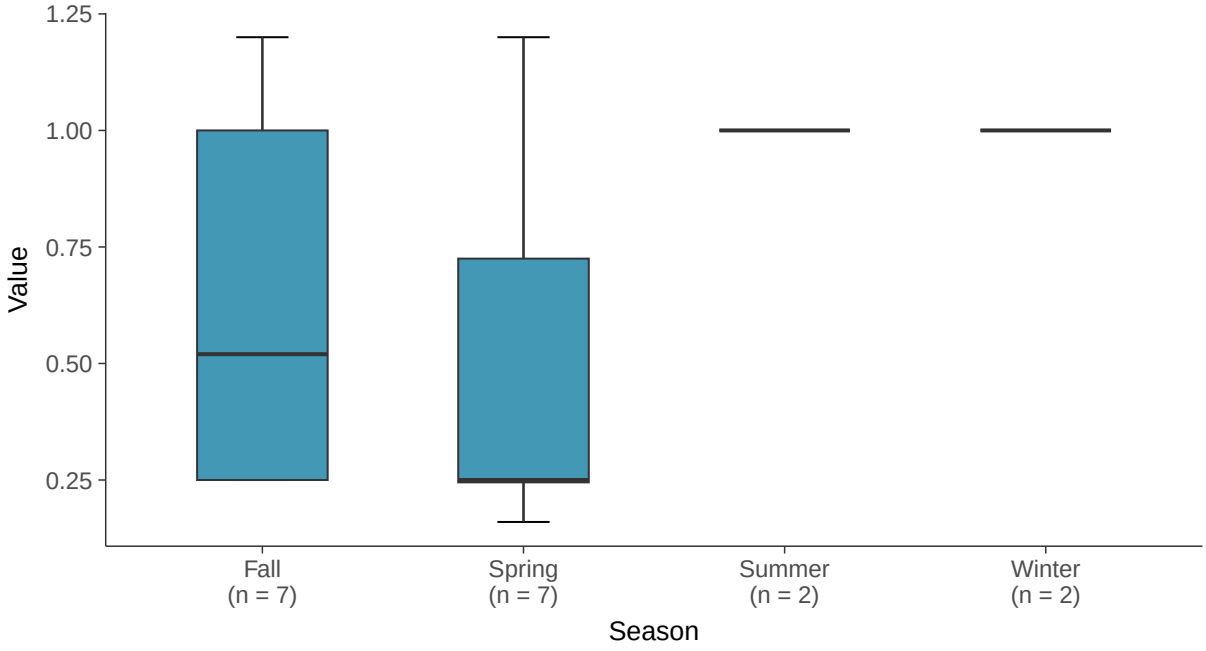
**Boxplot**

Chromium, MW-17003 (ug/L)



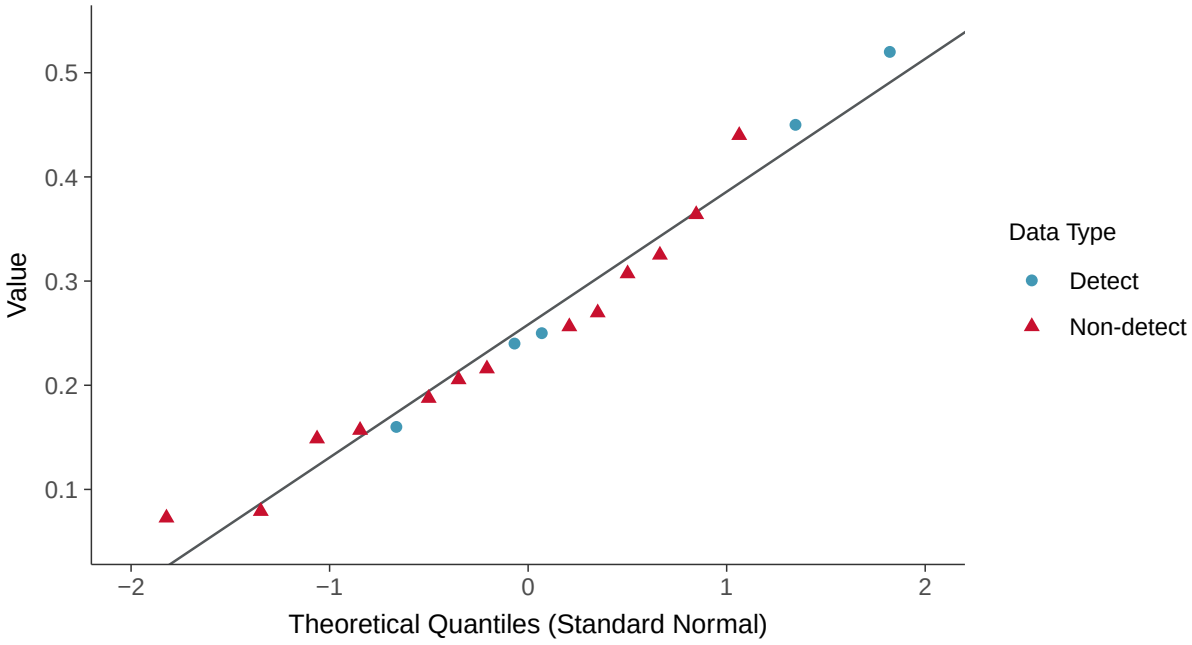

**Boxplot by Season**

Chromium, MW-17003 (ug/L)



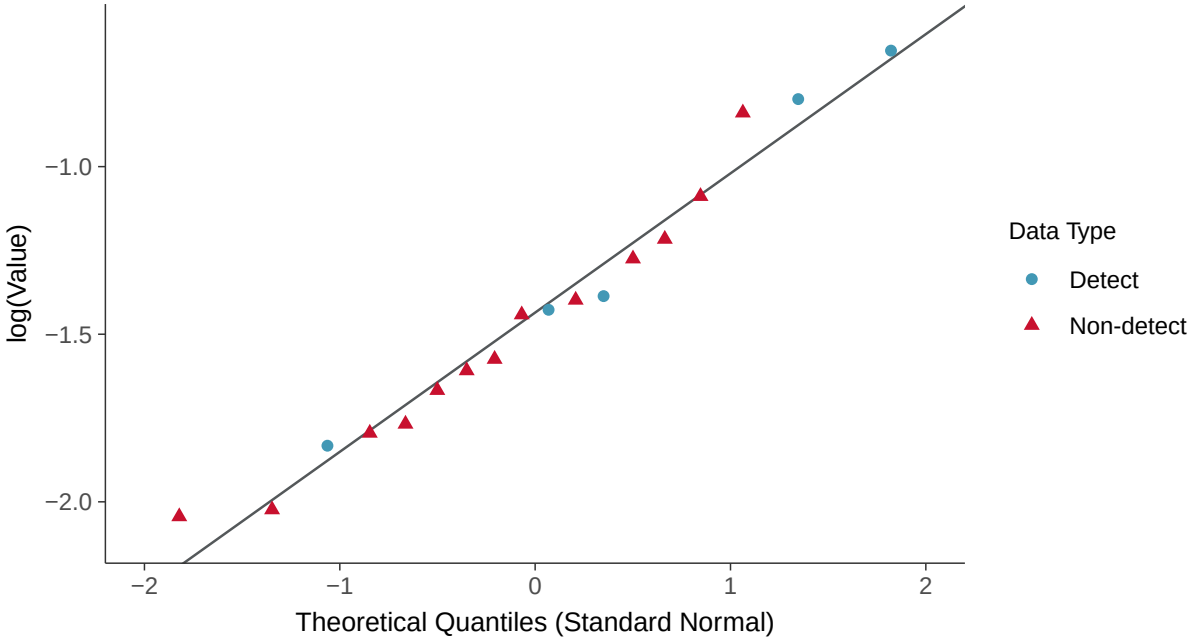
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17003 (ug/L)



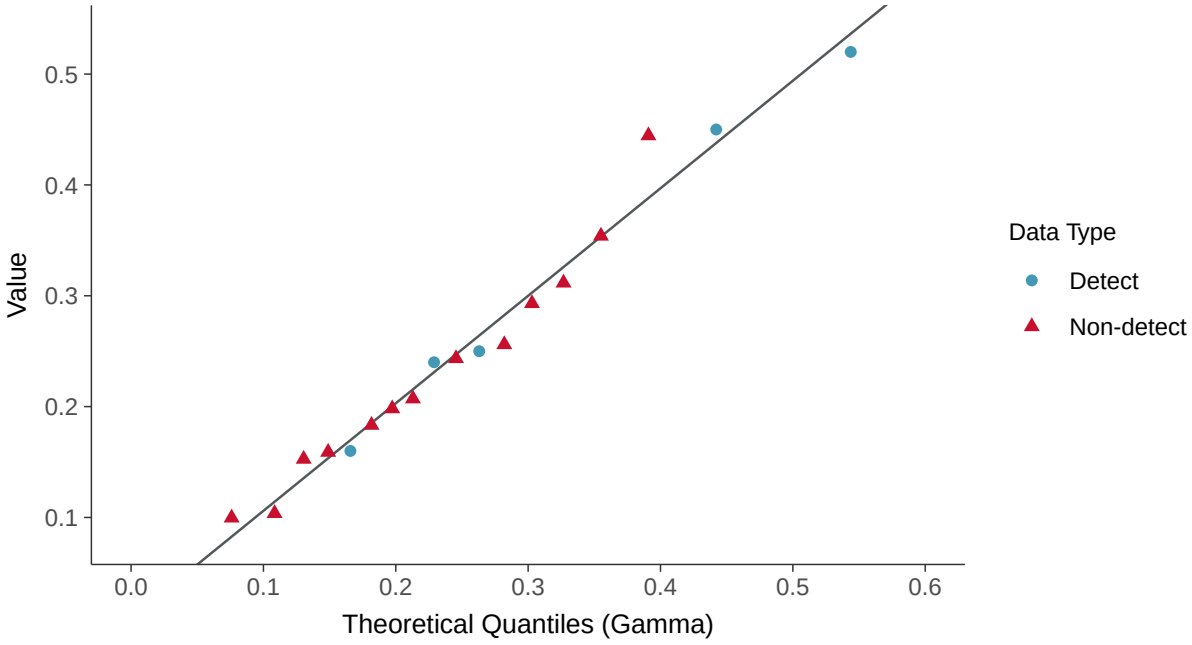

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17003 (ug/L)



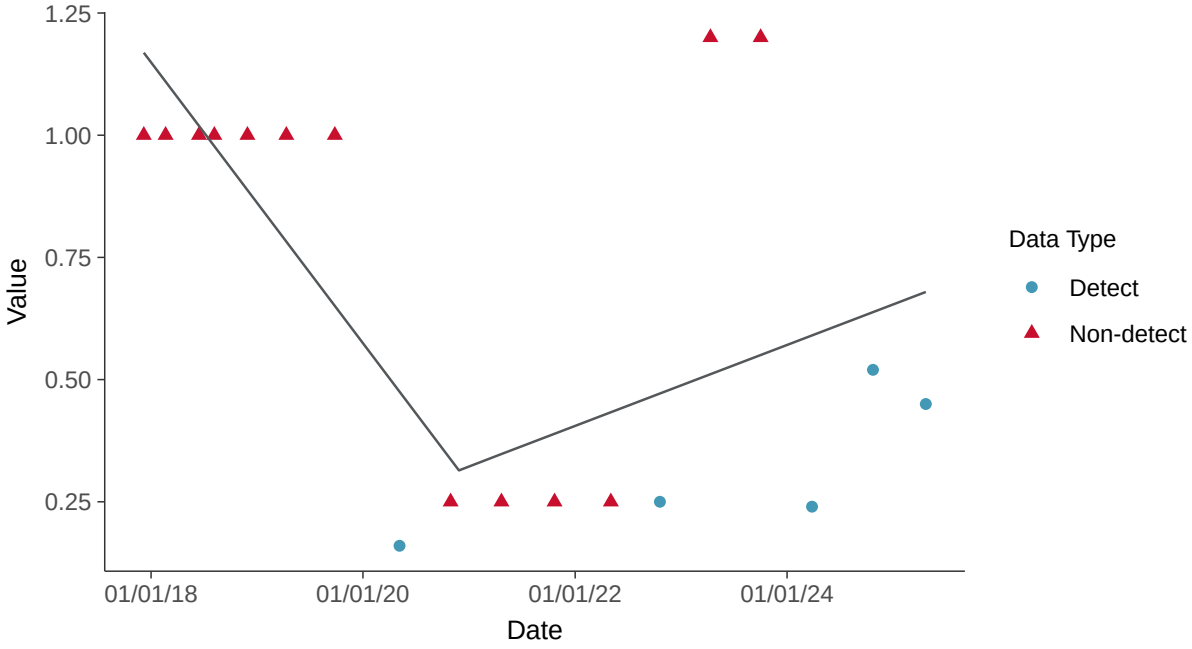
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17003 (ug/L)



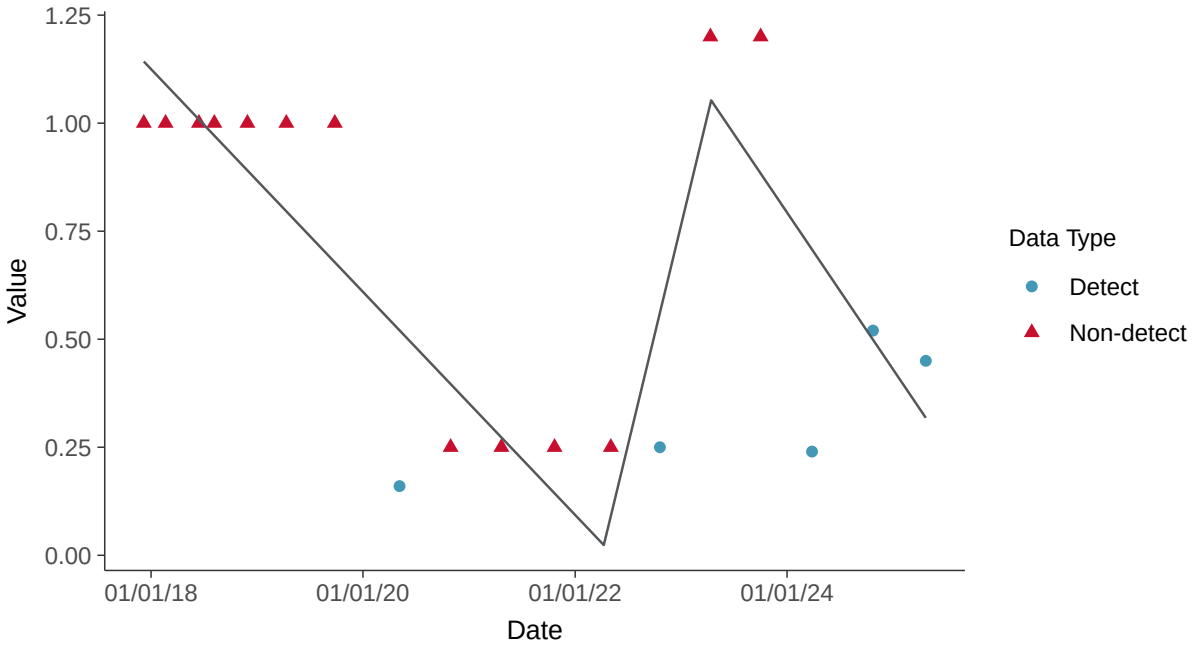

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-17003 (ug/L)



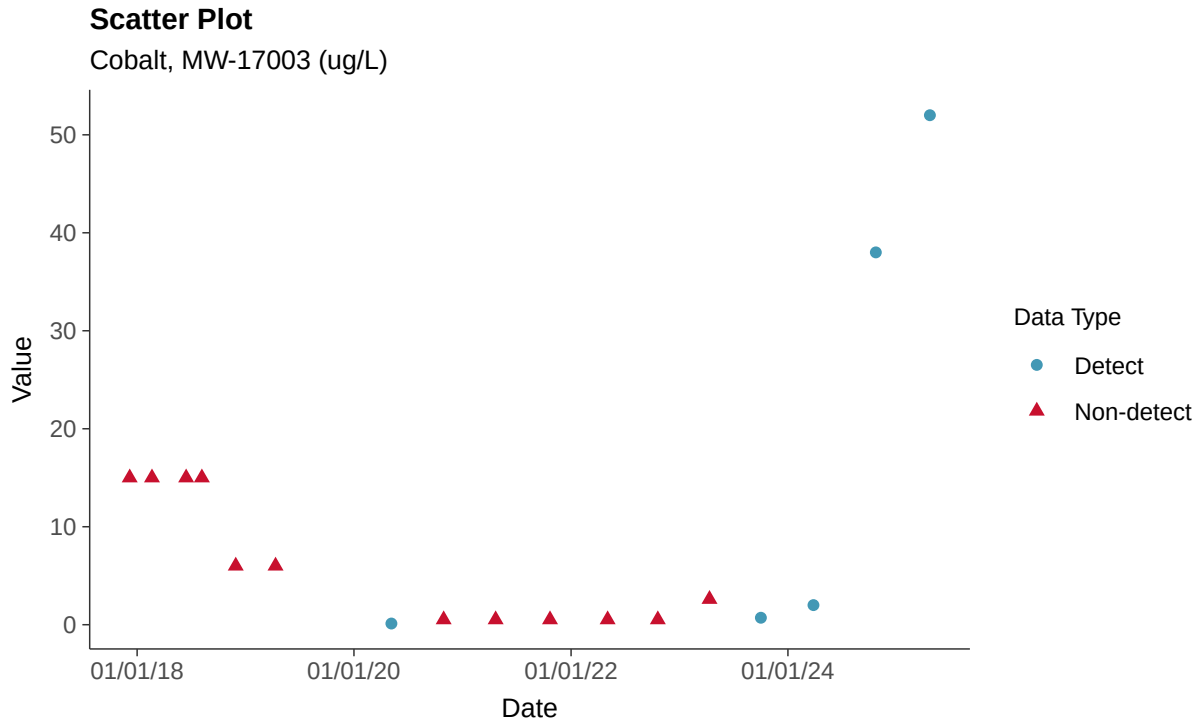
**Trend Regression: Piecewise Linear-Linear-Linear**

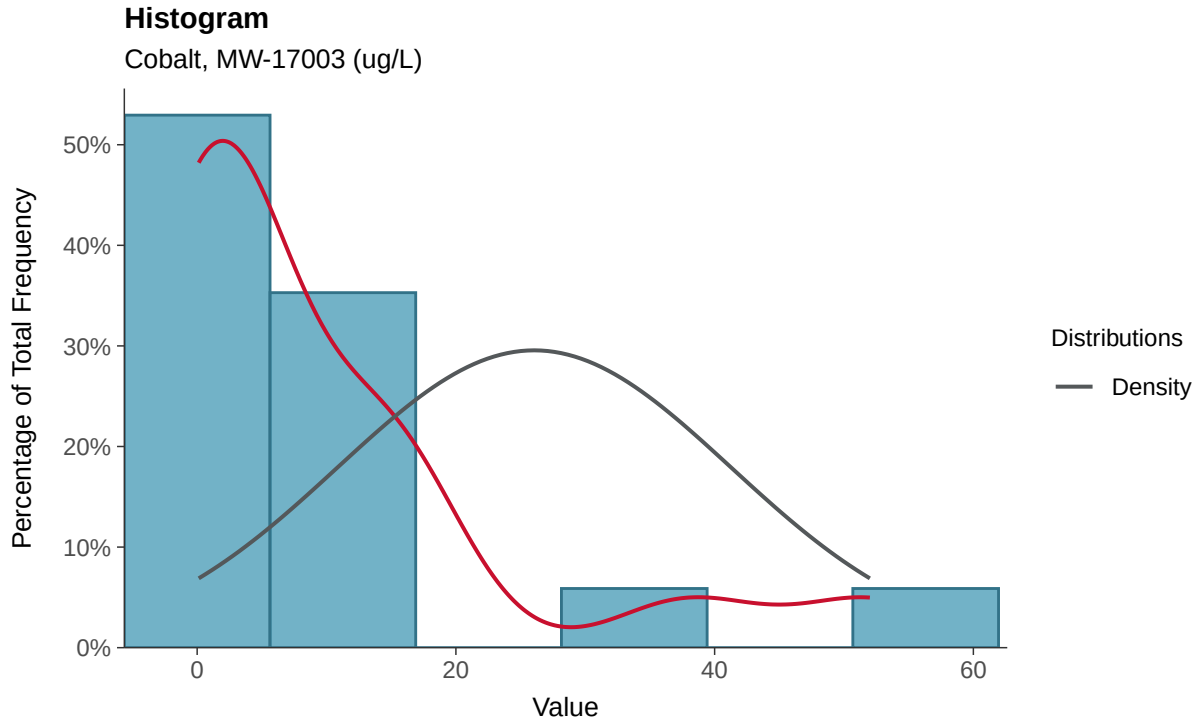
Chromium, MW-17003 (ug/L)



## Appendix IV: Cobalt, MW-17003

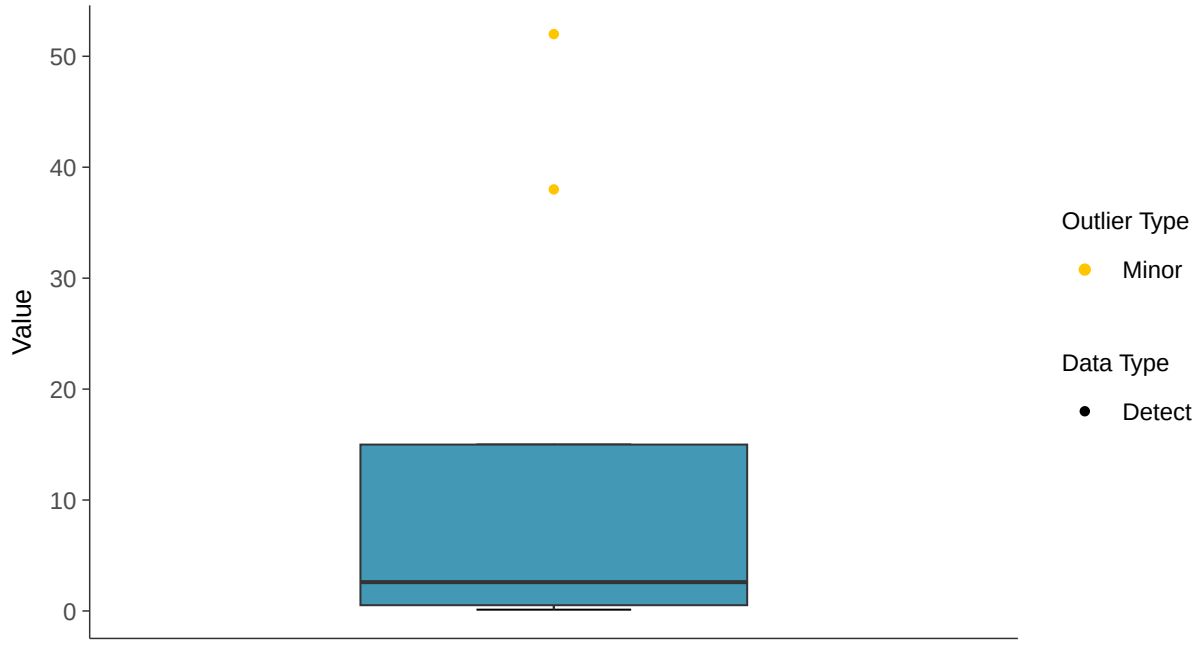
ID: 16_2_110



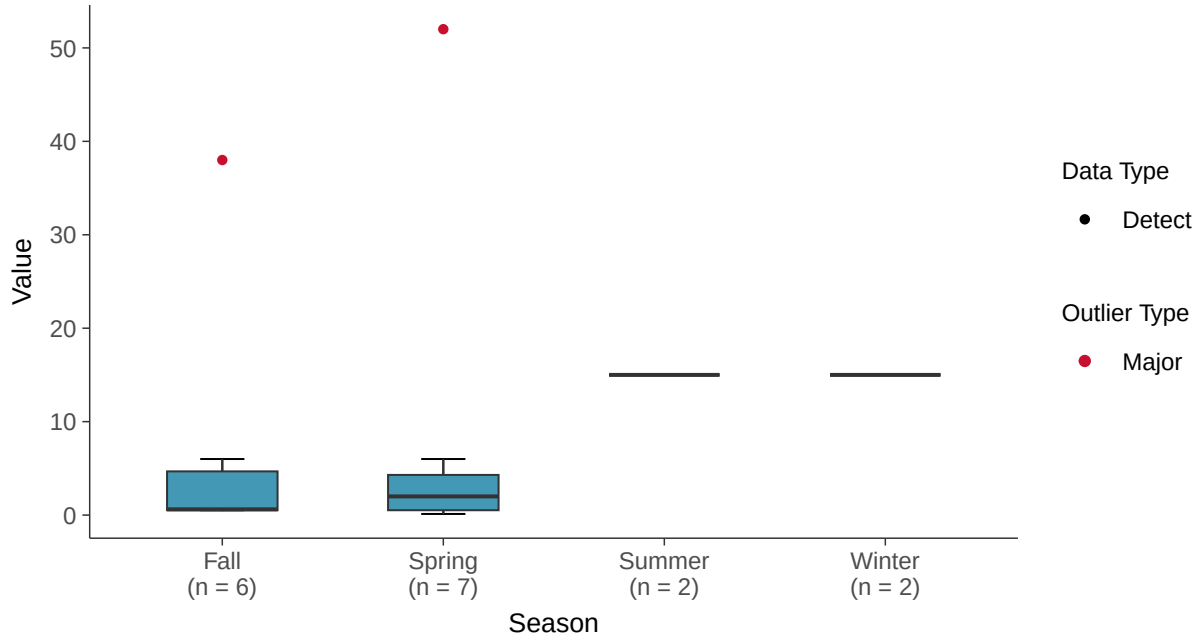
## Boxplot

Cobalt, MW-17003 (ug/L)



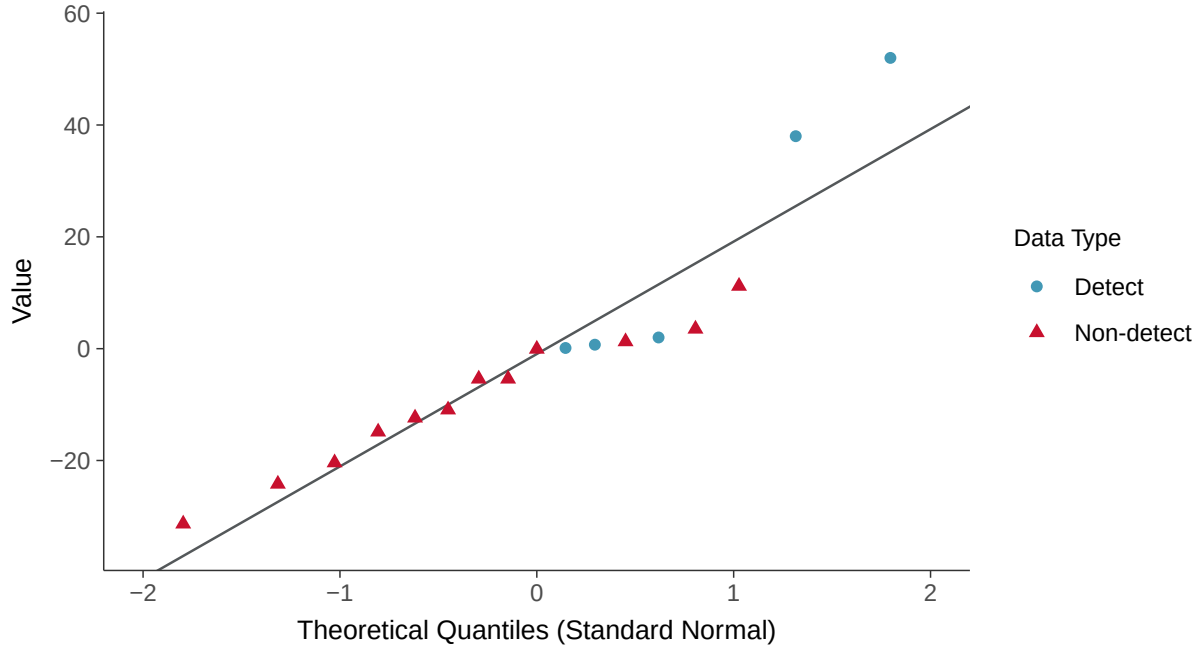

## Boxplot by Season

Cobalt, MW-17003 (ug/L)



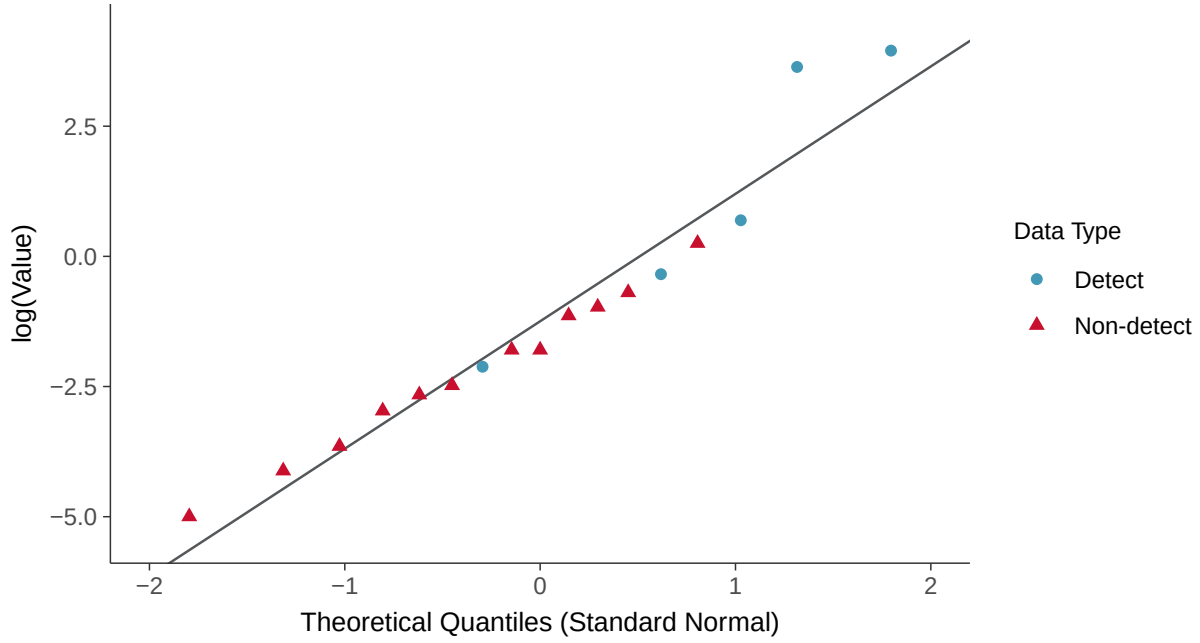
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17003 (ug/L)



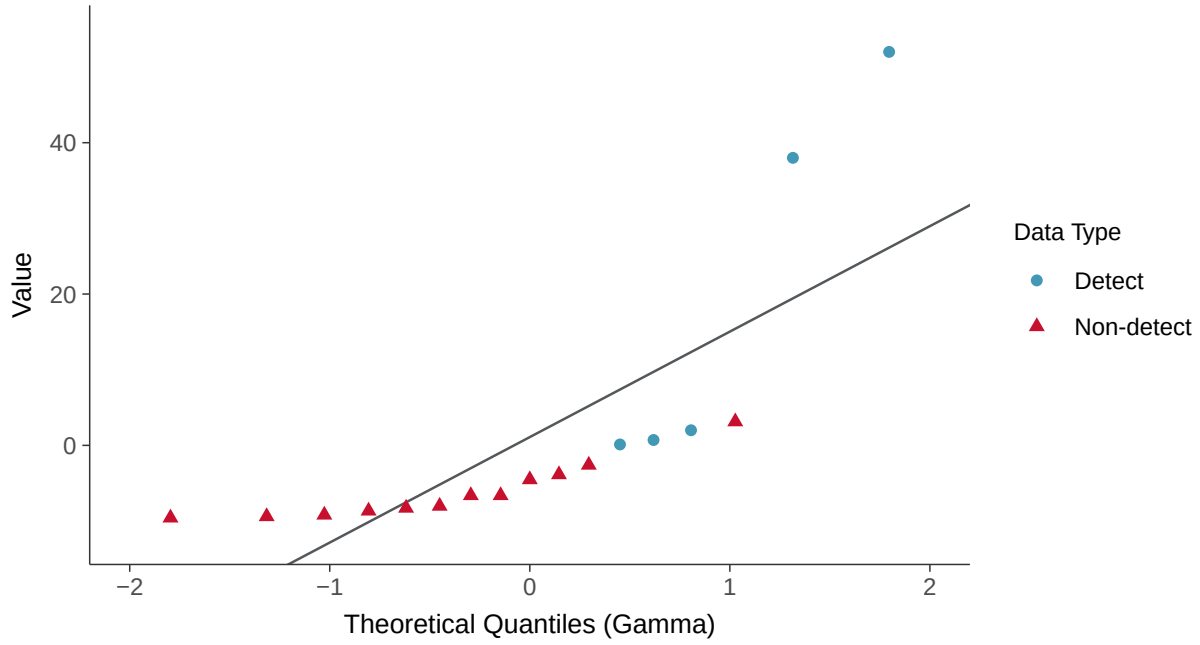

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17003 (ug/L)



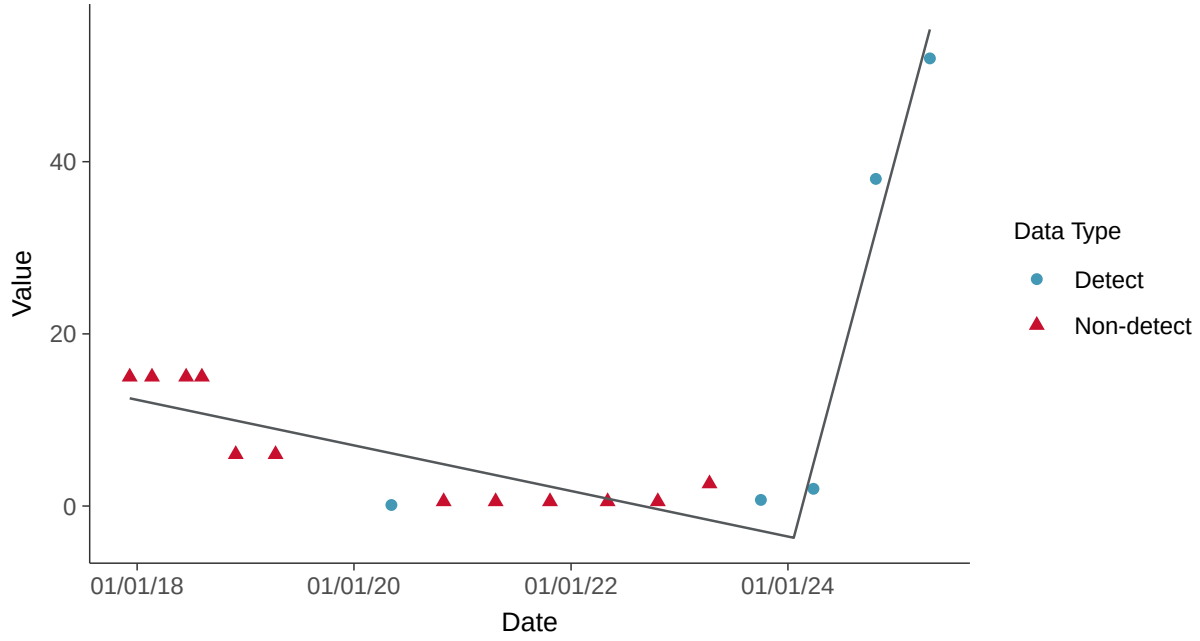
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17003 (ug/L)



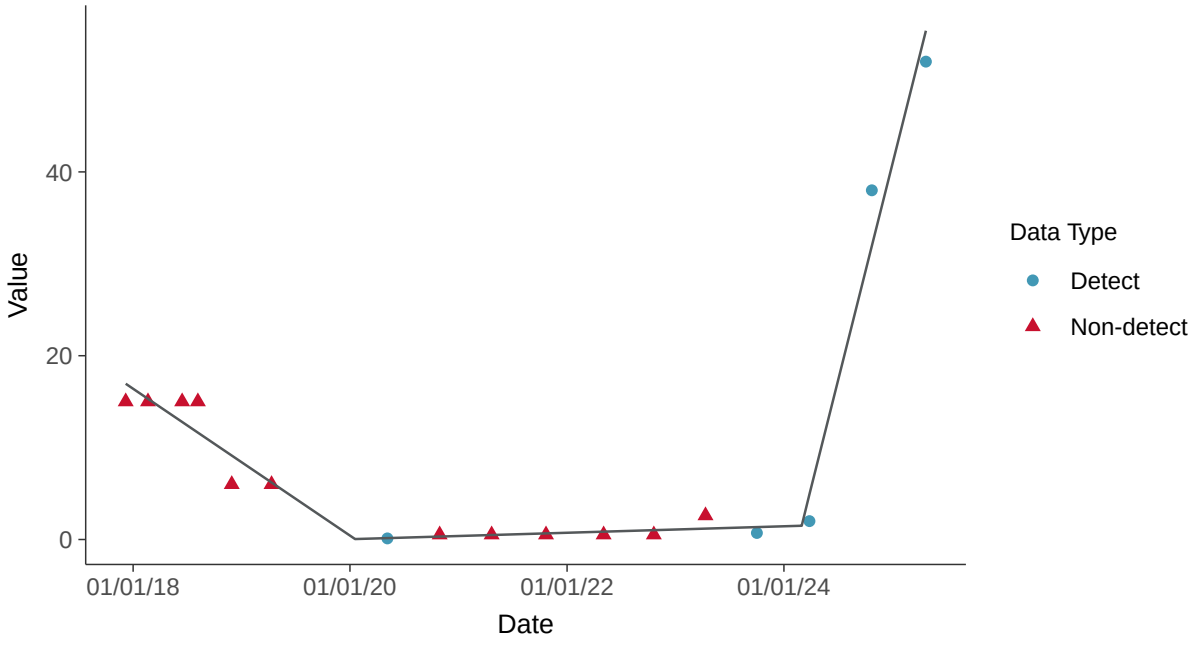

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17003 (ug/L)



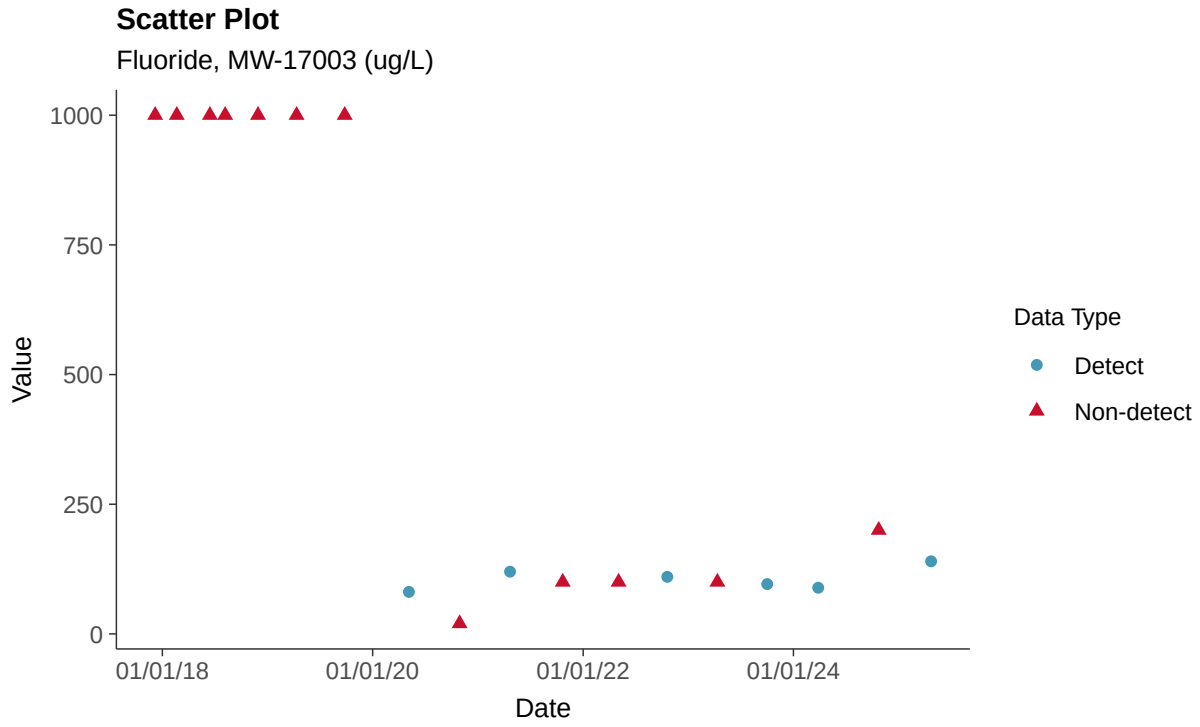
**Trend Regression: Piecewise Linear-Linear-Linear**

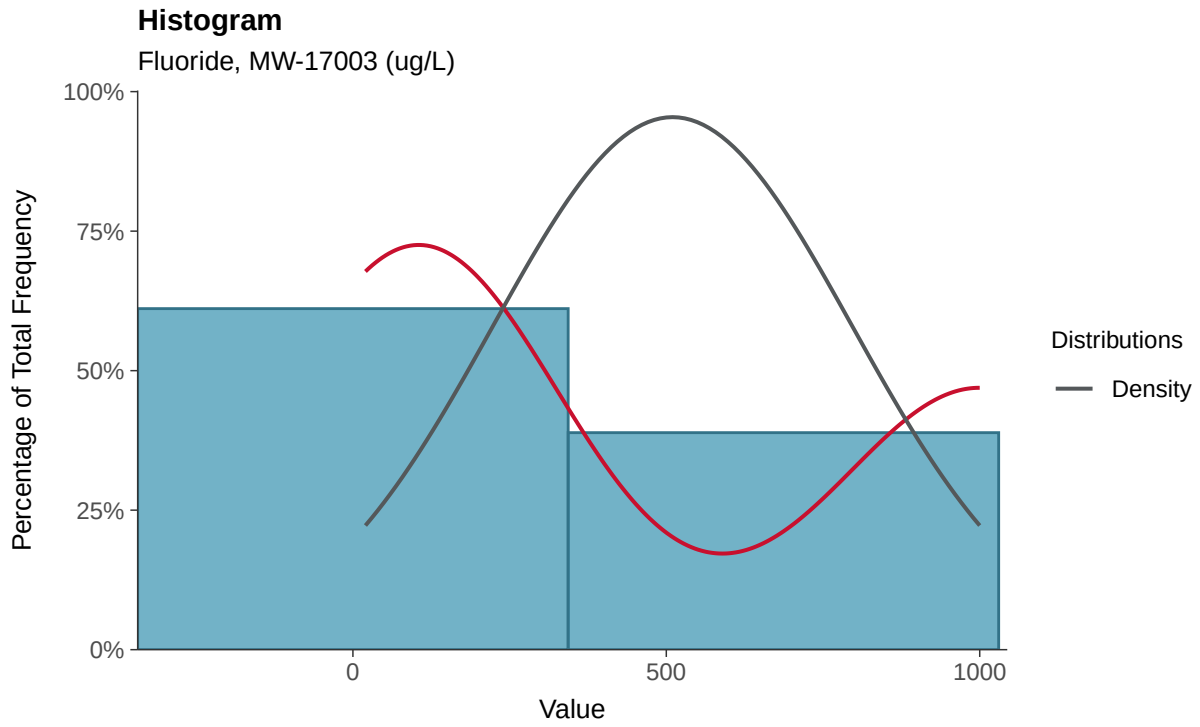
Cobalt, MW-17003 (ug/L)



# Appendix IV: Fluoride, MW-17003

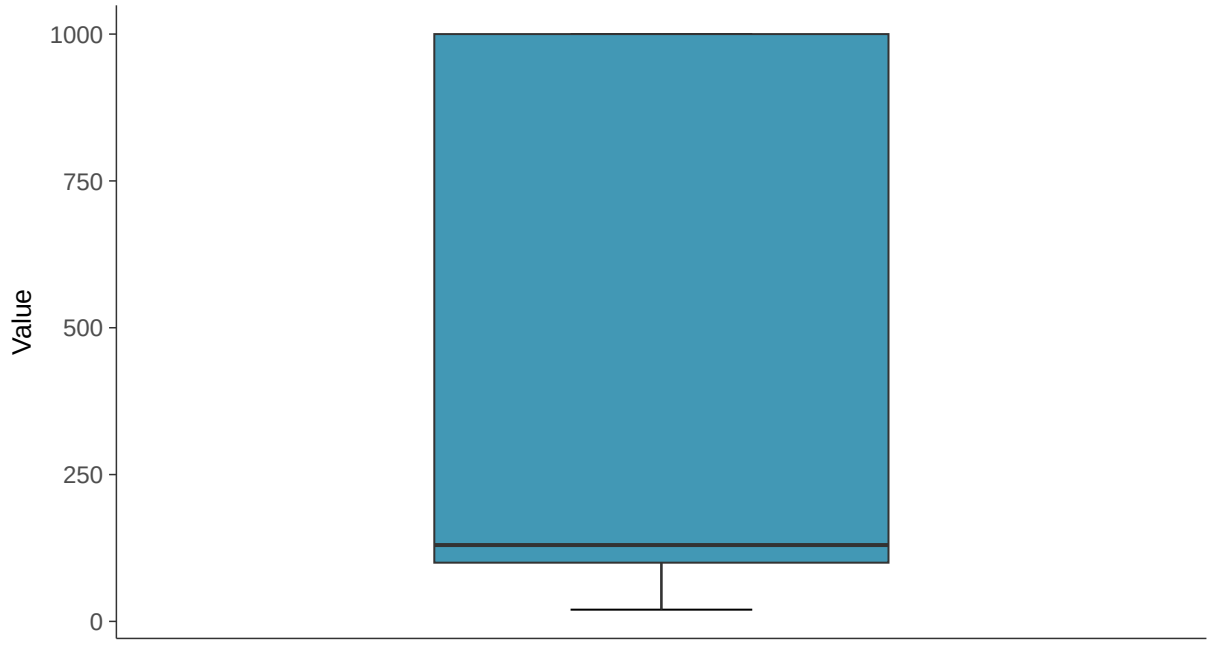
ID: 16_2_114



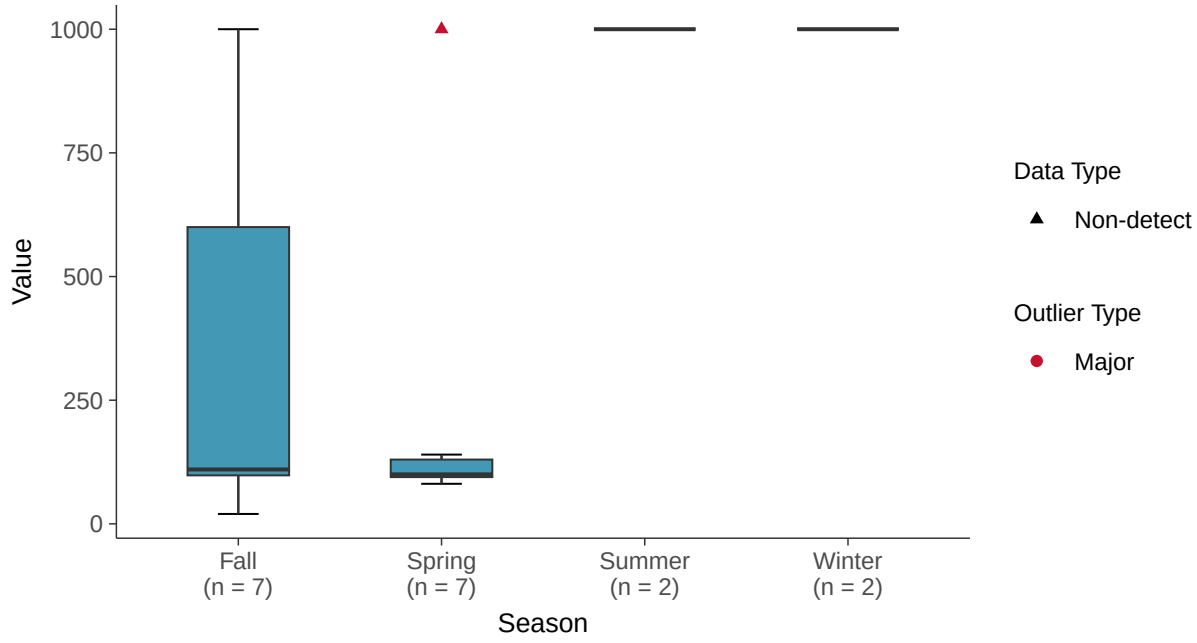
## Boxplot

Fluoride, MW-17003 (ug/L)



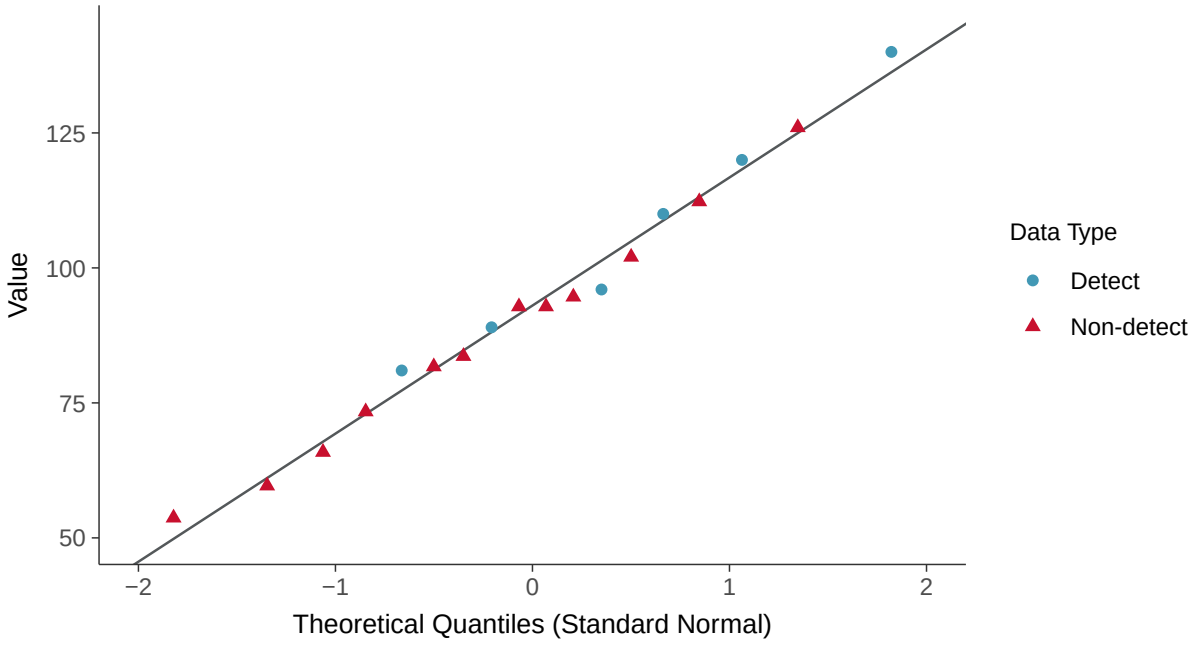

## Boxplot by Season

Fluoride, MW-17003 (ug/L)



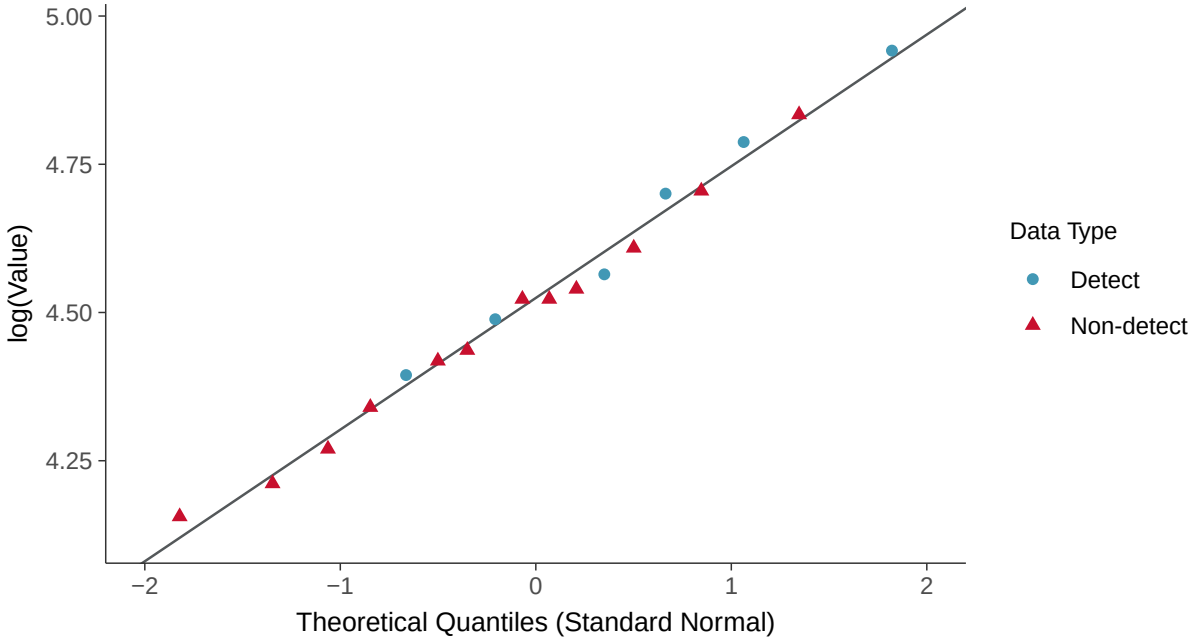
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17003 (ug/L)



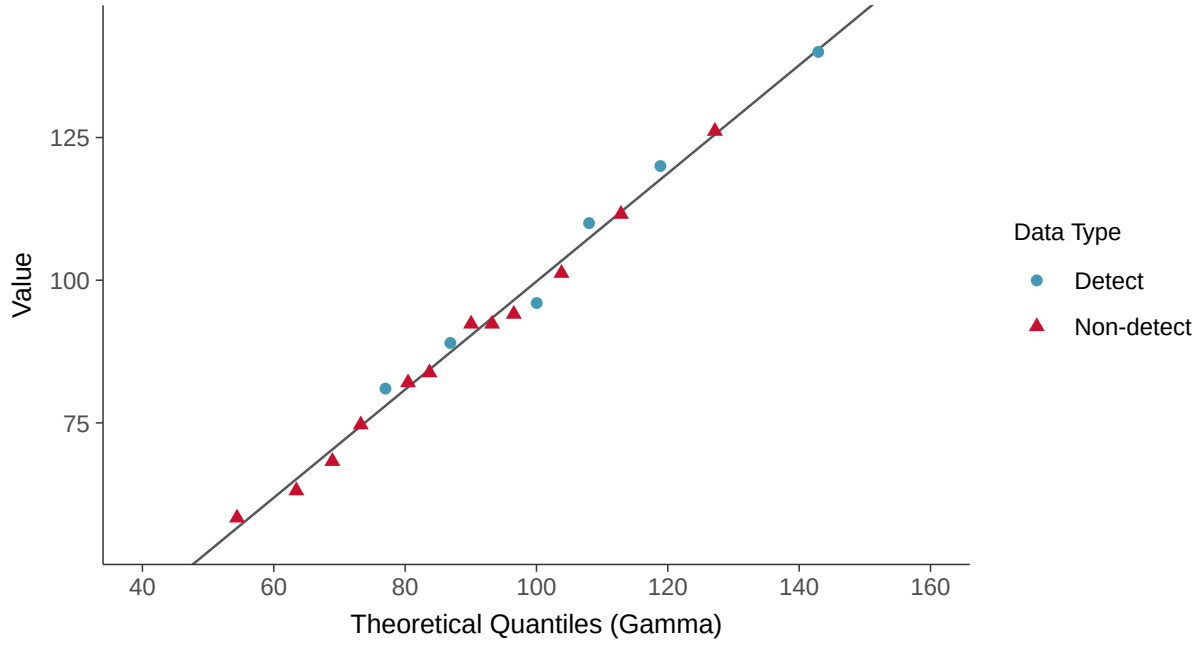

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17003 (ug/L)



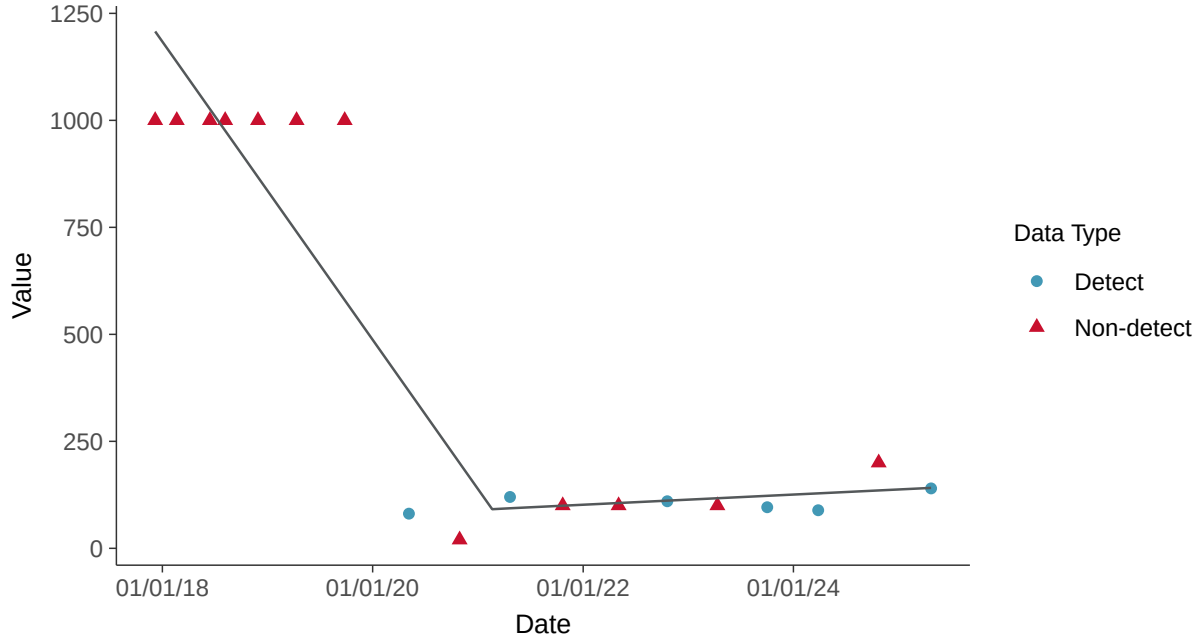
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17003 (ug/L)



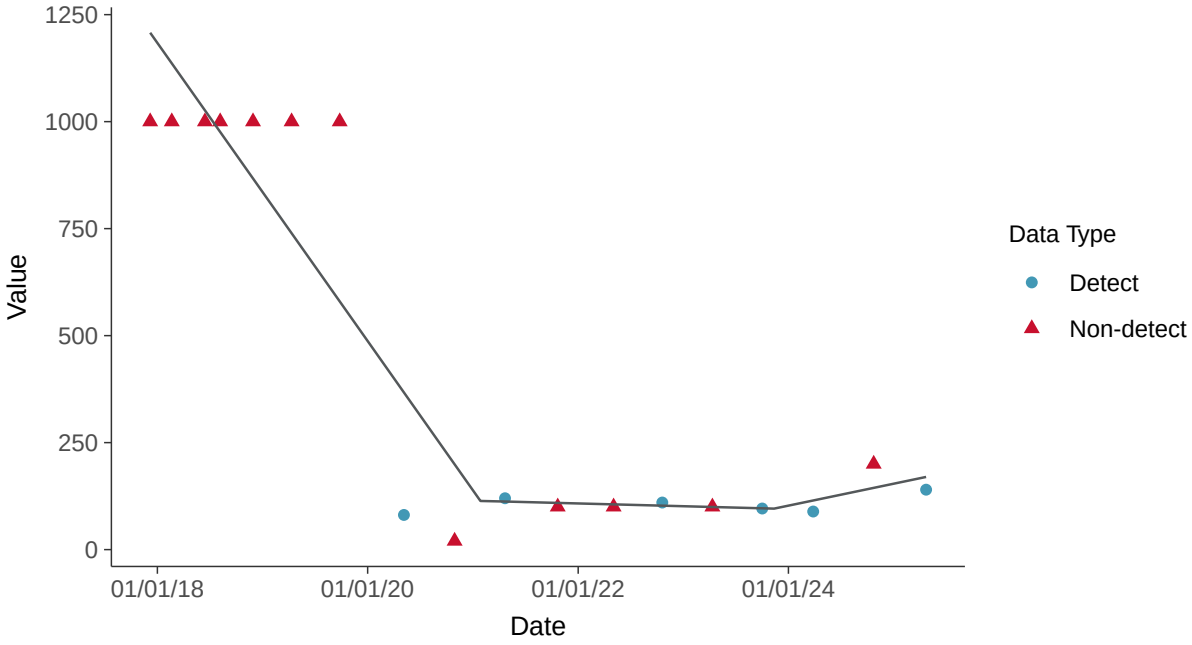

**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-17003 (ug/L)



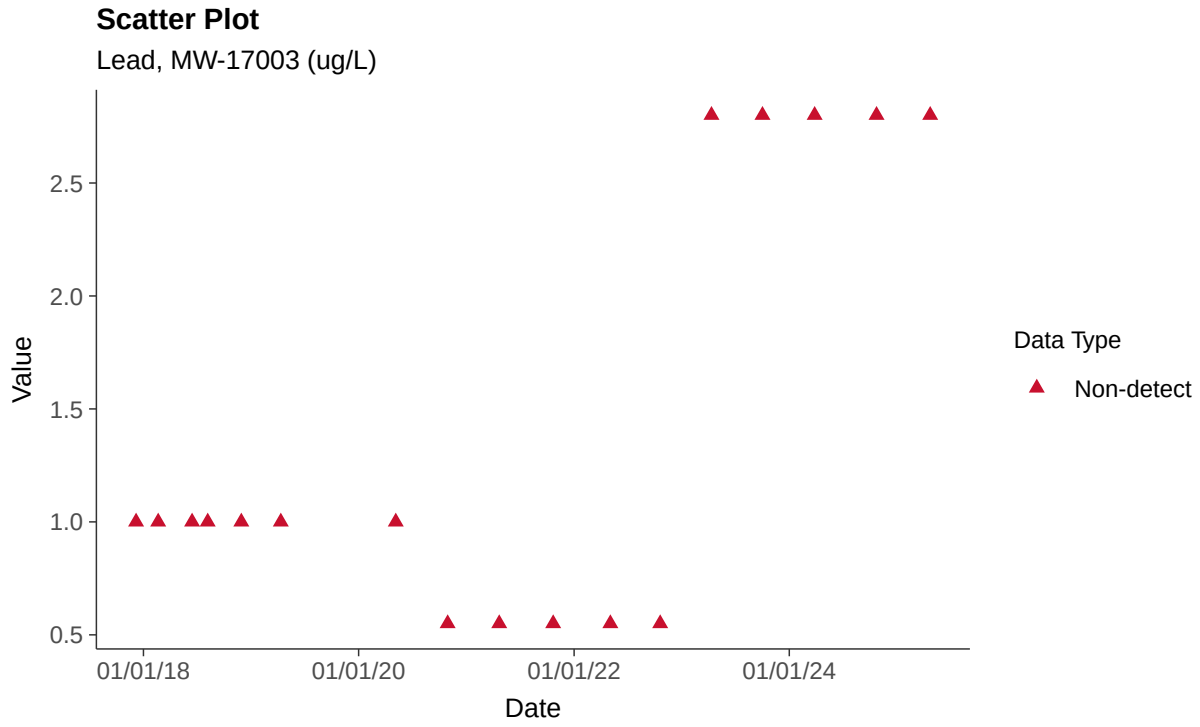
**Trend Regression: Piecewise Linear-Linear-Linear**

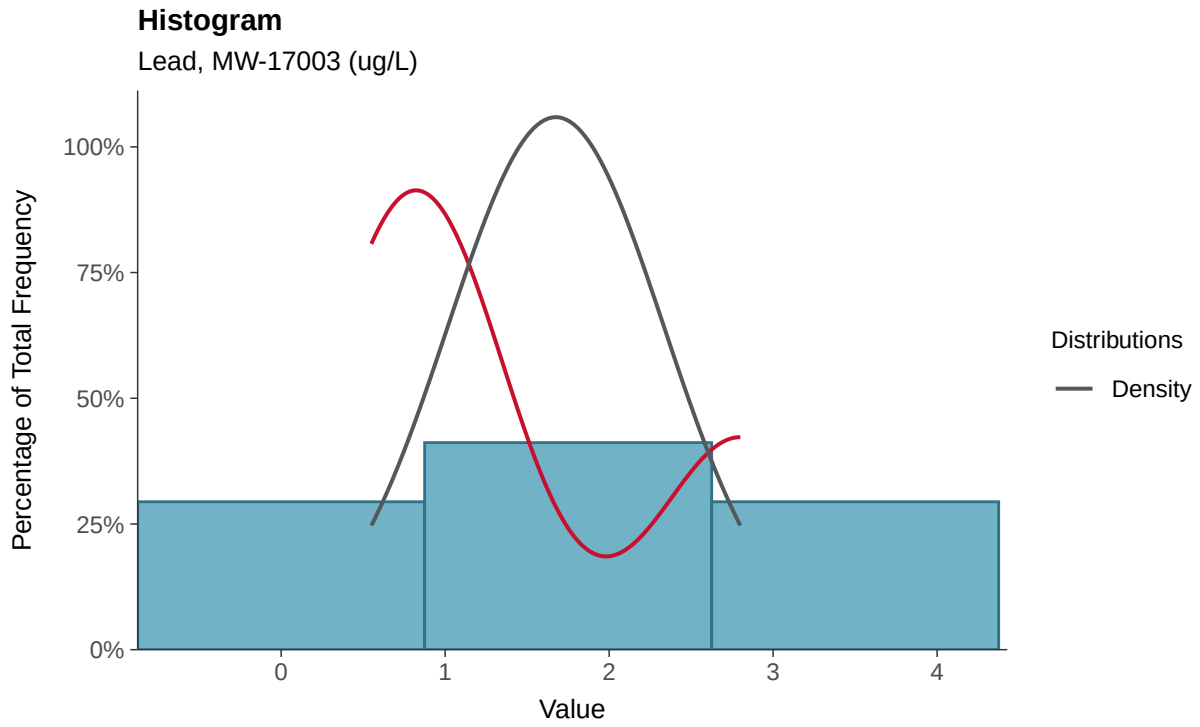
Fluoride, MW-17003 (ug/L)



## Appendix IV: Lead, MW-17003

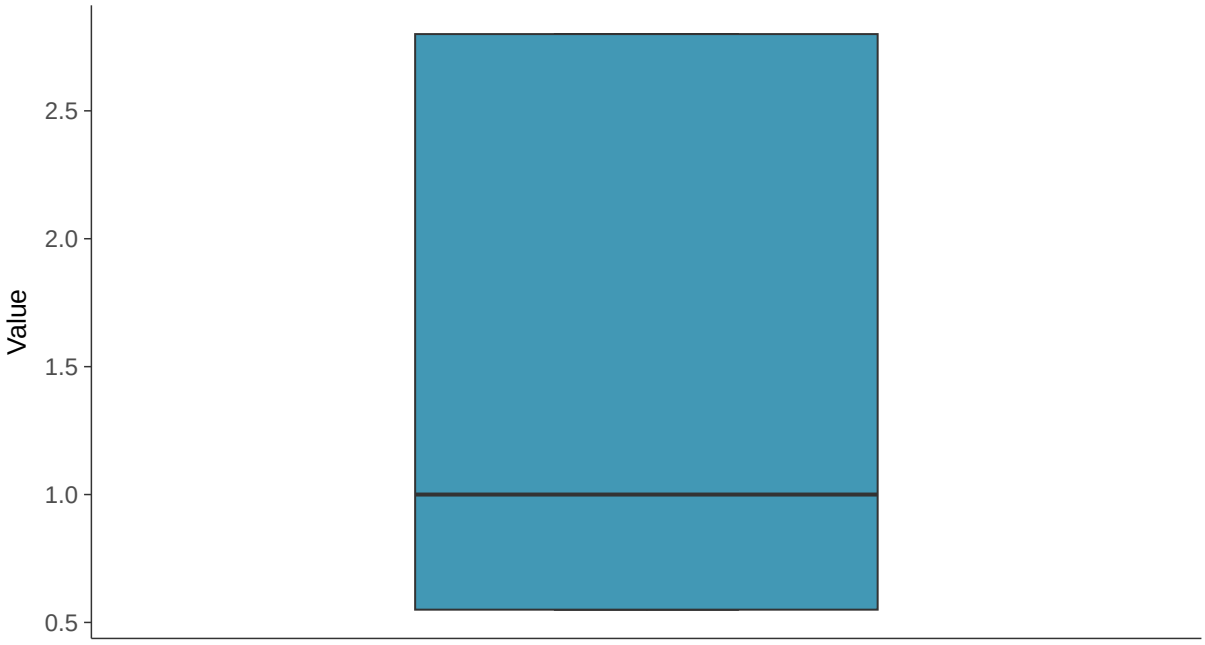
ID: 16_2_116



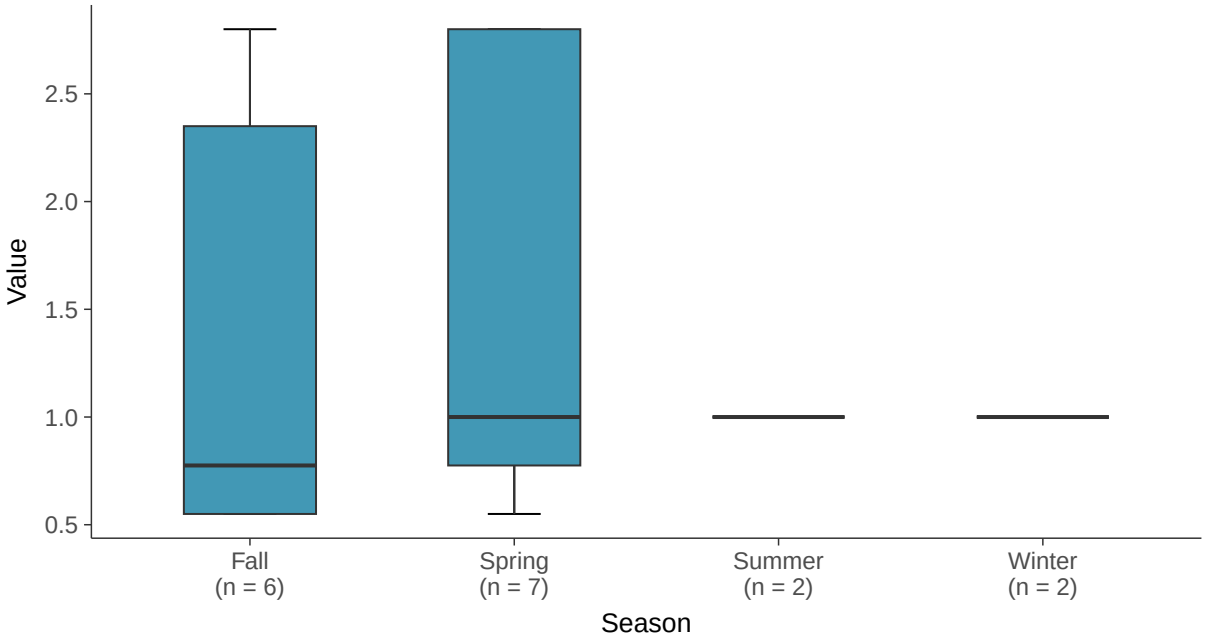
**Boxplot**

Lead, MW-17003 (ug/L)



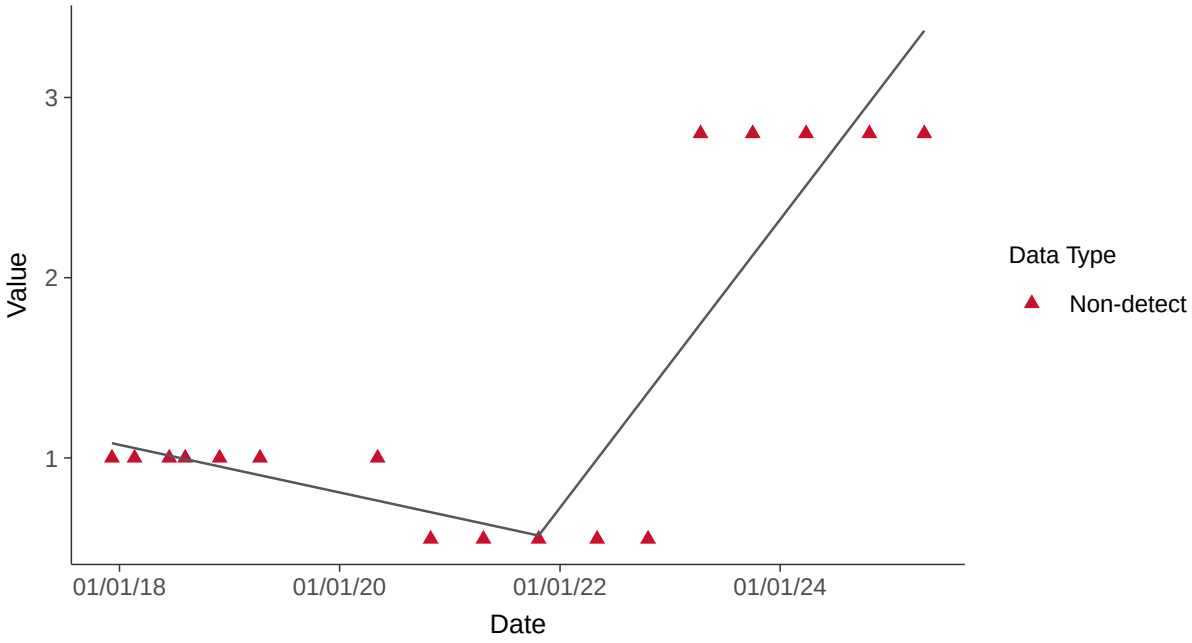

**Boxplot by Season**

Lead, MW-17003 (ug/L)



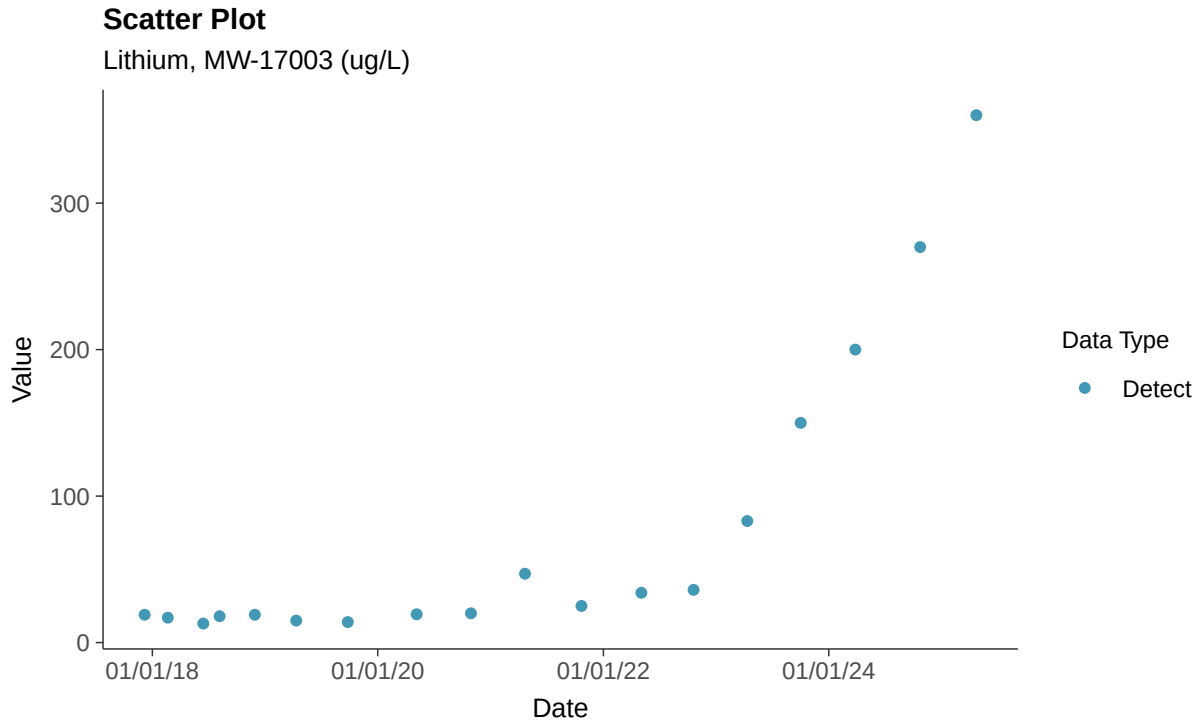
**Trend Regression: Piecewise Linear-Linear**

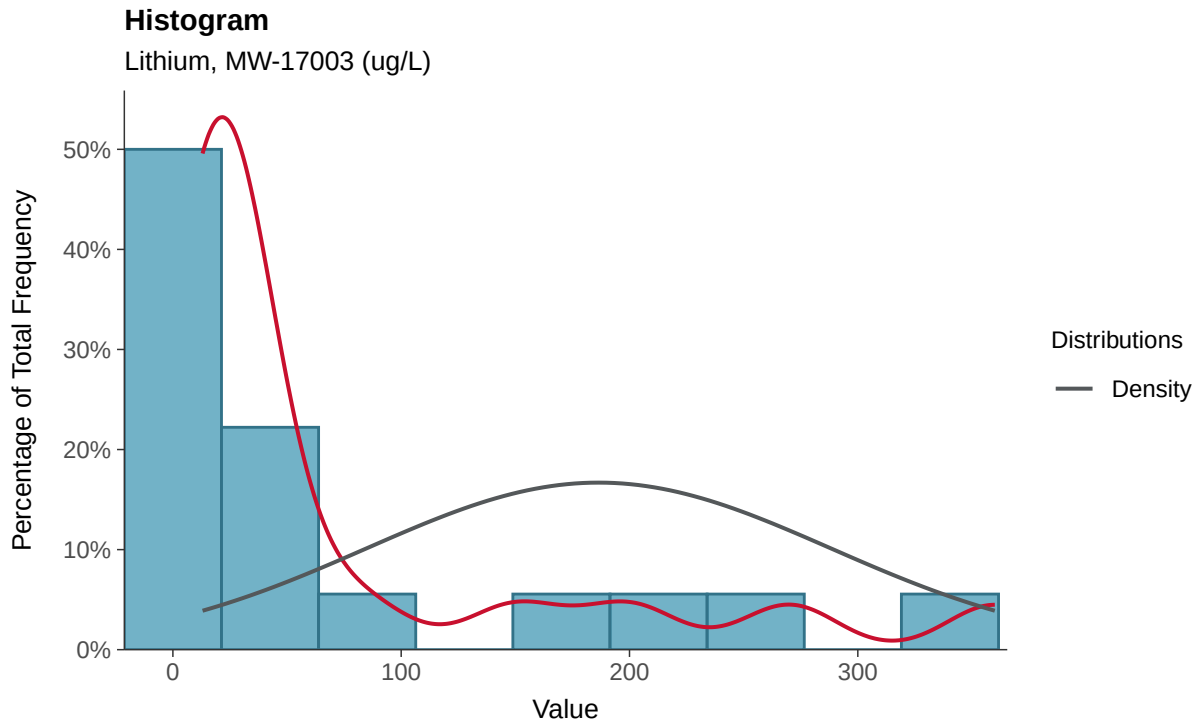
Lead, MW-17003 (ug/L)



## Appendix IV: Lithium, MW-17003

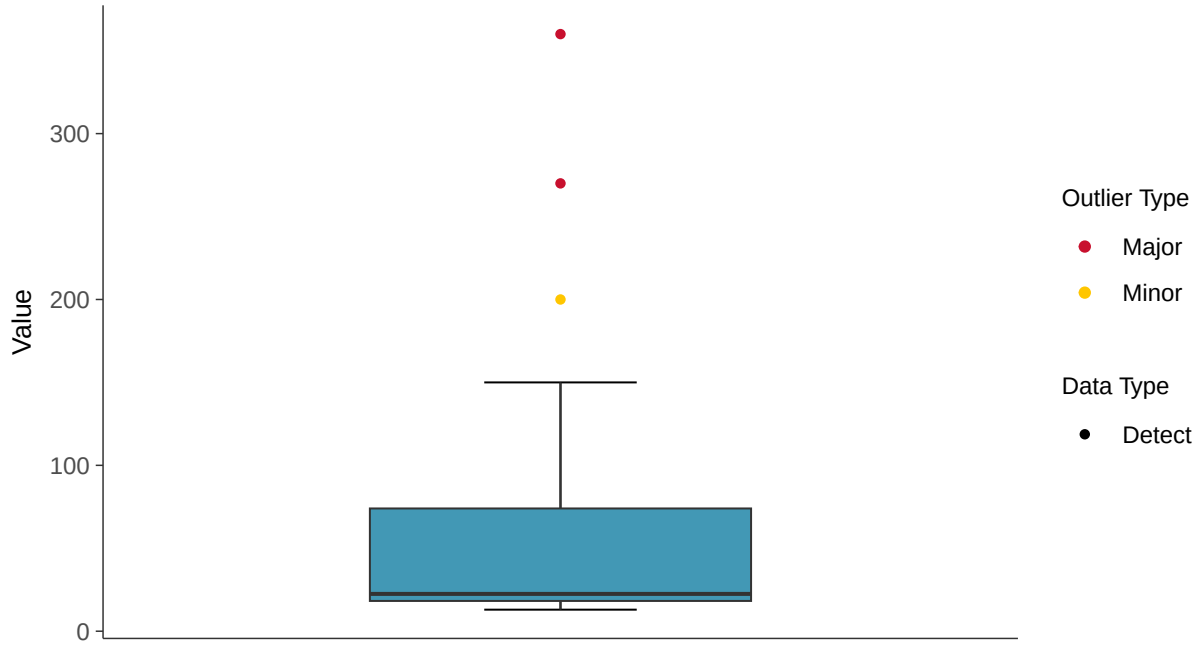
ID: 16_2_117



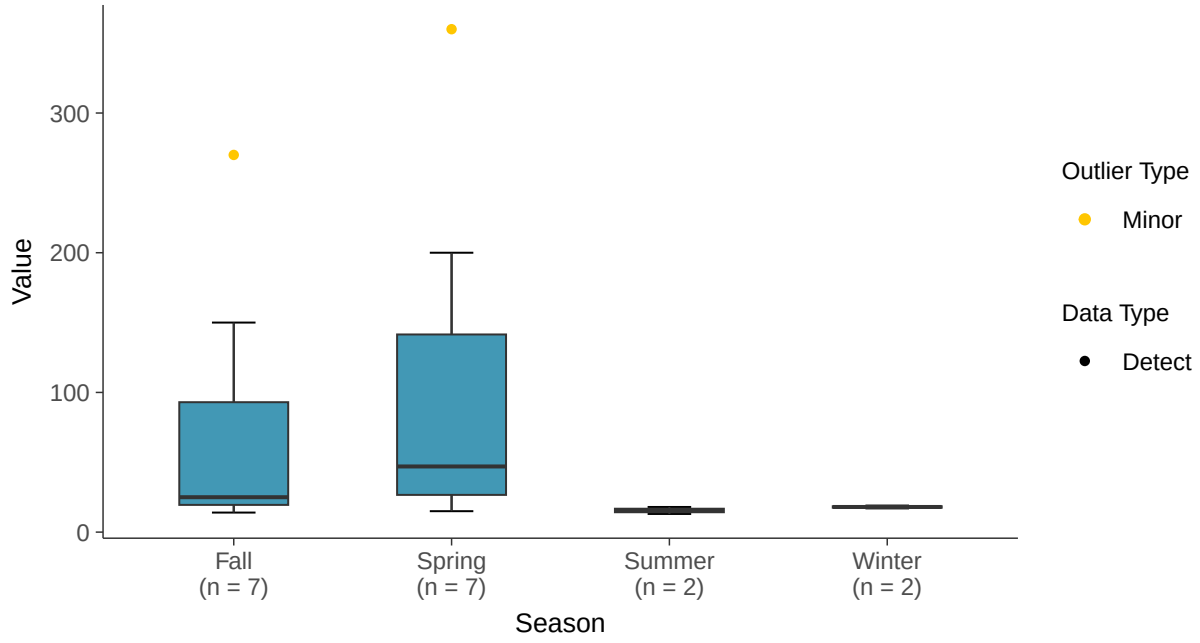
## Boxplot

Lithium, MW-17003 (ug/L)



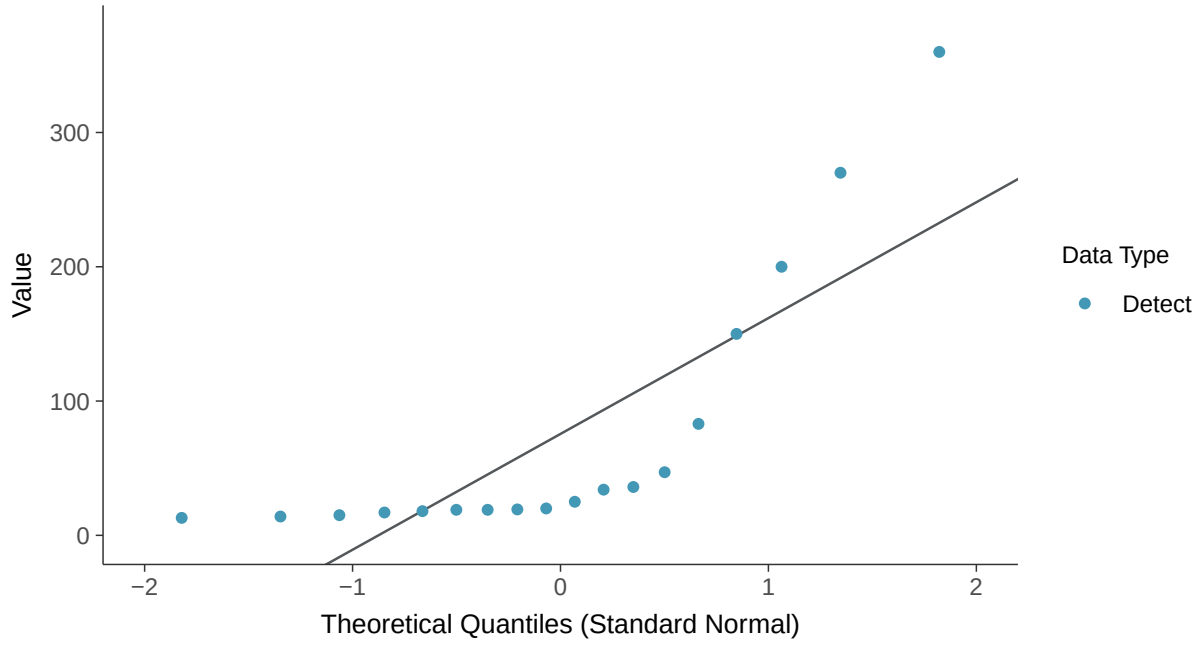

## Boxplot by Season

Lithium, MW-17003 (ug/L)



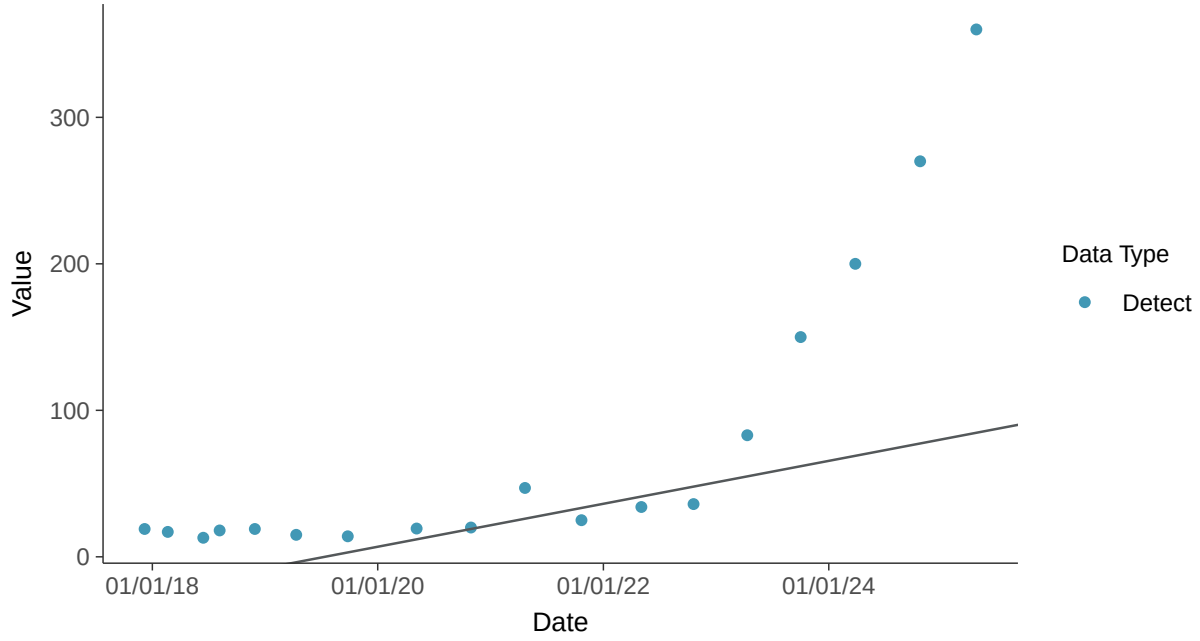
**Normal Q-Q plot**

Lithium, MW-17003 (ug/L)



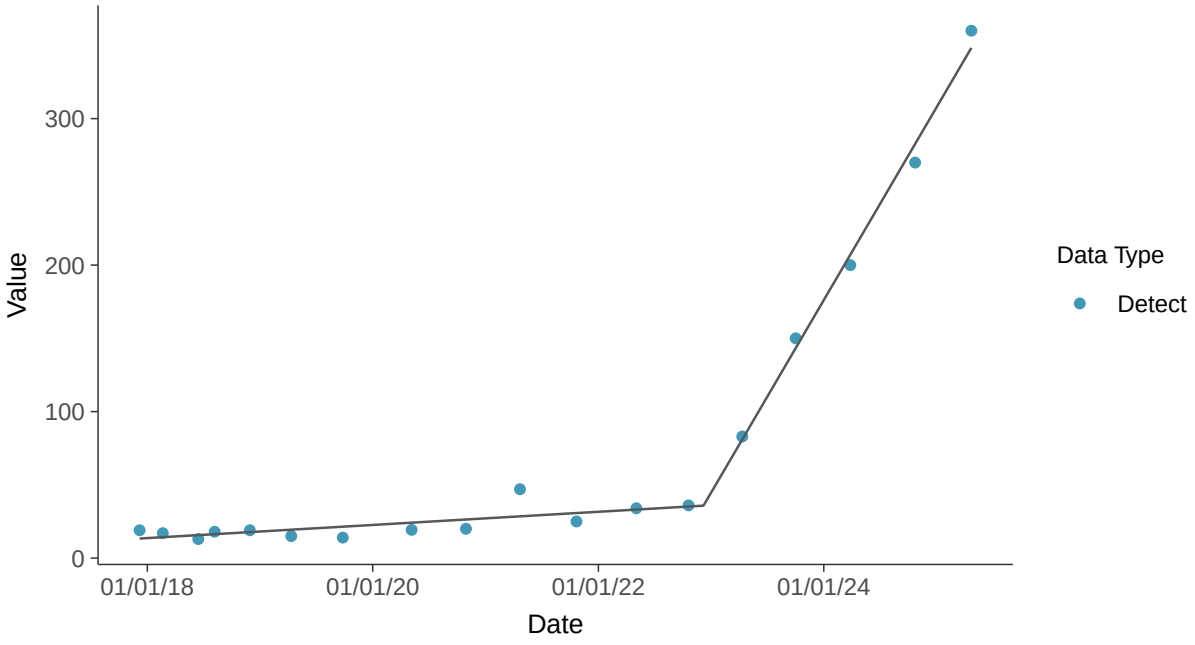

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Lithium, MW-17003 (ug/L)



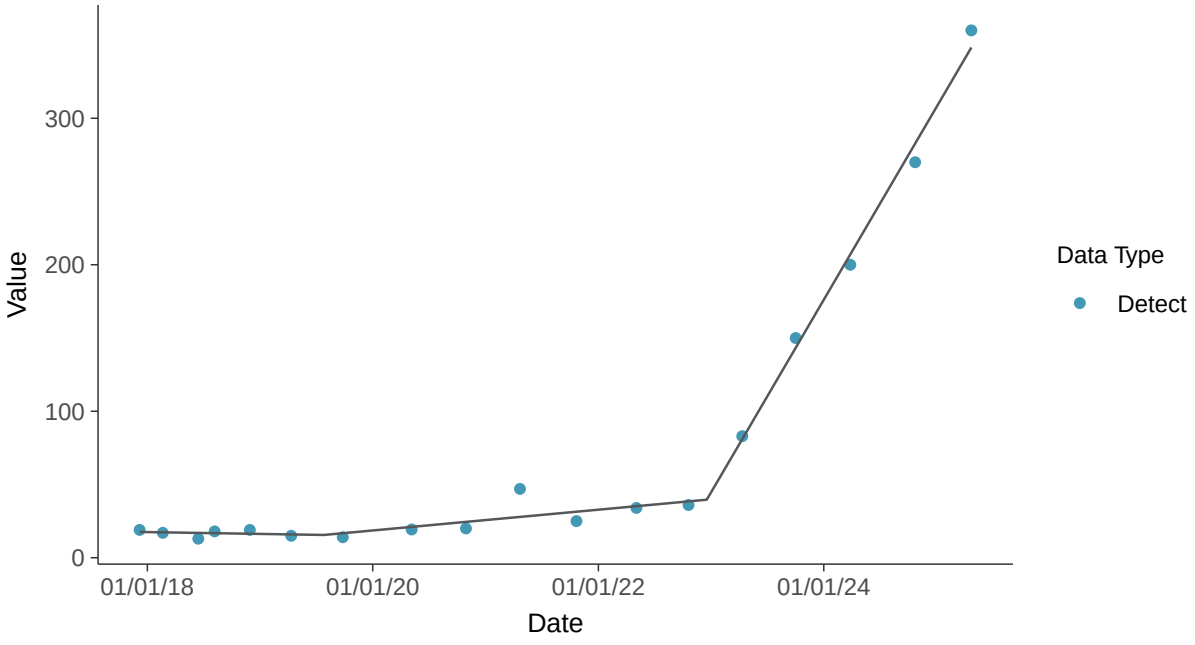
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-17003 (ug/L)



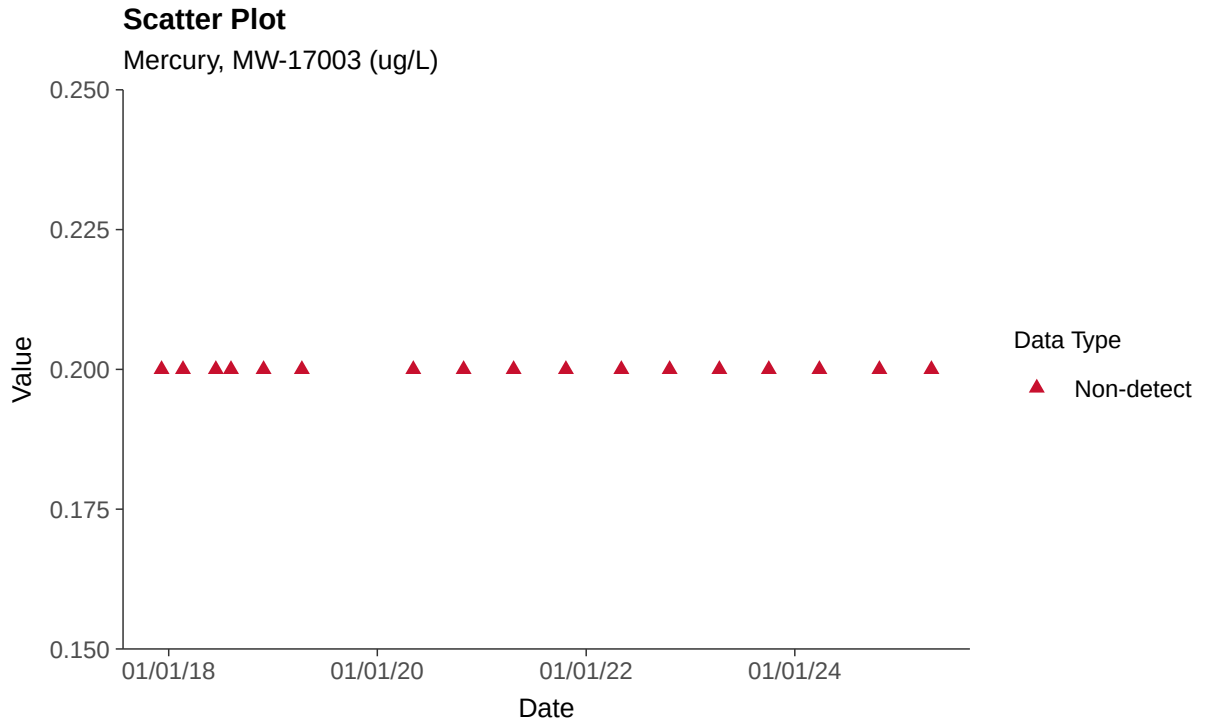

**Trend Regression: Piecewise Linear-Linear-Linear**

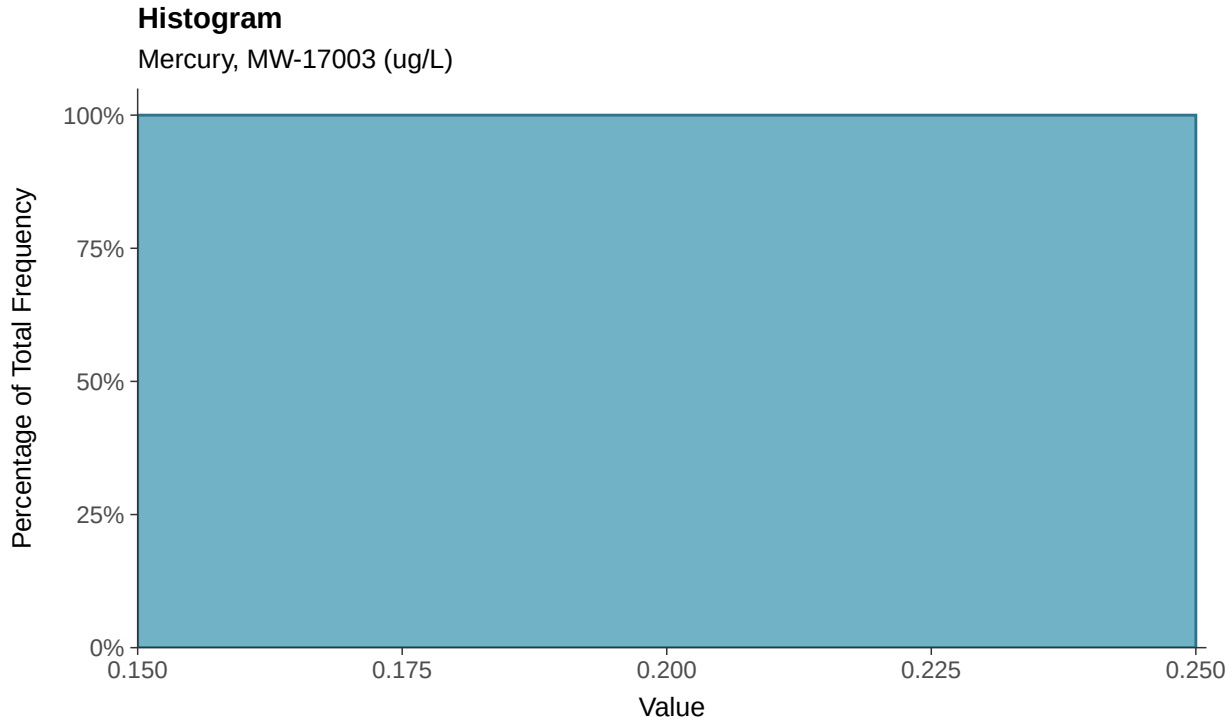
Lithium, MW-17003 (ug/L)



## Appendix IV: Mercury, MW-17003

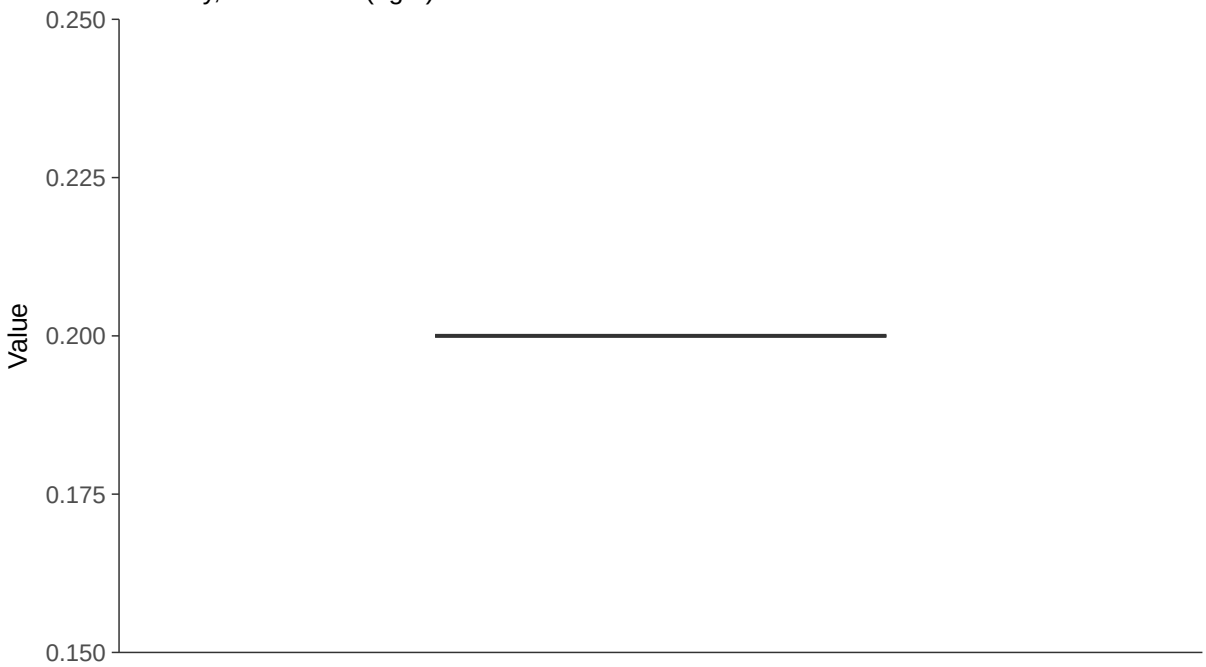
ID: 16_2_118



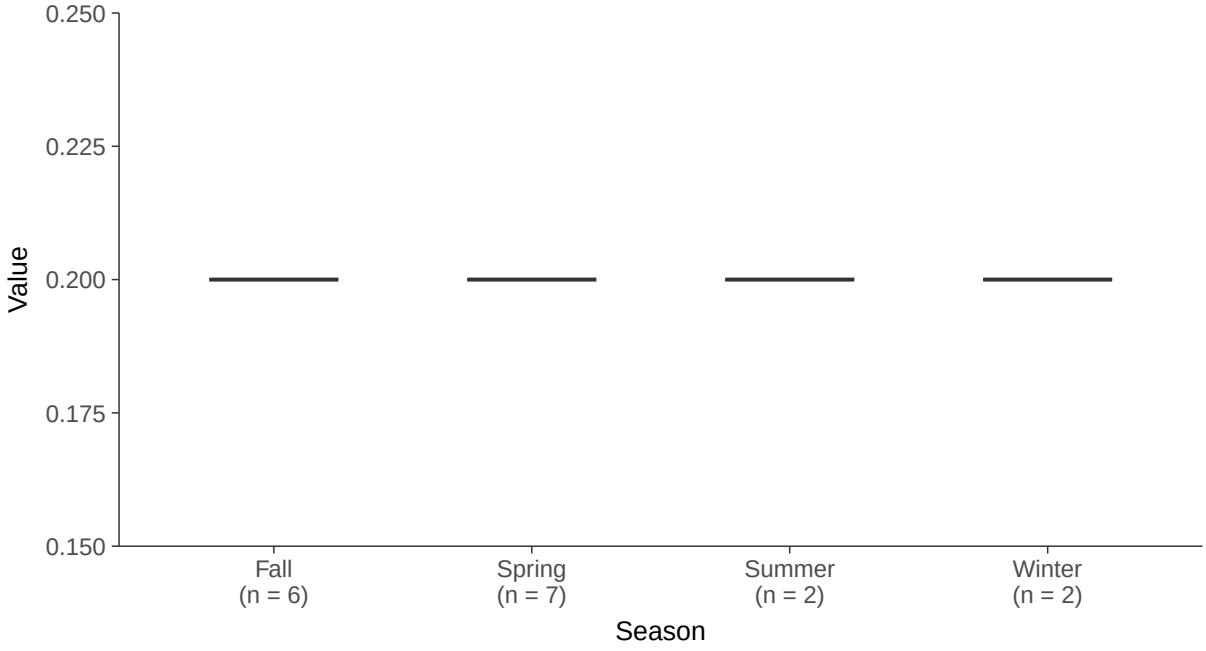
**Boxplot**

Mercury, MW-17003 (ug/L)



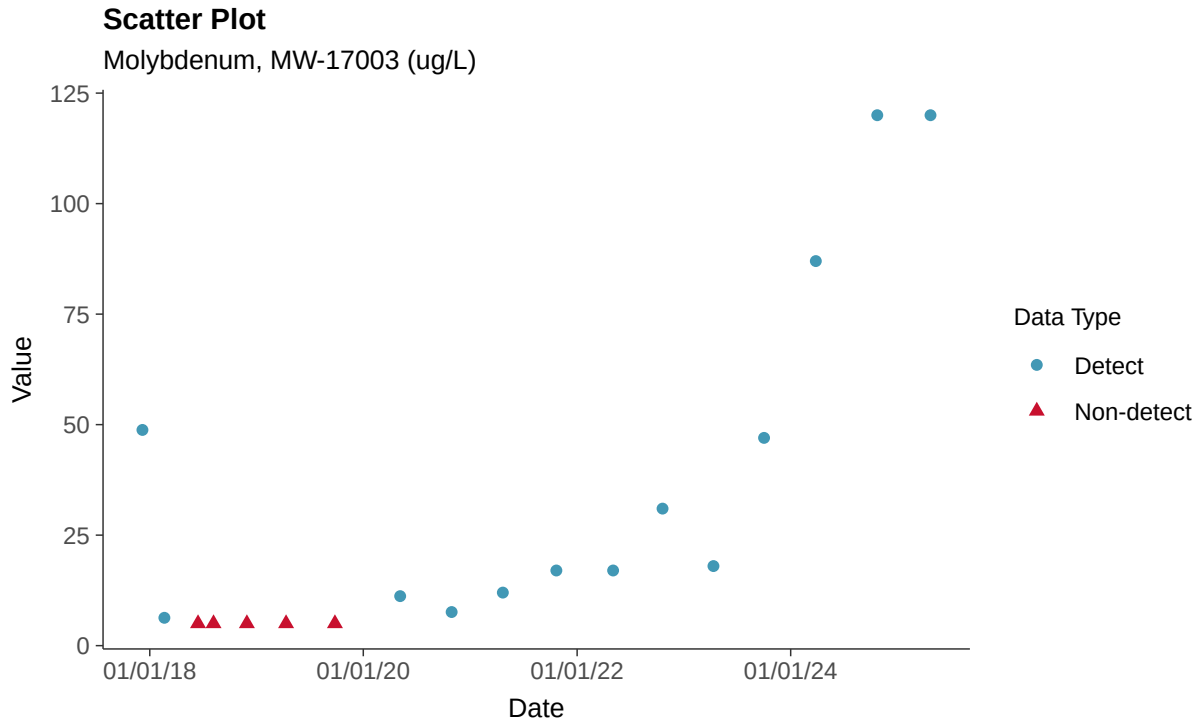

**Boxplot by Season**

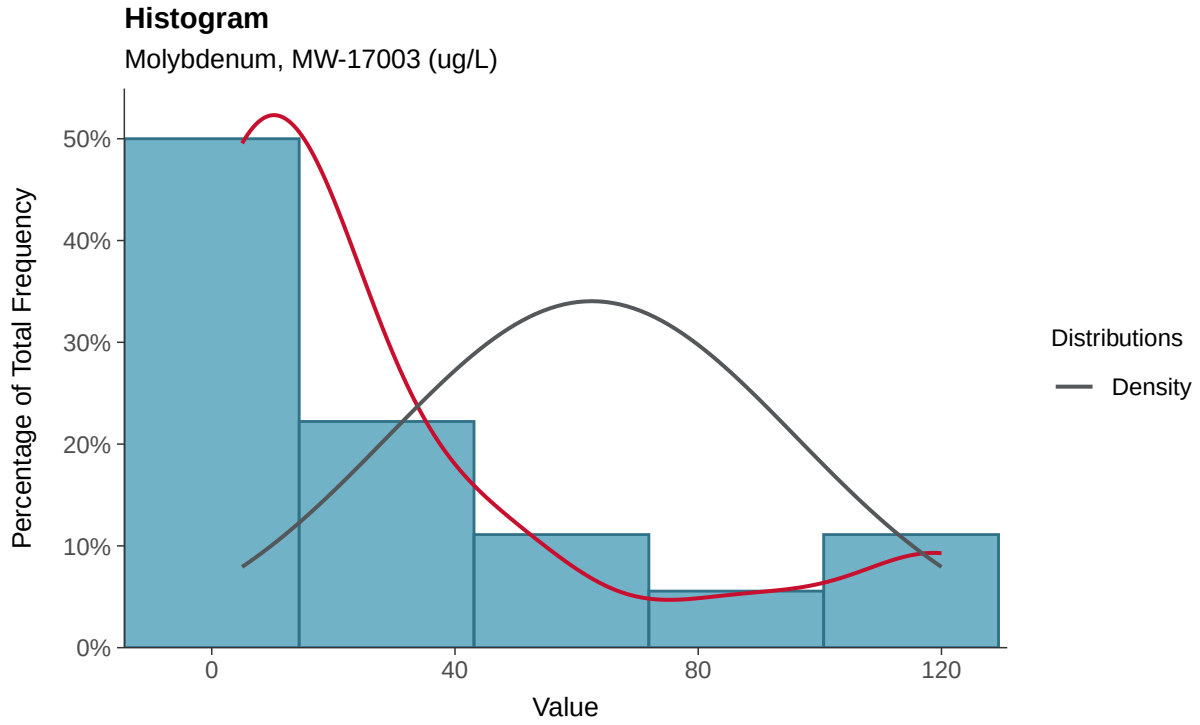
Mercury, MW-17003 (ug/L)



# Appendix IV: Molybdenum, MW-17003

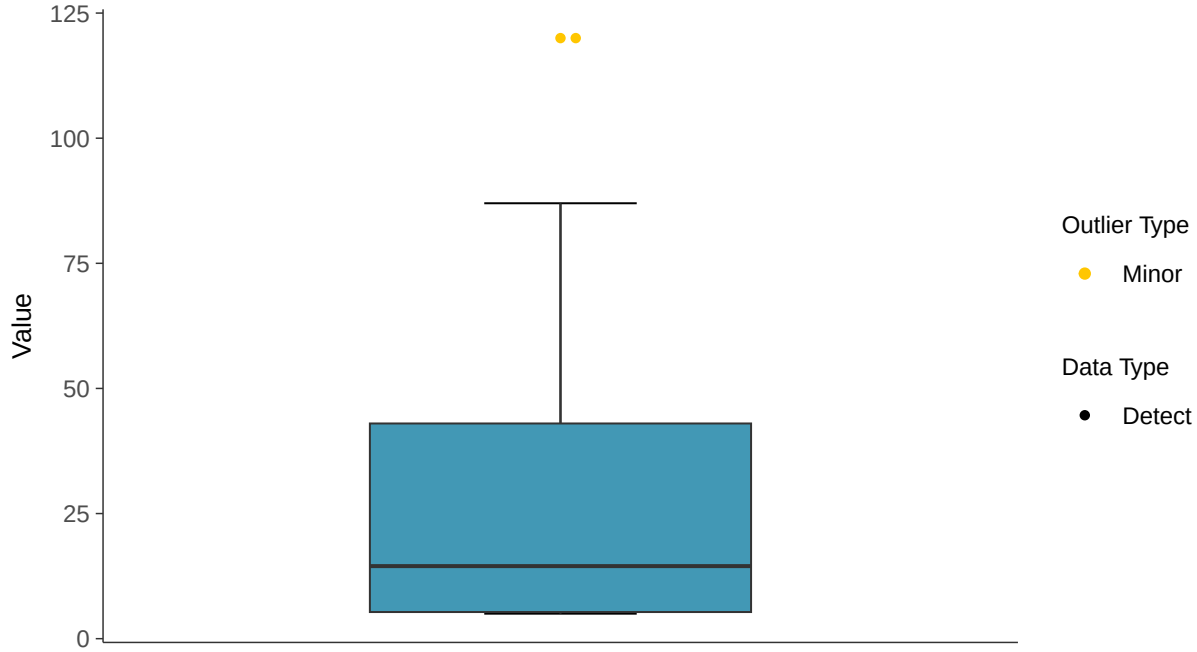
ID: 16_2_119



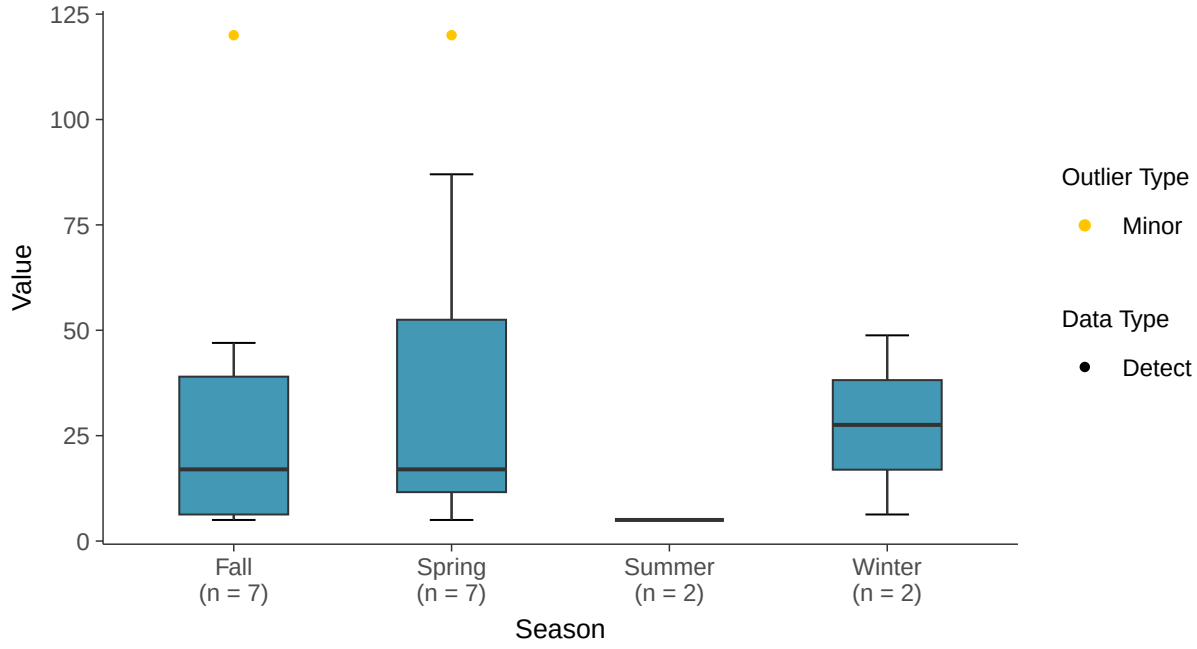
## Boxplot

Molybdenum, MW-17003 (ug/L)



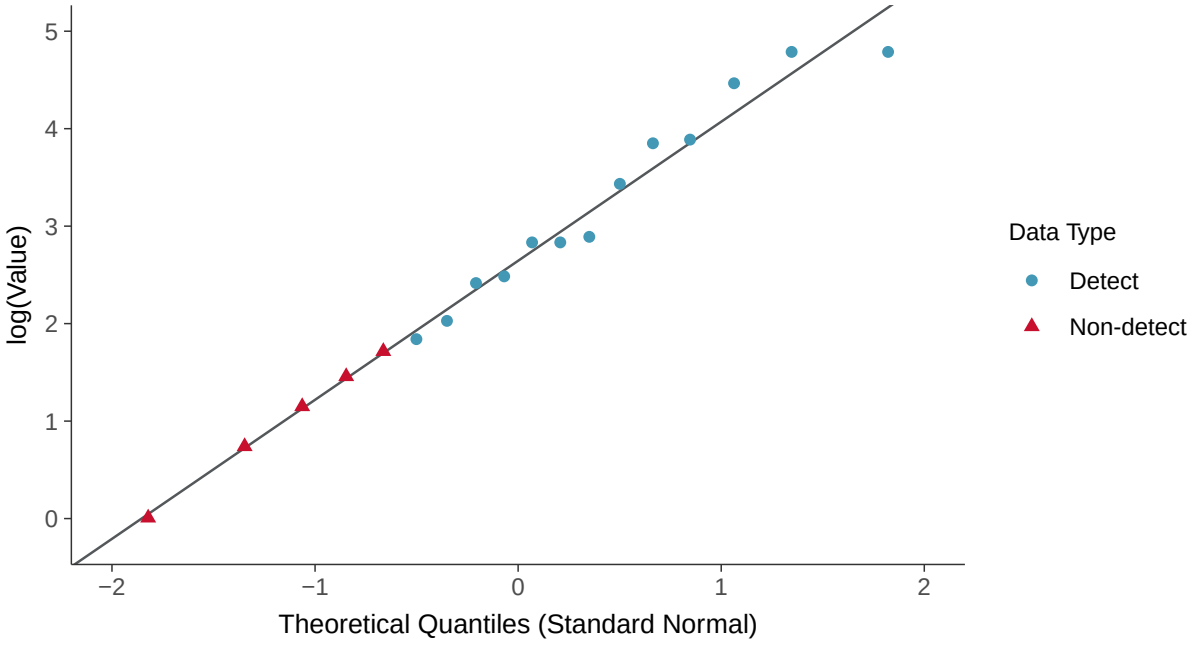

## Boxplot by Season

Molybdenum, MW-17003 (ug/L)



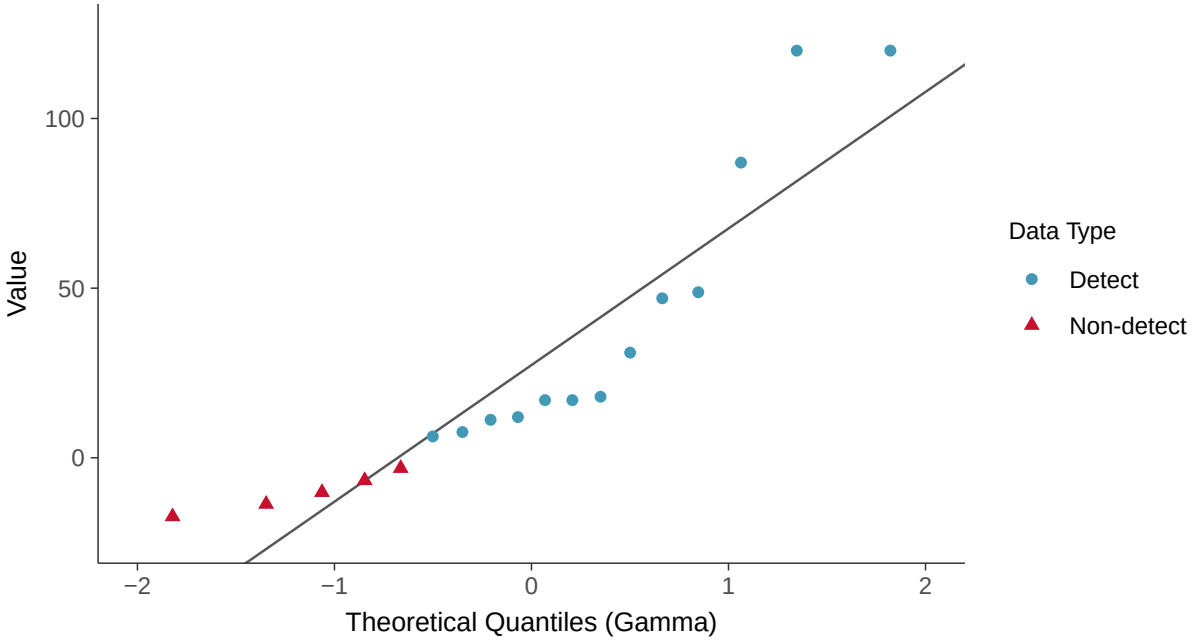
**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17003 (ug/L)



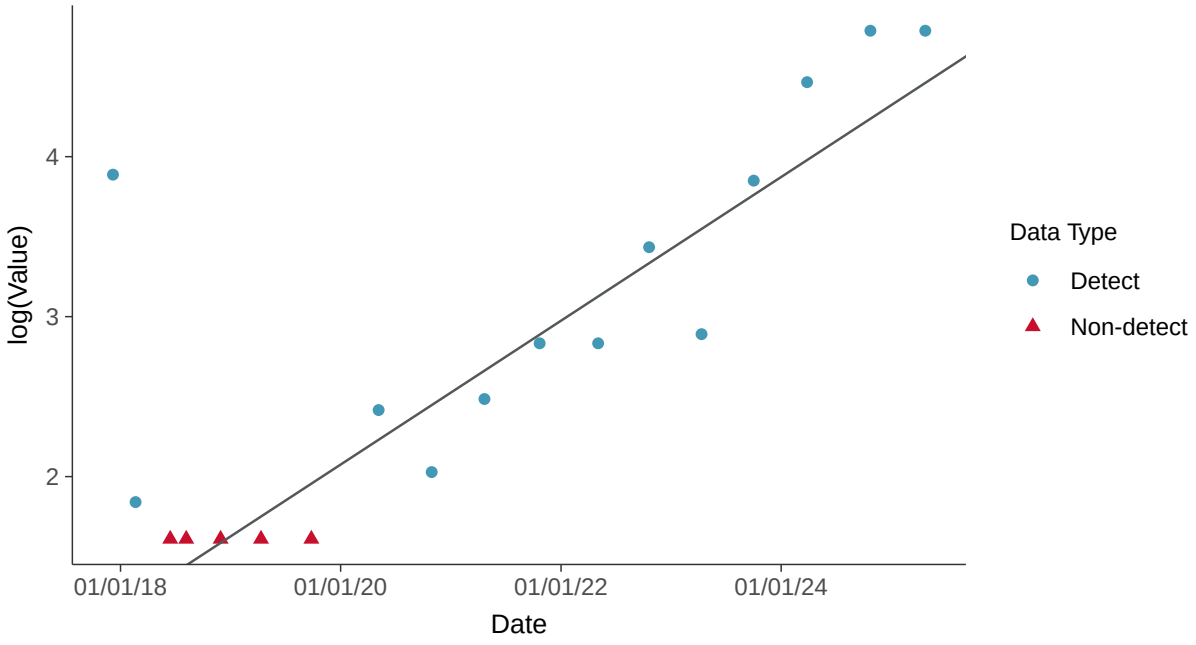

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17003 (ug/L)



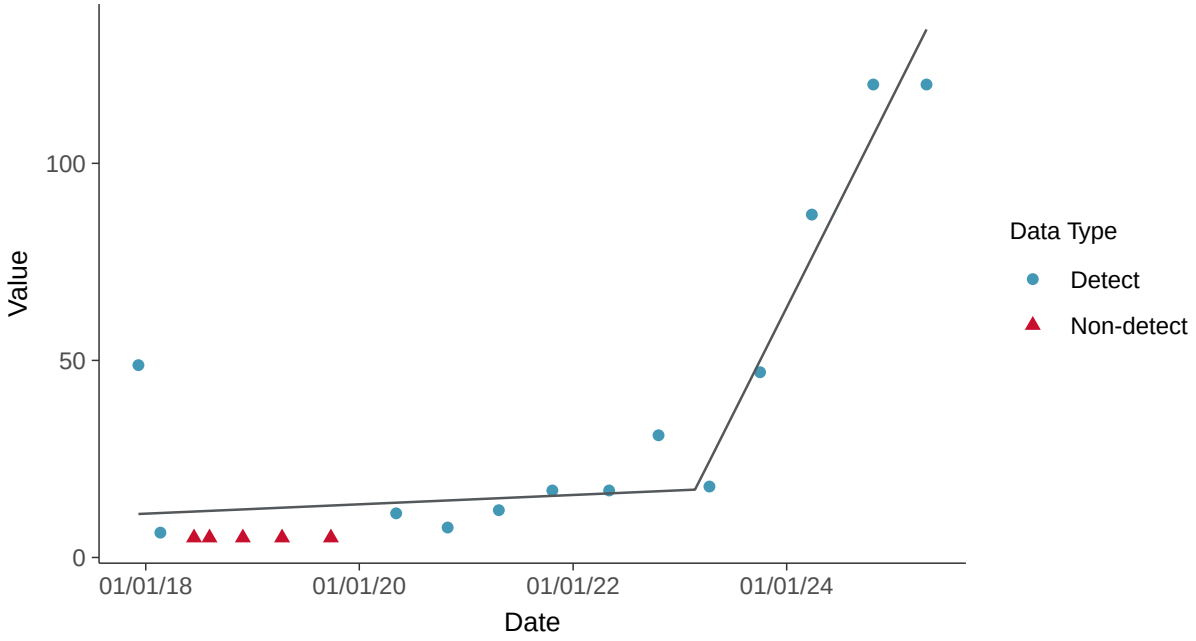
**Trend Regression: Lognormal MLE**

Molybdenum, MW-17003 (ug/L)



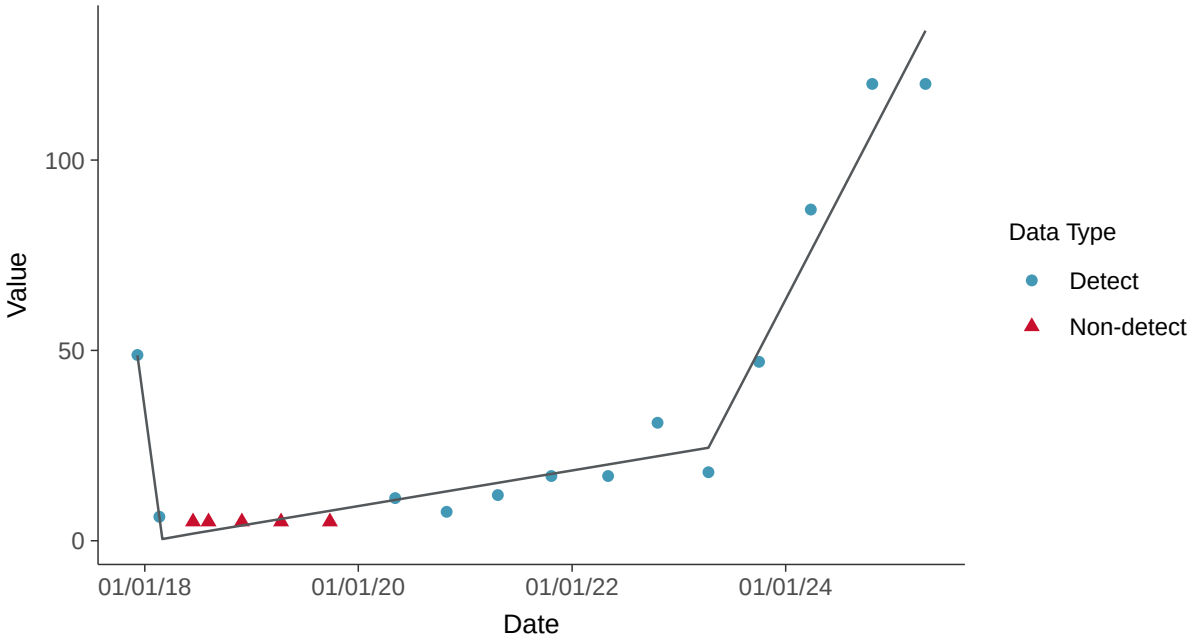

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17003 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-17003 (ug/L)

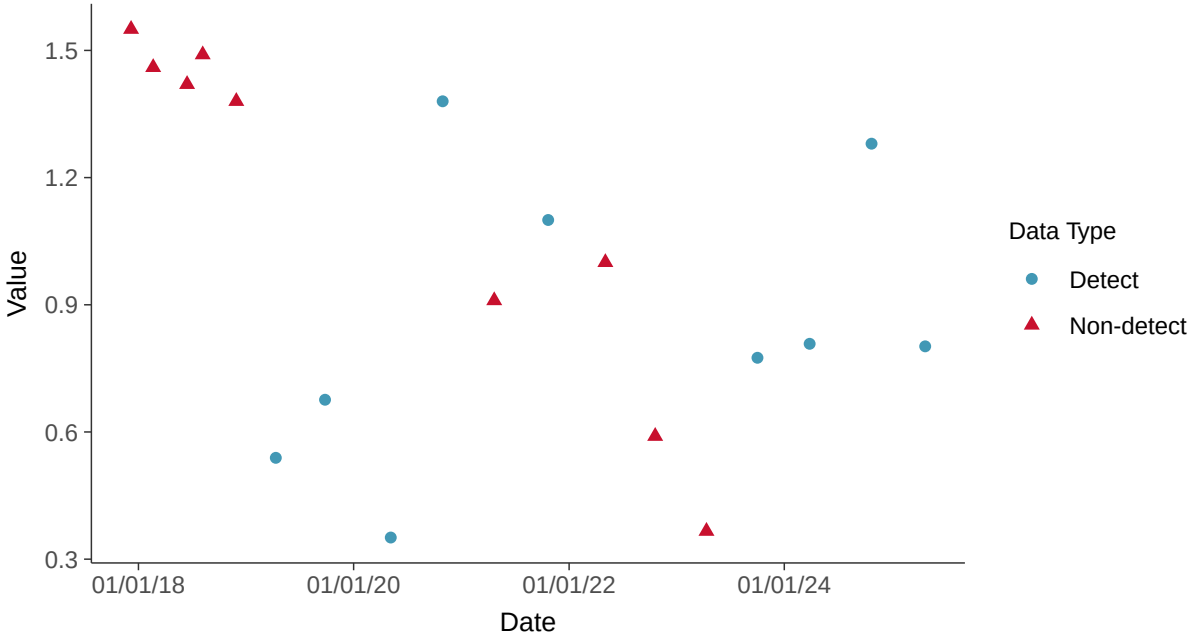


## Appendix IV: Radium-226+228, MW-17003

ID: 16_2_125

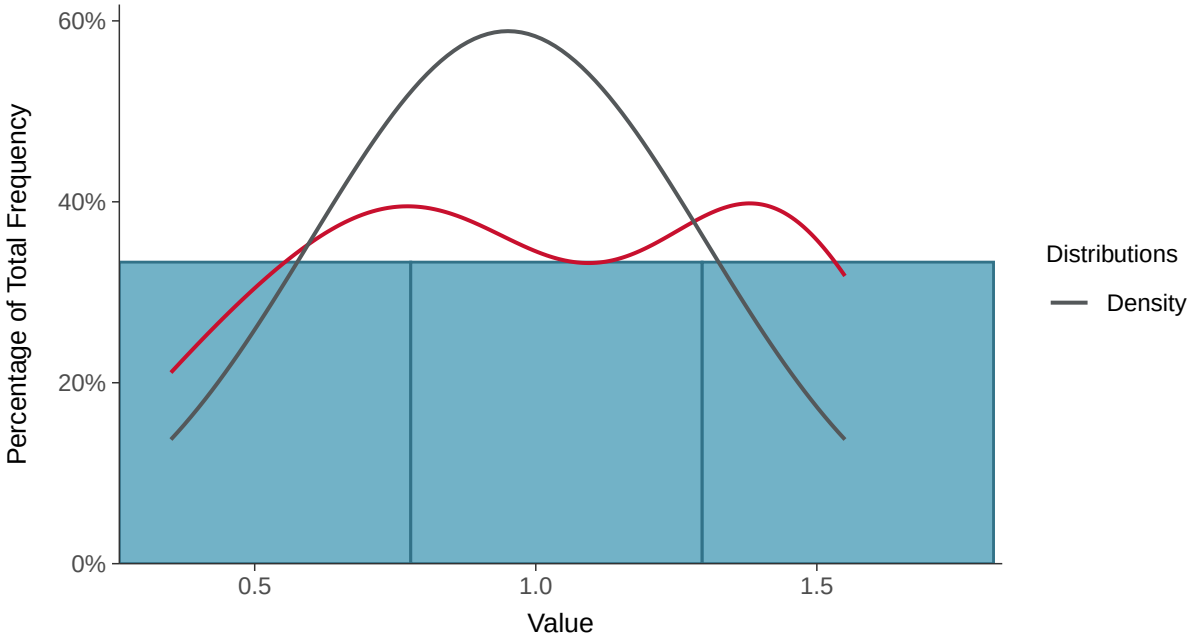
**Scatter Plot**

Radium-226+228, MW-17003 (pCi/L)



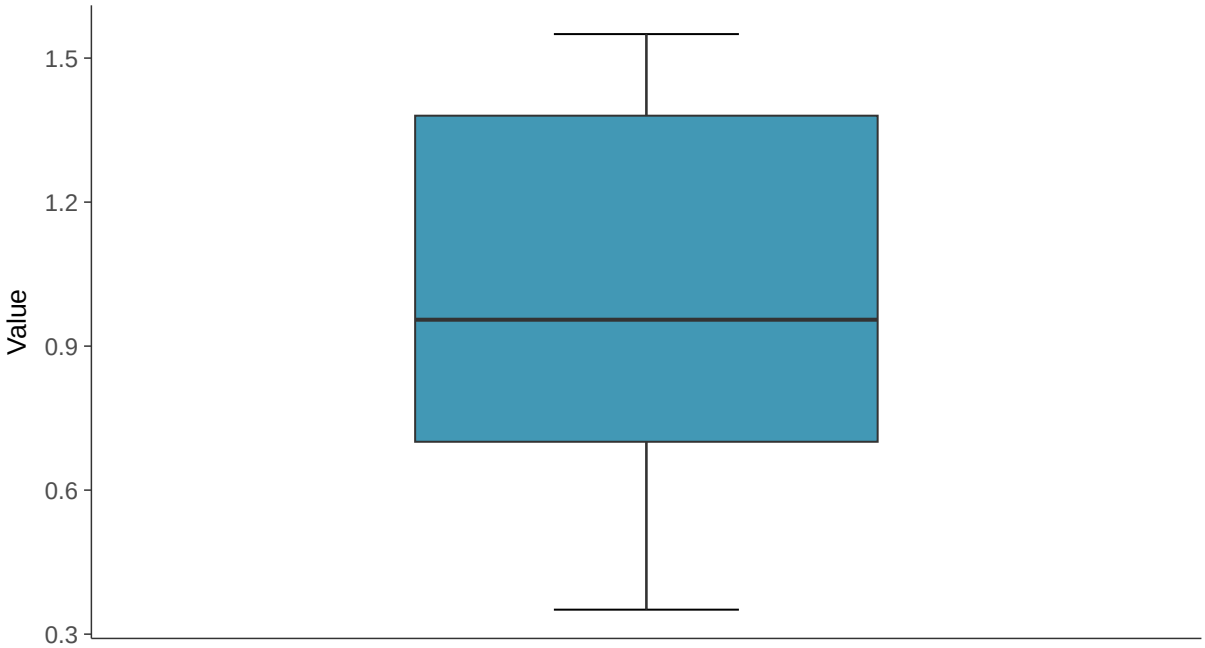

**Histogram**

Radium-226+228, MW-17003 (pCi/L)



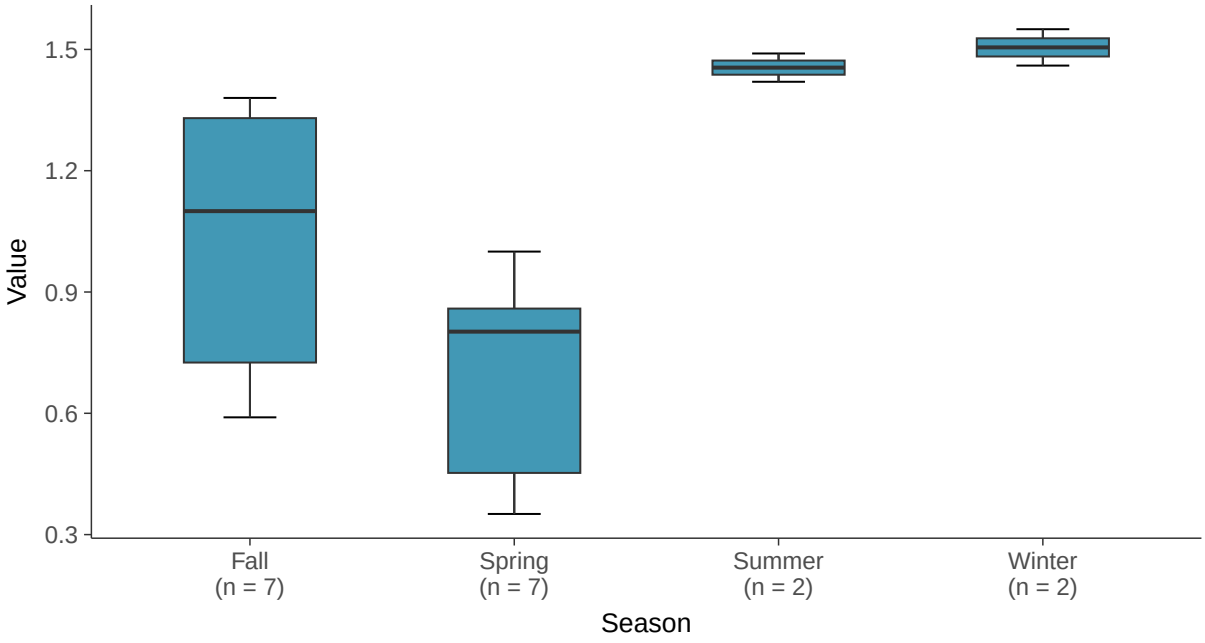
**Boxplot**

Radium-226+228, MW-17003 (pCi/L)



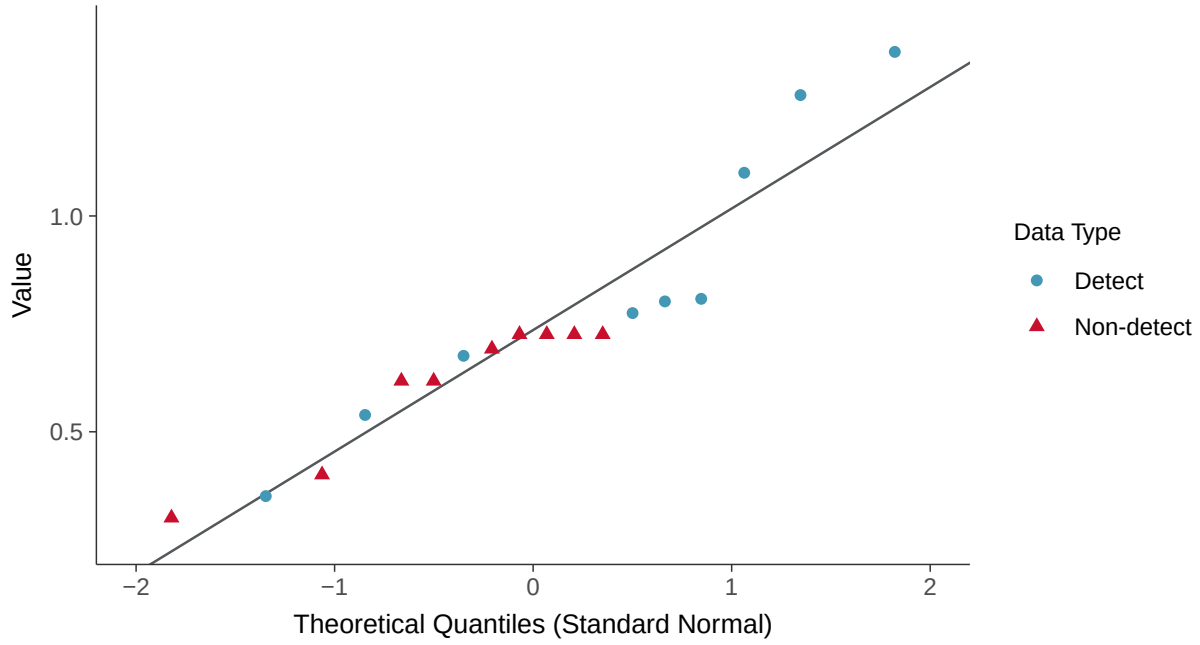

**Boxplot by Season**

Radium-226+228, MW-17003 (pCi/L)



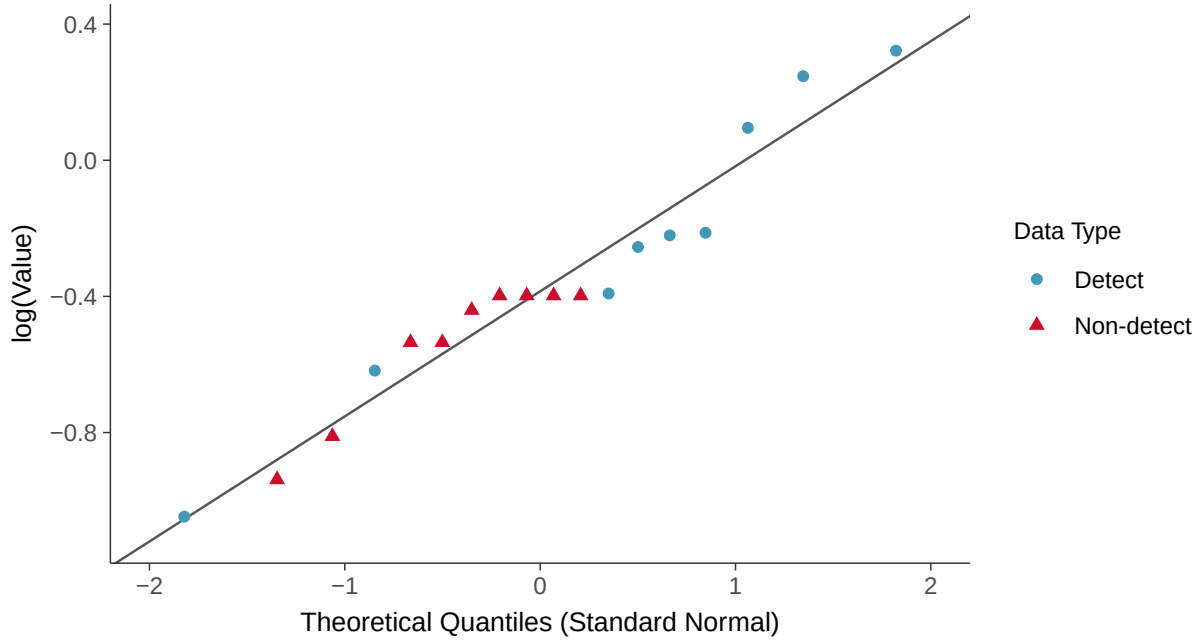
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17003 (pCi/L)



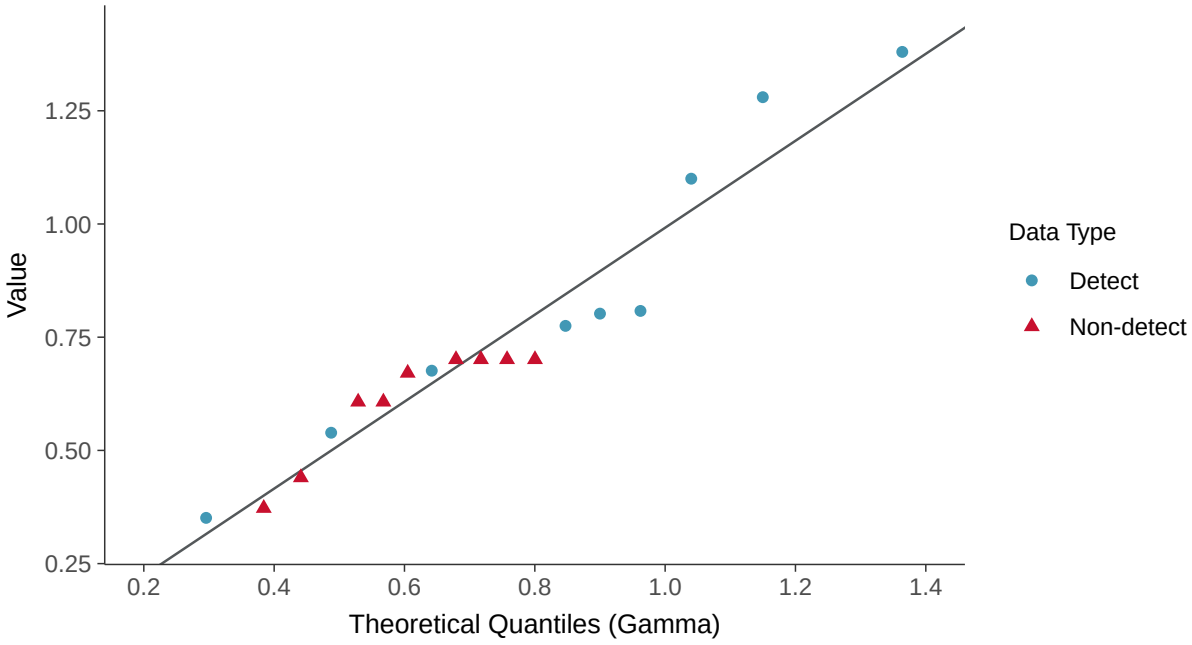

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17003 (pCi/L)



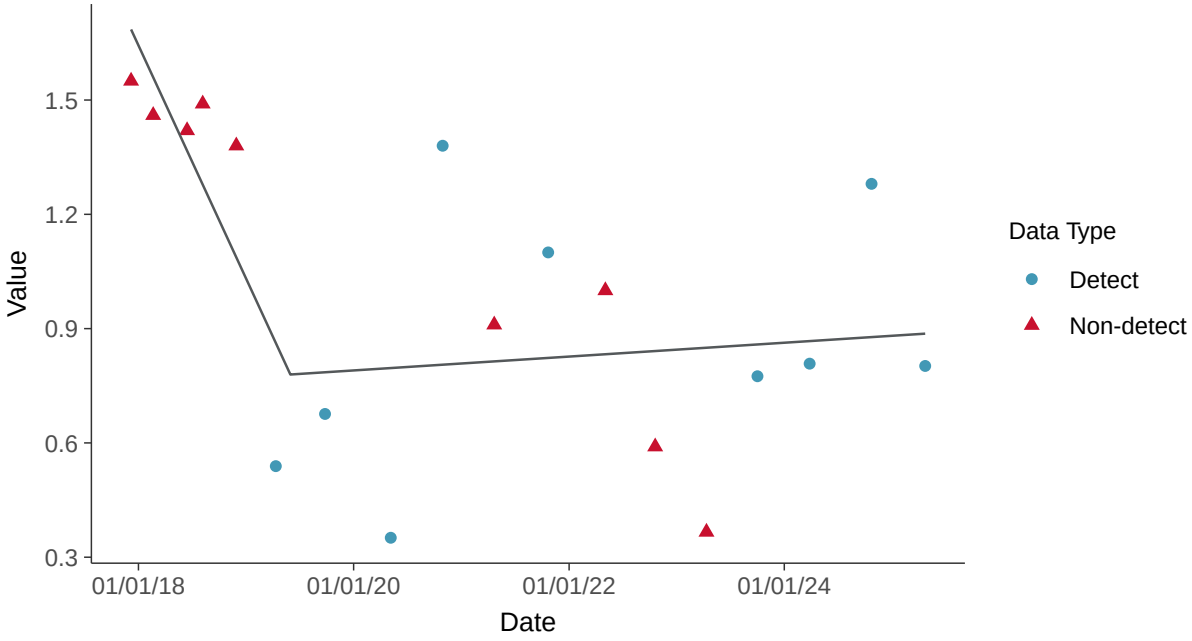
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17003 (pCi/L)



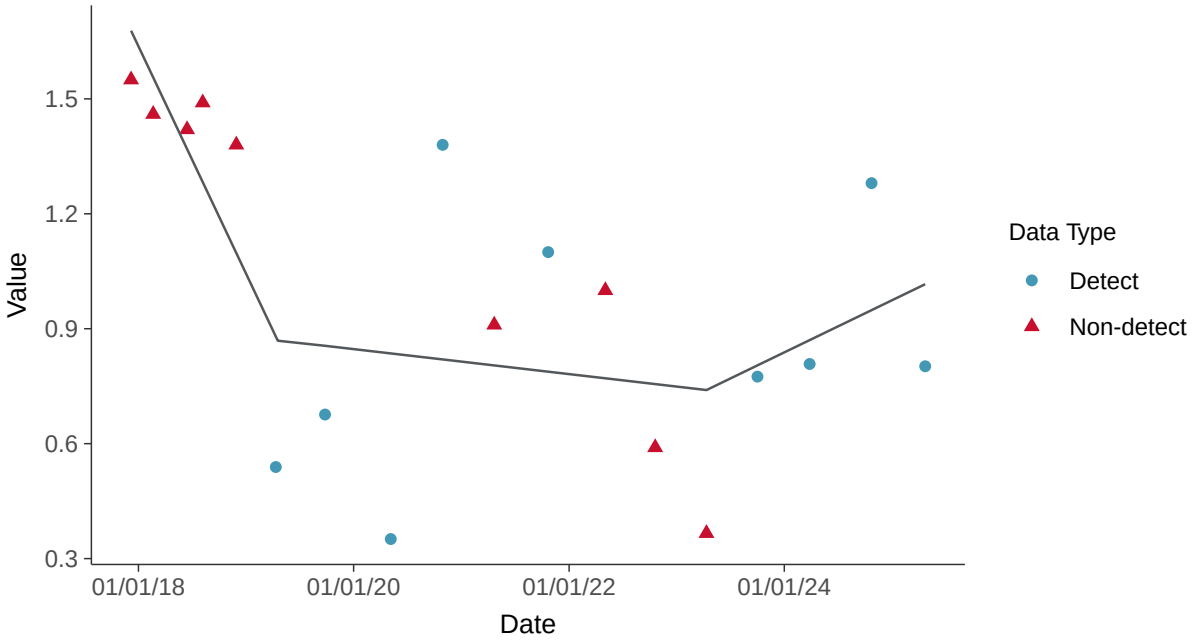

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17003 (pCi/L)



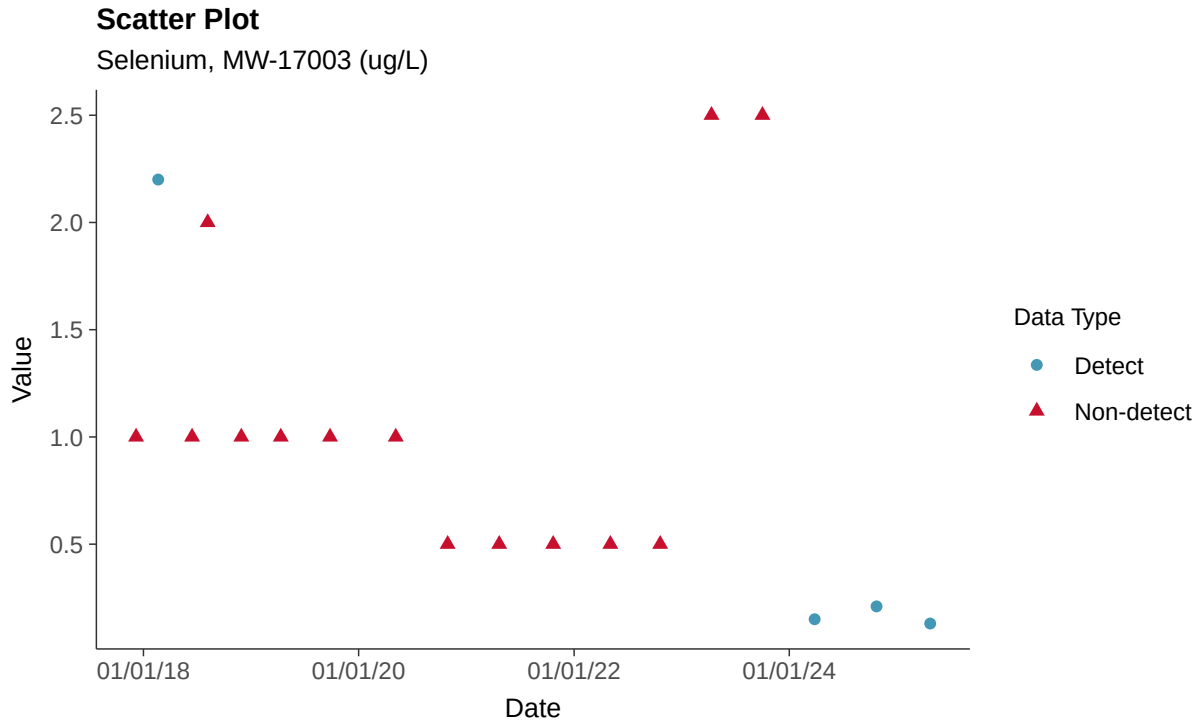
**Trend Regression: Piecewise Linear-Linear-Linear**

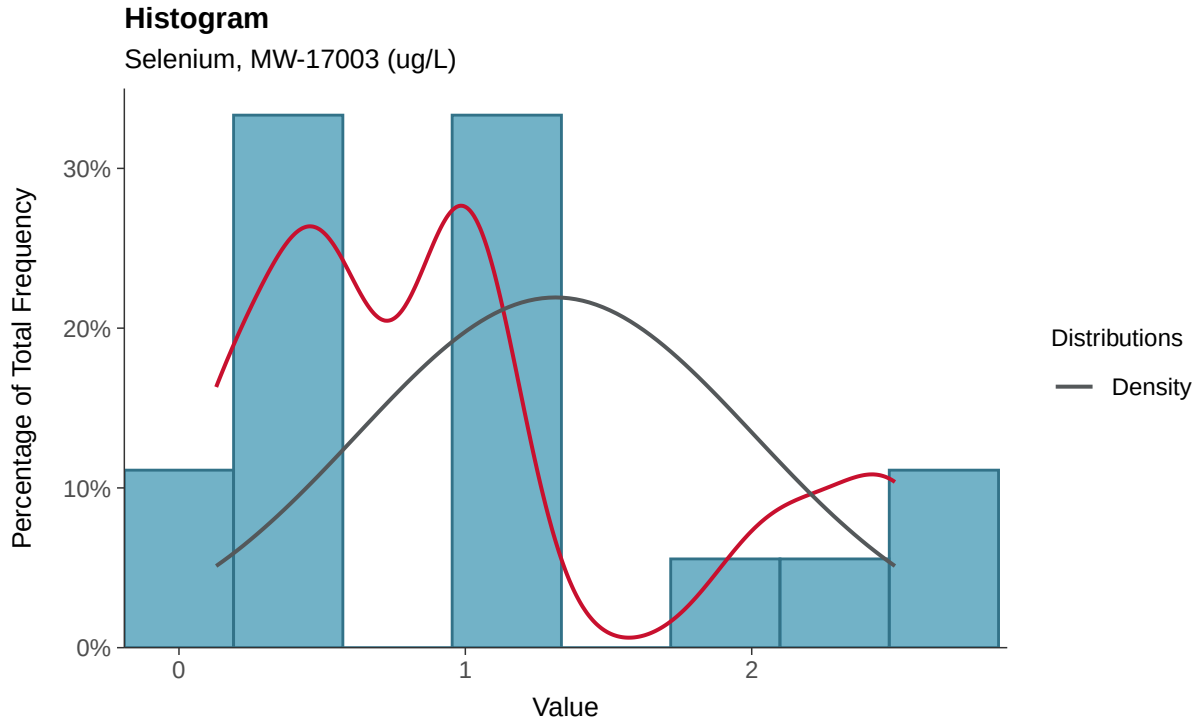
Radium-226+228, MW-17003 (pCi/L)



## Appendix IV: Selenium, MW-17003

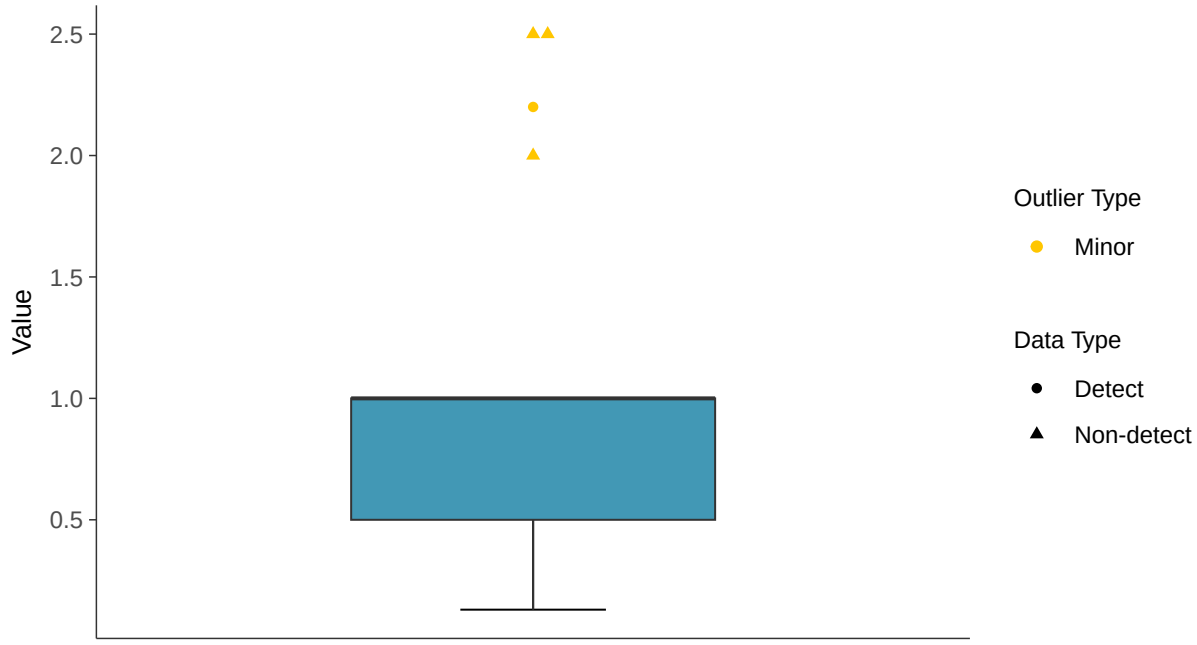
ID: 16_2_127



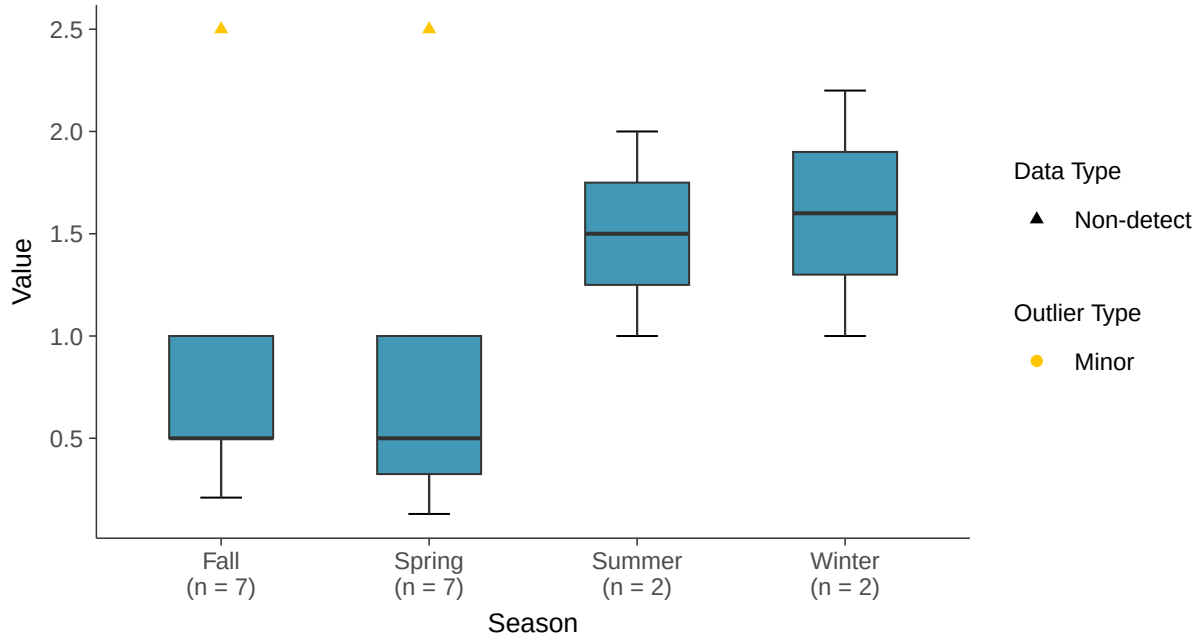
## Boxplot

Selenium, MW-17003 (ug/L)



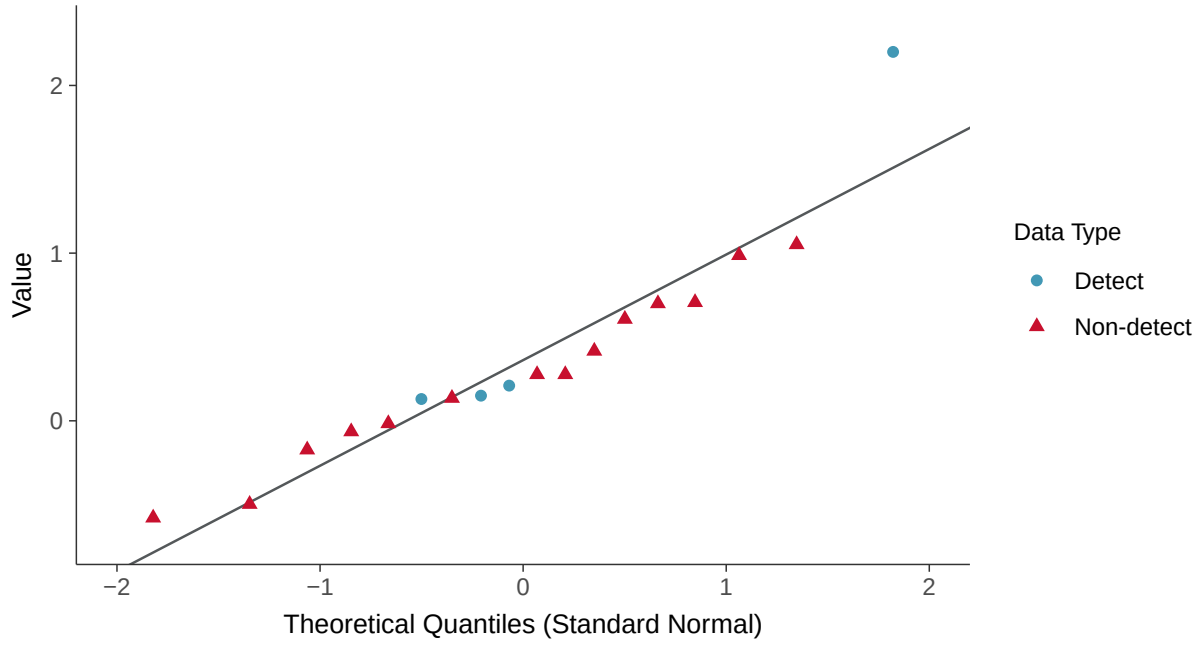

## Boxplot by Season

Selenium, MW-17003 (ug/L)



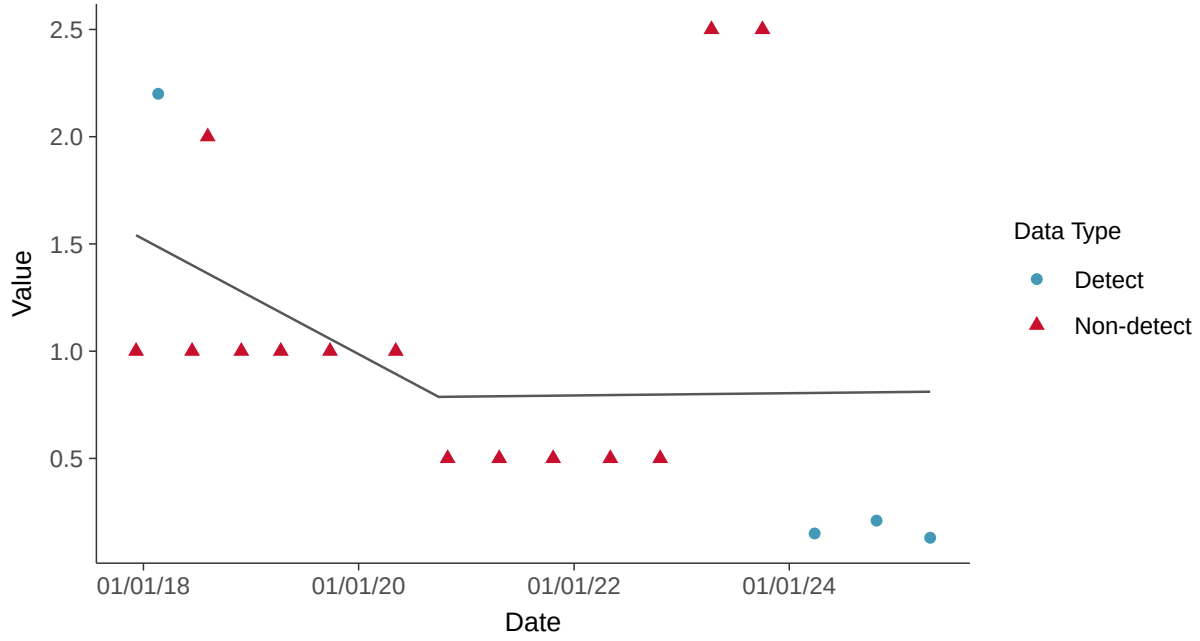
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-17003 (ug/L)



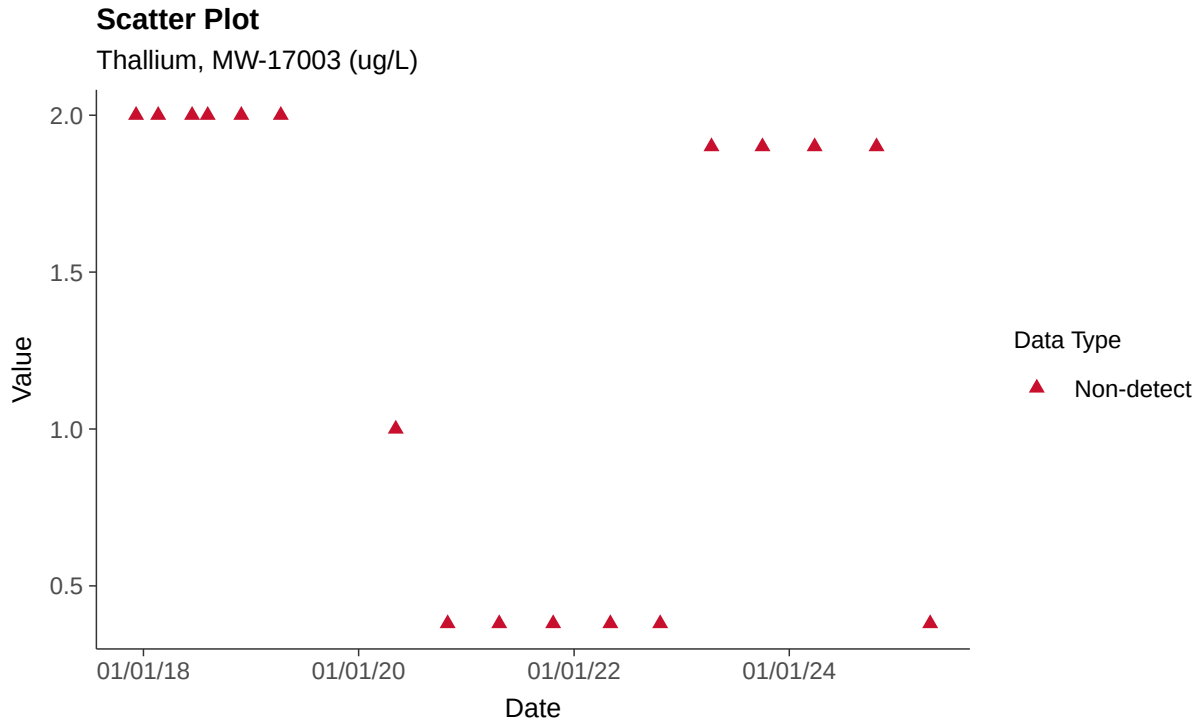

**Trend Regression: Piecewise Linear-Linear**

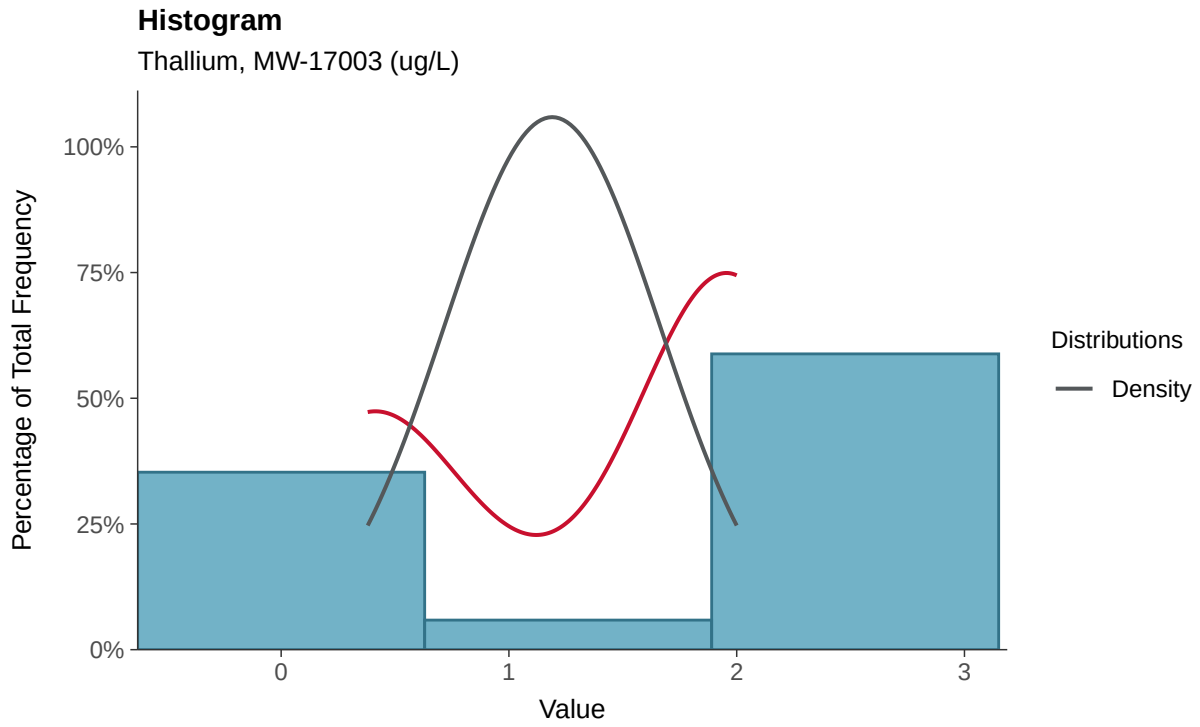
Selenium, MW-17003 (ug/L)



## Appendix IV: Thallium, MW-17003

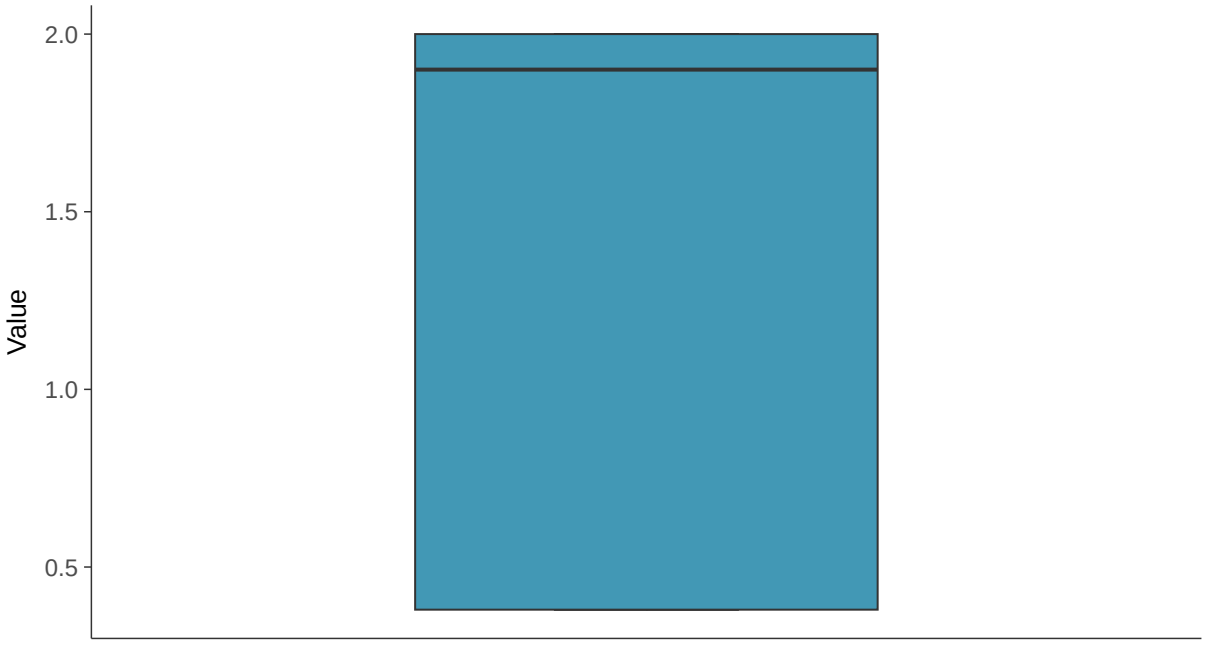
ID: 16_2_131



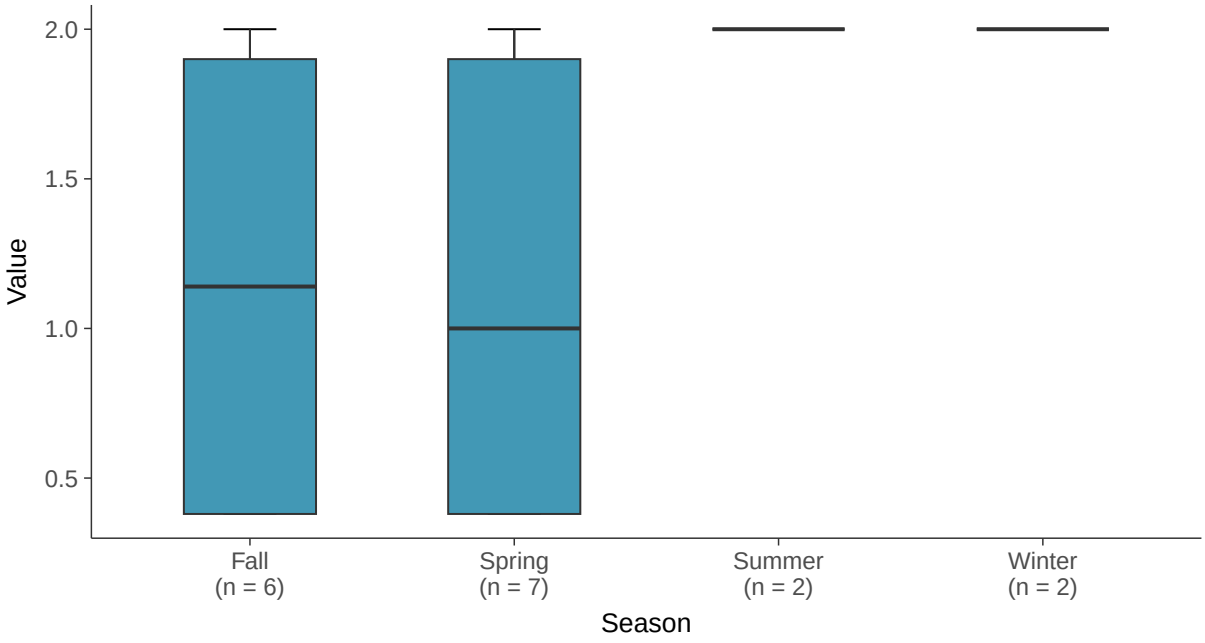
**Boxplot**

Thallium, MW-17003 (ug/L)



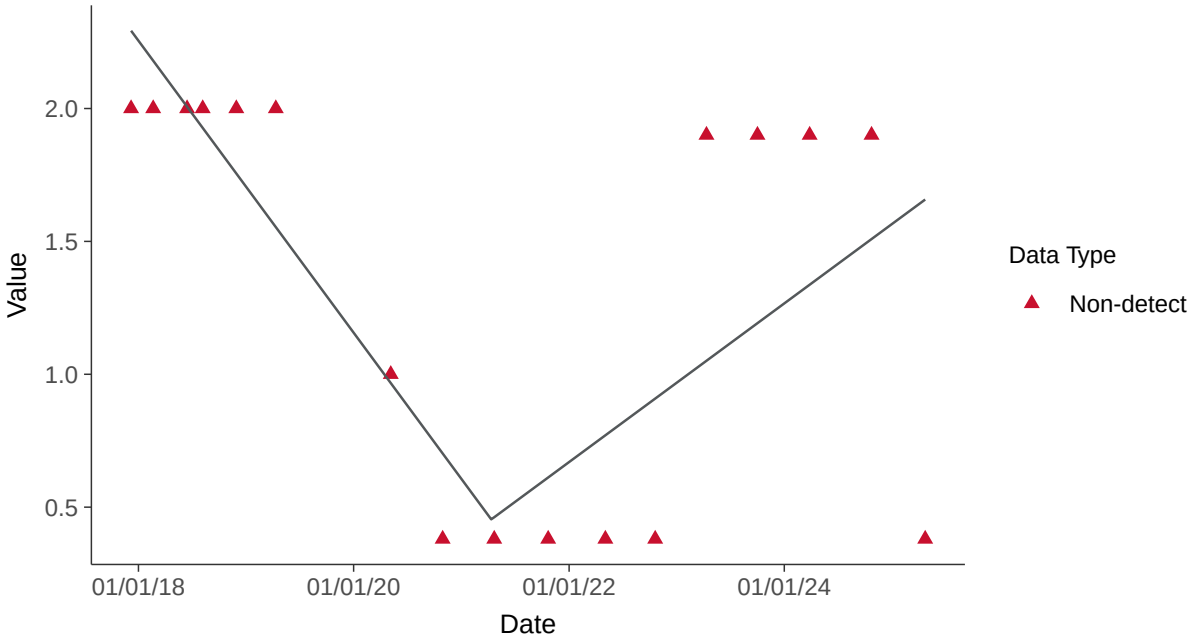

**Boxplot by Season**

Thallium, MW-17003 (ug/L)



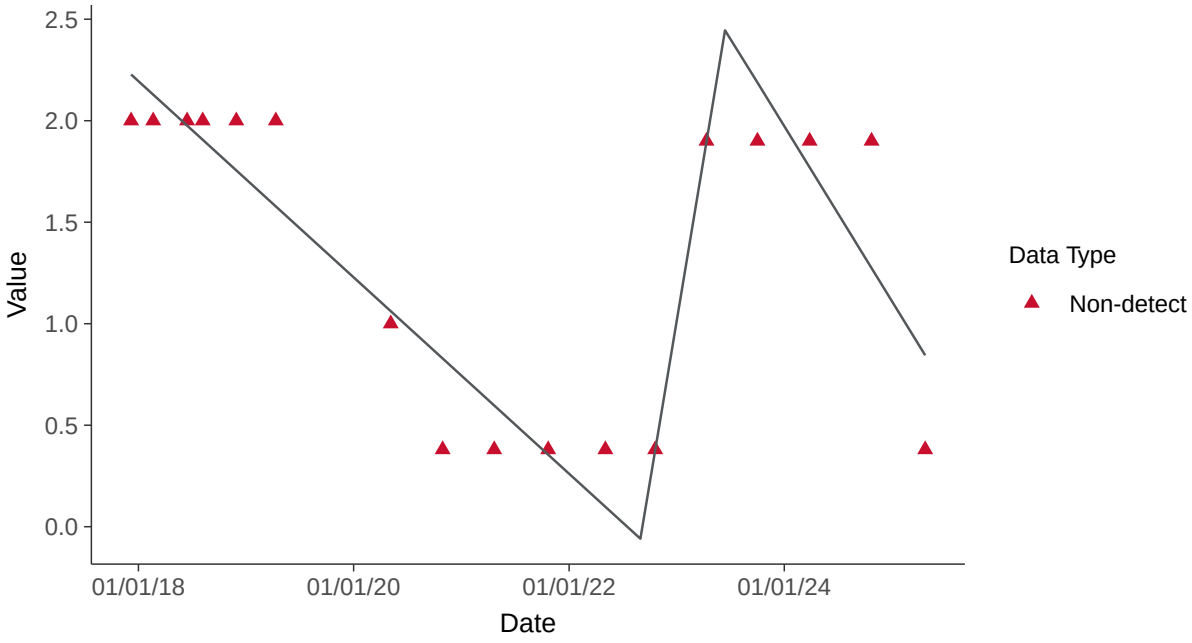
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17003 (ug/L)



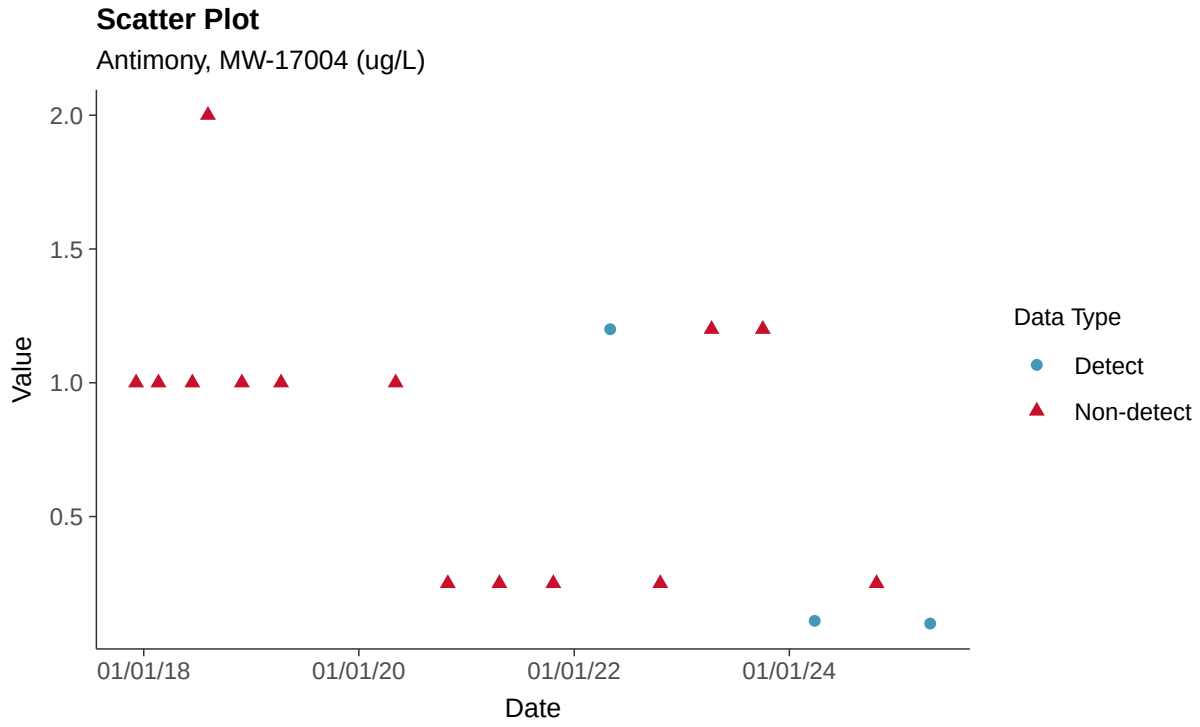

**Trend Regression: Piecewise Linear-Linear-Linear**

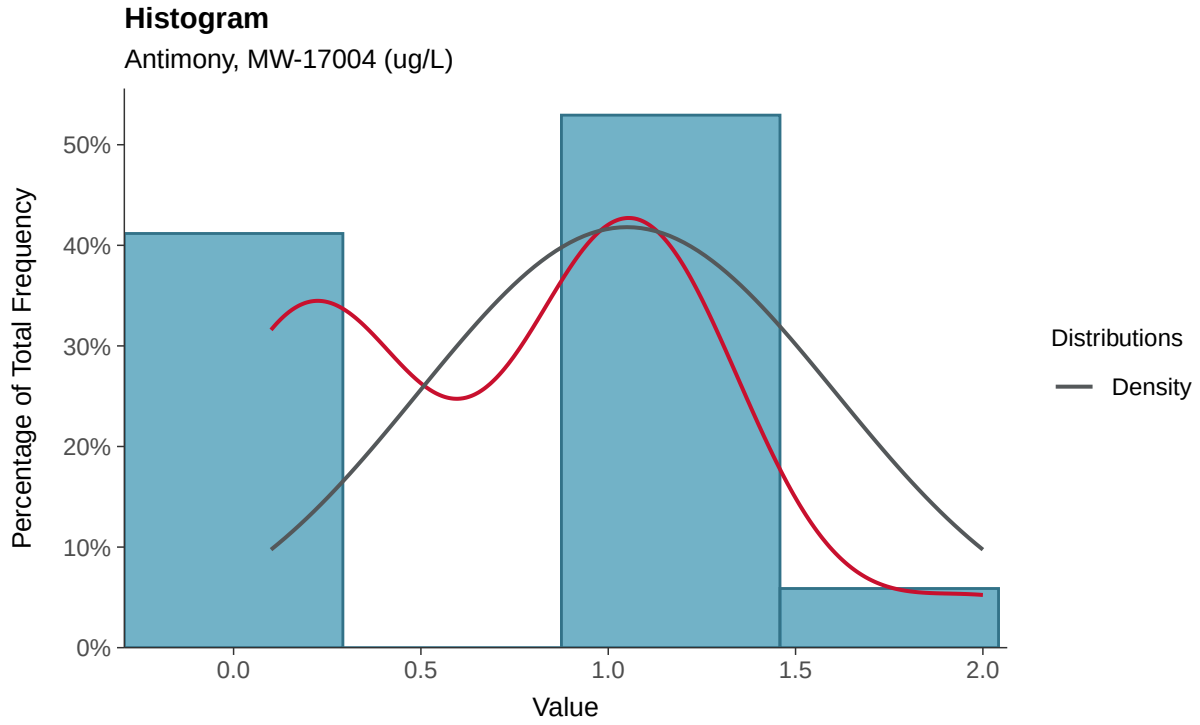
Thallium, MW-17003 (ug/L)



## Appendix IV: Antimony, MW-17004

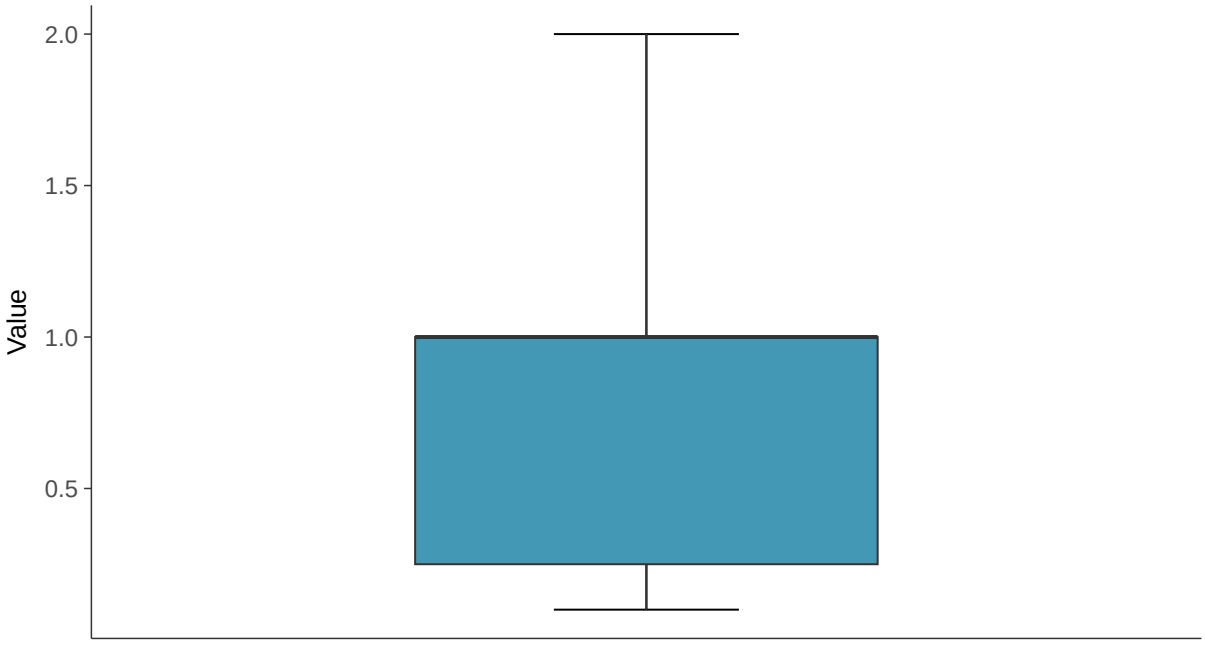
ID: 17_2_101



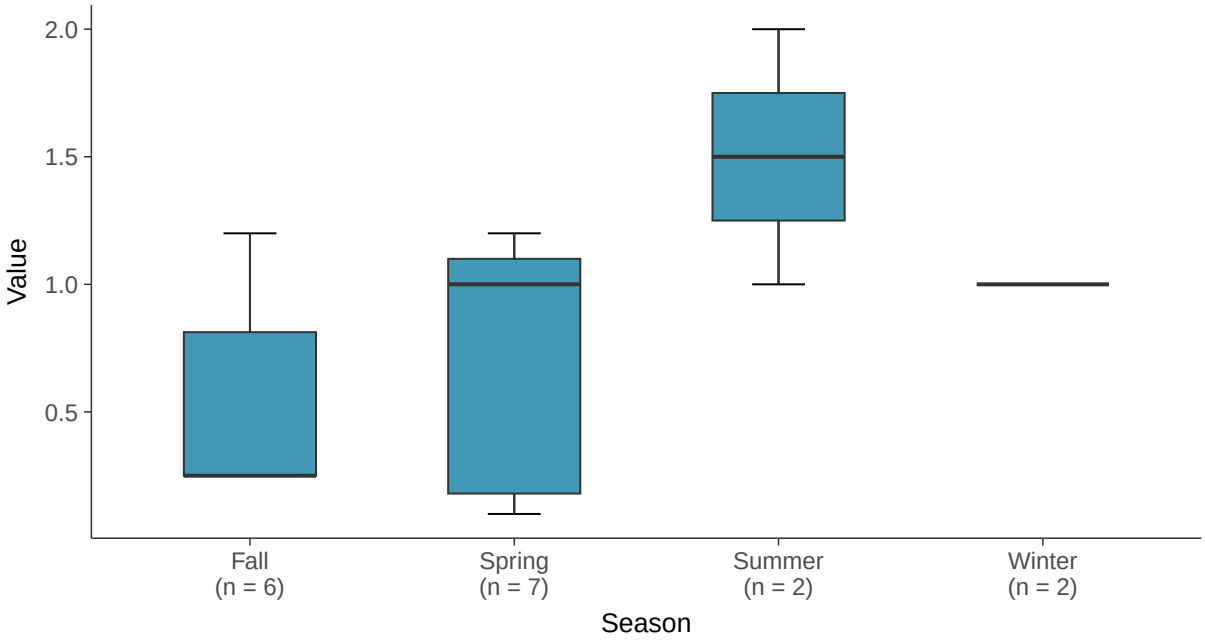
## Boxplot

Antimony, MW-17004 (ug/L)



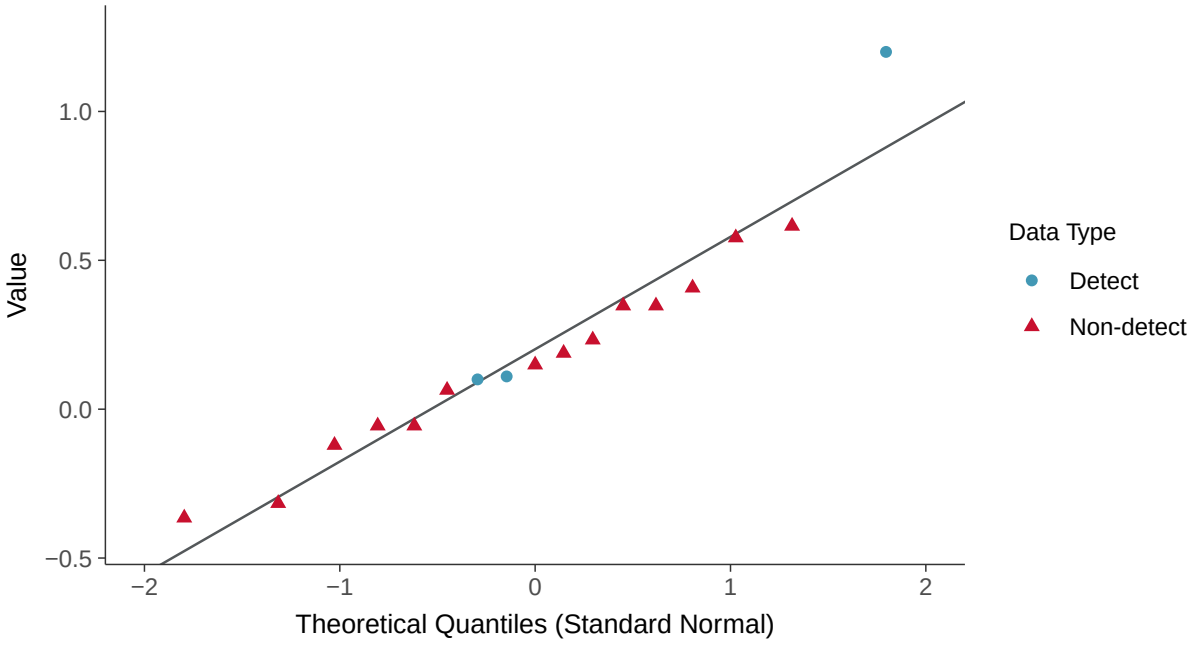

## Boxplot by Season

Antimony, MW-17004 (ug/L)



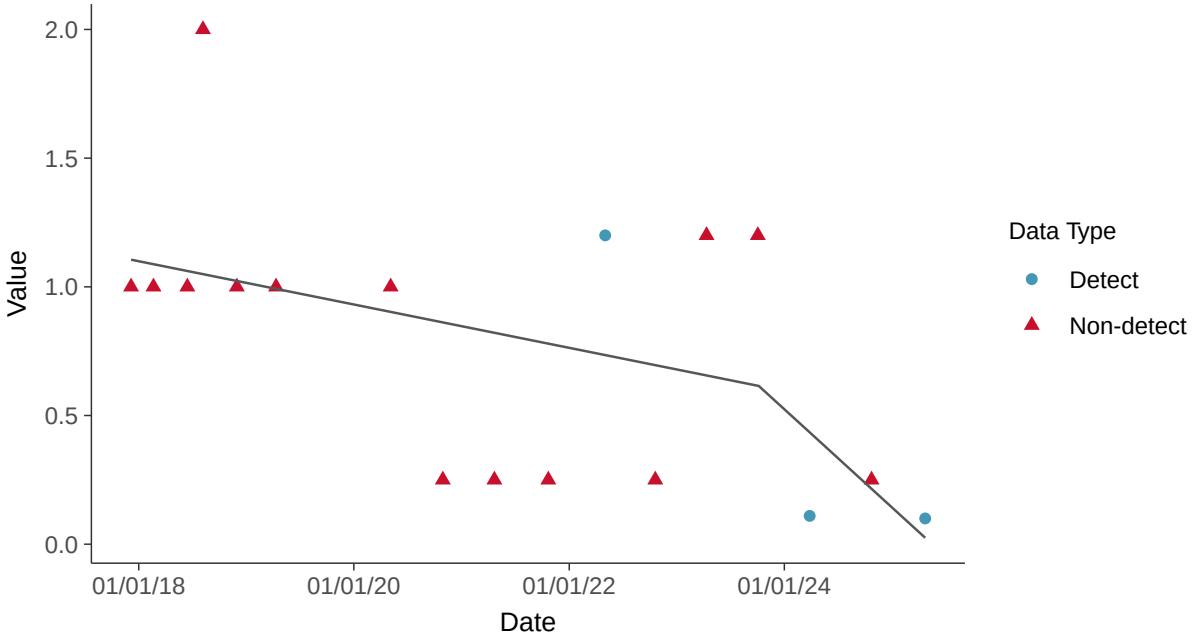
**Normal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-17004 (ug/L)



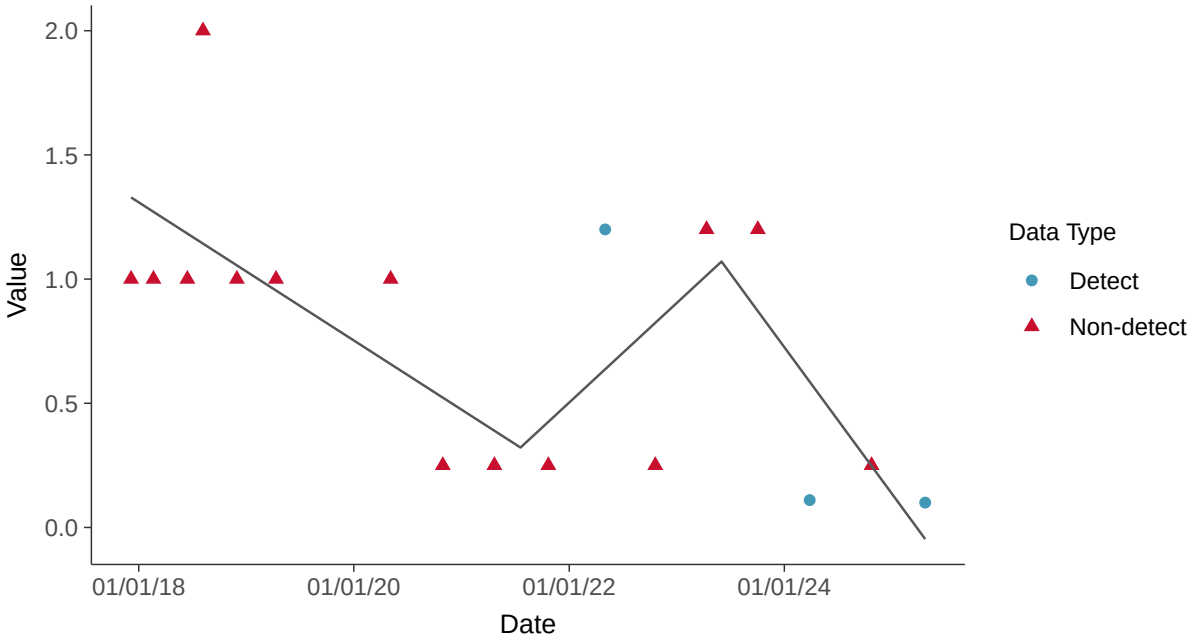

**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17004 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Antimony, MW-17004 (ug/L)

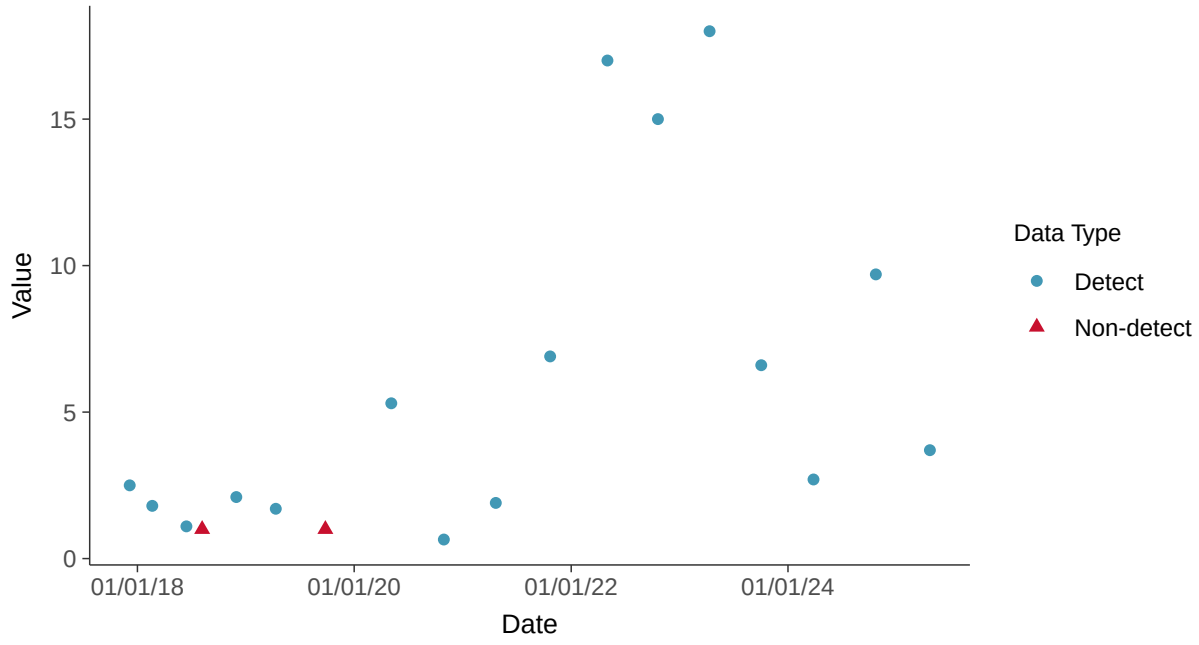


## Appendix IV: Arsenic, MW-17004

ID: 17_2_102

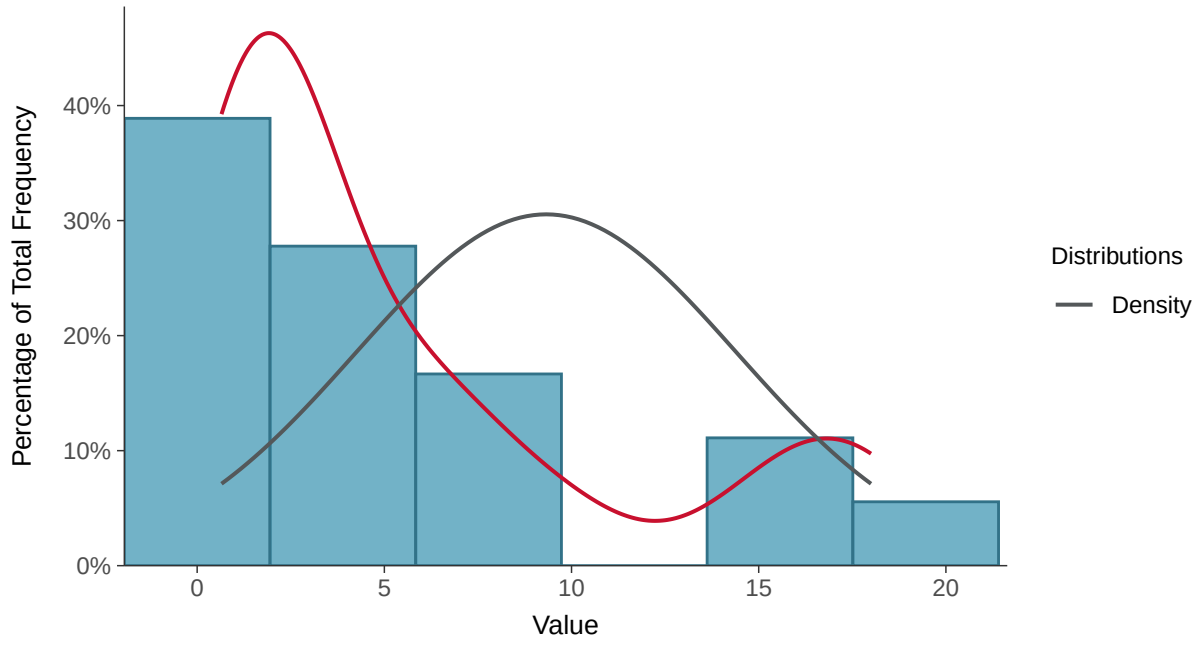
**Scatter Plot**

Arsenic, MW-17004 (ug/L)



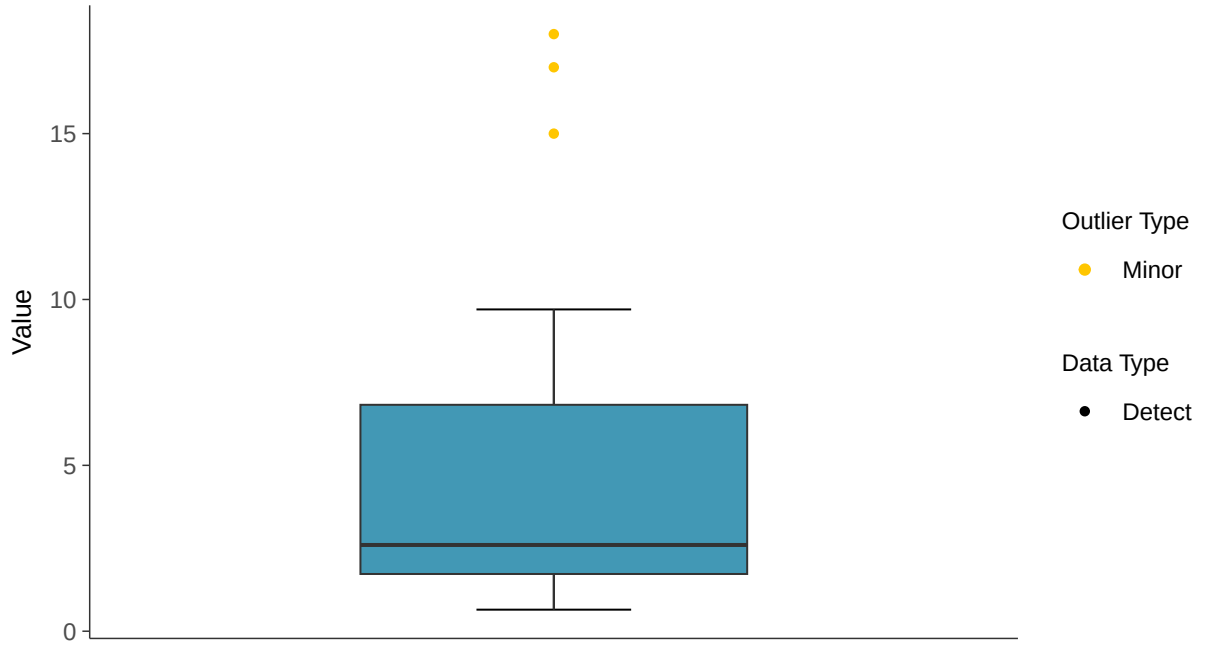

**Histogram**

Arsenic, MW-17004 (ug/L)



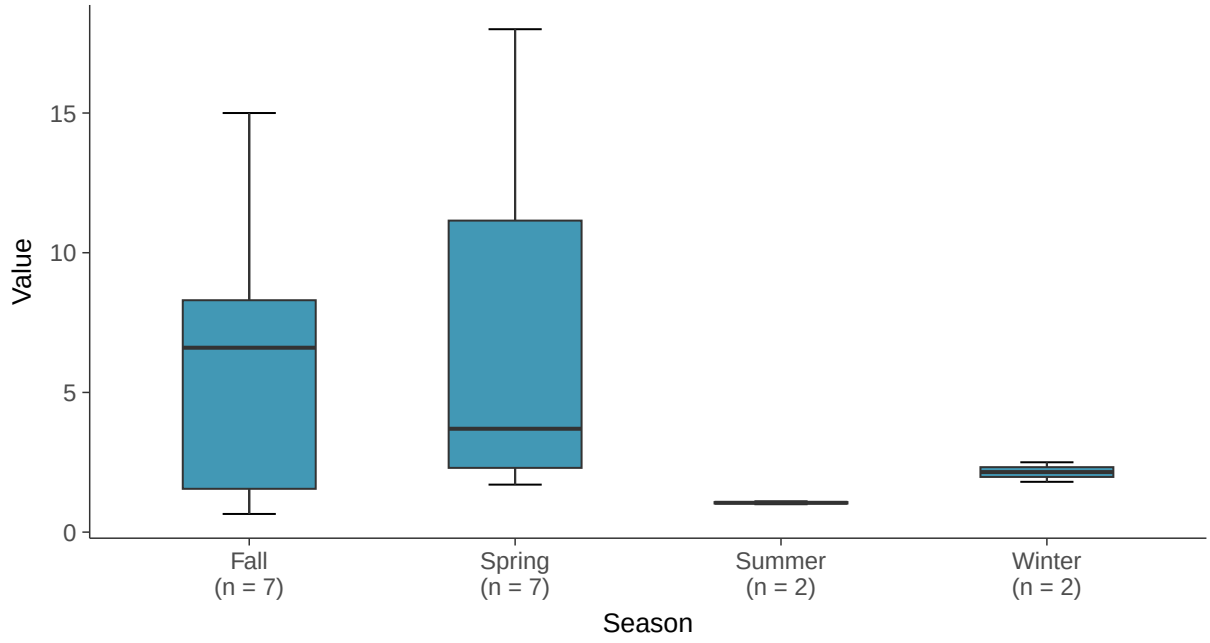
**Boxplot**

Arsenic, MW-17004 (ug/L)



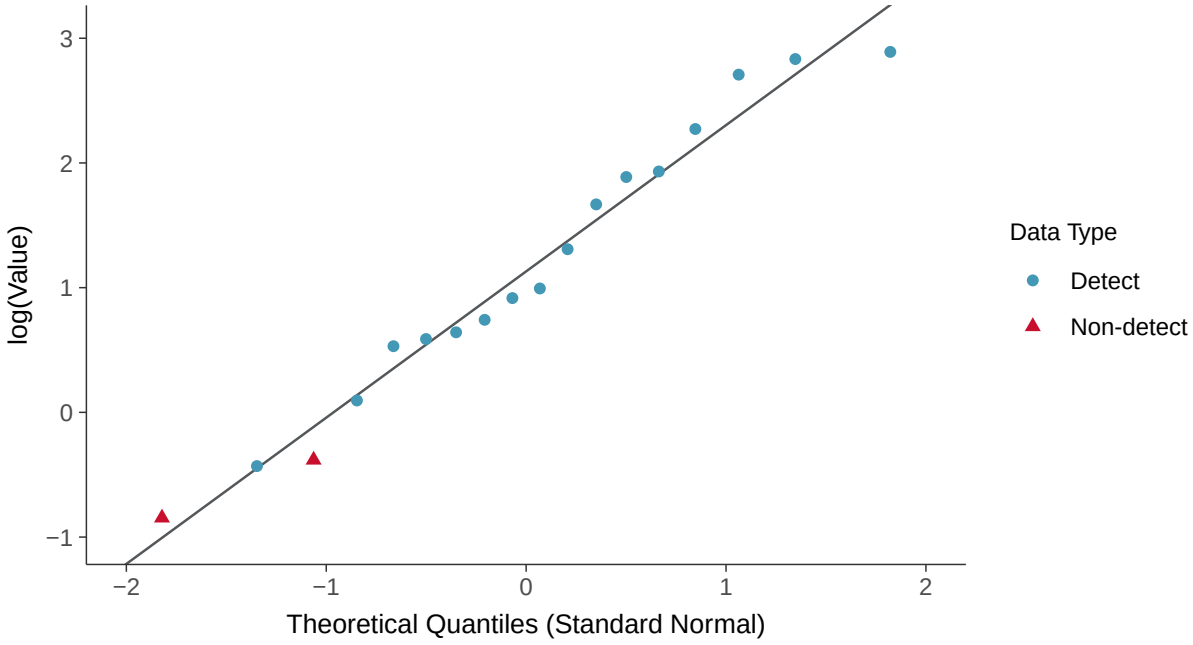

**Boxplot by Season**

Arsenic, MW-17004 (ug/L)



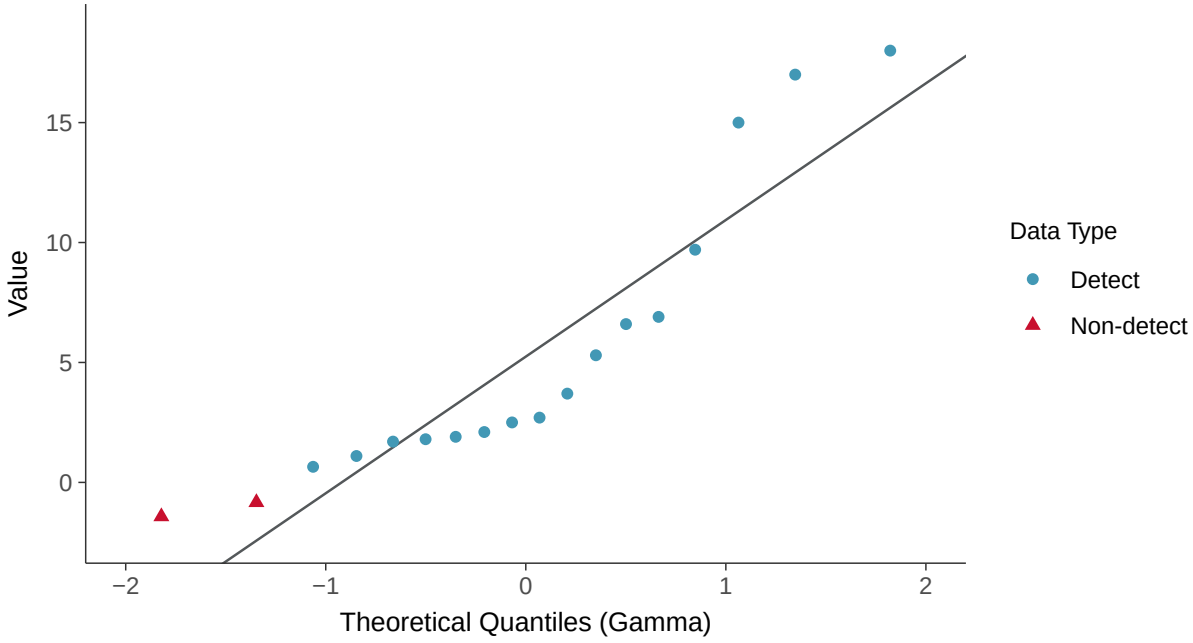
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17004 (ug/L)



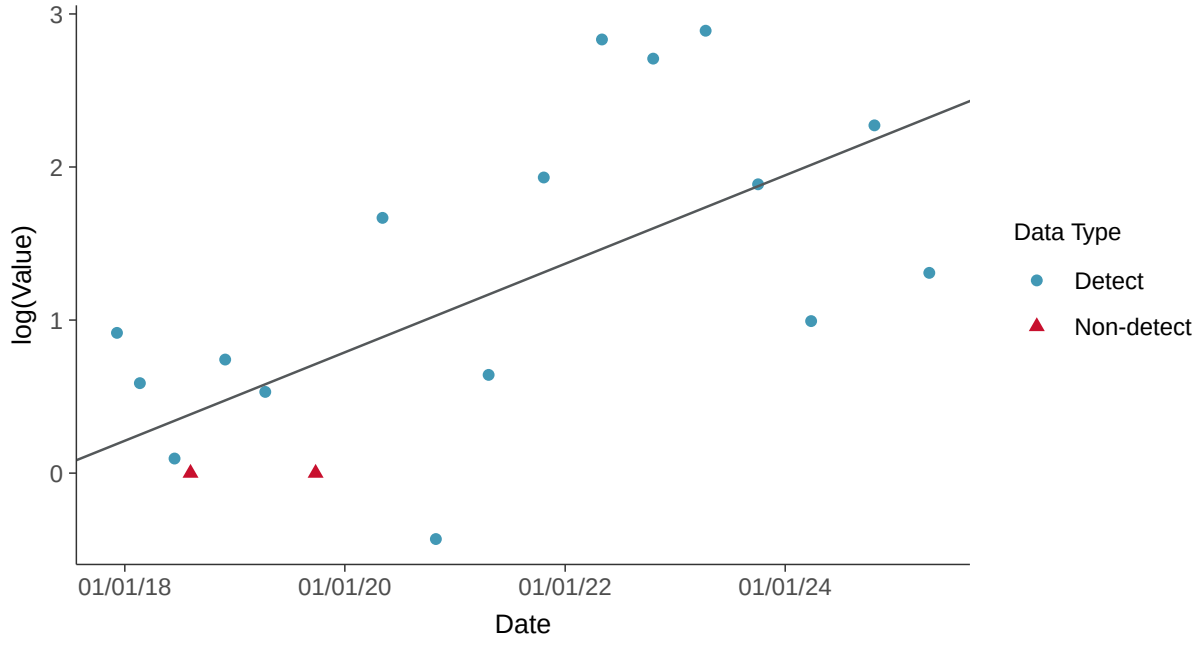

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17004 (ug/L)



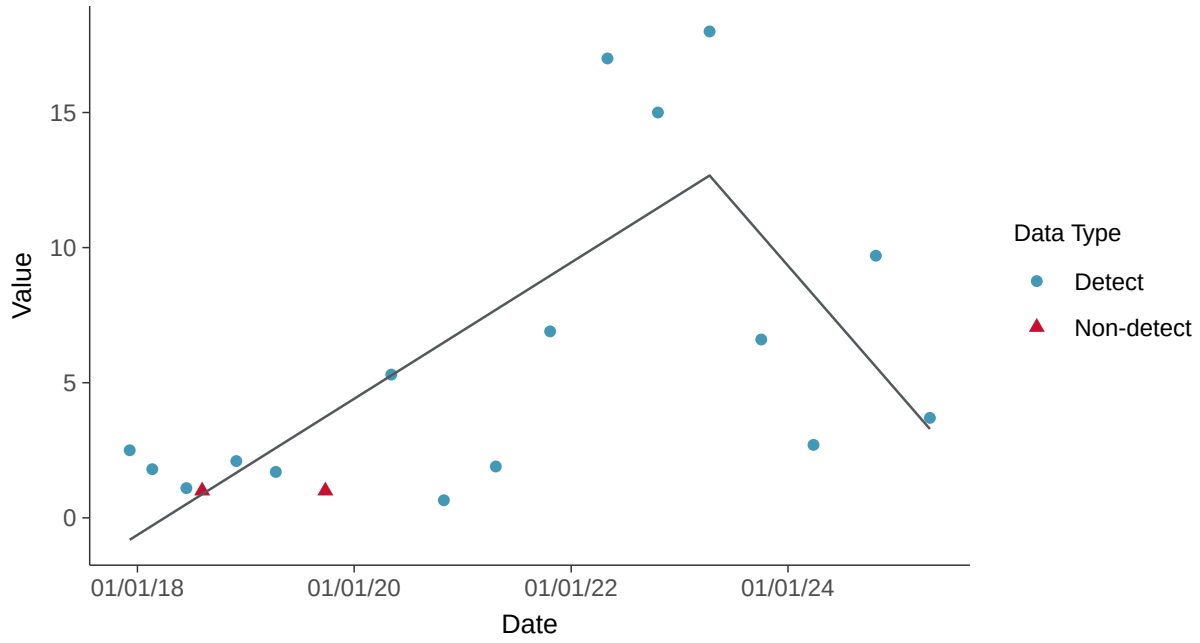
**Trend Regression: Lognormal MLE**

Arsenic, MW-17004 (ug/L)



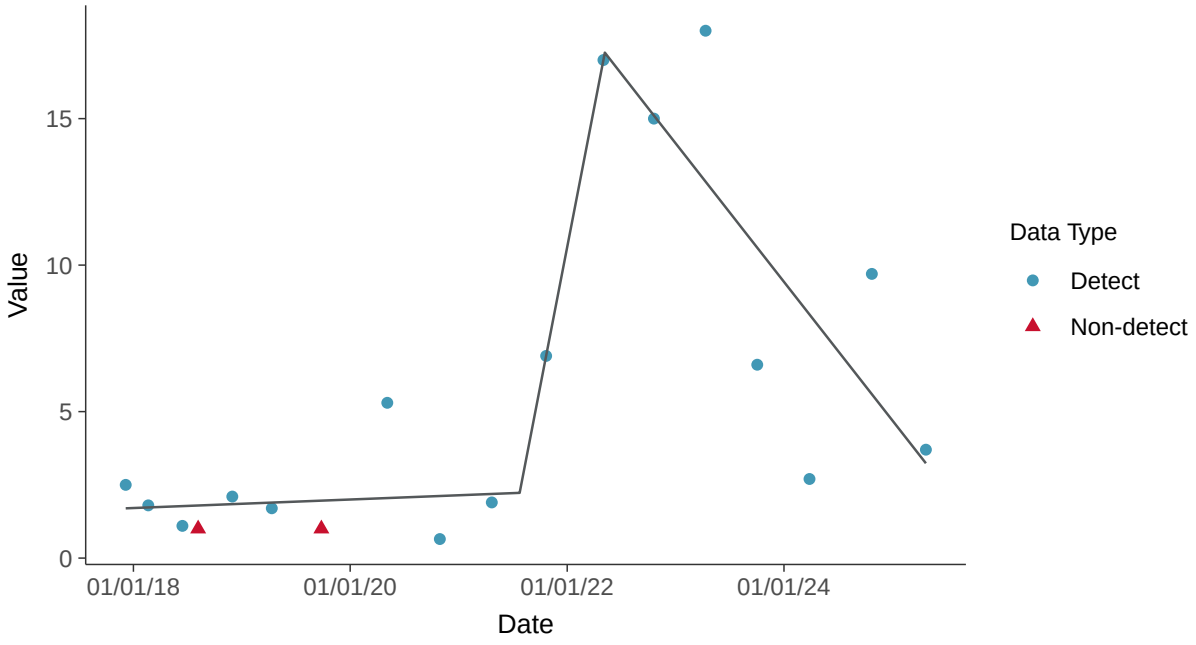

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17004 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-17004 (ug/L)

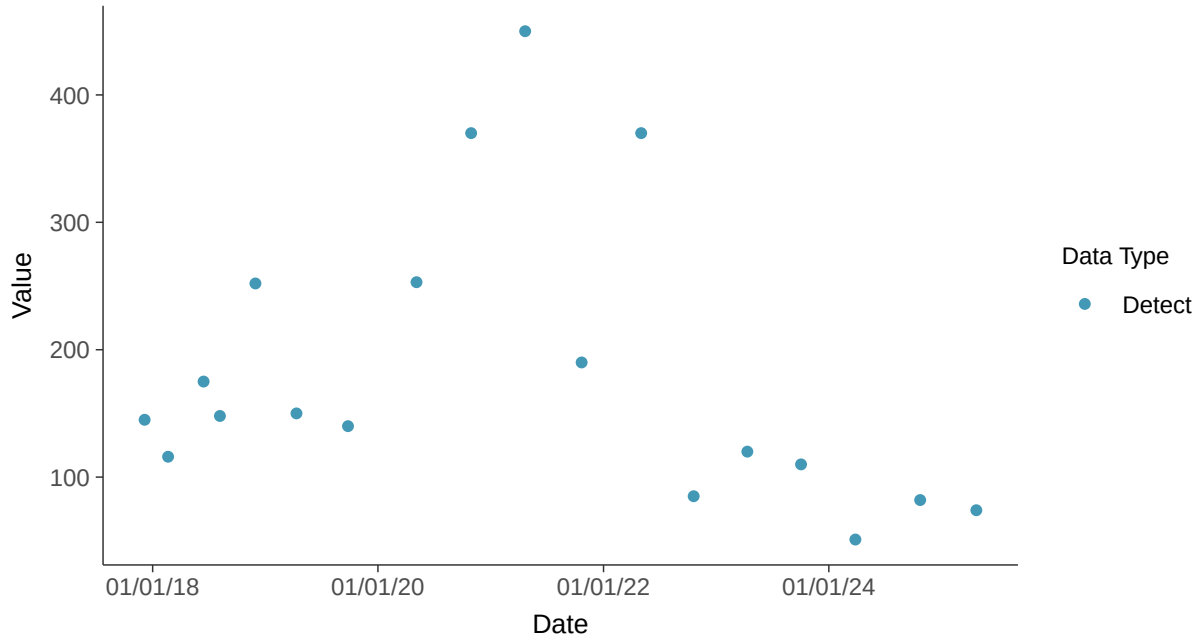


## Appendix IV: Barium, MW-17004

ID: 17_2_103

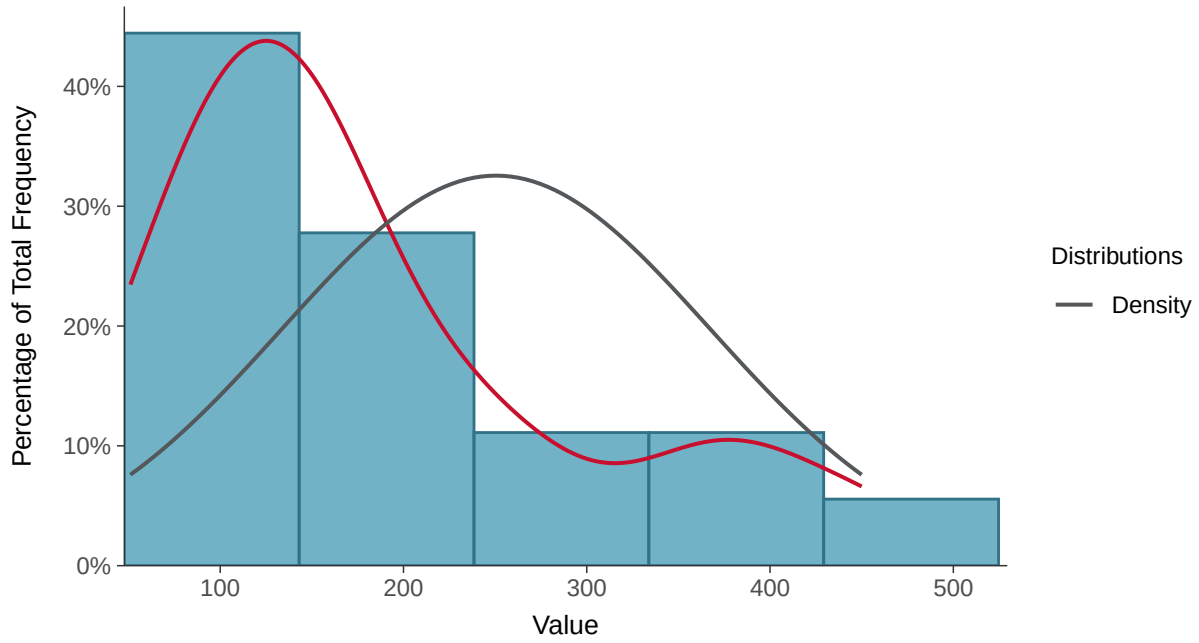
**Scatter Plot**

Barium, MW-17004 (ug/L)



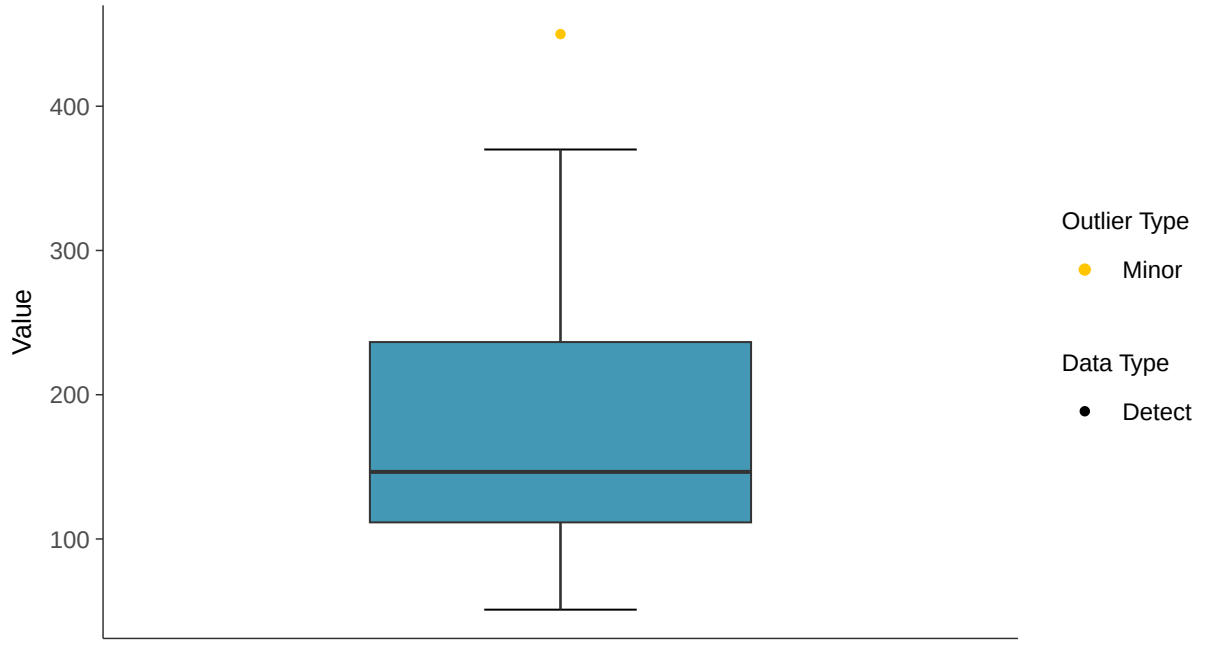

**Histogram**

Barium, MW-17004 (ug/L)



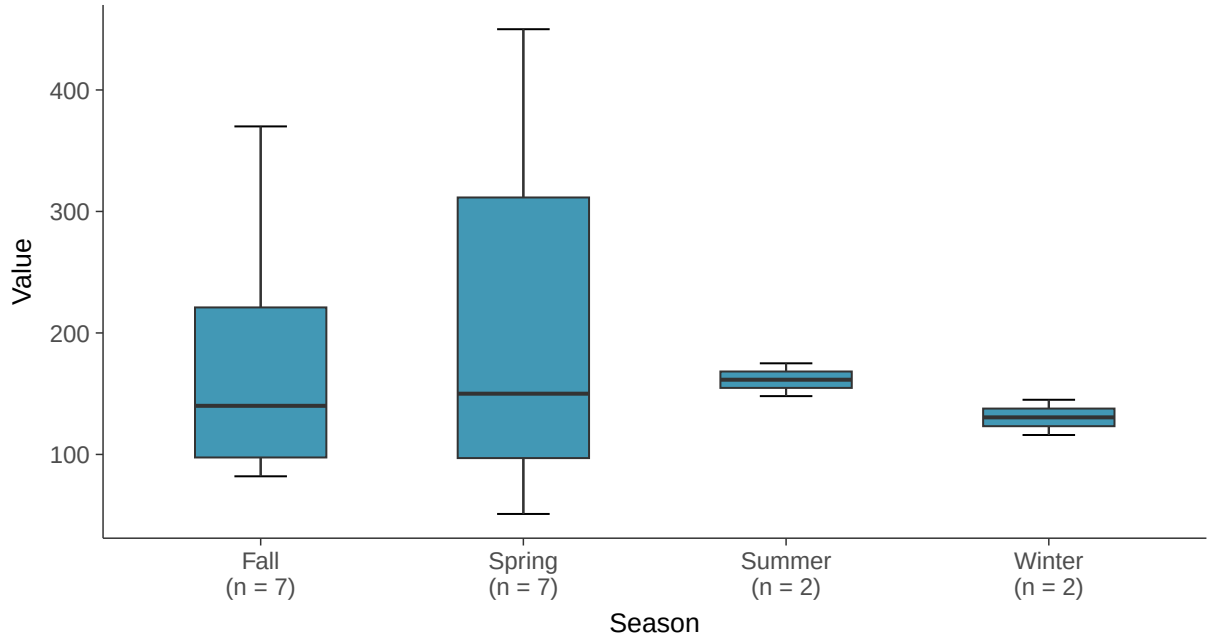
**Boxplot**

Barium, MW-17004 (ug/L)



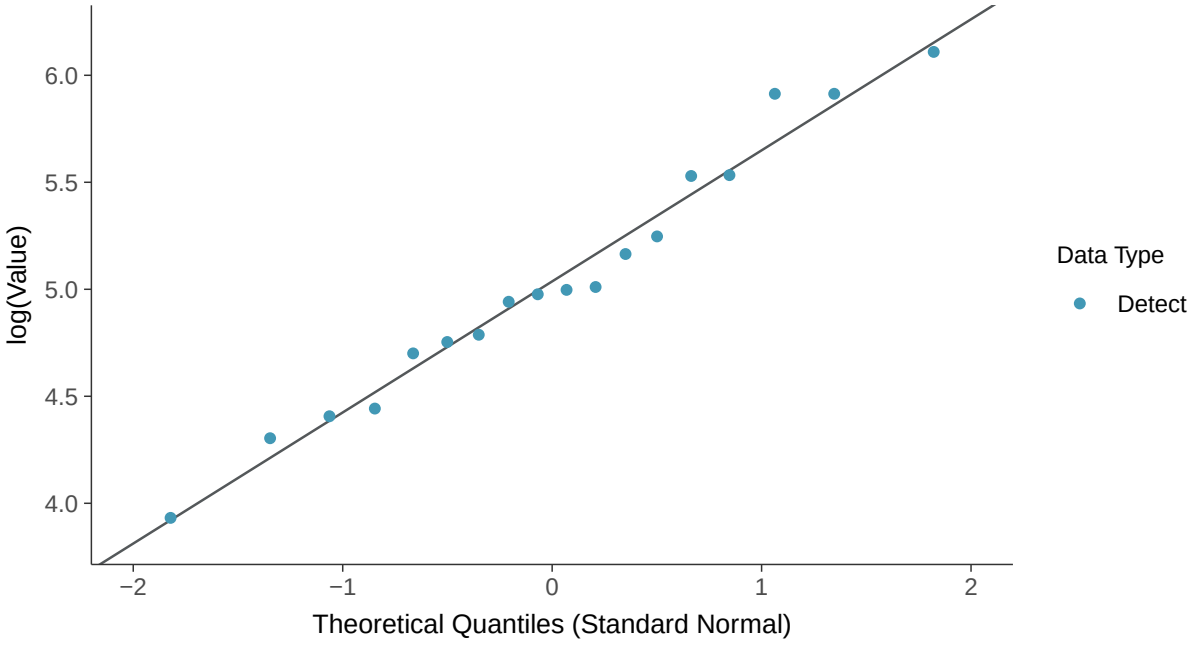

**Boxplot by Season**

Barium, MW-17004 (ug/L)



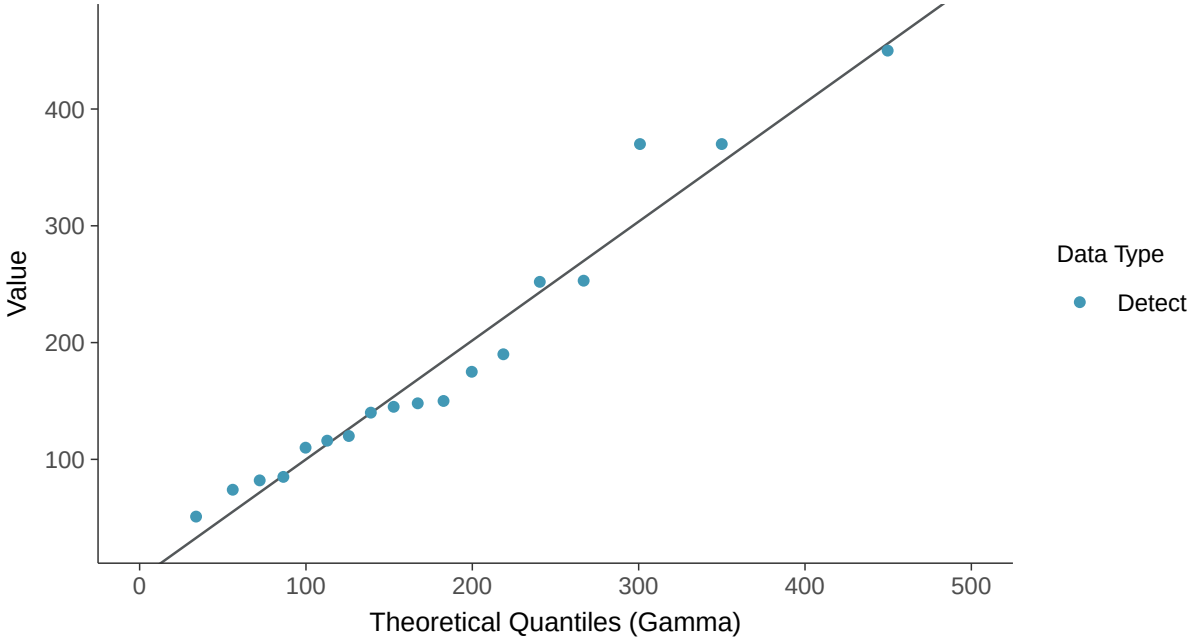
**Lognormal Q-Q plot**

Barium, MW-17004 (ug/L)



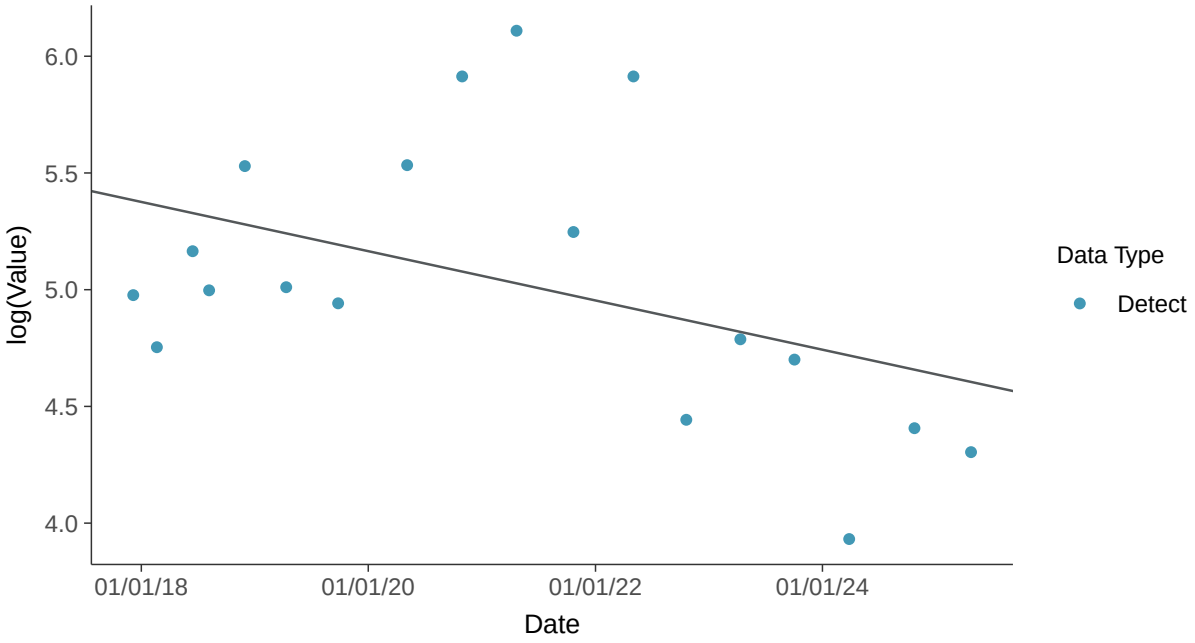

**Gamma Q-Q plot**

Barium, MW-17004 (ug/L)



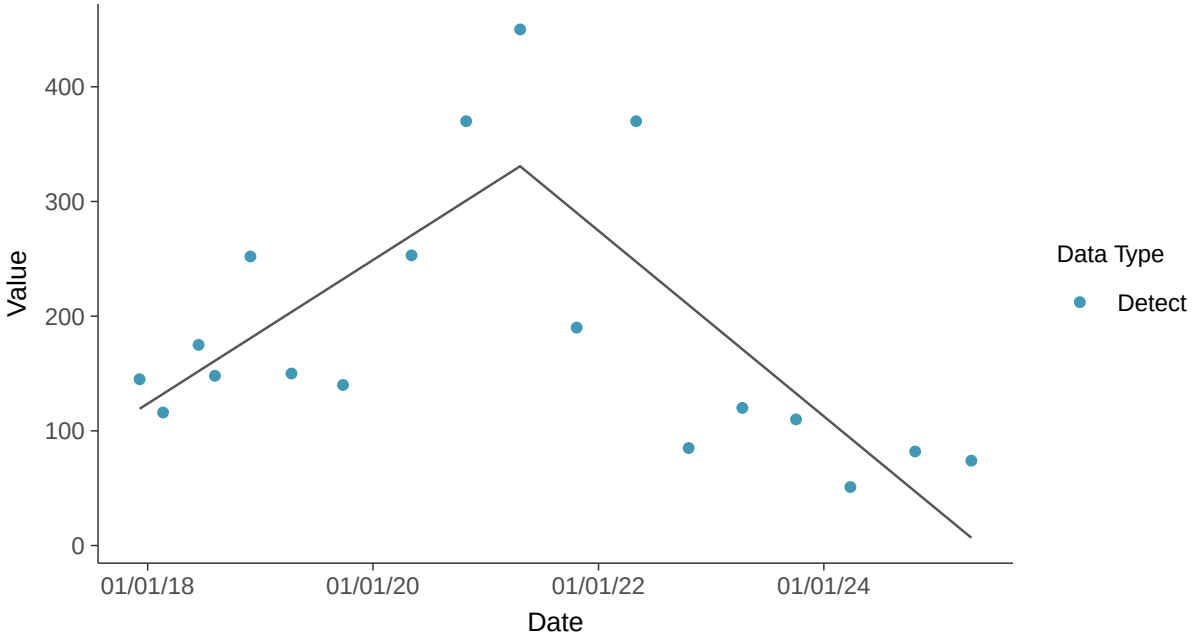
**Trend Regression: Lognormal MLE**

Barium, MW-17004 (ug/L)



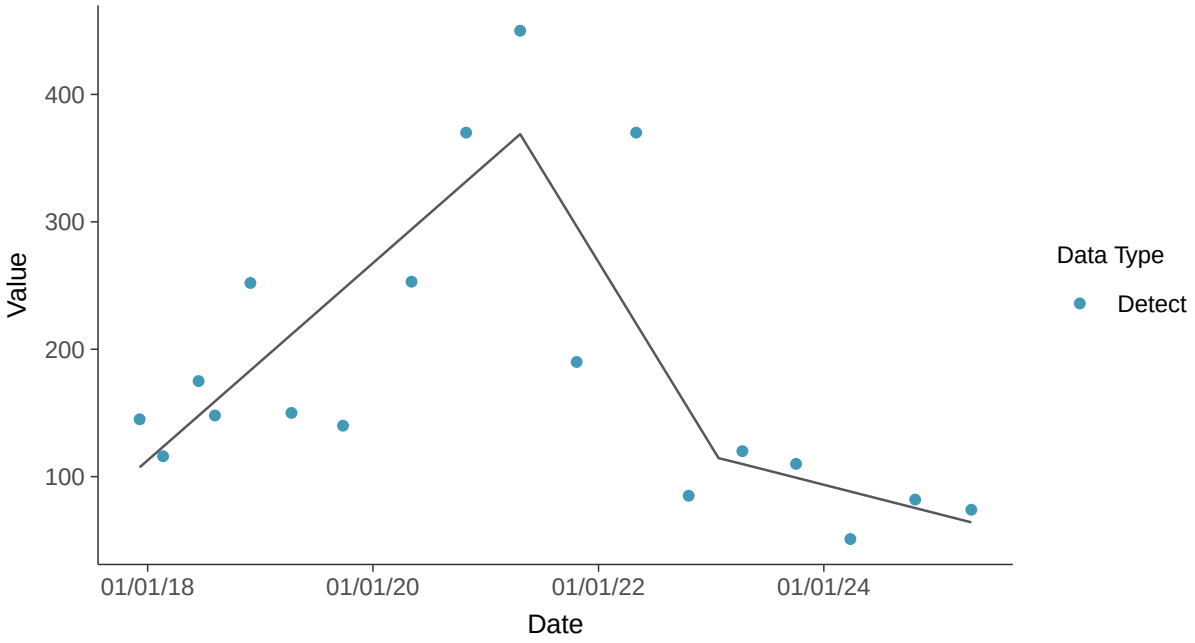

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17004 (ug/L)



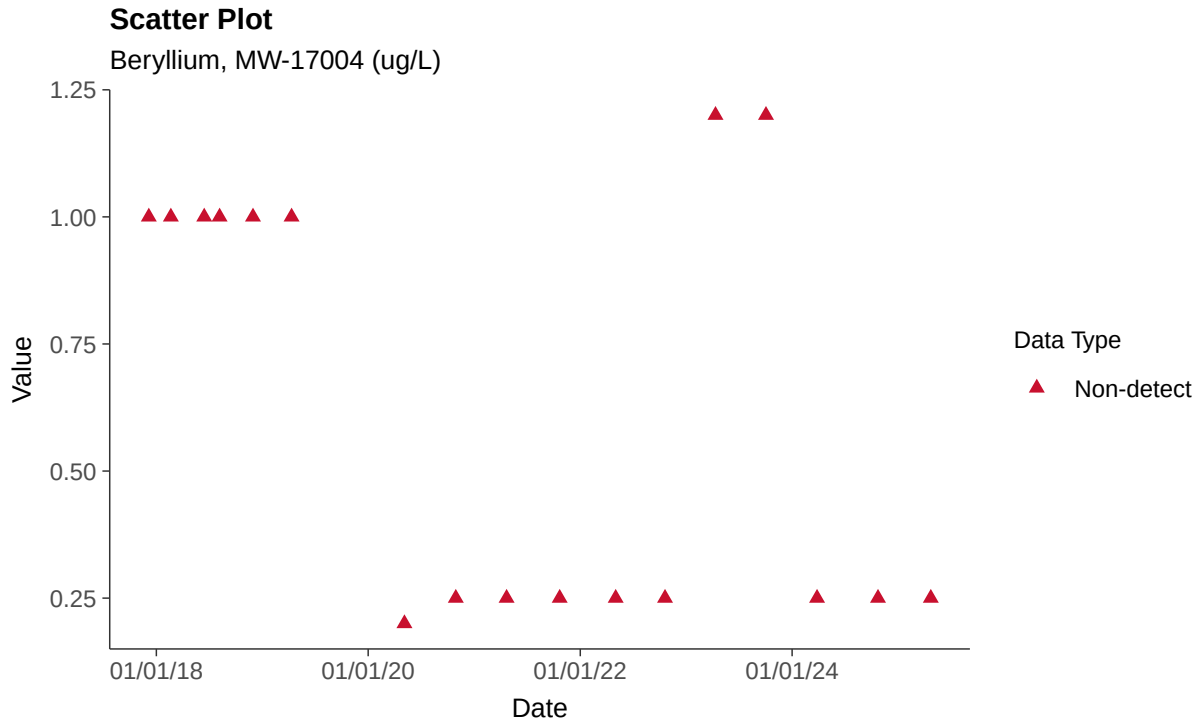
**Trend Regression: Piecewise Linear-Linear-Linear**

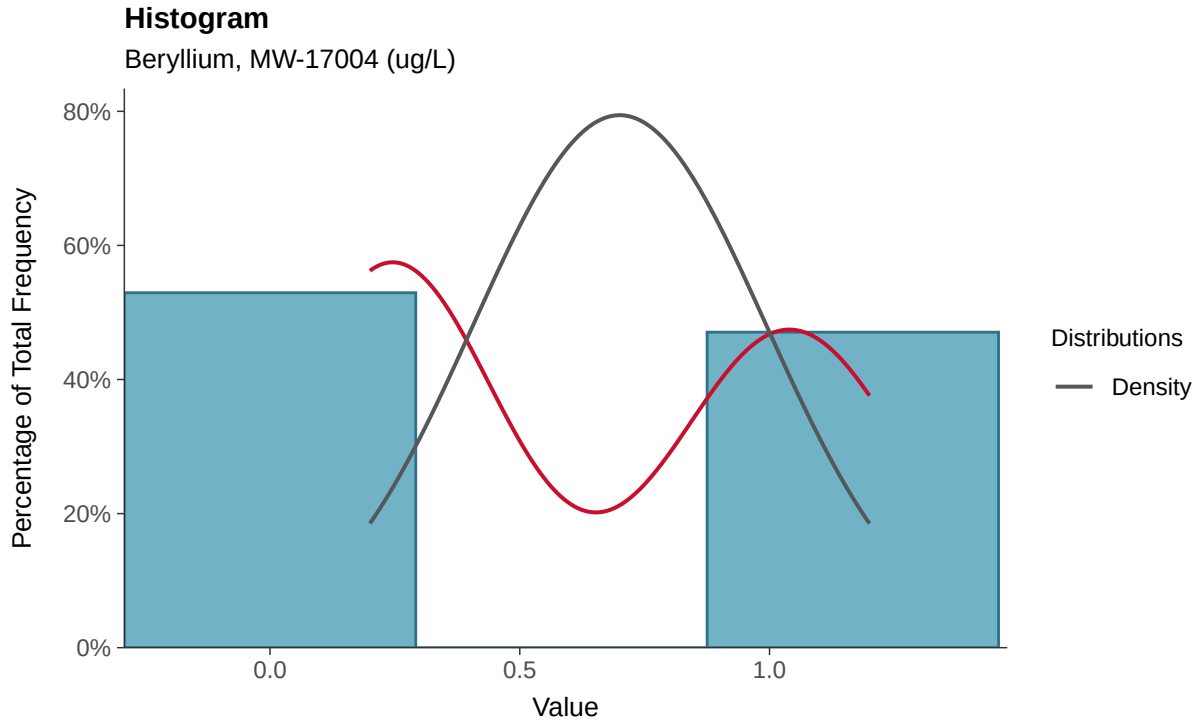
Barium, MW-17004 (ug/L)



## Appendix IV: Beryllium, MW-17004

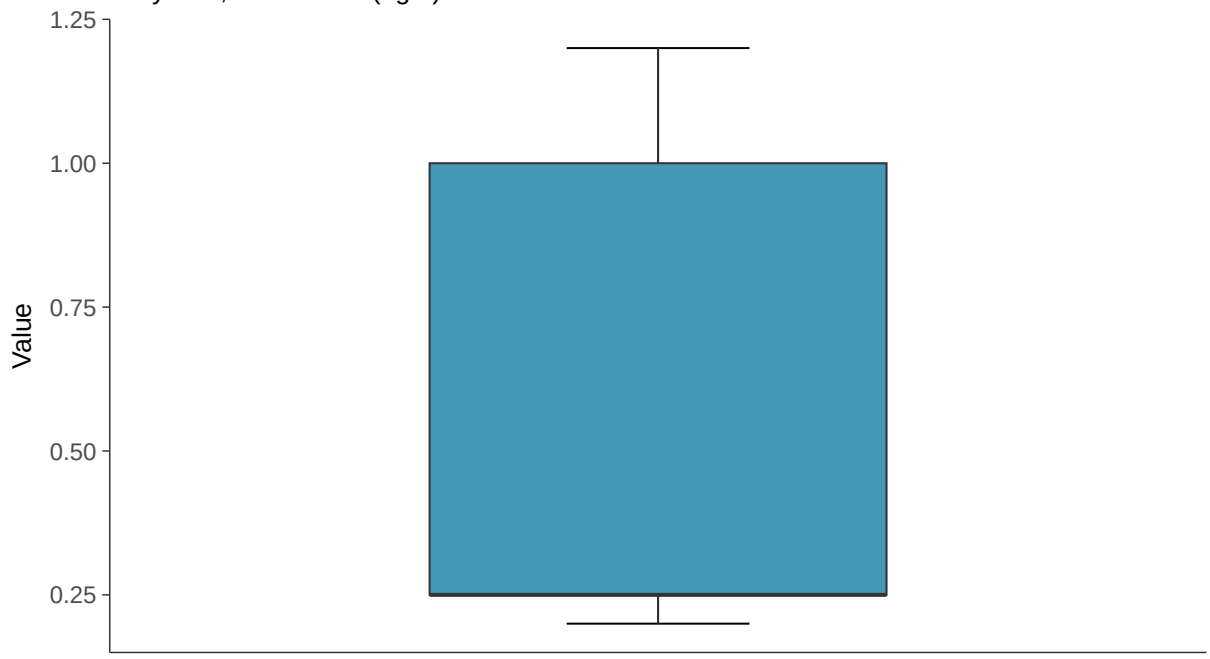
ID: 17_2_104



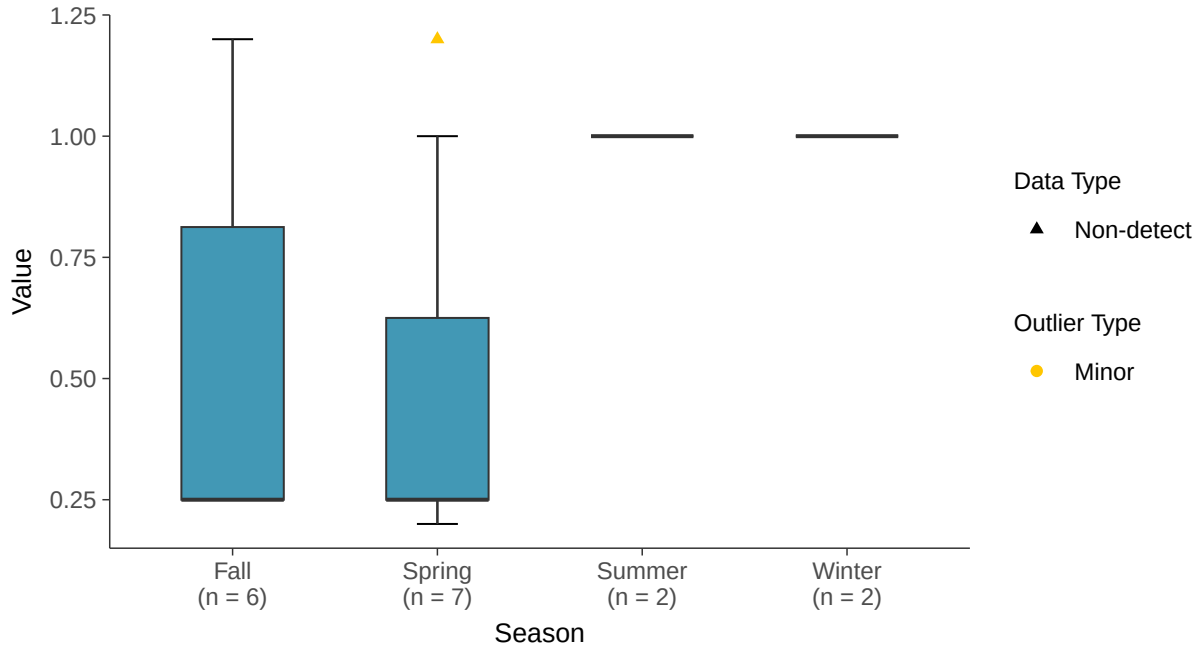
## Boxplot

Beryllium, MW-17004 (ug/L)



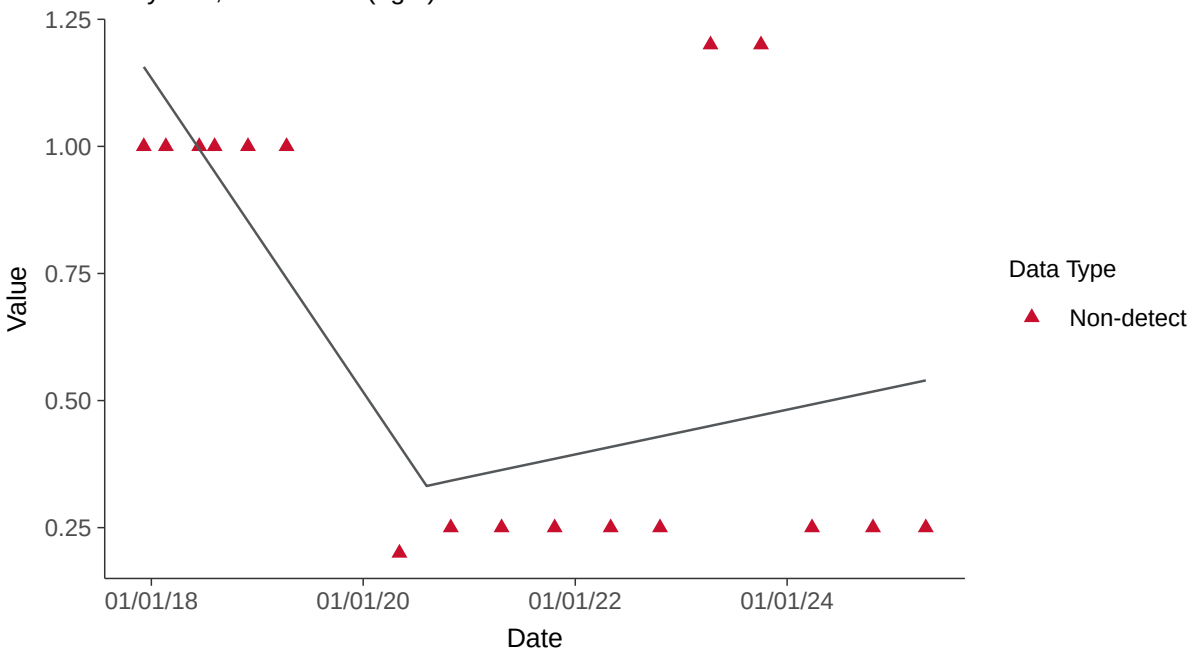

## Boxplot by Season

Beryllium, MW-17004 (ug/L)



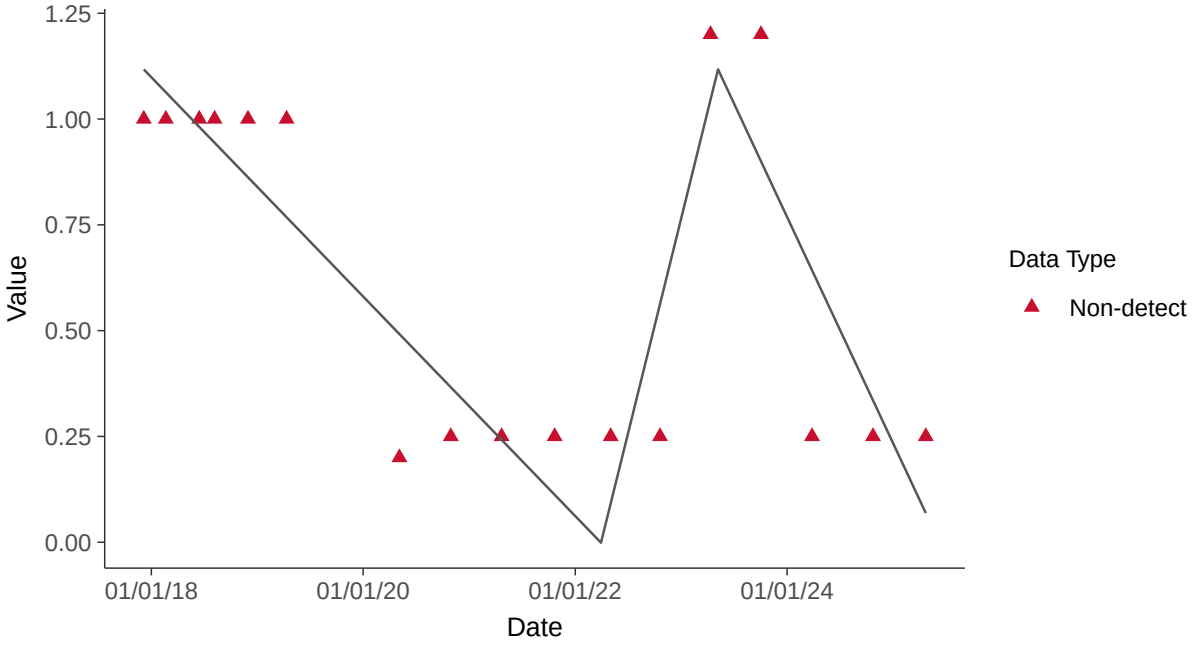
**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-17004 (ug/L)



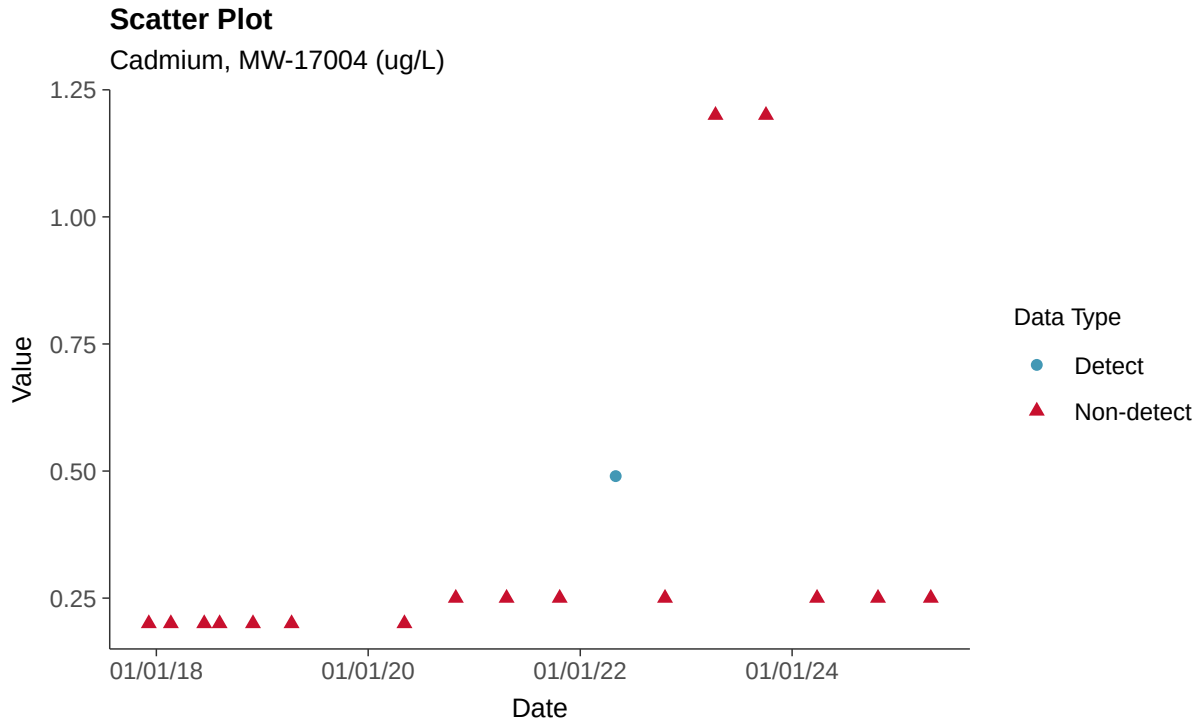

**Trend Regression: Piecewise Linear-Linear-Linear**

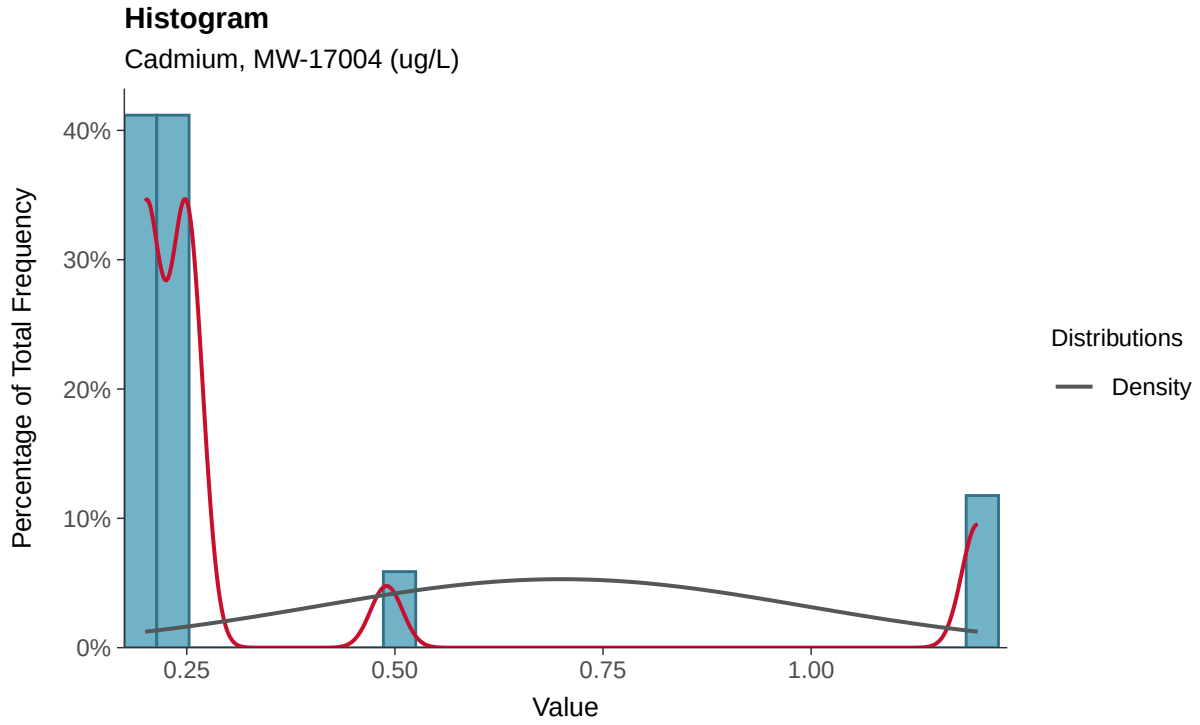
Beryllium, MW-17004 (ug/L)



## Appendix IV: Cadmium, MW-17004

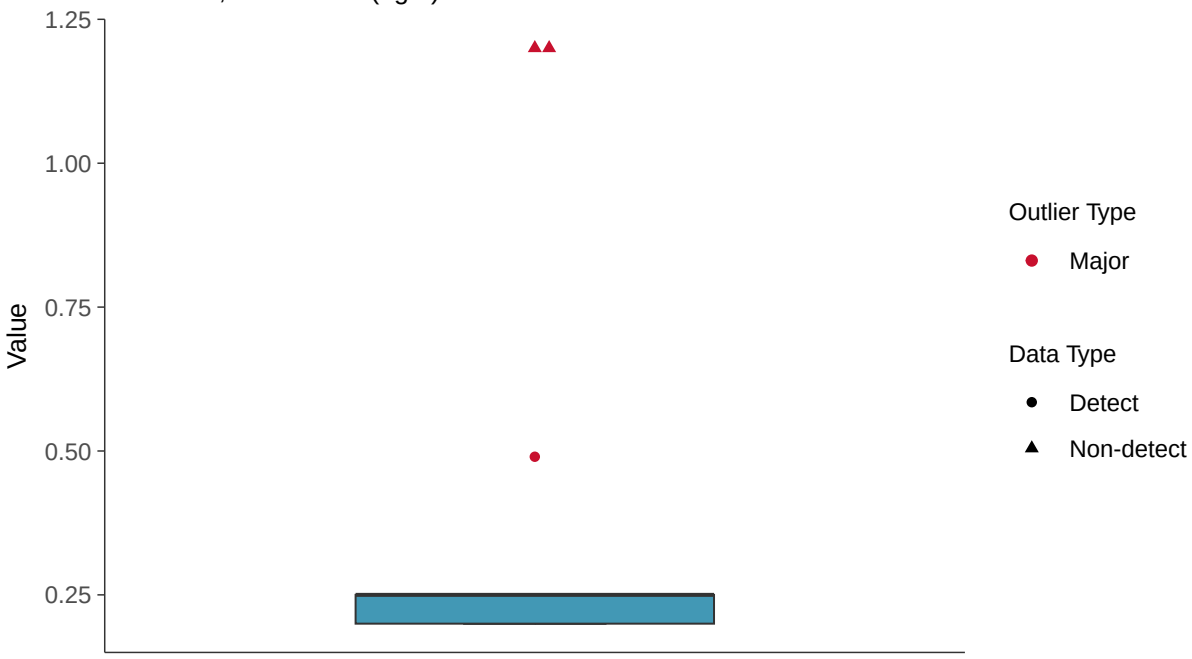
ID: 17_2_106



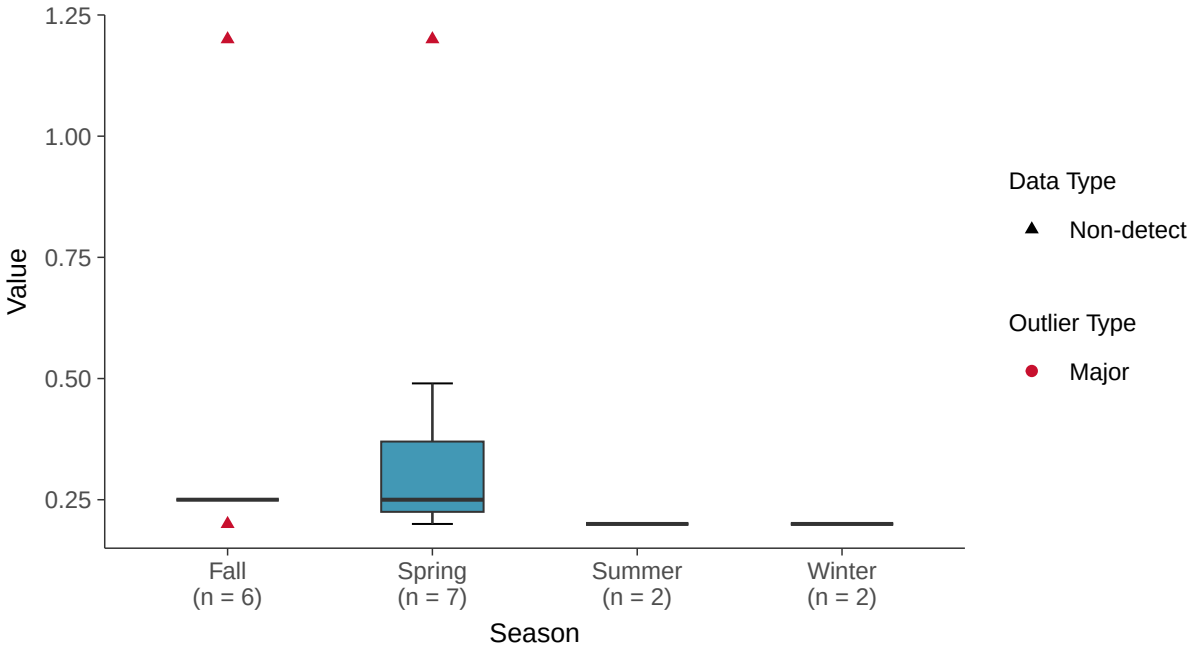
## Boxplot

Cadmium, MW-17004 (ug/L)



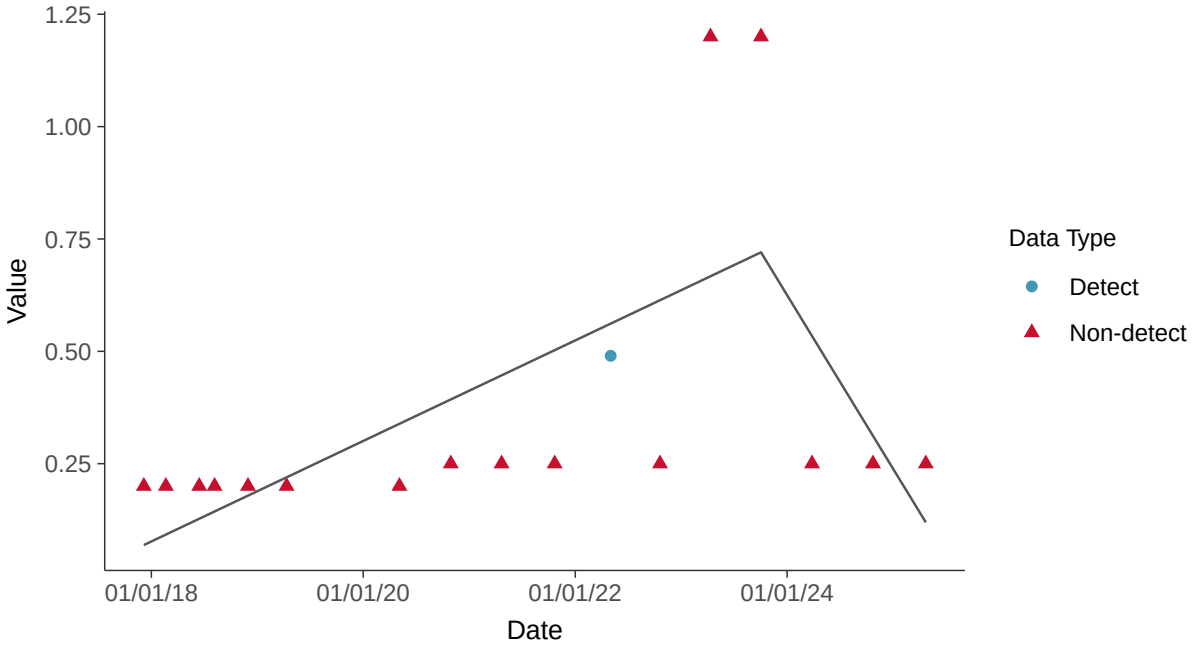

## Boxplot by Season

Cadmium, MW-17004 (ug/L)



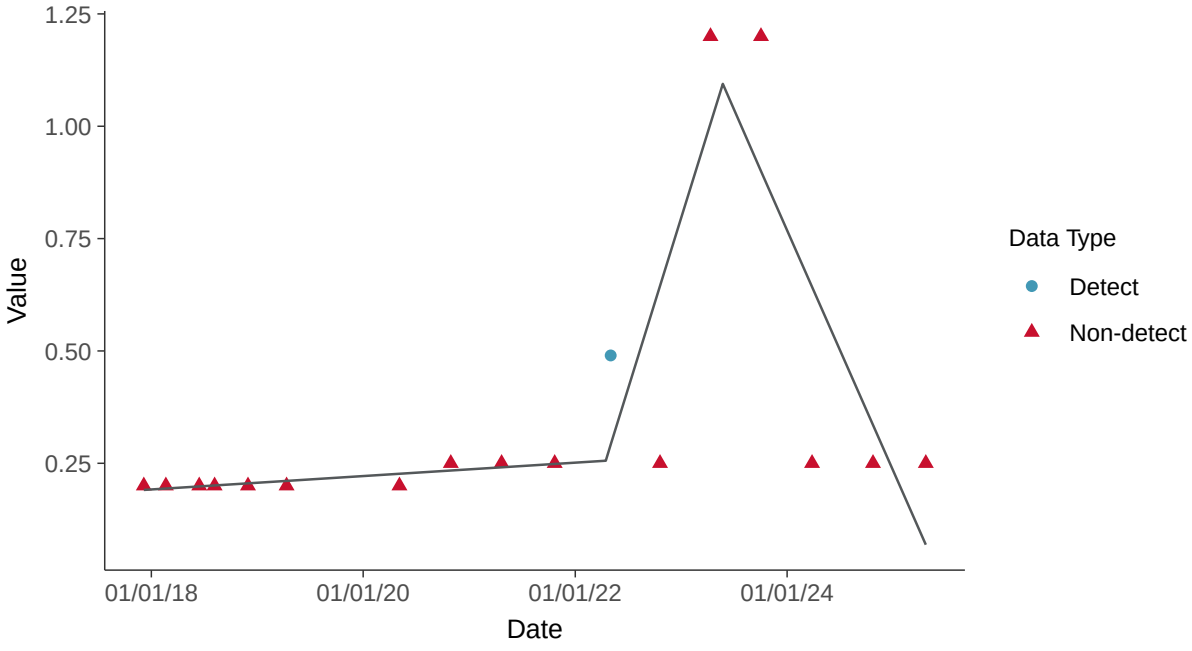
## Trend Regression: Piecewise Linear-Linear

Cadmium, MW-17004 (ug/L)



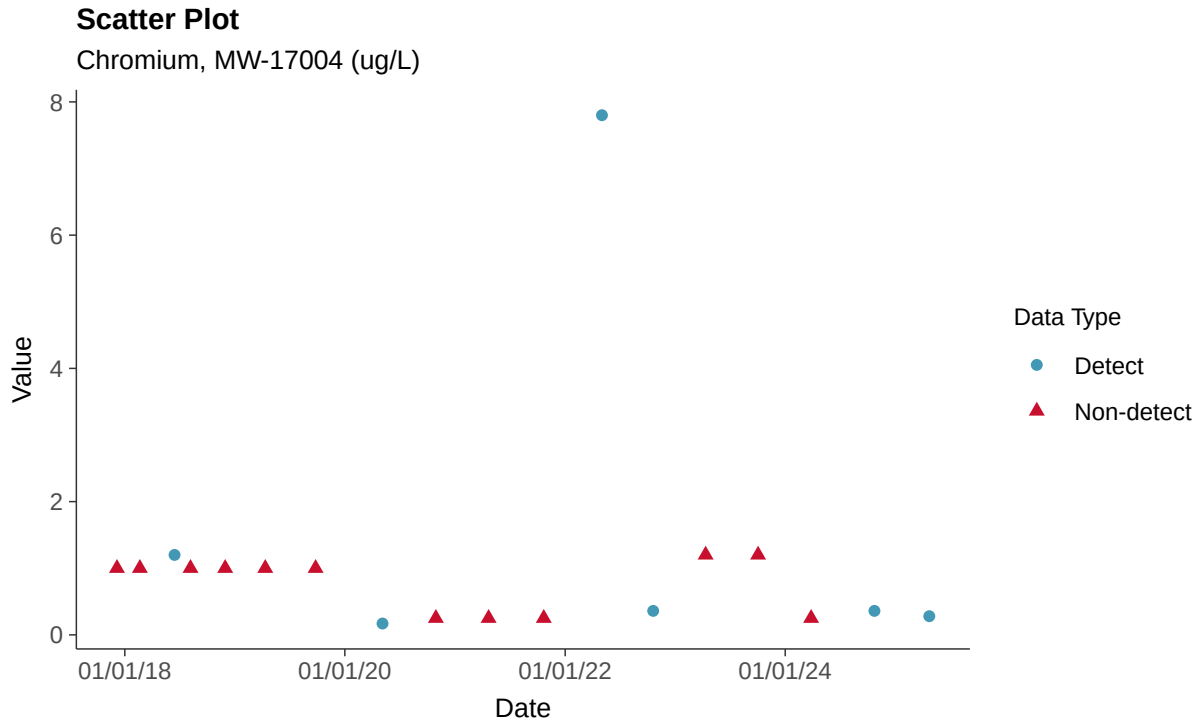

## Trend Regression: Piecewise Linear-Linear-Linear

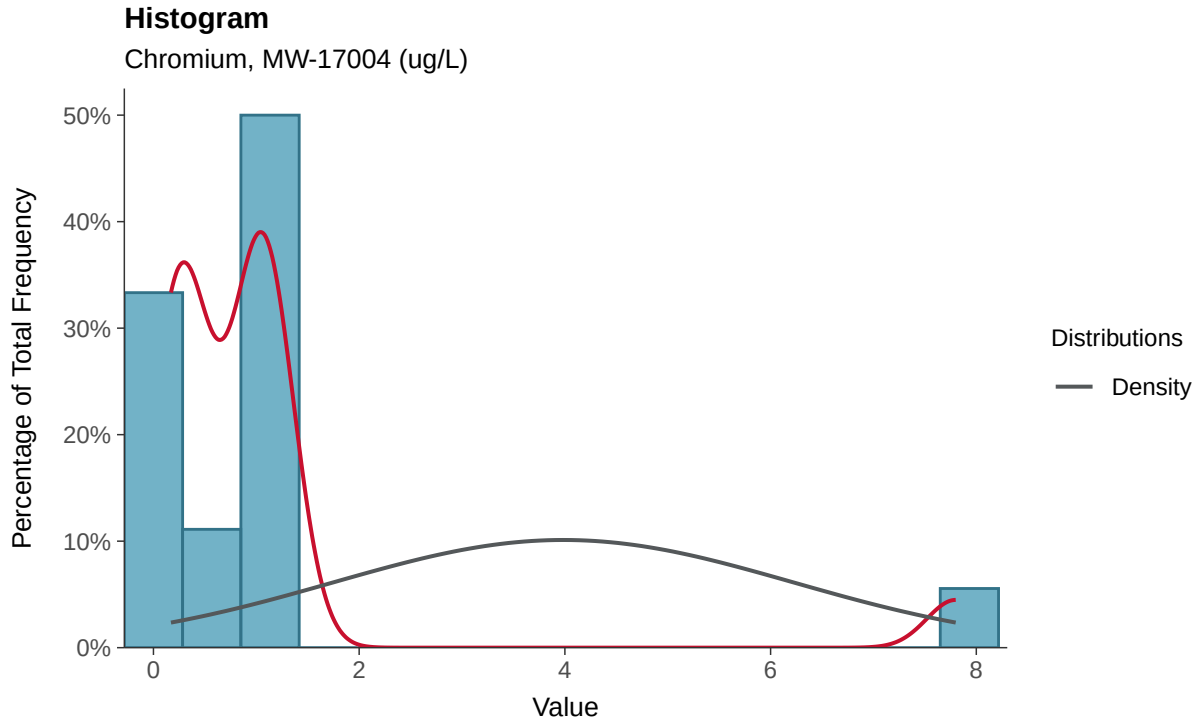
Cadmium, MW-17004 (ug/L)



## Appendix IV: Chromium, MW-17004

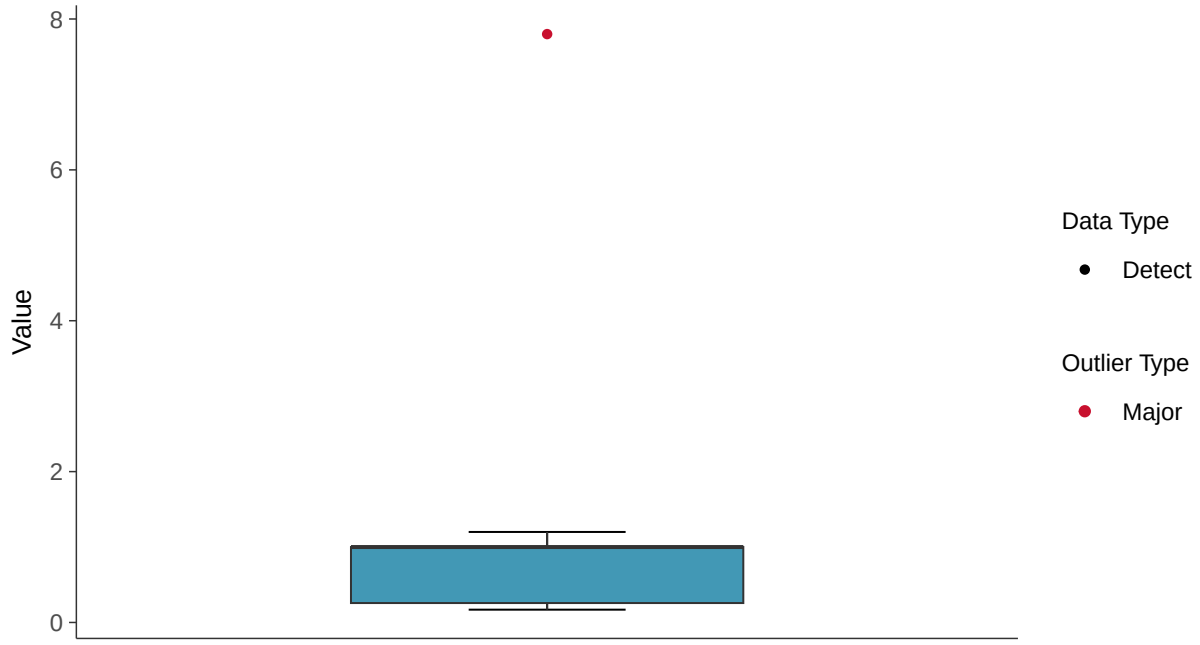
ID: 17_2_109



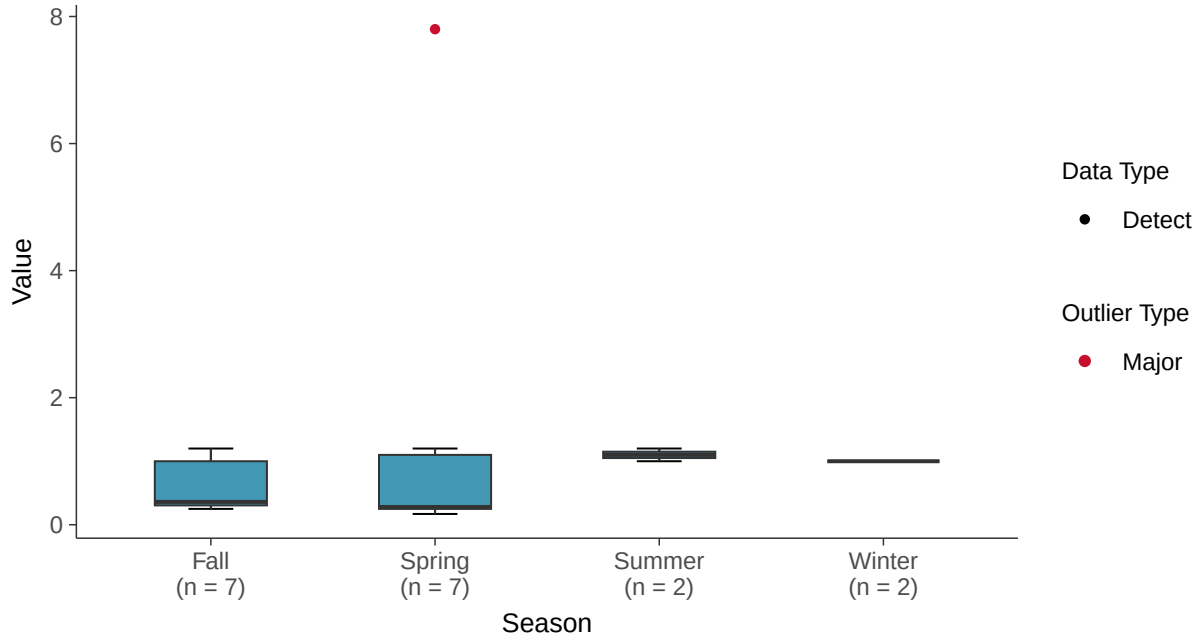
## Boxplot

Chromium, MW-17004 (ug/L)



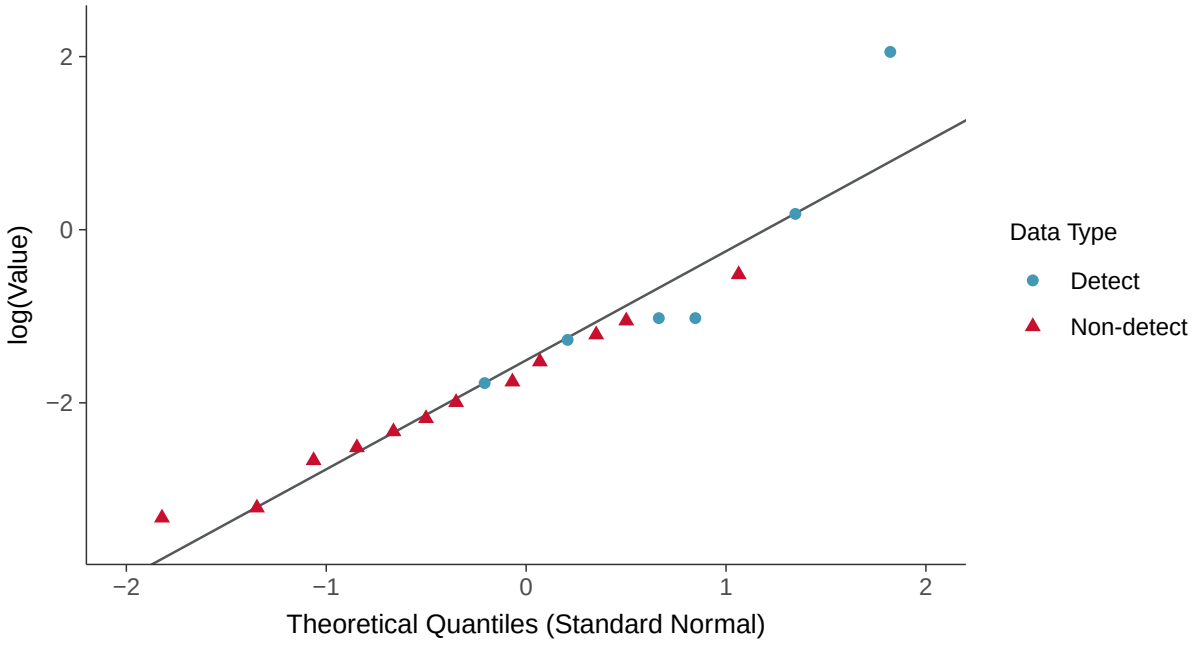

## Boxplot by Season

Chromium, MW-17004 (ug/L)



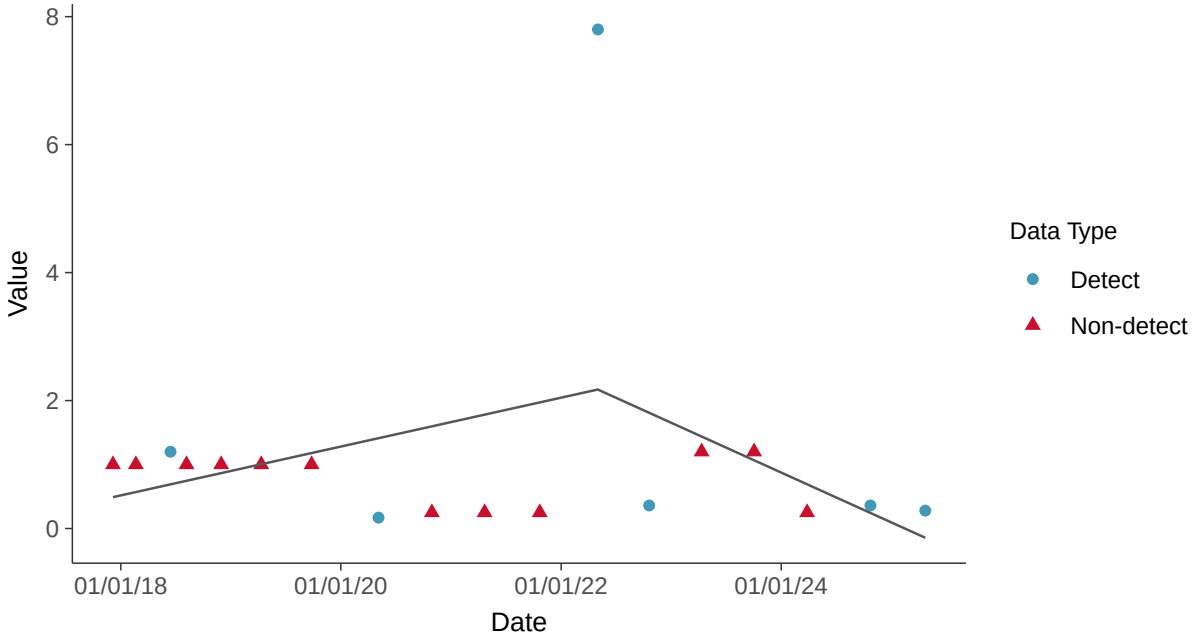
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17004 (ug/L)



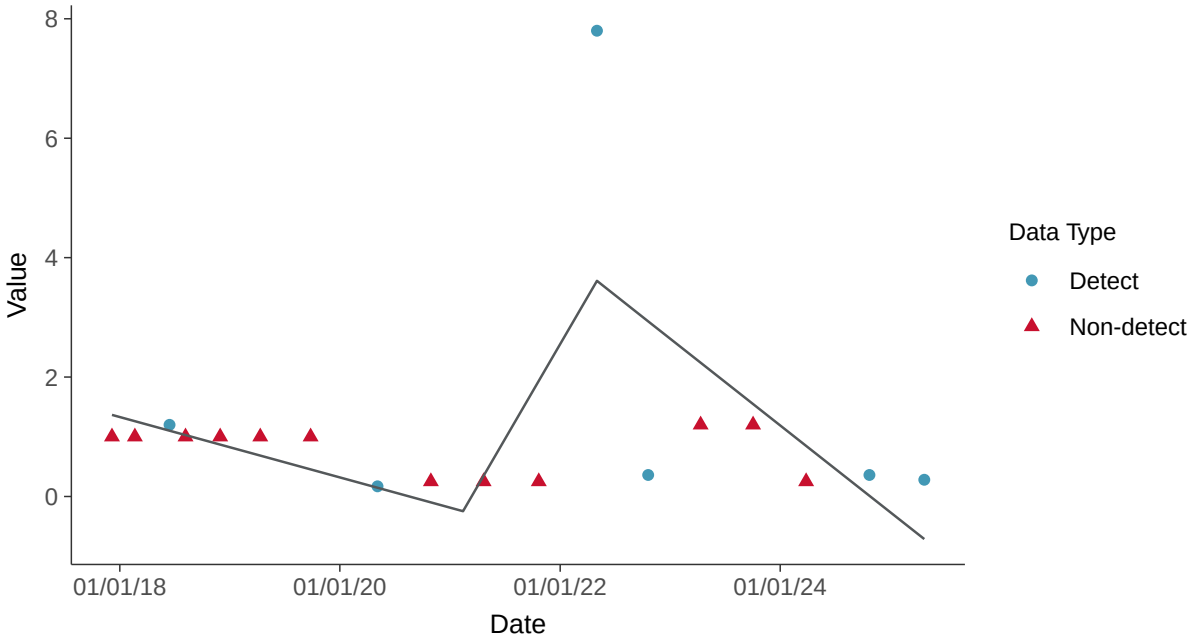

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-17004 (ug/L)



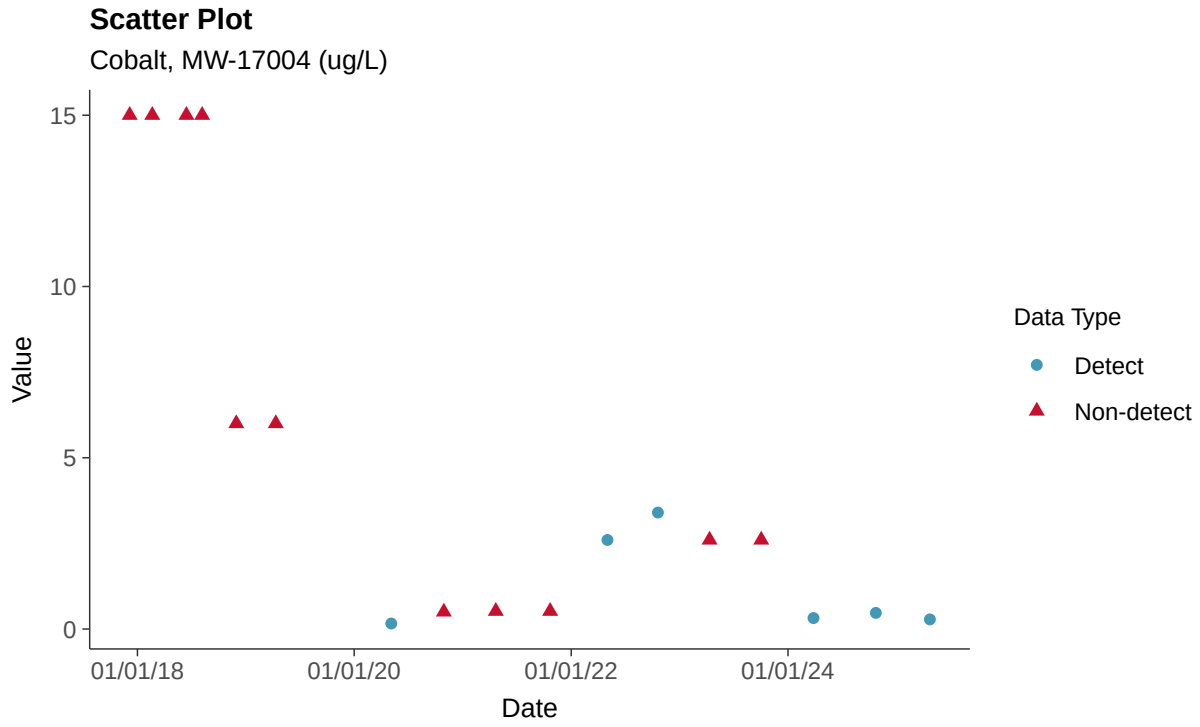
**Trend Regression: Piecewise Linear-Linear-Linear**

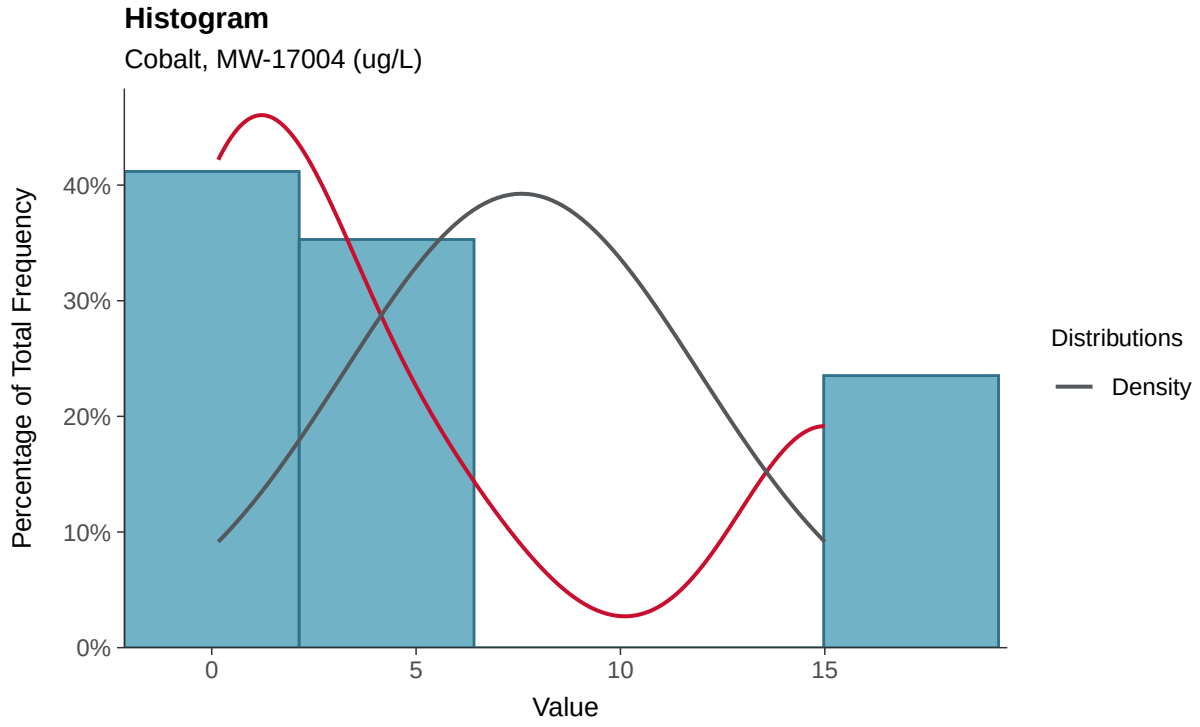
Chromium, MW-17004 (ug/L)



## Appendix IV: Cobalt, MW-17004

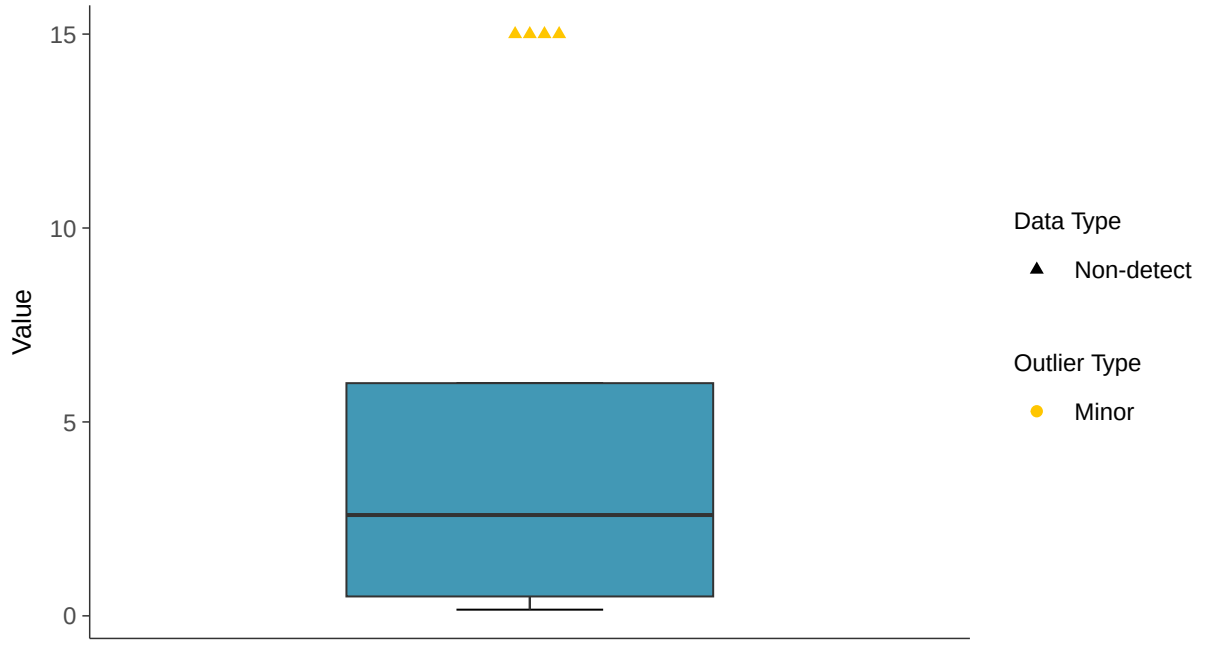
ID: 17_2_110



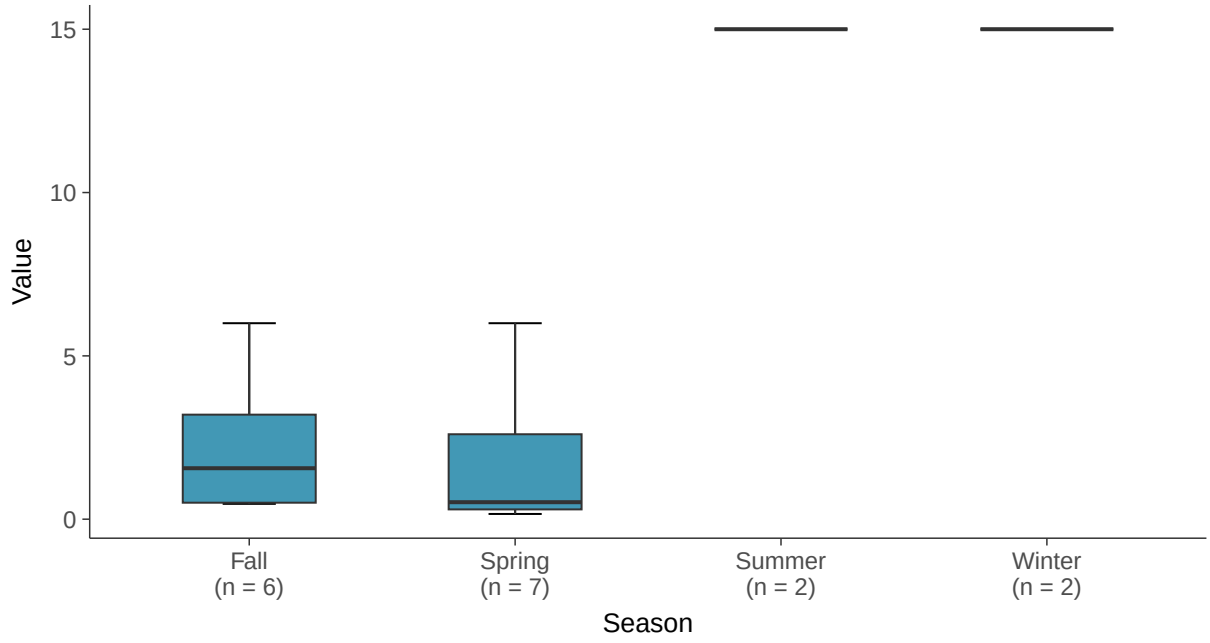
**Boxplot**

Cobalt, MW-17004 (ug/L)



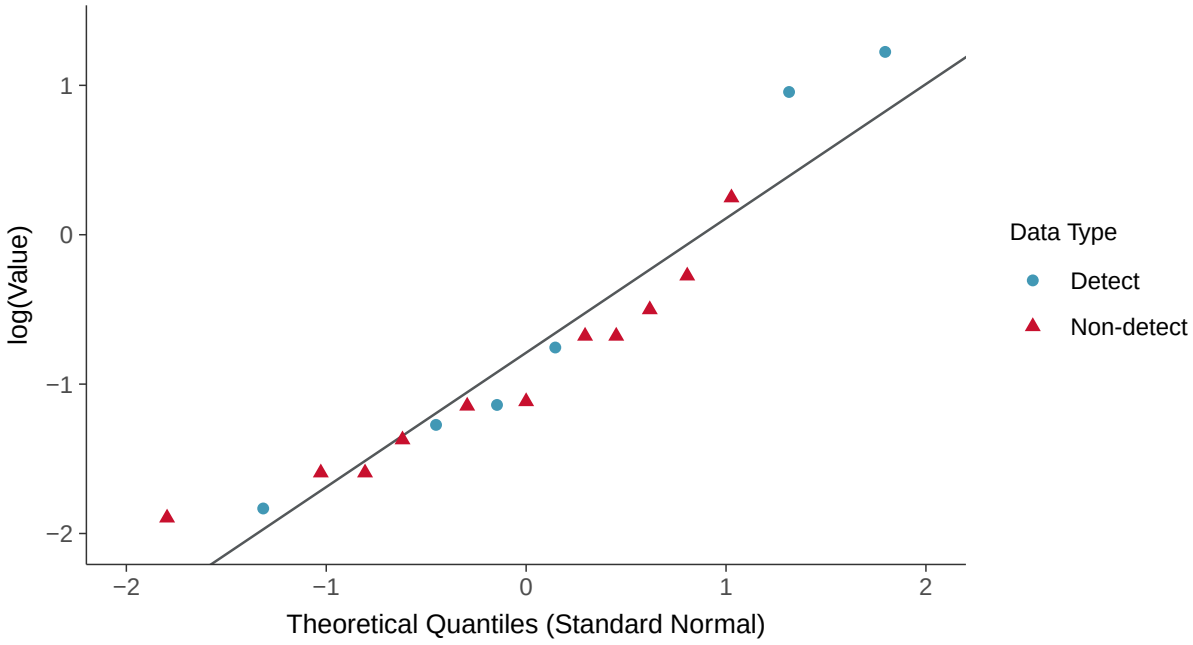

**Boxplot by Season**

Cobalt, MW-17004 (ug/L)



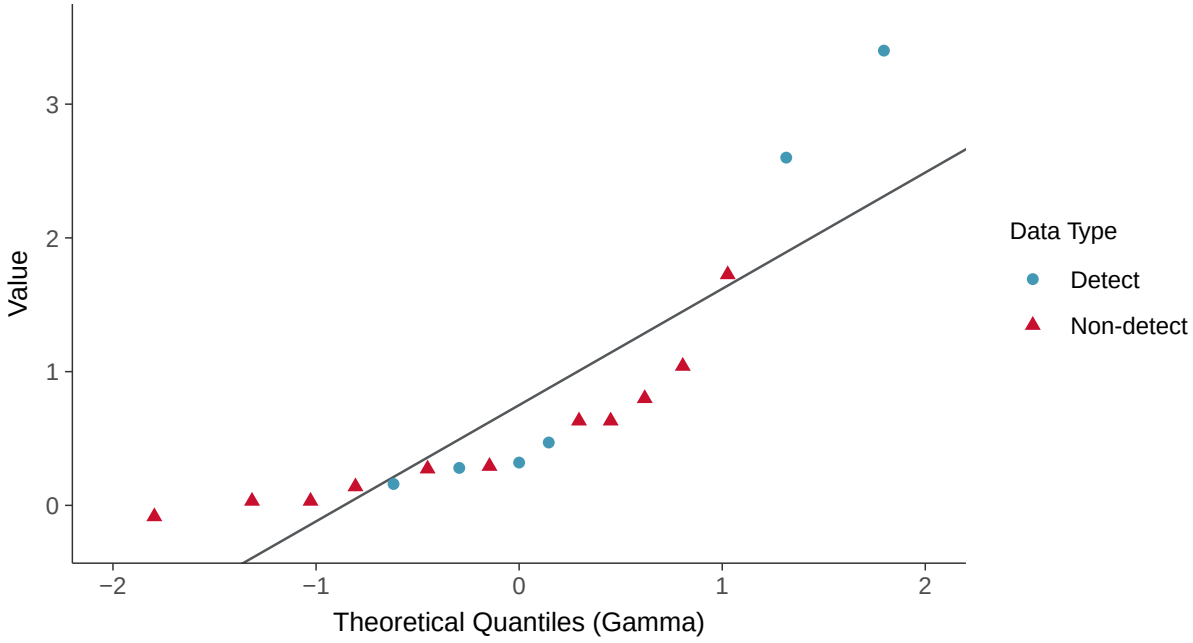
**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17004 (ug/L)



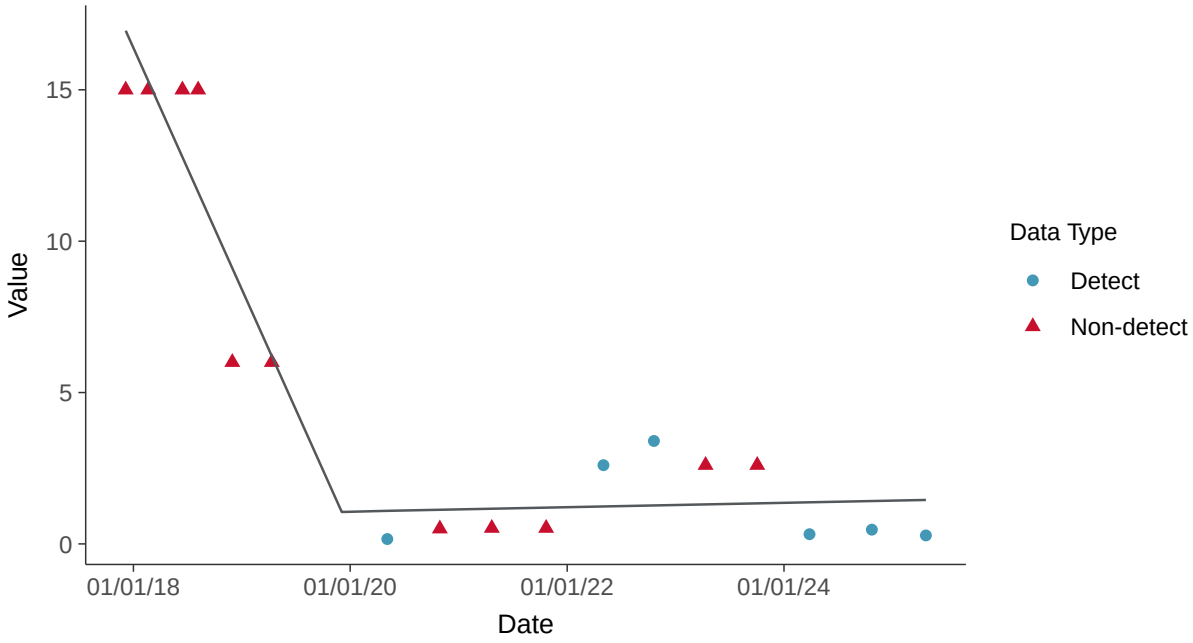

**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17004 (ug/L)



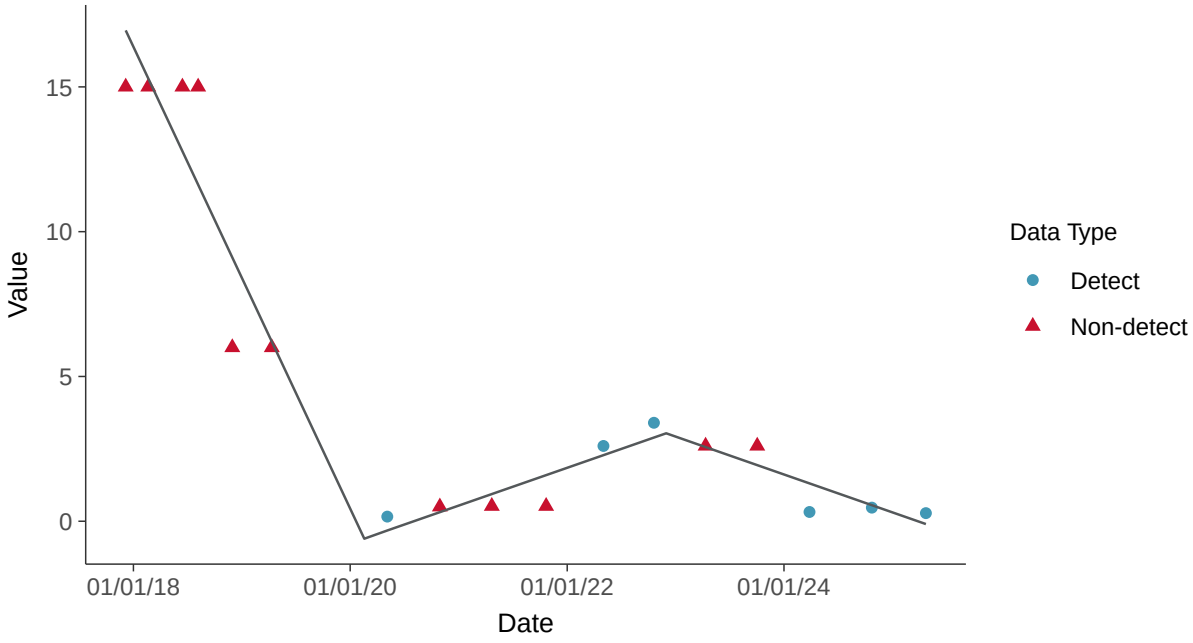
**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17004 (ug/L)



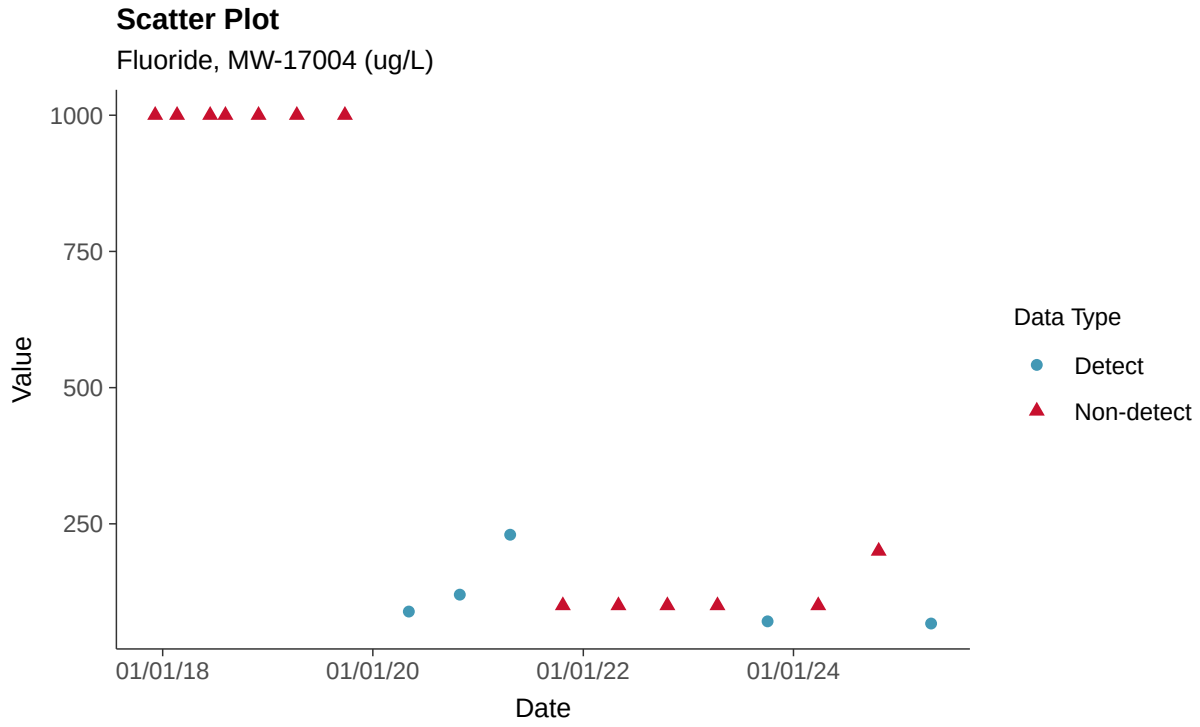

**Trend Regression: Piecewise Linear-Linear-Linear**

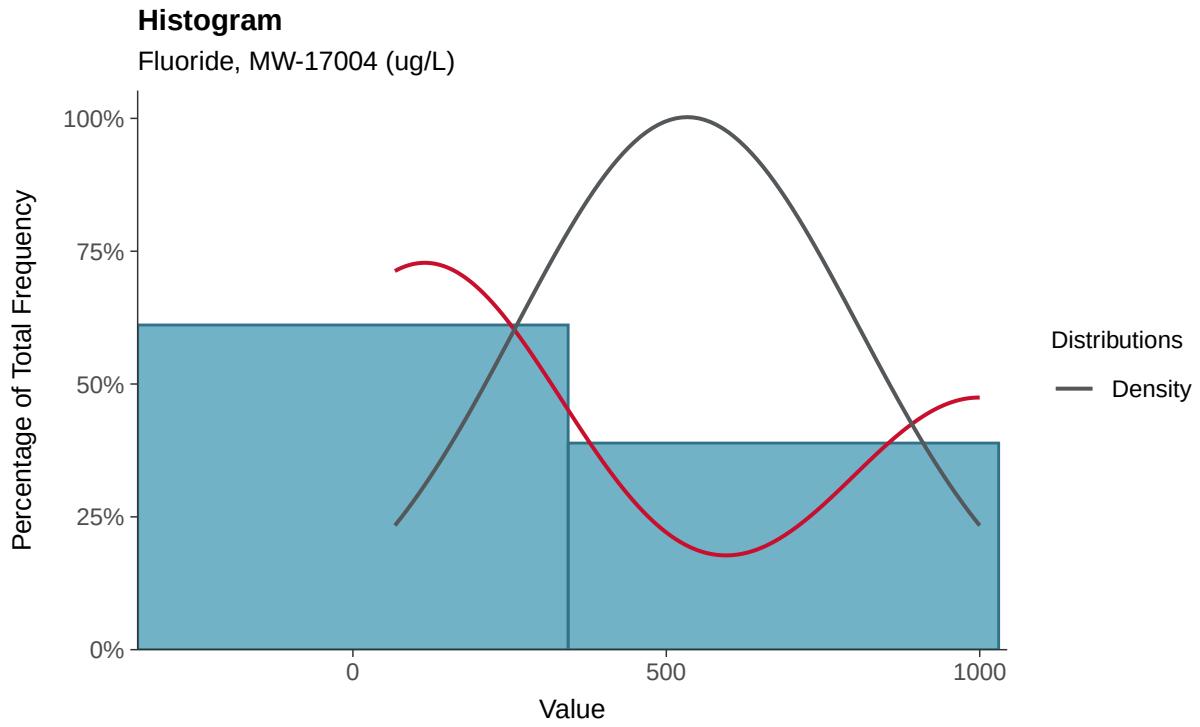
Cobalt, MW-17004 (ug/L)



# Appendix IV: Fluoride, MW-17004

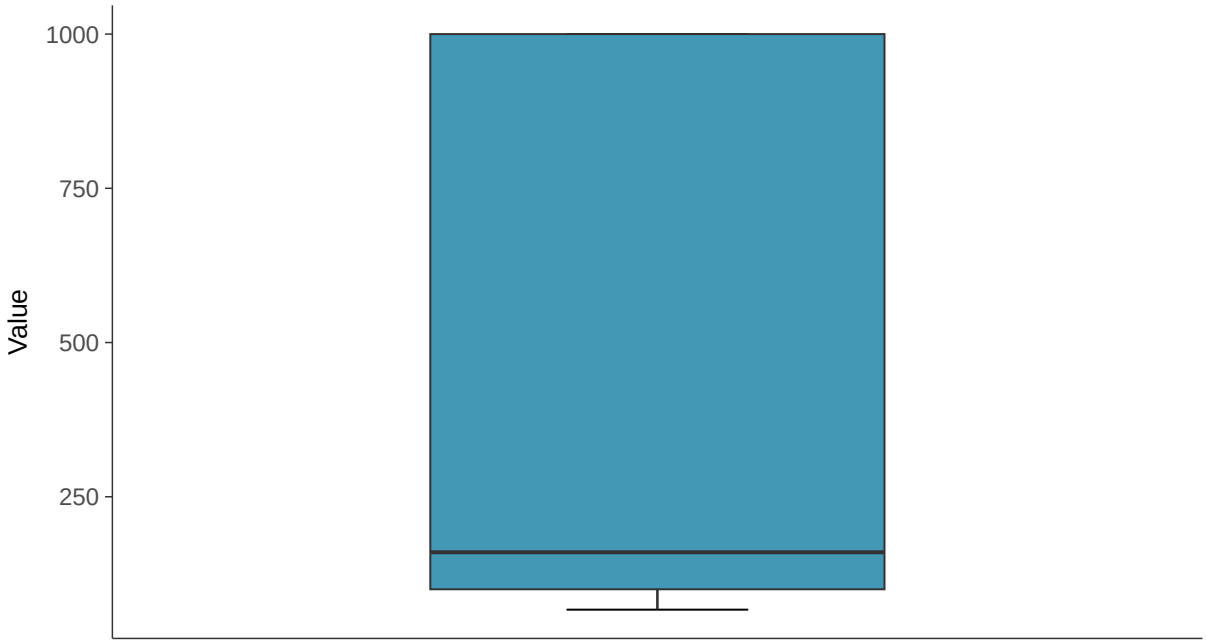
ID: 17_2_114



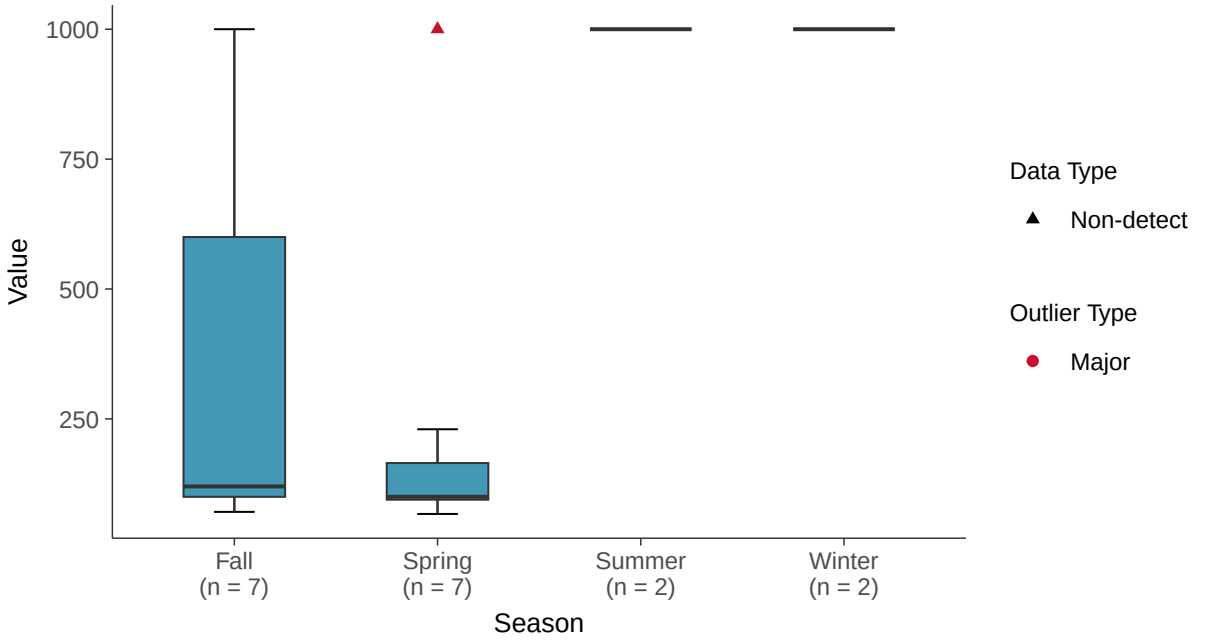
**Boxplot**

Fluoride, MW-17004 (ug/L)



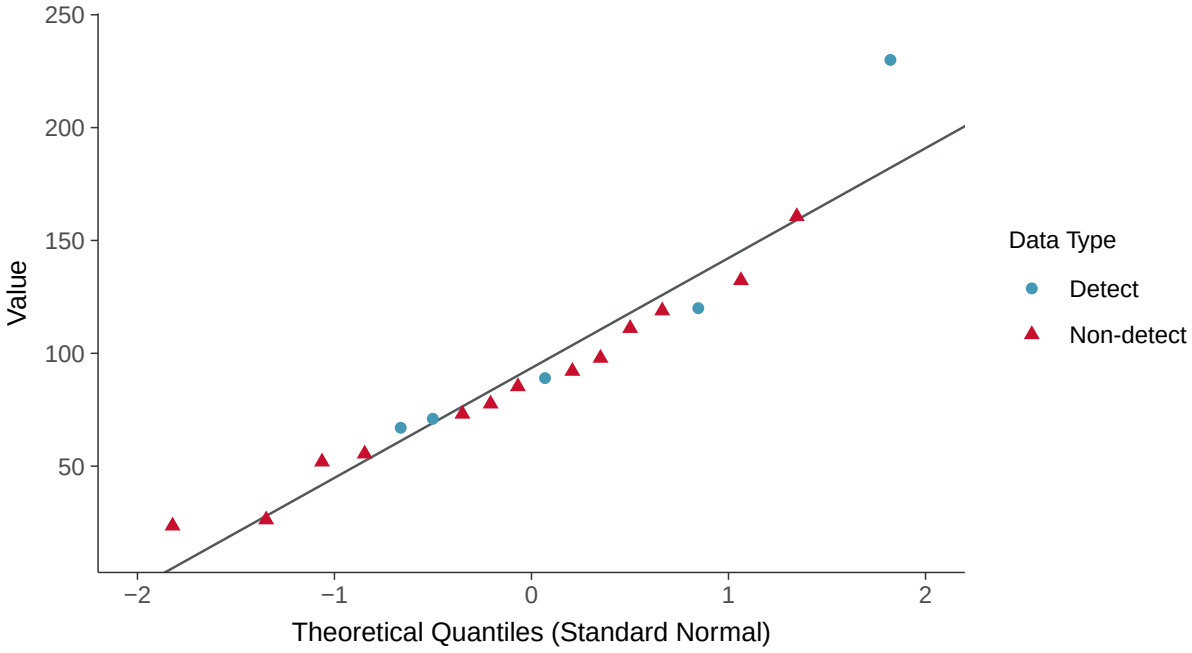

**Boxplot by Season**

Fluoride, MW-17004 (ug/L)



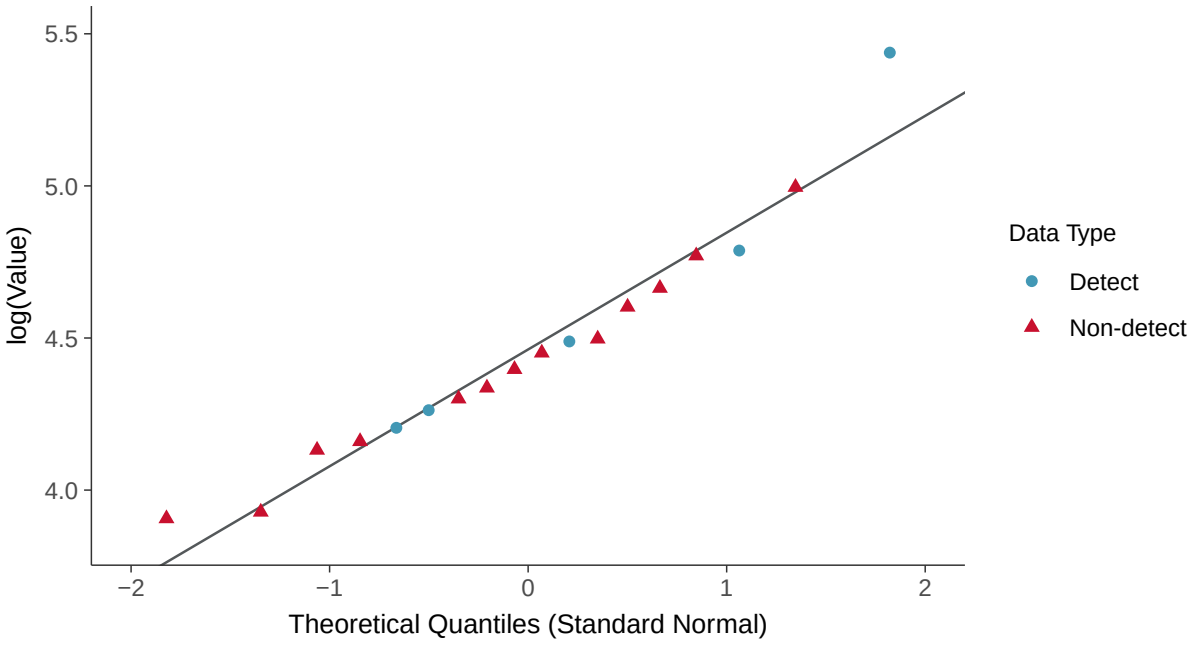
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17004 (ug/L)



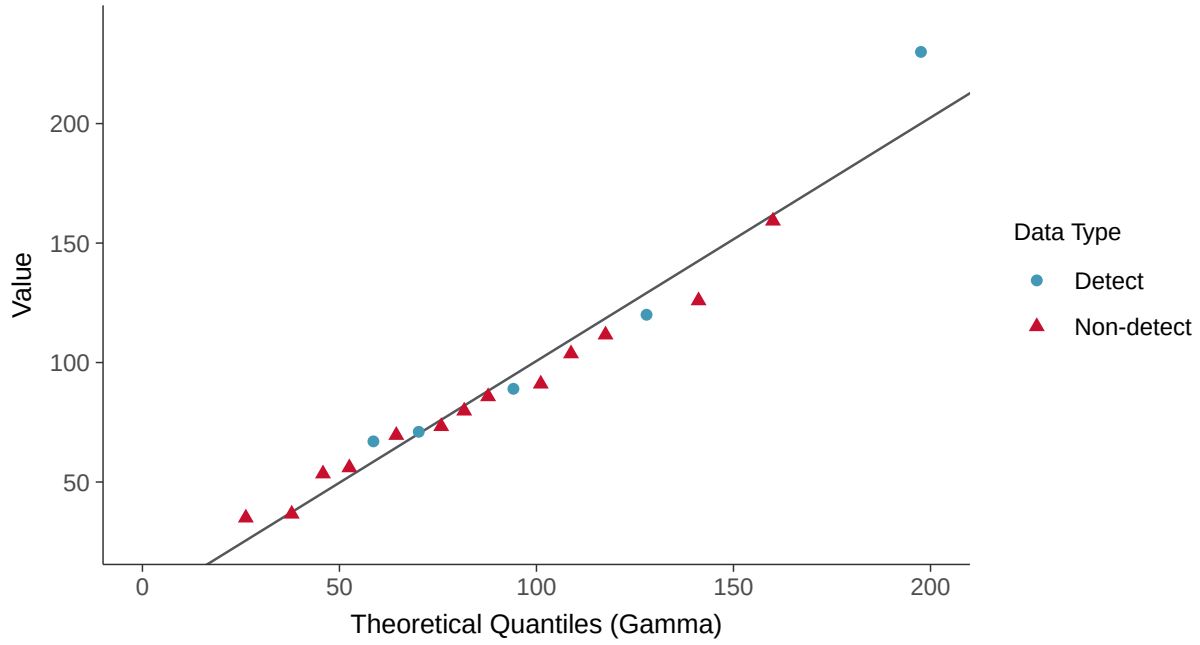

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17004 (ug/L)



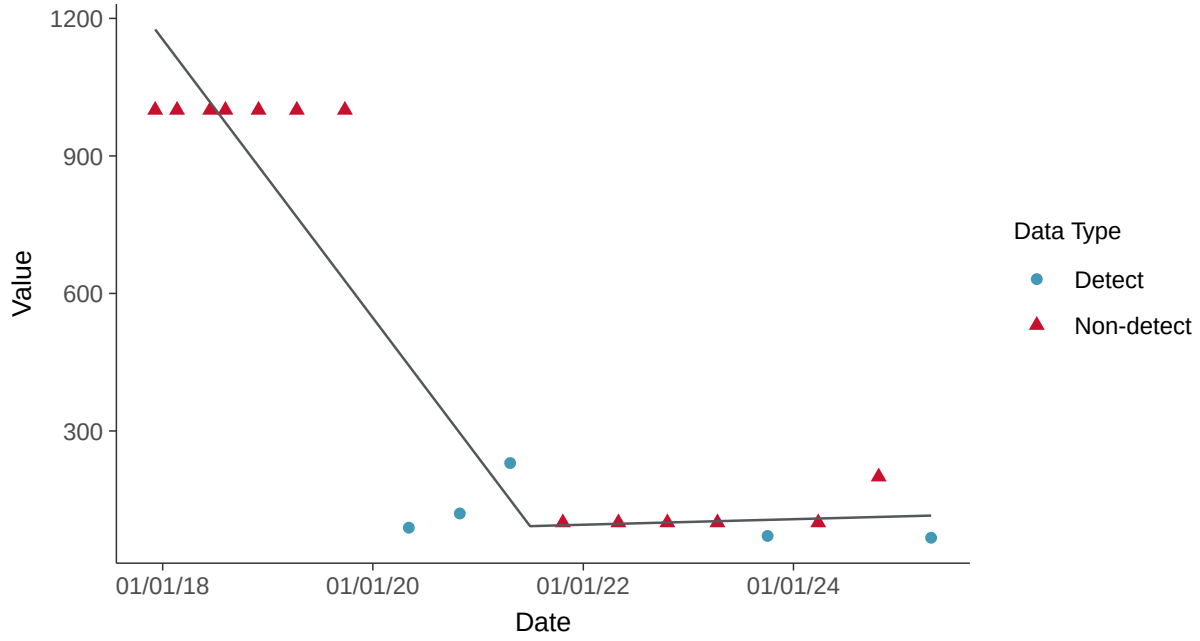
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17004 (ug/L)



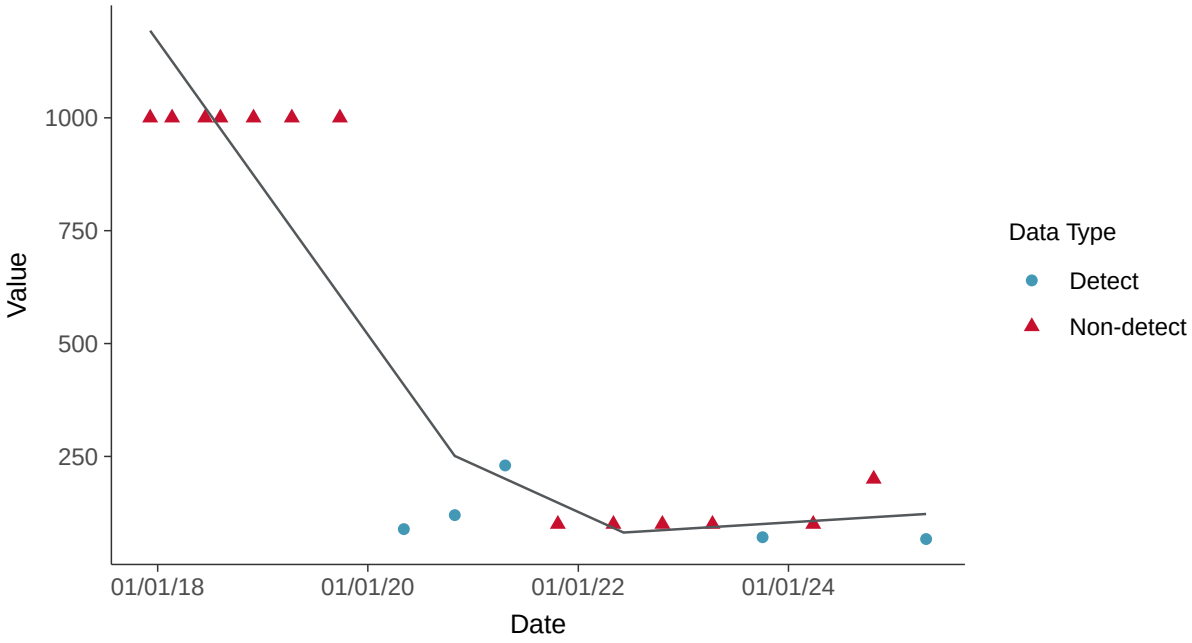

**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-17004 (ug/L)



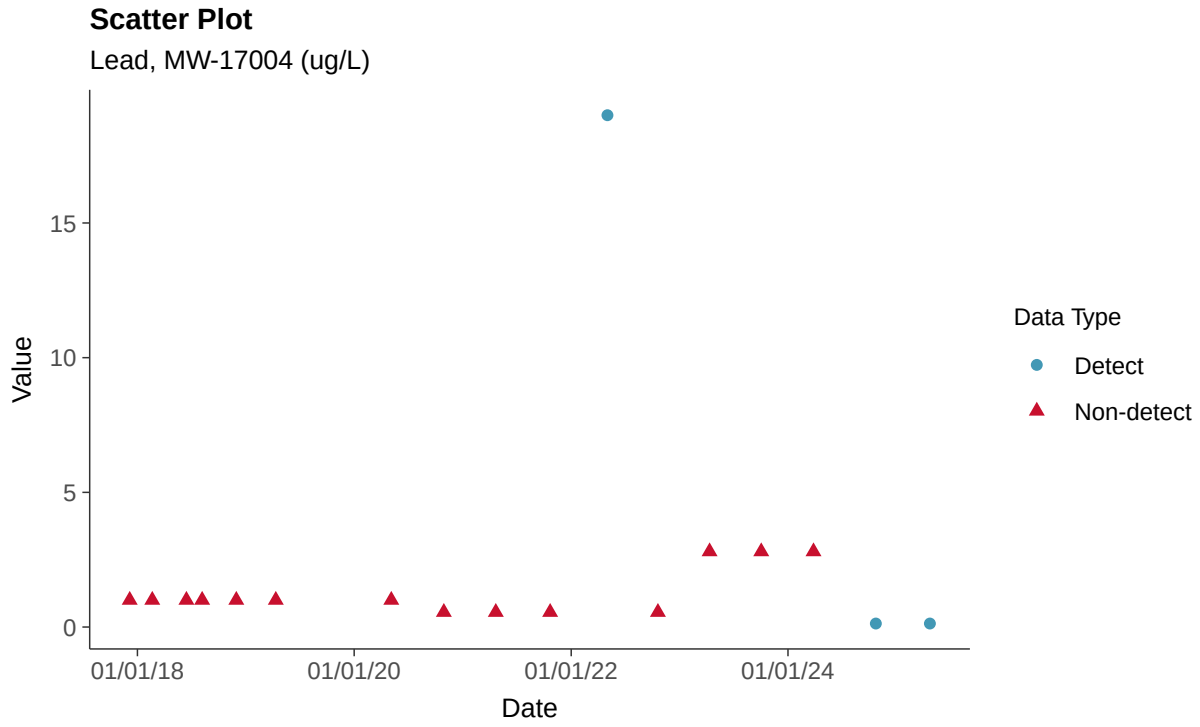
**Trend Regression: Piecewise Linear-Linear-Linear**

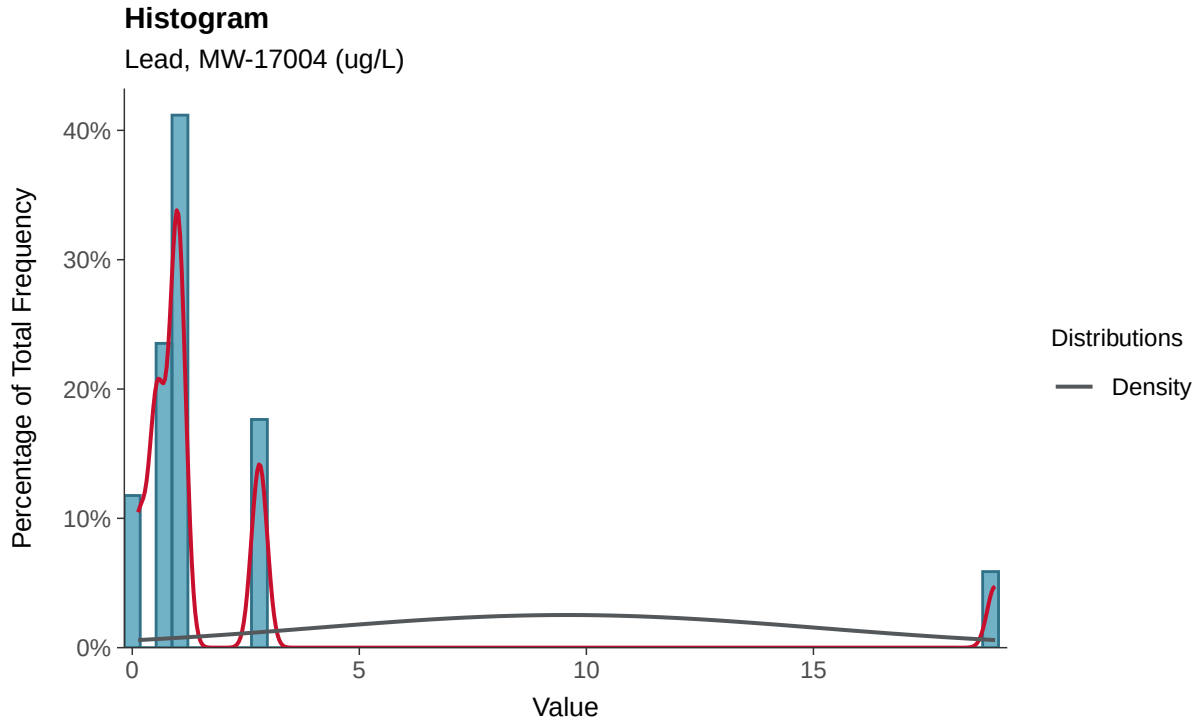
Fluoride, MW-17004 (ug/L)



## Appendix IV: Lead, MW-17004

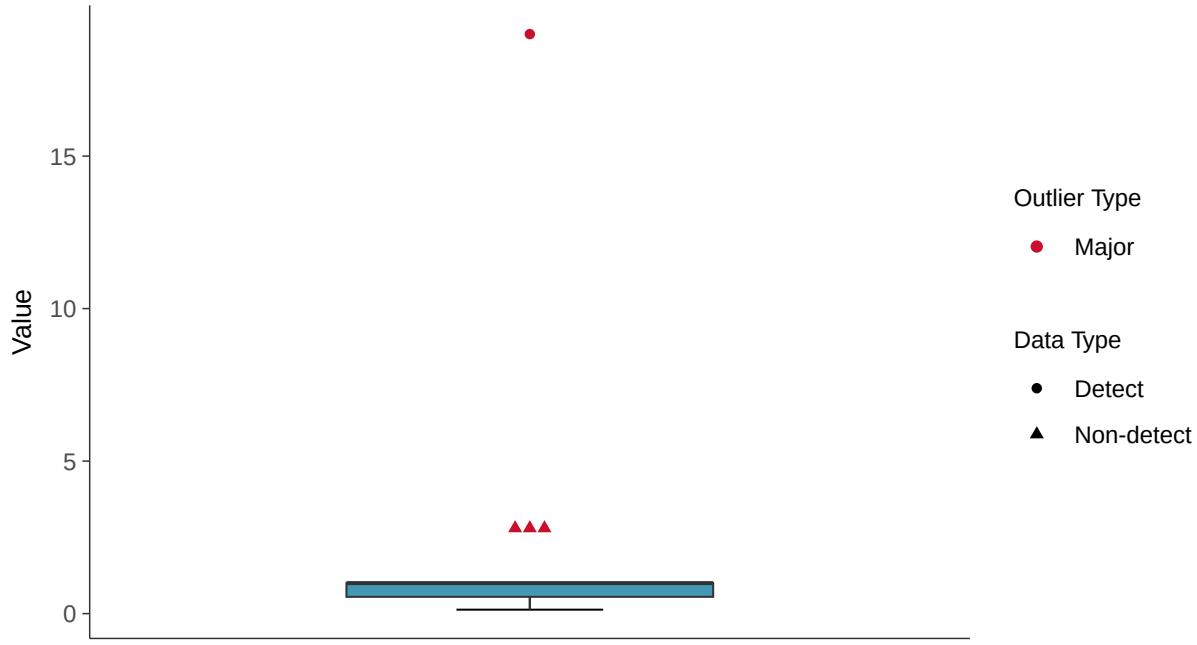
ID: 17_2_116



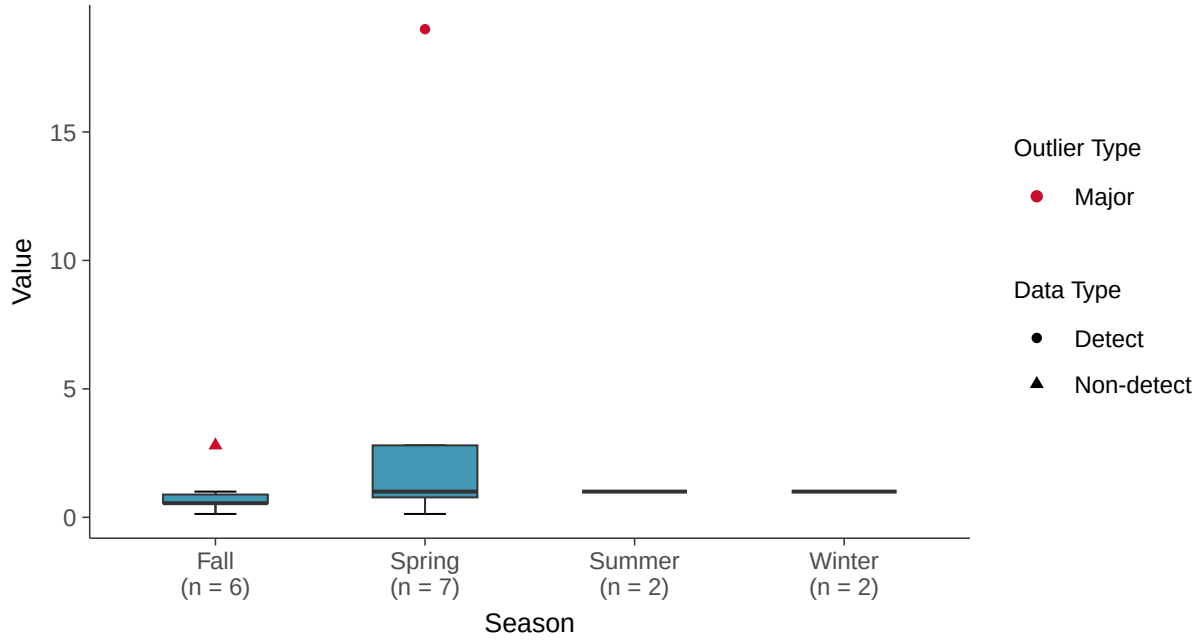
## Boxplot

Lead, MW-17004 (ug/L)



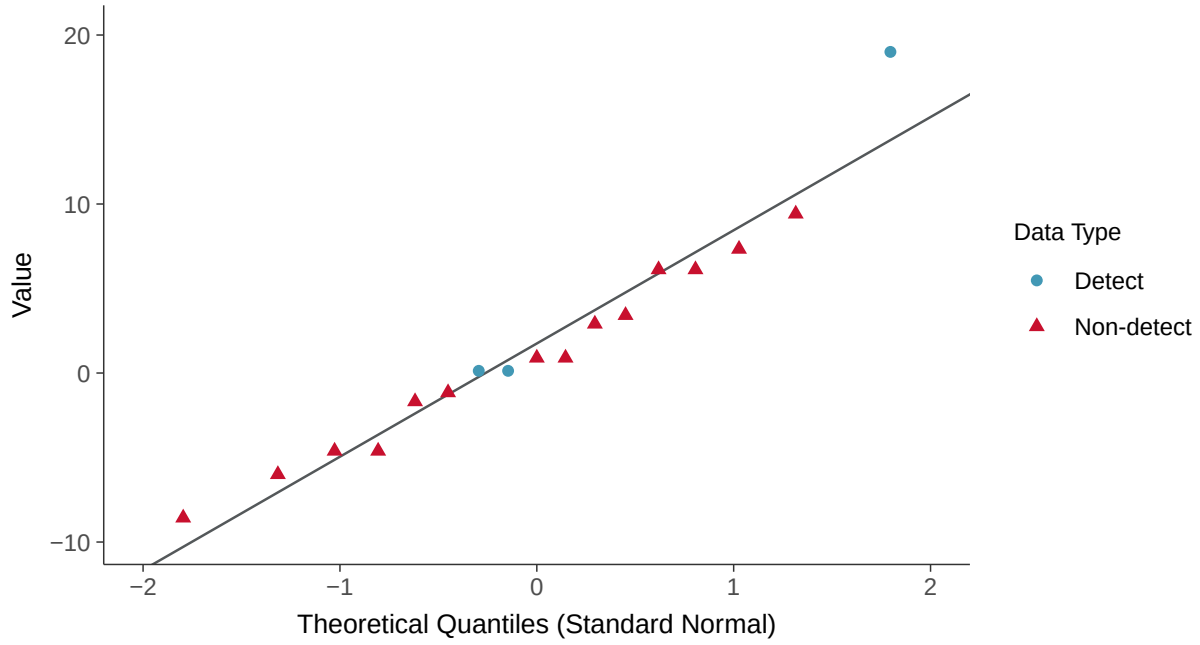

## Boxplot by Season

Lead, MW-17004 (ug/L)



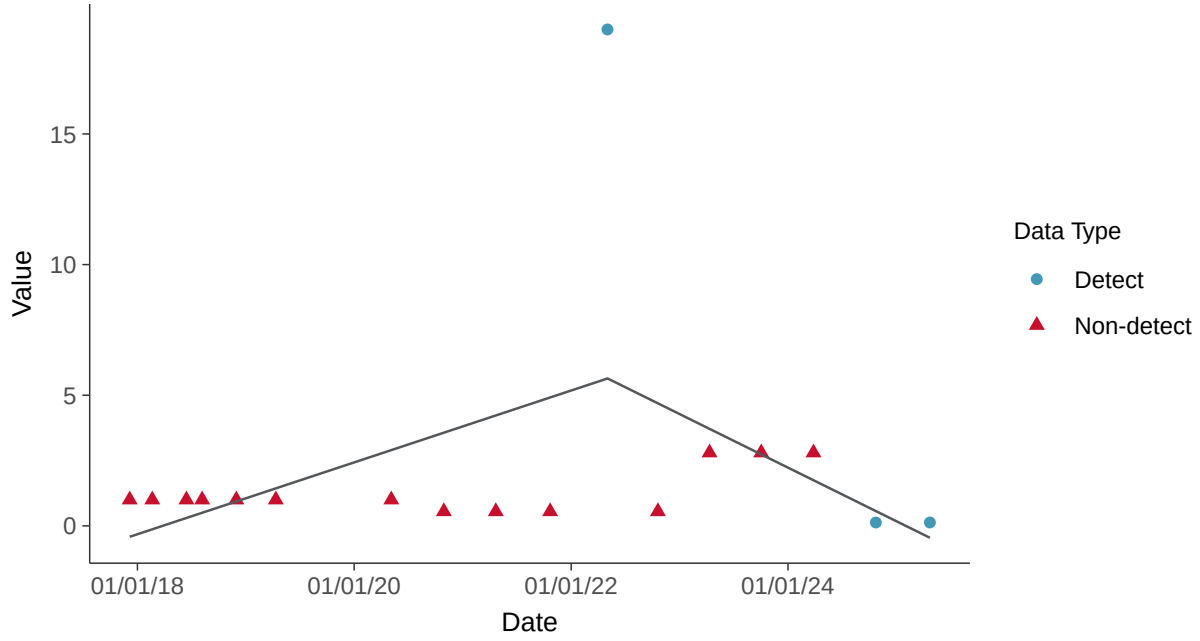
**Normal Q-Q plot using ROS Imputed Estimates**

Lead, MW-17004 (ug/L)



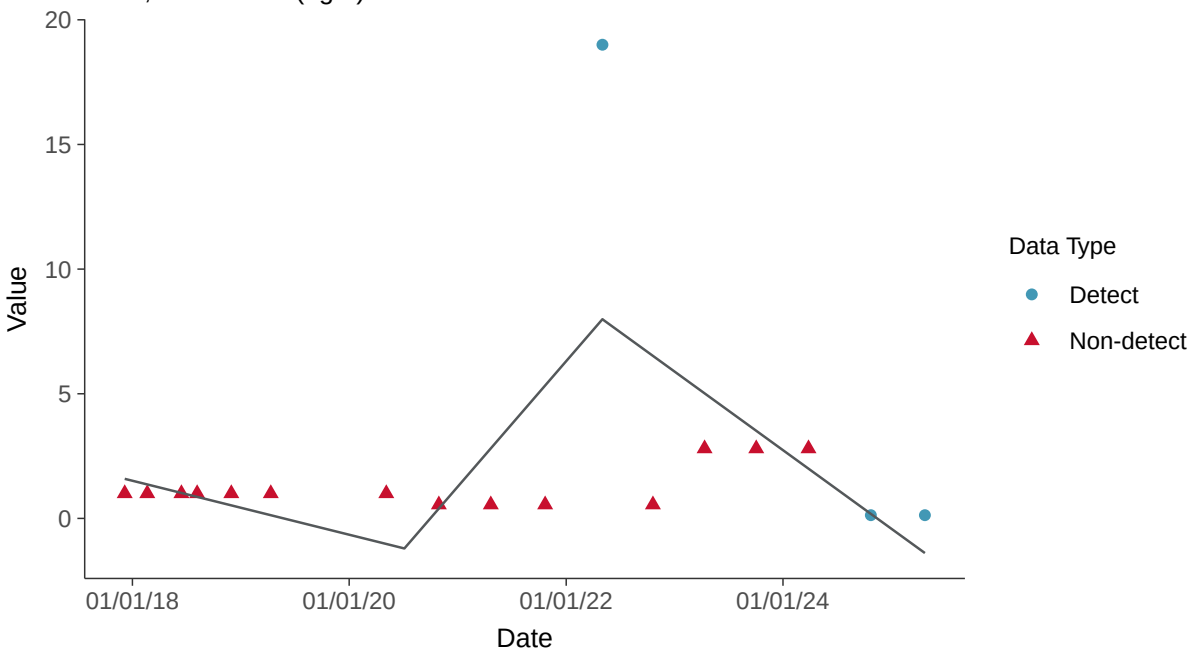

**Trend Regression: Piecewise Linear-Linear**

Lead, MW-17004 (ug/L)



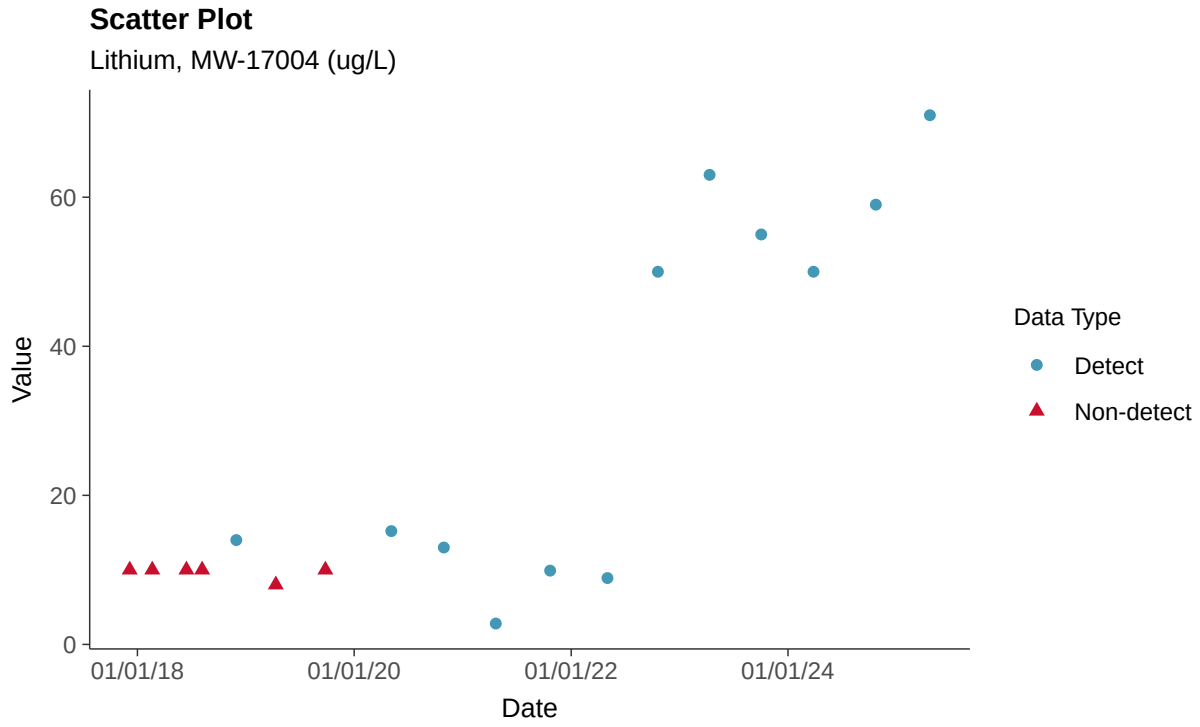
**Trend Regression: Piecewise Linear-Linear-Linear**

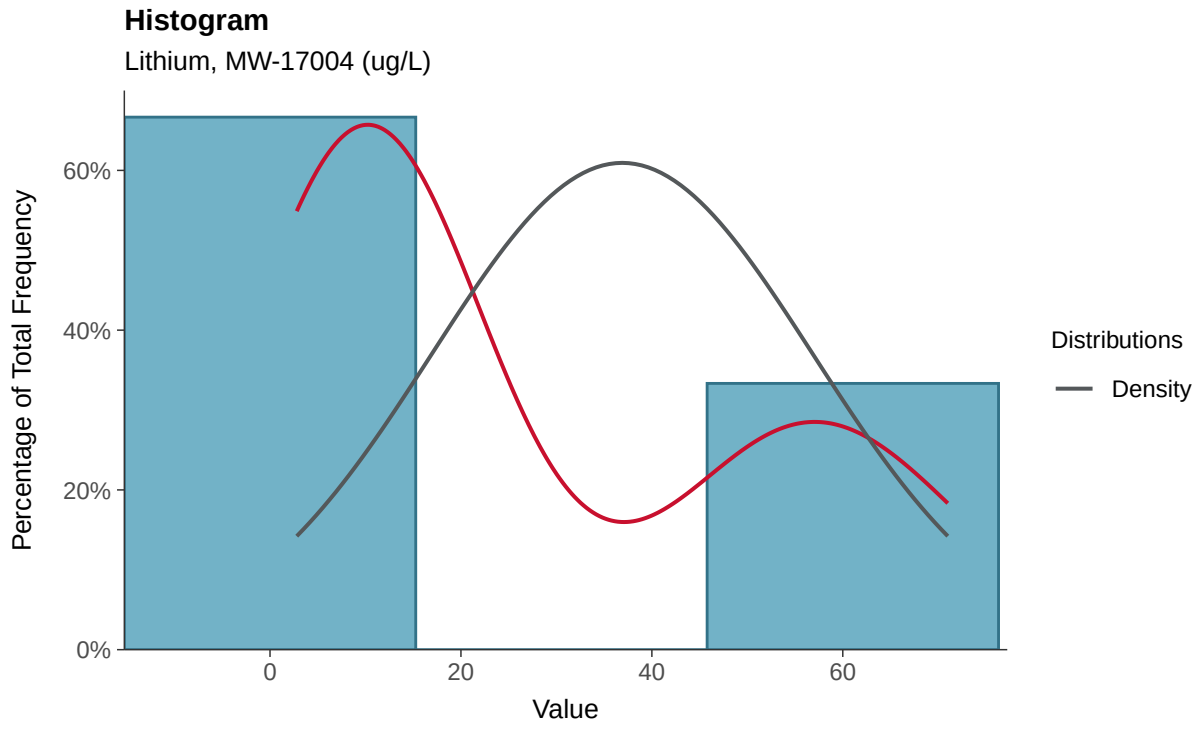
Lead, MW-17004 (ug/L)



## Appendix IV: Lithium, MW-17004

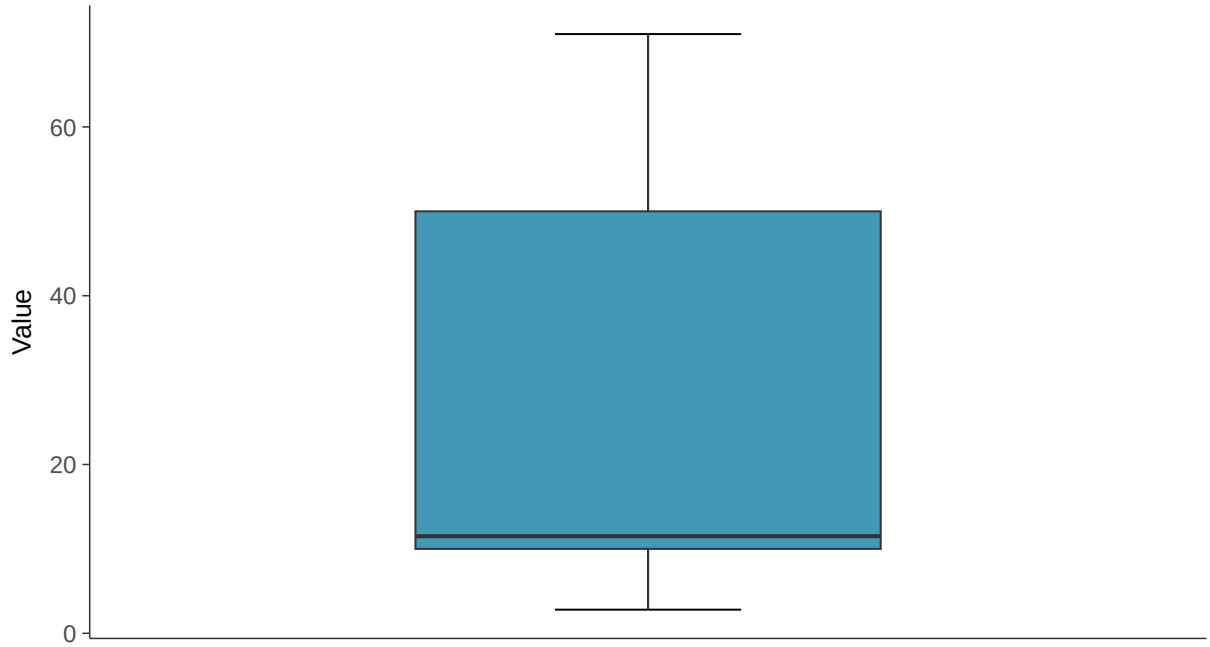
ID: 17_2_117



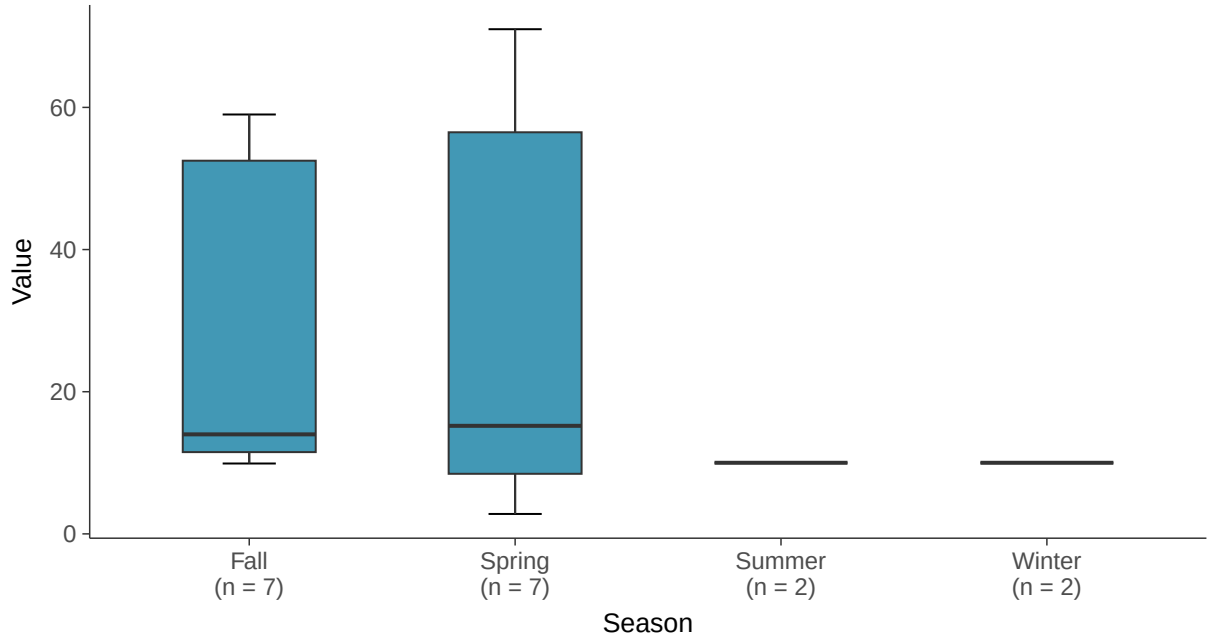
**Boxplot**

Lithium, MW-17004 (ug/L)



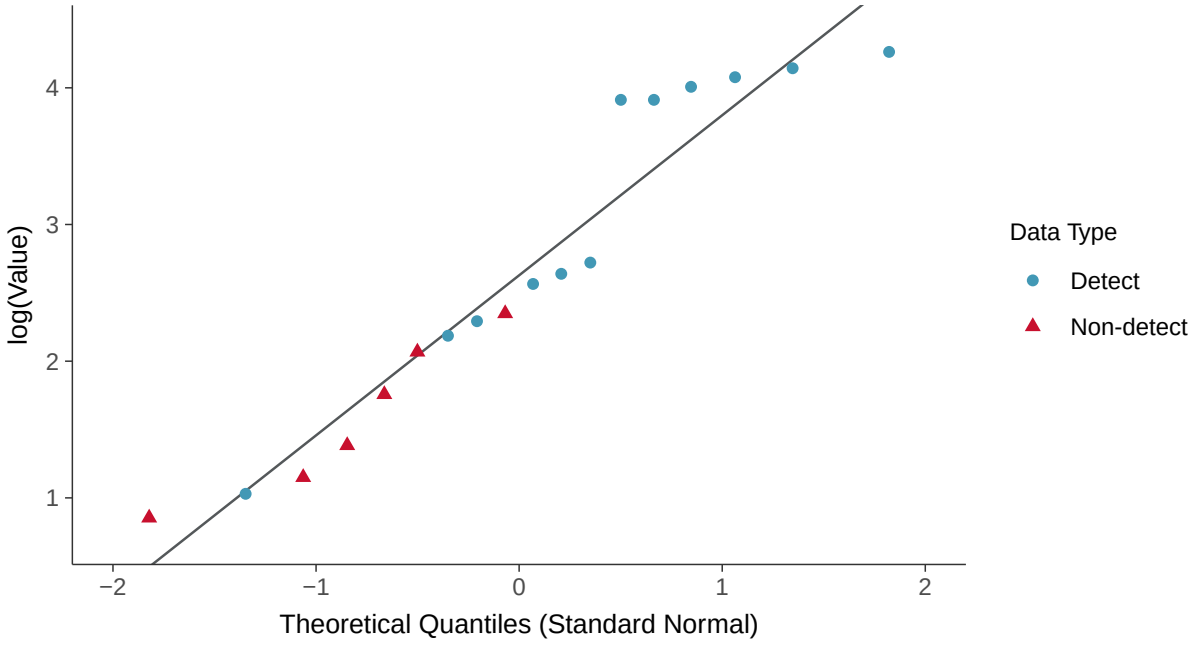

**Boxplot by Season**

Lithium, MW-17004 (ug/L)



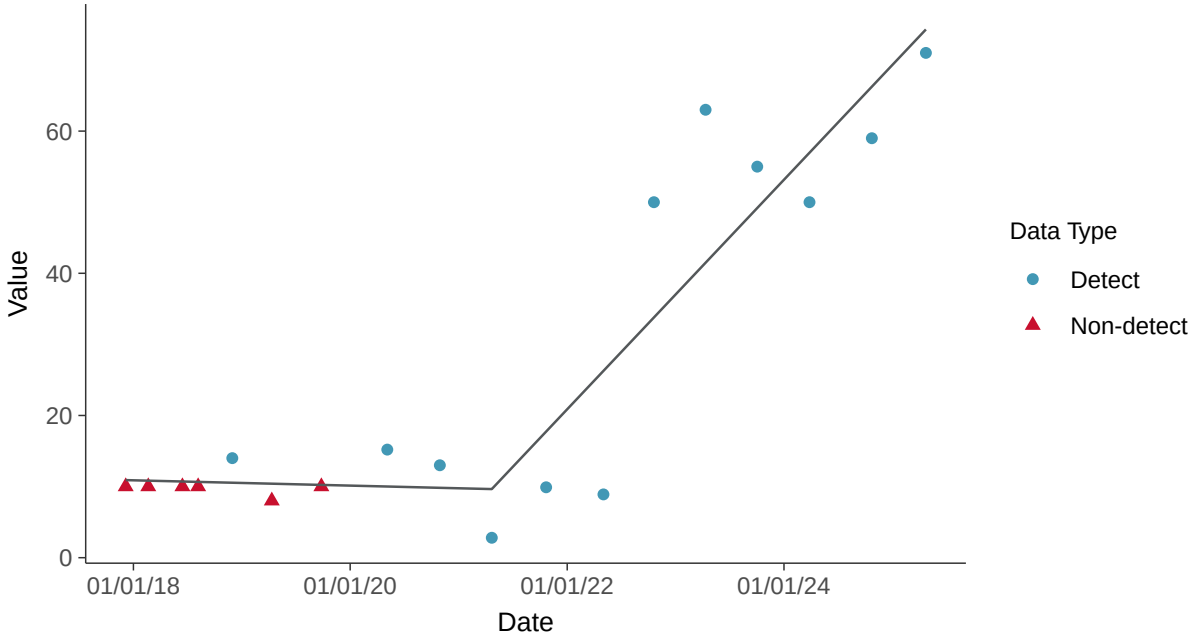
**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-17004 (ug/L)



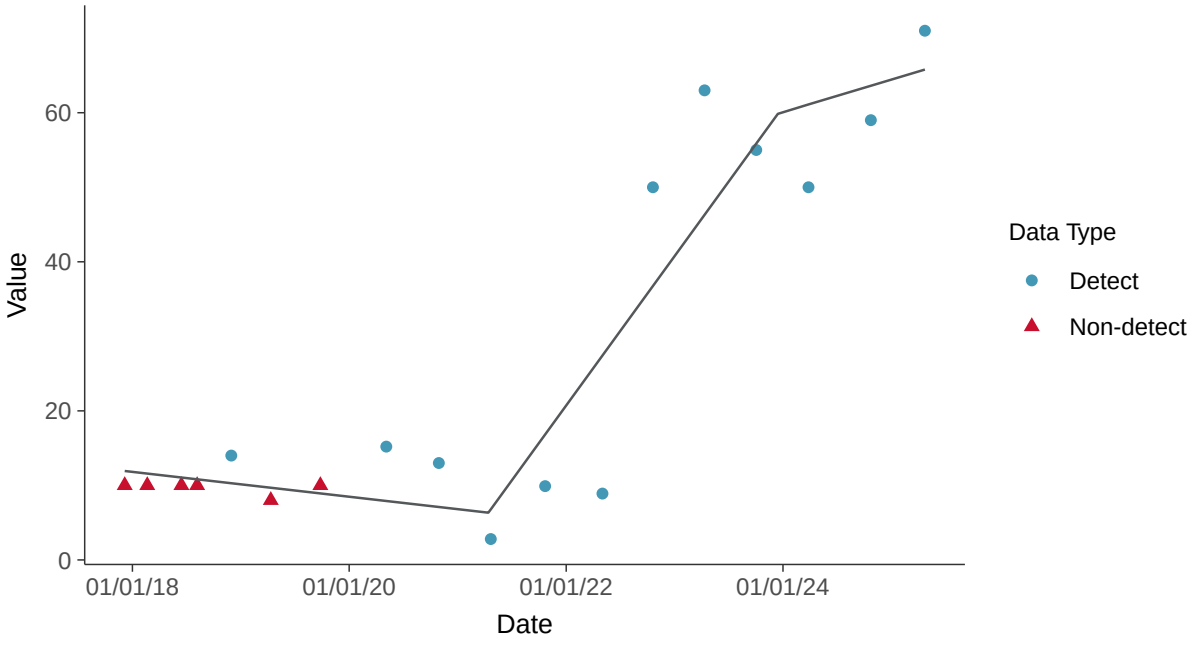

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-17004 (ug/L)



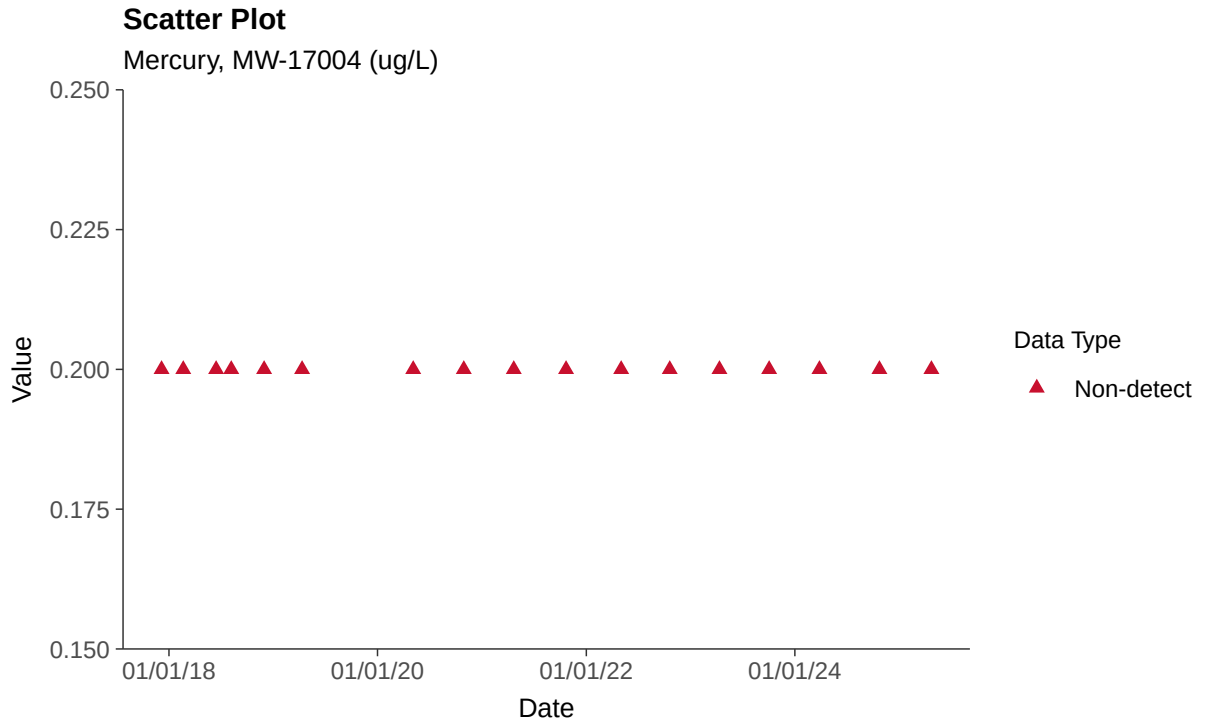
**Trend Regression: Piecewise Linear-Linear-Linear**

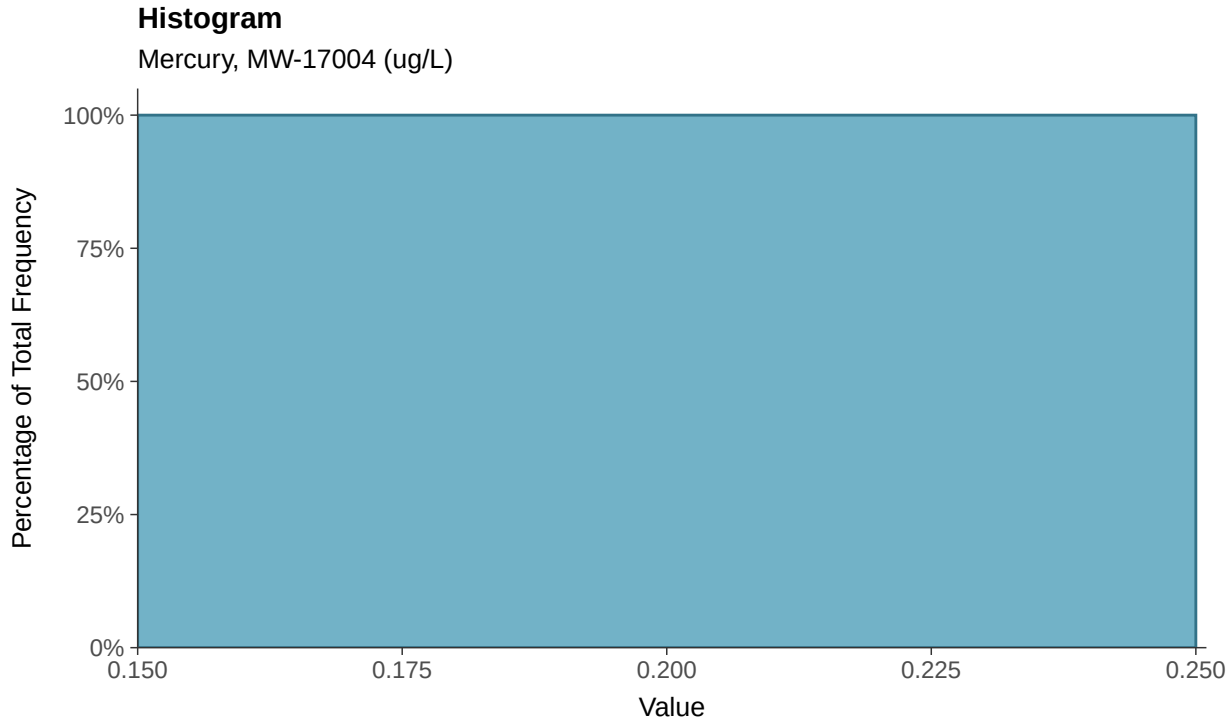
Lithium, MW-17004 (ug/L)



## Appendix IV: Mercury, MW-17004

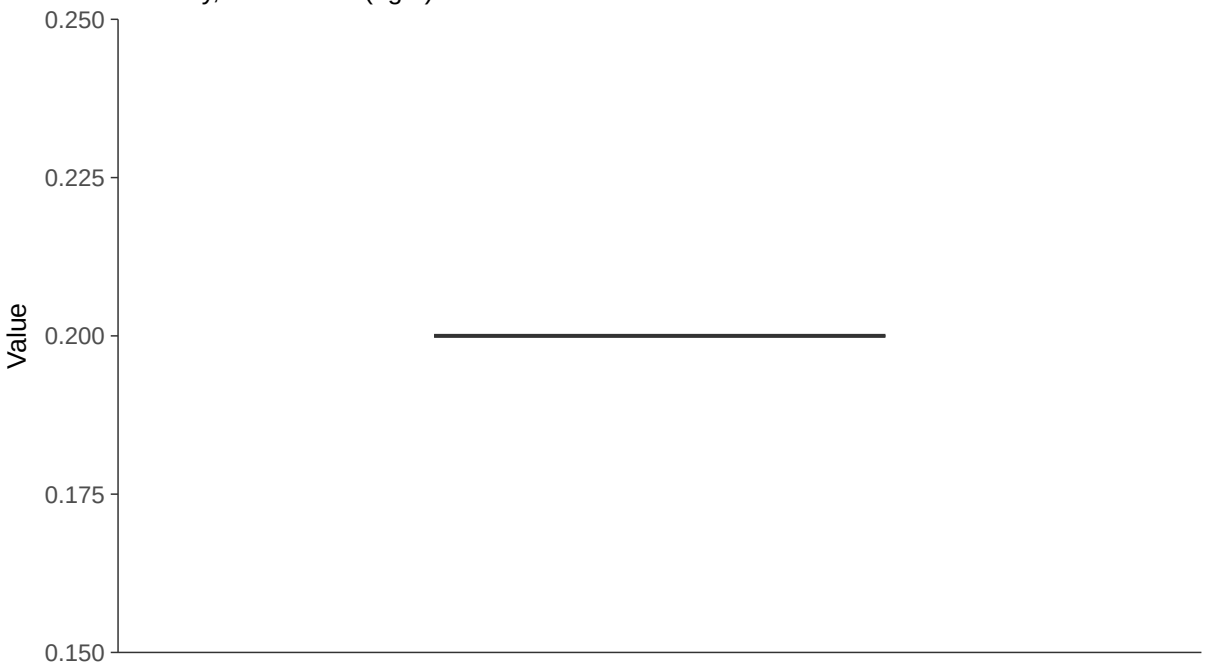
ID: 17_2_118



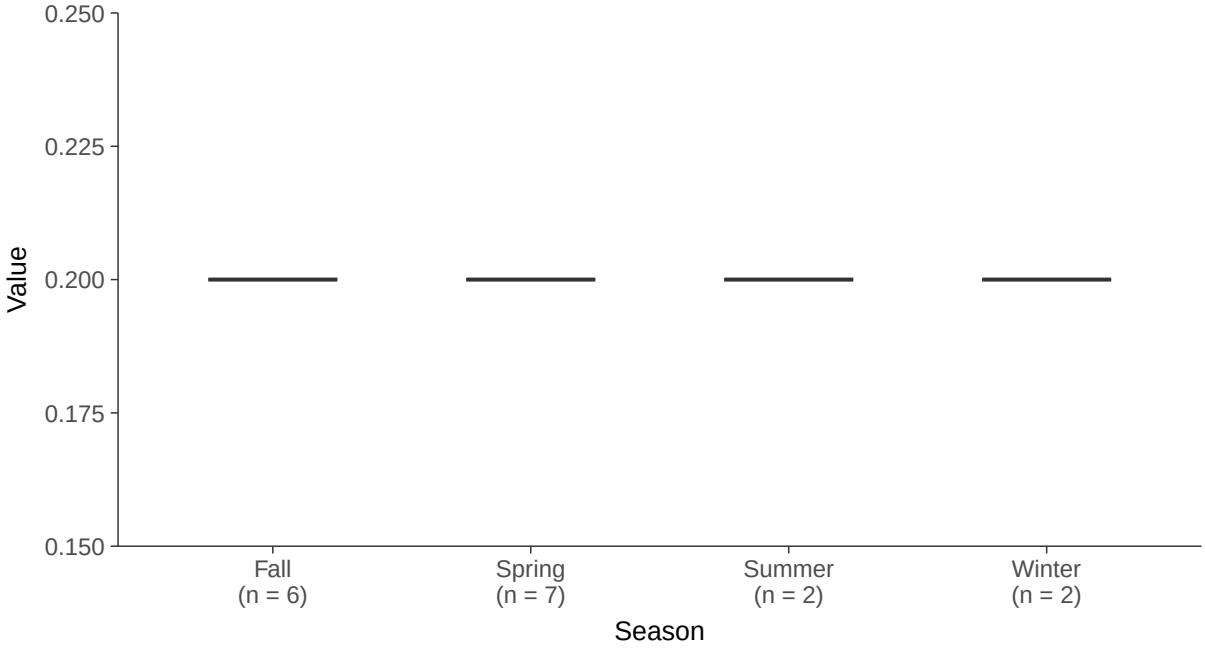
**Boxplot**

Mercury, MW-17004 (ug/L)



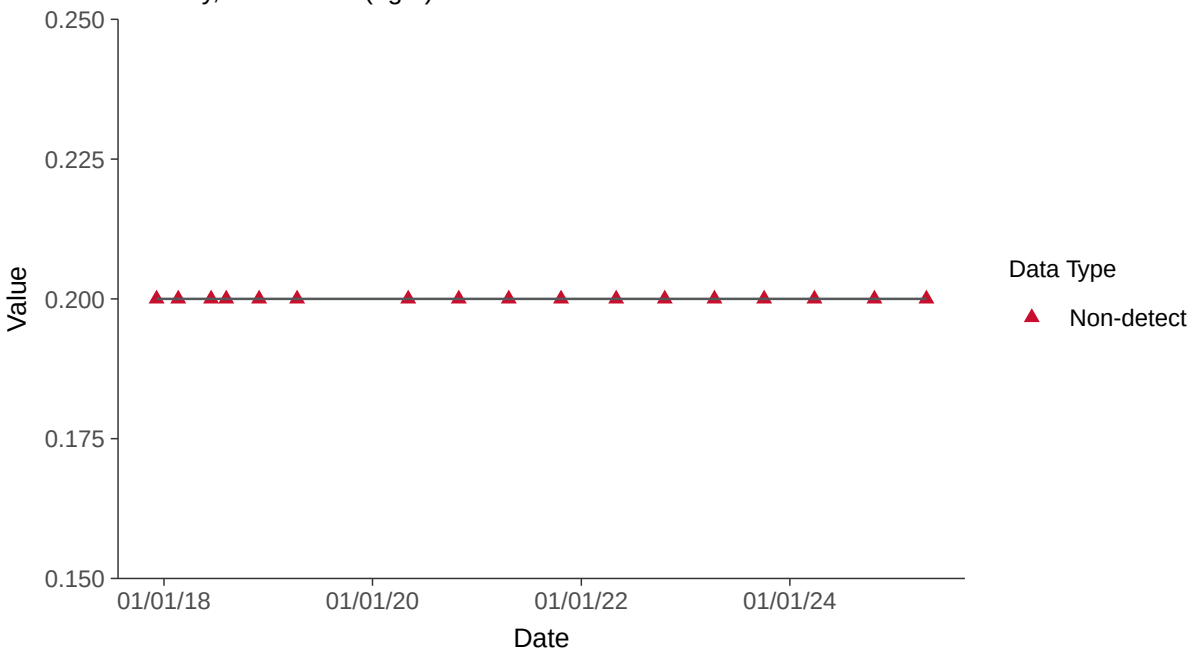

**Boxplot by Season**

Mercury, MW-17004 (ug/L)



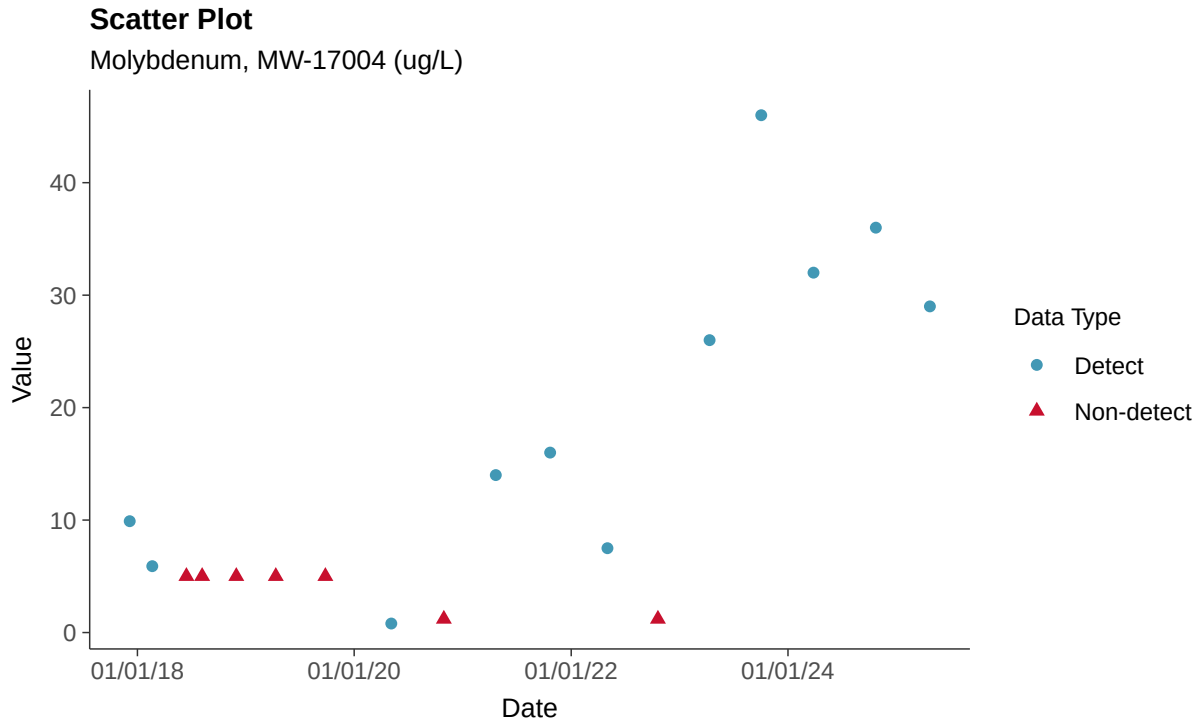
**Trend Regression: Piecewise Linear-Linear**

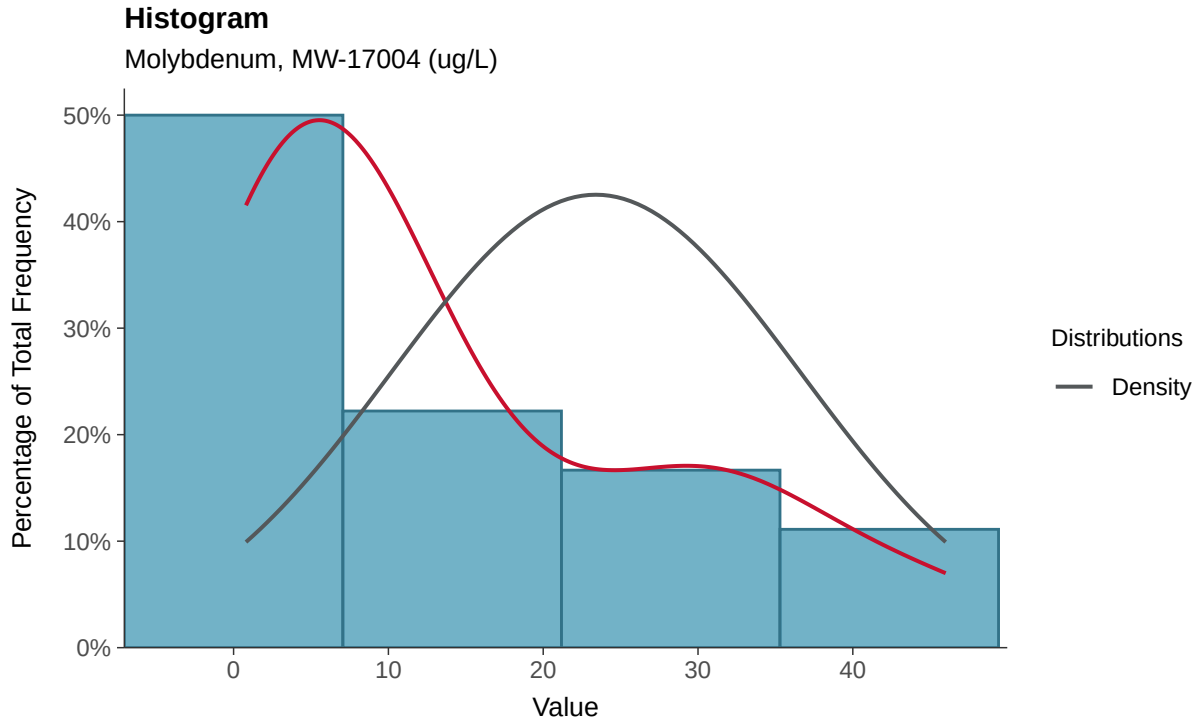
Mercury, MW-17004 (ug/L)



# Appendix IV: Molybdenum, MW-17004

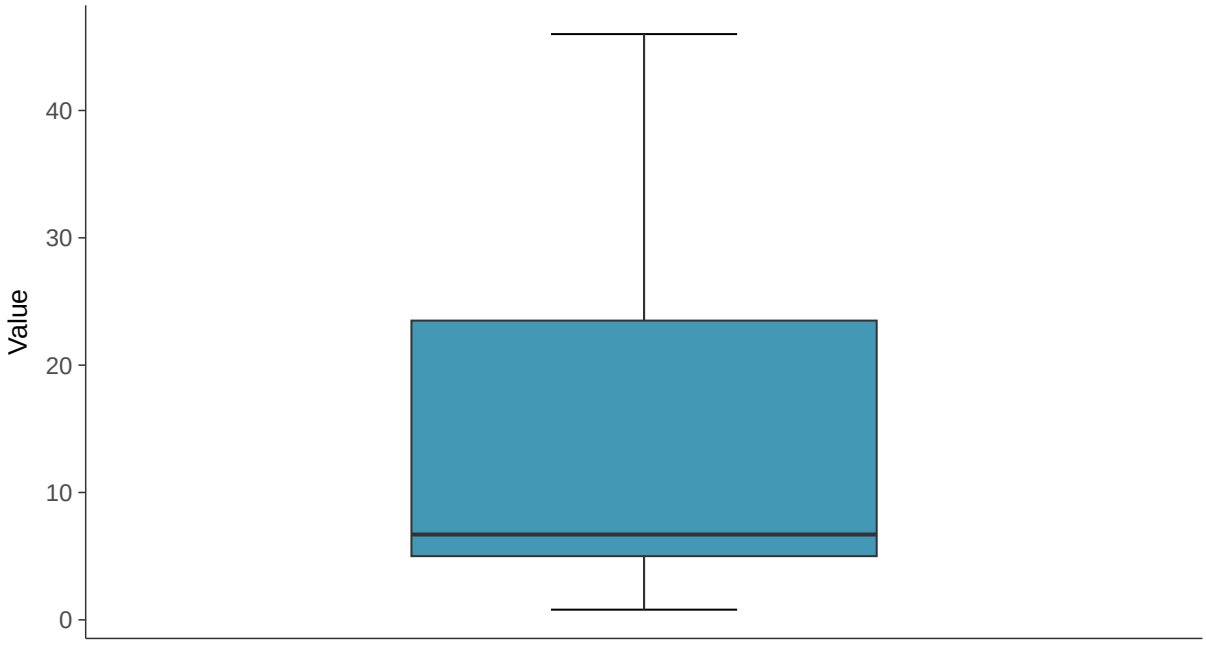
ID: 17_2_119



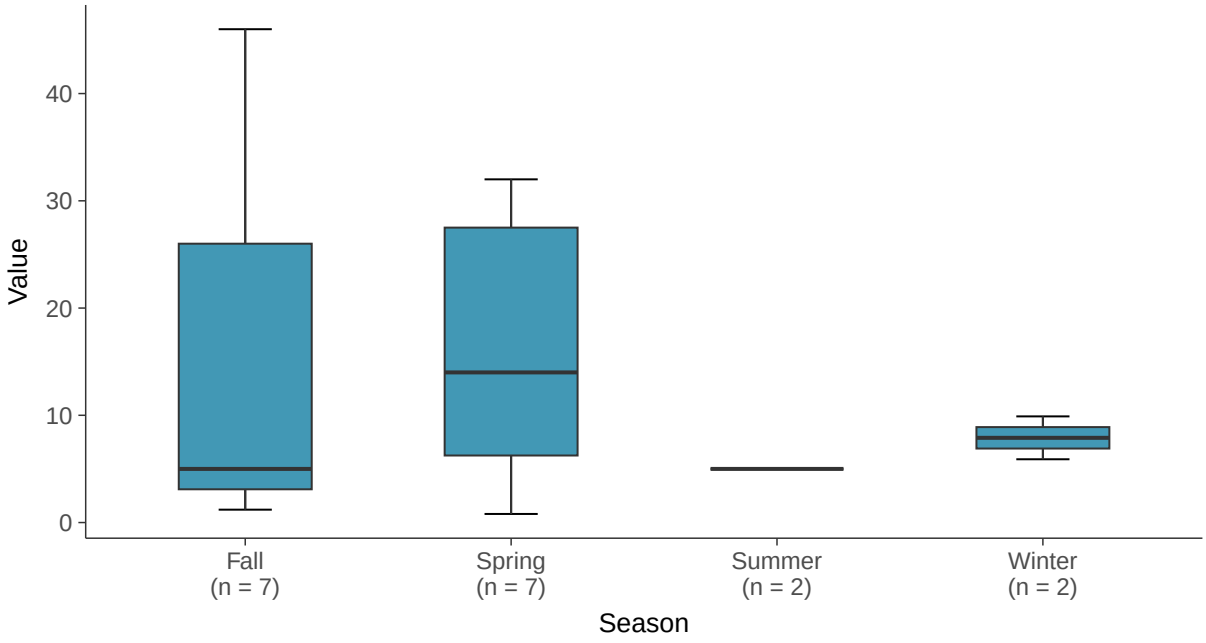
**Boxplot**

Molybdenum, MW-17004 (ug/L)



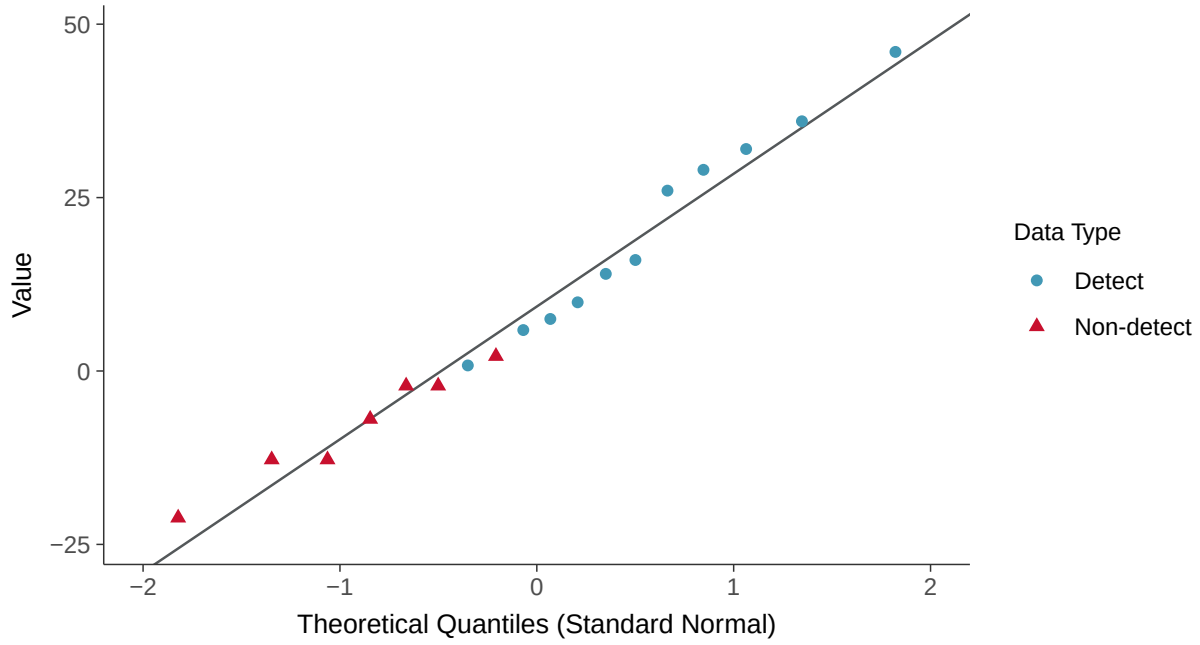

**Boxplot by Season**

Molybdenum, MW-17004 (ug/L)



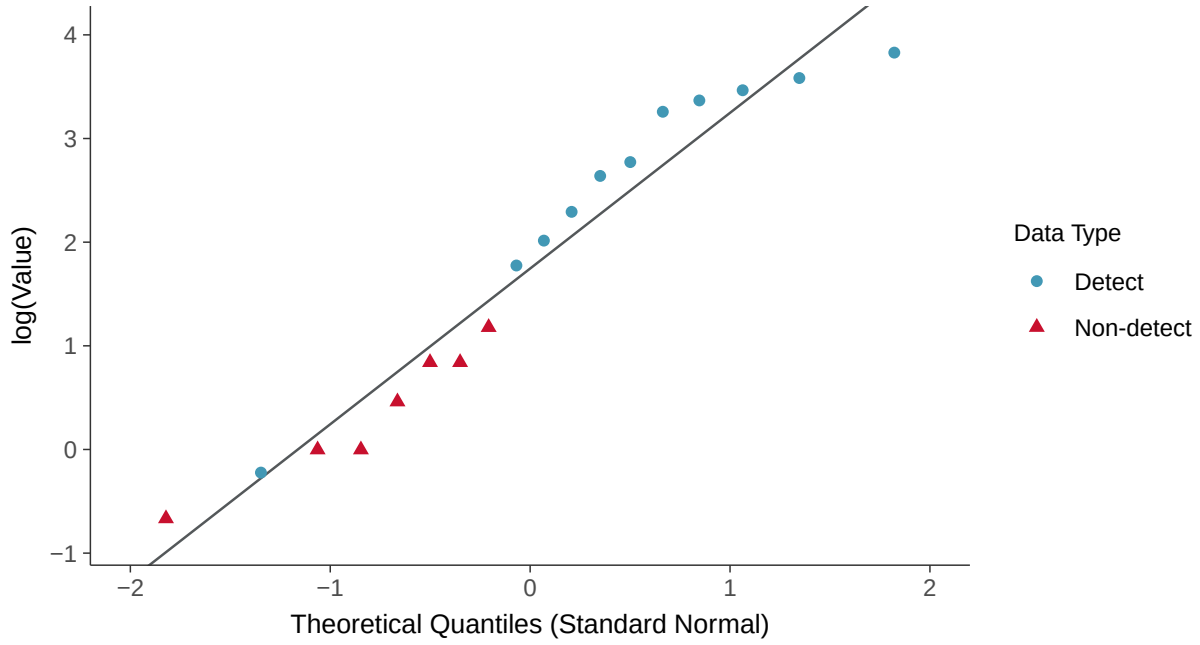
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17004 (ug/L)



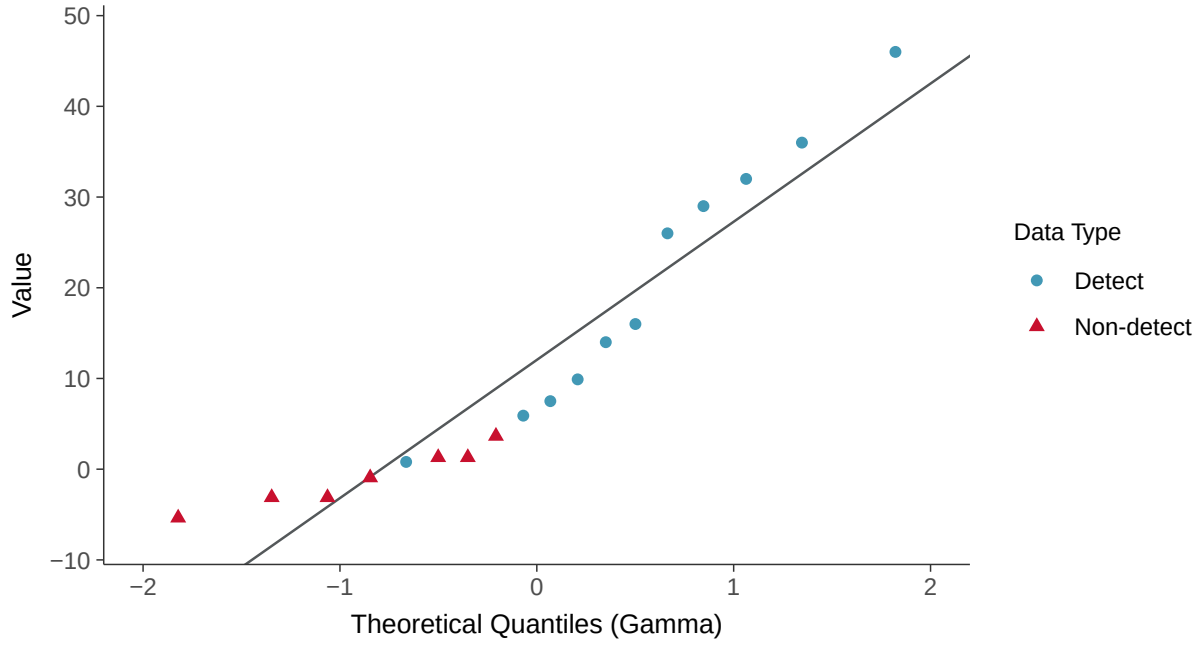

**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17004 (ug/L)



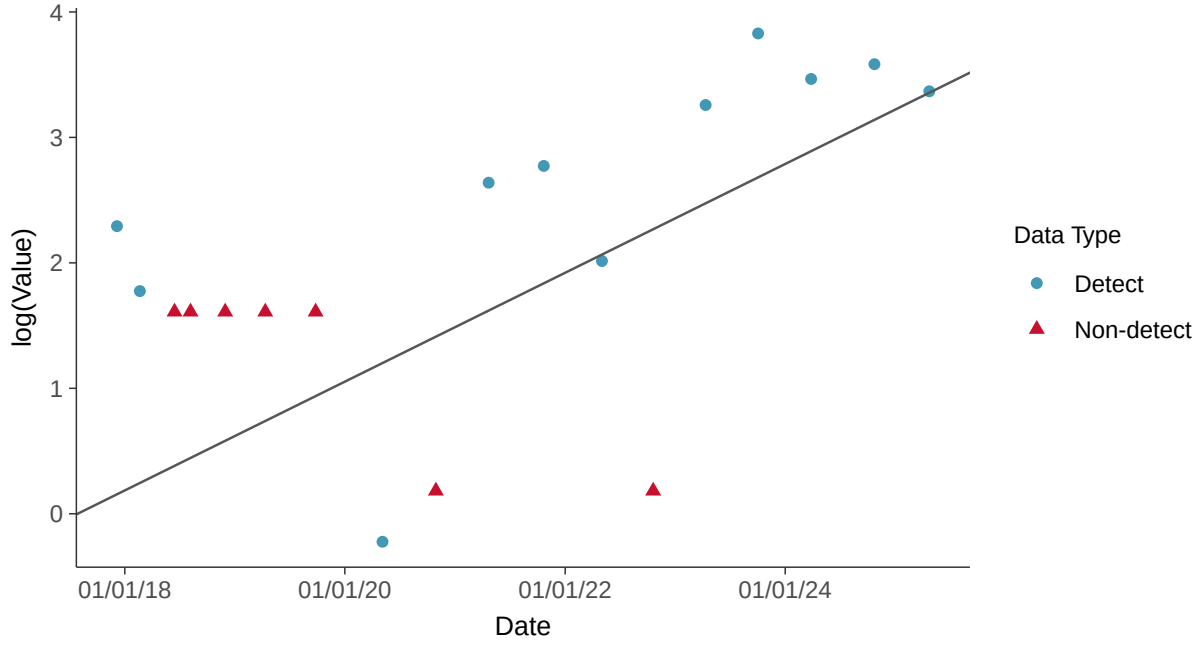
**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17004 (ug/L)



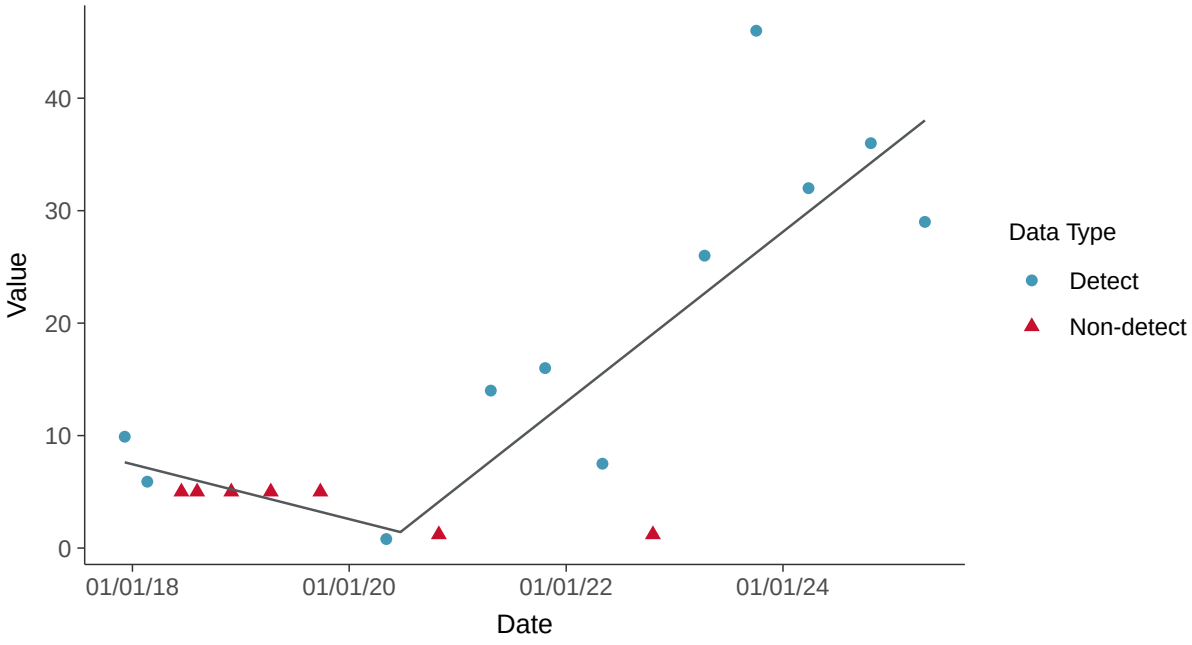

**Trend Regression: Lognormal MLE**

Molybdenum, MW-17004 (ug/L)



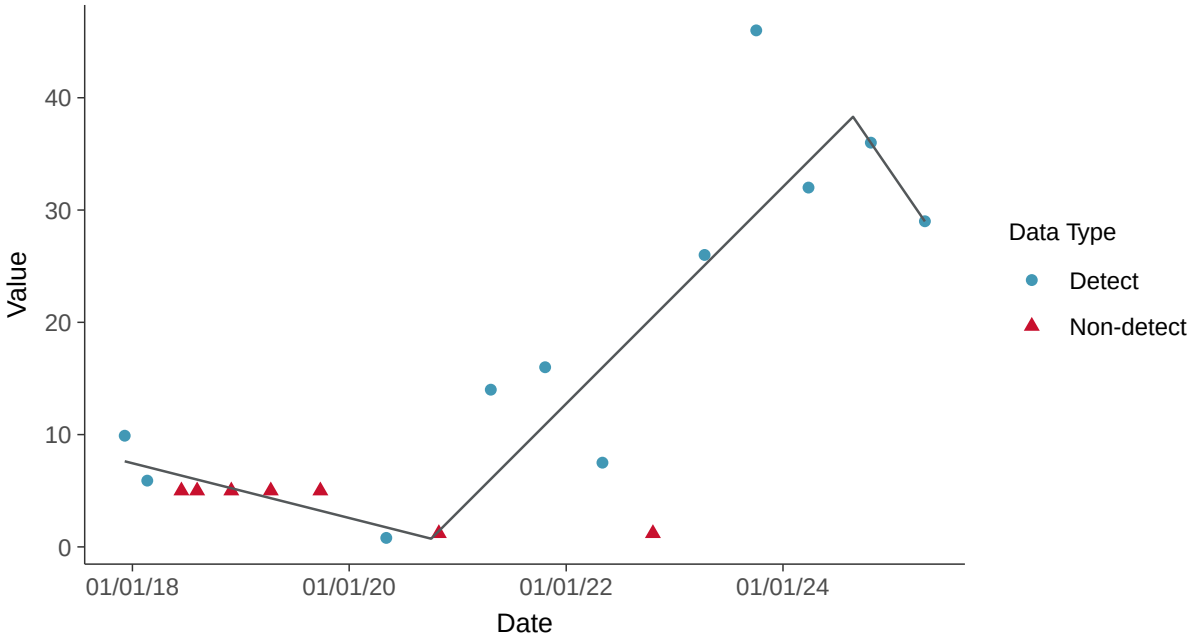
**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17004 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-17004 (ug/L)

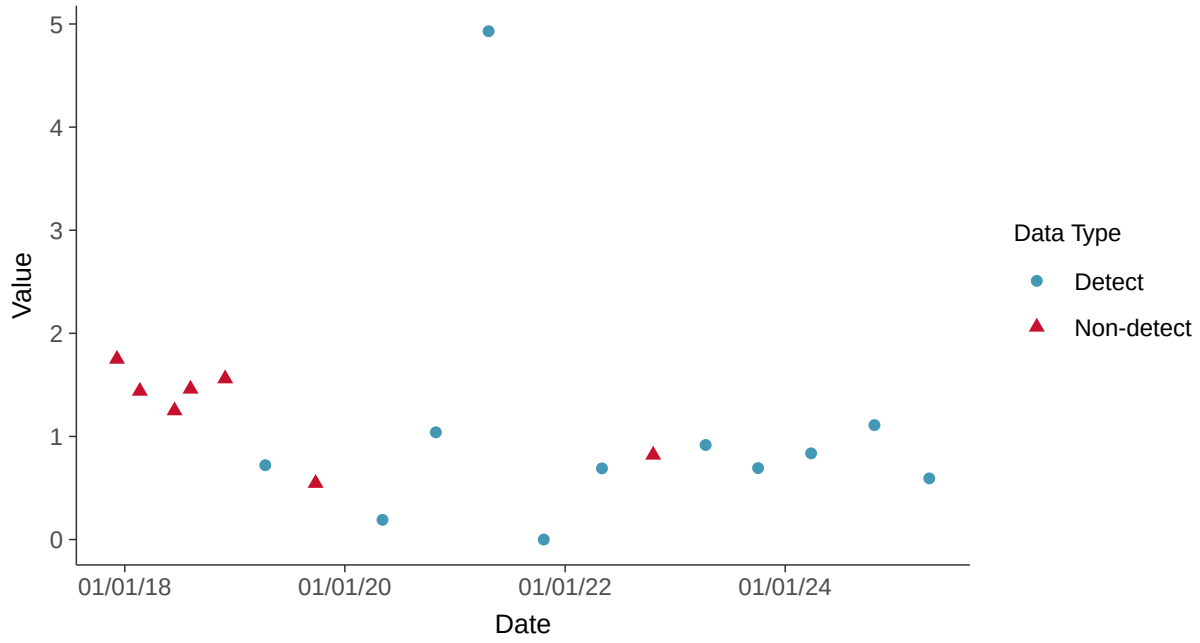


## Appendix IV: Radium-226+228, MW-17004

ID: 17_2_125

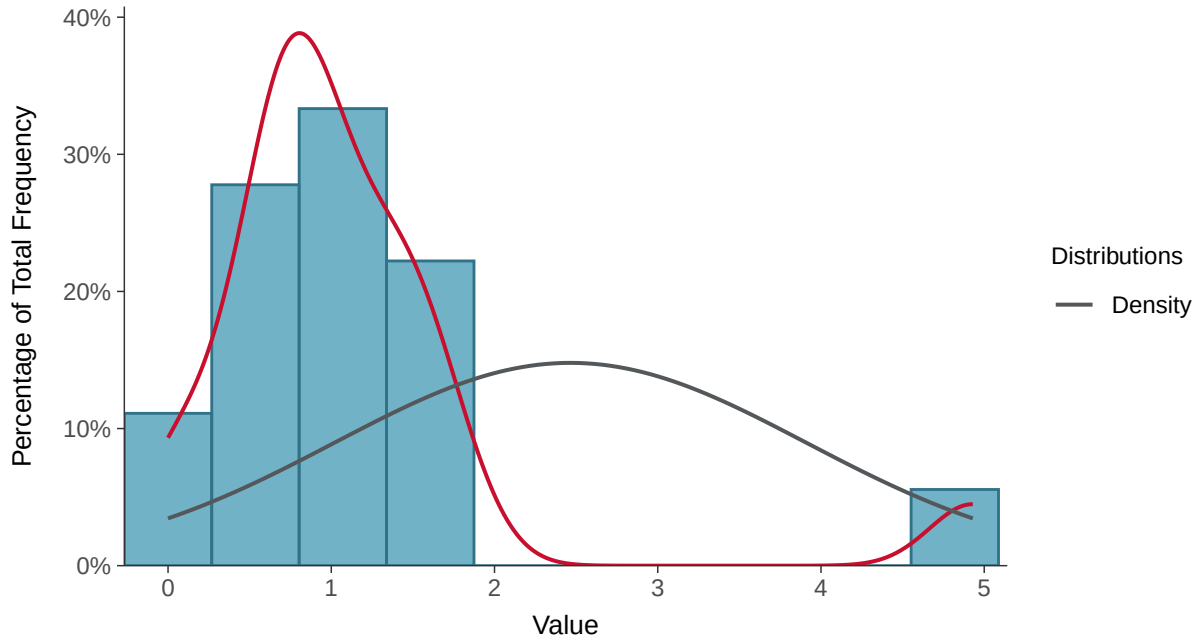
**Scatter Plot**

Radium-226+228, MW-17004 (pCi/L)



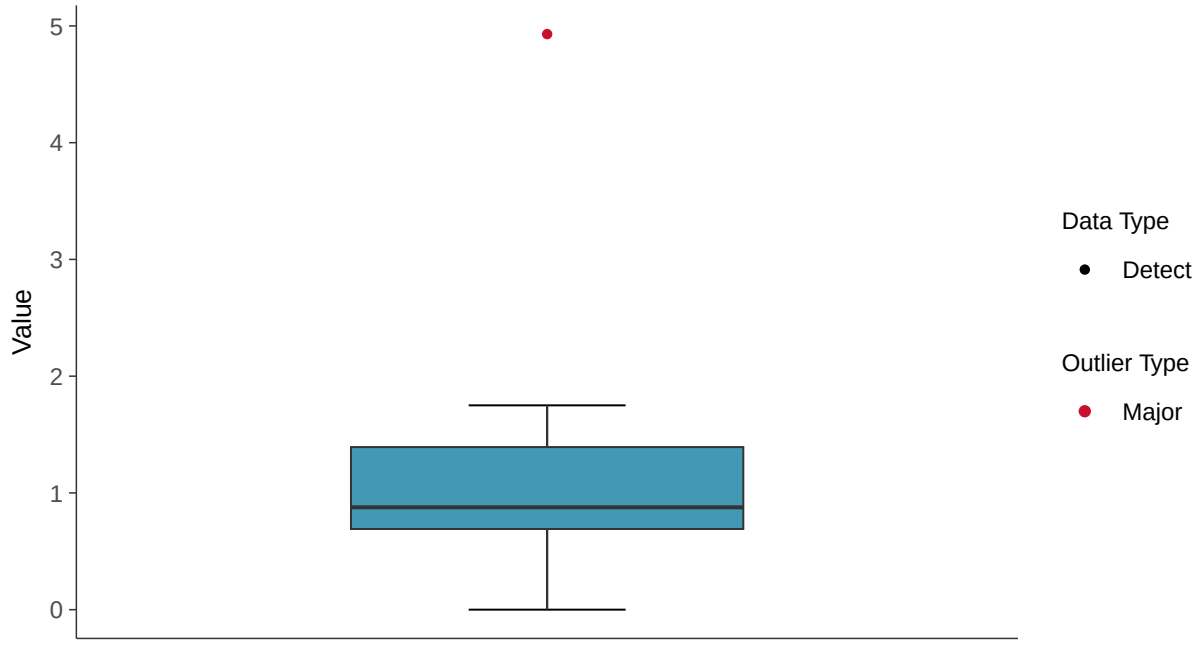

**Histogram**

Radium-226+228, MW-17004 (pCi/L)



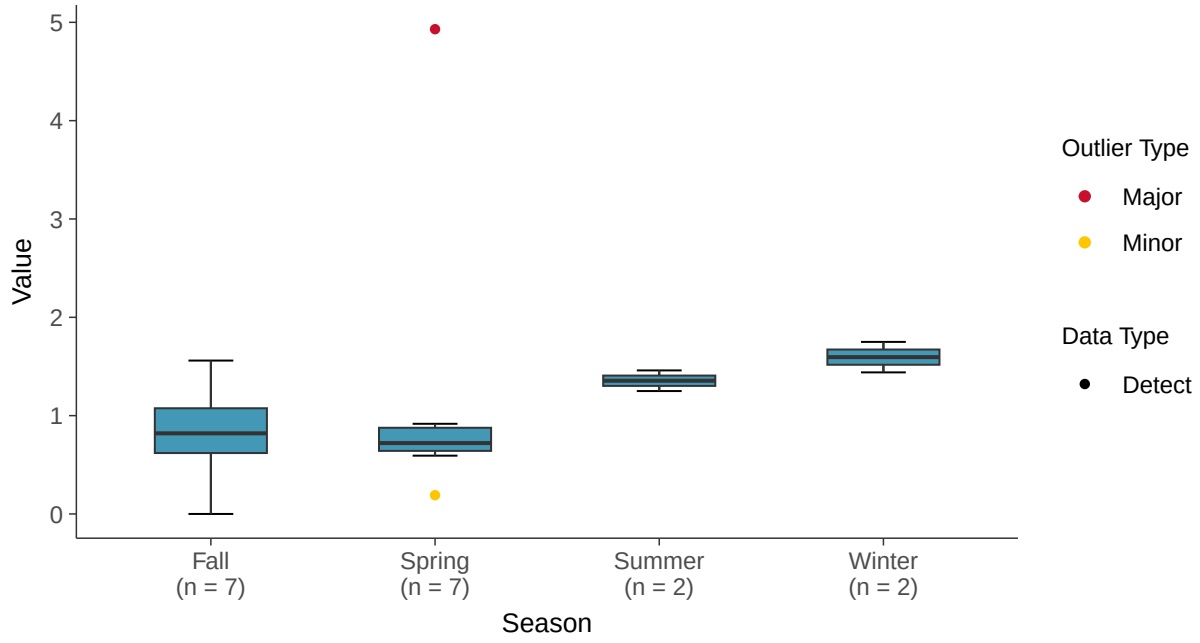
## Boxplot

Radium-226+228, MW-17004 (pCi/L)



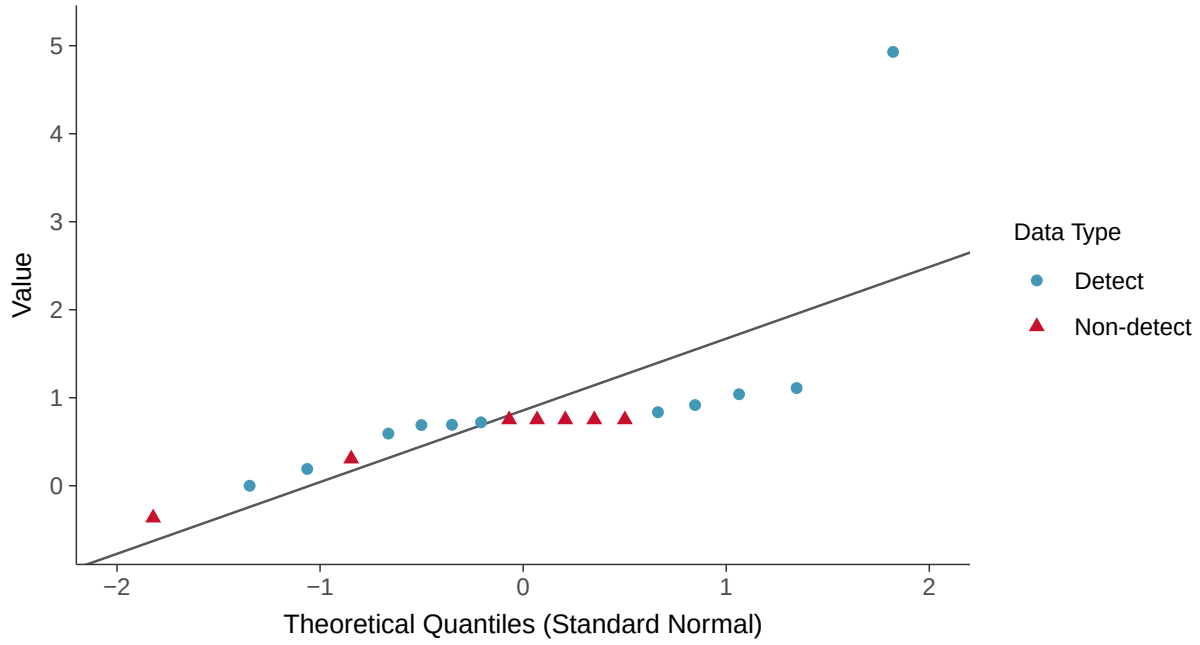

## Boxplot by Season

Radium-226+228, MW-17004 (pCi/L)



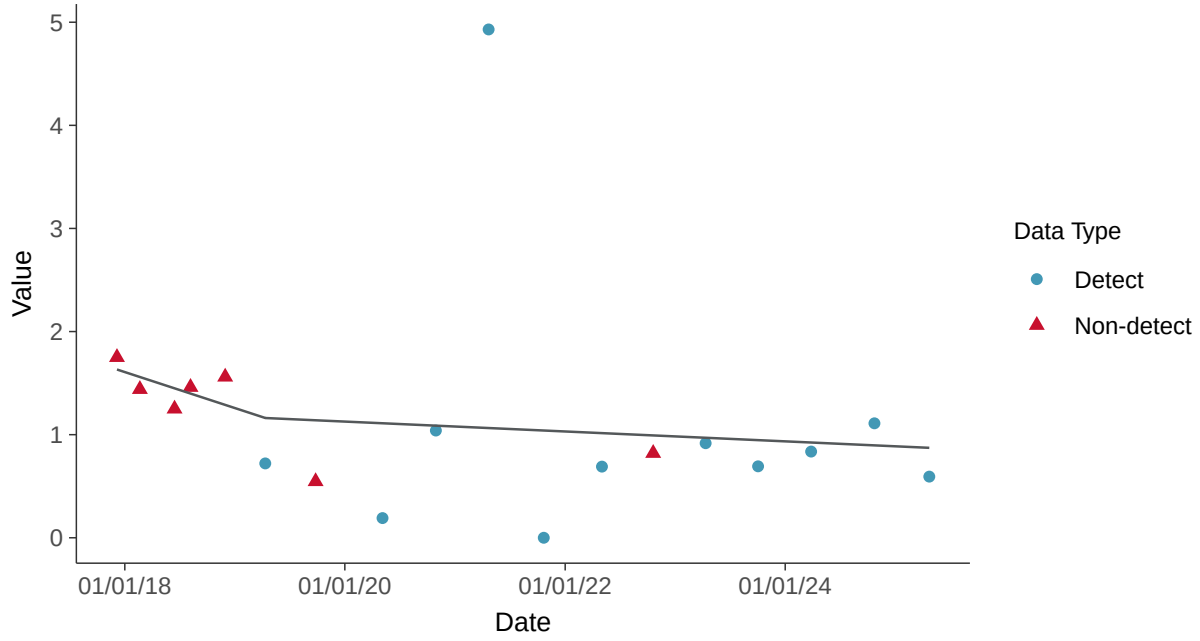
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17004 (pCi/L)



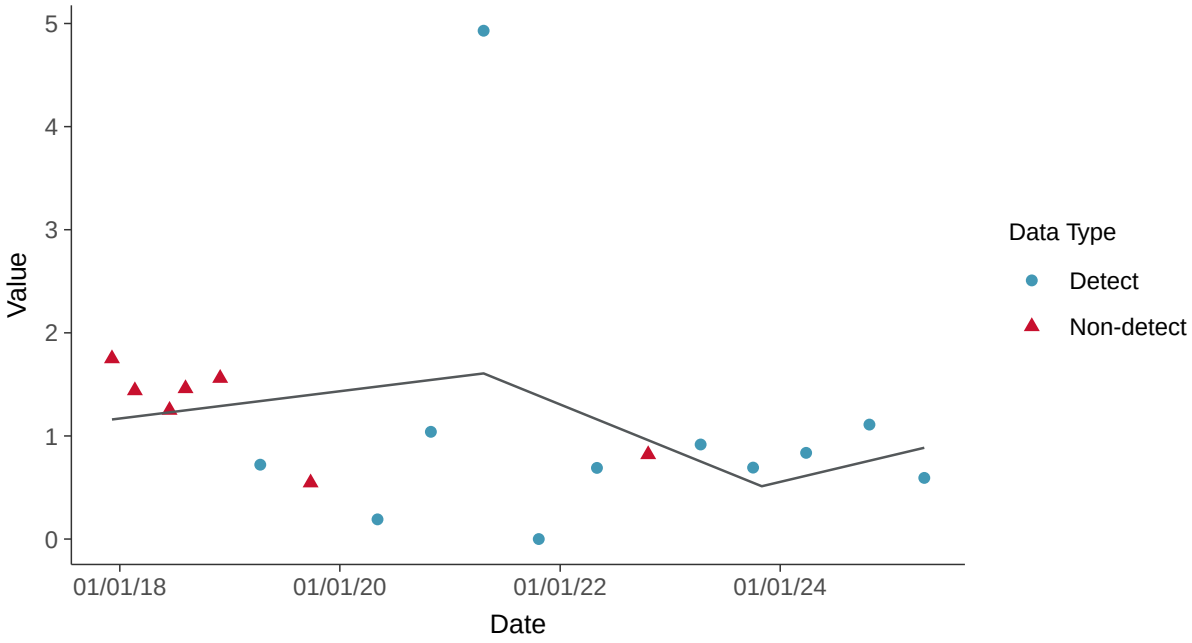

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17004 (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-17004 (pCi/L)

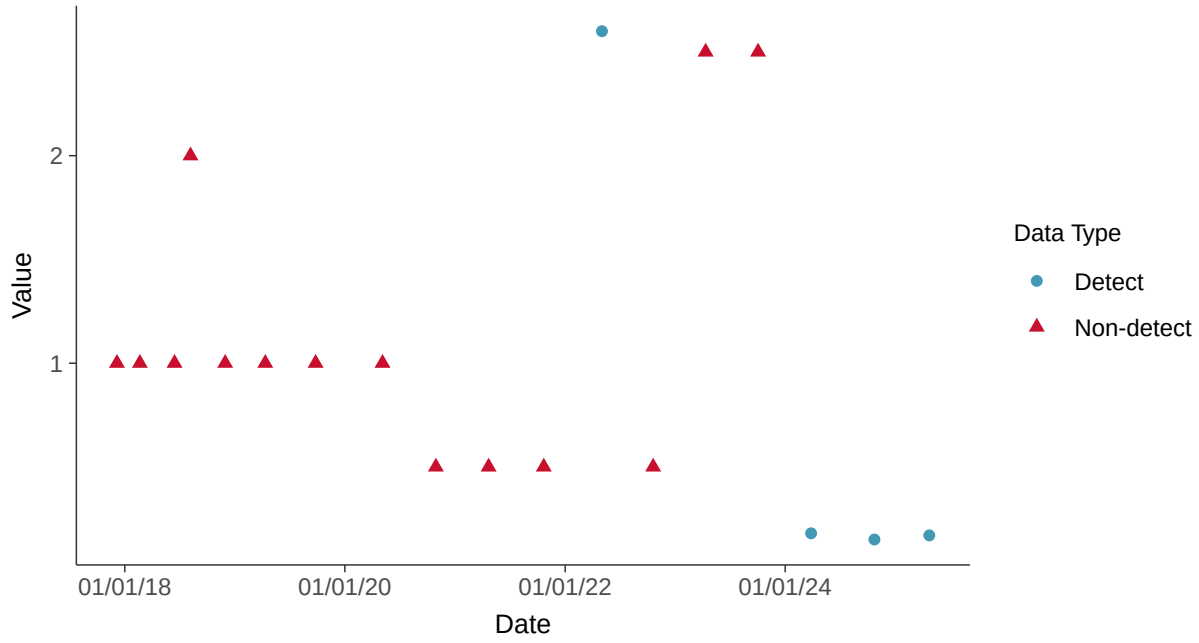


## Appendix IV: Selenium, MW-17004

ID: 17_2_127

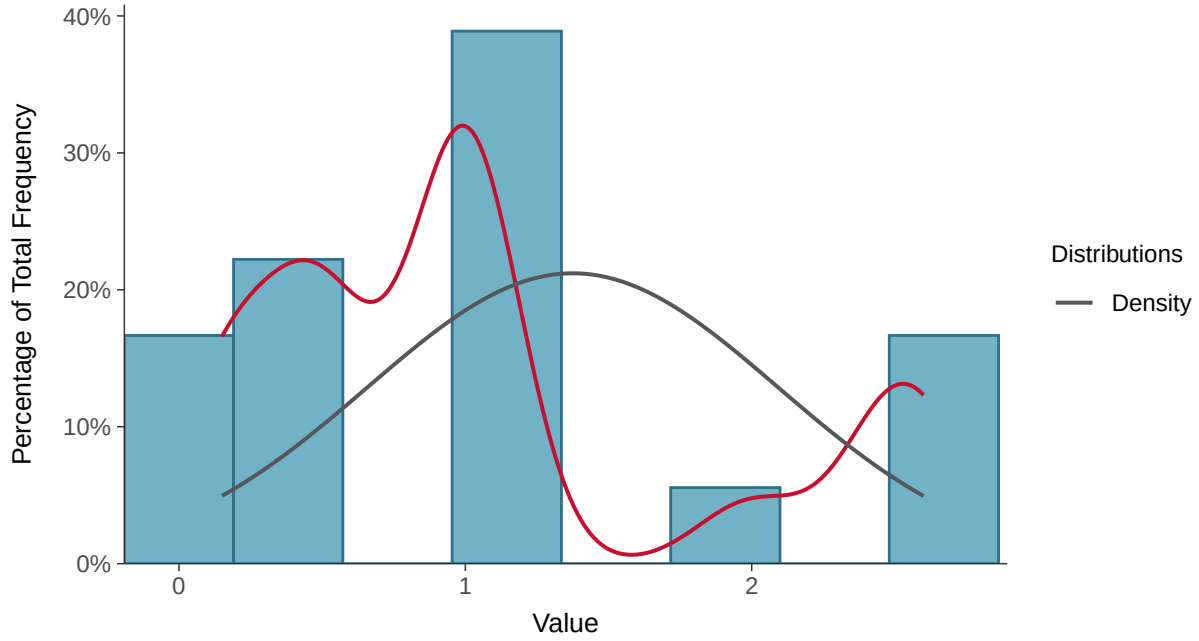
**Scatter Plot**

Selenium, MW-17004 (ug/L)



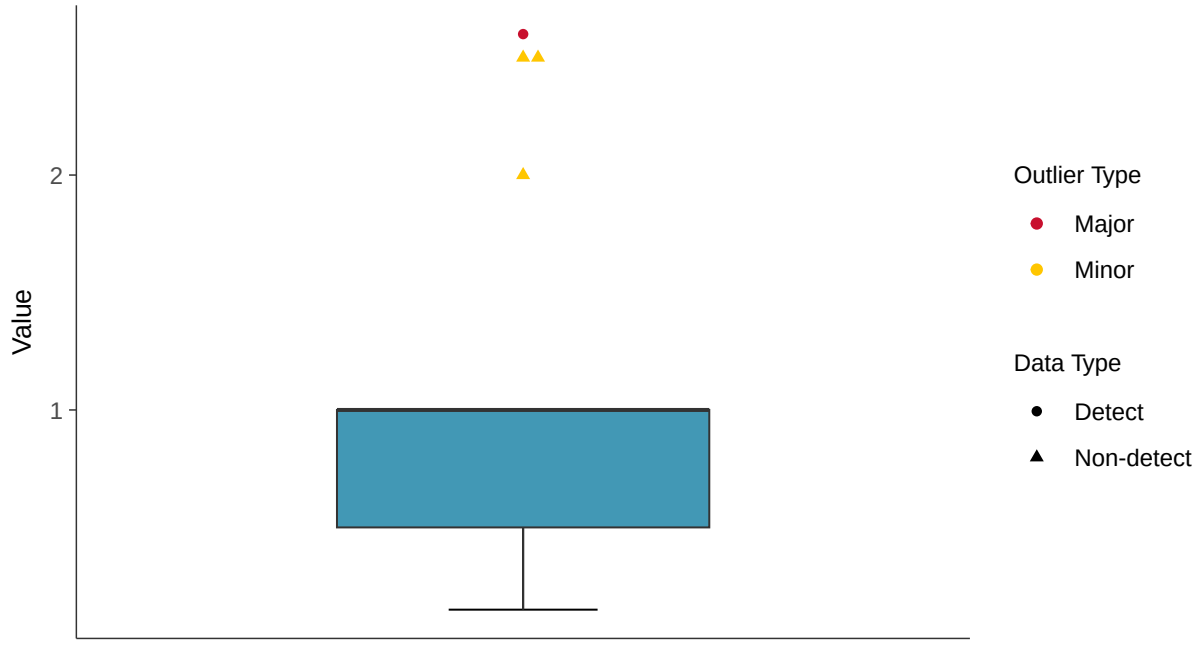

**Histogram**

Selenium, MW-17004 (ug/L)



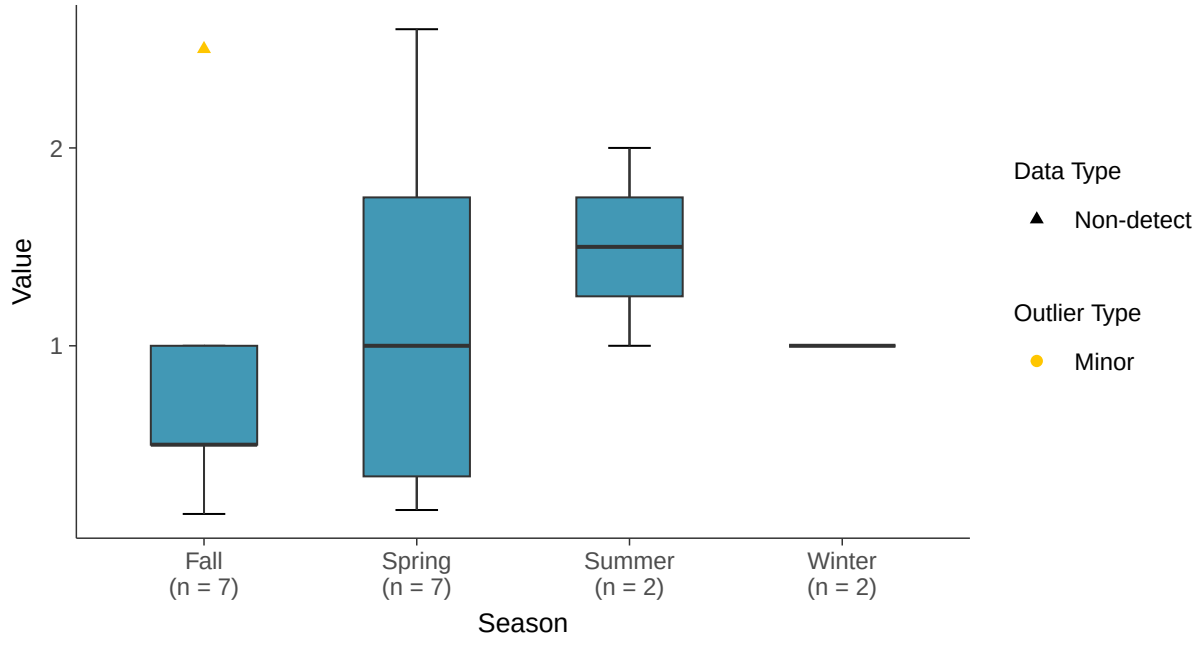
## Boxplot

Selenium, MW-17004 (ug/L)



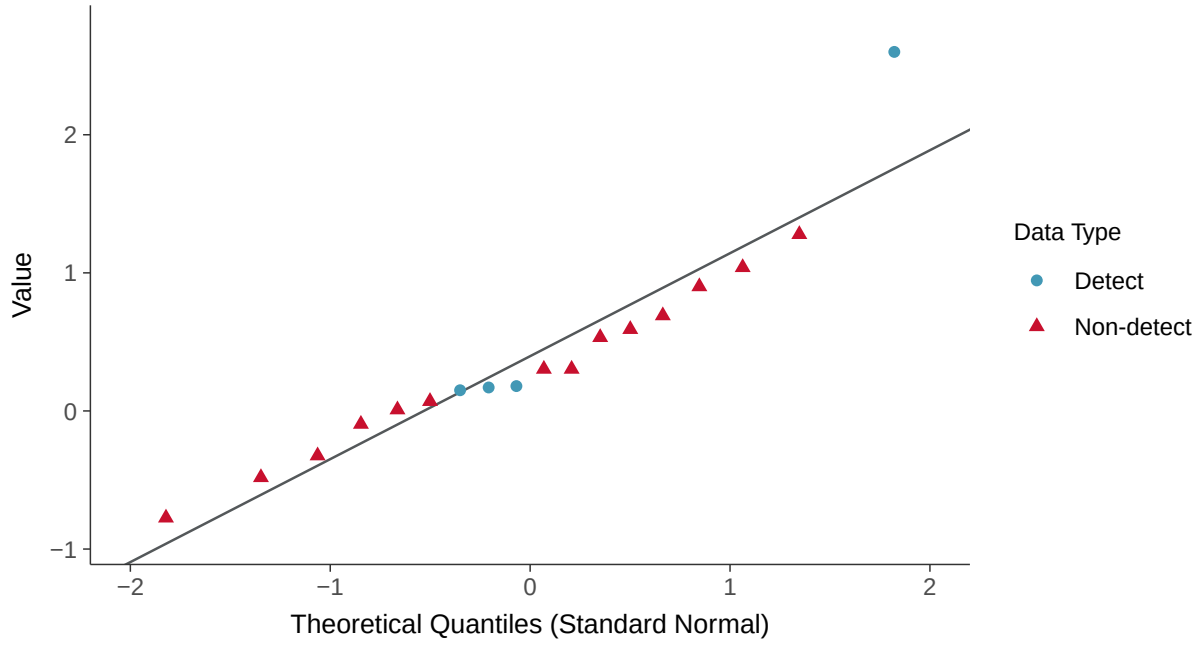

## Boxplot by Season

Selenium, MW-17004 (ug/L)



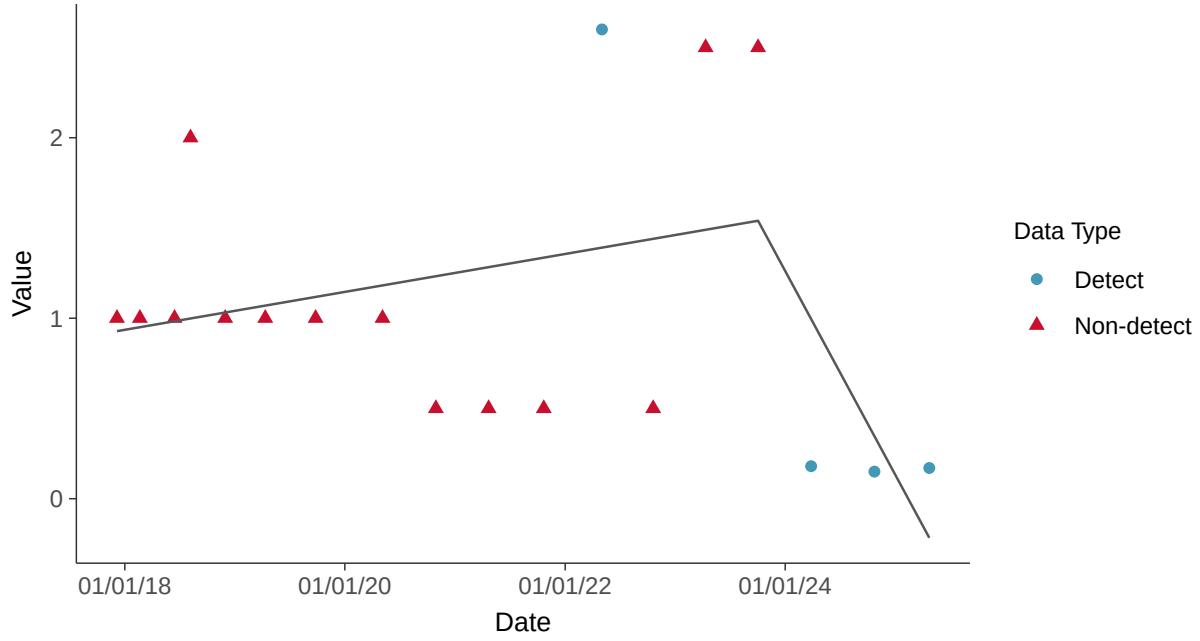
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-17004 (ug/L)



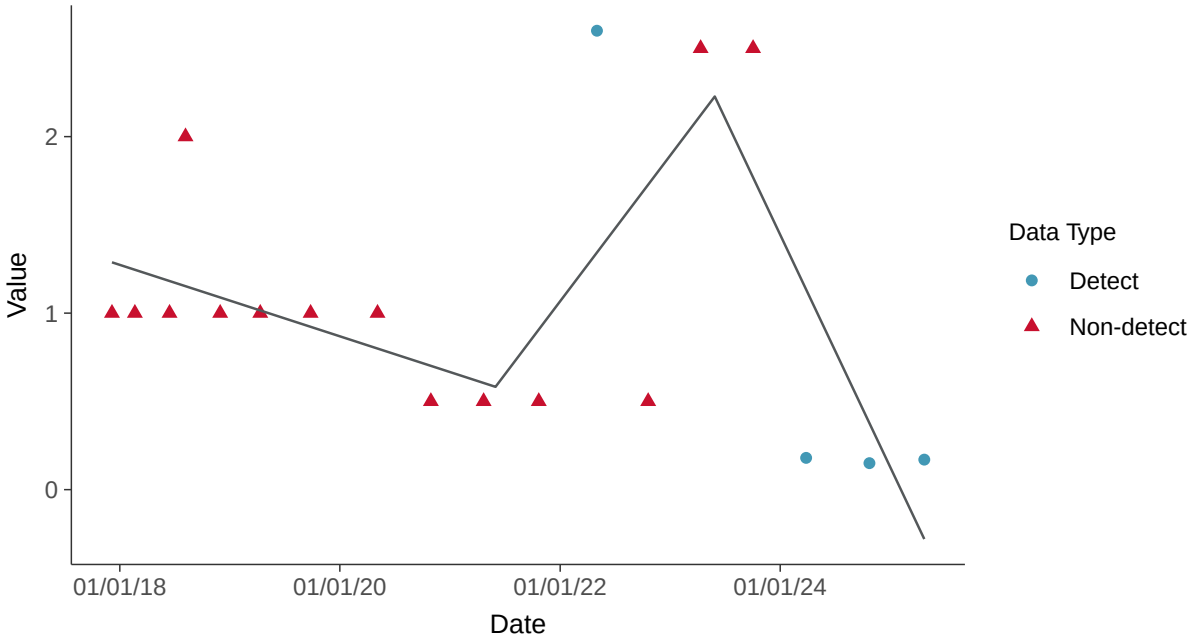

**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-17004 (ug/L)



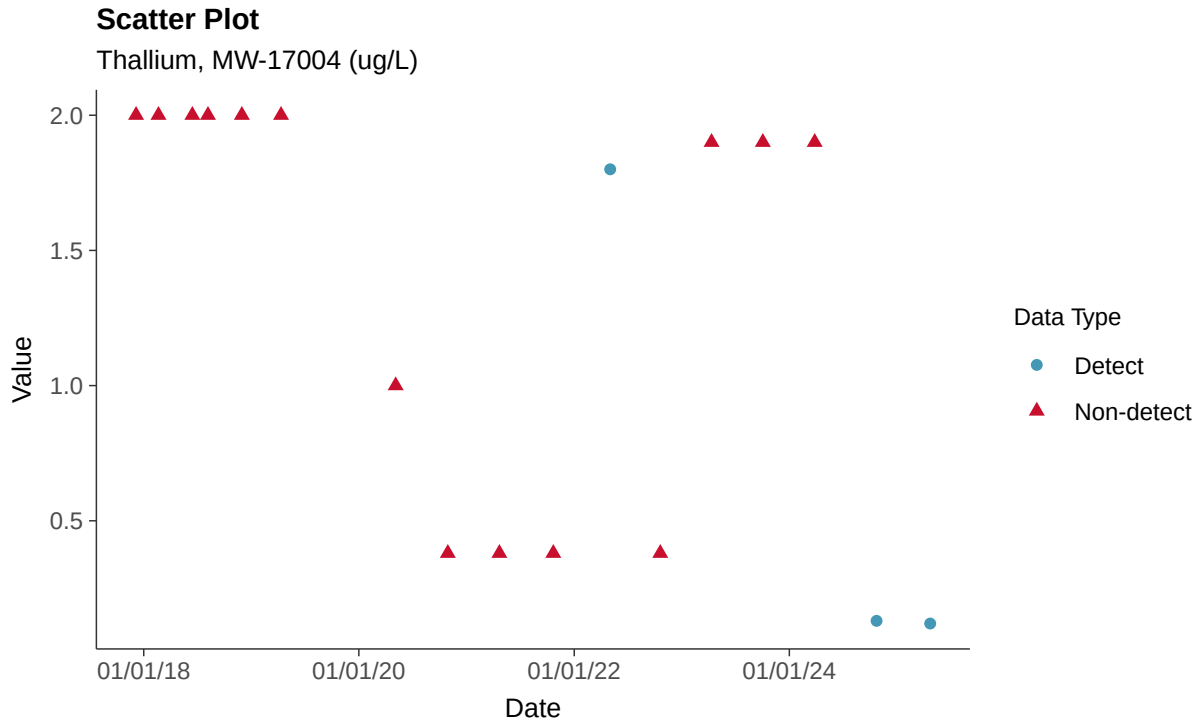
**Trend Regression: Piecewise Linear-Linear-Linear**

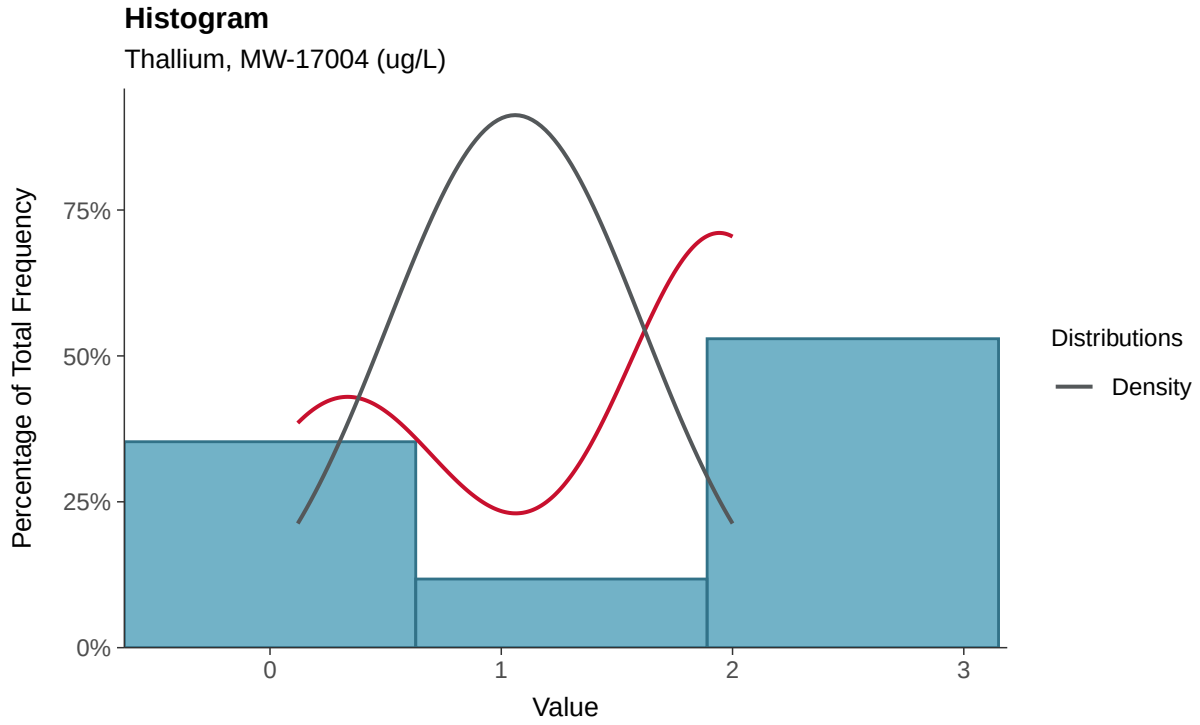
Selenium, MW-17004 (ug/L)



## Appendix IV: Thallium, MW-17004

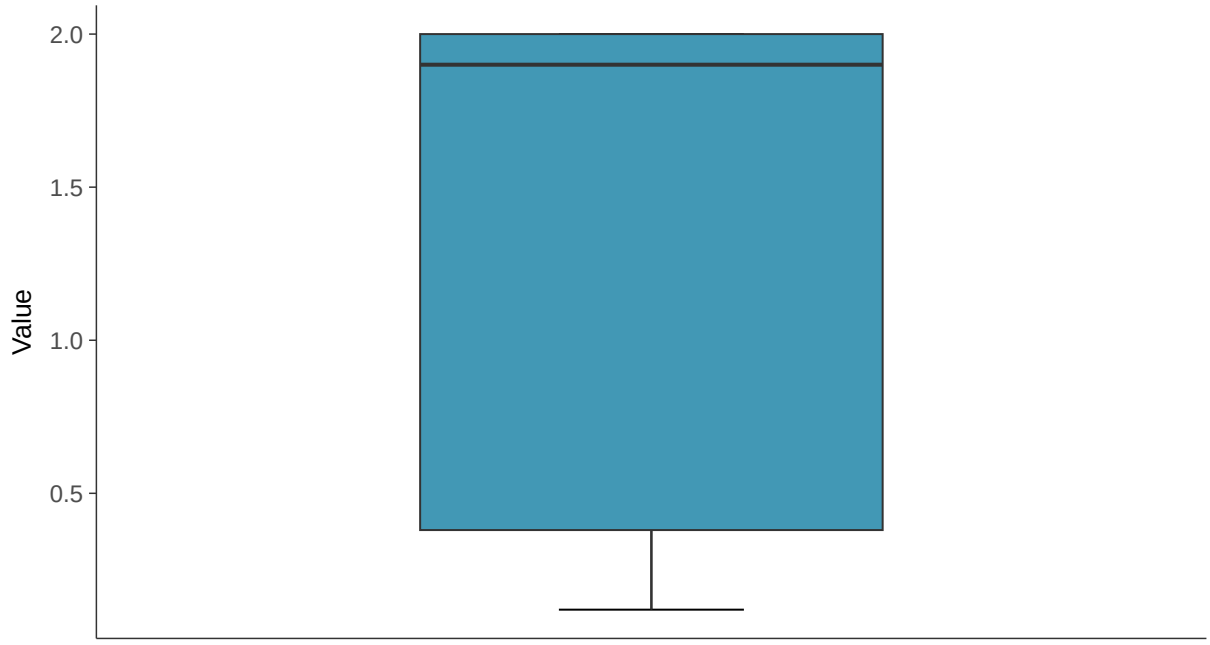
ID: 17_2_131



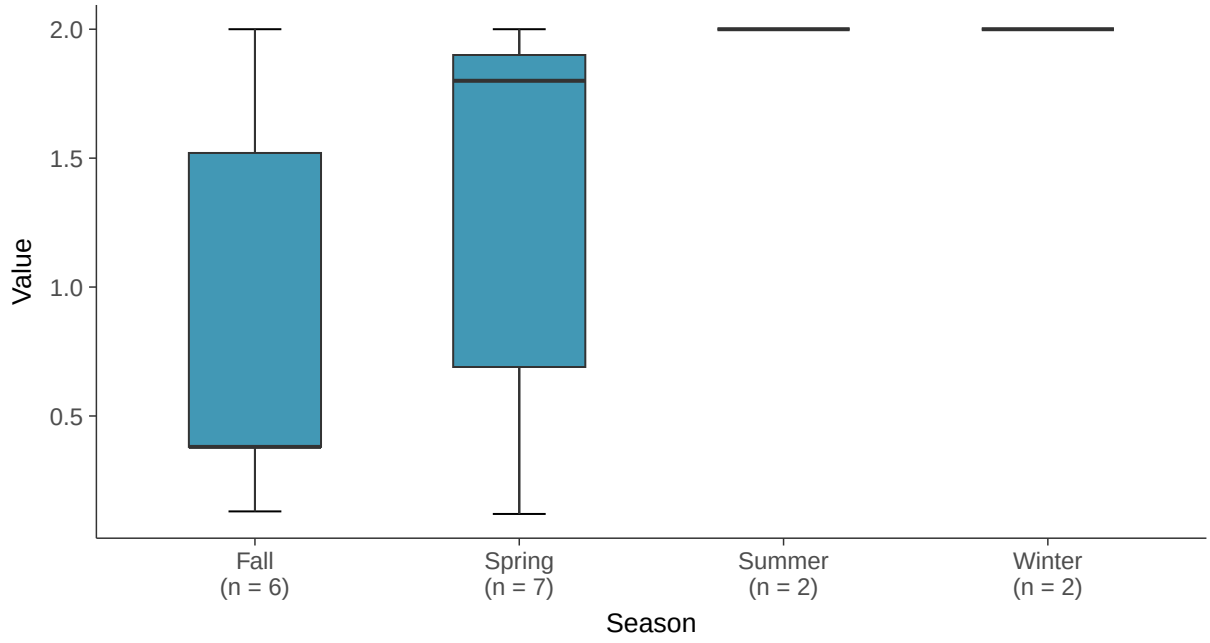
**Boxplot**

Thallium, MW-17004 (ug/L)



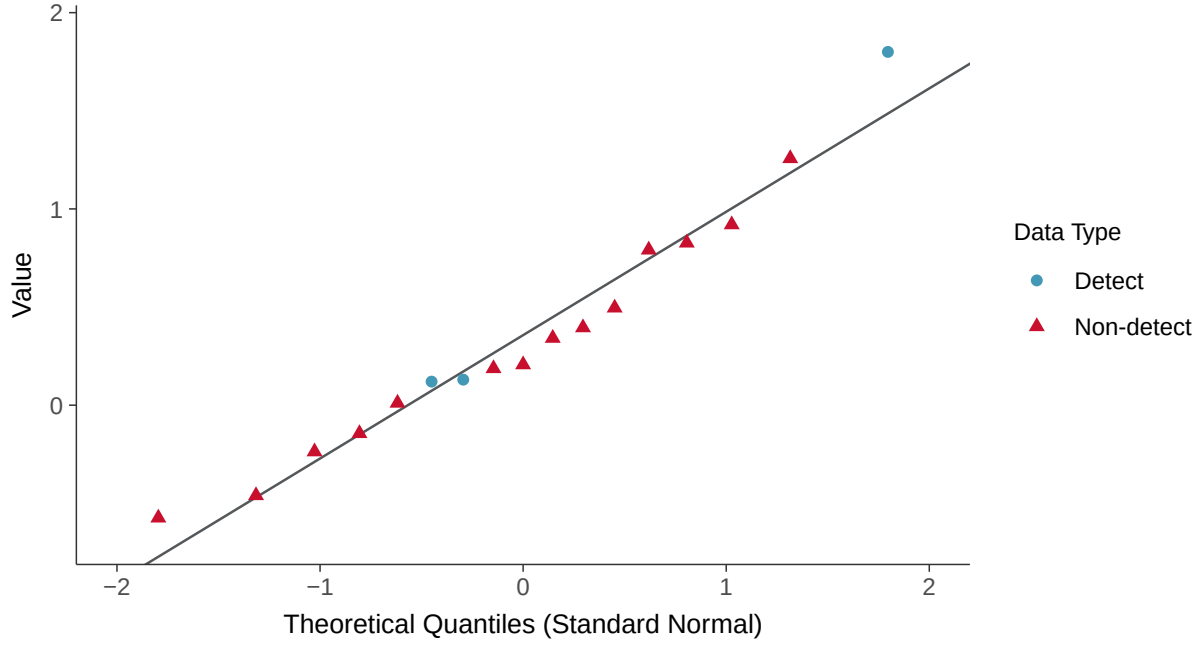

**Boxplot by Season**

Thallium, MW-17004 (ug/L)



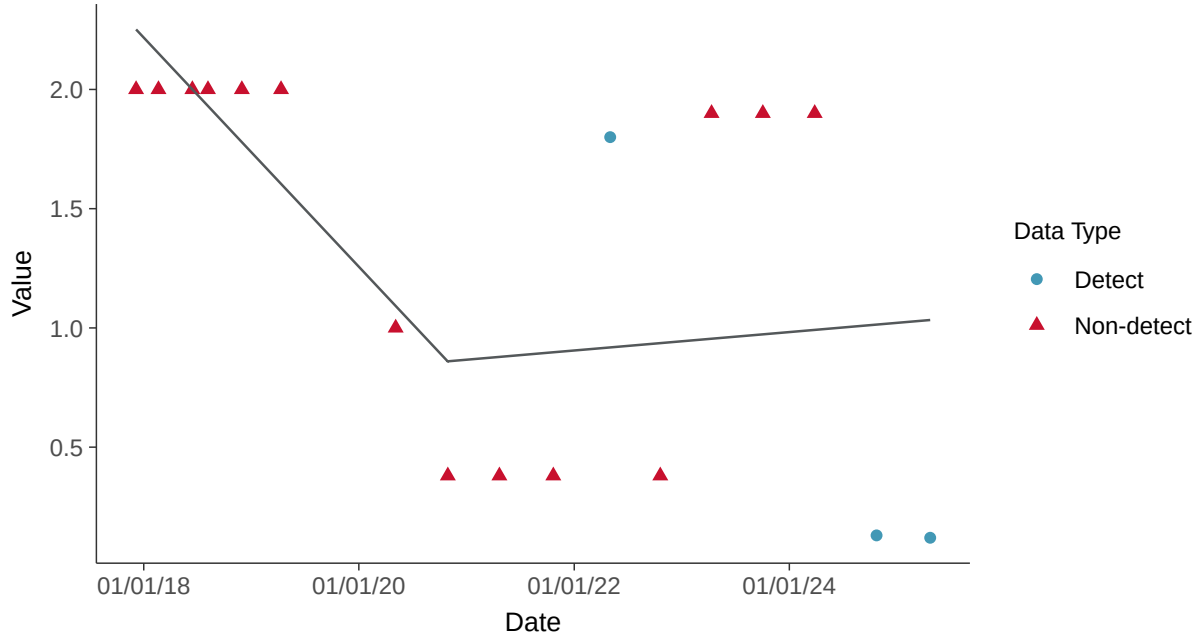
**Normal Q-Q plot using ROS Imputed Estimates**

Thallium, MW-17004 (ug/L)



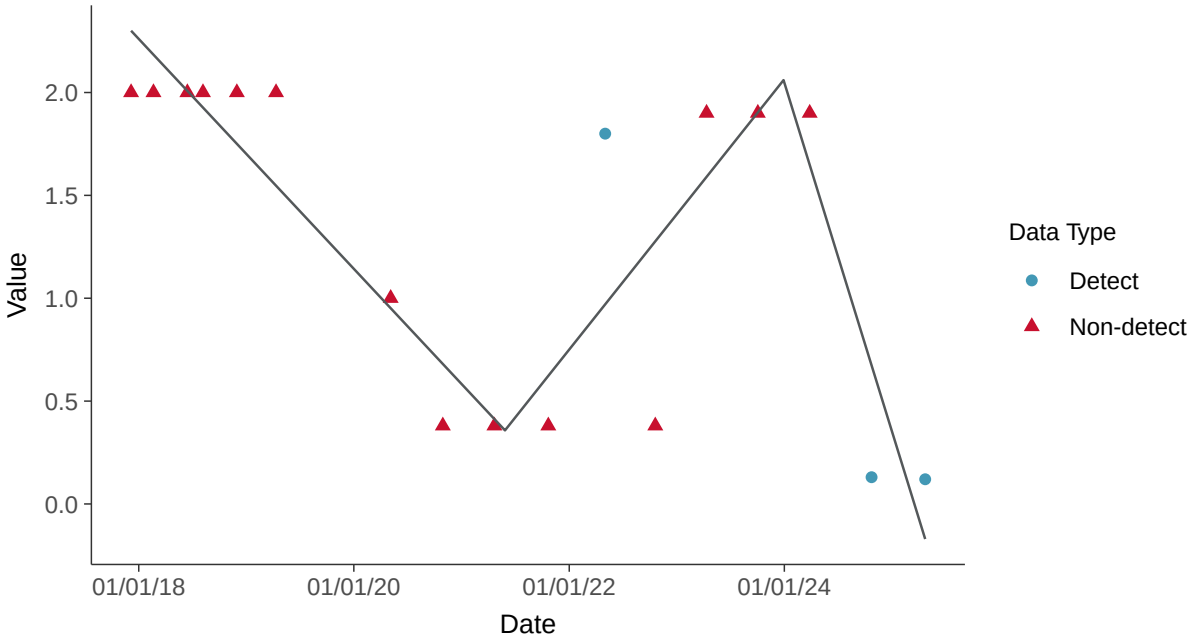

**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17004 (ug/L)



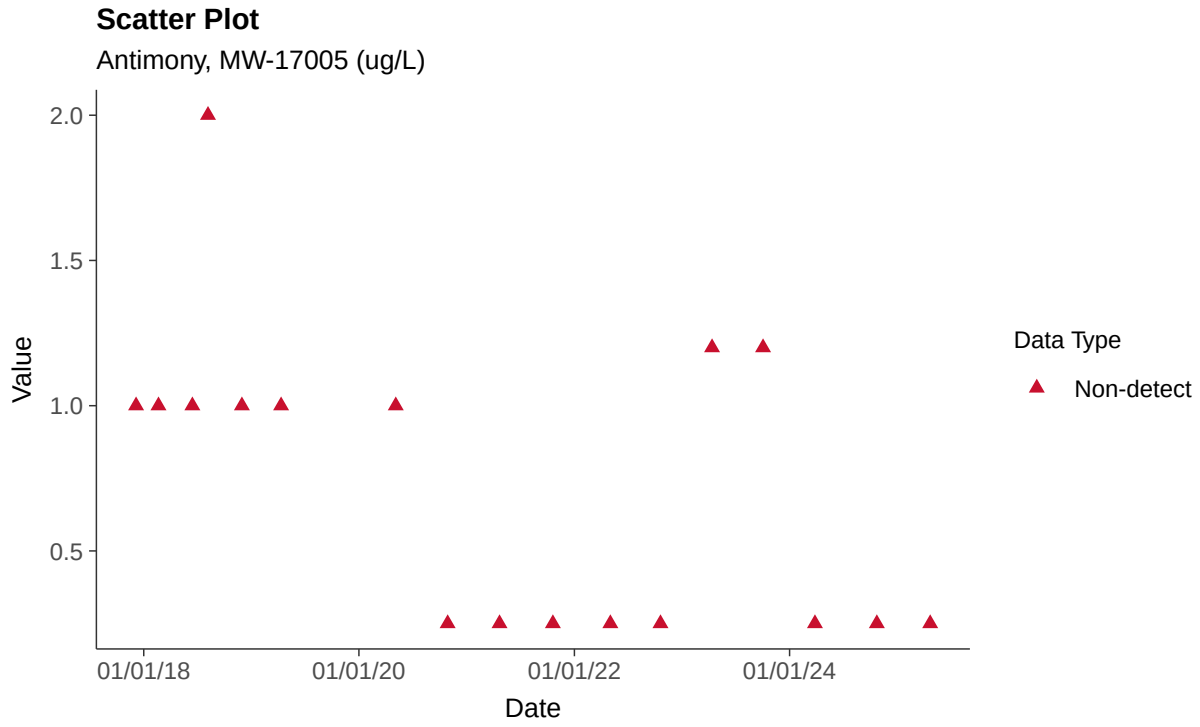
**Trend Regression: Piecewise Linear-Linear-Linear**

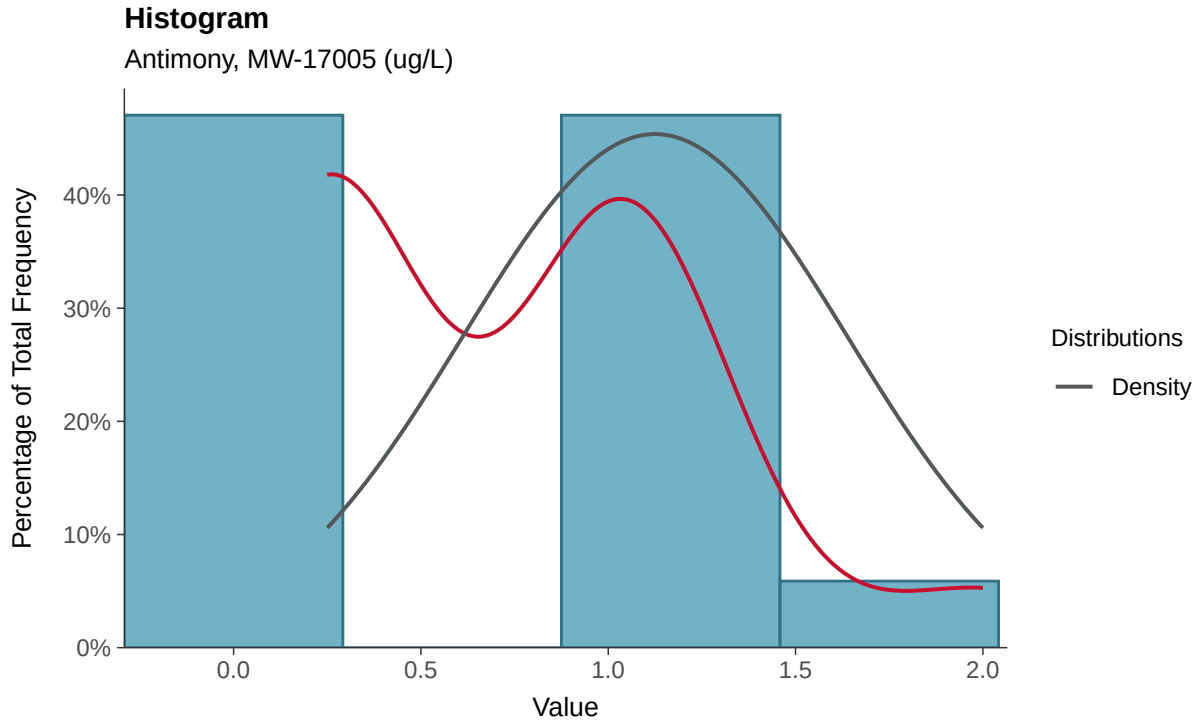
Thallium, MW-17004 (ug/L)



## Appendix IV: Antimony, MW-17005

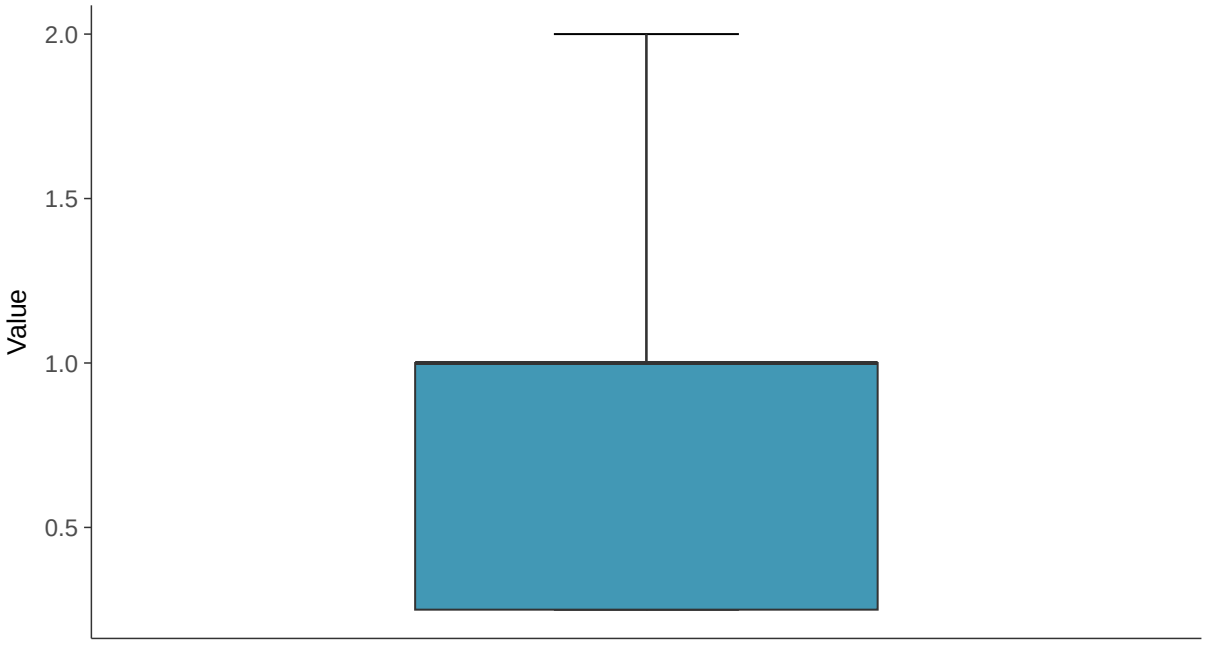
ID: 18_2_101



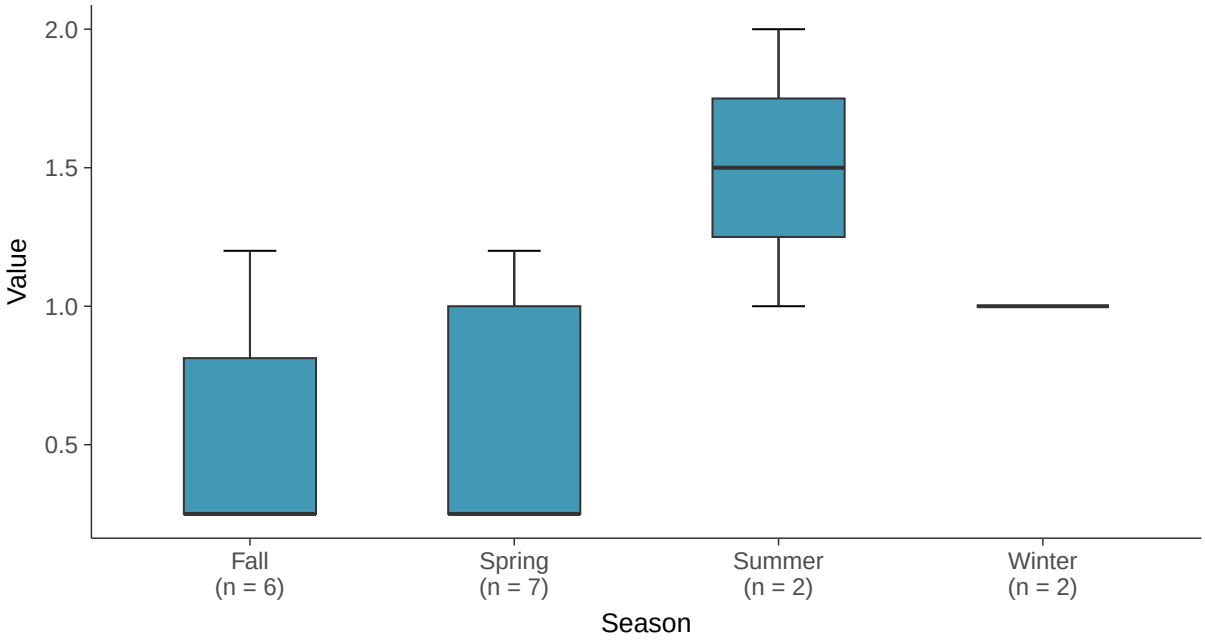
**Boxplot**

Antimony, MW-17005 (ug/L)



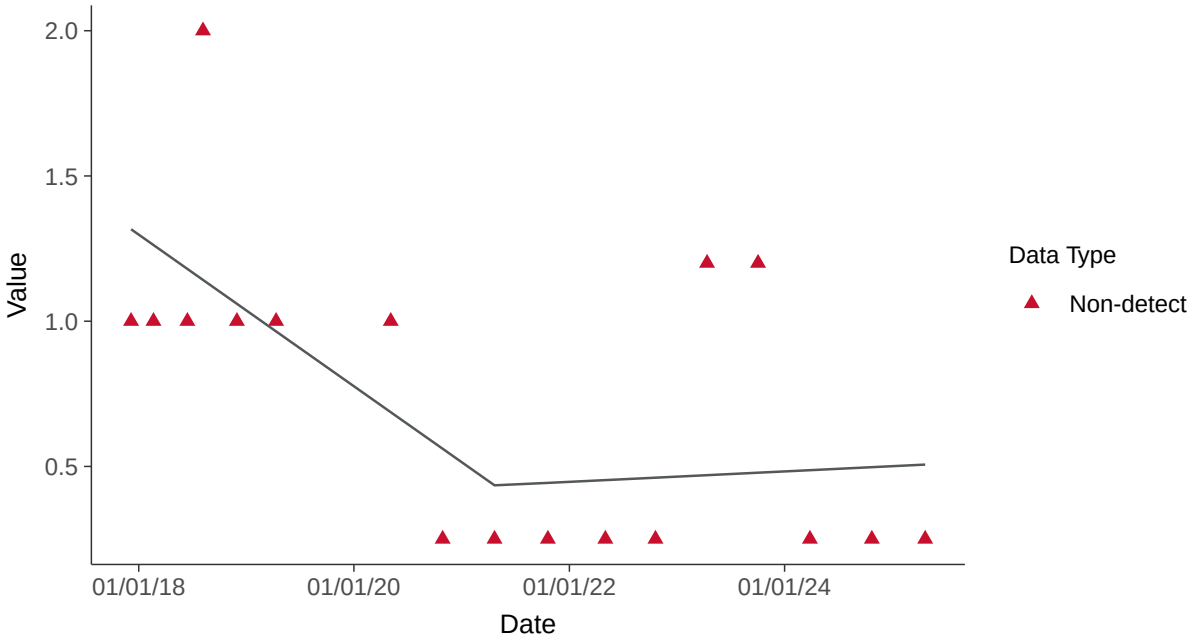

**Boxplot by Season**

Antimony, MW-17005 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17005 (ug/L)

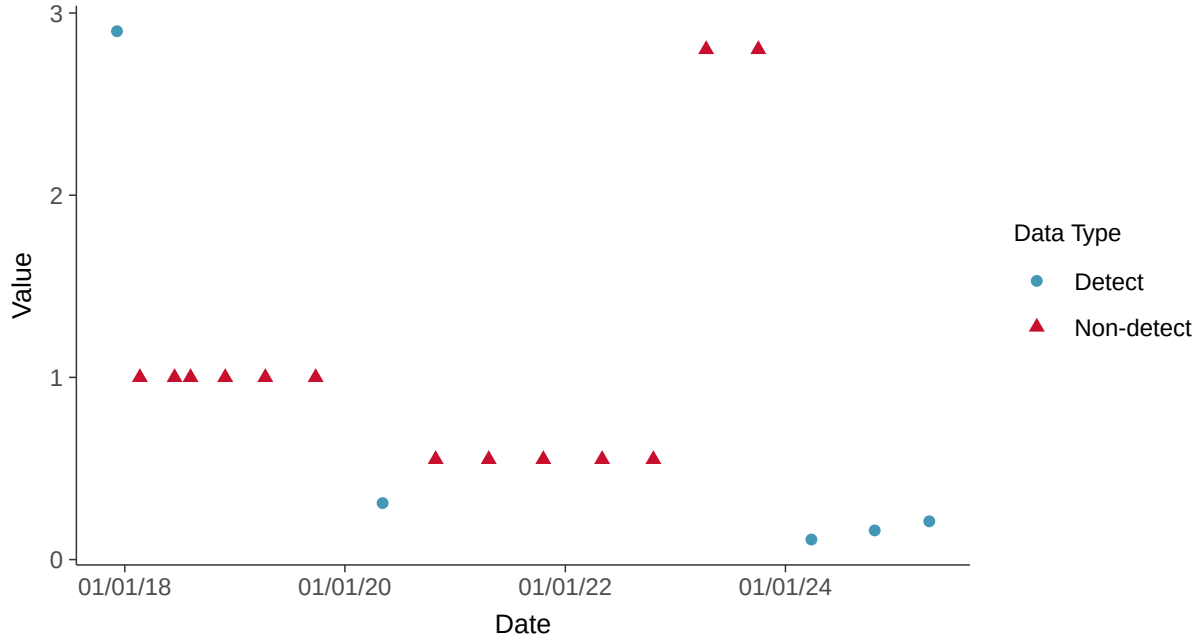


## Appendix IV: Arsenic, MW-17005

ID: 18_2_102

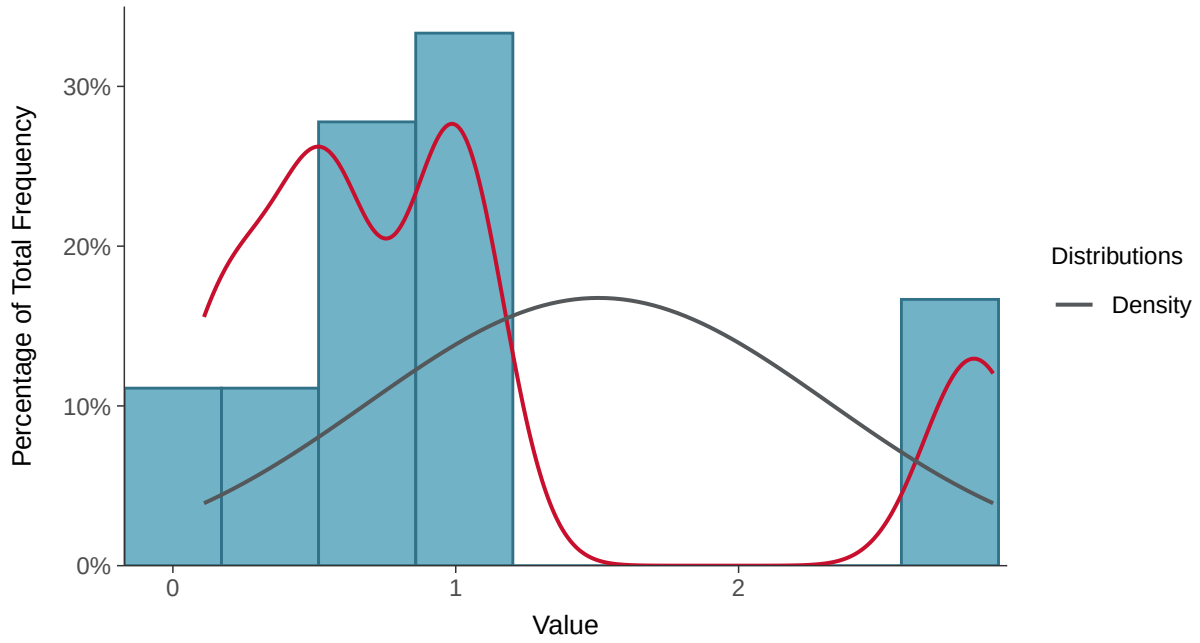
**Scatter Plot**

Arsenic, MW-17005 (ug/L)



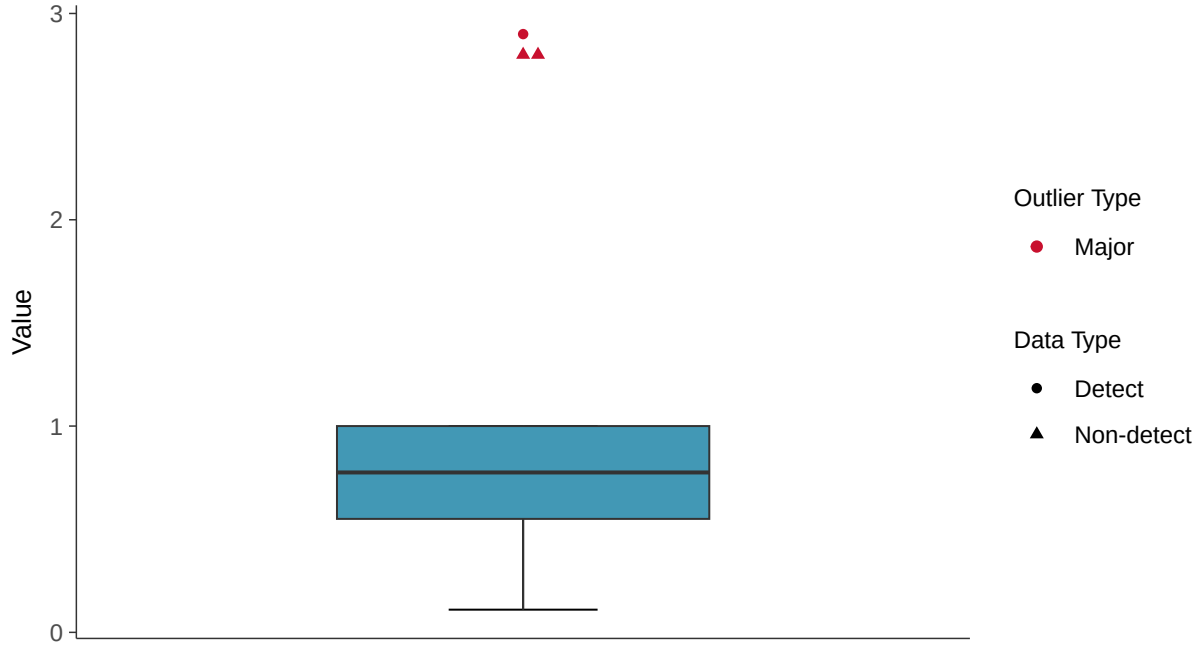

**Histogram**

Arsenic, MW-17005 (ug/L)



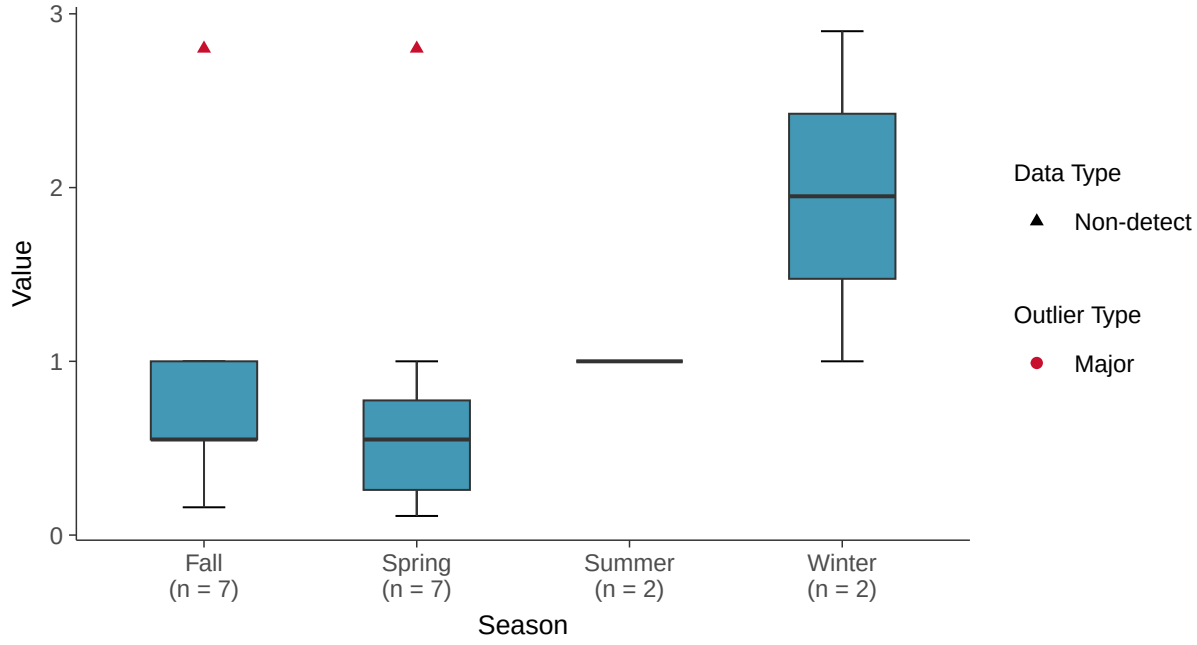
## Boxplot

Arsenic, MW-17005 (ug/L)



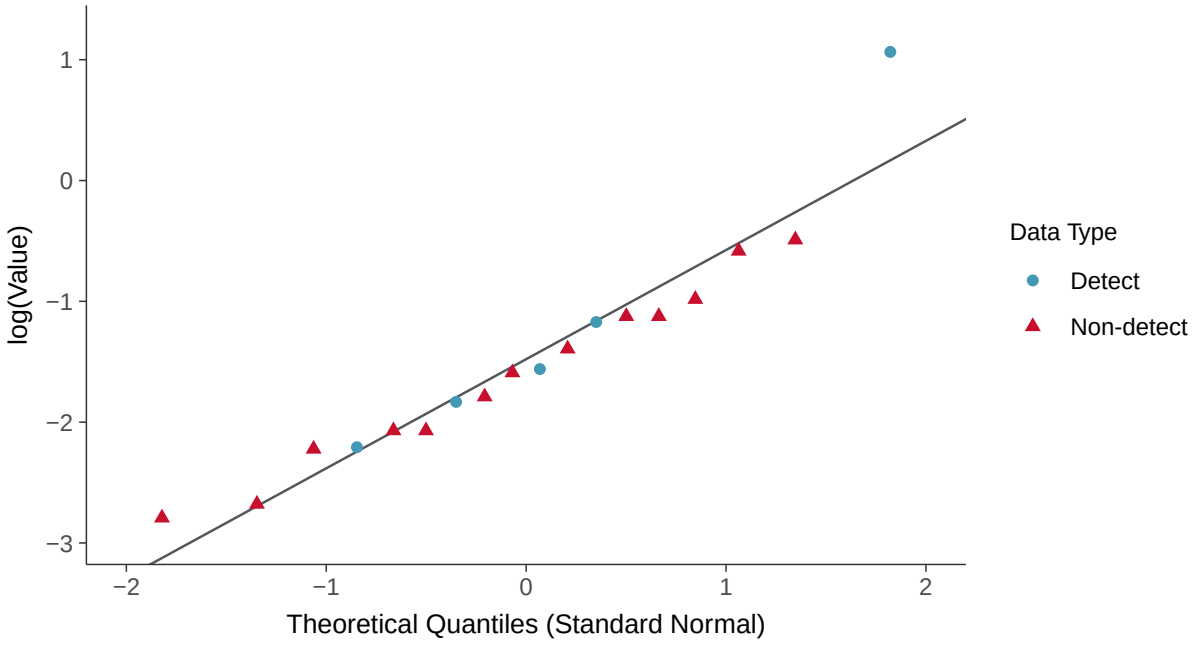

## Boxplot by Season

Arsenic, MW-17005 (ug/L)



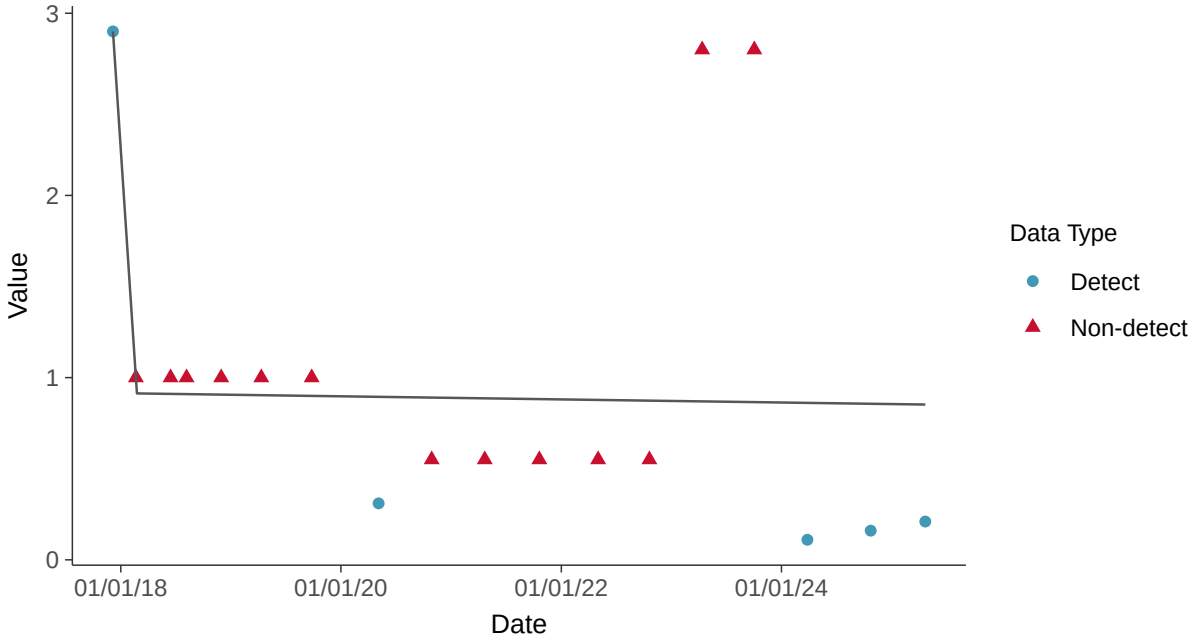
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17005 (ug/L)



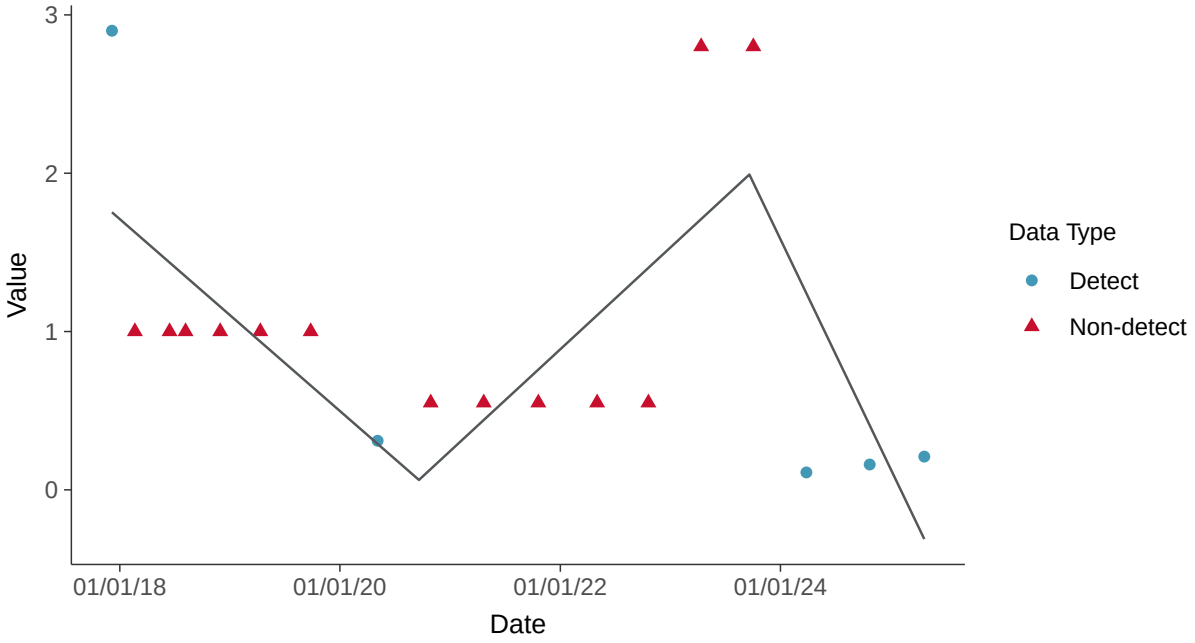

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17005 (ug/L)



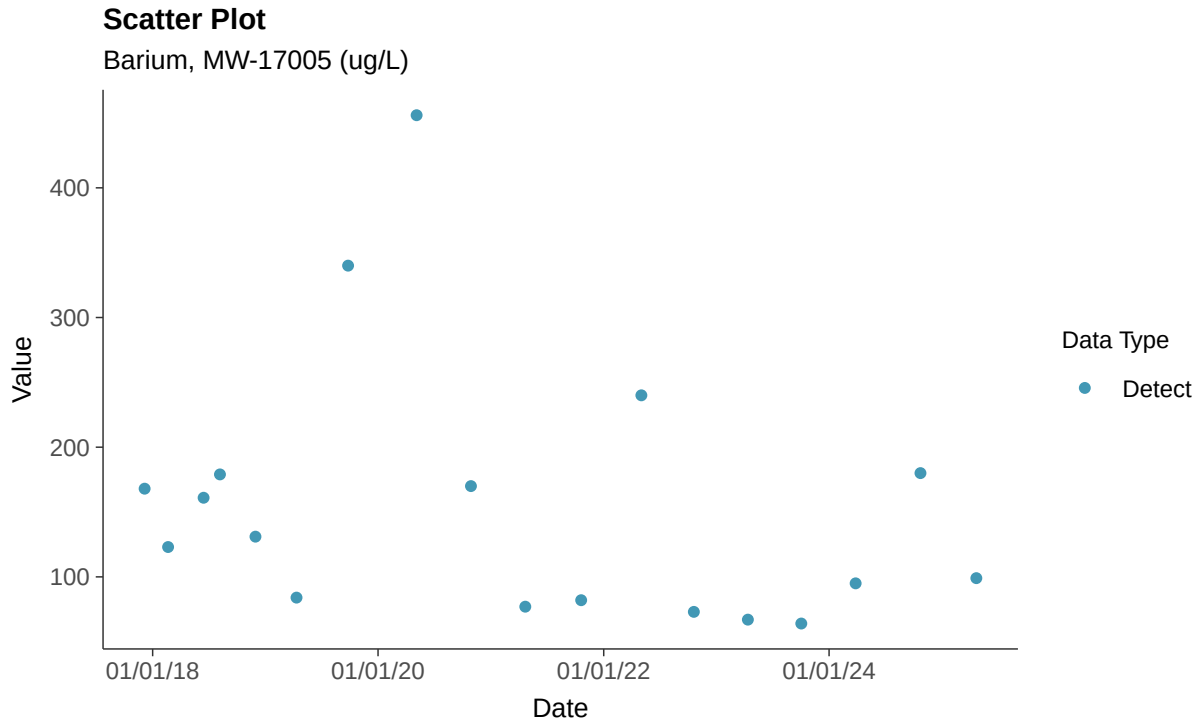
**Trend Regression: Piecewise Linear-Linear-Linear**

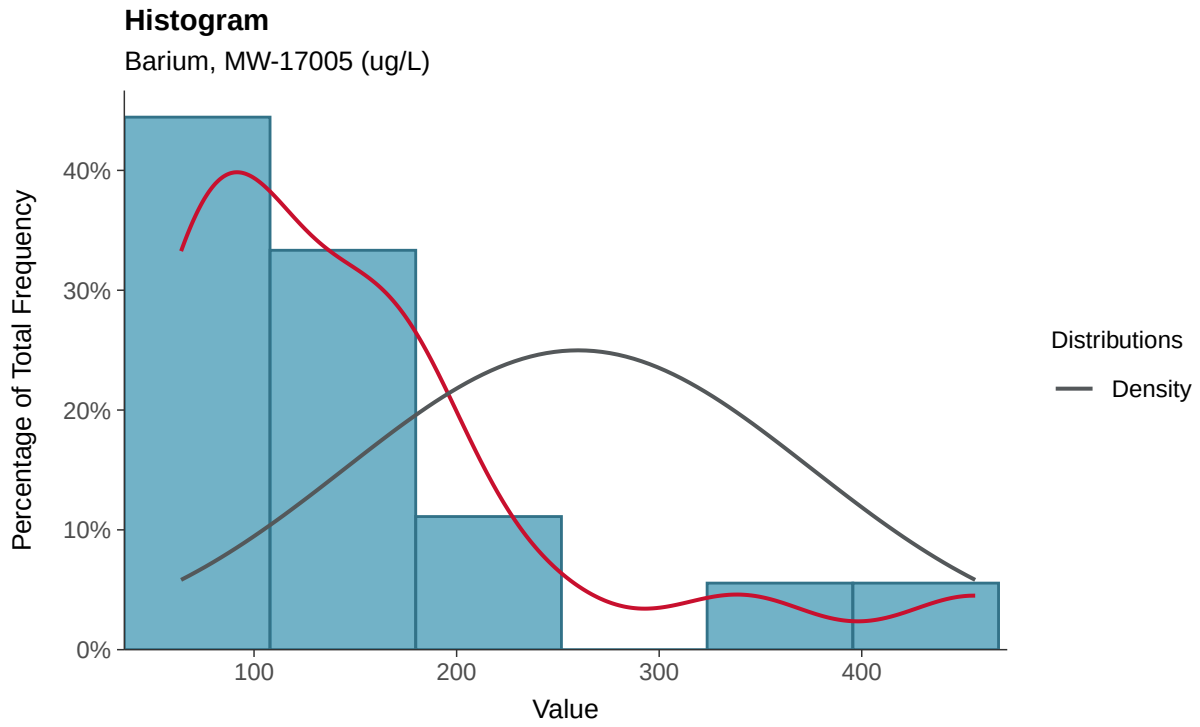
Arsenic, MW-17005 (ug/L)



## Appendix IV: Barium, MW-17005

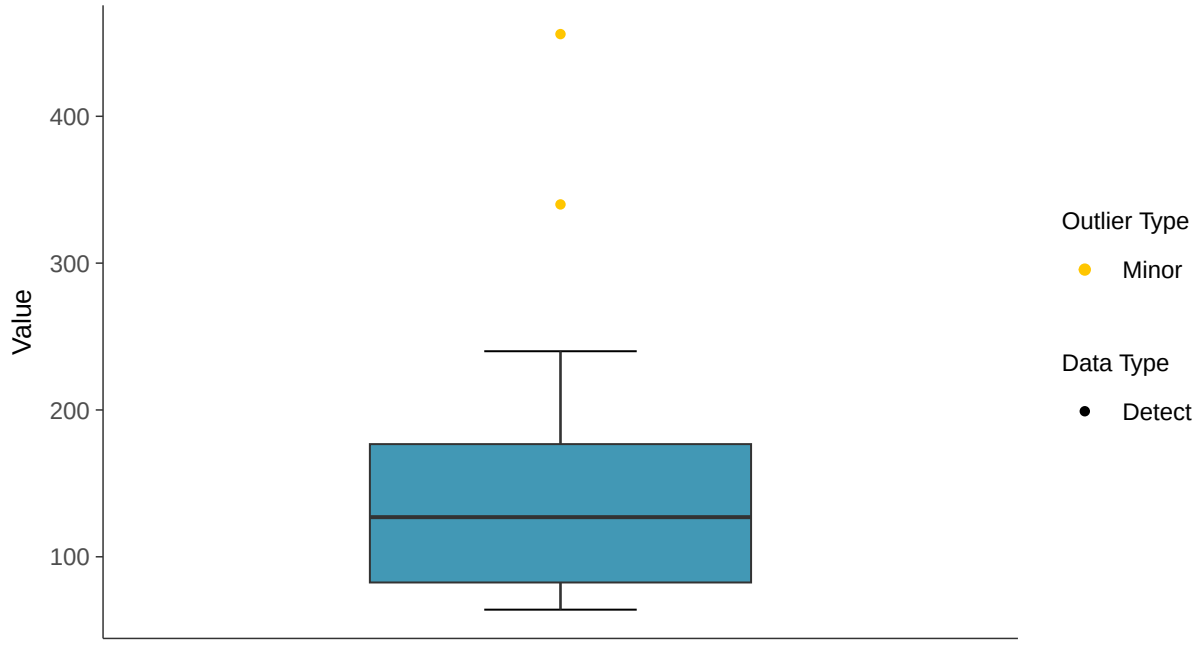
ID: 18_2_103



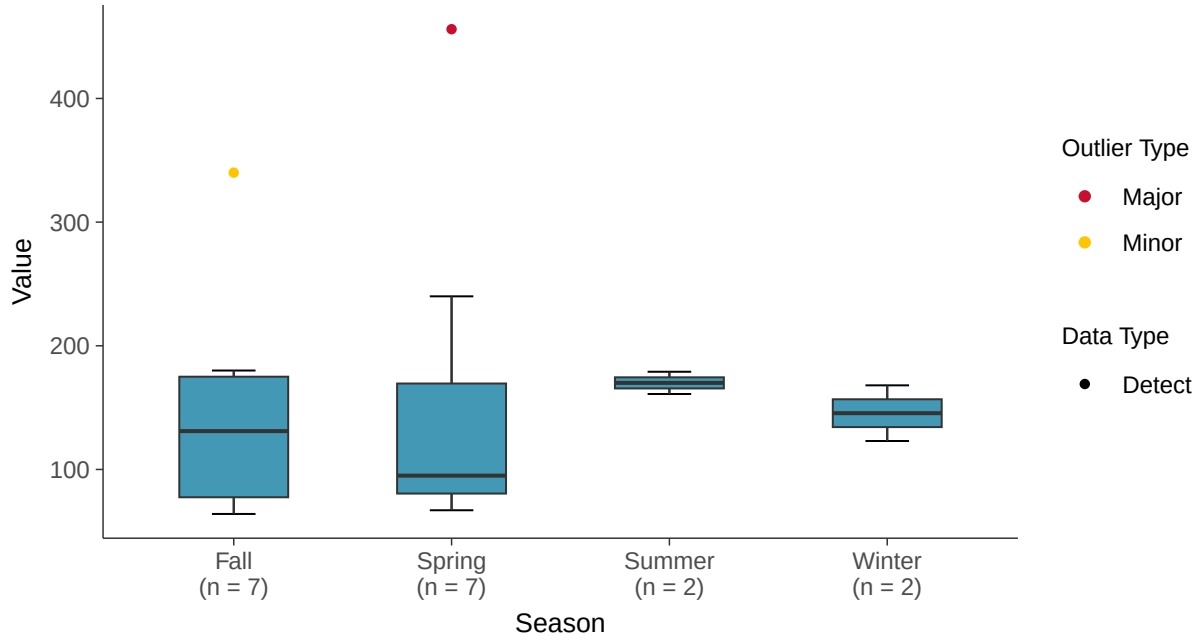
## Boxplot

Barium, MW-17005 (ug/L)



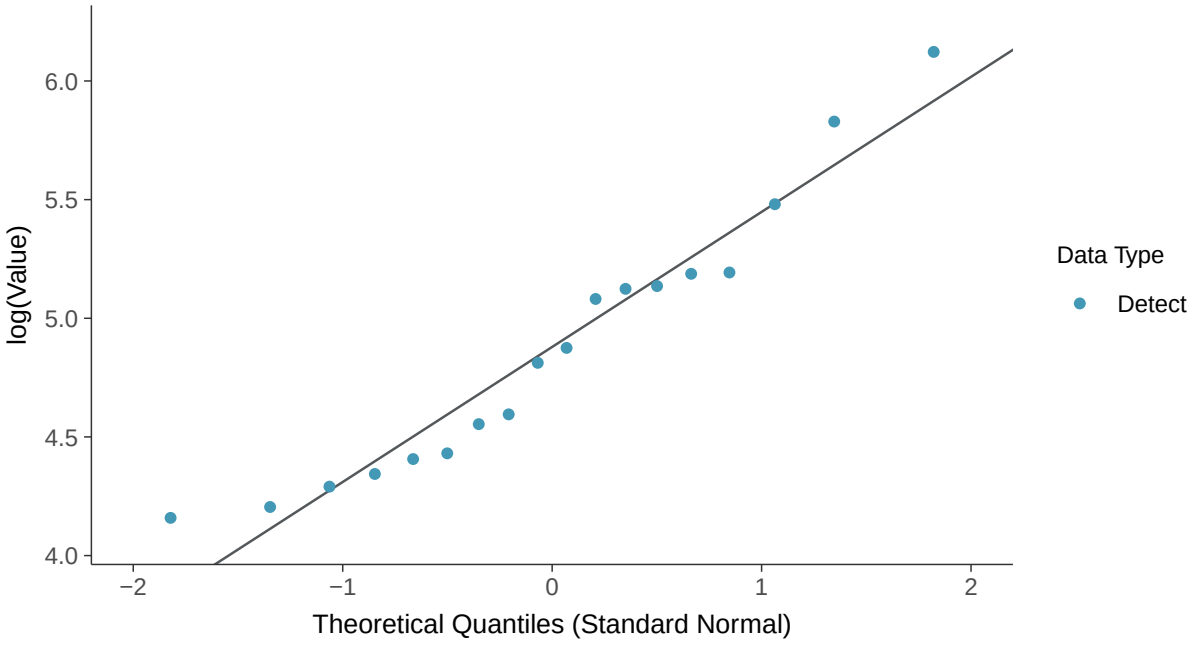

## Boxplot by Season

Barium, MW-17005 (ug/L)



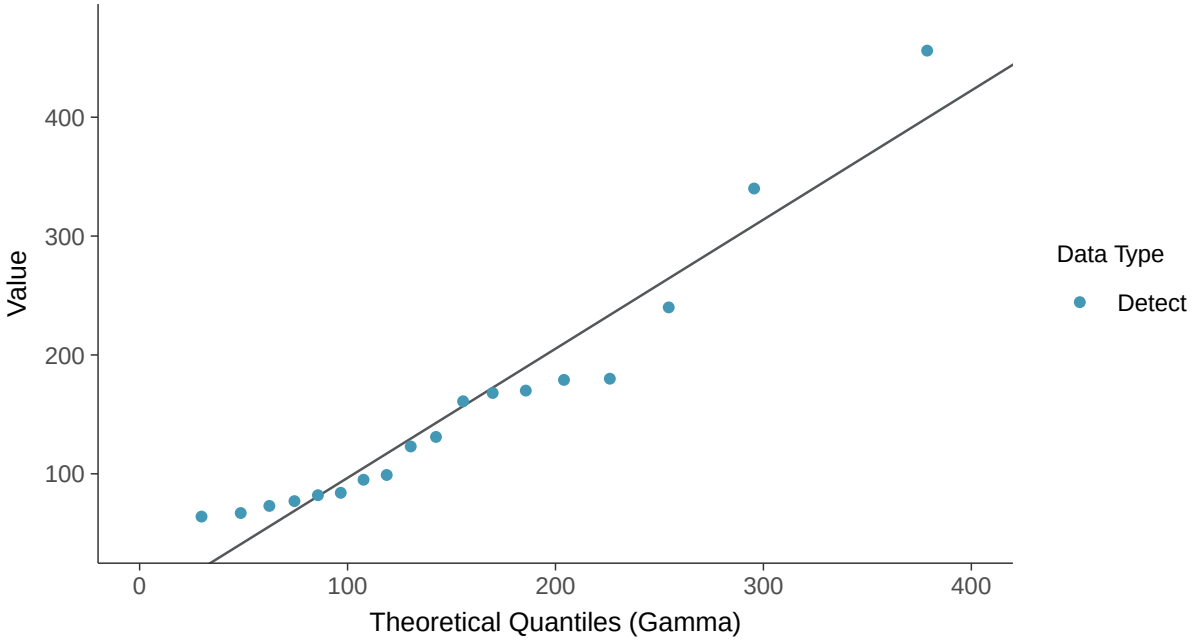
**Lognormal Q-Q plot**

Barium, MW-17005 (ug/L)



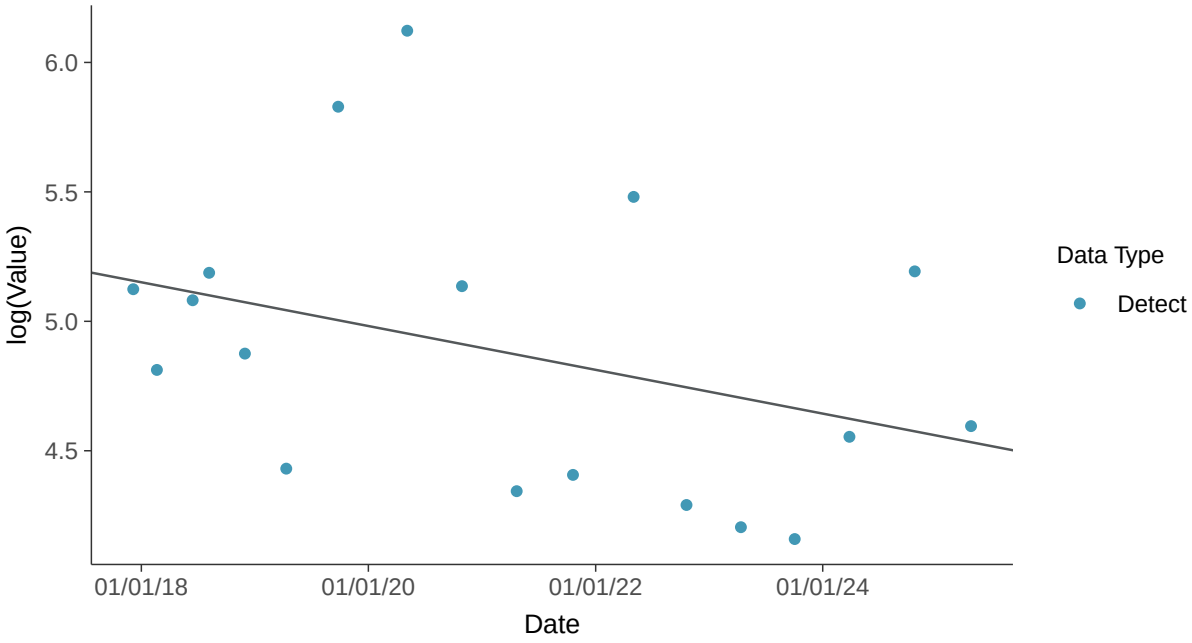

**Gamma Q-Q plot**

Barium, MW-17005 (ug/L)



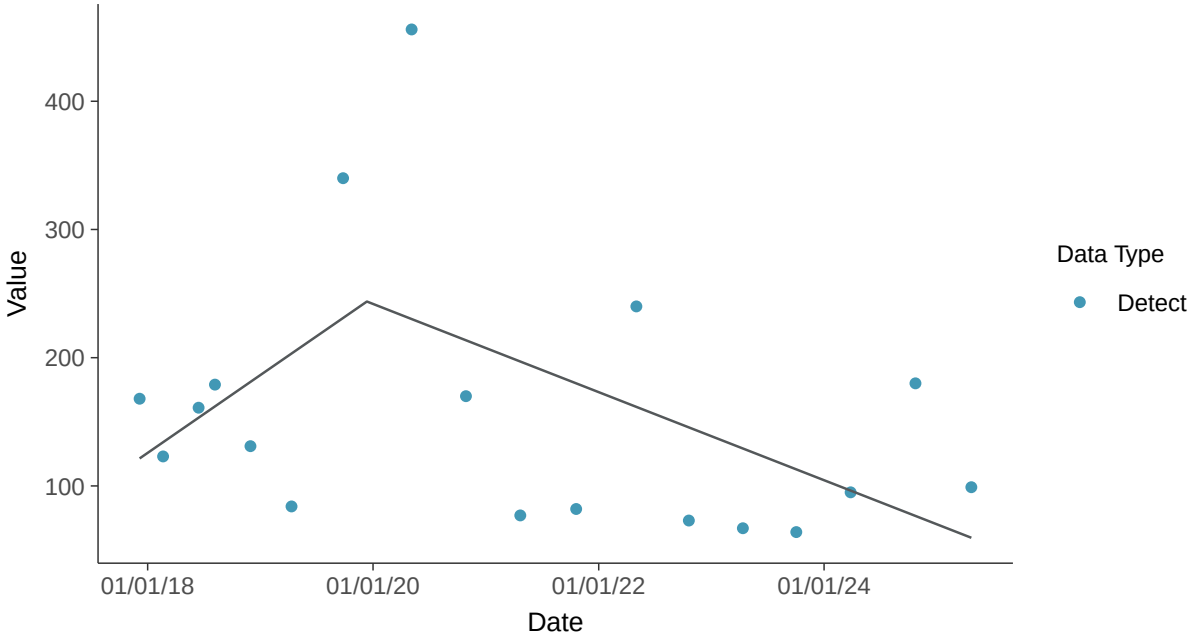
**Trend Regression: Lognormal MLE**

Barium, MW-17005 (ug/L)



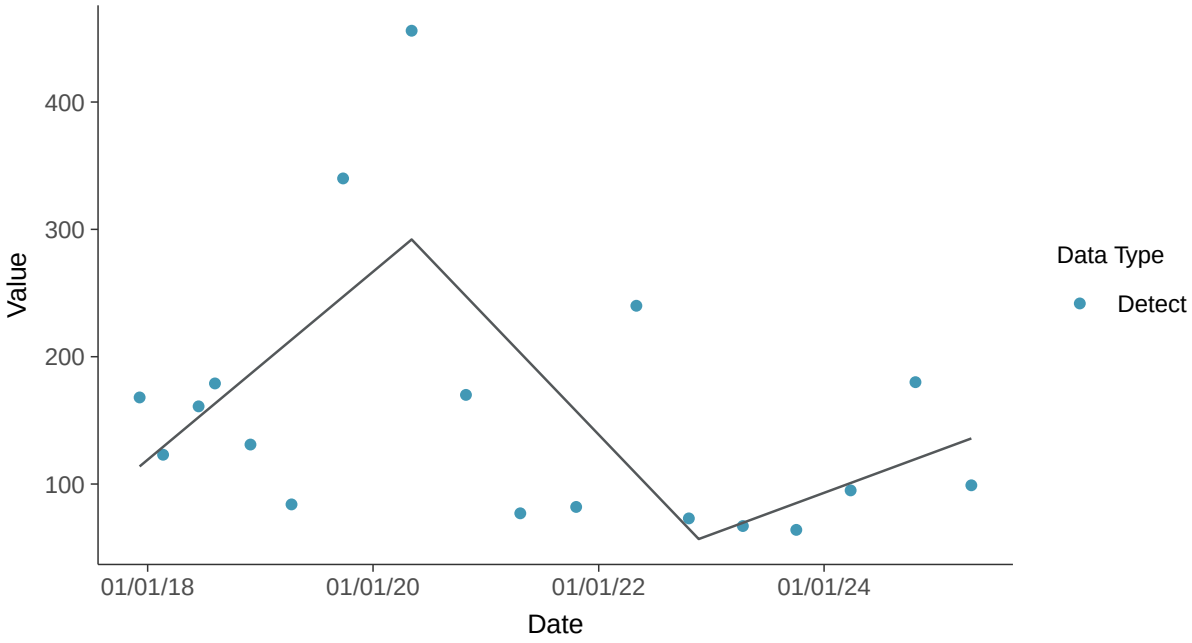

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17005 (ug/L)



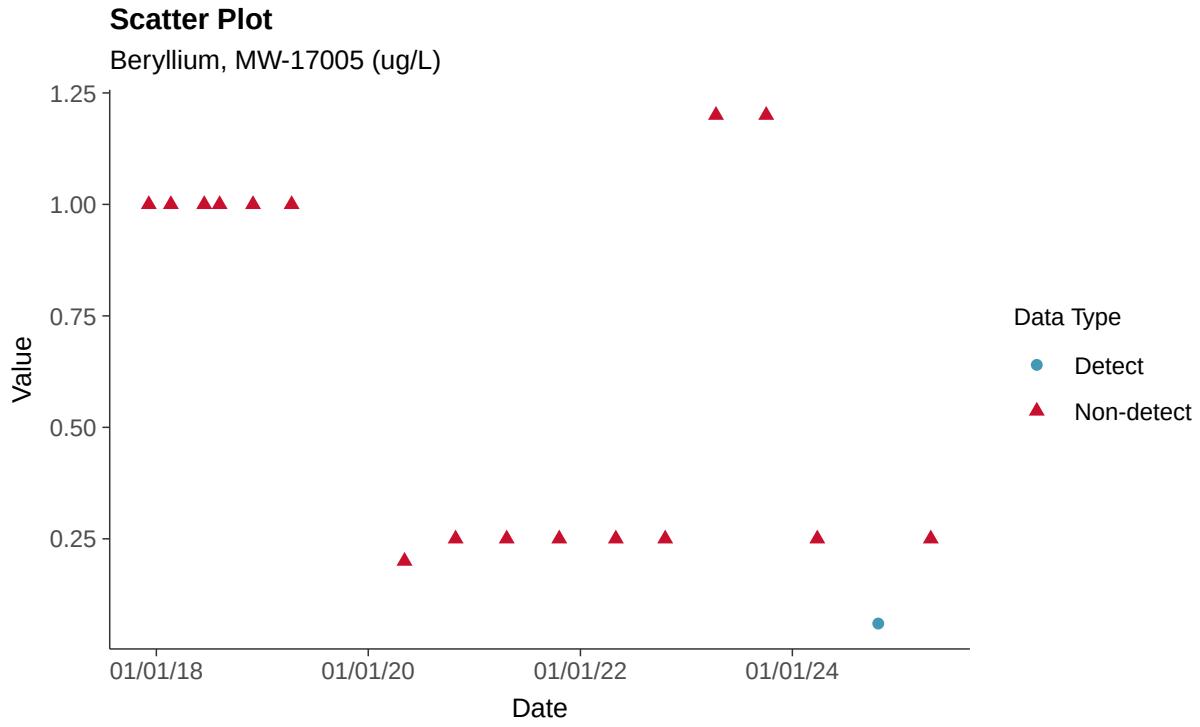
**Trend Regression: Piecewise Linear-Linear-Linear**

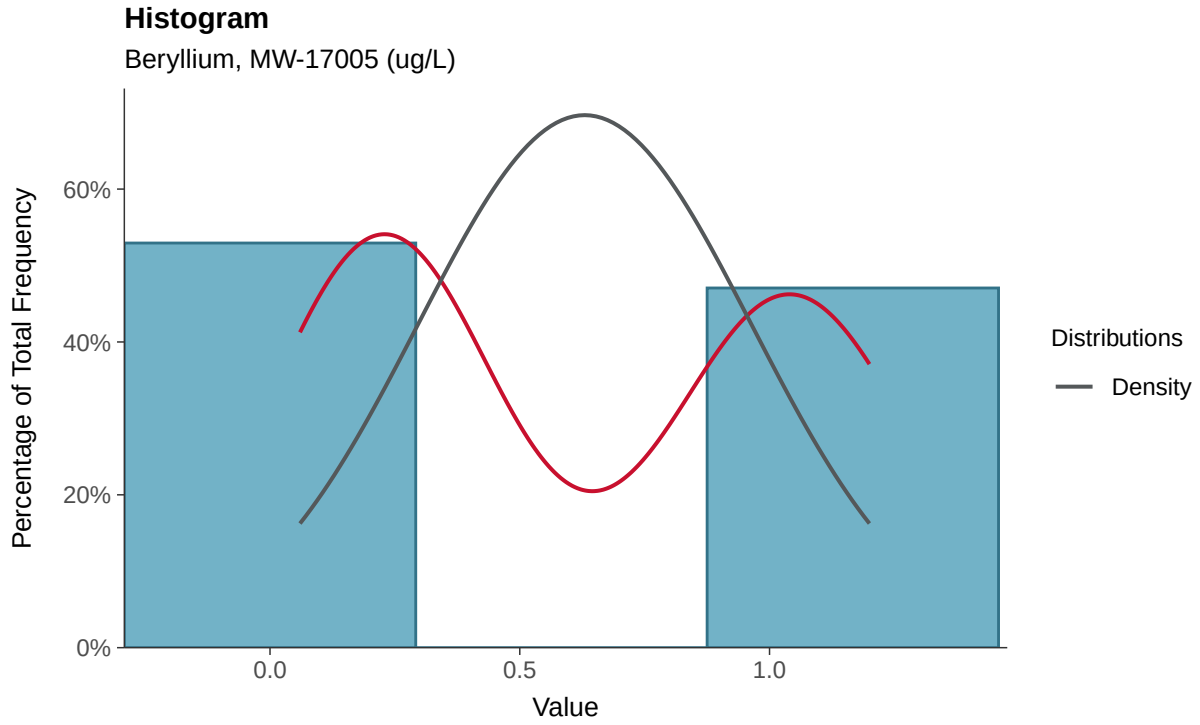
Barium, MW-17005 (ug/L)



## Appendix IV: Beryllium, MW-17005

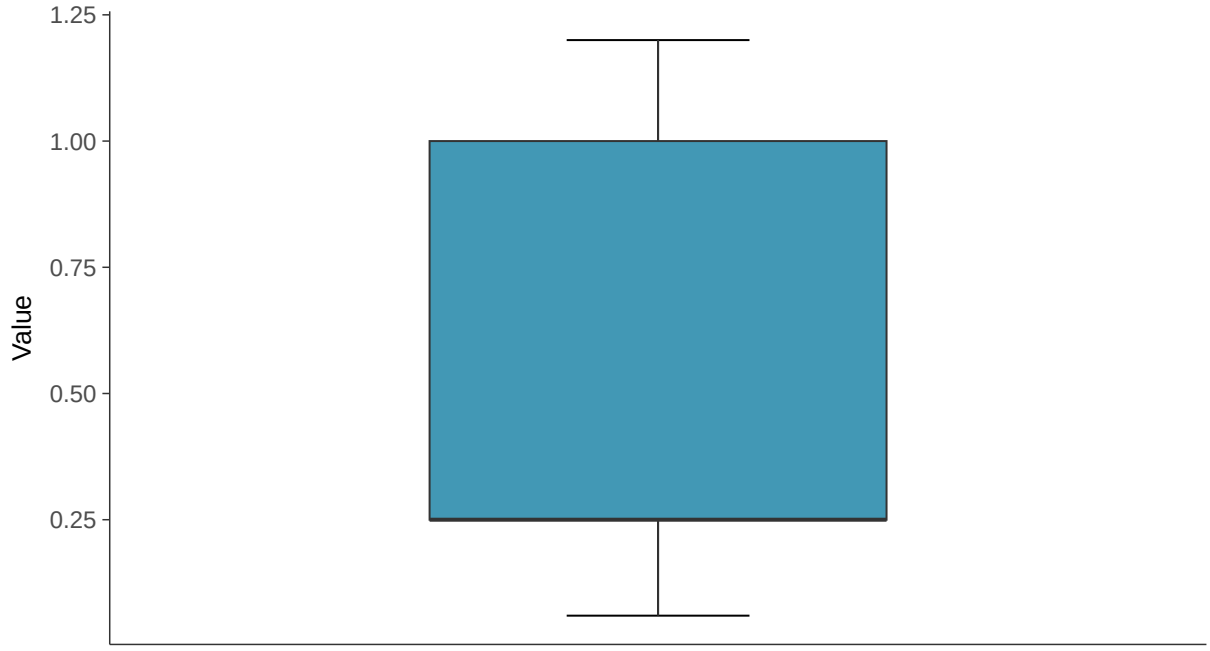
ID: 18_2_104



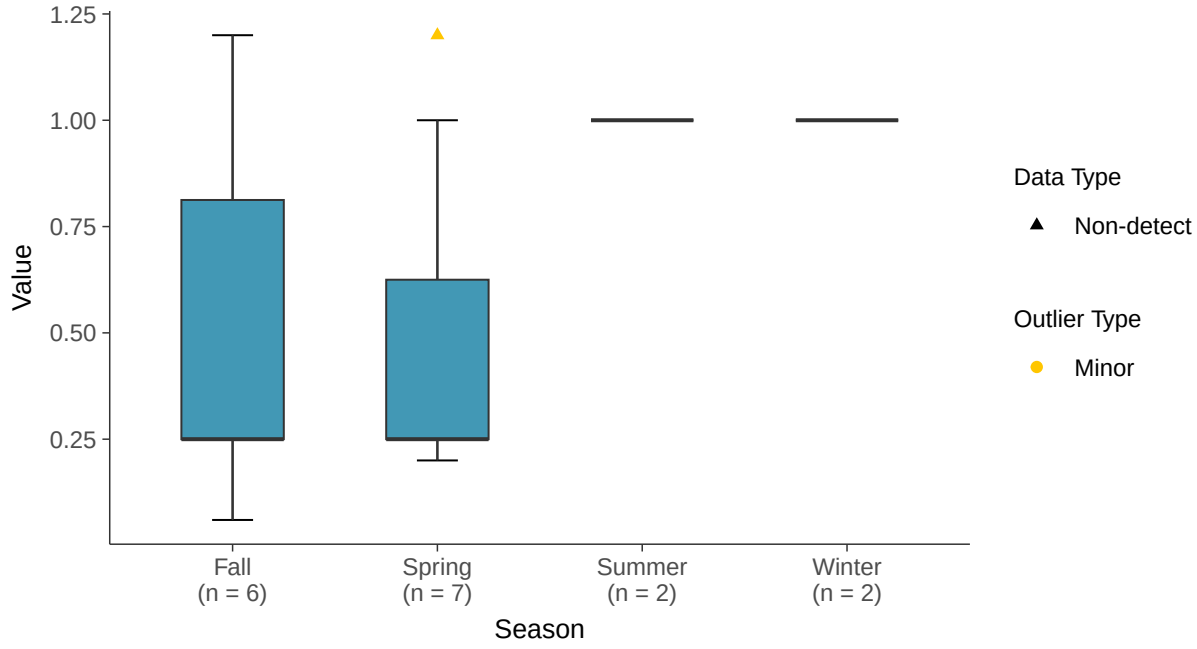
## Boxplot

Beryllium, MW-17005 (ug/L)



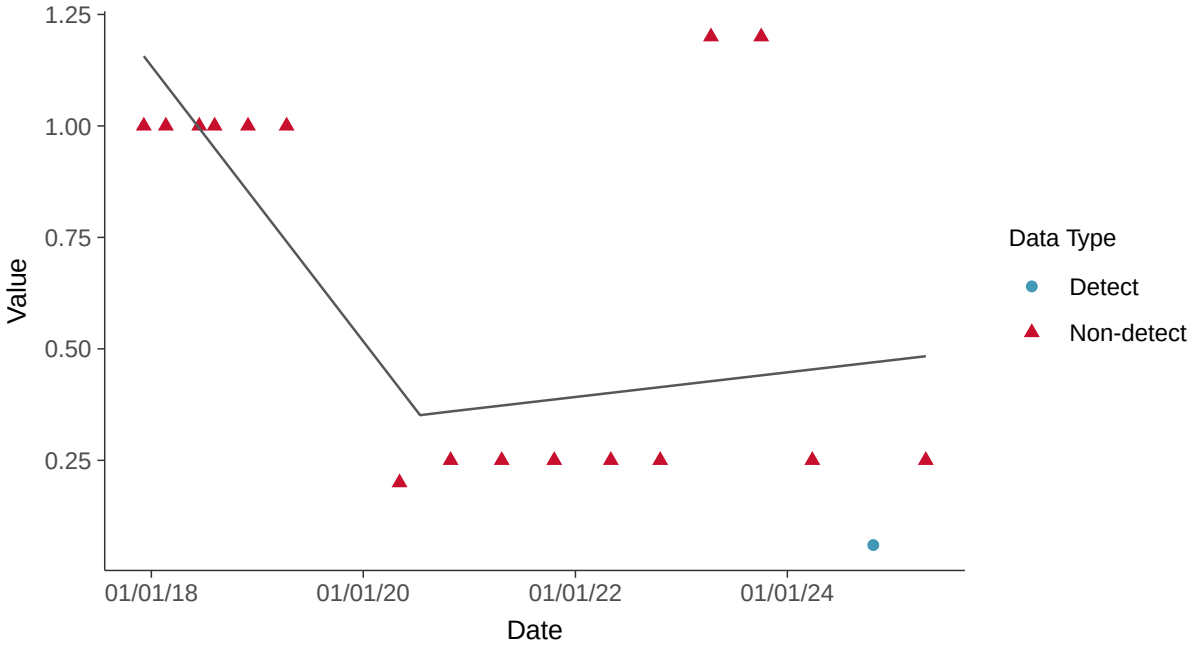

## Boxplot by Season

Beryllium, MW-17005 (ug/L)



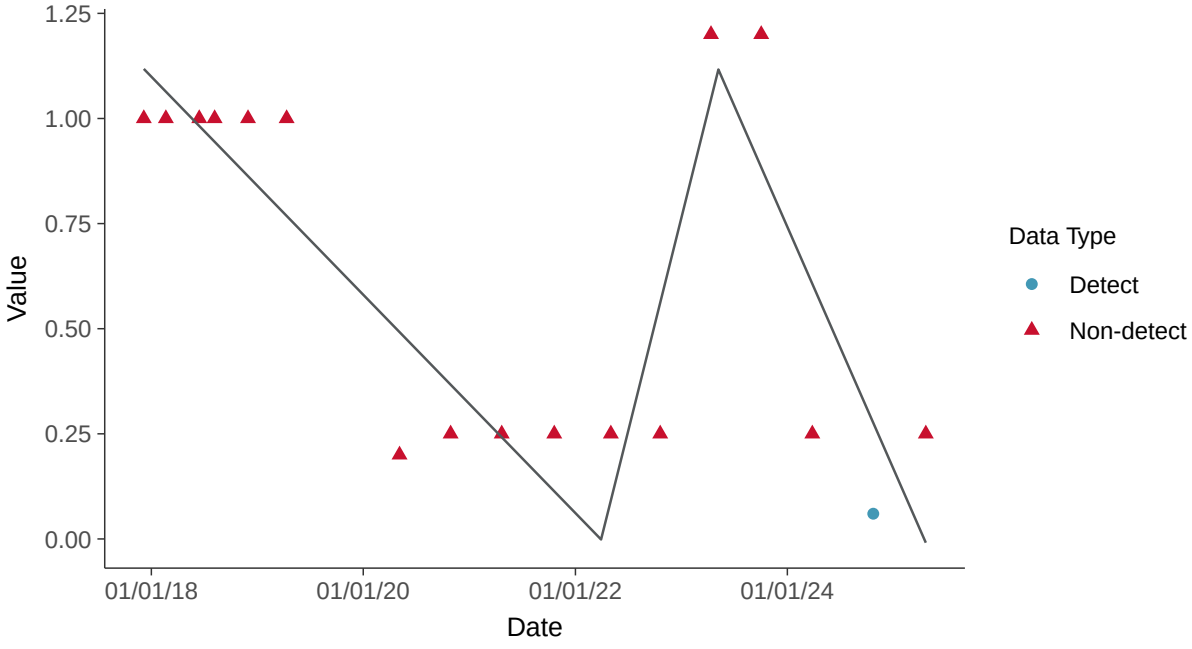
**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-17005 (ug/L)



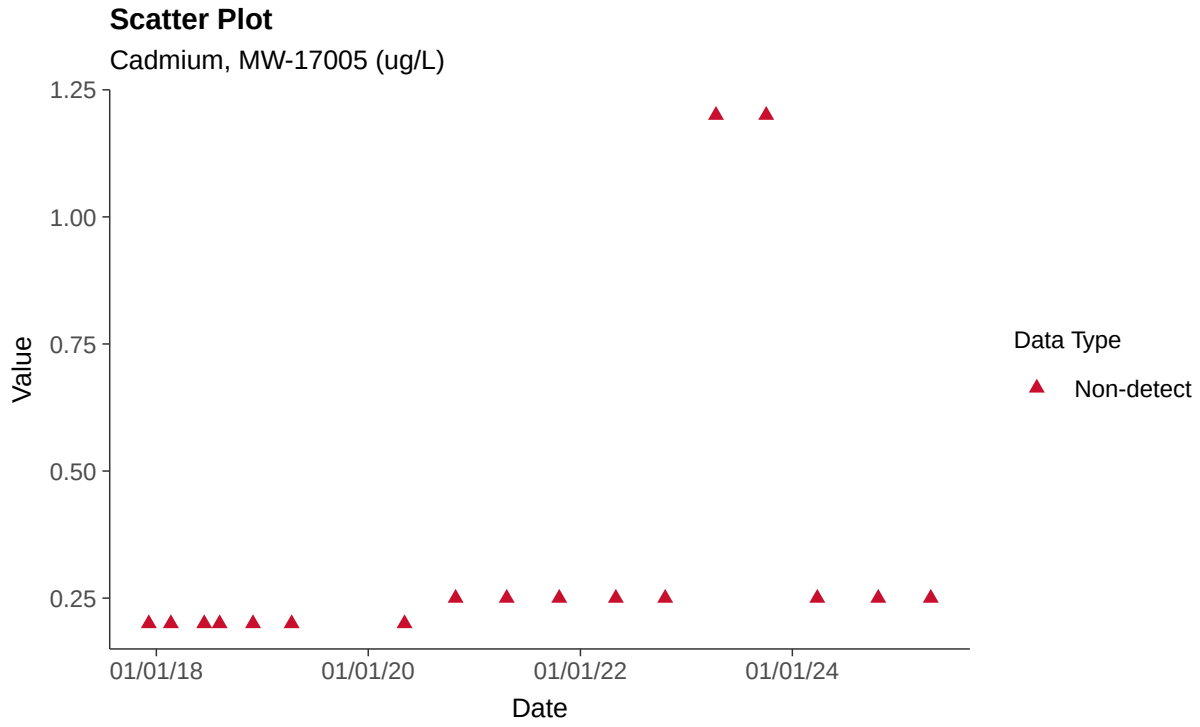

**Trend Regression: Piecewise Linear-Linear-Linear**

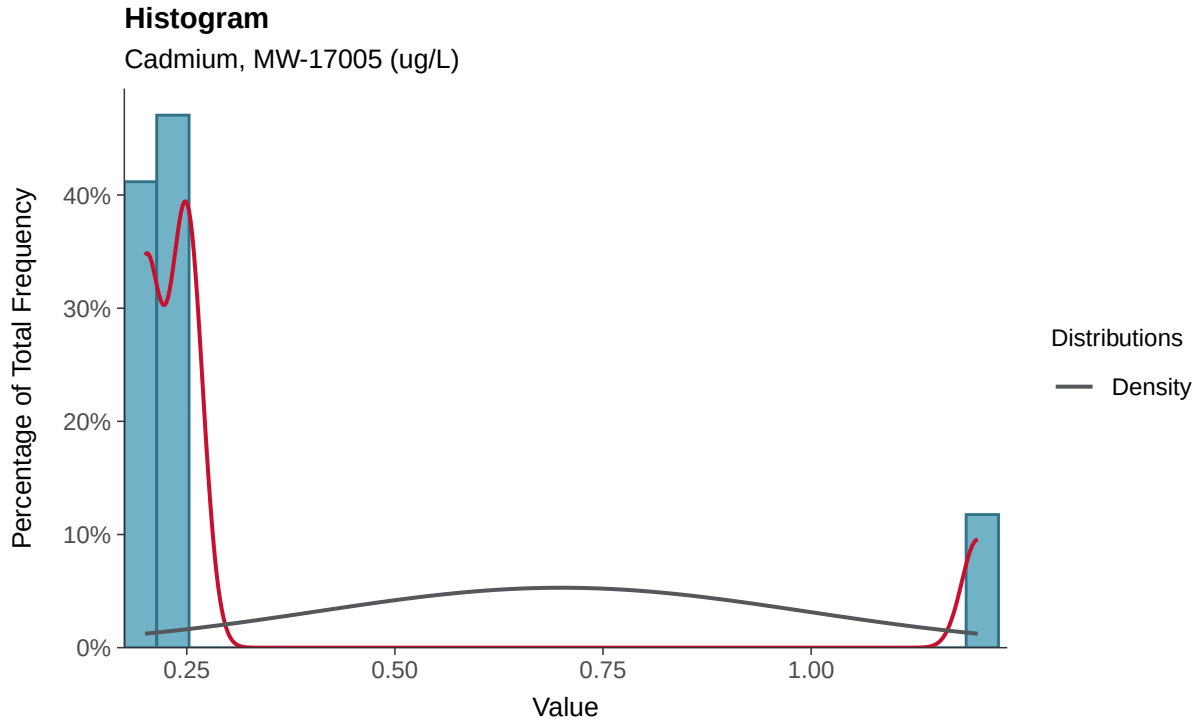
Beryllium, MW-17005 (ug/L)



## Appendix IV: Cadmium, MW-17005

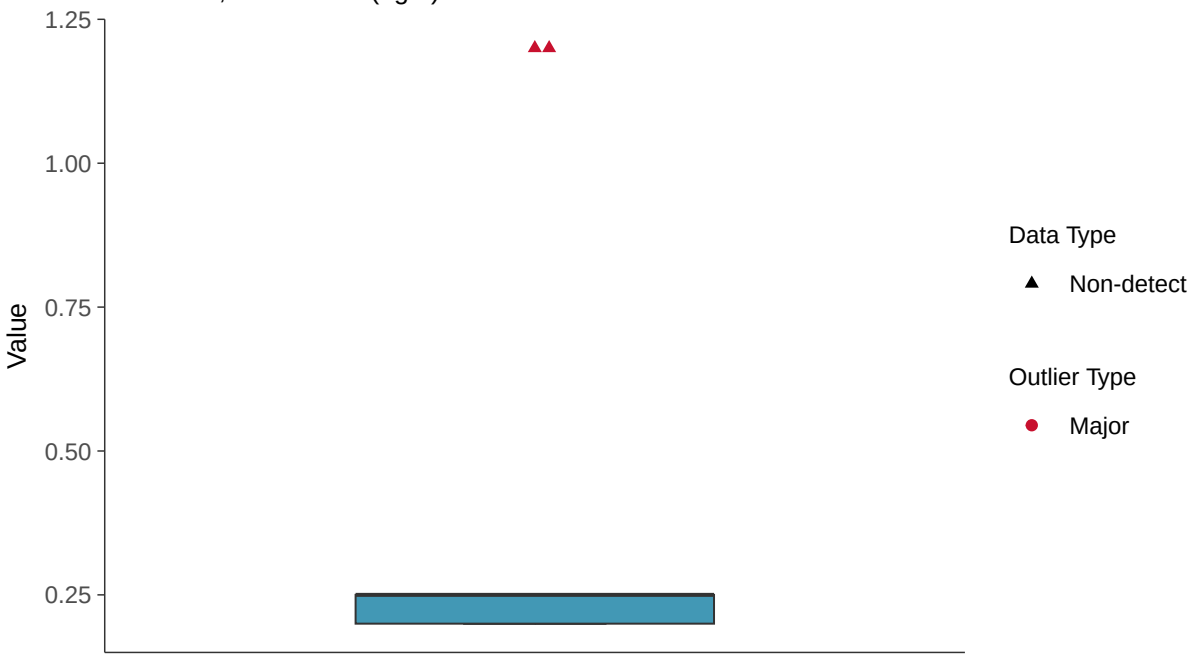
ID: 18_2_106



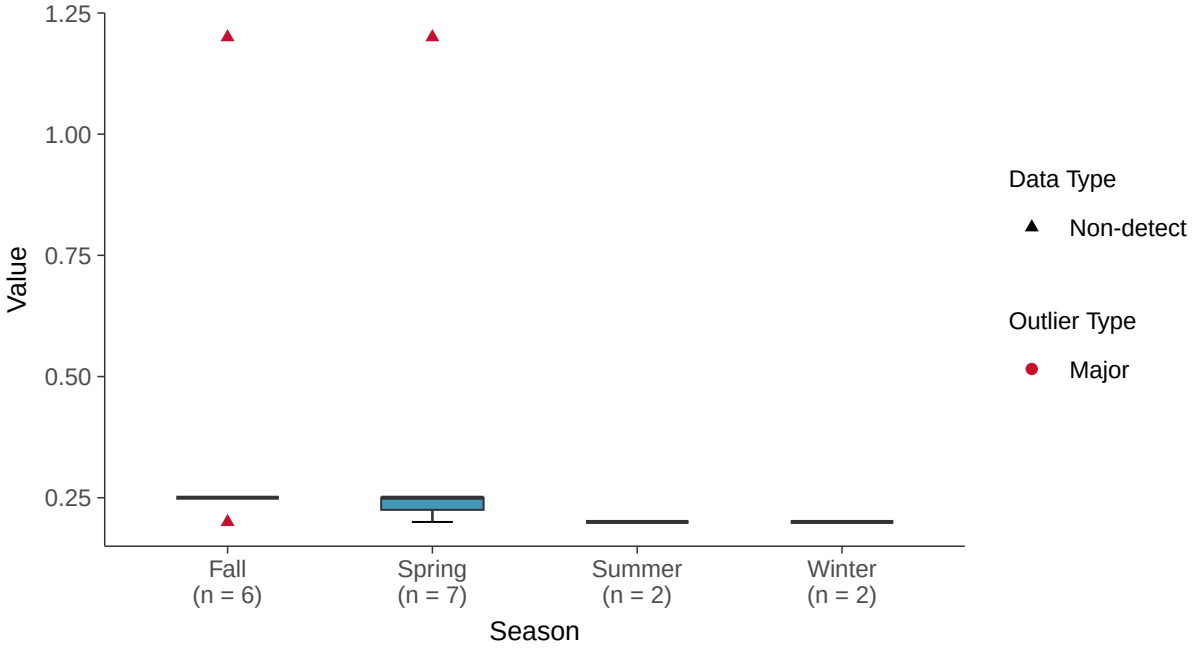
## Boxplot

Cadmium, MW-17005 (ug/L)



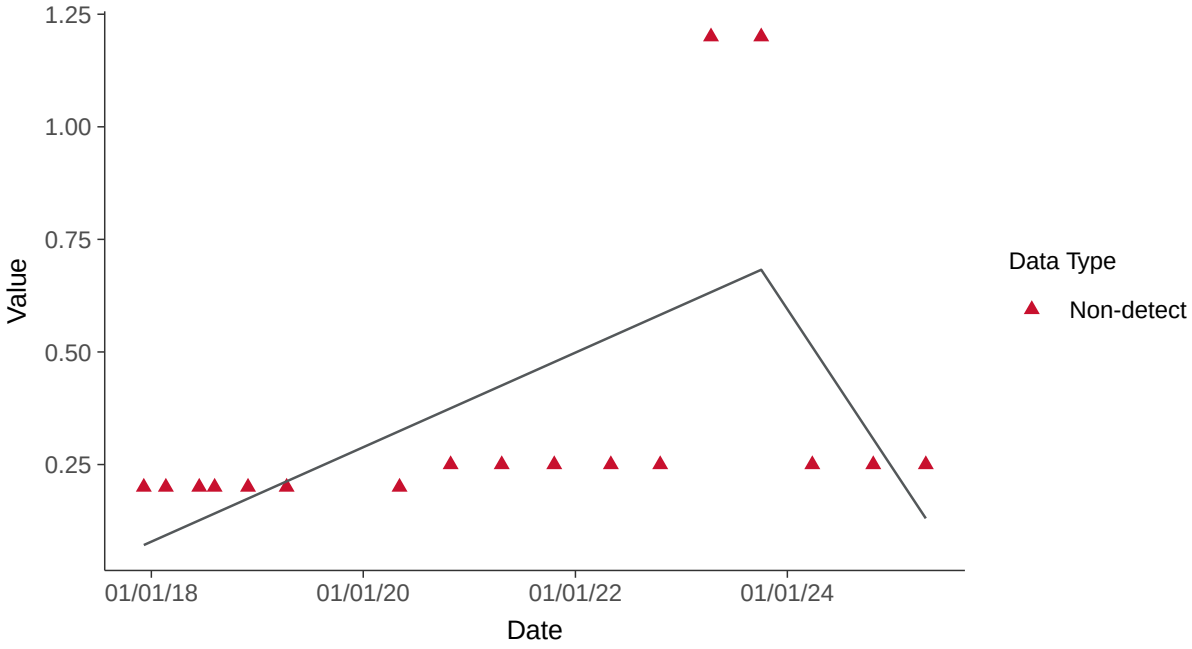

## Boxplot by Season

Cadmium, MW-17005 (ug/L)



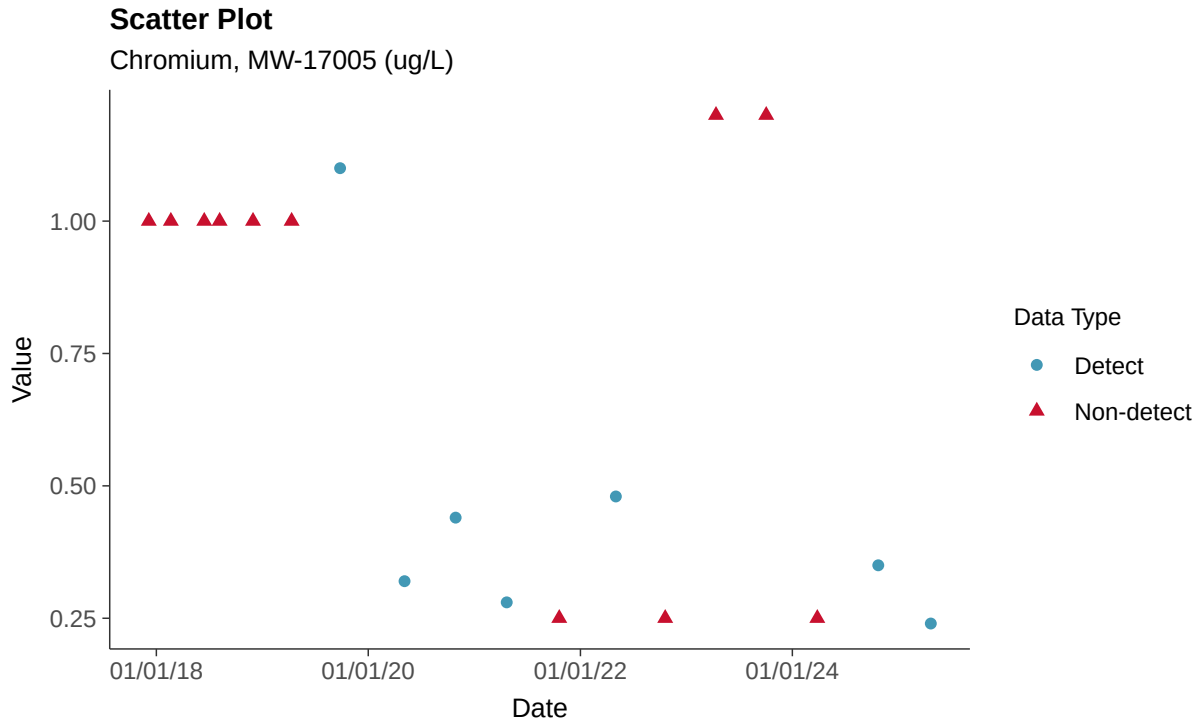
**Trend Regression: Piecewise Linear-Linear**

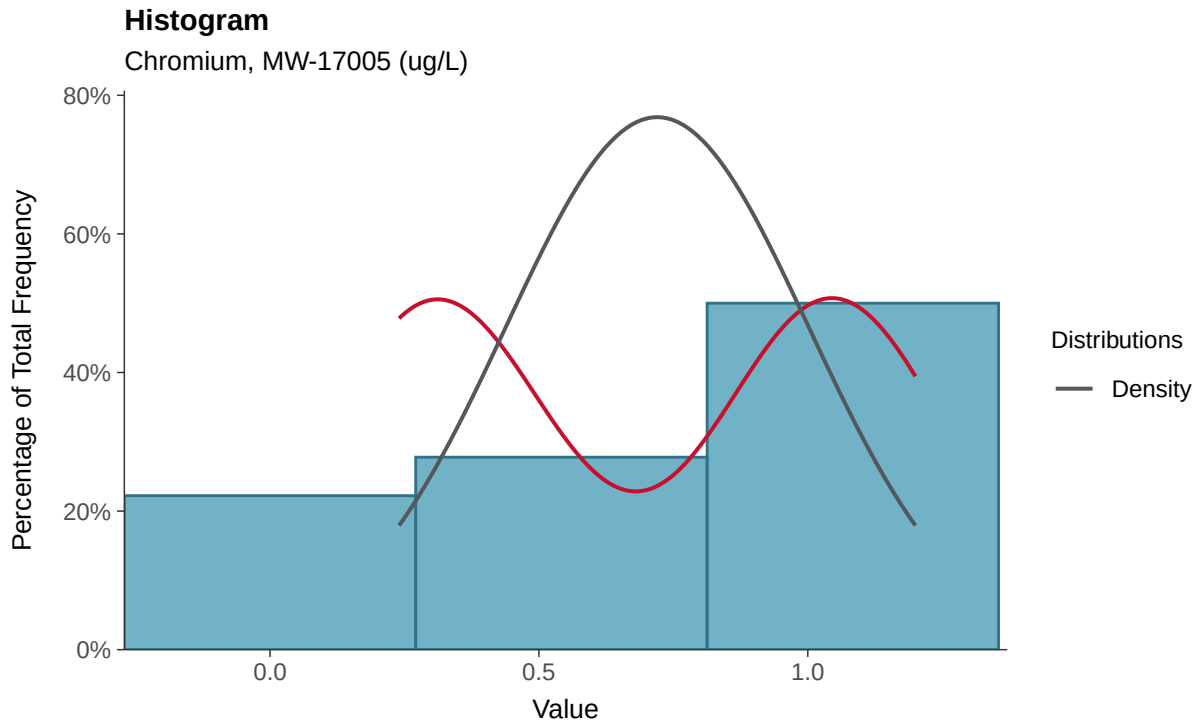
Cadmium, MW-17005 (ug/L)



## Appendix IV: Chromium, MW-17005

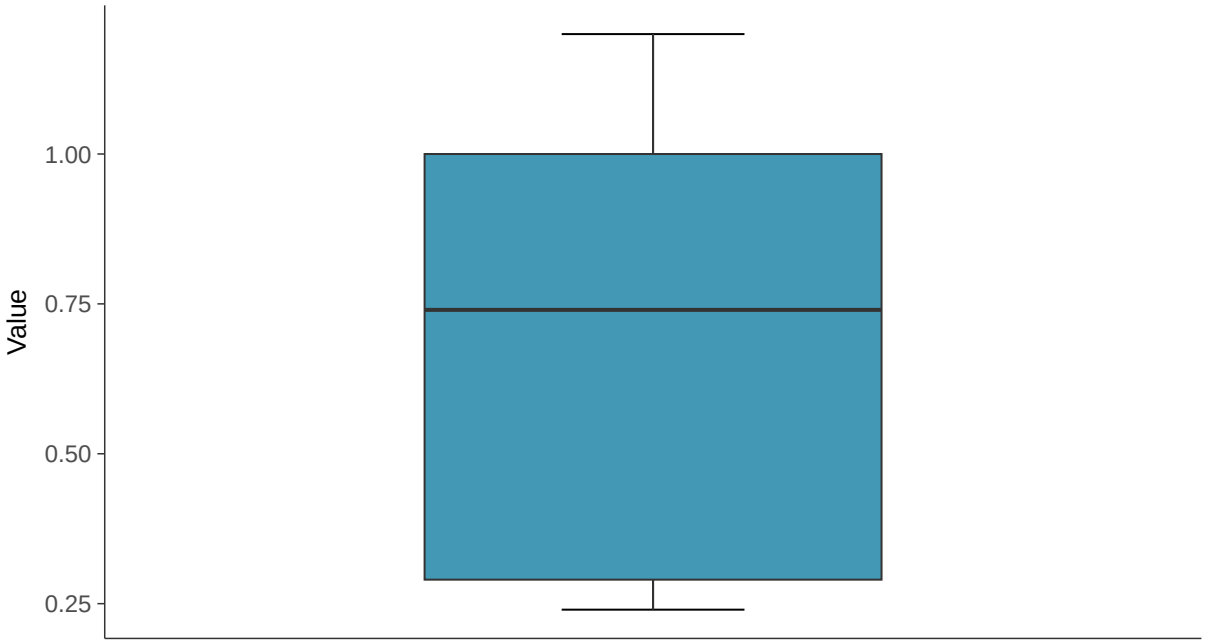
ID: 18_2_109



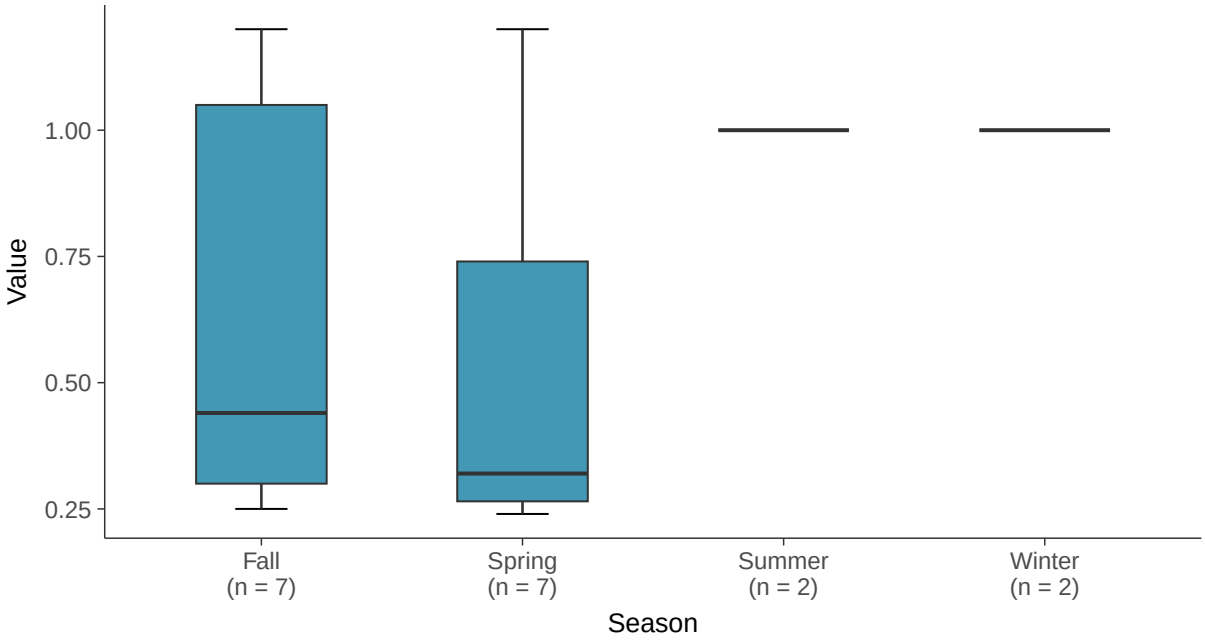
**Boxplot**

Chromium, MW-17005 (ug/L)



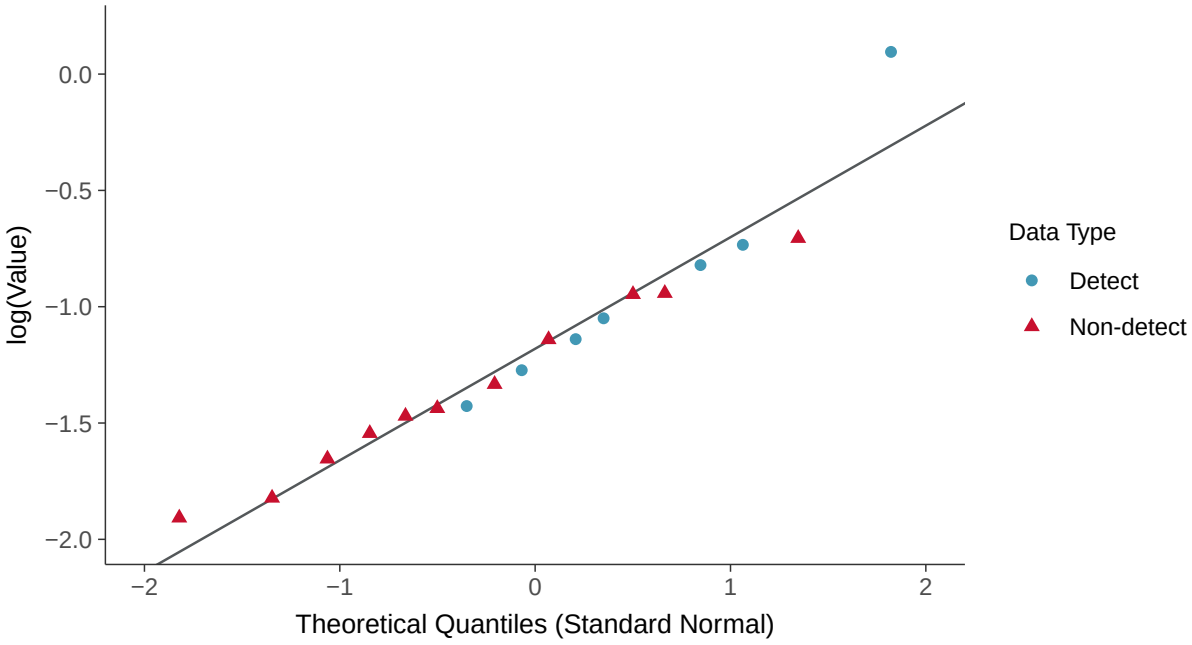

**Boxplot by Season**

Chromium, MW-17005 (ug/L)



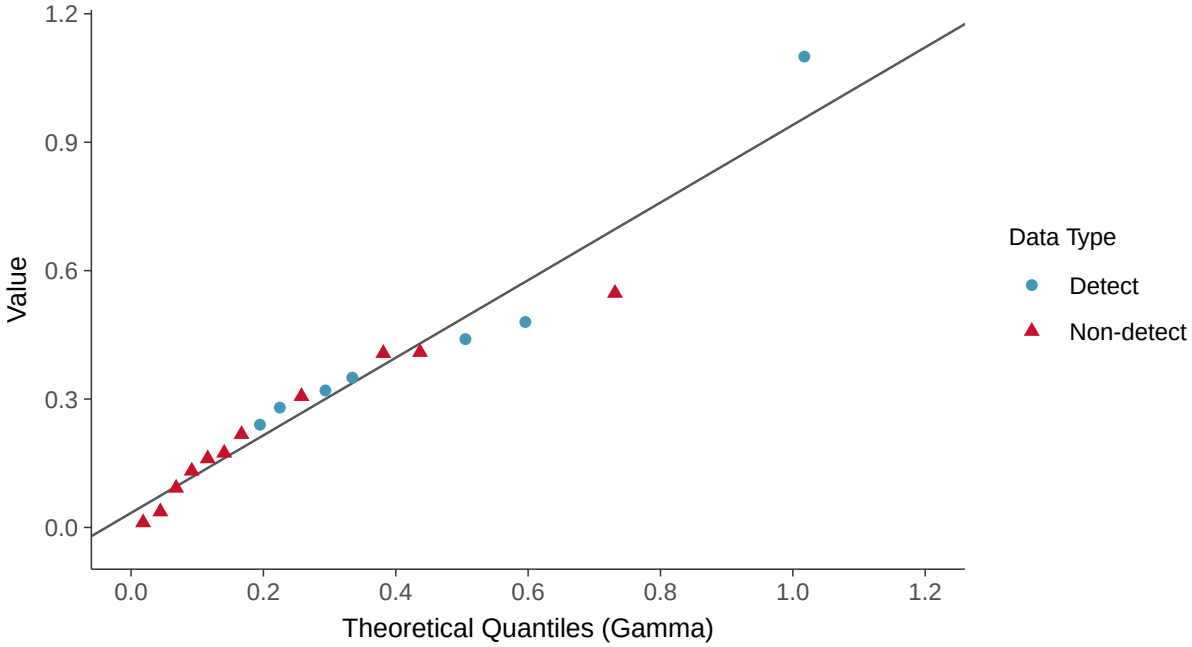
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17005 (ug/L)



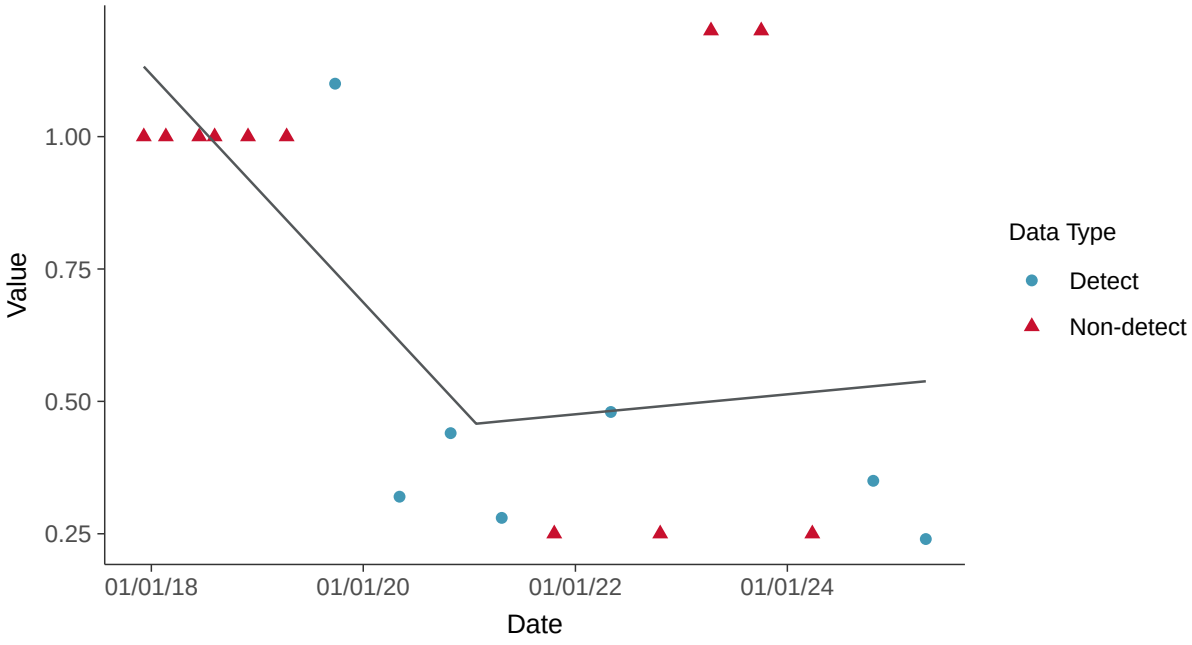

**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17005 (ug/L)



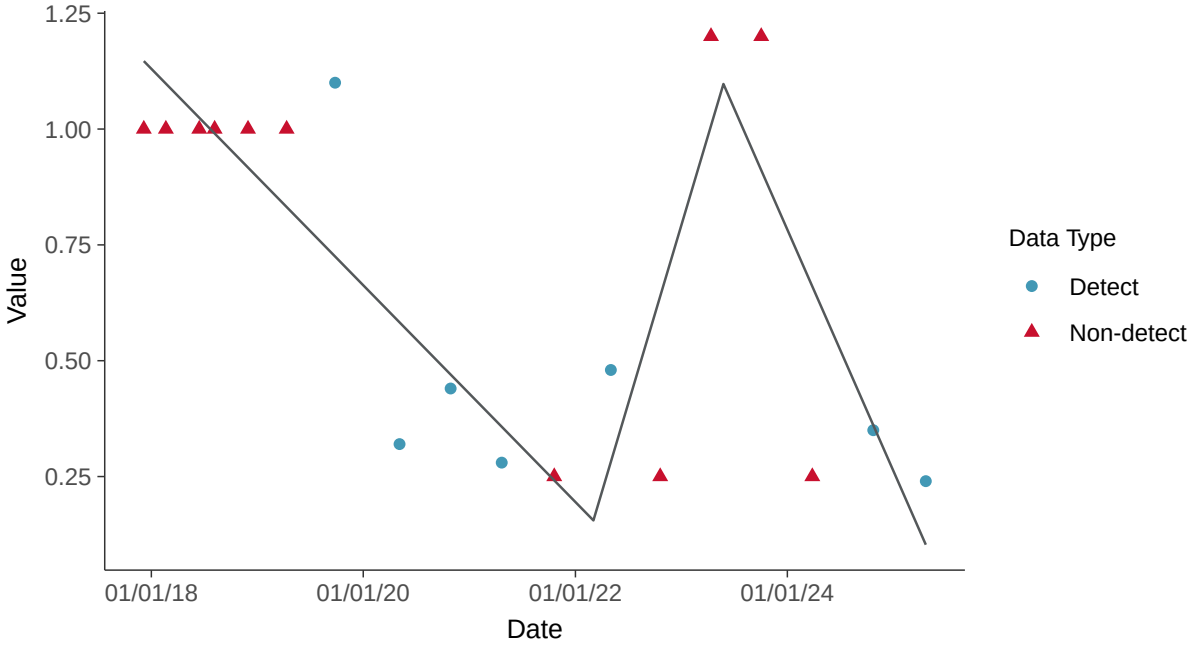
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-17005 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Chromium, MW-17005 (ug/L)

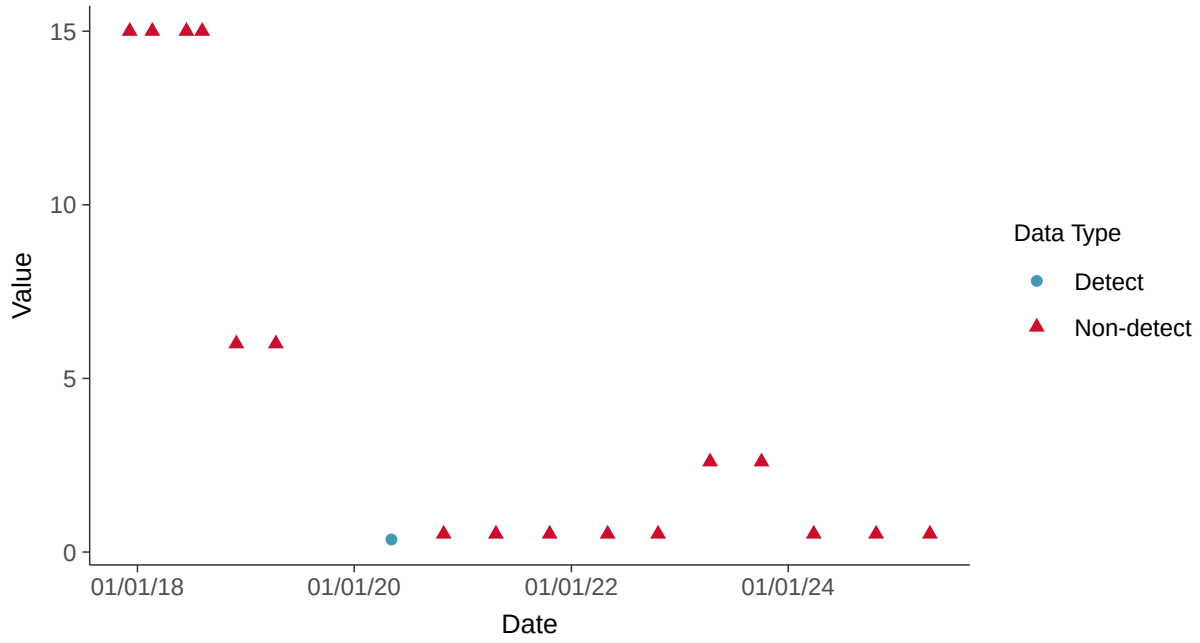


## Appendix IV: Cobalt, MW-17005

ID: 18_2_110

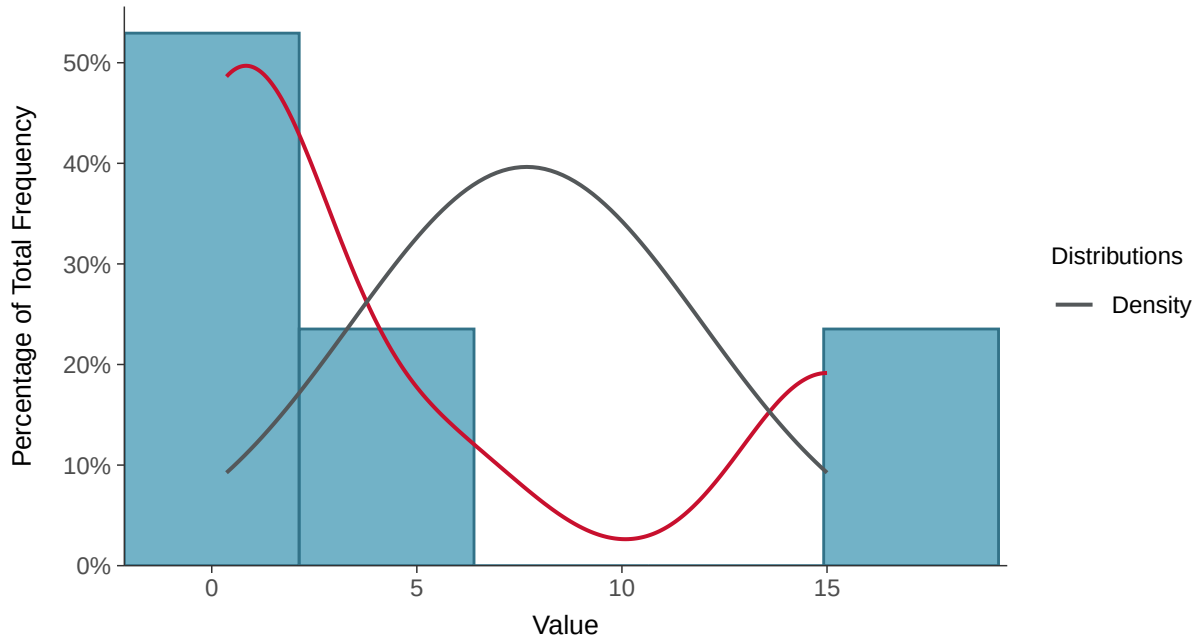
**Scatter Plot**

Cobalt, MW-17005 (ug/L)



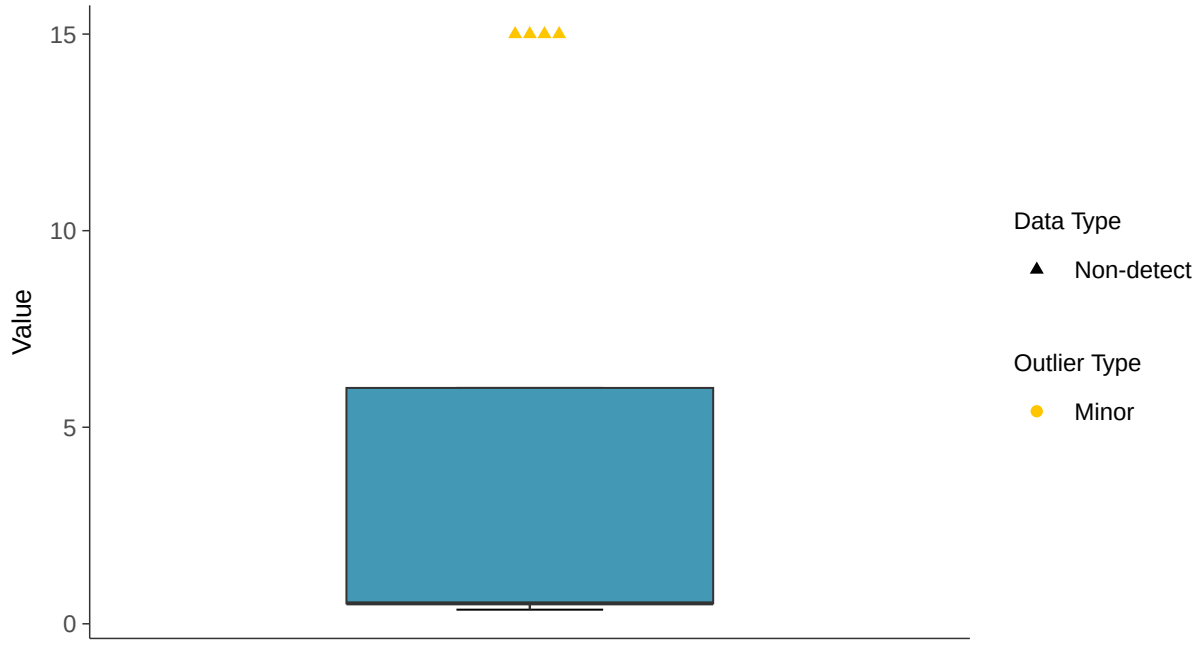

**Histogram**

Cobalt, MW-17005 (ug/L)



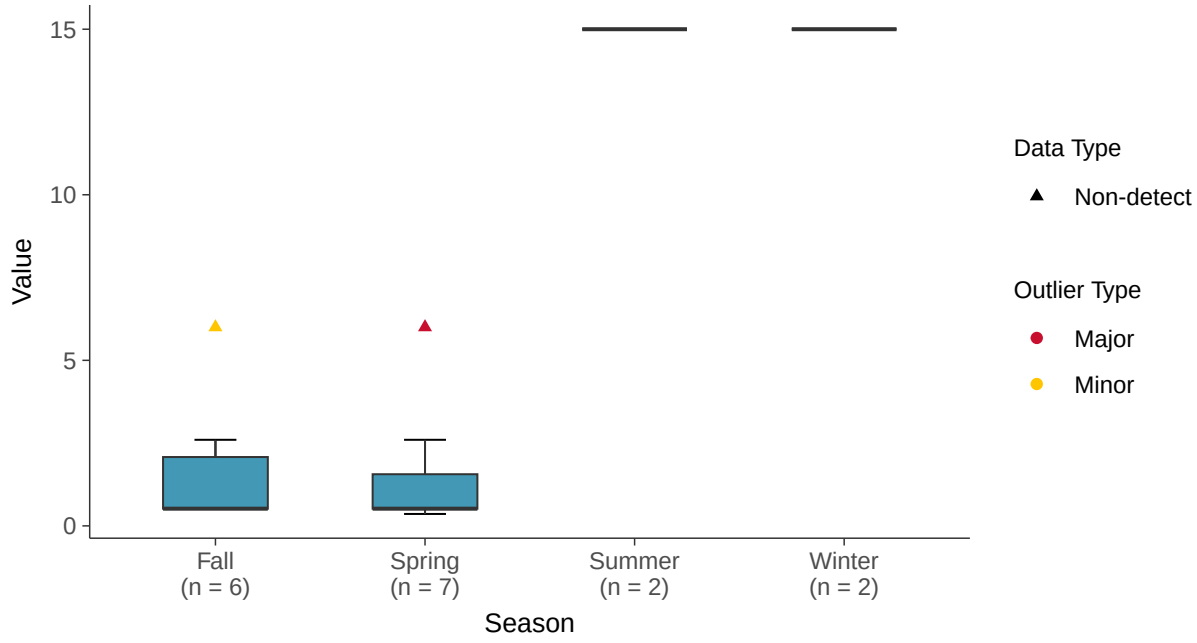
**Boxplot**

Cobalt, MW-17005 (ug/L)



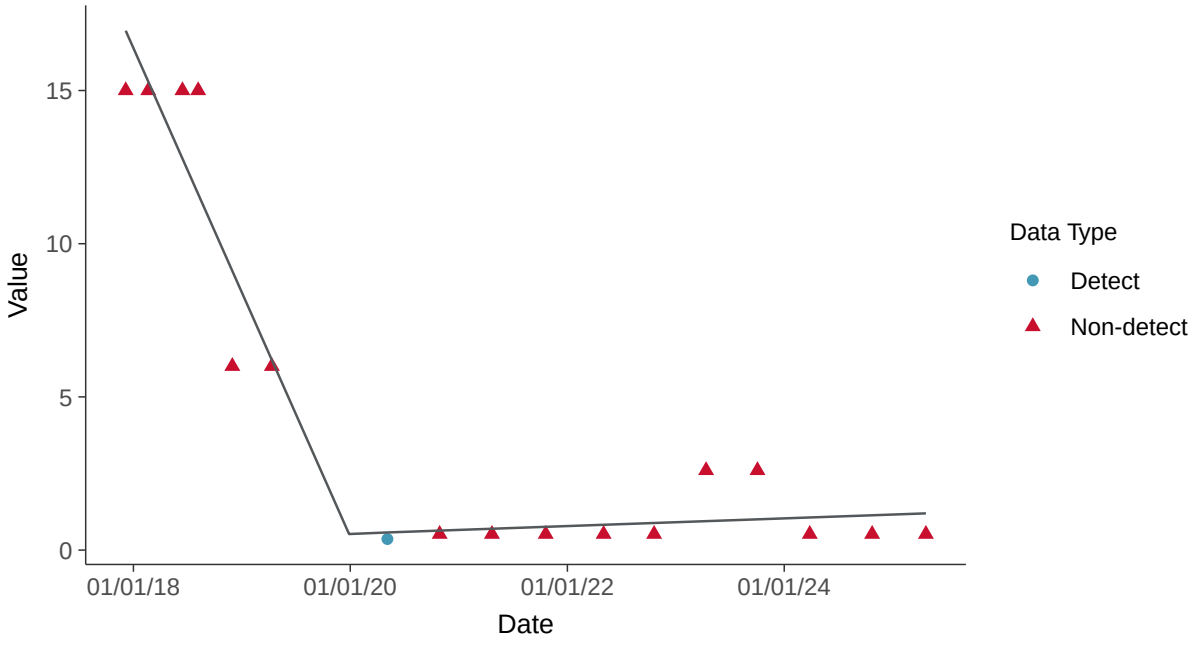

**Boxplot by Season**

Cobalt, MW-17005 (ug/L)



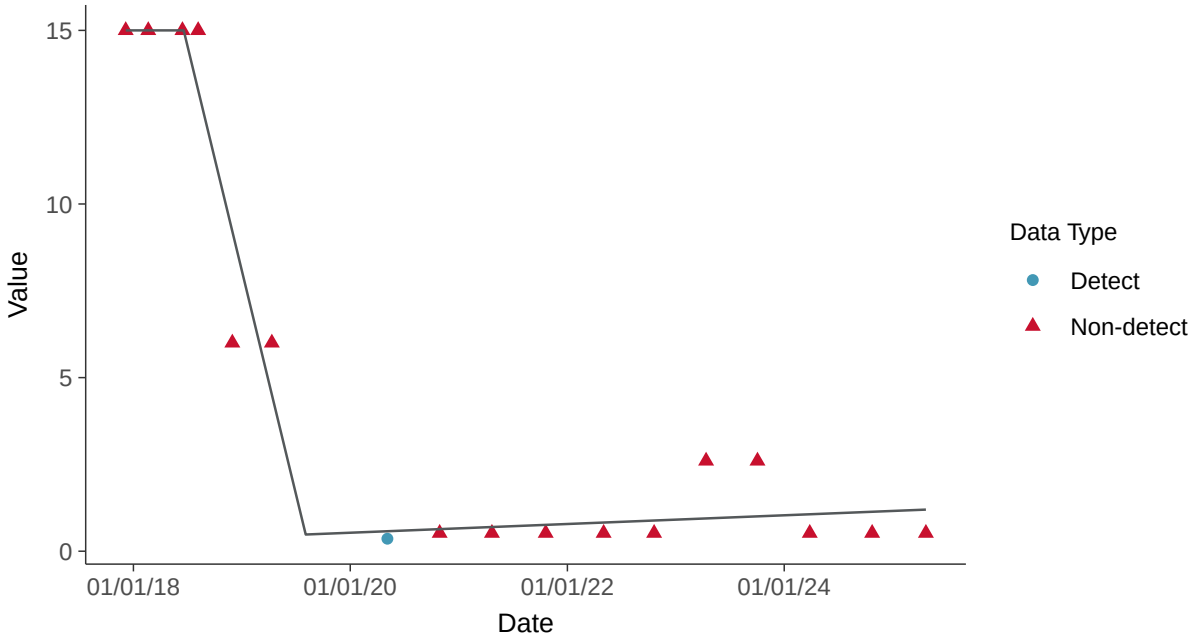
**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17005 (ug/L)



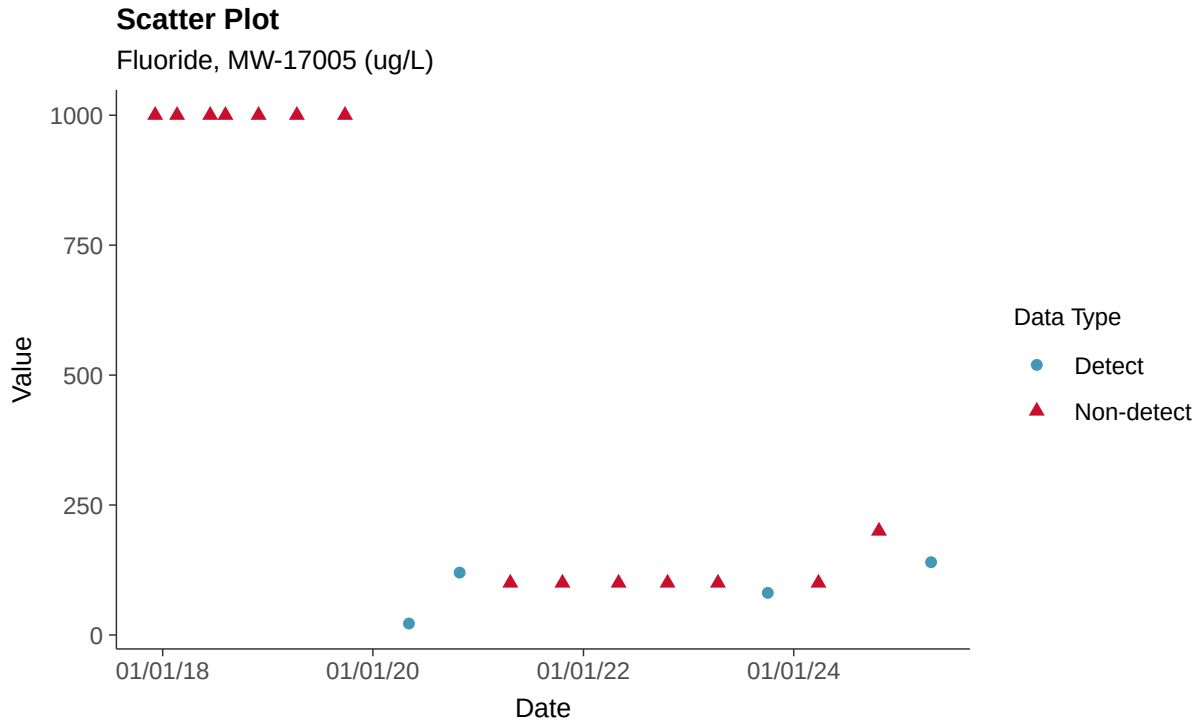

**Trend Regression: Piecewise Linear-Linear-Linear**

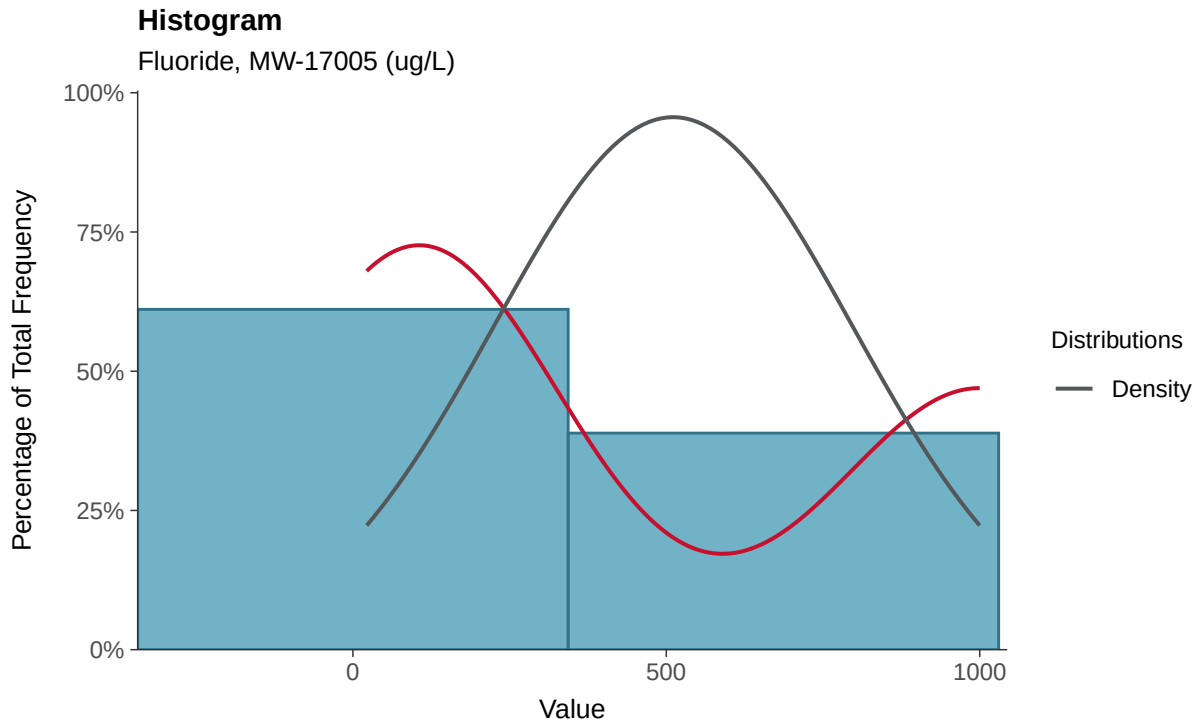
Cobalt, MW-17005 (ug/L)



# Appendix IV: Fluoride, MW-17005

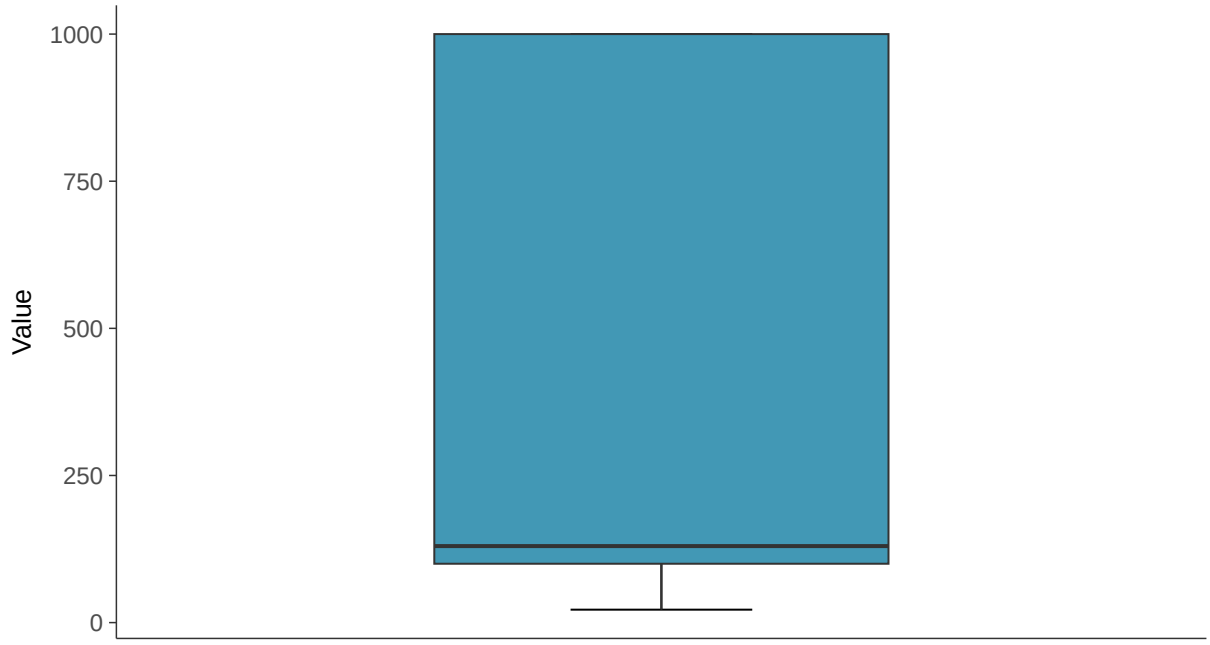
ID: 18_2_114



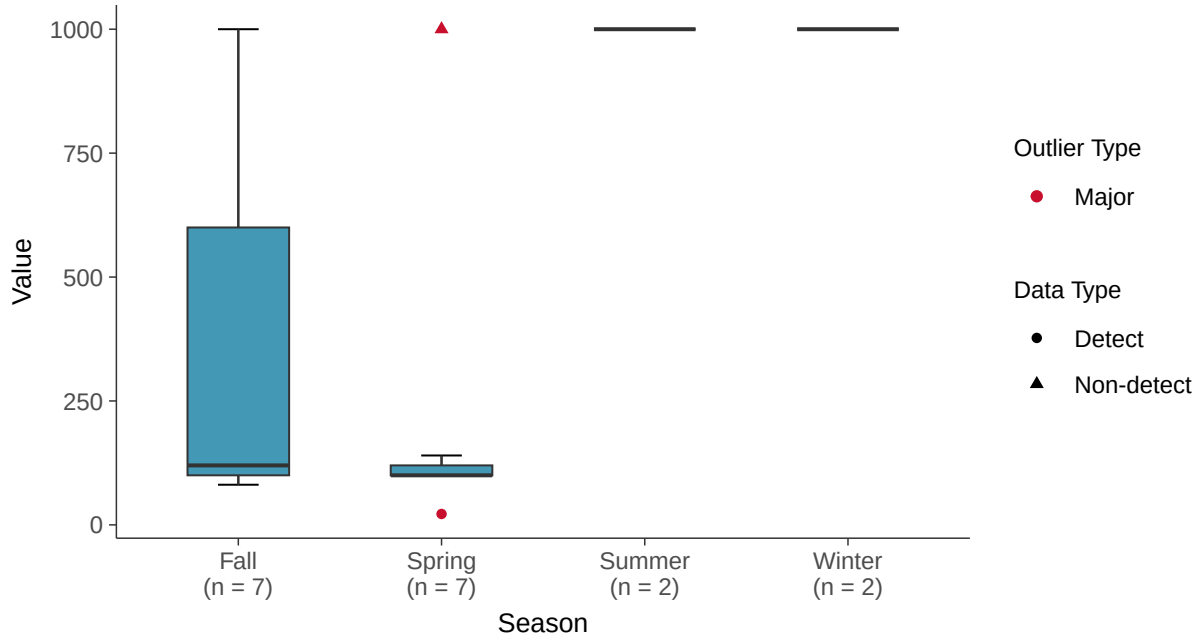
## Boxplot

Fluoride, MW-17005 (ug/L)



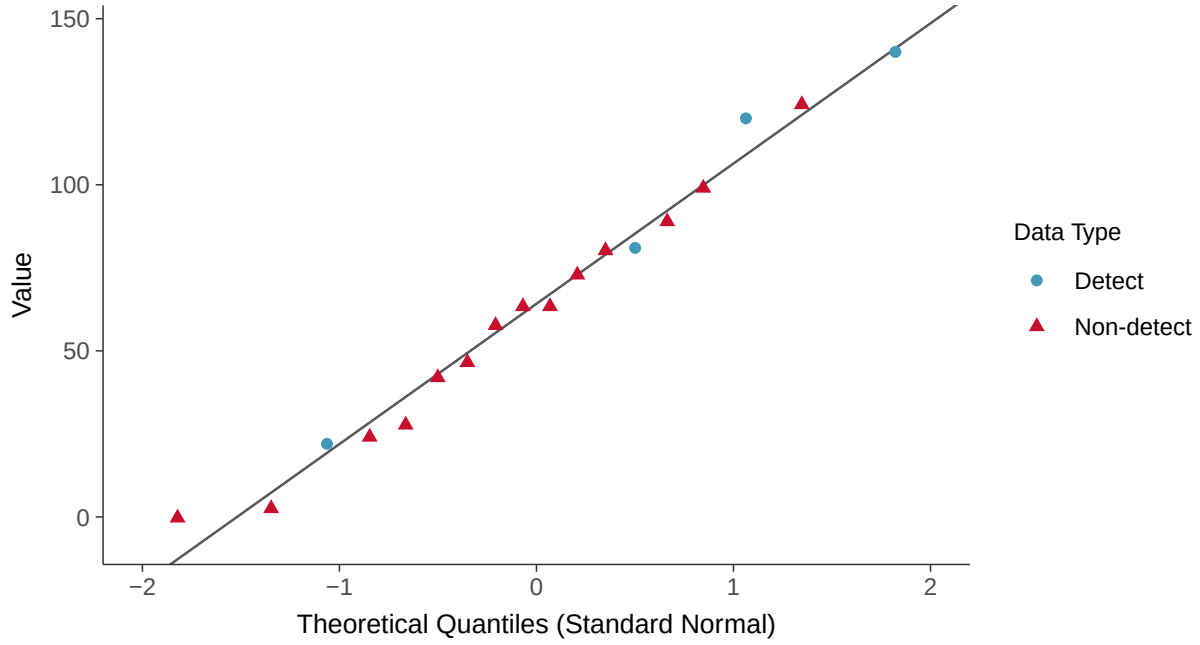

## Boxplot by Season

Fluoride, MW-17005 (ug/L)



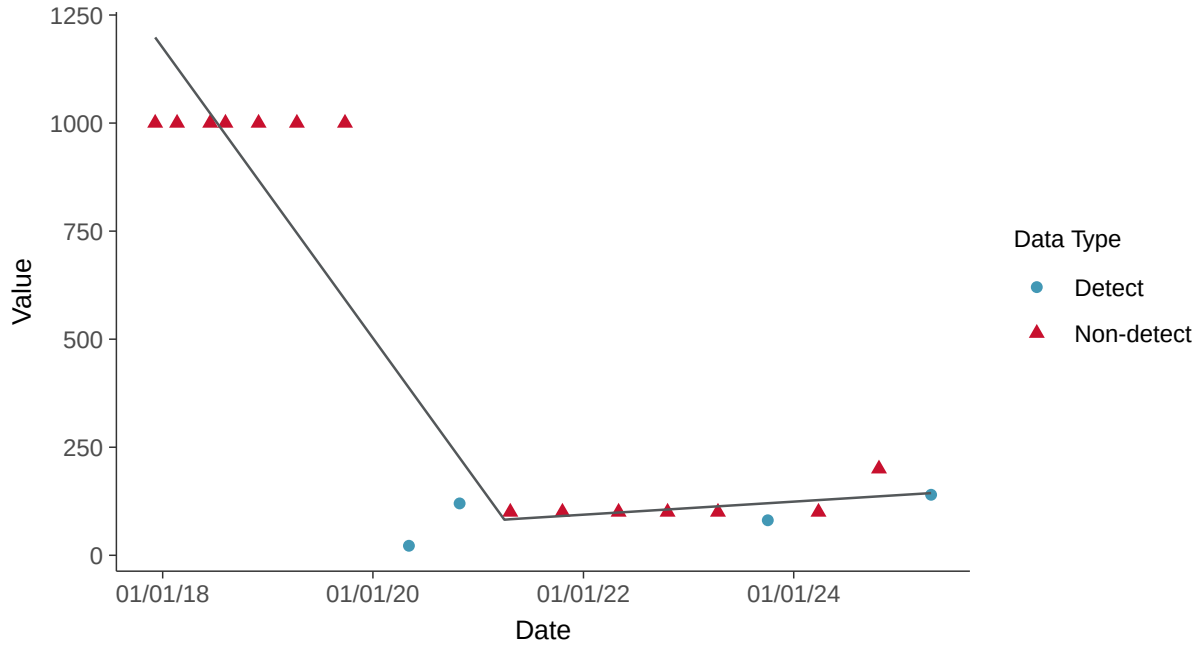
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17005 (ug/L)



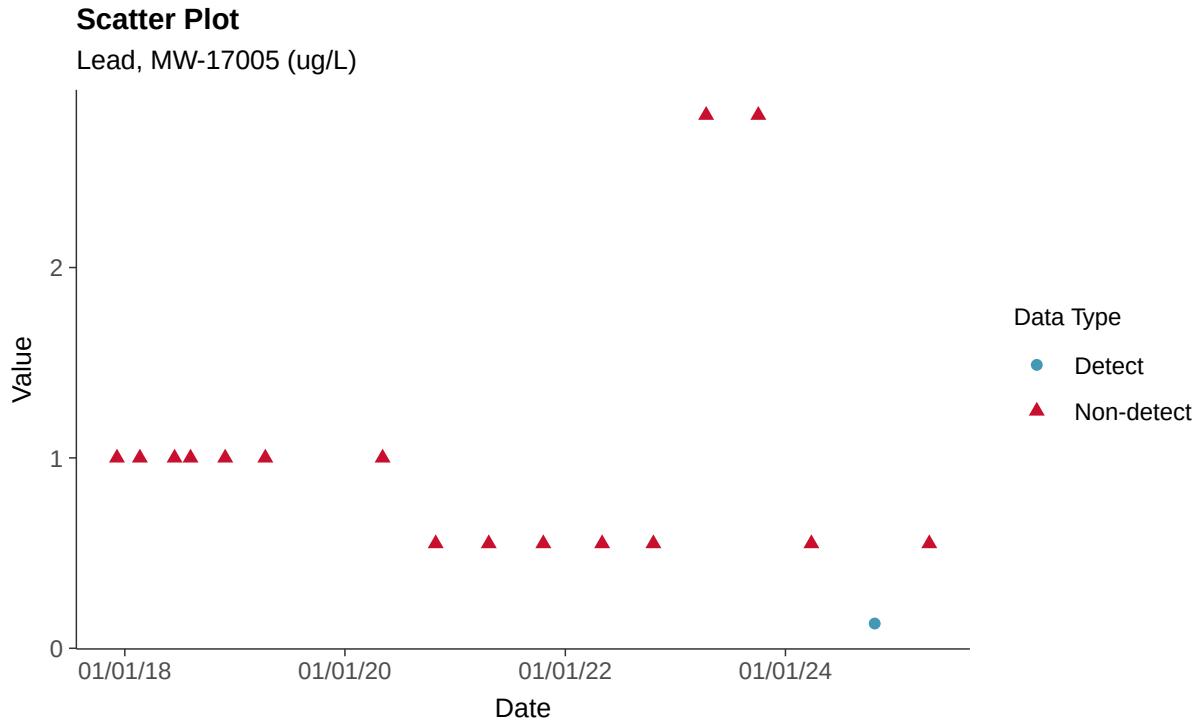

**Trend Regression: Piecewise Linear-Linear**

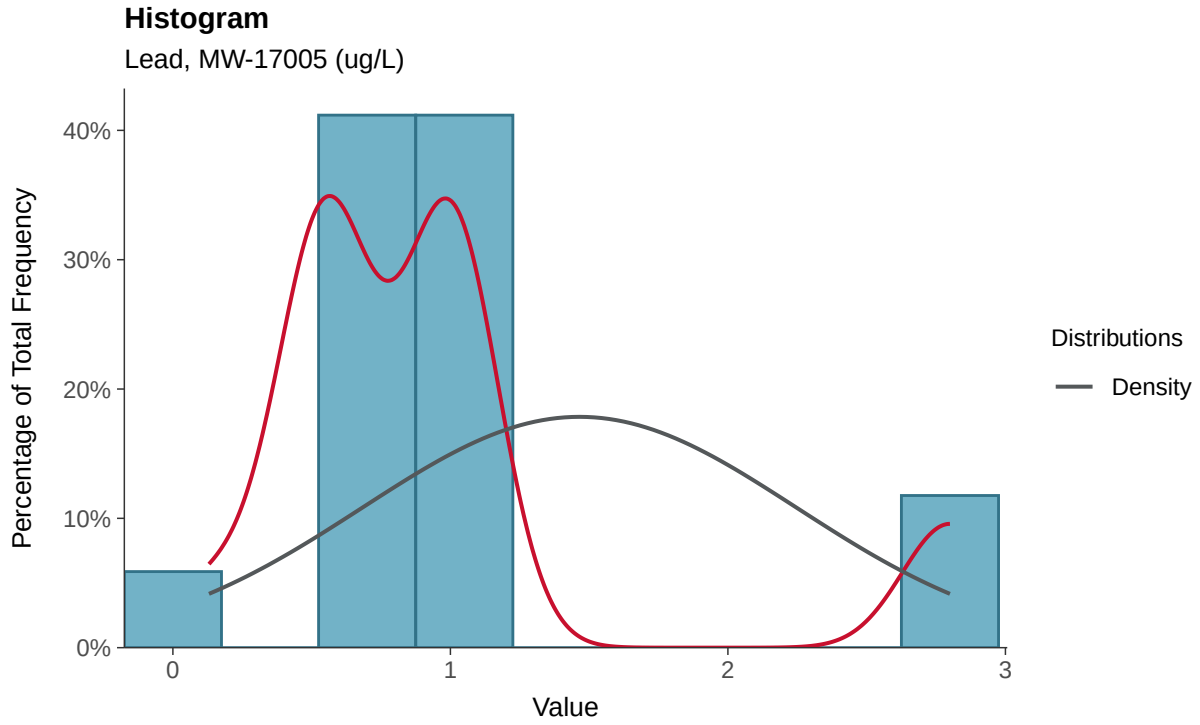
Fluoride, MW-17005 (ug/L)



## Appendix IV: Lead, MW-17005

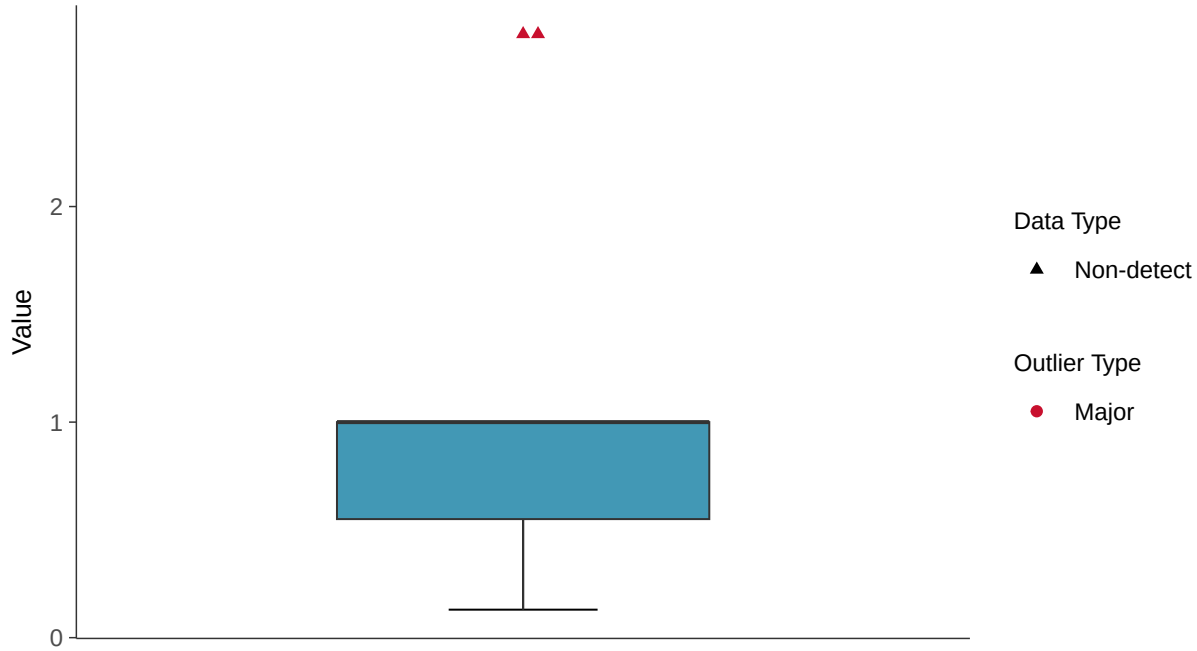
ID: 18_2_116



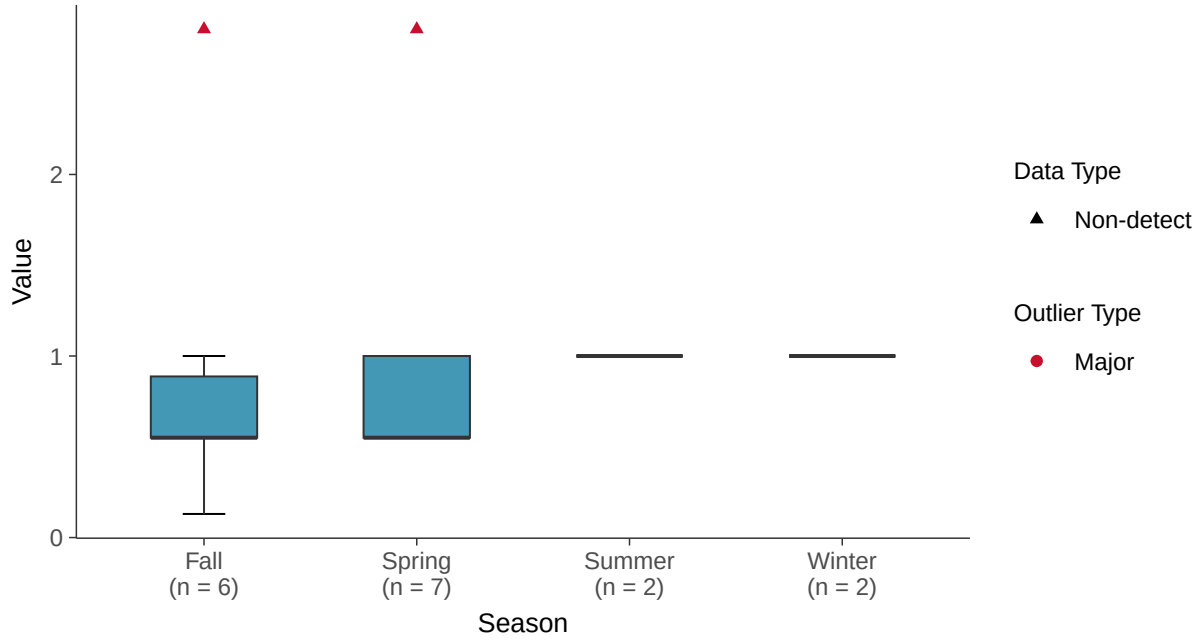
**Boxplot**

Lead, MW-17005 (ug/L)



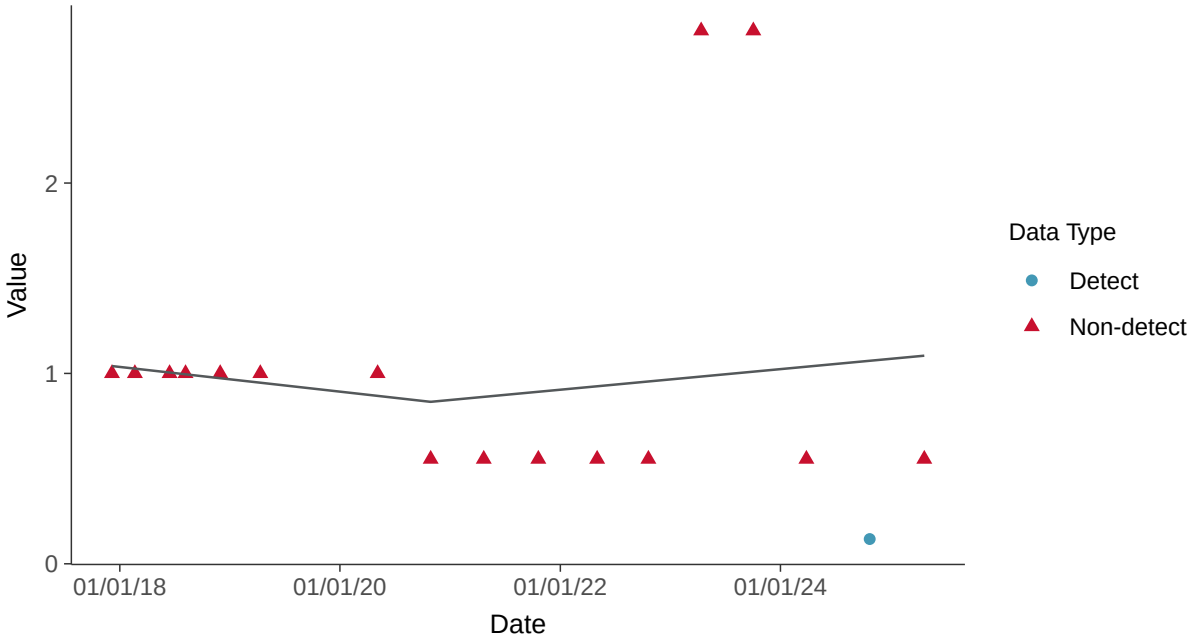

**Boxplot by Season**

Lead, MW-17005 (ug/L)



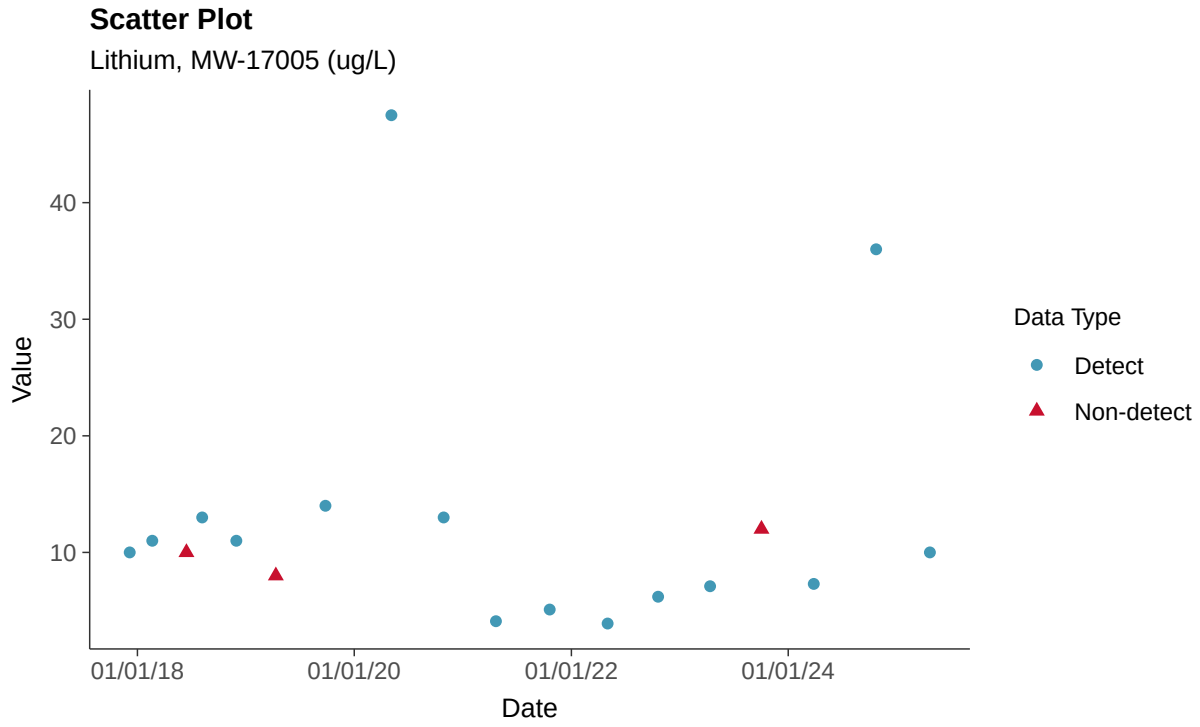
**Trend Regression: Piecewise Linear-Linear**

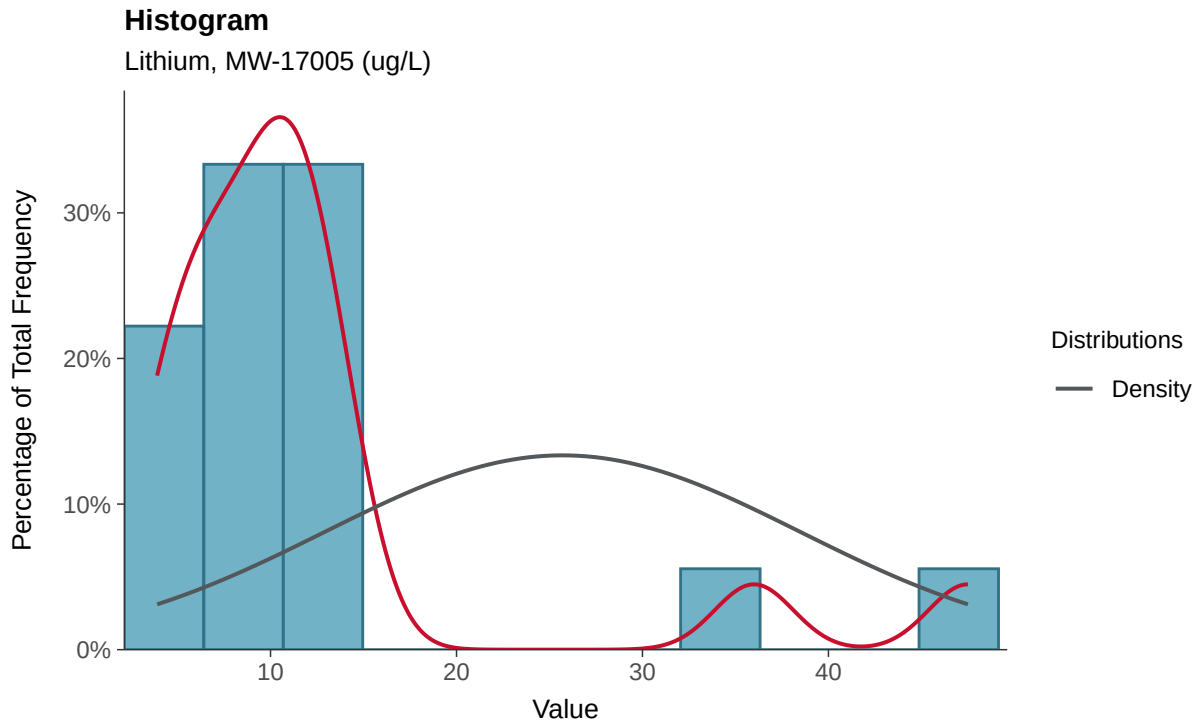
Lead, MW-17005 (ug/L)



## Appendix IV: Lithium, MW-17005

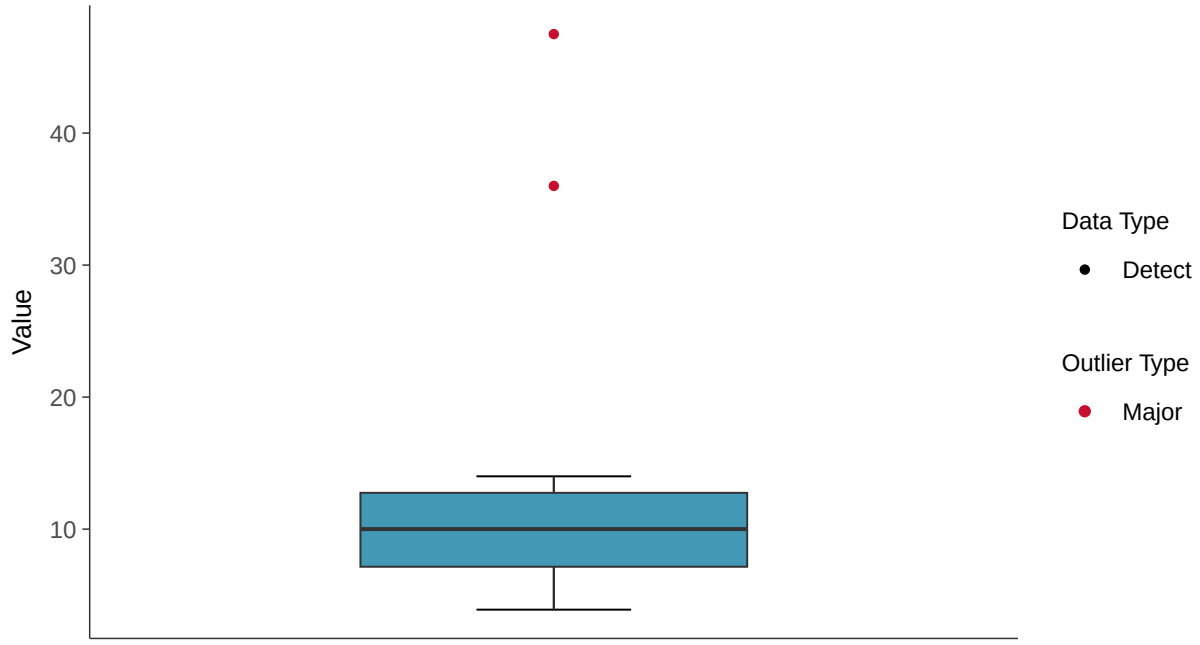
ID: 18_2_117



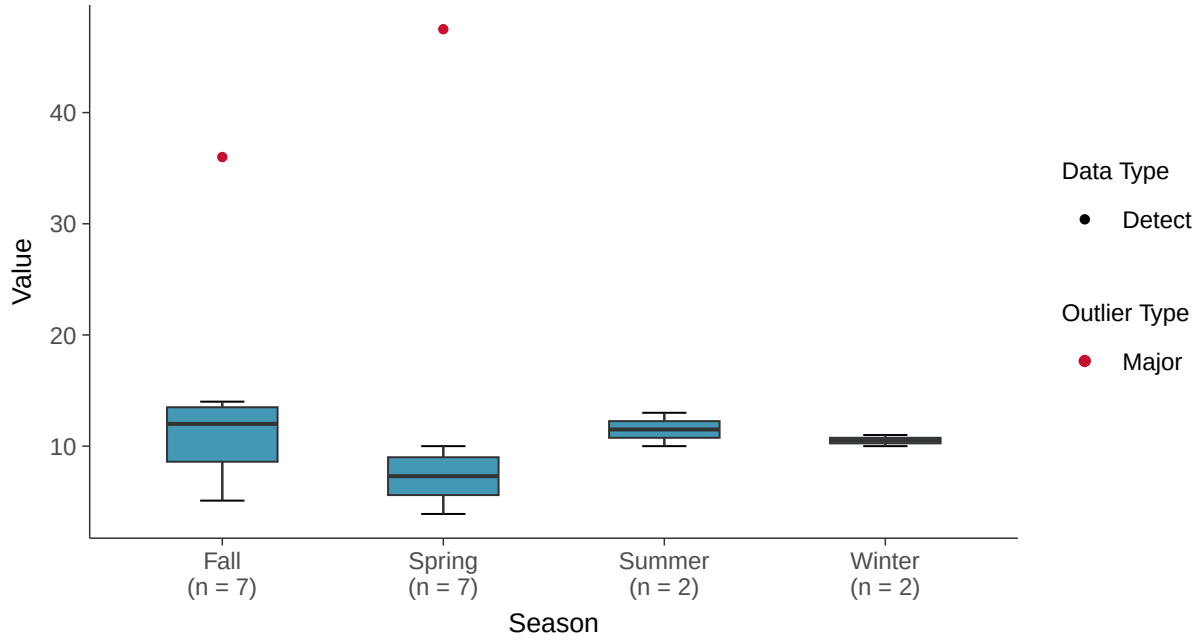
**Boxplot**

Lithium, MW-17005 (ug/L)



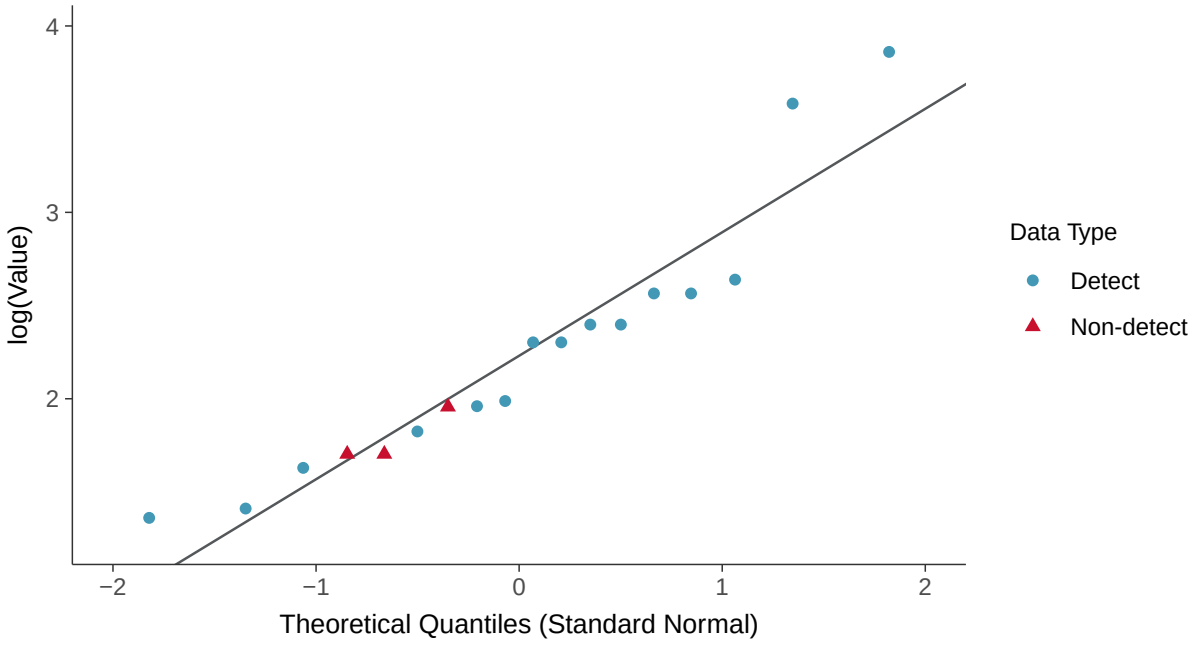

**Boxplot by Season**

Lithium, MW-17005 (ug/L)



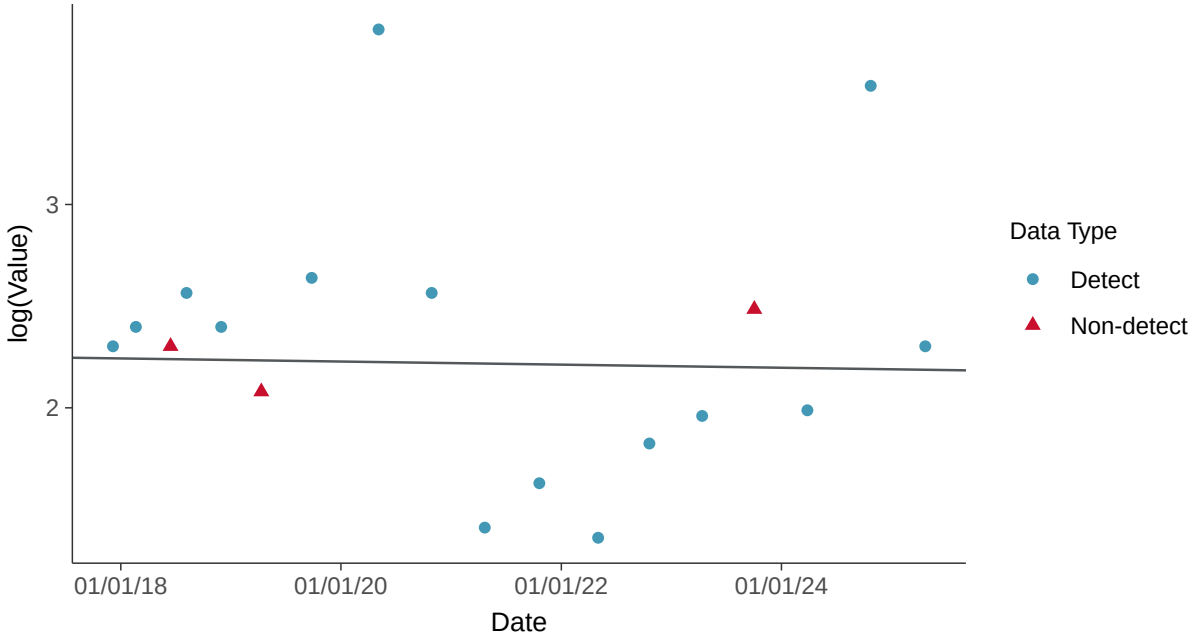
**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-17005 (ug/L)



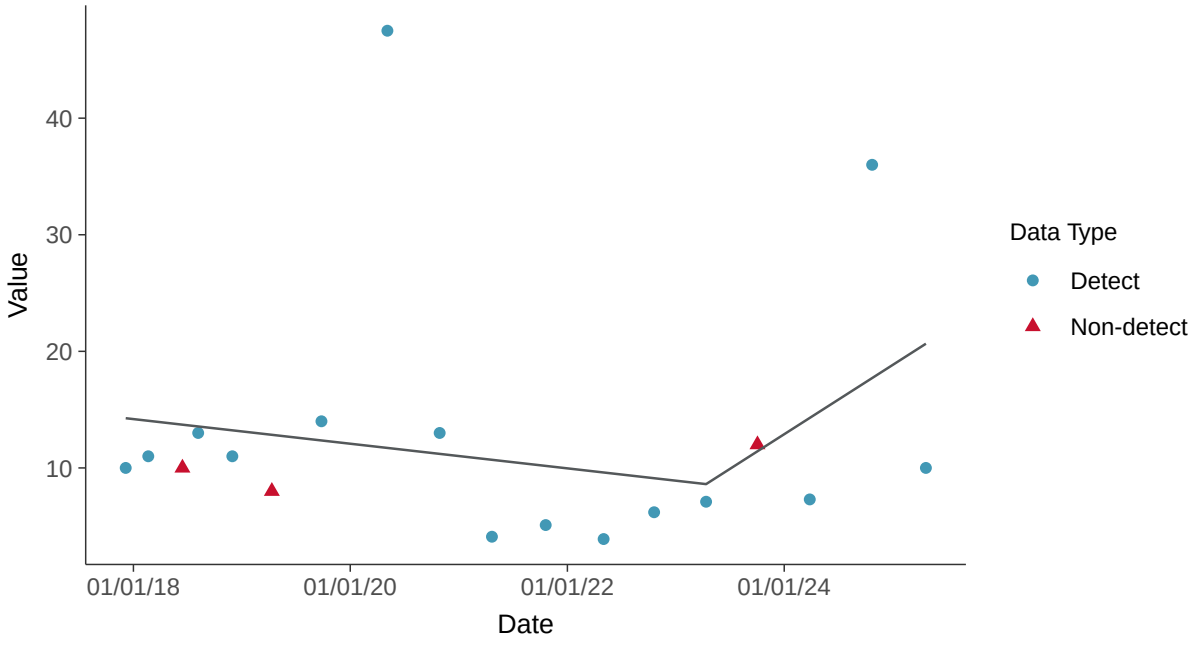

**Trend Regression: Lognormal MLE**

Lithium, MW-17005 (ug/L)



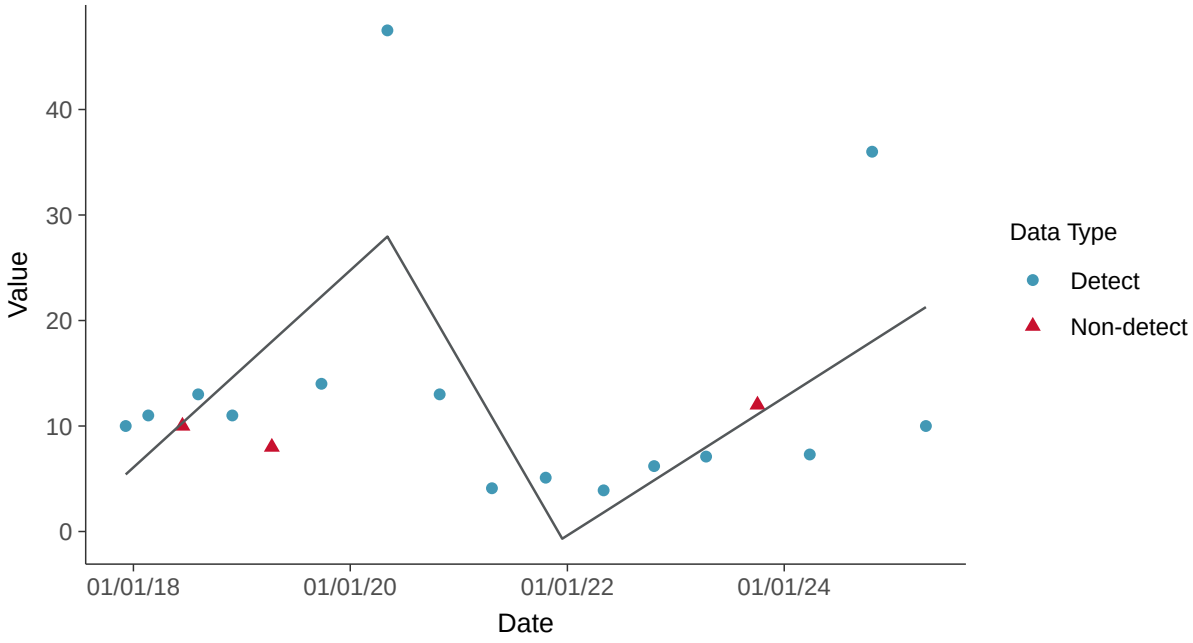
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-17005 (ug/L)



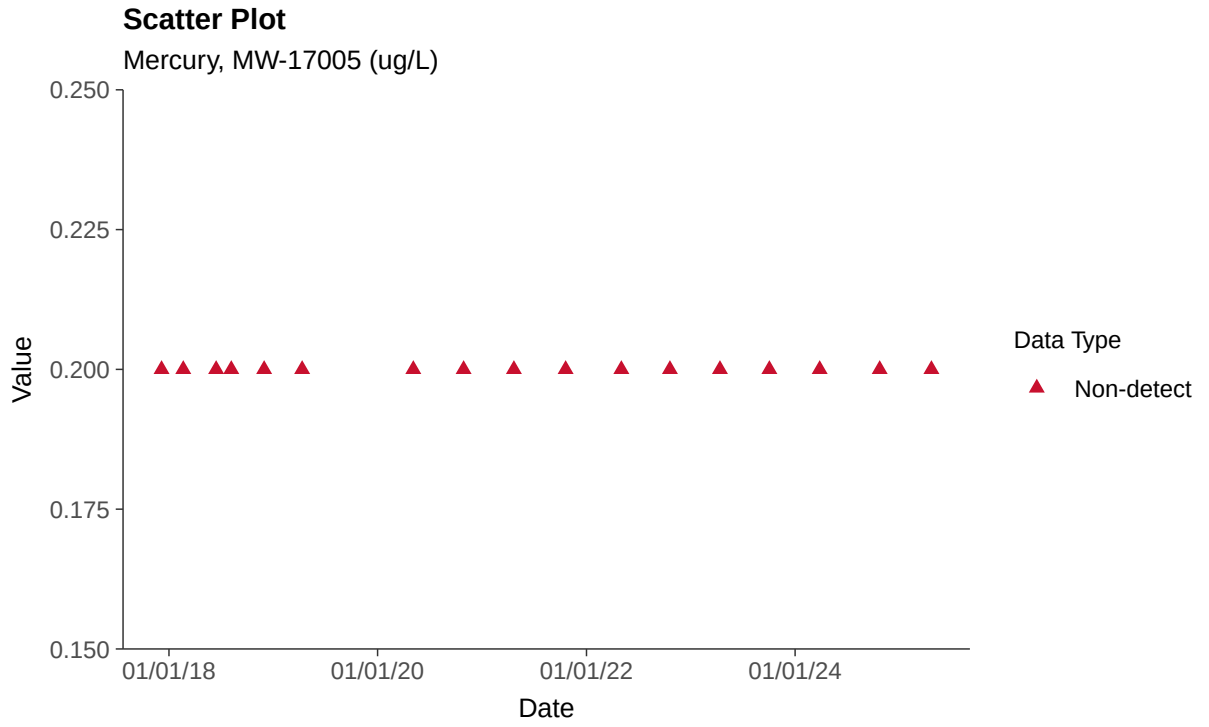

**Trend Regression: Piecewise Linear-Linear-Linear**

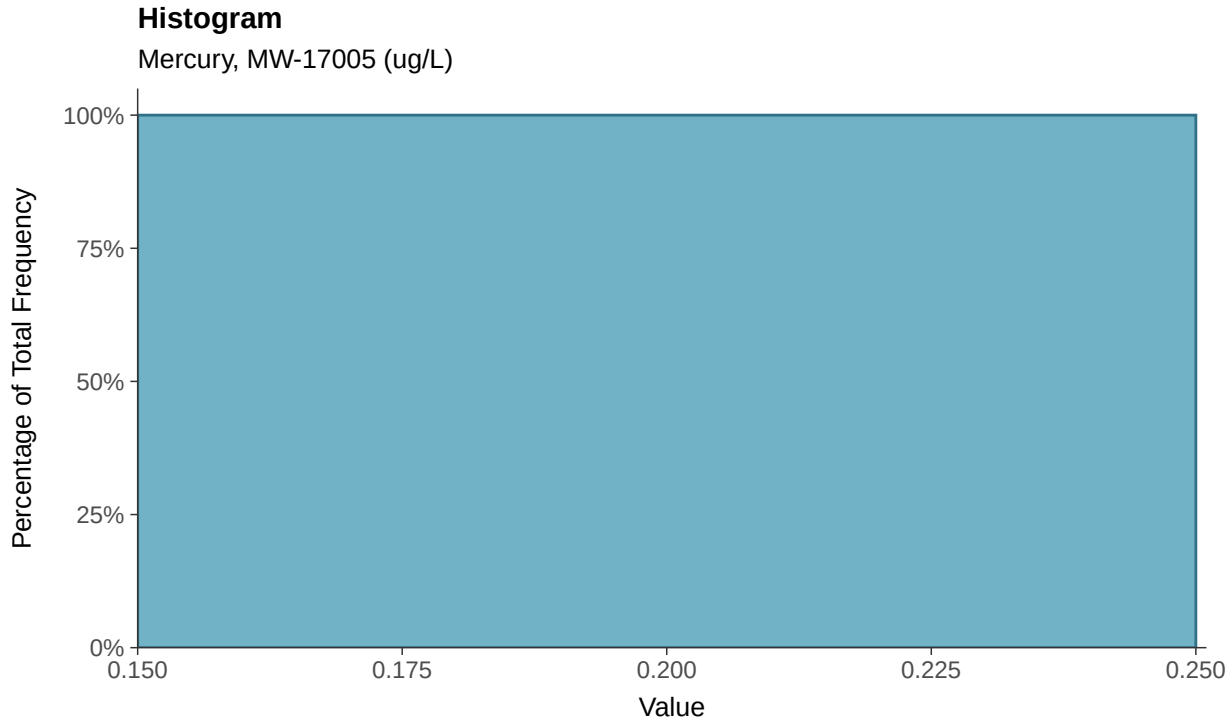
Lithium, MW-17005 (ug/L)



## Appendix IV: Mercury, MW-17005

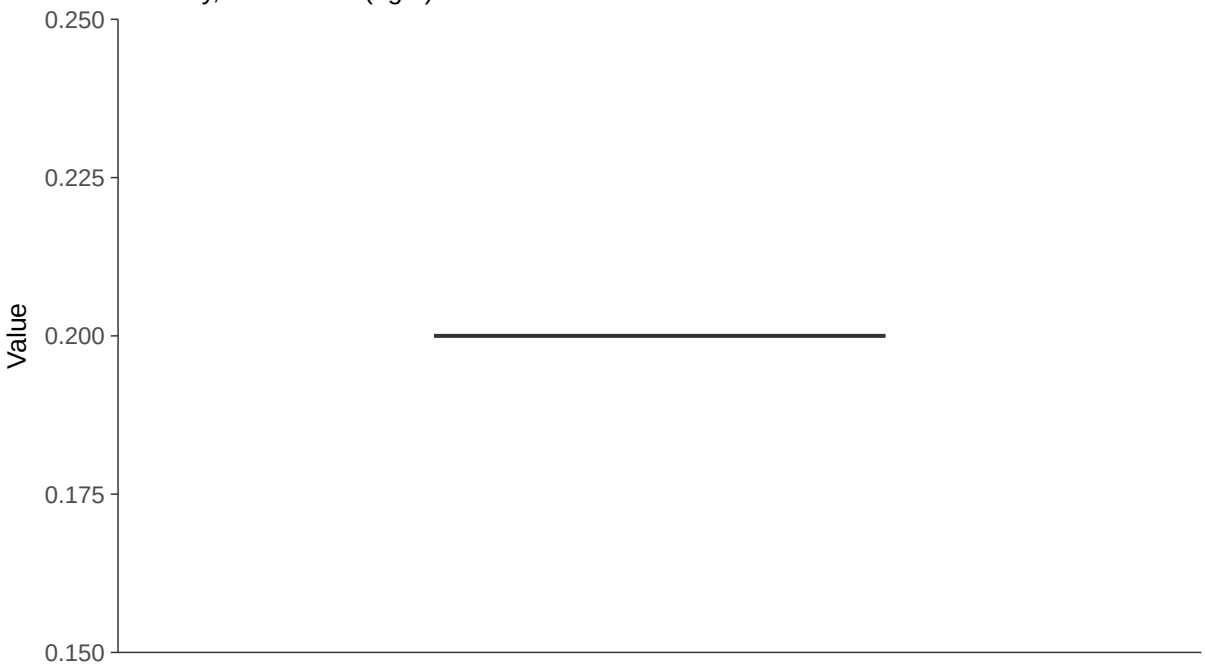
ID: 18_2_118



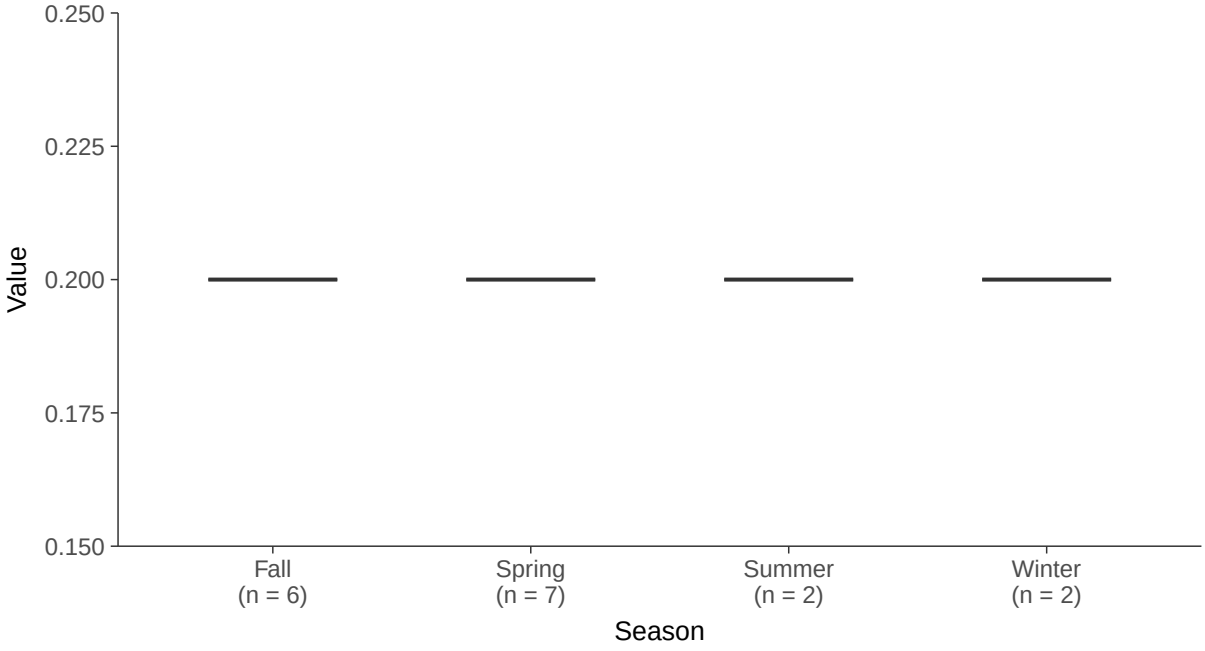
**Boxplot**

Mercury, MW-17005 (ug/L)



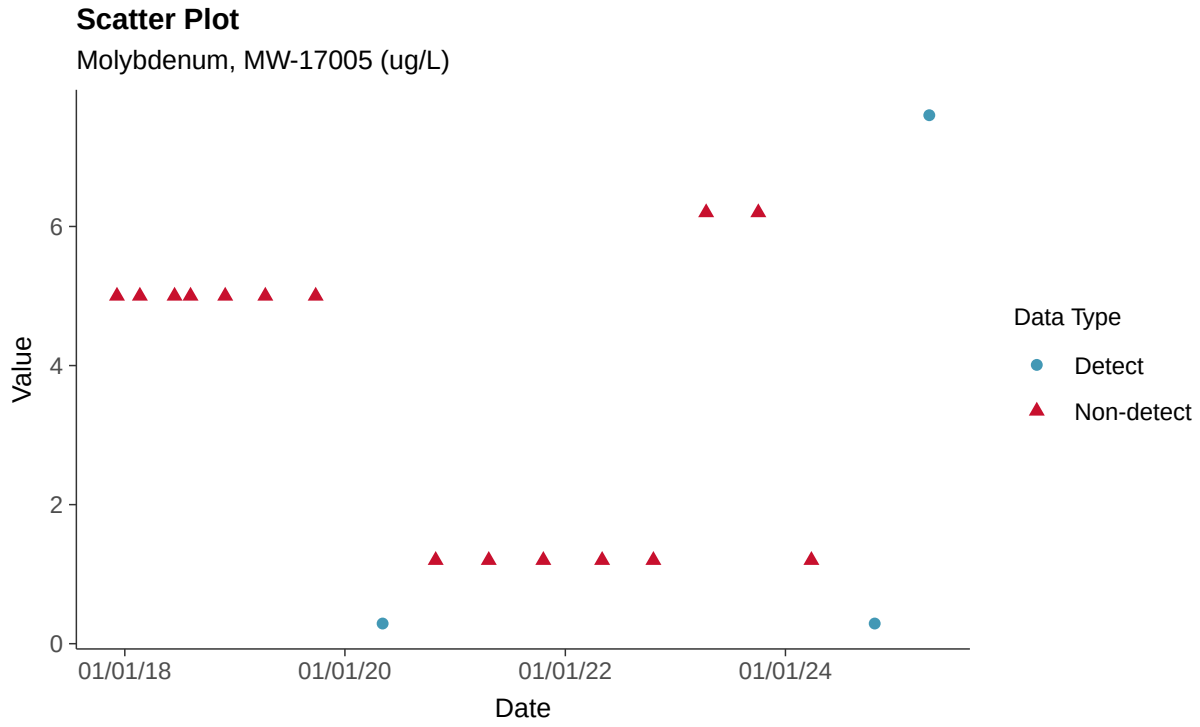

**Boxplot by Season**

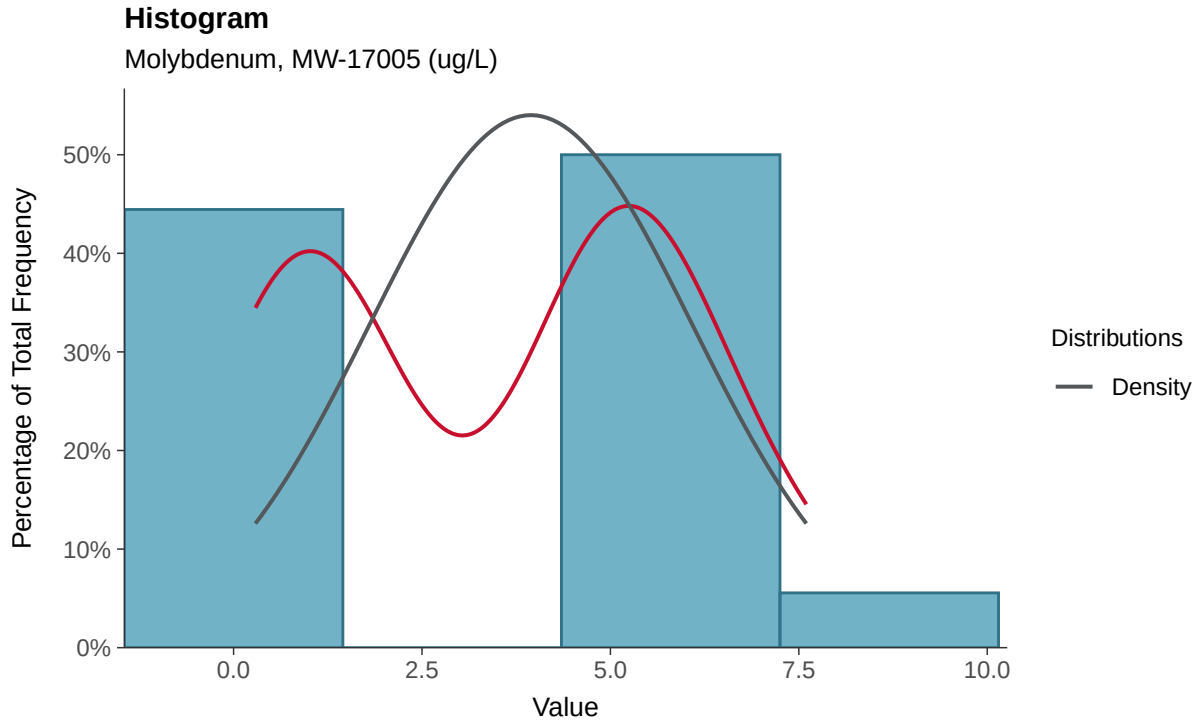
Mercury, MW-17005 (ug/L)



# Appendix IV: Molybdenum, MW-17005

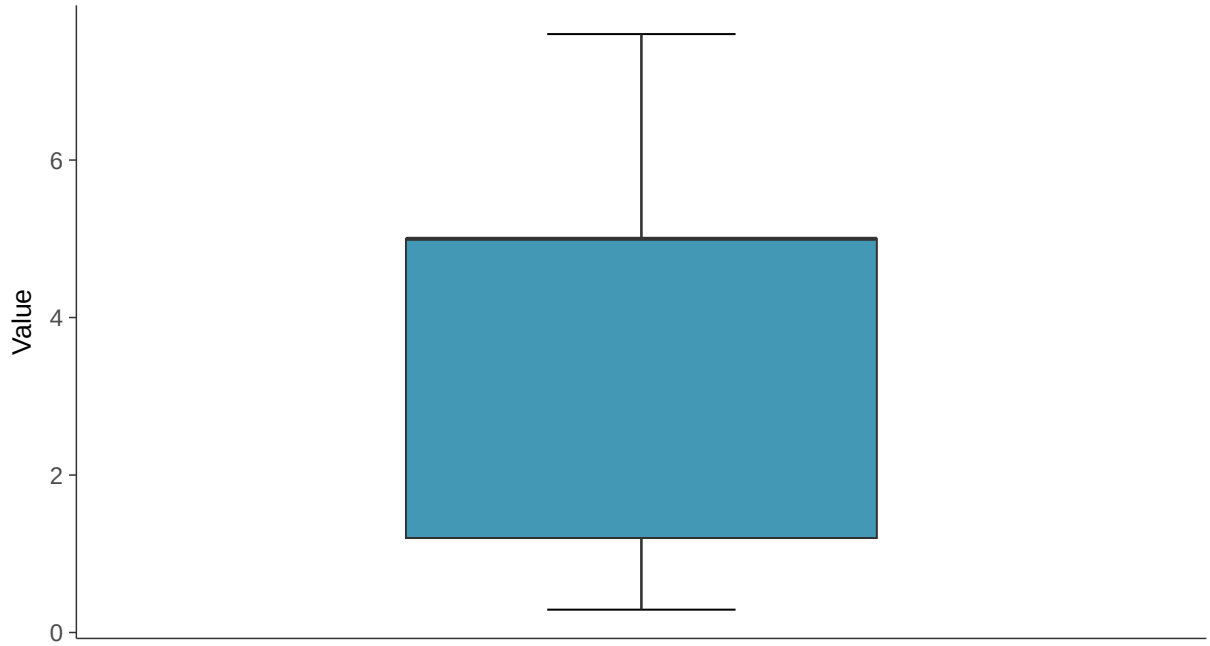
ID: 18_2_119



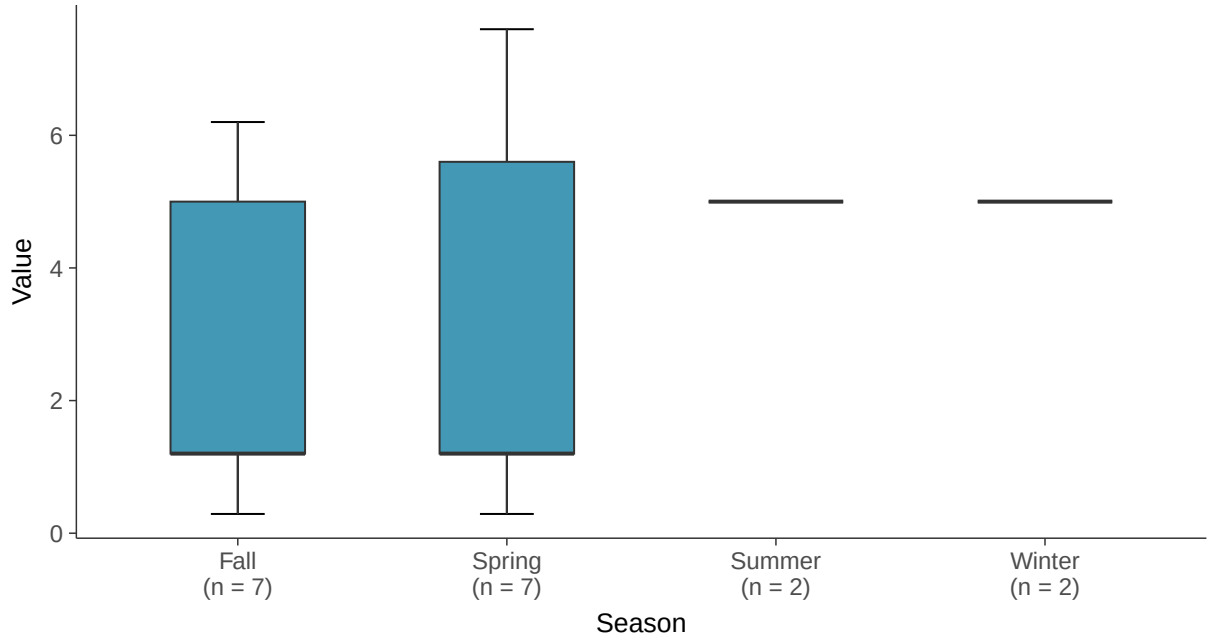
**Boxplot**

Molybdenum, MW-17005 (ug/L)



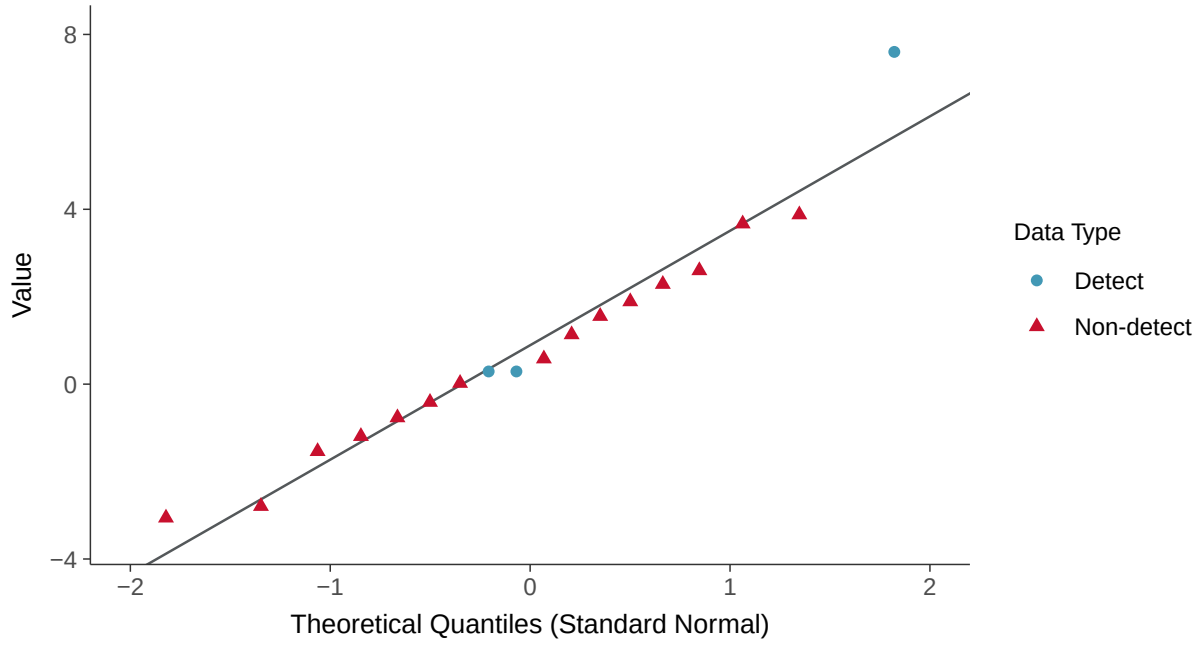

**Boxplot by Season**

Molybdenum, MW-17005 (ug/L)



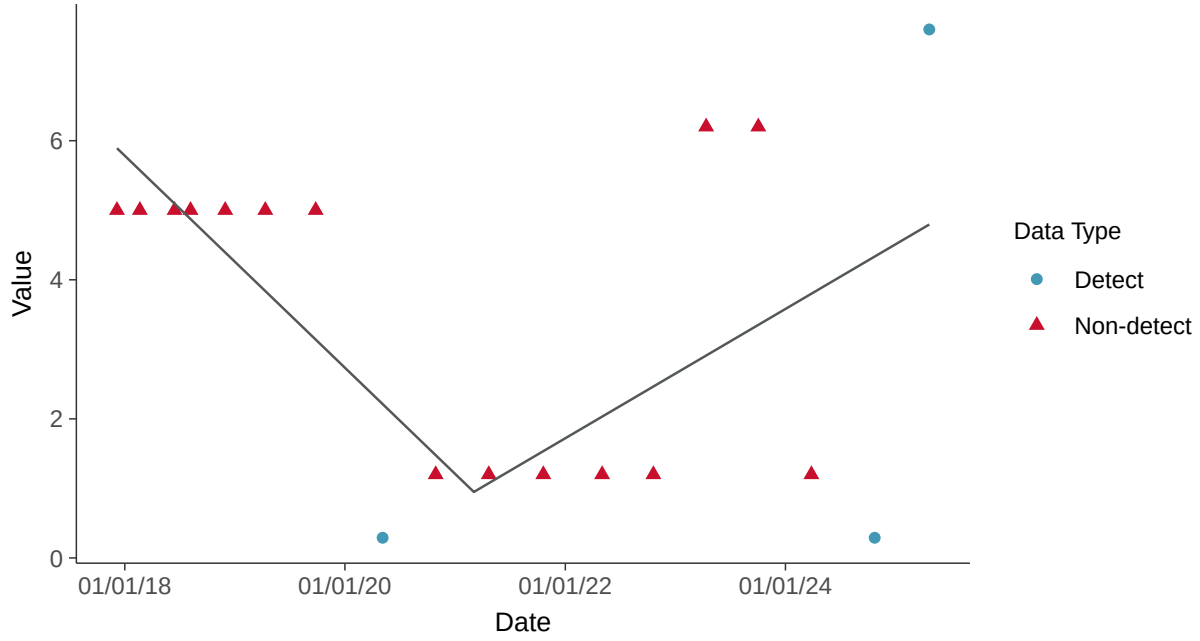
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17005 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17005 (ug/L)

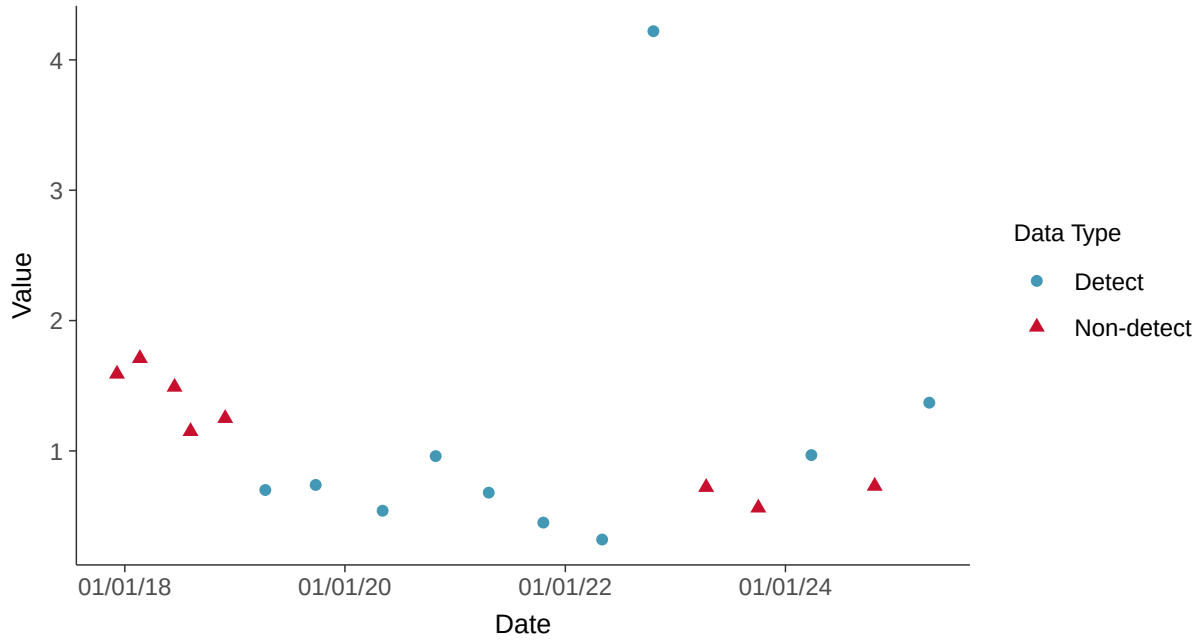


## Appendix IV: Radium-226+228, MW-17005

ID: 18_2_125

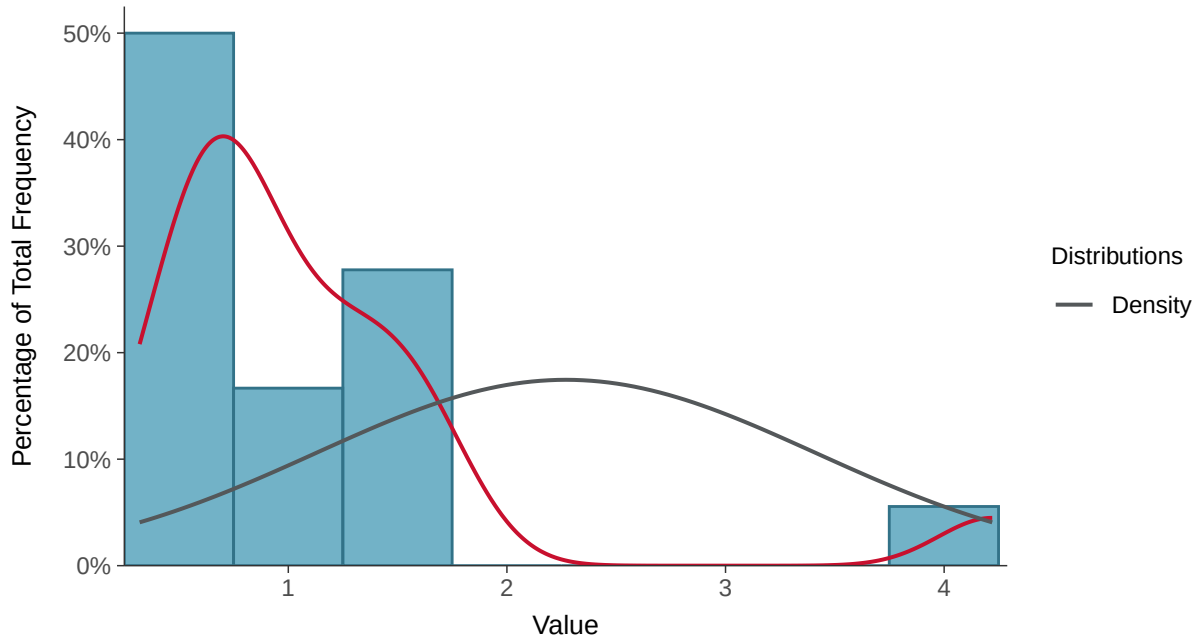
**Scatter Plot**

Radium-226+228, MW-17005 (pCi/L)



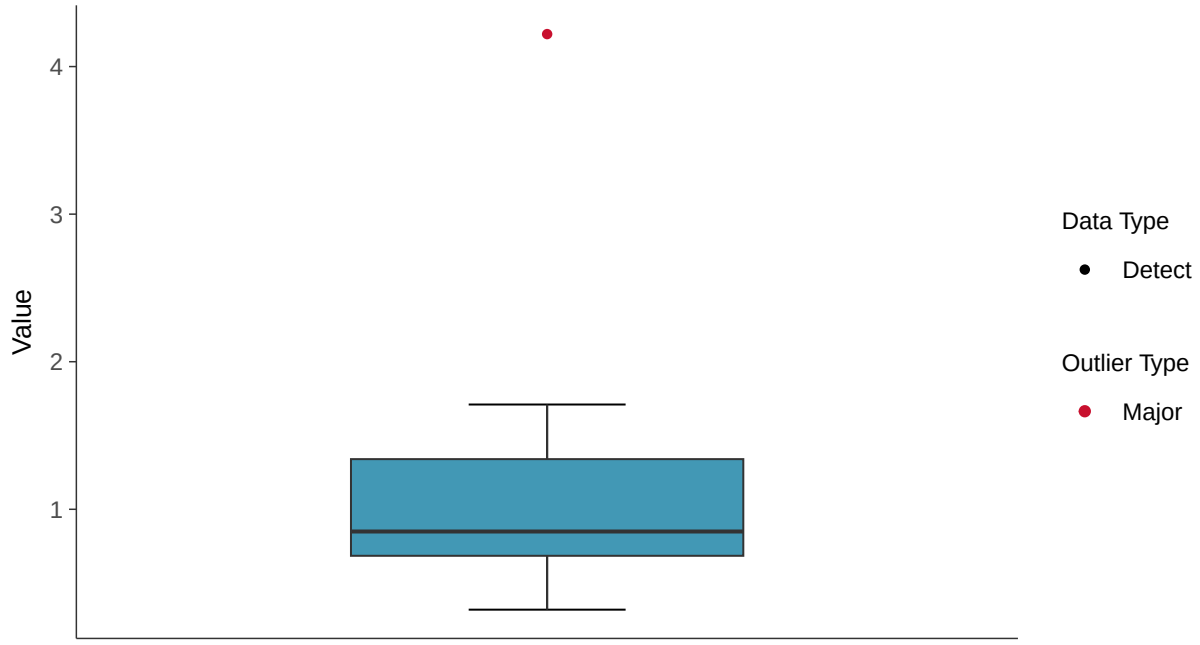

**Histogram**

Radium-226+228, MW-17005 (pCi/L)



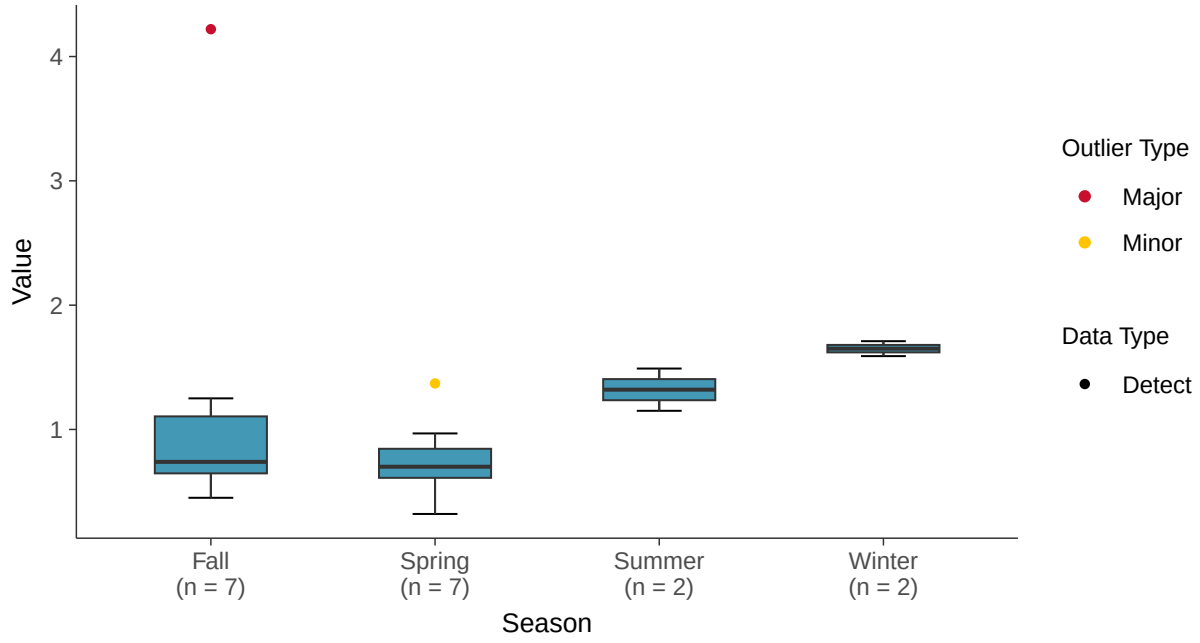
## Boxplot

Radium-226+228, MW-17005 (pCi/L)



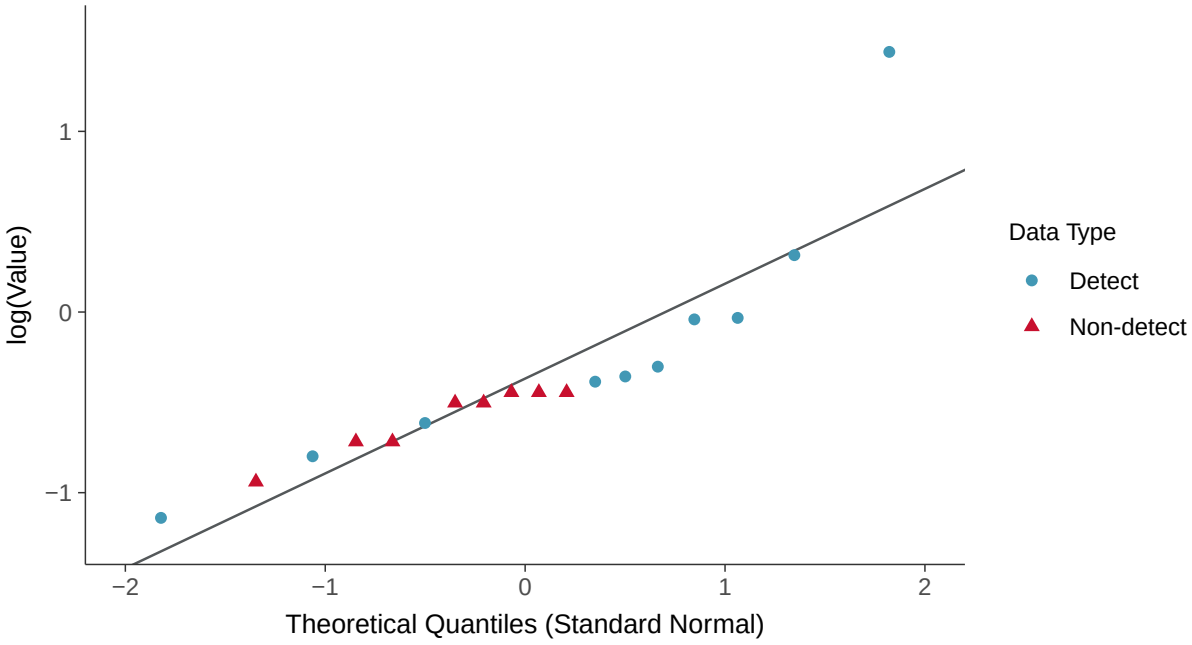

## Boxplot by Season

Radium-226+228, MW-17005 (pCi/L)



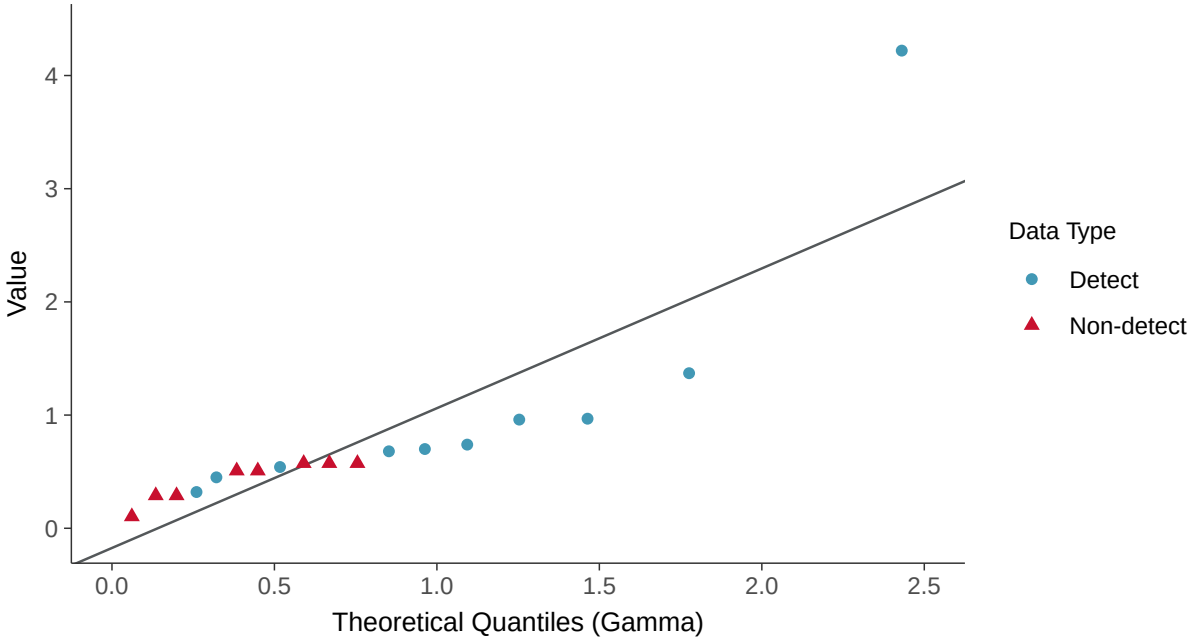
**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17005 (pCi/L)



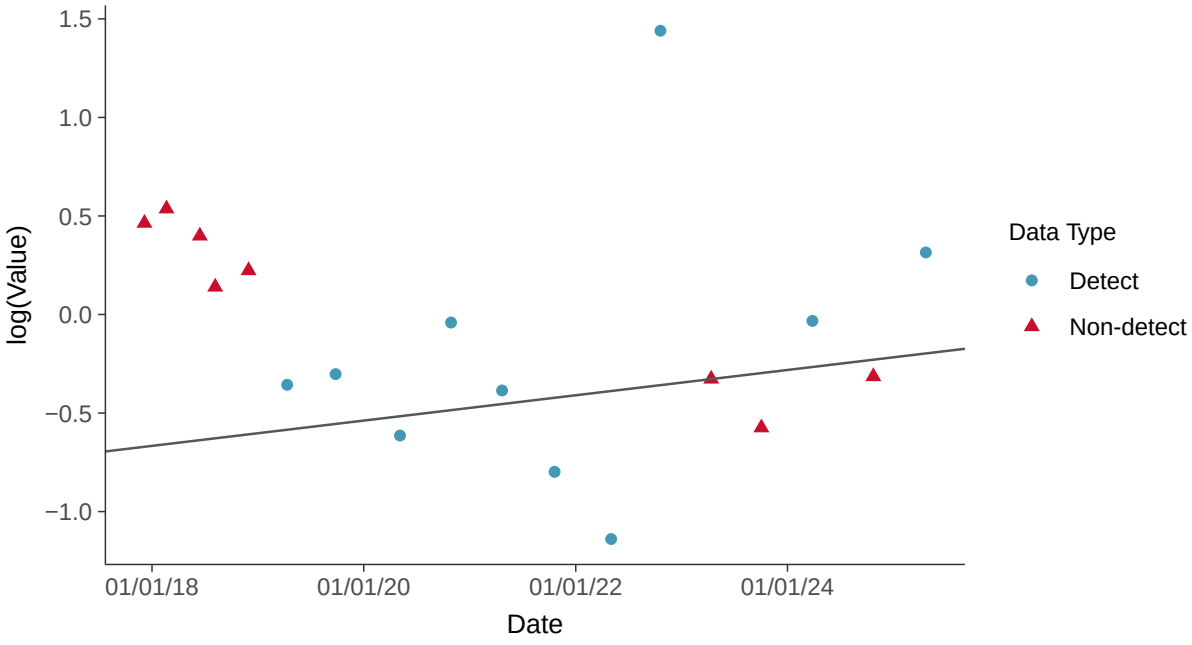

**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17005 (pCi/L)



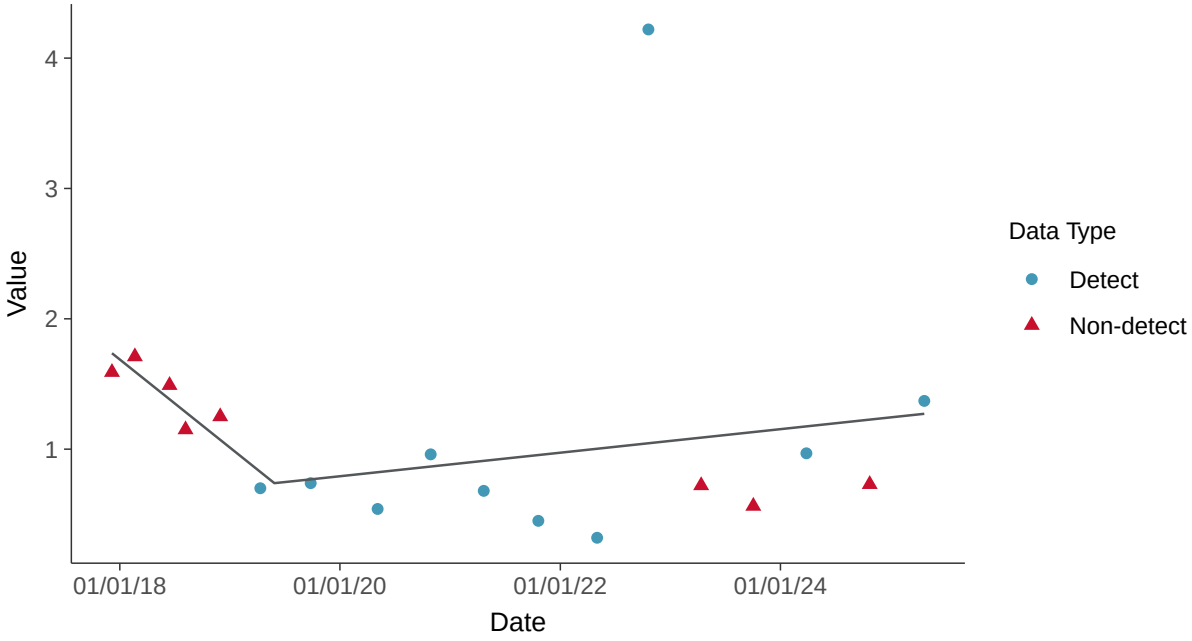
**Trend Regression: Lognormal MLE**

Radium-226+228, MW-17005 (pCi/L)



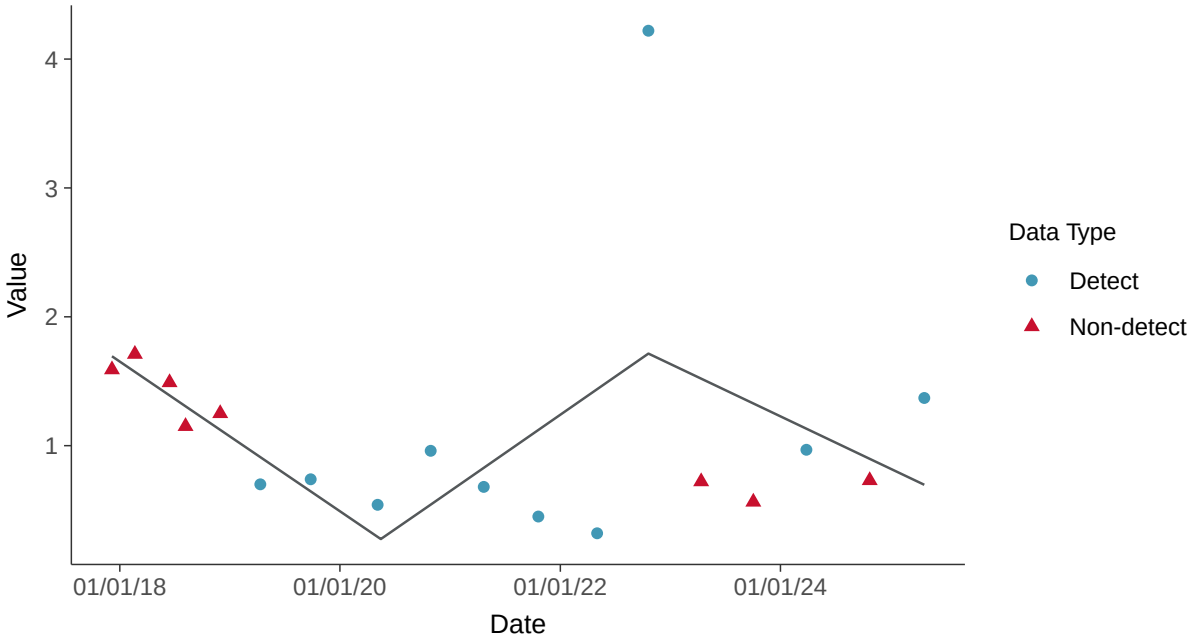

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17005 (pCi/L)



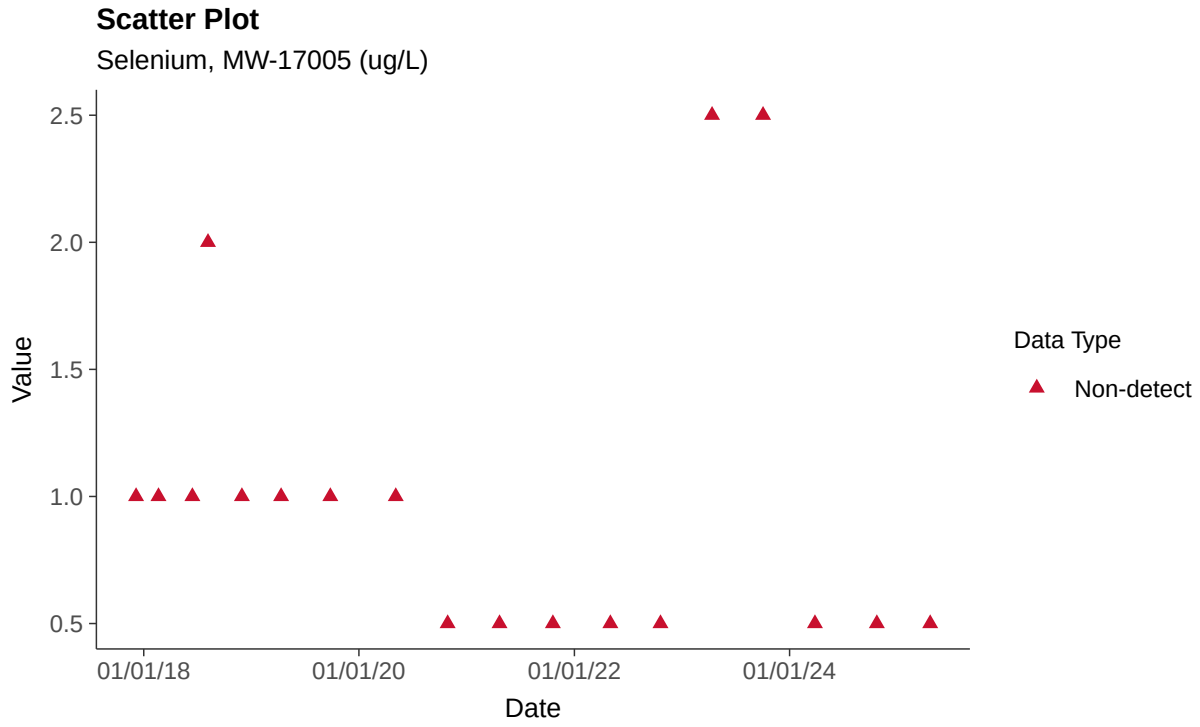
**Trend Regression: Piecewise Linear-Linear-Linear**

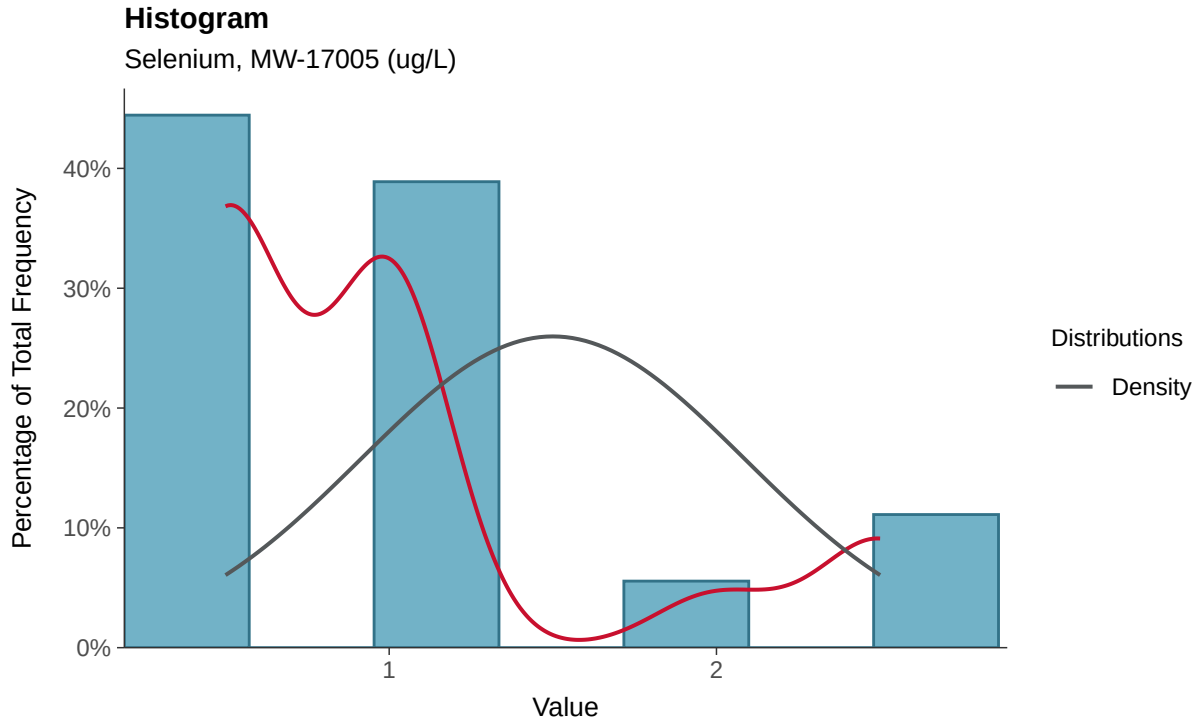
Radium-226+228, MW-17005 (pCi/L)



## Appendix IV: Selenium, MW-17005

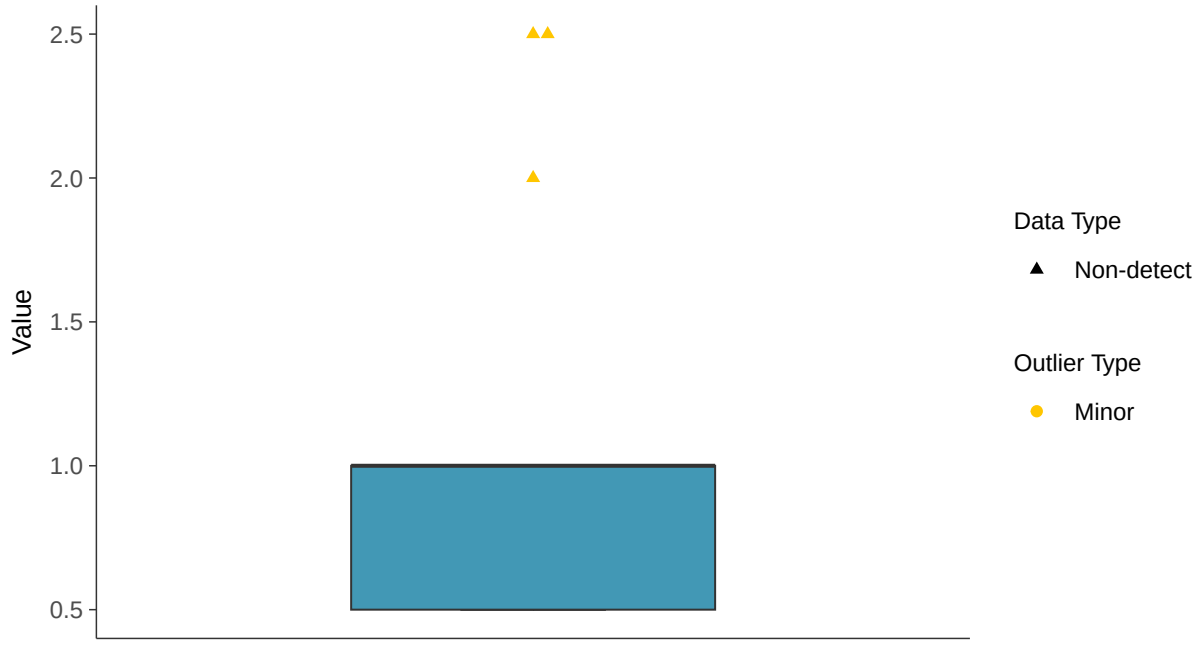
ID: 18_2_127



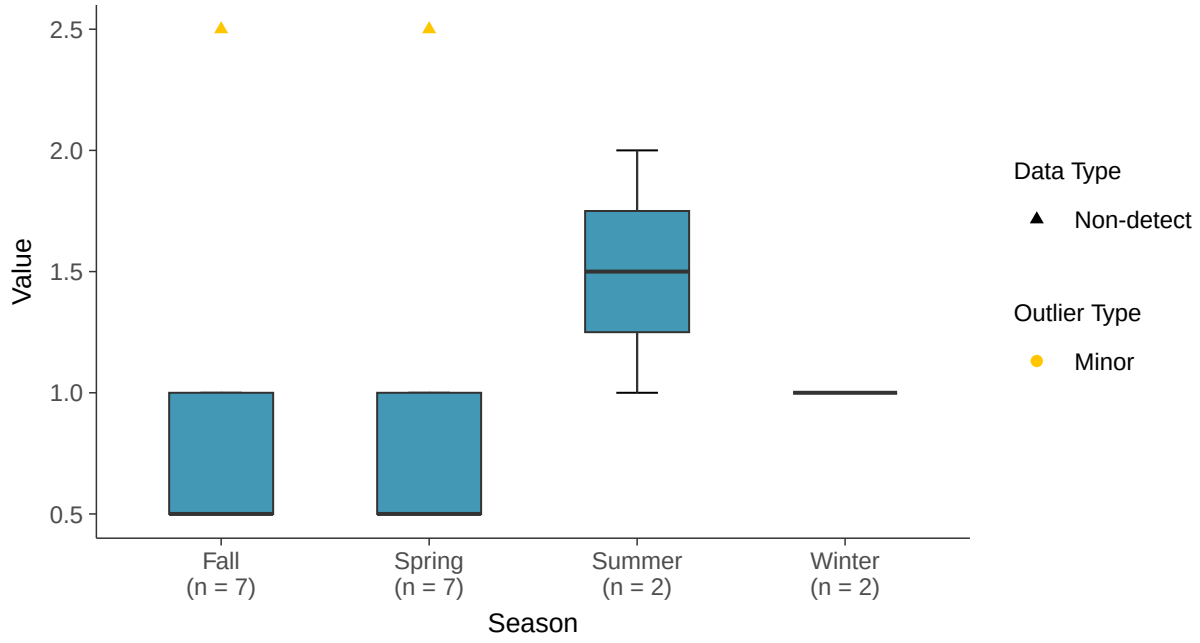
## Boxplot

Selenium, MW-17005 (ug/L)



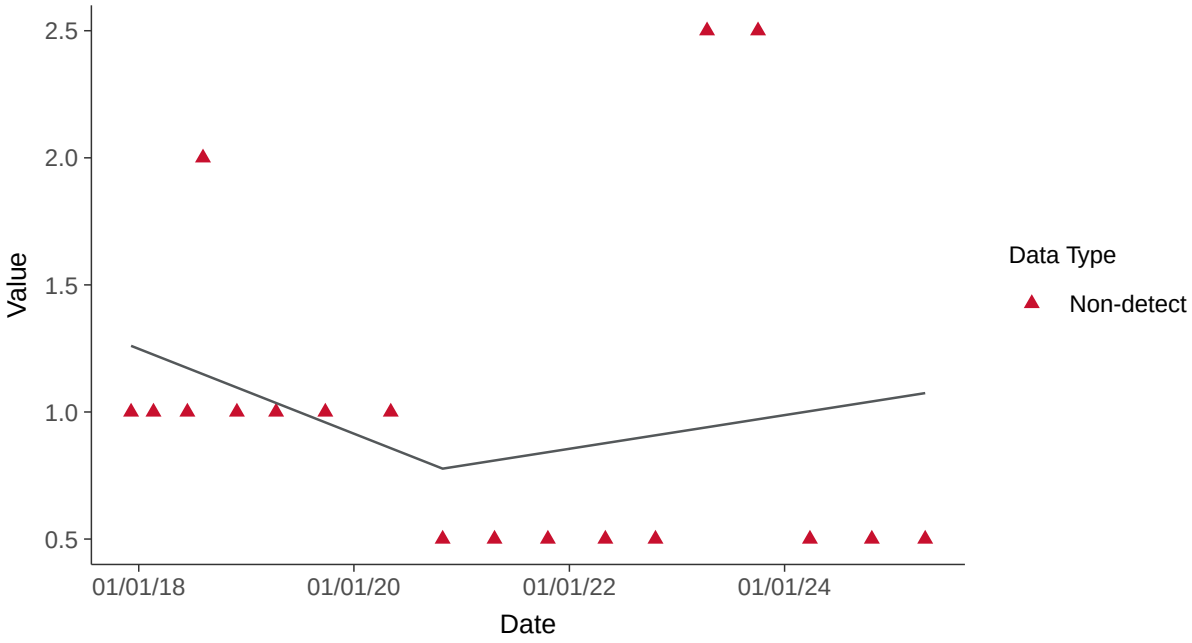

## Boxplot by Season

Selenium, MW-17005 (ug/L)



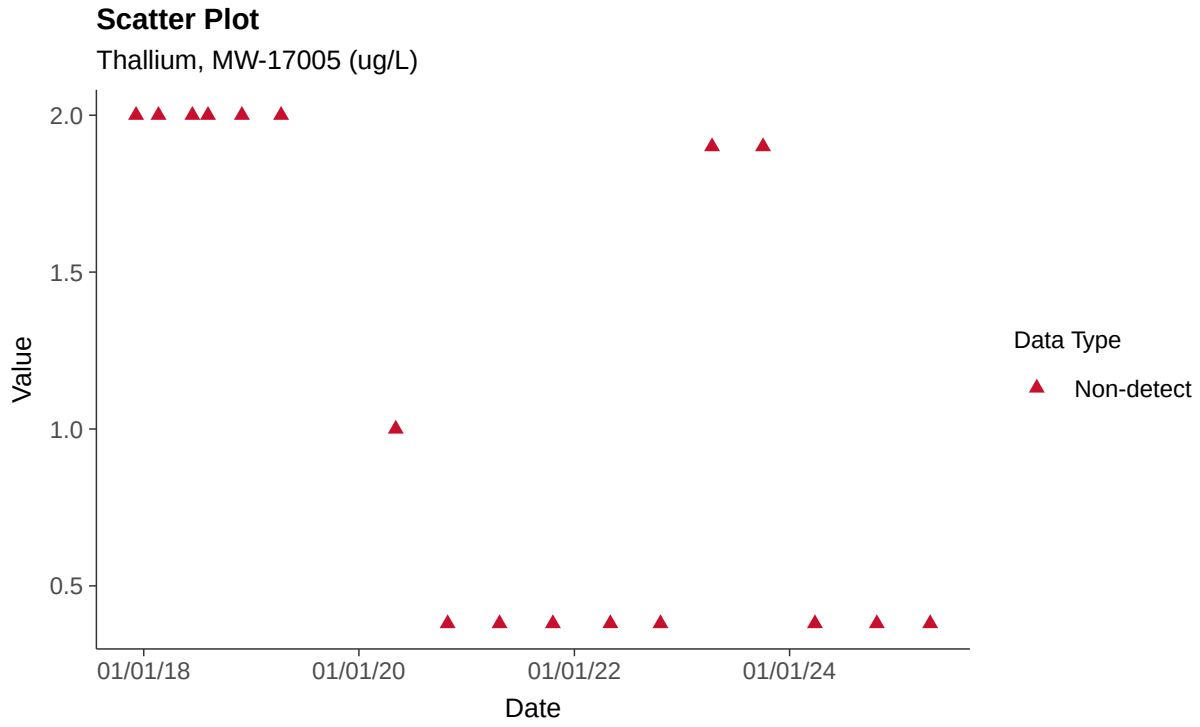
**Trend Regression: Piecewise Linear-Linear**

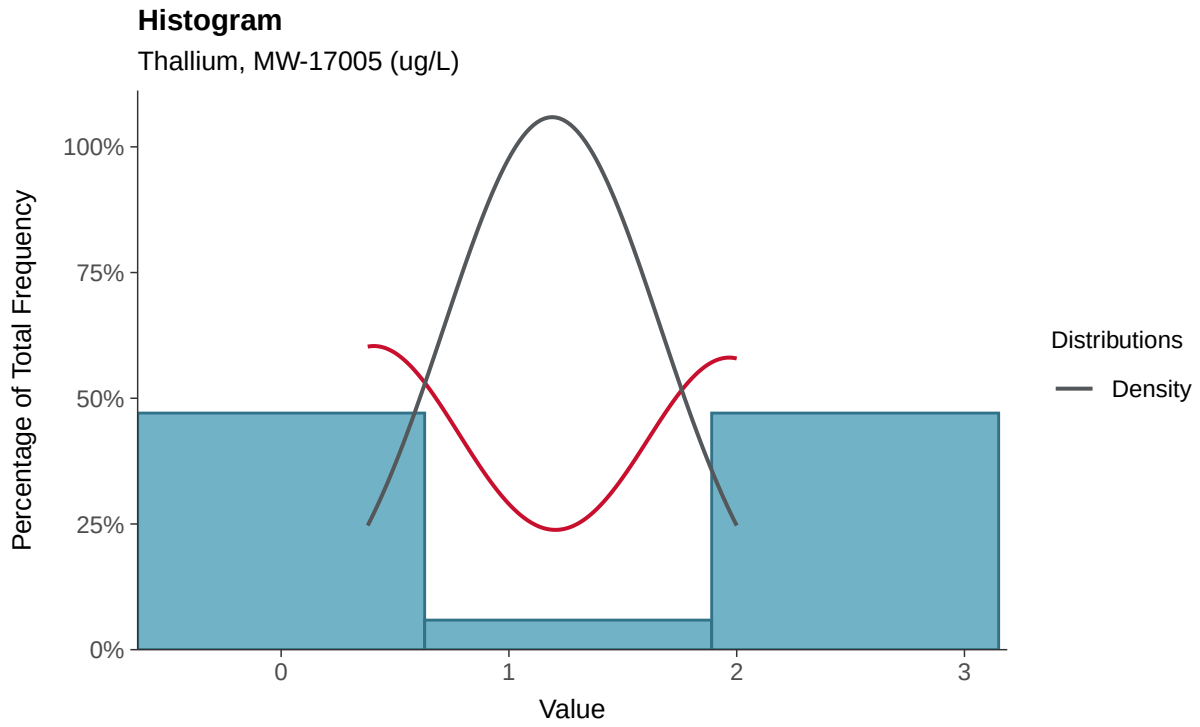
Selenium, MW-17005 (ug/L)



## Appendix IV: Thallium, MW-17005

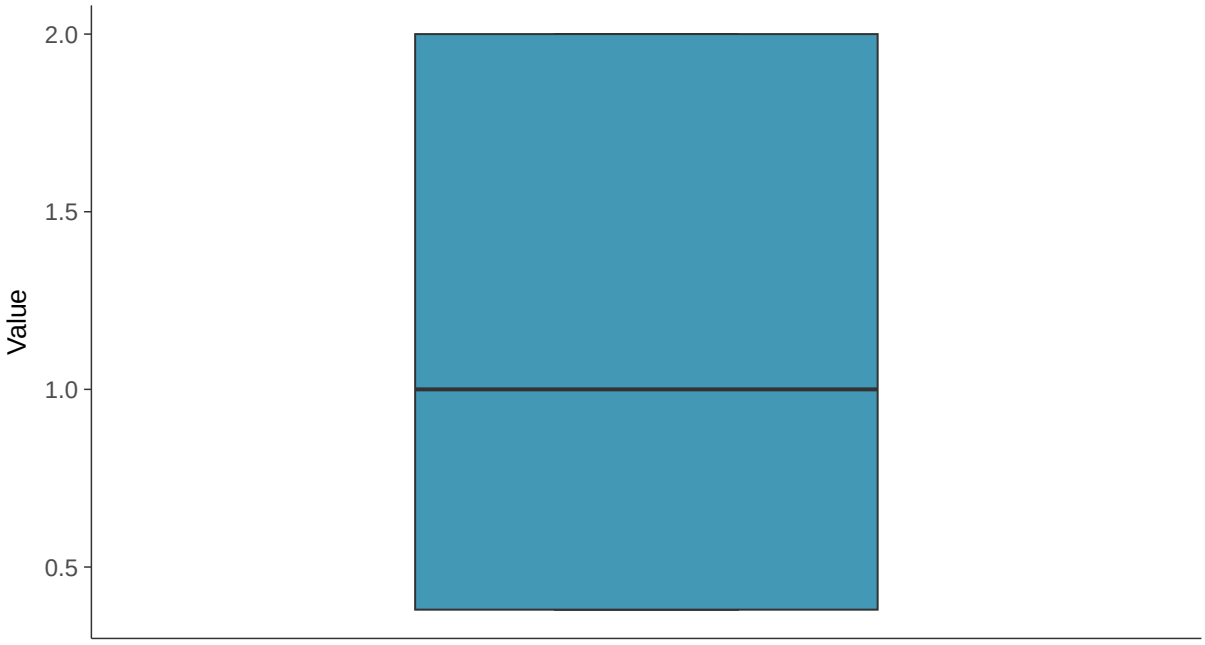
ID: 18_2_131



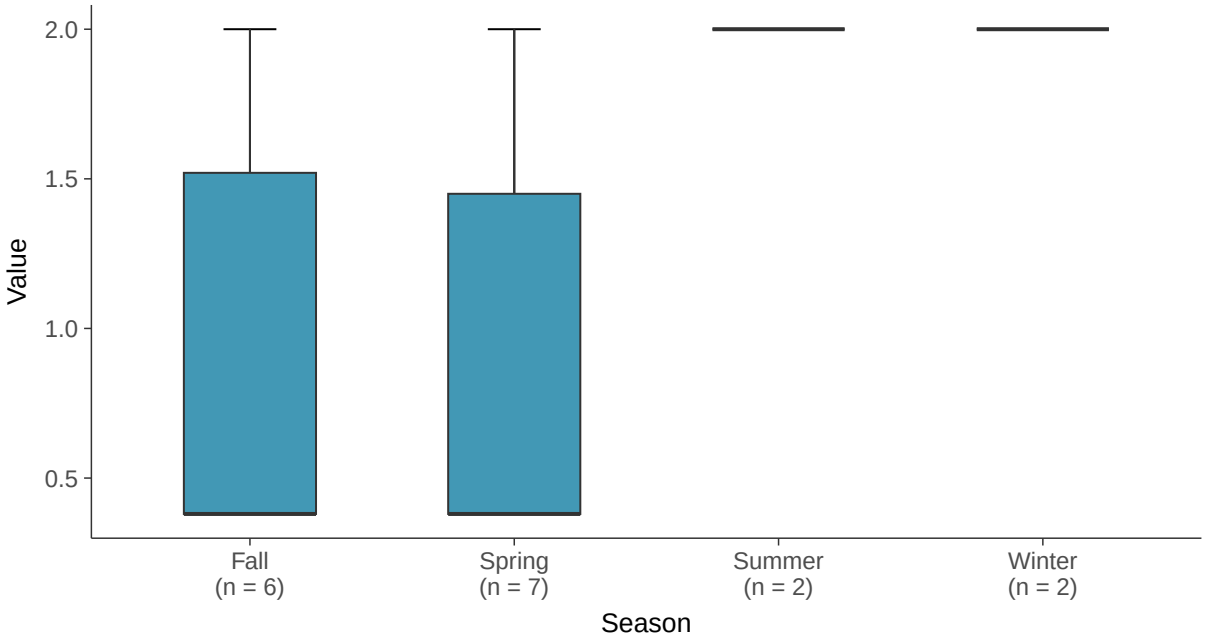
**Boxplot**

Thallium, MW-17005 (ug/L)



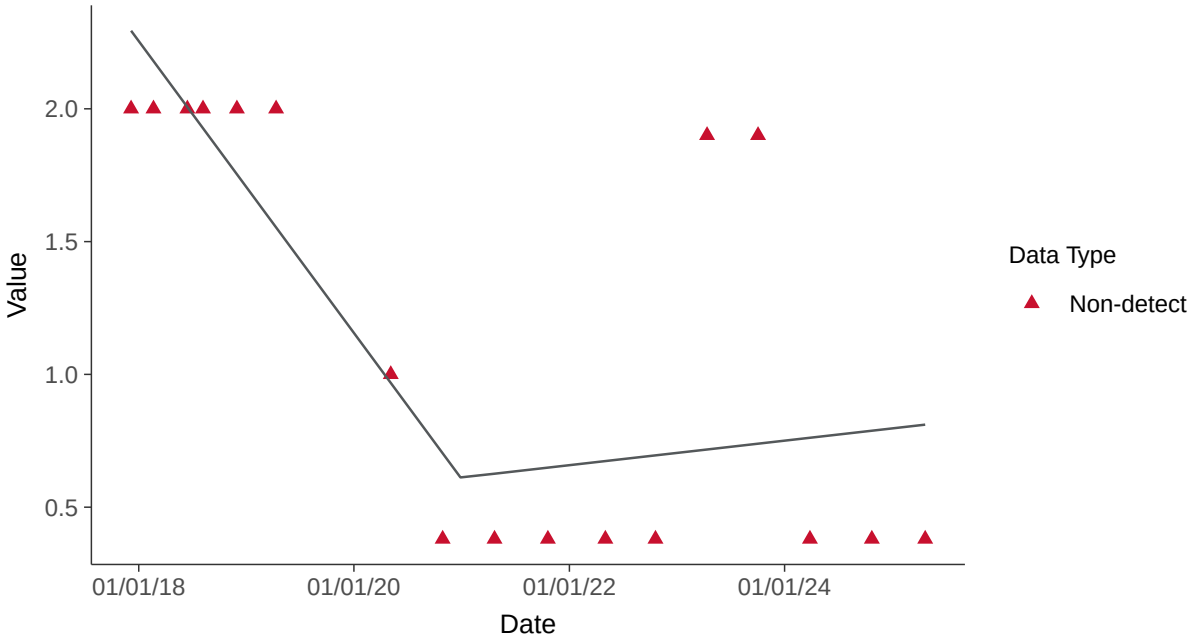

**Boxplot by Season**

Thallium, MW-17005 (ug/L)



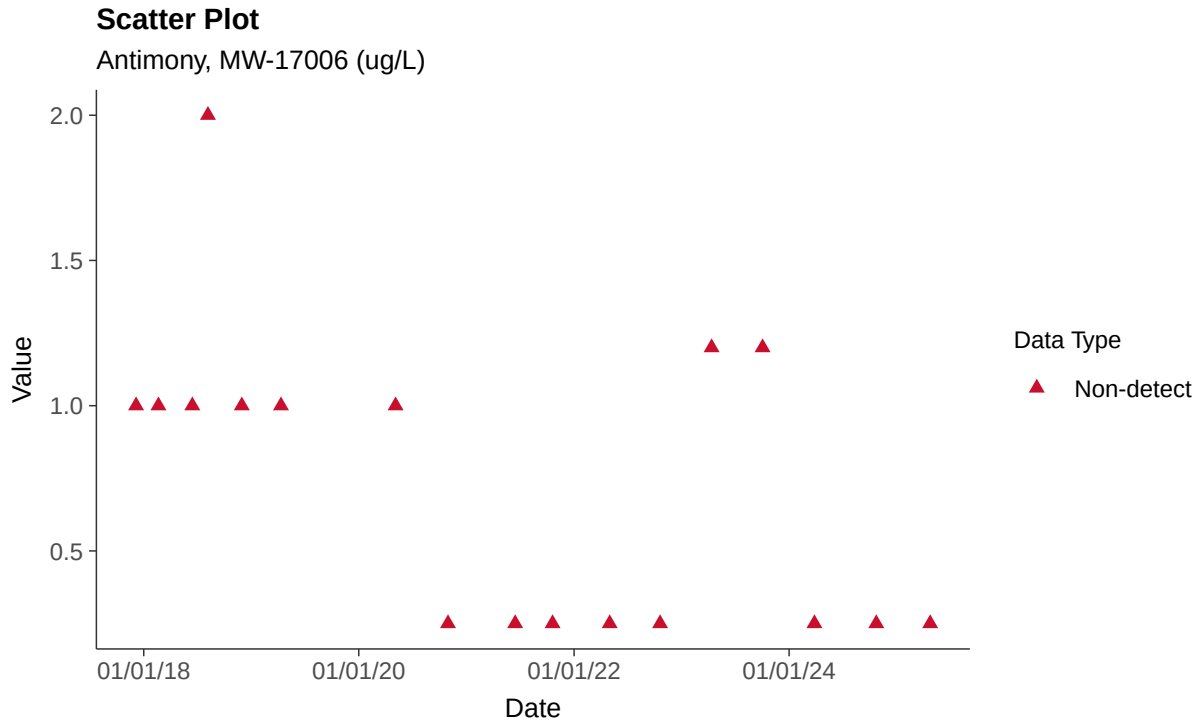
**Trend Regression: Piecewise Linear-Linear**

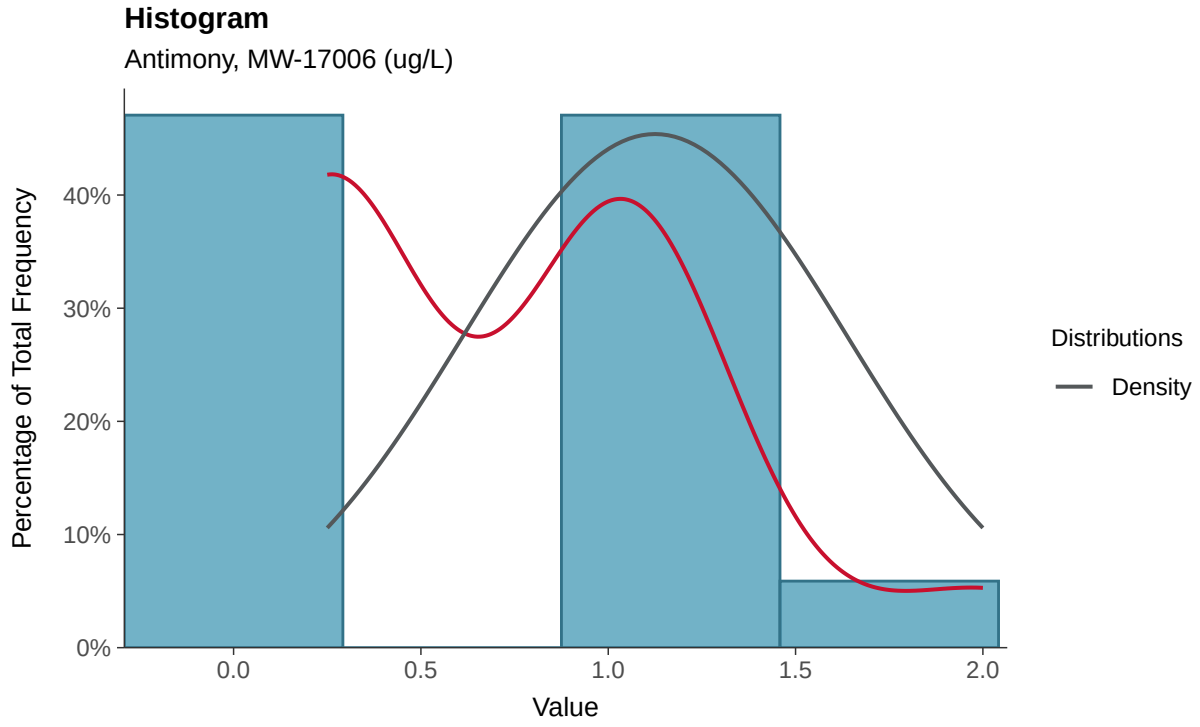
Thallium, MW-17005 (ug/L)



## Appendix IV: Antimony, MW-17006

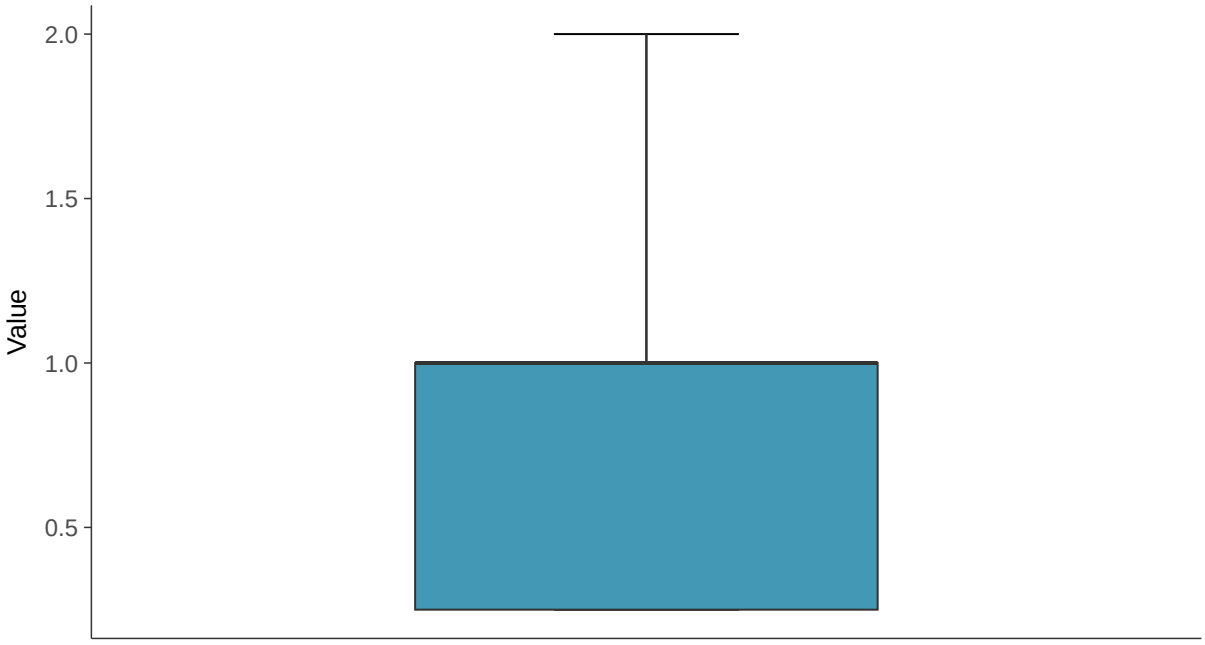
ID: 19_2_101



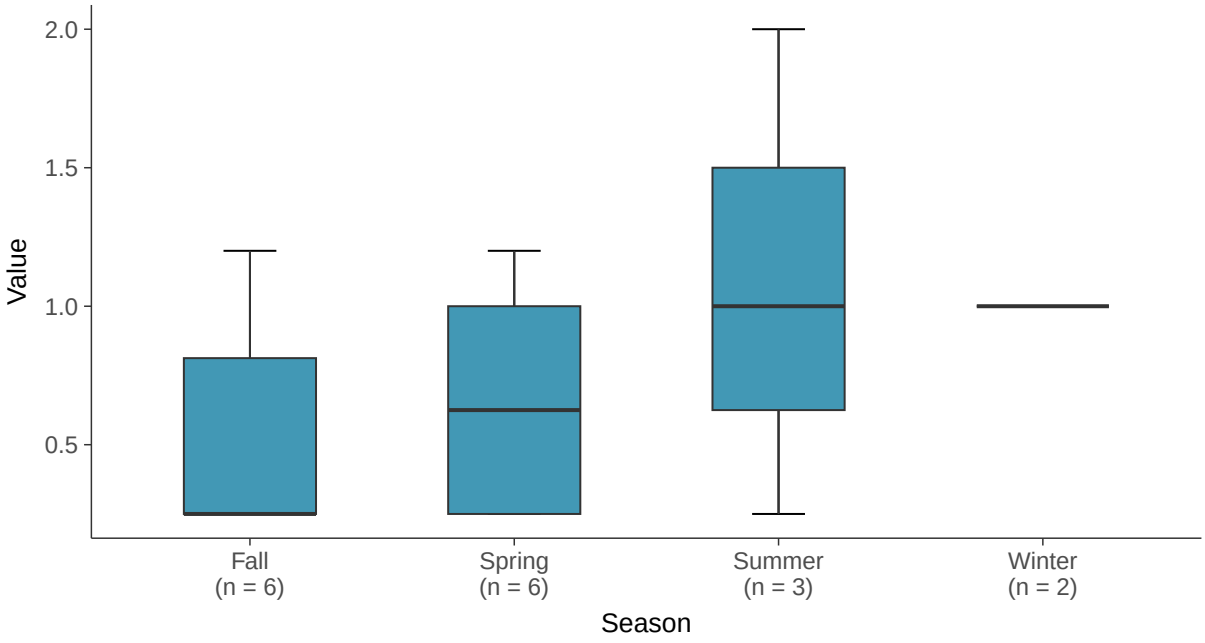
**Boxplot**

Antimony, MW-17006 (ug/L)



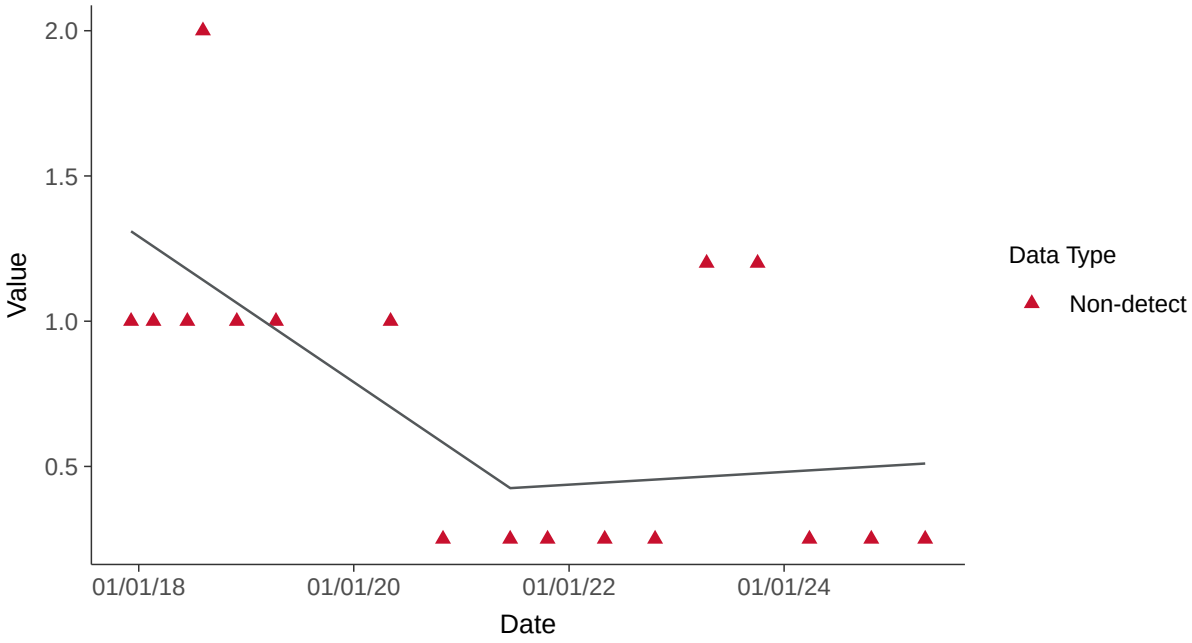

**Boxplot by Season**

Antimony, MW-17006 (ug/L)



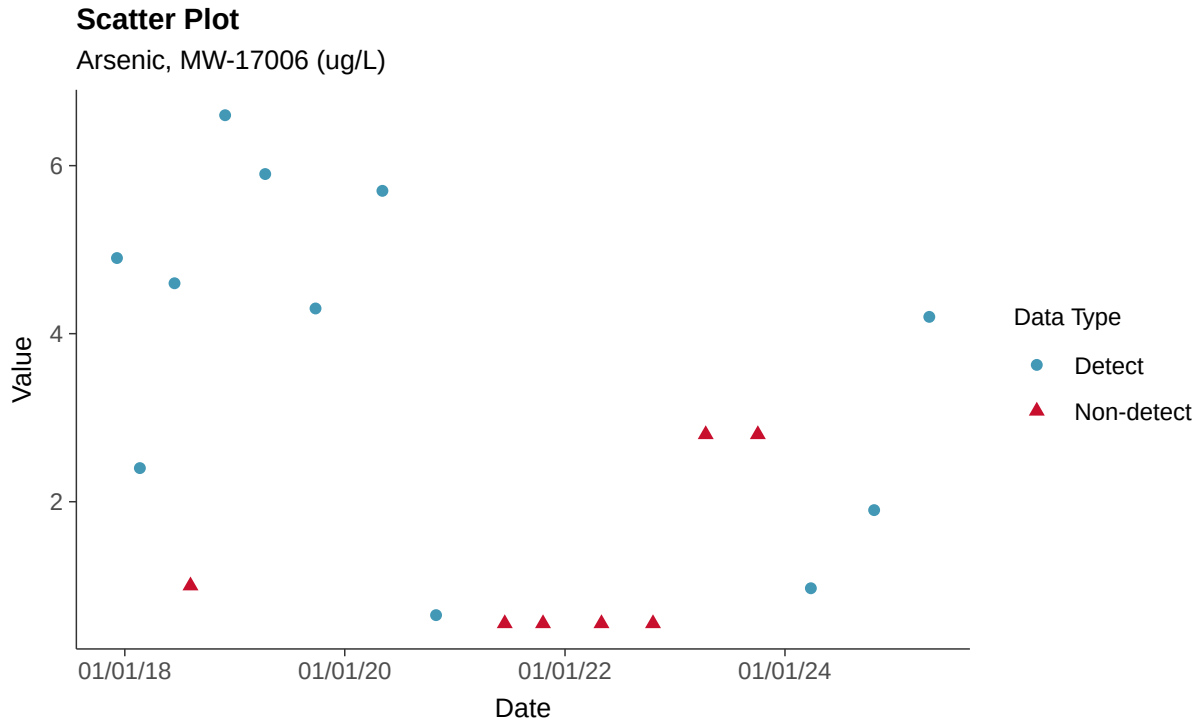
**Trend Regression: Piecewise Linear-Linear**

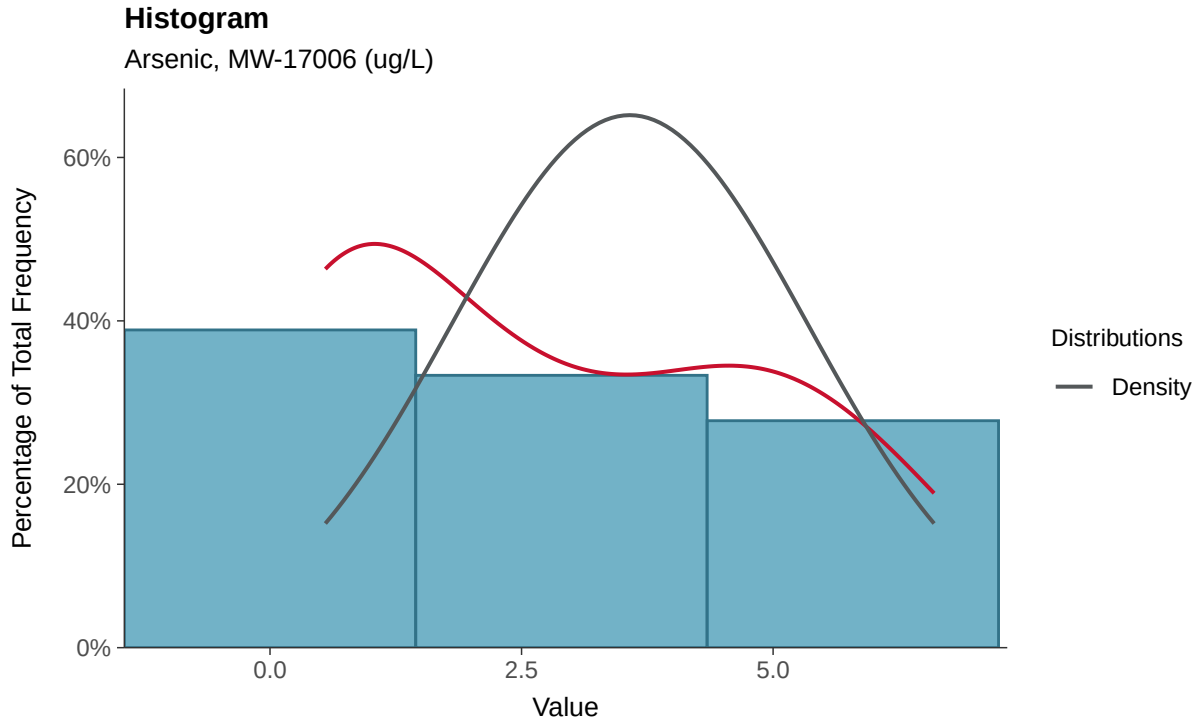
Antimony, MW-17006 (ug/L)



## Appendix IV: Arsenic, MW-17006

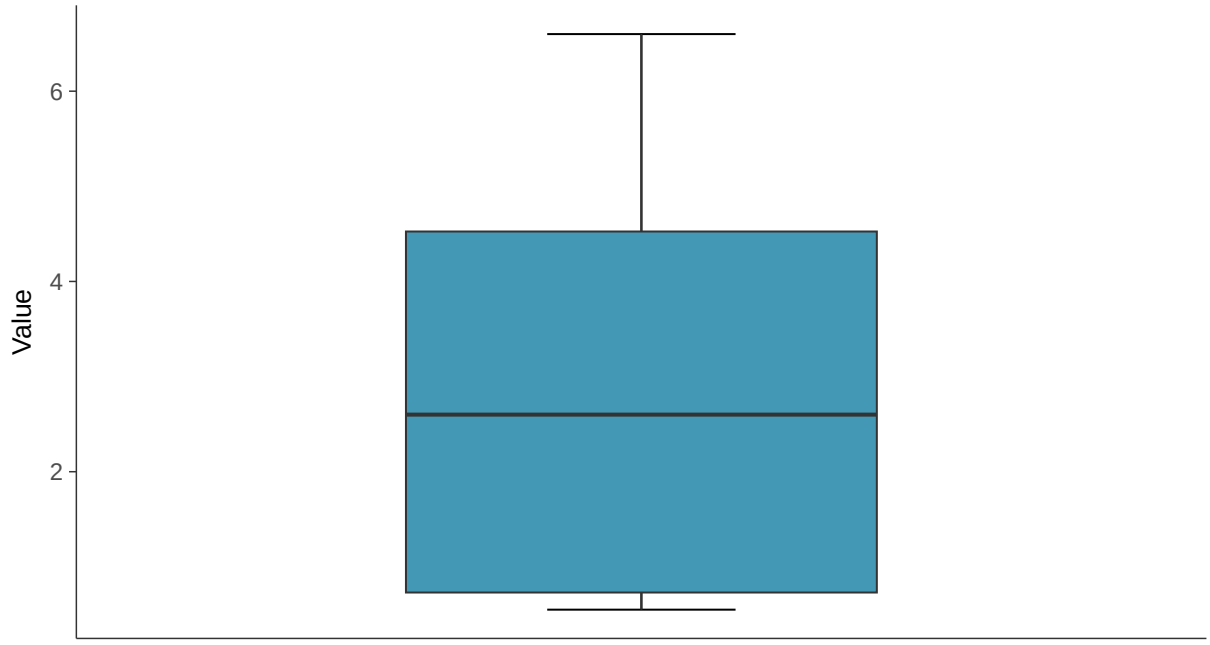
ID: 19_2_102



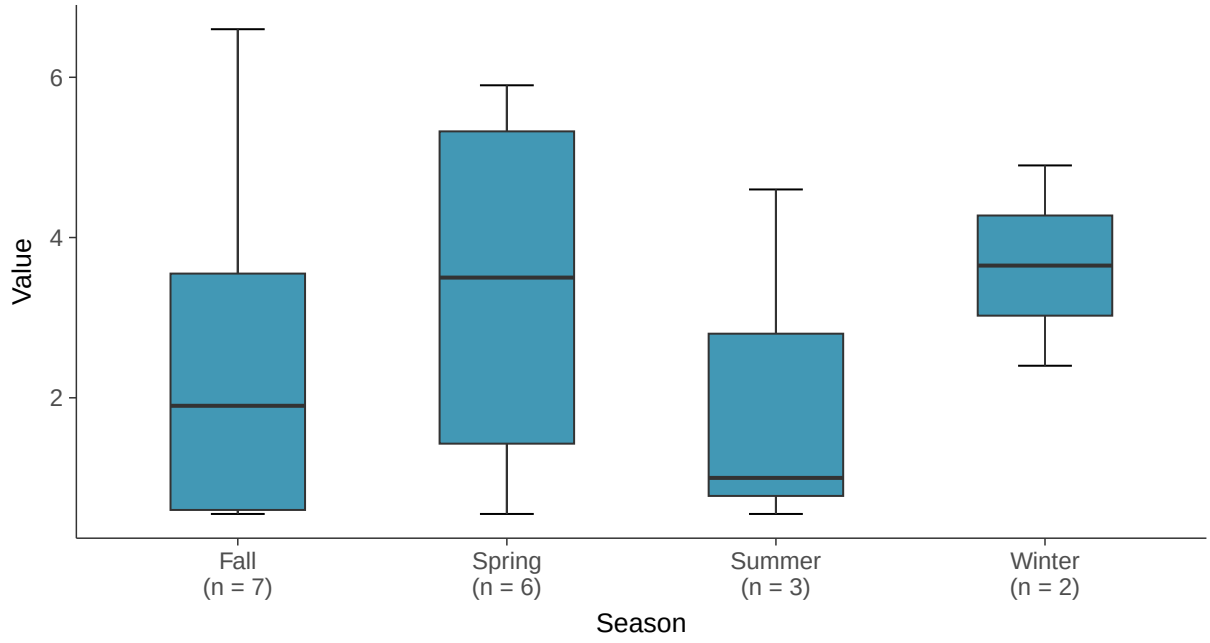
**Boxplot**

Arsenic, MW-17006 (ug/L)



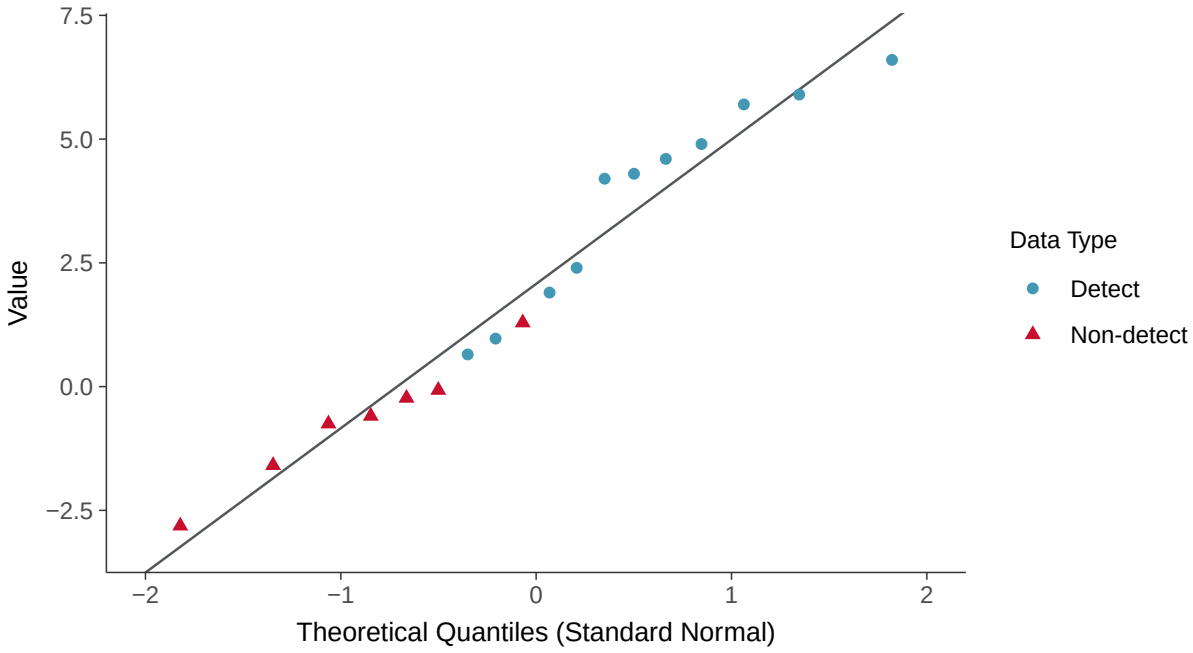

**Boxplot by Season**

Arsenic, MW-17006 (ug/L)



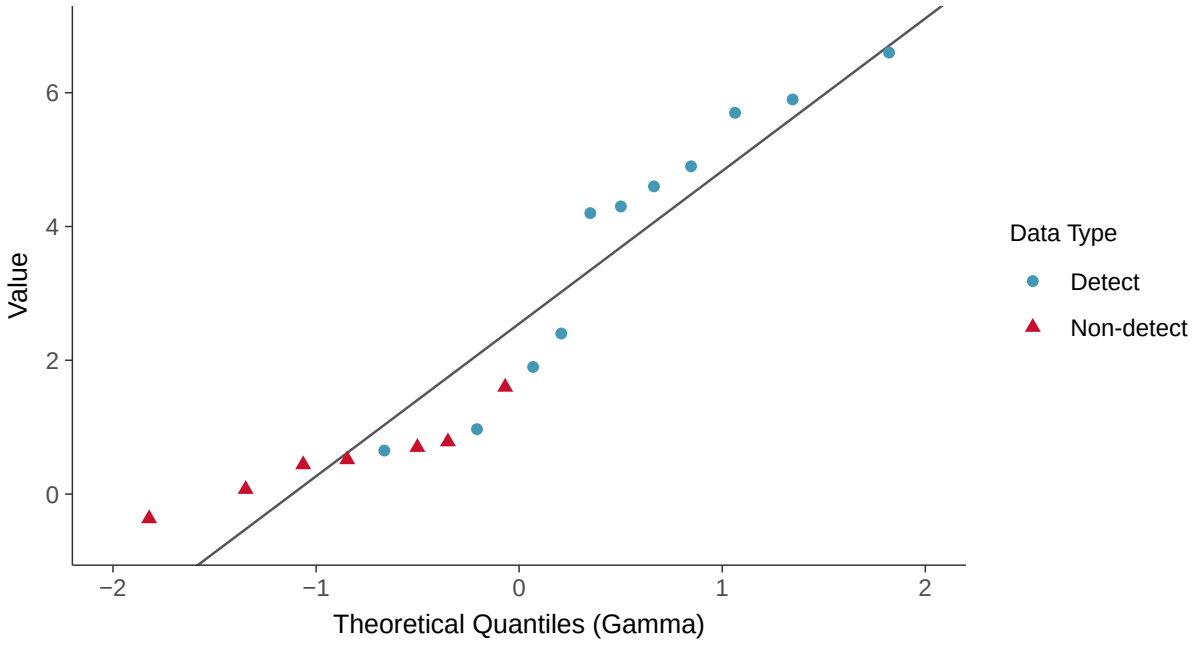
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17006 (ug/L)



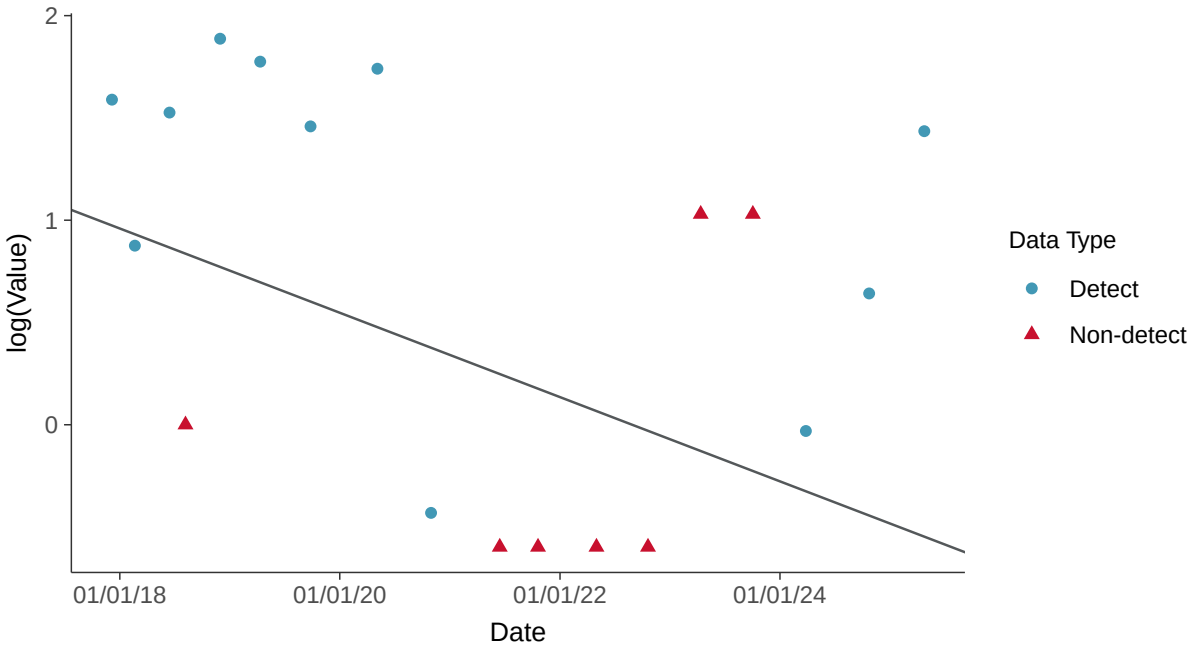

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17006 (ug/L)



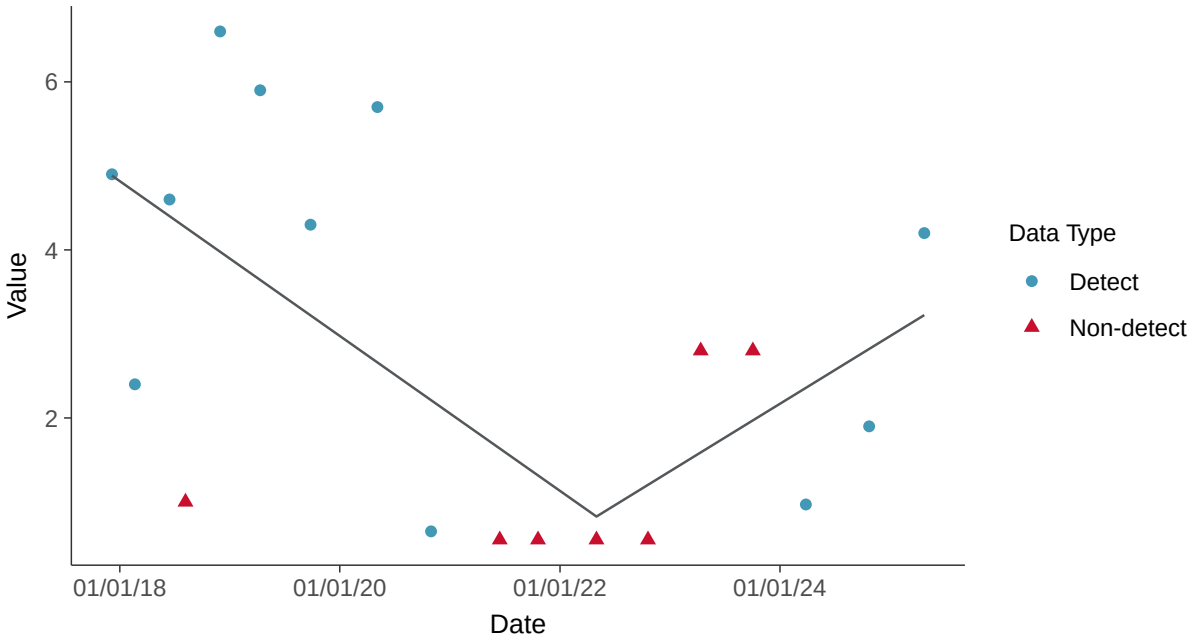
**Trend Regression: Lognormal MLE**

Arsenic, MW-17006 (ug/L)



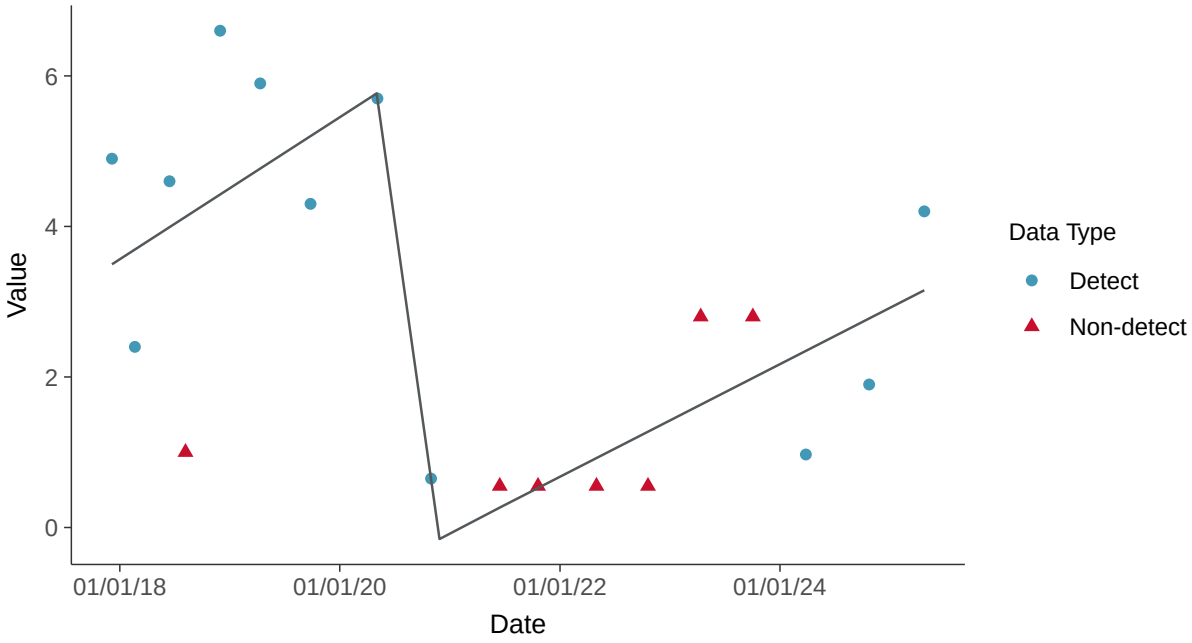

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17006 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-17006 (ug/L)

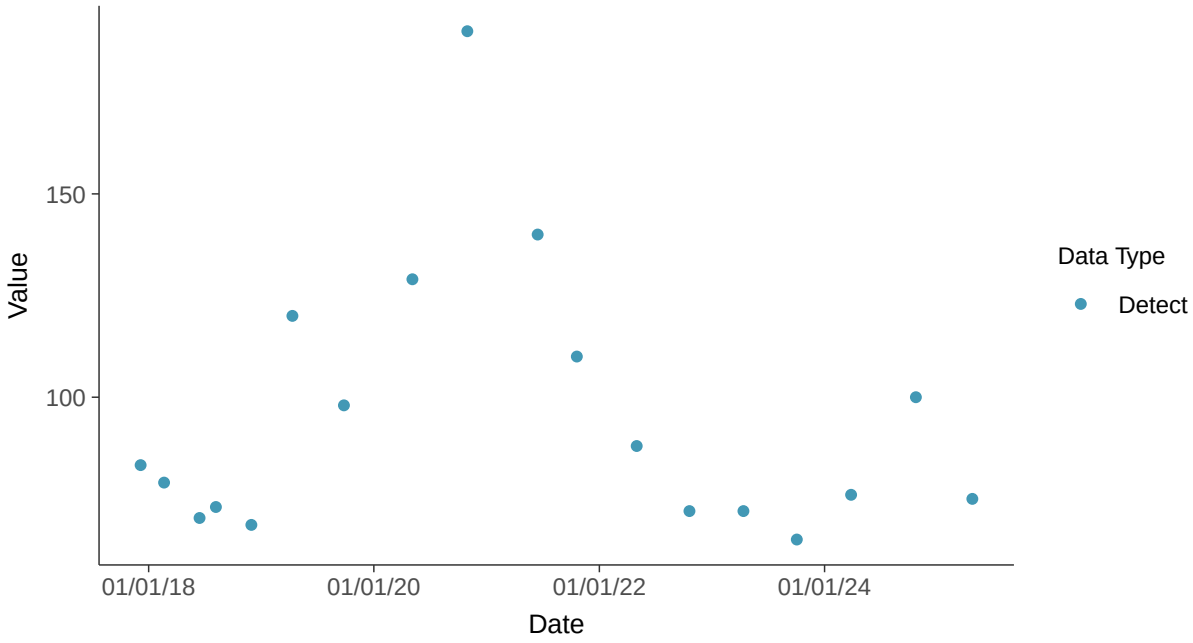


## Appendix IV: Barium, MW-17006

ID: 19_2_103

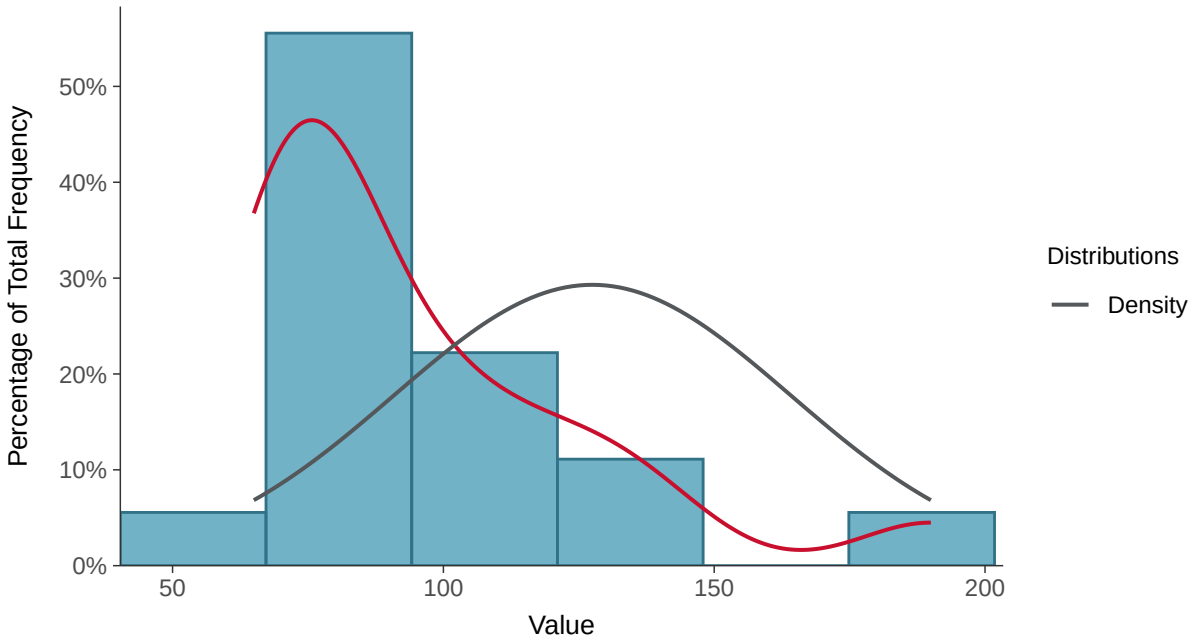
**Scatter Plot**

Barium, MW-17006 (ug/L)



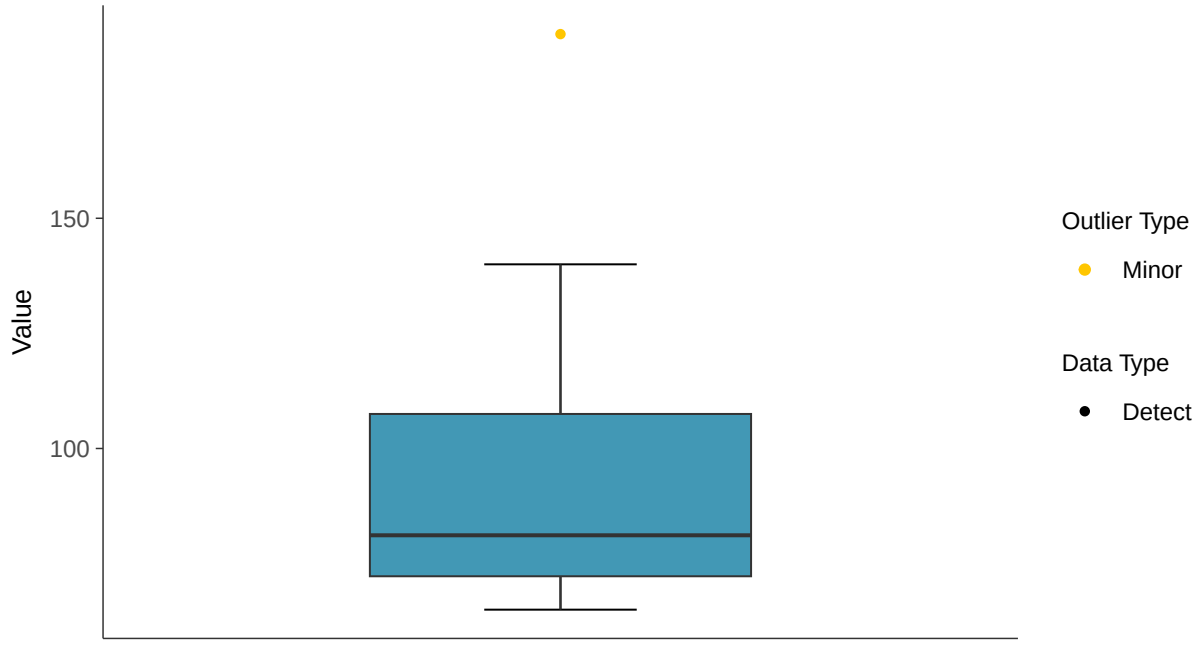

**Histogram**

Barium, MW-17006 (ug/L)



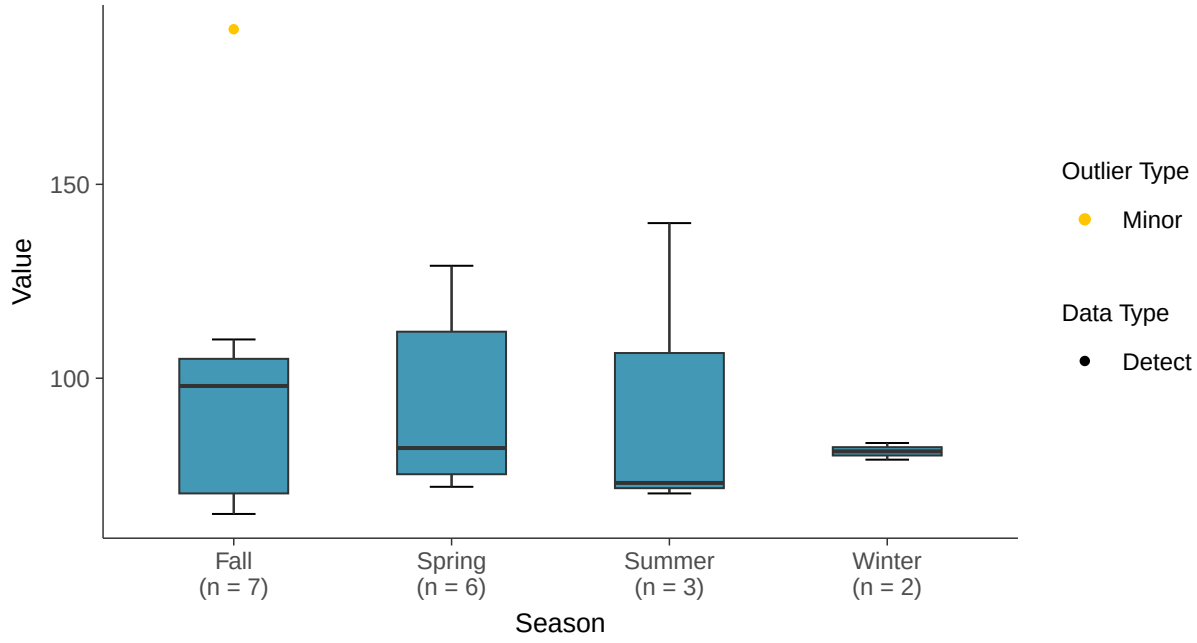
## Boxplot

Barium, MW-17006 (ug/L)



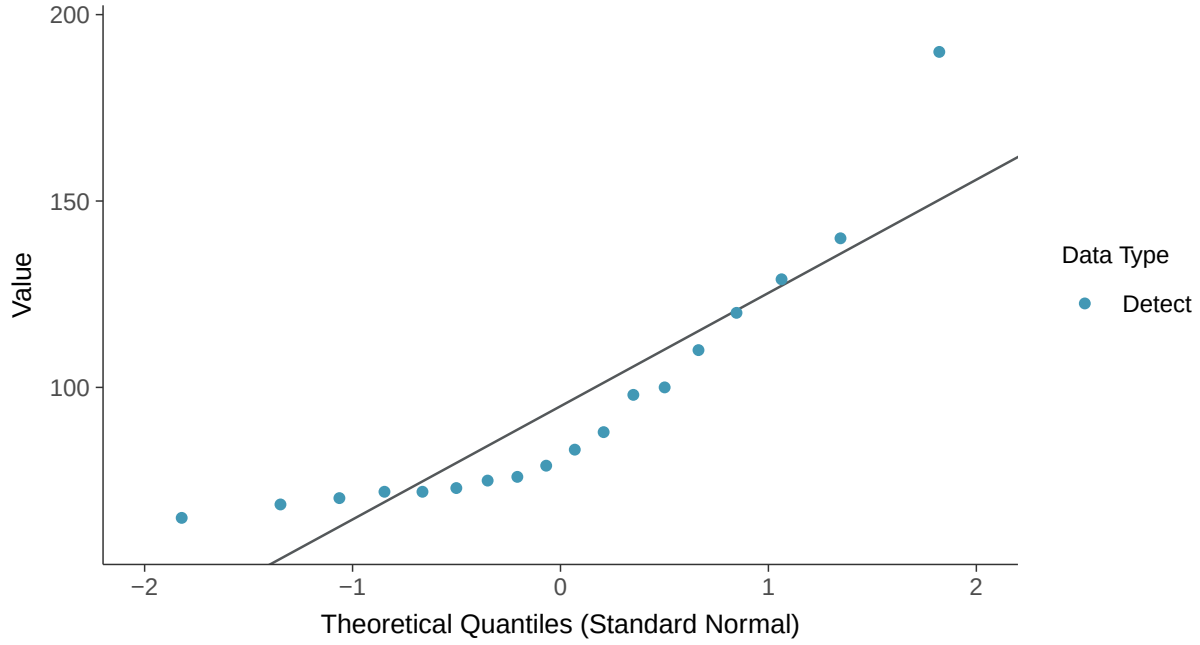

## Boxplot by Season

Barium, MW-17006 (ug/L)



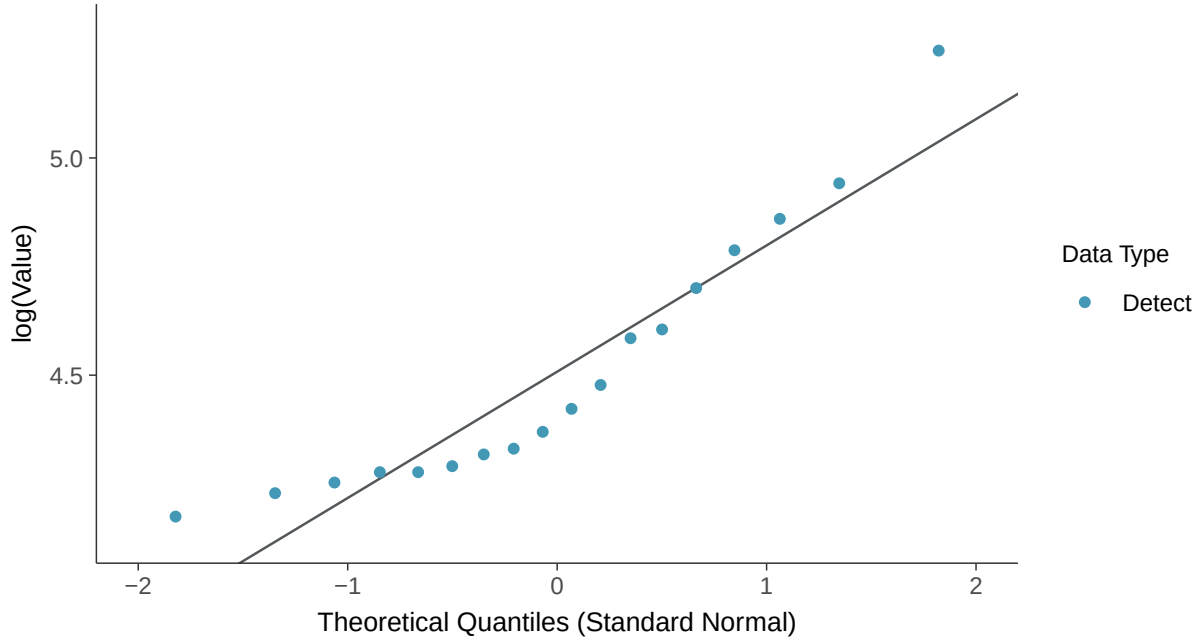
**Normal Q-Q plot**

Barium, MW-17006 (ug/L)



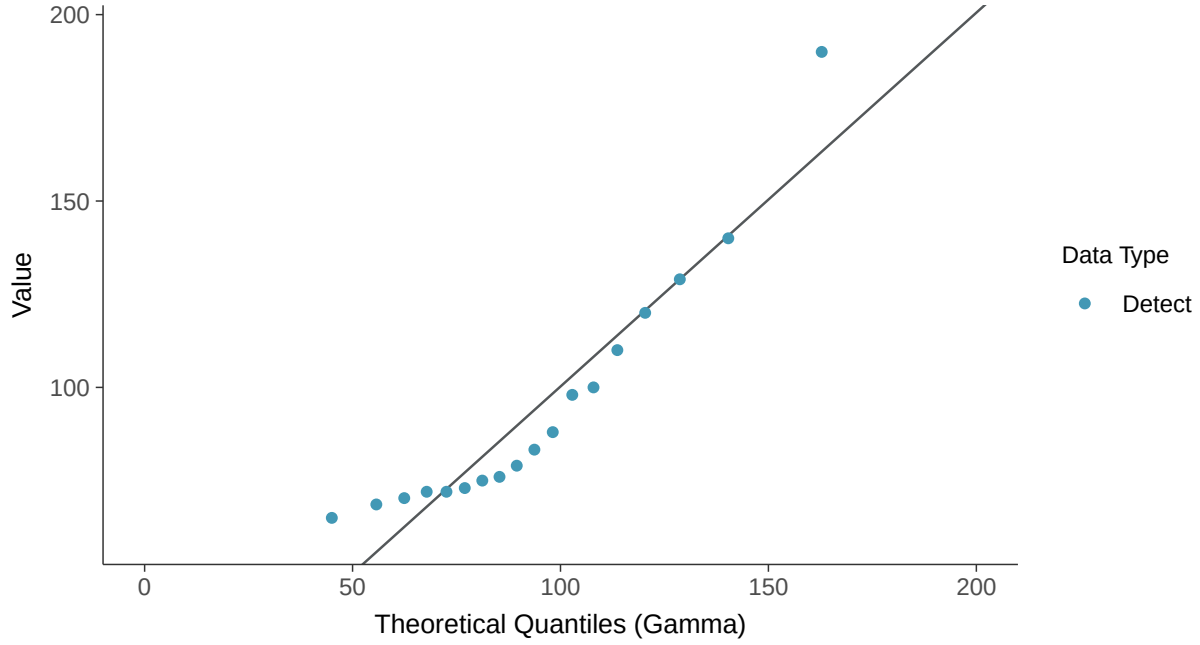

**Lognormal Q-Q plot**

Barium, MW-17006 (ug/L)



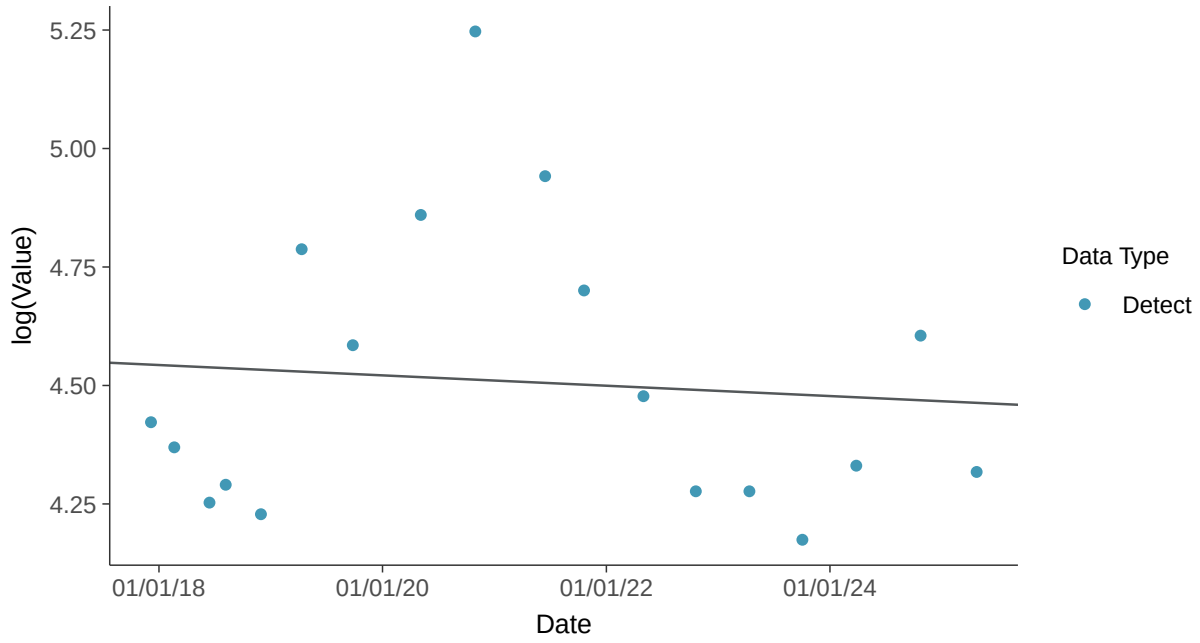
**Gamma Q-Q plot**

Barium, MW-17006 (ug/L)



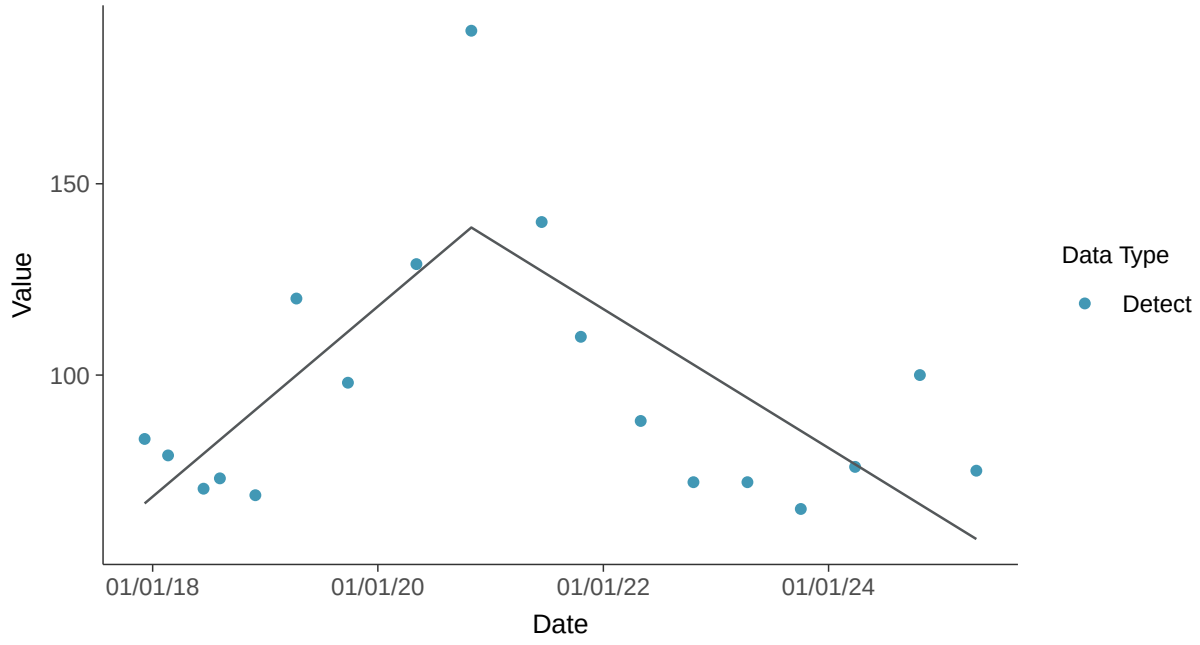

**Trend Regression: Lognormal MLE**

Barium, MW-17006 (ug/L)



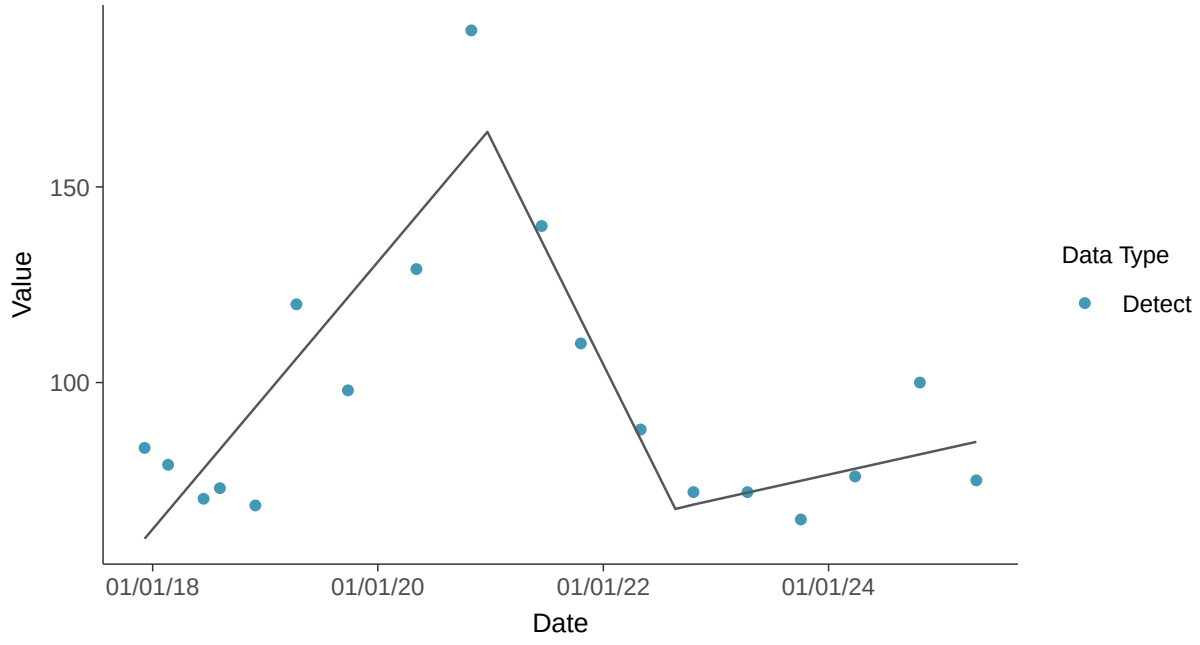
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17006 (ug/L)



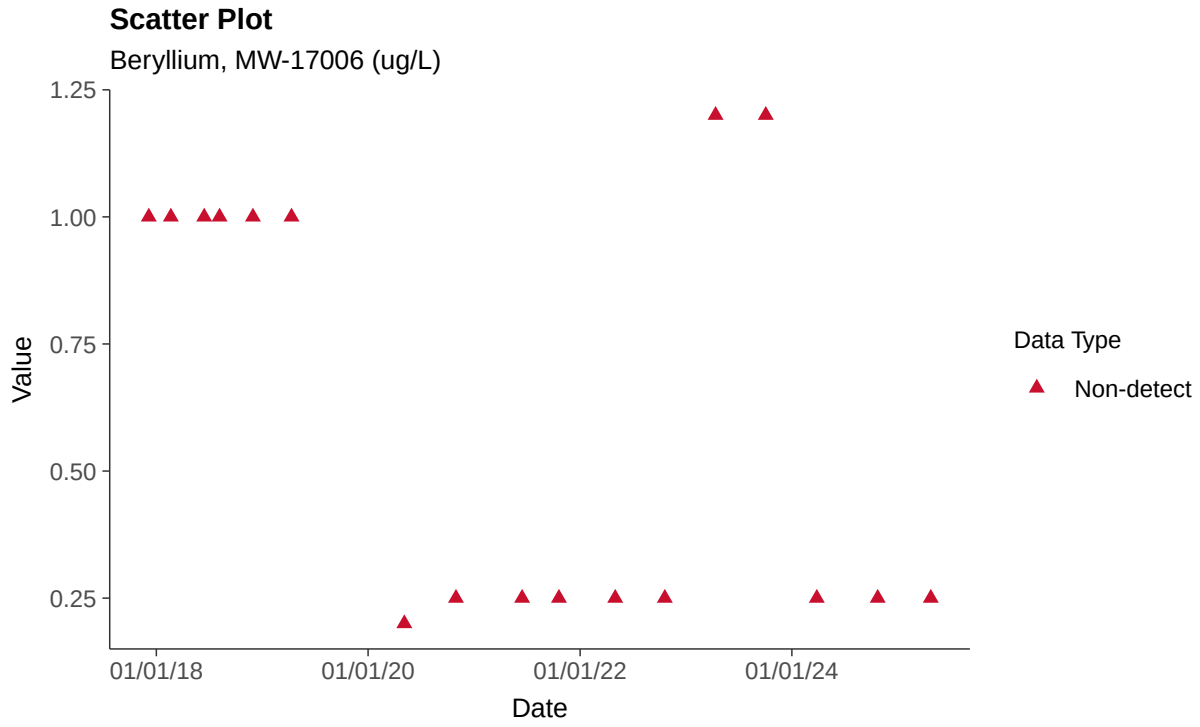

**Trend Regression: Piecewise Linear-Linear-Linear**

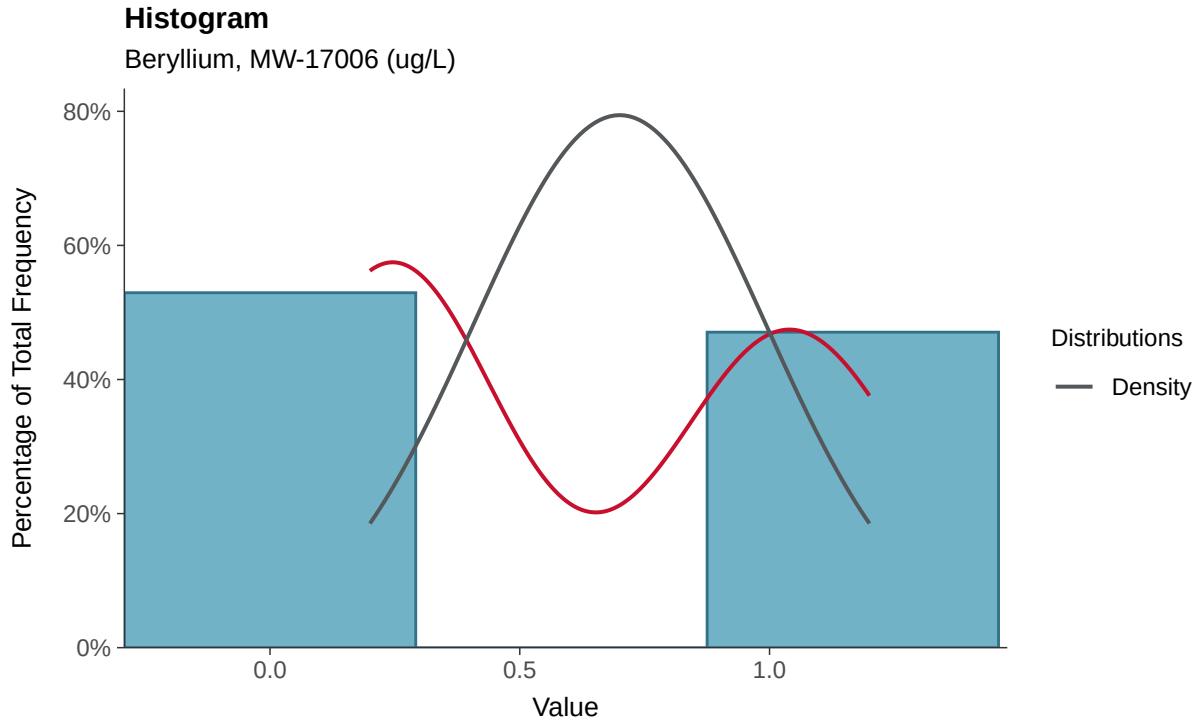
Barium, MW-17006 (ug/L)



## Appendix IV: Beryllium, MW-17006

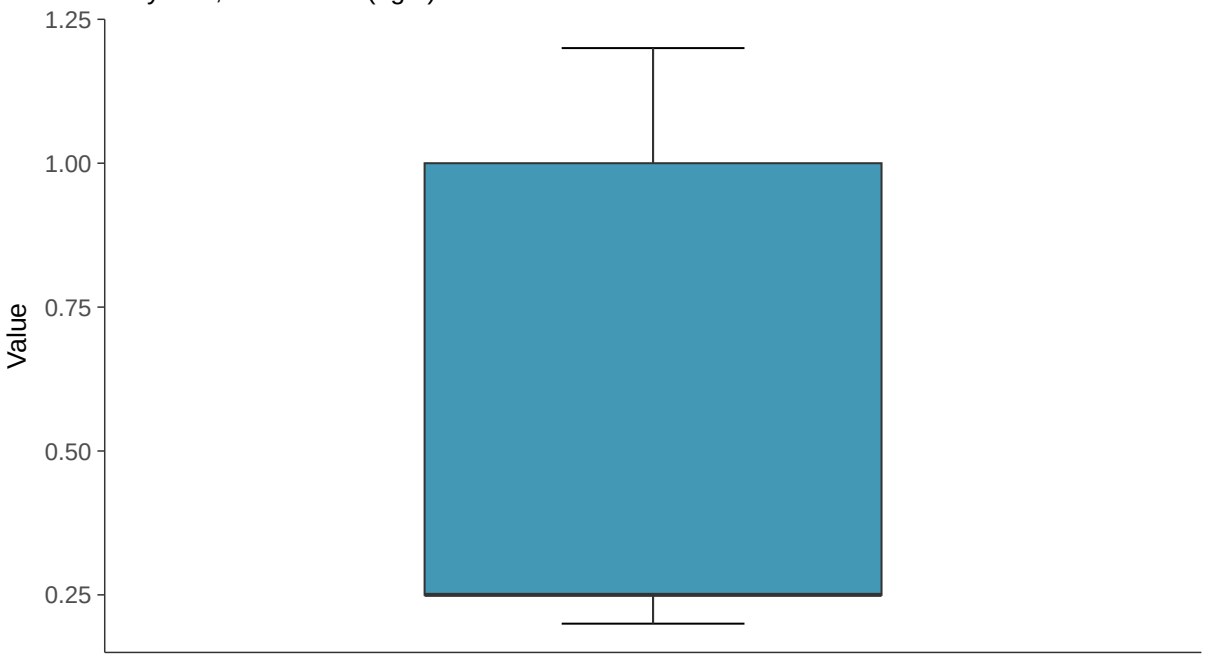
ID: 19_2_104



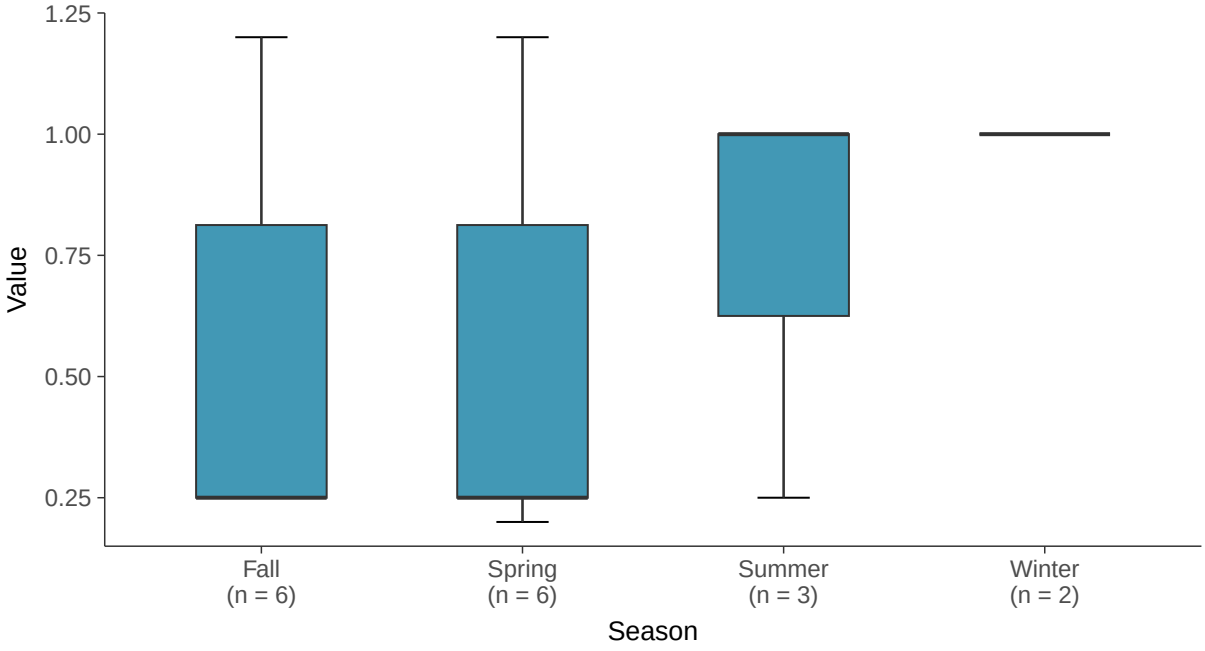
**Boxplot**

Beryllium, MW-17006 (ug/L)



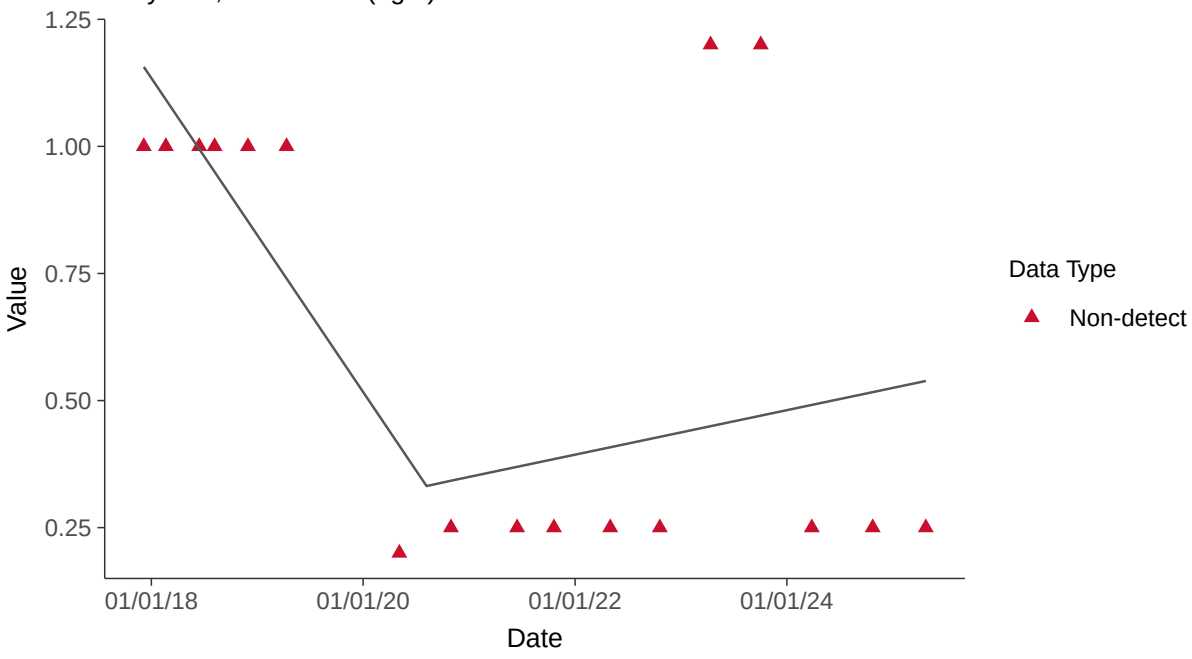

**Boxplot by Season**

Beryllium, MW-17006 (ug/L)



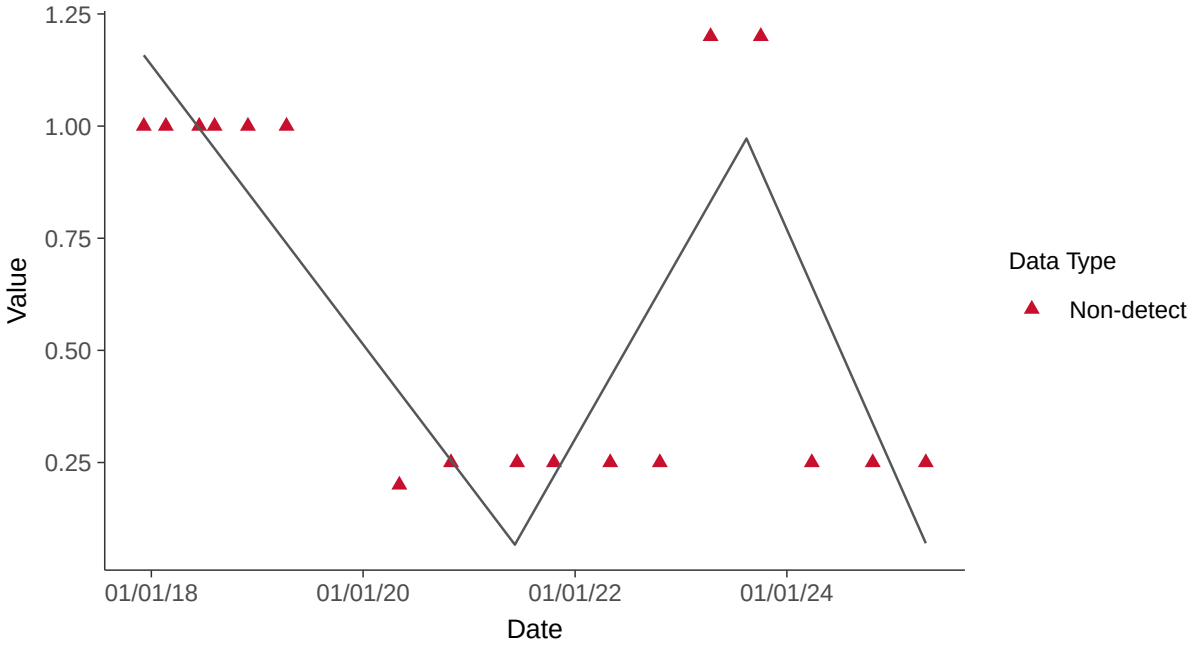
**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-17006 (ug/L)



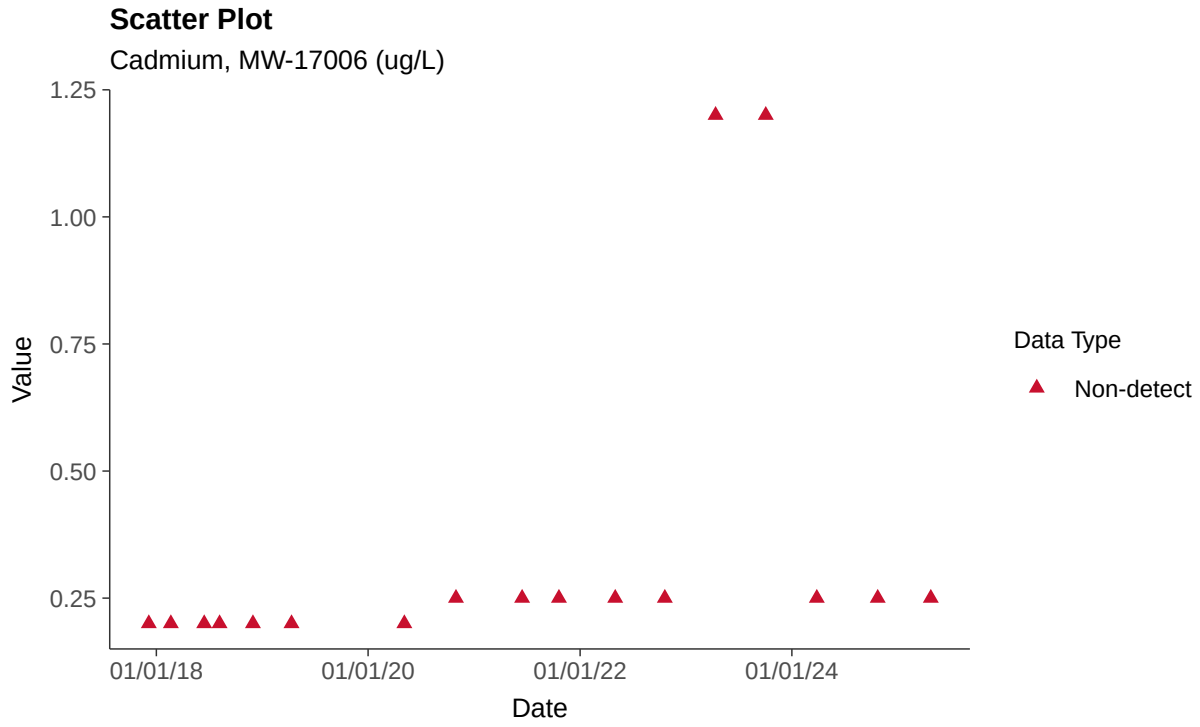

**Trend Regression: Piecewise Linear-Linear-Linear**

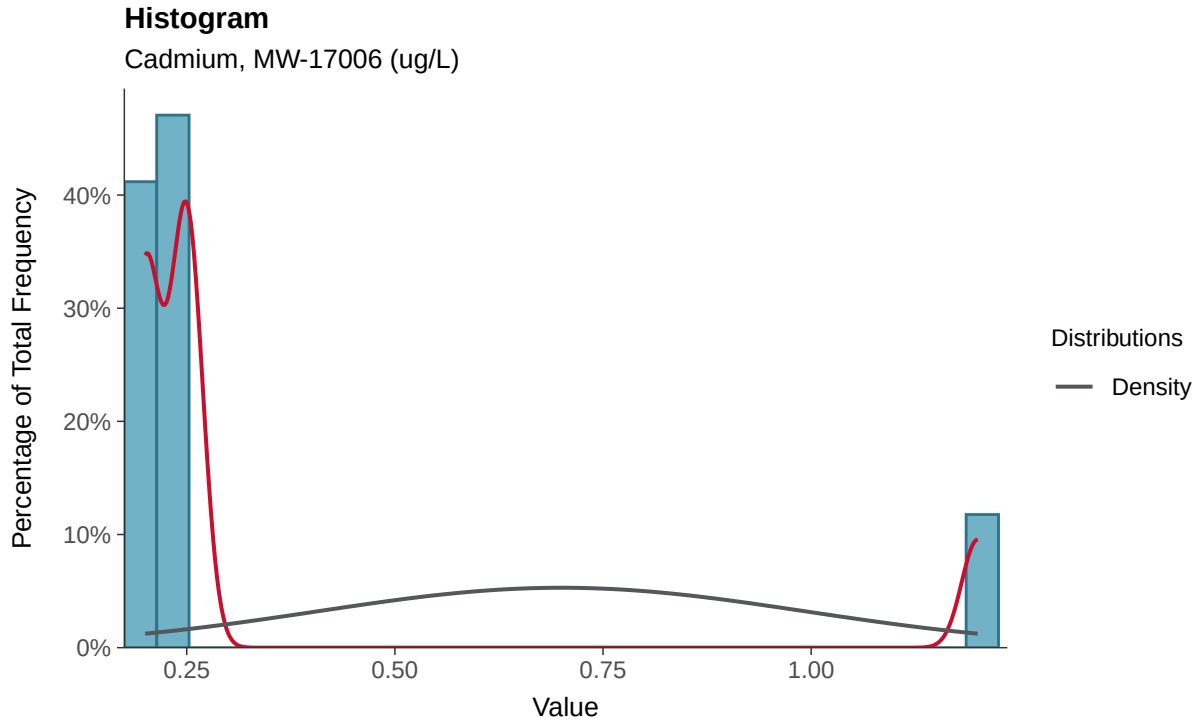
Beryllium, MW-17006 (ug/L)



## Appendix IV: Cadmium, MW-17006

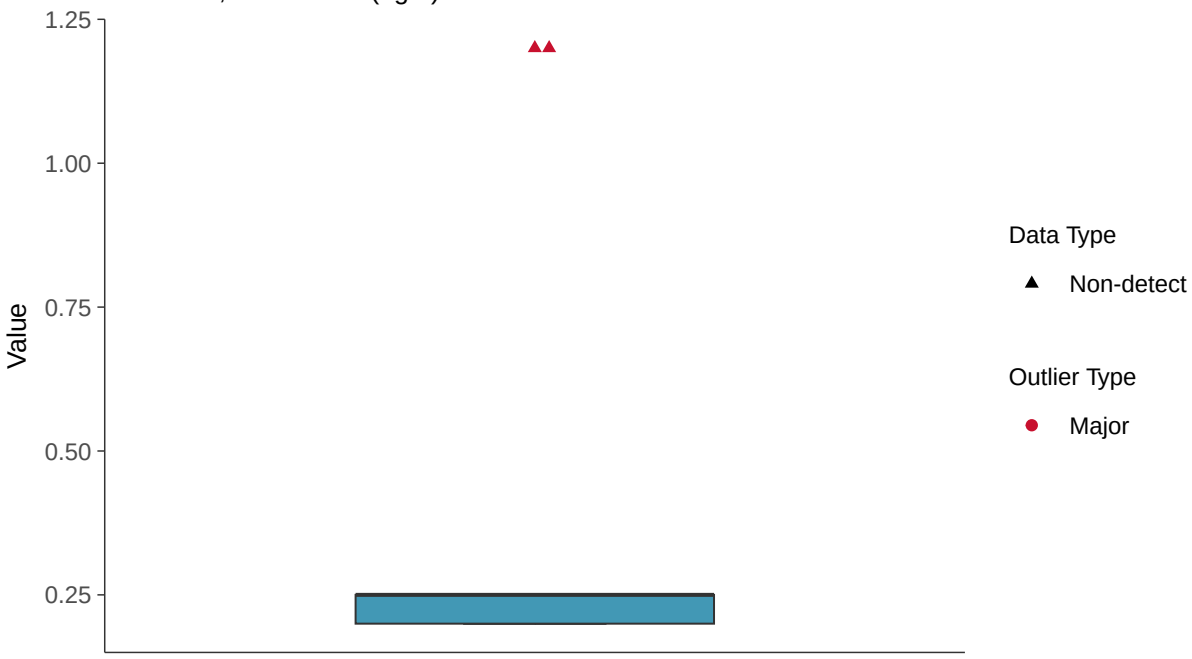
ID: 19_2_106



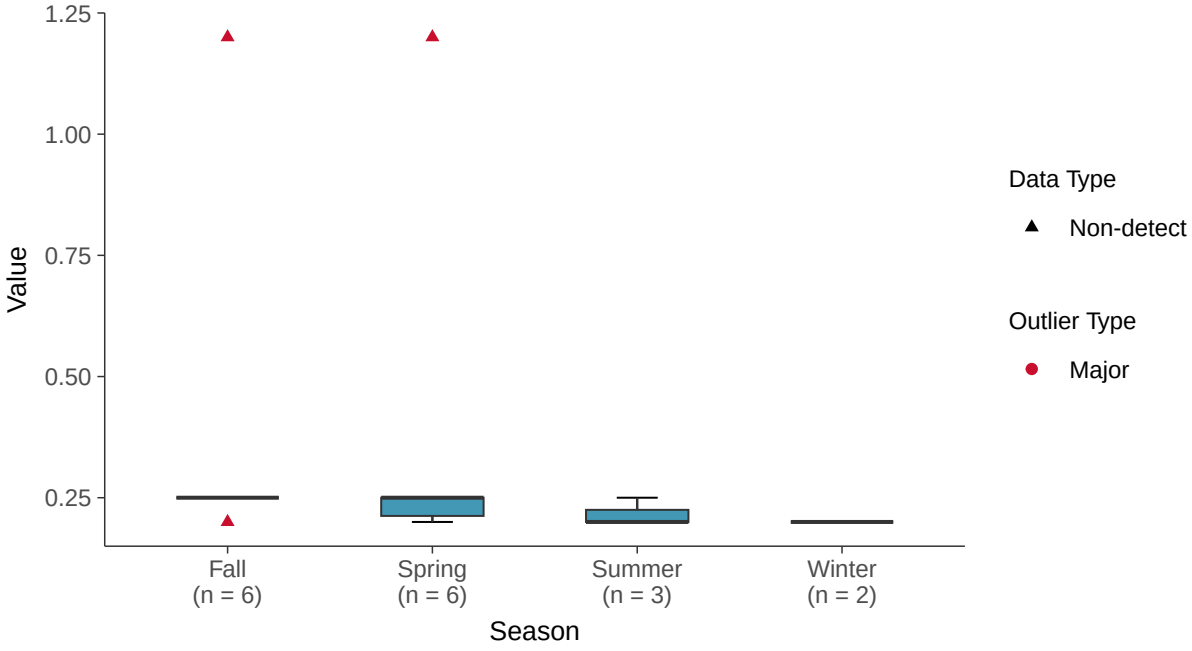
## Boxplot

Cadmium, MW-17006 (ug/L)



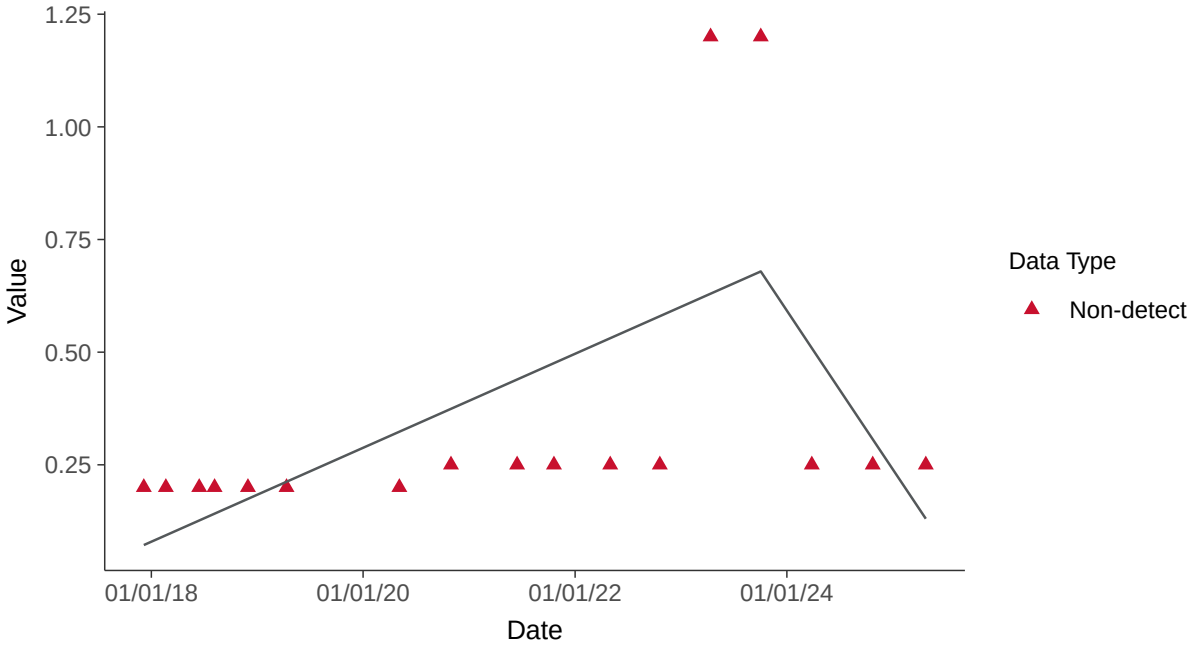

## Boxplot by Season

Cadmium, MW-17006 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-17006 (ug/L)

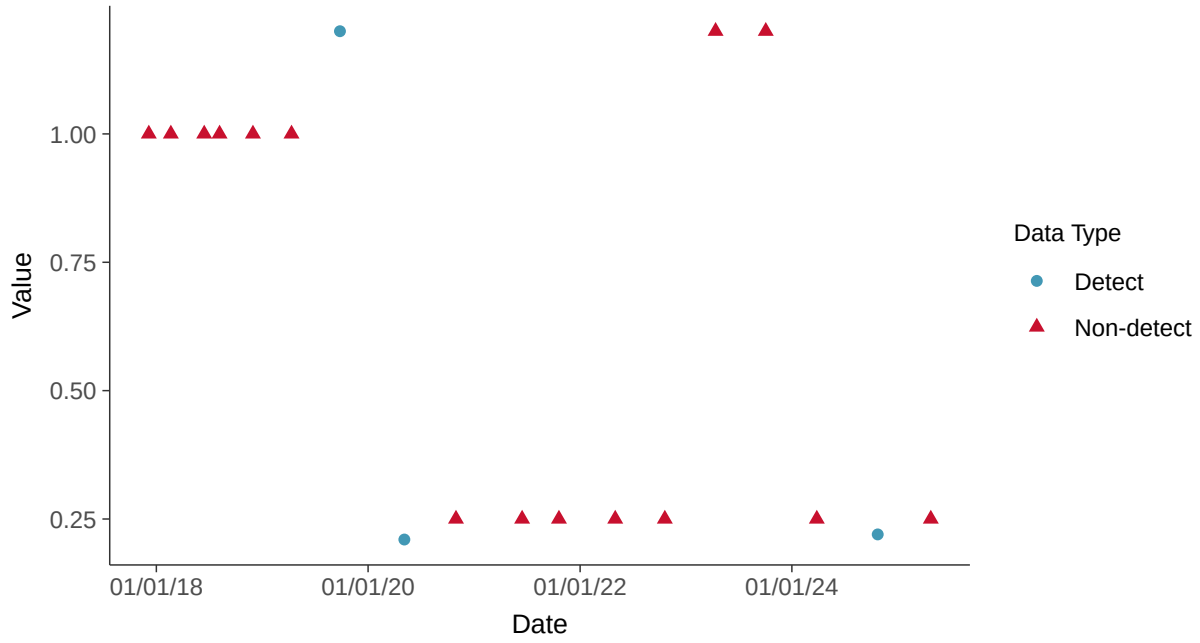


## Appendix IV: Chromium, MW-17006

ID: 19_2_109

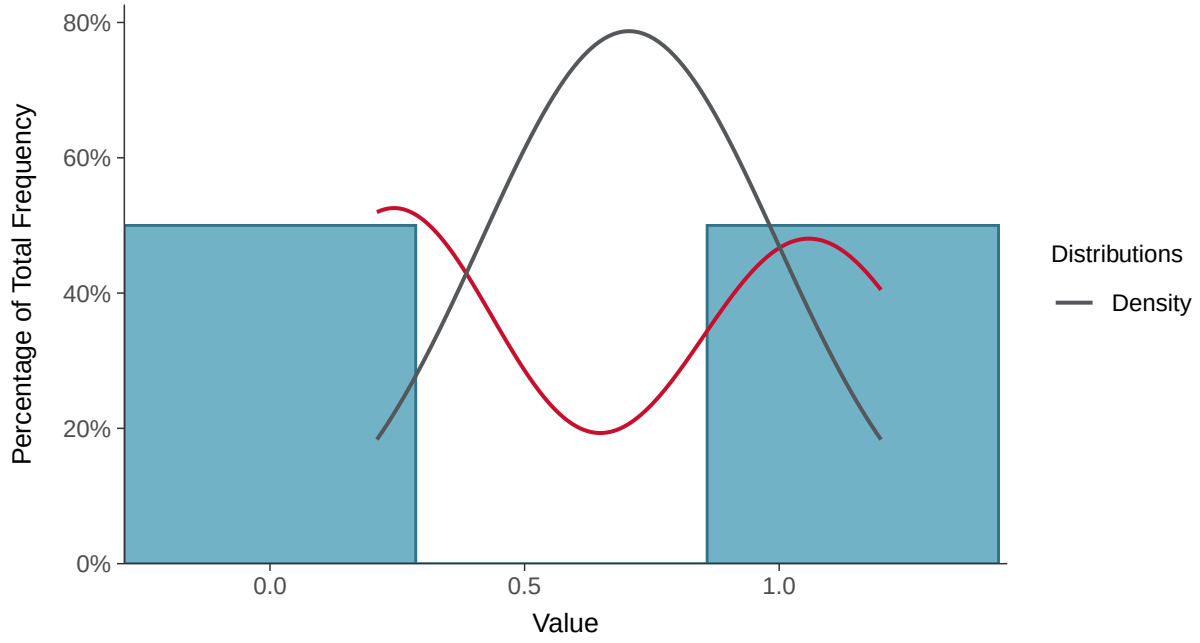
**Scatter Plot**

Chromium, MW-17006 (ug/L)



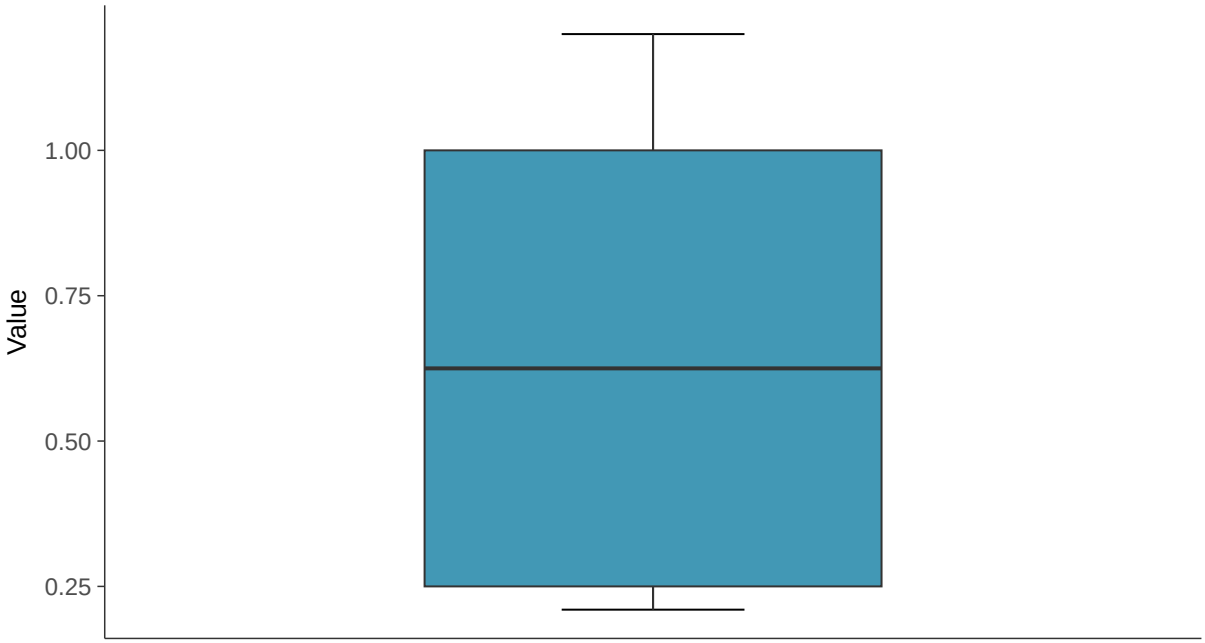

**Histogram**

Chromium, MW-17006 (ug/L)



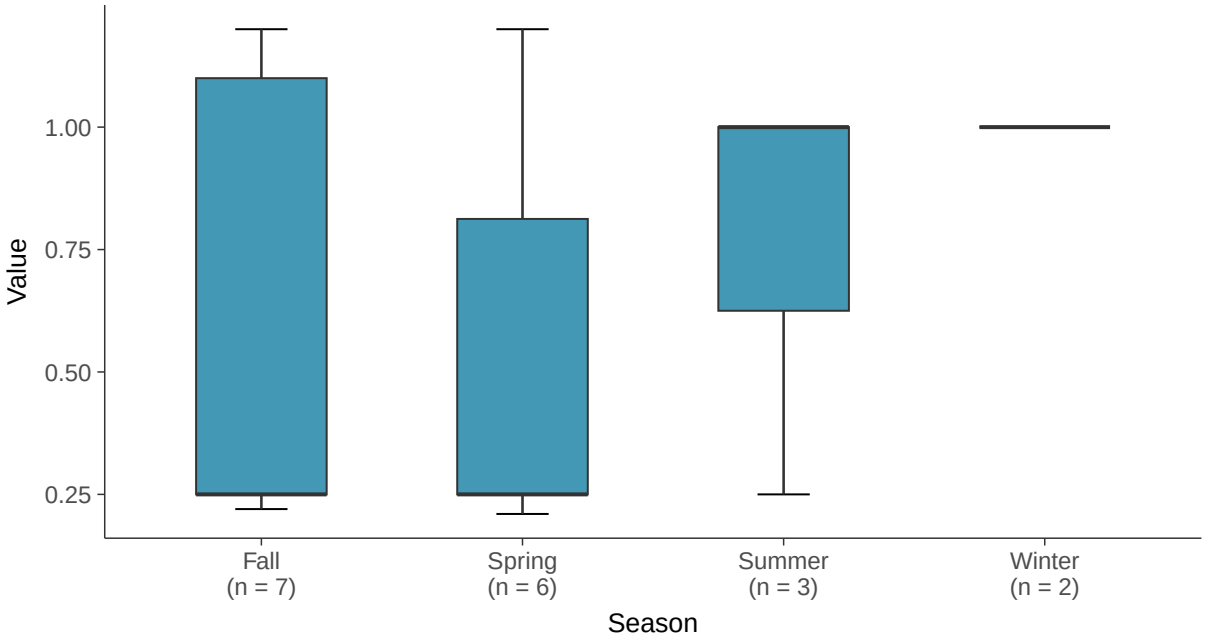
## Boxplot

Chromium, MW-17006 (ug/L)



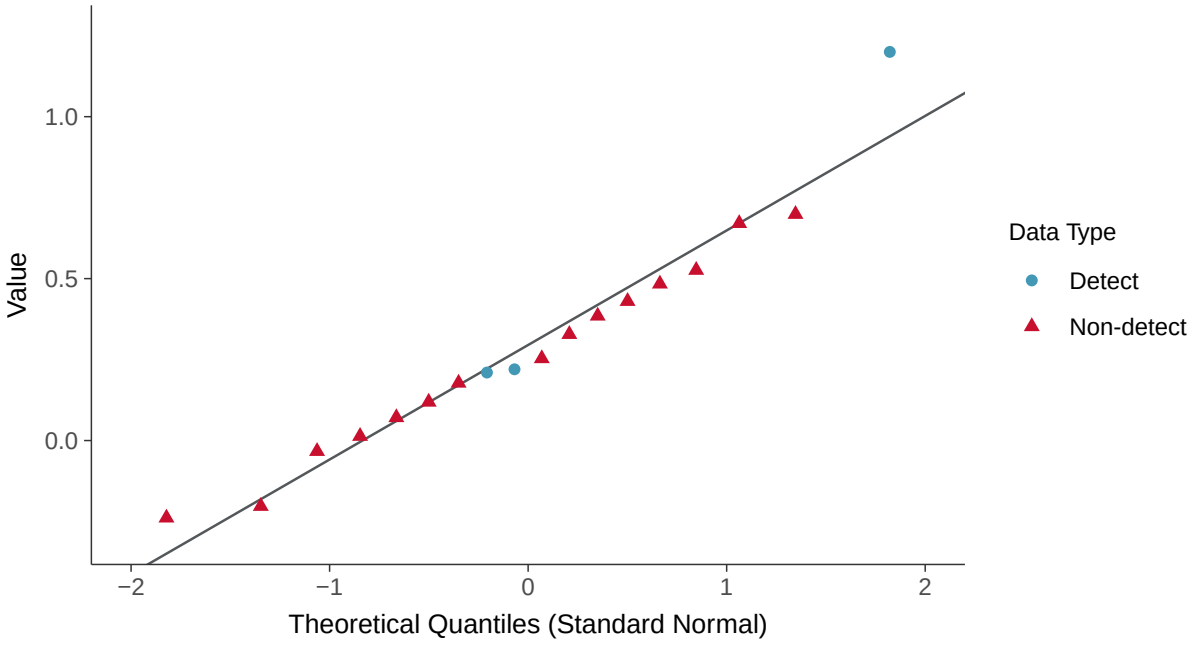

## Boxplot by Season

Chromium, MW-17006 (ug/L)



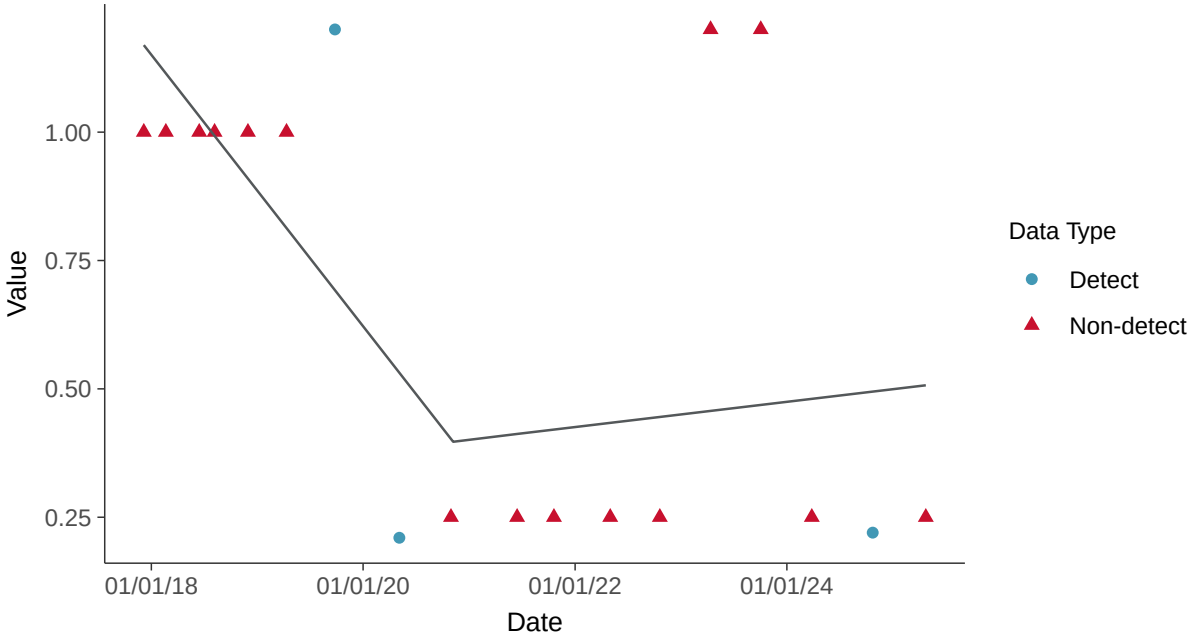
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17006 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-17006 (ug/L)

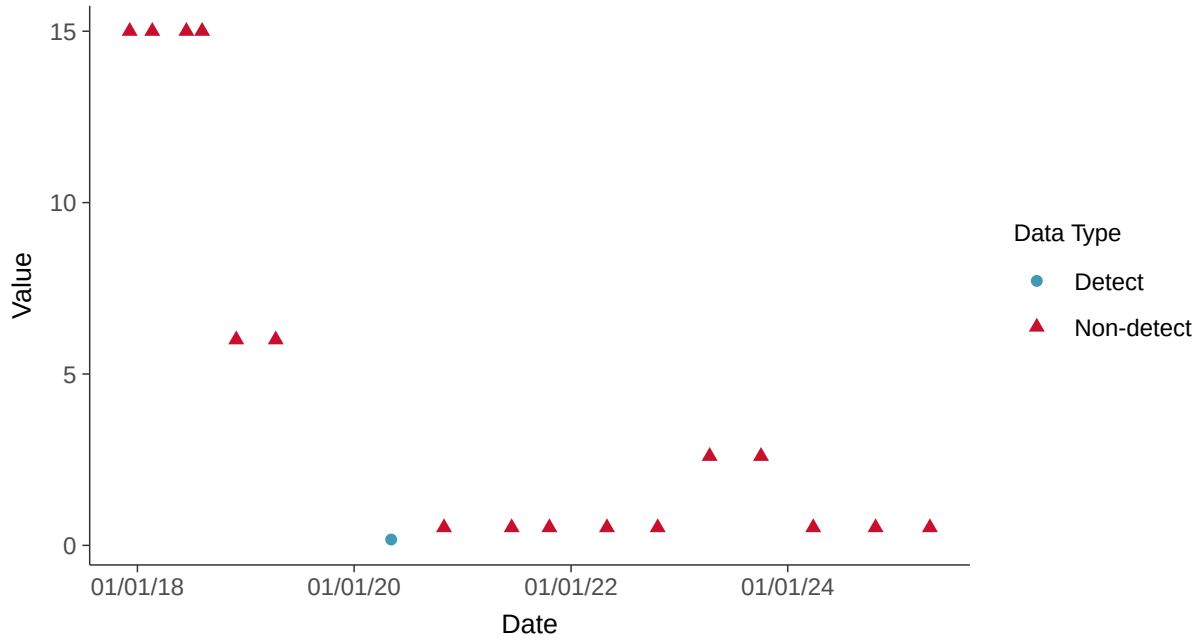


# Appendix IV: Cobalt, MW-17006

ID: 19_2_110

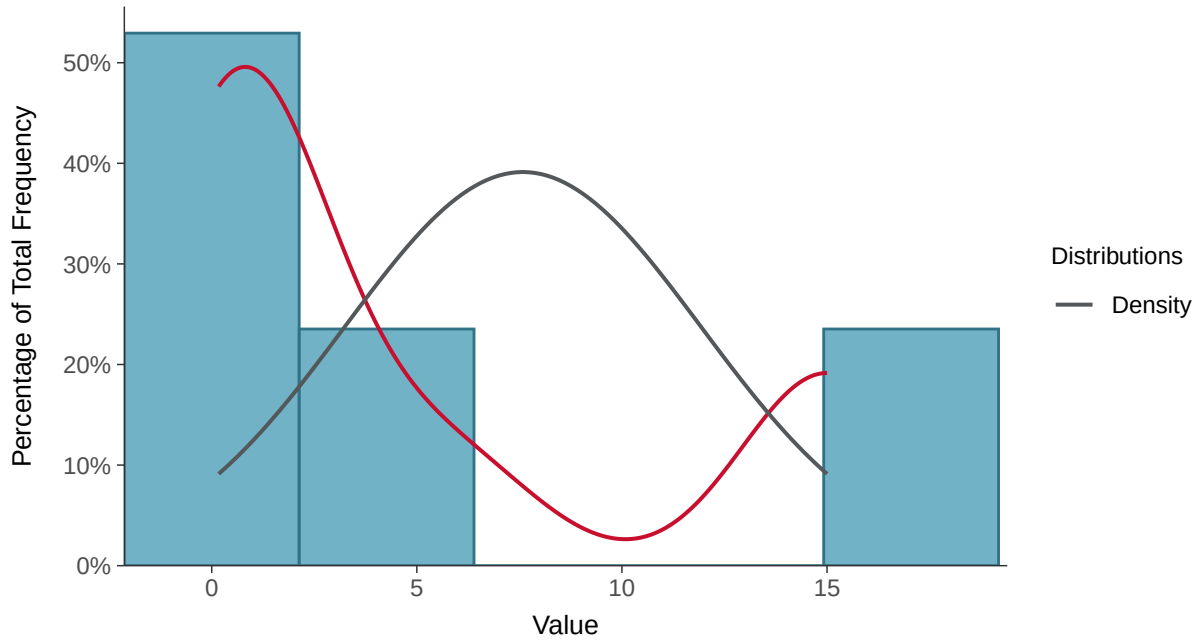
**Scatter Plot**

Cobalt, MW-17006 (ug/L)



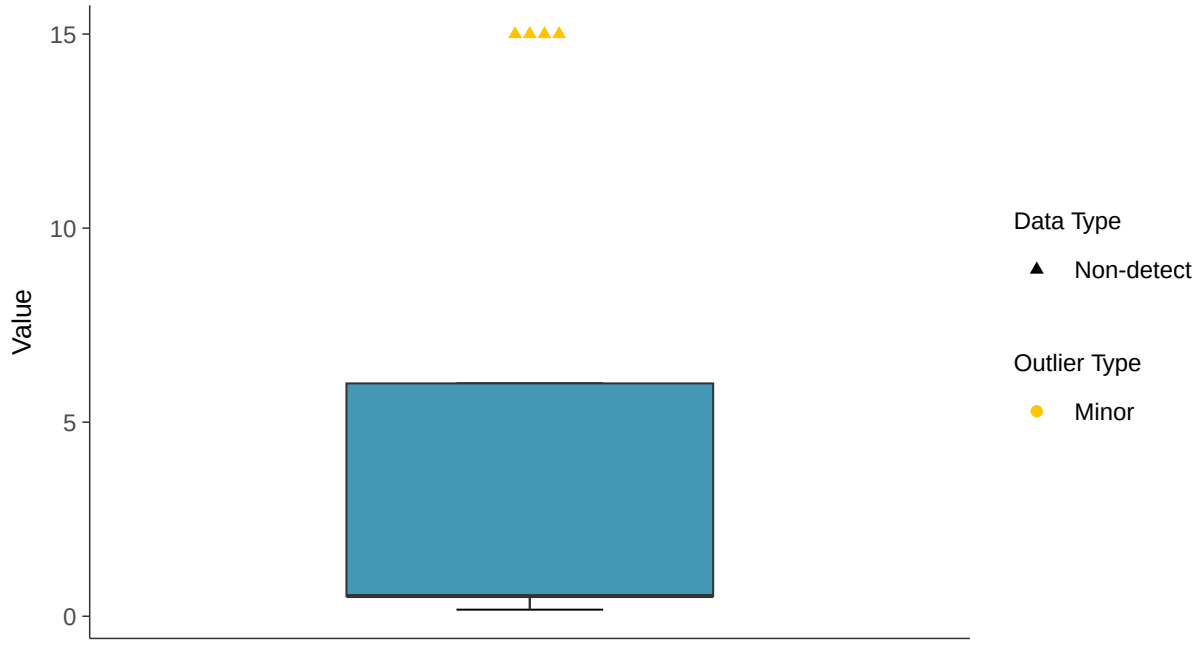

**Histogram**

Cobalt, MW-17006 (ug/L)



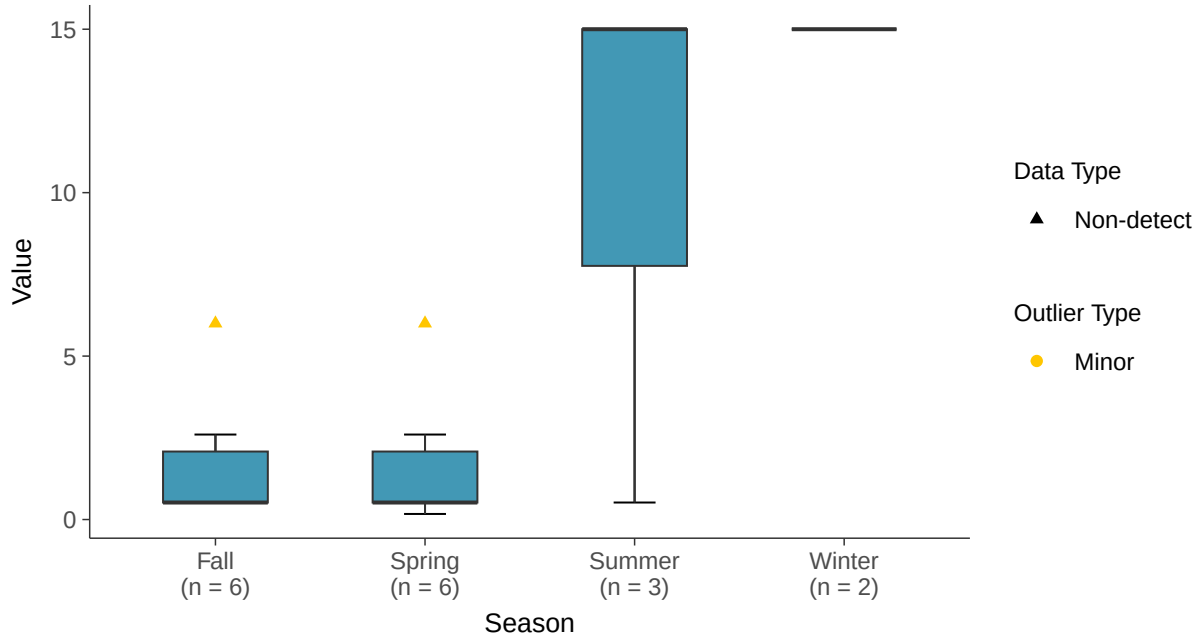
**Boxplot**

Cobalt, MW-17006 (ug/L)



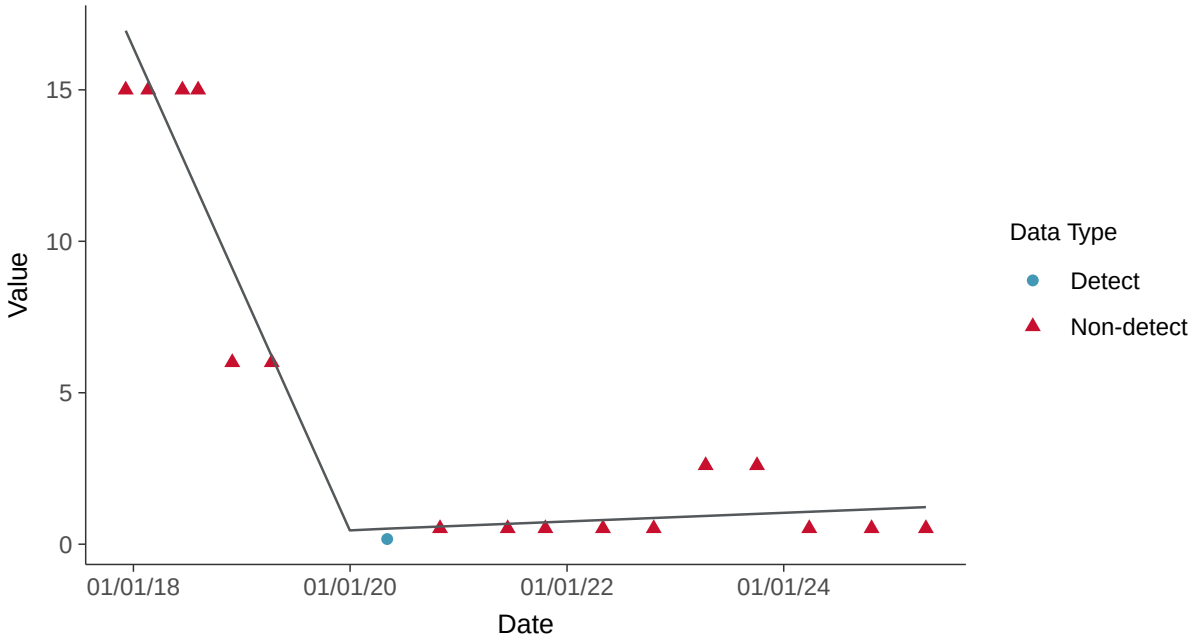

**Boxplot by Season**

Cobalt, MW-17006 (ug/L)



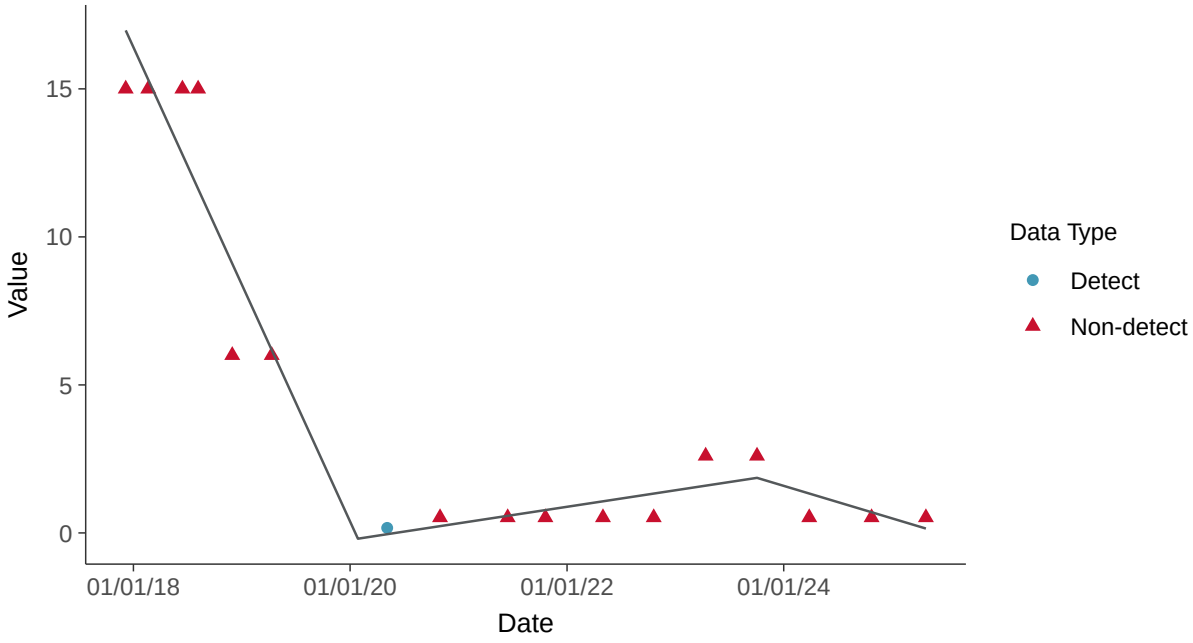
**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17006 (ug/L)



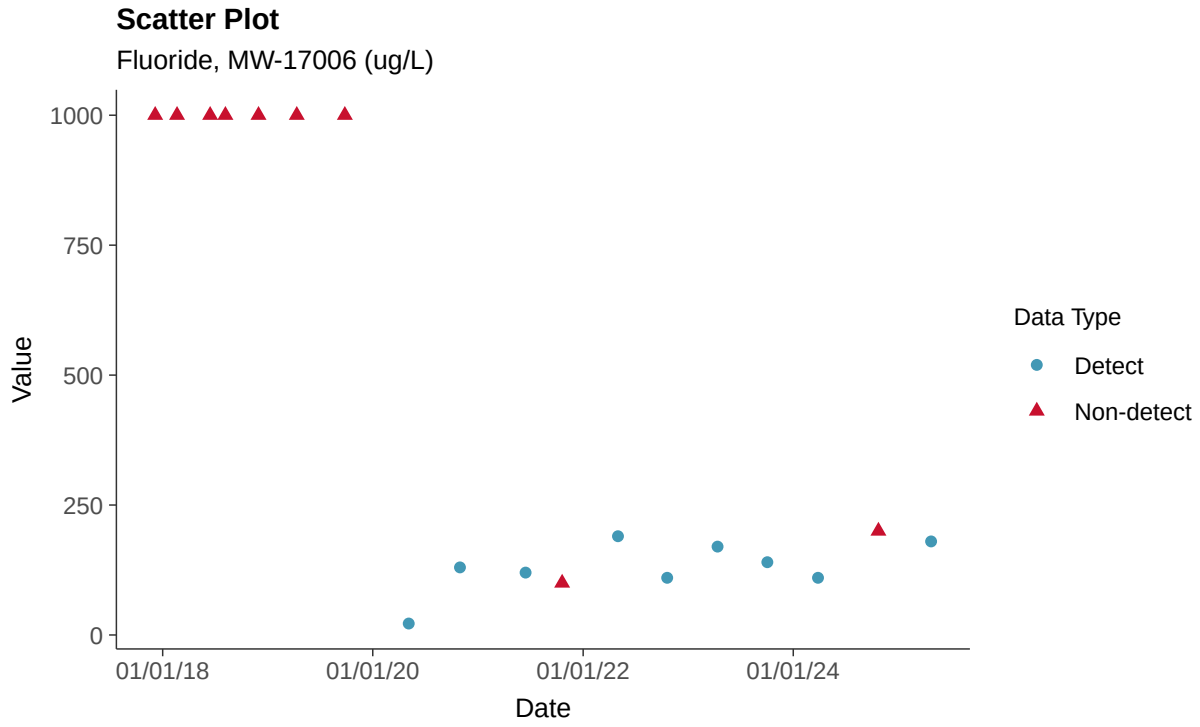

**Trend Regression: Piecewise Linear-Linear-Linear**

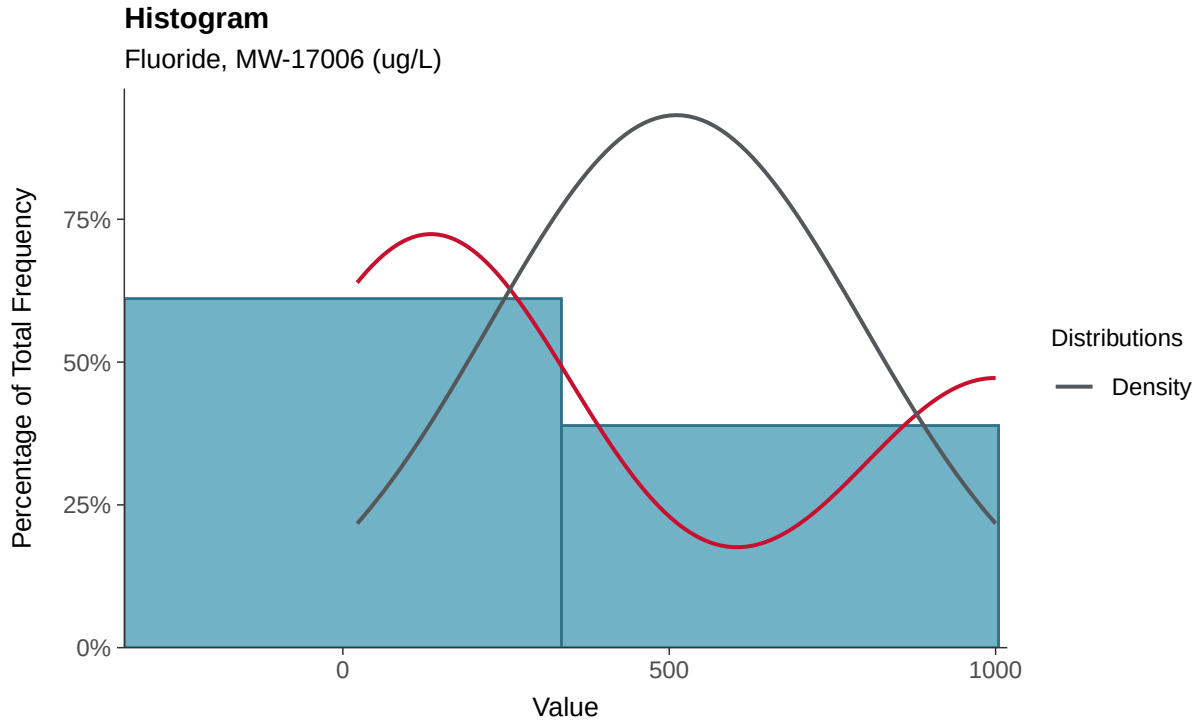
Cobalt, MW-17006 (ug/L)



# Appendix IV: Fluoride, MW-17006

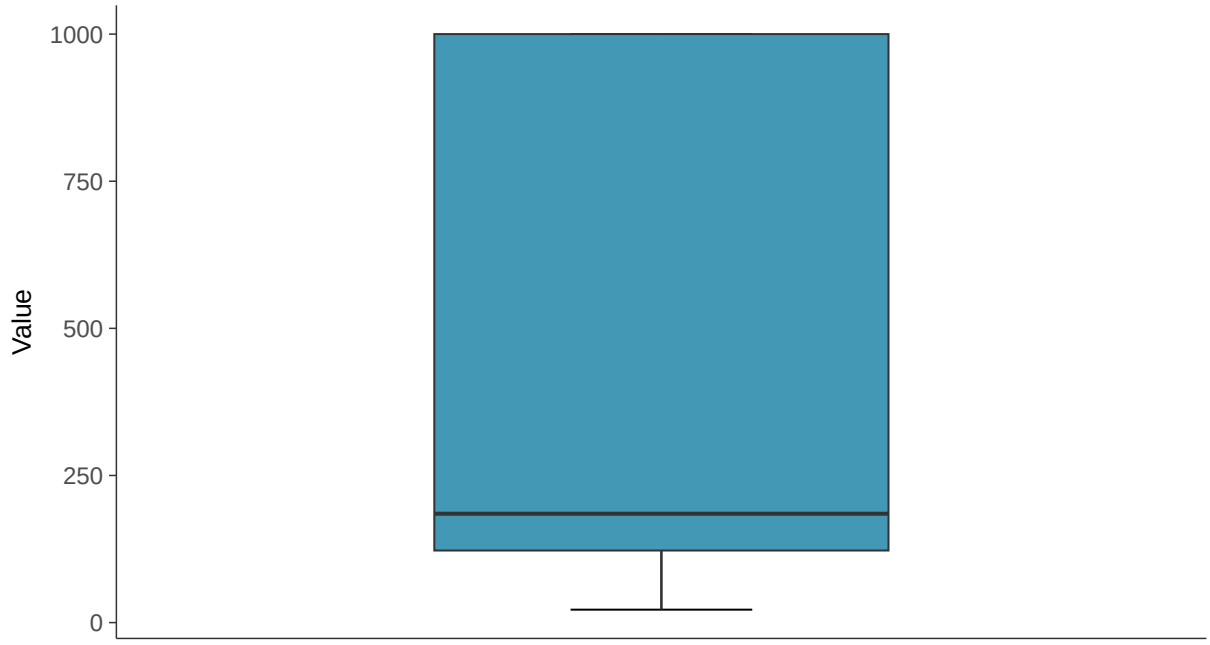
ID: 19_2_114



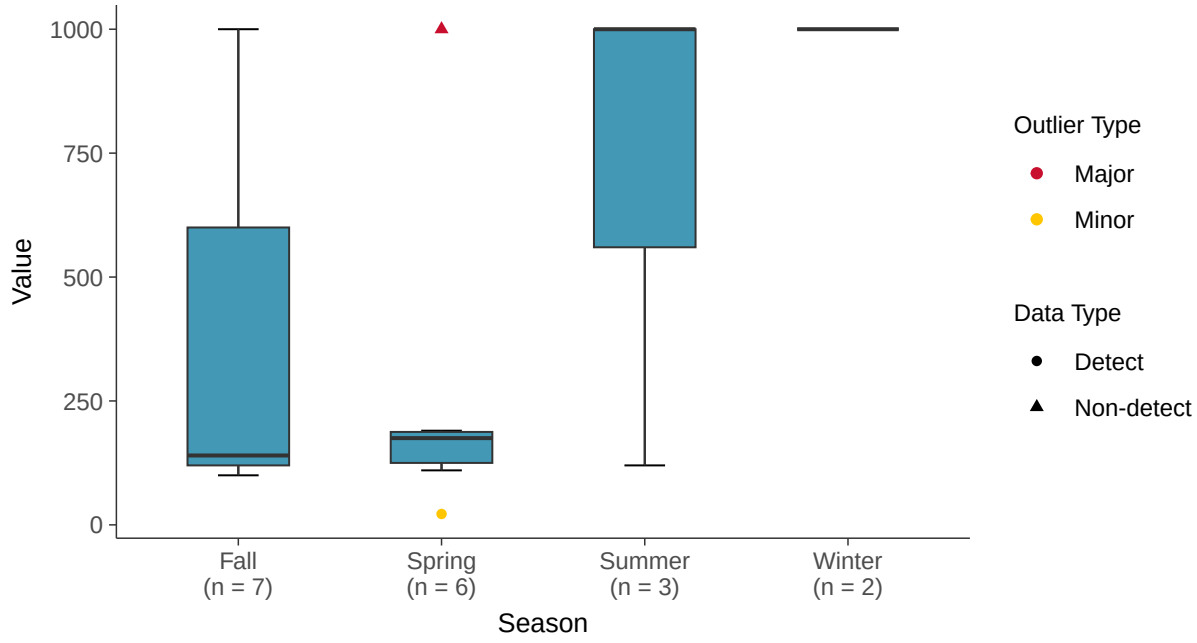
## Boxplot

Fluoride, MW-17006 (ug/L)



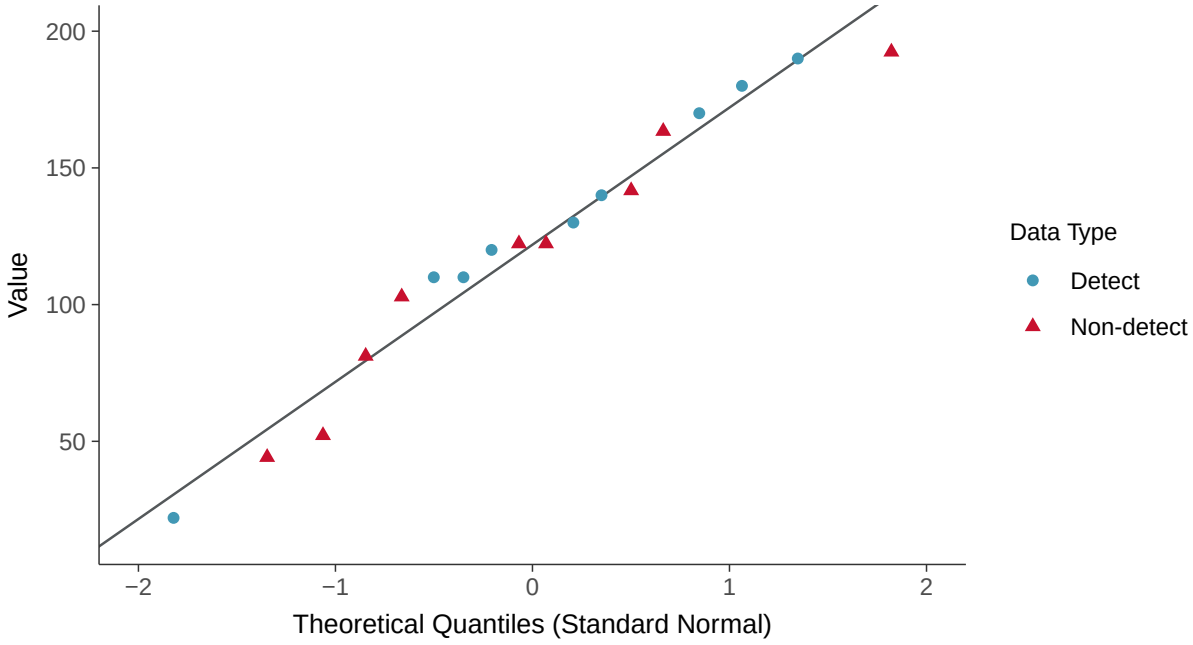

## Boxplot by Season

Fluoride, MW-17006 (ug/L)



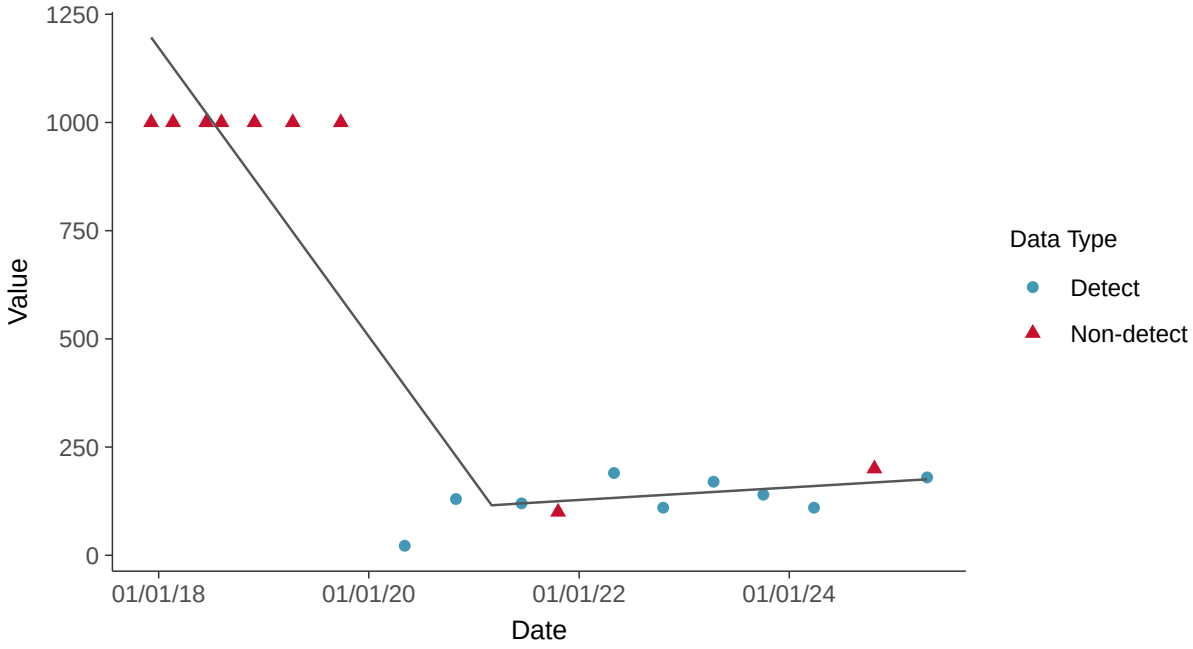
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17006 (ug/L)



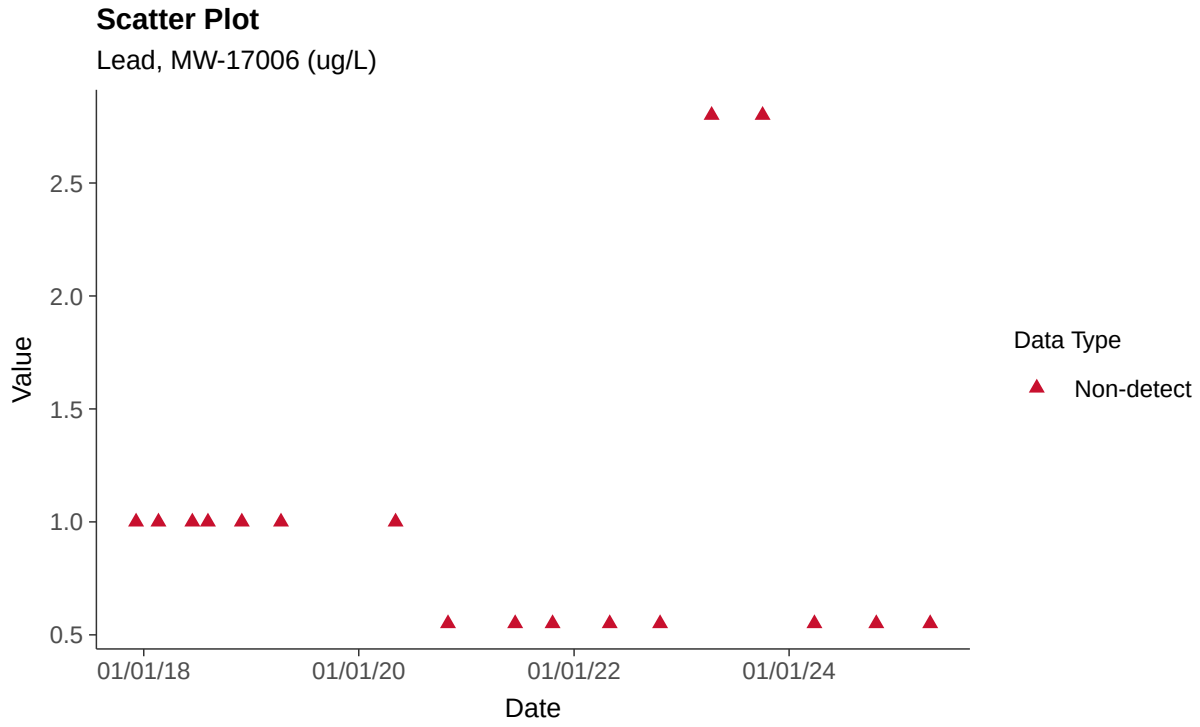

**Trend Regression: Piecewise Linear-Linear**

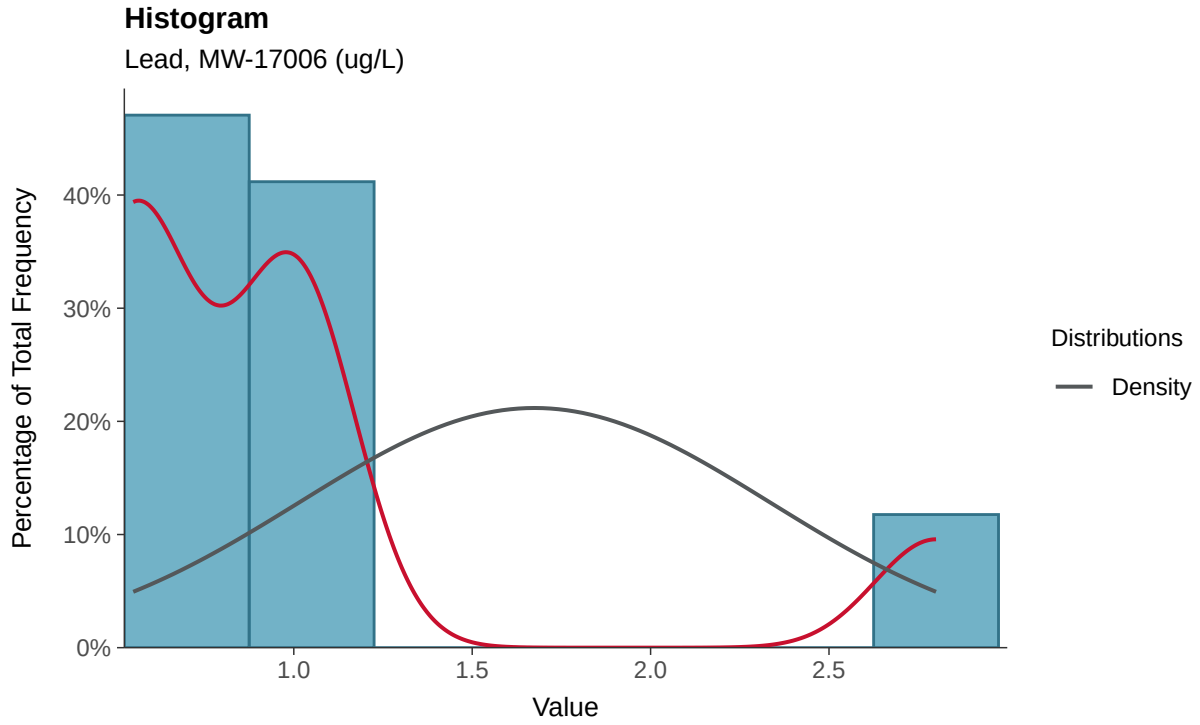
Fluoride, MW-17006 (ug/L)



# Appendix IV: Lead, MW-17006

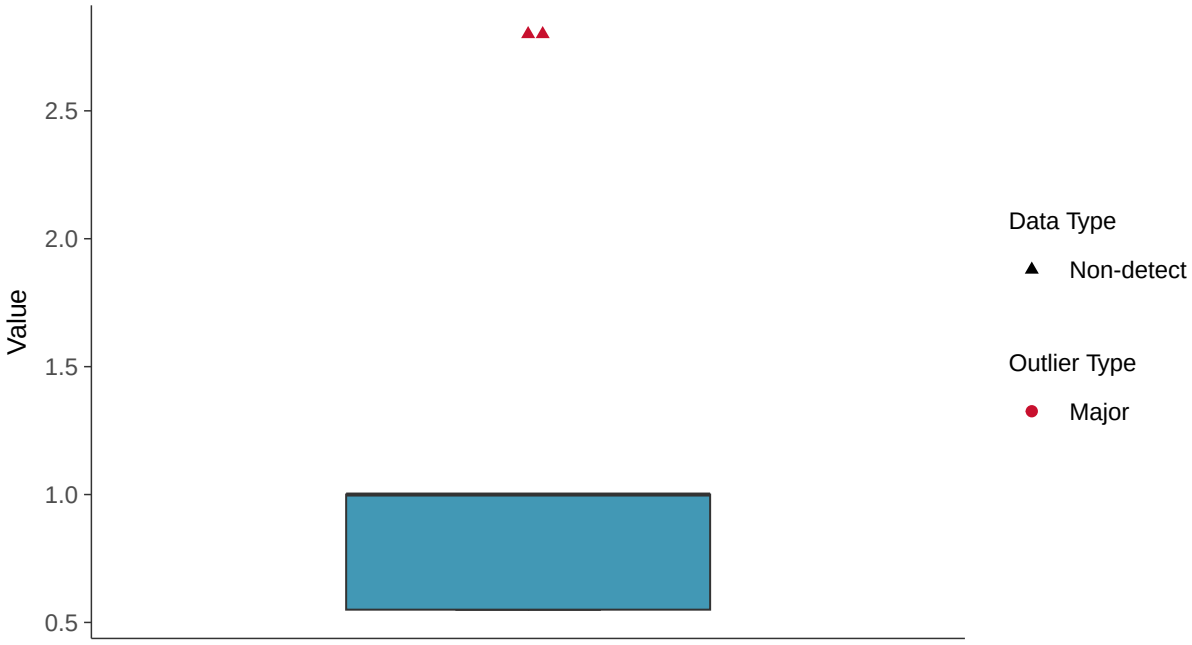
ID: 19_2_116



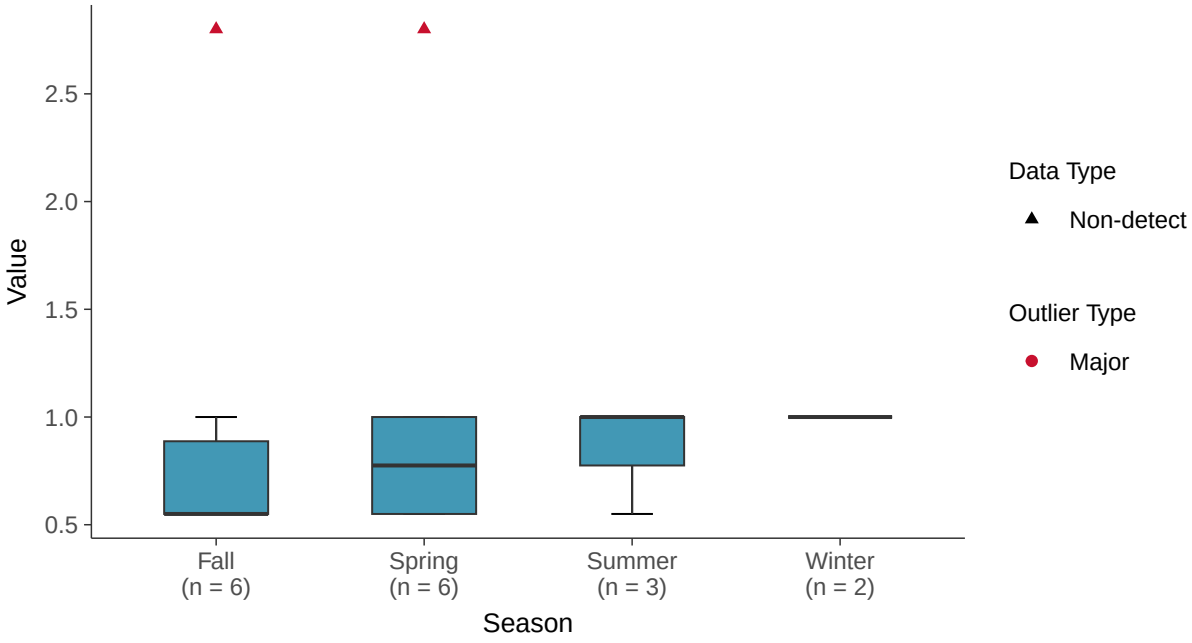
## Boxplot

Lead, MW-17006 (ug/L)



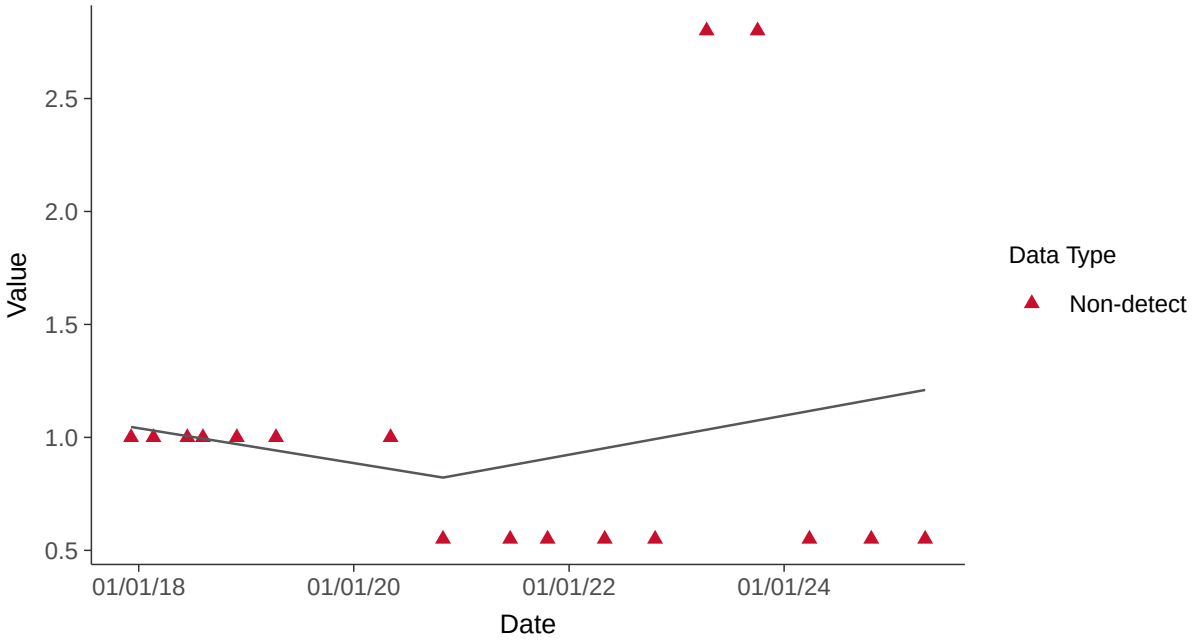

## Boxplot by Season

Lead, MW-17006 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Lead, MW-17006 (ug/L)

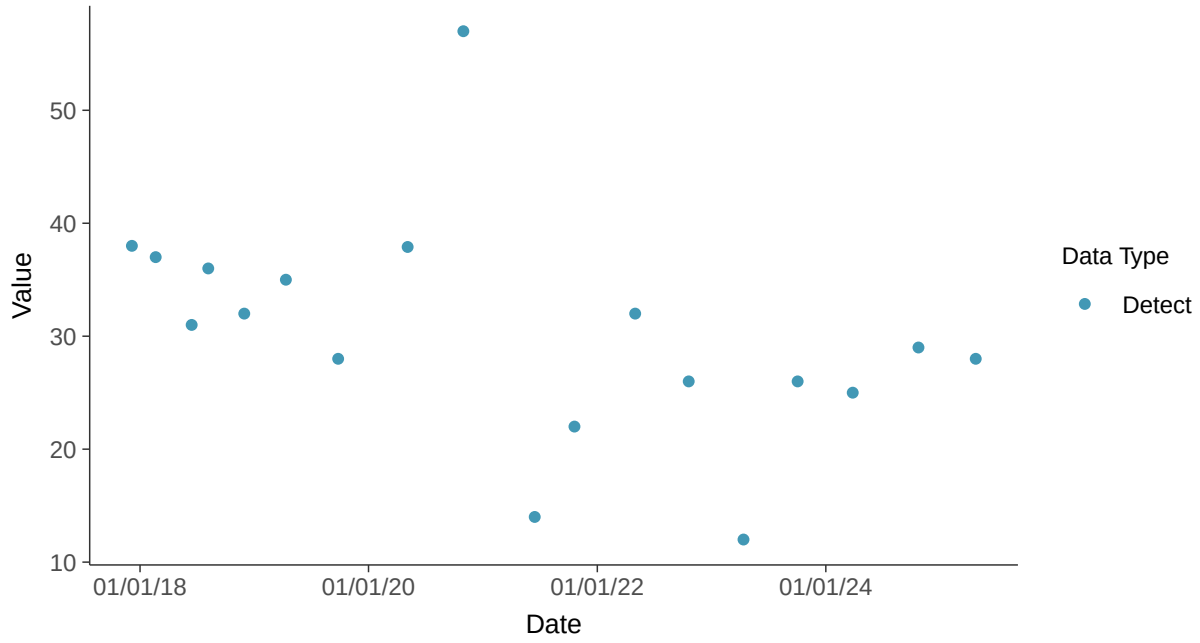


## Appendix IV: Lithium, MW-17006

ID: 19_2_117

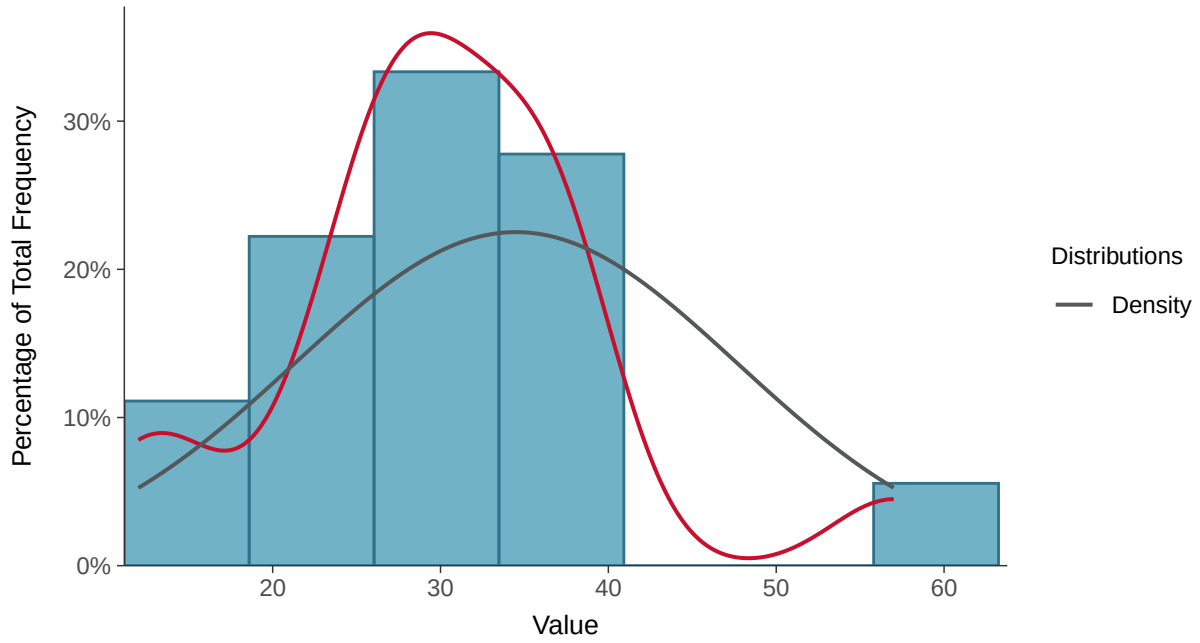
**Scatter Plot**

Lithium, MW-17006 (ug/L)



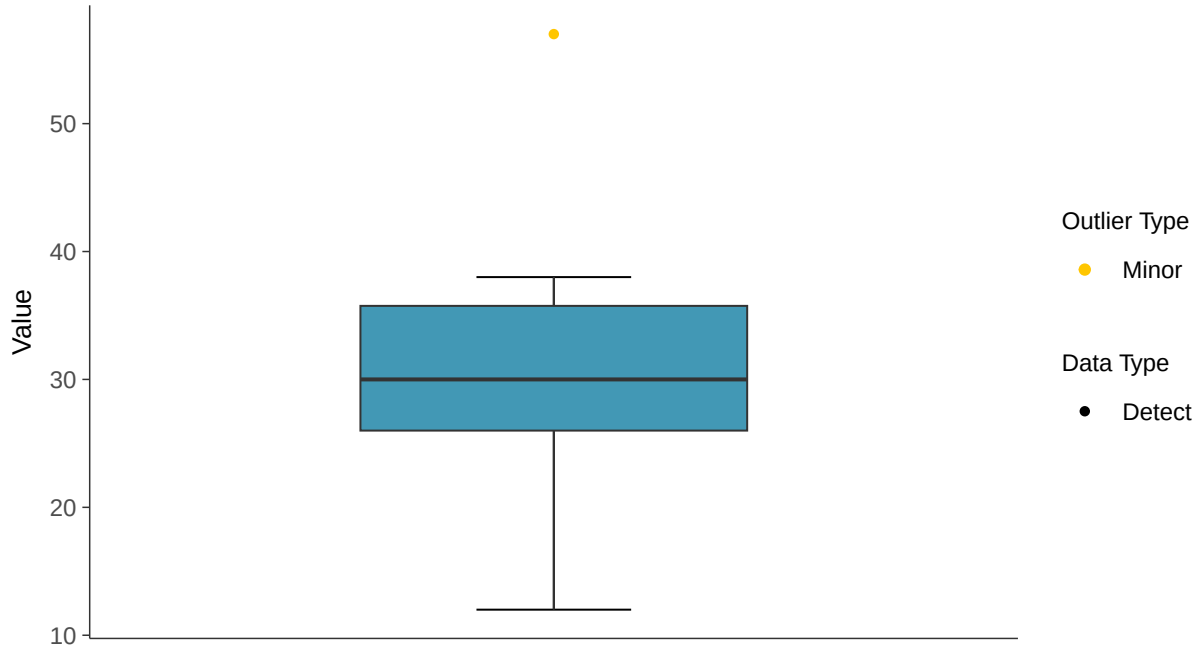

**Histogram**

Lithium, MW-17006 (ug/L)



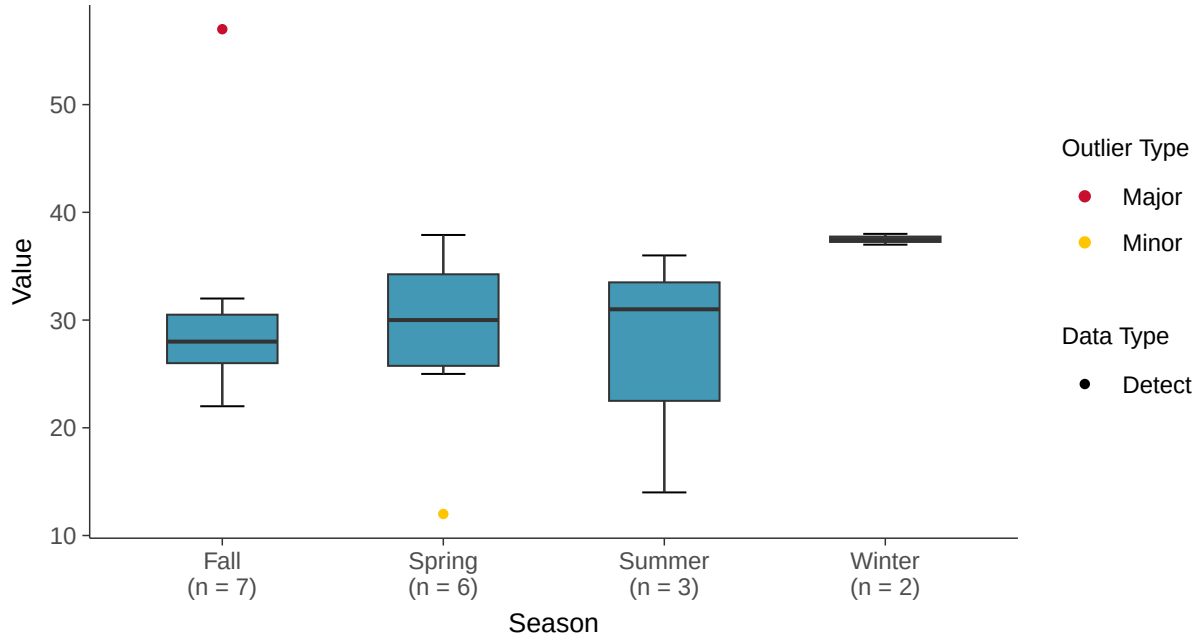
## Boxplot

Lithium, MW-17006 (ug/L)



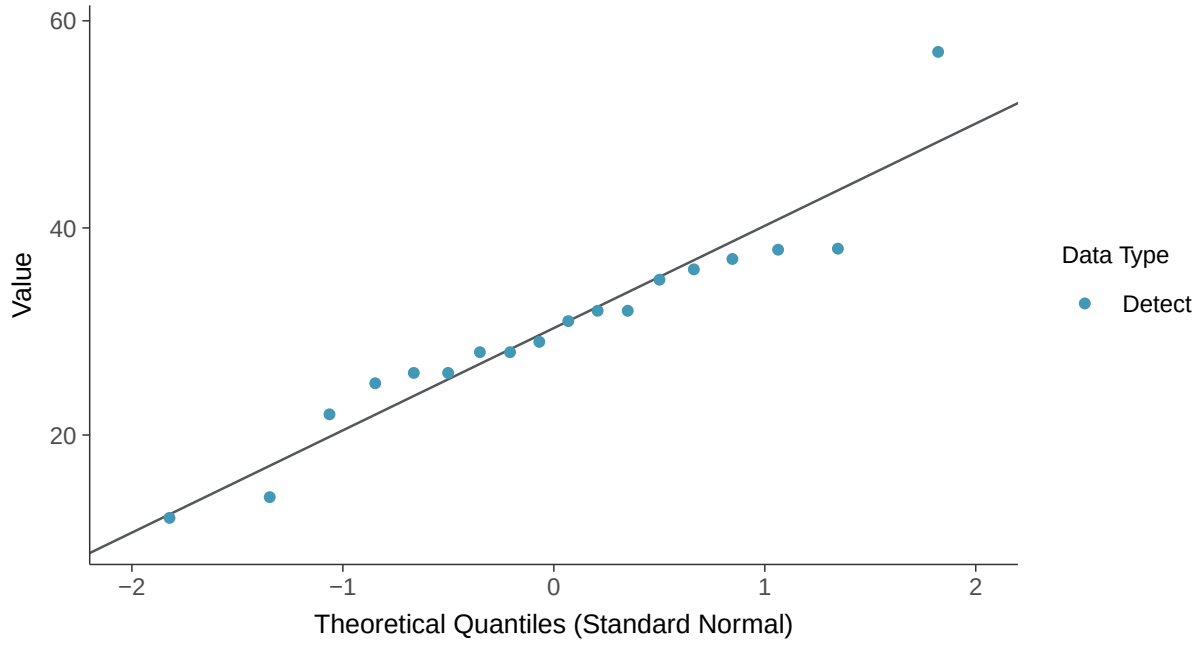

## Boxplot by Season

Lithium, MW-17006 (ug/L)



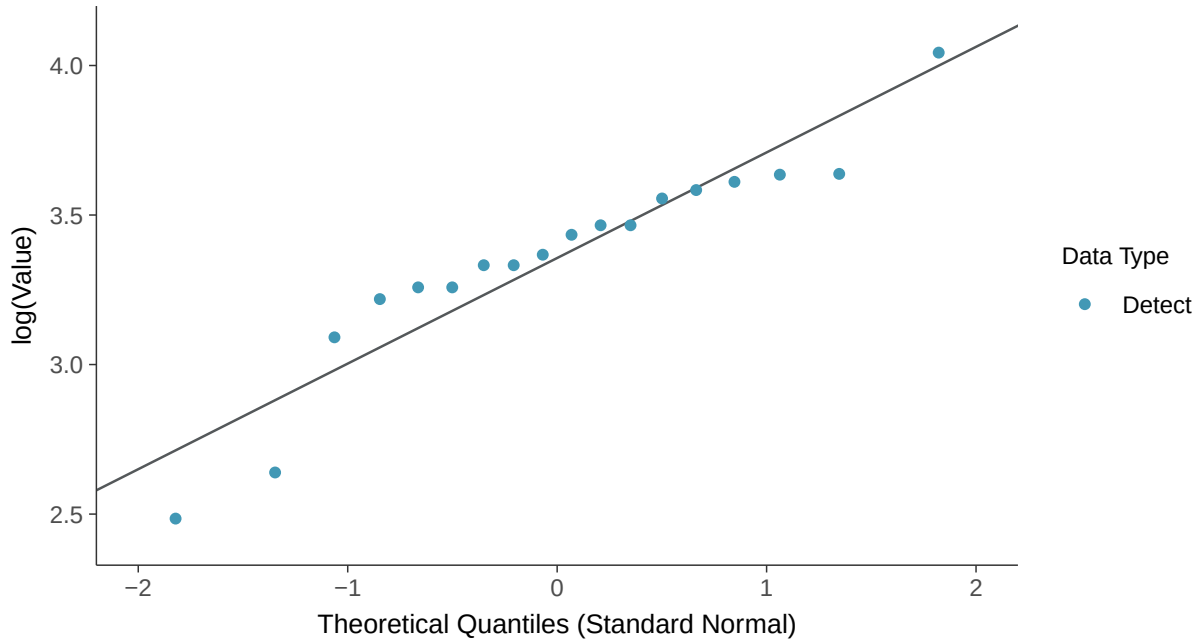
**Normal Q-Q plot**

Lithium, MW-17006 (ug/L)



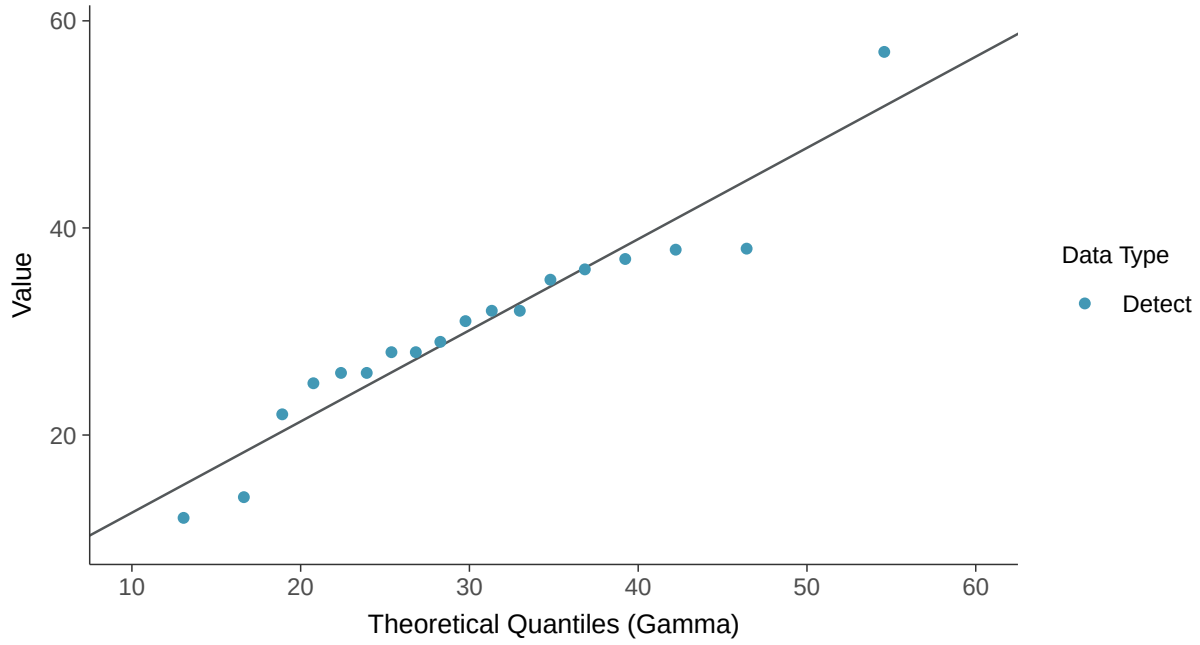

**Lognormal Q-Q plot**

Lithium, MW-17006 (ug/L)



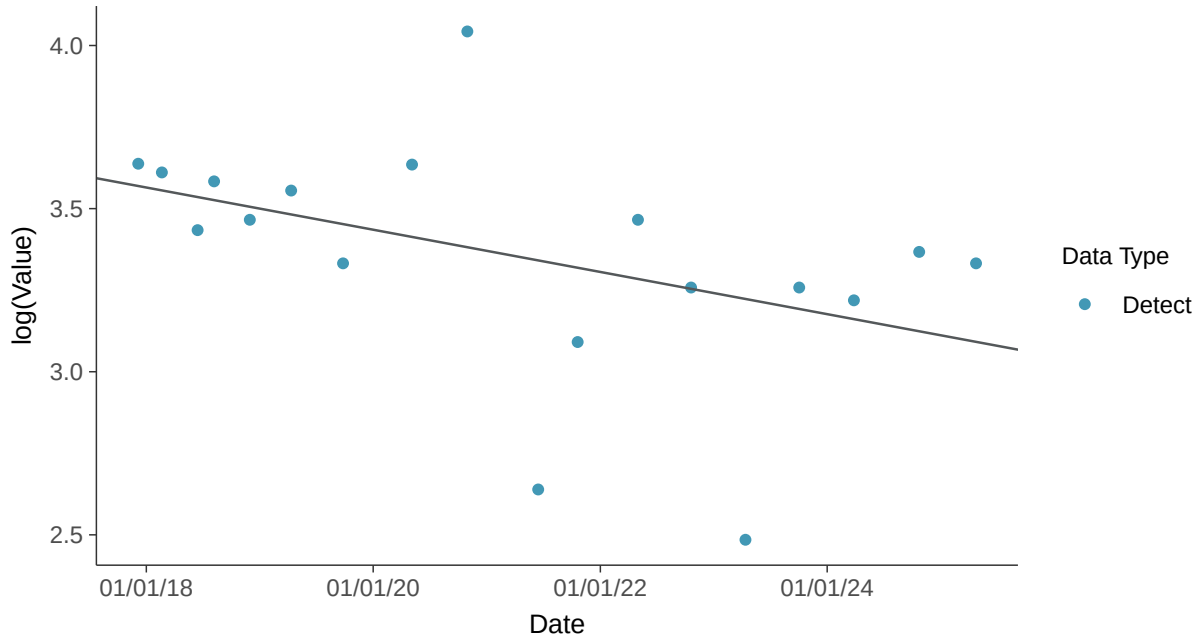
**Gamma Q-Q plot**

Lithium, MW-17006 (ug/L)



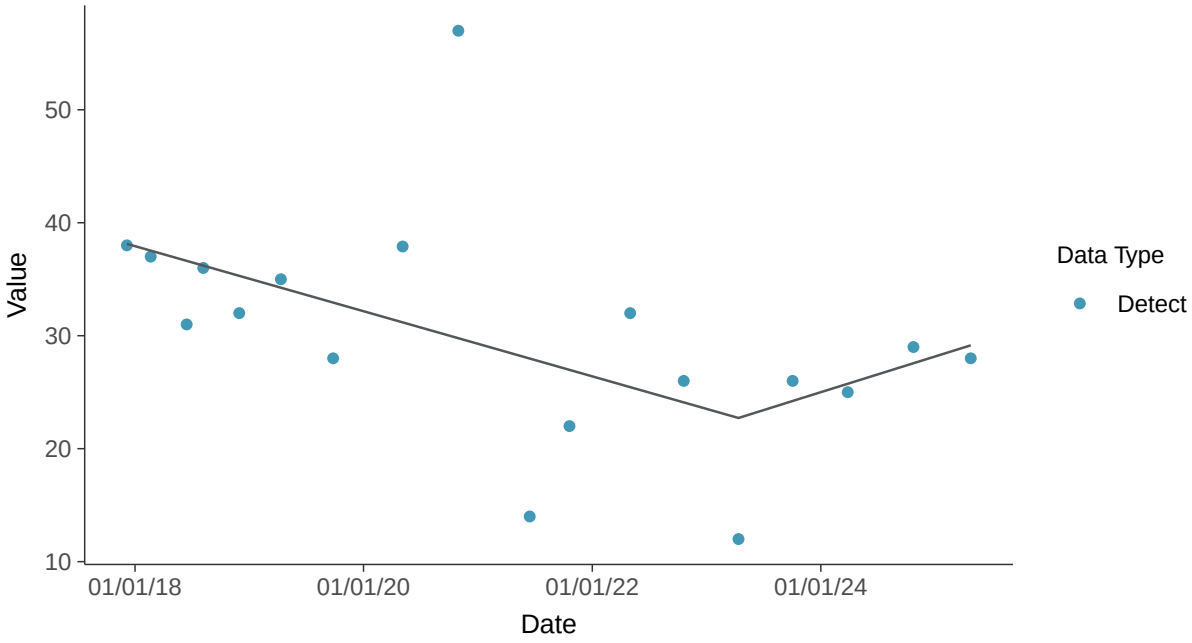

**Trend Regression: Lognormal MLE**

Lithium, MW-17006 (ug/L)



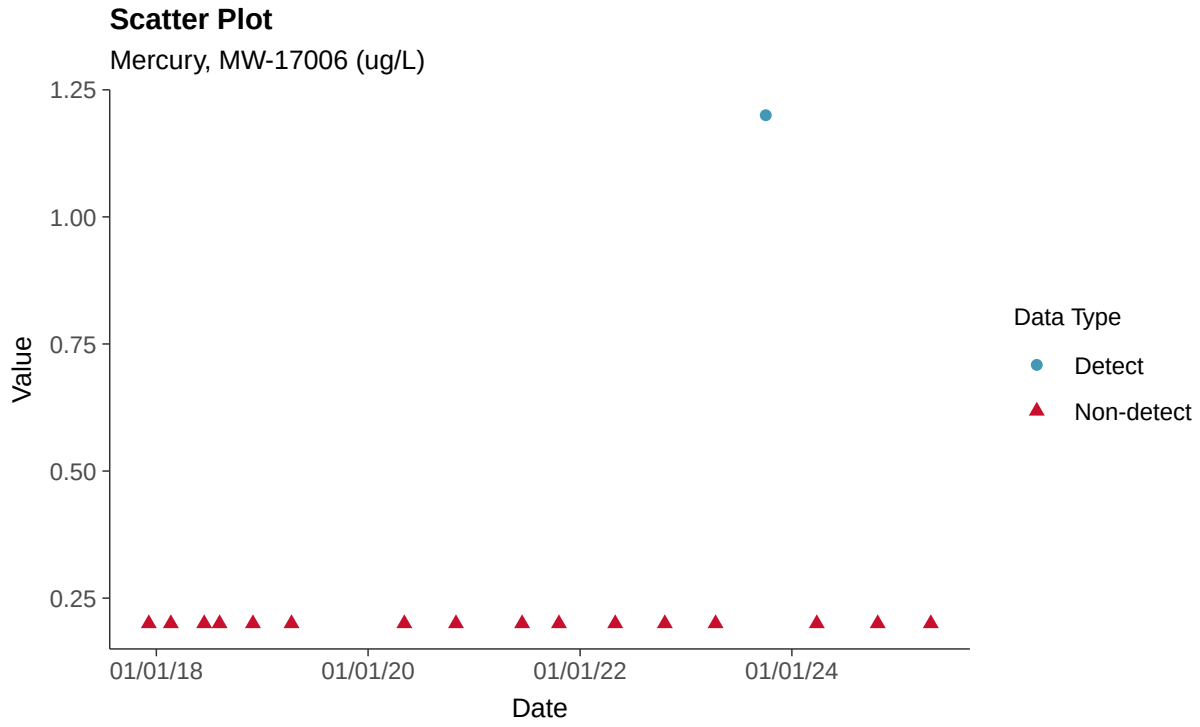
**Trend Regression: Piecewise Linear-Linear**

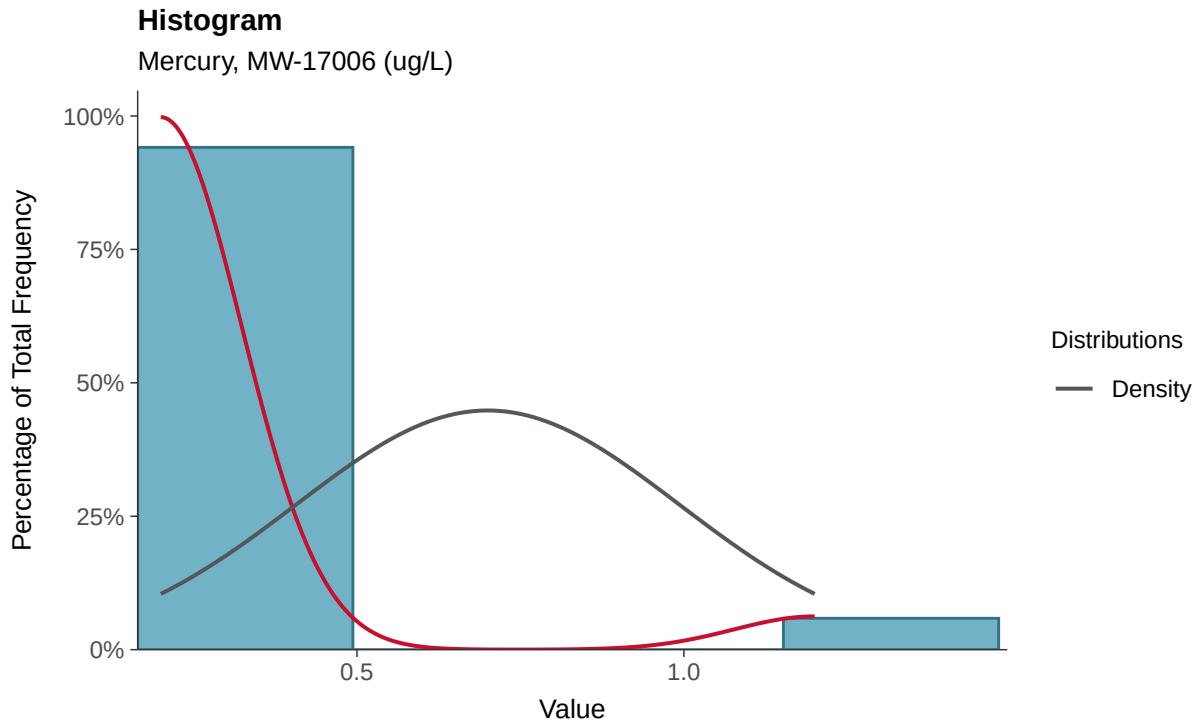
Lithium, MW-17006 (ug/L)



## Appendix IV: Mercury, MW-17006

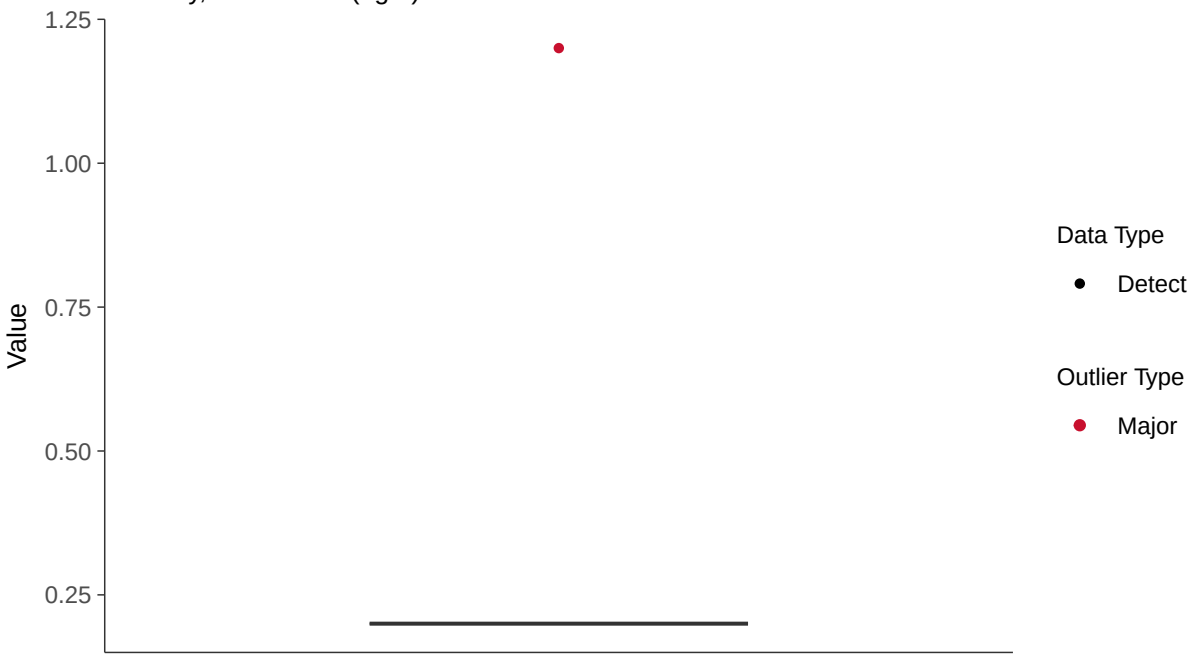
ID: 19_2_118



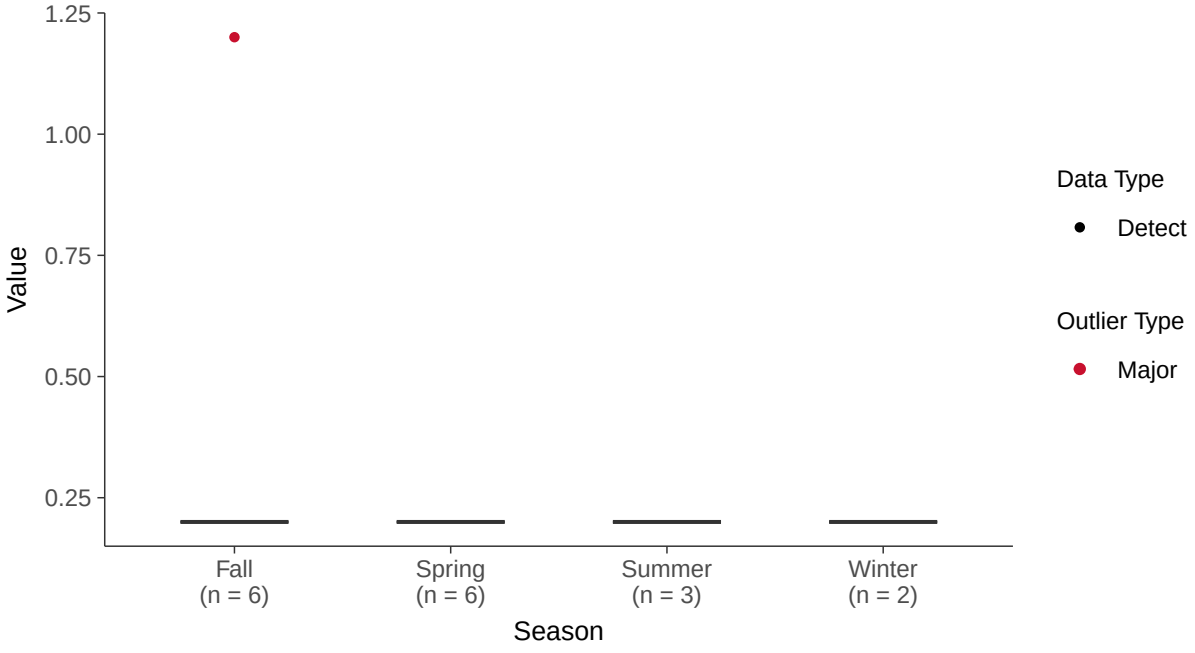
## Boxplot

Mercury, MW-17006 (ug/L)



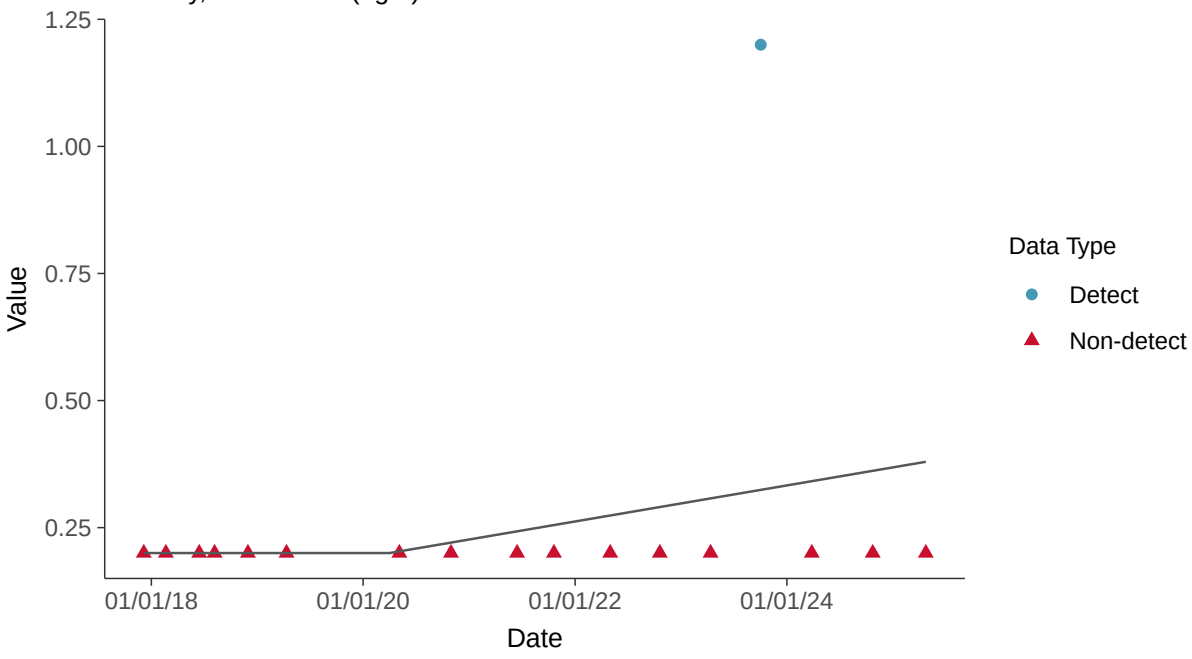

## Boxplot by Season

Mercury, MW-17006 (ug/L)



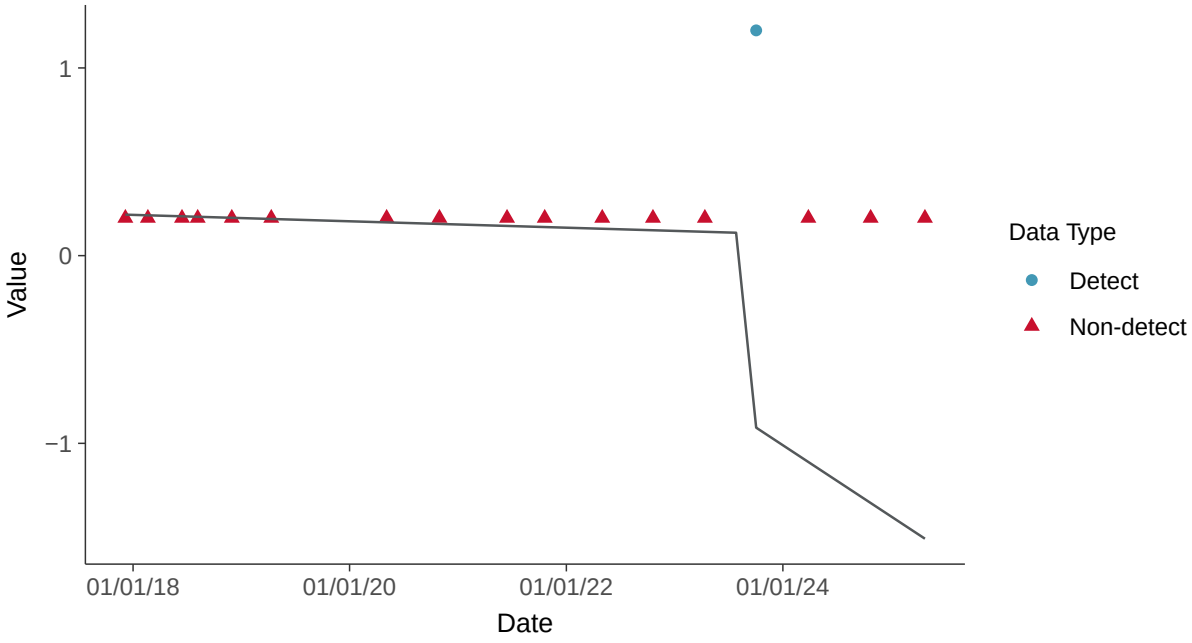
**Trend Regression: Piecewise Linear-Linear**

Mercury, MW-17006 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Mercury, MW-17006 (ug/L)

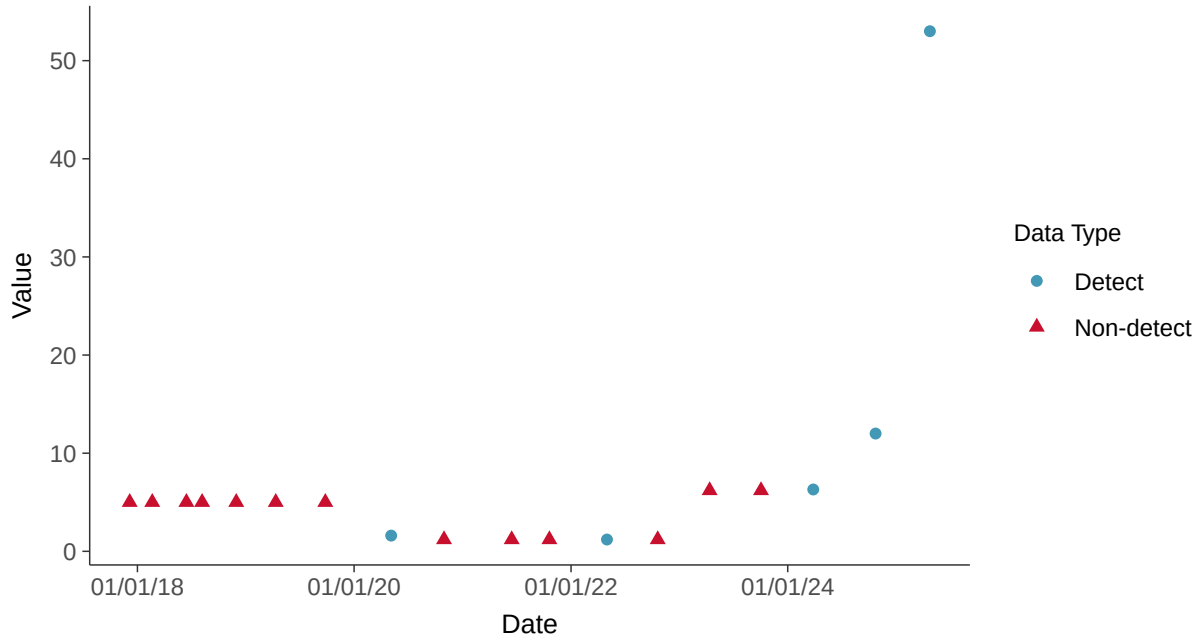


# Appendix IV: Molybdenum, MW-17006

ID: 19_2_119

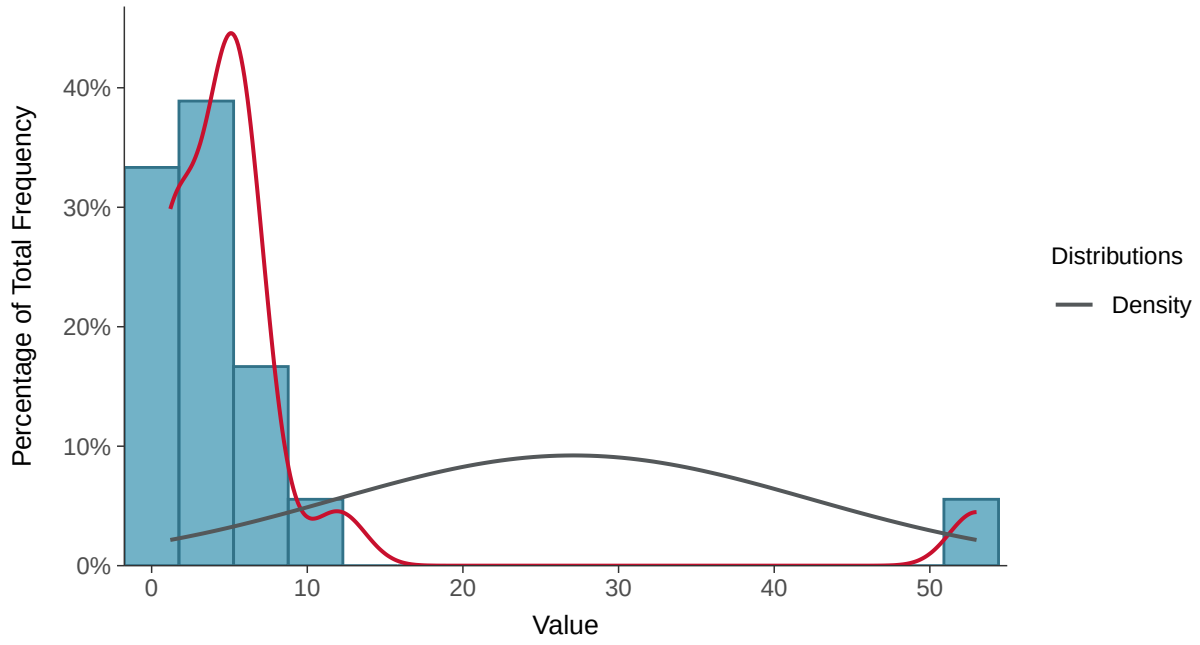
**Scatter Plot**

Molybdenum, MW-17006 (ug/L)



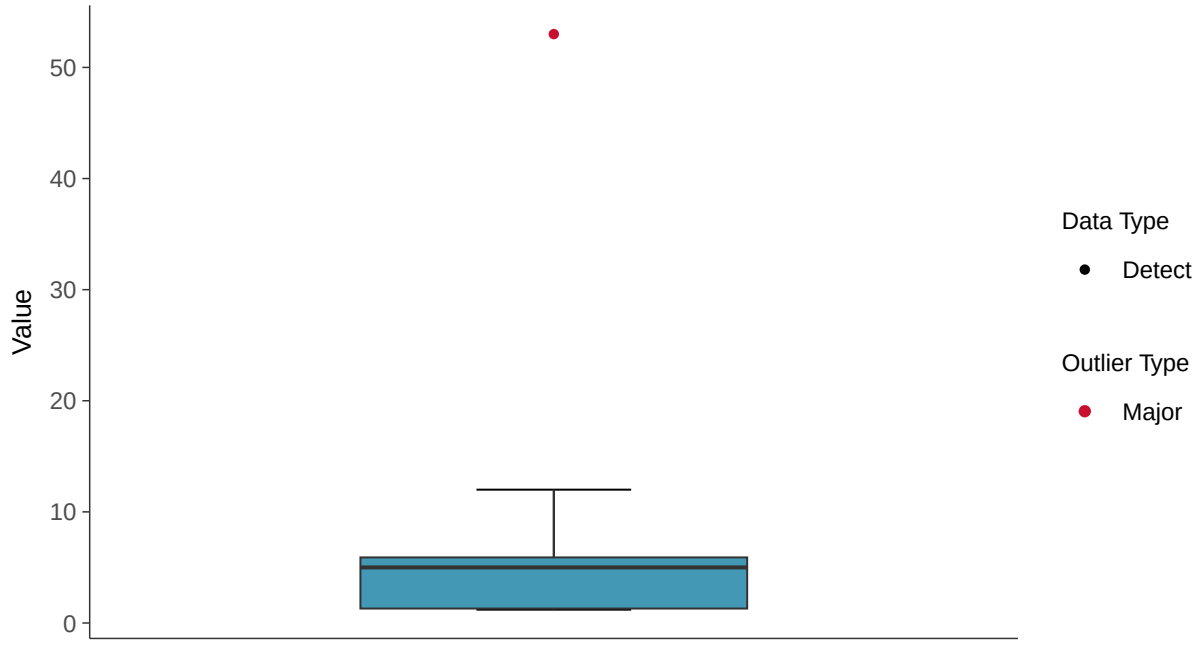

**Histogram**

Molybdenum, MW-17006 (ug/L)



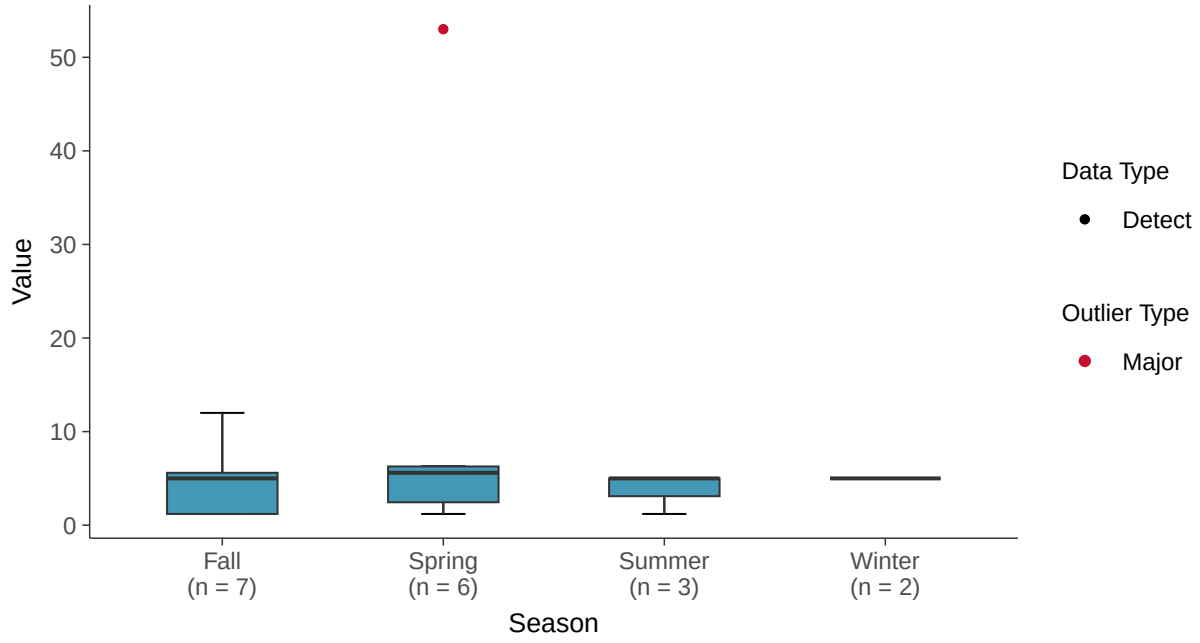
**Boxplot**

Molybdenum, MW-17006 (ug/L)



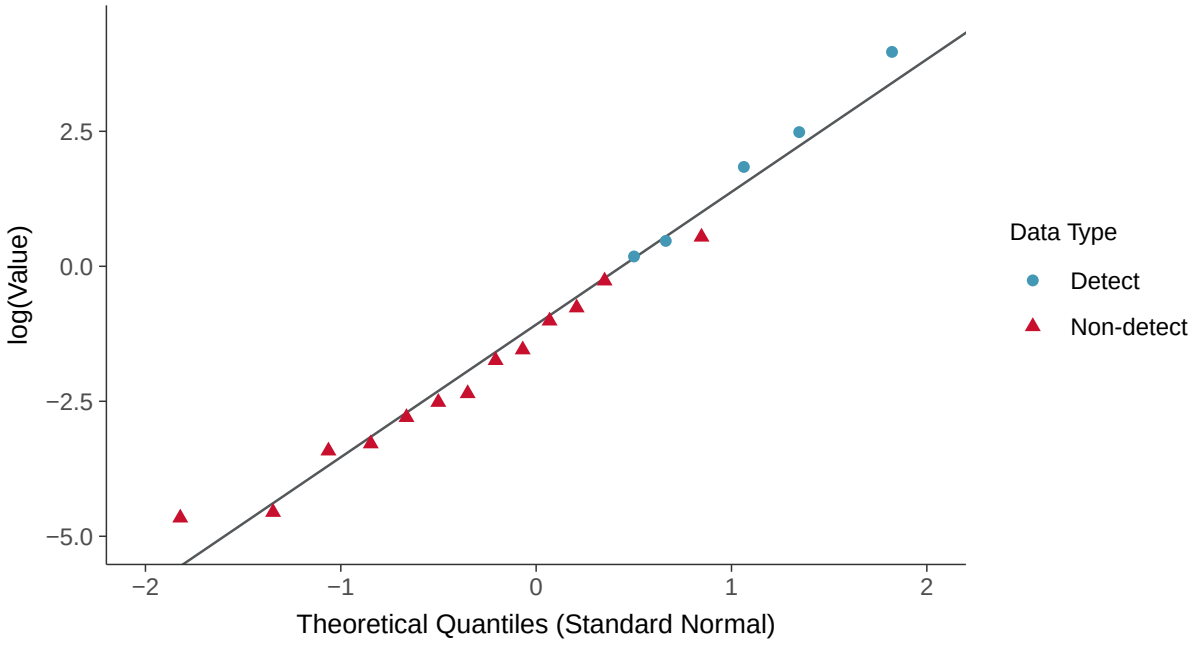

**Boxplot by Season**

Molybdenum, MW-17006 (ug/L)



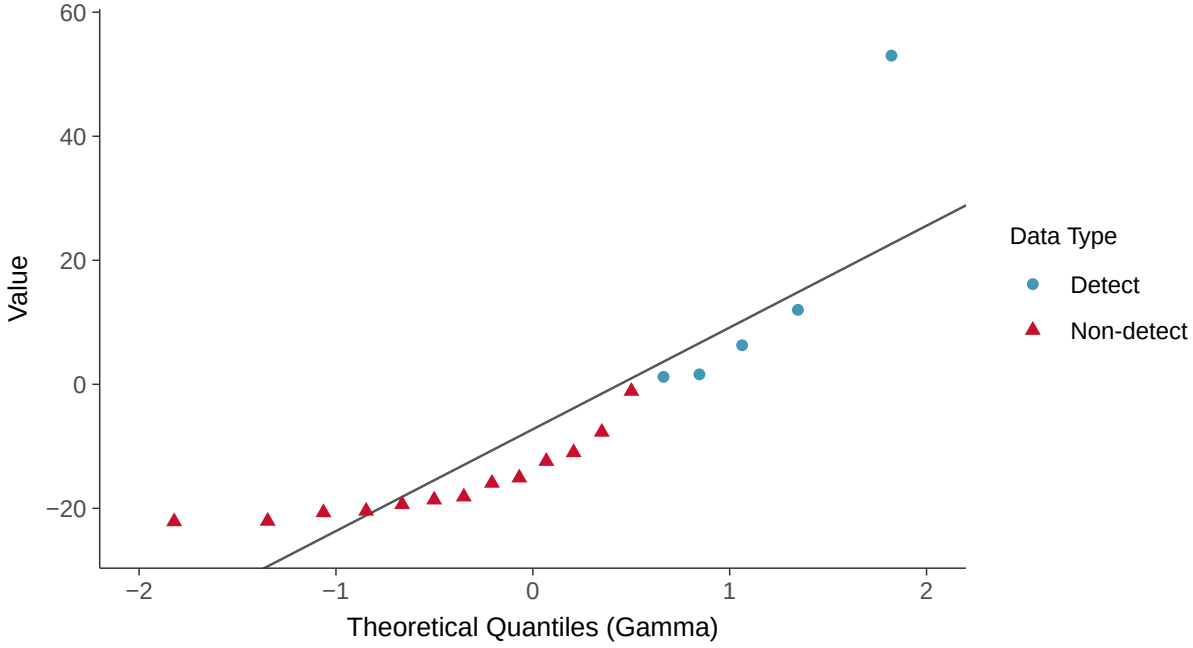
**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17006 (ug/L)



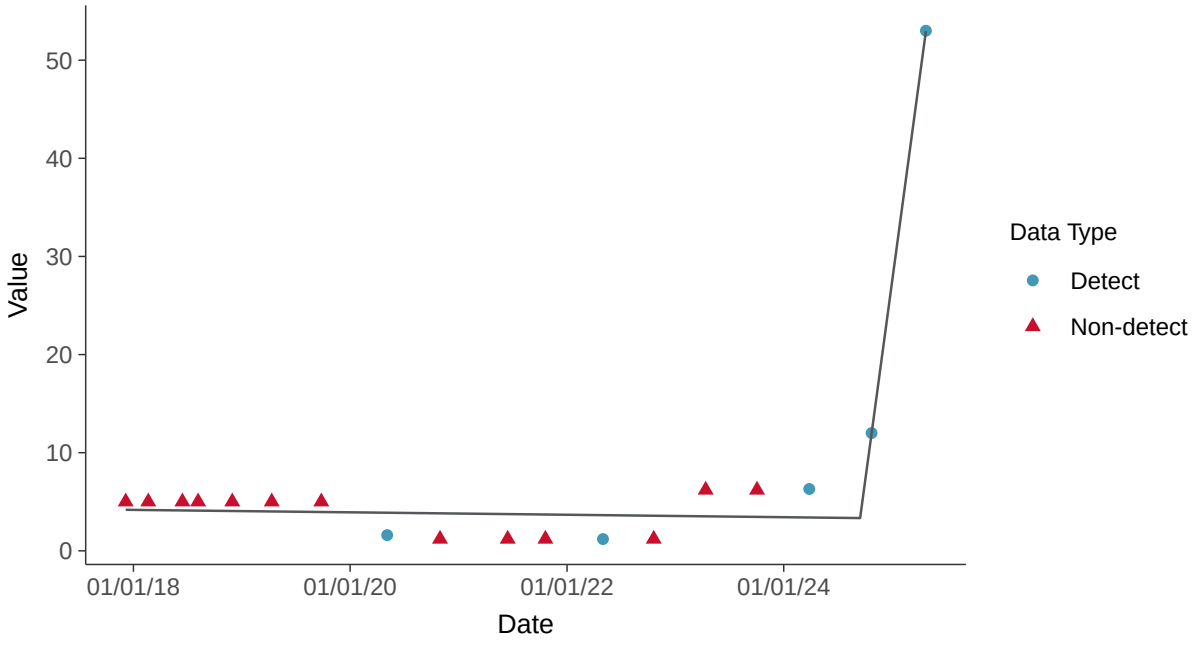

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17006 (ug/L)



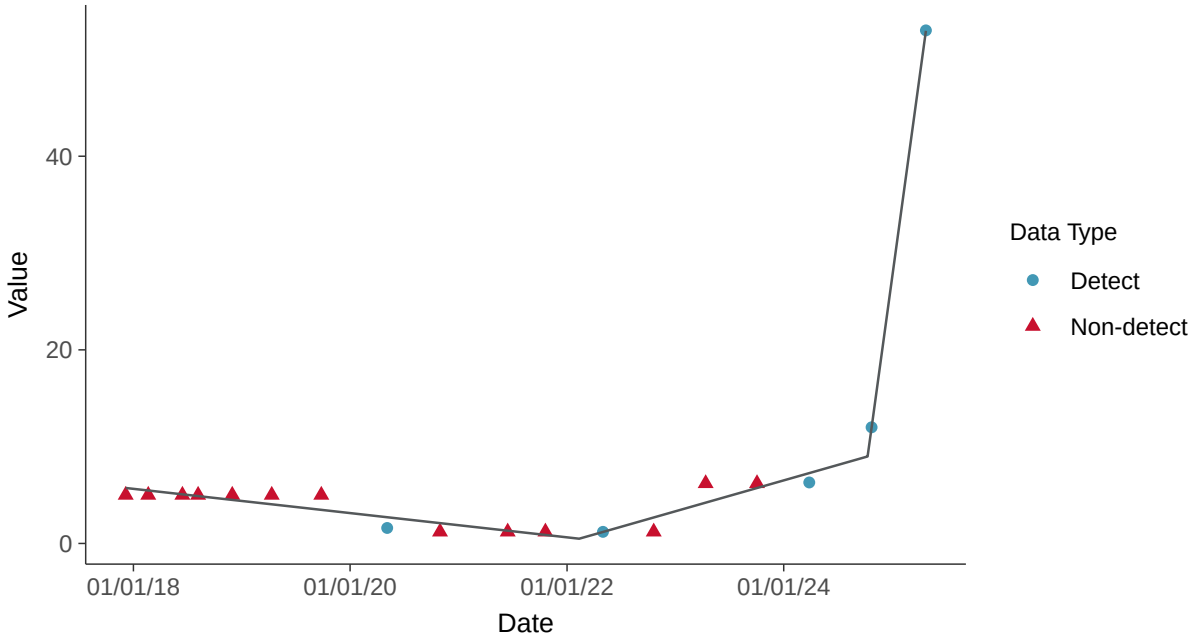
**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17006 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-17006 (ug/L)

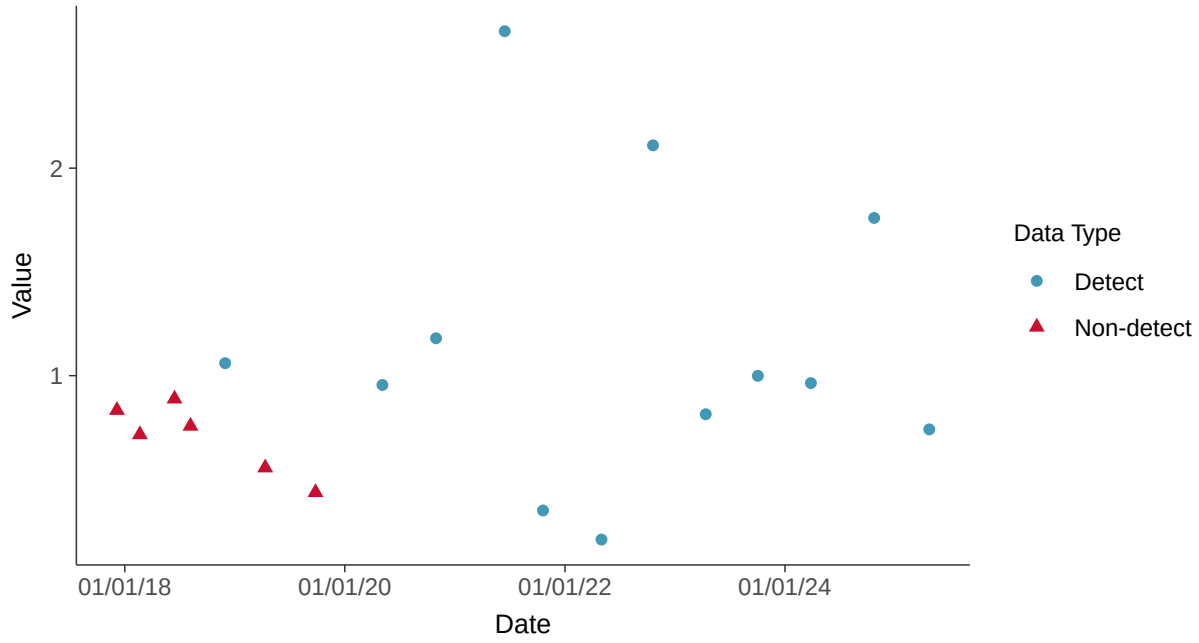


## Appendix IV: Radium-226+228, MW-17006

ID: 19_2_125

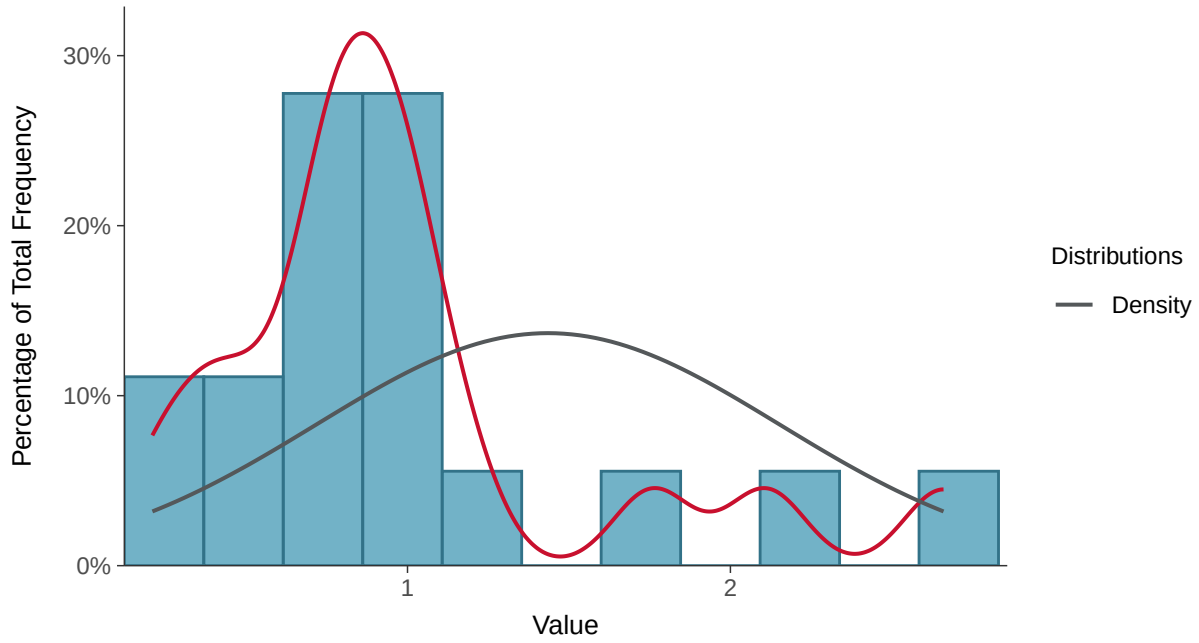
**Scatter Plot**

Radium-226+228, MW-17006 (pCi/L)



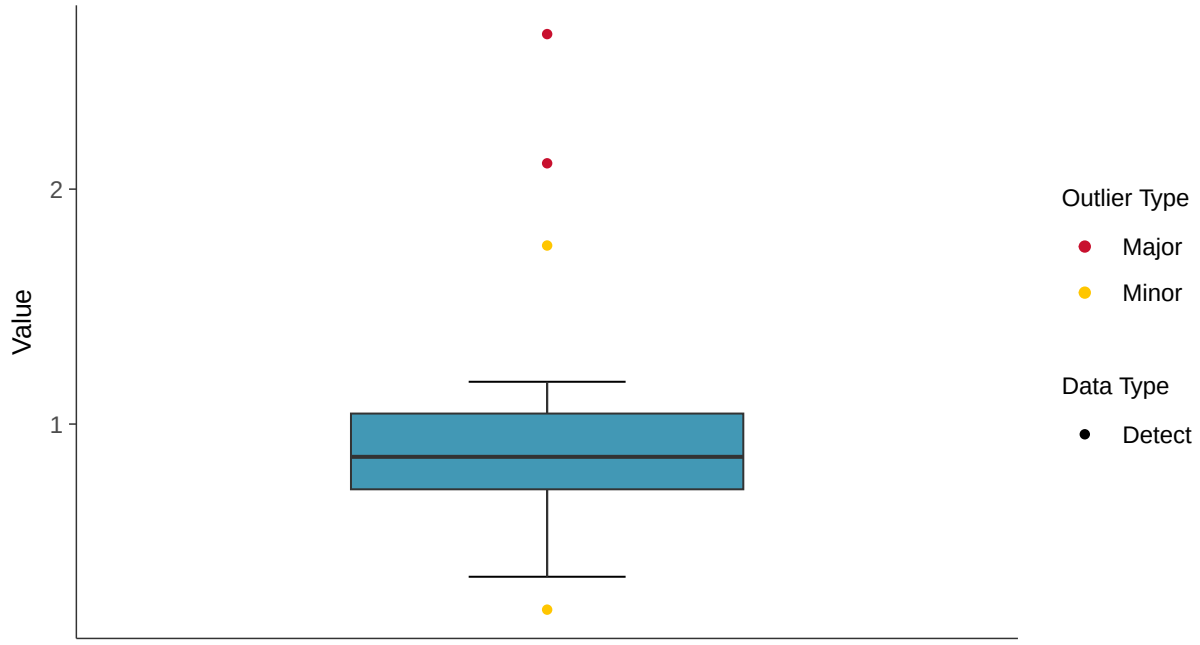

**Histogram**

Radium-226+228, MW-17006 (pCi/L)



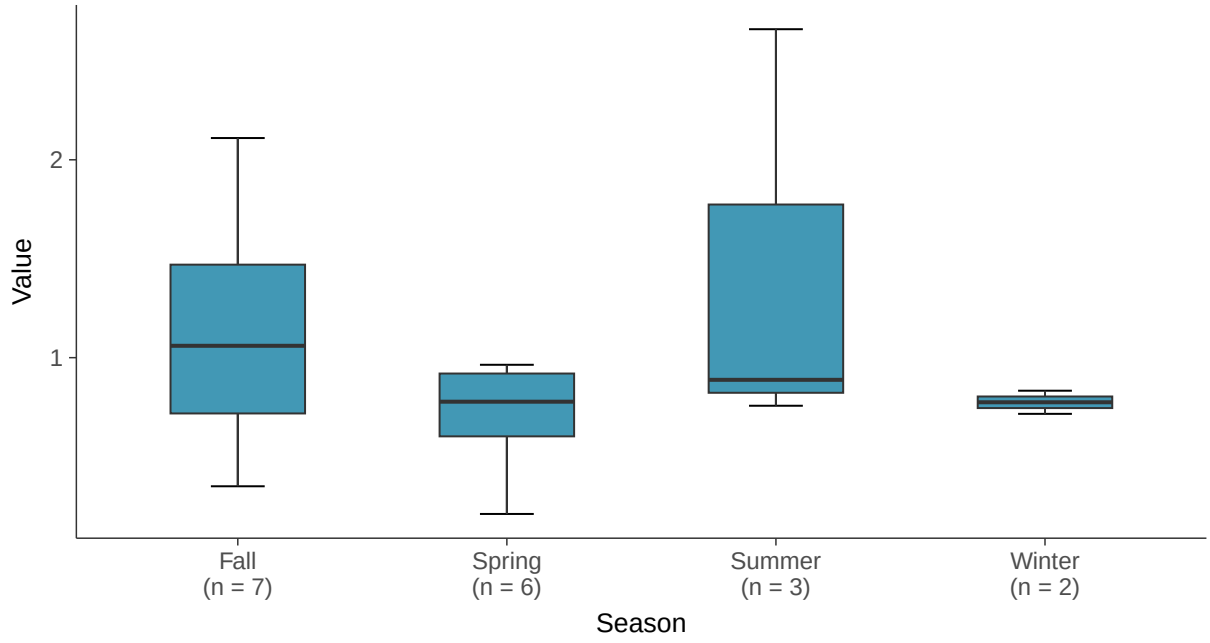
## Boxplot

Radium-226+228, MW-17006 (pCi/L)



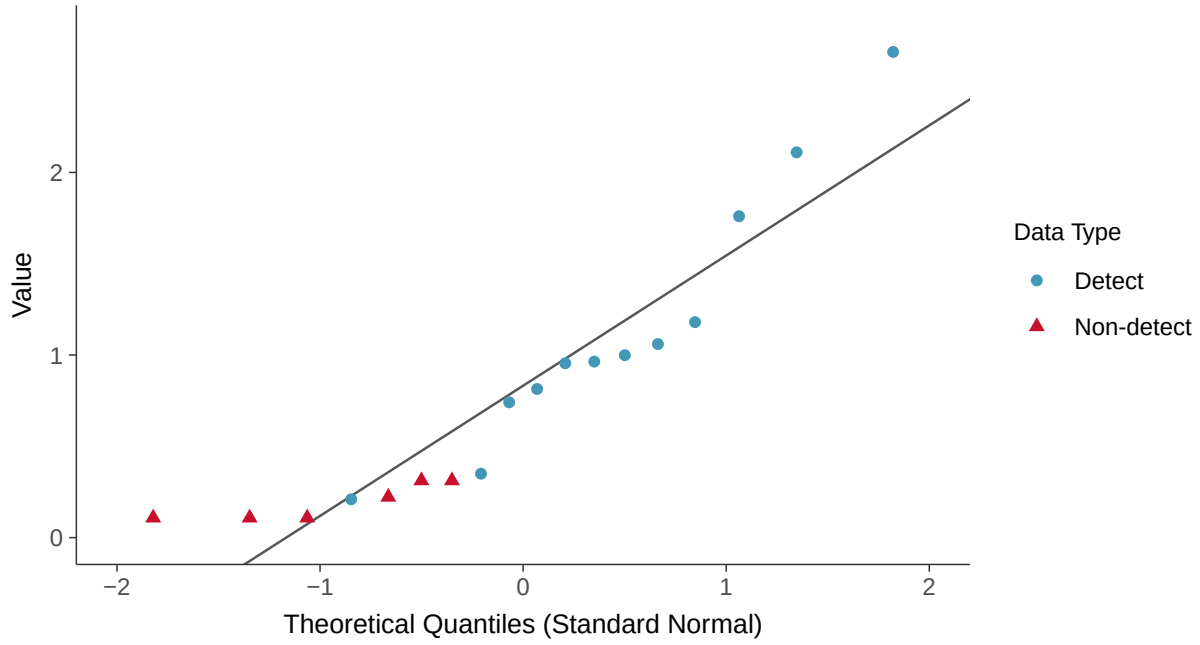

## Boxplot by Season

Radium-226+228, MW-17006 (pCi/L)



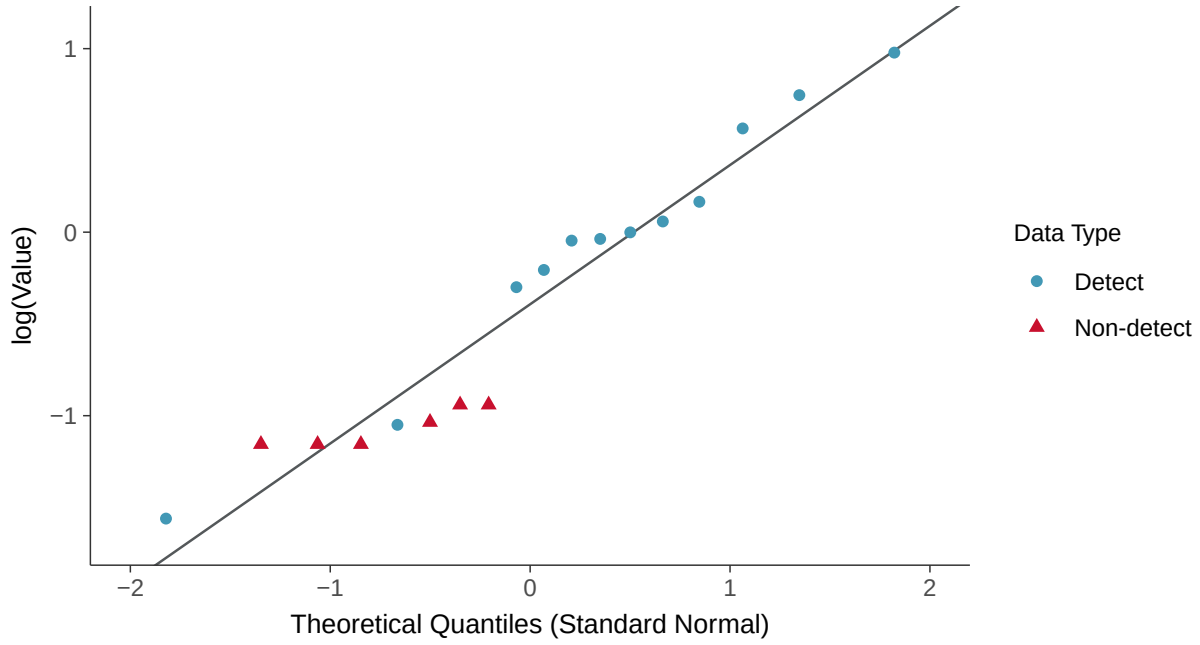
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17006 (pCi/L)



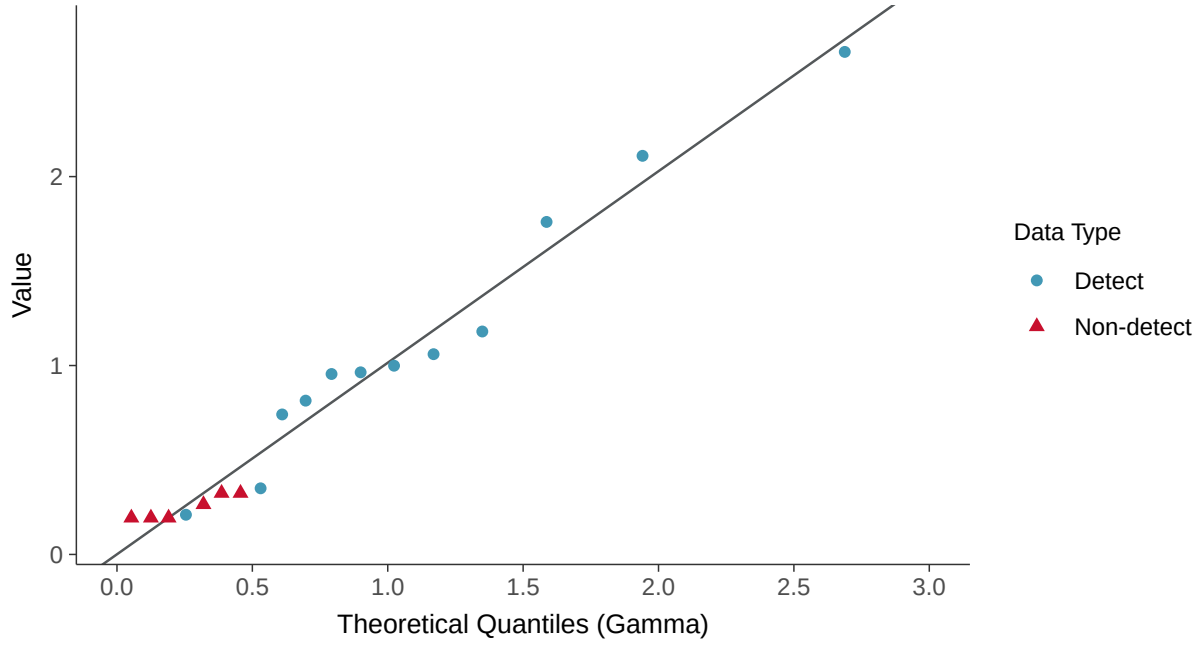

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17006 (pCi/L)



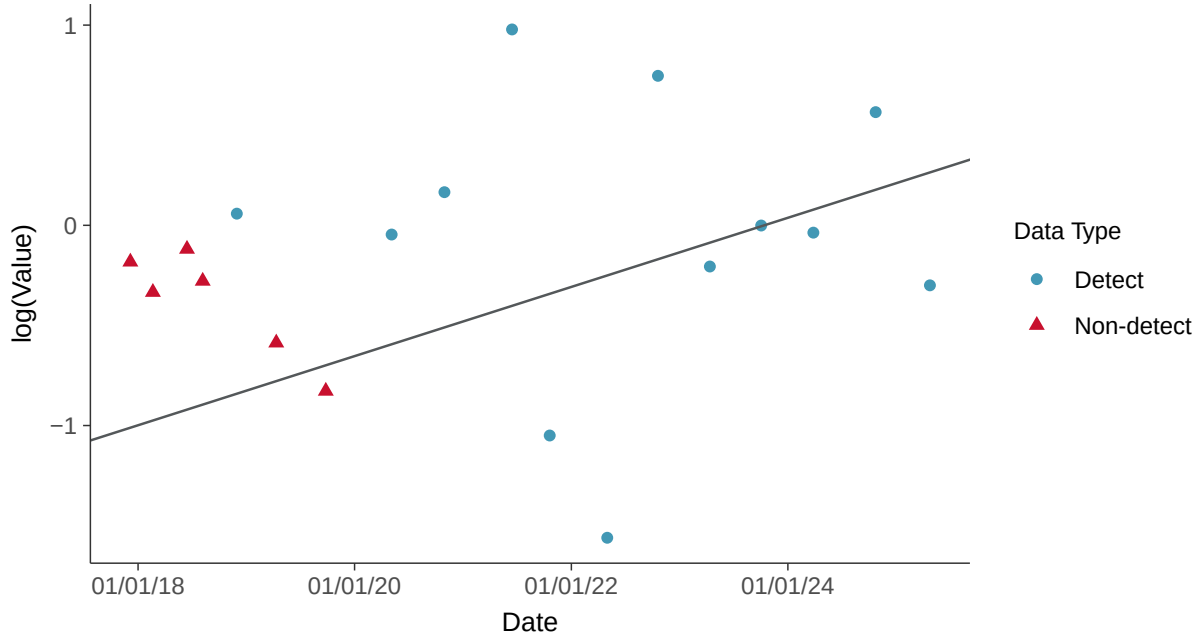
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17006 (pCi/L)



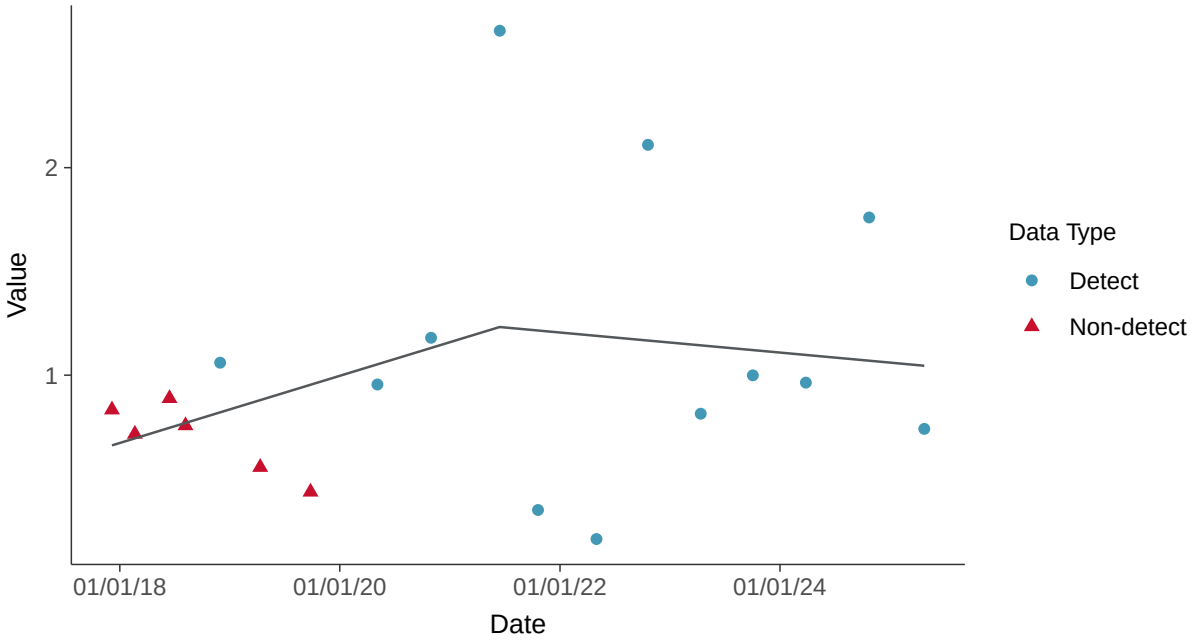

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-17006 (pCi/L)



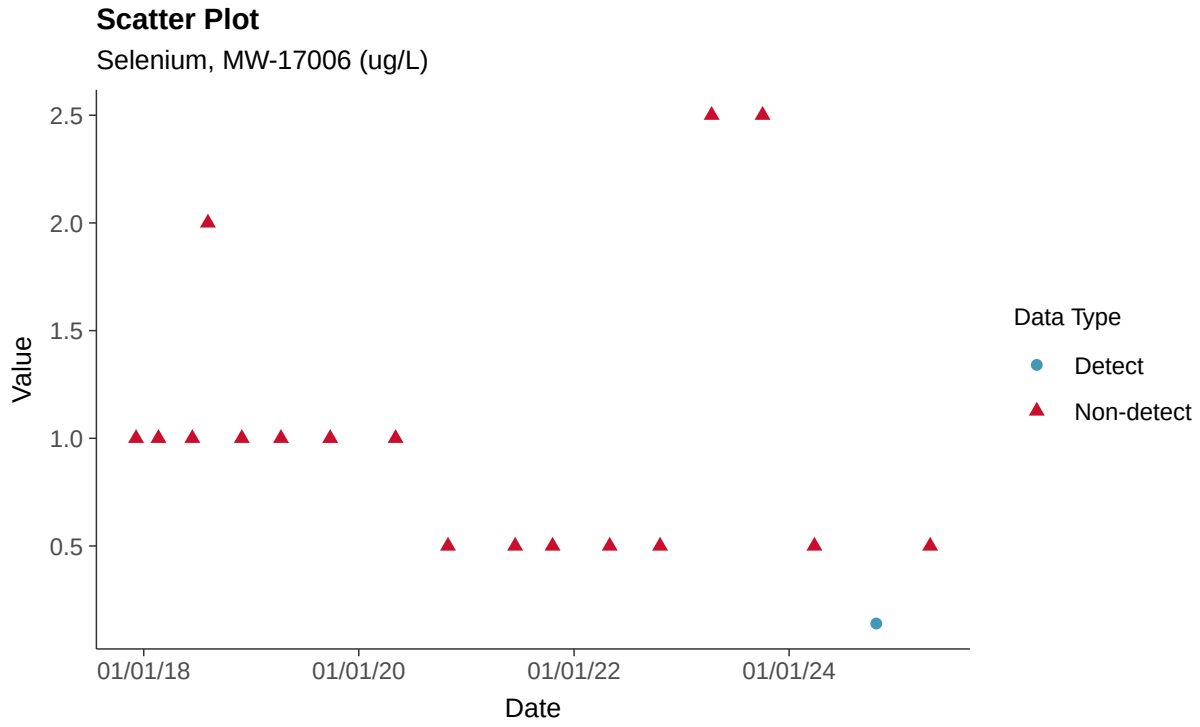
**Trend Regression: Piecewise Linear-Linear**

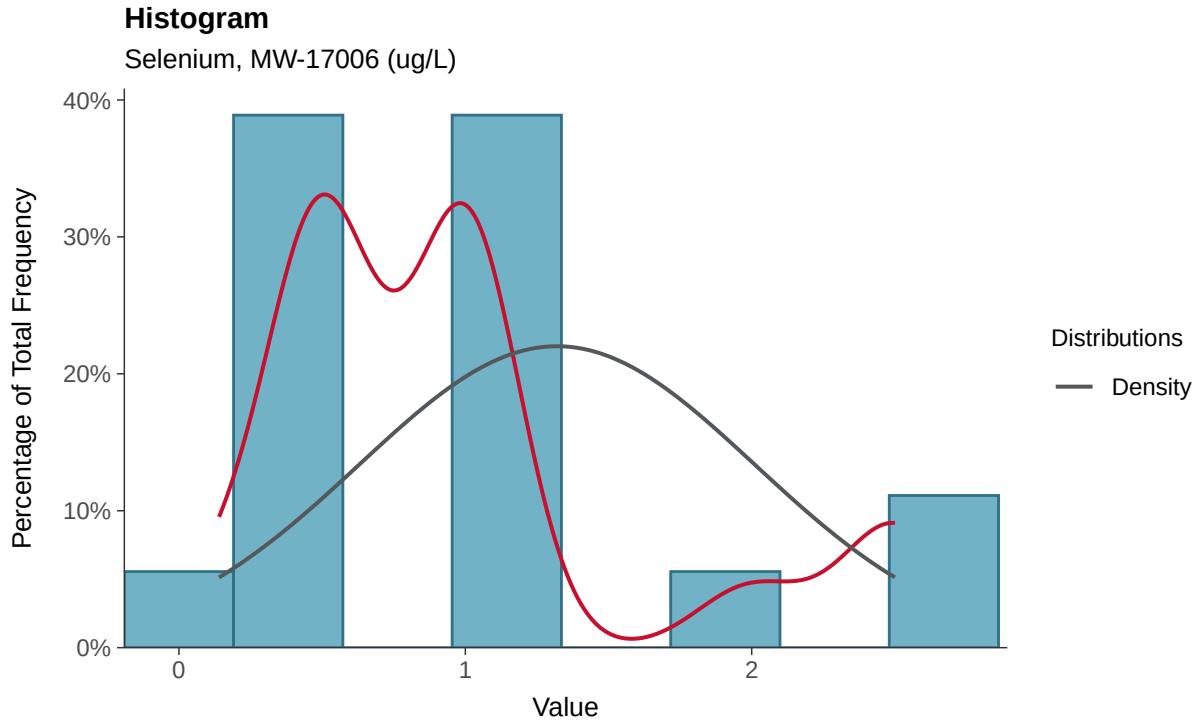
Radium-226+228, MW-17006 (pCi/L)



## Appendix IV: Selenium, MW-17006

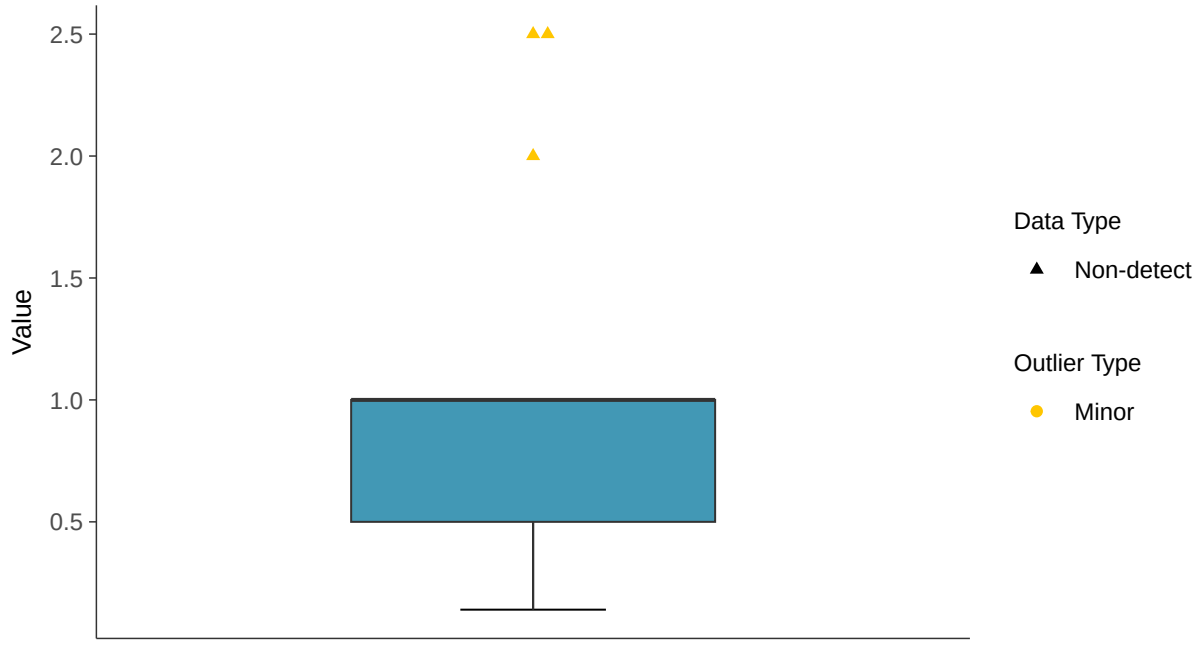
ID: 19_2_127



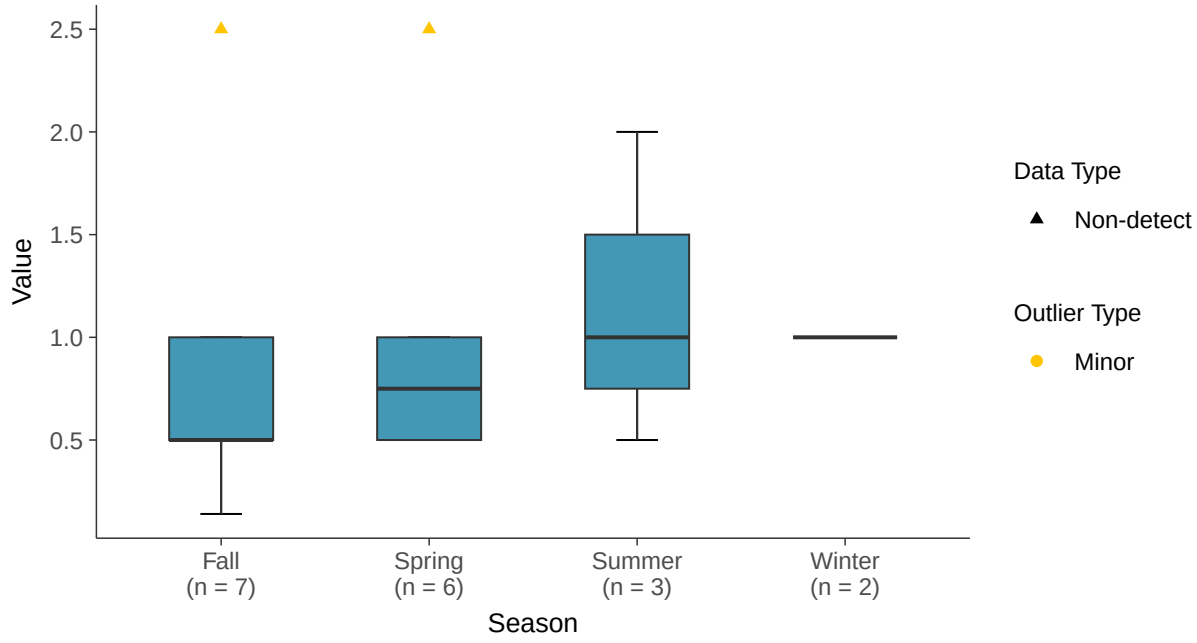
## Boxplot

Selenium, MW-17006 (ug/L)



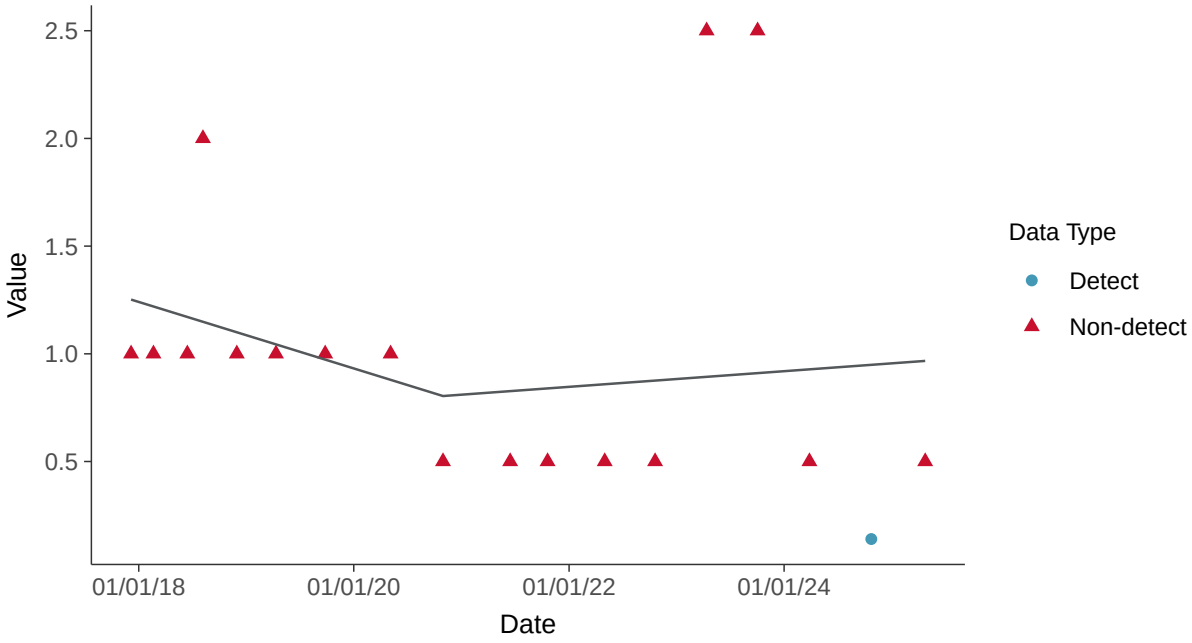

## Boxplot by Season

Selenium, MW-17006 (ug/L)



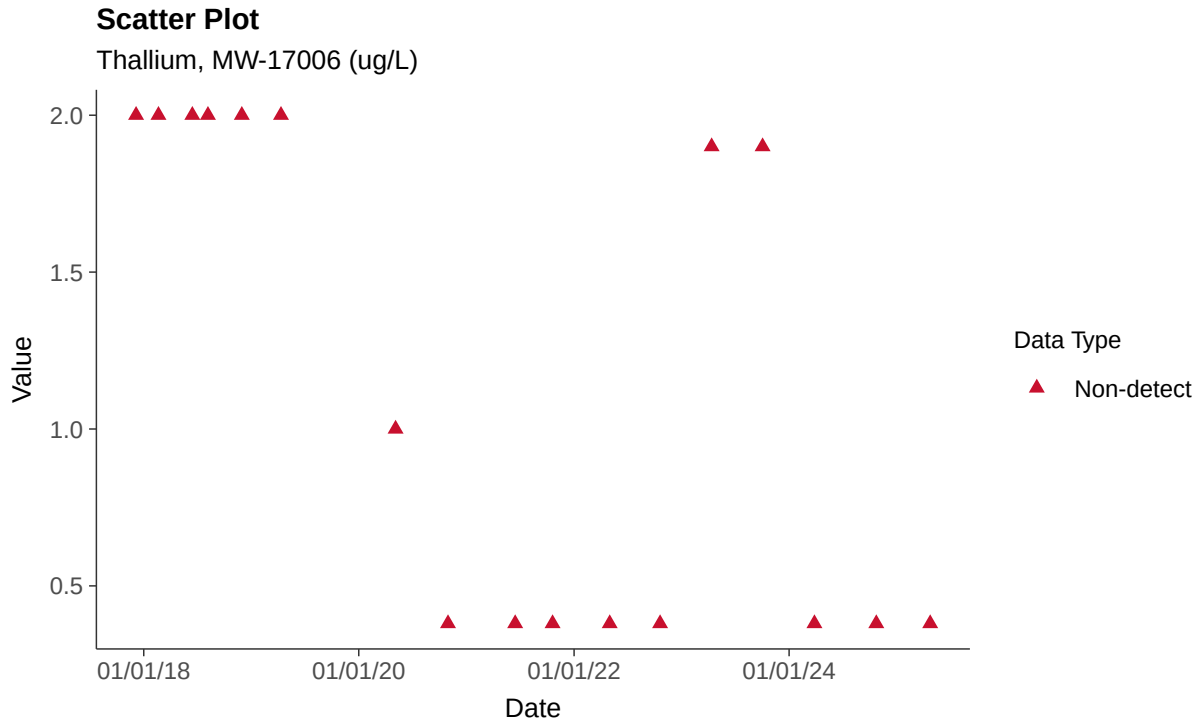
**Trend Regression: Piecewise Linear-Linear**

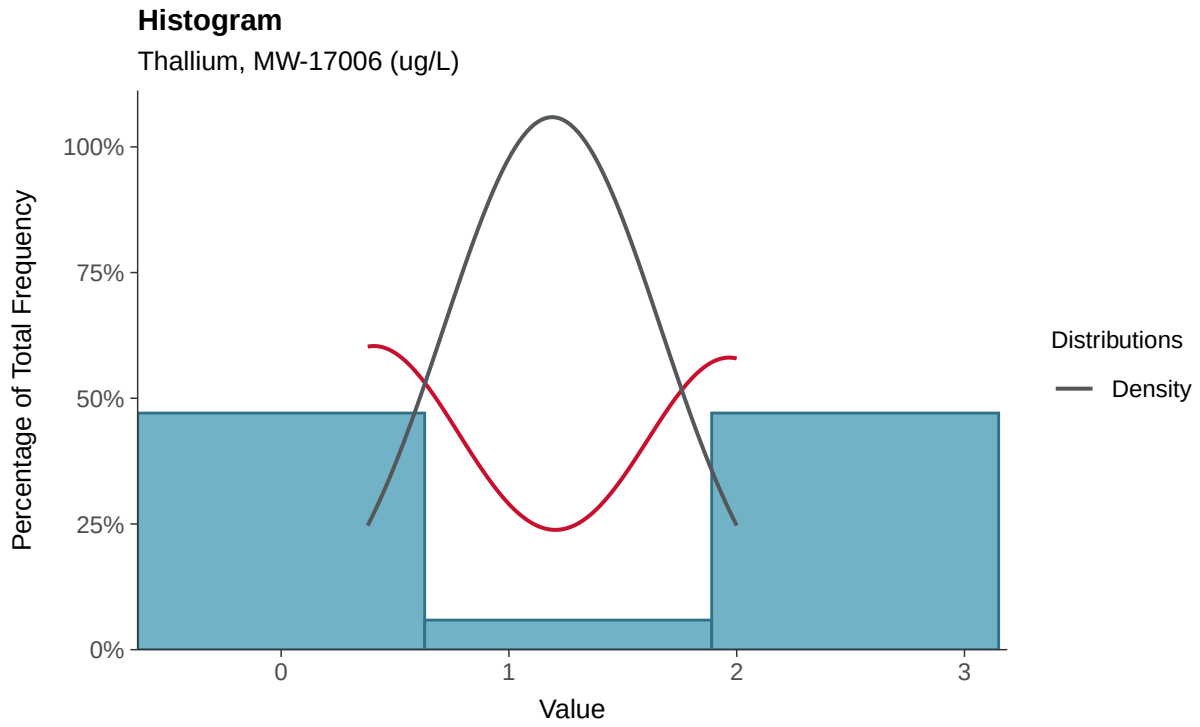
Selenium, MW-17006 (ug/L)



## Appendix IV: Thallium, MW-17006

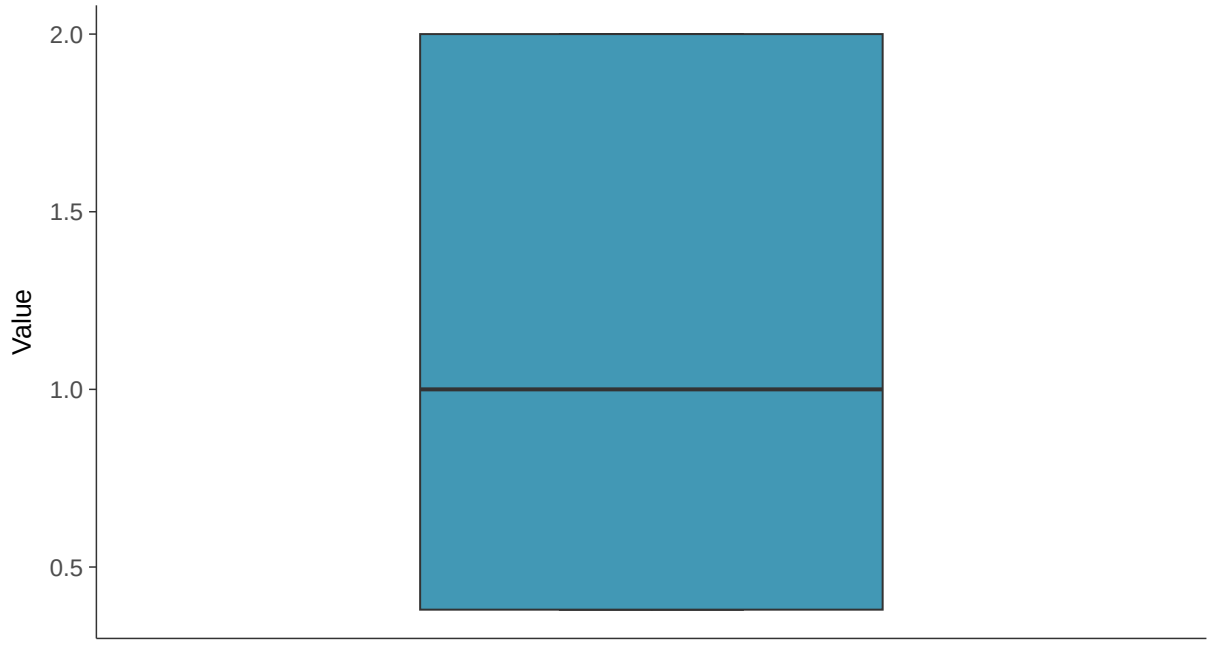
ID: 19_2_131



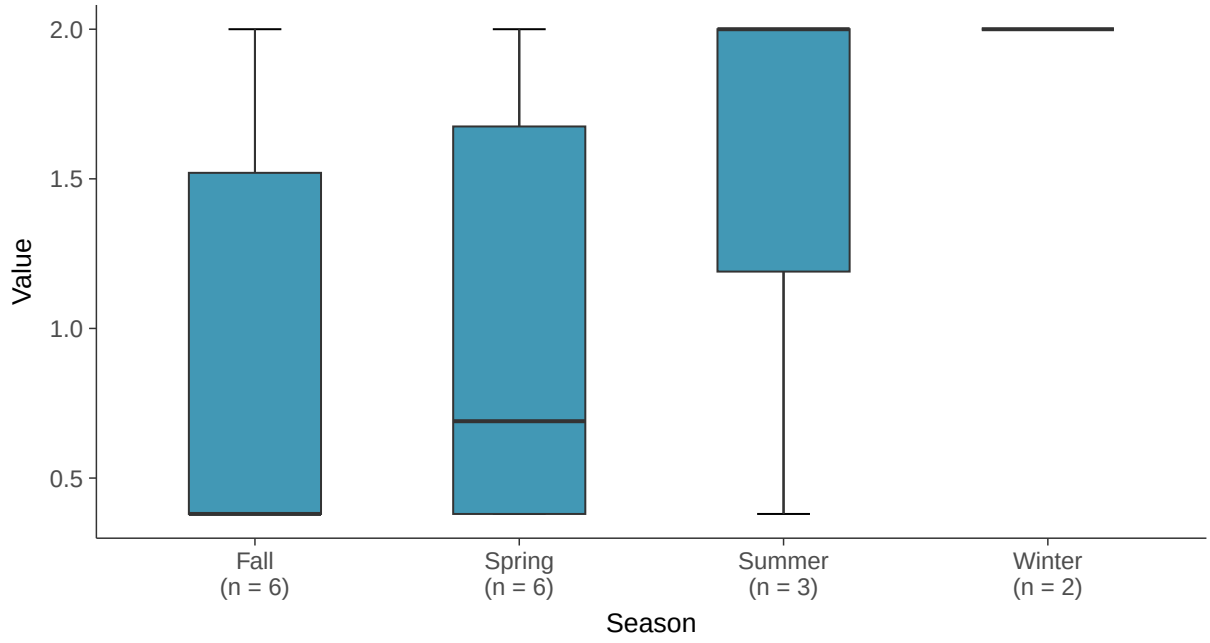
**Boxplot**

Thallium, MW-17006 (ug/L)




**Boxplot by Season**

Thallium, MW-17006 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17006 (ug/L)

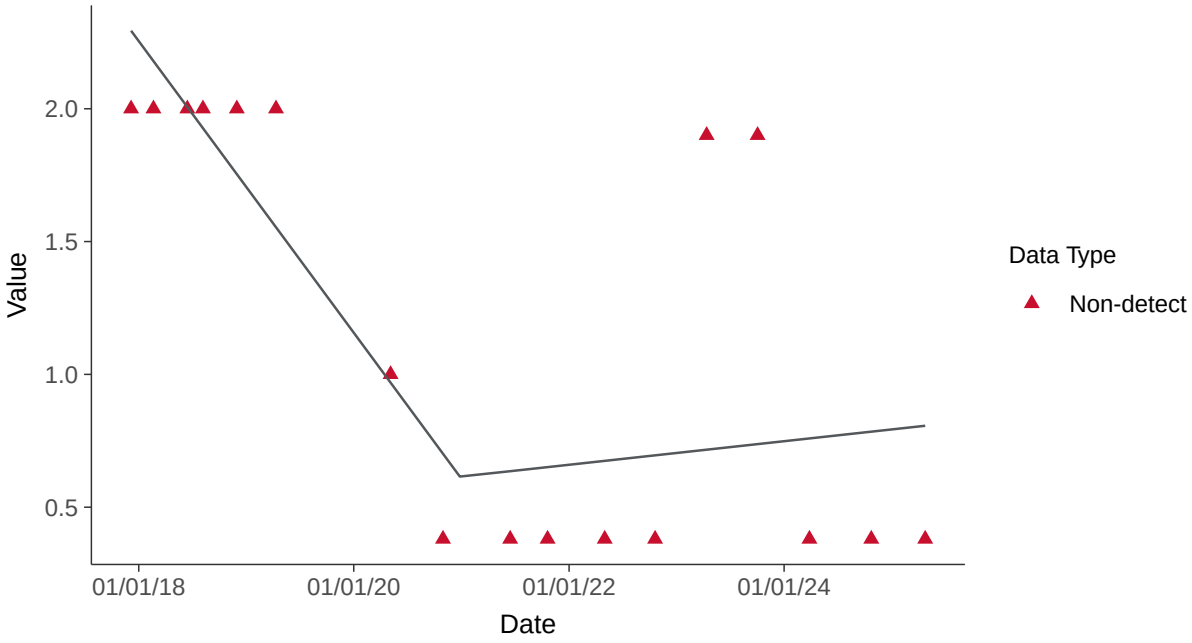


**Table 1:** Summary Statistics, Non-Detects Included

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit[a] | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.735 | 1.00 | 0.250 | 1.20 | 0.388 | 0.528 | -0.478 |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | 2015-12-01 to 2025-10-27 | Gamma; Normal | Gamma | 12.8 | 12.0 | 0.550 | 45.0 | 11.2 | 0.878 | 1.04 |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-27 | Nonparametric | Nonparametric | 53.7 | 27.0 | 9.00 | 250 | 56.9 | 1.06 | 1.93 |
| 01_2_104 | MW-15009 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.702 | 1.00 | 0.200 | 1.20 | 0.398 | 0.568 | -0.295 |
| 01_2_106 | MW-15009 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 25 | 21 | 84% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.756 | 1.00 | 0.190 | 2.00 | 0.466 | 0.616 | 0.433 |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | 2015-12-01 to 2025-10-27 | | Nonparametric | 7.15 | 4.30 | 0.100 | 15.0 | 6.95 | 0.972 | 0.229 |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 25 | 18 | 72% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 572 | 1000 | 20.0 | 1000 | 456 | 0.798 | -0.107 |
| 01_2_116 | MW-15009 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.981 | 1.00 | 0.550 | 2.80 | 0.601 | 0.612 | 2.48 |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Normal | 24.8 | 21.0 | 11.0 | 63.9 | 12.0 | 0.484 | 1.62 |
| 01_2_118 | MW-15009 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 25 | 6 | 24% | 2015-12-01 to 2025-10-27 | Gamma | Gamma | 18.9 | 6.50 | 0.560 | 60.0 | 21.4 | 1.13 | 0.833 |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 25 | 16 | 64% | 2015-12-01 to 2025-10-27 | Nonparametric | Nonparametric | 0.868 | 0.628 | 0.0300 | 3.85 | 0.848 | 0.977 | 2.37 |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.980 | 1.00 | 0.500 | 2.50 | 0.568 | 0.579 | 1.75 |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 1.34 | 1.95 | 0.380 | 2.00 | 0.788 | 0.587 | -0.418 |
| 02_2_101 | MW-15010 | Appendix IV | Antimony | ug/L | 25 | 25 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.716 | 1.00 | 0.250 | 1.20 | 0.392 | 0.548 | -0.366 |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 26 | 22 | 85% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.923 | 1.00 | 0.150 | 2.80 | 0.623 | 0.675 | 2.11 |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal | Gamma | 78.5 | 62.2 | 28.0 | 210 | 45.9 | 0.585 | 1.12 |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 25 | 24 | 96% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.676 | 1.00 | 0.0580 | 1.20 | 0.411 | 0.607 | -0.227 |
| 02_2_106 | MW-15010 | Appendix IV | Cadmium | ug/L | 25 | 25 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.300 | 0.200 | 0.200 | 1.20 | 0.272 | 0.907 | 3.25 |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 26 | 15 | 58% | 2015-12-01 to 2025-10-27 | Nonparametric | Nonparametric | 0.745 | 1.00 | 0.210 | 2.00 | 0.459 | 0.617 | 0.514 |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 25 | 20 | 80% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 6.87 | 2.60 | 0.110 | 15.0 | 6.94 | 1.01 | 0.304 |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 27 | 15 | 56% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 671 | 1000 | 200 | 1000 | 350 | 0.521 | -0.119 |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 25 | 25 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.964 | 1.00 | 0.550 | 2.80 | 0.594 | 0.616 | 2.52 |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 26 | 0 | 0% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal | Gamma | 30.3 | 28.0 | 14.0 | 54.0 | 11.7 | 0.388 | 0.559 |
| 02_2_118 | MW-15010 | Appendix IV | Mercury | ug/L | 25 | 25 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 26 | 11 | 42% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal | Gamma | 8.06 | 5.00 | 0.420 | 33.0 | 9.42 | 1.17 | 1.59 |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 1.02 | 0.896 | 0.280 | 2.03 | 0.575 | 0.566 | 0.367 |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 26 | 23 | 88% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.950 | 1.00 | 0.500 | 2.50 | 0.519 | 0.546 | 2.06 |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 25 | 25 | 100% | 2015-12-01 to 2025-10-27 | | Nonparametric | 1.30 | 1.90 | 0.380 | 2.00 | 0.795 | 0.609 | -0.311 |
| 03_2_101 | MW-15013 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.735 | 1.00 | 0.250 | 1.20 | 0.388 | 0.528 | -0.478 |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 25 | 19 | 76% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 1.02 | 1.00 | 0.140 | 2.80 | 0.658 | 0.646 | 1.62 |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-29 | Nonparametric | Nonparametric | 77.6 | 52.0 | 31.0 | 200 | 46.6 | 0.601 | 1.35 |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.703 | 1.00 | 0.200 | 1.20 | 0.397 | 0.565 | -0.296 |
| 03_2_106 | MW-15013 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 25 | 20 | 80% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 0.842 | 1.00 | 0.140 | 2.50 | 0.575 | 0.684 | 1.01 |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | 2015-12-01 to 2025-10-29 | | Nonparametric | 7.12 | 4.30 | 0.0820 | 15.0 | 6.98 | 0.979 | 0.226 |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 26 | 17 | 65% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 628 | 1000 | 97.0 | 1000 | 416 | 0.662 | -0.252 |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-10-29 | | Nonparametric | 1.15 | 1.00 | 0.550 | 4.70 | 0.961 | 0.832 | 2.77 |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-29 | Lognormal; Normal | Normal | 24.6 | 23.0 | 13.0 | 46.0 | 8.83 | 0.359 | 0.983 |
| 03_2_118 | MW-15013 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 25 | 5 | 20% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal | Gamma | 9.73 | 5.70 | 0.620 | 77.2 | 15.2 | 1.56 | 3.93 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 0.768 | 0.596 | 0.160 | 1.56 | 0.366 | 0.476 | 0.581 |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.927 | 1.00 | 0.280 | 2.50 | 0.536 | 0.578 | 2.03 |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-10-29 | | Nonparametric | 1.33 | 1.95 | 0.140 | 2.00 | 0.802 | 0.602 | -0.434 |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 10 | 10 | 100% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.535 | 0.250 | 0.250 | 1.20 | 0.459 | 0.858 | 1.04 |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 10 | 5 | 50% | 2022-02-01 to 2025-10-29 | Nonparametric | Nonparametric | 0.984 | 0.550 | 0.200 | 2.80 | 1.04 | 1.06 | 1.28 |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 10 | 0 | 0% | 2022-02-01 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 170 | 170 | 140 | 200 | 17 | 0.1000 | 0.170 |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 10 | 9 | 90% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.425 | 0.250 | 0.100 | 1.20 | 0.411 | 0.967 | 1.72 |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 10 | 10 | 100% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.535 | 0.250 | 0.250 | 1.20 | 0.459 | 0.858 | 1.04 |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 10 | 9 | 90% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.458 | 0.250 | 0.250 | 1.20 | 0.395 | 0.863 | 1.70 |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 10 | 8 | 80% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.856 | 0.520 | 0.110 | 2.60 | 0.934 | 1.09 | 1.64 |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10 | 1 | 10% | 2022-02-01 to 2025-10-29 | Gamma; Lognormal | Gamma | 276 | 270 | 180 | 510 | 92.6 | 0.336 | 1.93 |
| 04_2_116 | MW-15014R | Appendix IV | Lead | ug/L | 10 | 10 | 100% | 2022-02-01 to 2025-10-29 | | Nonparametric | 1.23 | 0.550 | 0.550 | 2.80 | 1.09 | 0.887 | 1.04 |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 10 | 0 | 0% | 2022-02-01 to 2025-10-29 | Nonparametric | Nonparametric | 55.6 | 48.0 | 36.0 | 130 | 27.6 | 0.497 | 2.60 |
| 04_2_118 | MW-15014R | Appendix IV | Mercury | ug/L | 10 | 10 | 100% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 10 | 2 | 20% | 2022-02-01 to 2025-10-29 | Gamma; Lognormal | Gamma | 3.61 | 2.50 | 0.680 | 11.0 | 3.29 | 0.910 | 1.42 |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 10 | 3 | 30% | 2022-02-01 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 0.910 | 0.735 | 0.230 | 1.76 | 0.516 | 0.567 | 0.396 |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 10 | 8 | 80% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.921 | 0.500 | 0.110 | 2.50 | 0.865 | 0.940 | 1.48 |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 10 | 10 | 100% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.836 | 0.380 | 0.380 | 1.90 | 0.734 | 0.878 | 1.04 |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 13 | 6 | 46% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 1.91 | 0.850 | 0.250 | 13.0 | 3.48 | 1.83 | 3.14 |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 25.6 | 23.0 | 3.20 | 60.0 | 18.2 | 0.713 | 0.780 |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 110 | 108 | 60.0 | 170 | 35.9 | 0.327 | 0.152 |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.374 | 0.250 | 0.0580 | 1.20 | 0.371 | 0.992 | 2.07 |
| 05_2_106 | MW-15015R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.388 | 0.250 | 0.200 | 1.20 | 0.361 | 0.928 | 2.17 |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 13 | 11 | 85% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.452 | 0.250 | 0.220 | 1.20 | 0.392 | 0.867 | 1.50 |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 13 | 8 | 62% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 0.739 | 0.520 | 0.150 | 2.60 | 0.837 | 1.13 | 2.05 |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 13 | 6 | 46% | 2020-05-21 to 2025-10-29 | Gamma; Normal | Normal | 120 | 110 | 12.0 | 200 | 51.4 | 0.426 | -0.0983 |
| 05_2_116 | MW-15015R | Appendix IV | Lead | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 1.35 | 1.00 | 0.550 | 2.80 | 1.02 | 0.756 | 0.817 |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 48.4 | 48.0 | 3.80 | 120 | 27.5 | 0.568 | 1.22 |
| 05_2_118 | MW-15015R | Appendix IV | Mercury | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 130 | 120 | 2.00 | 430 | 130 | 1.00 | 0.992 |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 13 | 5 | 38% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 0.933 | 0.681 | 0.250 | 2.12 | 0.617 | 0.662 | 1.08 |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 13 | 7 | 54% | 2020-05-21 to 2025-10-29 | Nonparametric | Nonparametric | 0.902 | 0.500 | 0.240 | 2.50 | 0.775 | 0.860 | 1.48 |
| 05_2_131 | MW-15015R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.972 | 0.750 | 0.380 | 1.90 | 0.683 | 0.703 | 0.602 |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 13 | 11 | 85% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.385 | 0.250 | 0.140 | 1.20 | 0.363 | 0.941 | 2.14 |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 13 | 1 | 8% | 2020-05-21 to 2025-10-29 | Nonparametric | Nonparametric | 2.84 | 2.00 | 1.30 | 10.1 | 2.43 | 0.857 | 2.65 |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 1016 | 1000 | 789 | 1300 | 151 | 0.149 | 0.203 |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.376 | 0.250 | 0.0850 | 1.20 | 0.369 | 0.981 | 2.10 |
| 06_2_106 | MW-15016R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.388 | 0.250 | 0.200 | 1.20 | 0.361 | 0.928 | 2.17 |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 13 | 2 | 15% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 0.889 | 0.800 | 0.650 | 1.20 | 0.210 | 0.236 | 0.667 |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 13 | 1 | 8% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 1.20 | 0.960 | 0.660 | 2.60 | 0.541 | 0.451 | 1.76 |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 13 | 10 | 77% | 2020-05-21 to 2025-10-29 | | Nonparametric | 107 | 100 | 20.0 | 200 | 49.9 | 0.465 | 0.624 |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 13 | 11 | 85% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.858 | 0.550 | 0.0590 | 2.80 | 0.891 | 1.04 | 1.87 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 13 | 3 | 23% | 2020-05-21 to 2025-10-29 | Nonparametric | Nonparametric | 14.7 | 5.90 | 3.70 | 110 | 28.8 | 1.96 | 3.54 |
| 06_2_118 | MW-15016R | Appendix IV | Mercury | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 13 | 9 | 69% | 2020-05-21 to 2025-10-29 | | Nonparametric | 2.63 | 1.20 | 0.390 | 7.50 | 2.47 | 0.940 | 1.15 |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Normal | Normal | 4.27 | 4.17 | 1.60 | 6.04 | 1.24 | 0.290 | -0.579 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 13 | 8 | 62% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 1.28 | 0.500 | 0.120 | 5.90 | 1.60 | 1.25 | 2.30 |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.709 | 0.380 | 0.380 | 1.90 | 0.576 | 0.812 | 1.60 |
| 07_2_101 | MW-15017 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-28 | | Nonparametric | 0.735 | 1.00 | 0.250 | 1.20 | 0.388 | 0.528 | -0.478 |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | 2015-12-01 to 2025-10-28 | Nonparametric | Nonparametric | 3.82 | 2.10 | 1.60 | 13.0 | 3.46 | 0.907 | 1.97 |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 985 | 981 | 772 | 1200 | 97.0 | 0.0985 | 0.00190 |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 24 | 22 | 92% | 2015-12-01 to 2025-10-28 | | Nonparametric | 0.687 | 1.00 | 0.0200 | 1.20 | 0.420 | 0.612 | -0.361 |
| 07_2_106 | MW-15017 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-28 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 25 | 1 | 4% | 2015-12-01 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 3.11 | 2.90 | 0.510 | 11.0 | 2.60 | 0.835 | 1.58 |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 2015-12-01 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 7.26 | 4.30 | 0.500 | 15.0 | 6.83 | 0.941 | 0.247 |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 26 | 25 | 96% | 2015-12-01 to 2025-10-28 | | Nonparametric | 595 | 1000 | 2.60 | 1000 | 450 | 0.756 | -0.219 |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-28 | | Nonparametric | 1.07 | 1.00 | 0.550 | 2.80 | 0.698 | 0.649 | 1.99 |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 25 | 16 | 64% | 2015-12-01 to 2025-10-28 | Nonparametric | Nonparametric | 9.07 | 10.0 | 3.50 | 18.0 | 3.36 | 0.371 | 0.105 |
| 07_2_118 | MW-15017 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-28 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 25 | 22 | 88% | 2015-12-01 to 2025-10-28 | | Nonparametric | 3.51 | 5.00 | 0.200 | 6.20 | 2.10 | 0.597 | -0.399 |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 4.80 | 4.75 | 3.00 | 5.89 | 0.649 | 0.135 | -0.593 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 25 | 12 | 48% | 2015-12-01 to 2025-10-28 | Gamma; Normal | Gamma | 1.94 | 1.70 | 0.150 | 8.00 | 1.77 | 0.910 | 1.81 |
| 07_2_131 | MW-15017 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | 2015-12-01 to 2025-10-28 | | Nonparametric | 1.41 | 1.95 | 0.380 | 2.00 | 0.768 | 0.546 | -0.611 |
| 08_2_101 | MW-15018 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.735 | 1.00 | 0.250 | 1.20 | 0.388 | 0.528 | -0.478 |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 25 | 14 | 56% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal | Nonparametric | 1.06 | 1.00 | 0.350 | 3.80 | 0.764 | 0.723 | 2.57 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 148 | 140 | 93.0 | 280 | 38.5 | 0.261 | 2.22 |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.698 | 1.00 | 0.140 | 1.20 | 0.405 | 0.580 | -0.306 |
| 08_2_106 | MW-15018 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 25 | 10 | 40% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 0.851 | 1.00 | 0.280 | 1.80 | 0.356 | 0.418 | 0.211 |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | 2015-12-02 to 2025-10-28 | | Nonparametric | 7.16 | 4.30 | 0.160 | 15.0 | 6.94 | 0.969 | 0.230 |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 620 | 1000 | 110 | 1000 | 420 | 0.677 | -0.182 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 24 | 17 | 71% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal | Nonparametric | 1.12 | 1.00 | 0.160 | 3.90 | 0.845 | 0.751 | 2.26 |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 20.6 | 21.0 | 12.0 | 33.0 | 5.25 | 0.255 | 0.323 |
| 08_2_118 | MW-15018 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 25 | 23 | 92% | 2015-12-02 to 2025-10-28 | | Nonparametric | 3.54 | 5.00 | 0.530 | 6.20 | 2.05 | 0.580 | -0.358 |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 25 | 7 | 28% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 1.17 | 1.17 | 0.554 | 1.84 | 0.355 | 0.304 | 0.0305 |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | 2015-12-02 to 2025-10-28 | | Nonparametric | 1.03 | 1.00 | 0.190 | 4.00 | 0.828 | 0.808 | 2.46 |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 1.33 | 1.95 | 0.170 | 2.00 | 0.800 | 0.600 | -0.430 |
| 09_2_101 | MW-15019 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.752 | 1.00 | 0.250 | 1.40 | 0.408 | 0.542 | -0.353 |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 25 | 15 | 60% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 1.26 | 1.00 | 0.400 | 8.10 | 1.51 | 1.20 | 4.22 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 211 | 150 | 78.0 | 640 | 150 | 0.709 | 1.25 |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.727 | 1.00 | 0.0580 | 1.20 | 0.400 | 0.550 | -0.515 |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.295 | 0.200 | 0.0780 | 1.20 | 0.281 | 0.953 | 3.12 |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 25 | 14 | 56% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.832 | 1.00 | 0.250 | 1.20 | 0.277 | 0.333 | -0.793 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 7.25 | 4.30 | 0.590 | 15.0 | 6.84 | 0.944 | 0.243 |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | 2015-12-02 to 2025-10-28 | | Nonparametric | 586 | 1000 | 20.0 | 1000 | 457 | 0.779 | -0.178 |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 24 | 20 | 83% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.998 | 1.00 | 0.160 | 2.80 | 0.670 | 0.671 | 1.71 |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 25 | 3 | 12% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 16.9 | 22.0 | 1.20 | 33.0 | 9.84 | 0.583 | -0.320 |
| 09_2_118 | MW-15019 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 25 | 21 | 84% | 2015-12-02 to 2025-10-28 | | Nonparametric | 4.30 | 5.00 | 0.580 | 9.70 | 2.37 | 0.552 | 0.130 |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 25 | 5 | 20% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 1.48 | 1.39 | 0.331 | 3.81 | 0.778 | 0.525 | 1.26 |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 25 | 19 | 76% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.949 | 1.00 | 0.120 | 2.50 | 0.609 | 0.641 | 1.37 |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 24 | 21 | 88% | 2015-12-02 to 2025-10-28 | | Nonparametric | 1.30 | 1.95 | 0.0970 | 2.00 | 0.832 | 0.639 | -0.389 |
| 10_2_101 | MW-15020 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-27 | | Nonparametric | 0.735 | 1.00 | 0.250 | 1.20 | 0.388 | 0.528 | -0.478 |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 25 | 18 | 72% | 2015-12-02 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 0.921 | 1.00 | 0.230 | 2.80 | 0.635 | 0.689 | 2.09 |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-27 | Gamma; Normal | Normal | 176 | 150 | 47.0 | 393 | 118 | 0.671 | 0.468 |
| 10_2_104 | MW-15020 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-27 | | Nonparametric | 0.702 | 1.00 | 0.200 | 1.20 | 0.398 | 0.568 | -0.295 |
| 10_2_106 | MW-15020 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-27 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 25 | 13 | 52% | 2015-12-02 to 2025-10-27 | Gamma; Lognormal | Nonparametric | 0.831 | 1.00 | 0.250 | 2.00 | 0.402 | 0.484 | 0.594 |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | 2015-12-02 to 2025-10-27 | Gamma; Lognormal | Nonparametric | 7.14 | 4.30 | 0.180 | 15.0 | 6.96 | 0.975 | 0.228 |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 26 | 22 | 85% | 2015-12-02 to 2025-10-27 | | Nonparametric | 588 | 1000 | 15.0 | 1000 | 455 | 0.773 | -0.185 |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-27 | | Nonparametric | 0.988 | 1.00 | 0.550 | 2.80 | 0.596 | 0.604 | 2.51 |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 25 | 4 | 16% | 2015-12-02 to 2025-10-27 | Normal | Normal | 11.5 | 12.0 | 1.20 | 20.0 | 4.98 | 0.431 | -0.336 |
| 10_2_118 | MW-15020 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-27 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 25 | 24 | 96% | 2015-12-02 to 2025-10-27 | | Nonparametric | 3.53 | 5.00 | 0.250 | 6.20 | 2.07 | 0.587 | -0.374 |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 25 | 6 | 24% | 2015-12-02 to 2025-10-27 | Gamma; Lognormal; Normal | Normal | 1.62 | 1.44 | 0.467 | 4.68 | 1.02 | 0.630 | 1.19 |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | 2015-12-02 to 2025-10-27 | | Nonparametric | 0.994 | 1.00 | 0.440 | 2.50 | 0.576 | 0.580 | 1.61 |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-27 | | Nonparametric | 1.34 | 1.95 | 0.380 | 2.00 | 0.788 | 0.587 | -0.418 |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.731 | 1.00 | 0.150 | 1.20 | 0.394 | 0.539 | -0.489 |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 25 | 6 | 24% | 2015-12-02 to 2025-10-29 | Gamma; Normal | Normal | 1.36 | 1.20 | 0.120 | 3.00 | 0.652 | 0.480 | 0.906 |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 301 | 252 | 211 | 480 | 80.2 | 0.267 | 0.732 |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.695 | 1.00 | 0.0240 | 1.20 | 0.410 | 0.590 | -0.341 |
| 11_2_106 | MW-15021 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 25 | 6 | 24% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 1.18 | 1.00 | 0.710 | 2.00 | 0.444 | 0.377 | 1.19 |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 24 | 14 | 58% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 7.23 | 4.30 | 0.470 | 15.0 | 6.85 | 0.947 | 0.246 |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | 2015-12-02 to 2025-10-29 | | Nonparametric | 582 | 1000 | 13.0 | 1000 | 461 | 0.792 | -0.180 |
| 11_2_116 | MW-15021 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.981 | 1.00 | 0.550 | 2.80 | 0.601 | 0.612 | 2.48 |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 25 | 18 | 72% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 7.17 | 10.0 | 1.20 | 12.0 | 3.81 | 0.532 | -0.393 |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.223 | 0.200 | 0.200 | 0.750 | 0.112 | 0.504 | 4.90 |
| 11_2_119 | MW-15021 | Appendix IV | Molybdenum | ug/L | 25 | 25 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 3.57 | 5.00 | 1.00 | 6.20 | 2.02 | 0.565 | -0.341 |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 25 | 4 | 16% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 1.69 | 1.53 | 0.354 | 3.24 | 0.729 | 0.432 | 0.219 |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 25 | 15 | 60% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 1.18 | 1.00 | 0.120 | 4.00 | 0.945 | 0.799 | 1.54 |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 1.34 | 1.95 | 0.380 | 2.00 | 0.788 | 0.587 | -0.418 |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 25 | 24 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.752 | 1.00 | 0.250 | 1.90 | 0.455 | 0.606 | 0.293 |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 26 | 10 | 38% | 2015-12-02 to 2025-10-28 | Normal | Nonparametric | 2.60 | 1.05 | 0.110 | 8.00 | 2.67 | 1.03 | 0.890 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 2015-12-02 to 2025-10-28 | Lognormal | Lognormal | 170 | 145 | 102 | 290 | 53.5 | 0.315 | 0.608 |

*(Table continues on next page)*

[a] Non-detects are excluded from goodness-of-fit tests.

**Table 1:** Summary Statistics, Non-Detects Included *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit[a] | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12_2_104 | MW-15022 | Appendix IV | Beryllium | ug/L | 25 | 25 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.684 | 1.00 | 0.200 | 1.20 | 0.400 | 0.585 | -0.196 |
| 12_2_106 | MW-15022 | Appendix IV | Cadmium | ug/L | 25 | 25 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.300 | 0.200 | 0.200 | 1.20 | 0.272 | 0.907 | 3.25 |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 26 | 17 | 65% | 2015-12-02 to 2025-10-28 | Lognormal | Nonparametric | 0.748 | 1.00 | 0.240 | 2.00 | 0.456 | 0.609 | 0.529 |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 25 | 19 | 76% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 6.79 | 2.60 | 0.190 | 15.0 | 7.01 | 1.03 | 0.312 |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 27 | 19 | 70% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 609 | 1000 | 100 | 1000 | 421 | 0.691 | -0.172 |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 25 | 25 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.964 | 1.00 | 0.550 | 2.80 | 0.594 | 0.616 | 2.52 |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 26 | 8 | 31% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 25.3 | 21.0 | 10.0 | 68.0 | 17.9 | 0.708 | 1.11 |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 25 | 24 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.204 | 0.200 | 0.200 | 0.290 | 0.0180 | 0.0884 | 5.00 |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 26 | 13 | 50% | 2015-12-02 to 2025-10-28 | Normal | Nonparametric | 8.37 | 5.00 | 0.310 | 47.6 | 10.4 | 1.24 | 2.39 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 2015-12-02 to 2025-10-28 | Lognormal | Nonparametric | 0.944 | 0.870 | 0.190 | 3.50 | 0.630 | 0.667 | 2.77 |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 26 | 24 | 92% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.902 | 1.00 | 0.110 | 2.50 | 0.547 | 0.606 | 1.85 |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 25 | 25 | 100% | 2015-12-02 to 2025-10-28 | | Nonparametric | 1.30 | 1.90 | 0.380 | 2.00 | 0.795 | 0.609 | -0.311 |
| 13_2_101 | MW-15023 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.735 | 1.00 | 0.250 | 1.20 | 0.388 | 0.528 | -0.478 |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 25 | 8 | 32% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 3.87 | 1.00 | 0.550 | 27.0 | 6.69 | 1.73 | 2.77 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-29 | Lognormal | Lognormal | 86.1 | 70.0 | 38.0 | 270 | 63.2 | 0.734 | 2.11 |
| 13_2_104 | MW-15023 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.702 | 1.00 | 0.200 | 1.20 | 0.398 | 0.568 | -0.295 |
| 13_2_106 | MW-15023 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.302 | 0.200 | 0.200 | 1.20 | 0.278 | 0.919 | 3.18 |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 0.768 | 1.00 | 0.250 | 2.00 | 0.454 | 0.591 | 0.464 |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | 2015-12-02 to 2025-10-29 | | Nonparametric | 7.15 | 4.30 | 0.110 | 15.0 | 6.95 | 0.972 | 0.229 |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 26 | 16 | 62% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal | Nonparametric | 605 | 1000 | 89.0 | 1000 | 437 | 0.721 | -0.191 |
| 13_2_116 | MW-15023 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.981 | 1.00 | 0.550 | 2.80 | 0.601 | 0.612 | 2.48 |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 25 | 5 | 20% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal | Gamma | 18.8 | 13.0 | 8.30 | 67.0 | 13.8 | 0.736 | 2.24 |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.215 | 0.200 | 0.200 | 0.550 | 0.0714 | 0.333 | 4.90 |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 25 | 4 | 16% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 10.8 | 6.60 | 5.00 | 34.0 | 8.60 | 0.795 | 1.69 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 0.958 | 0.780 | 0.178 | 3.28 | 0.704 | 0.735 | 1.58 |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.897 | 1.00 | 0.110 | 2.50 | 0.559 | 0.623 | 1.84 |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | 2015-12-02 to 2025-10-29 | | Nonparametric | 1.34 | 1.95 | 0.380 | 2.00 | 0.788 | 0.587 | -0.418 |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 13 | 12 | 92% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.444 | 0.250 | 0.120 | 1.20 | 0.397 | 0.896 | 1.47 |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 13 | 5 | 38% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 1.44 | 0.550 | 0.190 | 7.30 | 2.0 | 1.39 | 2.42 |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 182 | 200 | 90.6 | 300 | 67.9 | 0.372 | 0.0392 |
| 14_2_104 | MW-17001R | Appendix IV | Beryllium | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.388 | 0.250 | 0.200 | 1.20 | 0.361 | 0.928 | 2.17 |
| 14_2_106 | MW-17001R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.388 | 0.250 | 0.200 | 1.20 | 0.361 | 0.928 | 2.17 |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 13 | 8 | 62% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 0.390 | 0.250 | 0.170 | 1.20 | 0.362 | 0.928 | 2.12 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 13 | 6 | 46% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 0.590 | 0.520 | 0.220 | 2.60 | 0.629 | 1.07 | 3.14 |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 13 | 3 | 23% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 140 | 130 | 100 | 200 | 36.3 | 0.259 | 0.606 |
| 14_2_116 | MW-17001R | Appendix IV | Lead | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.965 | 0.550 | 0.550 | 2.80 | 0.831 | 0.861 | 2.01 |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 83.3 | 90.0 | 25.0 | 170 | 43.7 | 0.525 | 0.453 |
| 14_2_118 | MW-17001R | Appendix IV | Mercury | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 13 | 7 | 54% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 2.01 | 1.20 | 0.370 | 6.20 | 1.96 | 0.978 | 1.74 |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Normal | Normal | 1.08 | 1.18 | 0 | 2.02 | 0.620 | 0.573 | -0.341 |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 13 | 12 | 92% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.859 | 0.500 | 0.170 | 2.50 | 0.760 | 0.885 | 1.83 |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.709 | 0.380 | 0.380 | 1.90 | 0.576 | 0.812 | 1.60 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 18 | 16 | 89% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.724 | 0.625 | 0.140 | 2.00 | 0.553 | 0.764 | 0.707 |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Gamma | Nonparametric | 42.5 | 31.0 | 0.590 | 220 | 55.2 | 1.30 | 2.01 |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 96.8 | 80.0 | 39.0 | 240 | 48.8 | 0.504 | 1.66 |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.597 | 0.250 | 0.140 | 1.20 | 0.422 | 0.708 | 0.301 |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 18 | 13 | 72% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.339 | 0.250 | 0.0870 | 1.20 | 0.319 | 0.939 | 2.53 |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.651 | 0.470 | 0.150 | 1.20 | 0.393 | 0.604 | 0.112 |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 18 | 15 | 83% | 2017-12-07 to 2025-10-28 | | Nonparametric | 4.54 | 0.520 | 0.120 | 15.0 | 6.02 | 1.33 | 1.18 |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 19 | 8 | 42% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 546 | 340 | 160 | 1000 | 365 | 0.668 | 0.462 |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 1.20 | 1.00 | 0.130 | 2.80 | 0.914 | 0.761 | 1.16 |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 162 | 160 | 46.0 | 240 | 55.6 | 0.343 | -0.318 |
| 15_2_118 | MW-17002 | Appendix IV | Mercury | ug/L | 18 | 18 | 100% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 19 | 6 | 32% | 2017-12-07 to 2025-10-28 | Gamma; Normal | Gamma | 488 | 30.1 | 2.70 | 1800 | 640 | 1.31 | 1.05 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 19 | 5 | 26% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 1.69 | 1.19 | 0.100 | 5.04 | 1.39 | 0.823 | 1.44 |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.931 | 1.00 | 0.110 | 2.50 | 0.702 | 0.755 | 1.30 |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 1.28 | 1.90 | 0.120 | 2.00 | 0.802 | 0.628 | -0.345 |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.708 | 0.625 | 0.250 | 2.00 | 0.521 | 0.736 | 0.799 |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 19 | 3 | 16% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 52.6 | 21.1 | 1.00 | 220 | 73.6 | 1.40 | 1.58 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 88 | 78.1 | 18.0 | 320 | 69.6 | 0.791 | 2.24 |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 18 | 15 | 83% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.593 | 0.260 | 0.150 | 1.20 | 0.426 | 0.717 | 0.295 |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.327 | 0.250 | 0.0810 | 1.20 | 0.320 | 0.981 | 2.61 |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.658 | 0.520 | 0.160 | 1.20 | 0.391 | 0.595 | 0.0476 |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 18 | 12 | 67% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 14.3 | 4.30 | 0.120 | 87.0 | 23.0 | 1.61 | 2.32 |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 19 | 12 | 63% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Nonparametric | 448 | 140 | 20.0 | 1000 | 438 | 0.977 | 0.526 |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 18 | 18 | 100% | 2017-12-07 to 2025-10-28 | | Nonparametric | 1.38 | 1.00 | 0.550 | 2.80 | 0.927 | 0.672 | 0.915 |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Nonparametric | Nonparametric | 87.9 | 25.0 | 13.0 | 360 | 113 | 1.28 | 1.51 |
| 16_2_118 | MW-17003 | Appendix IV | Mercury | ug/L | 18 | 18 | 100% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 19 | 5 | 26% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 42 | 17.0 | 5.00 | 230 | 59.0 | 1.41 | 2.19 |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 19 | 9 | 47% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 1.01 | 1.00 | 0.351 | 1.55 | 0.399 | 0.395 | -0.222 |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 19 | 14 | 74% | 2017-12-07 to 2025-10-28 | Nonparametric | Nonparametric | 0.968 | 1.00 | 0.130 | 2.50 | 0.779 | 0.804 | 1.00 |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | 2017-12-07 to 2025-10-28 | | Nonparametric | 1.31 | 1.90 | 0.380 | 2.00 | 0.761 | 0.580 | -0.348 |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.739 | 1.00 | 0.100 | 2.00 | 0.536 | 0.724 | 0.512 |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 19 | 2 | 11% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 5.52 | 2.70 | 0.650 | 18.0 | 5.56 | 1.01 | 1.36 |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Gamma | 177 | 145 | 51.0 | 450 | 113 | 0.635 | 1.27 |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.603 | 0.250 | 0.200 | 1.20 | 0.416 | 0.690 | 0.314 |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.349 | 0.250 | 0.200 | 1.20 | 0.316 | 0.906 | 2.51 |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 2017-12-06 to 2025-10-28 | Lognormal | Nonparametric | 1.04 | 1.00 | 0.170 | 7.80 | 1.69 | 1.62 | 3.94 |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 18 | 11 | 61% | 2017-12-06 to 2025-10-28 | Lognormal | Nonparametric | 4.79 | 2.60 | 0.160 | 15.0 | 5.90 | 1.23 | 1.14 |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 19 | 14 | 74% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 446 | 200 | 67.0 | 1000 | 437 | 0.979 | 0.562 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-10-28 | | Nonparametric | 2.08 | 1.00 | 0.130 | 19.0 | 4.31 | 2.07 | 3.98 |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 19 | 6 | 32% | 2017-12-06 to 2025-10-28 | Nonparametric | Nonparametric | 27.6 | 13.0 | 2.80 | 71.0 | 24.0 | 0.870 | 0.673 |
| 17_2_118 | MW-17004 | Appendix IV | Mercury | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 19 | 7 | 37% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal; Normal | Gamma | 14.8 | 7.50 | 0.800 | 46.0 | 13.9 | 0.942 | 0.911 |

*(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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 19 | 7 | 37% | 2017-12-06 to 2025-10-28 | Nonparametric | Nonparametric | 1.12 | 0.836 | 0 | 4.93 | 1.03 | 0.913 | 3.04 |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | 2017-12-06 to 2025-10-28 | | Nonparametric | 1.03 | 1.00 | 0.150 | 2.60 | 0.795 | 0.771 | 1.04 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-10-28 | | Nonparametric | 1.26 | 1.85 | 0.120 | 2.00 | 0.816 | 0.649 | -0.355 |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.703 | 0.625 | 0.250 | 2.00 | 0.517 | 0.736 | 0.836 |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 19 | 13 | 68% | 2017-12-06 to 2025-10-28 | Lognormal | Nonparametric | 0.957 | 0.550 | 0.110 | 2.90 | 0.895 | 0.935 | 1.49 |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Gamma | 162 | 131 | 64.0 | 456 | 105 | 0.648 | 1.55 |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.592 | 0.250 | 0.0600 | 1.20 | 0.428 | 0.722 | 0.274 |
| 18_2_106 | MW-17005 | Appendix IV | Cadmium | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.336 | 0.250 | 0.200 | 1.20 | 0.315 | 0.938 | 2.68 |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Nonparametric | 0.665 | 0.480 | 0.240 | 1.20 | 0.390 | 0.587 | 0.122 |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-28 | | Nonparametric | 4.57 | 0.520 | 0.360 | 15.0 | 6.00 | 1.31 | 1.18 |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 19 | 15 | 79% | 2017-12-06 to 2025-10-28 | | Nonparametric | 440 | 140 | 22.0 | 1000 | 441 | 1.00 | 0.569 |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.952 | 0.775 | 0.130 | 2.80 | 0.720 | 0.757 | 2.05 |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 19 | 3 | 16% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Gamma | 13.3 | 10.0 | 3.90 | 47.5 | 11.2 | 0.837 | 2.22 |
| 18_2_118 | MW-17005 | Appendix IV | Mercury | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 0 | NA |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 19 | 15 | 79% | 2017-12-06 to 2025-10-28 | | Nonparametric | 3.47 | 5.00 | 0.290 | 7.60 | 2.35 | 0.679 | 0.0117 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 19 | 8 | 42% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Gamma | 1.16 | 0.960 | 0.320 | 4.22 | 0.867 | 0.748 | 2.62 |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | 2017-12-06 to 2025-10-28 | | Nonparametric | 0.954 | 1.00 | 0.120 | 2.50 | 0.676 | 0.709 | 1.45 |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-28 | | Nonparametric | 1.12 | 0.690 | 0.380 | 2.00 | 0.797 | 0.710 | 0.167 |
| 19_2_101 | MW-17006 | Appendix IV | Antimony | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-29 | | Nonparametric | 0.703 | 0.625 | 0.250 | 2.00 | 0.517 | 0.736 | 0.836 |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 19 | 7 | 37% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 2.75 | 2.40 | 0.550 | 6.60 | 2.09 | 0.762 | 0.479 |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal | Gamma | 94.5 | 83.3 | 65.0 | 190 | 31.7 | 0.335 | 1.78 |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-29 | | Nonparametric | 0.603 | 0.250 | 0.200 | 1.20 | 0.416 | 0.690 | 0.314 |
| 19_2_106 | MW-17006 | Appendix IV | Cadmium | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-29 | | Nonparametric | 0.336 | 0.250 | 0.200 | 1.20 | 0.315 | 0.938 | 2.68 |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 19 | 15 | 79% | 2017-12-06 to 2025-10-29 | | Nonparametric | 0.651 | 0.580 | 0.210 | 1.20 | 0.418 | 0.643 | 0.118 |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-29 | | Nonparametric | 4.56 | 0.520 | 0.170 | 15.0 | 6.01 | 1.32 | 1.18 |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 19 | 9 | 47% | 2017-12-06 to 2025-10-29 | Gamma; Normal | Normal | 461 | 190 | 22.0 | 1000 | 426 | 0.924 | 0.545 |
| 19_2_116 | MW-17006 | Appendix IV | Lead | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-29 | | Nonparametric | 0.975 | 0.775 | 0.550 | 2.80 | 0.698 | 0.716 | 2.23 |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 30.1 | 29.0 | 12.0 | 57.0 | 9.72 | 0.323 | 0.683 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-29 | | Nonparametric | 0.256 | 0.200 | 0.200 | 1.20 | 0.236 | 0.922 | 4.24 |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 19 | 13 | 68% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 7.49 | 5.00 | 1.20 | 53.0 | 11.7 | 1.56 | 3.66 |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 19 | 6 | 32% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 0.995 | 0.888 | 0.210 | 2.66 | 0.599 | 0.602 | 1.56 |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | 2017-12-06 to 2025-10-29 | | Nonparametric | 0.955 | 1.00 | 0.140 | 2.50 | 0.675 | 0.707 | 1.46 |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | 2017-12-06 to 2025-10-29 | | Nonparametric | 1.12 | 0.690 | 0.380 | 2.00 | 0.797 | 0.710 | 0.167 |

[a] Non-detects are excluded from goodness-of-fit tests.

**Table 2:** Summary Statistics, Non-Detects Excluded

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-10-27 | | Nonparametric | 1.00 | 1.00 | 1.00 | 1.00 | NA | NA | NA |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | 2015-12-01 to 2025-10-27 | Gamma; Normal | Gamma | 13.3 | 12.5 | 0.740 | 45.0 | 11.2 | 0.840 | 1.01 |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-27 | Nonparametric | Nonparametric | 53.7 | 27.0 | 9.00 | 250 | 56.9 | 1.06 | 1.93 |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 25 | 21 | 84% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.877 | 0.660 | 0.190 | 2.00 | 0.828 | 0.944 | 1.08 |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.130 | 0.130 | 0.100 | 0.160 | 0.0424 | 0.326 | NA |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 25 | 18 | 72% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 111 | 100 | 37.0 | 220 | 55.6 | 0.501 | 1.18 |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Normal | 24.8 | 21.0 | 11.0 | 63.9 | 12.0 | 0.484 | 1.62 |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 25 | 6 | 24% | 2015-12-01 to 2025-10-27 | Gamma | Gamma | 24.1 | 16.0 | 0.560 | 60.0 | 22.2 | 0.920 | 0.386 |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 25 | 16 | 64% | 2015-12-01 to 2025-10-27 | Nonparametric | Nonparametric | 0.651 | 0.747 | 0.0720 | 1.03 | 0.335 | 0.515 | -1.25 |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | 2015-12-01 to 2025-10-27 | | Nonparametric | 2.00 | 2.00 | 2.00 | 2.00 | NA | NA | NA |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 26 | 22 | 85% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.273 | 0.265 | 0.150 | 0.410 | 0.119 | 0.437 | 0.226 |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal | Gamma | 78.5 | 62.2 | 28.0 | 210 | 45.9 | 0.585 | 1.12 |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 25 | 24 | 96% | 2015-12-01 to 2025-10-27 | | Nonparametric | 0.0580 | 0.0580 | 0.0580 | 0.0580 | NA | NA | NA |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 26 | 15 | 58% | 2015-12-01 to 2025-10-27 | Nonparametric | Nonparametric | 0.497 | 0.260 | 0.210 | 2.00 | 0.546 | 1.10 | 2.56 |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 25 | 20 | 80% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 0.302 | 0.190 | 0.110 | 0.560 | 0.211 | 0.699 | 0.573 |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 27 | 15 | 56% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 328 | 315 | 260 | 410 | 47.7 | 0.146 | 0.216 |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 26 | 0 | 0% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal | Gamma | 30.3 | 28.0 | 14.0 | 54.0 | 11.7 | 0.388 | 0.559 |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 26 | 11 | 42% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal | Gamma | 11.2 | 7.00 | 0.420 | 33.0 | 11.4 | 1.02 | 0.806 |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 2015-12-01 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 1.19 | 1.06 | 0.400 | 2.03 | 0.556 | 0.467 | 0.198 |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 26 | 23 | 88% | 2015-12-01 to 2025-10-27 | | Nonparametric | 1.07 | 1.00 | 1.00 | 1.20 | 0.115 | 0.108 | 1.73 |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 25 | 19 | 76% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 0.777 | 0.510 | 0.140 | 2.00 | 0.748 | 0.963 | 0.982 |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-29 | Nonparametric | Nonparametric | 77.6 | 52.0 | 31.0 | 200 | 46.6 | 0.601 | 1.35 |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.280 | 0.280 | 0.280 | 0.280 | NA | NA | NA |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 25 | 20 | 80% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 1.33 | 1.00 | 0.140 | 2.50 | 0.929 | 0.699 | 0.0863 |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.166 | 0.115 | 0.0820 | 0.350 | 0.124 | 0.750 | 1.90 |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 26 | 17 | 65% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 215 | 170 | 97.0 | 490 | 122 | 0.567 | 1.57 |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-10-29 | | Nonparametric | 4.70 | 4.70 | 4.70 | 4.70 | NA | NA | NA |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-29 | Lognormal; Normal | Normal | 24.6 | 23.0 | 13.0 | 46.0 | 8.83 | 0.359 | 0.983 |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 25 | 5 | 20% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal | Gamma | 11 | 6.70 | 0.620 | 77.2 | 16.8 | 1.53 | 3.51 |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 2015-12-01 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 0.706 | 0.596 | 0.160 | 1.19 | 0.319 | 0.452 | -0.0157 |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.727 | 0.900 | 0.280 | 1.00 | 0.390 | 0.537 | -1.60 |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | 2015-12-01 to 2025-10-29 | | Nonparametric | 0.140 | 0.140 | 0.140 | 0.140 | NA | NA | NA |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 10 | 5 | 50% | 2022-02-01 to 2025-10-29 | Nonparametric | Nonparametric | 0.518 | 0.260 | 0.200 | 1.60 | 0.606 | 1.17 | 2.22 |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 10 | 0 | 0% | 2022-02-01 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 170 | 170 | 140 | 200 | 17 | 0.1000 | 0.170 |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 10 | 9 | 90% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.100 | 0.100 | 0.100 | 0.100 | NA | NA | NA |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 10 | 9 | 90% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.430 | 0.430 | 0.430 | 0.430 | NA | NA | NA |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 10 | 8 | 80% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.120 | 0.120 | 0.110 | 0.130 | 0.0141 | 0.118 | NA |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10 | 1 | 10% | 2022-02-01 to 2025-10-29 | Gamma; Lognormal | Gamma | 284 | 270 | 180 | 510 | 94.1 | 0.331 | 1.87 |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 10 | 0 | 0% | 2022-02-01 to 2025-10-29 | Nonparametric | Nonparametric | 55.6 | 48.0 | 36.0 | 130 | 27.6 | 0.497 | 2.60 |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 10 | 2 | 20% | 2022-02-01 to 2025-10-29 | Gamma; Lognormal | Gamma | 2.96 | 1.95 | 0.680 | 11.0 | 3.39 | 1.14 | 2.38 |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 10 | 3 | 30% | 2022-02-01 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 1.10 | 1.21 | 0.431 | 1.76 | 0.493 | 0.449 | -0.0938 |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 10 | 8 | 80% | 2022-02-01 to 2025-10-29 | | Nonparametric | 0.605 | 0.605 | 0.110 | 1.10 | 0.700 | 1.16 | NA |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 13 | 6 | 46% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 2.98 | 0.850 | 0.270 | 13.0 | 4.60 | 1.55 | 2.26 |

*(Table continues on next page)*

**Table 2:** Summary Statistics, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 25.6 | 23.0 | 3.20 | 60.0 | 18.2 | 0.713 | 0.780 |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 110 | 108 | 60.0 | 170 | 35.9 | 0.327 | 0.152 |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.0580 | 0.0580 | 0.0580 | 0.0580 | NA | NA | NA |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 13 | 11 | 85% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.235 | 0.235 | 0.220 | 0.250 | 0.0212 | 0.0903 | NA |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 13 | 8 | 62% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 0.262 | 0.220 | 0.150 | 0.420 | 0.105 | 0.402 | 0.871 |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 13 | 6 | 46% | 2020-05-21 to 2025-10-29 | Gamma; Normal | Normal | 109 | 110 | 12.0 | 180 | 52.4 | 0.479 | -0.896 |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 48.4 | 48.0 | 3.80 | 120 | 27.5 | 0.568 | 1.22 |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 130 | 120 | 2.00 | 430 | 130 | 1.00 | 0.992 |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 13 | 5 | 38% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 1.15 | 0.958 | 0.250 | 2.12 | 0.694 | 0.605 | 0.409 |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 13 | 7 | 54% | 2020-05-21 to 2025-10-29 | Nonparametric | Nonparametric | 0.537 | 0.305 | 0.240 | 1.10 | 0.400 | 0.745 | 0.977 |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 13 | 11 | 85% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.180 | 0.180 | 0.140 | 0.220 | 0.0566 | 0.314 | NA |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 13 | 1 | 8% | 2020-05-21 to 2025-10-29 | Nonparametric | Nonparametric | 2.84 | 1.90 | 1.30 | 10.1 | 2.54 | 0.894 | 2.58 |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 1016 | 1000 | 789 | 1300 | 151 | 0.149 | 0.203 |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.0850 | 0.0850 | 0.0850 | 0.0850 | NA | NA | NA |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 13 | 2 | 15% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 0.833 | 0.790 | 0.650 | 1.20 | 0.173 | 0.208 | 1.30 |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 13 | 1 | 8% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 1.08 | 0.960 | 0.660 | 1.90 | 0.354 | 0.327 | 1.42 |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 13 | 10 | 77% | 2020-05-21 to 2025-10-29 | | Nonparametric | 91.3 | 81.0 | 53.0 | 140 | 44.4 | 0.486 | 0.990 |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 13 | 11 | 85% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.0795 | 0.0795 | 0.0590 | 0.100 | 0.0290 | 0.365 | NA |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 13 | 3 | 23% | 2020-05-21 to 2025-10-29 | Nonparametric | Nonparametric | 16.1 | 5.10 | 3.70 | 110 | 33.0 | 2.05 | 3.14 |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 13 | 9 | 69% | 2020-05-21 to 2025-10-29 | | Nonparametric | 3.35 | 2.75 | 0.390 | 7.50 | 3.24 | 0.968 | 0.719 |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Normal | Normal | 4.27 | 4.17 | 1.60 | 6.04 | 1.24 | 0.290 | -0.579 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 13 | 8 | 62% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 1.53 | 0.190 | 0.120 | 5.90 | 2.49 | 1.63 | 2.03 |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | 2015-12-01 to 2025-10-28 | Nonparametric | Nonparametric | 3.86 | 2.10 | 1.60 | 13.0 | 3.53 | 0.915 | 1.90 |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 985 | 981 | 772 | 1200 | 97.0 | 0.0985 | 0.00190 |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 24 | 22 | 92% | 2015-12-01 to 2025-10-28 | | Nonparametric | 0.0430 | 0.0430 | 0.0200 | 0.0660 | 0.0325 | 0.756 | NA |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 25 | 1 | 4% | 2015-12-01 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 3.19 | 3.00 | 0.510 | 11.0 | 2.62 | 0.822 | 1.53 |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 2015-12-01 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.871 | 0.860 | 0.500 | 1.30 | 0.233 | 0.268 | 0.421 |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 26 | 25 | 96% | 2015-12-01 to 2025-10-28 | | Nonparametric | 360 | 360 | 360 | 360 | NA | NA | NA |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 25 | 16 | 64% | 2015-12-01 to 2025-10-28 | Nonparametric | Nonparametric | 6.74 | 4.80 | 3.50 | 18.0 | 4.82 | 0.714 | 2.03 |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 25 | 22 | 88% | 2015-12-01 to 2025-10-28 | | Nonparametric | 0.687 | 0.360 | 0.200 | 1.50 | 0.709 | 1.03 | 1.63 |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 25 | 0 | 0% | 2015-12-01 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 4.80 | 4.75 | 3.00 | 5.89 | 0.649 | 0.135 | -0.593 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 25 | 12 | 48% | 2015-12-01 to 2025-10-28 | Gamma; Normal | Gamma | 2.85 | 2.70 | 0.150 | 8.00 | 1.97 | 0.690 | 1.40 |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 25 | 14 | 56% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal | Nonparametric | 1.05 | 0.640 | 0.350 | 3.80 | 1.02 | 0.975 | 2.37 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 148 | 140 | 93.0 | 280 | 38.5 | 0.261 | 2.22 |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.140 | 0.140 | 0.140 | 0.140 | NA | NA | NA |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 25 | 10 | 40% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 0.725 | 0.600 | 0.280 | 1.80 | 0.412 | 0.569 | 1.21 |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.380 | 0.400 | 0.160 | 0.560 | 0.170 | 0.447 | -0.612 |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 175 | 180 | 110 | 250 | 49.9 | 0.286 | 0.225 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 24 | 17 | 71% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal | Nonparametric | 1.04 | 0.690 | 0.160 | 3.90 | 1.28 | 1.23 | 2.44 |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 20.6 | 21.0 | 12.0 | 33.0 | 5.25 | 0.255 | 0.323 |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 25 | 23 | 92% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.865 | 0.865 | 0.530 | 1.20 | 0.474 | 0.548 | NA |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 25 | 7 | 28% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 1.25 | 1.24 | 0.707 | 1.77 | 0.265 | 0.211 | 0.239 |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | 2015-12-02 to 2025-10-28 | | Nonparametric | 1.41 | 0.720 | 0.190 | 4.00 | 1.76 | 1.25 | 1.79 |

*(Table continues on next page)*

**Table 2:** Summary Statistics, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.170 | 0.170 | 0.170 | 0.170 | NA | NA | NA |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 25 | 15 | 60% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 1.52 | 0.555 | 0.400 | 8.10 | 2.36 | 1.56 | 2.93 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 211 | 150 | 78.0 | 640 | 150 | 0.709 | 1.25 |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.0580 | 0.0580 | 0.0580 | 0.0580 | NA | NA | NA |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.0780 | 0.0780 | 0.0780 | 0.0780 | NA | NA | NA |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 25 | 14 | 56% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.649 | 0.610 | 0.300 | 1.00 | 0.234 | 0.361 | 0.387 |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 0.849 | 0.700 | 0.590 | 1.80 | 0.386 | 0.455 | 2.06 |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | 2015-12-02 to 2025-10-28 | | Nonparametric | 107 | 100 | 51.0 | 170 | 59.8 | 0.559 | 0.519 |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 24 | 20 | 83% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.400 | 0.255 | 0.160 | 0.930 | 0.363 | 0.907 | 1.71 |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 25 | 3 | 12% | 2015-12-02 to 2025-10-28 | Nonparametric | Nonparametric | 18.3 | 22.0 | 1.20 | 33.0 | 9.48 | 0.518 | -0.591 |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 25 | 21 | 84% | 2015-12-02 to 2025-10-28 | | Nonparametric | 3.57 | 2.45 | 0.580 | 8.80 | 3.74 | 1.05 | 1.31 |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 25 | 5 | 20% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 1.52 | 1.32 | 0.331 | 3.81 | 0.846 | 0.556 | 1.15 |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 25 | 19 | 76% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.788 | 0.630 | 0.120 | 2.00 | 0.733 | 0.930 | 0.923 |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 24 | 21 | 88% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.319 | 0.280 | 0.0970 | 0.580 | 0.244 | 0.764 | 0.701 |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 25 | 18 | 72% | 2015-12-02 to 2025-10-27 | Gamma; Lognormal; Normal | Nonparametric | 0.397 | 0.320 | 0.230 | 0.700 | 0.182 | 0.459 | 0.850 |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-27 | Gamma; Normal | Normal | 176 | 150 | 47.0 | 393 | 118 | 0.671 | 0.468 |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 25 | 13 | 52% | 2015-12-02 to 2025-10-27 | Gamma; Lognormal | Nonparametric | 0.677 | 0.515 | 0.260 | 2.00 | 0.496 | 0.733 | 1.96 |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | 2015-12-02 to 2025-10-27 | Gamma; Lognormal | Nonparametric | 0.314 | 0.270 | 0.180 | 0.630 | 0.183 | 0.581 | 1.89 |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 26 | 22 | 85% | 2015-12-02 to 2025-10-27 | | Nonparametric | 119 | 135 | 15.0 | 190 | 74.9 | 0.631 | -1.15 |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-27 | | Nonparametric | 0.710 | 0.710 | 0.710 | 0.710 | NA | NA | NA |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 25 | 4 | 16% | 2015-12-02 to 2025-10-27 | Normal | Normal | 12.1 | 14.0 | 4.60 | 20.0 | 4.89 | 0.405 | -0.262 |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 25 | 24 | 96% | 2015-12-02 to 2025-10-27 | | Nonparametric | 0.250 | 0.250 | 0.250 | 0.250 | NA | NA | NA |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 25 | 6 | 24% | 2015-12-02 to 2025-10-27 | Gamma; Lognormal; Normal | Normal | 1.89 | 1.94 | 0.652 | 4.68 | 1.02 | 0.539 | 1.04 |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | 2015-12-02 to 2025-10-27 | | Nonparametric | 1.21 | 1.20 | 0.440 | 2.00 | 0.658 | 0.543 | 0.0800 |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.150 | 0.150 | 0.150 | 0.150 | NA | NA | NA |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 25 | 6 | 24% | 2015-12-02 to 2025-10-29 | Gamma; Normal | Normal | 1.38 | 1.30 | 0.120 | 3.00 | 0.645 | 0.469 | 0.549 |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 301 | 252 | 211 | 480 | 80.2 | 0.267 | 0.732 |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.0240 | 0.0240 | 0.0240 | 0.0240 | NA | NA | NA |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 25 | 6 | 24% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 1.21 | 1.00 | 0.710 | 2.00 | 0.504 | 0.416 | 0.889 |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 24 | 14 | 58% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 0.850 | 0.890 | 0.470 | 1.00 | 0.164 | 0.193 | -1.45 |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | 2015-12-02 to 2025-10-29 | | Nonparametric | 73.7 | 68.0 | 13.0 | 140 | 63.7 | 0.865 | 0.397 |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 25 | 18 | 72% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 2.77 | 2.70 | 1.90 | 3.70 | 0.732 | 0.264 | 0.324 |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.750 | 0.750 | 0.750 | 0.750 | NA | NA | NA |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 25 | 4 | 16% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 1.79 | 1.55 | 0.490 | 3.24 | 0.696 | 0.388 | 0.328 |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 25 | 15 | 60% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 1.41 | 1.00 | 0.120 | 4.00 | 1.29 | 0.914 | 1.02 |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 25 | 24 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 1.90 | 1.90 | 1.90 | 1.90 | NA | NA | NA |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 26 | 10 | 38% | 2015-12-02 to 2025-10-28 | Normal | Nonparametric | 3.54 | 4.00 | 0.110 | 8.00 | 2.99 | 0.844 | 0.170 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 2015-12-02 to 2025-10-28 | Lognormal | Lognormal | 170 | 145 | 102 | 290 | 53.5 | 0.315 | 0.608 |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 26 | 17 | 65% | 2015-12-02 to 2025-10-28 | Lognormal | Nonparametric | 0.646 | 0.370 | 0.240 | 2.00 | 0.593 | 0.919 | 1.78 |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 25 | 19 | 76% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.345 | 0.350 | 0.190 | 0.520 | 0.117 | 0.338 | 0.199 |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 27 | 19 | 70% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 230 | 185 | 110 | 440 | 125 | 0.542 | 0.853 |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 26 | 8 | 31% | 2015-12-02 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 32.1 | 25.0 | 11.0 | 68.0 | 17.7 | 0.551 | 0.736 |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 25 | 24 | 96% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.290 | 0.290 | 0.290 | 0.290 | NA | NA | NA |

*(Table continues on next page)*

**Table 2:** Summary Statistics, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 26 | 13 | 50% | 2015-12-02 to 2025-10-28 | Normal | Nonparametric | 13.6 | 13.6 | 0.310 | 47.6 | 12.6 | 0.927 | 1.57 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 2015-12-02 to 2025-10-28 | Lognormal | Nonparametric | 1.13 | 0.880 | 0.450 | 3.50 | 0.760 | 0.671 | 2.87 |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 26 | 24 | 92% | 2015-12-02 to 2025-10-28 | | Nonparametric | 0.225 | 0.225 | 0.110 | 0.340 | 0.163 | 0.723 | NA |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 25 | 8 | 32% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 5.14 | 2.00 | 0.590 | 27.0 | 7.85 | 1.53 | 2.15 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 2015-12-02 to 2025-10-29 | Lognormal | Lognormal | 86.1 | 70.0 | 38.0 | 270 | 63.2 | 0.734 | 2.11 |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 0.601 | 0.280 | 0.250 | 2.00 | 0.620 | 1.03 | 2.08 |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.110 | 0.110 | 0.110 | 0.110 | 0 | 0 | NA |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 26 | 16 | 62% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal | Nonparametric | 144 | 120 | 89.0 | 260 | 64.2 | 0.446 | 1.40 |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 25 | 5 | 20% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal | Gamma | 21.0 | 16.4 | 8.30 | 67.0 | 14.7 | 0.700 | 1.97 |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.550 | 0.550 | 0.550 | 0.550 | NA | NA | NA |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 25 | 4 | 16% | 2015-12-02 to 2025-10-29 | Nonparametric | Nonparametric | 11.9 | 7.10 | 5.10 | 34.0 | 8.99 | 0.753 | 1.45 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 2015-12-02 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 1.04 | 0.924 | 0.178 | 3.28 | 0.812 | 0.780 | 1.86 |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | 2015-12-02 to 2025-10-29 | | Nonparametric | 0.477 | 0.320 | 0.110 | 1.00 | 0.465 | 0.976 | 1.34 |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 13 | 12 | 92% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.120 | 0.120 | 0.120 | 0.120 | NA | NA | NA |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 13 | 5 | 38% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 1.43 | 0.430 | 0.190 | 7.30 | 2.45 | 1.71 | 2.52 |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 182 | 200 | 90.6 | 300 | 67.9 | 0.372 | 0.0392 |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 13 | 8 | 62% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 0.234 | 0.210 | 0.170 | 0.330 | 0.0688 | 0.294 | 0.703 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 13 | 6 | 46% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal | Gamma | 0.353 | 0.260 | 0.220 | 0.830 | 0.218 | 0.618 | 2.31 |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 13 | 3 | 23% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 142 | 130 | 100 | 200 | 31.6 | 0.222 | 0.673 |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 83.3 | 90.0 | 25.0 | 170 | 43.7 | 0.525 | 0.453 |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 13 | 7 | 54% | 2020-05-21 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 1.28 | 1.19 | 0.370 | 2.50 | 0.957 | 0.748 | 0.187 |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 2020-05-21 to 2025-10-29 | Normal | Normal | 1.08 | 1.18 | 0 | 2.02 | 0.620 | 0.573 | -0.341 |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 13 | 12 | 92% | 2020-05-21 to 2025-10-29 | | Nonparametric | 0.170 | 0.170 | 0.170 | 0.170 | NA | NA | NA |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 18 | 16 | 89% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.820 | 0.820 | 0.140 | 1.50 | 0.962 | 1.17 | NA |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Gamma | Nonparametric | 42.5 | 31.0 | 0.590 | 220 | 55.2 | 1.30 | 2.01 |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 96.8 | 80.0 | 39.0 | 240 | 48.8 | 0.504 | 1.66 |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.140 | 0.140 | 0.140 | 0.140 | NA | NA | NA |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 18 | 13 | 72% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.261 | 0.260 | 0.0870 | 0.350 | 0.107 | 0.411 | -1.32 |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.309 | 0.310 | 0.150 | 0.470 | 0.0983 | 0.318 | 0.112 |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 18 | 15 | 83% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.280 | 0.300 | 0.120 | 0.420 | 0.151 | 0.539 | -0.586 |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 19 | 8 | 42% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 288 | 260 | 160 | 530 | 100 | 0.347 | 1.47 |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.130 | 0.130 | 0.130 | 0.130 | NA | NA | NA |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 162 | 160 | 46.0 | 240 | 55.6 | 0.343 | -0.318 |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 19 | 6 | 32% | 2017-12-07 to 2025-10-28 | Gamma; Normal | Gamma | 711 | 700 | 2.70 | 1800 | 666 | 0.936 | 0.461 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 19 | 5 | 26% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 1.50 | 1.13 | 0.100 | 5.04 | 1.22 | 0.813 | 2.07 |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.420 | 0.235 | 0.110 | 1.10 | 0.458 | 1.09 | 1.89 |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.120 | 0.120 | 0.120 | 0.120 | NA | NA | NA |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 1.10 | 1.10 | 1.10 | 1.10 | NA | NA | NA |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 19 | 3 | 16% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 62.3 | 27.5 | 1.00 | 220 | 76.6 | 1.23 | 1.35 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 88 | 78.1 | 18.0 | 320 | 69.6 | 0.791 | 2.24 |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 18 | 15 | 83% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.193 | 0.160 | 0.150 | 0.270 | 0.0666 | 0.344 | 1.69 |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | 2017-12-07 to 2025-10-28 | | Nonparametric | 0.0810 | 0.0810 | 0.0810 | 0.0810 | NA | NA | NA |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 0.350 | 0.350 | 0.160 | 0.520 | 0.151 | 0.431 | -0.0941 |

*(Table continues on next page)*

**Table 2:** Summary Statistics, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Date Range | Distributions Fit | Recommended Distribution | Mean | Median | Minimum | Maximum | SD | CV | Skewness |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 18 | 12 | 67% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 30 | 20.0 | 0.120 | 87.0 | 35.6 | 1.19 | 0.820 |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 19 | 12 | 63% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Nonparametric | 142 | 110 | 81.0 | 360 | 98.0 | 0.689 | 2.42 |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 2017-12-07 to 2025-10-28 | Nonparametric | Nonparametric | 87.9 | 25.0 | 13.0 | 360 | 113 | 1.28 | 1.51 |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 19 | 5 | 26% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal | Gamma | 55.2 | 24.5 | 6.30 | 230 | 64.1 | 1.16 | 1.82 |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 19 | 9 | 47% | 2017-12-07 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 0.906 | 0.805 | 0.351 | 1.38 | 0.355 | 0.391 | 0.0511 |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 19 | 14 | 74% | 2017-12-07 to 2025-10-28 | Nonparametric | Nonparametric | 0.578 | 0.200 | 0.130 | 2.20 | 0.907 | 1.57 | 2.23 |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 0.470 | 0.110 | 0.100 | 1.20 | 0.632 | 1.35 | 1.73 |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 19 | 2 | 11% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal; Normal | Normal | 6.05 | 3.70 | 0.650 | 18.0 | 5.65 | 0.934 | 1.23 |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Gamma | 177 | 145 | 51.0 | 450 | 113 | 0.635 | 1.27 |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 0.490 | 0.490 | 0.490 | 0.490 | NA | NA | NA |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 2017-12-06 to 2025-10-28 | Lognormal | Nonparametric | 1.70 | 0.360 | 0.170 | 7.80 | 3.01 | 1.78 | 2.37 |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 18 | 11 | 61% | 2017-12-06 to 2025-10-28 | Lognormal | Nonparametric | 1.07 | 0.320 | 0.160 | 3.40 | 1.34 | 1.26 | 1.33 |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 19 | 14 | 74% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal; Normal | Nonparametric | 115 | 89.0 | 67.0 | 230 | 67.4 | 0.584 | 1.75 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 6.42 | 0.130 | 0.130 | 19.0 | 10.9 | 1.70 | 1.73 |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 19 | 6 | 32% | 2017-12-06 to 2025-10-28 | Nonparametric | Nonparametric | 35.9 | 50.0 | 2.80 | 71.0 | 25.1 | 0.699 | -0.0627 |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 19 | 7 | 37% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal; Normal | Gamma | 21.1 | 21.0 | 0.800 | 46.0 | 14.0 | 0.664 | 0.204 |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 19 | 7 | 37% | 2017-12-06 to 2025-10-28 | Nonparametric | Nonparametric | 1.04 | 0.757 | 0 | 4.93 | 1.26 | 1.21 | 3.06 |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 0.775 | 0.175 | 0.150 | 2.60 | 1.22 | 1.57 | 2.0 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 18 | 15 | 83% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 0.683 | 0.130 | 0.120 | 1.80 | 0.967 | 1.42 | 1.73 |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 19 | 13 | 68% | 2017-12-06 to 2025-10-28 | Lognormal | Nonparametric | 0.638 | 0.185 | 0.110 | 2.90 | 1.11 | 1.74 | 2.43 |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Gamma | 162 | 131 | 64.0 | 456 | 105 | 0.648 | 1.55 |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 0.0600 | 0.0600 | 0.0600 | 0.0600 | NA | NA | NA |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Nonparametric | 0.435 | 0.335 | 0.240 | 1.10 | 0.281 | 0.647 | 2.36 |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 0.360 | 0.360 | 0.360 | 0.360 | NA | NA | NA |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 19 | 15 | 79% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 90.8 | 100 | 22.0 | 140 | 52 | 0.573 | -0.862 |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 0.130 | 0.130 | 0.130 | 0.130 | NA | NA | NA |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 19 | 3 | 16% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Gamma | 13.9 | 10.5 | 3.90 | 47.5 | 12.1 | 0.866 | 1.97 |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 19 | 15 | 79% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 2.82 | 1.70 | 0.290 | 7.60 | 3.45 | 1.22 | 1.25 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 19 | 8 | 42% | 2017-12-06 to 2025-10-28 | Gamma; Lognormal | Gamma | 1.16 | 0.739 | 0.320 | 4.22 | 1.10 | 0.948 | 2.49 |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | 2017-12-06 to 2025-10-28 |  | Nonparametric | 0.120 | 0.120 | 0.120 | 0.120 | NA | NA | NA |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 19 | 7 | 37% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 3.62 | 4.25 | 0.650 | 6.60 | 2.08 | 0.574 | -0.159 |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal | Gamma | 94.5 | 83.3 | 65.0 | 190 | 31.7 | 0.335 | 1.78 |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 19 | 15 | 79% | 2017-12-06 to 2025-10-29 |  | Nonparametric | 0.552 | 0.400 | 0.210 | 1.20 | 0.465 | 0.841 | 1.29 |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-29 |  | Nonparametric | 0.170 | 0.170 | 0.170 | 0.170 | NA | NA | NA |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 19 | 9 | 47% | 2017-12-06 to 2025-10-29 | Gamma; Normal | Normal | 146 | 135 | 22.0 | 290 | 69.4 | 0.475 | 0.447 |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 30.1 | 29.0 | 12.0 | 57.0 | 9.72 | 0.323 | 0.683 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 18 | 17 | 94% | 2017-12-06 to 2025-10-29 |  | Nonparametric | 1.20 | 1.20 | 1.20 | 1.20 | NA | NA | NA |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 19 | 13 | 68% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal; Normal | Nonparametric | 15.0 | 9.15 | 1.20 | 53.0 | 19.5 | 1.30 | 1.99 |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 19 | 6 | 32% | 2017-12-06 to 2025-10-29 | Gamma; Lognormal; Normal | Normal | 1.13 | 0.964 | 0.210 | 2.66 | 0.679 | 0.600 | 1.06 |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | 2017-12-06 to 2025-10-29 |  | Nonparametric | 0.140 | 0.140 | 0.140 | 0.140 | NA | NA | NA |

**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 |
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | 0.905 | 0.028 | 0.131 | 0.361 | 0.903 | 0.025 | 0.185 | 0.034 | 0.127 | >= 0.10 | 0.541 | >= 0.10 | 1.216 | Gamma; Normal | Gamma |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.767 | 0.000 | 0.223 | 0.002 | 0.887 | 0.010 | 0.221 | 0.003 | 0.241 | < 0.01 | 1.197 | < 0.01 | 1.039 | Nonparametric | Nonparametric |
| 01_2_104 | MW-15009 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_106 | MW-15009 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 25 | 21 | 84% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.069 | | Nonparametric |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.332 | | Nonparametric |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 25 | 18 | 72% | 0.880 | 0.225 | 0.293 | 0.071 | 0.908 | 0.383 | 0.268 | 0.135 | 0.231 | >= 0.10 | 0.413 | >= 0.10 | 0.532 | Gamma; Lognormal; Normal | Nonparametric |
| 01_2_116 | MW-15009 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.858 | 0.003 | 0.156 | 0.121 | 0.963 | 0.483 | 0.122 | 0.439 | 0.123 | >= 0.10 | 0.449 | >= 0.10 | 0.436 | Gamma; Lognormal; Normal | Normal |
| 01_2_118 | MW-15009 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 25 | 6 | 24% | 0.841 | 0.005 | 0.222 | 0.015 | 0.886 | 0.028 | 0.206 | 0.033 | 0.210 | 0.01 <= p < 0.05 | 0.734 | 0.05 <= p < 0.10 | 1.544 | Gamma | Gamma |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 25 | 16 | 64% | 0.782 | 0.013 | 0.348 | 0.002 | 0.654 | 0.000 | 0.423 | 0.000 | 0.420 | < 0.01 | 1.535 | < 0.01 | 1.011 | Nonparametric | Nonparametric |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_101 | MW-15010 | Appendix IV | Antimony | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 26 | 22 | 85% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.459 | | Nonparametric |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 0.866 | 0.003 | 0.205 | 0.006 | 0.948 | 0.210 | 0.156 | 0.107 | 0.153 | >= 0.10 | 0.722 | 0.05 <= p < 0.10 | 0.562 | Gamma; Lognormal | Gamma |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 25 | 24 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_106 | MW-15010 | Appendix IV | Cadmium | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 26 | 15 | 58% | 0.570 | 0.000 | 0.417 | 0.000 | 0.723 | 0.001 | 0.326 | 0.002 | 0.377 | < 0.01 | 1.706 | < 0.01 | 0.709 | Nonparametric | Nonparametric |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 25 | 20 | 80% | 0.825 | 0.128 | 0.302 | 0.139 | 0.880 | 0.311 | 0.236 | 0.478 | 0.280 | >= 0.10 | 0.477 | >= 0.10 | 0.731 | Gamma; Lognormal; Normal | Nonparametric |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 27 | 15 | 56% | 0.951 | 0.651 | 0.169 | 0.451 | 0.954 | 0.698 | 0.180 | 0.352 | 0.186 | >= 0.10 | 0.310 | >= 0.10 | 0.146 | Gamma; Lognormal; Normal | Nonparametric |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 26 | 0 | 0% | 0.919 | 0.043 | 0.197 | 0.011 | 0.954 | 0.289 | 0.133 | 0.279 | 0.149 | >= 0.10 | 0.582 | >= 0.10 | 0.388 | Gamma; Lognormal | Gamma |
| 02_2_118 | MW-15010 | Appendix IV | Mercury | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 26 | 11 | 42% | 0.841 | 0.013 | 0.224 | 0.042 | 0.916 | 0.168 | 0.178 | 0.226 | 0.204 | >= 0.10 | 0.577 | >= 0.10 | 1.418 | Gamma; Lognormal | Gamma |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 0.929 | 0.335 | 0.159 | 0.489 | 0.926 | 0.300 | 0.142 | 0.671 | 0.160 | >= 0.10 | 0.332 | >= 0.10 | 0.529 | Gamma; Lognormal; Normal | Nonparametric |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 26 | 23 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.105 | | Nonparametric |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_101 | MW-15013 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 25 | 19 | 76% | 0.862 | 0.195 | 0.264 | 0.214 | 0.908 | 0.422 | 0.241 | 0.334 | 0.277 | >= 0.10 | 0.385 | >= 0.10 | 1.098 | Gamma; Lognormal; Normal | Nonparametric |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.814 | 0.000 | 0.228 | 0.002 | 0.908 | 0.028 | 0.207 | 0.007 | 0.223 | < 0.01 | 1.242 | < 0.01 | 0.527 | Nonparametric | Nonparametric |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_106 | MW-15013 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 25 | 20 | 80% | 0.949 | 0.730 | 0.238 | 0.463 | 0.841 | 0.167 | 0.325 | 0.091 | 0.275 | >= 0.10 | 0.382 | >= 0.10 | 1.136 | Gamma; Lognormal; Normal | Nonparametric |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.634 | | Nonparametric |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 26 | 17 | 65% | 0.840 | 0.057 | 0.200 | 0.375 | 0.947 | 0.655 | 0.173 | 0.608 | 0.191 | >= 0.10 | 0.377 | >= 0.10 | 0.507 | Gamma; Lognormal; Normal | Nonparametric |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | 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 |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.884 | 0.008 | 0.172 | 0.054 | 0.933 | 0.103 | 0.177 | 0.043 | 0.182 | 0.01 <= p < 0.05 | 0.845 | 0.01 <= p < 0.05 | 0.336 | Lognormal; Normal | Normal |
| 03_2_118 | MW-15013 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 25 | 5 | 20% | 0.567 | 0.000 | 0.276 | 0.000 | 0.968 | 0.706 | 0.115 | 0.700 | 0.126 | >= 0.10 | 0.438 | >= 0.10 | 1.267 | Gamma; Lognormal | Gamma |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.947 | 0.548 | 0.173 | 0.358 | 0.899 | 0.132 | 0.156 | 0.529 | 0.155 | >= 0.10 | 0.373 | >= 0.10 | 0.562 | Gamma; Lognormal; Normal | Normal |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.706 | | Nonparametric |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 10 | 10 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 10 | 5 | 50% | 0.599 | 0.001 | 0.453 | 0.001 | 0.692 | 0.008 | 0.413 | 0.005 | 0.453 | < 0.01 | 1.038 | < 0.01 | 0.847 | Nonparametric | Nonparametric |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 10 | 0 | 0% | 0.954 | 0.717 | 0.200 | 0.309 | 0.953 | 0.709 | 0.188 | 0.404 | 0.187 | >= 0.10 | 0.331 | >= 0.10 | 0.100 | Gamma; Lognormal; Normal | Normal |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 10 | 9 | 90% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 10 | 10 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 10 | 9 | 90% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 10 | 8 | 80% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.118 | | Nonparametric |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10 | 1 | 10% | 0.790 | 0.016 | 0.323 | 0.007 | 0.890 | 0.199 | 0.263 | 0.073 | 0.277 | 0.05 <= p < 0.10 | 0.619 | 0.05 <= p < 0.10 | 0.293 | Gamma; Lognormal | Gamma |
| 04_2_116 | MW-15014R | Appendix IV | Lead | ug/L | 10 | 10 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 10 | 0 | 0% | 0.653 | 0.000 | 0.308 | 0.008 | 0.799 | 0.014 | 0.277 | 0.028 | 0.297 | 0.01 <= p < 0.05 | 1.028 | < 0.01 | 0.371 | Nonparametric | Nonparametric |
| 04_2_118 | MW-15014R | Appendix IV | Mercury | ug/L | 10 | 10 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 10 | 2 | 20% | 0.680 | 0.001 | 0.335 | 0.008 | 0.935 | 0.558 | 0.161 | 0.782 | 0.214 | >= 0.10 | 0.470 | >= 0.10 | 0.915 | Gamma; Lognormal | Gamma |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 10 | 3 | 30% | 0.932 | 0.566 | 0.206 | 0.494 | 0.913 | 0.415 | 0.224 | 0.356 | 0.217 | >= 0.10 | 0.380 | >= 0.10 | 0.516 | Gamma; Lognormal; Normal | Normal |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 10 | 8 | 80% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.628 | | Nonparametric |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 10 | 10 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 13 | 6 | 46% | 0.662 | 0.001 | 0.324 | 0.026 | 0.944 | 0.678 | 0.186 | 0.657 | 0.244 | >= 0.10 | 0.494 | >= 0.10 | 1.364 | Gamma; Lognormal | Gamma |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 13 | 0 | 0% | 0.909 | 0.180 | 0.205 | 0.144 | 0.955 | 0.676 | 0.120 | 0.873 | 0.117 | >= 0.10 | 0.208 | >= 0.10 | 0.843 | Gamma; Lognormal; Normal | Normal |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.944 | 0.517 | 0.156 | 0.523 | 0.940 | 0.450 | 0.148 | 0.613 | 0.149 | >= 0.10 | 0.337 | >= 0.10 | 0.343 | Gamma; Lognormal; Normal | Normal |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_106 | MW-15015R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 13 | 11 | 85% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.090 | | Nonparametric |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 13 | 8 | 62% | 0.936 | 0.638 | 0.255 | 0.352 | 0.974 | 0.901 | 0.212 | 0.650 | 0.243 | >= 0.10 | 0.248 | >= 0.10 | 0.394 | Gamma; Lognormal; Normal | Nonparametric |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 13 | 6 | 46% | 0.940 | 0.641 | 0.219 | 0.396 | 0.703 | 0.004 | 0.338 | 0.015 | 0.303 | 0.05 <= p < 0.10 | 0.788 | 0.01 <= p < 0.05 | 0.908 | Gamma; Normal | Normal |
| 05_2_116 | MW-15015R | Appendix IV | Lead | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 0.899 | 0.128 | 0.209 | 0.123 | 0.796 | 0.006 | 0.227 | 0.065 | 0.177 | >= 0.10 | 0.604 | >= 0.10 | 0.814 | Gamma; Lognormal; Normal | Normal |
| 05_2_118 | MW-15015R | Appendix IV | Mercury | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 13 | 0 | 0% | 0.864 | 0.043 | 0.239 | 0.040 | 0.902 | 0.143 | 0.214 | 0.106 | 0.179 | >= 0.10 | 0.452 | >= 0.10 | 1.676 | Gamma; Lognormal | Gamma |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 13 | 5 | 38% | 0.918 | 0.415 | 0.210 | 0.374 | 0.937 | 0.577 | 0.138 | 0.923 | 0.150 | >= 0.10 | 0.246 | >= 0.10 | 0.721 | Gamma; Lognormal; Normal | Normal |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 13 | 7 | 54% | 0.724 | 0.011 | 0.373 | 0.009 | 0.767 | 0.029 | 0.336 | 0.033 | 0.369 | 0.01 <= p < 0.05 | 0.869 | 0.01 <= p < 0.05 | 0.692 | Nonparametric | Nonparametric |
| 05_2_131 | MW-15015R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 13 | 11 | 85% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.320 | | Nonparametric |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 13 | 1 | 8% | 0.604 | 0.000 | 0.371 | 0.000 | 0.787 | 0.007 | 0.278 | 0.011 | 0.318 | < 0.01 | 1.465 | < 0.01 | 0.598 | Nonparametric | Nonparametric |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.959 | 0.745 | 0.173 | 0.355 | 0.961 | 0.762 | 0.188 | 0.238 | 0.191 | >= 0.10 | 0.291 | >= 0.10 | 0.149 | 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 |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 06_2_106 | MW-15016R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 13 | 2 | 15% | 0.851 | 0.044 | 0.211 | 0.185 | 0.897 | 0.168 | 0.183 | 0.385 | 0.196 | >= 0.10 | 0.588 | >= 0.10 | 0.192 | Gamma; Lognormal; Normal | Normal |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 13 | 1 | 8% | 0.848 | 0.034 | 0.258 | 0.027 | 0.923 | 0.315 | 0.215 | 0.129 | 0.234 | 0.05 <= p < 0.10 | 0.632 | 0.05 <= p < 0.10 | 0.295 | Gamma; Lognormal | Gamma |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 13 | 10 | 77% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.487 | | Nonparametric |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 13 | 11 | 85% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.373 | | Nonparametric |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 13 | 3 | 23% | 0.411 | 0.000 | 0.463 | 0.000 | 0.609 | 0.000 | 0.368 | 0.000 | 0.423 | < 0.01 | 2.347 | < 0.01 | 0.993 | Nonparametric | Nonparametric |
| 06_2_118 | MW-15016R | Appendix IV | Mercury | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 13 | 9 | 69% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.325 | | Nonparametric |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 0.943 | 0.495 | 0.182 | 0.278 | 0.854 | 0.032 | 0.251 | 0.024 | 0.228 | 0.05 <= p < 0.10 | 0.538 | >= 0.10 | 0.354 | Gamma; Normal | Normal |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 13 | 8 | 62% | 0.683 | 0.006 | 0.337 | 0.066 | 0.844 | 0.176 | 0.305 | 0.130 | 0.343 | >= 0.10 | 0.580 | >= 0.10 | 1.702 | Gamma; Lognormal; Normal | Nonparametric |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_101 | MW-15017 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | 0.631 | 0.000 | 0.337 | 0.000 | 0.752 | 0.000 | 0.313 | 0.000 | 0.334 | < 0.01 | 3.039 | < 0.01 | 0.669 | Nonparametric | Nonparametric |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.970 | 0.652 | 0.121 | 0.450 | 0.967 | 0.573 | 0.115 | 0.533 | 0.124 | >= 0.10 | 0.392 | >= 0.10 | 0.100 | Gamma; Lognormal; Normal | Normal |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 24 | 22 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.844 | | Nonparametric |
| 07_2_106 | MW-15017 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 25 | 1 | 4% | 0.837 | 0.001 | 0.170 | 0.072 | 0.931 | 0.104 | 0.191 | 0.023 | 0.166 | 0.05 <= p < 0.10 | 0.661 | 0.05 <= p < 0.10 | 0.875 | Gamma; Lognormal; Normal | Normal |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 0.964 | 0.821 | 0.169 | 0.508 | 0.974 | 0.922 | 0.149 | 0.704 | 0.137 | >= 0.10 | 0.206 | >= 0.10 | 0.274 | Gamma; Lognormal; Normal | Nonparametric |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 26 | 25 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 25 | 16 | 64% | 0.694 | 0.001 | 0.380 | 0.000 | 0.816 | 0.031 | 0.310 | 0.013 | 0.345 | < 0.01 | 0.972 | 0.01 <= p < 0.05 | 0.549 | Nonparametric | Nonparametric |
| 07_2_118 | MW-15017 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 25 | 22 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.036 | | Nonparametric |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 25 | 0 | 0% | 0.963 | 0.483 | 0.084 | 0.922 | 0.920 | 0.052 | 0.100 | 0.747 | 0.086 | >= 0.10 | 0.310 | >= 0.10 | 0.145 | Gamma; Lognormal; Normal | Normal |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 25 | 12 | 48% | 0.886 | 0.085 | 0.240 | 0.039 | 0.831 | 0.016 | 0.264 | 0.014 | 0.202 | >= 0.10 | 0.556 | >= 0.10 | 1.002 | Gamma; Normal | Gamma |
| 07_2_131 | MW-15017 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_101 | MW-15018 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 25 | 14 | 56% | 0.672 | 0.000 | 0.337 | 0.001 | 0.893 | 0.152 | 0.189 | 0.329 | 0.247 | 0.05 <= p < 0.10 | 0.828 | 0.01 <= p < 0.05 | 0.710 | Gamma; Lognormal | Nonparametric |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.763 | 0.000 | 0.254 | 0.000 | 0.880 | 0.007 | 0.198 | 0.013 | 0.215 | < 0.01 | 1.322 | < 0.01 | 0.224 | Nonparametric | Nonparametric |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_106 | MW-15018 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 25 | 10 | 40% | 0.858 | 0.023 | 0.185 | 0.179 | 0.929 | 0.266 | 0.198 | 0.117 | 0.194 | >= 0.10 | 0.514 | >= 0.10 | 0.559 | Gamma; Lognormal; Normal | Normal |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.546 | | Nonparametric |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | 0.928 | 0.391 | 0.143 | 0.763 | 0.931 | 0.417 | 0.139 | 0.803 | 0.146 | >= 0.10 | 0.313 | >= 0.10 | 0.293 | Gamma; Lognormal; Normal | Nonparametric |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 24 | 17 | 71% | 0.632 | 0.001 | 0.423 | 0.000 | 0.915 | 0.433 | 0.265 | 0.146 | 0.331 | 0.01 <= p < 0.05 | 0.649 | 0.05 <= p < 0.10 | 0.983 | Gamma; Lognormal | Nonparametric |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.977 | 0.808 | 0.074 | 0.976 | 0.977 | 0.827 | 0.102 | 0.714 | 0.086 | >= 0.10 | 0.210 | >= 0.10 | 0.261 | Gamma; Lognormal; Normal | Normal |
| 08_2_118 | MW-15018 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 25 | 23 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.578 | | 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 |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 25 | 7 | 28% | 0.957 | 0.548 | 0.163 | 0.233 | 0.948 | 0.395 | 0.170 | 0.185 | 0.154 | >= 0.10 | 0.349 | >= 0.10 | 0.219 | Gamma; Lognormal; Normal | Normal |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.298 | | Nonparametric |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_101 | MW-15019 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 25 | 15 | 60% | 0.526 | 0.000 | 0.353 | 0.001 | 0.789 | 0.011 | 0.264 | 0.047 | 0.287 | 0.01 <= p < 0.05 | 1.296 | < 0.01 | 0.945 | Nonparametric | Nonparametric |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.818 | 0.000 | 0.222 | 0.003 | 0.878 | 0.006 | 0.210 | 0.006 | 0.224 | < 0.01 | 1.396 | < 0.01 | 0.654 | Nonparametric | Nonparametric |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 25 | 14 | 56% | 0.927 | 0.381 | 0.152 | 0.681 | 0.950 | 0.640 | 0.135 | 0.830 | 0.146 | >= 0.10 | 0.280 | >= 0.10 | 0.377 | Gamma; Lognormal; Normal | Nonparametric |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 0.655 | 0.000 | 0.389 | 0.000 | 0.733 | 0.001 | 0.336 | 0.001 | 0.360 | < 0.01 | 1.535 | < 0.01 | 0.358 | Nonparametric | Nonparametric |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.603 | | Nonparametric |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 24 | 20 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.819 | | Nonparametric |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 25 | 3 | 12% | 0.865 | 0.006 | 0.252 | 0.001 | 0.775 | 0.000 | 0.332 | 0.000 | 0.321 | < 0.01 | 1.969 | < 0.01 | 0.855 | Nonparametric | Nonparametric |
| 09_2_118 | MW-15019 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 25 | 21 | 84% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.202 | | Nonparametric |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 25 | 5 | 20% | 0.915 | 0.081 | 0.145 | 0.328 | 0.978 | 0.912 | 0.095 | 0.906 | 0.115 | >= 0.10 | 0.218 | >= 0.10 | 0.569 | Gamma; Lognormal; Normal | Normal |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 25 | 19 | 76% | 0.895 | 0.347 | 0.220 | 0.478 | 0.923 | 0.530 | 0.201 | 0.630 | 0.196 | >= 0.10 | 0.288 | >= 0.10 | 1.151 | Gamma; Lognormal; Normal | Nonparametric |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 24 | 21 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.899 | | Nonparametric |
| 10_2_101 | MW-15020 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 25 | 18 | 72% | 0.878 | 0.220 | 0.235 | 0.284 | 0.908 | 0.379 | 0.188 | 0.640 | 0.217 | >= 0.10 | 0.395 | >= 0.10 | 0.440 | Gamma; Lognormal; Normal | Nonparametric |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.880 | 0.007 | 0.156 | 0.120 | 0.882 | 0.008 | 0.174 | 0.050 | 0.176 | 0.05 <= p < 0.10 | 0.925 | 0.01 <= p < 0.05 | 0.769 | Gamma; Normal | Normal |
| 10_2_104 | MW-15020 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_106 | MW-15020 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 25 | 13 | 52% | 0.780 | 0.006 | 0.268 | 0.017 | 0.943 | 0.540 | 0.180 | 0.349 | 0.220 | >= 0.10 | 0.483 | >= 0.10 | 0.608 | Gamma; Lognormal | Nonparametric |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | 0.772 | 0.047 | 0.352 | 0.042 | 0.878 | 0.302 | 0.277 | 0.236 | 0.307 | >= 0.10 | 0.495 | >= 0.10 | 0.492 | Gamma; Lognormal | Nonparametric |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 26 | 22 | 85% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.169 | | Nonparametric |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 25 | 4 | 16% | 0.911 | 0.057 | 0.225 | 0.007 | 0.867 | 0.008 | 0.267 | 0.000 | 0.261 | < 0.01 | 1.073 | < 0.01 | 0.481 | Normal | Normal |
| 10_2_118 | MW-15020 | Appendix IV | Mercury | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 25 | 24 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 25 | 6 | 24% | 0.914 | 0.088 | 0.112 | 0.765 | 0.943 | 0.304 | 0.144 | 0.375 | 0.144 | >= 0.10 | 0.366 | >= 0.10 | 0.561 | Gamma; Lognormal; Normal | Normal |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.647 | | Nonparametric |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 25 | 6 | 24% | 0.955 | 0.476 | 0.126 | 0.593 | 0.797 | 0.001 | 0.244 | 0.004 | 0.195 | 0.05 <= p < 0.10 | 0.607 | >= 0.10 | 0.676 | Gamma; Normal | Normal |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.851 | 0.002 | 0.249 | 0.000 | 0.867 | 0.004 | 0.237 | 0.001 | 0.246 | < 0.01 | 1.598 | < 0.01 | 0.254 | Nonparametric | Nonparametric |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_106 | MW-15021 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 25 | 6 | 24% | 0.772 | 0.000 | 0.247 | 0.003 | 0.843 | 0.005 | 0.200 | 0.043 | 0.221 | 0.01 <= p < 0.05 | 1.411 | < 0.01 | 0.385 | 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 |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 24 | 14 | 58% | 0.851 | 0.060 | 0.196 | 0.338 | 0.781 | 0.008 | 0.215 | 0.212 | 0.216 | >= 0.10 | 0.722 | 0.05 <= p < 0.10 | 0.229 | Gamma; Lognormal; Normal | Nonparametric |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.218 | | Nonparametric |
| 11_2_116 | MW-15021 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 25 | 18 | 72% | 0.905 | 0.360 | 0.183 | 0.677 | 0.924 | 0.502 | 0.171 | 0.773 | 0.193 | >= 0.10 | 0.317 | >= 0.10 | 0.265 | Gamma; Lognormal; Normal | Nonparametric |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_119 | MW-15021 | Appendix IV | Molybdenum | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 25 | 4 | 16% | 0.959 | 0.506 | 0.160 | 0.172 | 0.933 | 0.160 | 0.149 | 0.258 | 0.130 | >= 0.10 | 0.362 | >= 0.10 | 0.437 | Gamma; Lognormal; Normal | Normal |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 25 | 15 | 60% | 0.884 | 0.145 | 0.224 | 0.166 | 0.888 | 0.160 | 0.264 | 0.047 | 0.202 | >= 0.10 | 0.386 | >= 0.10 | 1.259 | Gamma; Lognormal; Normal | Nonparametric |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 25 | 24 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 26 | 10 | 38% | 0.871 | 0.028 | 0.200 | 0.085 | 0.838 | 0.009 | 0.271 | 0.003 | 0.248 | 0.01 <= p < 0.05 | 0.922 | 0.01 <= p < 0.05 | 1.550 | Normal | Nonparametric |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 0.905 | 0.020 | 0.211 | 0.004 | 0.928 | 0.070 | 0.184 | 0.024 | 0.198 | 0.01 <= p < 0.05 | 0.922 | 0.01 <= p < 0.05 | 0.307 | Lognormal | Lognormal |
| 12_2_104 | MW-15022 | Appendix IV | Beryllium | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_106 | MW-15022 | Appendix IV | Cadmium | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 26 | 17 | 65% | 0.728 | 0.003 | 0.333 | 0.005 | 0.830 | 0.045 | 0.274 | 0.050 | 0.313 | 0.01 <= p < 0.05 | 0.879 | 0.01 <= p < 0.05 | 0.767 | Lognormal | Nonparametric |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 25 | 19 | 76% | 0.973 | 0.910 | 0.184 | 0.758 | 0.962 | 0.837 | 0.239 | 0.348 | 0.227 | >= 0.10 | 0.233 | >= 0.10 | 0.358 | Gamma; Lognormal; Normal | Nonparametric |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 27 | 19 | 70% | 0.871 | 0.154 | 0.213 | 0.355 | 0.916 | 0.396 | 0.178 | 0.640 | 0.204 | >= 0.10 | 0.410 | >= 0.10 | 0.524 | Gamma; Lognormal; Normal | Nonparametric |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 26 | 8 | 31% | 0.900 | 0.057 | 0.212 | 0.031 | 0.953 | 0.469 | 0.131 | 0.569 | 0.165 | >= 0.10 | 0.429 | >= 0.10 | 0.559 | Gamma; Lognormal; Normal | Normal |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 25 | 24 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 26 | 13 | 50% | 0.837 | 0.019 | 0.181 | 0.293 | 0.785 | 0.005 | 0.321 | 0.001 | 0.277 | 0.01 <= p < 0.05 | 0.910 | 0.01 <= p < 0.05 | 1.739 | Normal | Nonparametric |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 0.638 | 0.000 | 0.274 | 0.008 | 0.877 | 0.066 | 0.209 | 0.125 | 0.241 | 0.01 <= p < 0.05 | 1.029 | < 0.01 | 0.481 | Lognormal | Nonparametric |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 26 | 24 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.798 | | Nonparametric |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 25 | 25 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_101 | MW-15023 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 25 | 8 | 32% | 0.617 | 0.000 | 0.372 | 0.000 | 0.867 | 0.020 | 0.248 | 0.007 | 0.319 | < 0.01 | 1.528 | < 0.01 | 1.224 | Nonparametric | Nonparametric |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.693 | 0.000 | 0.293 | 0.000 | 0.867 | 0.004 | 0.164 | 0.080 | 0.204 | 0.01 <= p < 0.05 | 1.545 | < 0.01 | 0.564 | Lognormal | Lognormal |
| 13_2_104 | MW-15023 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_106 | MW-15023 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | 0.660 | 0.001 | 0.327 | 0.012 | 0.759 | 0.010 | 0.307 | 0.025 | 0.330 | 0.01 <= p < 0.05 | 1.074 | < 0.01 | 0.781 | Nonparametric | Nonparametric |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.000 | | Nonparametric |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 26 | 16 | 62% | 0.763 | 0.005 | 0.263 | 0.049 | 0.853 | 0.063 | 0.209 | 0.245 | 0.231 | >= 0.10 | 0.782 | 0.01 <= p < 0.05 | 0.389 | Gamma; Lognormal | Nonparametric |
| 13_2_116 | MW-15023 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 25 | 5 | 20% | 0.780 | 0.000 | 0.228 | 0.008 | 0.940 | 0.235 | 0.154 | 0.247 | 0.167 | >= 0.10 | 0.708 | 0.05 <= p < 0.10 | 0.573 | Gamma; Lognormal | Gamma |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 25 | 4 | 16% | 0.723 | 0.000 | 0.307 | 0.000 | 0.804 | 0.001 | 0.240 | 0.003 | 0.271 | < 0.01 | 2.119 | < 0.01 | 0.619 | Nonparametric | Nonparametric |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.836 | 0.019 | 0.166 | 0.420 | 0.989 | 1.000 | 0.111 | 0.934 | 0.088 | >= 0.10 | 0.146 | >= 0.10 | 0.774 | Gamma; Lognormal; Normal | Normal |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.104 | | Nonparametric |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 24 | 24 | 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 |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 13 | 12 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 13 | 5 | 38% | 0.591 | 0.000 | 0.366 | 0.002 | 0.854 | 0.105 | 0.195 | 0.491 | 0.286 | 0.05 <= p < 0.10 | 0.837 | 0.01 <= p < 0.05 | 1.306 | Gamma; Lognormal | Gamma |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.929 | 0.335 | 0.165 | 0.436 | 0.905 | 0.158 | 0.195 | 0.193 | 0.184 | >= 0.10 | 0.546 | >= 0.10 | 0.405 | Gamma; Lognormal; Normal | Normal |
| 14_2_104 | MW-17001R | Appendix IV | Beryllium | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_106 | MW-17001R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 13 | 8 | 62% | 0.900 | 0.409 | 0.236 | 0.473 | 0.915 | 0.501 | 0.203 | 0.712 | 0.228 | >= 0.10 | 0.346 | >= 0.10 | 0.286 | Gamma; Lognormal; Normal | Nonparametric |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 13 | 6 | 46% | 0.662 | 0.001 | 0.328 | 0.022 | 0.777 | 0.024 | 0.285 | 0.090 | 0.312 | 0.05 <= p < 0.10 | 0.895 | 0.01 <= p < 0.05 | 0.467 | Gamma; Lognormal | Gamma |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 13 | 3 | 23% | 0.916 | 0.325 | 0.248 | 0.082 | 0.937 | 0.519 | 0.221 | 0.178 | 0.238 | >= 0.10 | 0.444 | >= 0.10 | 0.216 | Gamma; Lognormal; Normal | Normal |
| 14_2_116 | MW-17001R | Appendix IV | Lead | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 0.952 | 0.629 | 0.161 | 0.470 | 0.932 | 0.367 | 0.186 | 0.255 | 0.166 | >= 0.10 | 0.307 | >= 0.10 | 0.603 | Gamma; Lognormal; Normal | Normal |
| 14_2_118 | MW-17001R | Appendix IV | Mercury | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 13 | 7 | 54% | 0.818 | 0.084 | 0.298 | 0.096 | 0.802 | 0.062 | 0.283 | 0.139 | 0.308 | >= 0.10 | 0.701 | 0.05 <= p < 0.10 | 0.889 | Gamma; Lognormal; Normal | Nonparametric |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 0.959 | 0.733 | 0.125 | 0.838 | NA | NA | NA | NA | NA | | NA | | NA | Normal | Normal |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 13 | 12 | 92% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 18 | 16 | 89% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.677 | | Nonparametric |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 19 | 0 | 0% | 0.755 | 0.000 | 0.224 | 0.013 | 0.888 | 0.030 | 0.208 | 0.030 | 0.198 | 0.05 <= p < 0.10 | 0.863 | 0.01 <= p < 0.05 | 1.886 | Gamma | Nonparametric |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.841 | 0.005 | 0.227 | 0.011 | 0.965 | 0.668 | 0.159 | 0.230 | 0.188 | 0.05 <= p < 0.10 | 0.569 | >= 0.10 | 0.442 | Gamma; Lognormal | Gamma |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 18 | 13 | 72% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.576 | | Nonparametric |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | 0.978 | 0.954 | 0.164 | 0.756 | 0.947 | 0.679 | 0.196 | 0.487 | 0.167 | >= 0.10 | 0.231 | >= 0.10 | 0.348 | Gamma; Lognormal; Normal | Nonparametric |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 18 | 15 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.648 | | Nonparametric |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 19 | 8 | 42% | 0.885 | 0.119 | 0.220 | 0.144 | 0.970 | 0.886 | 0.159 | 0.607 | 0.178 | >= 0.10 | 0.318 | >= 0.10 | 0.318 | Gamma; Lognormal; Normal | Normal |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.947 | 0.346 | 0.166 | 0.180 | 0.876 | 0.018 | 0.167 | 0.179 | 0.152 | >= 0.10 | 0.534 | >= 0.10 | 0.424 | Gamma; Lognormal; Normal | Normal |
| 15_2_118 | MW-17002 | Appendix IV | Mercury | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 19 | 6 | 32% | 0.886 | 0.087 | 0.159 | 0.494 | 0.811 | 0.009 | 0.239 | 0.041 | 0.219 | >= 0.10 | 0.766 | 0.05 <= p < 0.10 | 2.435 | Gamma; Normal | Gamma |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 19 | 5 | 26% | 0.794 | 0.004 | 0.267 | 0.008 | 0.887 | 0.073 | 0.222 | 0.060 | 0.178 | >= 0.10 | 0.432 | >= 0.10 | 0.893 | Gamma; Lognormal | Gamma |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.972 | | Nonparametric |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 19 | 3 | 16% | 0.735 | 0.000 | 0.324 | 0.000 | 0.956 | 0.587 | 0.109 | 0.875 | 0.173 | >= 0.10 | 0.482 | >= 0.10 | 1.501 | Gamma; Lognormal | Gamma |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.784 | 0.001 | 0.208 | 0.030 | 0.976 | 0.888 | 0.146 | 0.353 | 0.116 | >= 0.10 | 0.314 | >= 0.10 | 0.720 | Gamma; Lognormal | Gamma |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 18 | 15 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.322 | | Nonparametric |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 0.879 | 0.263 | 0.246 | 0.305 | 0.884 | 0.290 | 0.262 | 0.221 | 0.278 | >= 0.10 | 0.468 | >= 0.10 | 0.478 | Gamma; Lognormal; Normal | Nonparametric |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 18 | 12 | 67% | 0.852 | 0.163 | 0.284 | 0.135 | 0.896 | 0.352 | 0.262 | 0.218 | 0.252 | >= 0.10 | 0.411 | >= 0.10 | 2.693 | Gamma; Lognormal; Normal | Nonparametric |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 19 | 12 | 63% | 0.644 | 0.001 | 0.366 | 0.005 | 0.792 | 0.034 | 0.264 | 0.146 | 0.302 | 0.05 <= p < 0.10 | 0.881 | 0.01 <= p < 0.05 | 0.504 | Gamma; Lognormal | Nonparametric |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 18 | 18 | 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 |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.695 | 0.000 | 0.326 | 0.000 | 0.833 | 0.004 | 0.220 | 0.016 | 0.258 | < 0.01 | 1.755 | < 0.01 | 1.167 | Nonparametric | Nonparametric |
| 16_2_118 | MW-17003 | Appendix IV | Mercury | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 19 | 5 | 26% | 0.760 | 0.002 | 0.254 | 0.015 | 0.946 | 0.505 | 0.183 | 0.233 | 0.219 | 0.05 <= p < 0.10 | 0.543 | >= 0.10 | 1.130 | Gamma; Lognormal | Gamma |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 19 | 9 | 47% | 0.931 | 0.457 | 0.209 | 0.248 | 0.925 | 0.400 | 0.133 | 0.883 | 0.161 | >= 0.10 | 0.323 | >= 0.10 | 0.439 | Gamma; Lognormal; Normal | Normal |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 19 | 14 | 74% | 0.587 | 0.000 | 0.457 | 0.001 | 0.709 | 0.012 | 0.401 | 0.009 | 0.454 | < 0.01 | 1.014 | < 0.01 | 1.164 | Nonparametric | Nonparametric |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 18 | 15 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.408 | | Nonparametric |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 19 | 2 | 11% | 0.815 | 0.003 | 0.205 | 0.056 | 0.962 | 0.662 | 0.123 | 0.713 | 0.166 | >= 0.10 | 0.442 | >= 0.10 | 0.981 | Gamma; Lognormal; Normal | Normal |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.851 | 0.007 | 0.227 | 0.011 | 0.969 | 0.754 | 0.129 | 0.550 | 0.169 | >= 0.10 | 0.474 | >= 0.10 | 0.592 | Gamma; Lognormal | Gamma |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 0.587 | 0.000 | 0.399 | 0.003 | 0.844 | 0.142 | 0.319 | 0.056 | 0.362 | 0.01 <= p < 0.05 | 0.828 | 0.01 <= p < 0.05 | 1.396 | Lognormal | Nonparametric |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 18 | 11 | 61% | 0.703 | 0.004 | 0.386 | 0.002 | 0.835 | 0.089 | 0.265 | 0.143 | 0.333 | 0.01 <= p < 0.05 | 0.844 | 0.01 <= p < 0.05 | 1.201 | Lognormal | Nonparametric |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 19 | 14 | 74% | 0.795 | 0.074 | 0.273 | 0.255 | 0.884 | 0.327 | 0.215 | 0.624 | 0.247 | >= 0.10 | 0.450 | >= 0.10 | 0.503 | Gamma; Lognormal; Normal | Nonparametric |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 18 | 15 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 2.878 | | Nonparametric |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 19 | 6 | 32% | 0.845 | 0.025 | 0.257 | 0.019 | 0.850 | 0.029 | 0.291 | 0.004 | 0.296 | < 0.01 | 0.953 | 0.01 <= p < 0.05 | 1.025 | Nonparametric | Nonparametric |
| 17_2_118 | MW-17004 | Appendix IV | Mercury | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 19 | 7 | 37% | 0.955 | 0.713 | 0.142 | 0.724 | 0.839 | 0.027 | 0.196 | 0.230 | 0.204 | >= 0.10 | 0.404 | >= 0.10 | 1.125 | Gamma; Lognormal; Normal | Gamma |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 19 | 7 | 37% | 0.568 | 0.000 | 0.395 | 0.000 | NA | NA | NA | NA | NA | | NA | | NA | Nonparametric | Nonparametric |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.377 | | Nonparametric |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 18 | 15 | 83% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.541 | | Nonparametric |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 19 | 13 | 68% | 0.553 | 0.000 | 0.450 | 0.000 | 0.765 | 0.028 | 0.298 | 0.098 | 0.388 | 0.01 <= p < 0.05 | 1.055 | < 0.01 | 1.202 | Lognormal | Nonparametric |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.832 | 0.003 | 0.222 | 0.015 | 0.944 | 0.305 | 0.135 | 0.481 | 0.151 | >= 0.10 | 0.535 | >= 0.10 | 0.577 | Gamma; Lognormal | Gamma |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_106 | MW-17005 | Appendix IV | Cadmium | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | 0.686 | 0.002 | 0.311 | 0.022 | 0.848 | 0.091 | 0.200 | 0.451 | 0.232 | >= 0.10 | 0.727 | 0.01 <= p < 0.05 | 0.487 | Gamma; Lognormal | Nonparametric |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 19 | 15 | 79% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.841 | | Nonparametric |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 19 | 3 | 16% | 0.742 | 0.001 | 0.311 | 0.000 | 0.945 | 0.409 | 0.167 | 0.275 | 0.218 | 0.05 <= p < 0.10 | 0.684 | 0.05 <= p < 0.10 | 0.712 | Gamma; Lognormal | Gamma |
| 18_2_118 | MW-17005 | Appendix IV | Mercury | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 19 | 15 | 79% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 1.667 | | Nonparametric |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 19 | 8 | 42% | 0.689 | 0.000 | 0.298 | 0.007 | 0.949 | 0.632 | 0.180 | 0.411 | 0.232 | >= 0.10 | 0.577 | >= 0.10 | 0.713 | Gamma; Lognormal | Gamma |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_101 | MW-17006 | Appendix IV | Antimony | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 19 | 7 | 37% | 0.921 | 0.293 | 0.194 | 0.245 | 0.878 | 0.082 | 0.267 | 0.018 | 0.257 | 0.01 <= p < 0.05 | 0.578 | >= 0.10 | 0.781 | Gamma; Lognormal; Normal | Normal |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.807 | 0.001 | 0.213 | 0.023 | 0.890 | 0.032 | 0.171 | 0.153 | 0.189 | 0.05 <= p < 0.10 | 0.906 | 0.01 <= p < 0.05 | 0.288 | 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 |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_106 | MW-17006 | Appendix IV | Cadmium | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 19 | 15 | 79% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | 0.838 | | Nonparametric |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 19 | 9 | 47% | 0.938 | 0.530 | 0.201 | 0.302 | 0.785 | 0.009 | 0.323 | 0.004 | 0.274 | 0.01 <= p < 0.05 | 0.612 | >= 0.10 | 0.681 | Gamma; Normal | Normal |
| 19_2_116 | MW-17006 | Appendix IV | Lead | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.923 | 0.129 | 0.156 | 0.263 | 0.906 | 0.062 | 0.195 | 0.056 | 0.170 | >= 0.10 | 0.599 | >= 0.10 | 0.350 | Gamma; Lognormal; Normal | Normal |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 18 | 17 | 94% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 19 | 13 | 68% | 0.754 | 0.022 | 0.313 | 0.067 | 0.950 | 0.740 | 0.182 | 0.772 | 0.186 | >= 0.10 | 0.270 | >= 0.10 | 1.440 | Gamma; Lognormal; Normal | Nonparametric |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 19 | 6 | 32% | 0.894 | 0.112 | 0.241 | 0.037 | 0.919 | 0.242 | 0.207 | 0.131 | 0.166 | >= 0.10 | 0.448 | >= 0.10 | 0.677 | Gamma; Lognormal; Normal | Normal |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | | NA | | Nonparametric |

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

**Table 4:** Autocorrelation Tests, Non-Detects Excluded

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Autocorrelation | Box-Ljung p-value | Sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | NA | NA | |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | 0.667 | 0.001 | *** |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.433 | 0.022 | * |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 25 | 21 | 84% | -0.122 | 0.730 | |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | -0.500 | 0.157 | |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 25 | 18 | 72% | 0.035 | 0.909 | |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.536 | 0.004 | ** |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 25 | 6 | 24% | 0.849 | 0.000 | *** |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 25 | 16 | 64% | -0.361 | 0.204 | |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | NA | NA | |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 26 | 22 | 85% | 0.229 | 0.516 | |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 0.728 | 0.000 | *** |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 25 | 24 | 96% | NA | NA | |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 26 | 15 | 58% | 0.343 | 0.195 | |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 25 | 20 | 80% | -0.822 | 0.015 | * |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 27 | 15 | 56% | 0.002 | 0.995 | |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 26 | 0 | 0% | 0.567 | 0.002 | ** |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 26 | 11 | 42% | 0.665 | 0.005 | ** |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 0.249 | 0.316 | |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 26 | 23 | 88% | -0.167 | 0.648 | |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 25 | 19 | 76% | -0.403 | 0.212 | |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.408 | 0.030 | * |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 25 | 20 | 80% | -0.323 | 0.339 | |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | -0.027 | 0.940 | |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 26 | 17 | 65% | 0.394 | 0.166 | |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | NA | NA | |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.524 | 0.005 | ** |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 25 | 5 | 20% | 0.050 | 0.809 | |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.215 | 0.387 | |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | -0.099 | 0.787 | |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | NA | NA | |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 10 | 5 | 50% | -0.020 | 0.954 | |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 10 | 0 | 0% | -0.154 | 0.574 | |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 10 | 9 | 90% | NA | NA | |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 10 | 9 | 90% | NA | NA | |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 10 | 8 | 80% | -0.500 | 0.157 | |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10 | 1 | 10% | 0.118 | 0.677 | |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 10 | 0 | 0% | -0.054 | 0.843 | |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 10 | 2 | 20% | 0.134 | 0.650 | |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 10 | 3 | 30% | -0.299 | 0.332 | |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 10 | 8 | 80% | -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. |
|---|---|---|---|---|---|---|---|---|---|---|
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 13 | 6 | 46% | -0.162 | 0.600 | |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 13 | 0 | 0% | 0.636 | 0.010 | * |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.126 | 0.611 | |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | NA | NA | |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 13 | 11 | 85% | -0.500 | 0.157 | |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 13 | 8 | 62% | 0.307 | 0.364 | |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 13 | 6 | 46% | 0.104 | 0.737 | |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 0.176 | 0.478 | |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 13 | 0 | 0% | 0.214 | 0.388 | |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 13 | 5 | 38% | -0.098 | 0.742 | |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 13 | 7 | 54% | 0.426 | 0.186 | |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 13 | 11 | 85% | -0.500 | 0.157 | |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 13 | 1 | 8% | 0.282 | 0.271 | |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.430 | 0.083 | |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | NA | NA | |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 13 | 2 | 15% | -0.478 | 0.071 | |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 13 | 1 | 8% | 0.340 | 0.184 | |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 13 | 10 | 77% | -0.600 | 0.100 | |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 13 | 11 | 85% | -0.500 | 0.157 | |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 13 | 3 | 23% | -0.124 | 0.651 | |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 13 | 9 | 69% | -0.063 | 0.859 | |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 0.180 | 0.468 | |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 13 | 8 | 62% | -0.080 | 0.812 | |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | 0.601 | 0.002 | ** |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.459 | 0.015 | * |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 24 | 22 | 92% | -0.500 | 0.157 | |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 25 | 1 | 4% | 0.733 | 0.000 | *** |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 0.226 | 0.393 | |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 26 | 25 | 96% | NA | NA | |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 25 | 16 | 64% | -0.219 | 0.440 | |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 25 | 22 | 88% | -0.658 | 0.071 | |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 25 | 0 | 0% | 0.059 | 0.756 | |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 25 | 12 | 48% | 0.011 | 0.965 | |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 25 | 14 | 56% | -0.124 | 0.638 | |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.567 | 0.003 | ** |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 25 | 10 | 40% | 0.162 | 0.489 | |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | -0.095 | 0.789 | |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | 0.168 | 0.525 | |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 24 | 17 | 71% | -0.022 | 0.944 | |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.492 | 0.009 | ** |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 25 | 23 | 92% | -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. |
|---|---|---|---|---|---|---|---|---|---|---|
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 25 | 7 | 28% | -0.219 | 0.314 | |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | -0.256 | 0.468 | |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | NA | NA | |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 25 | 15 | 60% | 0.006 | 0.984 | |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.175 | 0.352 | |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 24 | 23 | 96% | NA | NA | |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 25 | 14 | 56% | 0.030 | 0.911 | |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 0.303 | 0.252 | |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | -0.007 | 0.985 | |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 24 | 20 | 83% | -0.132 | 0.708 | |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 25 | 3 | 12% | 0.434 | 0.030 | * |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 25 | 21 | 84% | -0.110 | 0.755 | |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 25 | 5 | 20% | 0.205 | 0.324 | |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 25 | 19 | 76% | 0.359 | 0.266 | |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 24 | 21 | 88% | -0.013 | 0.972 | |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 25 | 18 | 72% | 0.439 | 0.155 | |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.693 | 0.000 | *** |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 25 | 13 | 52% | 0.381 | 0.136 | |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | -0.235 | 0.486 | |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 26 | 22 | 85% | 0.127 | 0.719 | |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | NA | NA | |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 25 | 4 | 16% | 0.797 | 0.000 | *** |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 25 | 24 | 96% | NA | NA | |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 25 | 6 | 24% | 0.326 | 0.125 | |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | -0.125 | 0.724 | |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | NA | NA | |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 25 | 6 | 24% | 0.221 | 0.299 | |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.814 | 0.000 | *** |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | NA | NA | |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 25 | 6 | 24% | 0.571 | 0.007 | ** |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 24 | 14 | 58% | 0.052 | 0.849 | |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | -0.004 | 0.991 | |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 25 | 18 | 72% | -0.274 | 0.375 | |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | NA | NA | |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 25 | 4 | 16% | 0.045 | 0.826 | |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 25 | 15 | 60% | -0.126 | 0.646 | |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 25 | 24 | 96% | NA | NA | |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 26 | 10 | 38% | 0.732 | 0.001 | ** |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 0.320 | 0.084 | |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 26 | 17 | 65% | 0.490 | 0.085 | |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 25 | 19 | 76% | -0.484 | 0.134 | |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 4:** Autocorrelation Tests, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Autocorrelation | Box-Ljung p-value | Sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 27 | 19 | 70% | 0.610 | 0.039 | * |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 26 | 8 | 31% | 0.580 | 0.008 | ** |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 25 | 24 | 96% | NA | NA | |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 26 | 13 | 50% | 0.082 | 0.740 | |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | -0.015 | 0.953 | |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 26 | 24 | 92% | -0.500 | 0.157 | |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 25 | 8 | 32% | 0.646 | 0.004 | ** |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.694 | 0.000 | *** |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | 0.312 | 0.292 | |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | NA | NA | |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 26 | 16 | 62% | 0.452 | 0.099 | |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 25 | 5 | 20% | 0.597 | 0.004 | ** |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | NA | NA | |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 25 | 4 | 16% | 0.358 | 0.079 | |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.352 | 0.156 | |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | -0.057 | 0.877 | |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 13 | 12 | 92% | NA | NA | |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 13 | 5 | 38% | 0.214 | 0.470 | |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.756 | 0.002 | ** |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 13 | 8 | 62% | 0.163 | 0.630 | |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 13 | 6 | 46% | -0.210 | 0.496 | |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 13 | 3 | 23% | -0.099 | 0.719 | |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 0.546 | 0.028 | * |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 13 | 7 | 54% | -0.253 | 0.433 | |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 0.134 | 0.589 | |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 13 | 12 | 92% | NA | NA | |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 18 | 16 | 89% | -0.500 | 0.157 | |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 19 | 0 | 0% | 0.467 | 0.028 | * |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | -0.009 | 0.965 | |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | NA | NA | |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 18 | 13 | 72% | 0.170 | 0.615 | |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | -0.283 | 0.339 | |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 18 | 15 | 83% | -0.430 | 0.239 | |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 19 | 8 | 42% | -0.123 | 0.641 | |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | NA | NA | |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.423 | 0.046 | * |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 19 | 6 | 32% | 0.442 | 0.075 | |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 19 | 5 | 26% | -0.386 | 0.109 | |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | -0.203 | 0.566 | |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 18 | 17 | 94% | NA | NA | |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 18 | 17 | 94% | NA | NA | |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 19 | 3 | 16% | 0.720 | 0.002 | ** |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 4:** Autocorrelation Tests, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Autocorrelation | Box-Ljung p-value | Sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.523 | 0.014 | * |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 18 | 15 | 83% | -0.212 | 0.562 | |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | NA | NA | |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 0.362 | 0.262 | |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 18 | 12 | 67% | 0.458 | 0.156 | |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 19 | 12 | 63% | 0.098 | 0.750 | |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.825 | 0.000 | *** |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 19 | 5 | 26% | 0.546 | 0.023 | * |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 19 | 9 | 47% | -0.082 | 0.763 | |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 19 | 14 | 74% | -0.061 | 0.856 | |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 18 | 15 | 83% | -0.162 | 0.657 | |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 19 | 2 | 11% | 0.581 | 0.009 | ** |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.439 | 0.039 | * |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | NA | NA | |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | -0.287 | 0.374 | |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 18 | 11 | 61% | 0.185 | 0.549 | |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 19 | 14 | 74% | -0.139 | 0.680 | |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 18 | 15 | 83% | -0.167 | 0.648 | |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 19 | 6 | 32% | 0.773 | 0.002 | ** |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 19 | 7 | 37% | 0.652 | 0.011 | * |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 19 | 7 | 37% | -0.181 | 0.479 | |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | -0.076 | 0.831 | |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 18 | 15 | 83% | -0.164 | 0.654 | |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 19 | 13 | 68% | 0.017 | 0.959 | |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.249 | 0.242 | |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | NA | NA | |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | -0.072 | 0.808 | |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | NA | NA | |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 19 | 15 | 79% | -0.343 | 0.332 | |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | NA | NA | |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 19 | 3 | 16% | 0.034 | 0.880 | |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 19 | 15 | 79% | -0.122 | 0.730 | |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 19 | 8 | 42% | -0.118 | 0.655 | |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | NA | NA | |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 19 | 7 | 37% | 0.291 | 0.255 | |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.620 | 0.004 | ** |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 19 | 15 | 79% | -0.181 | 0.609 | |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | NA | NA | |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 19 | 9 | 47% | 0.059 | 0.830 | |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.076 | 0.719 | |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 18 | 17 | 94% | NA | NA | |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 19 | 13 | 68% | 0.134 | 0.678 | |

*(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. |
|---|---|---|---|---|---|---|---|---|---|---|
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 19 | 6 | 32% | -0.328 | 0.187 | |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | NA | NA | |

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 5:** Outlier Counts by Date

| Date | Count |
|---|---|
| 2016-04-13 | 1 |
| 2016-09-29 | 1 |
| 2017-12-06 | 1 |
| 2018-02-20 | 1 |
| 2019-09-26 | 1 |
| 2020-05-05 | 1 |
| 2020-05-07 | 2 |
| 2020-05-21 | 1 |
| 2020-06-15 | 1 |
| 2020-10-29 | 2 |
| 2021-04-22 | 3 |
| 2021-10-22 | 3 |
| 2022-02-01 | 2 |
| 2022-05-03 | 7 |
| 2022-05-05 | 1 |
| 2022-10-20 | 2 |
| 2023-04-11 | 3 |
| 2023-04-12 | 3 |
| 2023-10-03 | 1 |
| 2023-10-04 | 1 |
| 2024-03-27 | 1 |
| 2024-10-23 | 2 |
| 2025-04-22 | 4 |
| 2025-04-23 | 1 |
| 2025-04-24 | 1 |
| 2025-10-27 | 1 |
| 2025-10-28 | 2 |
| 2025-10-29 | 3 |

**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 | Value |
|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2022-05-05 | 250 |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 25 | 2020-05-07 | 63.9 |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 26 | 15 | 58% | 11 | 2016-04-13 | 2.00 |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 26 | 23 | 88% | 3 | 2025-10-27 | 1.20 |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 25 | 5 | 20% | 20 | 2020-05-07 | 77.2 |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 10 | 5 | 50% | 5 | 2022-02-01 | 1.60 |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10 | 1 | 10% | 9 | 2025-10-29 | 510 |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 10 | 0 | 0% | 10 | 2023-04-11 | 130 |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 10 | 2 | 20% | 8 | 2022-02-01 | 11.0 |

*(Table continues on next page)*

**Table 6:** Outliers Identified at the 1% Significance Level, Non-Detects Excluded *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | No. Detects | Date | Value |
|---|---|---|---|---|---|---|---|---|---|---|
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 13 | 6 | 46% | 7 | 2023-04-11 | 13.0 |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 13 | 2023-04-11 | 120 |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 13 | 1 | 8% | 12 | 2020-06-15 | 10.1 |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 13 | 3 | 23% | 10 | 2023-04-12 | 110 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 13 | 8 | 62% | 5 | 2025-10-29 | 5.90 |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 25 | 1 | 4% | 24 | 2016-09-29 | 11.0 |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 25 | 14 | 56% | 11 | 2021-10-22 | 3.80 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2021-04-22 | 280 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2020-10-29 | 240 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 24 | 17 | 71% | 7 | 2021-10-22 | 3.90 |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 25 | 15 | 60% | 10 | 2022-05-03 | 8.10 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2021-10-22 | 640 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2023-04-12 | 440 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2022-10-20 | 410 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2023-10-03 | 380 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2025-10-28 | 370 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2020-10-29 | 340 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2024-10-23 | 320 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2024-03-27 | 280 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2025-04-23 | 280 |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | 11 | 2022-05-03 | 1.80 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 13 | 2020-05-05 | 3.50 |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 25 | 8 | 32% | 17 | 2025-04-22 | 27.0 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2025-04-22 | 270 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2025-10-29 | 260 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 25 | 2024-10-23 | 190 |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 25 | 5 | 20% | 20 | 2025-04-22 | 67.0 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 13 | 2025-04-22 | 3.28 |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 13 | 5 | 38% | 8 | 2020-05-21 | 7.30 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 13 | 6 | 46% | 7 | 2023-10-04 | 0.830 |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 19 | 0 | 0% | 19 | 2023-04-12 | 220 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 19 | 2021-04-22 | 320 |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 19 | 12 | 63% | 7 | 2025-10-28 | 360 |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 19 | 14 | 74% | 5 | 2018-02-20 | 2.20 |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 18 | 15 | 83% | 3 | 2022-05-03 | 1.20 |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 6 | 2022-05-03 | 7.80 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 18 | 15 | 83% | 3 | 2022-05-03 | 19.0 |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 19 | 7 | 37% | 12 | 2021-04-22 | 4.93 |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | 4 | 2022-05-03 | 2.60 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 18 | 15 | 83% | 3 | 2022-05-03 | 1.80 |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 19 | 13 | 68% | 6 | 2017-12-06 | 2.90 |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | 8 | 2019-09-26 | 1.10 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 19 | 8 | 42% | 11 | 2022-10-20 | 4.22 |

*(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 | Value |
|---|---|---|---|---|---|---|---|---|---|---|
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 19 | 13 | 68% | 6 | 2025-04-24 | 53.0 |

**Table 7:** Seasonality Tests

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.380 | 0.215 | 0.168 | 1 | 0 | 0 | 0 | 1 | NA | NA | NA |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 4% | 3 | 10 | 3 | 9 | 25 | 0.142 | 0.024 * | 0.181 | 3 | 9 | 3 | 9 | 24 | 0.164 | 0.030 * | 0.186 |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.120 | 0.249 | 0.064 | 3 | 10 | 3 | 9 | 25 | 0.120 | 0.249 | 0.064 |
| 01_2_104 | MW-15009 | Appendix IV | Beryllium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.368 | 0.200 | 0.158 | NA | NA | NA | NA | NA | NA | NA | NA |
| 01_2_106 | MW-15009 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.070 | 0.787 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 84% | 3 | 10 | 3 | 9 | 25 | 0.222 | 0.063 | 0.115 | 0 | 3 | 1 | 0 | 4 | 0.180 | 0.097 | 0.239 |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 92% | 3 | 10 | 3 | 8 | 24 | 0.026 * | 0.005 ** | 0.027 * | 0 | 1 | 0 | 1 | 2 | 0.317 | NA | NA |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 72% | 3 | 10 | 3 | 9 | 25 | 0.105 | 0.060 | 0.093 | 0 | 5 | 0 | 2 | 7 | 0.434 | 0.198 | 0.297 |
| 01_2_116 | MW-15009 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.380 | 0.998 | 0.829 | NA | NA | NA | NA | NA | NA | NA | NA |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.119 | 0.238 | 0.137 | 3 | 10 | 3 | 9 | 25 | 0.119 | 0.238 | 0.137 |
| 01_2_118 | MW-15009 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | NA | 0.059 | 0.059 | NA | NA | NA | NA | NA | NA | NA | NA |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 24% | 3 | 10 | 3 | 9 | 25 | 0.026 * | 0.002 ** | 0.016 * | 3 | 7 | 3 | 6 | 19 | 0.065 | 0.028 * | 0.095 |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 64% | 3 | 10 | 3 | 9 | 25 | 0.307 | 0.006 ** | 0.281 | 1 | 4 | 0 | 4 | 9 | 0.118 | 0.180 | 0.227 |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 96% | 3 | 10 | 3 | 9 | 25 | 0.534 | 0.950 | 0.768 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.055 | 0.098 | 0.107 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_101 | MW-15010 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | 0.537 | 0.389 | 0.332 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 85% | 3 | 10 | 4 | 9 | 26 | 0.623 | 0.993 | 0.830 | 0 | 2 | 0 | 2 | 4 | 1.000 | 0.927 | 0.956 |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 4 | 9 | 26 | 0.185 | 0.360 | 0.190 | 3 | 10 | 4 | 9 | 26 | 0.185 | 0.360 | 0.190 |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 96% | 3 | 10 | 4 | 8 | 25 | 0.501 | 0.355 | 0.281 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 02_2_106 | MW-15010 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | 0.136 | 0.773 | 0.624 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 58% | 3 | 10 | 4 | 9 | 26 | 0.526 | 0.625 | 0.413 | 1 | 5 | 1 | 4 | 11 | 0.264 | 0.667 | 0.425 |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 80% | 3 | 10 | 4 | 8 | 25 | 0.070 | 0.027 * | 0.093 | 0 | 3 | 0 | 2 | 5 | 1.000 | 0.874 | 0.822 |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 56% | 3 | 10 | 4 | 10 | 27 | 0.229 | 0.209 | 0.214 | 0 | 6 | 1 | 5 | 12 | 0.887 | 0.831 | 0.817 |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | 0.537 | 0.991 | 0.896 | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 0% | 3 | 10 | 4 | 9 | 26 | 0.664 | 0.710 | 0.608 | 3 | 10 | 4 | 9 | 26 | 0.664 | 0.710 | 0.608 |
| 02_2_118 | MW-15010 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | NA | 0.050 * | 0.050 * | NA | NA | NA | NA | NA | NA | NA | NA |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 42% | 3 | 10 | 4 | 9 | 26 | 0.070 | 0.010 ** | 0.055 | 3 | 6 | 2 | 4 | 15 | 0.127 | 0.123 | 0.106 |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 50% | 3 | 10 | 4 | 9 | 26 | 0.587 | 0.632 | 0.615 | 1 | 5 | 2 | 5 | 13 | 0.745 | 0.649 | 0.659 |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 88% | 3 | 10 | 4 | 9 | 26 | 0.874 | 0.991 | 0.944 | 0 | 1 | 1 | 1 | 3 | 0.368 | NA | NA |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | 0.140 | 0.240 | 0.253 | NA | NA | NA | NA | NA | NA | NA | NA |
| 03_2_101 | MW-15013 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.380 | 0.215 | 0.168 | NA | NA | NA | NA | NA | NA | NA | NA |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 76% | 3 | 10 | 3 | 9 | 25 | 0.514 | 0.896 | 0.671 | 0 | 3 | 0 | 3 | 6 | 0.275 | 0.236 | 0.316 |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.308 | 0.174 | 0.295 | 3 | 10 | 3 | 9 | 25 | 0.308 | 0.174 | 0.295 |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.361 | 0.199 | 0.157 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 03_2_106 | MW-15013 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.070 | 0.787 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 80% | 3 | 10 | 3 | 9 | 25 | 0.598 | 0.522 | 0.397 | 0 | 3 | 1 | 1 | 5 | 0.839 | 0.896 | 0.997 |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 83% | 3 | 10 | 3 | 8 | 24 | 0.034 * | 0.005 ** | 0.041 * | 0 | 3 | 0 | 1 | 4 | 0.655 | 0.755 | 0.842 |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 65% | 3 | 10 | 3 | 10 | 26 | 0.124 | 0.092 | 0.123 | 0 | 5 | 0 | 4 | 9 | 0.539 | 0.897 | 0.784 |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.373 | 0.760 | 0.705 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.494 | 0.381 | 0.459 | 3 | 10 | 3 | 9 | 25 | 0.494 | 0.381 | 0.459 |
| 03_2_118 | MW-15013 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | NA | 0.059 | 0.059 | NA | NA | NA | NA | NA | NA | NA | NA |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 20% | 3 | 10 | 3 | 9 | 25 | 0.114 | 0.614 | 0.232 | 3 | 8 | 2 | 7 | 20 | 0.194 | 0.704 | 0.350 |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 48% | 3 | 10 | 3 | 9 | 25 | 0.131 | 0.196 | 0.254 | 1 | 7 | 1 | 4 | 13 | 0.289 | 0.381 | 0.534 |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 88% | 3 | 10 | 3 | 9 | 25 | 0.415 | 0.986 | 0.754 | 0 | 2 | 1 | 0 | 3 | 0.221 | 0.585 | 0.619 |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.065 | 0.105 | 0.152 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 100% | 1 | 5 | 0 | 4 | 10 | 0.308 | 0.345 | 0.345 | NA | NA | NA | NA | NA | NA | NA | NA |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 50% | 1 | 5 | 0 | 4 | 10 | 0.674 | 0.850 | 0.655 | 1 | 2 | 0 | 2 | 5 | 0.368 | 0.002 ** | 0.020 * |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 0% | 1 | 5 | 0 | 4 | 10 | 0.268 | 0.396 | 0.440 | 1 | 5 | 0 | 4 | 10 | 0.268 | 0.396 | 0.440 |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 90% | 1 | 5 | 0 | 4 | 10 | 0.874 | 0.923 | 0.932 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 100% | 1 | 5 | 0 | 4 | 10 | 0.308 | 0.345 | 0.345 | NA | NA | NA | NA | NA | NA | NA | NA |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 90% | 1 | 5 | 0 | 4 | 10 | 0.772 | 0.885 | 0.869 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 80% | 1 | 5 | 0 | 4 | 10 | 0.605 | 0.936 | 0.691 | 0 | 0 | 0 | 2 | 2 | NA | NA | NA |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10% | 1 | 5 | 0 | 4 | 10 | 0.407 | 0.993 | 0.846 | 1 | 5 | 0 | 3 | 9 | 0.679 | 0.968 | 0.973 |
| 04_2_116 | MW-15014R | Appendix IV | Lead | ug/L | 100% | 1 | 5 | 0 | 4 | 10 | 0.308 | 0.345 | 0.345 | NA | NA | NA | NA | NA | NA | NA | NA |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 0% | 1 | 5 | 0 | 4 | 10 | 0.464 | 0.754 | 0.716 | 1 | 5 | 0 | 4 | 10 | 0.464 | 0.754 | 0.716 |
| 04_2_118 | MW-15014R | Appendix IV | Mercury | ug/L | 100% | 1 | 5 | 0 | 4 | 10 | NA | 0.000 *** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 20% | 1 | 5 | 0 | 4 | 10 | 0.275 | 0.031 * | 0.239 | 1 | 4 | 0 | 3 | 8 | 0.256 | 0.001 ** | 0.075 |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 30% | 1 | 5 | 0 | 4 | 10 | 0.235 | 0.208 | 0.441 | 1 | 4 | 0 | 2 | 7 | 0.158 | 0.161 | 0.222 |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 80% | 1 | 5 | 0 | 4 | 10 | 0.916 | 0.877 | 0.958 | 0 | 0 | 0 | 2 | 2 | NA | NA | NA |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 100% | 1 | 5 | 0 | 4 | 10 | 0.308 | 0.345 | 0.345 | NA | NA | NA | NA | NA | NA | NA | NA |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 46% | 0 | 6 | 1 | 6 | 13 | 0.225 | 0.375 | 0.188 | 0 | 4 | 0 | 3 | 7 | 0.077 | 0.251 | 0.079 |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.565 | 0.665 | 0.636 | 0 | 6 | 1 | 6 | 13 | 0.565 | 0.665 | 0.636 |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.493 | 0.543 | 0.560 | 0 | 6 | 1 | 6 | 13 | 0.493 | 0.543 | 0.560 |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 92% | 0 | 6 | 1 | 6 | 13 | 0.385 | 0.900 | 0.843 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 05_2_106 | MW-15015R | Appendix IV | Cadmium | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.174 | 0.882 | 0.791 | NA | NA | NA | NA | NA | NA | NA | NA |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 85% | 0 | 6 | 1 | 6 | 13 | 0.383 | 0.377 | 0.285 | 0 | 2 | 0 | 0 | 2 | NA | NA | NA |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 62% | 0 | 6 | 1 | 6 | 13 | 0.590 | 0.878 | 0.788 | 0 | 3 | 1 | 1 | 5 | 0.670 | 0.887 | 0.871 |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 46% | 0 | 6 | 1 | 6 | 13 | 0.239 | 0.076 | 0.000 *** | 0 | 3 | 1 | 3 | 7 | 0.296 | 0.107 | 0.004 ** |
| 05_2_116 | MW-15015R | Appendix IV | Lead | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.983 | 0.947 | 0.997 | NA | NA | NA | NA | NA | NA | NA | NA |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.381 | 0.656 | 0.714 | 0 | 6 | 1 | 6 | 13 | 0.381 | 0.656 | 0.714 |
| 05_2_118 | MW-15015R | Appendix IV | Mercury | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | NA | 0.600 | 0.600 | NA | NA | NA | NA | NA | NA | NA | NA |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.487 | 0.429 | 0.694 | 0 | 6 | 1 | 6 | 13 | 0.487 | 0.429 | 0.694 |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 38% | 0 | 6 | 1 | 6 | 13 | 0.137 | 0.095 | 0.165 | 0 | 3 | 1 | 4 | 8 | 0.256 | 0.292 | 0.406 |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 54% | 0 | 6 | 1 | 6 | 13 | 0.861 | 0.978 | 0.879 | 0 | 3 | 0 | 3 | 6 | 0.513 | 1.000 | 0.896 |
| 05_2_131 | MW-15015R | Appendix IV | Thallium | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.906 | 0.995 | 0.934 | NA | NA | NA | NA | NA | NA | NA | NA |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 85% | 0 | 6 | 1 | 6 | 13 | 0.131 | 0.810 | 0.492 | 0 | 1 | 1 | 0 | 2 | 0.317 | NA | NA |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 8% | 0 | 6 | 1 | 6 | 13 | 0.172 | 0.000 *** | 0.006 ** | 0 | 5 | 1 | 6 | 12 | 0.234 | 0.000 *** | 0.009 ** |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.264 | 0.317 | 0.250 | 0 | 6 | 1 | 6 | 13 | 0.264 | 0.317 | 0.250 |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 92% | 0 | 6 | 1 | 6 | 13 | 0.385 | 0.898 | 0.850 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 06_2_106 | MW-15016R | Appendix IV | Cadmium | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.174 | 0.882 | 0.791 | NA | NA | NA | NA | NA | NA | NA | NA |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 15% | 0 | 6 | 1 | 6 | 13 | 0.891 | 0.891 | 0.912 | 0 | 5 | 1 | 5 | 11 | 0.960 | 0.952 | 0.964 |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 8% | 0 | 6 | 1 | 6 | 13 | 0.511 | 0.326 | 0.340 | 0 | 5 | 1 | 6 | 12 | 0.425 | 0.238 | 0.281 |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 77% | 0 | 6 | 1 | 6 | 13 | 0.268 | 0.483 | 0.778 | 0 | 2 | 1 | 0 | 3 | 0.221 | 0.204 | 0.287 |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 85% | 0 | 6 | 1 | 6 | 13 | 0.473 | 0.989 | 0.855 | 0 | 1 | 0 | 1 | 2 | 0.317 | NA | NA |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 23% | 0 | 6 | 1 | 6 | 13 | 0.268 | 0.622 | 0.591 | 0 | 5 | 1 | 4 | 10 | 0.249 | 0.628 | 0.494 |
| 06_2_118 | MW-15016R | Appendix IV | Mercury | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | NA | 0.600 | 0.600 | NA | NA | NA | NA | NA | NA | NA | NA |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 69% | 0 | 6 | 1 | 6 | 13 | 0.140 | 0.101 | 0.190 | 0 | 2 | 1 | 1 | 4 | 0.259 | 0.391 | 0.393 |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.584 | 0.495 | 0.416 | 0 | 6 | 1 | 6 | 13 | 0.584 | 0.495 | 0.416 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 62% | 0 | 6 | 1 | 6 | 13 | 0.844 | 0.740 | 0.808 | 0 | 3 | 0 | 2 | 5 | 0.248 | 0.332 | 0.471 |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.457 | 0.854 | 0.637 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_101 | MW-15017 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.380 | 0.215 | 0.168 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 4% | 3 | 10 | 3 | 9 | 25 | 0.025 * | 0.040 * | 0.015 * | 3 | 9 | 3 | 9 | 24 | 0.029 * | 0.049 * | 0.018 * |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.555 | 0.444 | 0.405 | 3 | 10 | 3 | 9 | 25 | 0.555 | 0.444 | 0.405 |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 92% | 3 | 10 | 3 | 8 | 24 | 0.365 | 0.202 | 0.297 | 0 | 1 | 0 | 1 | 2 | 0.317 | NA | NA |
| 07_2_106 | MW-15017 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.070 | 0.787 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 4% | 3 | 10 | 3 | 9 | 25 | 0.042 * | 0.147 | 0.072 | 3 | 10 | 3 | 8 | 24 | 0.050 | 0.173 | 0.096 |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 54% | 3 | 10 | 3 | 8 | 24 | 0.030 * | 0.004 ** | 0.012 * | 0 | 5 | 0 | 6 | 11 | 0.715 | 0.913 | 0.815 |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 96% | 3 | 10 | 3 | 10 | 26 | 0.120 | 0.088 | 0.209 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.742 | 0.919 | 0.964 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 64% | 3 | 10 | 3 | 9 | 25 | 0.853 | 0.676 | 0.546 | 0 | 5 | 0 | 4 | 9 | 0.176 | 0.206 | 0.169 |
| 07_2_118 | MW-15017 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | NA | 0.059 | 0.059 | NA | NA | NA | NA | NA | NA | NA | NA |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 88% | 3 | 10 | 3 | 9 | 25 | 0.413 | 0.269 | 0.294 | 0 | 2 | 0 | 1 | 3 | 1.000 | 0.739 | 0.850 |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.263 | 0.394 | 0.475 | 3 | 10 | 3 | 9 | 25 | 0.263 | 0.394 | 0.475 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 48% | 3 | 10 | 3 | 9 | 25 | 0.076 | 0.024 * | 0.048 * | 3 | 4 | 3 | 3 | 13 | 0.677 | 0.489 | 0.499 |
| 07_2_131 | MW-15017 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.068 | 0.184 | 0.210 | NA | NA | NA | NA | NA | NA | NA | NA |
| 08_2_101 | MW-15018 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.380 | 0.215 | 0.168 | NA | NA | NA | NA | NA | NA | NA | NA |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 56% | 3 | 10 | 3 | 9 | 25 | 0.307 | 0.924 | 0.683 | 1 | 4 | 1 | 5 | 11 | 0.375 | 0.689 | 0.512 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.269 | 0.943 | 0.859 | 3 | 10 | 3 | 9 | 25 | 0.269 | 0.943 | 0.859 |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.357 | 0.194 | 0.151 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 08_2_106 | MW-15018 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.070 | 0.787 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 40% | 3 | 10 | 3 | 9 | 25 | 0.611 | 0.620 | 0.512 | 1 | 7 | 1 | 6 | 15 | 0.566 | 0.733 | 0.674 |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 83% | 3 | 10 | 3 | 8 | 24 | 0.034 * | 0.005 ** | 0.027 * | 0 | 2 | 0 | 2 | 4 | 0.121 | 0.150 | 0.205 |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 58% | 3 | 10 | 3 | 10 | 26 | 0.126 | 0.084 | 0.095 | 0 | 6 | 0 | 5 | 11 | 0.462 | 0.551 | 0.608 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 71% | 3 | 10 | 3 | 8 | 24 | 0.746 | 0.815 | 0.978 | 0 | 3 | 0 | 4 | 7 | 0.289 | 0.434 | 0.629 |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.560 | 0.818 | 0.773 | 3 | 10 | 3 | 9 | 25 | 0.560 | 0.818 | 0.773 |
| 08_2_118 | MW-15018 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | NA | 0.059 | 0.059 | NA | NA | NA | NA | NA | NA | NA | NA |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 92% | 3 | 10 | 3 | 9 | 25 | 0.413 | 0.264 | 0.210 | 0 | 0 | 0 | 2 | 2 | NA | NA | NA |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 28% | 3 | 10 | 3 | 9 | 25 | 0.527 | 0.387 | 0.443 | 2 | 7 | 2 | 7 | 18 | 0.872 | 0.669 | 0.658 |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 84% | 3 | 10 | 3 | 9 | 25 | 0.220 | 0.188 | 0.230 | 0 | 2 | 1 | 1 | 4 | 0.259 | 0.130 | 0.258 |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.052 | 0.095 | 0.100 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 09_2_101 | MW-15019 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.432 | 0.263 | 0.187 | NA | NA | NA | NA | NA | NA | NA | NA |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 60% | 3 | 10 | 3 | 9 | 25 | 0.658 | 0.565 | 0.676 | 0 | 5 | 0 | 5 | 10 | 0.602 | 0.363 | 0.573 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.041 * | 0.046 * | 0.036 * | 3 | 10 | 3 | 9 | 25 | 0.041 * | 0.046 * | 0.036 * |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.353 | 0.198 | 0.150 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.255 | 0.840 | 0.835 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 56% | 3 | 10 | 3 | 9 | 25 | 0.403 | 0.325 | 0.258 | 0 | 5 | 1 | 5 | 11 | 0.260 | 0.265 | 0.290 |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 54% | 3 | 10 | 3 | 8 | 24 | 0.032 * | 0.004 ** | 0.013 * | 0 | 5 | 0 | 6 | 11 | 0.465 | 0.800 | 0.955 |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 88% | 3 | 10 | 3 | 10 | 26 | 0.113 | 0.084 | 0.112 | 0 | 2 | 0 | 1 | 3 | 0.221 | 0.269 | 0.377 |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 83% | 3 | 10 | 3 | 8 | 24 | 0.546 | 0.993 | 0.863 | 0 | 2 | 0 | 2 | 4 | 1.000 | 0.539 | 0.667 |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 12% | 3 | 10 | 3 | 9 | 25 | 0.085 | 0.118 | 0.265 | 3 | 9 | 3 | 7 | 22 | 0.135 | 0.202 | 0.355 |
| 09_2_118 | MW-15019 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | NA | 0.059 | 0.059 | NA | NA | NA | NA | NA | NA | NA | NA |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 84% | 3 | 10 | 3 | 9 | 25 | 0.317 | 0.215 | 0.132 | 0 | 3 | 0 | 1 | 4 | 0.180 | 0.467 | 0.265 |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 20% | 3 | 10 | 3 | 9 | 25 | 0.350 | 0.241 | 0.266 | 3 | 8 | 2 | 7 | 20 | 0.205 | 0.191 | 0.207 |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 76% | 3 | 10 | 3 | 9 | 25 | 0.179 | 0.597 | 0.438 | 0 | 2 | 2 | 2 | 6 | 0.156 | 0.113 | 0.210 |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 88% | 3 | 10 | 3 | 8 | 24 | 0.070 | 0.103 | 0.133 | 0 | 2 | 0 | 1 | 3 | 0.221 | 0.422 | 0.265 |
| 10_2_101 | MW-15020 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.380 | 0.215 | 0.168 | NA | NA | NA | NA | NA | NA | NA | NA |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 72% | 3 | 10 | 3 | 9 | 25 | 0.437 | 0.991 | 0.719 | 0 | 4 | 0 | 3 | 7 | 0.724 | 0.909 | 0.981 |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.044 * | 0.066 | 0.019 * | 3 | 10 | 3 | 9 | 25 | 0.044 * | 0.066 | 0.019 * |
| 10_2_104 | MW-15020 | Appendix IV | Beryllium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.368 | 0.200 | 0.158 | NA | NA | NA | NA | NA | NA | NA | NA |
| 10_2_106 | MW-15020 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.070 | 0.787 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 52% | 3 | 10 | 3 | 9 | 25 | 0.320 | 0.077 | 0.169 | 1 | 4 | 1 | 6 | 12 | 0.273 | 0.005 ** | 0.072 |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 79% | 3 | 10 | 3 | 8 | 24 | 0.030 * | 0.005 ** | 0.028 * | 0 | 3 | 0 | 2 | 5 | 0.564 | 0.785 | 0.984 |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 85% | 3 | 10 | 3 | 10 | 26 | 0.122 | 0.084 | 0.137 | 0 | 3 | 0 | 1 | 4 | 0.180 | 0.366 | 0.539 |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.343 | 0.996 | 0.816 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 16% | 3 | 10 | 3 | 9 | 25 | 0.088 | 0.109 | 0.220 | 3 | 9 | 3 | 6 | 21 | 0.178 | 0.166 | 0.170 |
| 10_2_118 | MW-15020 | Appendix IV | Mercury | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | NA | 0.059 | 0.059 | NA | NA | NA | NA | NA | NA | NA | NA |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 96% | 3 | 10 | 3 | 9 | 25 | 0.413 | 0.263 | 0.228 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 24% | 3 | 10 | 3 | 9 | 25 | 0.169 | 0.355 | 0.145 | 1 | 8 | 1 | 9 | 19 | 0.557 | 0.578 | 0.566 |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 84% | 3 | 10 | 3 | 9 | 25 | 0.167 | 0.517 | 0.293 | 1 | 0 | 2 | 1 | 4 | 0.259 | 0.373 | 0.225 |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.055 | 0.098 | 0.107 | NA | NA | NA | NA | NA | NA | NA | NA |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 96% | 3 | 9 | 4 | 8 | 24 | 0.591 | 0.382 | 0.368 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 24% | 3 | 9 | 4 | 9 | 25 | 0.481 | 0.270 | 0.220 | 3 | 6 | 3 | 7 | 19 | 0.549 | 0.284 | 0.259 |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 0% | 3 | 9 | 4 | 9 | 25 | 0.209 | 0.300 | 0.294 | 3 | 9 | 4 | 9 | 25 | 0.209 | 0.300 | 0.294 |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 96% | 3 | 9 | 4 | 8 | 24 | 0.583 | 0.419 | 0.491 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 11_2_106 | MW-15021 | Appendix IV | Cadmium | ug/L | 100% | 3 | 9 | 4 | 8 | 24 | 0.141 | 0.777 | 0.640 | NA | NA | NA | NA | NA | NA | NA | NA |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 24% | 3 | 9 | 4 | 9 | 25 | 0.279 | 0.129 | 0.171 | 2 | 7 | 3 | 7 | 19 | 0.211 | 0.054 | 0.085 |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 58% | 3 | 9 | 4 | 8 | 24 | 0.125 | 0.029 * | 0.063 | 0 | 4 | 1 | 5 | 10 | 0.162 | 0.281 | 0.322 |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 88% | 3 | 9 | 4 | 10 | 26 | 0.266 | 0.249 | 0.288 | 0 | 2 | 0 | 1 | 3 | 0.221 | 0.284 | 0.475 |
| 11_2_116 | MW-15021 | Appendix IV | Lead | ug/L | 100% | 3 | 9 | 4 | 8 | 24 | 0.514 | 0.974 | 0.862 | NA | NA | NA | NA | NA | NA | NA | NA |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 72% | 3 | 9 | 4 | 9 | 25 | 0.543 | 0.468 | 0.589 | 0 | 3 | 0 | 4 | 7 | 0.372 | 0.525 | 0.485 |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 96% | 3 | 9 | 4 | 8 | 24 | 0.572 | 0.601 | 0.601 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 11_2_119 | MW-15021 | Appendix IV | Molybdenum | ug/L | 100% | 3 | 9 | 4 | 9 | 25 | 0.650 | 0.510 | 0.443 | NA | NA | NA | NA | NA | NA | NA | NA |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 16% | 3 | 9 | 4 | 9 | 25 | 0.232 | 0.202 | 0.247 | 3 | 7 | 3 | 8 | 21 | 0.138 | 0.094 | 0.101 |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 60% | 3 | 9 | 4 | 9 | 25 | 0.530 | 0.524 | 0.502 | 2 | 4 | 2 | 2 | 10 | 0.207 | 0.269 | 0.345 |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 100% | 3 | 9 | 4 | 8 | 24 | 0.142 | 0.243 | 0.248 | NA | NA | NA | NA | NA | NA | NA | NA |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 96% | 3 | 10 | 4 | 8 | 25 | 0.555 | 0.482 | 0.367 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 38% | 3 | 10 | 4 | 9 | 26 | 0.113 | 0.085 | 0.119 | 3 | 6 | 3 | 4 | 16 | 0.317 | 0.347 | 0.285 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 4 | 9 | 26 | 0.170 | 0.091 | 0.131 | 3 | 10 | 4 | 9 | 26 | 0.170 | 0.091 | 0.131 |
| 12_2_104 | MW-15022 | Appendix IV | Beryllium | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | 0.533 | 0.378 | 0.323 | NA | NA | NA | NA | NA | NA | NA | NA |
| 12_2_106 | MW-15022 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | 0.136 | 0.773 | 0.624 | NA | NA | NA | NA | NA | NA | NA | NA |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 65% | 3 | 10 | 4 | 9 | 26 | 0.763 | 0.700 | 0.547 | 1 | 4 | 1 | 3 | 9 | 0.520 | 0.765 | 0.559 |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 76% | 3 | 10 | 4 | 8 | 25 | 0.066 | 0.024 * | 0.062 | 0 | 3 | 0 | 3 | 6 | 0.077 | 0.075 | 0.076 |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 70% | 3 | 10 | 4 | 10 | 27 | 0.240 | 0.231 | 0.274 | 0 | 5 | 1 | 2 | 8 | 0.406 | 0.508 | 0.519 |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | 0.537 | 0.991 | 0.896 | NA | NA | NA | NA | NA | NA | NA | NA |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 31% | 3 | 10 | 4 | 9 | 26 | 0.047 * | 0.094 | 0.044 * | 0 | 8 | 2 | 8 | 18 | 0.497 | 0.366 | 0.372 |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 96% | 3 | 10 | 4 | 8 | 25 | 0.547 | 0.574 | 0.574 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 50% | 3 | 10 | 4 | 9 | 26 | 0.142 | 0.377 | 0.205 | 3 | 5 | 2 | 3 | 13 | 0.183 | 0.346 | 0.402 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 50% | 3 | 10 | 4 | 9 | 26 | 0.133 | 0.251 | 0.119 | 0 | 8 | 1 | 4 | 13 | 0.737 | 0.553 | 0.427 |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 92% | 3 | 10 | 4 | 9 | 26 | 0.532 | 0.957 | 0.595 | 0 | 0 | 0 | 2 | 2 | NA | NA | NA |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 4 | 8 | 25 | 0.140 | 0.240 | 0.253 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_101 | MW-15023 | Appendix IV | Antimony | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.380 | 0.215 | 0.168 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 32% | 3 | 10 | 3 | 9 | 25 | 0.597 | 0.903 | 0.998 | 3 | 6 | 2 | 6 | 17 | 0.856 | 0.829 | 0.986 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 0% | 3 | 10 | 3 | 9 | 25 | 0.185 | 0.537 | 0.350 | 3 | 10 | 3 | 9 | 25 | 0.185 | 0.537 | 0.350 |
| 13_2_104 | MW-15023 | Appendix IV | Beryllium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.368 | 0.200 | 0.158 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_106 | MW-15023 | Appendix IV | Cadmium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.070 | 0.787 | 0.610 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 68% | 3 | 10 | 3 | 9 | 25 | 0.552 | 0.526 | 0.318 | 0 | 4 | 1 | 3 | 8 | 0.530 | 0.658 | 0.520 |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 92% | 3 | 10 | 3 | 8 | 24 | 0.026 * | 0.005 ** | 0.030 * | 0 | 1 | 0 | 1 | 2 | NA | NA | NA |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 62% | 3 | 10 | 3 | 10 | 26 | 0.126 | 0.085 | 0.100 | 0 | 5 | 0 | 5 | 10 | 0.916 | 0.993 | 0.971 |
| 13_2_116 | MW-15023 | Appendix IV | Lead | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.380 | 0.998 | 0.829 | NA | NA | NA | NA | NA | NA | NA | NA |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 20% | 3 | 10 | 3 | 9 | 25 | 0.469 | 0.515 | 0.421 | 2 | 9 | 1 | 8 | 20 | 0.602 | 0.744 | 0.670 |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 96% | 3 | 10 | 3 | 8 | 24 | 0.572 | 0.601 | 0.601 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 16% | 3 | 10 | 3 | 9 | 25 | 0.689 | 0.563 | 0.574 | 3 | 6 | 3 | 9 | 21 | 0.454 | 0.417 | 0.371 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 48% | 3 | 10 | 3 | 9 | 25 | 0.429 | 0.491 | 0.543 | 2 | 6 | 0 | 5 | 13 | 0.419 | 0.487 | 0.627 |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 88% | 3 | 10 | 3 | 9 | 25 | 0.413 | 0.968 | 0.636 | 0 | 1 | 1 | 1 | 3 | 0.368 | NA | NA |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 100% | 3 | 10 | 3 | 8 | 24 | 0.055 | 0.098 | 0.107 | NA | NA | NA | NA | NA | NA | NA | NA |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 92% | 0 | 6 | 1 | 6 | 13 | 0.383 | 0.376 | 0.300 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 38% | 0 | 6 | 1 | 6 | 13 | 0.673 | 0.642 | 0.568 | 0 | 3 | 1 | 4 | 8 | 0.443 | 0.565 | 0.518 |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.473 | 0.489 | 0.432 | 0 | 6 | 1 | 6 | 13 | 0.473 | 0.489 | 0.432 |
| 14_2_104 | MW-17001R | Appendix IV | Beryllium | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.174 | 0.882 | 0.791 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_106 | MW-17001R | Appendix IV | Cadmium | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.174 | 0.882 | 0.791 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 62% | 0 | 6 | 1 | 6 | 13 | 0.361 | 0.855 | 0.708 | 0 | 2 | 1 | 2 | 5 | 0.497 | 0.700 | 0.692 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 46% | 0 | 6 | 1 | 6 | 13 | 0.714 | 0.761 | 0.821 | 0 | 3 | 1 | 3 | 7 | 0.368 | 0.463 | 0.419 |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 23% | 0 | 6 | 1 | 6 | 13 | 0.541 | 0.502 | 0.528 | 0 | 6 | 1 | 3 | 10 | 0.348 | 0.358 | 0.378 |
| 14_2_116 | MW-17001R | Appendix IV | Lead | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.457 | 0.989 | 0.893 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.923 | 0.930 | 0.957 | 0 | 6 | 1 | 6 | 13 | 0.923 | 0.930 | 0.957 |
| 14_2_118 | MW-17001R | Appendix IV | Mercury | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | NA | 0.600 | 0.600 | NA | NA | NA | NA | NA | NA | NA | NA |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 54% | 0 | 6 | 1 | 6 | 13 | 0.249 | 0.714 | 0.320 | 0 | 3 | 1 | 2 | 6 | 0.343 | 0.646 | 0.600 |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 0% | 0 | 6 | 1 | 6 | 13 | 0.358 | 0.527 | NA | 0 | 6 | 1 | 6 | 13 | 0.358 | 0.527 | NA |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 92% | 0 | 6 | 1 | 6 | 13 | 0.408 | 0.944 | 0.690 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 100% | 0 | 6 | 1 | 6 | 13 | 0.457 | 0.854 | 0.637 | NA | NA | NA | NA | NA | NA | NA | NA |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 89% | 2 | 7 | 2 | 7 | 18 | 0.133 | 0.041 * | 0.098 | 1 | 1 | 0 | 0 | 2 | 0.317 | NA | NA |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 0% | 2 | 7 | 2 | 8 | 19 | 0.869 | 0.451 | 0.681 | 2 | 7 | 2 | 8 | 19 | 0.869 | 0.451 | 0.681 |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 0% | 2 | 7 | 2 | 8 | 19 | 0.254 | 0.546 | 0.438 | 2 | 7 | 2 | 8 | 19 | 0.254 | 0.546 | 0.438 |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.348 | 0.197 | 0.148 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 72% | 2 | 7 | 2 | 7 | 18 | 0.240 | 0.832 | 0.762 | 0 | 3 | 0 | 2 | 5 | 0.761 | 0.546 | 0.420 |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 58% | 2 | 7 | 2 | 8 | 19 | 0.337 | 0.236 | 0.176 | 0 | 4 | 0 | 4 | 8 | 0.144 | 0.128 | 0.147 |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 83% | 2 | 7 | 2 | 7 | 18 | 0.023 * | 0.000 *** | 0.003 ** | 0 | 1 | 0 | 2 | 3 | 1.000 | 0.927 | 0.834 |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 42% | 2 | 7 | 2 | 8 | 19 | 0.103 | 0.028 * | 0.044 * | 0 | 6 | 0 | 5 | 11 | 0.715 | 0.960 | 0.763 |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.865 | 0.965 | 0.925 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 0% | 2 | 7 | 2 | 8 | 19 | 0.601 | 0.608 | 0.665 | 2 | 7 | 2 | 8 | 19 | 0.601 | 0.608 | 0.665 |
| 15_2_118 | MW-17002 | Appendix IV | Mercury | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | NA | 0.027 * | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 32% | 2 | 7 | 2 | 8 | 19 | 0.475 | 0.266 | 0.386 | 1 | 6 | 0 | 6 | 13 | 0.579 | 0.402 | 0.754 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 26% | 2 | 7 | 2 | 8 | 19 | 0.015 * | 0.037 * | 0.014 * | 0 | 5 | 1 | 8 | 14 | 0.081 | 0.227 | 0.107 |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 79% | 2 | 7 | 2 | 8 | 19 | 0.319 | 0.683 | 0.520 | 1 | 1 | 0 | 2 | 4 | 0.259 | 0.045 * | 0.090 |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.065 | 0.243 | 0.295 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.172 | 0.054 | 0.102 | 1 | 0 | 0 | 0 | 1 | NA | NA | NA |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 16% | 2 | 7 | 2 | 8 | 19 | 0.150 | 0.610 | 0.072 | 1 | 7 | 1 | 7 | 16 | 0.436 | 0.798 | 0.149 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 0% | 2 | 7 | 2 | 8 | 19 | 0.812 | 0.924 | 0.894 | 2 | 7 | 2 | 8 | 19 | 0.812 | 0.924 | 0.894 |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 83% | 2 | 7 | 2 | 7 | 18 | 0.349 | 0.197 | 0.149 | 0 | 1 | 0 | 2 | 3 | 0.221 | 0.619 | 0.603 |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.149 | 0.866 | 0.795 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 68% | 2 | 7 | 2 | 8 | 19 | 0.323 | 0.252 | 0.207 | 0 | 3 | 0 | 3 | 6 | 0.127 | 0.331 | 0.323 |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 67% | 2 | 7 | 2 | 7 | 18 | 0.356 | 0.904 | 0.399 | 0 | 3 | 0 | 3 | 6 | 0.513 | 0.474 | 0.490 |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 63% | 2 | 7 | 2 | 8 | 19 | 0.090 | 0.022 * | 0.057 | 0 | 4 | 0 | 3 | 7 | 0.480 | 0.320 | 0.346 |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | 0.965 | 0.776 | 0.911 | NA | NA | NA | NA | NA | NA | NA | NA |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 0% | 2 | 7 | 2 | 8 | 19 | 0.124 | 0.607 | 0.342 | 2 | 7 | 2 | 8 | 19 | 0.124 | 0.607 | 0.342 |
| 16_2_118 | MW-17003 | Appendix IV | Mercury | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | NA | 0.027 * | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 26% | 2 | 7 | 2 | 8 | 19 | 0.316 | 0.717 | 0.485 | 2 | 6 | 0 | 6 | 14 | 0.656 | 0.602 | 0.648 |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 47% | 2 | 7 | 2 | 8 | 19 | 0.011 * | 0.004 ** | 0.014 * | 0 | 4 | 0 | 6 | 10 | 0.088 | 0.030 * | 0.031 * |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 74% | 2 | 7 | 2 | 8 | 19 | 0.330 | 0.445 | 0.351 | 1 | 2 | 0 | 2 | 5 | 0.165 | 0.000 *** | 0.002 ** |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | 0.069 | 0.250 | 0.312 | NA | NA | NA | NA | NA | NA | NA | NA |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 83% | 2 | 7 | 2 | 7 | 18 | 0.367 | 0.096 | 0.251 | 0 | 3 | 0 | 0 | 3 | NA | NA | NA |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 11% | 2 | 7 | 2 | 8 | 19 | 0.252 | 0.469 | 0.279 | 2 | 7 | 1 | 7 | 17 | 0.324 | 0.593 | 0.425 |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 0% | 2 | 7 | 2 | 8 | 19 | 0.874 | 0.814 | 0.964 | 2 | 7 | 2 | 8 | 19 | 0.874 | 0.814 | 0.964 |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | 0.319 | 0.198 | 0.140 | NA | NA | NA | NA | NA | NA | NA | NA |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.093 | 0.793 | 0.614 | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 68% | 2 | 7 | 2 | 8 | 19 | 0.493 | 0.770 | 0.629 | 0 | 3 | 1 | 2 | 6 | 0.643 | 0.773 | 0.837 |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 61% | 2 | 7 | 2 | 7 | 18 | 0.028 * | 0.000 *** | 0.011 * | 0 | 4 | 0 | 3 | 7 | 0.480 | 0.648 | 0.620 |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 74% | 2 | 7 | 2 | 8 | 19 | 0.076 | 0.021 * | 0.029 * | 0 | 3 | 0 | 2 | 5 | 1.000 | 0.661 | 0.745 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 83% | 2 | 7 | 2 | 7 | 18 | 0.407 | 0.603 | 0.642 | 0 | 2 | 0 | 1 | 3 | 0.480 | 0.667 | 0.667 |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 32% | 2 | 7 | 2 | 8 | 19 | 0.593 | 0.463 | 0.509 | 0 | 6 | 0 | 7 | 13 | 0.943 | 0.925 | 0.603 |
| 17_2_118 | MW-17004 | Appendix IV | Mercury | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | NA | 0.027 * | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 37% | 2 | 7 | 2 | 8 | 19 | 0.758 | 0.635 | 0.928 | 2 | 6 | 0 | 4 | 12 | 0.083 | 0.097 | 0.297 |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 37% | 2 | 7 | 2 | 8 | 19 | 0.146 | 0.748 | NA | 0 | 7 | 0 | 5 | 12 | 0.808 | 0.492 | NA |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 79% | 2 | 7 | 2 | 8 | 19 | 0.544 | 0.757 | 0.686 | 0 | 3 | 0 | 1 | 4 | 0.180 | 0.658 | 0.618 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 83% | 2 | 7 | 2 | 7 | 18 | 0.063 | 0.123 | 0.215 | 0 | 2 | 0 | 1 | 3 | 1.000 | 0.670 | 0.683 |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | 0.203 | 0.059 | 0.110 | NA | NA | NA | NA | NA | NA | NA | NA |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 68% | 2 | 7 | 2 | 8 | 19 | 0.223 | 0.447 | 0.393 | 1 | 3 | 0 | 2 | 6 | 0.304 | 0.000 *** | 0.021 * |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 0% | 2 | 7 | 2 | 8 | 19 | 0.870 | 0.996 | 0.929 | 2 | 7 | 2 | 8 | 19 | 0.870 | 0.996 | 0.929 |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.348 | 0.198 | 0.185 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 18_2_106 | MW-17005 | Appendix IV | Cadmium | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | 0.076 | 0.839 | 0.686 | NA | NA | NA | NA | NA | NA | NA | NA |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 58% | 2 | 7 | 2 | 8 | 19 | 0.531 | 0.292 | 0.239 | 0 | 4 | 0 | 4 | 8 | 0.386 | 0.327 | 0.315 |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.016 * | 0.000 *** | 0.002 ** | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 79% | 2 | 7 | 2 | 8 | 19 | 0.067 | 0.020 * | 0.028 * | 0 | 2 | 0 | 2 | 4 | 1.000 | 0.783 | 0.605 |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 94% | 2 | 7 | 2 | 7 | 18 | 0.390 | 0.991 | 0.738 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 16% | 2 | 7 | 2 | 8 | 19 | 0.341 | 0.945 | 0.734 | 2 | 6 | 1 | 7 | 16 | 0.486 | 0.966 | 0.816 |
| 18_2_118 | MW-17005 | Appendix IV | Mercury | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | NA | 0.027 * | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 79% | 2 | 7 | 2 | 8 | 19 | 0.647 | 0.563 | 0.492 | 0 | 2 | 0 | 2 | 4 | 0.683 | 0.624 | 0.845 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 42% | 2 | 7 | 2 | 8 | 19 | 0.118 | 0.493 | 0.239 | 0 | 6 | 0 | 5 | 11 | 0.273 | 0.201 | 0.217 |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 95% | 2 | 7 | 2 | 8 | 19 | 0.359 | 0.695 | 0.490 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 100% | 2 | 7 | 2 | 7 | 18 | 0.050 * | 0.084 | 0.104 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_101 | MW-17006 | Appendix IV | Antimony | ug/L | 100% | 2 | 6 | 3 | 7 | 18 | 0.499 | 0.346 | 0.372 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 37% | 2 | 6 | 3 | 8 | 19 | 0.677 | 0.713 | 0.626 | 2 | 4 | 1 | 5 | 12 | 0.837 | 0.838 | 0.772 |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 0% | 2 | 6 | 3 | 8 | 19 | 0.975 | 0.931 | 0.954 | 2 | 6 | 3 | 8 | 19 | 0.975 | 0.931 | 0.954 |

*(Table continues on next page)*

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 7:** Seasonality Tests *(continued)*

| | | | | | | Full | | | | | | | | Without Non-Detects | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sample Size | | | | | p-Value | | | Sample Size | | | | | p-Value | | |
| ID | Well | Constituent Type | Constituent | Unit | % NDs | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA | Winter | Spring | Summer | Fall | Total | Kruskal-Wallis | ANOVA | Log ANOVA |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 100% | 2 | 6 | 3 | 7 | 18 | 0.543 | 0.439 | 0.360 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_106 | MW-17006 | Appendix IV | Cadmium | ug/L | 100% | 2 | 6 | 3 | 7 | 18 | 0.161 | 0.805 | 0.688 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 79% | 2 | 6 | 3 | 8 | 19 | 0.690 | 0.581 | 0.491 | 0 | 1 | 0 | 3 | 4 | 0.180 | 0.509 | 0.442 |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 94% | 2 | 6 | 3 | 7 | 18 | 0.061 | 0.001 *** | 0.034 * | 0 | 1 | 0 | 0 | 1 | NA | NA | NA |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 47% | 2 | 6 | 3 | 8 | 19 | 0.264 | 0.120 | 0.167 | 0 | 5 | 1 | 4 | 10 | 0.857 | 0.765 | 0.764 |
| 19_2_116 | MW-17006 | Appendix IV | Lead | ug/L | 100% | 2 | 6 | 3 | 7 | 18 | 0.594 | 0.976 | 0.925 | NA | NA | NA | NA | NA | NA | NA | NA |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 0% | 2 | 6 | 3 | 8 | 19 | 0.318 | 0.673 | 0.620 | 2 | 6 | 3 | 8 | 19 | 0.318 | 0.673 | 0.620 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 94% | 2 | 6 | 3 | 7 | 18 | 0.666 | 0.704 | 0.704 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 68% | 2 | 6 | 3 | 8 | 19 | 0.808 | 0.712 | 0.907 | 0 | 4 | 0 | 2 | 6 | 0.355 | 0.939 | 0.479 |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 32% | 2 | 6 | 3 | 8 | 19 | 0.347 | 0.336 | 0.440 | 0 | 5 | 1 | 7 | 13 | 0.062 | 0.015 * | 0.127 |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 95% | 2 | 6 | 3 | 8 | 19 | 0.632 | 0.912 | 0.704 | 0 | 0 | 0 | 1 | 1 | NA | NA | NA |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 100% | 2 | 6 | 3 | 7 | 18 | 0.156 | 0.270 | 0.298 | NA | NA | NA | NA | NA | NA | NA | NA |

*** p < 0.001, ** p < 0.01, * p < 0.05

**Table 8:** Trend Tests: Lognormal MLE and MK

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Type | Method | Slope | p-value | Trend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | Parametric | Lognormal MLE | -0.000297 | 0.188 | ↔ |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Nonparametric | MK | 0.0293 | 0.000 | ↑ |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | 0.000225 | 0.000 | ↑ |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 25 | 6 | 24% | Parametric | Lognormal MLE | -0.000938 | 0.000 | ↓ |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | Parametric | Lognormal MLE | 0.000396 | 0.000 | ↑ |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 26 | 0 | 0% | Parametric | Lognormal MLE | 0.0000825 | 0.197 | ↔ |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 26 | 11 | 42% | Parametric | Lognormal MLE | -0.000984 | 0.000 | ↓ |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Nonparametric | MK | 0.0194 | 0.019 | ↔ |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | 0.000211 | 0.000 | ↑ |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 25 | 5 | 20% | Parametric | Lognormal MLE | -0.000862 | 0.000 | ↓ |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | Parametric | Lognormal MLE | -0.0000262 | 0.819 | ↔ |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 10 | 0 | 0% | Parametric | Lognormal MLE | -0.0000937 | 0.101 | ↔ |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10 | 1 | 10% | Parametric | Lognormal MLE | 0.000207 | 0.279 | ↔ |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 10 | 0 | 0% | Nonparametric | MK | 0 | 1.000 | ↔ |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 10 | 2 | 20% | Parametric | Lognormal MLE | -0.00127 | 0.001 | ↓ |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 10 | 3 | 30% | Parametric | Lognormal MLE | 0.0000666 | 0.905 | ↔ |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 13 | 6 | 46% | Parametric | Lognormal MLE | 0.00122 | 0.215 | ↔ |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 13 | 0 | 0% | Parametric | Lognormal MLE | 0.00102 | 0.000 | ↑ |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | Parametric | Lognormal MLE | -0.000323 | 0.003 | ↓ |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 13 | 6 | 46% | Parametric | Lognormal MLE | 0.000167 | 0.665 | ↔ |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | Parametric | Lognormal MLE | 0.000644 | 0.022 | ↔ |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 13 | 0 | 0% | Parametric | Lognormal MLE | 0.00141 | 0.012 | ↔ |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 13 | 5 | 38% | Parametric | Lognormal MLE | -0.000446 | 0.255 | ↔ |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 13 | 1 | 8% | Nonparametric | MK | 0.000171 | 0.668 | ↔ |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | Parametric | Lognormal MLE | 0.000125 | 0.013 | ↔ |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 13 | 2 | 15% | Parametric | Lognormal MLE | 0.0000487 | 0.527 | ↔ |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 13 | 1 | 8% | Parametric | Lognormal MLE | -0.000243 | 0.013 | ↔ |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | Parametric | Lognormal MLE | 0.000273 | 0.027 | ↔ |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | Nonparametric | MK | -0.000943 | 0.000 | ↓ |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | 0.0000403 | 0.008 | ↑ |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 25 | 1 | 4% | Parametric | Lognormal MLE | -0.000634 | 0.000 | ↓ |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 25 | 0 | 0% | Parametric | Lognormal MLE | -0.0000381 | 0.108 | ↔ |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 25 | 12 | 48% | Parametric | Lognormal MLE | -0.000832 | 0.000 | ↓ |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Nonparametric | MK | -0.00809 | 0.044 | ↔ |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 25 | 10 | 40% | Parametric | Lognormal MLE | -0.000202 | 0.014 | ↔ |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | -0.0000684 | 0.109 | ↔ |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 25 | 7 | 28% | Parametric | Lognormal MLE | -0.0000759 | 0.273 | ↔ |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Nonparametric | MK | 0.0712 | 0.000 | ↑ |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 25 | 5 | 20% | Parametric | Lognormal MLE | 0.000237 | 0.010 | ↑ |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | 0.000454 | 0.000 | ↑ |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 25 | 4 | 16% | Parametric | Lognormal MLE | -0.000334 | 0.001 | ↓ |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 25 | 6 | 24% | Parametric | Lognormal MLE | 0.000334 | 0.006 | ↑ |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 25 | 6 | 24% | Parametric | Lognormal MLE | -0.0000712 | 0.551 | ↔ |

*(Table continues on next page)*

**Table 8:** Trend Tests: Lognormal MLE and MK *(continued)*

| ID | Well | Constituent Type | Constituent | Unit | n | No. NDs | % NDs | Type | Method | Slope | p-value | Trend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Nonparametric | MK | 0.0493 | 0.000 | ↑ |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 25 | 4 | 16% | Parametric | Lognormal MLE | 0.000136 | 0.174 | ↔ |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | Parametric | Lognormal MLE | 0.000161 | 0.000 | ↑ |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 26 | 8 | 31% | Parametric | Lognormal MLE | 0.000655 | 0.000 | ↑ |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | Parametric | Lognormal MLE | 0.000305 | 0.000 | ↑ |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 25 | 5 | 20% | Parametric | Lognormal MLE | 0.000359 | 0.000 | ↑ |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 25 | 4 | 16% | Nonparametric | MK | 0.00180 | 0.002 | ↑ |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | Parametric | Lognormal MLE | 0.000327 | 0.060 | ↔ |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 13 | 5 | 38% | Parametric | Lognormal MLE | -0.00113 | 0.001 | ↓ |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | Parametric | Lognormal MLE | 0.000564 | 0.000 | ↑ |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 13 | 6 | 46% | Parametric | Lognormal MLE | 0.0000474 | 0.807 | ↔ |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 13 | 3 | 23% | Parametric | Lognormal MLE | -0.000000649 | 0.995 | ↔ |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | Parametric | Lognormal MLE | 0.000445 | 0.037 | ↔ |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 19 | 0 | 0% | Nonparametric | MK | 0.0284 | 0.007 | ↑ |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | Parametric | Lognormal MLE | -0.000113 | 0.279 | ↔ |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 19 | 8 | 42% | Parametric | Lognormal MLE | 0.0000529 | 0.723 | ↔ |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | Parametric | Lognormal MLE | 0.000275 | 0.001 | ↑ |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 19 | 6 | 32% | Parametric | Lognormal MLE | 0.00300 | 0.000 | ↑ |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 19 | 5 | 26% | Parametric | Lognormal MLE | -0.00000915 | 0.972 | ↔ |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 19 | 3 | 16% | Parametric | Lognormal MLE | 0.00179 | 0.000 | ↑ |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | Parametric | Lognormal MLE | -0.000459 | 0.001 | ↓ |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | Nonparametric | MK | 0.0616 | 0.000 | ↑ |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 19 | 5 | 26% | Parametric | Lognormal MLE | 0.00131 | 0.000 | ↑ |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 19 | 9 | 47% | Parametric | Lognormal MLE | 0.000245 | 0.133 | ↔ |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 19 | 2 | 11% | Parametric | Lognormal MLE | 0.000725 | 0.001 | ↑ |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | Parametric | Lognormal MLE | -0.000296 | 0.019 | ↔ |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 19 | 7 | 37% | Parametric | Lognormal MLE | 0.00115 | 0.001 | ↑ |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | Parametric | Lognormal MLE | -0.000115 | 0.405 | ↔ |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 19 | 3 | 16% | Parametric | Lognormal MLE | 0.0000838 | 0.640 | ↔ |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 19 | 8 | 42% | Parametric | Lognormal MLE | 0.000288 | 0.187 | ↔ |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 19 | 7 | 37% | Parametric | Lognormal MLE | -0.000459 | 0.124 | ↔ |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | Parametric | Lognormal MLE | -0.0000291 | 0.676 | ↔ |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 19 | 9 | 47% | Parametric | Lognormal MLE | 0.000668 | 0.003 | ↑ |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | Parametric | Lognormal MLE | -0.000157 | 0.041 | ↔ |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 19 | 6 | 32% | Parametric | Lognormal MLE | 0.000409 | 0.058 | ↔ |

**Table 9:** 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 |
| 01_2_101 | MW-15009 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | -0.00018535 | 0.021 | ↔ | -0.00047229 | 0.519 | ↔ | 2023-10-07 | 0.450 |

*(Table continues on next page)*

**Table 9:** 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 |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | -0.023859 | 0.000 | ↓ | 0.011245 | 0.000 | ↑ | 2019-11-16 | 0.784 |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.047818 | 0.001 | ↑ | 0.00031772 | 0.994 | ↔ | 2022-05-05 | 0.565 |
| 01_2_104 | MW-15009 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | -0.0003665 | 0.024 | ↔ | < 0.0001 | 0.968 | ↔ | 2021-02-18 | 0.479 |
| 01_2_106 | MW-15009 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.00010909 | 0.178 | ↔ | 2018-02-16 | 0.153 |
| 01_2_109 | MW-15009 | Appendix IV | Chromium | ug/L | 25 | 21 | 84% | -0.00042885 | 0.018 | ↔ | < 0.0001 | 0.932 | ↔ | 2021-02-21 | 0.472 |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | -0.0088956 | 0.000 | ↓ | < 0.0001 | 0.950 | ↔ | 2021-02-07 | 0.907 |
| 01_2_114 | MW-15009 | Appendix IV | Fluoride | ug/L | 25 | 18 | 72% | -0.46861 | 0.000 | ↓ | 0.099618 | 0.654 | ↔ | 2022-07-17 | 0.807 |
| 01_2_116 | MW-15009 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | 0.00015419 | 0.296 | ↔ | -0.0013113 | 0.358 | ↔ | 2023-10-03 | 0.141 |
| 01_2_117 | MW-15009 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.015006 | 0.022 | ↔ | -0.0037059 | 0.418 | ↔ | 2020-05-06 | 0.429 |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 25 | 6 | 24% | -0.048035 | 0.000 | ↓ | 0.0036004 | 0.048 | ↔ | 2019-06-05 | 0.966 |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 25 | 16 | 64% | 0.0024203 | 0.086 | ↔ | -0.00054115 | 0.016 | ↔ | 2017-09-18 | 0.326 |
| 01_2_127 | MW-15009 | Appendix IV | Selenium | ug/L | 25 | 24 | 96% | -0.00020121 | 0.531 | ↔ | < 0.0001 | 0.879 | ↔ | 2020-10-26 | 0.046 |
| 01_2_131 | MW-15009 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | -0.00075222 | 0.002 | ↓ | -0.00013051 | 0.723 | ↔ | 2021-04-20 | 0.632 |
| 02_2_101 | MW-15010 | Appendix IV | Antimony | ug/L | 25 | 25 | 100% | -0.00029748 | 0.014 | ↔ | < 0.0001 | 0.784 | ↔ | 2021-10-21 | 0.473 |
| 02_2_102 | MW-15010 | Appendix IV | Arsenic | ug/L | 26 | 22 | 85% | 0.00011236 | 0.418 | ↔ | -0.0017 | 0.229 | ↔ | 2023-10-04 | 0.214 |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | -0.19231 | 0.737 | ↔ | 0.031753 | 0.000 | ↑ | 2016-03-09 | 0.593 |
| 02_2_104 | MW-15010 | Appendix IV | Beryllium | ug/L | 25 | 24 | 96% | -0.00036766 | 0.024 | ↔ | < 0.0001 | 0.911 | ↔ | 2021-04-20 | 0.497 |
| 02_2_106 | MW-15010 | Appendix IV | Cadmium | ug/L | 25 | 25 | 100% | < 0.0001 | 1.000 | ↔ | 0.00010693 | 0.177 | ↔ | 2018-03-30 | 0.146 |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 26 | 15 | 58% | -0.00043467 | 0.012 | ↔ | < 0.0001 | 0.842 | ↔ | 2021-01-12 | 0.501 |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 25 | 20 | 80% | -0.0088842 | 0.000 | ↓ | -0.00013734 | 0.918 | ↔ | 2021-02-12 | 0.910 |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 27 | 15 | 56% | -0.33189 | 0.000 | ↓ | 0.10776 | 0.657 | ↔ | 2023-06-11 | 0.851 |
| 02_2_116 | MW-15010 | Appendix IV | Lead | ug/L | 25 | 25 | 100% | < 0.0001 | 0.780 | ↔ | < 0.0001 | 0.852 | ↔ | 2020-10-27 | 0.006 |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 26 | 0 | 0% | 0.024175 | 0.041 | ↔ | -0.0044957 | 0.211 | ↔ | 2018-06-14 | 0.279 |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 26 | 11 | 42% | -0.05373 | 0.000 | ↓ | -0.0021374 | 0.008 | ↓ | 2017-03-21 | 0.904 |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 0.00029745 | 0.030 | ↔ | -0.0016416 | 0.068 | ↔ | 2023-10-03 | 0.298 |
| 02_2_127 | MW-15010 | Appendix IV | Selenium | ug/L | 26 | 23 | 88% | -0.00014642 | 0.565 | ↔ | 0.00020406 | 0.533 | ↔ | 2021-04-20 | 0.033 |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 25 | 25 | 100% | -0.00076303 | 0.002 | ↓ | < 0.0001 | 0.815 | ↔ | 2021-07-15 | 0.645 |
| 03_2_101 | MW-15013 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | -0.00018536 | 0.021 | ↔ | -0.00047115 | 0.519 | ↔ | 2023-10-07 | 0.450 |
| 03_2_102 | MW-15013 | Appendix IV | Arsenic | ug/L | 25 | 19 | 76% | 0.00015124 | 0.363 | ↔ | -0.0010195 | 0.524 | ↔ | 2023-10-09 | 0.073 |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | -0.015111 | 0.462 | ↔ | 0.053001 | 0.000 | ↑ | 2019-05-24 | 0.693 |
| 03_2_104 | MW-15013 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | -0.0003659 | 0.024 | ↔ | < 0.0001 | 0.996 | ↔ | 2021-02-28 | 0.477 |
| 03_2_106 | MW-15013 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.00010899 | 0.179 | ↔ | 2018-02-15 | 0.153 |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 25 | 20 | 80% | -0.00048506 | 0.032 | ↔ | 0.00052516 | 0.169 | ↔ | 2021-08-23 | 0.280 |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | -0.0089027 | 0.000 | ↓ | -0.00016221 | 0.908 | ↔ | 2021-02-05 | 0.907 |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 26 | 17 | 65% | -0.4039 | 0.000 | ↓ | 0.0016326 | 0.994 | ↔ | 2022-12-12 | 0.861 |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | -0.00017149 | 0.665 | ↔ | 0.00091765 | 0.181 | ↔ | 2021-06-16 | 0.174 |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.00078781 | 0.828 | ↔ | 0.0098826 | 0.001 | ↑ | 2020-04-14 | 0.633 |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 25 | 5 | 20% | 0.0030209 | 0.710 | ↔ | -0.010024 | 0.217 | ↔ | 2020-05-07 | 0.142 |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.00027255 | 0.685 | ↔ | -0.00016003 | 0.133 | ↔ | 2018-04-16 | 0.114 |
| 03_2_127 | MW-15013 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.652 | ↔ | 2016-11-18 | 0.015 |
| 03_2_131 | MW-15013 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | -0.00074305 | 0.003 | ↓ | -0.00017907 | 0.632 | ↔ | 2021-04-21 | 0.633 |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 10 | 10 | 100% | 0.00076395 | 0.585 | ↔ | -0.00098745 | 0.260 | ↔ | 2023-07-05 | 0.275 |

*(Table continues on next page)*

**Table 9:** 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 |
| 04_2_102 | MW-15014R | Appendix IV | Arsenic | ug/L | 10 | 5 | 50% | 0.003325 | 0.242 | ↔ | -0.0026932 | 0.129 | ↔ | 2023-05-04 | 0.472 |
| 04_2_103 | MW-15014R | Appendix IV | Barium | ug/L | 10 | 0 | 0% | 0.004114 | 0.800 | ↔ | -0.10638 | 0.388 | ↔ | 2024-11-10 | 0.468 |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 10 | 9 | 90% | 0.0019508 | 0.078 | ↔ | -0.0010004 | 0.119 | ↔ | 2023-04-11 | 0.566 |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 10 | 10 | 100% | 0.00076395 | 0.585 | ↔ | -0.00098745 | 0.260 | ↔ | 2023-07-05 | 0.275 |
| 04_2_109 | MW-15014R | Appendix IV | Chromium | ug/L | 10 | 9 | 90% | 0.0019638 | 0.068 | ↔ | -0.00089276 | 0.142 | ↔ | 2023-04-11 | 0.566 |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 10 | 8 | 80% | 0.0042997 | 0.068 | ↔ | -0.0025985 | 0.066 | ↔ | 2023-04-28 | 0.628 |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10 | 1 | 10% | -0.049478 | 0.326 | ↔ | 1.1702 | 0.014 | ↔ | 2025-02-14 | 0.841 |
| 04_2_116 | MW-15014R | Appendix IV | Lead | ug/L | 10 | 10 | 100% | 0.0018093 | 0.585 | ↔ | -0.0023387 | 0.260 | ↔ | 2023-07-05 | 0.275 |
| 04_2_117 | MW-15014R | Appendix IV | Lithium | ug/L | 10 | 0 | 0% | 0.10239 | 0.475 | ↔ | -0.056985 | 0.145 | ↔ | 2023-04-10 | 0.376 |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 10 | 3 | 30% | -0.029459 | 0.164 | ↔ | 0.00033041 | 0.451 | ↔ | 2022-03-12 | 0.409 |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 10 | 8 | 80% | 0.0038311 | 0.373 | ↔ | -0.0016848 | 0.146 | ↔ | 2023-04-10 | 0.441 |
| 04_2_131 | MW-15014R | Appendix IV | Thallium | ug/L | 10 | 10 | 100% | 0.0012223 | 0.585 | ↔ | -0.0015799 | 0.260 | ↔ | 2023-07-05 | 0.275 |
| 05_2_101 | MW-15015R | Appendix IV | Antimony | ug/L | 13 | 6 | 46% | 0.005441 | 0.111 | ↔ | -0.006918 | 0.230 | ↔ | 2023-04-11 | 0.351 |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 13 | 0 | 0% | 0.014763 | 0.017 | ↔ | 0.058093 | 0.079 | ↔ | 2024-03-28 | 0.866 |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.21375 | 0.375 | ↔ | -0.0515 | 0.014 | ↔ | 2021-01-07 | 0.535 |
| 05_2_104 | MW-15015R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | 0.00055173 | 0.108 | ↔ | -0.00099178 | 0.099 | ↔ | 2023-09-30 | 0.425 |
| 05_2_106 | MW-15015R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | 0.00056985 | 0.083 | ↔ | -0.00096041 | 0.092 | ↔ | 2023-10-02 | 0.456 |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 13 | 11 | 85% | 0.00032708 | 0.326 | ↔ | -0.00083856 | 0.393 | ↔ | 2023-10-03 | 0.210 |
| 05_2_110 | MW-15015R | Appendix IV | Cobalt | ug/L | 13 | 8 | 62% | 0.0012492 | 0.110 | ↔ | -0.0021979 | 0.107 | ↔ | 2023-08-26 | 0.414 |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 13 | 6 | 46% | 0.89223 | 0.748 | ↔ | 0.022074 | 0.400 | ↔ | 2020-07-30 | 0.354 |
| 05_2_116 | MW-15015R | Appendix IV | Lead | ug/L | 13 | 13 | 100% | 0.00096063 | 0.387 | ↔ | -0.00058131 | 0.759 | ↔ | 2023-06-05 | 0.118 |
| 05_2_117 | MW-15015R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | 0.048747 | 0.060 | ↔ | -0.015758 | 0.699 | ↔ | 2023-04-11 | 0.438 |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 13 | 0 | 0% | 0.38038 | 0.055 | ↔ | -0.0945 | 0.420 | ↔ | 2022-05-04 | 0.466 |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 13 | 5 | 38% | 0.00034799 | 0.574 | ↔ | -0.0010803 | 0.326 | ↔ | 2023-04-11 | 0.225 |
| 05_2_127 | MW-15015R | Appendix IV | Selenium | ug/L | 13 | 7 | 54% | 0.00099665 | 0.149 | ↔ | -0.0022811 | 0.068 | ↔ | 2023-08-05 | 0.450 |
| 06_2_101 | MW-15016R | Appendix IV | Antimony | ug/L | 13 | 11 | 85% | 0.00058062 | 0.078 | ↔ | -0.00096452 | 0.090 | ↔ | 2023-10-02 | 0.464 |
| 06_2_102 | MW-15016R | Appendix IV | Arsenic | ug/L | 13 | 1 | 8% | -0.037052 | 0.009 | ↓ | 0.00052803 | 0.540 | ↔ | 2020-11-14 | 0.761 |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.49116 | 0.011 | ↔ | -0.11187 | 0.292 | ↔ | 2022-06-18 | 0.684 |
| 06_2_104 | MW-15016R | Appendix IV | Beryllium | ug/L | 13 | 12 | 92% | 0.00055153 | 0.105 | ↔ | -0.00098889 | 0.097 | ↔ | 2023-10-02 | 0.429 |
| 06_2_106 | MW-15016R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | 0.00056906 | 0.083 | ↔ | -0.00095889 | 0.093 | ↔ | 2023-10-02 | 0.455 |
| 06_2_109 | MW-15016R | Appendix IV | Chromium | ug/L | 13 | 2 | 15% | 0.00028689 | 0.178 | ↔ | -0.00033318 | 0.356 | ↔ | 2023-08-12 | 0.272 |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 13 | 1 | 8% | -0.012 | 0.709 | ↔ | < 0.0001 | 0.812 | ↔ | 2020-07-20 | 0.223 |
| 06_2_116 | MW-15016R | Appendix IV | Lead | ug/L | 13 | 11 | 85% | 0.0012469 | 0.137 | ↔ | -0.0023293 | 0.115 | ↔ | 2023-10-02 | 0.390 |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 13 | 3 | 23% | 0.039986 | 0.171 | ↔ | -0.050665 | 0.307 | ↔ | 2023-04-12 | 0.277 |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 13 | 9 | 69% | -0.024992 | 0.856 | ↔ | < 0.0001 | 0.991 | ↔ | 2020-10-27 | 0.314 |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | -0.0022745 | 0.807 | ↔ | 0.0015258 | 0.049 | ↔ | 2021-04-20 | 0.400 |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | 0.00048782 | 0.311 | ↔ | -0.0013173 | 0.354 | ↔ | 2023-10-03 | 0.236 |
| 07_2_101 | MW-15017 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | -0.00018552 | 0.021 | ↔ | -0.00047104 | 0.519 | ↔ | 2023-10-06 | 0.451 |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | -0.012224 | 0.001 | ↓ | < 0.0001 | 0.969 | ↔ | 2017-12-09 | 0.753 |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | -0.18236 | 0.337 | ↔ | 0.066577 | 0.005 | ↑ | 2017-07-11 | 0.357 |
| 07_2_104 | MW-15017 | Appendix IV | Beryllium | ug/L | 24 | 22 | 92% | -0.0003965 | 0.051 | ↔ | < 0.0001 | 0.878 | ↔ | 2020-10-28 | 0.470 |
| 07_2_106 | MW-15017 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.00010902 | 0.179 | ↔ | 2018-02-15 | 0.153 |

*(Table continues on next page)*

**Table 9:** 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 |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 25 | 1 | 4% | -0.0026496 | 0.001 | ↓ | 0.00017249 | 0.886 | ↔ | 2021-08-17 | 0.633 |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | -0.0085346 | 0.000 | ↓ | -0.00030234 | 0.817 | ↔ | 2021-03-11 | 0.915 |
| 07_2_114 | MW-15017 | Appendix IV | Fluoride | ug/L | 26 | 25 | 96% | -0.47605 | 0.000 | ↓ | 0.17947 | 0.425 | ↔ | 2022-07-30 | 0.797 |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | 0.00025794 | 0.123 | ↔ | -0.0017877 | 0.262 | ↔ | 2023-10-02 | 0.208 |
| 07_2_117 | MW-15017 | Appendix IV | Lithium | ug/L | 25 | 16 | 64% | -0.00012867 | 0.874 | ↔ | -0.0080281 | 0.129 | ↔ | 2023-08-24 | 0.274 |
| 07_2_119 | MW-15017 | Appendix IV | Molybdenum | ug/L | 25 | 22 | 88% | -0.0017485 | 0.036 | ↔ | -0.0001677 | 0.871 | ↔ | 2021-04-20 | 0.431 |
| 07_2_125 | MW-15017 | Appendix IV | Radium-226+228 | pCi/L | 25 | 0 | 0% | -0.00036237 | 0.125 | ↔ | 0.00035206 | 0.517 | ↔ | 2022-05-04 | 0.168 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 25 | 12 | 48% | -0.0023636 | 0.004 | ↓ | 0.0010729 | 0.156 | ↔ | 2020-07-14 | 0.460 |
| 07_2_131 | MW-15017 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | -0.00060857 | 0.069 | ↔ | -0.00032975 | 0.261 | ↔ | 2020-10-28 | 0.563 |
| 08_2_101 | MW-15018 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | -0.00018525 | 0.021 | ↔ | -0.00047069 | 0.519 | ↔ | 2023-10-02 | 0.451 |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 25 | 14 | 56% | 0.0001509 | 0.457 | ↔ | -0.0013166 | 0.307 | ↔ | 2023-04-13 | 0.137 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.022628 | 0.161 | ↔ | -0.053213 | 0.016 | ↔ | 2021-04-21 | 0.327 |
| 08_2_104 | MW-15018 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | -0.00036609 | 0.026 | ↔ | < 0.0001 | 0.891 | ↔ | 2021-02-04 | 0.480 |
| 08_2_106 | MW-15018 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.0001091 | 0.179 | ↔ | 2018-02-16 | 0.153 |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 25 | 10 | 40% | < 0.0001 | 0.449 | ↔ | -0.00069259 | 0.377 | ↔ | 2023-10-09 | 0.248 |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | -0.0088493 | 0.000 | ↓ | -0.00012267 | 0.929 | ↔ | 2021-02-12 | 0.908 |
| 08_2_114 | MW-15018 | Appendix IV | Fluoride | ug/L | 26 | 15 | 58% | -0.40876 | 0.000 | ↓ | 0.054356 | 0.821 | ↔ | 2022-12-09 | 0.827 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 24 | 17 | 71% | 0.00033175 | 0.129 | ↔ | -0.0022555 | 0.103 | ↔ | 2023-10-01 | 0.228 |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.0081162 | 0.191 | ↔ | -0.0037115 | 0.016 | ↔ | 2018-04-18 | 0.299 |
| 08_2_119 | MW-15018 | Appendix IV | Molybdenum | ug/L | 25 | 23 | 92% | -0.0016881 | 0.036 | ↔ | -0.00026723 | 0.790 | ↔ | 2021-04-21 | 0.444 |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 25 | 7 | 28% | 0.00091691 | 0.120 | ↔ | -0.00022996 | 0.016 | ↔ | 2017-10-06 | 0.312 |
| 08_2_127 | MW-15018 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | -0.0004856 | 0.289 | ↔ | < 0.0001 | 0.843 | ↔ | 2020-05-06 | 0.102 |
| 08_2_131 | MW-15018 | Appendix IV | Thallium | ug/L | 24 | 23 | 96% | -0.00074855 | 0.003 | ↓ | -0.00016293 | 0.663 | ↔ | 2021-04-22 | 0.633 |
| 09_2_101 | MW-15019 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | -0.00017829 | 0.039 | ↔ | -0.00052588 | 0.508 | ↔ | 2023-10-07 | 0.411 |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 25 | 15 | 60% | 0.00088422 | 0.098 | ↔ | -0.0020797 | 0.098 | ↔ | 2022-05-02 | 0.222 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.1136 | 0.001 | ↑ | -0.04693 | 0.802 | ↔ | 2023-04-12 | 0.517 |
| 09_2_104 | MW-15019 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | -0.00019071 | 0.020 | ↔ | -0.0005206 | 0.484 | ↔ | 2023-10-07 | 0.466 |
| 09_2_106 | MW-15019 | Appendix IV | Cadmium | ug/L | 24 | 23 | 96% | 0.00016759 | 0.012 | ↔ | -0.00063171 | 0.292 | ↔ | 2023-10-03 | 0.308 |
| 09_2_109 | MW-15019 | Appendix IV | Chromium | ug/L | 25 | 14 | 56% | -0.00020323 | 0.050 | ↔ | < 0.0001 | 0.923 | ↔ | 2021-04-22 | 0.331 |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | -0.0087299 | 0.000 | ↓ | -0.00038317 | 0.775 | ↔ | 2021-01-18 | 0.911 |
| 09_2_114 | MW-15019 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | -0.47273 | 0.000 | ↓ | 0.060845 | 0.779 | ↔ | 2022-06-13 | 0.814 |
| 09_2_116 | MW-15019 | Appendix IV | Lead | ug/L | 24 | 20 | 83% | 0.00015505 | 0.331 | ↔ | -0.0017243 | 0.265 | ↔ | 2023-10-09 | 0.189 |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 25 | 3 | 12% | -0.0066632 | 0.000 | ↓ | 0.011214 | 0.831 | ↔ | 2025-03-17 | 0.572 |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 25 | 21 | 84% | -0.00027235 | 0.628 | ↔ | -0.0052145 | 0.151 | ↔ | 2023-07-26 | 0.309 |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 25 | 5 | 20% | 0.00042521 | 0.024 | ↔ | -0.0009799 | 0.567 | ↔ | 2023-10-03 | 0.241 |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 25 | 19 | 76% | -0.00030304 | 0.375 | ↔ | < 0.0001 | 0.765 | ↔ | 2020-07-11 | 0.070 |
| 09_2_131 | MW-15019 | Appendix IV | Thallium | ug/L | 24 | 21 | 88% | -0.00080801 | 0.007 | ↓ | -0.00012888 | 0.705 | ↔ | 2021-02-19 | 0.612 |
| 10_2_101 | MW-15020 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | -0.0001854 | 0.021 | ↔ | -0.00047237 | 0.519 | ↔ | 2023-10-07 | 0.450 |
| 10_2_102 | MW-15020 | Appendix IV | Arsenic | ug/L | 25 | 18 | 72% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.676 | ↔ | 2017-07-02 | 0.015 |
| 10_2_103 | MW-15020 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.18437 | 0.000 | ↑ | -0.085804 | 0.027 | ↔ | 2020-09-21 | 0.703 |
| 10_2_104 | MW-15020 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | -0.00036598 | 0.024 | ↔ | < 0.0001 | 0.970 | ↔ | 2021-02-21 | 0.478 |
| 10_2_106 | MW-15020 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.00010926 | 0.178 | ↔ | 2018-02-18 | 0.153 |

*(Table continues on next page)*

**Table 9:** 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 |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 25 | 13 | 52% | -0.0011607 | 0.547 | ↔ | -0.00020923 | 0.005 | ↓ | 2016-08-11 | 0.476 |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | -0.0087919 | 0.000 | ↓ | -0.00023666 | 0.863 | ↔ | 2021-02-19 | 0.909 |
| 10_2_114 | MW-15020 | Appendix IV | Fluoride | ug/L | 26 | 22 | 85% | -0.47246 | 0.000 | ↓ | 0.092118 | 0.676 | ↔ | 2022-07-02 | 0.807 |
| 10_2_116 | MW-15020 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | 0.00015998 | 0.273 | ↔ | -0.0013414 | 0.341 | ↔ | 2023-10-03 | 0.150 |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 25 | 4 | 16% | -0.0047858 | 0.000 | ↓ | 0.00244 | 0.492 | ↔ | 2022-05-18 | 0.589 |
| 10_2_119 | MW-15020 | Appendix IV | Molybdenum | ug/L | 25 | 24 | 96% | -0.001685 | 0.020 | ↔ | -0.0003083 | 0.794 | ↔ | 2021-04-22 | 0.444 |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 25 | 6 | 24% | 0.0015044 | 0.005 | ↑ | -0.00073999 | 0.051 | ↔ | 2020-05-04 | 0.495 |
| 10_2_127 | MW-15020 | Appendix IV | Selenium | ug/L | 25 | 21 | 84% | -0.00020217 | 0.473 | ↔ | < 0.0001 | 0.954 | ↔ | 2020-10-28 | 0.052 |
| 10_2_131 | MW-15020 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | -0.00075189 | 0.002 | ↓ | -0.00012989 | 0.724 | ↔ | 2021-04-22 | 0.632 |
| 11_2_101 | MW-15021 | Appendix IV | Antimony | ug/L | 24 | 23 | 96% | -0.00019213 | 0.018 | ↔ | -0.00046354 | 0.529 | ↔ | 2023-10-06 | 0.456 |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 25 | 6 | 24% | -0.0010016 | 0.066 | ↔ | 0.00029933 | 0.183 | ↔ | 2019-02-19 | 0.266 |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | -0.066115 | 0.376 | ↔ | 0.076068 | 0.000 | ↑ | 2017-09-20 | 0.775 |
| 11_2_104 | MW-15021 | Appendix IV | Beryllium | ug/L | 24 | 23 | 96% | -0.00039874 | 0.018 | ↔ | < 0.0001 | 0.985 | ↔ | 2020-10-30 | 0.468 |
| 11_2_106 | MW-15021 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.00010893 | 0.180 | ↔ | 2018-02-17 | 0.152 |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 25 | 6 | 24% | -0.00056164 | 0.005 | ↓ | < 0.0001 | 0.648 | ↔ | 2020-05-06 | 0.495 |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 24 | 14 | 58% | -0.0088254 | 0.000 | ↓ | < 0.0001 | 0.976 | ↔ | 2021-02-06 | 0.910 |
| 11_2_114 | MW-15021 | Appendix IV | Fluoride | ug/L | 26 | 23 | 88% | -0.47386 | 0.000 | ↓ | 0.030859 | 0.888 | ↔ | 2022-05-18 | 0.813 |
| 11_2_116 | MW-15021 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | < 0.0001 | 0.878 | ↔ | < 0.0001 | 0.868 | ↔ | 2020-10-29 | 0.003 |
| 11_2_117 | MW-15021 | Appendix IV | Lithium | ug/L | 25 | 18 | 72% | -0.0029544 | 0.040 | ↔ | -0.0014322 | 0.433 | ↔ | 2020-10-30 | 0.485 |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.513 | ↔ | 2019-01-02 | 0.058 |
| 11_2_119 | MW-15021 | Appendix IV | Molybdenum | ug/L | 25 | 25 | 100% | -0.001665 | 0.036 | ↔ | -0.00014029 | 0.888 | ↔ | 2021-06-14 | 0.441 |
| 11_2_125 | MW-15021 | Appendix IV | Radium-226+228 | pCi/L | 25 | 4 | 16% | -0.00033097 | 0.914 | ↔ | 0.00024293 | 0.154 | ↔ | 2017-02-14 | 0.114 |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 25 | 15 | 60% | -0.00030251 | 0.106 | ↔ | 0.010463 | 0.126 | ↔ | 2025-03-17 | 0.244 |
| 11_2_131 | MW-15021 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | -0.00074045 | 0.002 | ↓ | -0.00011747 | 0.748 | ↔ | 2021-06-15 | 0.634 |
| 12_2_101 | MW-15022 | Appendix IV | Antimony | ug/L | 25 | 24 | 96% | -0.00031085 | 0.060 | ↔ | -0.00010089 | 0.695 | ↔ | 2021-10-19 | 0.410 |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 26 | 10 | 38% | -0.0067976 | 0.000 | ↓ | -0.00041846 | 0.253 | ↔ | 2018-06-10 | 0.825 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 0.033889 | 0.019 | ↔ | -0.0020303 | 0.966 | ↔ | 2022-10-19 | 0.356 |
| 12_2_104 | MW-15022 | Appendix IV | Beryllium | ug/L | 25 | 25 | 100% | -0.00037146 | 0.020 | ↔ | < 0.0001 | 0.960 | ↔ | 2021-04-20 | 0.496 |
| 12_2_106 | MW-15022 | Appendix IV | Cadmium | ug/L | 25 | 25 | 100% | < 0.0001 | 1.000 | ↔ | 0.00010686 | 0.177 | ↔ | 2018-03-29 | 0.146 |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 26 | 17 | 65% | -0.00043996 | 0.011 | ↔ | < 0.0001 | 0.886 | ↔ | 2021-04-20 | 0.499 |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 25 | 19 | 76% | -0.0088937 | 0.000 | ↓ | -0.00019221 | 0.883 | ↔ | 2021-02-27 | 0.915 |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 27 | 19 | 70% | -0.40784 | 0.000 | ↓ | 0.13324 | 0.615 | ↔ | 2023-05-25 | 0.876 |
| 12_2_116 | MW-15022 | Appendix IV | Lead | ug/L | 25 | 25 | 100% | < 0.0001 | 0.816 | ↔ | < 0.0001 | 0.832 | ↔ | 2020-10-27 | 0.006 |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 26 | 8 | 31% | 0.0068755 | 0.049 | ↔ | 0.025375 | 0.000 | ↑ | 2021-07-18 | 0.818 |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 25 | 24 | 96% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.557 | ↔ | 2019-04-27 | 0.054 |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 26 | 13 | 50% | -0.0075395 | 0.044 | ↔ | -0.00074451 | 0.901 | ↔ | 2021-10-08 | 0.380 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 0.00098298 | 0.138 | ↔ | -0.00023219 | 0.258 | ↔ | 2018-08-06 | 0.177 |
| 12_2_127 | MW-15022 | Appendix IV | Selenium | ug/L | 26 | 24 | 92% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.556 | ↔ | 2017-10-23 | 0.031 |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 25 | 25 | 100% | -0.00076378 | 0.002 | ↓ | < 0.0001 | 0.815 | ↔ | 2021-07-15 | 0.645 |
| 13_2_101 | MW-15023 | Appendix IV | Antimony | ug/L | 24 | 24 | 100% | -0.00018531 | 0.021 | ↔ | -0.00047069 | 0.519 | ↔ | 2023-10-03 | 0.450 |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 25 | 8 | 32% | -0.00024808 | 0.668 | ↔ | 0.03148 | 0.000 | ↑ | 2023-09-02 | 0.908 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.0048315 | 0.419 | ↔ | 0.29426 | 0.000 | ↑ | 2023-10-21 | 0.870 |

*(Table continues on next page)*

**Table 9:** 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 |
| 13_2_104 | MW-15023 | Appendix IV | Beryllium | ug/L | 24 | 24 | 100% | -0.00036627 | 0.024 | ↔ | < 0.0001 | 0.970 | ↔ | 2021-02-21 | 0.478 |
| 13_2_106 | MW-15023 | Appendix IV | Cadmium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | 0.00010918 | 0.178 | ↔ | 2018-02-17 | 0.153 |
| 13_2_109 | MW-15023 | Appendix IV | Chromium | ug/L | 25 | 17 | 68% | -0.00043553 | 0.014 | ↔ | < 0.0001 | 0.840 | ↔ | 2021-04-20 | 0.480 |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | -0.0089055 | 0.000 | ↓ | < 0.0001 | 0.951 | ↔ | 2021-02-07 | 0.907 |
| 13_2_114 | MW-15023 | Appendix IV | Fluoride | ug/L | 26 | 16 | 62% | -0.42302 | 0.000 | ↓ | 0.053848 | 0.825 | ↔ | 2023-01-06 | 0.836 |
| 13_2_116 | MW-15023 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | < 0.0001 | 0.874 | ↔ | < 0.0001 | 0.858 | ↔ | 2020-10-29 | 0.003 |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 25 | 5 | 20% | 0.0010006 | 0.620 | ↔ | 0.057436 | 0.000 | ↑ | 2023-10-02 | 0.739 |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | < 0.0001 | 1.000 | ↔ | < 0.0001 | 0.510 | ↔ | 2019-01-02 | 0.058 |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 25 | 4 | 16% | -0.00046739 | 0.936 | ↔ | 0.0073298 | 0.006 | ↑ | 2019-04-11 | 0.474 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | < 0.0001 | 0.551 | ↔ | 0.0020075 | 0.063 | ↔ | 2023-07-13 | 0.329 |
| 13_2_127 | MW-15023 | Appendix IV | Selenium | ug/L | 25 | 22 | 88% | < 0.0001 | 0.616 | ↔ | -0.0011658 | 0.379 | ↔ | 2023-10-10 | 0.127 |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | -0.00075243 | 0.002 | ↓ | -0.0001301 | 0.723 | ↔ | 2021-04-21 | 0.632 |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 13 | 12 | 92% | 0.00035686 | 0.290 | ↔ | -0.00085547 | 0.388 | ↔ | 2023-10-04 | 0.218 |
| 14_2_102 | MW-17001R | Appendix IV | Arsenic | ug/L | 13 | 5 | 38% | -0.212 | 0.005 | ↓ | -0.00016844 | 0.761 | ↔ | 2020-06-19 | 0.803 |
| 14_2_103 | MW-17001R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.12683 | 0.001 | ↑ | 0.067623 | 0.038 | ↔ | 2022-10-20 | 0.923 |
| 14_2_104 | MW-17001R | Appendix IV | Beryllium | ug/L | 13 | 13 | 100% | 0.00056832 | 0.084 | ↔ | -0.00096099 | 0.093 | ↔ | 2023-10-03 | 0.455 |
| 14_2_106 | MW-17001R | Appendix IV | Cadmium | ug/L | 13 | 13 | 100% | 0.00056832 | 0.084 | ↔ | -0.00096099 | 0.093 | ↔ | 2023-10-03 | 0.455 |
| 14_2_109 | MW-17001R | Appendix IV | Chromium | ug/L | 13 | 8 | 62% | 0.00057216 | 0.080 | ↔ | -0.00098777 | 0.084 | ↔ | 2023-10-03 | 0.465 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 13 | 6 | 46% | 0.0010445 | 0.146 | ↔ | -0.0014242 | 0.073 | ↔ | 2023-04-11 | 0.427 |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 13 | 3 | 23% | -0.051324 | 0.213 | ↔ | 0.084624 | 0.068 | ↔ | 2023-03-04 | 0.414 |
| 14_2_116 | MW-17001R | Appendix IV | Lead | ug/L | 13 | 13 | 100% | 0.0010031 | 0.138 | ↔ | -0.0020994 | 0.281 | ↔ | 2023-10-04 | 0.327 |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | -0.17624 | 0.078 | ↔ | 0.086832 | 0.001 | ↑ | 2021-08-02 | 0.781 |
| 14_2_119 | MW-17001R | Appendix IV | Molybdenum | ug/L | 13 | 7 | 54% | 0.0029352 | 0.115 | ↔ | -0.0047829 | 0.139 | ↔ | 2023-07-14 | 0.388 |
| 14_2_125 | MW-17001R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | 0.00078027 | 0.117 | ↔ | -0.00010676 | 0.938 | ↔ | 2023-10-04 | 0.356 |
| 14_2_127 | MW-17001R | Appendix IV | Selenium | ug/L | 13 | 12 | 92% | 0.00086701 | 0.148 | ↔ | -0.0021275 | 0.223 | ↔ | 2023-10-04 | 0.365 |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | 0.00048707 | 0.312 | ↔ | -0.0013201 | 0.354 | ↔ | 2023-10-04 | 0.236 |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 18 | 16 | 89% | -0.00085375 | 0.062 | ↔ | < 0.0001 | 0.945 | ↔ | 2021-02-20 | 0.519 |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 19 | 0 | 0% | 0.045278 | 0.004 | ↑ | -0.2234 | 0.515 | ↔ | 2025-02-03 | 0.458 |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.038332 | 0.224 | ↔ | -0.061715 | 0.136 | ↔ | 2021-10-22 | 0.245 |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | -0.00084724 | 0.098 | ↔ | < 0.0001 | 0.895 | ↔ | 2020-06-01 | 0.442 |
| 15_2_106 | MW-17002 | Appendix IV | Cadmium | ug/L | 18 | 13 | 72% | 0.00029573 | 0.009 | ↑ | -0.0008389 | 0.191 | ↔ | 2023-10-02 | 0.441 |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | -0.00069988 | 0.115 | ↔ | < 0.0001 | 0.849 | ↔ | 2020-09-08 | 0.405 |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 18 | 15 | 83% | -0.021943 | 0.000 | ↓ | < 0.0001 | 0.901 | ↔ | 2019-12-17 | 0.939 |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 19 | 8 | 42% | -0.78245 | 0.002 | ↓ | -0.045754 | 0.607 | ↔ | 2020-10-28 | 0.828 |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | 0.00054935 | 0.101 | ↔ | -0.0033679 | 0.105 | ↔ | 2024-03-26 | 0.314 |
| 15_2_117 | MW-17002 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.012463 | 0.741 | ↔ | 0.068734 | 0.009 | ↑ | 2021-04-20 | 0.608 |
| 15_2_119 | MW-17002 | Appendix IV | Molybdenum | ug/L | 19 | 6 | 32% | 0.673 | 0.000 | ↑ | -1.838 | 0.284 | ↔ | 2024-06-10 | 0.619 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 19 | 5 | 26% | -0.0047926 | 0.164 | ↔ | 0.00014371 | 0.792 | ↔ | 2019-04-11 | 0.249 |
| 15_2_127 | MW-17002 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | < 0.0001 | 0.796 | ↔ | -0.0014789 | 0.374 | ↔ | 2023-10-02 | 0.185 |
| 15_2_131 | MW-17002 | Appendix IV | Thallium | ug/L | 18 | 17 | 94% | -0.0011661 | 0.233 | ↔ | < 0.0001 | 0.832 | ↔ | 2020-10-28 | 0.406 |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 18 | 17 | 94% | -0.00071212 | 0.052 | ↔ | < 0.0001 | 0.957 | ↔ | 2021-04-22 | 0.454 |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 19 | 3 | 16% | 0.014037 | 0.201 | ↔ | 0.22365 | 0.000 | ↑ | 2023-04-11 | 0.925 |

*(Table continues on next page)*

**Table 9:** 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 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.075833 | 0.102 | ↔ | -0.10684 | 0.016 | ↔ | 2021-04-22 | 0.469 |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 18 | 15 | 83% | -0.00084651 | 0.100 | ↔ | < 0.0001 | 0.947 | ↔ | 2020-05-25 | 0.442 |
| 16_2_106 | MW-17003 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | 0.00027351 | 0.020 | ↔ | -0.00080798 | 0.231 | ↔ | 2023-10-02 | 0.381 |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | -0.0007748 | 0.026 | ↔ | 0.00016105 | 0.422 | ↔ | 2020-10-29 | 0.432 |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 18 | 12 | 67% | -0.0072476 | 0.000 | ↓ | 0.14025 | 0.000 | ↑ | 2024-02-05 | 0.973 |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 19 | 12 | 63% | -0.91569 | 0.000 | ↓ | 0.1235 | 0.342 | ↔ | 2021-05-27 | 0.862 |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 18 | 18 | 100% | -0.00029585 | 0.690 | ↔ | 0.0012602 | 0.012 | ↔ | 2021-04-21 | 0.493 |
| 16_2_117 | MW-17003 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.012024 | 0.309 | ↔ | 0.28829 | 0.000 | ↑ | 2022-09-13 | 0.972 |
| 16_2_119 | MW-17003 | Appendix IV | Molybdenum | ug/L | 19 | 5 | 26% | 0.0033657 | 0.655 | ↔ | 0.20886 | 0.000 | ↑ | 2023-06-08 | 0.926 |
| 16_2_125 | MW-17003 | Appendix IV | Radium-226+228 | pCi/L | 19 | 9 | 47% | -0.00039805 | 0.014 | ↔ | 0.00073186 | 0.218 | ↔ | 2023-04-12 | 0.384 |
| 16_2_127 | MW-17003 | Appendix IV | Selenium | ug/L | 19 | 14 | 74% | -0.0010083 | 0.611 | ↔ | -0.00016967 | 0.601 | ↔ | 2019-08-06 | 0.159 |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | -0.0015049 | 0.025 | ↔ | 0.00049545 | 0.193 | ↔ | 2021-01-21 | 0.489 |
| 17_2_101 | MW-17004 | Appendix IV | Antimony | ug/L | 18 | 15 | 83% | -0.00058382 | 0.383 | ↔ | -0.00017242 | 0.497 | ↔ | 2020-10-28 | 0.361 |
| 17_2_102 | MW-17004 | Appendix IV | Arsenic | ug/L | 19 | 2 | 11% | 0.0067786 | 0.004 | ↑ | -0.0089394 | 0.112 | ↔ | 2023-03-07 | 0.535 |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.16948 | 0.048 | ↔ | -0.1851 | 0.002 | ↓ | 2021-03-09 | 0.567 |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 18 | 18 | 100% | -0.00084586 | 0.094 | ↔ | < 0.0001 | 0.821 | ↔ | 2020-06-11 | 0.443 |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | 0.00029126 | 0.011 | ↔ | -0.00078359 | 0.224 | ↔ | 2023-10-03 | 0.423 |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | 0.00098521 | 0.392 | ↔ | -0.0018268 | 0.226 | ↔ | 2022-05-02 | 0.138 |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 18 | 11 | 61% | -0.021845 | 0.000 | ↓ | < 0.0001 | 0.936 | ↔ | 2019-11-24 | 0.922 |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 19 | 14 | 74% | -0.83212 | 0.000 | ↓ | 0.046755 | 0.702 | ↔ | 2021-07-18 | 0.874 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 18 | 15 | 83% | 0.0036092 | 0.144 | ↔ | -0.0048222 | 0.283 | ↔ | 2022-05-03 | 0.207 |
| 17_2_117 | MW-17004 | Appendix IV | Lithium | ug/L | 19 | 6 | 32% | 0.0018985 | 0.863 | ↔ | 0.037006 | 0.000 | ↑ | 2021-04-21 | 0.822 |
| 17_2_119 | MW-17004 | Appendix IV | Molybdenum | ug/L | 19 | 7 | 37% | -0.0059384 | 0.692 | ↔ | 0.017967 | 0.000 | ↑ | 2020-05-04 | 0.698 |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 19 | 7 | 37% | -0.00094118 | 0.812 | ↔ | -0.00013928 | 0.730 | ↔ | 2019-04-11 | 0.054 |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | 0.00022822 | 0.488 | ↔ | -0.0020129 | 0.134 | ↔ | 2023-10-02 | 0.226 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 18 | 15 | 83% | -0.0012291 | 0.095 | ↔ | < 0.0001 | 0.907 | ↔ | 2020-10-29 | 0.413 |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 18 | 18 | 100% | -0.00068677 | 0.062 | ↔ | < 0.0001 | 0.946 | ↔ | 2021-04-22 | 0.434 |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 19 | 13 | 68% | -0.025 | 0.125 | ↔ | -0.00010468 | 0.660 | ↔ | 2018-02-20 | 0.288 |
| 18_2_104 | MW-17005 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | -0.00084586 | 0.103 | ↔ | < 0.0001 | 0.945 | ↔ | 2020-05-28 | 0.439 |
| 18_2_106 | MW-17005 | Appendix IV | Cadmium | ug/L | 18 | 18 | 100% | 0.00027357 | 0.019 | ↔ | -0.00072076 | 0.279 | ↔ | 2023-10-03 | 0.373 |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | -0.00058893 | 0.085 | ↔ | < 0.0001 | 0.872 | ↔ | 2020-10-28 | 0.407 |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | -0.021845 | 0.000 | ↓ | 0.00018375 | 0.810 | ↔ | 2019-12-22 | 0.939 |
| 18_2_114 | MW-17005 | Appendix IV | Fluoride | ug/L | 19 | 15 | 79% | -0.90431 | 0.000 | ↓ | 0.066849 | 0.597 | ↔ | 2021-05-07 | 0.869 |
| 18_2_116 | MW-17005 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | 0.00028559 | 0.306 | ↔ | -0.0016088 | 0.351 | ↔ | 2023-10-03 | 0.184 |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 19 | 3 | 16% | -0.0029072 | 0.602 | ↔ | 0.01644 | 0.278 | ↔ | 2023-04-12 | 0.121 |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 19 | 15 | 79% | -0.0041766 | 0.058 | ↔ | 0.0018863 | 0.156 | ↔ | 2021-01-04 | 0.342 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 19 | 8 | 42% | -0.0018508 | 0.416 | ↔ | 0.00034608 | 0.356 | ↔ | 2019-07-04 | 0.111 |
| 18_2_127 | MW-17005 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | 0.00013319 | 0.598 | ↔ | -0.0015556 | 0.330 | ↔ | 2023-10-03 | 0.196 |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | -0.0015052 | 0.015 | ↔ | < 0.0001 | 0.973 | ↔ | 2020-11-01 | 0.613 |
| 19_2_101 | MW-17006 | Appendix IV | Antimony | ug/L | 18 | 18 | 100% | -0.00065969 | 0.145 | ↔ | < 0.0001 | 0.955 | ↔ | 2021-06-14 | 0.434 |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 19 | 7 | 37% | -0.0024294 | 0.061 | ↔ | 0.0012217 | 0.449 | ↔ | 2022-03-14 | 0.339 |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.063031 | 0.065 | ↔ | -0.040794 | 0.008 | ↓ | 2020-10-29 | 0.478 |

*(Table continues on next page)*

**Table 9:** 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 |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 18 | 18 | 100% | -0.00084586 | 0.094 | ↔ | < 0.0001 | 0.829 | ↔ | 2020-06-10 | 0.442 |
| 19_2_106 | MW-17006 | Appendix IV | Cadmium | ug/L | 18 | 18 | 100% | 0.00027192 | 0.019 | ↔ | -0.00071431 | 0.283 | ↔ | 2023-10-03 | 0.370 |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 19 | 15 | 79% | -0.00072424 | 0.052 | ↔ | < 0.0001 | 0.697 | ↔ | 2020-11-22 | 0.402 |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | -0.021845 | 0.000 | ↓ | 0.00022279 | 0.773 | ↔ | 2019-12-25 | 0.939 |
| 19_2_114 | MW-17006 | Appendix IV | Fluoride | ug/L | 19 | 9 | 47% | -0.91355 | 0.000 | ↓ | 0.072748 | 0.510 | ↔ | 2021-03-21 | 0.858 |
| 19_2_116 | MW-17006 | Appendix IV | Lead | ug/L | 18 | 18 | 100% | 0.00029968 | 0.270 | ↔ | -0.0014966 | 0.372 | ↔ | 2023-10-03 | 0.176 |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | -0.0076289 | 0.064 | ↔ | 0.0057396 | 0.710 | ↔ | 2023-04-13 | 0.262 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 18 | 17 | 94% | 0.00013792 | 0.140 | ↔ | -0.00038786 | 0.490 | ↔ | 2023-10-03 | 0.175 |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 19 | 13 | 68% | -0.0028896 | 0.493 | ↔ | 0.02991 | 0.016 | ↔ | 2023-01-10 | 0.540 |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 19 | 6 | 32% | 0.00045366 | 0.466 | ↔ | -0.00016059 | 0.681 | ↔ | 2021-06-14 | 0.094 |
| 19_2_127 | MW-17006 | Appendix IV | Selenium | ug/L | 19 | 18 | 95% | < 0.0001 | 0.713 | ↔ | -0.0013112 | 0.421 | ↔ | 2023-10-03 | 0.145 |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | -0.0015029 | 0.015 | ↔ | < 0.0001 | 0.959 | ↔ | 2020-10-30 | 0.613 |

**Table 10:** 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 |
| 01_2_102 | MW-15009 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | -0.15237 | 0.002 | ↓ | -0.013449 | 0.000 | ↓ | 0.013131 | 0.000 | ↑ | 2016-05-11 | 2020-10-31 | 0.887 |
| 01_2_103 | MW-15009 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.012419 | 0.528 | ↔ | 0.16327 | 0.267 | ↔ | -0.038977 | 0.218 | ↔ | 2020-07-14 | 2022-05-04 | 0.679 |
| 01_2_110 | MW-15009 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | < 0.0001 | 1.000 | ↔ | -0.031051 | 0.000 | ↓ | 0.00016787 | 0.722 | ↔ | 2018-05-06 | 2019-08-13 | 0.984 |
| 01_2_119 | MW-15009 | Appendix IV | Molybdenum | ug/L | 25 | 6 | 24% | -0.049704 | 0.000 | ↓ | -0.0027837 | 0.409 | ↔ | 0.01114 | 0.040 | ↔ | 2019-01-26 | 2023-01-19 | 0.973 |
| 01_2_125 | MW-15009 | Appendix IV | Radium-226+228 | pCi/L | 25 | 16 | 64% | 0.0026987 | 0.000 | ↑ | -0.0037886 | 0.193 | ↔ | 0.00013293 | 0.636 | ↔ | 2018-06-13 | 2020-01-11 | 0.605 |
| 02_2_103 | MW-15010 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 0.01012 | 0.217 | ↔ | 0.19978 | 0.011 | ↔ | -0.084826 | 0.003 | ↓ | 2021-09-12 | 2023-03-28 | 0.854 |
| 02_2_109 | MW-15010 | Appendix IV | Chromium | ug/L | 26 | 15 | 58% | -0.00047593 | 0.000 | ↓ | 0.0029524 | 0.623 | ↔ | -0.0011202 | 0.006 | ↓ | 2022-06-16 | 2023-04-11 | 0.685 |
| 02_2_110 | MW-15010 | Appendix IV | Cobalt | ug/L | 25 | 20 | 80% | < 0.0001 | 1.000 | ↔ | -0.031133 | 0.000 | ↓ | 0.00010185 | 0.826 | ↔ | 2018-05-07 | 2019-08-12 | 0.984 |
| 02_2_114 | MW-15010 | Appendix IV | Fluoride | ug/L | 27 | 15 | 56% | < 0.0001 | 1.000 | ↔ | -2.87 | 0.000 | ↓ | -0.033583 | 0.123 | ↔ | 2019-09-23 | 2020-05-07 | 0.989 |
| 02_2_117 | MW-15010 | Appendix IV | Lithium | ug/L | 26 | 0 | 0% | 0.028669 | 0.002 | ↑ | -0.030013 | 0.072 | ↔ | 0.0077197 | 0.242 | ↔ | 2019-01-15 | 2021-05-01 | 0.484 |
| 02_2_119 | MW-15010 | Appendix IV | Molybdenum | ug/L | 26 | 11 | 42% | -0.053439 | 0.000 | ↓ | -0.0070798 | 0.030 | ↔ | 0.00035918 | 0.784 | ↔ | 2017-01-22 | 2020-05-03 | 0.929 |
| 02_2_125 | MW-15010 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 0.00063729 | 0.781 | ↔ | 0.00026569 | 0.159 | ↔ | -0.0015969 | 0.090 | ↔ | 2017-02-07 | 2023-10-03 | 0.301 |
| 02_2_131 | MW-15010 | Appendix IV | Thallium | ug/L | 25 | 25 | 100% | < 0.0001 | 1.000 | ↔ | -0.0025575 | 0.132 | ↔ | < 0.0001 | 0.726 | ↔ | 2019-04-08 | 2020-10-23 | 0.748 |
| 03_2_103 | MW-15013 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | -0.014301 | 0.332 | ↔ | 0.22857 | 0.308 | ↔ | 0.028681 | 0.149 | ↔ | 2020-08-19 | 2021-06-25 | 0.735 |
| 03_2_109 | MW-15013 | Appendix IV | Chromium | ug/L | 25 | 20 | 80% | -0.00052682 | 0.022 | ↔ | 0.00086579 | 0.132 | ↔ | -0.0031555 | 0.432 | ↔ | 2021-09-29 | 2025-03-03 | 0.346 |
| 03_2_110 | MW-15013 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | < 0.0001 | 1.000 | ↔ | -0.030839 | 0.000 | ↓ | 0.00011894 | 0.804 | ↔ | 2018-05-06 | 2019-08-16 | 0.983 |
| 03_2_114 | MW-15013 | Appendix IV | Fluoride | ug/L | 26 | 17 | 65% | < 0.0001 | 1.000 | ↔ | -1.0941 | 0.000 | ↓ | 0.019269 | 0.758 | ↔ | 2019-04-29 | 2021-07-04 | 0.965 |
| 03_2_116 | MW-15013 | Appendix IV | Lead | ug/L | 24 | 23 | 96% | -0.00026345 | 0.491 | ↔ | 0.0016813 | 0.092 | ↔ | -0.0087819 | 0.211 | ↔ | 2021-09-19 | 2025-03-27 | 0.314 |
| 03_2_117 | MW-15013 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | 0.0086166 | 0.152 | ↔ | -0.045113 | 0.451 | ↔ | 0.010842 | 0.000 | ↑ | 2018-10-06 | 2019-05-18 | 0.692 |
| 03_2_119 | MW-15013 | Appendix IV | Molybdenum | ug/L | 25 | 5 | 20% | -0.04123 | 0.522 | ↔ | 0.012947 | 0.331 | ↔ | -0.012467 | 0.131 | ↔ | 2017-02-02 | 2020-05-07 | 0.221 |
| 03_2_125 | MW-15013 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.00039043 | 0.427 | ↔ | -0.00038319 | 0.356 | ↔ | < 0.0001 | 0.849 | ↔ | 2018-06-12 | 2021-10-20 | 0.159 |
| 04_2_101 | MW-15014R | Appendix IV | Antimony | ug/L | 10 | 10 | 100% | -0.026206 | 0.129 | ↔ | 0.002656 | 0.429 | ↔ | -0.0010339 | 0.086 | ↔ | 2022-03-19 | 2023-04-10 | 0.728 |
| 04_2_104 | MW-15014R | Appendix IV | Beryllium | ug/L | 10 | 9 | 90% | 0.0019638 | 0.040 | ↔ | -0.0053672 | 0.047 | ↔ | 0.00040247 | 0.678 | ↔ | 2023-09-17 | 2024-05-03 | 0.853 |

*(Table continues on next page)*

**Table 10:** 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 |
| 04_2_106 | MW-15014R | Appendix IV | Cadmium | ug/L | 10 | 10 | 100% | -0.026206 | 0.129 | ↔ | 0.002656 | 0.429 | ↔ | -0.0010339 | 0.086 | ↔ | 2022-03-19 | 2023-04-10 | 0.728 |
| 04_2_110 | MW-15014R | Appendix IV | Cobalt | ug/L | 10 | 8 | 80% | 0.0042997 | 0.045 | ↔ | -0.011751 | 0.052 | ↔ | < 0.0001 | 0.977 | ↔ | 2023-09-17 | 2024-04-17 | 0.852 |
| 04_2_114 | MW-15014R | Appendix IV | Fluoride | ug/L | 10 | 1 | 10% | -0.30174 | 0.690 | ↔ | 0.034199 | 0.691 | ↔ | 1.1699 | 0.028 | ↔ | 2022-10-18 | 2025-03-14 | 0.890 |
| 04_2_118 | MW-15014R | Appendix IV | Mercury | ug/L | 10 | 10 | 100% | < 0.0001 | 0.319 | ↔ | < 0.0001 | 0.815 | ↔ | < 0.0001 | 0.911 | ↔ | 2022-12-27 | 2024-08-13 | 0.482 |
| 04_2_119 | MW-15014R | Appendix IV | Molybdenum | ug/L | 10 | 2 | 20% | -0.19317 | 0.078 | ↔ | 0.0098382 | 0.616 | ↔ | -0.0054595 | 0.117 | ↔ | 2022-03-21 | 2023-04-05 | 0.810 |
| 04_2_125 | MW-15014R | Appendix IV | Radium-226+228 | pCi/L | 10 | 3 | 30% | -0.011311 | 0.205 | ↔ | 0.0032104 | 0.465 | ↔ | -0.00064618 | 0.471 | ↔ | 2022-07-03 | 2023-10-02 | 0.599 |
| 04_2_127 | MW-15014R | Appendix IV | Selenium | ug/L | 10 | 8 | 80% | 0.0041343 | 0.039 | ↔ | -0.011299 | 0.046 | ↔ | 0.0026708 | 0.230 | ↔ | 2023-09-17 | 2024-06-06 | 0.855 |
| 05_2_102 | MW-15015R | Appendix IV | Arsenic | ug/L | 13 | 0 | 0% | -0.0072939 | 0.918 | ↔ | 0.019375 | 0.128 | ↔ | 0.054467 | 0.027 | ↔ | 2021-03-13 | 2024-03-27 | 0.876 |
| 05_2_103 | MW-15015R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.18149 | 0.493 | ↔ | -0.013696 | 0.909 | ↔ | -0.067074 | 0.071 | ↔ | 2020-12-02 | 2022-10-10 | 0.566 |
| 05_2_109 | MW-15015R | Appendix IV | Chromium | ug/L | 13 | 11 | 85% | -0.00079677 | 0.361 | ↔ | 0.0025475 | 0.424 | ↔ | -0.0010256 | 0.058 | ↔ | 2022-03-17 | 2023-04-10 | 0.516 |
| 05_2_114 | MW-15015R | Appendix IV | Fluoride | ug/L | 13 | 6 | 46% | 0.54358 | 0.159 | ↔ | -0.1826 | 0.288 | ↔ | 0.074124 | 0.131 | ↔ | 2021-01-24 | 2022-06-26 | 0.601 |
| 05_2_116 | MW-15015R | Appendix IV | Lead | ug/L | 13 | 13 | 100% | -0.0020988 | 0.841 | ↔ | 0.0013603 | 0.553 | ↔ | -0.00064093 | 0.765 | ↔ | 2020-10-30 | 2023-04-22 | 0.136 |
| 05_2_119 | MW-15015R | Appendix IV | Molybdenum | ug/L | 13 | 0 | 0% | -0.44576 | 0.616 | ↔ | 0.80157 | 0.080 | ↔ | -0.13841 | 0.236 | ↔ | 2021-02-12 | 2022-05-04 | 0.622 |
| 05_2_125 | MW-15015R | Appendix IV | Radium-226+228 | pCi/L | 13 | 5 | 38% | -0.0032276 | 0.119 | ↔ | 0.0036688 | 0.092 | ↔ | -0.0014186 | 0.055 | ↔ | 2021-08-10 | 2022-11-22 | 0.641 |
| 06_2_103 | MW-15016R | Appendix IV | Barium | ug/L | 13 | 0 | 0% | 0.40322 | 0.011 | ↔ | -0.40096 | 0.138 | ↔ | 0.53191 | 0.500 | ↔ | 2023-03-19 | 2025-01-21 | 0.747 |
| 06_2_110 | MW-15016R | Appendix IV | Cobalt | ug/L | 13 | 1 | 8% | -0.0023002 | 0.303 | ↔ | 0.0015591 | 0.297 | ↔ | -0.00093484 | 0.340 | ↔ | 2021-08-28 | 2023-04-12 | 0.393 |
| 06_2_114 | MW-15016R | Appendix IV | Fluoride | ug/L | 13 | 10 | 77% | -0.71426 | 0.823 | ↔ | 0.12018 | 0.794 | ↔ | 0.03777 | 0.360 | ↔ | 2020-08-31 | 2021-10-19 | 0.304 |
| 06_2_117 | MW-15016R | Appendix IV | Lithium | ug/L | 13 | 3 | 23% | -0.021027 | 0.763 | ↔ | 0.11025 | 0.667 | ↔ | -0.067175 | 0.115 | ↔ | 2021-12-05 | 2023-04-11 | 0.392 |
| 06_2_119 | MW-15016R | Appendix IV | Molybdenum | ug/L | 13 | 9 | 69% | -0.009424 | 0.092 | ↔ | 0.013806 | 0.460 | ↔ | -0.0055875 | 0.076 | ↔ | 2022-02-01 | 2023-04-11 | 0.574 |
| 06_2_125 | MW-15016R | Appendix IV | Radium-226+228 | pCi/L | 13 | 0 | 0% | -0.0048327 | 0.600 | ↔ | 0.0036717 | 0.093 | ↔ | -0.00039326 | 0.832 | ↔ | 2021-04-20 | 2023-06-11 | 0.560 |
| 06_2_127 | MW-15016R | Appendix IV | Selenium | ug/L | 13 | 8 | 62% | 0.00084315 | 0.217 | ↔ | -0.0044653 | 0.431 | ↔ | 0.03115 | 0.001 | ↑ | 2023-10-03 | 2025-03-29 | 0.857 |
| 06_2_131 | MW-15016R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | -0.0012918 | 0.258 | ↔ | 0.0042623 | 0.304 | ↔ | -0.0016558 | 0.025 | ↔ | 2022-04-02 | 2023-04-11 | 0.629 |
| 07_2_102 | MW-15017 | Appendix IV | Arsenic | ug/L | 25 | 1 | 4% | -0.012224 | 0.002 | ↓ | -0.0035714 | 0.942 | ↔ | < 0.0001 | 0.966 | ↔ | 2017-09-18 | 2018-07-20 | 0.754 |
| 07_2_103 | MW-15017 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | -0.094176 | 0.257 | ↔ | 0.17693 | 0.014 | ↔ | -0.096902 | 0.232 | ↔ | 2018-11-05 | 2022-07-13 | 0.502 |
| 07_2_109 | MW-15017 | Appendix IV | Chromium | ug/L | 25 | 1 | 4% | 0.019044 | 0.182 | ↔ | -0.0039967 | 0.000 | ↓ | 0.00034398 | 0.679 | ↔ | 2016-07-12 | 2021-01-27 | 0.784 |
| 07_2_110 | MW-15017 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | < 0.0001 | 1.000 | ↔ | -0.030759 | 0.000 | ↓ | -0.00023537 | 0.561 | ↔ | 2018-05-05 | 2019-07-24 | 0.988 |
| 07_2_116 | MW-15017 | Appendix IV | Lead | ug/L | 24 | 24 | 100% | -0.00011596 | 0.721 | ↔ | 0.0011911 | 0.315 | ↔ | -0.0023398 | 0.046 | ↔ | 2020-11-24 | 2023-08-07 | 0.304 |
| 07_2_127 | MW-15017 | Appendix IV | Selenium | ug/L | 25 | 12 | 48% | -0.0025292 | 0.016 | ↔ | < 0.0001 | 0.915 | ↔ | 0.015917 | 0.123 | ↔ | 2019-08-27 | 2025-03-17 | 0.565 |
| 08_2_102 | MW-15018 | Appendix IV | Arsenic | ug/L | 25 | 14 | 56% | -0.00040808 | 0.272 | ↔ | 0.0046178 | 0.409 | ↔ | -0.0014553 | 0.007 | ↓ | 2020-10-24 | 2021-10-21 | 0.378 |
| 08_2_103 | MW-15018 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | -0.0080855 | 0.733 | ↔ | 0.16578 | 0.424 | ↔ | -0.064608 | 0.001 | ↓ | 2019-09-24 | 2020-10-28 | 0.455 |
| 08_2_109 | MW-15018 | Appendix IV | Chromium | ug/L | 25 | 10 | 40% | -0.0002294 | 0.204 | ↔ | 0.00036991 | 0.404 | ↔ | -0.00091859 | 0.107 | ↔ | 2020-10-28 | 2023-06-20 | 0.331 |
| 08_2_110 | MW-15018 | Appendix IV | Cobalt | ug/L | 24 | 20 | 83% | < 0.0001 | 1.000 | ↔ | -0.030759 | 0.000 | ↓ | 0.00010872 | 0.816 | ↔ | 2018-05-05 | 2019-08-14 | 0.984 |
| 08_2_116 | MW-15018 | Appendix IV | Lead | ug/L | 24 | 17 | 71% | < 0.0001 | 0.956 | ↔ | 0.0012622 | 0.384 | ↔ | -0.0025656 | 0.071 | ↔ | 2020-10-29 | 2023-06-23 | 0.285 |
| 08_2_117 | MW-15018 | Appendix IV | Lithium | ug/L | 25 | 0 | 0% | -0.039997 | 0.139 | ↔ | 0.040927 | 0.062 | ↔ | -0.0039836 | 0.003 | ↓ | 2016-09-06 | 2017-08-05 | 0.483 |
| 08_2_125 | MW-15018 | Appendix IV | Radium-226+228 | pCi/L | 25 | 7 | 28% | 0.00091691 | 0.086 | ↔ | -0.00044279 | 0.002 | ↓ | 0.00075459 | 0.263 | ↔ | 2018-02-23 | 2023-10-24 | 0.501 |
| 09_2_102 | MW-15019 | Appendix IV | Arsenic | ug/L | 25 | 15 | 60% | -0.00040562 | 0.556 | ↔ | 0.0051653 | 0.111 | ↔ | -0.0035194 | 0.014 | ↔ | 2020-07-20 | 2022-05-03 | 0.440 |
| 09_2_103 | MW-15019 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.047314 | 0.576 | ↔ | 0.17059 | 0.159 | ↔ | -0.090148 | 0.542 | ↔ | 2019-04-12 | 2023-03-20 | 0.541 |
| 09_2_110 | MW-15019 | Appendix IV | Cobalt | ug/L | 24 | 13 | 54% | < 0.0001 | 1.000 | ↔ | -0.030679 | 0.000 | ↓ | < 0.0001 | 0.831 | ↔ | 2018-05-05 | 2019-08-01 | 0.987 |
| 09_2_117 | MW-15019 | Appendix IV | Lithium | ug/L | 25 | 3 | 12% | 0.00044539 | 0.939 | ↔ | -0.021545 | 0.384 | ↔ | -0.0023009 | 0.518 | ↔ | 2019-01-07 | 2020-10-28 | 0.637 |
| 09_2_119 | MW-15019 | Appendix IV | Molybdenum | ug/L | 25 | 21 | 84% | < 0.0001 | 0.987 | ↔ | -0.00078902 | 0.790 | ↔ | -0.0049259 | 0.195 | ↔ | 2020-05-05 | 2023-08-25 | 0.314 |
| 09_2_125 | MW-15019 | Appendix IV | Radium-226+228 | pCi/L | 25 | 5 | 20% | 0.00016275 | 0.687 | ↔ | 0.00080951 | 0.318 | ↔ | -0.0014977 | 0.399 | ↔ | 2020-05-05 | 2023-11-10 | 0.269 |
| 09_2_127 | MW-15019 | Appendix IV | Selenium | ug/L | 25 | 19 | 76% | -0.00042376 | 0.036 | ↔ | 0.003826 | 0.391 | ↔ | -0.001799 | 0.014 | ↔ | 2022-03-06 | 2023-04-11 | 0.413 |

*(Table continues on next page)*

**Table 10:** 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 |
| 10_2_109 | MW-15020 | Appendix IV | Chromium | ug/L | 25 | 13 | 52% | -0.001379 | 0.487 | ↔ | -0.00015316 | 0.126 | ↔ | -0.00059178 | 0.436 | ↔ | 2016-08-16 | 2023-10-03 | 0.501 |
| 10_2_110 | MW-15020 | Appendix IV | Cobalt | ug/L | 24 | 19 | 79% | < 0.0001 | 1.000 | ↔ | -0.030679 | 0.000 | ↓ | < 0.0001 | 0.924 | ↔ | 2018-05-05 | 2019-08-10 | 0.983 |
| 10_2_117 | MW-15020 | Appendix IV | Lithium | ug/L | 25 | 4 | 16% | 0.0021025 | 0.374 | ↔ | -0.017075 | 0.013 | ↔ | 0.0024532 | 0.145 | ↔ | 2018-11-30 | 2020-11-10 | 0.771 |
| 10_2_125 | MW-15020 | Appendix IV | Radium-226+228 | pCi/L | 25 | 6 | 24% | 0.001674 | 0.001 | ↑ | -0.0024957 | 0.700 | ↔ | -0.00027573 | 0.629 | ↔ | 2020-07-18 | 2021-10-19 | 0.522 |
| 11_2_102 | MW-15021 | Appendix IV | Arsenic | ug/L | 25 | 6 | 24% | -0.0008462 | 0.009 | ↓ | 0.0016801 | 0.035 | ↔ | -0.0010342 | 0.267 | ↔ | 2020-10-23 | 2023-04-13 | 0.447 |
| 11_2_103 | MW-15021 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | -0.0090817 | 0.642 | ↔ | 0.18325 | 0.000 | ↑ | -0.044972 | 0.264 | ↔ | 2020-01-08 | 2022-12-10 | 0.884 |
| 11_2_109 | MW-15021 | Appendix IV | Chromium | ug/L | 25 | 6 | 24% | 0.0095886 | 0.096 | ↔ | -0.00074842 | 0.003 | ↓ | 0.00011068 | 0.440 | ↔ | 2016-02-29 | 2020-02-24 | 0.633 |
| 11_2_110 | MW-15021 | Appendix IV | Cobalt | ug/L | 24 | 14 | 58% | < 0.0001 | 1.000 | ↔ | -0.030679 | 0.000 | ↓ | 0.00019884 | 0.625 | ↔ | 2018-05-05 | 2019-08-14 | 0.988 |
| 11_2_118 | MW-15021 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | < 0.0001 | 0.670 | ↔ | 0.00070007 | 0.361 | ↔ | -0.00047473 | 0.006 | ↓ | 2022-08-08 | 2023-10-02 | 0.470 |
| 11_2_127 | MW-15021 | Appendix IV | Selenium | ug/L | 25 | 15 | 60% | -0.00048517 | 0.277 | ↔ | 0.0052644 | 0.467 | ↔ | 0.005792 | 0.420 | ↔ | 2025-01-02 | 2021-03-23 | 0.217 |
| 12_2_102 | MW-15022 | Appendix IV | Arsenic | ug/L | 26 | 10 | 38% | -0.0070182 | 0.000 | ↓ | -0.00010157 | 0.873 | ↔ | -0.0017954 | 0.536 | ↔ | 2018-06-21 | 2023-10-04 | 0.832 |
| 12_2_103 | MW-15022 | Appendix IV | Barium | ug/L | 26 | 0 | 0% | 0.025969 | 0.101 | ↔ | 0.23959 | 0.804 | ↔ | -0.030541 | 0.617 | ↔ | 2022-05-20 | 2022-11-08 | 0.379 |
| 12_2_109 | MW-15022 | Appendix IV | Chromium | ug/L | 26 | 17 | 65% | -0.00047407 | 0.000 | ↓ | 0.0036306 | 0.530 | ↔ | -0.0010996 | 0.006 | ↓ | 2022-07-27 | 2023-04-11 | 0.696 |
| 12_2_110 | MW-15022 | Appendix IV | Cobalt | ug/L | 25 | 19 | 76% | < 0.0001 | 1.000 | ↔ | -0.030454 | 0.000 | ↓ | < 0.0001 | 0.998 | ↔ | 2018-05-02 | 2019-08-18 | 0.987 |
| 12_2_114 | MW-15022 | Appendix IV | Fluoride | ug/L | 27 | 19 | 70% | < 0.0001 | 1.000 | ↔ | -1.1442 | 0.000 | ↓ | 0.048873 | 0.279 | ↔ | 2019-05-31 | 2021-07-29 | 0.981 |
| 12_2_117 | MW-15022 | Appendix IV | Lithium | ug/L | 26 | 8 | 31% | 0.010298 | 0.063 | ↔ | -0.014773 | 0.828 | ↔ | 0.026952 | 0.000 | ↑ | 2020-03-15 | 2021-03-15 | 0.827 |
| 12_2_118 | MW-15022 | Appendix IV | Mercury | ug/L | 25 | 24 | 96% | < 0.0001 | 0.576 | ↔ | < 0.0001 | 0.198 | ↔ | < 0.0001 | 0.013 | ↔ | 2022-03-27 | 2023-10-03 | 0.419 |
| 12_2_119 | MW-15022 | Appendix IV | Molybdenum | ug/L | 26 | 13 | 50% | 0.00048296 | 0.958 | ↔ | -0.017792 | 0.138 | ↔ | 0.0014376 | 0.810 | ↔ | 2018-11-26 | 2021-04-22 | 0.436 |
| 12_2_125 | MW-15022 | Appendix IV | Radium-226+228 | pCi/L | 26 | 13 | 50% | 0.0008302 | 0.032 | ↔ | -0.0012276 | 0.090 | ↔ | 0.00050137 | 0.501 | ↔ | 2020-05-04 | 2023-01-08 | 0.335 |
| 12_2_131 | MW-15022 | Appendix IV | Thallium | ug/L | 25 | 25 | 100% | < 0.0001 | 1.000 | ↔ | -0.0005788 | 0.002 | ↓ | < 0.0001 | 1.000 | ↔ | 2017-02-07 | 2024-10-07 | 0.601 |
| 13_2_102 | MW-15023 | Appendix IV | Arsenic | ug/L | 25 | 8 | 32% | -0.00078937 | 0.391 | ↔ | 0.0024446 | 0.545 | ↔ | 0.030714 | 0.000 | ↑ | 2021-07-22 | 2023-10-03 | 0.913 |
| 13_2_103 | MW-15023 | Appendix IV | Barium | ug/L | 25 | 0 | 0% | 0.046825 | 0.011 | ↔ | -0.026655 | 0.065 | ↔ | 0.3192 | 0.000 | ↑ | 2019-04-01 | 2023-09-25 | 0.926 |
| 13_2_110 | MW-15023 | Appendix IV | Cobalt | ug/L | 24 | 22 | 92% | -0.0088649 | 0.000 | ↓ | 0.0034615 | 0.565 | ↔ | -0.0021706 | 0.585 | ↔ | 2021-07-05 | 2023-04-29 | 0.910 |
| 13_2_117 | MW-15023 | Appendix IV | Lithium | ug/L | 25 | 5 | 20% | 0.011814 | 0.030 | ↔ | -0.010215 | 0.162 | ↔ | 0.051845 | 0.000 | ↑ | 2019-04-12 | 2023-03-04 | 0.805 |
| 13_2_118 | MW-15023 | Appendix IV | Mercury | ug/L | 24 | 23 | 96% | < 0.0001 | 0.644 | ↔ | < 0.0001 | 0.184 | ↔ | -0.0001438 | 0.403 | ↔ | 2018-06-25 | 2023-10-03 | 0.201 |
| 13_2_119 | MW-15023 | Appendix IV | Molybdenum | ug/L | 25 | 4 | 16% | -0.0028282 | 0.823 | ↔ | 0.0047737 | 0.227 | ↔ | 0.011929 | 0.193 | ↔ | 2017-10-27 | 2023-04-12 | 0.486 |
| 13_2_125 | MW-15023 | Appendix IV | Radium-226+228 | pCi/L | 25 | 12 | 48% | 0.0015027 | 0.142 | ↔ | -0.0006502 | 0.043 | ↔ | 0.002129 | 0.006 | ↑ | 2018-01-09 | 2023-02-13 | 0.526 |
| 13_2_131 | MW-15023 | Appendix IV | Thallium | ug/L | 24 | 24 | 100% | < 0.0001 | 1.000 | ↔ | -0.0025641 | 0.139 | ↔ | < 0.0001 | 0.784 | ↔ | 2019-04-11 | 2020-10-10 | 0.736 |
| 14_2_101 | MW-17001R | Appendix IV | Antimony | ug/L | 13 | 12 | 92% | -0.00067001 | 0.454 | ↔ | 0.0025683 | 0.435 | ↔ | -0.001029 | 0.066 | ↔ | 2022-04-01 | 2023-04-11 | 0.494 |
| 14_2_110 | MW-17001R | Appendix IV | Cobalt | ug/L | 13 | 6 | 46% | < 0.0001 | 0.975 | ↔ | 0.0021638 | 0.671 | ↔ | -0.0016992 | 0.056 | ↔ | 2021-11-10 | 2023-04-11 | 0.499 |
| 14_2_114 | MW-17001R | Appendix IV | Fluoride | ug/L | 13 | 3 | 23% | -0.33133 | 0.869 | ↔ | -0.01527 | 0.746 | ↔ | 0.084952 | 0.179 | ↔ | 2020-10-05 | 2023-06-26 | 0.481 |
| 14_2_117 | MW-17001R | Appendix IV | Lithium | ug/L | 13 | 0 | 0% | -0.16666 | 0.127 | ↔ | 0.060073 | 0.232 | ↔ | 0.11322 | 0.099 | ↔ | 2021-07-04 | 2023-10-04 | 0.800 |
| 14_2_131 | MW-17001R | Appendix IV | Thallium | ug/L | 13 | 13 | 100% | -0.0014695 | 0.207 | ↔ | 0.0039881 | 0.337 | ↔ | -0.0016335 | 0.028 | ↔ | 2022-02-27 | 2023-04-11 | 0.624 |
| 15_2_101 | MW-17002 | Appendix IV | Antimony | ug/L | 18 | 16 | 89% | -0.00089393 | 0.003 | ↓ | 0.0025588 | 0.424 | ↔ | -0.0010194 | 0.051 | ↔ | 2022-04-05 | 2023-04-11 | 0.685 |
| 15_2_102 | MW-17002 | Appendix IV | Arsenic | ug/L | 19 | 0 | 0% | -0.017043 | 0.547 | ↔ | 0.2192 | 0.027 | ↔ | -0.085077 | 0.168 | ↔ | 2021-07-04 | 2023-04-12 | 0.708 |
| 15_2_103 | MW-17002 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | -0.89264 | 0.313 | ↔ | 0.061043 | 0.113 | ↔ | -0.068986 | 0.093 | ↔ | 2018-03-11 | 2021-10-22 | 0.381 |
| 15_2_104 | MW-17002 | Appendix IV | Beryllium | ug/L | 18 | 17 | 94% | -0.00072095 | 0.001 | ↓ | 0.0025686 | 0.031 | ↔ | -0.0010507 | 0.029 | ↔ | 2022-03-15 | 2023-04-12 | 0.743 |
| 15_2_109 | MW-17002 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | -0.00068875 | 0.001 | ↓ | 0.0024036 | 0.033 | ↔ | -0.00098476 | 0.031 | ↔ | 2022-03-07 | 2023-04-12 | 0.720 |
| 15_2_110 | MW-17002 | Appendix IV | Cobalt | ug/L | 18 | 15 | 83% | < 0.0001 | 1.000 | ↔ | -0.03535 | 0.001 | ↓ | < 0.0001 | 0.884 | ↔ | 2018-06-18 | 2019-07-28 | 0.962 |
| 15_2_114 | MW-17002 | Appendix IV | Fluoride | ug/L | 19 | 8 | 42% | -0.74861 | 0.001 | ↓ | -0.10897 | 0.473 | ↔ | 0.59386 | 0.654 | ↔ | 2020-10-29 | 2024-12-27 | 0.839 |
| 15_2_116 | MW-17002 | Appendix IV | Lead | ug/L | 18 | 17 | 94% | -0.00028857 | 0.733 | ↔ | 0.0017611 | 0.138 | ↔ | -0.003402 | 0.103 | ↔ | 2021-01-28 | 2023-11-02 | 0.421 |
| 15_2_125 | MW-17002 | Appendix IV | Radium-226+228 | pCi/L | 19 | 5 | 26% | -0.0044955 | 0.079 | ↔ | 0.0015617 | 0.395 | ↔ | -0.001204 | 0.493 | ↔ | 2019-10-13 | 2022-10-20 | 0.327 |

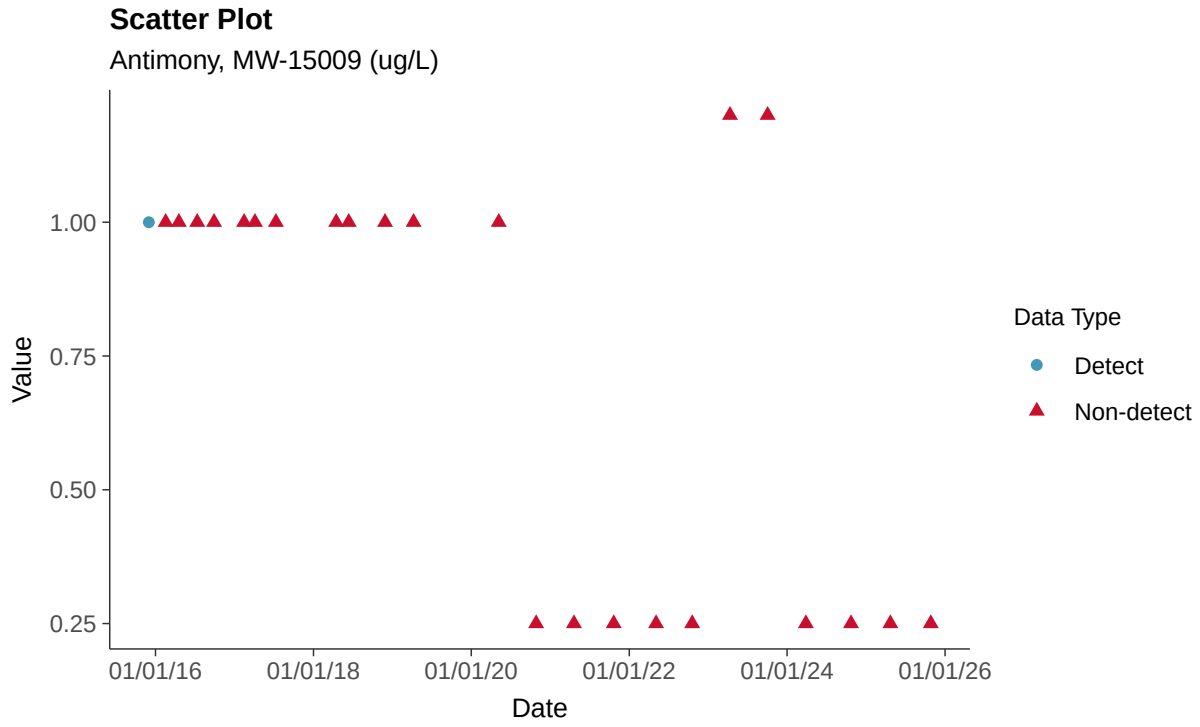
*(Table continues on next page)*

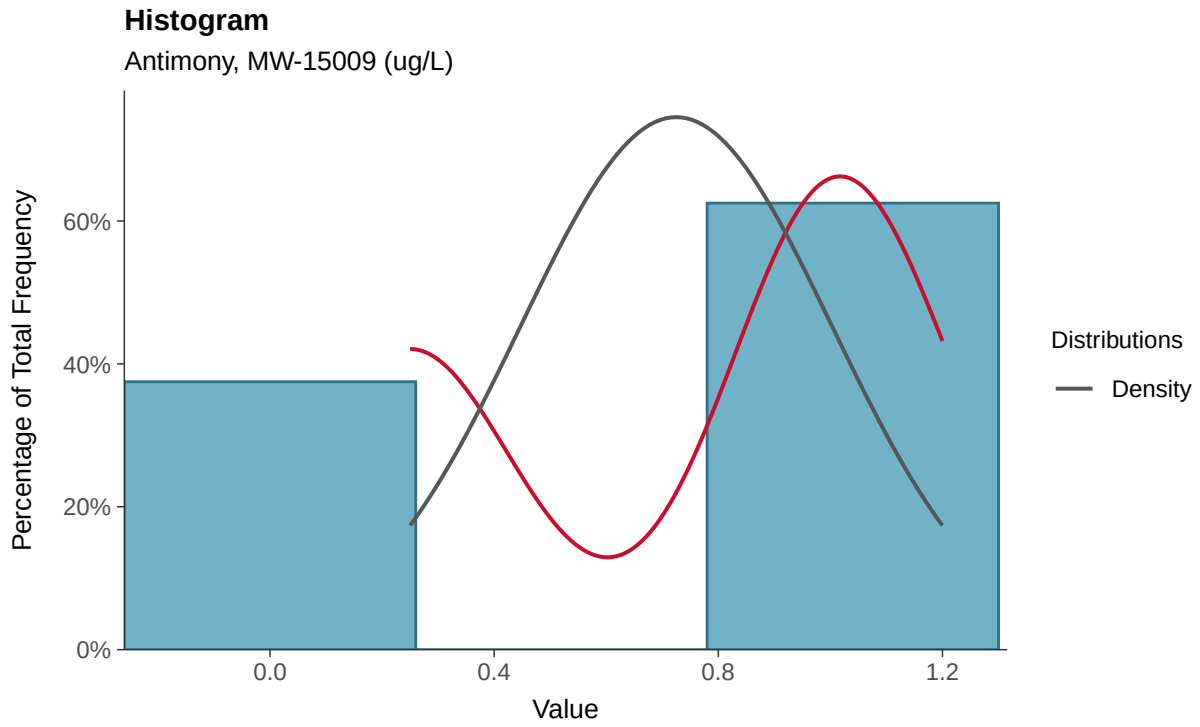
**Table 10:** Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

| | | | | | | | | 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 |
| 16_2_101 | MW-17003 | Appendix IV | Antimony | ug/L | 18 | 17 | 94% | -0.00078661 | 0.007 | ↓ | 0.0026881 | 0.400 | ↔ | -0.0010381 | 0.047 | ↔ | 2022-05-01 | 2023-04-11 | 0.649 |
| 16_2_102 | MW-17003 | Appendix IV | Arsenic | ug/L | 19 | 3 | 16% | -0.31784 | 0.470 | ↔ | 0.018066 | 0.129 | ↔ | 0.2205 | 0.000 | ↑ | 2018-02-26 | 2023-04-12 | 0.931 |
| 16_2_103 | MW-17003 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.11314 | 0.010 | ↑ | -0.50515 | 0.169 | ↔ | -0.005237 | 0.916 | ↔ | 2021-08-21 | 2022-07-30 | 0.662 |
| 16_2_104 | MW-17003 | Appendix IV | Beryllium | ug/L | 18 | 15 | 83% | -0.00073109 | 0.001 | ↓ | 0.002484 | 0.268 | ↔ | -0.0010695 | 0.007 | ↓ | 2022-03-02 | 2023-04-11 | 0.745 |
| 16_2_109 | MW-17003 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | -0.00068998 | 0.001 | ↓ | 0.0027014 | 0.240 | ↔ | -0.00073477 | 0.046 | ↔ | 2022-04-21 | 2023-04-11 | 0.676 |
| 16_2_110 | MW-17003 | Appendix IV | Cobalt | ug/L | 18 | 12 | 67% | -0.021885 | 0.012 | ↔ | 0.00096484 | 0.715 | ↔ | 0.14025 | 0.000 | ↑ | 2020-01-18 | 2024-03-14 | 0.988 |
| 16_2_114 | MW-17003 | Appendix IV | Fluoride | ug/L | 19 | 12 | 63% | -0.95409 | 0.000 | ↓ | -0.020374 | 0.920 | ↔ | 0.43648 | 0.551 | ↔ | 2021-01-25 | 2024-05-31 | 0.869 |
| 16_2_116 | MW-17003 | Appendix IV | Lead | ug/L | 18 | 18 | 100% | -0.00036748 | 0.203 | ↔ | 0.003891 | 0.000 | ↑ | -0.004619 | 0.014 | ↔ | 2022-04-17 | 2024-06-28 | 0.856 |
| 16_2_131 | MW-17003 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | -0.0014449 | 0.000 | ↓ | 0.0035368 | 0.003 | ↑ | -0.002563 | 0.011 | ↔ | 2022-03-08 | 2023-12-04 | 0.836 |
| 17_2_103 | MW-17004 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.21073 | 0.012 | ↔ | -0.38391 | 0.056 | ↔ | -0.030051 | 0.758 | ↔ | 2021-04-21 | 2023-03-17 | 0.680 |
| 17_2_104 | MW-17004 | Appendix IV | Beryllium | ug/L | 18 | 18 | 100% | -0.00078805 | 0.003 | ↓ | 0.0015786 | 0.034 | ↔ | -0.00098789 | 0.043 | ↔ | 2021-10-09 | 2023-05-13 | 0.718 |
| 17_2_106 | MW-17004 | Appendix IV | Cadmium | ug/L | 18 | 17 | 94% | < 0.0001 | 0.852 | ↔ | 0.0019457 | 0.318 | ↔ | -0.00099737 | 0.004 | ↓ | 2022-03-21 | 2023-04-11 | 0.645 |
| 17_2_109 | MW-17004 | Appendix IV | Chromium | ug/L | 19 | 13 | 68% | -0.0014635 | 0.484 | ↔ | 0.0060266 | 0.362 | ↔ | -0.0030145 | 0.045 | ↔ | 2020-10-24 | 2022-05-02 | 0.338 |
| 17_2_110 | MW-17004 | Appendix IV | Cobalt | ug/L | 18 | 11 | 61% | -0.021865 | 0.000 | ↓ | 0.0035529 | 0.136 | ↔ | -0.0028242 | 0.212 | ↔ | 2020-02-16 | 2022-10-20 | 0.943 |
| 17_2_114 | MW-17004 | Appendix IV | Fluoride | ug/L | 19 | 14 | 74% | -0.89195 | 0.000 | ↓ | -0.21412 | 0.635 | ↔ | 0.091051 | 0.698 | ↔ | 2020-11-28 | 2022-11-19 | 0.877 |
| 17_2_116 | MW-17004 | Appendix IV | Lead | ug/L | 18 | 15 | 83% | -0.0059502 | 0.589 | ↔ | 0.0080366 | 0.475 | ↔ | -0.0061227 | 0.120 | ↔ | 2019-07-15 | 2022-05-02 | 0.285 |
| 17_2_125 | MW-17004 | Appendix IV | Radium-226+228 | pCi/L | 19 | 7 | 37% | -0.0020481 | 0.285 | ↔ | 0.0044164 | 0.606 | ↔ | -0.0010019 | 0.137 | ↔ | 2020-03-05 | 2021-04-21 | 0.249 |
| 17_2_127 | MW-17004 | Appendix IV | Selenium | ug/L | 19 | 15 | 79% | -0.00057362 | 0.435 | ↔ | 0.0019389 | 0.299 | ↔ | -0.0023124 | 0.028 | ↔ | 2021-04-13 | 2023-04-11 | 0.384 |
| 17_2_131 | MW-17004 | Appendix IV | Thallium | ug/L | 18 | 15 | 83% | -0.001531 | 0.003 | ↓ | 0.0018078 | 0.190 | ↔ | -0.0025666 | 0.011 | ↔ | 2021-05-28 | 2023-09-21 | 0.716 |
| 18_2_101 | MW-17005 | Appendix IV | Antimony | ug/L | 18 | 18 | 100% | -0.00076603 | 0.009 | ↓ | 0.002646 | 0.110 | ↔ | -0.0010379 | 0.121 | ↔ | 2022-04-30 | 2023-04-13 | 0.630 |
| 18_2_102 | MW-17005 | Appendix IV | Arsenic | ug/L | 19 | 13 | 68% | -0.0011073 | 0.077 | ↔ | 0.0037184 | 0.063 | ↔ | -0.0027137 | 0.044 | ↔ | 2021-10-09 | 2023-04-25 | 0.514 |
| 18_2_103 | MW-17005 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.19274 | 0.269 | ↔ | -0.2256 | 0.041 | ↔ | 0.24145 | 0.150 | ↔ | 2020-05-04 | 2023-06-18 | 0.410 |
| 18_2_109 | MW-17005 | Appendix IV | Chromium | ug/L | 19 | 11 | 58% | -0.0006432 | 0.002 | ↓ | 0.0020571 | 0.354 | ↔ | -0.0009779 | 0.011 | ↔ | 2022-02-26 | 2023-04-12 | 0.686 |
| 18_2_110 | MW-17005 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | < 0.0001 | 1.000 | ↔ | -0.03535 | 0.001 | ↓ | 0.00018375 | 0.777 | ↔ | 2018-06-19 | 2019-07-31 | 0.963 |
| 18_2_117 | MW-17005 | Appendix IV | Lithium | ug/L | 19 | 3 | 16% | 0.025966 | 0.147 | ↔ | -0.050741 | 0.056 | ↔ | 0.017113 | 0.054 | ↔ | 2020-05-04 | 2021-11-20 | 0.467 |
| 18_2_119 | MW-17005 | Appendix IV | Molybdenum | ug/L | 19 | 15 | 79% | -0.0038238 | 0.015 | ↔ | 0.0098671 | 0.580 | ↔ | -0.0011335 | 0.678 | ↔ | 2022-01-18 | 2023-04-12 | 0.430 |
| 18_2_125 | MW-17005 | Appendix IV | Radium-226+228 | pCi/L | 19 | 8 | 42% | -0.0018508 | 0.446 | ↔ | 0.00021729 | 0.671 | ↔ | 0.0025926 | 0.722 | ↔ | 2019-05-17 | 2025-02-21 | 0.128 |
| 18_2_131 | MW-17005 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | -0.0014771 | 0.000 | ↓ | 0.0040193 | 0.243 | ↔ | -0.0016424 | 0.007 | ↓ | 2022-03-09 | 2023-04-12 | 0.828 |
| 19_2_102 | MW-17006 | Appendix IV | Arsenic | ug/L | 19 | 7 | 37% | 0.0049607 | 0.251 | ↔ | -0.0084995 | 0.173 | ↔ | 0.0013536 | 0.209 | ↔ | 2019-07-08 | 2021-04-15 | 0.540 |
| 19_2_103 | MW-17006 | Appendix IV | Barium | ug/L | 19 | 0 | 0% | 0.093579 | 0.000 | ↑ | -0.13331 | 0.014 | ↔ | 0.019924 | 0.388 | ↔ | 2020-11-21 | 2022-10-31 | 0.779 |
| 19_2_104 | MW-17006 | Appendix IV | Beryllium | ug/L | 18 | 18 | 100% | -0.00076565 | 0.003 | ↓ | 0.0015699 | 0.035 | ↔ | -0.00098584 | 0.044 | ↔ | 2021-10-18 | 2023-05-13 | 0.715 |
| 19_2_109 | MW-17006 | Appendix IV | Chromium | ug/L | 19 | 15 | 79% | -0.00069403 | 0.003 | ↓ | 0.0024008 | 0.355 | ↔ | -0.00079353 | 0.060 | ↔ | 2022-04-05 | 2023-04-12 | 0.621 |
| 19_2_110 | MW-17006 | Appendix IV | Cobalt | ug/L | 18 | 17 | 94% | < 0.0001 | 1.000 | ↔ | -0.03535 | 0.001 | ↓ | 0.00022279 | 0.734 | ↔ | 2018-06-19 | 2019-08-01 | 0.963 |
| 19_2_117 | MW-17006 | Appendix IV | Lithium | ug/L | 19 | 0 | 0% | 0.0030865 | 0.731 | ↔ | -0.021584 | 0.388 | ↔ | 0.011995 | 0.317 | ↔ | 2020-10-30 | 2023-03-14 | 0.374 |
| 19_2_118 | MW-17006 | Appendix IV | Mercury | ug/L | 18 | 17 | 94% | -0.0001188 | 0.618 | ↔ | 0.0004447 | 0.197 | ↔ | -0.00060935 | 0.282 | ↔ | 2020-12-20 | 2023-10-03 | 0.309 |
| 19_2_119 | MW-17006 | Appendix IV | Molybdenum | ug/L | 19 | 13 | 68% | -0.0036281 | 0.694 | ↔ | < 0.0001 | 1.000 | ↔ | 0.02991 | 0.025 | ↔ | 2021-05-25 | 2023-02-15 | 0.540 |
| 19_2_125 | MW-17006 | Appendix IV | Radium-226+228 | pCi/L | 19 | 6 | 32% | -0.00049573 | 0.763 | ↔ | 0.001612 | 0.494 | ↔ | -0.00025502 | 0.533 | ↔ | 2019-09-25 | 2021-02-10 | 0.150 |
| 19_2_131 | MW-17006 | Appendix IV | Thallium | ug/L | 18 | 18 | 100% | -0.0014565 | 0.000 | ↓ | 0.0040059 | 0.241 | ↔ | -0.0016389 | 0.007 | ↓ | 2022-03-13 | 2023-04-12 | 0.829 |

## Appendix IV: Antimony, MW-15009

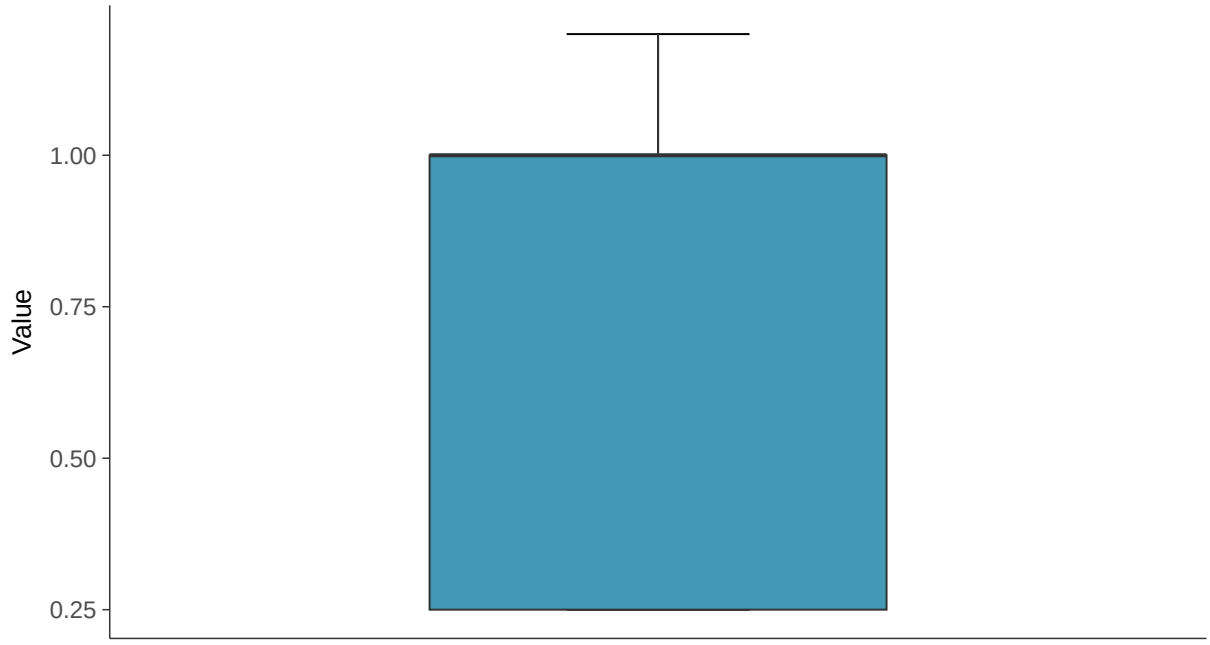
ID: 01_2_101



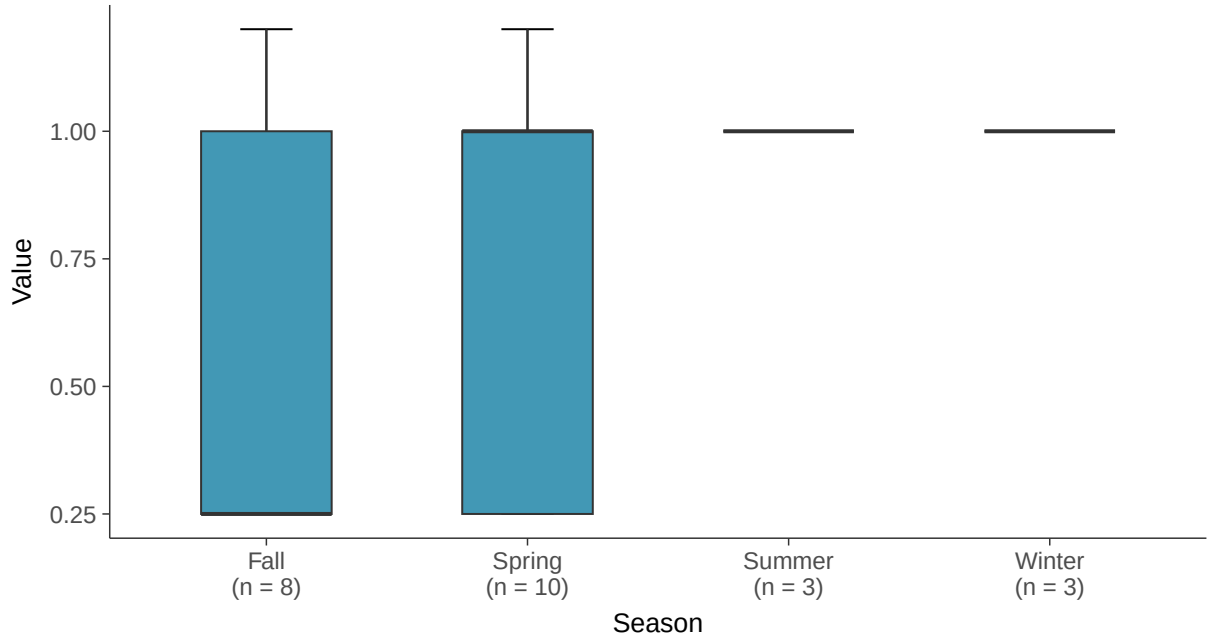
**Boxplot**

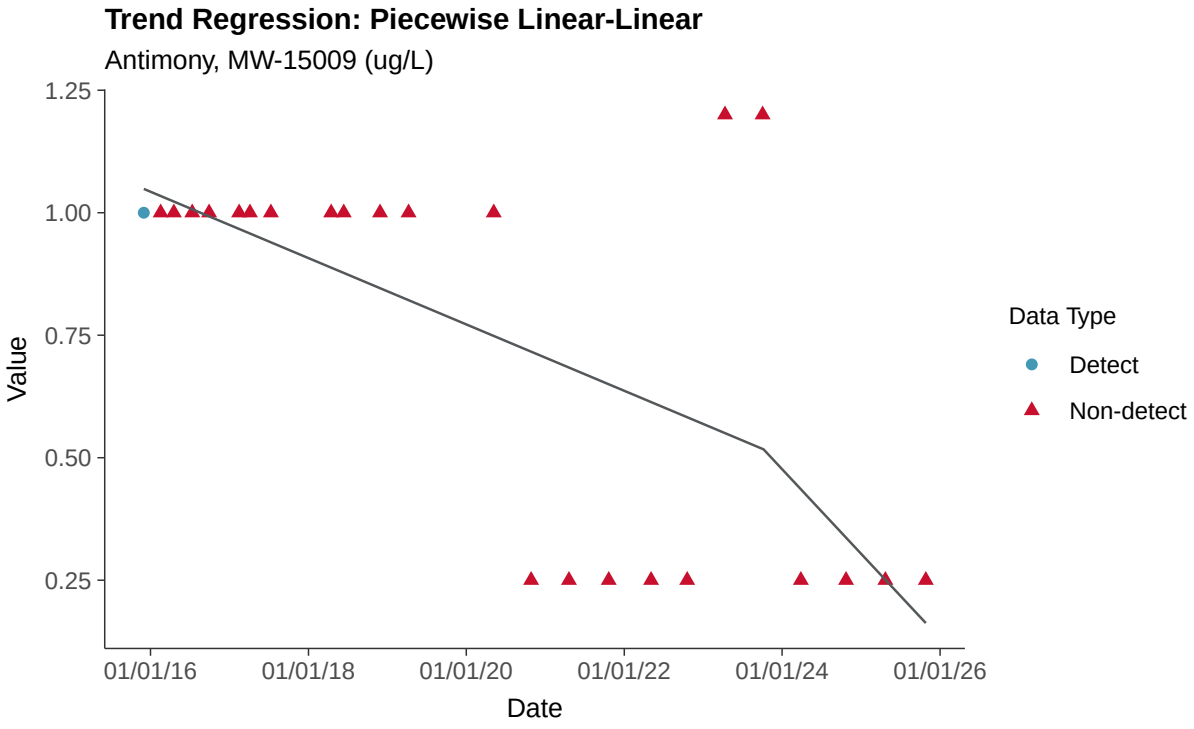
Antimony, MW-15009 (ug/L)




**Boxplot by Season**

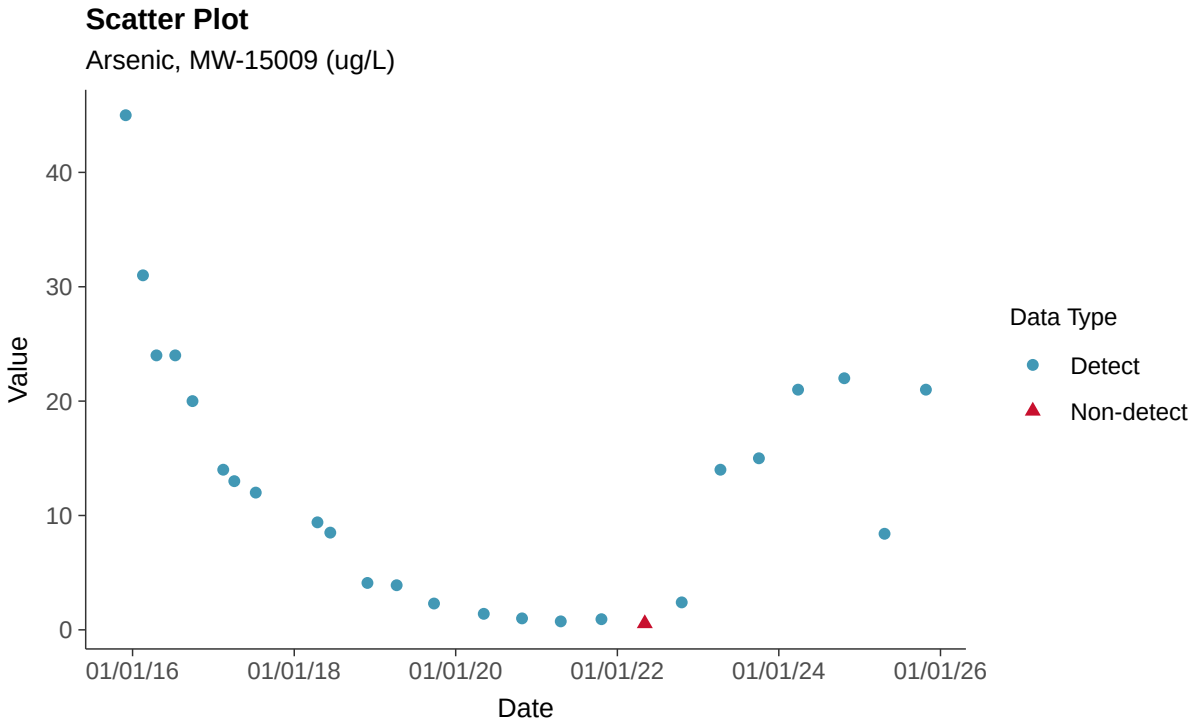
Antimony, MW-15009 (ug/L)

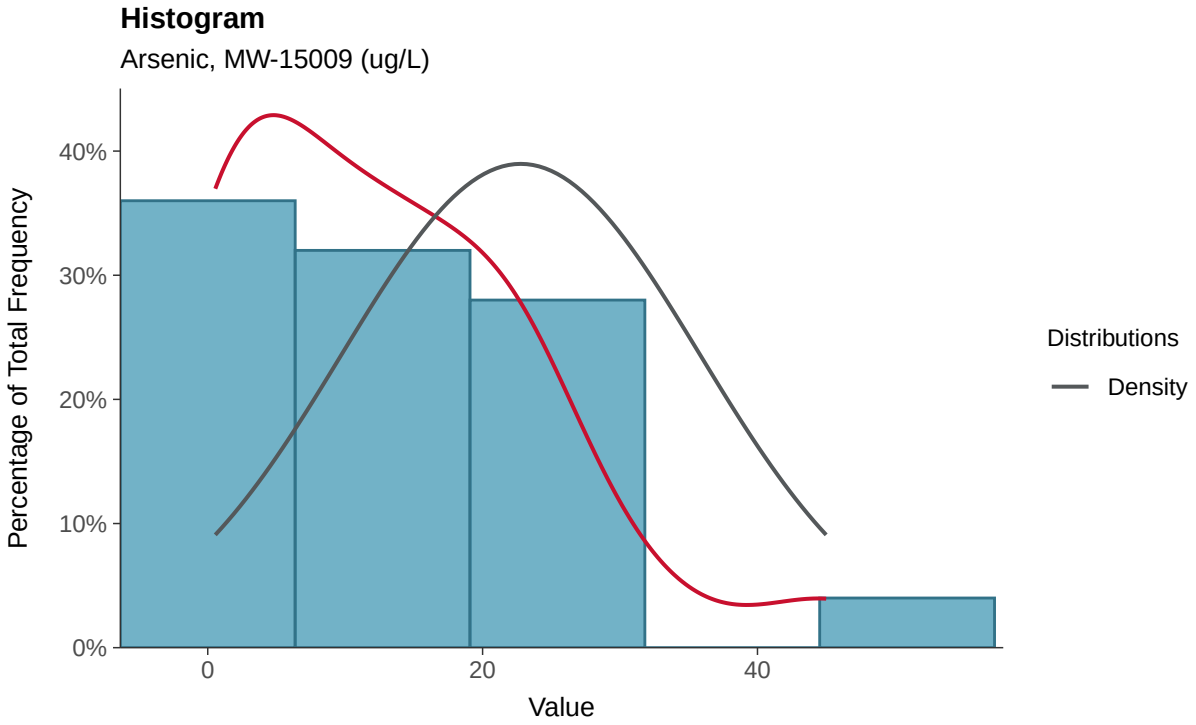



Trend Regression: Piecewise Linear-Linear
Antimony, MW-15009 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Arsenic, MW-15009

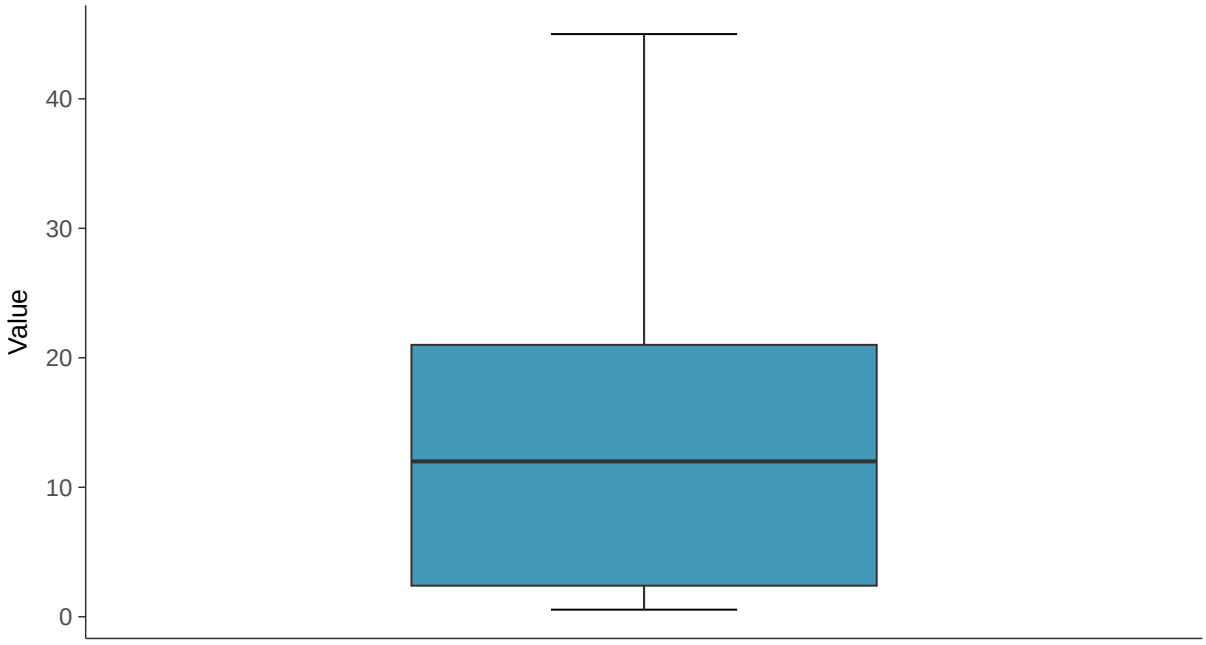
ID: 01_2_102



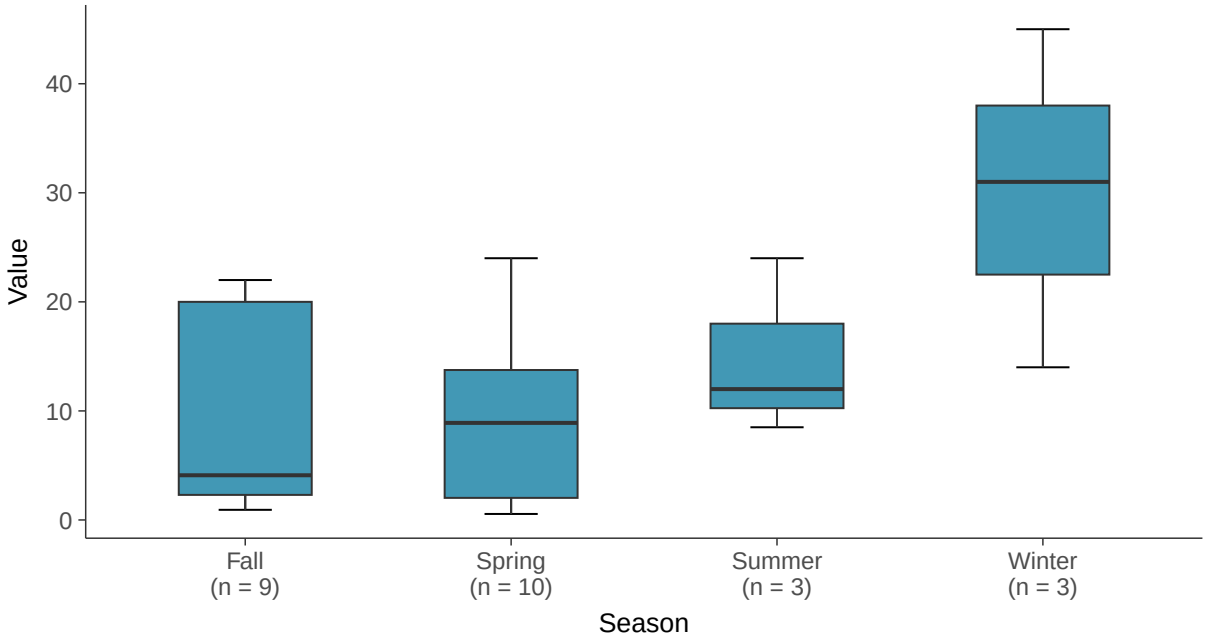
**Boxplot**

Arsenic, MW-15009 (ug/L)



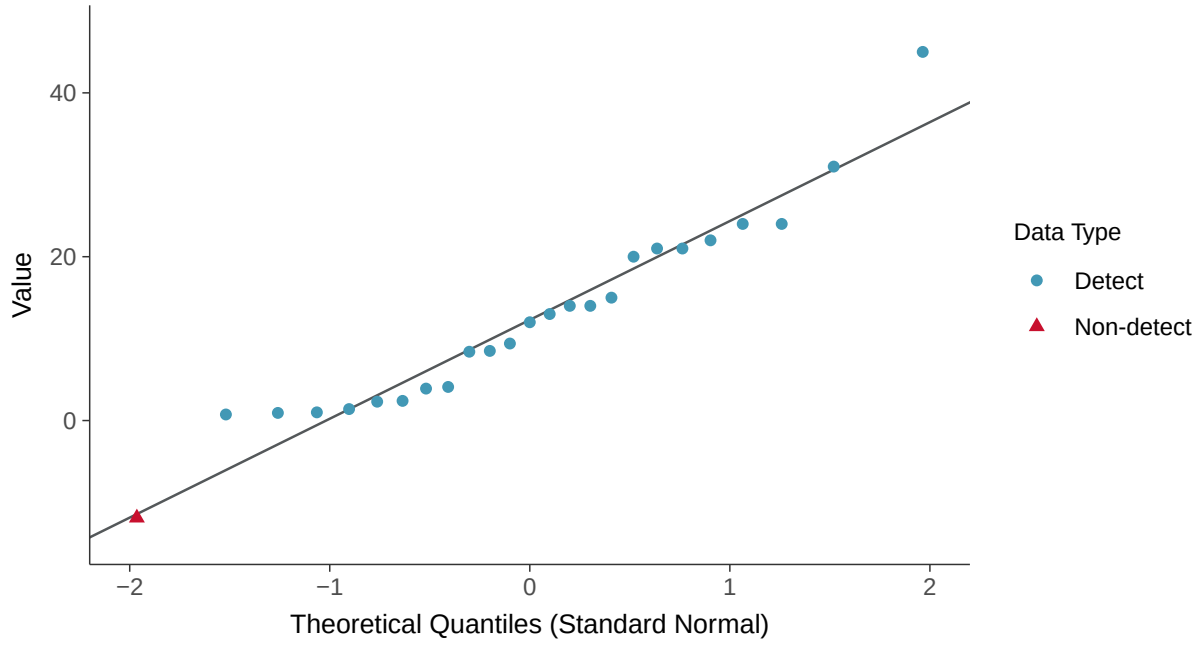

**Boxplot by Season**

Arsenic, MW-15009 (ug/L)



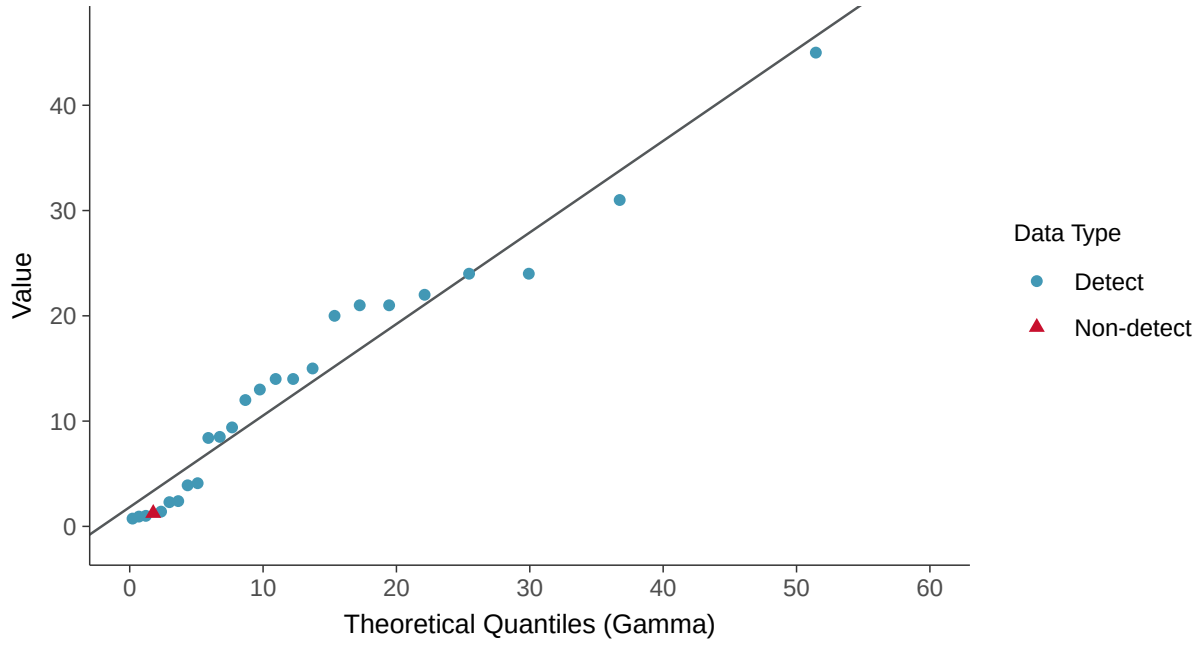
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15009 (ug/L)



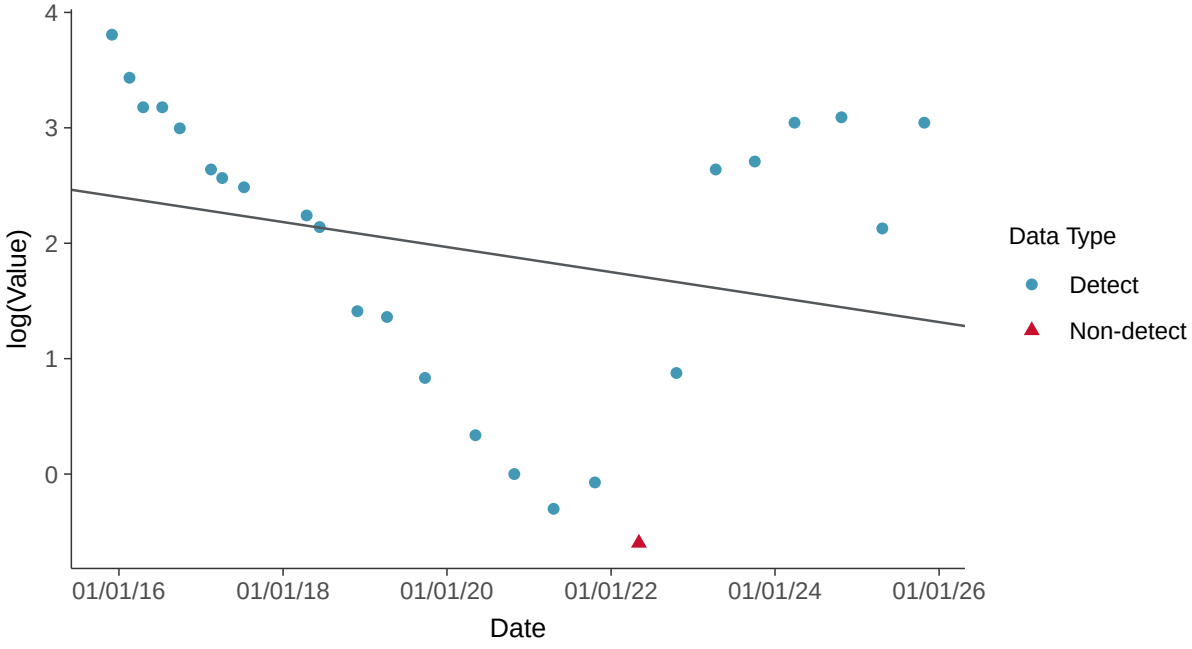

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15009 (ug/L)



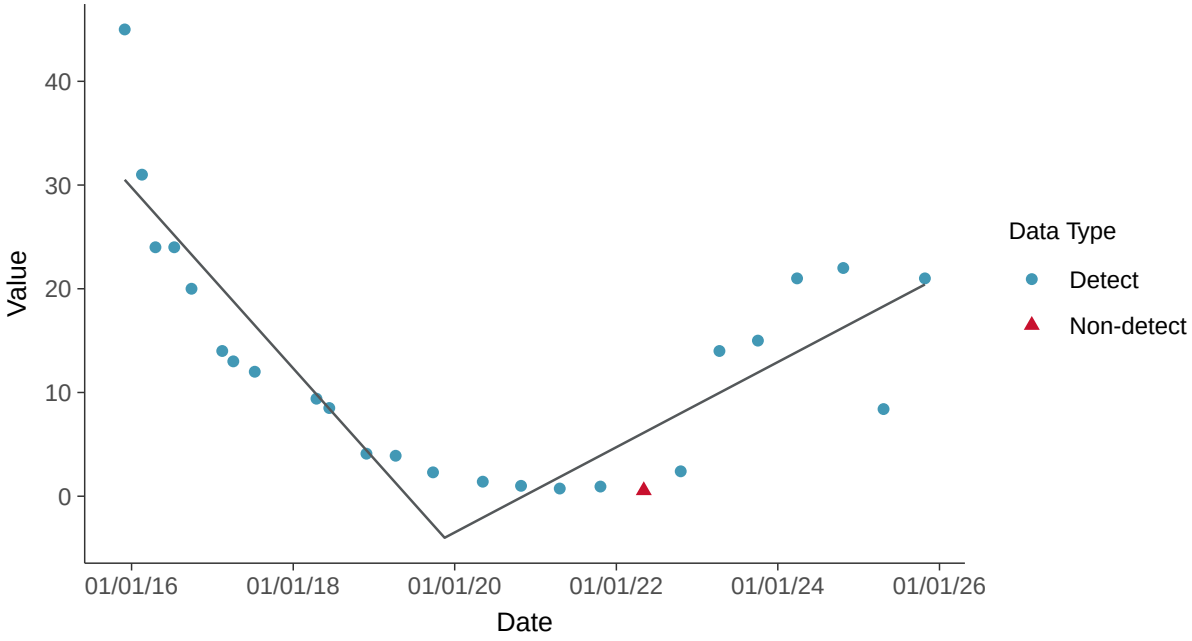
## Trend Regression: Lognormal MLE

Arsenic, MW-15009 (ug/L)



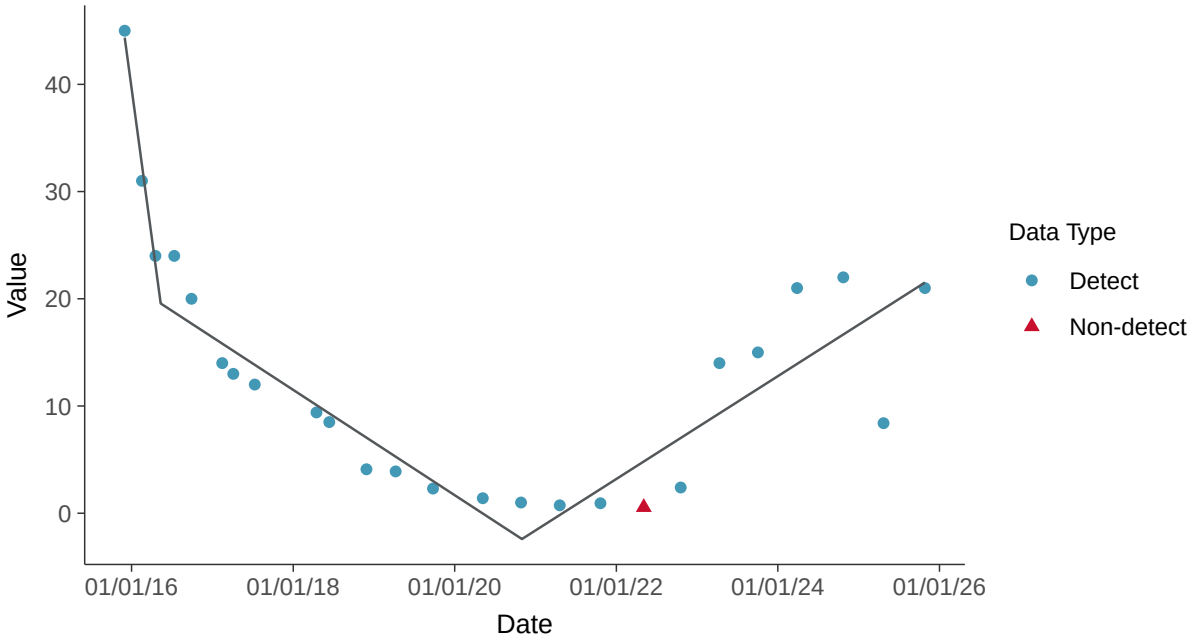

## Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15009 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15009 (ug/L)

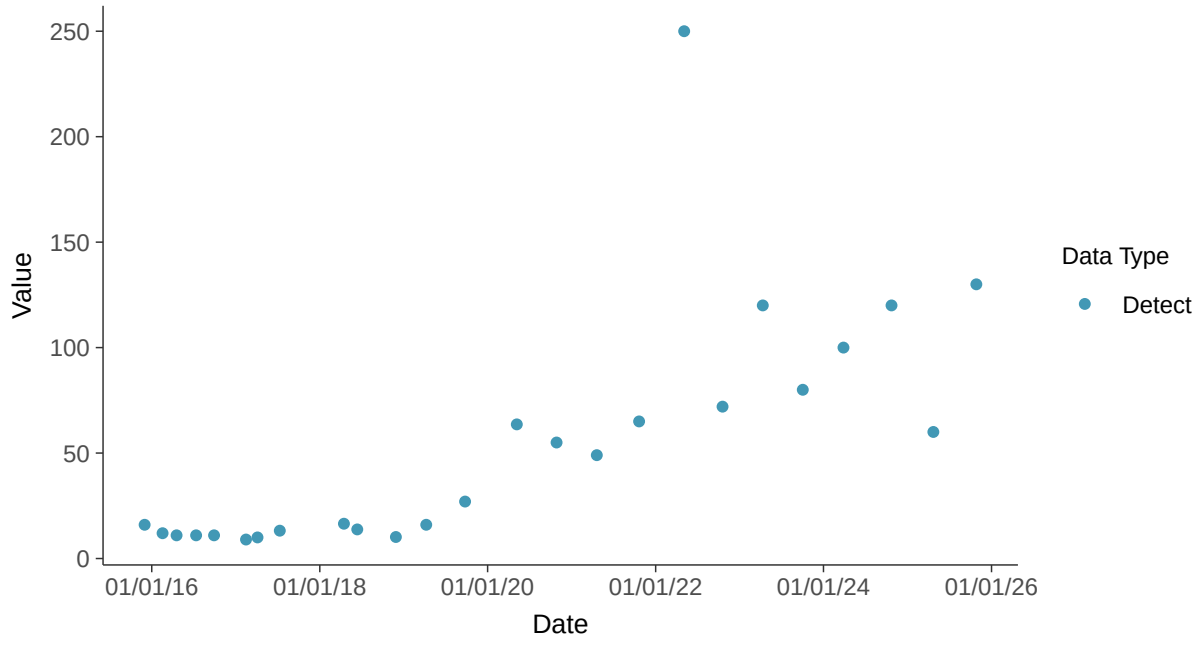


## Appendix IV: Barium, MW-15009

ID: 01_2_103

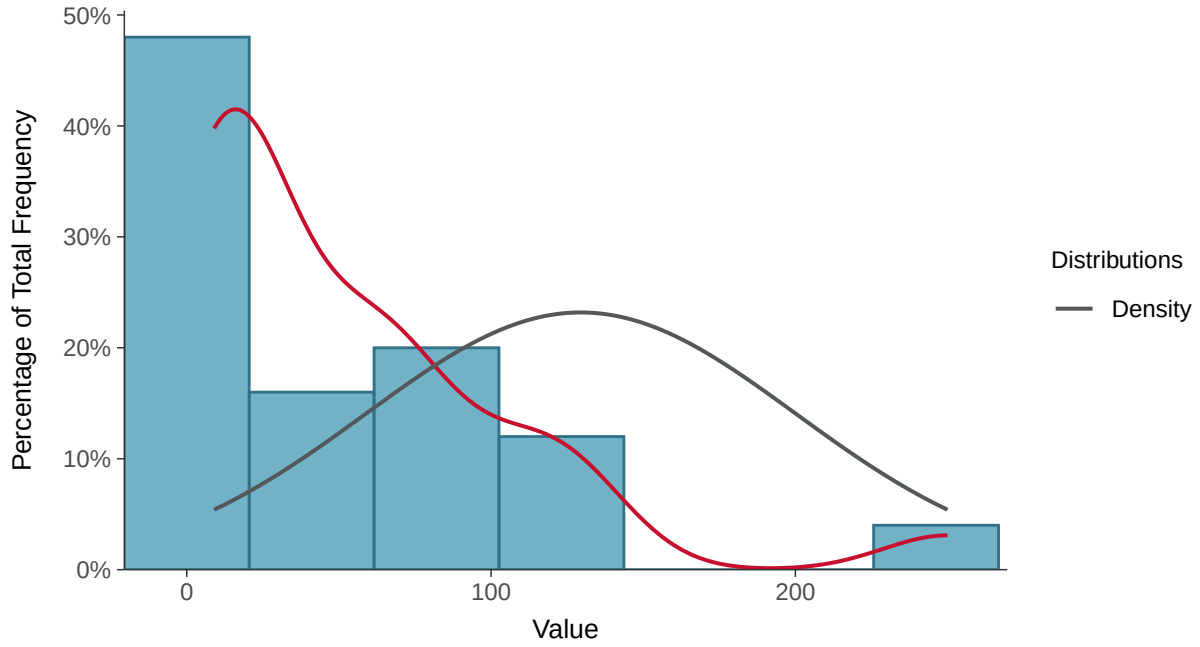
**Scatter Plot**

Barium, MW-15009 (ug/L)



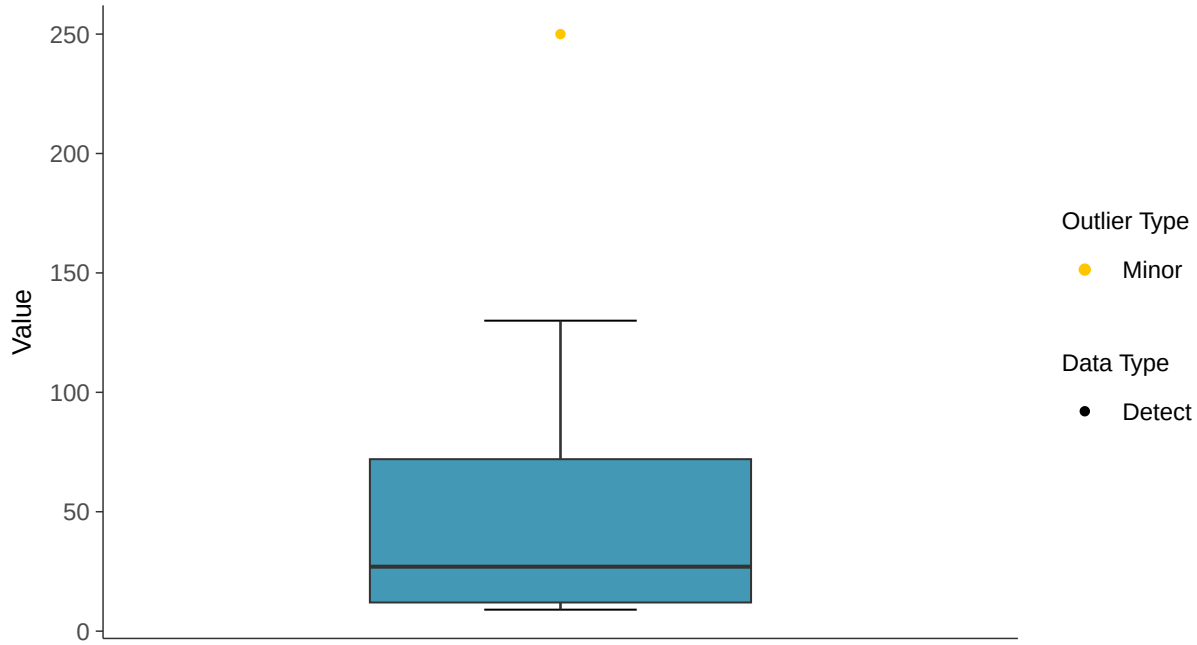

**Histogram**

Barium, MW-15009 (ug/L)



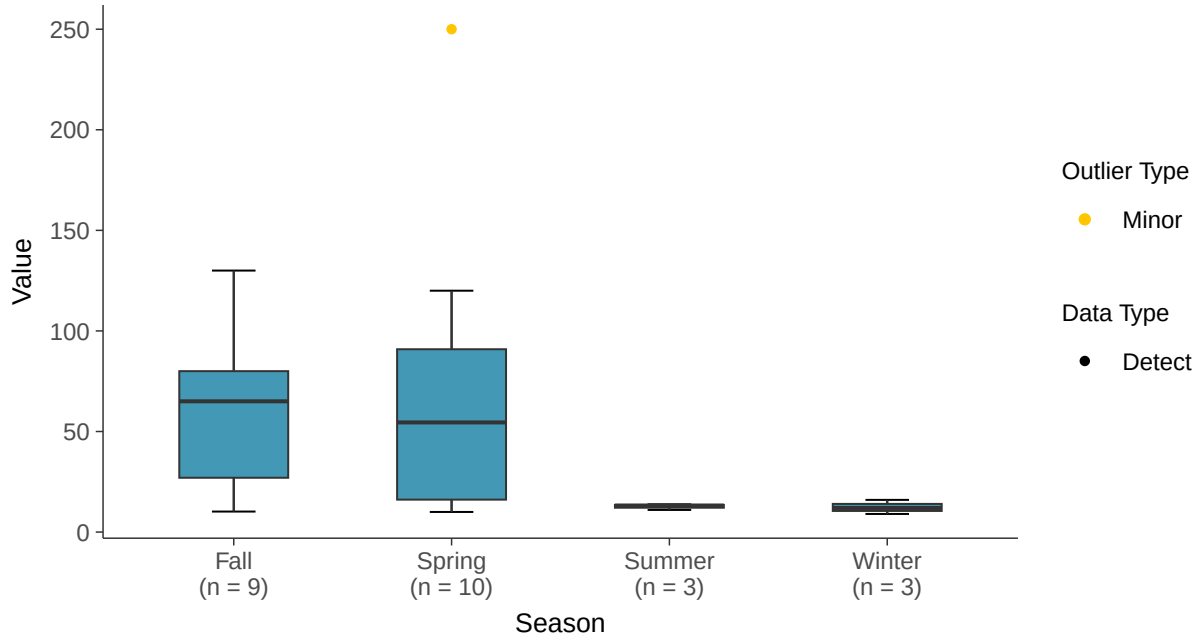
## Boxplot

Barium, MW-15009 (ug/L)



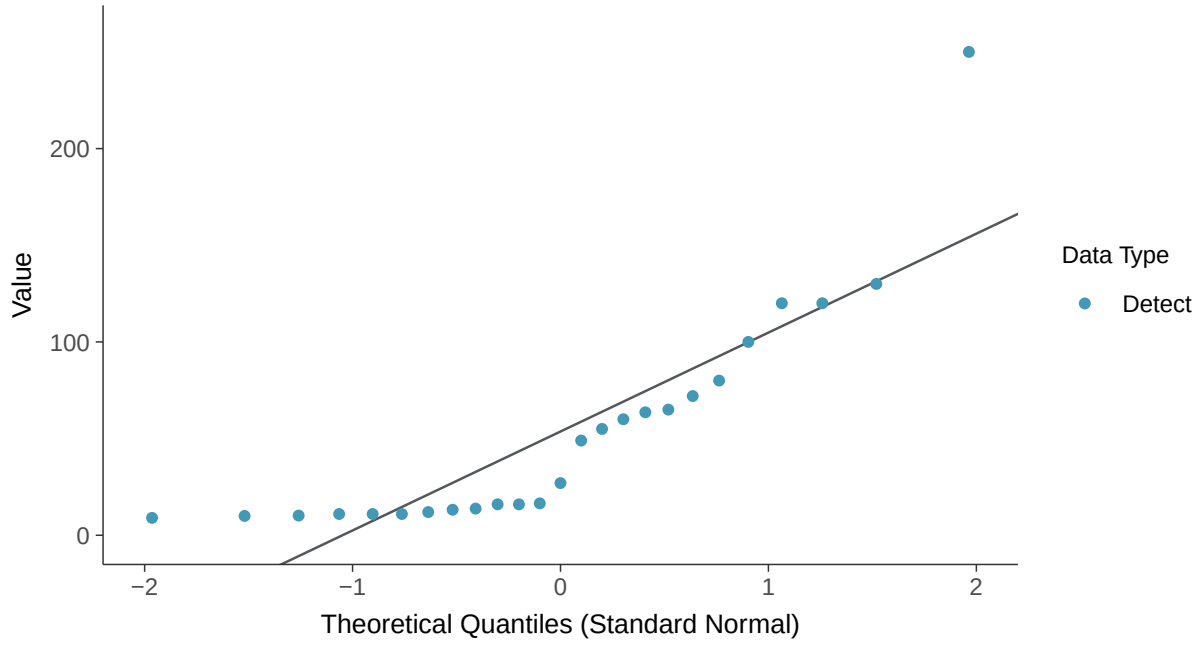

## Boxplot by Season

Barium, MW-15009 (ug/L)



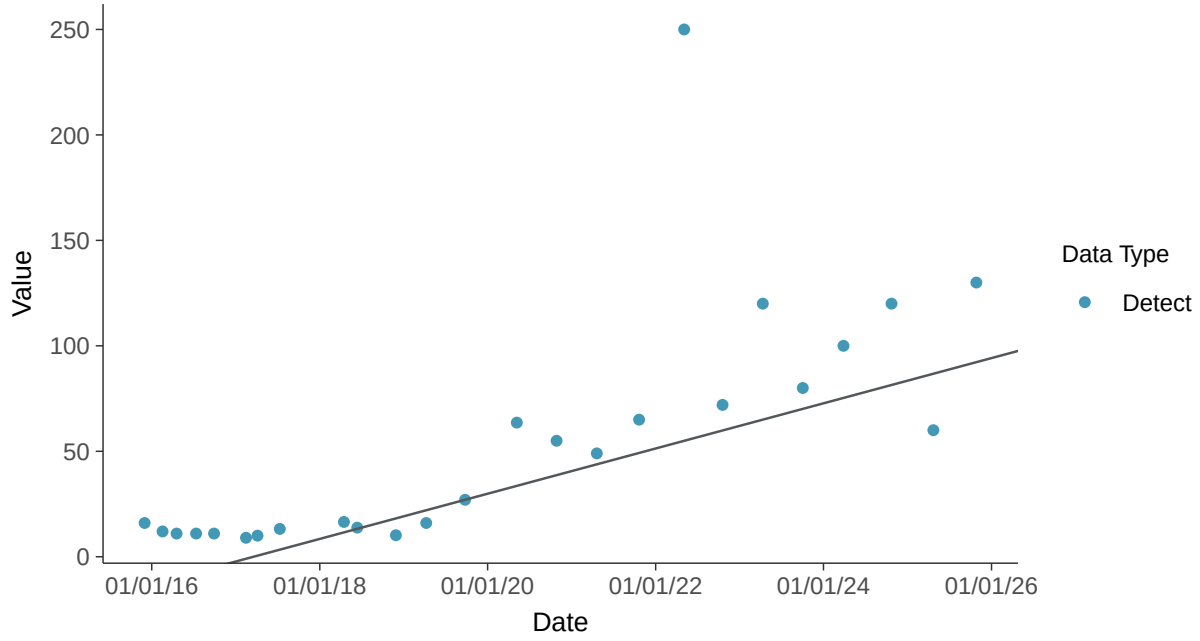
**Normal Q-Q plot**

Barium, MW-15009 (ug/L)



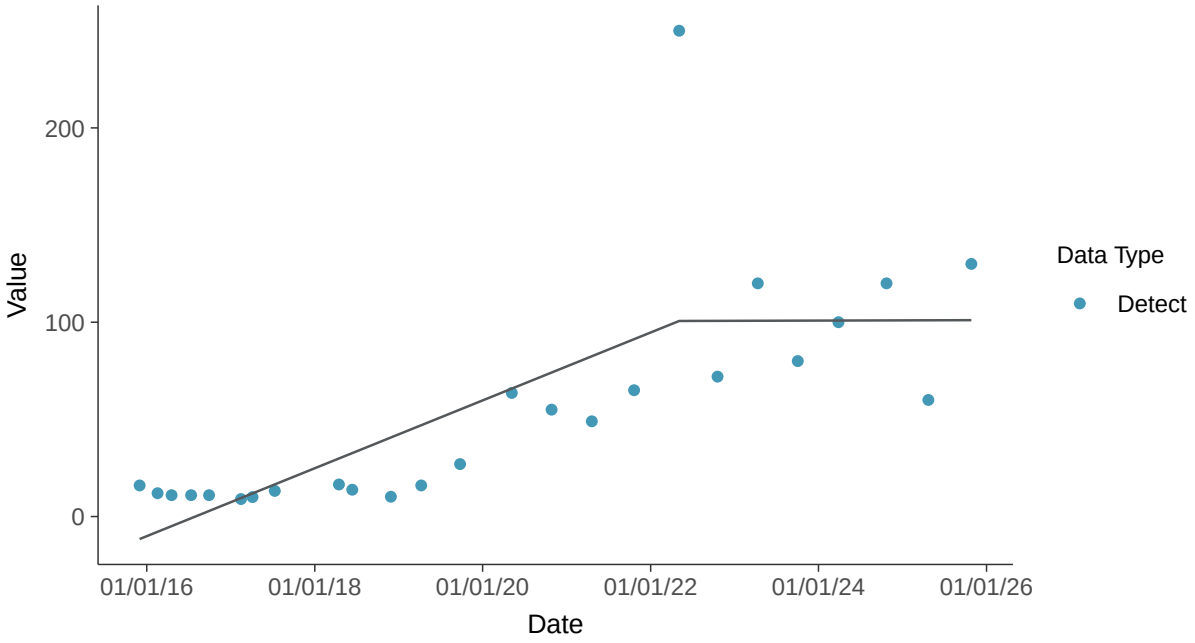

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15009 (ug/L)



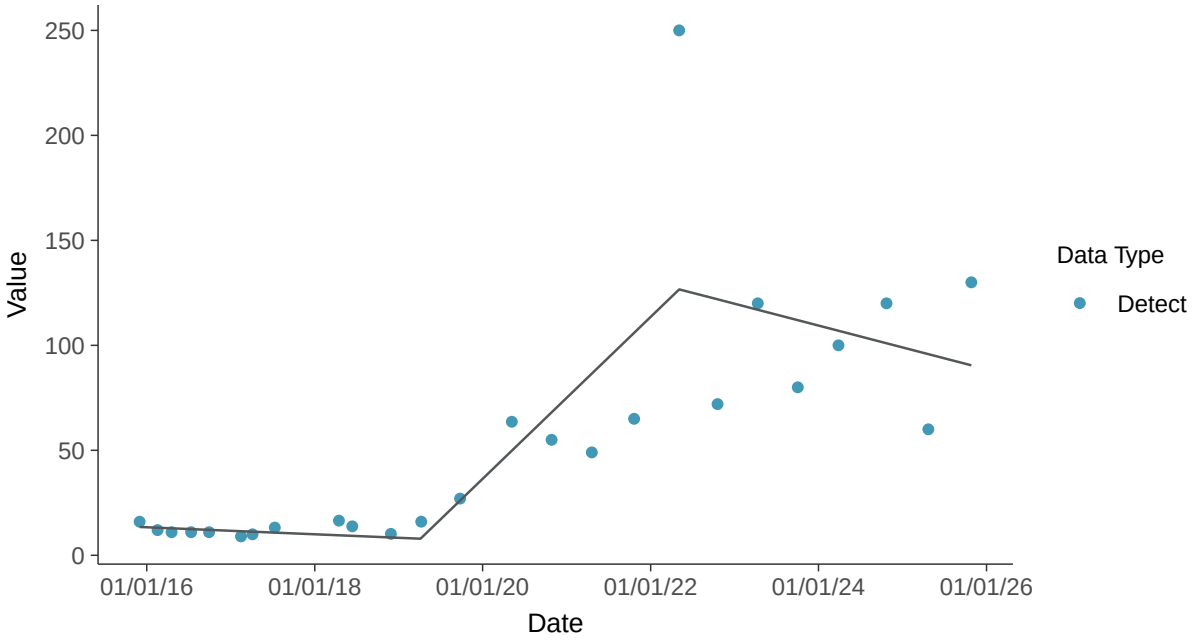
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15009 (ug/L)



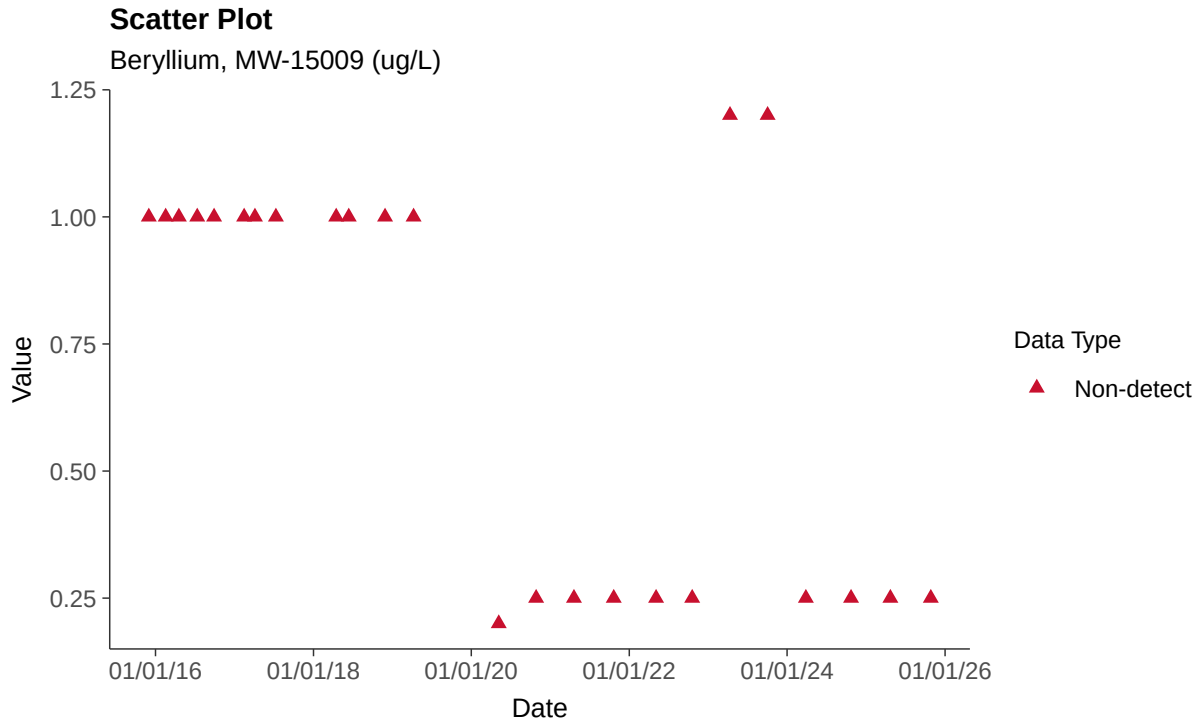

**Trend Regression: Piecewise Linear-Linear-Linear**

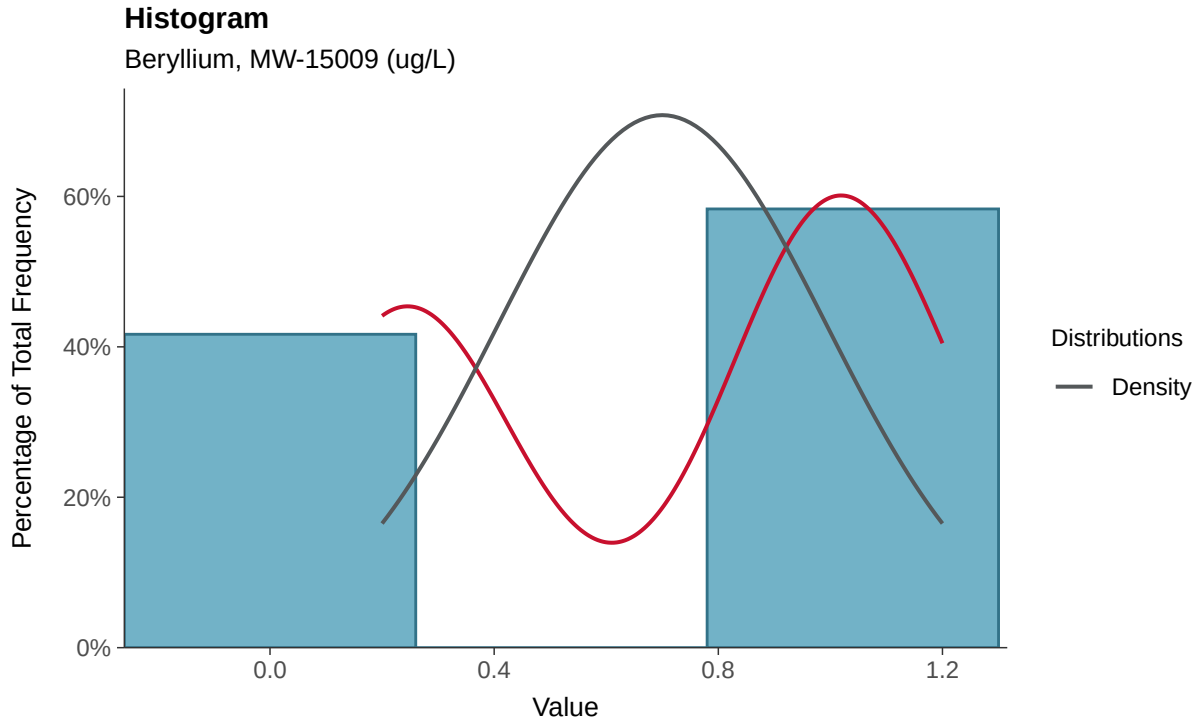
Barium, MW-15009 (ug/L)



## Appendix IV: Beryllium, MW-15009

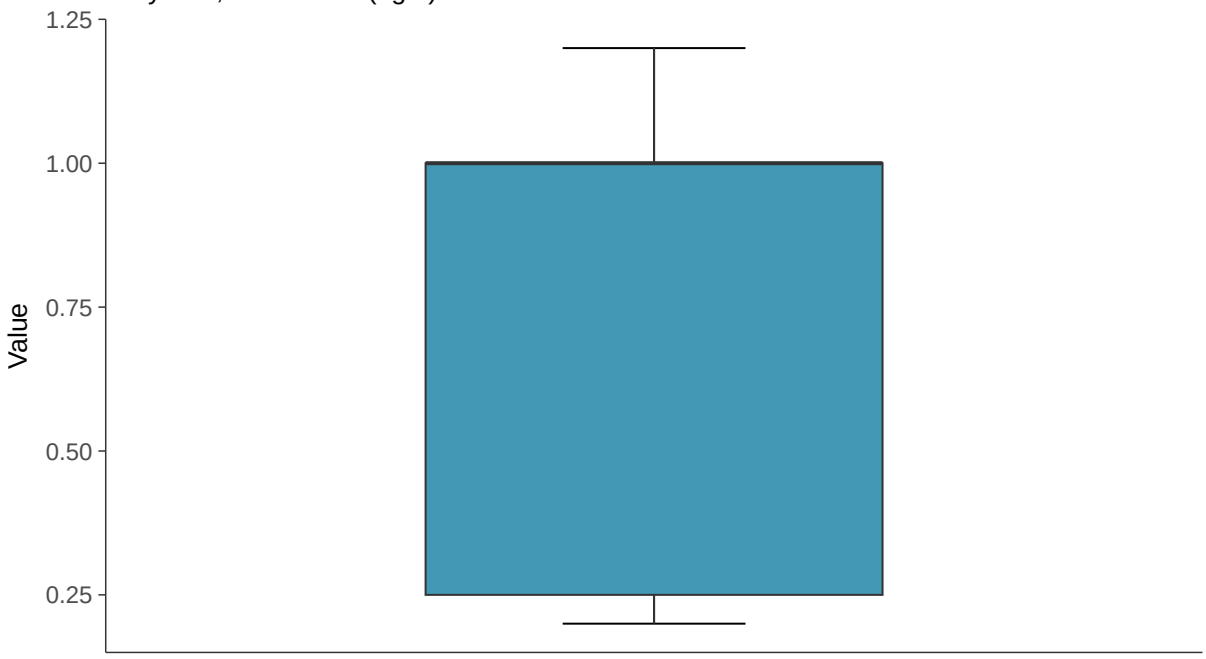
ID: 01_2_104



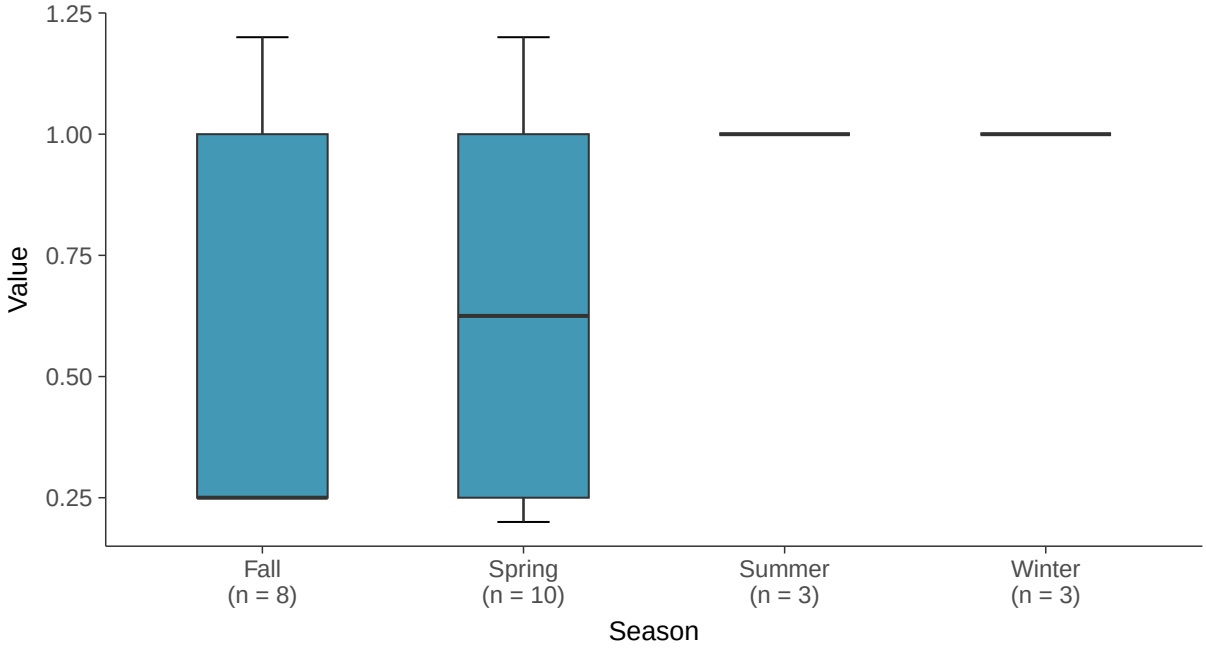
**Boxplot**

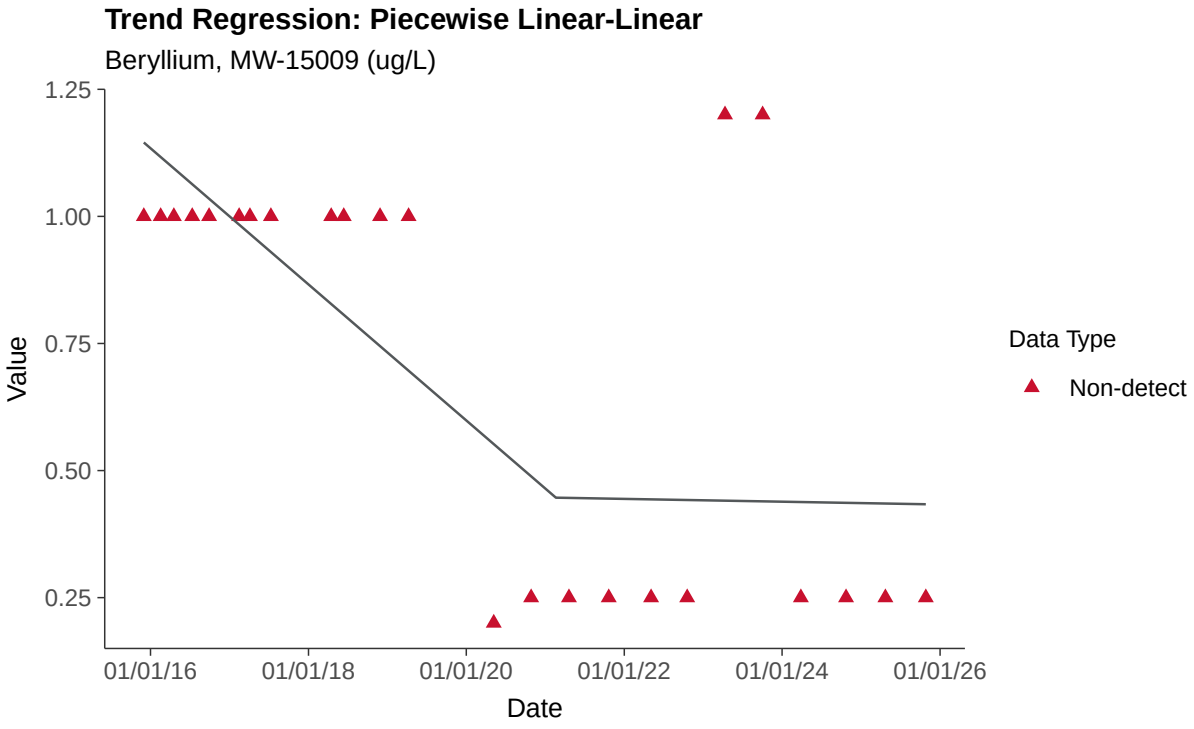
Beryllium, MW-15009 (ug/L)




**Boxplot by Season**

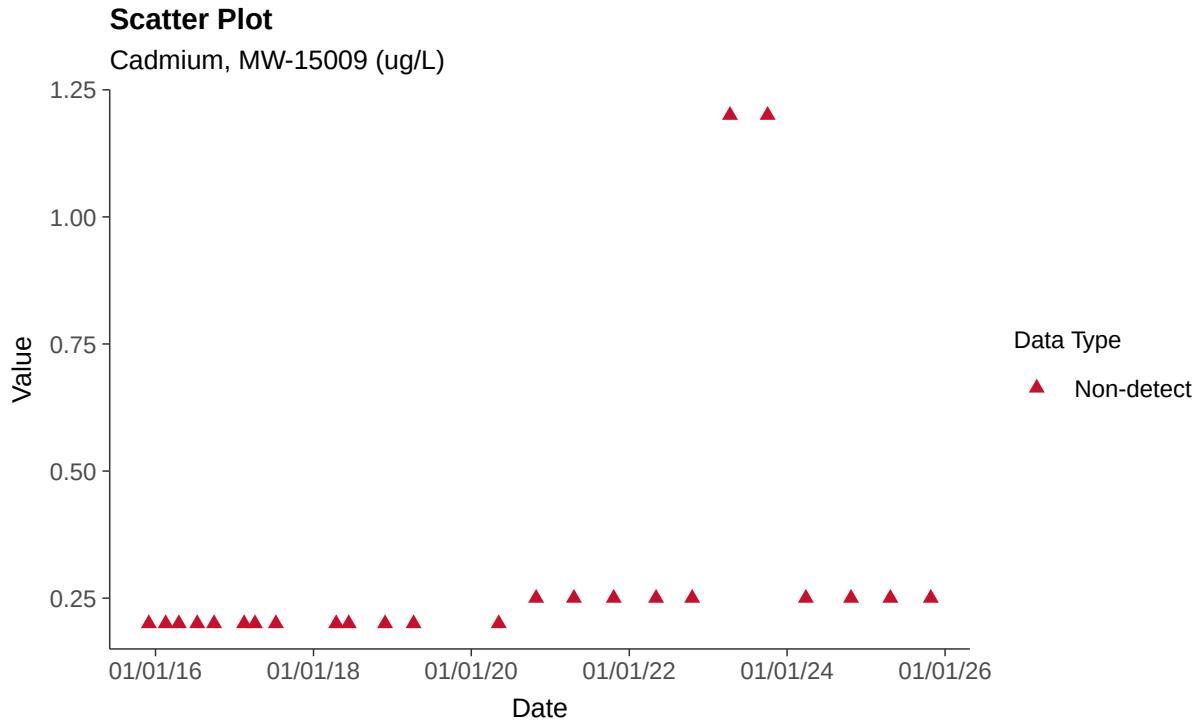
Beryllium, MW-15009 (ug/L)

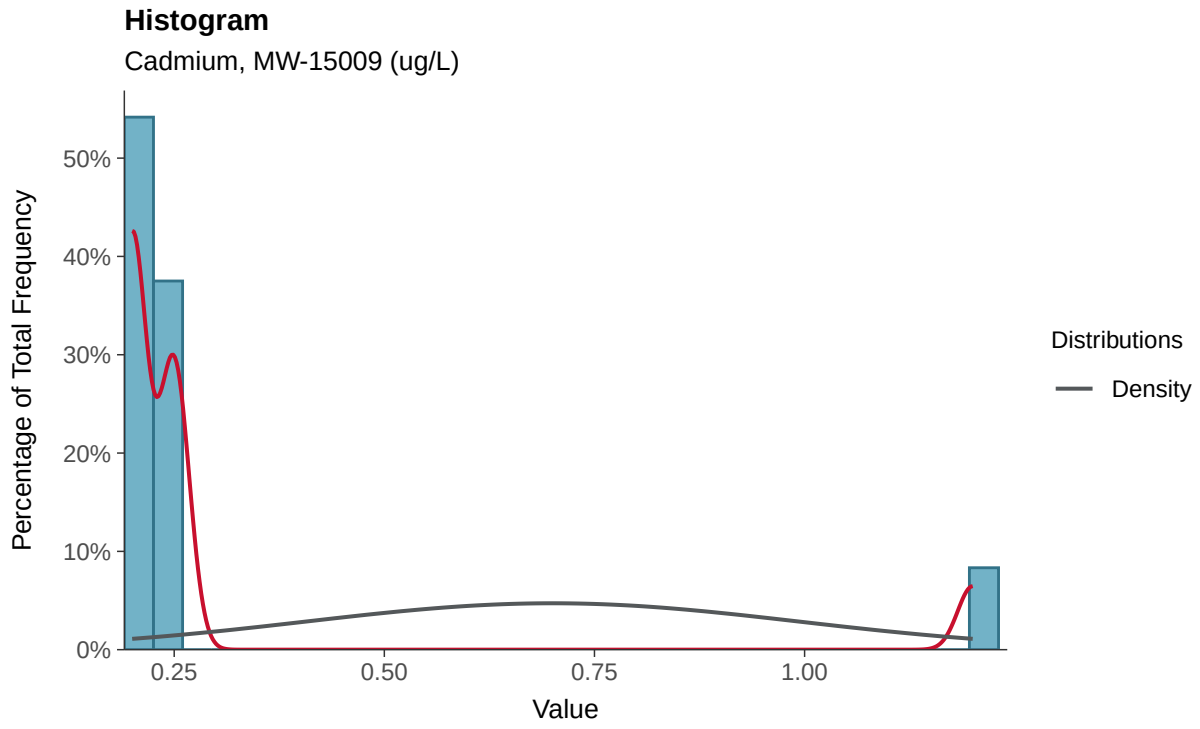



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15009 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Cadmium, MW-15009

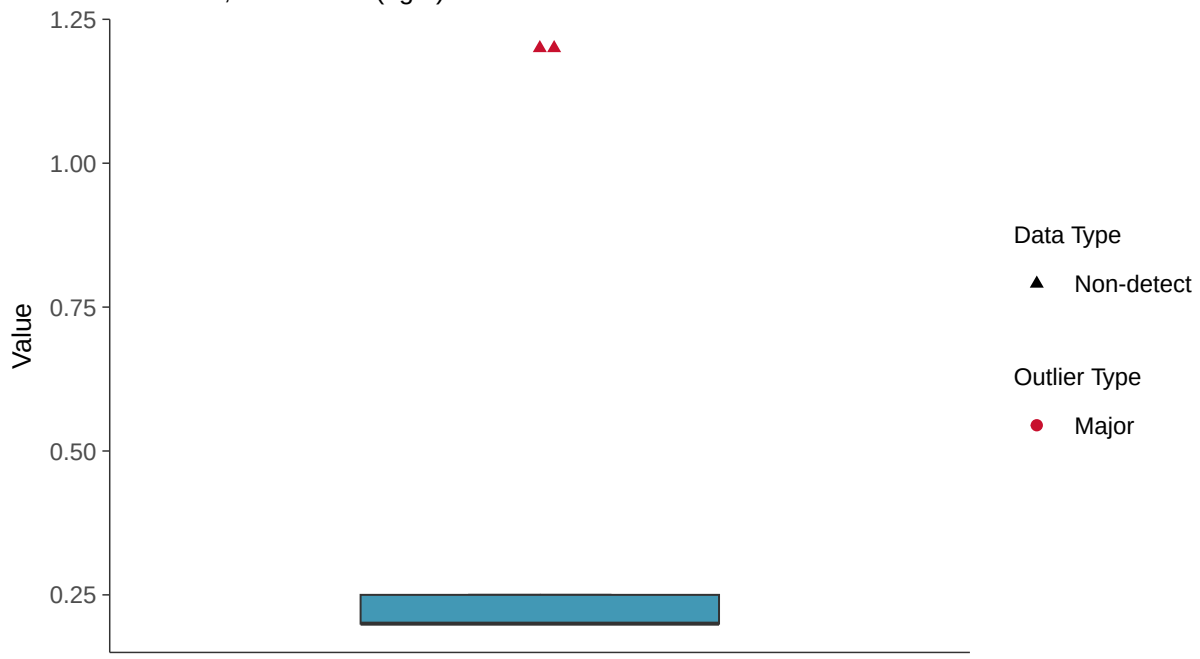
ID: 01_2_106



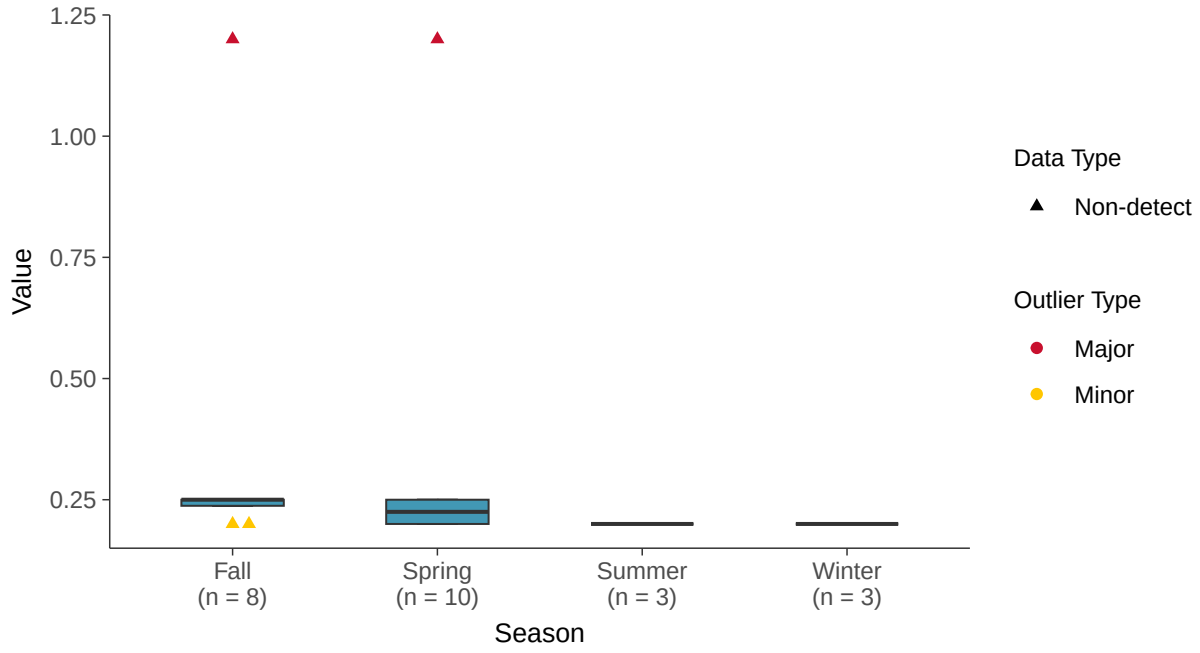
## Boxplot

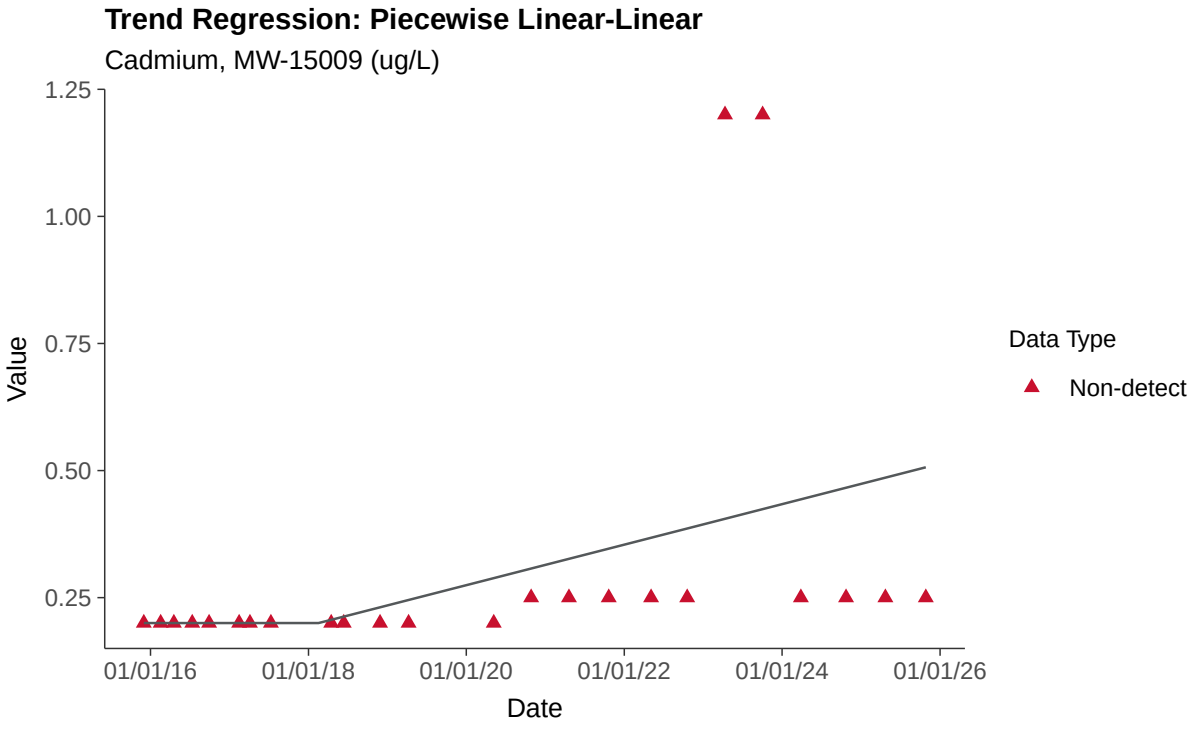
Cadmium, MW-15009 (ug/L)




## Boxplot by Season

Cadmium, MW-15009 (ug/L)



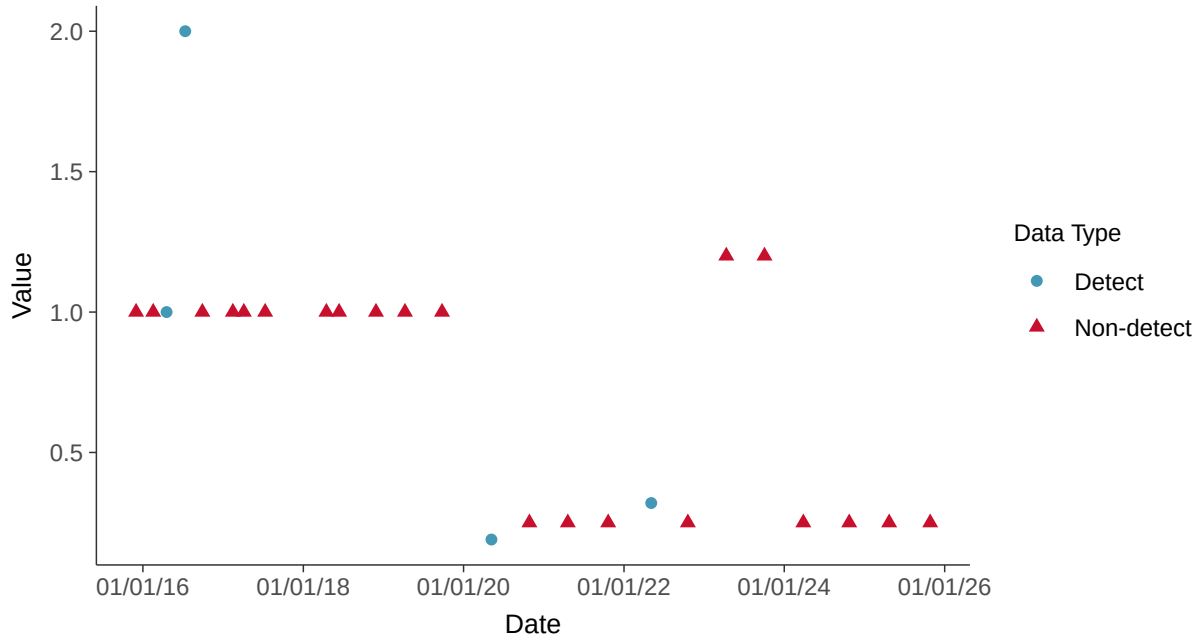

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15009 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15009

ID: 01_2_109

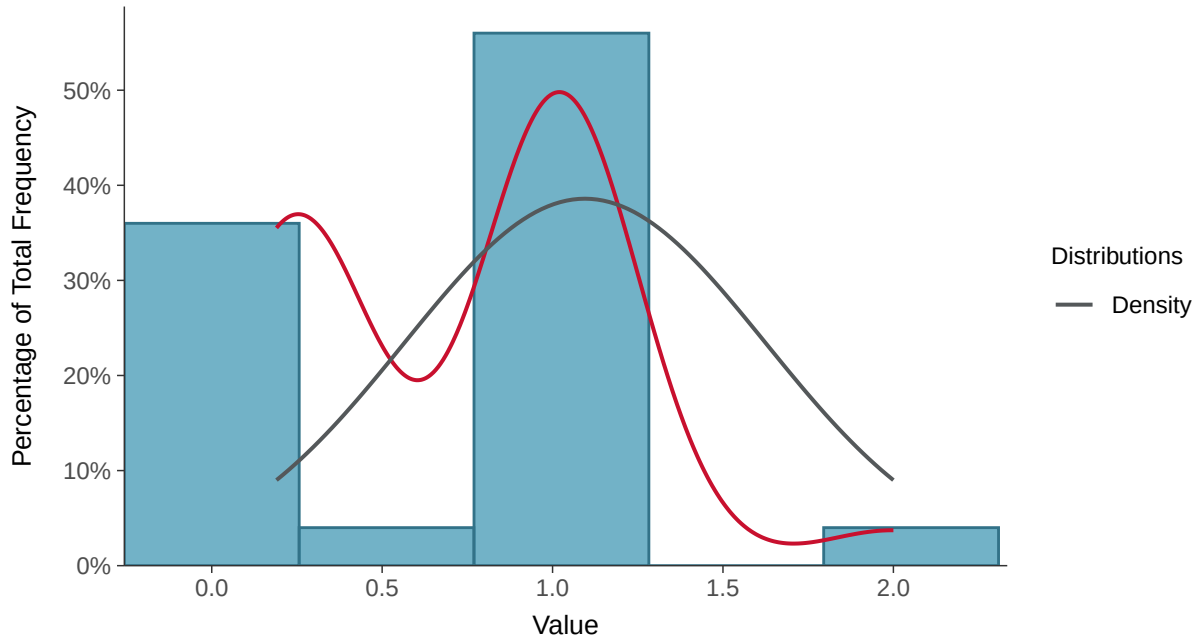
**Scatter Plot**

Chromium, MW-15009 (ug/L)



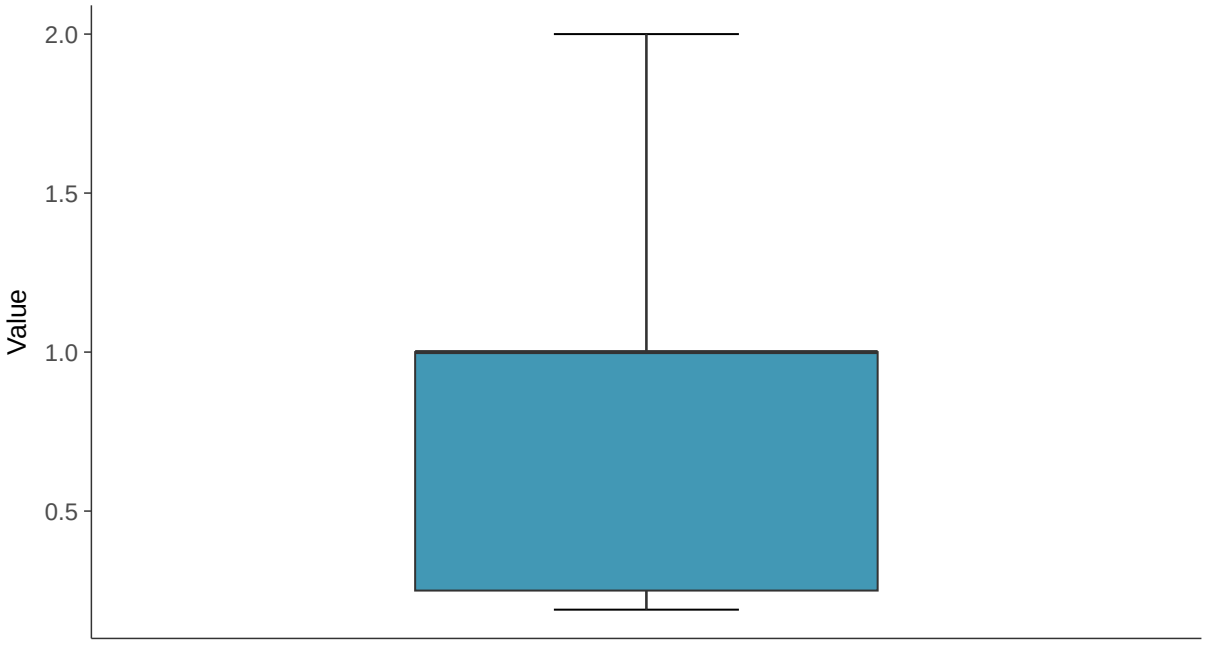

**Histogram**

Chromium, MW-15009 (ug/L)



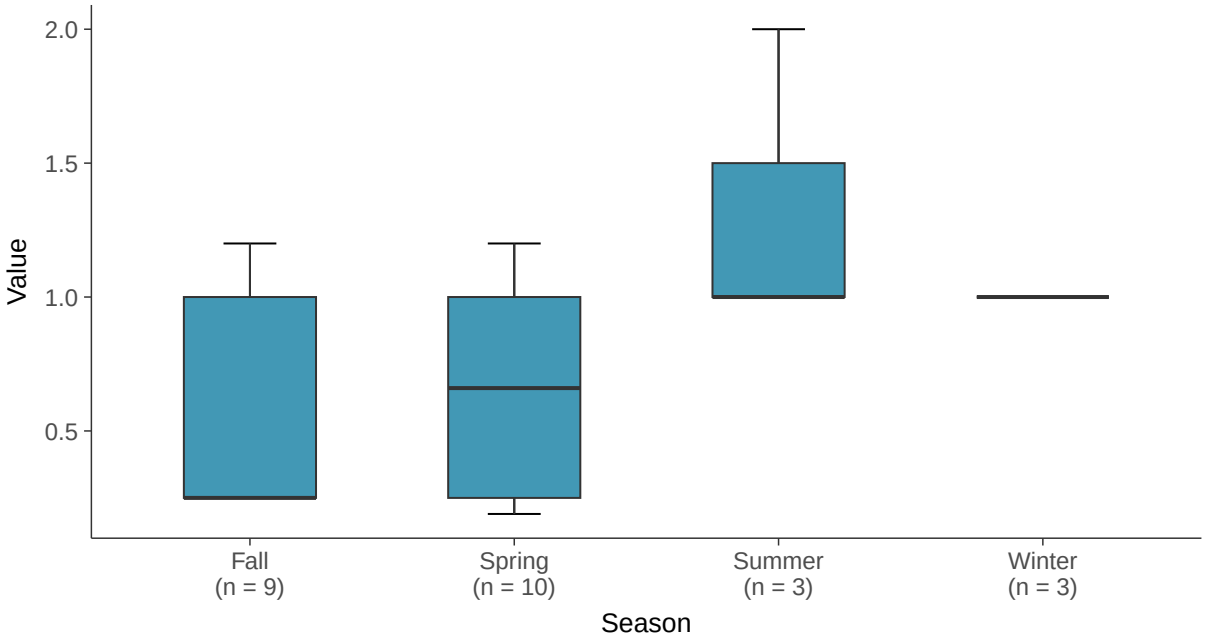
**Boxplot**

Chromium, MW-15009 (ug/L)



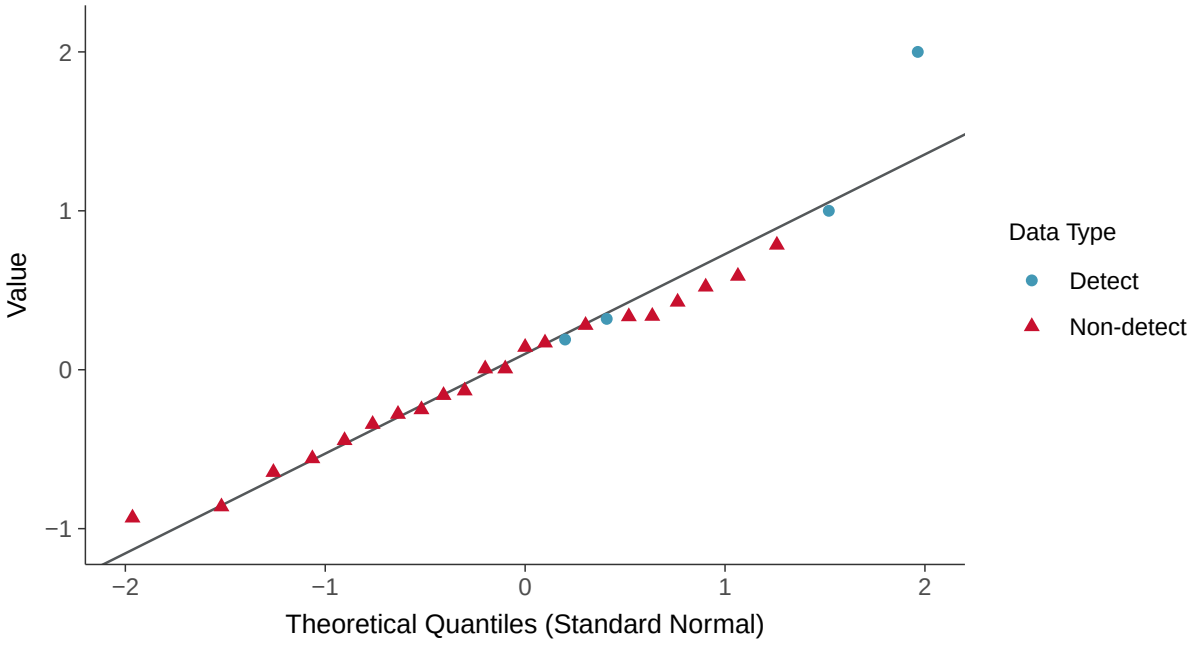

**Boxplot by Season**

Chromium, MW-15009 (ug/L)



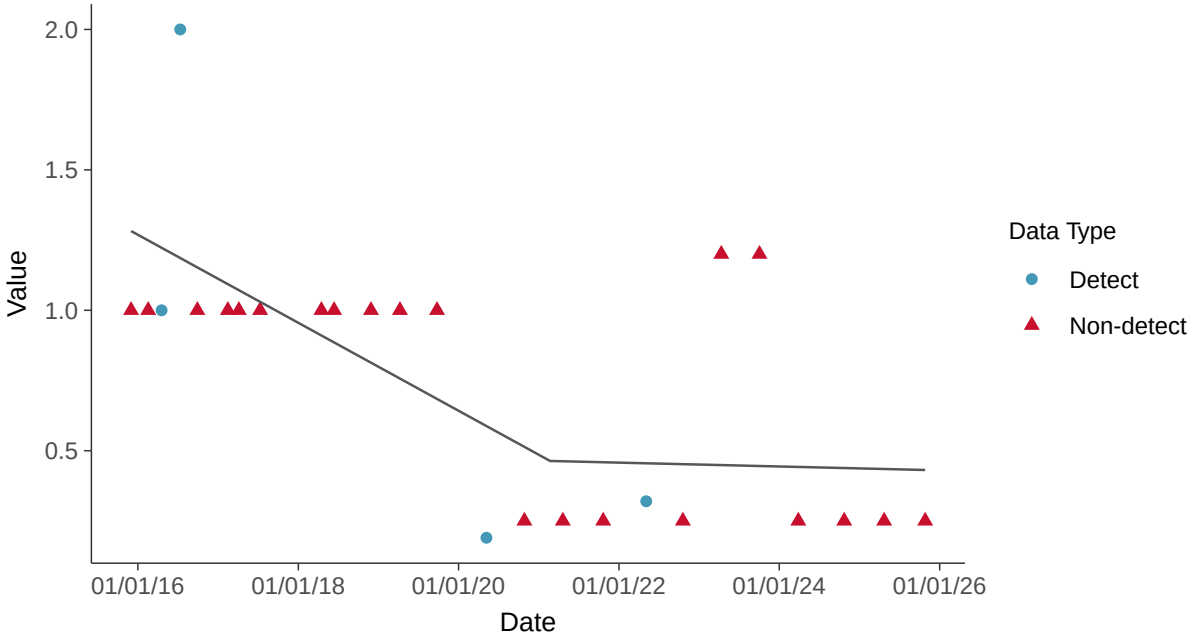
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15009 (ug/L)



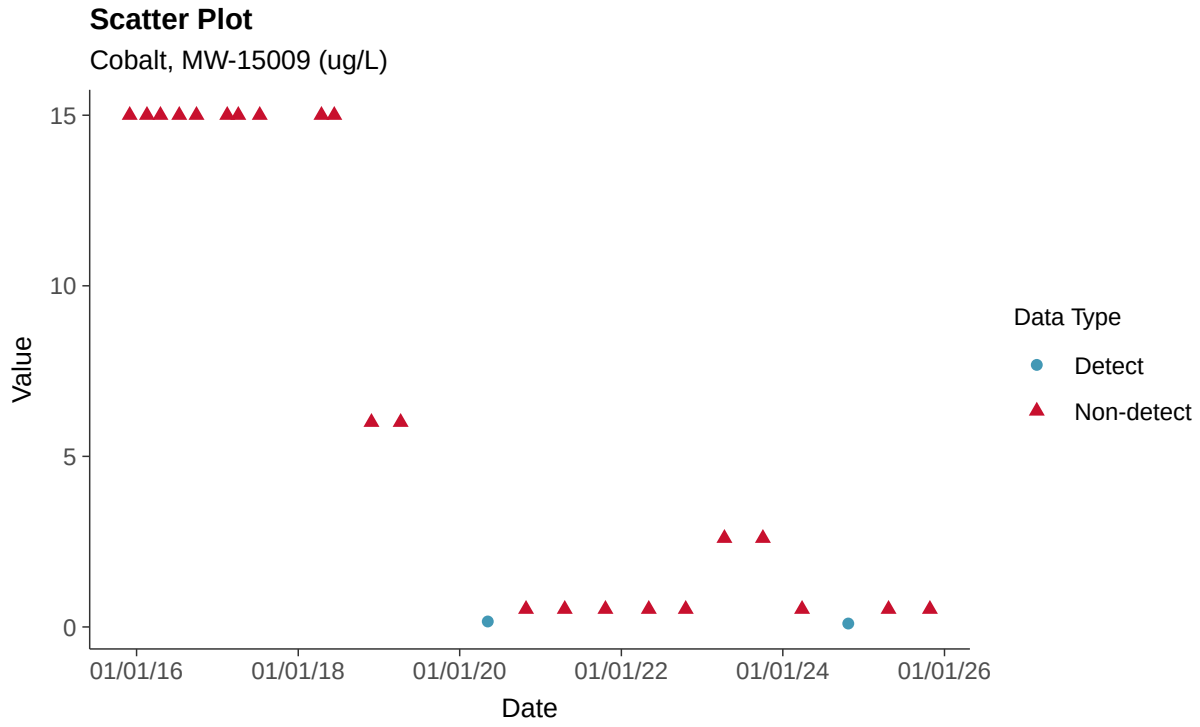

**Trend Regression: Piecewise Linear-Linear**

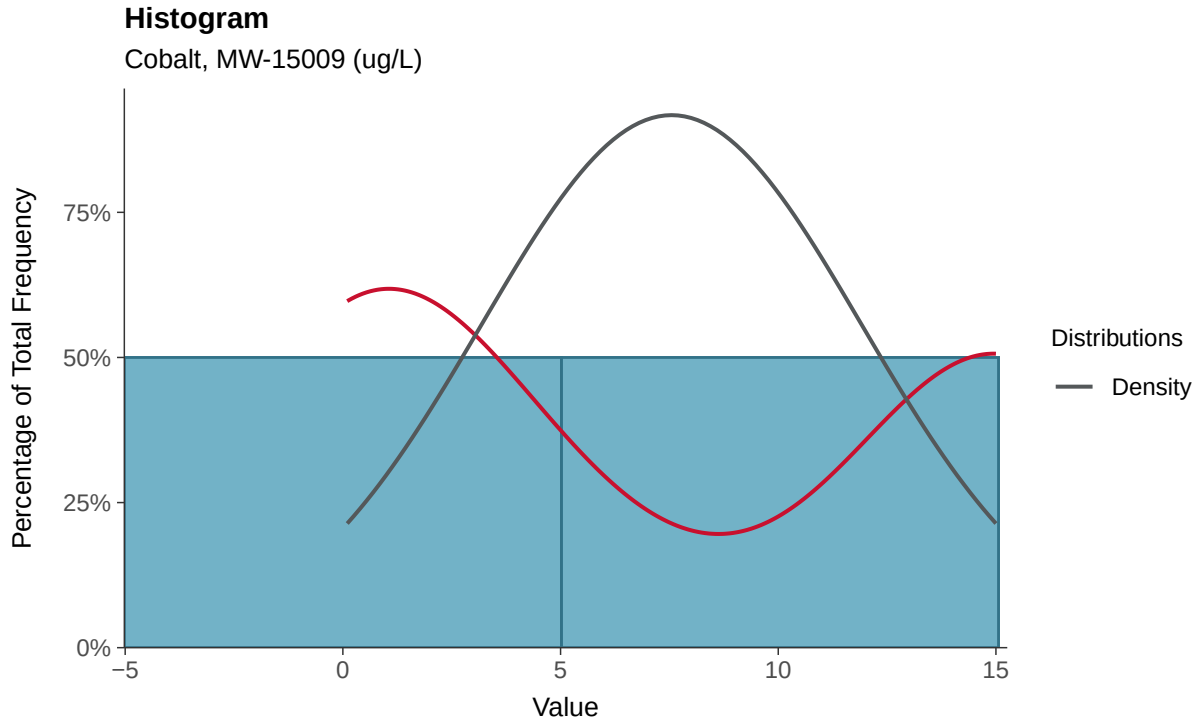
Chromium, MW-15009 (ug/L)



## Appendix IV: Cobalt, MW-15009

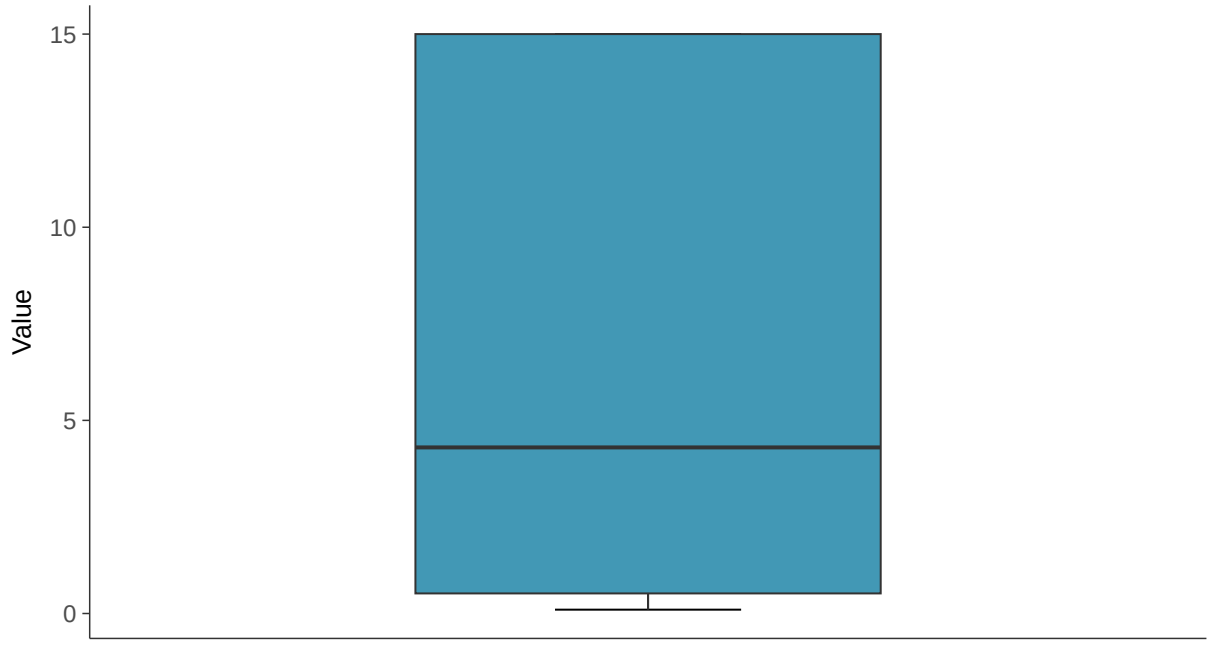
ID: 01_2_110



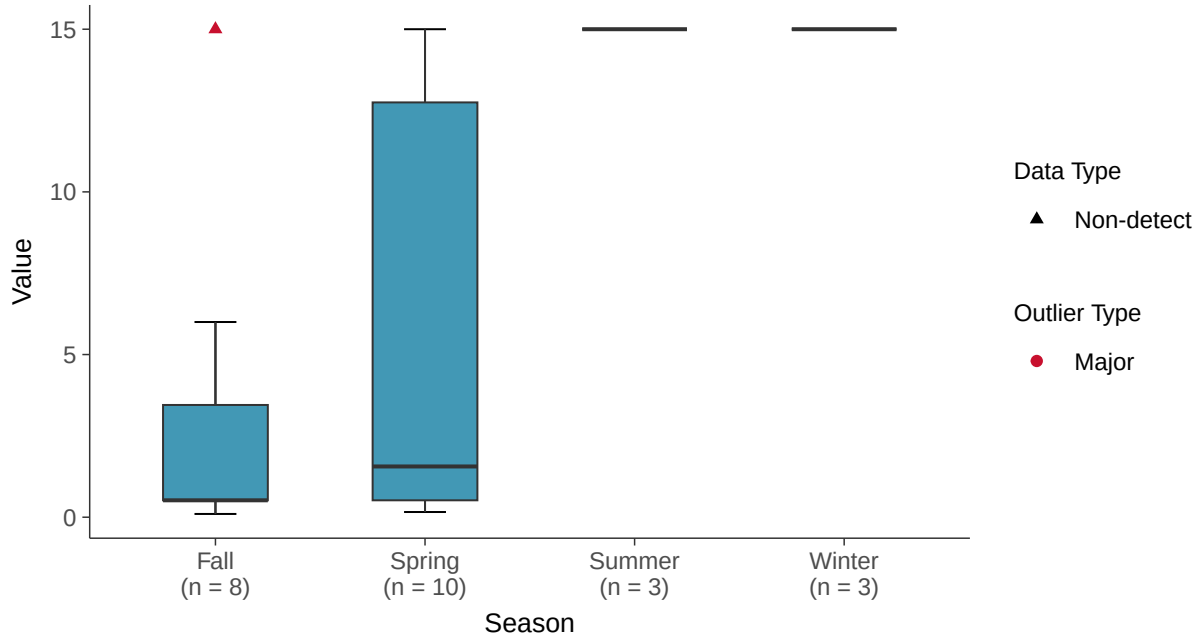
## Boxplot

Cobalt, MW-15009 (ug/L)



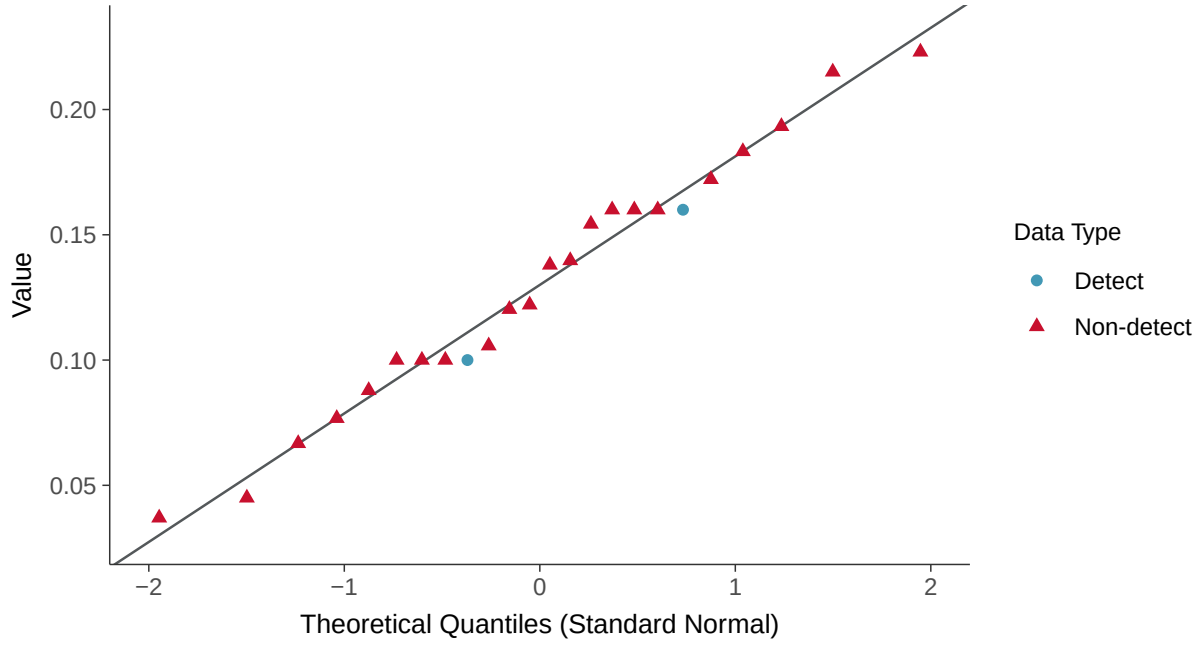

## Boxplot by Season

Cobalt, MW-15009 (ug/L)



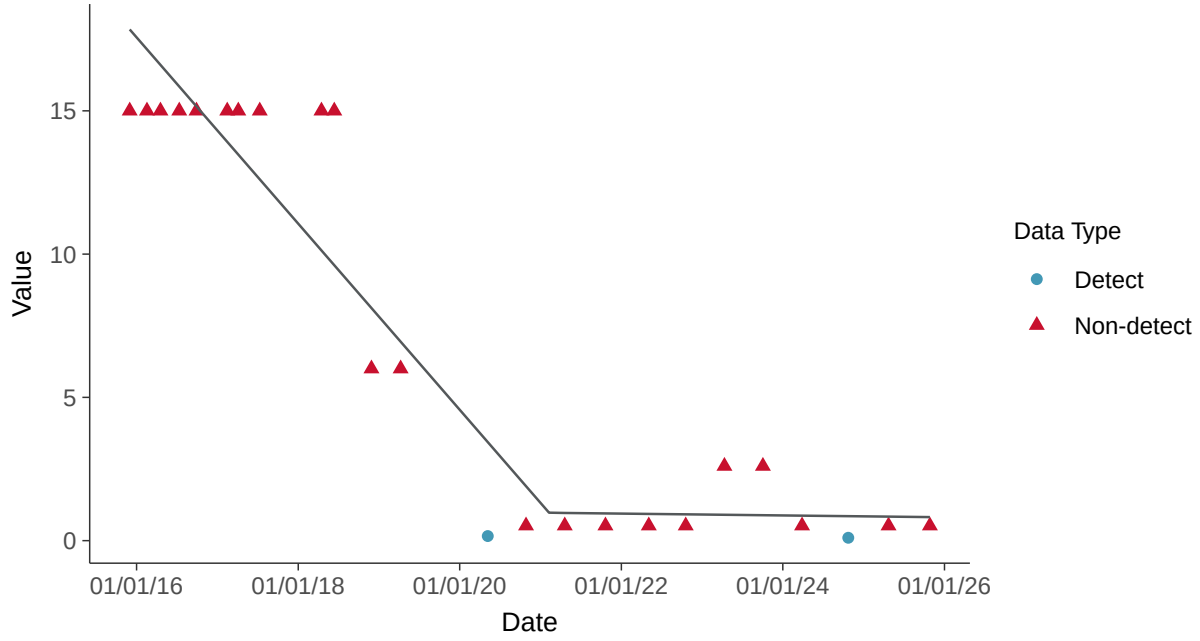
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15009 (ug/L)



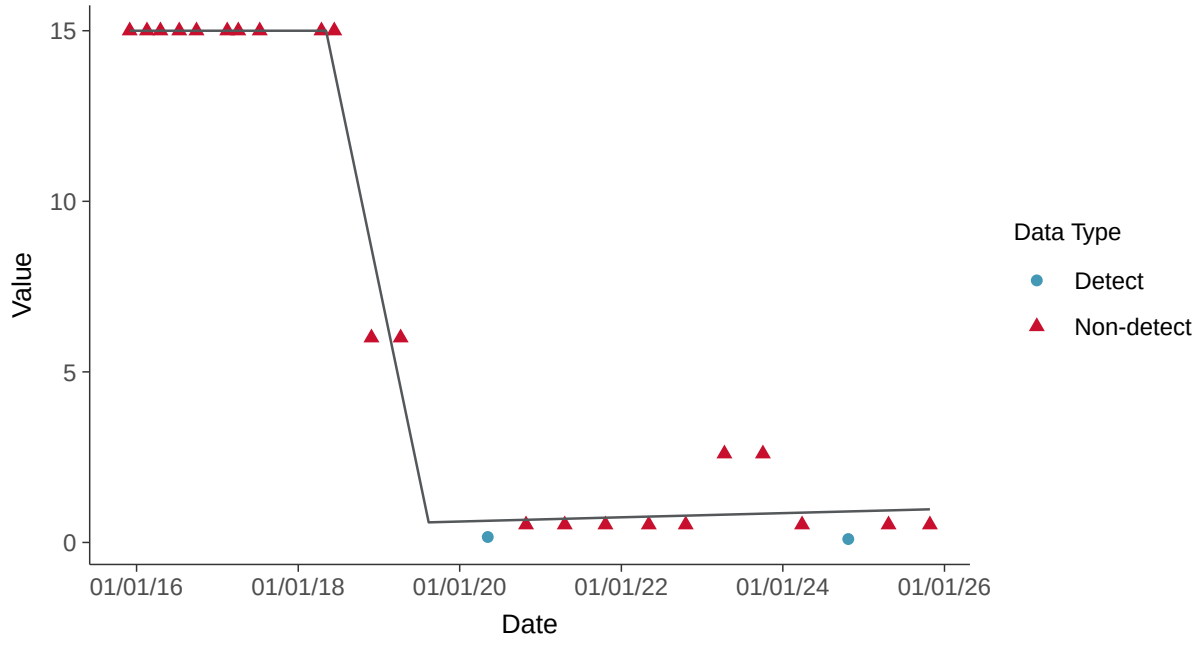

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15009 (ug/L)



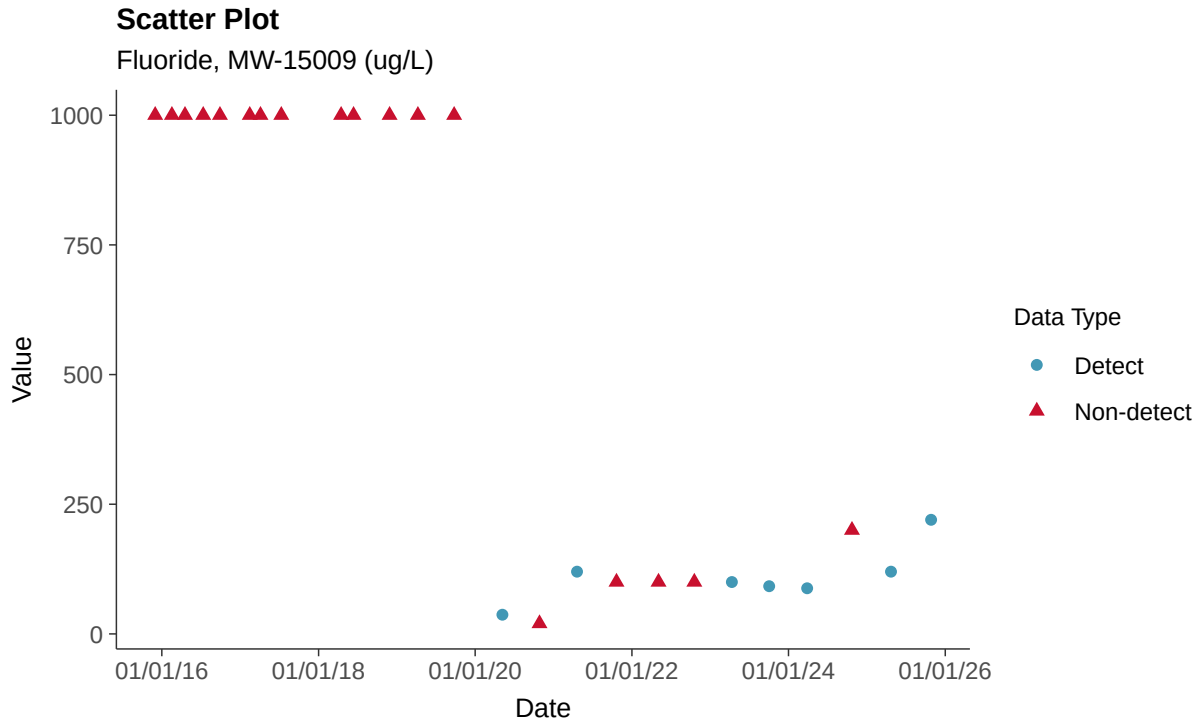
**Trend Regression: Piecewise Linear-Linear-Linear**

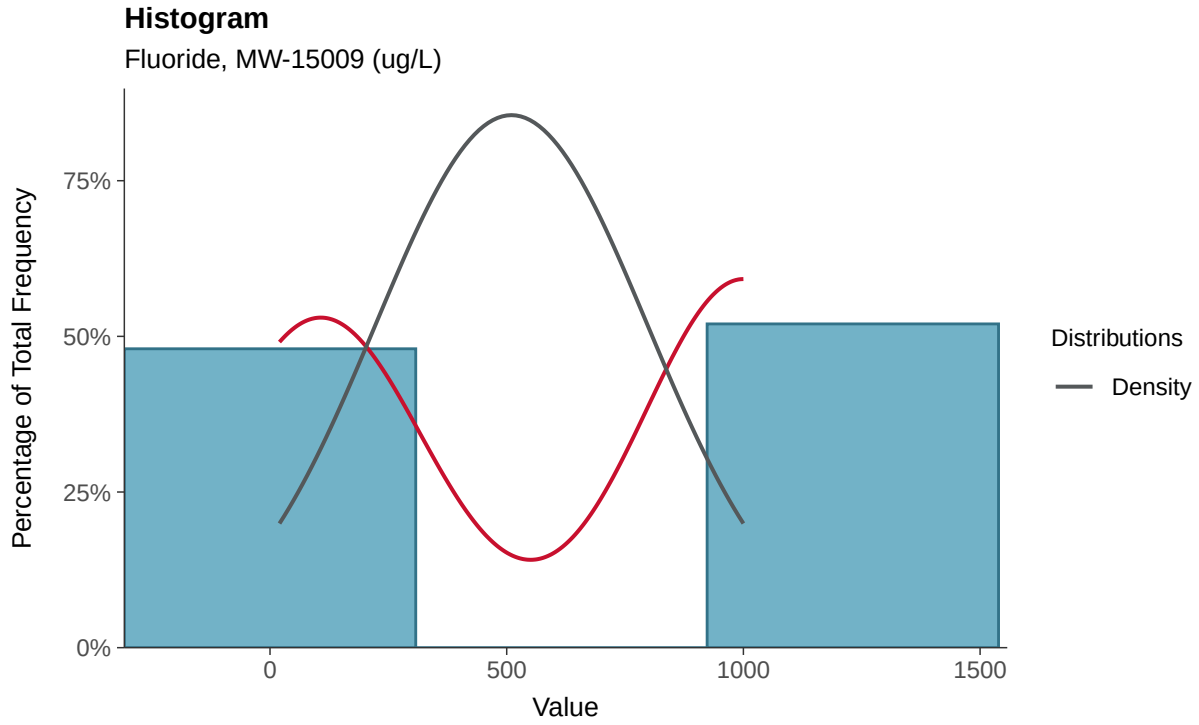
Cobalt, MW-15009 (ug/L)



## Appendix IV: Fluoride, MW-15009

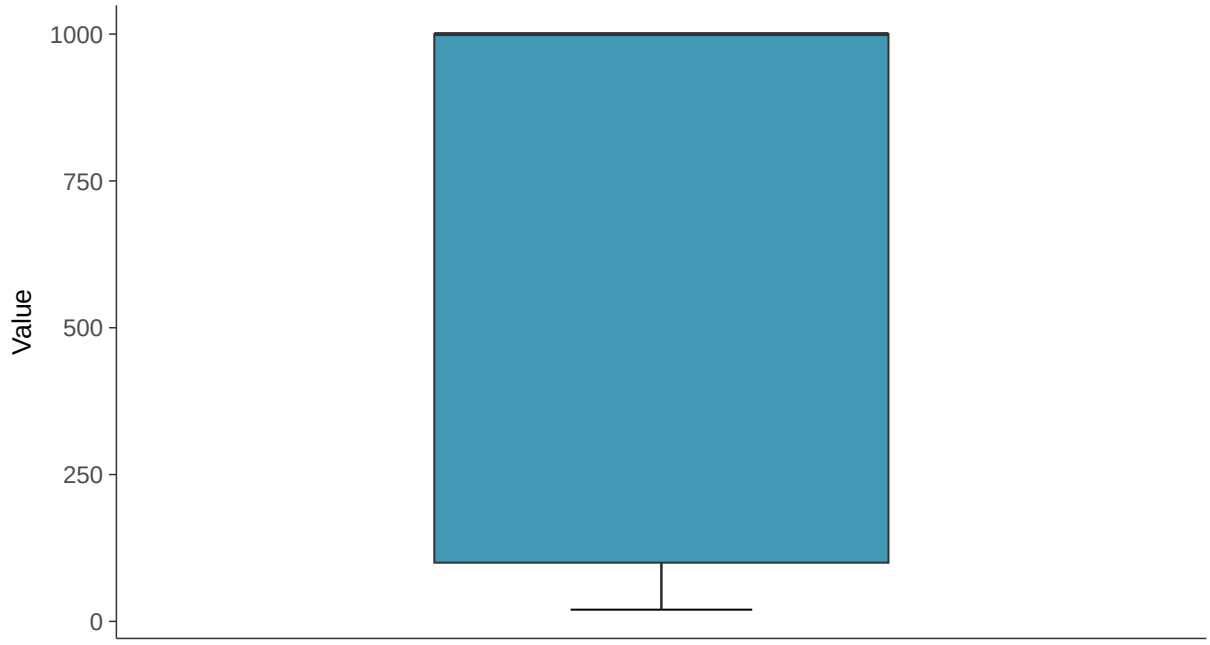
ID: 01_2_114



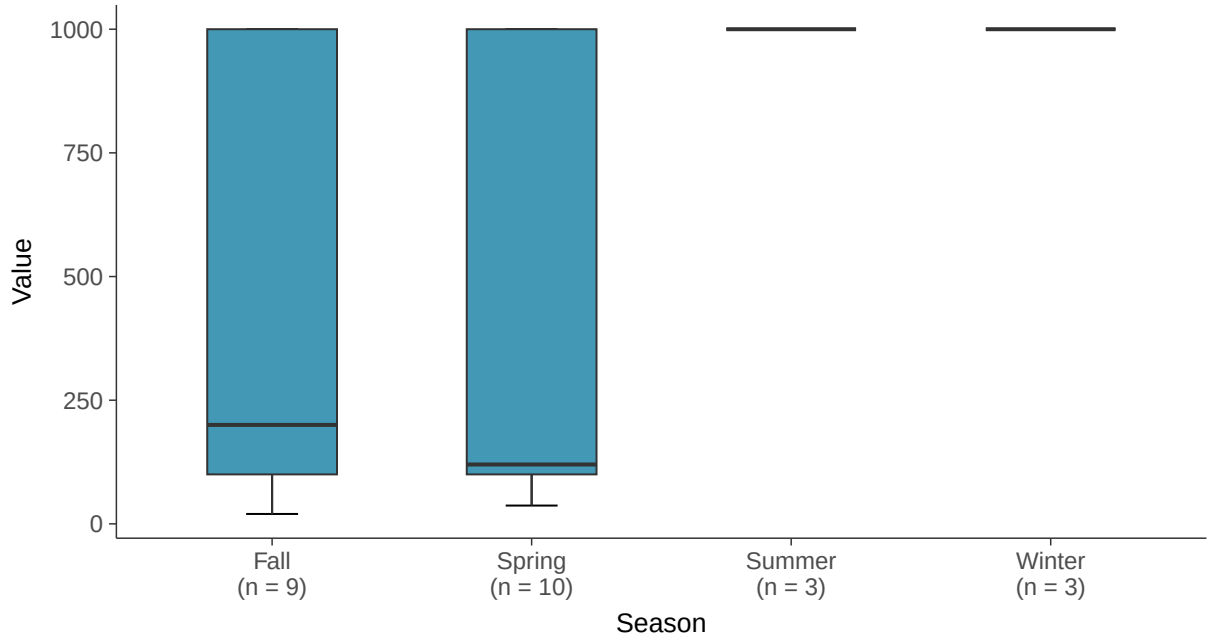
**Boxplot**

Fluoride, MW-15009 (ug/L)



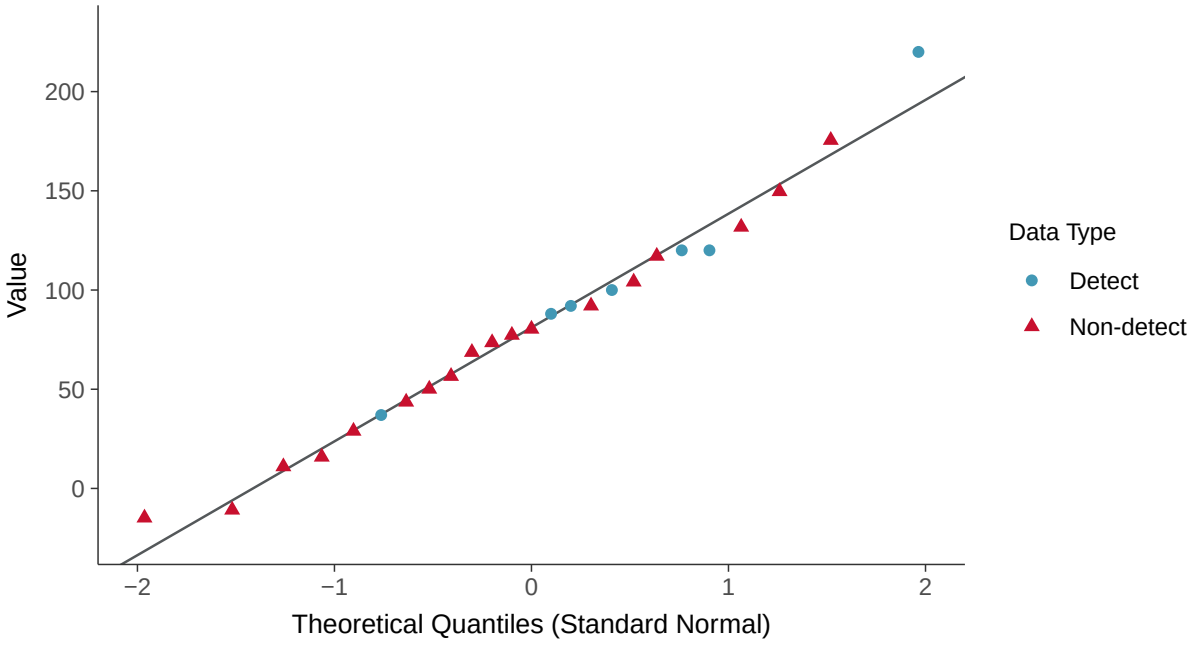

**Boxplot by Season**

Fluoride, MW-15009 (ug/L)



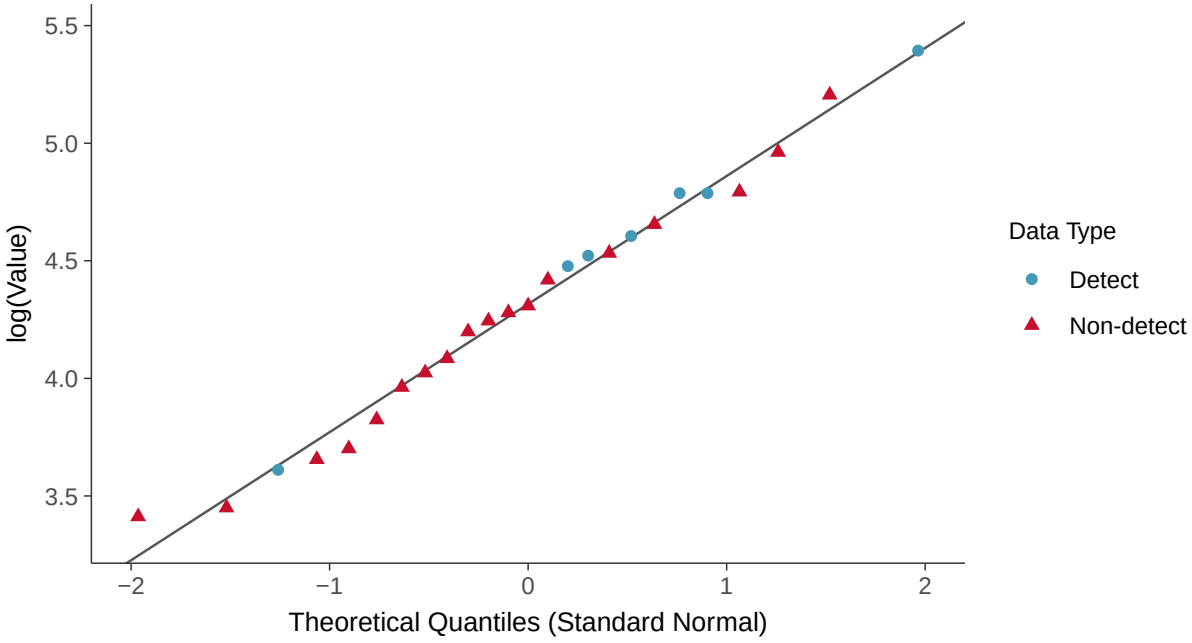
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15009 (ug/L)



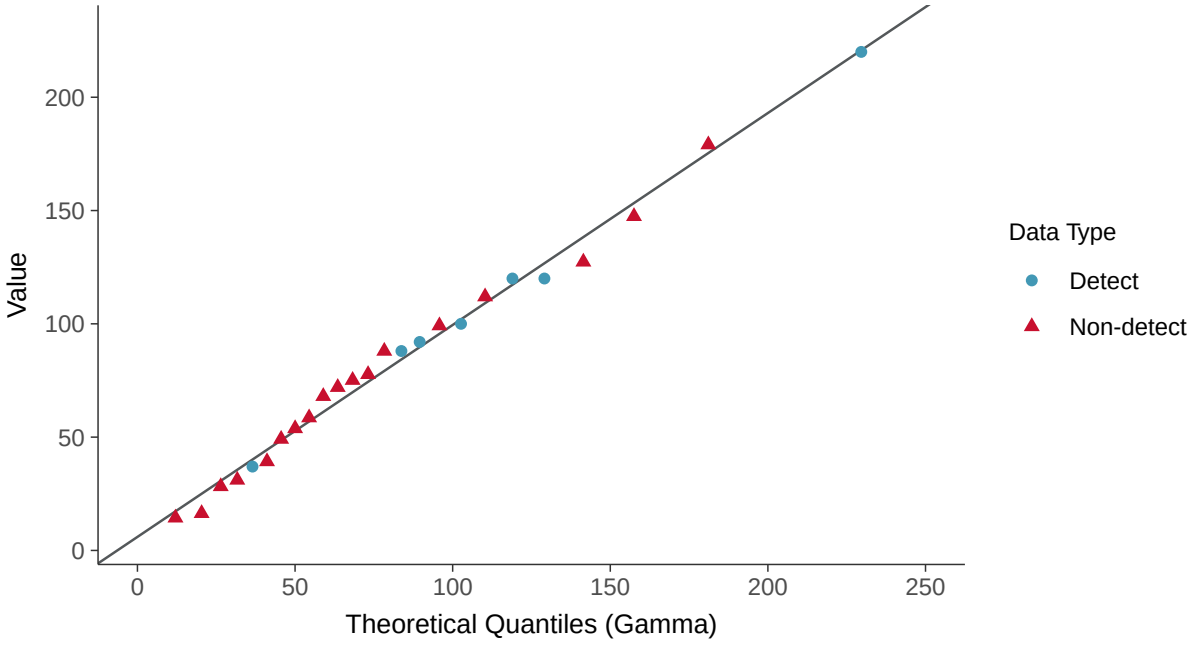

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15009 (ug/L)



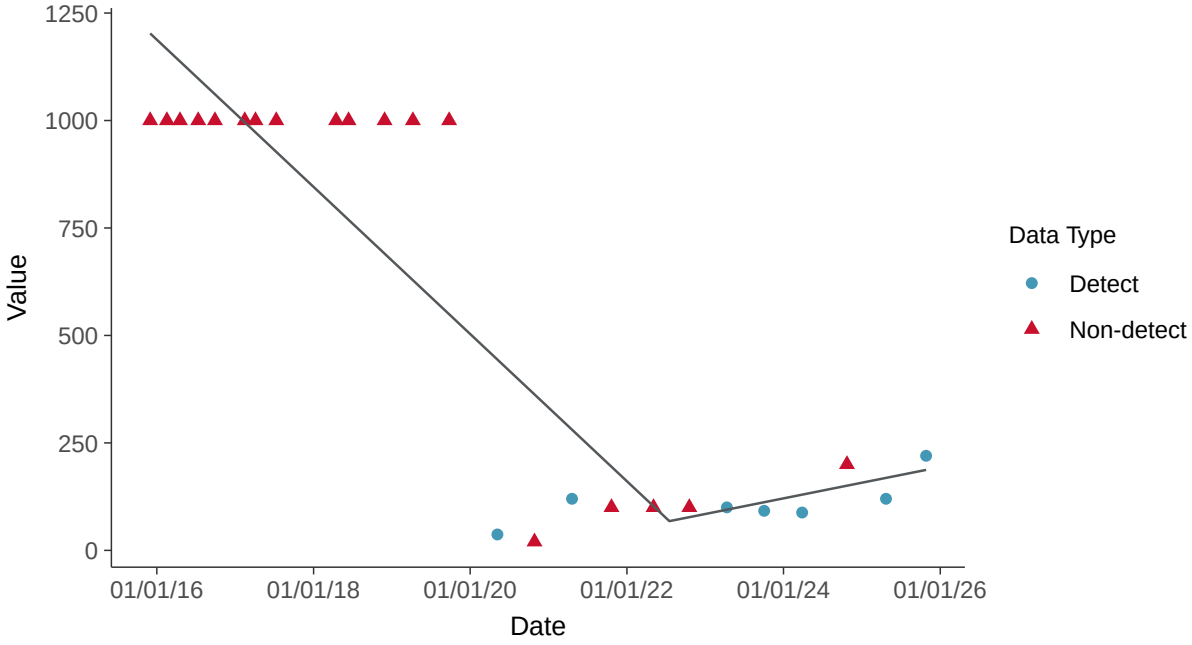
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15009 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15009 (ug/L)

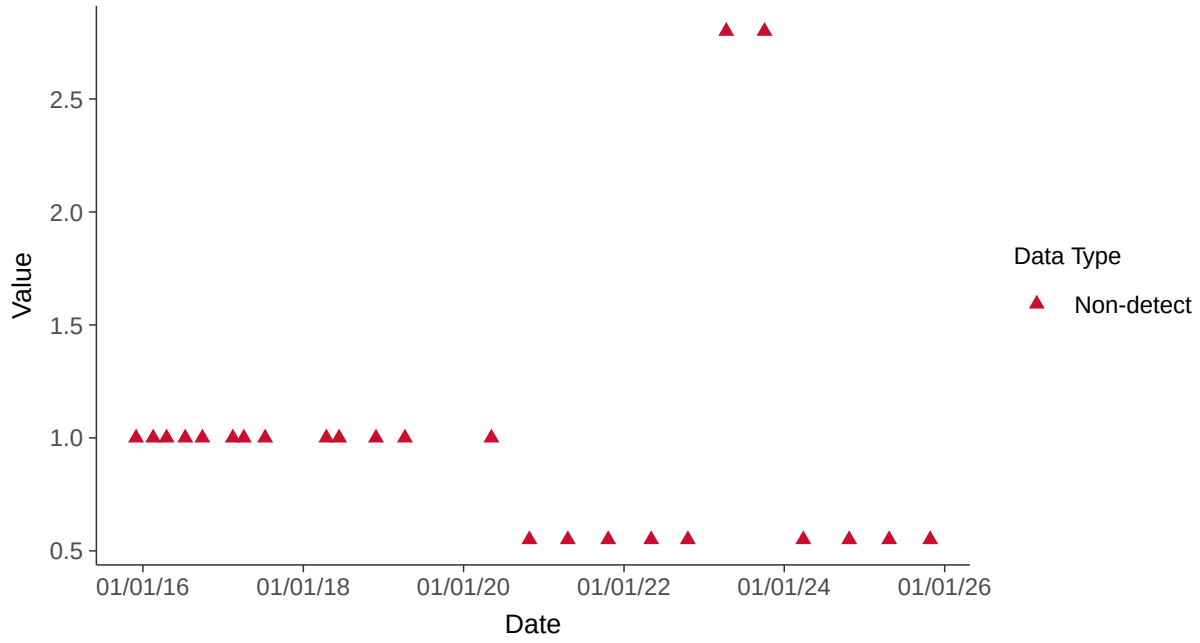


## Appendix IV: Lead, MW-15009

ID: 01_2_116

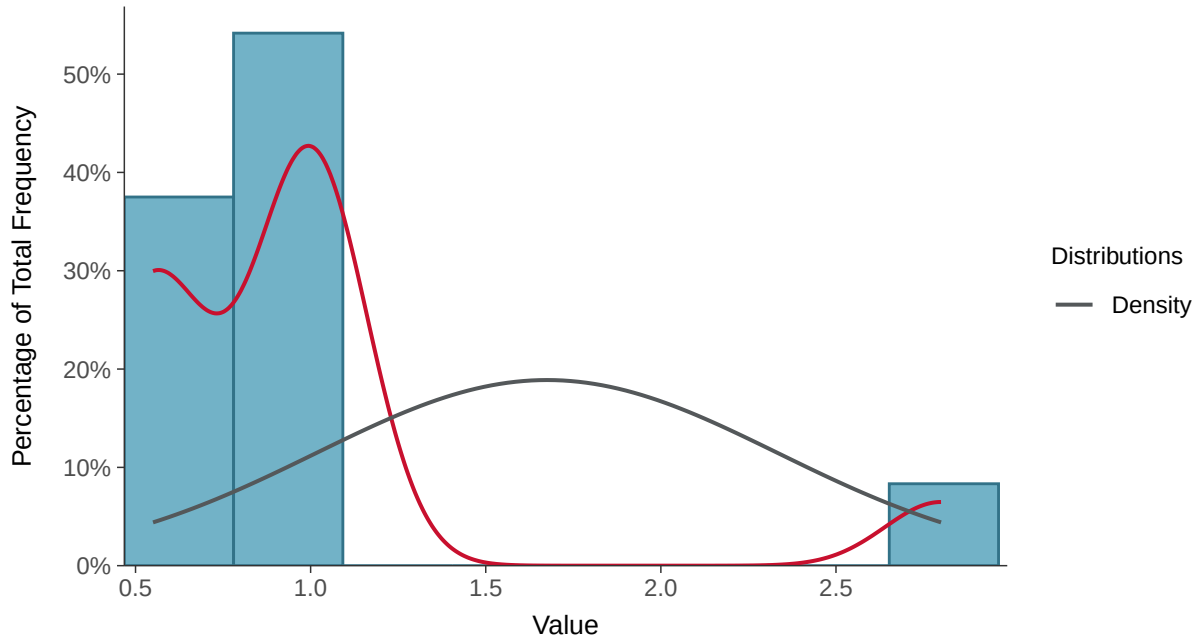
**Scatter Plot**

Lead, MW-15009 (ug/L)



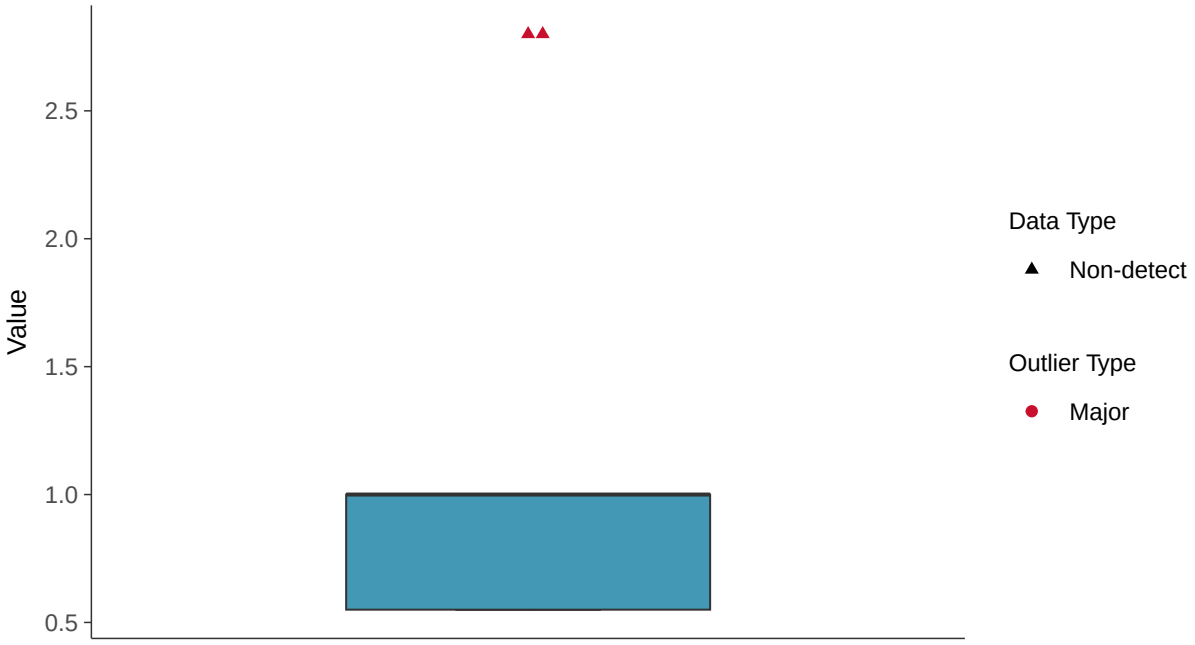

**Histogram**

Lead, MW-15009 (ug/L)



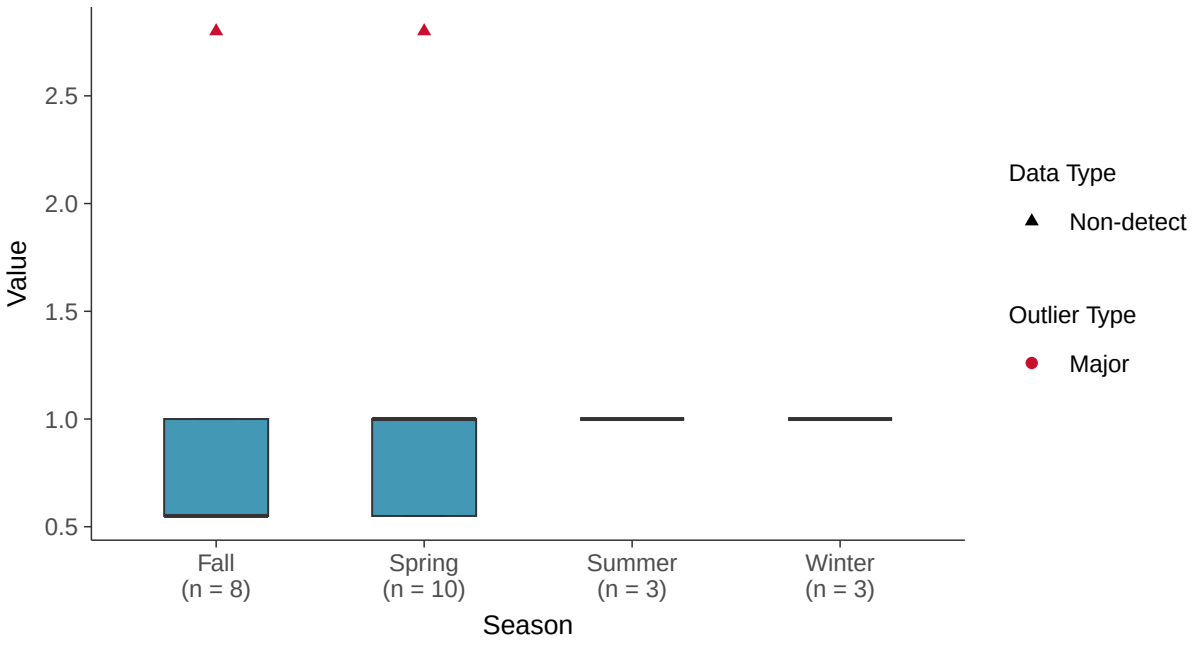
## Boxplot

Lead, MW-15009 (ug/L)



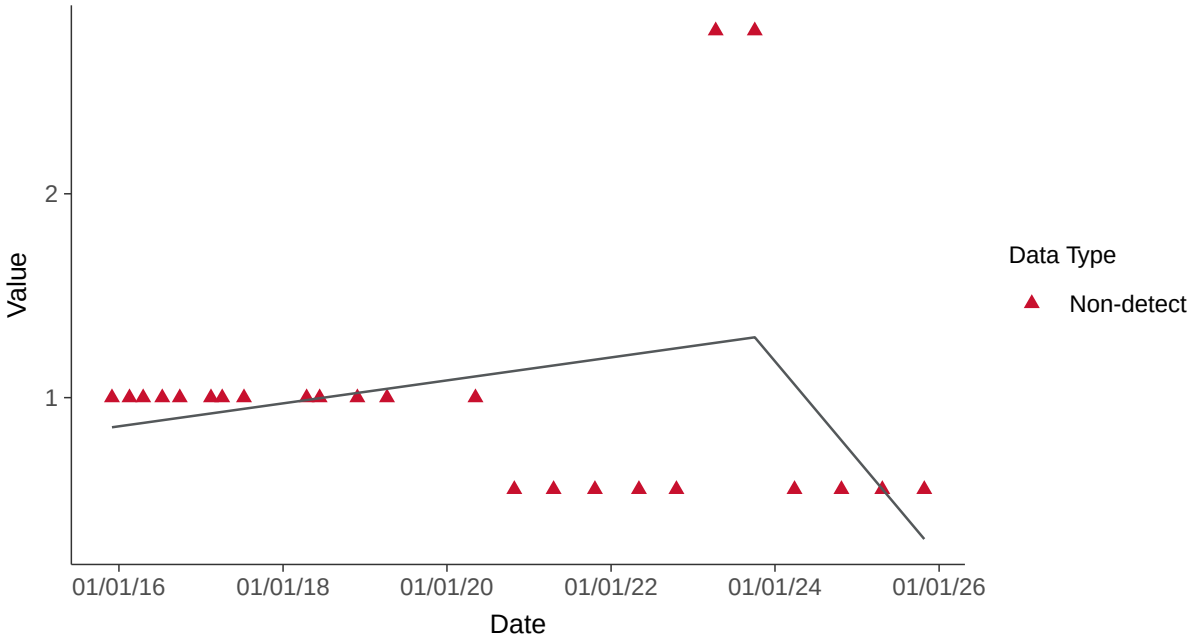

## Boxplot by Season

Lead, MW-15009 (ug/L)



## Trend Regression: Piecewise Linear-Linear

Lead, MW-15009 (ug/L)

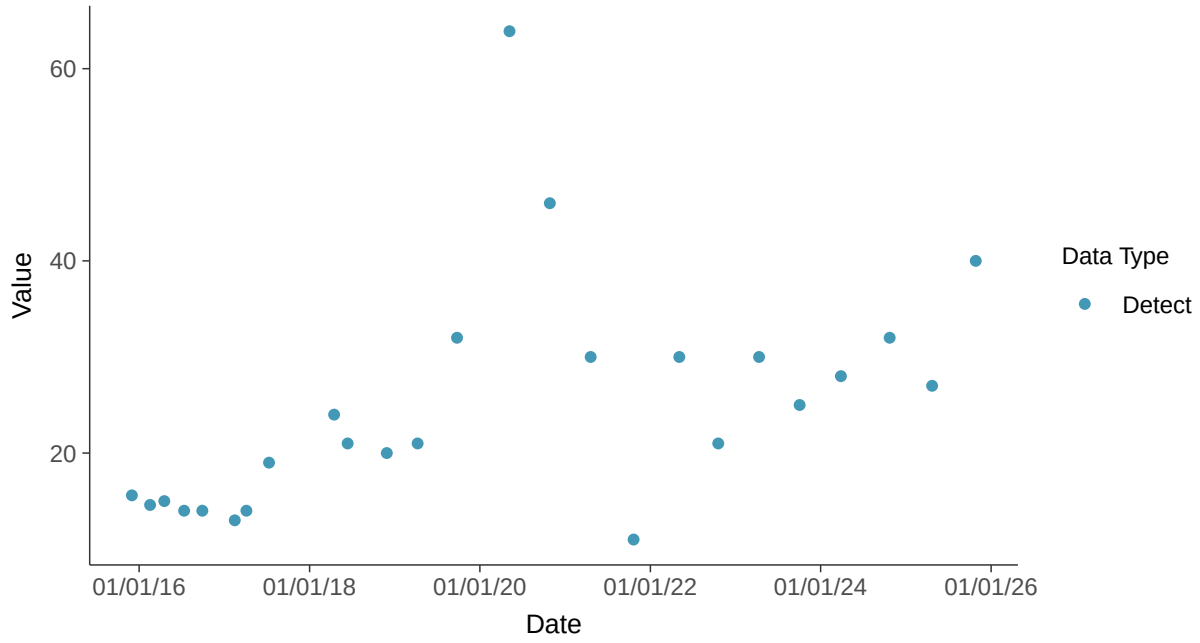


## Appendix IV: Lithium, MW-15009

ID: 01_2_117

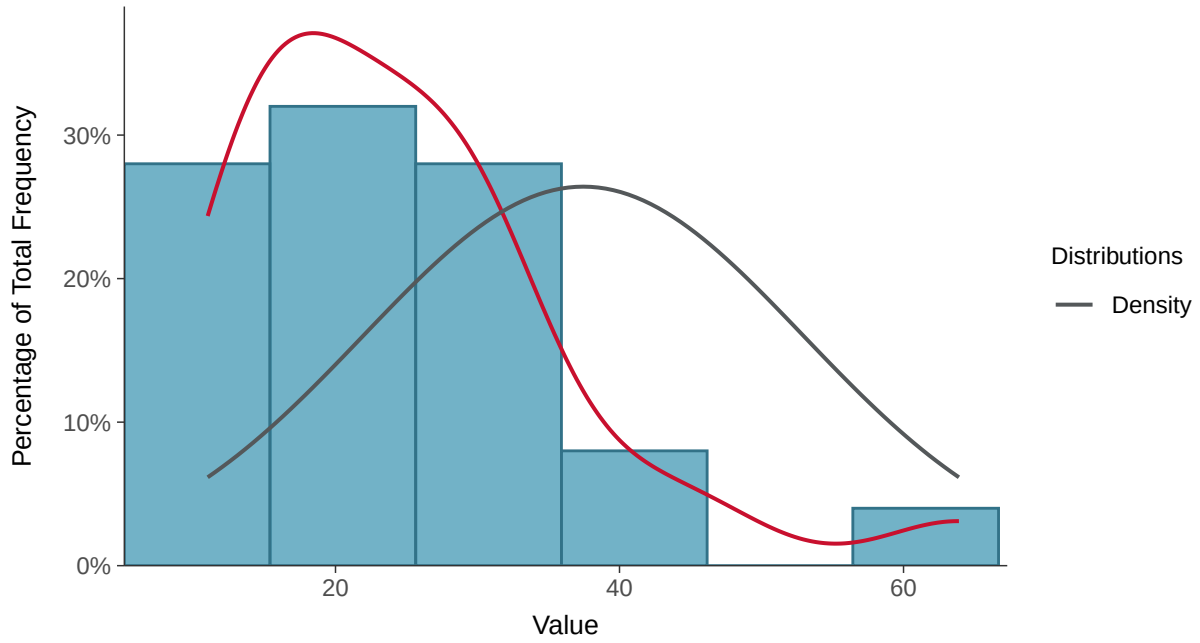
**Scatter Plot**

Lithium, MW-15009 (ug/L)



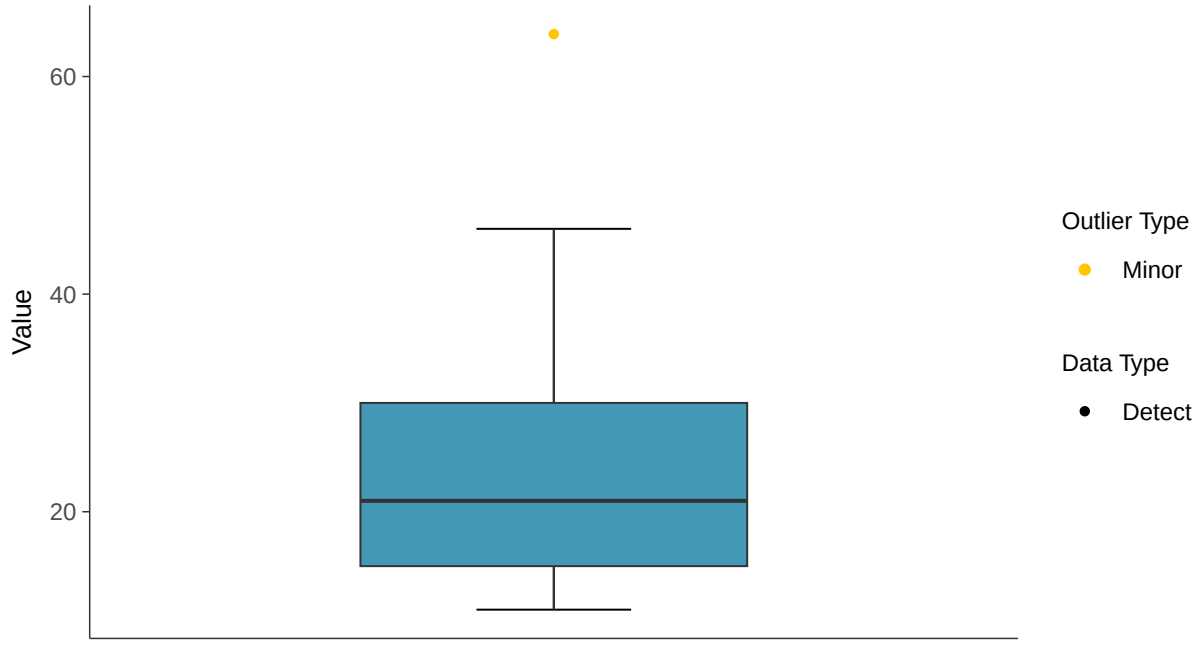

**Histogram**

Lithium, MW-15009 (ug/L)



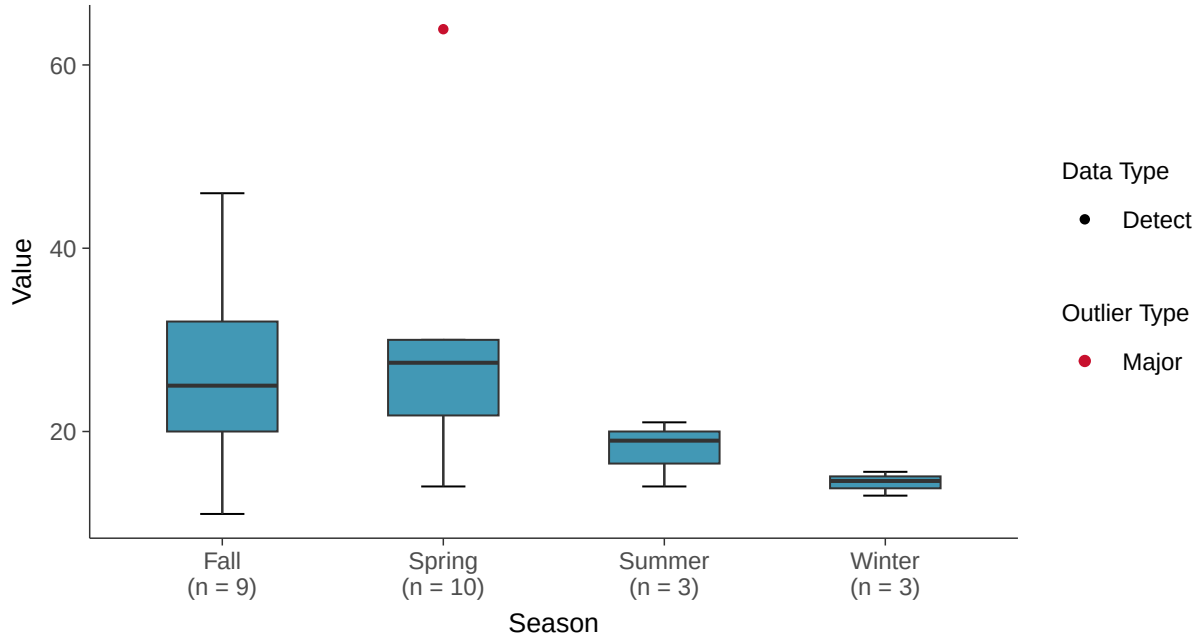
## Boxplot

Lithium, MW-15009 (ug/L)



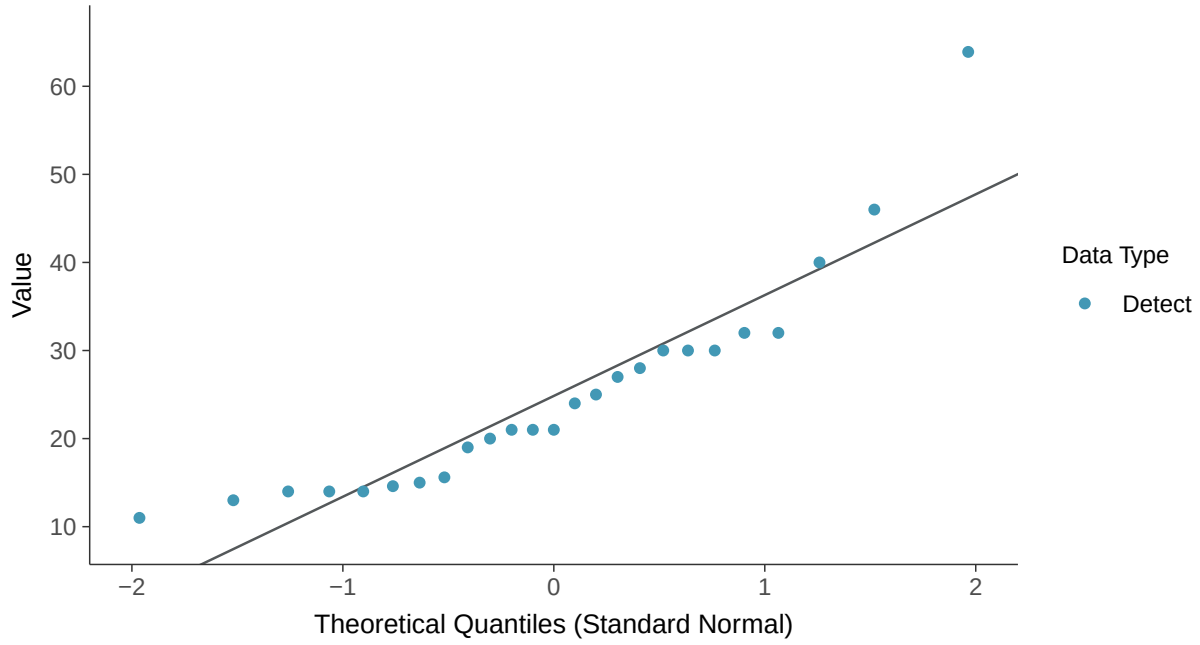

## Boxplot by Season

Lithium, MW-15009 (ug/L)



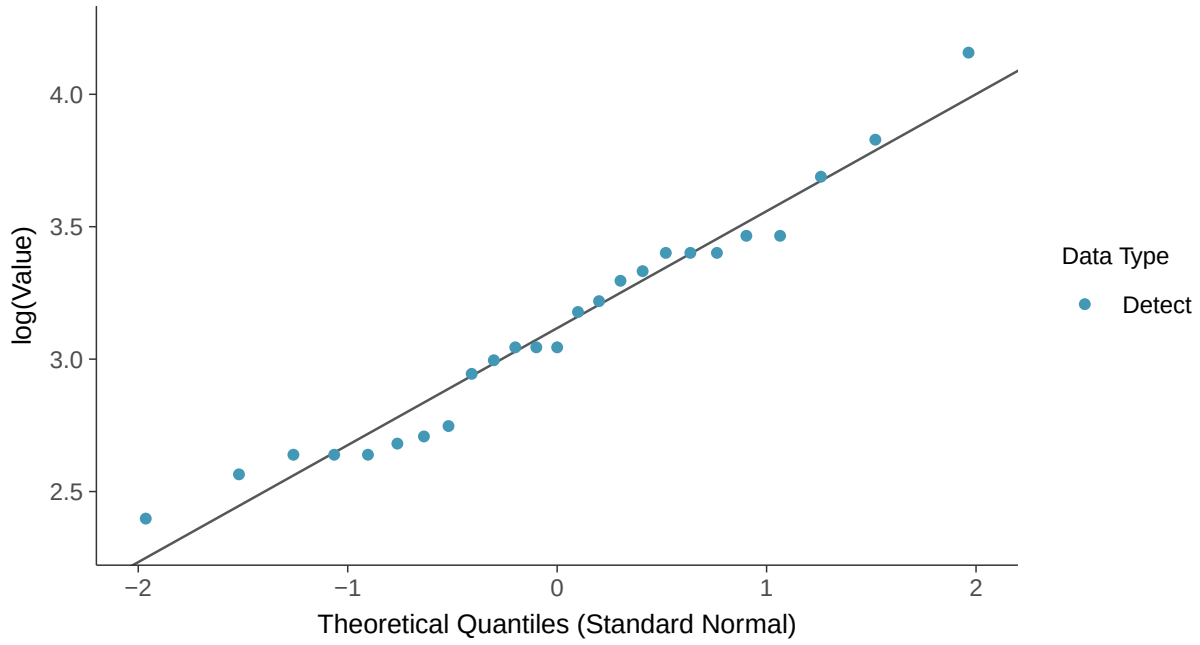
**Normal Q-Q plot**

Lithium, MW-15009 (ug/L)



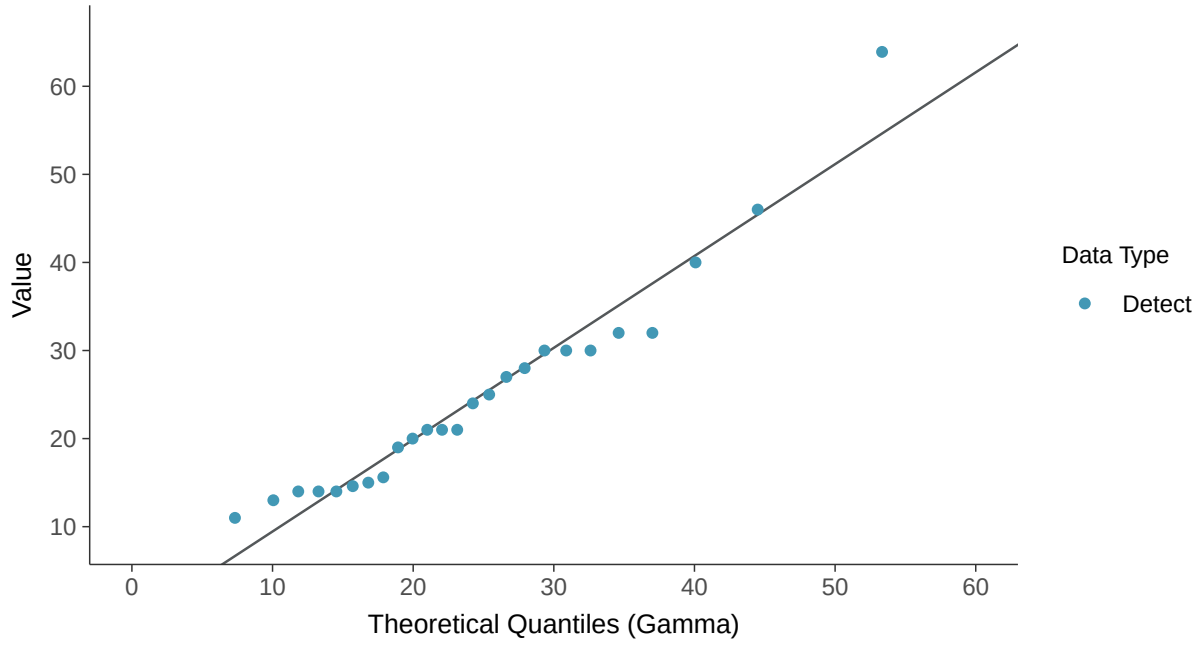

**Lognormal Q-Q plot**

Lithium, MW-15009 (ug/L)



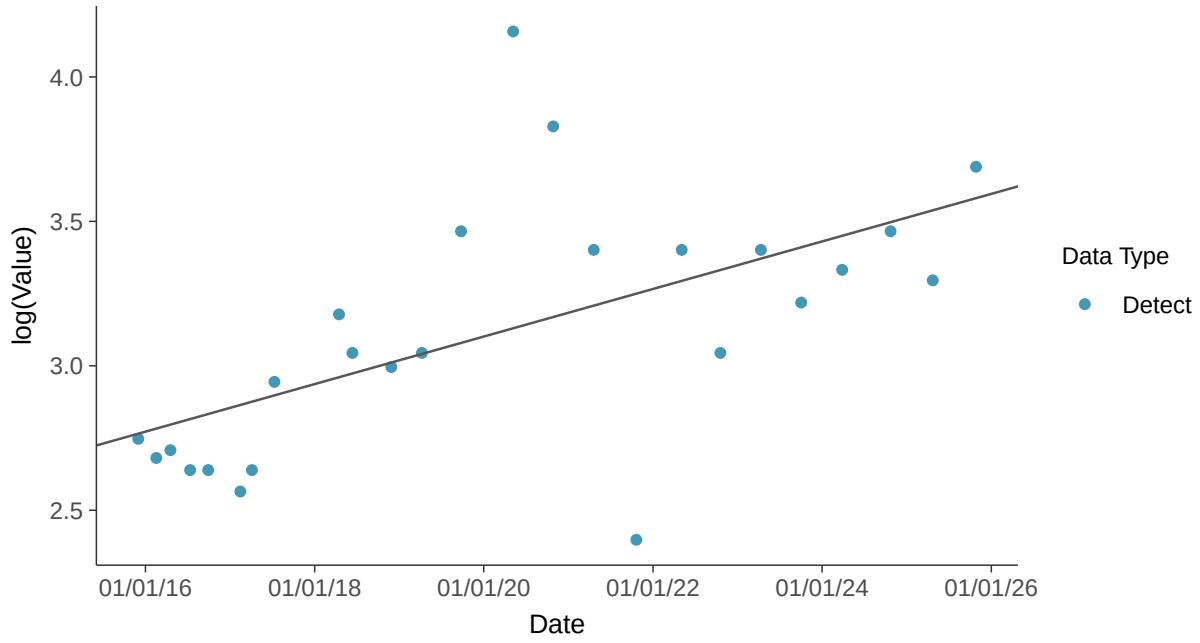
**Gamma Q-Q plot**

Lithium, MW-15009 (ug/L)



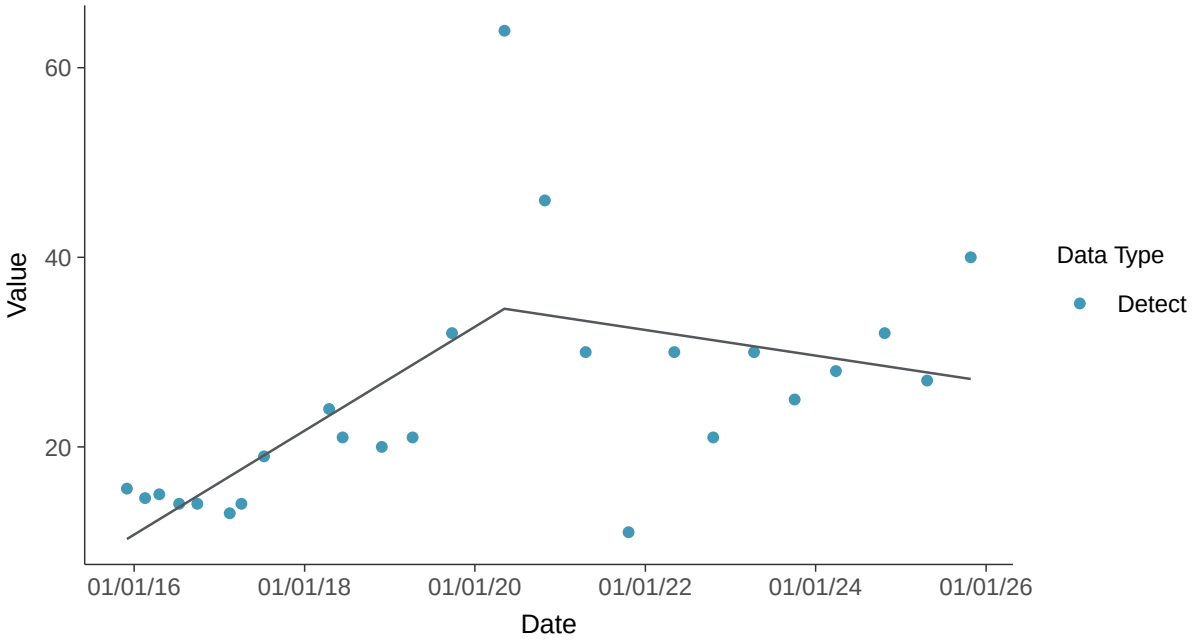

**Trend Regression: Lognormal MLE**

Lithium, MW-15009 (ug/L)



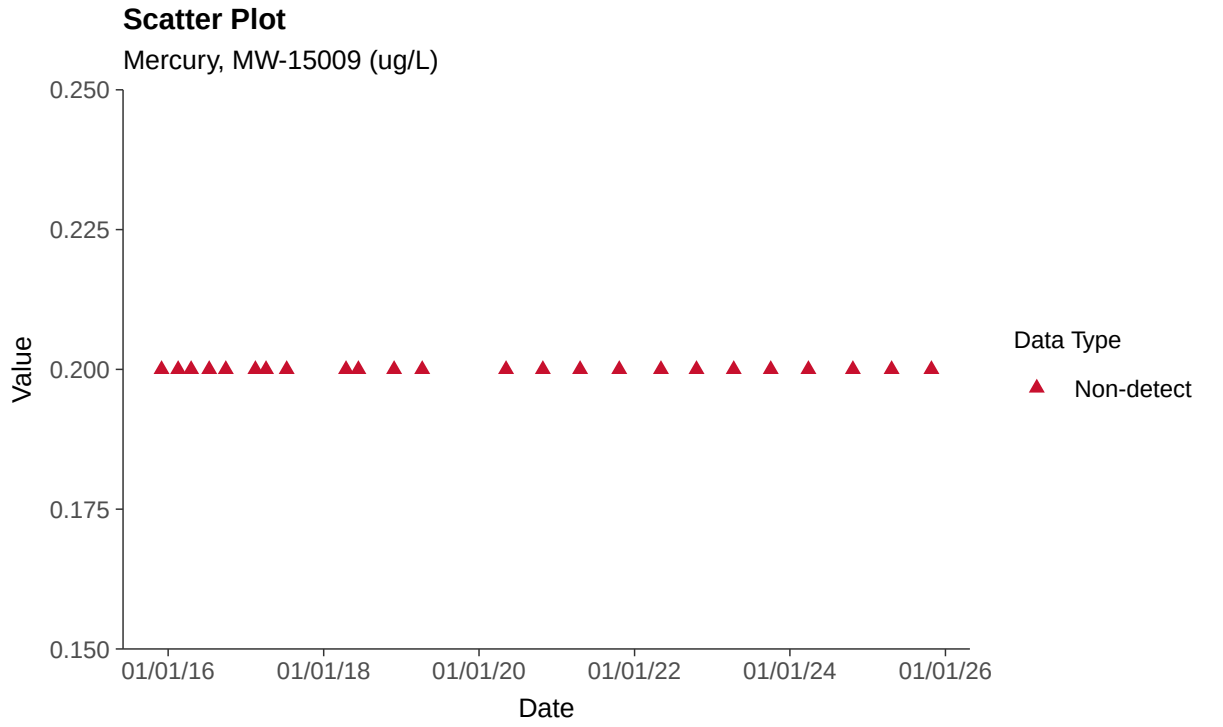
**Trend Regression: Piecewise Linear-Linear**

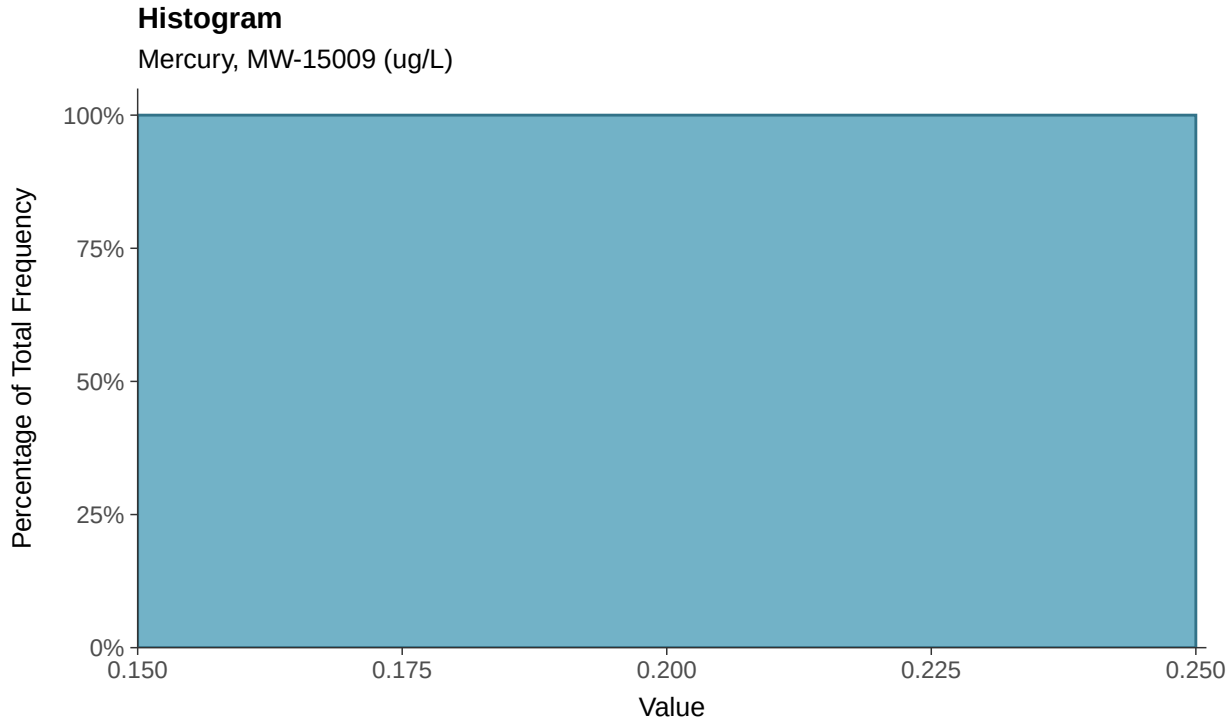
Lithium, MW-15009 (ug/L)



## Appendix IV: Mercury, MW-15009

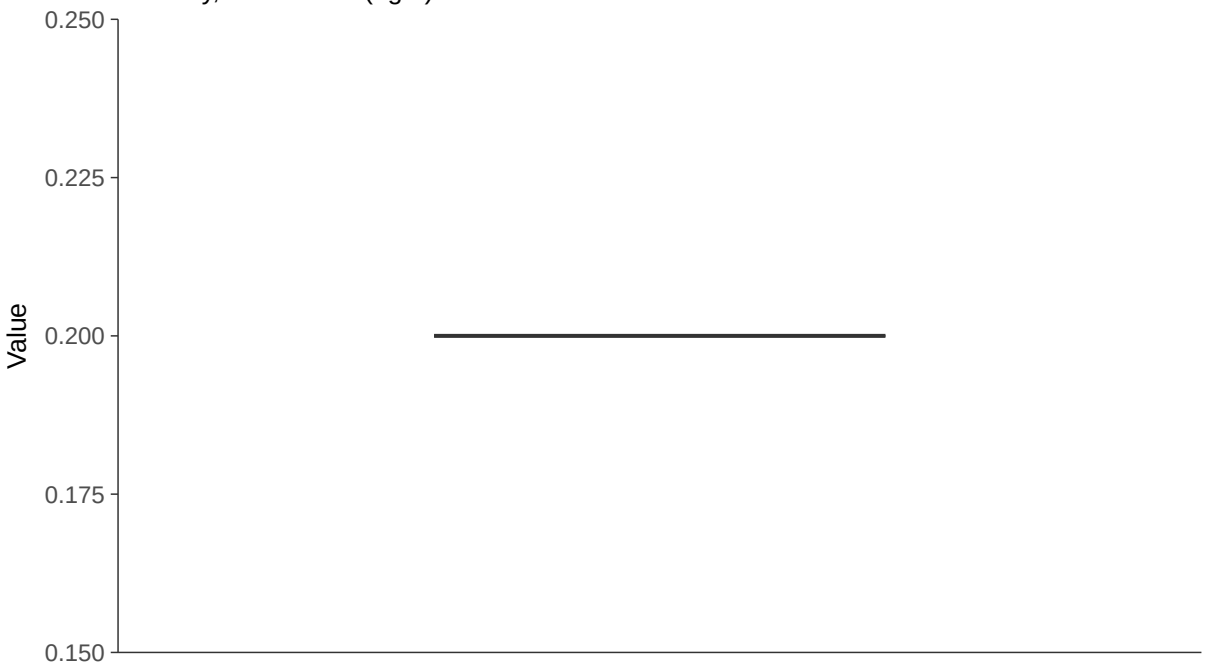
ID: 01_2_118



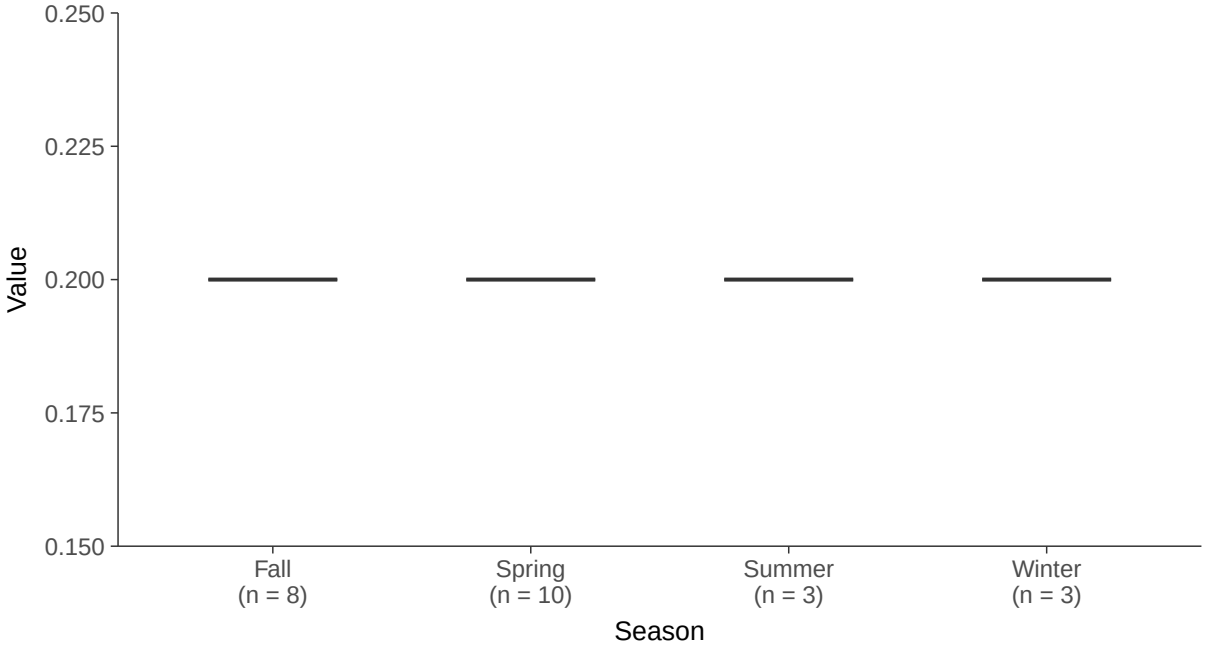
**Boxplot**

Mercury, MW-15009 (ug/L)



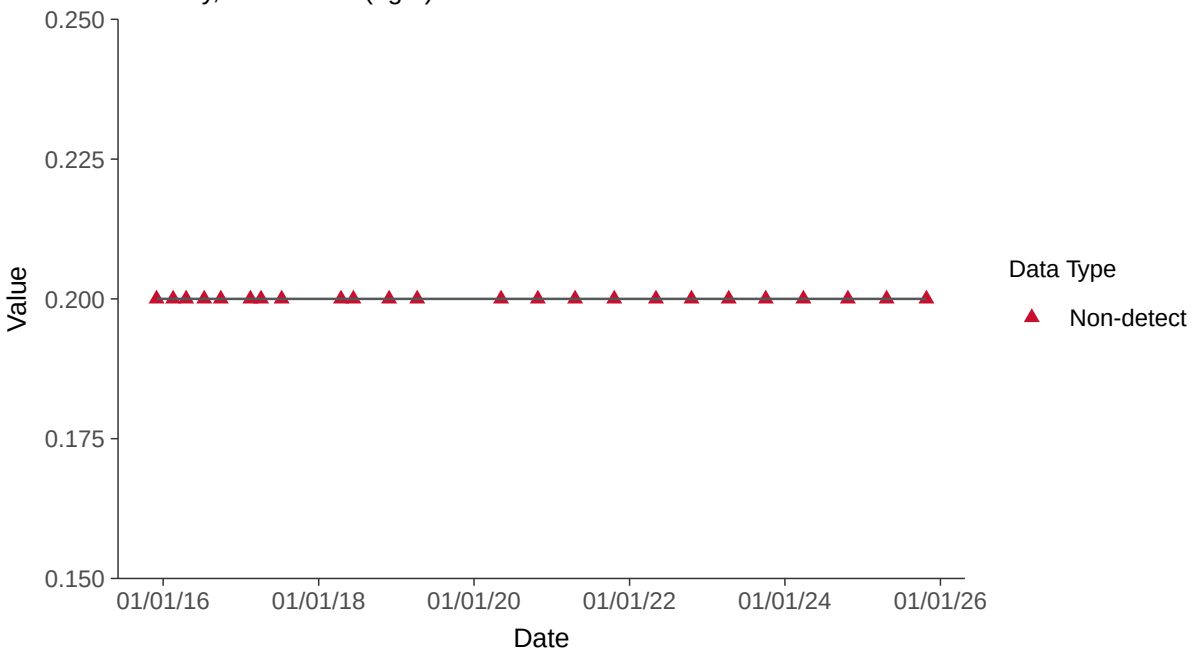

**Boxplot by Season**

Mercury, MW-15009 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Mercury, MW-15009 (ug/L)

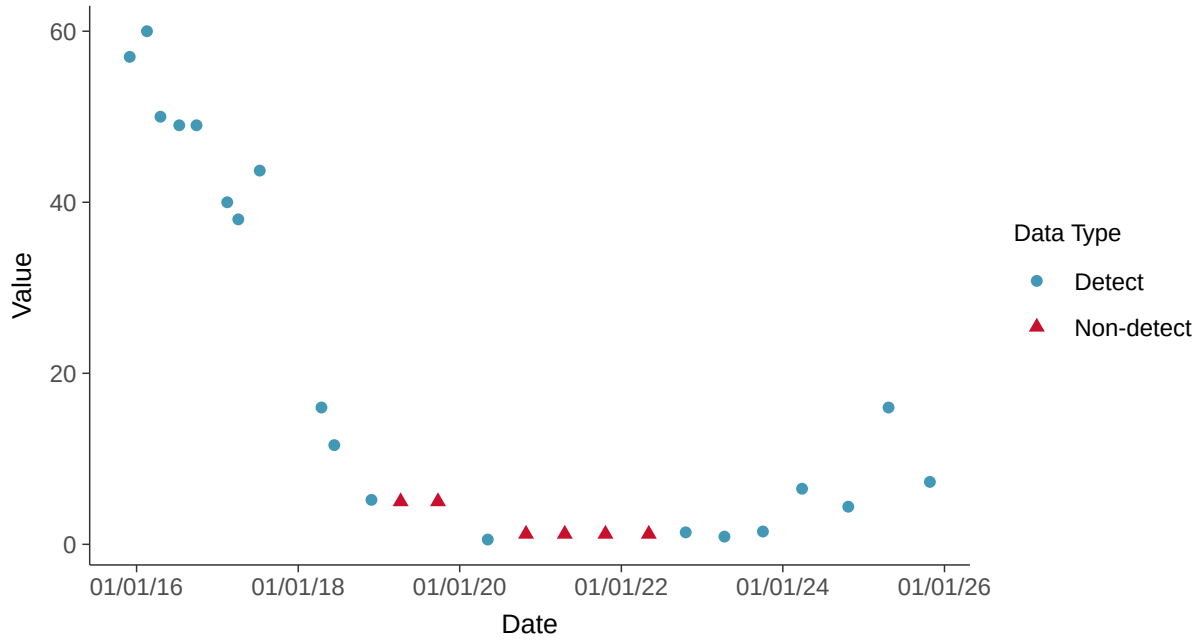


## Appendix IV: Molybdenum, MW-15009

ID: 01_2_119

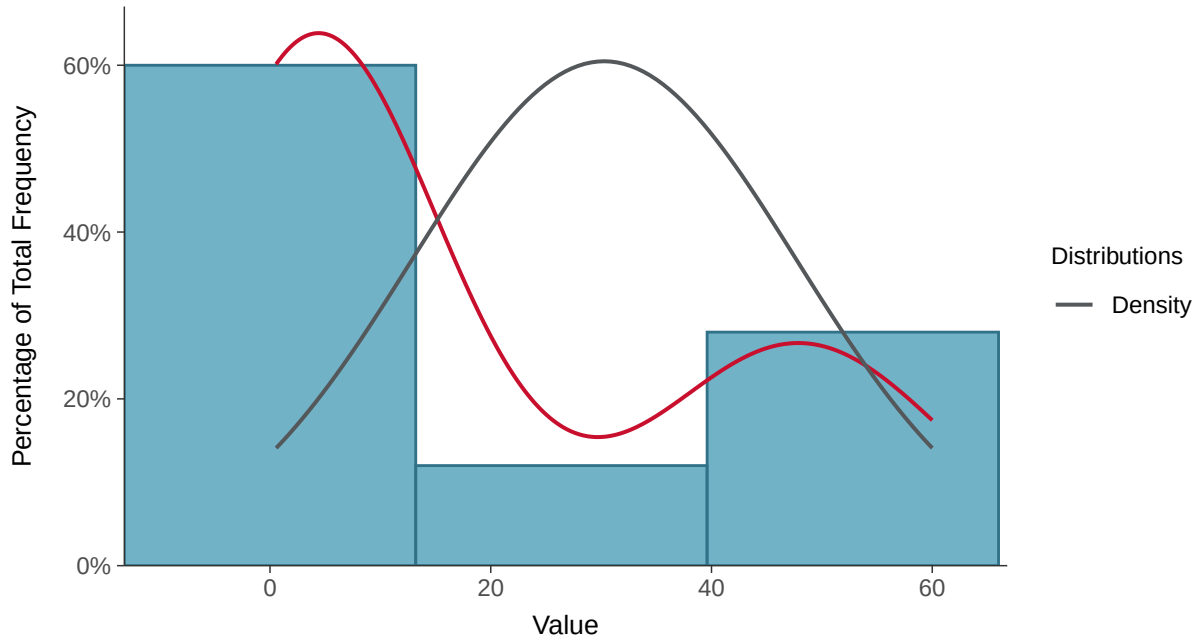
**Scatter Plot**

Molybdenum, MW-15009 (ug/L)



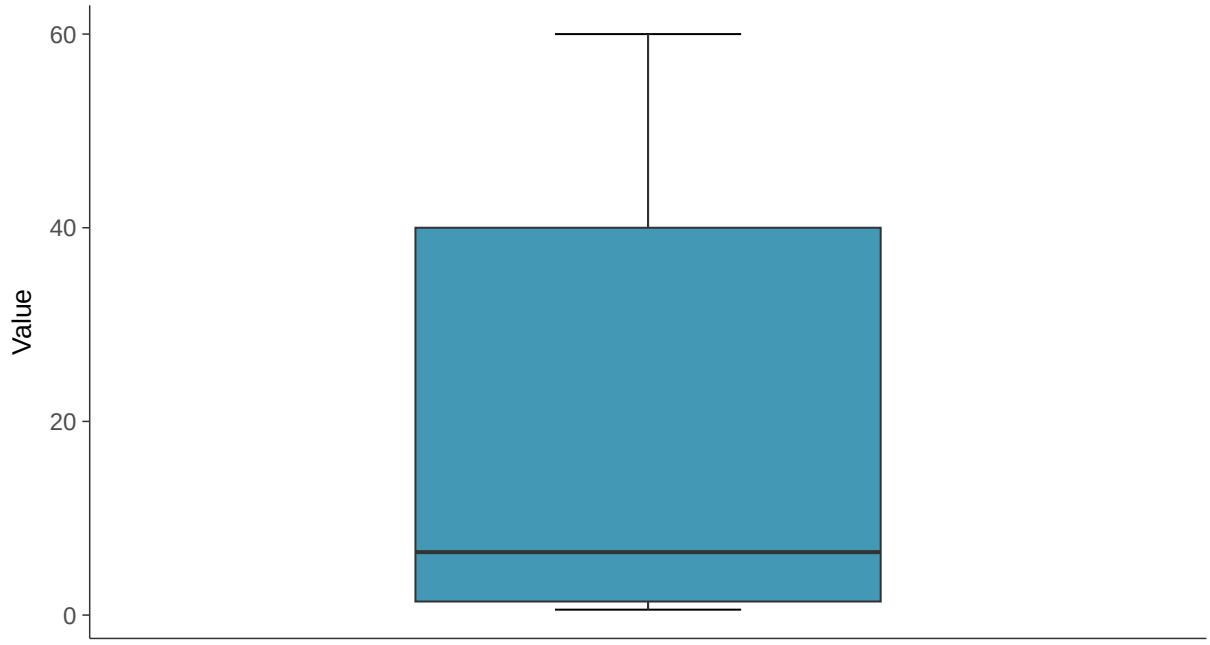

**Histogram**

Molybdenum, MW-15009 (ug/L)



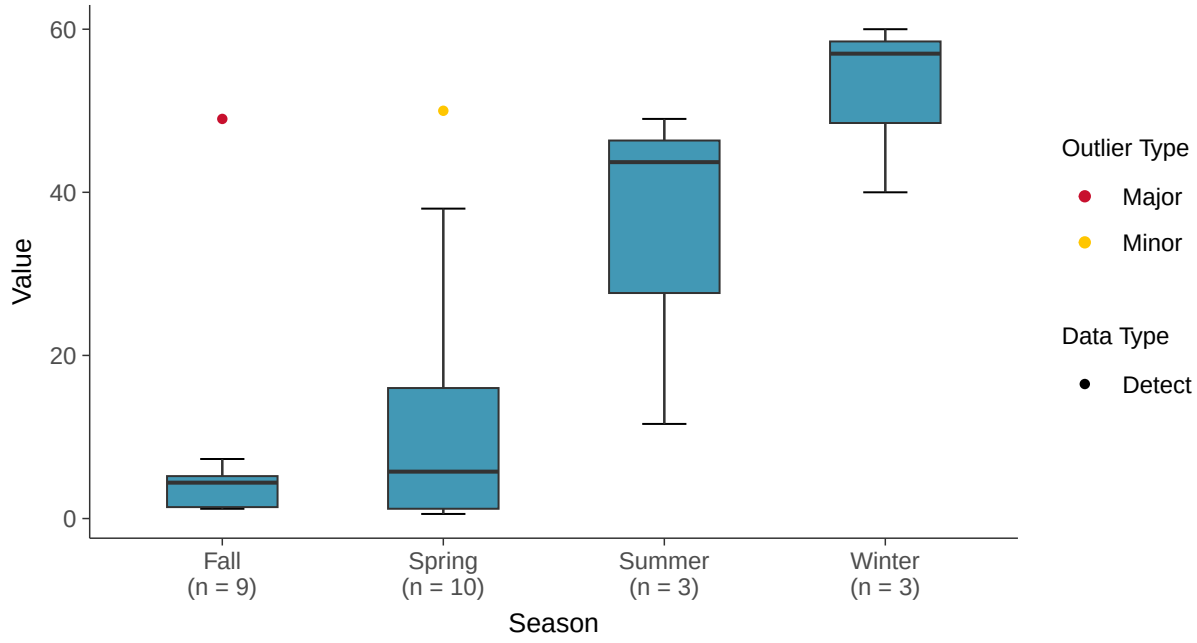
## Boxplot

Molybdenum, MW-15009 (ug/L)



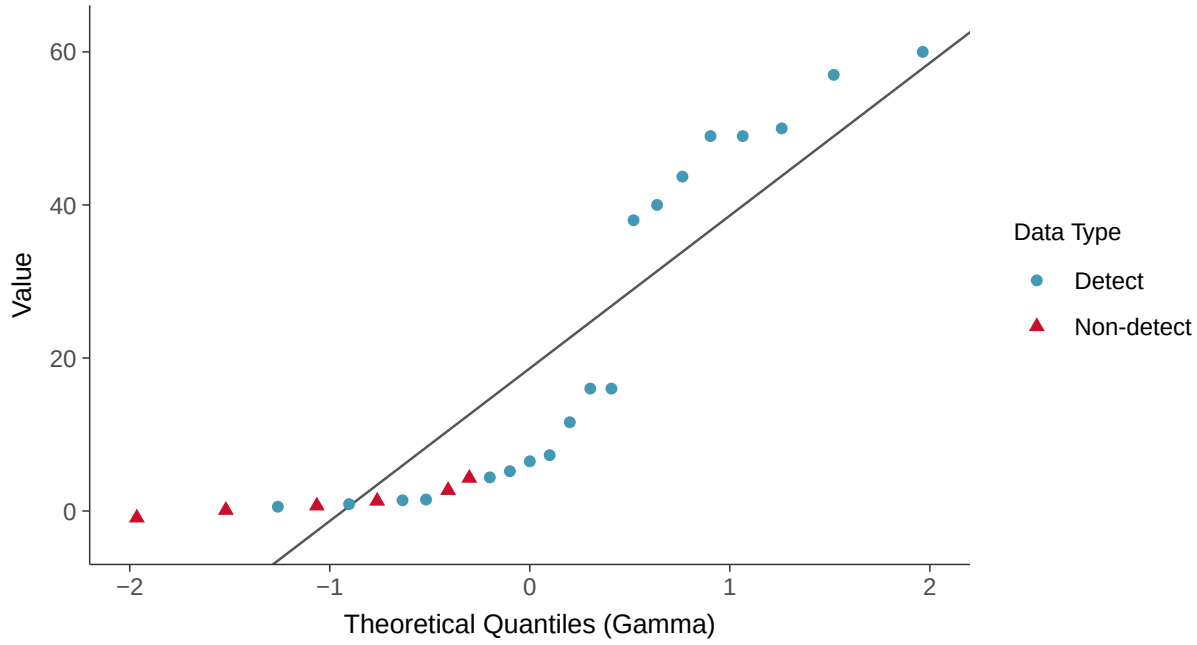

## Boxplot by Season

Molybdenum, MW-15009 (ug/L)



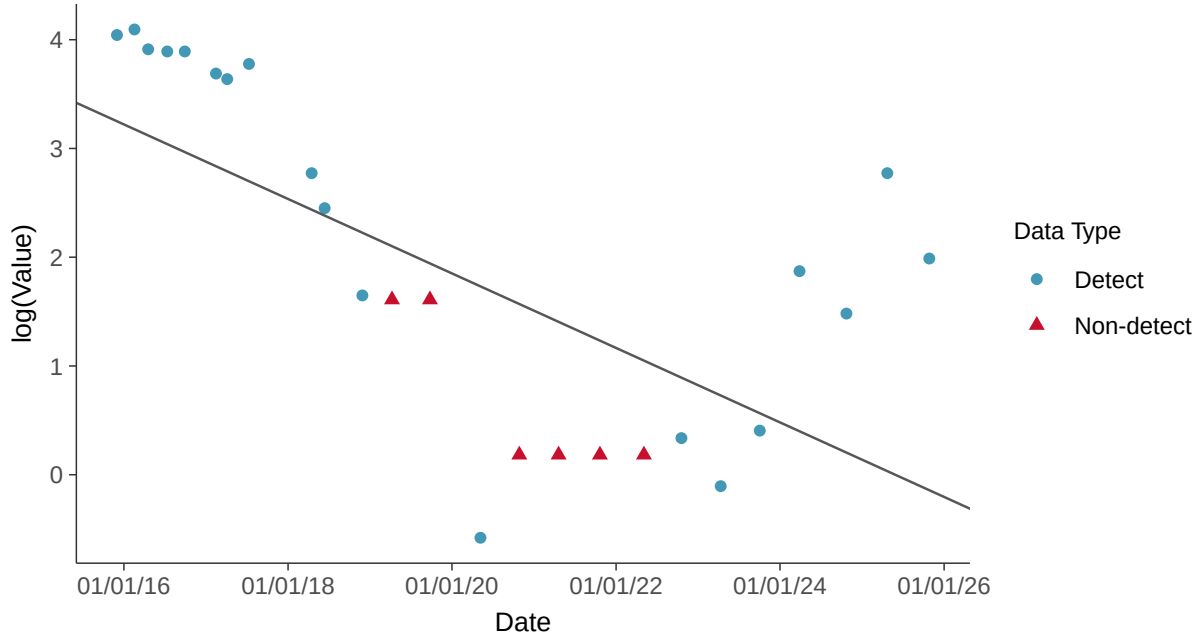
**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15009 (ug/L)



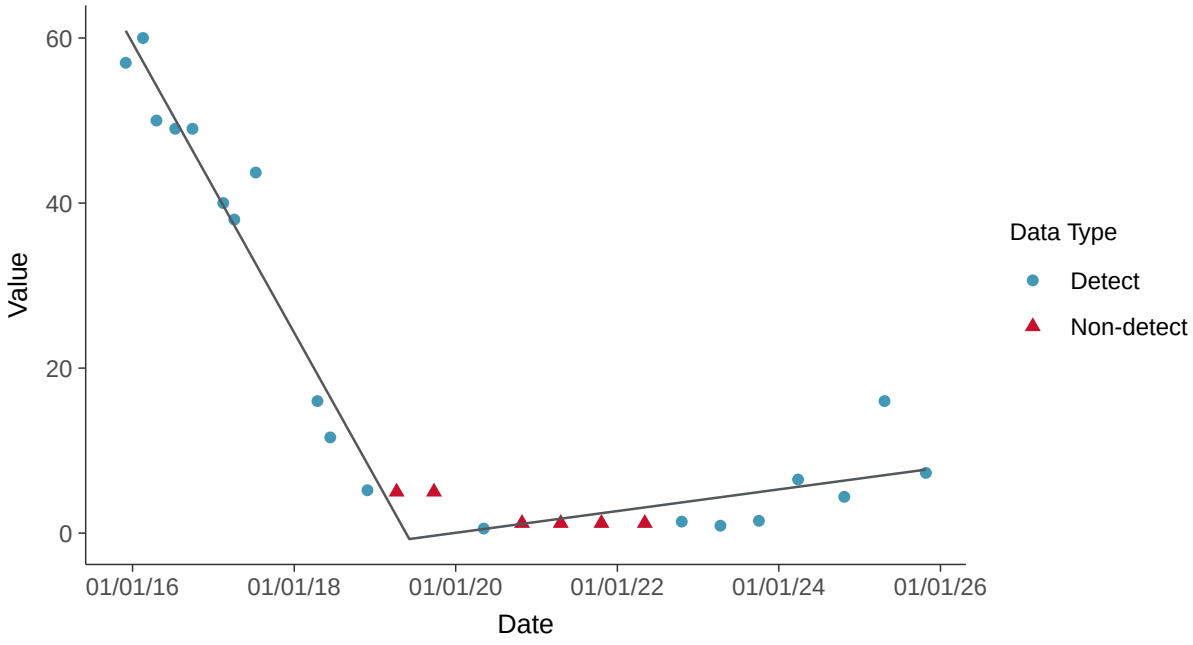

**Trend Regression: Lognormal MLE**

Molybdenum, MW-15009 (ug/L)



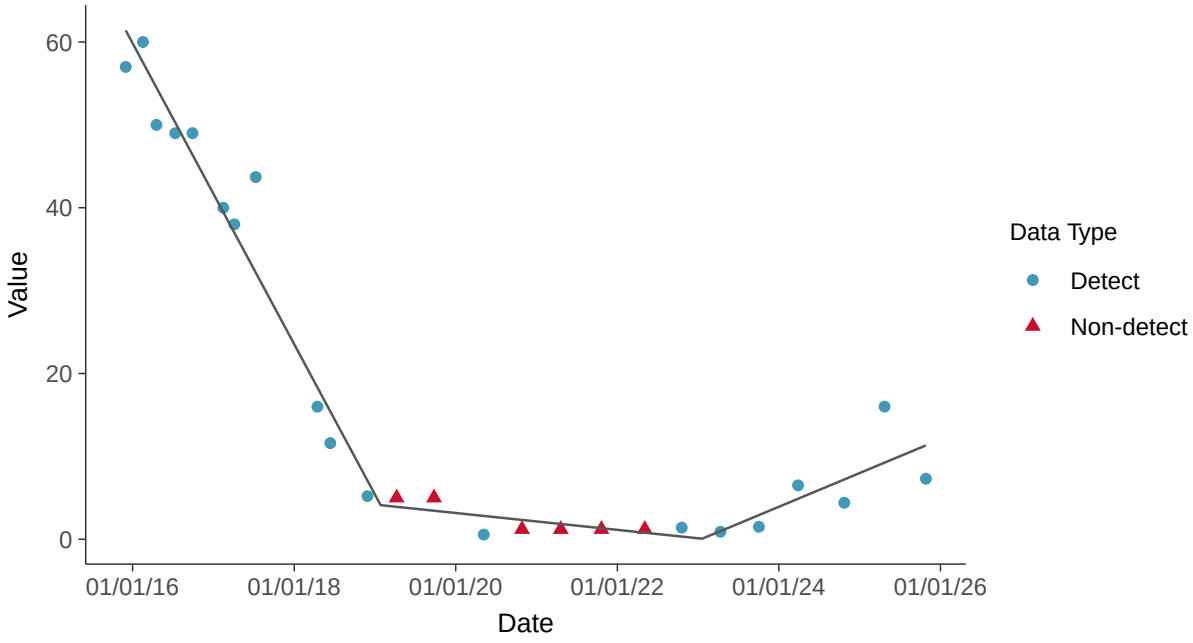
**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15009 (ug/L)



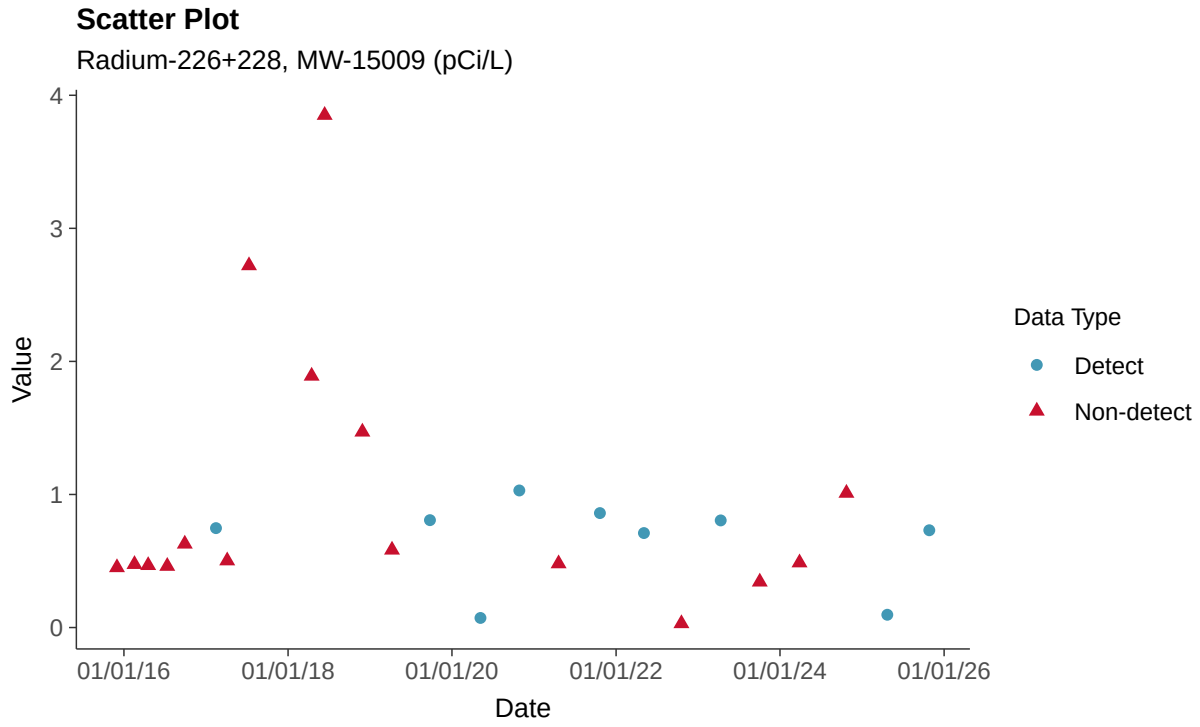

**Trend Regression: Piecewise Linear-Linear-Linear**

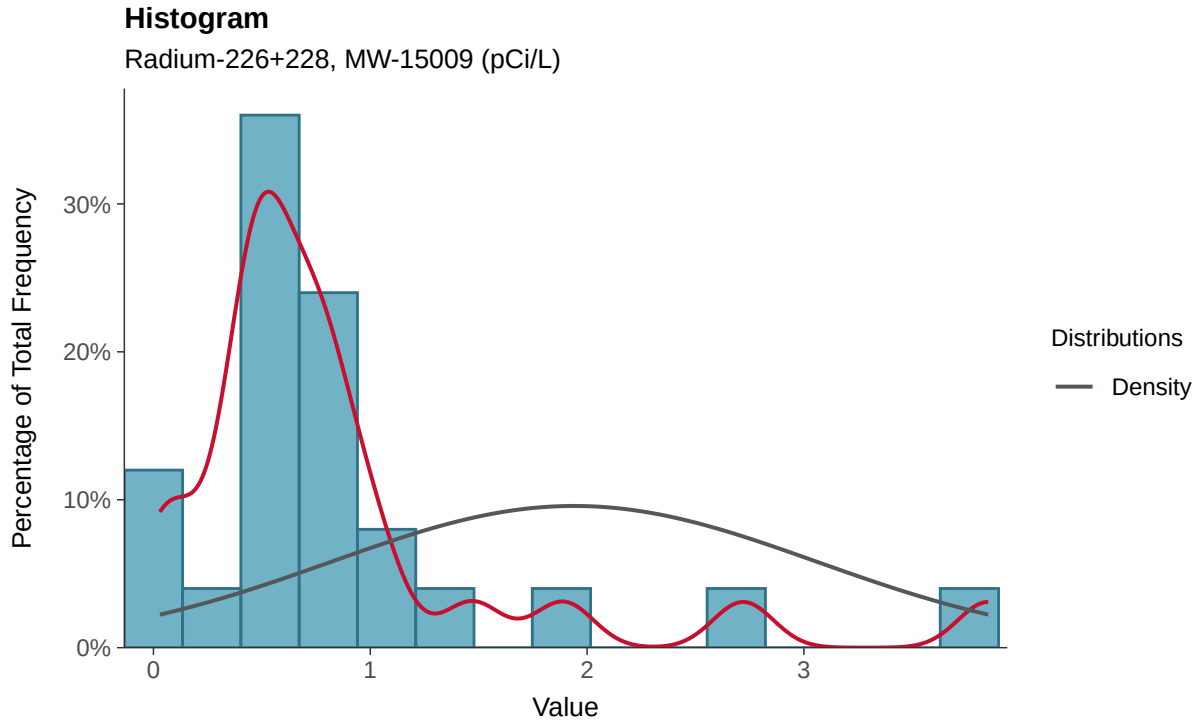
Molybdenum, MW-15009 (ug/L)



## Appendix IV: Radium-226+228, MW-15009

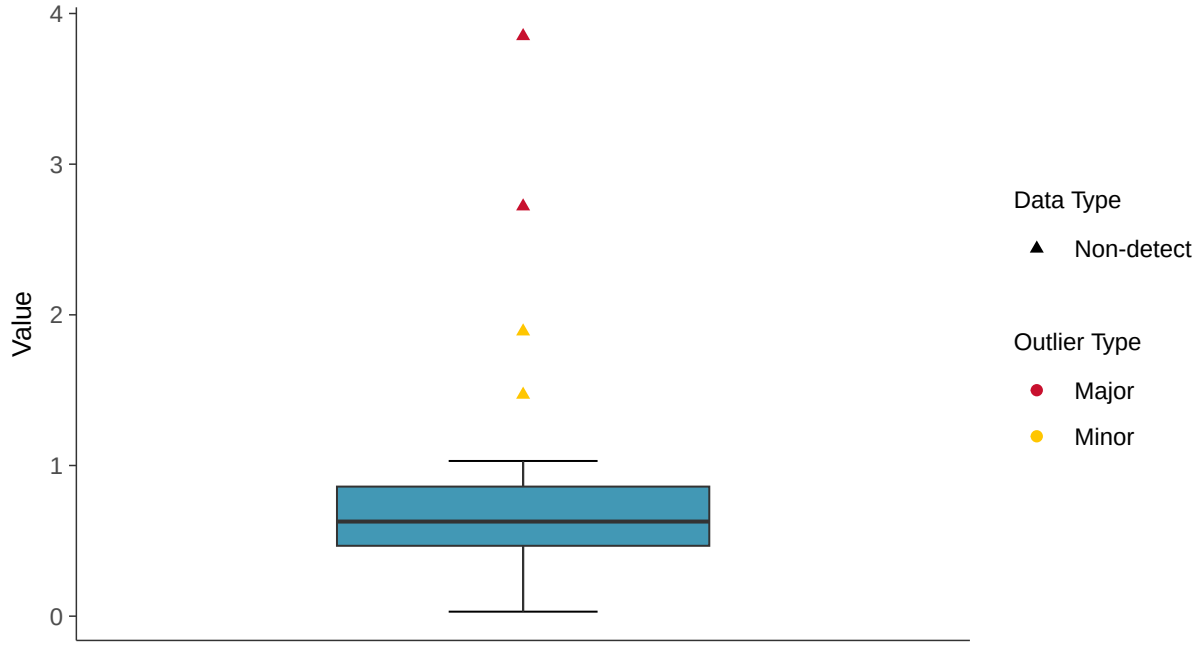
ID: 01_2_125



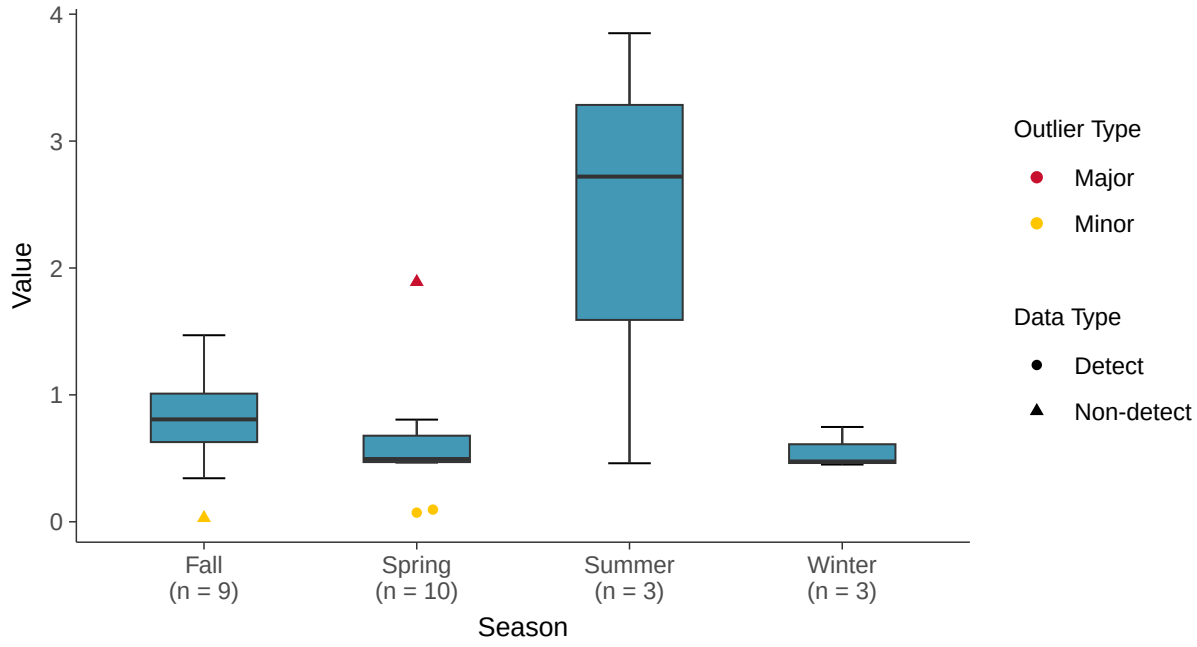
## Boxplot

Radium-226+228, MW-15009 (pCi/L)



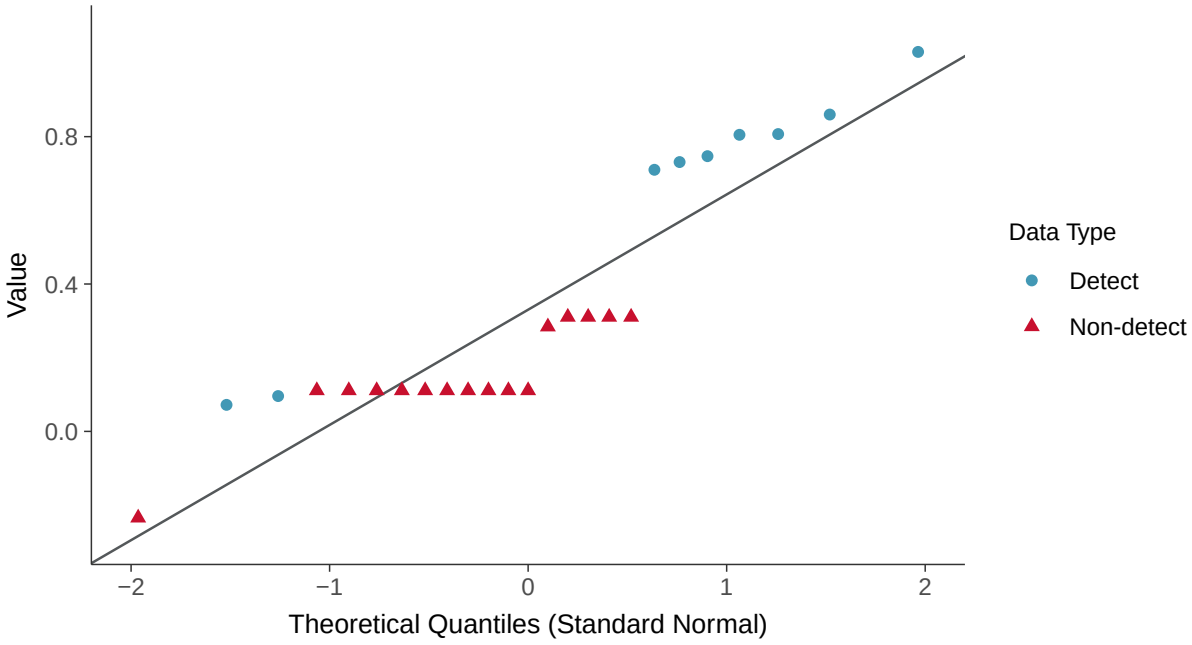

## Boxplot by Season

Radium-226+228, MW-15009 (pCi/L)



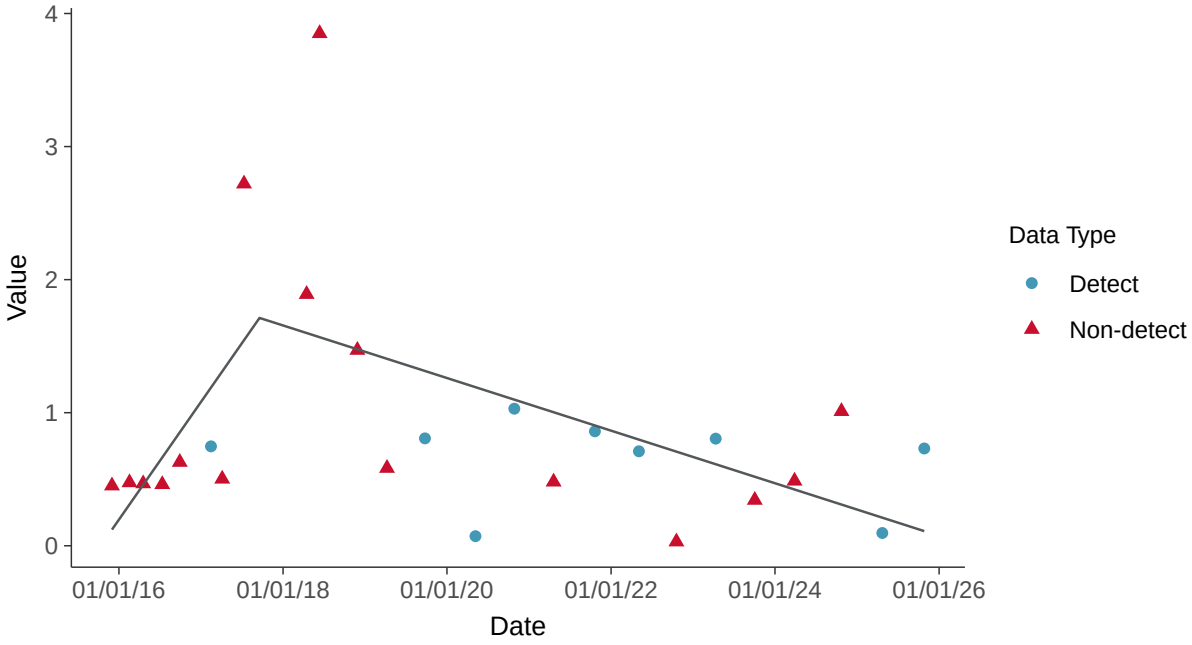
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15009 (pCi/L)



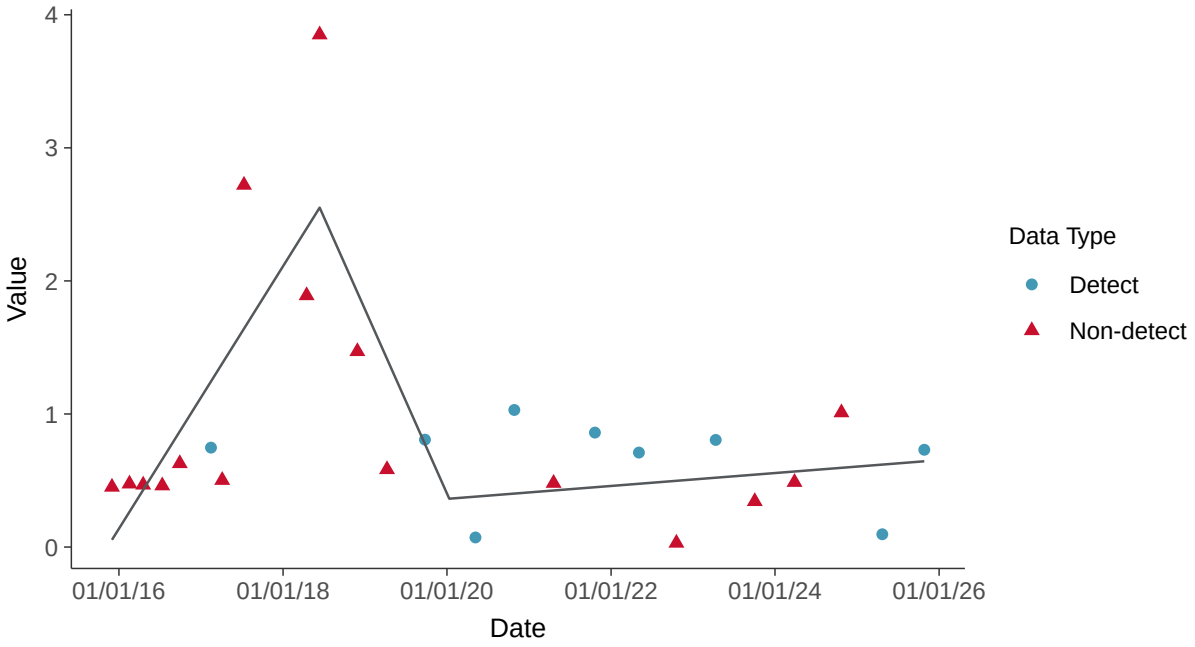

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15009 (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15009 (pCi/L)

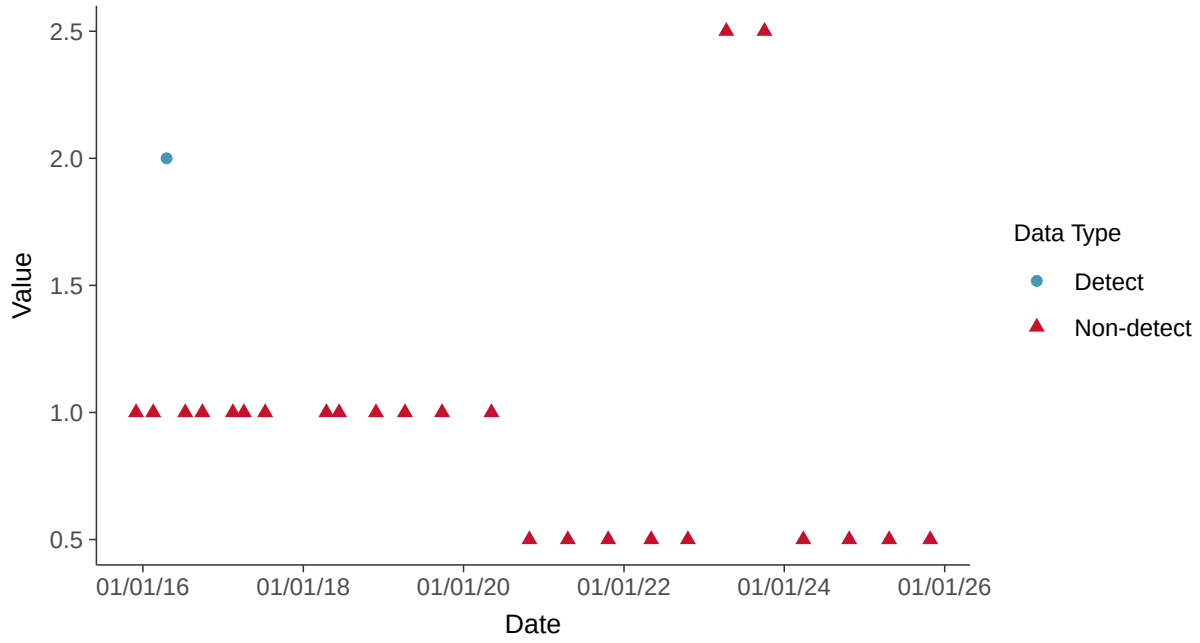


## Appendix IV: Selenium, MW-15009

ID: 01_2_127

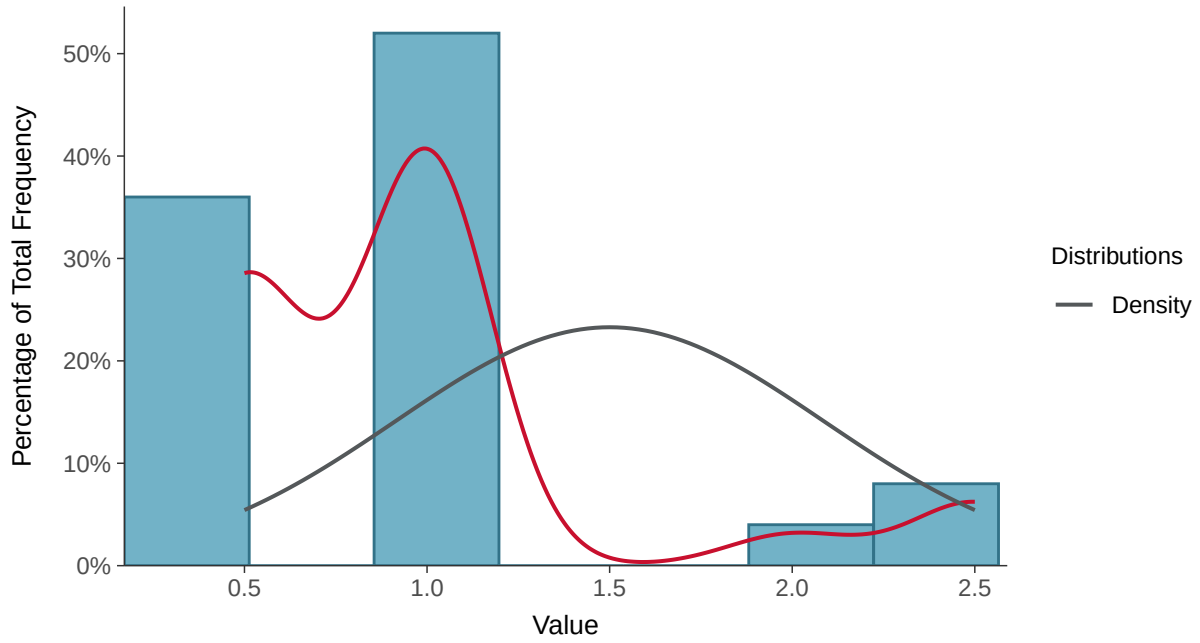
**Scatter Plot**

Selenium, MW-15009 (ug/L)



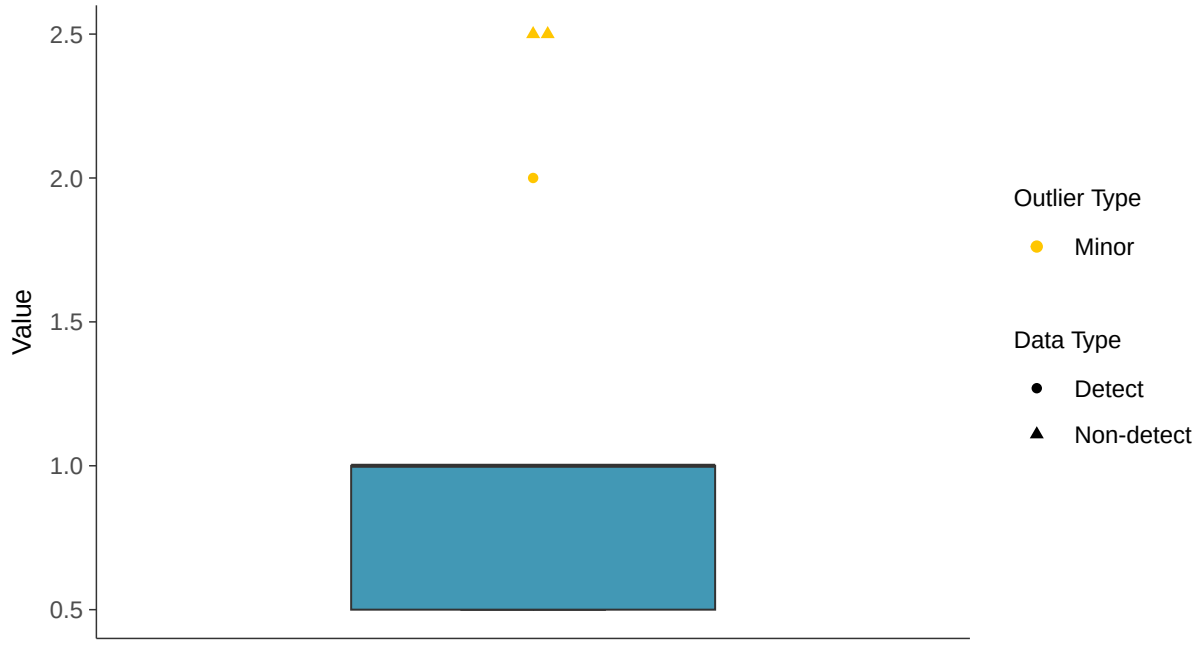

**Histogram**

Selenium, MW-15009 (ug/L)



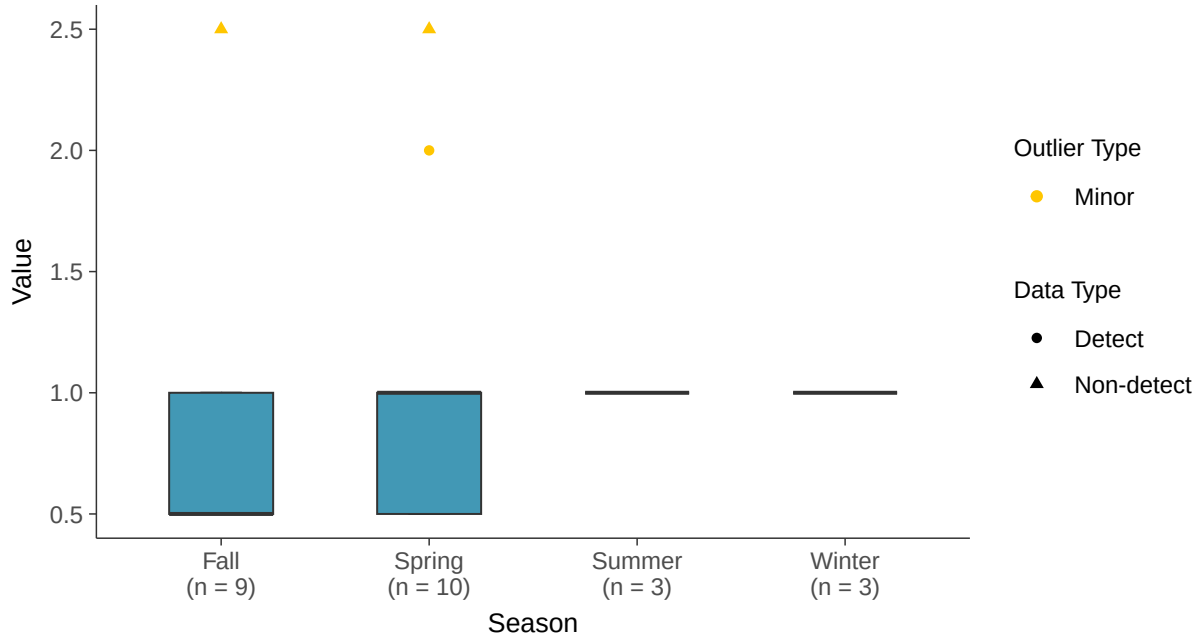
## Boxplot

Selenium, MW-15009 (ug/L)



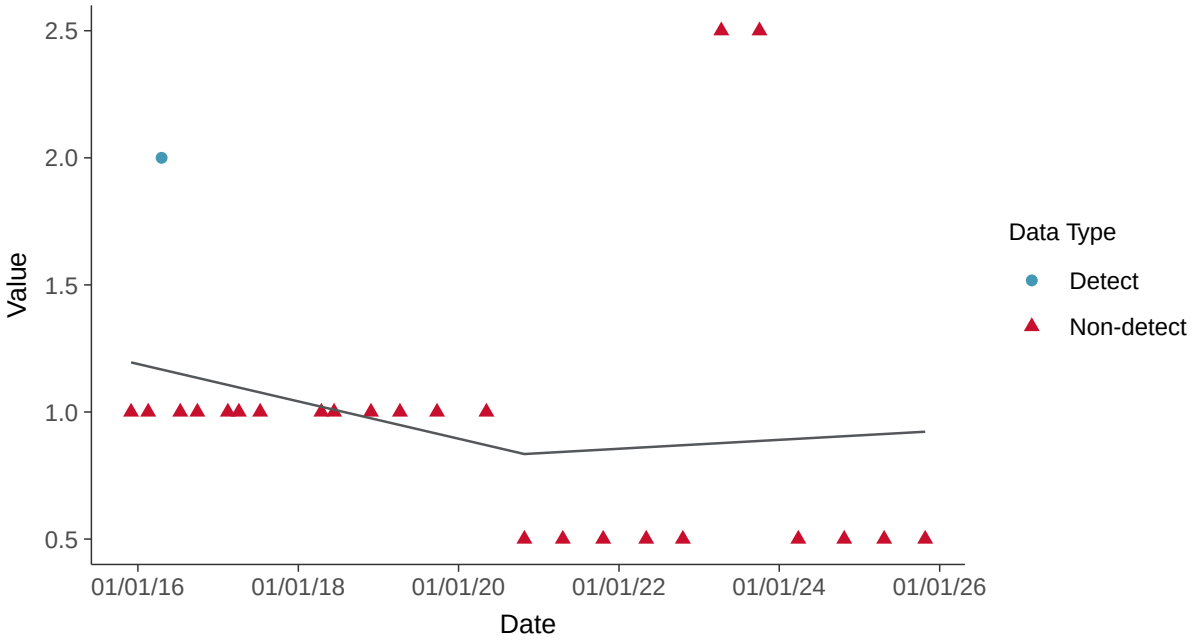

## Boxplot by Season

Selenium, MW-15009 (ug/L)



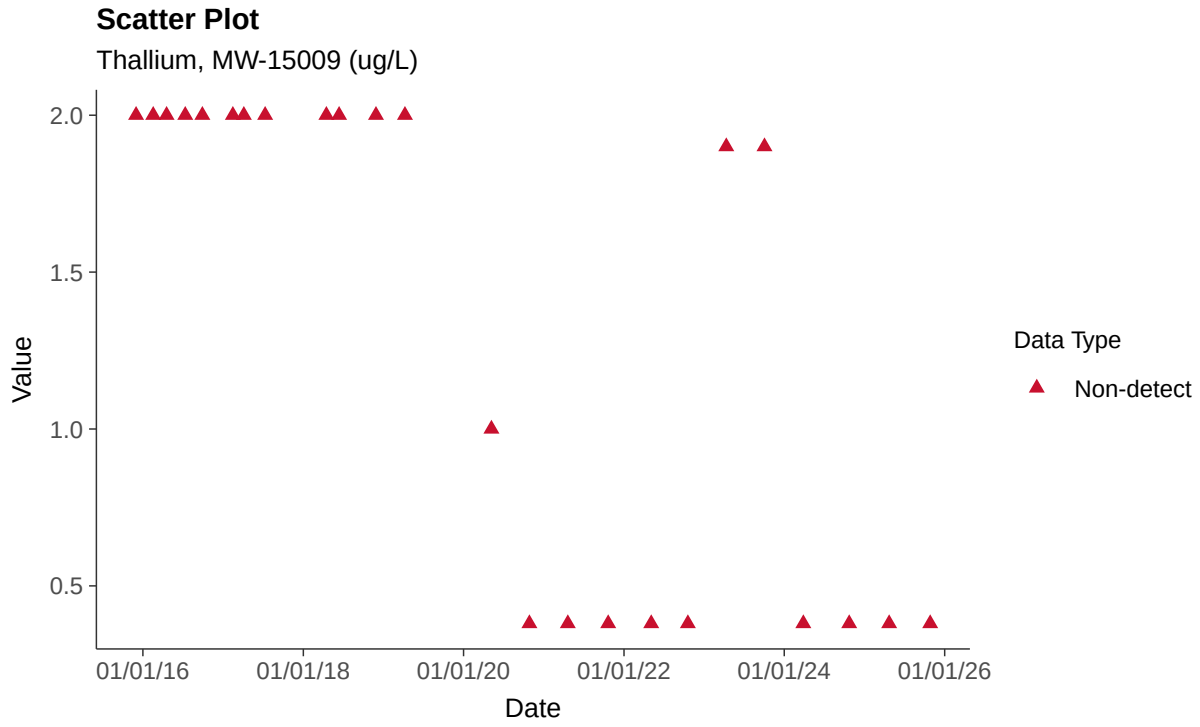
**Trend Regression: Piecewise Linear-Linear**

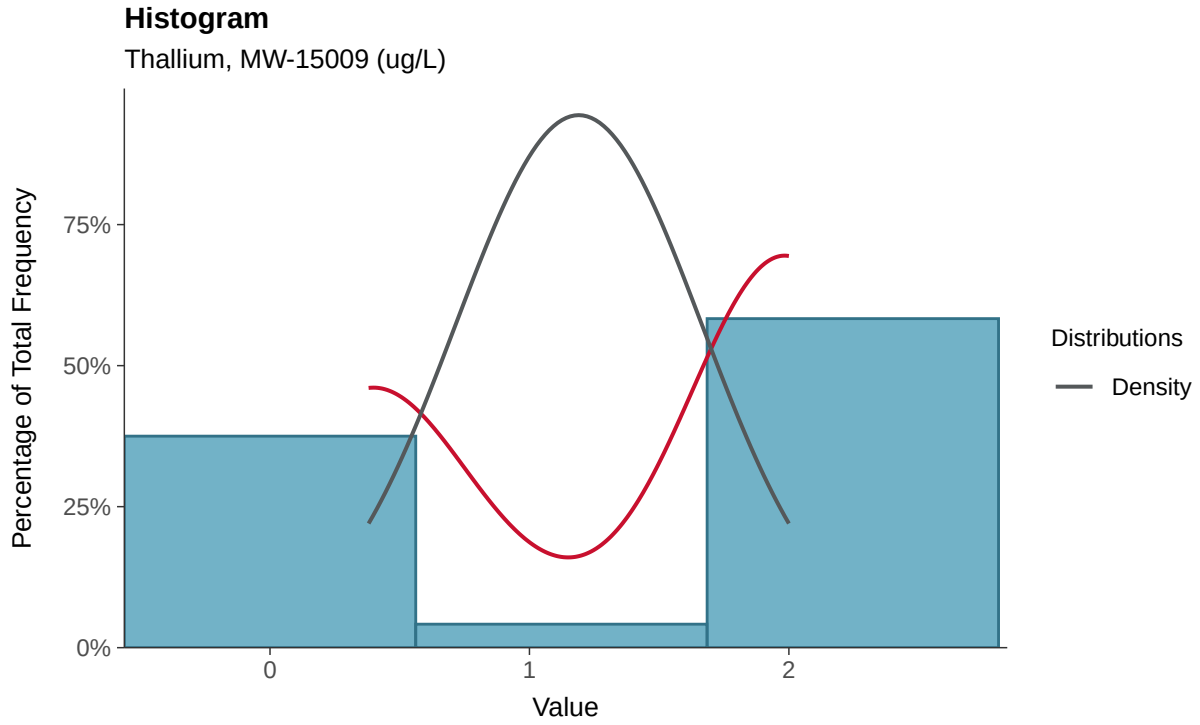
Selenium, MW-15009 (ug/L)



## Appendix IV: Thallium, MW-15009

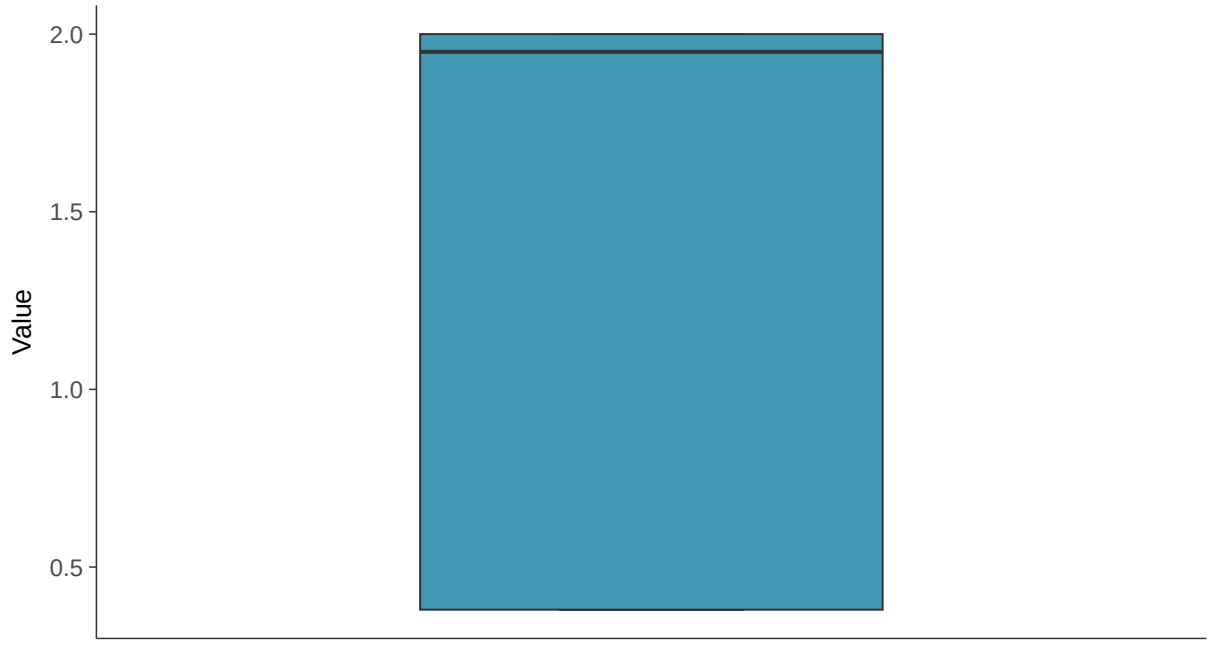
ID: 01_2_131



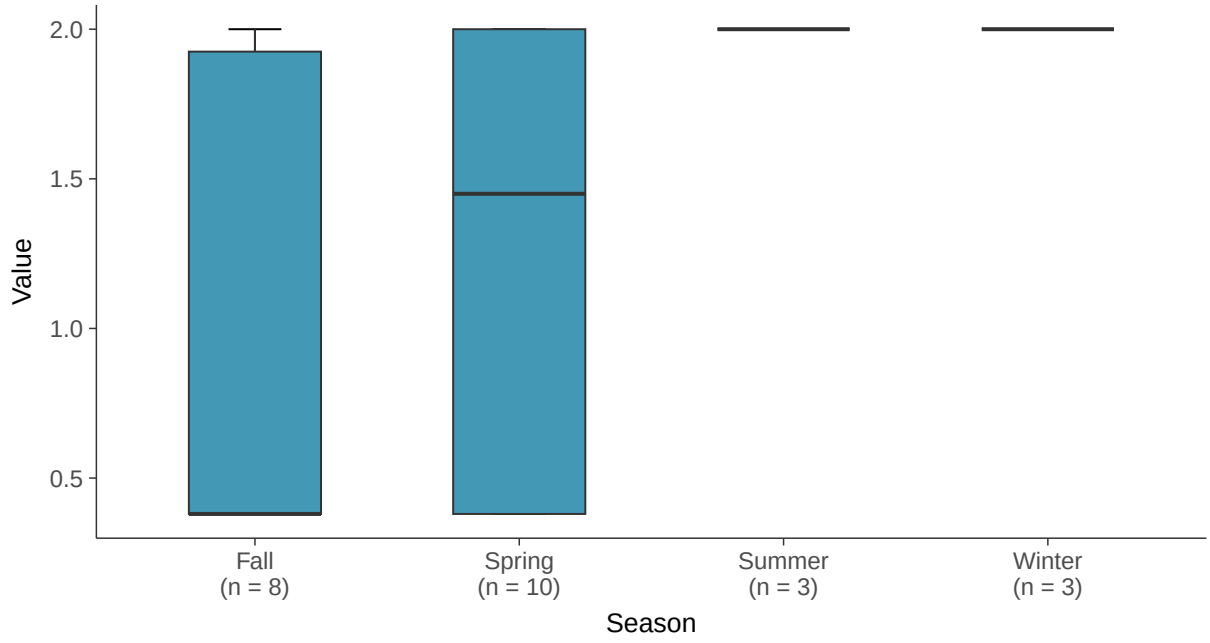
## Boxplot

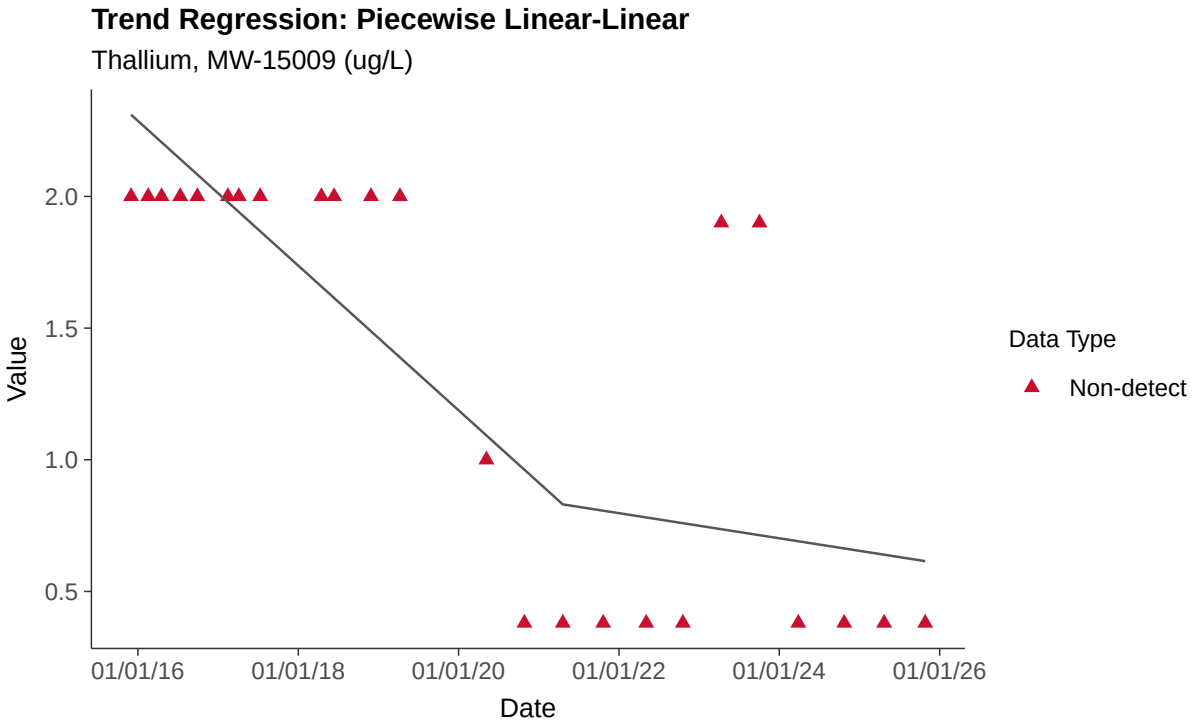
Thallium, MW-15009 (ug/L)




## Boxplot by Season

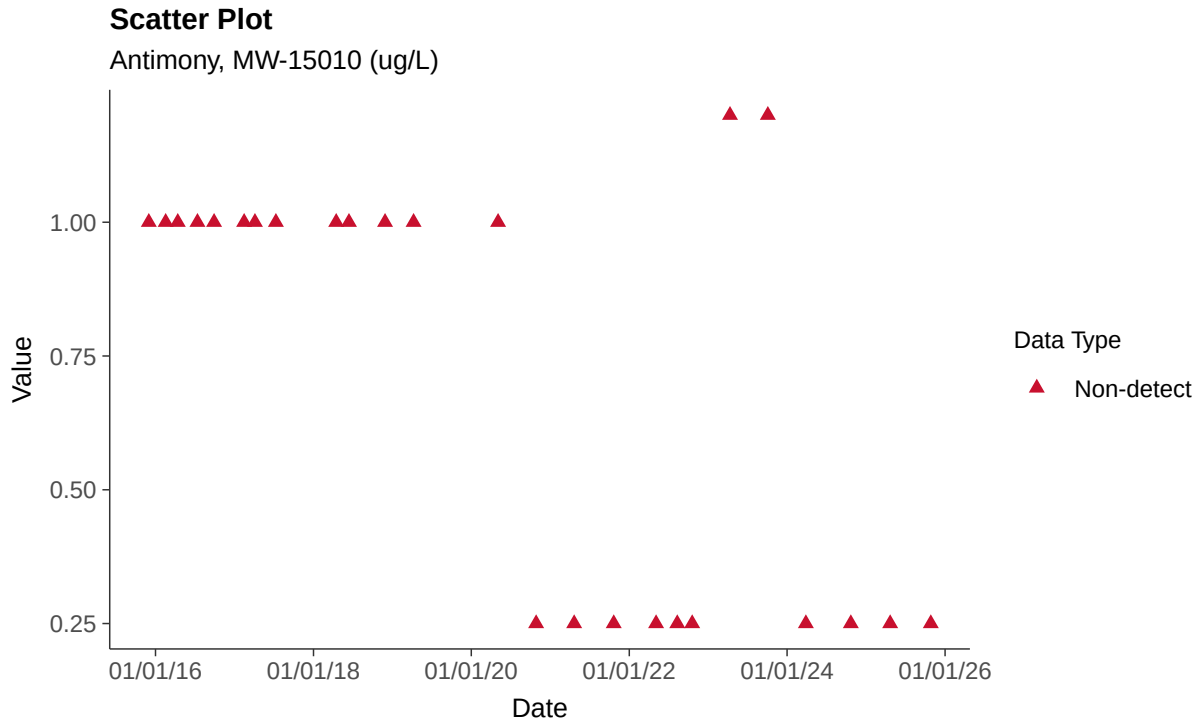
Thallium, MW-15009 (ug/L)

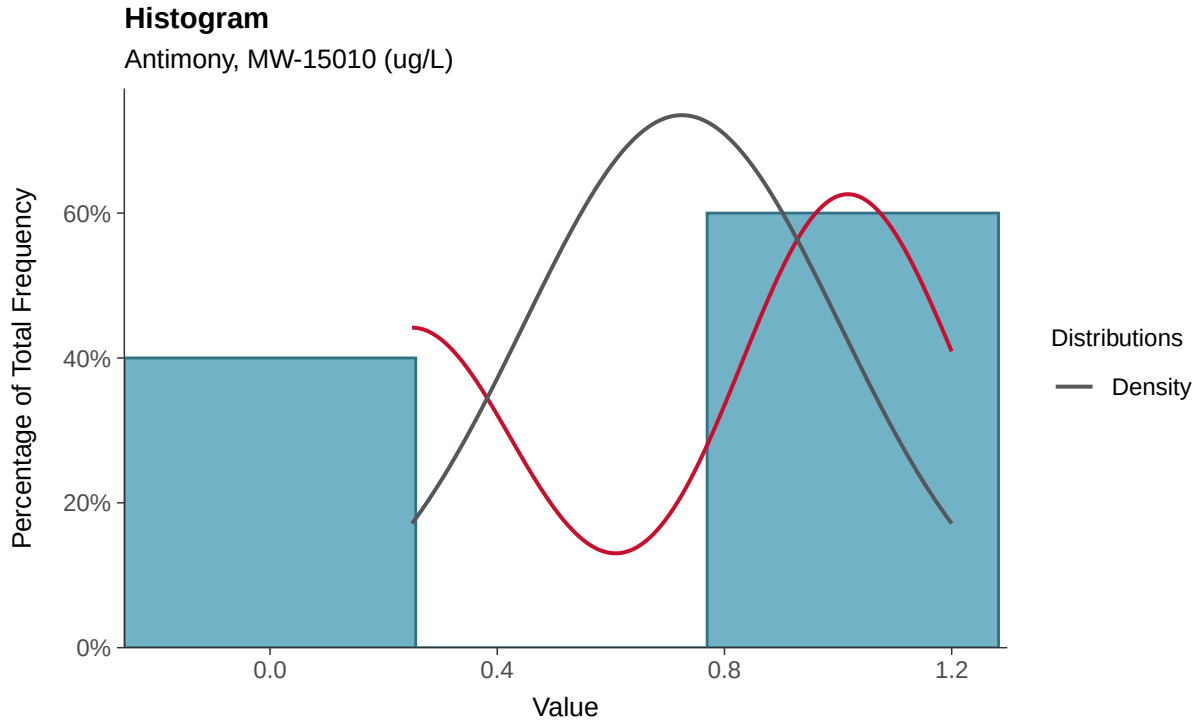



Trend Regression: Piecewise Linear-Linear
Thallium, MW-15009 (ug/L)
Value
2.0
1.5
1.0
0.5
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Antimony, MW-15010

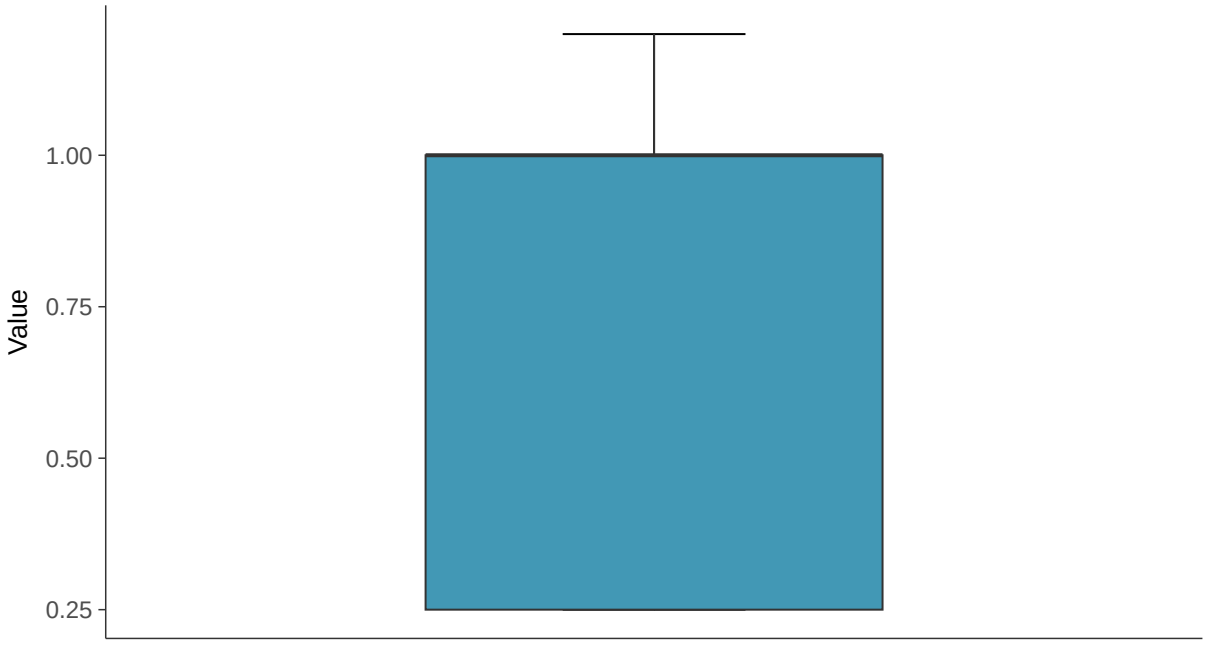
ID: 02_2_101



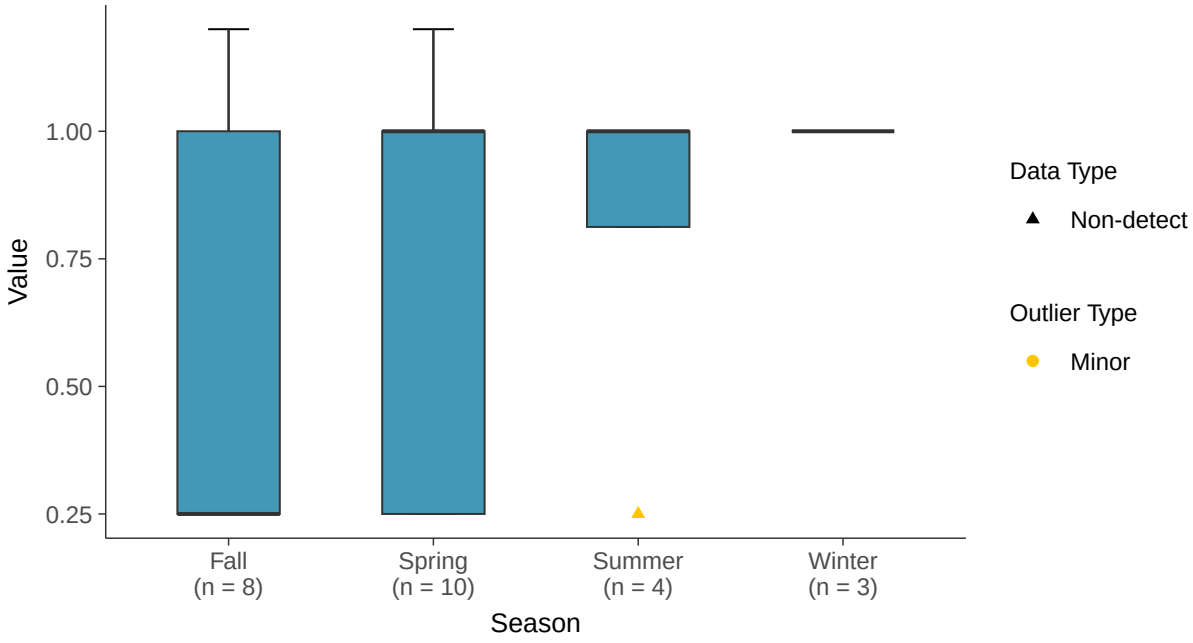
## Boxplot

Antimony, MW-15010 (ug/L)



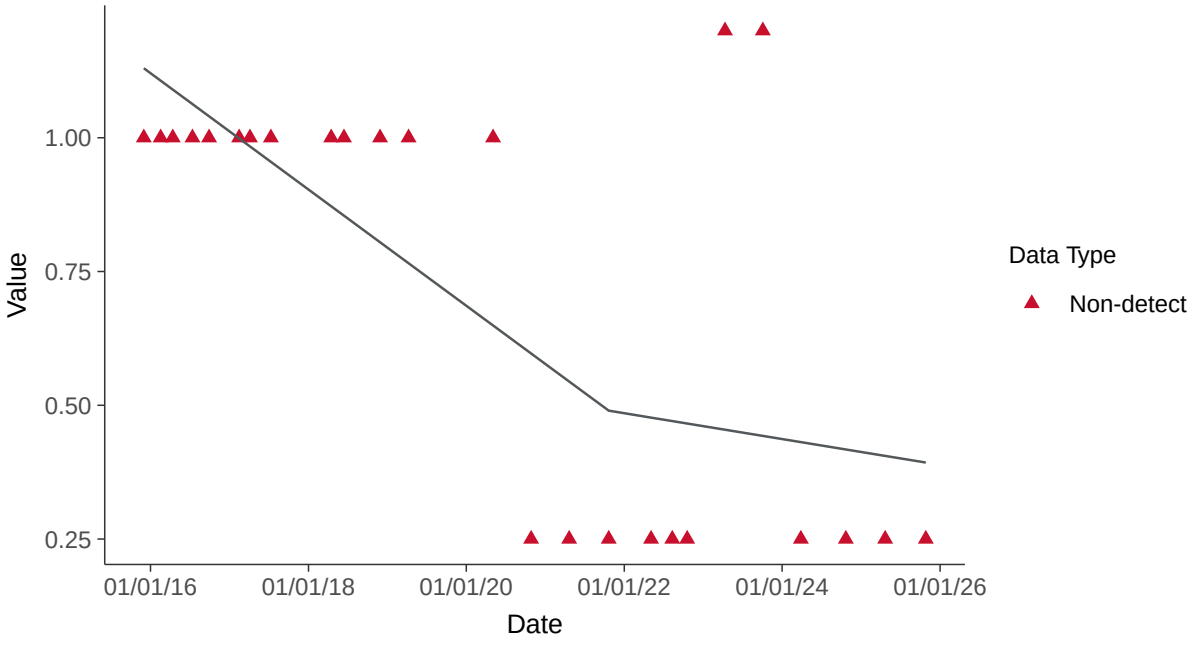

## Boxplot by Season

Antimony, MW-15010 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15010 (ug/L)

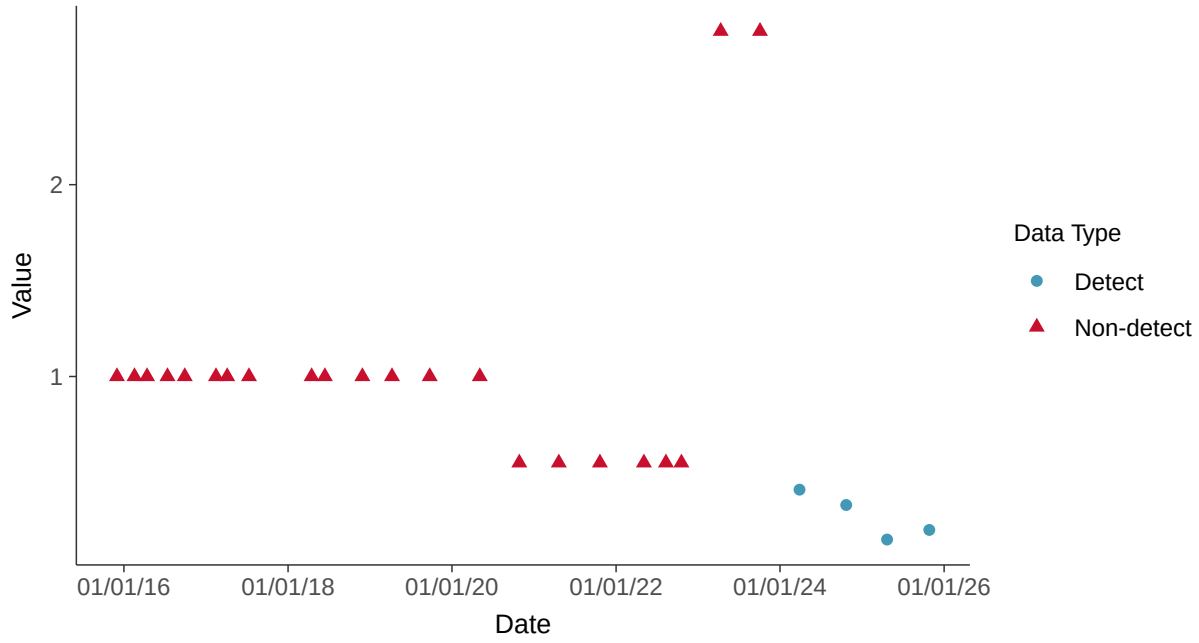


## Appendix IV: Arsenic, MW-15010

ID: 02_2_102

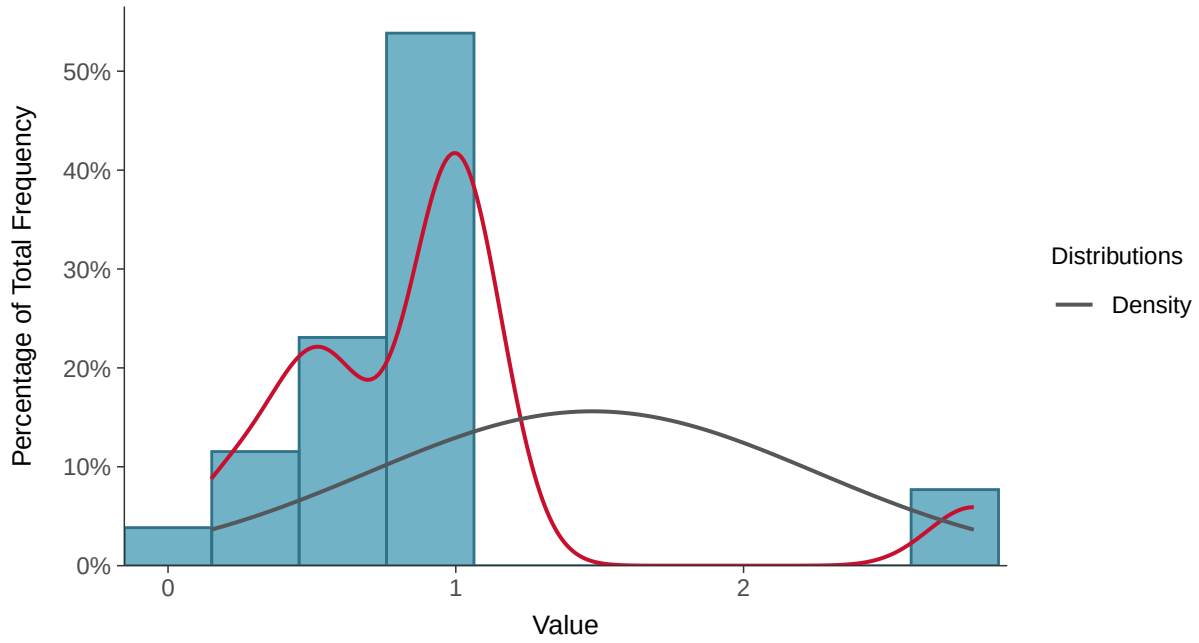
**Scatter Plot**

Arsenic, MW-15010 (ug/L)



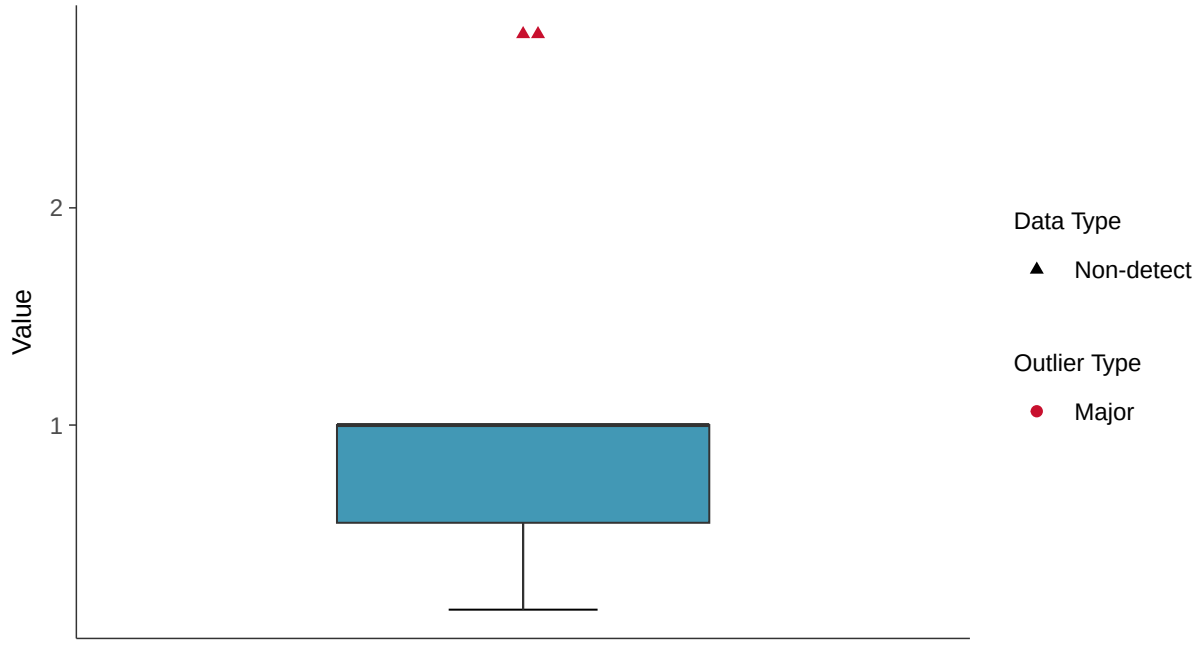

**Histogram**

Arsenic, MW-15010 (ug/L)



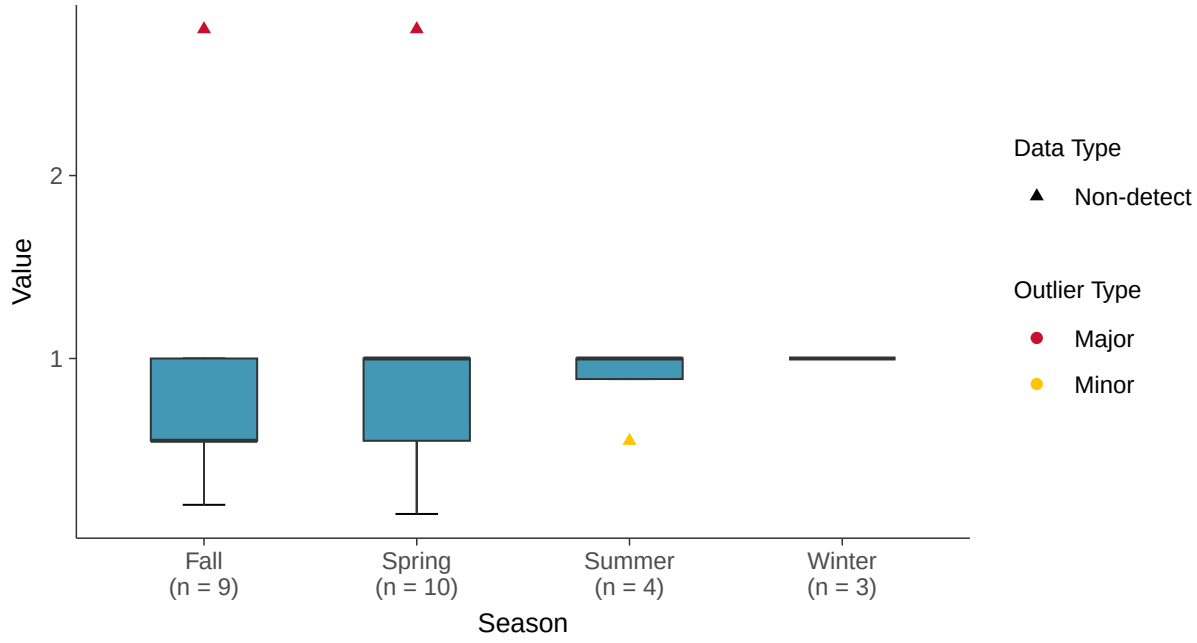
## Boxplot

Arsenic, MW-15010 (ug/L)



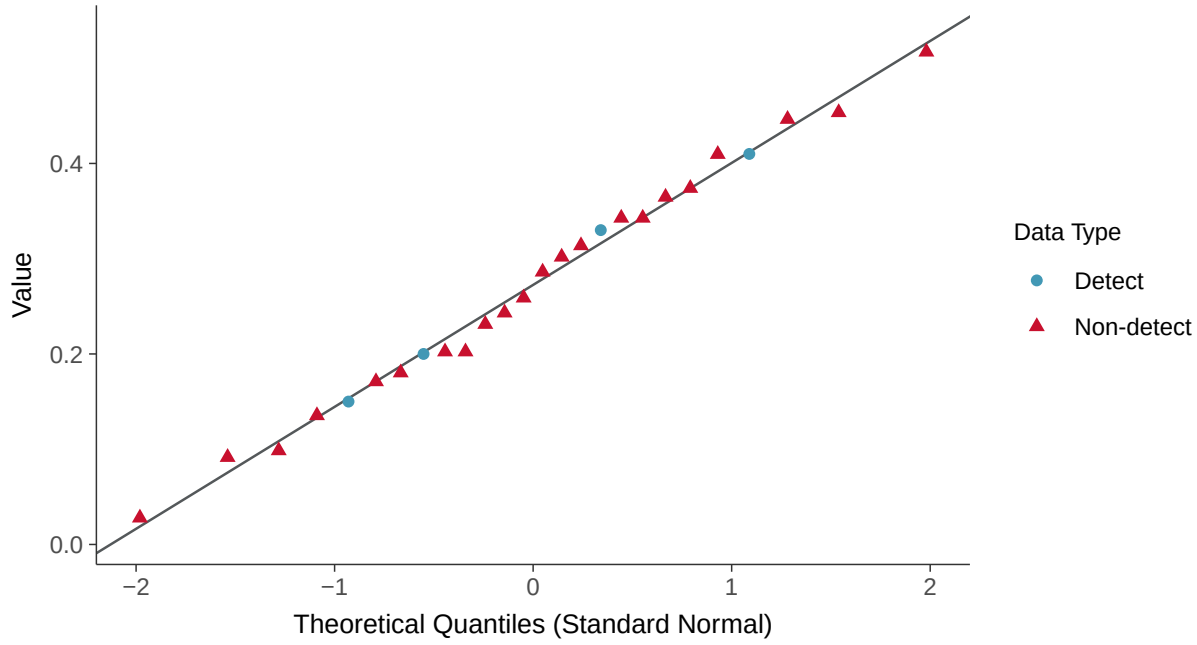

## Boxplot by Season

Arsenic, MW-15010 (ug/L)



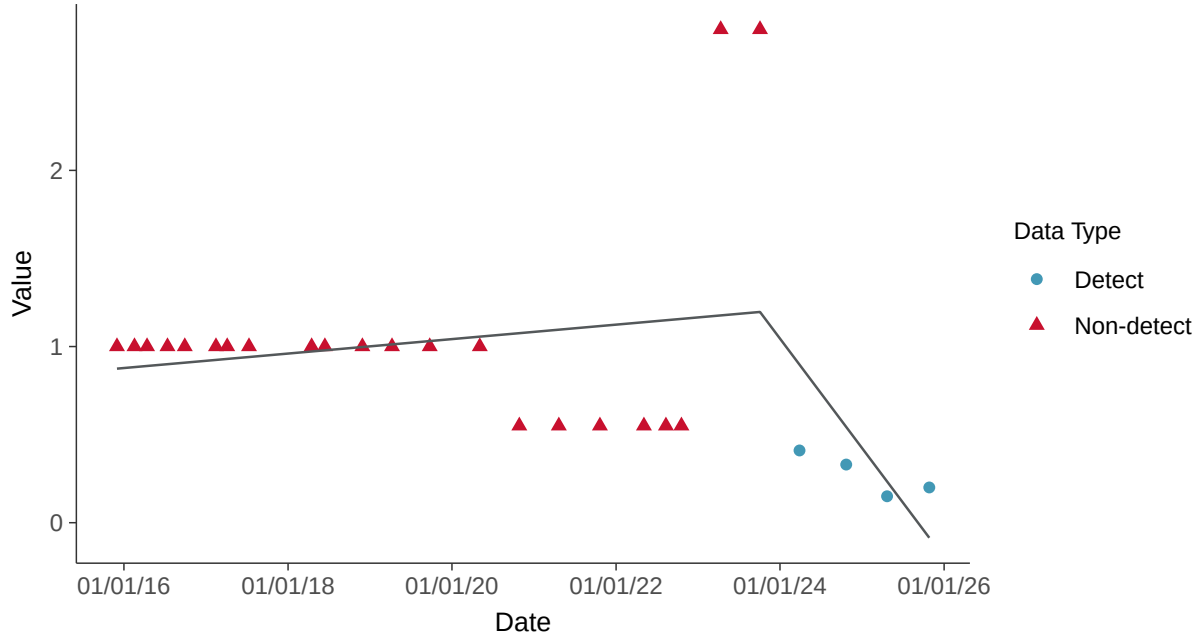
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15010 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15010 (ug/L)

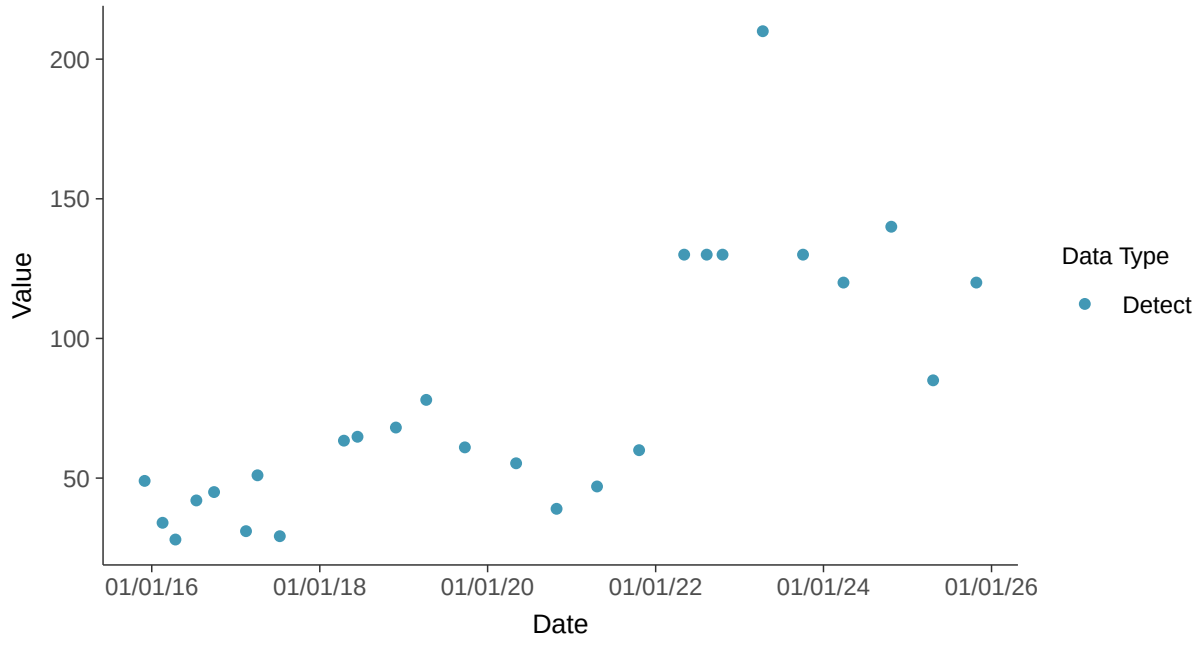


## Appendix IV: Barium, MW-15010

ID: 02_2_103

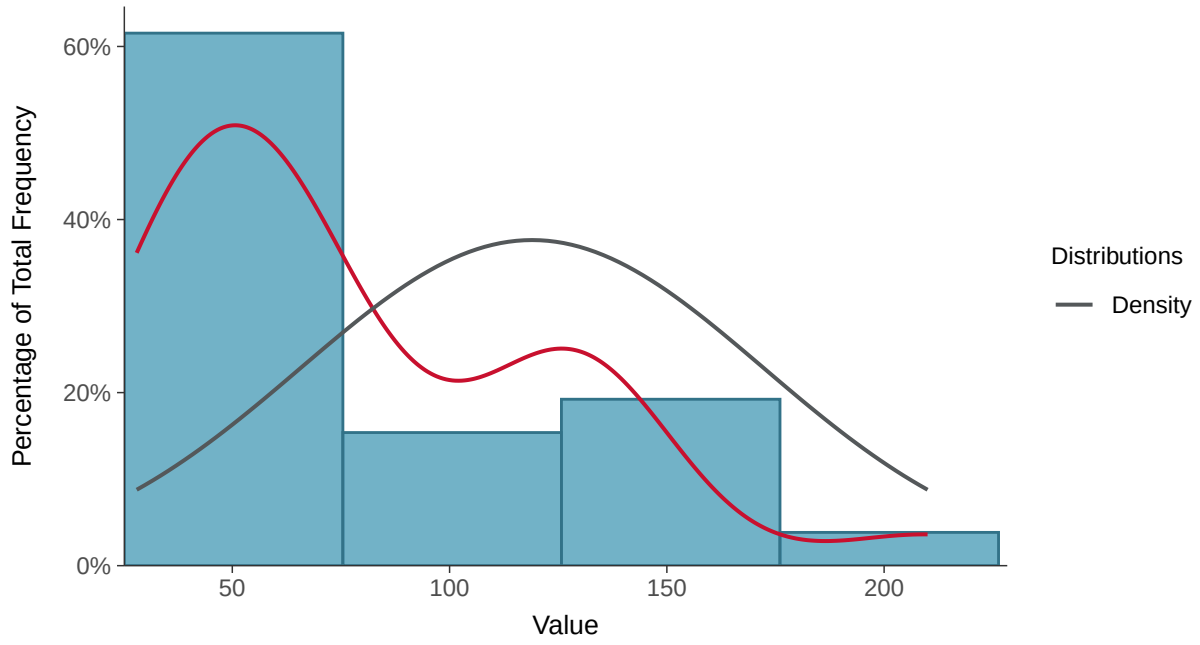
**Scatter Plot**

Barium, MW-15010 (ug/L)



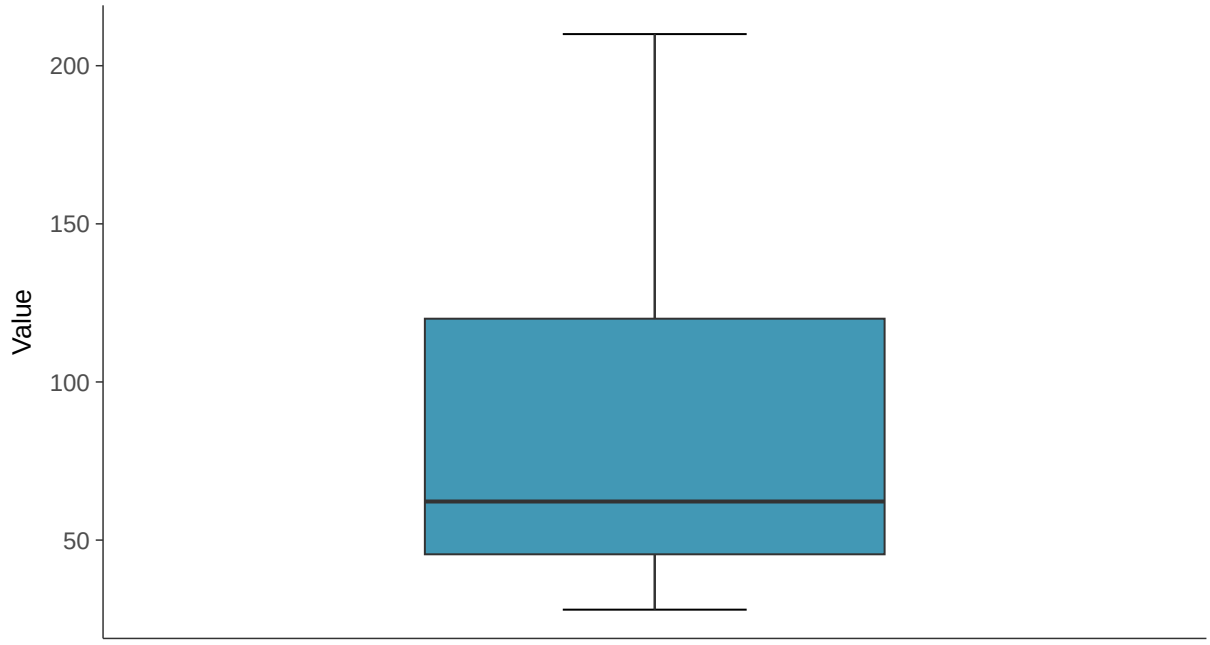

**Histogram**

Barium, MW-15010 (ug/L)



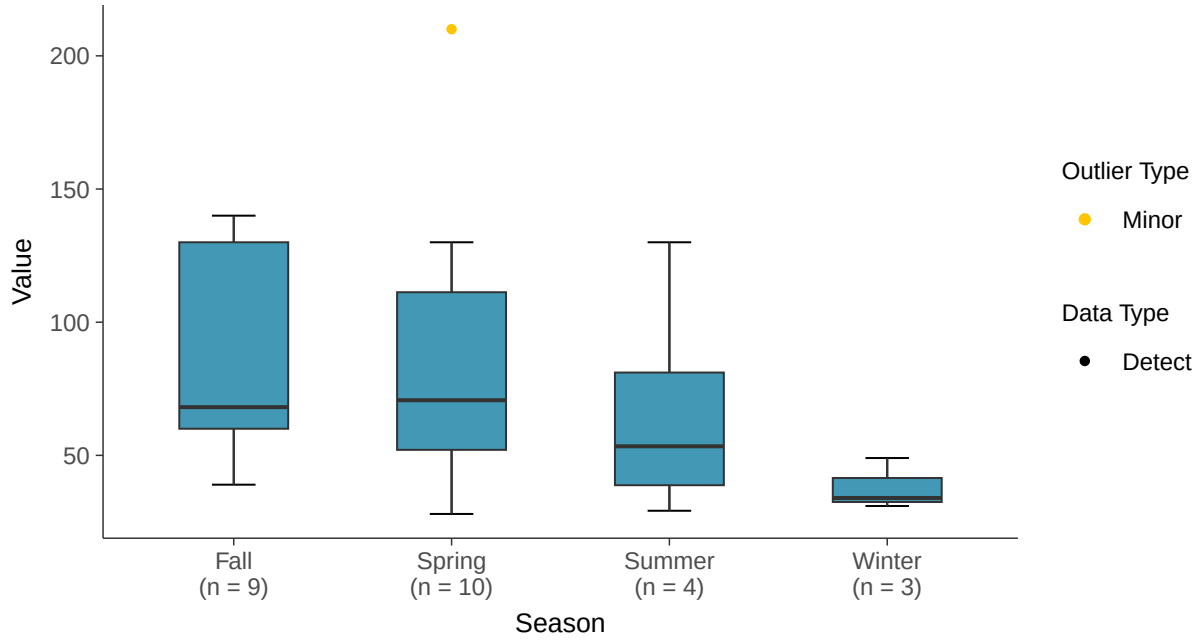
## Boxplot

Barium, MW-15010 (ug/L)



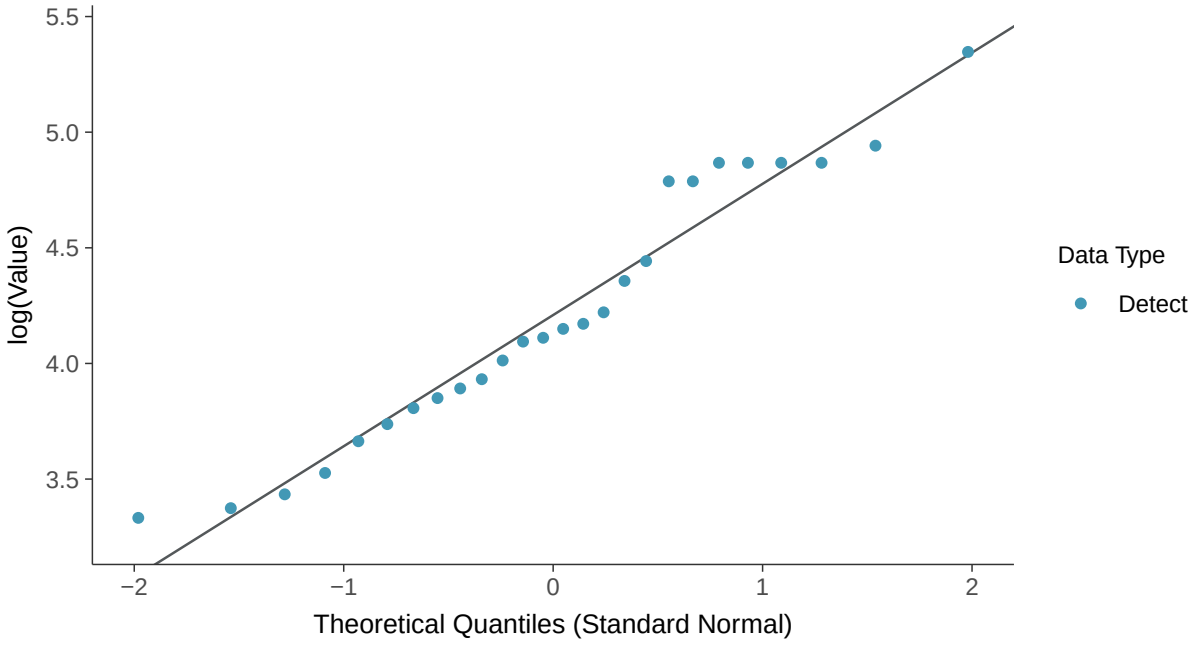

## Boxplot by Season

Barium, MW-15010 (ug/L)



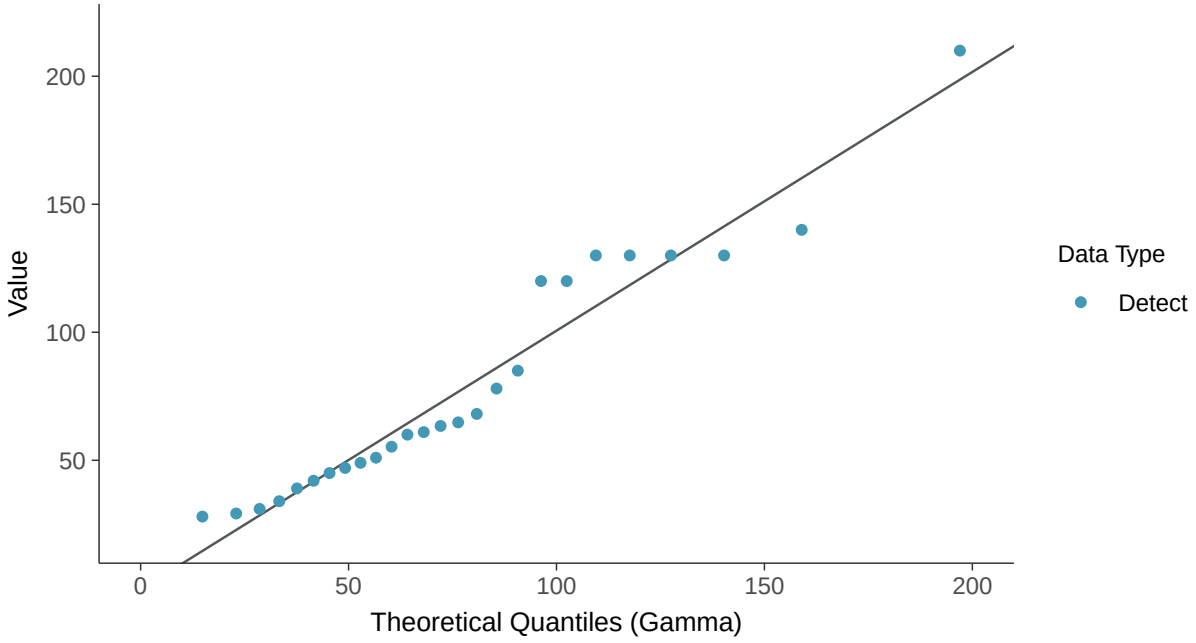
**Lognormal Q-Q plot**

Barium, MW-15010 (ug/L)



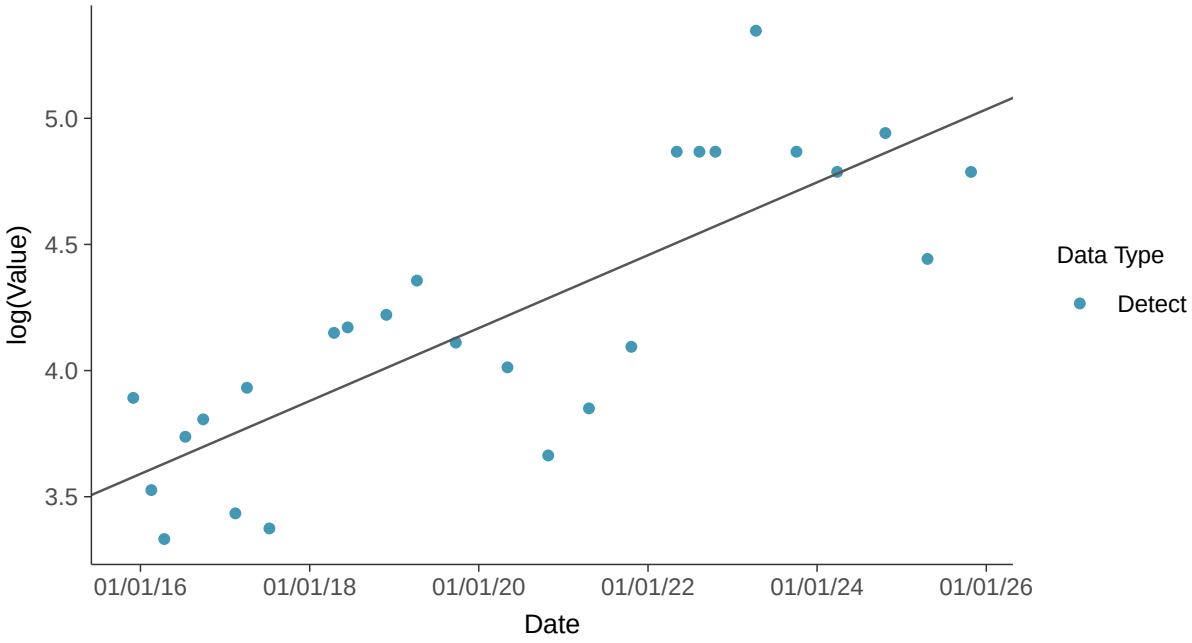

**Gamma Q-Q plot**

Barium, MW-15010 (ug/L)



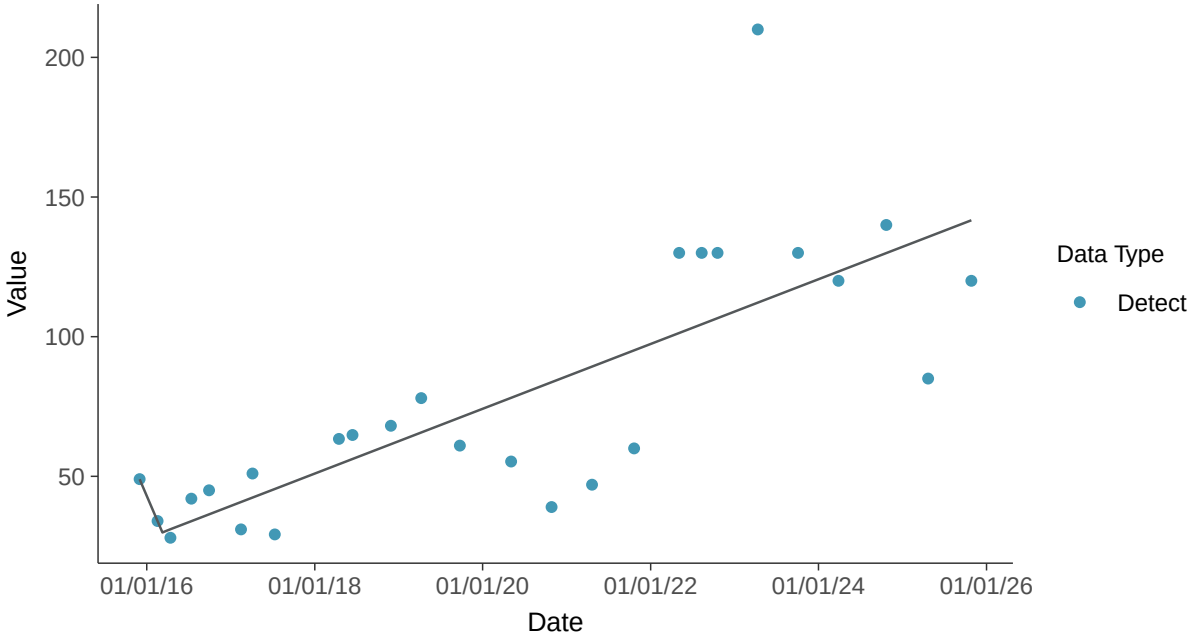
**Trend Regression: Lognormal MLE**

Barium, MW-15010 (ug/L)



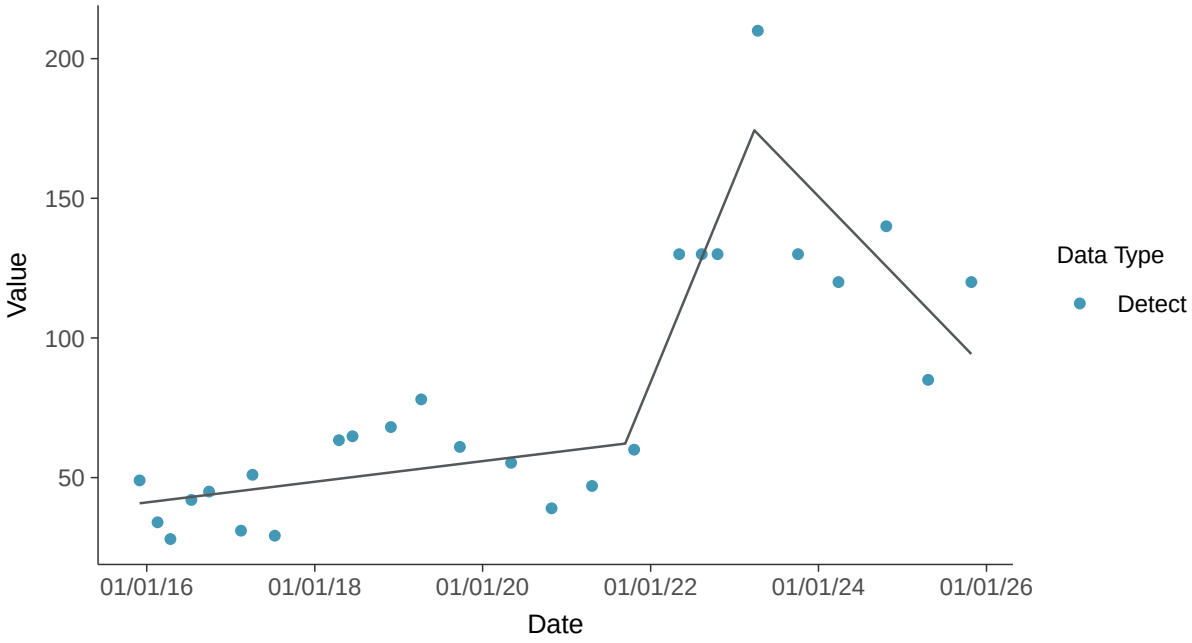

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15010 (ug/L)



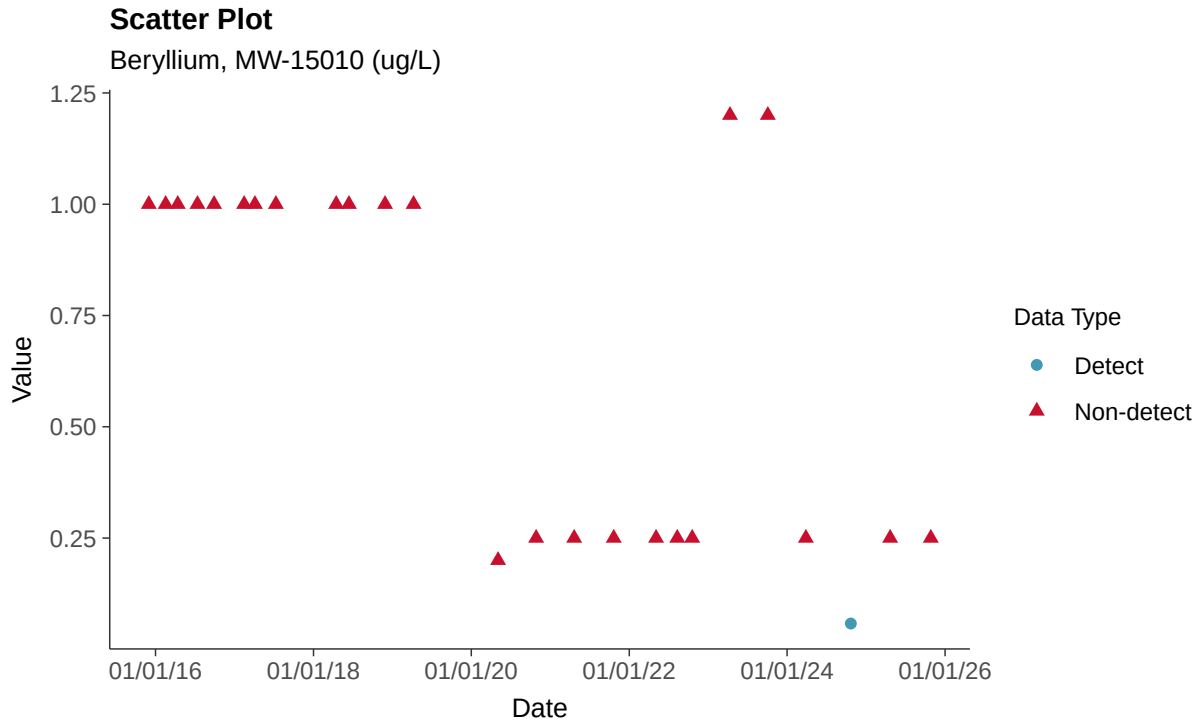
**Trend Regression: Piecewise Linear-Linear-Linear**

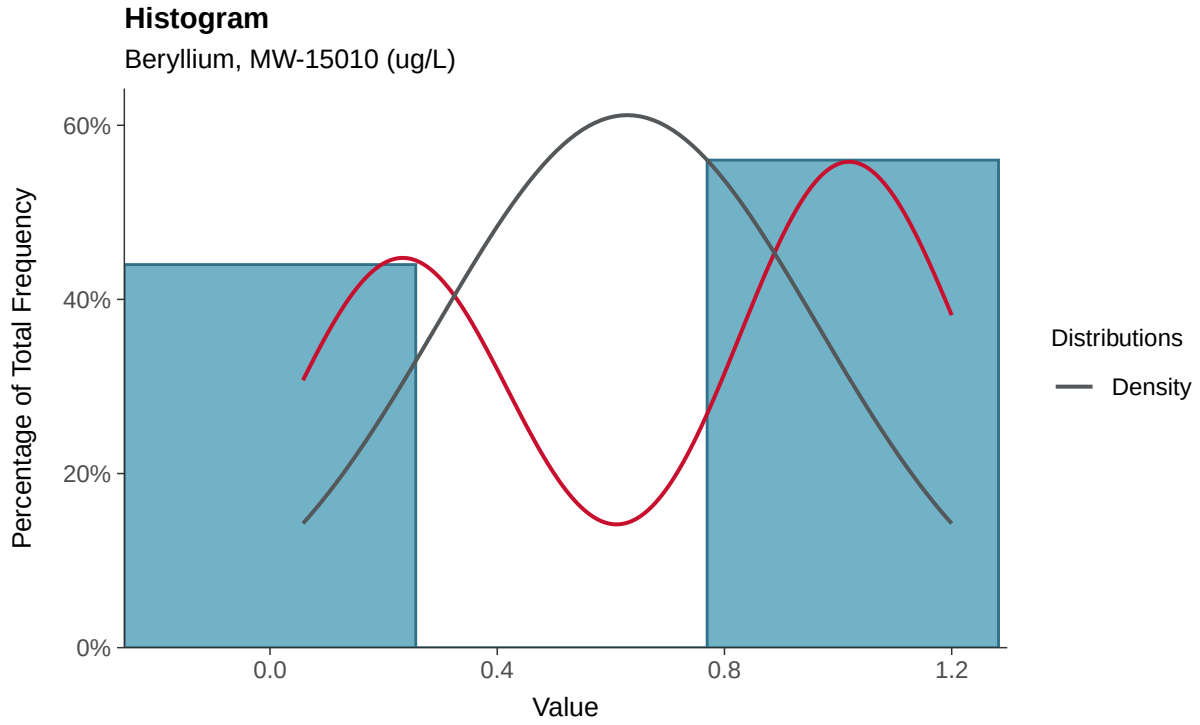
Barium, MW-15010 (ug/L)



## Appendix IV: Beryllium, MW-15010

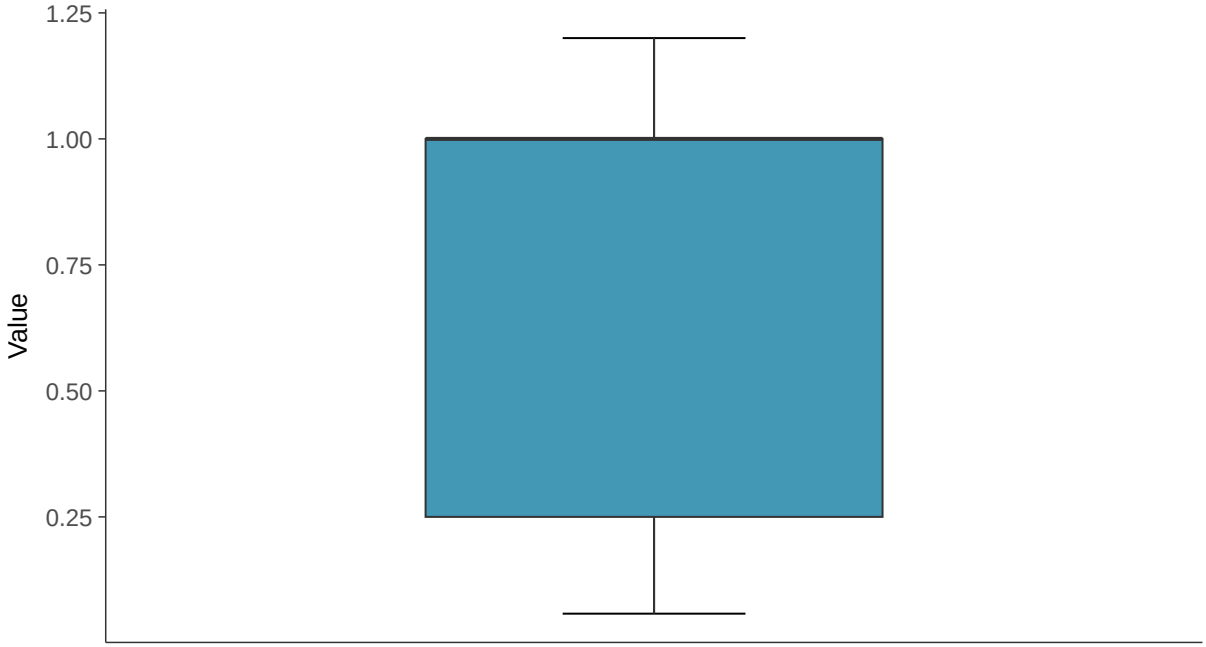
ID: 02_2_104



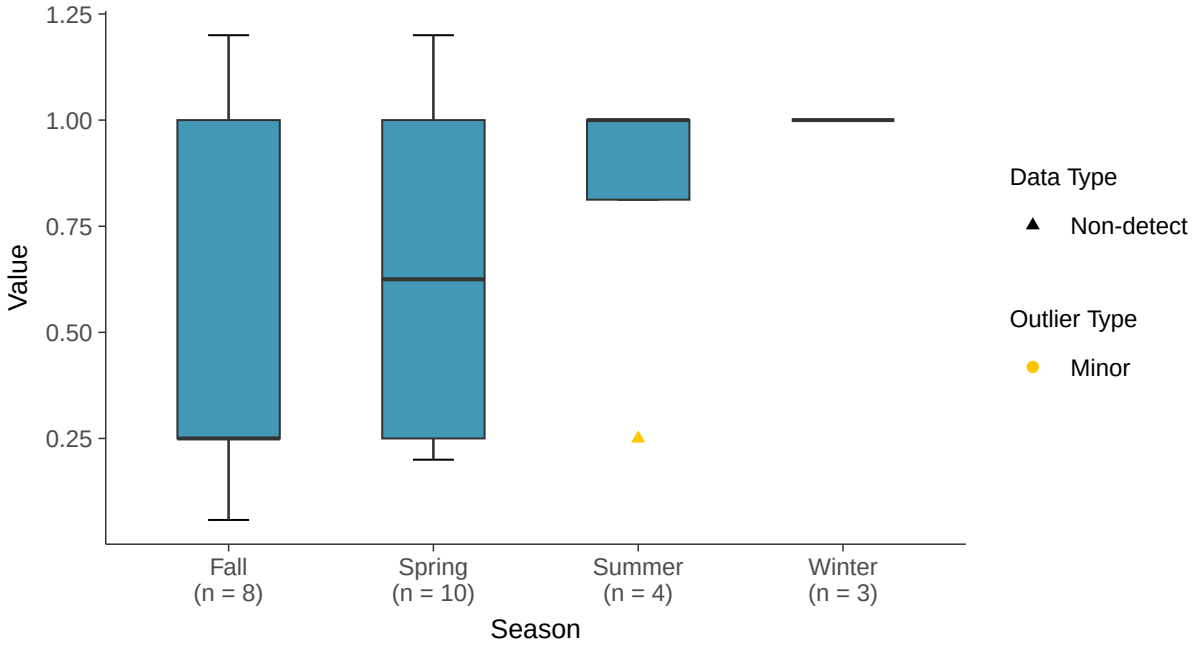
## Boxplot

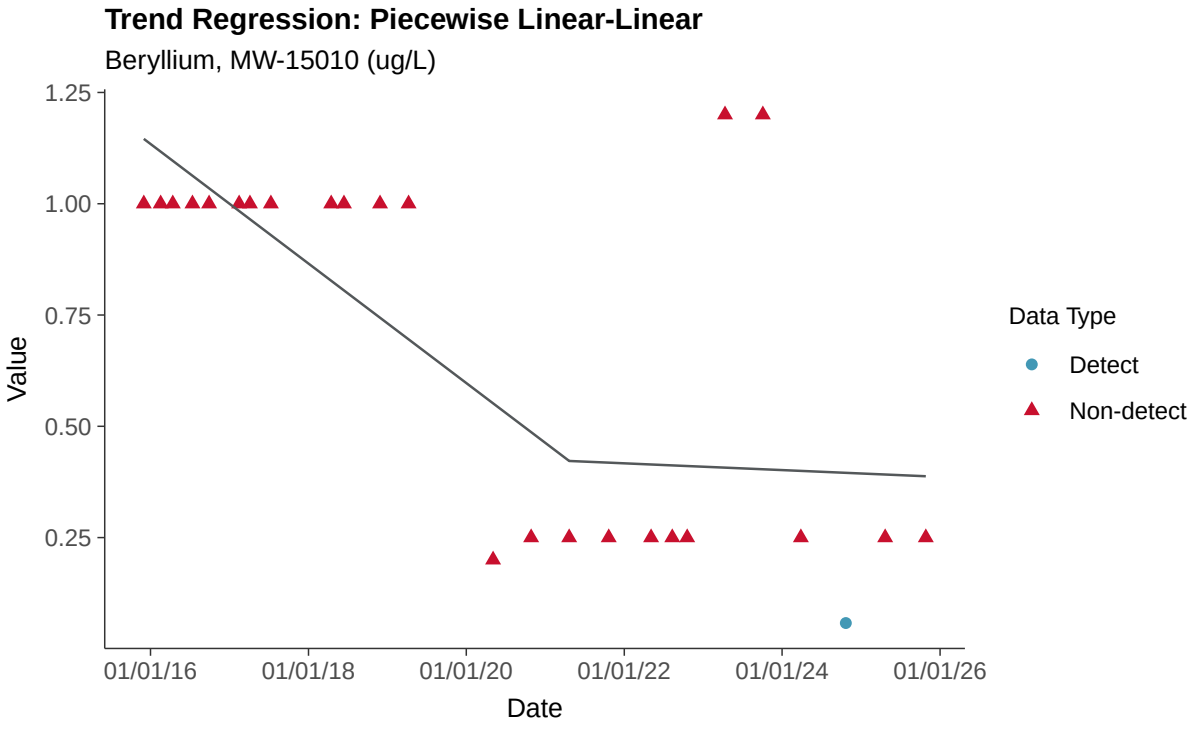
Beryllium, MW-15010 (ug/L)




## Boxplot by Season

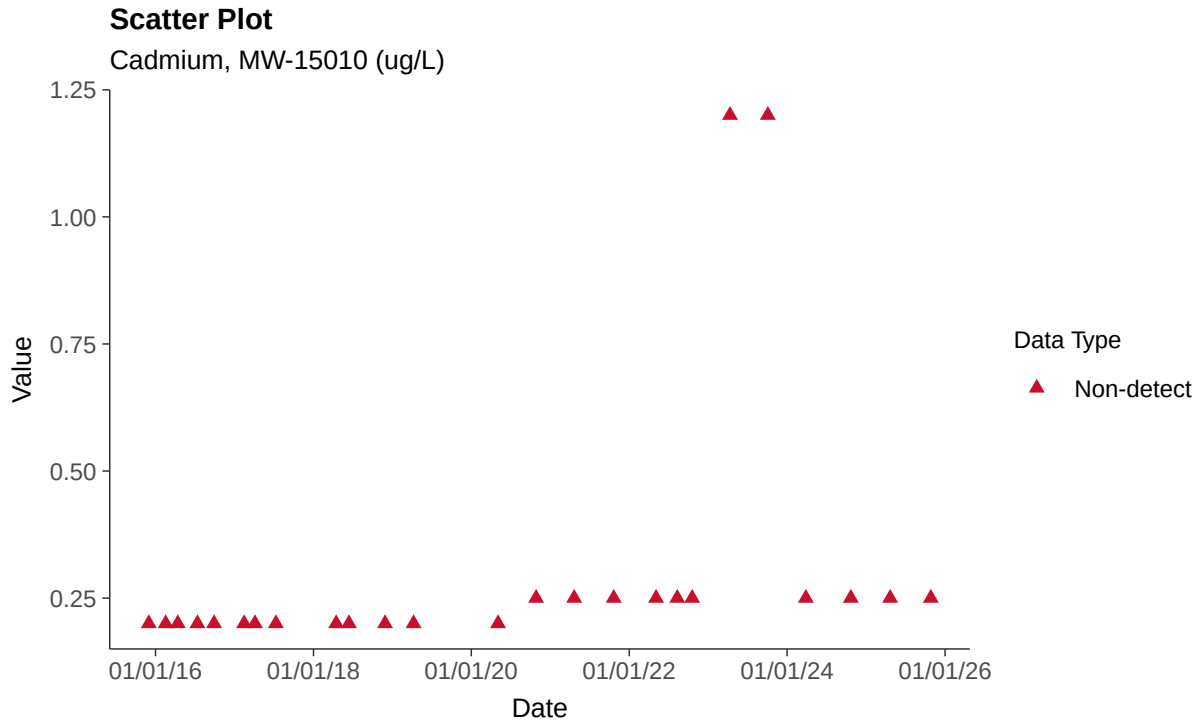
Beryllium, MW-15010 (ug/L)

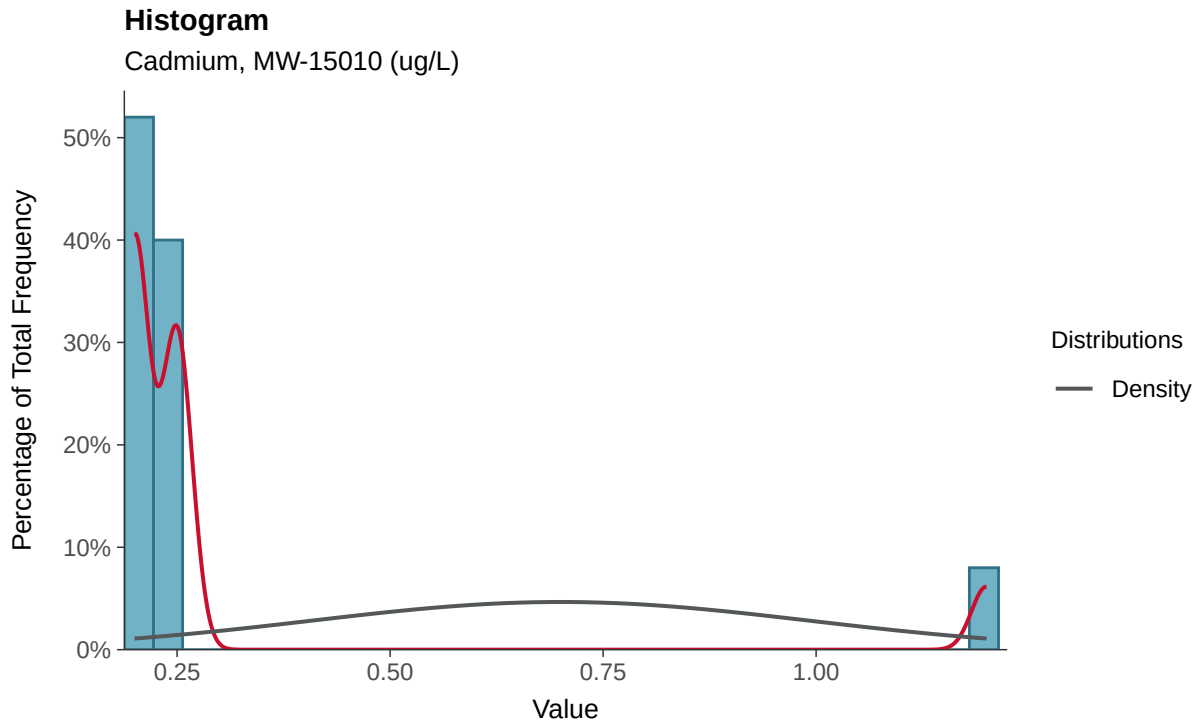



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15010 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15010

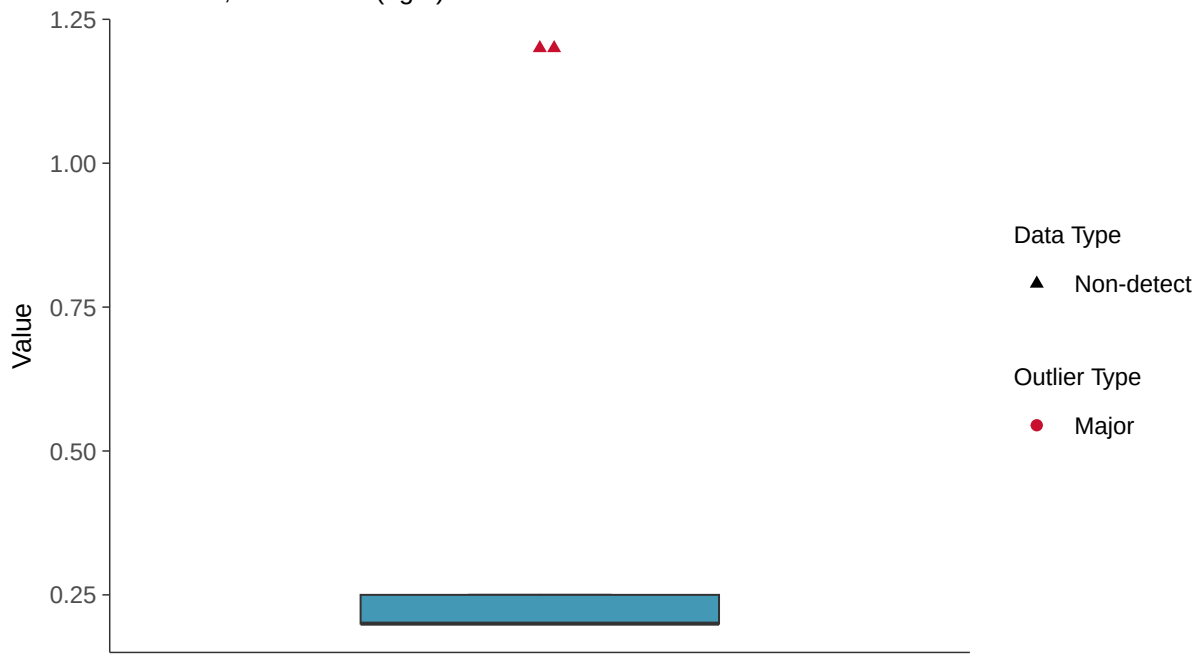
ID: 02_2_106



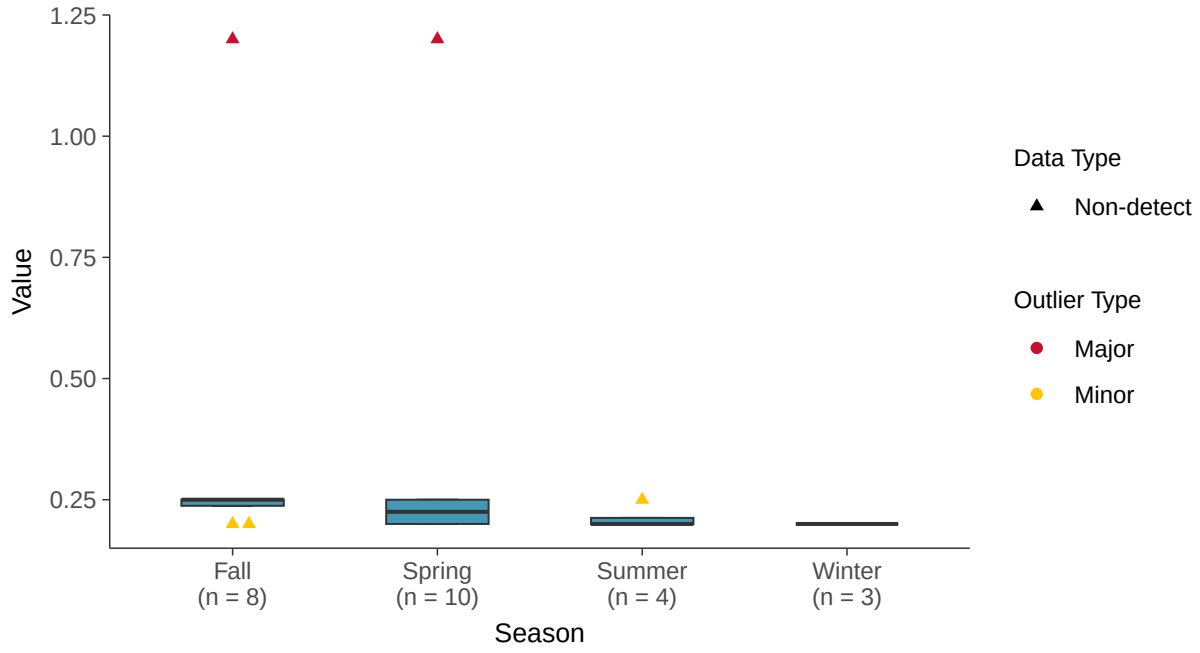
## Boxplot

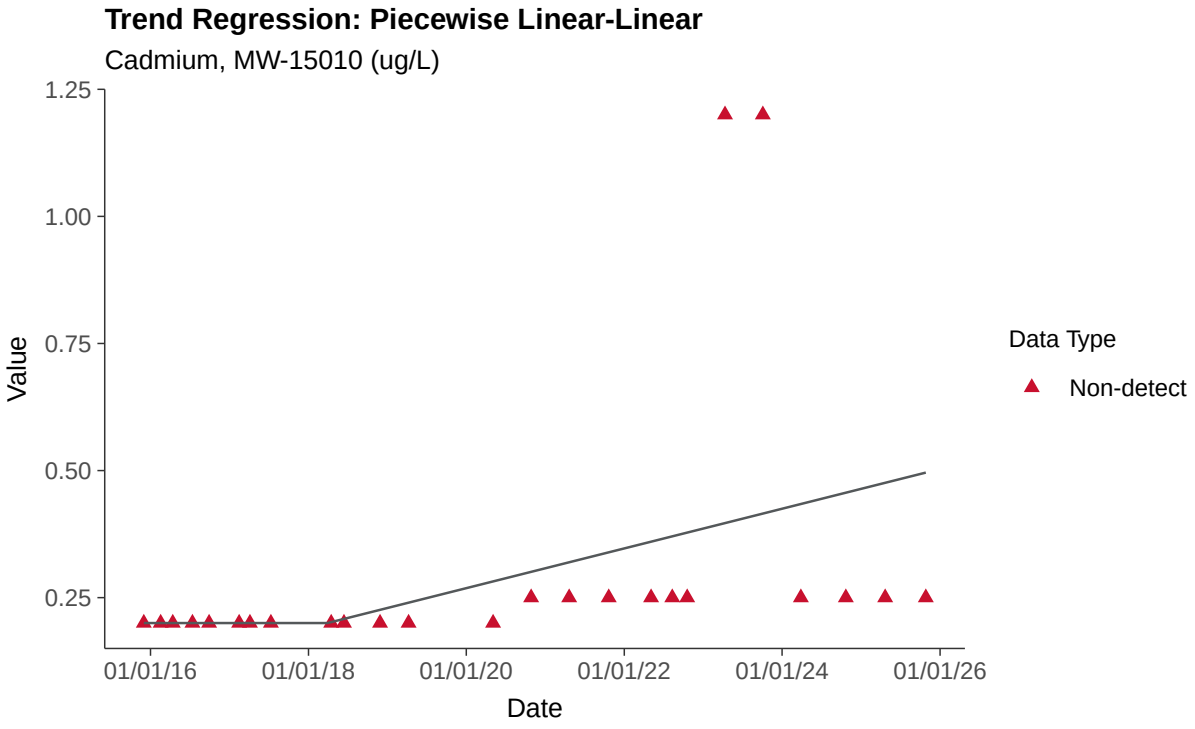
Cadmium, MW-15010 (ug/L)




## Boxplot by Season

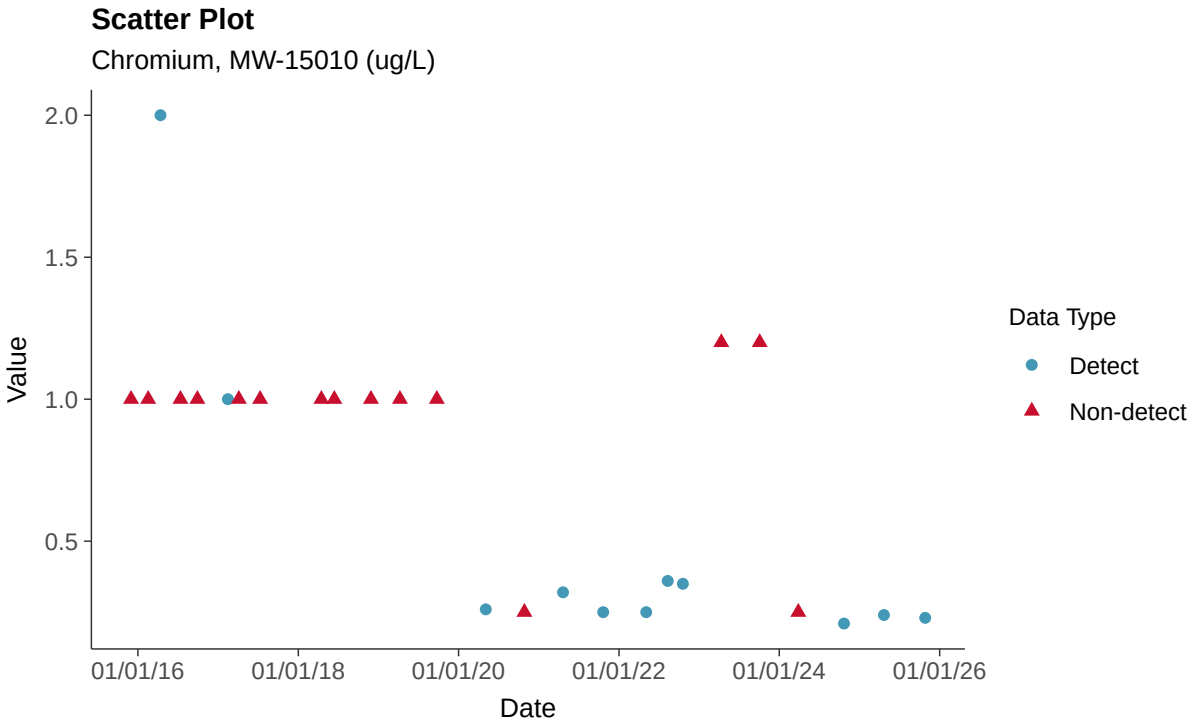
Cadmium, MW-15010 (ug/L)

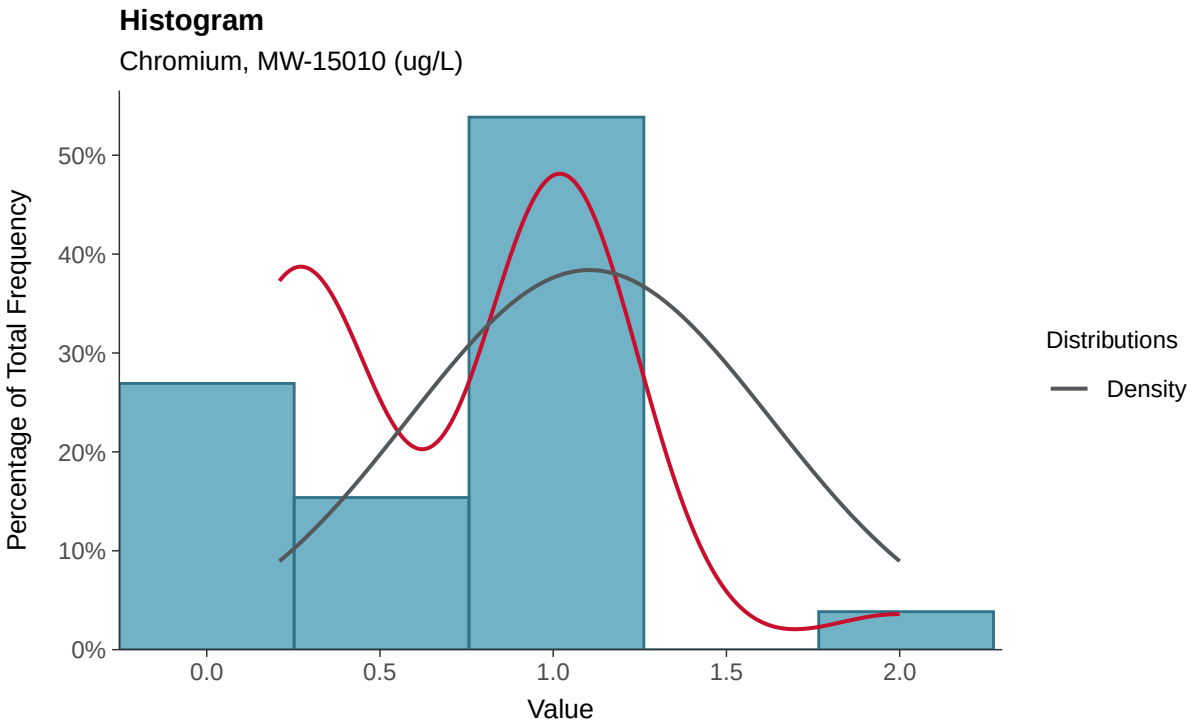



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15010 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15010

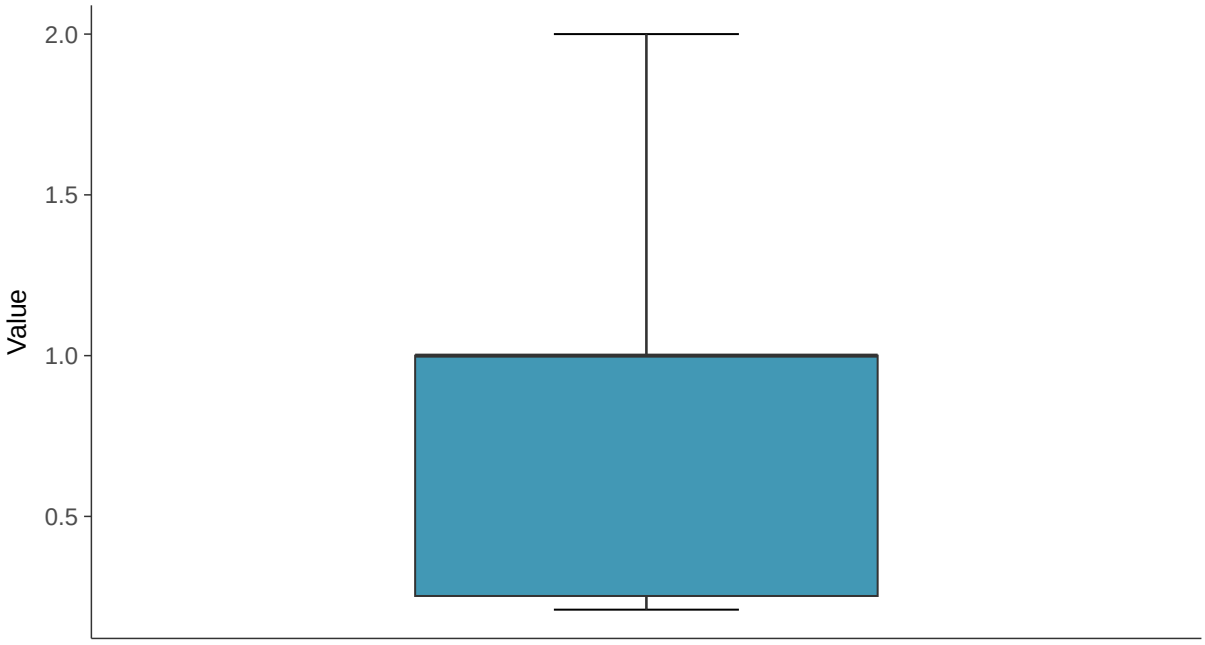
ID: 02_2_109



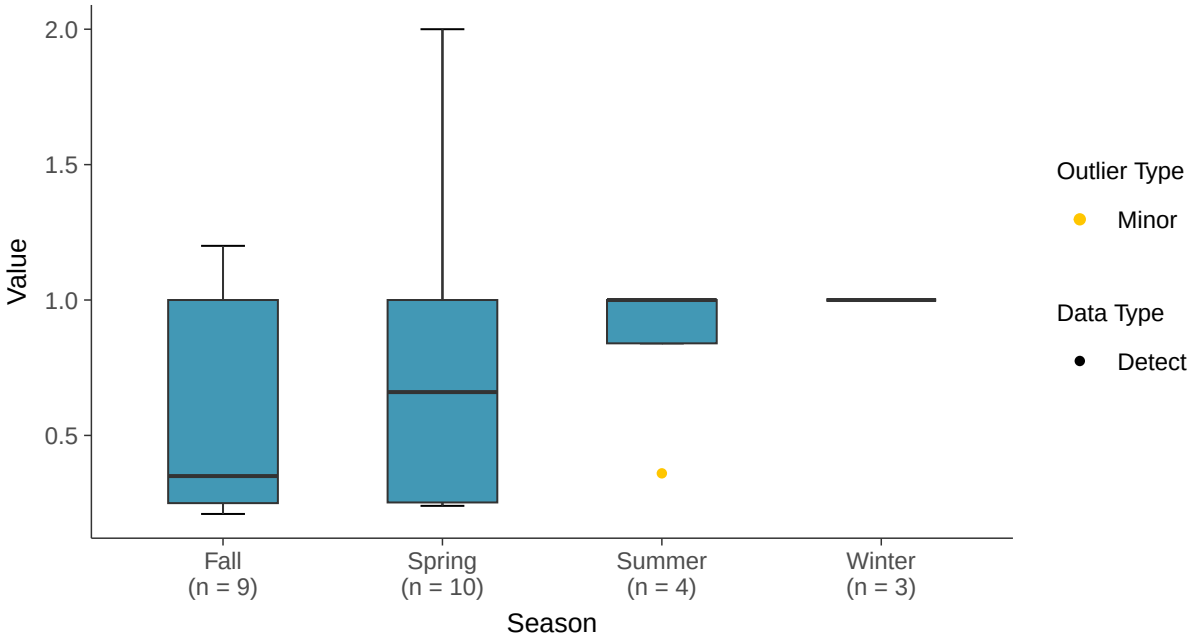
## Boxplot

Chromium, MW-15010 (ug/L)



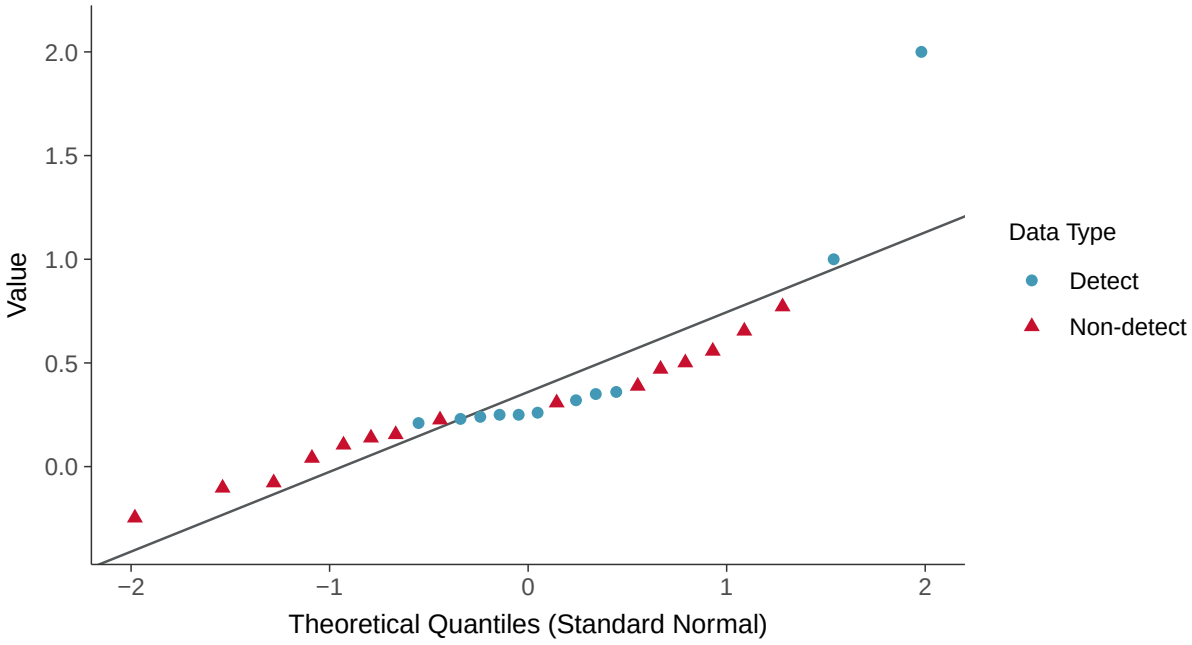

## Boxplot by Season

Chromium, MW-15010 (ug/L)



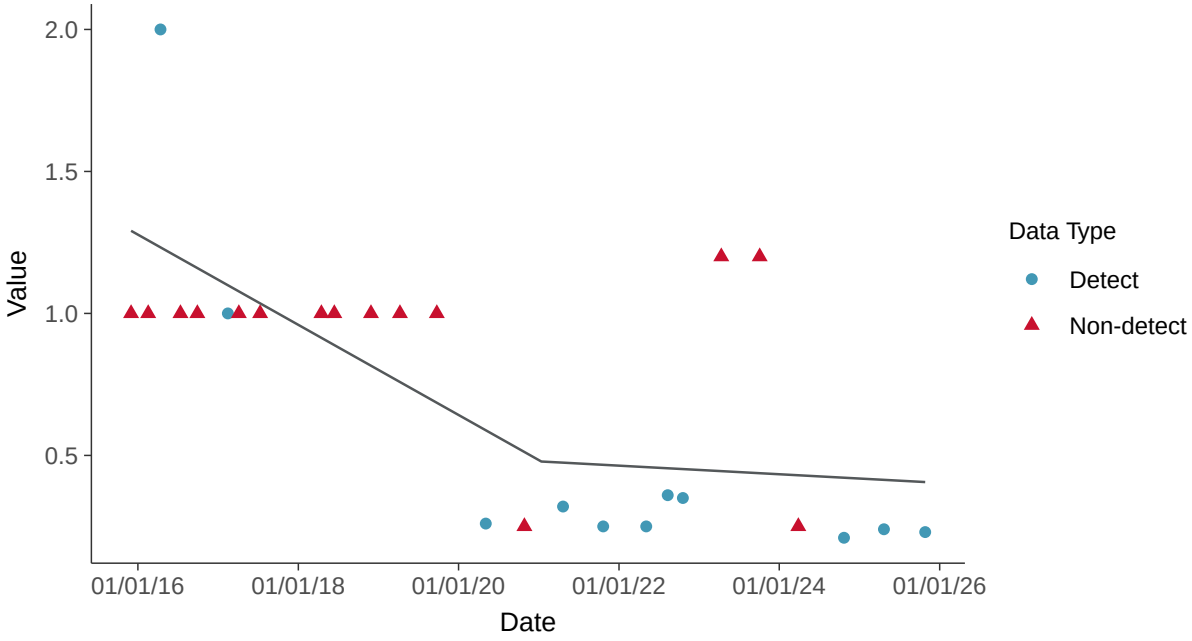
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15010 (ug/L)



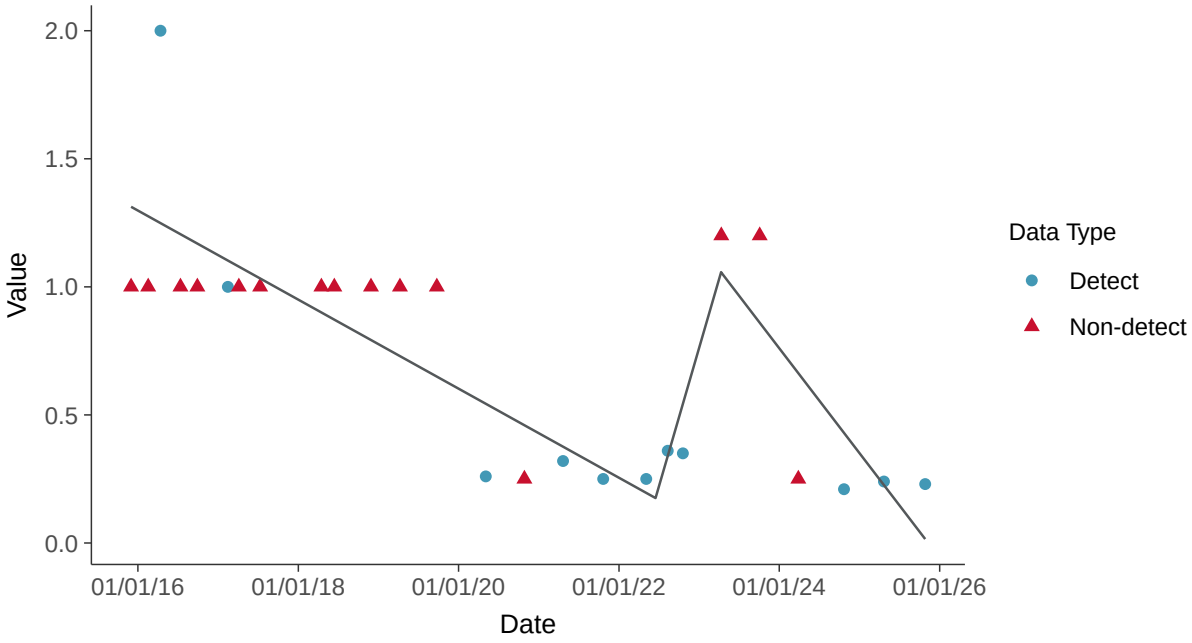

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15010 (ug/L)



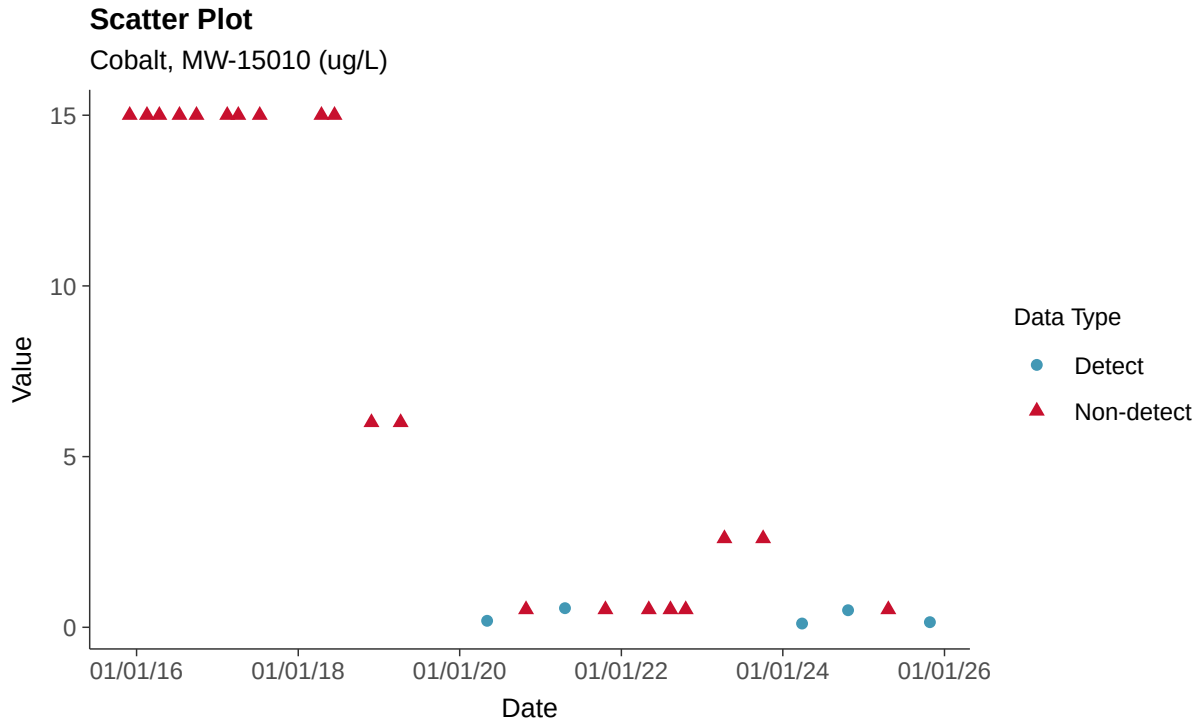
**Trend Regression: Piecewise Linear-Linear-Linear**

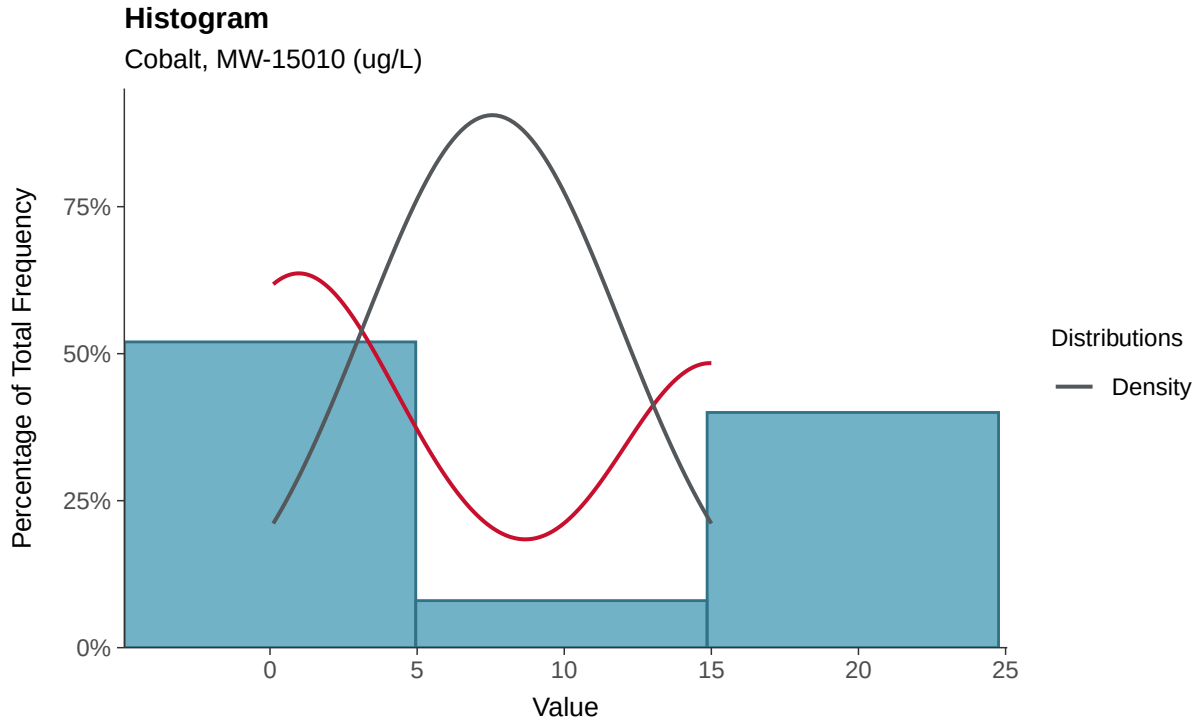
Chromium, MW-15010 (ug/L)



## Appendix IV: Cobalt, MW-15010

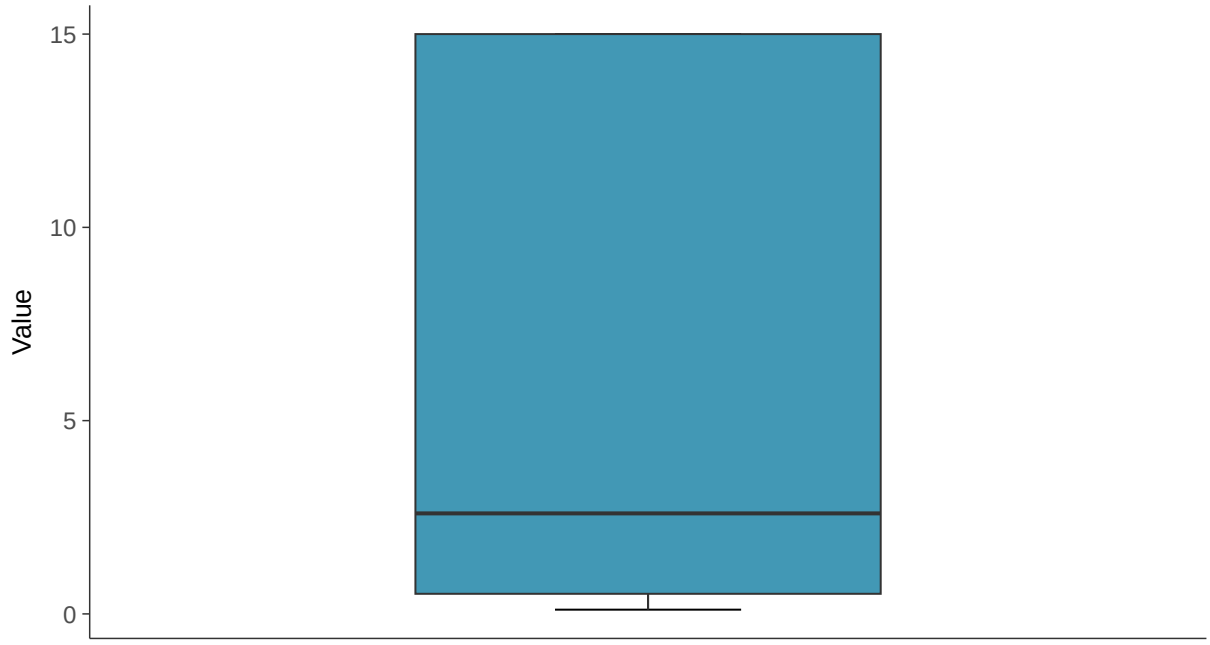
ID: 02_2_110



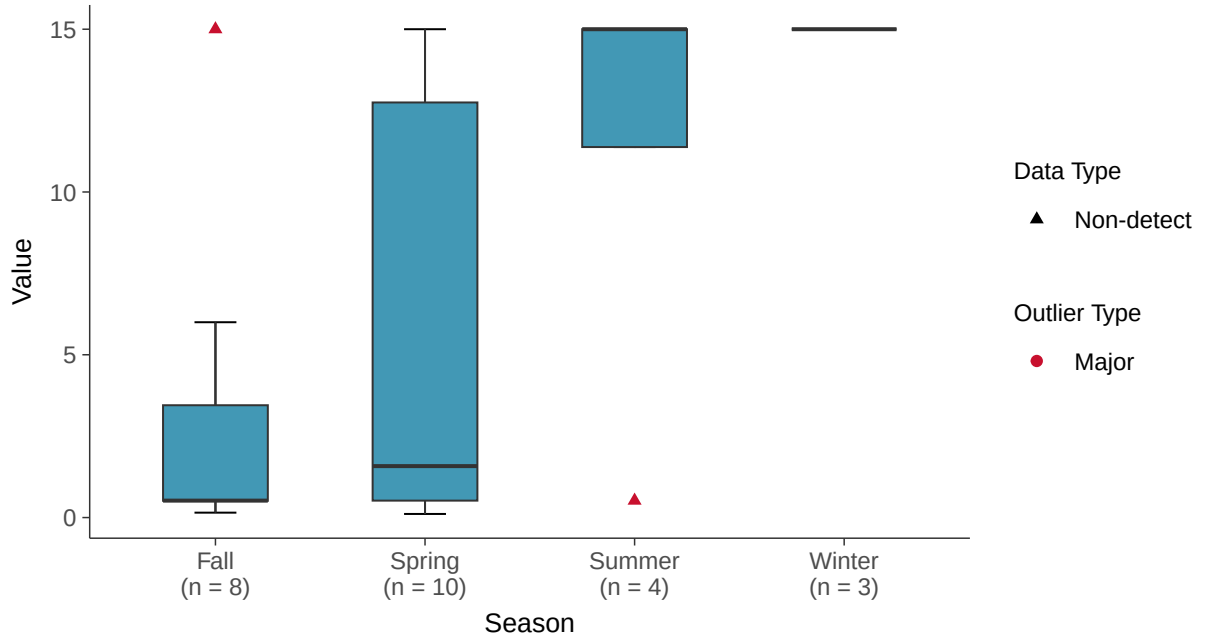
**Boxplot**

Cobalt, MW-15010 (ug/L)



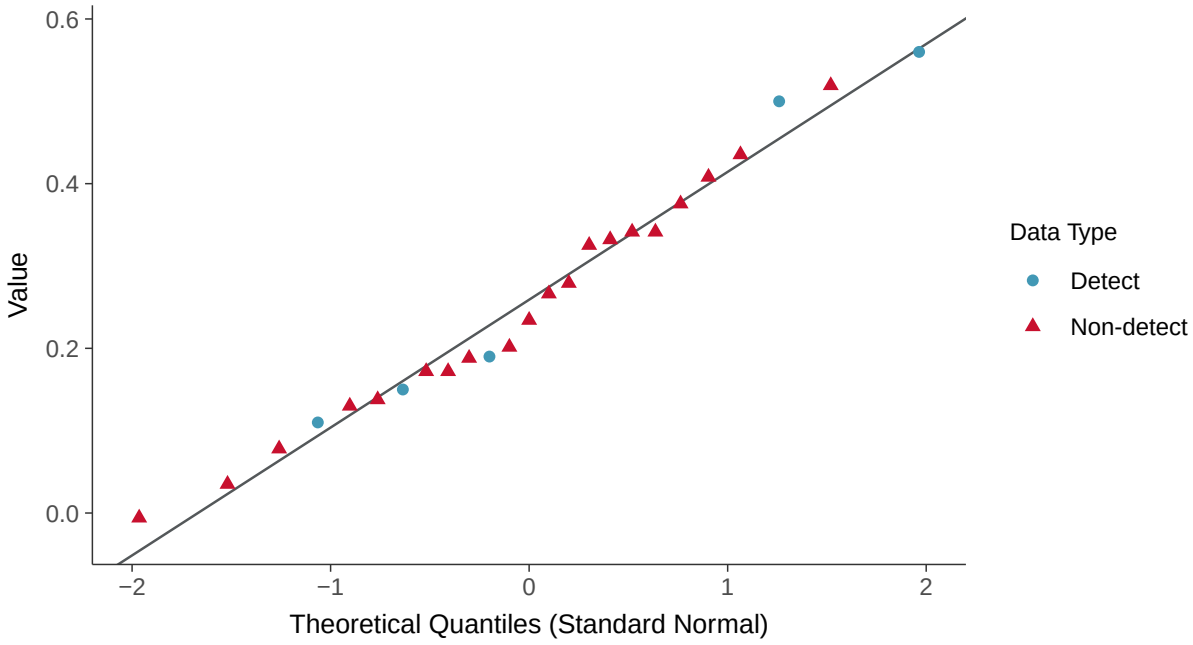

**Boxplot by Season**

Cobalt, MW-15010 (ug/L)



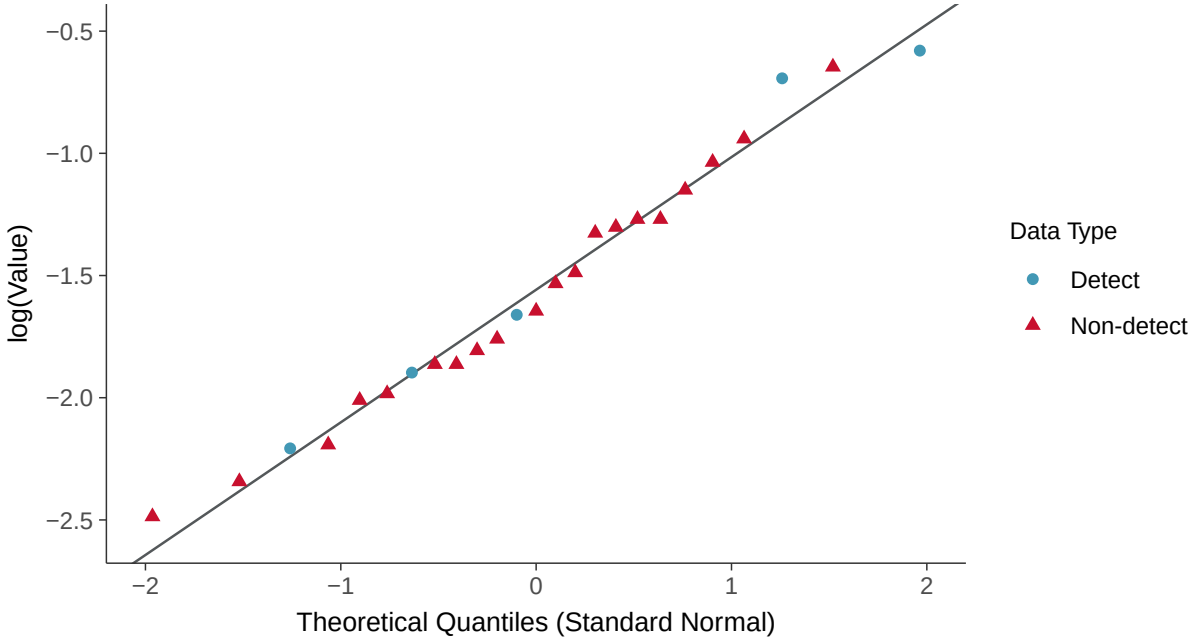
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15010 (ug/L)



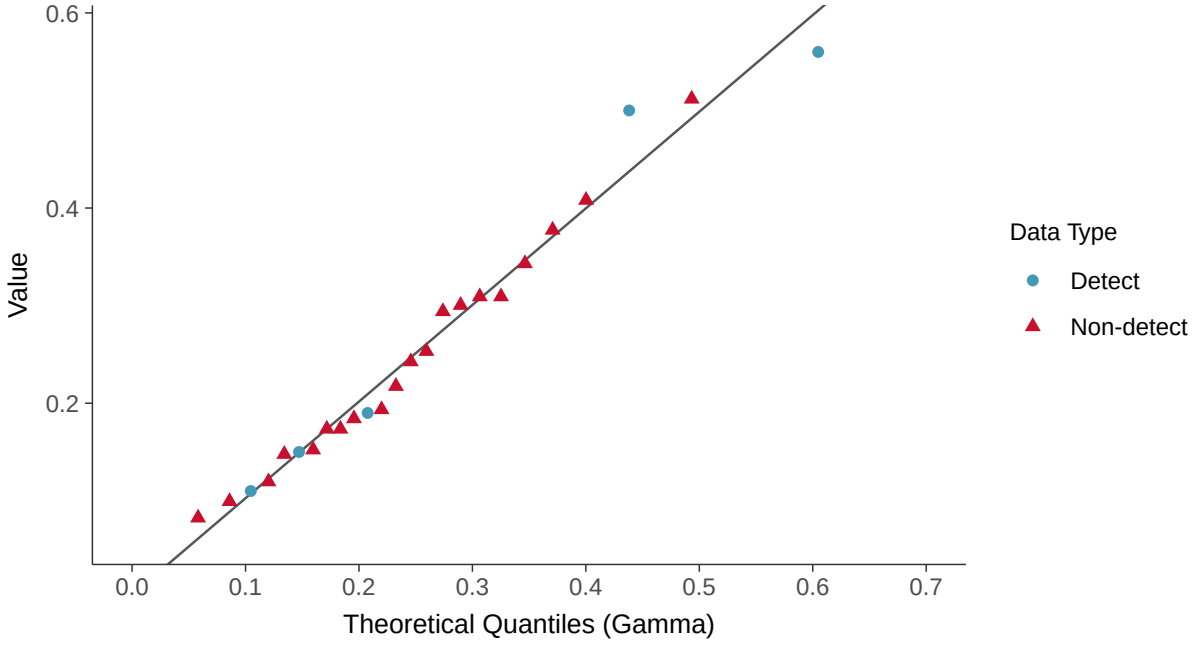

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15010 (ug/L)



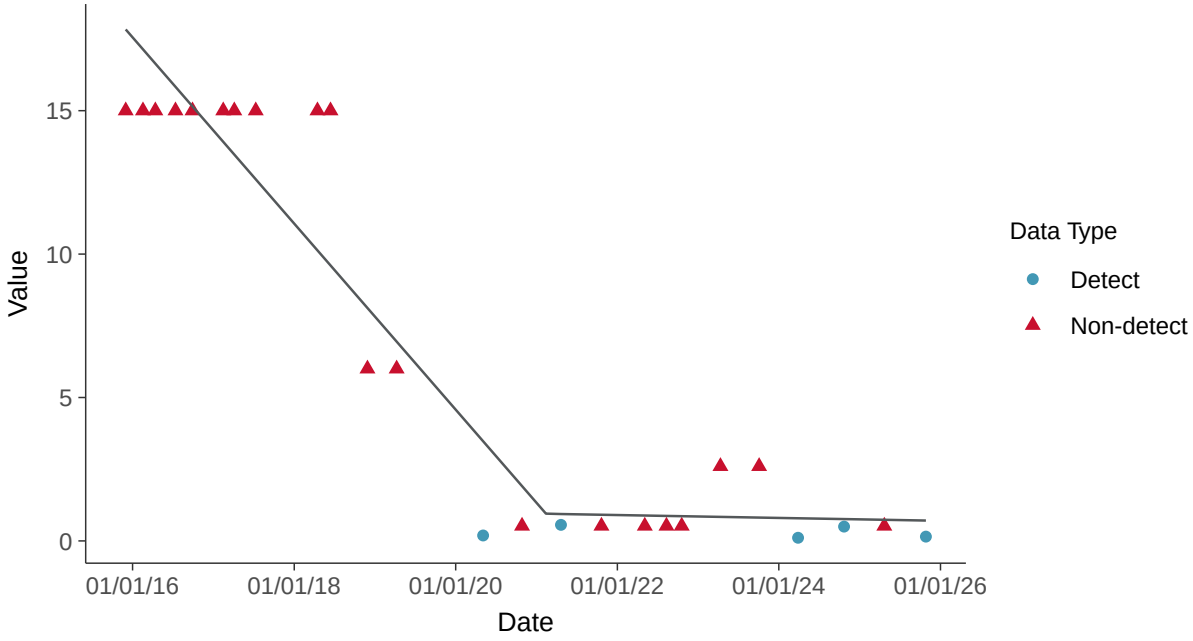
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15010 (ug/L)



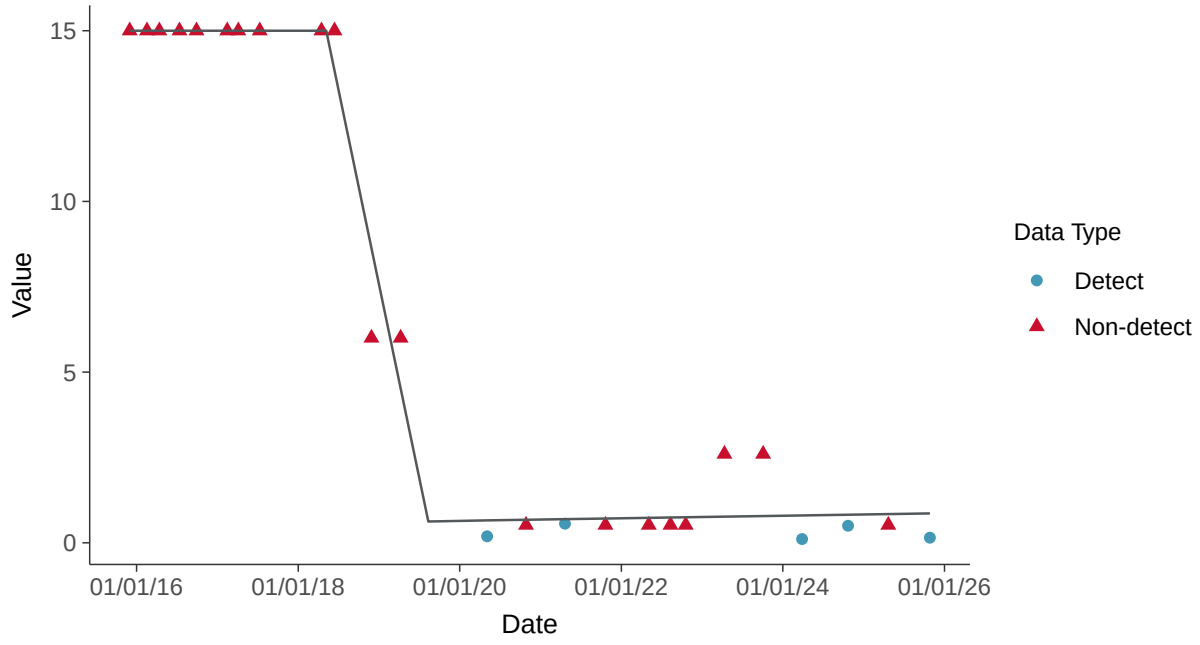

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15010 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Cobalt, MW-15010 (ug/L)

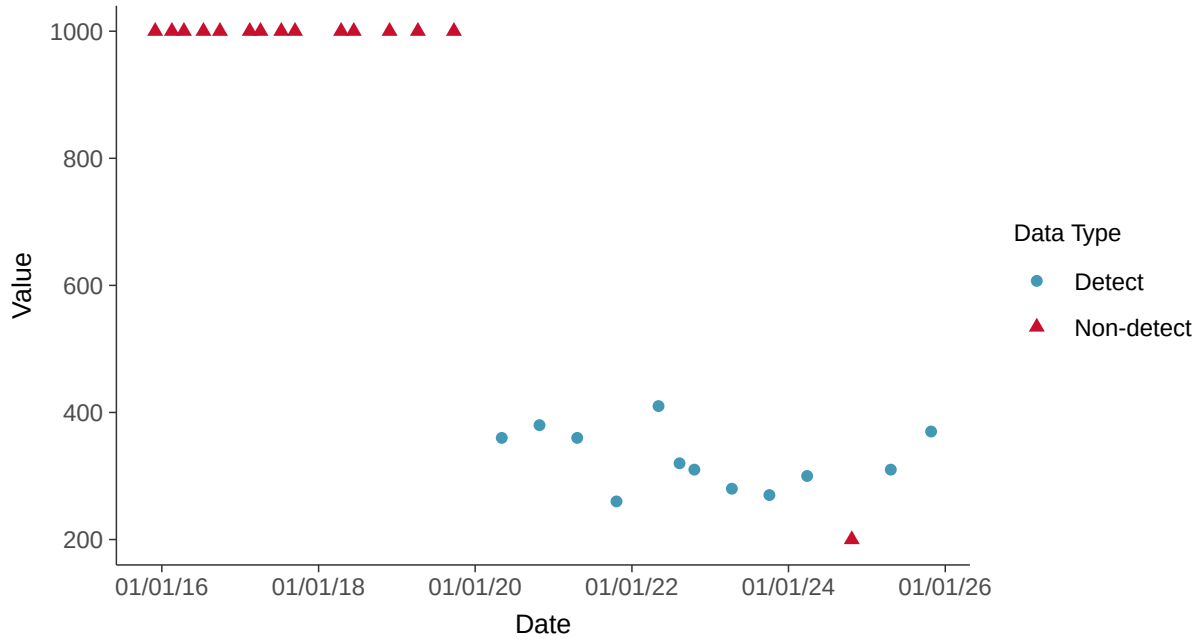


## Appendix IV: Fluoride, MW-15010

ID: 02_2_114

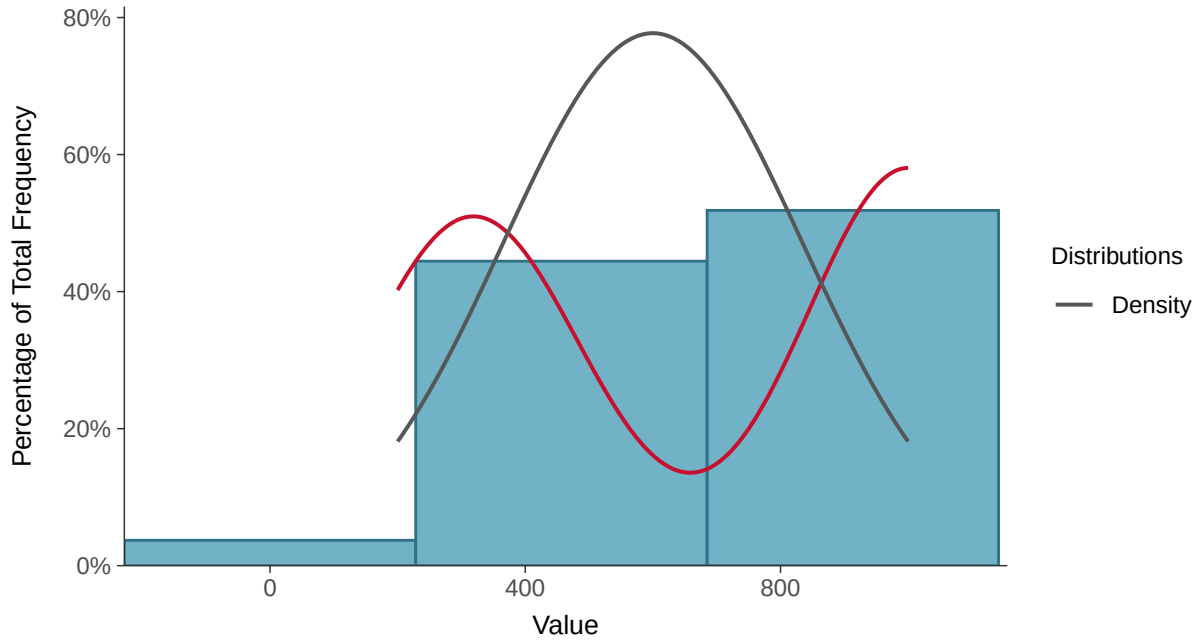
**Scatter Plot**

Fluoride, MW-15010 (ug/L)



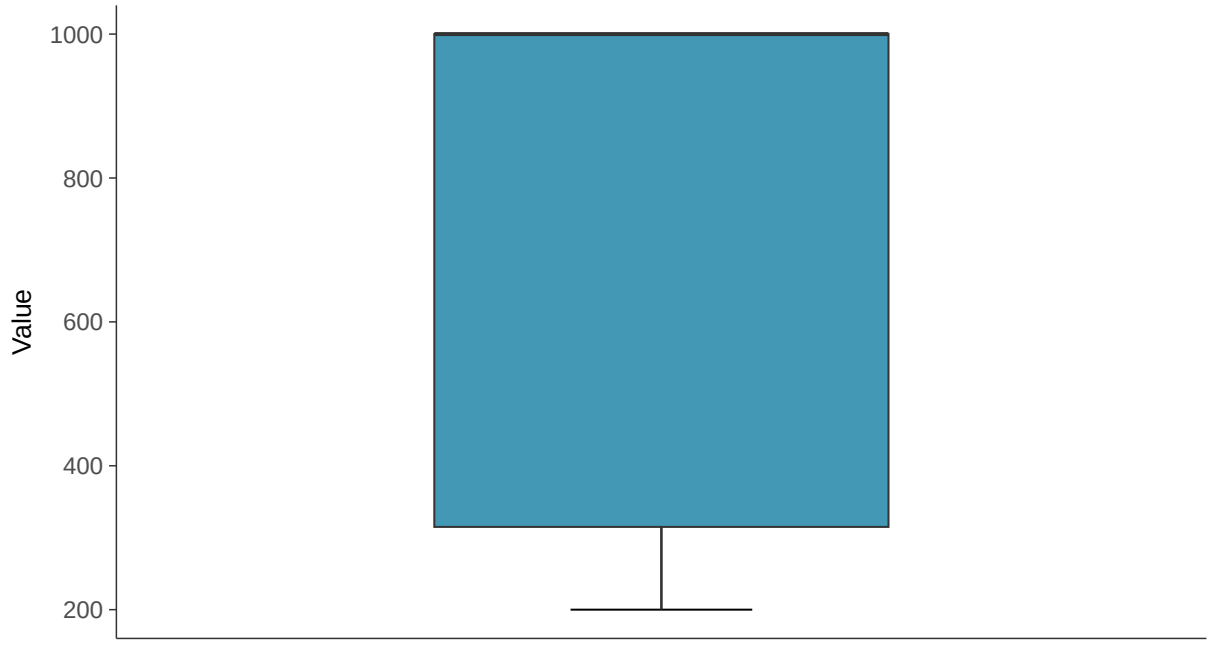

**Histogram**

Fluoride, MW-15010 (ug/L)



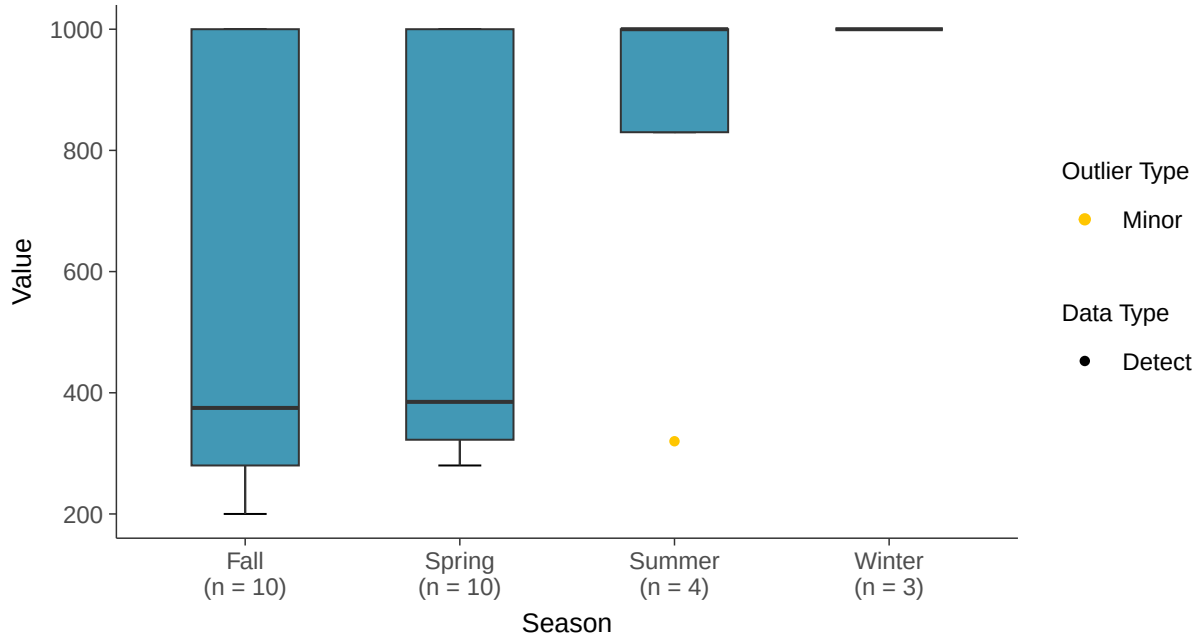
**Boxplot**

Fluoride, MW-15010 (ug/L)



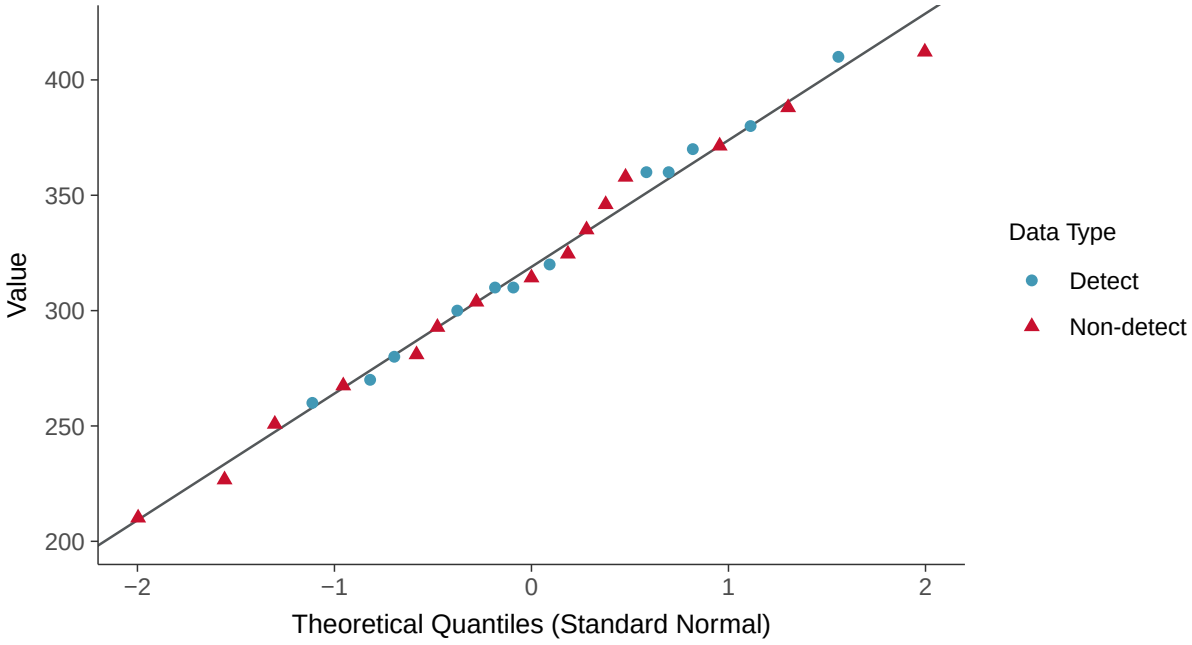

**Boxplot by Season**

Fluoride, MW-15010 (ug/L)



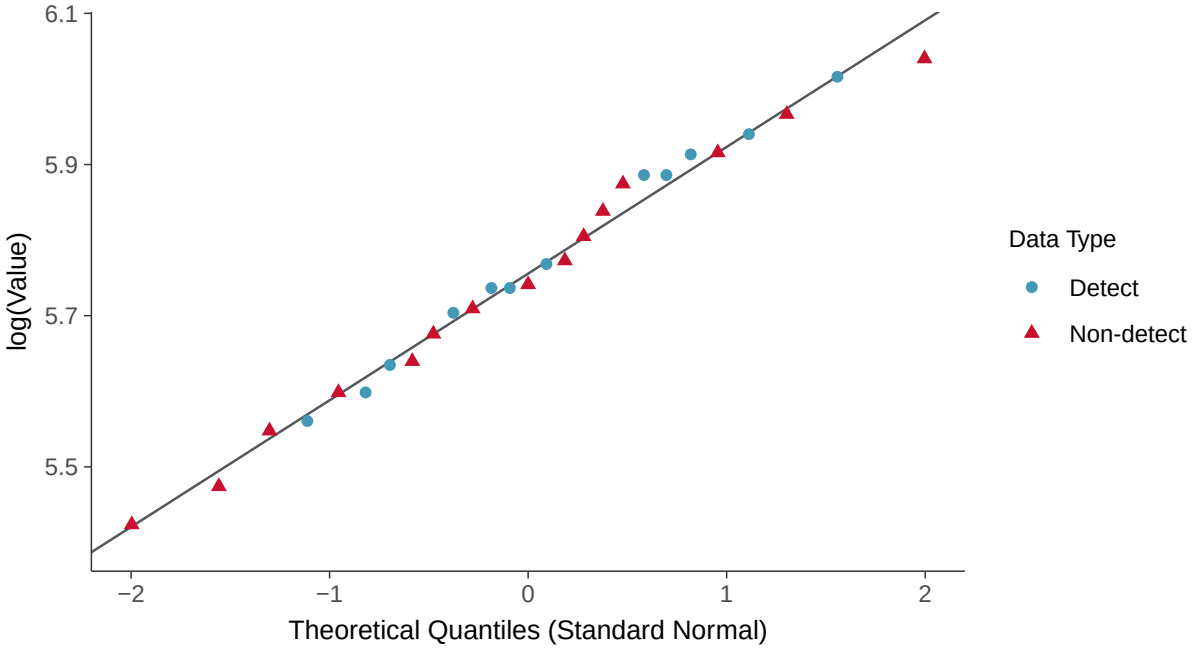
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15010 (ug/L)



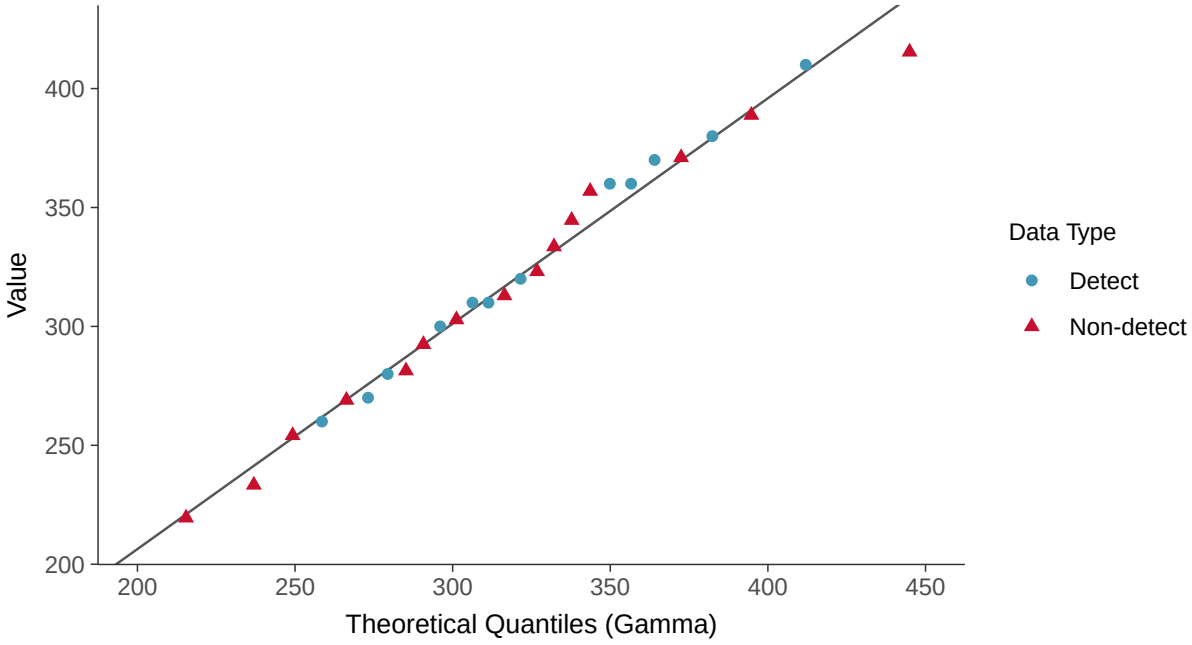

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15010 (ug/L)



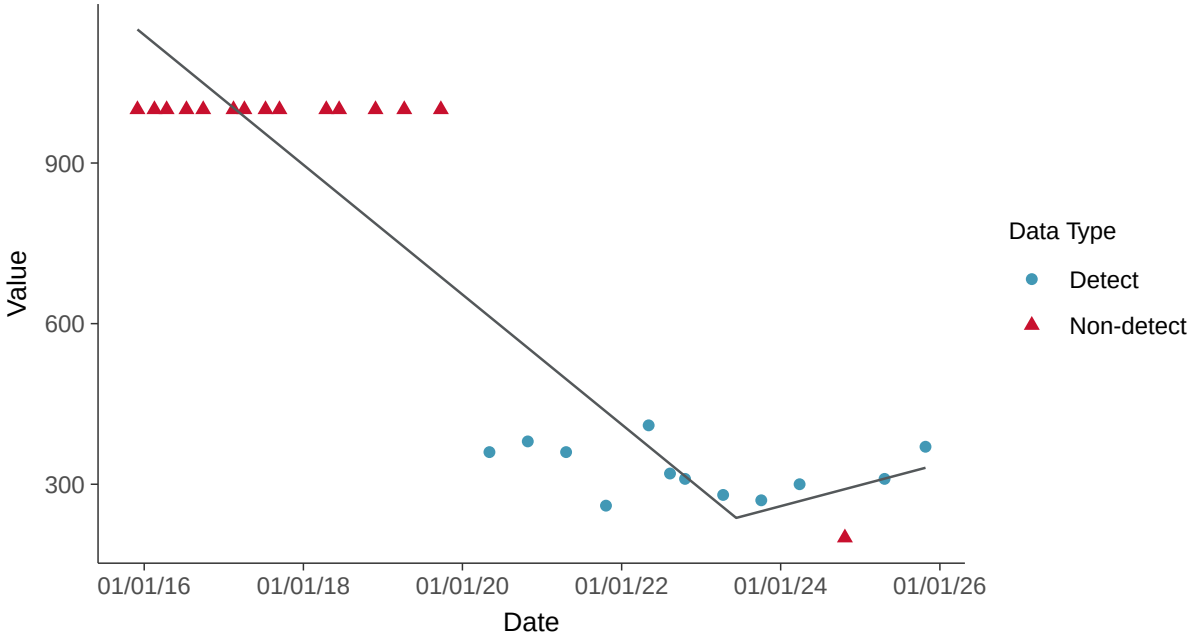
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15010 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15010 (ug/L)

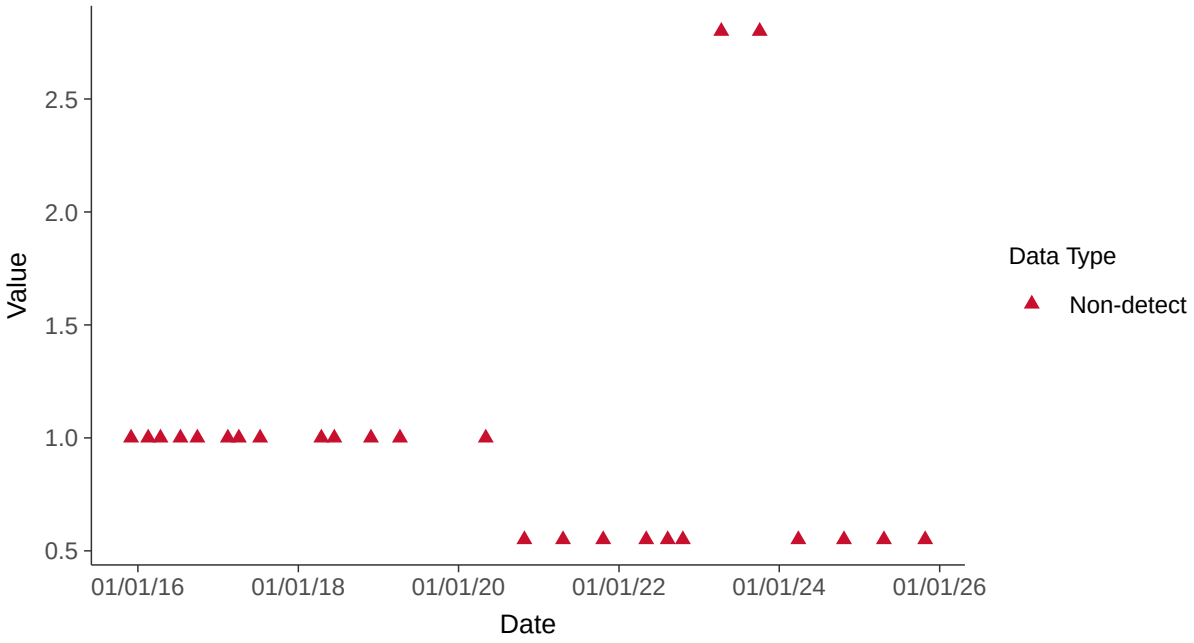


## Appendix IV: Lead, MW-15010

ID: 02_2_116

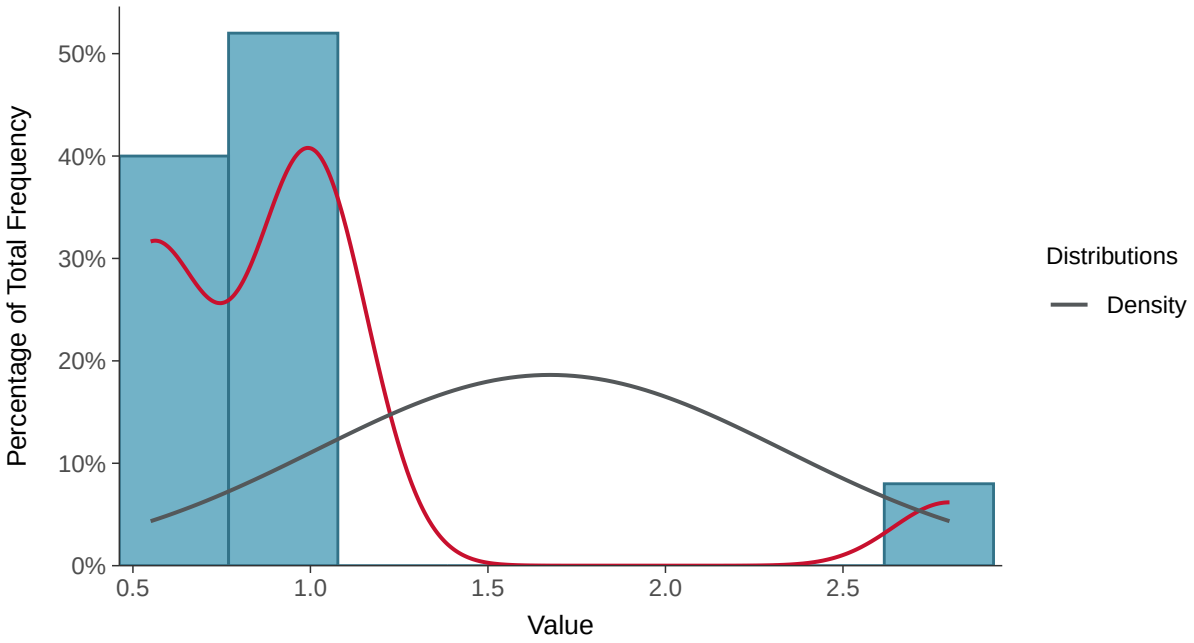
**Scatter Plot**

Lead, MW-15010 (ug/L)



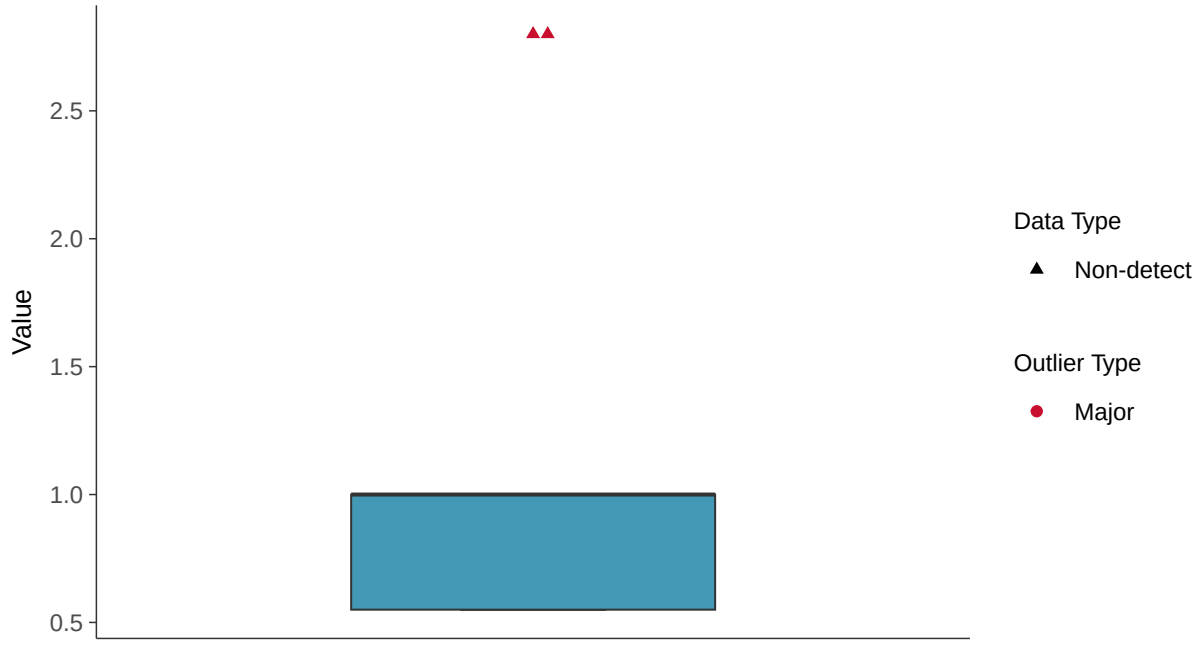

**Histogram**

Lead, MW-15010 (ug/L)



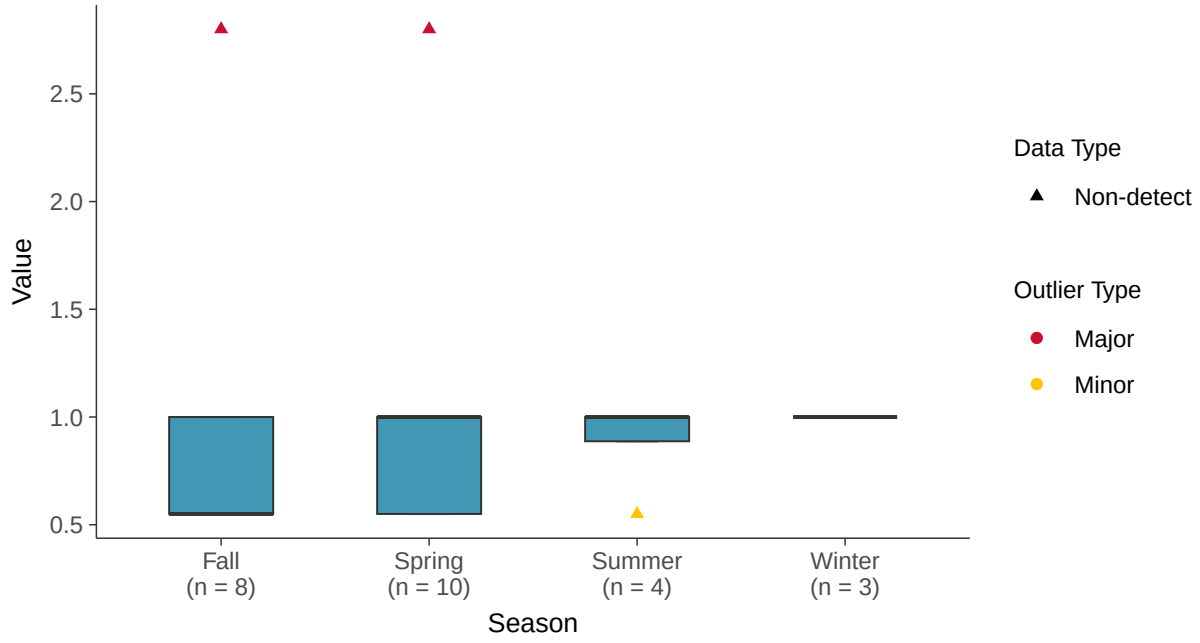
## Boxplot

Lead, MW-15010 (ug/L)



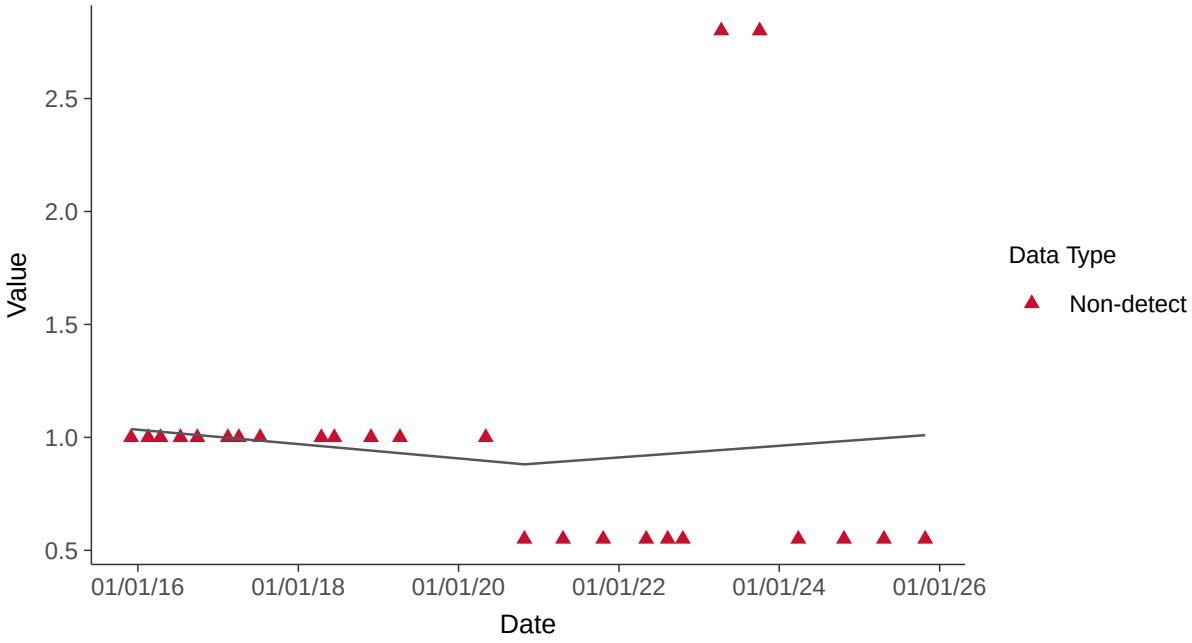

## Boxplot by Season

Lead, MW-15010 (ug/L)



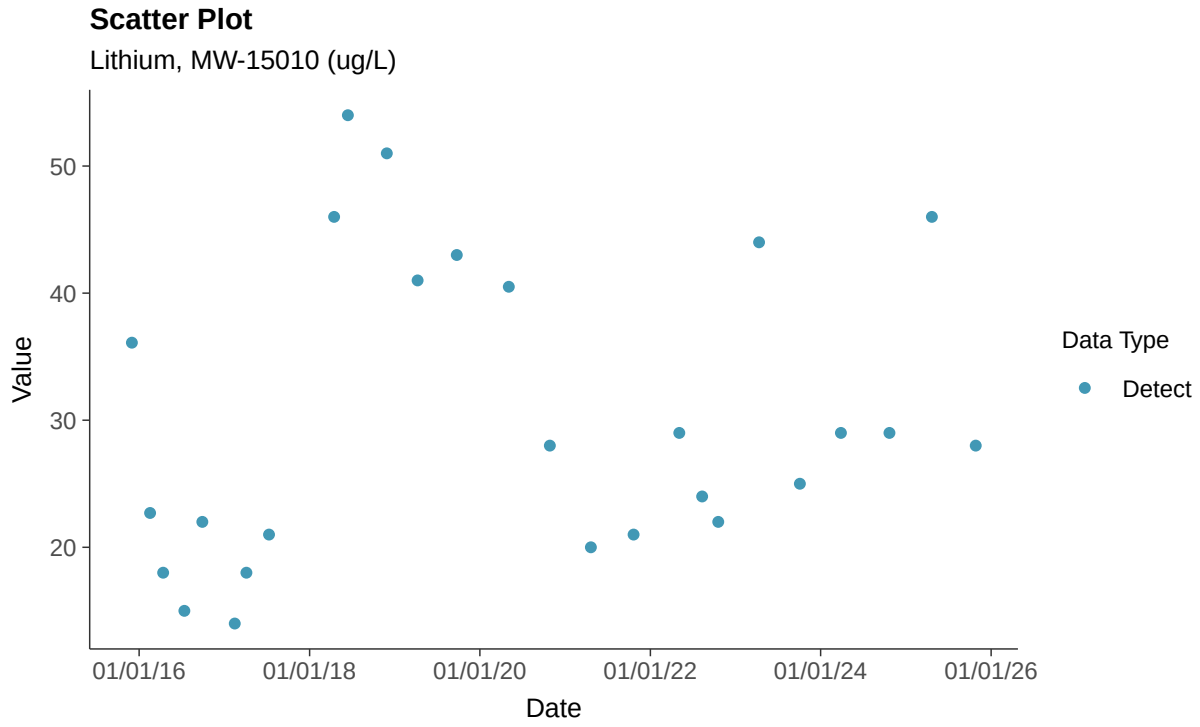
**Trend Regression: Piecewise Linear-Linear**

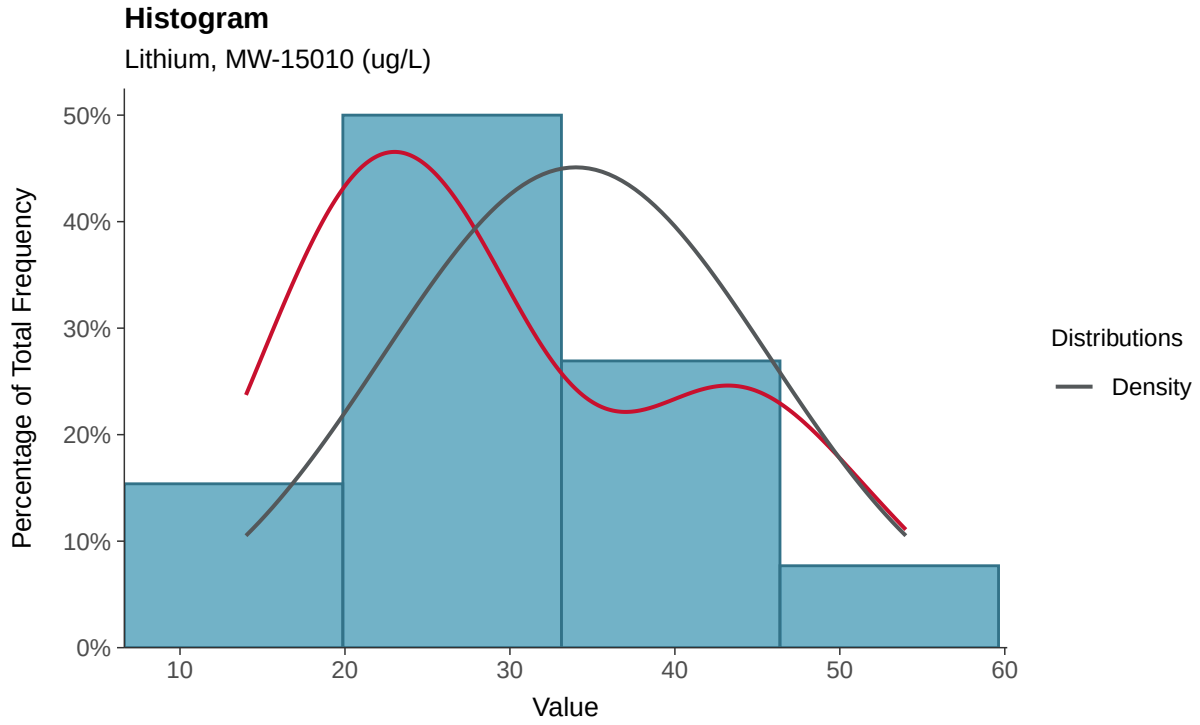
Lead, MW-15010 (ug/L)



## Appendix IV: Lithium, MW-15010

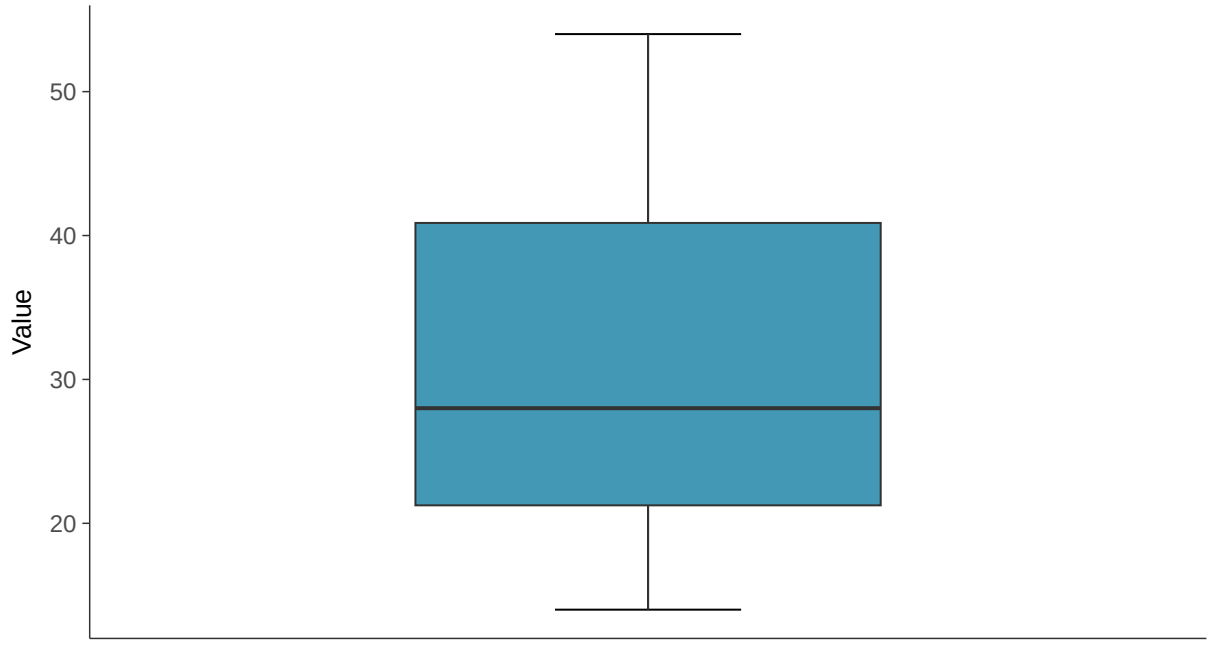
ID: 02_2_117



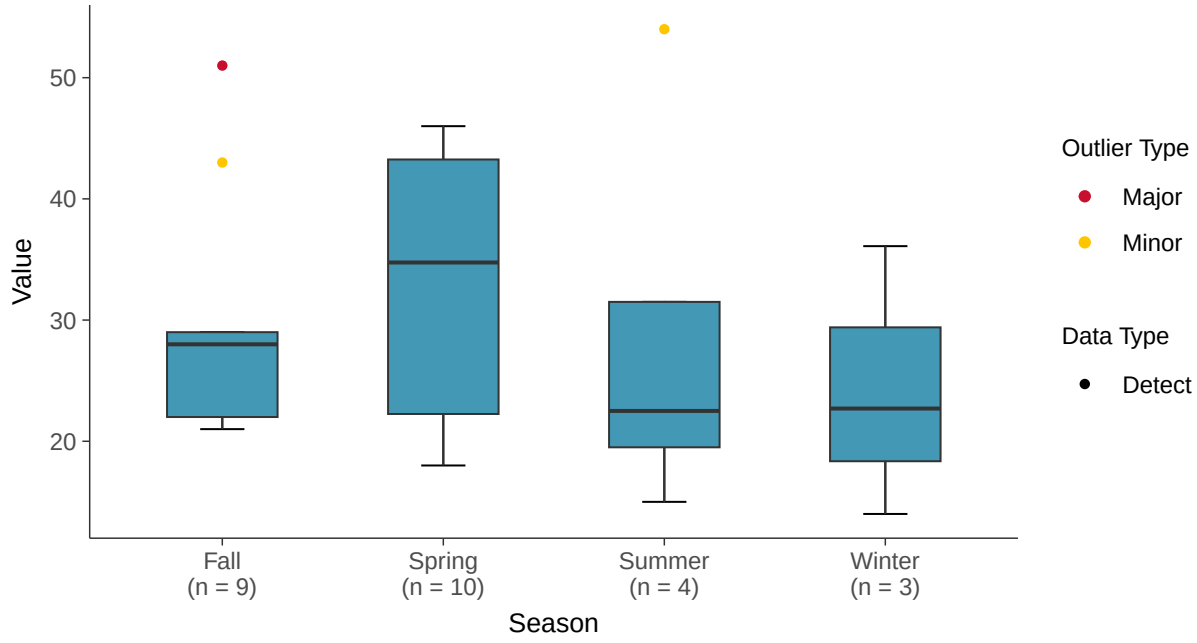
## Boxplot

Lithium, MW-15010 (ug/L)



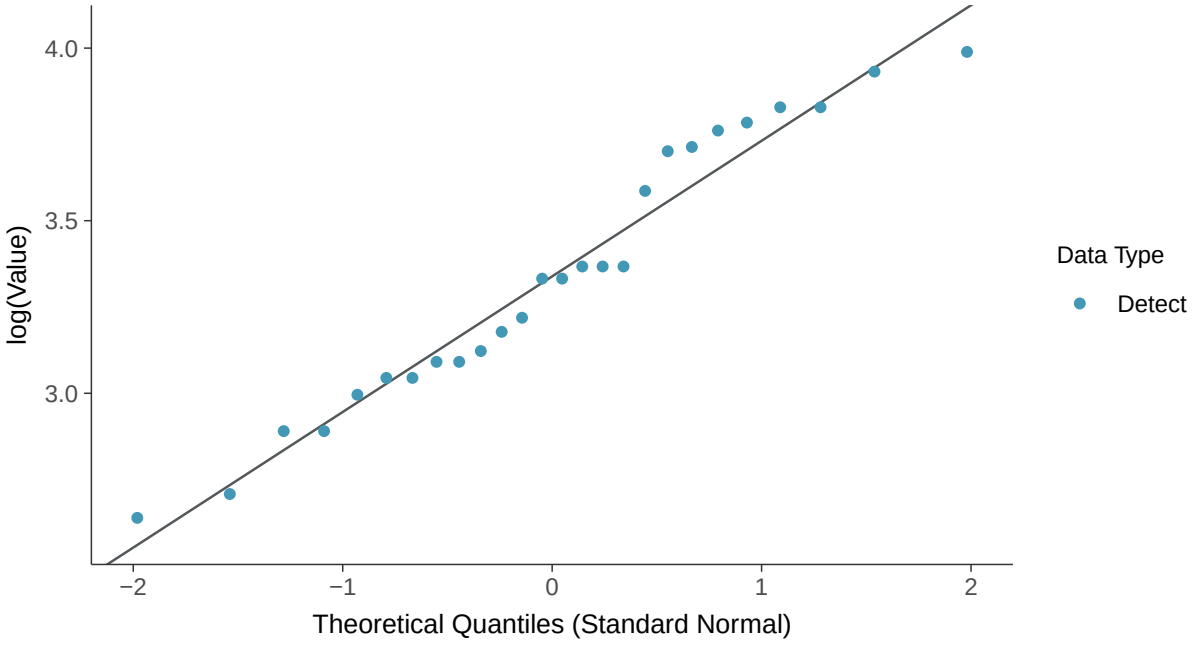

## Boxplot by Season

Lithium, MW-15010 (ug/L)



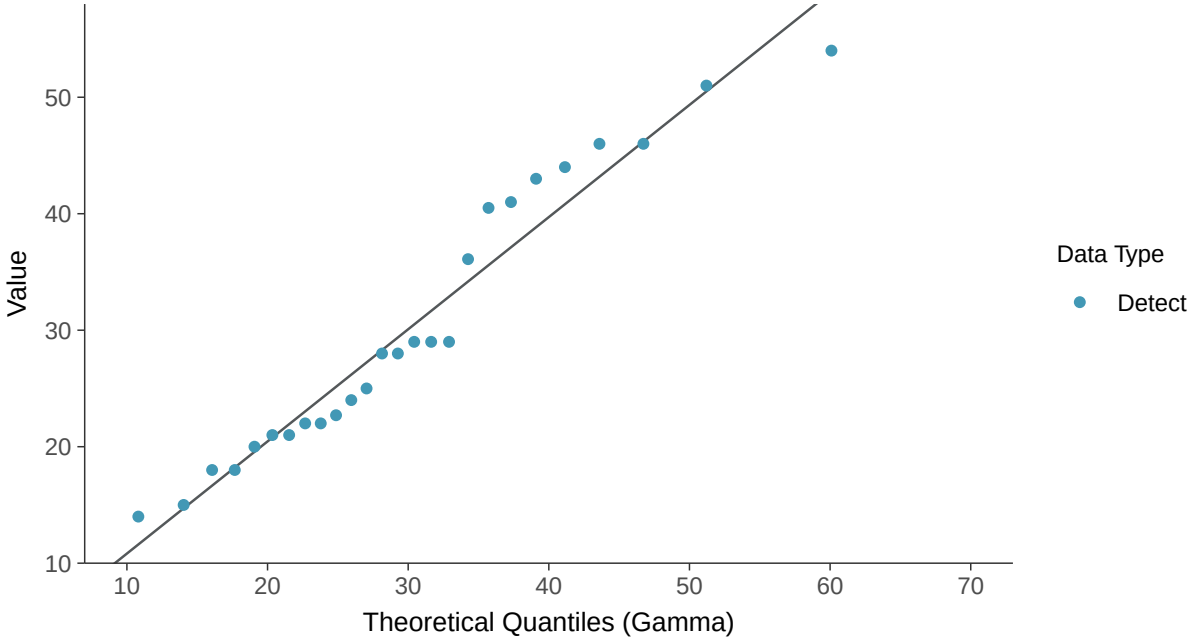
**Lognormal Q-Q plot**

Lithium, MW-15010 (ug/L)



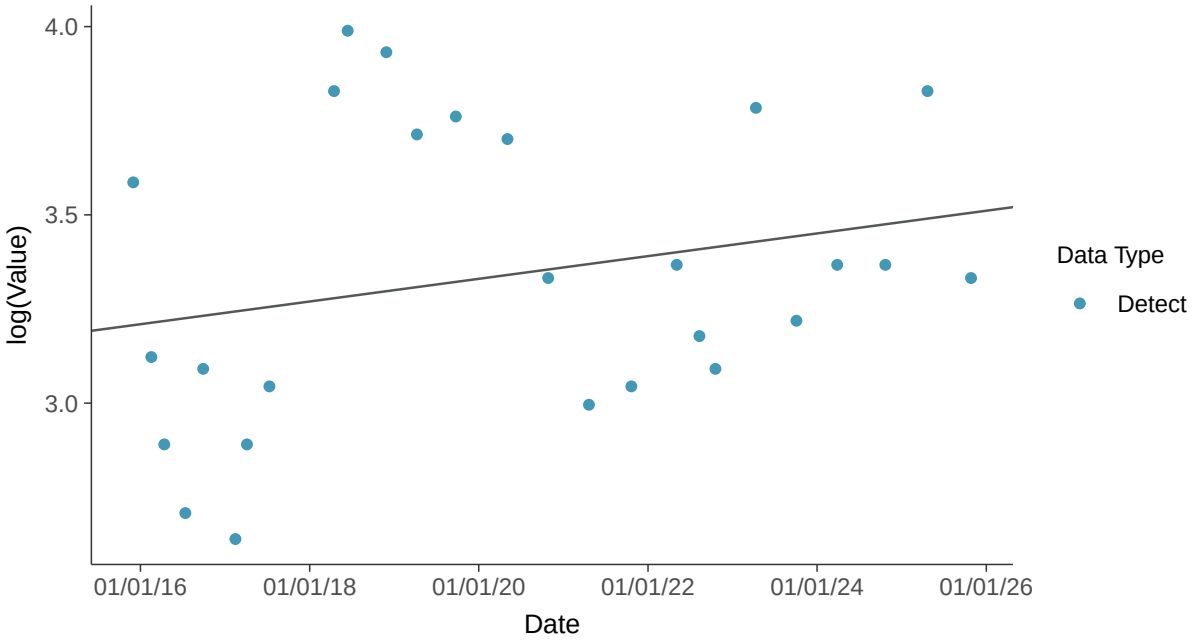

**Gamma Q-Q plot**

Lithium, MW-15010 (ug/L)



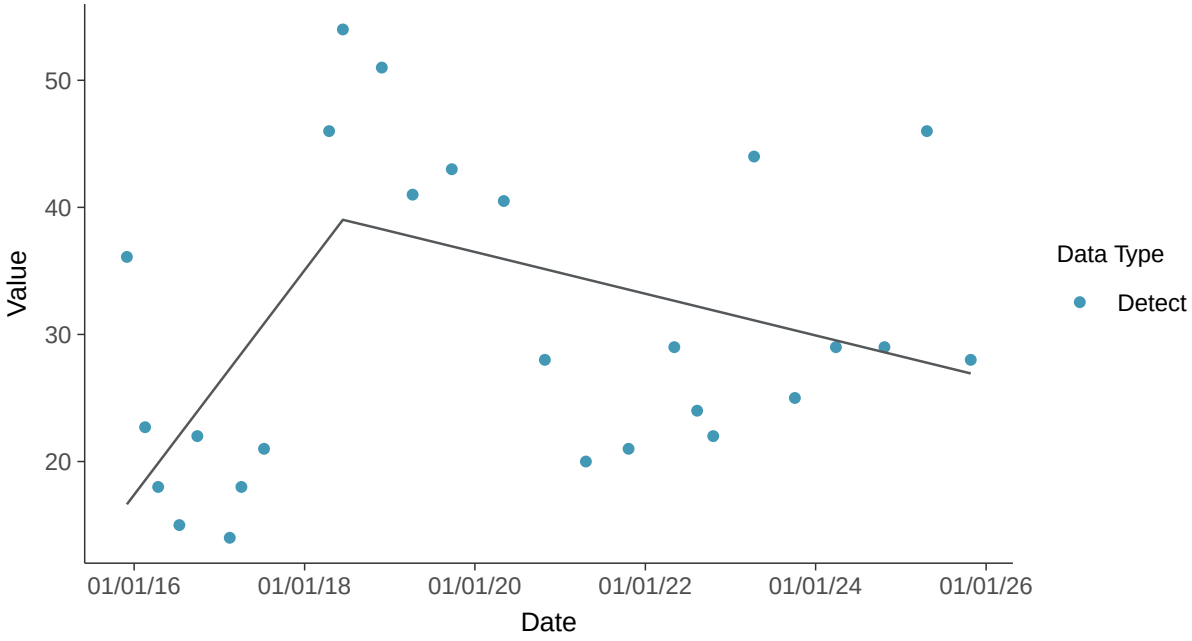
**Trend Regression: Lognormal MLE**

Lithium, MW-15010 (ug/L)



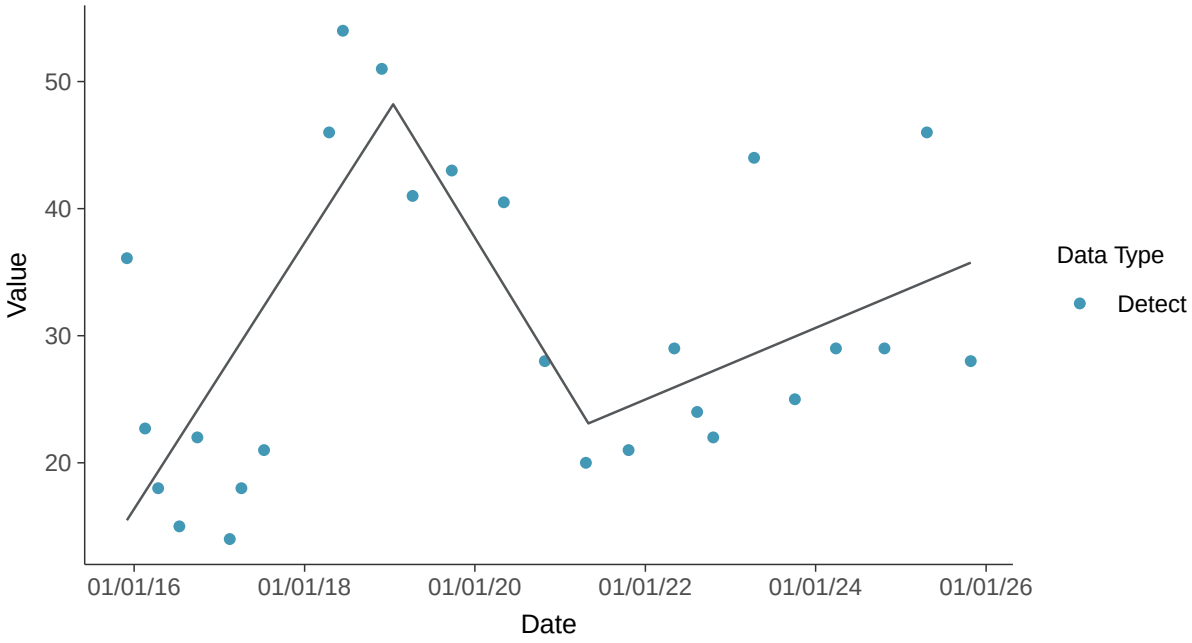

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15010 (ug/L)



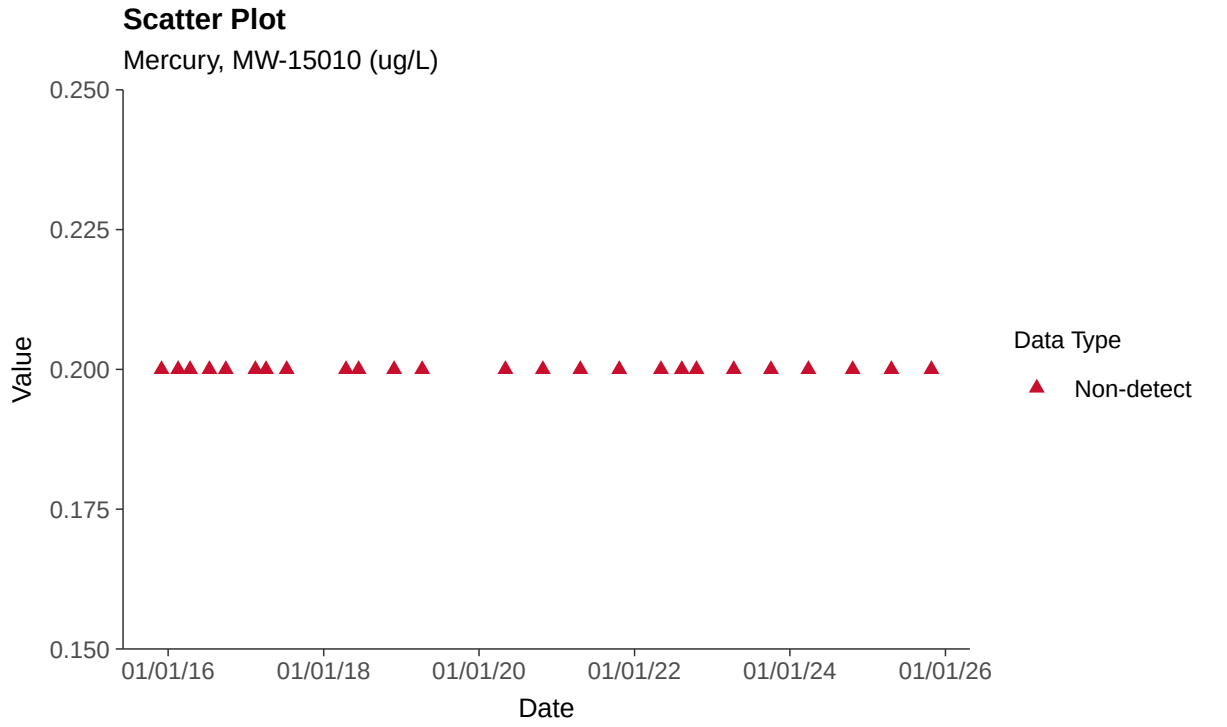
**Trend Regression: Piecewise Linear-Linear-Linear**

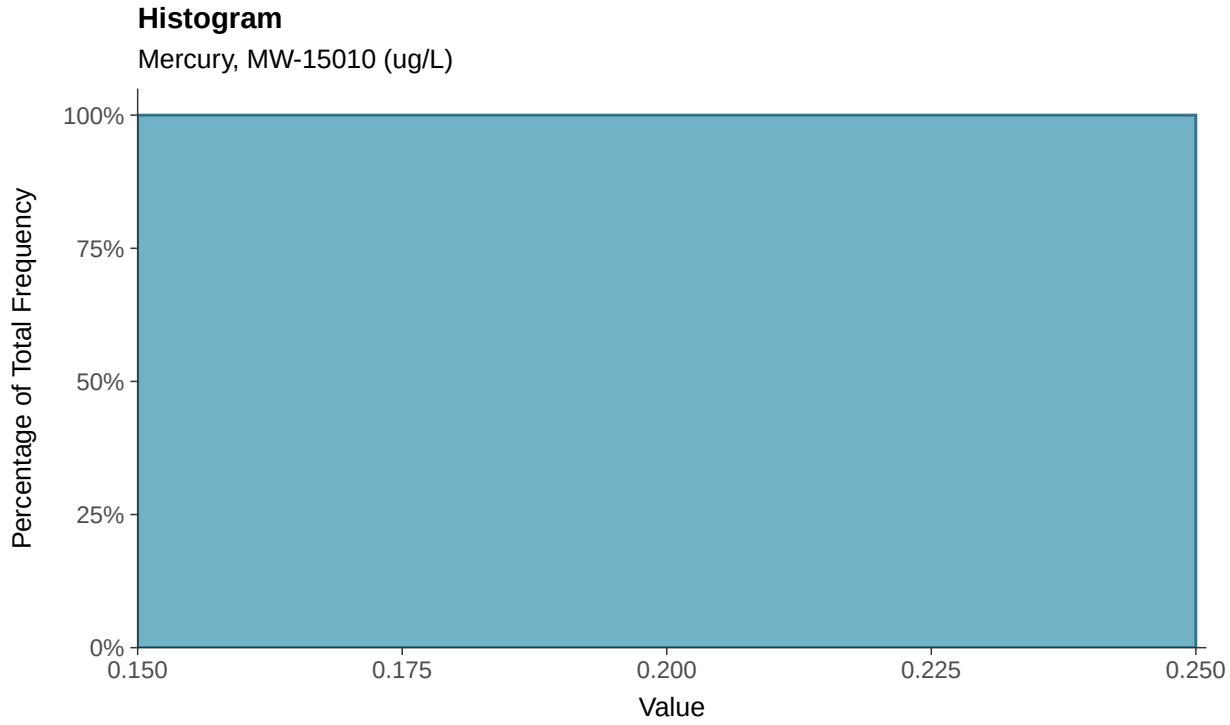
Lithium, MW-15010 (ug/L)



## Appendix IV: Mercury, MW-15010

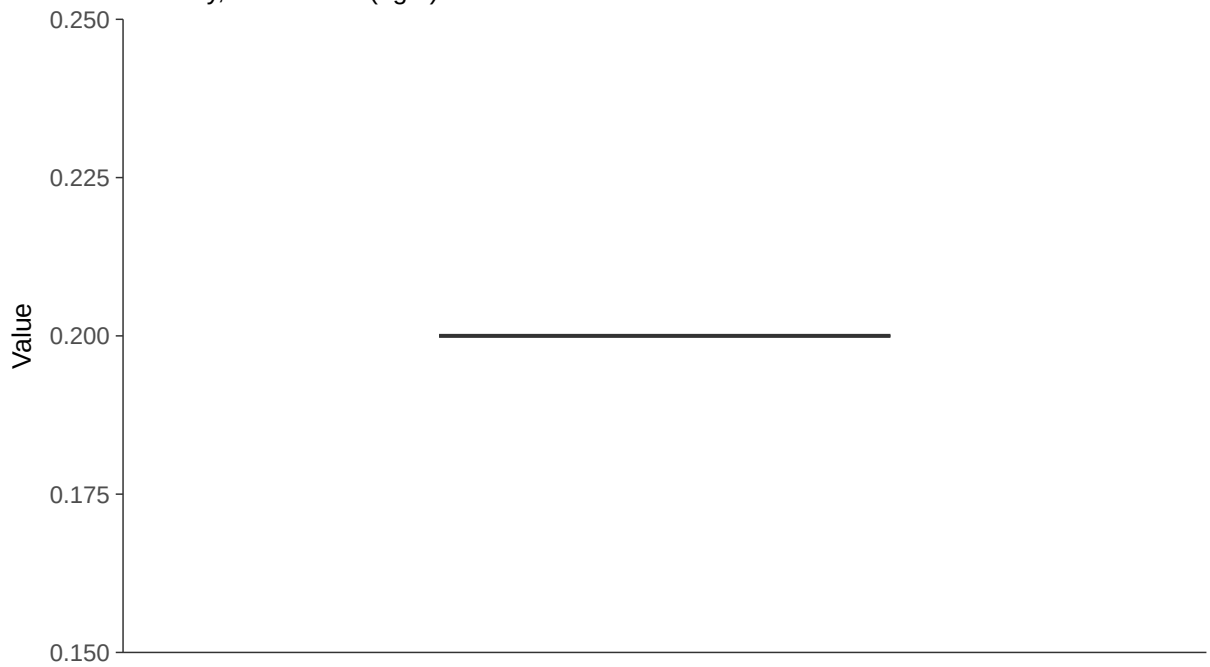
ID: 02_2_118



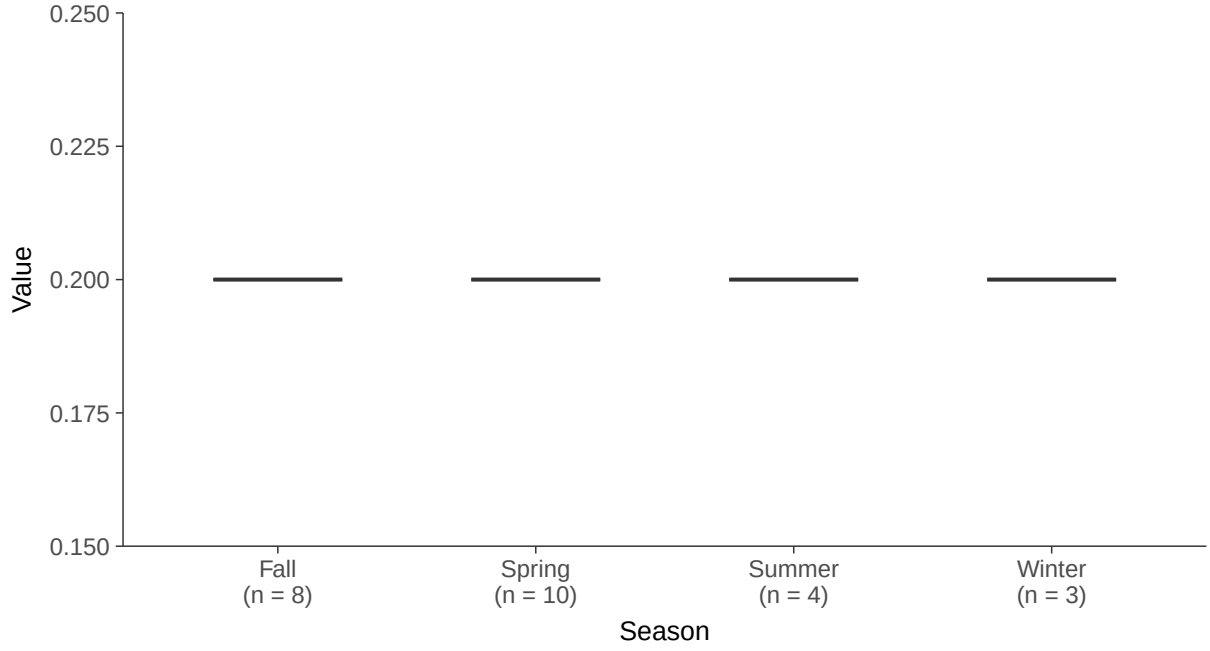
**Boxplot**

Mercury, MW-15010 (ug/L)




**Boxplot by Season**

Mercury, MW-15010 (ug/L)

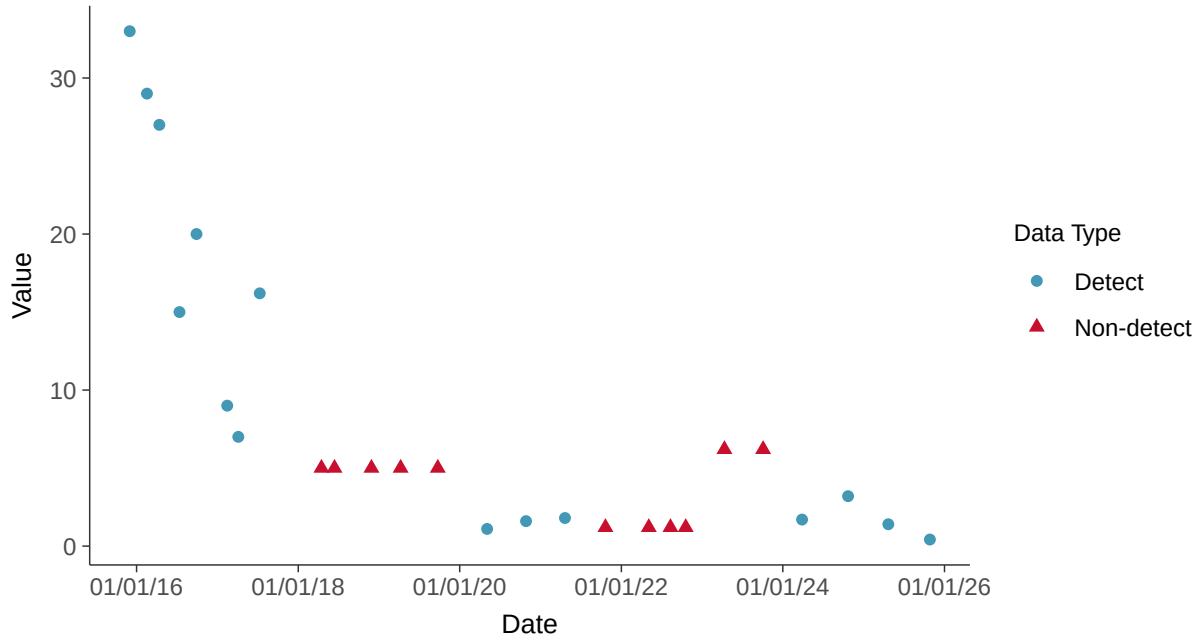


## Appendix IV: Molybdenum, MW-15010

ID: 02_2_119

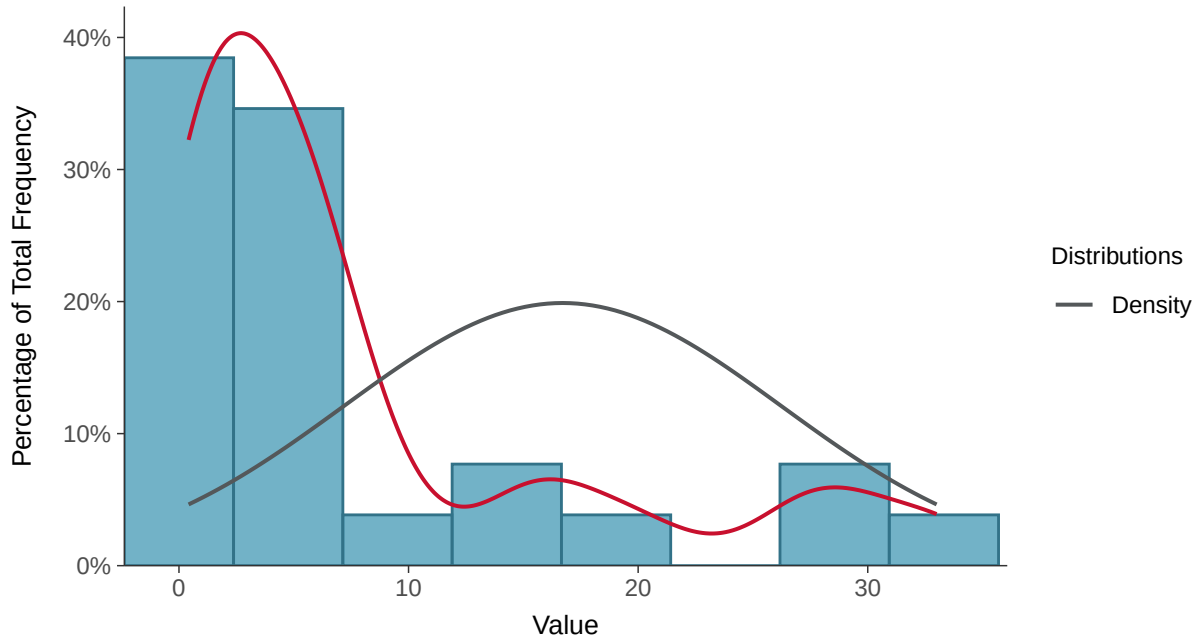
**Scatter Plot**

Molybdenum, MW-15010 (ug/L)



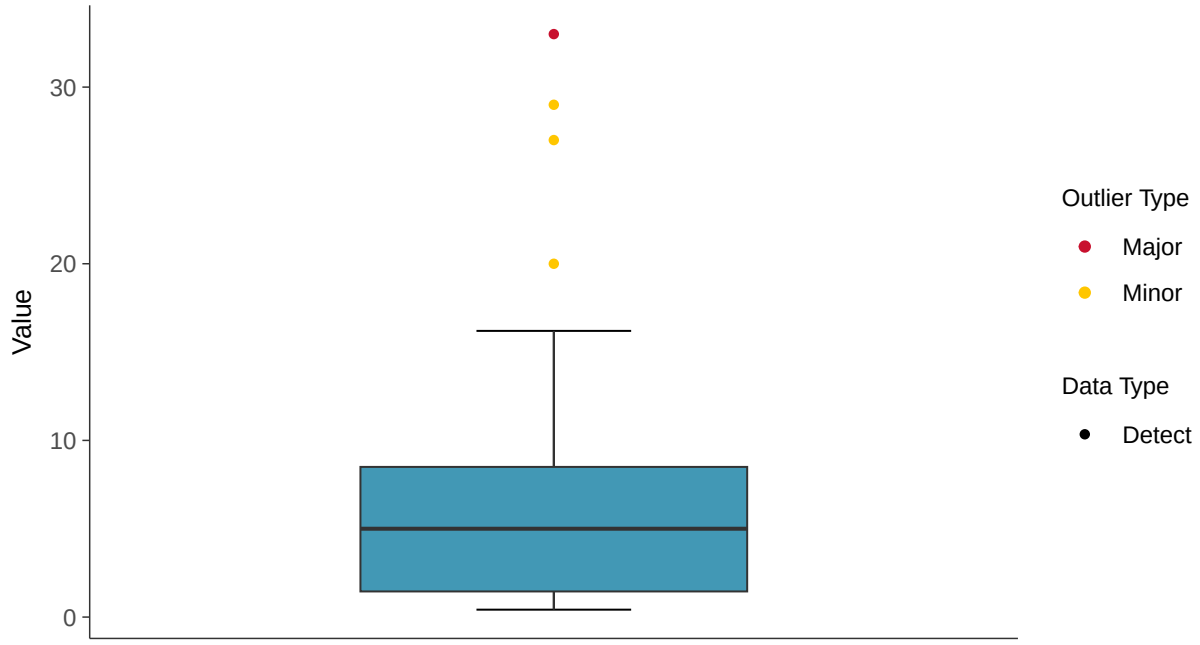

**Histogram**

Molybdenum, MW-15010 (ug/L)



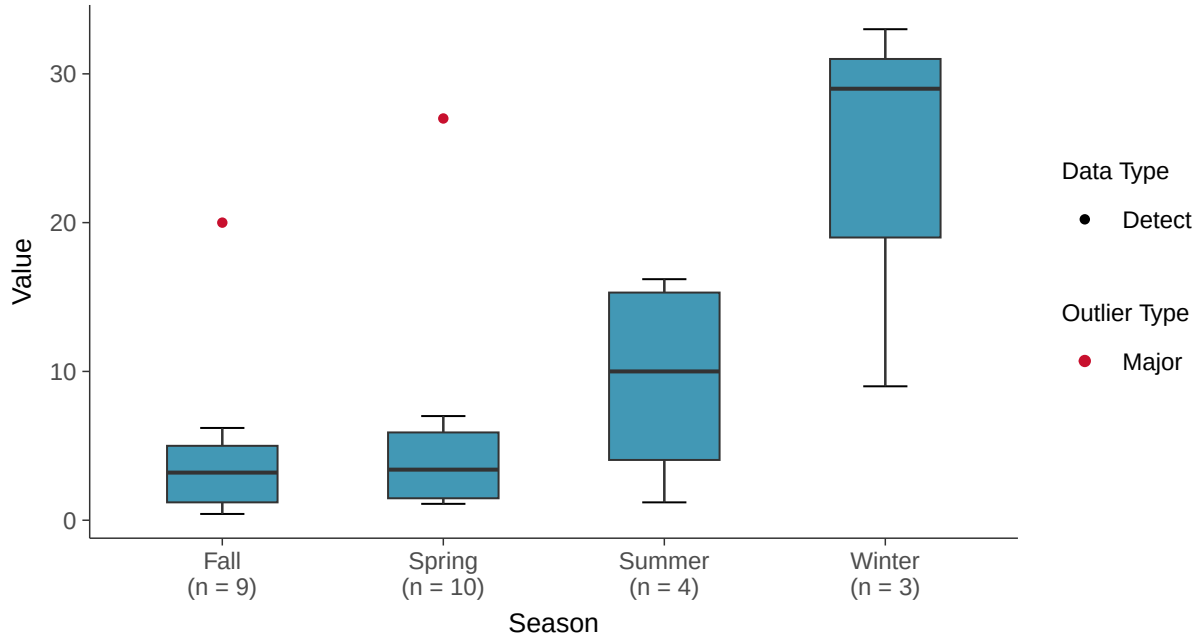
## Boxplot

Molybdenum, MW-15010 (ug/L)



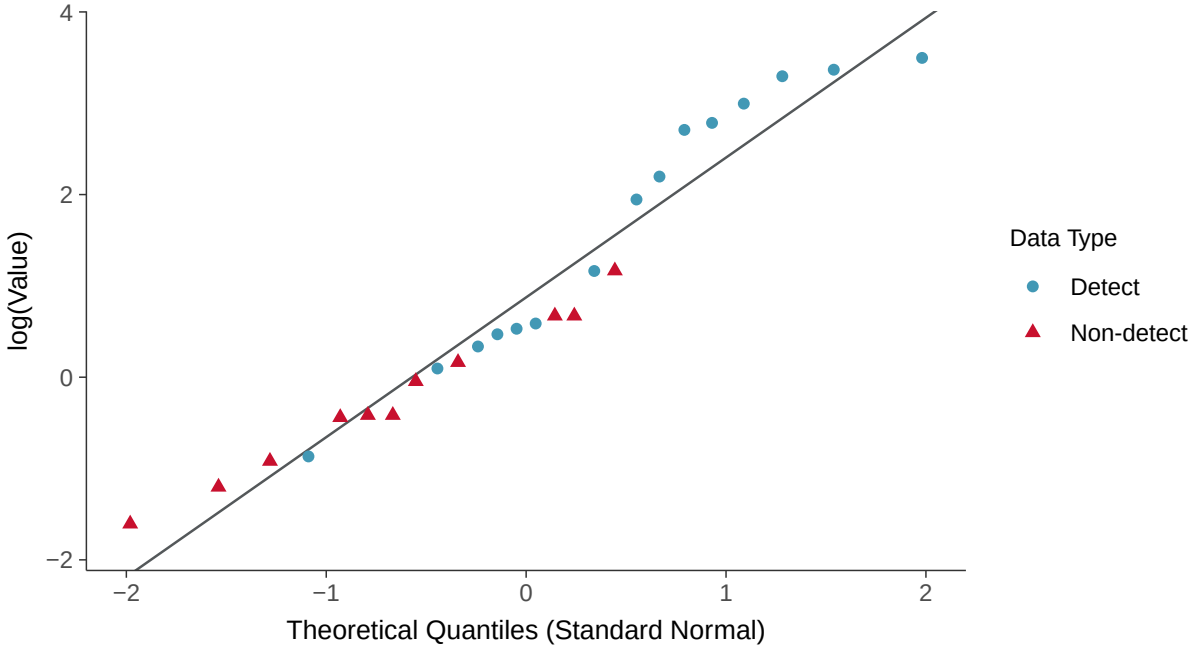

## Boxplot by Season

Molybdenum, MW-15010 (ug/L)



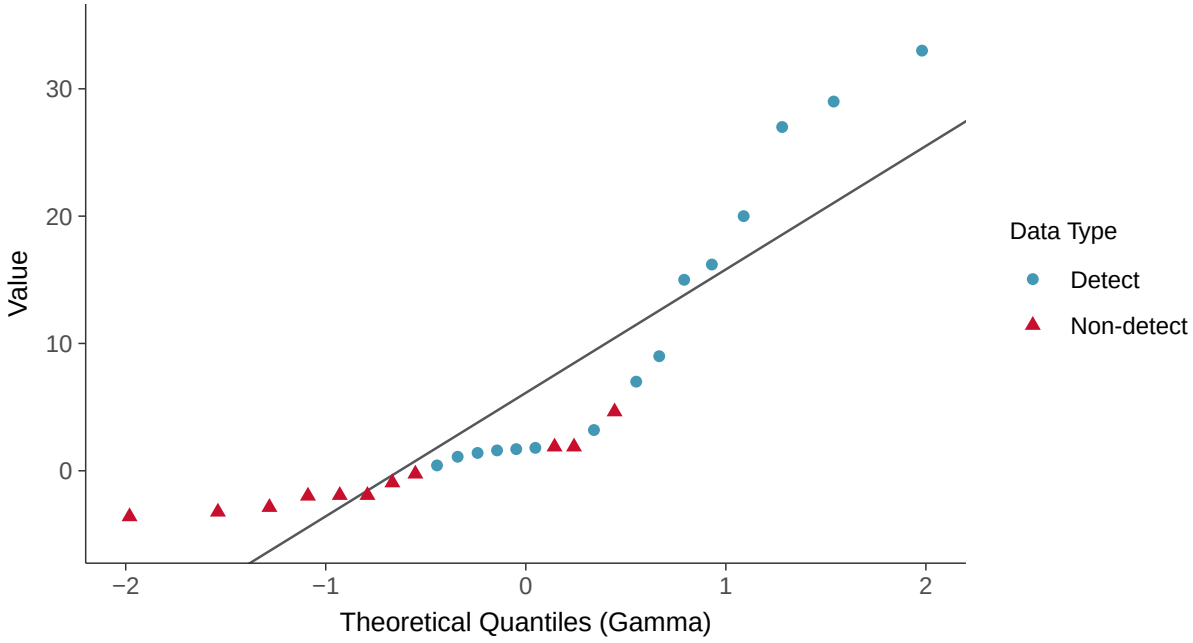
**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15010 (ug/L)



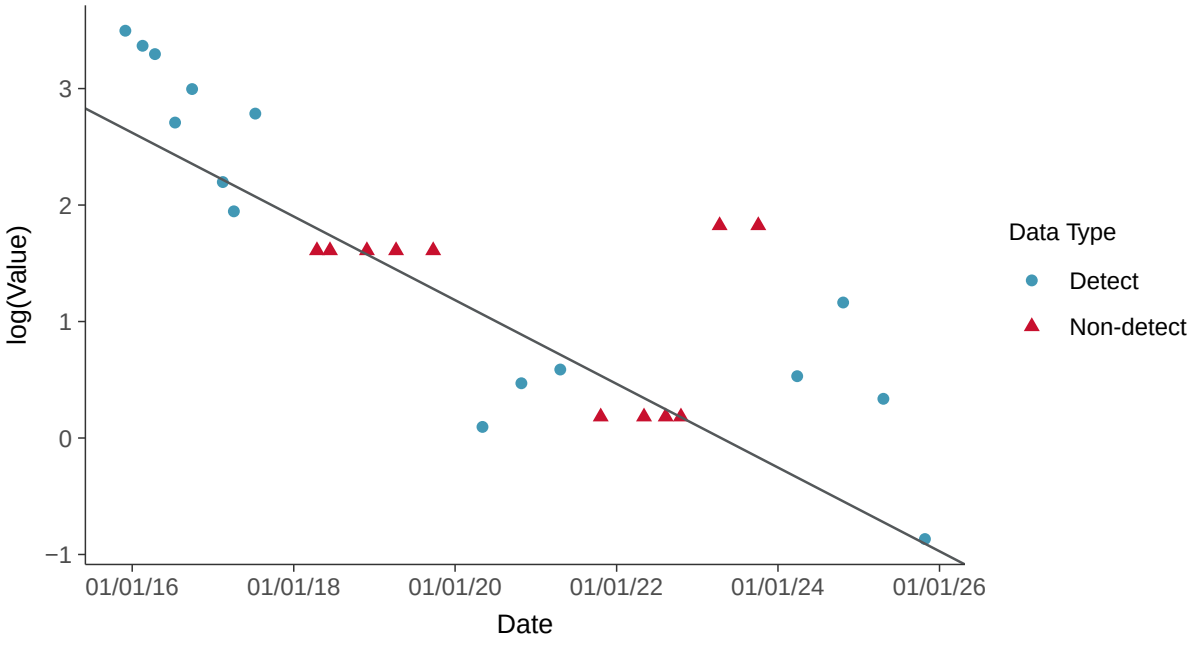

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15010 (ug/L)



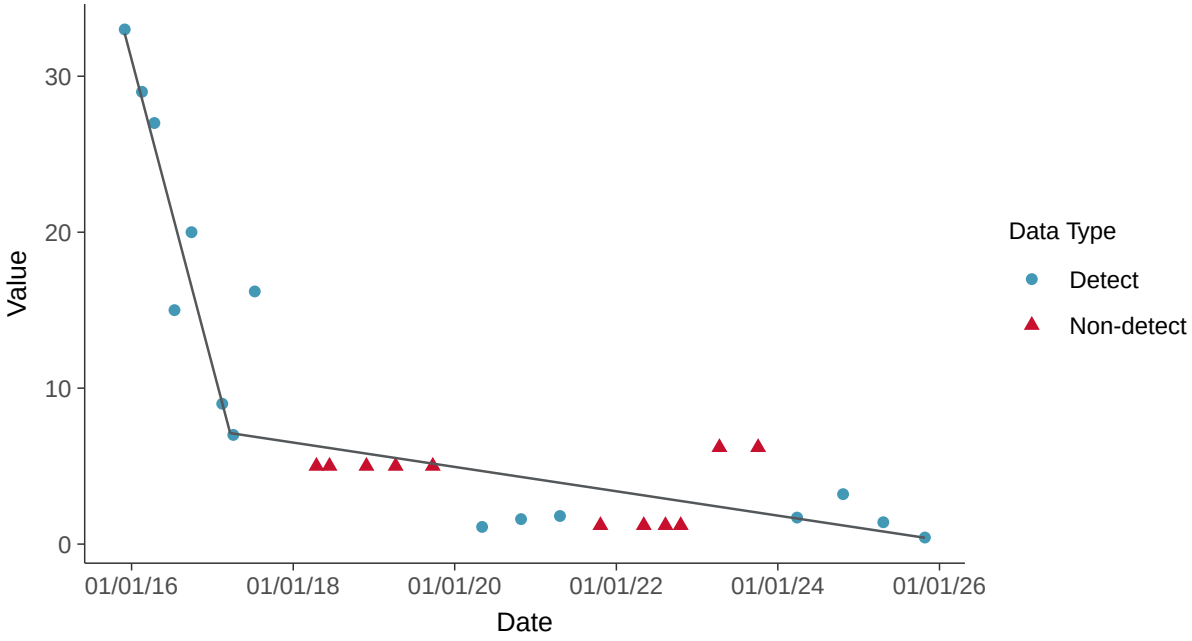
**Trend Regression: Lognormal MLE**

Molybdenum, MW-15010 (ug/L)



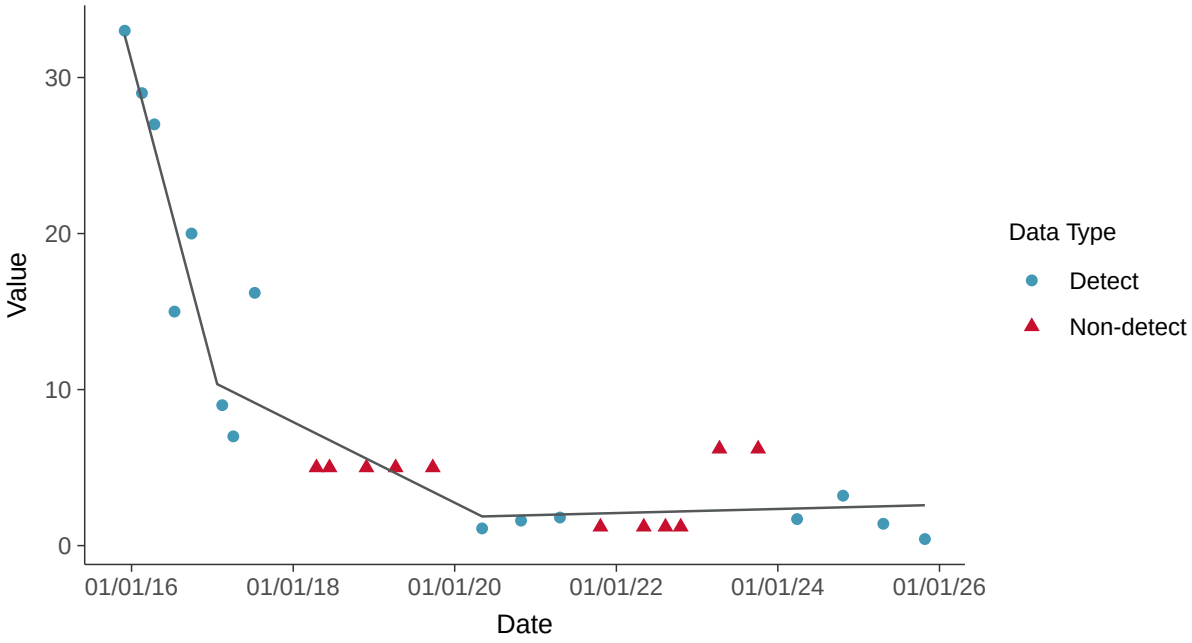

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15010 (ug/L)



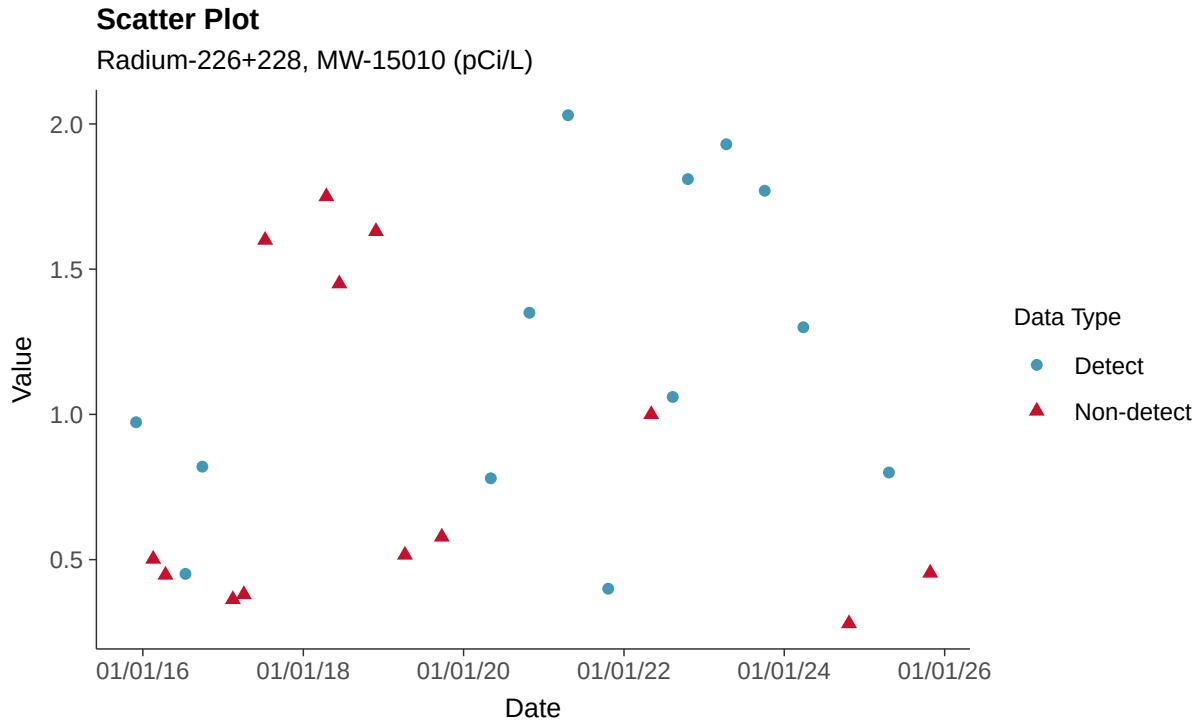
**Trend Regression: Piecewise Linear-Linear-Linear**

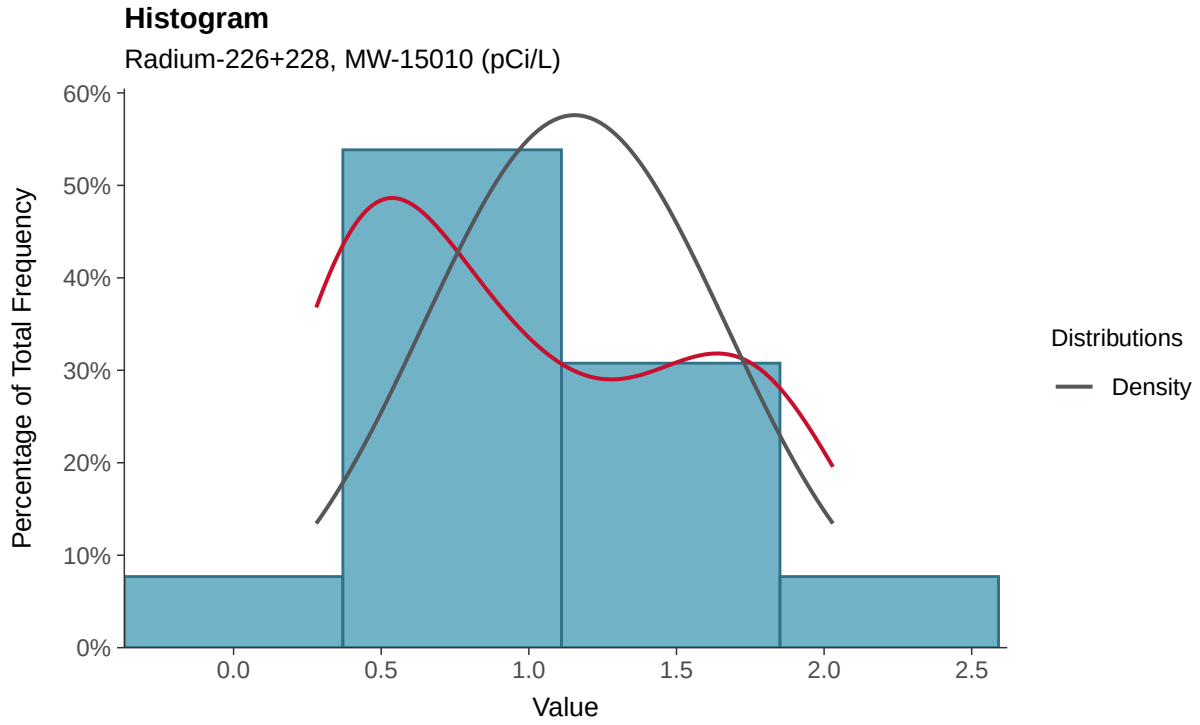
Molybdenum, MW-15010 (ug/L)



## Appendix IV: Radium-226+228, MW-15010

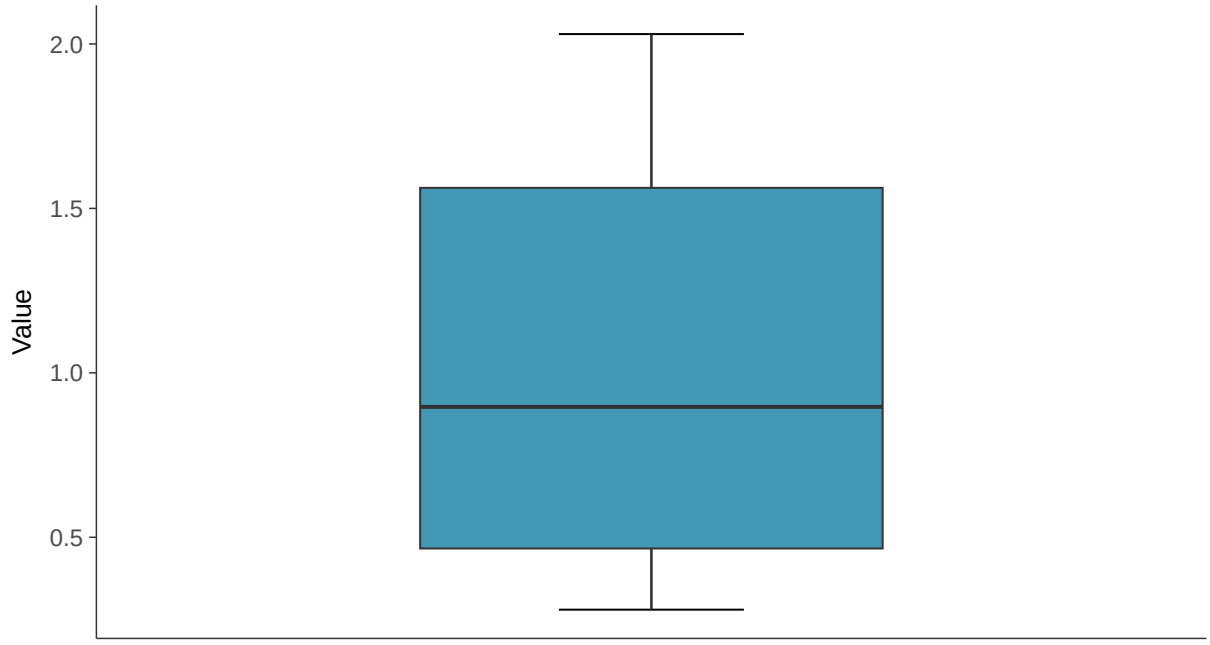
ID: 02_2_125



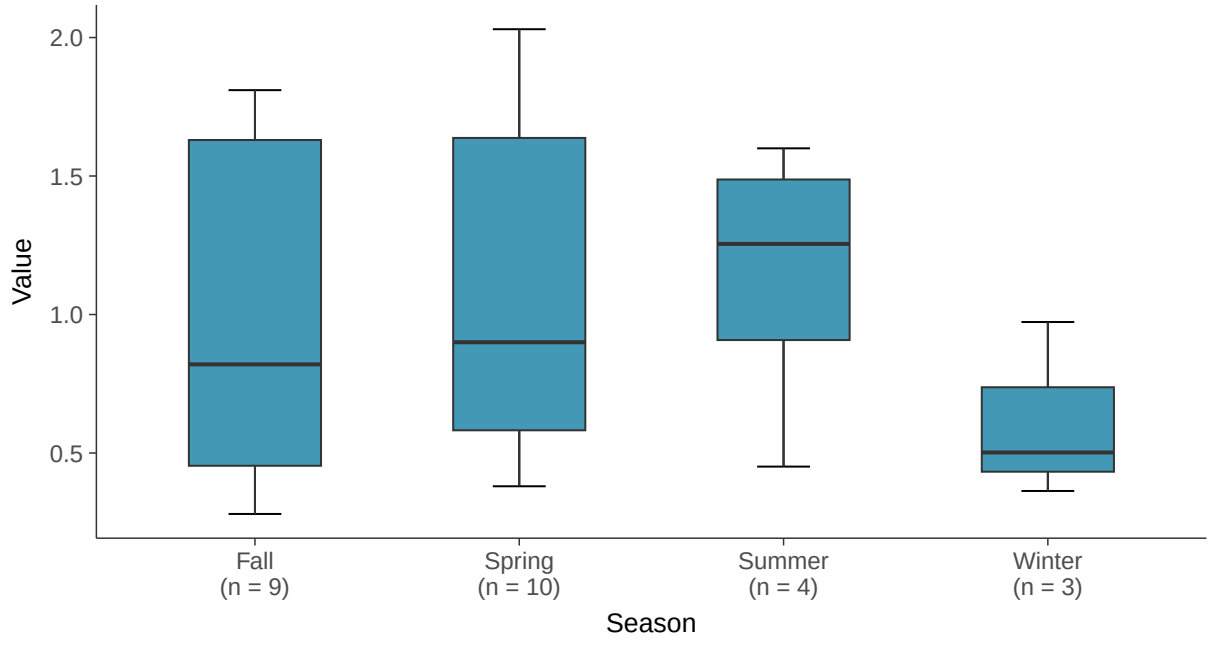
## Boxplot

Radium-226+228, MW-15010 (pCi/L)



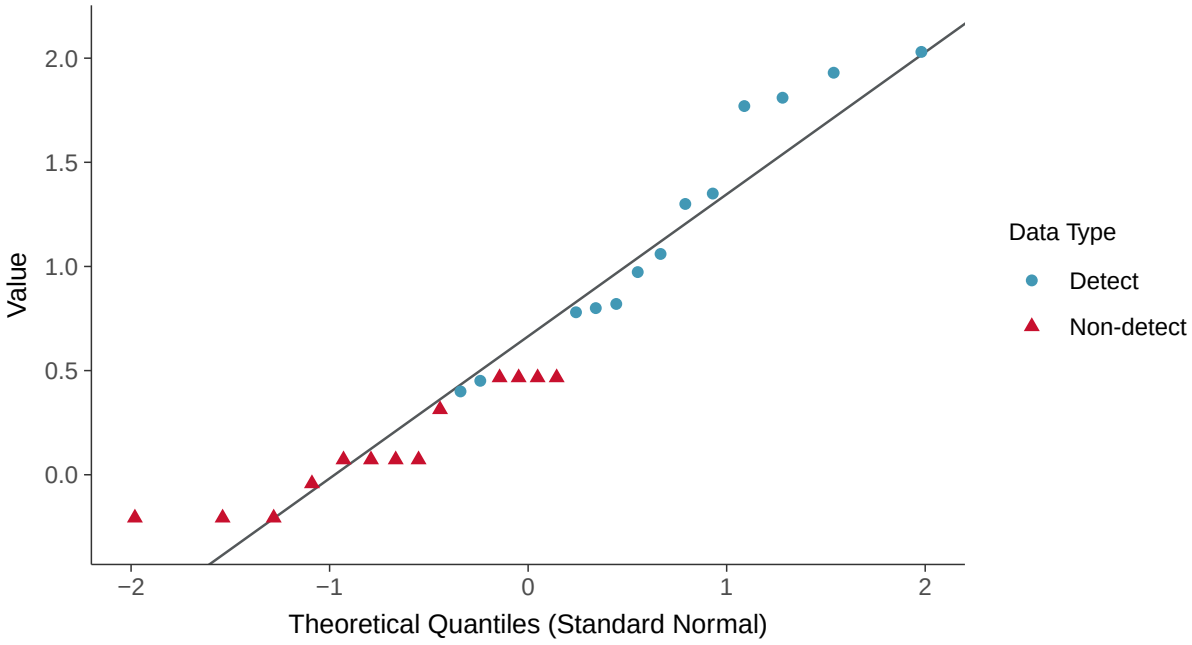

## Boxplot by Season

Radium-226+228, MW-15010 (pCi/L)



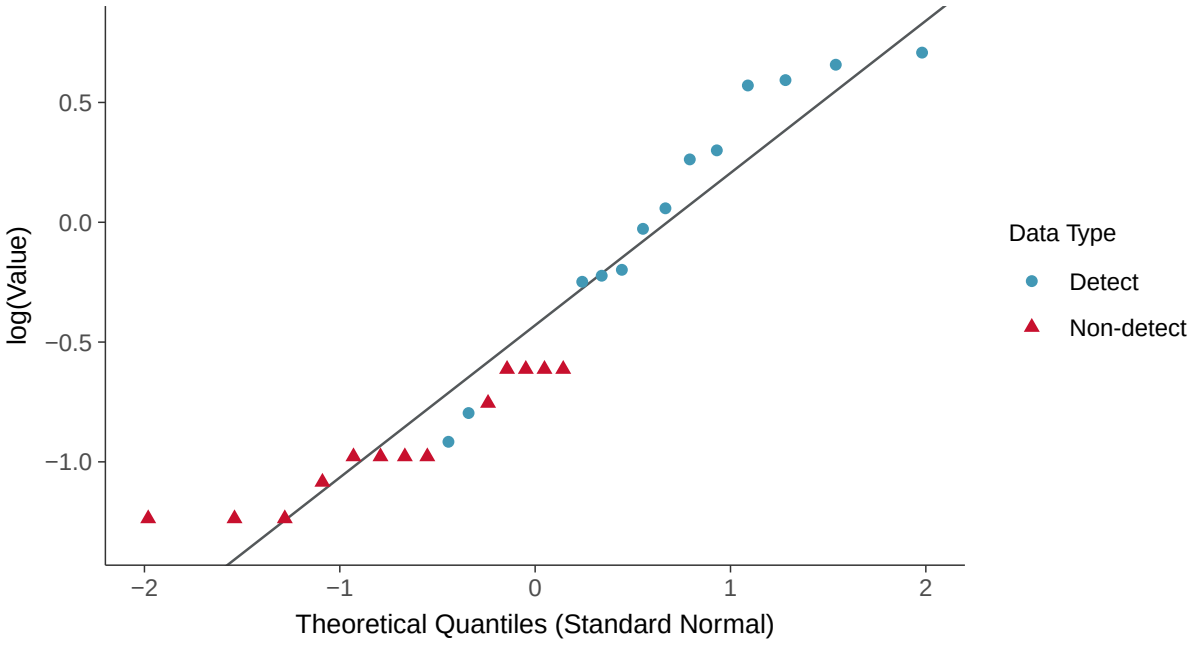
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15010 (pCi/L)



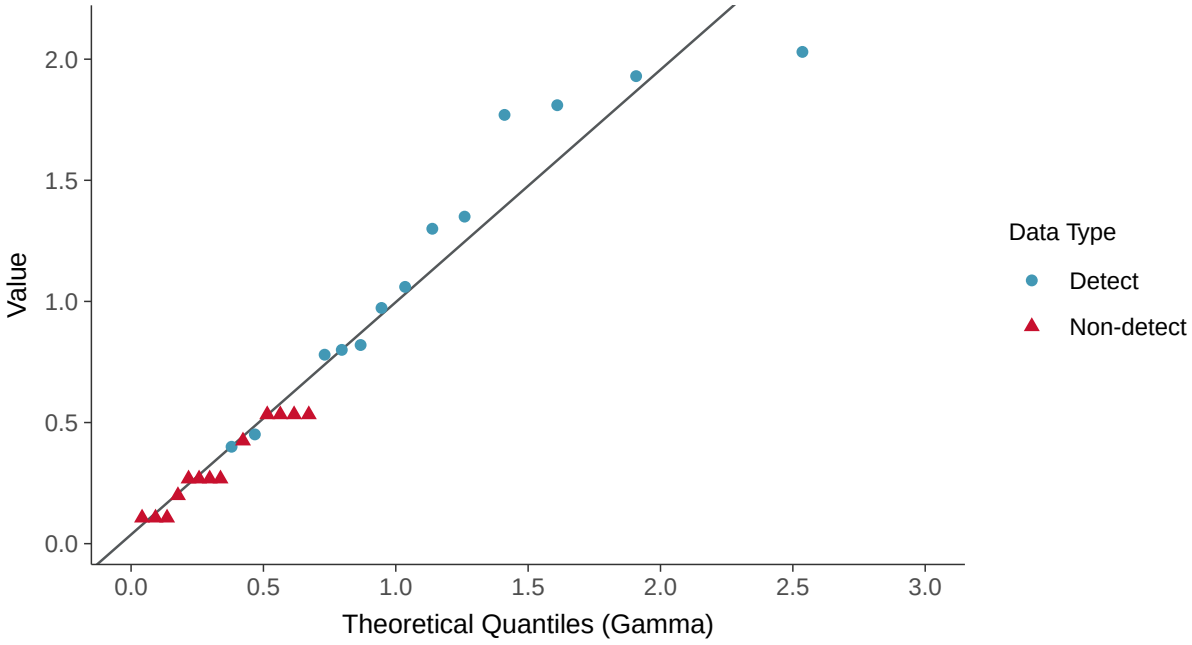

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15010 (pCi/L)



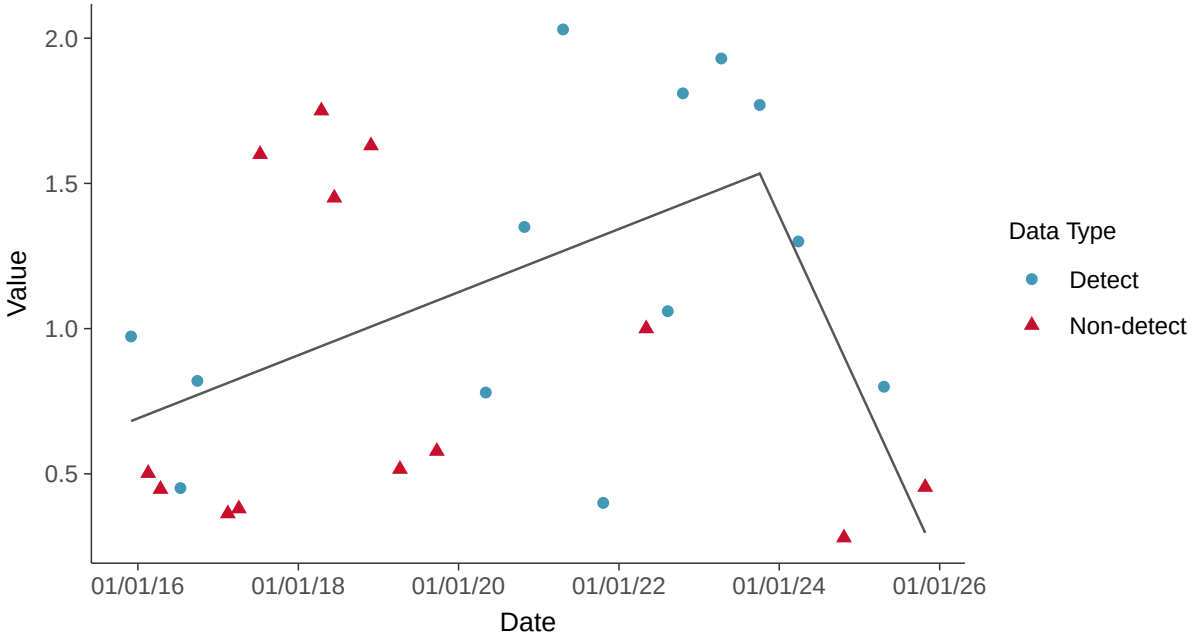
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15010 (pCi/L)



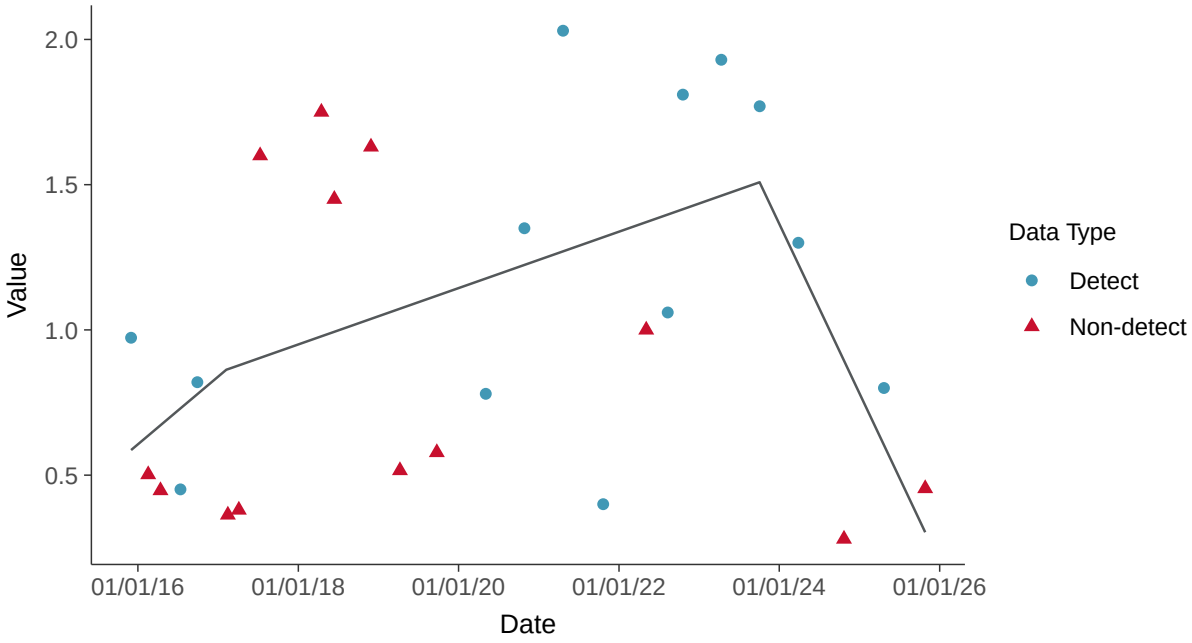

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15010 (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15010 (pCi/L)

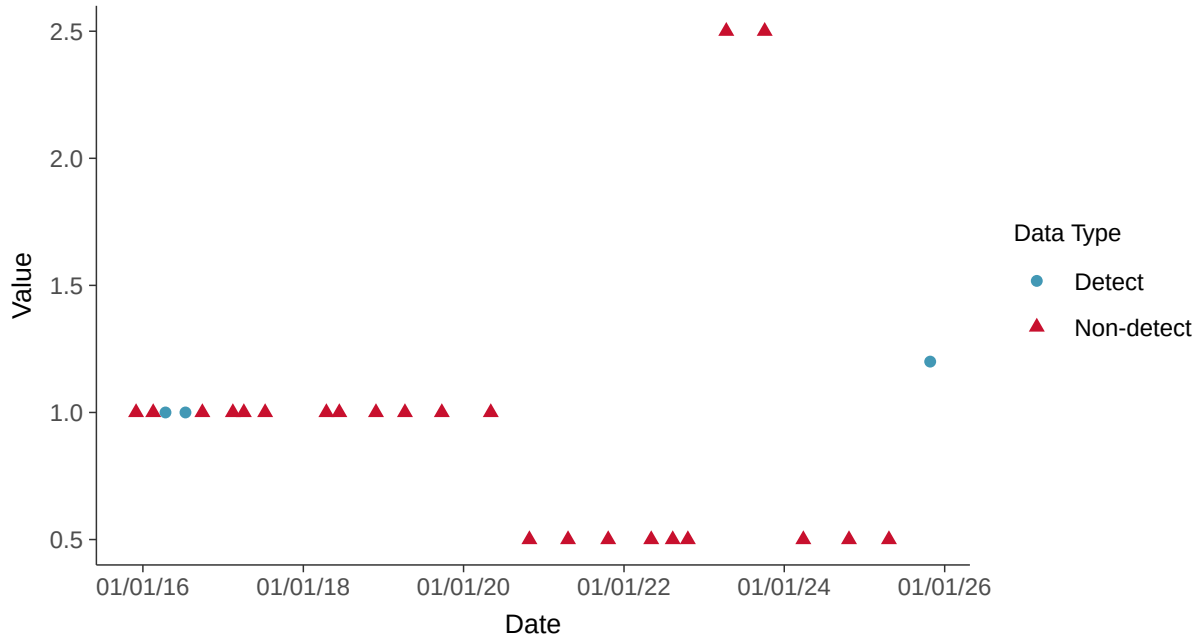


## Appendix IV: Selenium, MW-15010

ID: 02_2_127

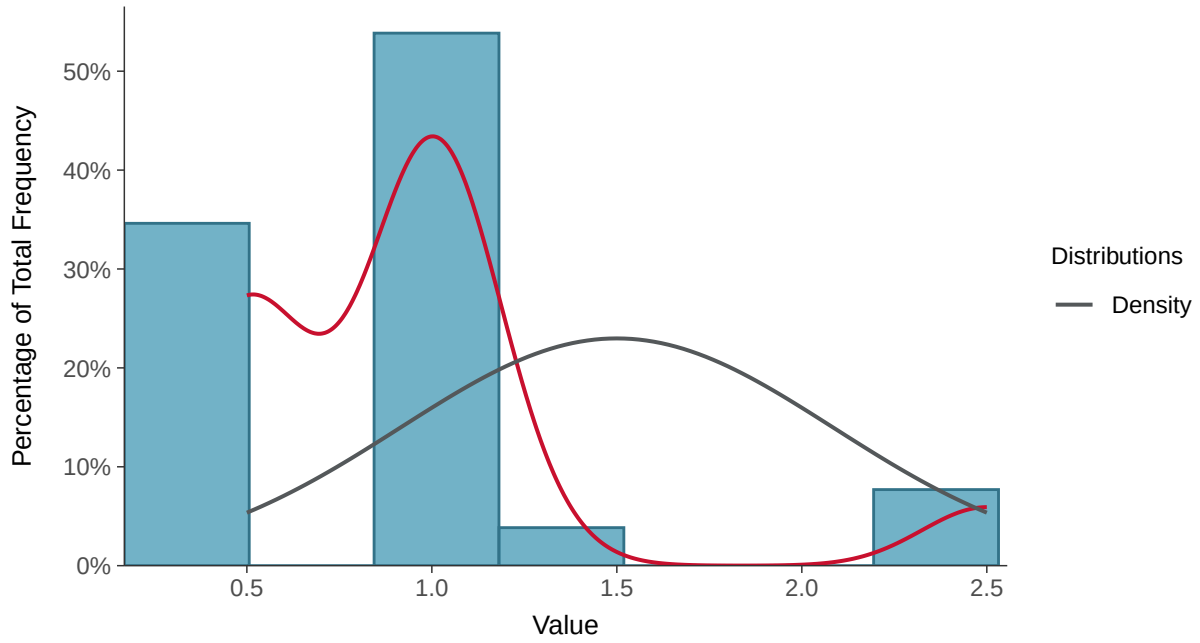
**Scatter Plot**

Selenium, MW-15010 (ug/L)



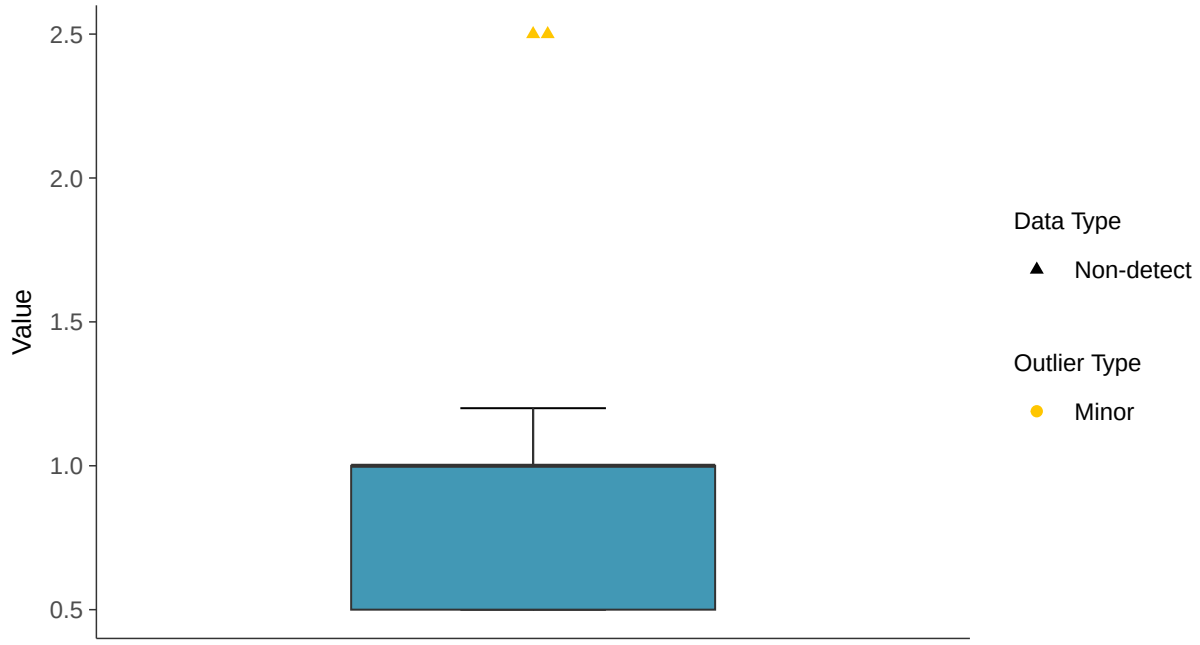

**Histogram**

Selenium, MW-15010 (ug/L)



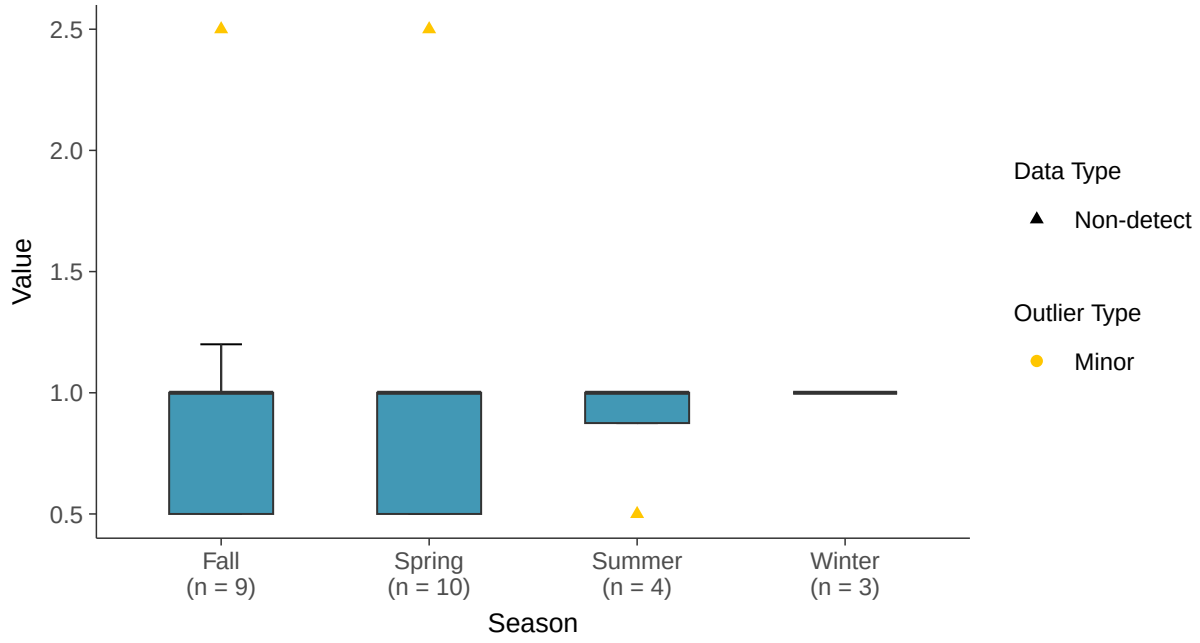
## Boxplot

Selenium, MW-15010 (ug/L)



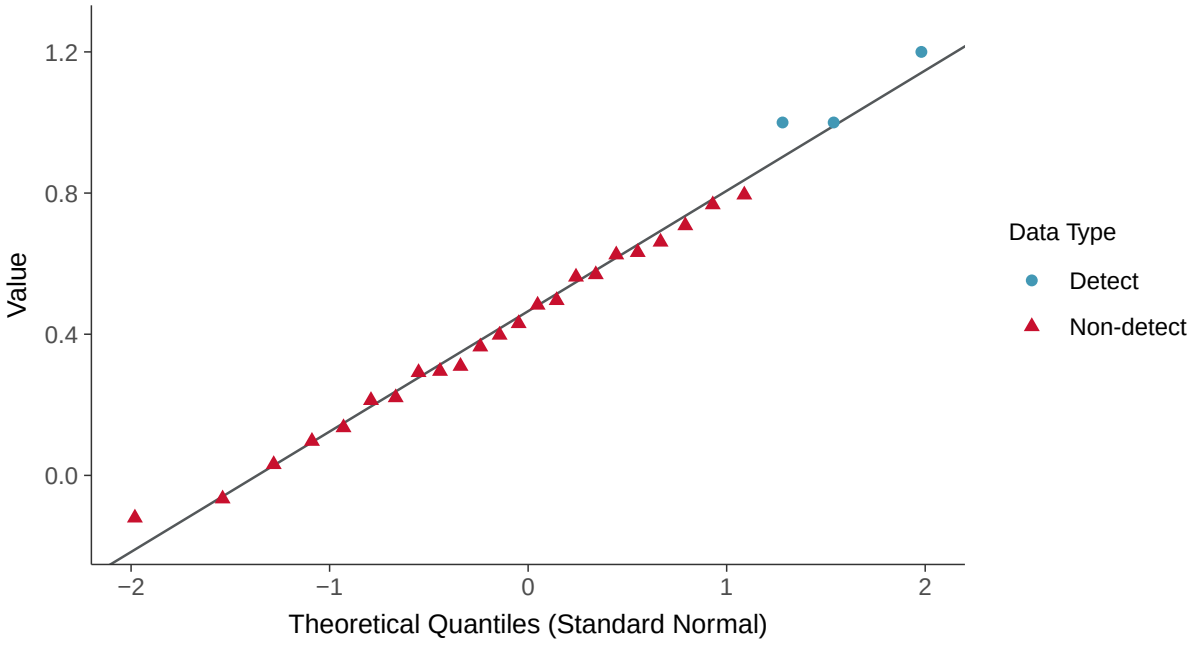

## Boxplot by Season

Selenium, MW-15010 (ug/L)



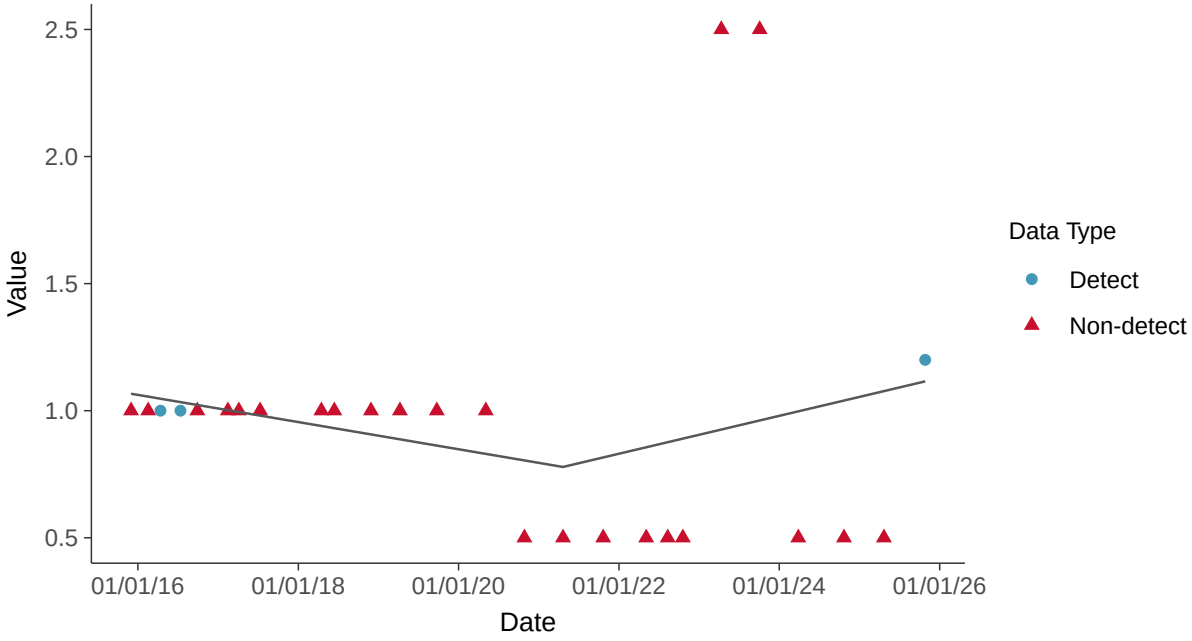
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15010 (ug/L)



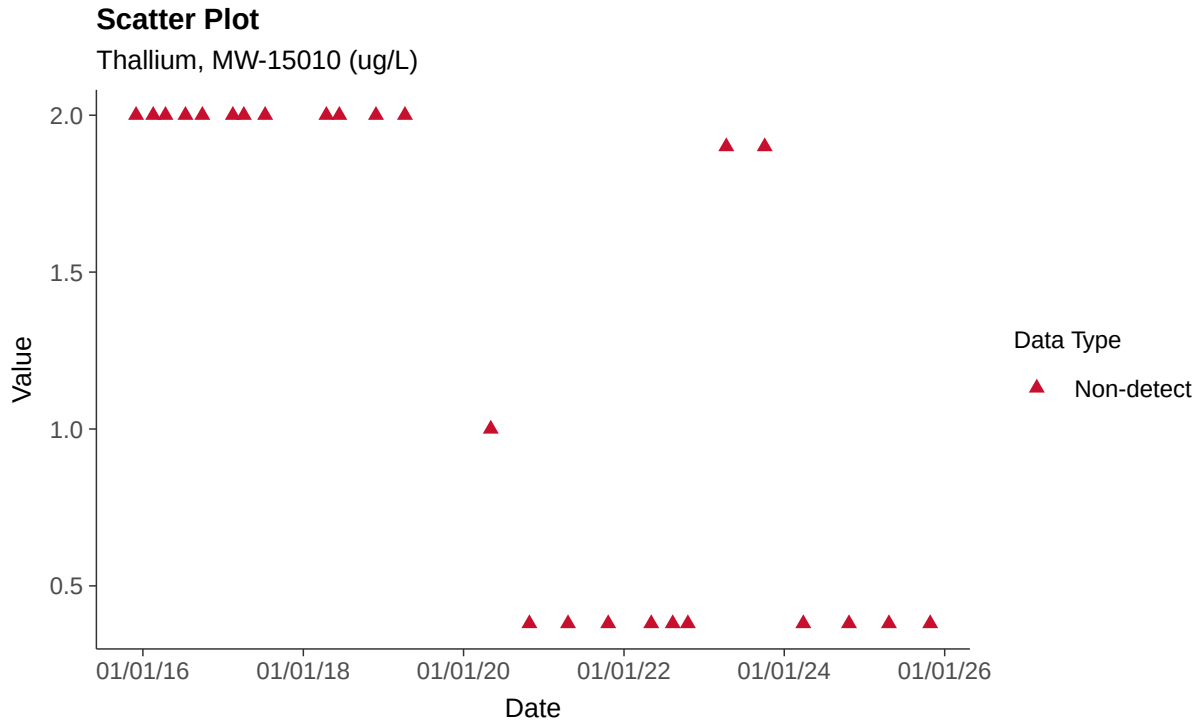

**Trend Regression: Piecewise Linear-Linear**

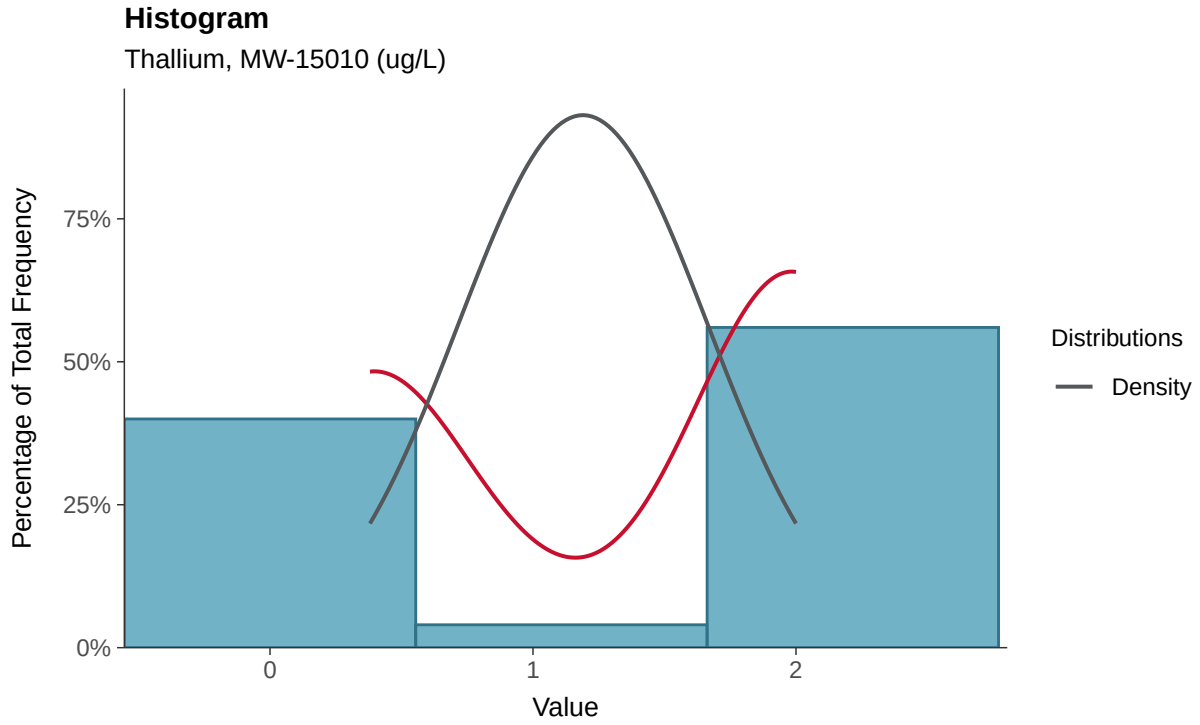
Selenium, MW-15010 (ug/L)



## Appendix IV: Thallium, MW-15010

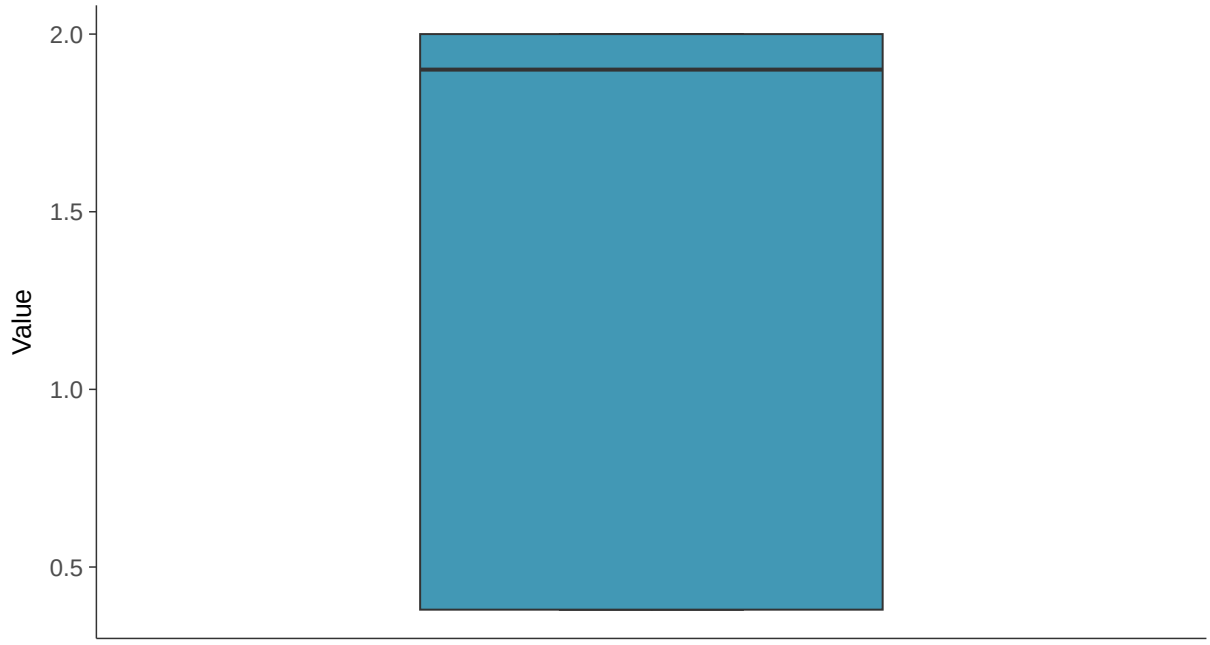
ID: 02_2_131



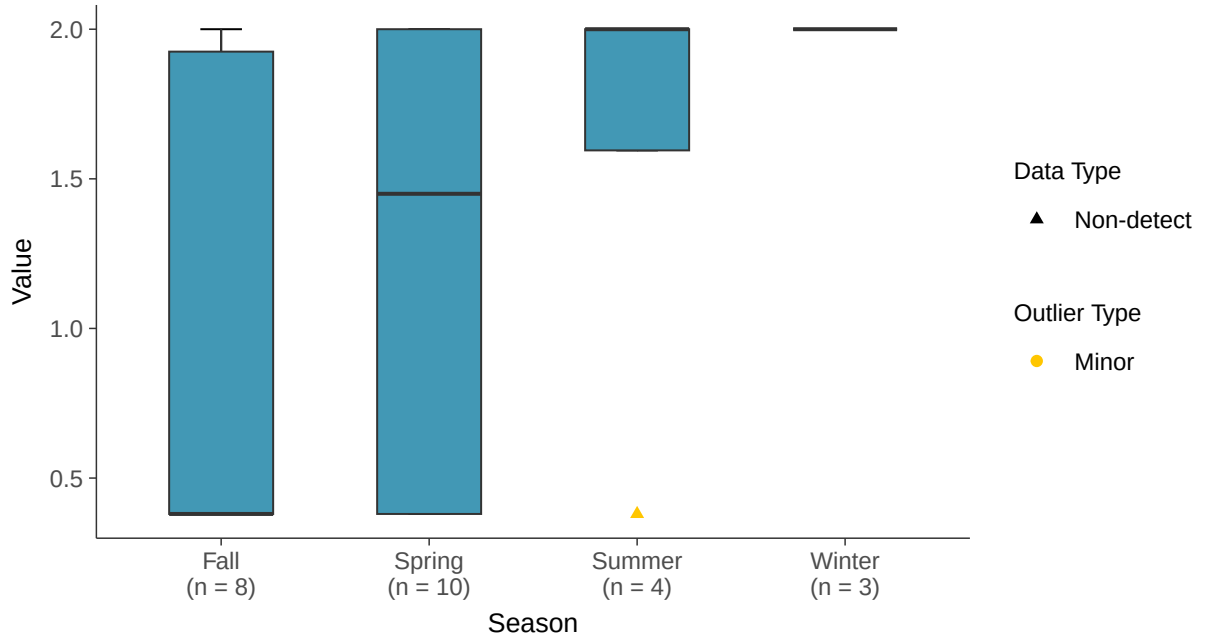
## Boxplot

Thallium, MW-15010 (ug/L)



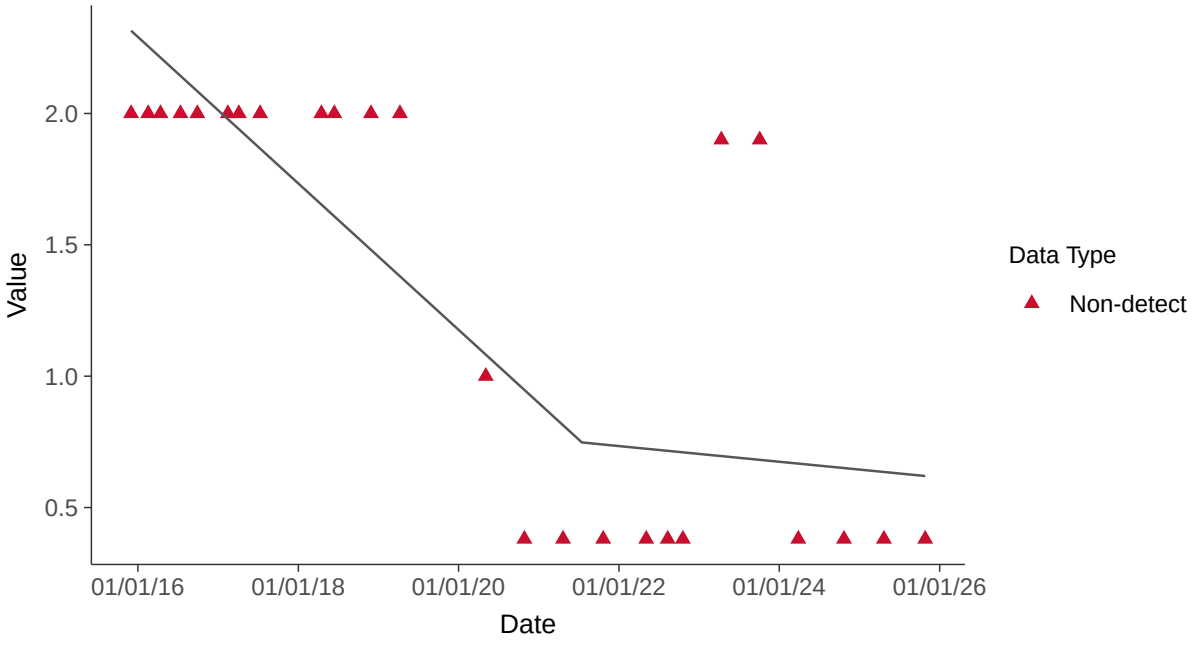

## Boxplot by Season

Thallium, MW-15010 (ug/L)



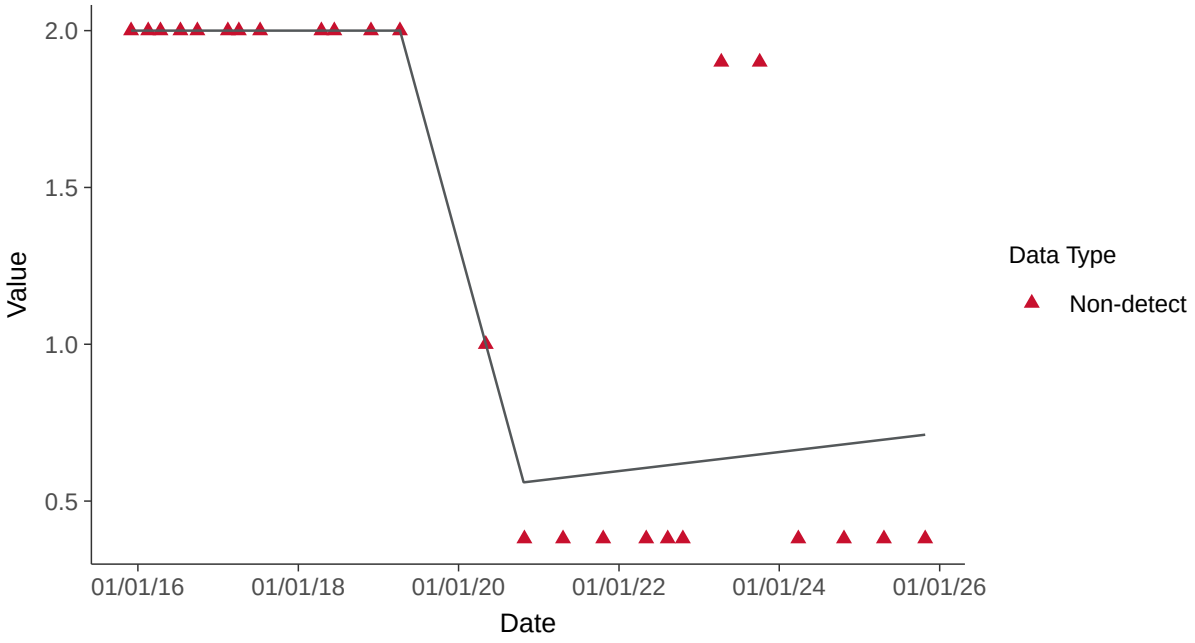
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15010 (ug/L)



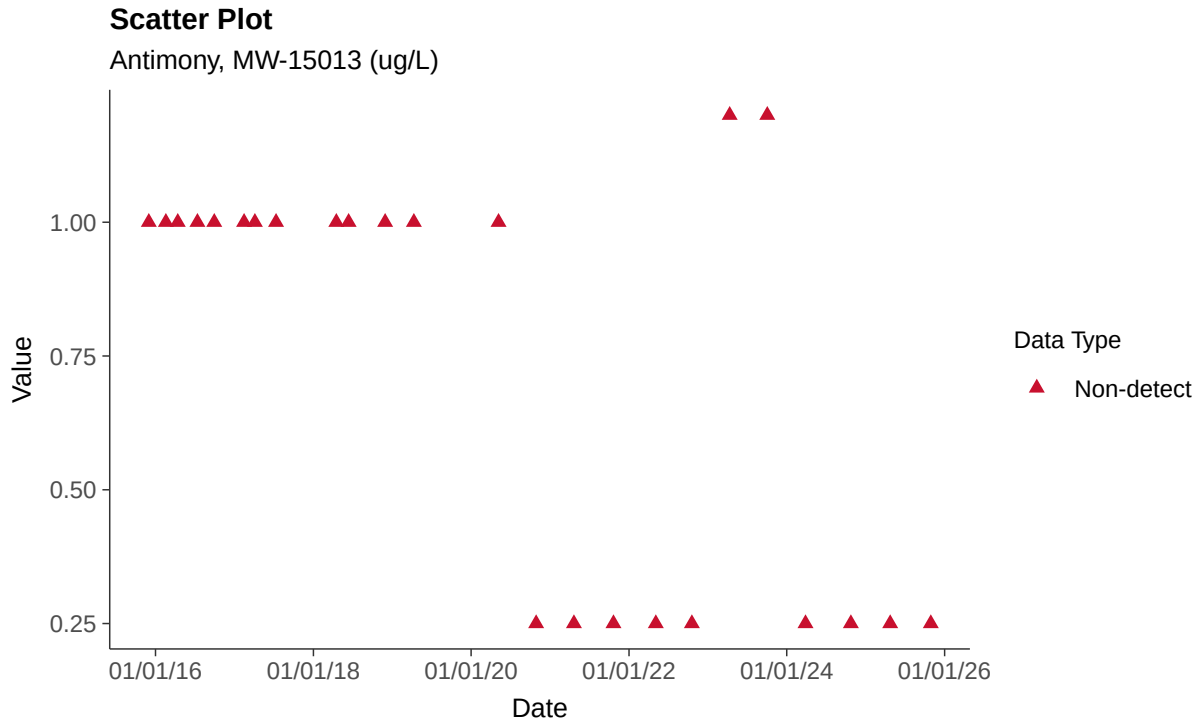

**Trend Regression: Piecewise Linear-Linear-Linear**

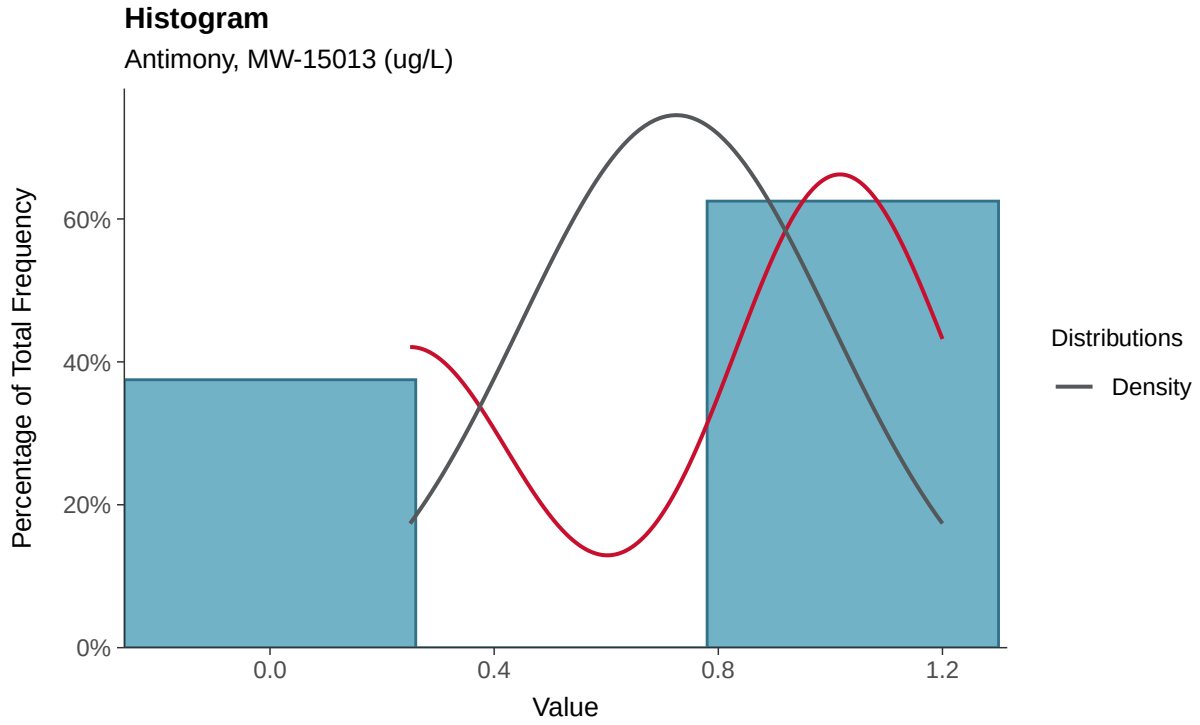
Thallium, MW-15010 (ug/L)



## Appendix IV: Antimony, MW-15013

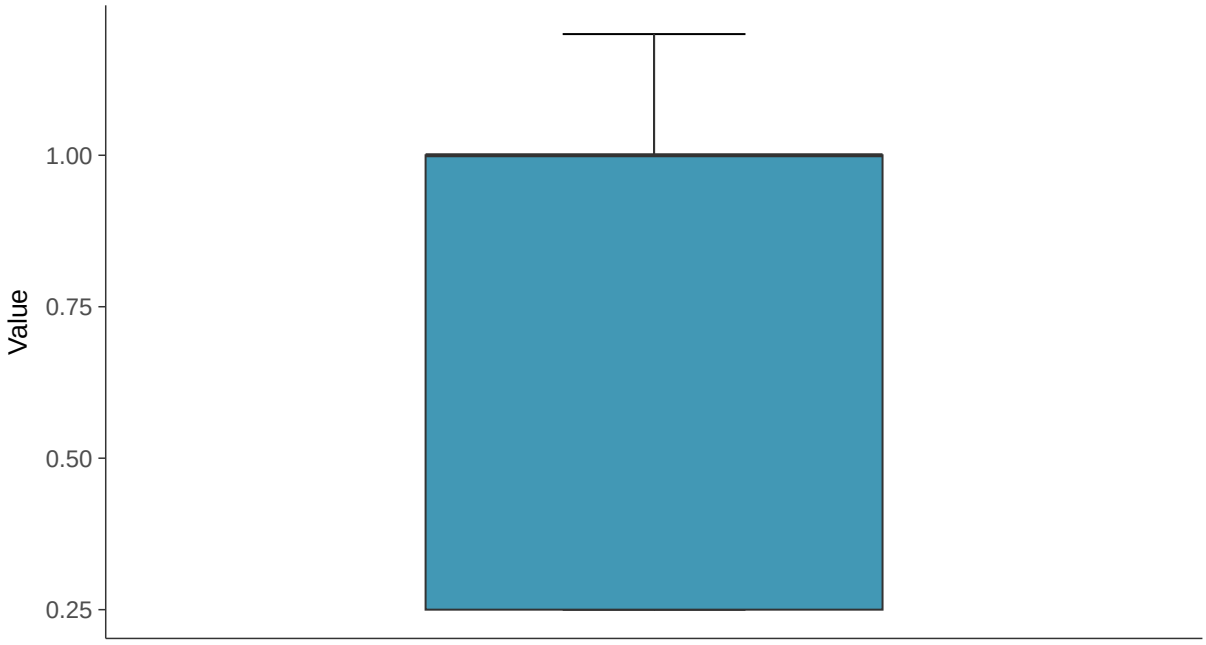
ID: 03_2_101



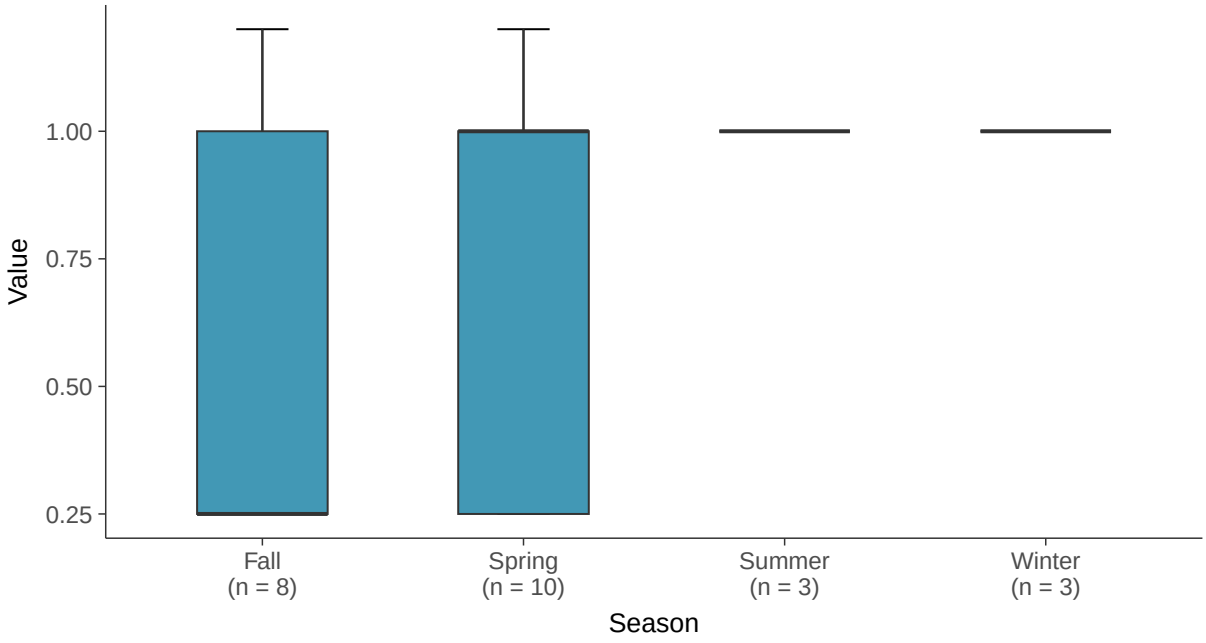
**Boxplot**

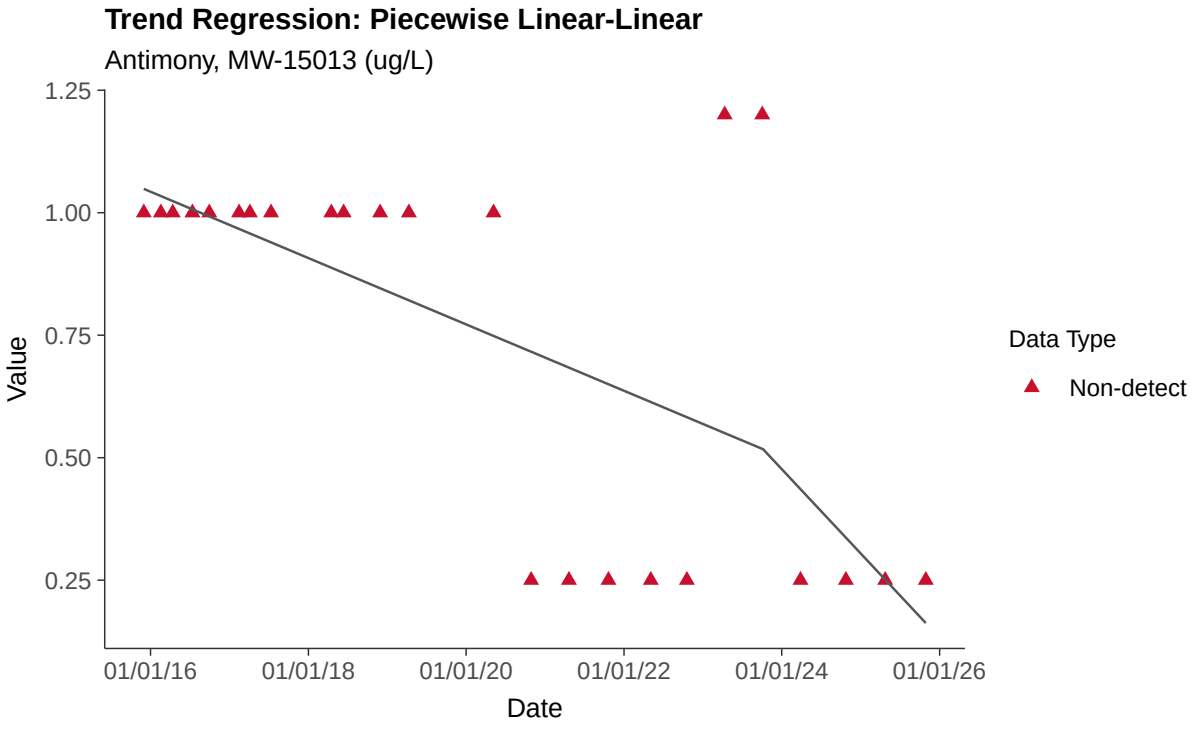
Antimony, MW-15013 (ug/L)




**Boxplot by Season**

Antimony, MW-15013 (ug/L)



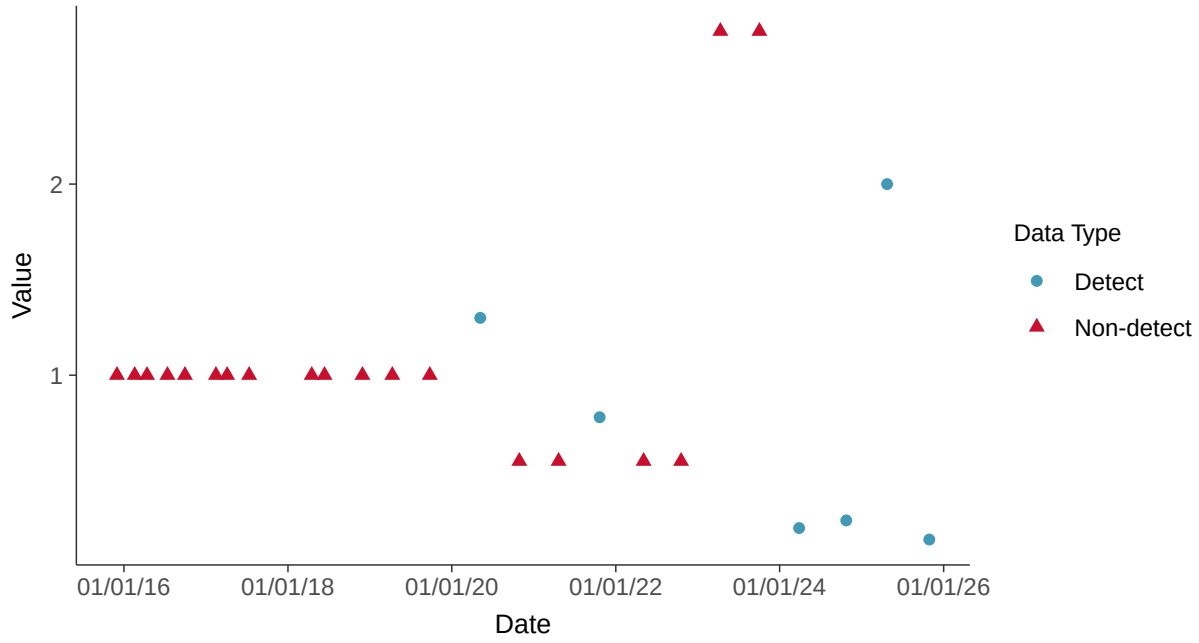

Trend Regression: Piecewise Linear-Linear
Antimony, MW-15013 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Arsenic, MW-15013

ID: 03_2_102

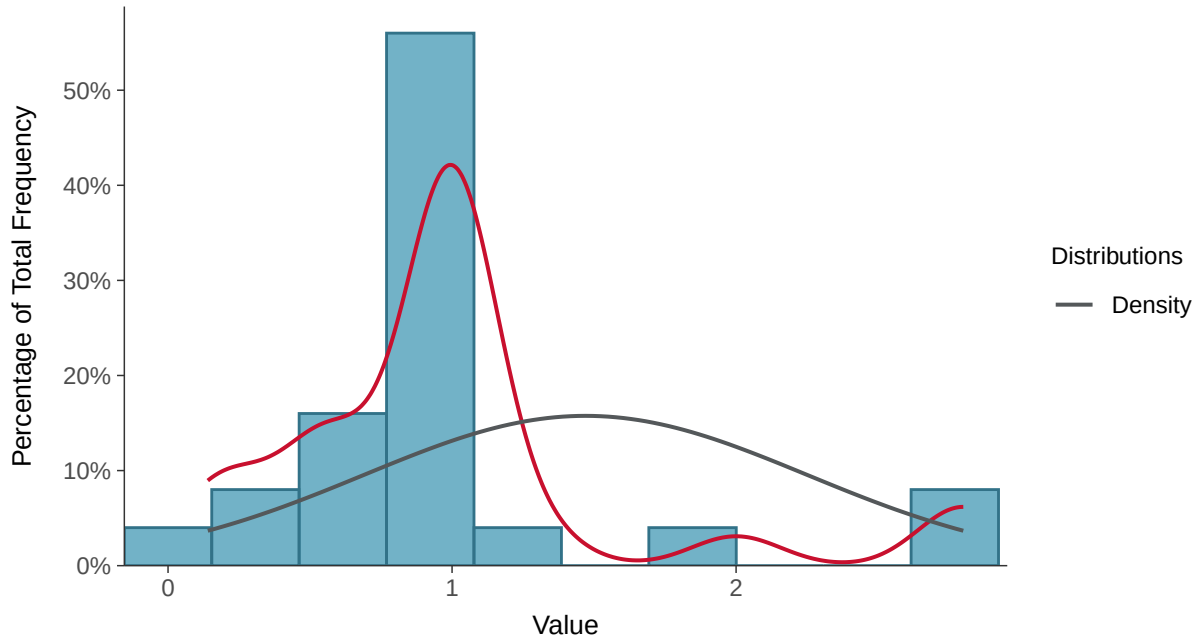
**Scatter Plot**

Arsenic, MW-15013 (ug/L)



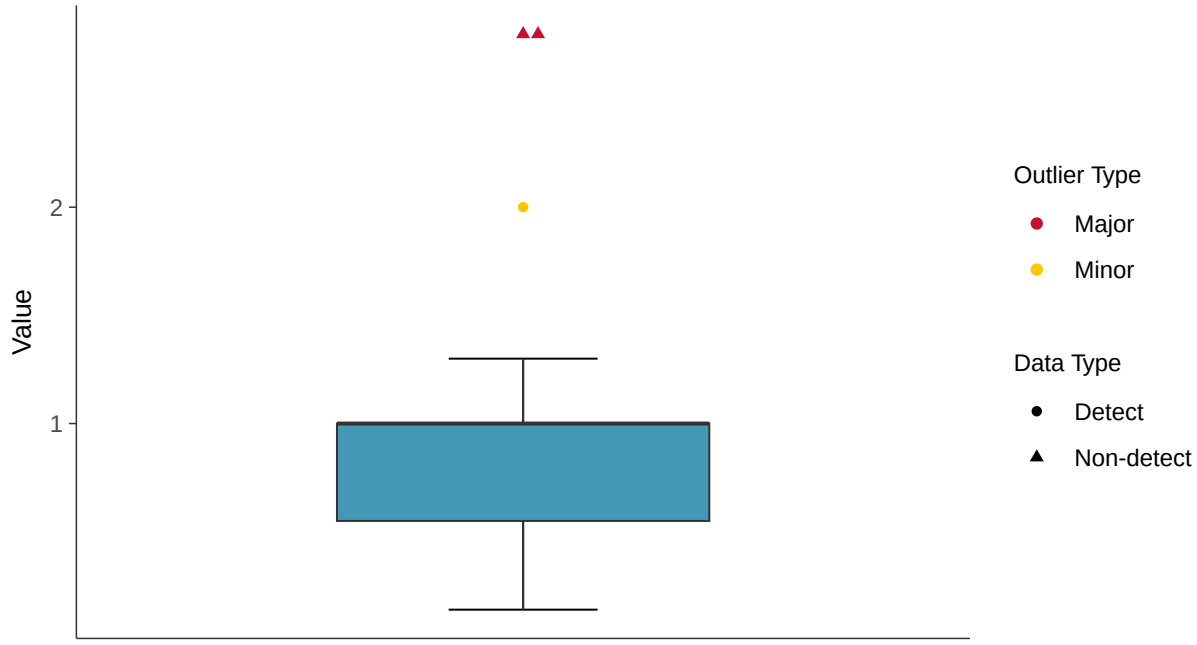

**Histogram**

Arsenic, MW-15013 (ug/L)



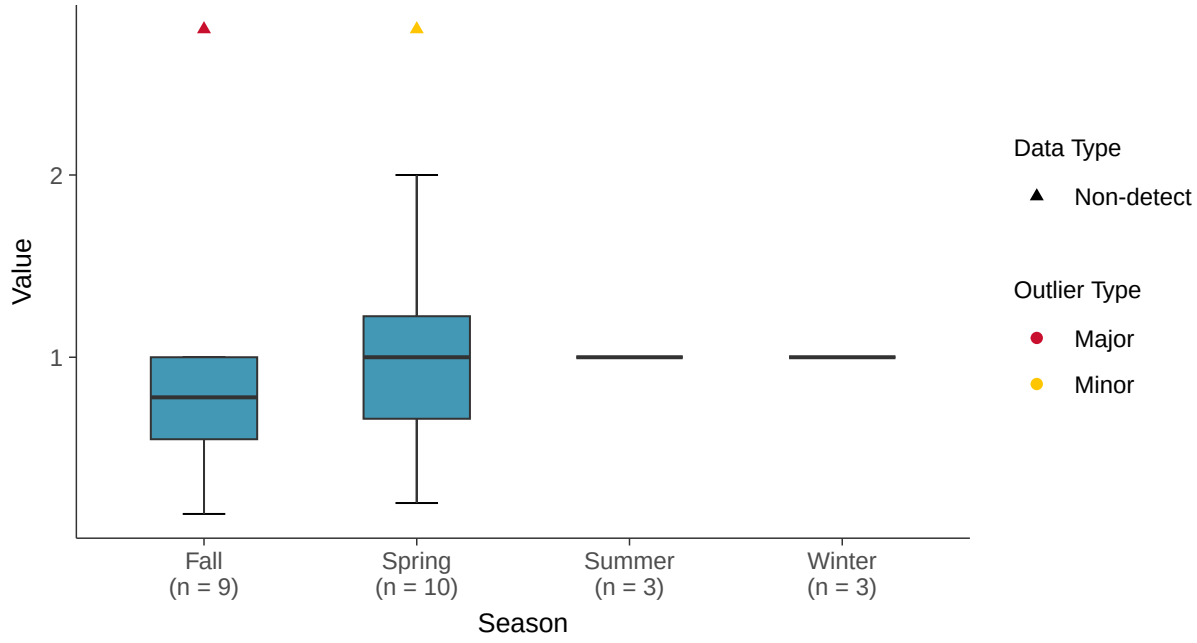
## Boxplot

Arsenic, MW-15013 (ug/L)



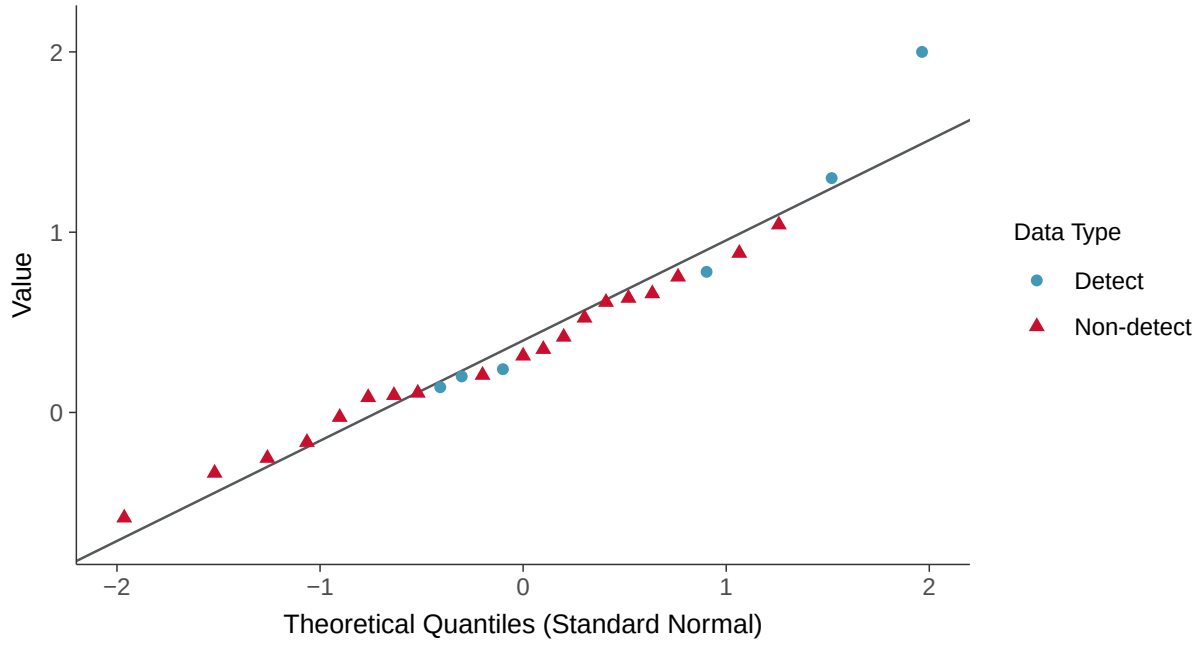

## Boxplot by Season

Arsenic, MW-15013 (ug/L)



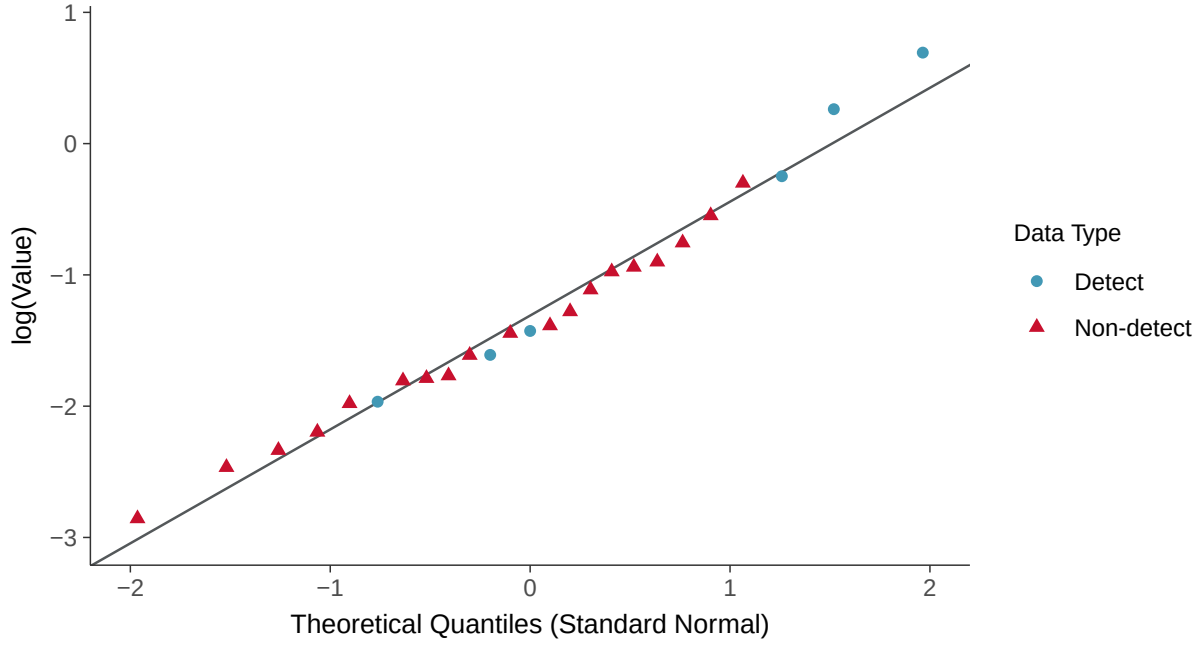
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15013 (ug/L)



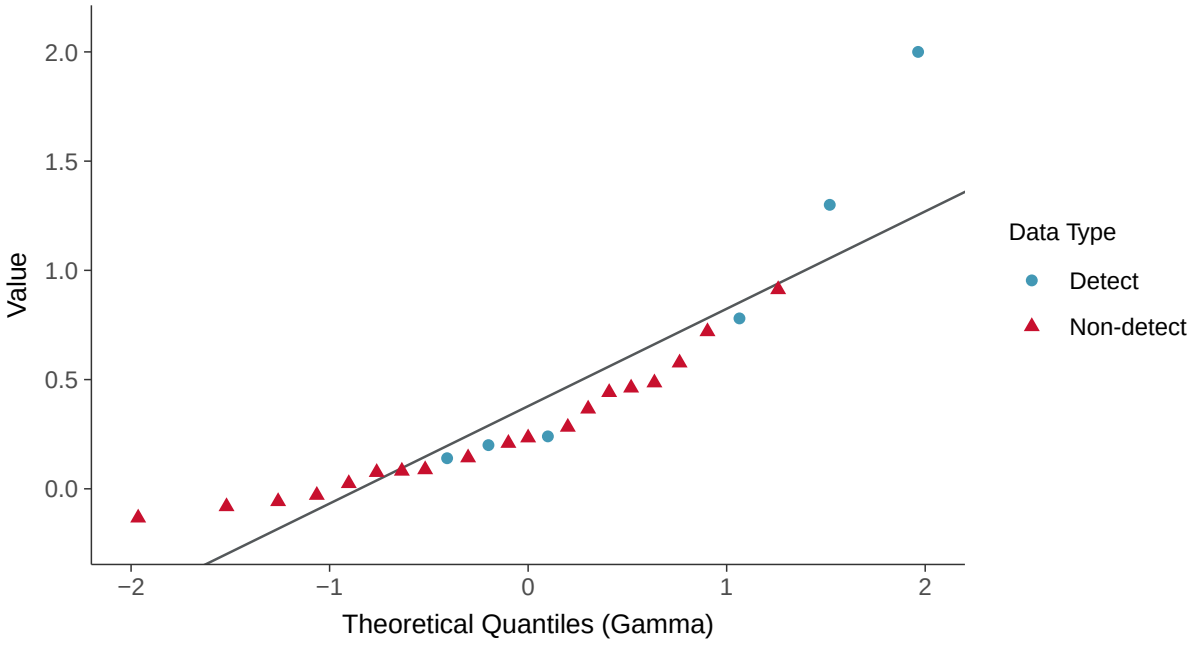

**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15013 (ug/L)



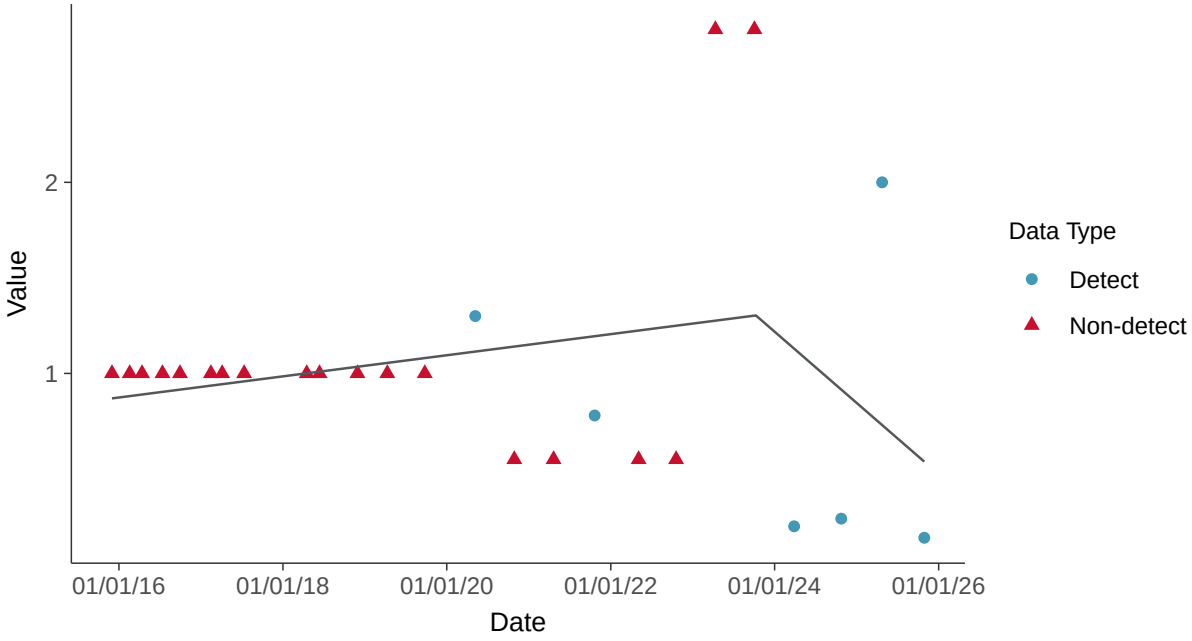
**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15013 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15013 (ug/L)

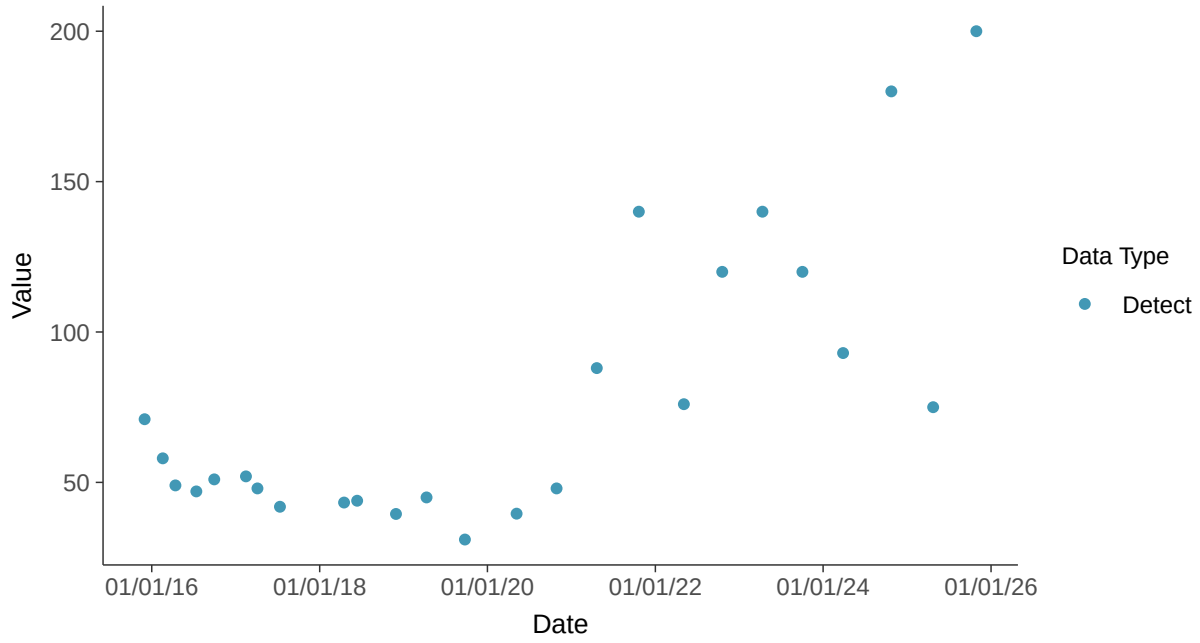


## Appendix IV: Barium, MW-15013

ID: 03_2_103

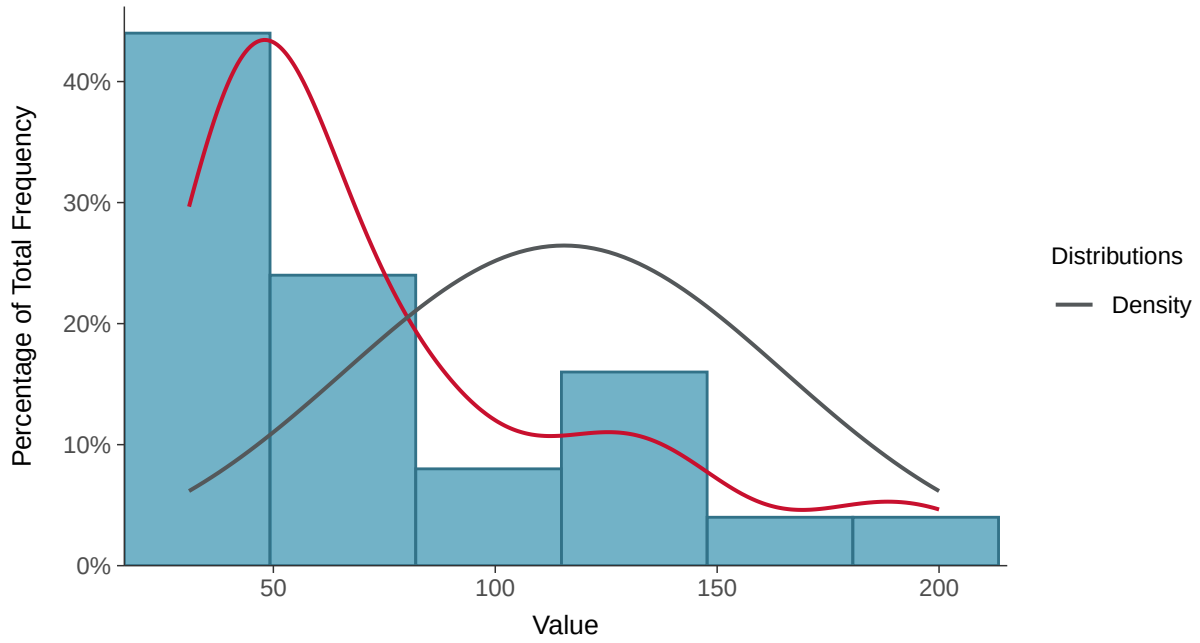
**Scatter Plot**

Barium, MW-15013 (ug/L)



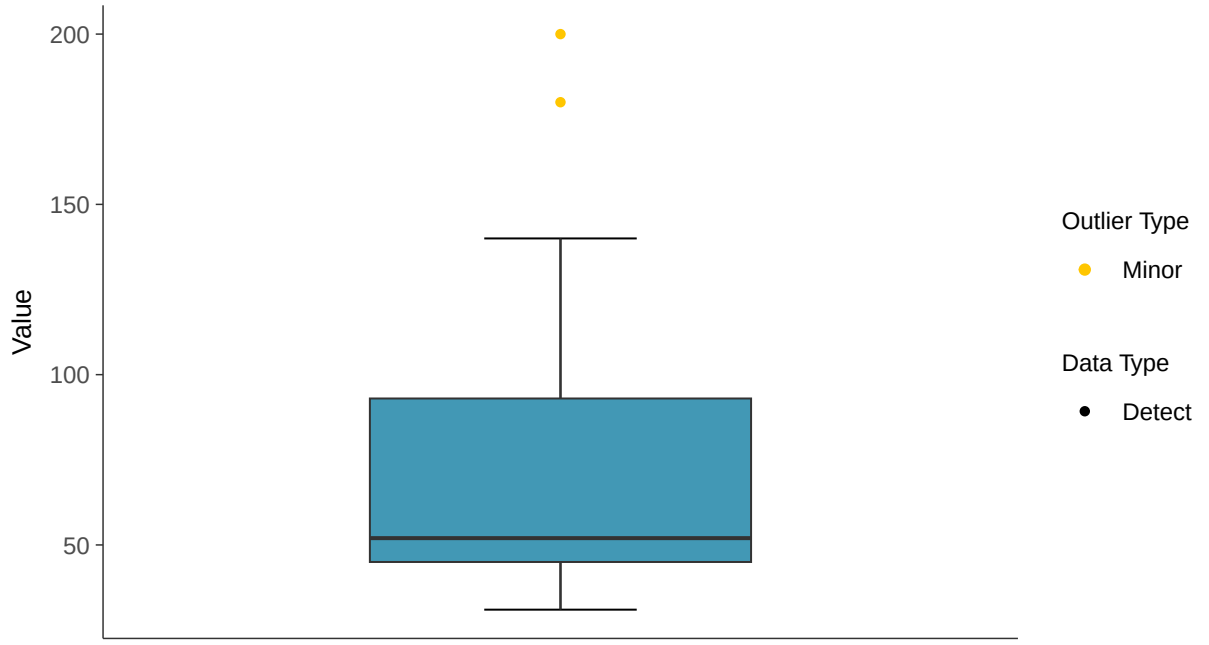

**Histogram**

Barium, MW-15013 (ug/L)



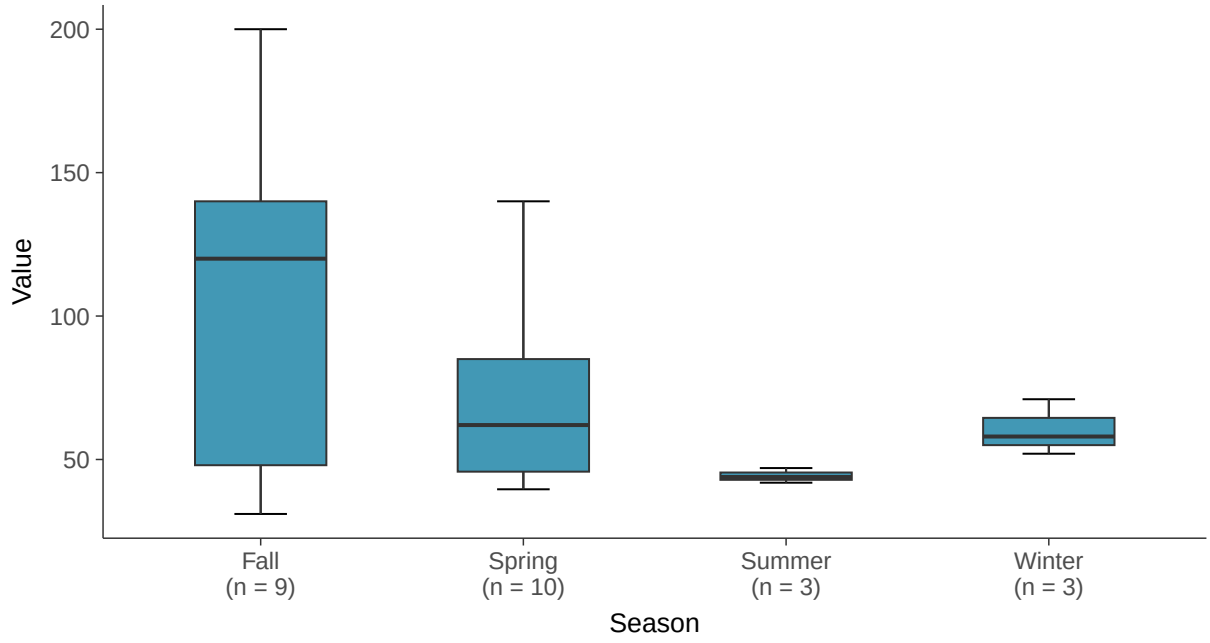
## Boxplot

Barium, MW-15013 (ug/L)



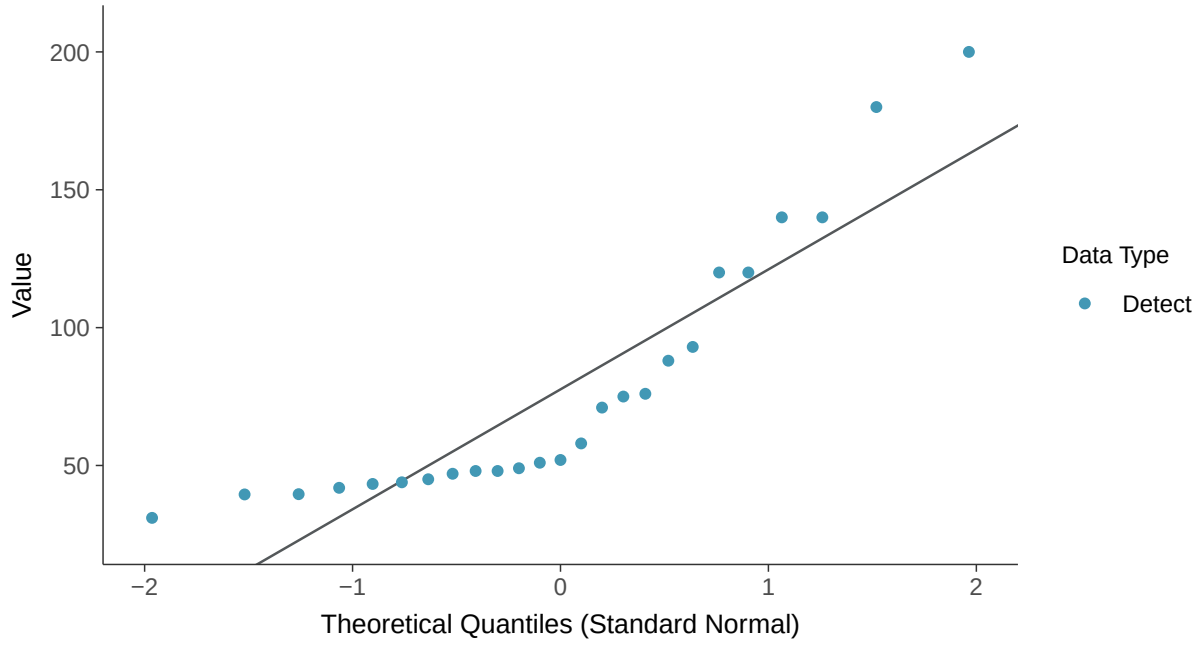

## Boxplot by Season

Barium, MW-15013 (ug/L)



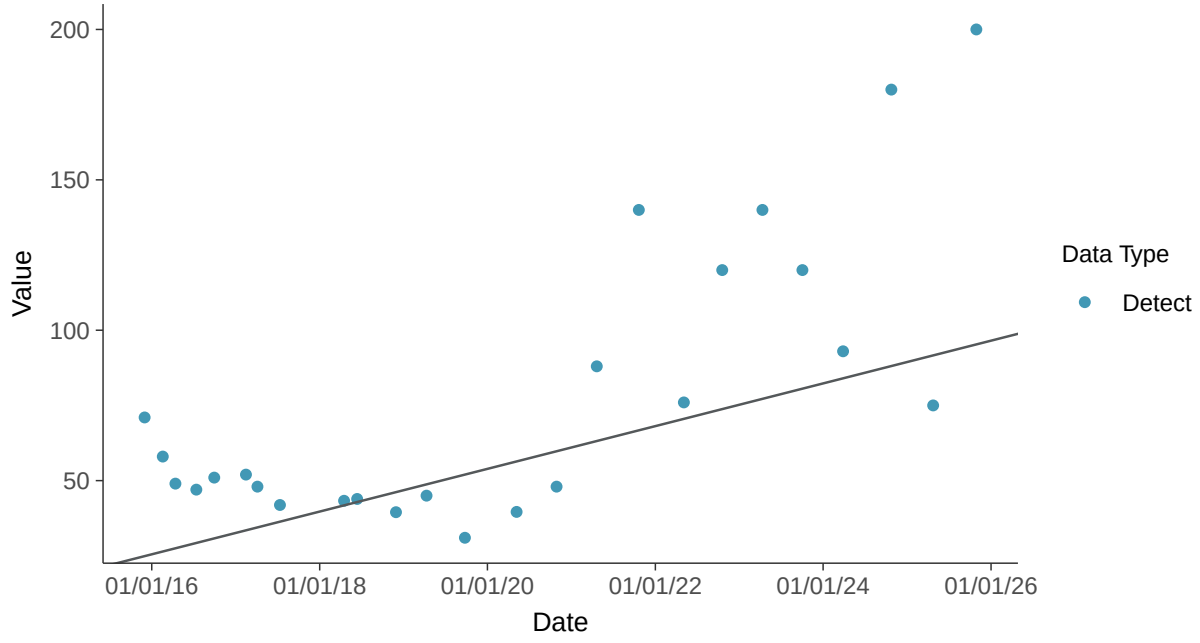
**Normal Q-Q plot**

Barium, MW-15013 (ug/L)



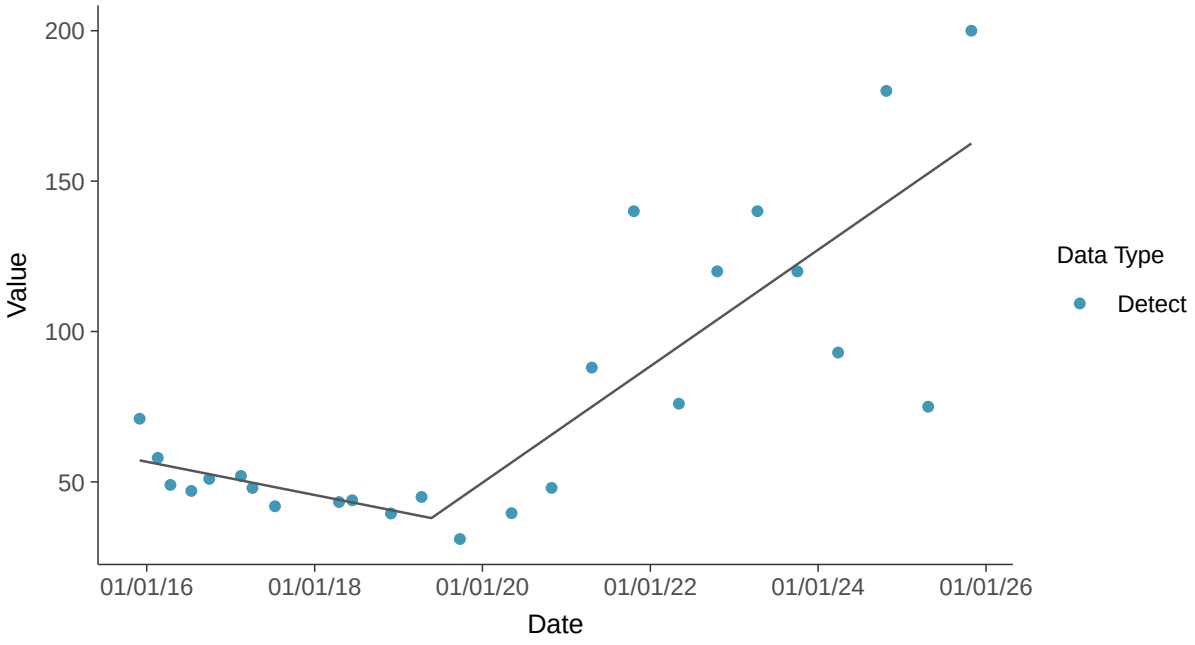

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15013 (ug/L)



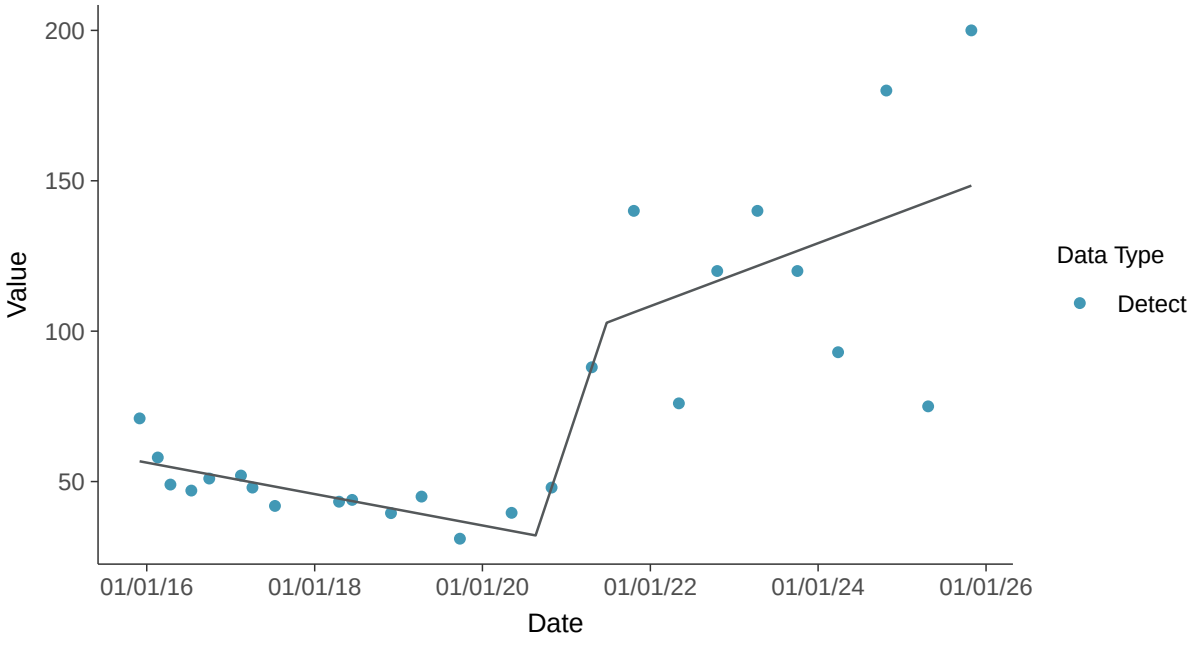
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15013 (ug/L)



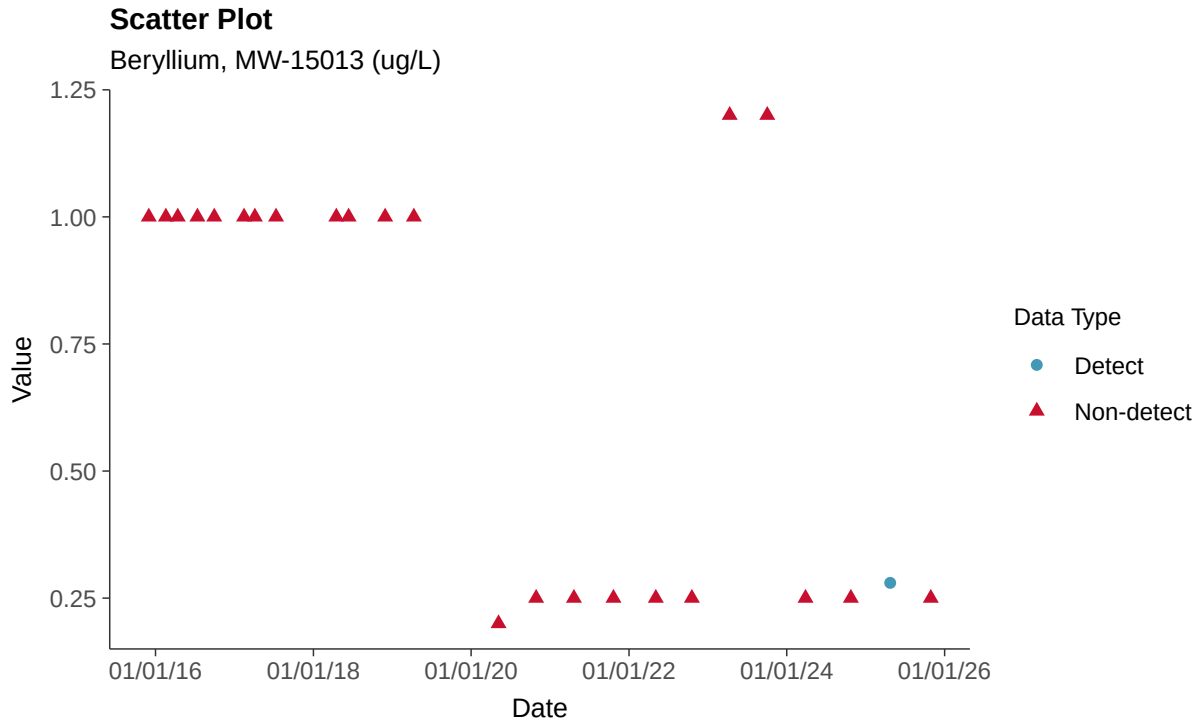

**Trend Regression: Piecewise Linear-Linear-Linear**

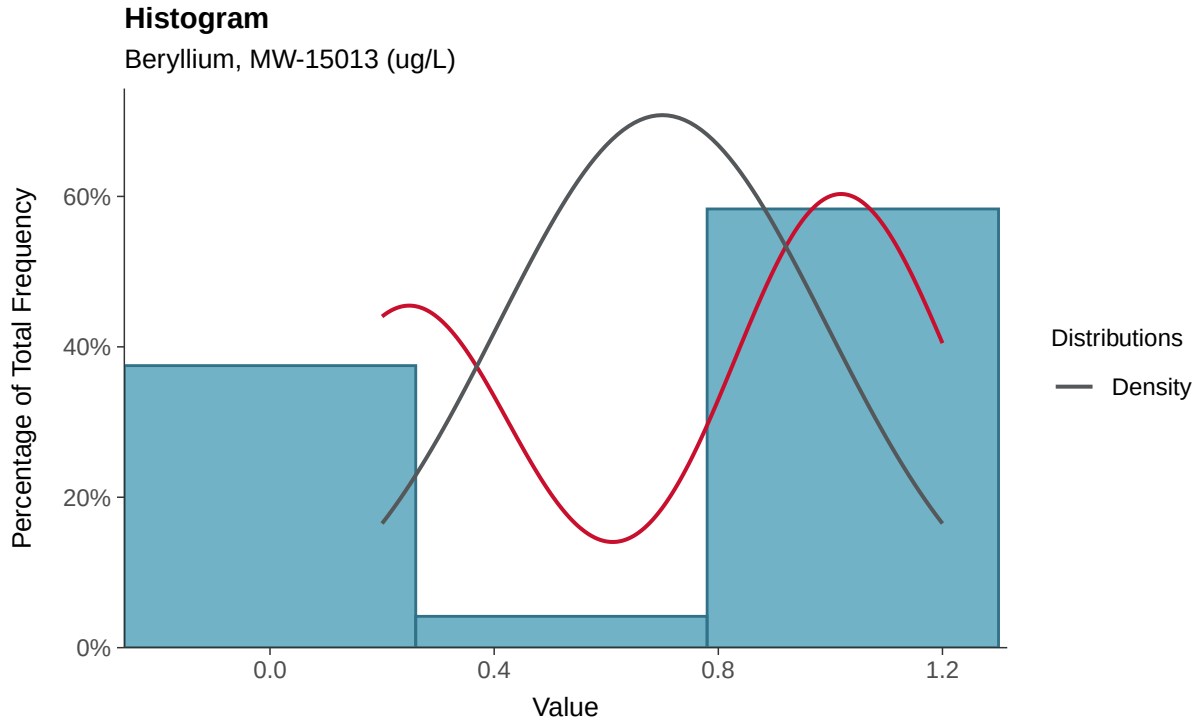
Barium, MW-15013 (ug/L)



## Appendix IV: Beryllium, MW-15013

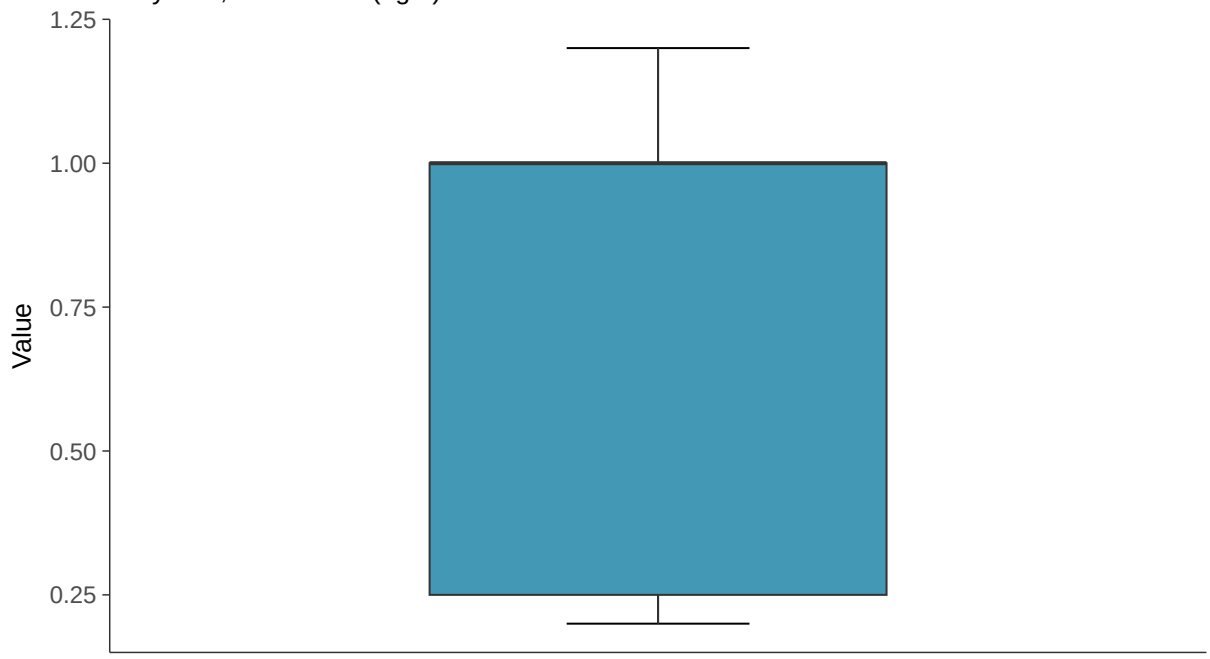
ID: 03_2_104



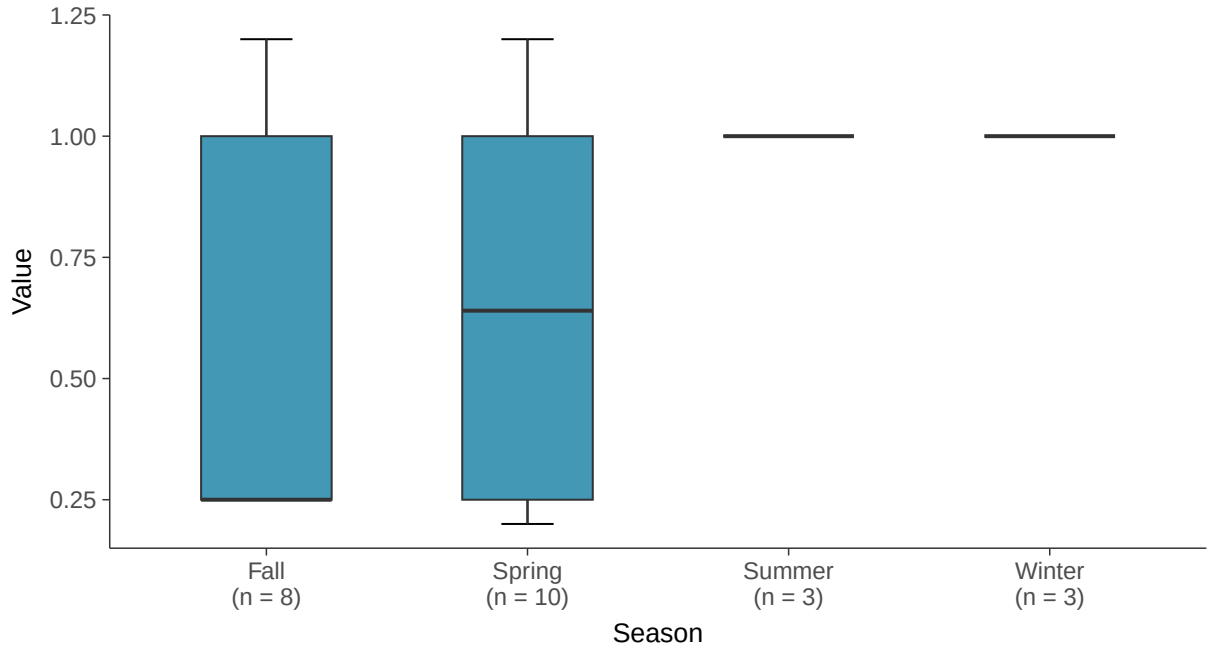
## Boxplot

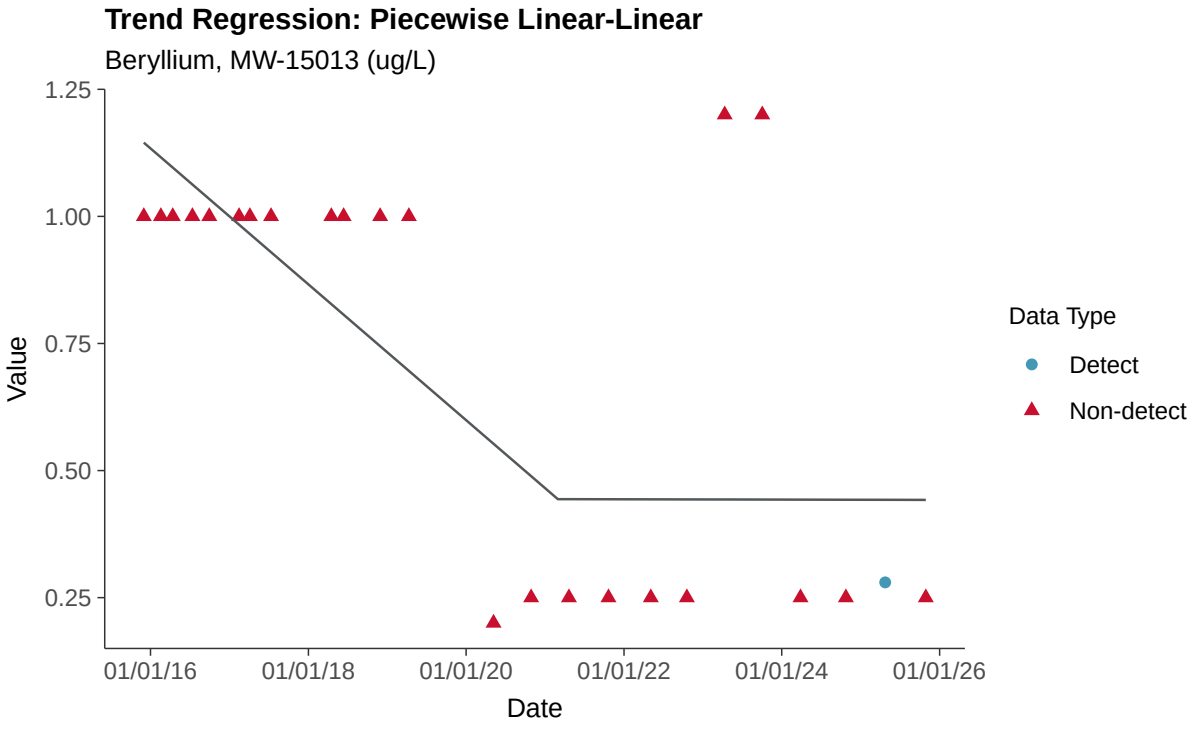
Beryllium, MW-15013 (ug/L)




## Boxplot by Season

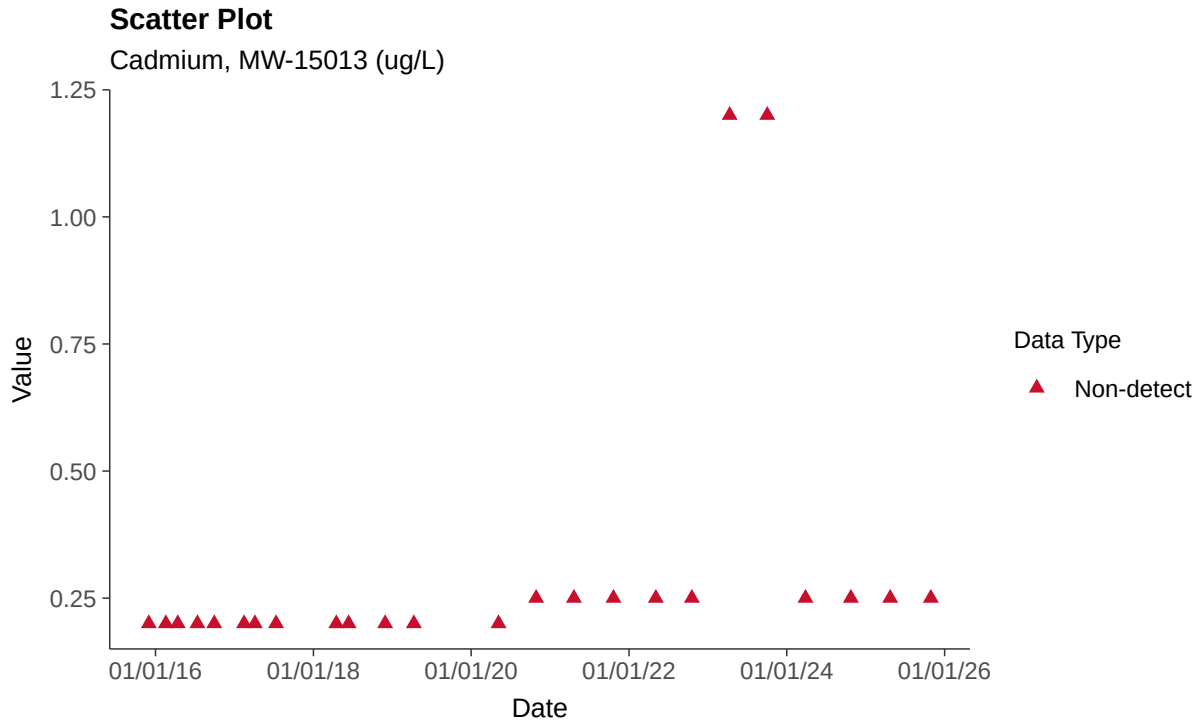
Beryllium, MW-15013 (ug/L)

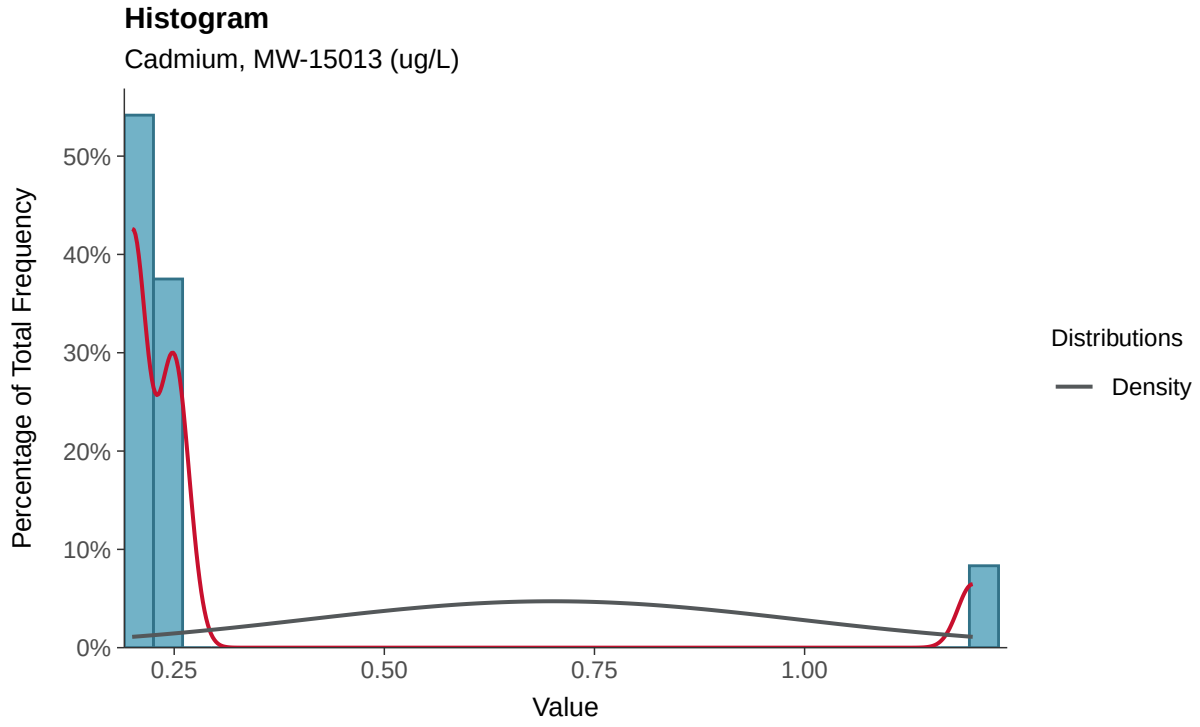



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15013 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15013

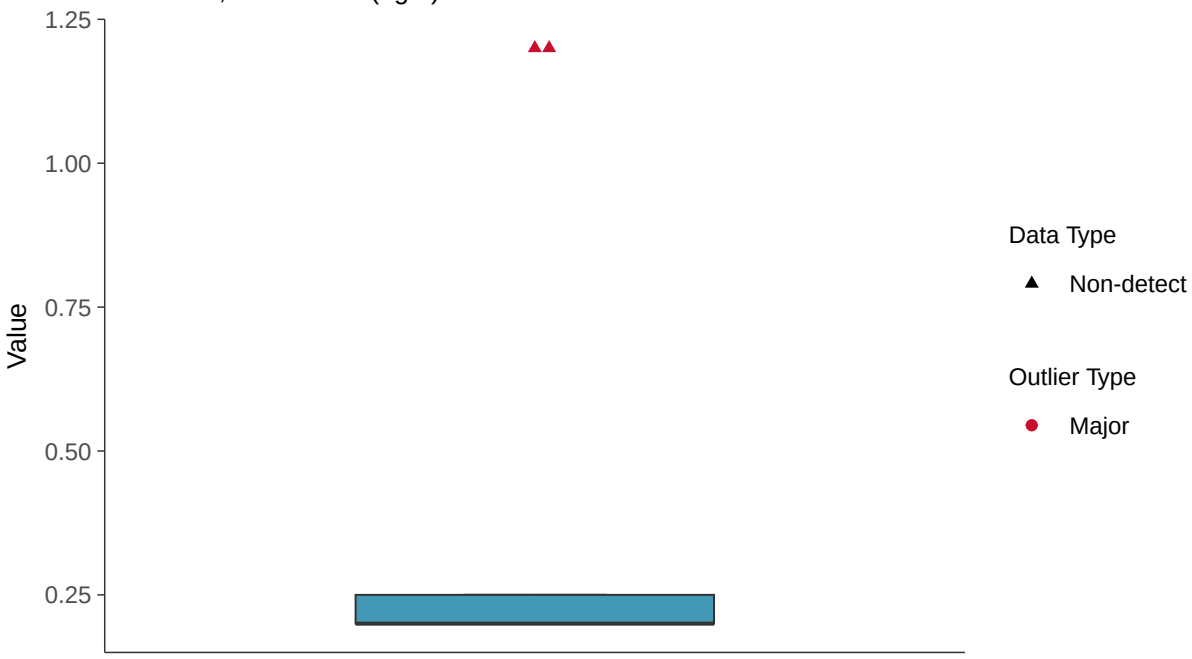
ID: 03_2_106



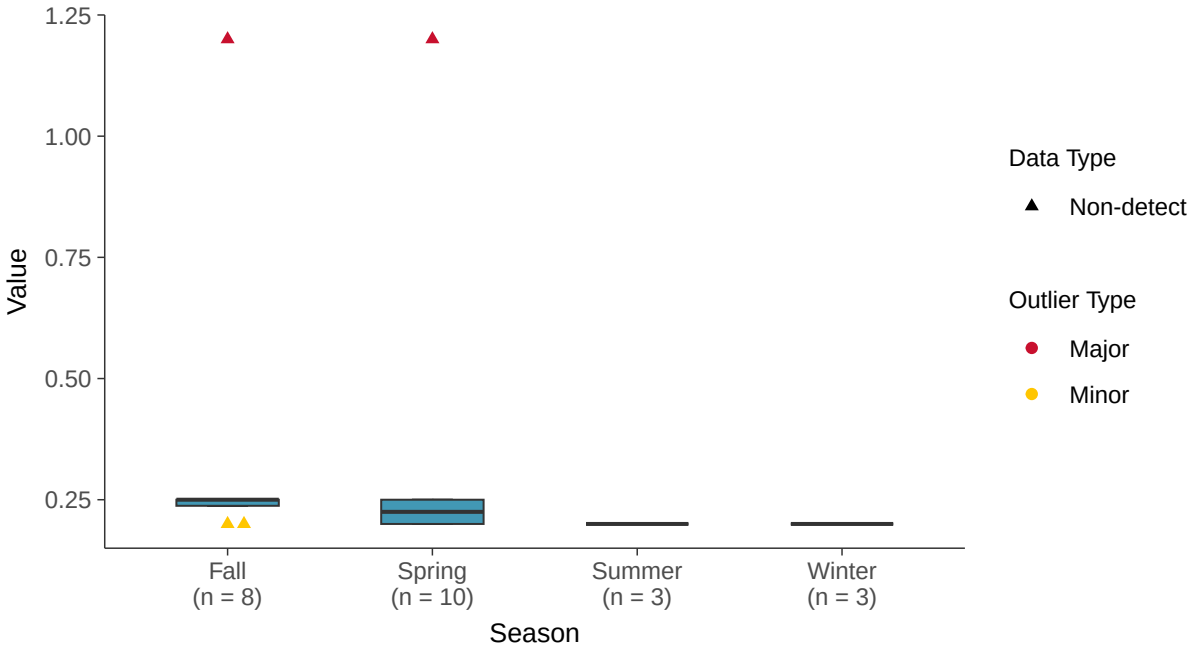
## Boxplot

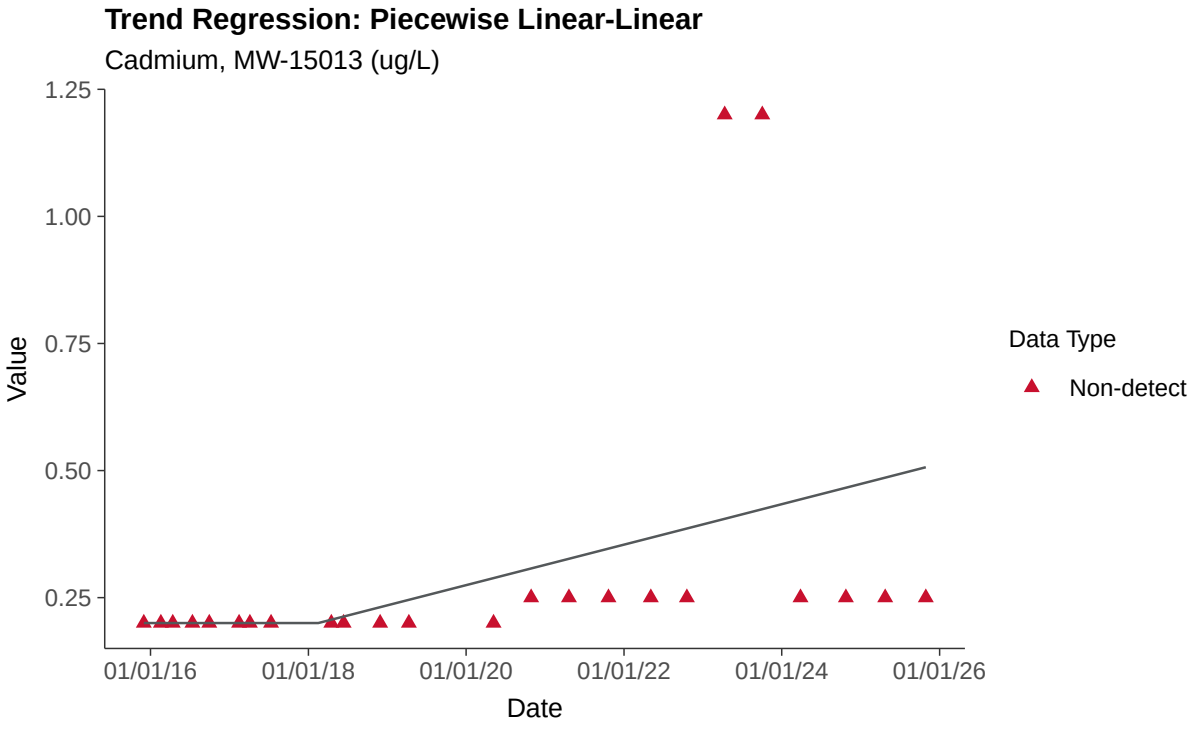
Cadmium, MW-15013 (ug/L)




## Boxplot by Season

Cadmium, MW-15013 (ug/L)



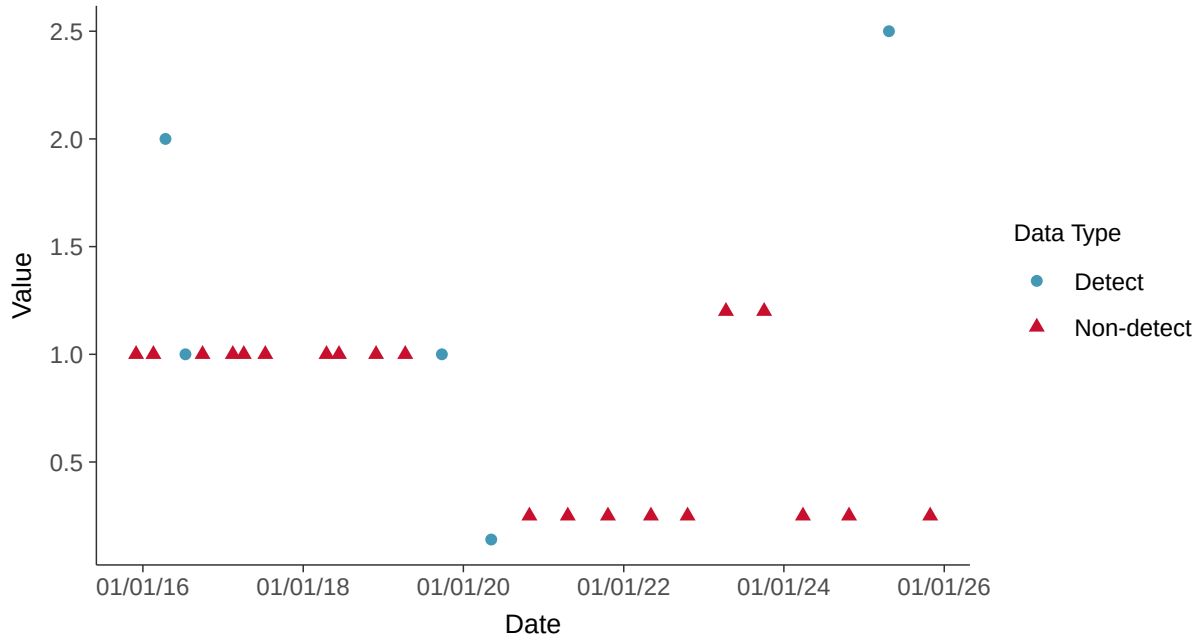

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15013 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15013

ID: 03_2_109

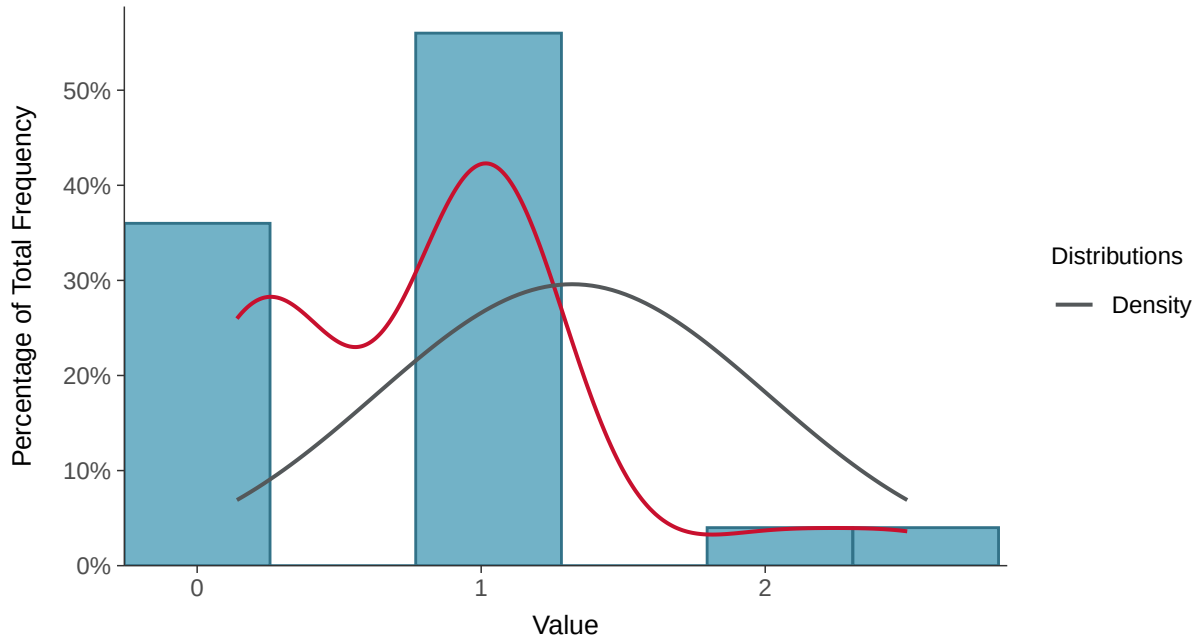
**Scatter Plot**

Chromium, MW-15013 (ug/L)



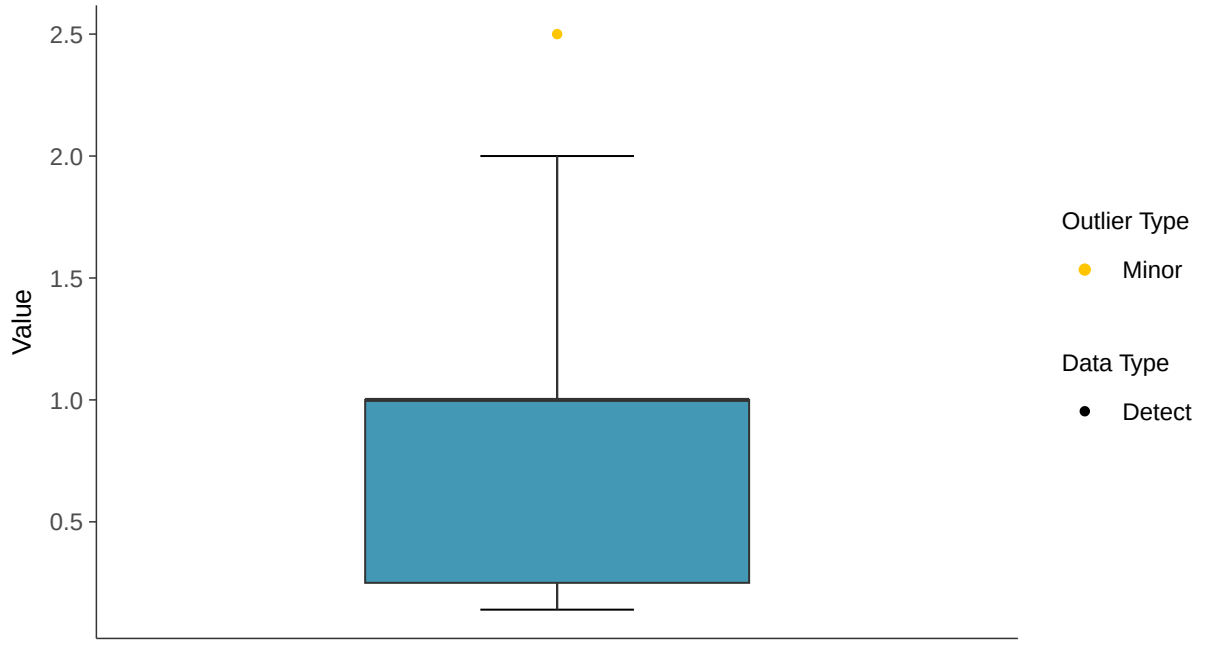

**Histogram**

Chromium, MW-15013 (ug/L)



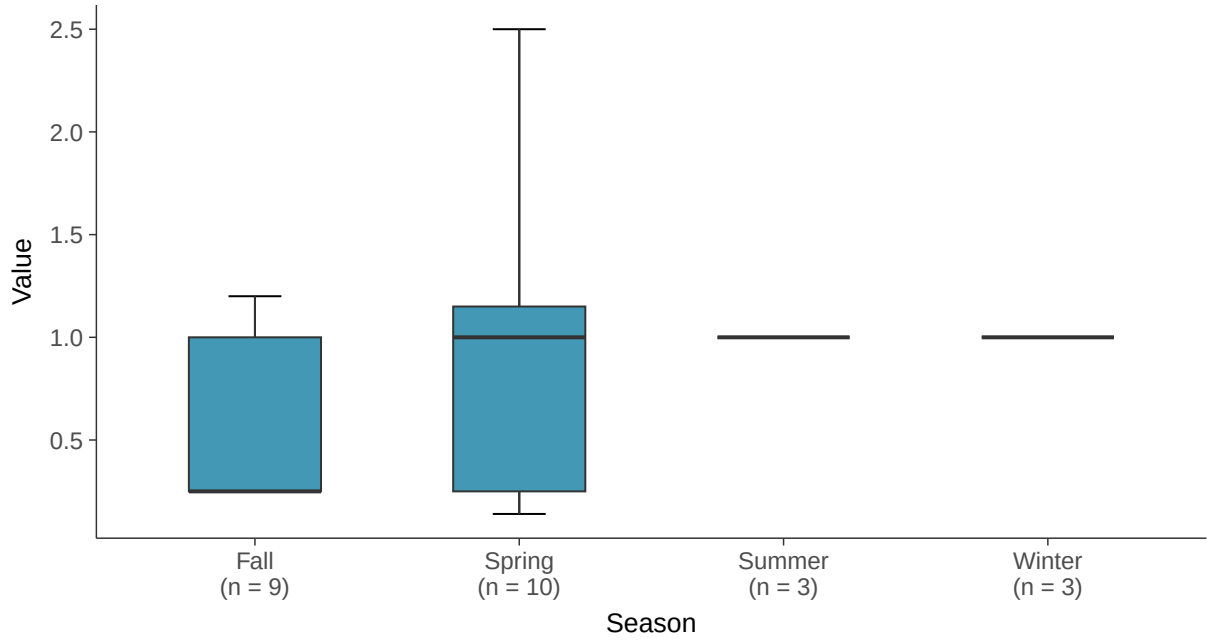
## Boxplot

Chromium, MW-15013 (ug/L)



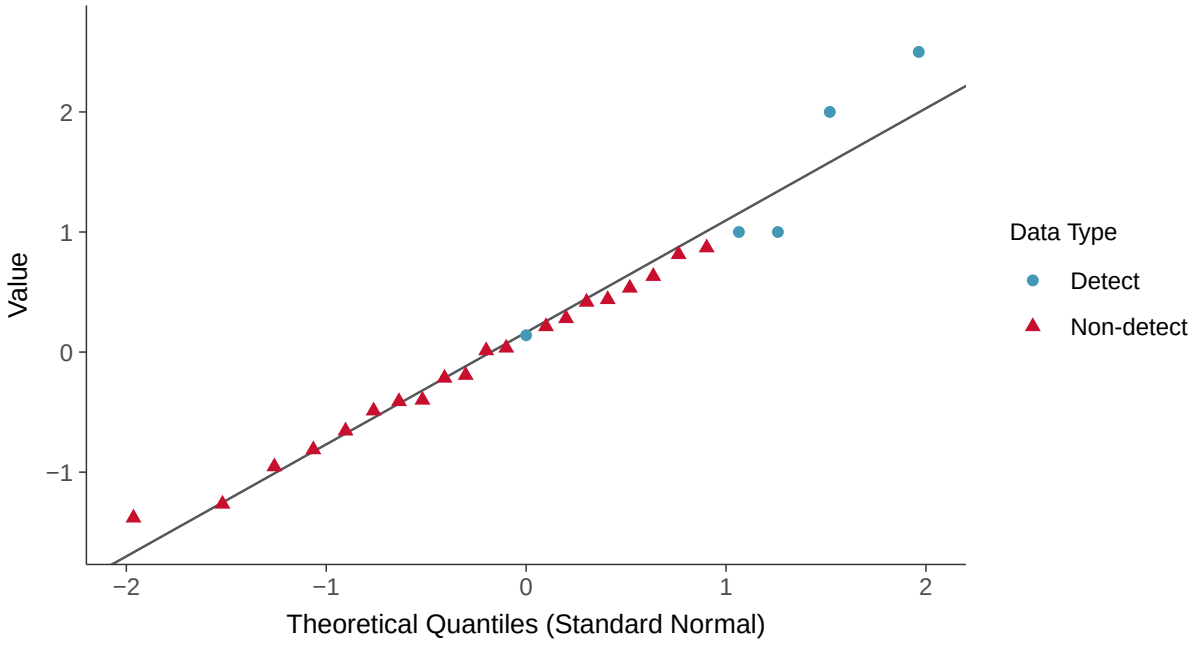

## Boxplot by Season

Chromium, MW-15013 (ug/L)



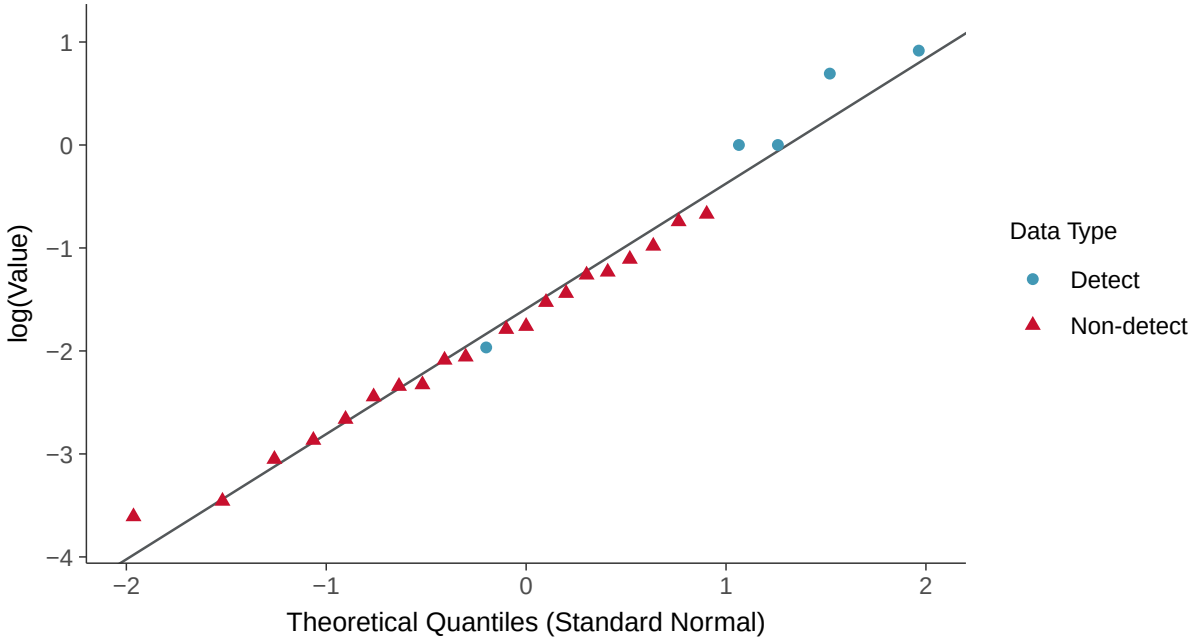
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15013 (ug/L)



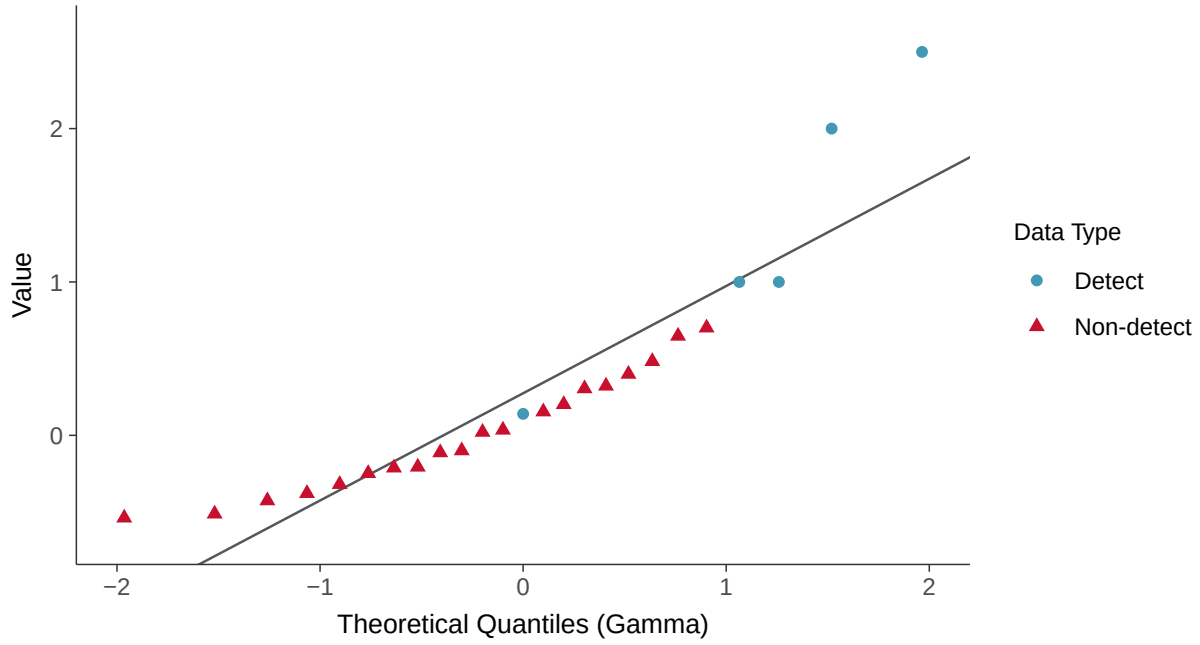

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15013 (ug/L)



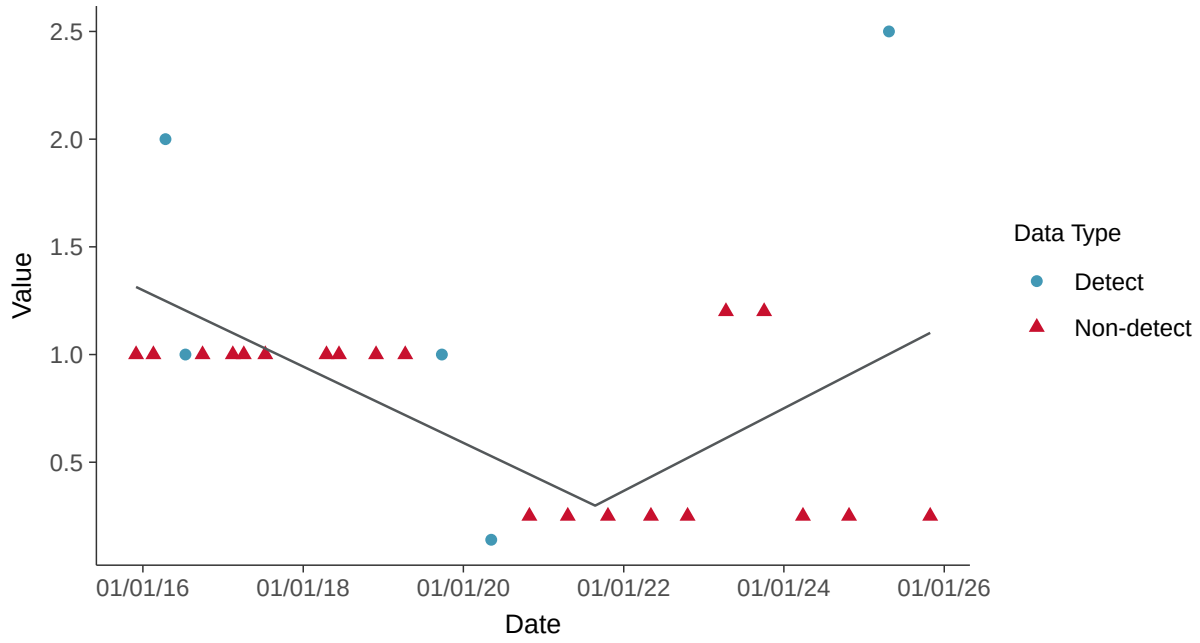
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15013 (ug/L)



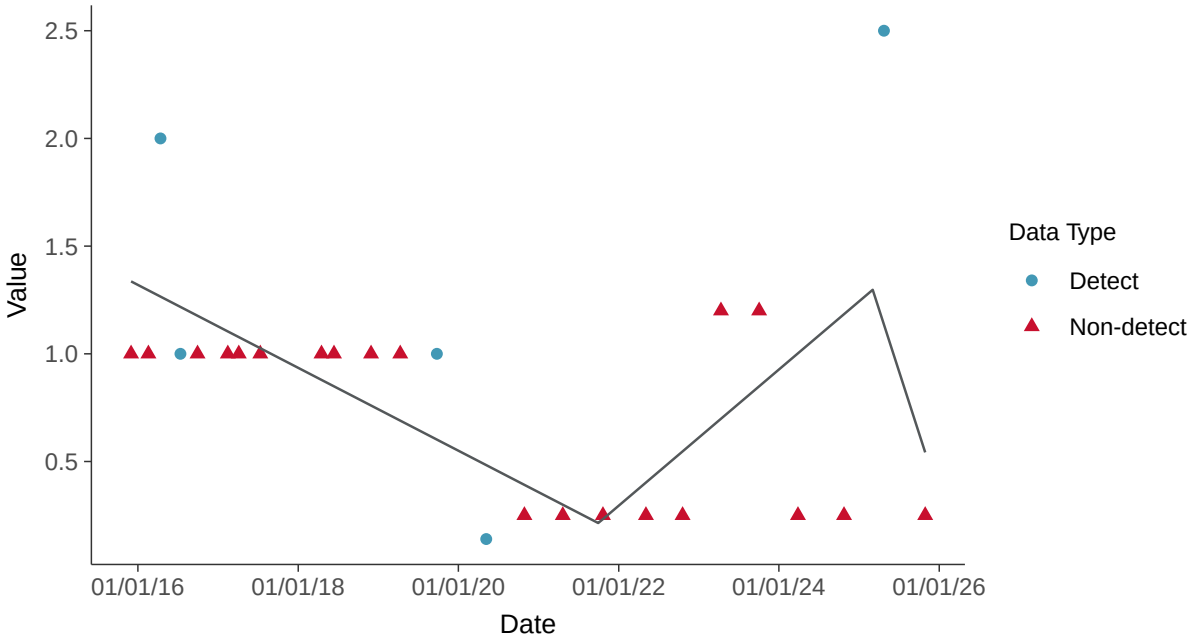

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15013 (ug/L)



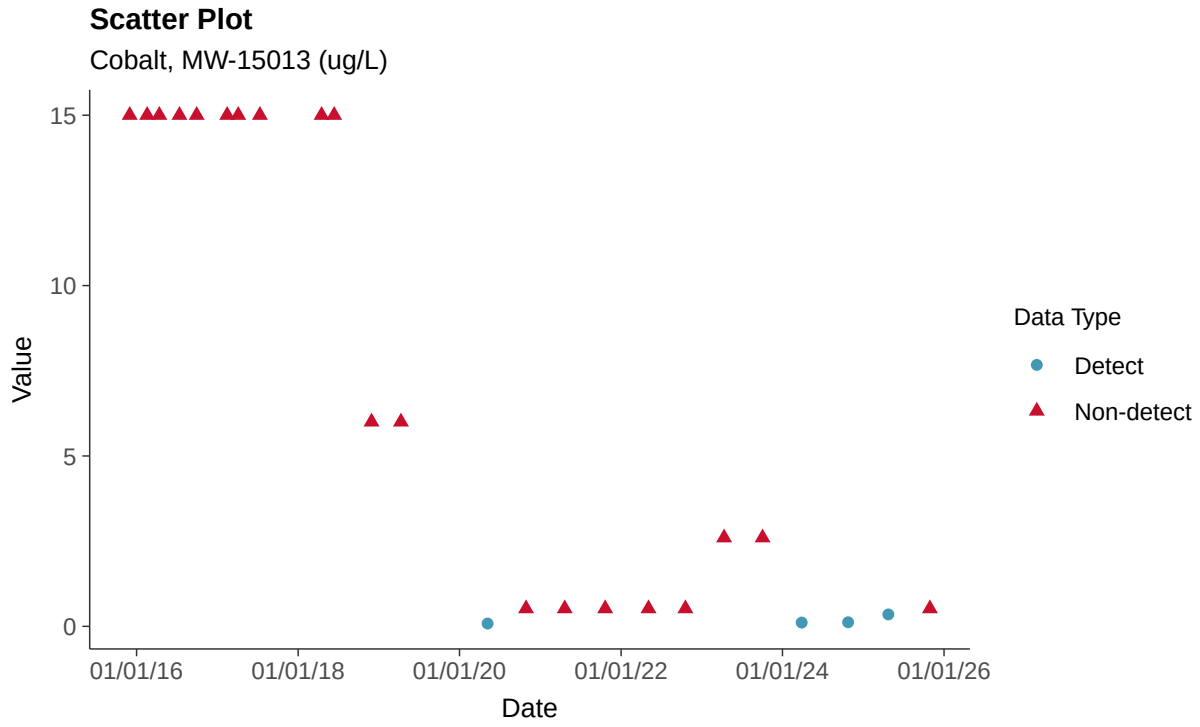
**Trend Regression: Piecewise Linear-Linear-Linear**

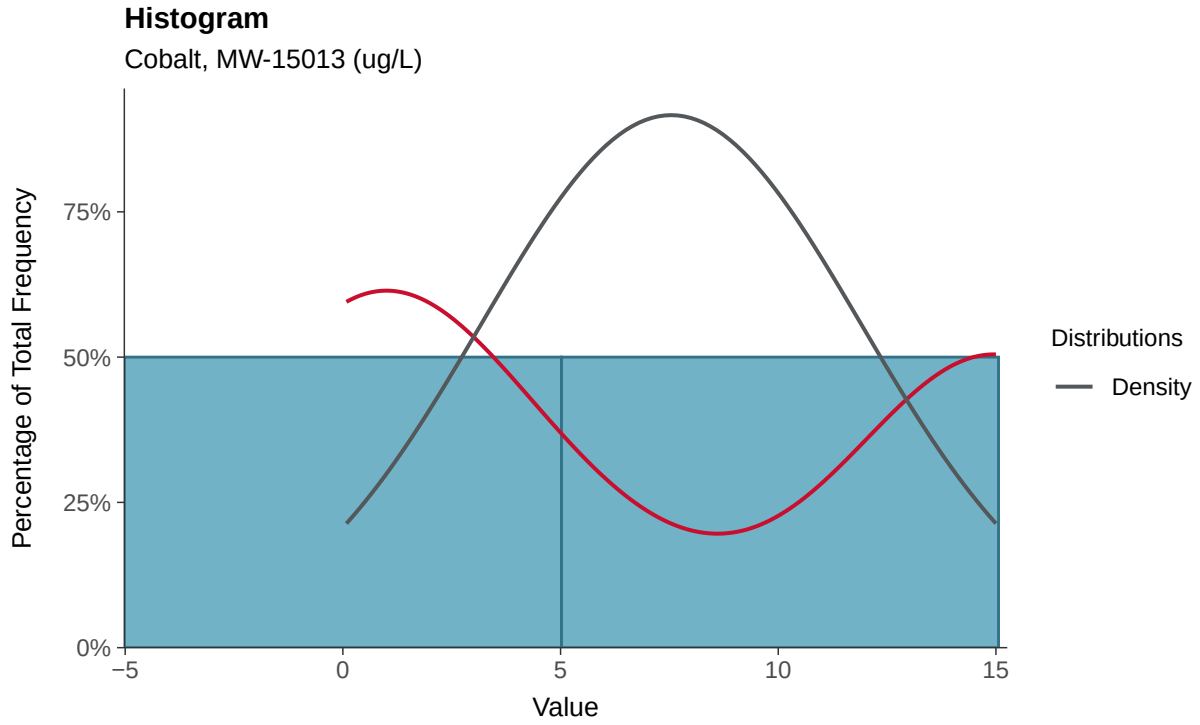
Chromium, MW-15013 (ug/L)



## Appendix IV: Cobalt, MW-15013

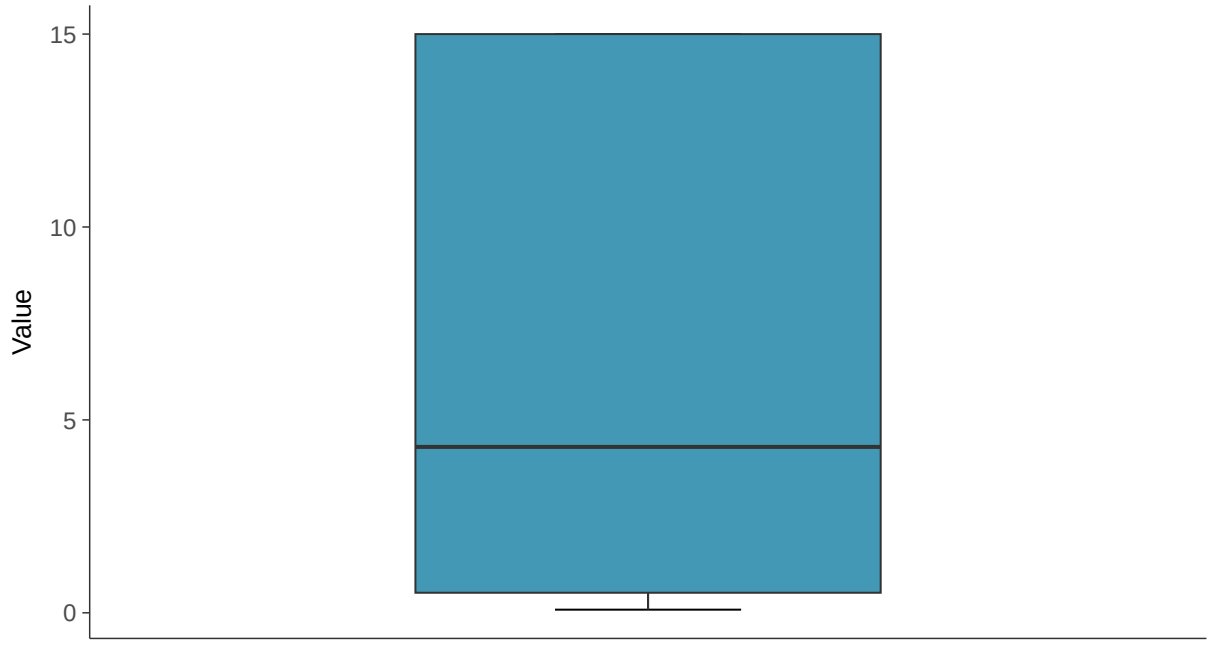
ID: 03_2_110



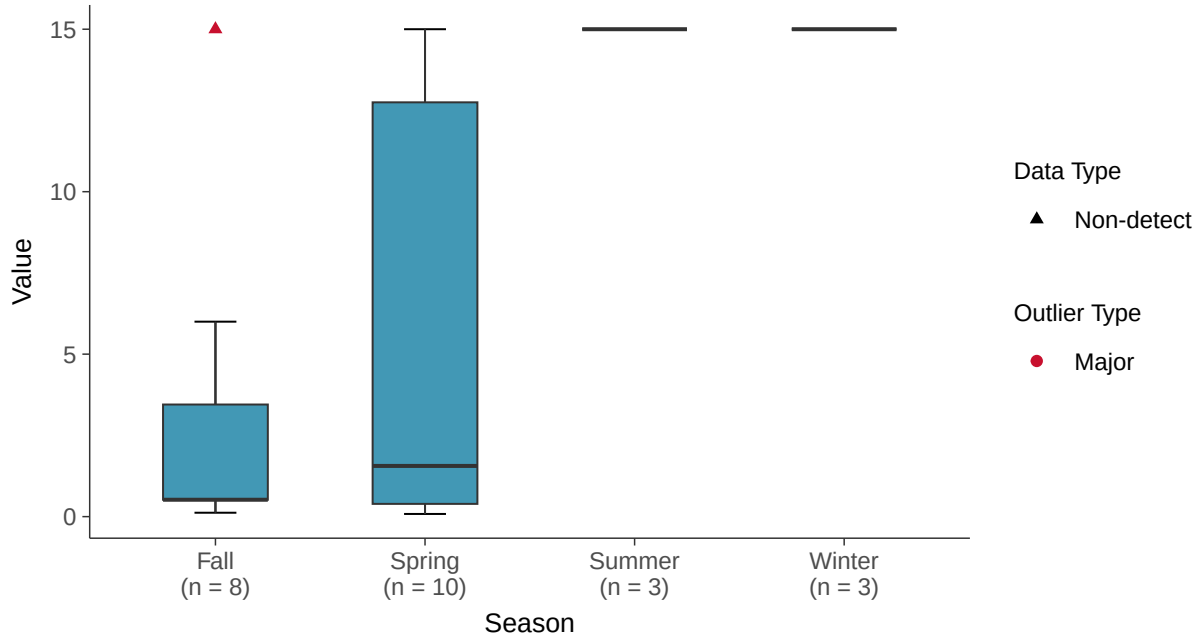
## Boxplot

Cobalt, MW-15013 (ug/L)



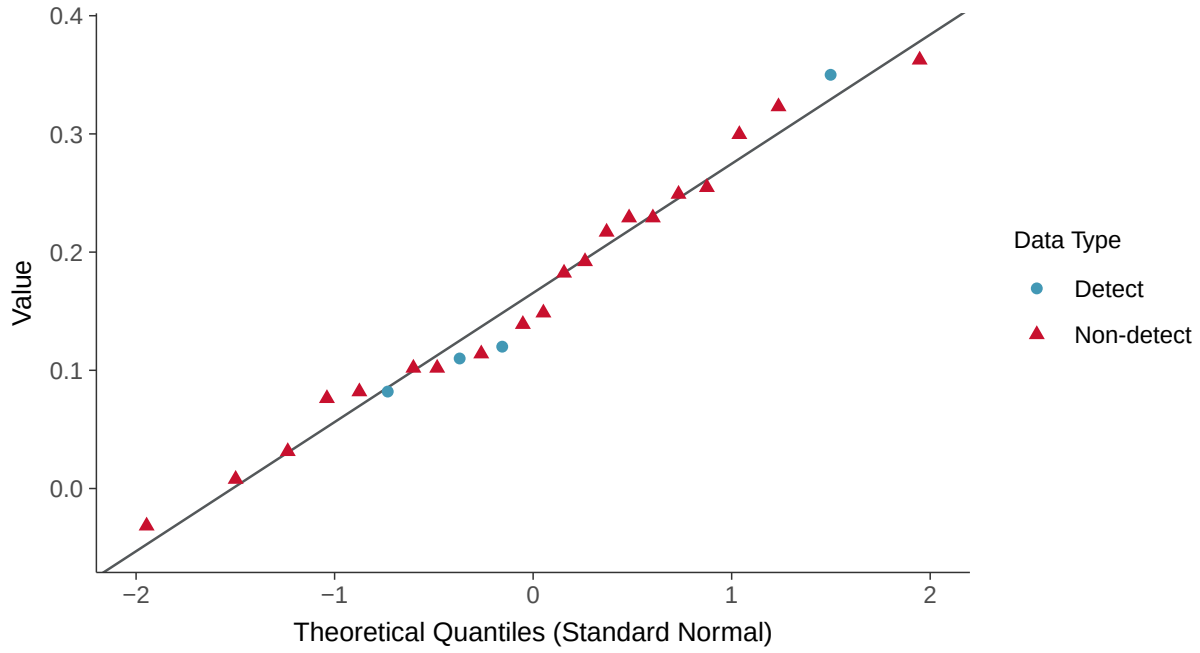

## Boxplot by Season

Cobalt, MW-15013 (ug/L)



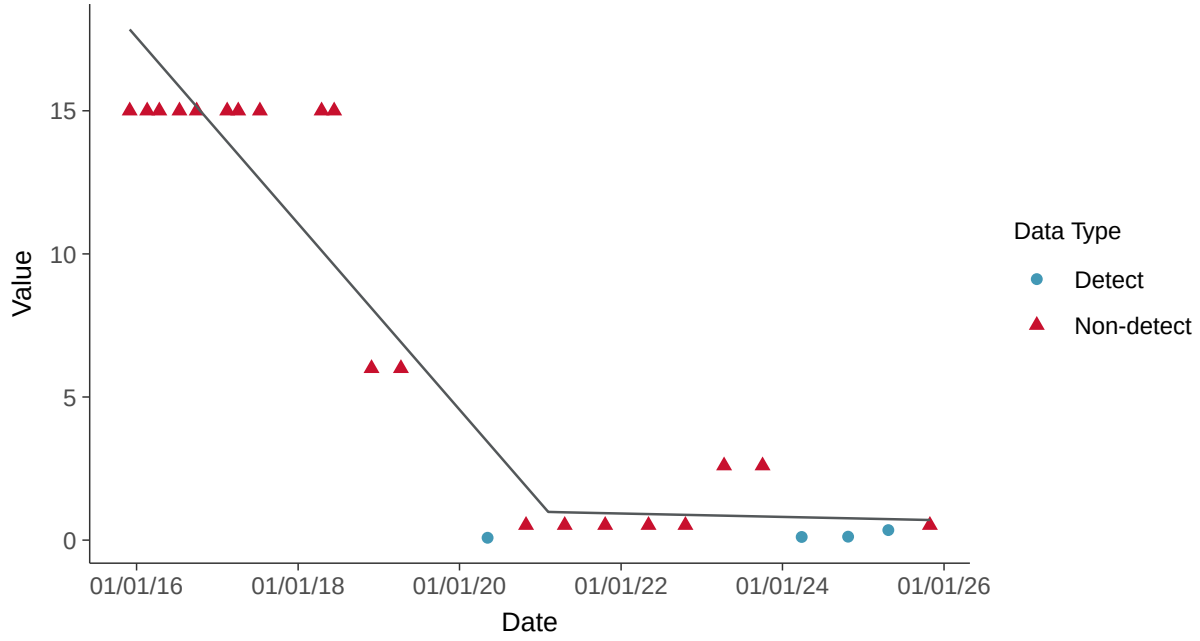
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15013 (ug/L)



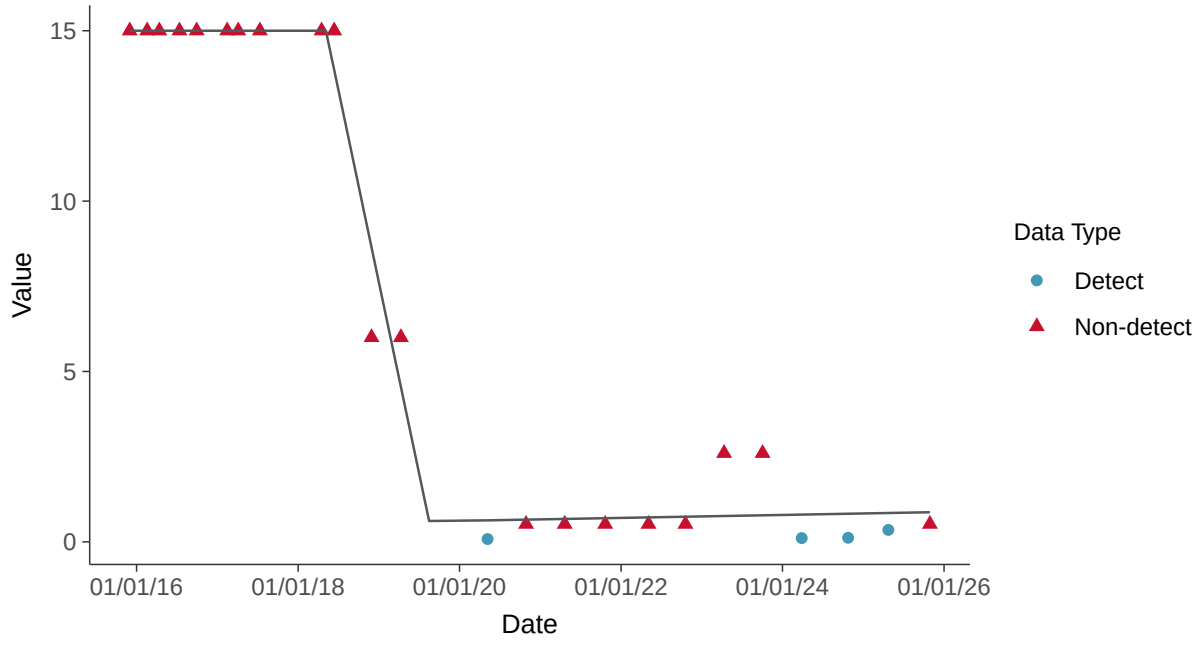

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15013 (ug/L)



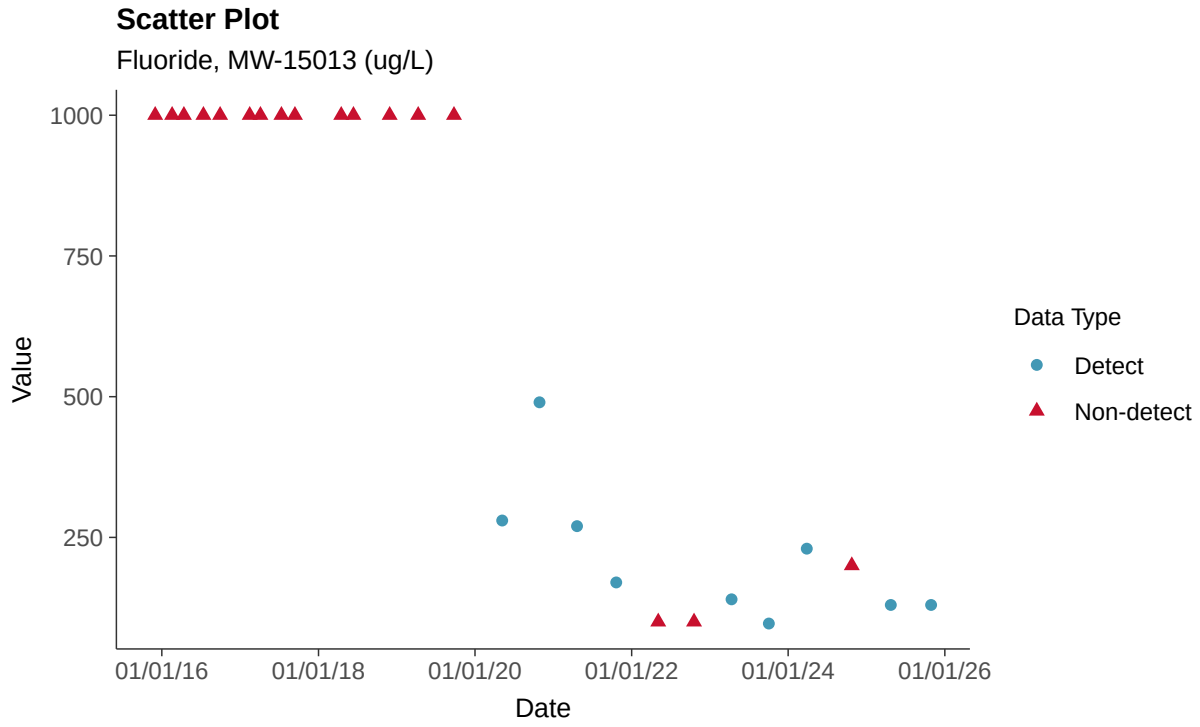
**Trend Regression: Piecewise Linear-Linear-Linear**

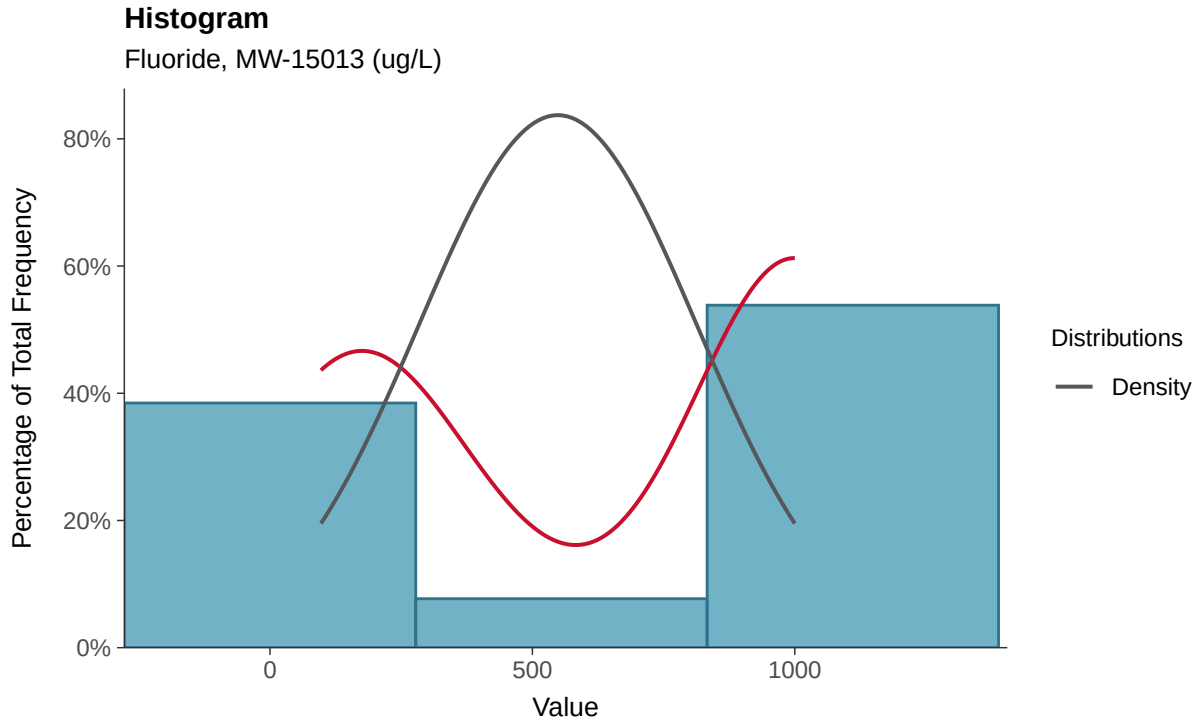
Cobalt, MW-15013 (ug/L)



## Appendix IV: Fluoride, MW-15013

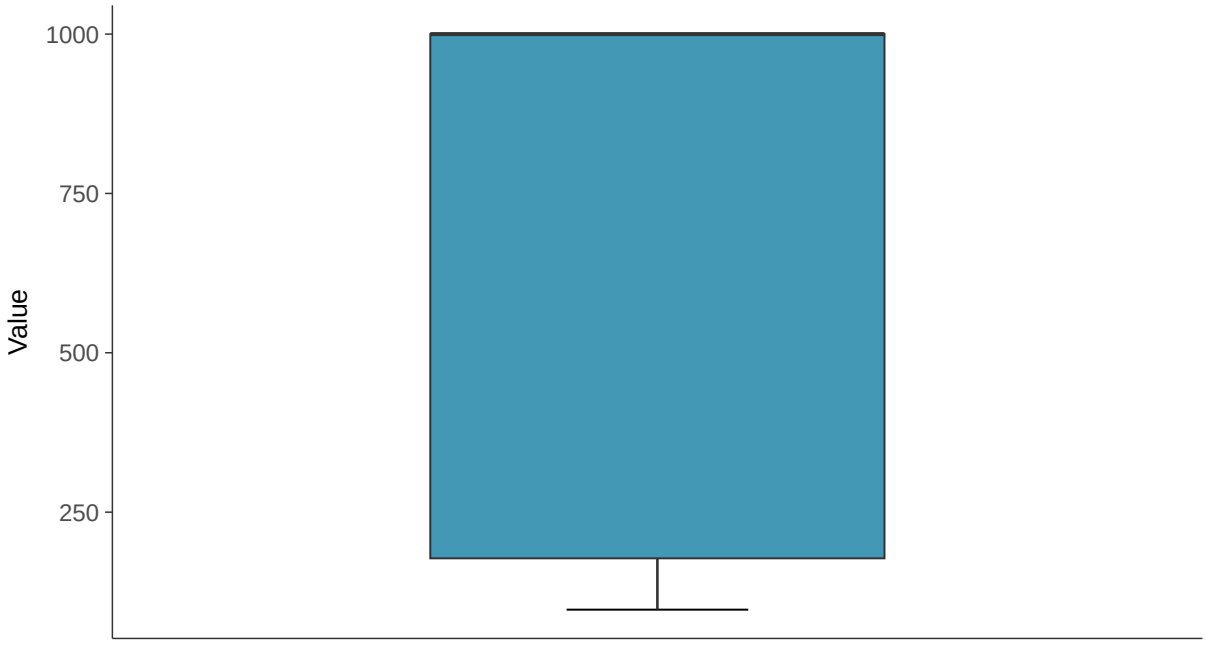
ID: 03_2_114



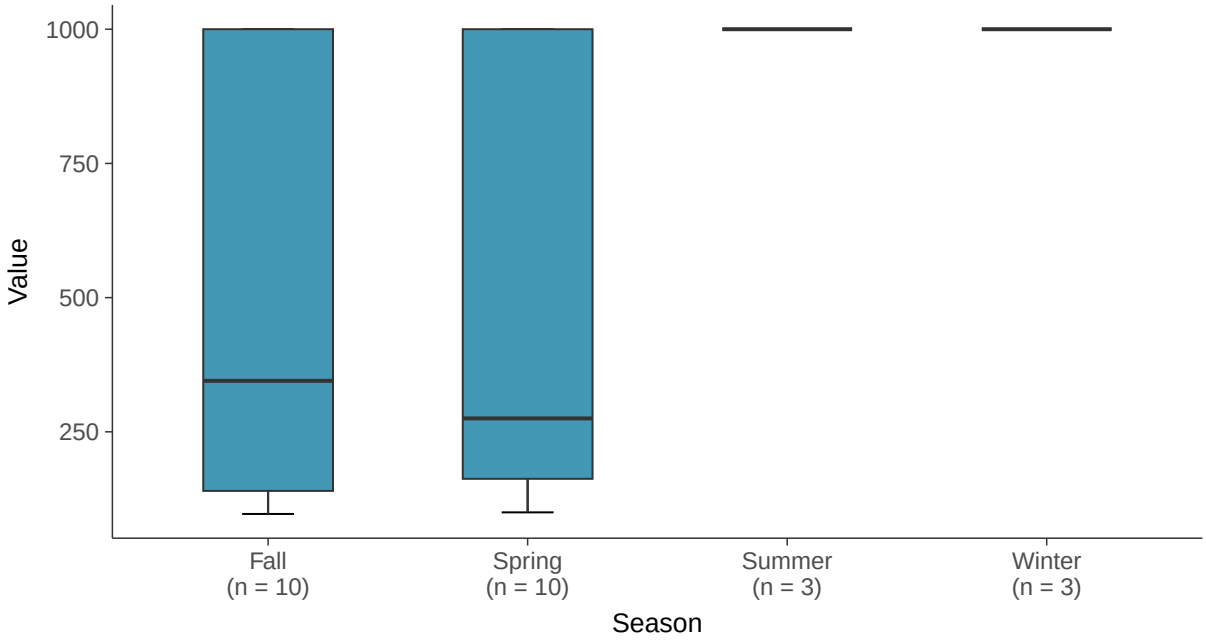
**Boxplot**

Fluoride, MW-15013 (ug/L)



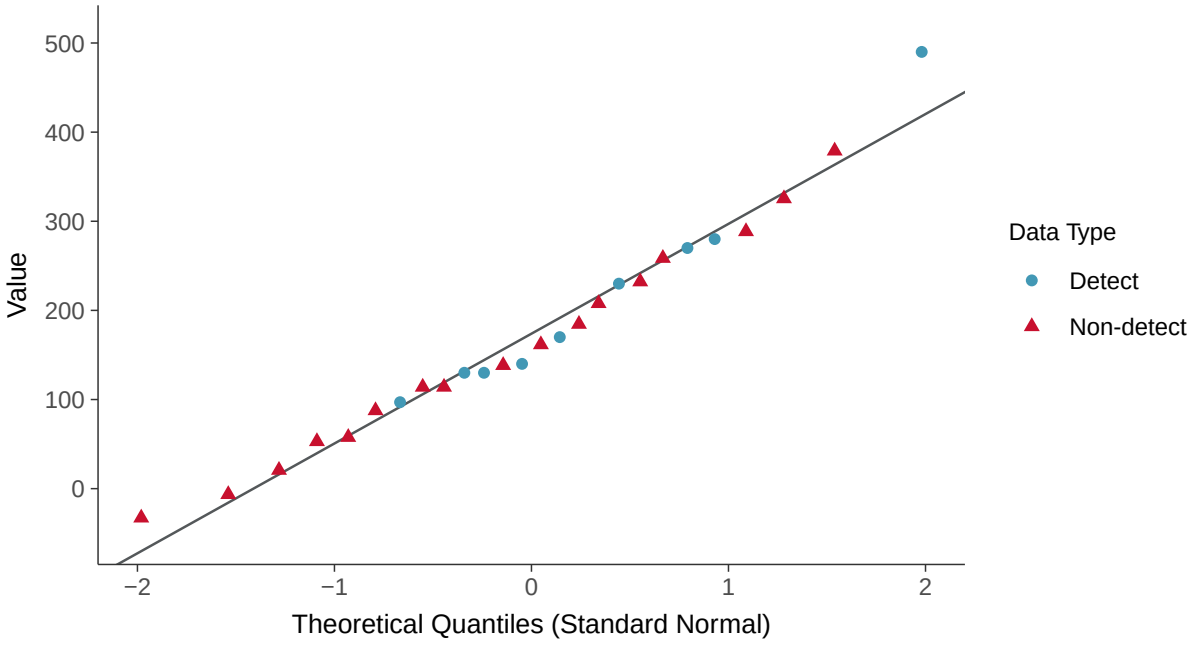

**Boxplot by Season**

Fluoride, MW-15013 (ug/L)



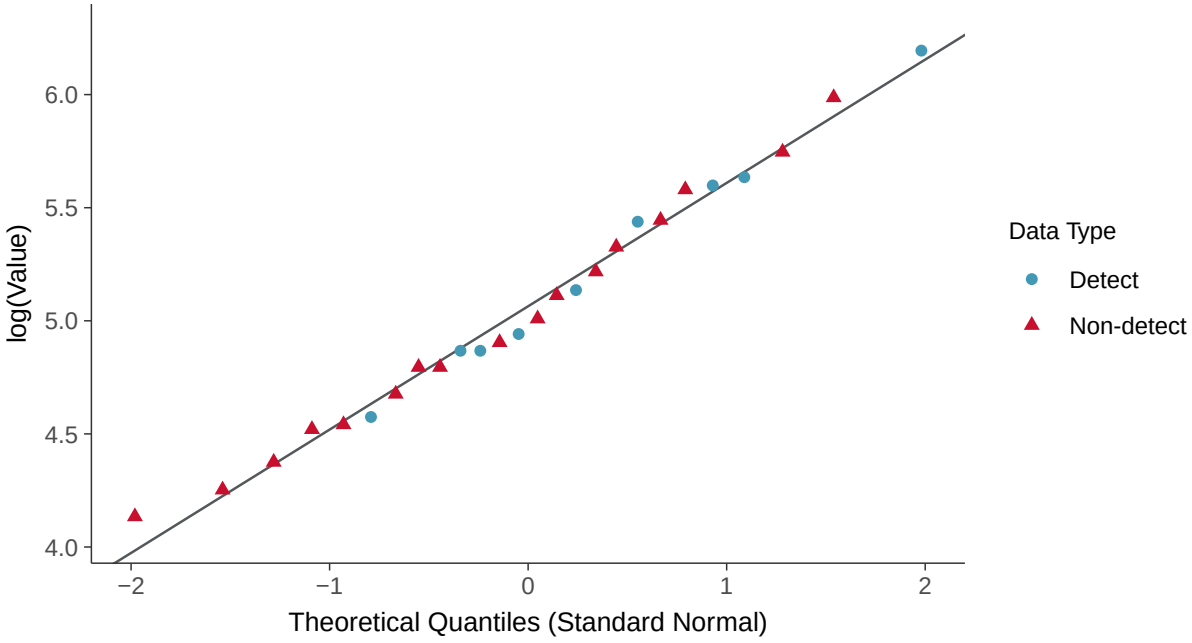
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15013 (ug/L)



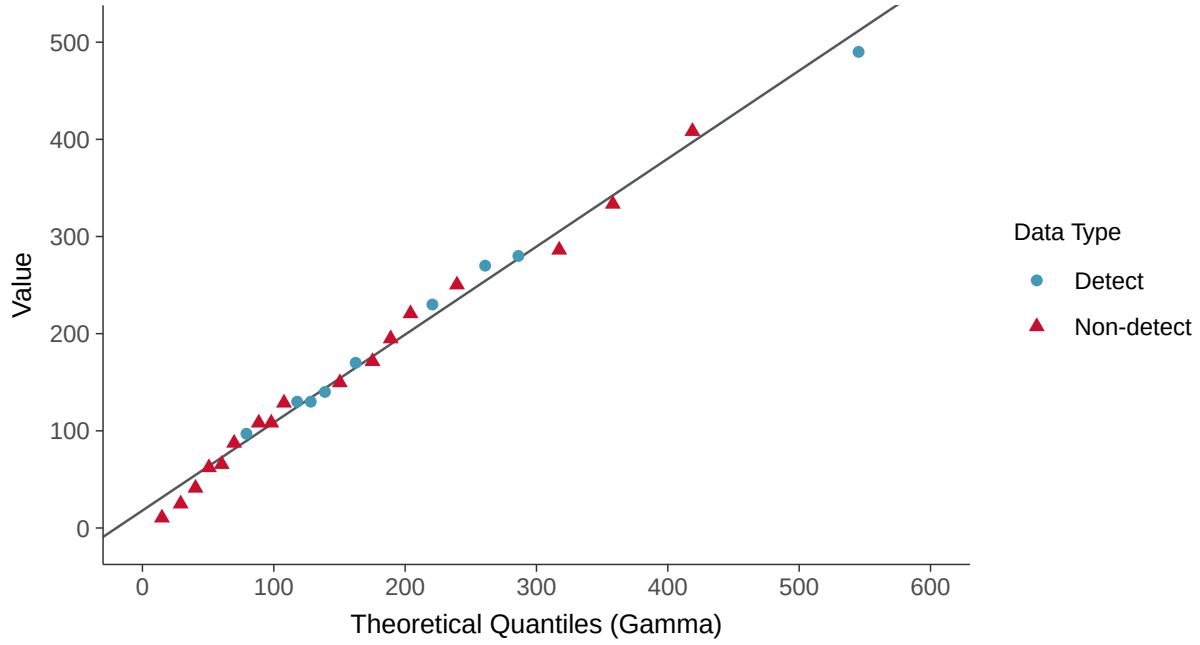

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15013 (ug/L)



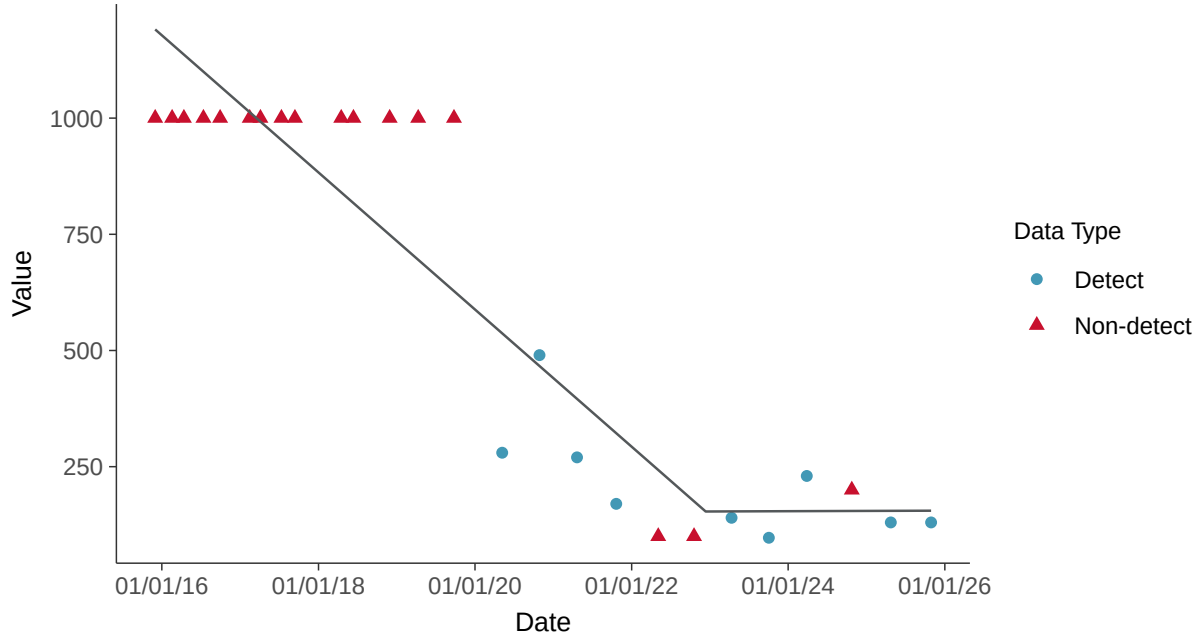
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15013 (ug/L)



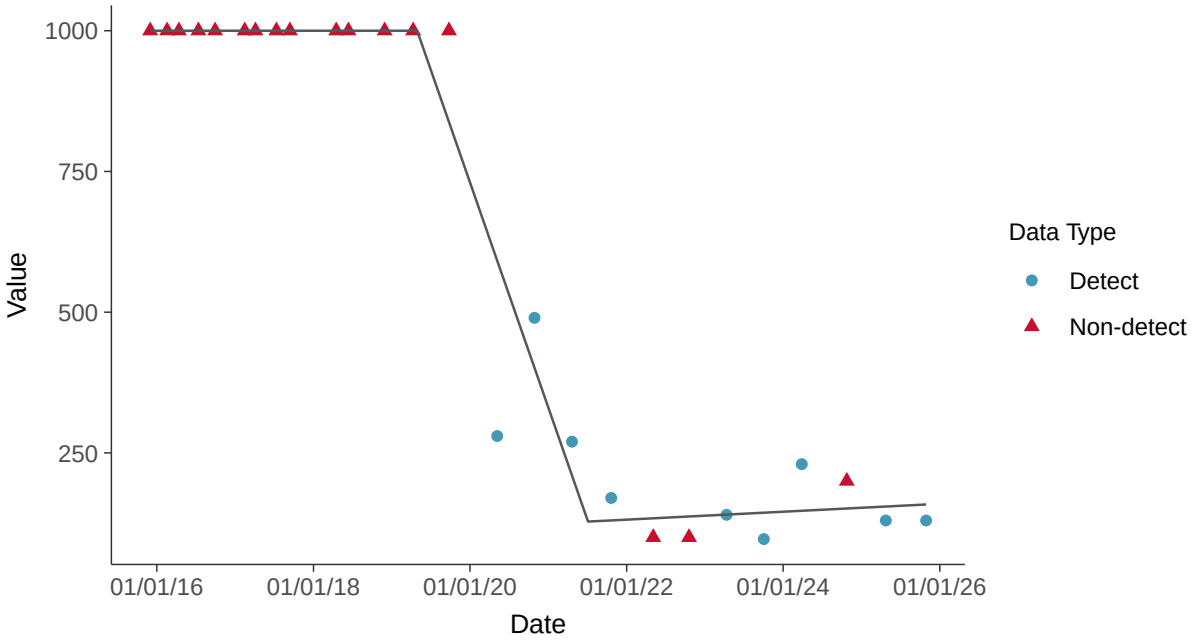

**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15013 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Fluoride, MW-15013 (ug/L)

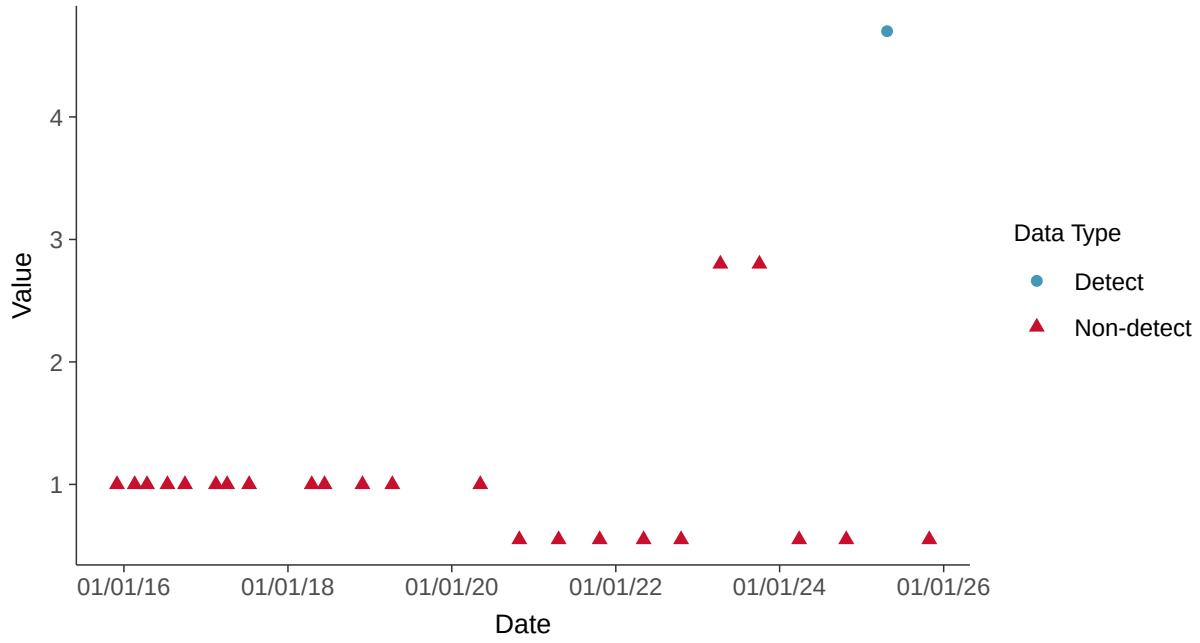


## Appendix IV: Lead, MW-15013

ID: 03_2_116

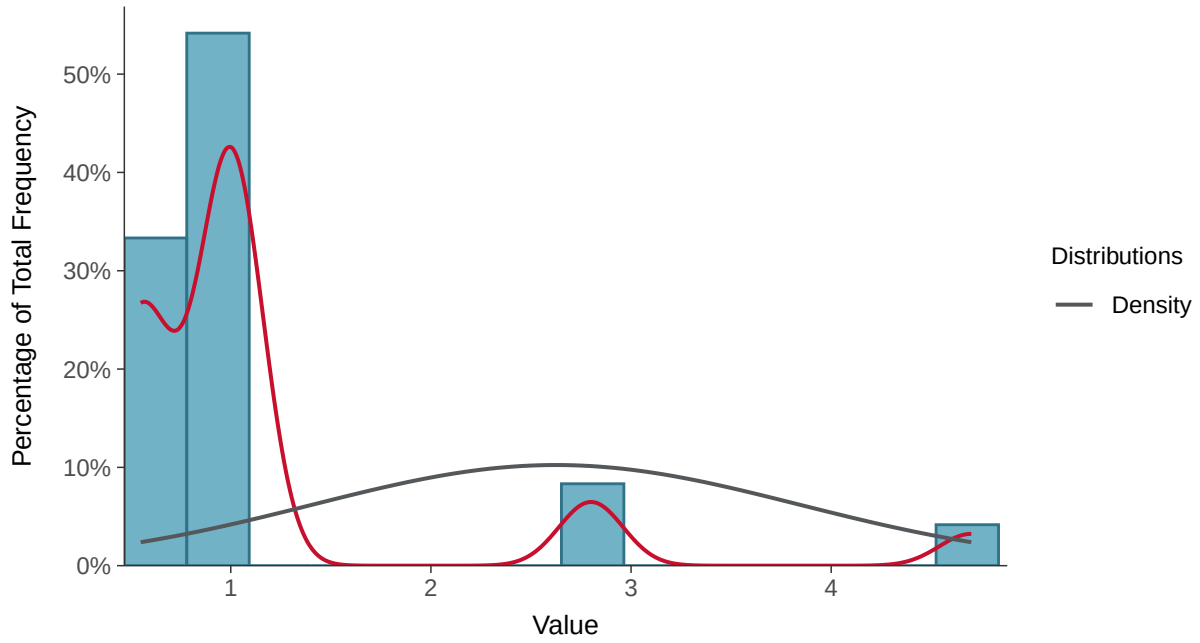
**Scatter Plot**

Lead, MW-15013 (ug/L)



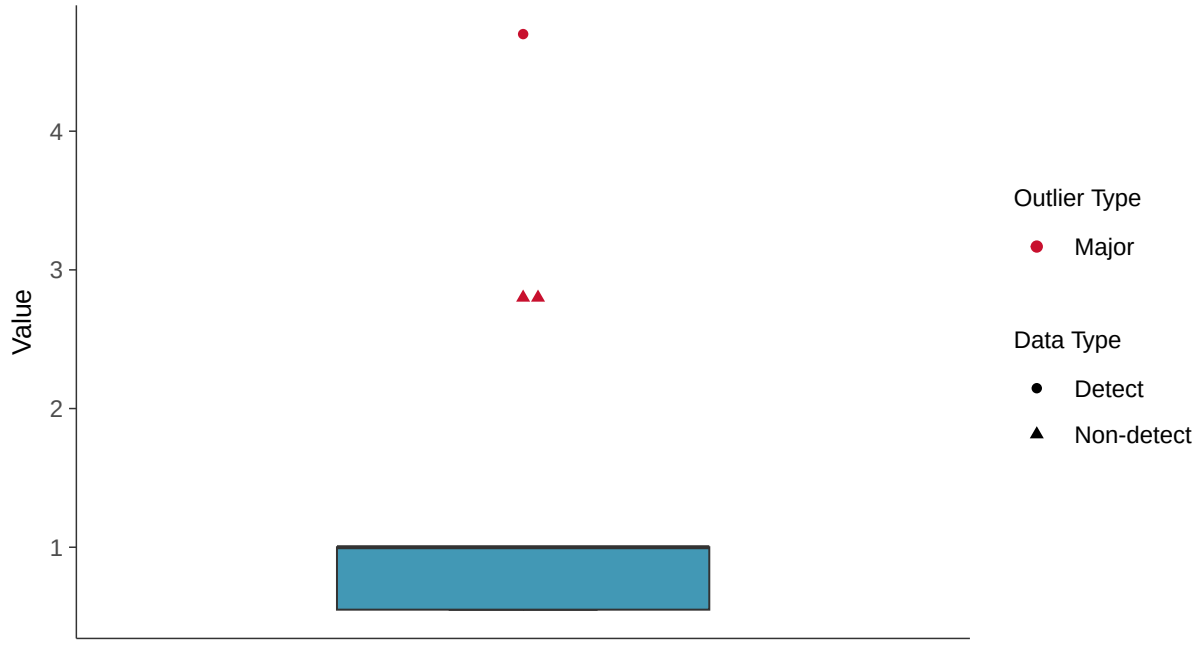

**Histogram**

Lead, MW-15013 (ug/L)



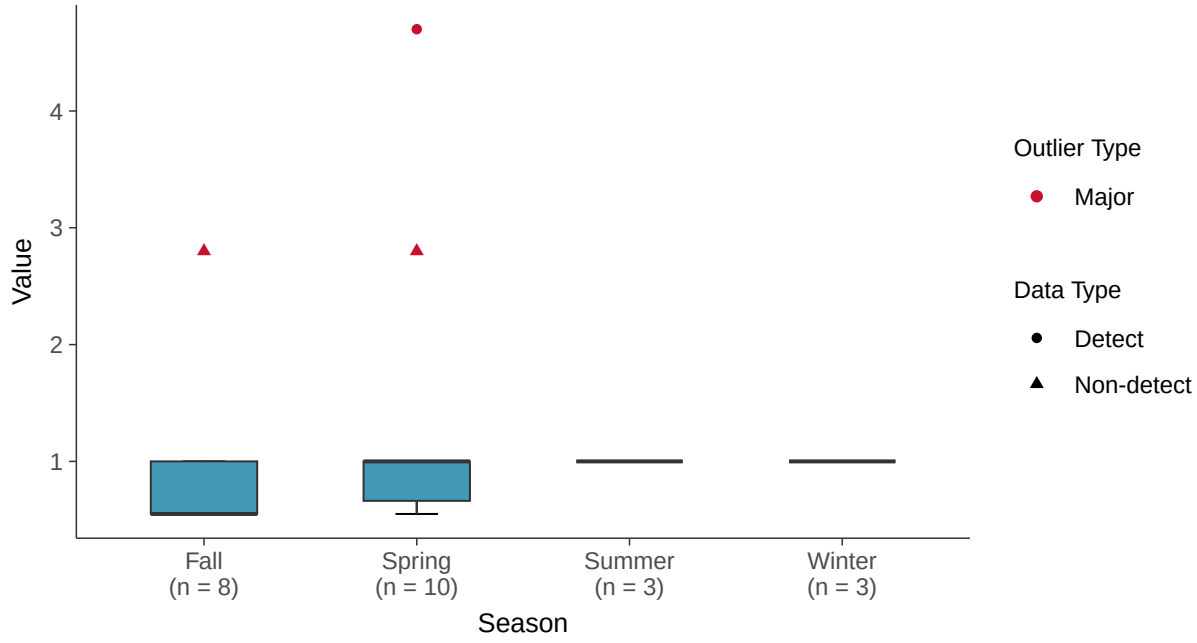
## Boxplot

Lead, MW-15013 (ug/L)



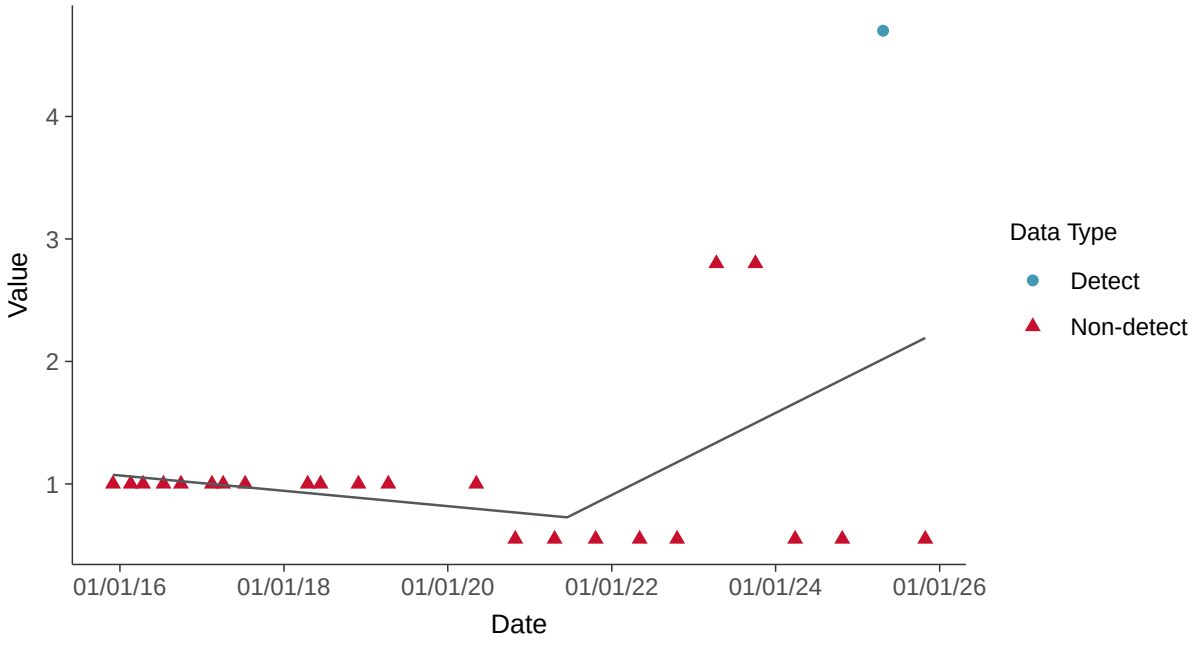

## Boxplot by Season

Lead, MW-15013 (ug/L)



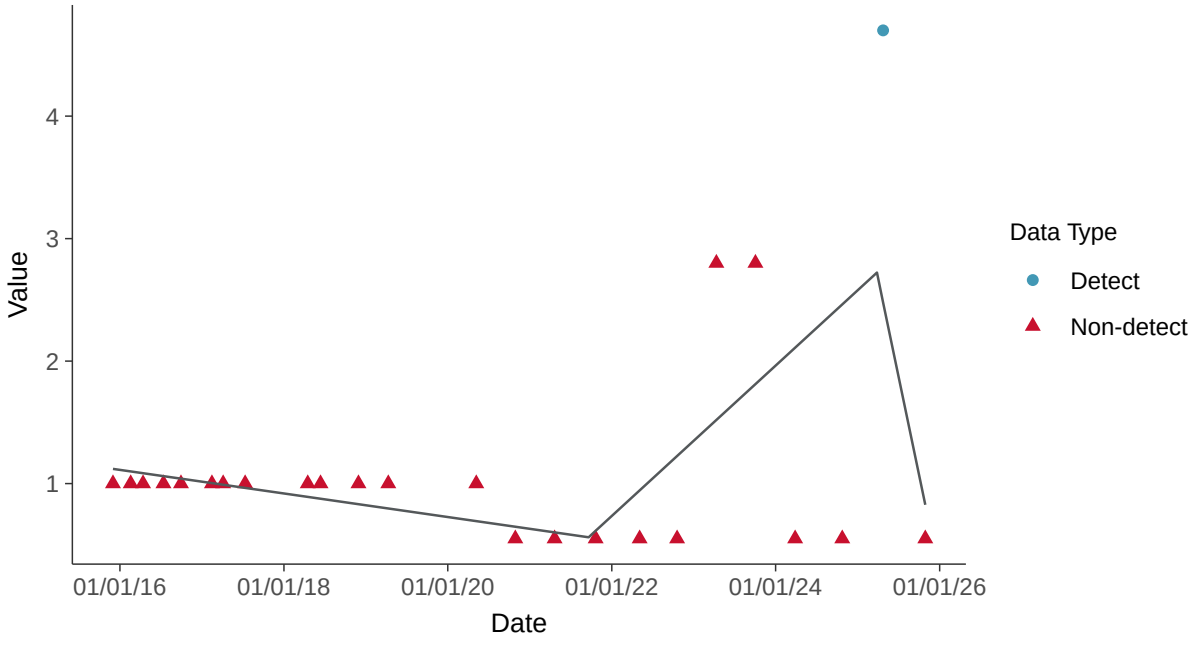
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15013 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Lead, MW-15013 (ug/L)

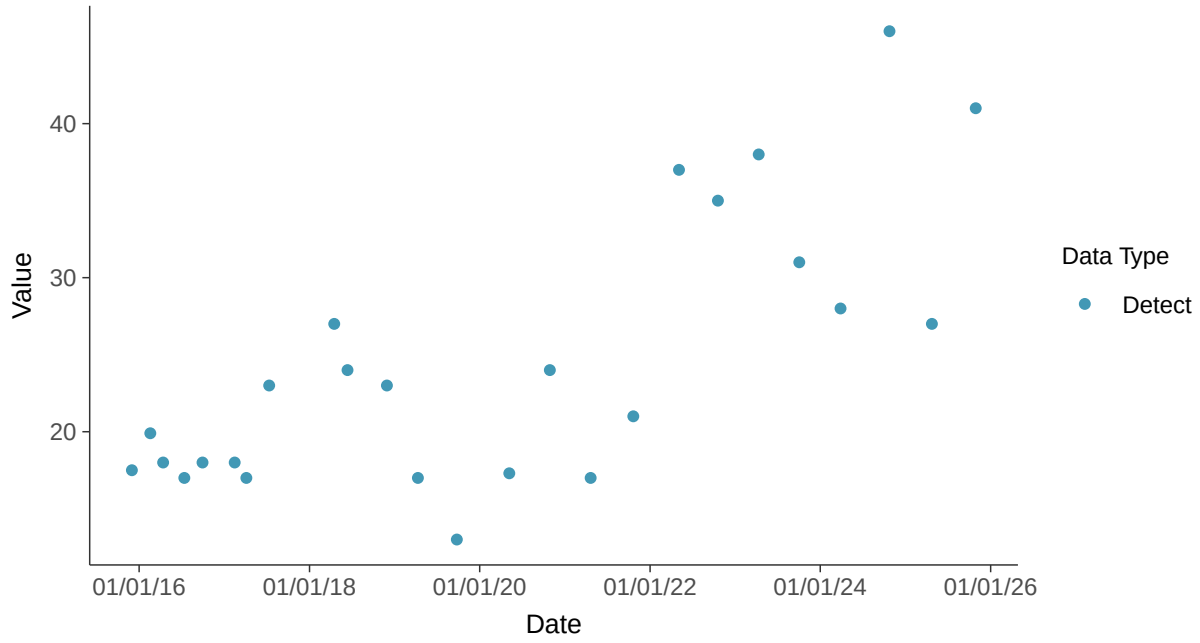


## Appendix IV: Lithium, MW-15013

ID: 03_2_117

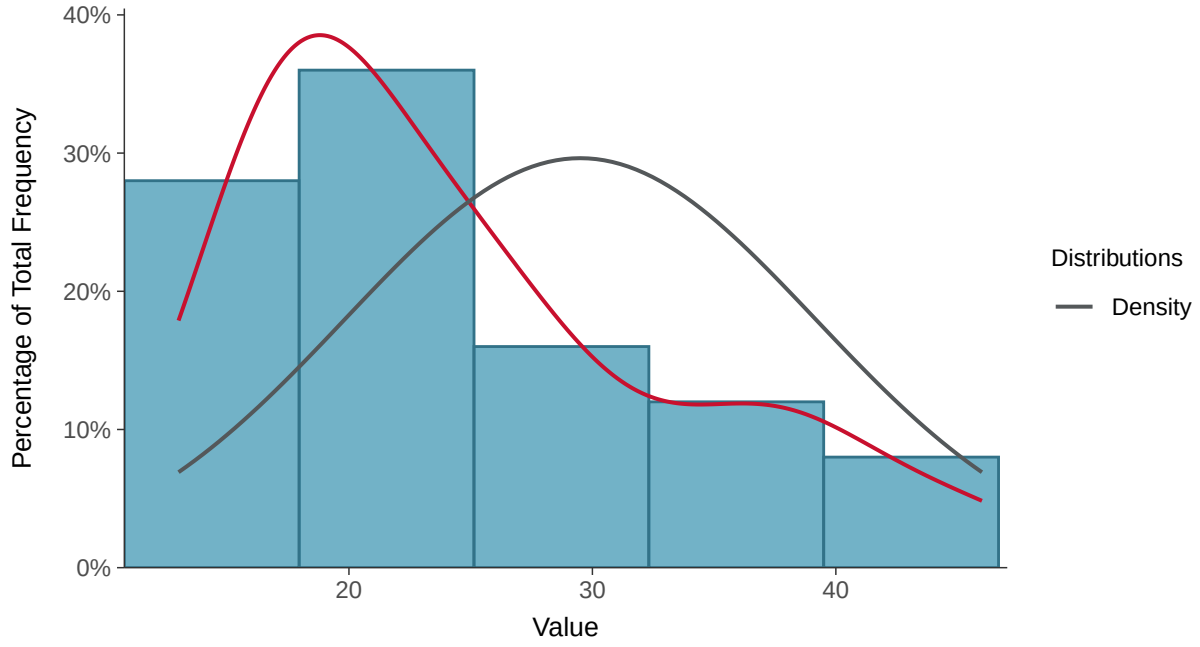
**Scatter Plot**

Lithium, MW-15013 (ug/L)



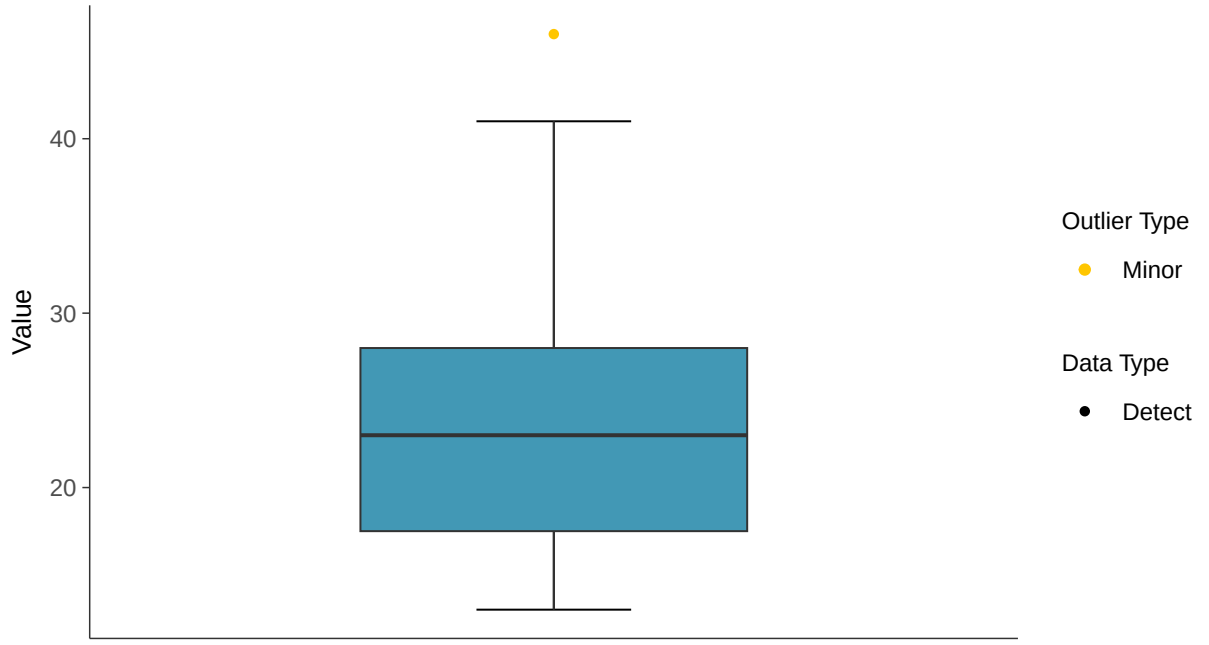

**Histogram**

Lithium, MW-15013 (ug/L)



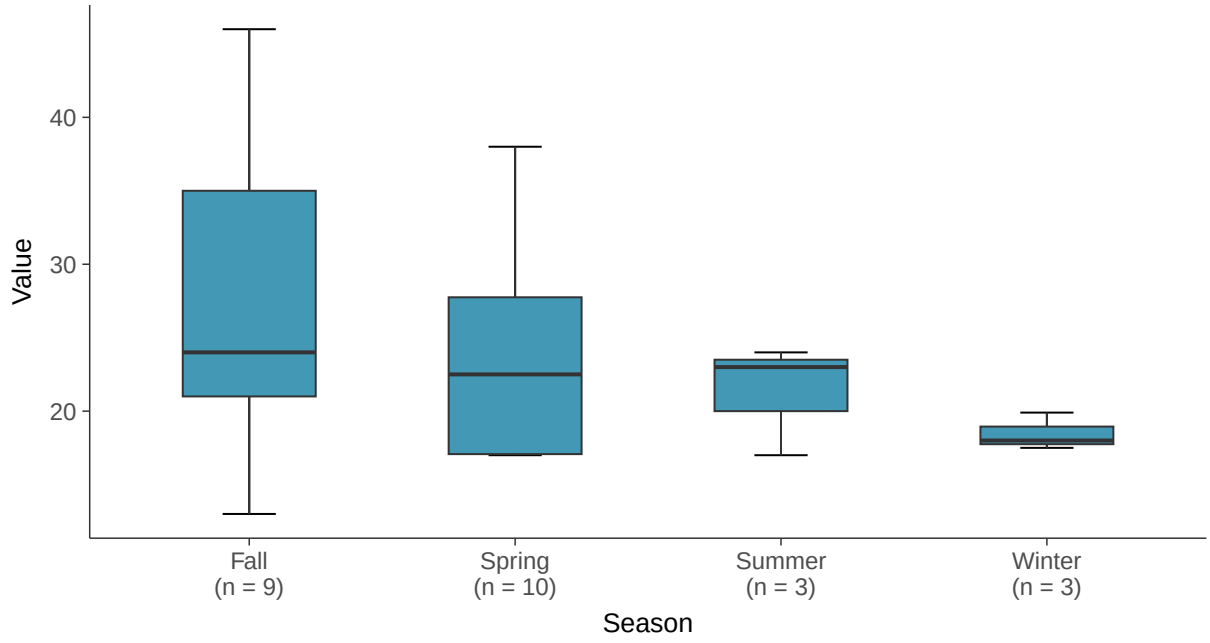
**Boxplot**

Lithium, MW-15013 (ug/L)



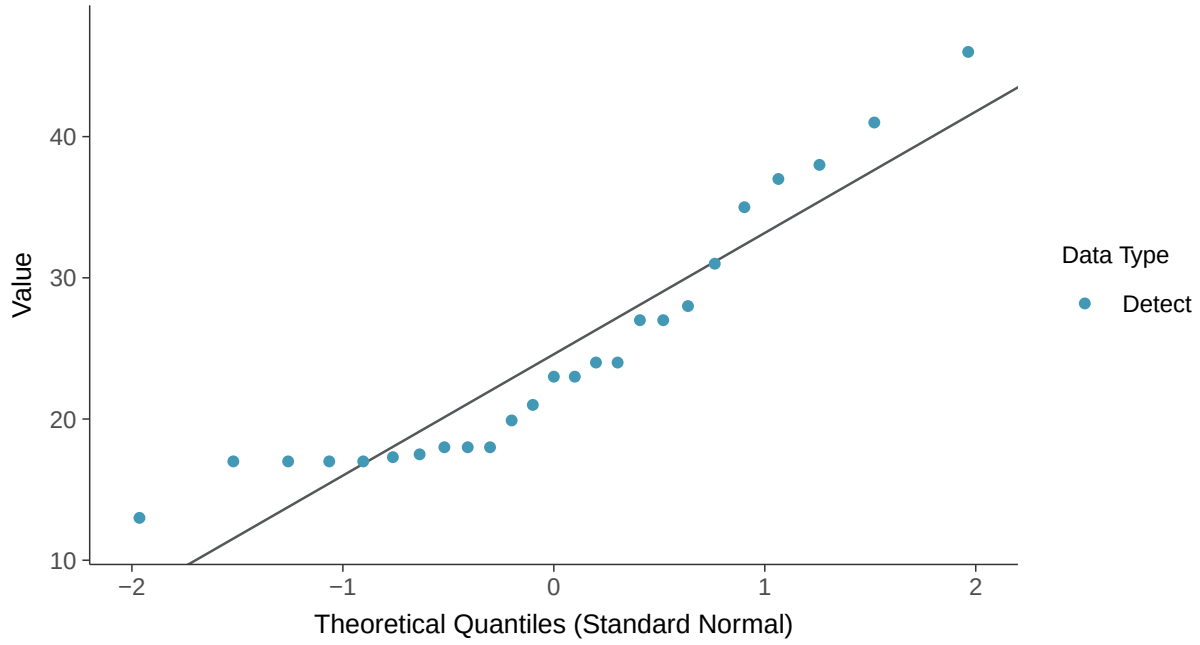

**Boxplot by Season**

Lithium, MW-15013 (ug/L)



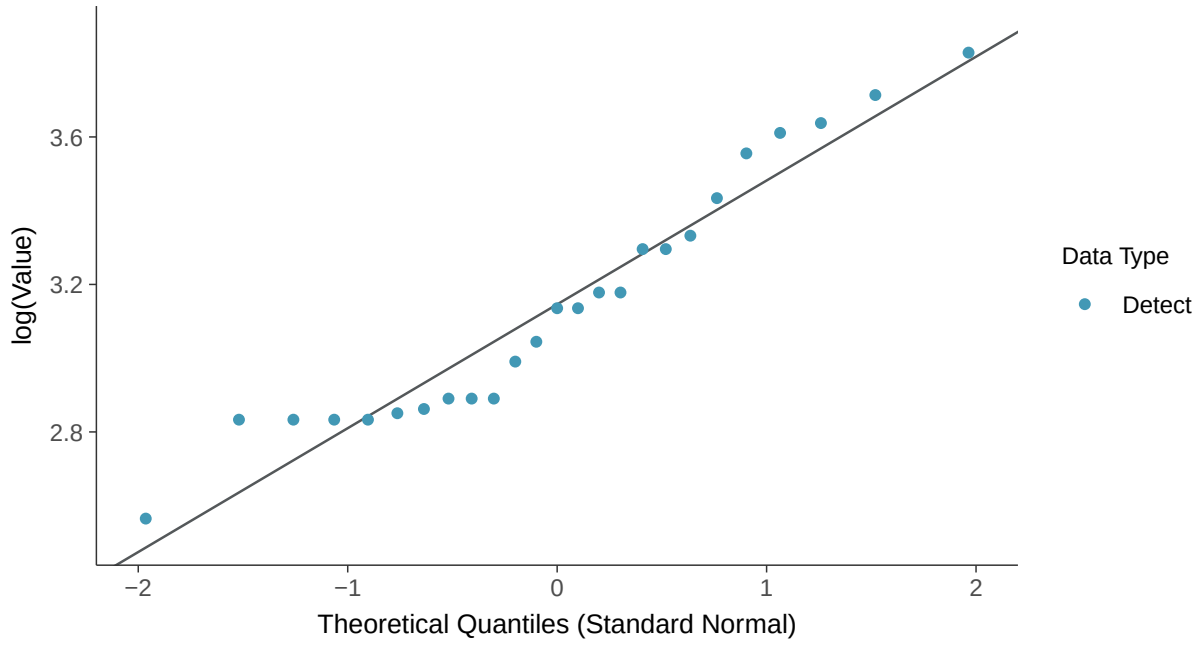
**Normal Q-Q plot**

Lithium, MW-15013 (ug/L)



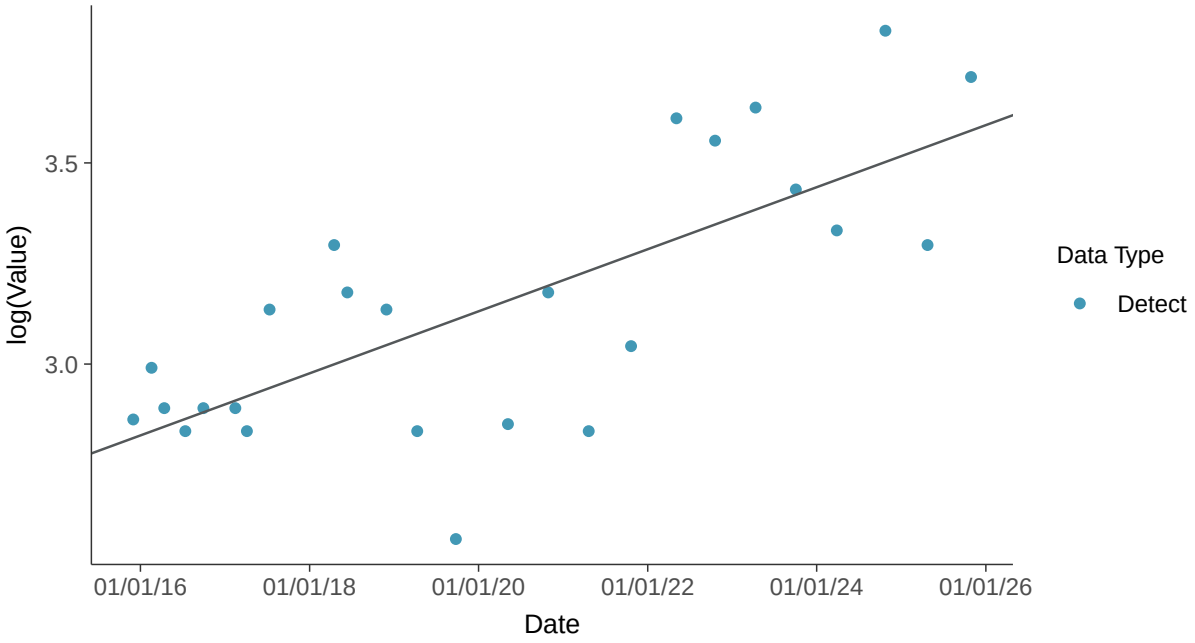

**Lognormal Q-Q plot**

Lithium, MW-15013 (ug/L)



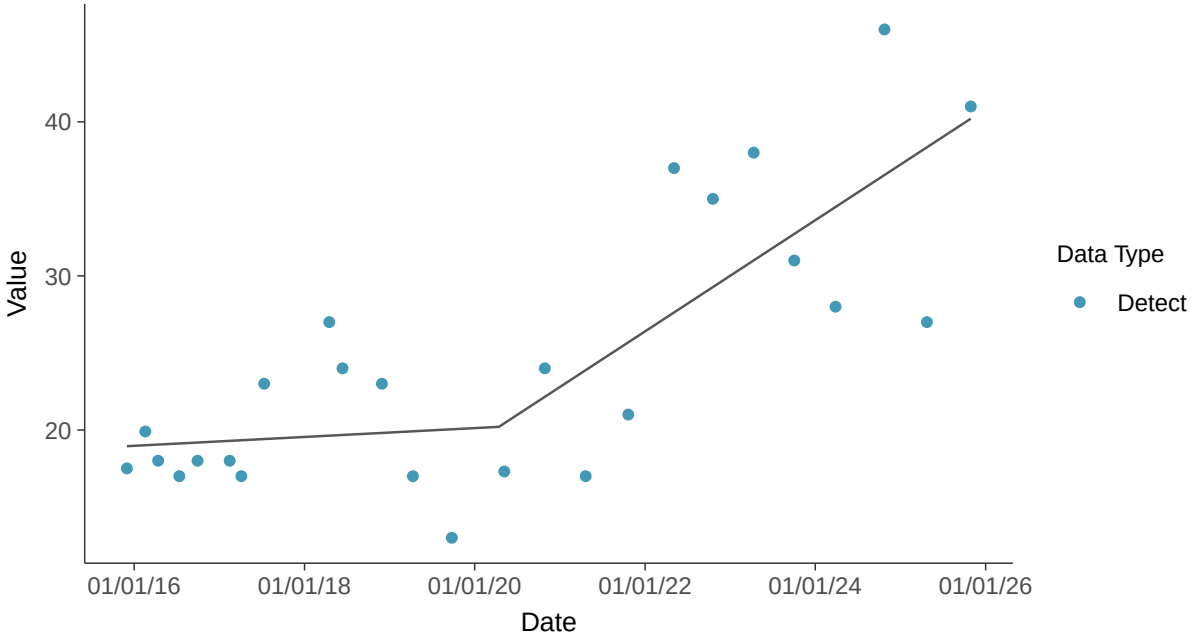
**Trend Regression: Lognormal MLE**

Lithium, MW-15013 (ug/L)



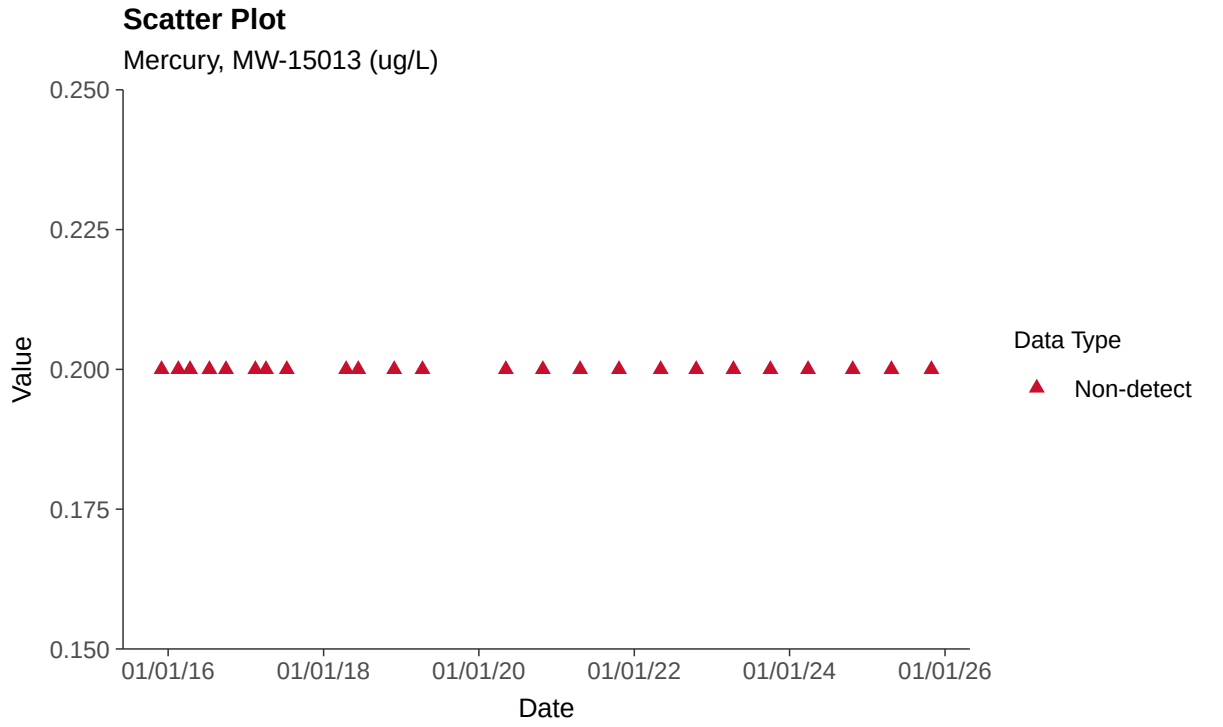

**Trend Regression: Piecewise Linear-Linear**

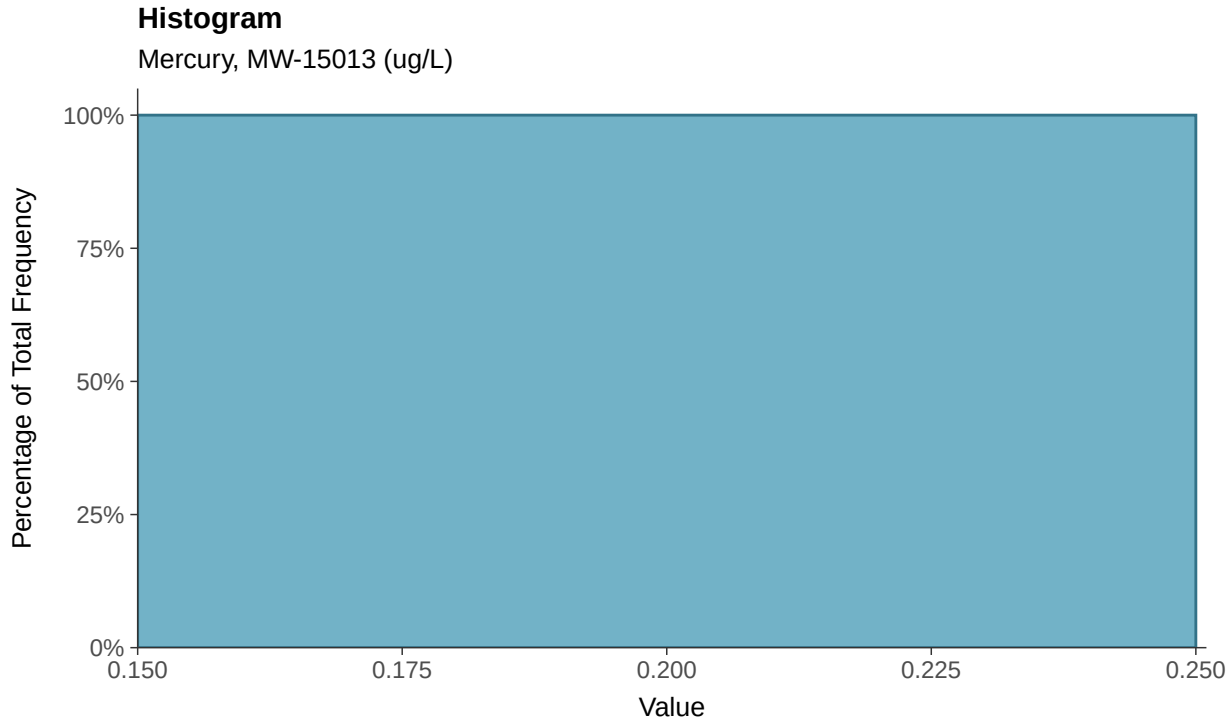
Lithium, MW-15013 (ug/L)



## Appendix IV: Mercury, MW-15013

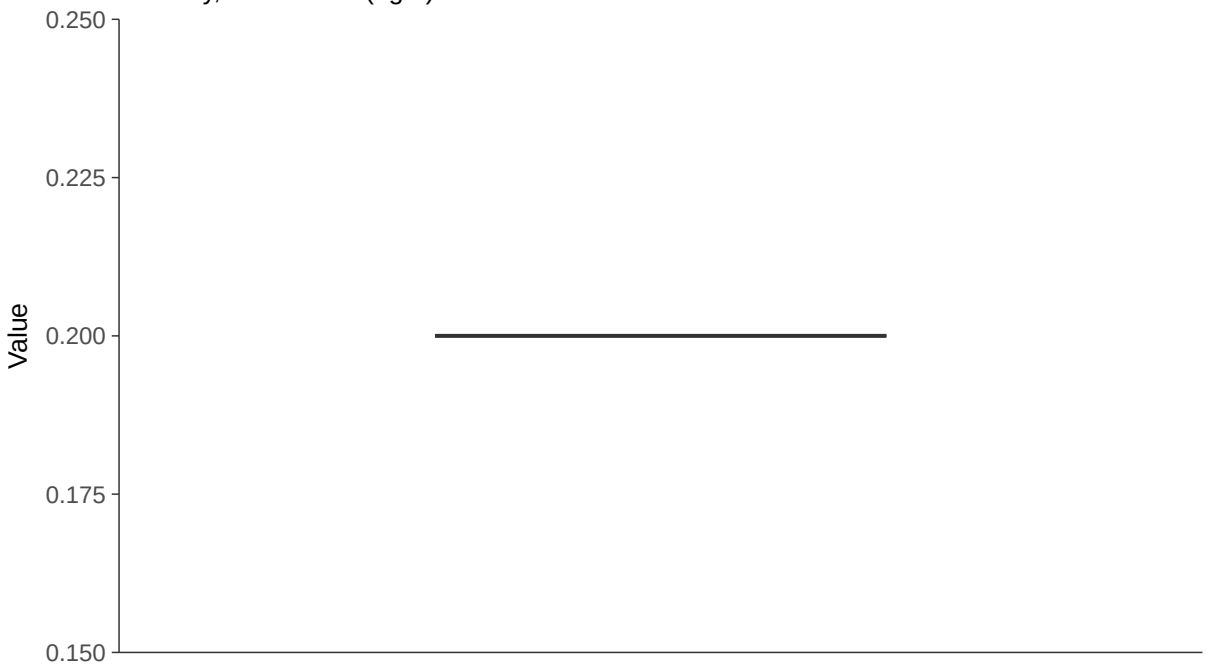
ID: 03_2_118



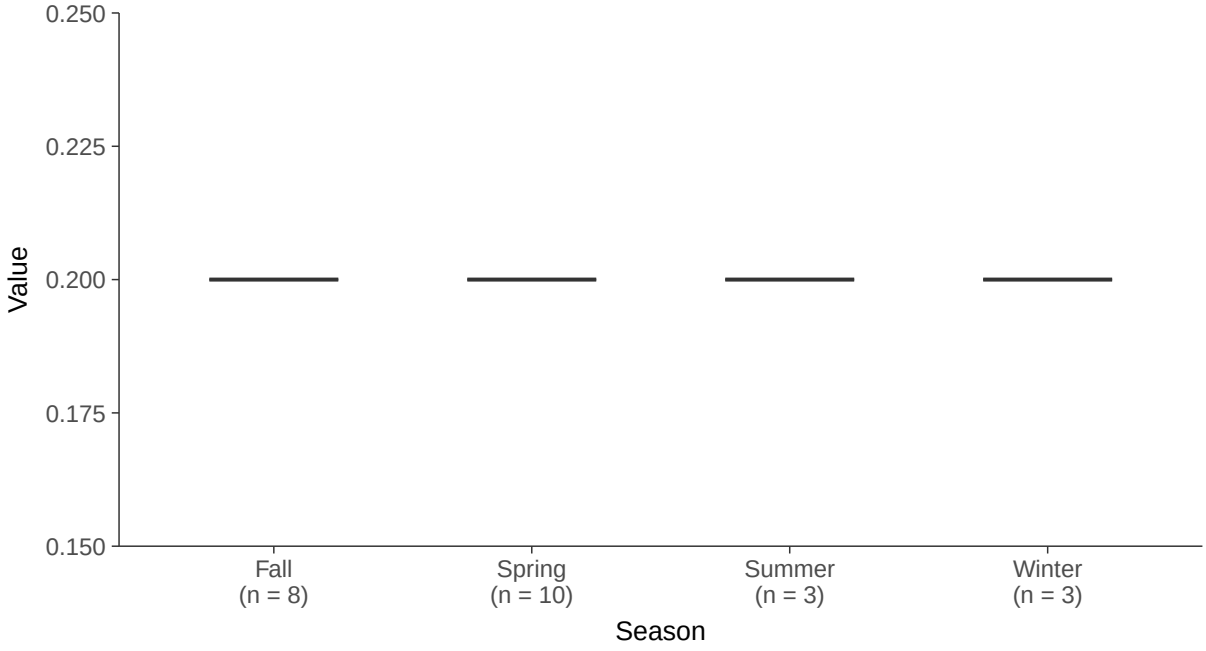
**Boxplot**

Mercury, MW-15013 (ug/L)




**Boxplot by Season**

Mercury, MW-15013 (ug/L)

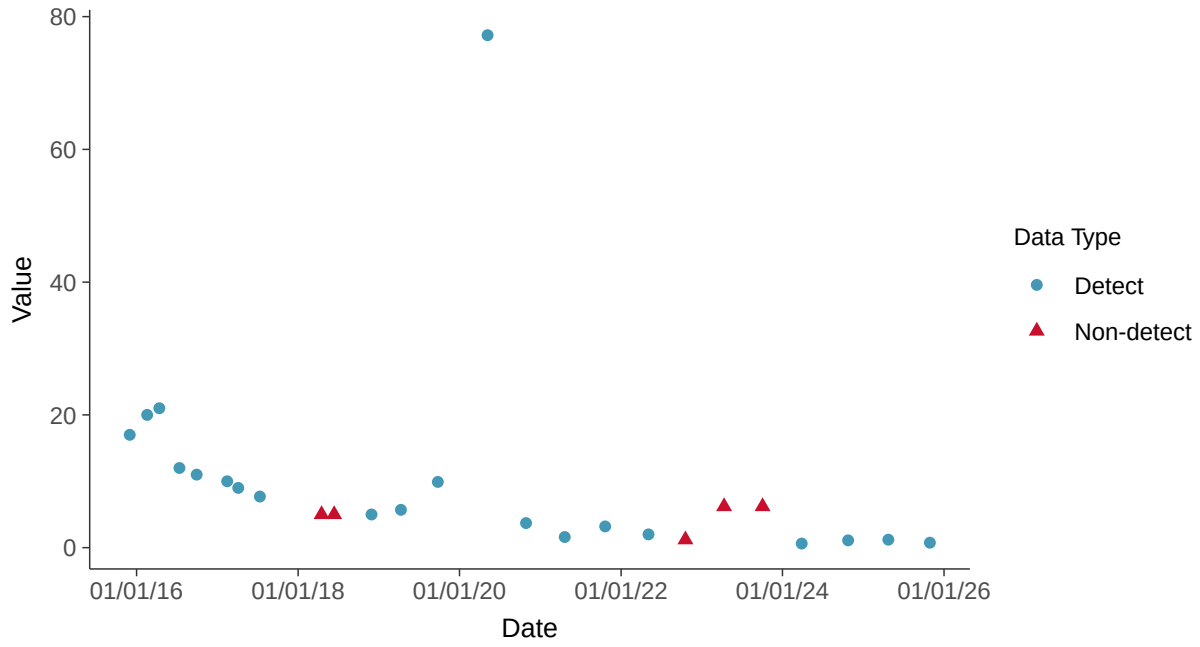


## Appendix IV: Molybdenum, MW-15013

ID: 03_2_119

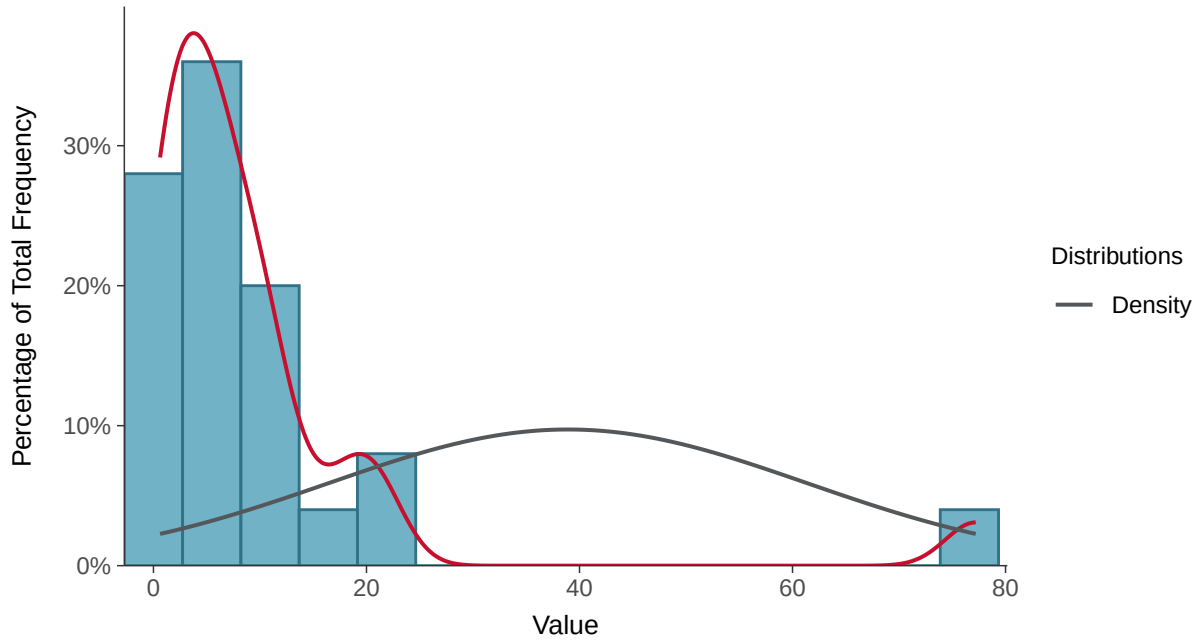
**Scatter Plot**

Molybdenum, MW-15013 (ug/L)



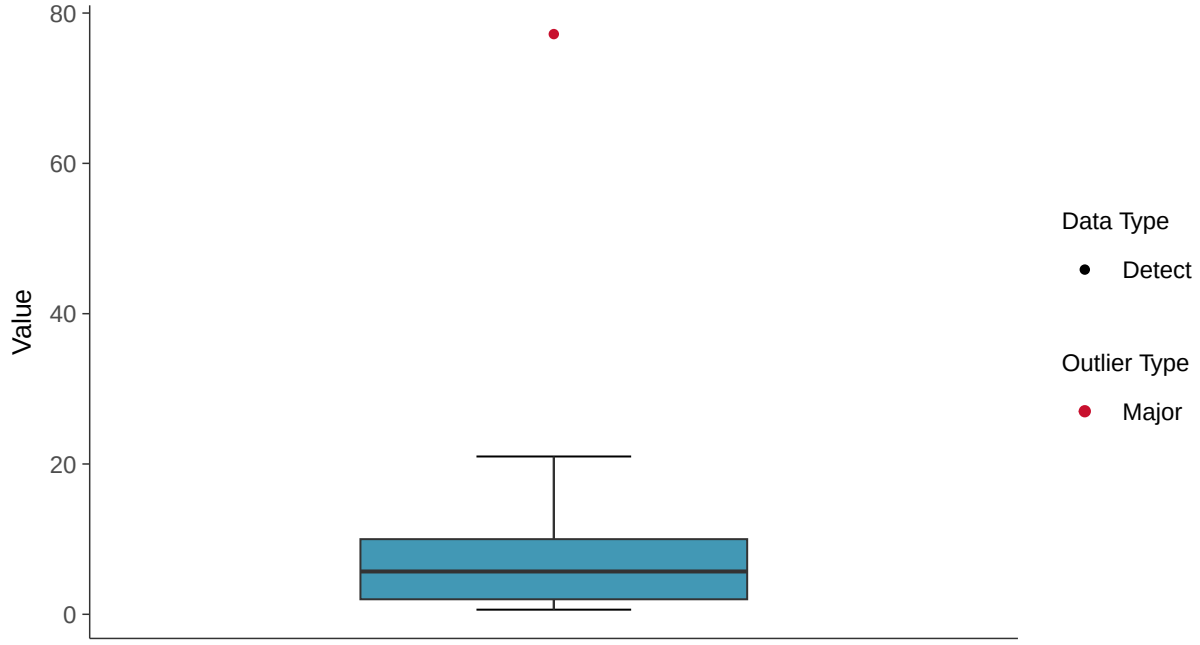

**Histogram**

Molybdenum, MW-15013 (ug/L)



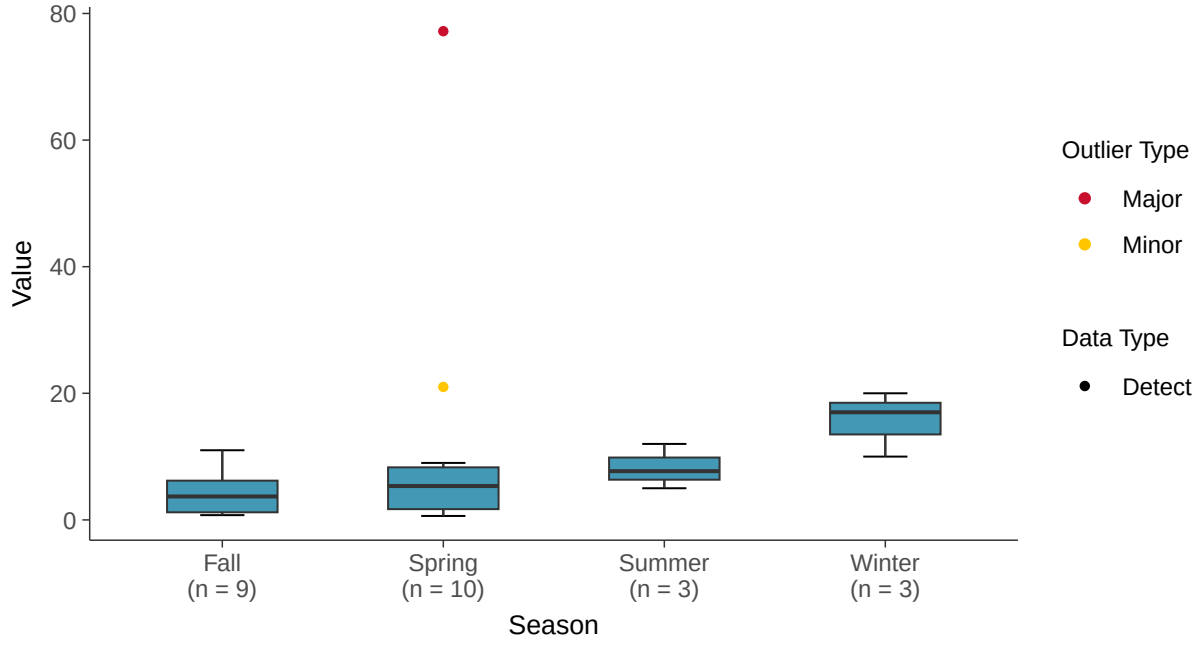
## Boxplot

Molybdenum, MW-15013 (ug/L)



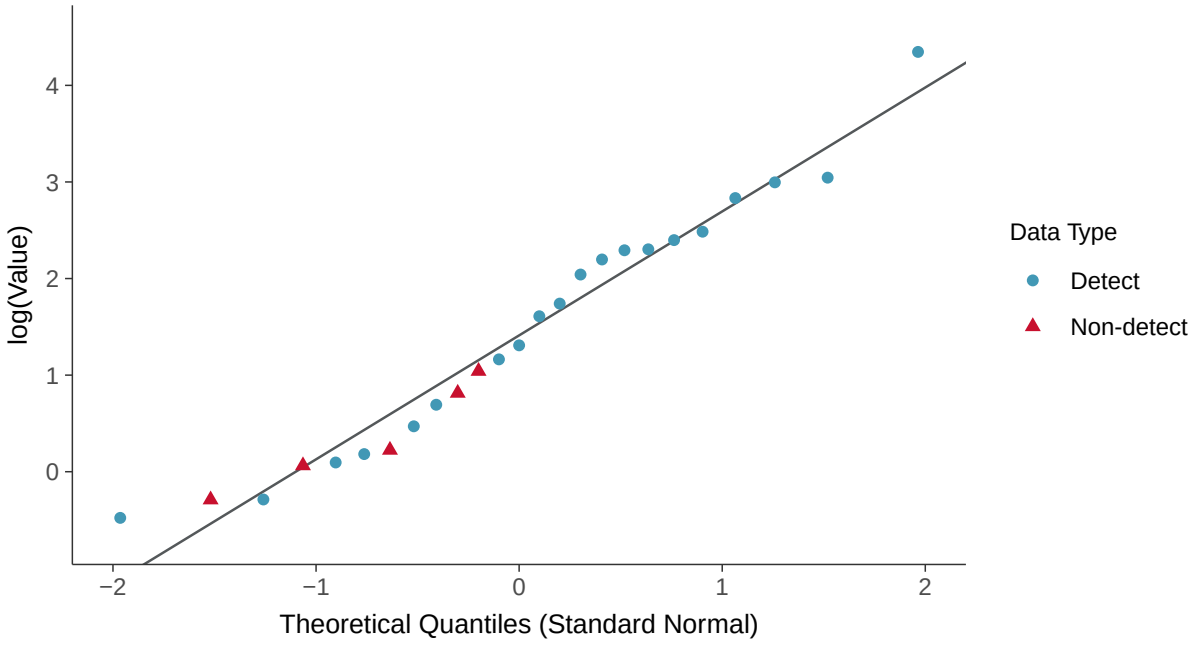

## Boxplot by Season

Molybdenum, MW-15013 (ug/L)



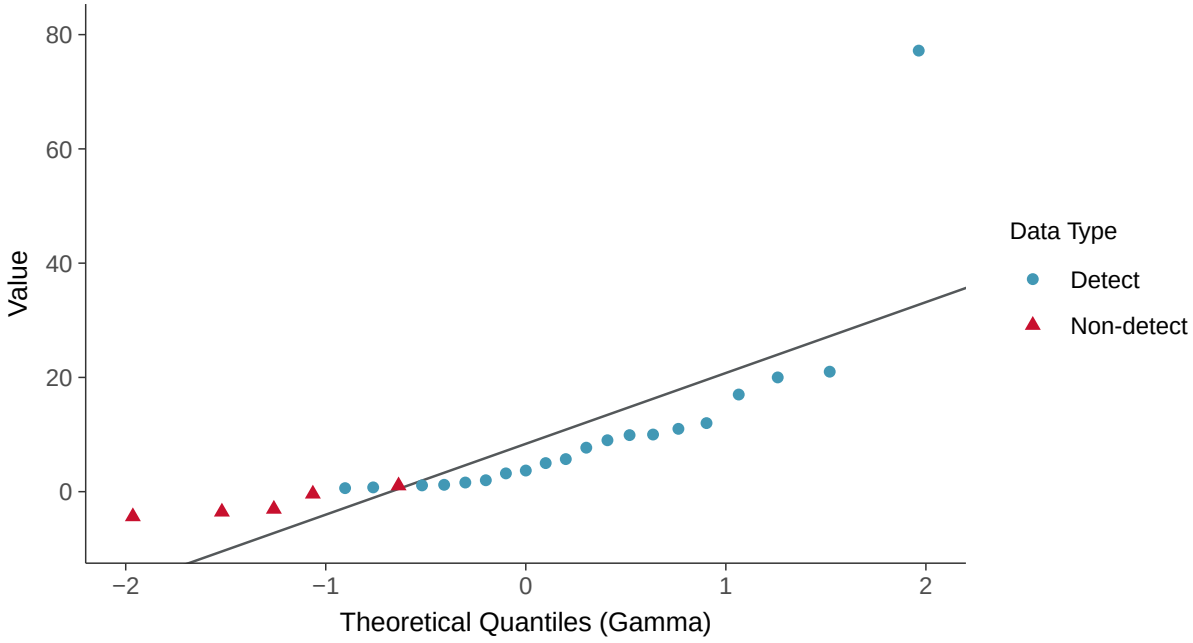
**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15013 (ug/L)



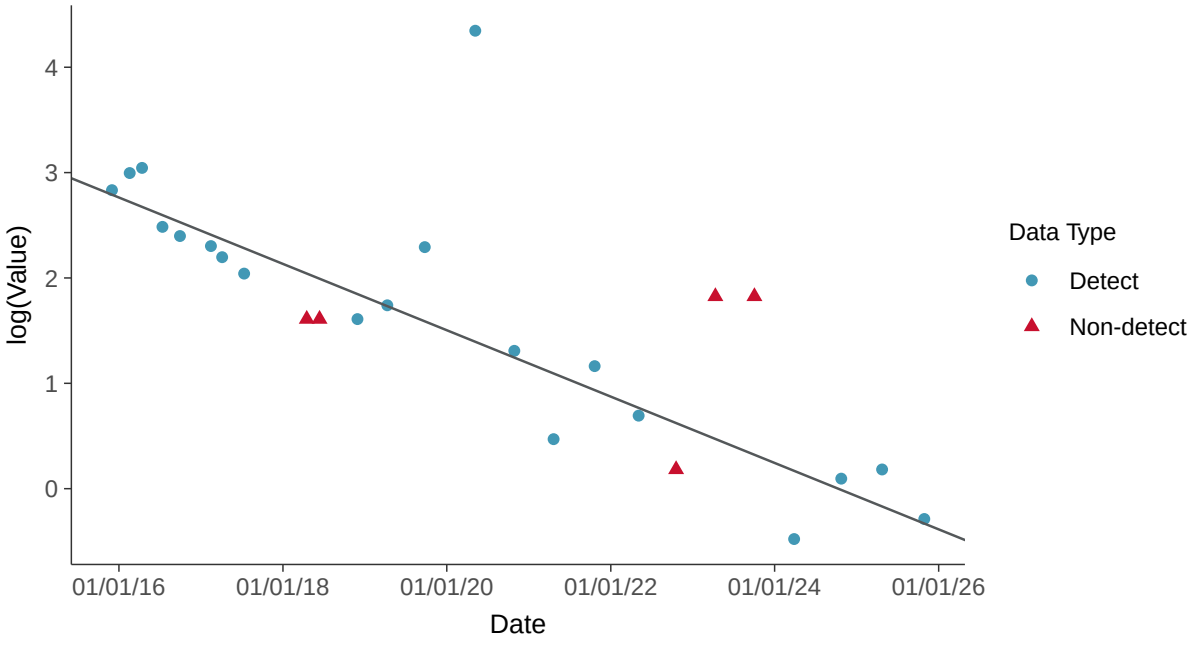

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15013 (ug/L)



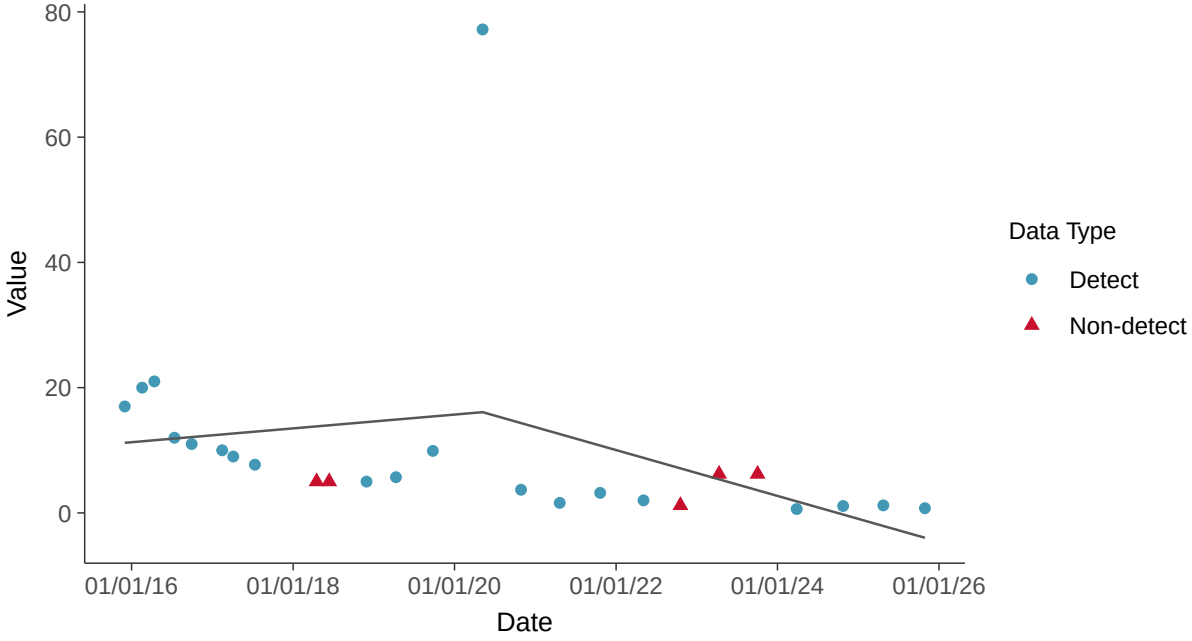
## Trend Regression: Lognormal MLE

Molybdenum, MW-15013 (ug/L)



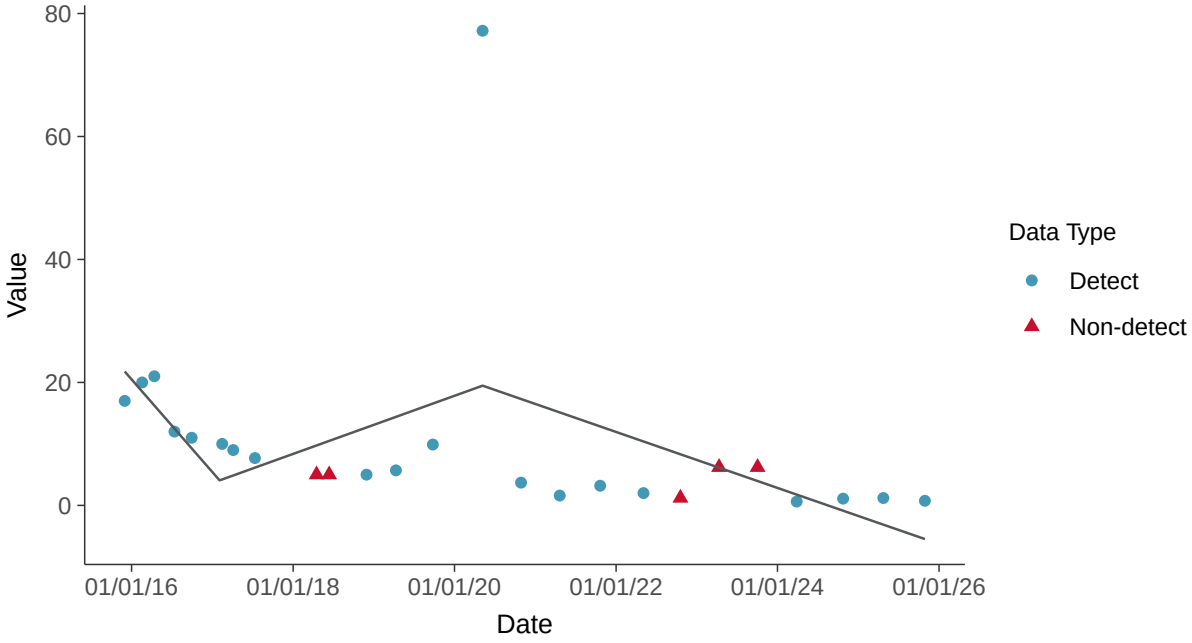

## Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15013 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-15013 (ug/L)

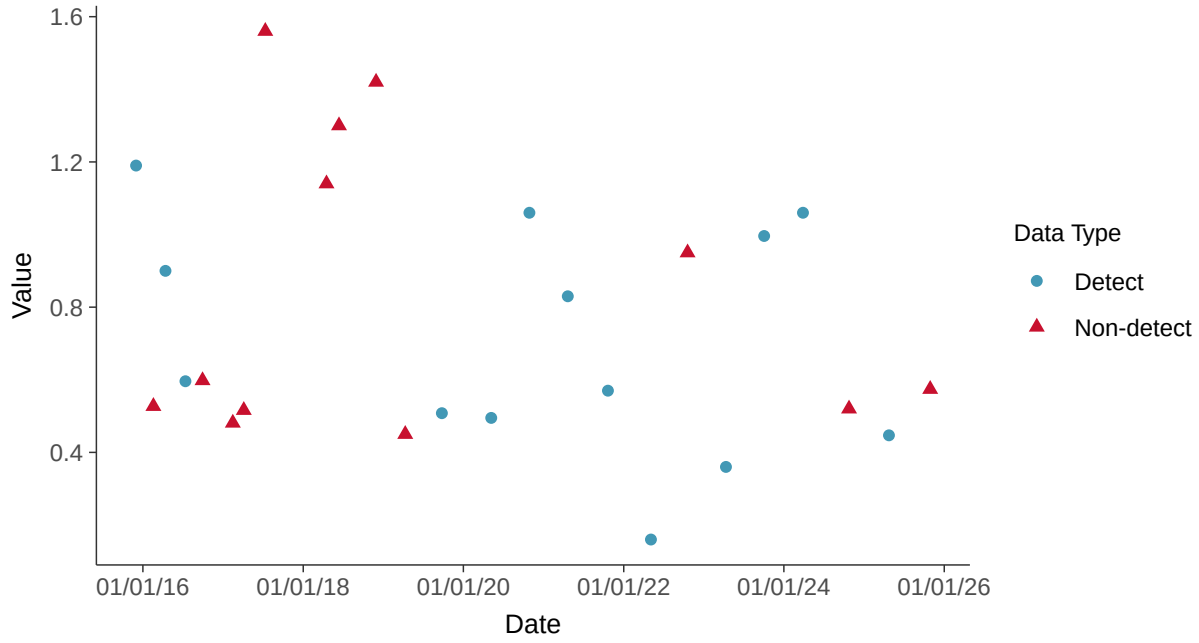


## Appendix IV: Radium-226+228, MW-15013

ID: 03_2_125

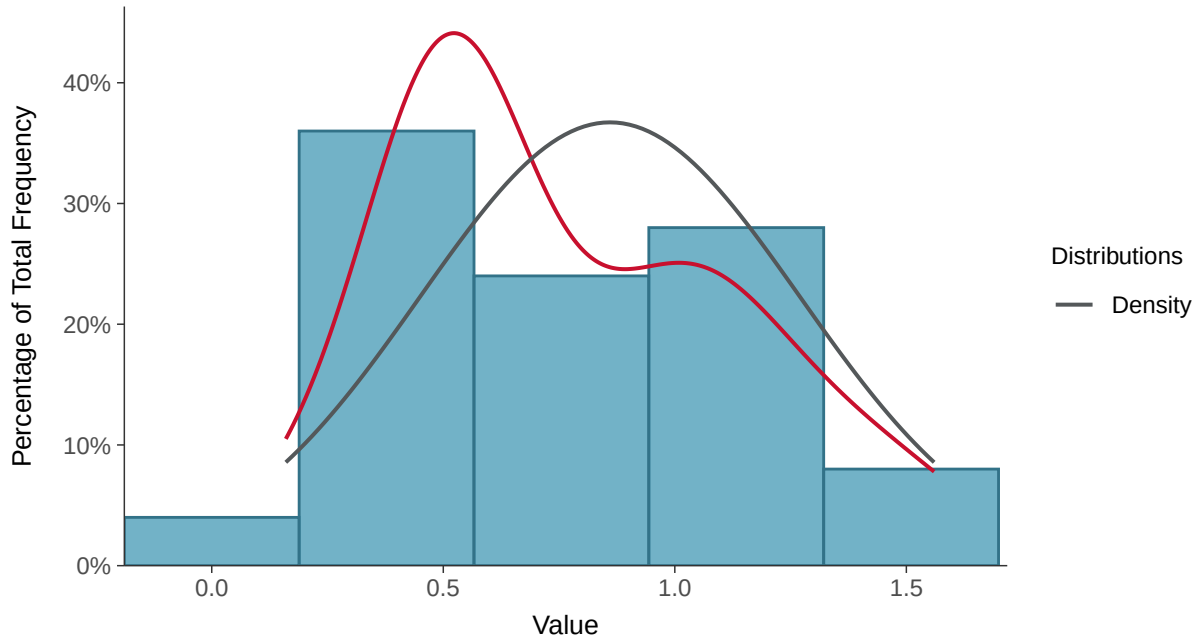
**Scatter Plot**

Radium-226+228, MW-15013 (pCi/L)



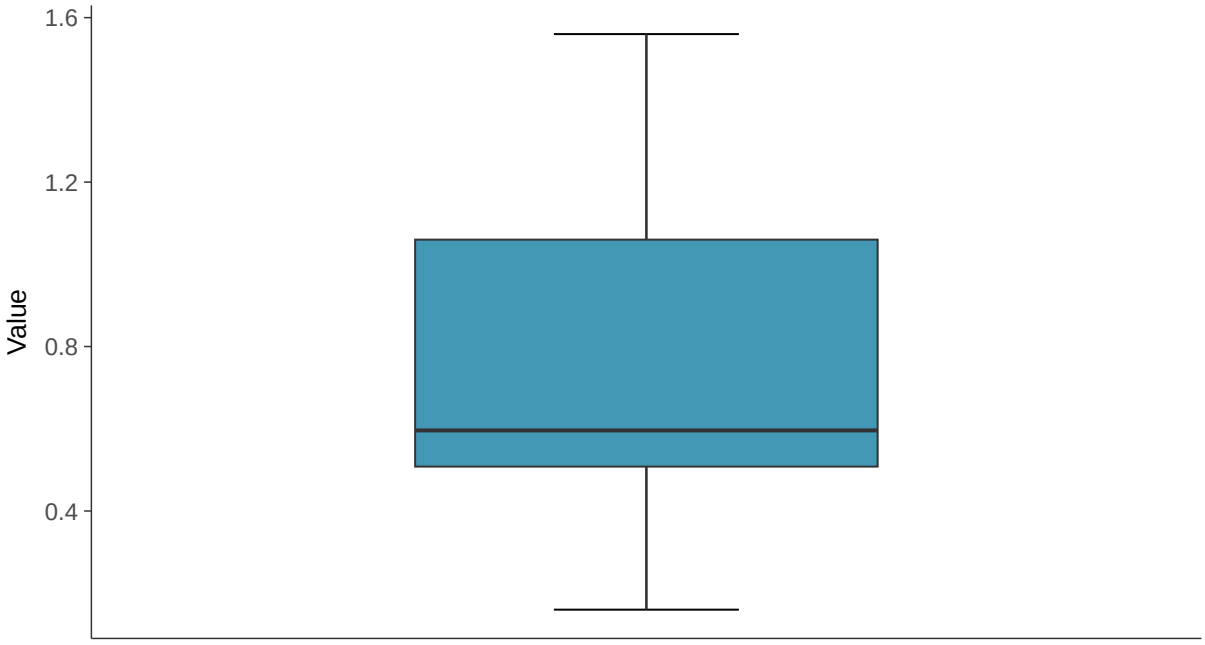

**Histogram**

Radium-226+228, MW-15013 (pCi/L)



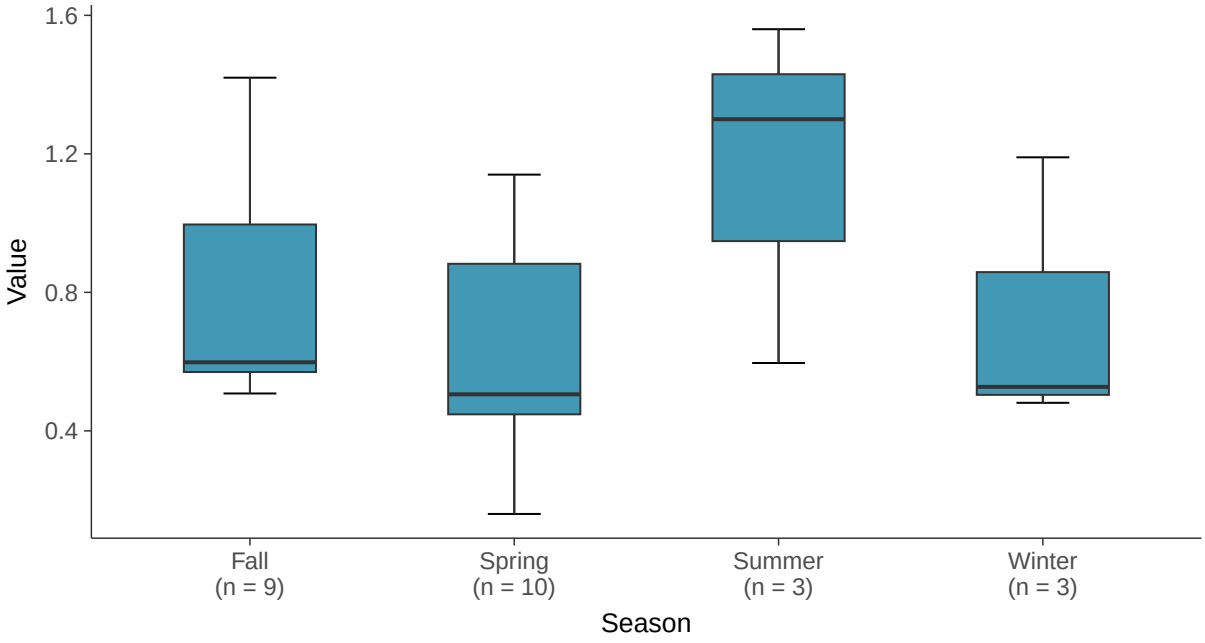
## Boxplot

Radium-226+228, MW-15013 (pCi/L)



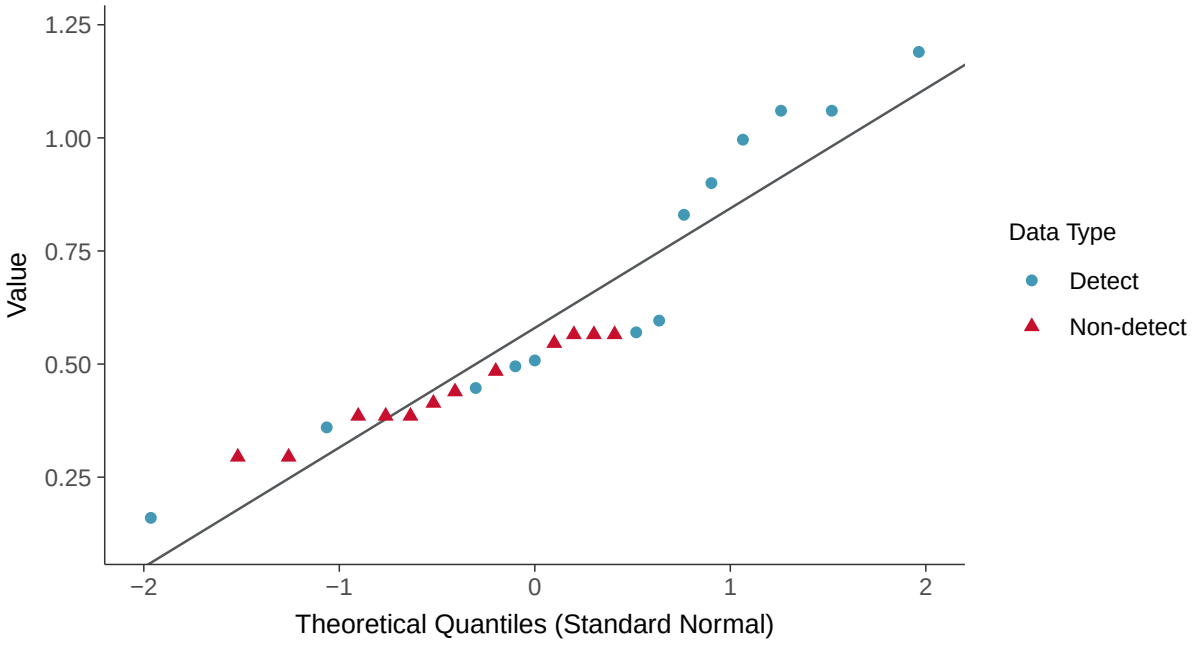

## Boxplot by Season

Radium-226+228, MW-15013 (pCi/L)



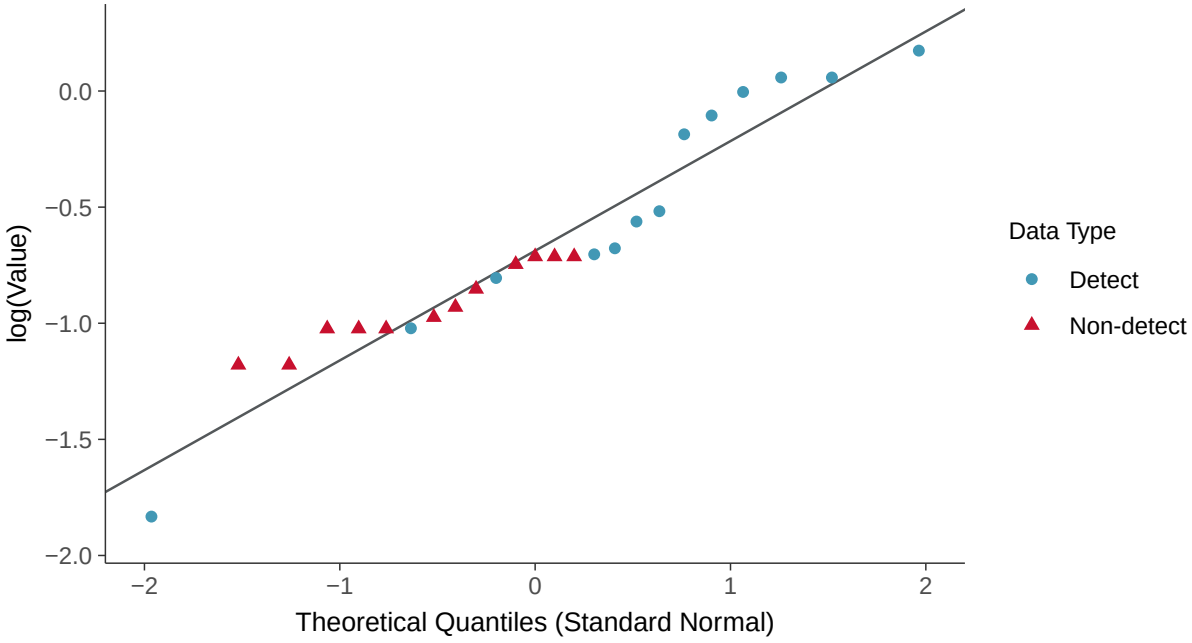
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15013 (pCi/L)



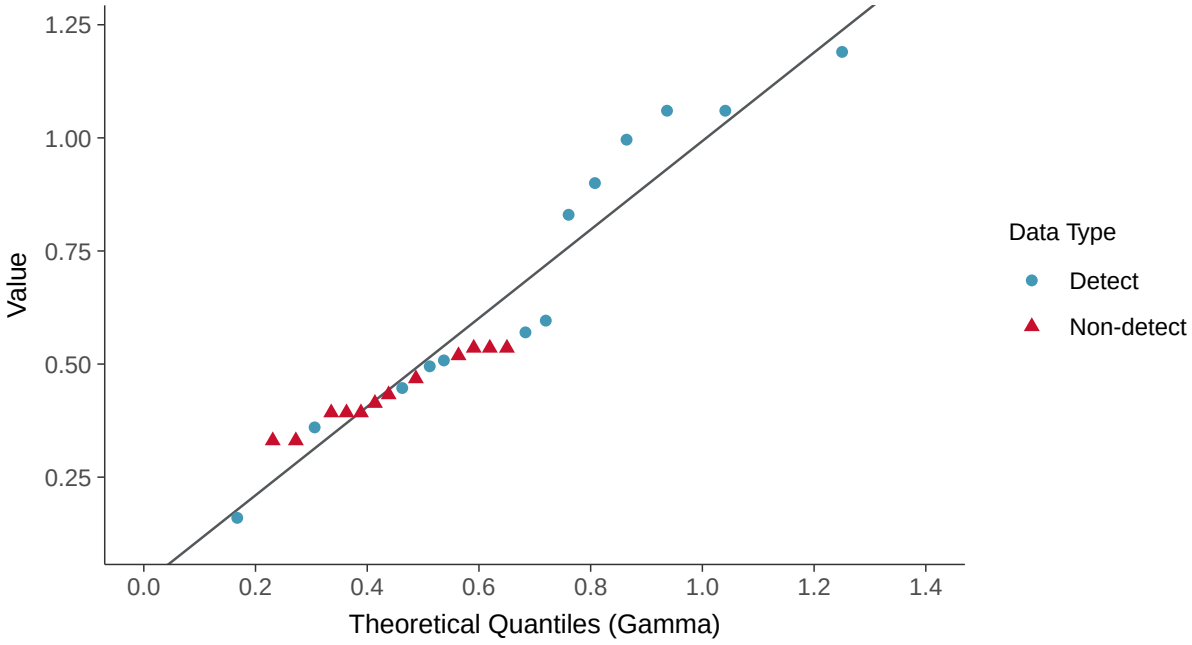

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15013 (pCi/L)



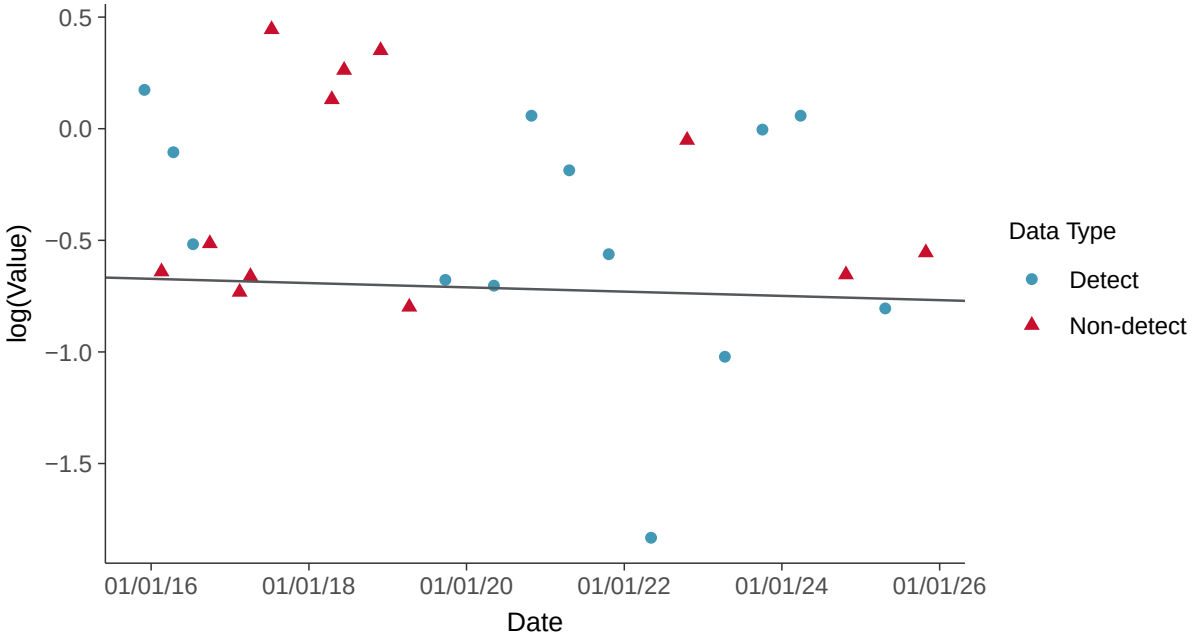
## Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15013 (pCi/L)



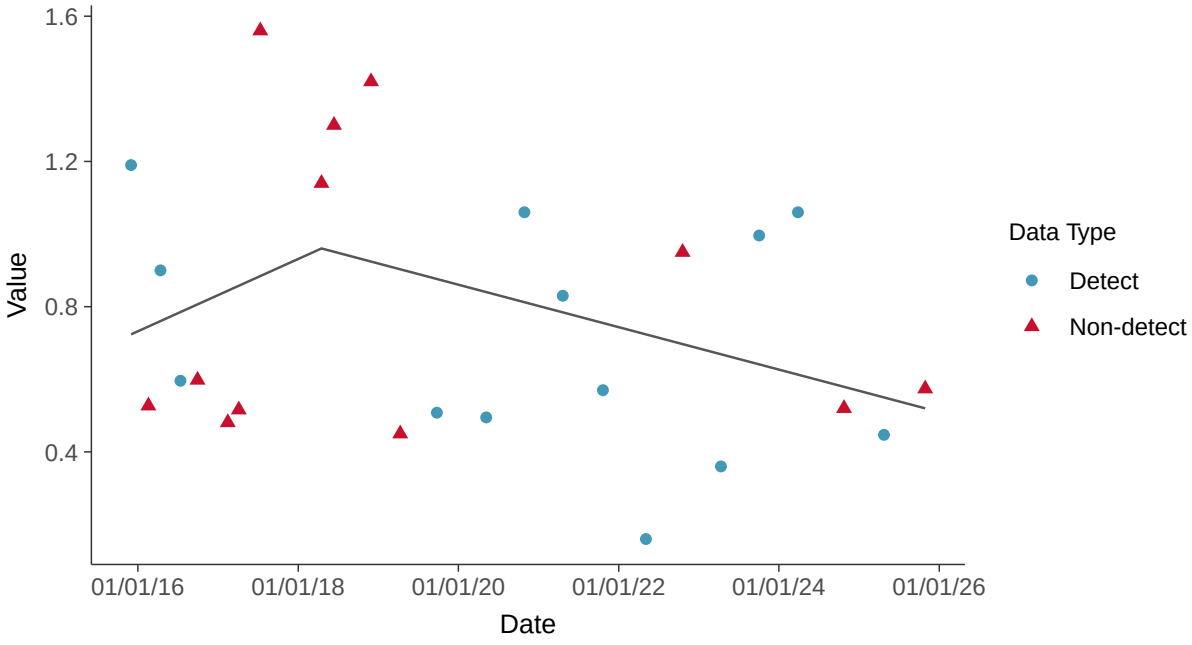

## Trend Regression: Lognormal MLE

Radium-226+228, MW-15013 (pCi/L)



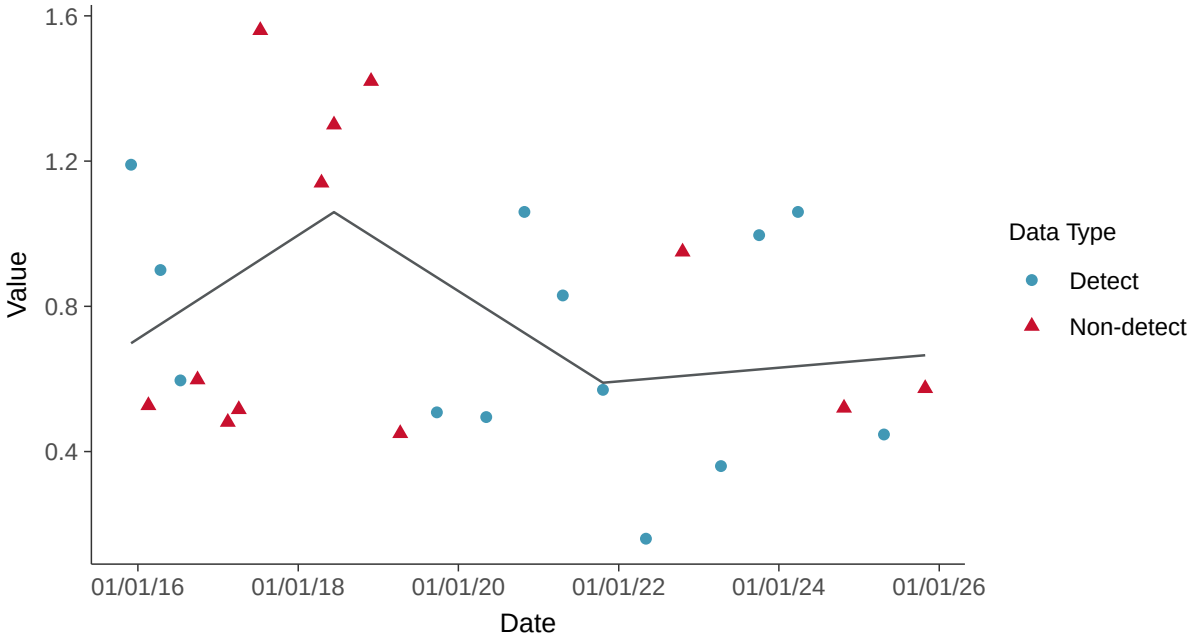
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15013 (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15013 (pCi/L)

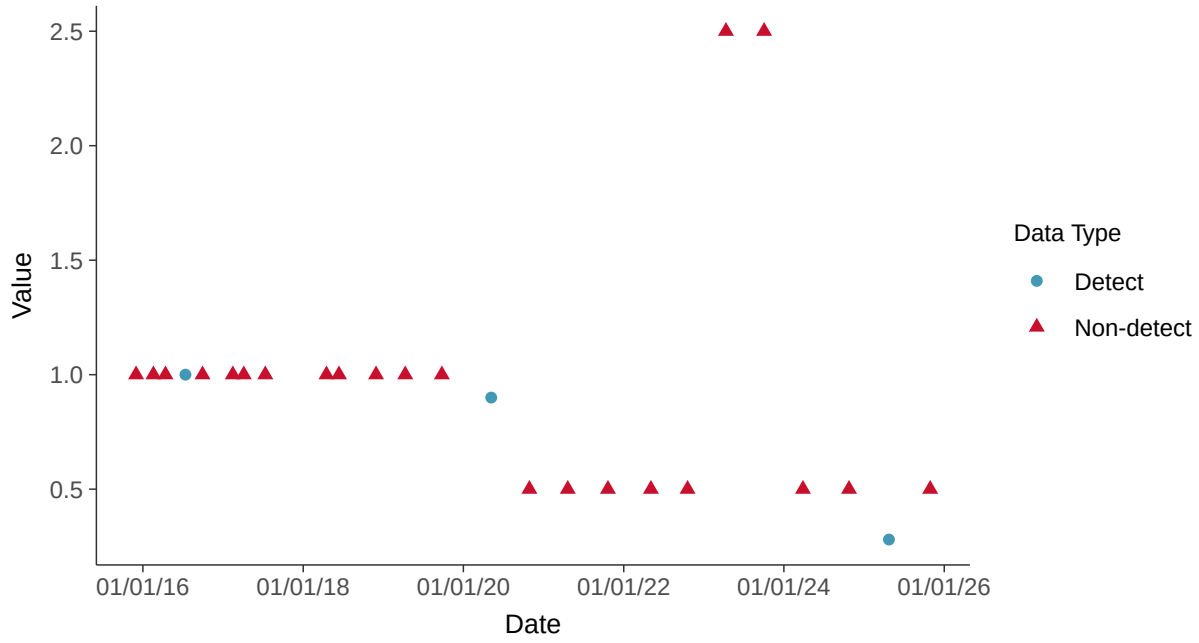


## Appendix IV: Selenium, MW-15013

ID: 03_2_127

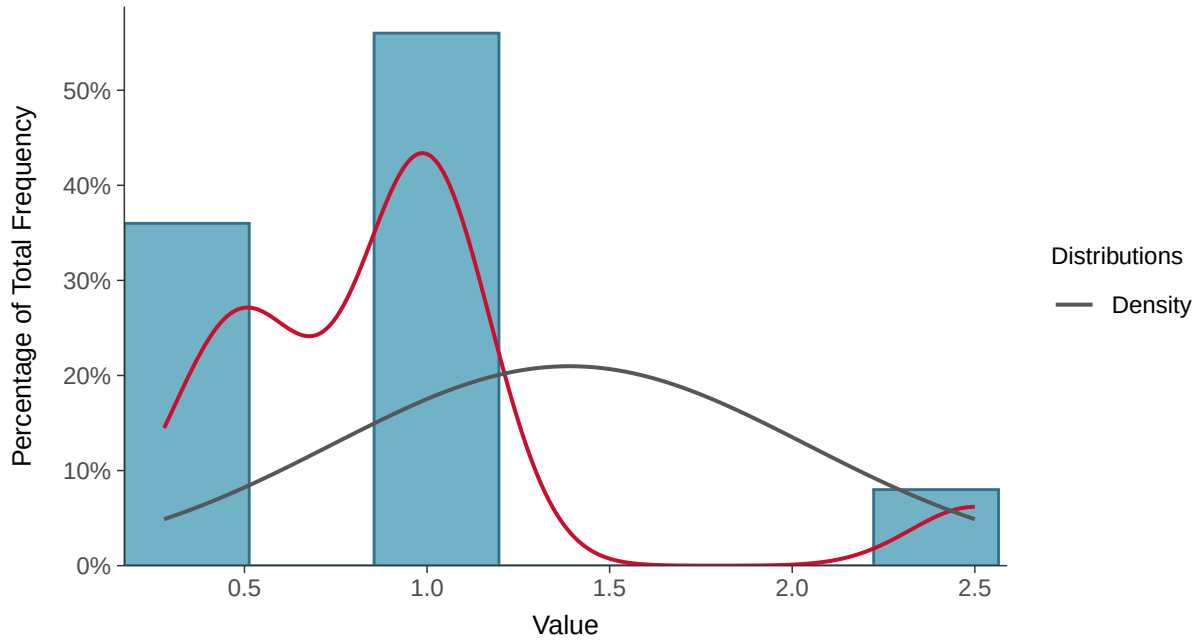
**Scatter Plot**

Selenium, MW-15013 (ug/L)



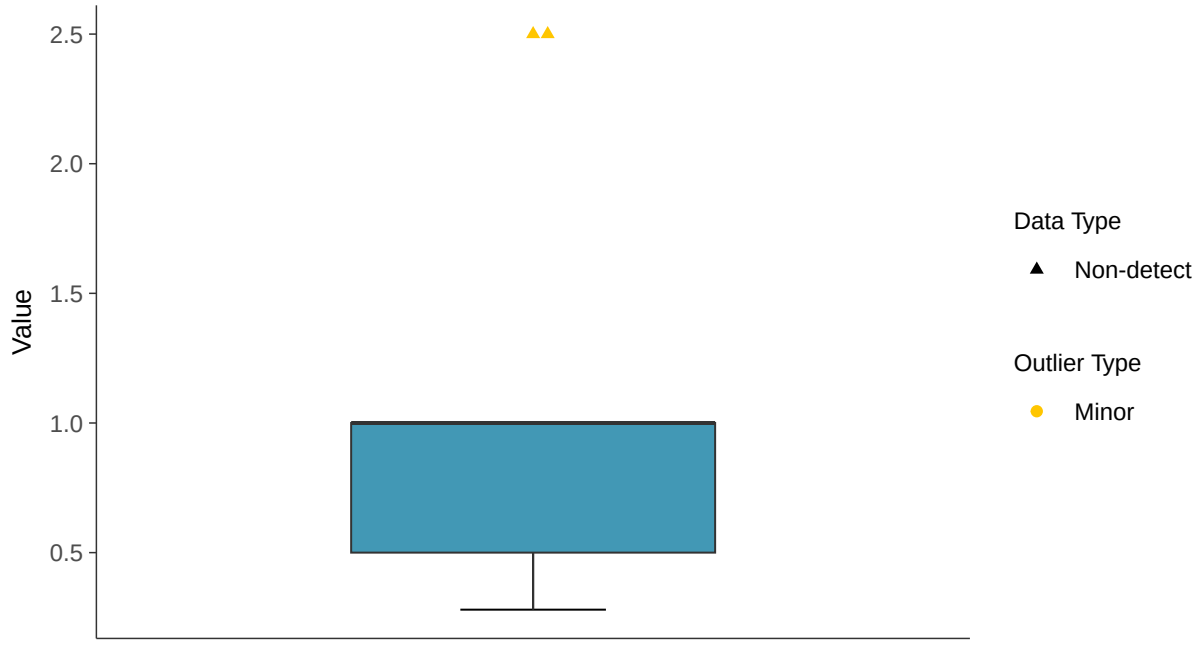

**Histogram**

Selenium, MW-15013 (ug/L)



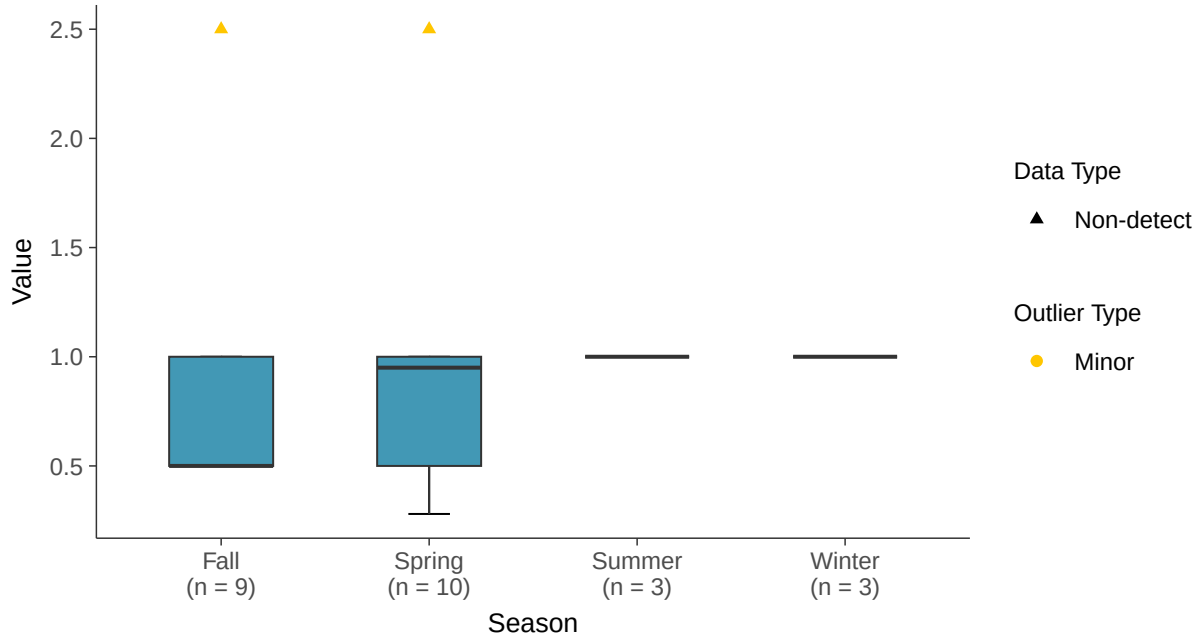
## Boxplot

Selenium, MW-15013 (ug/L)



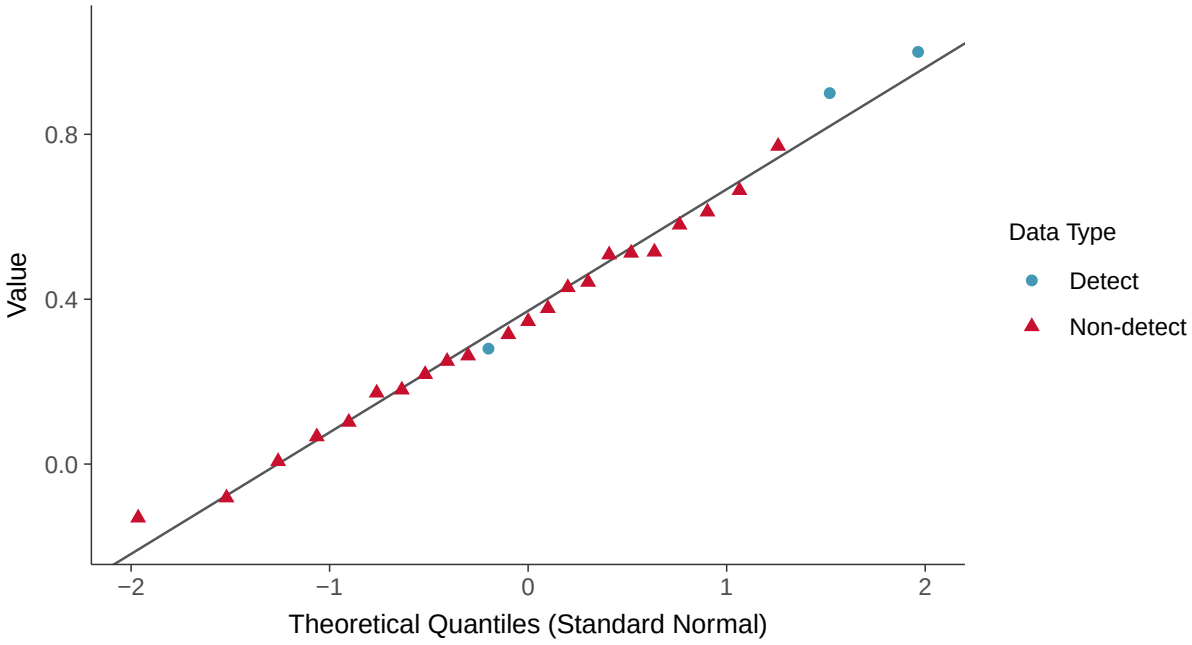

## Boxplot by Season

Selenium, MW-15013 (ug/L)



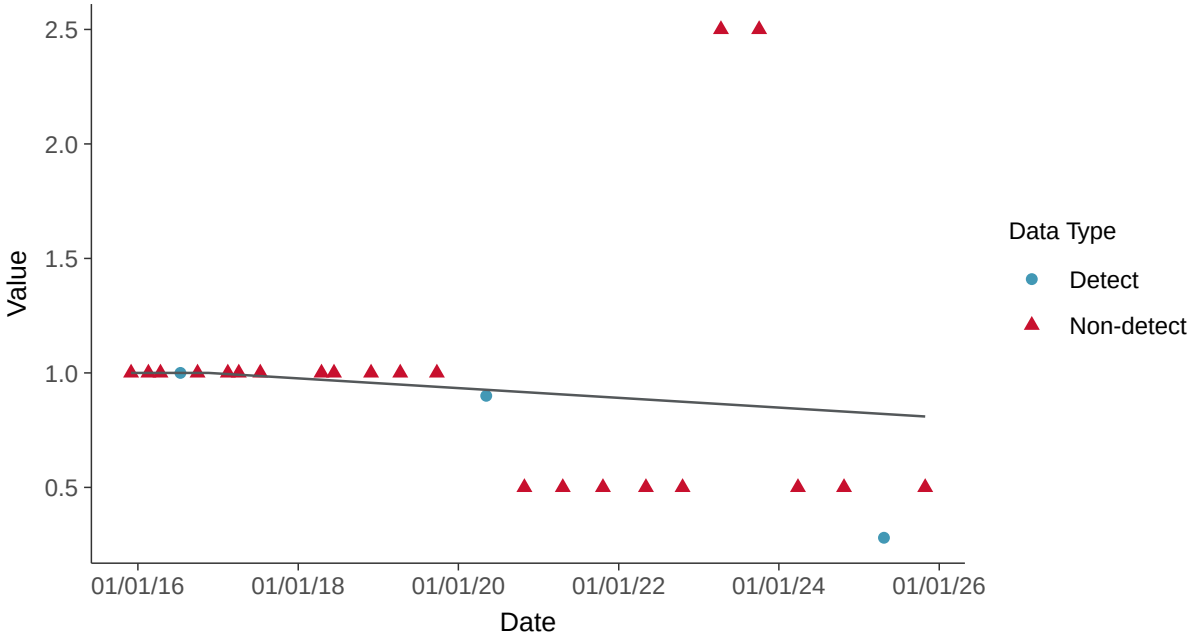
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15013 (ug/L)



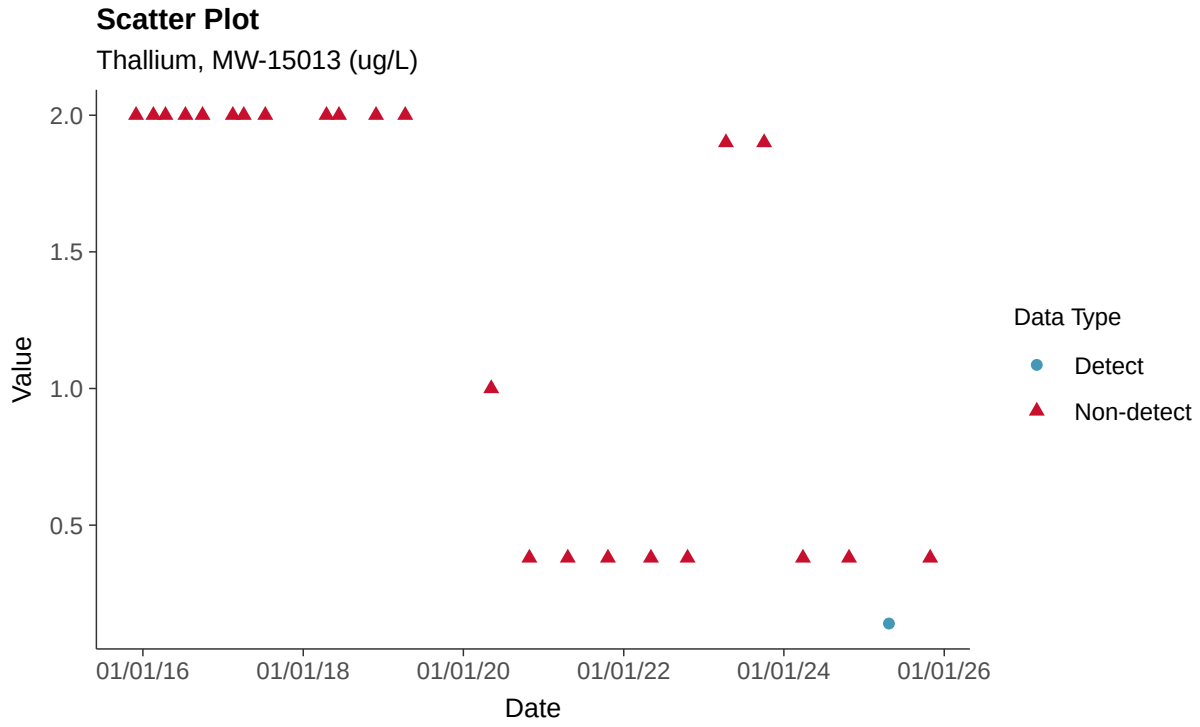

**Trend Regression: Piecewise Linear-Linear**

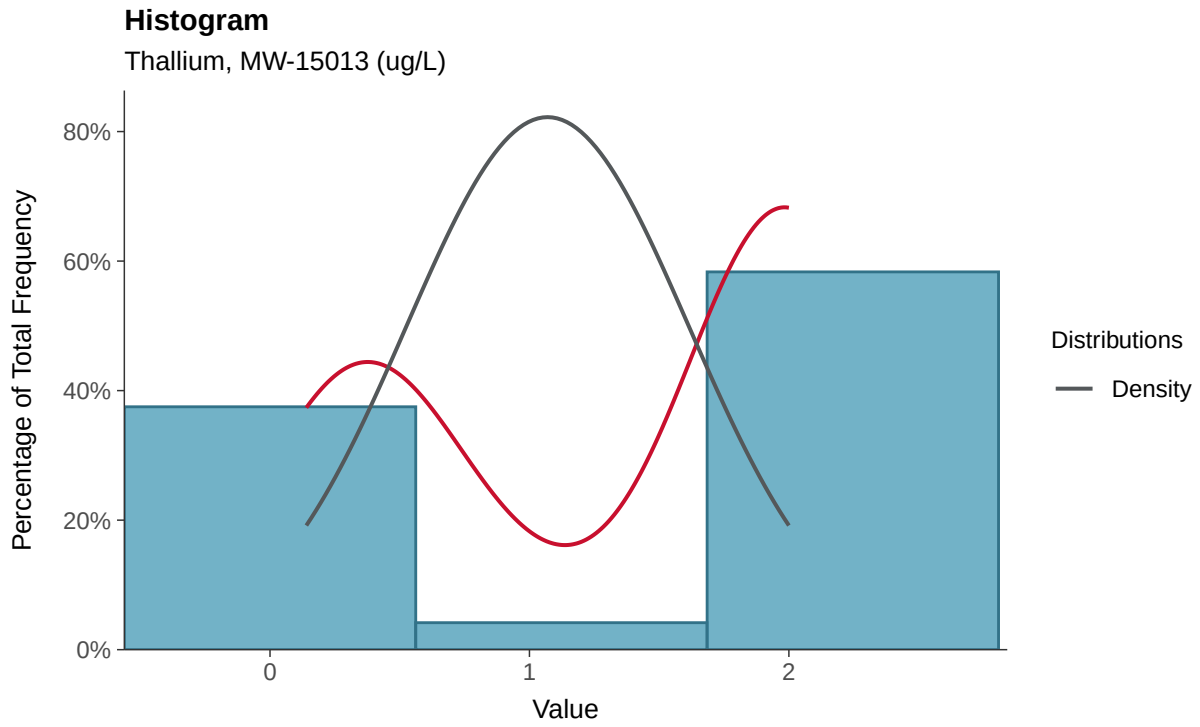
Selenium, MW-15013 (ug/L)



## Appendix IV: Thallium, MW-15013

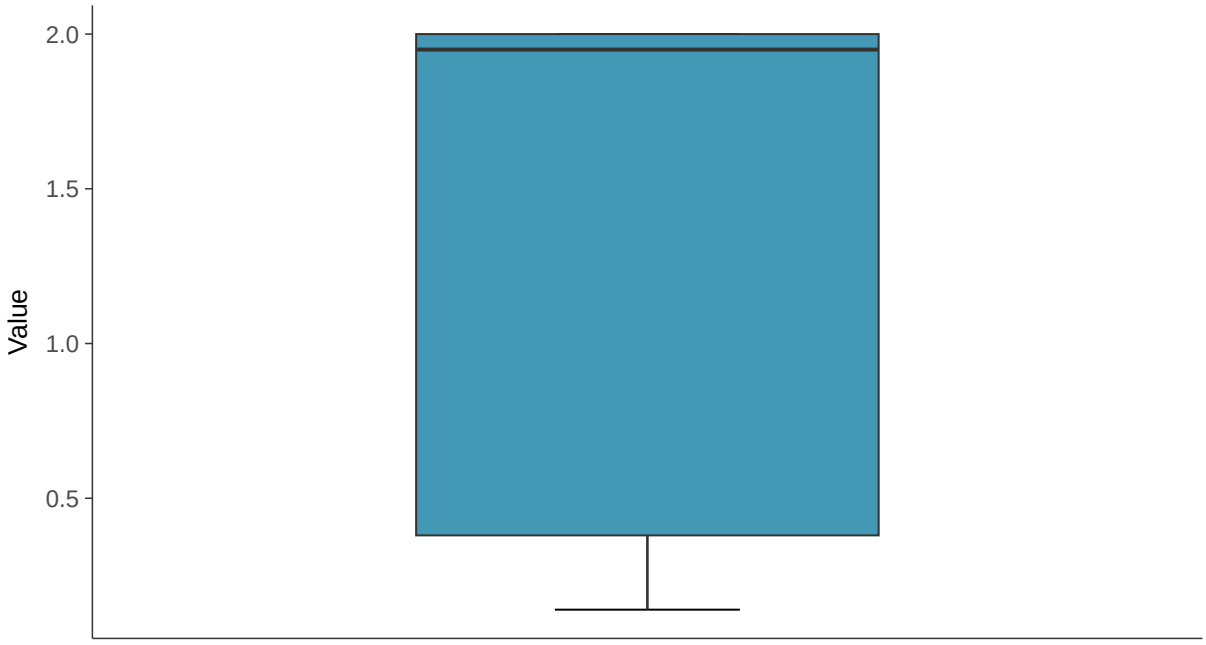
ID: 03_2_131



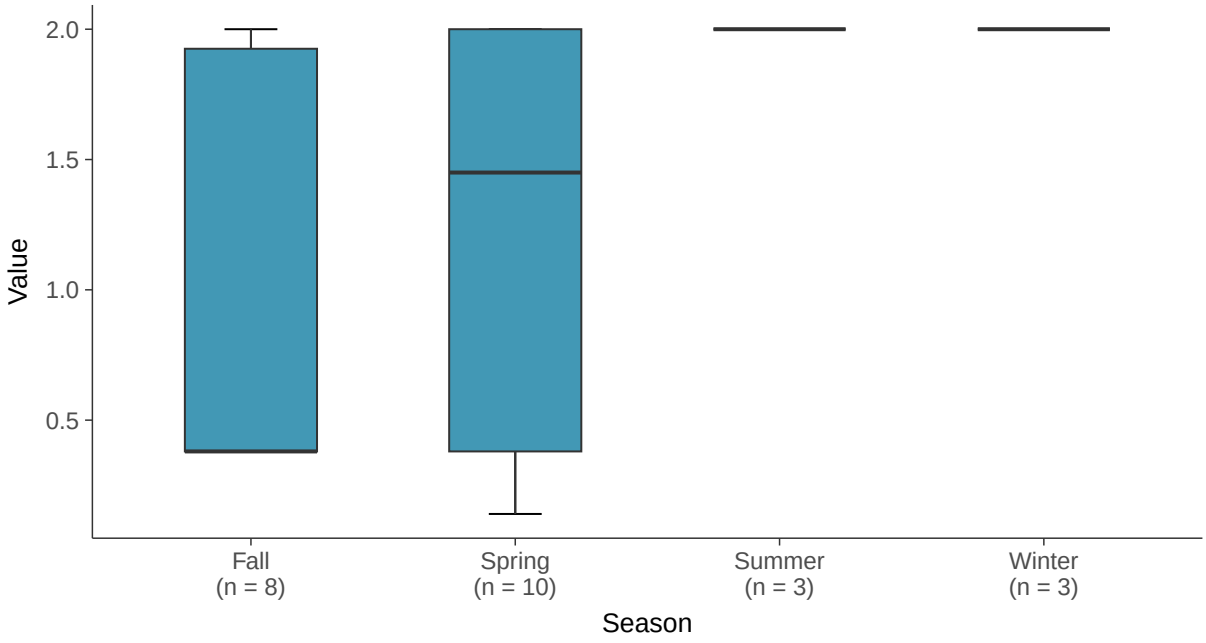
**Boxplot**

Thallium, MW-15013 (ug/L)



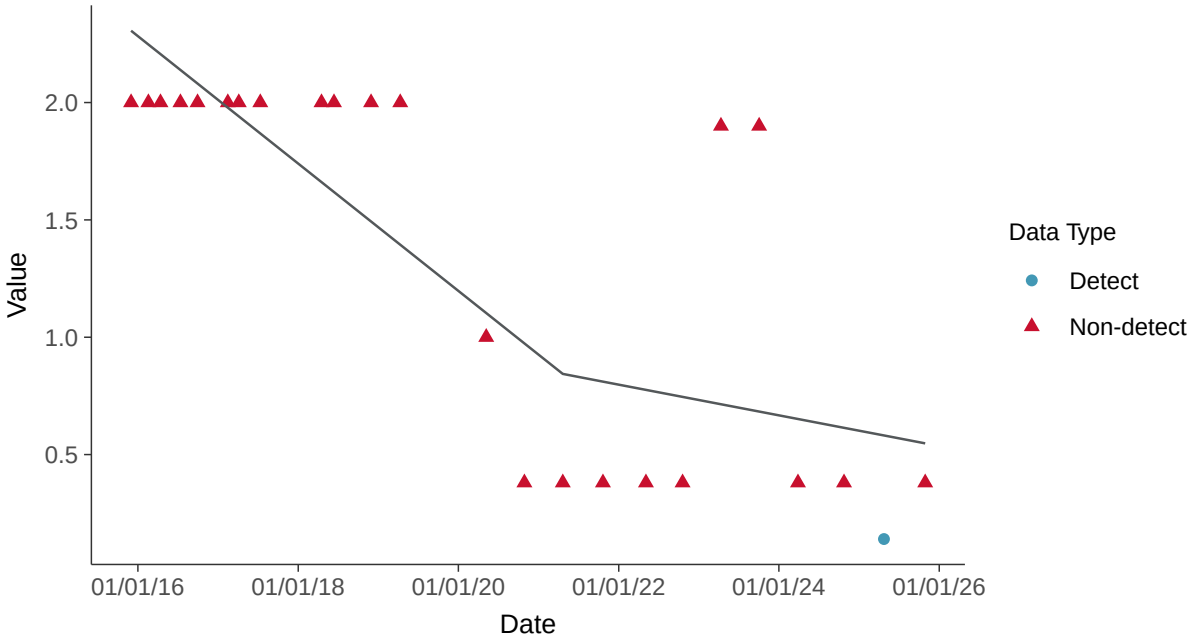

**Boxplot by Season**

Thallium, MW-15013 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15013 (ug/L)

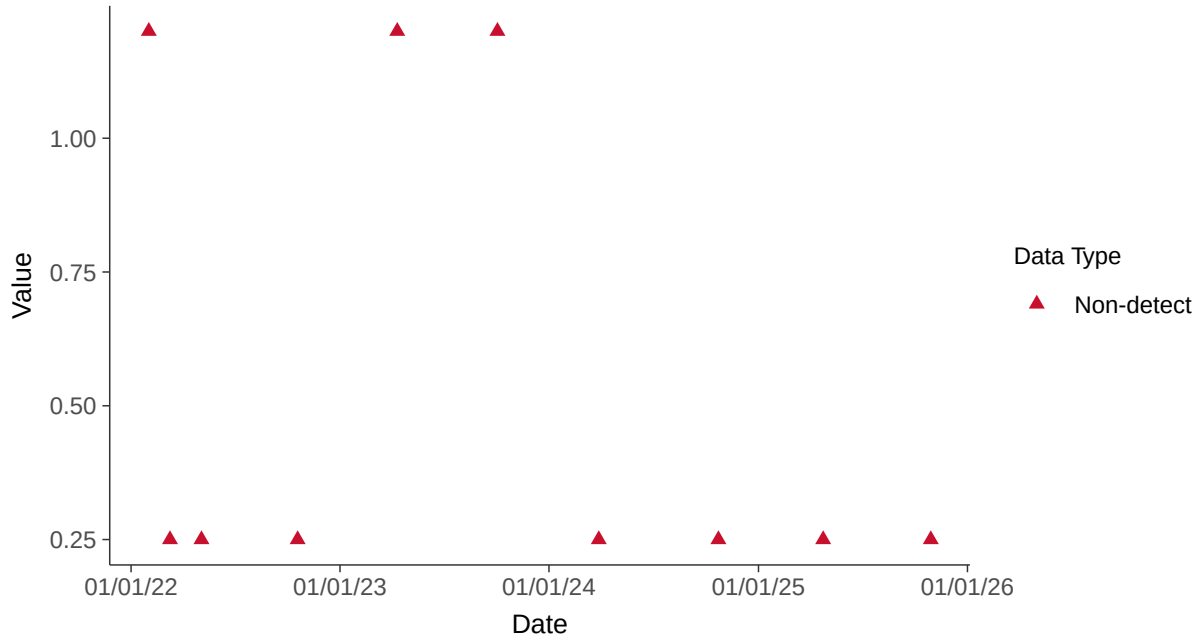


## Appendix IV: Antimony, MW-15014R

ID: 04_2_101

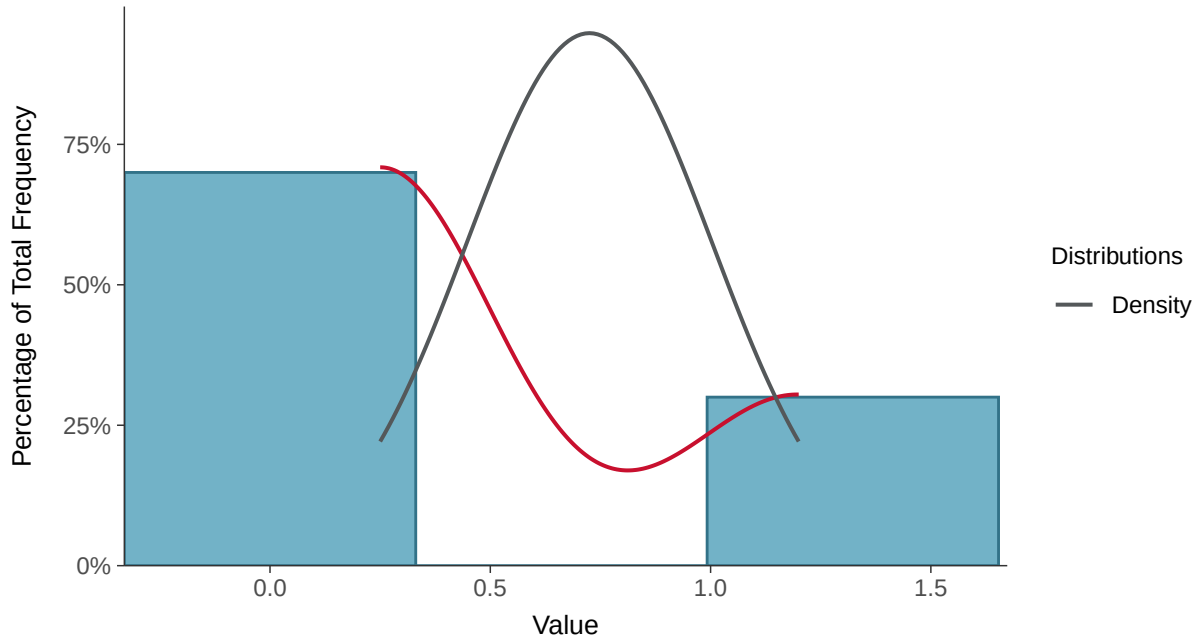
**Scatter Plot**

Antimony, MW-15014R (ug/L)



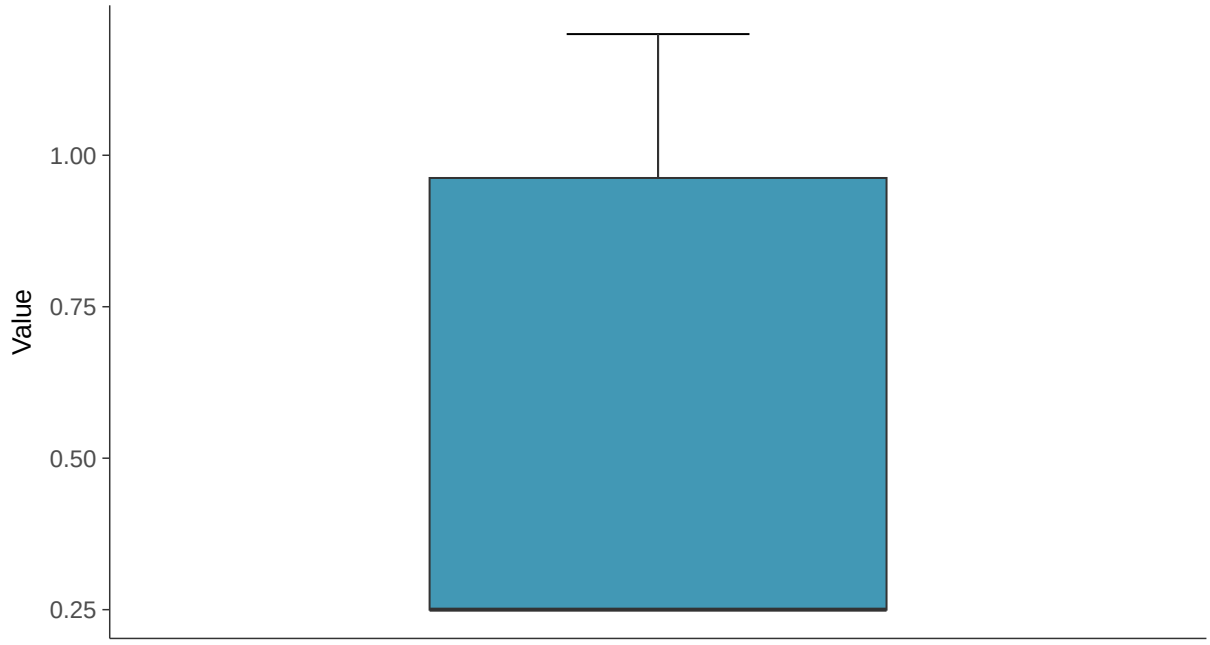

**Histogram**

Antimony, MW-15014R (ug/L)



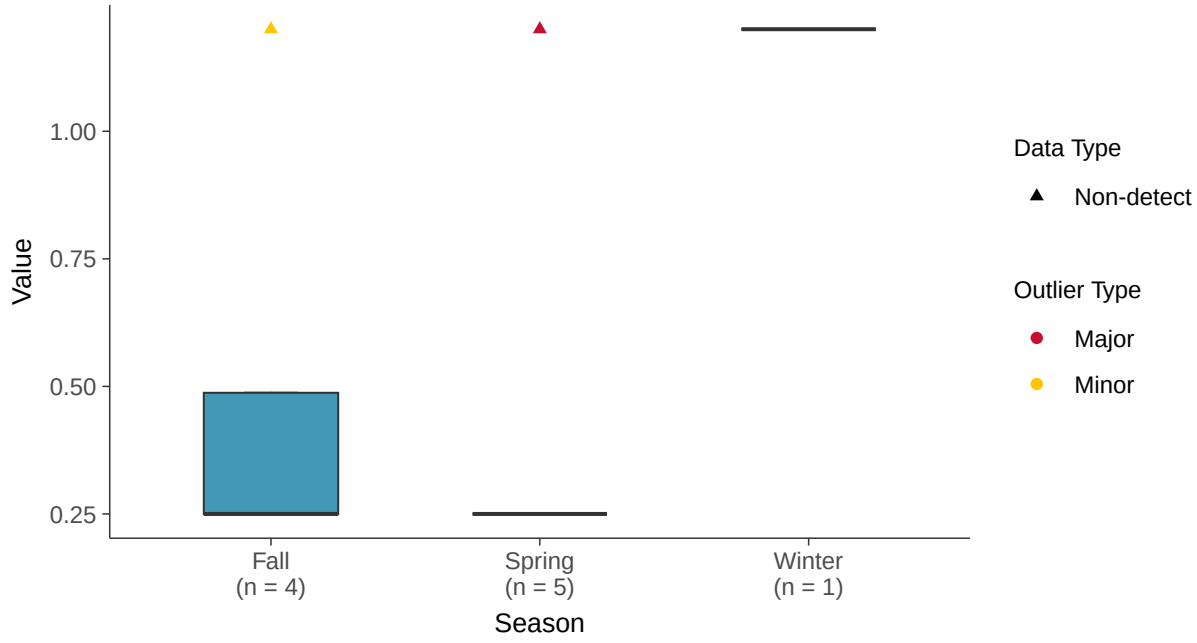
## Boxplot

Antimony, MW-15014R (ug/L)



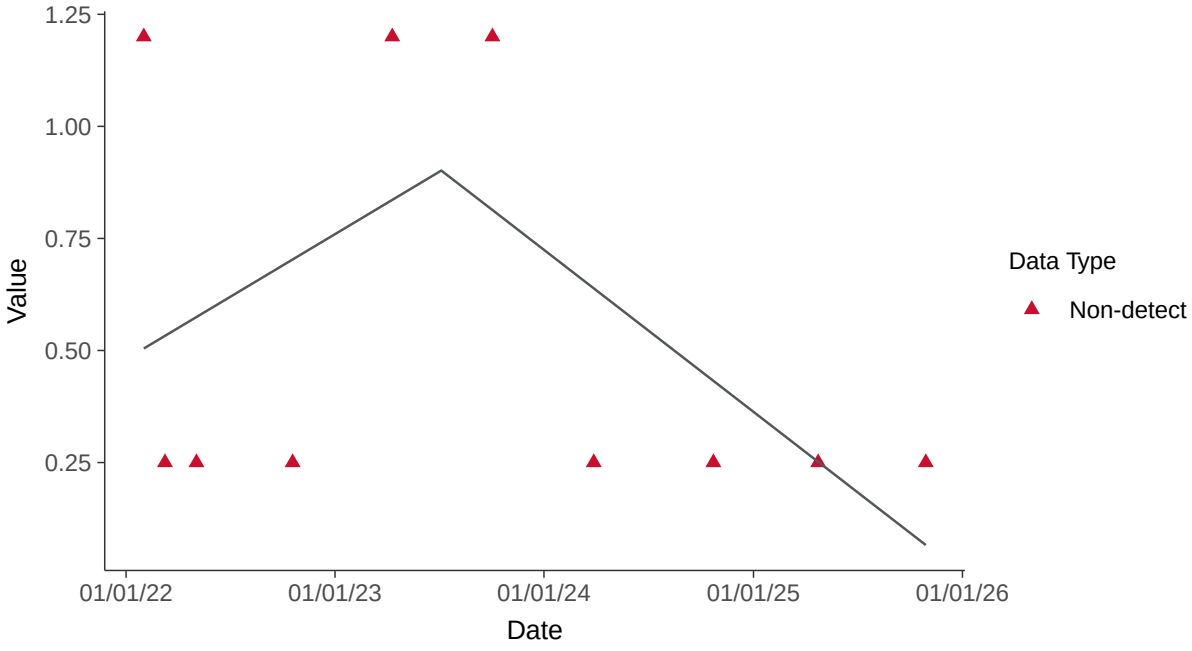

## Boxplot by Season

Antimony, MW-15014R (ug/L)



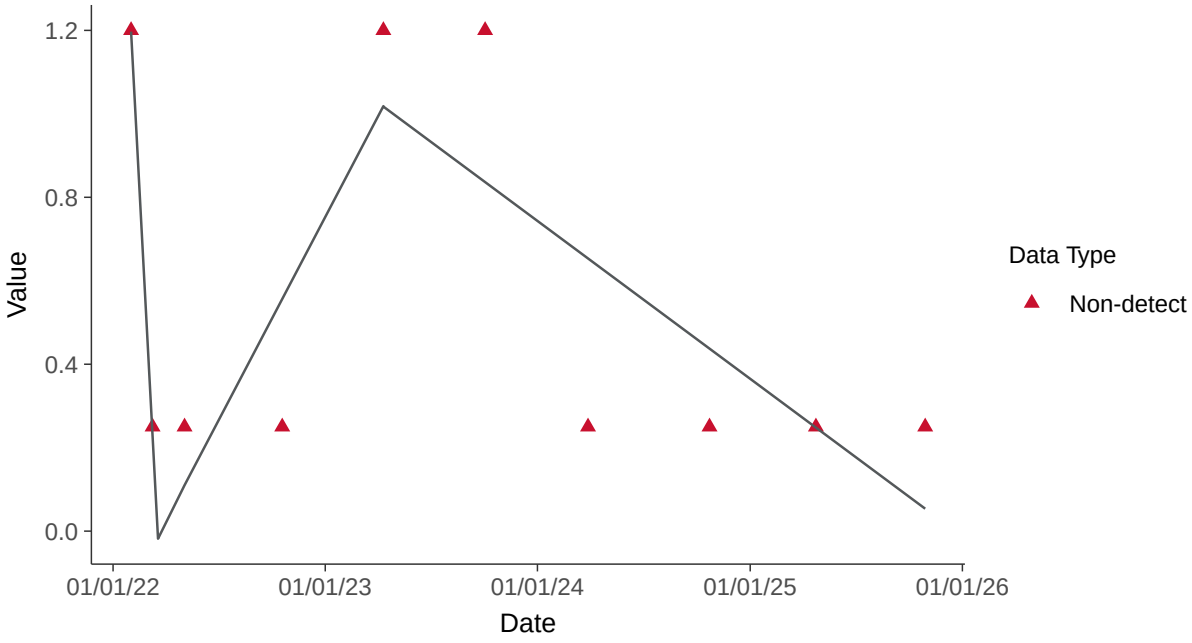
**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15014R (ug/L)



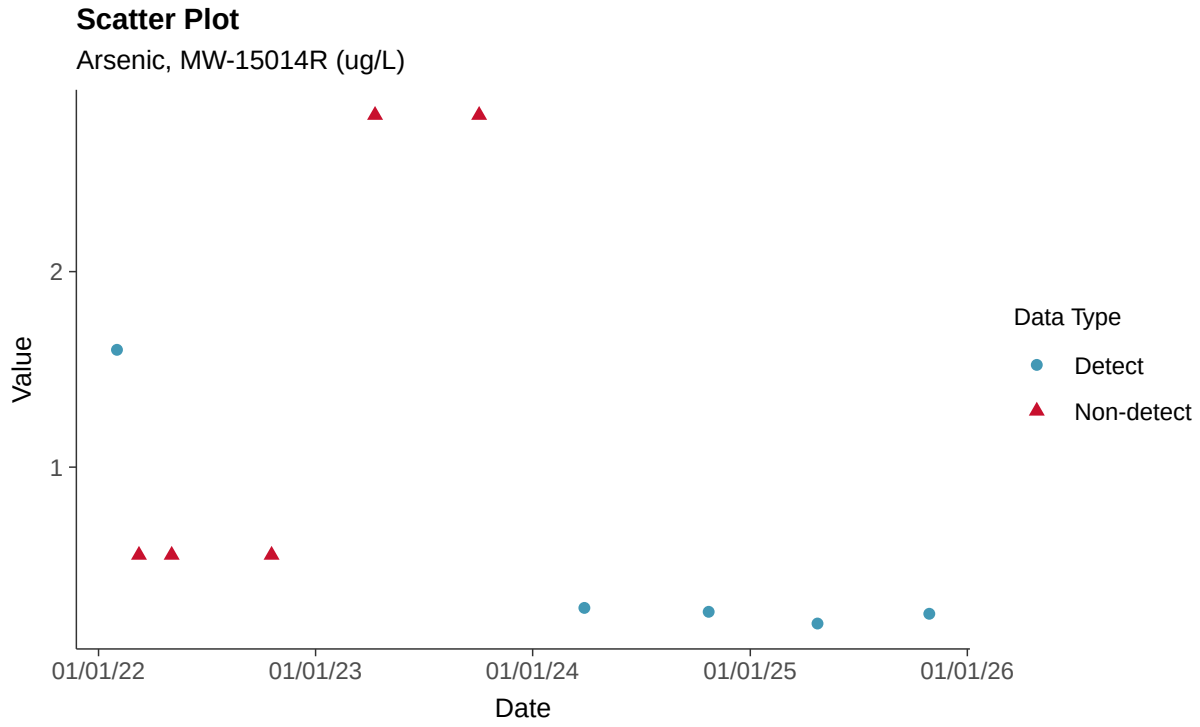

**Trend Regression: Piecewise Linear-Linear-Linear**

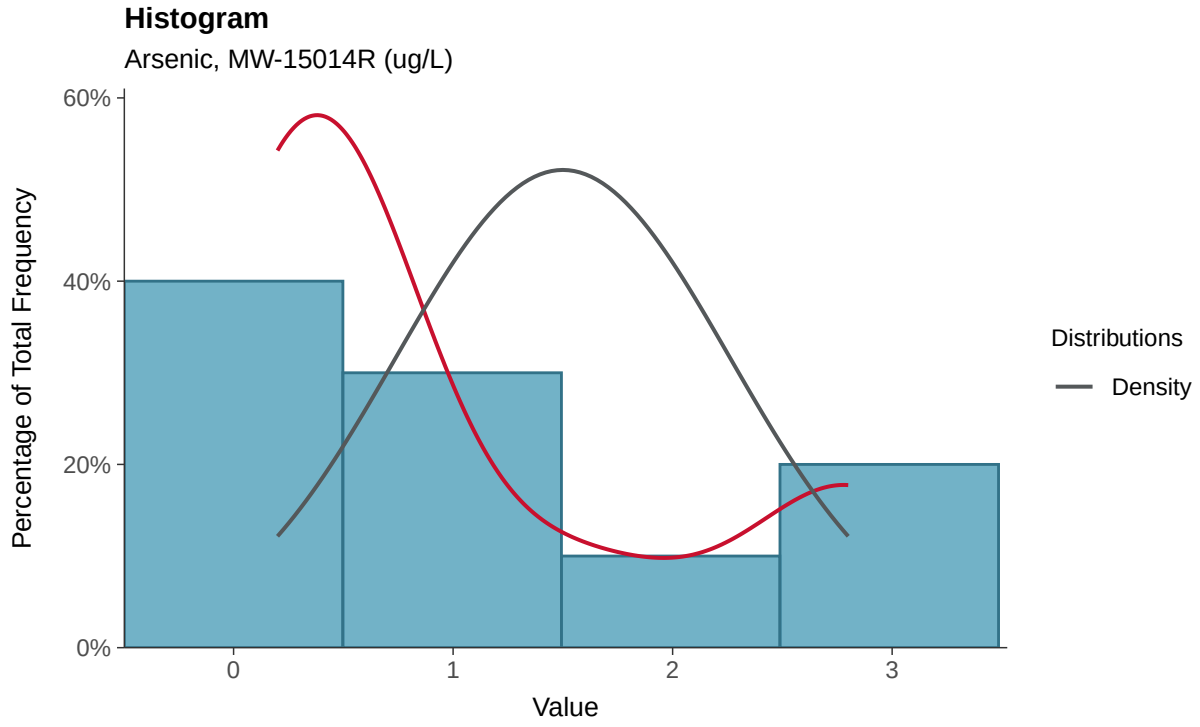
Antimony, MW-15014R (ug/L)



## Appendix IV: Arsenic, MW-15014R

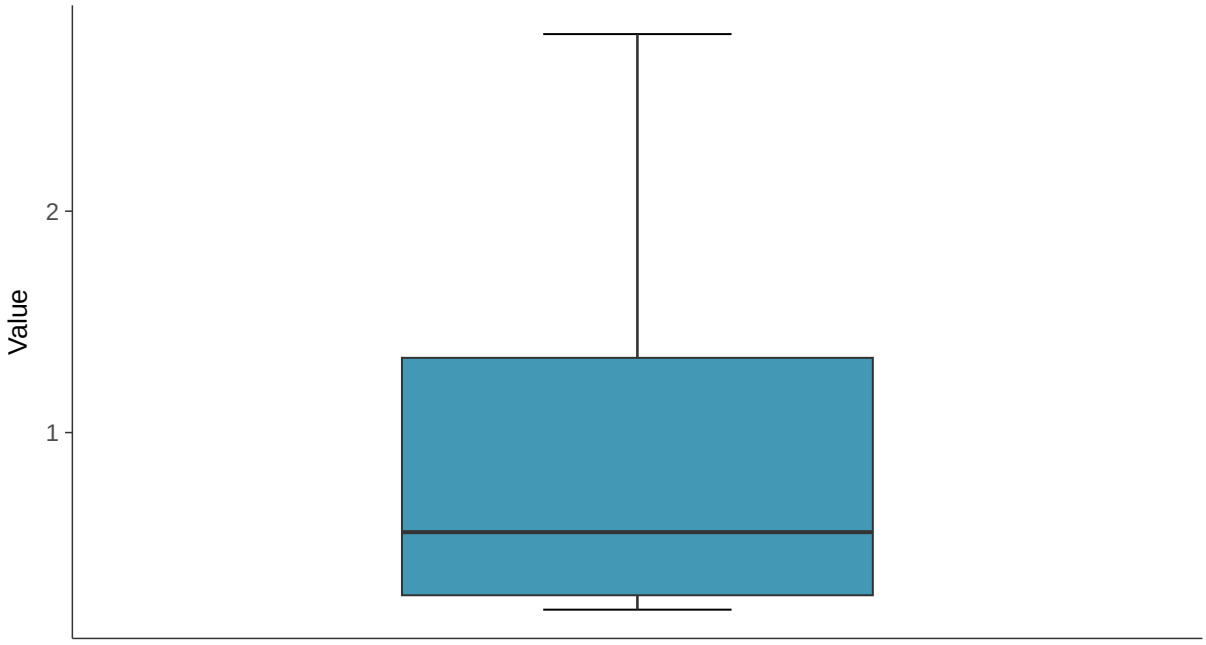
ID: 04_2_102



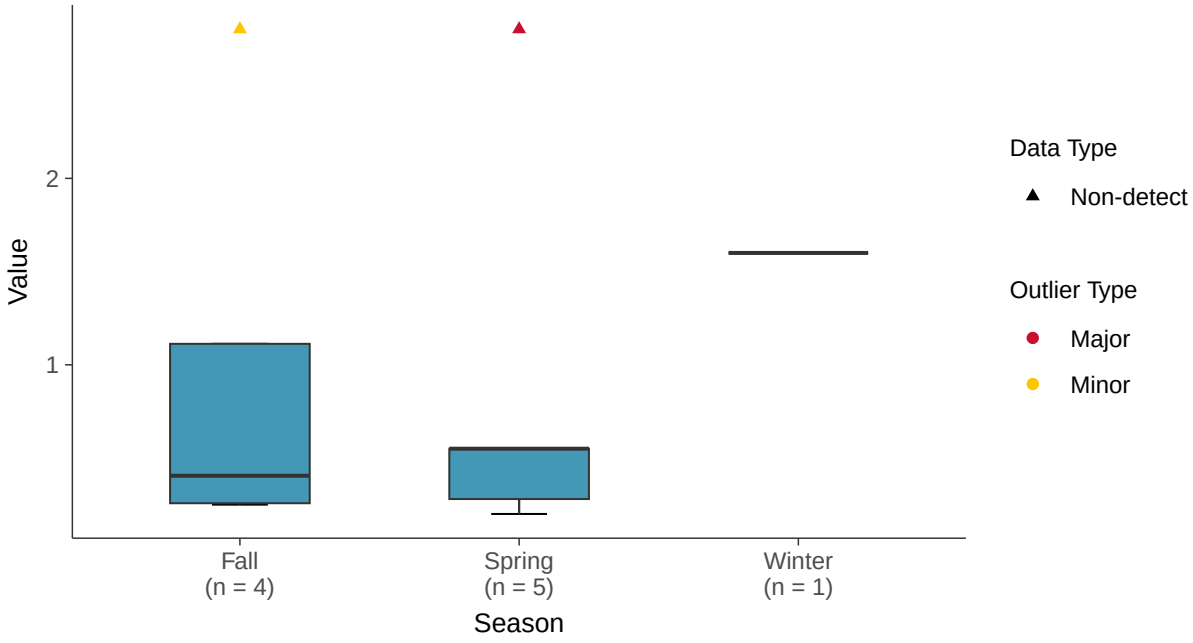
## Boxplot

Arsenic, MW-15014R (ug/L)



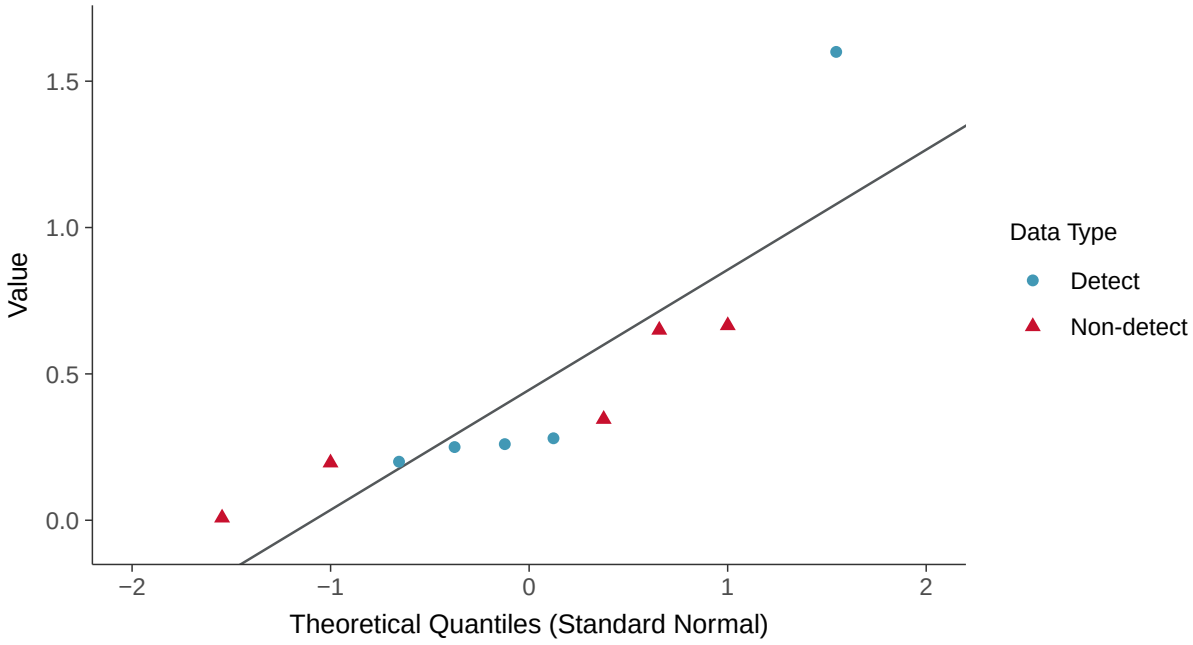

## Boxplot by Season

Arsenic, MW-15014R (ug/L)



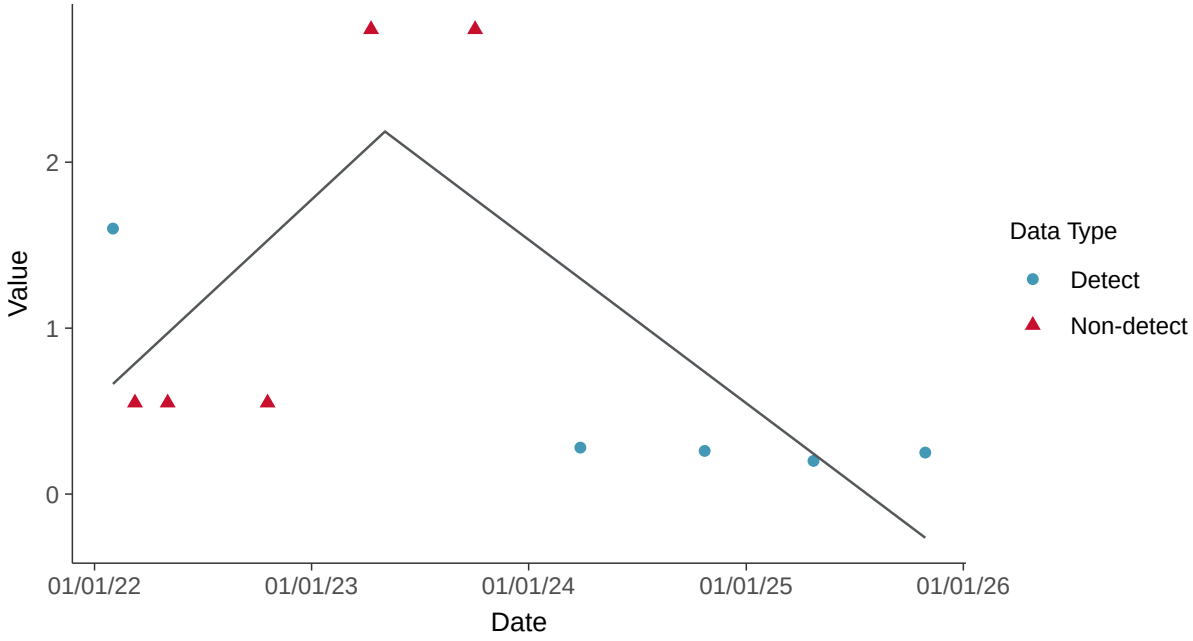
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15014R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15014R (ug/L)

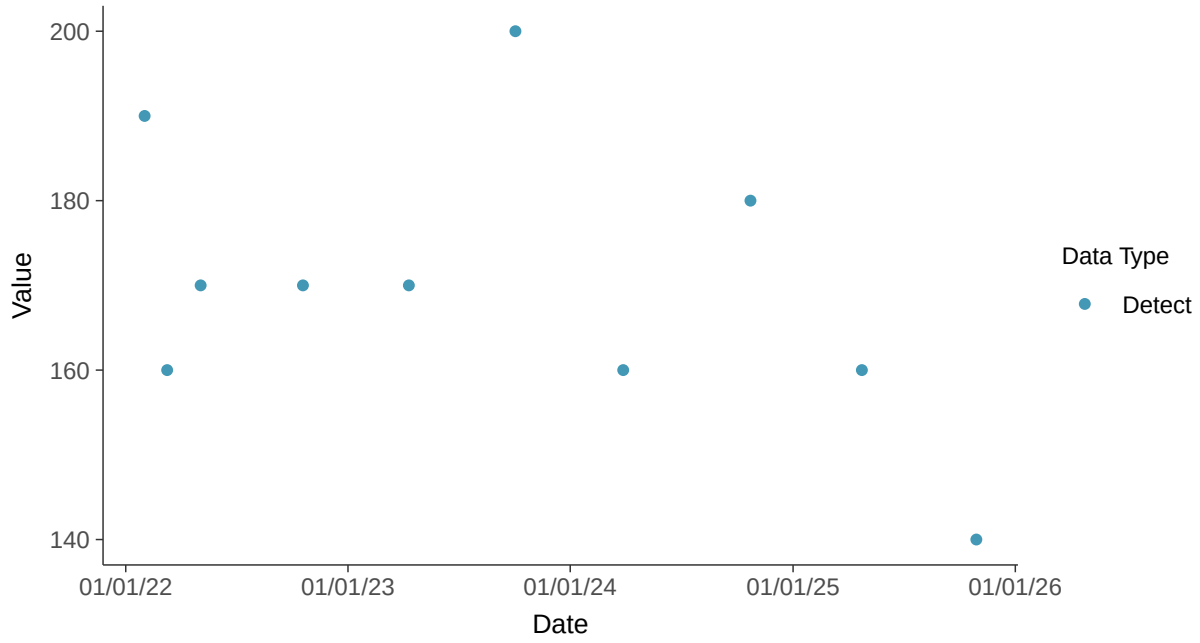


## Appendix IV: Barium, MW-15014R

ID: 04_2_103

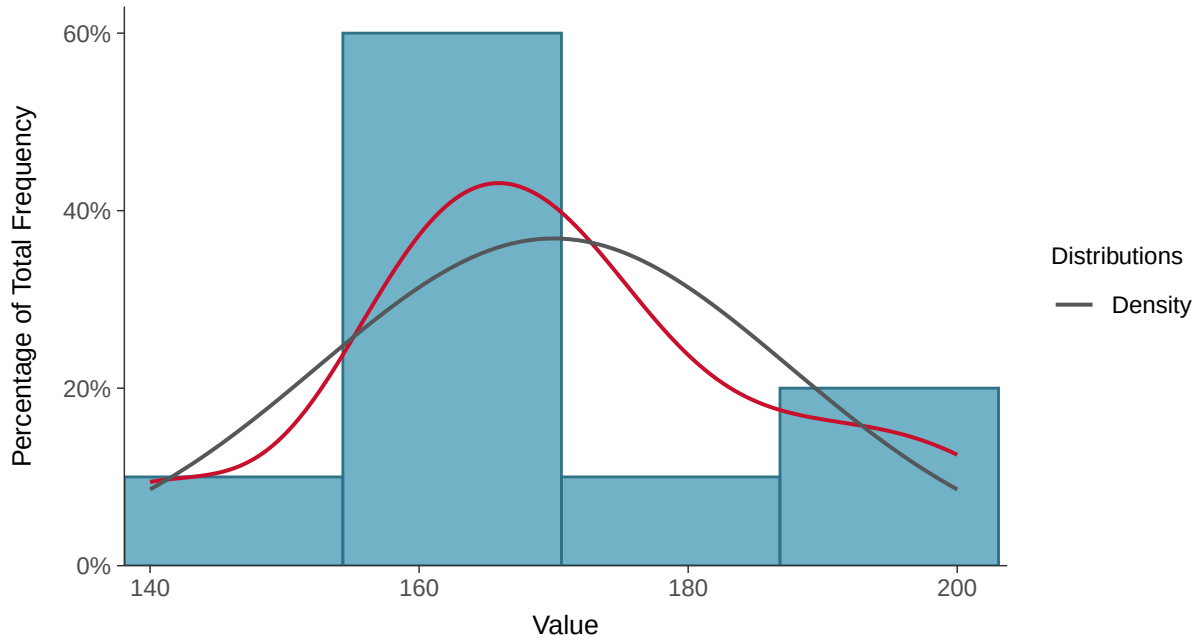
**Scatter Plot**

Barium, MW-15014R (ug/L)



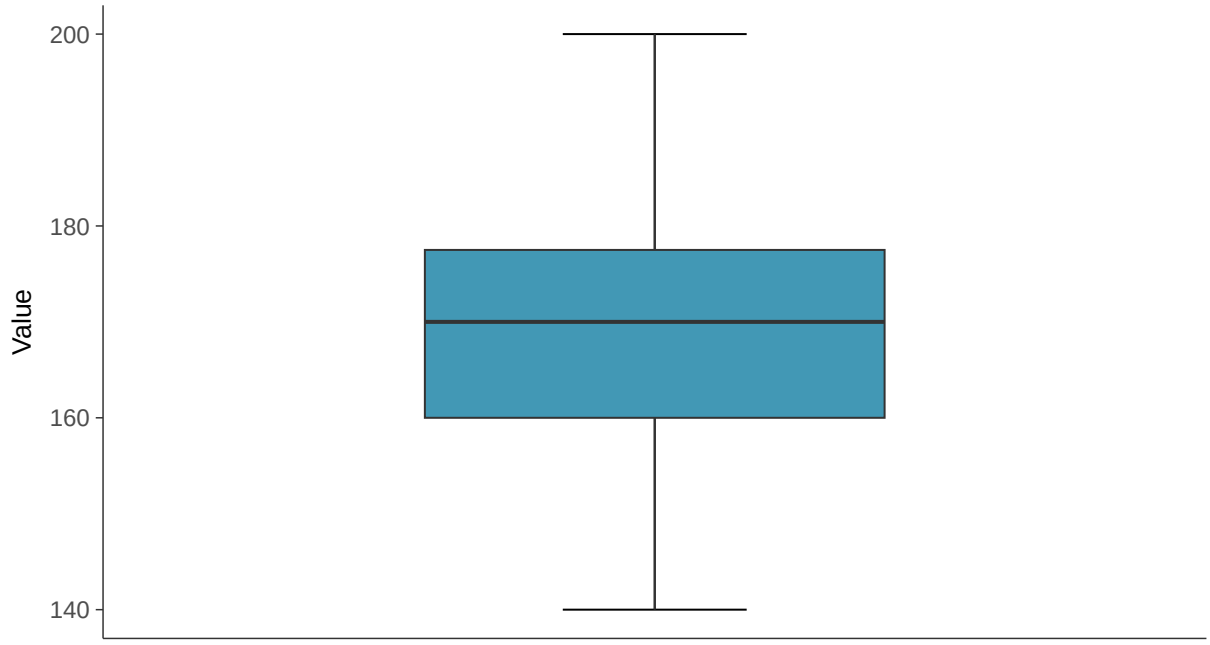

**Histogram**

Barium, MW-15014R (ug/L)



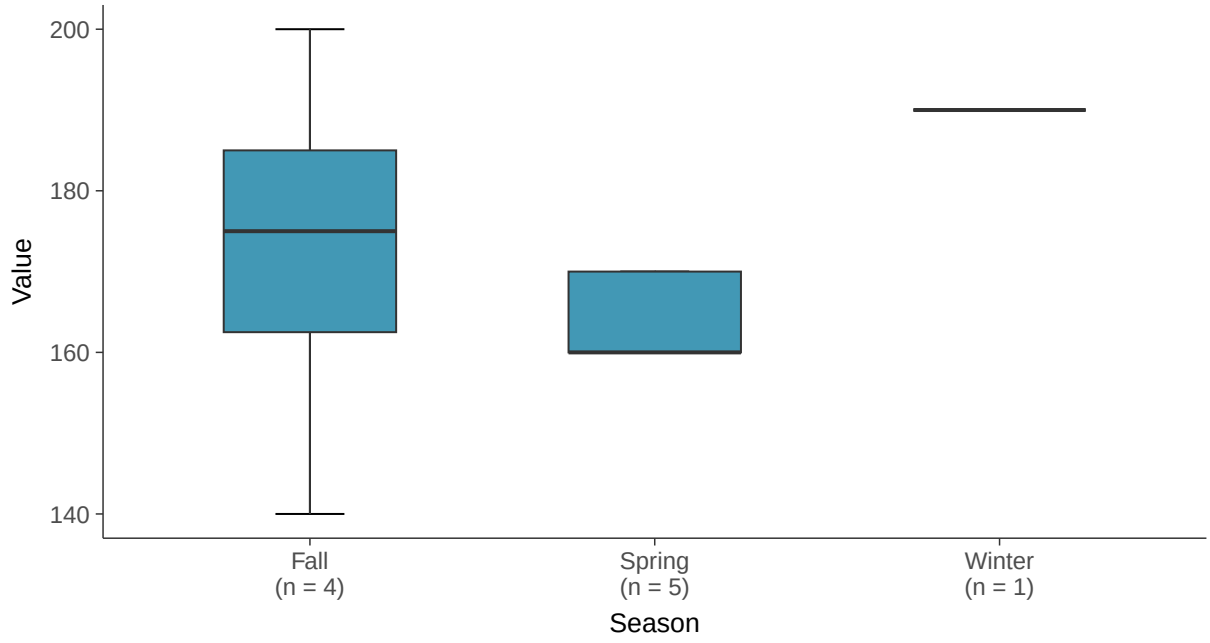
## Boxplot

Barium, MW-15014R (ug/L)



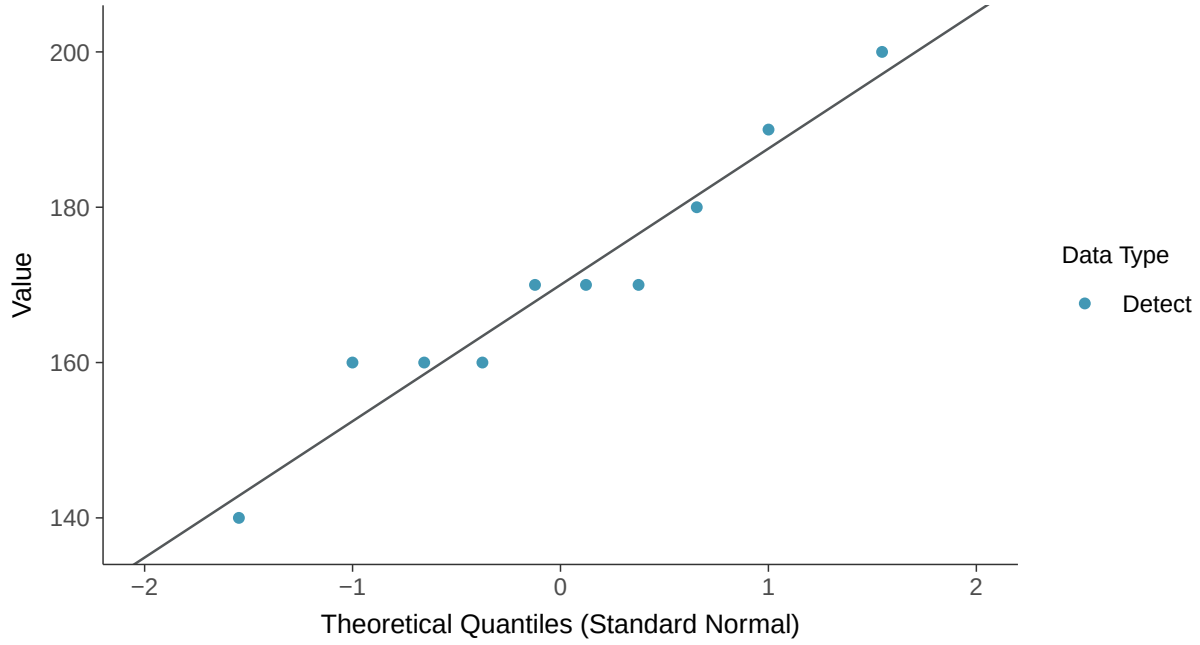

## Boxplot by Season

Barium, MW-15014R (ug/L)



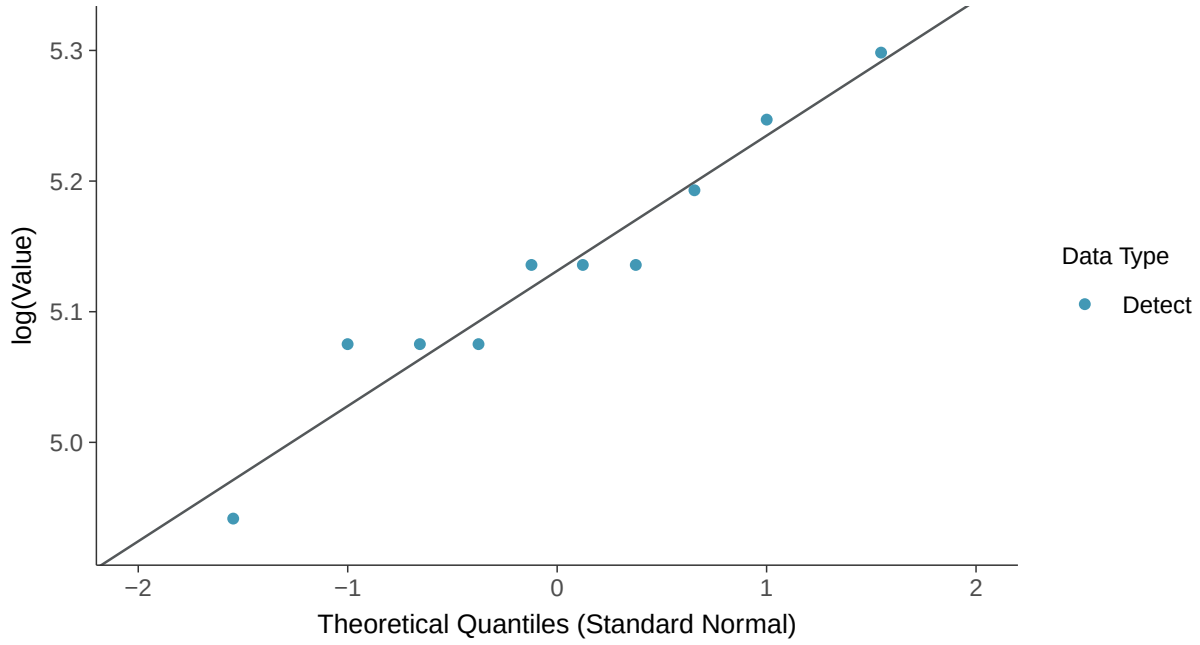
**Normal Q-Q plot**

Barium, MW-15014R (ug/L)



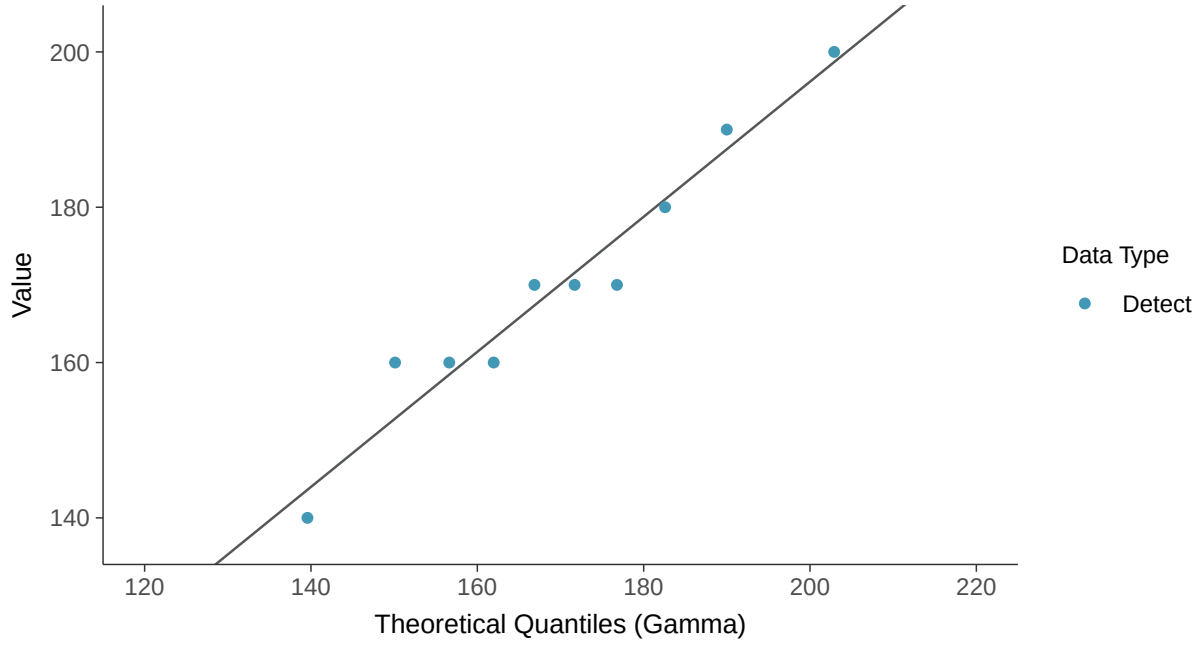

**Lognormal Q-Q plot**

Barium, MW-15014R (ug/L)



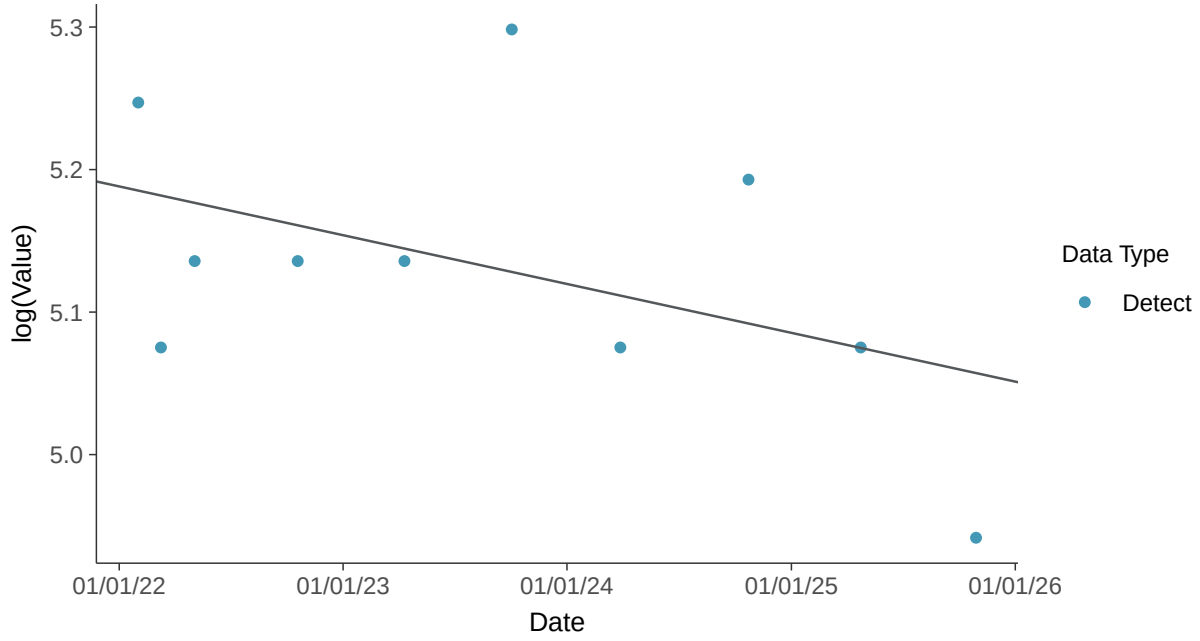
**Gamma Q-Q plot**

Barium, MW-15014R (ug/L)



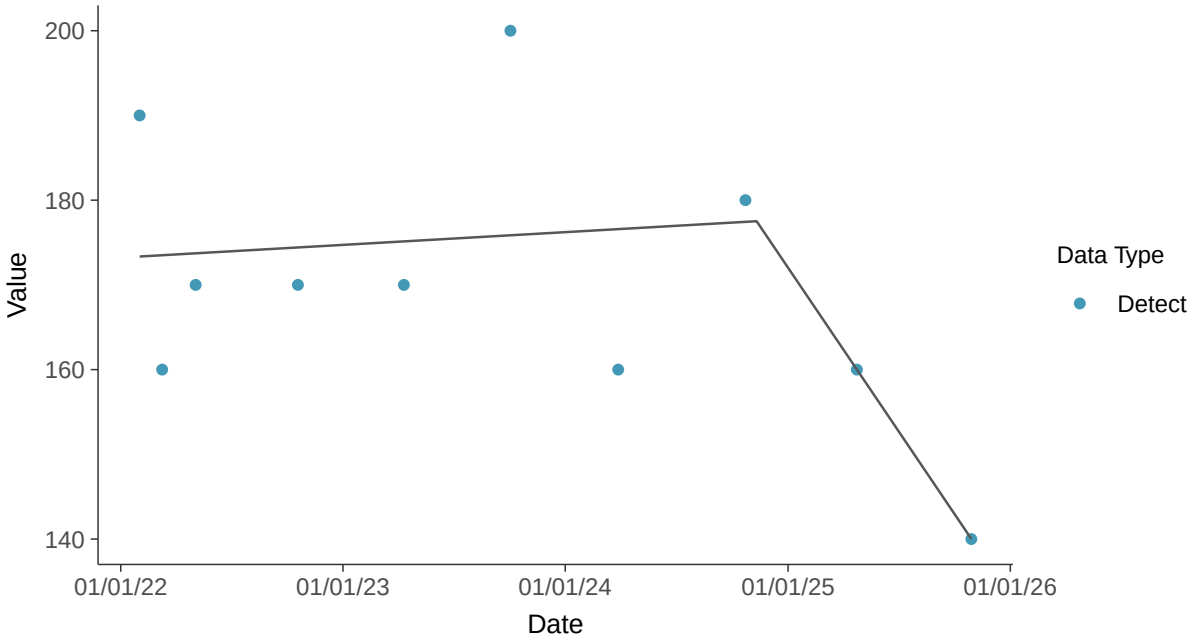

**Trend Regression: Lognormal MLE**

Barium, MW-15014R (ug/L)



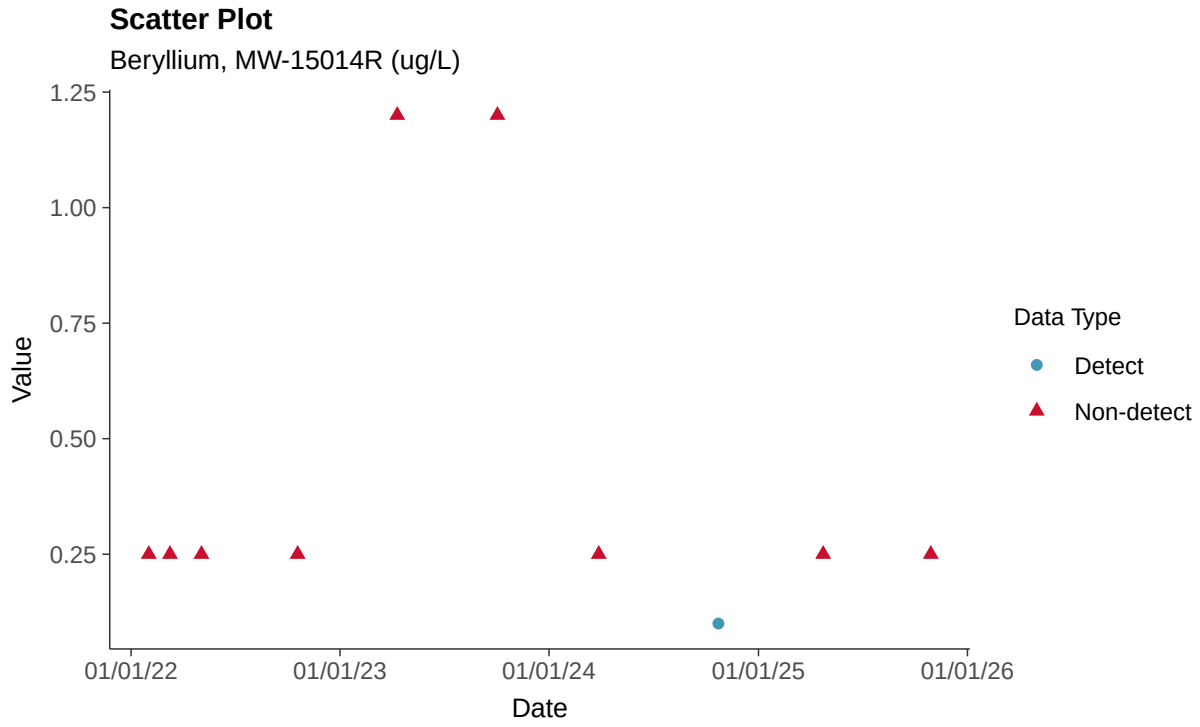
**Trend Regression: Piecewise Linear-Linear**

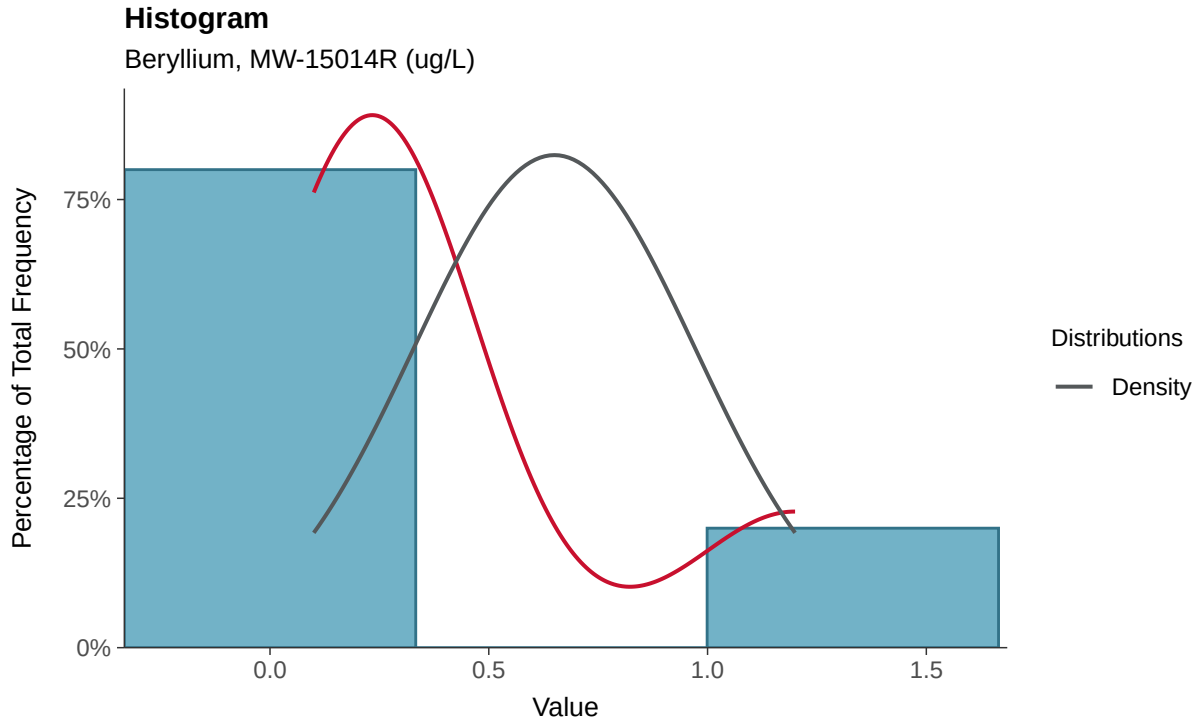
Barium, MW-15014R (ug/L)



## Appendix IV: Beryllium, MW-15014R

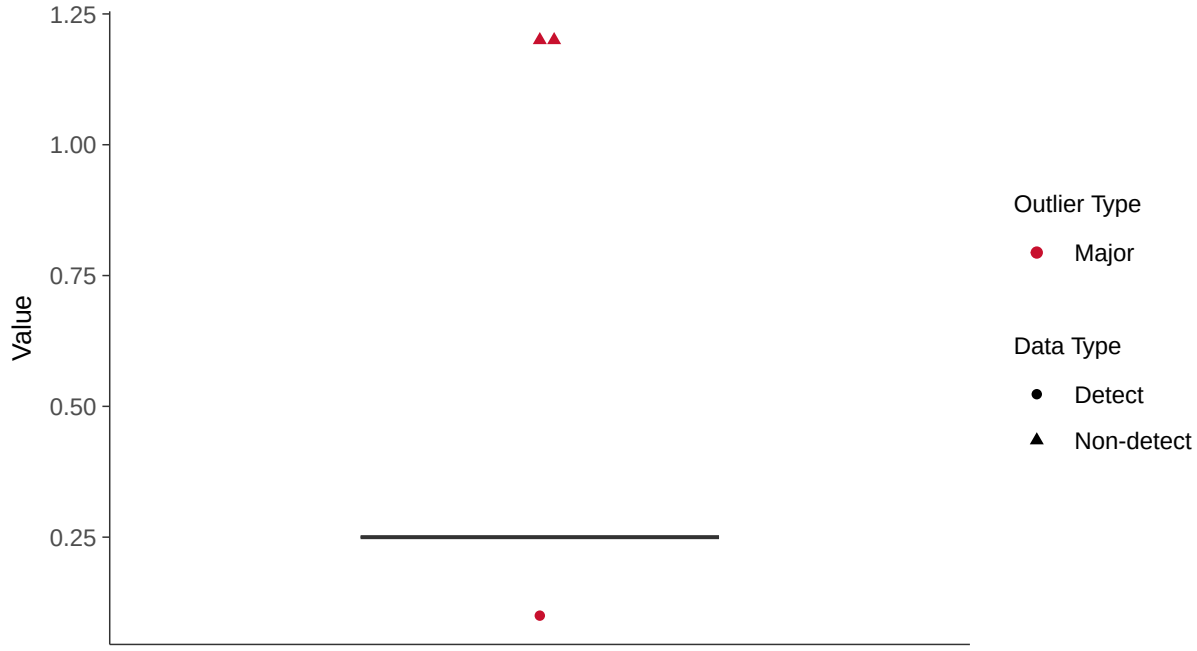
ID: 04_2_104



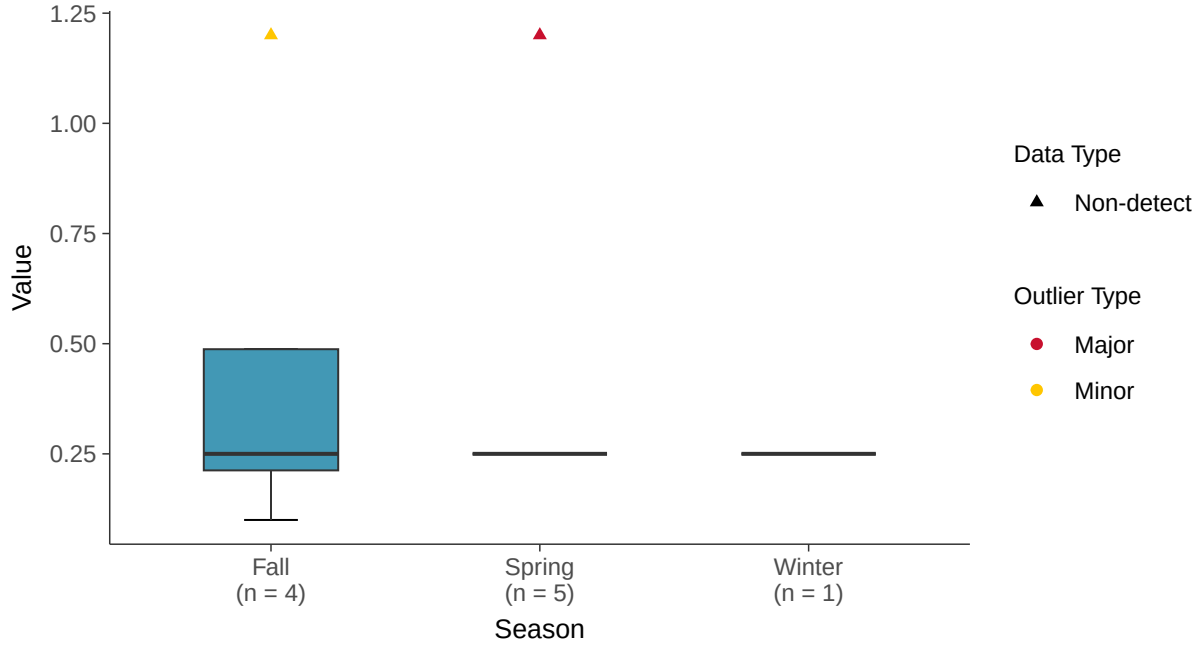
## Boxplot

Beryllium, MW-15014R (ug/L)



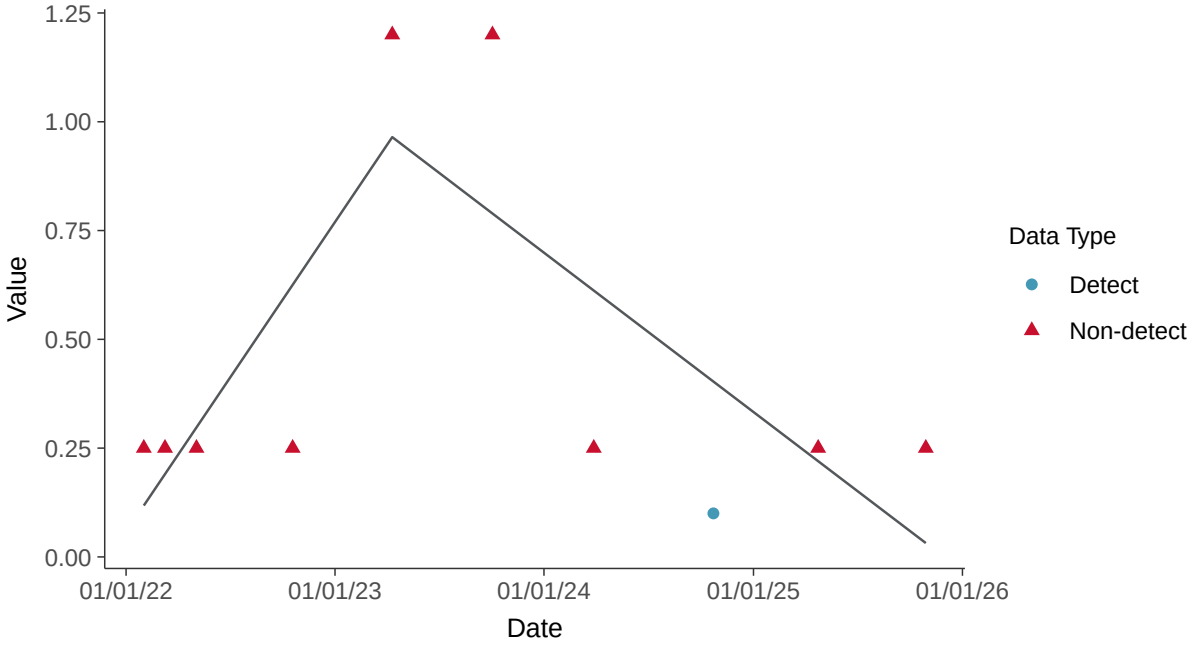

## Boxplot by Season

Beryllium, MW-15014R (ug/L)



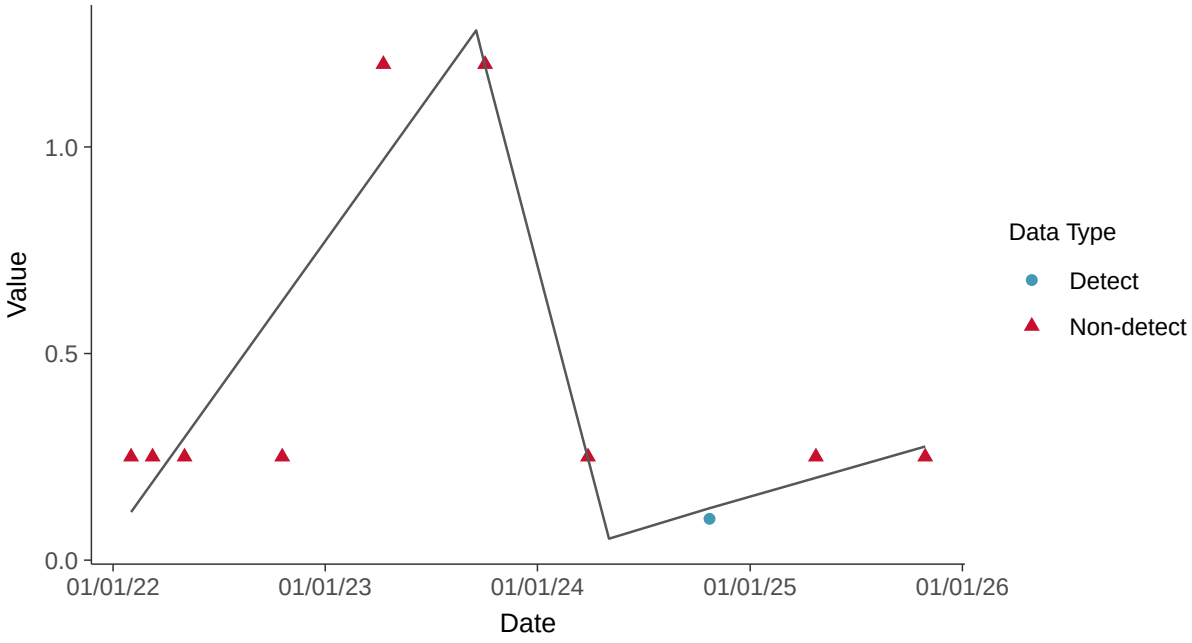
**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-15014R (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Beryllium, MW-15014R (ug/L)

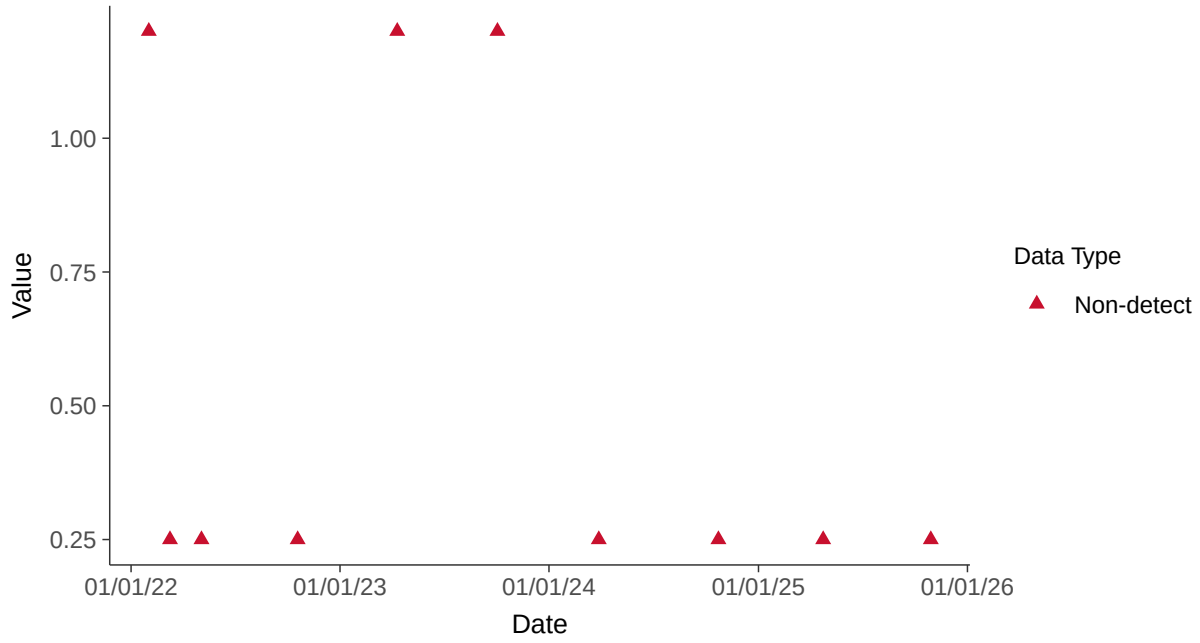


## Appendix IV: Cadmium, MW-15014R

ID: 04_2_106

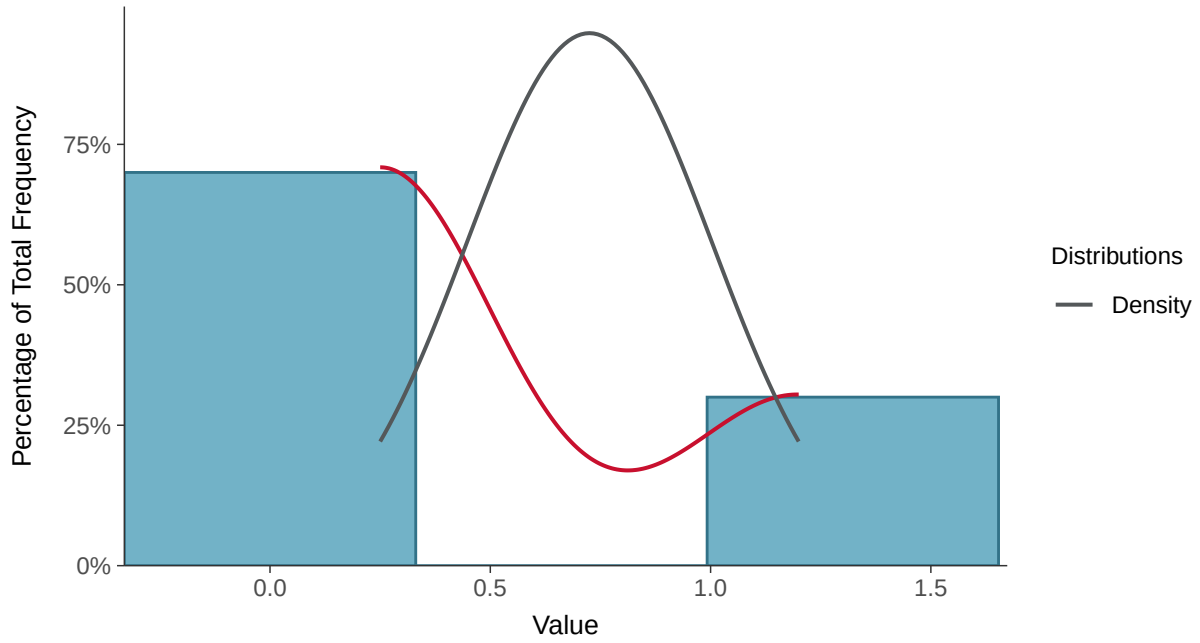
**Scatter Plot**

Cadmium, MW-15014R (ug/L)



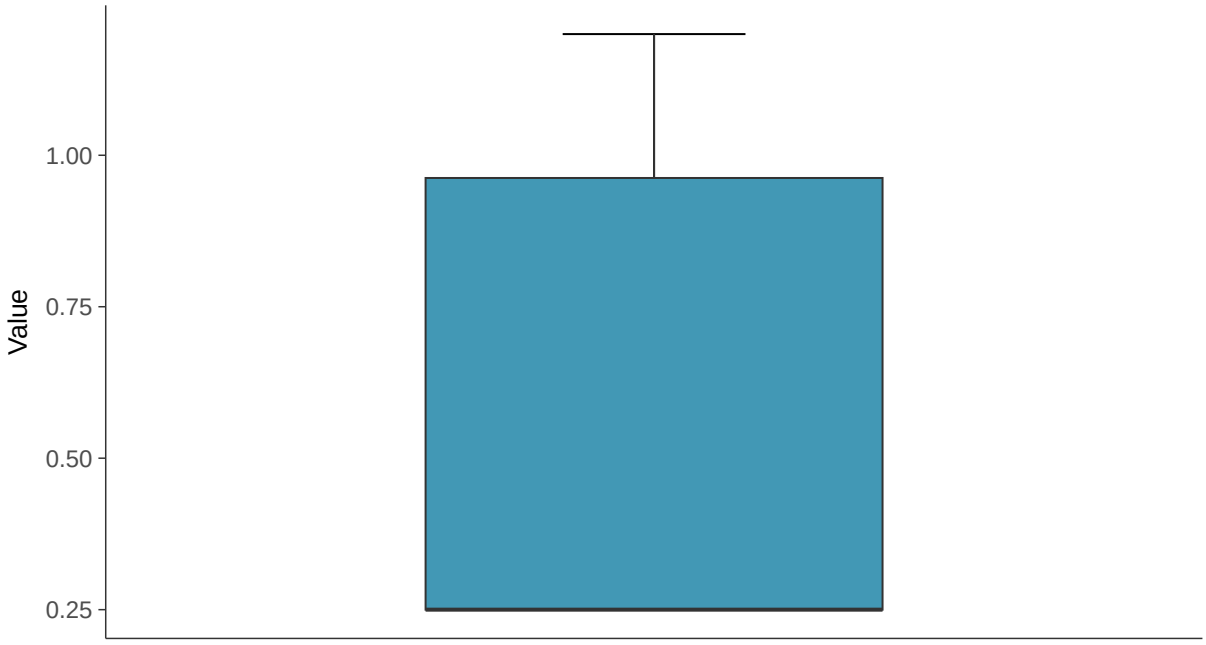

**Histogram**

Cadmium, MW-15014R (ug/L)



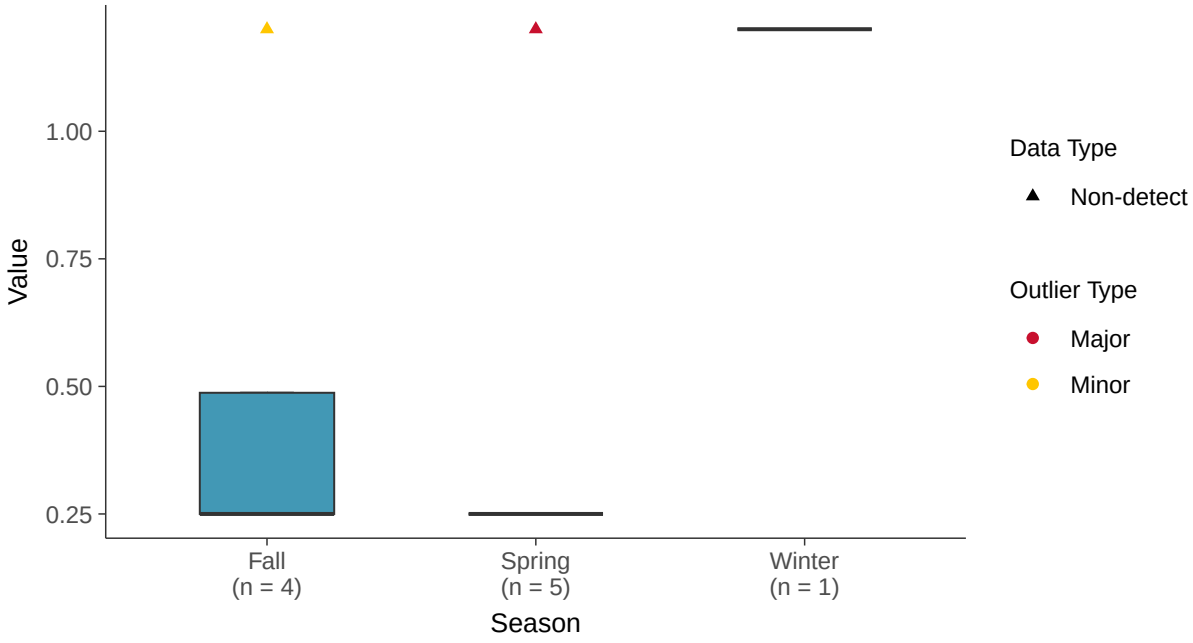
## Boxplot

Cadmium, MW-15014R (ug/L)



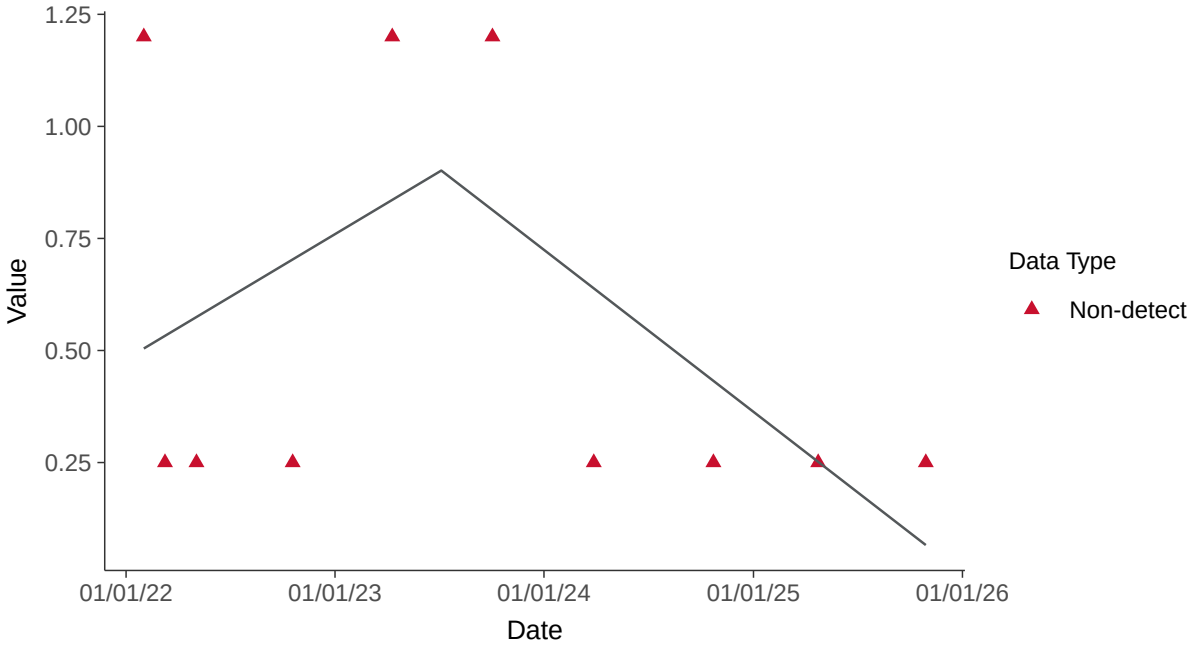

## Boxplot by Season

Cadmium, MW-15014R (ug/L)



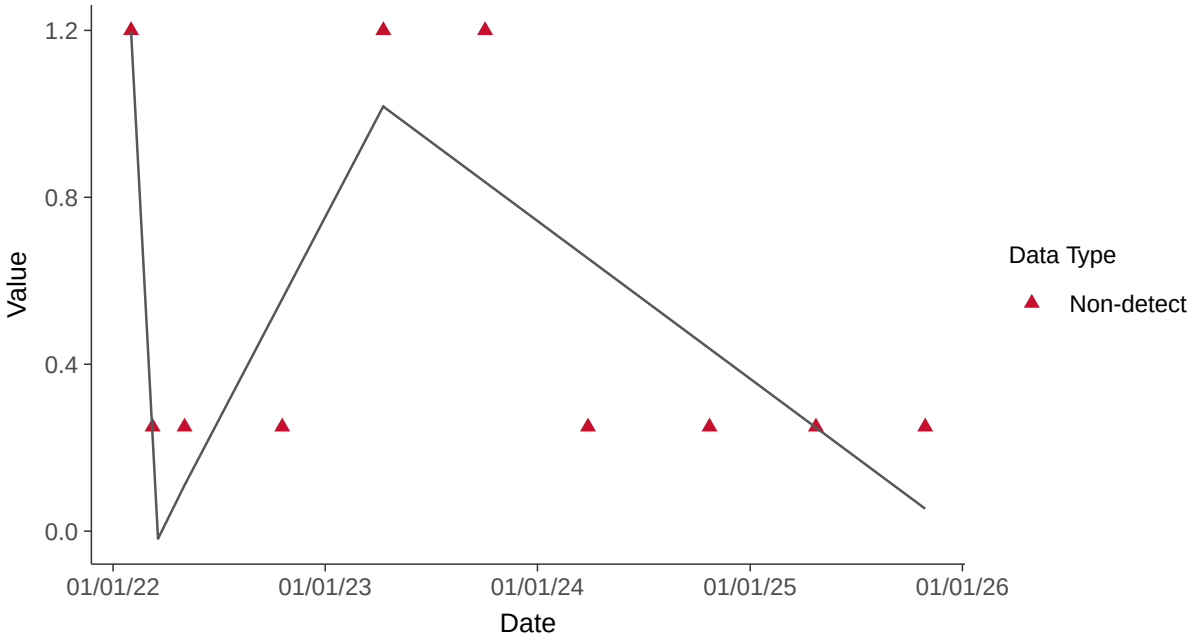
**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-15014R (ug/L)



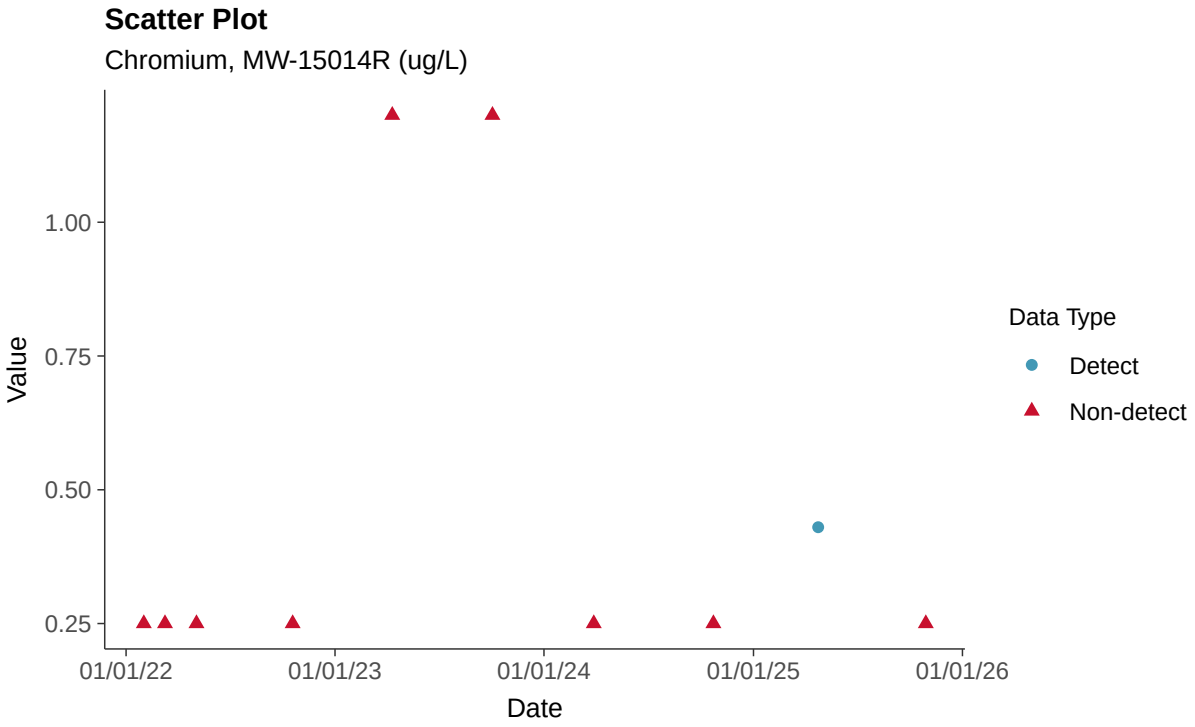

**Trend Regression: Piecewise Linear-Linear-Linear**

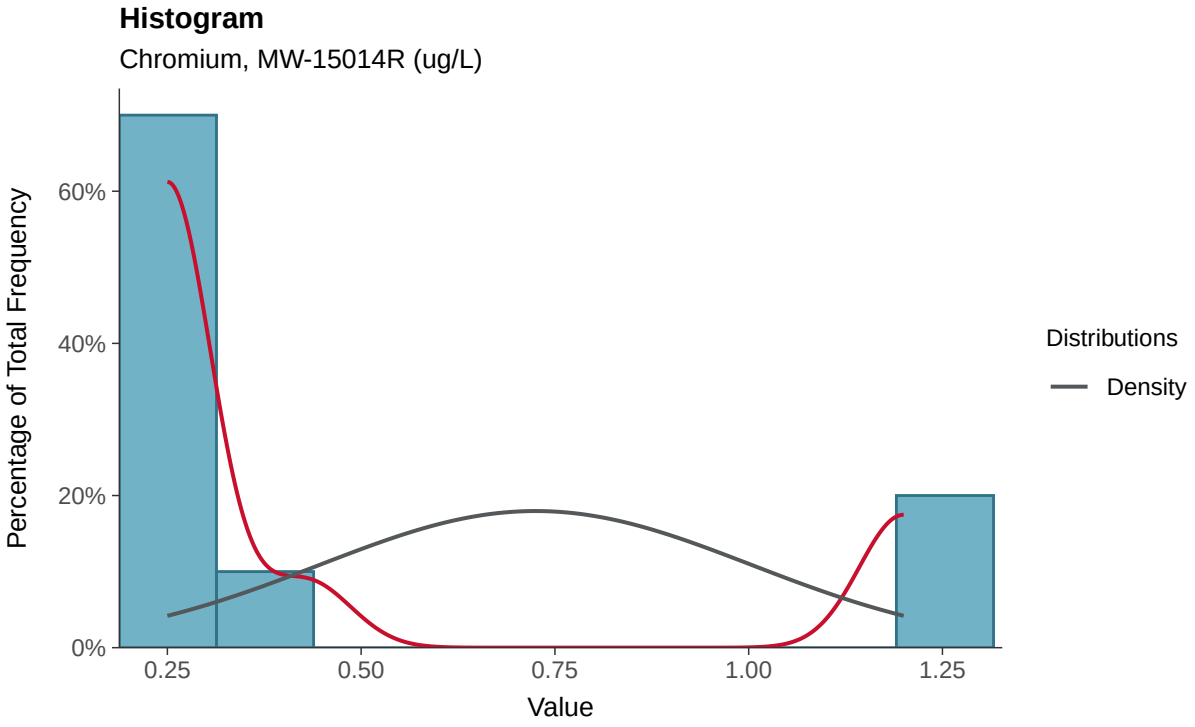
Cadmium, MW-15014R (ug/L)



## Appendix IV: Chromium, MW-15014R

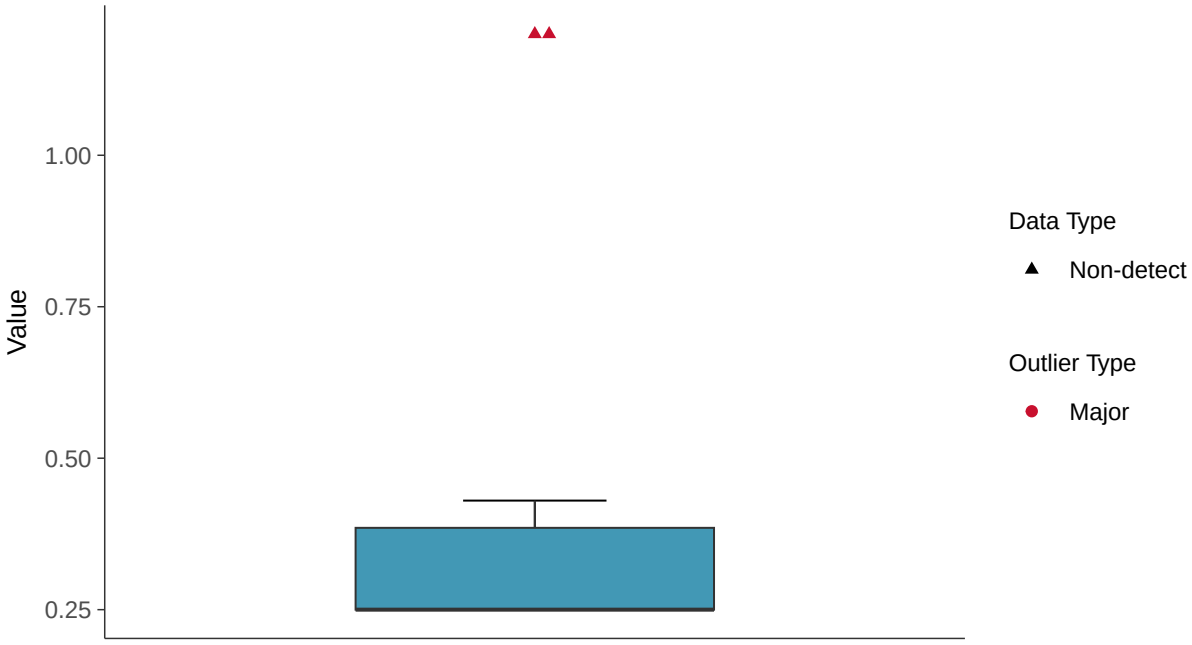
ID: 04_2_109



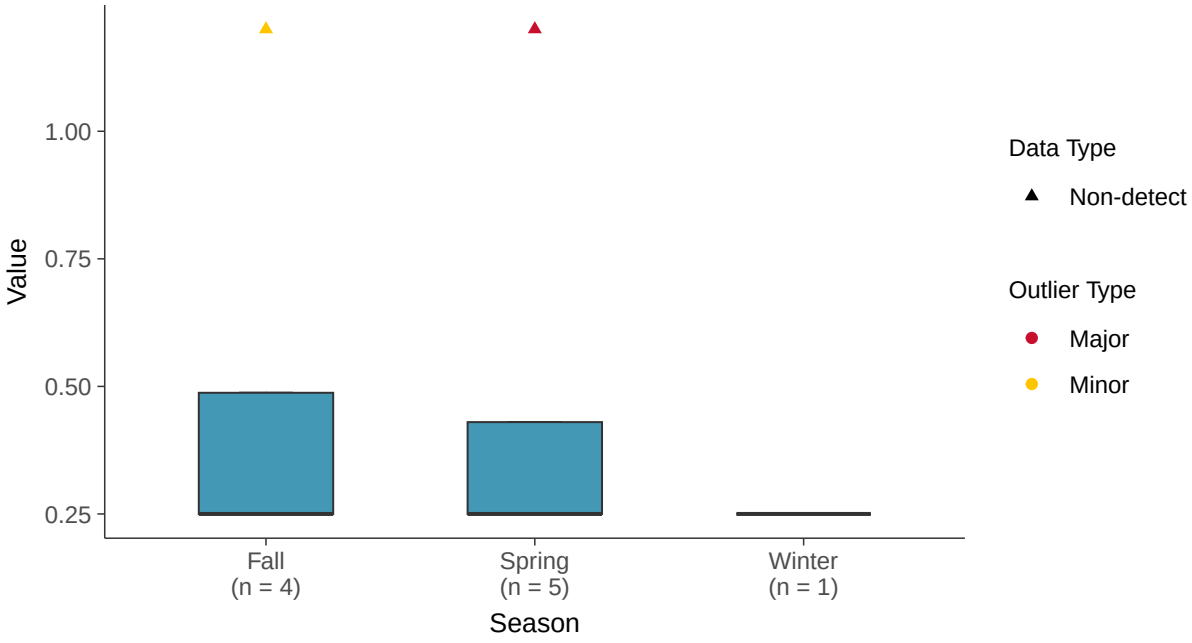
## Boxplot

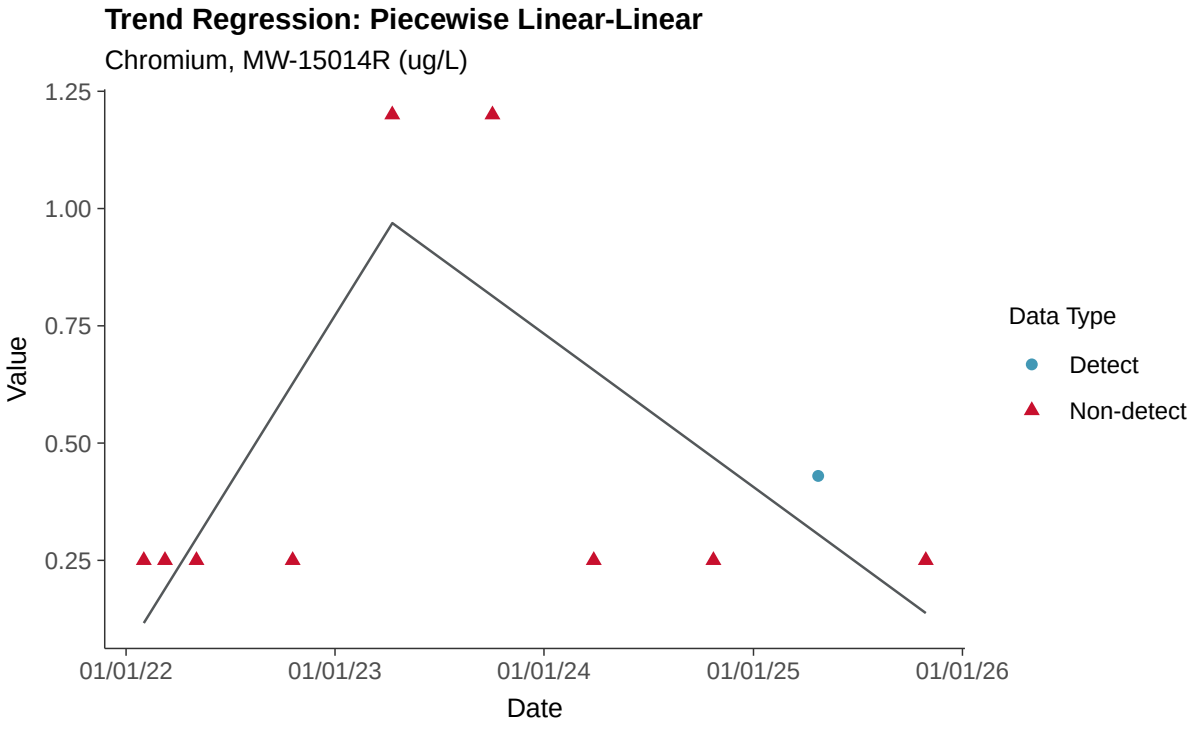
Chromium, MW-15014R (ug/L)




## Boxplot by Season

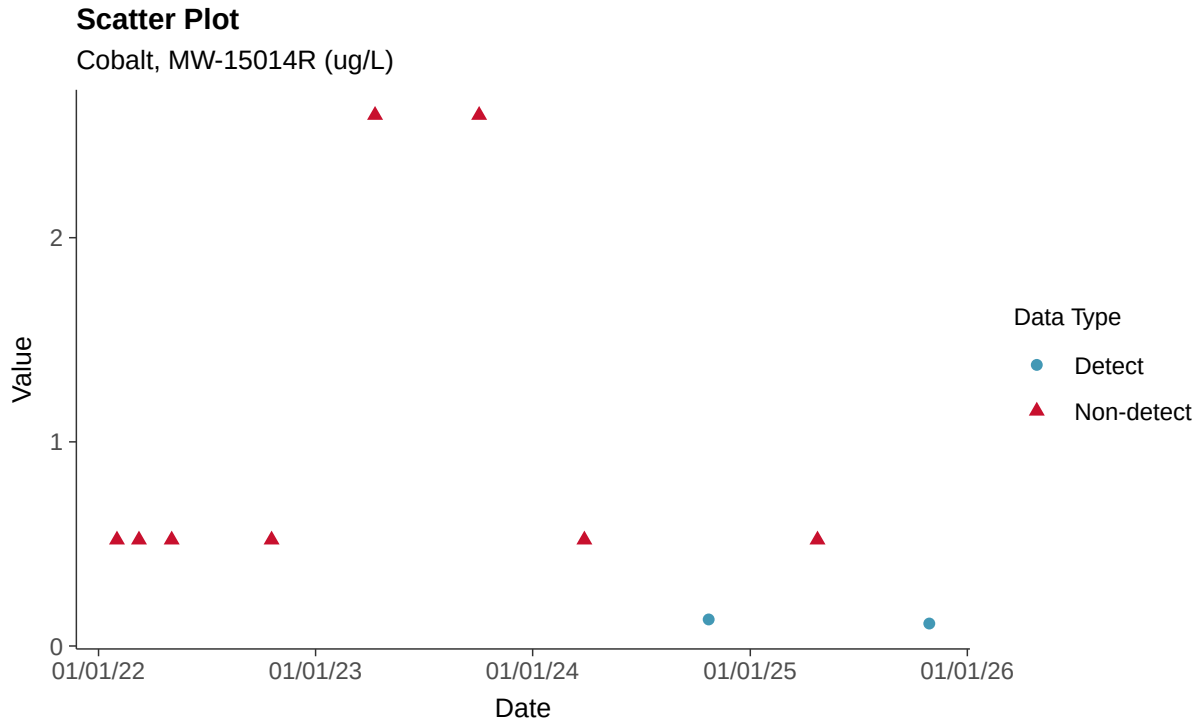
Chromium, MW-15014R (ug/L)

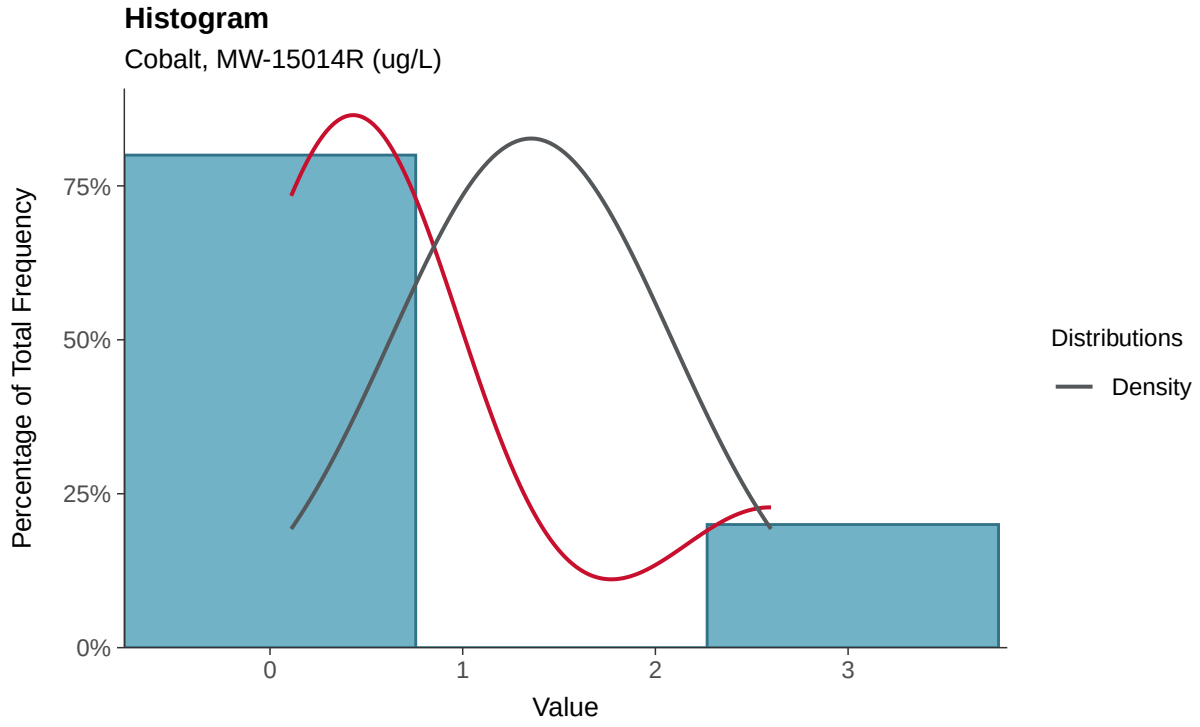



Trend Regression: Piecewise Linear-Linear
Chromium, MW-15014R (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cobalt, MW-15014R

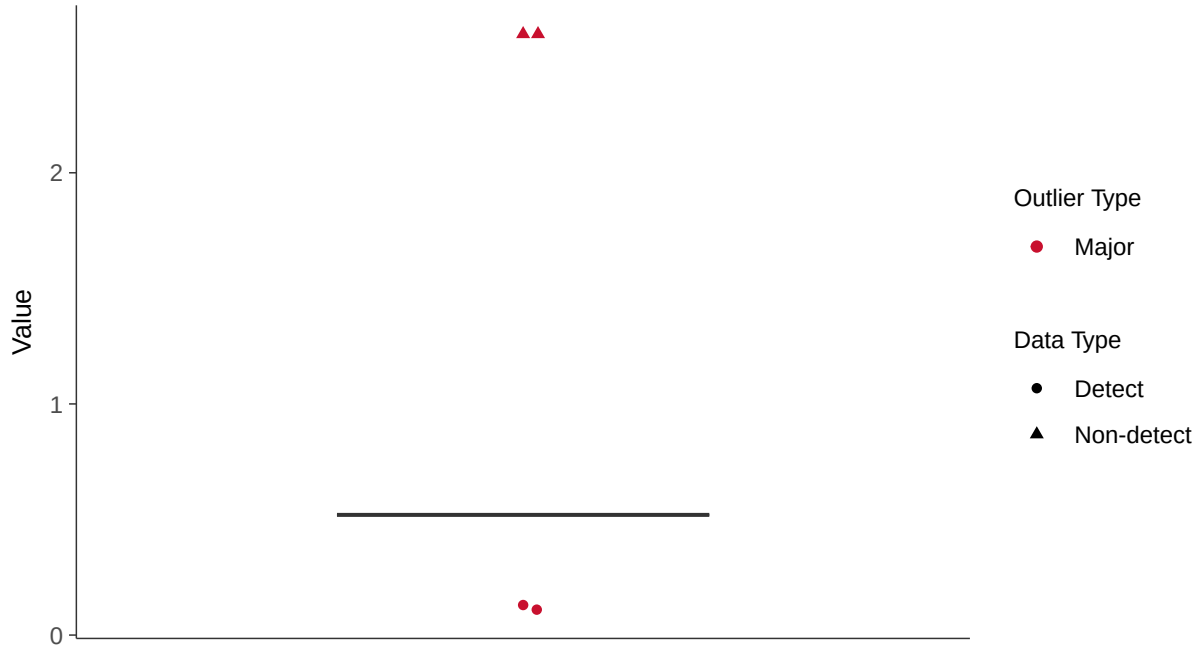
ID: 04_2_110



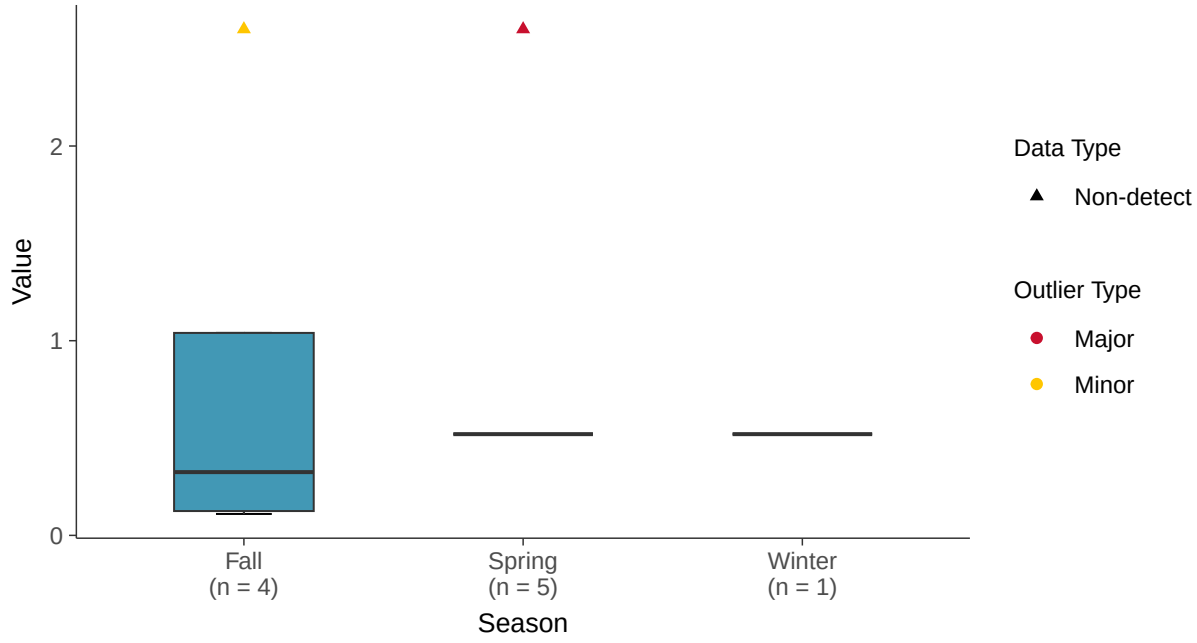
## Boxplot

Cobalt, MW-15014R (ug/L)



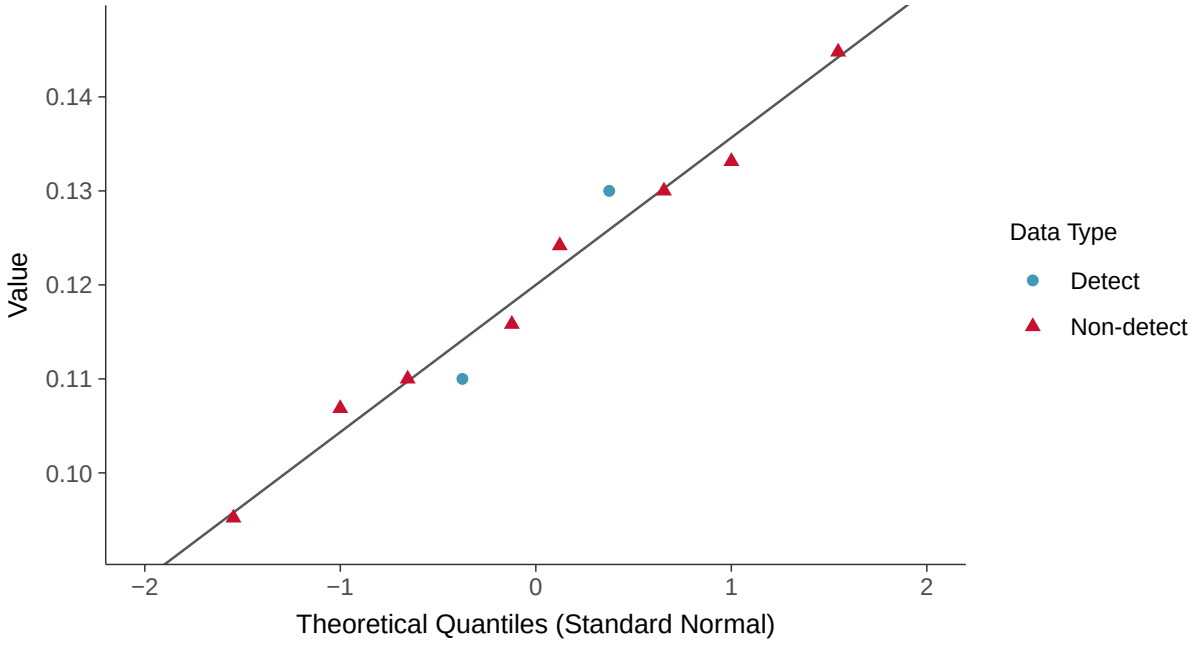

## Boxplot by Season

Cobalt, MW-15014R (ug/L)



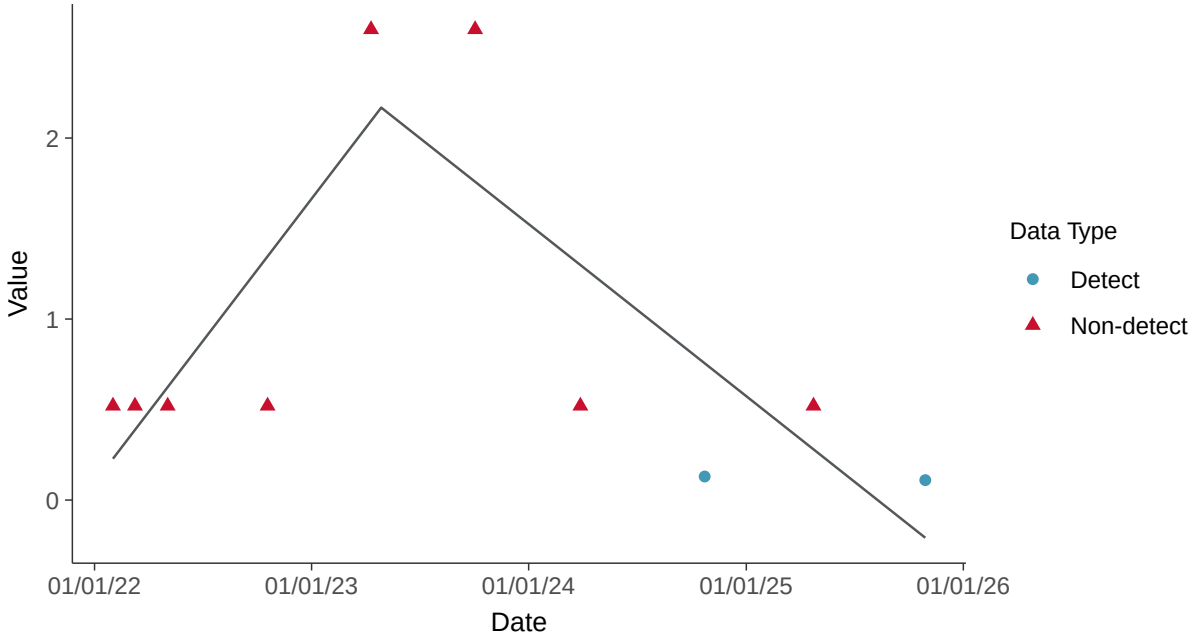
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15014R (ug/L)



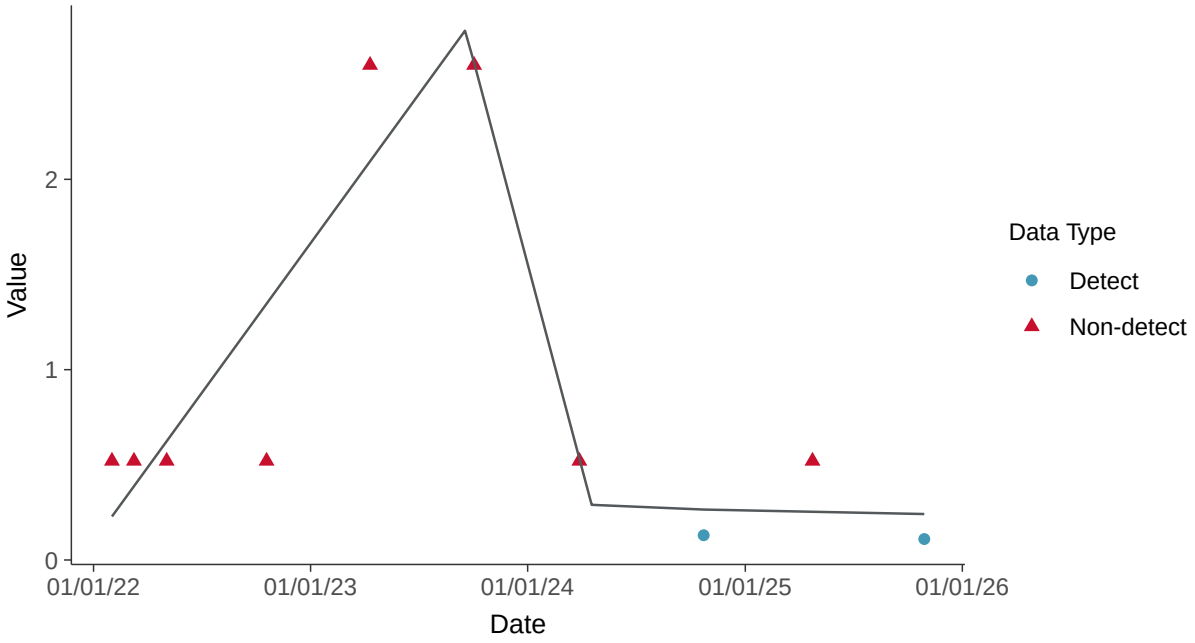

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15014R (ug/L)



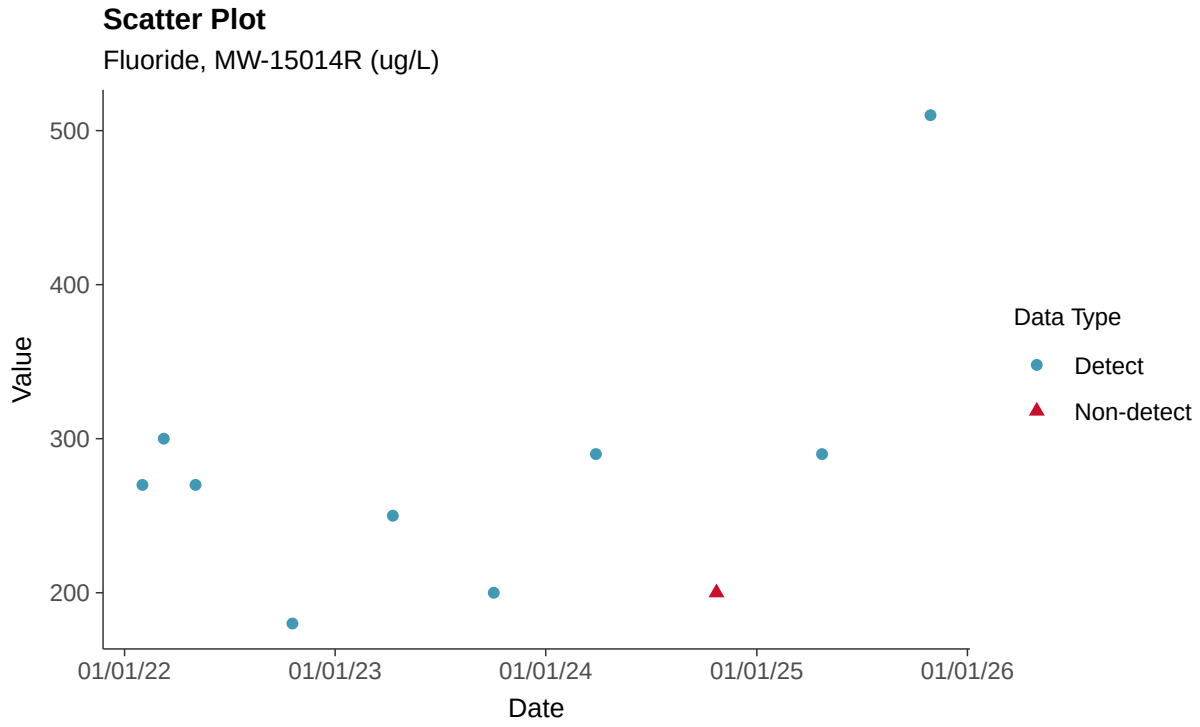
**Trend Regression: Piecewise Linear-Linear-Linear**

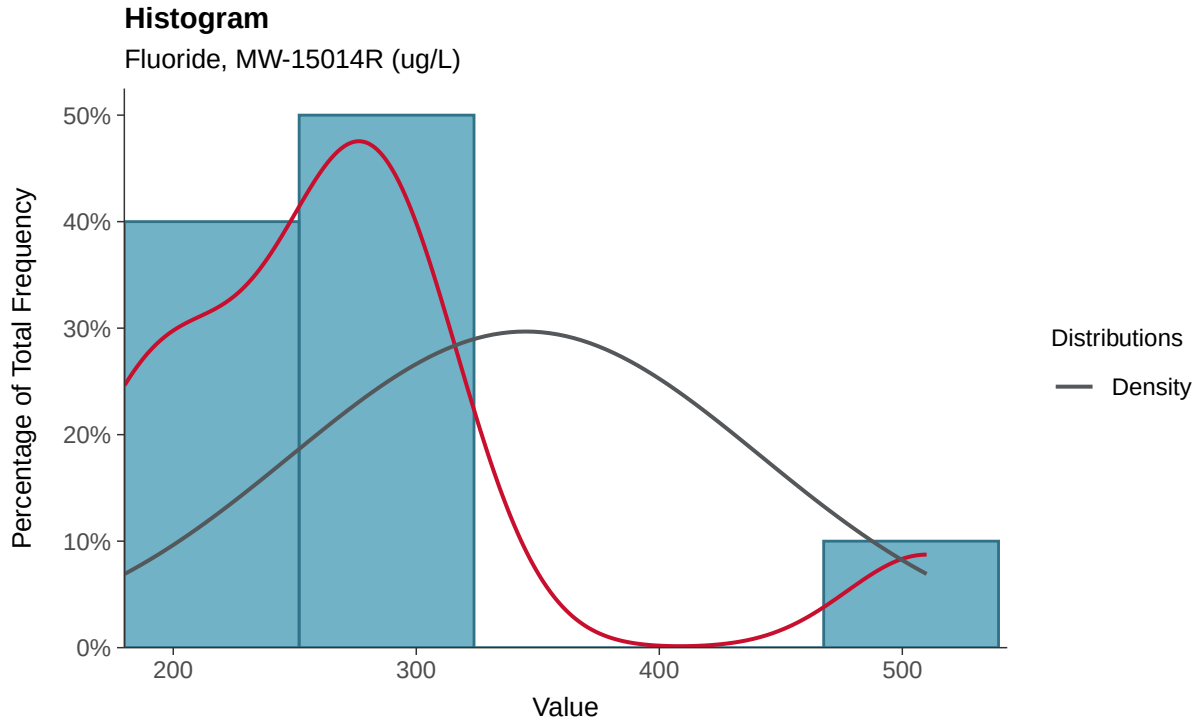
Cobalt, MW-15014R (ug/L)



## Appendix IV: Fluoride, MW-15014R

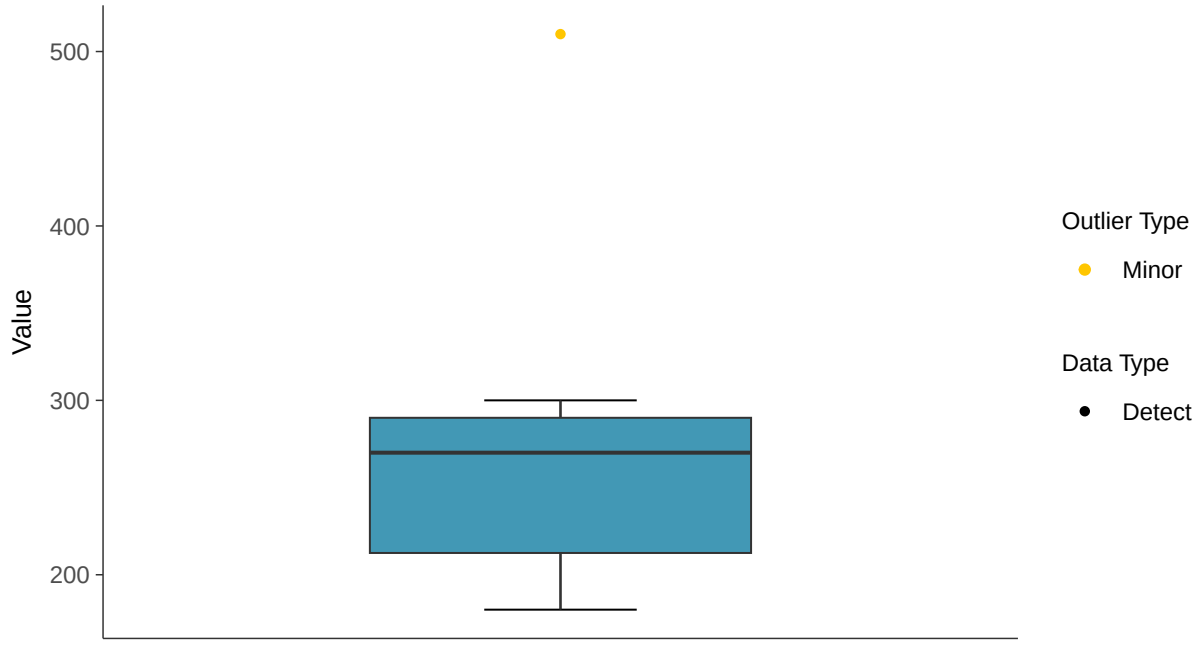
ID: 04_2_114



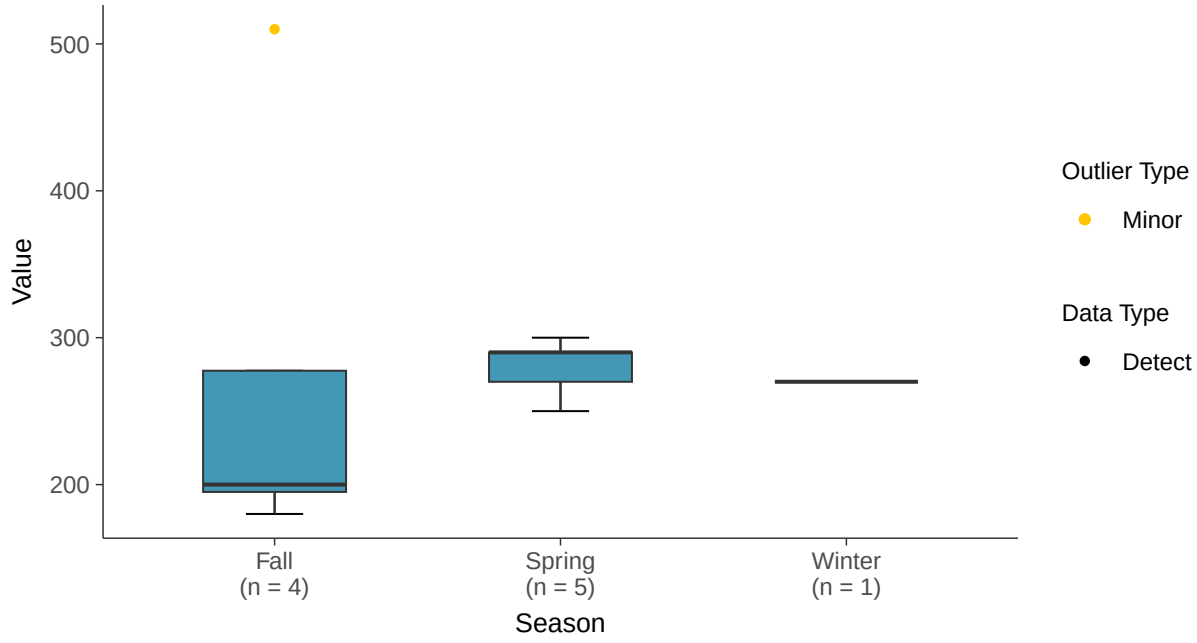
## Boxplot

Fluoride, MW-15014R (ug/L)



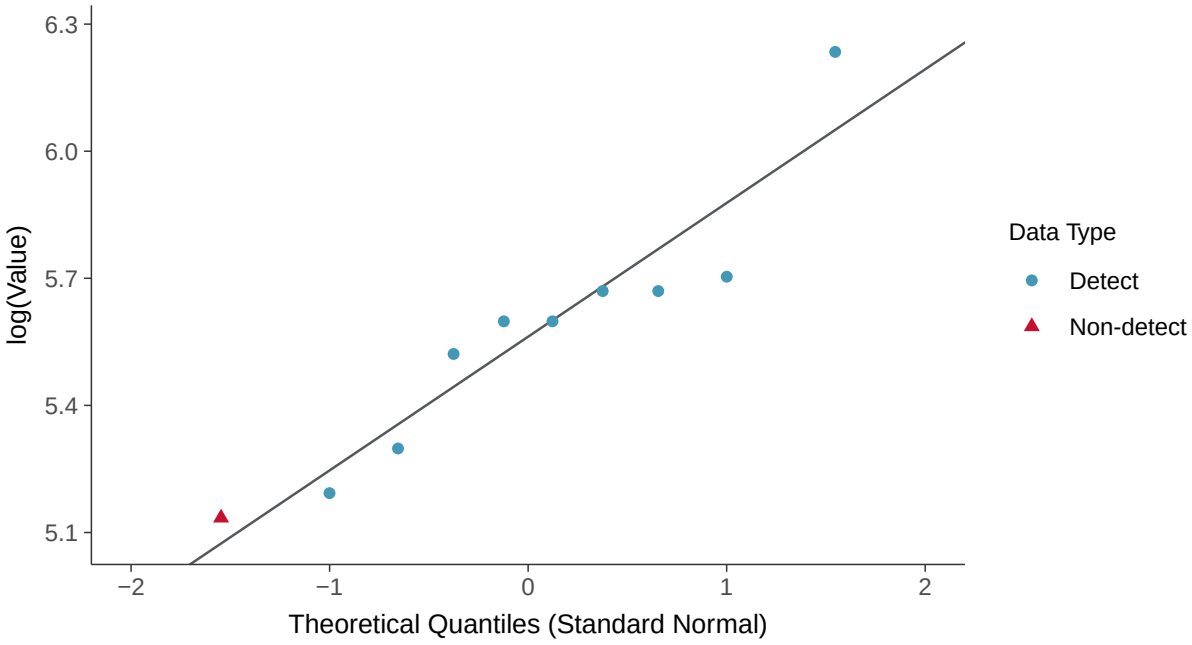

## Boxplot by Season

Fluoride, MW-15014R (ug/L)



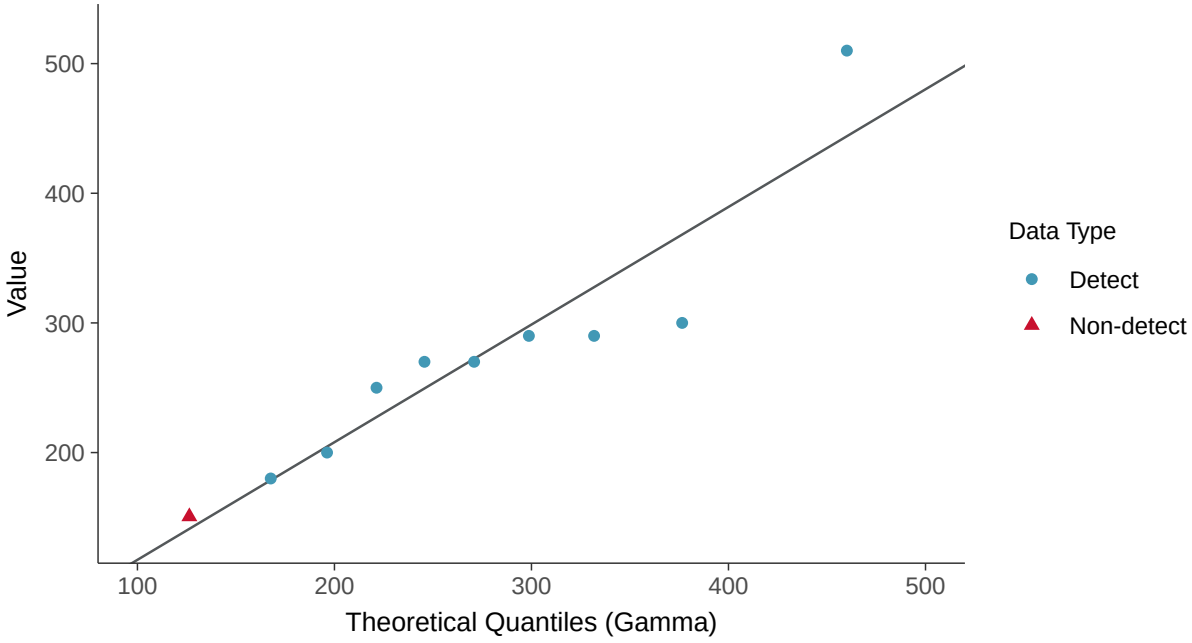
**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15014R (ug/L)



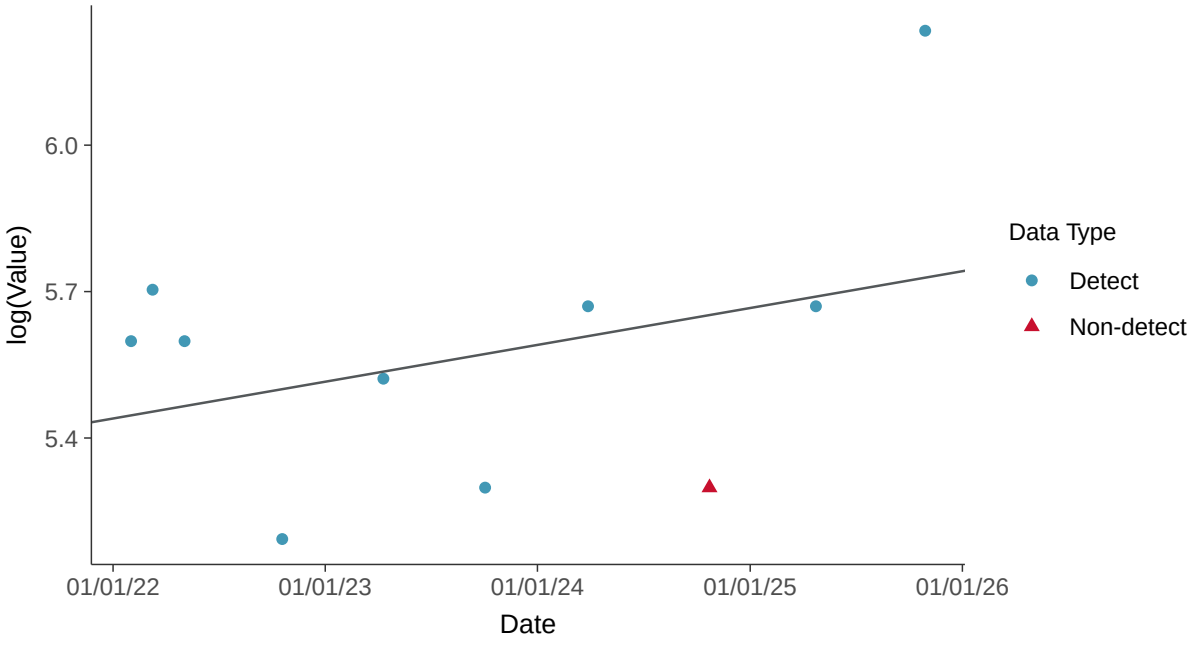

**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15014R (ug/L)



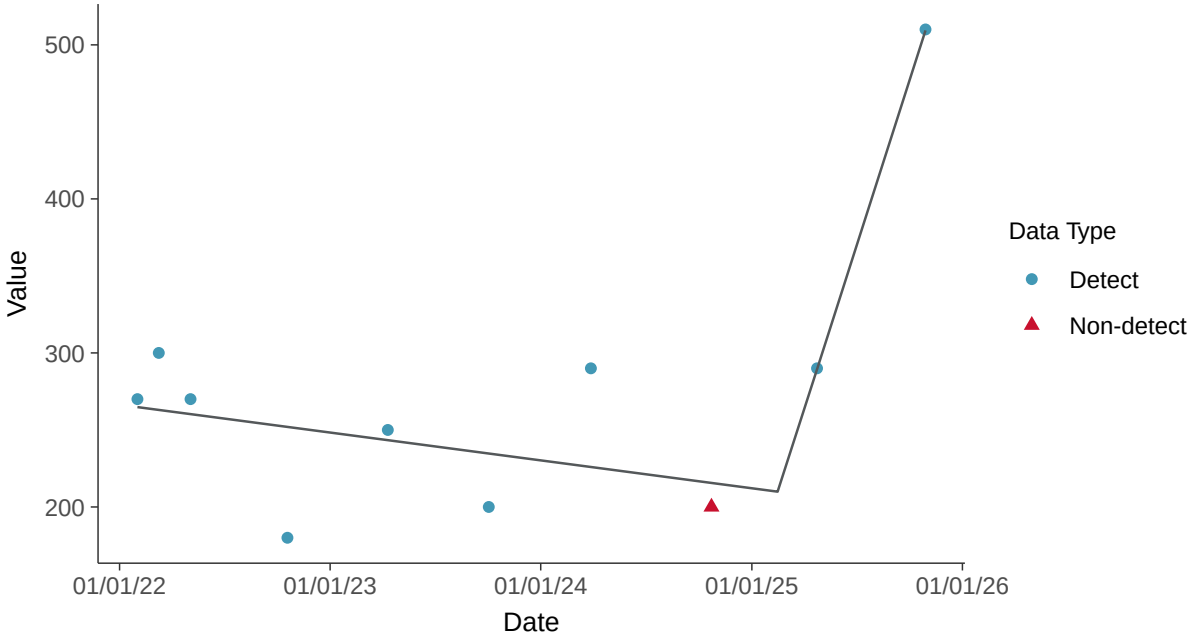
**Trend Regression: Lognormal MLE**

Fluoride, MW-15014R (ug/L)



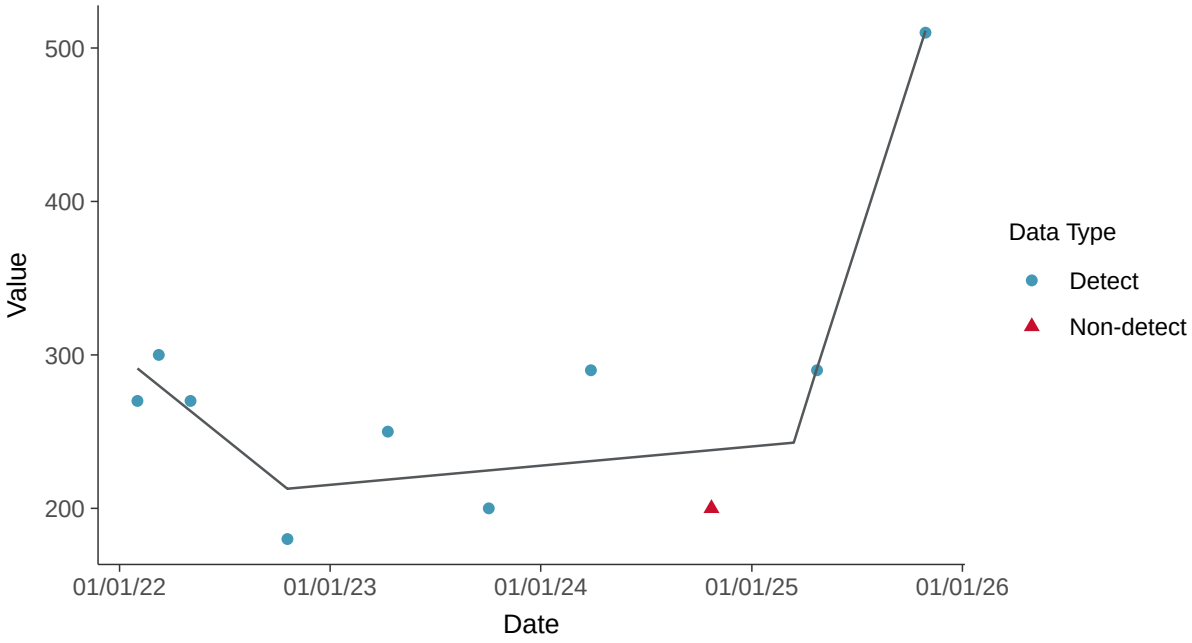

**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15014R (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Fluoride, MW-15014R (ug/L)

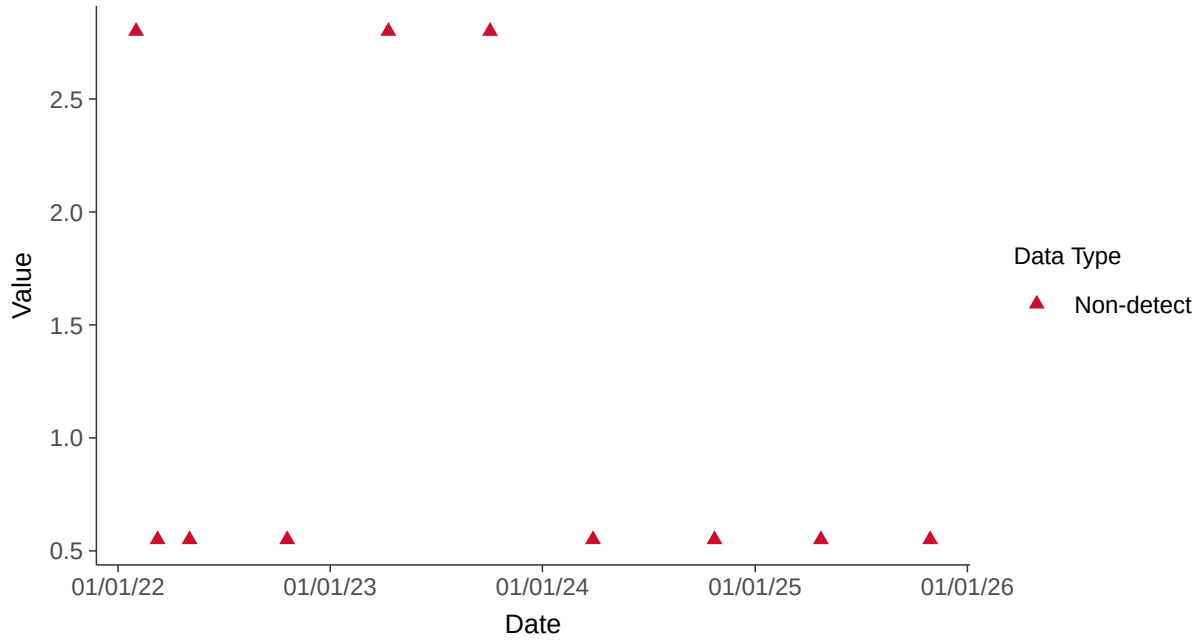


## Appendix IV: Lead, MW-15014R

ID: 04_2_116

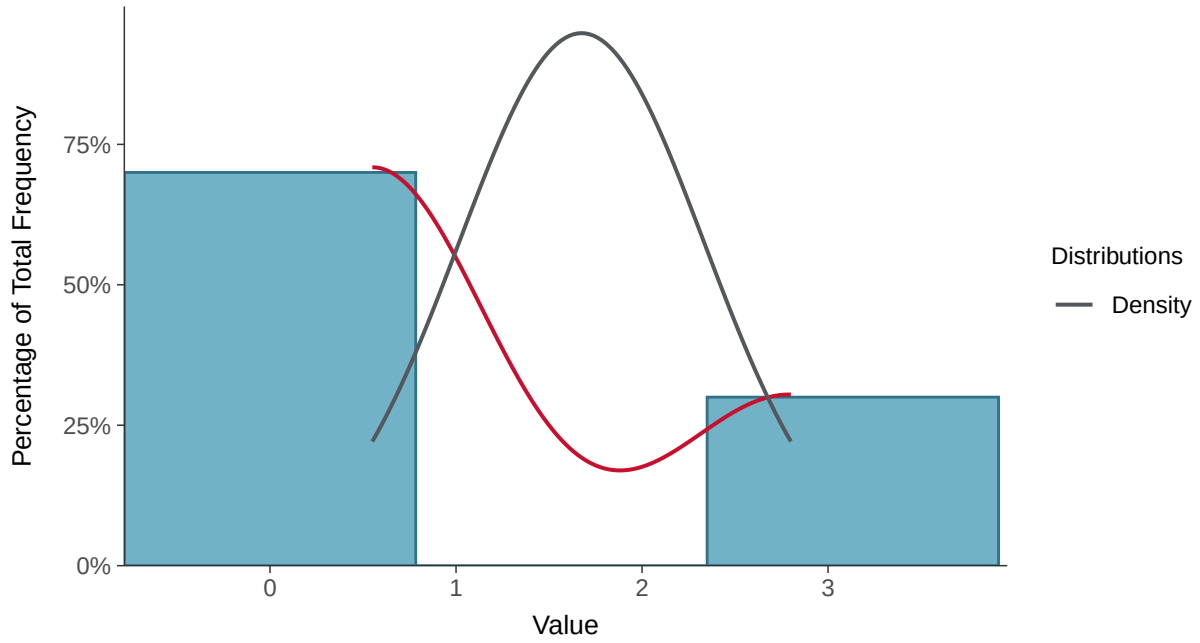
**Scatter Plot**

Lead, MW-15014R (ug/L)



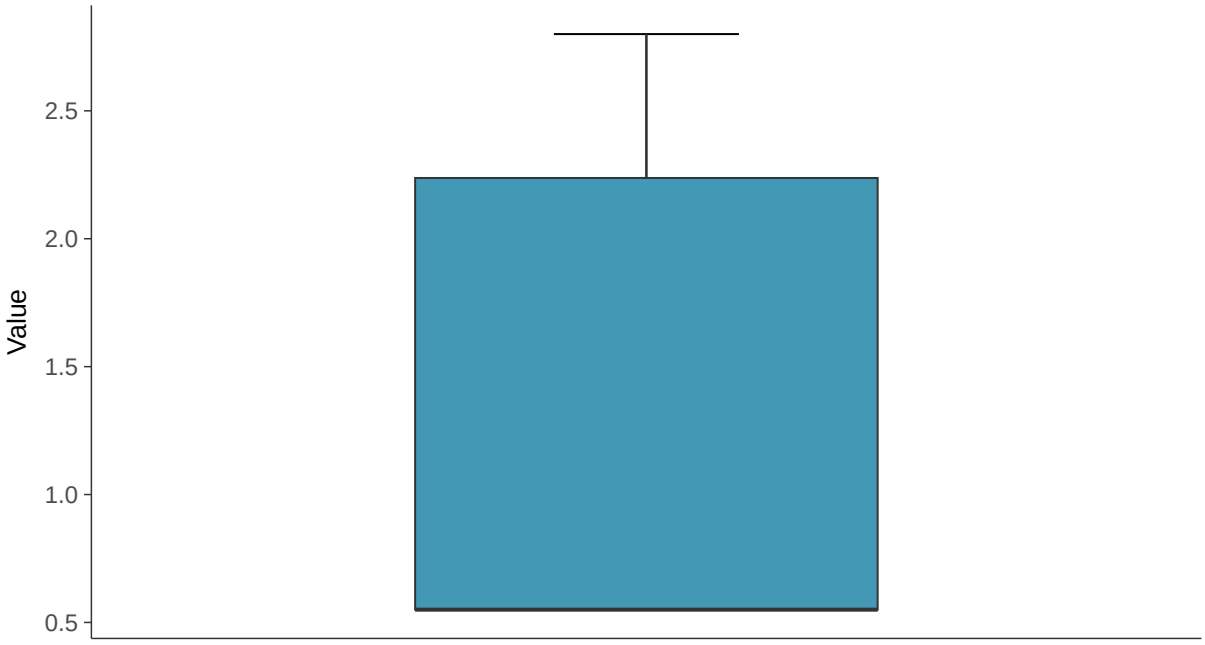

**Histogram**

Lead, MW-15014R (ug/L)



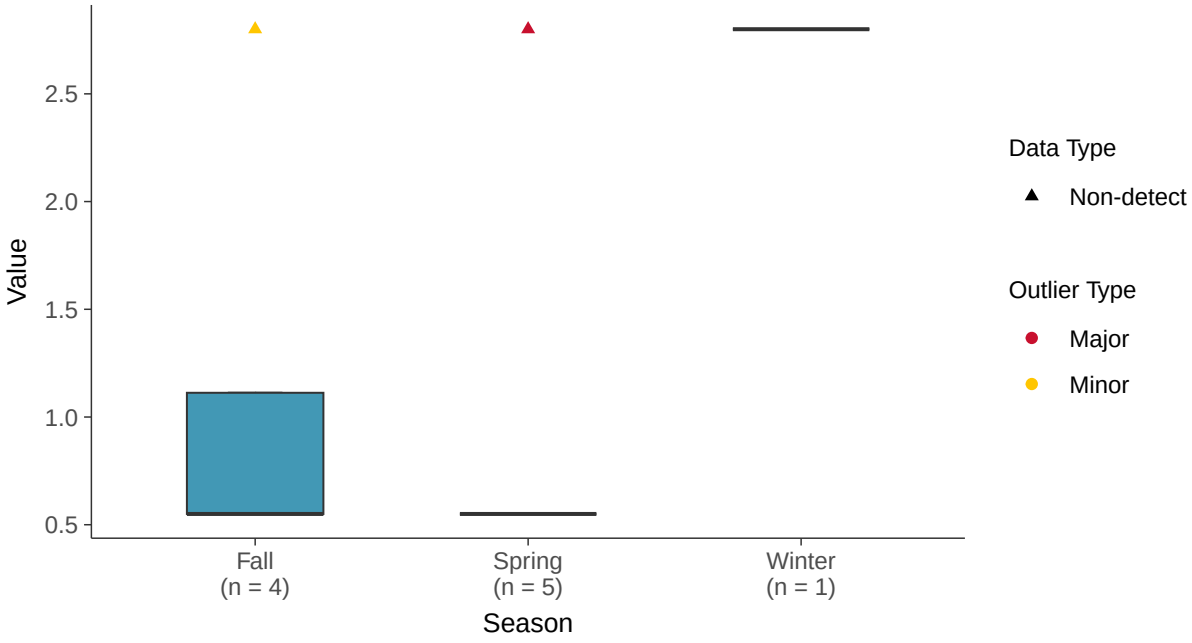
## Boxplot

Lead, MW-15014R (ug/L)



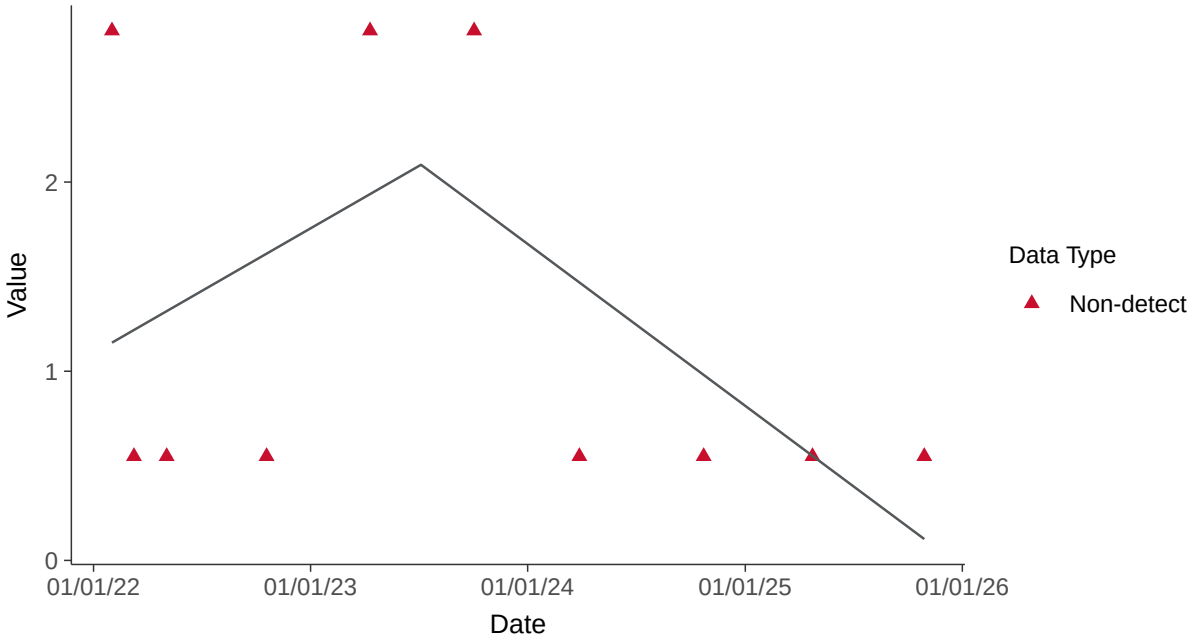

## Boxplot by Season

Lead, MW-15014R (ug/L)



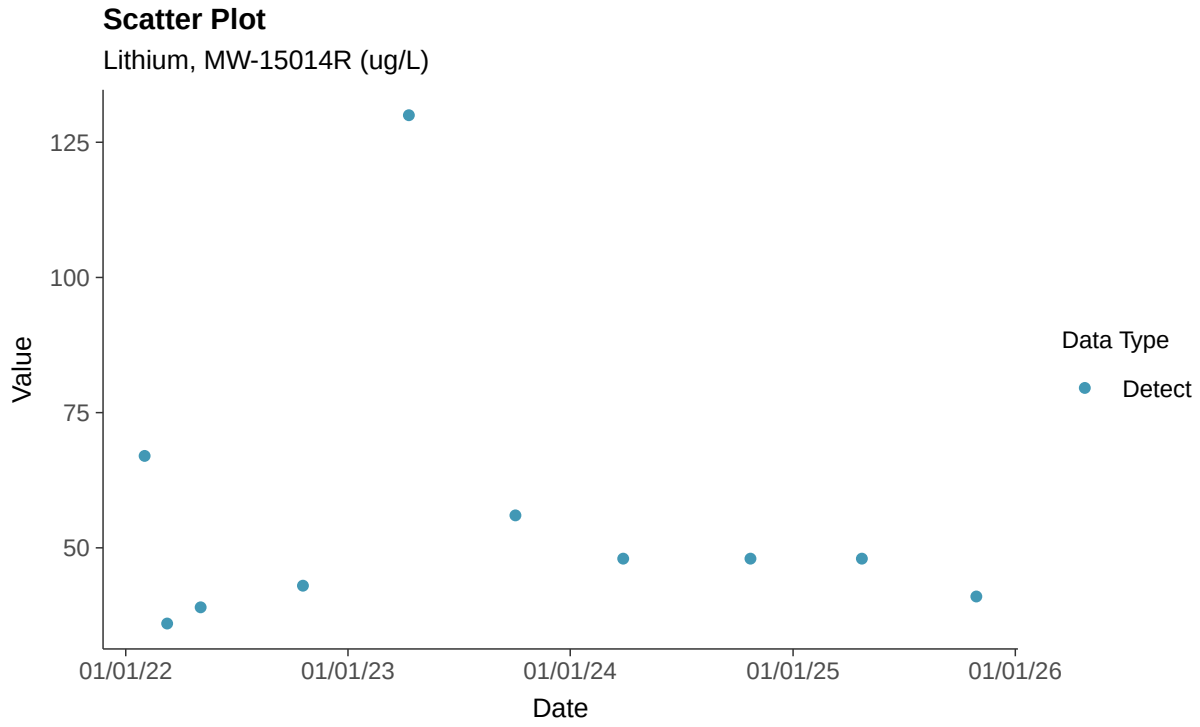
**Trend Regression: Piecewise Linear-Linear**

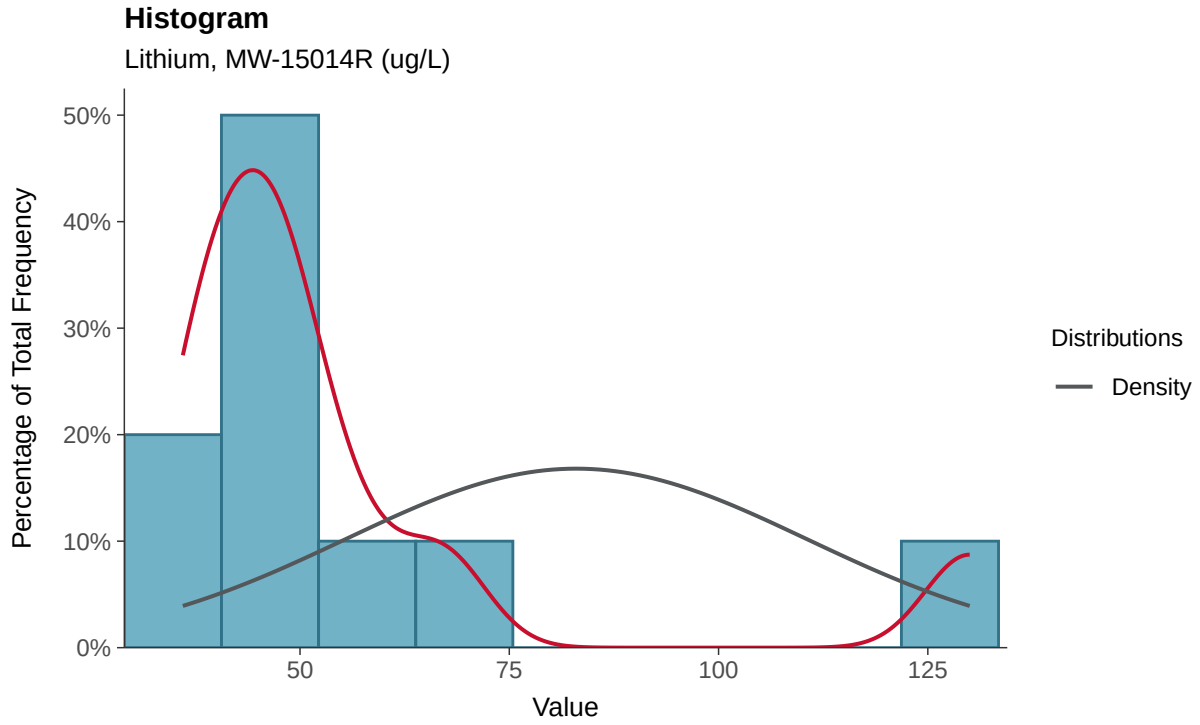
Lead, MW-15014R (ug/L)



## Appendix IV: Lithium, MW-15014R

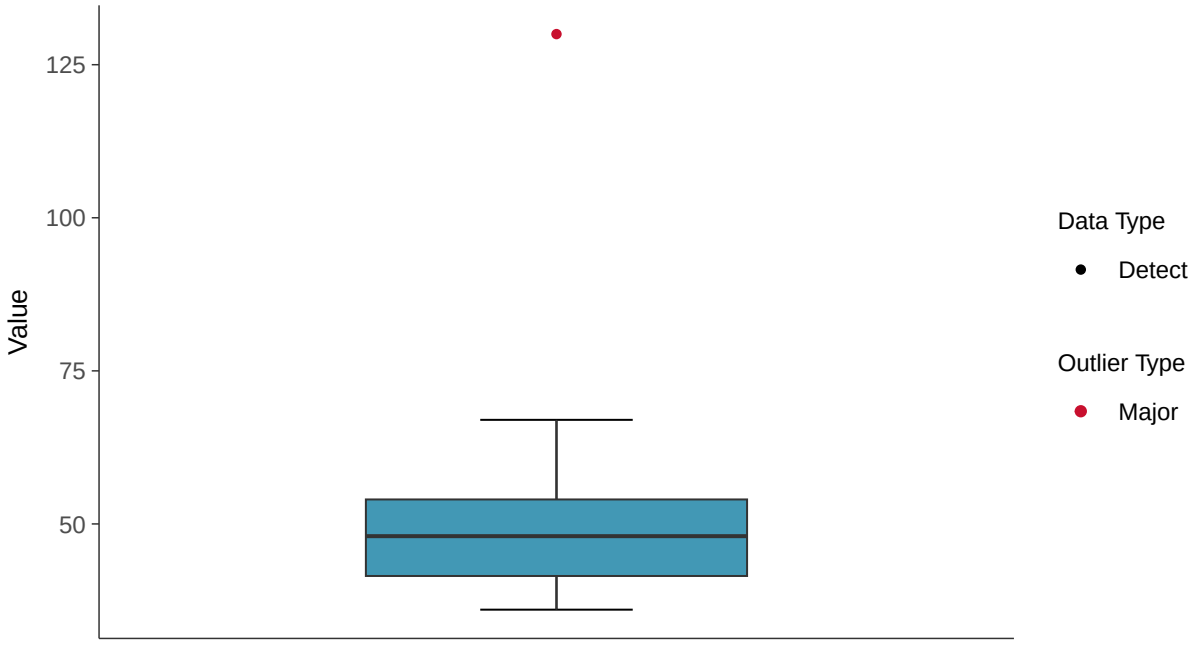
ID: 04_2_117



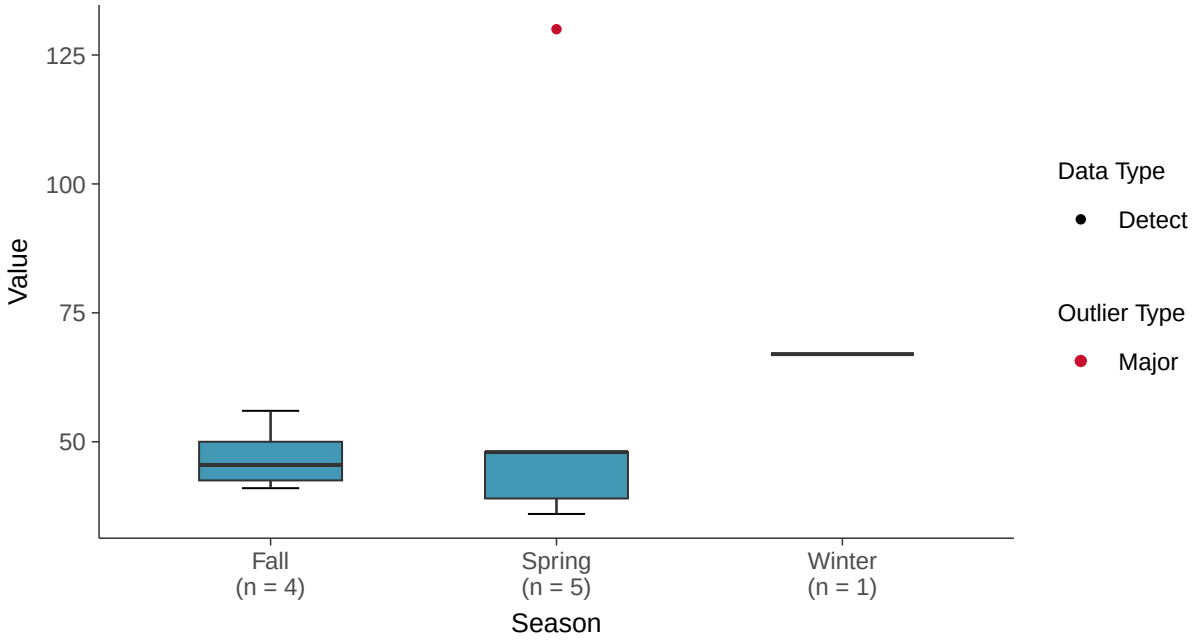
## Boxplot

Lithium, MW-15014R (ug/L)



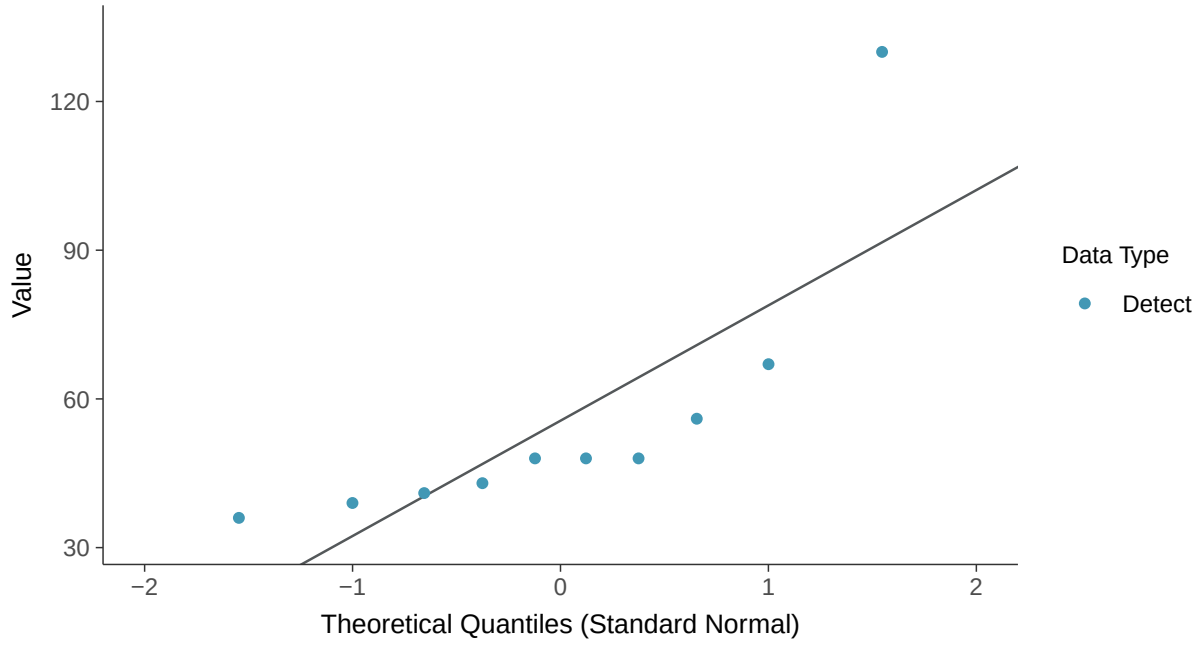

## Boxplot by Season

Lithium, MW-15014R (ug/L)



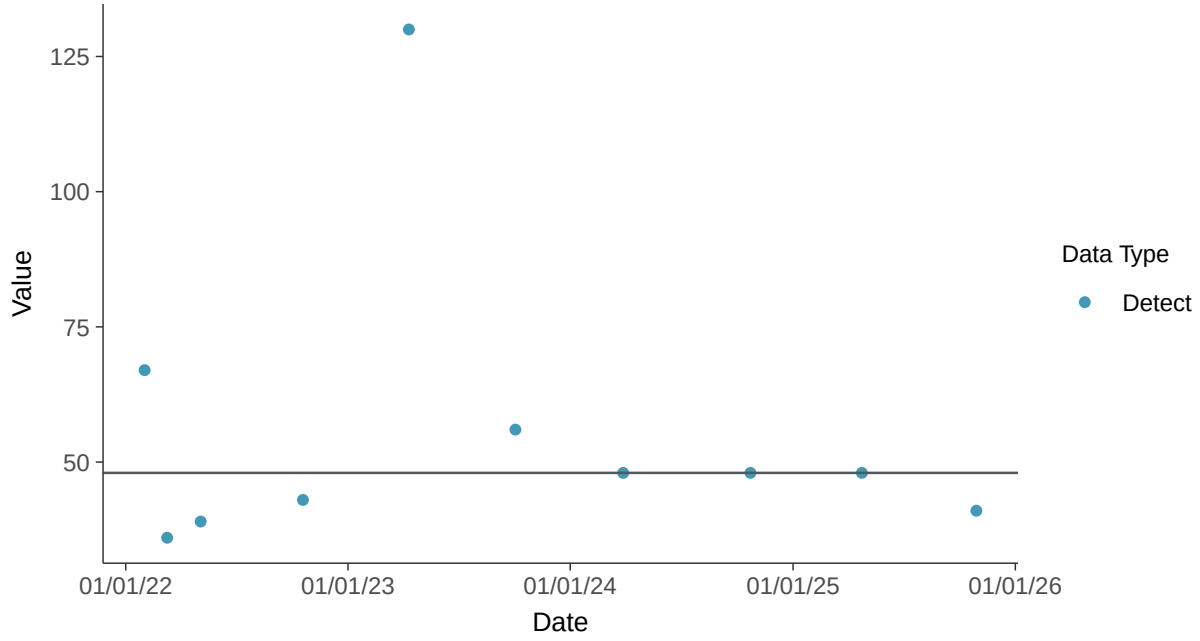
**Normal Q-Q plot**

Lithium, MW-15014R (ug/L)



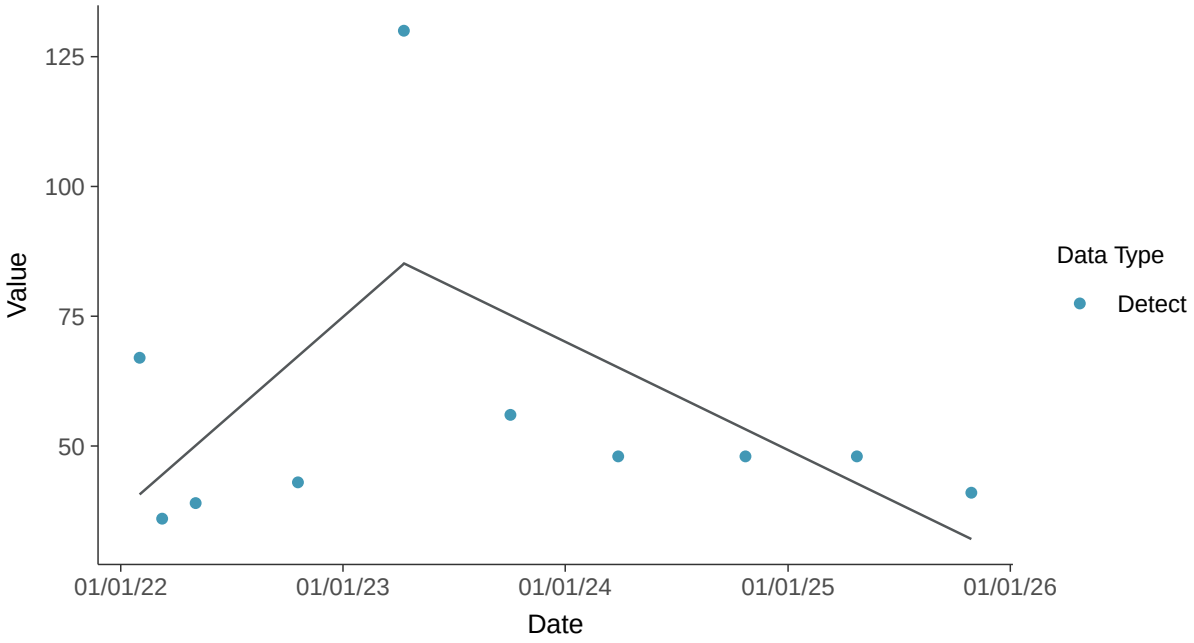

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Lithium, MW-15014R (ug/L)



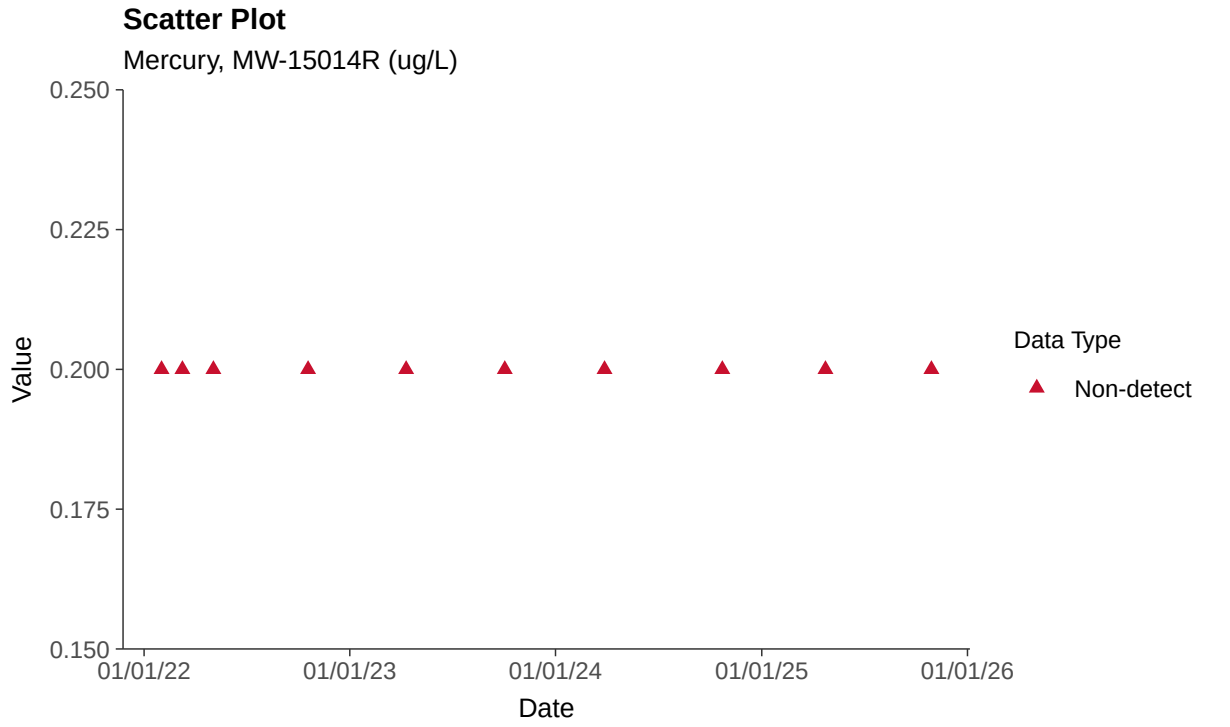
**Trend Regression: Piecewise Linear-Linear**

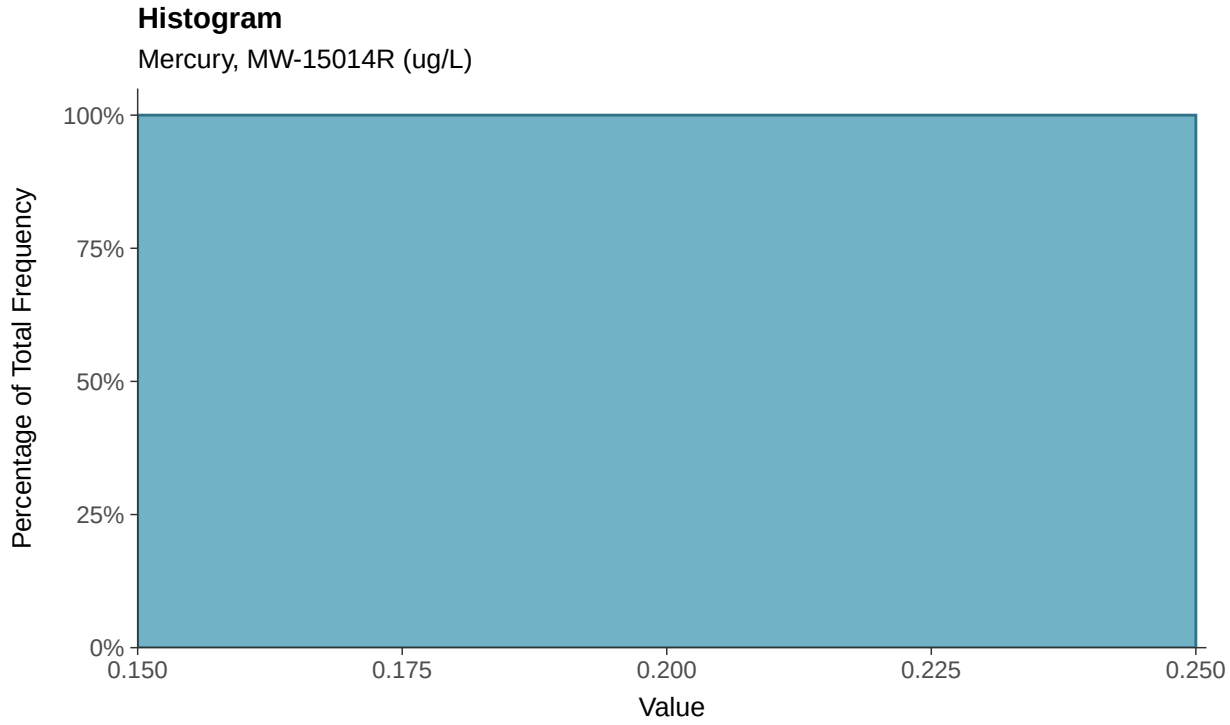
Lithium, MW-15014R (ug/L)



## Appendix IV: Mercury, MW-15014R

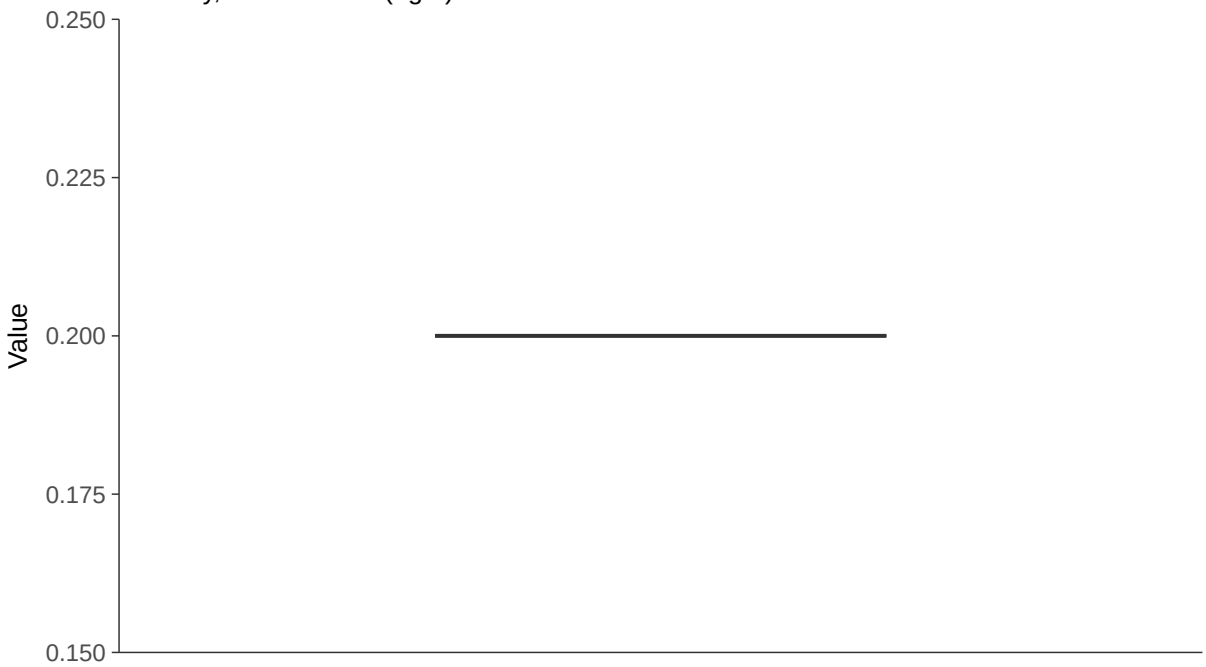
ID: 04_2_118



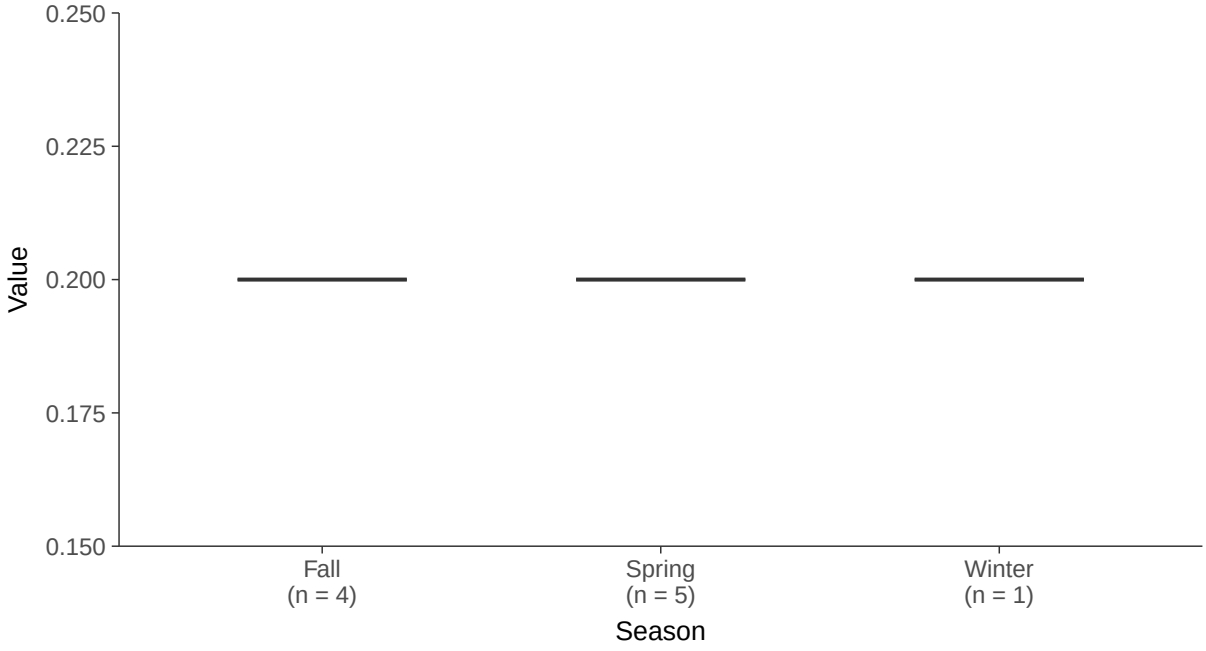
**Boxplot**

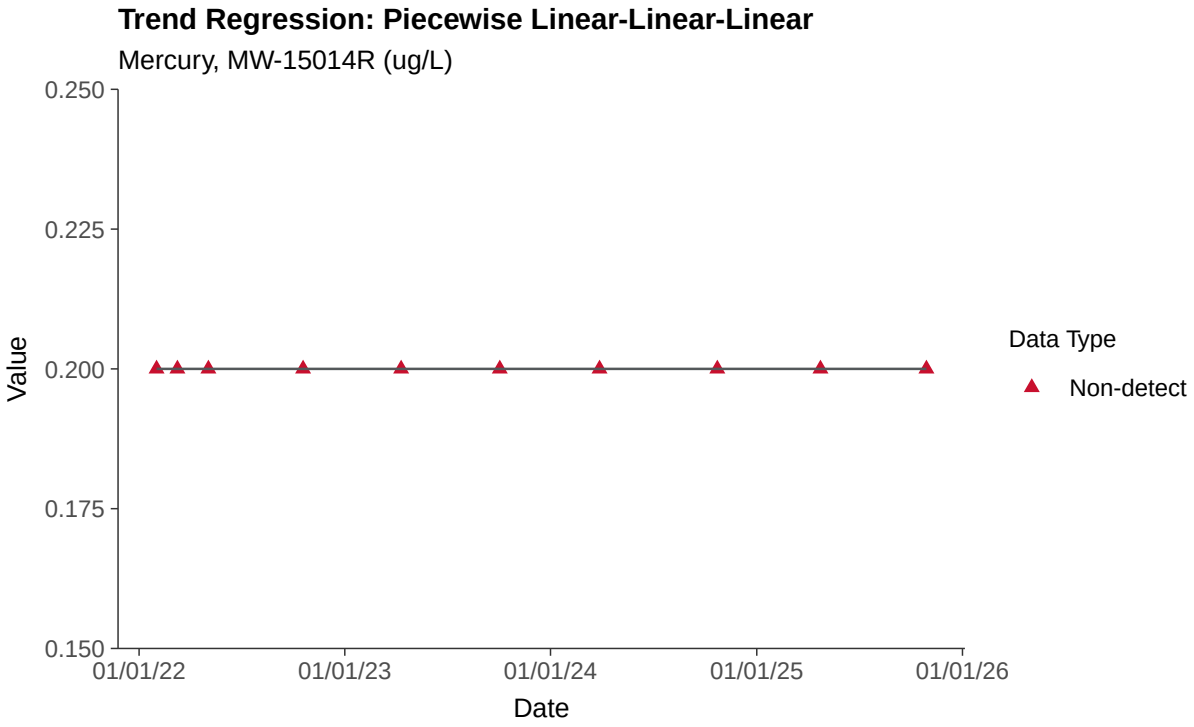
Mercury, MW-15014R (ug/L)




**Boxplot by Season**

Mercury, MW-15014R (ug/L)



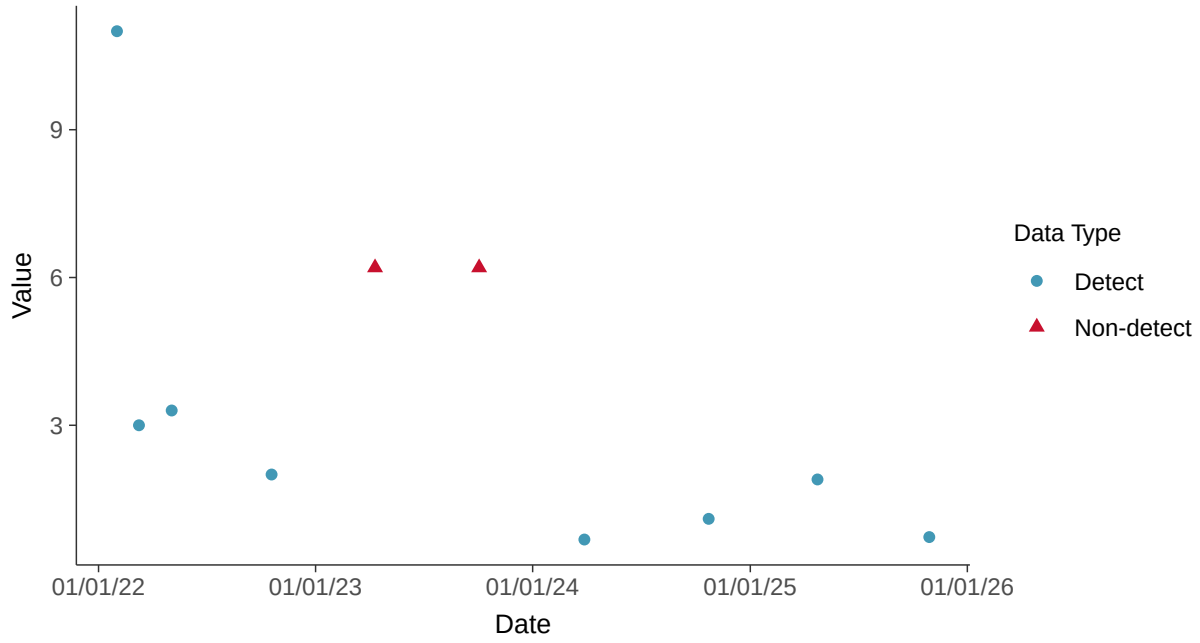

Trend Regression: Piecewise Linear-Linear-Linear
Mercury, MW-15014R (ug/L)
0.250
0.225
0.200
0.175
0.150
Value
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Molybdenum, MW-15014R

ID: 04_2_119

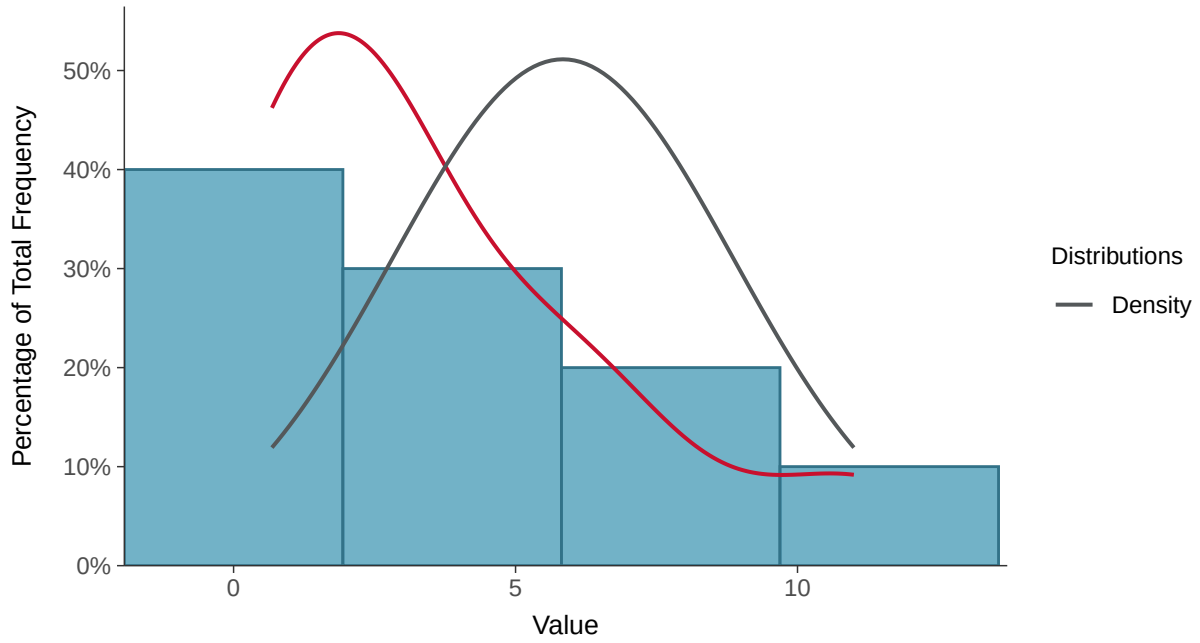
**Scatter Plot**

Molybdenum, MW-15014R (ug/L)



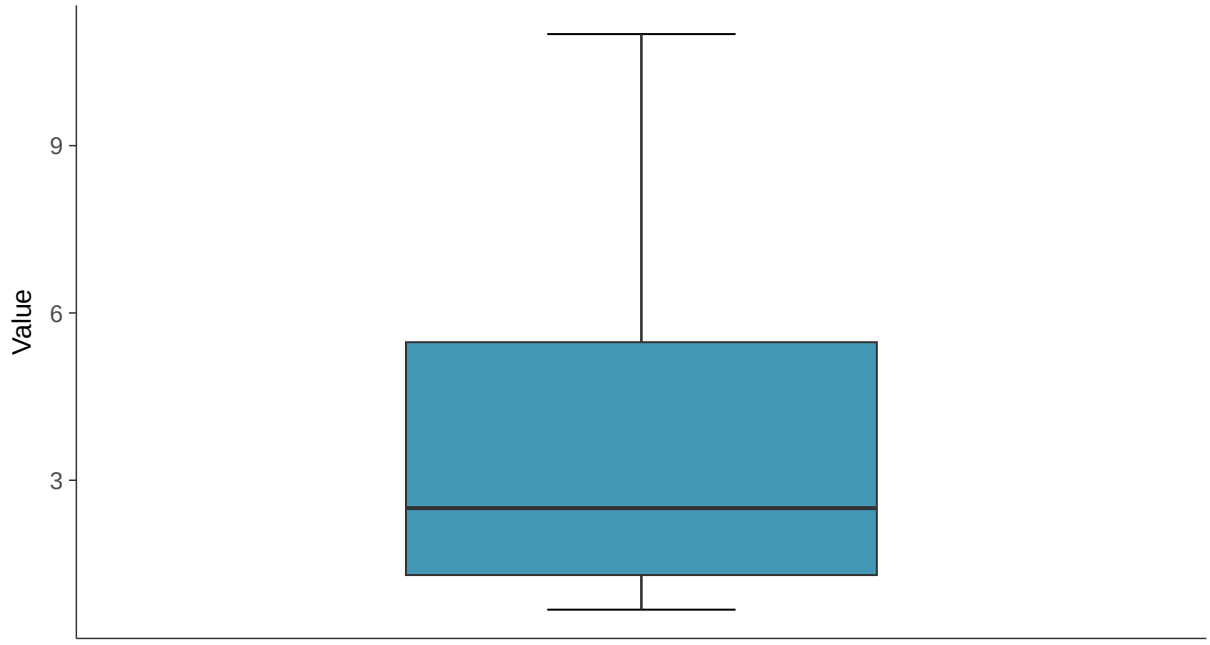

**Histogram**

Molybdenum, MW-15014R (ug/L)



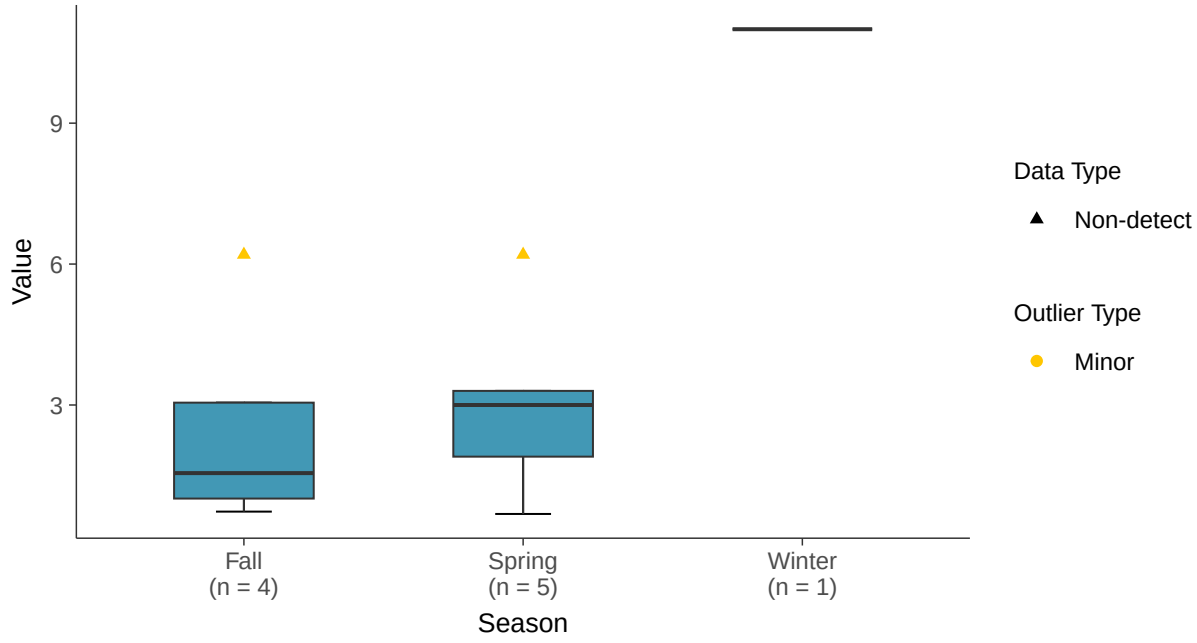
## Boxplot

Molybdenum, MW-15014R (ug/L)



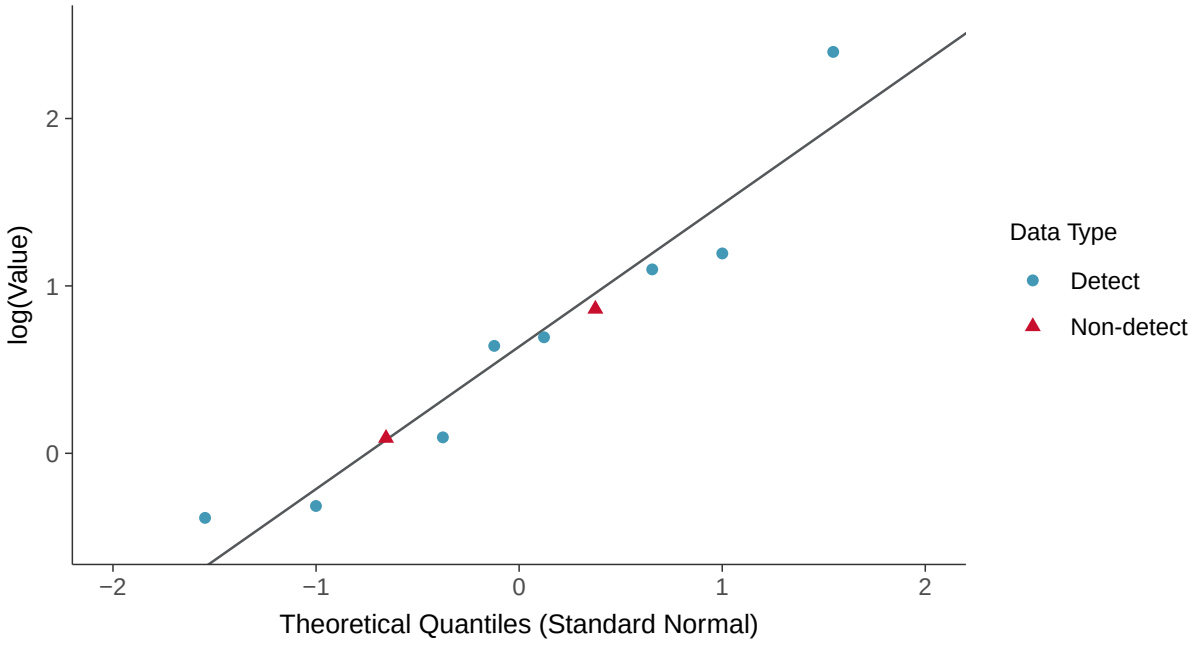

## Boxplot by Season

Molybdenum, MW-15014R (ug/L)



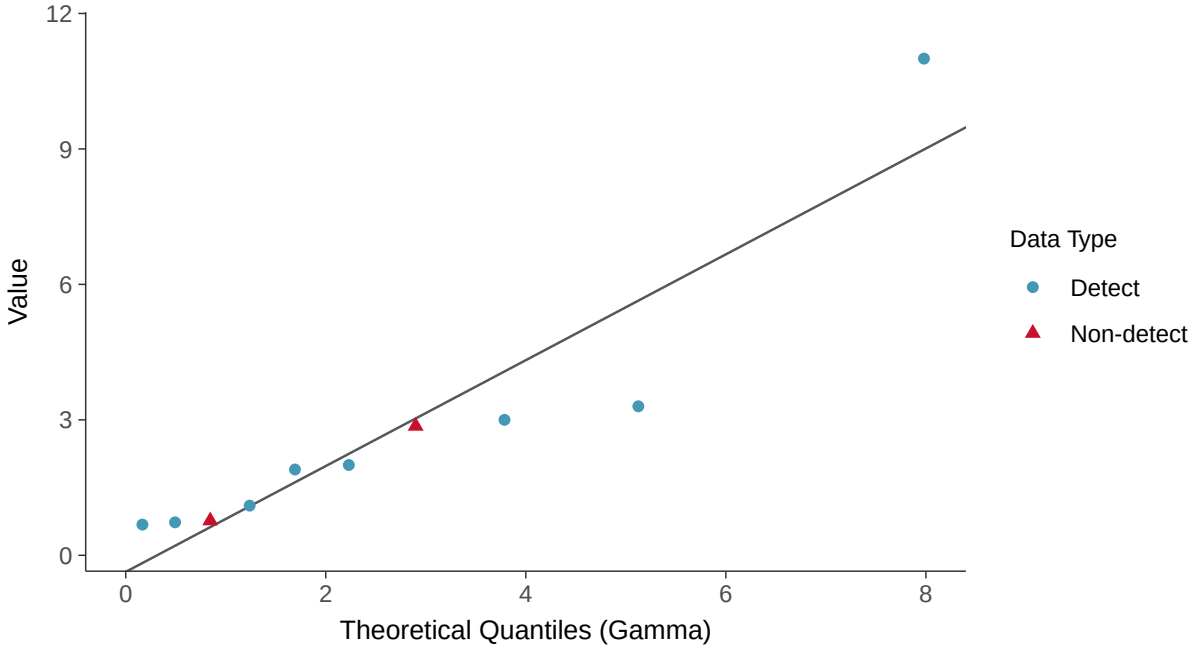
**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15014R (ug/L)



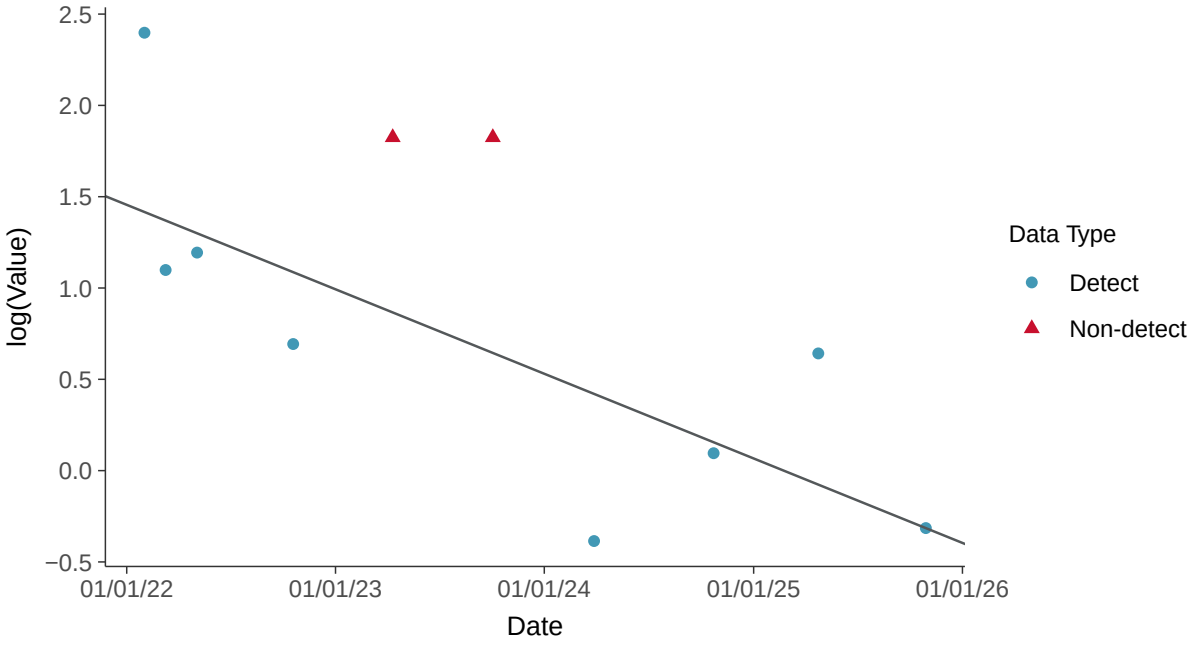

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15014R (ug/L)



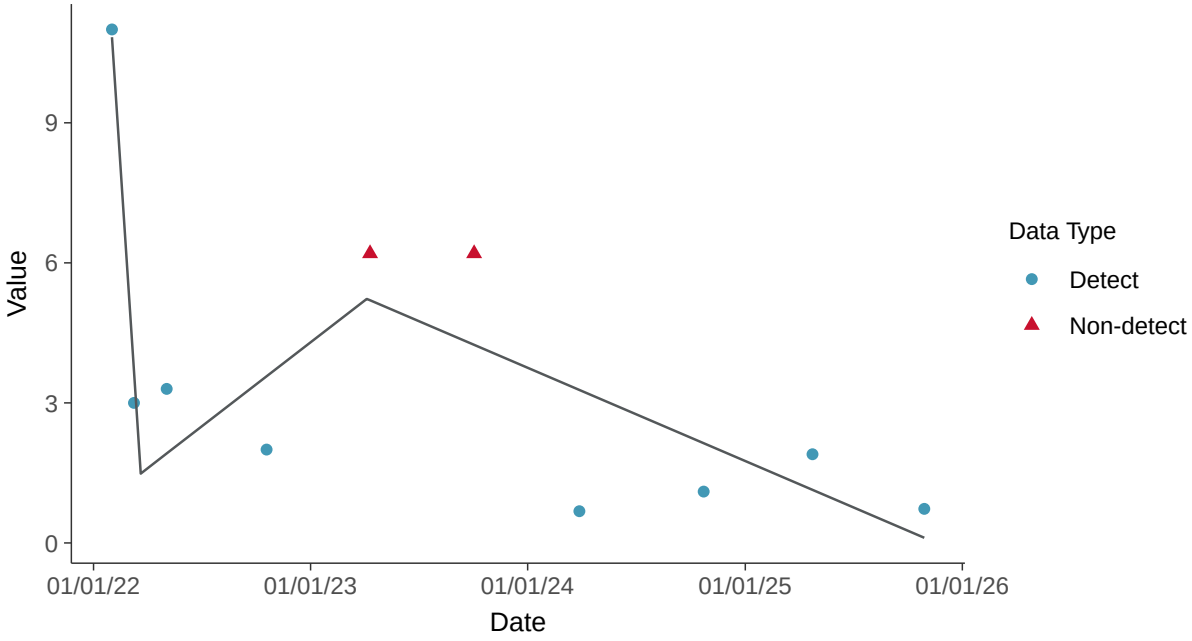
**Trend Regression: Lognormal MLE**

Molybdenum, MW-15014R (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-15014R (ug/L)

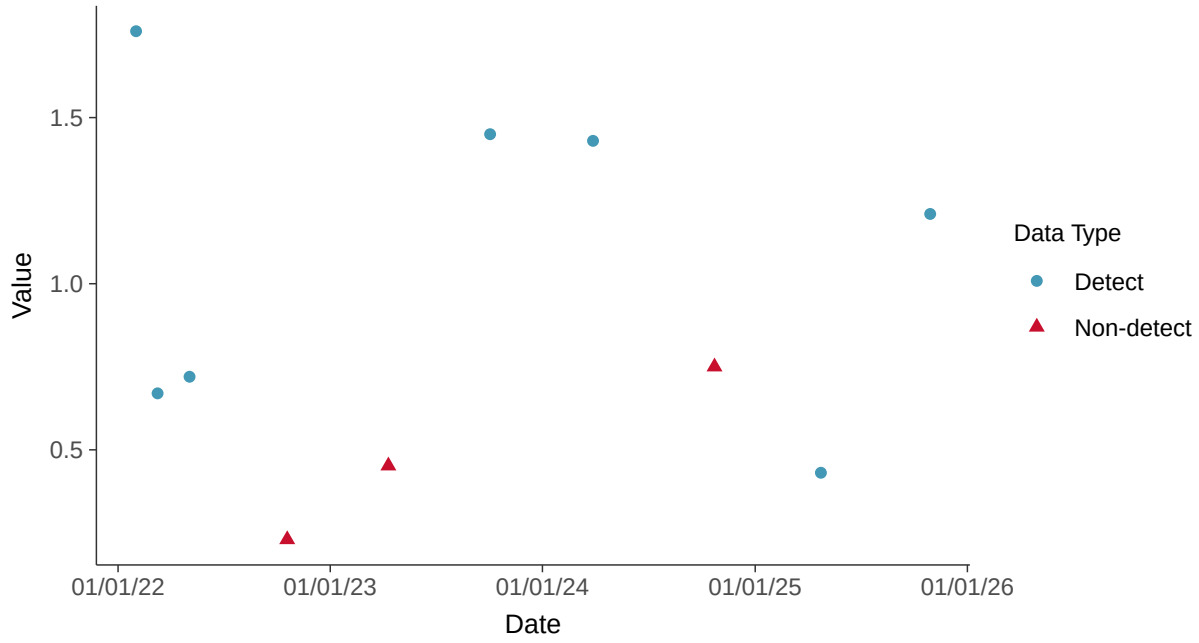


## Appendix IV: Radium-226+228, MW-15014R

ID: 04_2_125

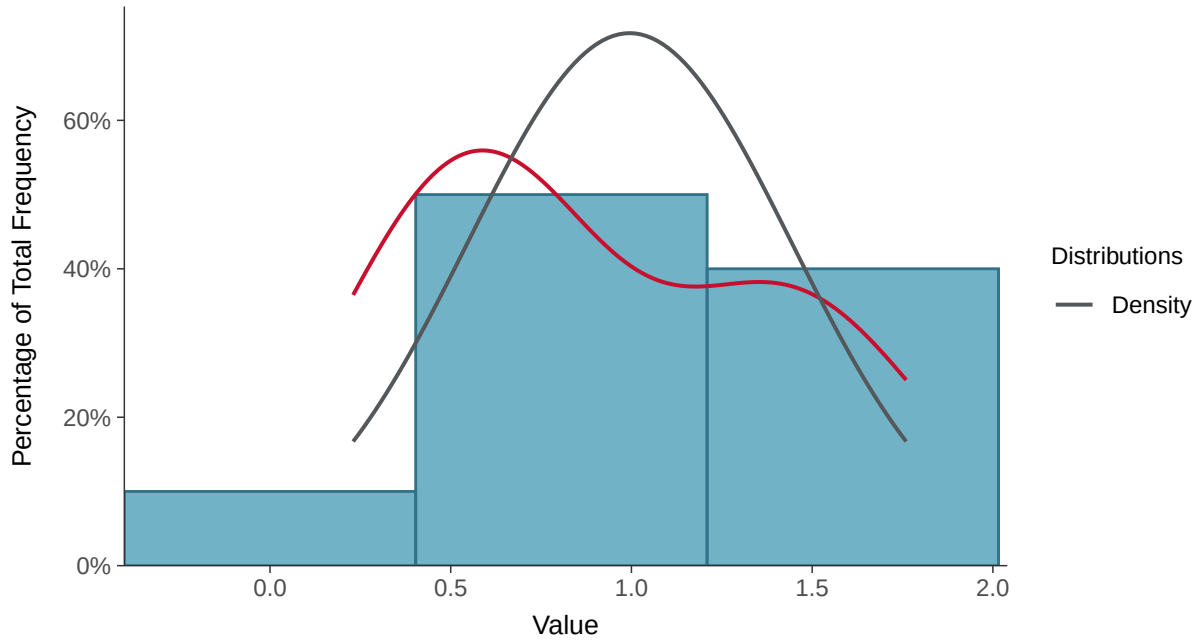
**Scatter Plot**

Radium-226+228, MW-15014R (pCi/L)



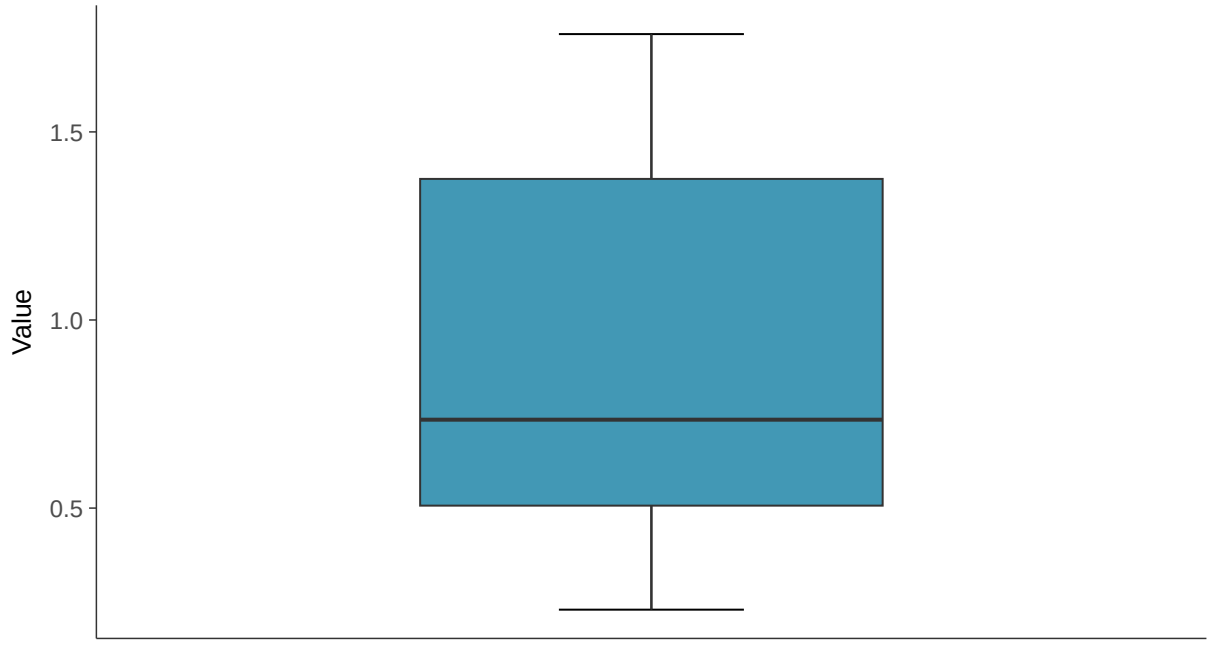

**Histogram**

Radium-226+228, MW-15014R (pCi/L)



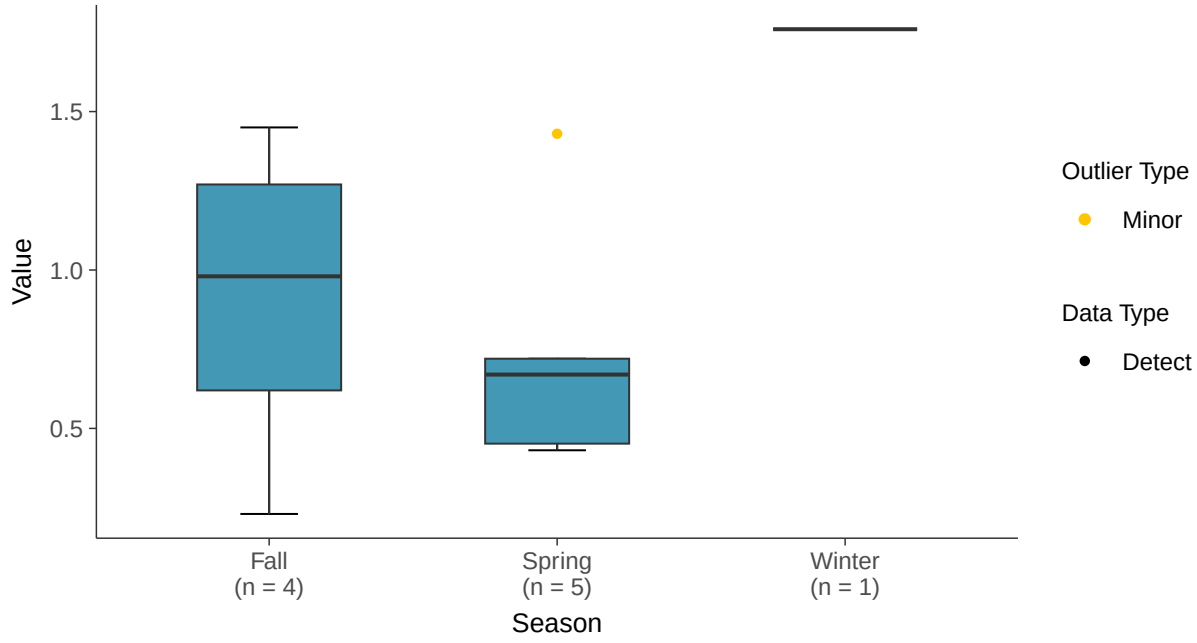
## Boxplot

Radium-226+228, MW-15014R (pCi/L)



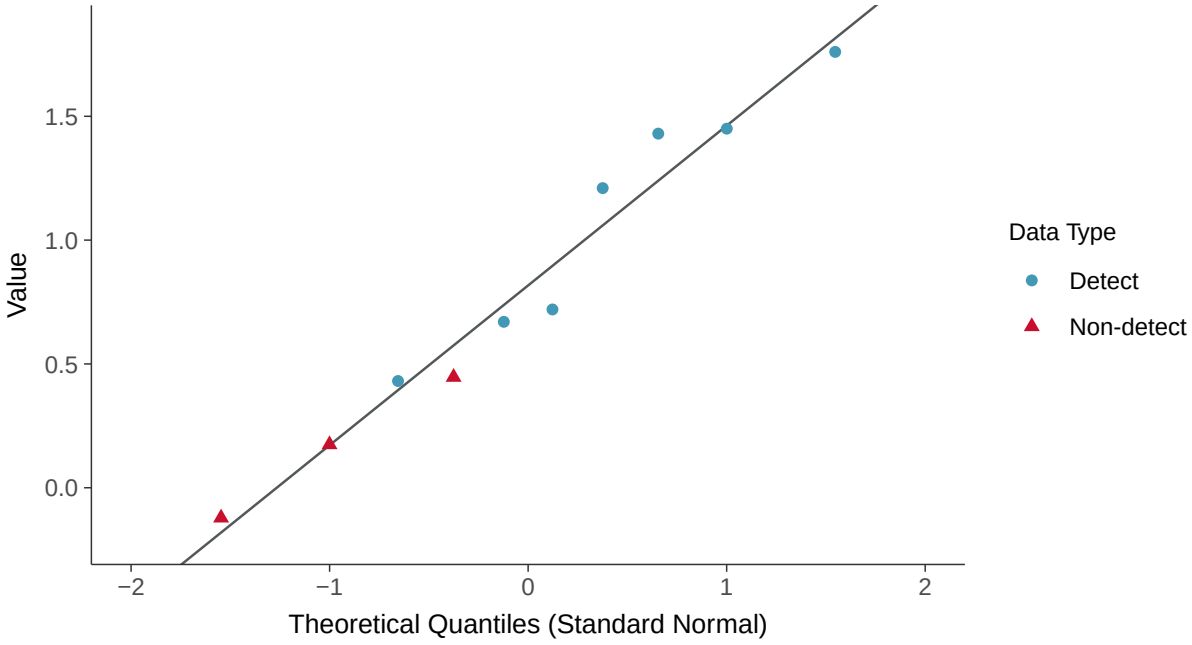

## Boxplot by Season

Radium-226+228, MW-15014R (pCi/L)



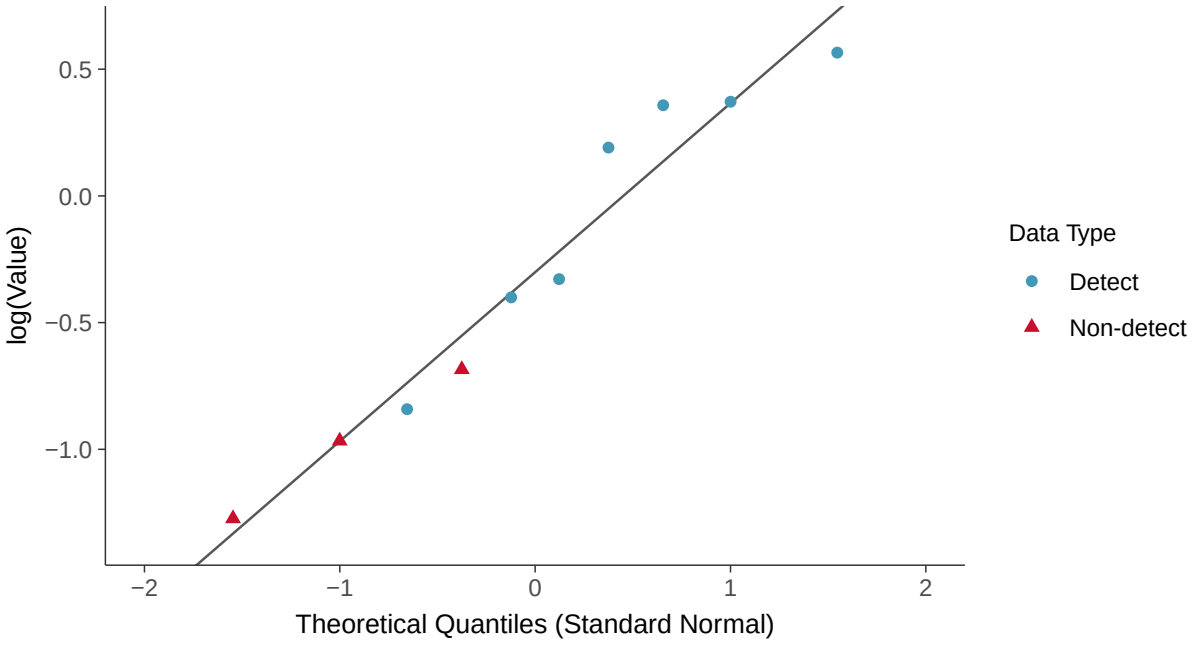
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15014R (pCi/L)



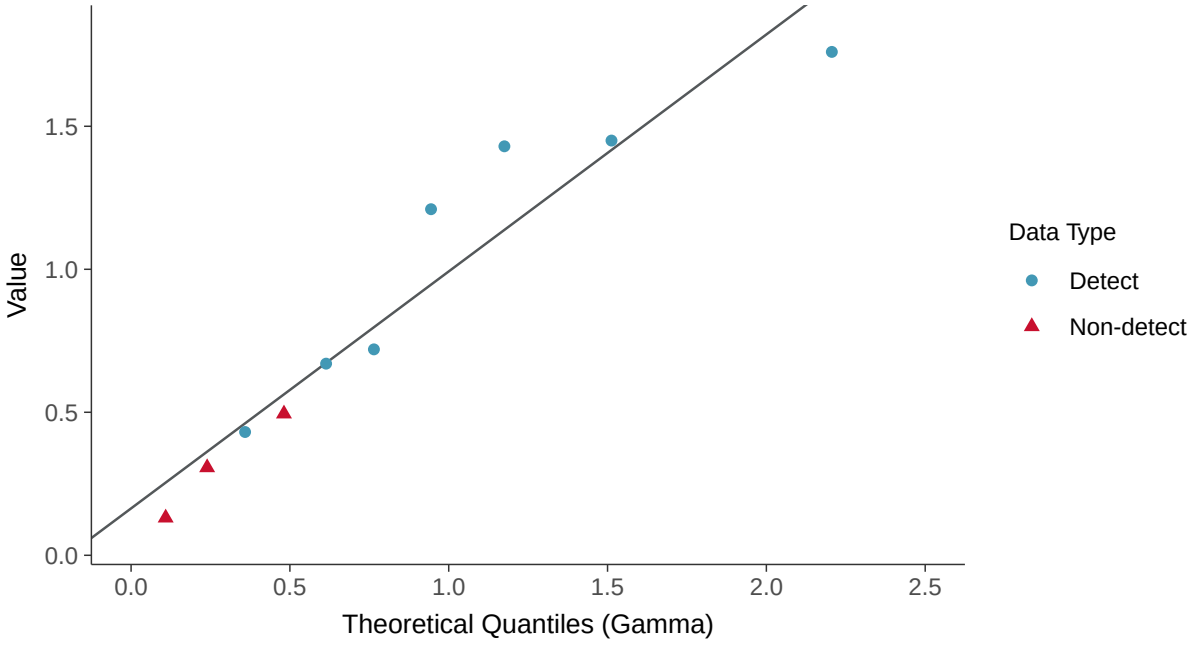

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15014R (pCi/L)



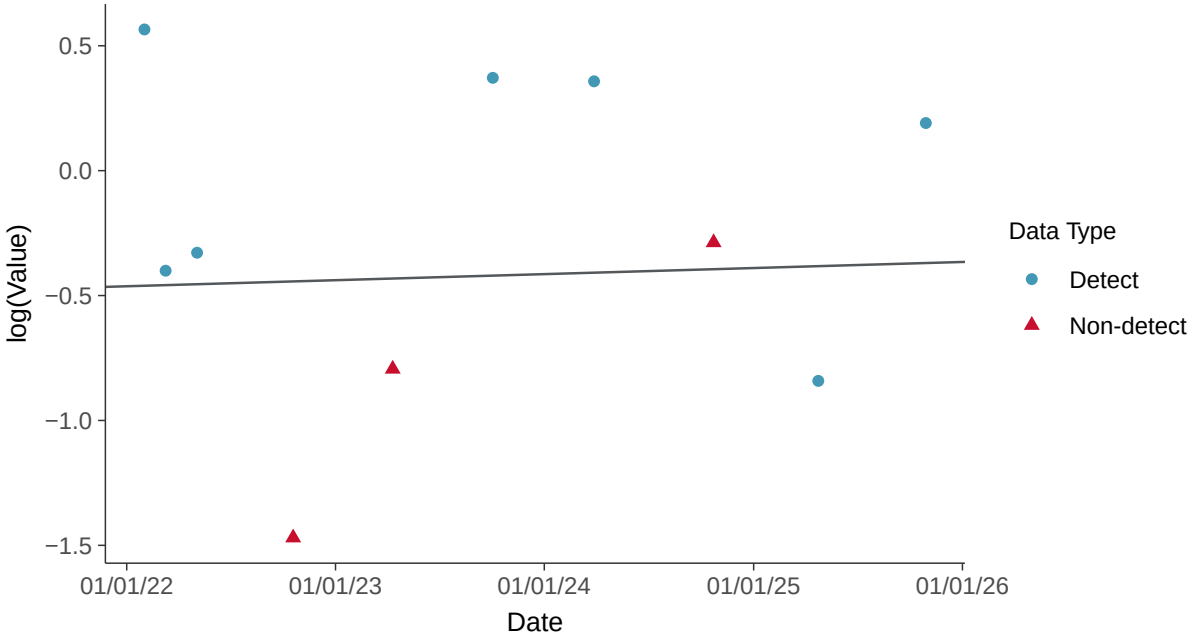
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15014R (pCi/L)



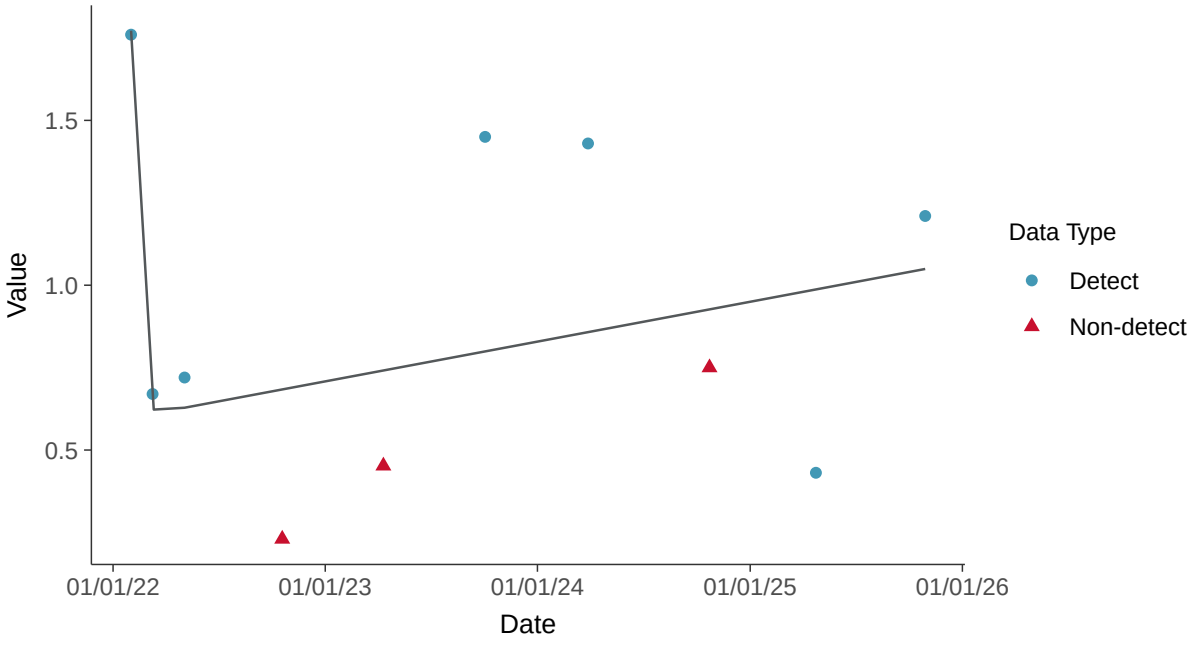

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15014R (pCi/L)



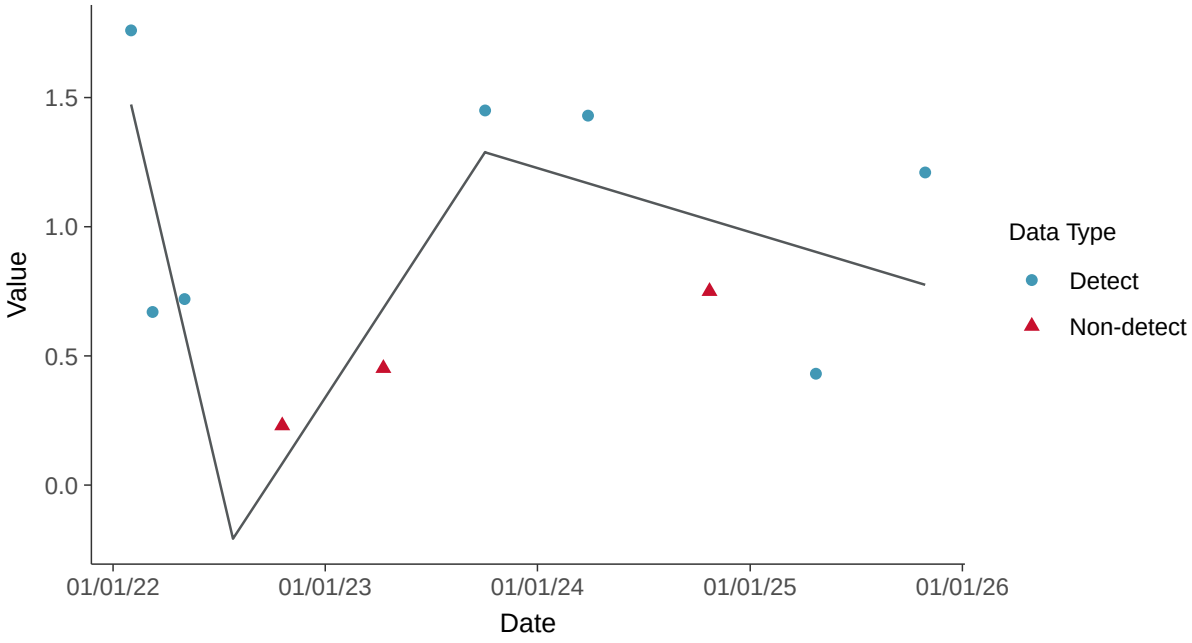
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15014R (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15014R (pCi/L)

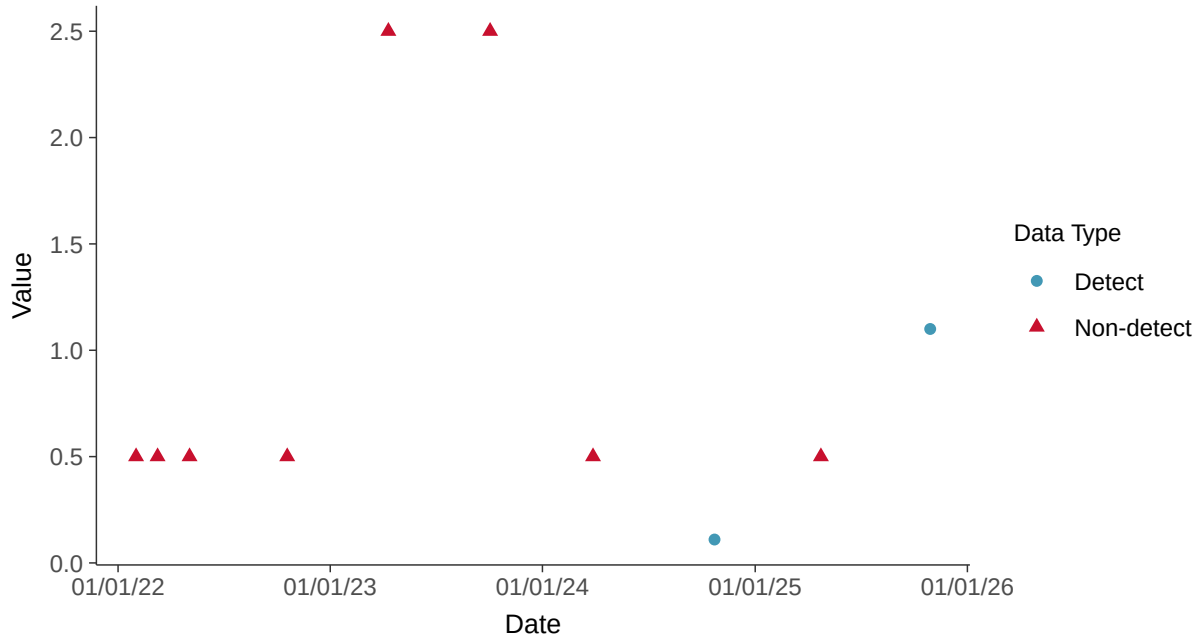


## Appendix IV: Selenium, MW-15014R

ID: 04_2_127

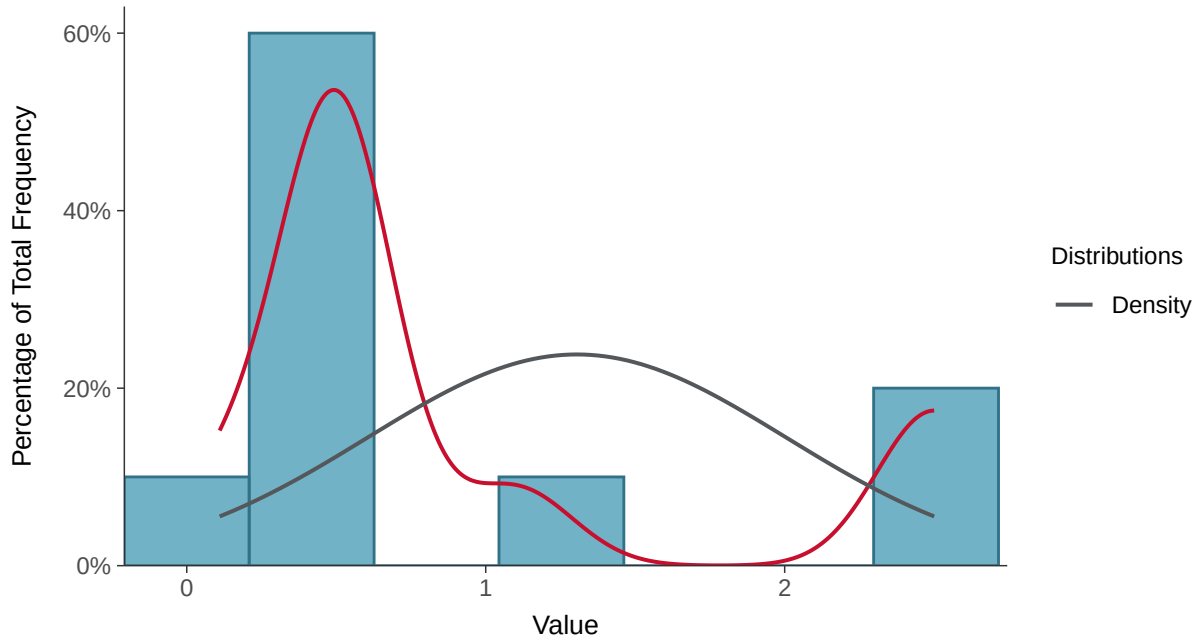
**Scatter Plot**

Selenium, MW-15014R (ug/L)



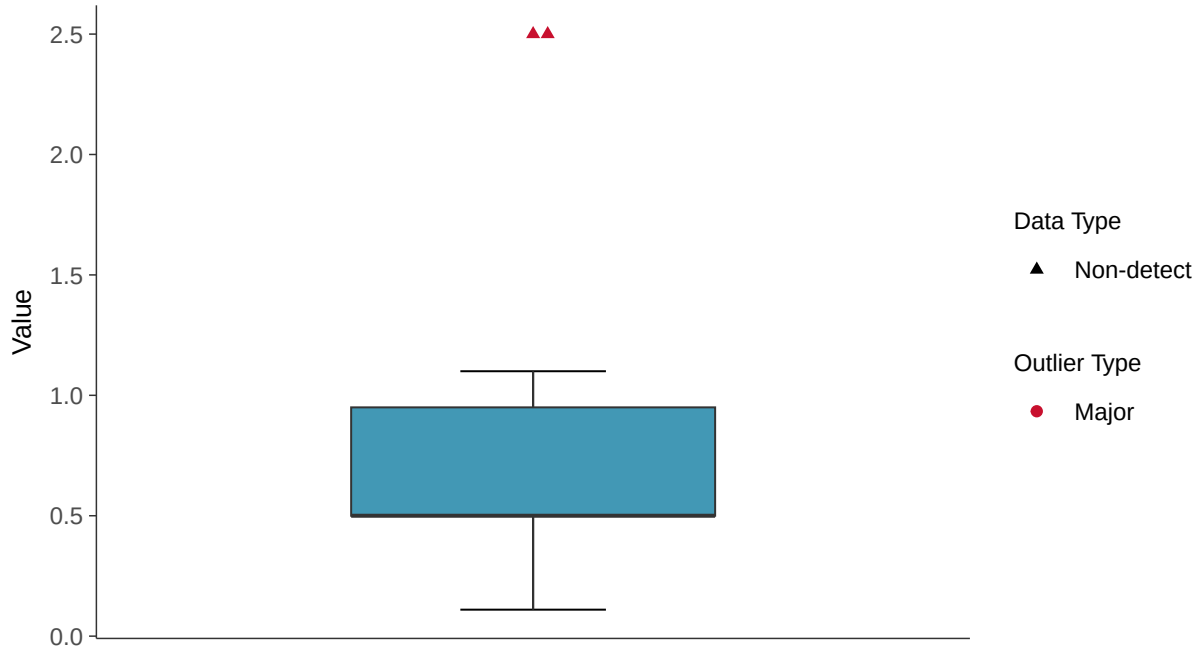

**Histogram**

Selenium, MW-15014R (ug/L)



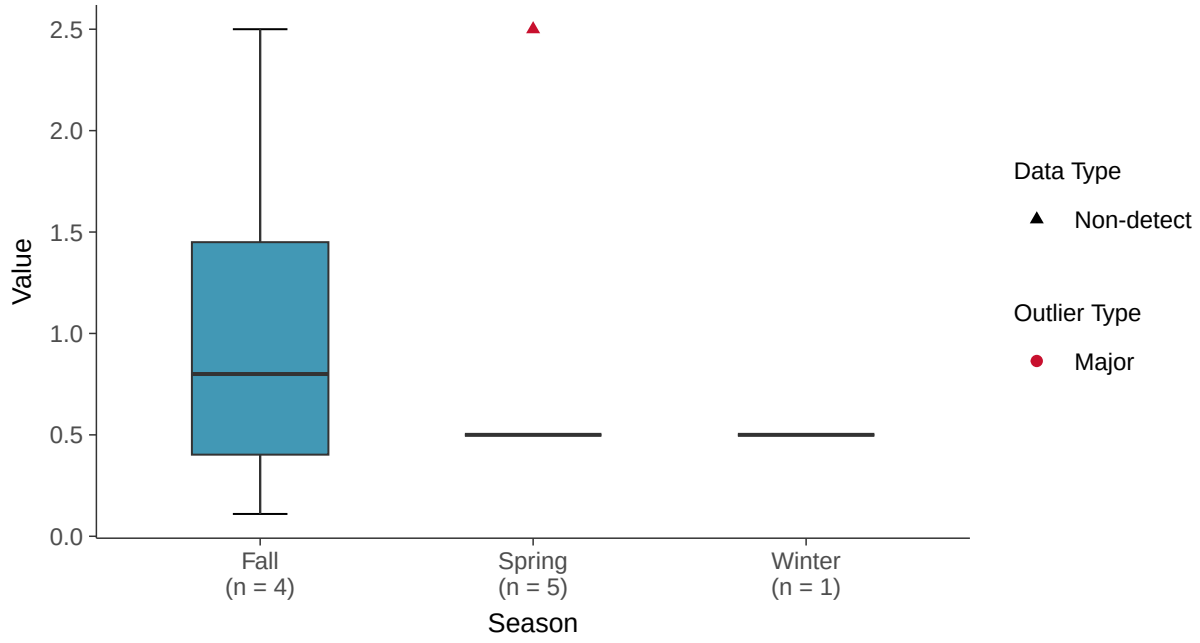
## Boxplot

Selenium, MW-15014R (ug/L)



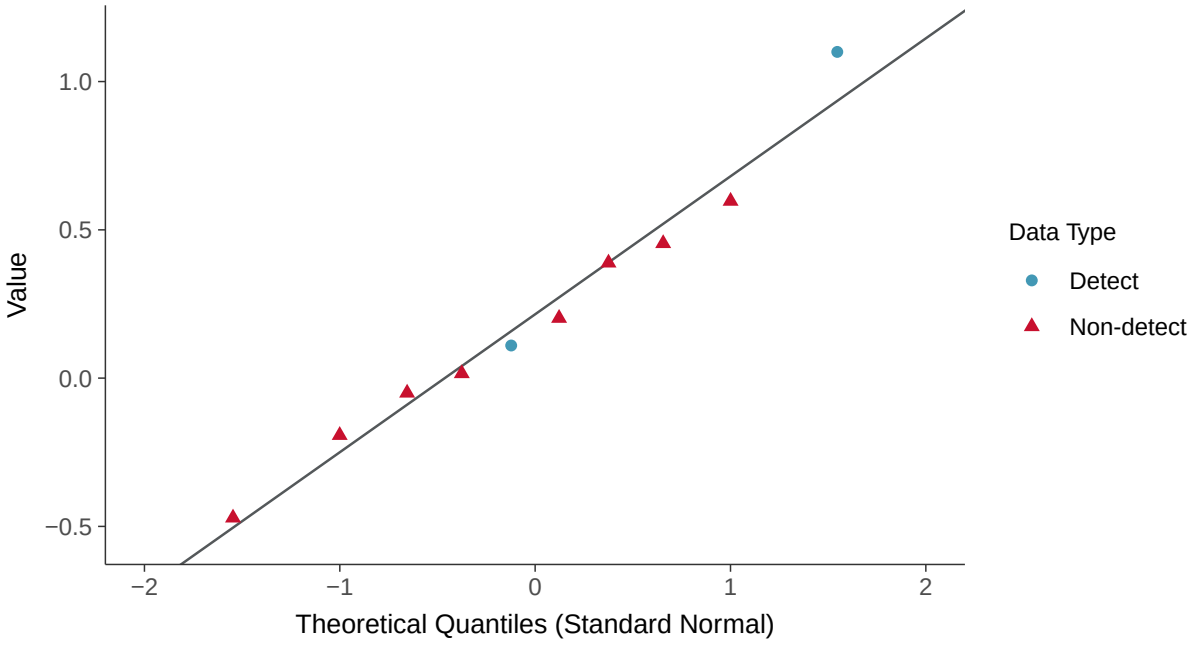

## Boxplot by Season

Selenium, MW-15014R (ug/L)



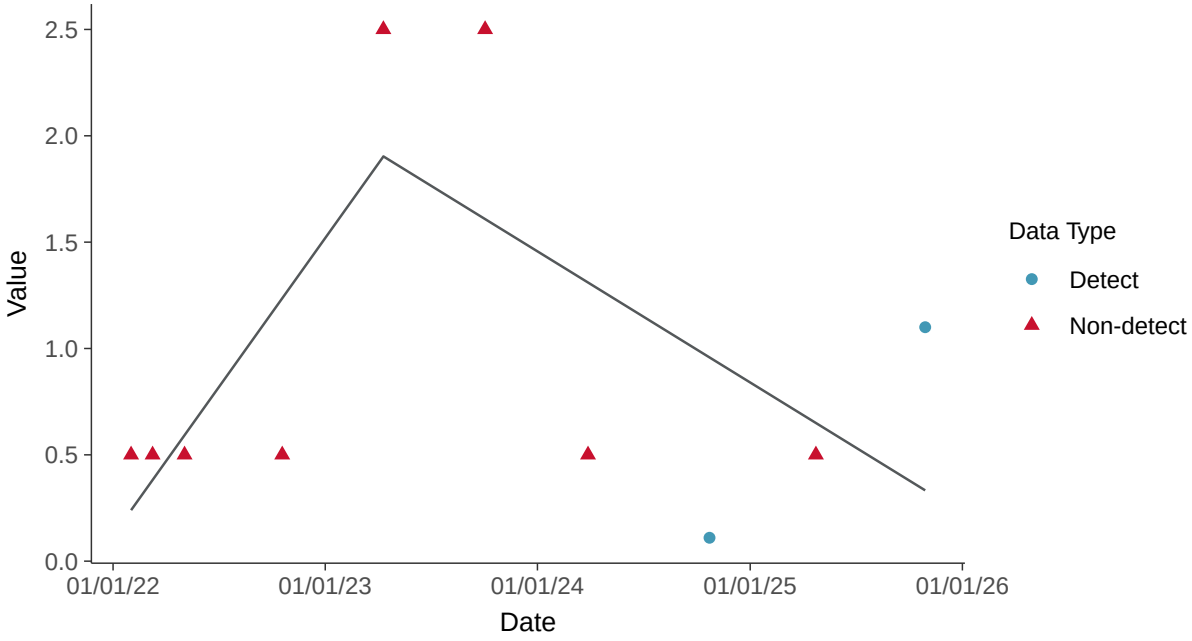
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15014R (ug/L)



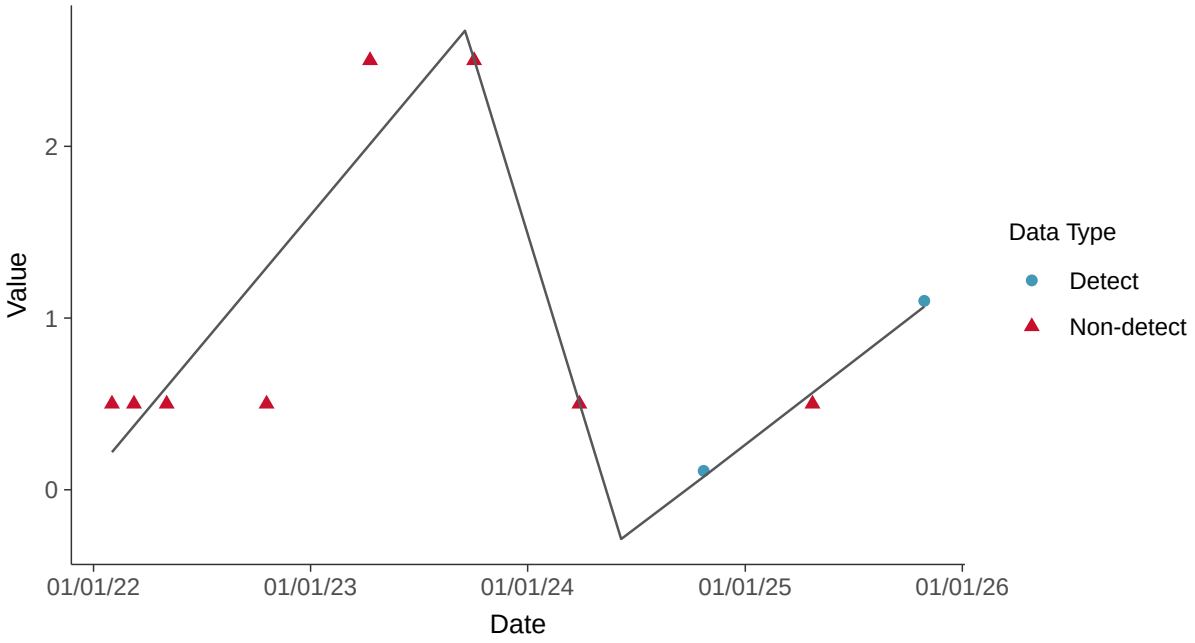

**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15014R (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Selenium, MW-15014R (ug/L)

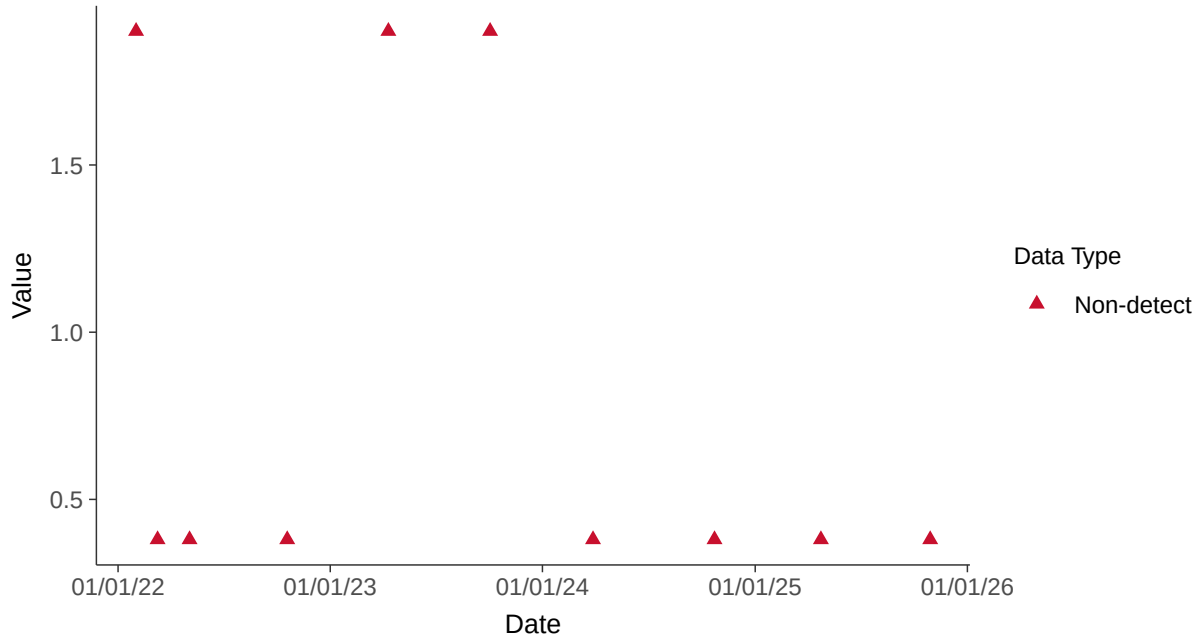


## Appendix IV: Thallium, MW-15014R

ID: 04_2_131

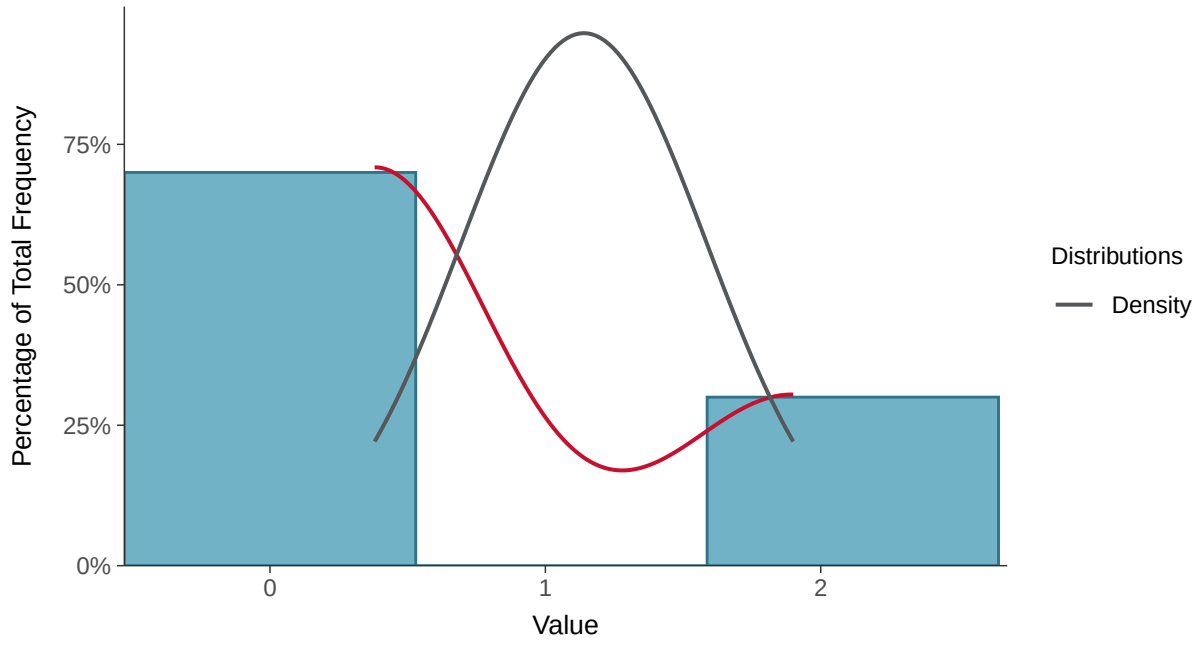
**Scatter Plot**

Thallium, MW-15014R (ug/L)



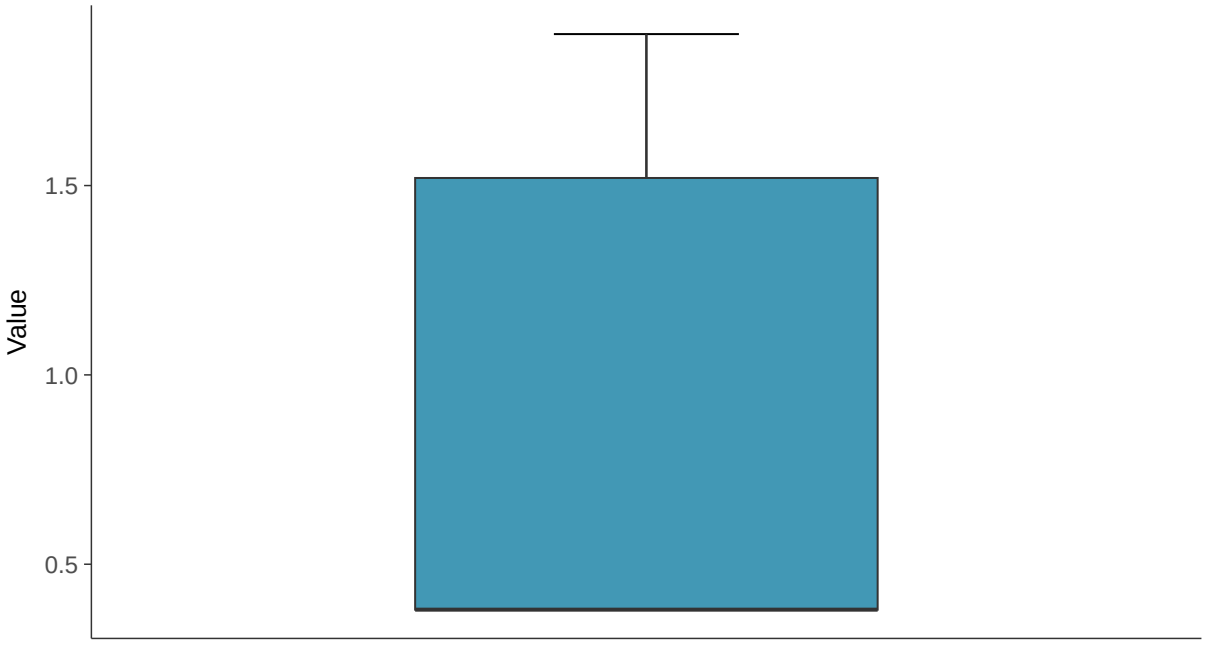

**Histogram**

Thallium, MW-15014R (ug/L)



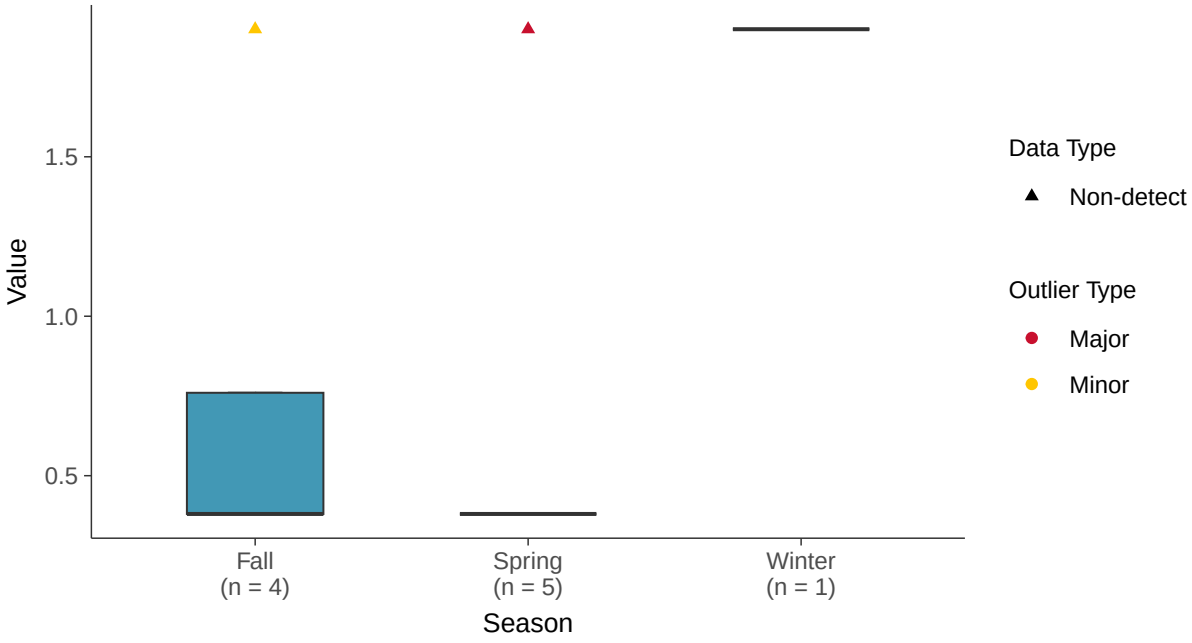
## Boxplot

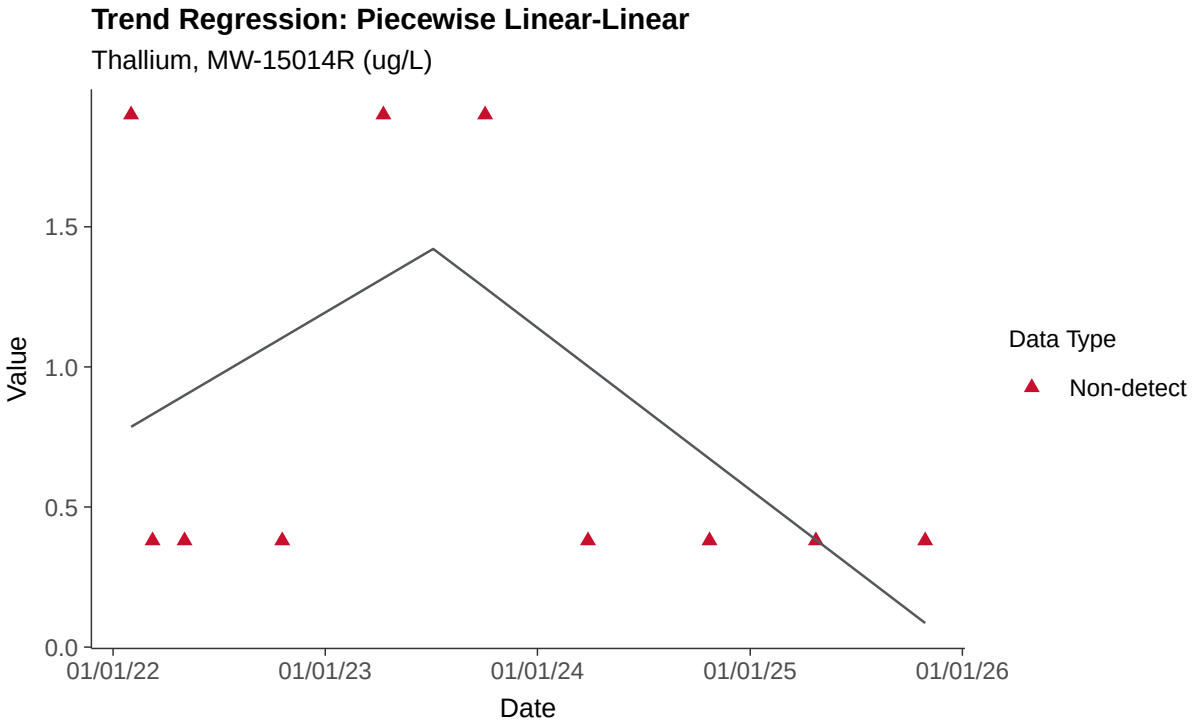
Thallium, MW-15014R (ug/L)




## Boxplot by Season

Thallium, MW-15014R (ug/L)



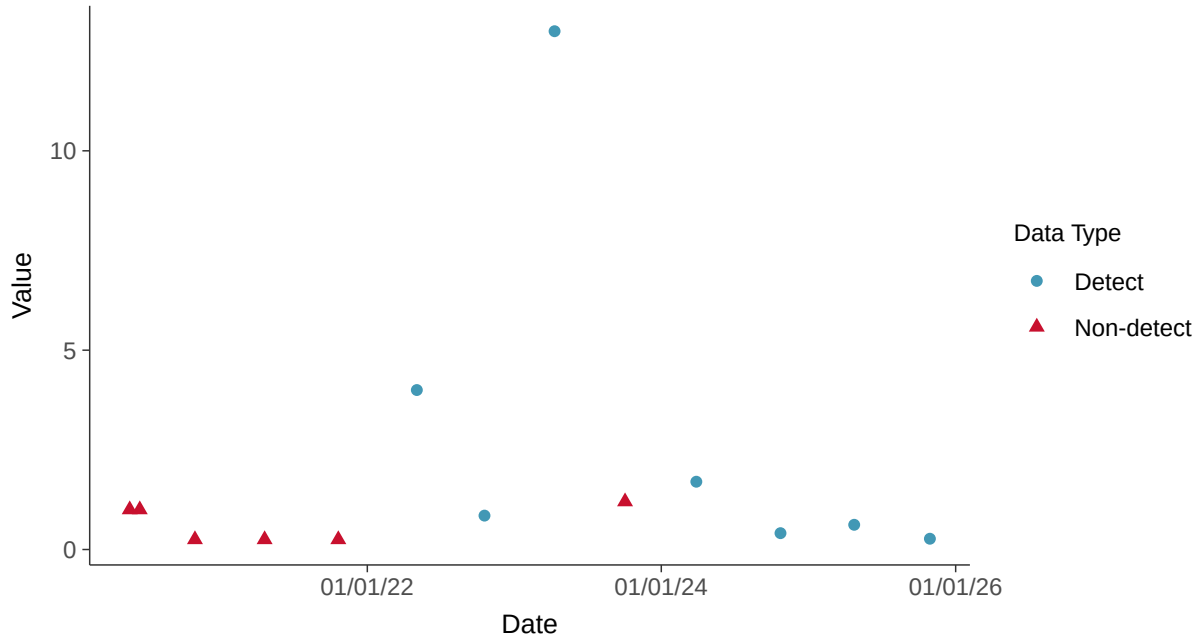

Trend Regression: Piecewise Linear-Linear
Thallium, MW-15014R (ug/L)
Value
1.5
1.0
0.5
0.0
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Antimony, MW-15015R

ID: 05_2_101

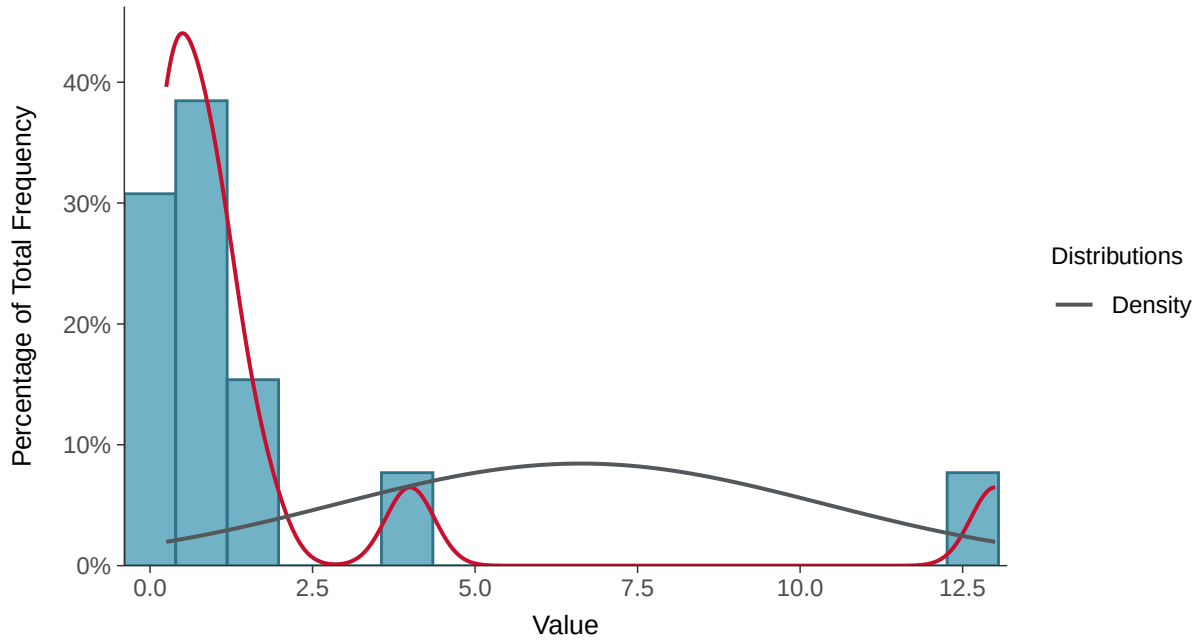
**Scatter Plot**

Antimony, MW-15015R (ug/L)



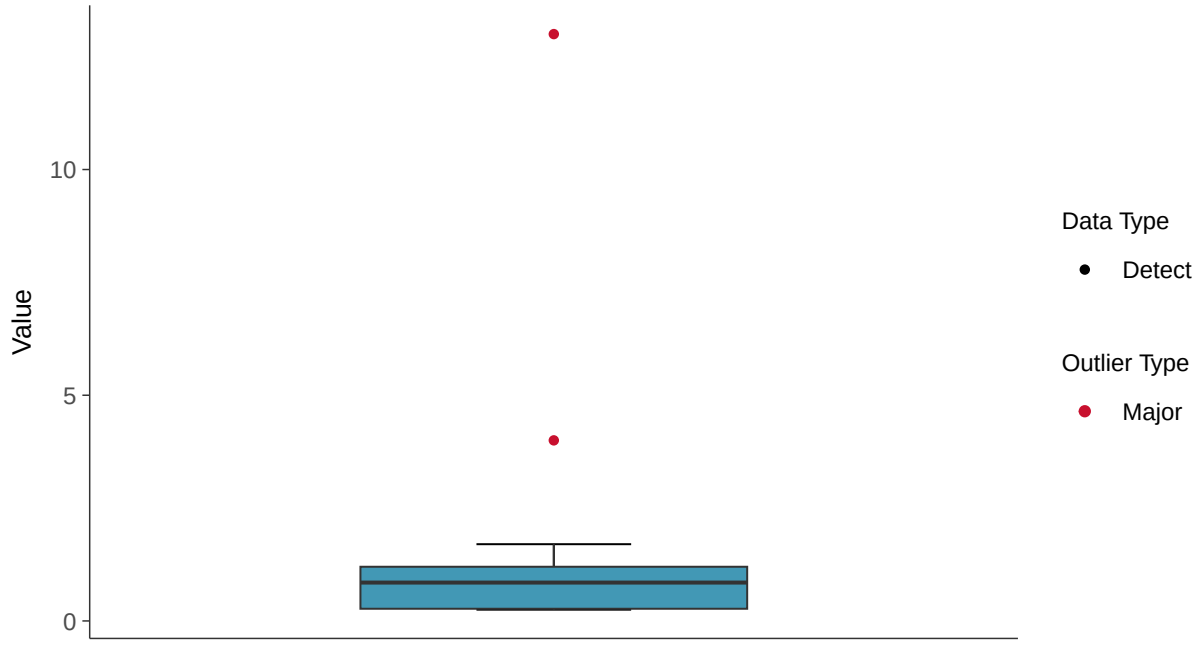

**Histogram**

Antimony, MW-15015R (ug/L)



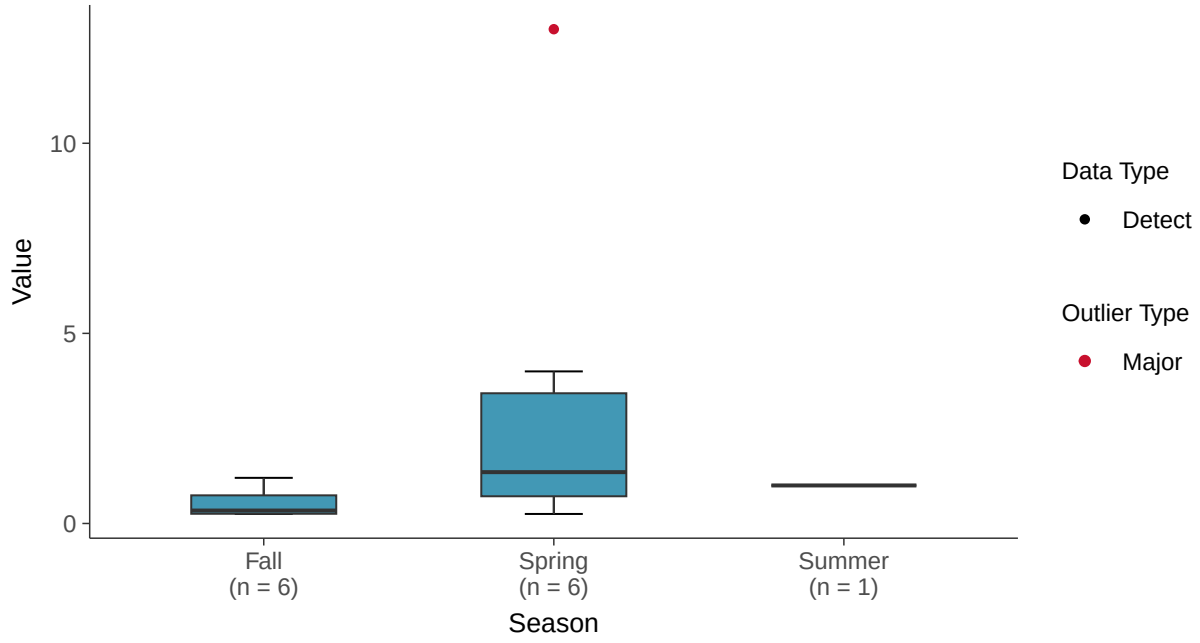
**Boxplot**

Antimony, MW-15015R (ug/L)



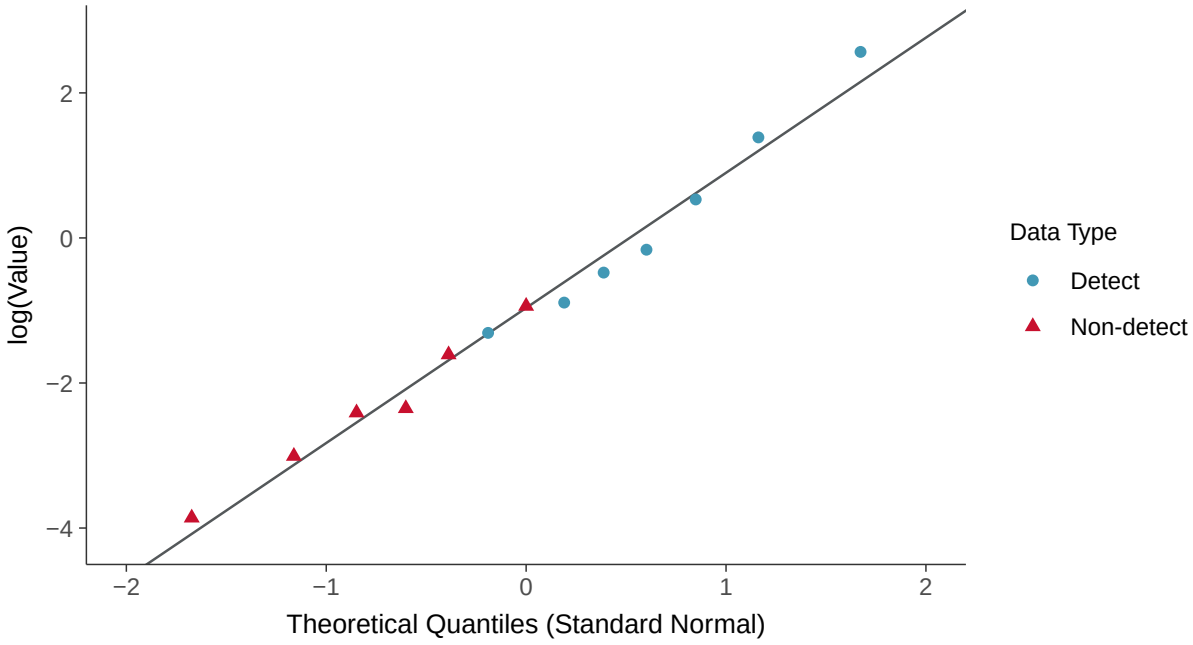

**Boxplot by Season**

Antimony, MW-15015R (ug/L)



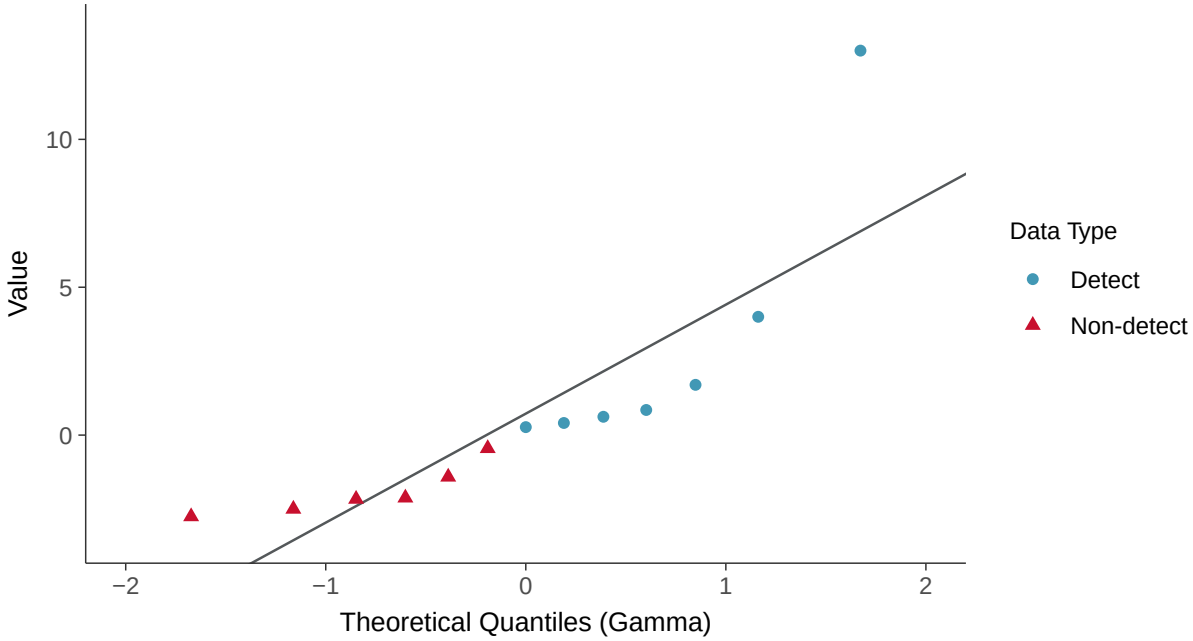
**Lognormal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-15015R (ug/L)



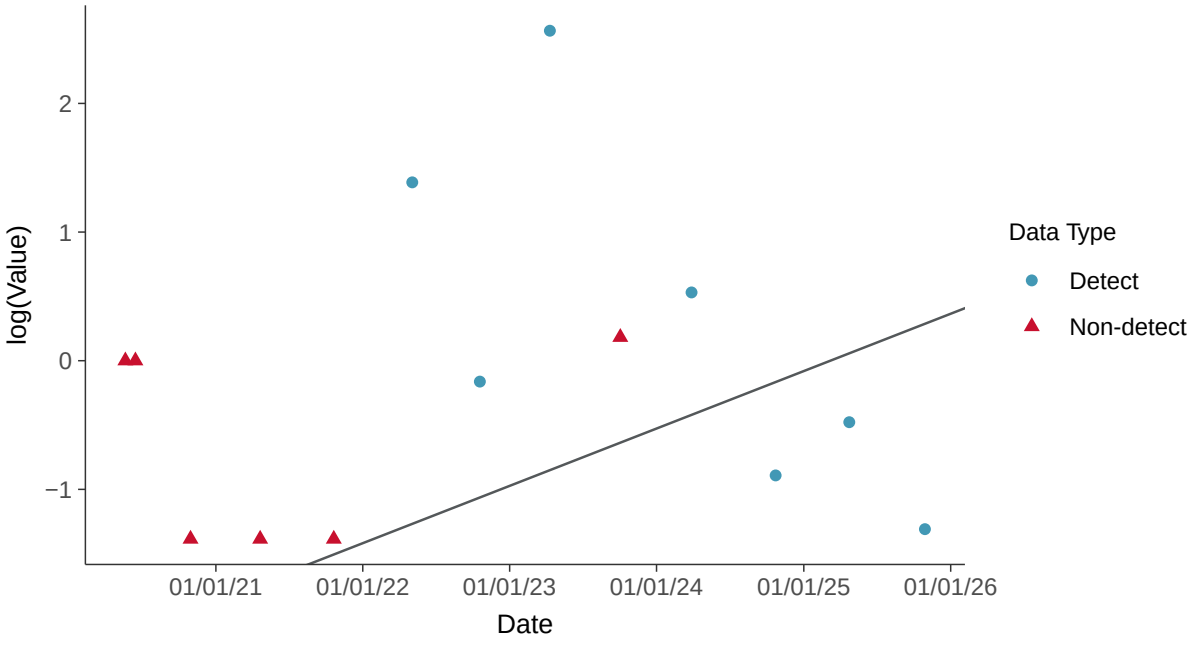

**Gamma Q-Q plot using ROS Imputed Estimates**

Antimony, MW-15015R (ug/L)



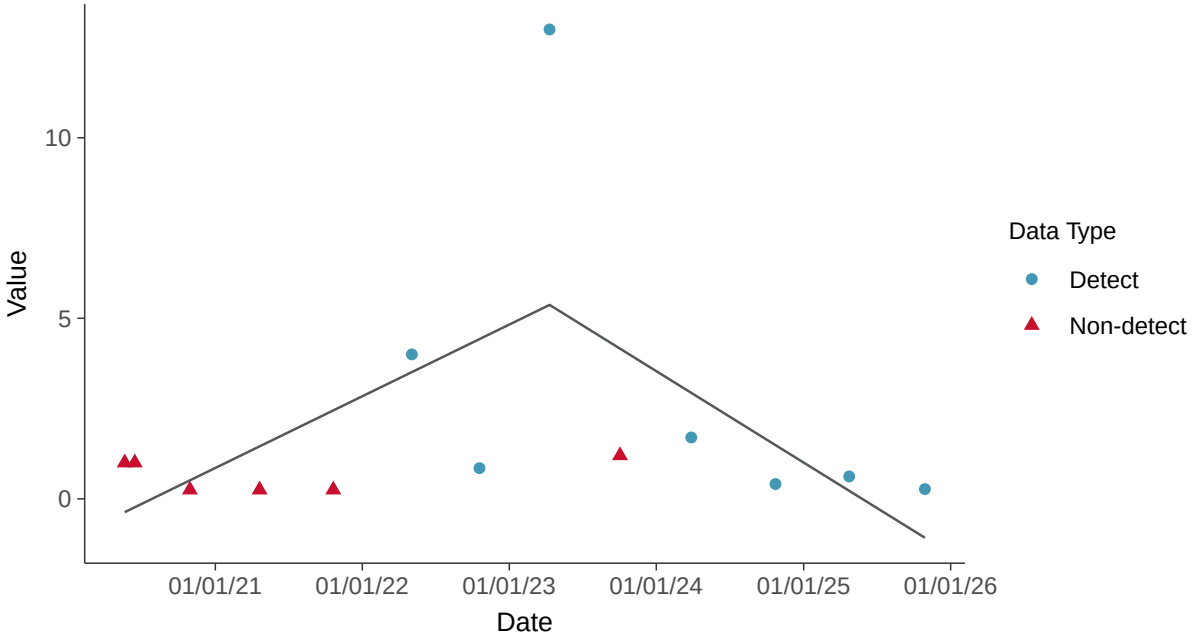
**Trend Regression: Lognormal MLE**

Antimony, MW-15015R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15015R (ug/L)

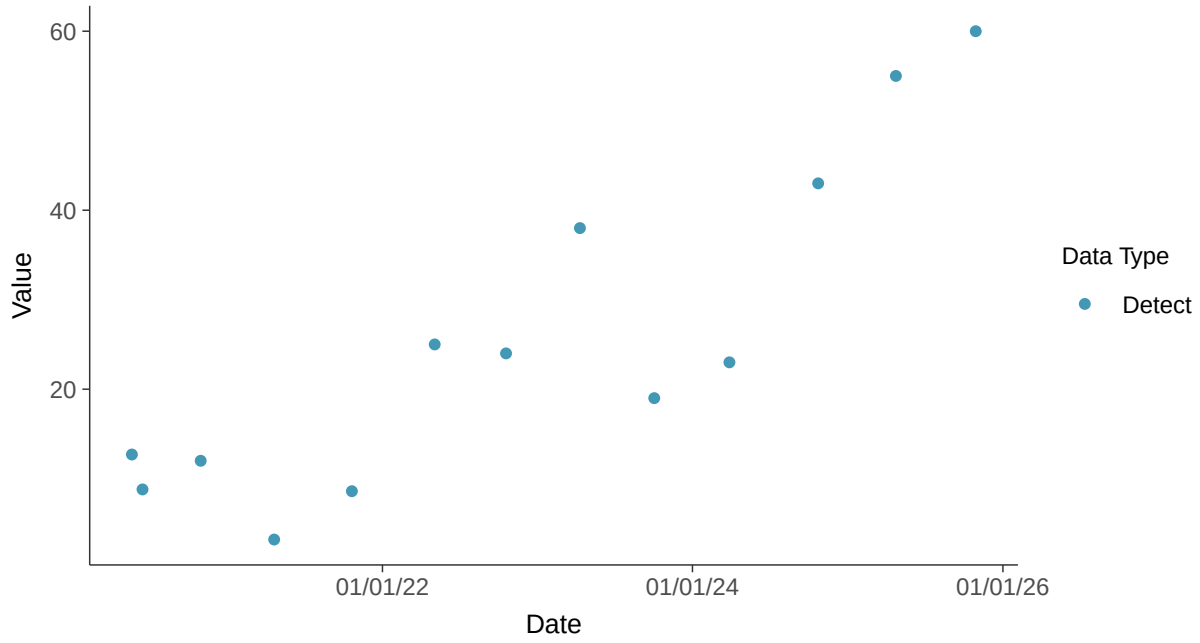


## Appendix IV: Arsenic, MW-15015R

ID: 05_2_102

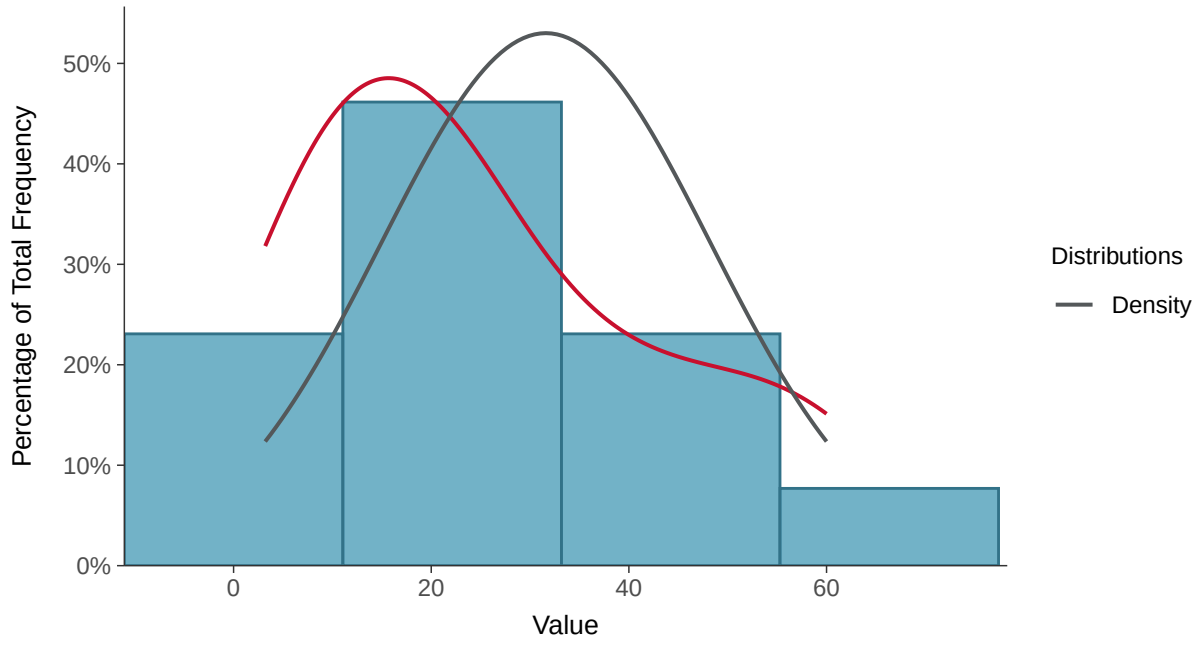
**Scatter Plot**

Arsenic, MW-15015R (ug/L)



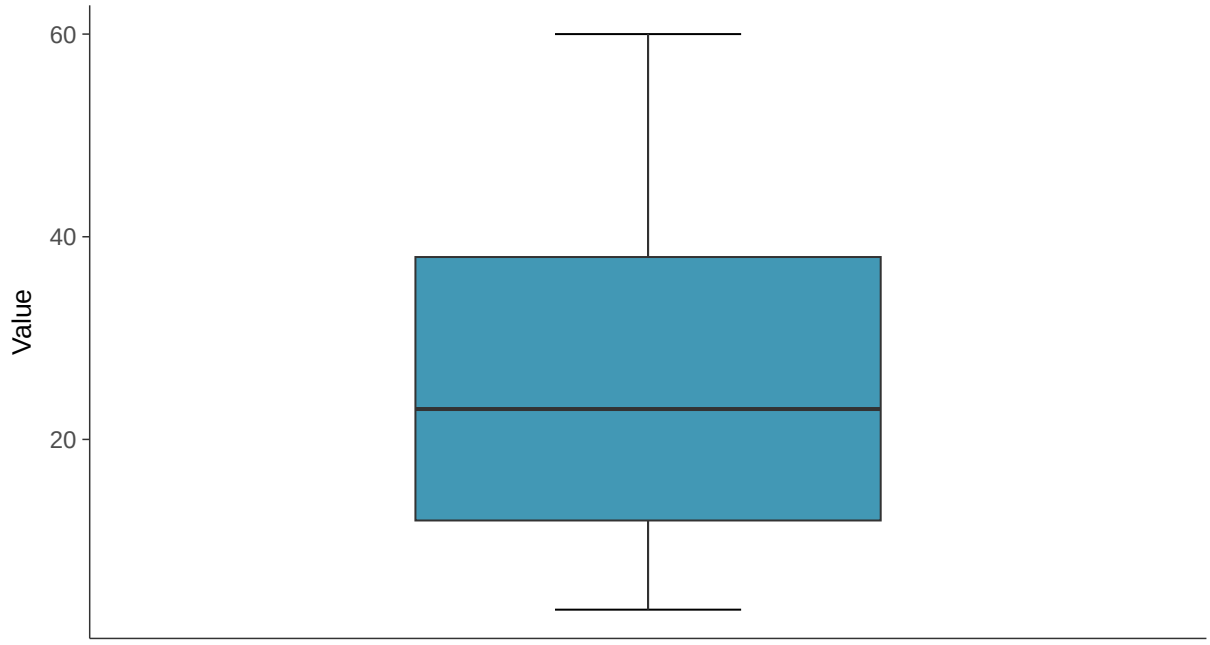

**Histogram**

Arsenic, MW-15015R (ug/L)



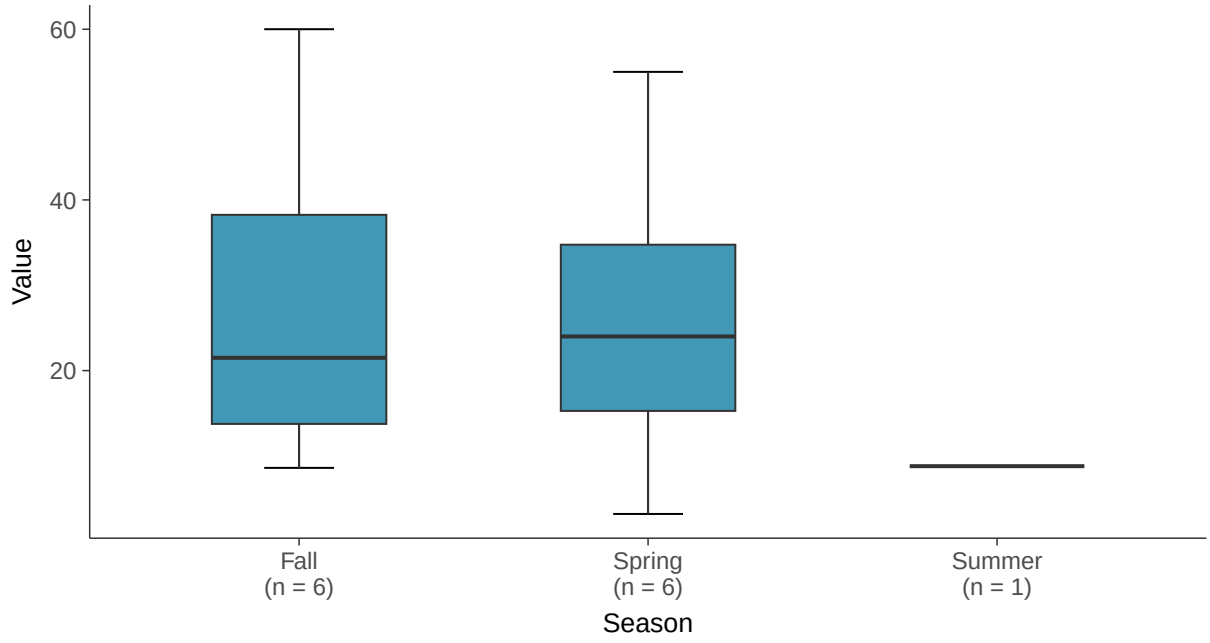
**Boxplot**

Arsenic, MW-15015R (ug/L)



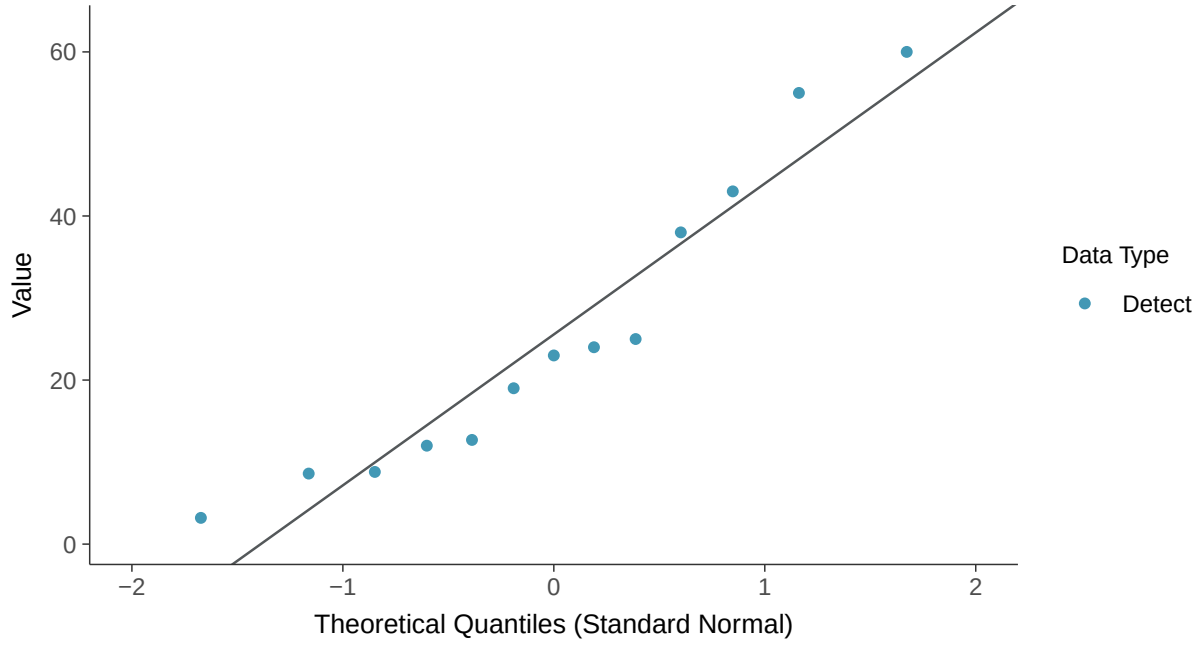

**Boxplot by Season**

Arsenic, MW-15015R (ug/L)



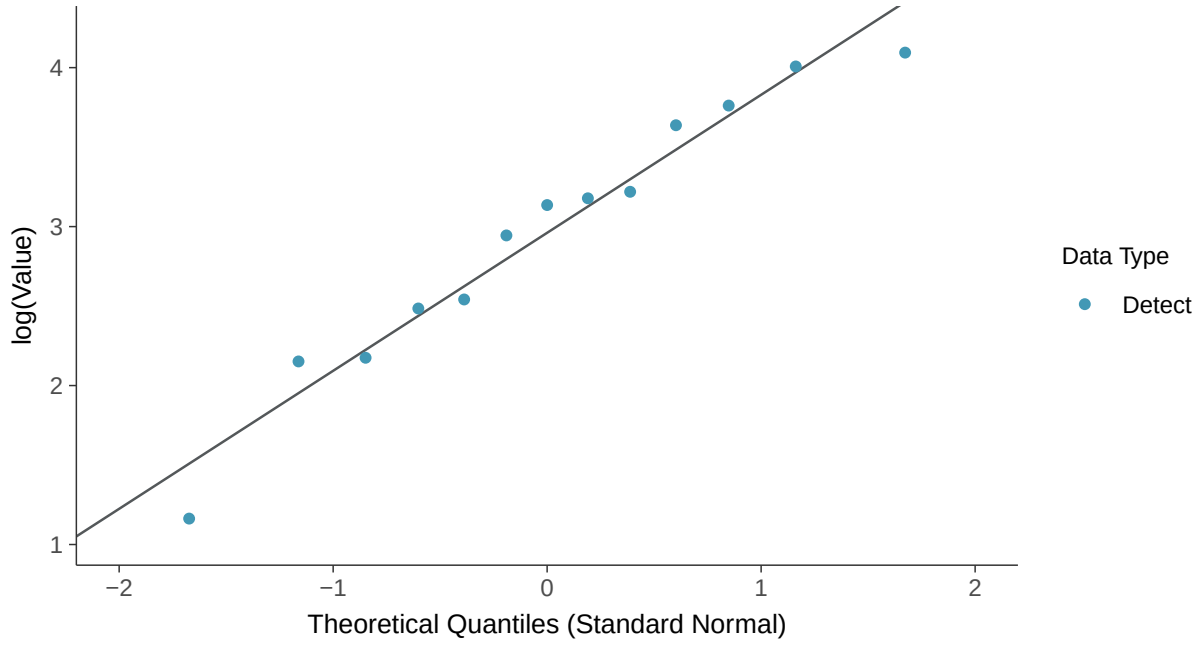
**Normal Q-Q plot**

Arsenic, MW-15015R (ug/L)



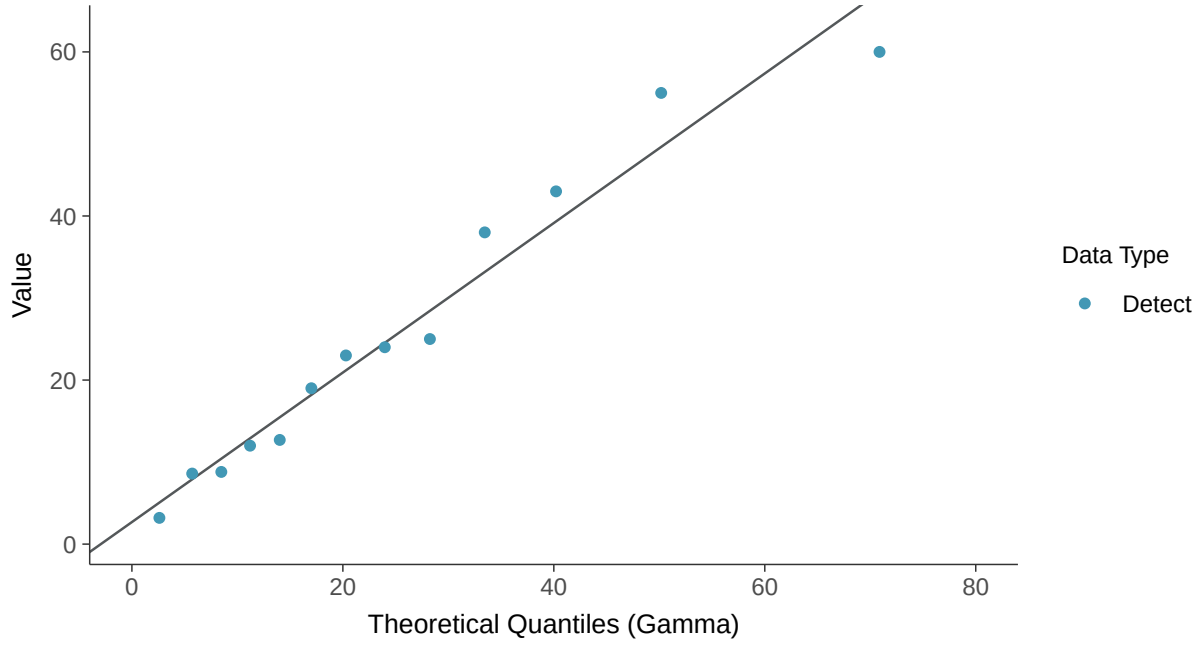

**Lognormal Q-Q plot**

Arsenic, MW-15015R (ug/L)



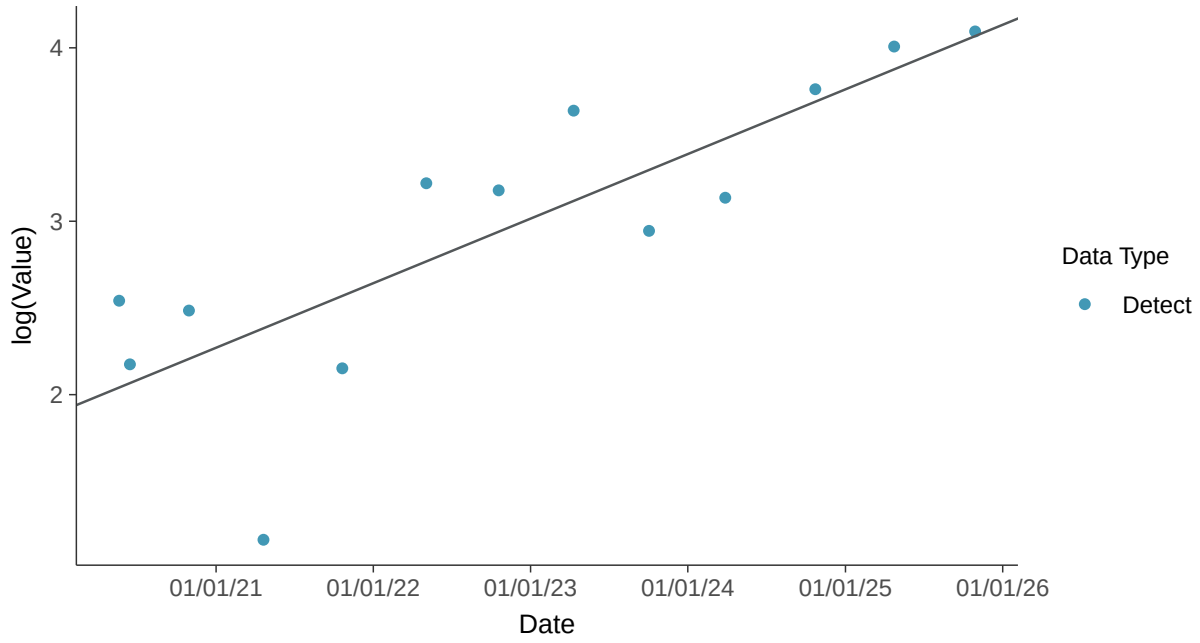
**Gamma Q-Q plot**

Arsenic, MW-15015R (ug/L)



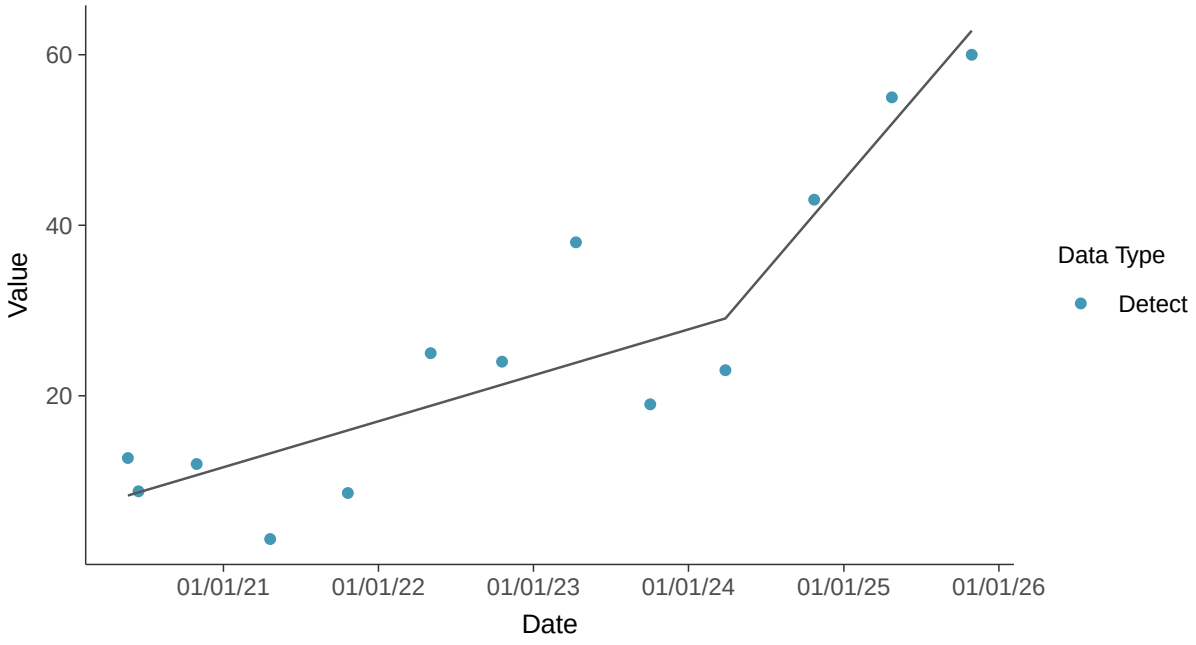

**Trend Regression: Lognormal MLE**

Arsenic, MW-15015R (ug/L)



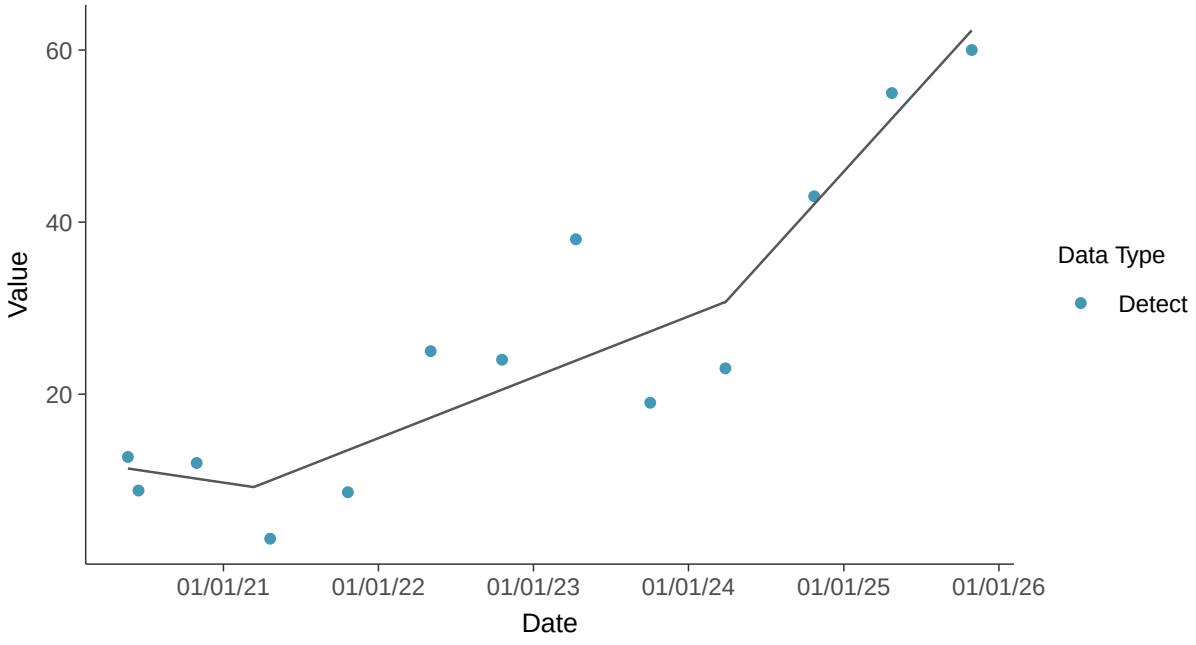
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15015R (ug/L)



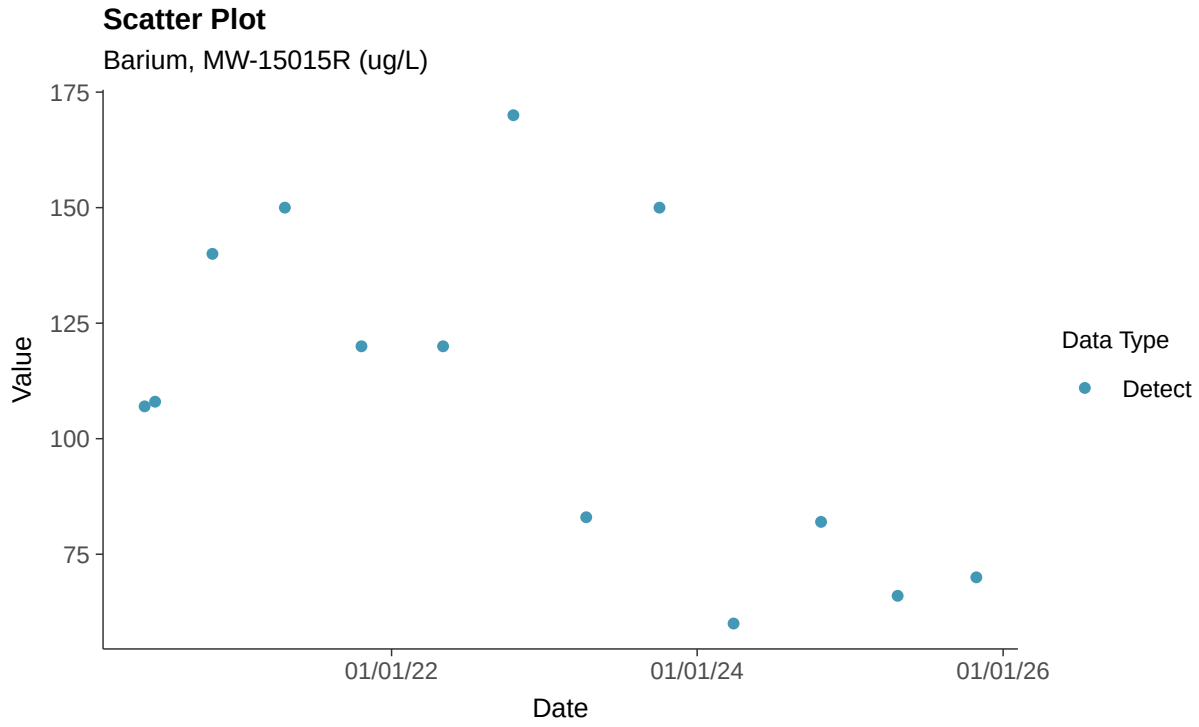

**Trend Regression: Piecewise Linear-Linear-Linear**

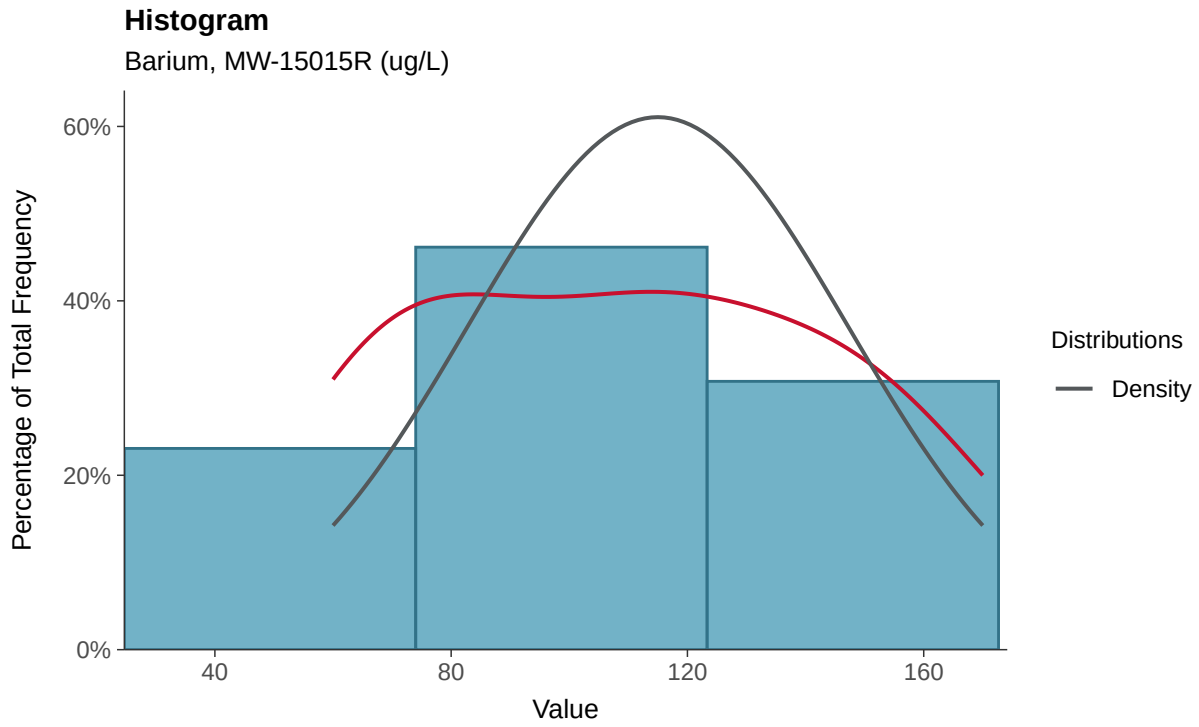
Arsenic, MW-15015R (ug/L)



## Appendix IV: Barium, MW-15015R

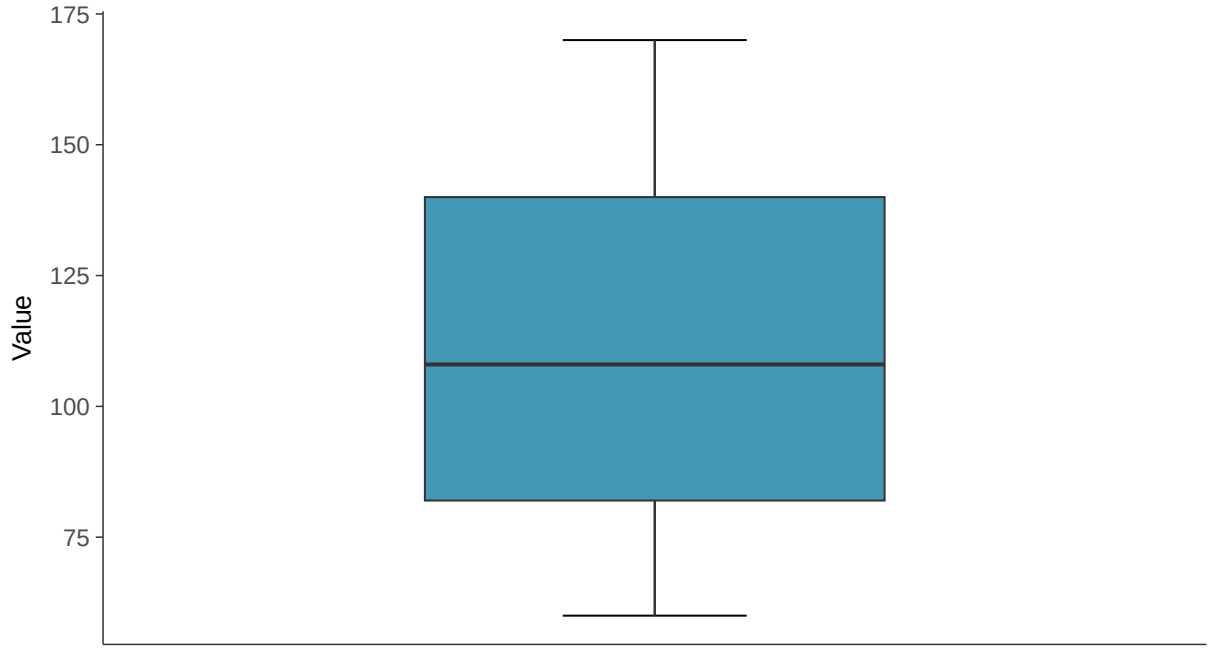
ID: 05_2_103



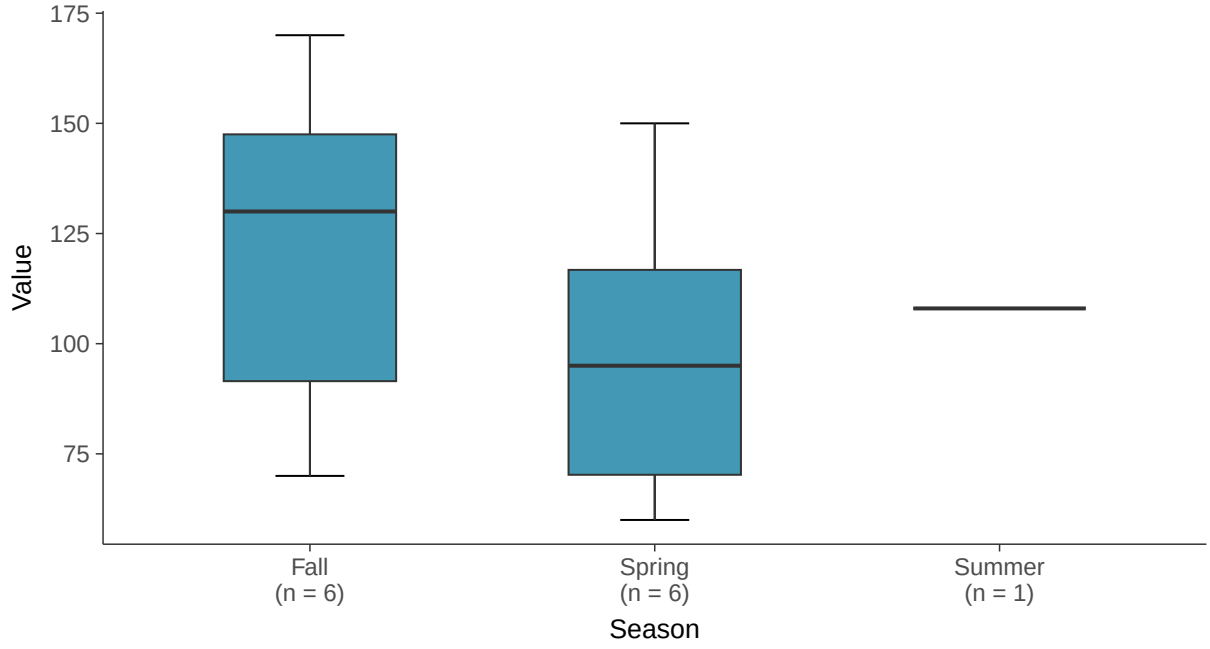
**Boxplot**

Barium, MW-15015R (ug/L)



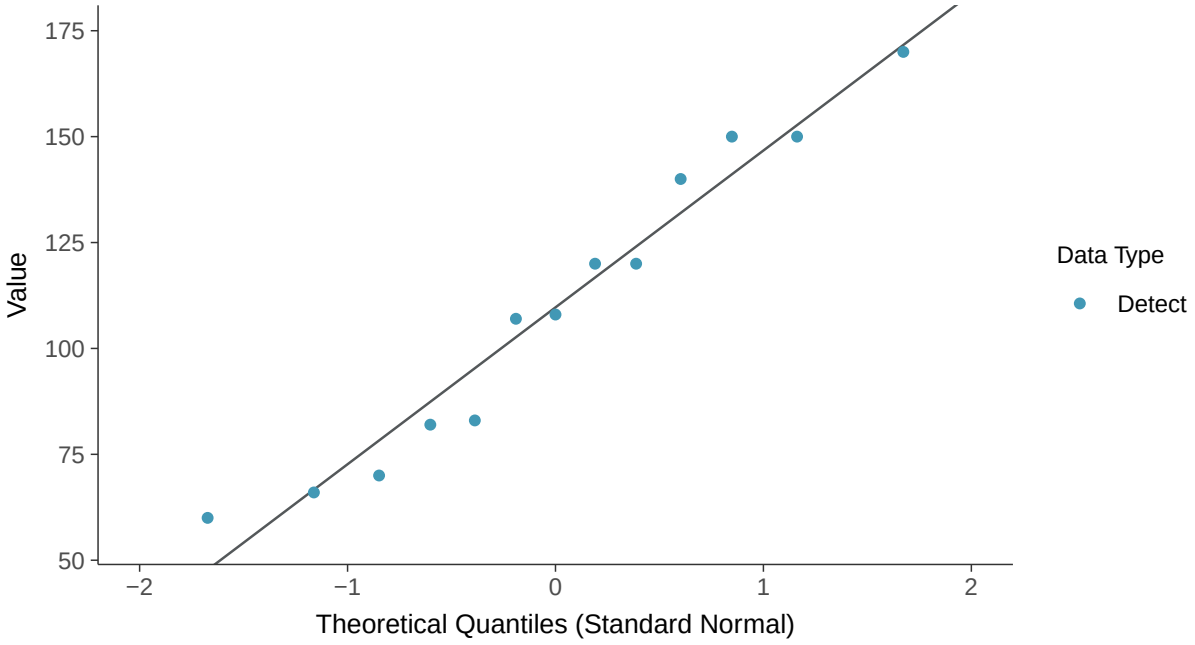

**Boxplot by Season**

Barium, MW-15015R (ug/L)



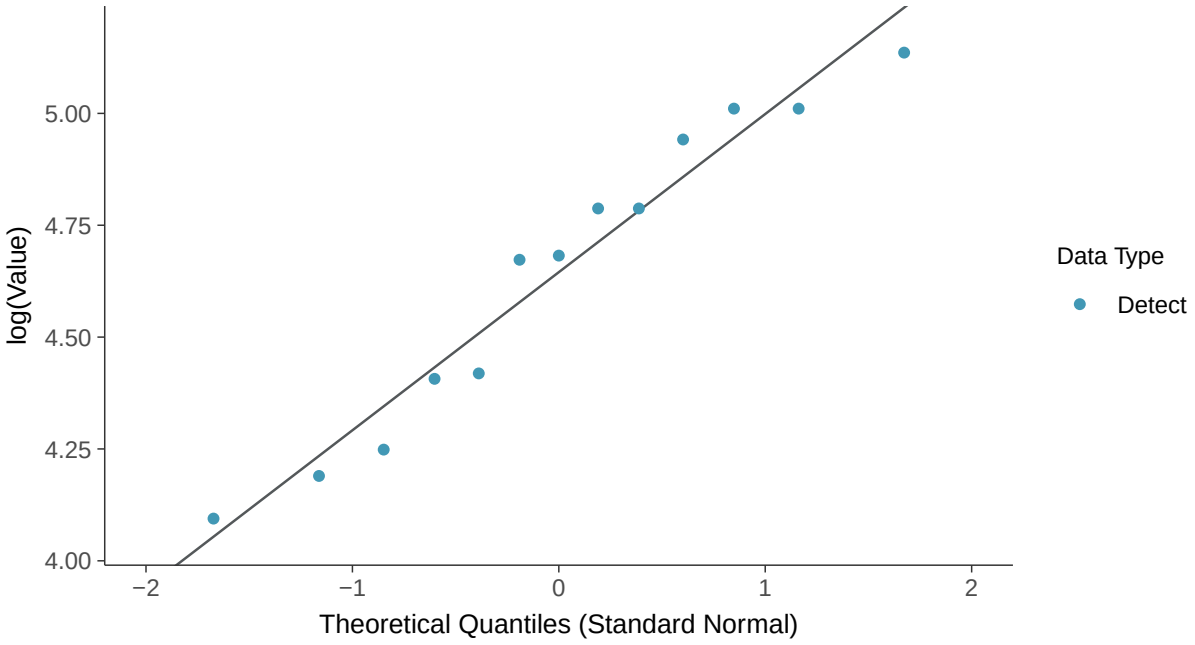
**Normal Q-Q plot**

Barium, MW-15015R (ug/L)



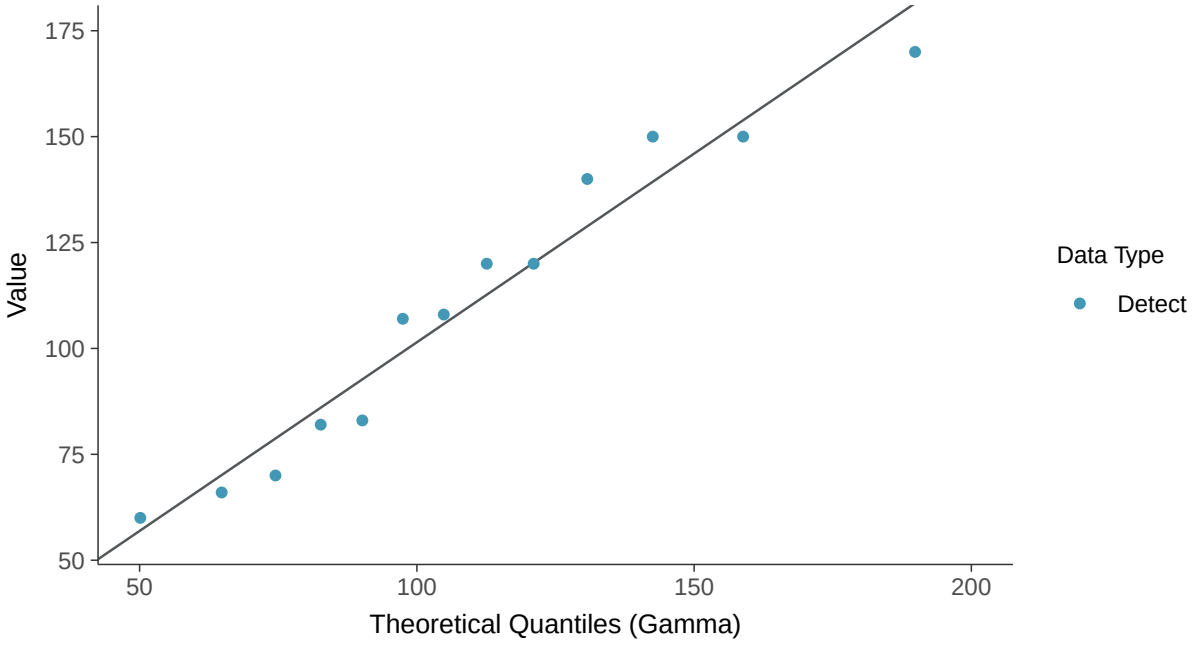

**Lognormal Q-Q plot**

Barium, MW-15015R (ug/L)



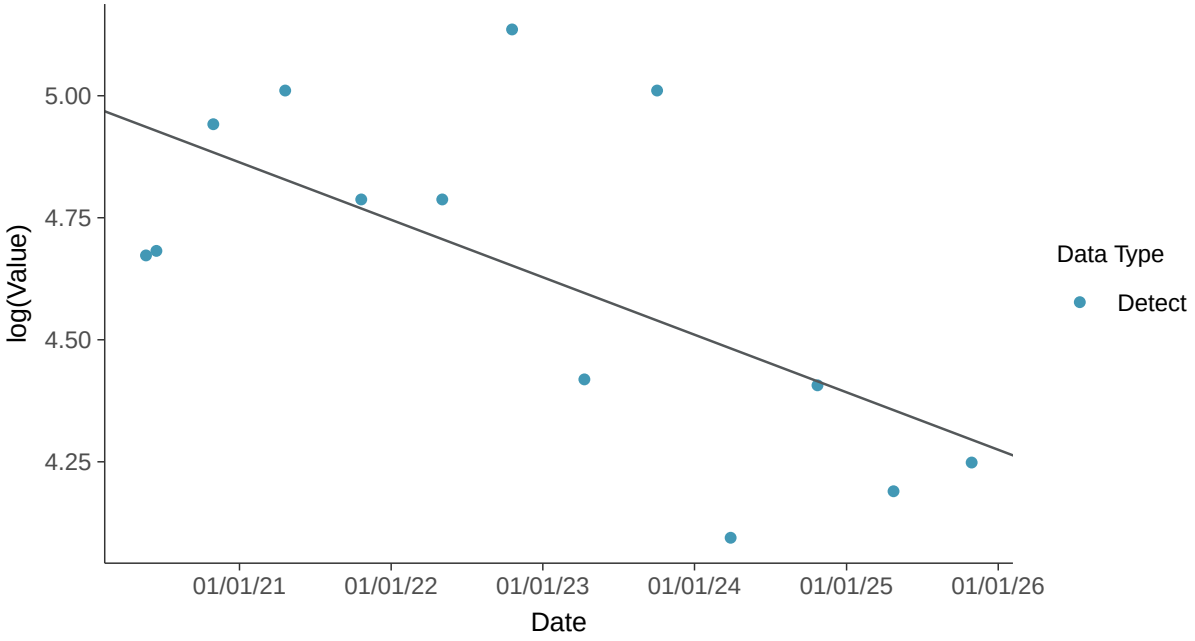
**Gamma Q-Q plot**

Barium, MW-15015R (ug/L)



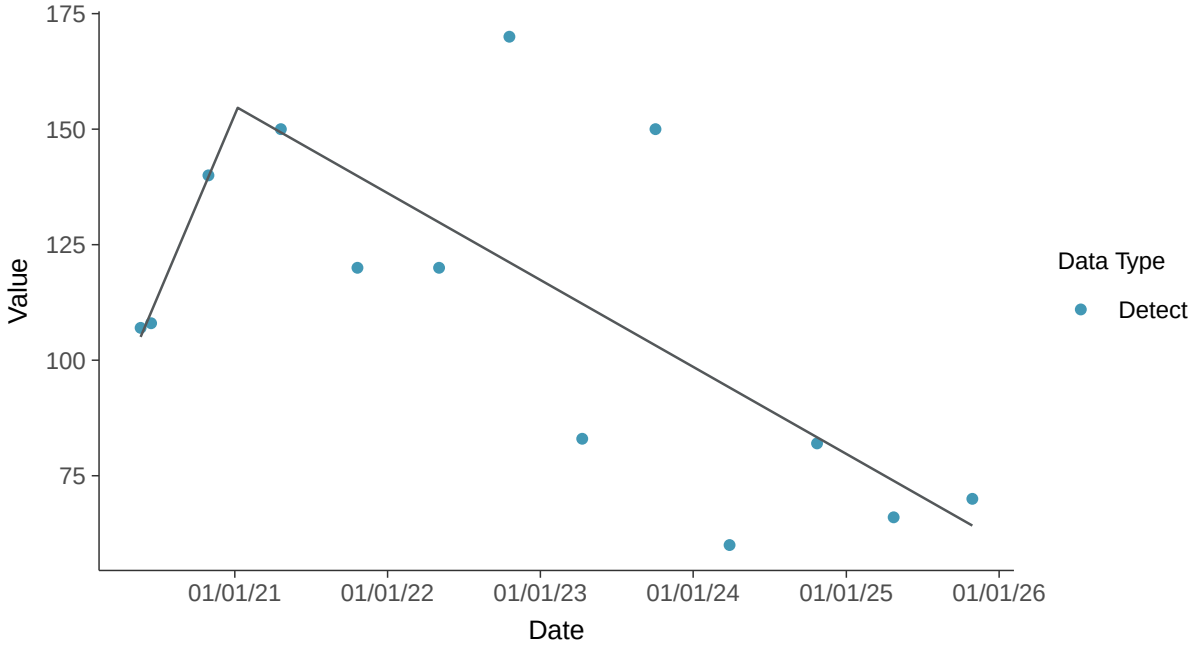

**Trend Regression: Lognormal MLE**

Barium, MW-15015R (ug/L)



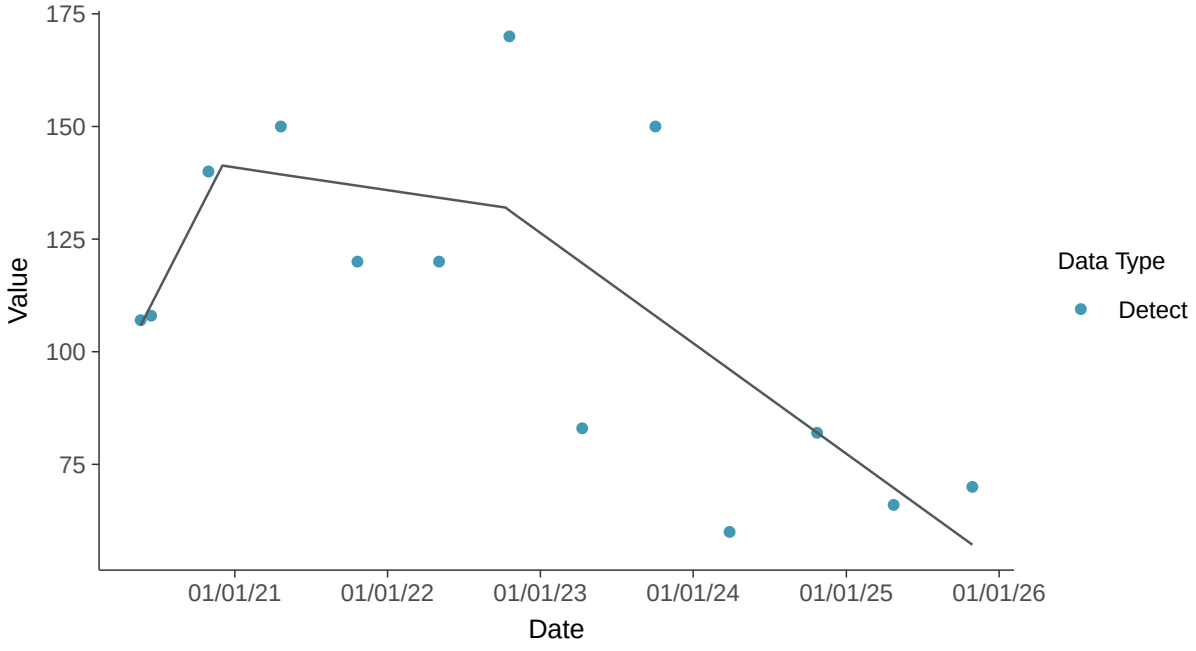
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15015R (ug/L)



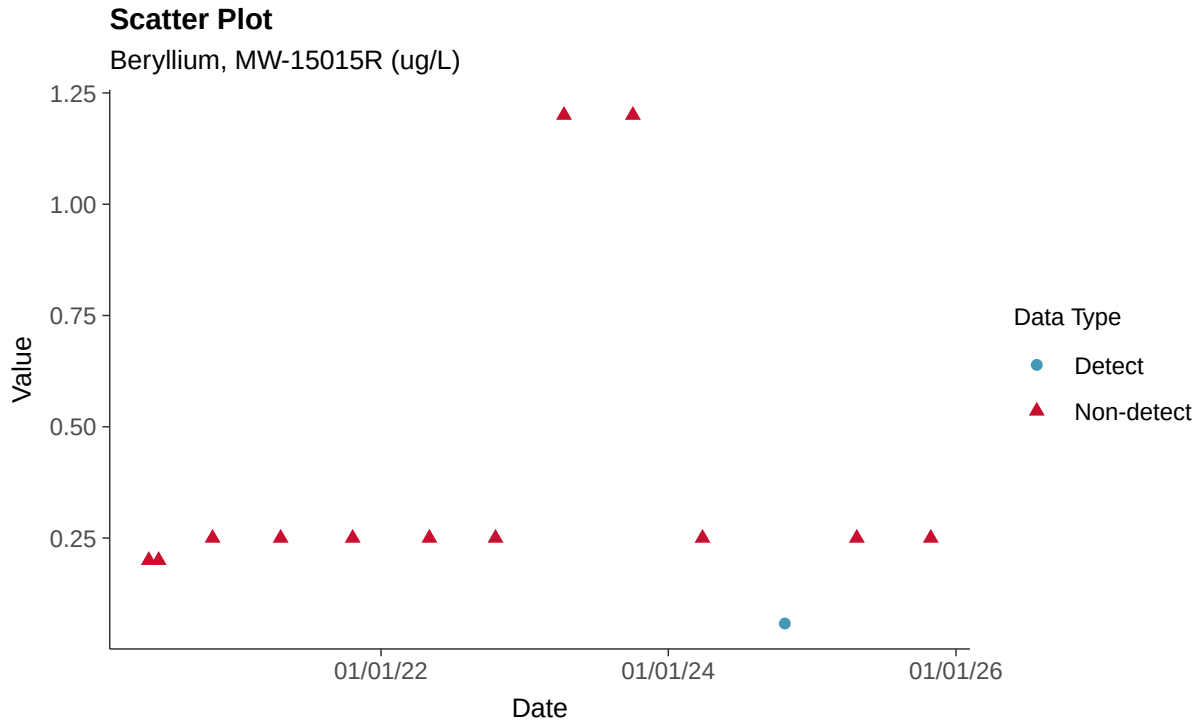

**Trend Regression: Piecewise Linear-Linear-Linear**

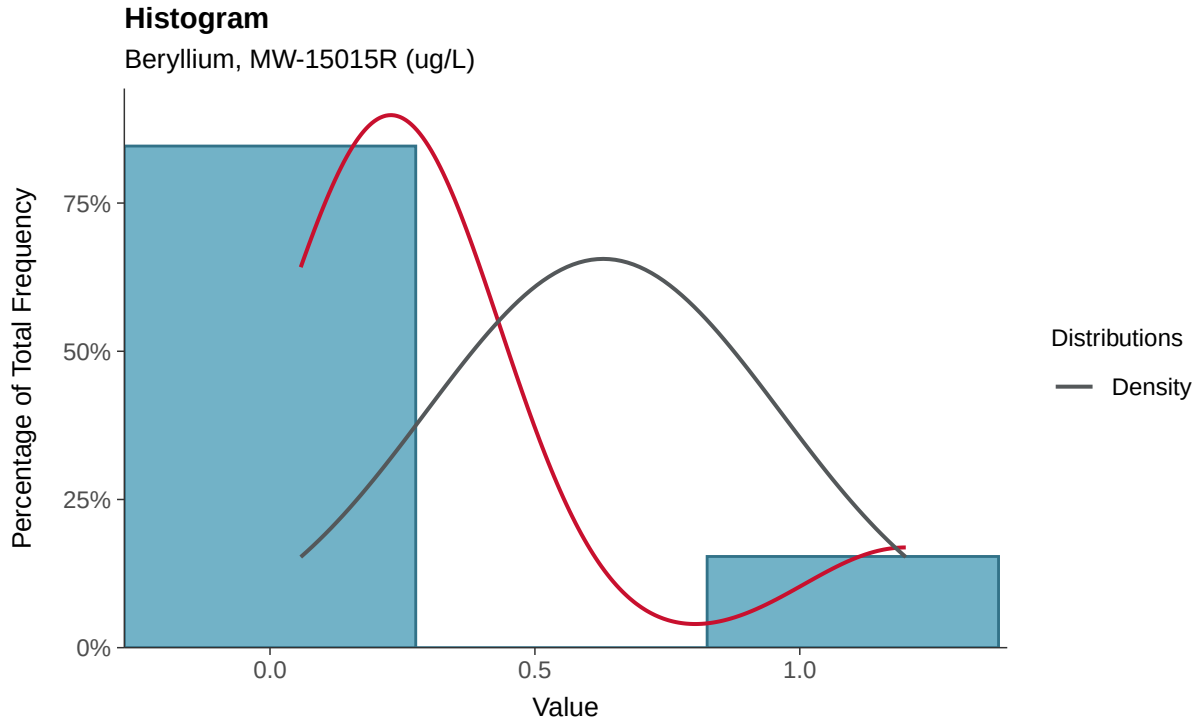
Barium, MW-15015R (ug/L)



## Appendix IV: Beryllium, MW-15015R

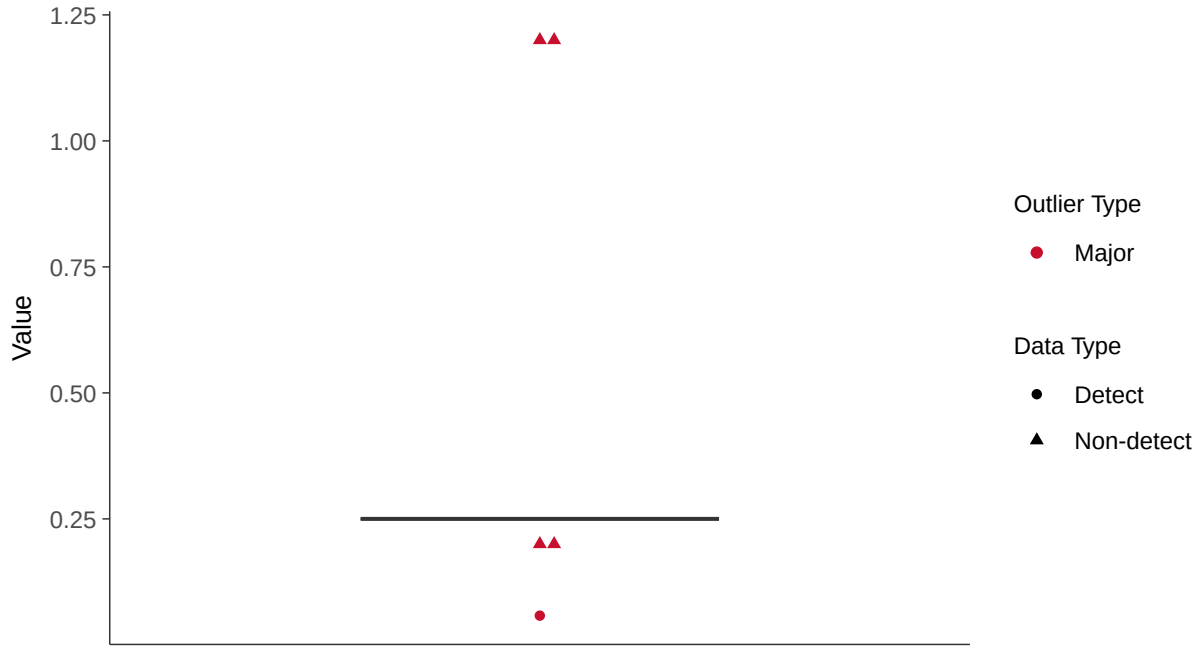
ID: 05_2_104



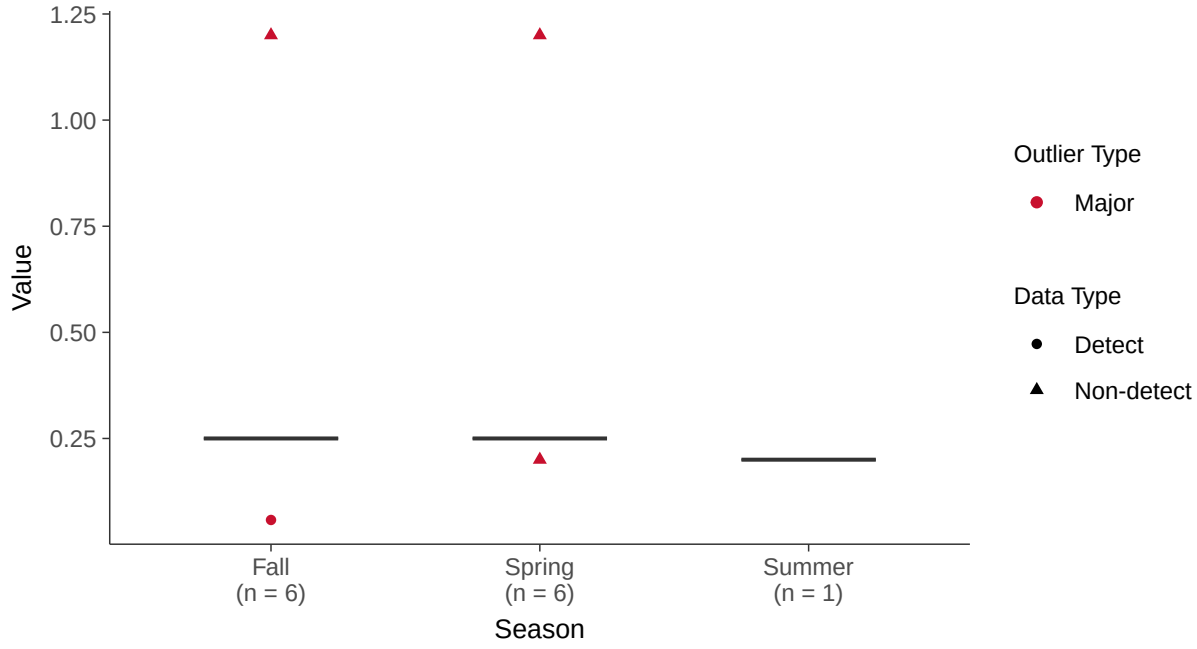
## Boxplot

Beryllium, MW-15015R (ug/L)



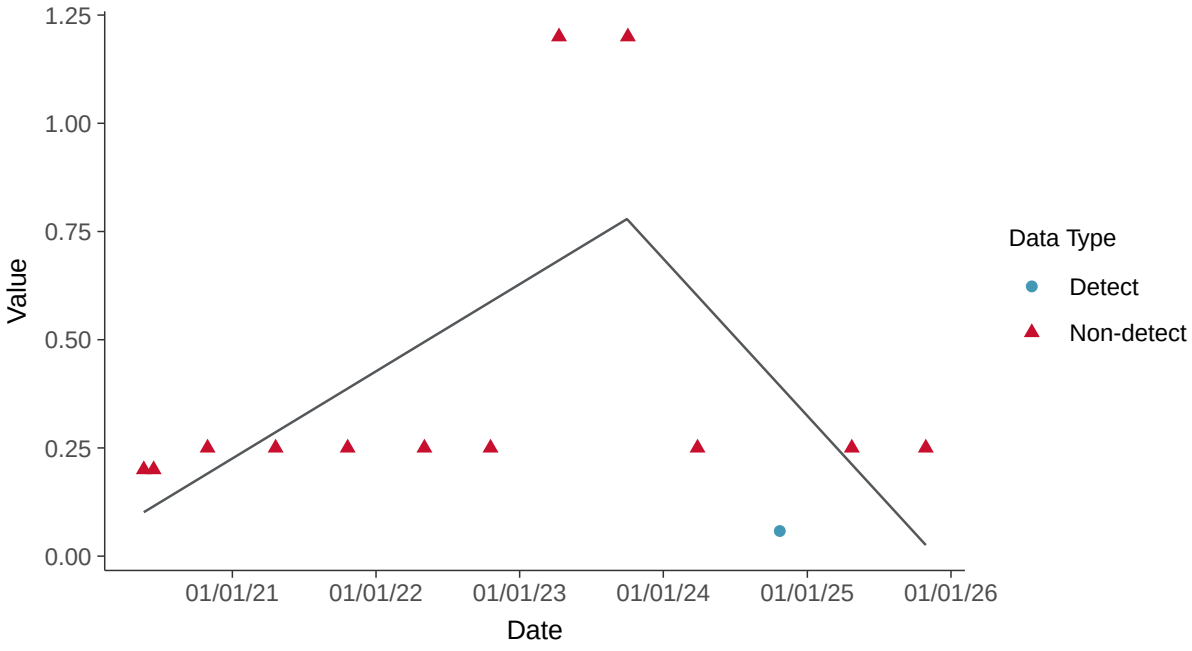

## Boxplot by Season

Beryllium, MW-15015R (ug/L)



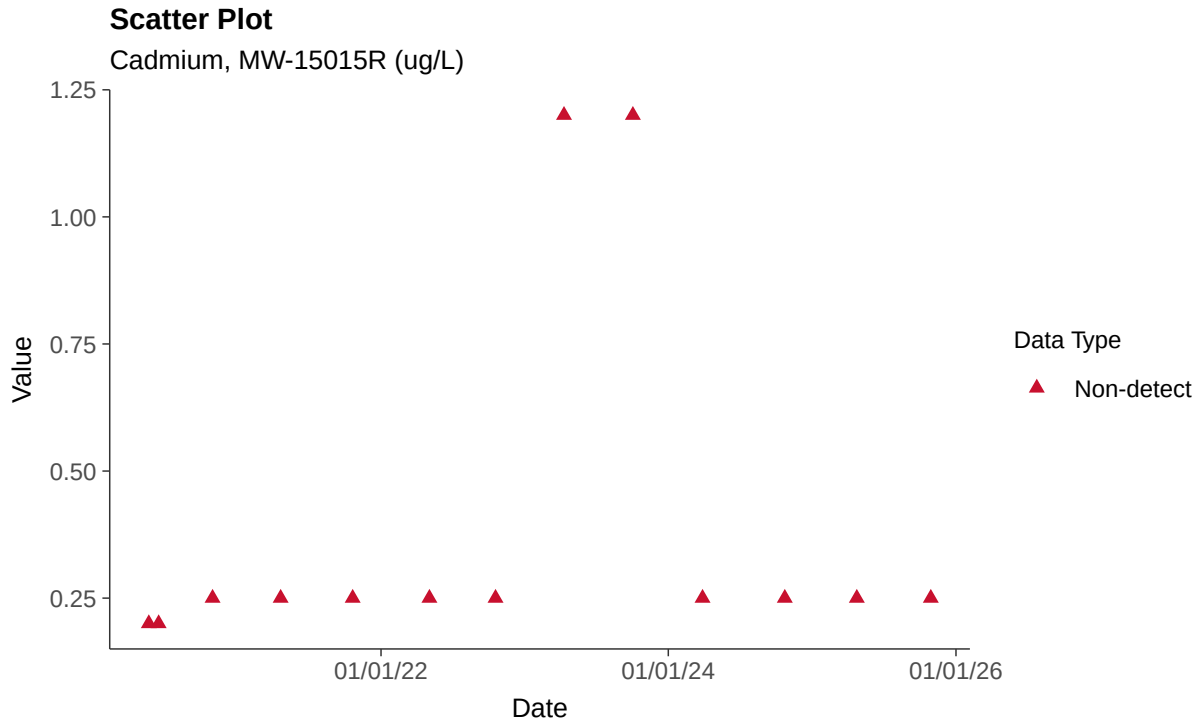
**Trend Regression: Piecewise Linear-Linear**

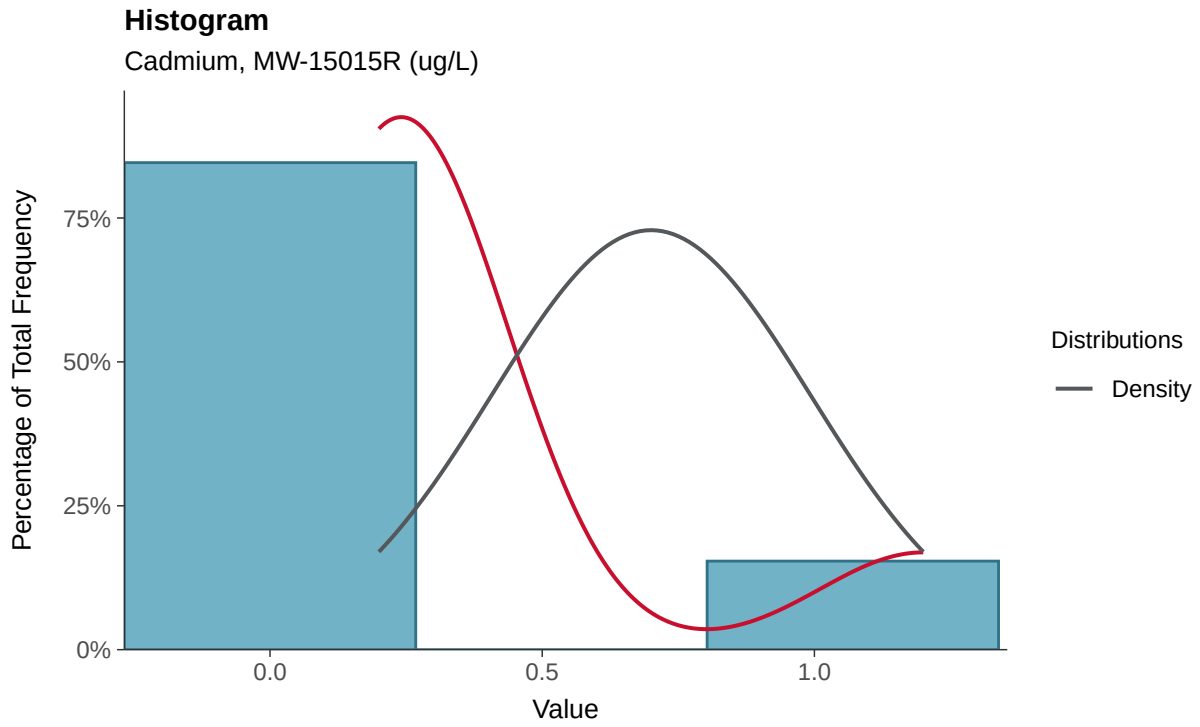
Beryllium, MW-15015R (ug/L)



## Appendix IV: Cadmium, MW-15015R

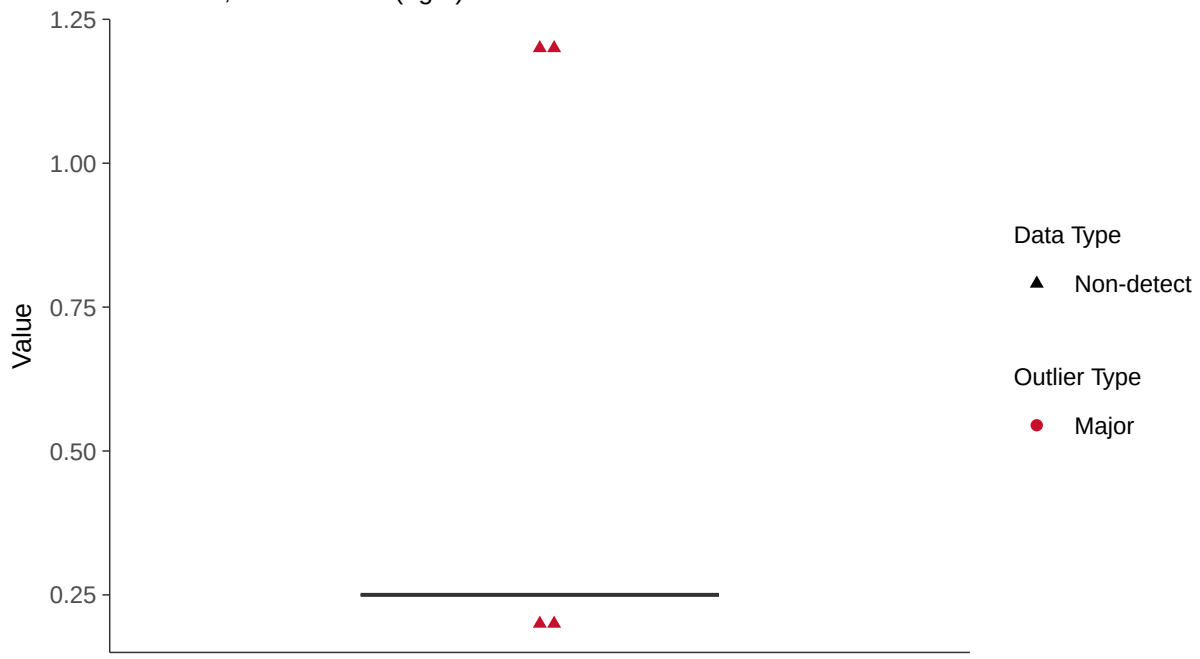
ID: 05_2_106



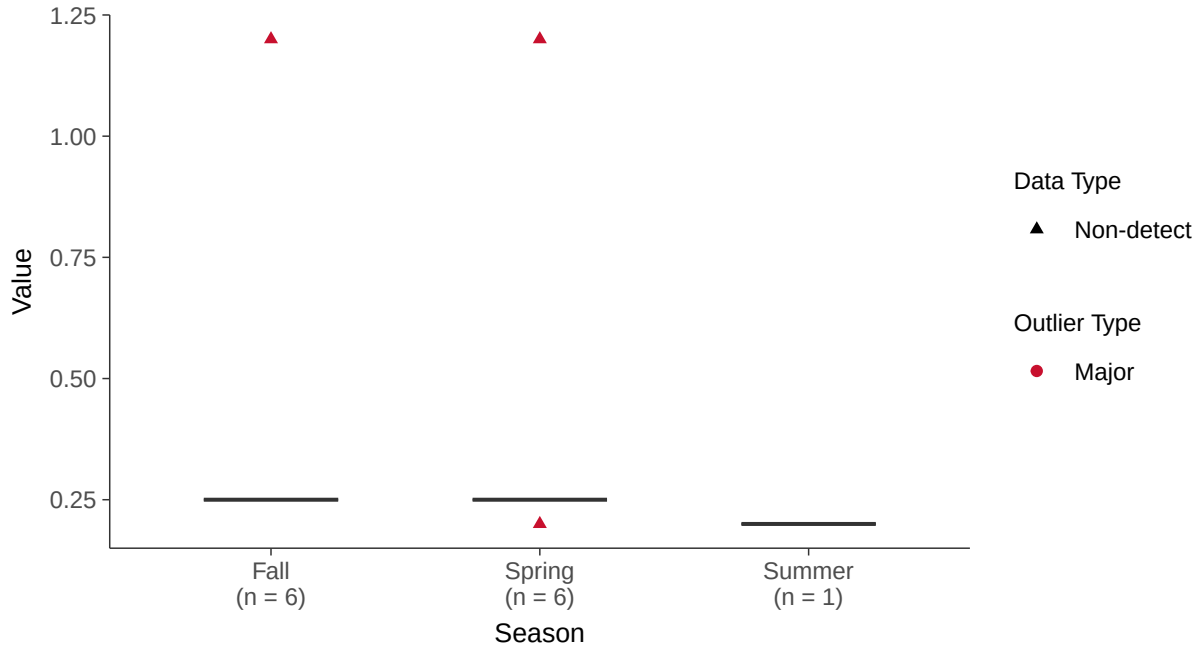
## Boxplot

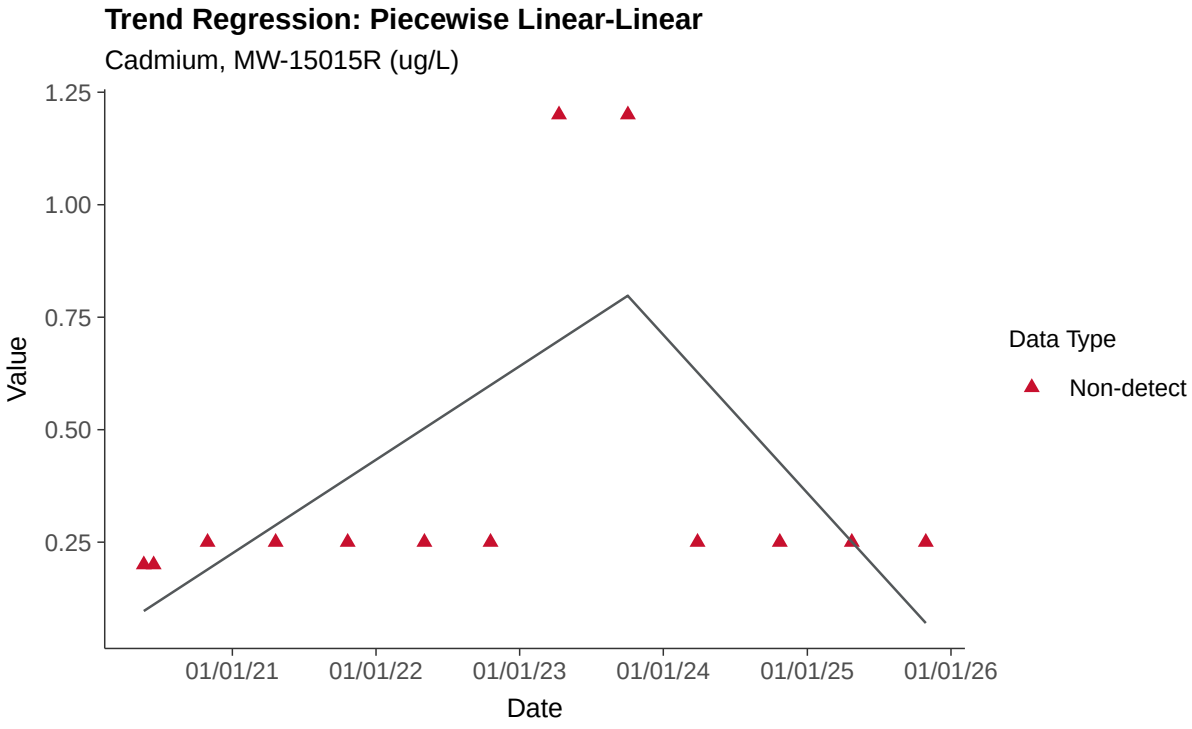
Cadmium, MW-15015R (ug/L)




## Boxplot by Season

Cadmium, MW-15015R (ug/L)



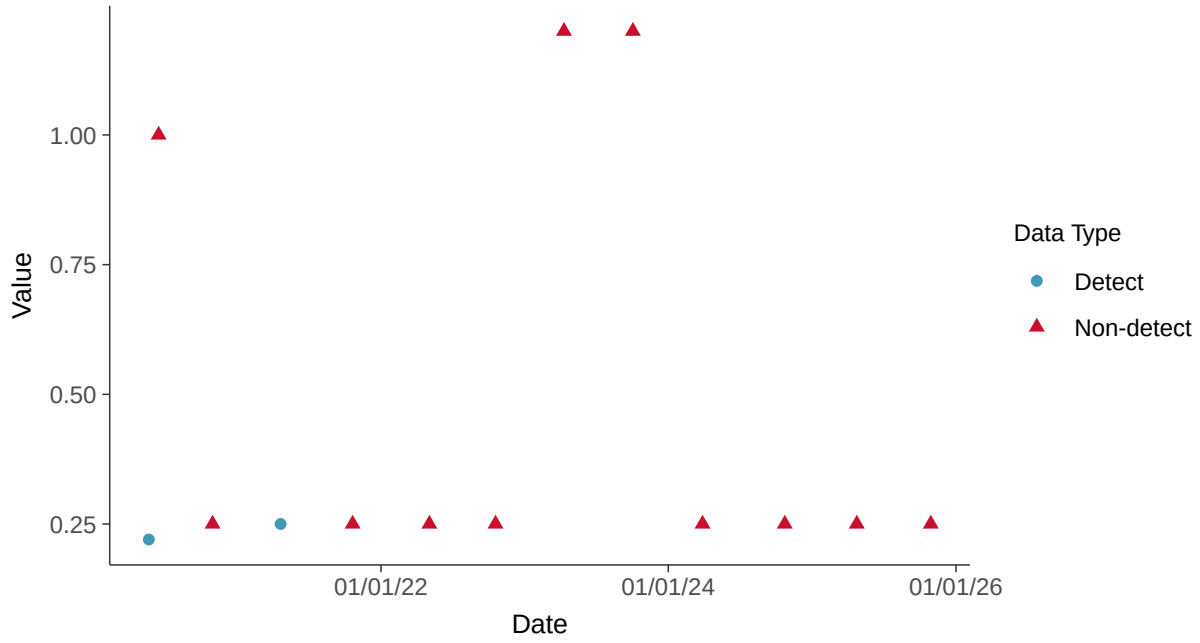

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15015R (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15015R

ID: 05_2_109

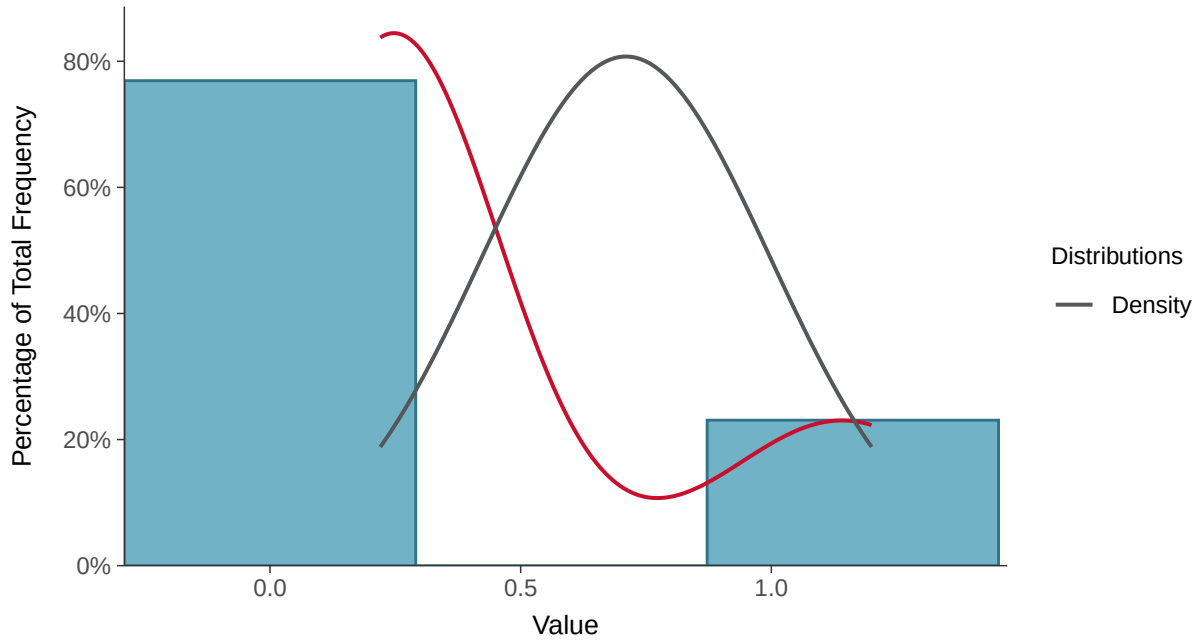
**Scatter Plot**

Chromium, MW-15015R (ug/L)



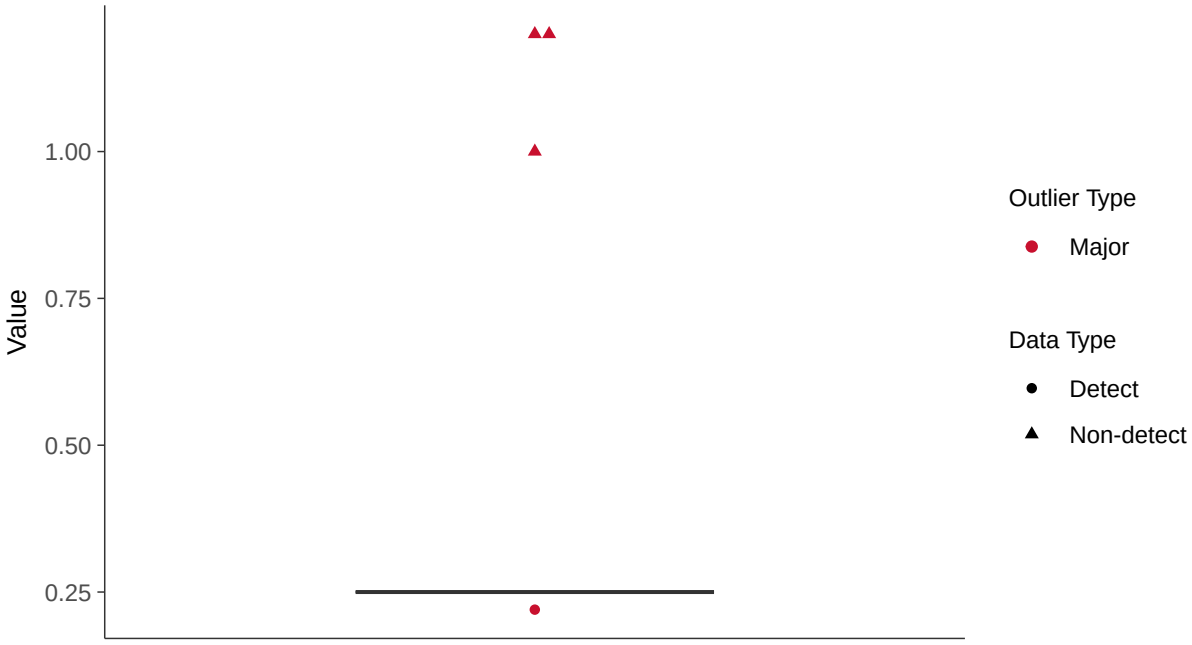

**Histogram**

Chromium, MW-15015R (ug/L)



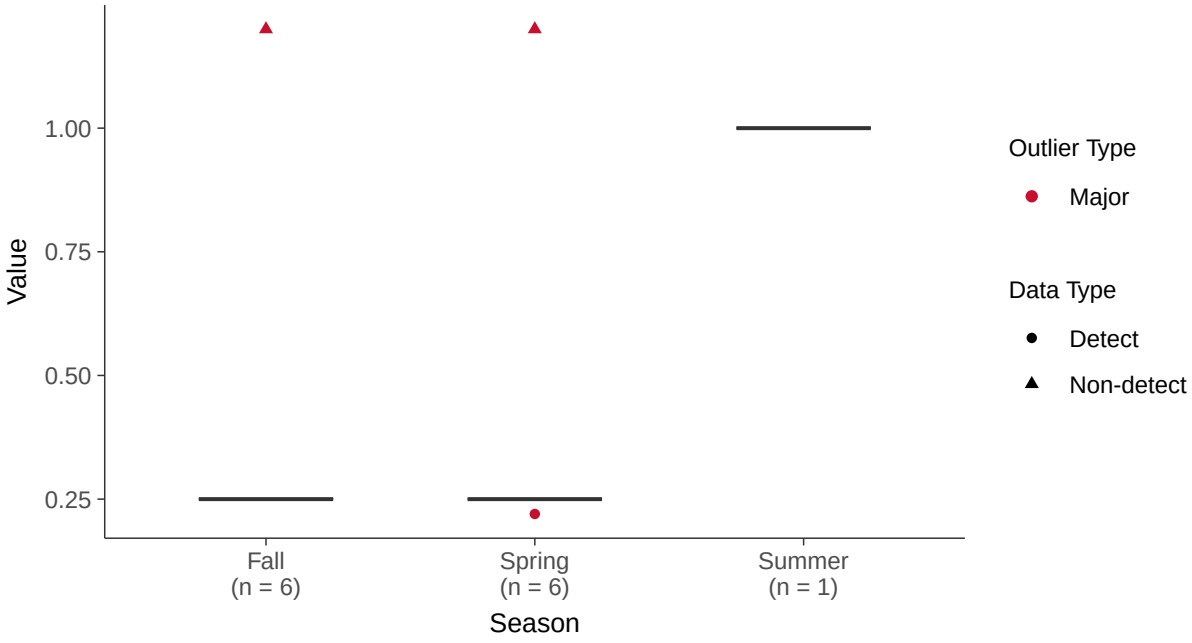
## Boxplot

Chromium, MW-15015R (ug/L)



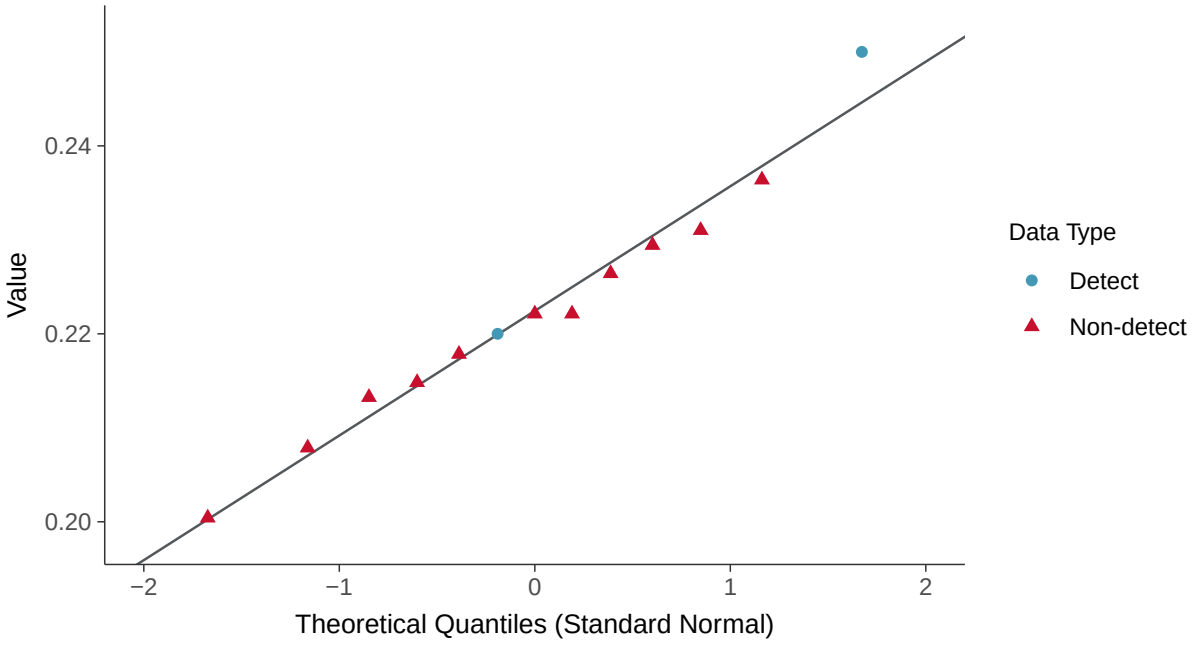

## Boxplot by Season

Chromium, MW-15015R (ug/L)



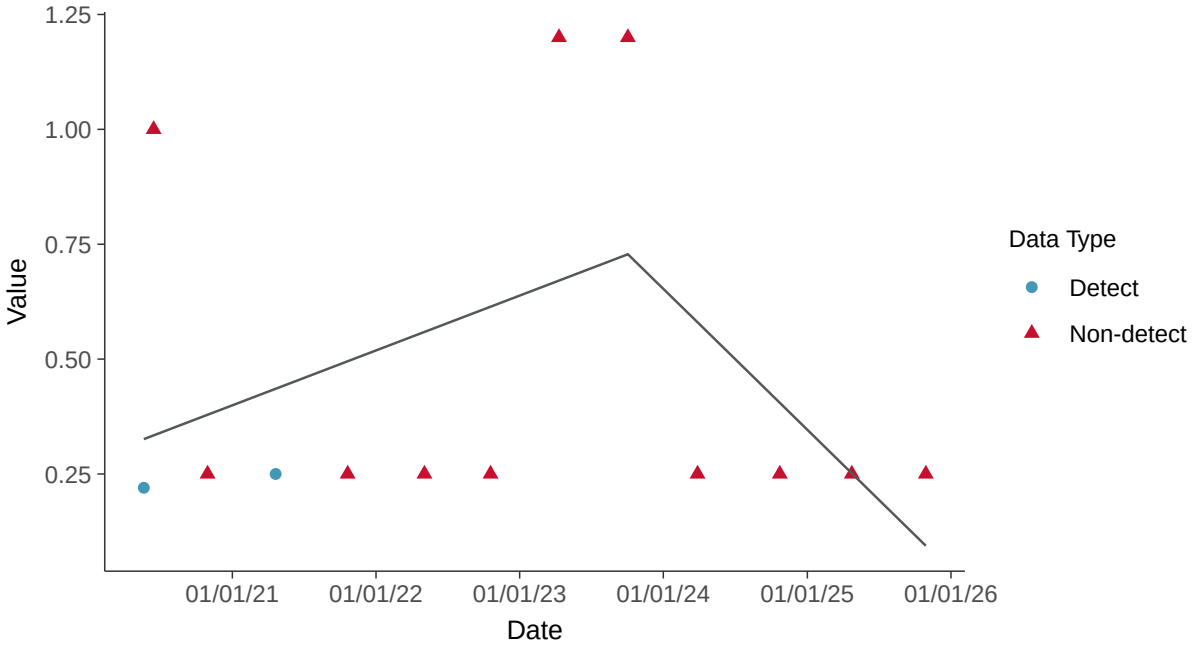
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15015R (ug/L)



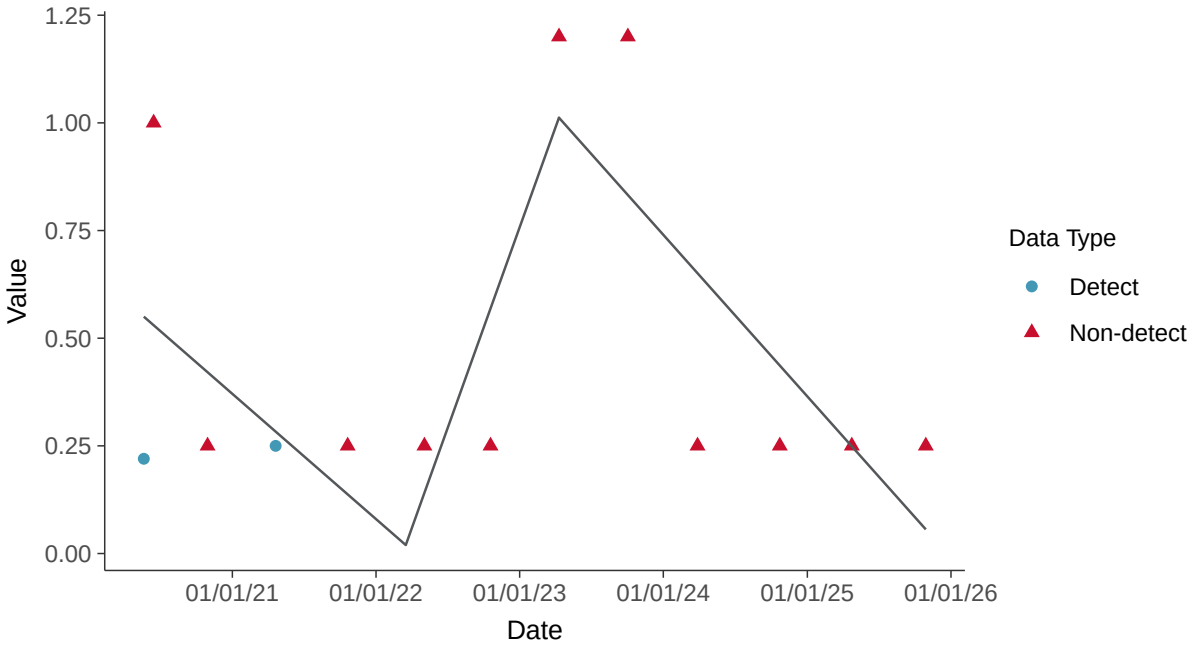

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15015R (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Chromium, MW-15015R (ug/L)

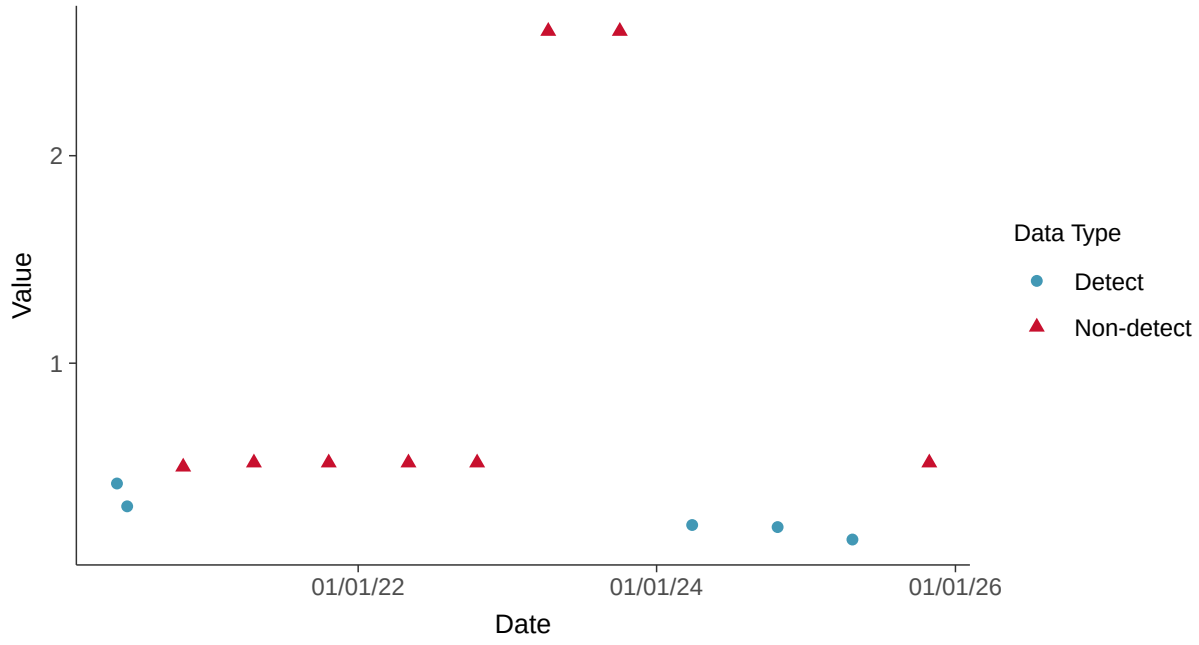


## Appendix IV: Cobalt, MW-15015R

ID: 05_2_110

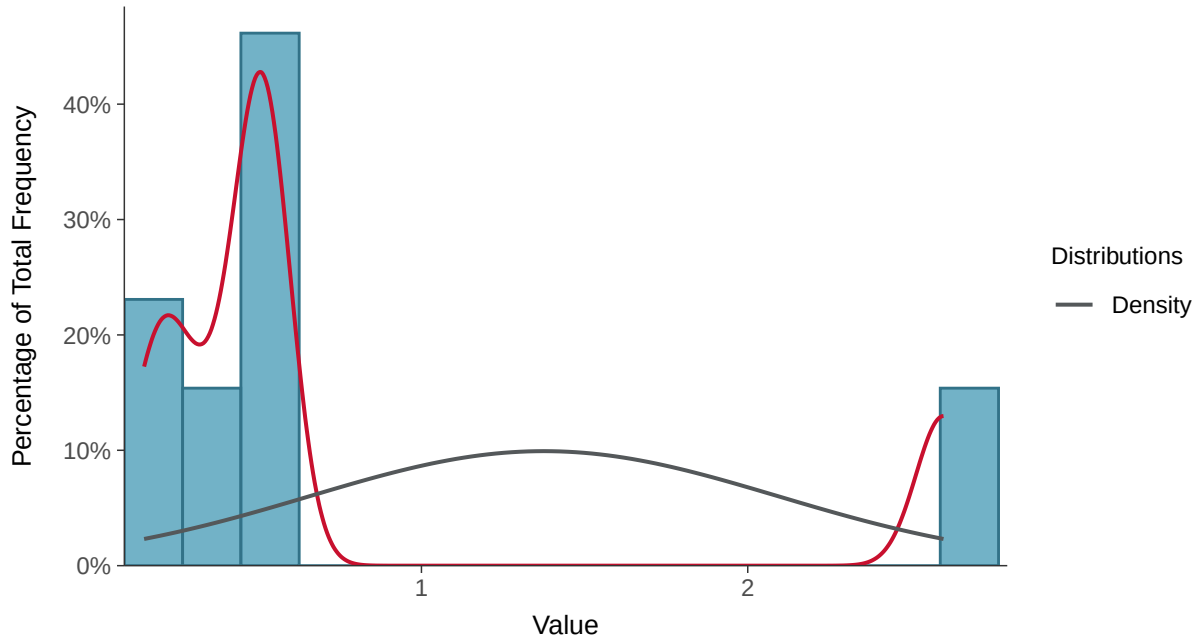
**Scatter Plot**

Cobalt, MW-15015R (ug/L)



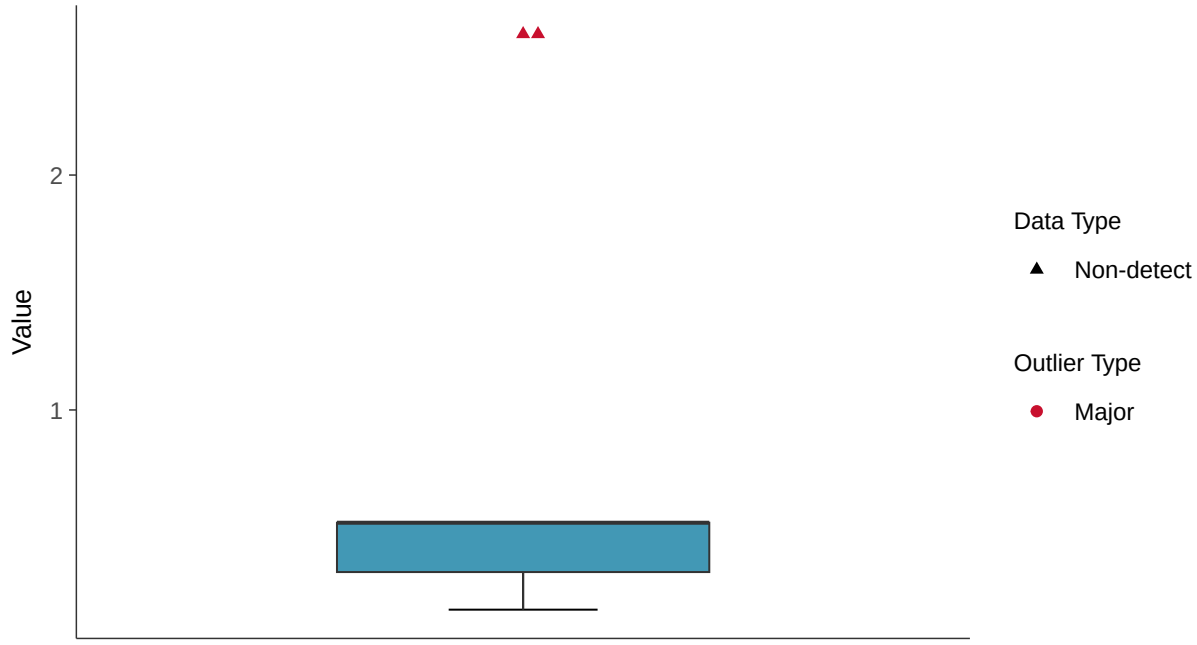

**Histogram**

Cobalt, MW-15015R (ug/L)



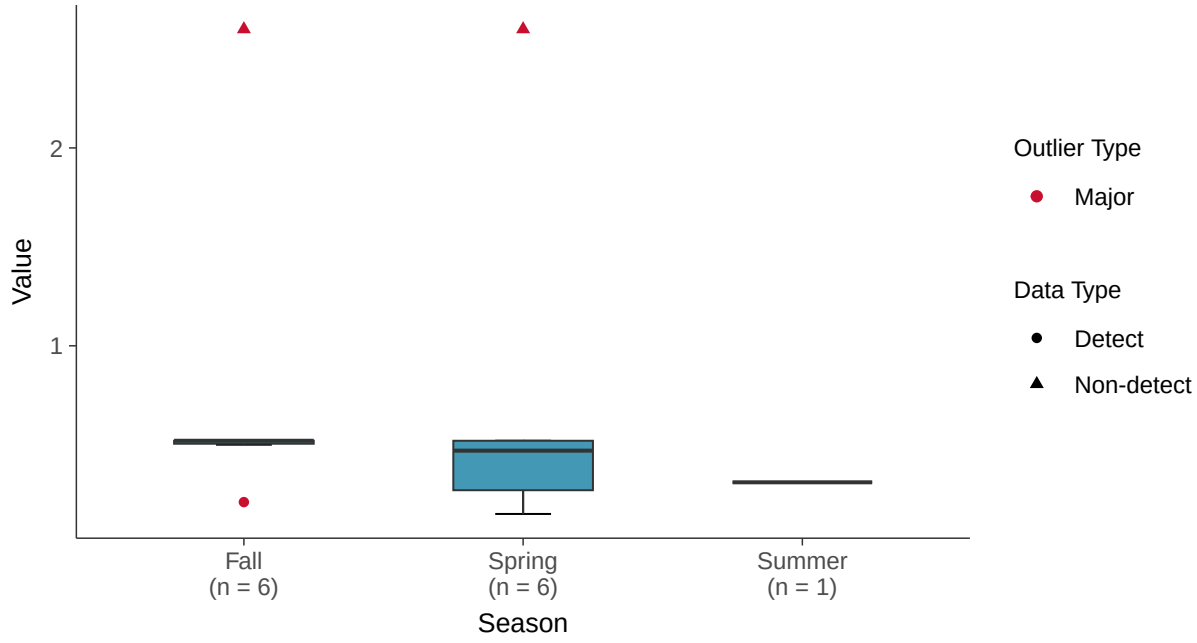
## Boxplot

Cobalt, MW-15015R (ug/L)



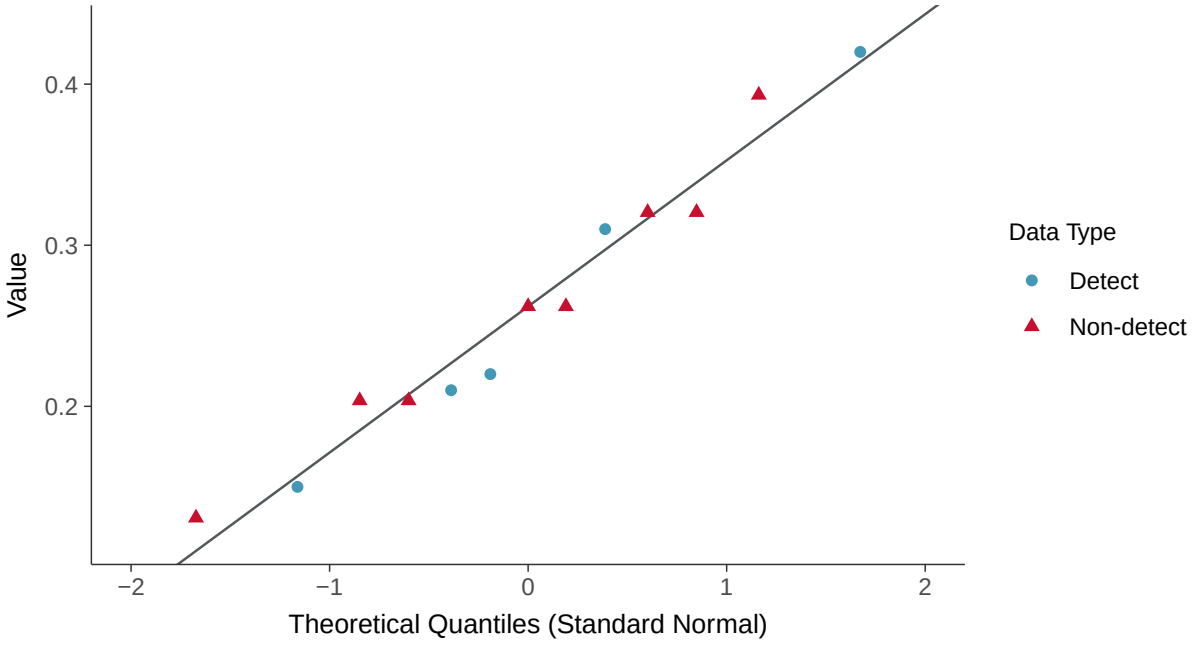

## Boxplot by Season

Cobalt, MW-15015R (ug/L)



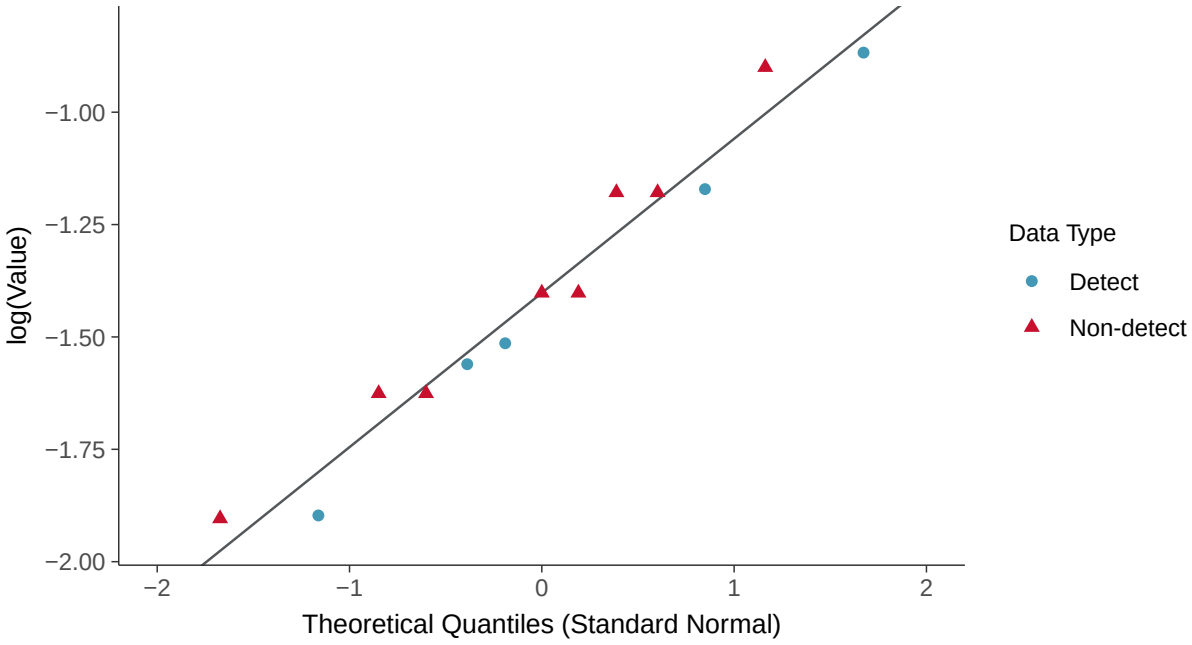
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15015R (ug/L)



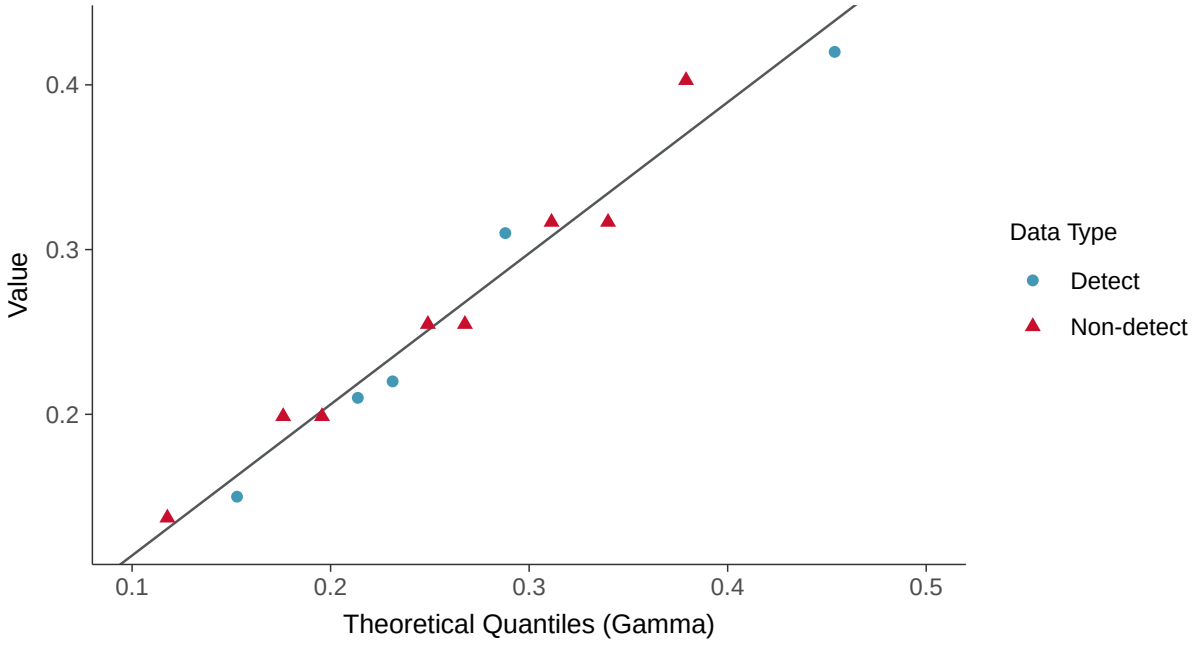

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15015R (ug/L)



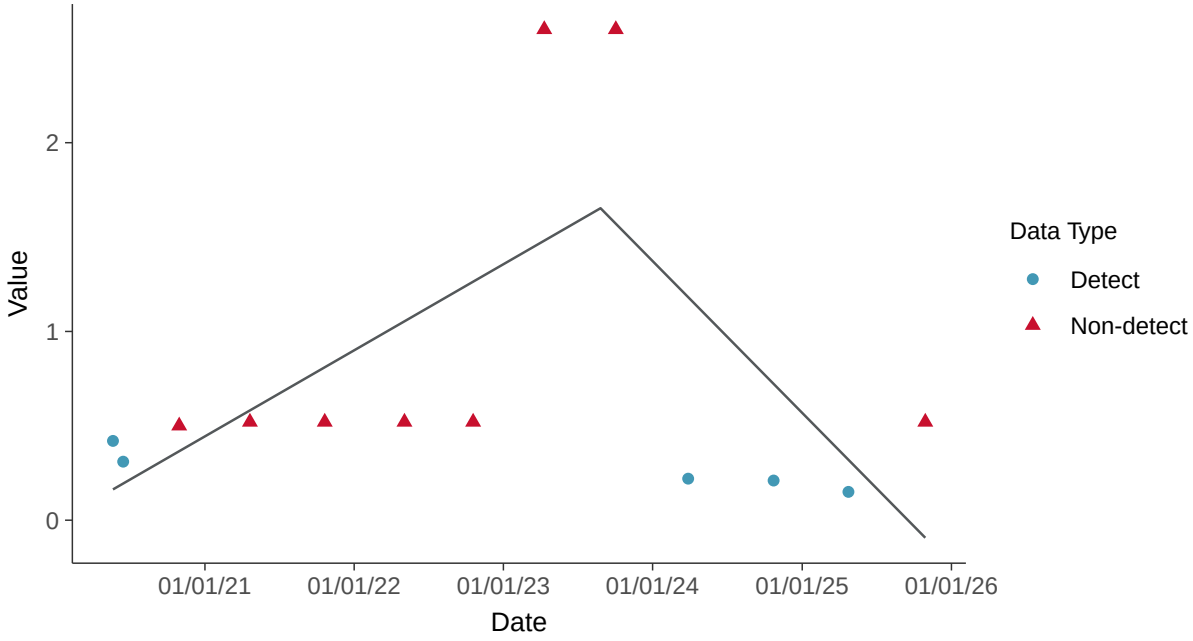
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15015R (ug/L)



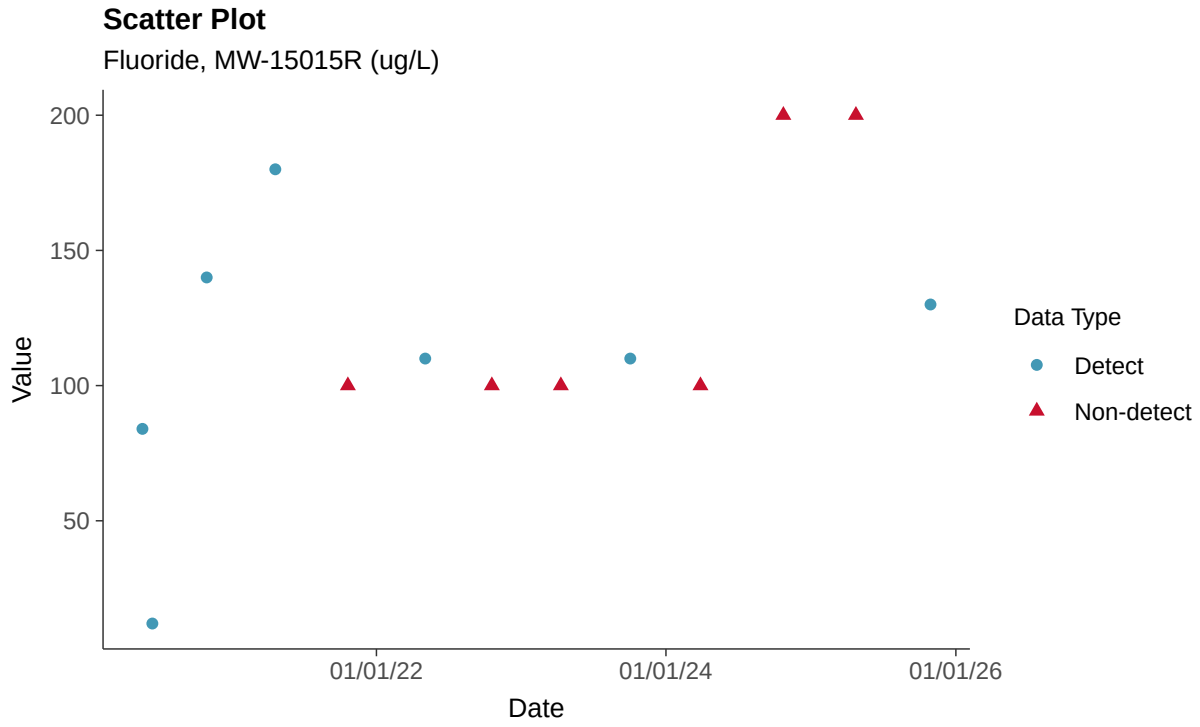

**Trend Regression: Piecewise Linear-Linear**

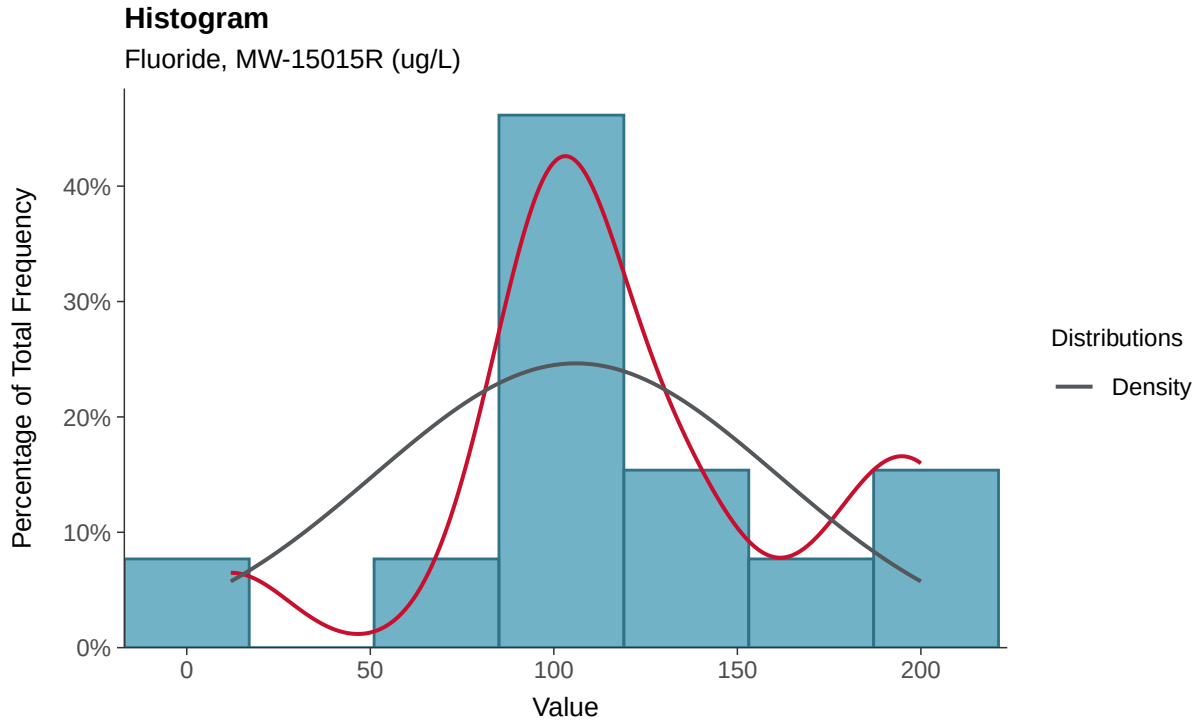
Cobalt, MW-15015R (ug/L)



## Appendix IV: Fluoride, MW-15015R

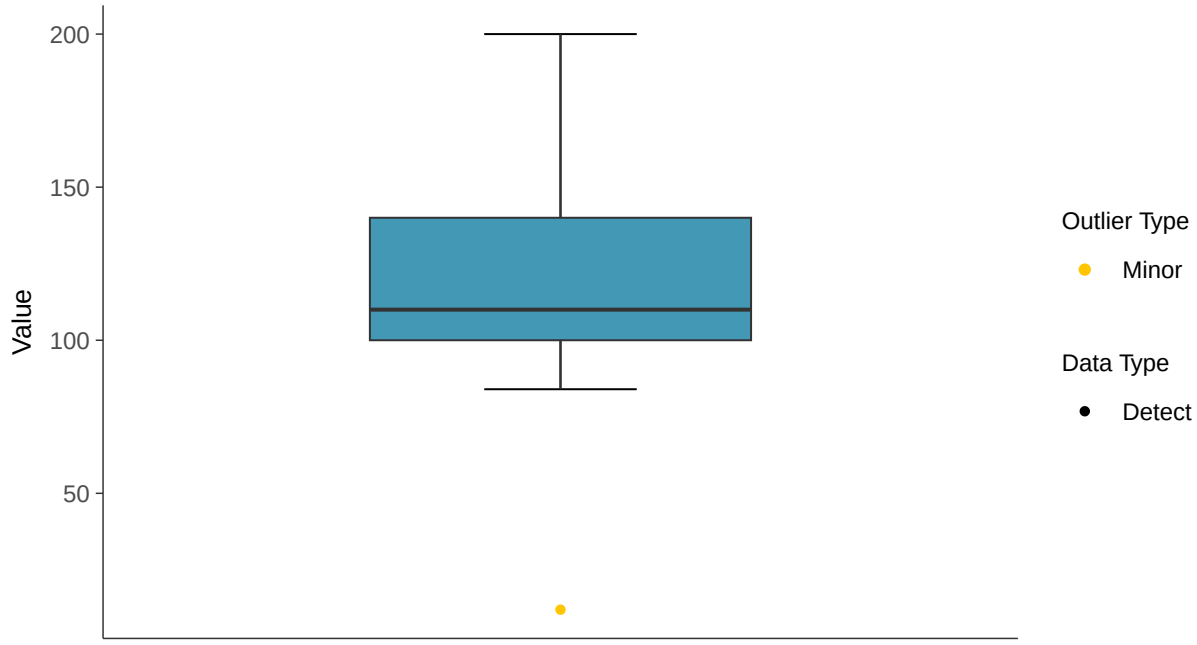
ID: 05_2_114



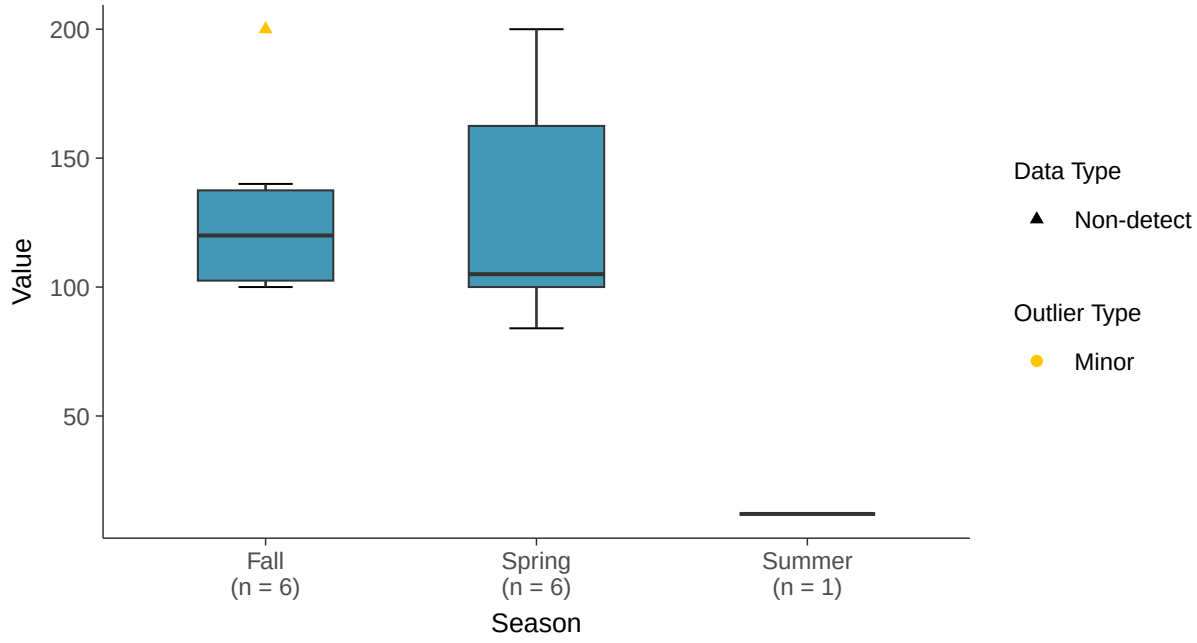
## Boxplot

Fluoride, MW-15015R (ug/L)



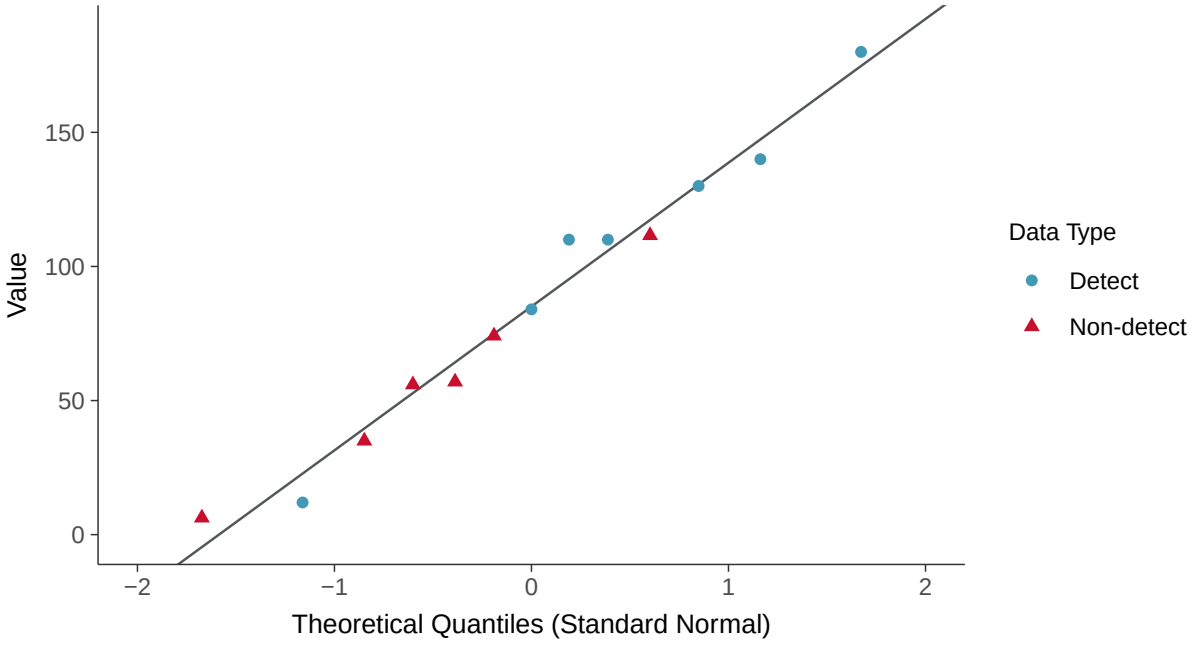

## Boxplot by Season

Fluoride, MW-15015R (ug/L)



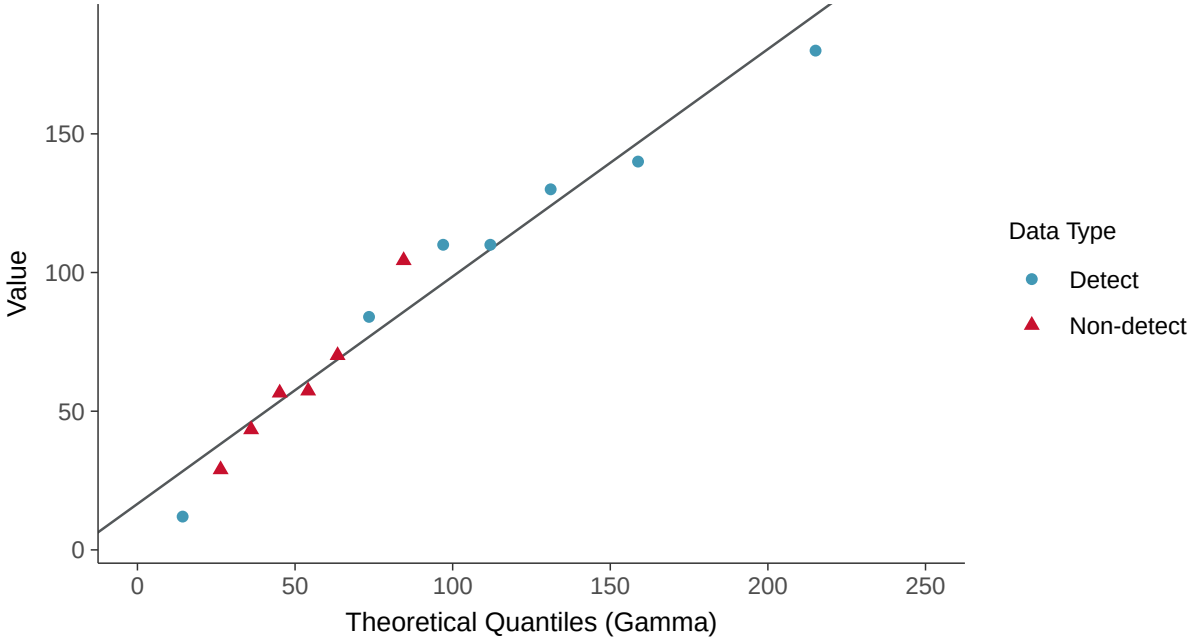
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15015R (ug/L)



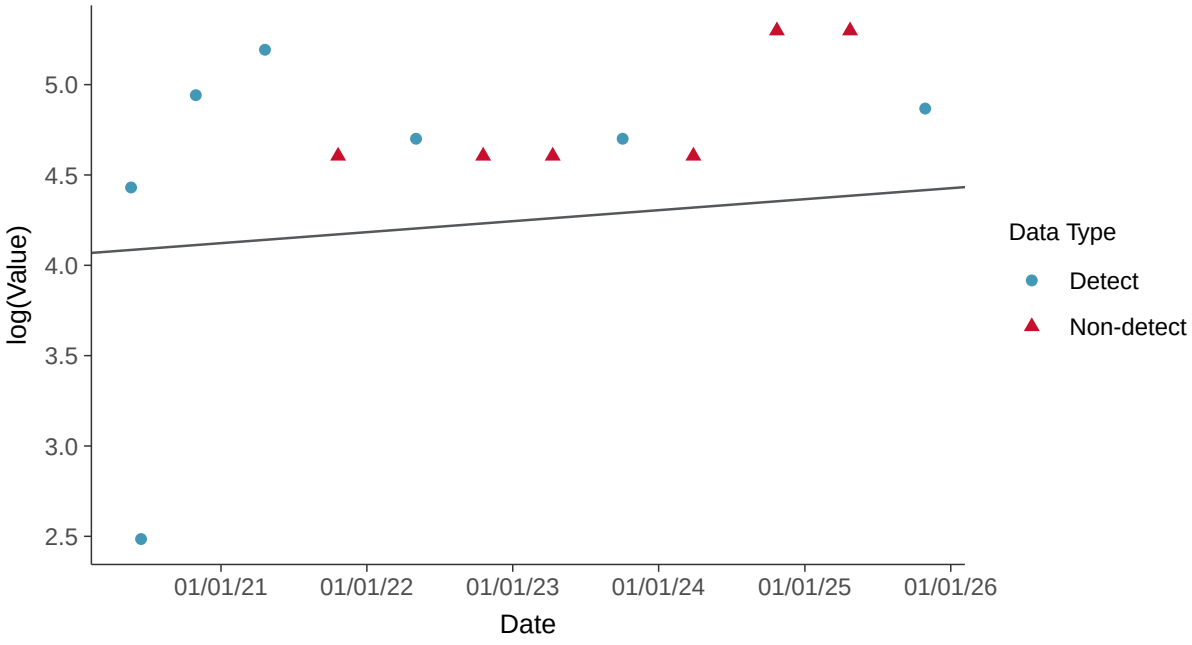

**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15015R (ug/L)



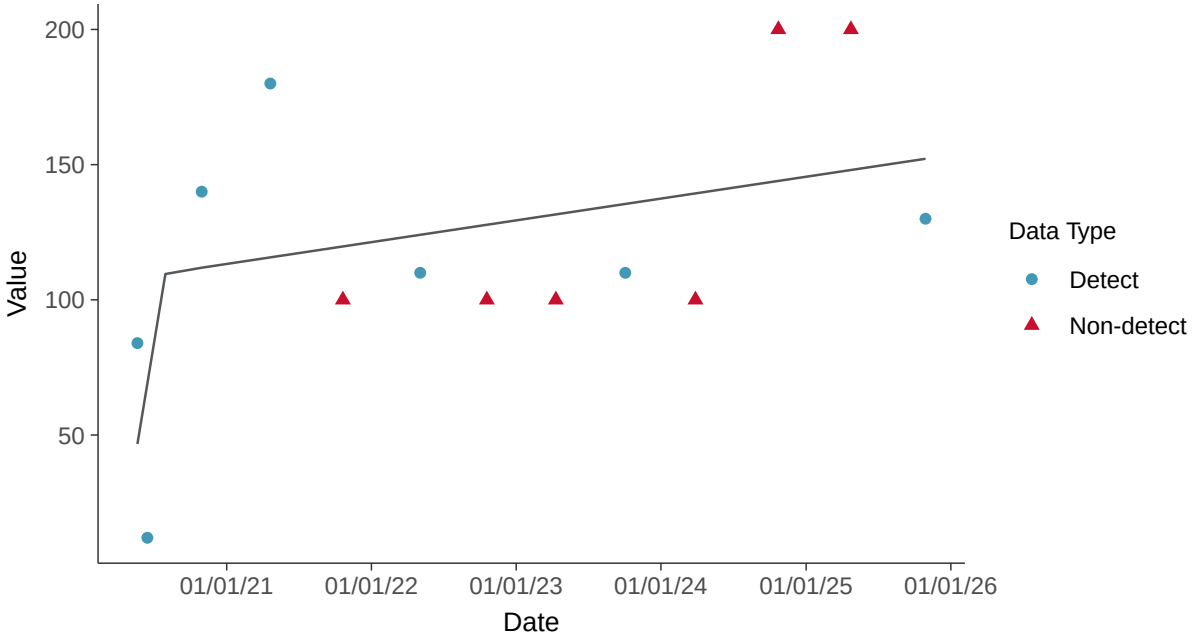
**Trend Regression: Lognormal MLE**

Fluoride, MW-15015R (ug/L)



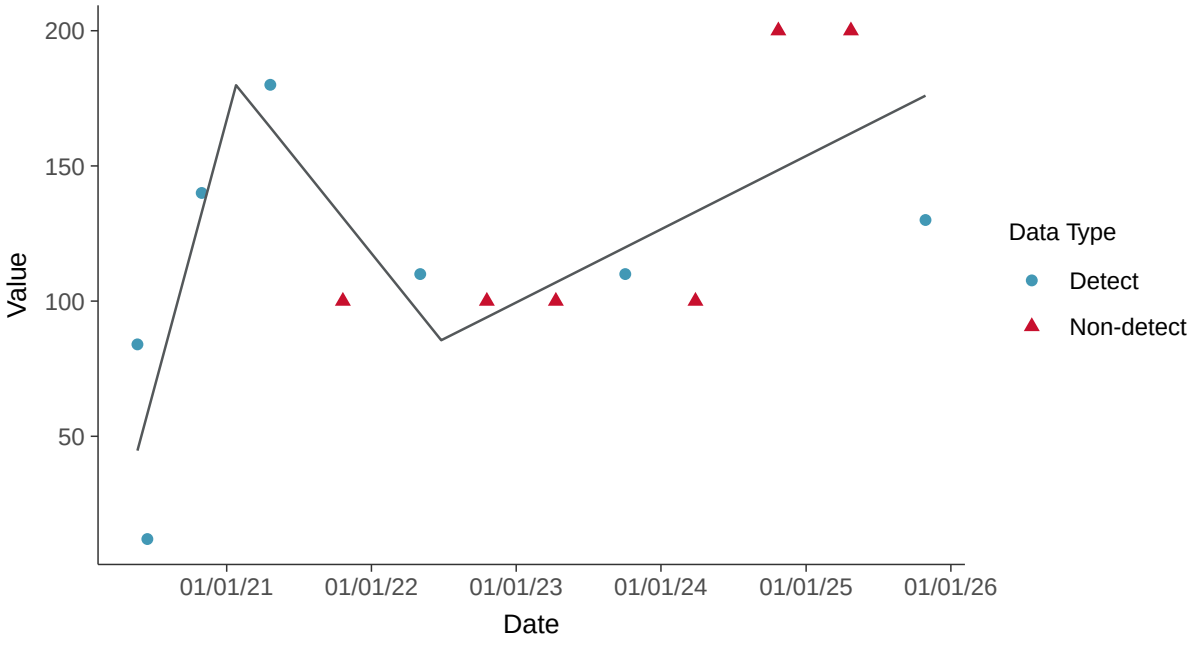

**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15015R (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Fluoride, MW-15015R (ug/L)

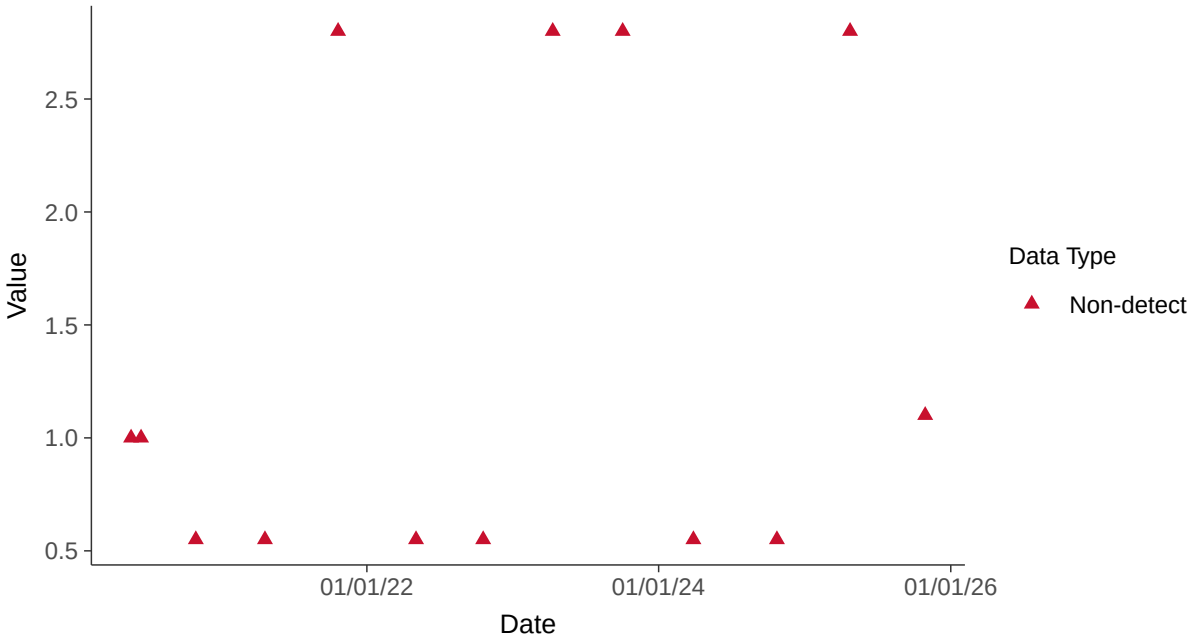


## Appendix IV: Lead, MW-15015R

ID: 05_2_116

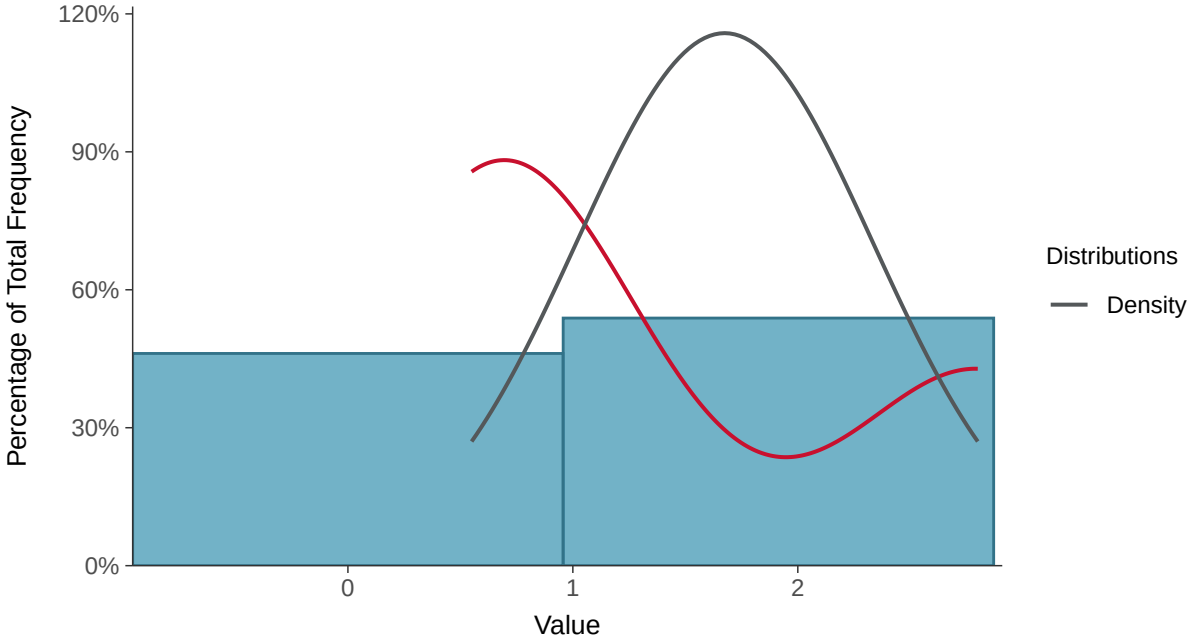
**Scatter Plot**

Lead, MW-15015R (ug/L)



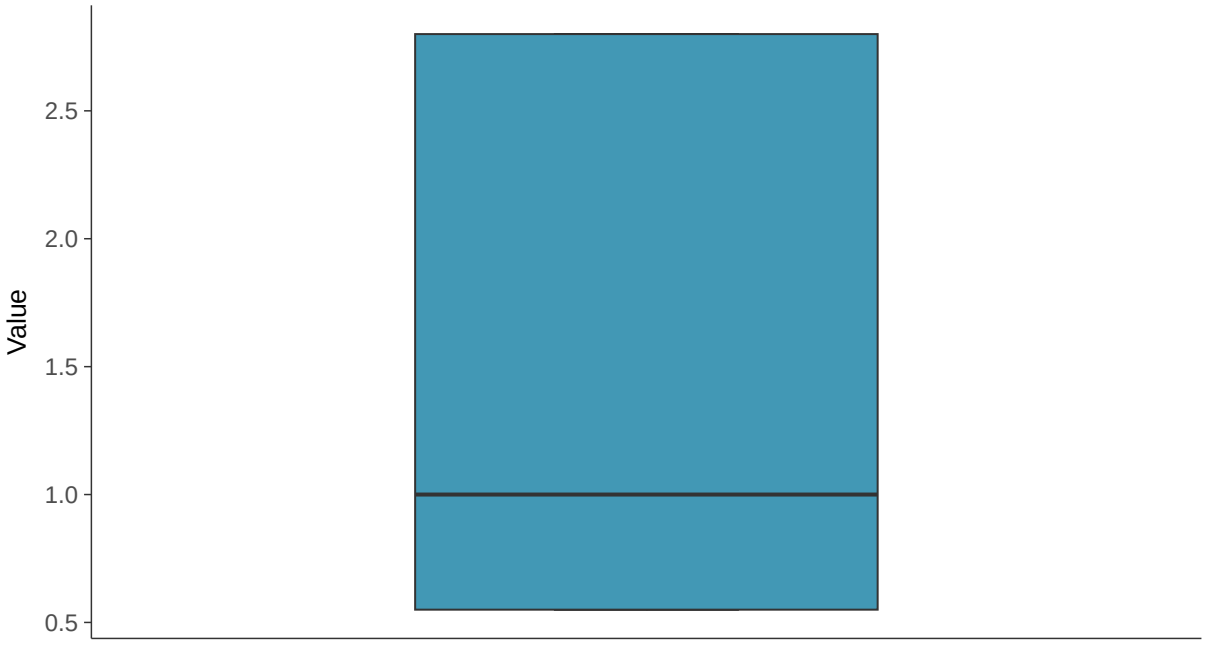

**Histogram**

Lead, MW-15015R (ug/L)



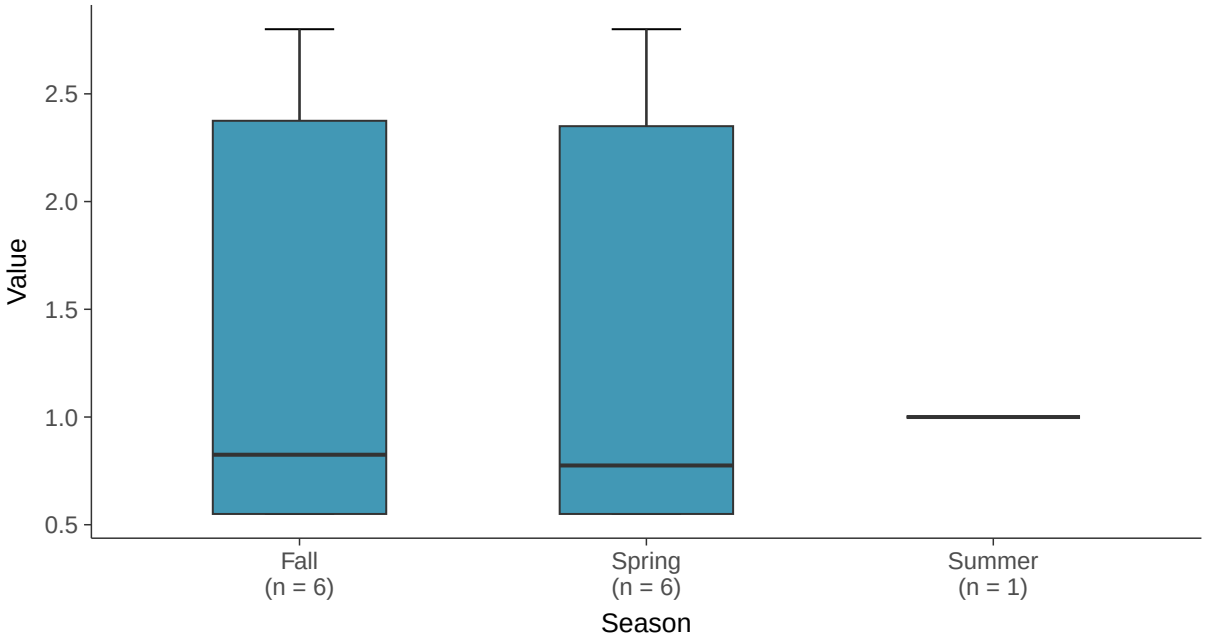
**Boxplot**

Lead, MW-15015R (ug/L)



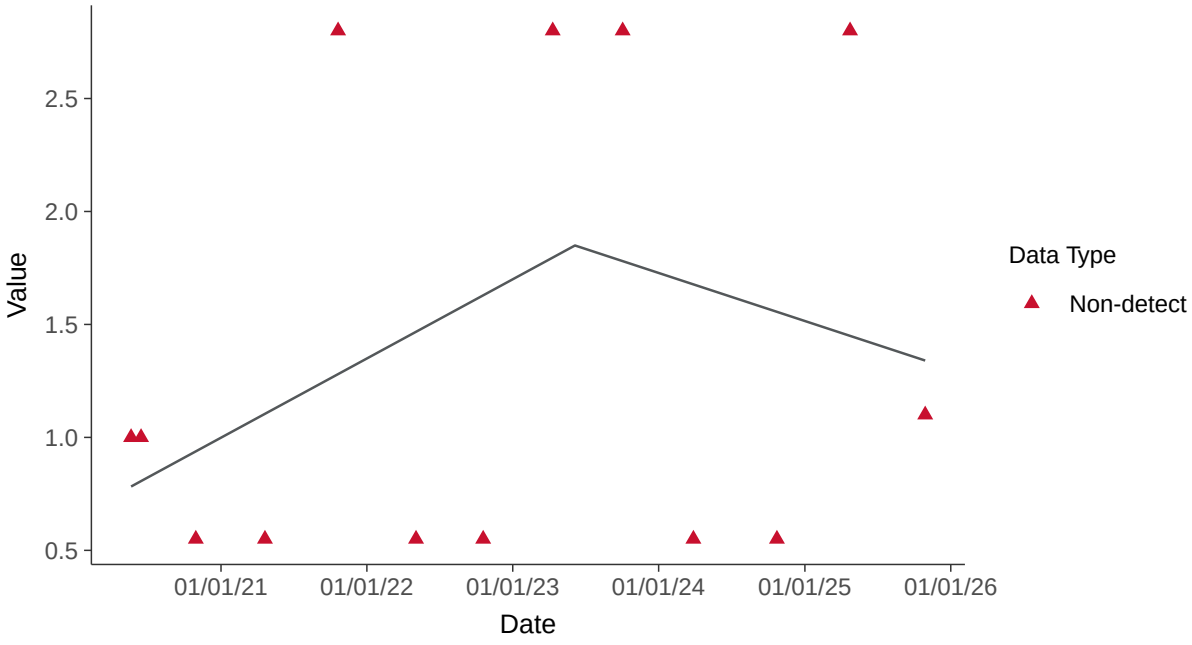

**Boxplot by Season**

Lead, MW-15015R (ug/L)



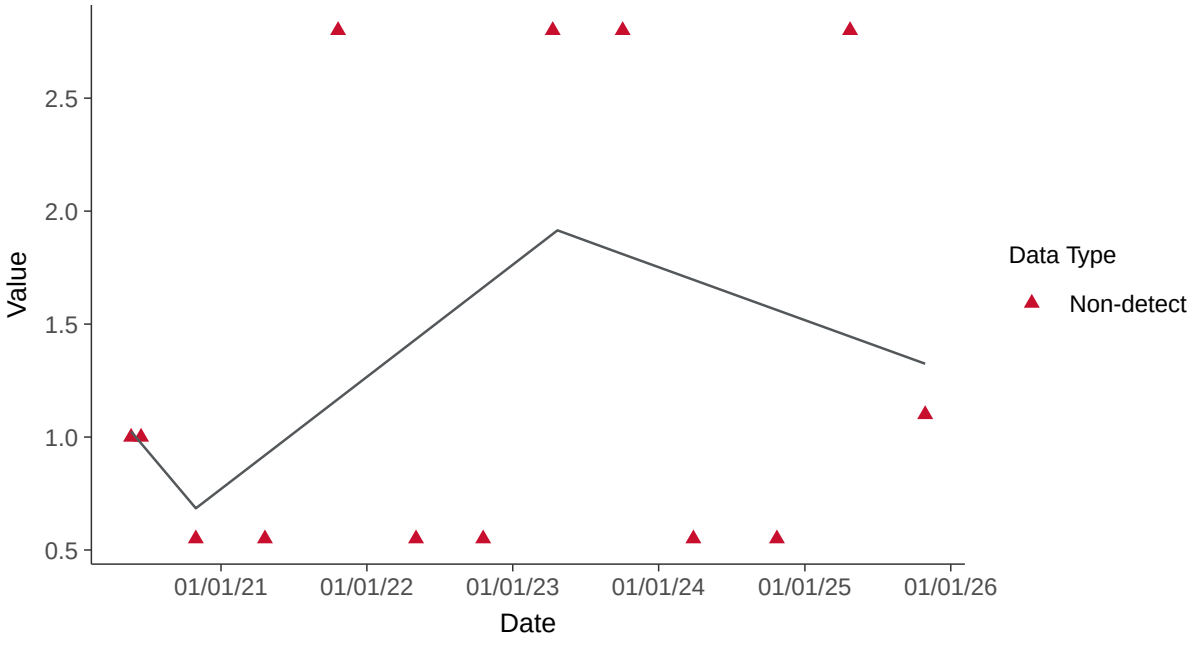
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15015R (ug/L)



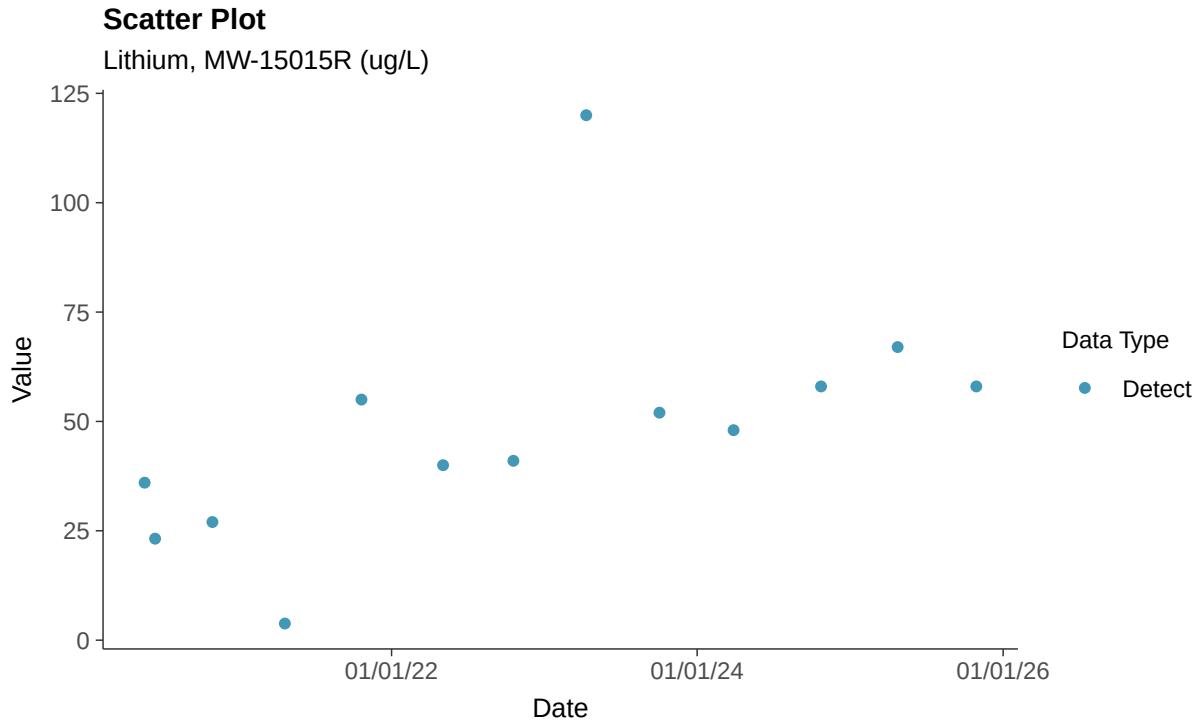

**Trend Regression: Piecewise Linear-Linear-Linear**

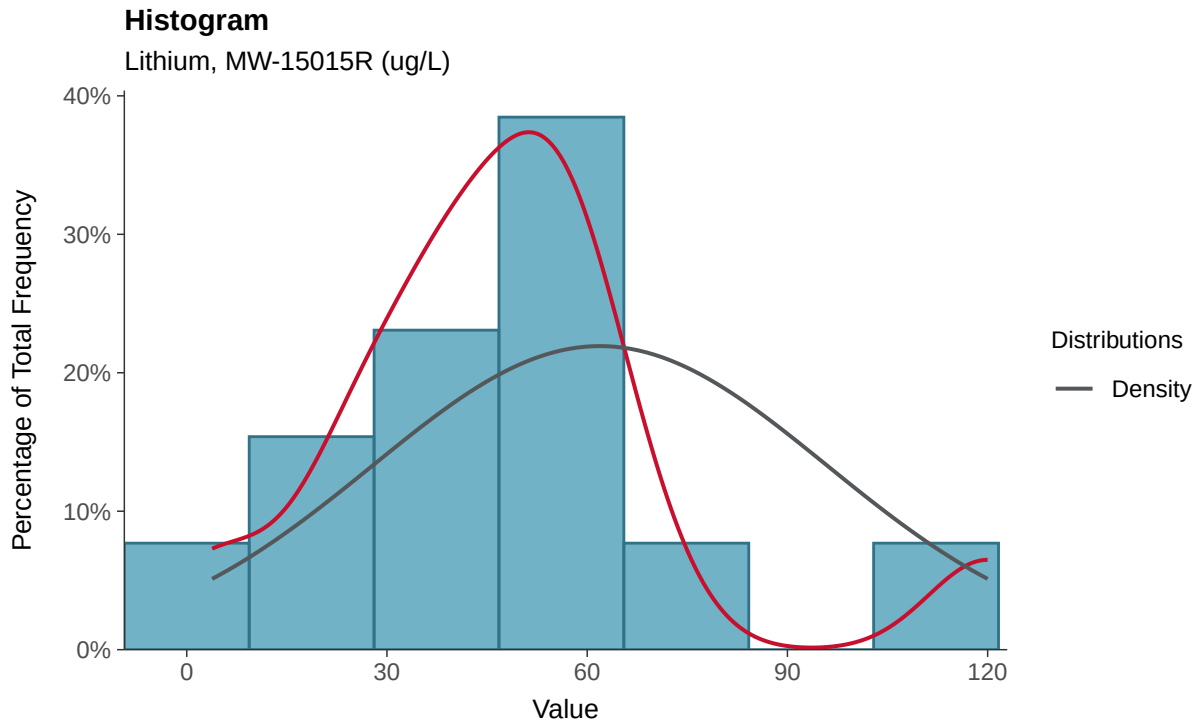
Lead, MW-15015R (ug/L)



## Appendix IV: Lithium, MW-15015R

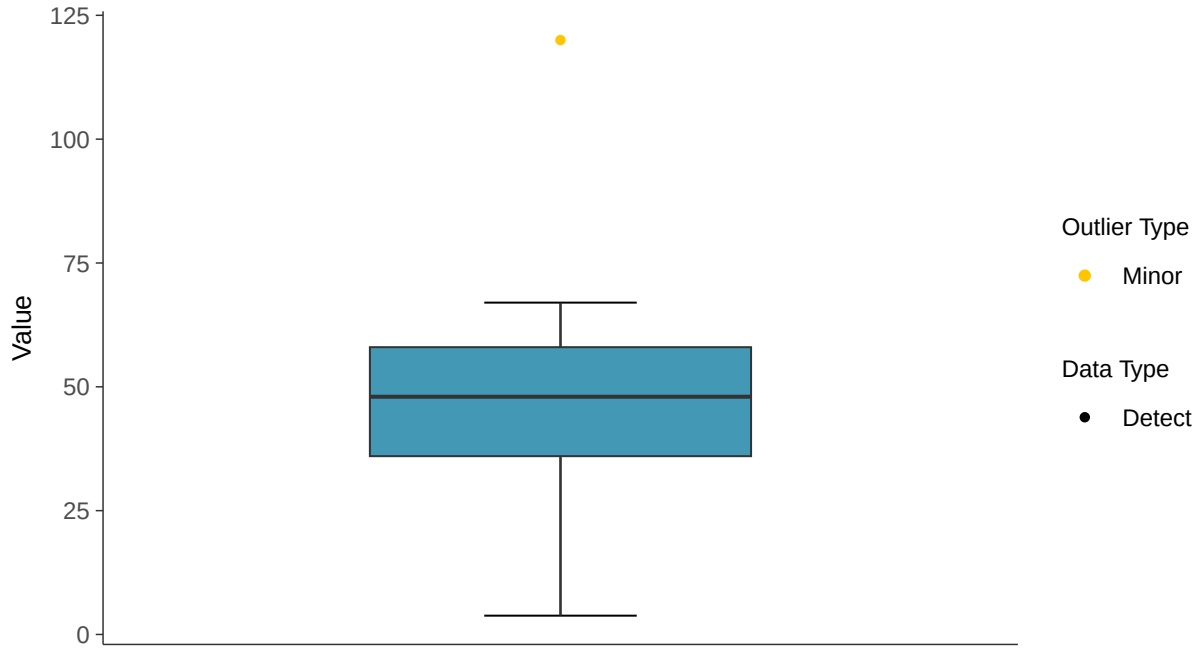
ID: 05_2_117



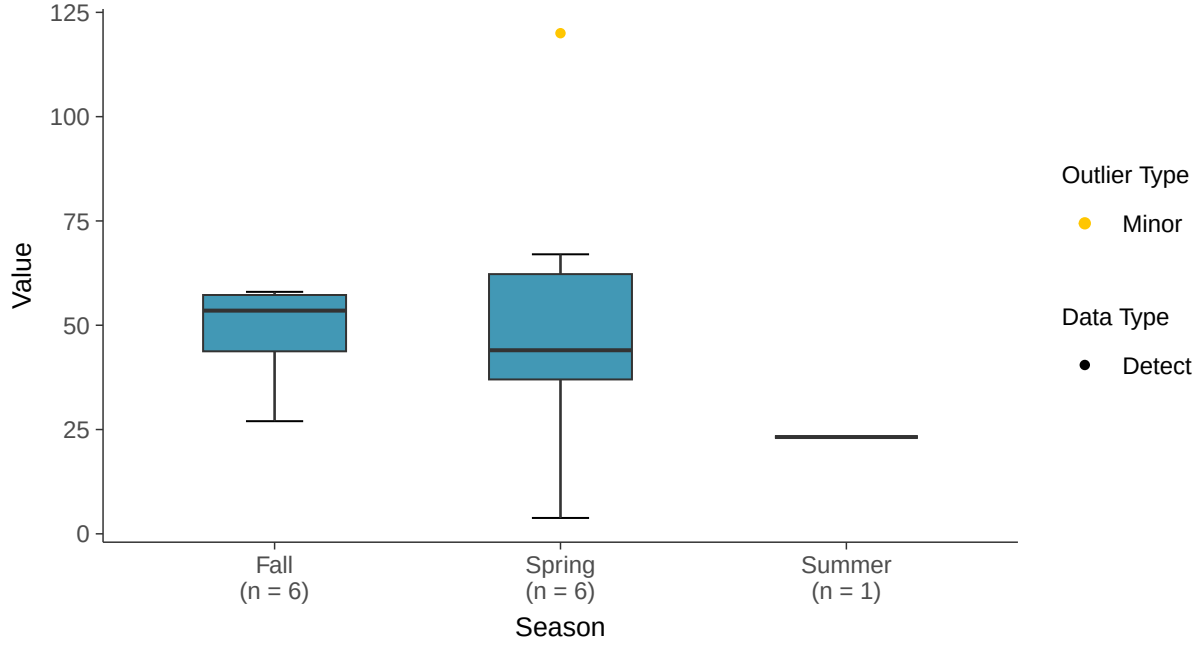
## Boxplot

Lithium, MW-15015R (ug/L)



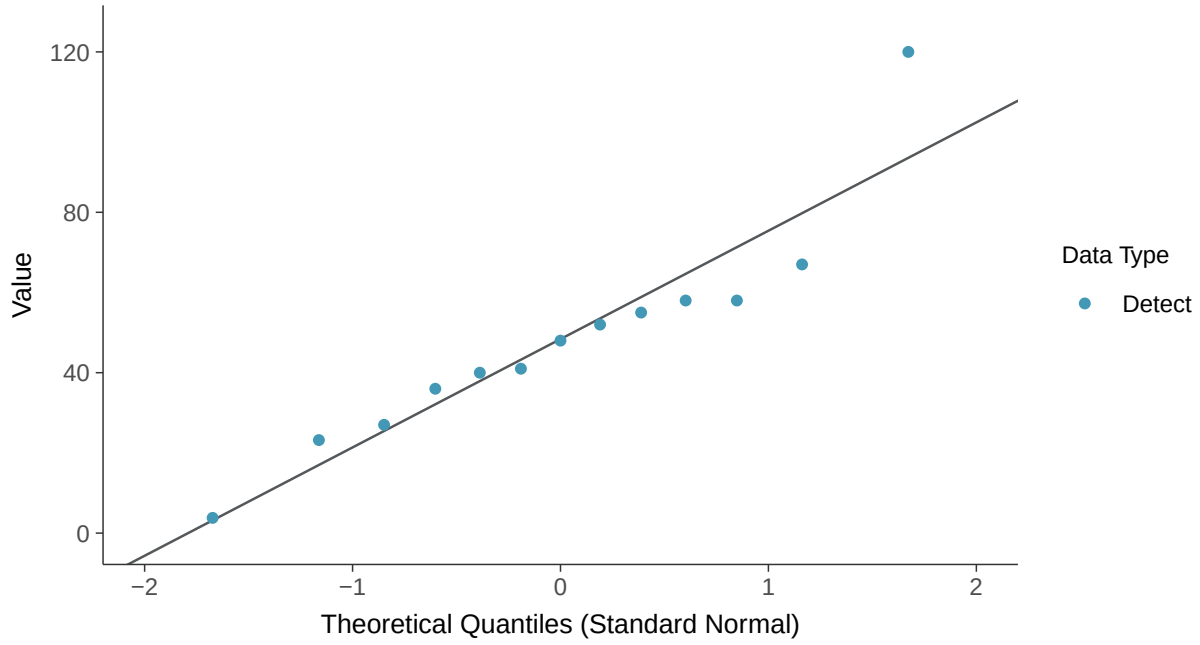

## Boxplot by Season

Lithium, MW-15015R (ug/L)



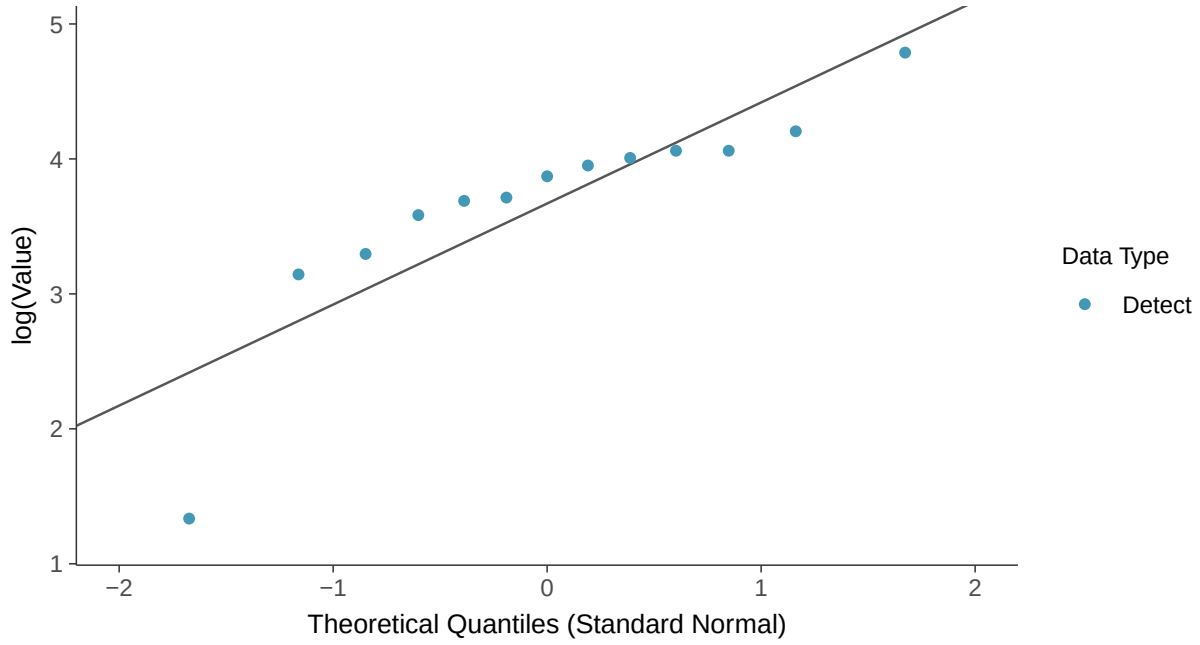
**Normal Q-Q plot**

Lithium, MW-15015R (ug/L)



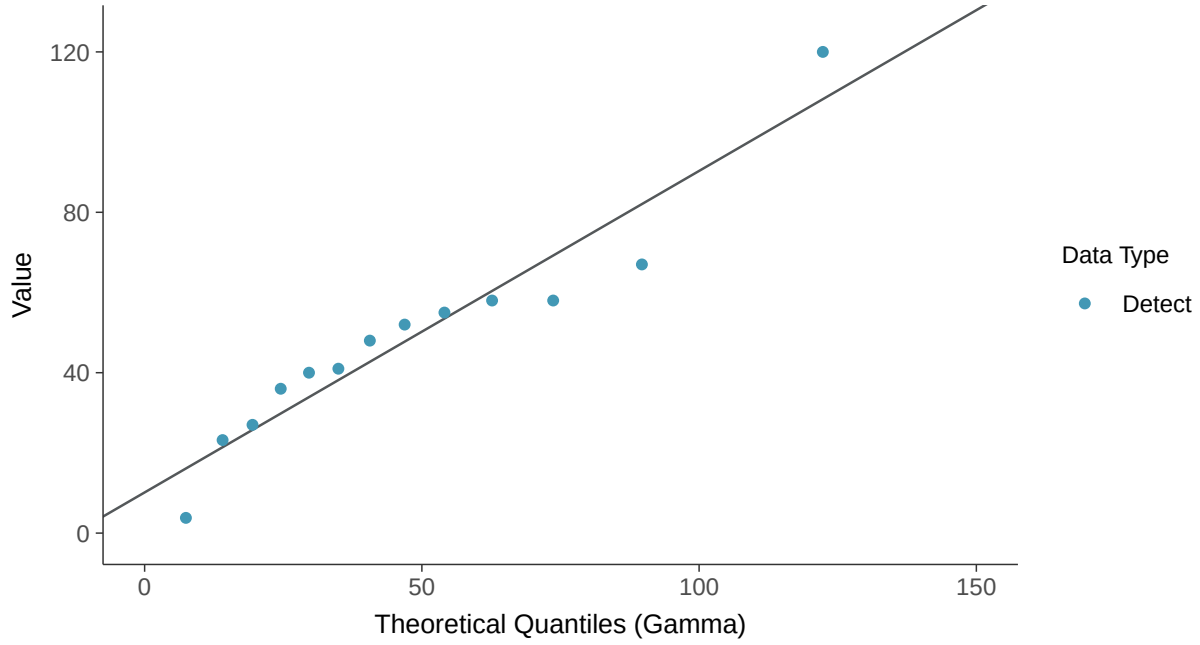

**Lognormal Q-Q plot**

Lithium, MW-15015R (ug/L)



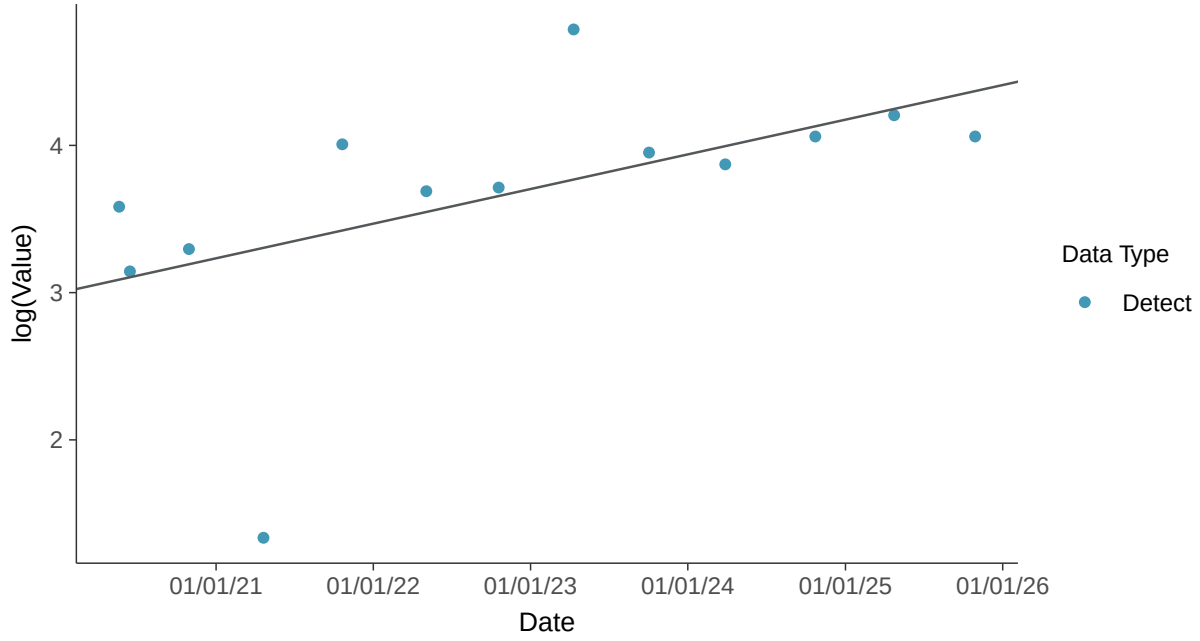
**Gamma Q-Q plot**

Lithium, MW-15015R (ug/L)



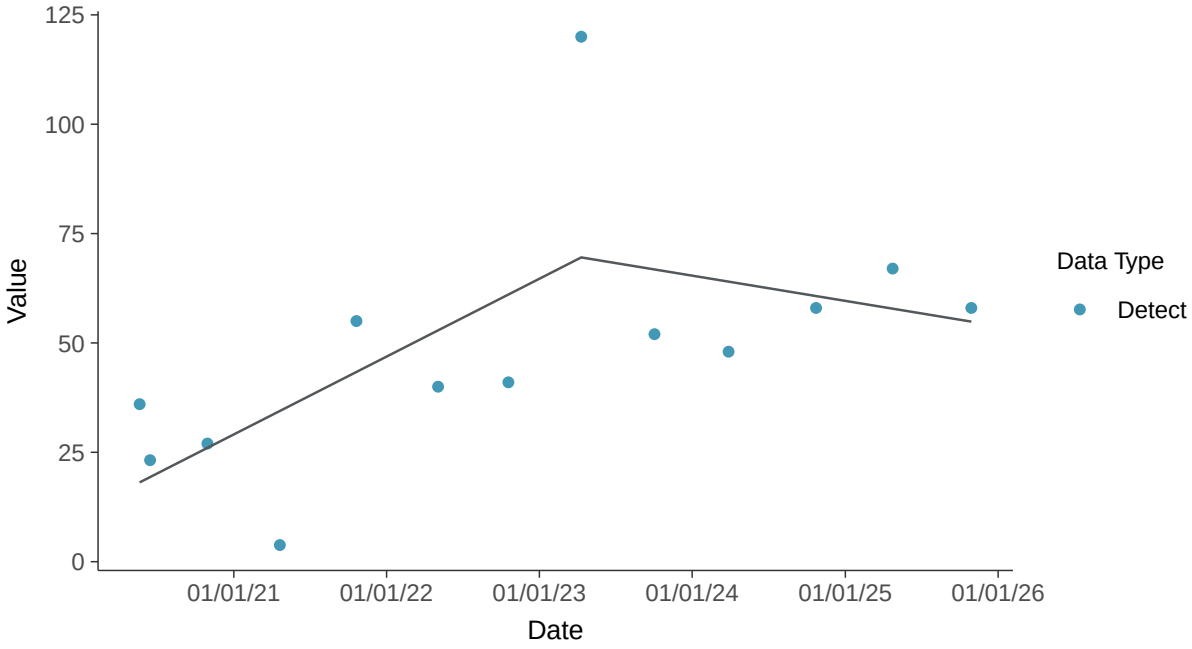

**Trend Regression: Lognormal MLE**

Lithium, MW-15015R (ug/L)



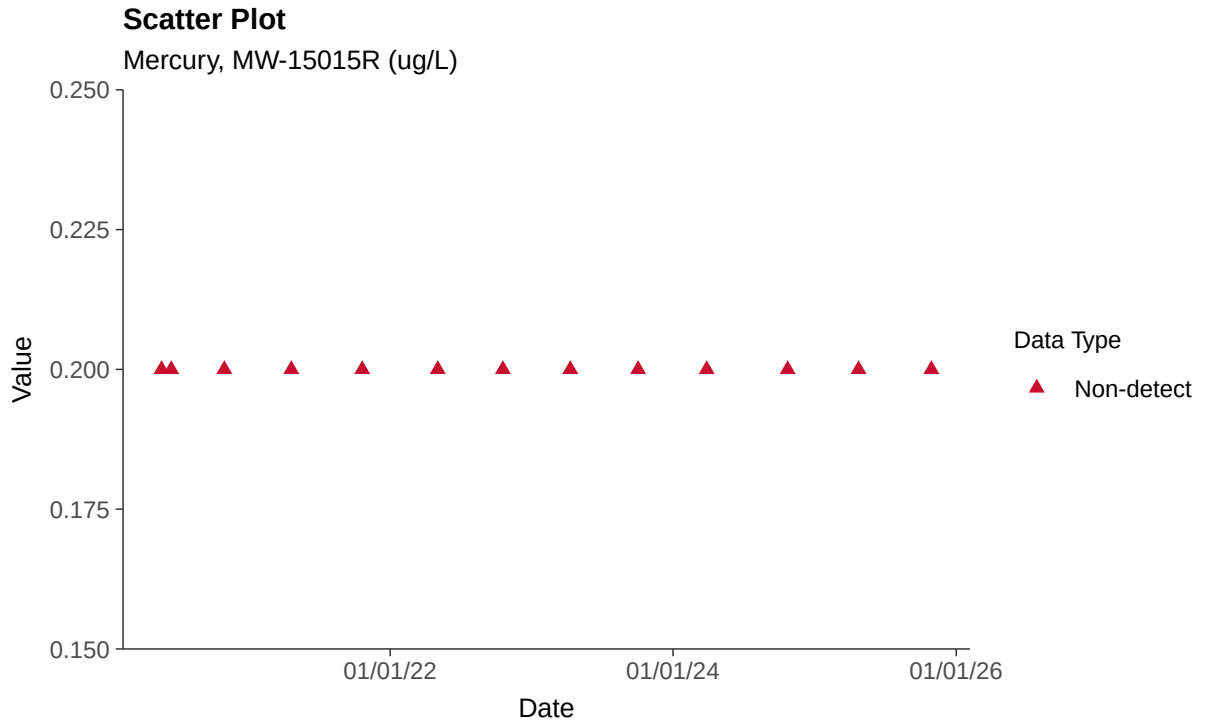
## Trend Regression: Piecewise Linear-Linear

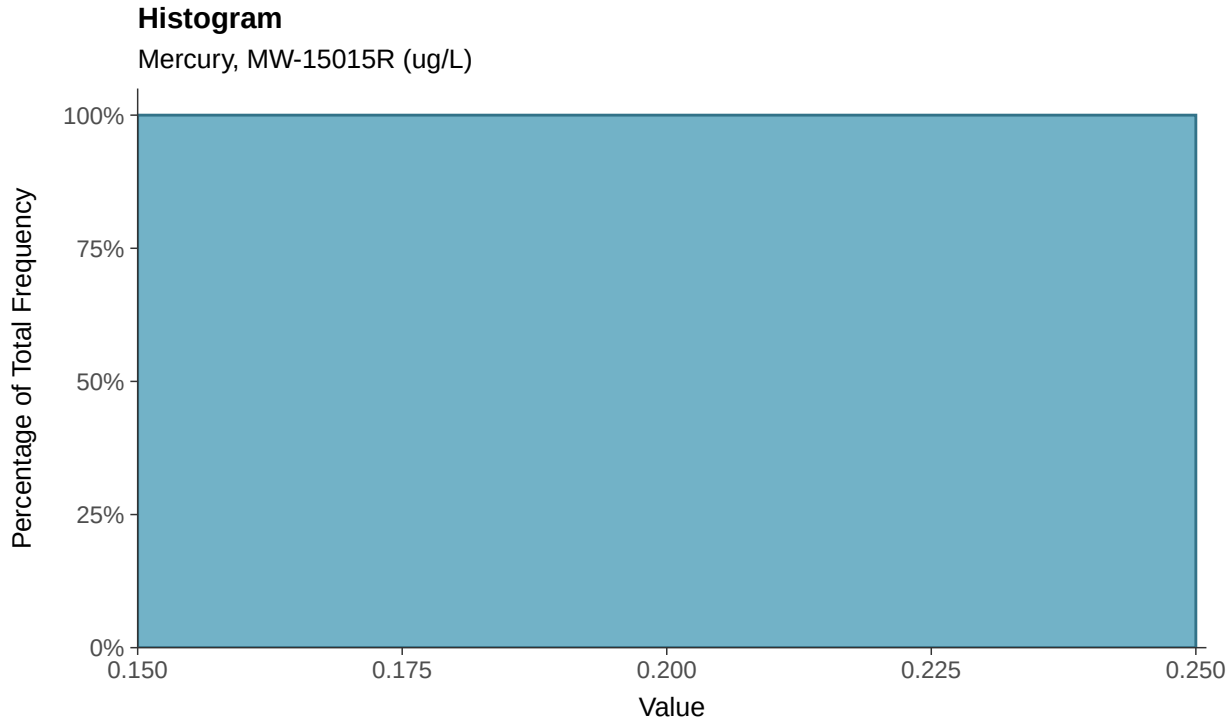
Lithium, MW-15015R (ug/L)



## Appendix IV: Mercury, MW-15015R

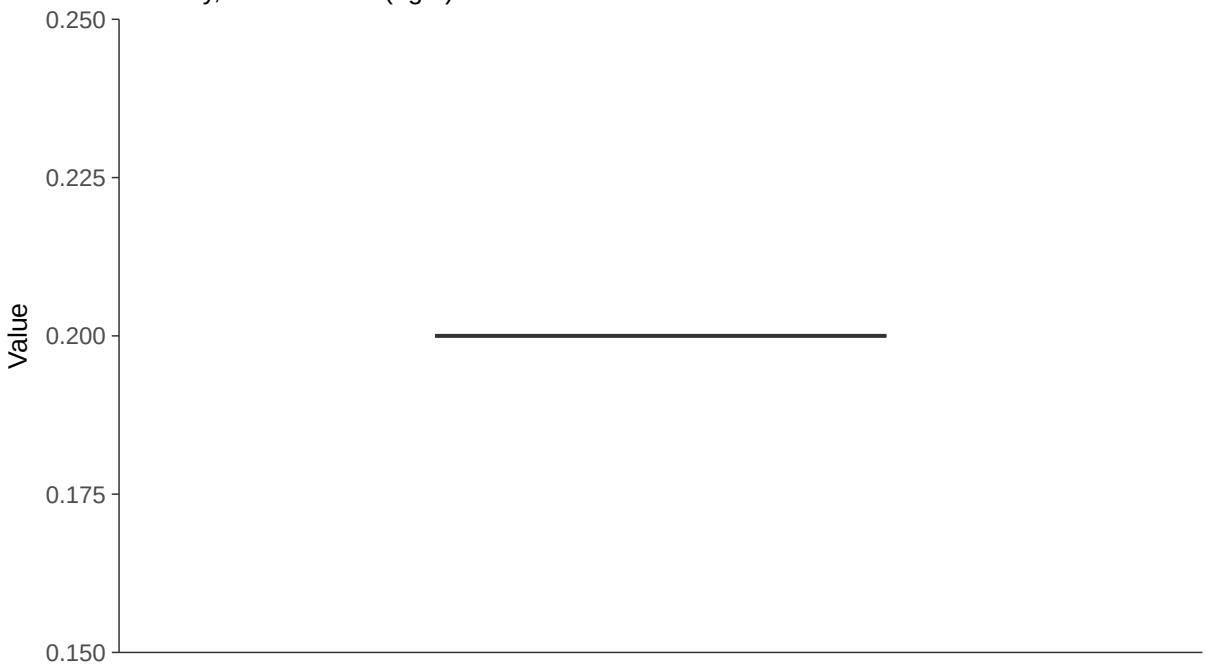
ID: 05_2_118



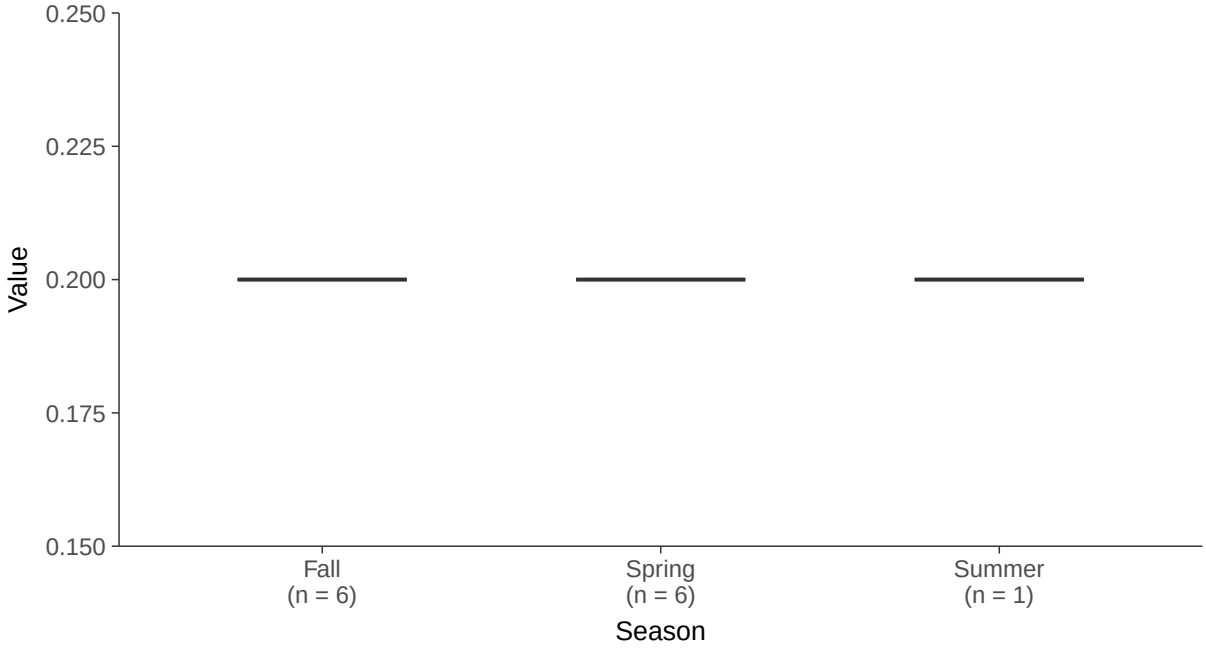
**Boxplot**

Mercury, MW-15015R (ug/L)




**Boxplot by Season**

Mercury, MW-15015R (ug/L)

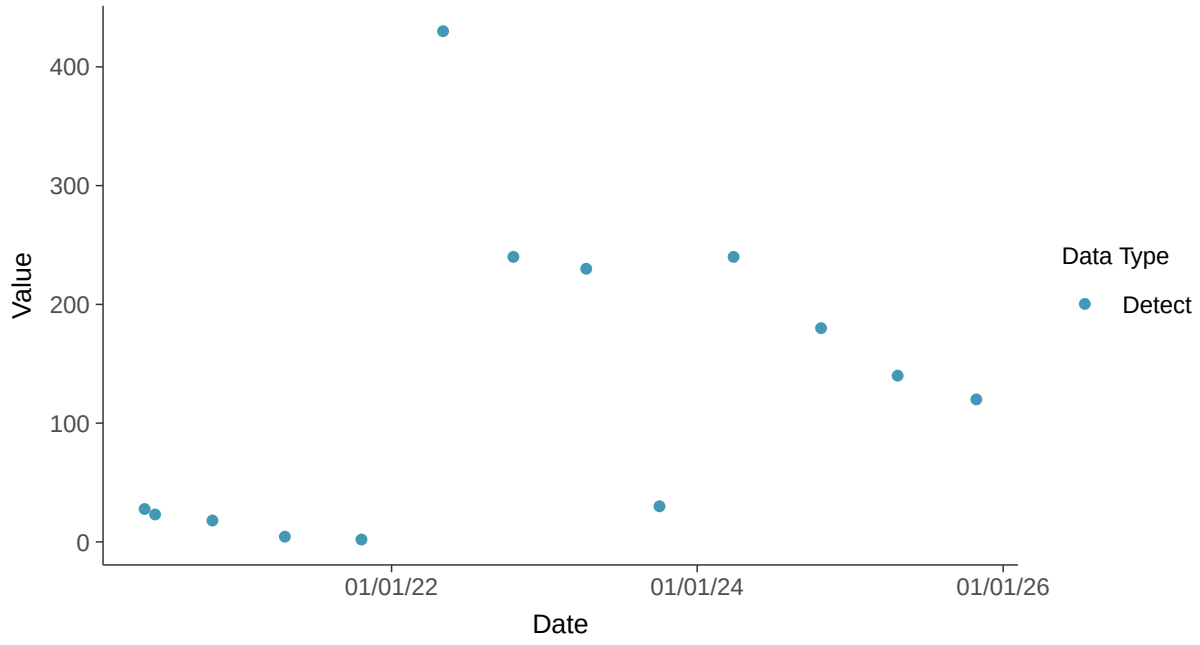


## Appendix IV: Molybdenum, MW-15015R

ID: 05_2_119

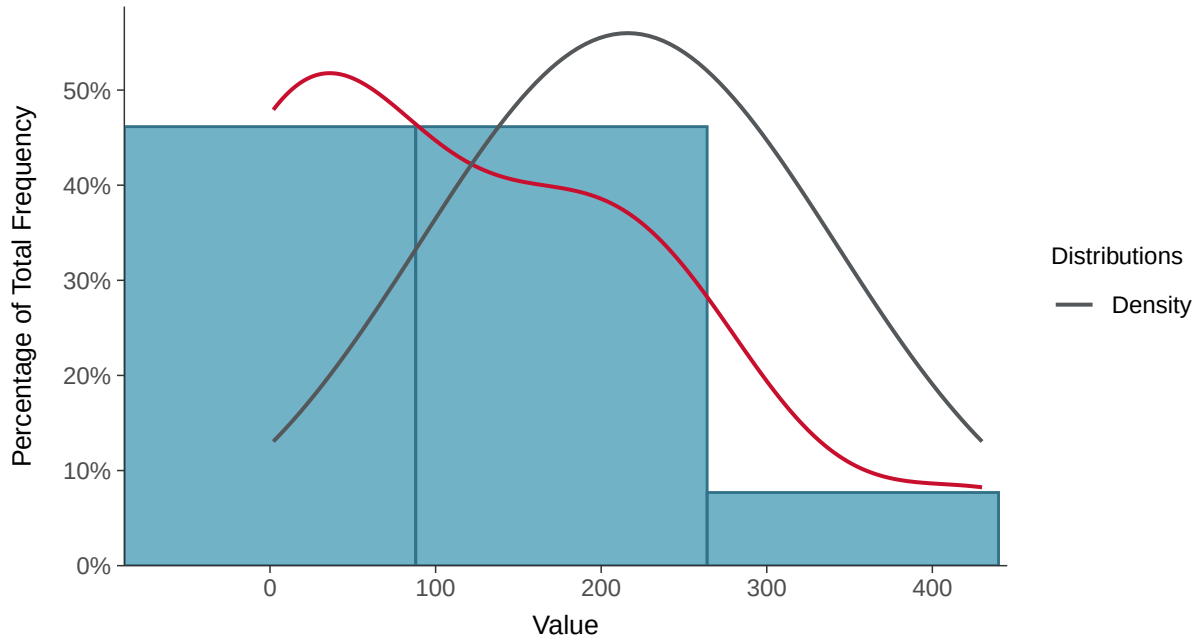
**Scatter Plot**

Molybdenum, MW-15015R (ug/L)



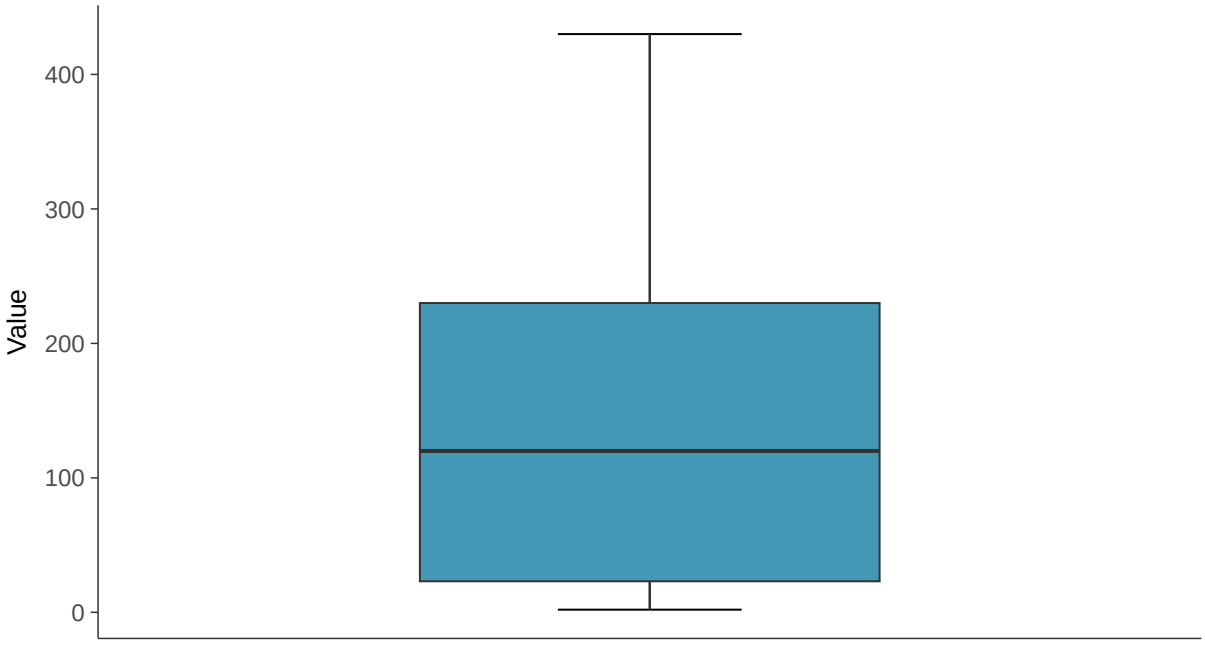

**Histogram**

Molybdenum, MW-15015R (ug/L)



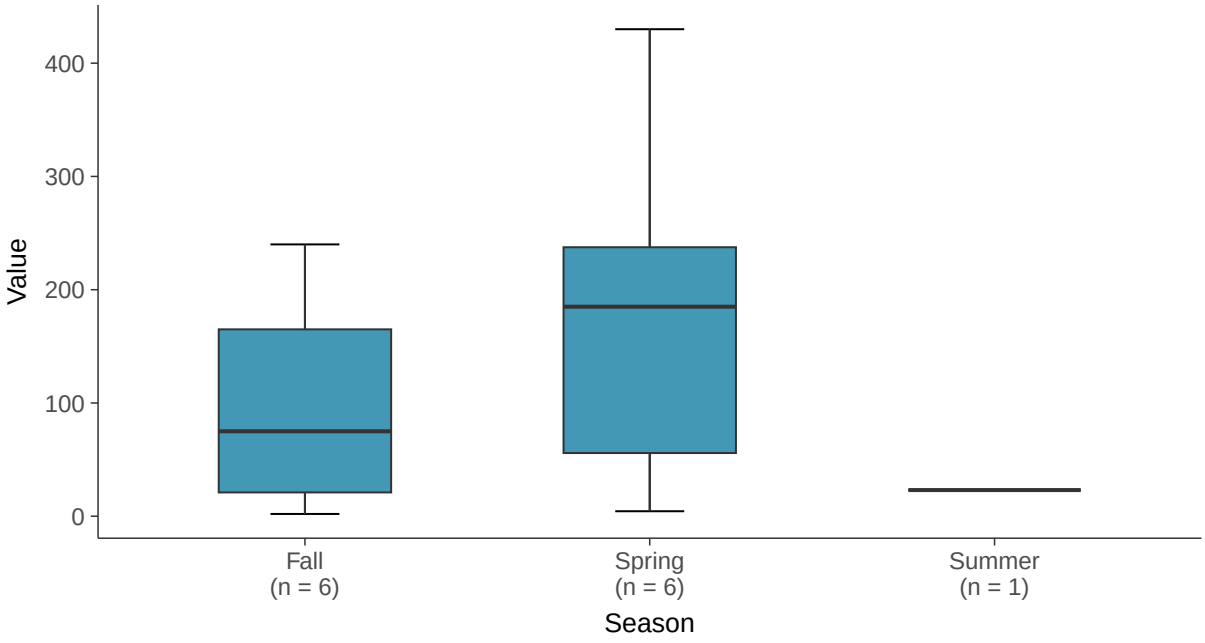
**Boxplot**

Molybdenum, MW-15015R (ug/L)



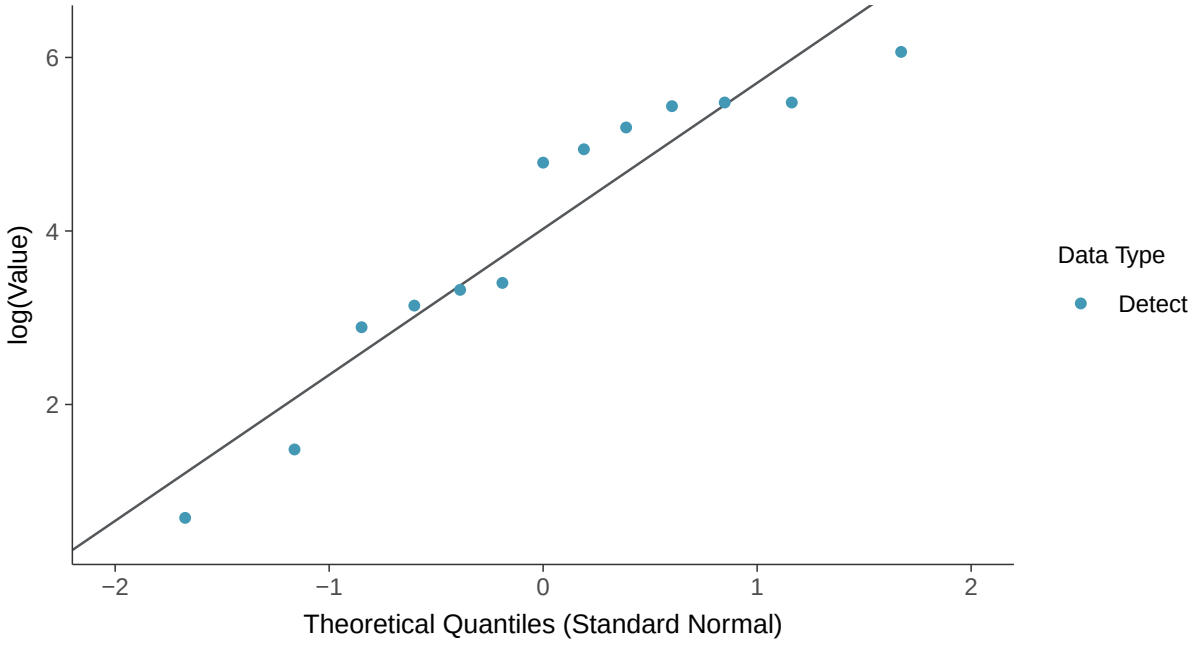

**Boxplot by Season**

Molybdenum, MW-15015R (ug/L)



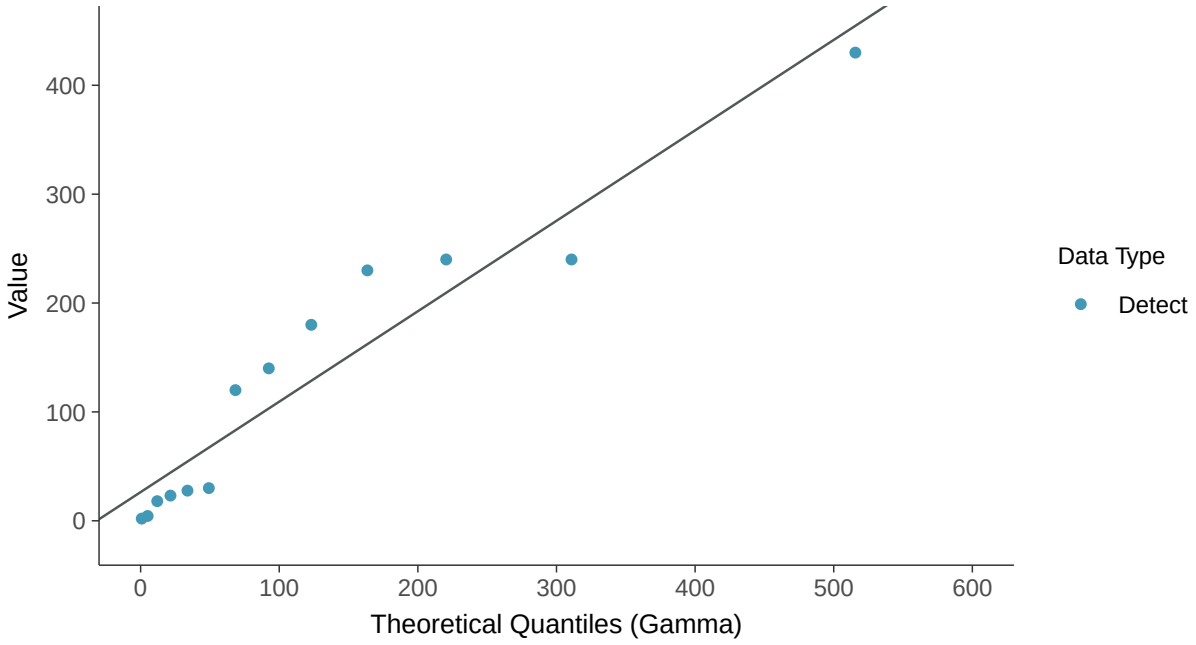
**Lognormal Q-Q plot**

Molybdenum, MW-15015R (ug/L)



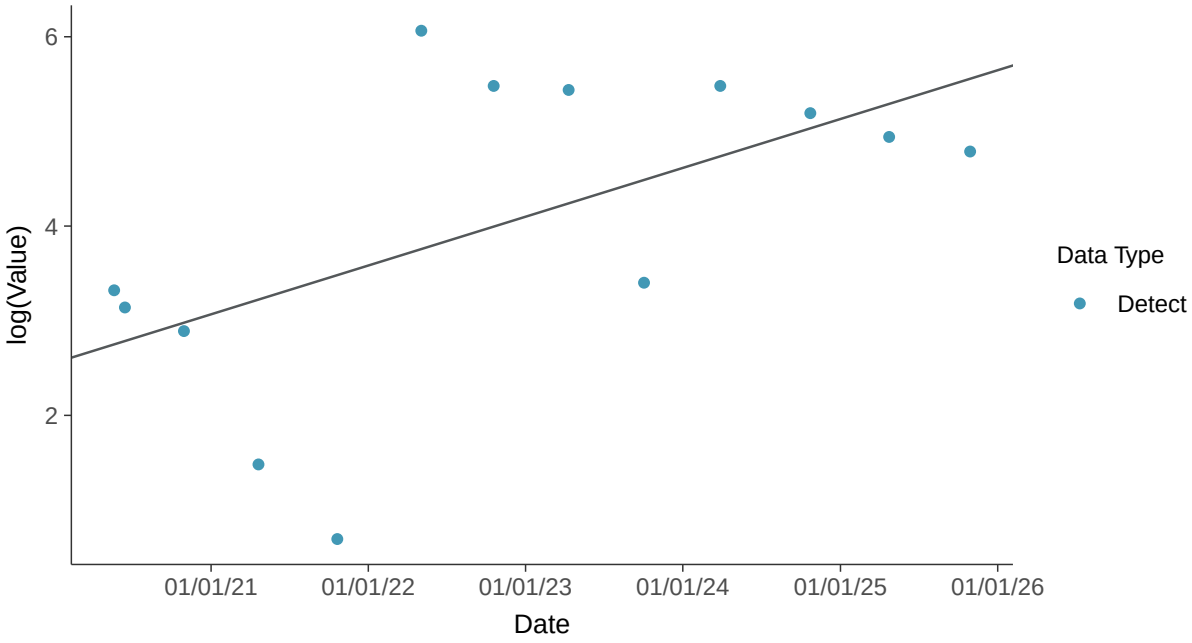

**Gamma Q-Q plot**

Molybdenum, MW-15015R (ug/L)



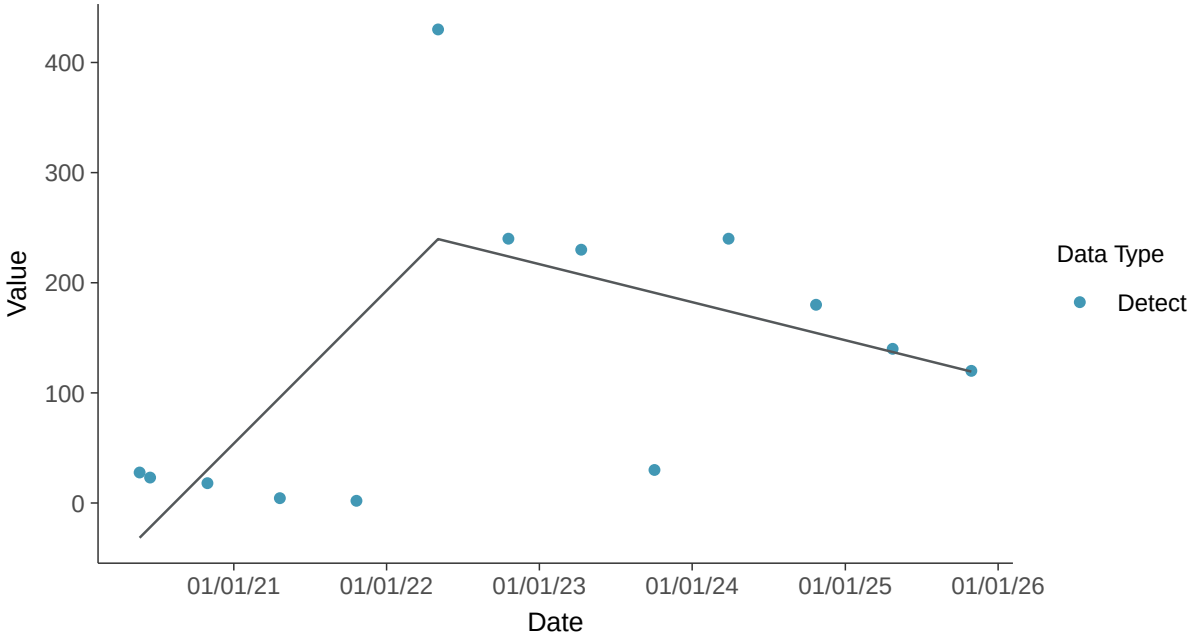
**Trend Regression: Lognormal MLE**

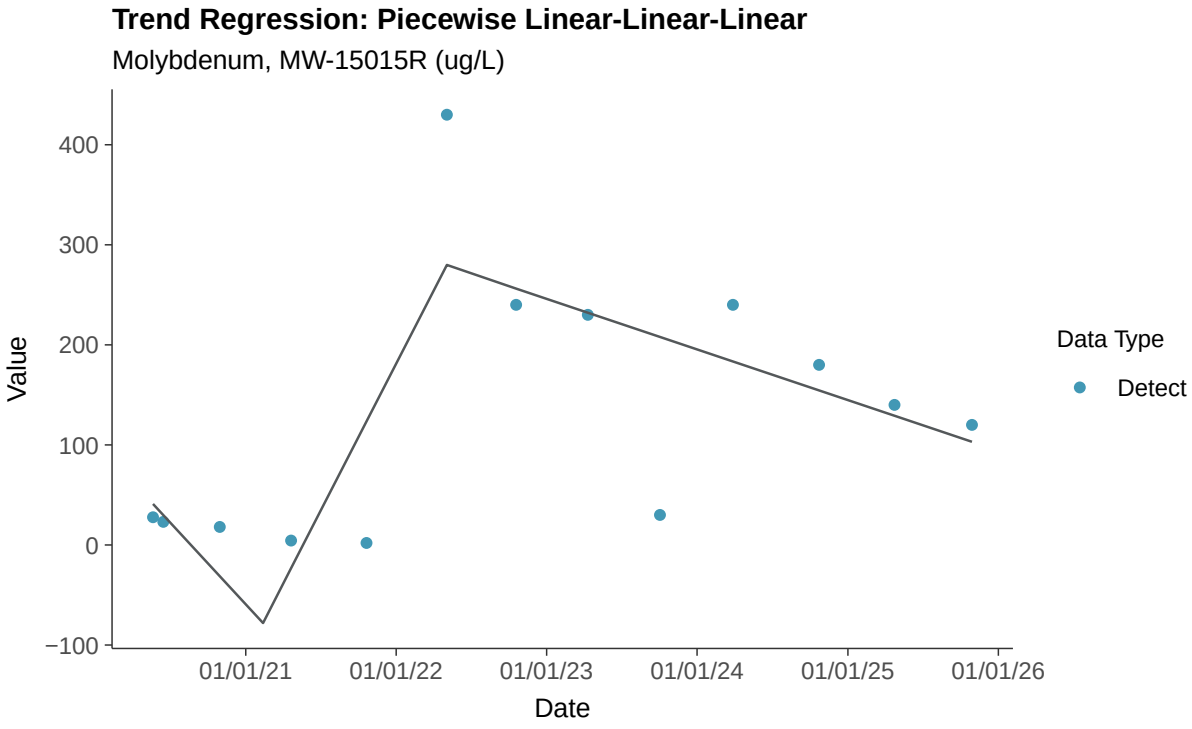
Molybdenum, MW-15015R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15015R (ug/L)



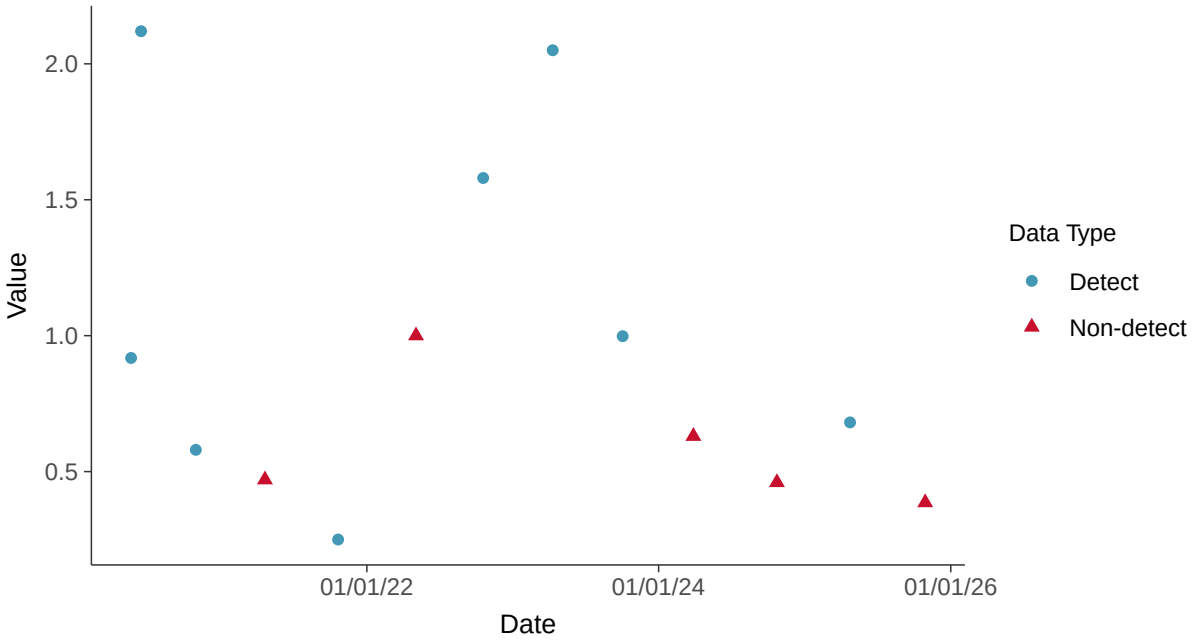

Trend Regression: Piecewise Linear-Linear-Linear
Molybdenum, MW-15015R (ug/L)
Value
400
300
200
100
0
−100
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Detect

## Appendix IV: Radium-226+228, MW-15015R

ID: 05_2_125

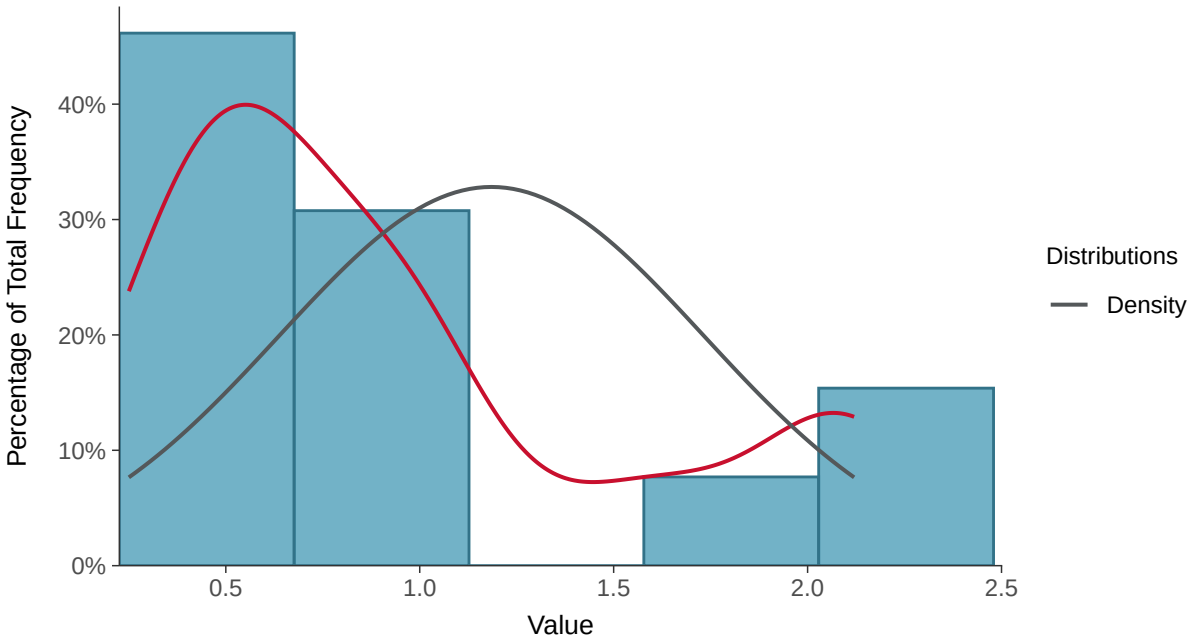
**Scatter Plot**

Radium-226+228, MW-15015R (pCi/L)



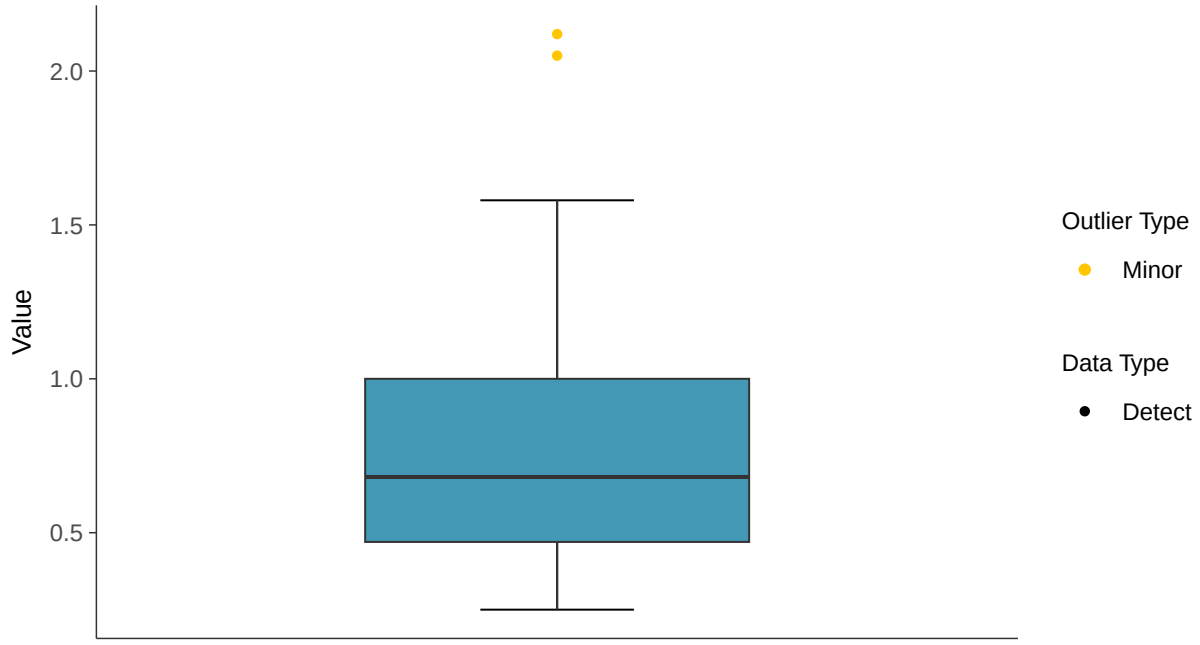

**Histogram**

Radium-226+228, MW-15015R (pCi/L)



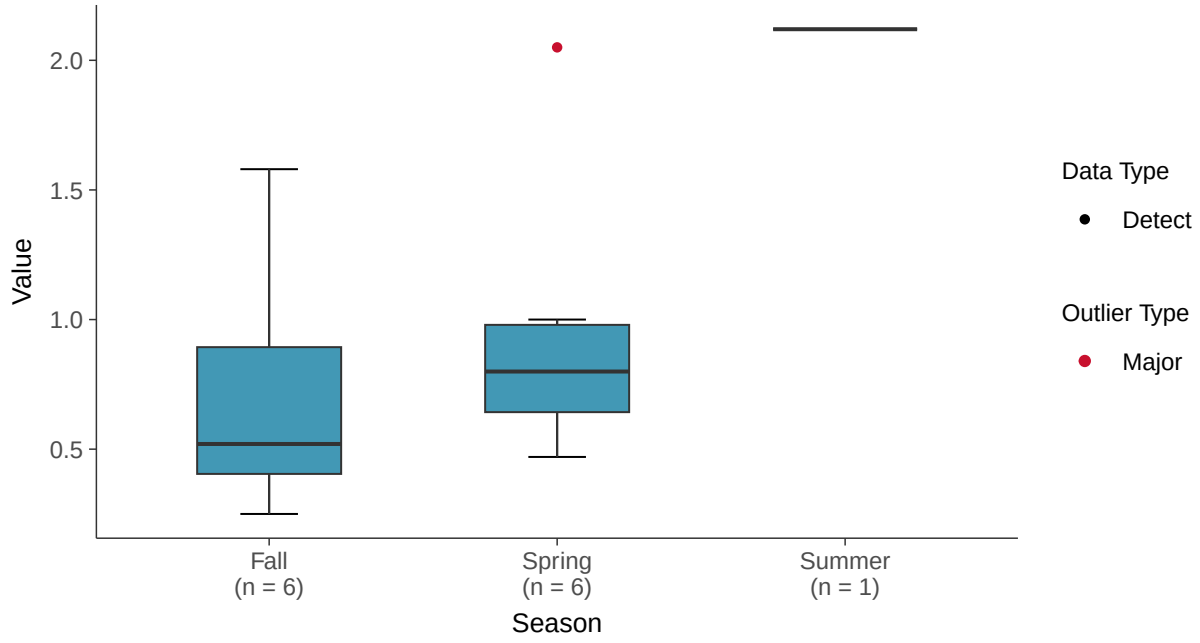
## Boxplot

Radium-226+228, MW-15015R (pCi/L)



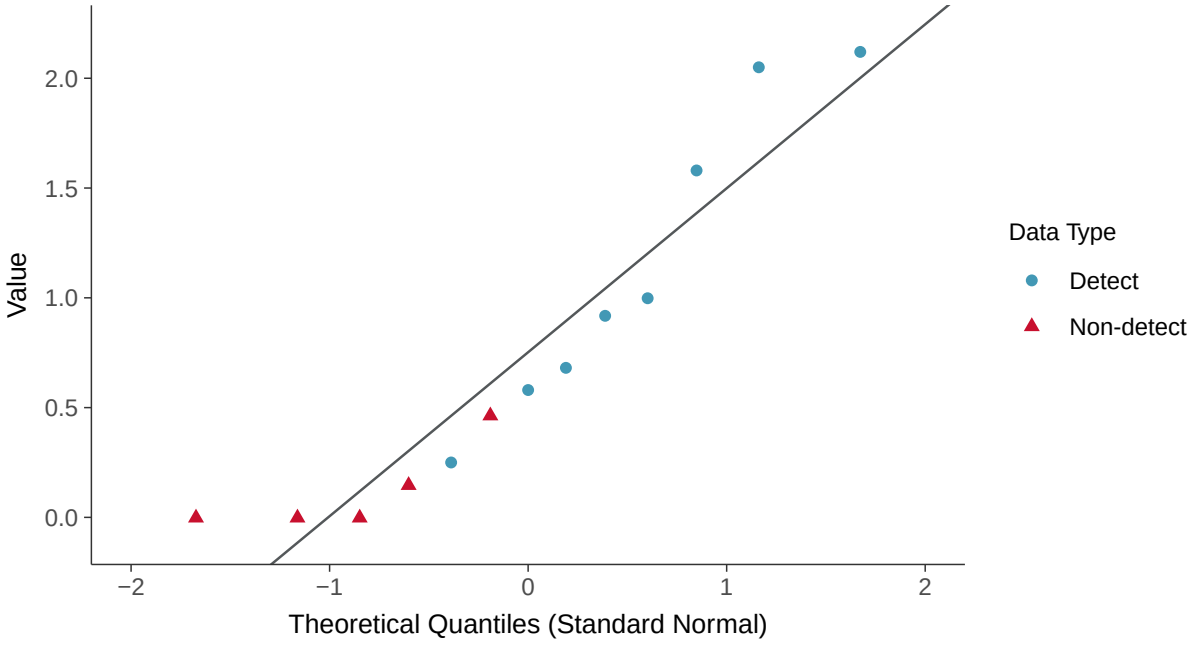

## Boxplot by Season

Radium-226+228, MW-15015R (pCi/L)



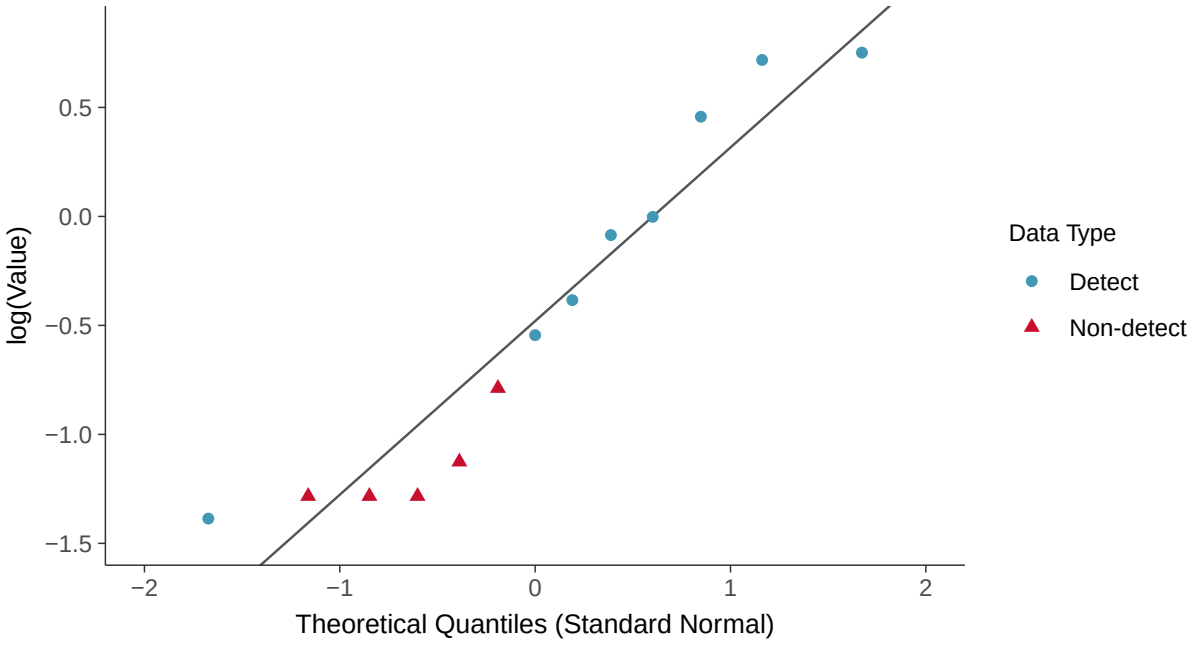
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15015R (pCi/L)



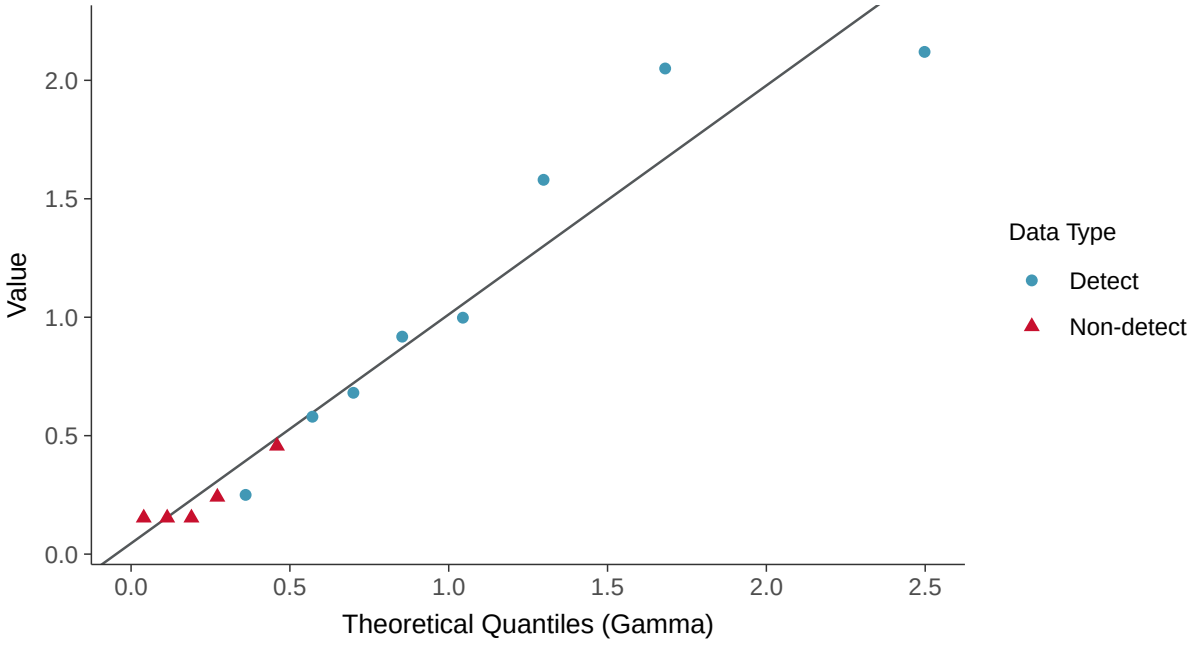

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15015R (pCi/L)



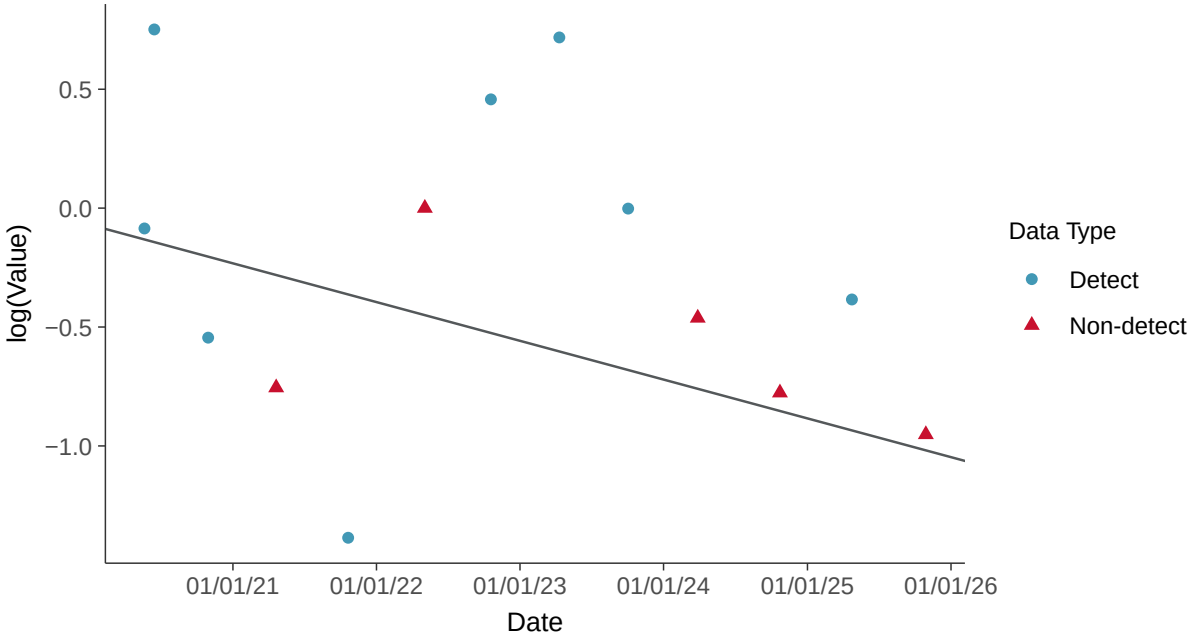
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15015R (pCi/L)



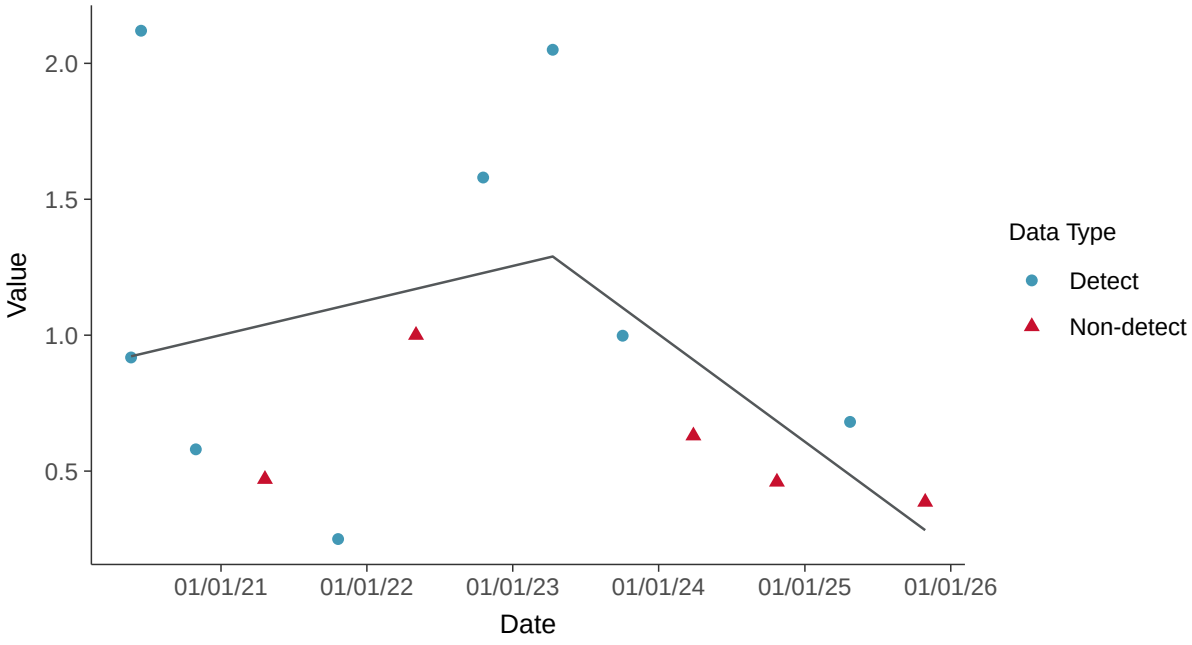

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15015R (pCi/L)



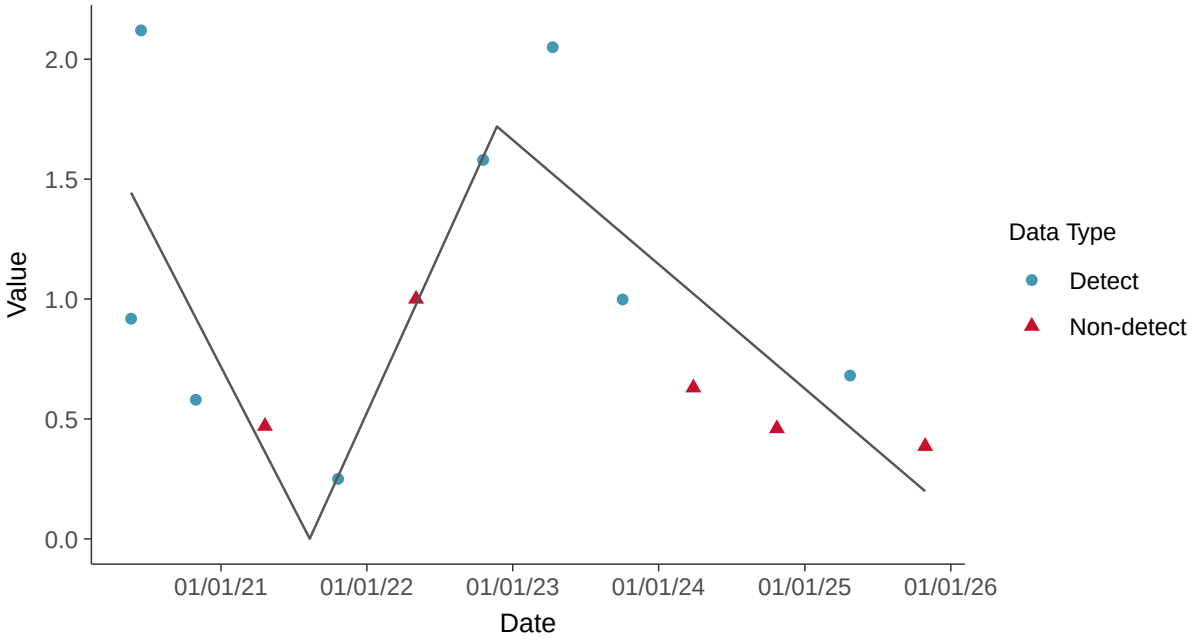
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15015R (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15015R (pCi/L)

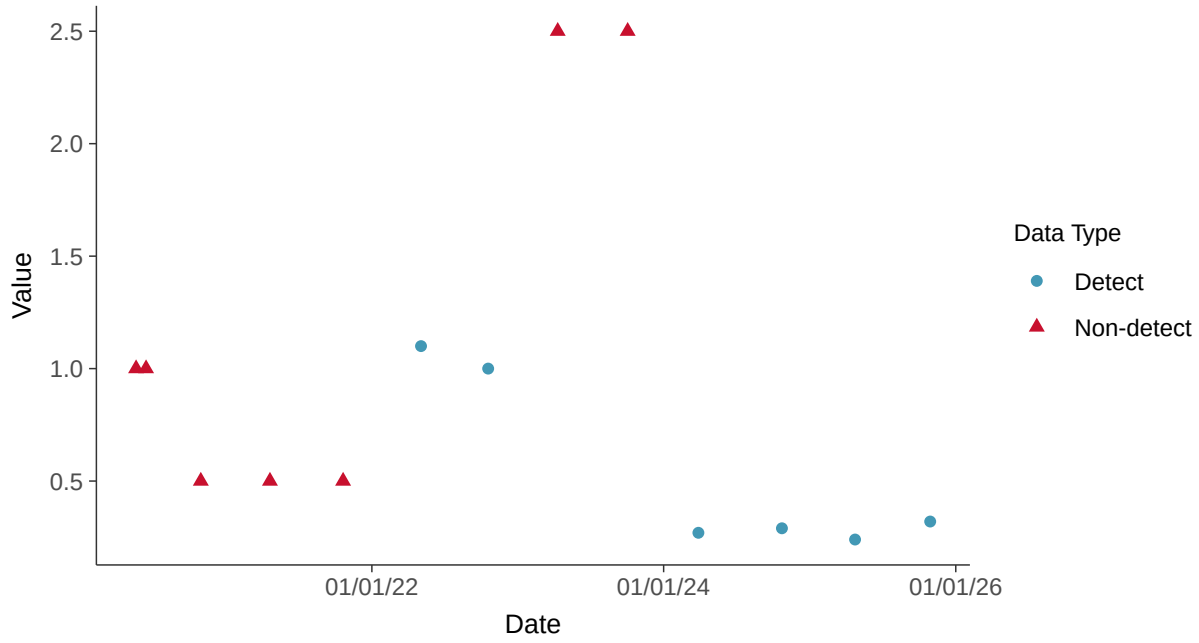


## Appendix IV: Selenium, MW-15015R

ID: 05_2_127

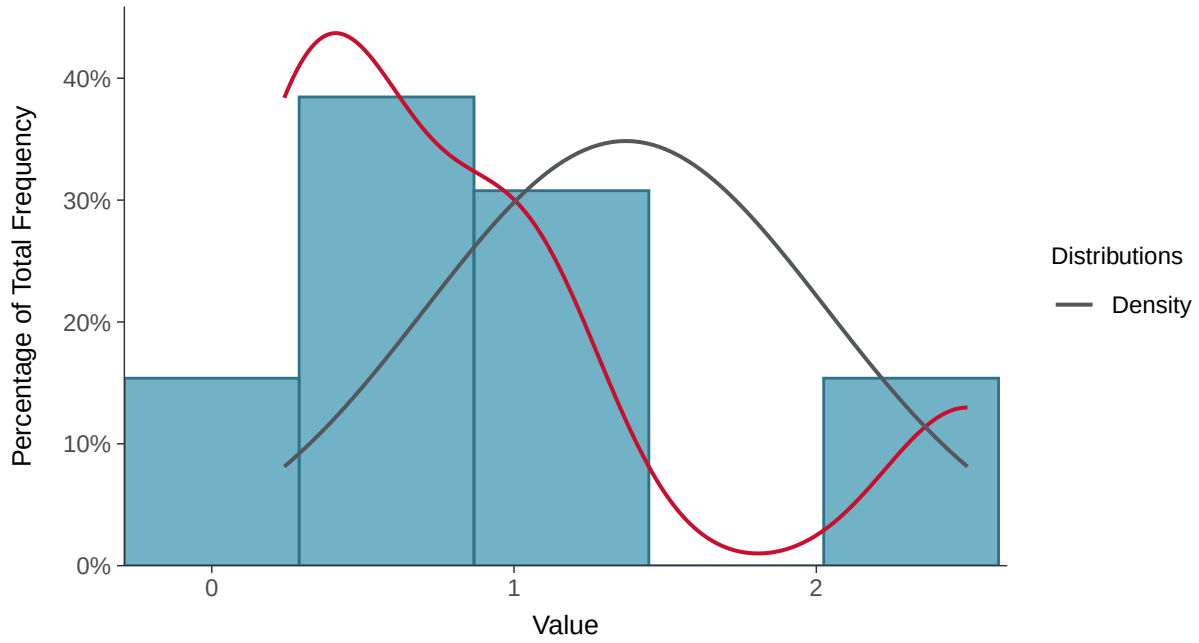
**Scatter Plot**

Selenium, MW-15015R (ug/L)



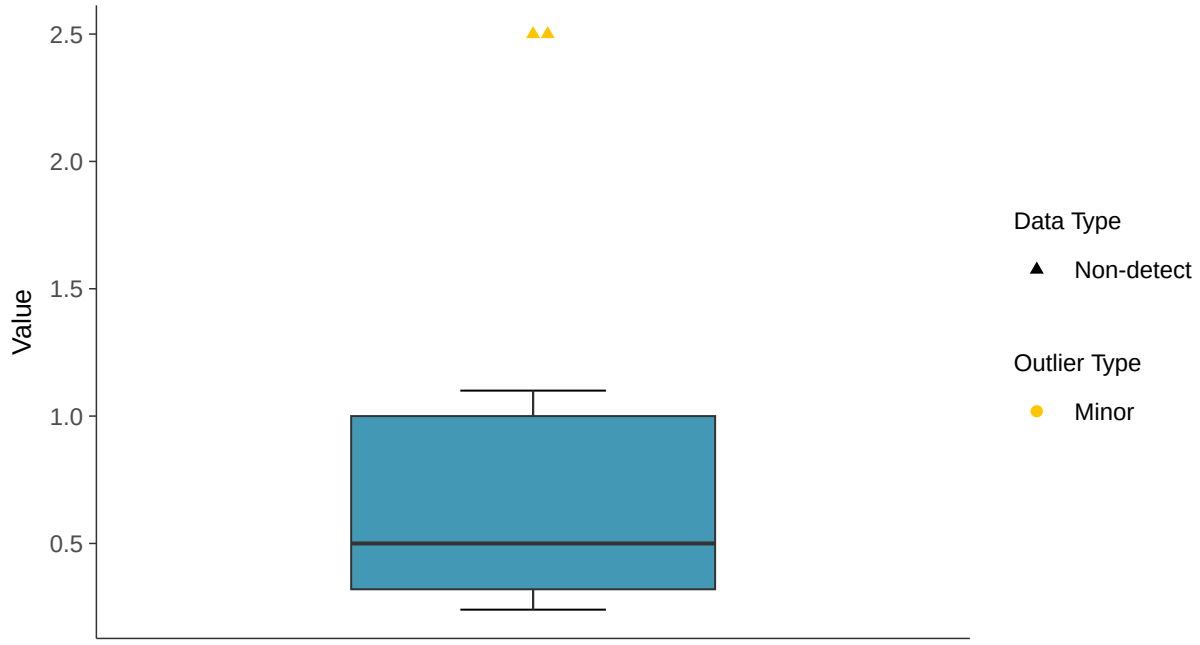

**Histogram**

Selenium, MW-15015R (ug/L)



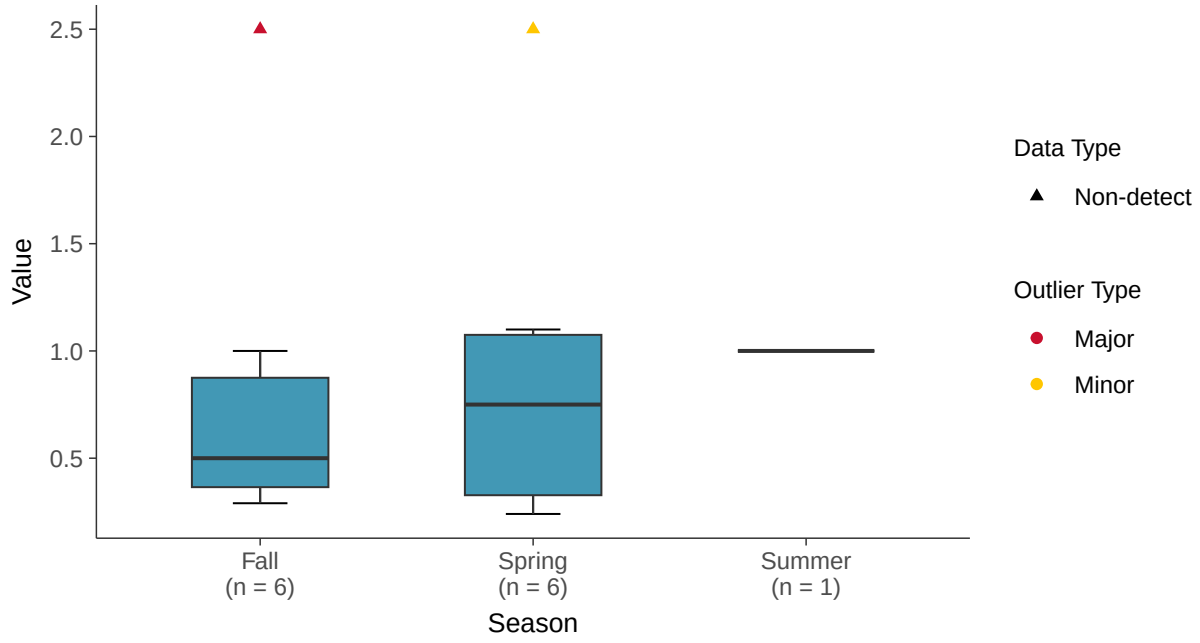
## Boxplot

Selenium, MW-15015R (ug/L)



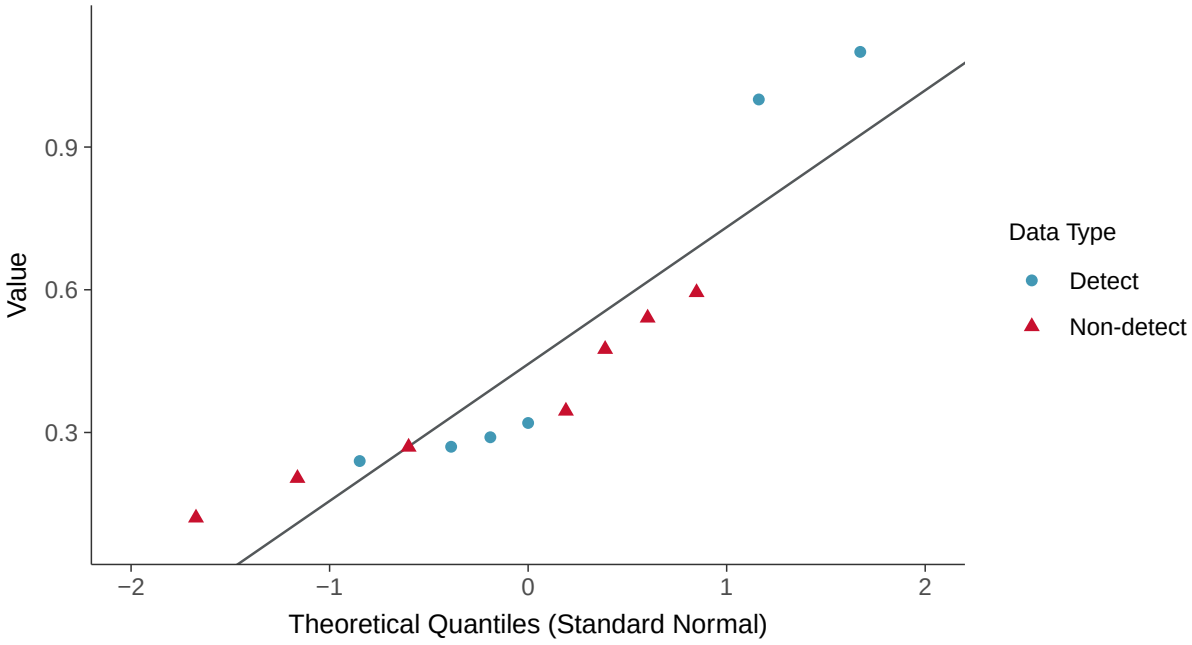

## Boxplot by Season

Selenium, MW-15015R (ug/L)



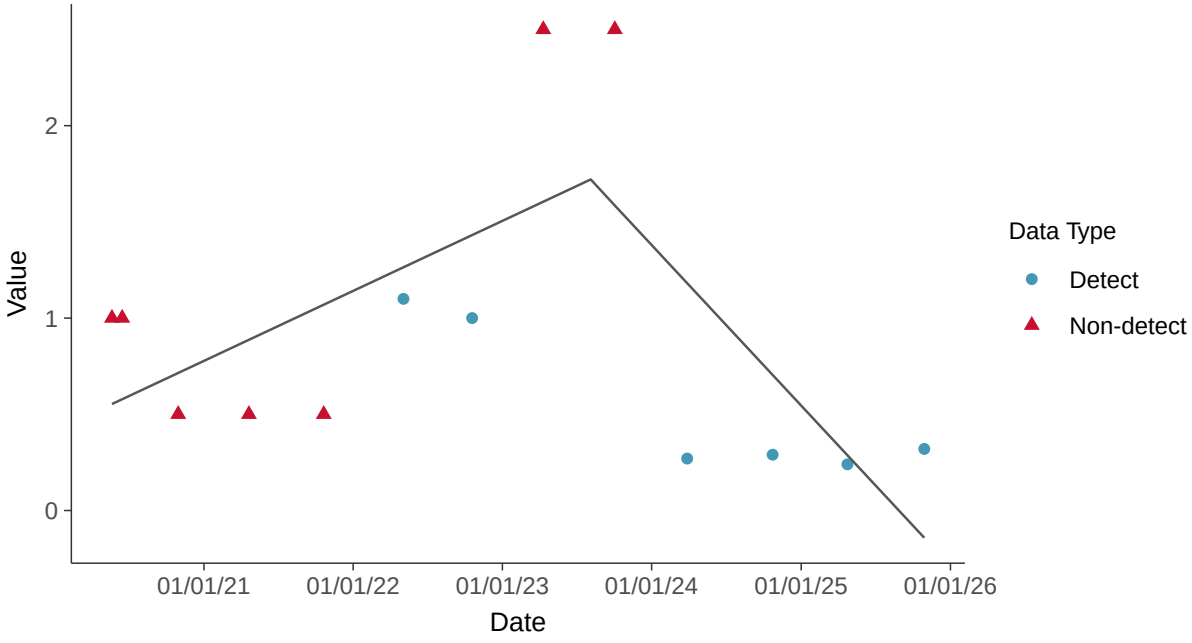
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15015R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15015R (ug/L)

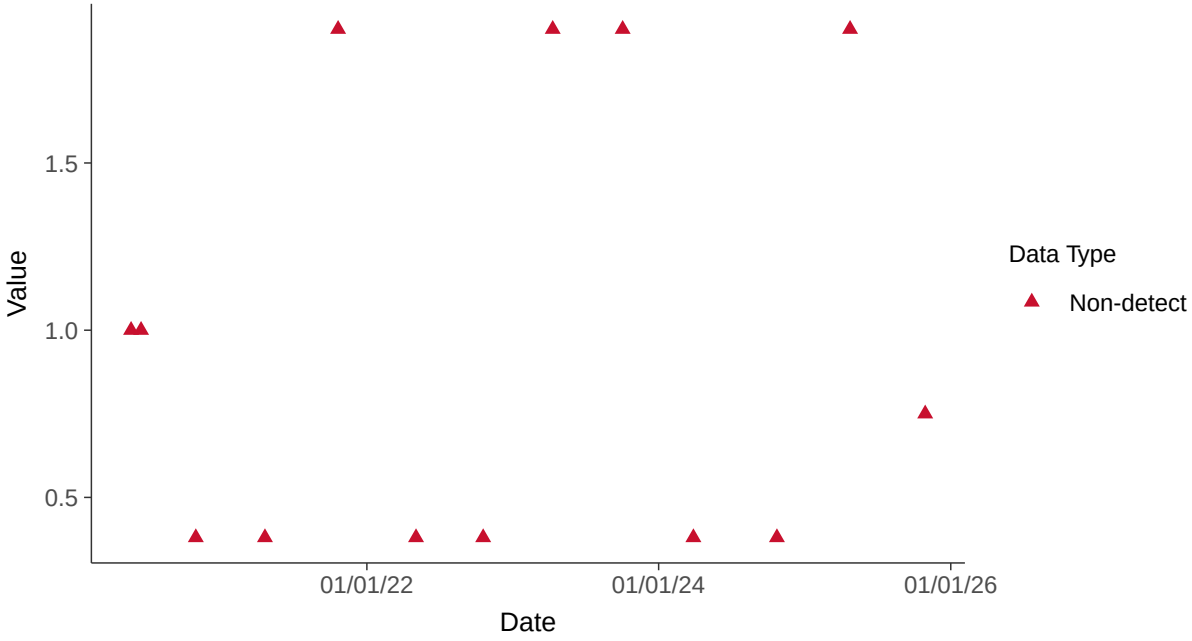


## Appendix IV: Thallium, MW-15015R

ID: 05_2_131

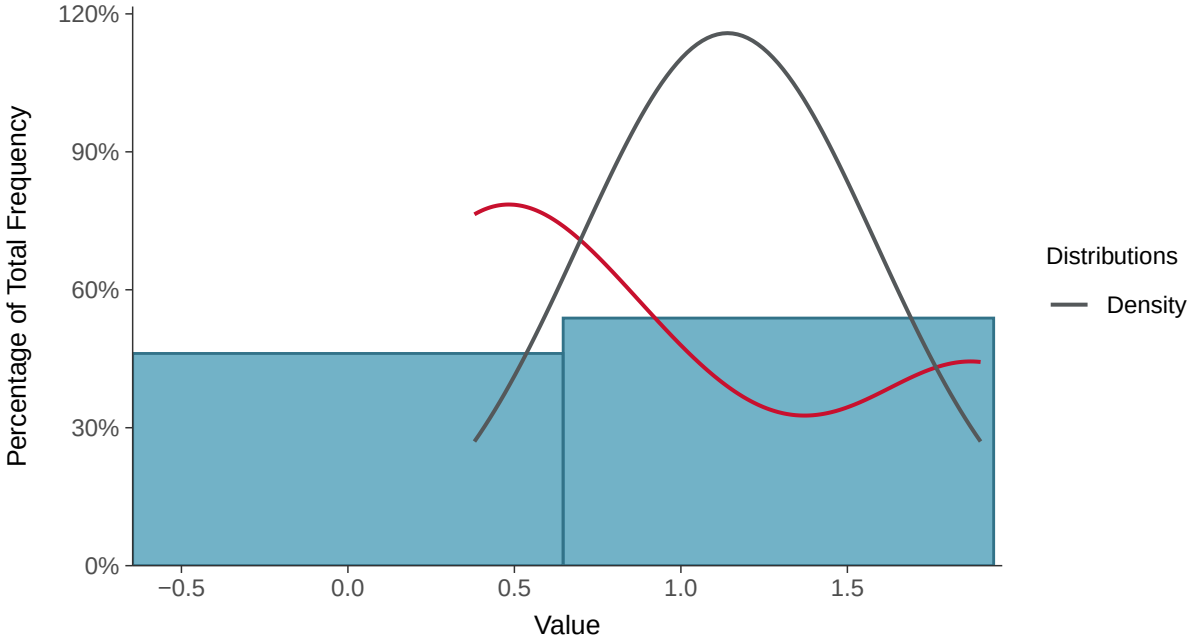
**Scatter Plot**

Thallium, MW-15015R (ug/L)



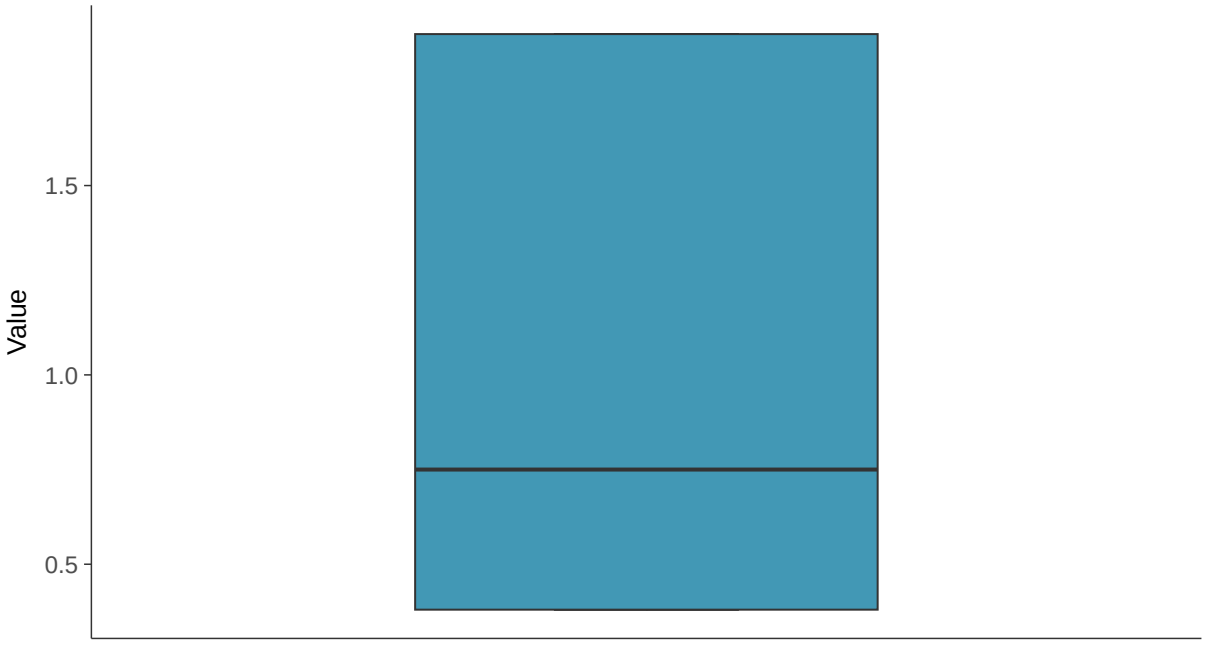

**Histogram**

Thallium, MW-15015R (ug/L)



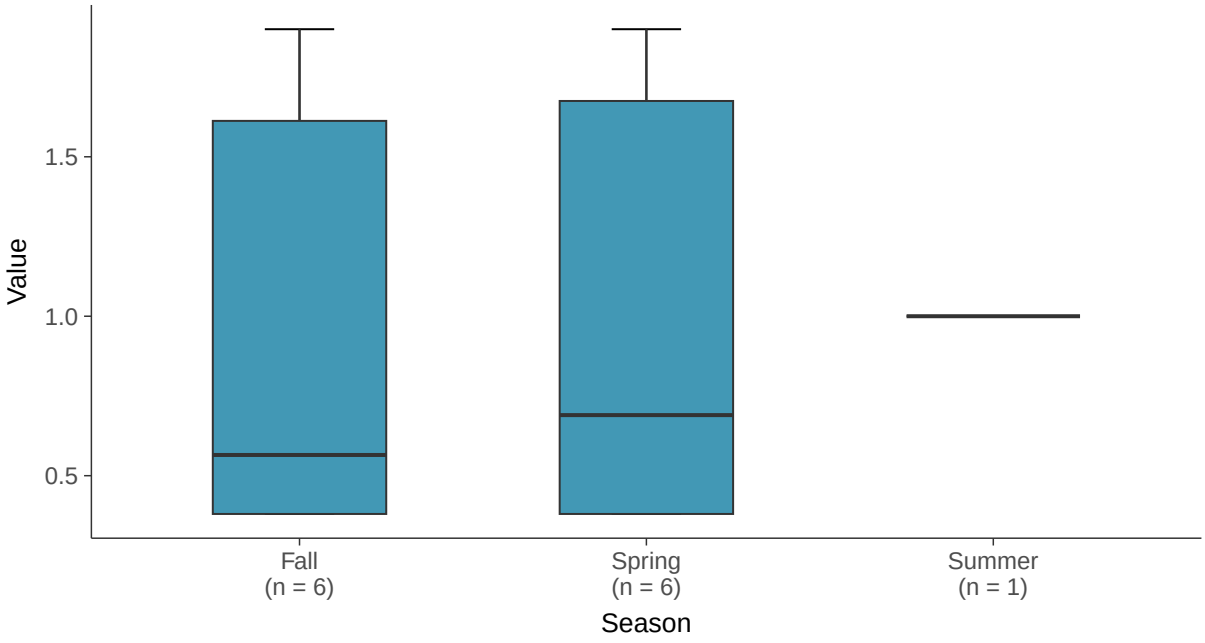
**Boxplot**

Thallium, MW-15015R (ug/L)



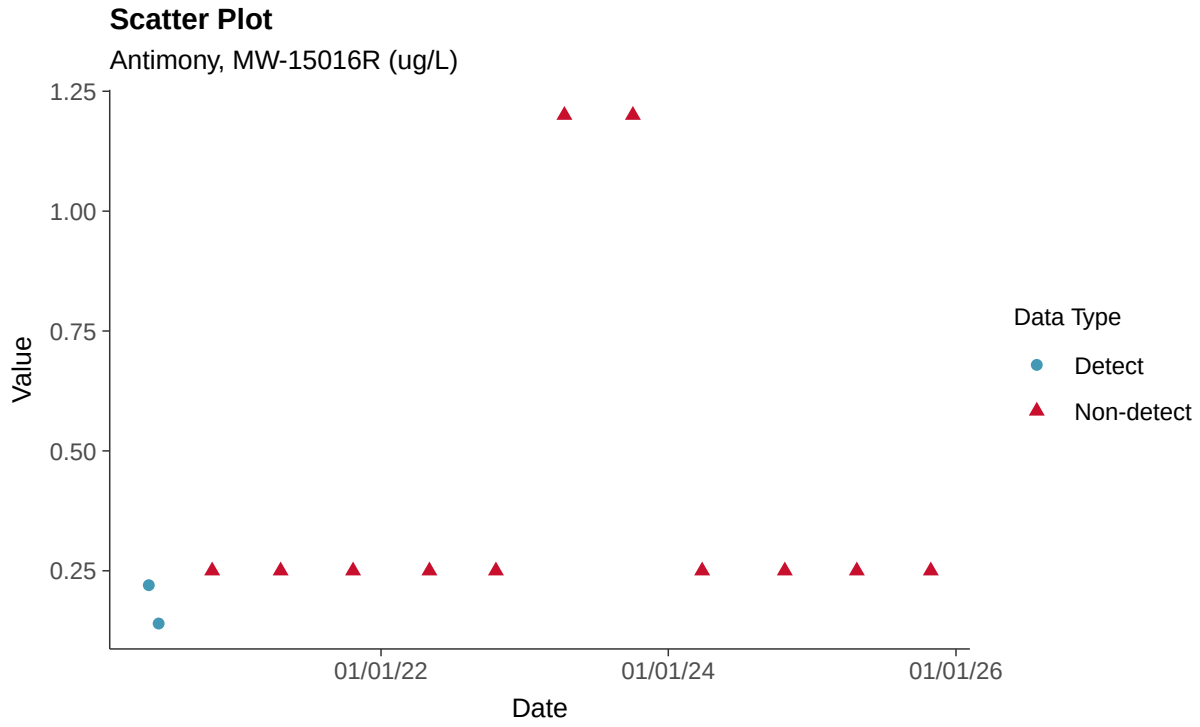

**Boxplot by Season**

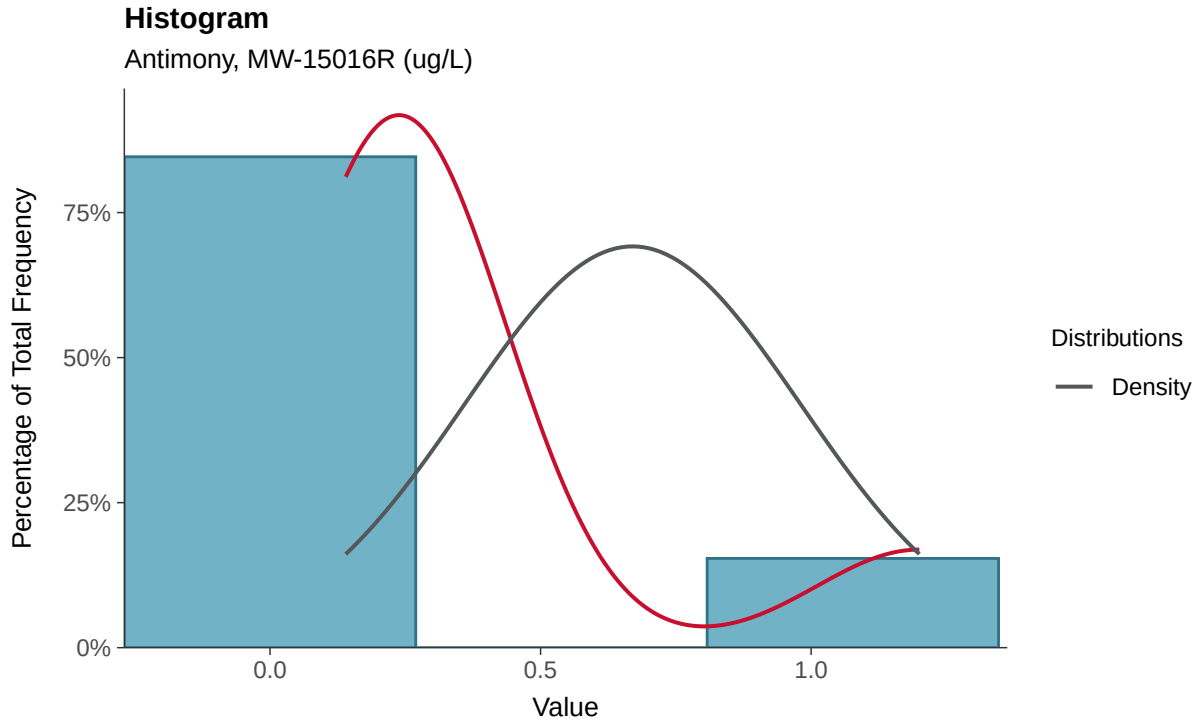
Thallium, MW-15015R (ug/L)



## Appendix IV: Antimony, MW-15016R

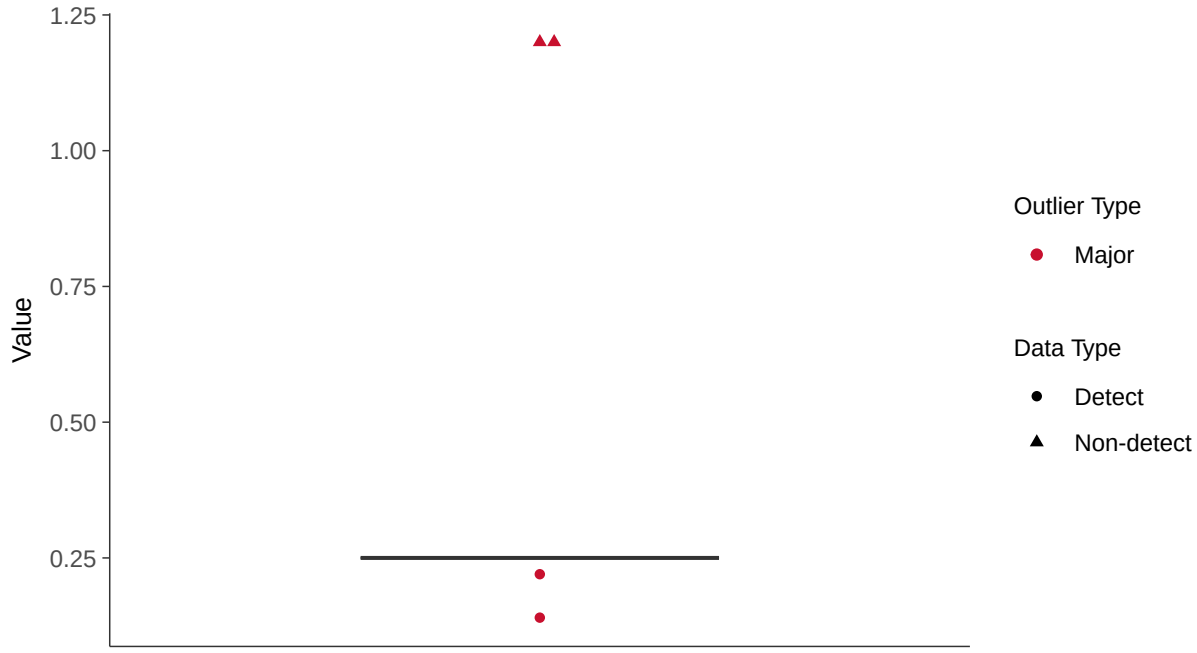
ID: 06_2_101



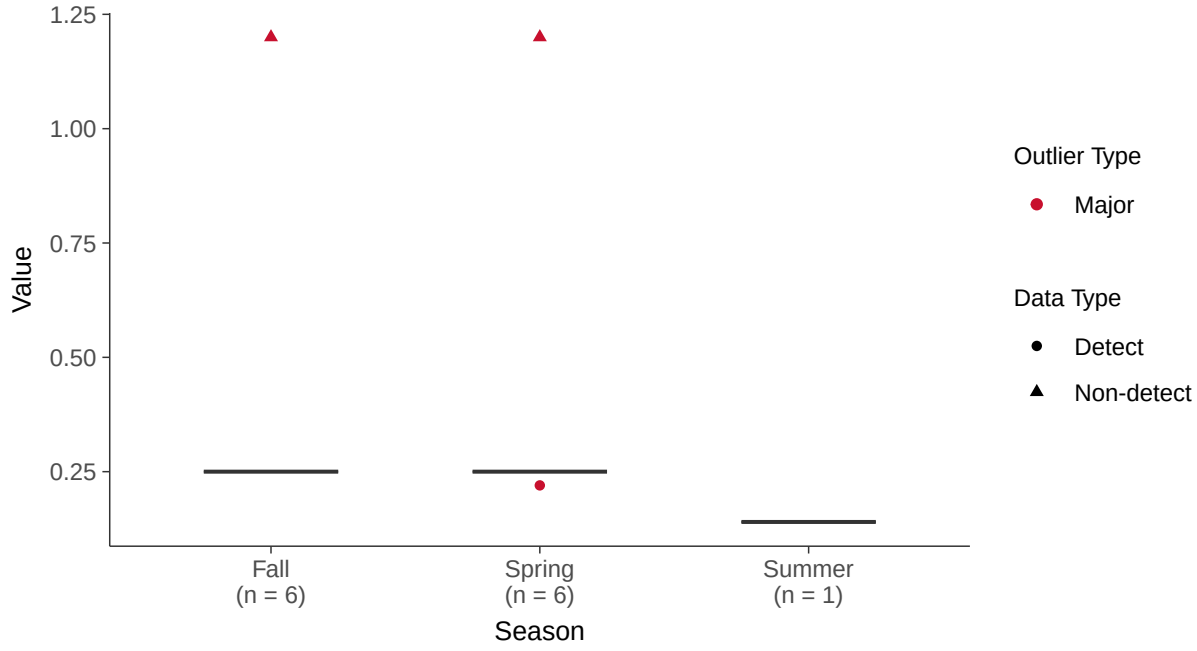
## Boxplot

Antimony, MW-15016R (ug/L)



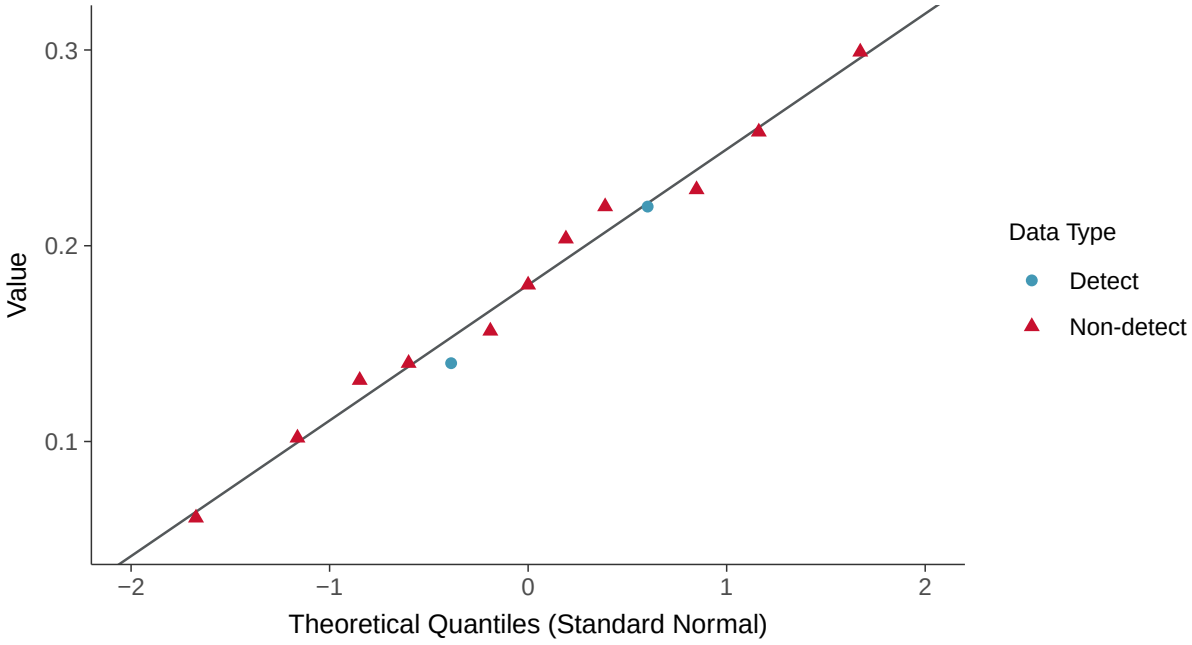

## Boxplot by Season

Antimony, MW-15016R (ug/L)



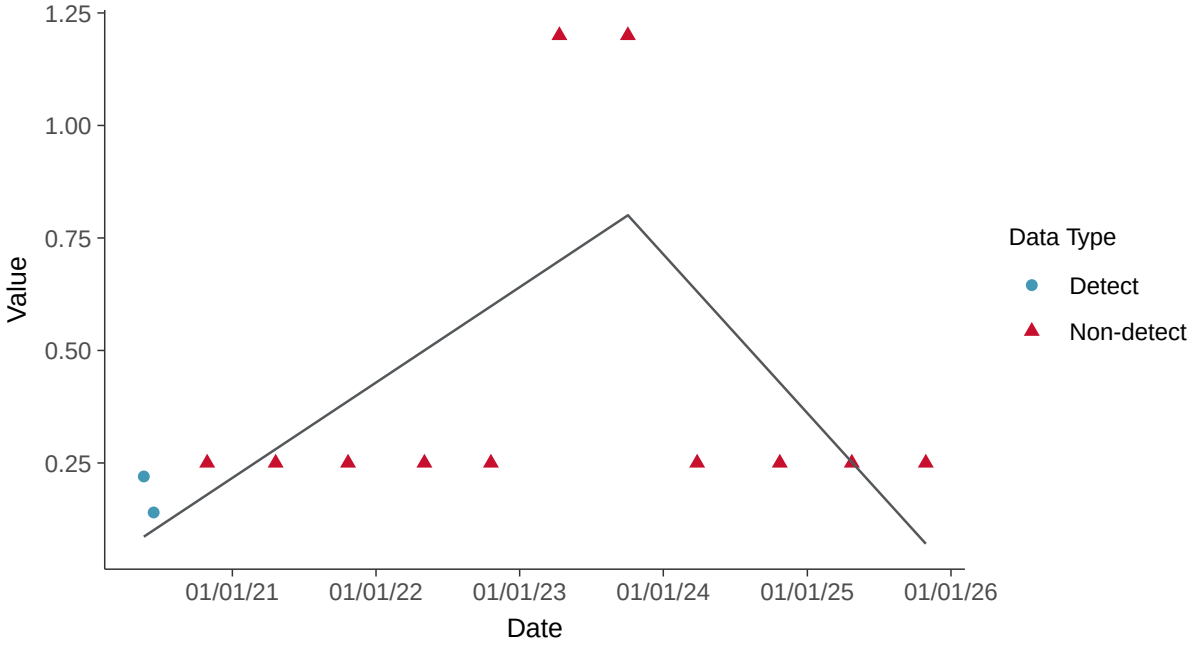
**Normal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-15016R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15016R (ug/L)

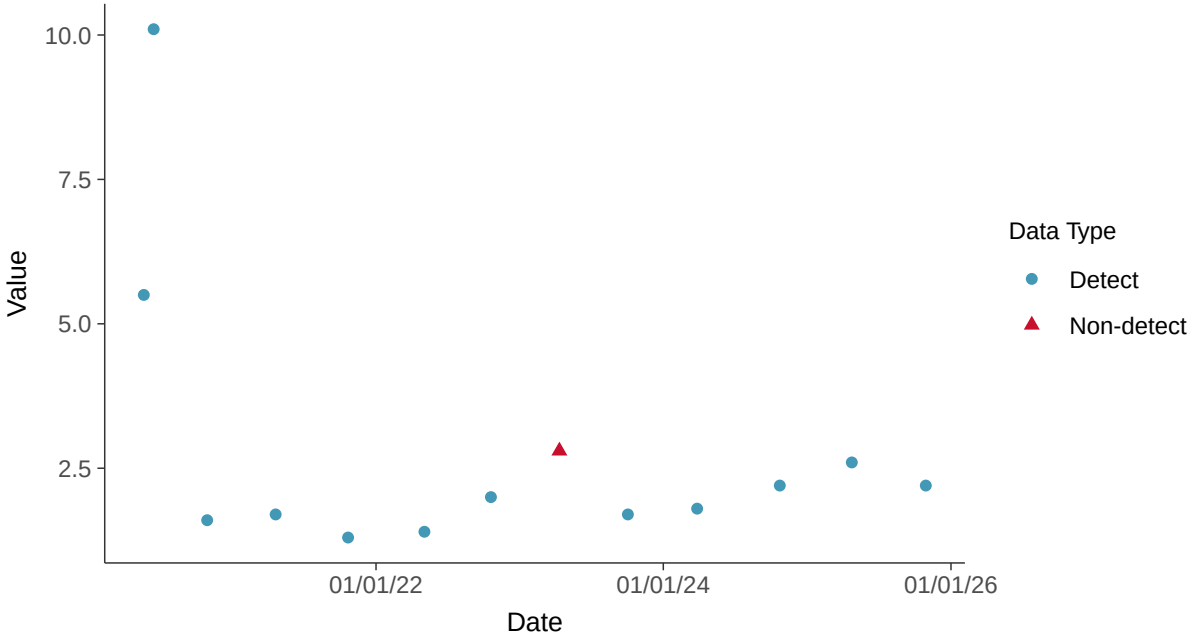


## Appendix IV: Arsenic, MW-15016R

ID: 06_2_102

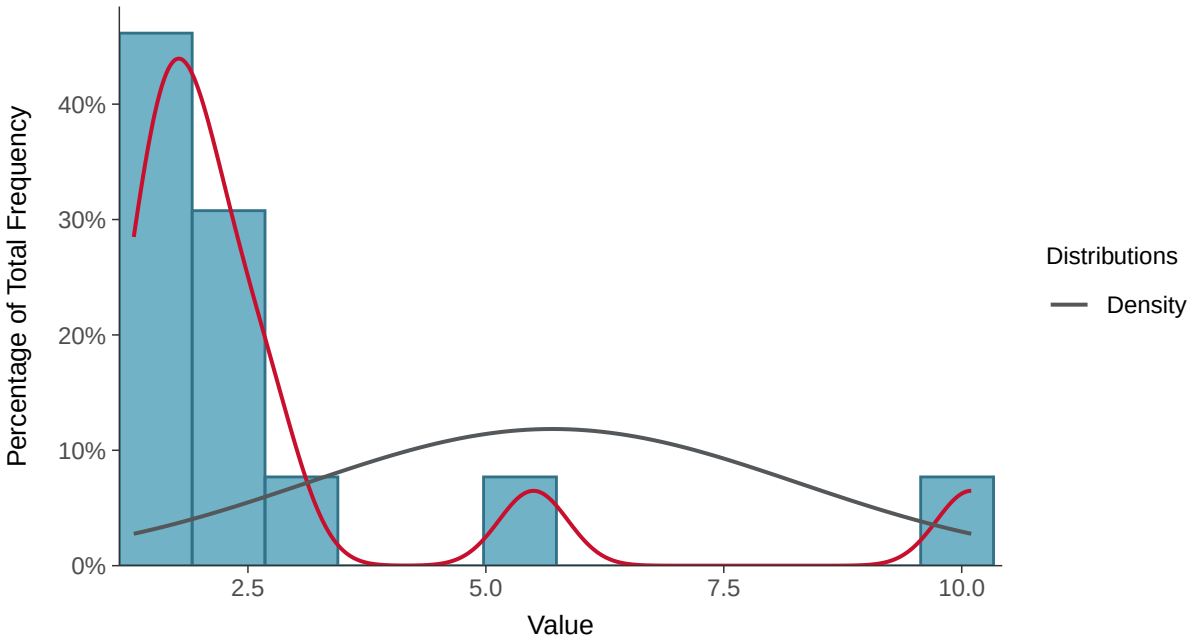
**Scatter Plot**

Arsenic, MW-15016R (ug/L)



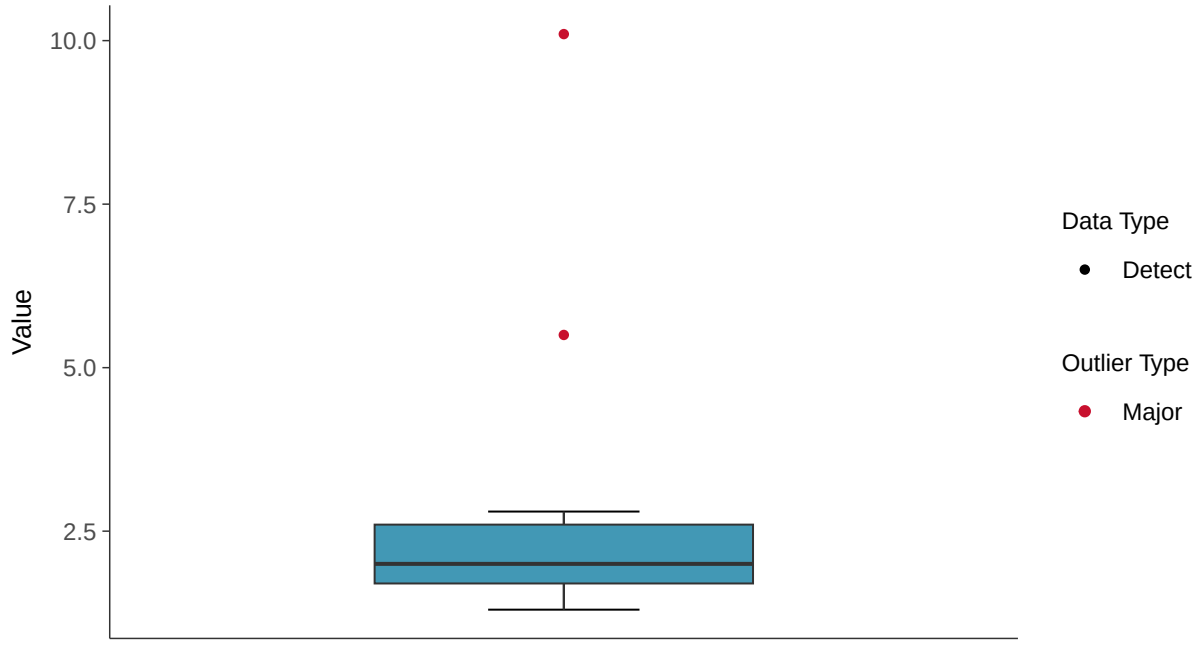

**Histogram**

Arsenic, MW-15016R (ug/L)



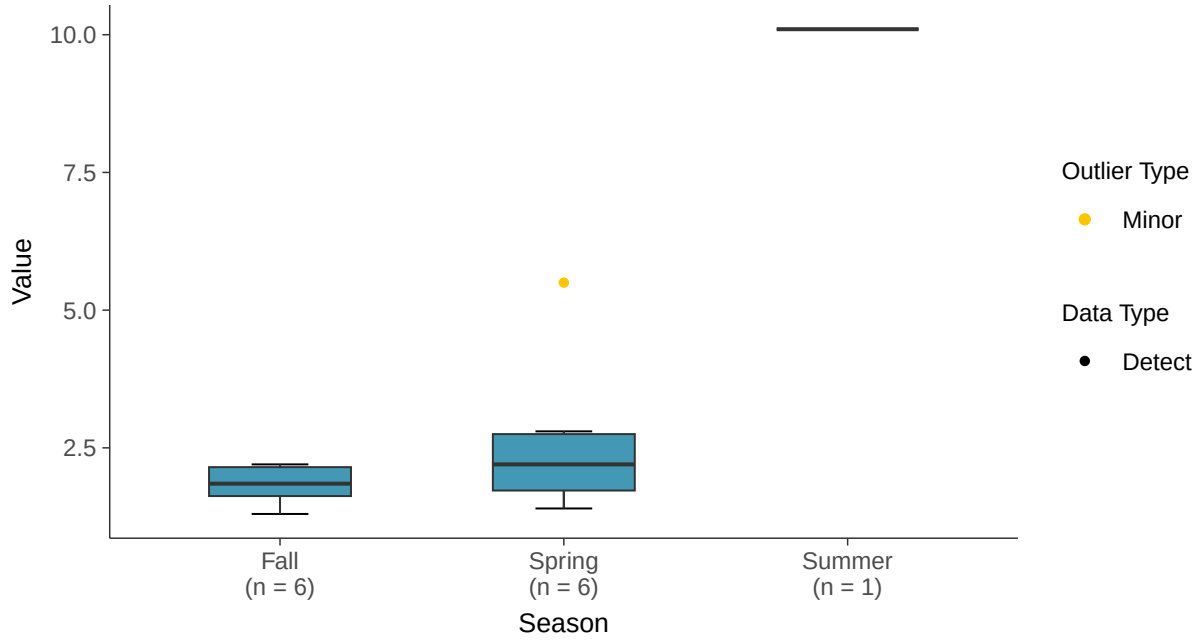
## Boxplot

Arsenic, MW-15016R (ug/L)



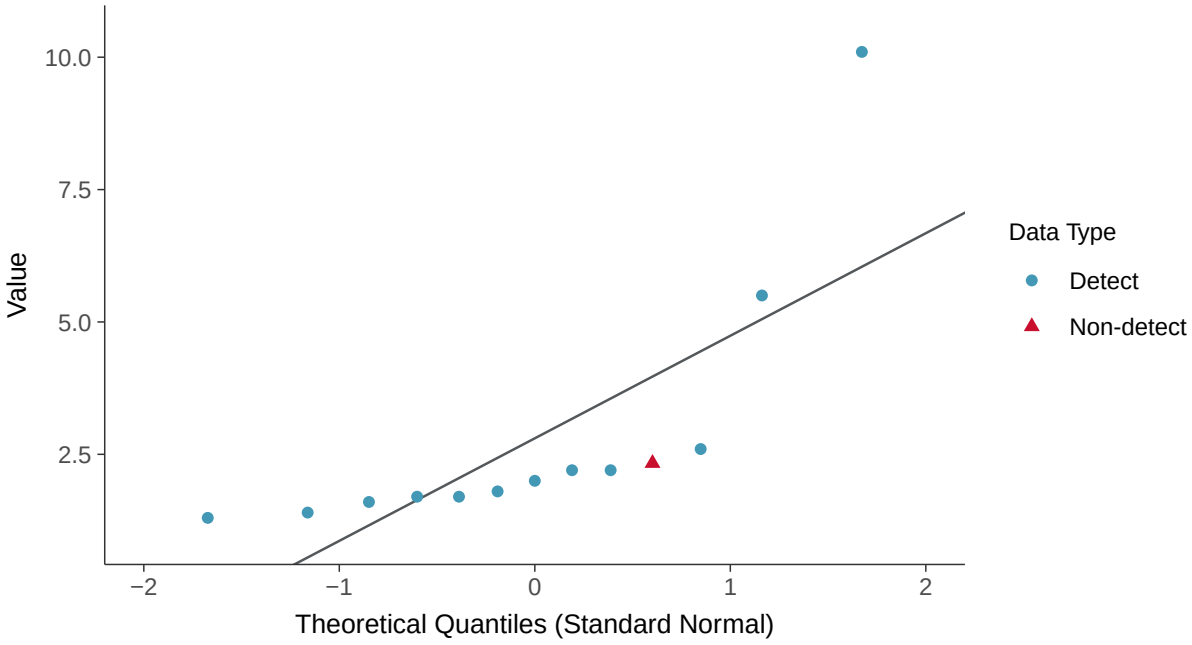

## Boxplot by Season

Arsenic, MW-15016R (ug/L)



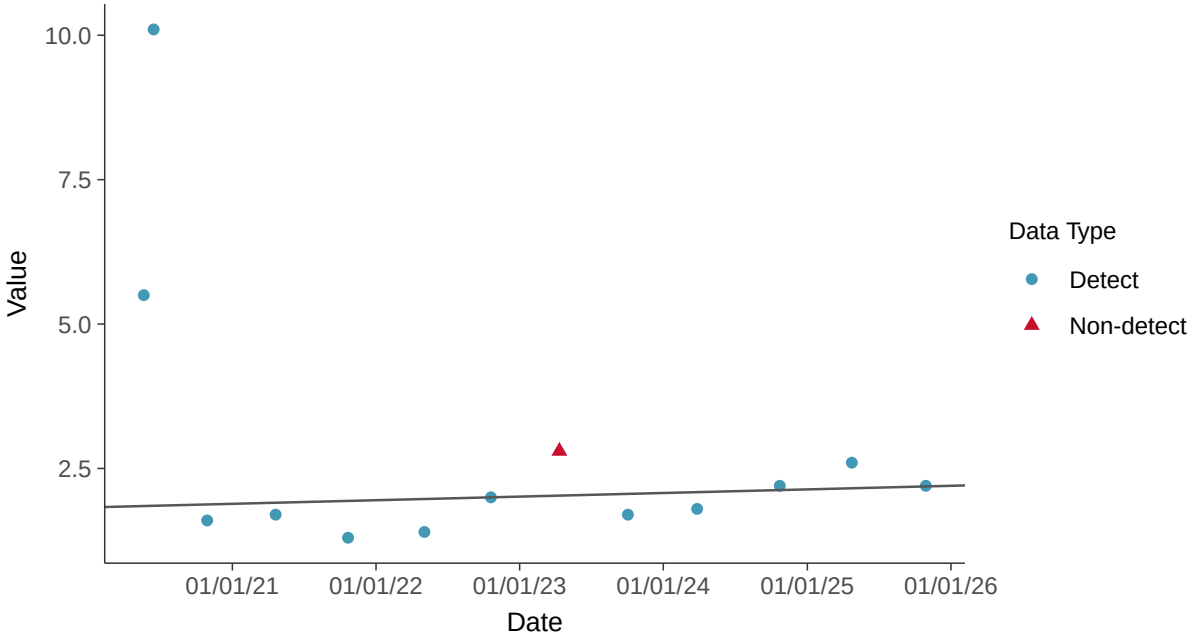
**Normal Q-Q plot using ROS Imputed Estimates**

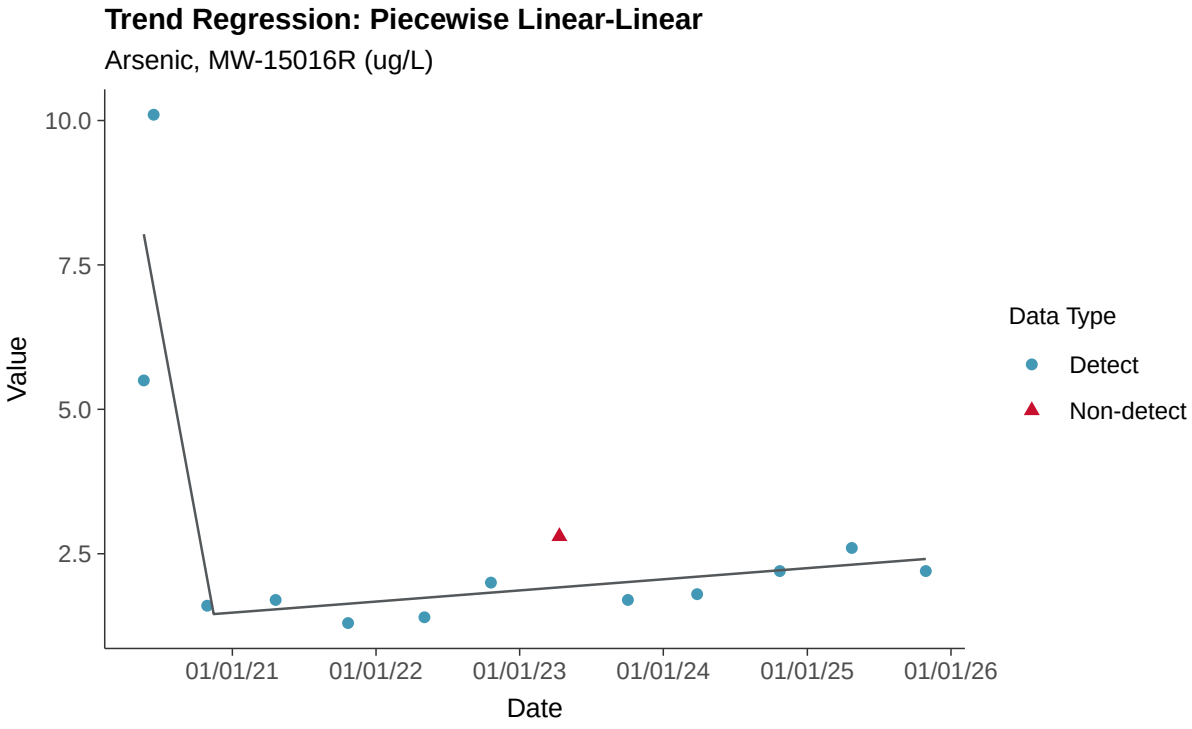
Arsenic, MW-15016R (ug/L)




**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Arsenic, MW-15016R (ug/L)



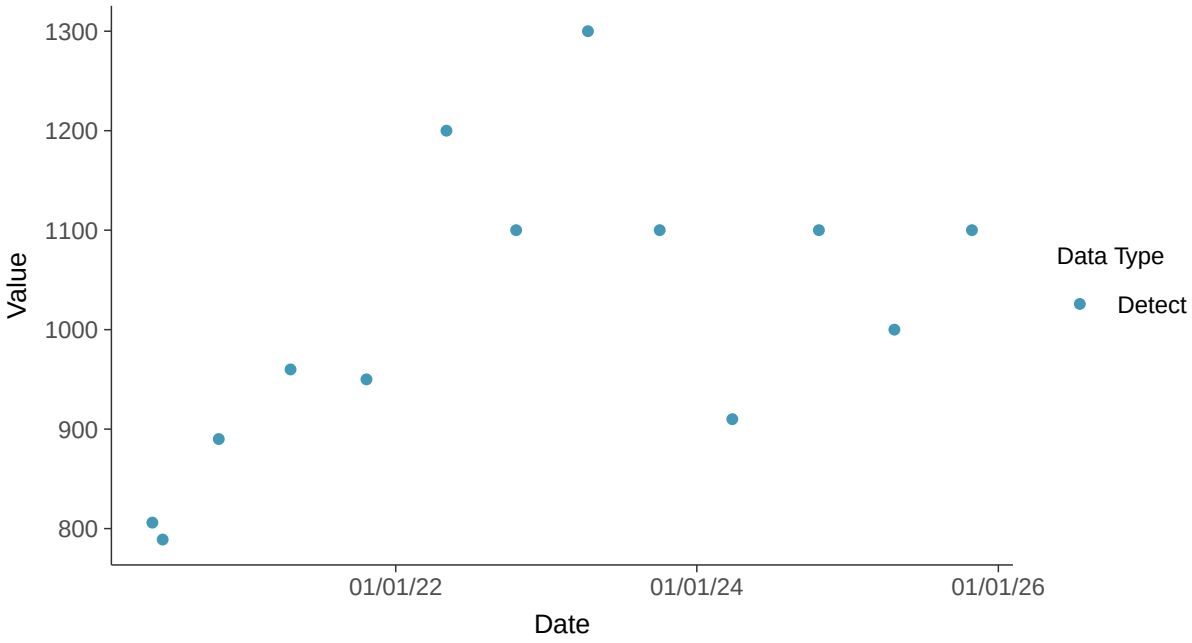

Trend Regression: Piecewise Linear-Linear
Arsenic, MW-15016R (ug/L)
Value
10.0
7.5
5.0
2.5
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Barium, MW-15016R

ID: 06_2_103

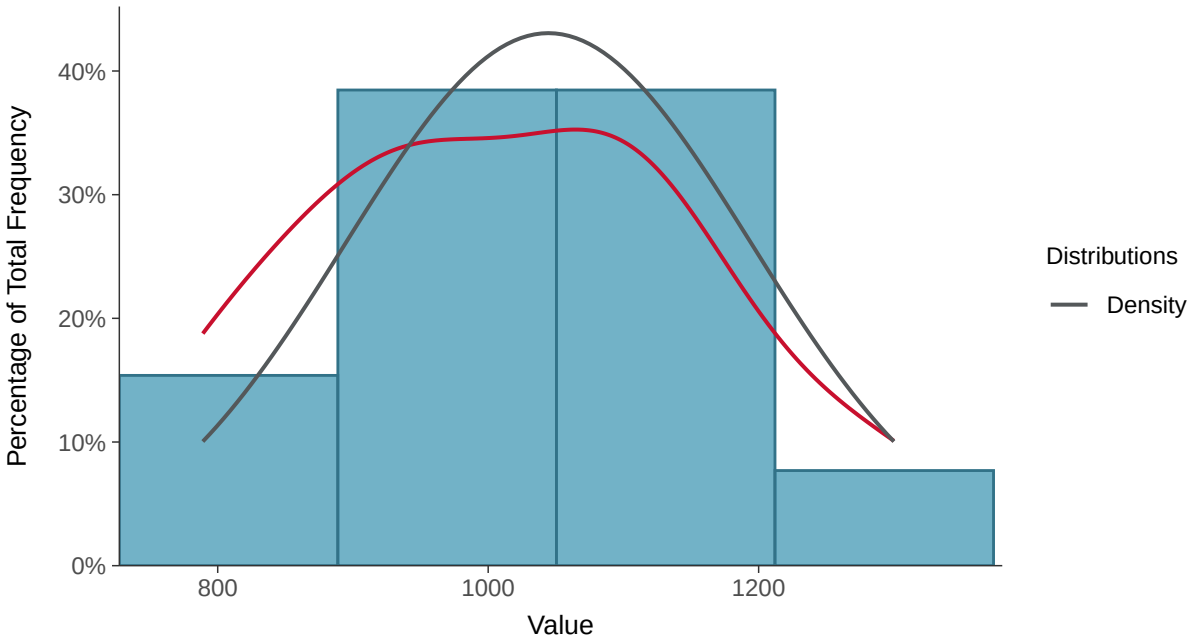
**Scatter Plot**

Barium, MW-15016R (ug/L)



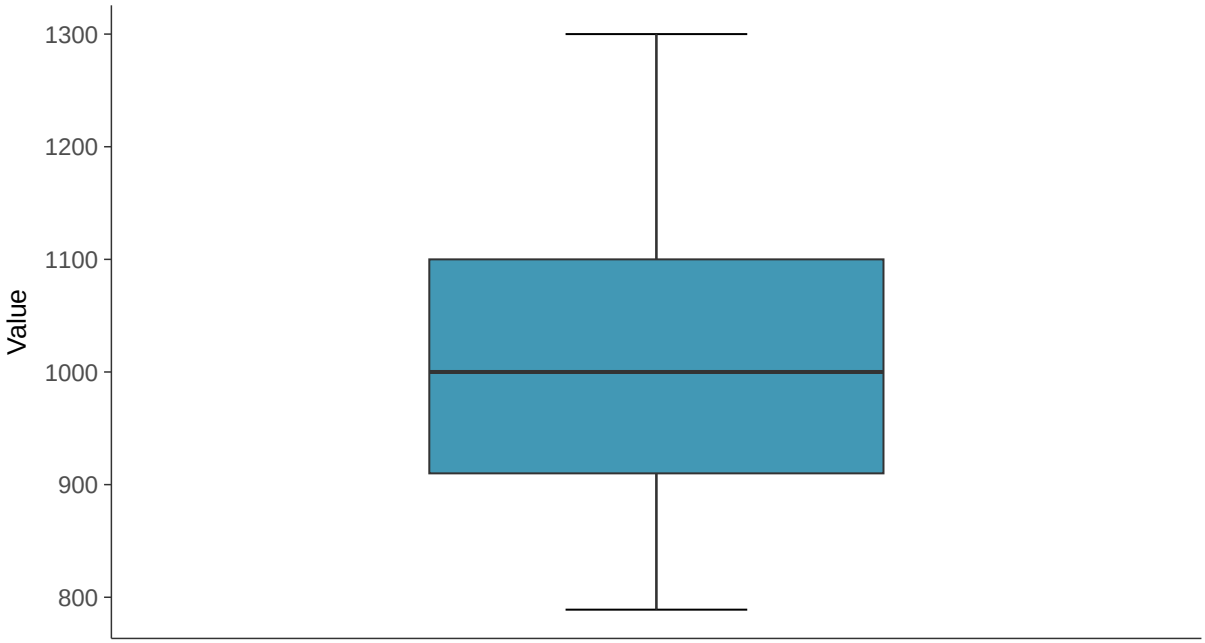

**Histogram**

Barium, MW-15016R (ug/L)



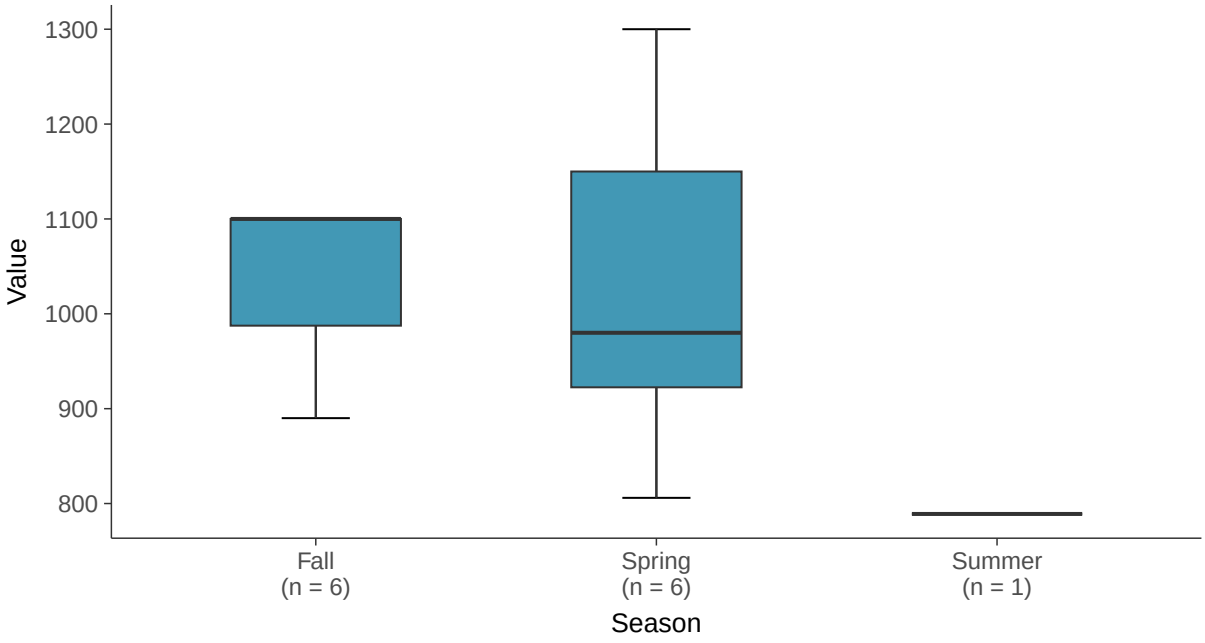
**Boxplot**

Barium, MW-15016R (ug/L)



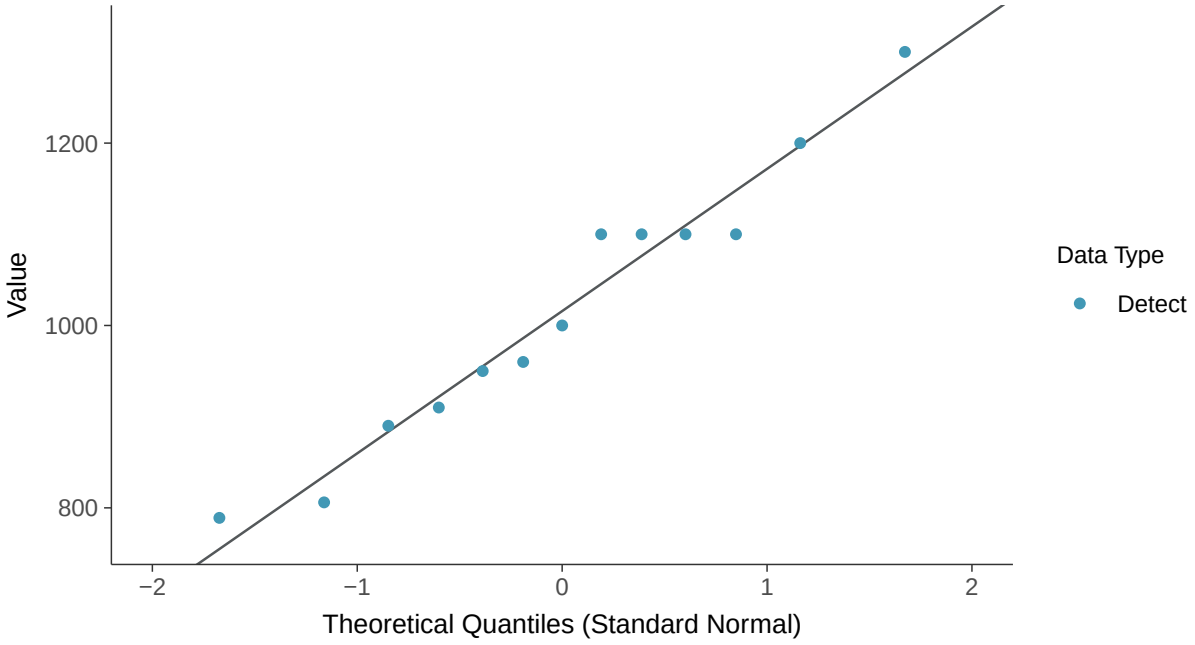

**Boxplot by Season**

Barium, MW-15016R (ug/L)



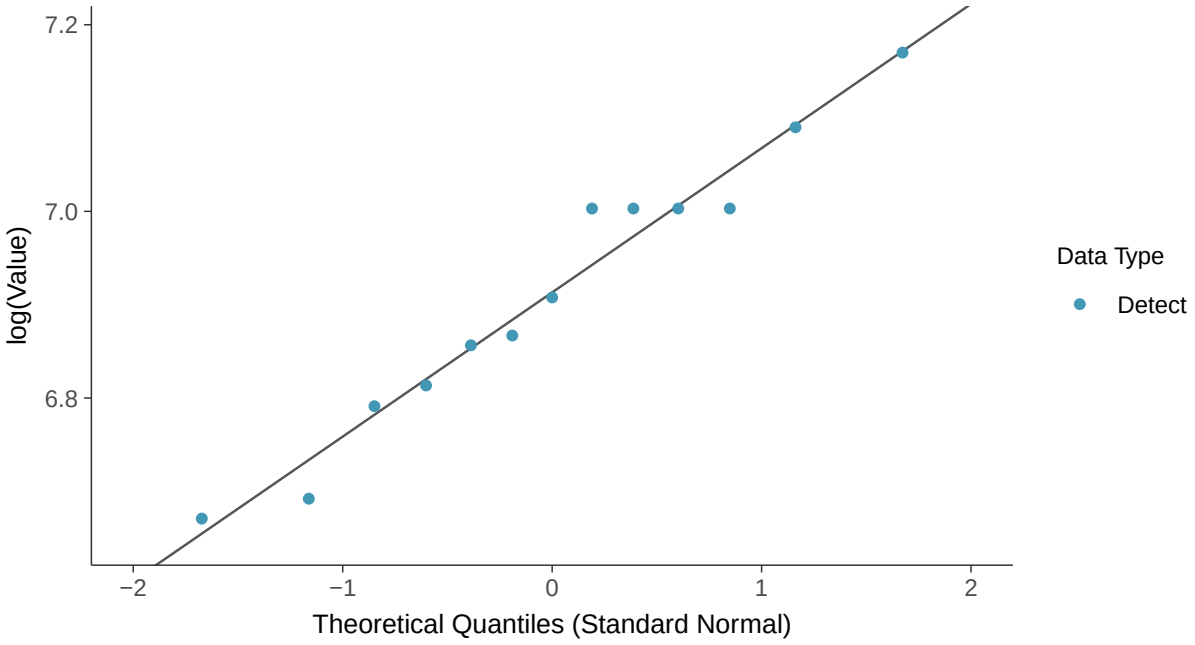
**Normal Q-Q plot**

Barium, MW-15016R (ug/L)



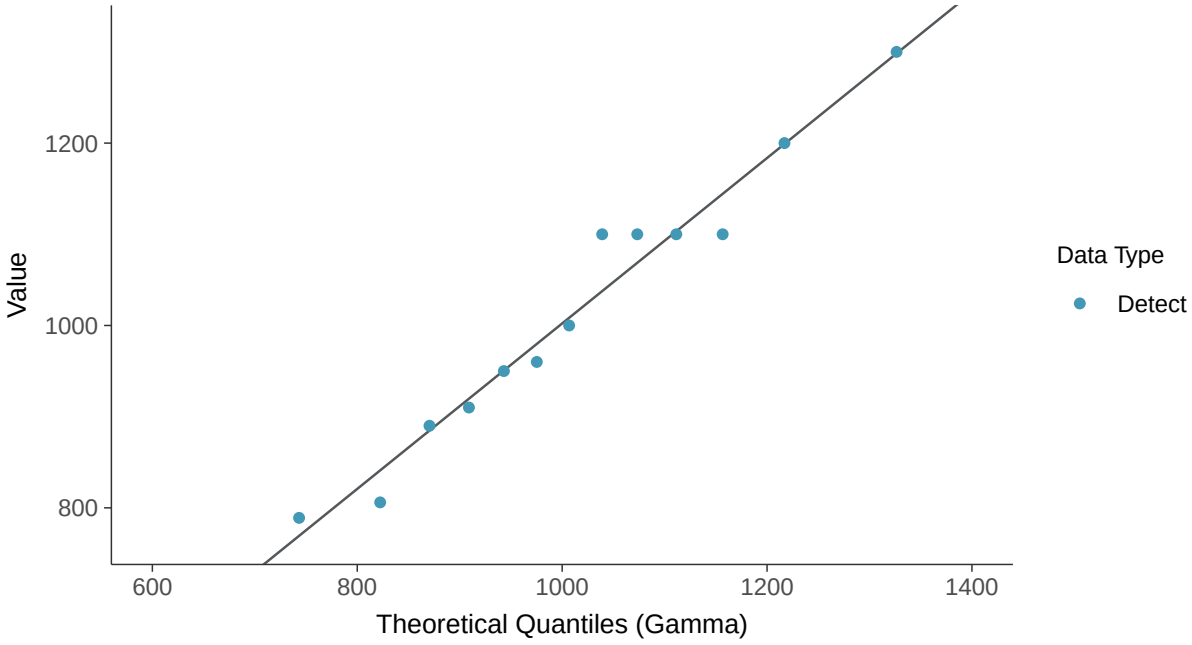

**Lognormal Q-Q plot**

Barium, MW-15016R (ug/L)



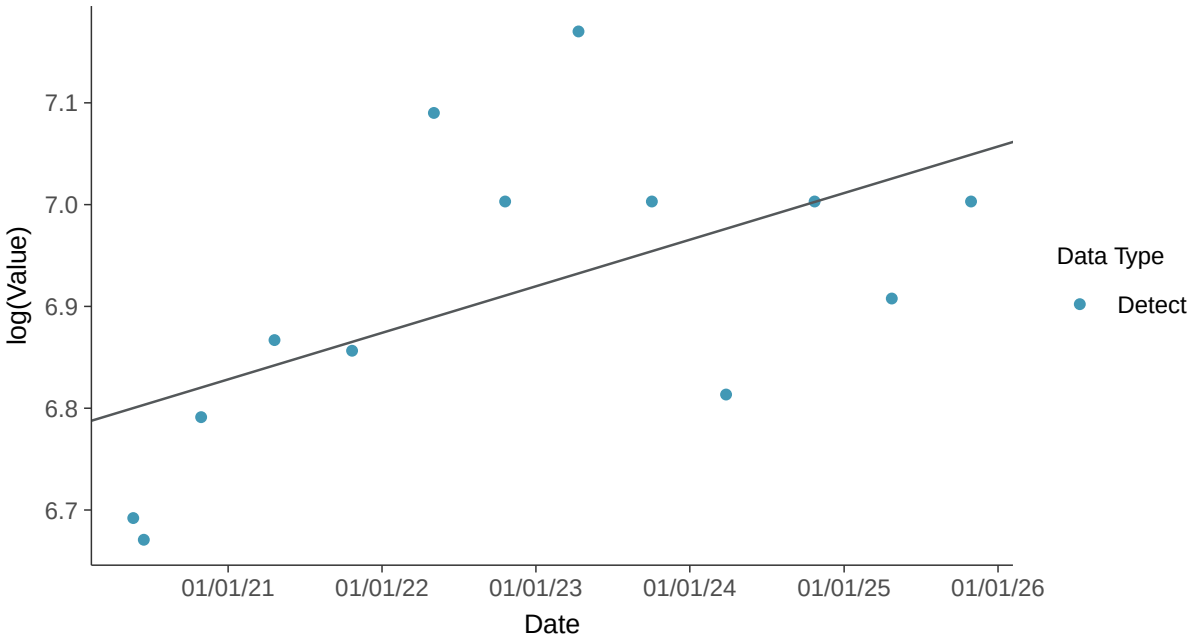
**Gamma Q-Q plot**

Barium, MW-15016R (ug/L)



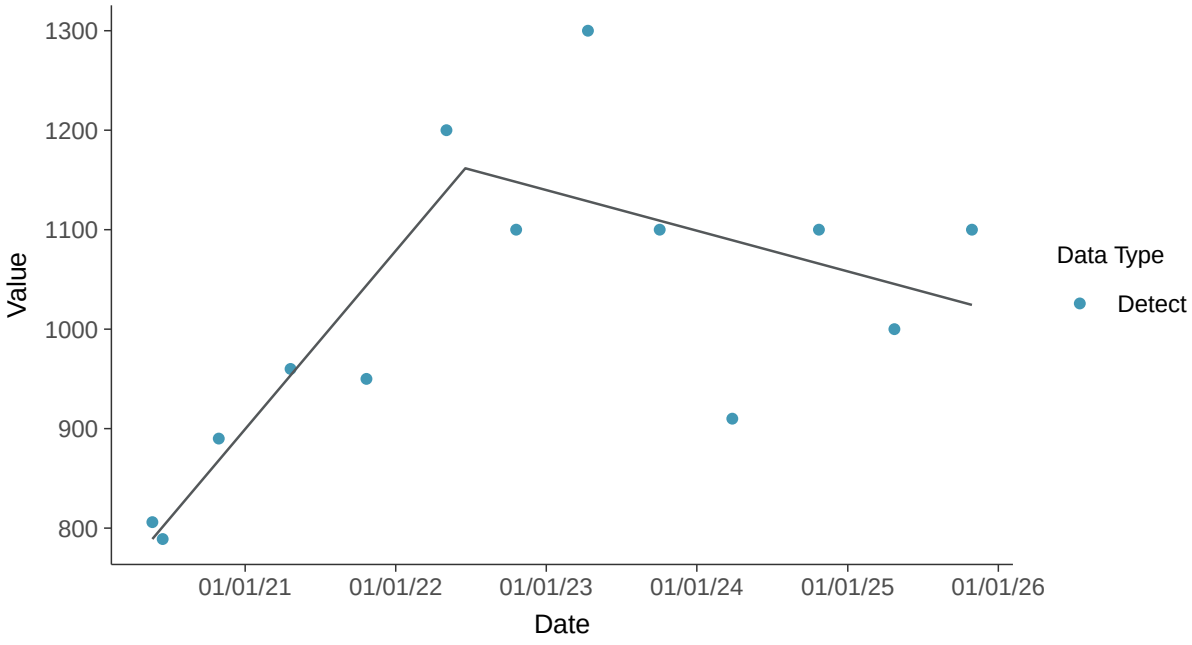

**Trend Regression: Lognormal MLE**

Barium, MW-15016R (ug/L)



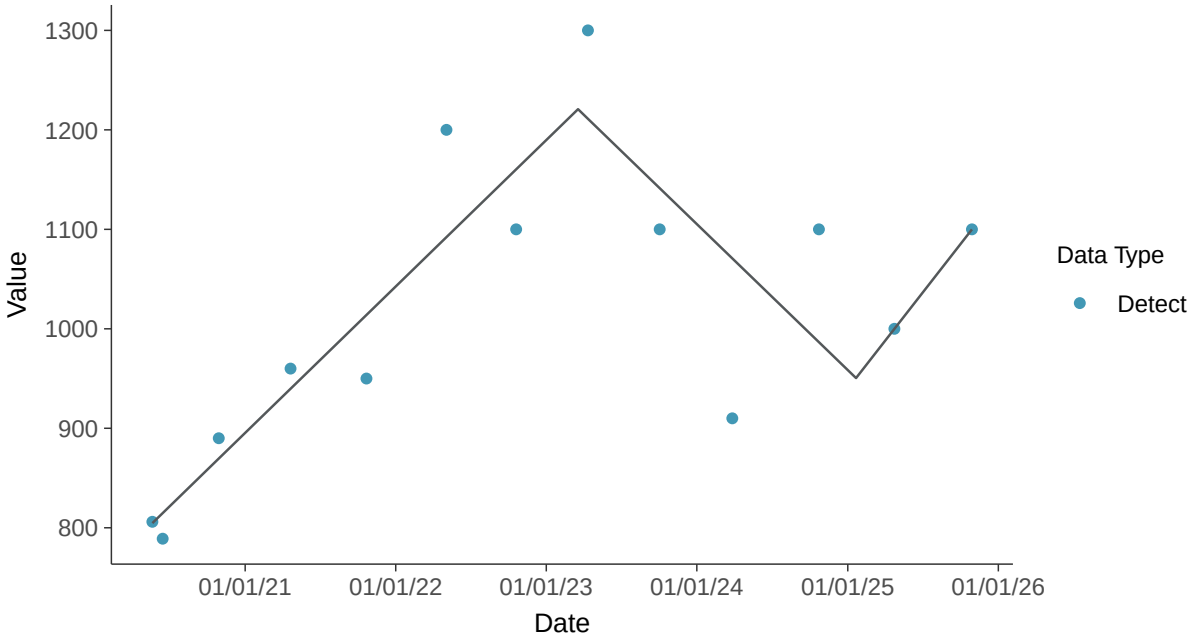
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15016R (ug/L)



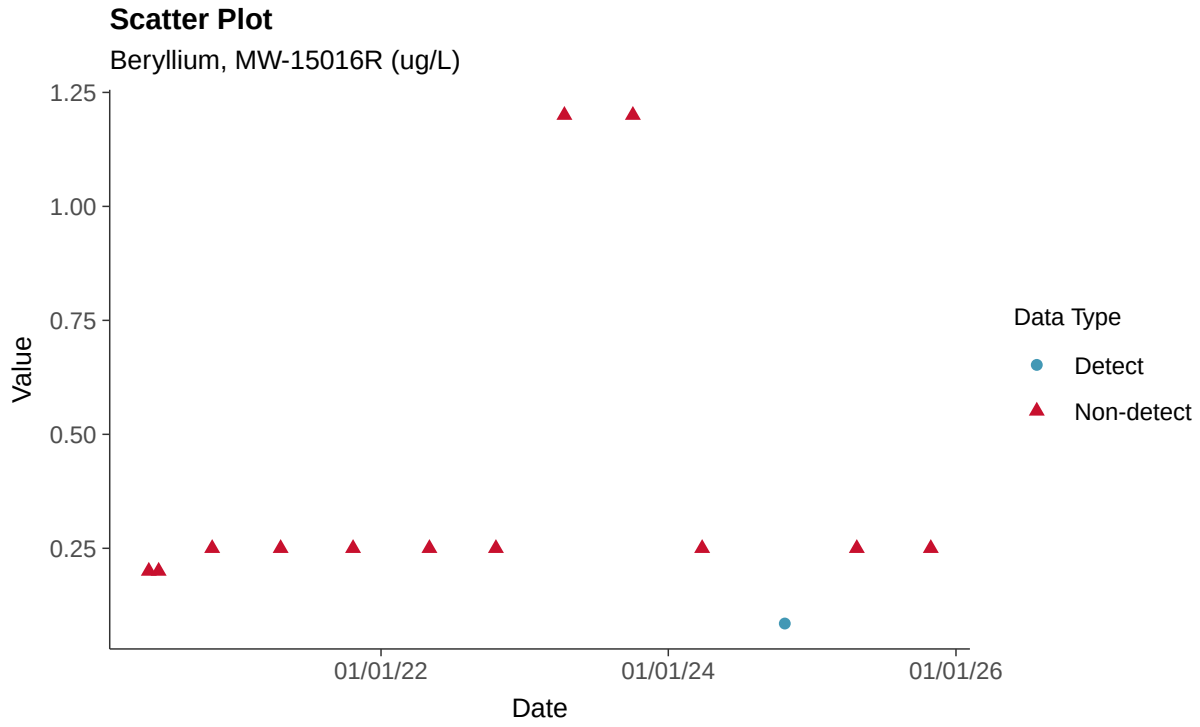

**Trend Regression: Piecewise Linear-Linear-Linear**

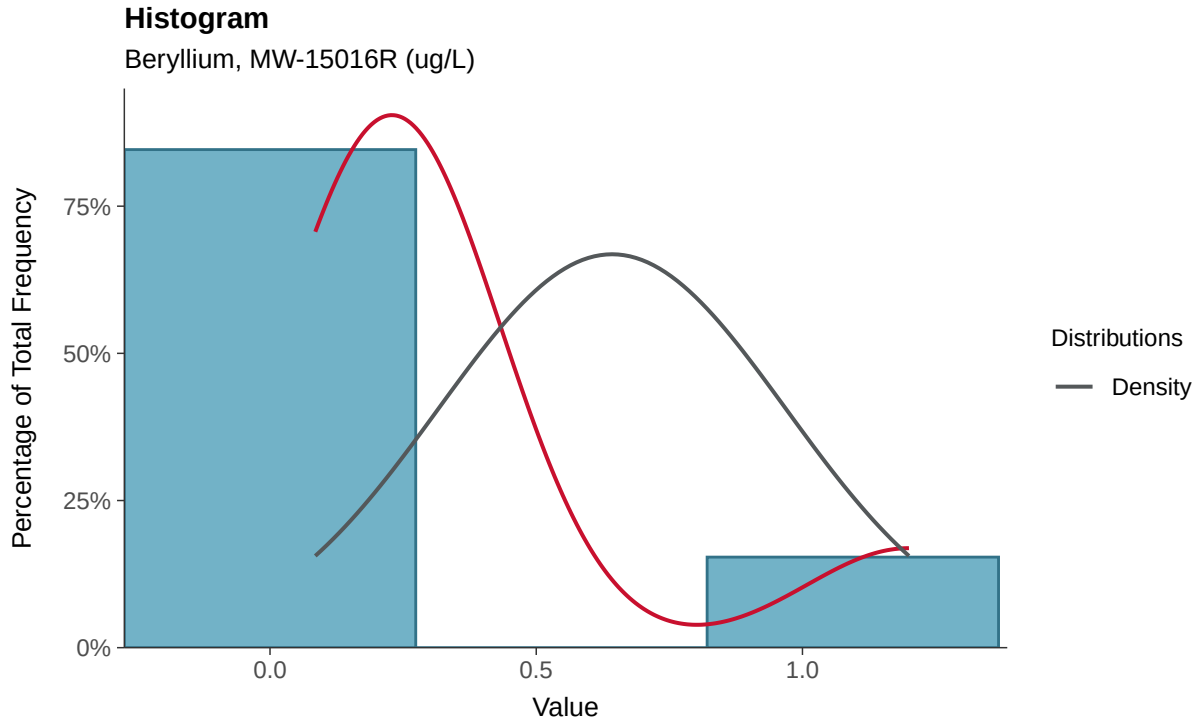
Barium, MW-15016R (ug/L)



## Appendix IV: Beryllium, MW-15016R

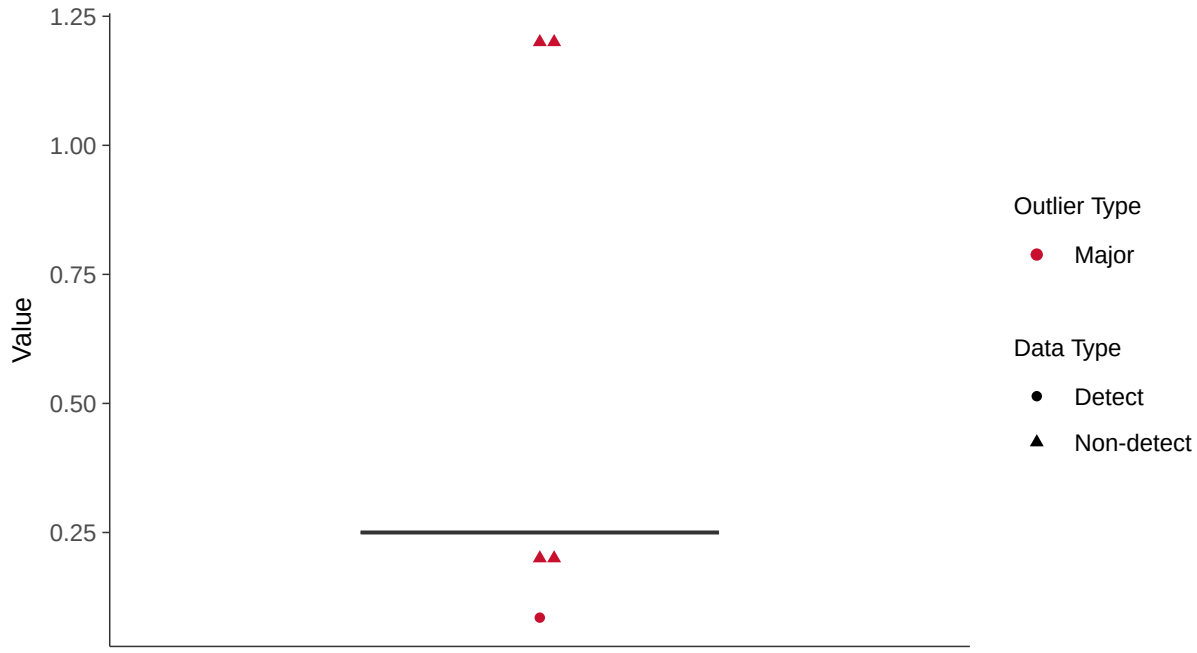
ID: 06_2_104



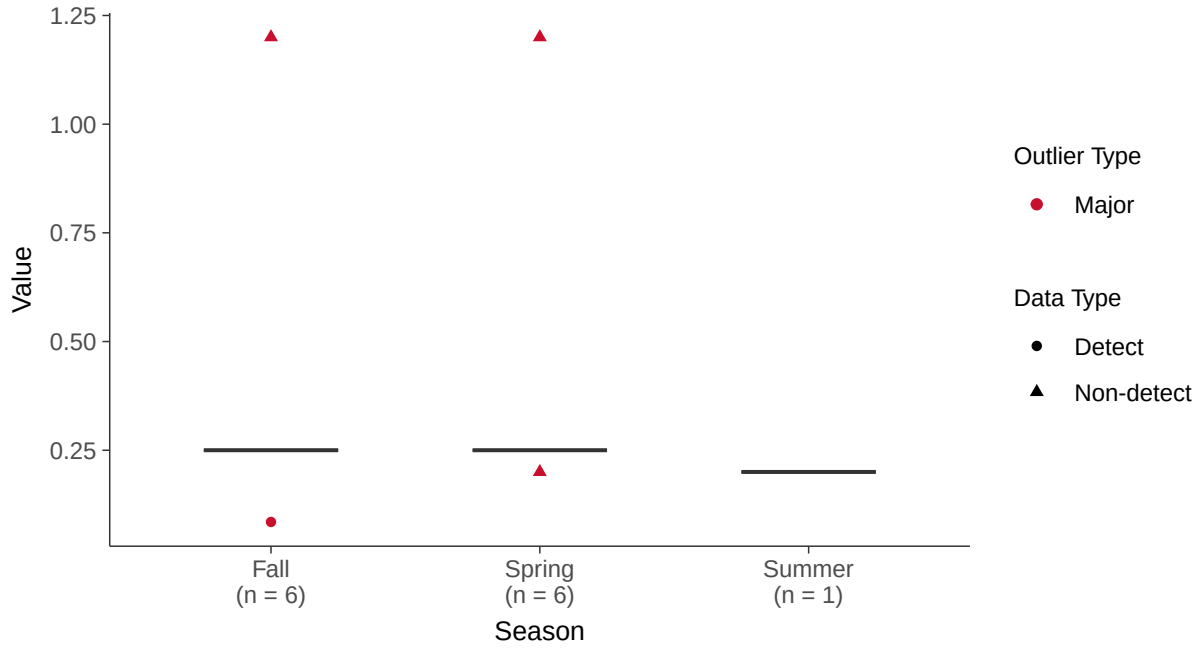
## Boxplot

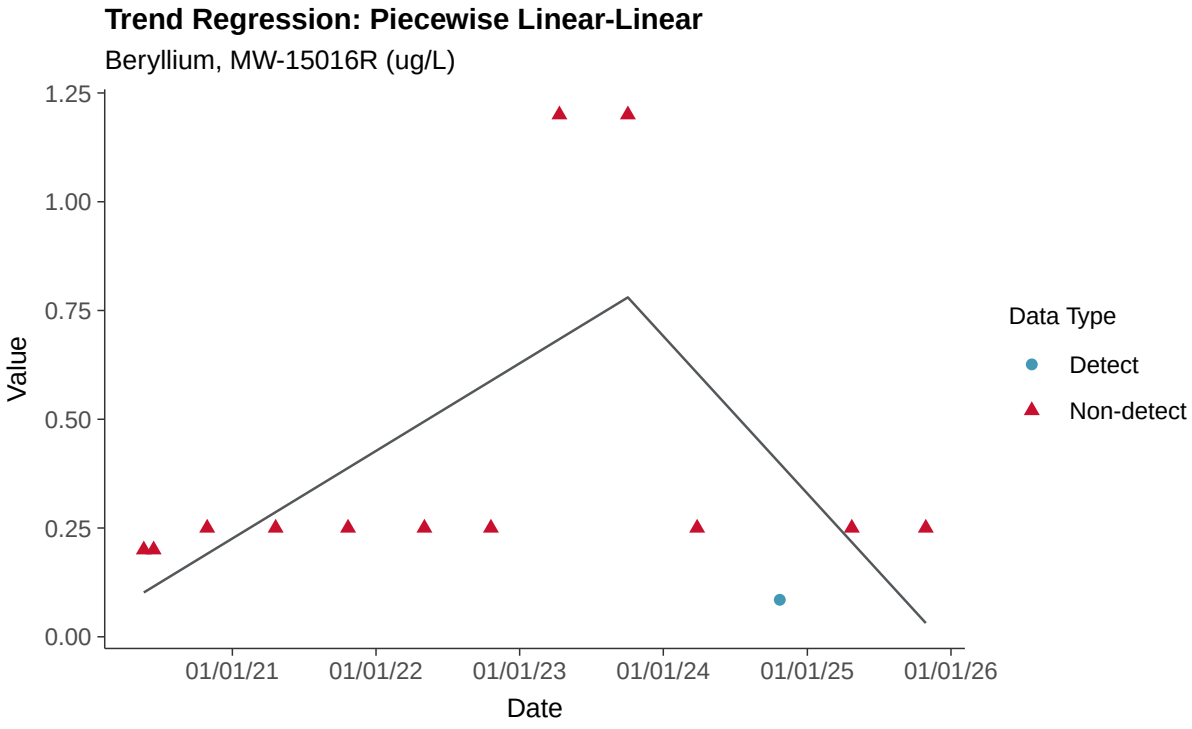
Beryllium, MW-15016R (ug/L)




## Boxplot by Season

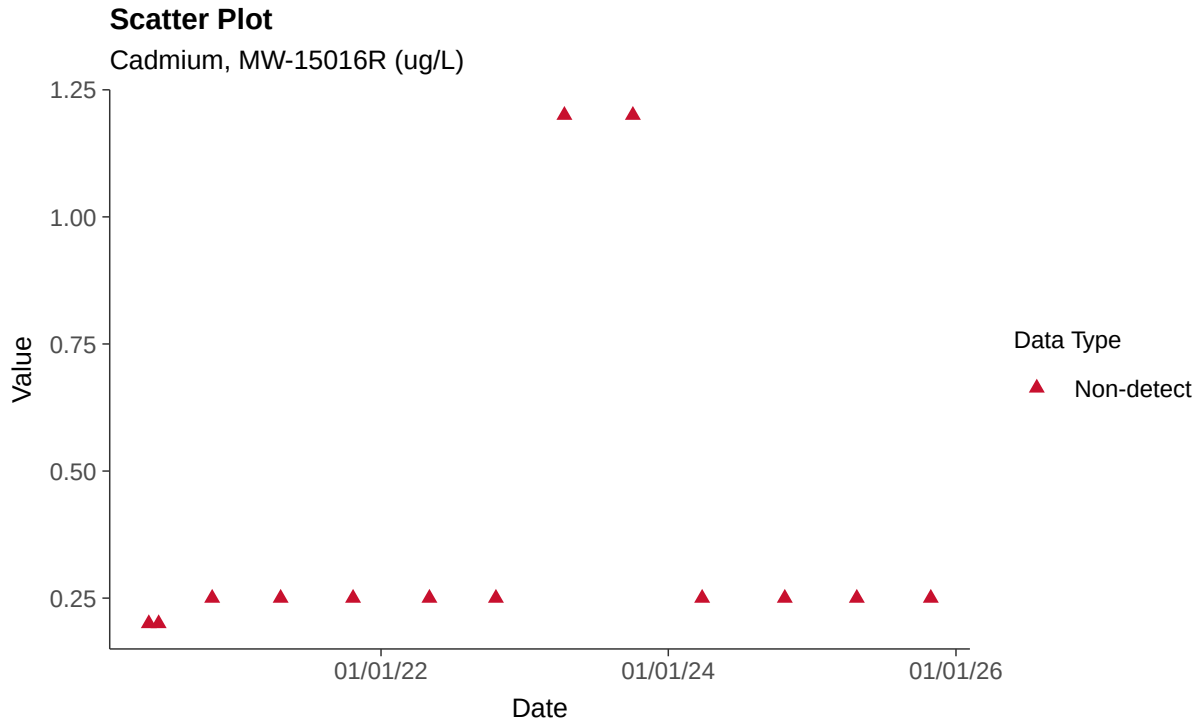
Beryllium, MW-15016R (ug/L)

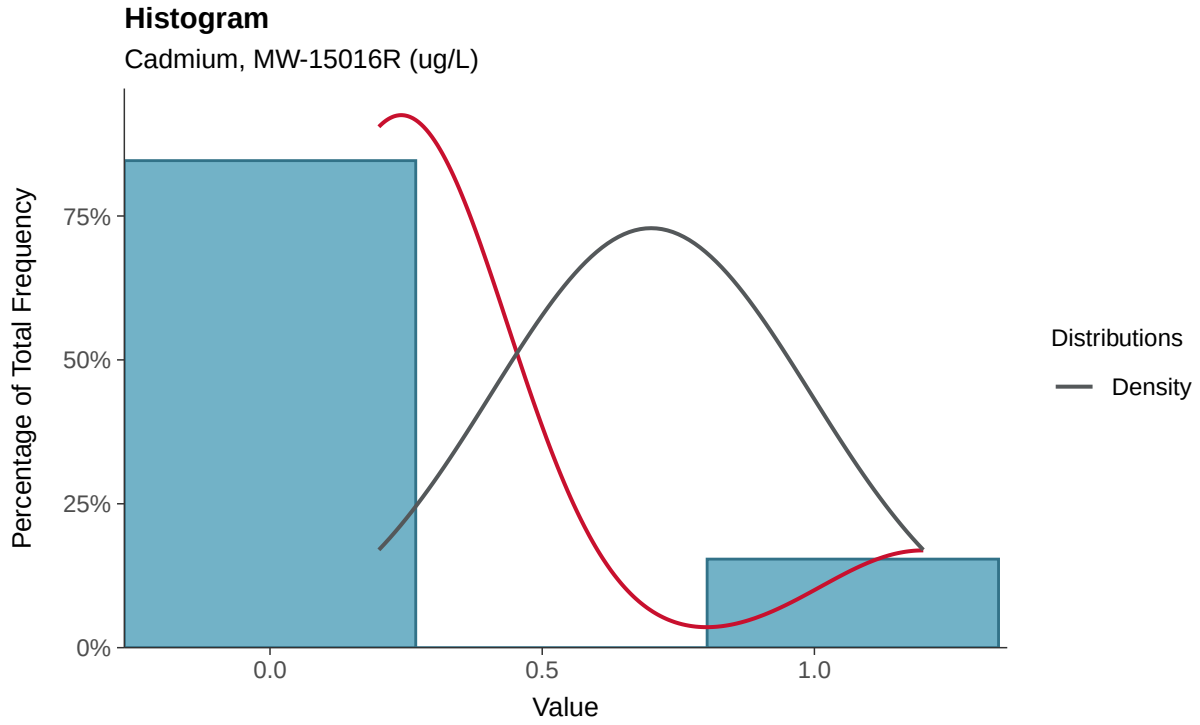



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15016R (ug/L)
1.25
1.00
0.75
0.50
0.25
0.00
Value
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15016R

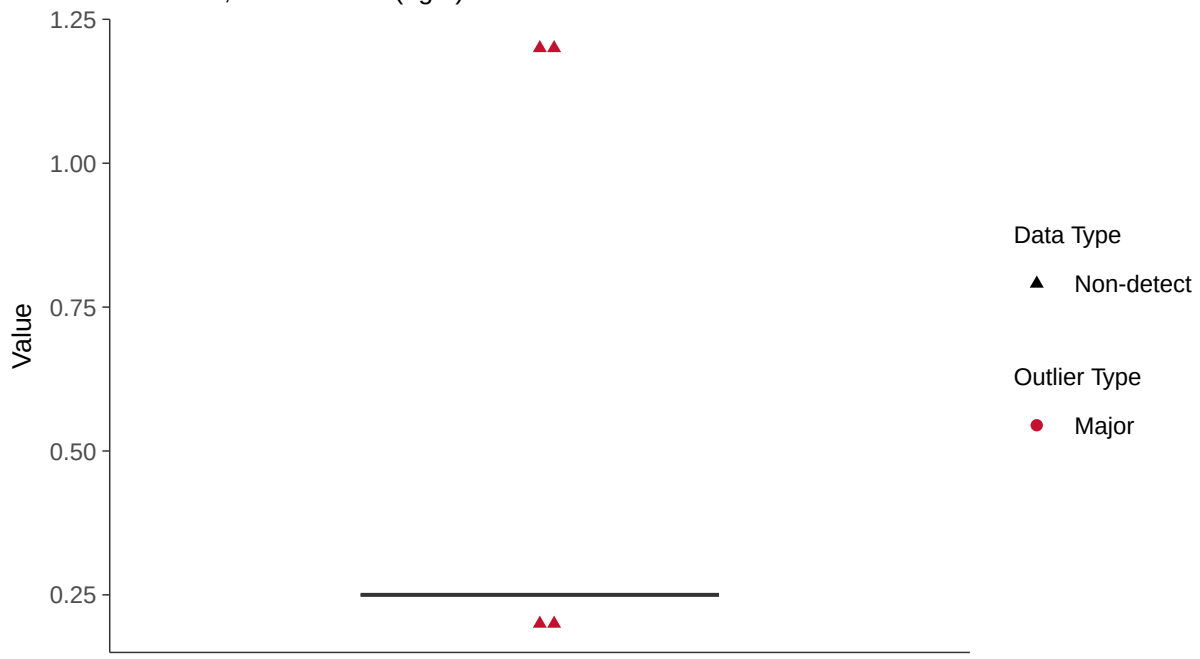
ID: 06_2_106



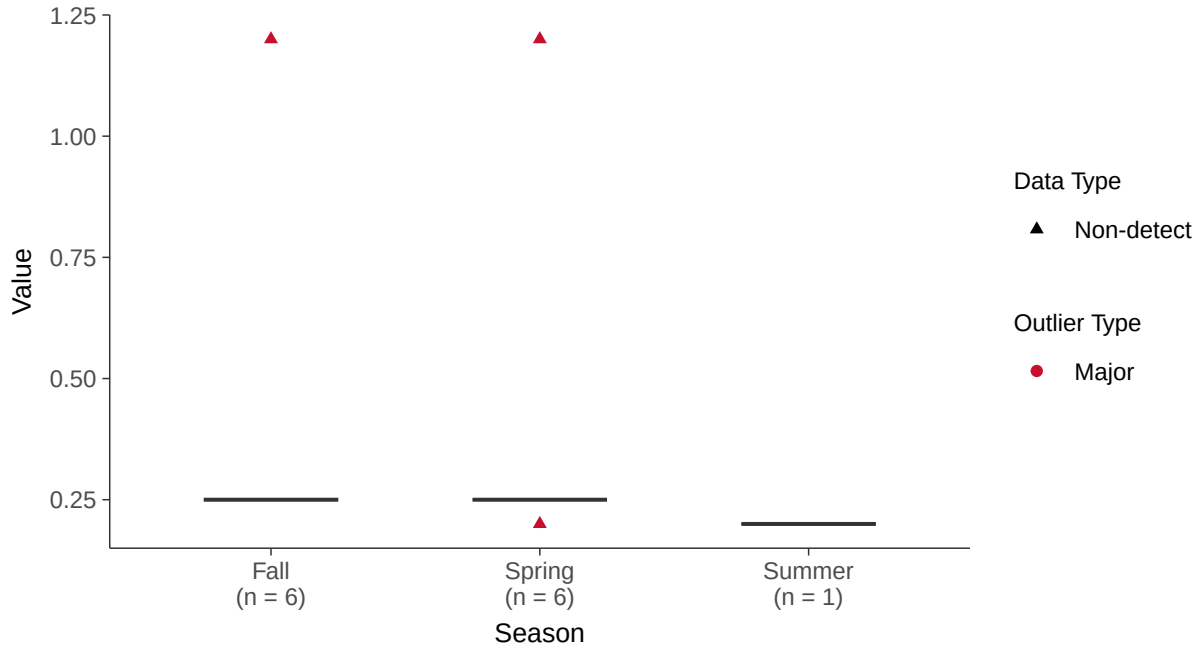
## Boxplot

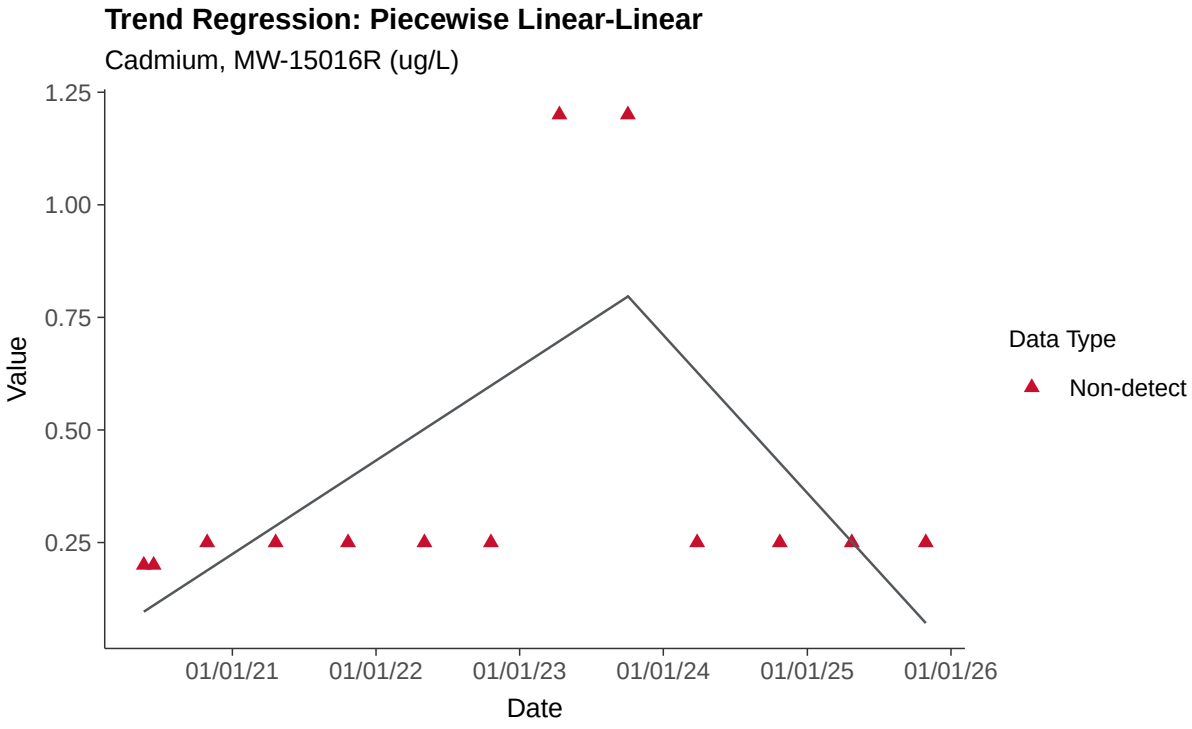
Cadmium, MW-15016R (ug/L)




## Boxplot by Season

Cadmium, MW-15016R (ug/L)



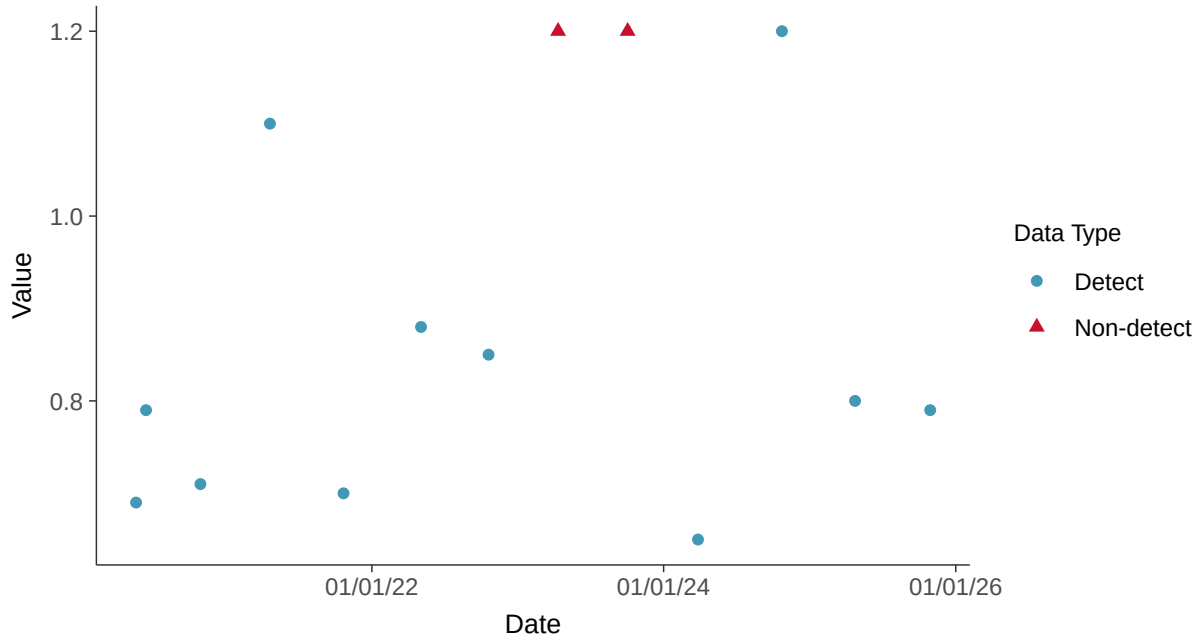

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15016R (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15016R

ID: 06_2_109

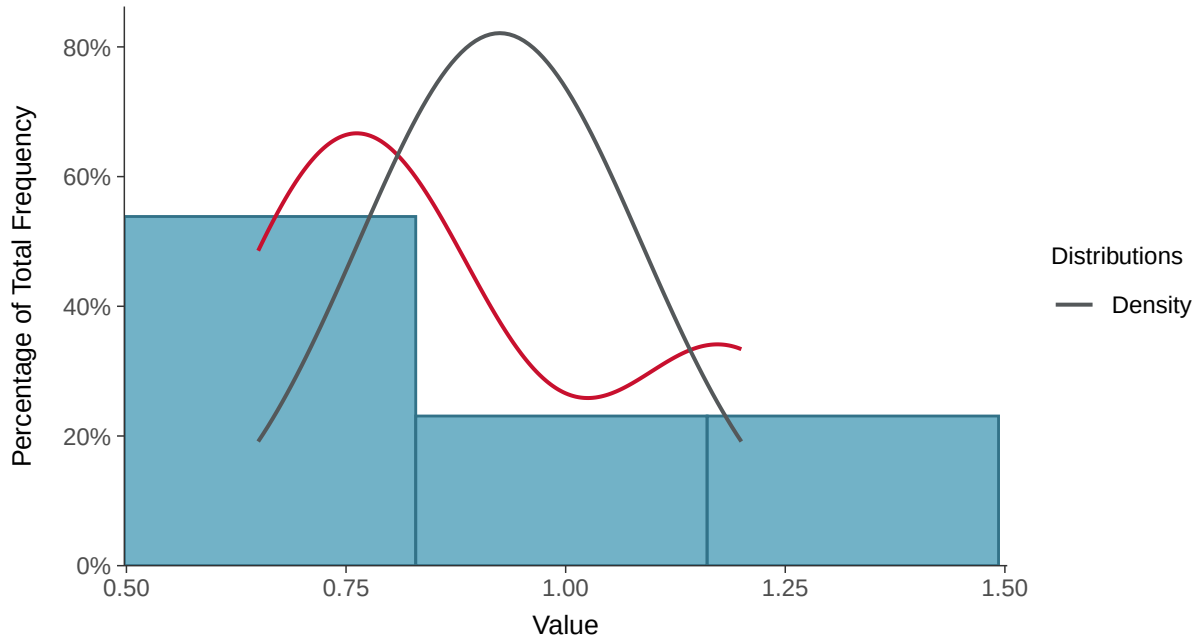
**Scatter Plot**

Chromium, MW-15016R (ug/L)



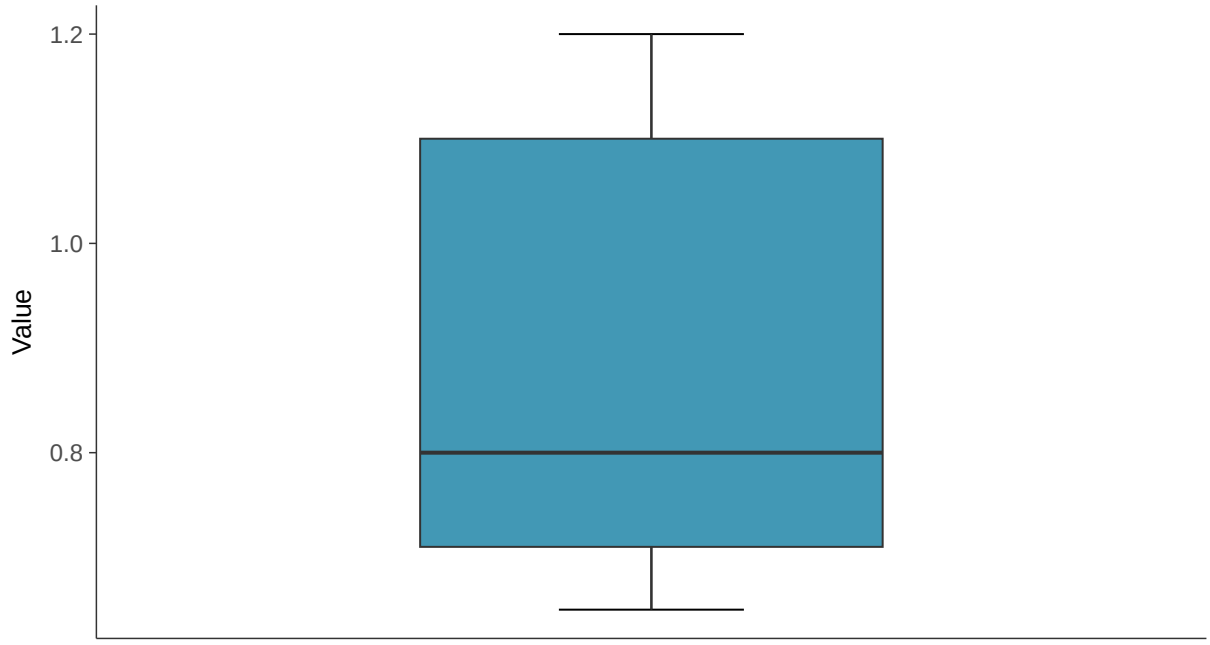

**Histogram**

Chromium, MW-15016R (ug/L)



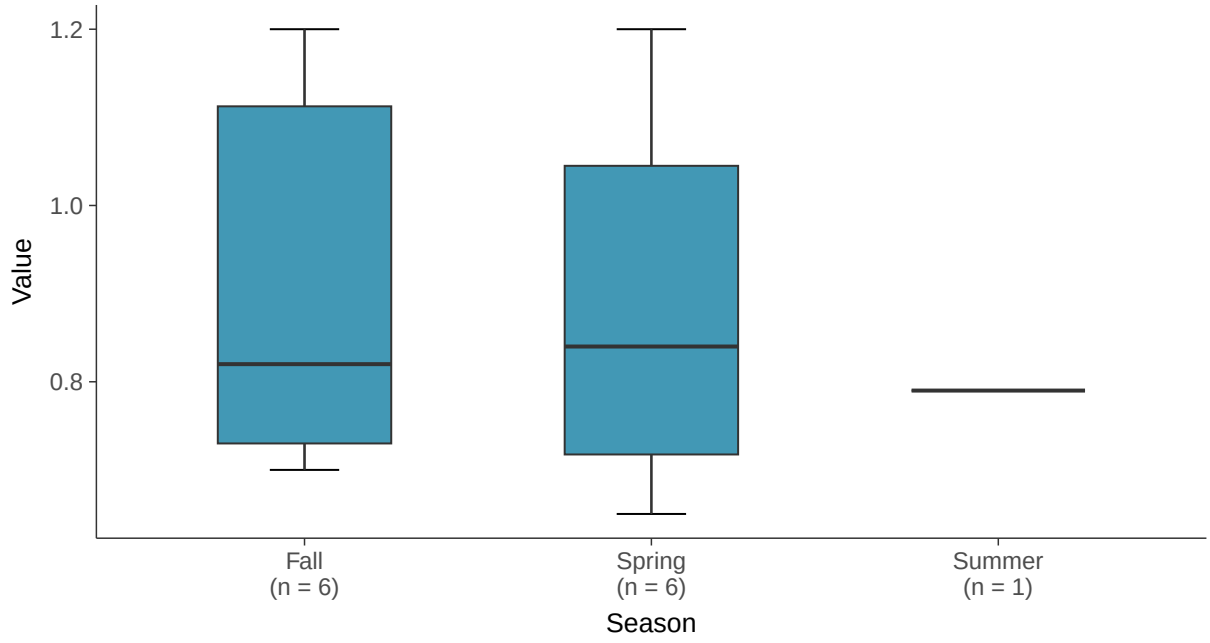
## Boxplot

Chromium, MW-15016R (ug/L)



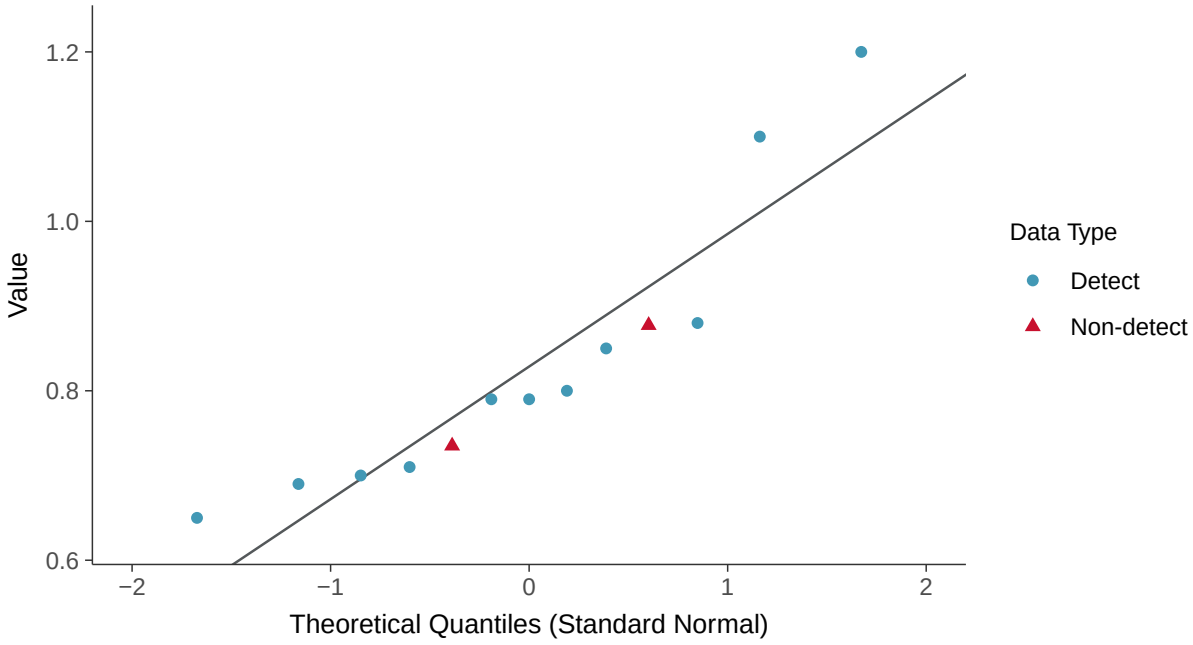

## Boxplot by Season

Chromium, MW-15016R (ug/L)



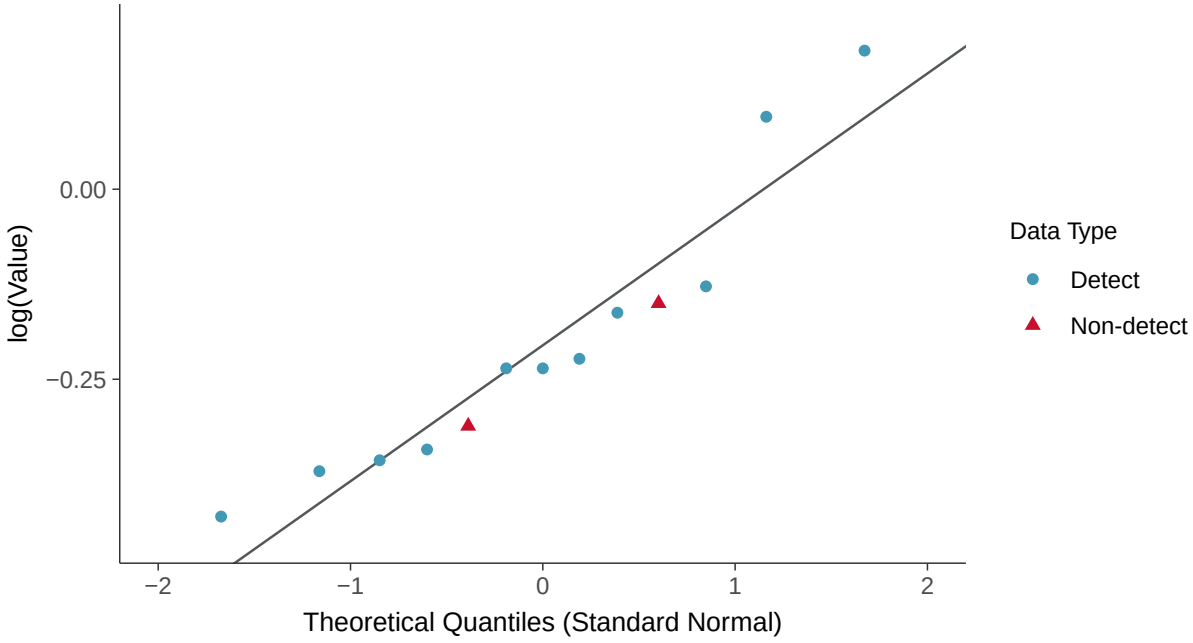
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15016R (ug/L)



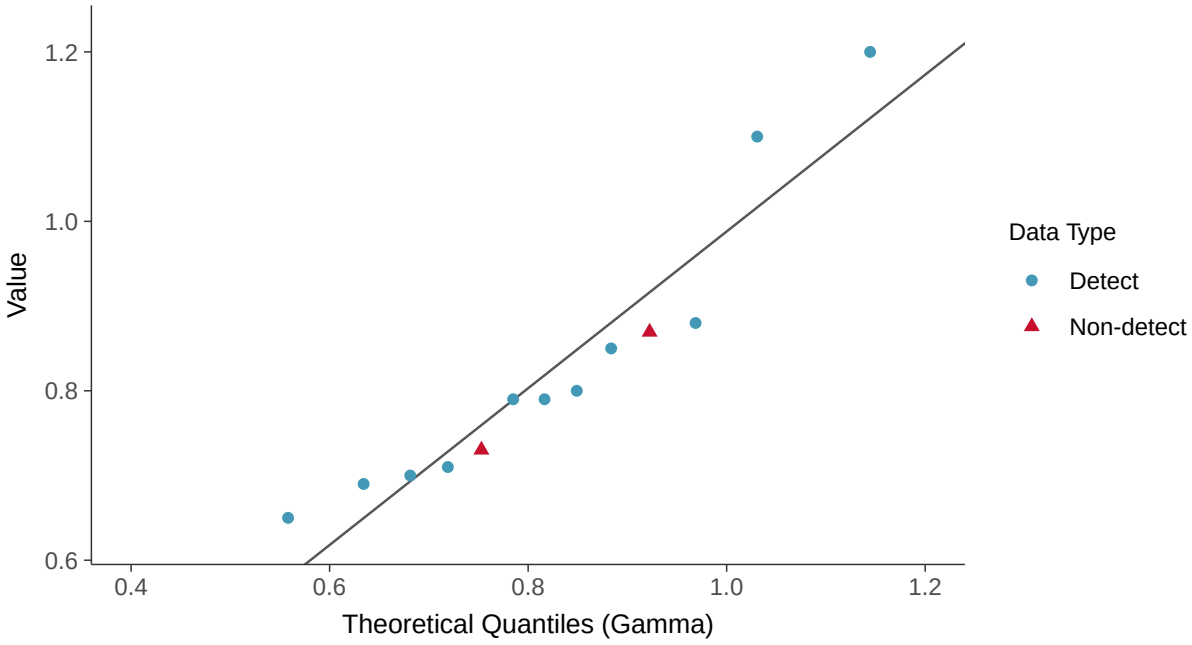

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15016R (ug/L)



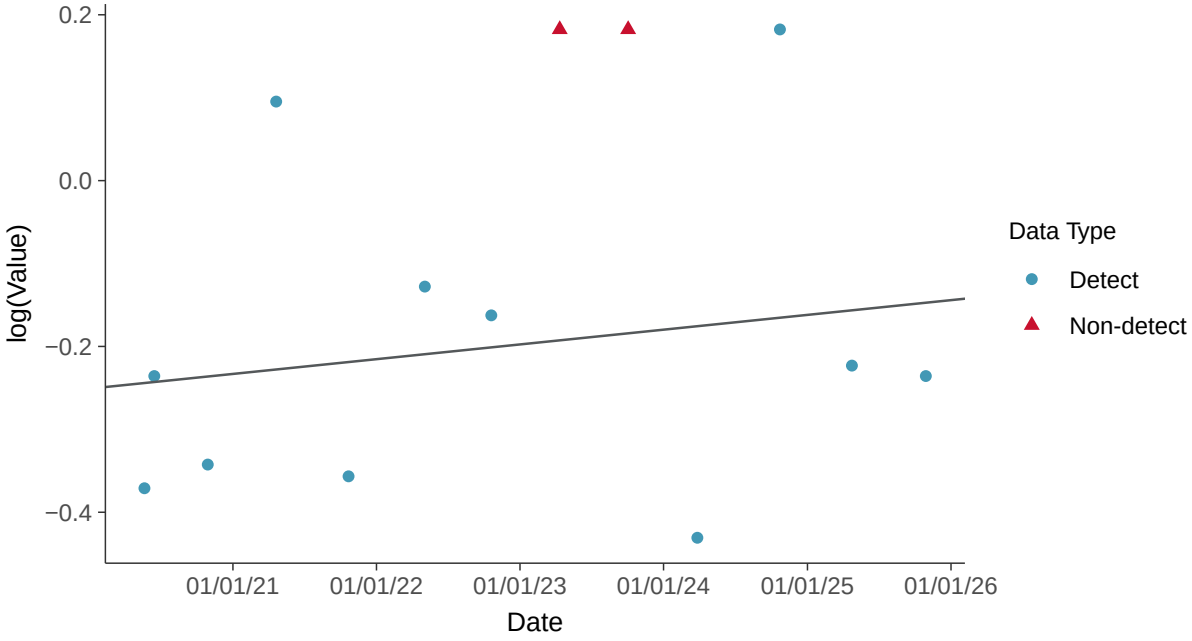
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15016R (ug/L)



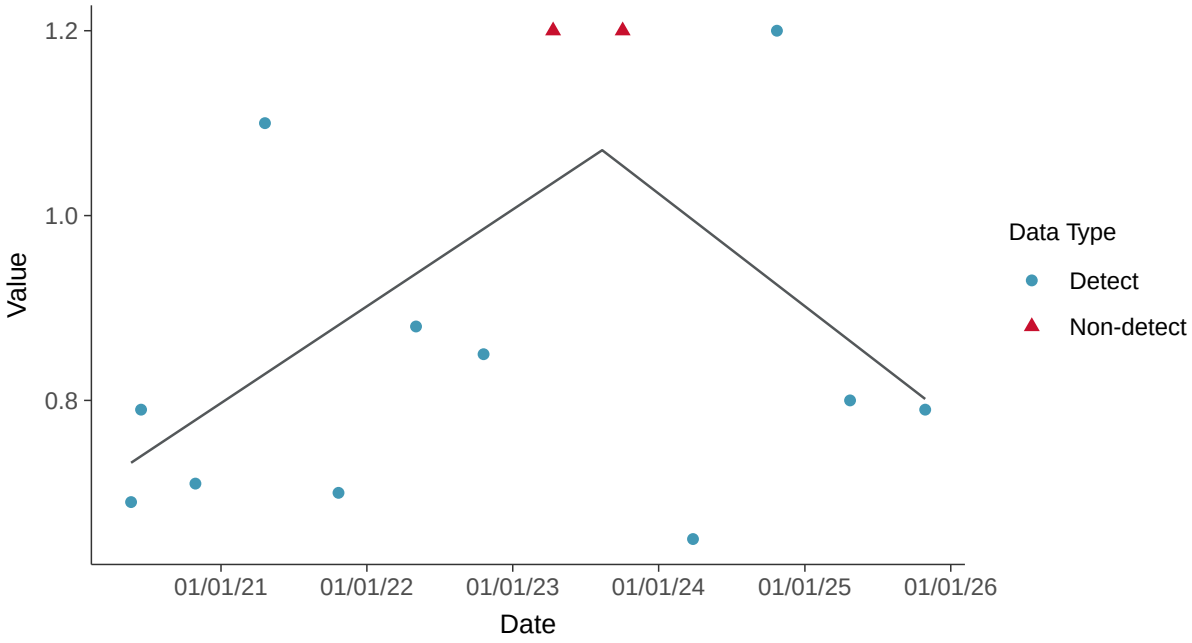

**Trend Regression: Lognormal MLE**

Chromium, MW-15016R (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15016R (ug/L)

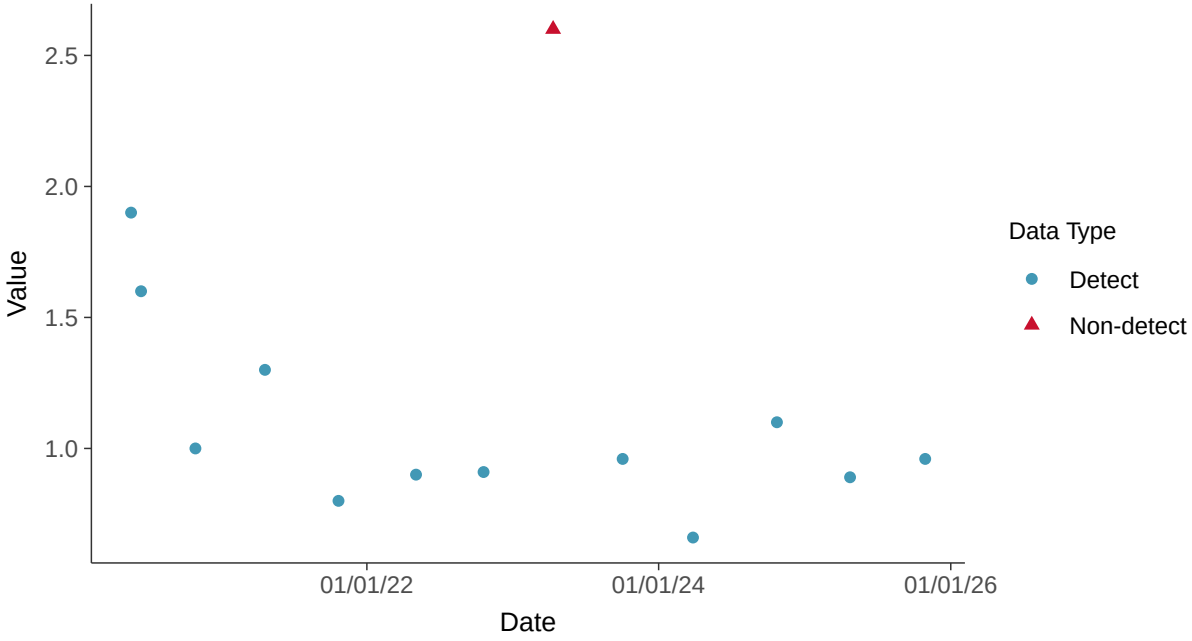


## Appendix IV: Cobalt, MW-15016R

ID: 06_2_110

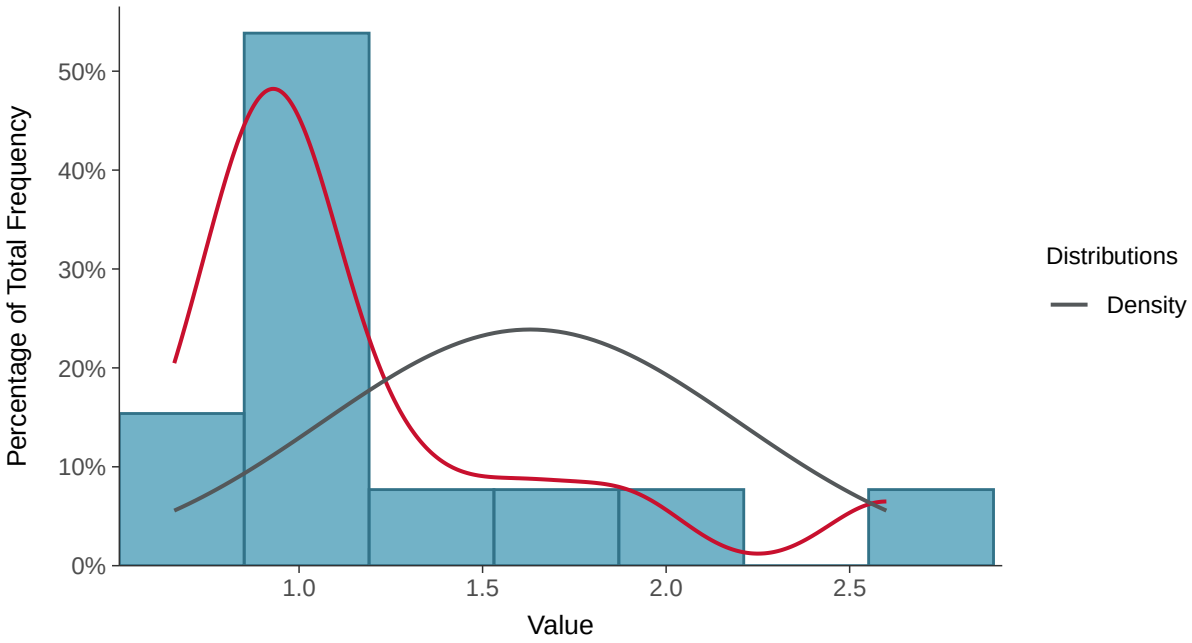
**Scatter Plot**

Cobalt, MW-15016R (ug/L)



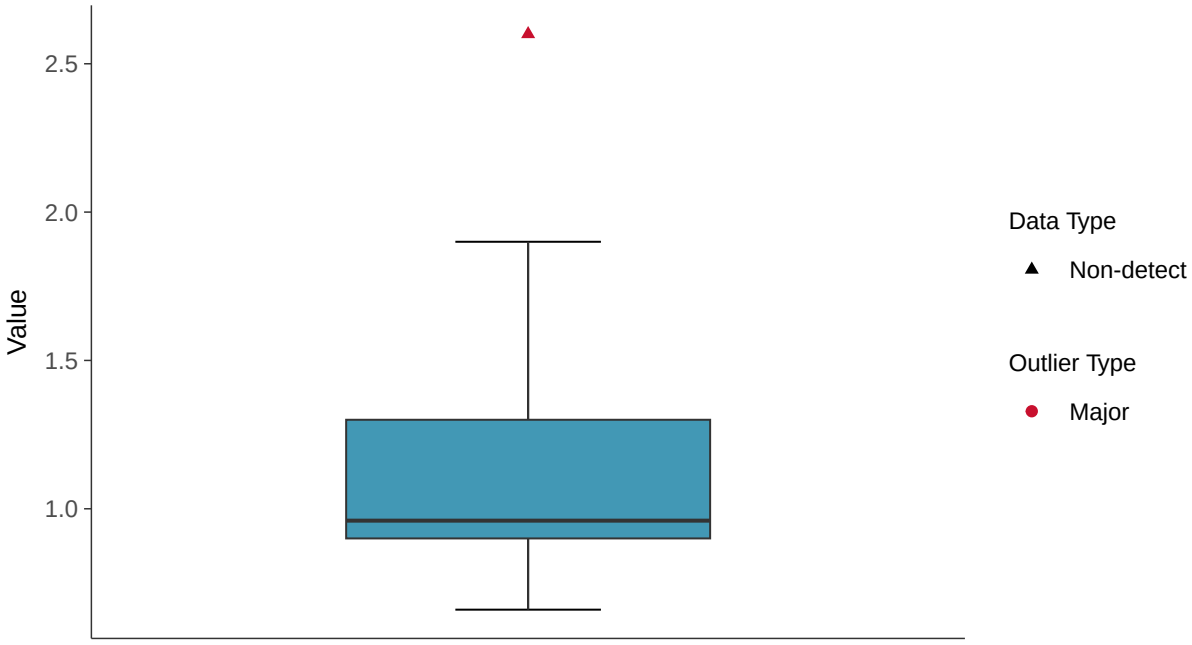

**Histogram**

Cobalt, MW-15016R (ug/L)



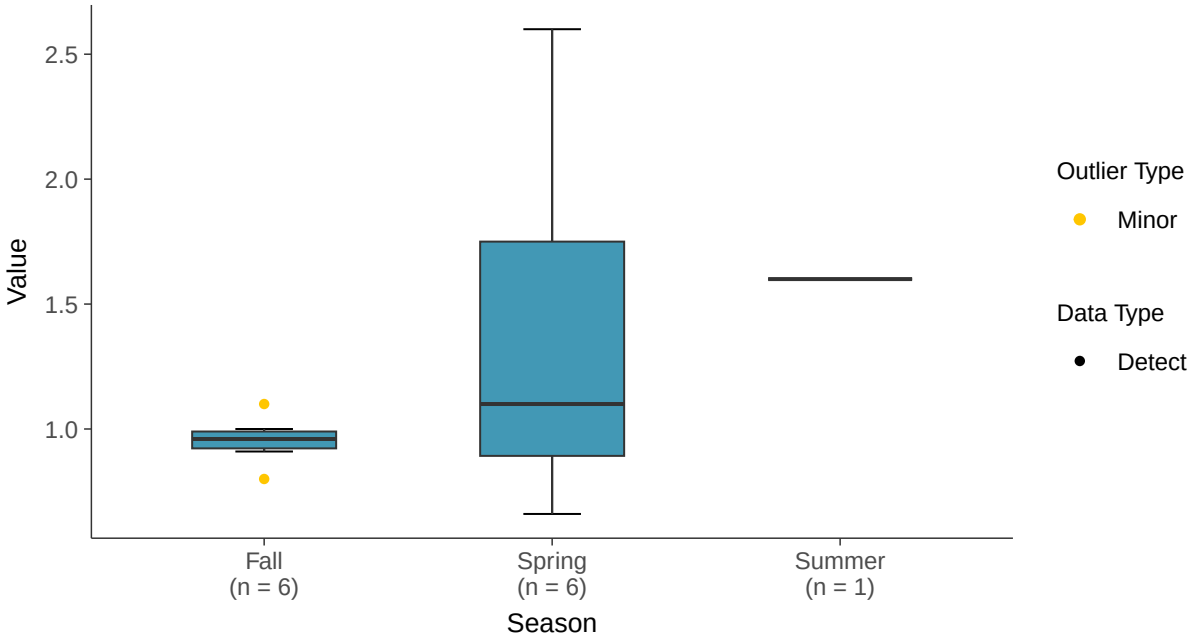
## Boxplot

Cobalt, MW-15016R (ug/L)



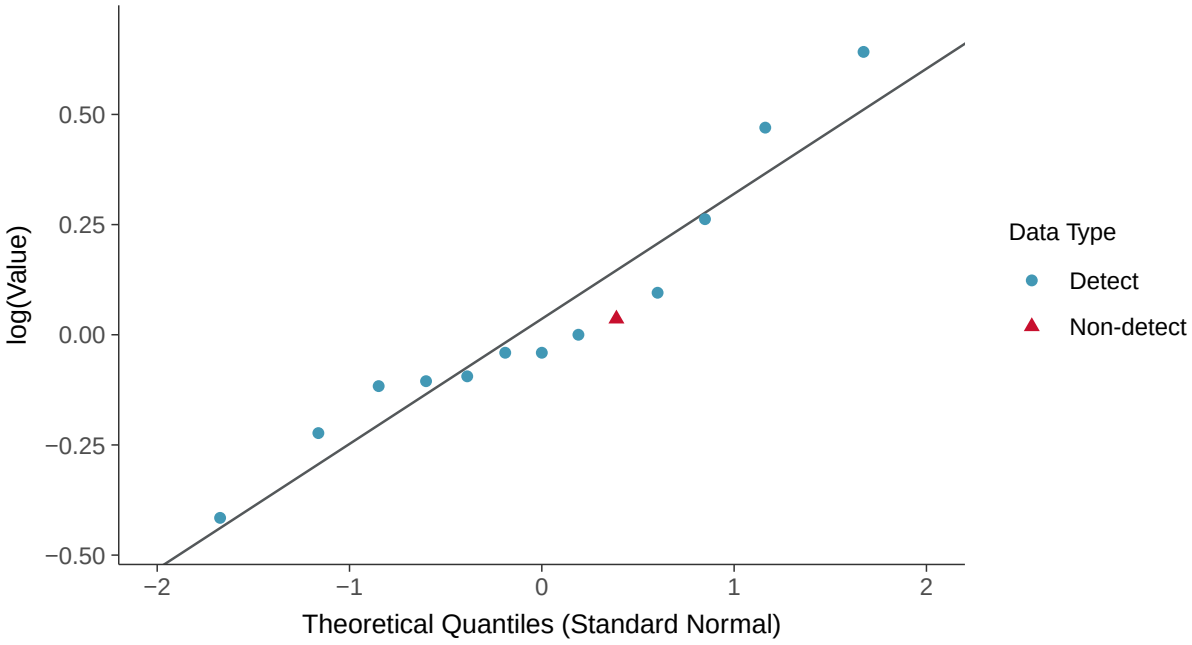

## Boxplot by Season

Cobalt, MW-15016R (ug/L)



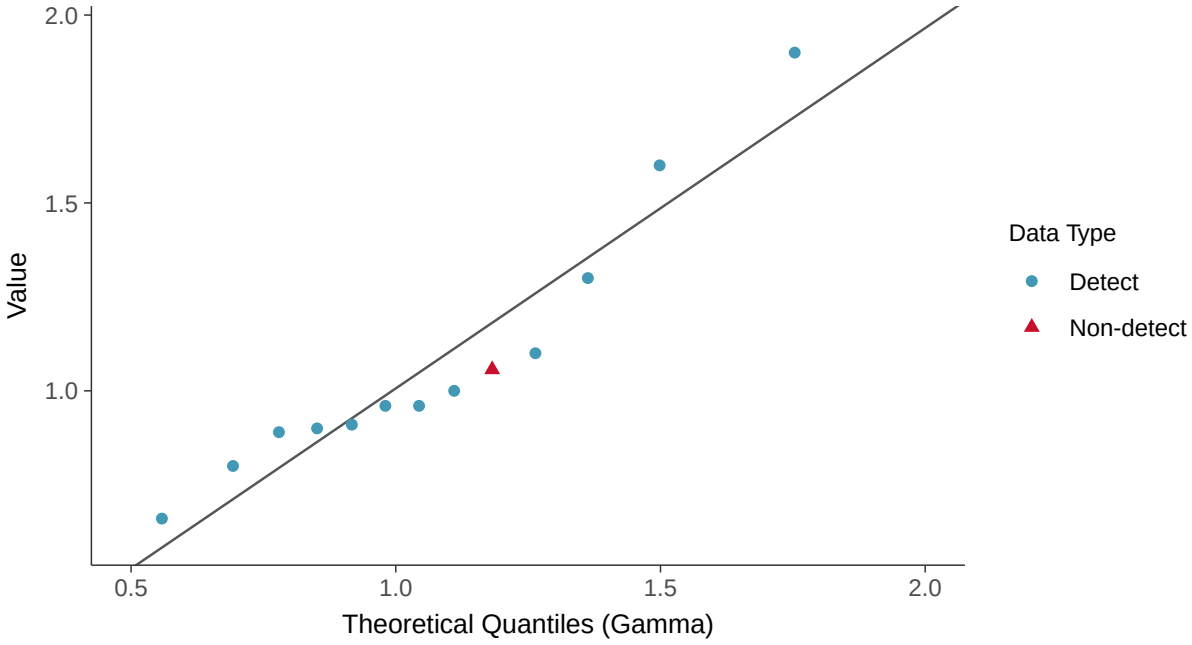
**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15016R (ug/L)



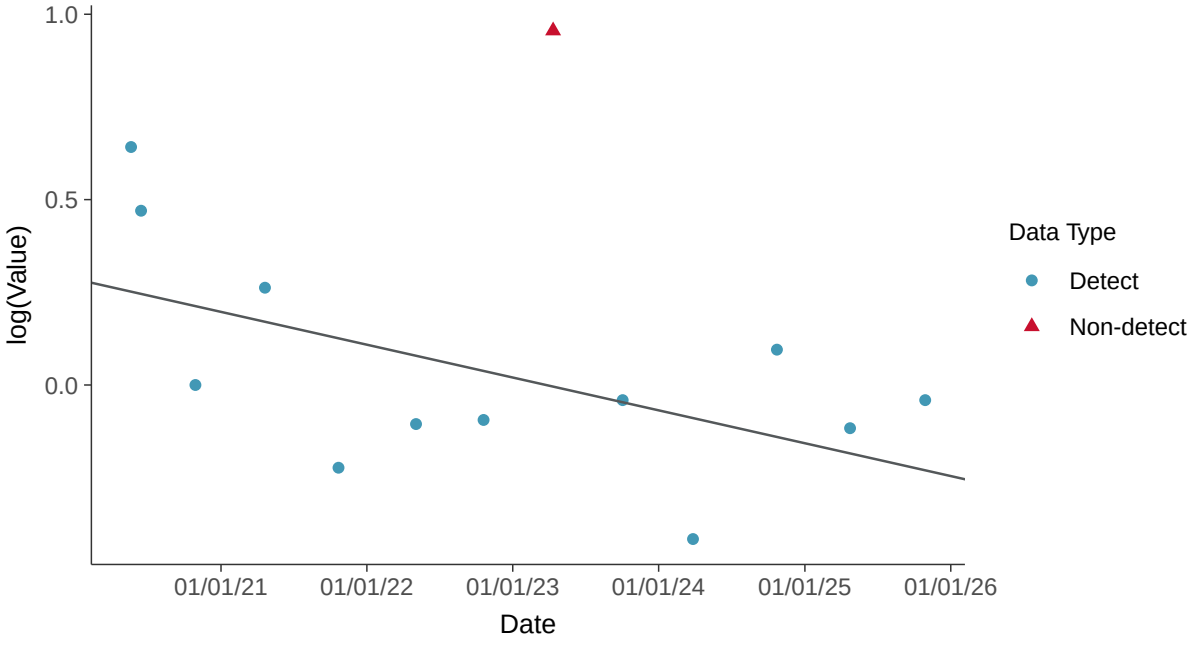

**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15016R (ug/L)



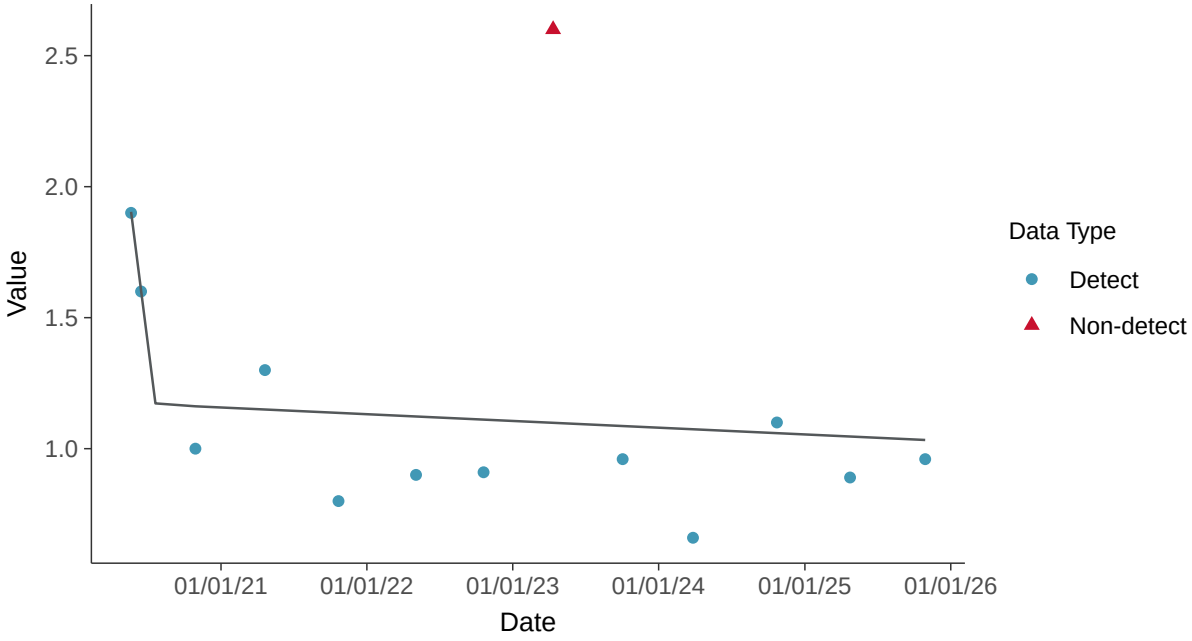
**Trend Regression: Lognormal MLE**

Cobalt, MW-15016R (ug/L)



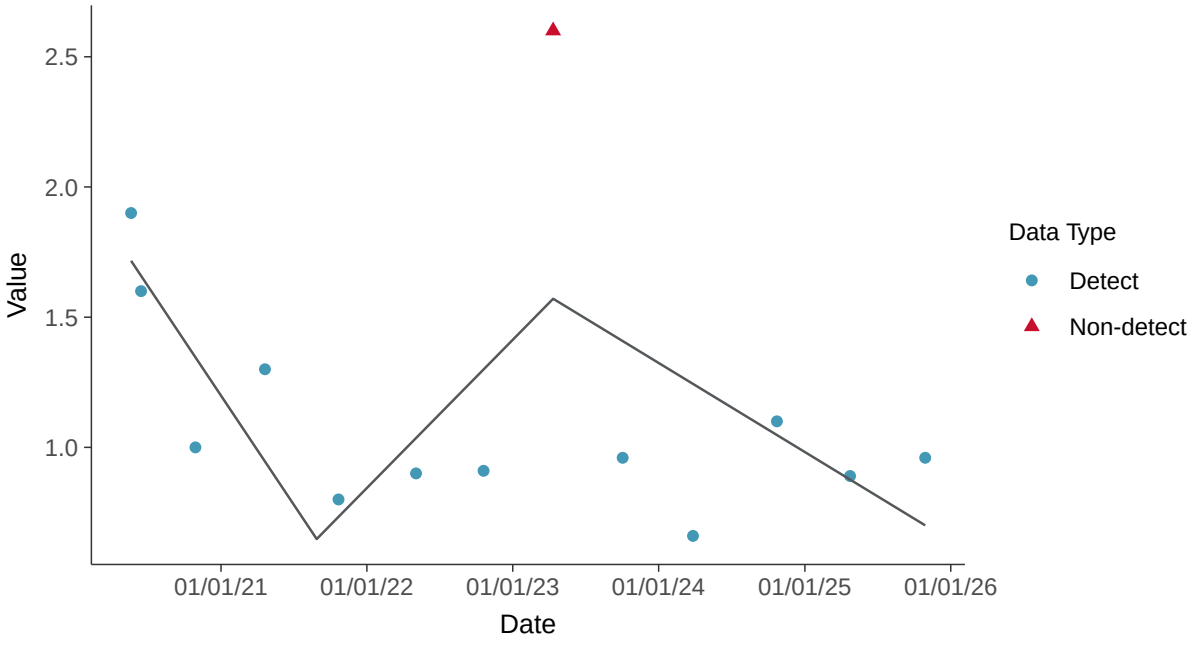

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15016R (ug/L)



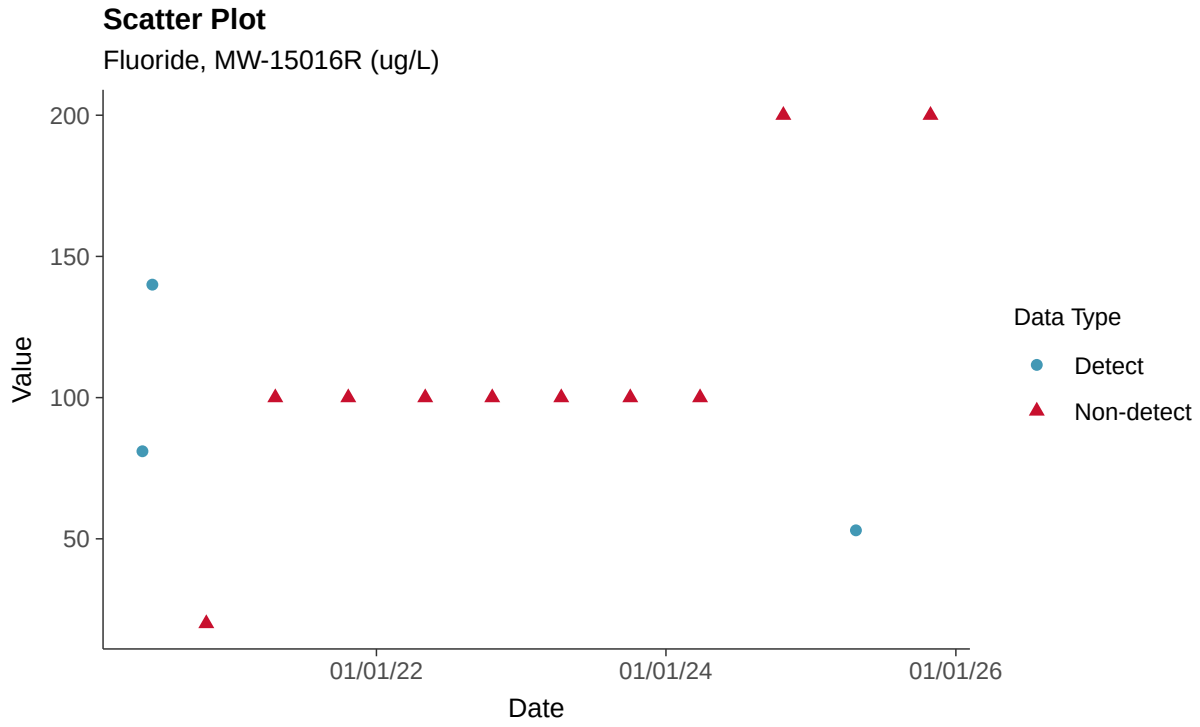
**Trend Regression: Piecewise Linear-Linear-Linear**

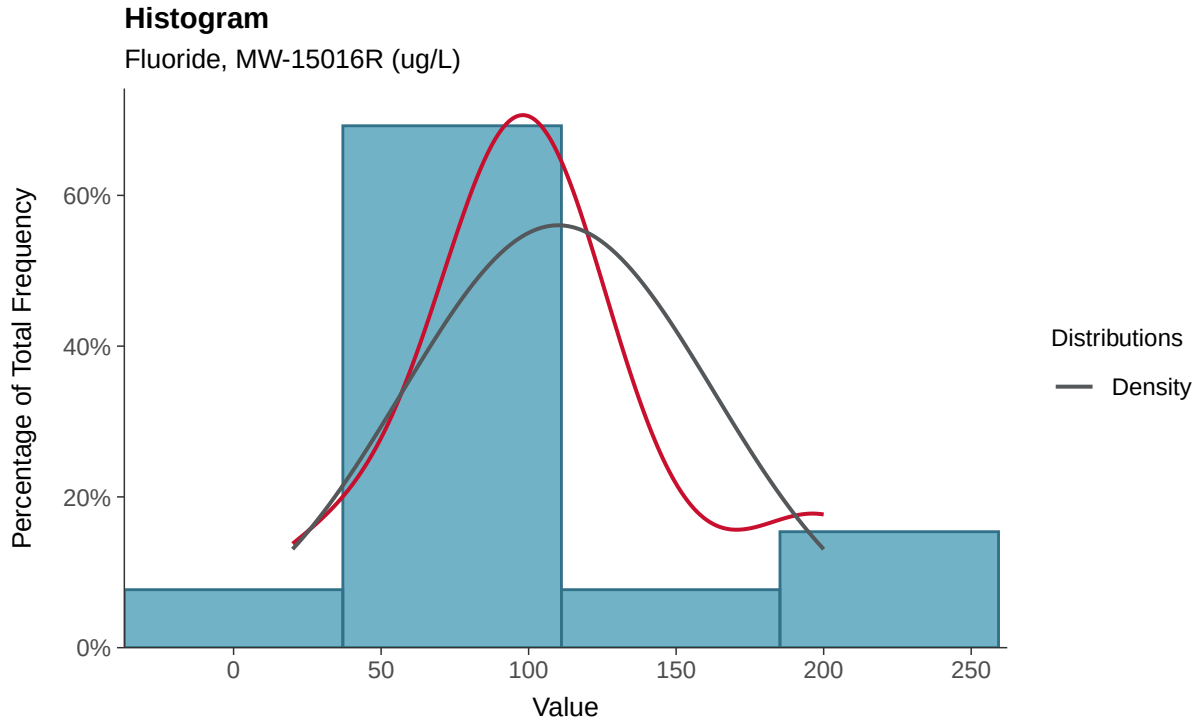
Cobalt, MW-15016R (ug/L)



## Appendix IV: Fluoride, MW-15016R

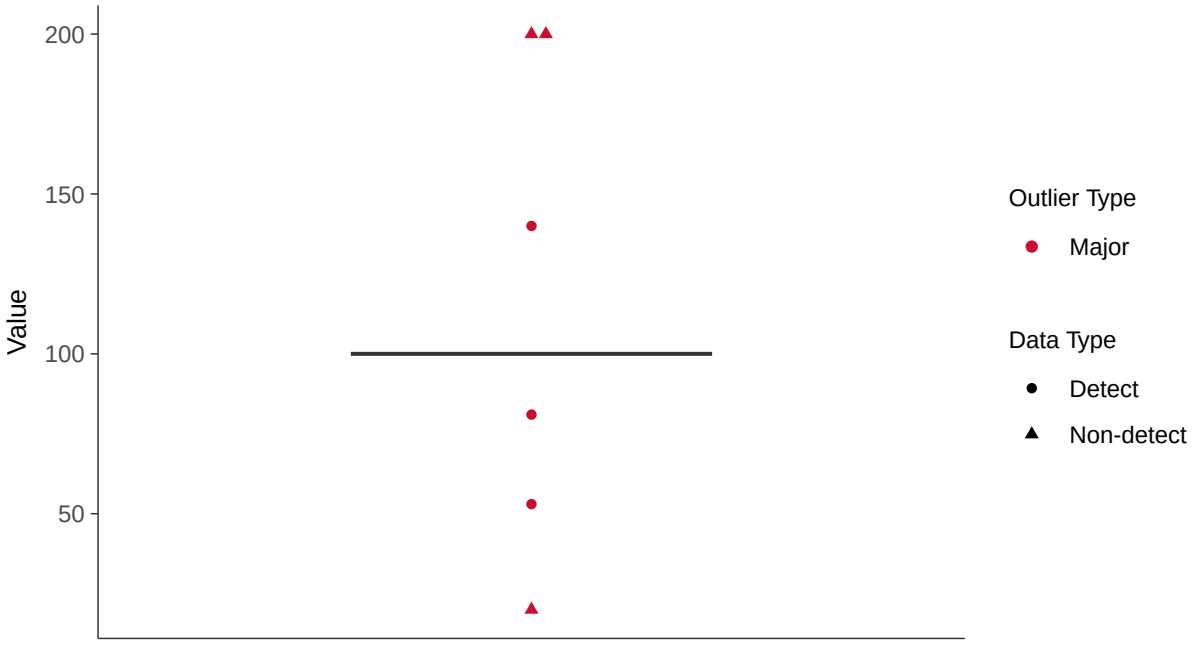
ID: 06_2_114



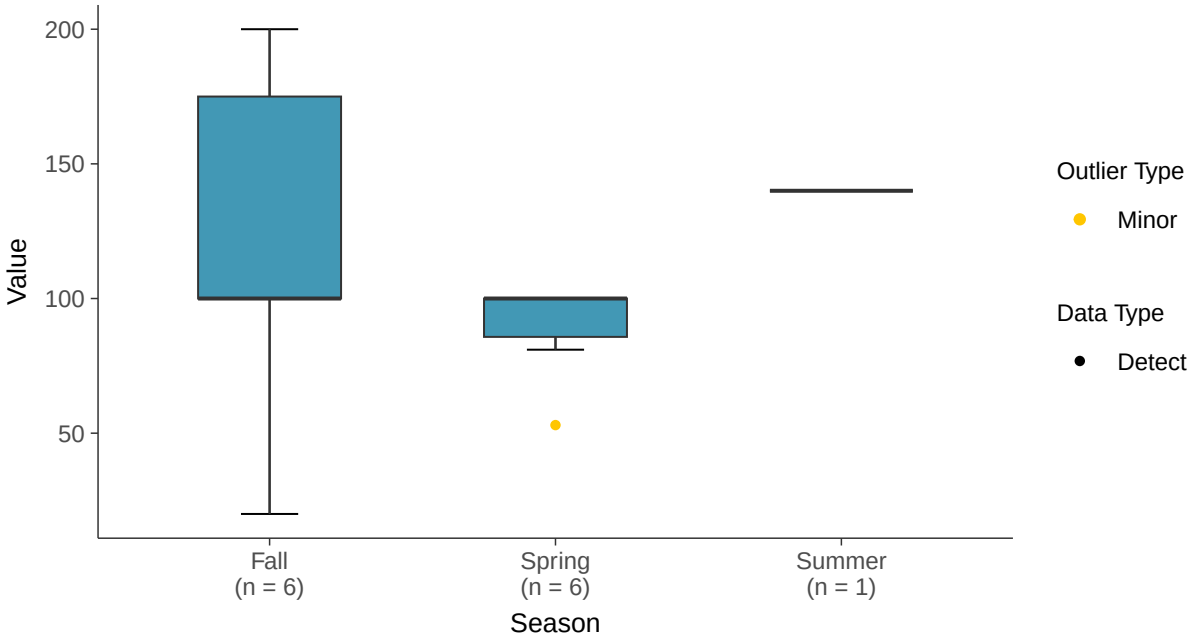
## Boxplot

Fluoride, MW-15016R (ug/L)



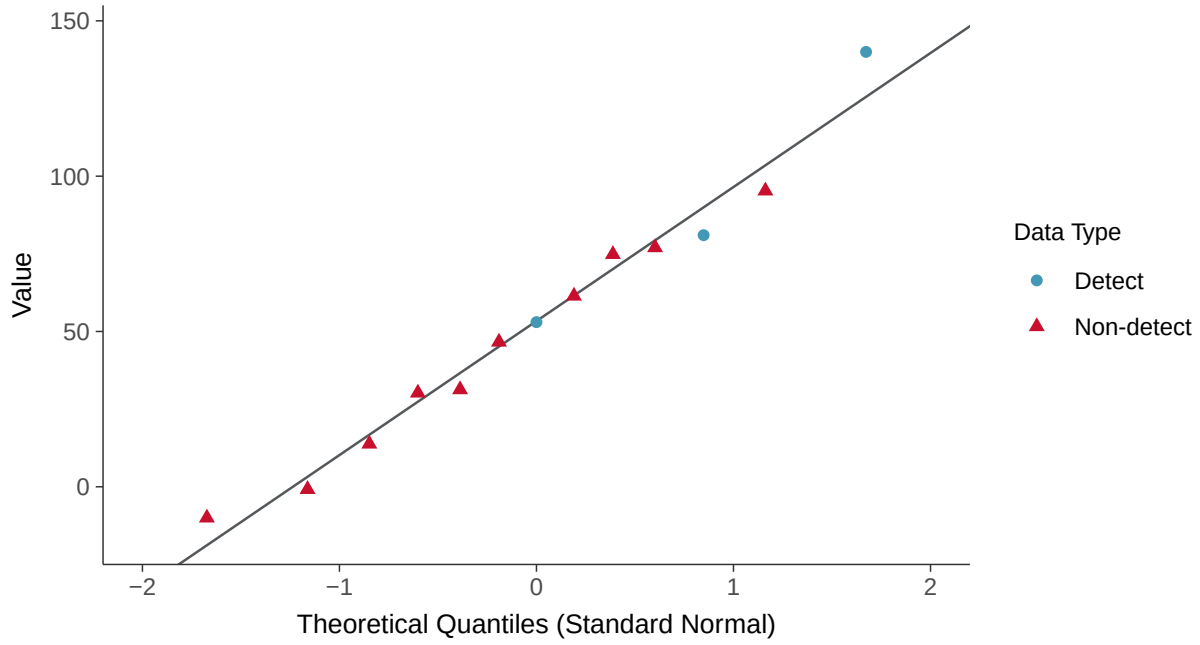

## Boxplot by Season

Fluoride, MW-15016R (ug/L)



**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15016R (ug/L)

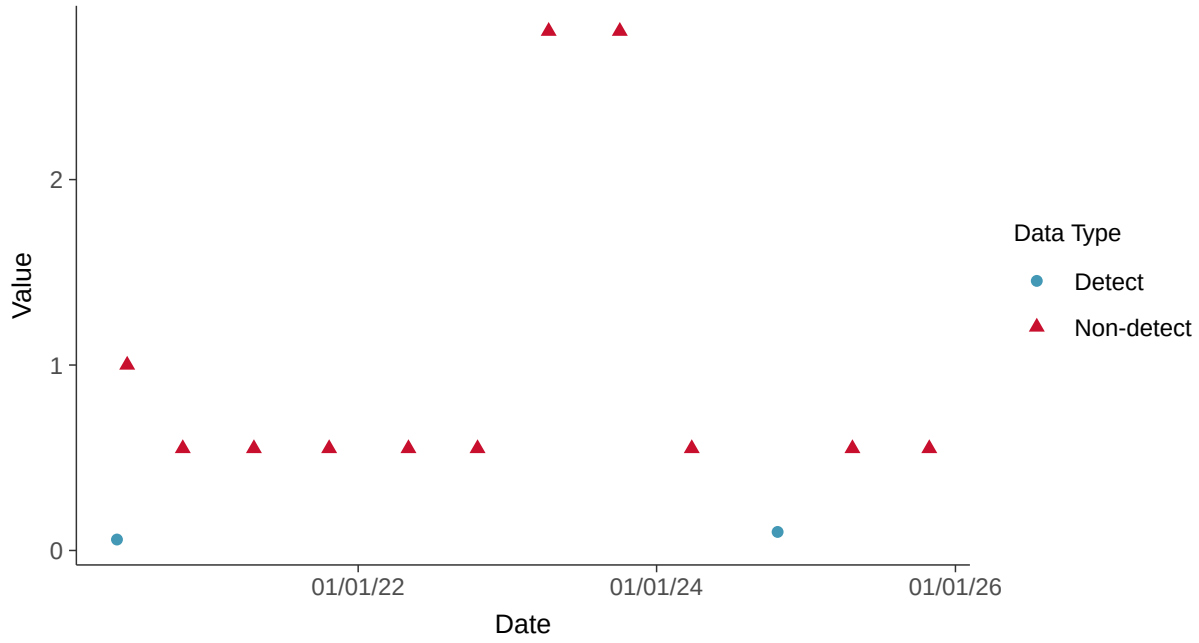


## Appendix IV: Lead, MW-15016R

ID: 06_2_116

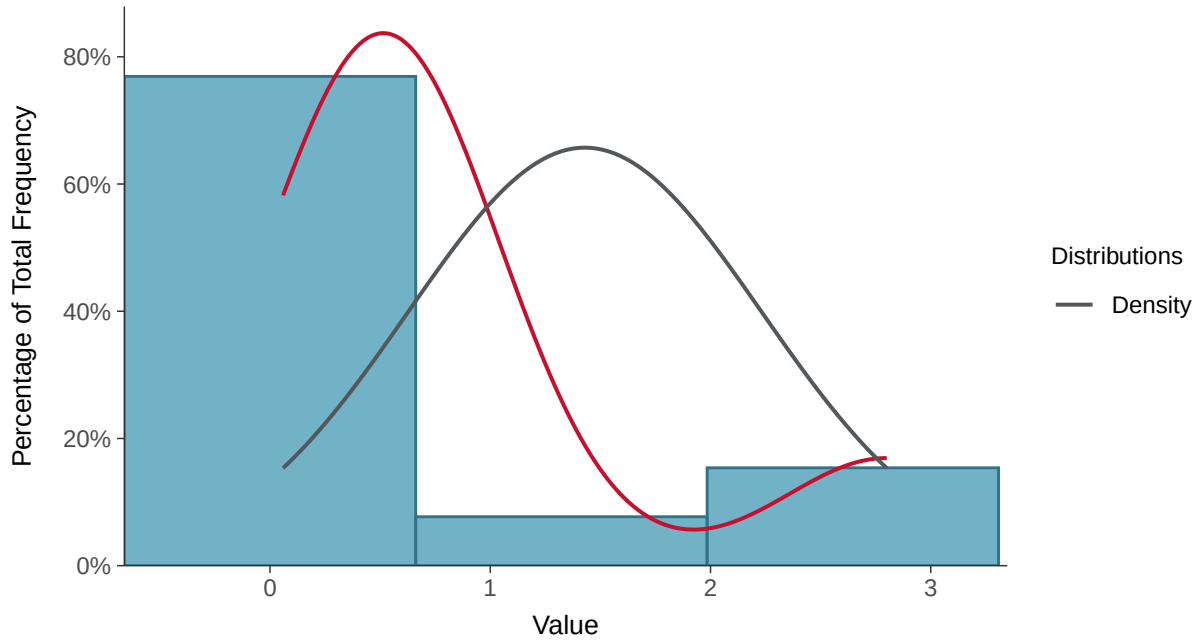
**Scatter Plot**

Lead, MW-15016R (ug/L)



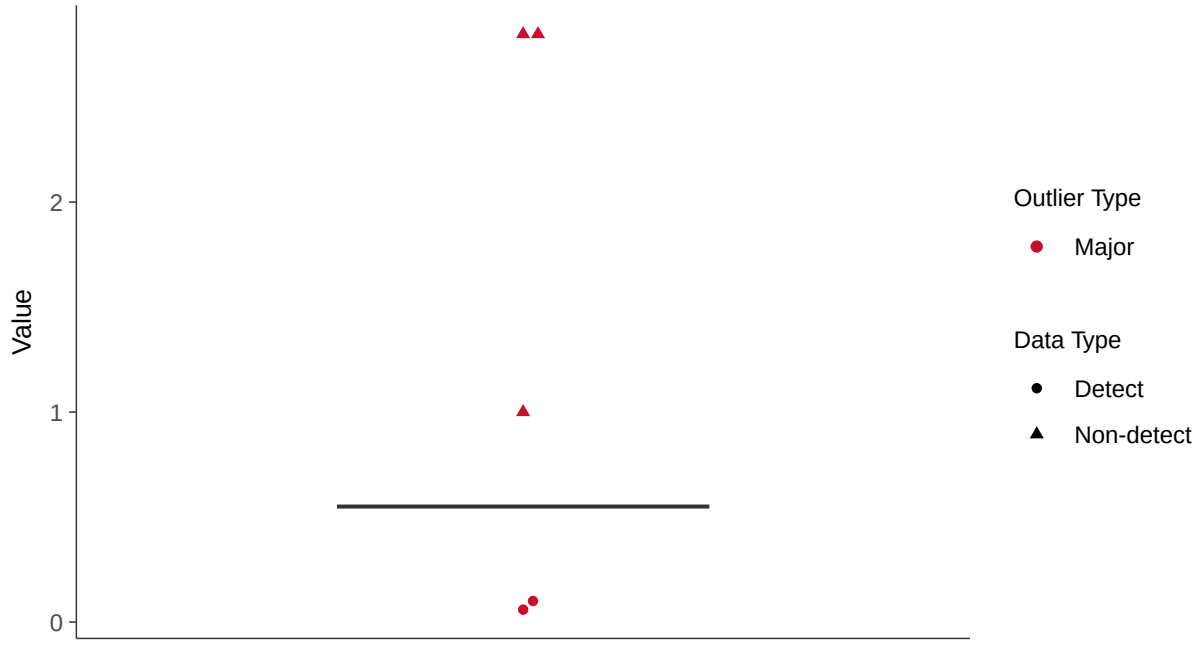

**Histogram**

Lead, MW-15016R (ug/L)



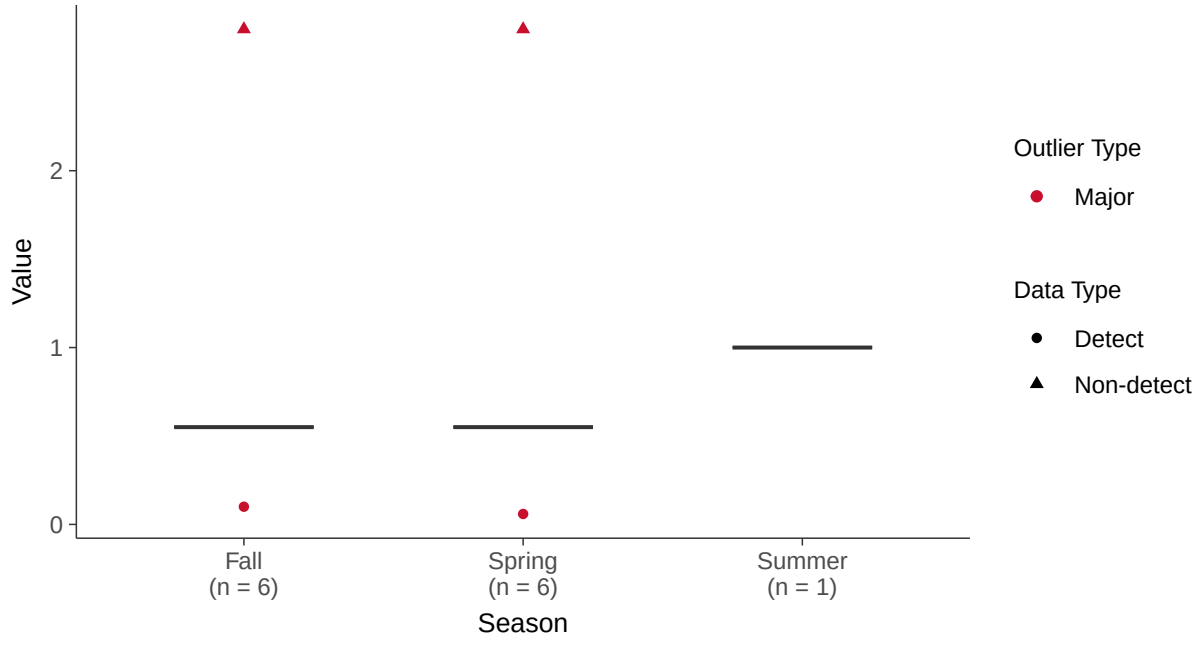
## Boxplot

Lead, MW-15016R (ug/L)



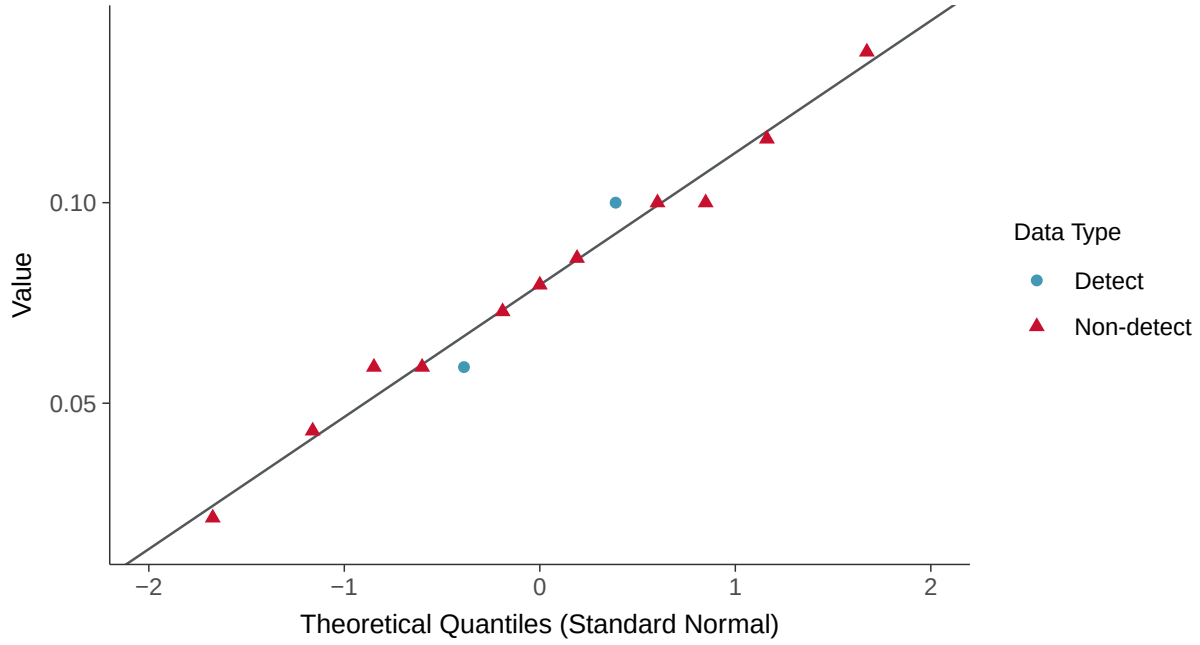

## Boxplot by Season

Lead, MW-15016R (ug/L)



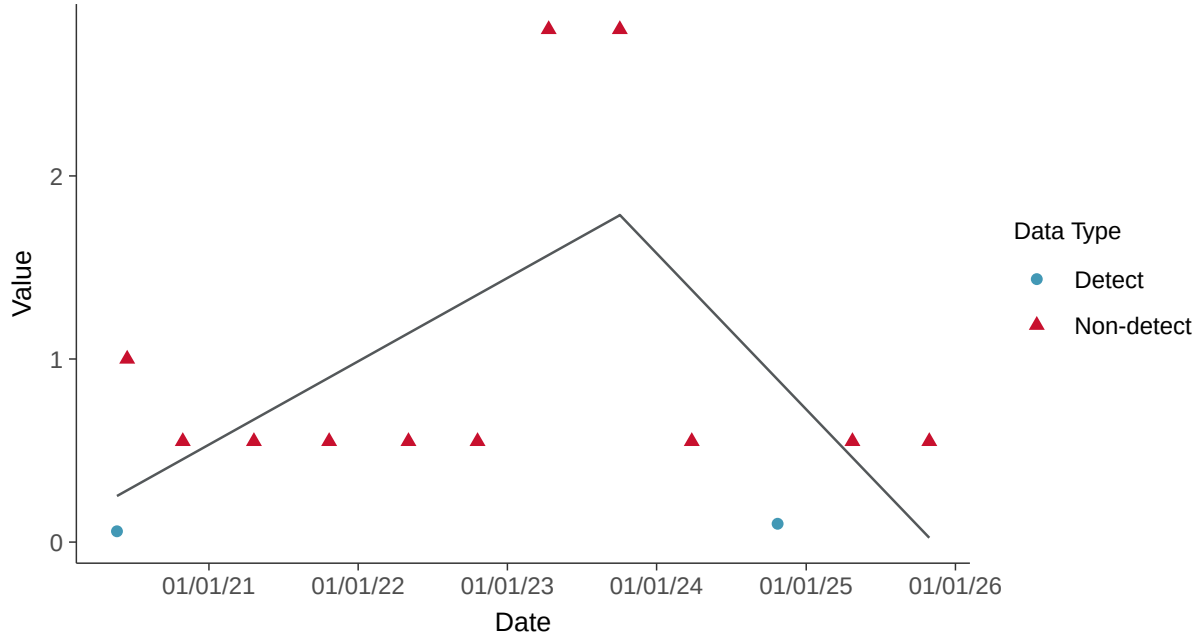
**Normal Q-Q plot using ROS Imputed Estimates**

Lead, MW-15016R (ug/L)



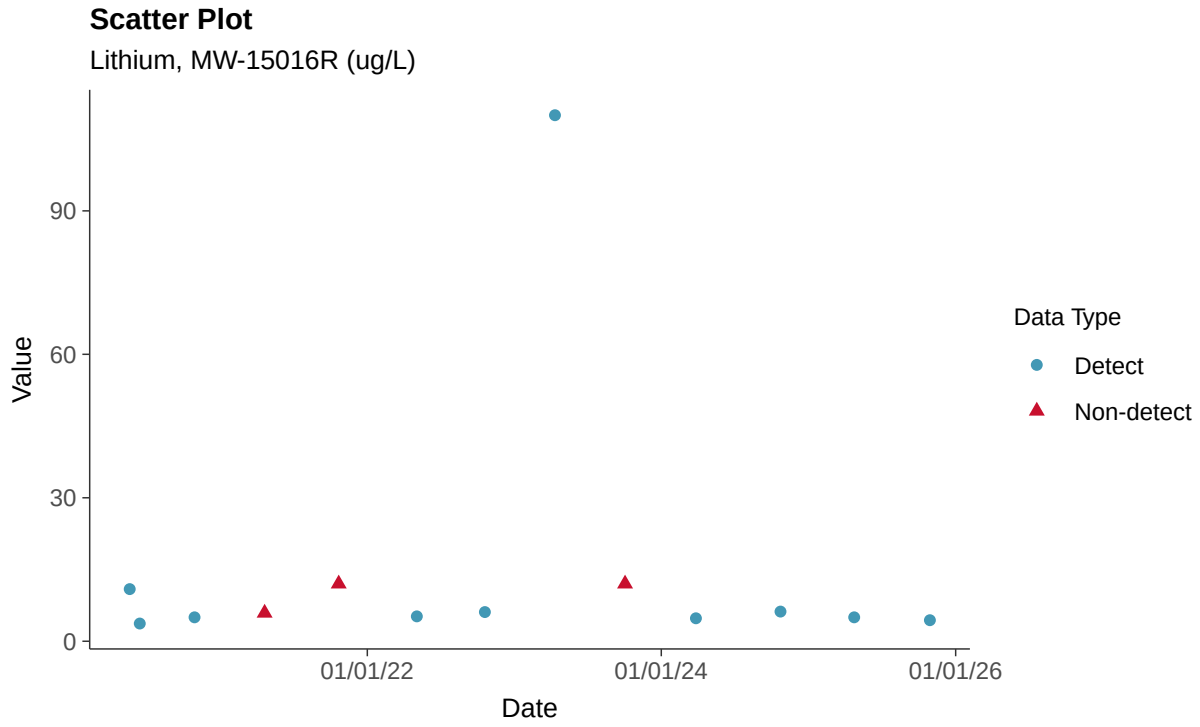

**Trend Regression: Piecewise Linear-Linear**

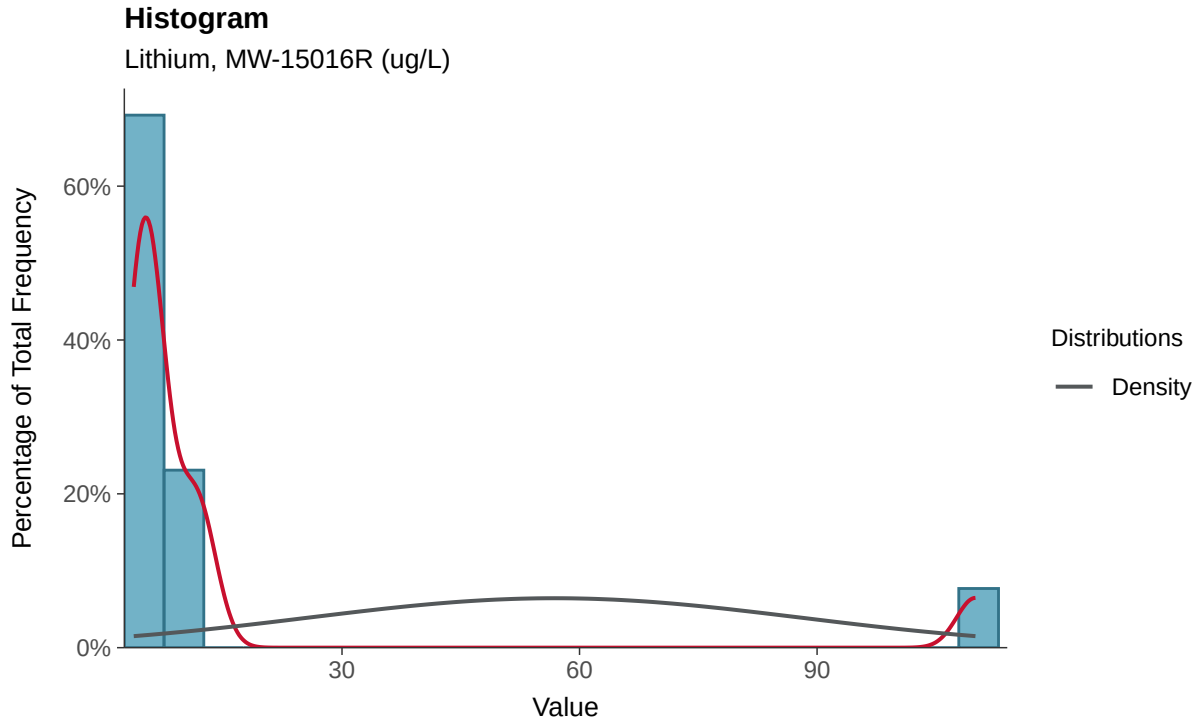
Lead, MW-15016R (ug/L)



## Appendix IV: Lithium, MW-15016R

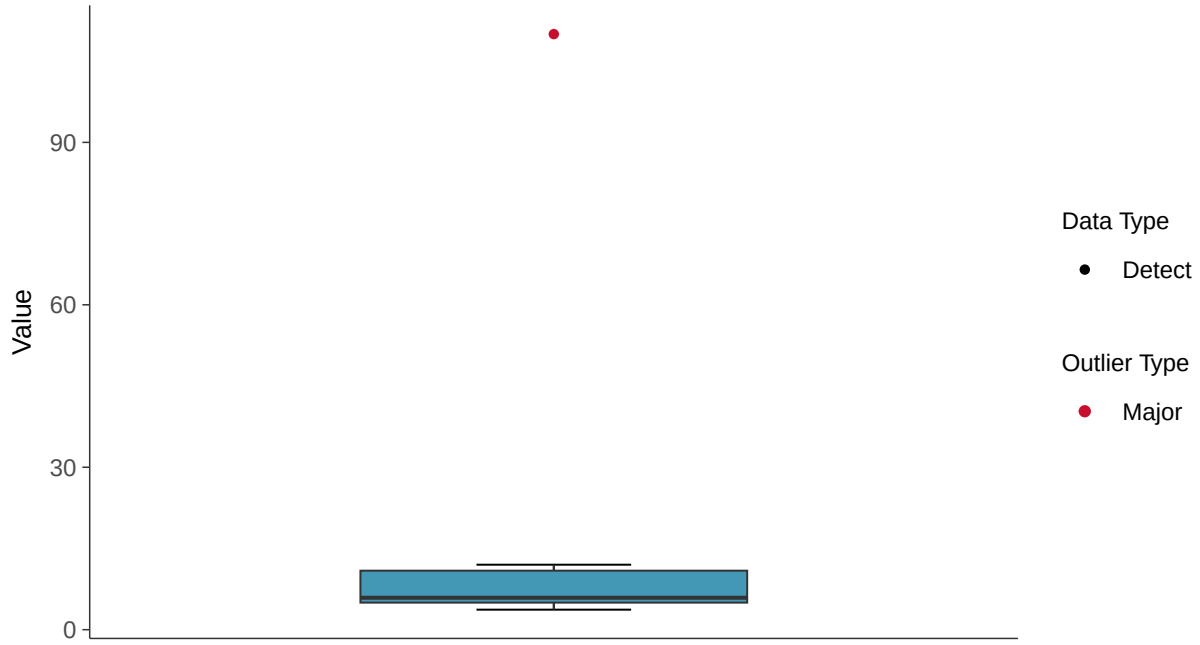
ID: 06_2_117



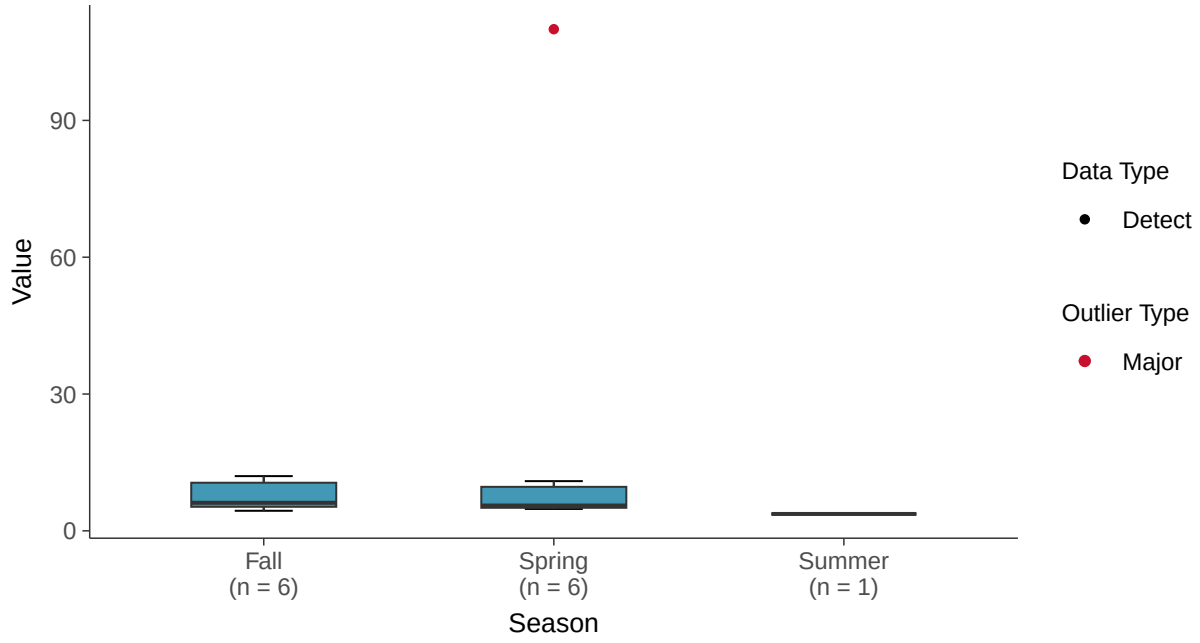
## Boxplot

Lithium, MW-15016R (ug/L)



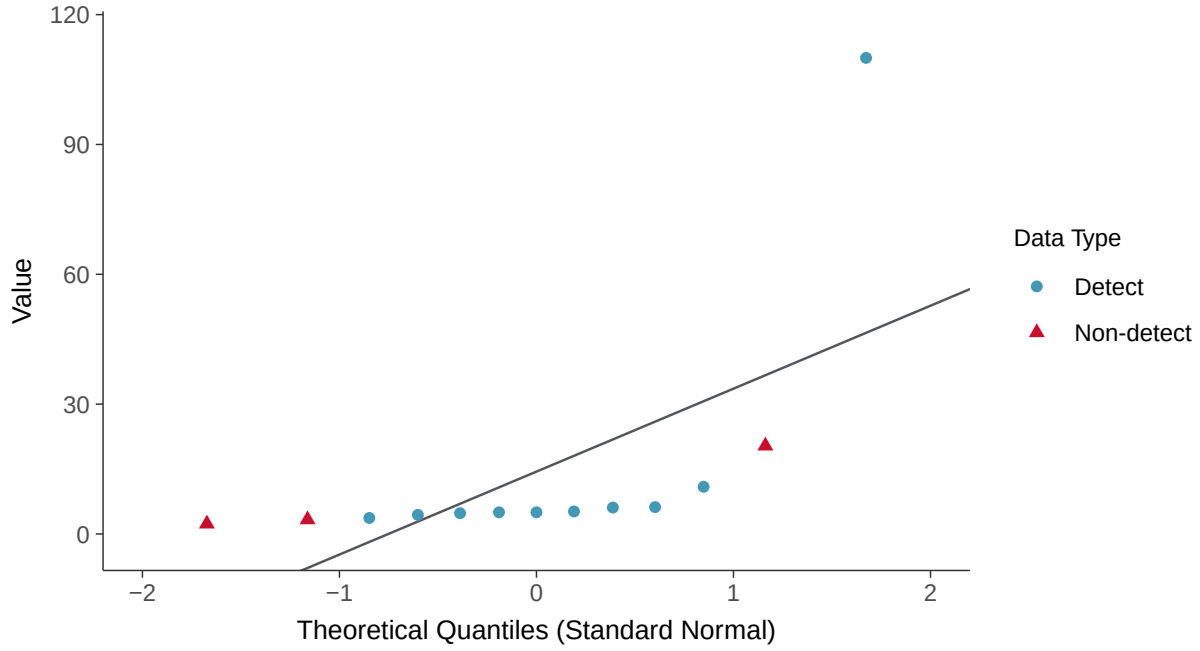

## Boxplot by Season

Lithium, MW-15016R (ug/L)



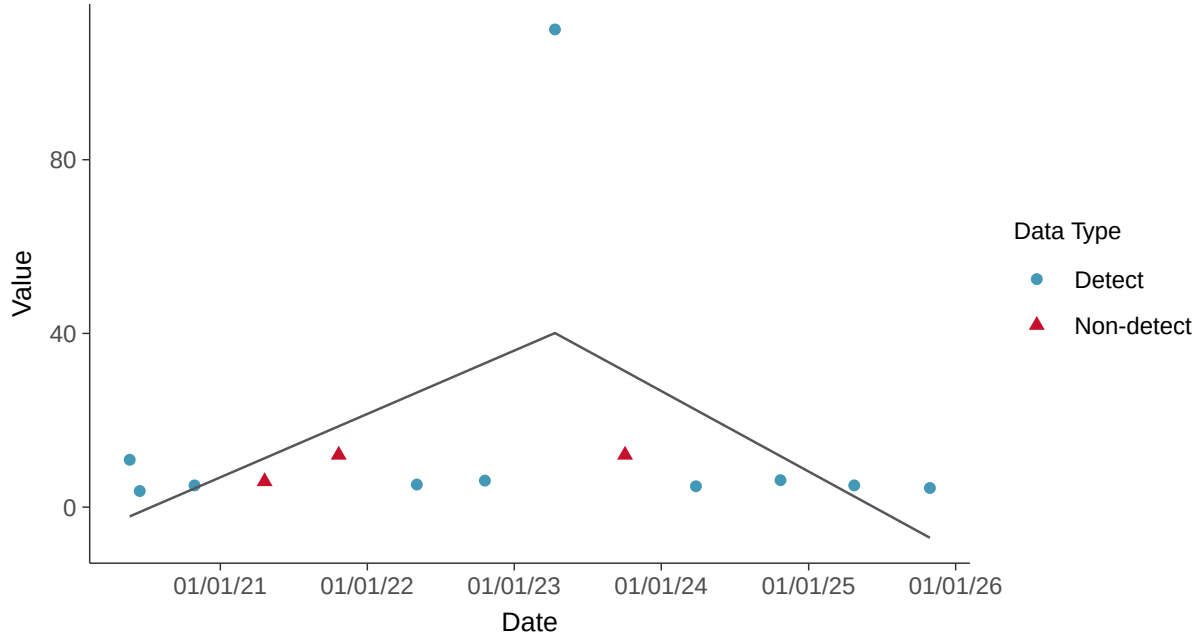
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15016R (ug/L)



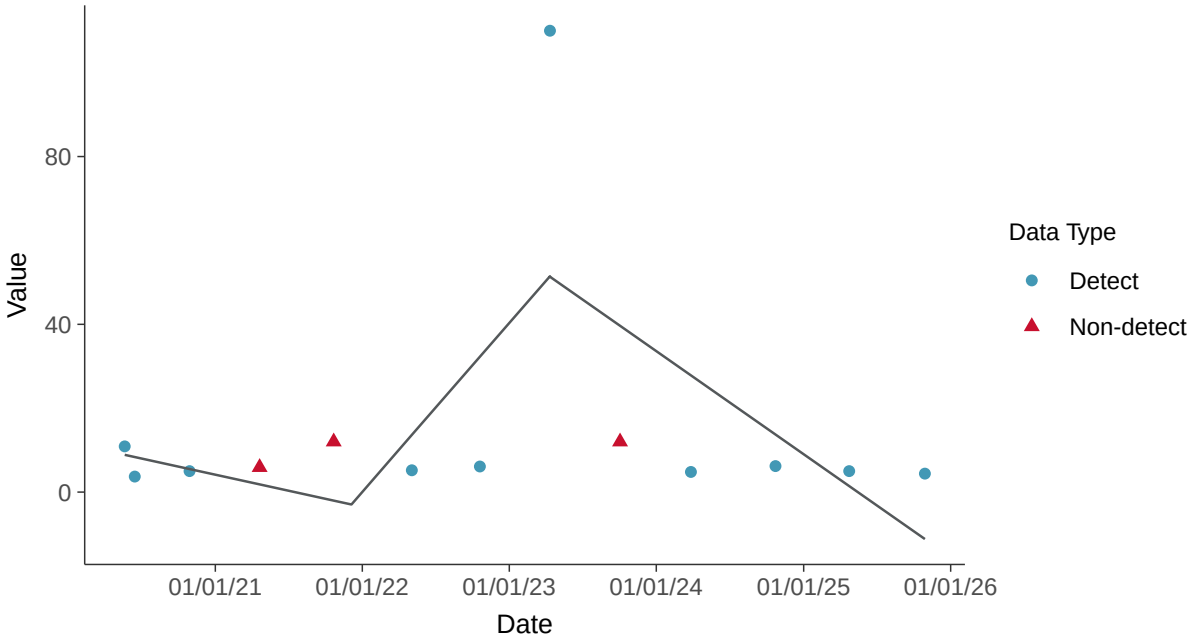

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15016R (ug/L)



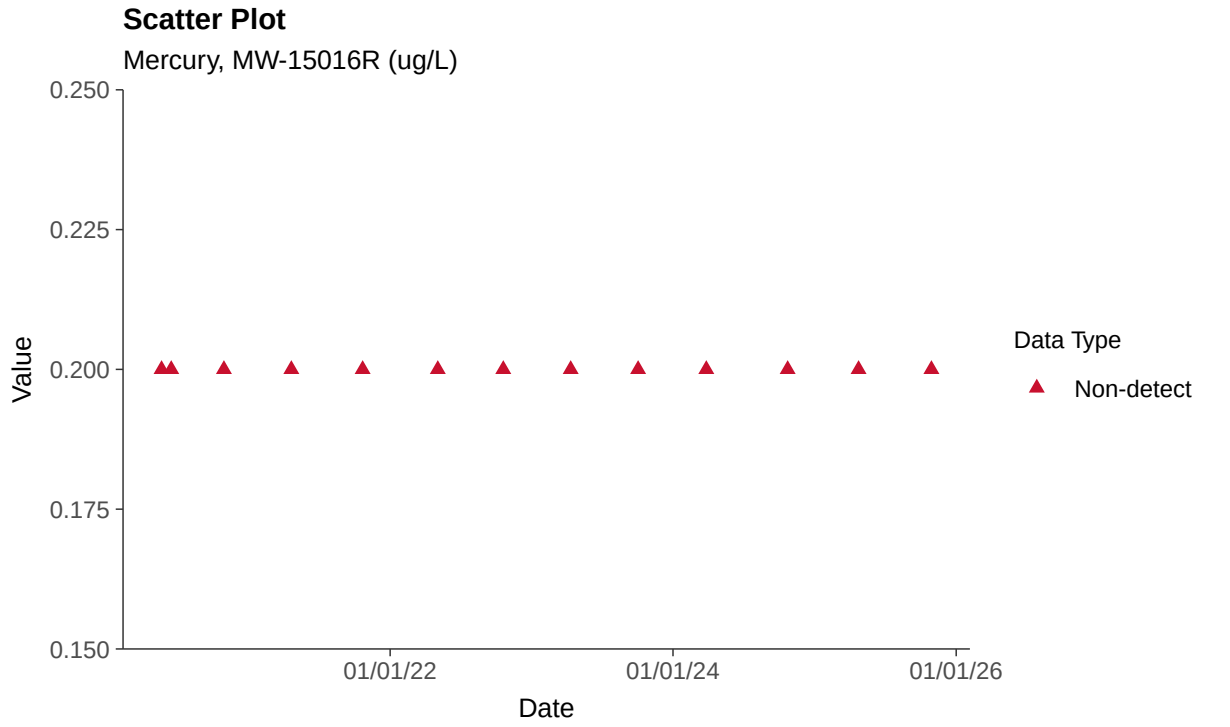
**Trend Regression: Piecewise Linear-Linear-Linear**

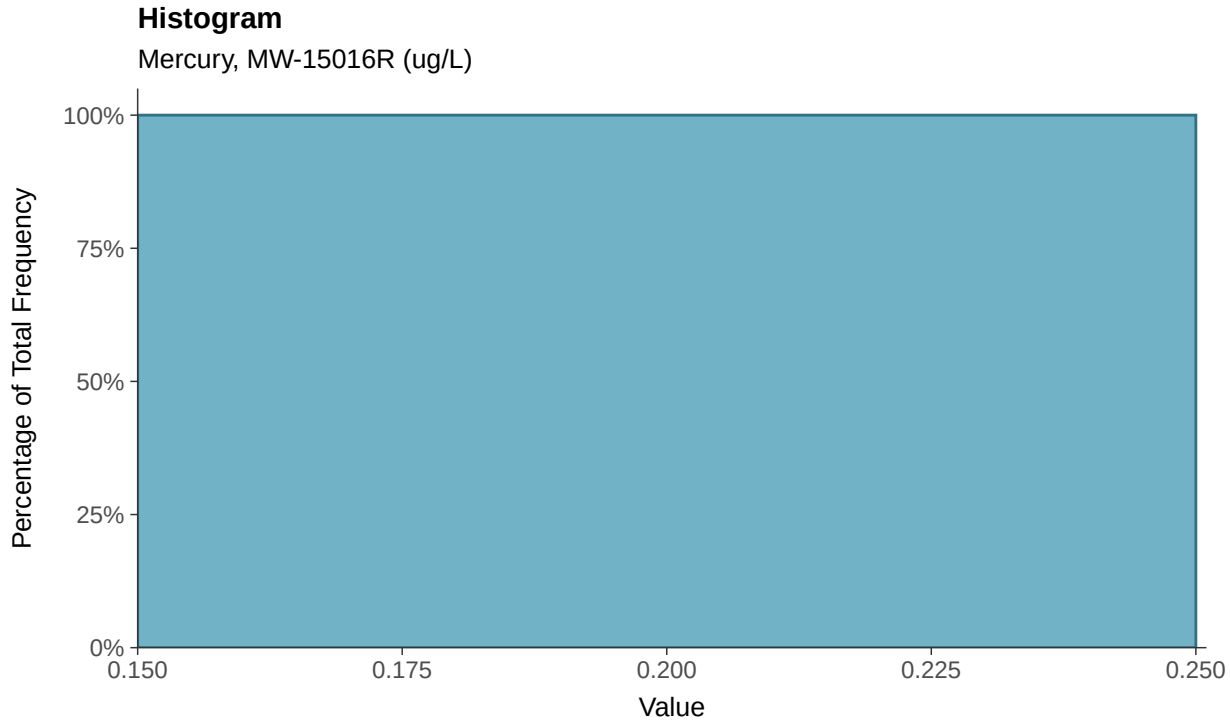
Lithium, MW-15016R (ug/L)



## Appendix IV: Mercury, MW-15016R

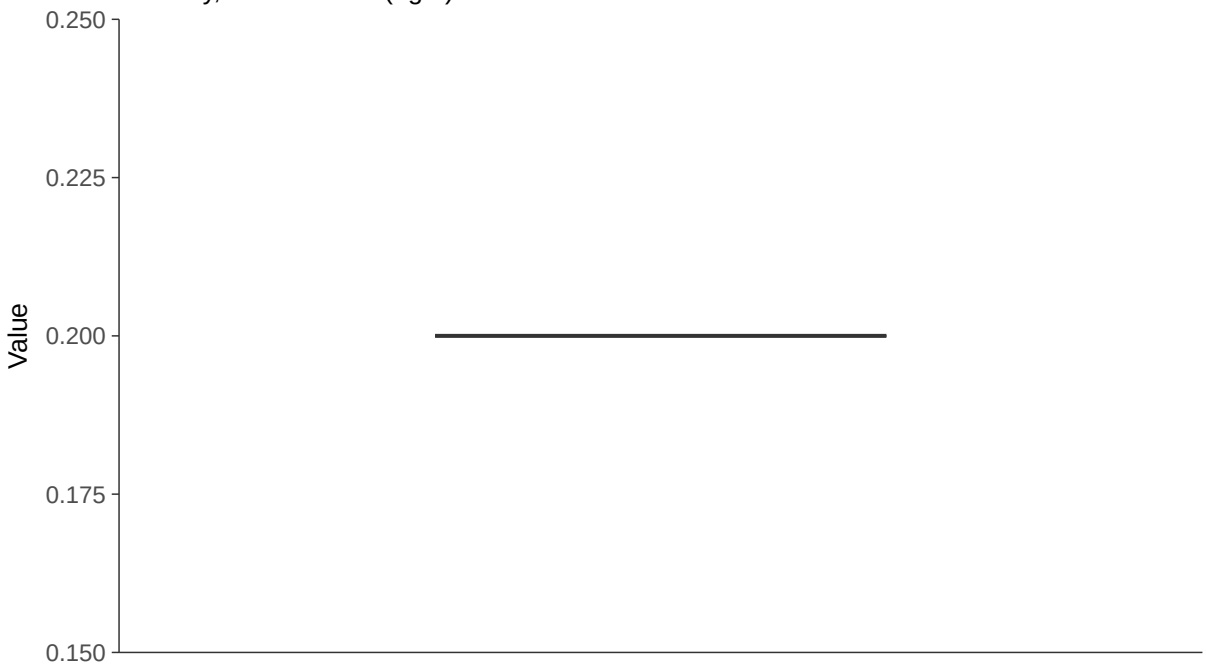
ID: 06_2_118



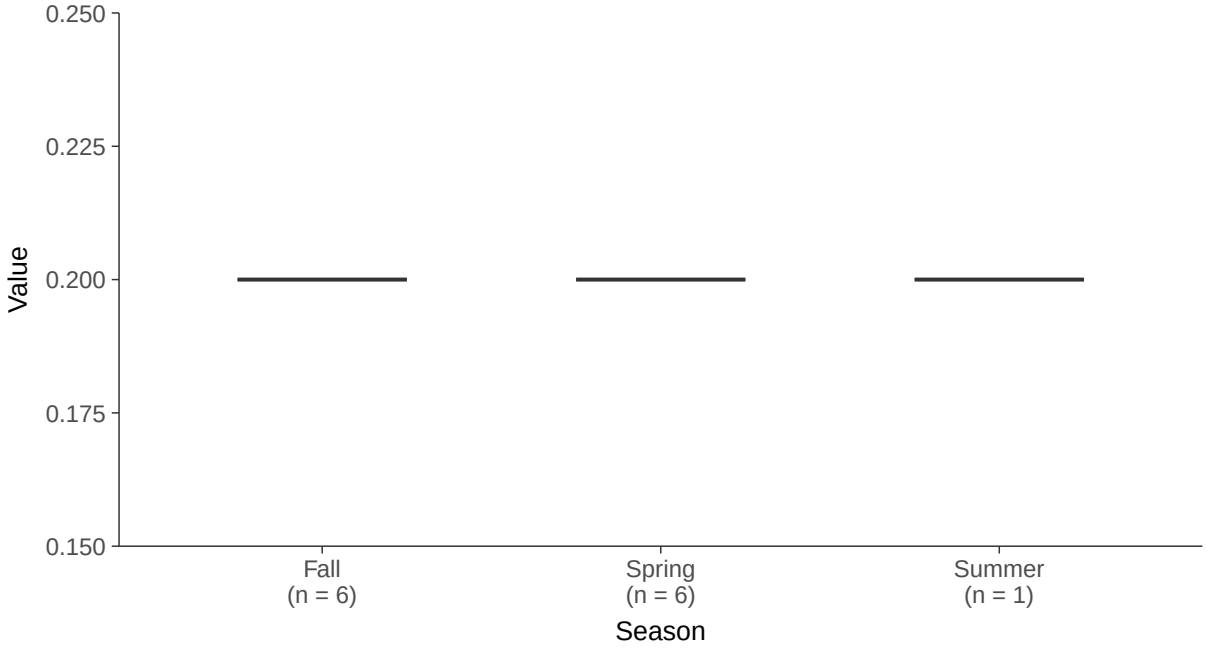
**Boxplot**

Mercury, MW-15016R (ug/L)




**Boxplot by Season**

Mercury, MW-15016R (ug/L)

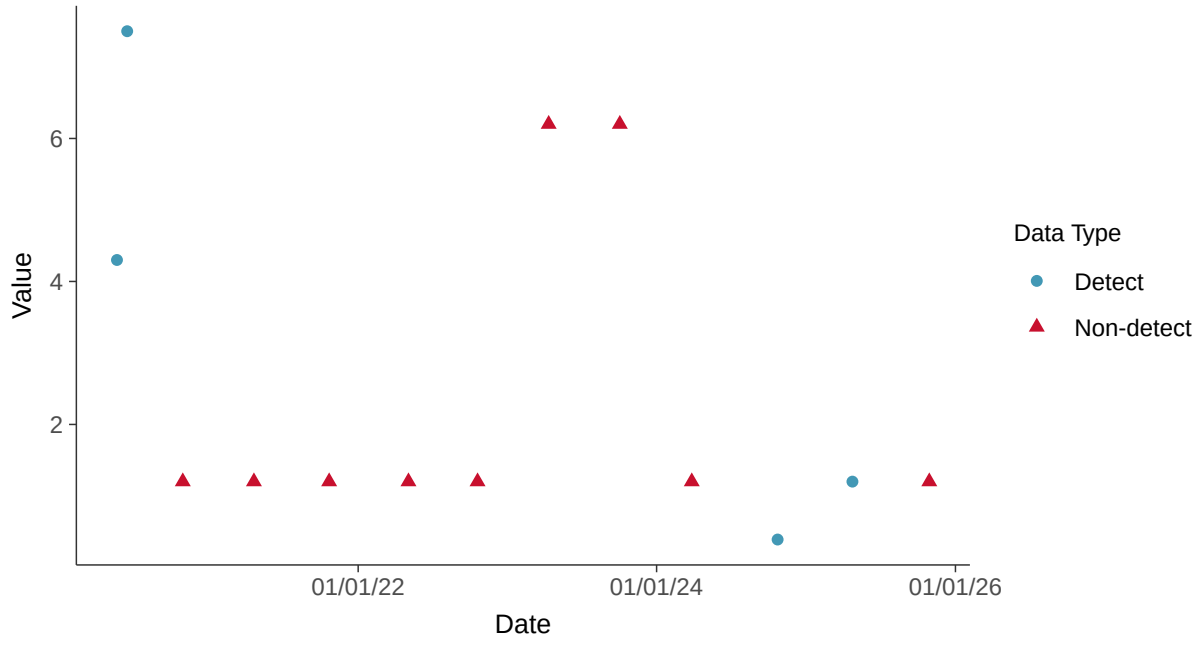


## Appendix IV: Molybdenum, MW-15016R

ID: 06_2_119

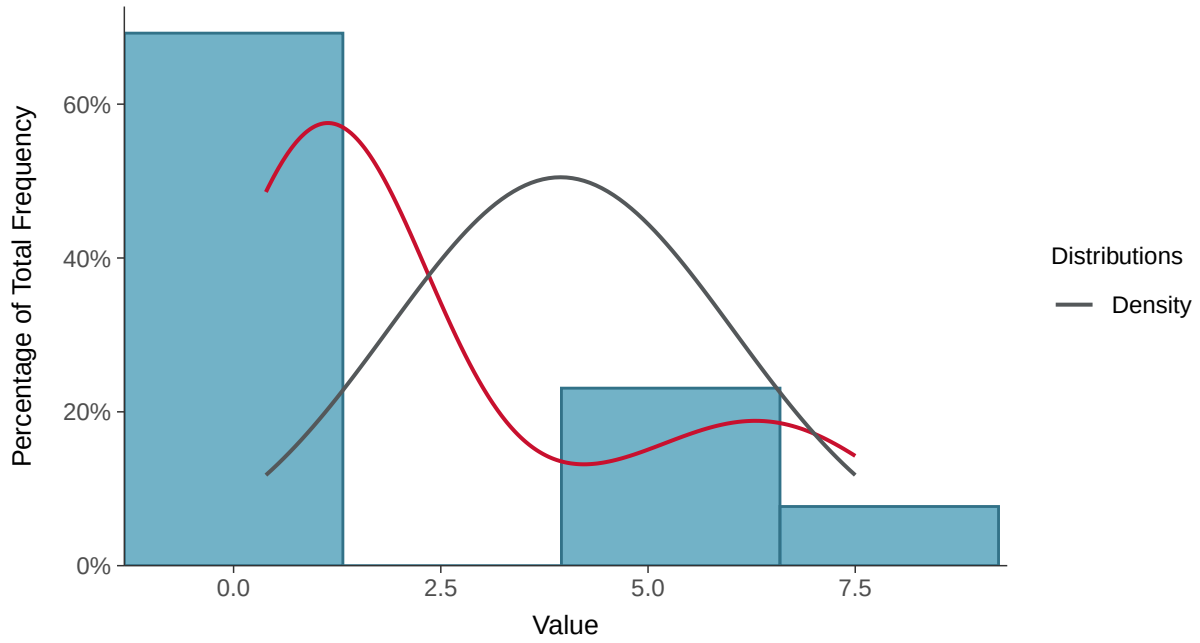
**Scatter Plot**

Molybdenum, MW-15016R (ug/L)



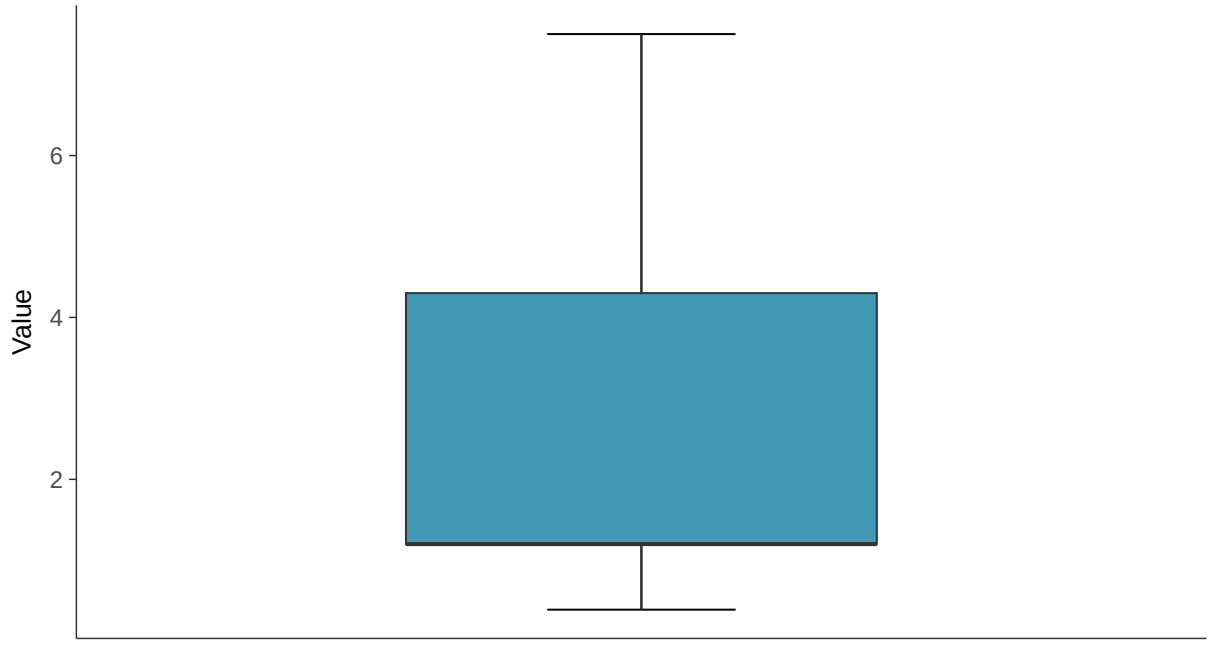

**Histogram**

Molybdenum, MW-15016R (ug/L)



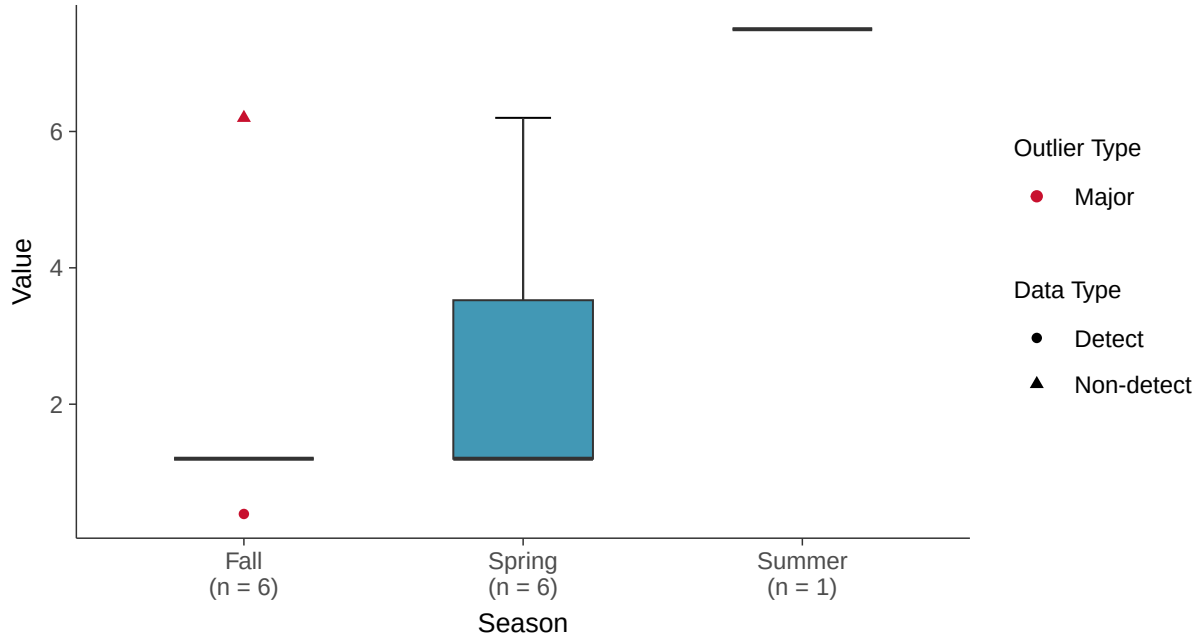
## Boxplot

Molybdenum, MW-15016R (ug/L)



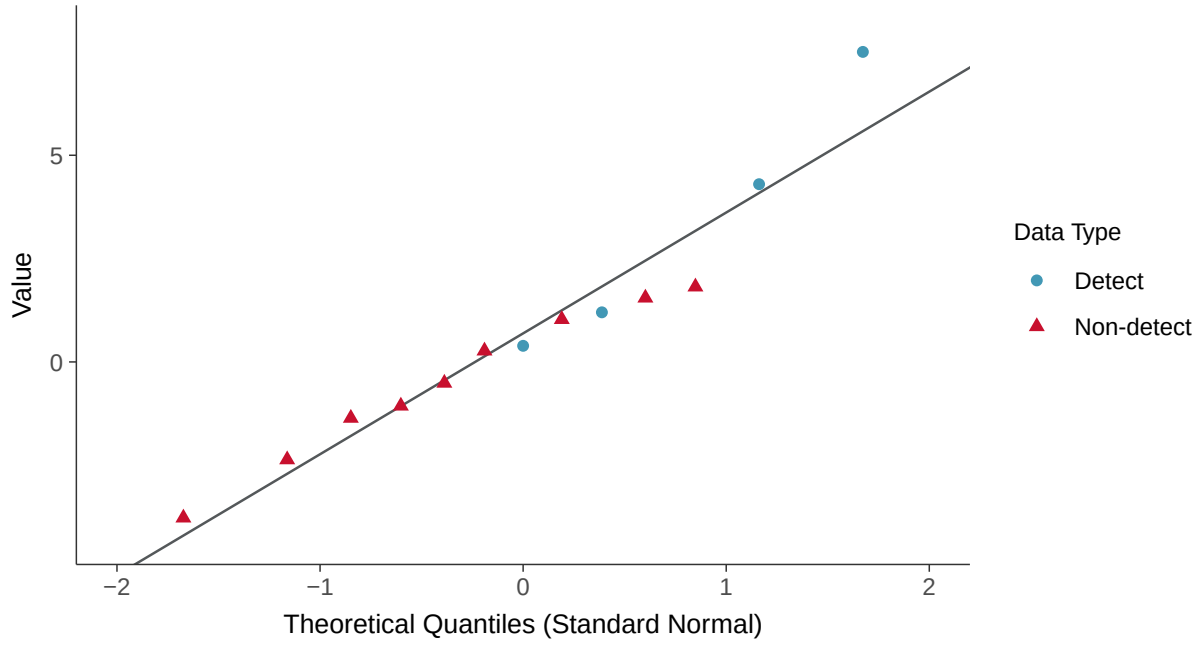

## Boxplot by Season

Molybdenum, MW-15016R (ug/L)



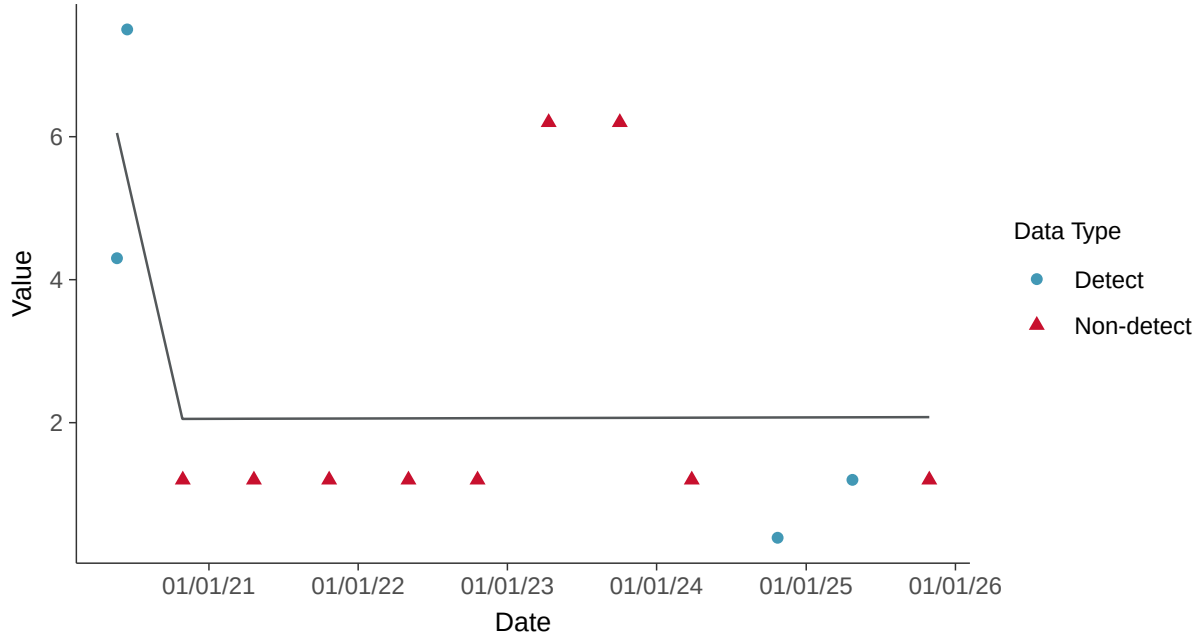
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15016R (ug/L)



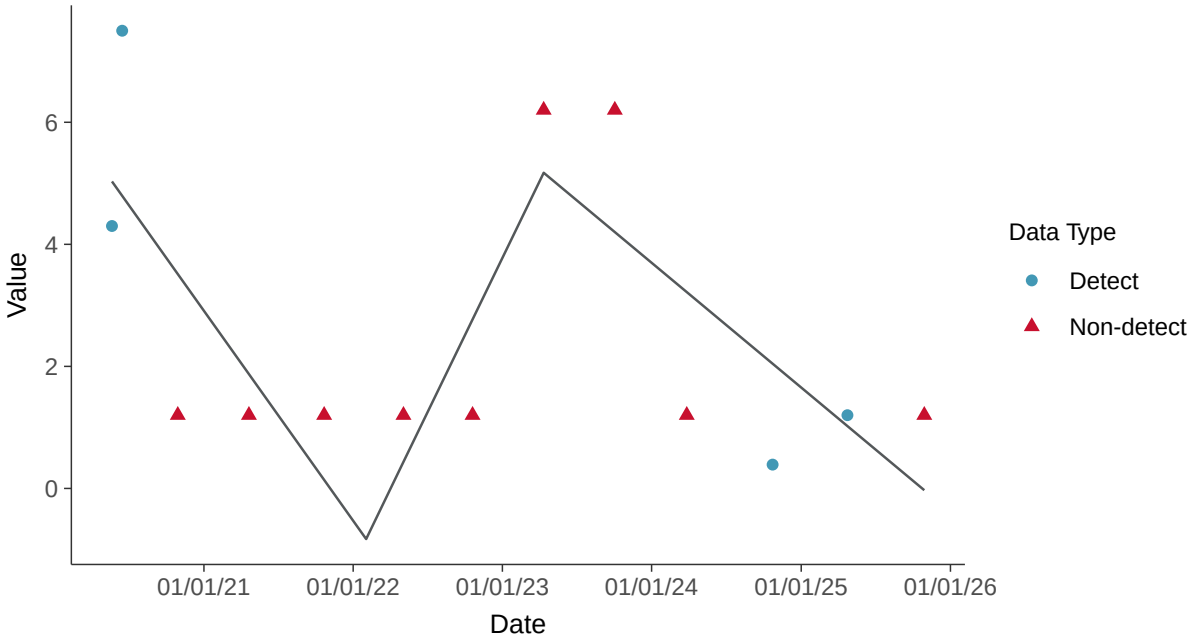

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15016R (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-15016R (ug/L)

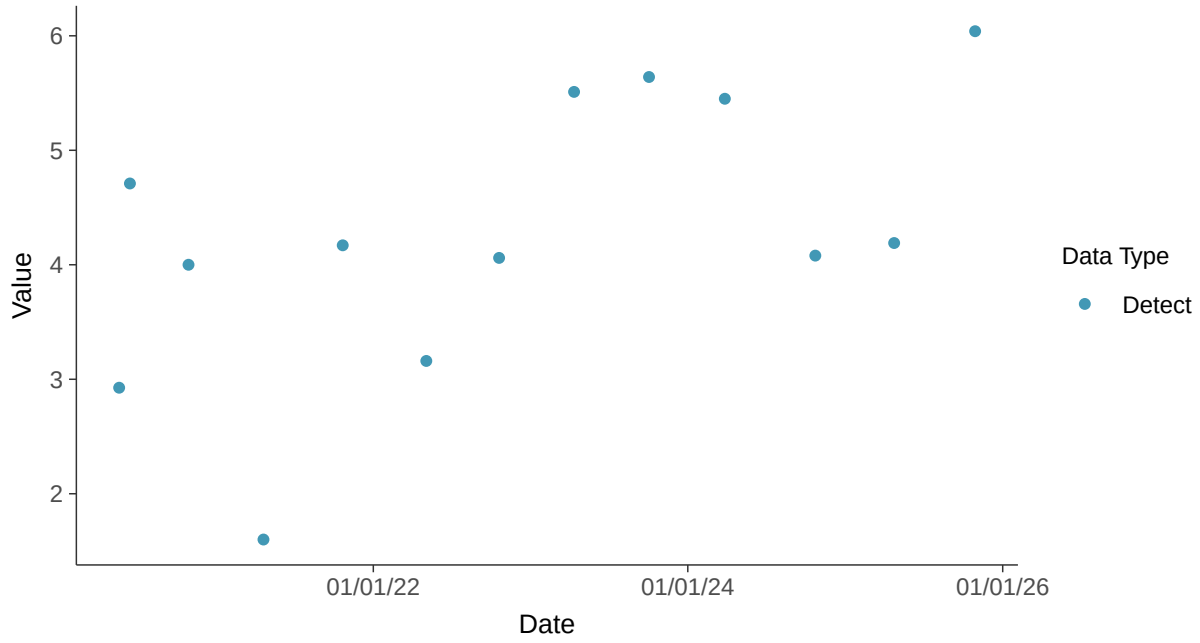


## Appendix IV: Radium-226+228, MW-15016R

ID: 06_2_125

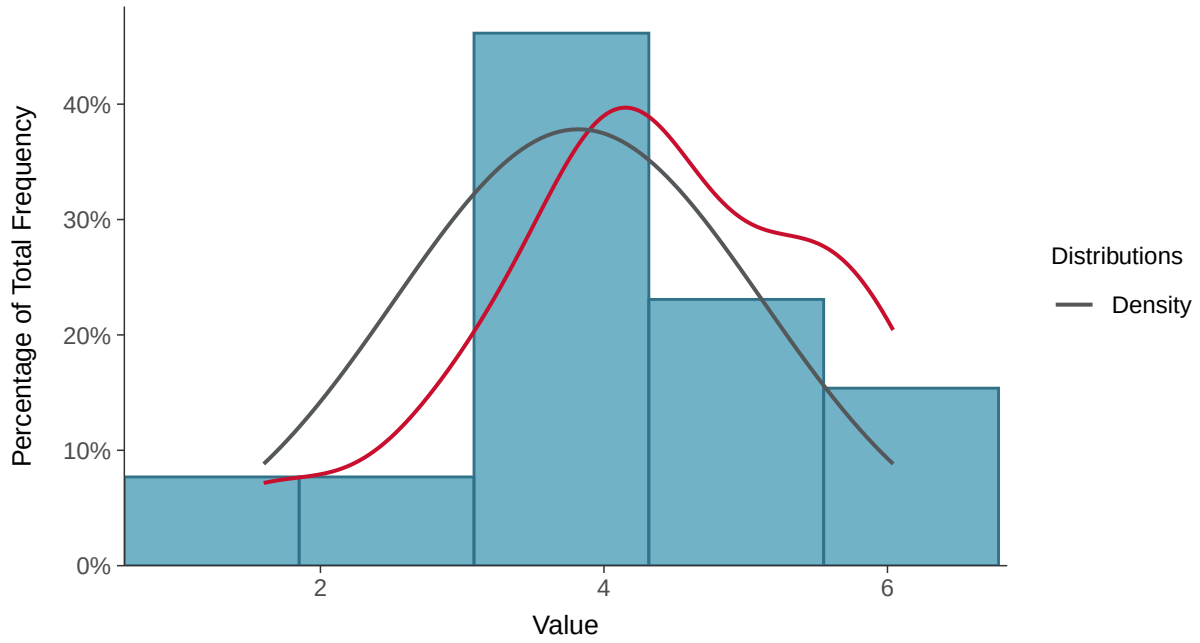
**Scatter Plot**

Radium-226+228, MW-15016R (pCi/L)



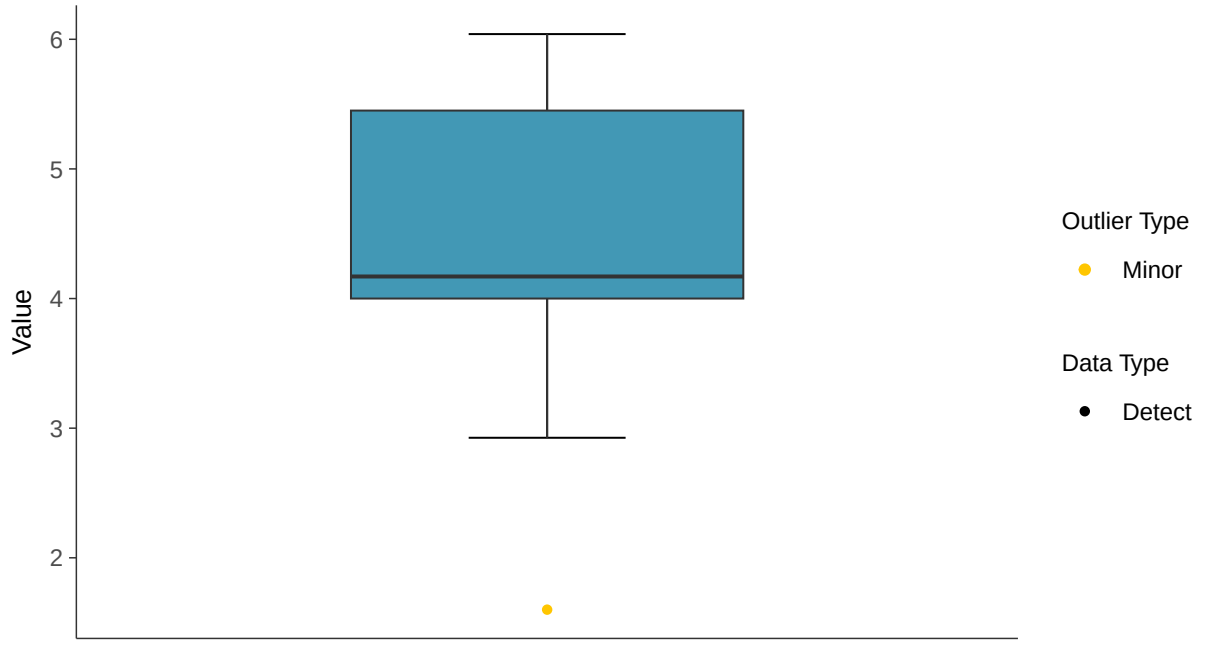

**Histogram**

Radium-226+228, MW-15016R (pCi/L)



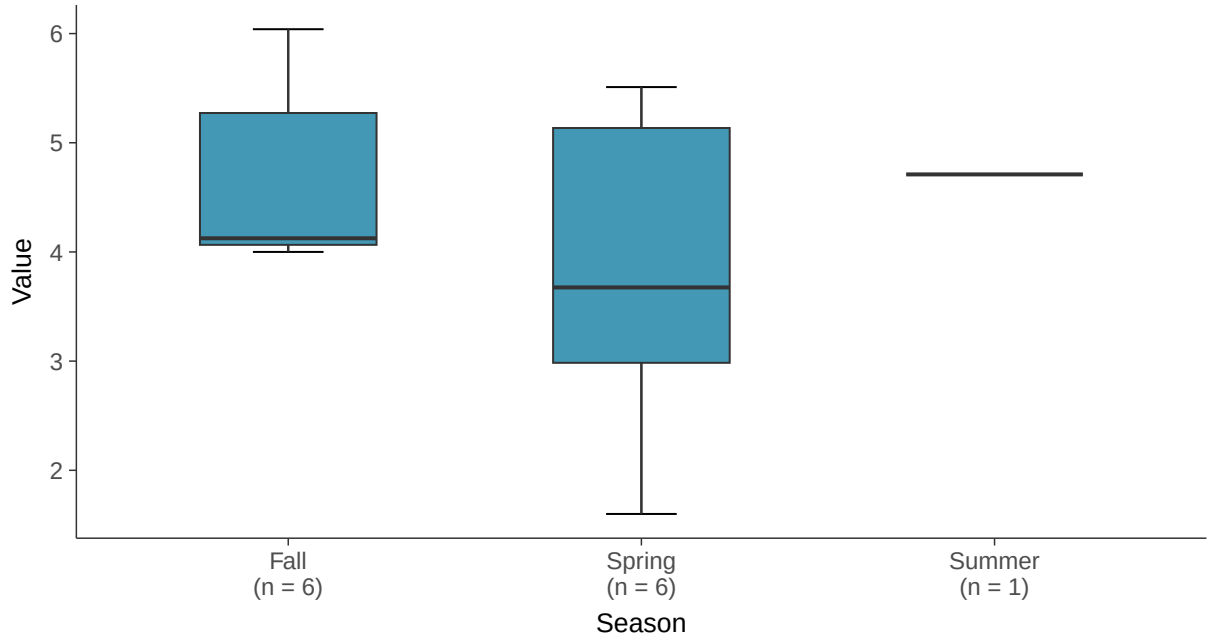
## Boxplot

Radium-226+228, MW-15016R (pCi/L)



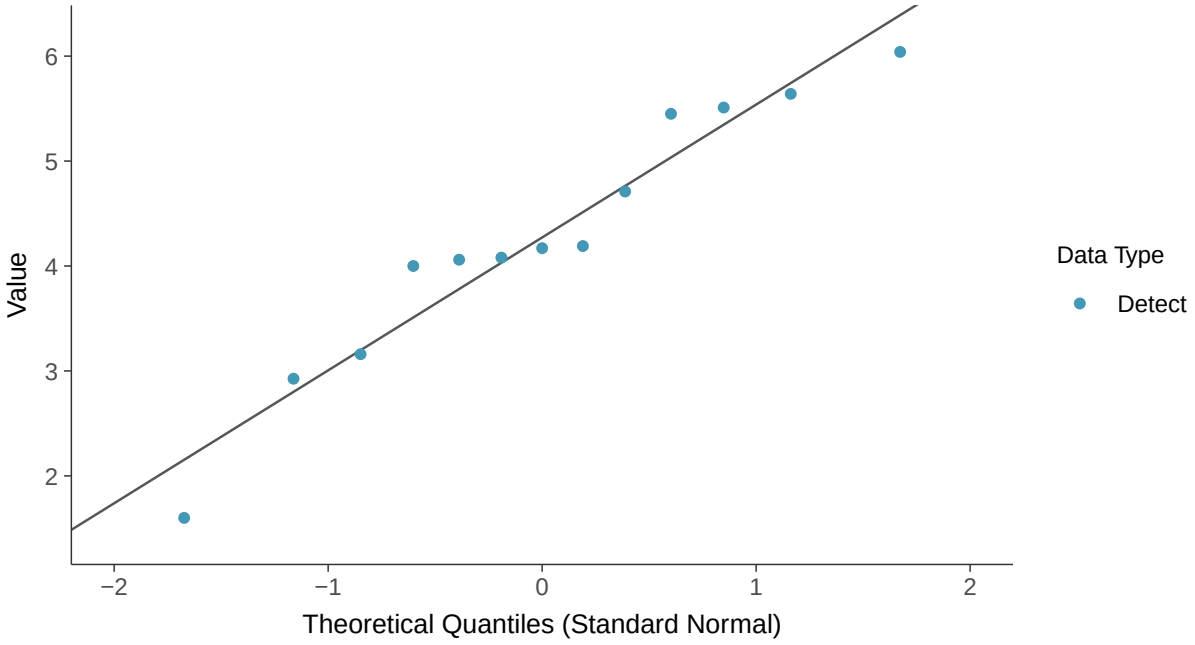

## Boxplot by Season

Radium-226+228, MW-15016R (pCi/L)



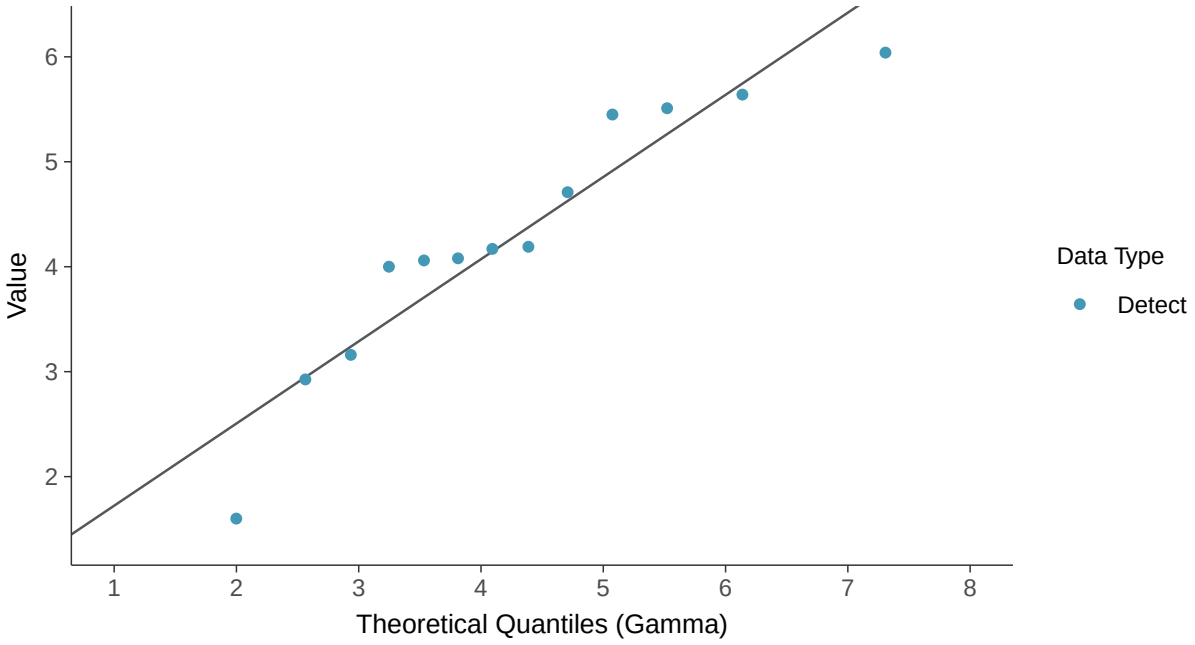
**Normal Q-Q plot**

Radium-226+228, MW-15016R (pCi/L)



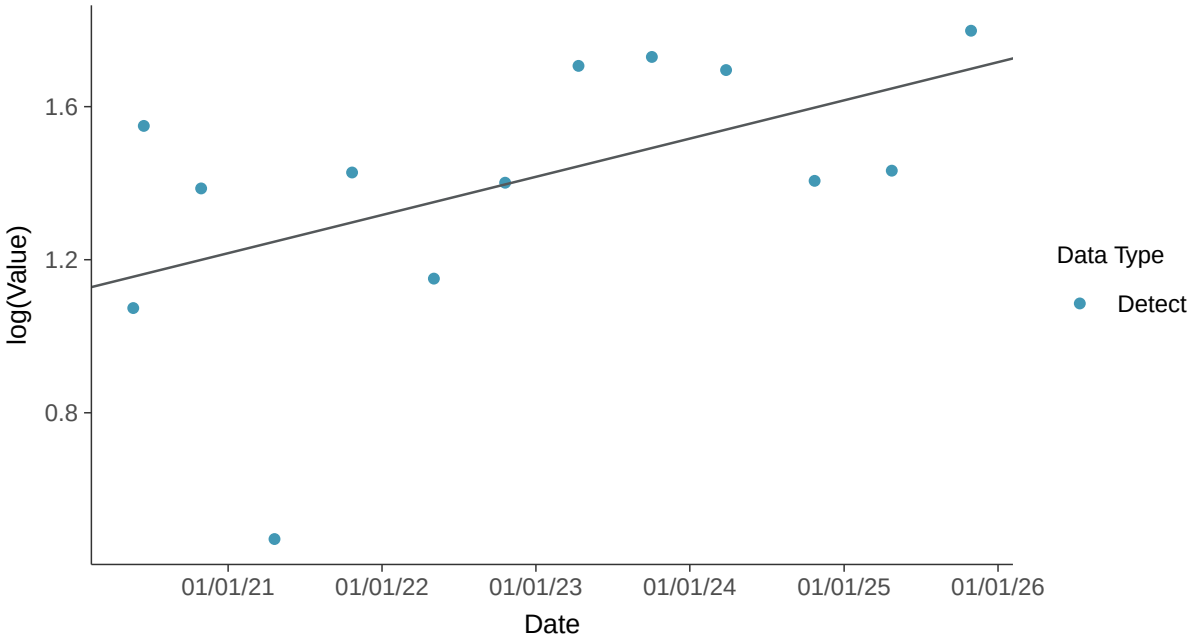

**Gamma Q-Q plot**

Radium-226+228, MW-15016R (pCi/L)



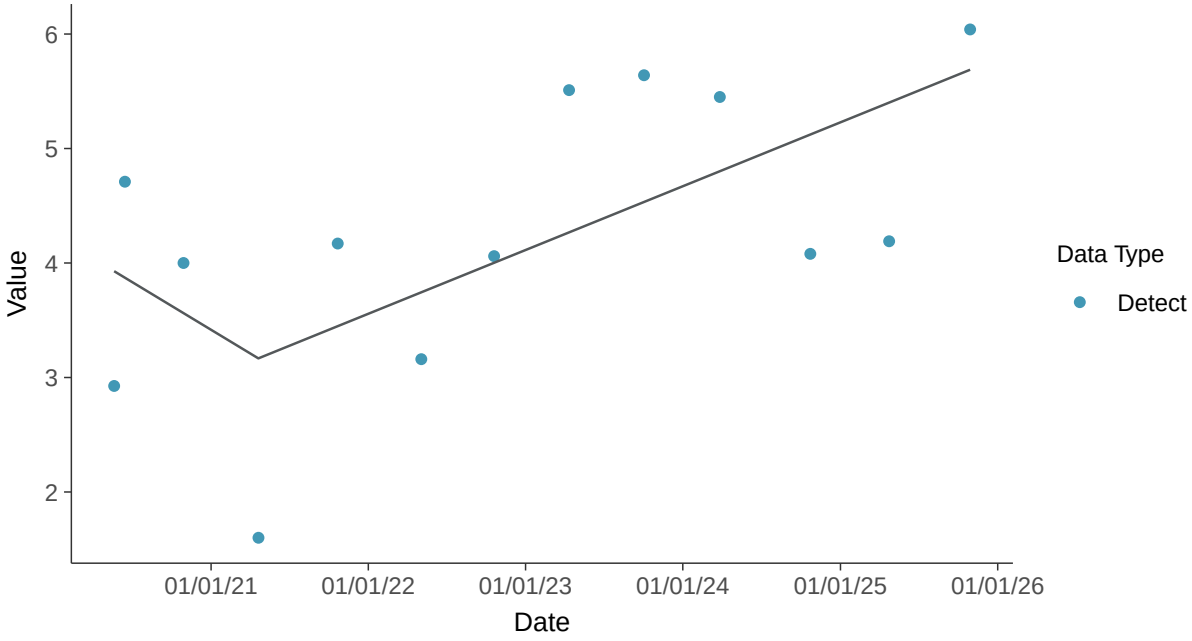
**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15016R (pCi/L)



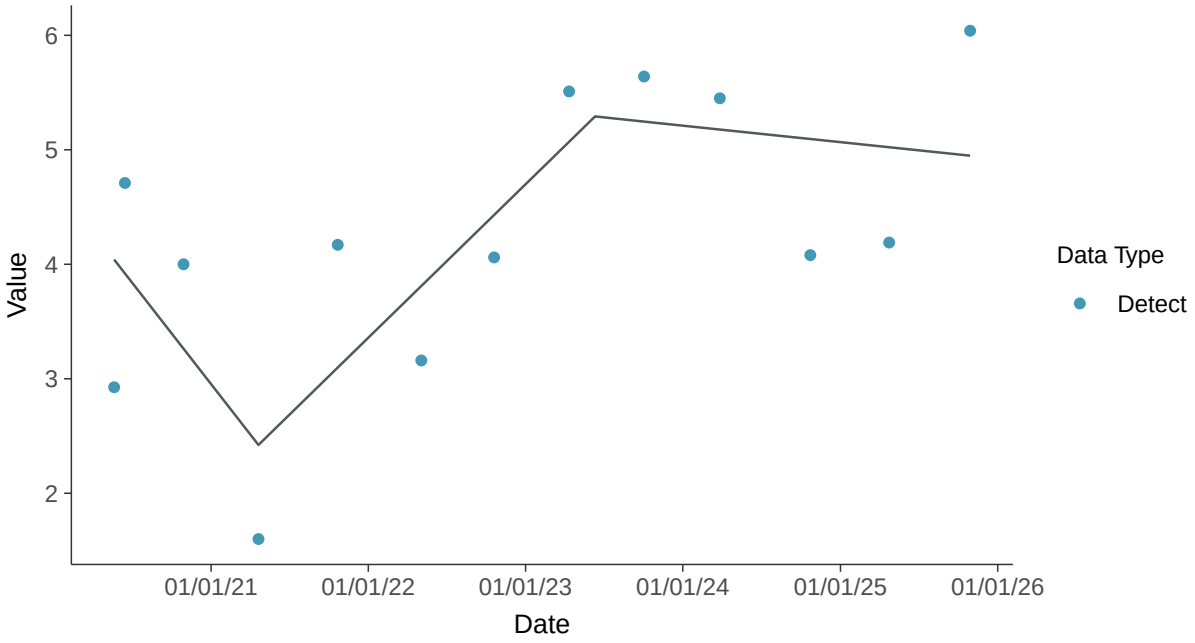

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15016R (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15016R (pCi/L)

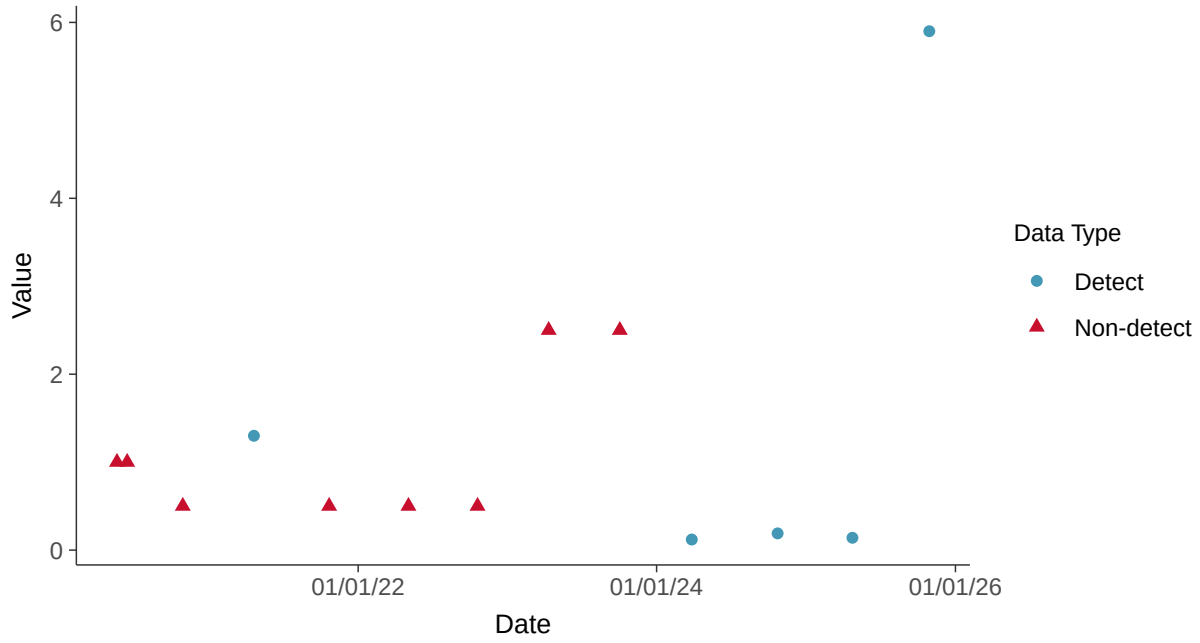


## Appendix IV: Selenium, MW-15016R

ID: 06_2_127

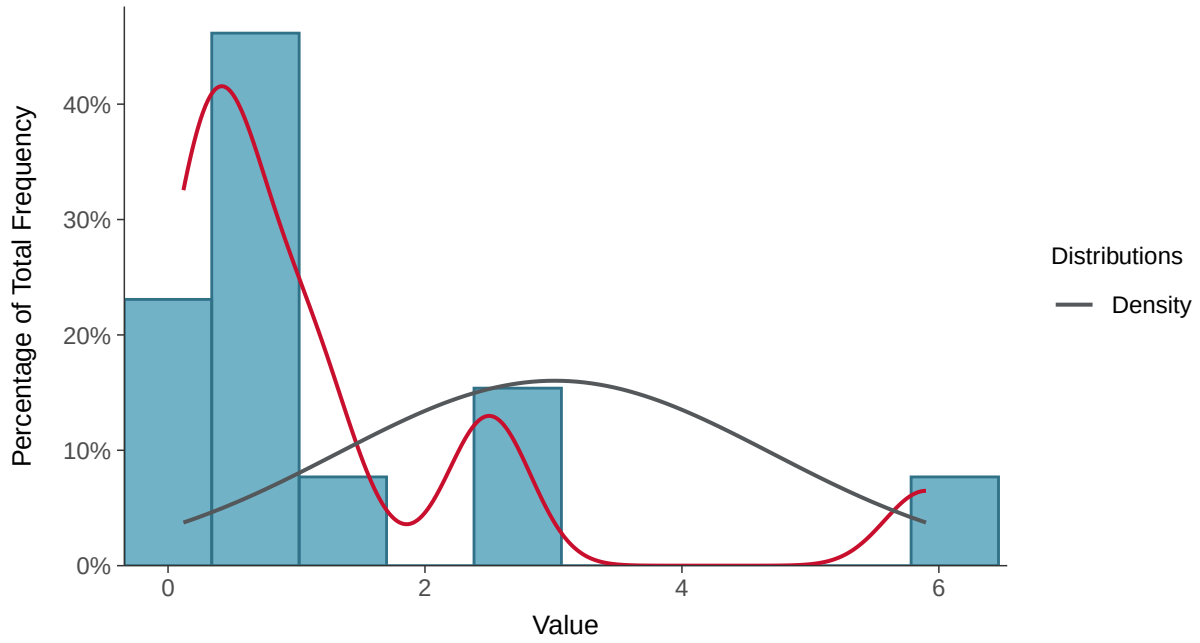
**Scatter Plot**

Selenium, MW-15016R (ug/L)



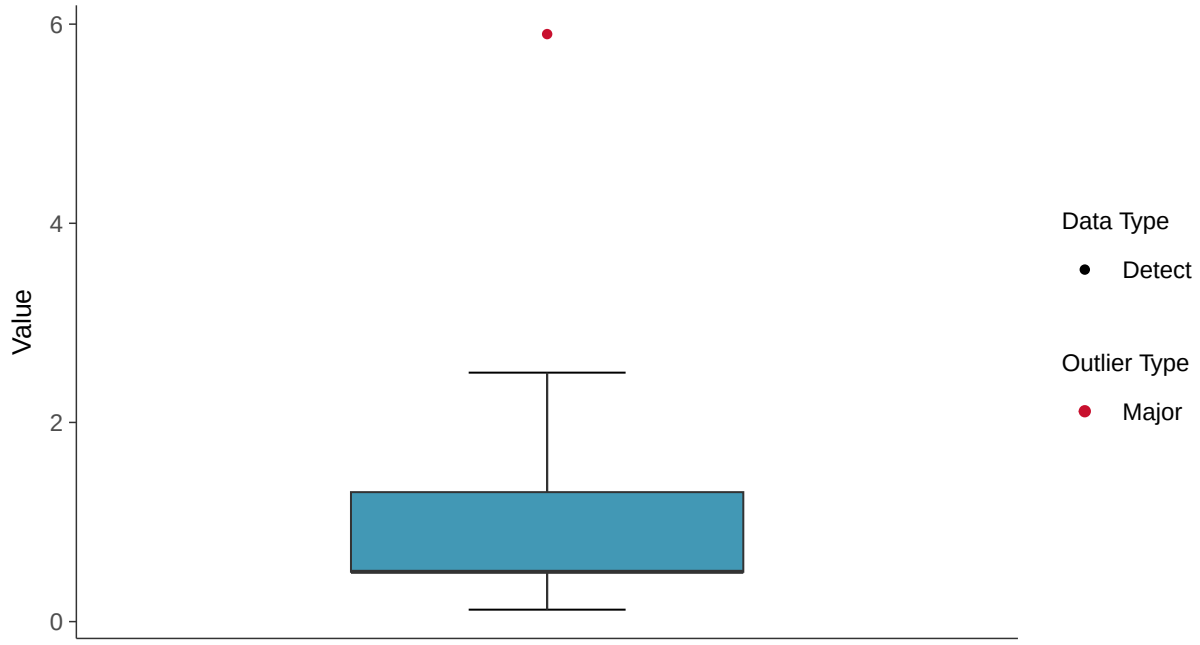

**Histogram**

Selenium, MW-15016R (ug/L)



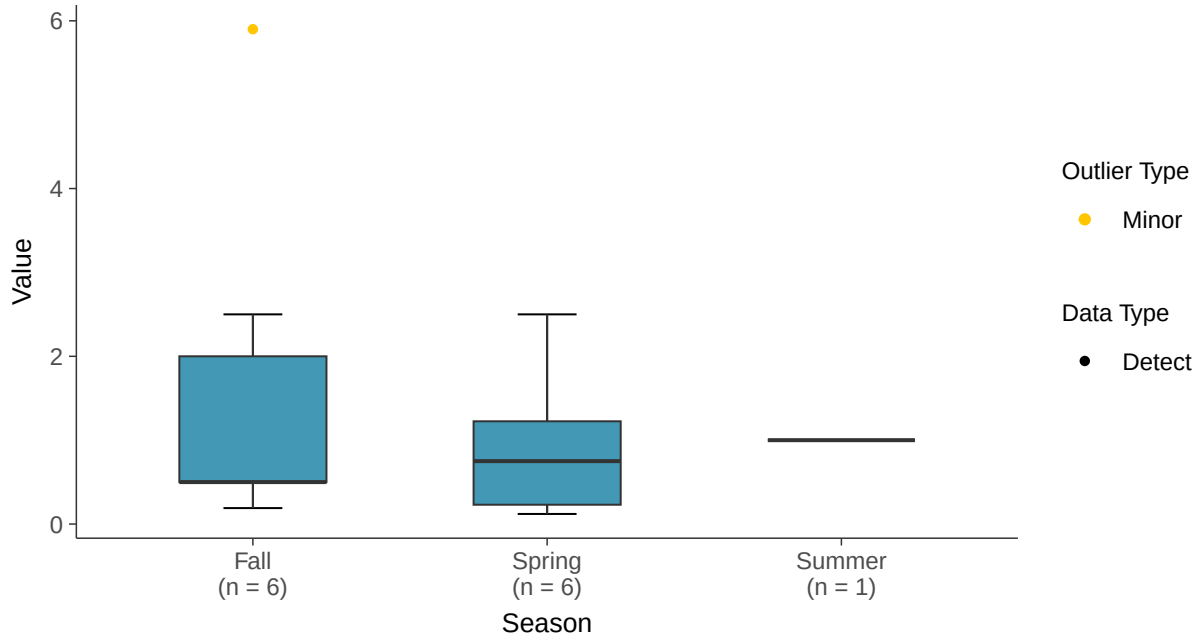
## Boxplot

Selenium, MW-15016R (ug/L)



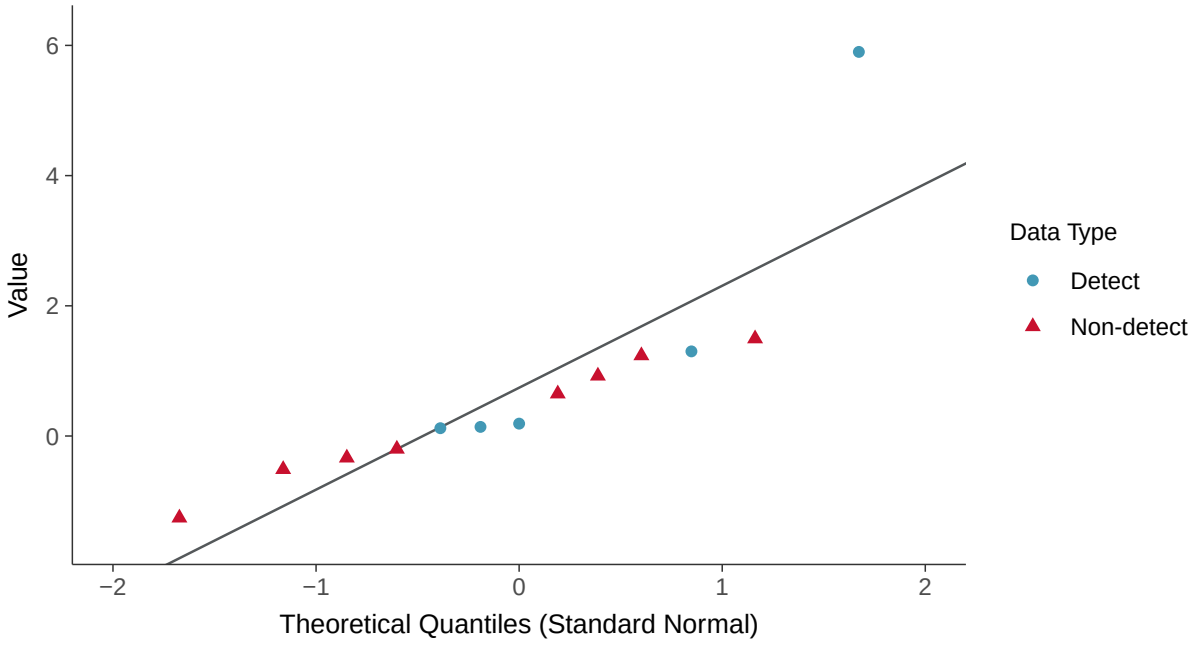

## Boxplot by Season

Selenium, MW-15016R (ug/L)



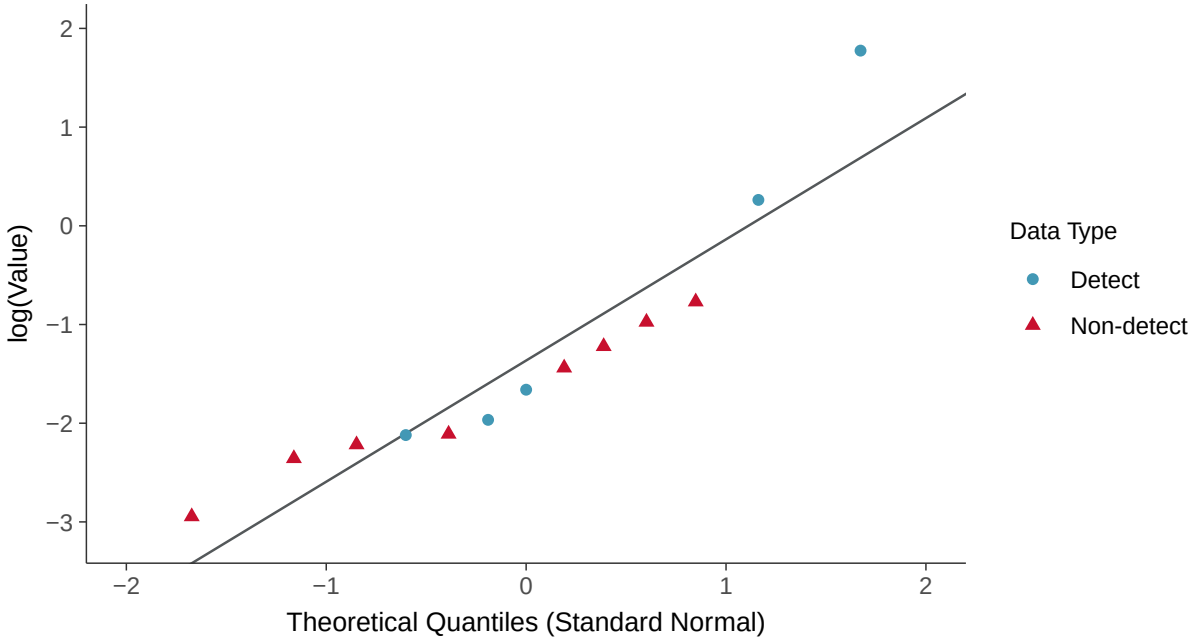
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15016R (ug/L)



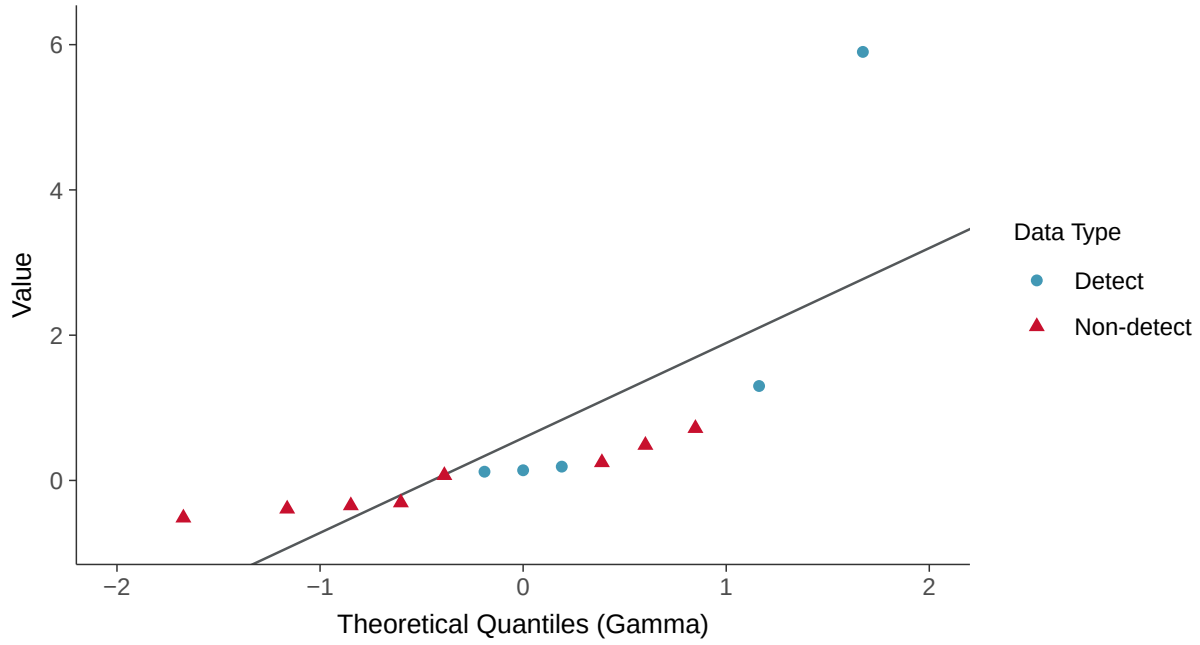

**Lognormal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15016R (ug/L)



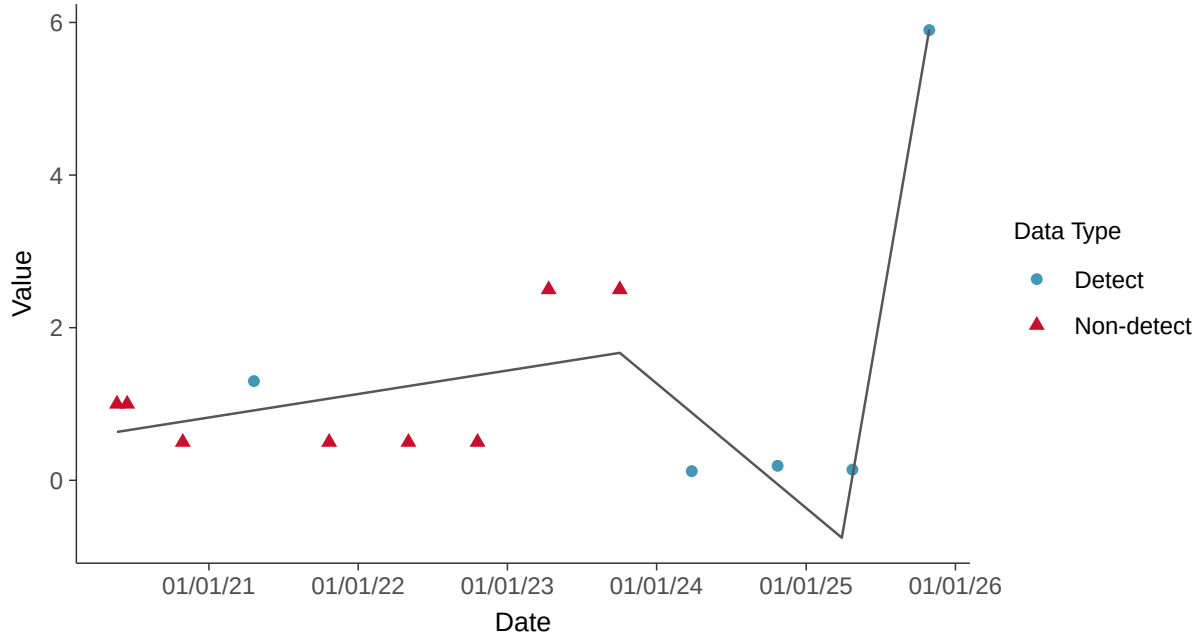
**Gamma Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15016R (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Selenium, MW-15016R (ug/L)

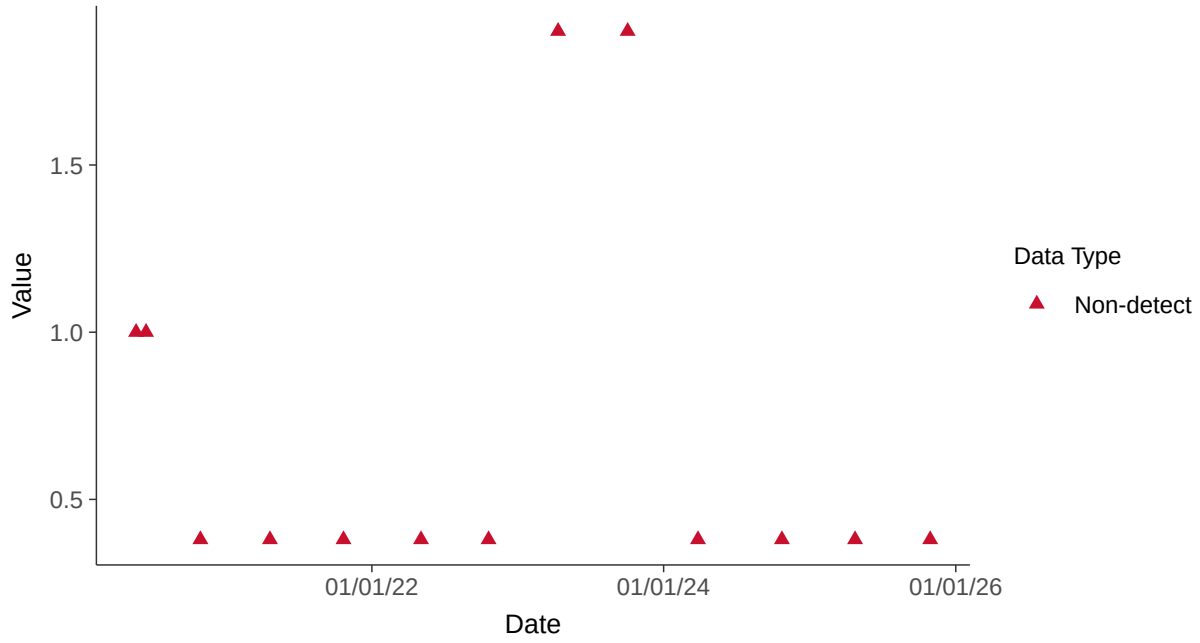


## Appendix IV: Thallium, MW-15016R

ID: 06_2_131

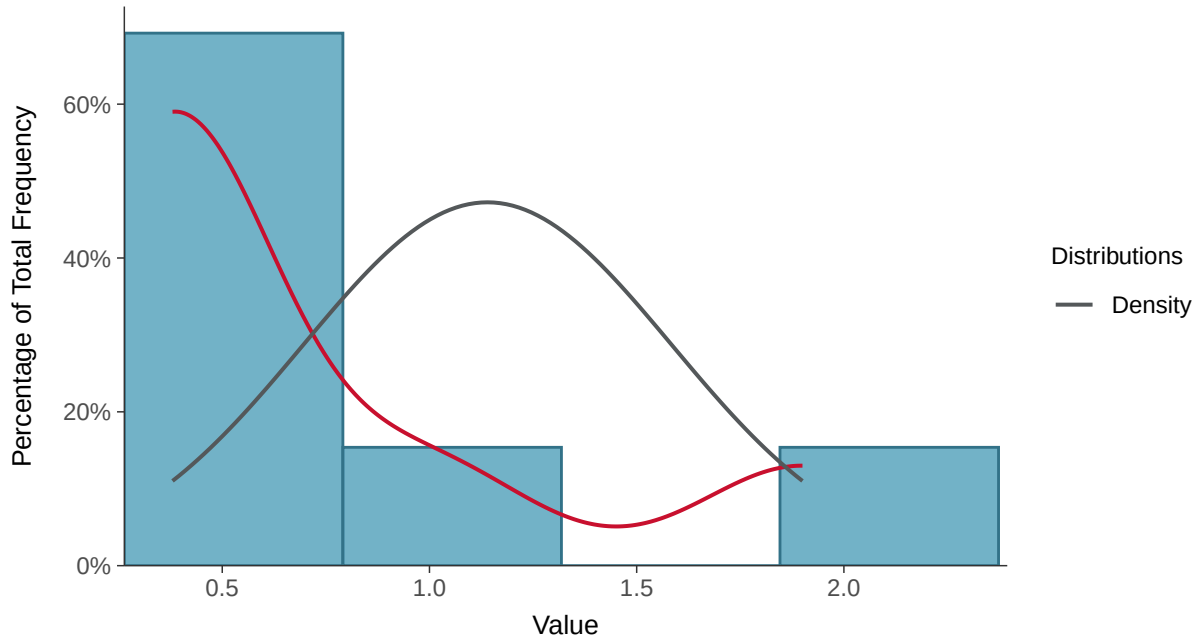
**Scatter Plot**

Thallium, MW-15016R (ug/L)



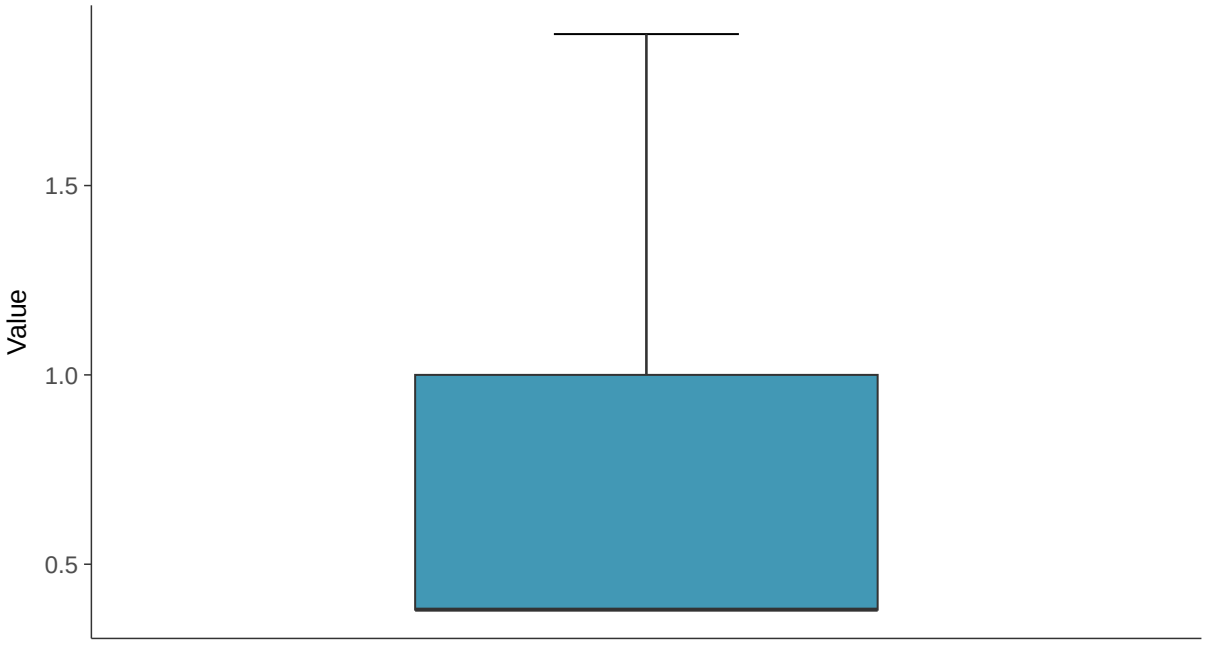

**Histogram**

Thallium, MW-15016R (ug/L)



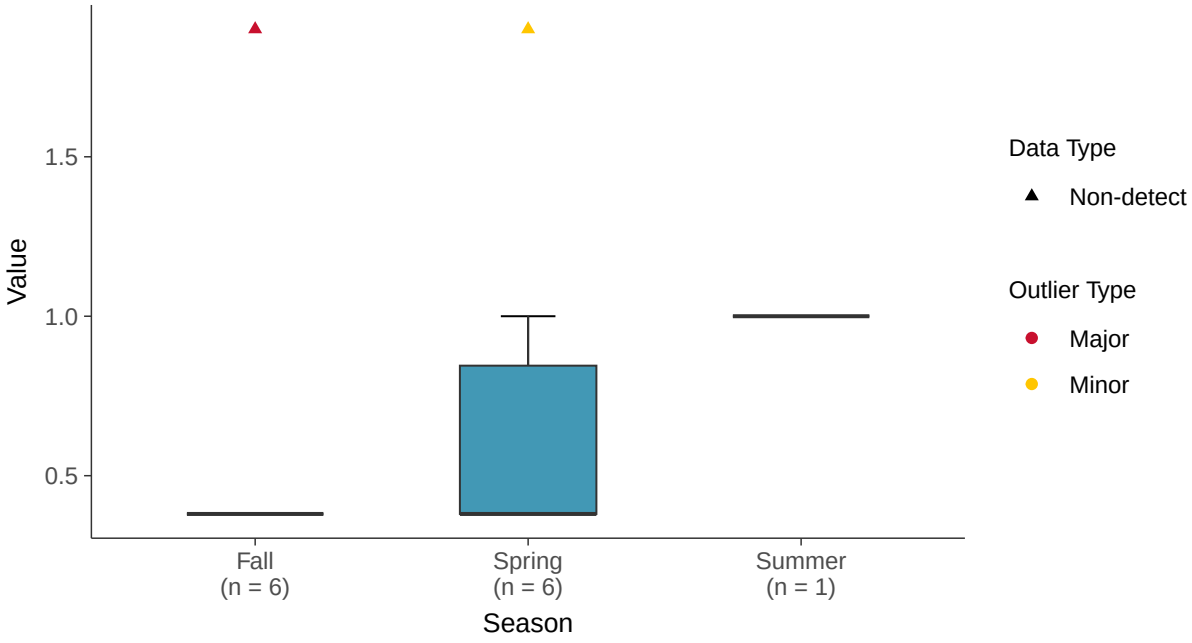
## Boxplot

Thallium, MW-15016R (ug/L)



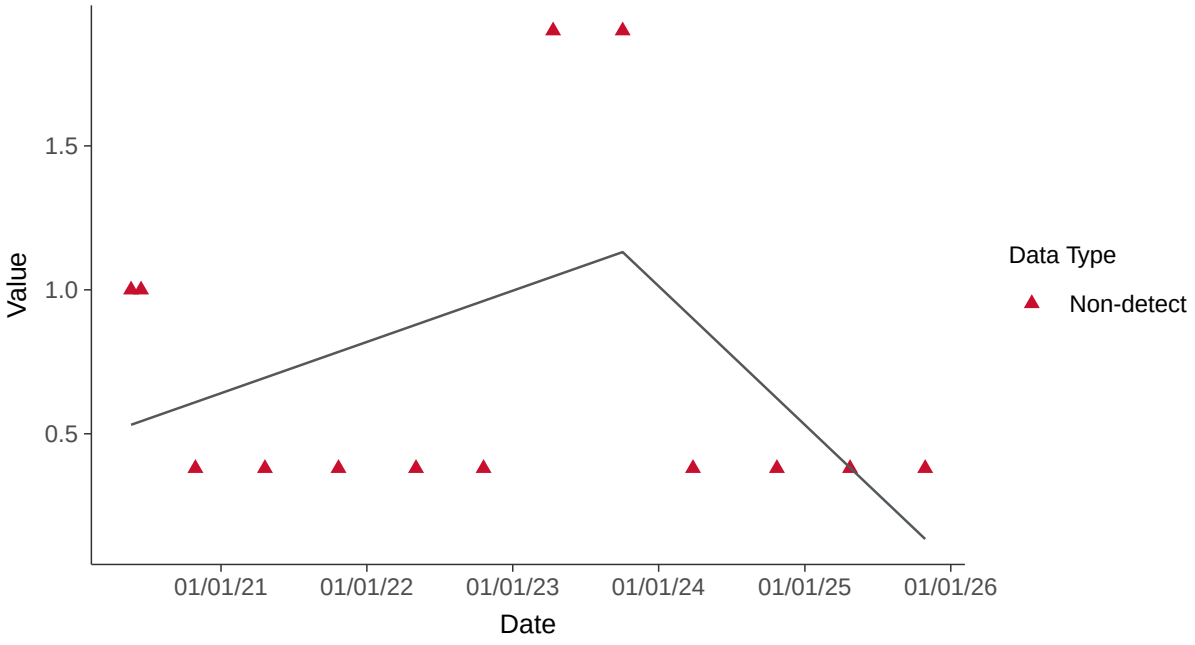

## Boxplot by Season

Thallium, MW-15016R (ug/L)



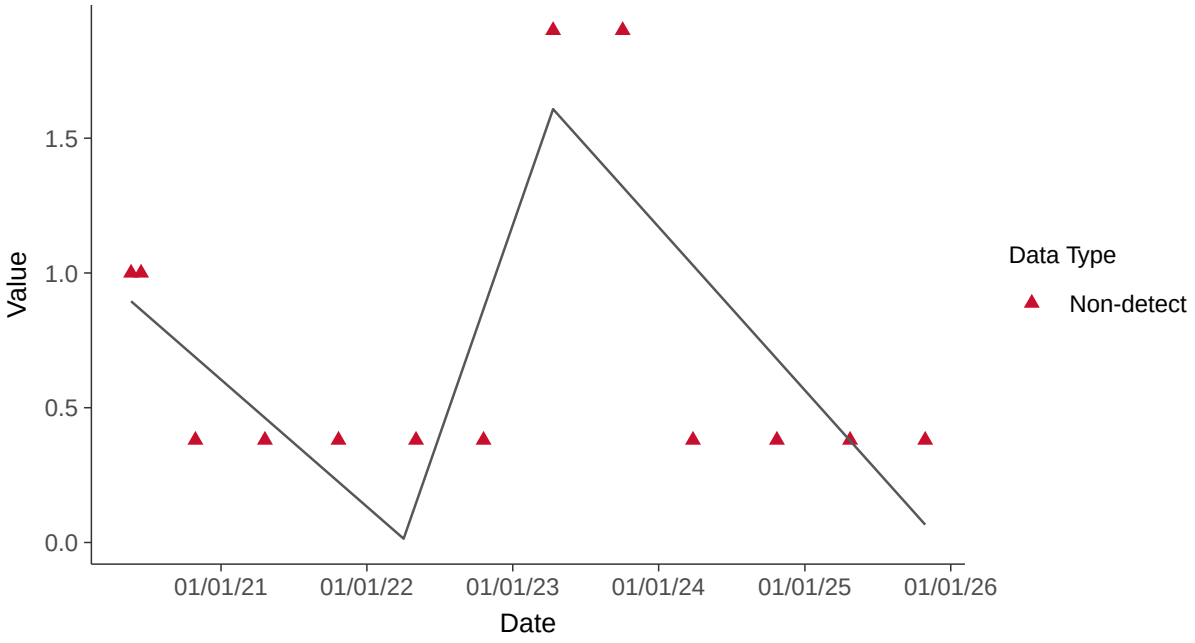
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15016R (ug/L)



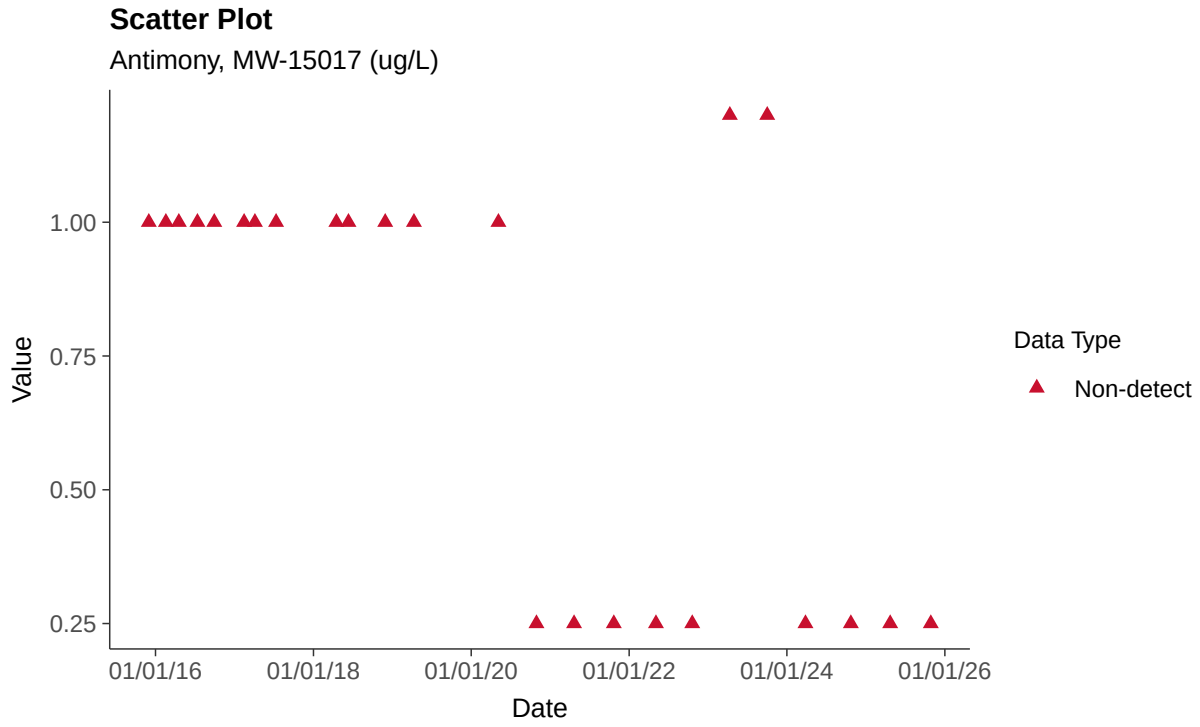

**Trend Regression: Piecewise Linear-Linear-Linear**

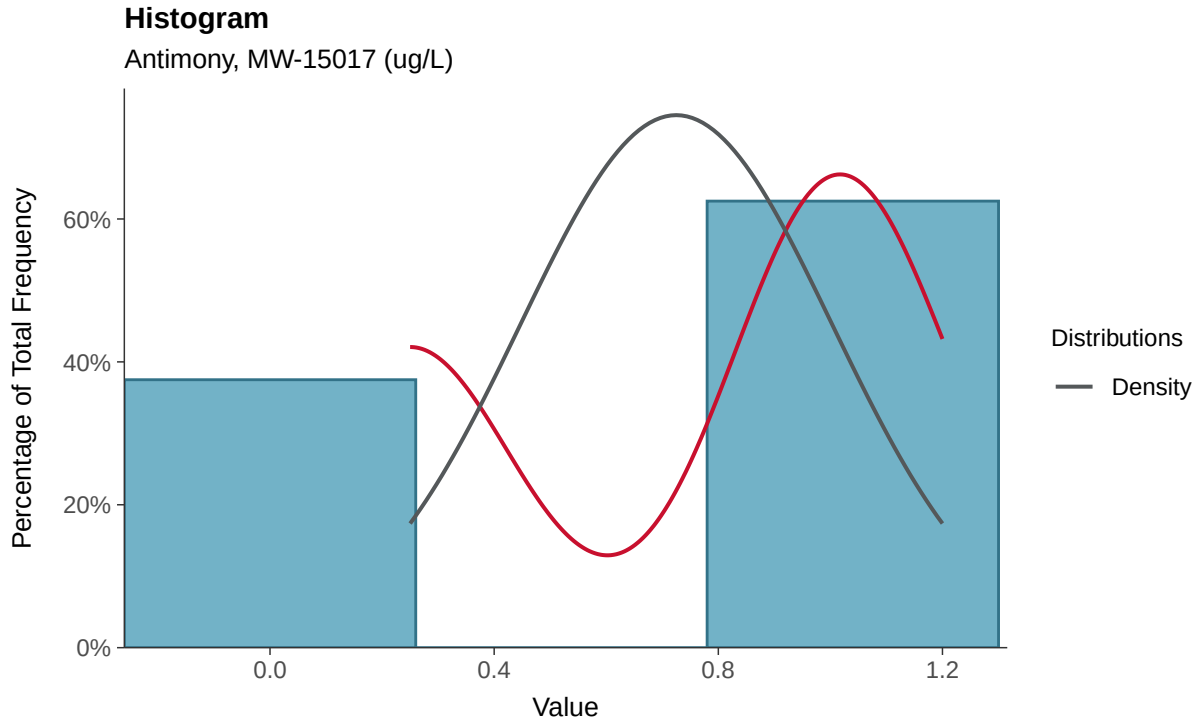
Thallium, MW-15016R (ug/L)



## Appendix IV: Antimony, MW-15017

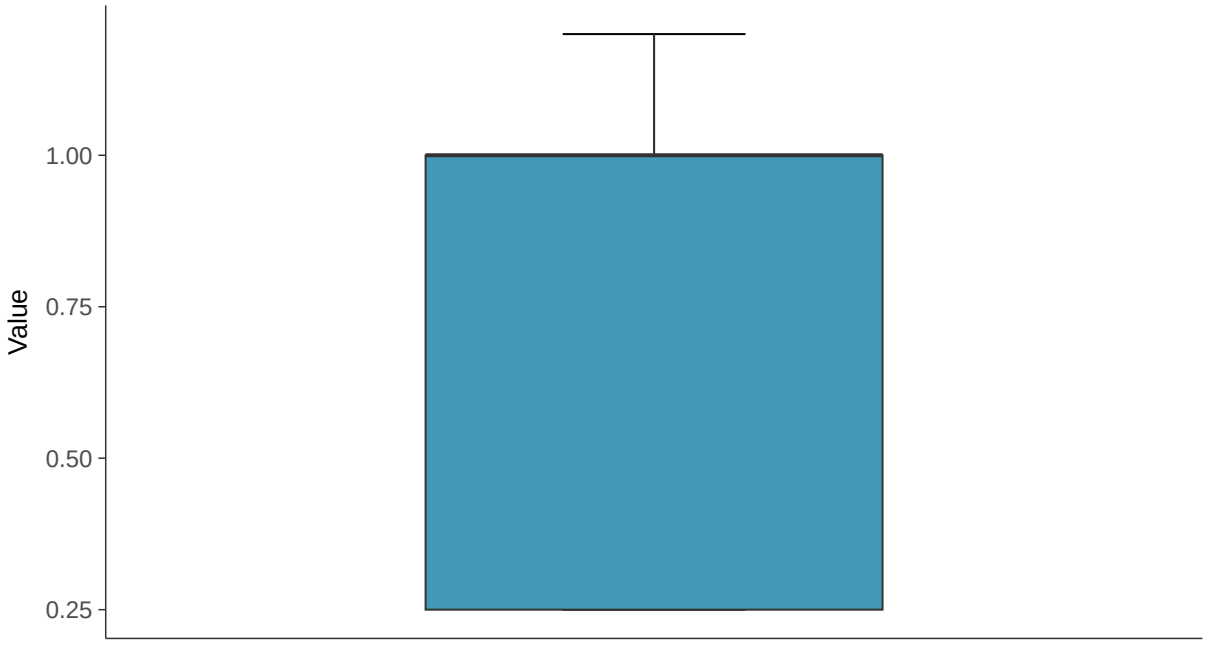
ID: 07_2_101



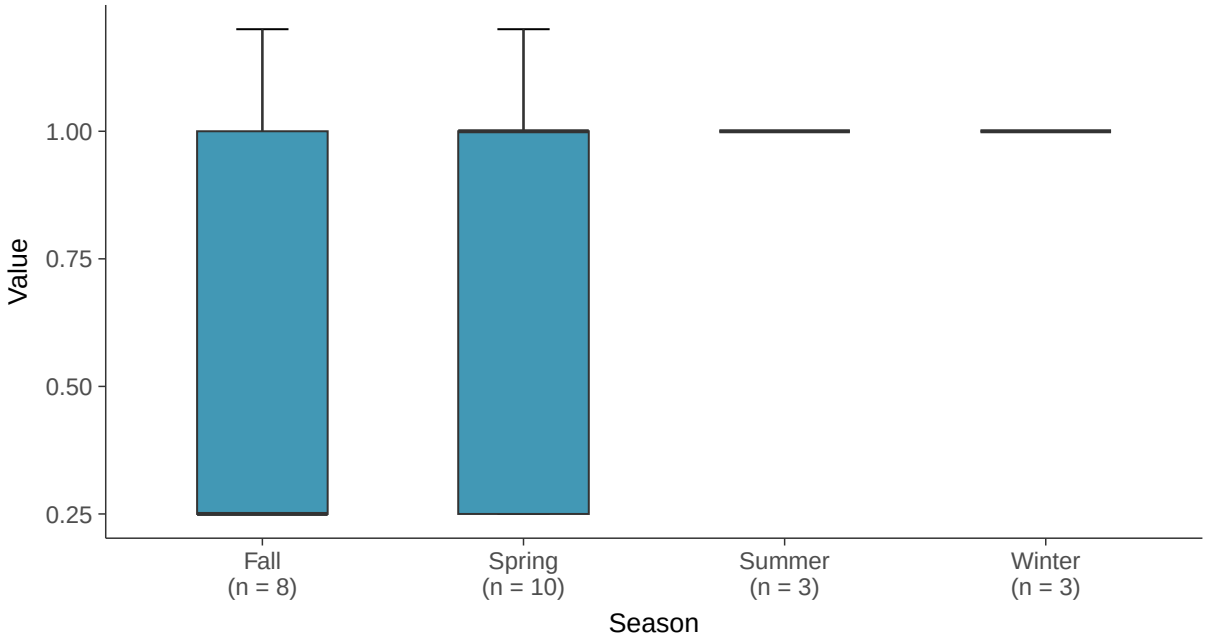
**Boxplot**

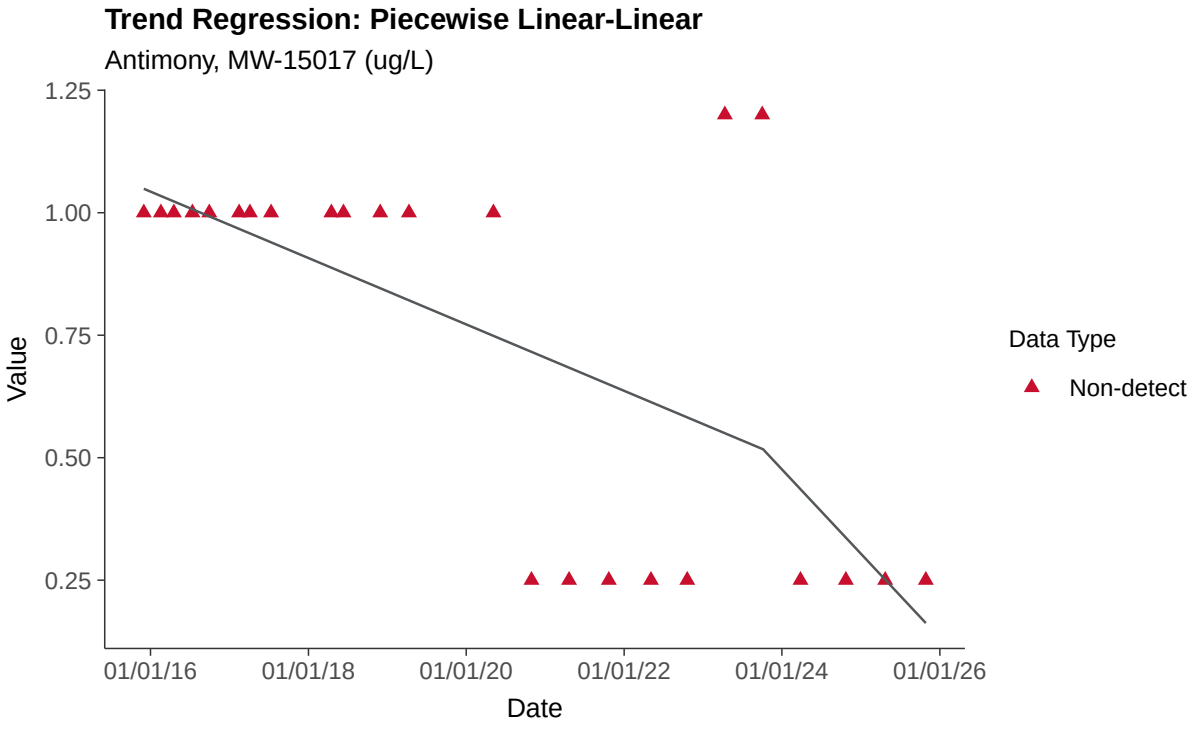
Antimony, MW-15017 (ug/L)




**Boxplot by Season**

Antimony, MW-15017 (ug/L)



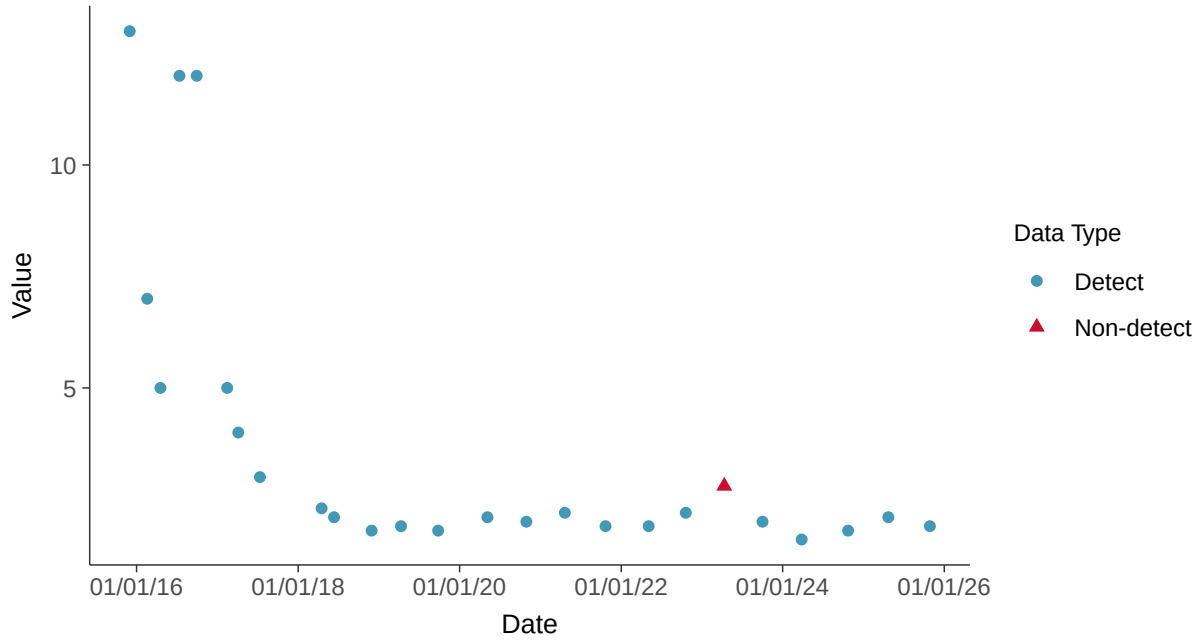

Trend Regression: Piecewise Linear-Linear
Antimony, MW-15017 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Arsenic, MW-15017

ID: 07_2_102

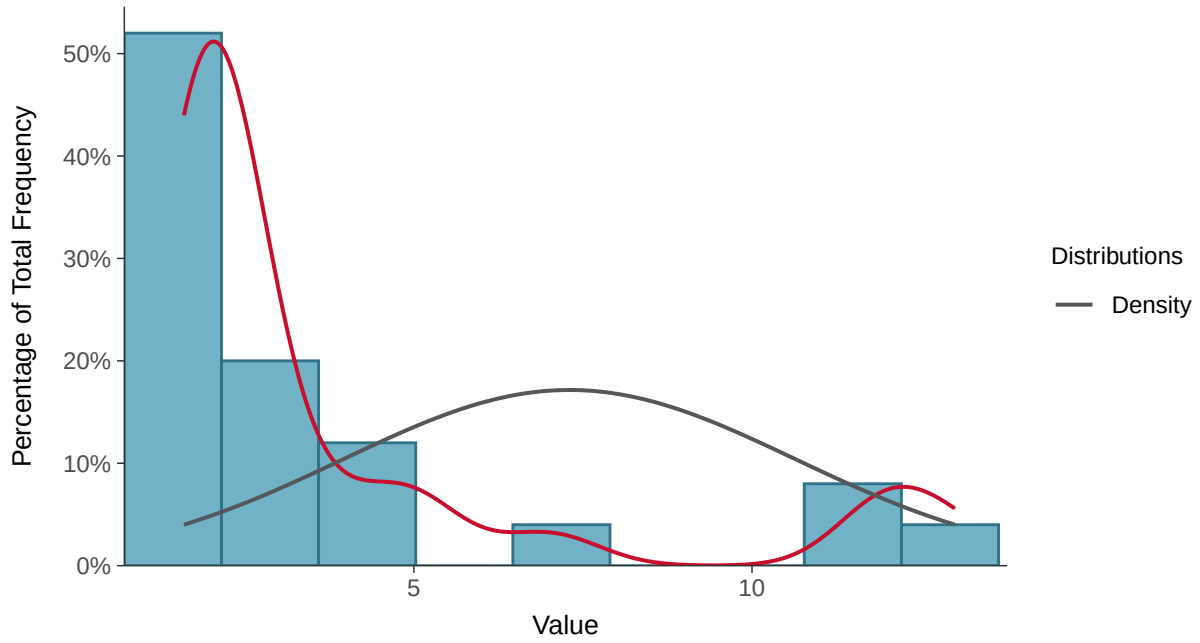
**Scatter Plot**

Arsenic, MW-15017 (ug/L)



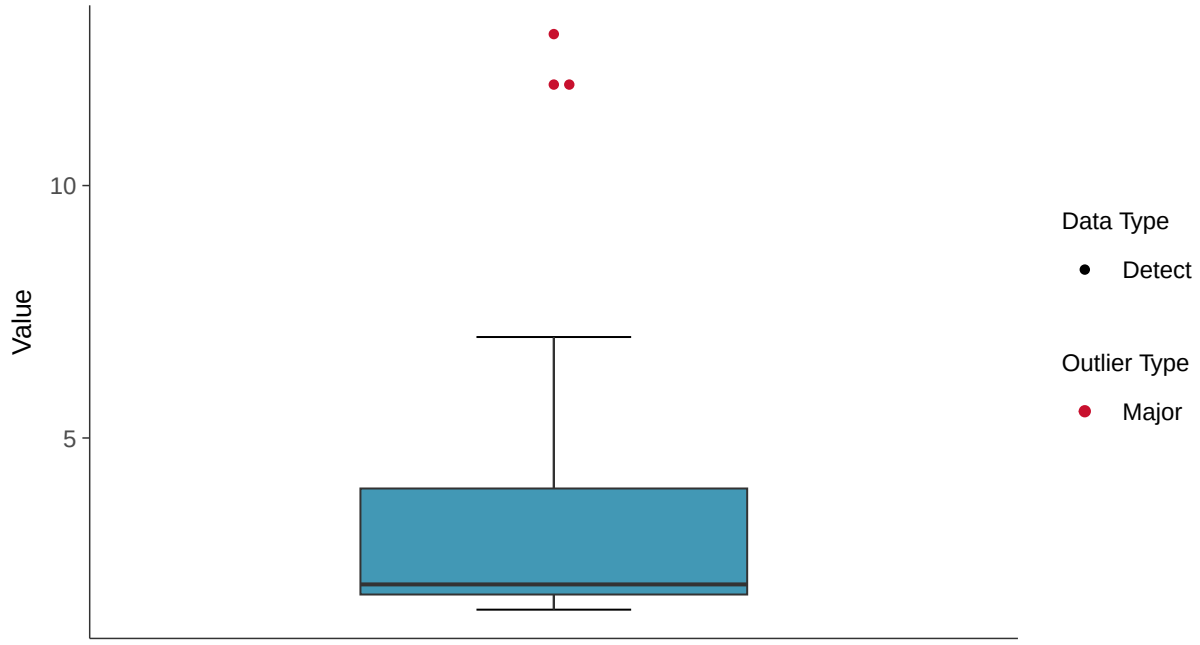

**Histogram**

Arsenic, MW-15017 (ug/L)



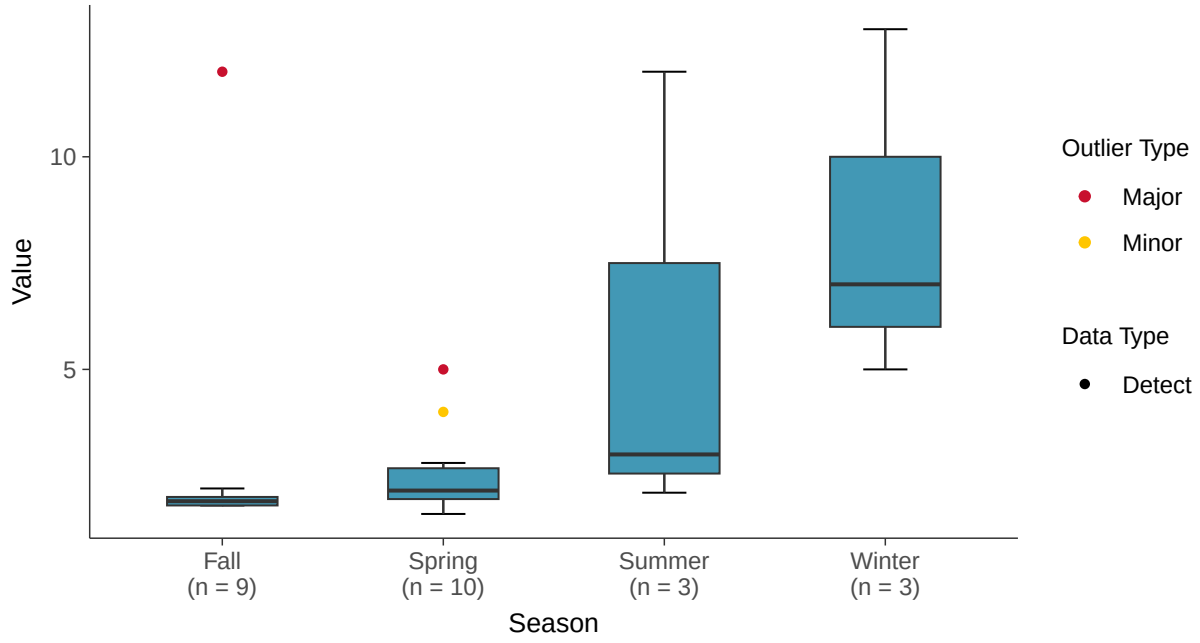
## Boxplot

Arsenic, MW-15017 (ug/L)



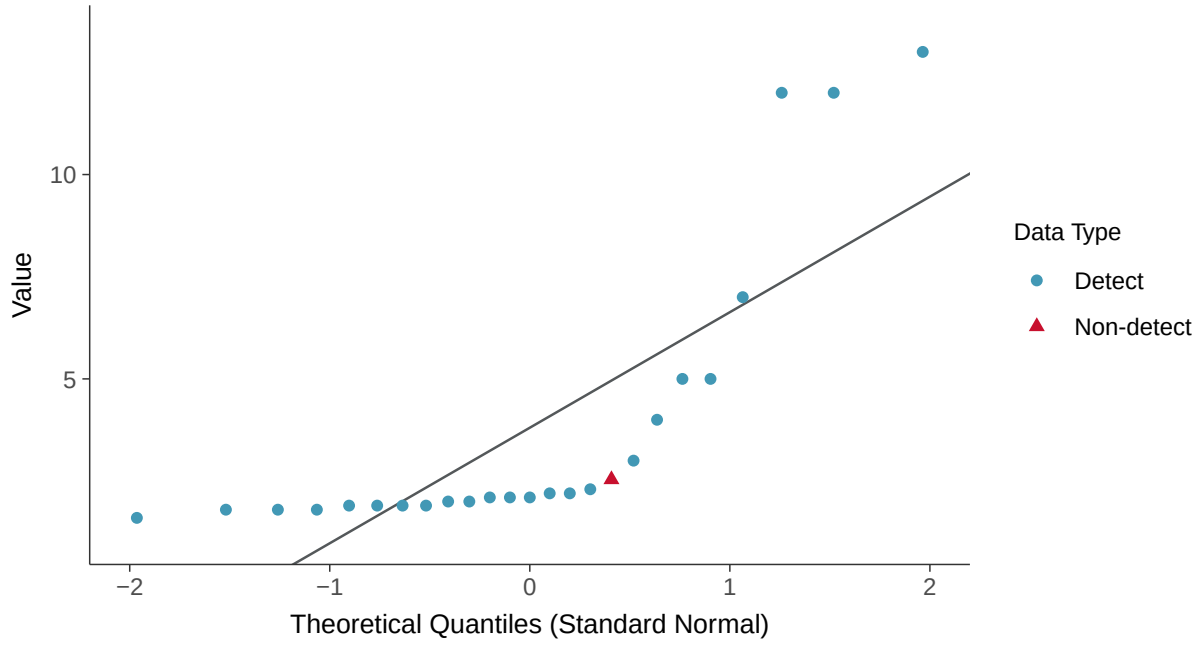

## Boxplot by Season

Arsenic, MW-15017 (ug/L)



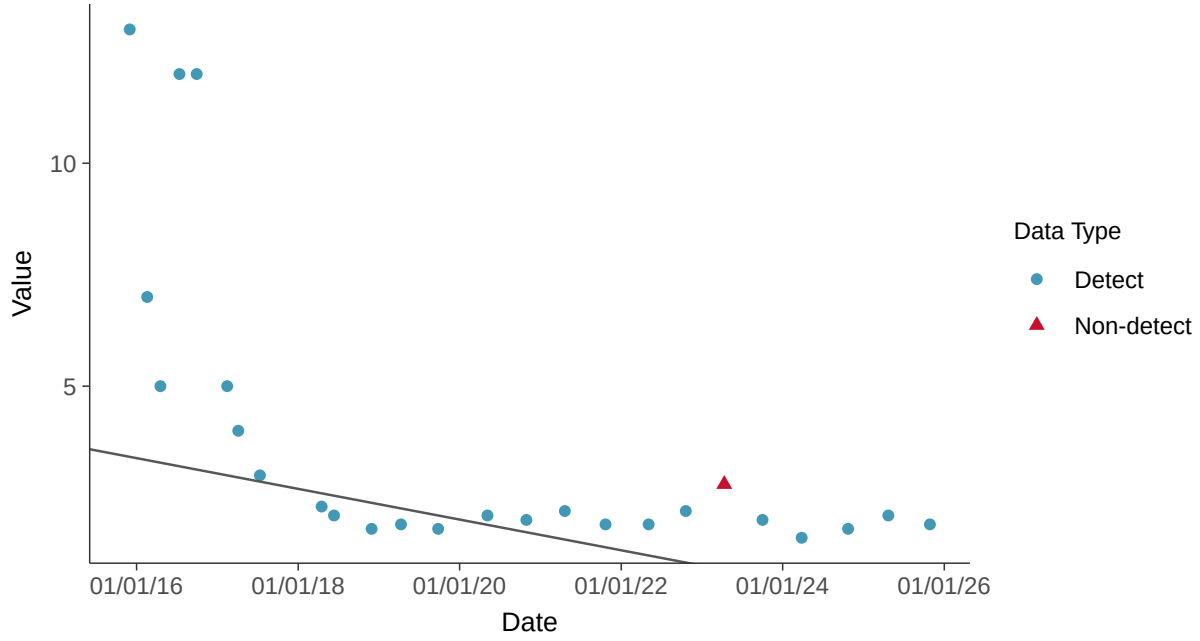
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15017 (ug/L)



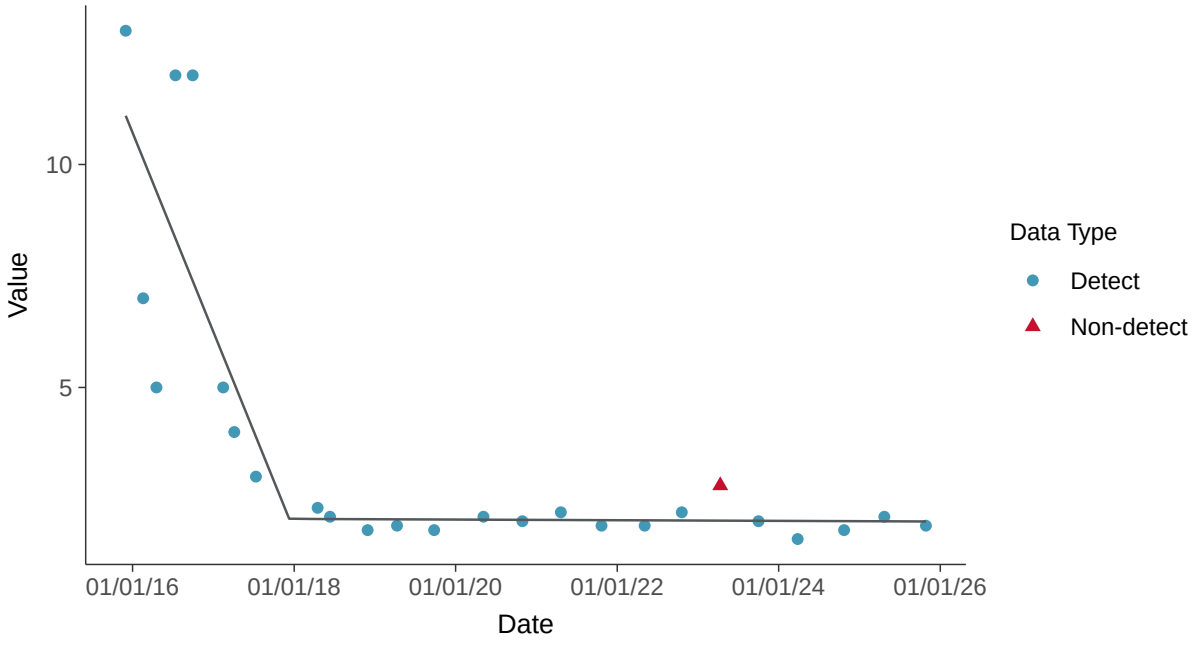

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Arsenic, MW-15017 (ug/L)



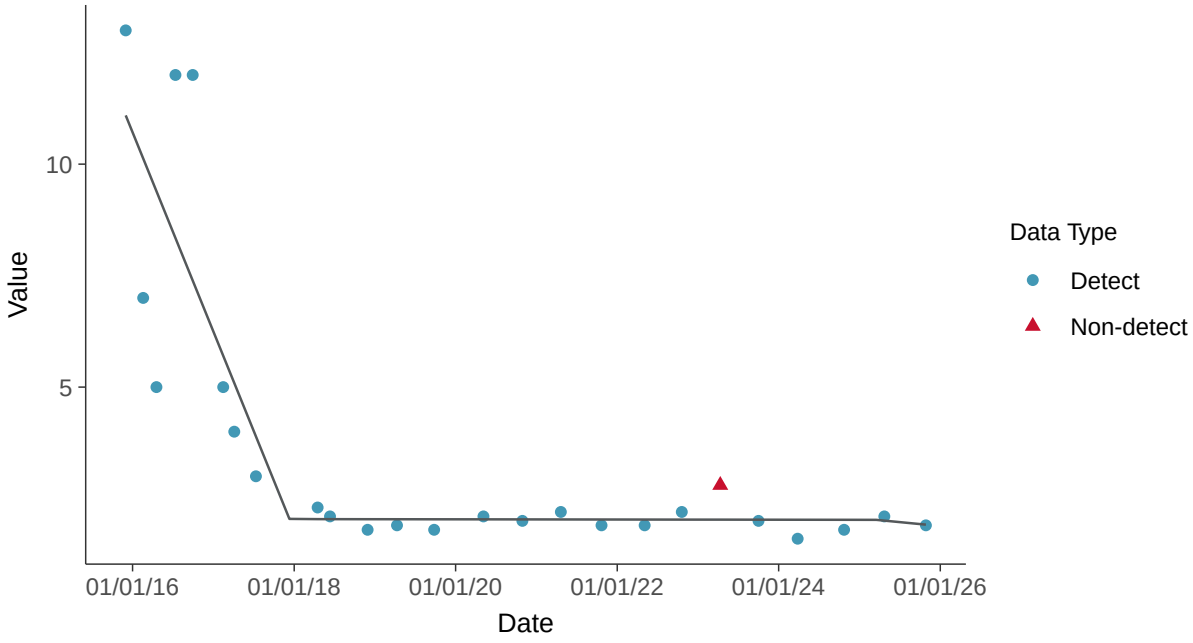
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15017 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15017 (ug/L)

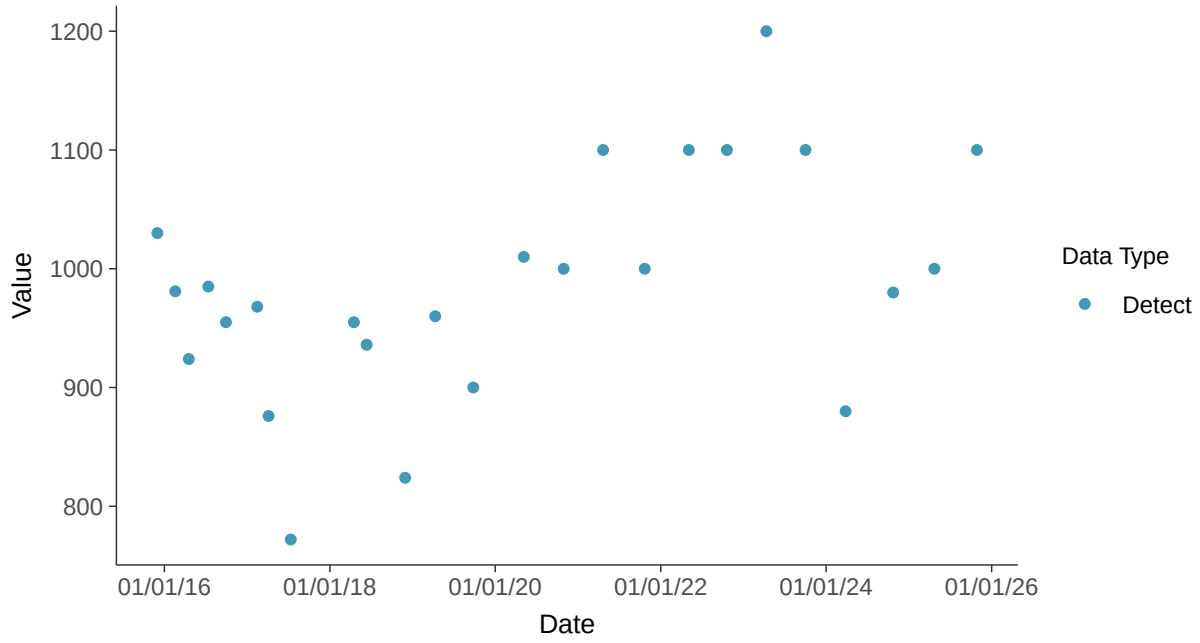


## Appendix IV: Barium, MW-15017

ID: 07_2_103

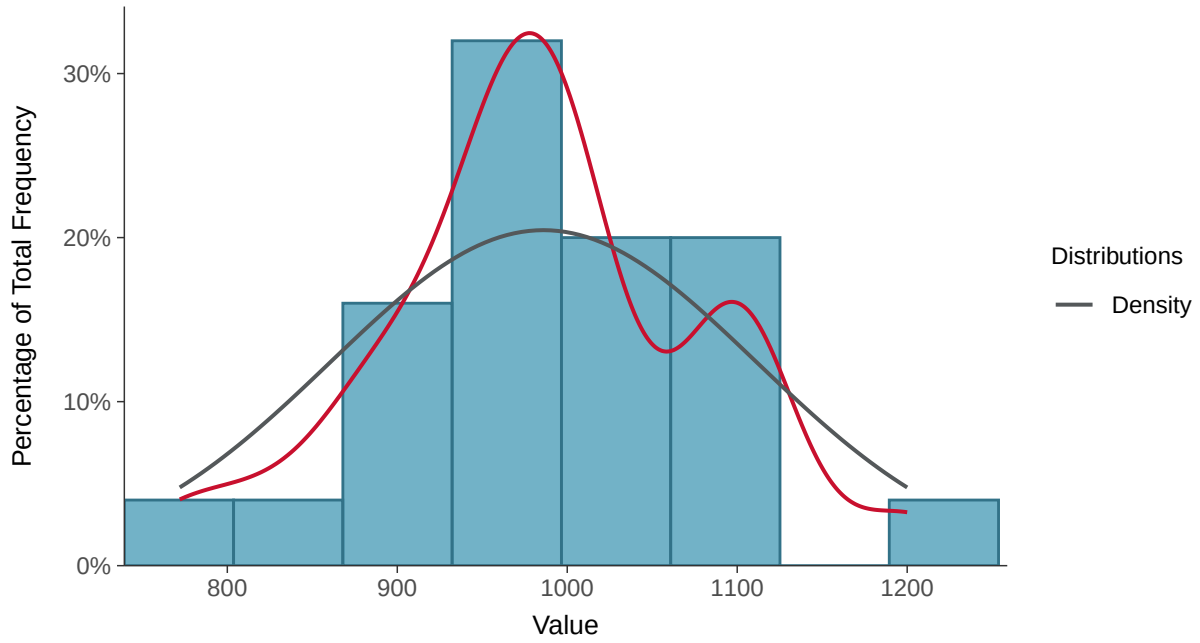
**Scatter Plot**

Barium, MW-15017 (ug/L)



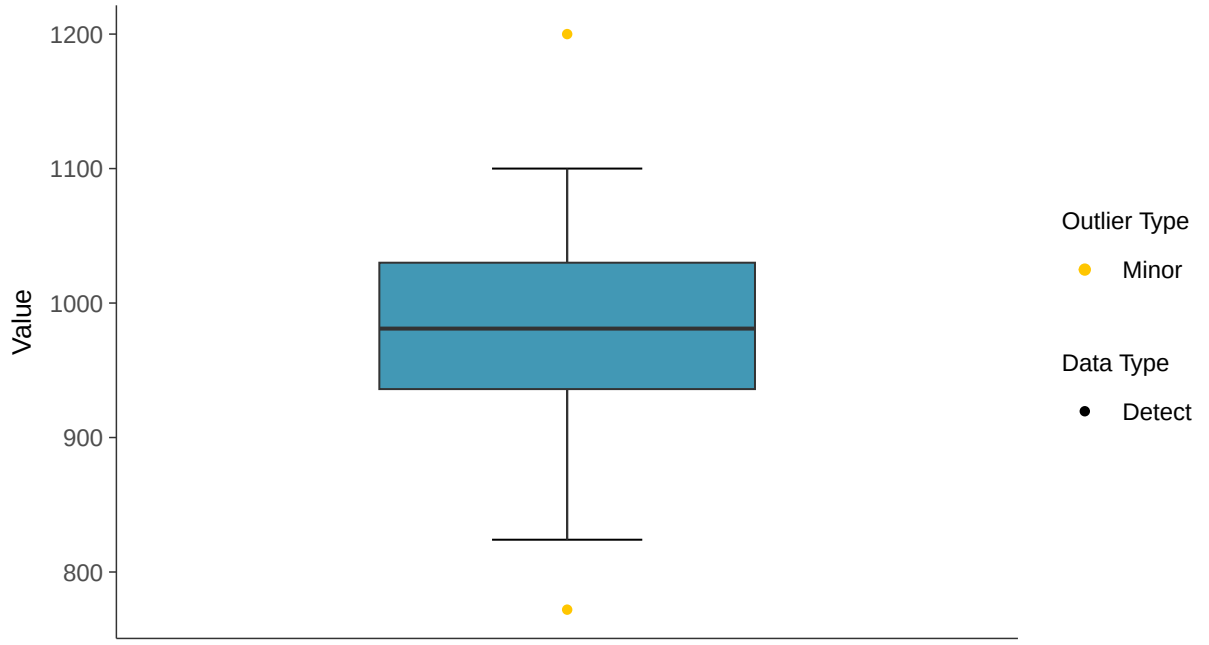

**Histogram**

Barium, MW-15017 (ug/L)



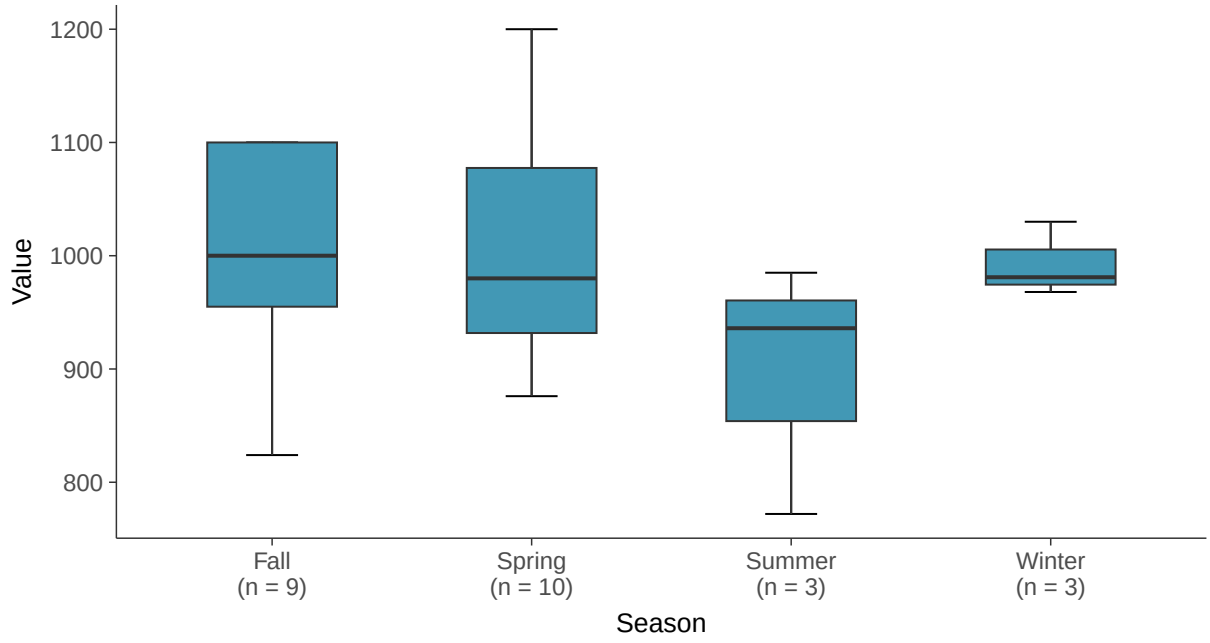
## Boxplot

Barium, MW-15017 (ug/L)



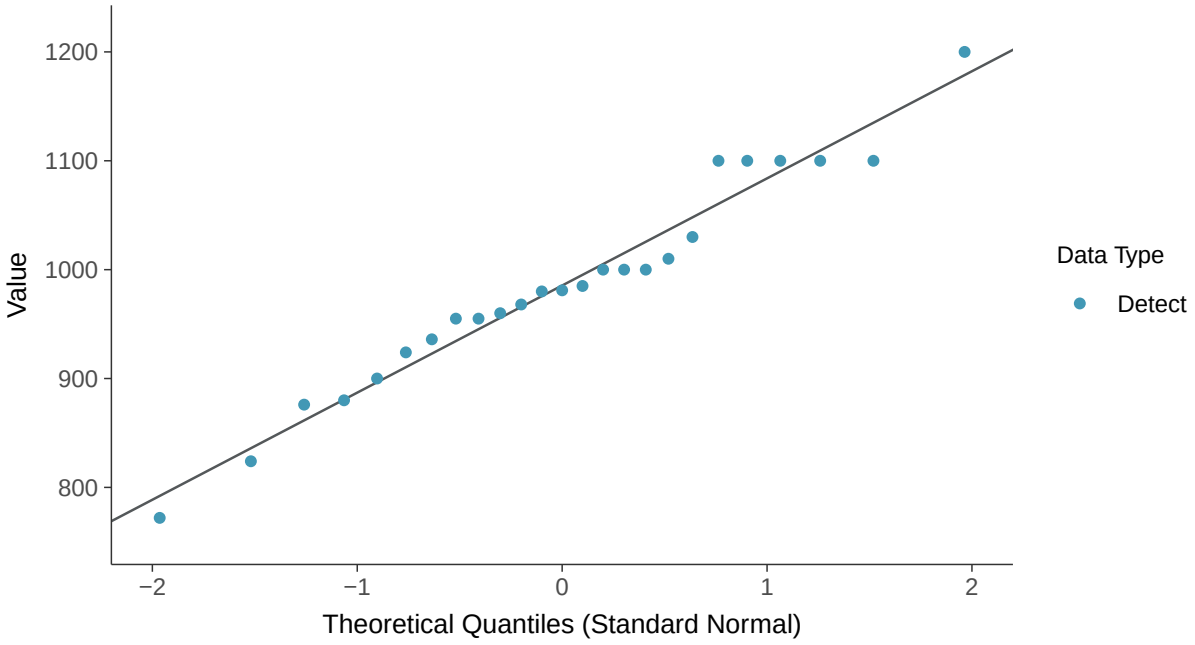

## Boxplot by Season

Barium, MW-15017 (ug/L)



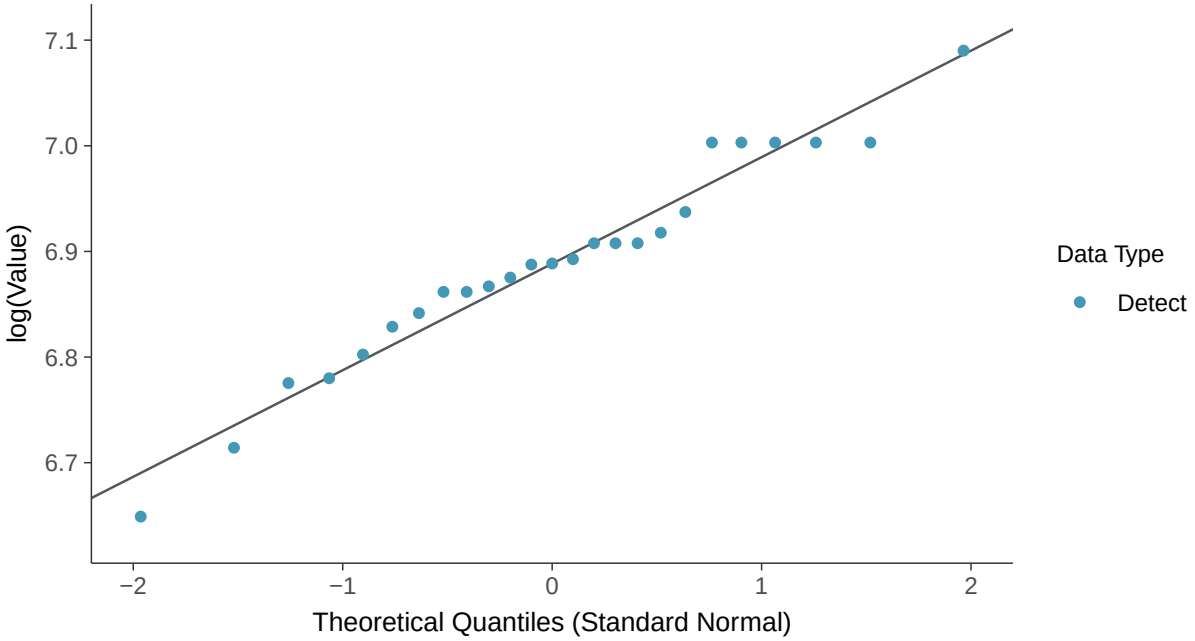
**Normal Q-Q plot**

Barium, MW-15017 (ug/L)



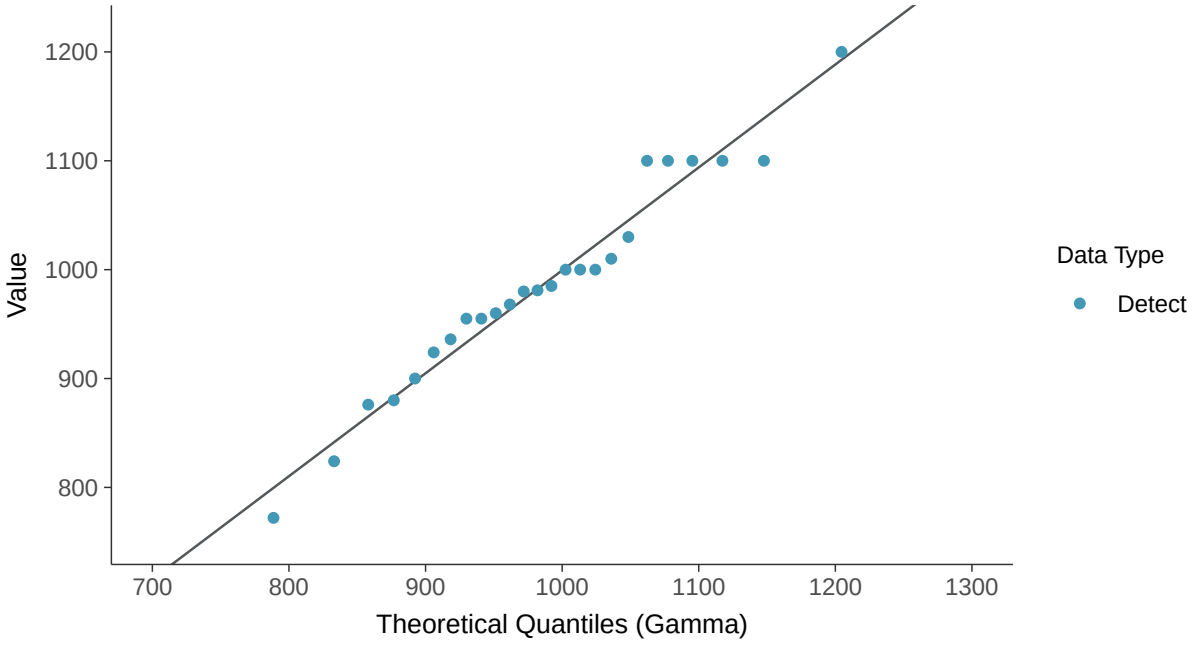

**Lognormal Q-Q plot**

Barium, MW-15017 (ug/L)



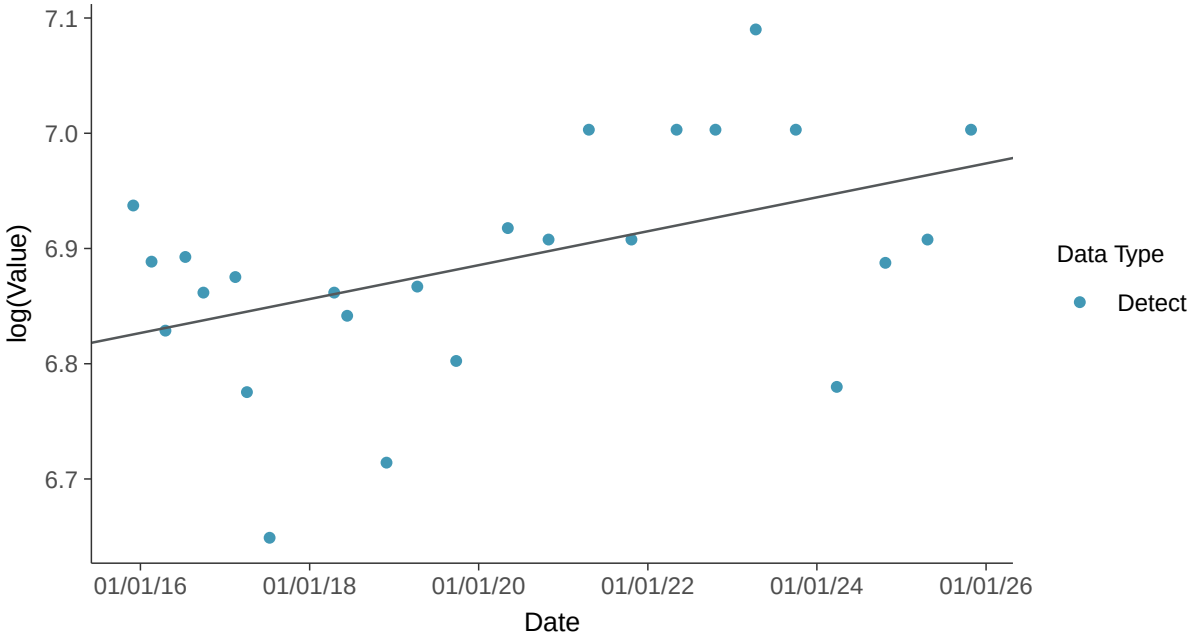
**Gamma Q-Q plot**

Barium, MW-15017 (ug/L)



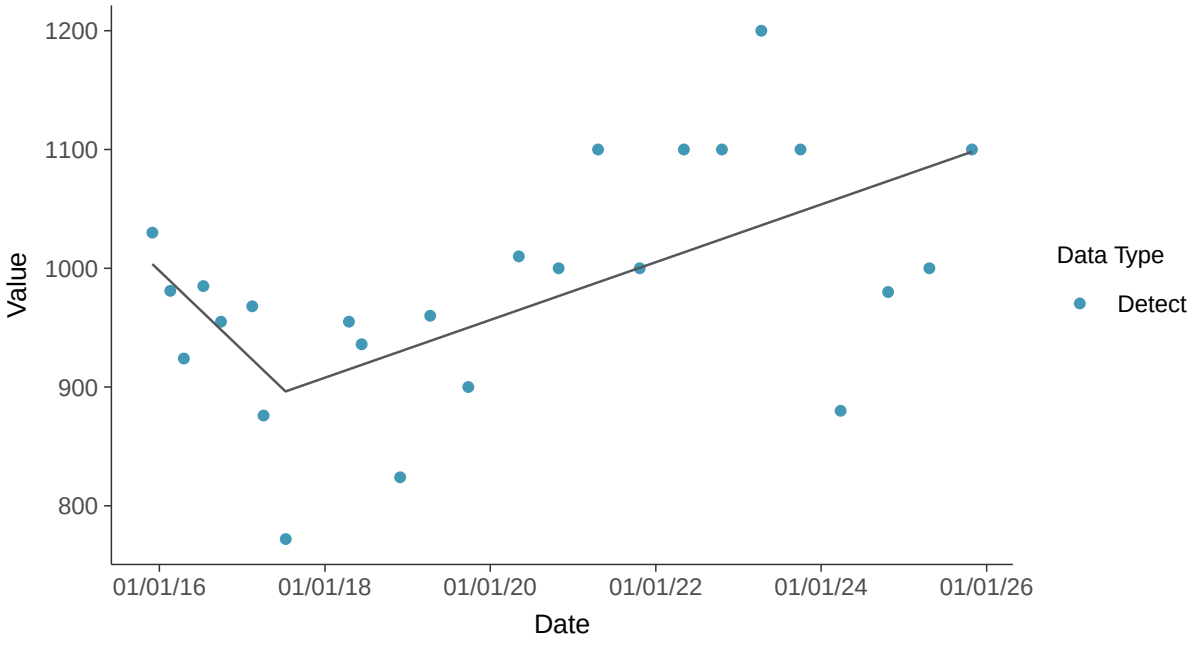

**Trend Regression: Lognormal MLE**

Barium, MW-15017 (ug/L)



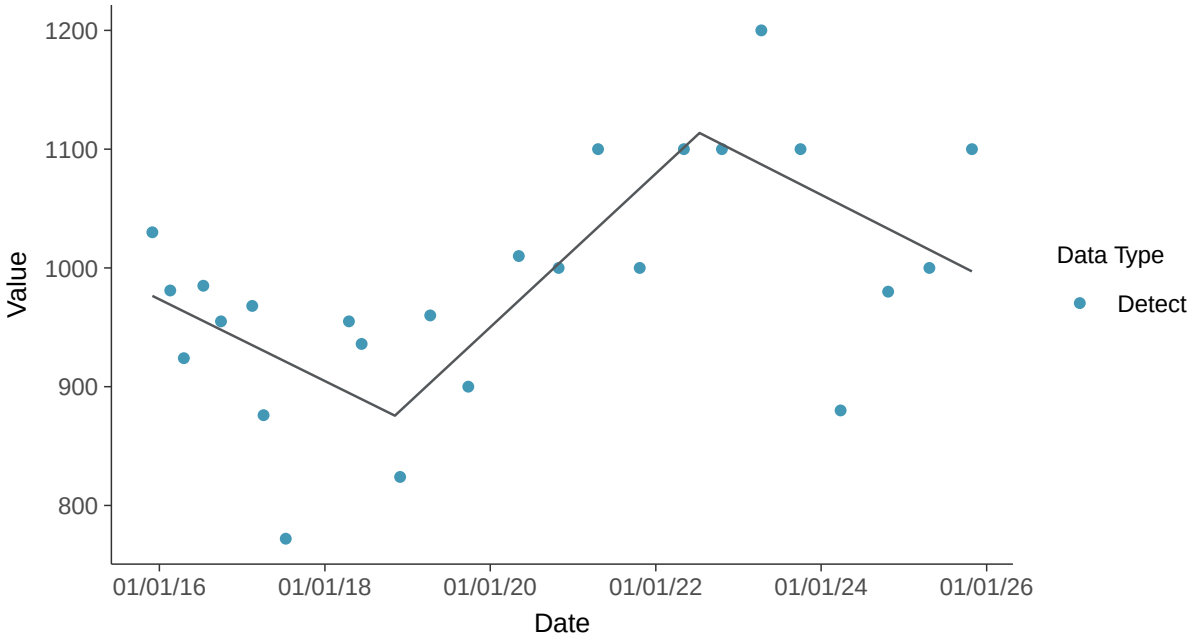
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15017 (ug/L)



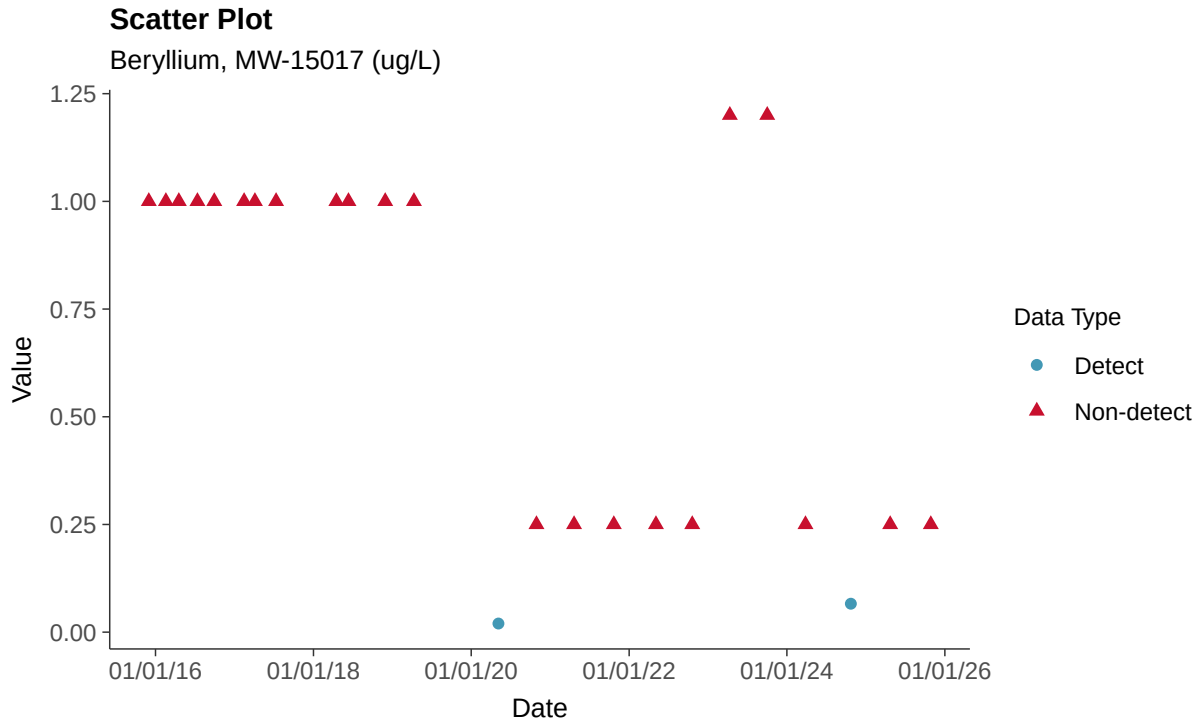

**Trend Regression: Piecewise Linear-Linear-Linear**

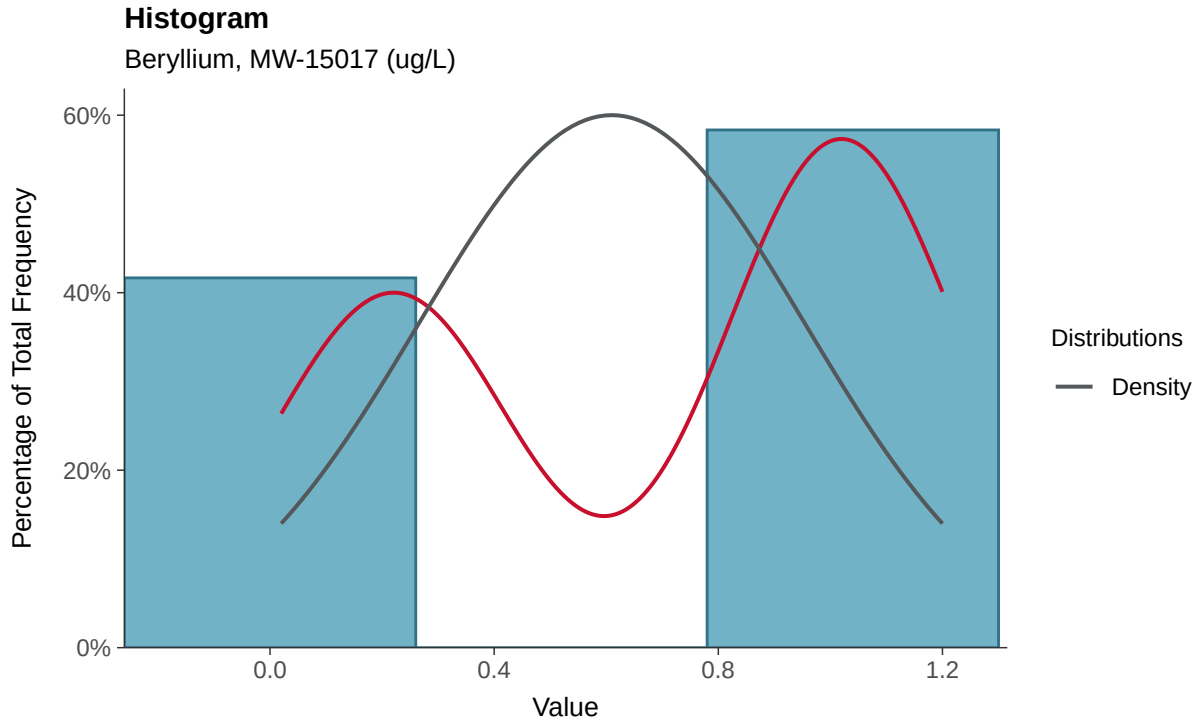
Barium, MW-15017 (ug/L)



## Appendix IV: Beryllium, MW-15017

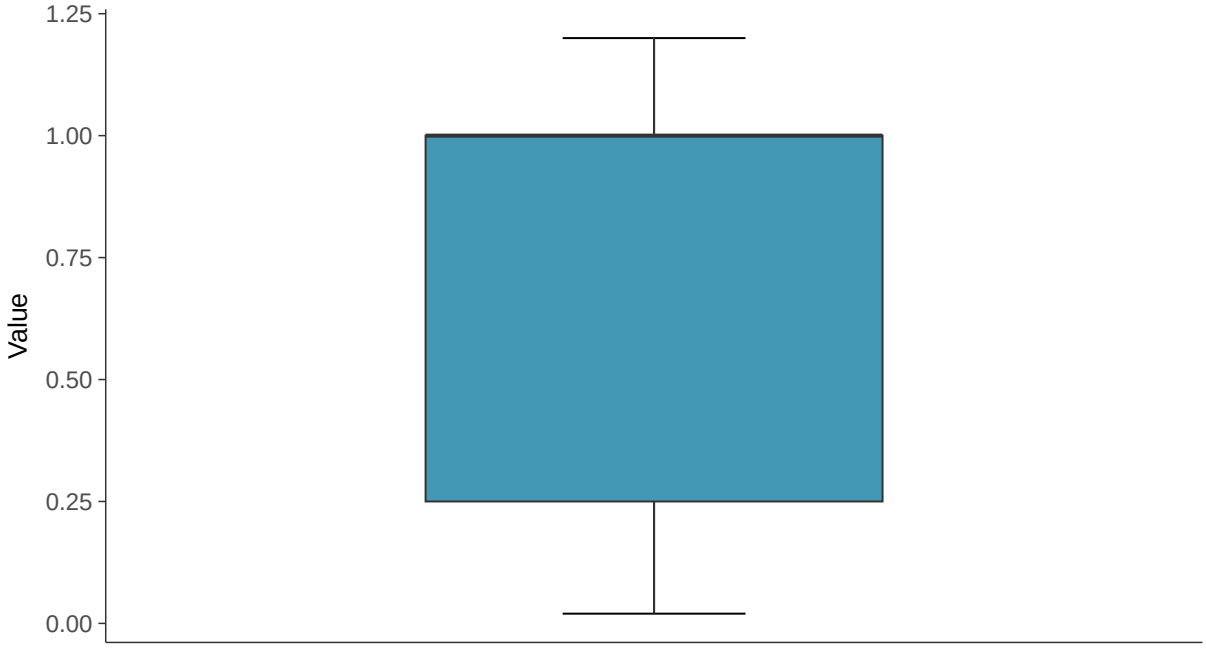
ID: 07_2_104



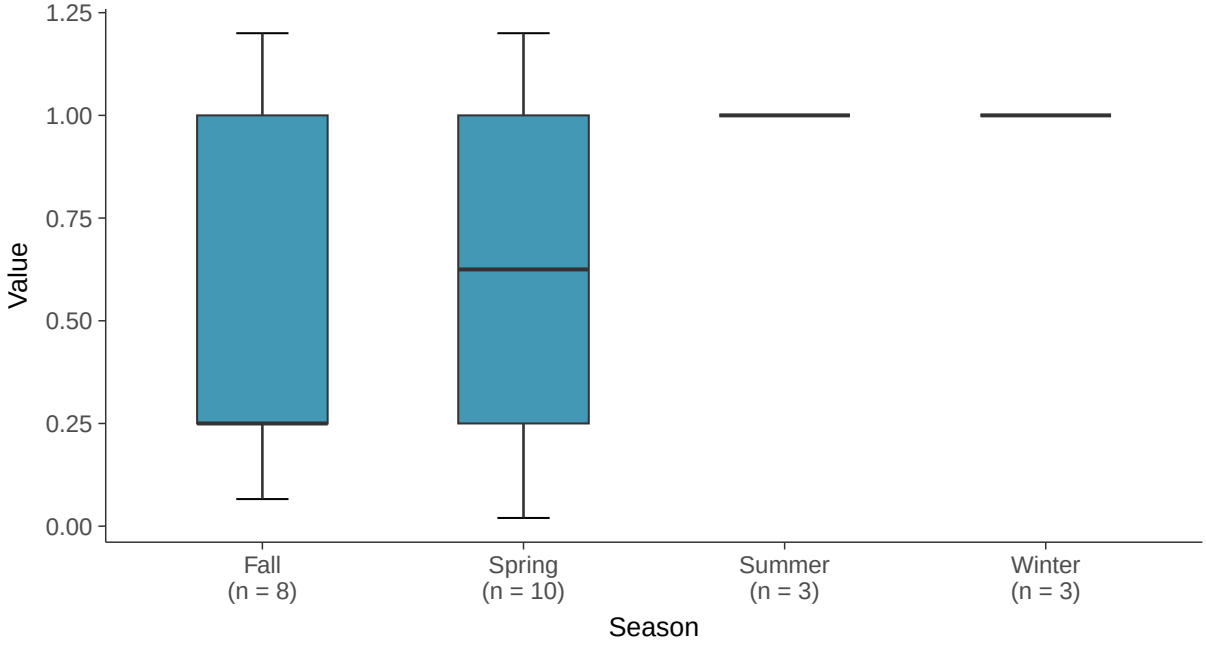
**Boxplot**

Beryllium, MW-15017 (ug/L)



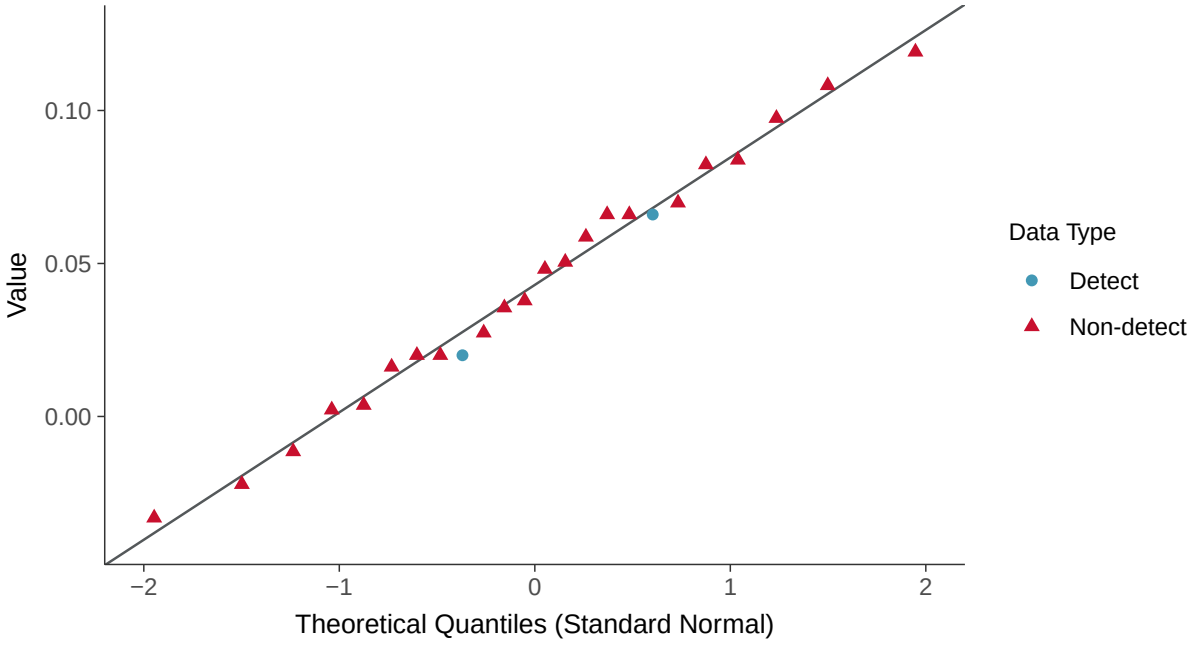

**Boxplot by Season**

Beryllium, MW-15017 (ug/L)



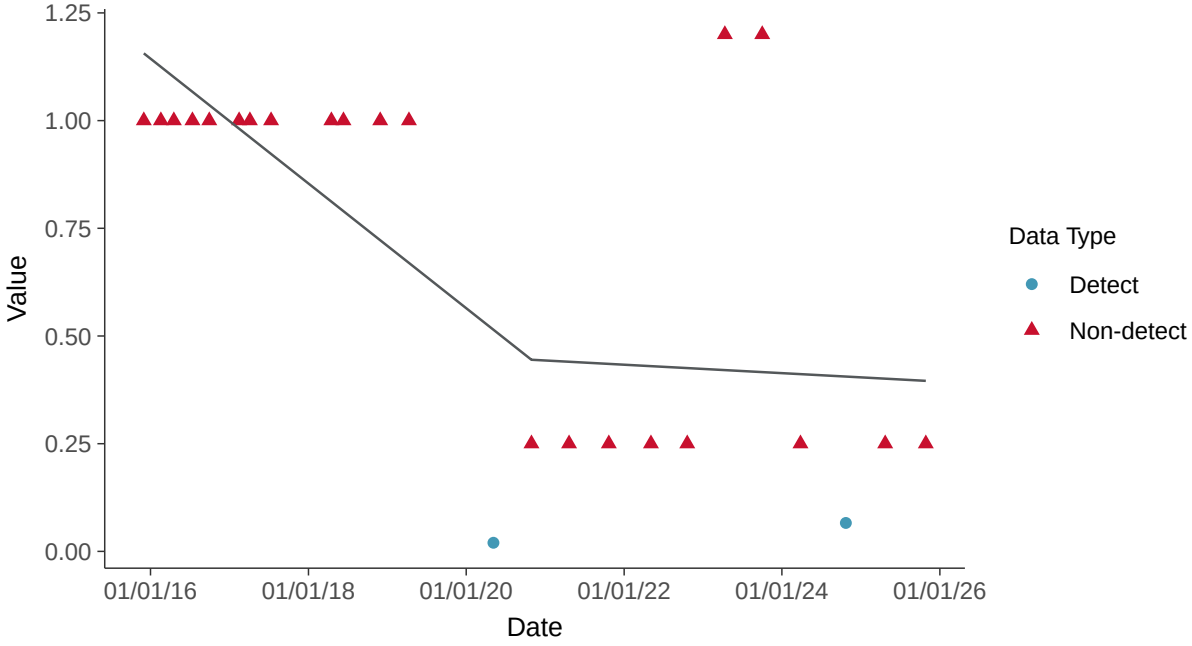
**Normal Q-Q plot using ROS Imputed Estimates**

Beryllium, MW-15017 (ug/L)



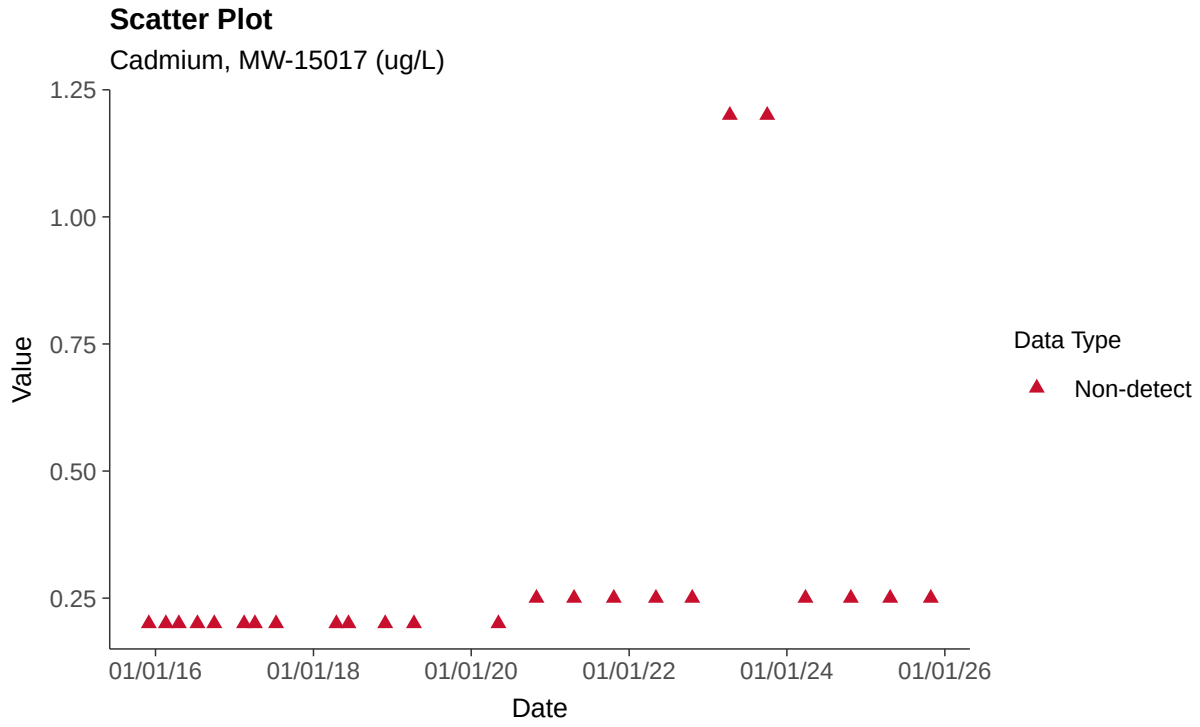

**Trend Regression: Piecewise Linear-Linear**

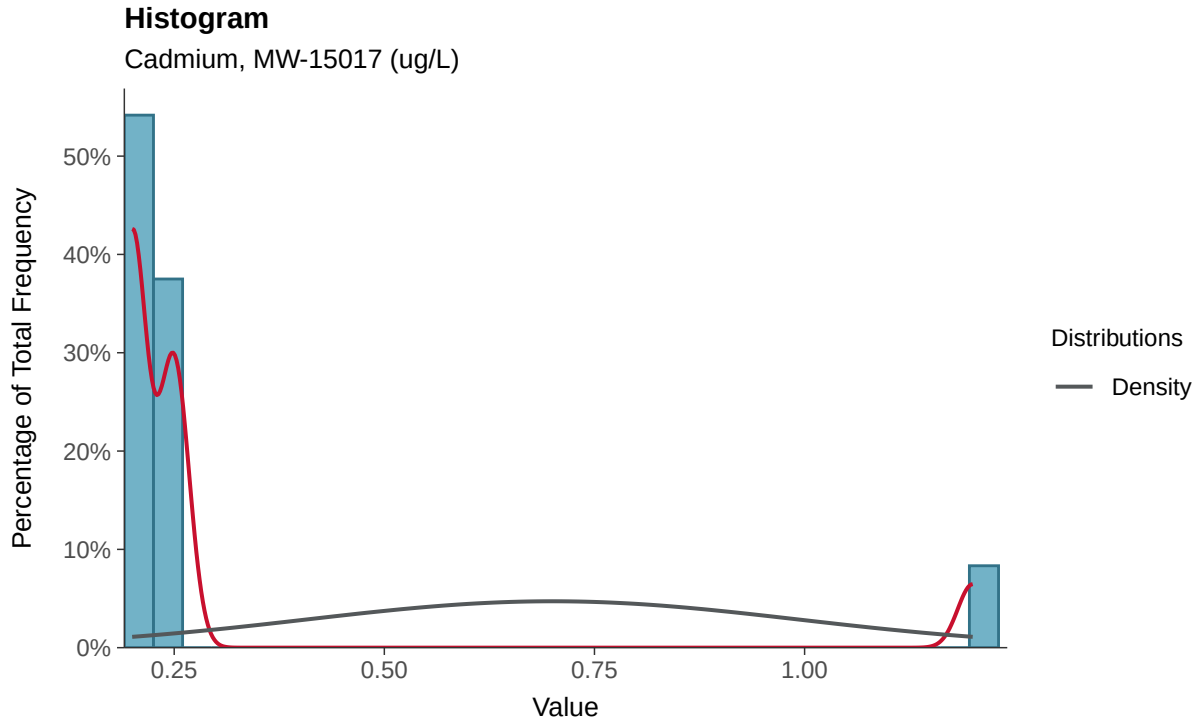
Beryllium, MW-15017 (ug/L)



## Appendix IV: Cadmium, MW-15017

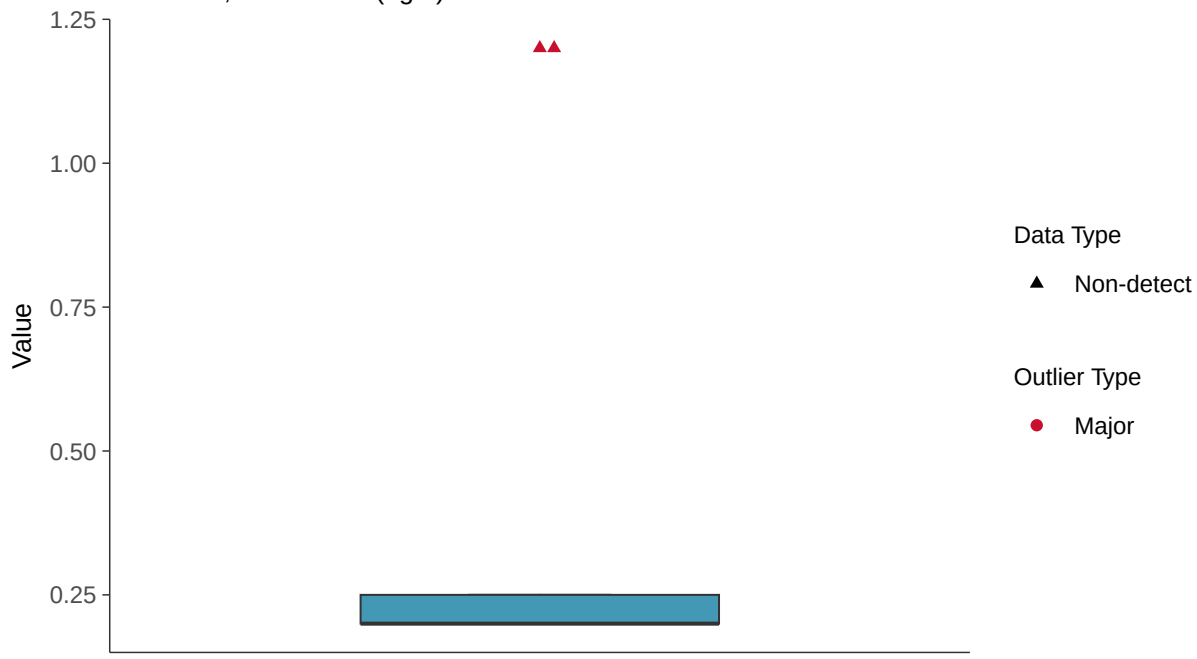
ID: 07_2_106



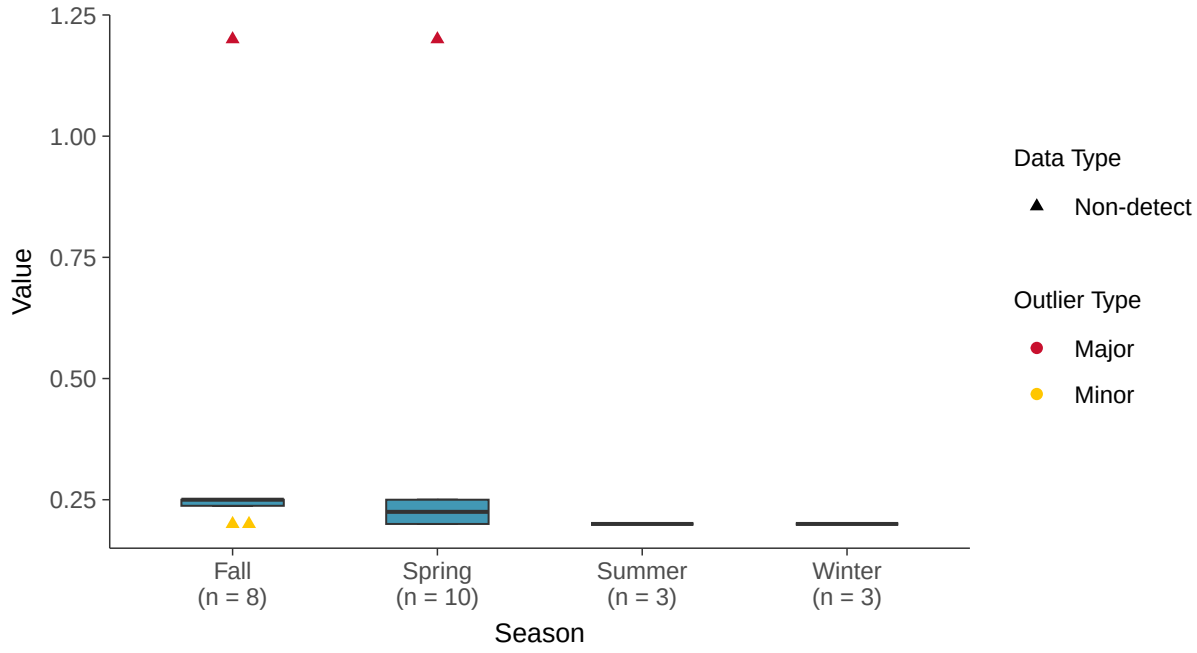
## Boxplot

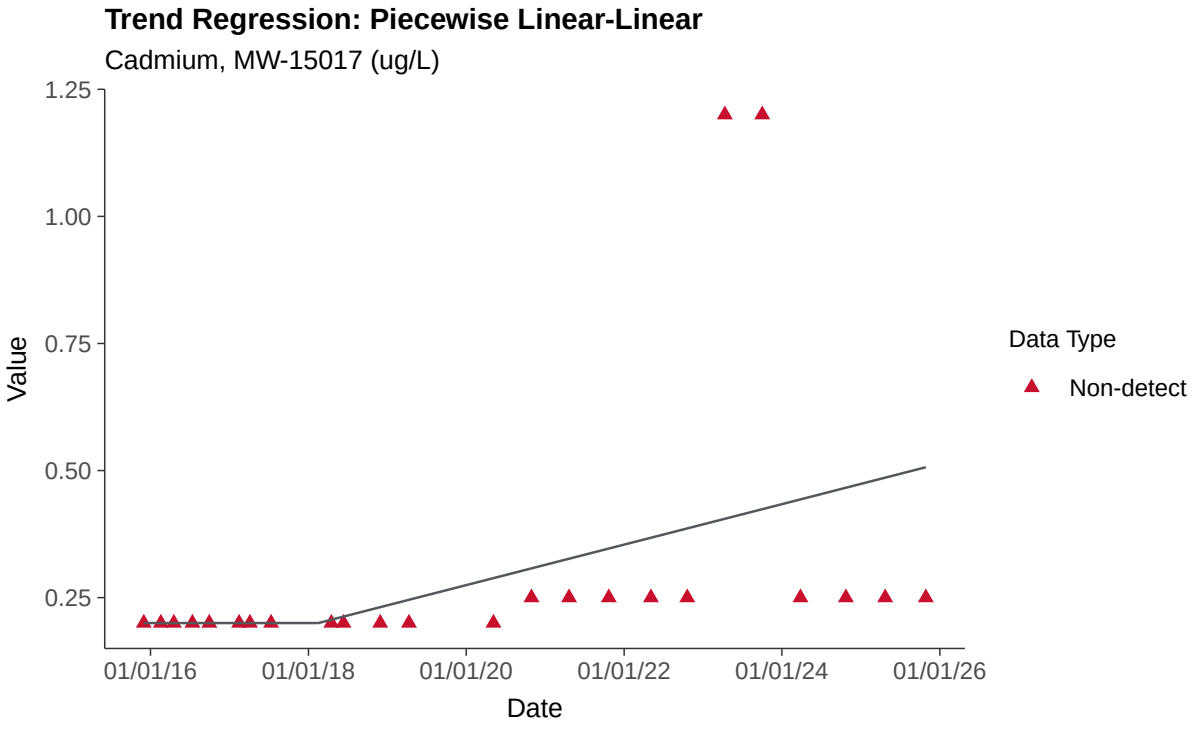
Cadmium, MW-15017 (ug/L)




## Boxplot by Season

Cadmium, MW-15017 (ug/L)



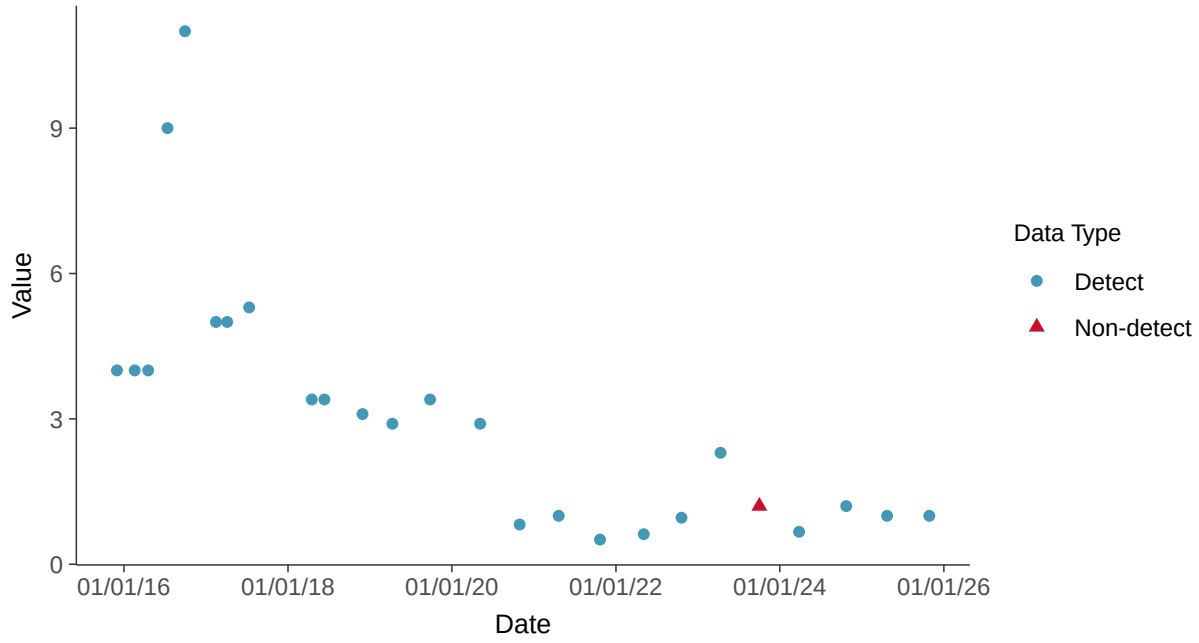

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15017 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15017

ID: 07_2_109

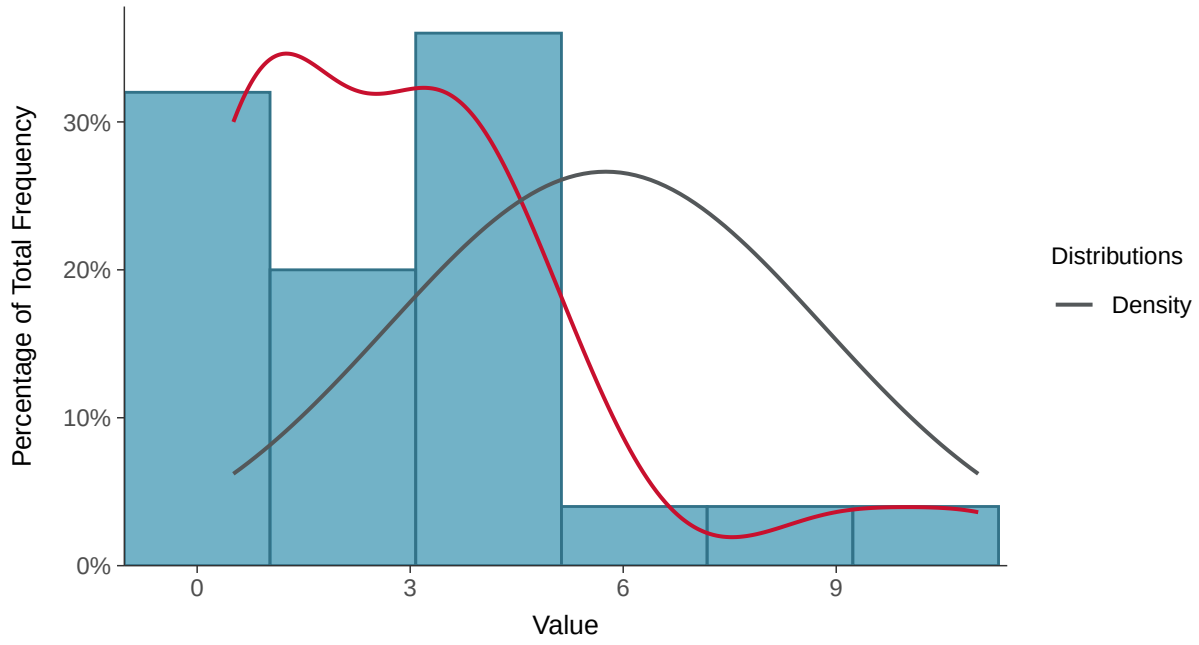
**Scatter Plot**

Chromium, MW-15017 (ug/L)



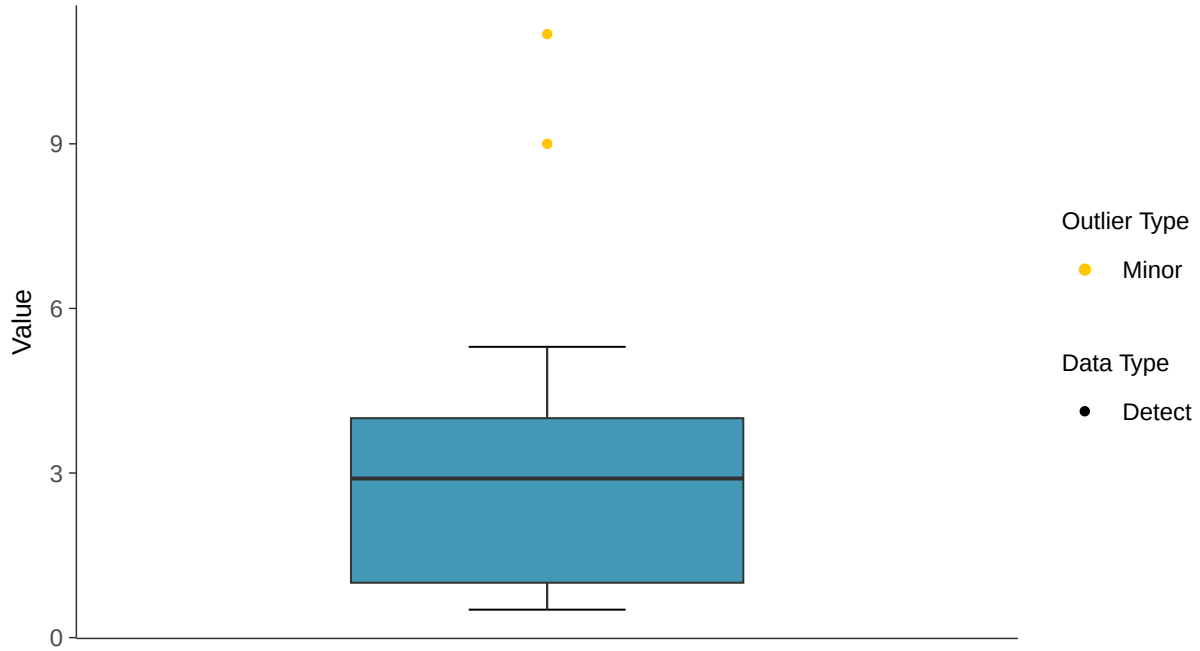

**Histogram**

Chromium, MW-15017 (ug/L)



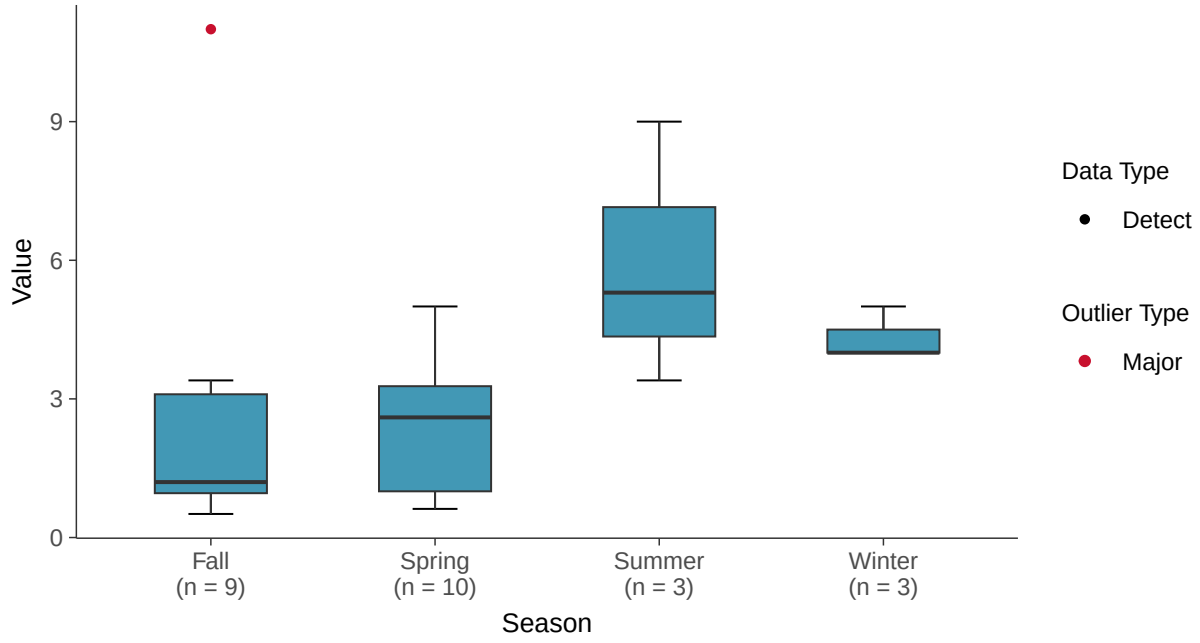
## Boxplot

Chromium, MW-15017 (ug/L)



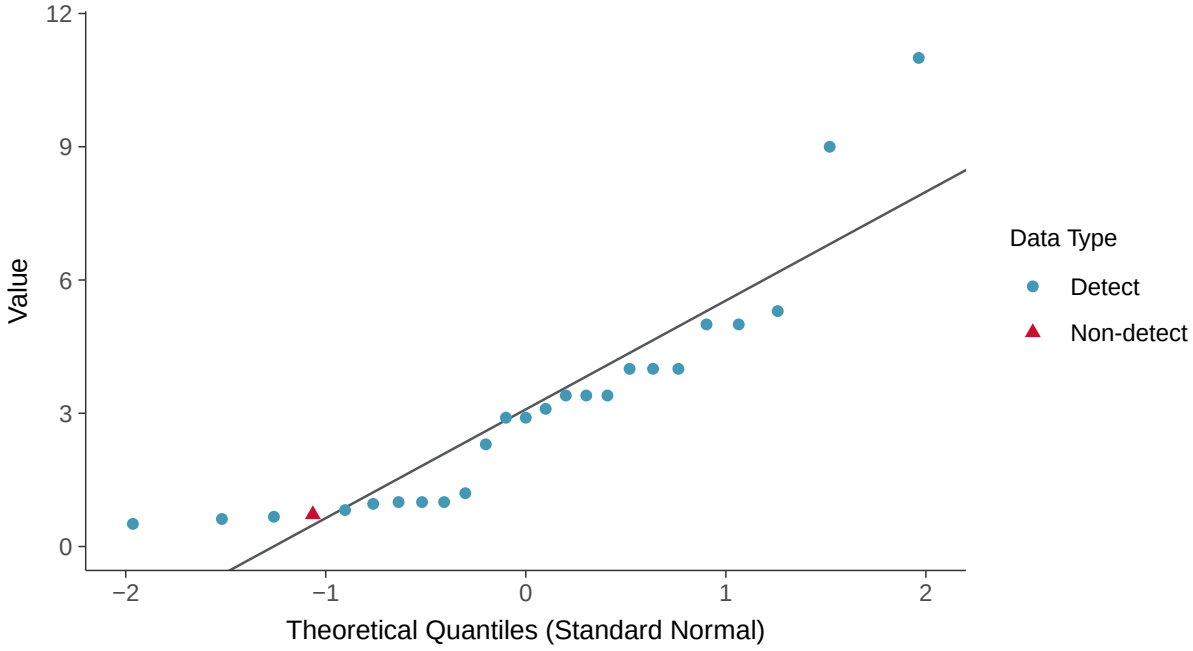

## Boxplot by Season

Chromium, MW-15017 (ug/L)



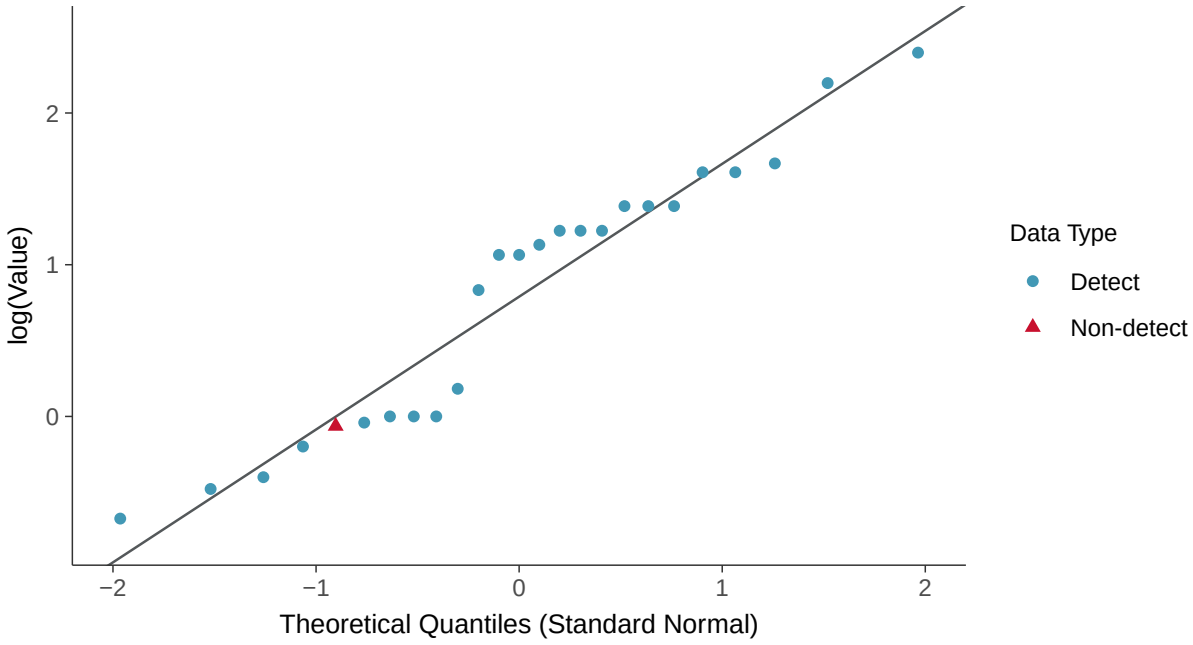
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15017 (ug/L)



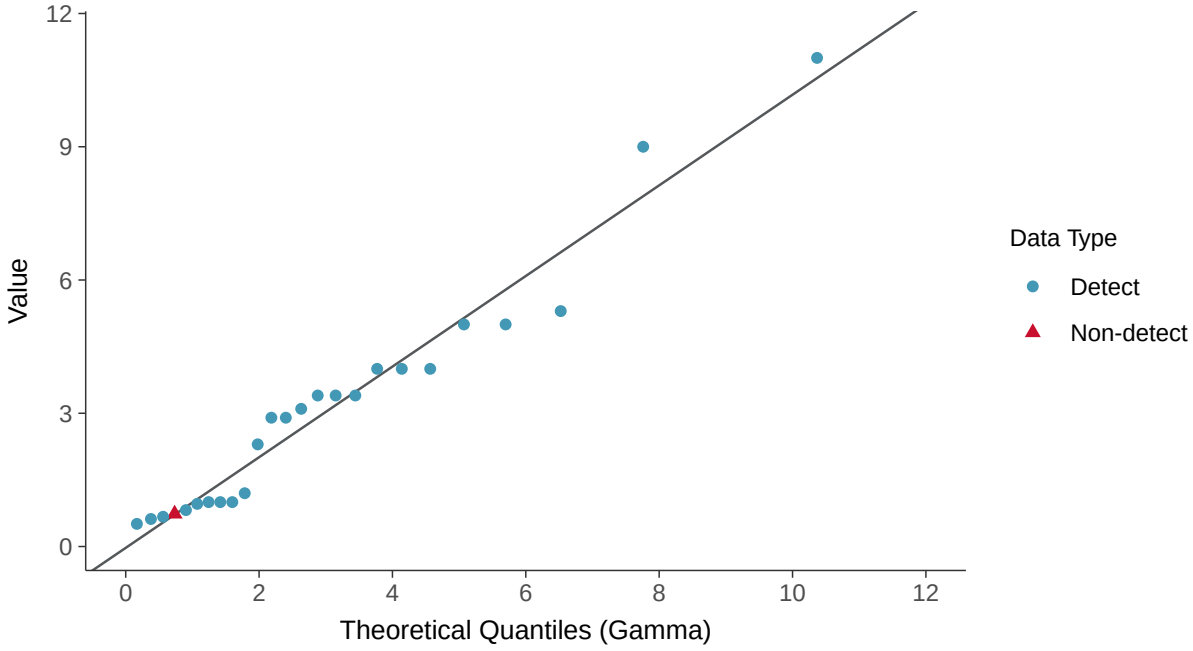

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15017 (ug/L)



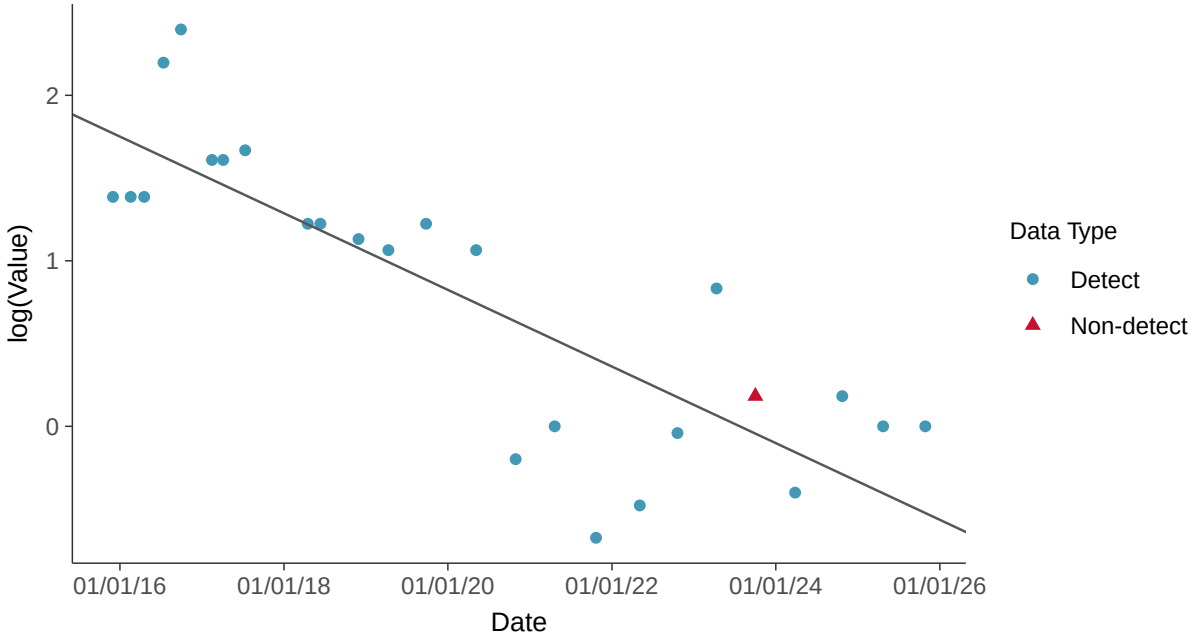
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15017 (ug/L)



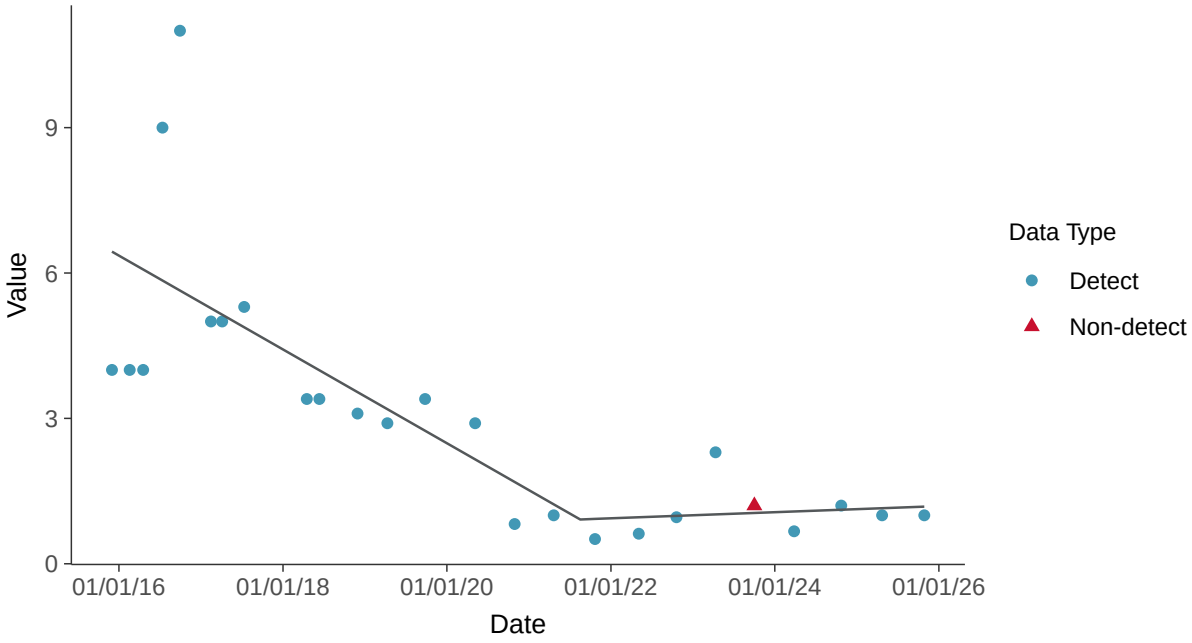

**Trend Regression: Lognormal MLE**

Chromium, MW-15017 (ug/L)



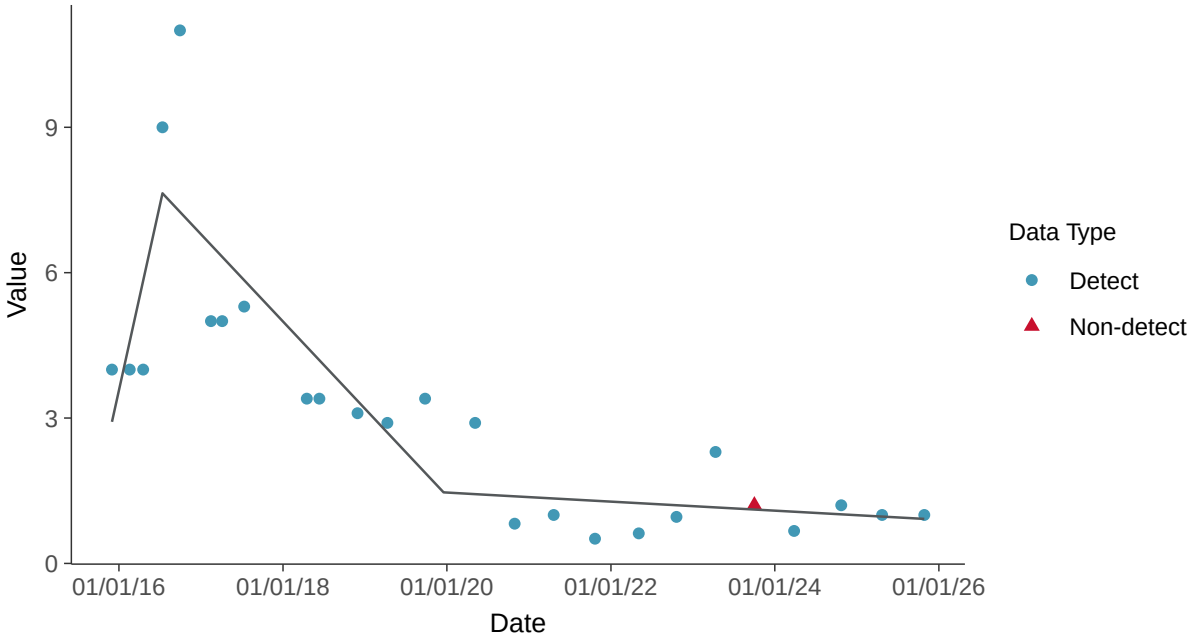
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15017 (ug/L)



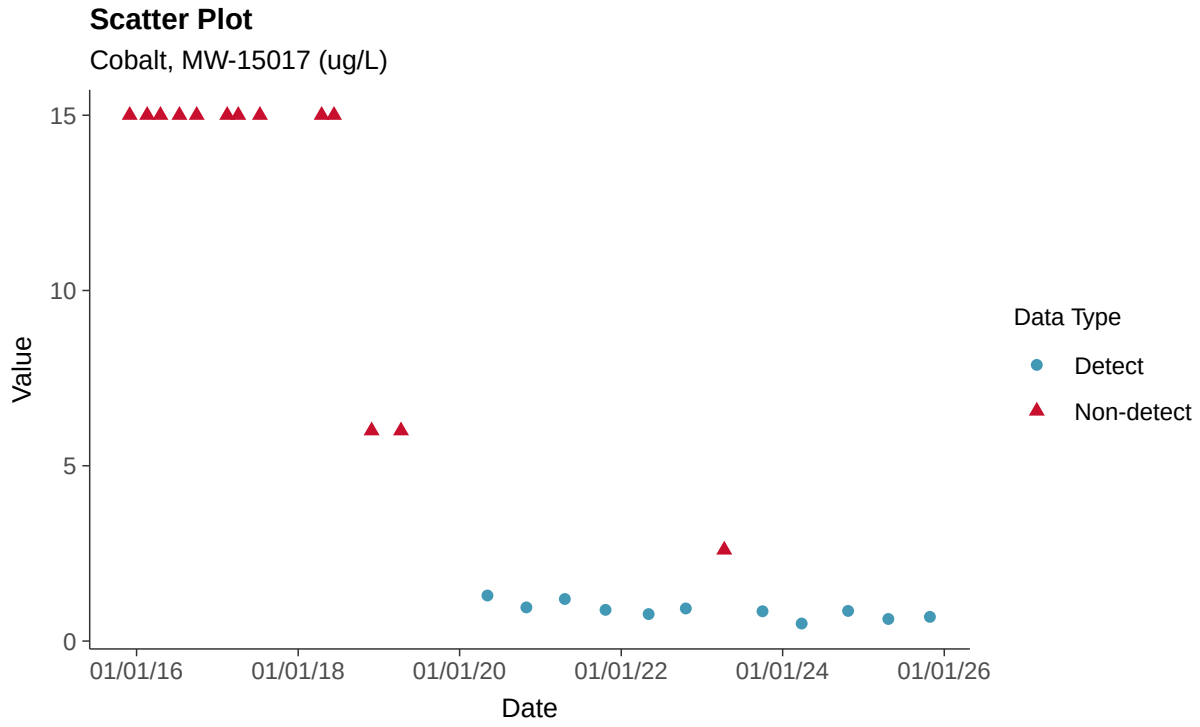

**Trend Regression: Piecewise Linear-Linear-Linear**

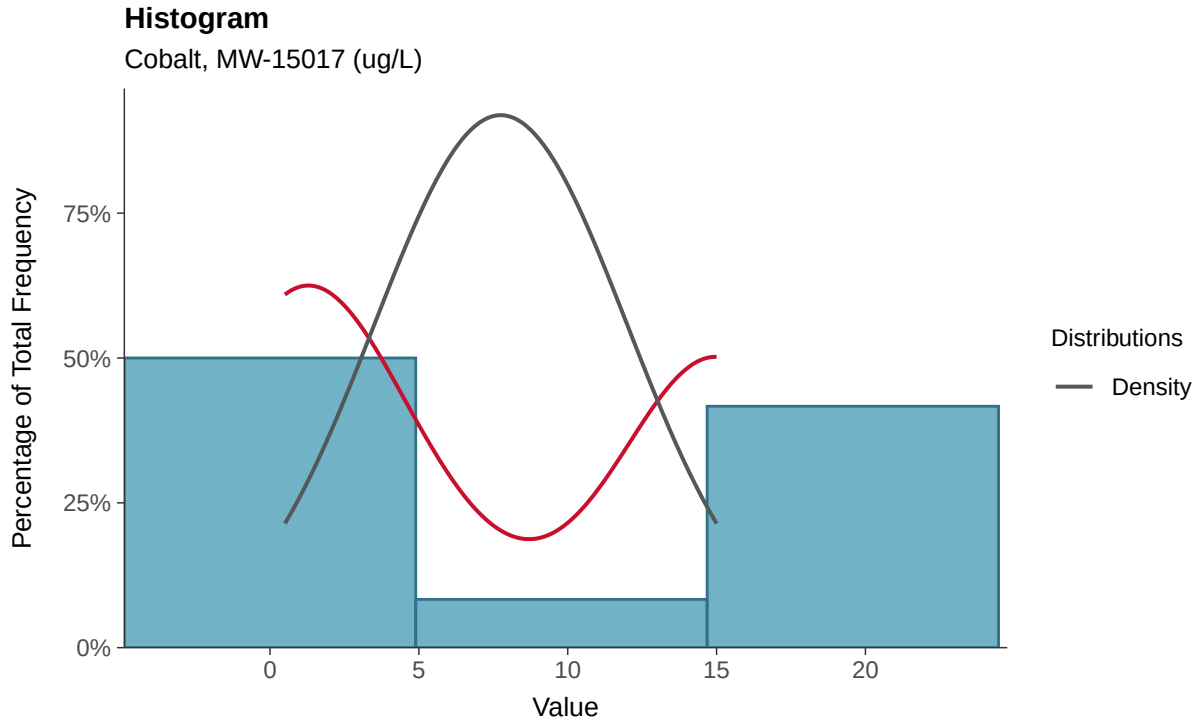
Chromium, MW-15017 (ug/L)



## Appendix IV: Cobalt, MW-15017

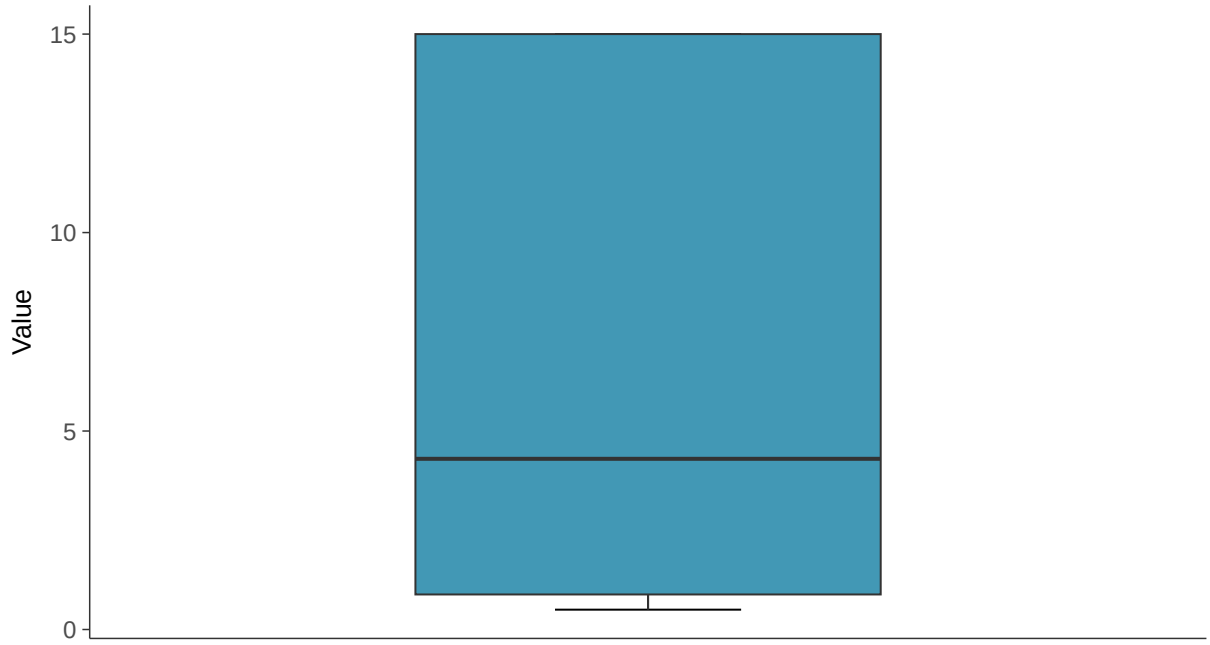
ID: 07_2_110



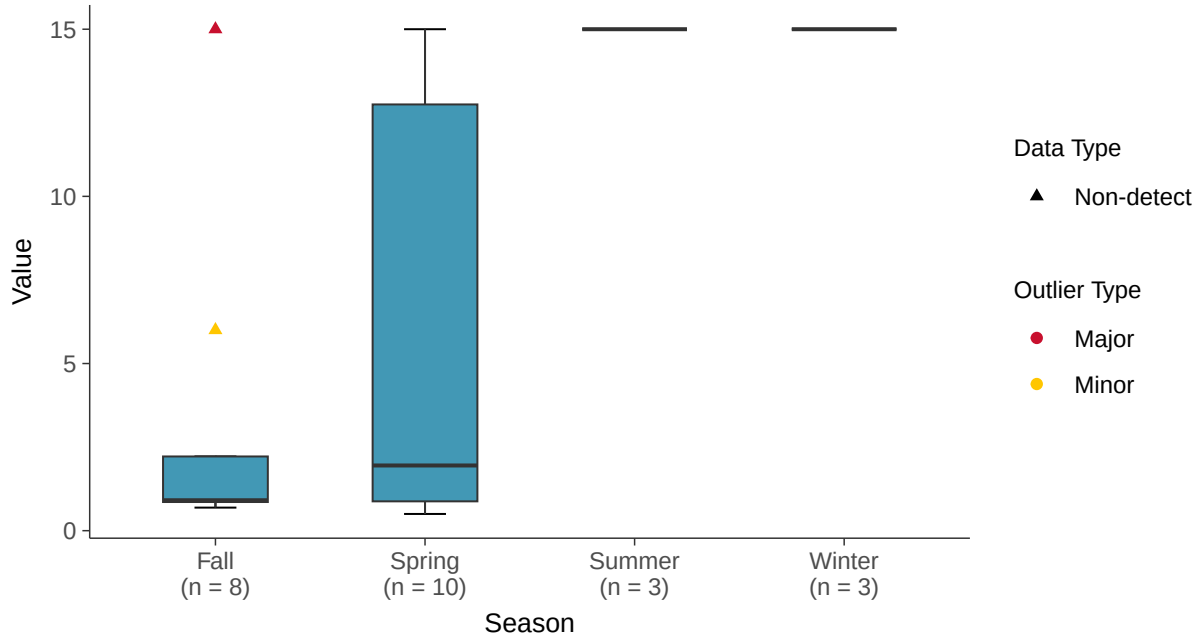
**Boxplot**

Cobalt, MW-15017 (ug/L)



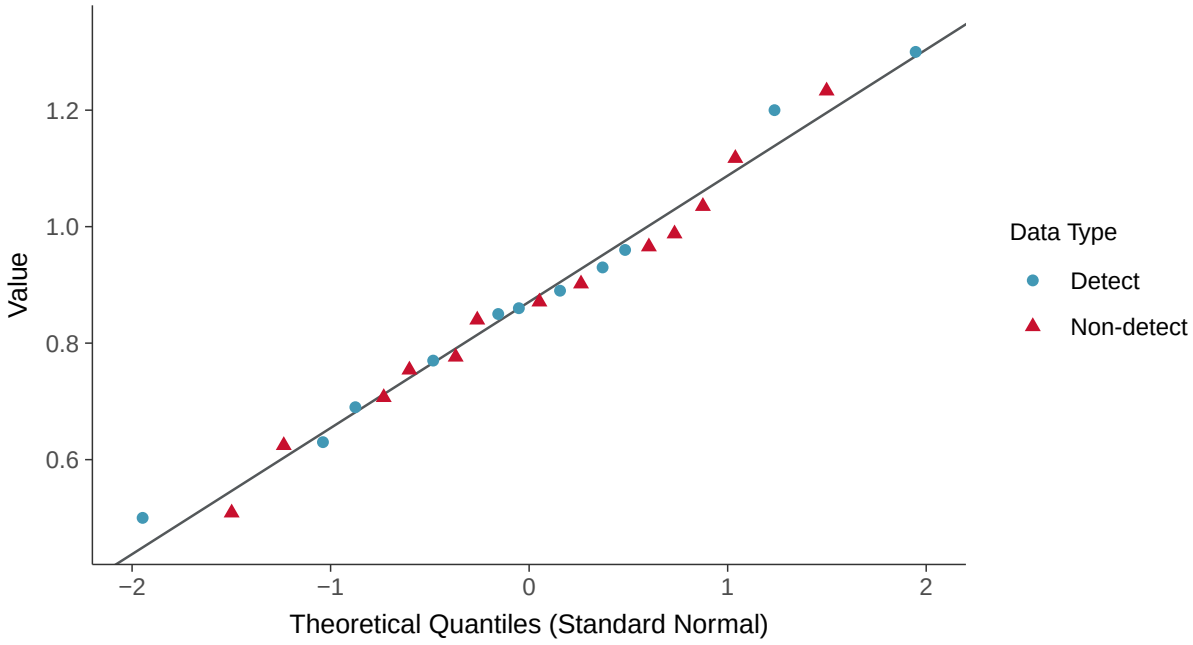

**Boxplot by Season**

Cobalt, MW-15017 (ug/L)



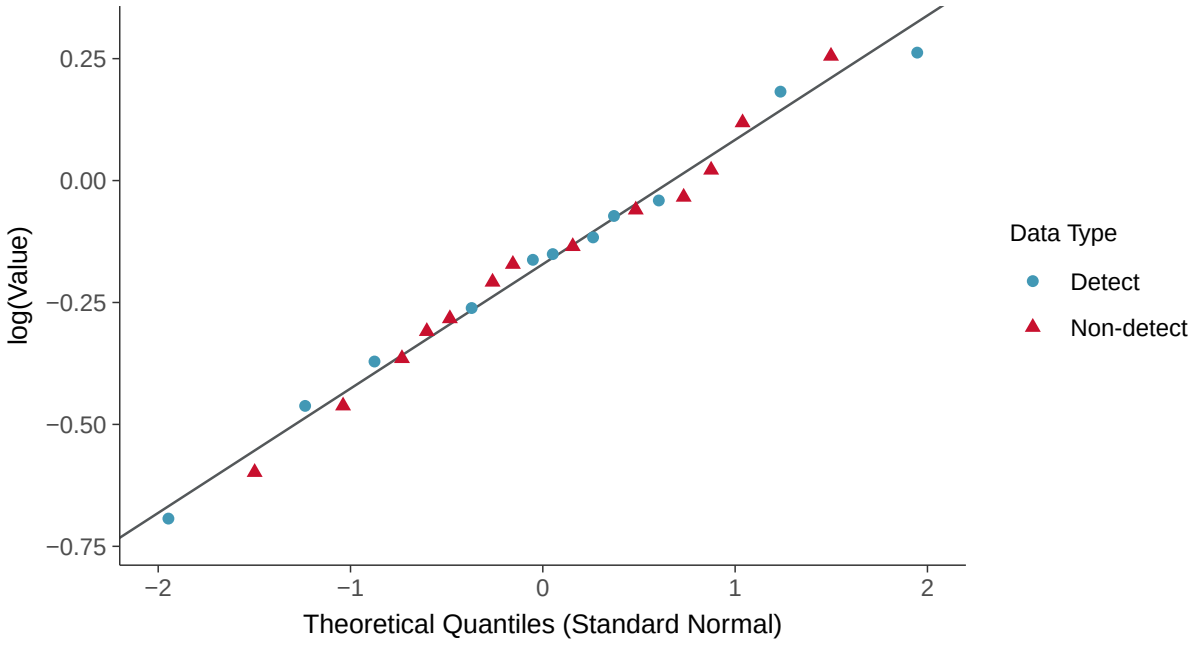
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15017 (ug/L)



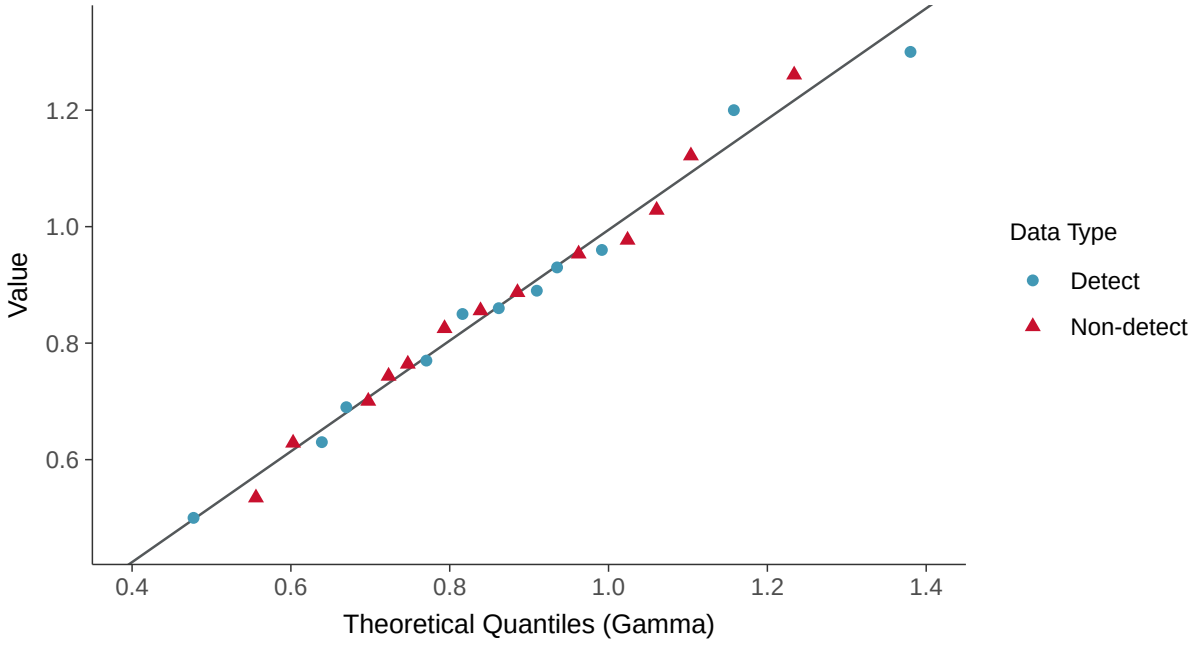

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15017 (ug/L)



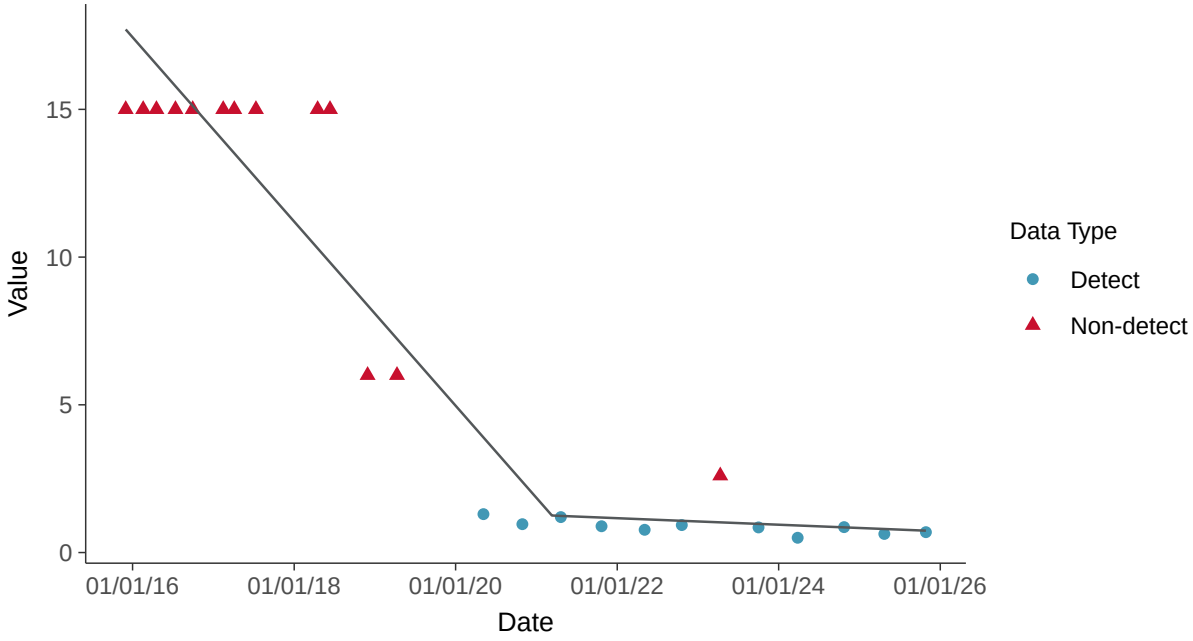
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15017 (ug/L)



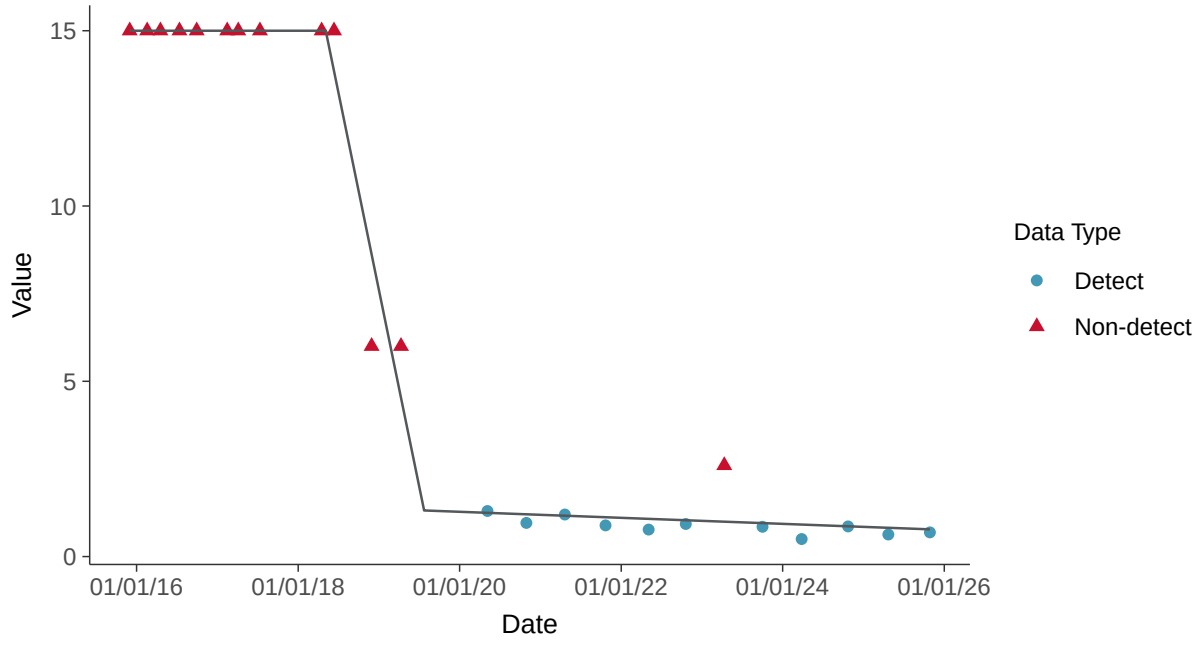

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15017 (ug/L)



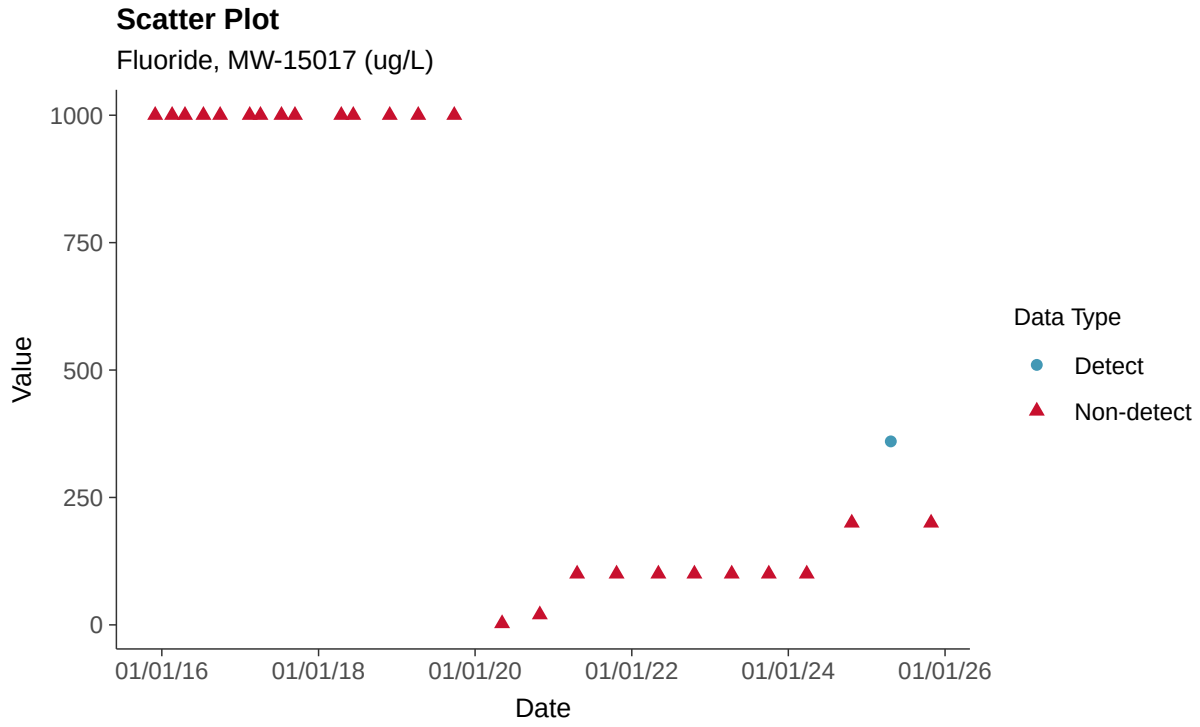
**Trend Regression: Piecewise Linear-Linear-Linear**

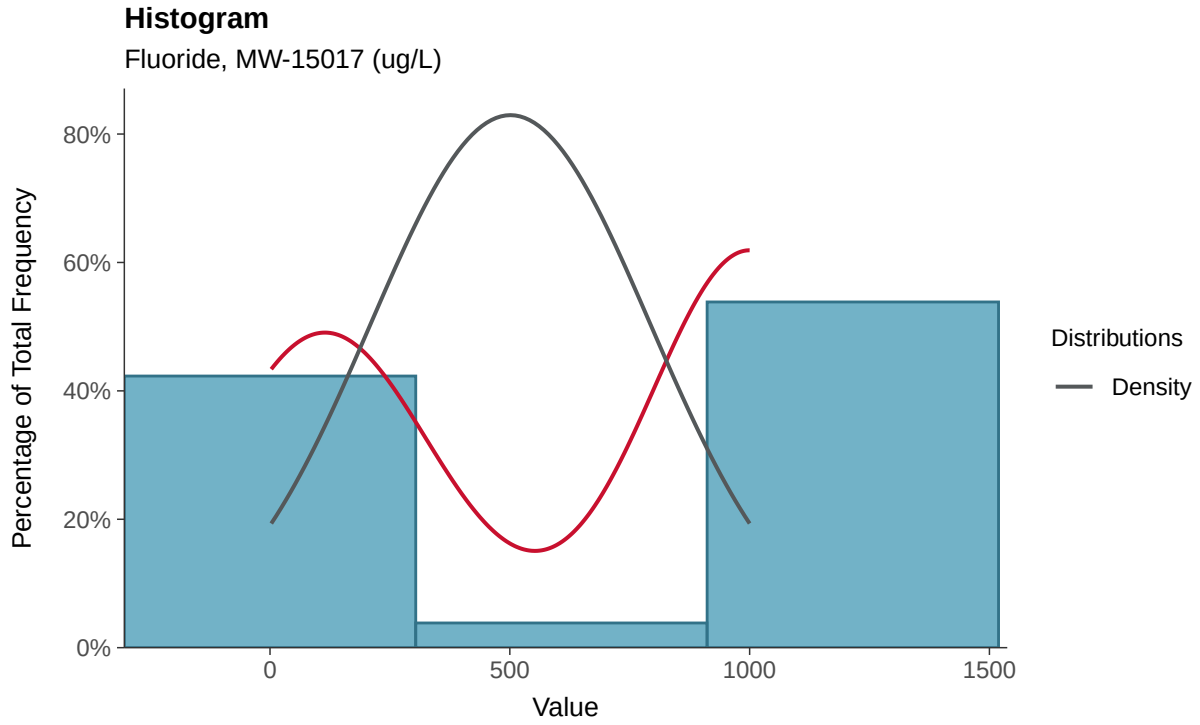
Cobalt, MW-15017 (ug/L)



## Appendix IV: Fluoride, MW-15017

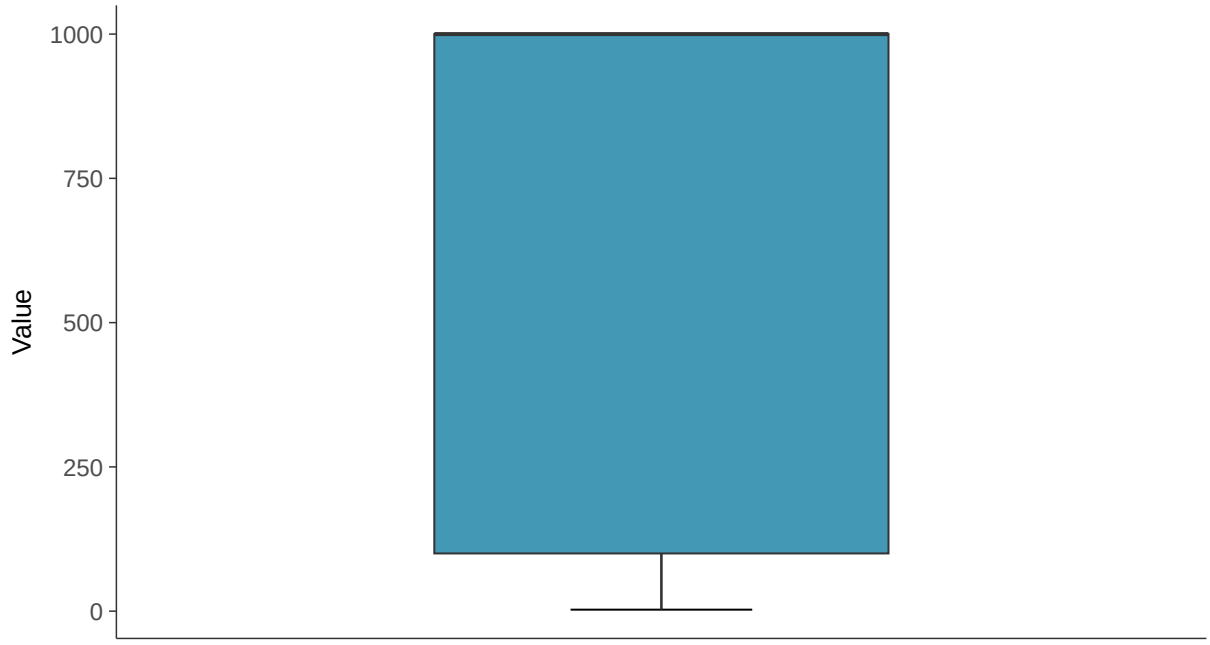
ID: 07_2_114



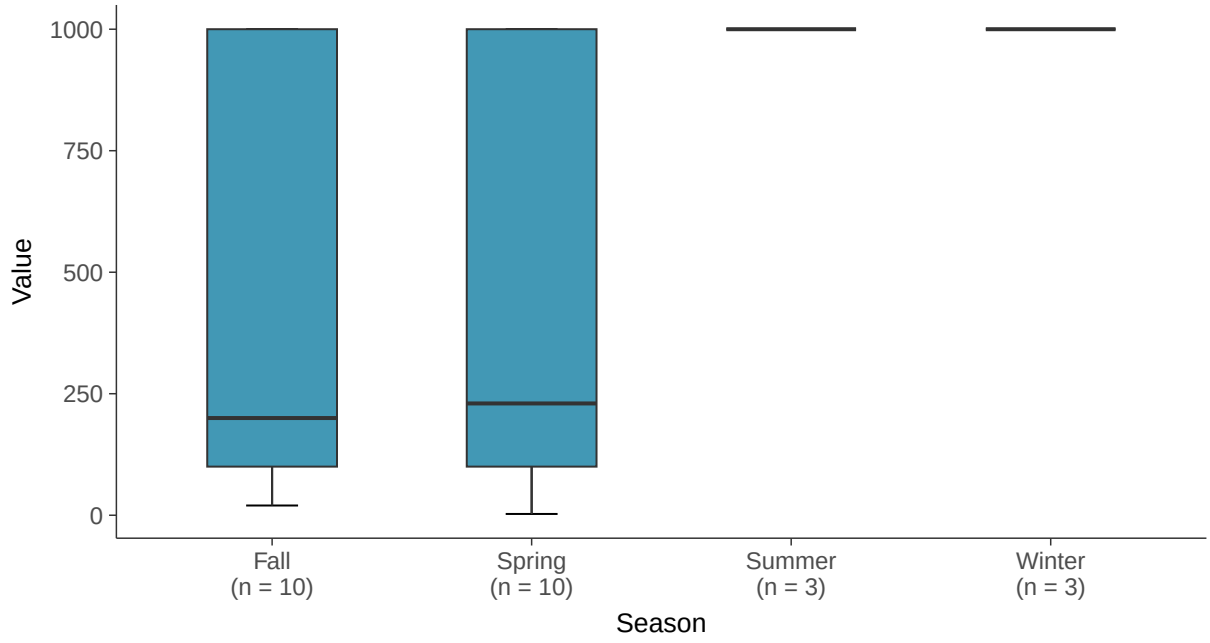
**Boxplot**

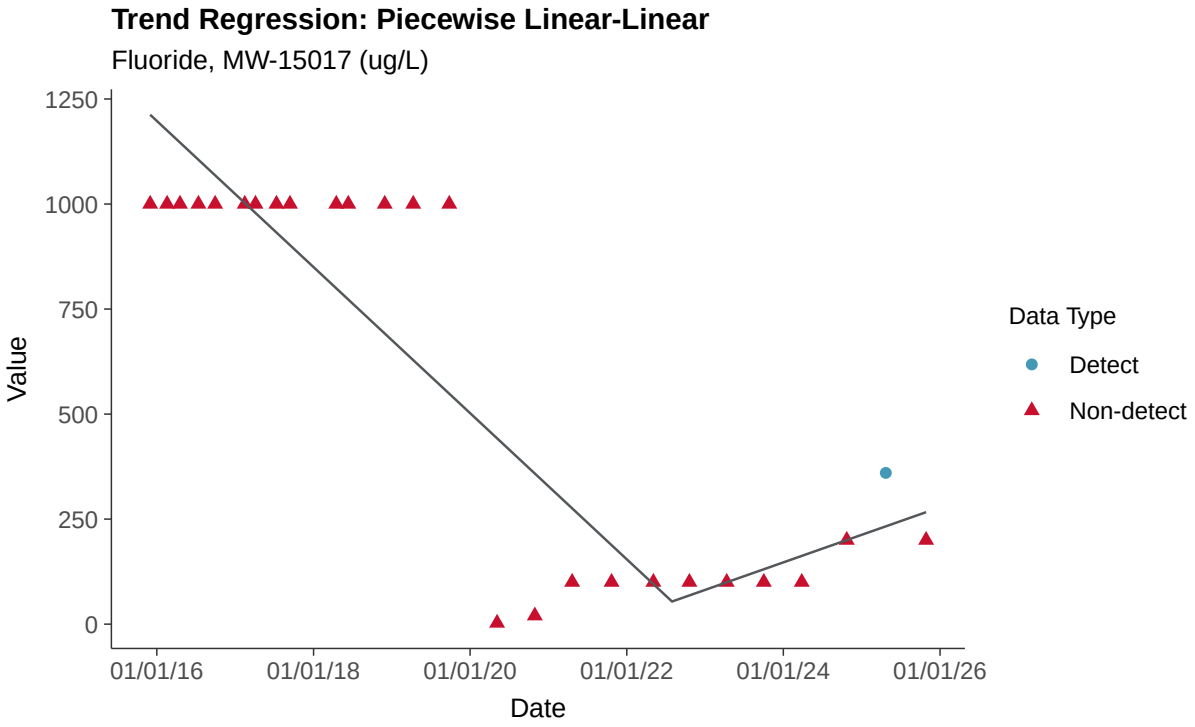
Fluoride, MW-15017 (ug/L)




**Boxplot by Season**

Fluoride, MW-15017 (ug/L)



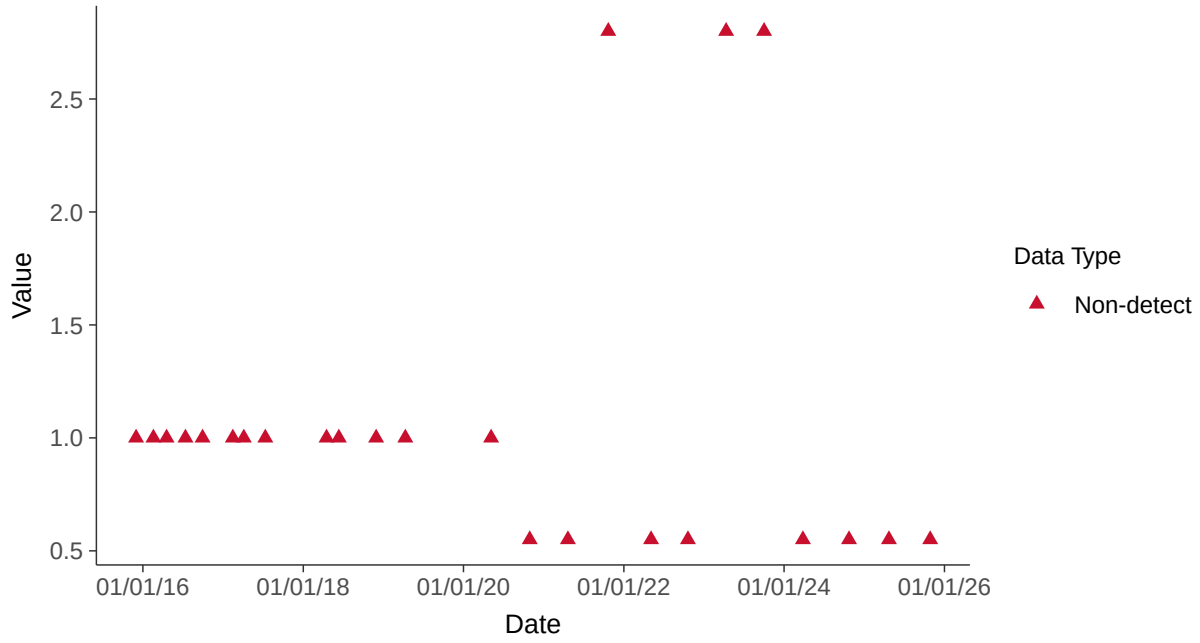

Trend Regression: Piecewise Linear-Linear
Fluoride, MW-15017 (ug/L)
Value
1250
1000
750
500
250
0
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Lead, MW-15017

ID: 07_2_116

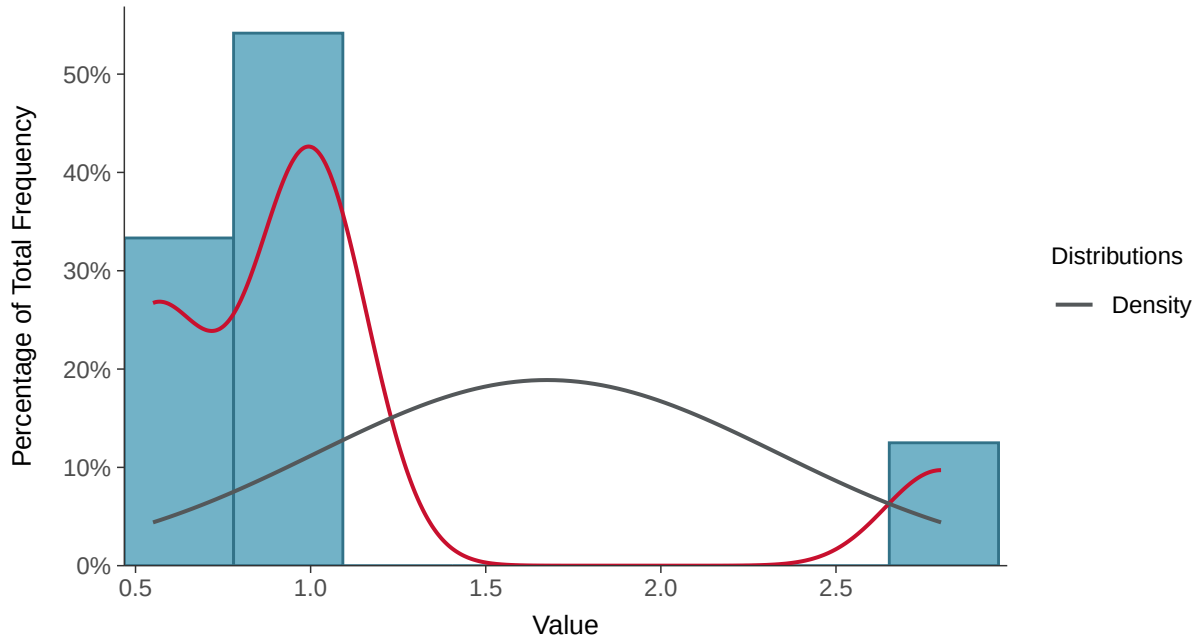
**Scatter Plot**

Lead, MW-15017 (ug/L)



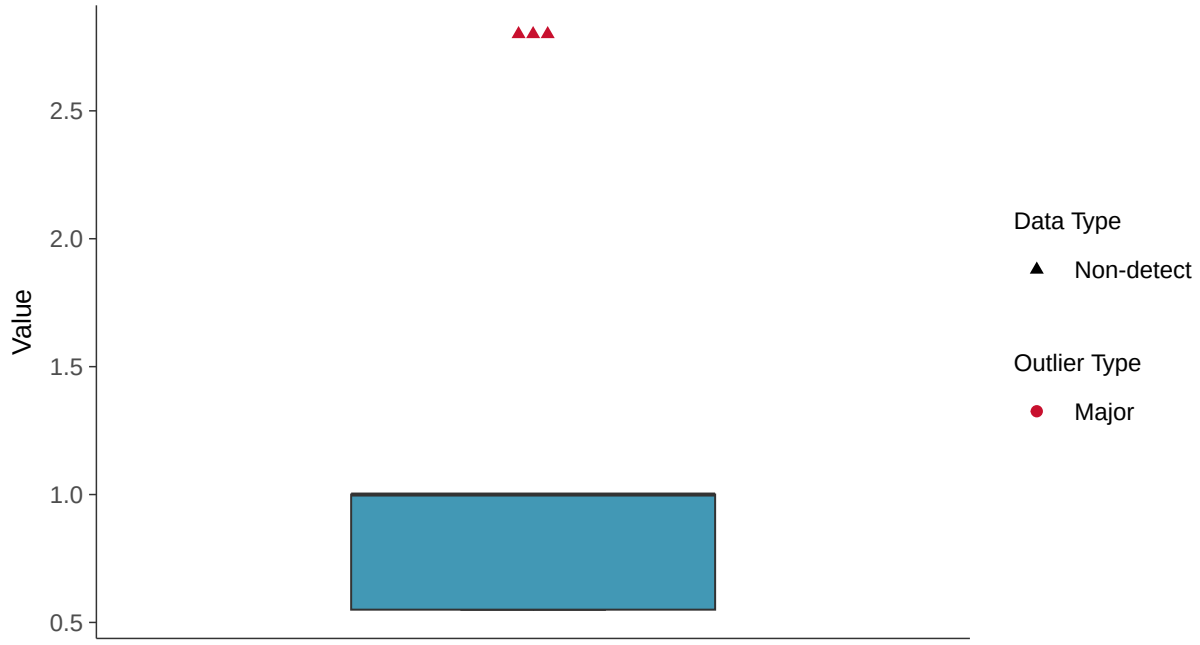

**Histogram**

Lead, MW-15017 (ug/L)



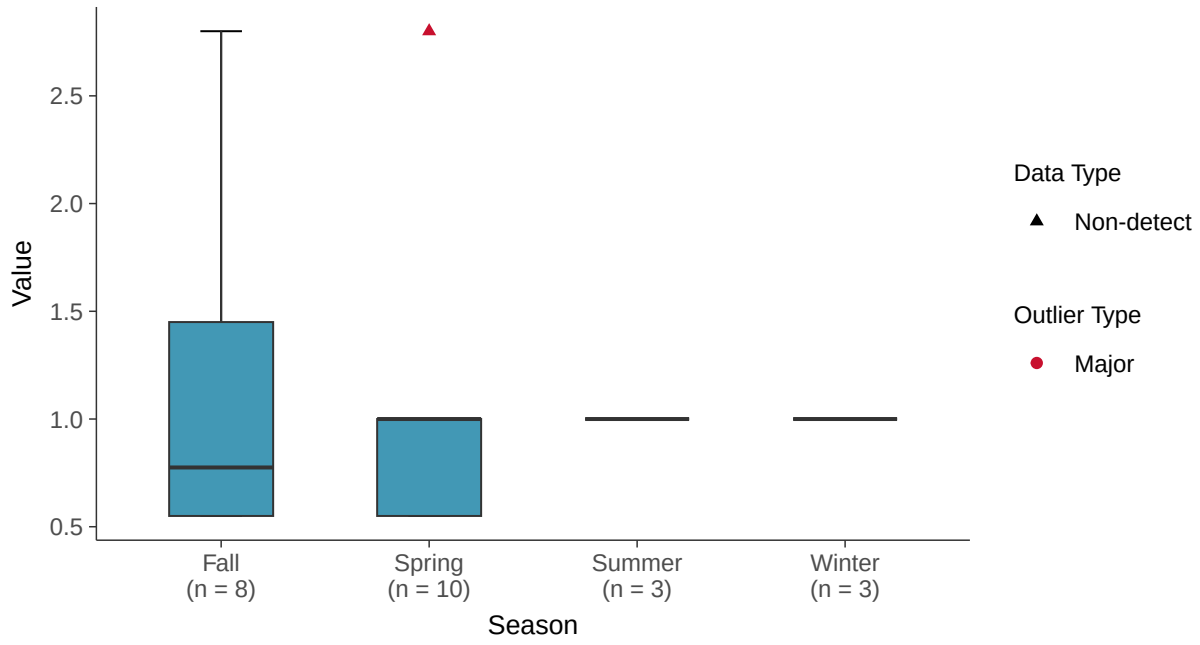
## Boxplot

Lead, MW-15017 (ug/L)



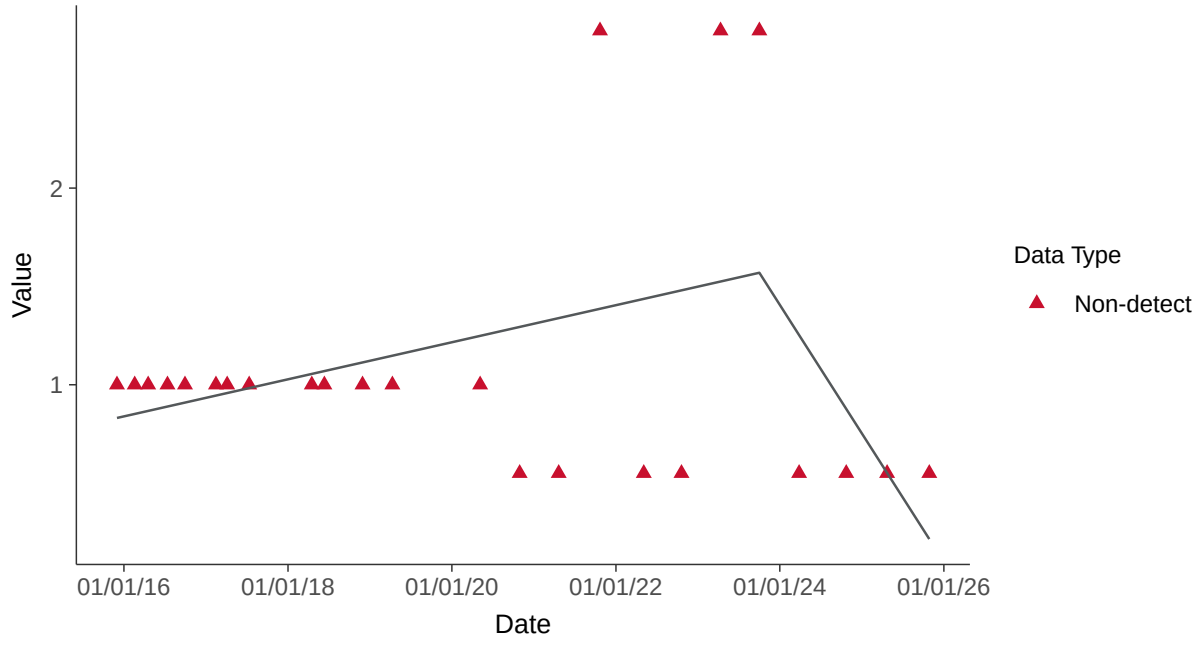

## Boxplot by Season

Lead, MW-15017 (ug/L)



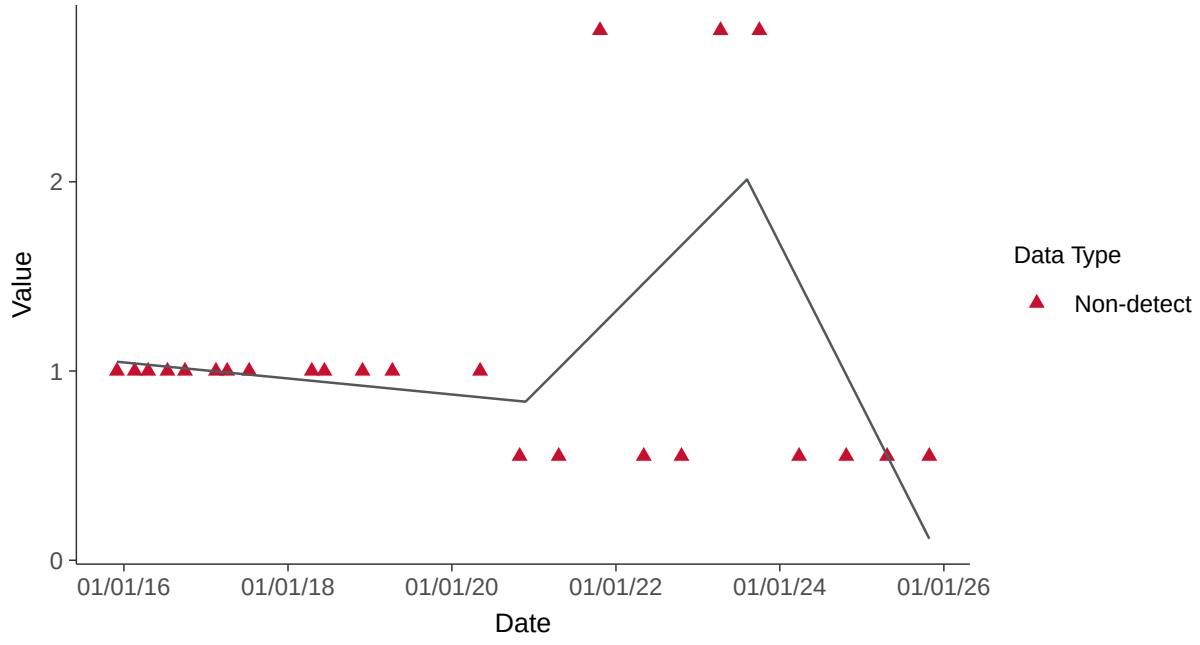
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15017 (ug/L)



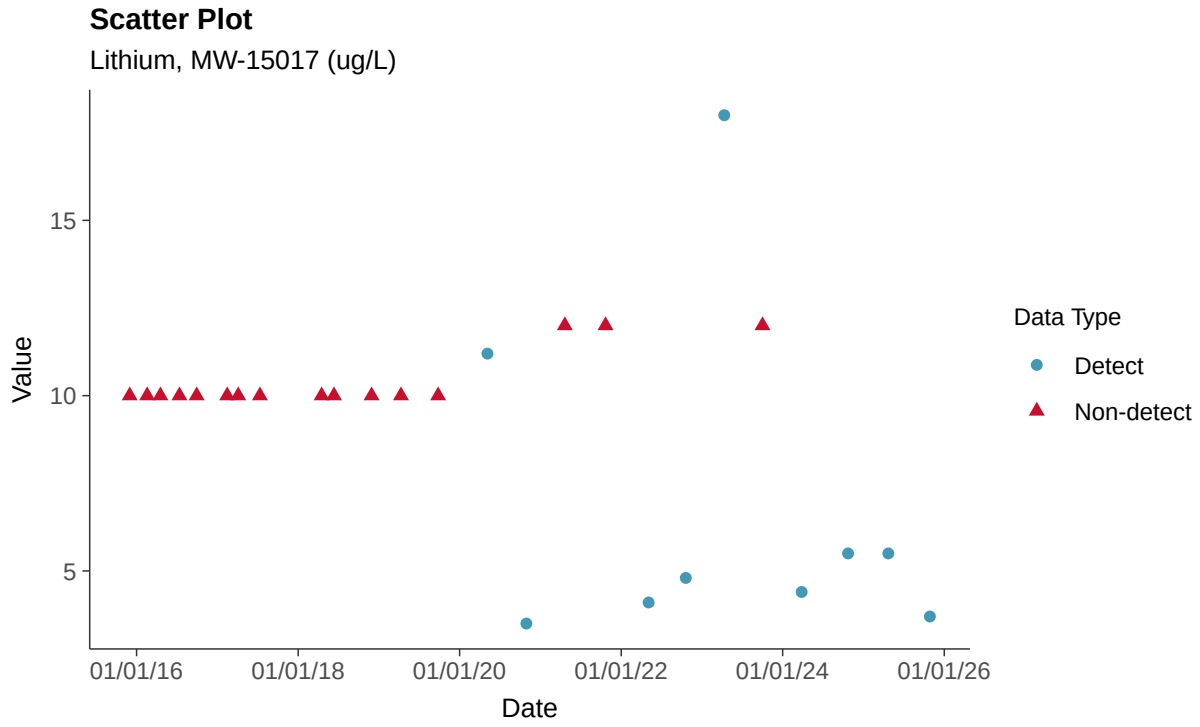

**Trend Regression: Piecewise Linear-Linear-Linear**

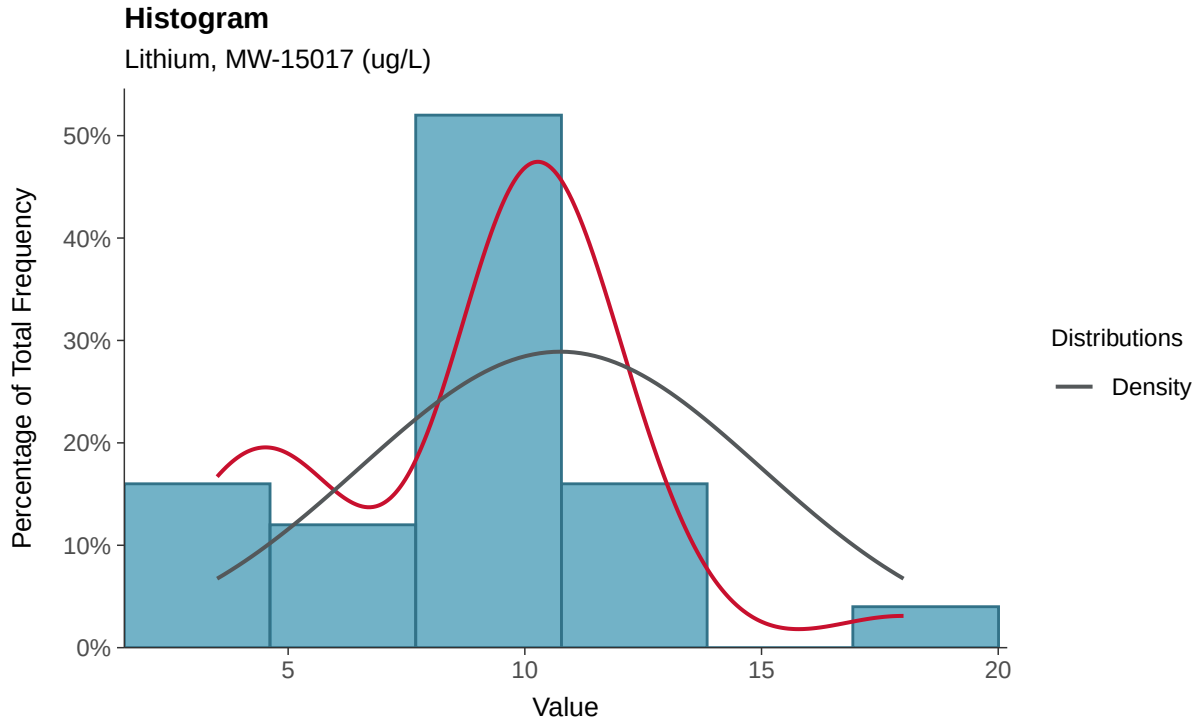
Lead, MW-15017 (ug/L)



## Appendix IV: Lithium, MW-15017

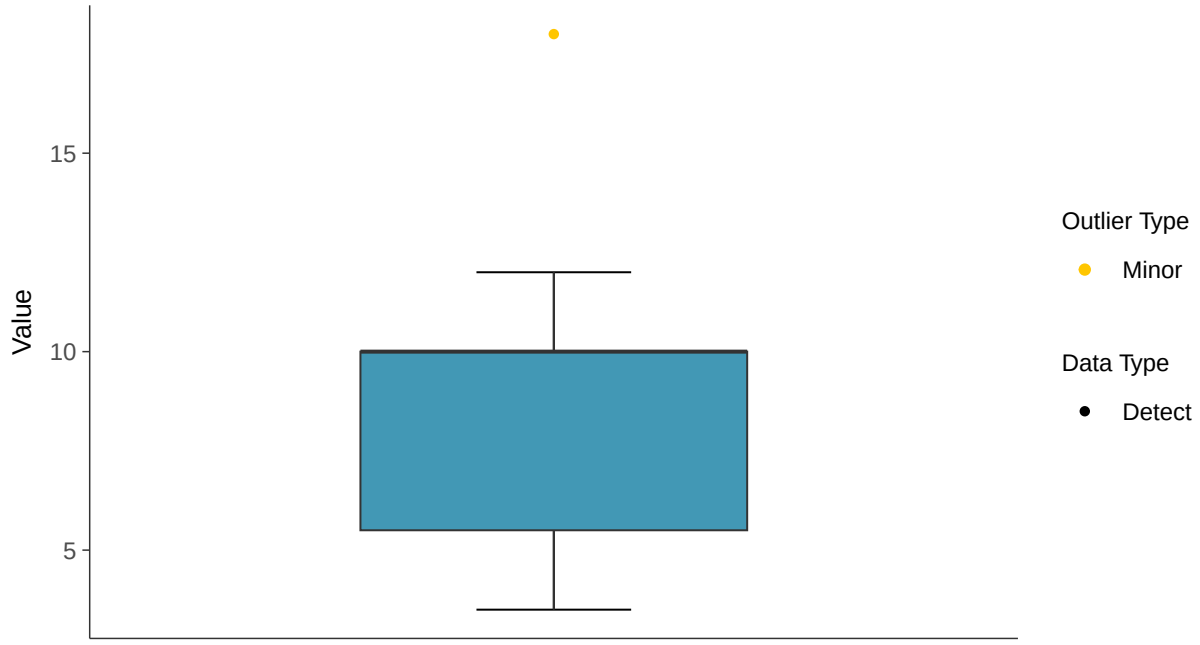
ID: 07_2_117



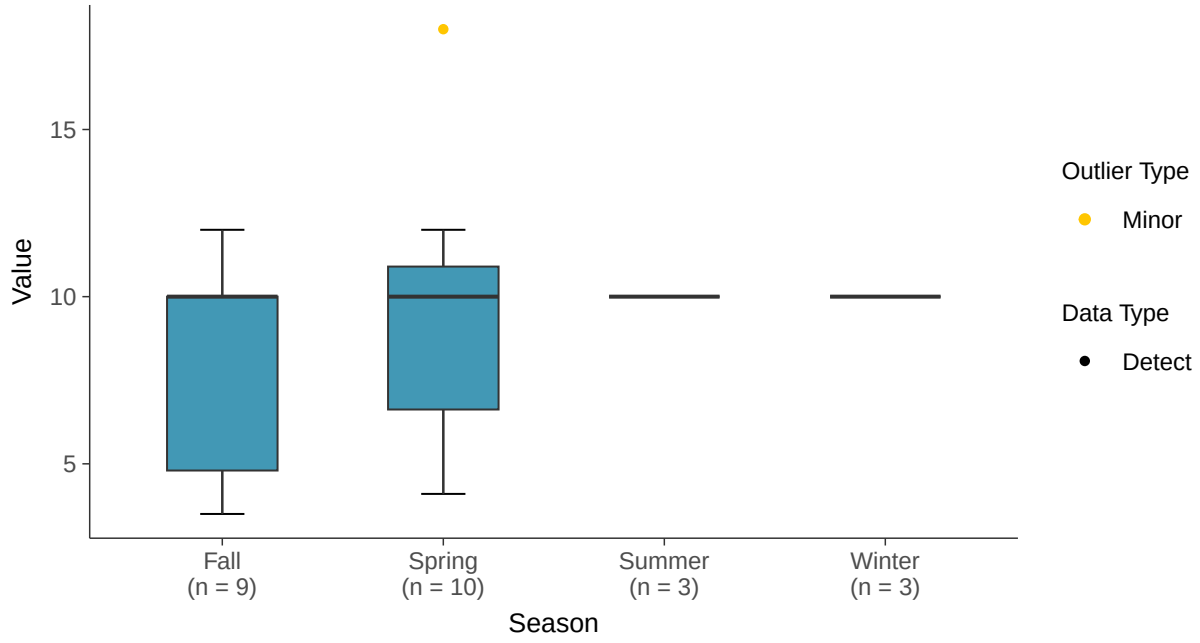
## Boxplot

Lithium, MW-15017 (ug/L)



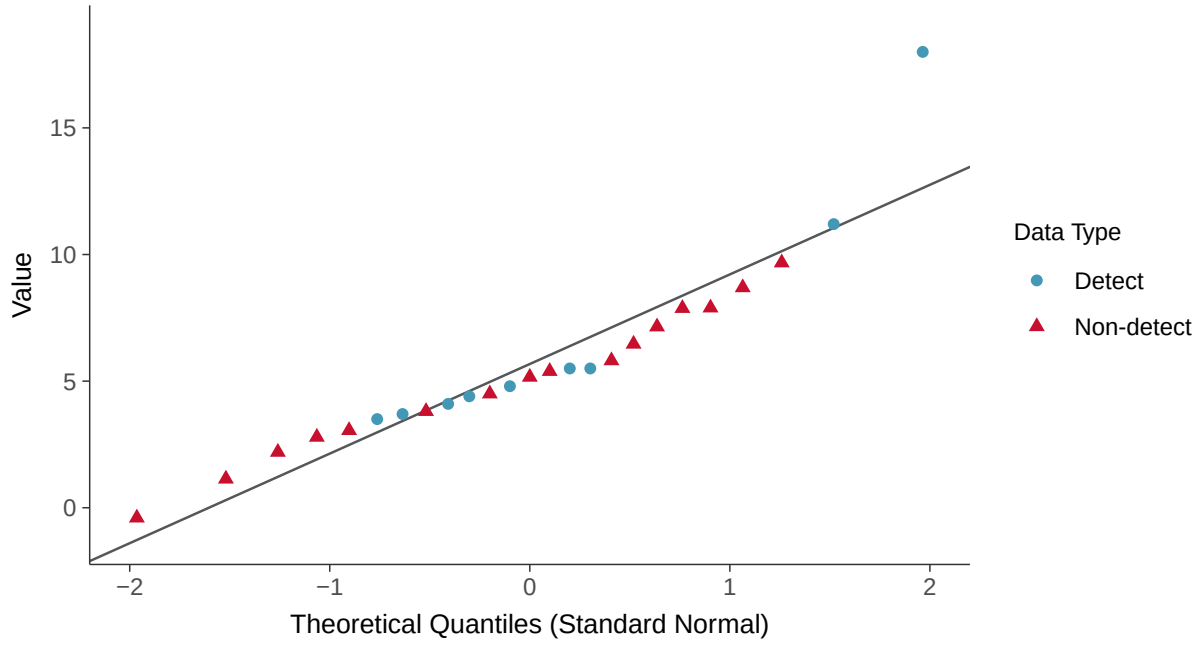

## Boxplot by Season

Lithium, MW-15017 (ug/L)



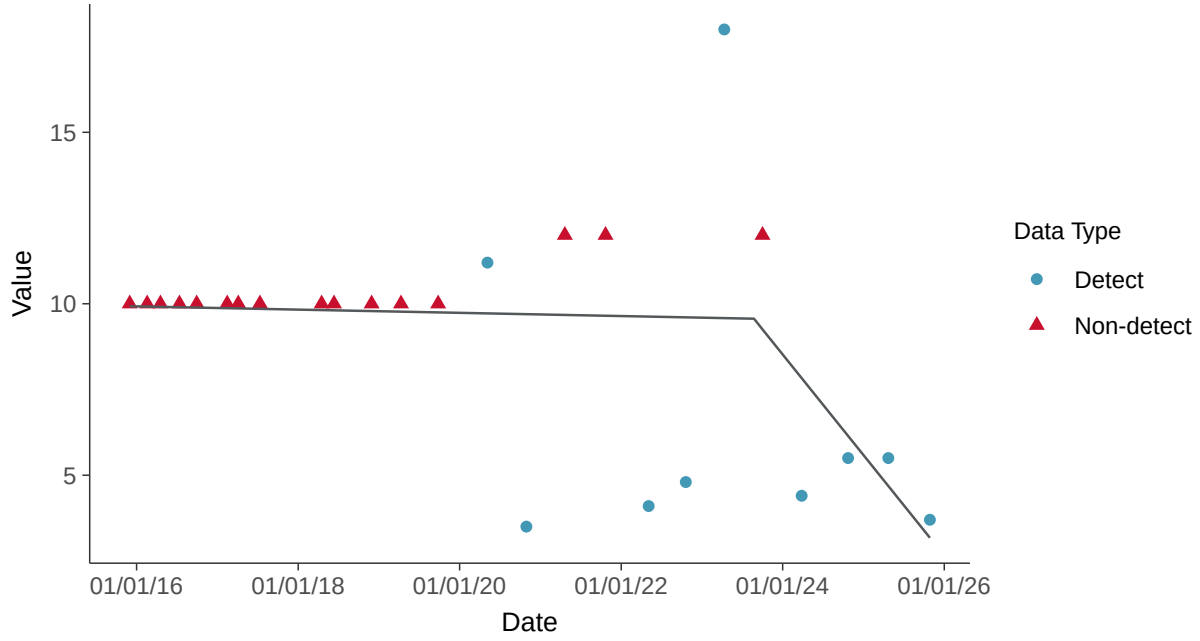
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15017 (ug/L)



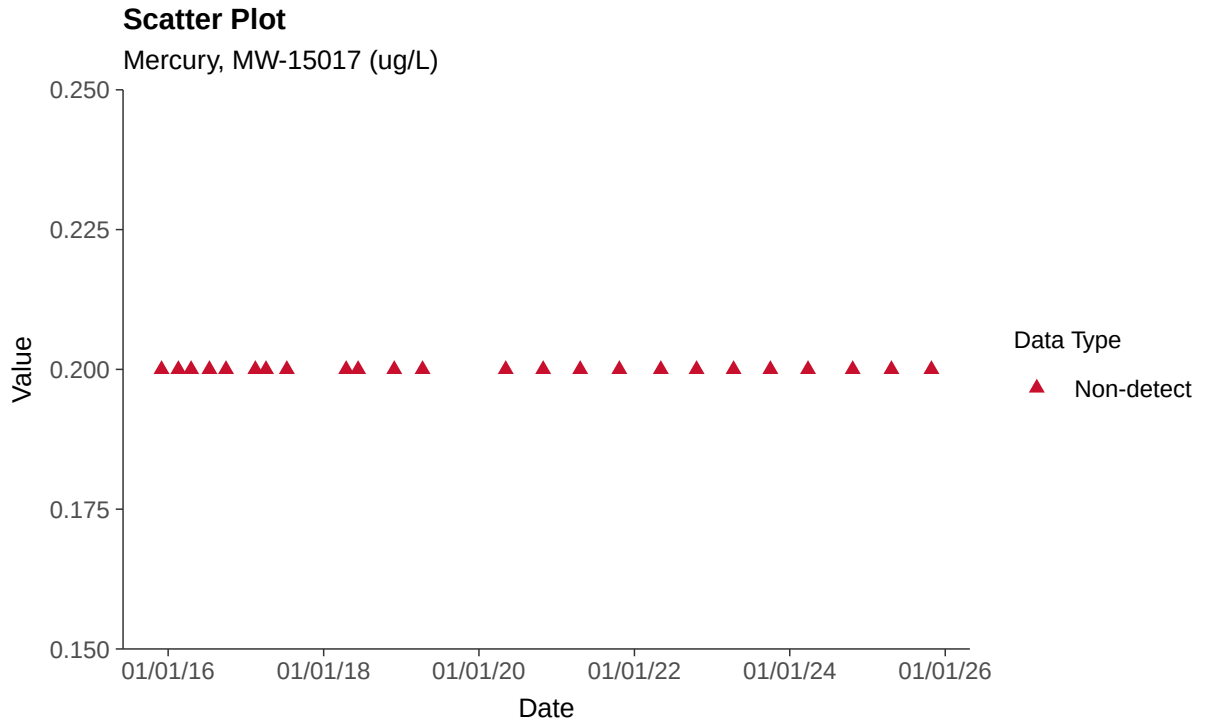

**Trend Regression: Piecewise Linear-Linear**

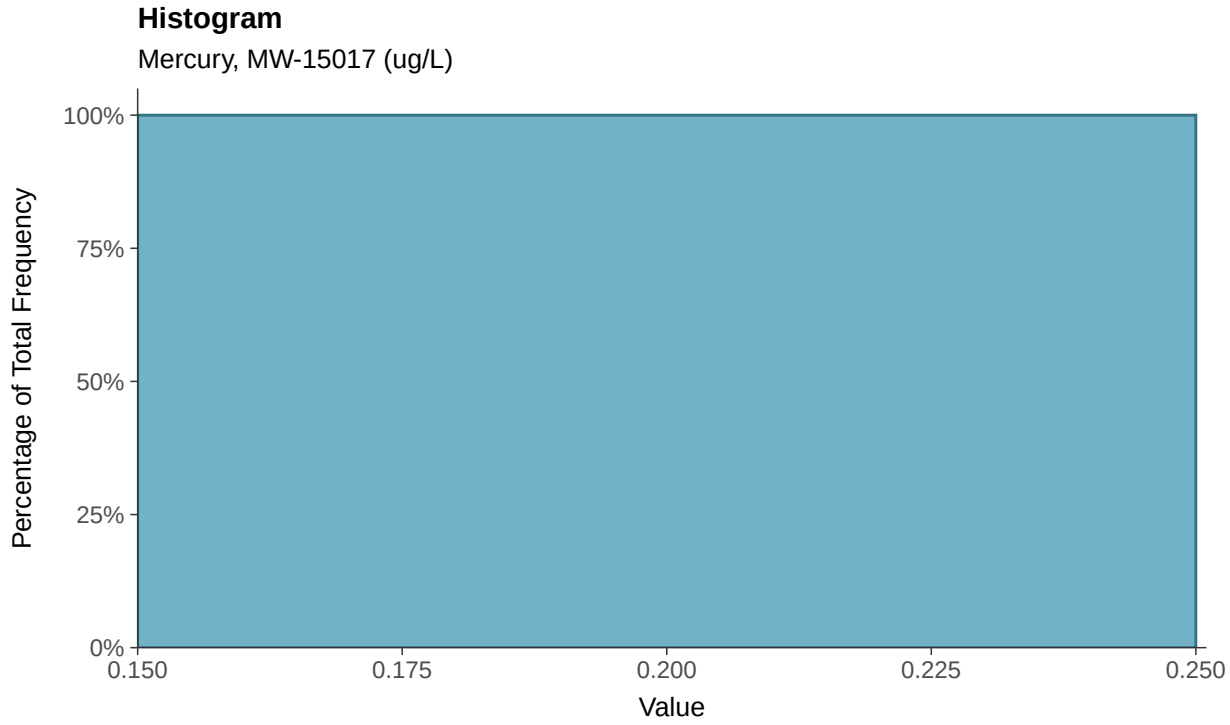
Lithium, MW-15017 (ug/L)



## Appendix IV: Mercury, MW-15017

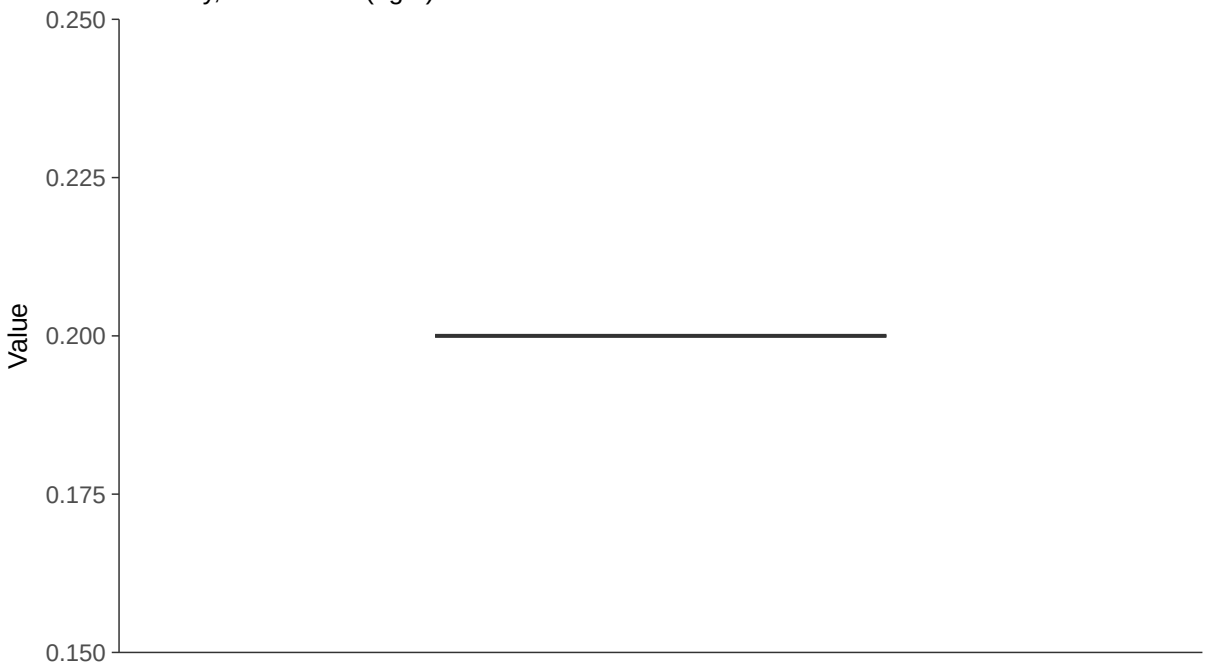
ID: 07_2_118



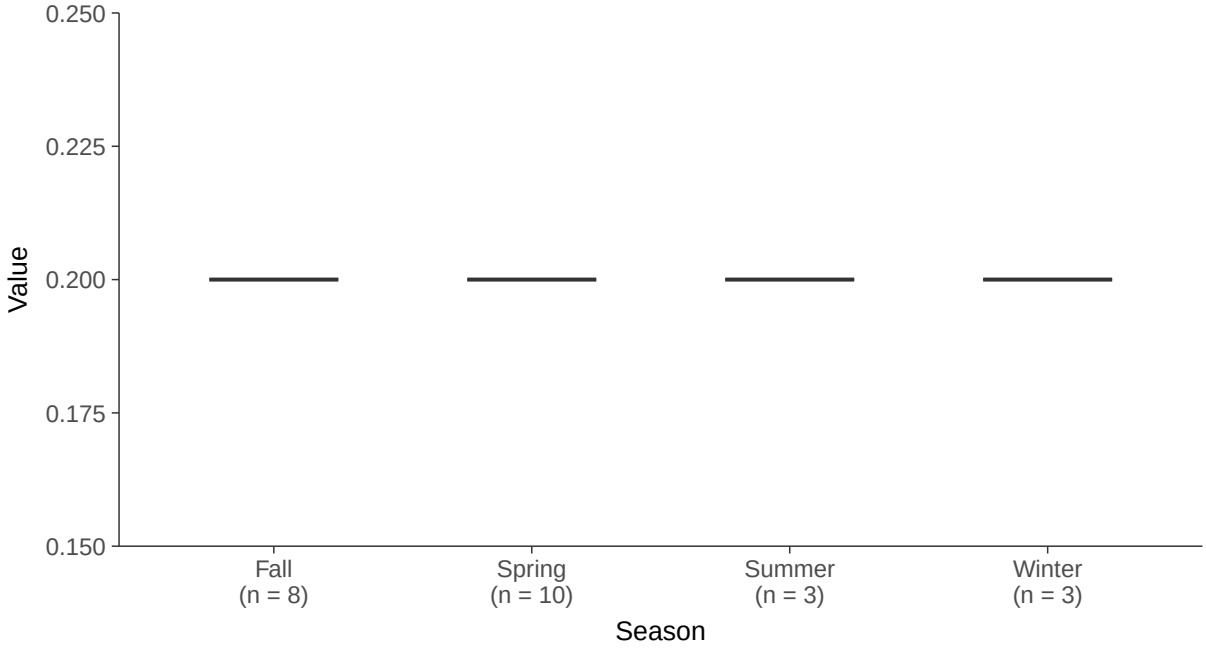
**Boxplot**

Mercury, MW-15017 (ug/L)




**Boxplot by Season**

Mercury, MW-15017 (ug/L)

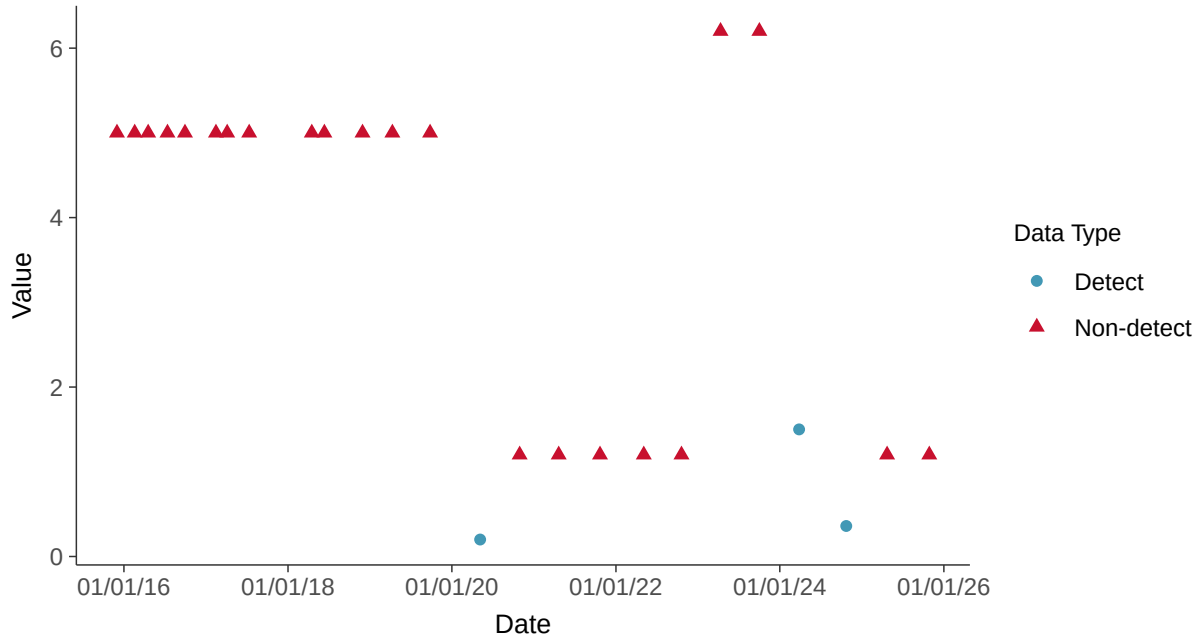


## Appendix IV: Molybdenum, MW-15017

ID: 07_2_119

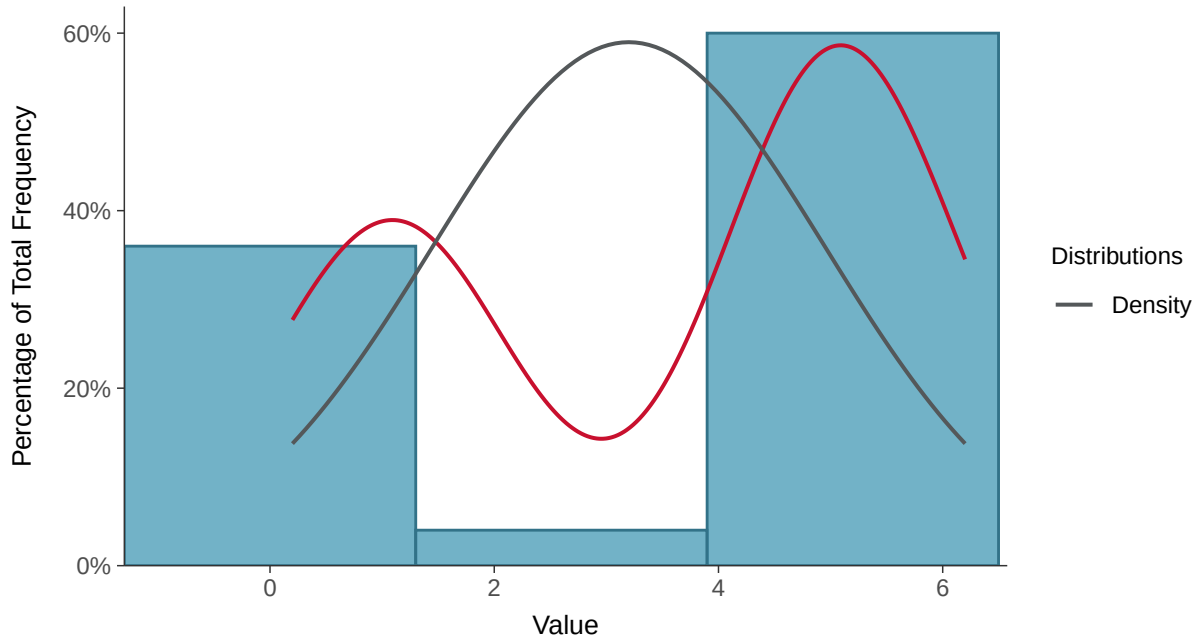
**Scatter Plot**

Molybdenum, MW-15017 (ug/L)



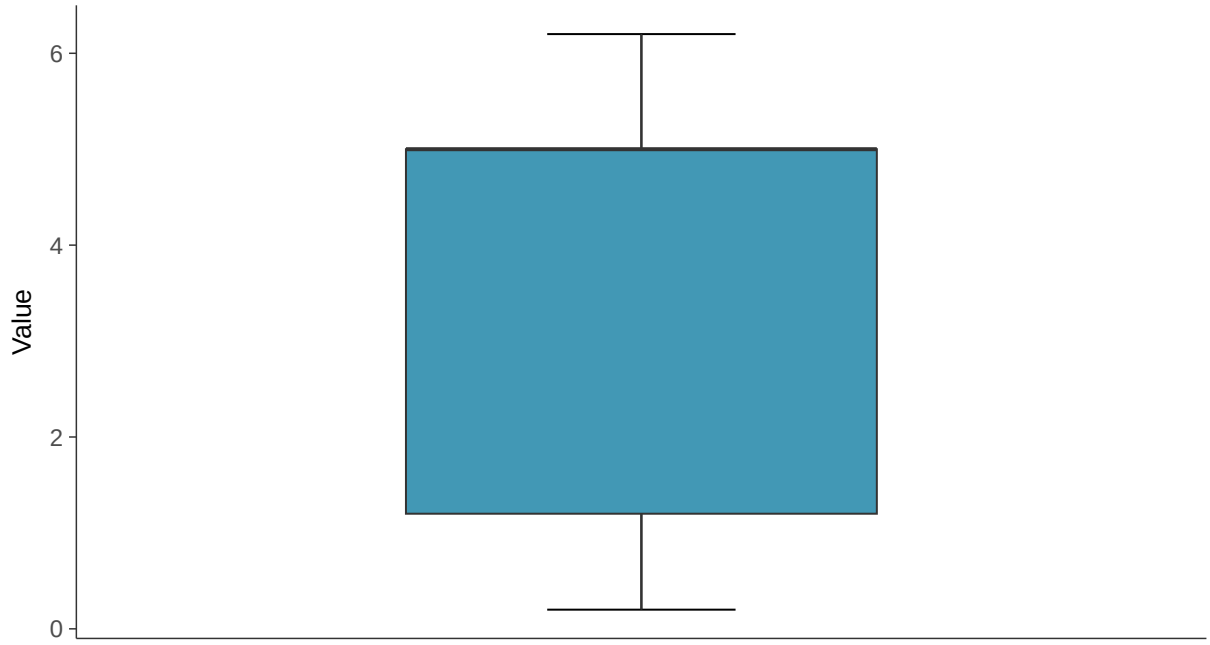

**Histogram**

Molybdenum, MW-15017 (ug/L)



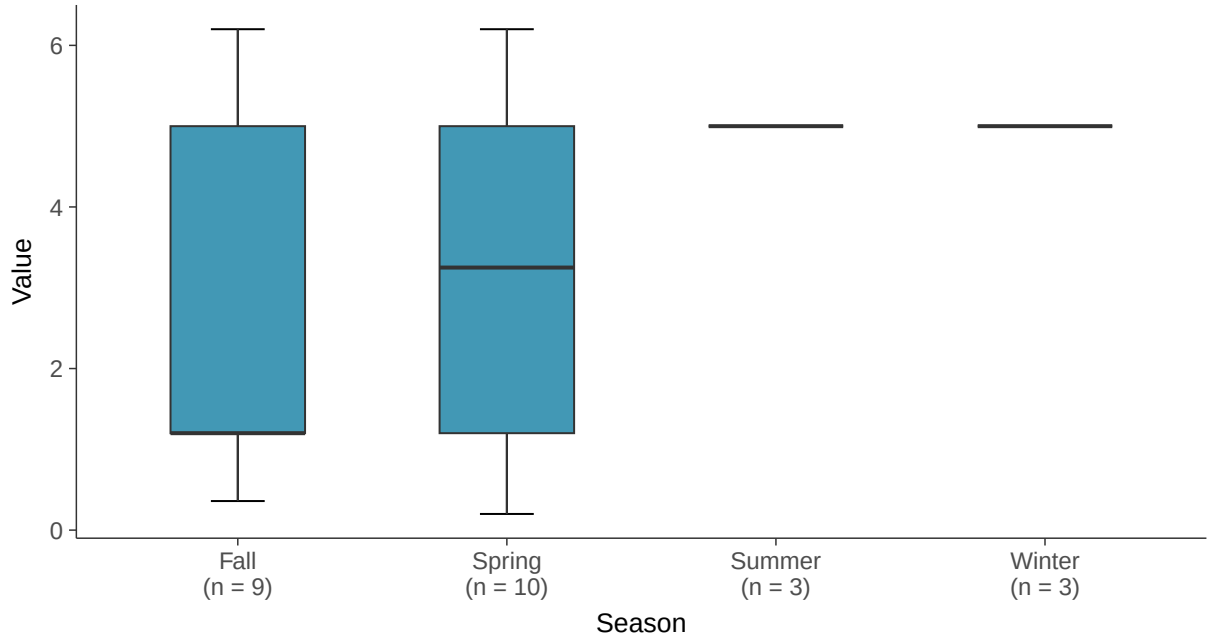
**Boxplot**

Molybdenum, MW-15017 (ug/L)



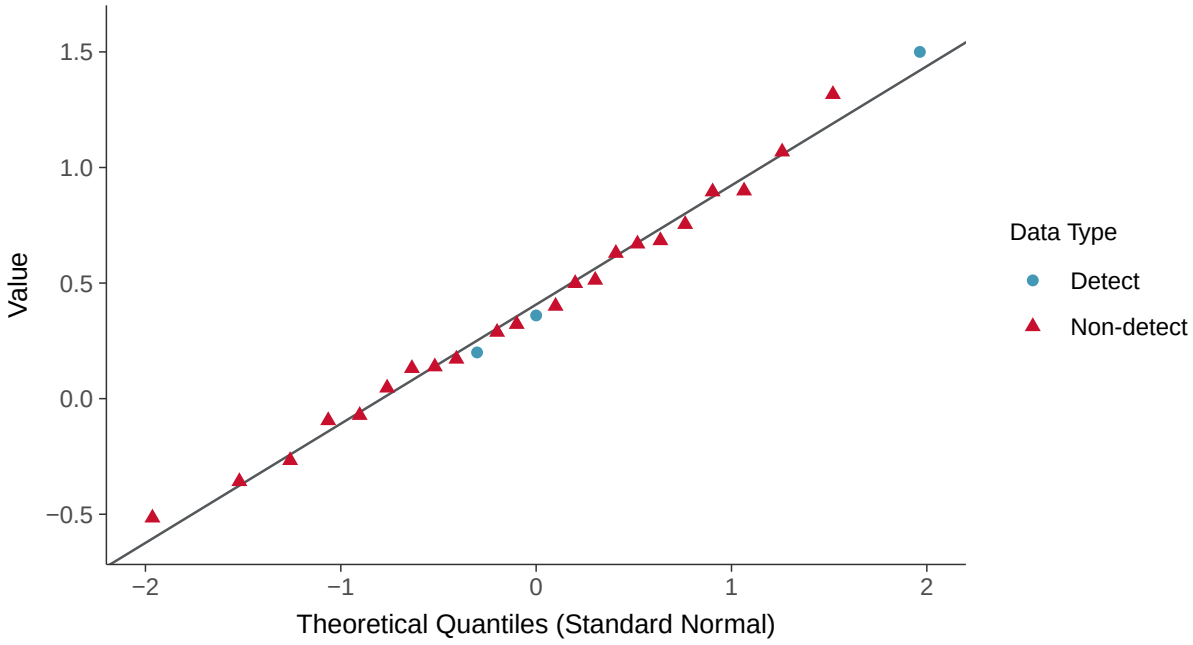

**Boxplot by Season**

Molybdenum, MW-15017 (ug/L)



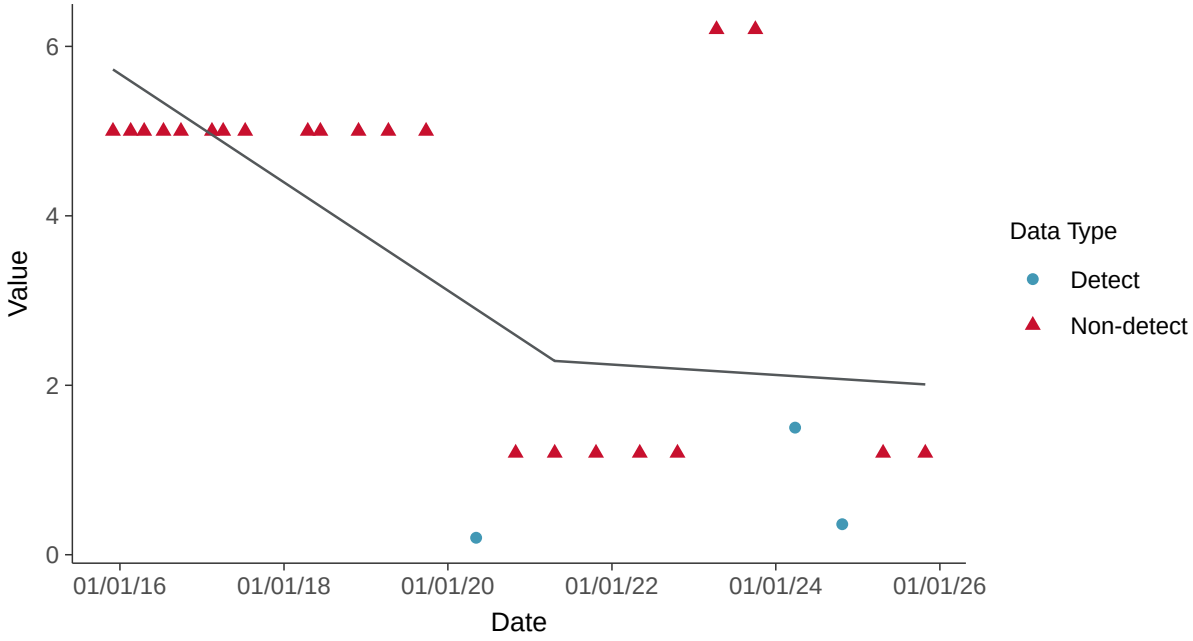
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15017 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15017 (ug/L)

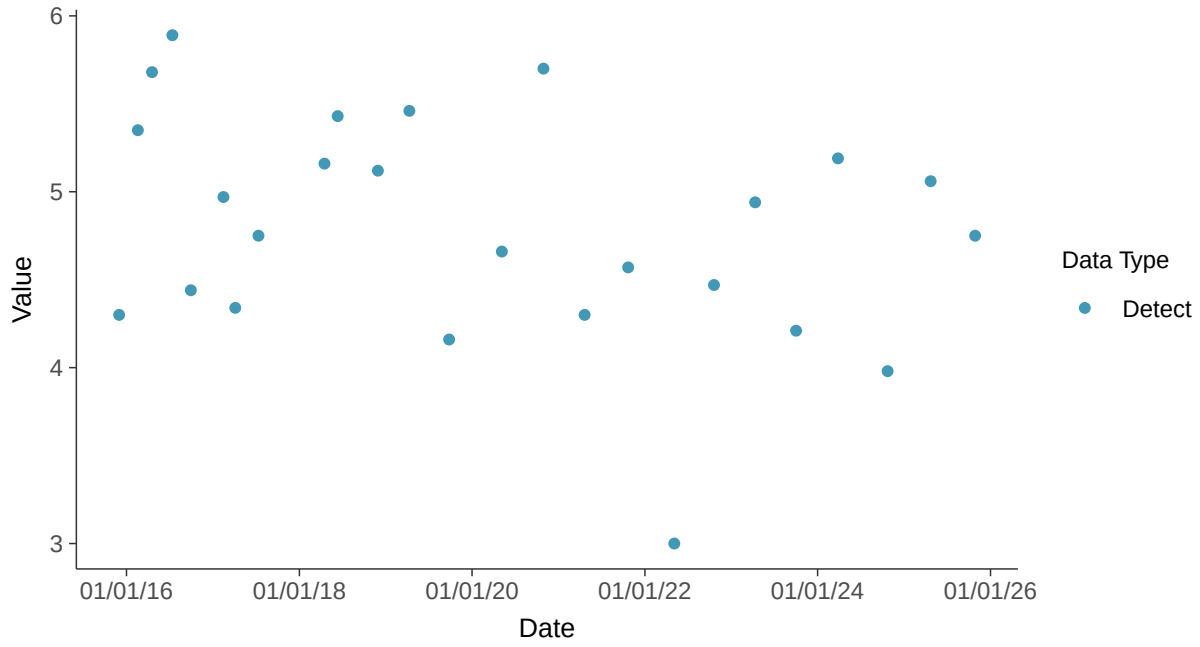


## Appendix IV: Radium-226+228, MW-15017

ID: 07_2_125

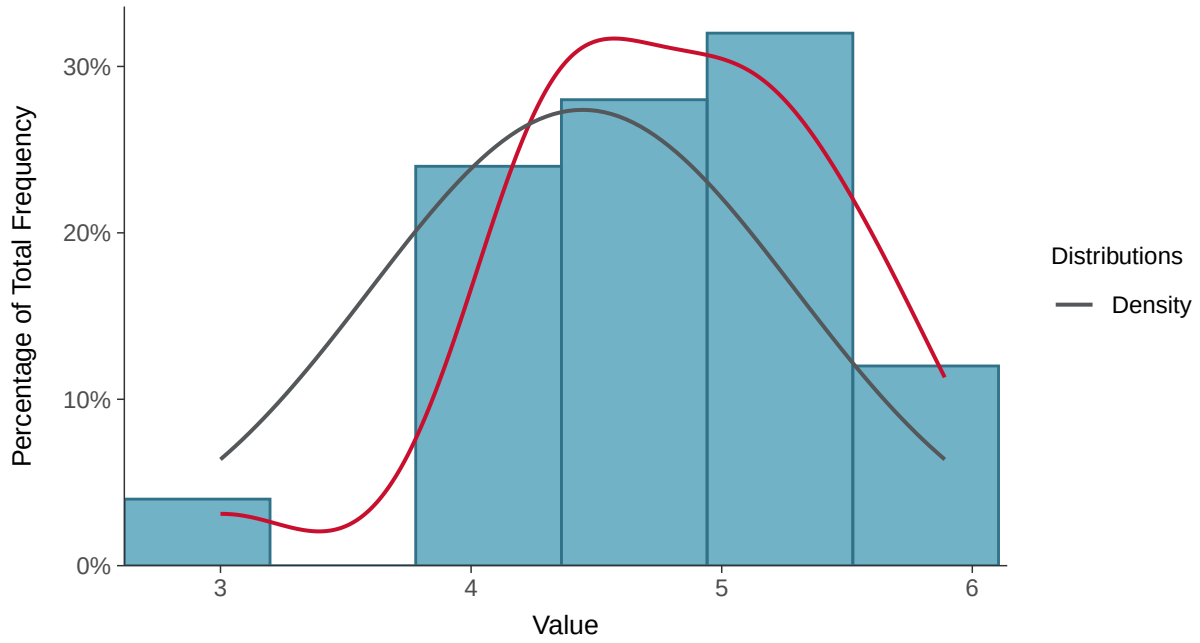
**Scatter Plot**

Radium-226+228, MW-15017 (pCi/L)



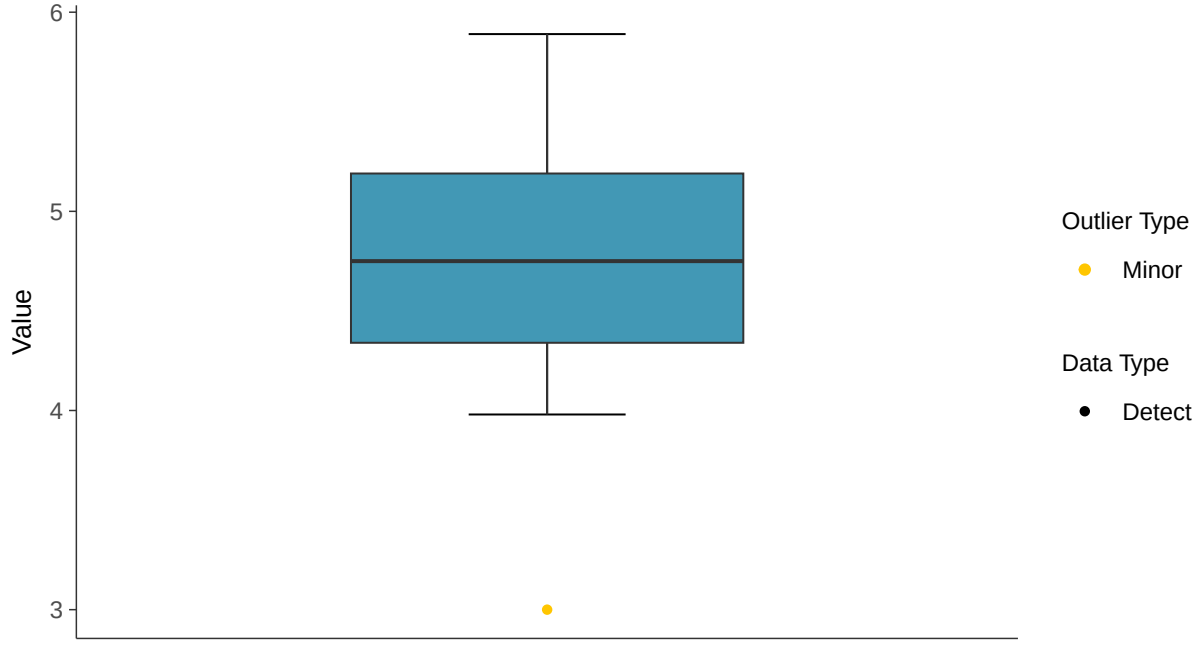

**Histogram**

Radium-226+228, MW-15017 (pCi/L)



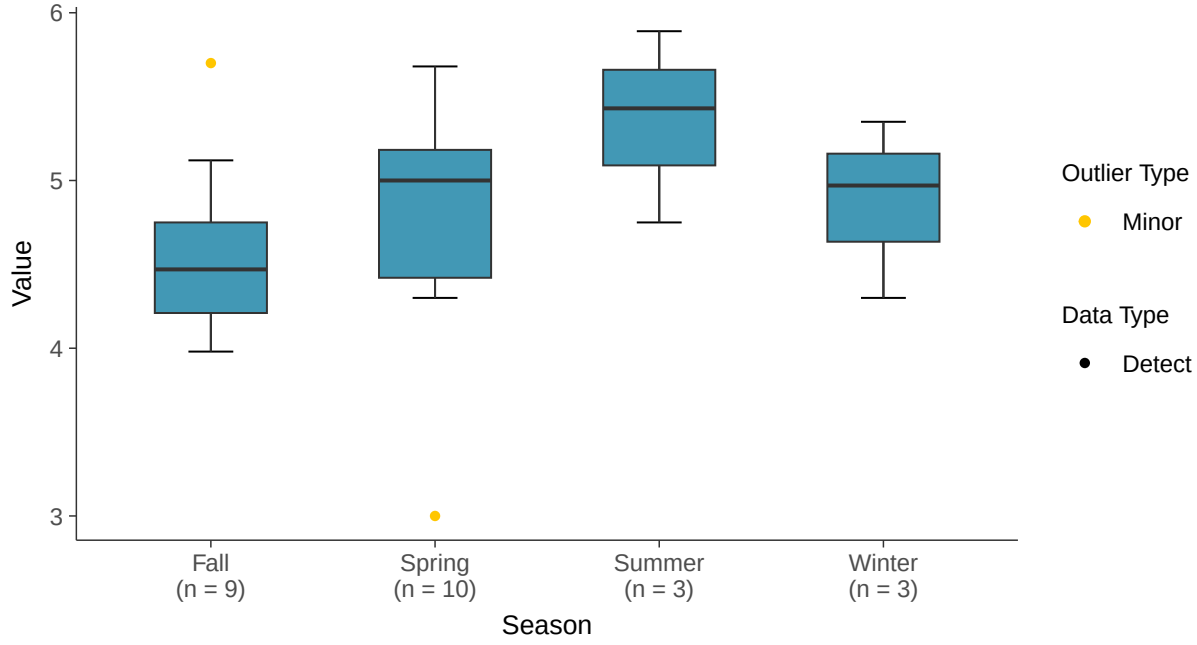
## Boxplot

Radium-226+228, MW-15017 (pCi/L)



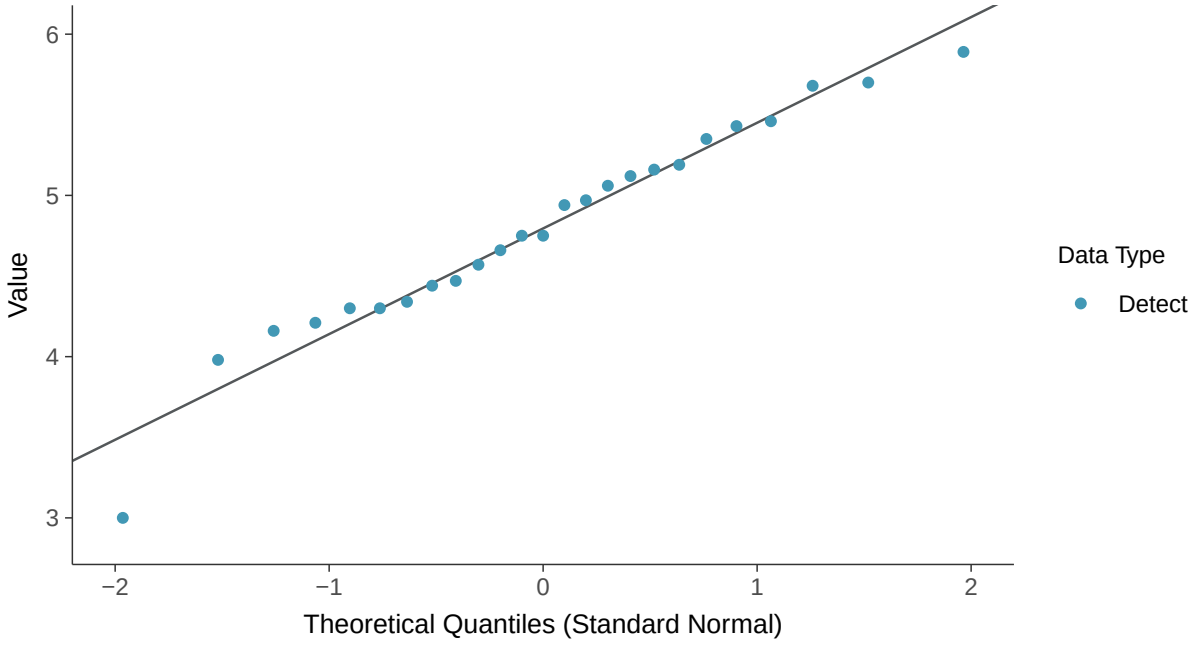

## Boxplot by Season

Radium-226+228, MW-15017 (pCi/L)



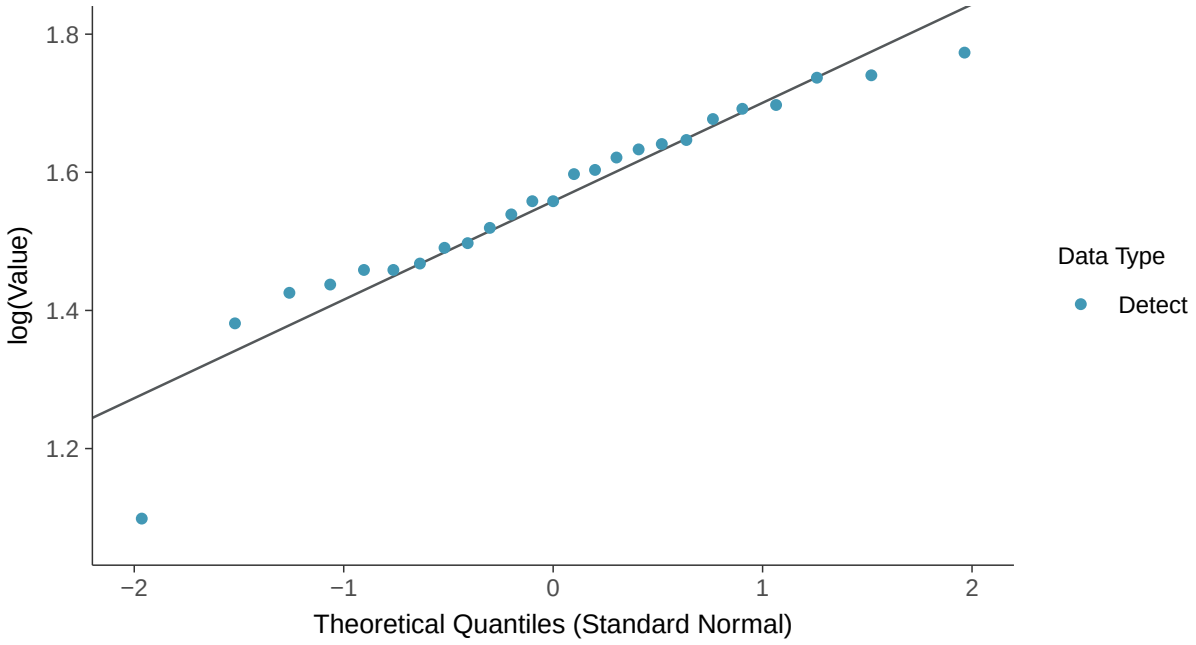
**Normal Q-Q plot**

Radium-226+228, MW-15017 (pCi/L)



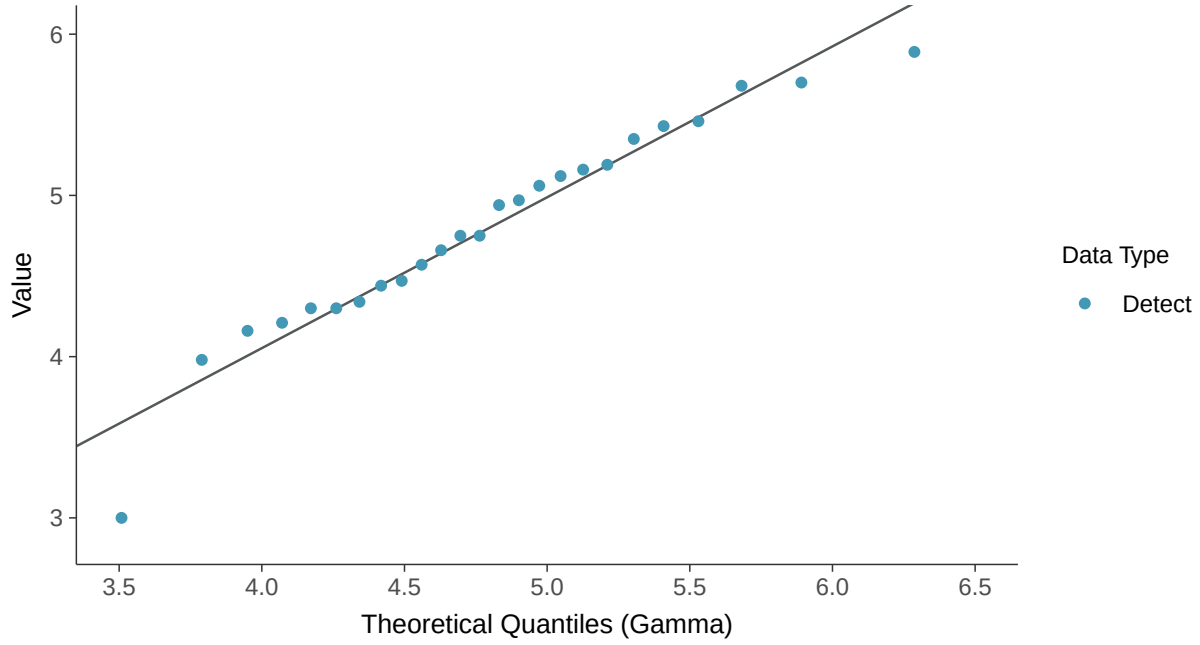

**Lognormal Q-Q plot**

Radium-226+228, MW-15017 (pCi/L)



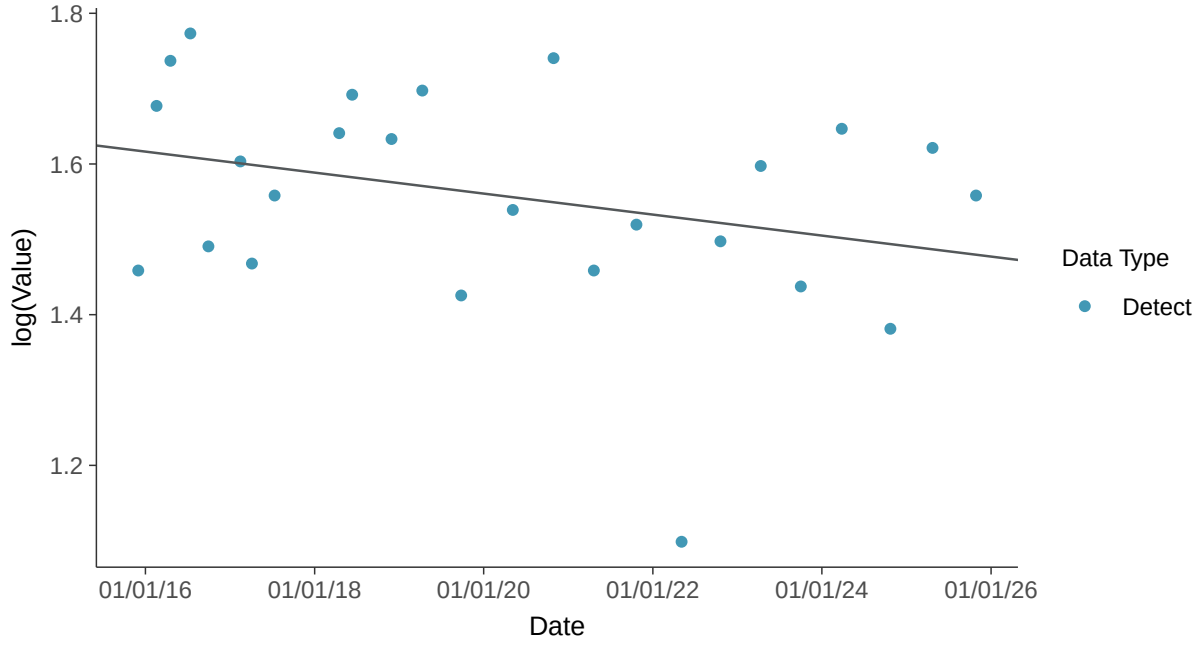
**Gamma Q-Q plot**

Radium-226+228, MW-15017 (pCi/L)



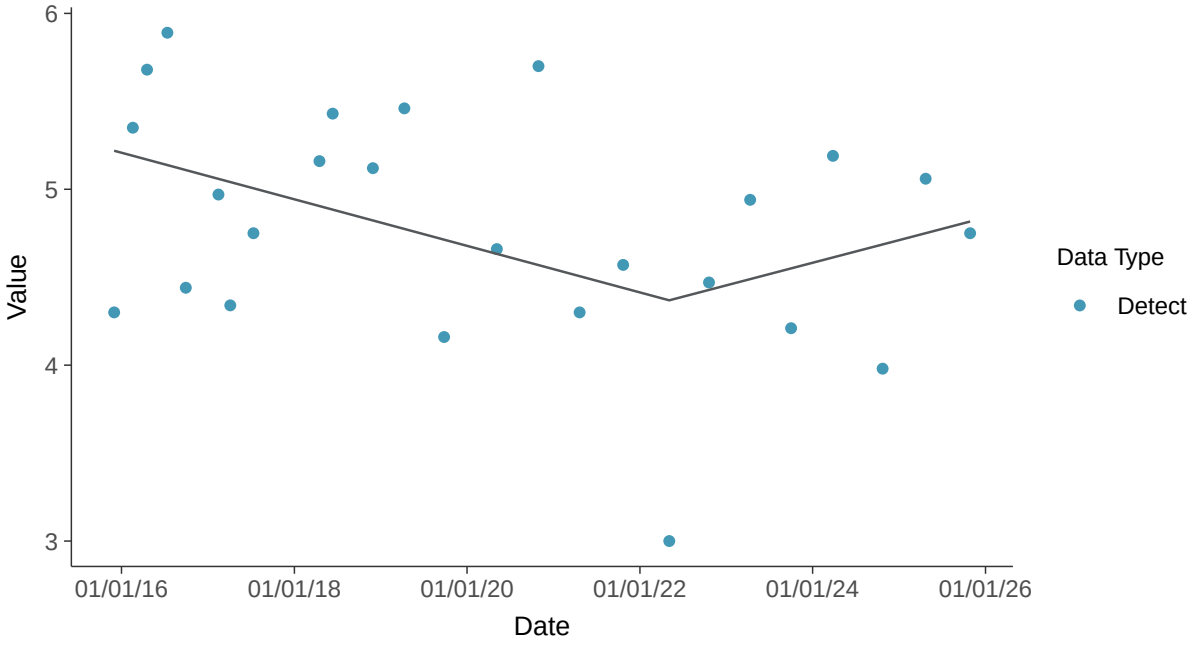

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15017 (pCi/L)



**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15017 (pCi/L)

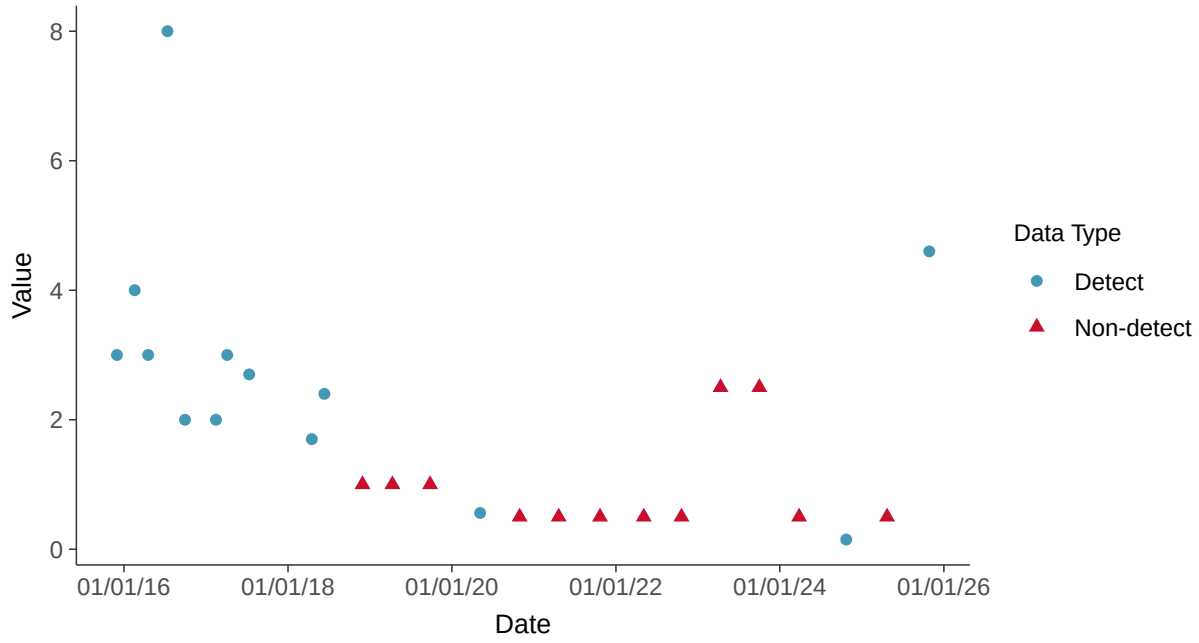


## Appendix IV: Selenium, MW-15017

ID: 07_2_127

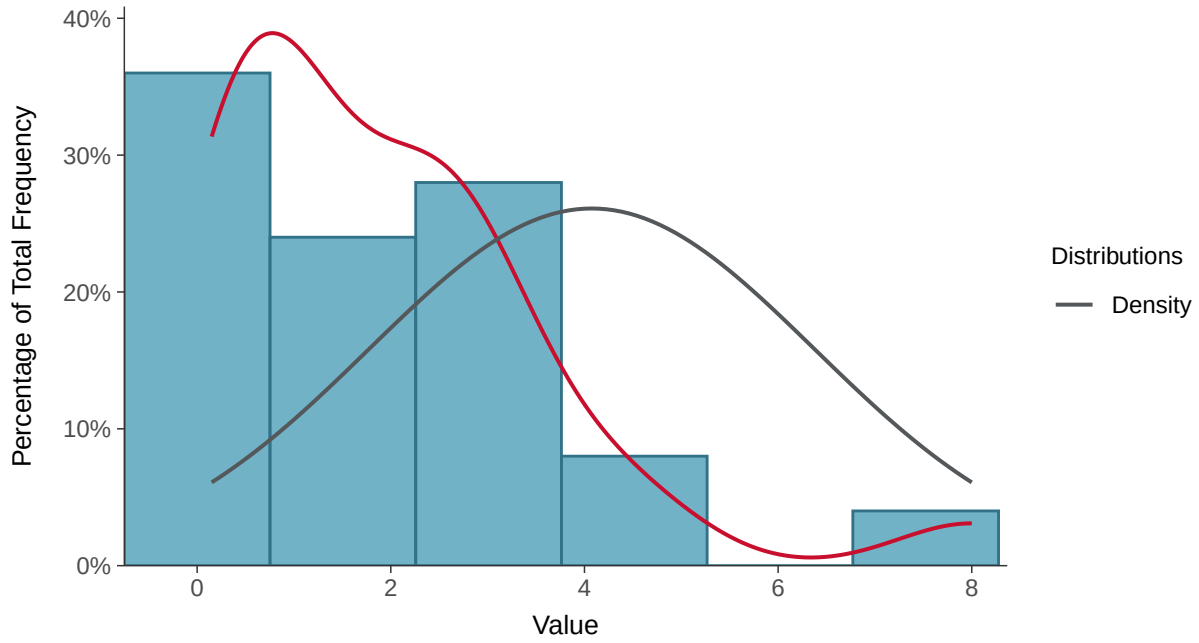
**Scatter Plot**

Selenium, MW-15017 (ug/L)



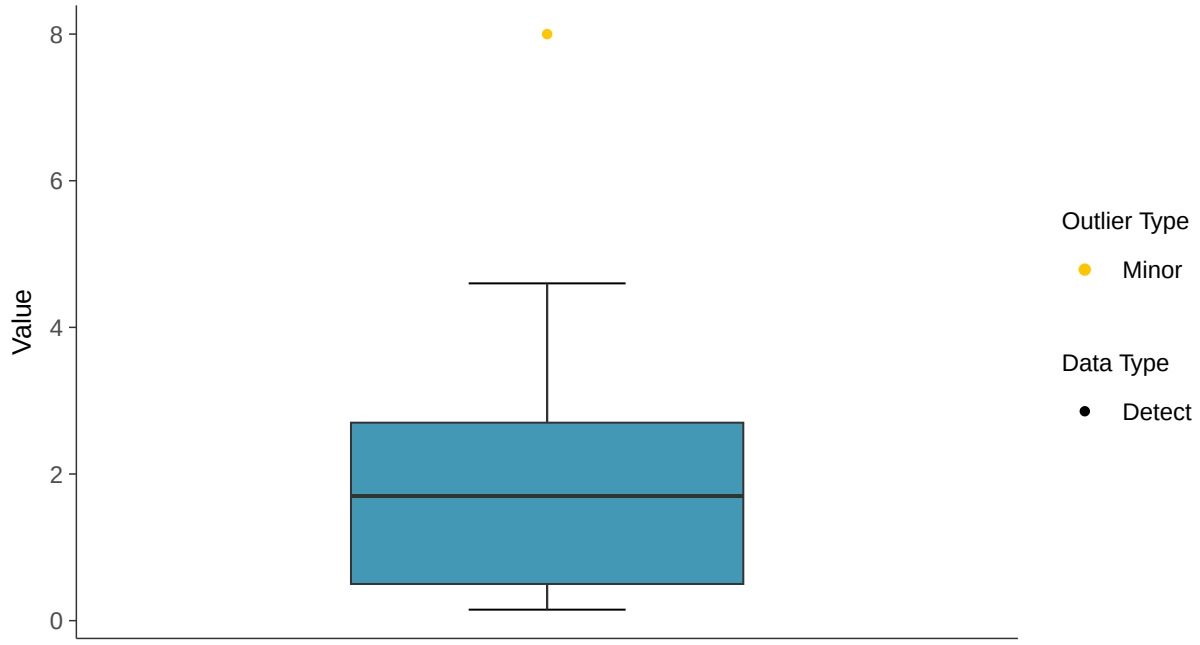

**Histogram**

Selenium, MW-15017 (ug/L)



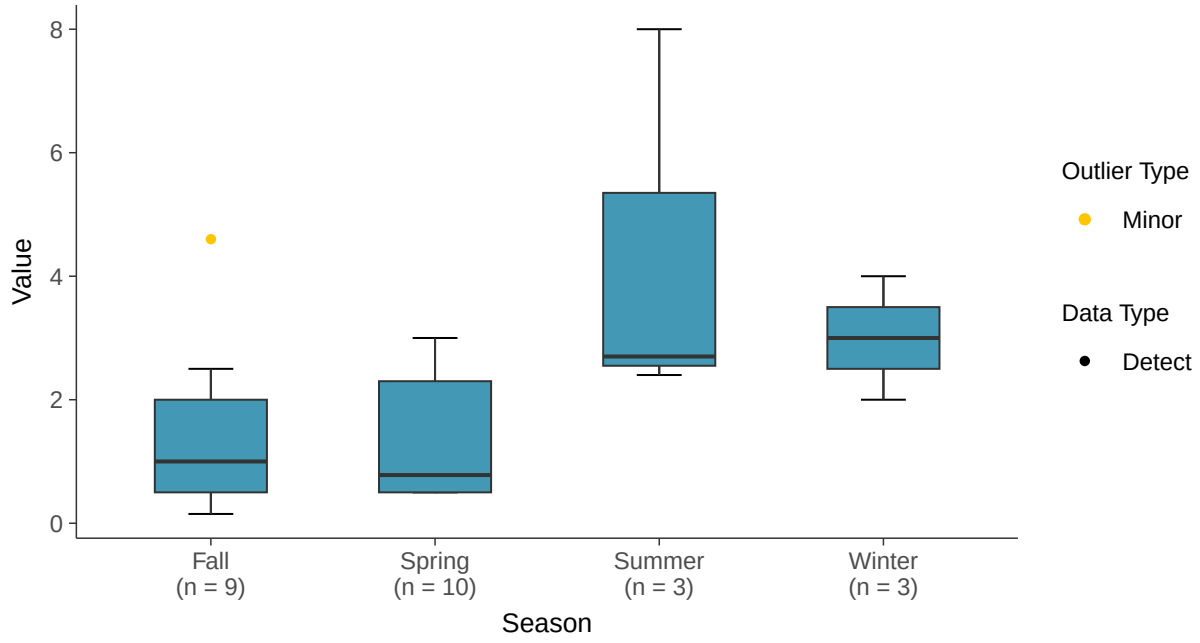
## Boxplot

Selenium, MW-15017 (ug/L)



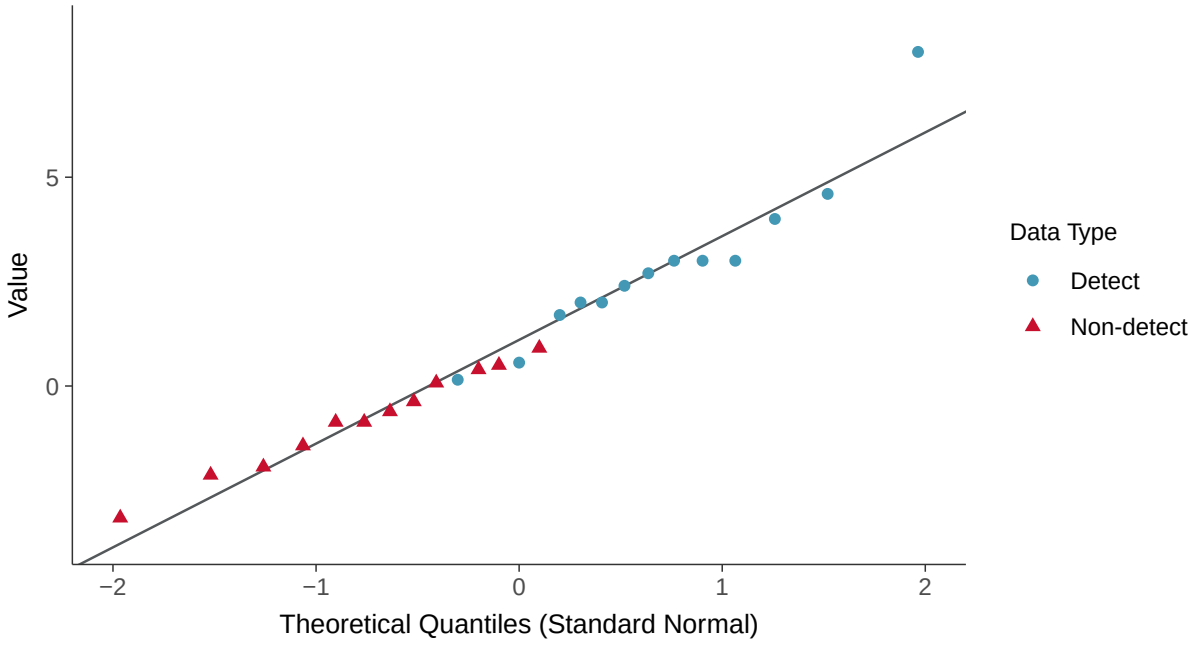

## Boxplot by Season

Selenium, MW-15017 (ug/L)



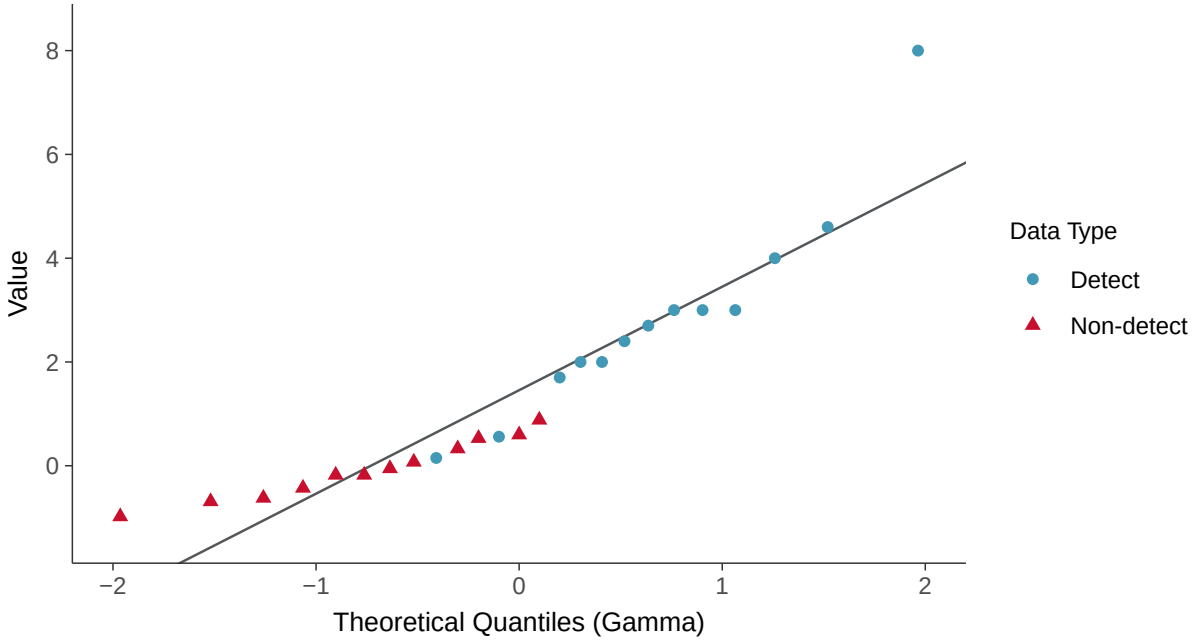
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15017 (ug/L)



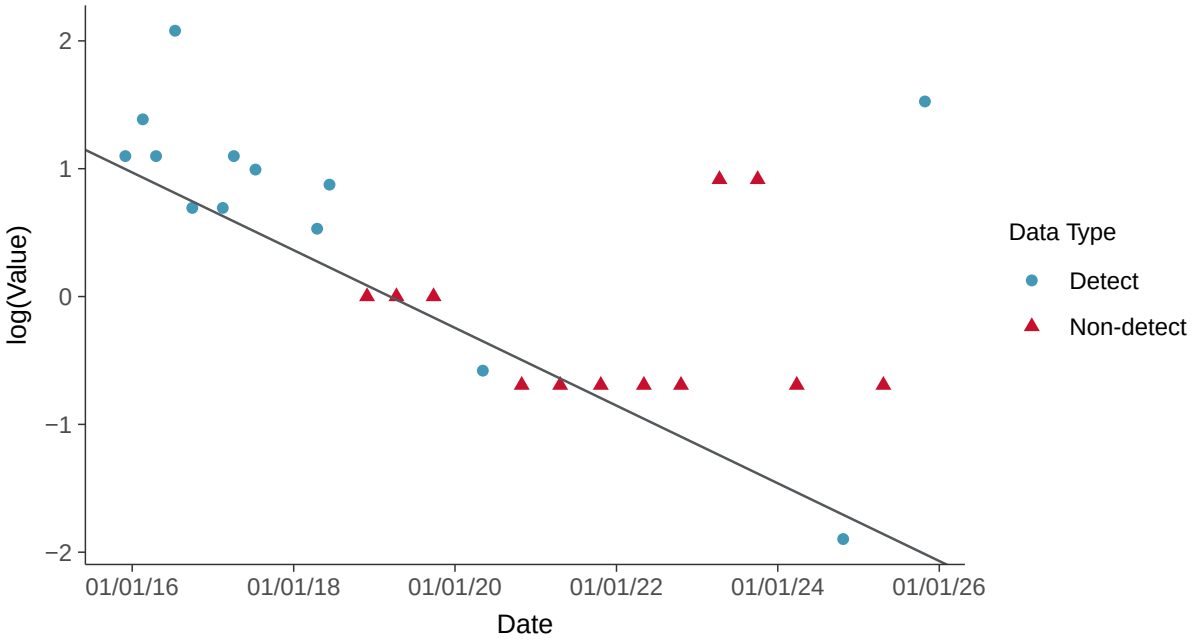

**Gamma Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15017 (ug/L)



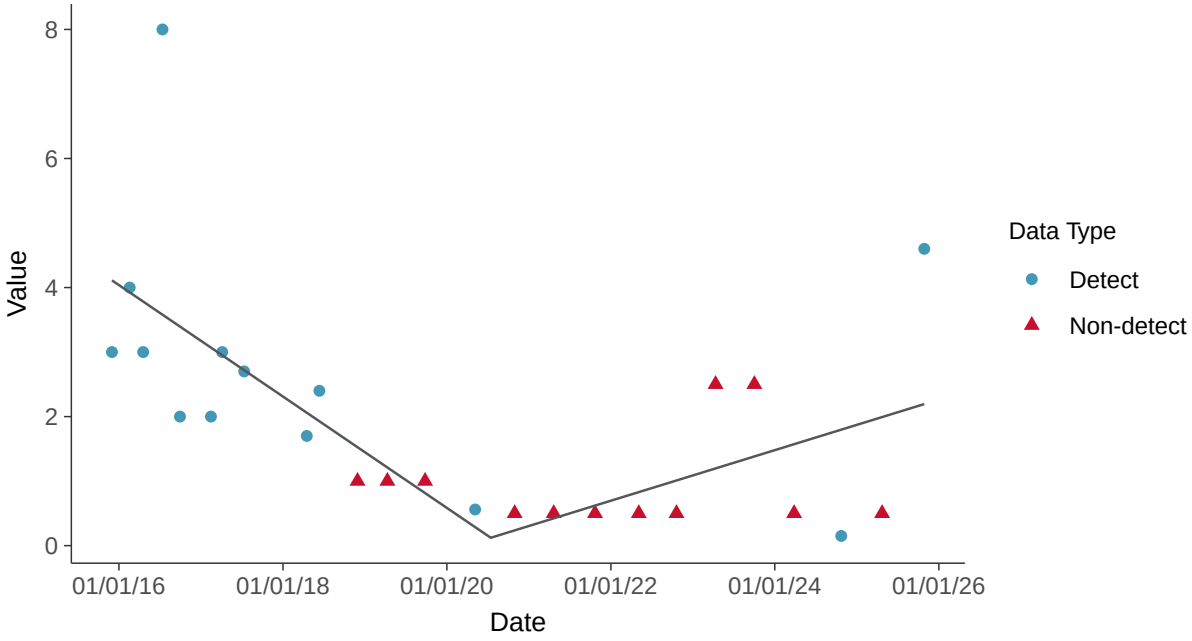
**Trend Regression: Lognormal MLE**

Selenium, MW-15017 (ug/L)



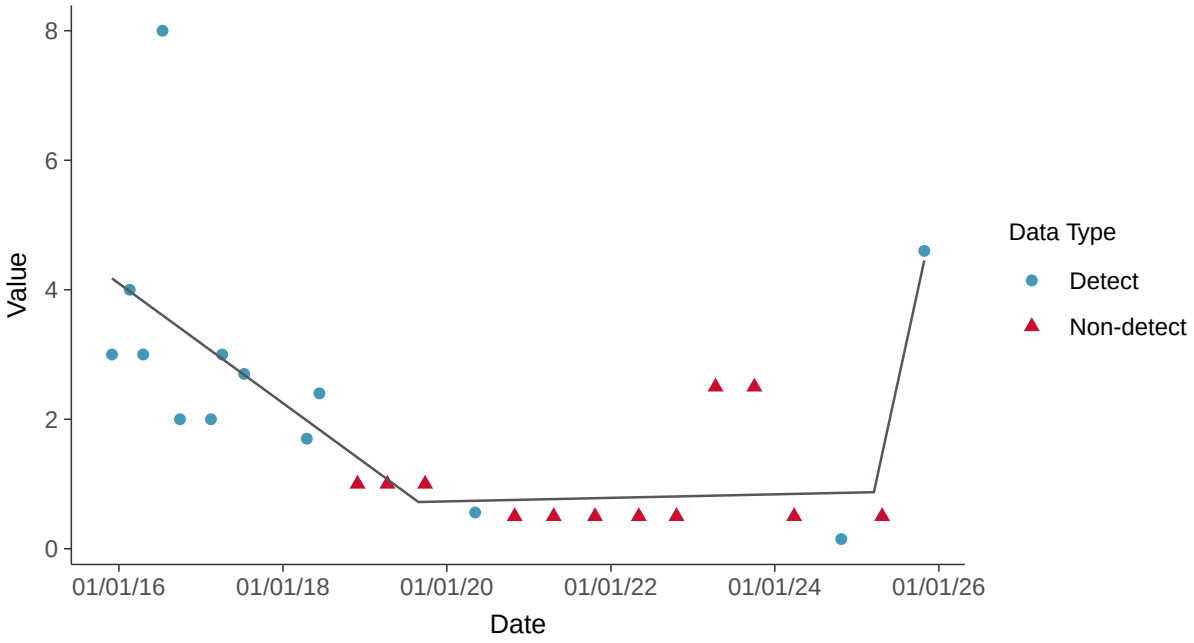

**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15017 (ug/L)



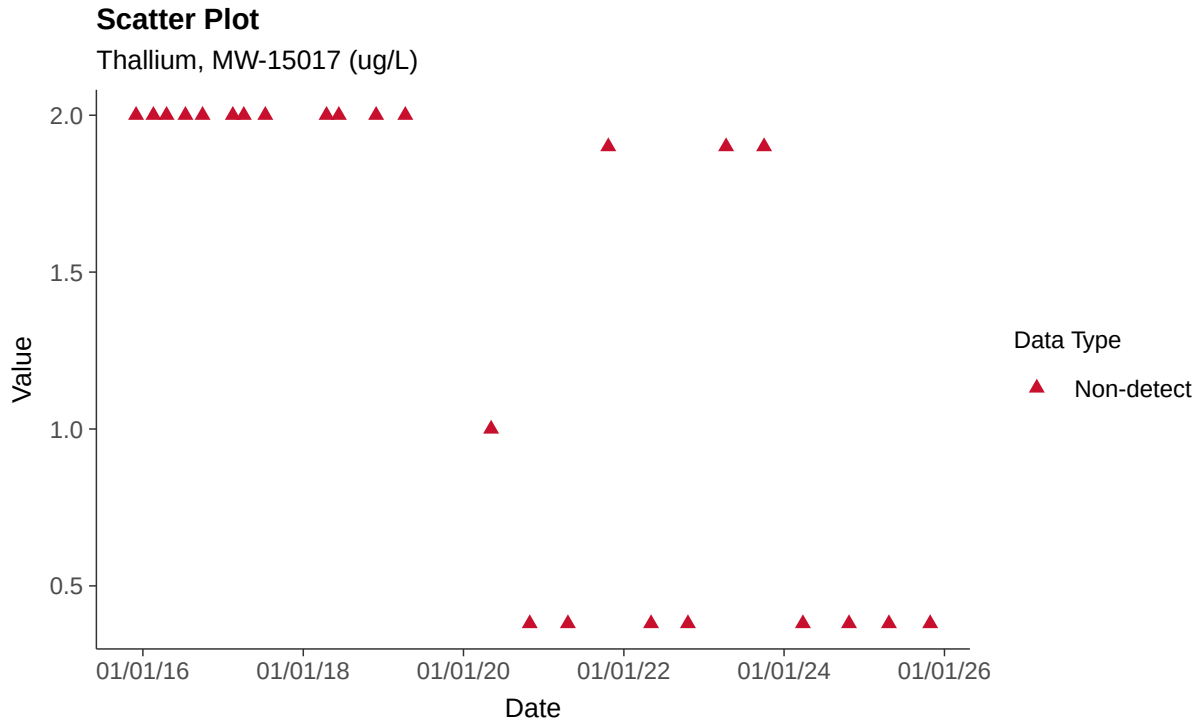
**Trend Regression: Piecewise Linear-Linear-Linear**

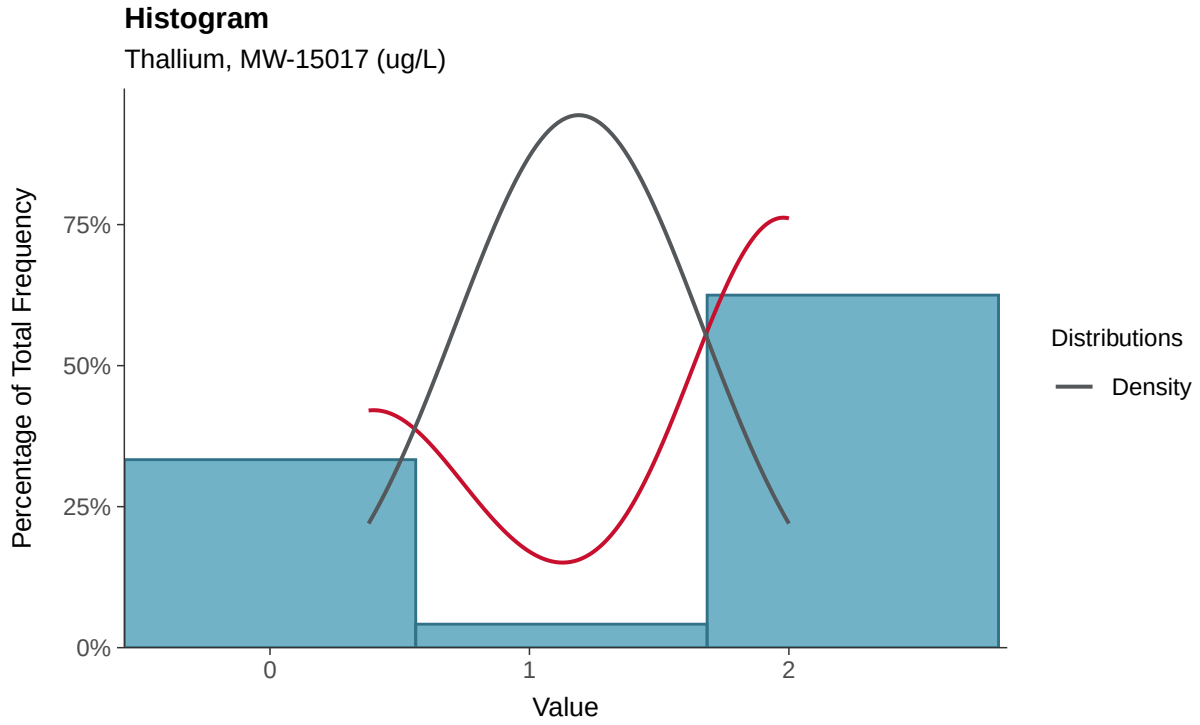
Selenium, MW-15017 (ug/L)



## Appendix IV: Thallium, MW-15017

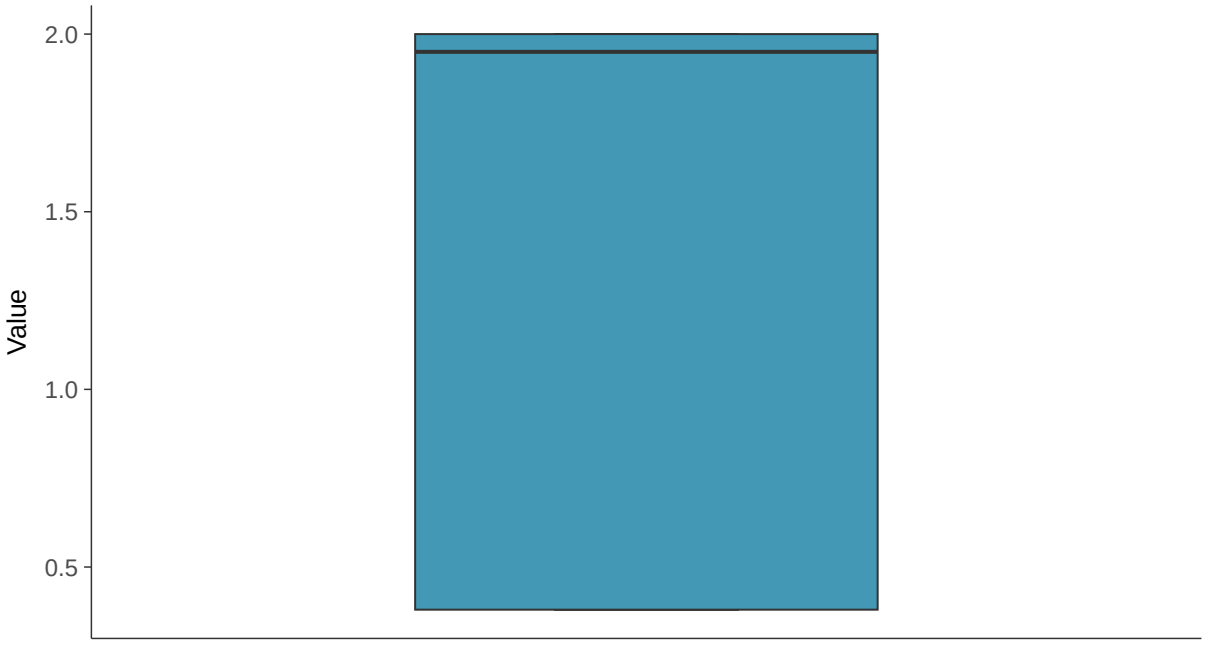
ID: 07_2_131



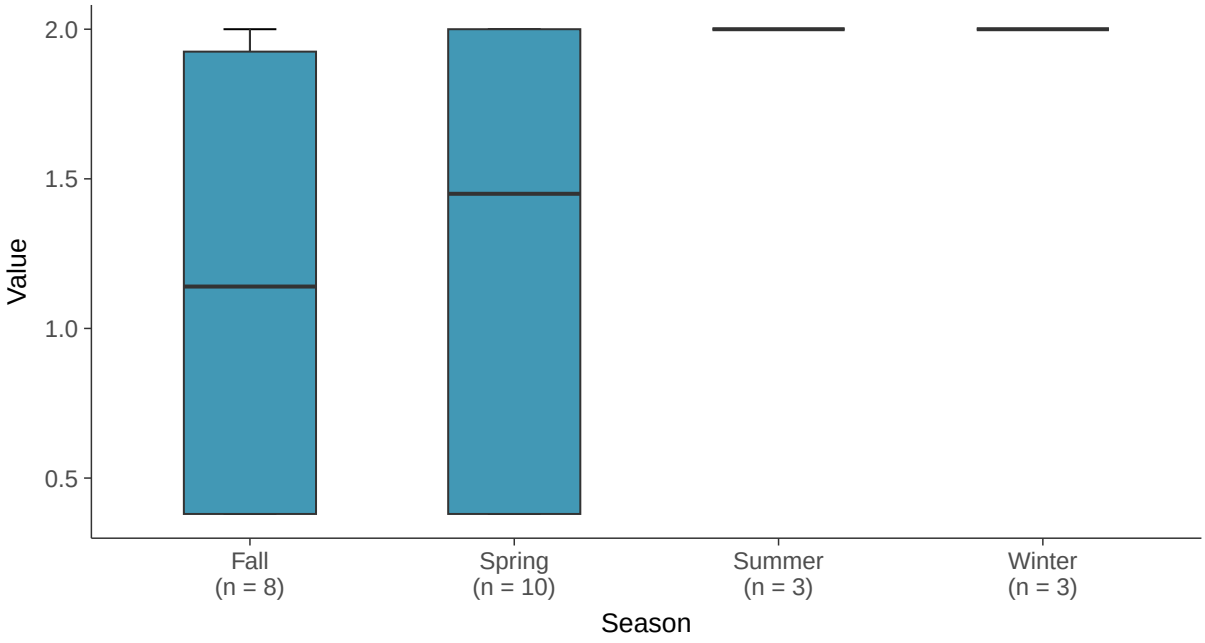
**Boxplot**

Thallium, MW-15017 (ug/L)



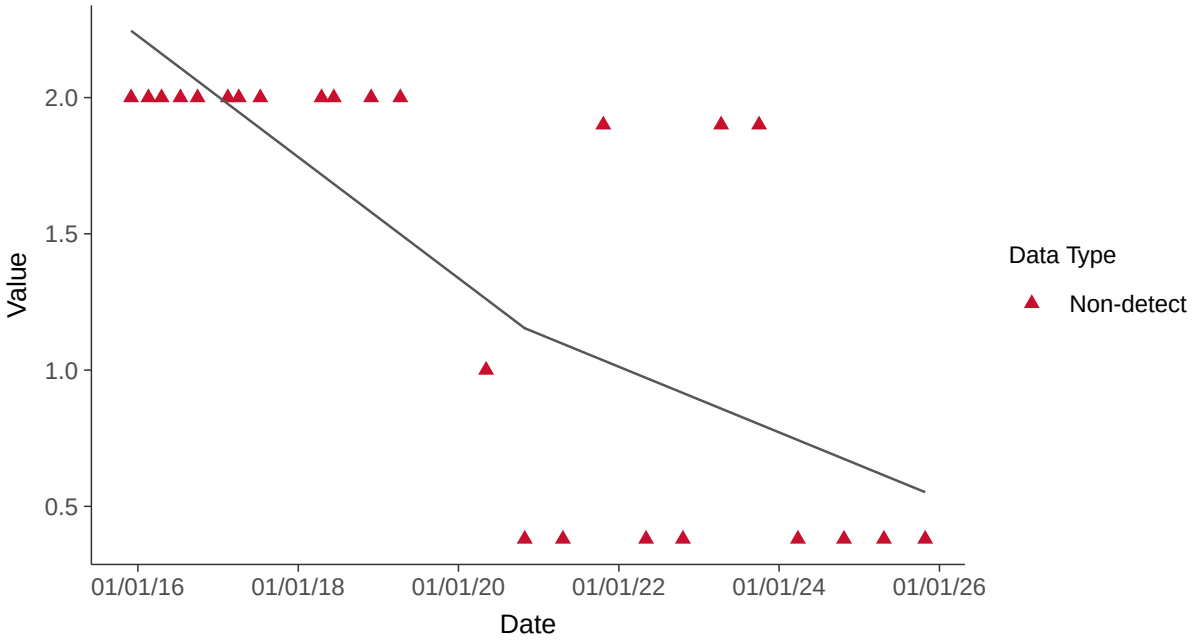

**Boxplot by Season**

Thallium, MW-15017 (ug/L)



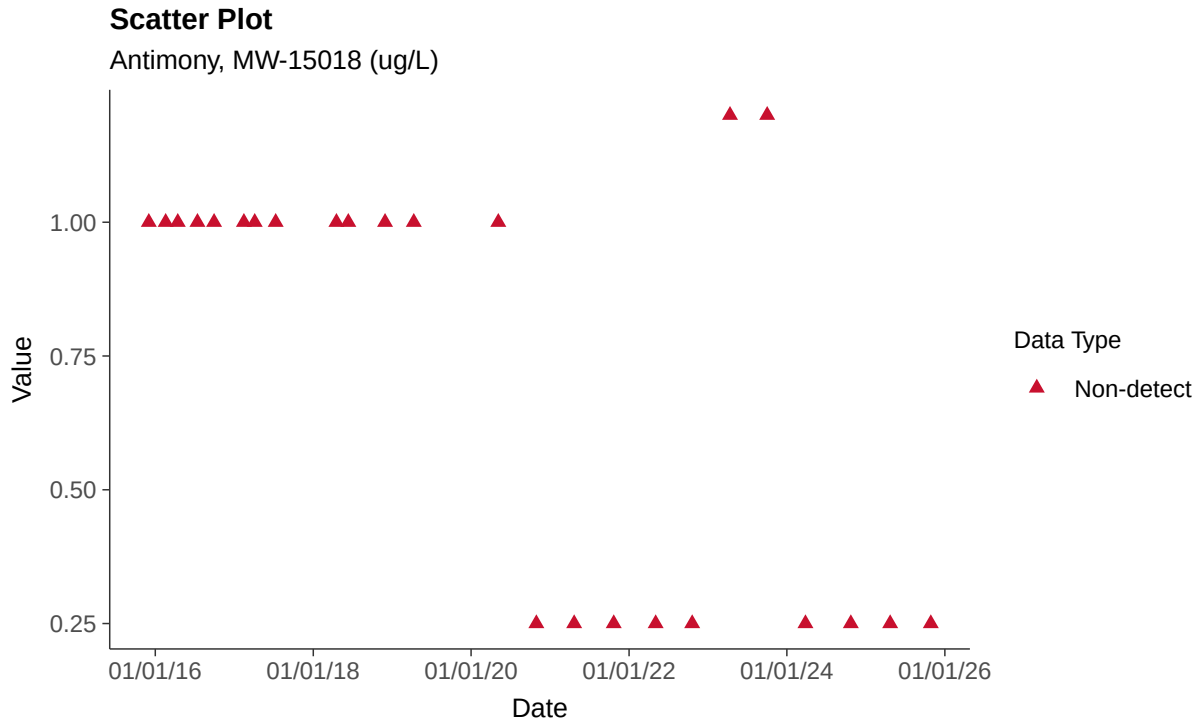
**Trend Regression: Piecewise Linear-Linear**

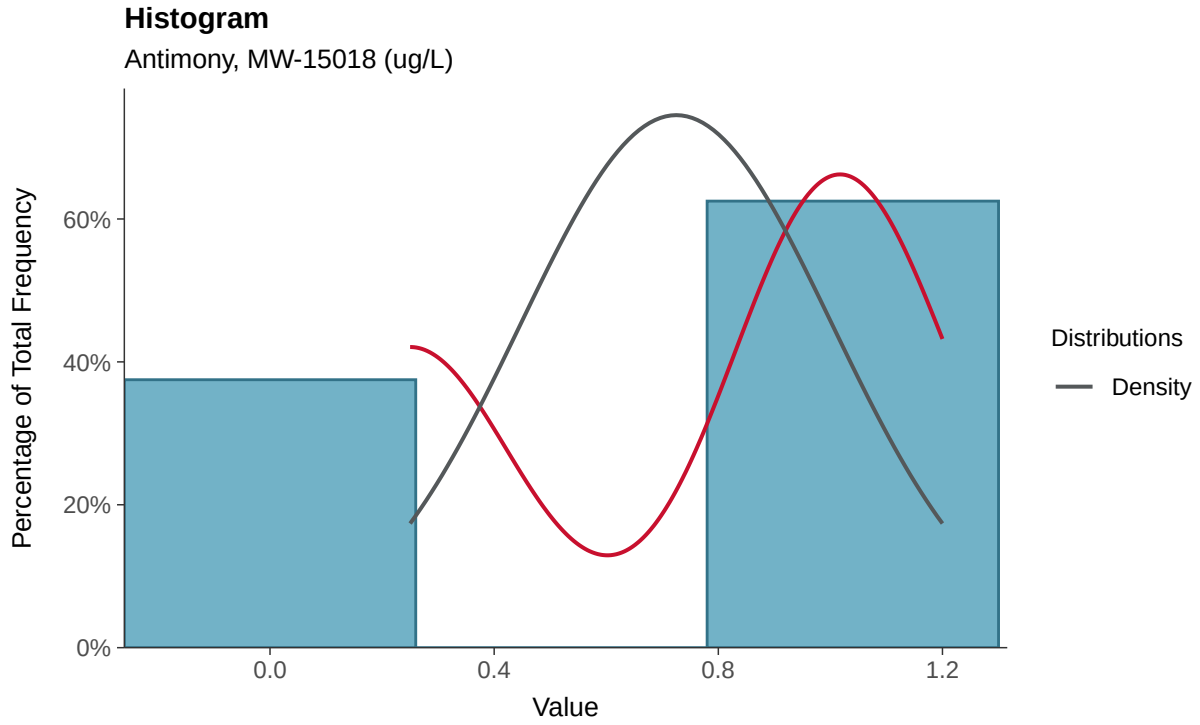
Thallium, MW-15017 (ug/L)



## Appendix IV: Antimony, MW-15018

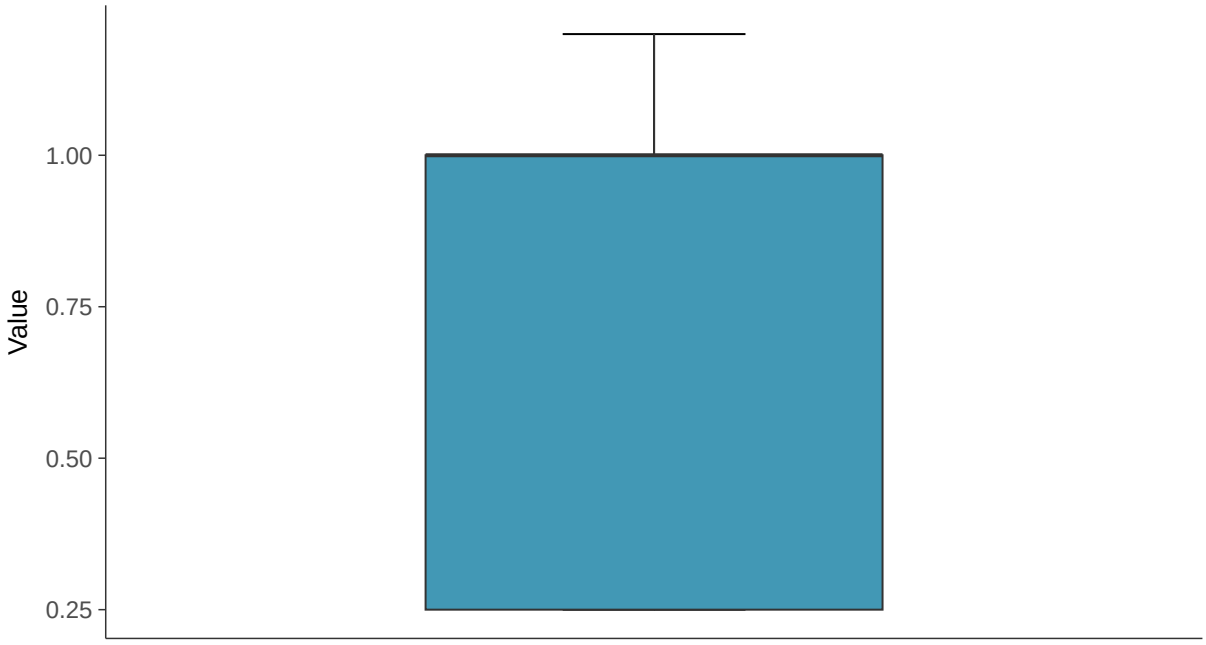
ID: 08_2_101



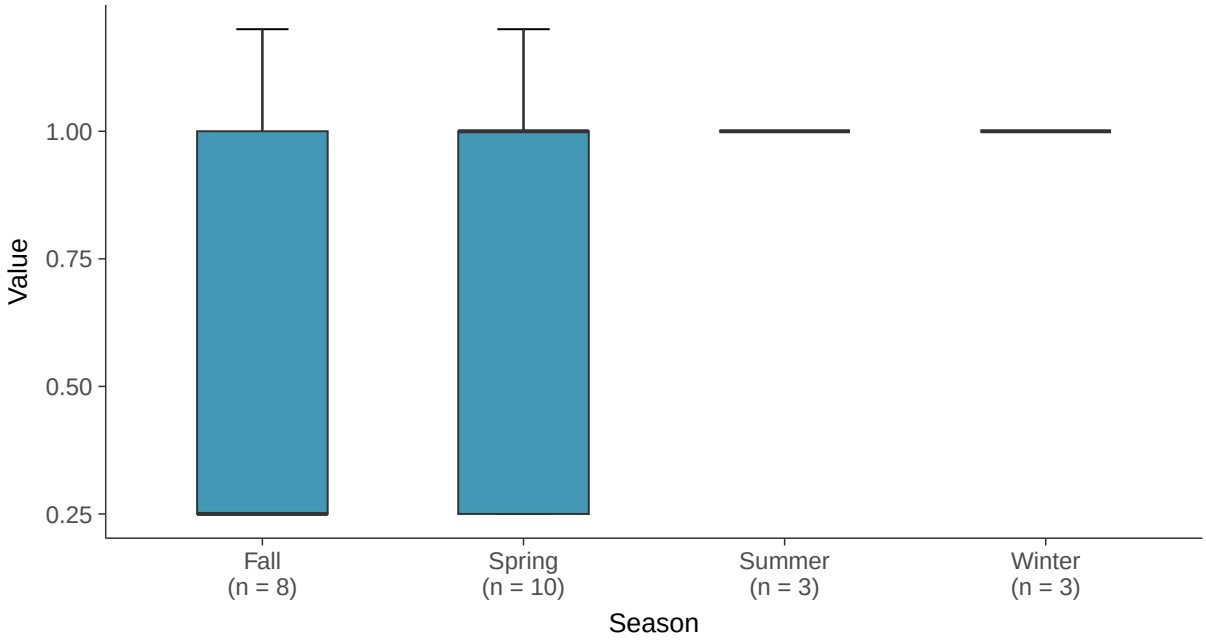
**Boxplot**

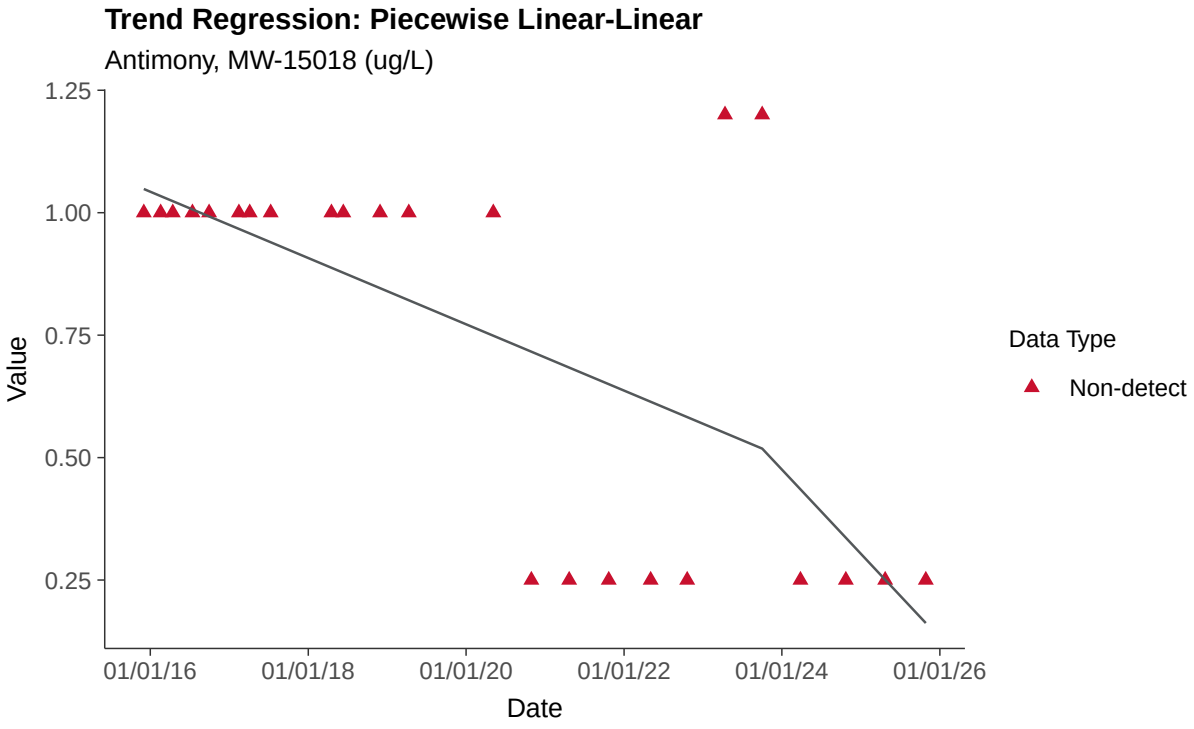
Antimony, MW-15018 (ug/L)




**Boxplot by Season**

Antimony, MW-15018 (ug/L)



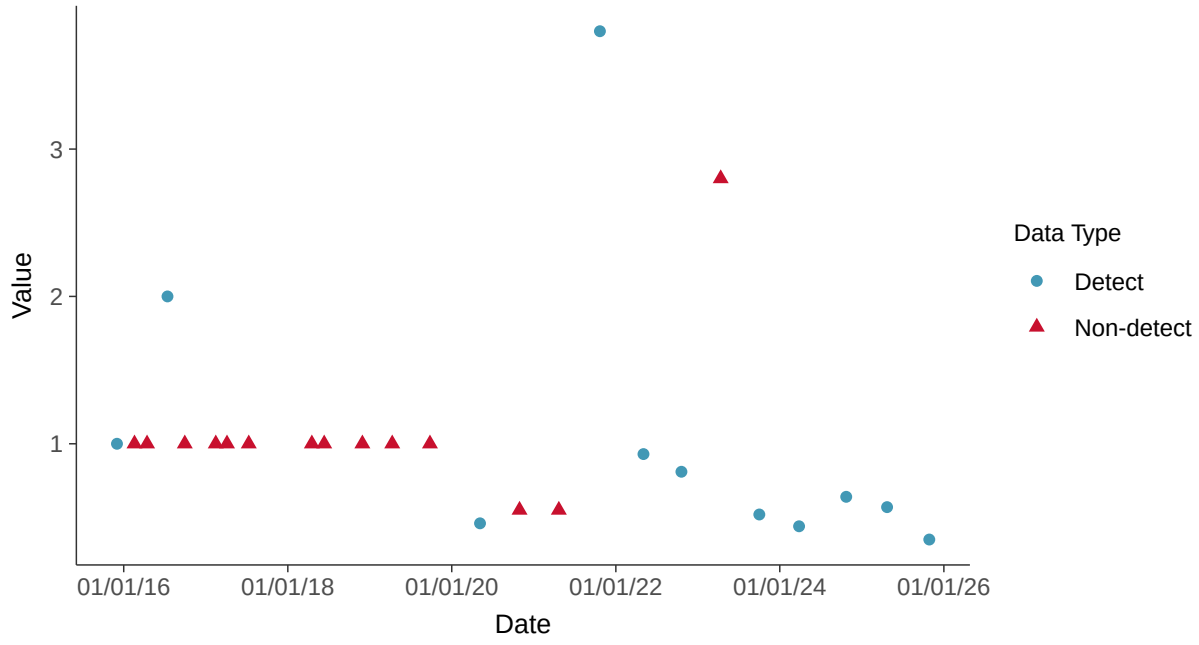

Trend Regression: Piecewise Linear-Linear
Antimony, MW-15018 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Arsenic, MW-15018

ID: 08_2_102

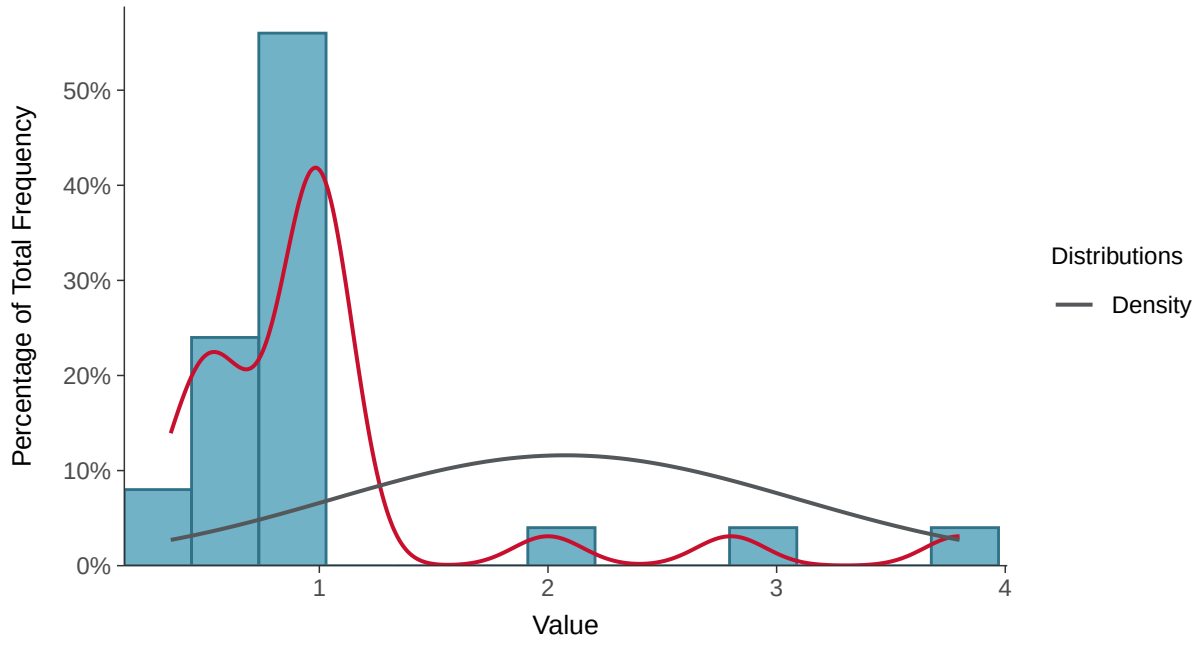
**Scatter Plot**

Arsenic, MW-15018 (ug/L)



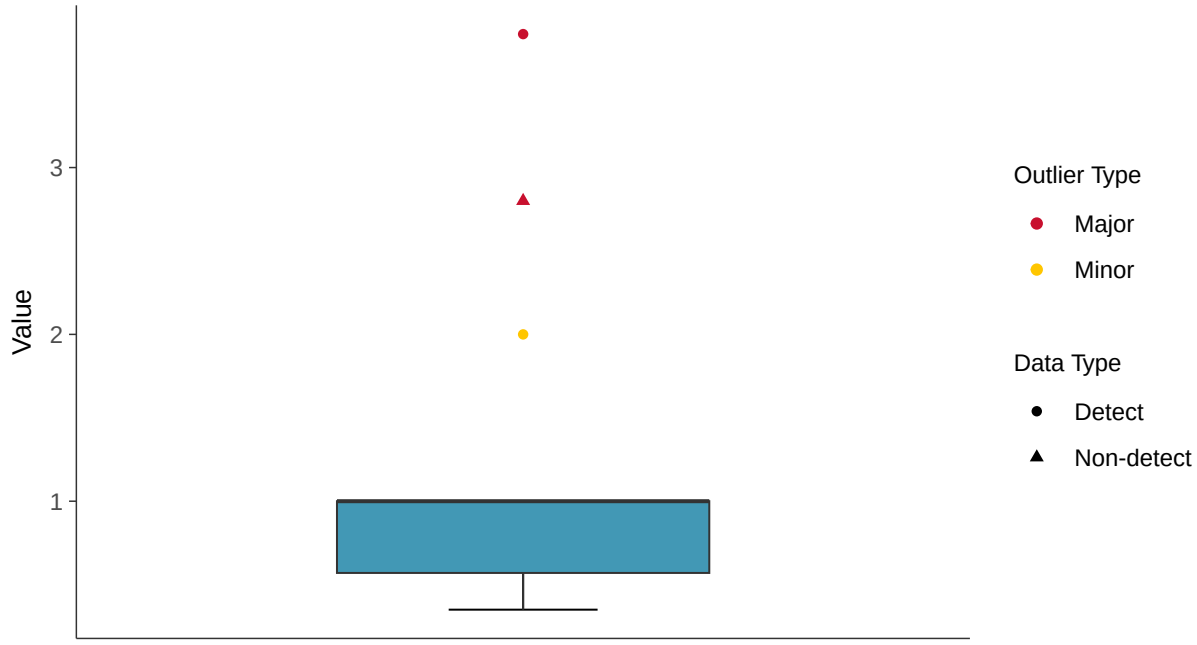

**Histogram**

Arsenic, MW-15018 (ug/L)



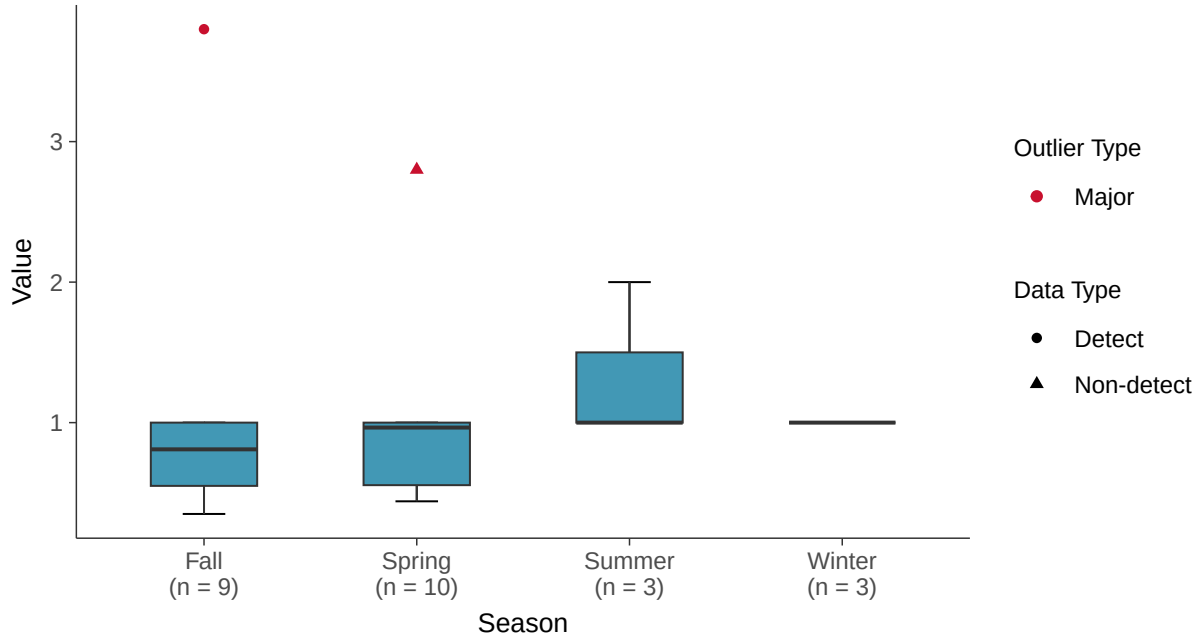
## Boxplot

Arsenic, MW-15018 (ug/L)



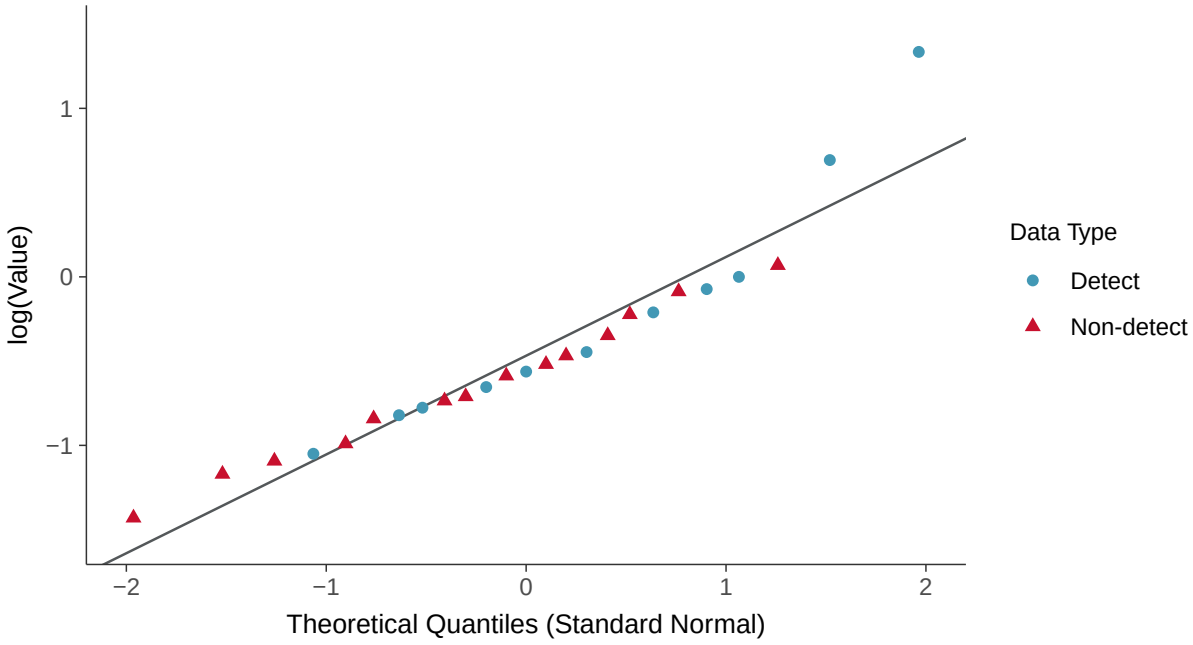

## Boxplot by Season

Arsenic, MW-15018 (ug/L)



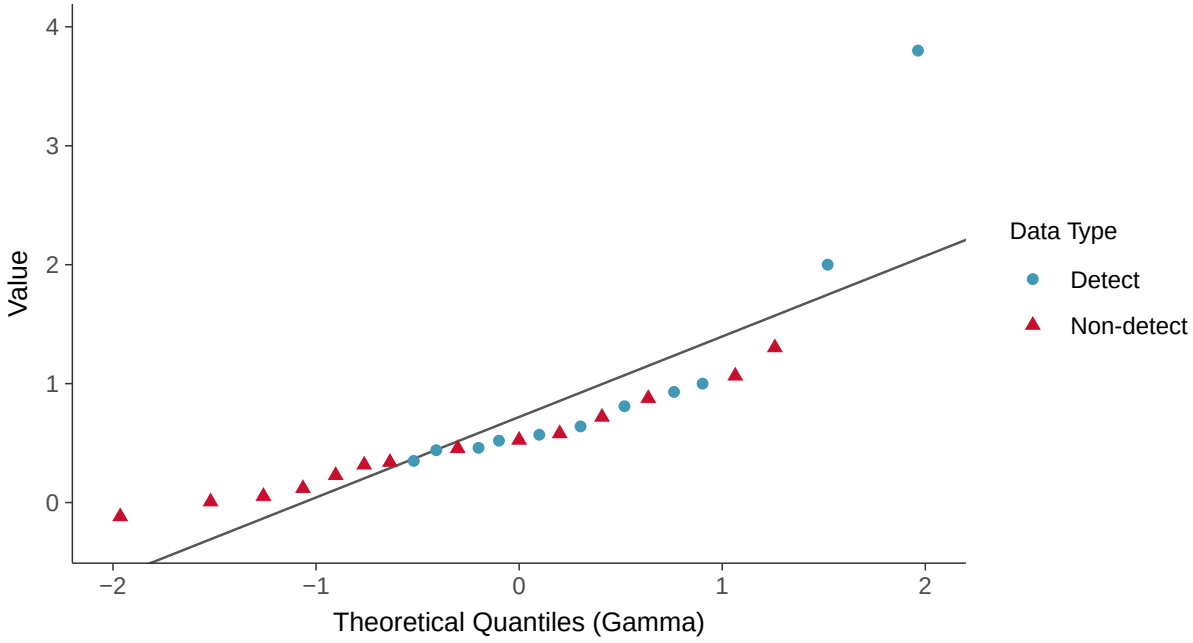
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15018 (ug/L)



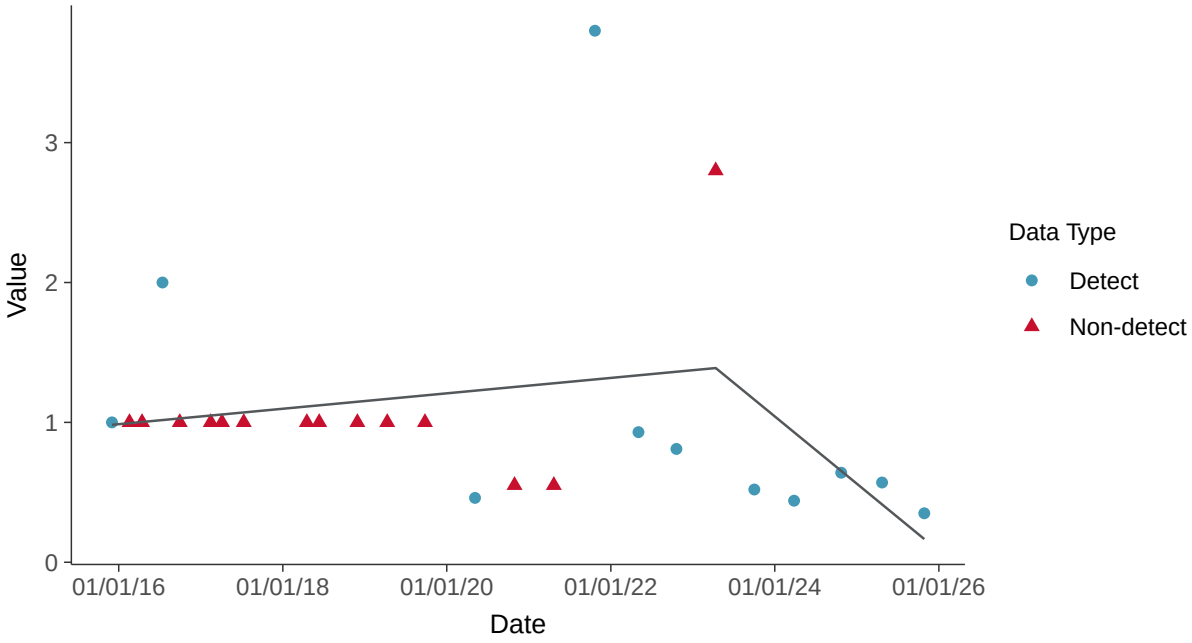

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15018 (ug/L)



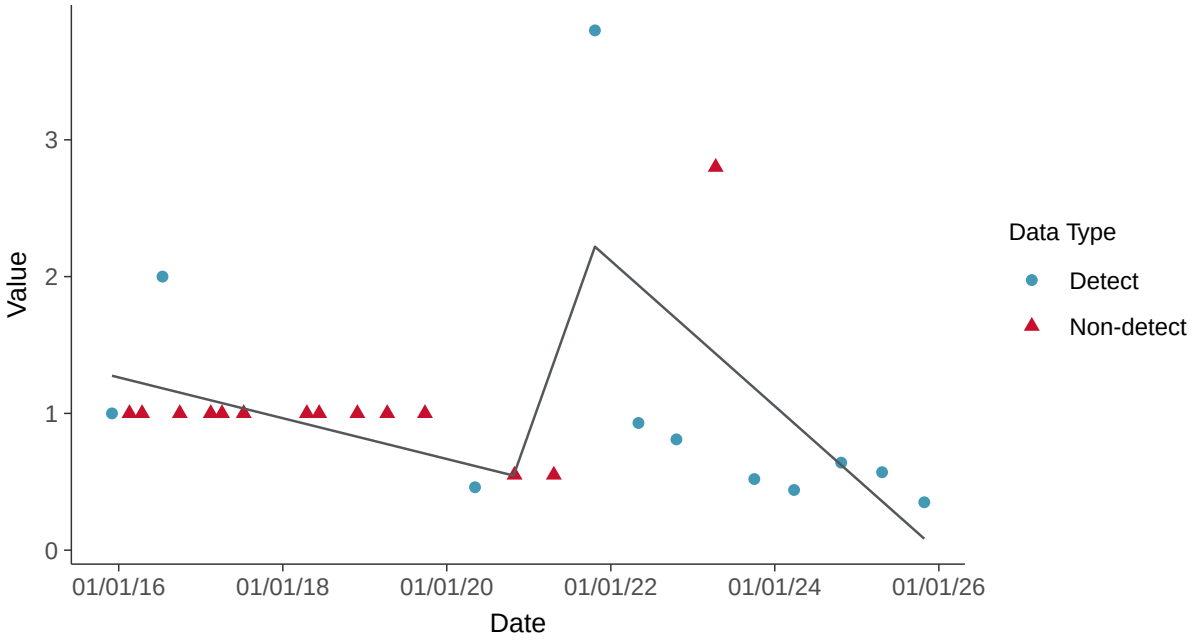
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15018 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15018 (ug/L)

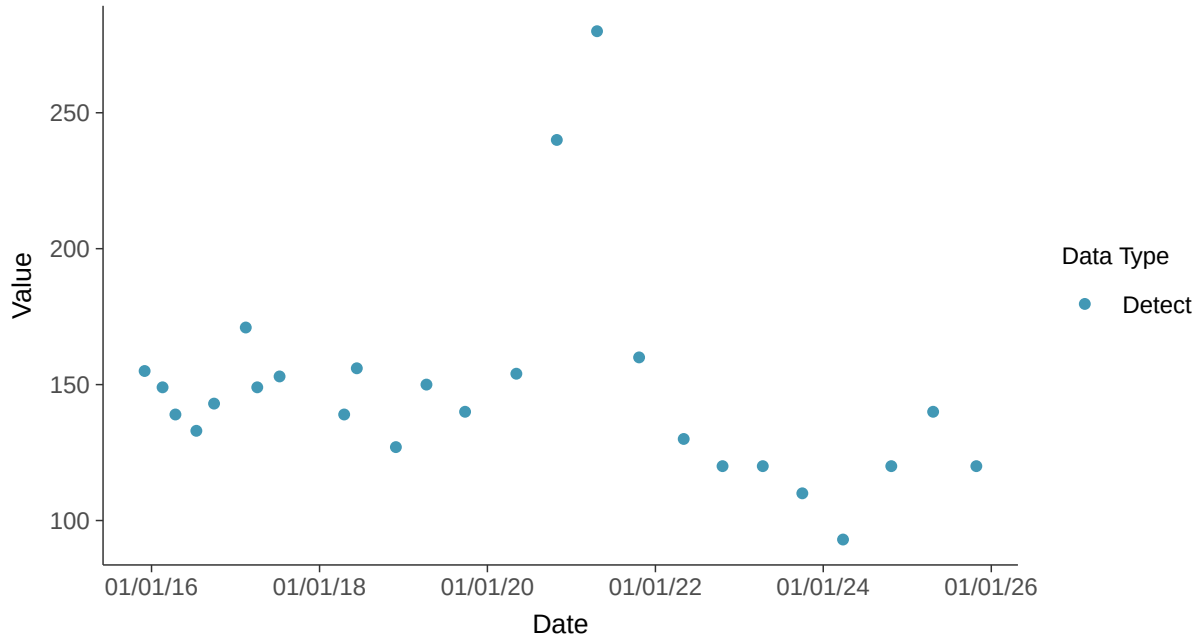


## Appendix IV: Barium, MW-15018

ID: 08_2_103

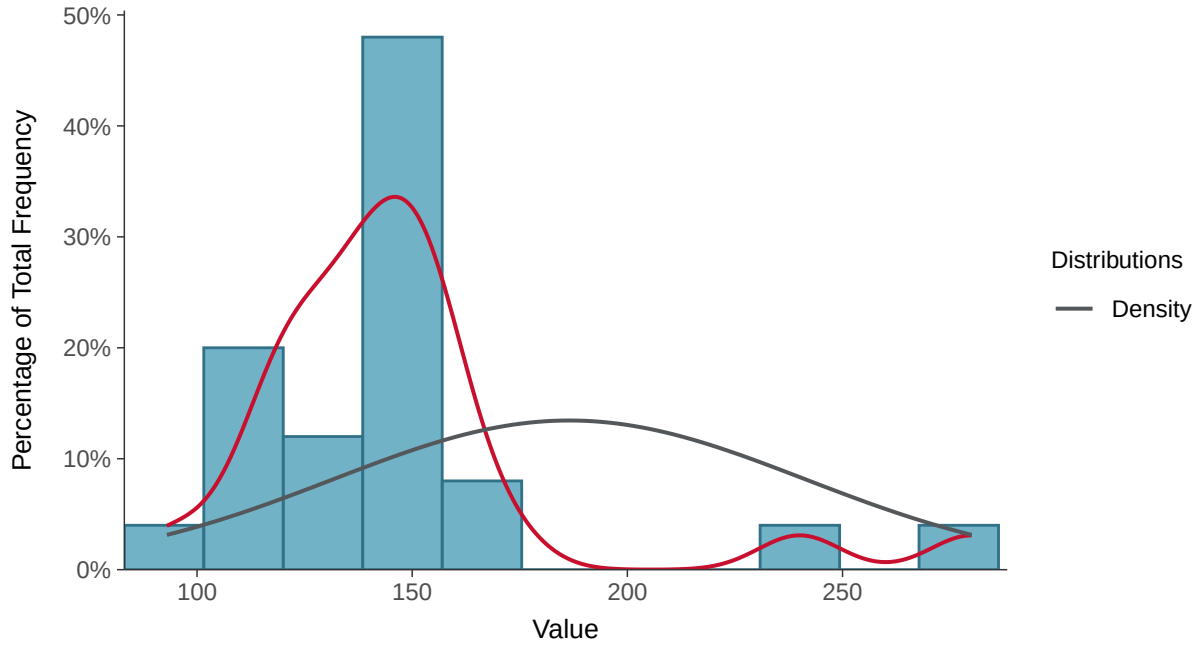
**Scatter Plot**

Barium, MW-15018 (ug/L)



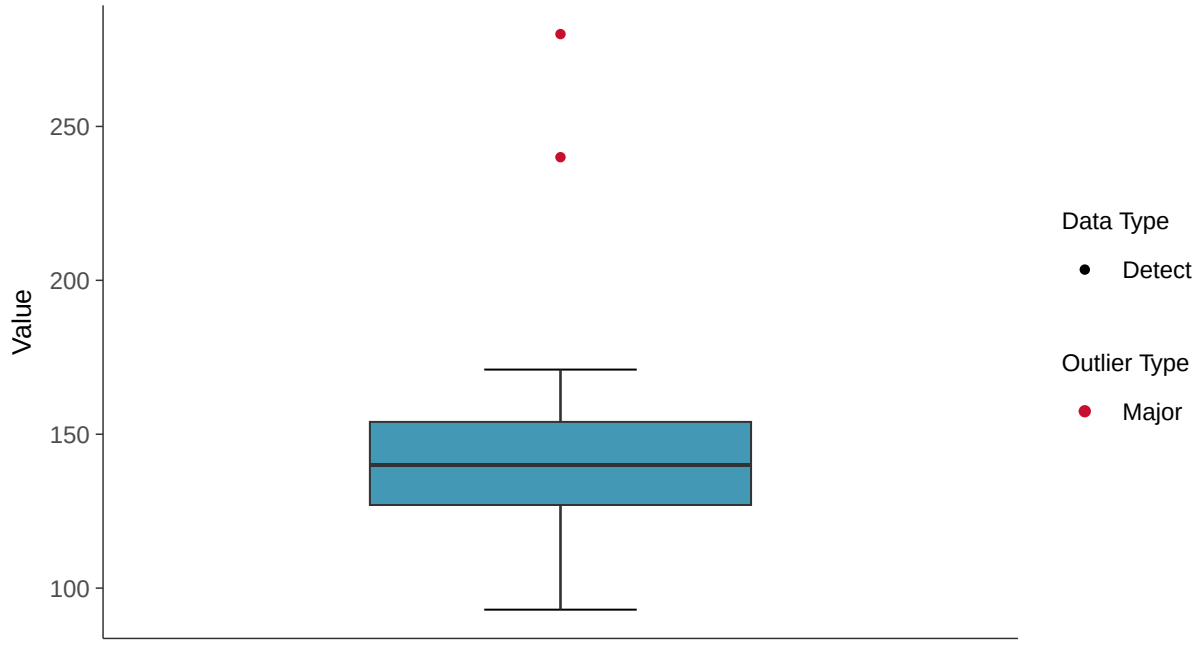

**Histogram**

Barium, MW-15018 (ug/L)



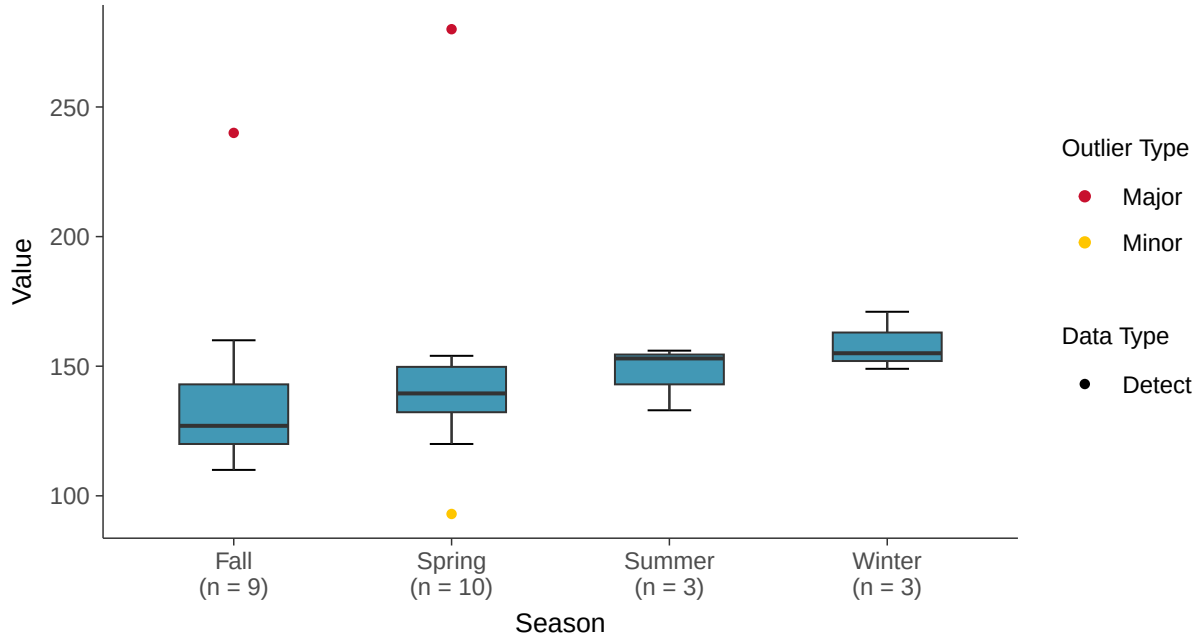
## Boxplot

Barium, MW-15018 (ug/L)



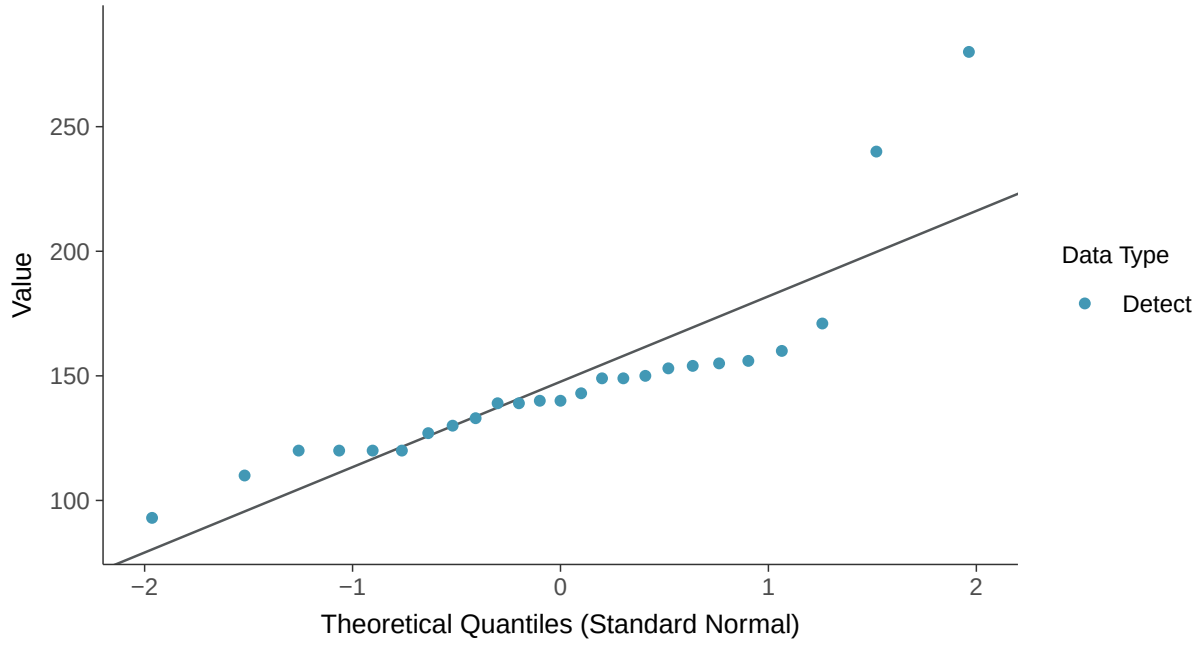

## Boxplot by Season

Barium, MW-15018 (ug/L)



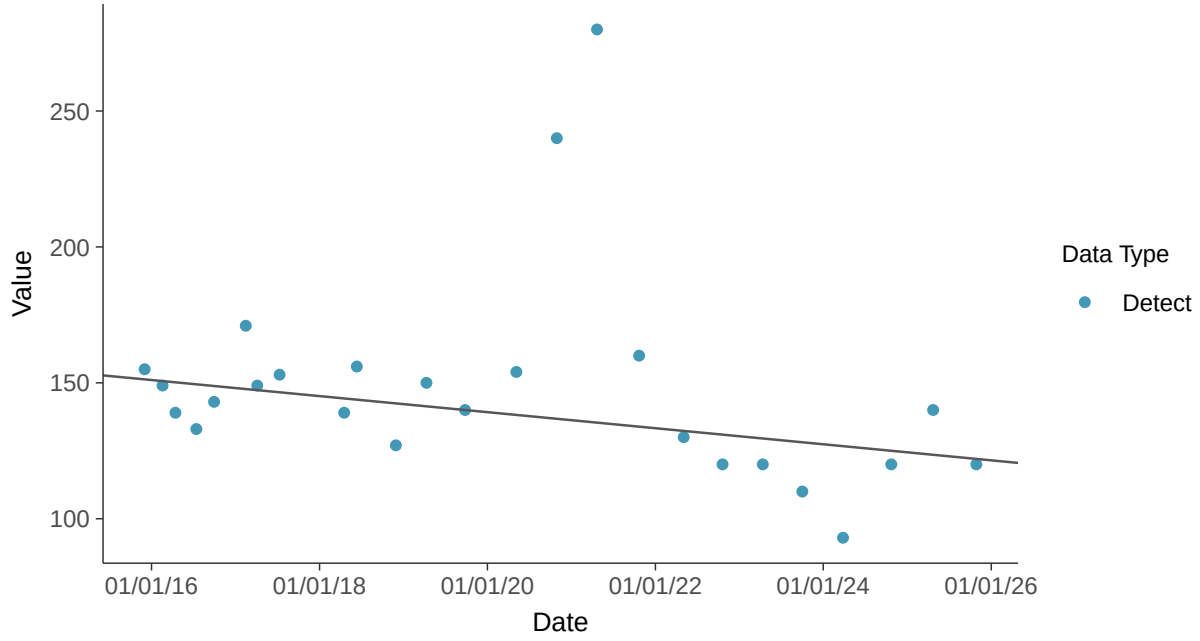
**Normal Q-Q plot**

Barium, MW-15018 (ug/L)



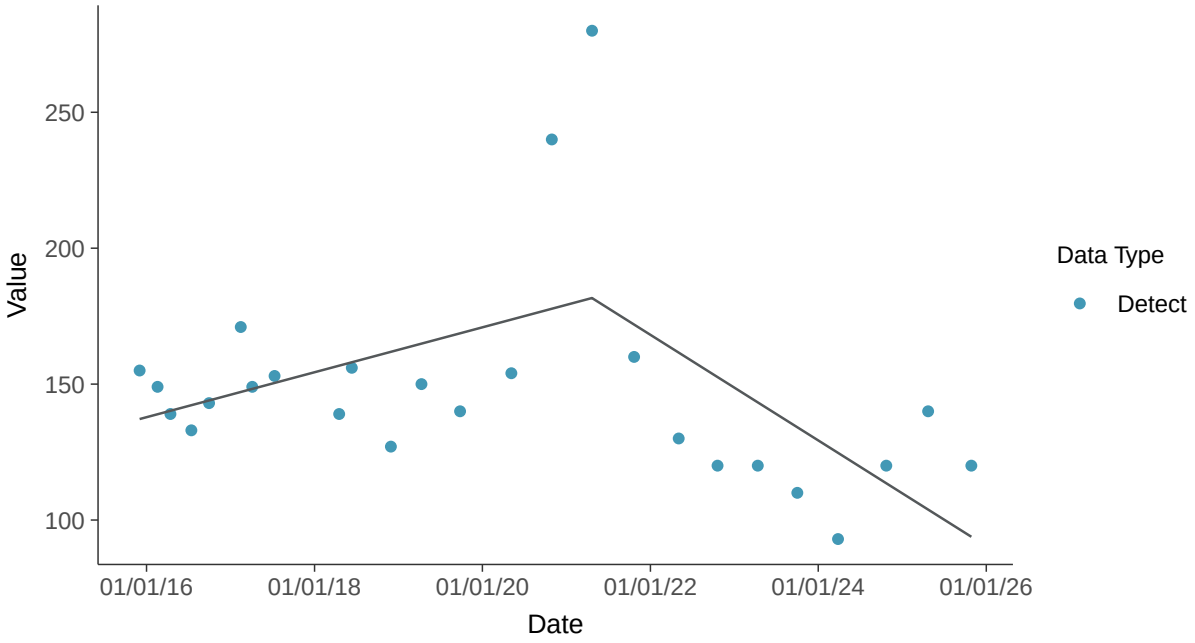

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15018 (ug/L)



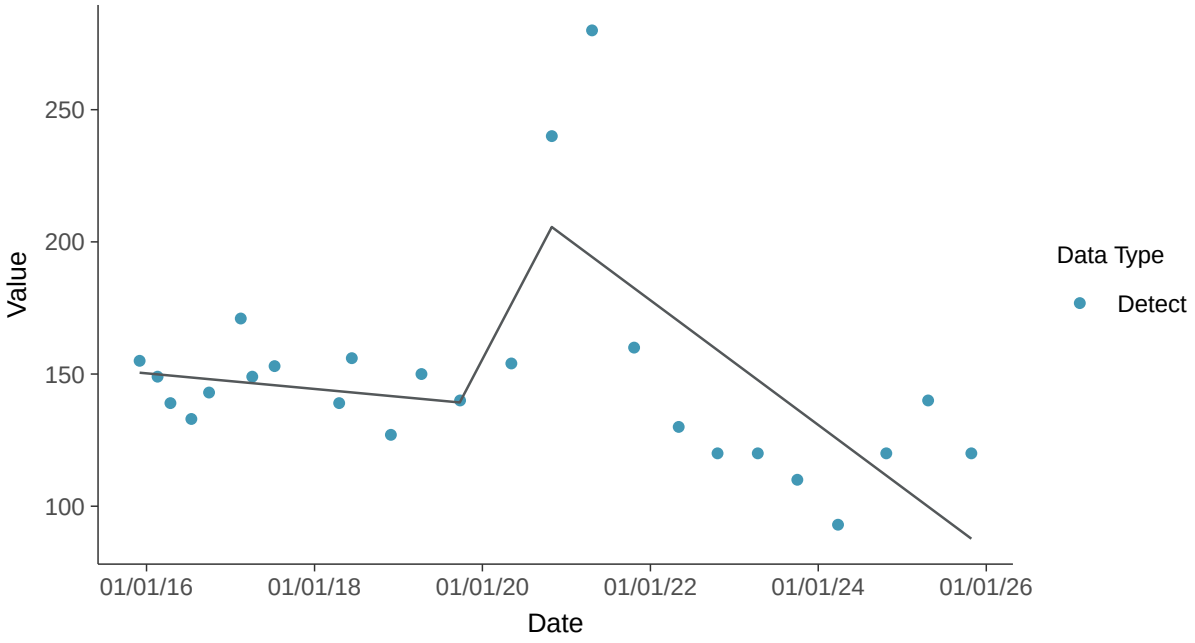
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15018 (ug/L)



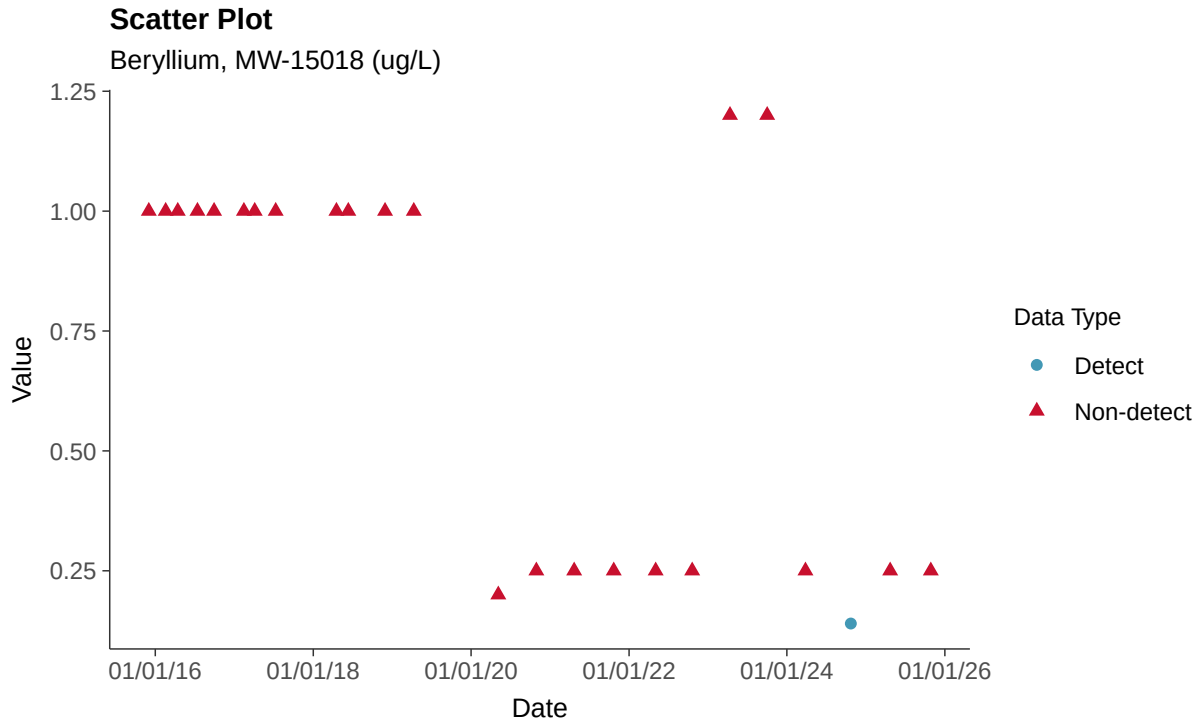

**Trend Regression: Piecewise Linear-Linear-Linear**

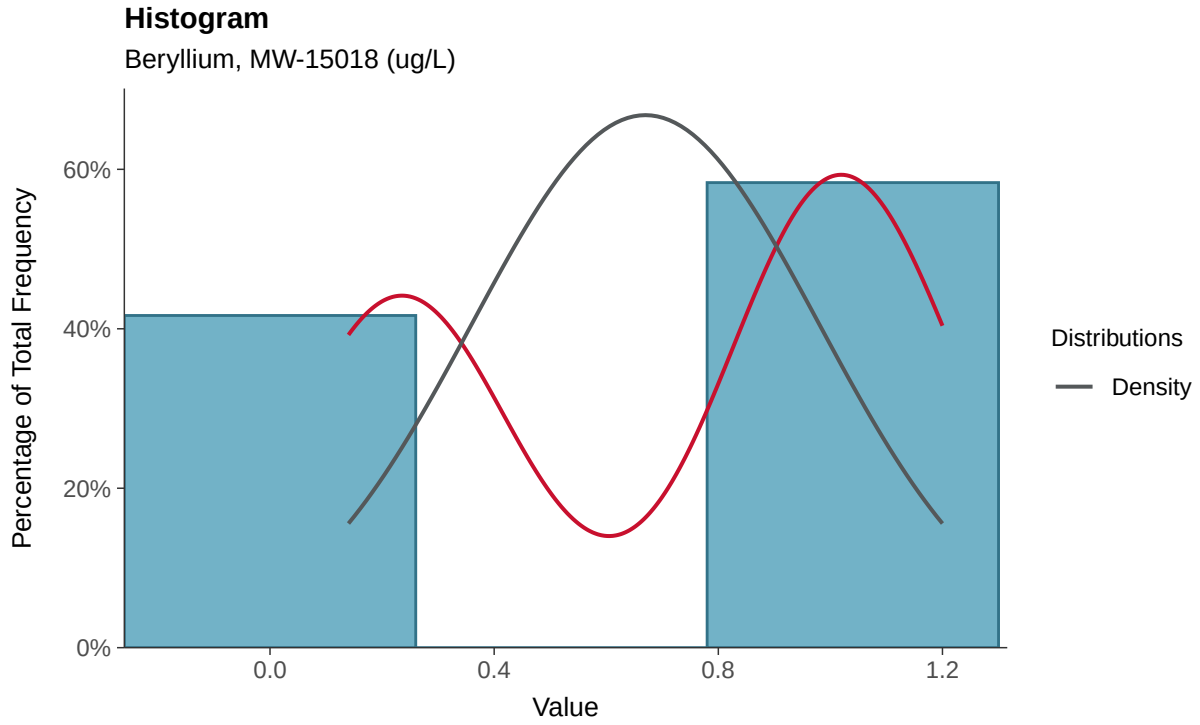
Barium, MW-15018 (ug/L)



## Appendix IV: Beryllium, MW-15018

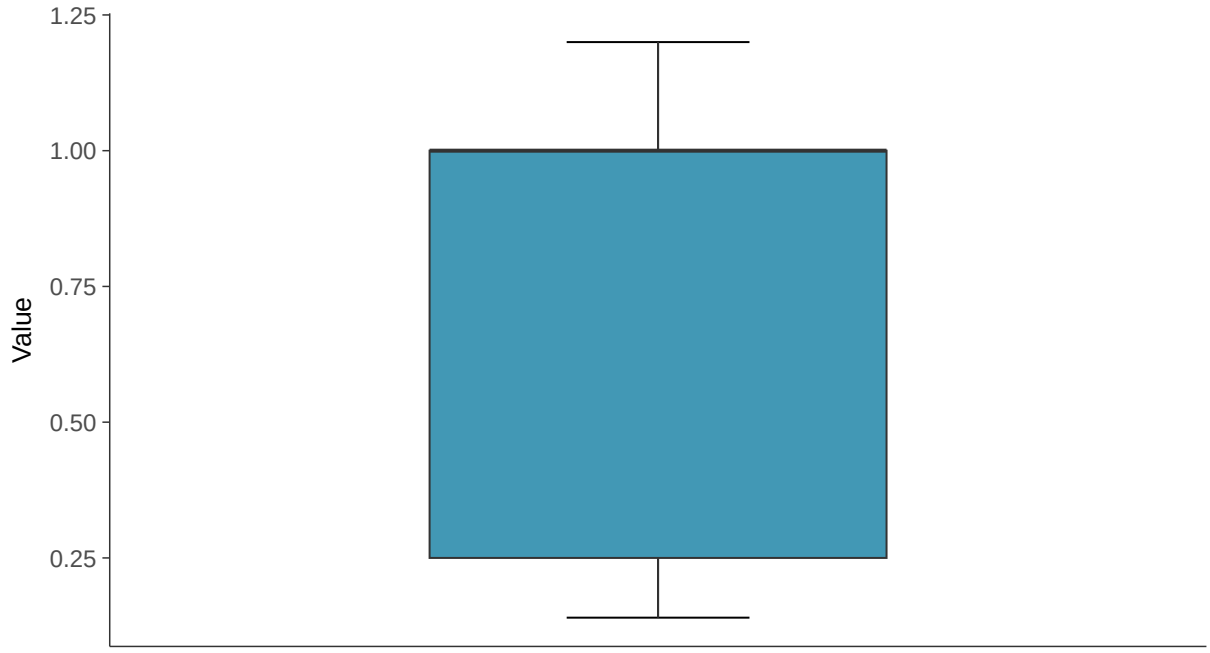
ID: 08_2_104



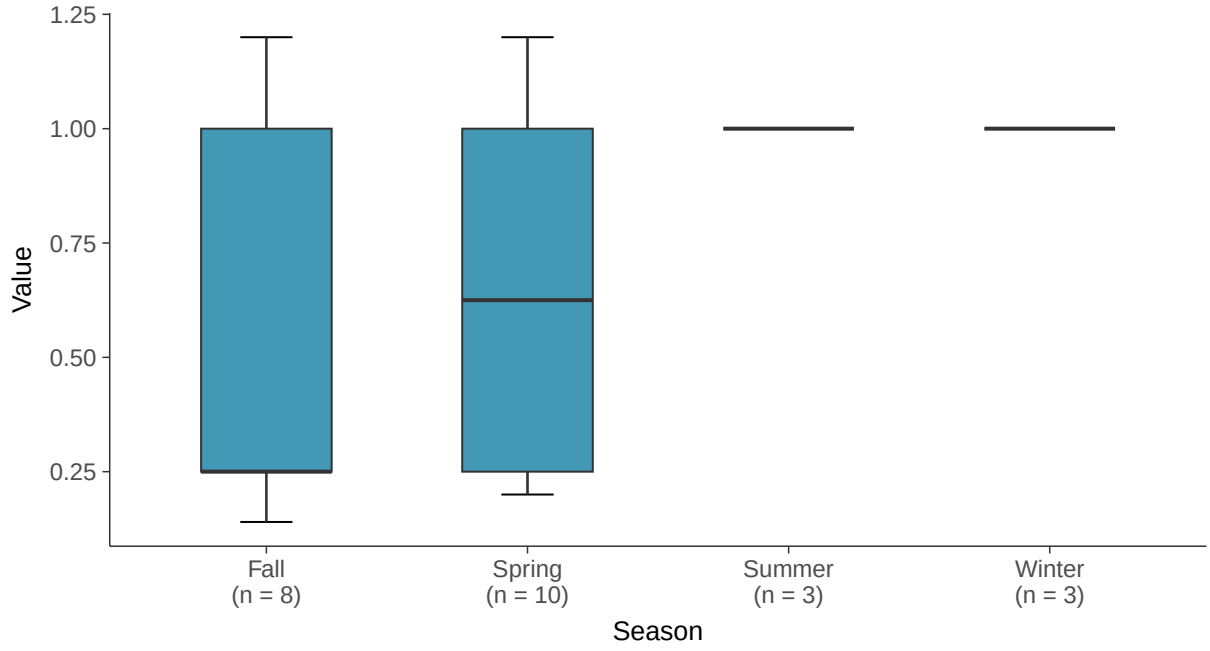
## Boxplot

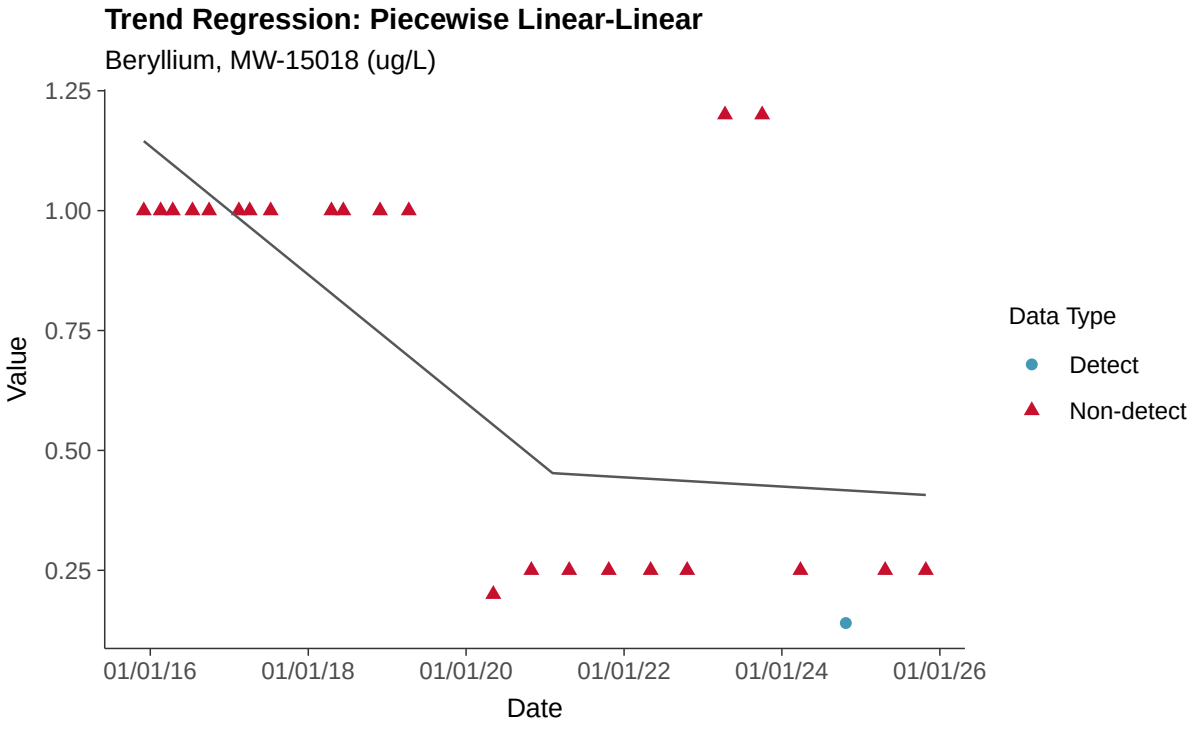
Beryllium, MW-15018 (ug/L)




## Boxplot by Season

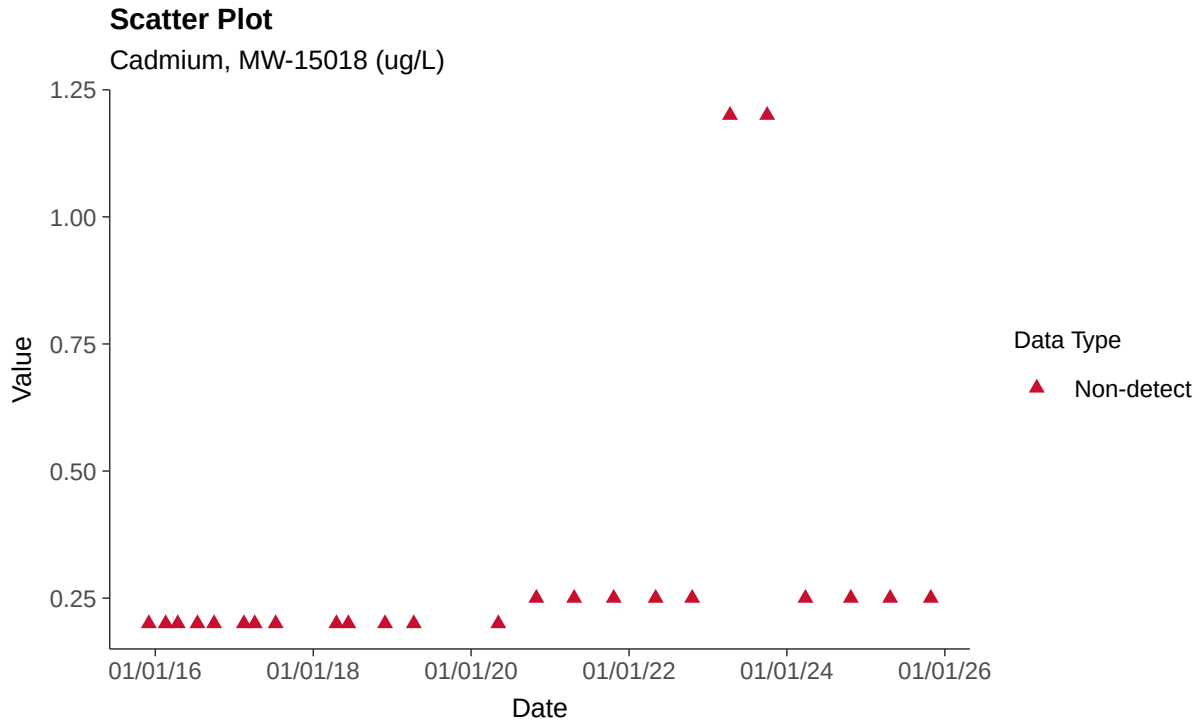
Beryllium, MW-15018 (ug/L)

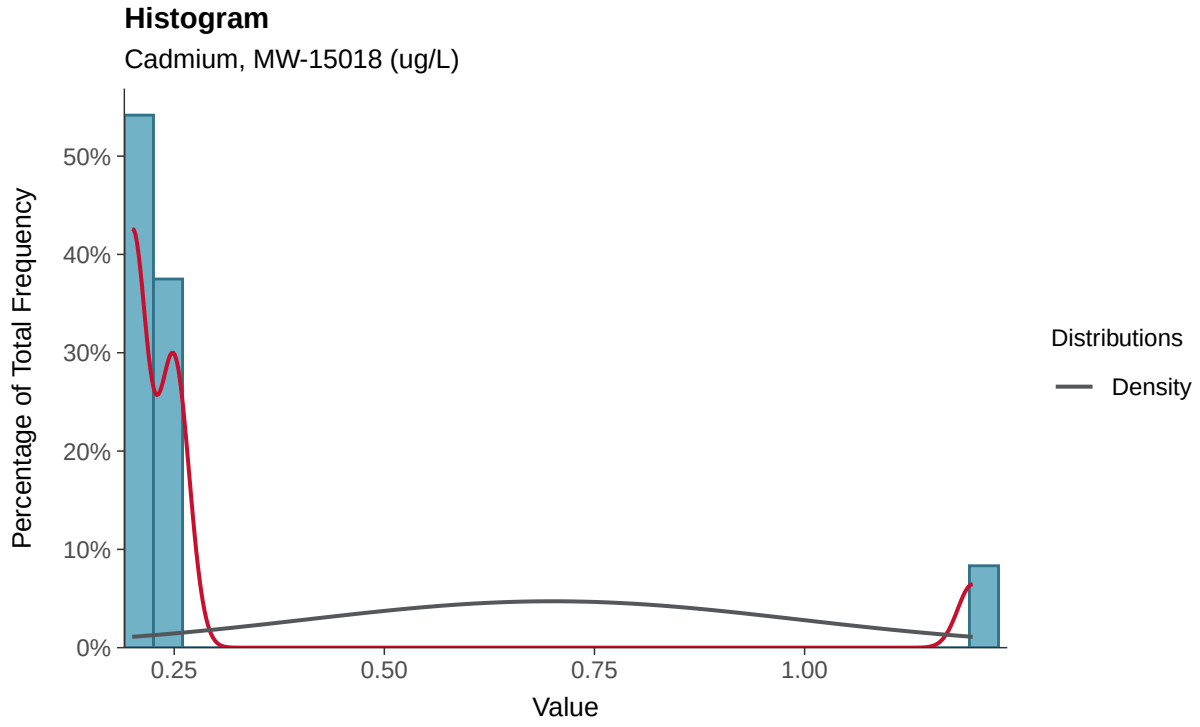



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15018 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15018

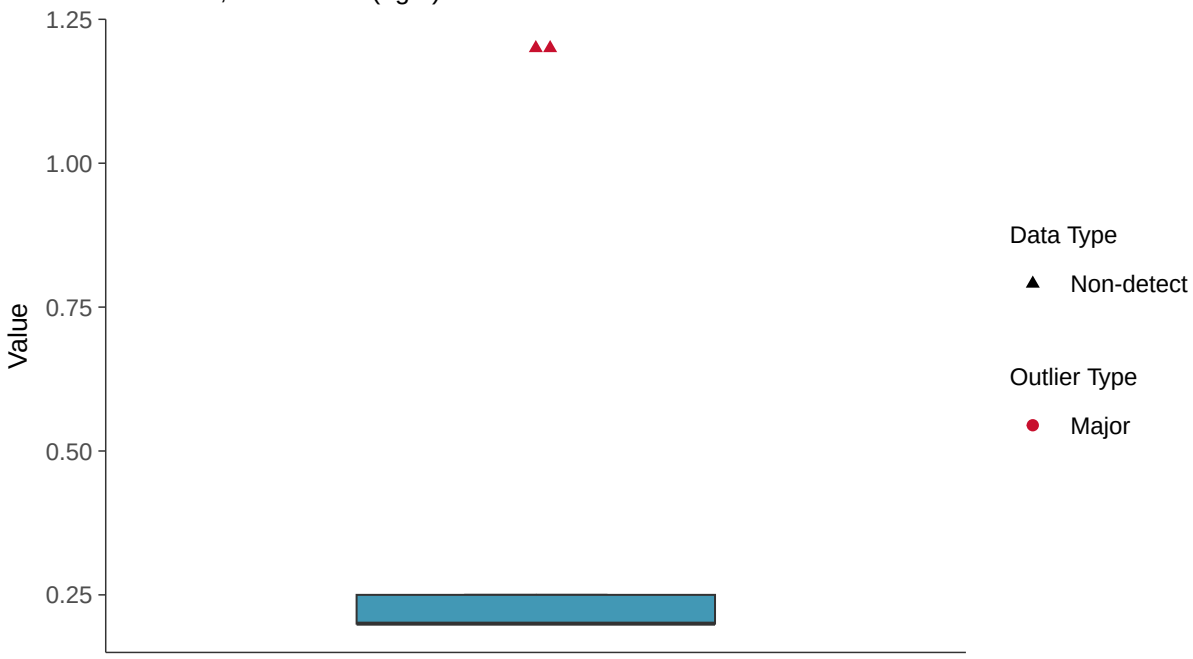
ID: 08_2_106



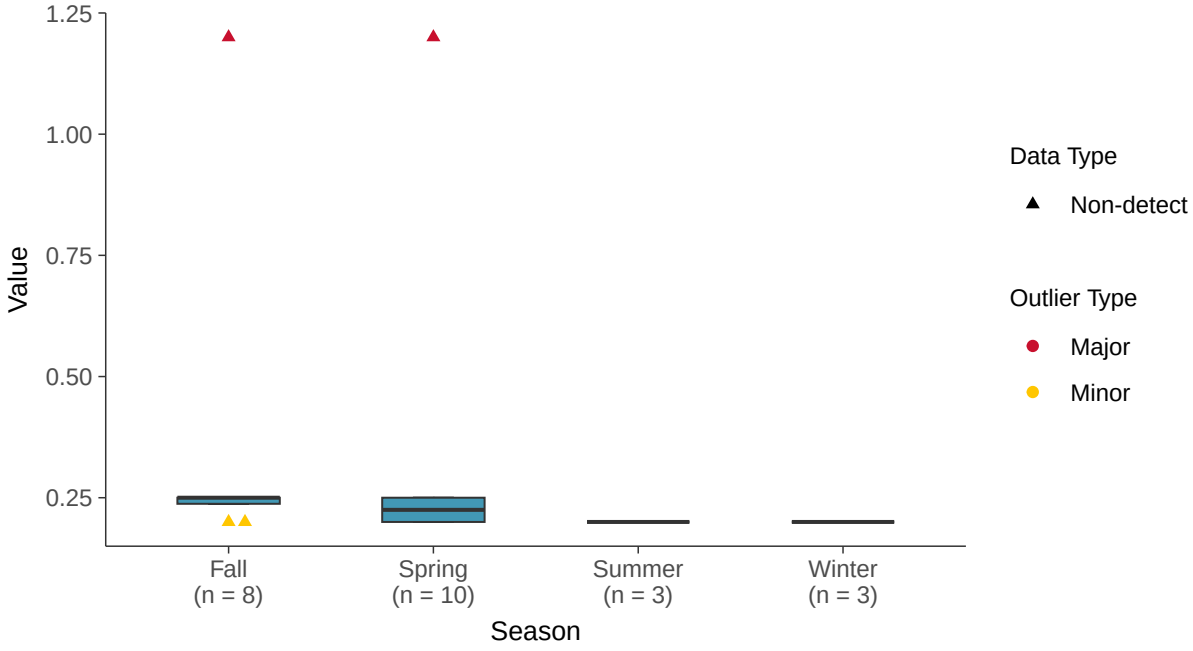
## Boxplot

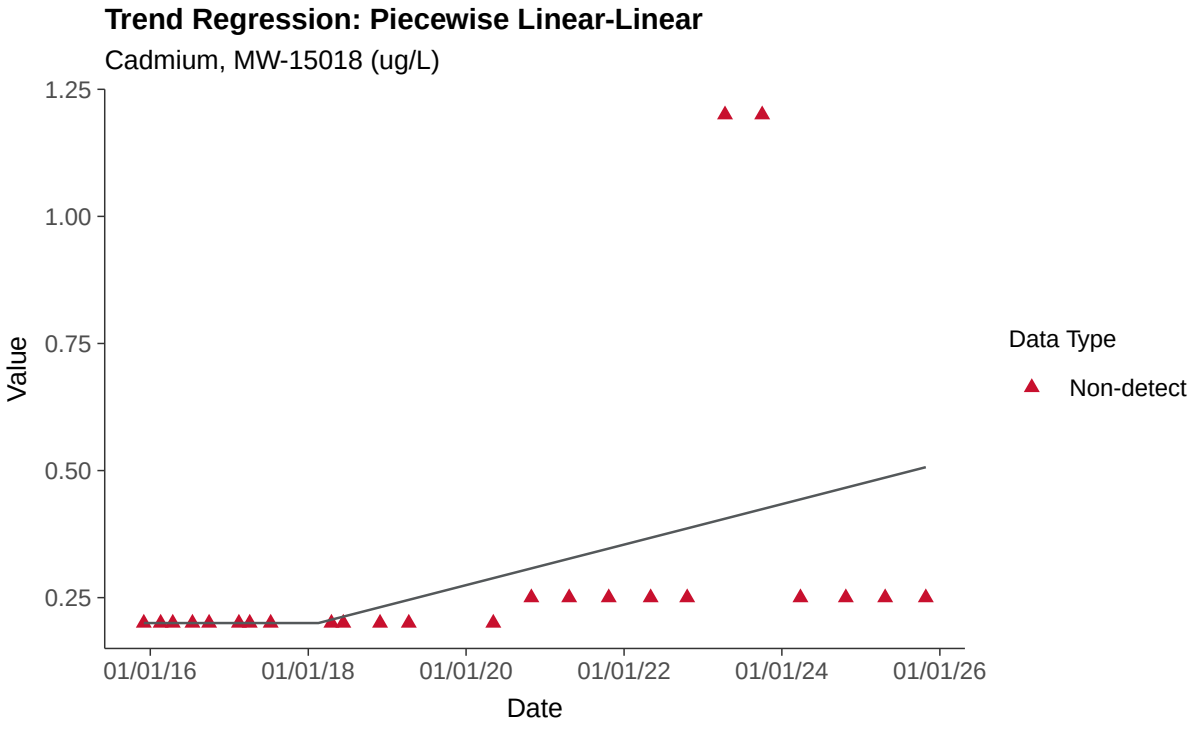
Cadmium, MW-15018 (ug/L)




## Boxplot by Season

Cadmium, MW-15018 (ug/L)



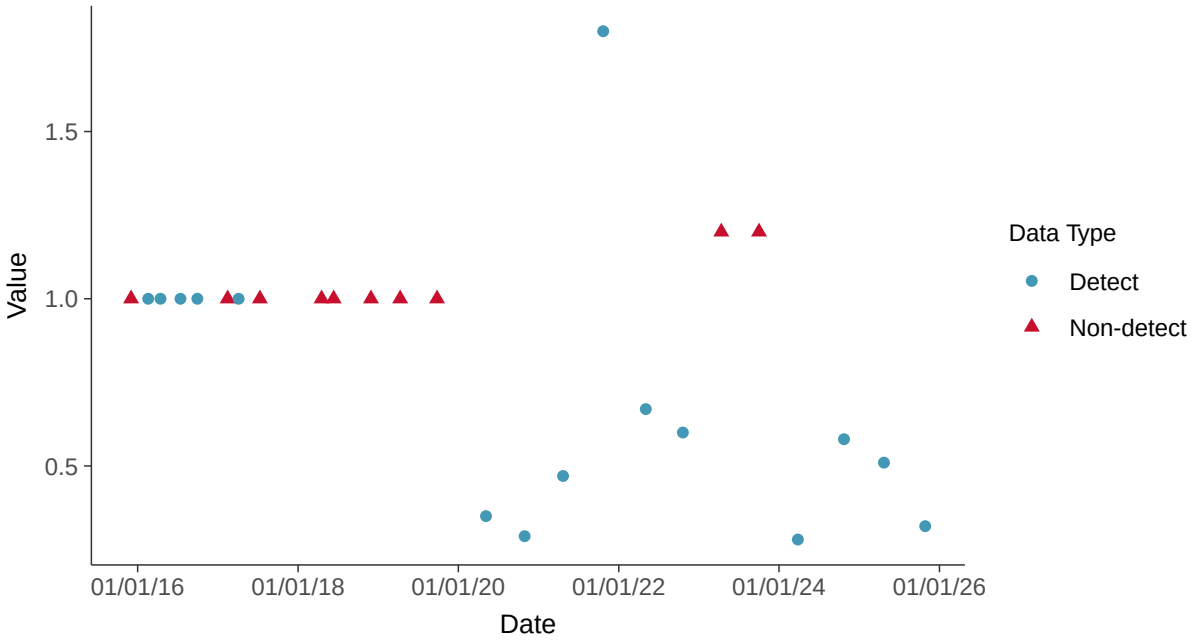

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15018 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15018

ID: 08_2_109

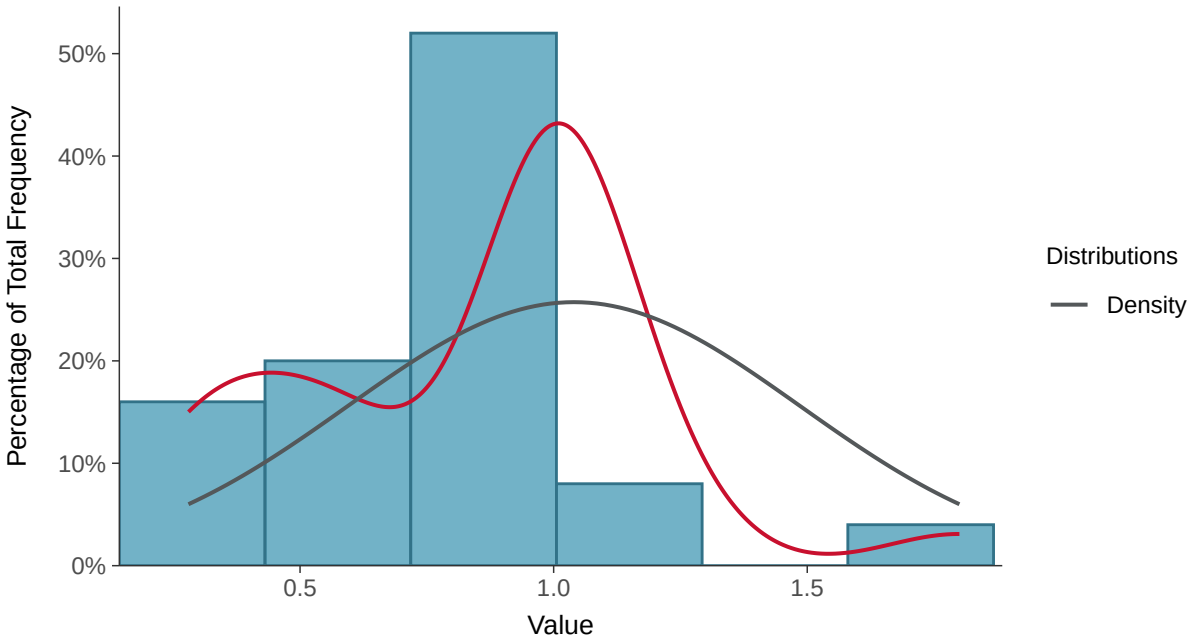
**Scatter Plot**

Chromium, MW-15018 (ug/L)



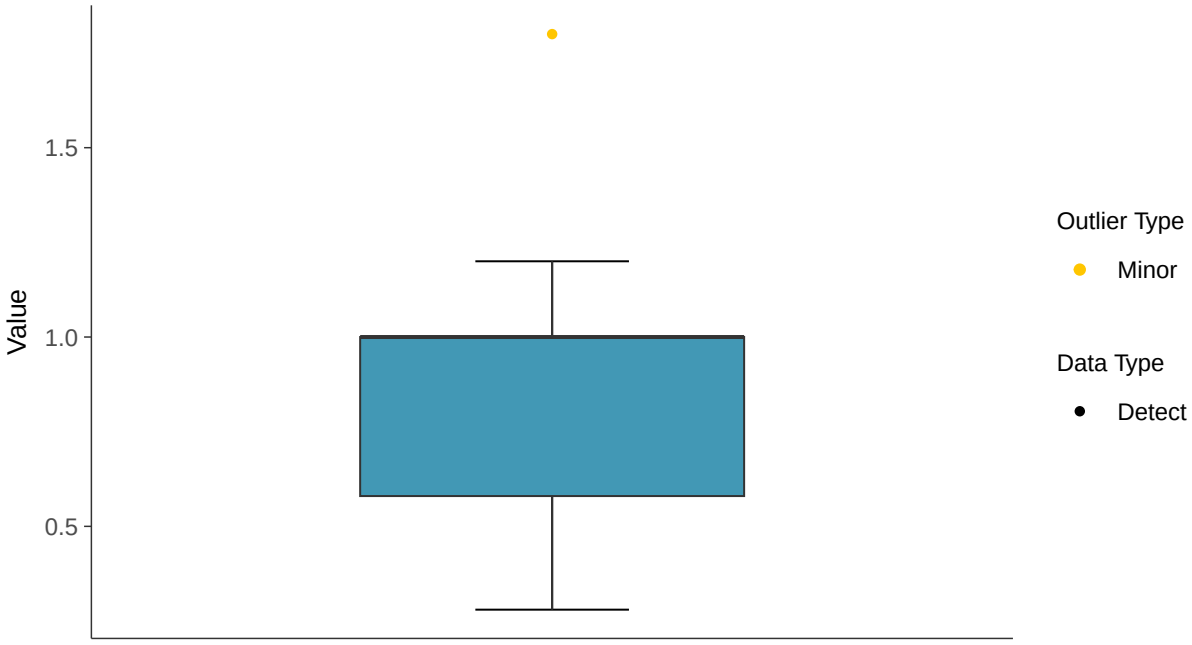

**Histogram**

Chromium, MW-15018 (ug/L)



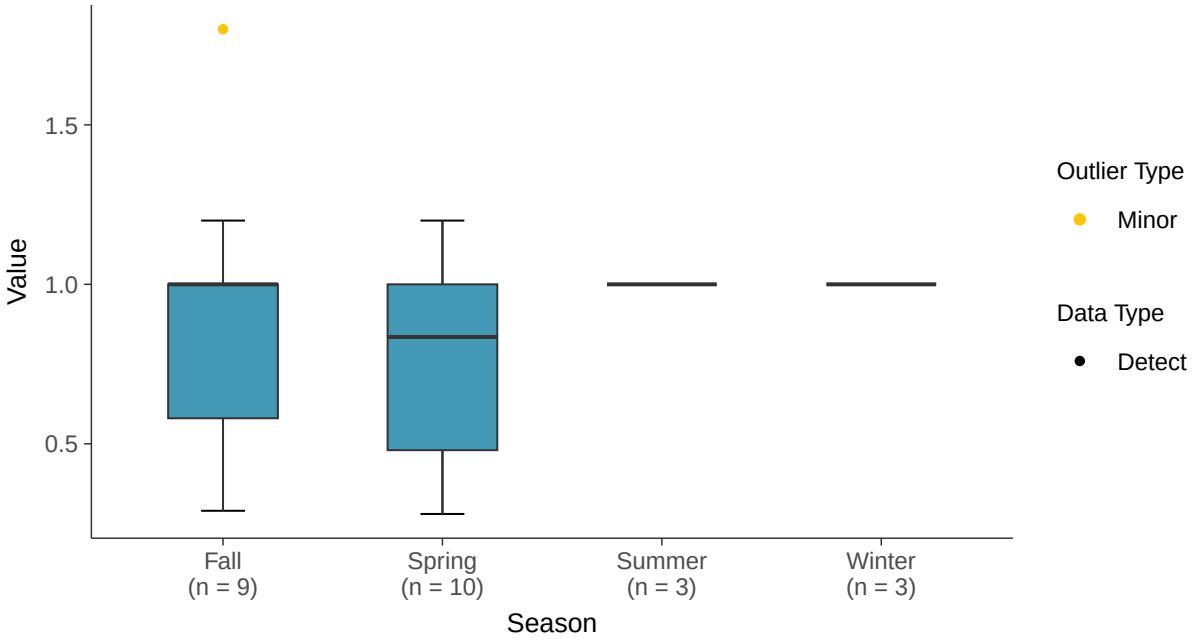
## Boxplot

Chromium, MW-15018 (ug/L)



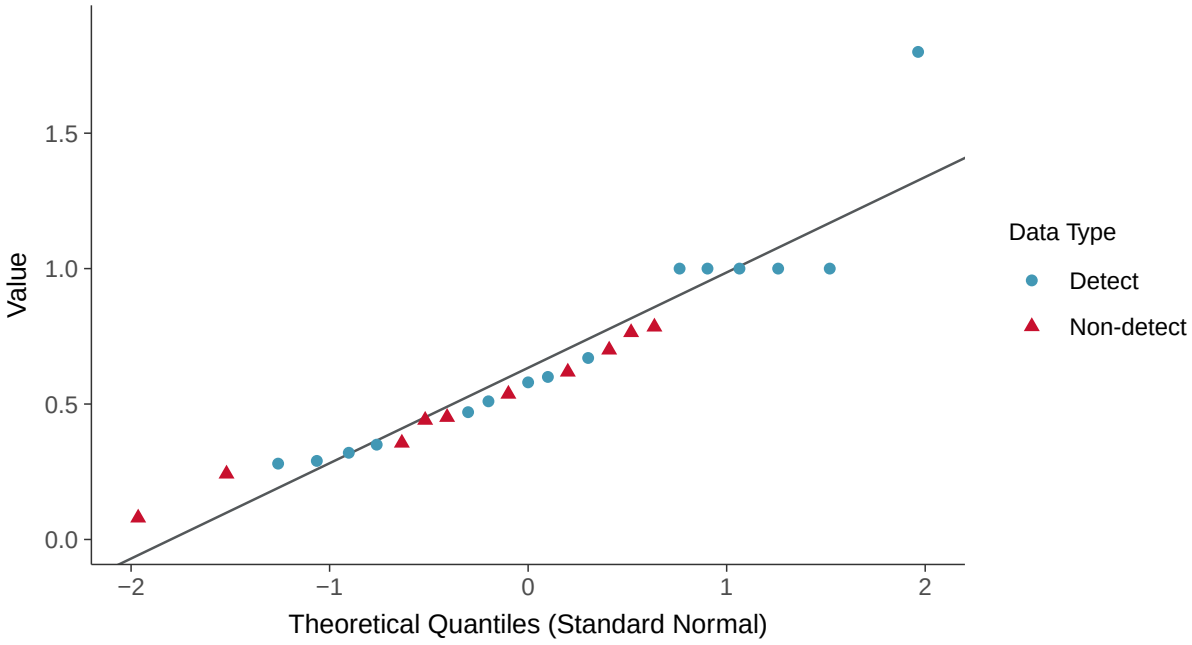

## Boxplot by Season

Chromium, MW-15018 (ug/L)



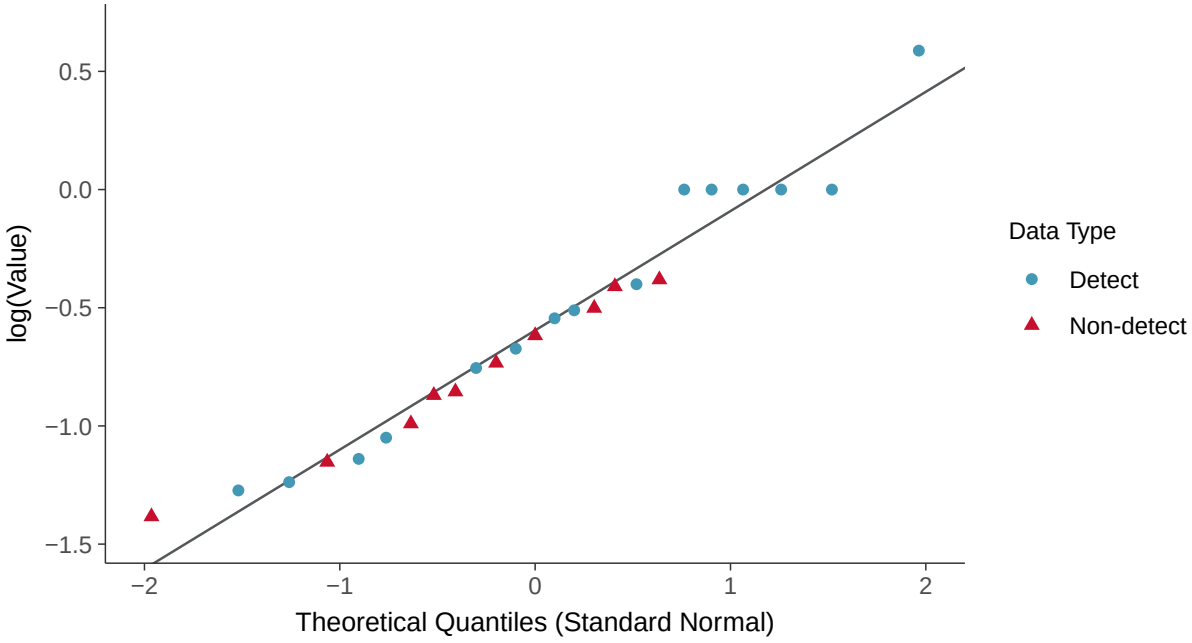
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15018 (ug/L)



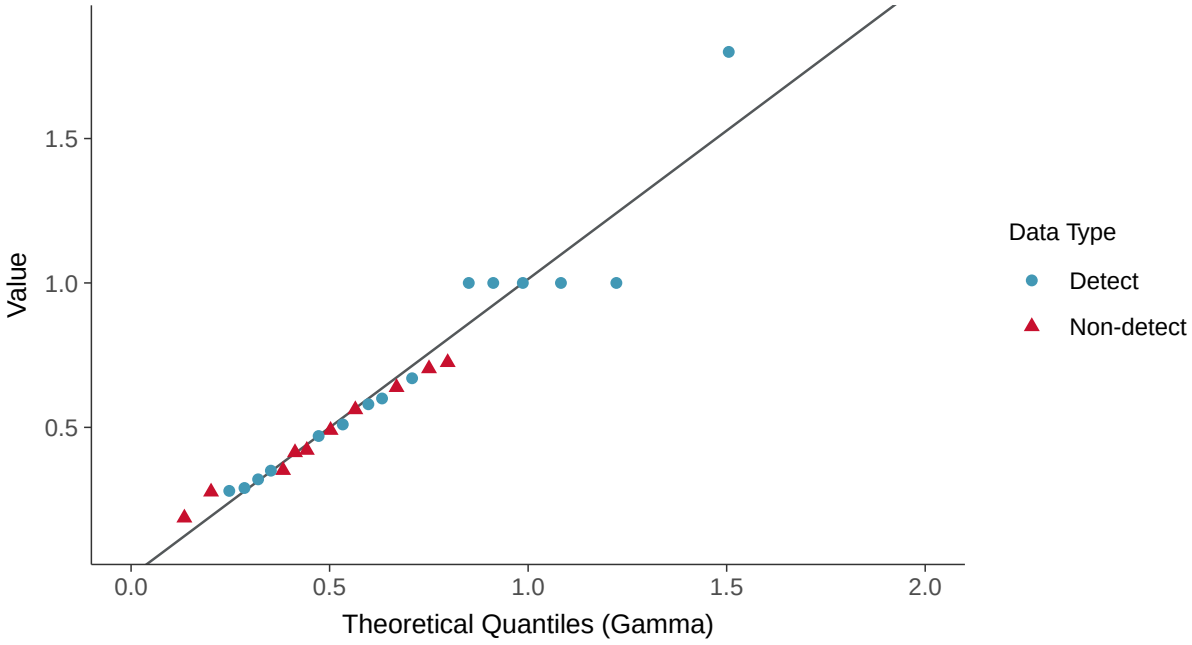

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15018 (ug/L)



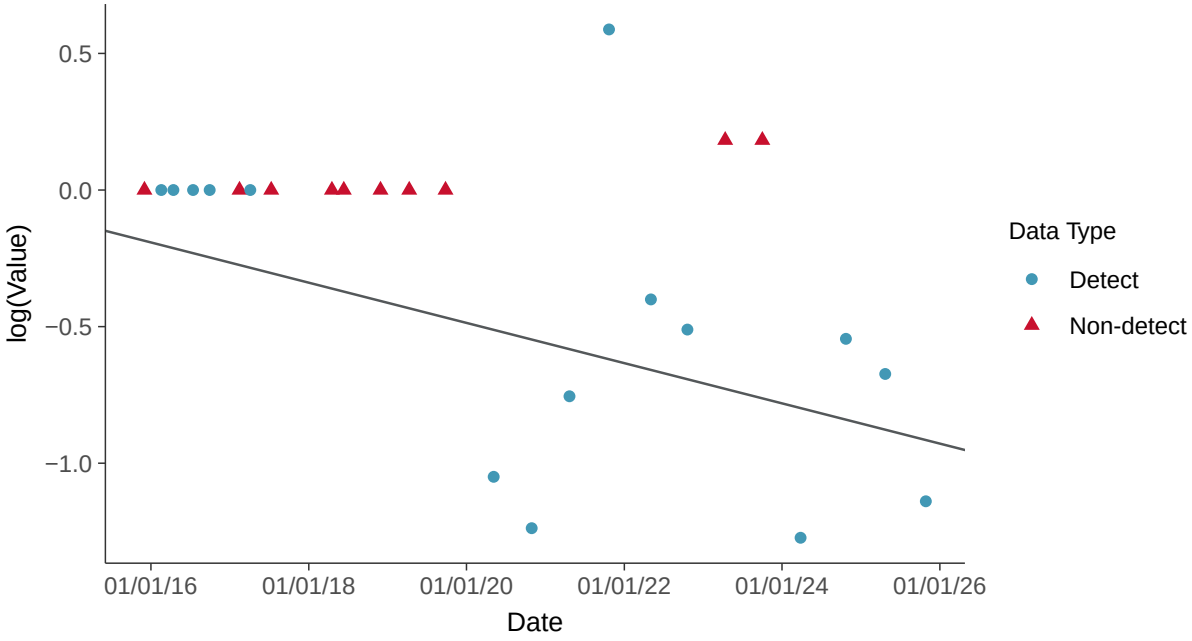
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15018 (ug/L)



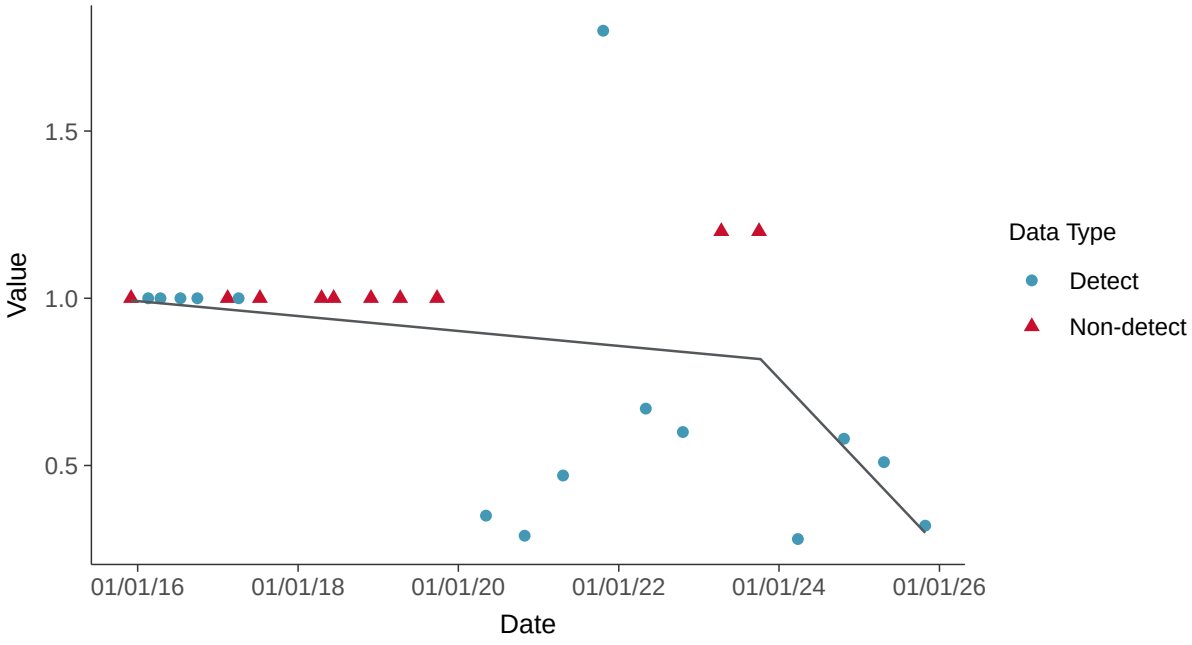

**Trend Regression: Lognormal MLE**

Chromium, MW-15018 (ug/L)



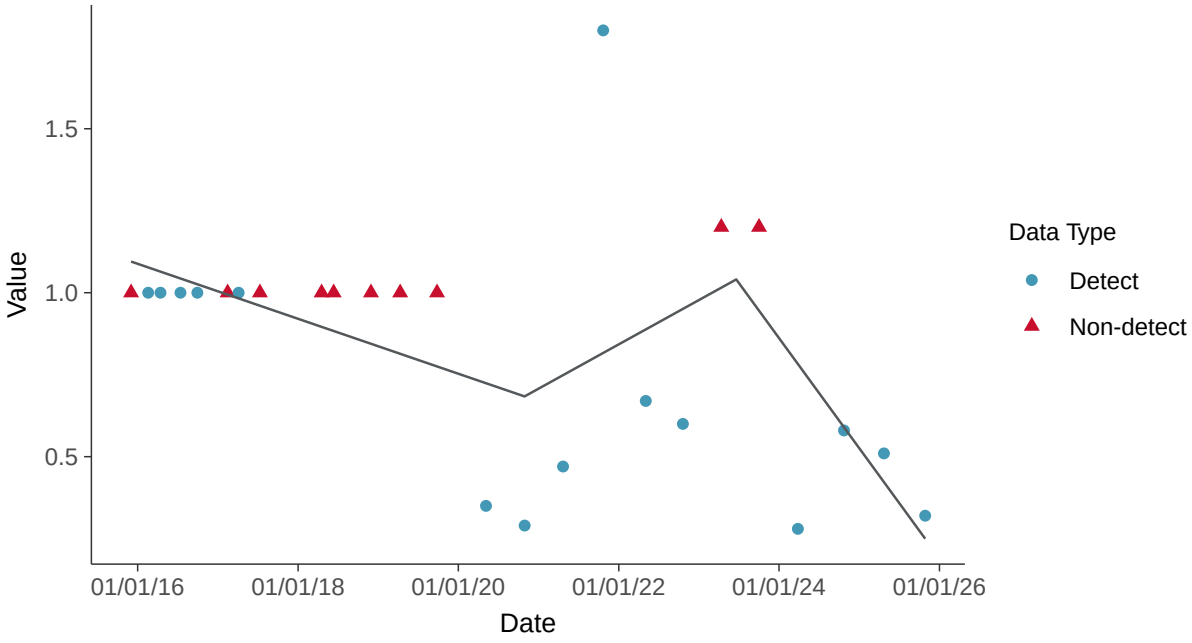
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15018 (ug/L)



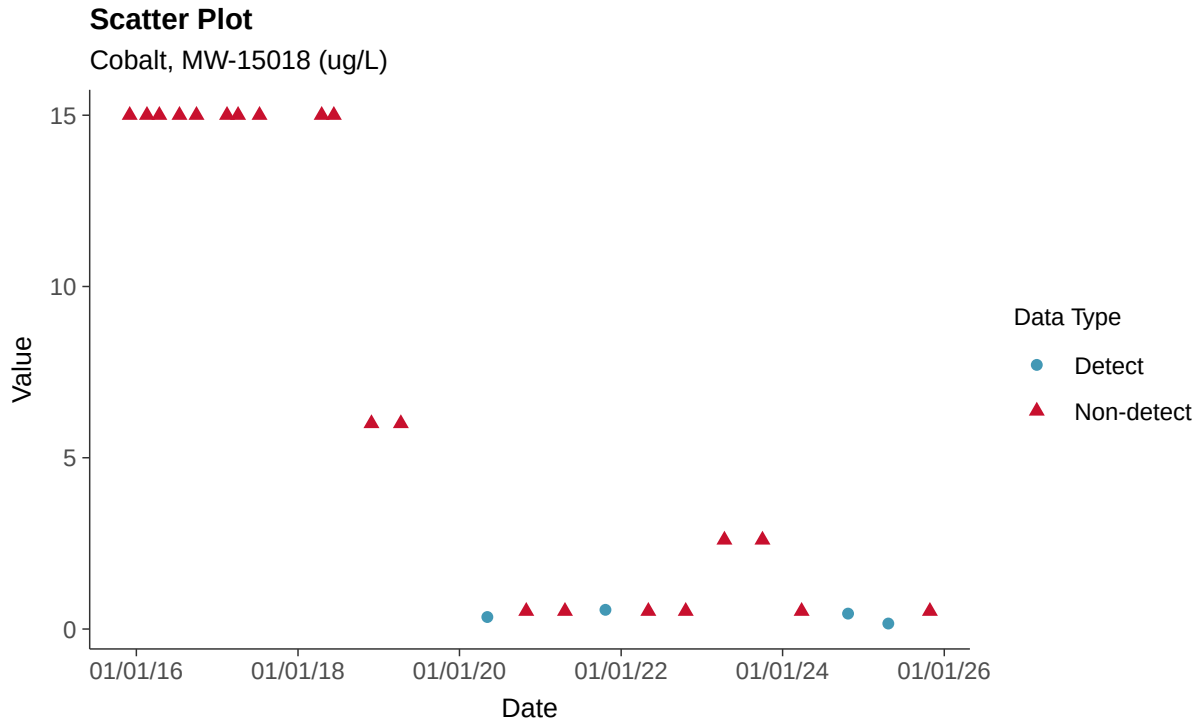

**Trend Regression: Piecewise Linear-Linear-Linear**

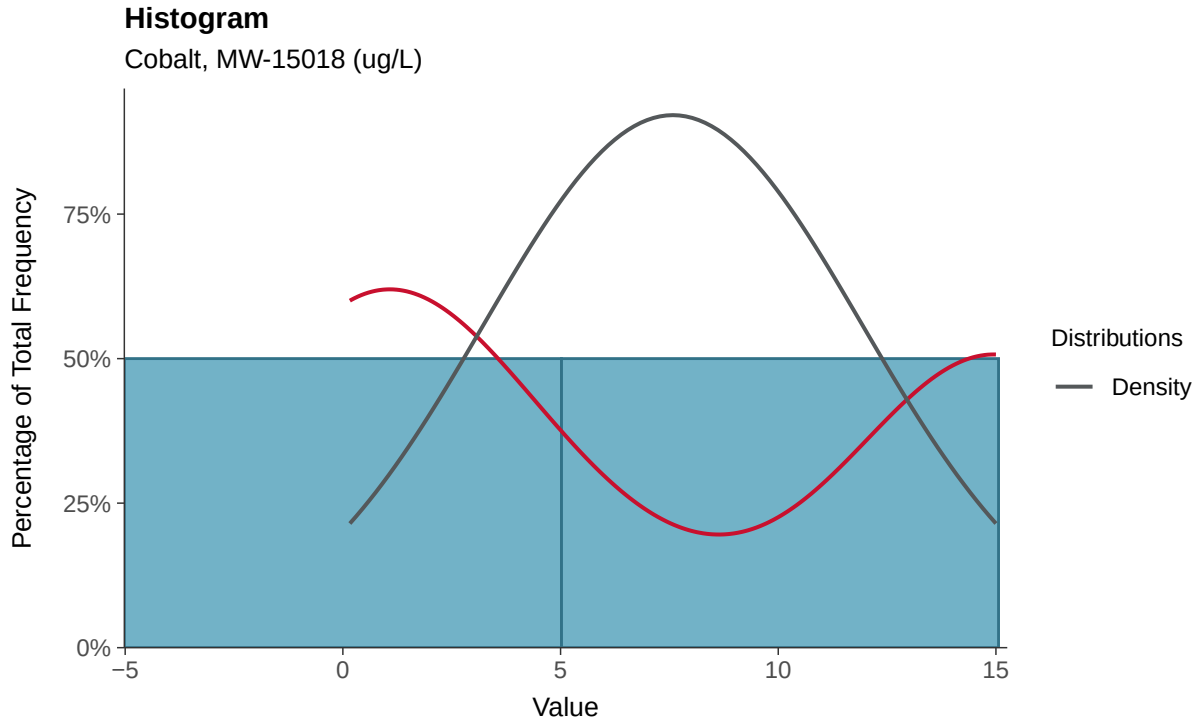
Chromium, MW-15018 (ug/L)



## Appendix IV: Cobalt, MW-15018

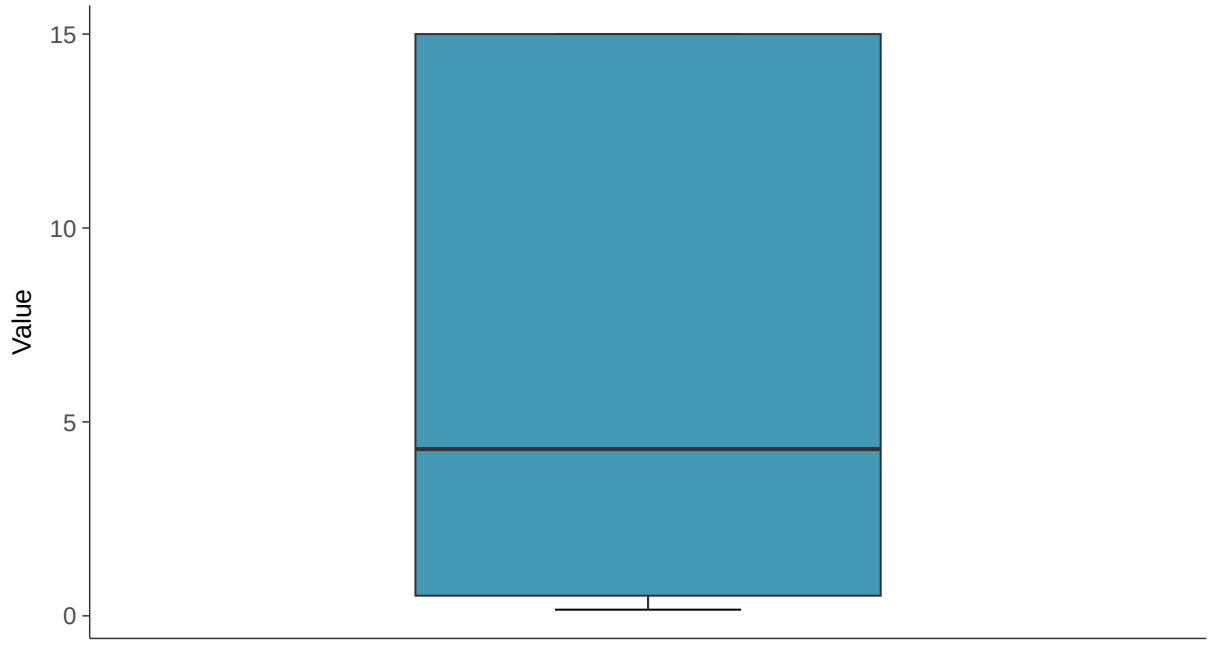
ID: 08_2_110



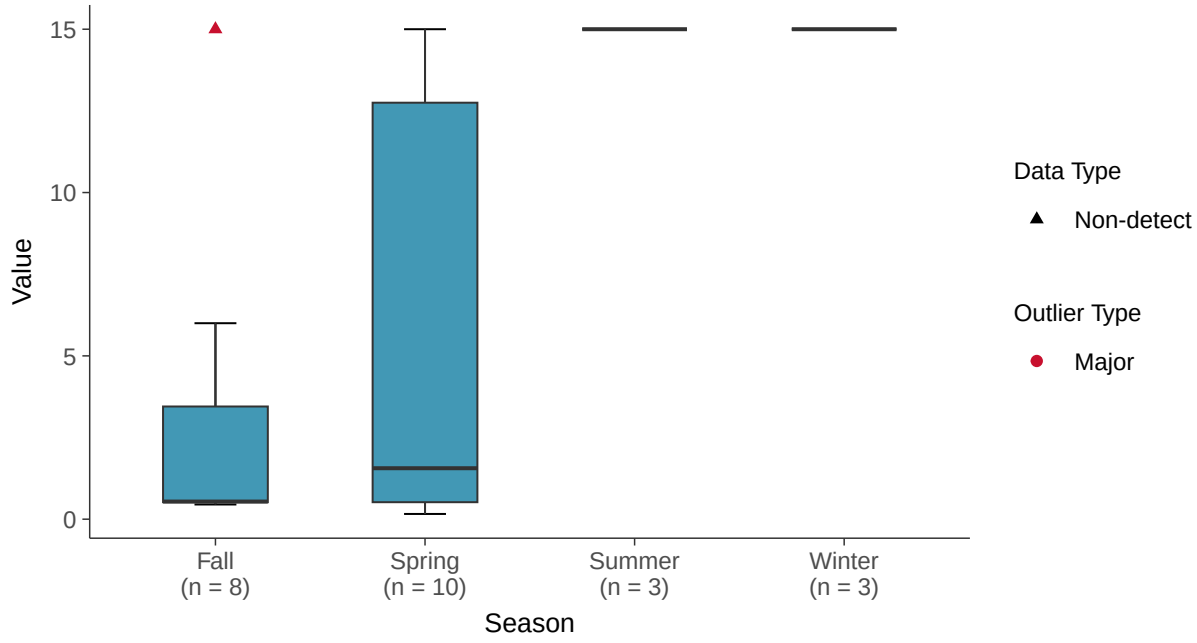
**Boxplot**

Cobalt, MW-15018 (ug/L)



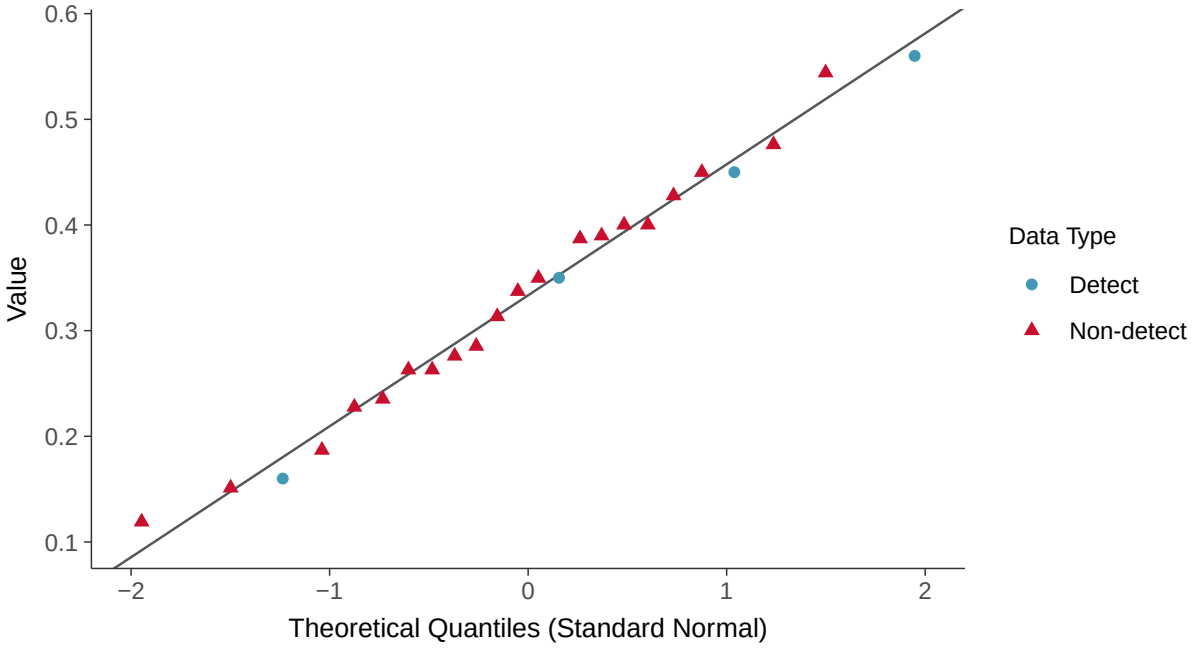

**Boxplot by Season**

Cobalt, MW-15018 (ug/L)



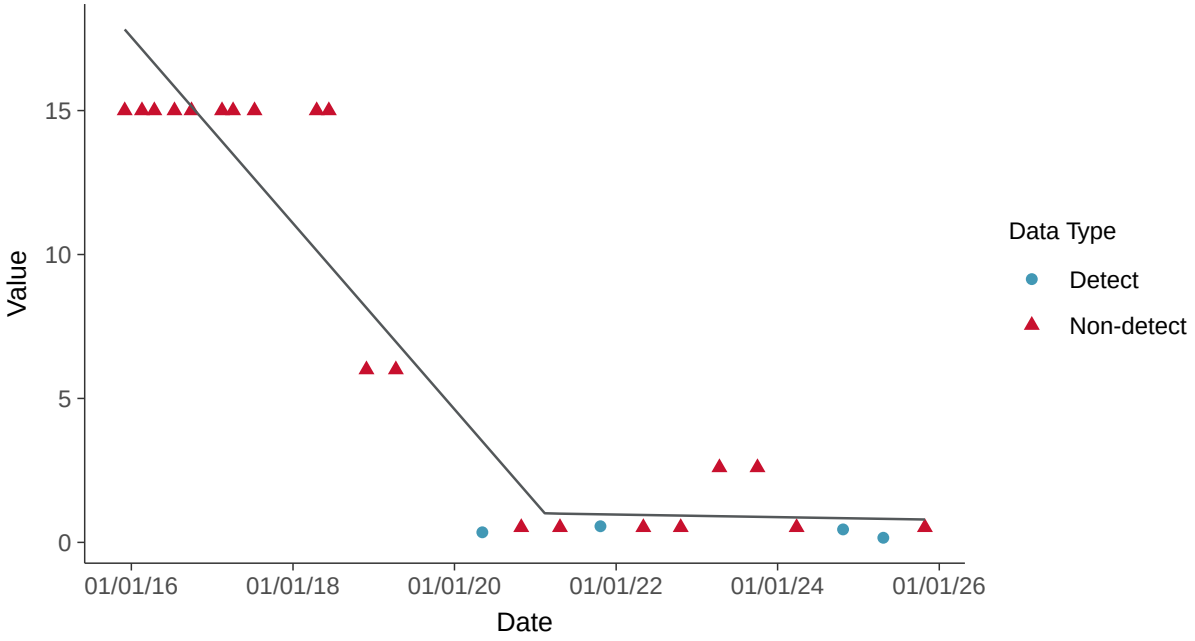
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15018 (ug/L)



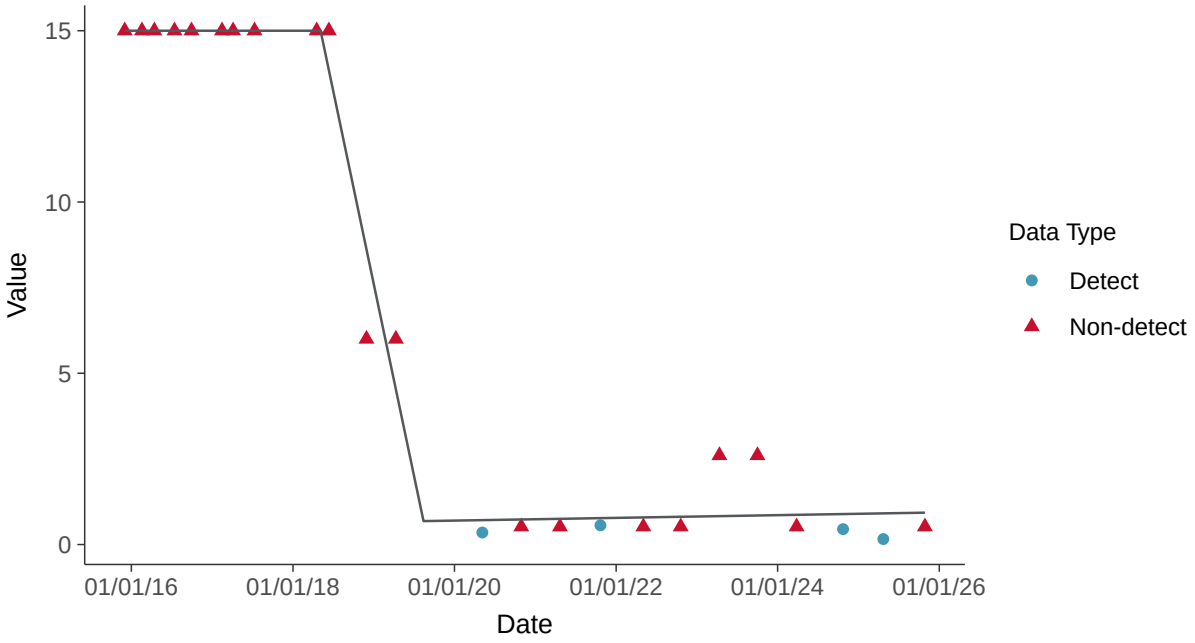

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15018 (ug/L)



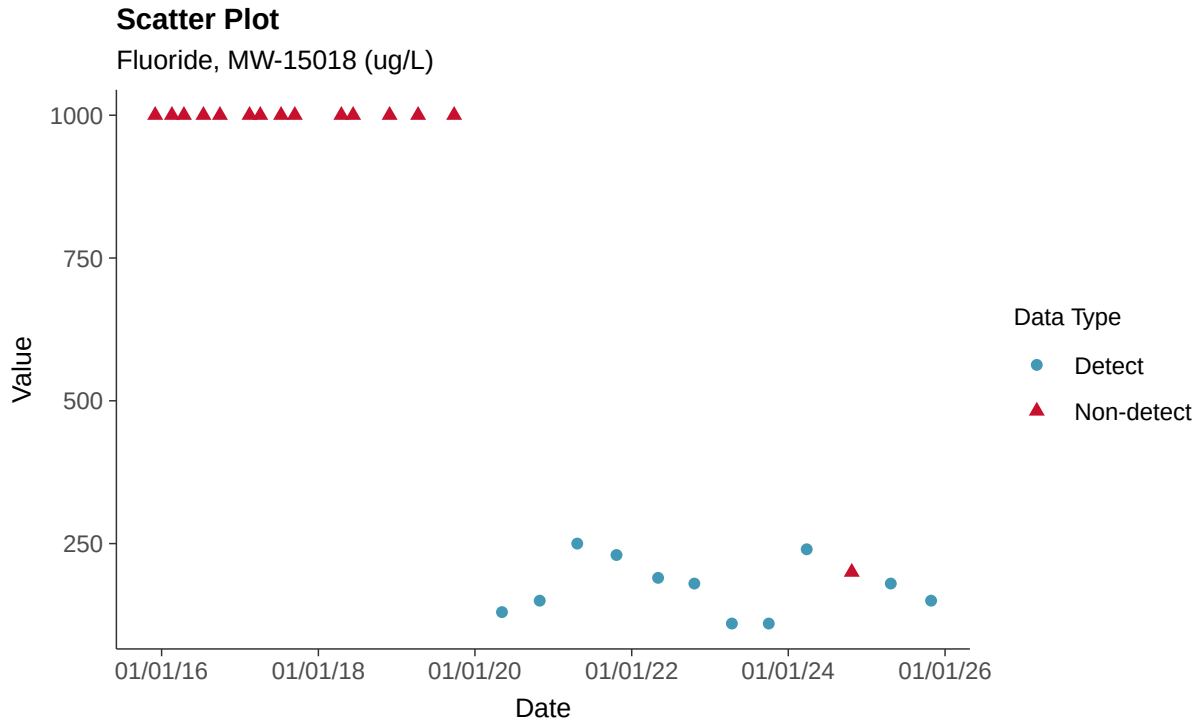
**Trend Regression: Piecewise Linear-Linear-Linear**

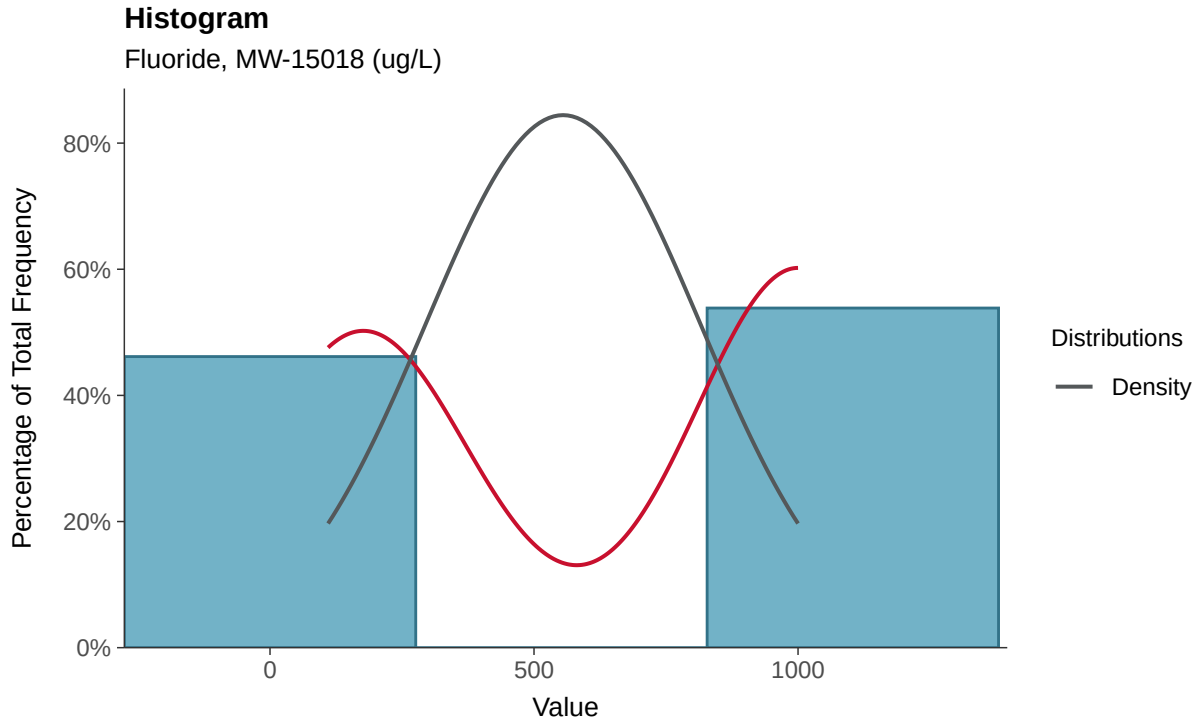
Cobalt, MW-15018 (ug/L)



## Appendix IV: Fluoride, MW-15018

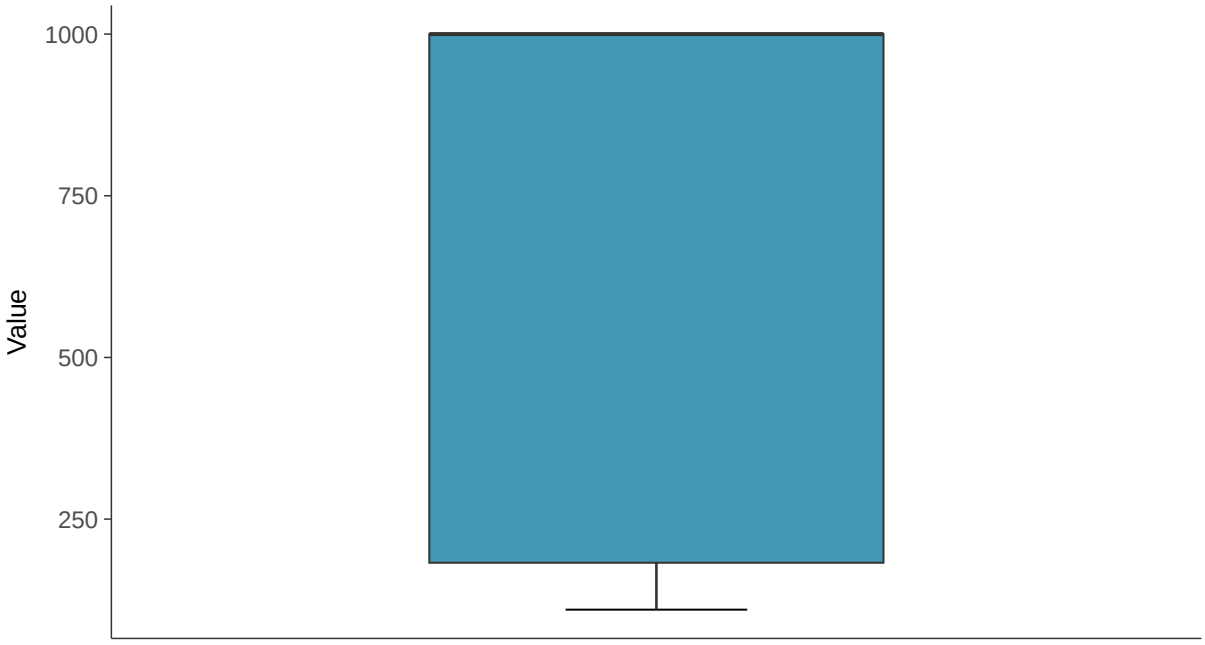
ID: 08_2_114



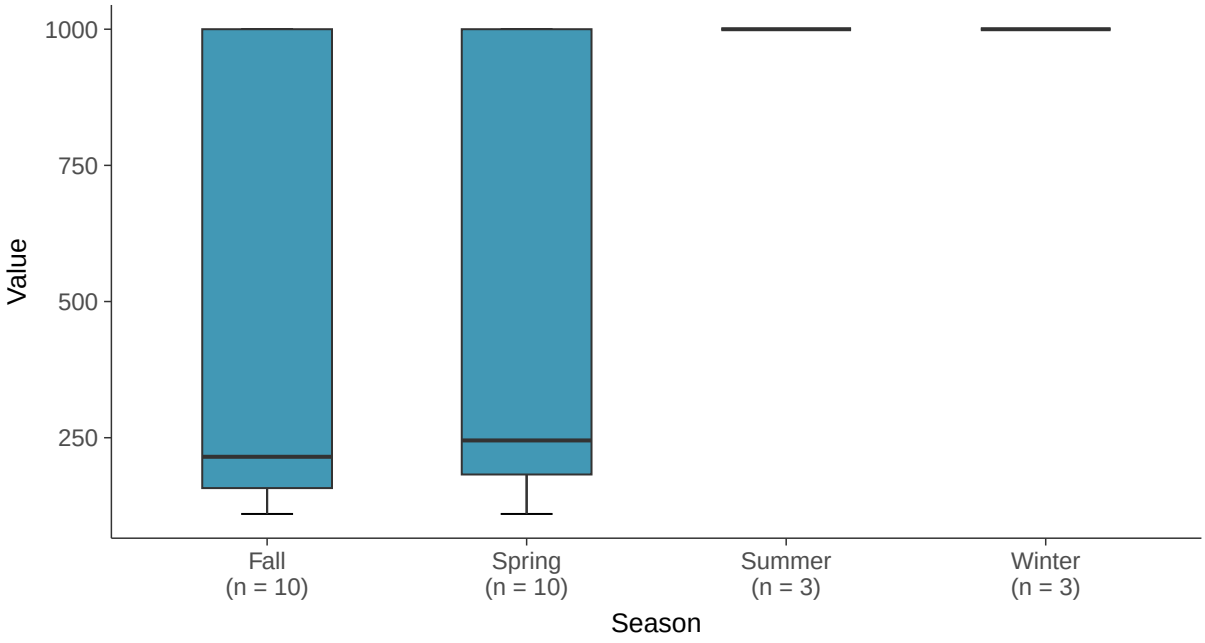
**Boxplot**

Fluoride, MW-15018 (ug/L)



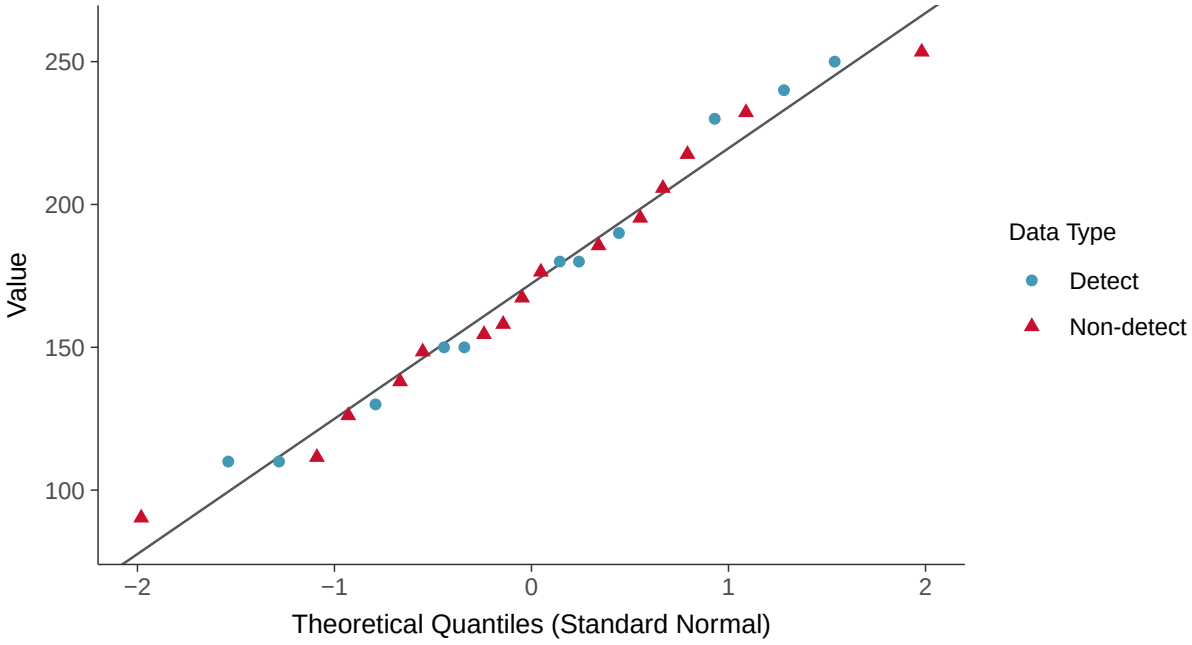

**Boxplot by Season**

Fluoride, MW-15018 (ug/L)



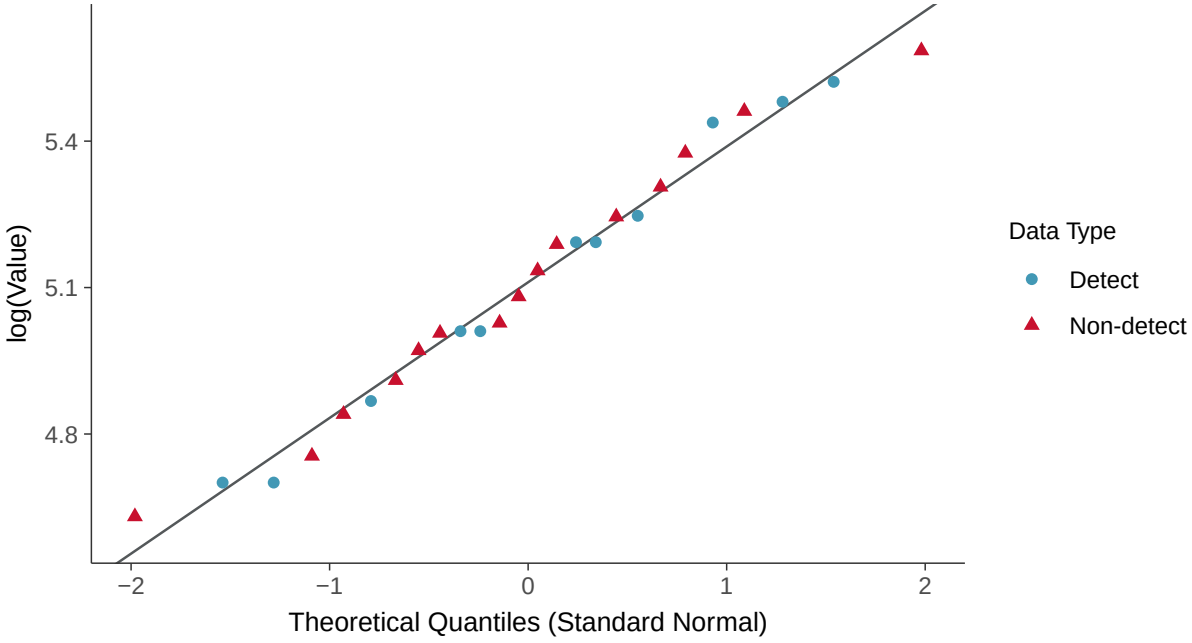
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15018 (ug/L)



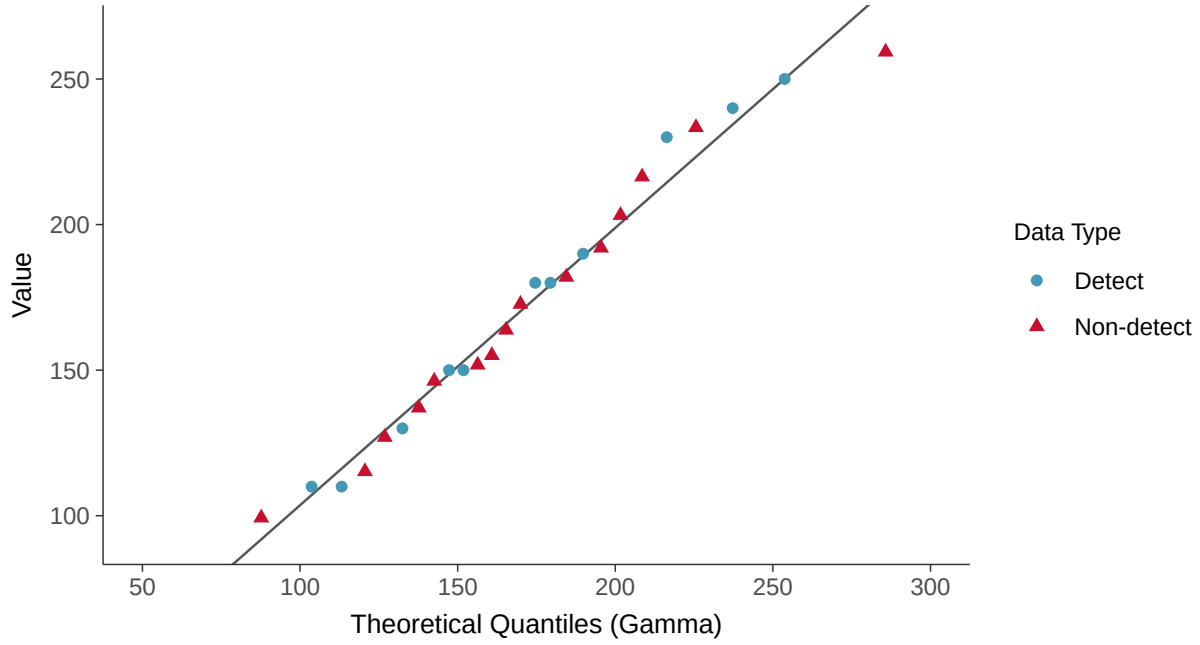

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15018 (ug/L)



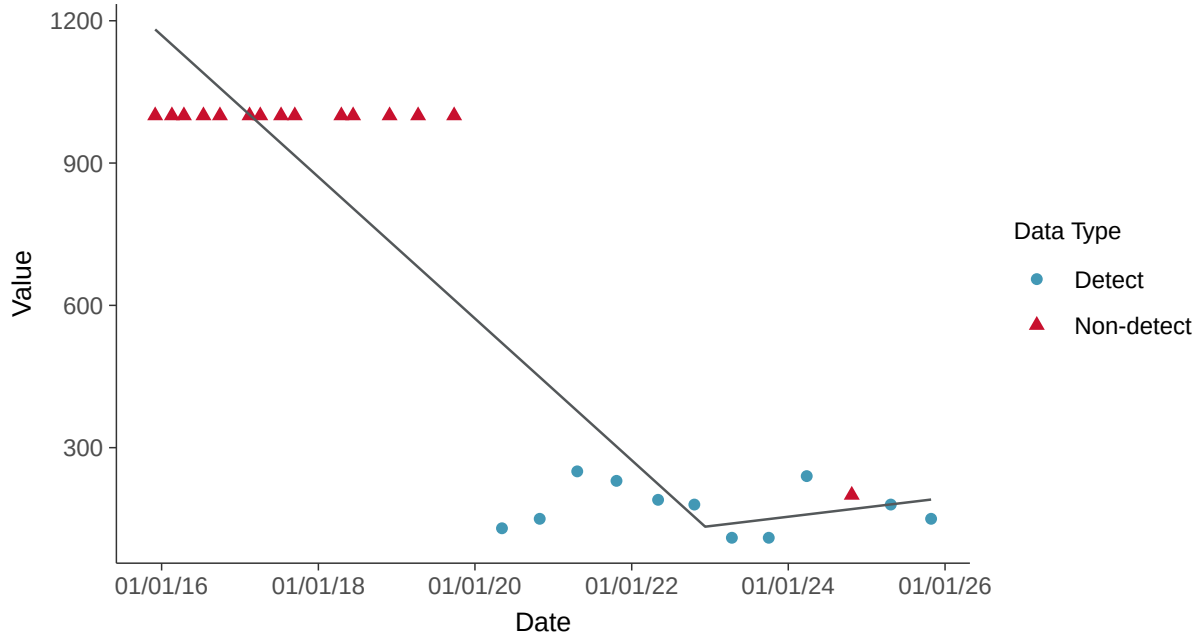
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15018 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15018 (ug/L)

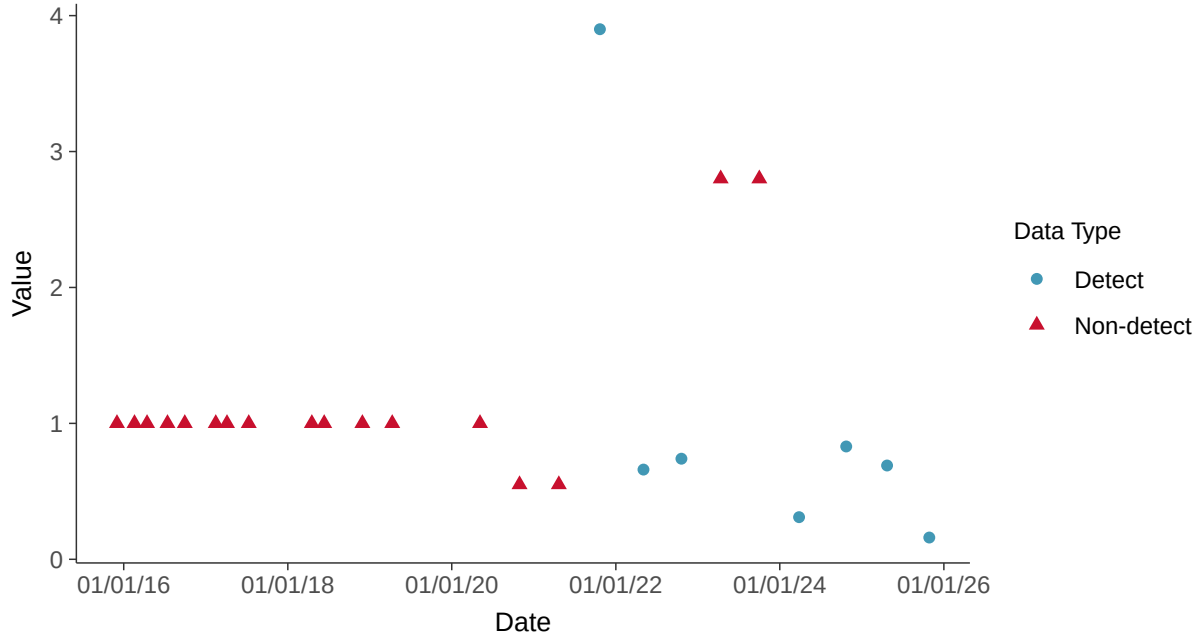


# Appendix IV: Lead, MW-15018

ID: 08_2_116

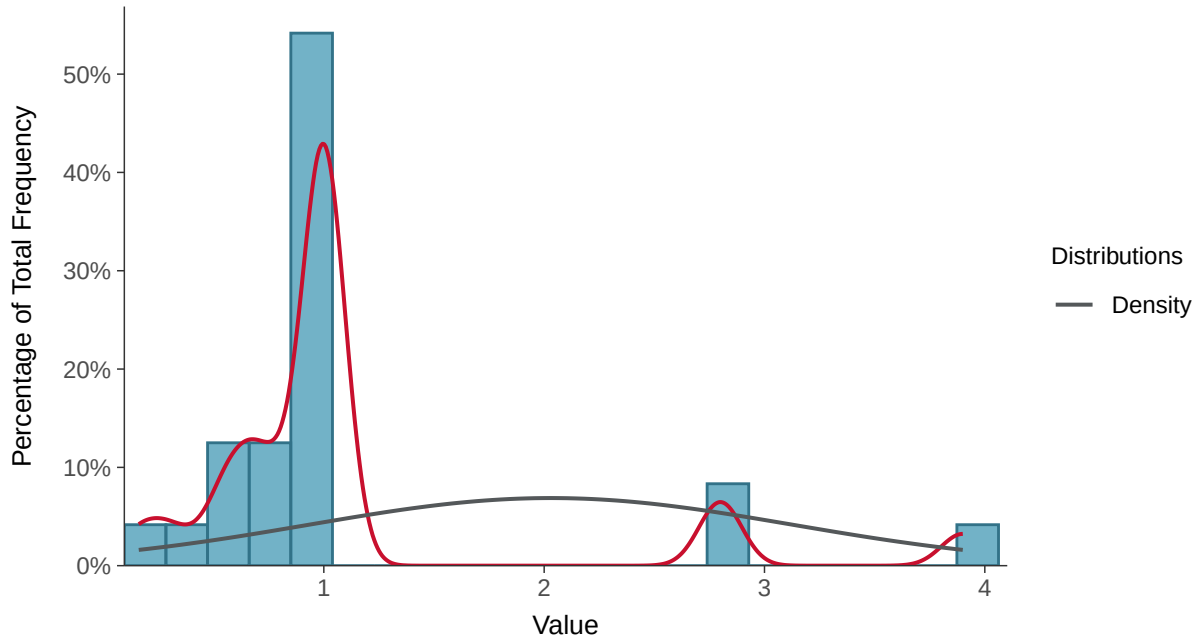
**Scatter Plot**

Lead, MW-15018 (ug/L)



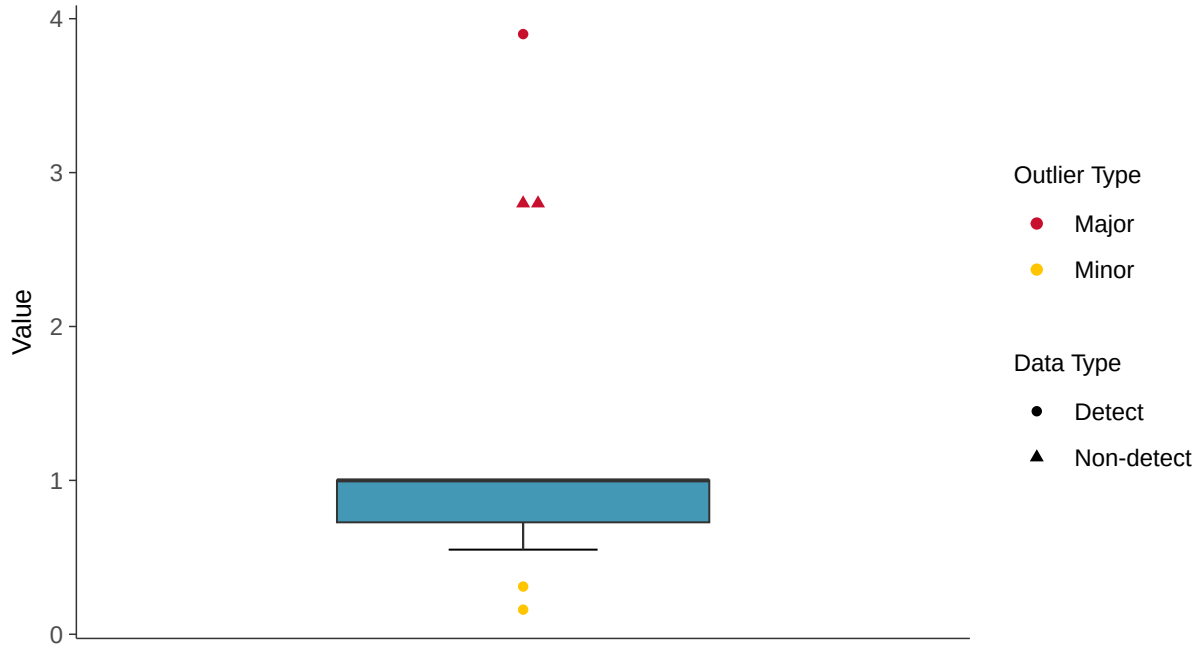

**Histogram**

Lead, MW-15018 (ug/L)



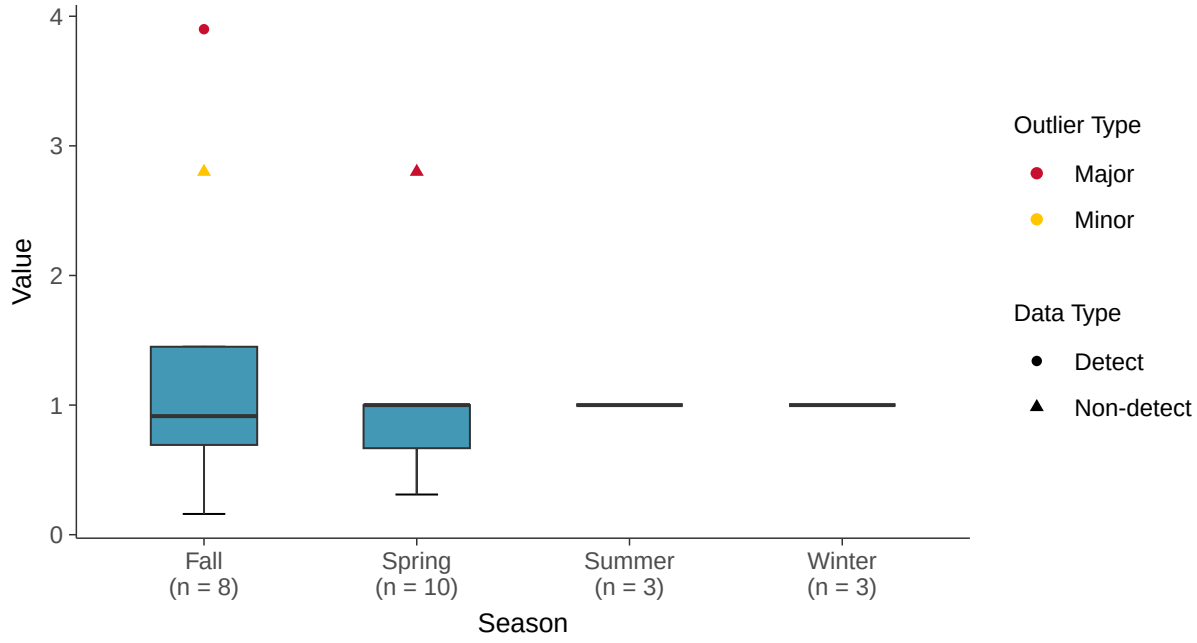
## Boxplot

Lead, MW-15018 (ug/L)



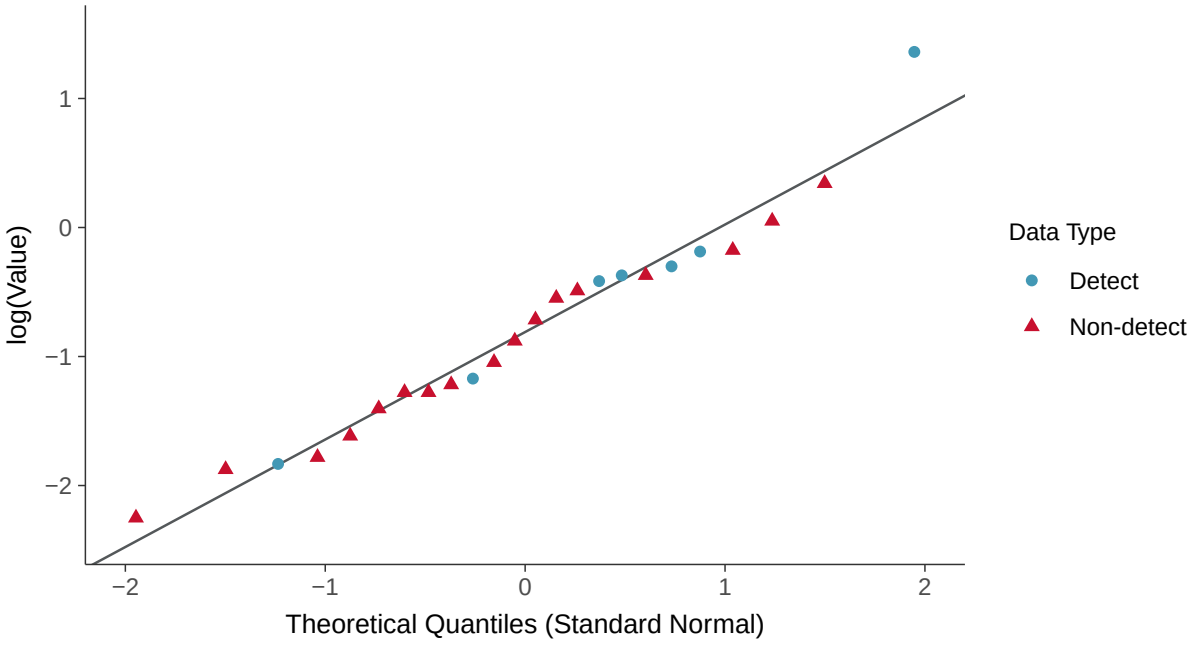

## Boxplot by Season

Lead, MW-15018 (ug/L)



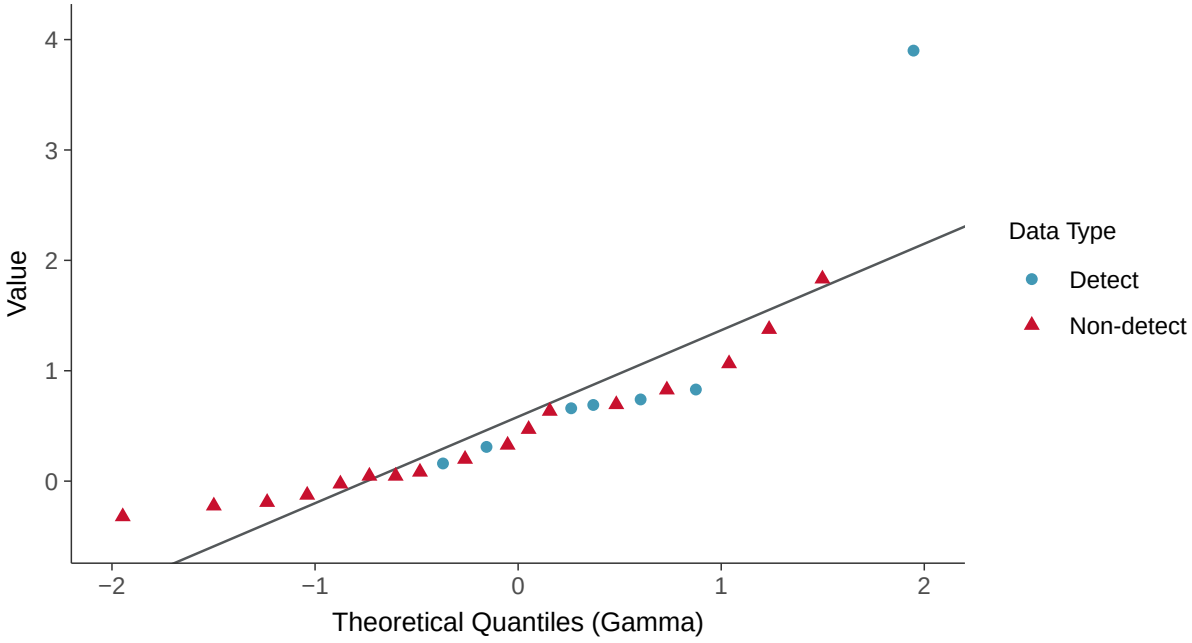
**Lognormal Q-Q plot using ROS Imputed Estimates**

Lead, MW-15018 (ug/L)



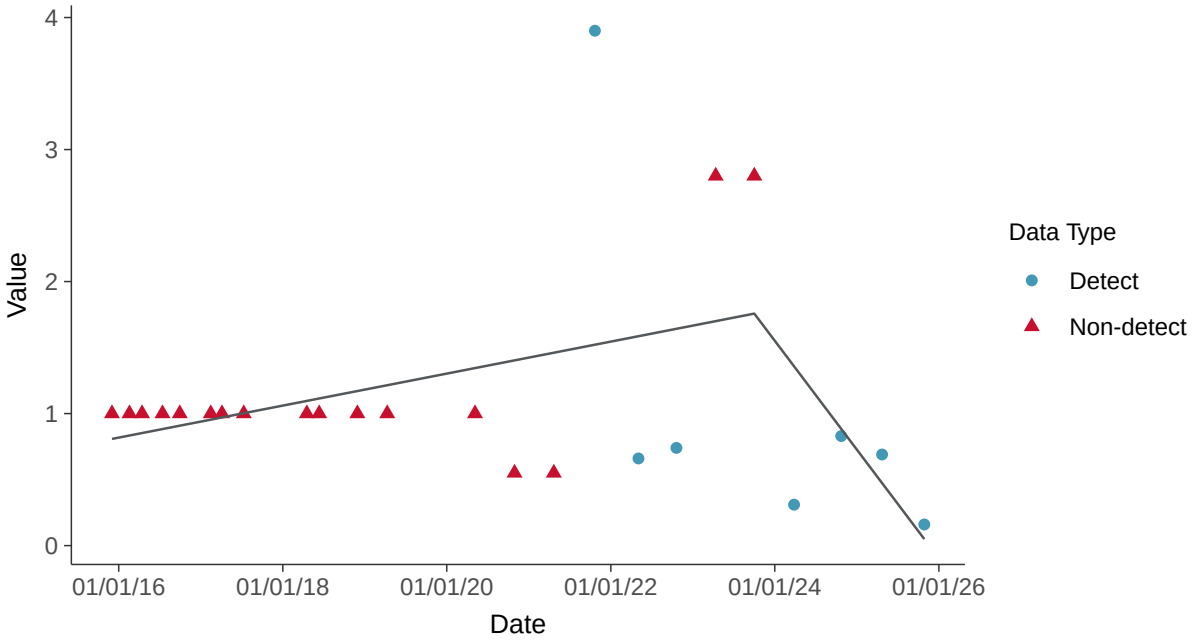

**Gamma Q-Q plot using ROS Imputed Estimates**

Lead, MW-15018 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15018 (ug/L)

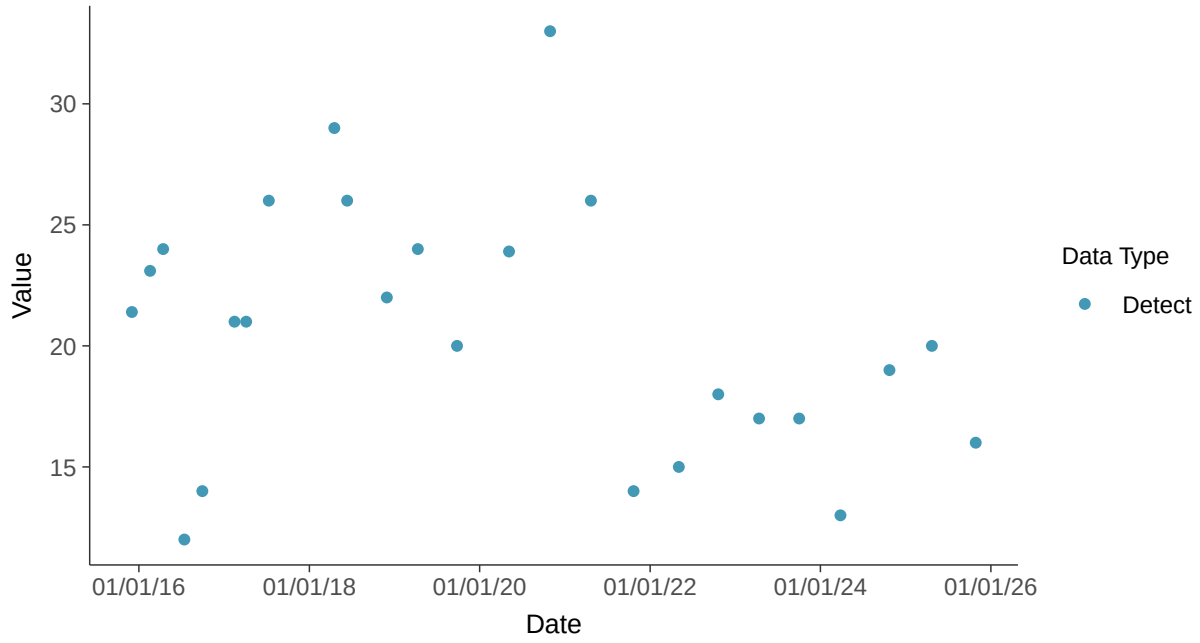


## Appendix IV: Lithium, MW-15018

ID: 08_2_117

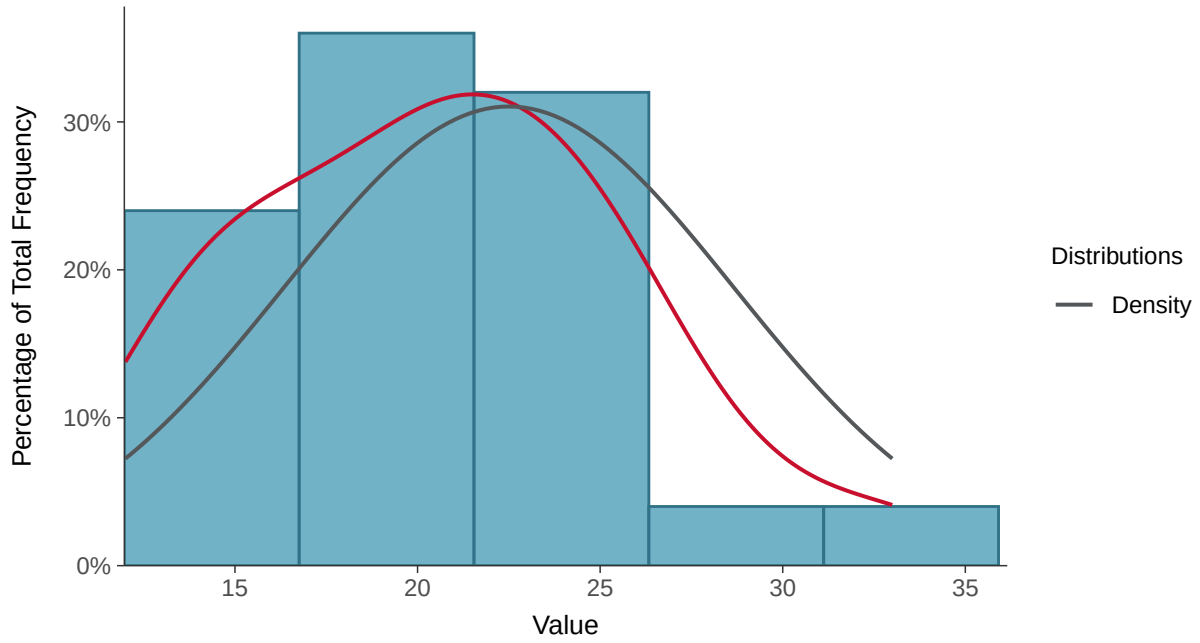
**Scatter Plot**

Lithium, MW-15018 (ug/L)



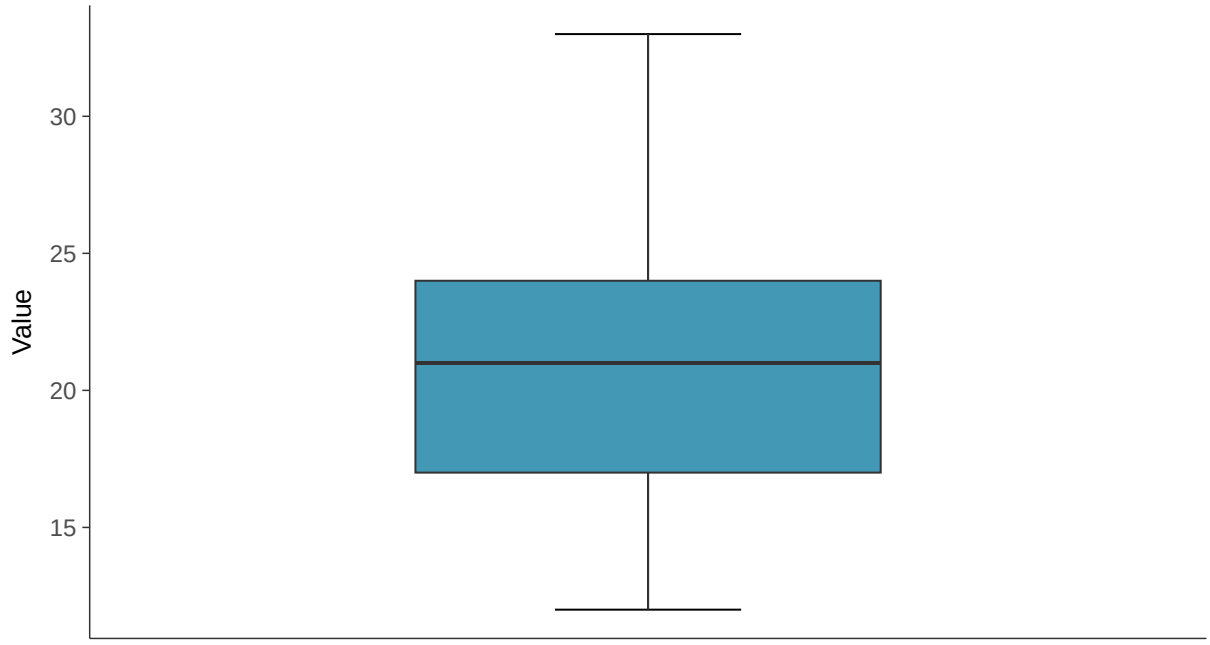

**Histogram**

Lithium, MW-15018 (ug/L)



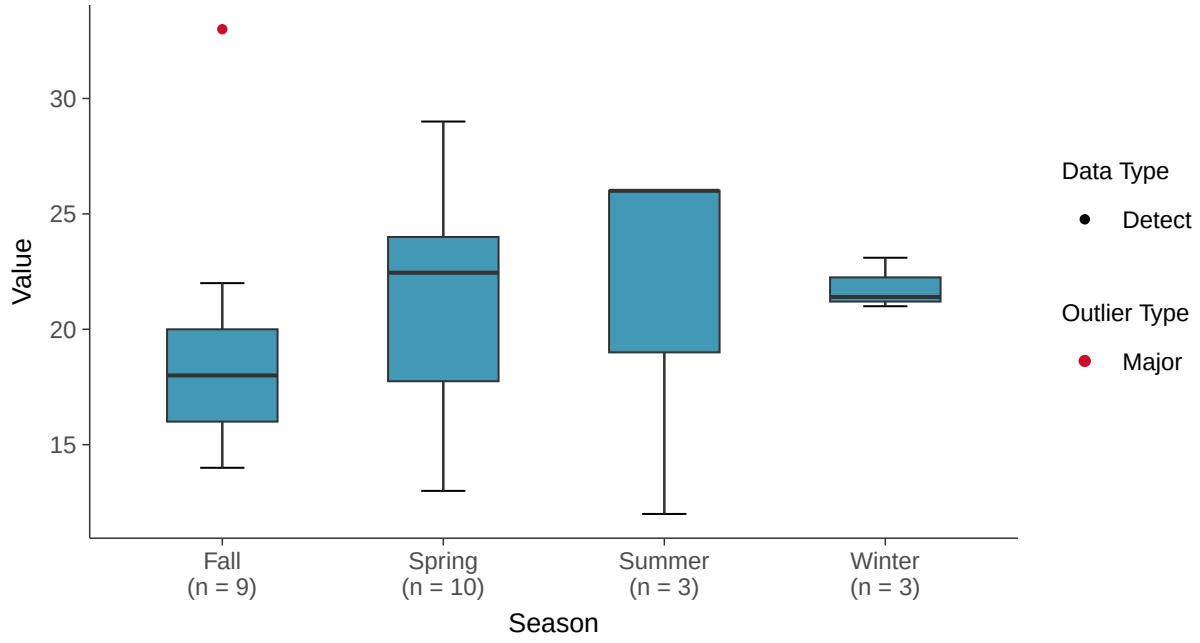
**Boxplot**

Lithium, MW-15018 (ug/L)



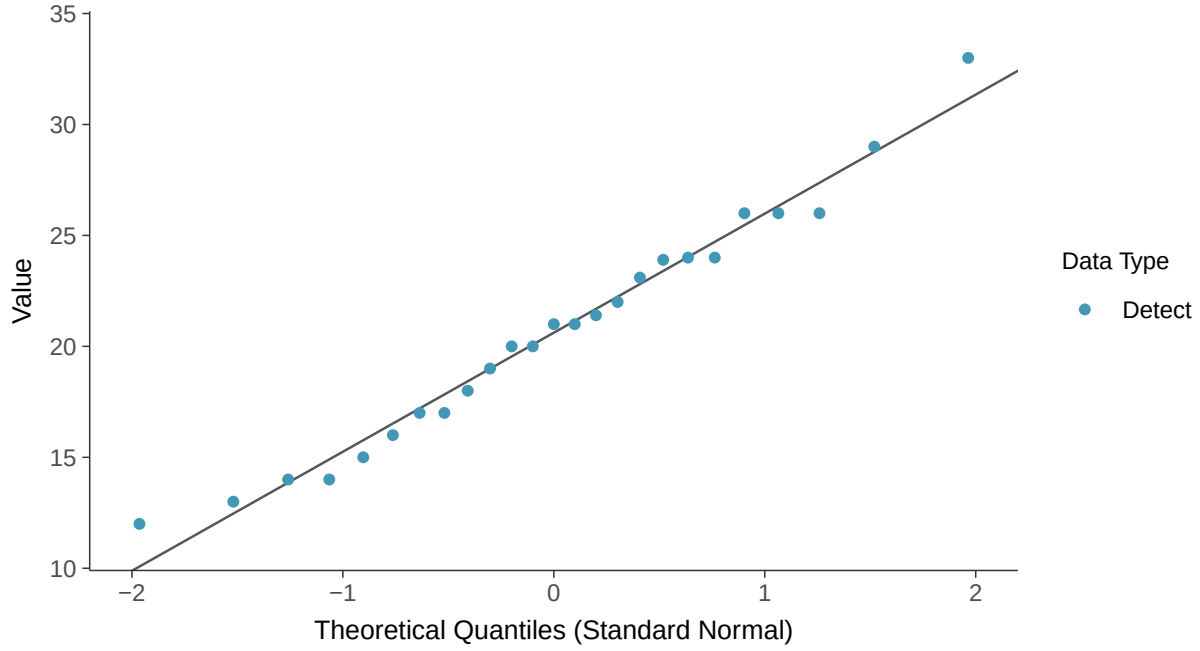

**Boxplot by Season**

Lithium, MW-15018 (ug/L)



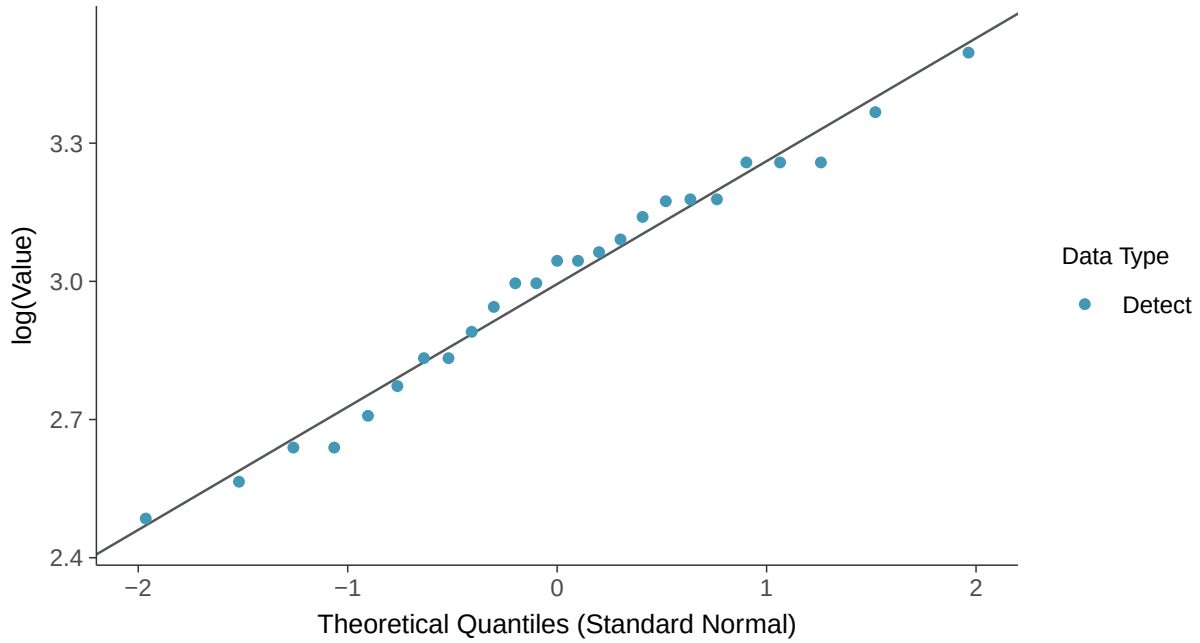
**Normal Q-Q plot**

Lithium, MW-15018 (ug/L)



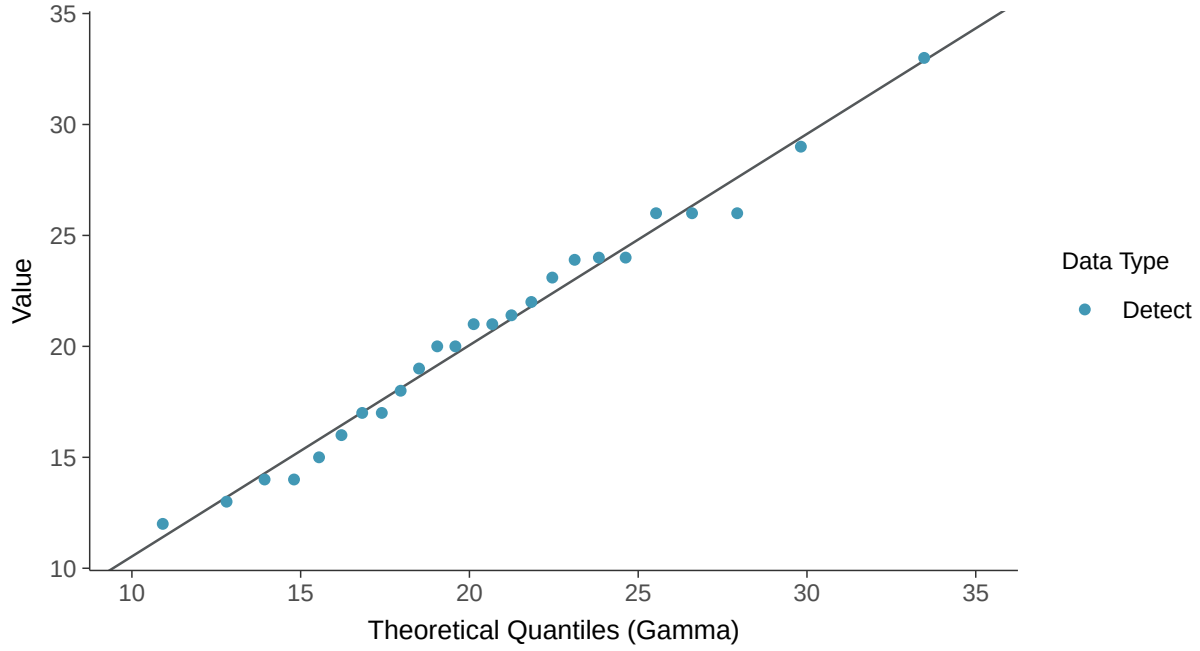

**Lognormal Q-Q plot**

Lithium, MW-15018 (ug/L)



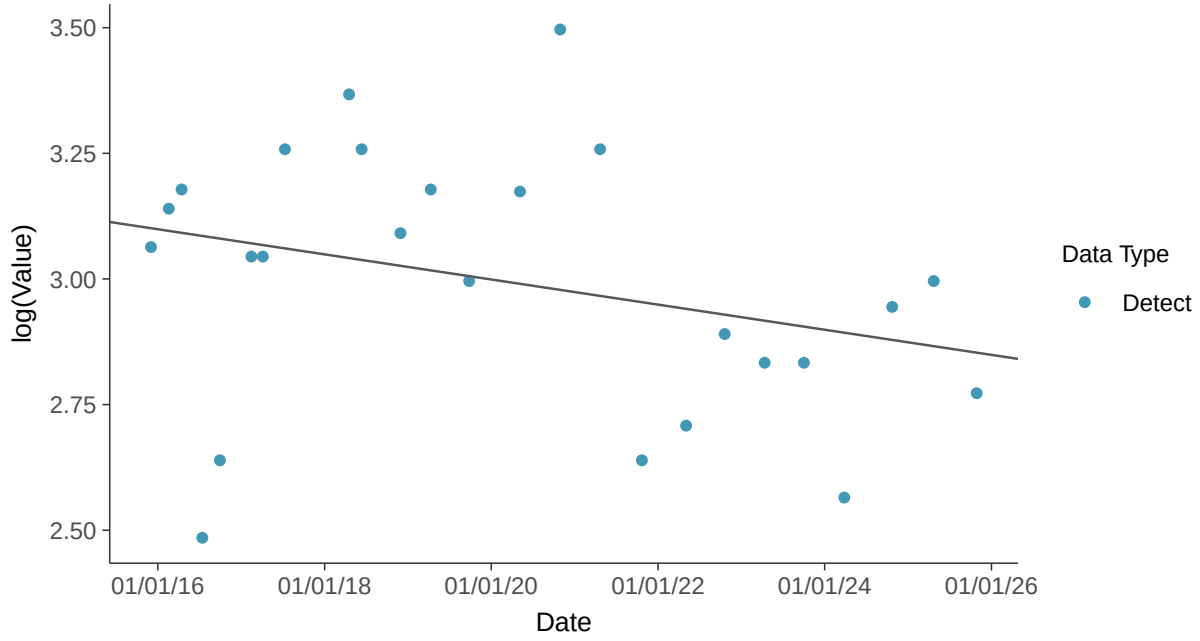
**Gamma Q-Q plot**

Lithium, MW-15018 (ug/L)



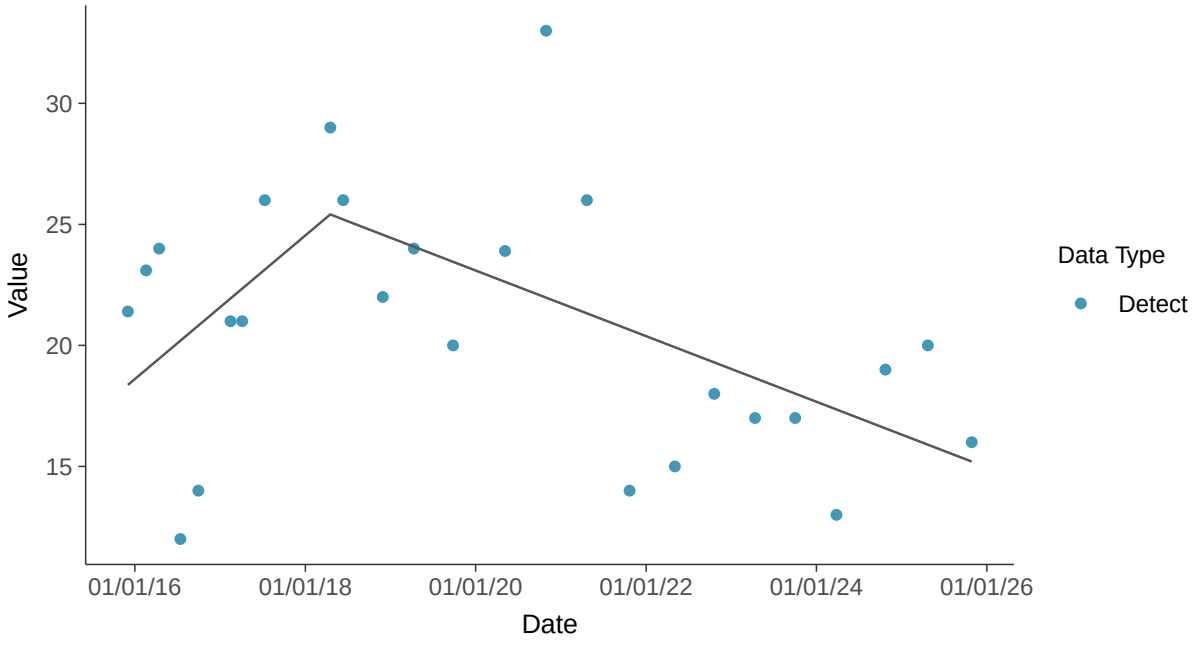

**Trend Regression: Lognormal MLE**

Lithium, MW-15018 (ug/L)



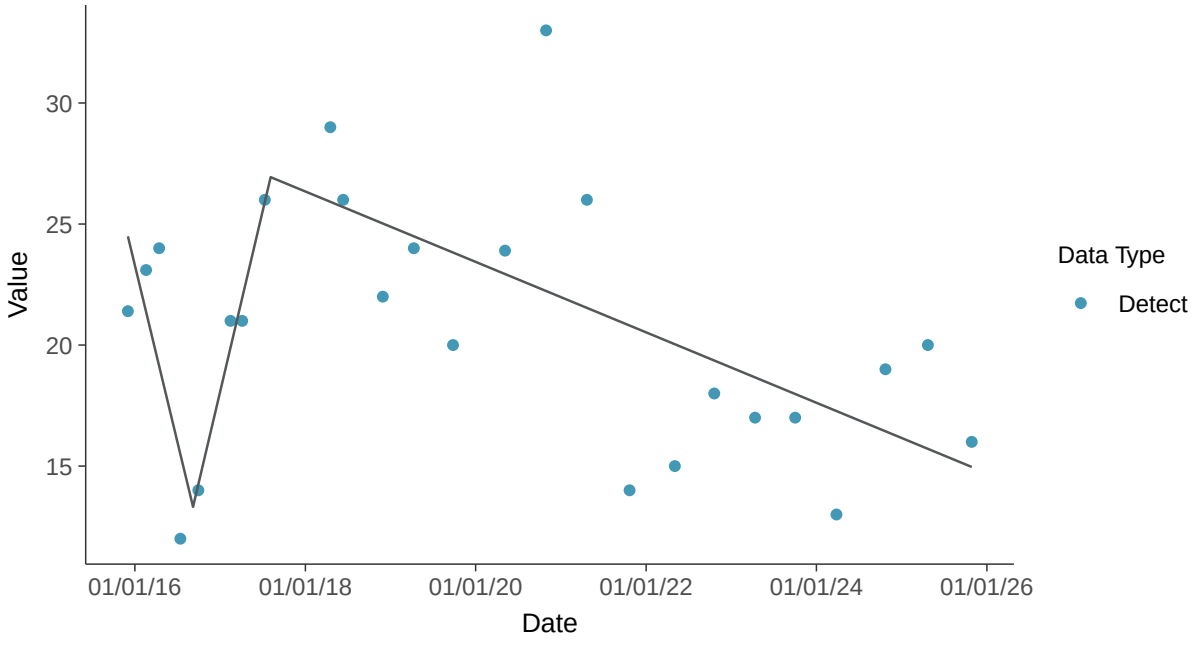
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15018 (ug/L)



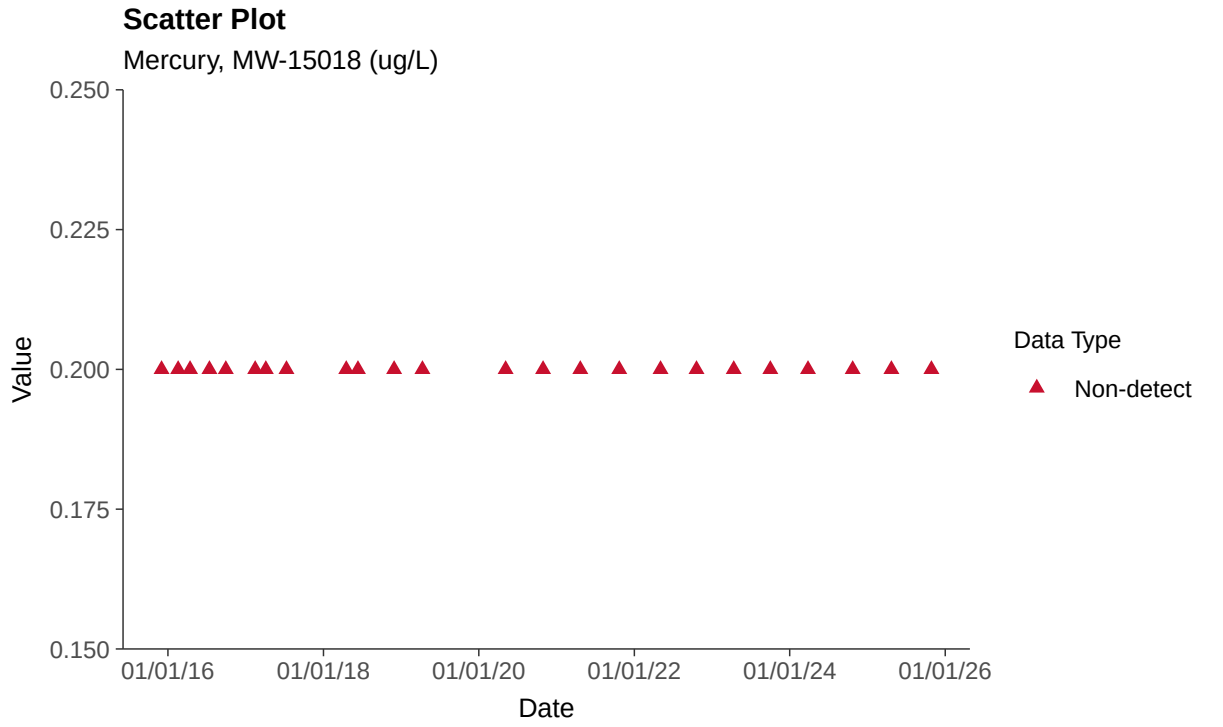

**Trend Regression: Piecewise Linear-Linear-Linear**

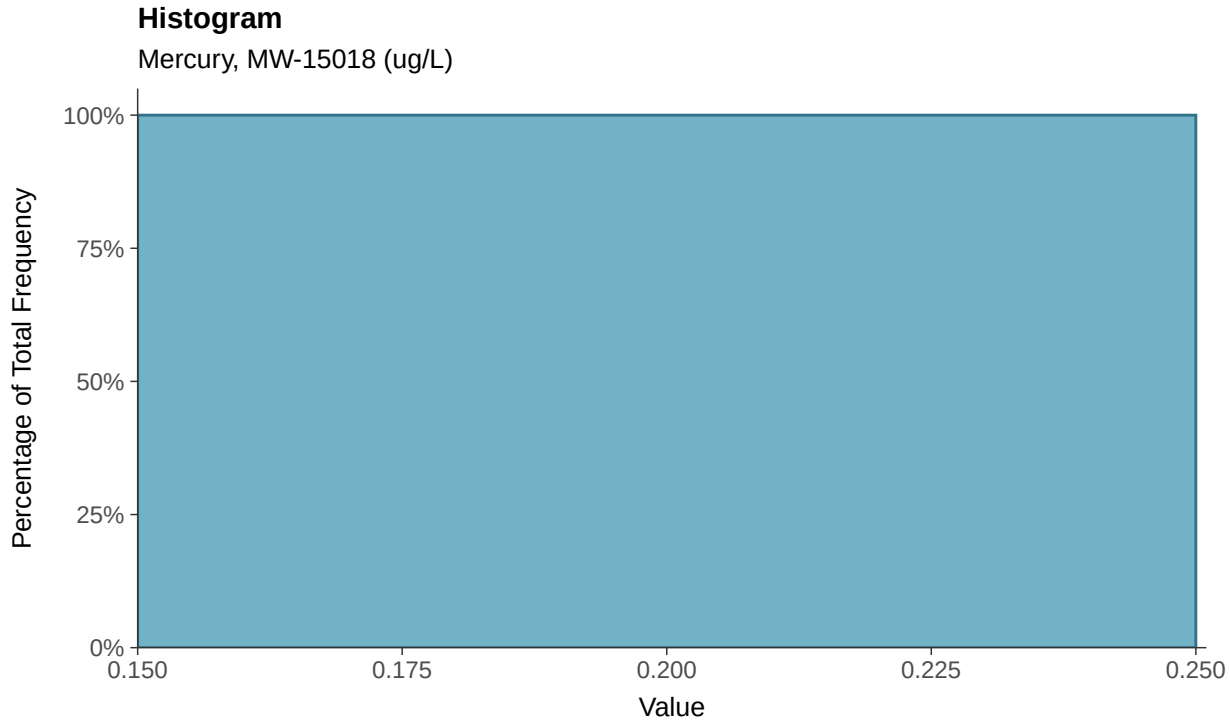
Lithium, MW-15018 (ug/L)



## Appendix IV: Mercury, MW-15018

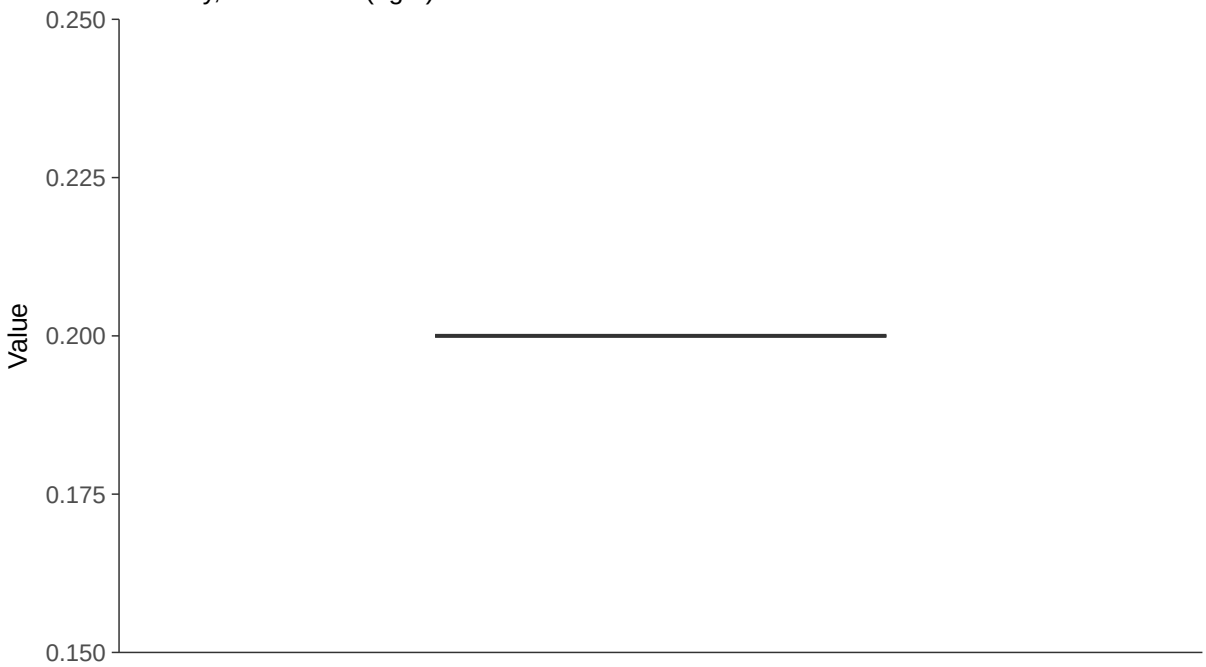
ID: 08_2_118



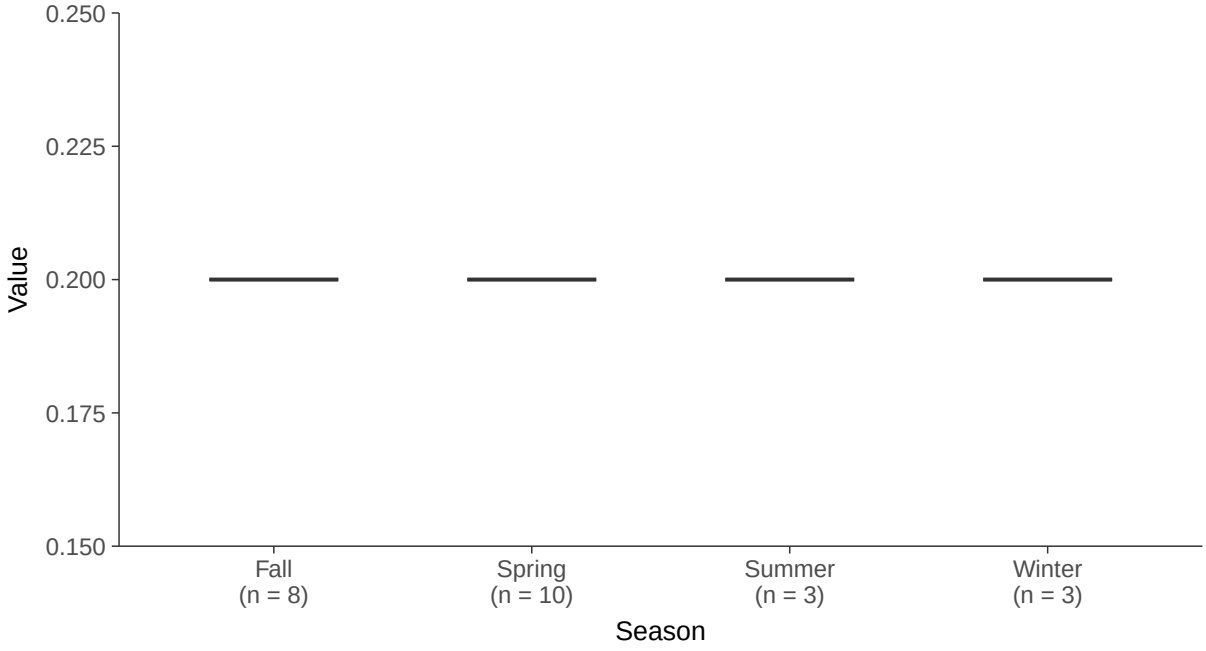
**Boxplot**

Mercury, MW-15018 (ug/L)



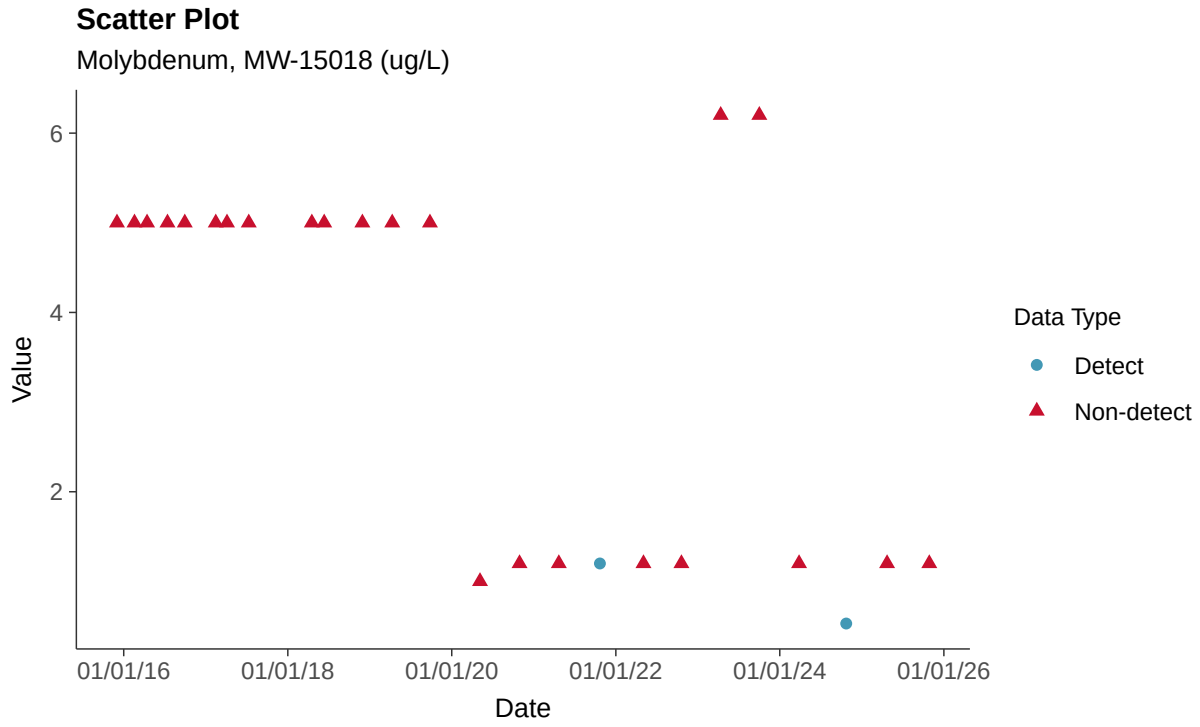

**Boxplot by Season**

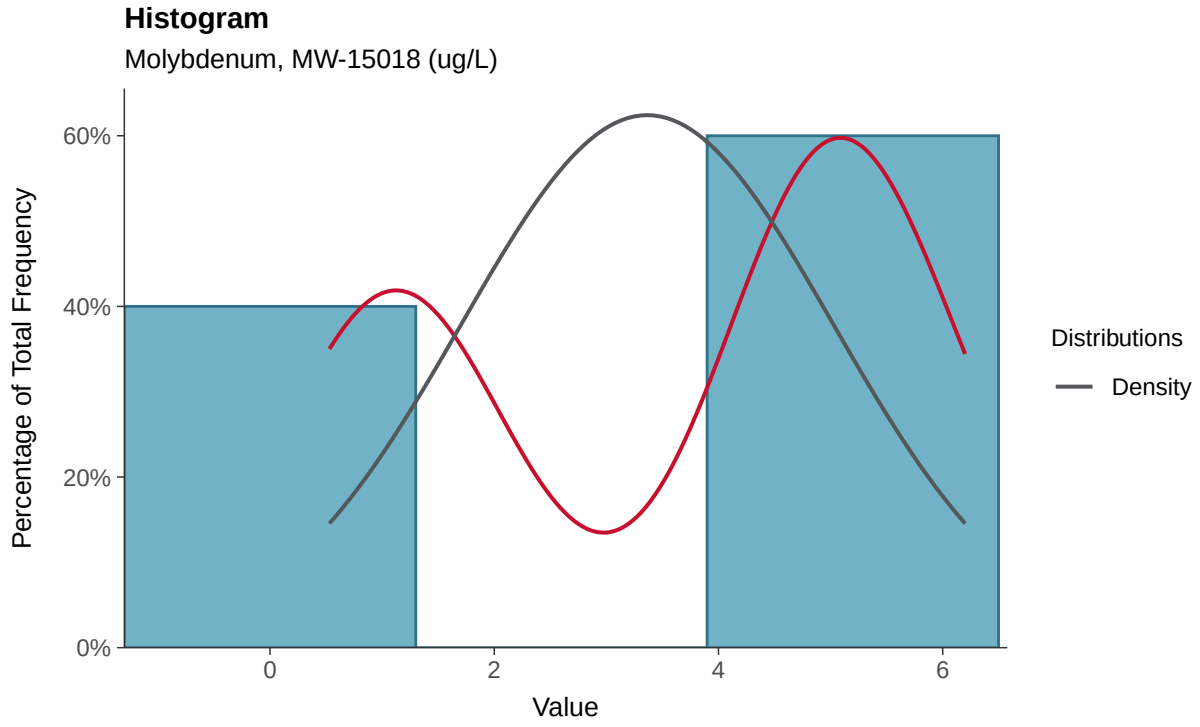
Mercury, MW-15018 (ug/L)



## Appendix IV: Molybdenum, MW-15018

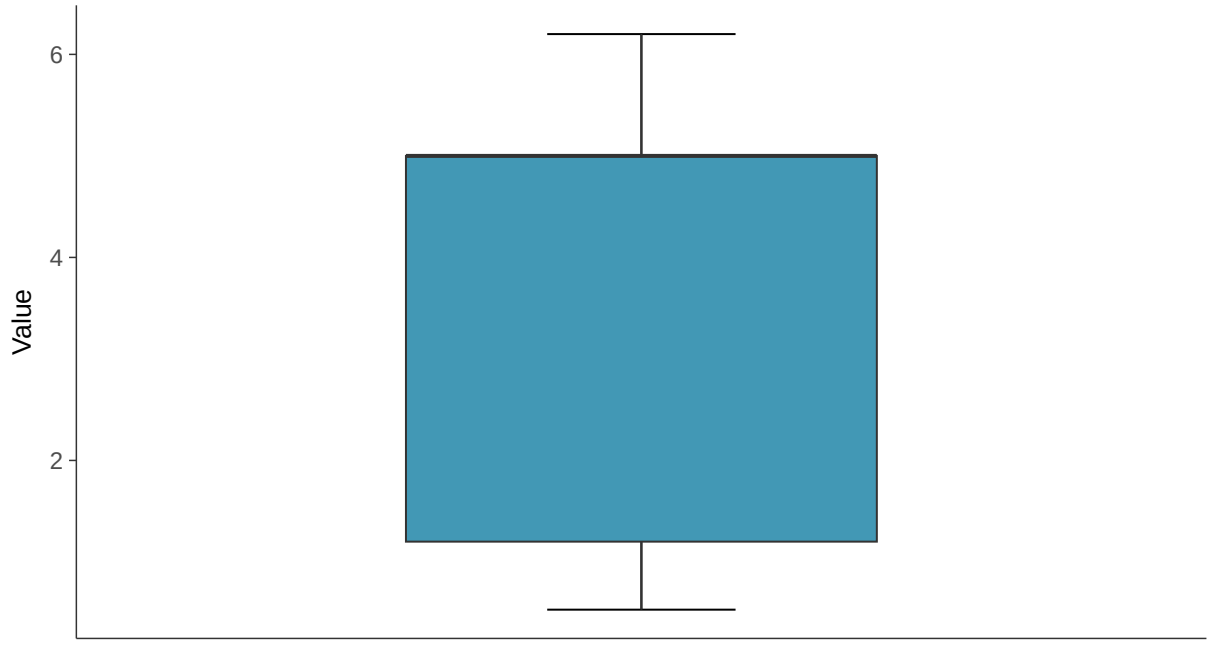
ID: 08_2_119



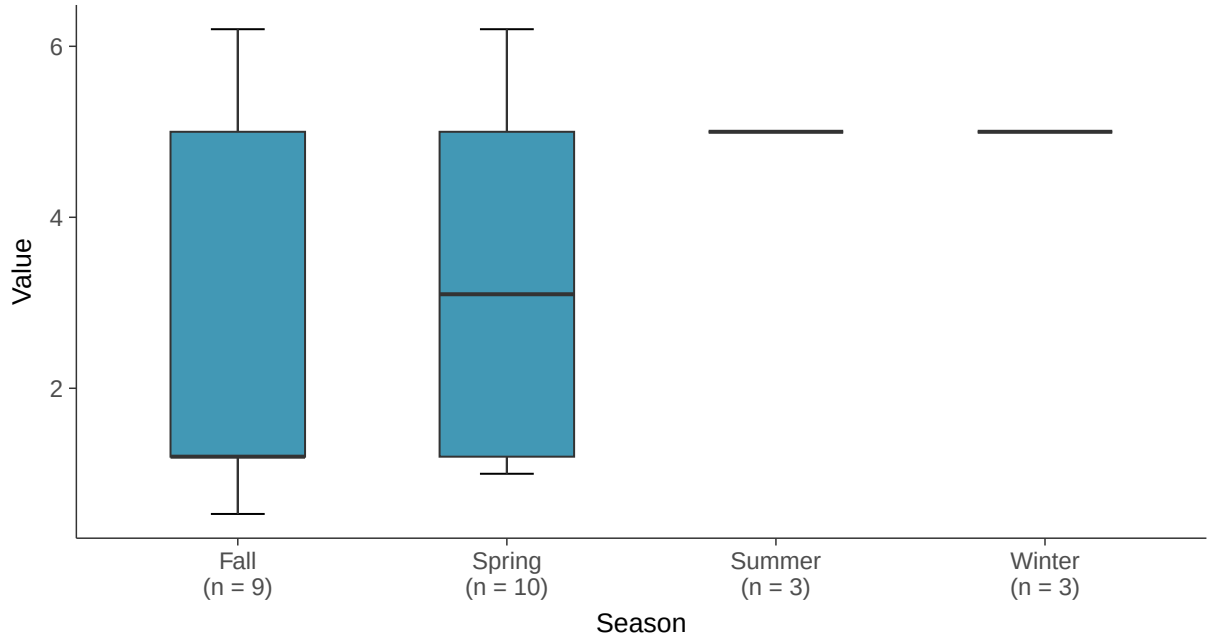
**Boxplot**

Molybdenum, MW-15018 (ug/L)



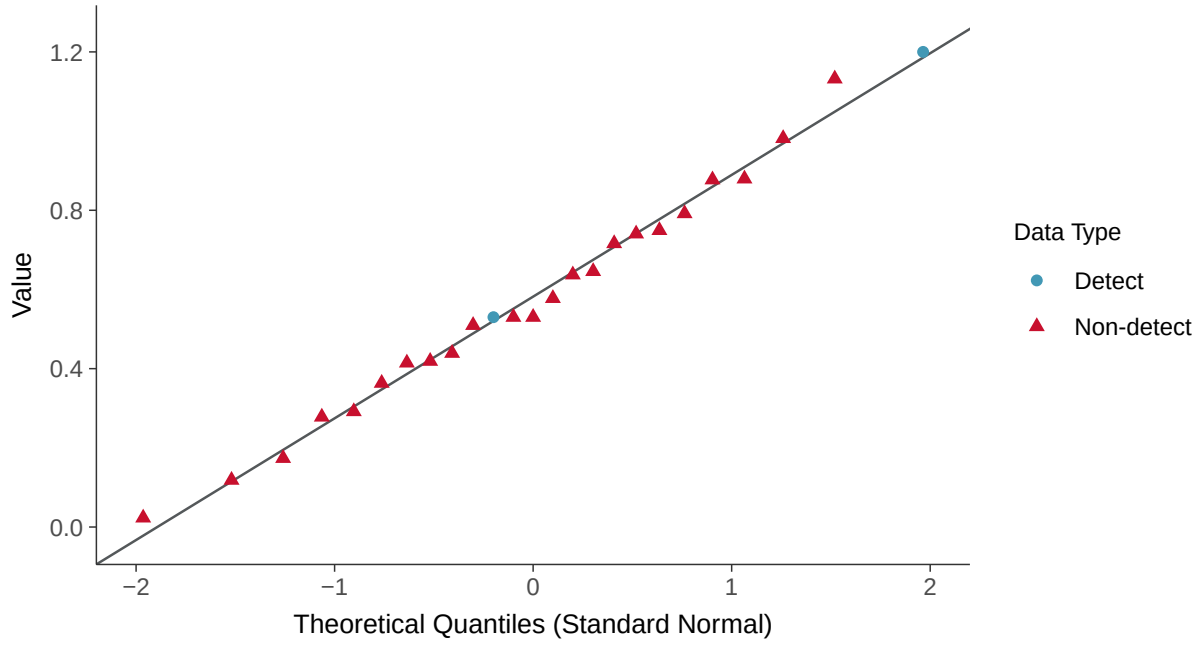

**Boxplot by Season**

Molybdenum, MW-15018 (ug/L)



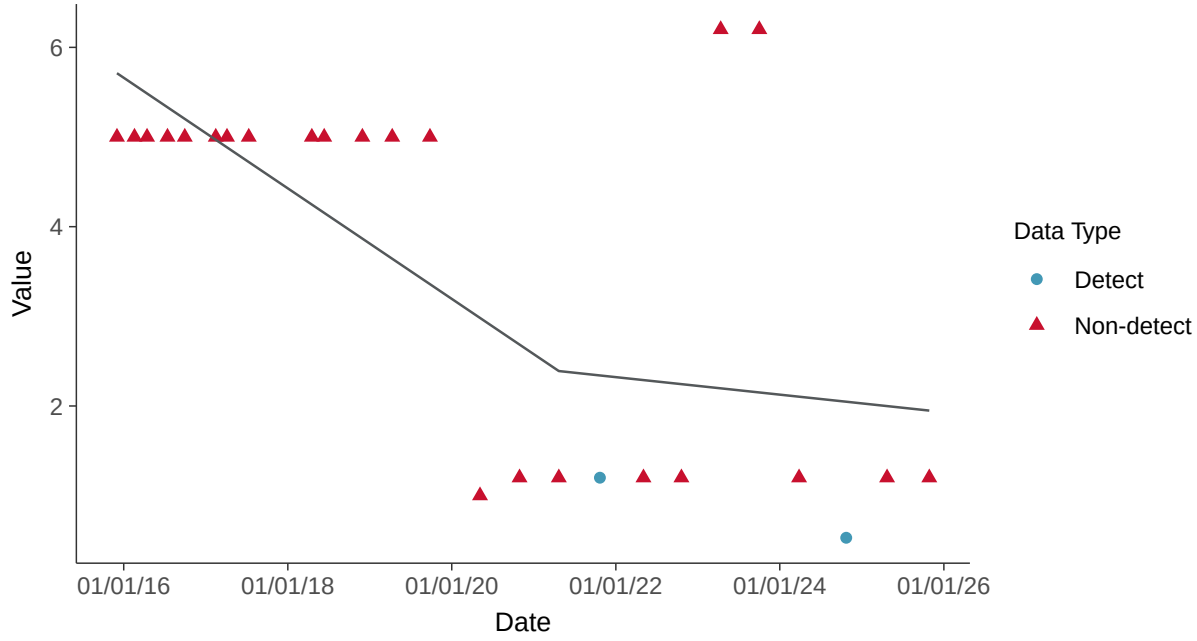
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15018 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15018 (ug/L)

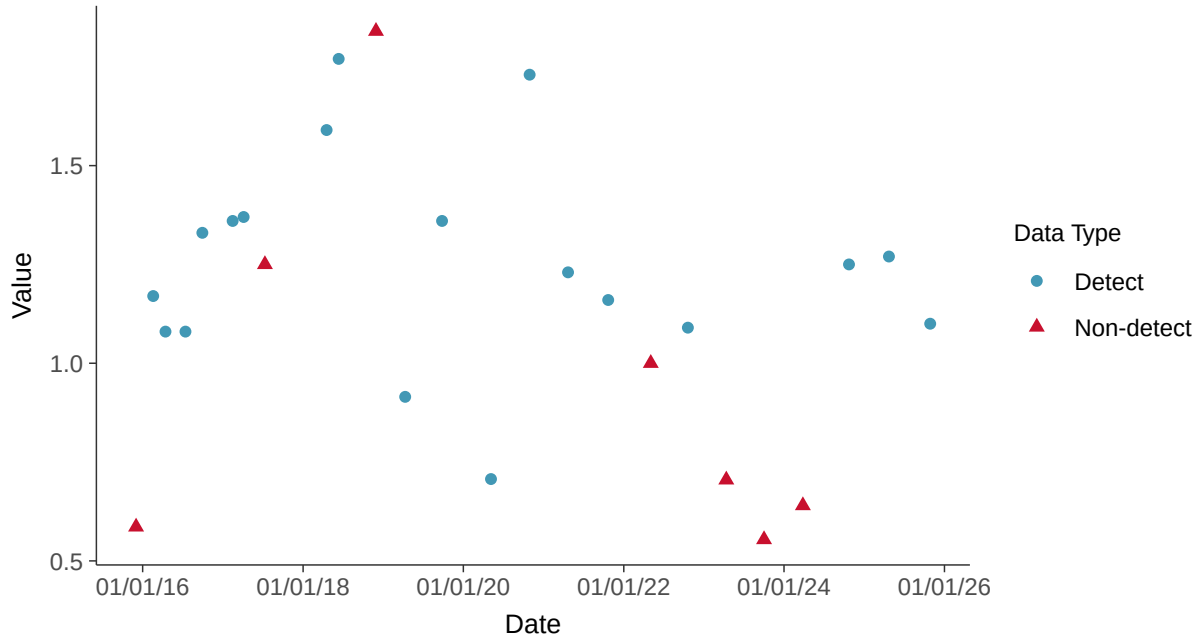


## Appendix IV: Radium-226+228, MW-15018

ID: 08_2_125

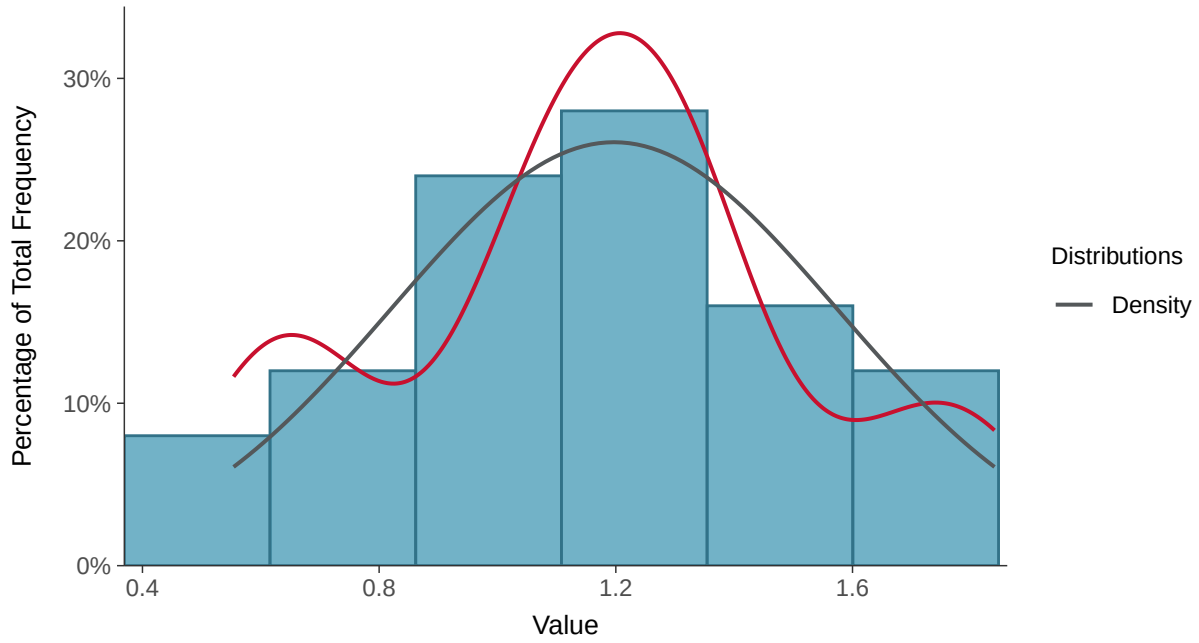
**Scatter Plot**

Radium-226+228, MW-15018 (pCi/L)



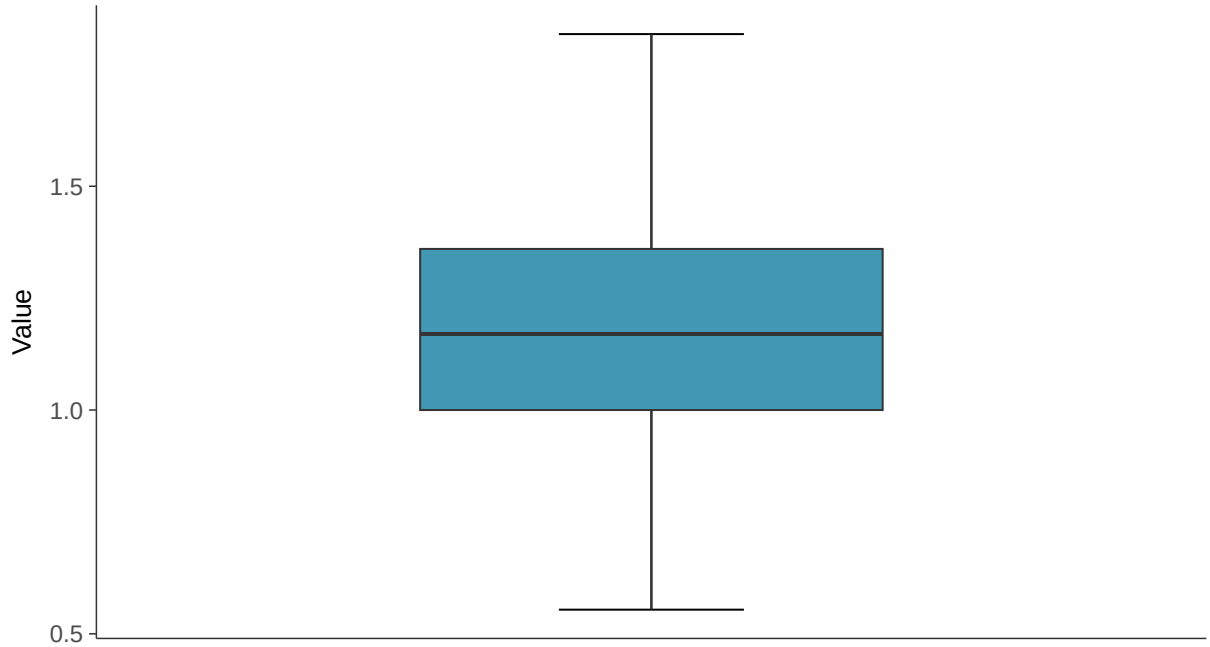

**Histogram**

Radium-226+228, MW-15018 (pCi/L)



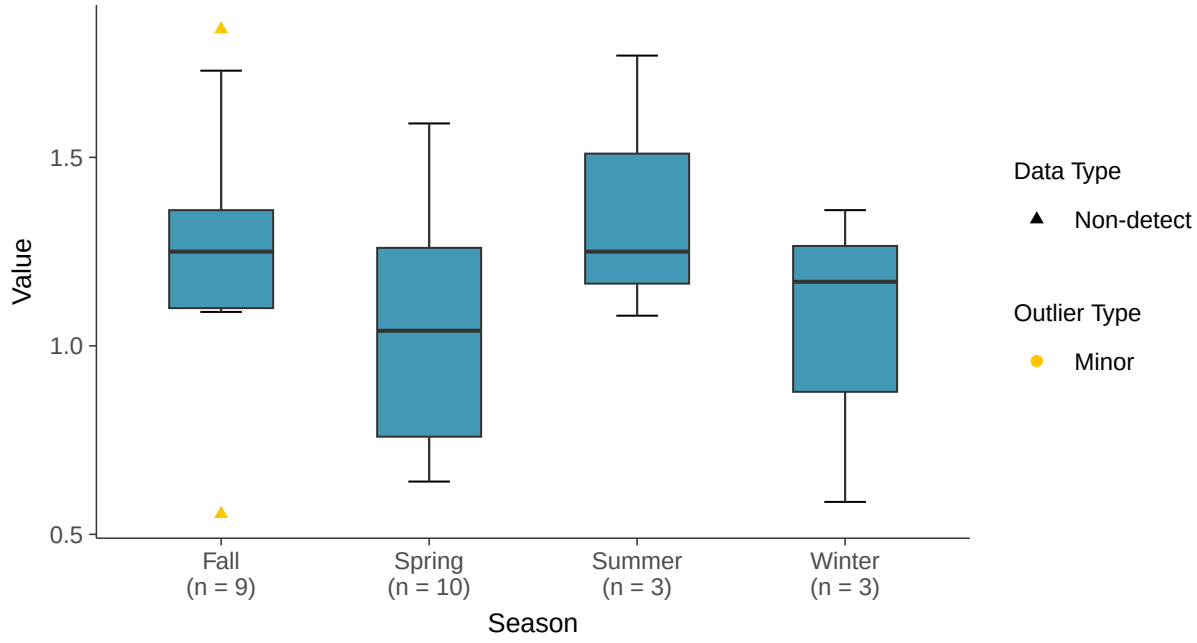
## Boxplot

Radium-226+228, MW-15018 (pCi/L)



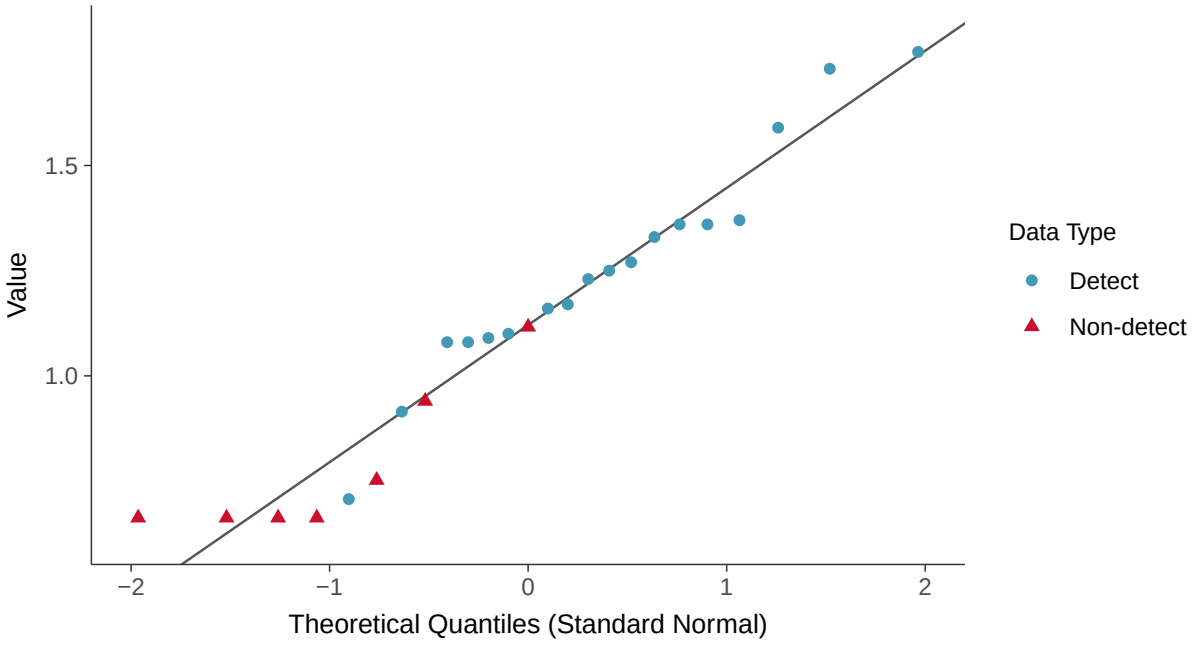

## Boxplot by Season

Radium-226+228, MW-15018 (pCi/L)



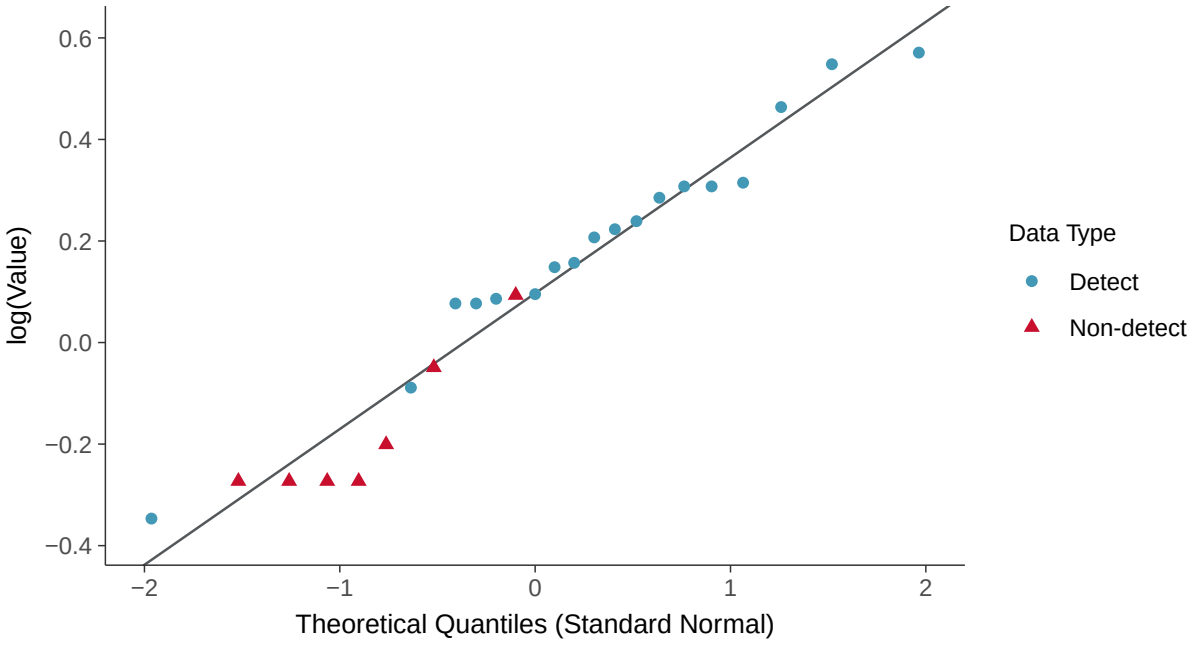
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15018 (pCi/L)



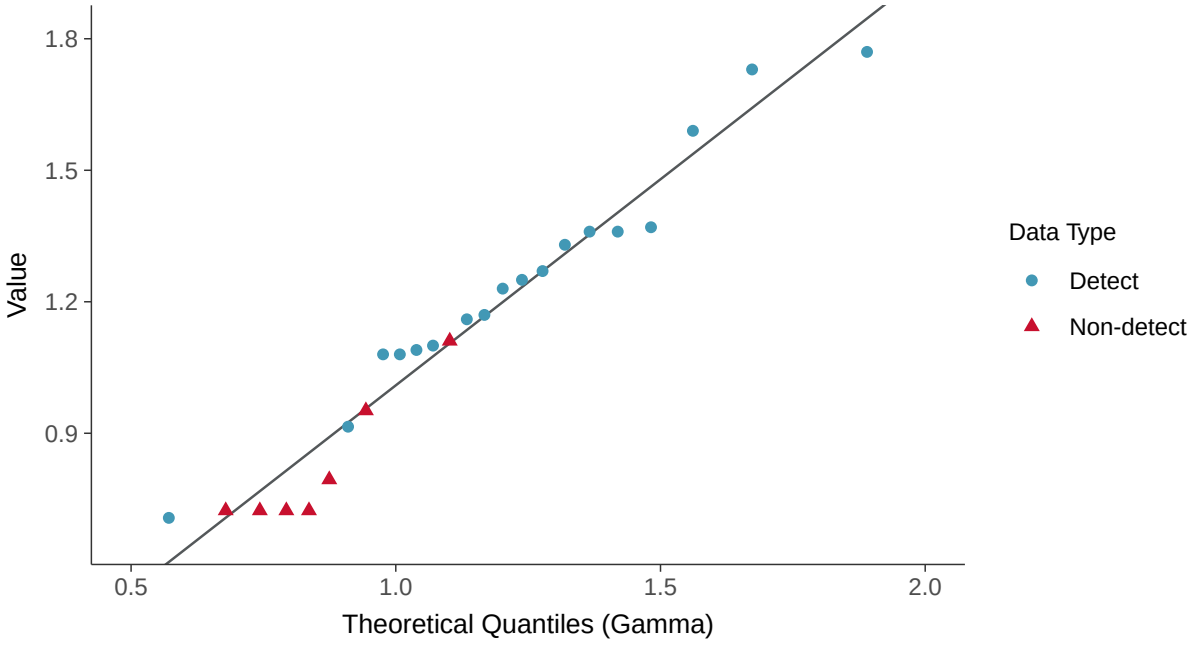

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15018 (pCi/L)



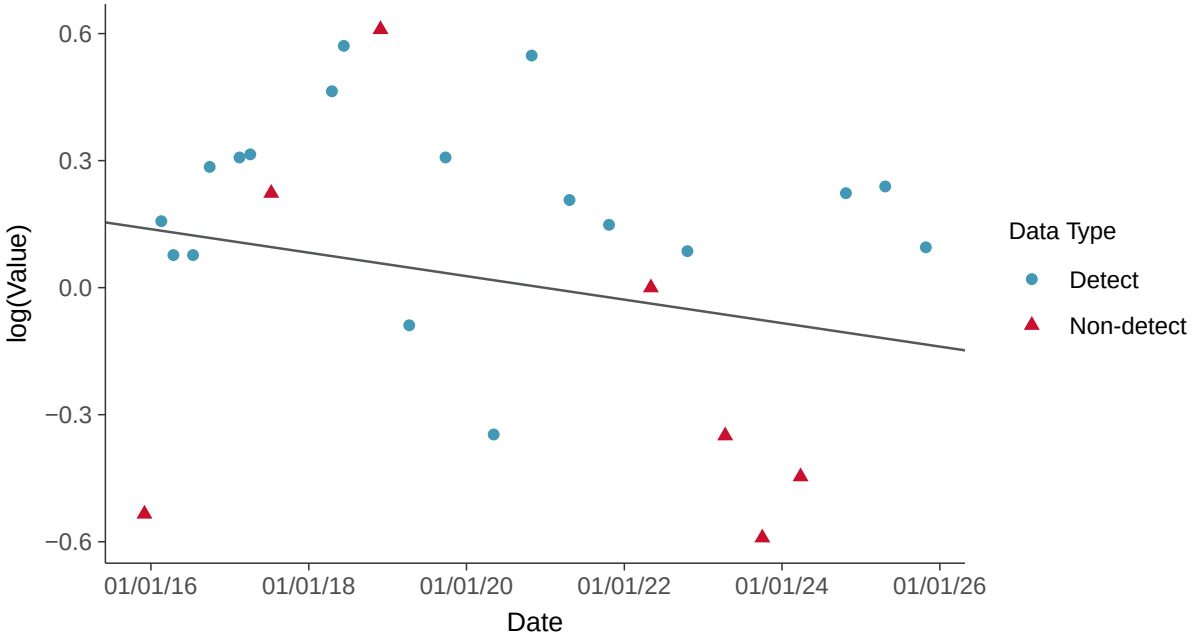
## Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15018 (pCi/L)



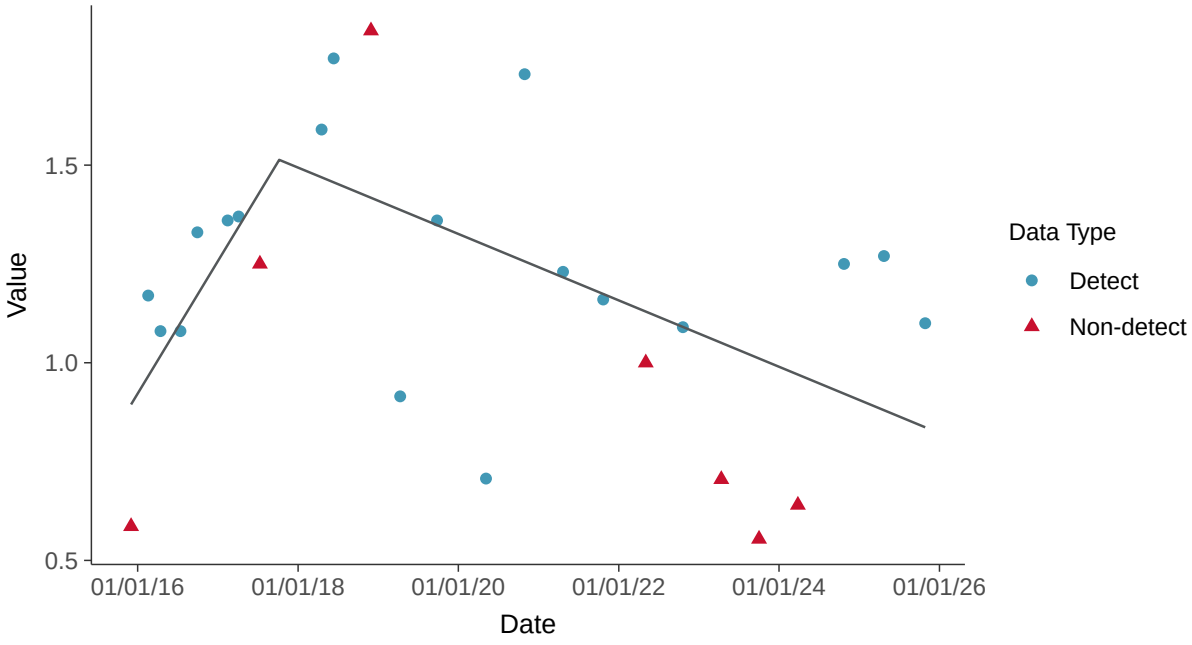

## Trend Regression: Lognormal MLE

Radium-226+228, MW-15018 (pCi/L)



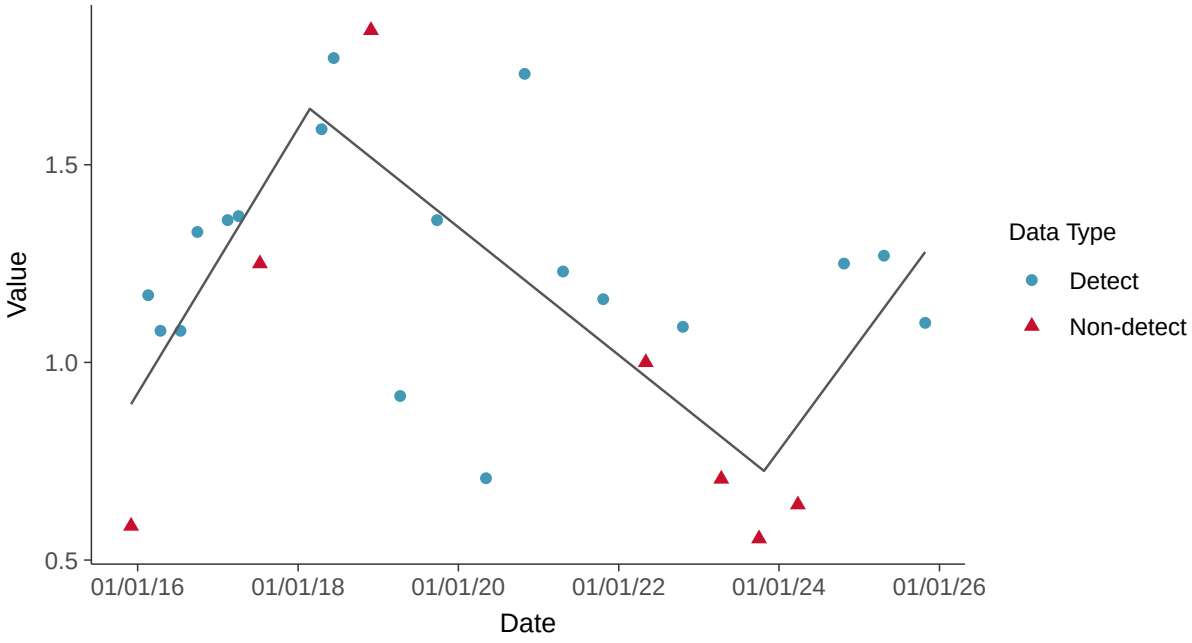
## Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15018 (pCi/L)




## Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-15018 (pCi/L)

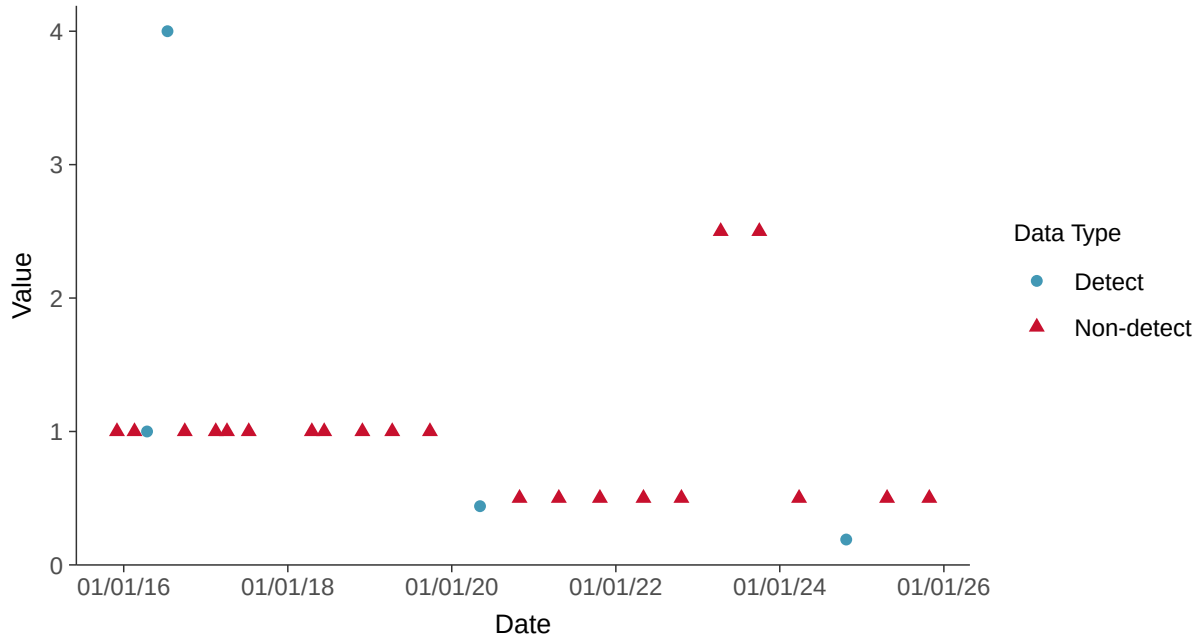


## Appendix IV: Selenium, MW-15018

ID: 08_2_127

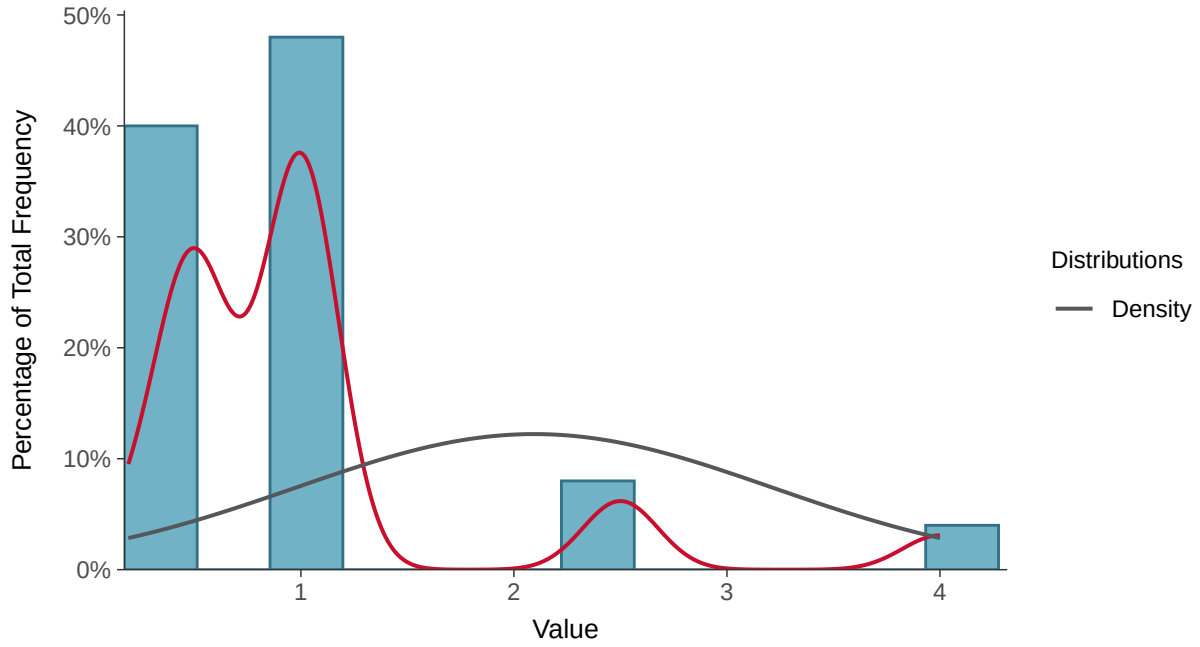
**Scatter Plot**

Selenium, MW-15018 (ug/L)



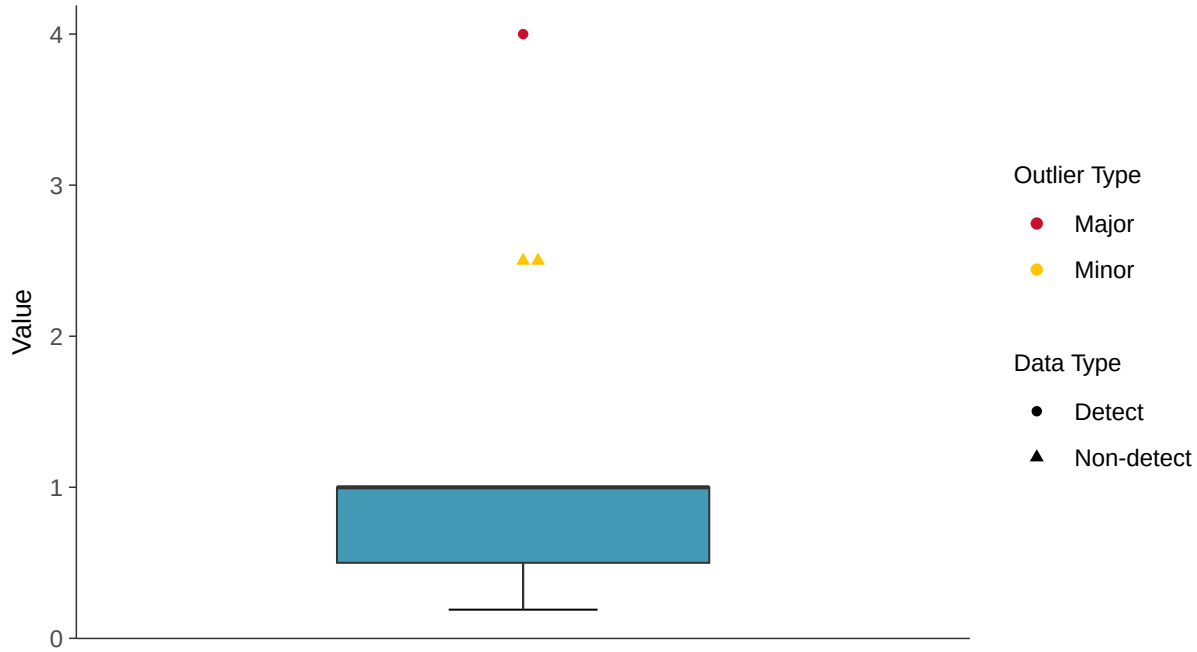

**Histogram**

Selenium, MW-15018 (ug/L)



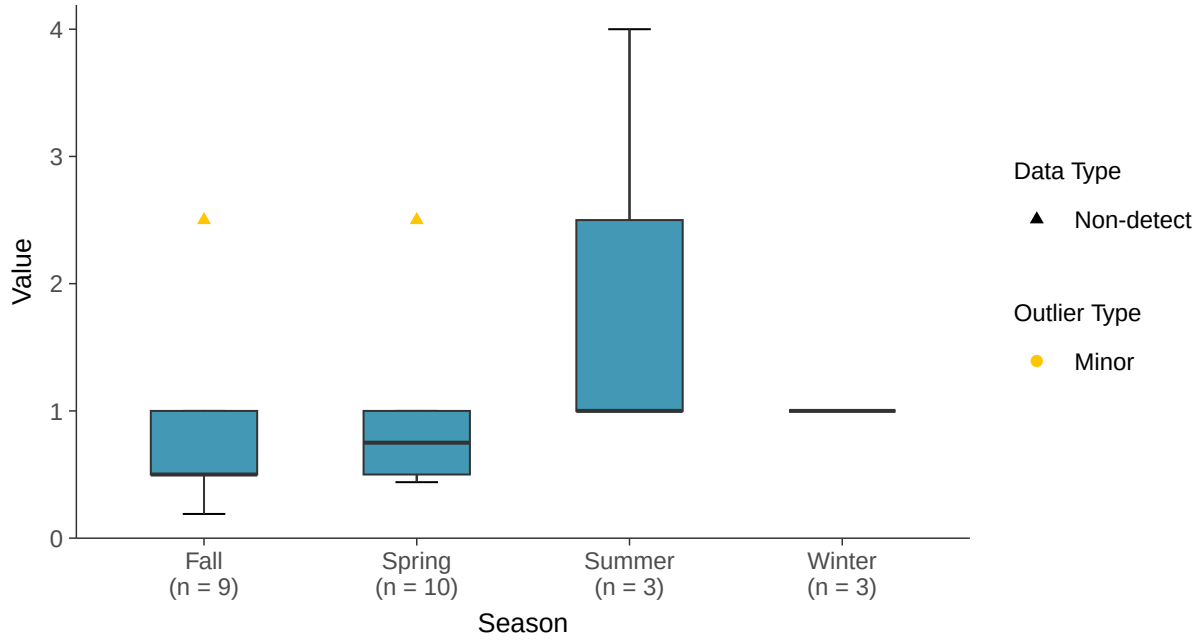
## Boxplot

Selenium, MW-15018 (ug/L)



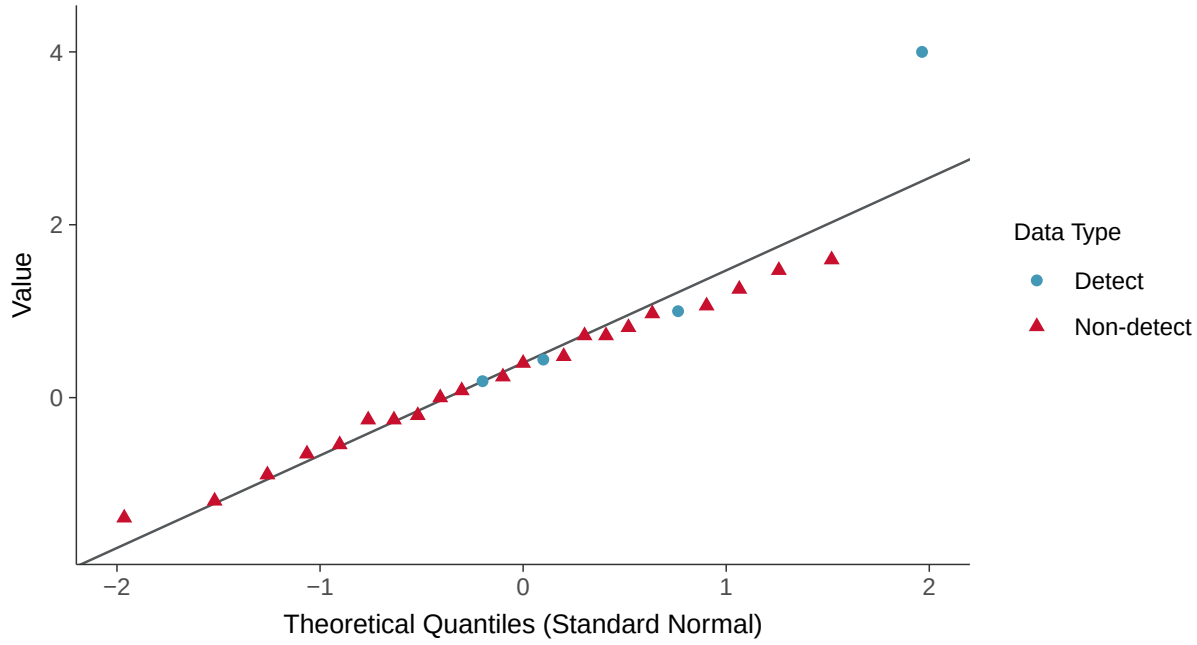

## Boxplot by Season

Selenium, MW-15018 (ug/L)



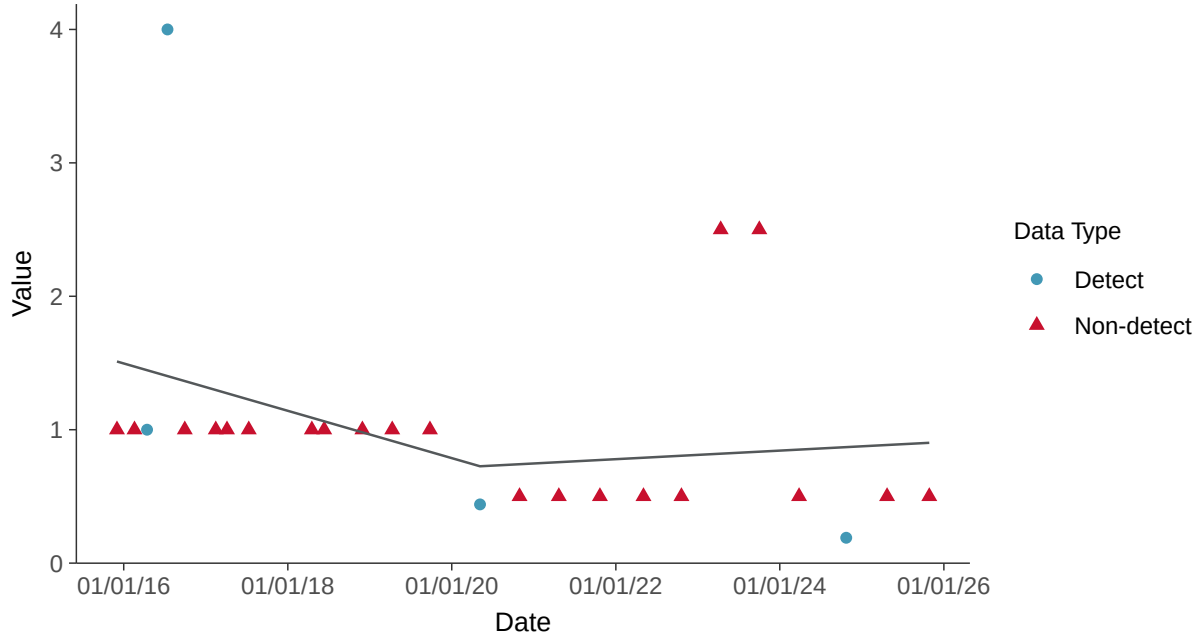
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15018 (ug/L)



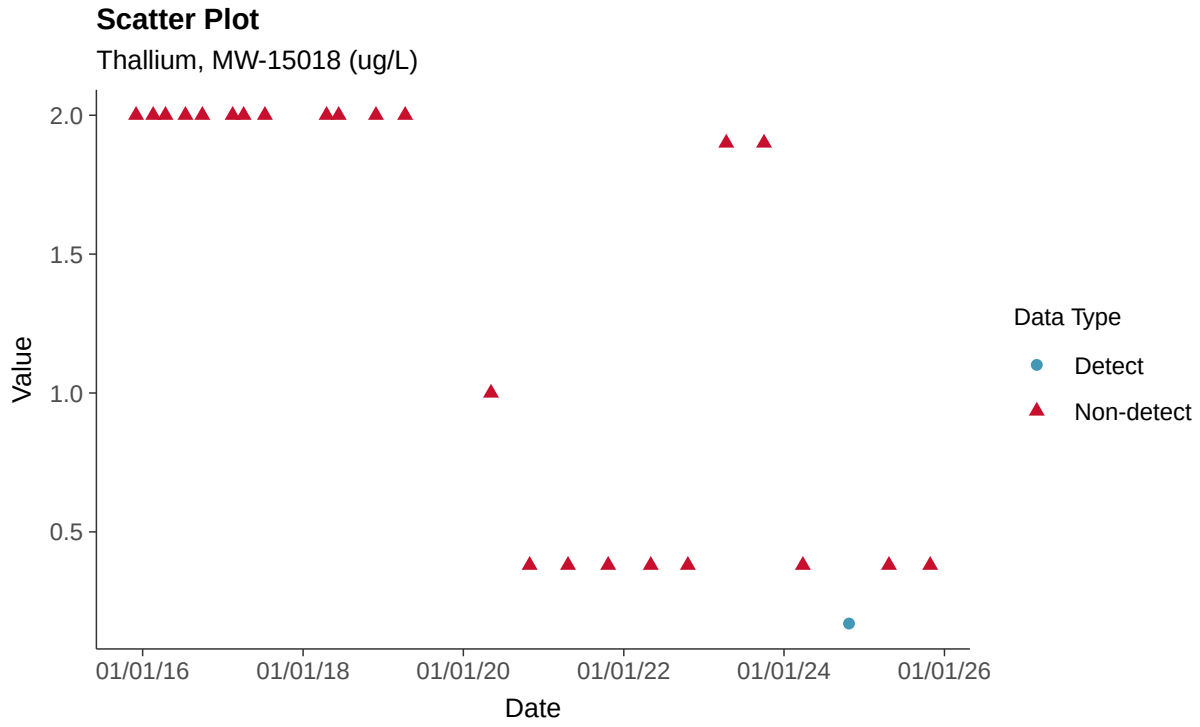

**Trend Regression: Piecewise Linear-Linear**

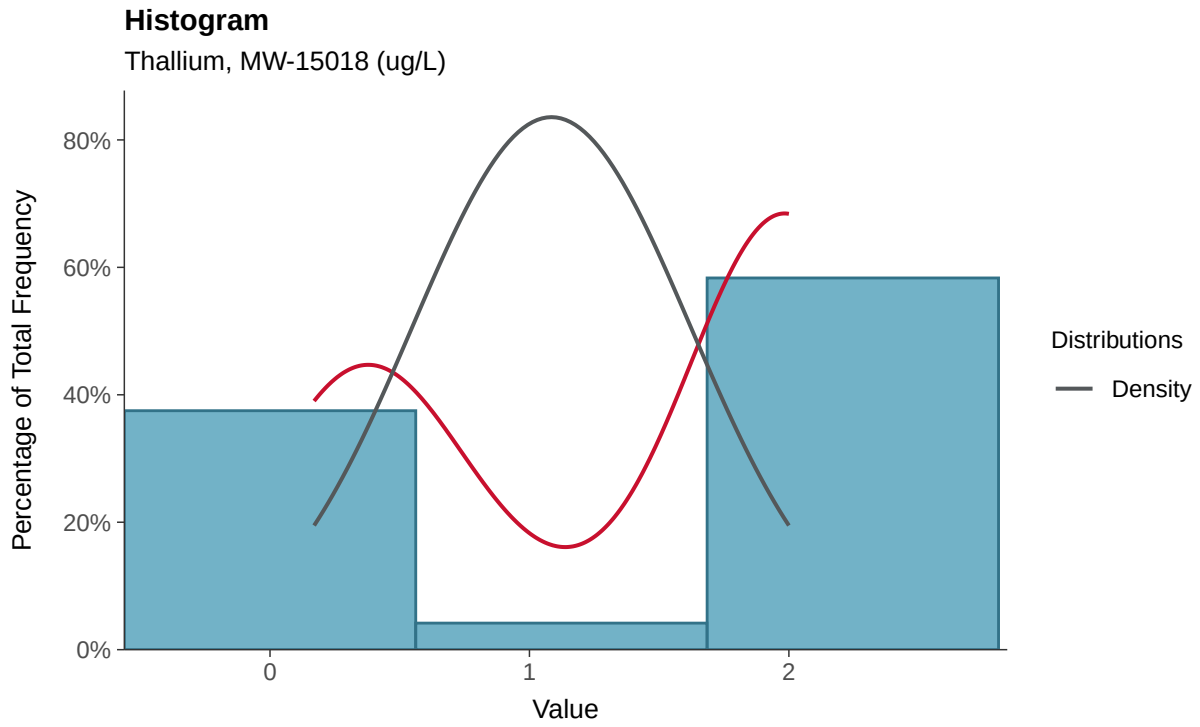
Selenium, MW-15018 (ug/L)



## Appendix IV: Thallium, MW-15018

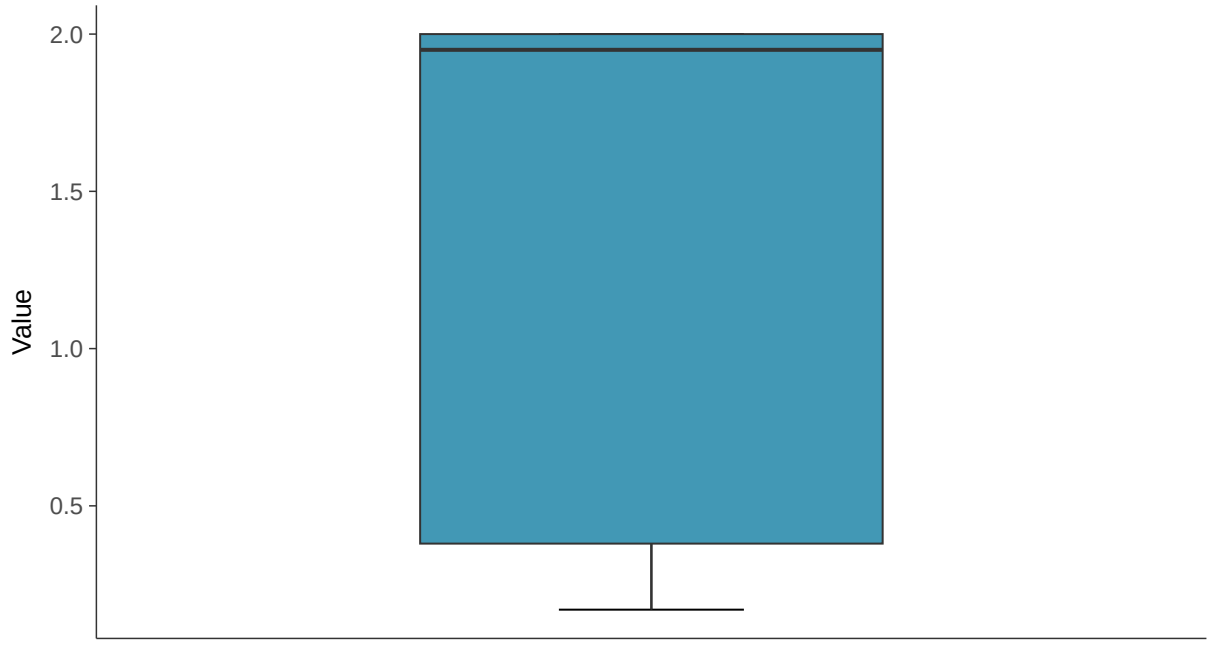
ID: 08_2_131



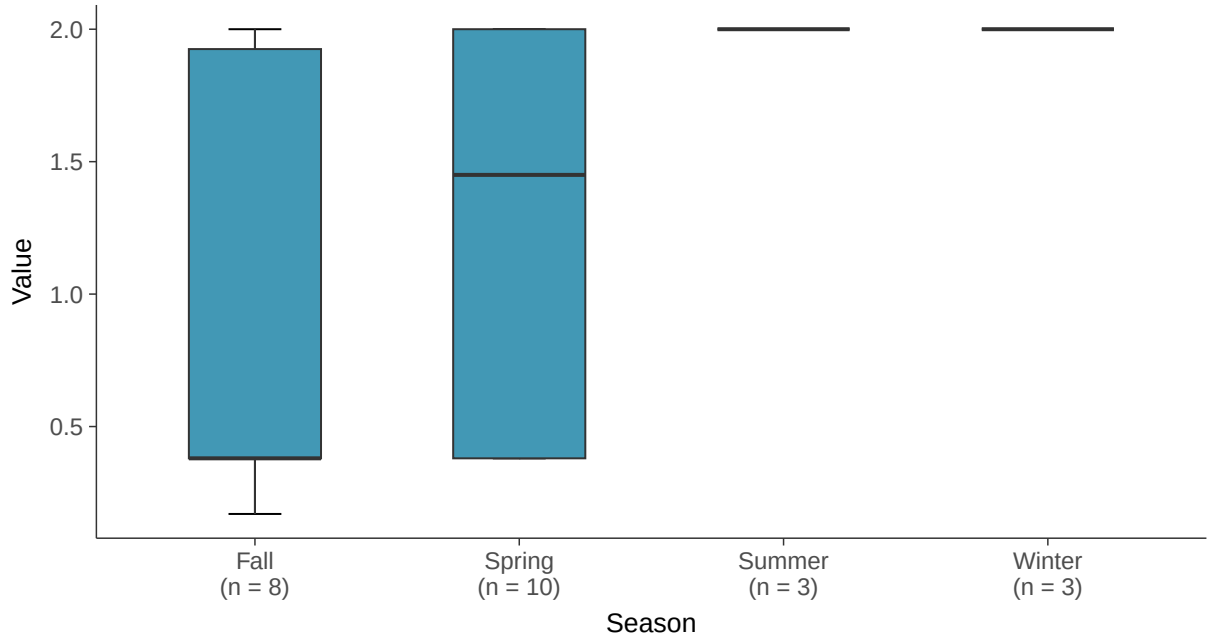
**Boxplot**

Thallium, MW-15018 (ug/L)



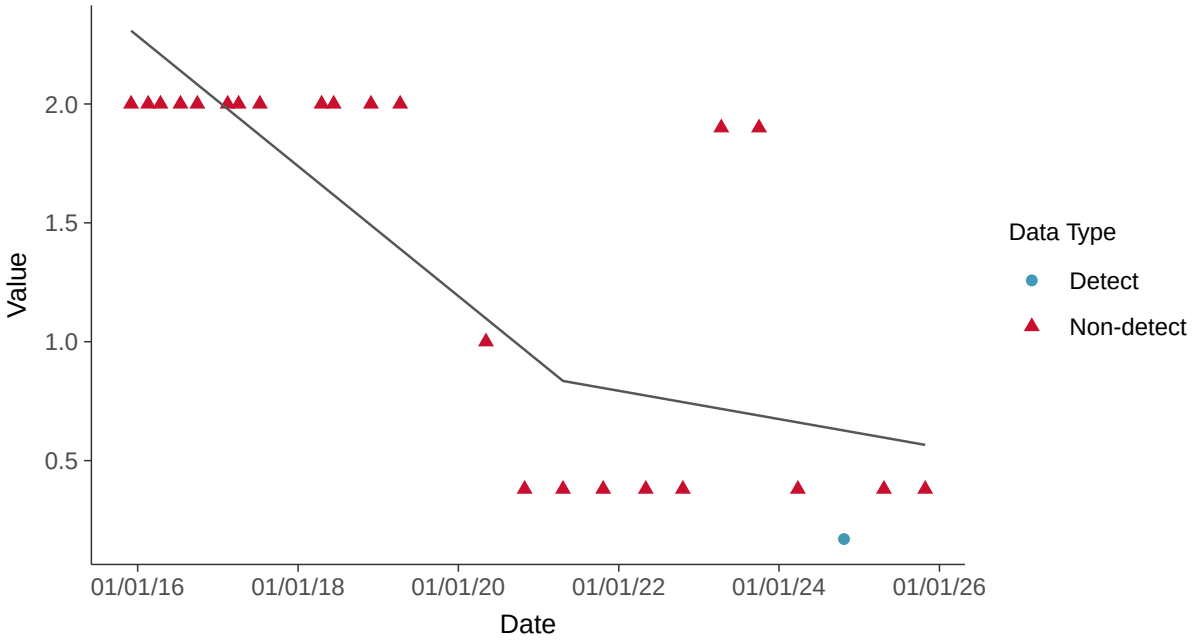

**Boxplot by Season**

Thallium, MW-15018 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15018 (ug/L)

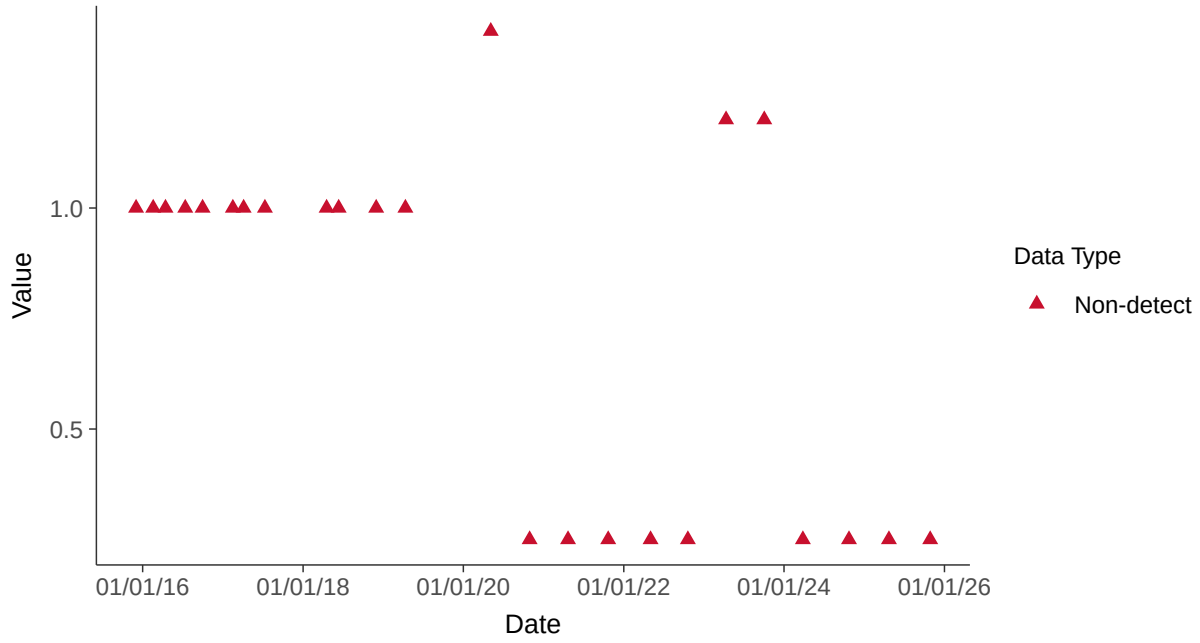


## Appendix IV: Antimony, MW-15019

ID: 09_2_101

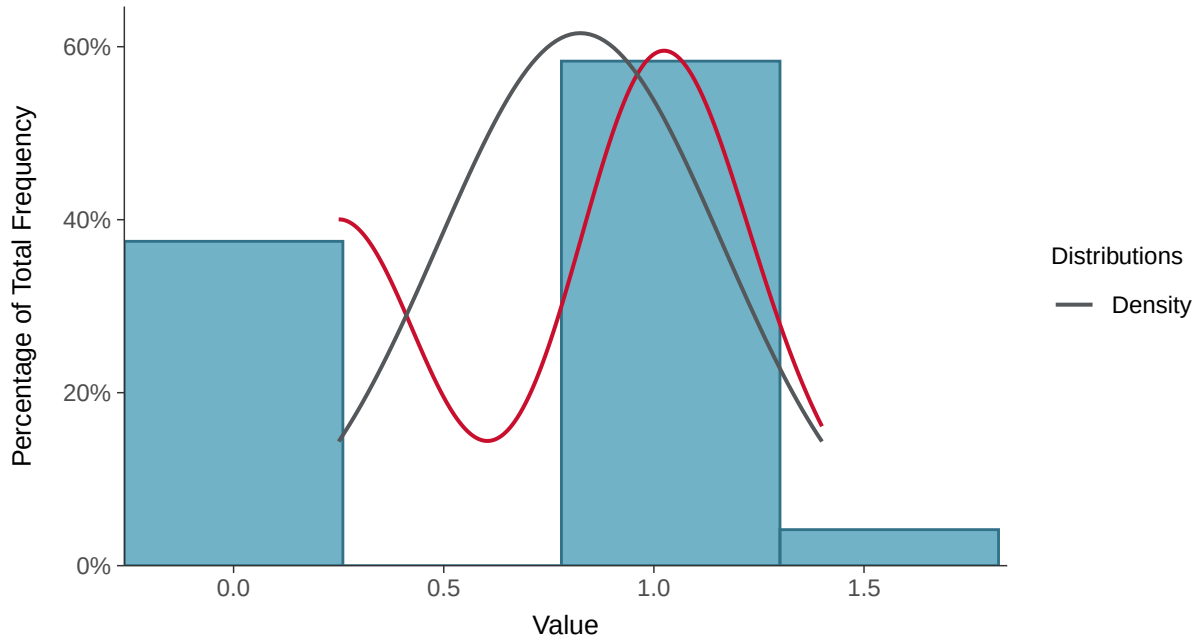
**Scatter Plot**

Antimony, MW-15019 (ug/L)



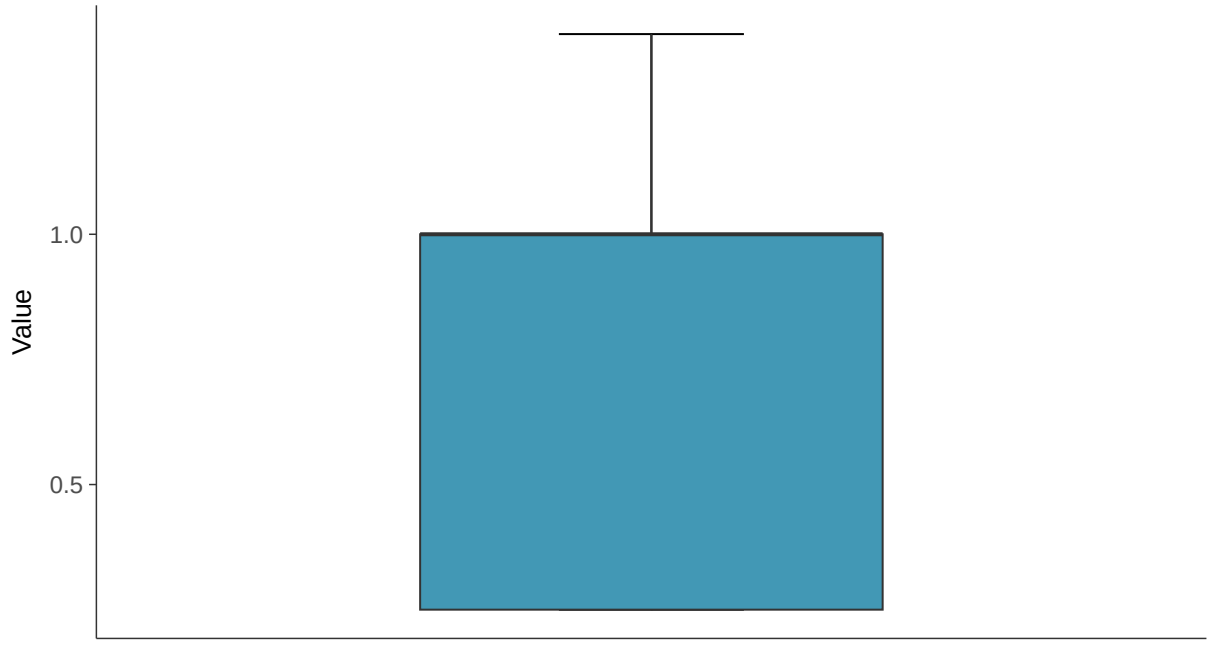

**Histogram**

Antimony, MW-15019 (ug/L)



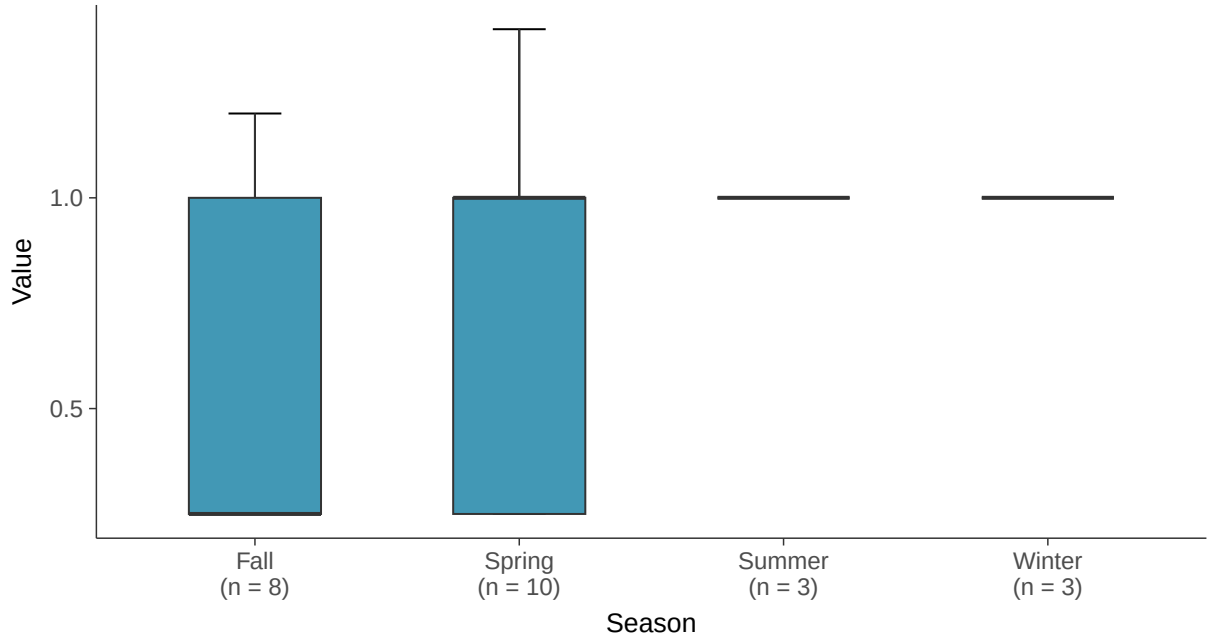
## Boxplot

Antimony, MW-15019 (ug/L)



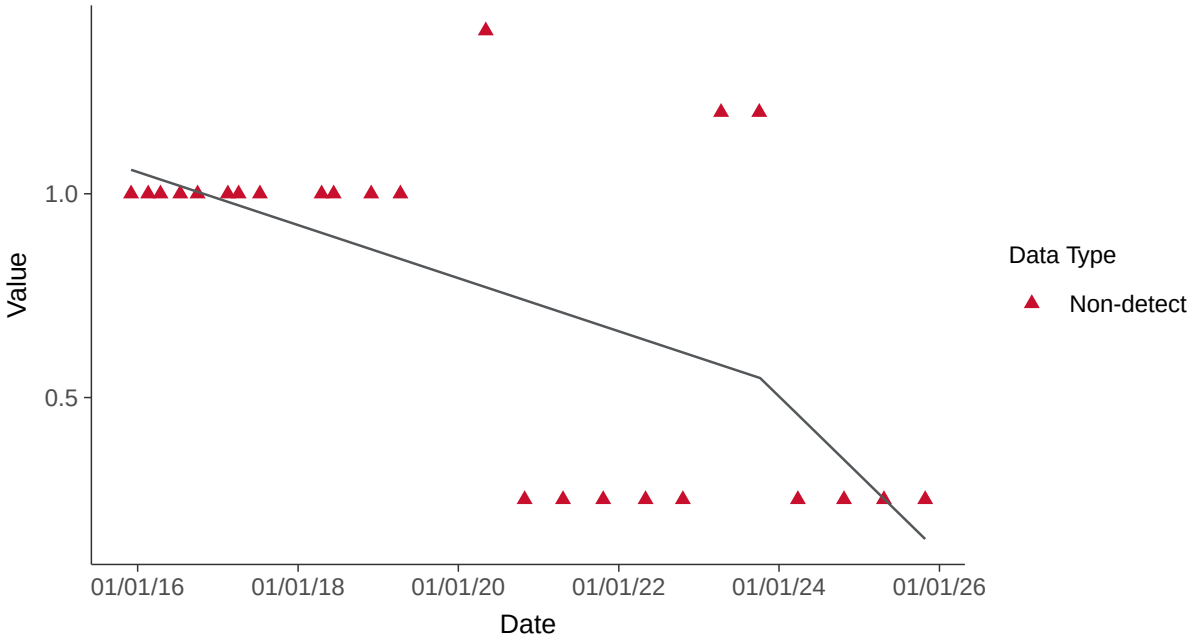

## Boxplot by Season

Antimony, MW-15019 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15019 (ug/L)

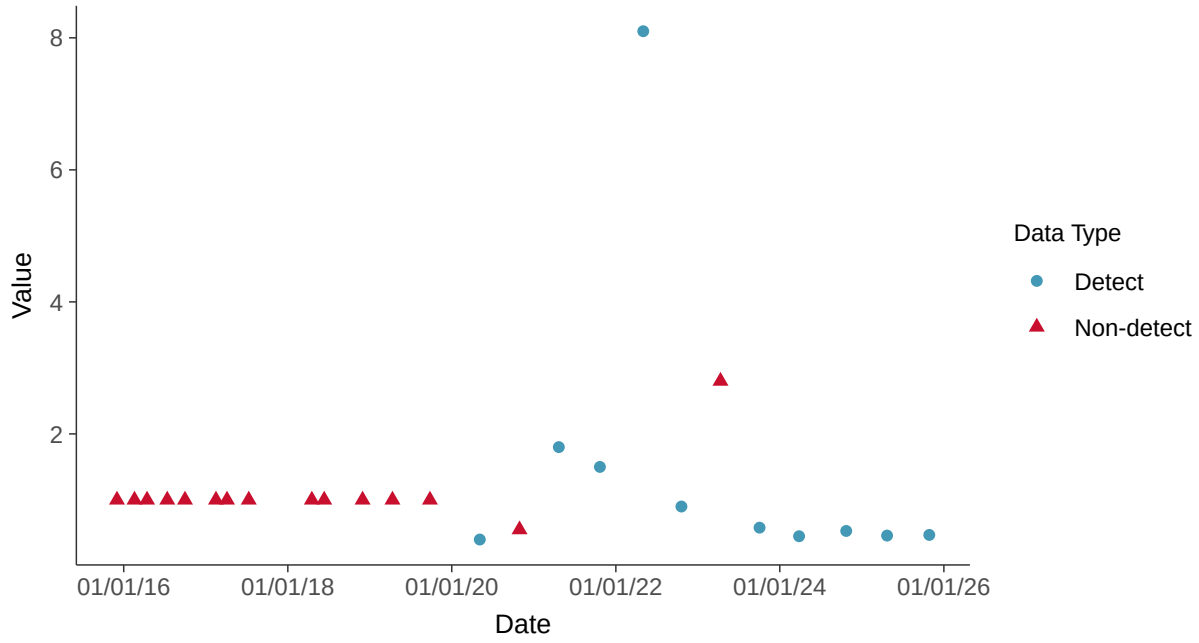


## Appendix IV: Arsenic, MW-15019

ID: 09_2_102

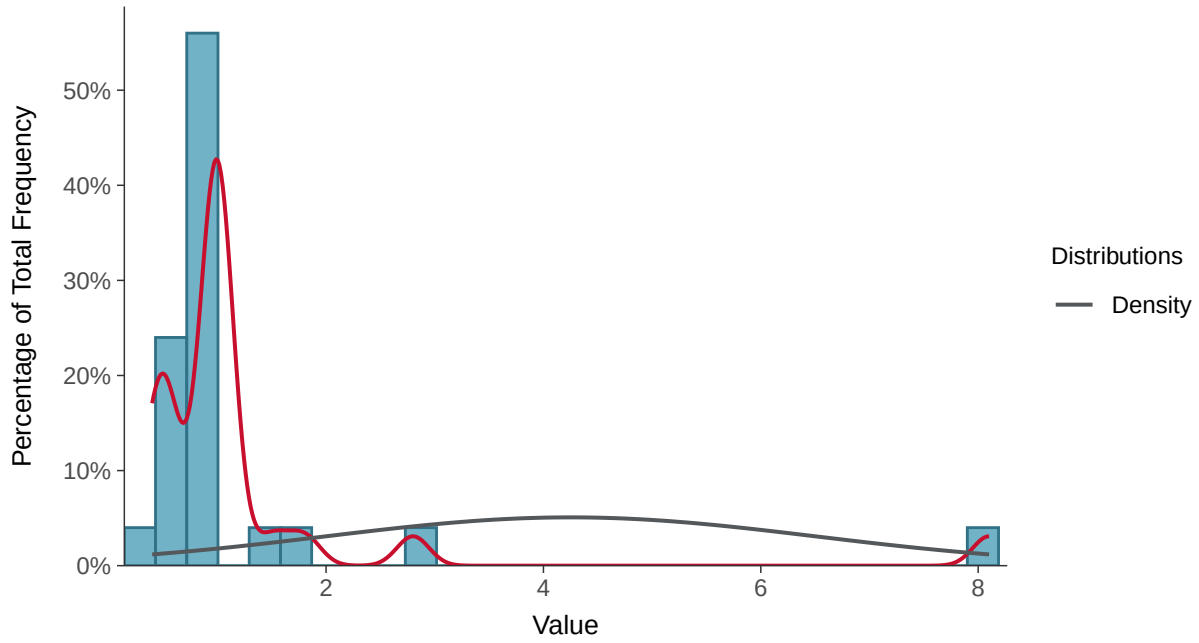
**Scatter Plot**

Arsenic, MW-15019 (ug/L)



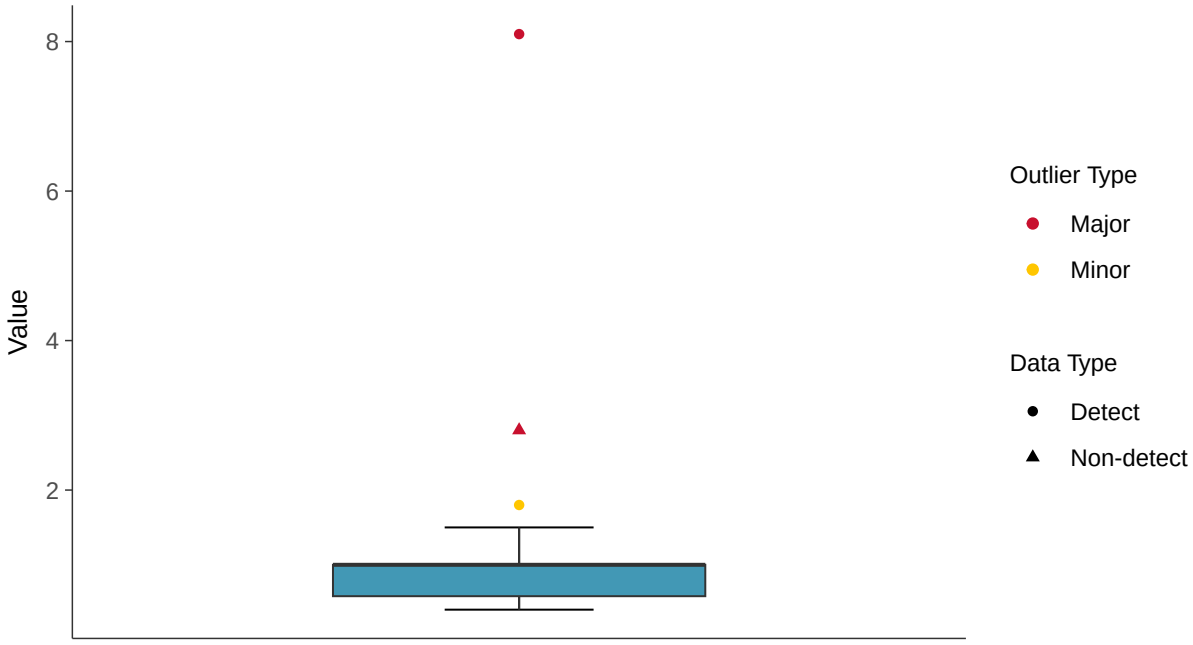

**Histogram**

Arsenic, MW-15019 (ug/L)



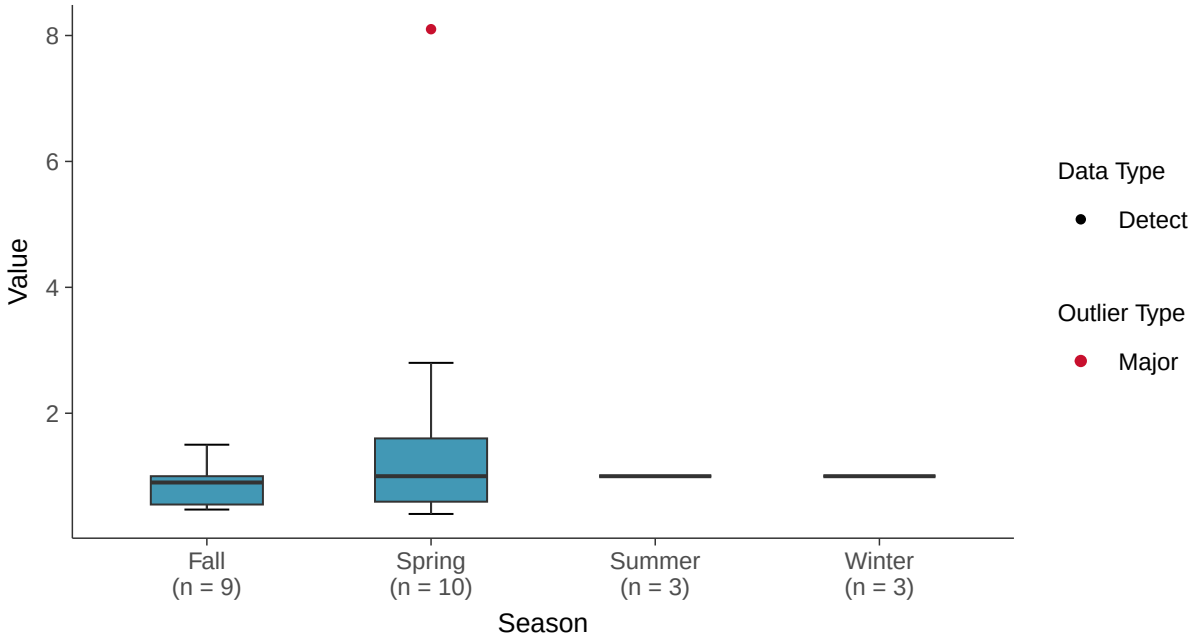
## Boxplot

Arsenic, MW-15019 (ug/L)



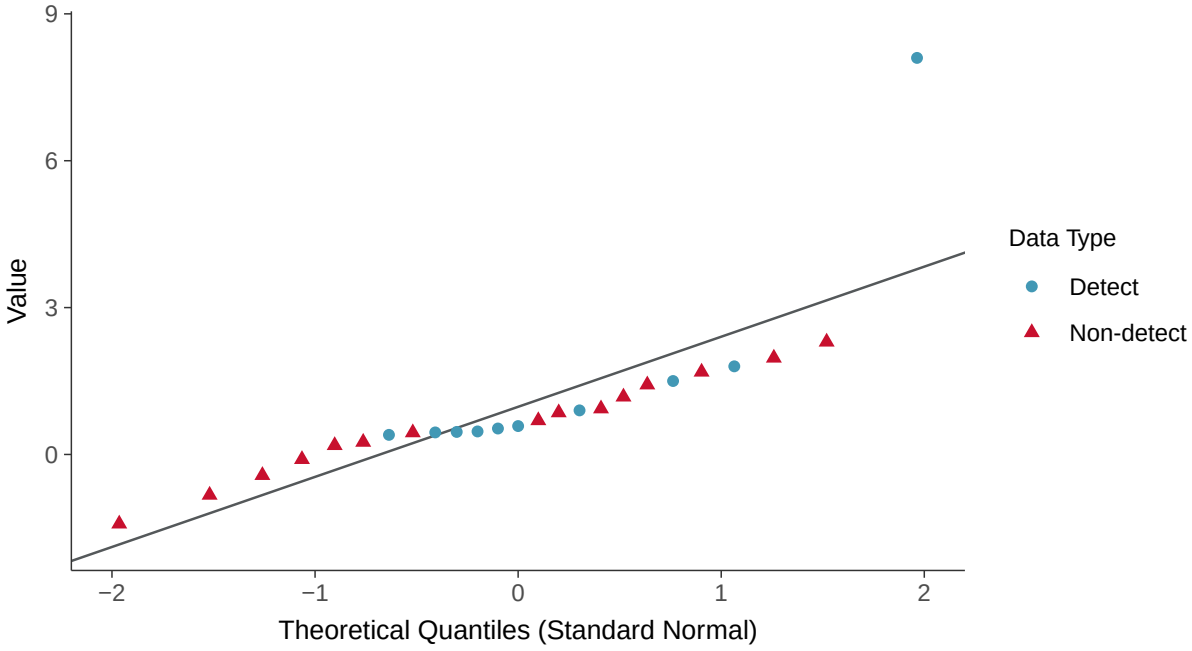

## Boxplot by Season

Arsenic, MW-15019 (ug/L)



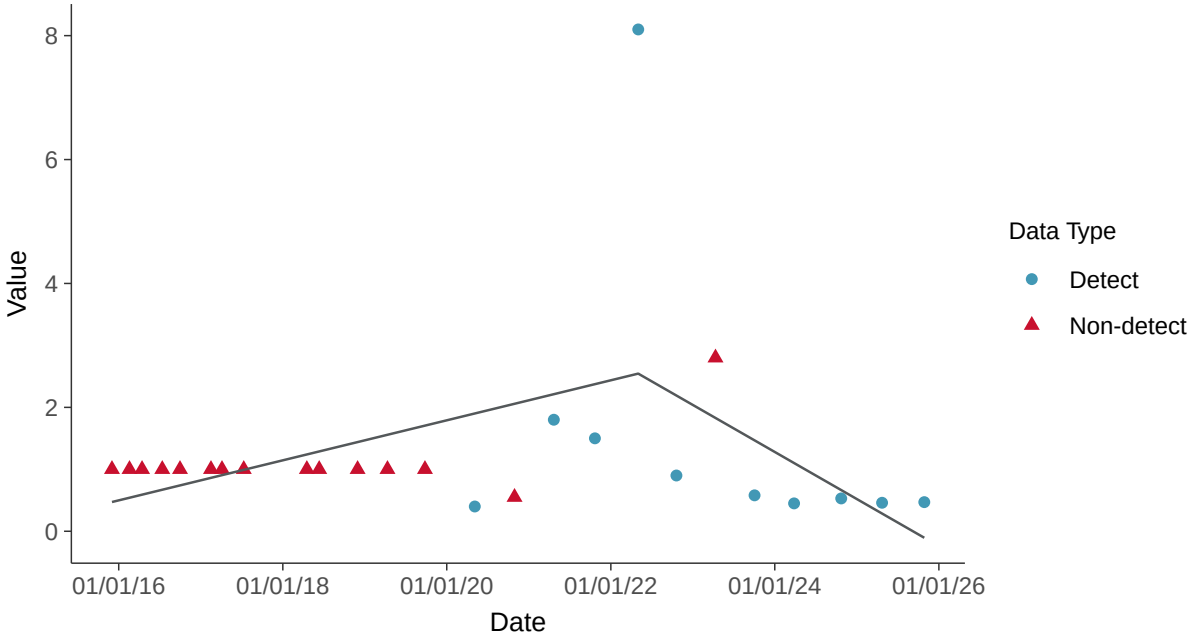
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15019 (ug/L)



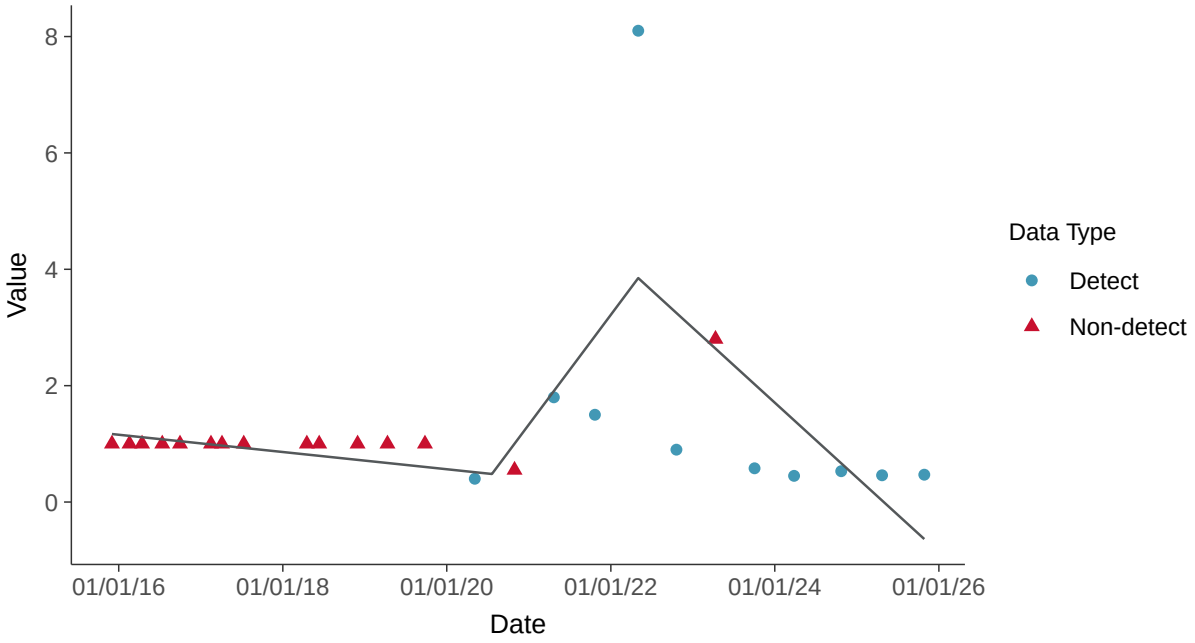

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15019 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15019 (ug/L)

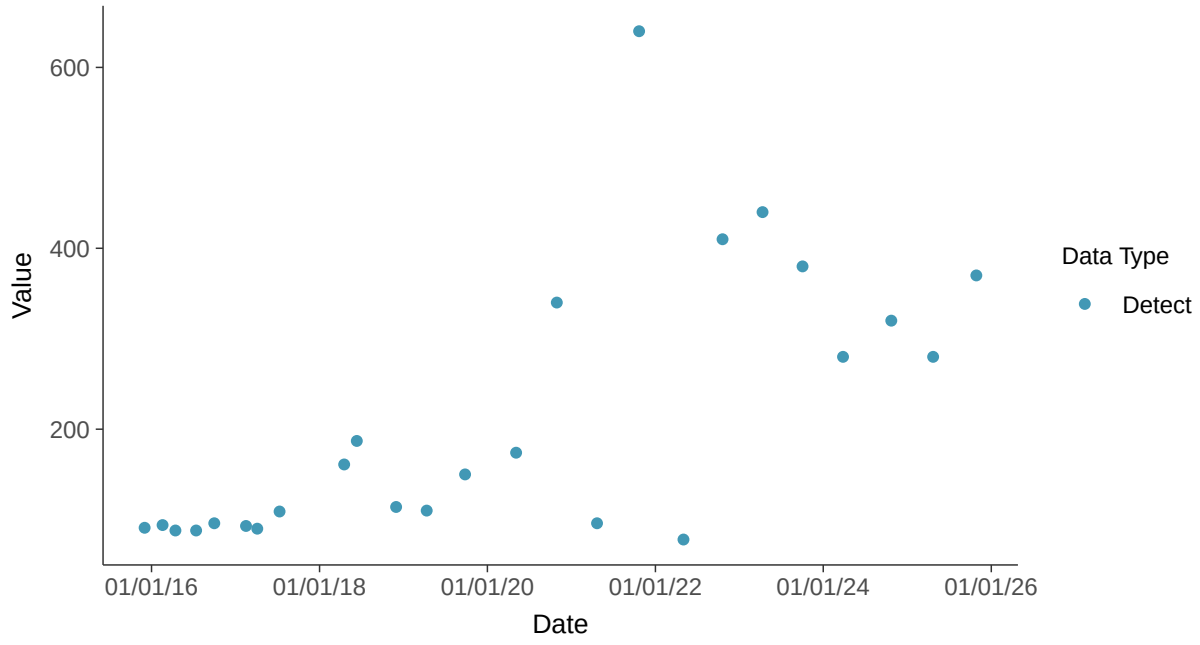


## Appendix IV: Barium, MW-15019

ID: 09_2_103

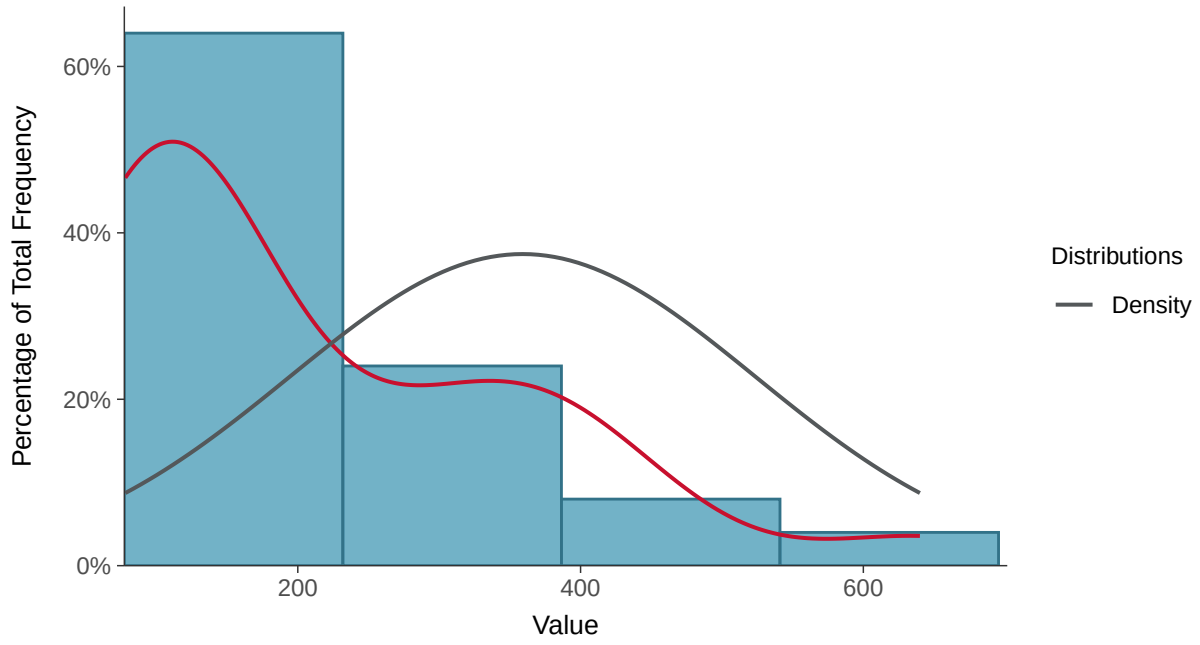
**Scatter Plot**

Barium, MW-15019 (ug/L)



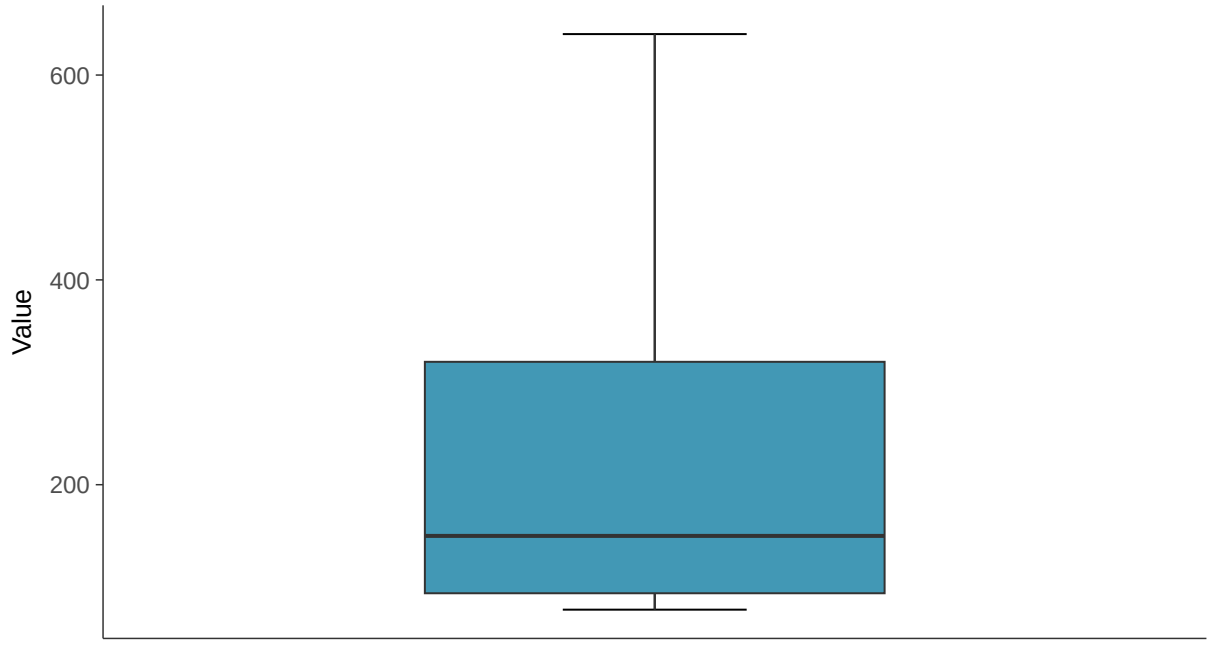

**Histogram**

Barium, MW-15019 (ug/L)



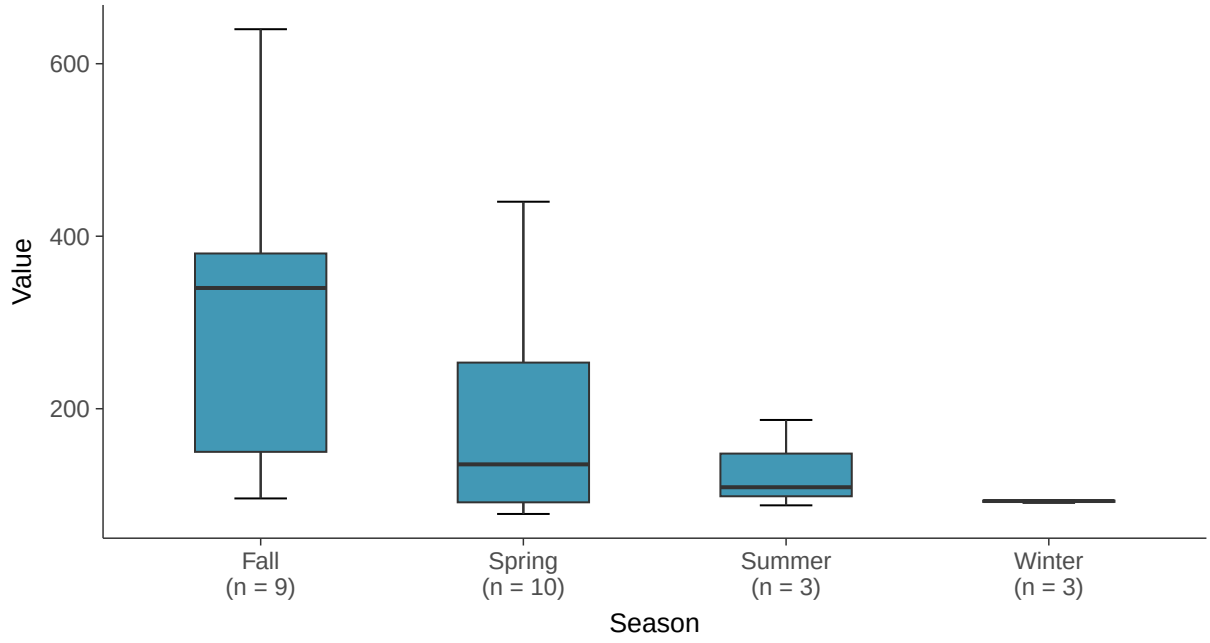
**Boxplot**

Barium, MW-15019 (ug/L)



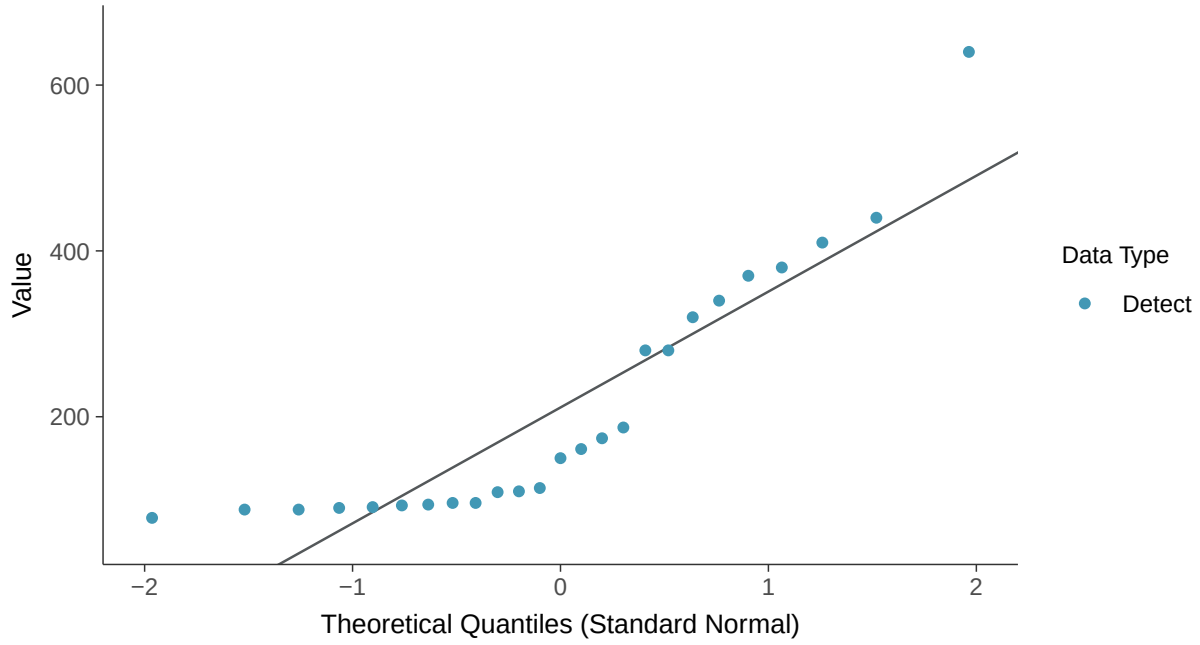

**Boxplot by Season**

Barium, MW-15019 (ug/L)



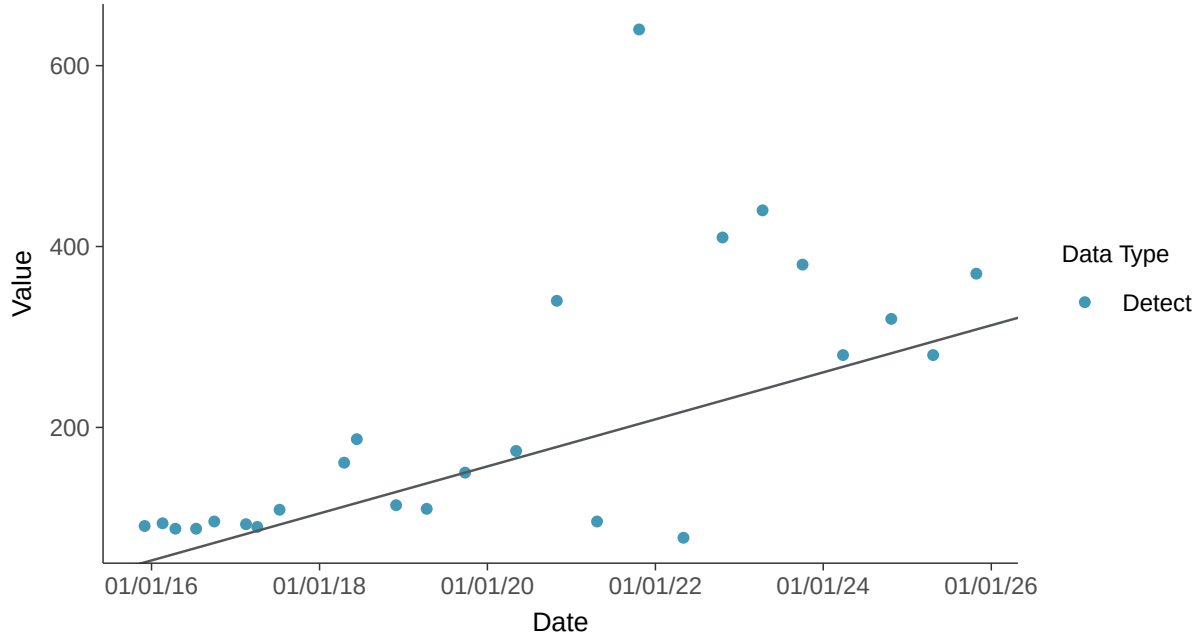
**Normal Q-Q plot**

Barium, MW-15019 (ug/L)



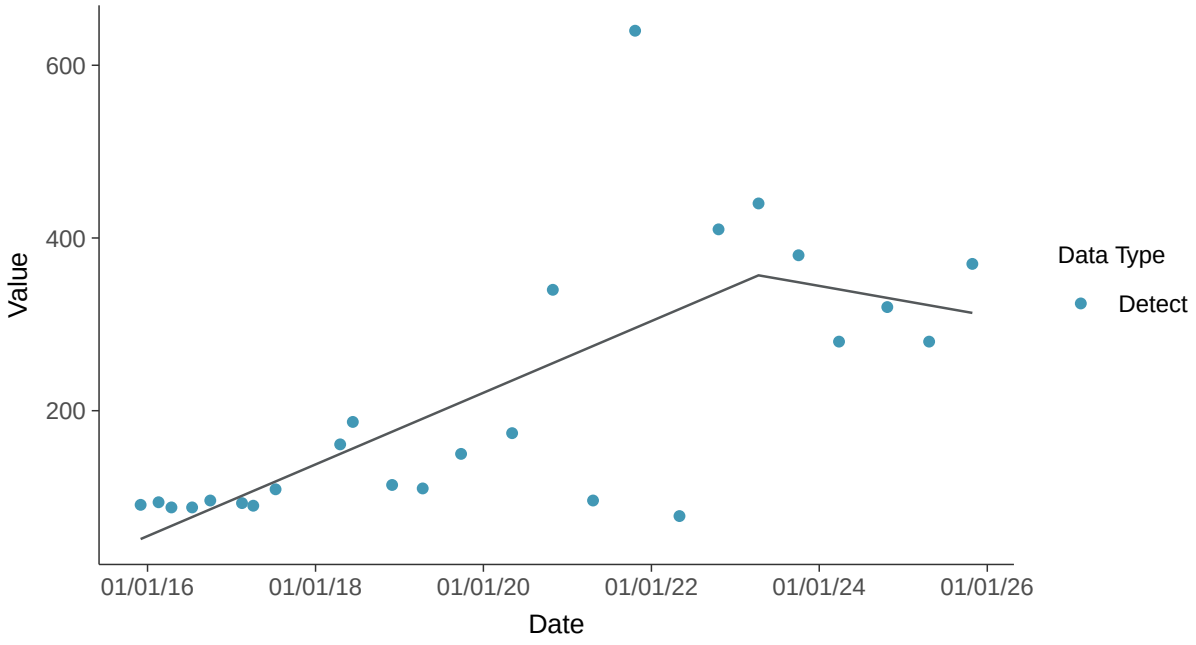

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15019 (ug/L)



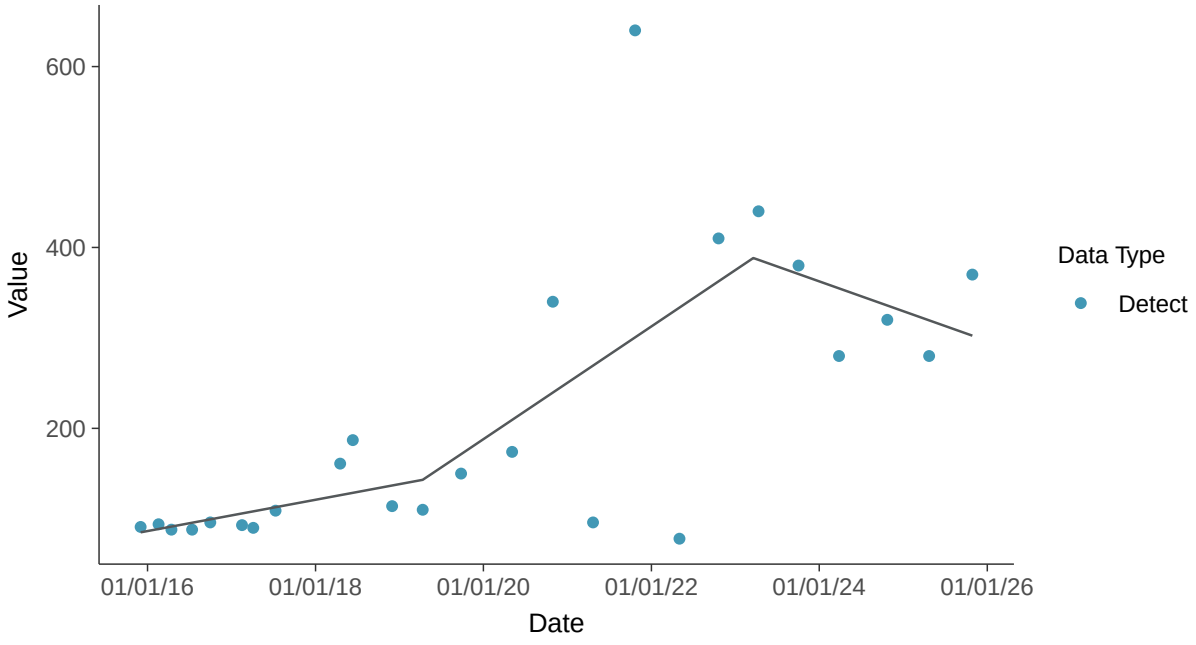
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15019 (ug/L)



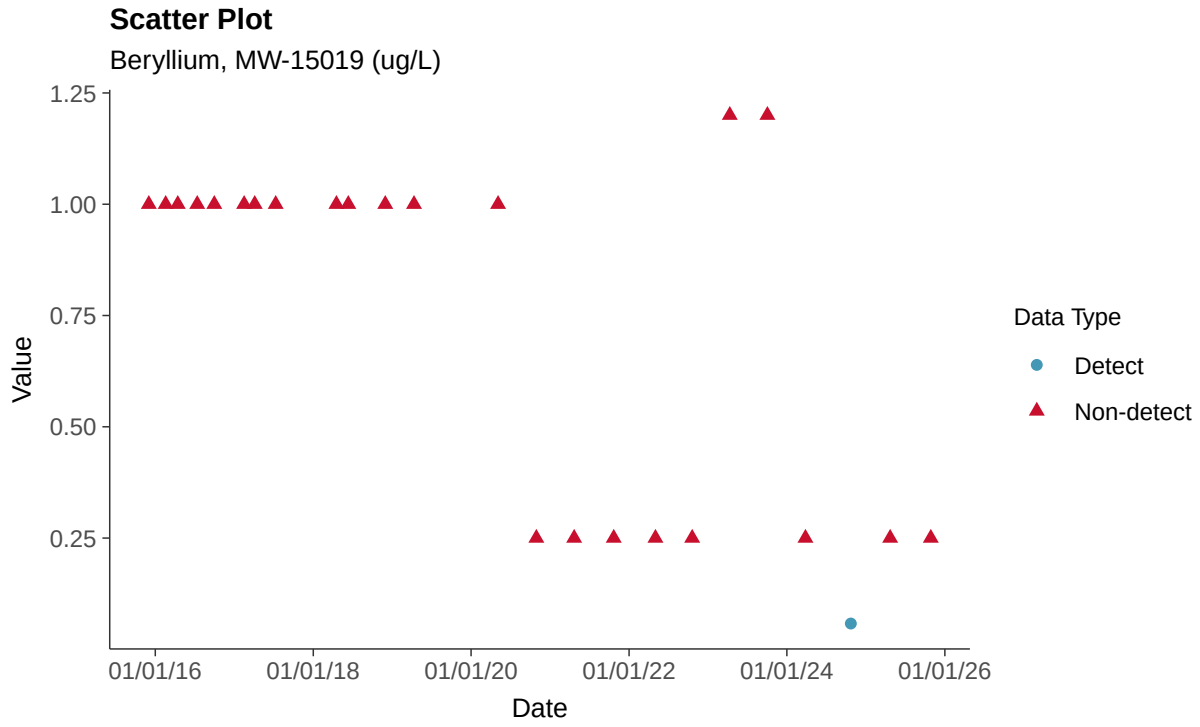

**Trend Regression: Piecewise Linear-Linear-Linear**

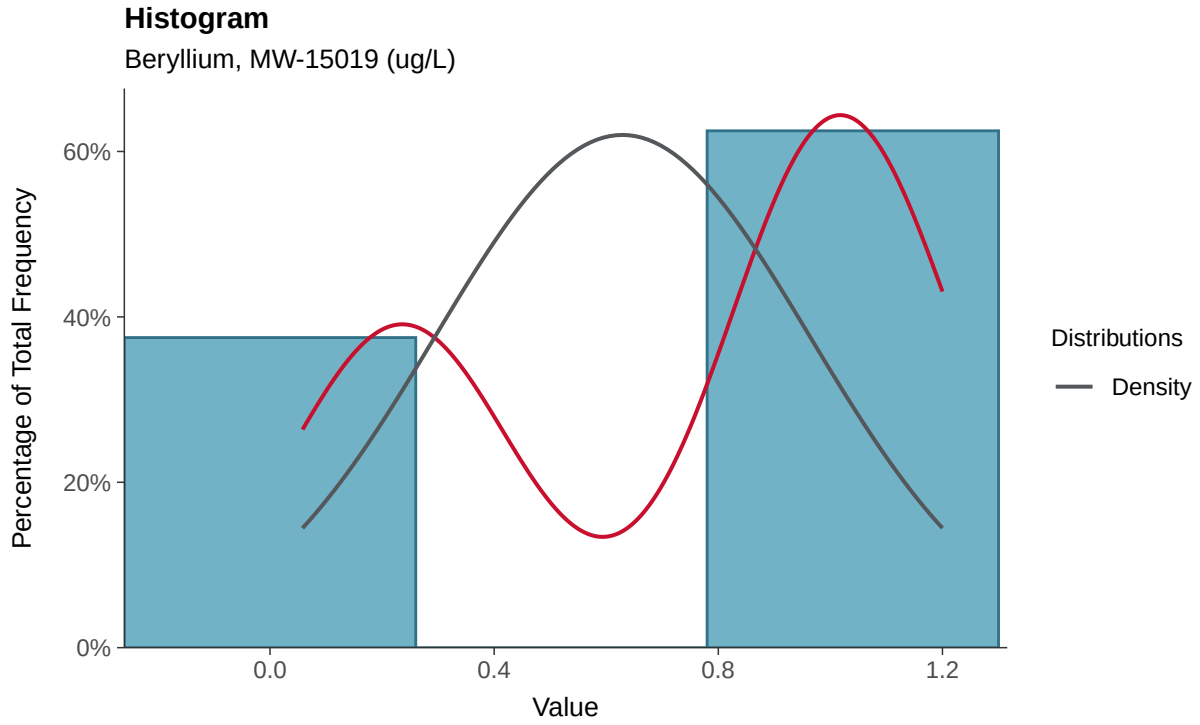
Barium, MW-15019 (ug/L)



## Appendix IV: Beryllium, MW-15019

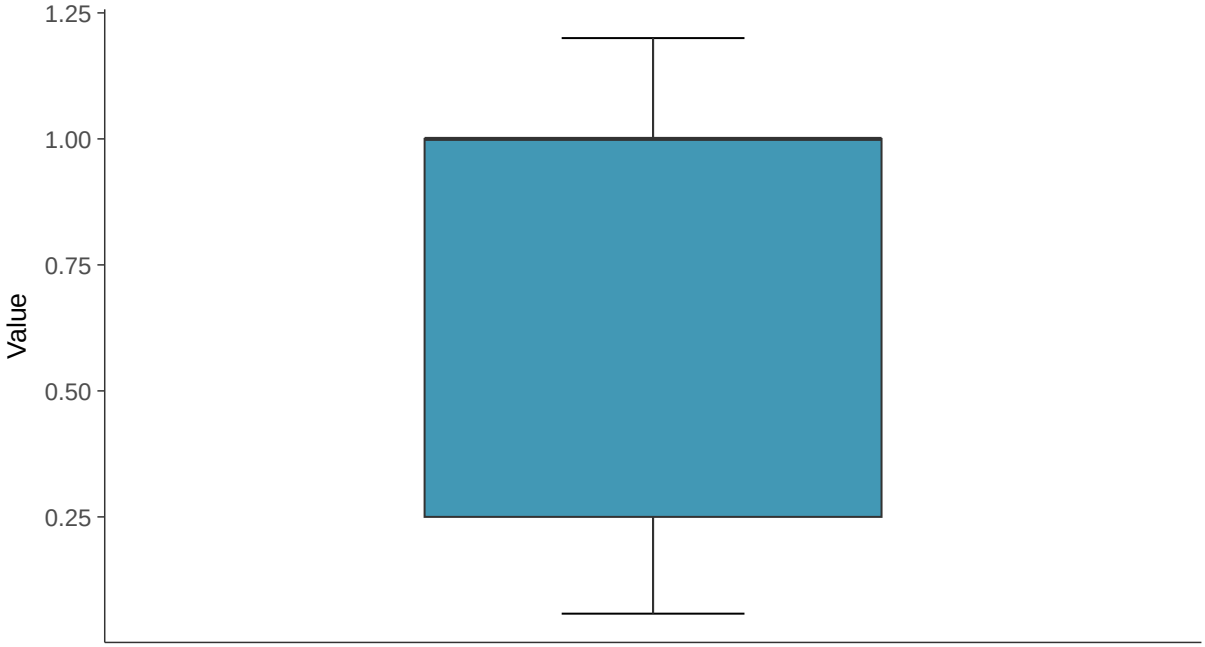
ID: 09_2_104



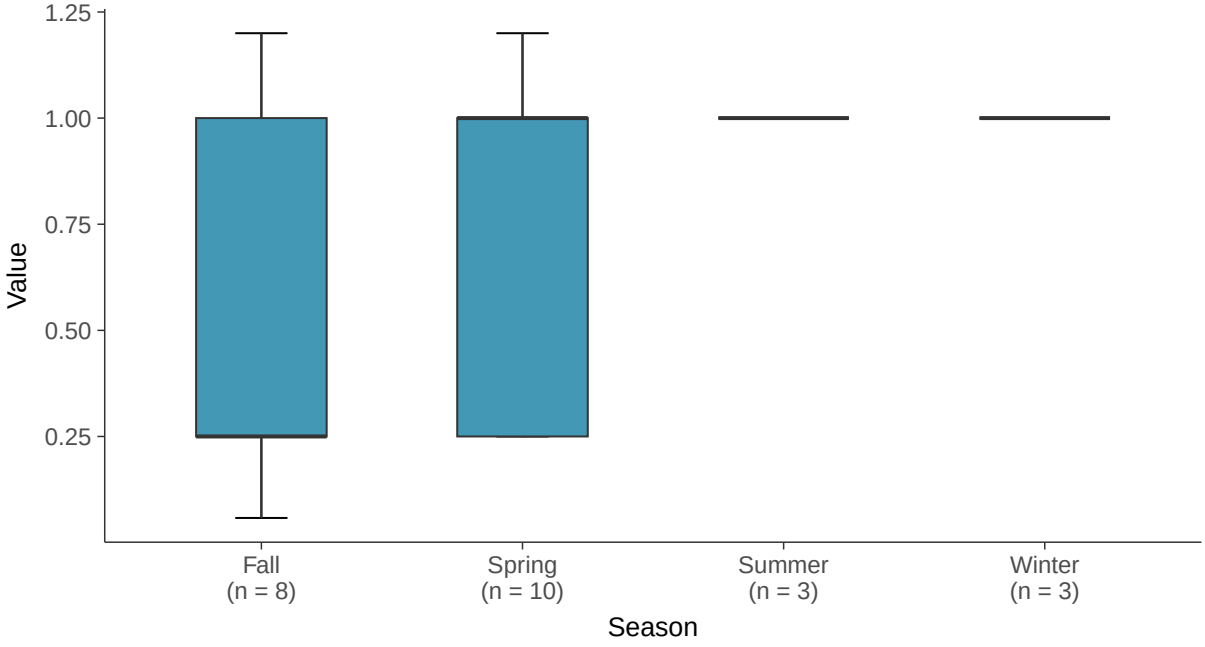
## Boxplot

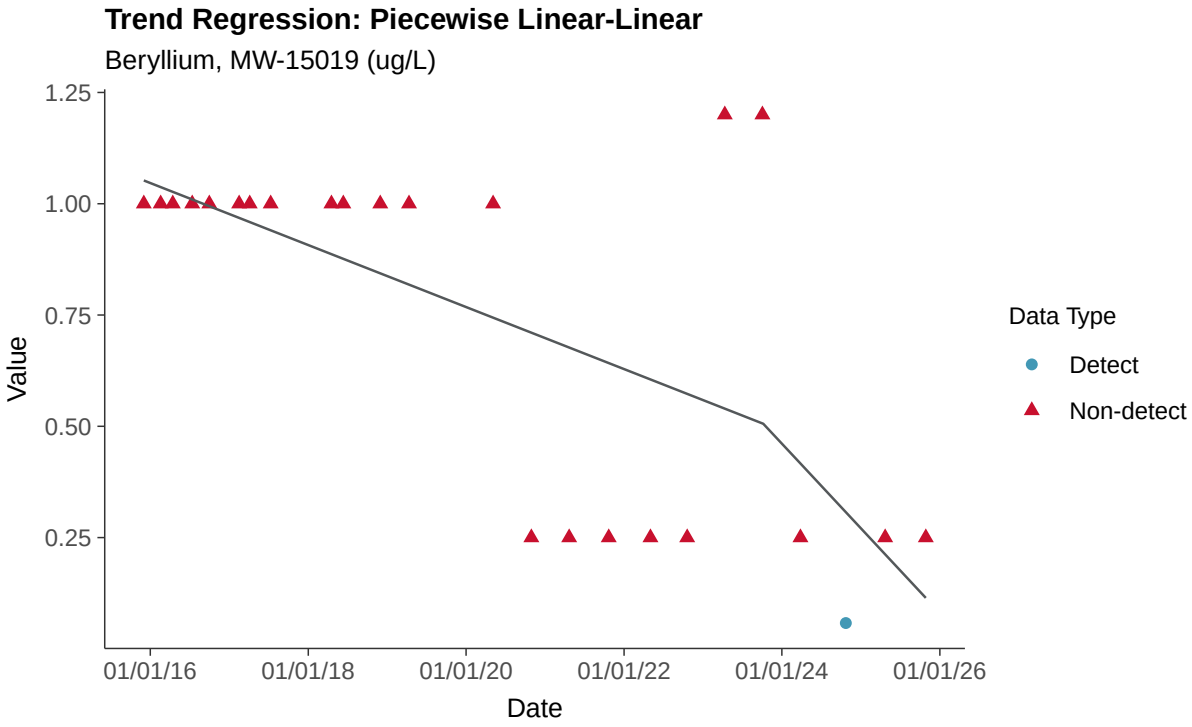
Beryllium, MW-15019 (ug/L)




## Boxplot by Season

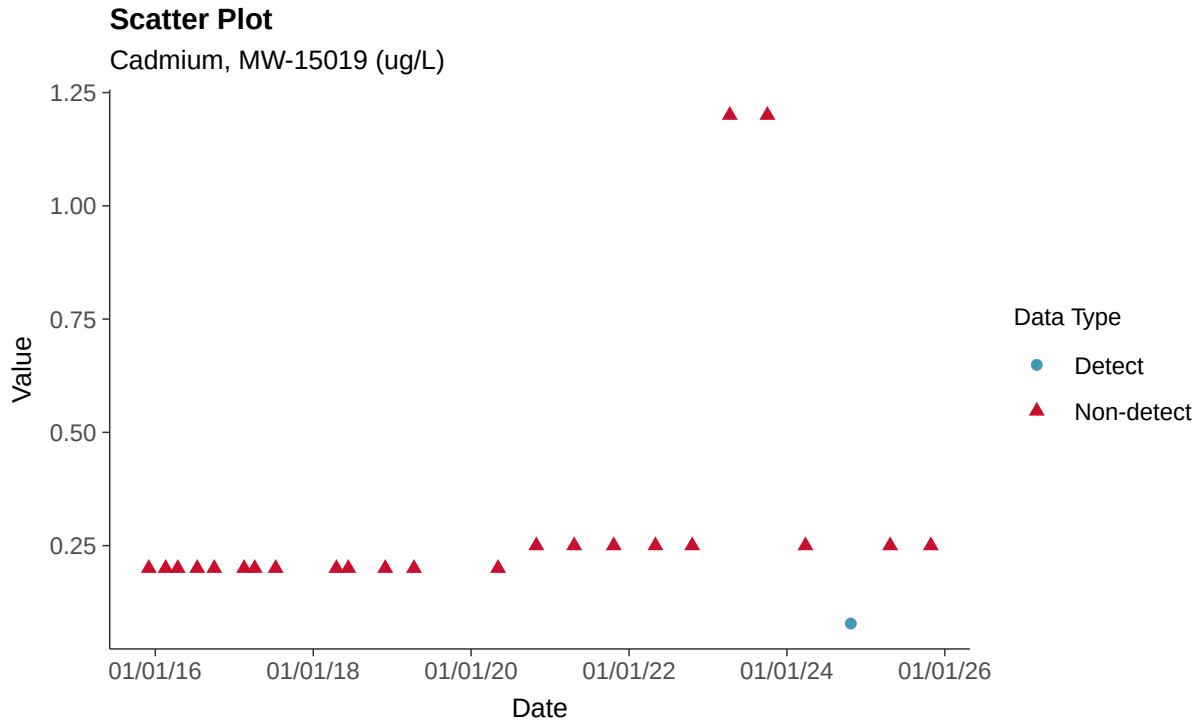
Beryllium, MW-15019 (ug/L)

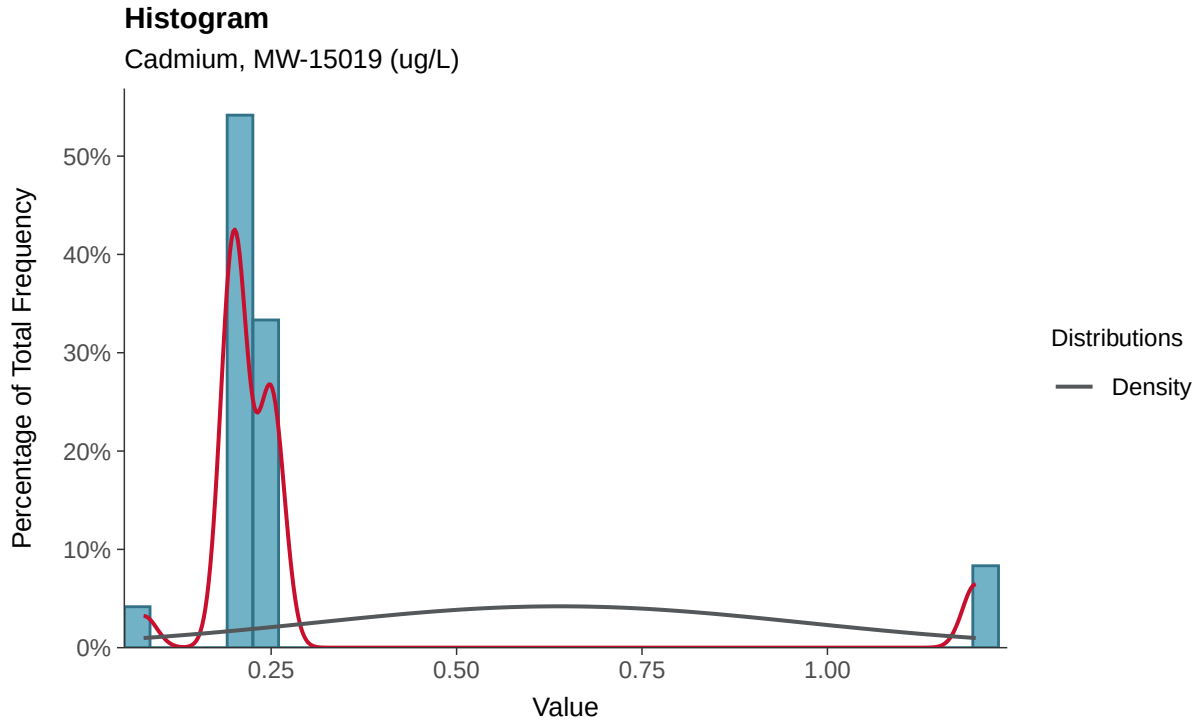



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15019 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15019

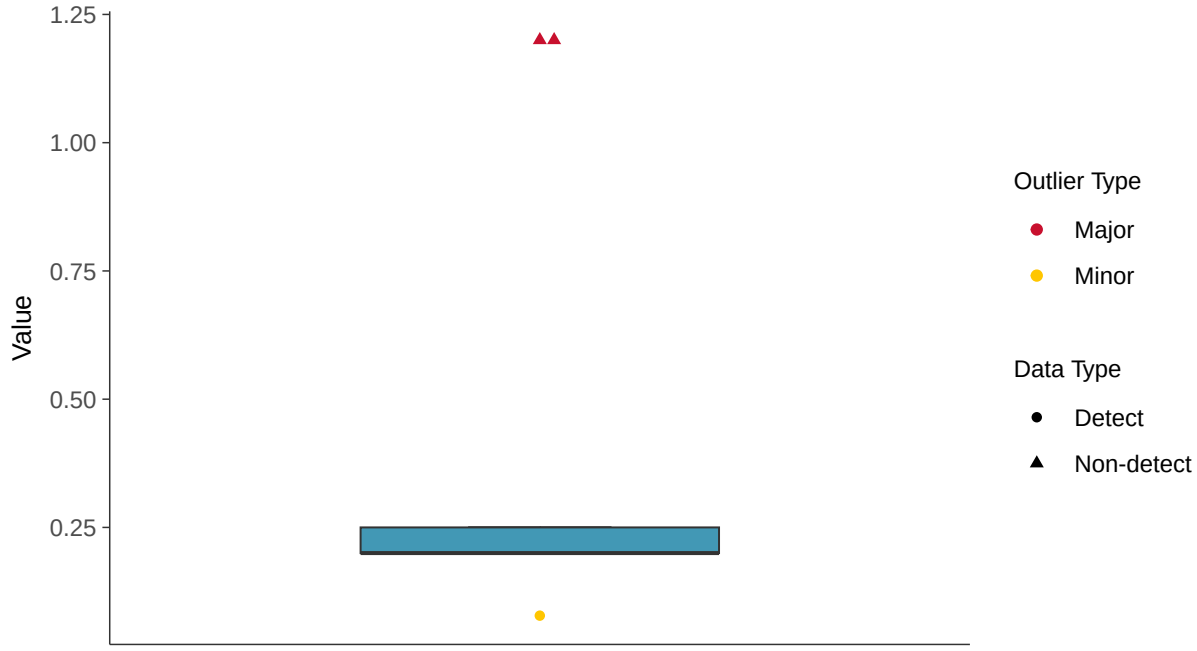
ID: 09_2_106



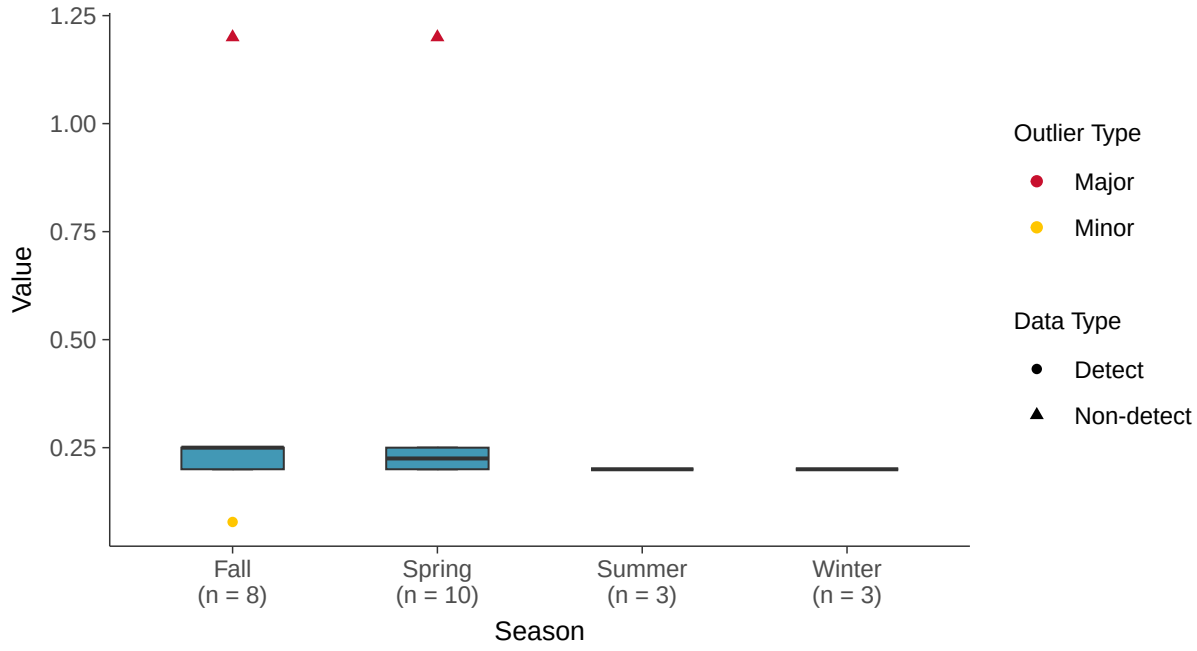
## Boxplot

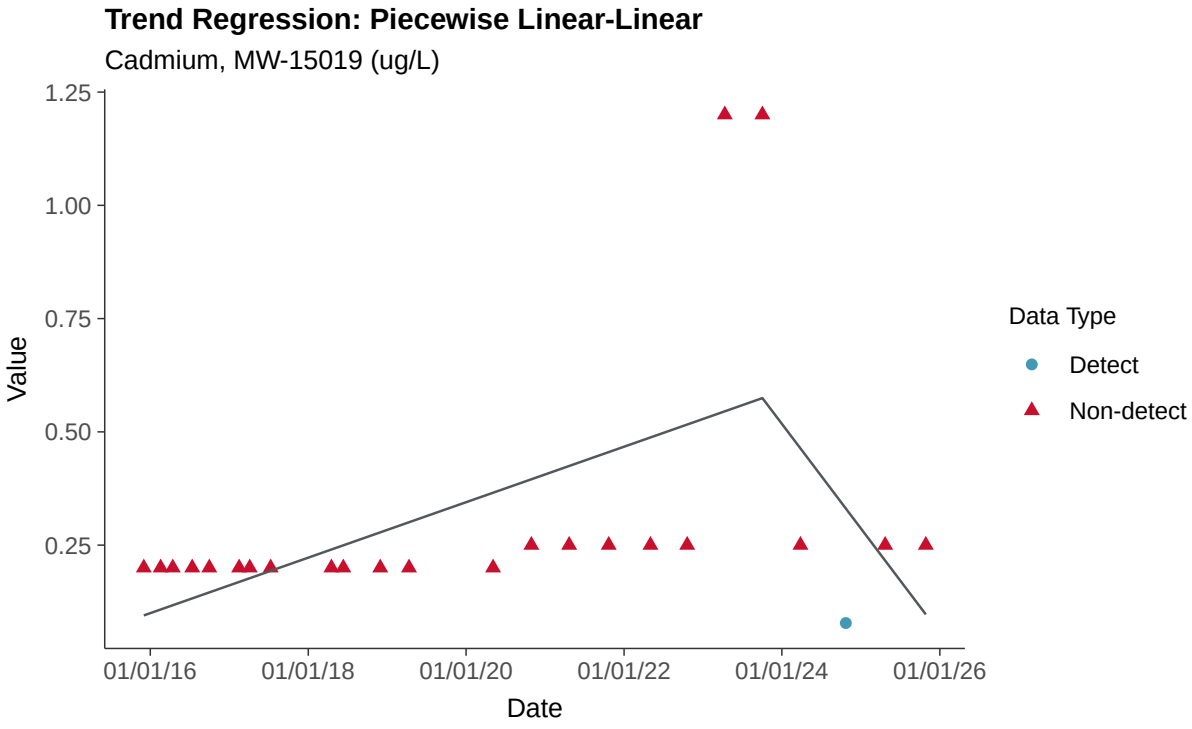
Cadmium, MW-15019 (ug/L)




## Boxplot by Season

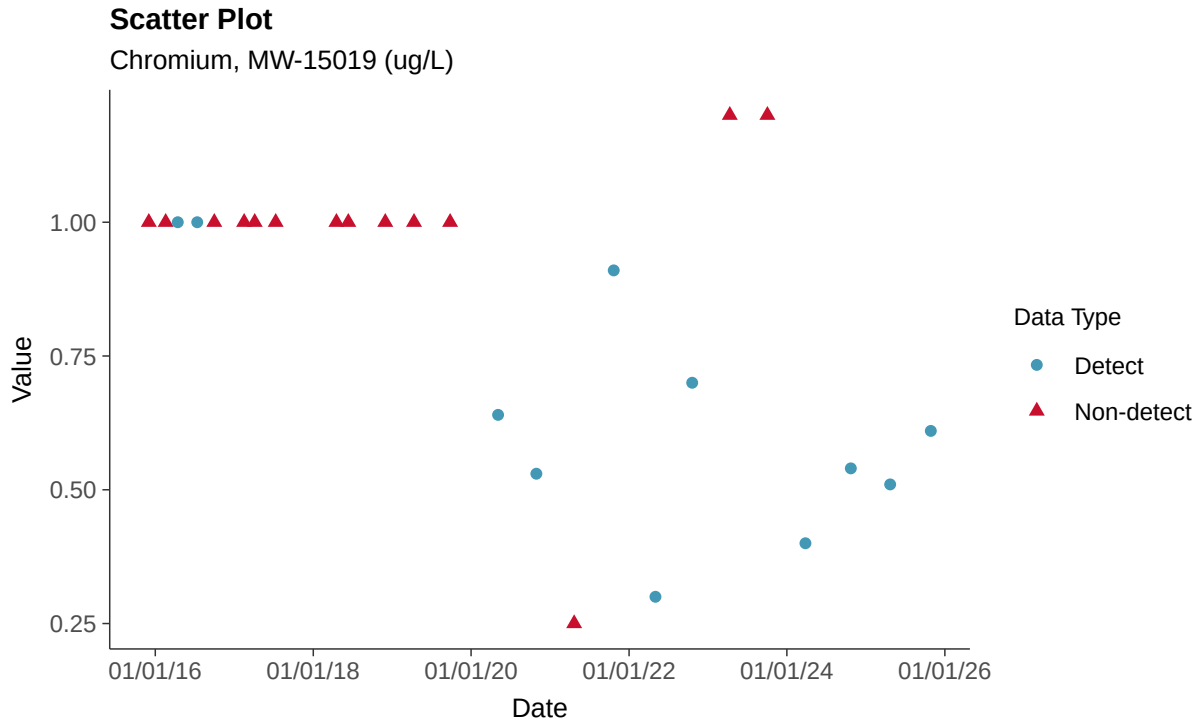
Cadmium, MW-15019 (ug/L)

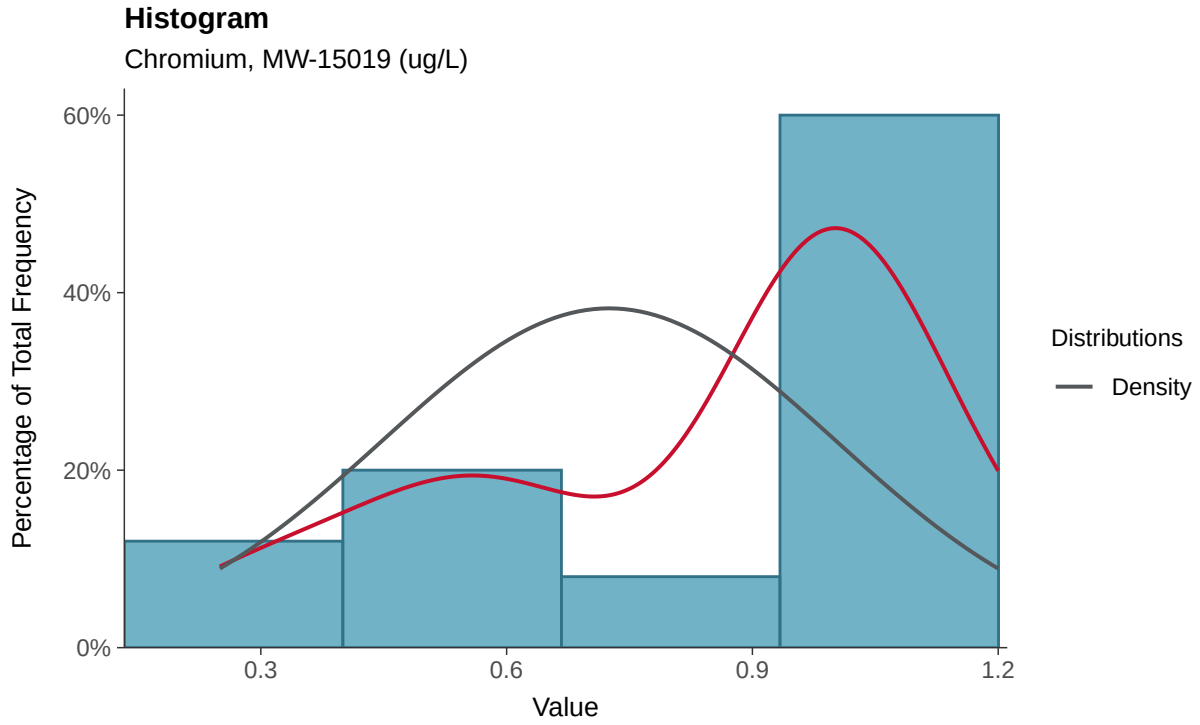



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15019 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Chromium, MW-15019

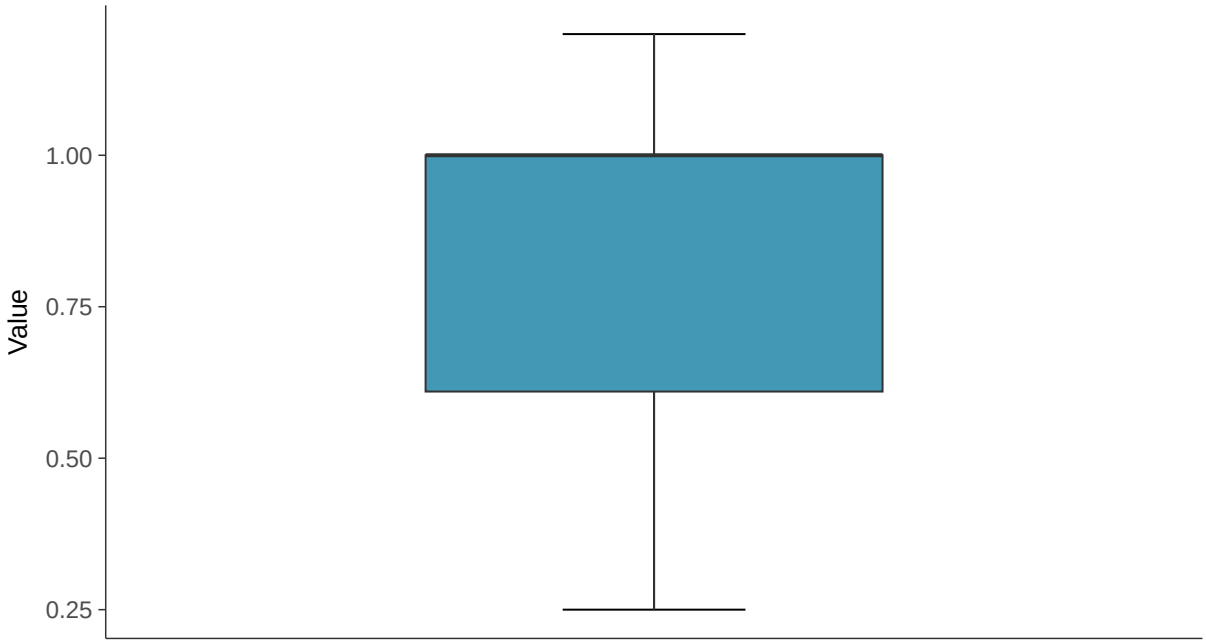
ID: 09_2_109



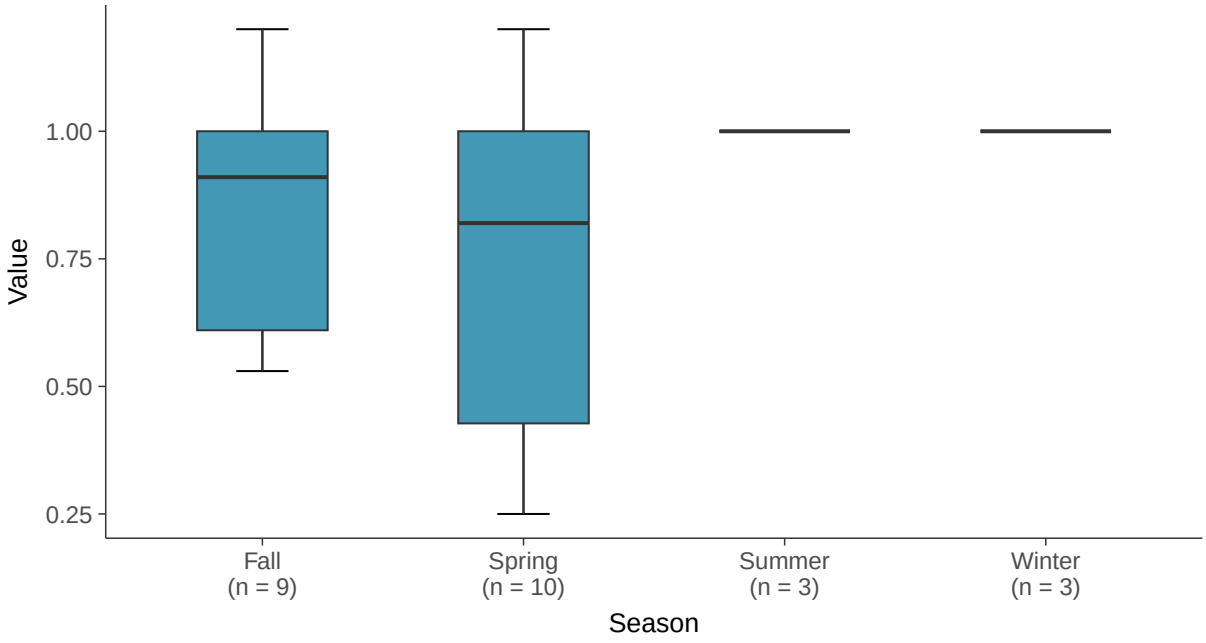
## Boxplot

Chromium, MW-15019 (ug/L)



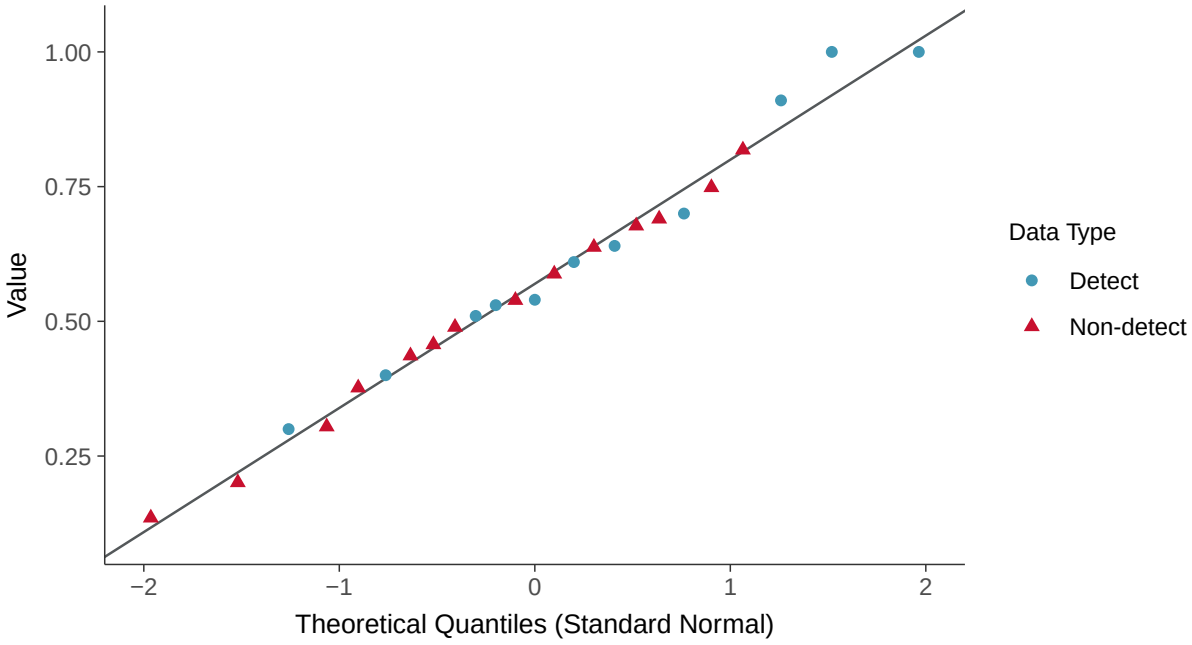

## Boxplot by Season

Chromium, MW-15019 (ug/L)



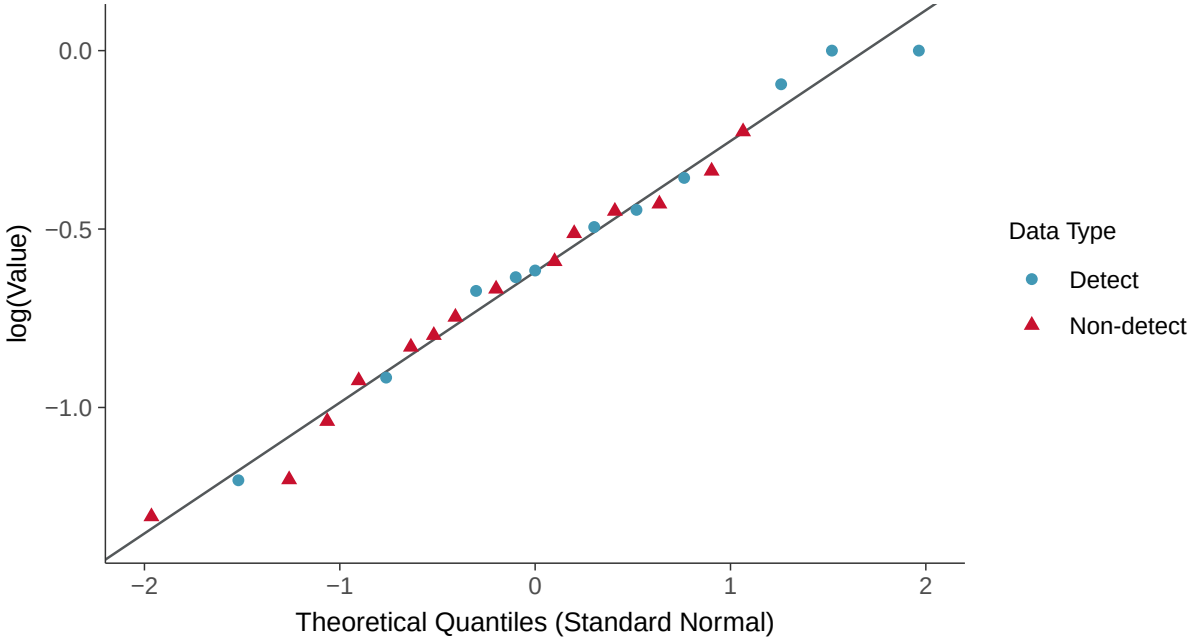
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15019 (ug/L)



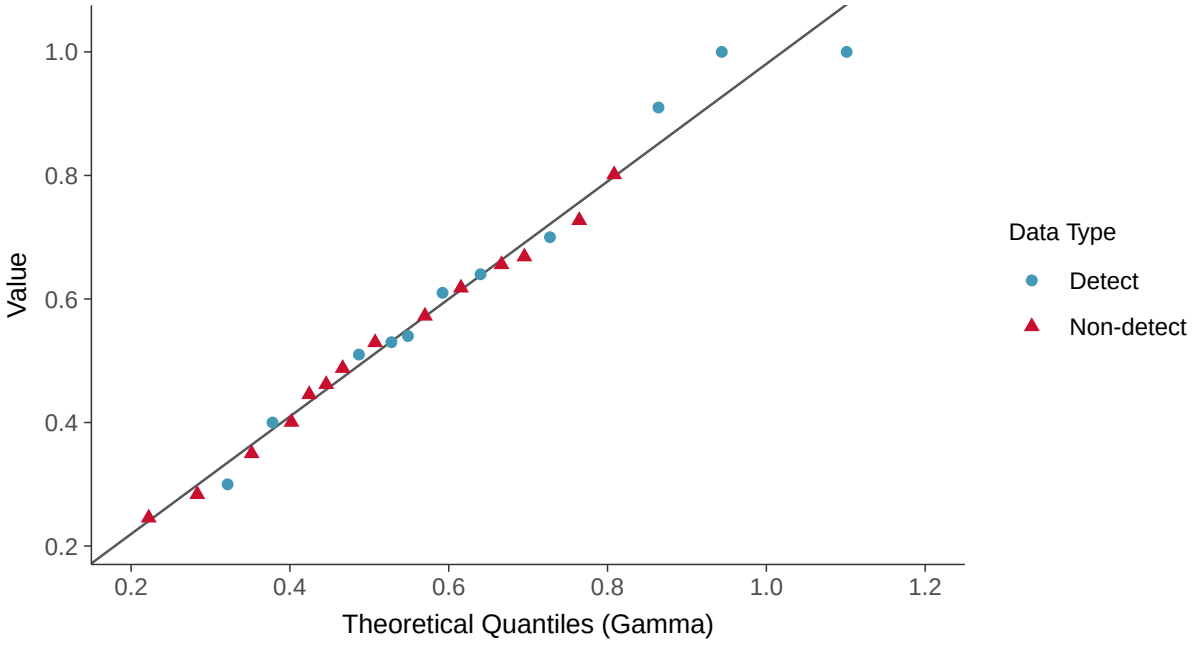

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15019 (ug/L)



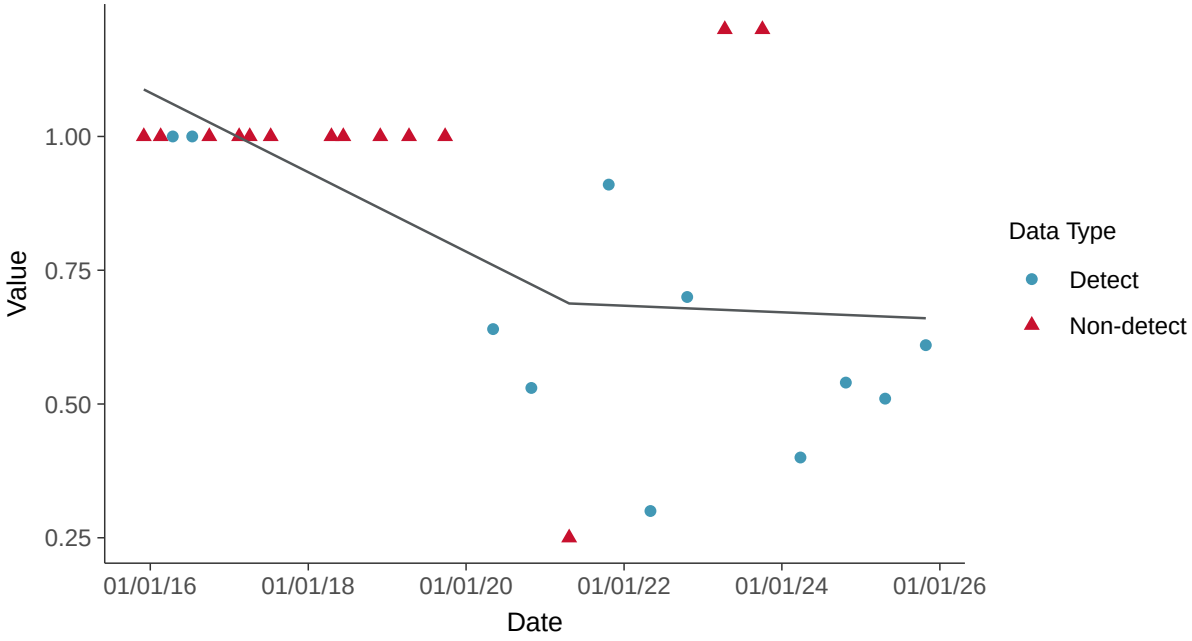
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15019 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15019 (ug/L)

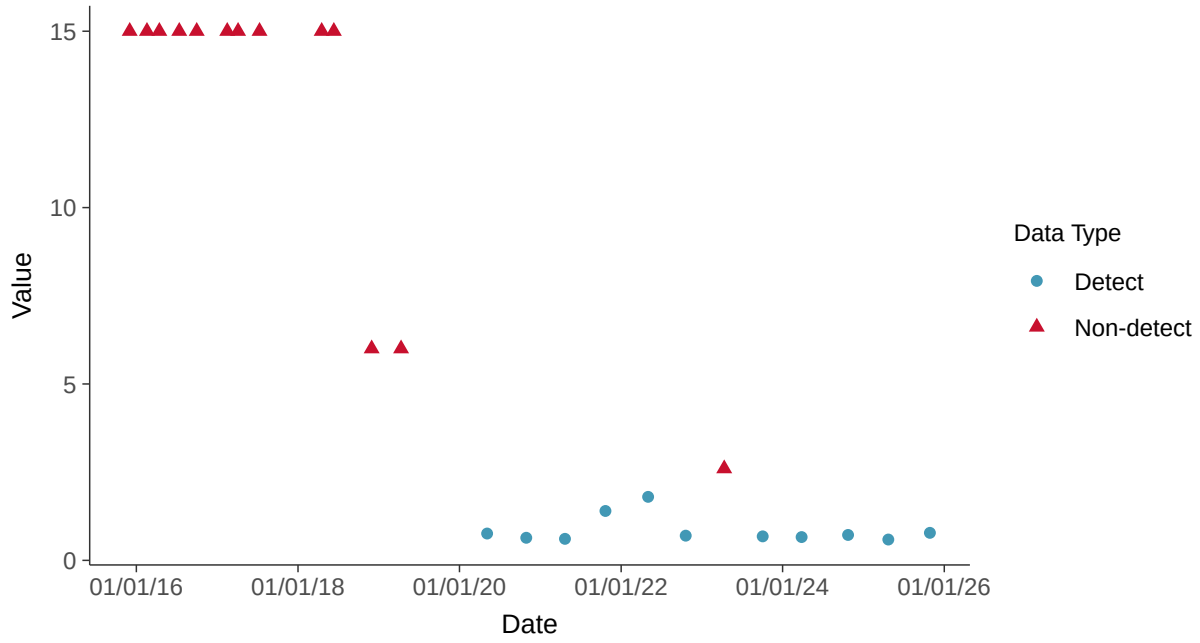


## Appendix IV: Cobalt, MW-15019

ID: 09_2_110

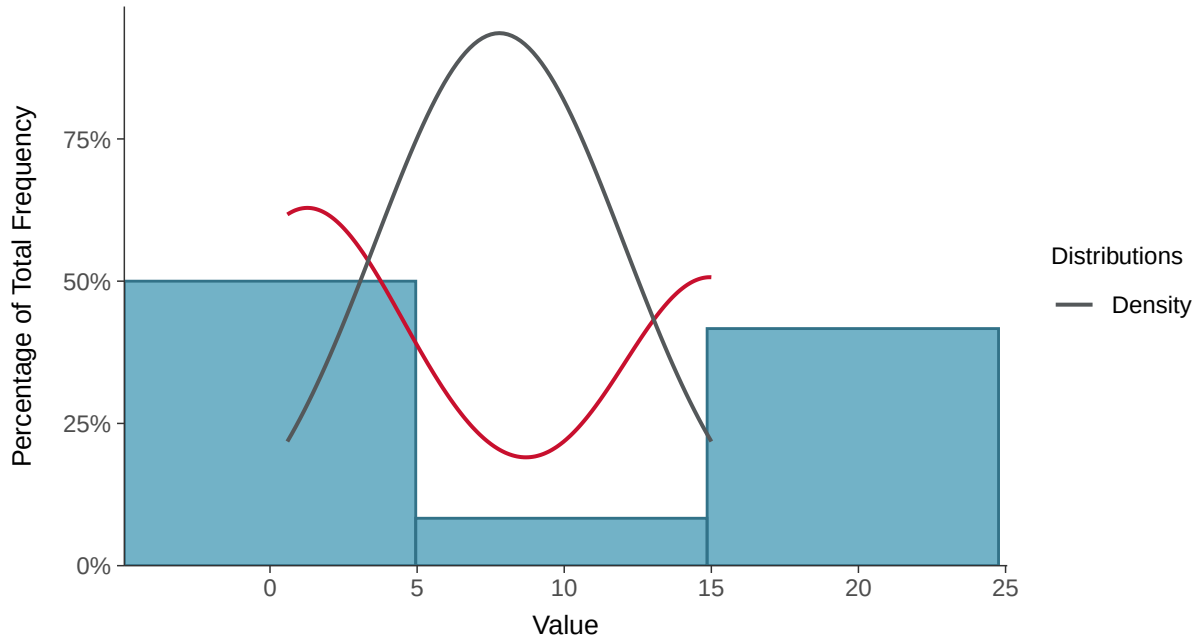
**Scatter Plot**

Cobalt, MW-15019 (ug/L)



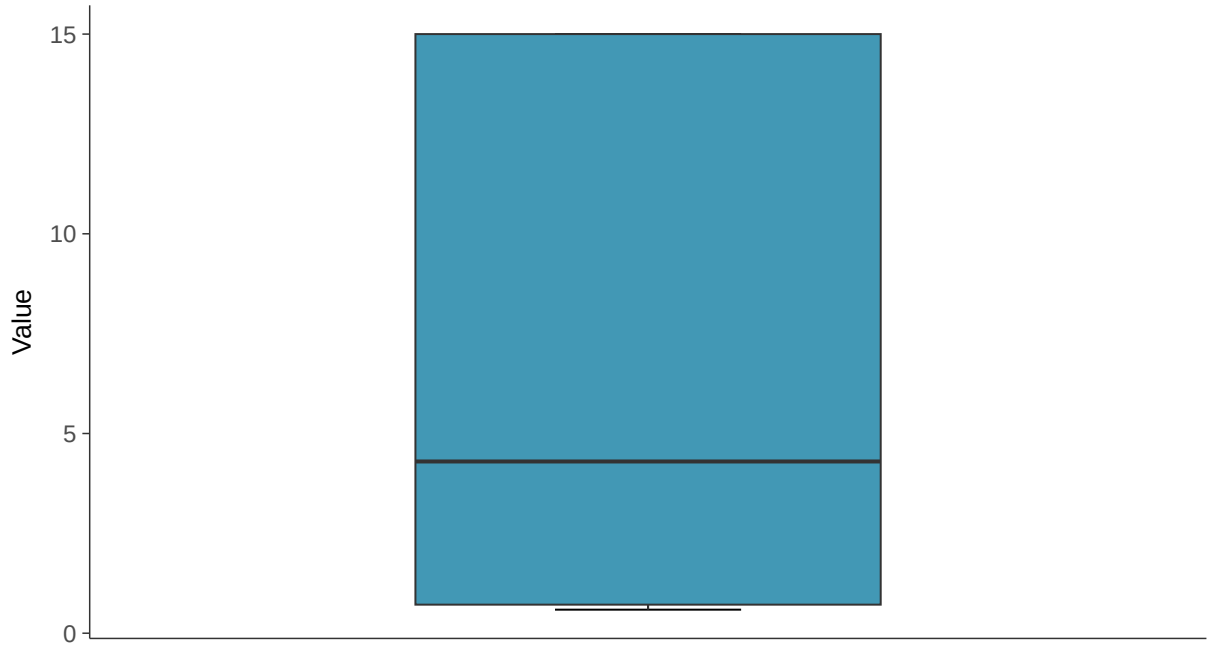

**Histogram**

Cobalt, MW-15019 (ug/L)



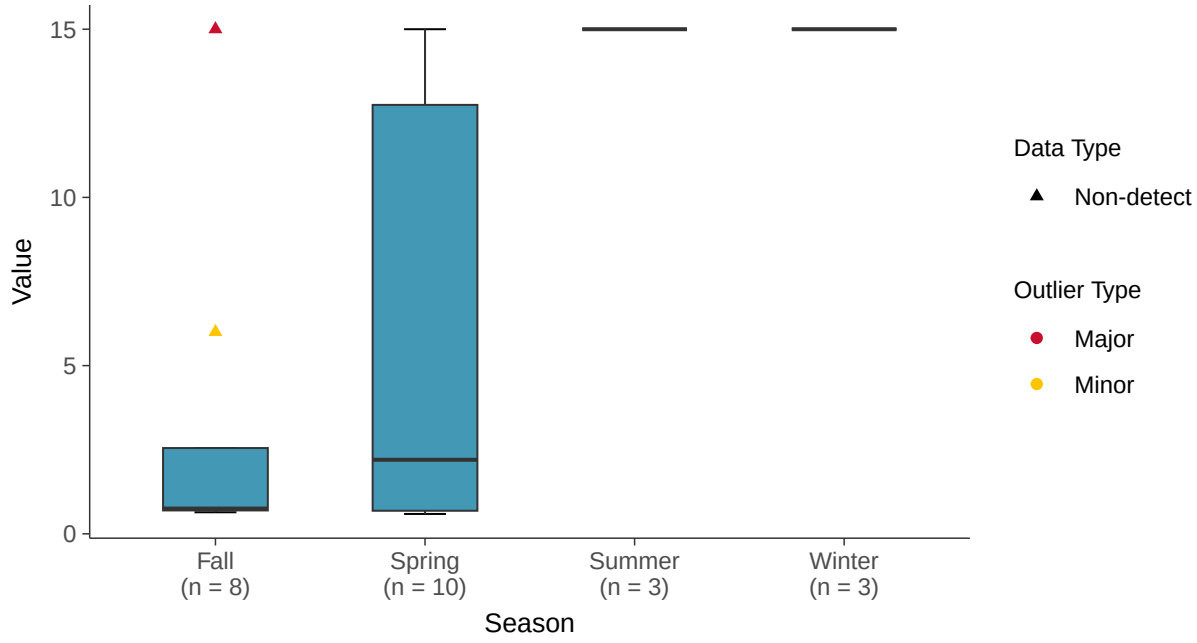
**Boxplot**

Cobalt, MW-15019 (ug/L)



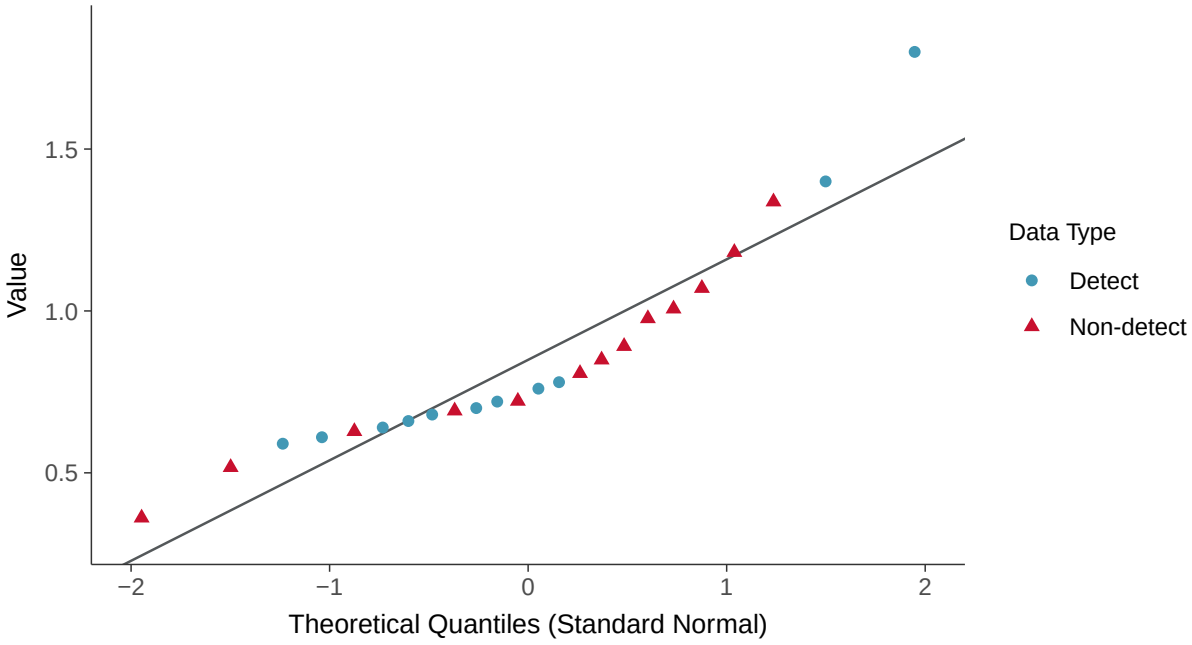

**Boxplot by Season**

Cobalt, MW-15019 (ug/L)



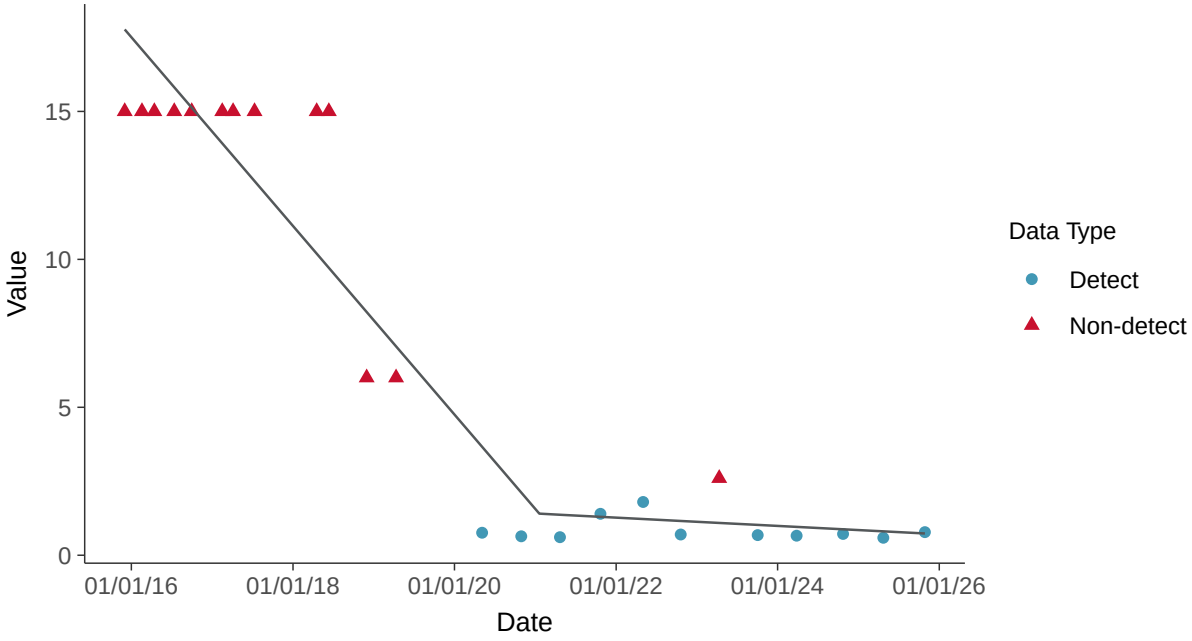
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15019 (ug/L)



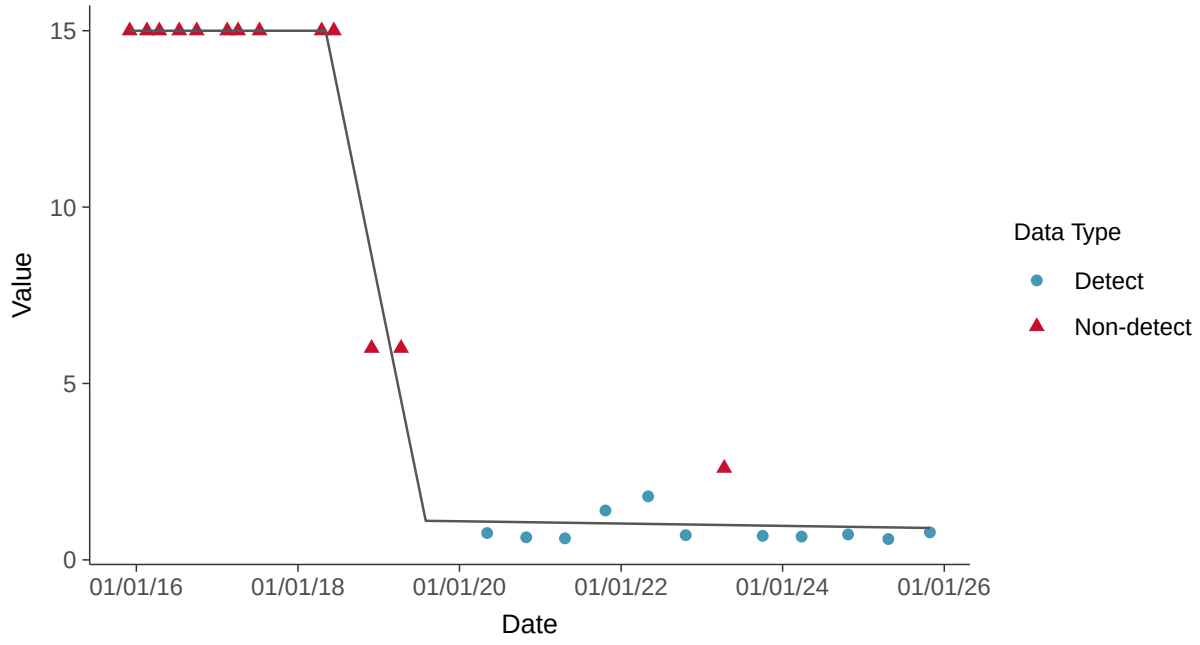

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15019 (ug/L)



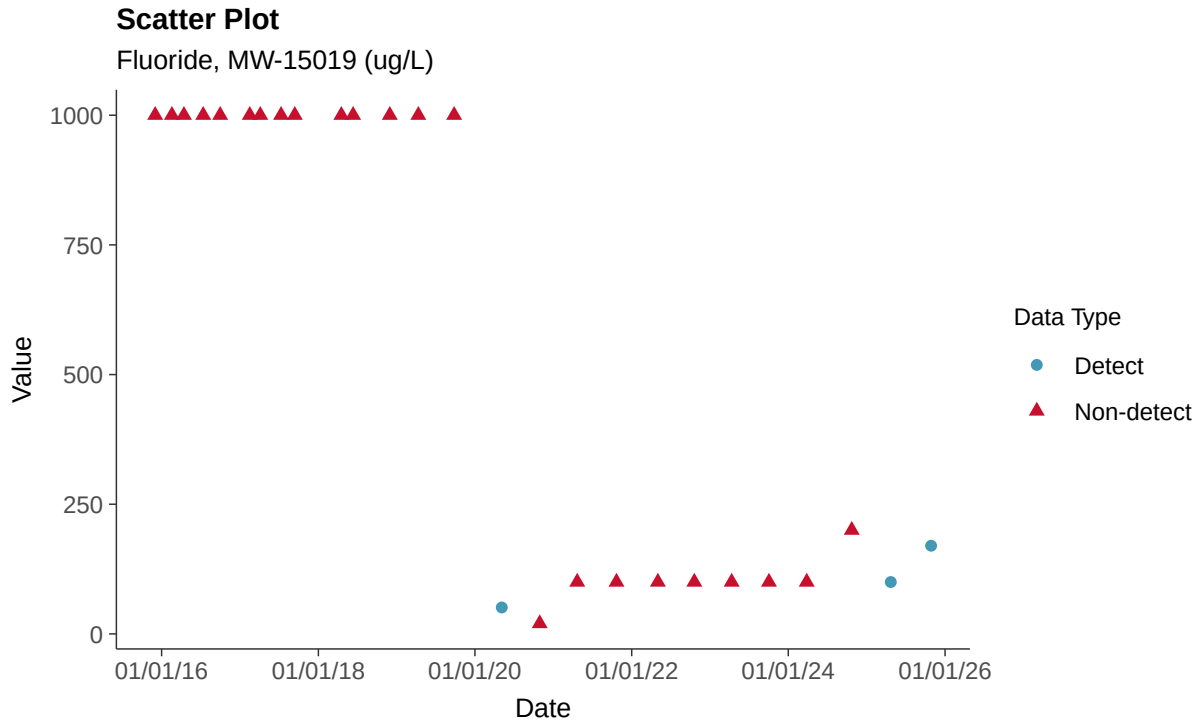
**Trend Regression: Piecewise Linear-Linear-Linear**

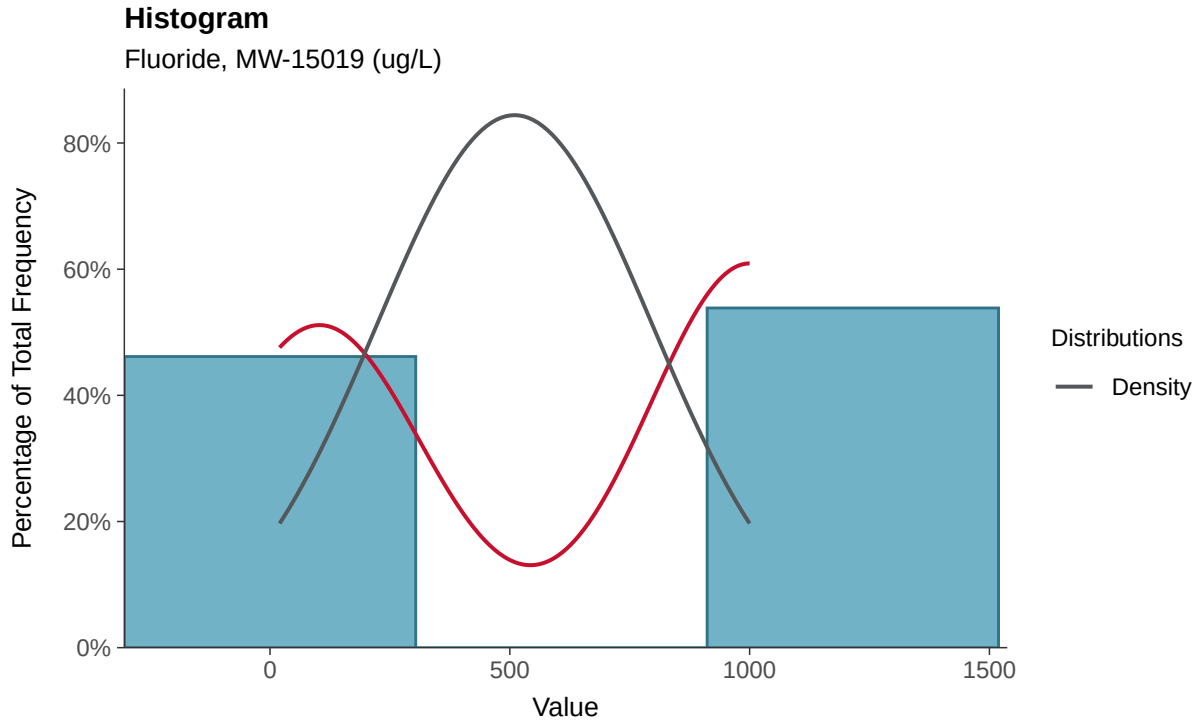
Cobalt, MW-15019 (ug/L)



## Appendix IV: Fluoride, MW-15019

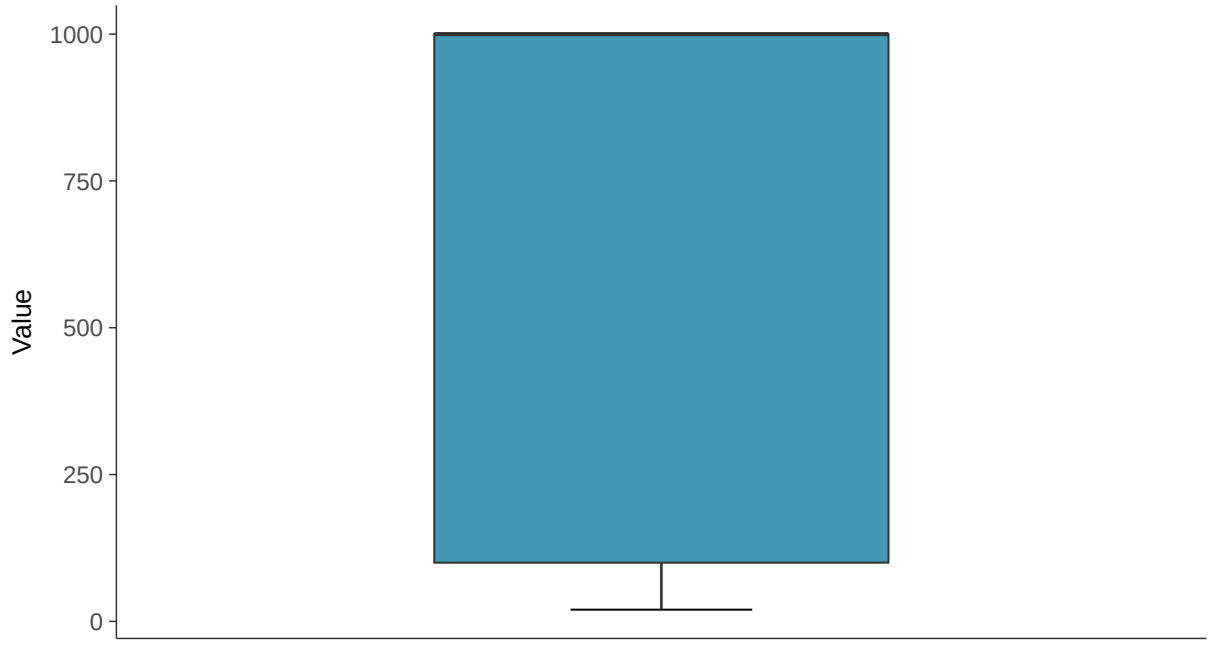
ID: 09_2_114



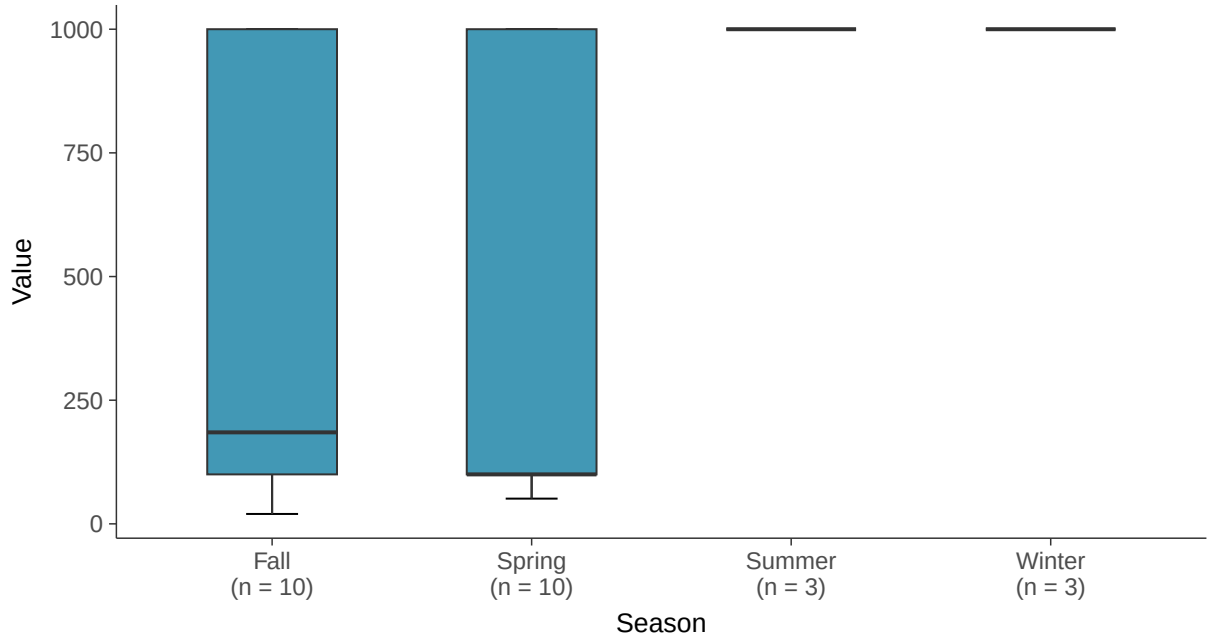
**Boxplot**

Fluoride, MW-15019 (ug/L)



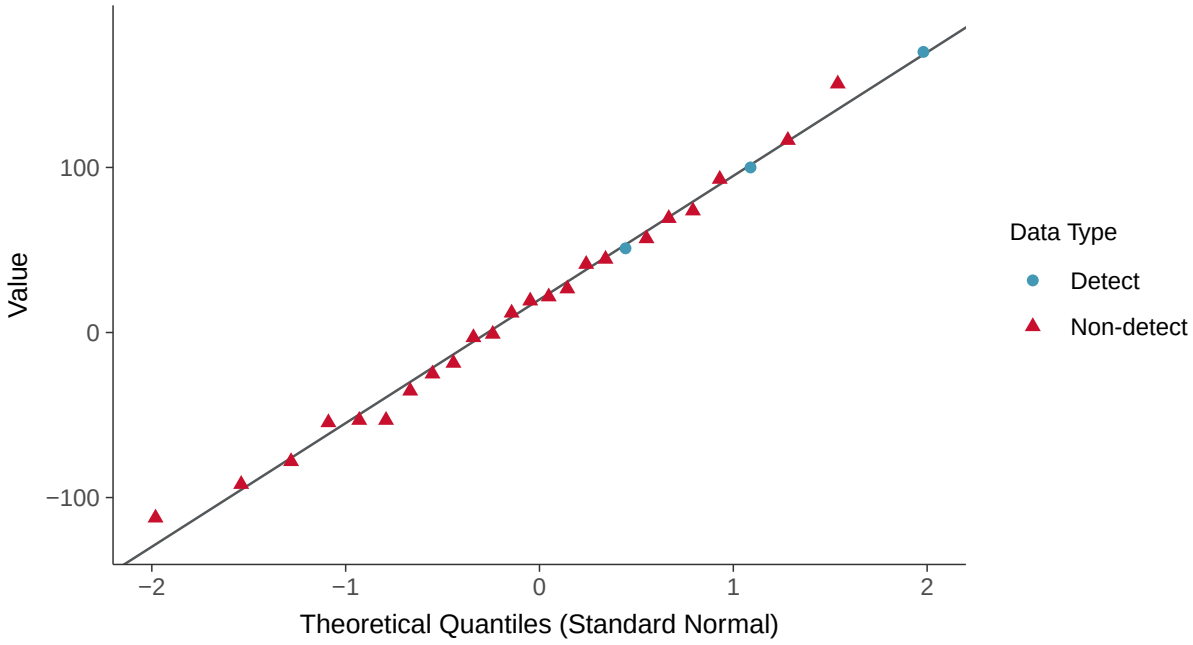

**Boxplot by Season**

Fluoride, MW-15019 (ug/L)



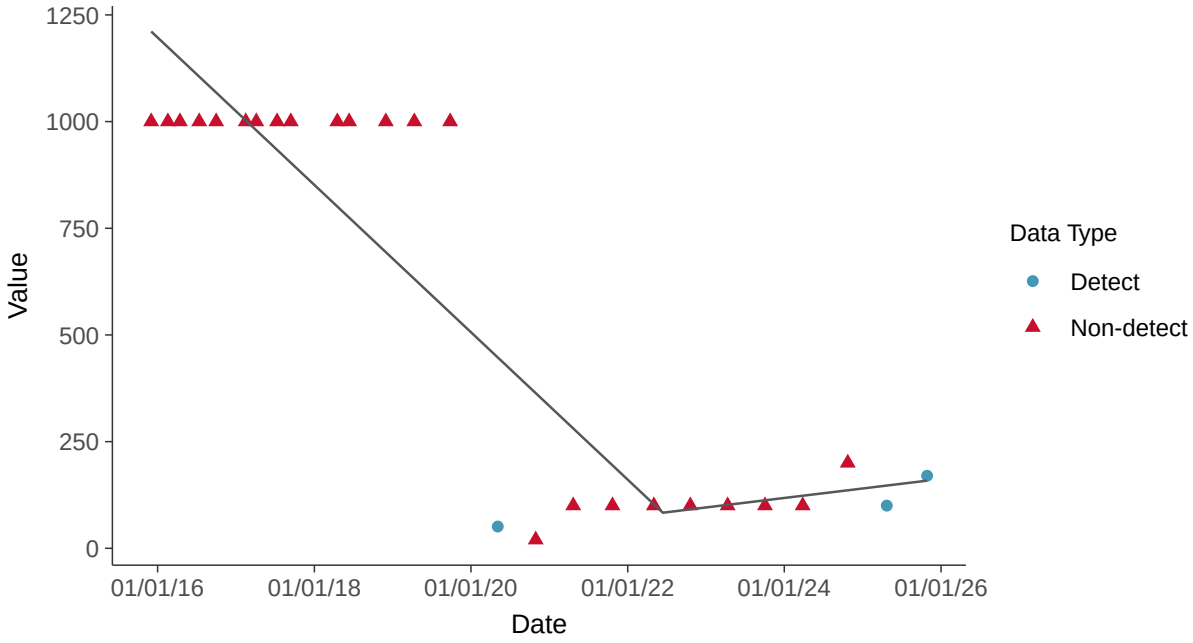
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15019 (ug/L)



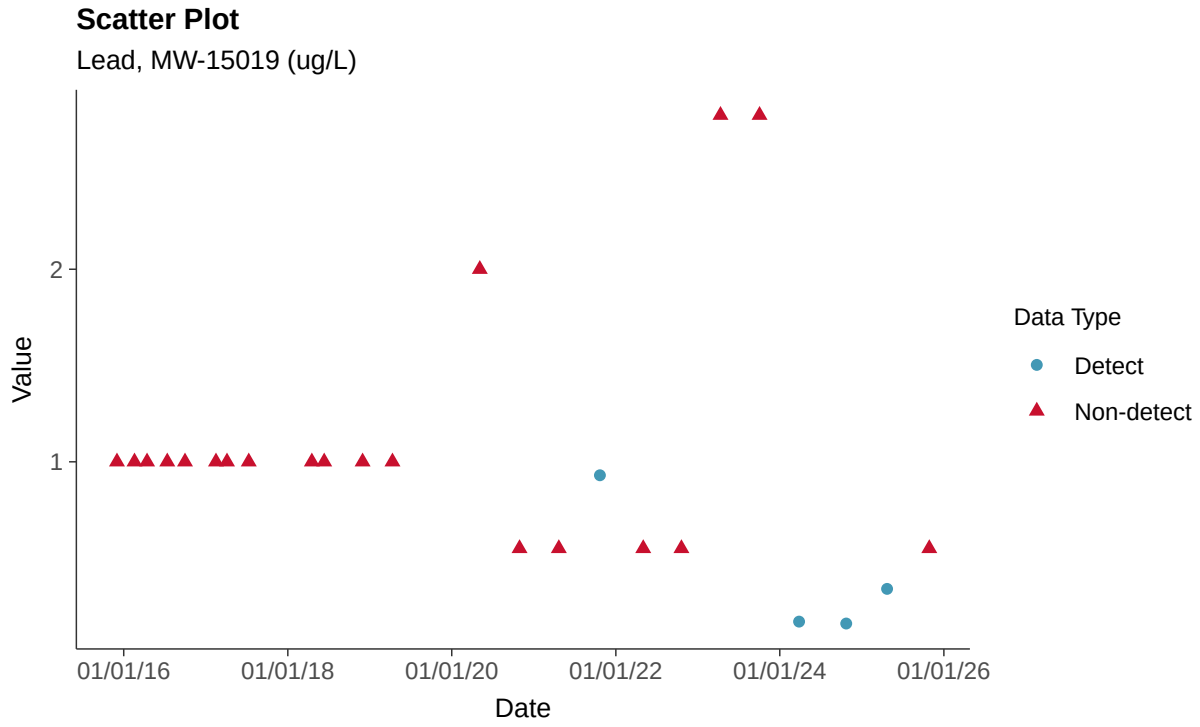

**Trend Regression: Piecewise Linear-Linear**

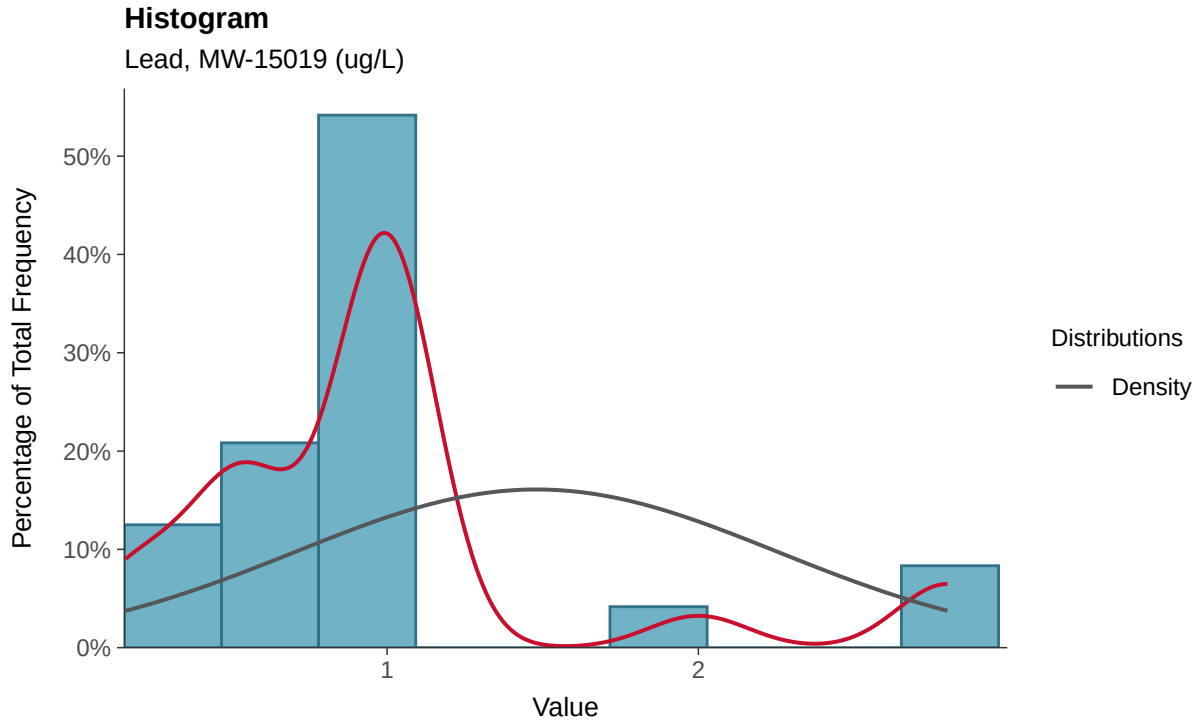
Fluoride, MW-15019 (ug/L)



# Appendix IV: Lead, MW-15019

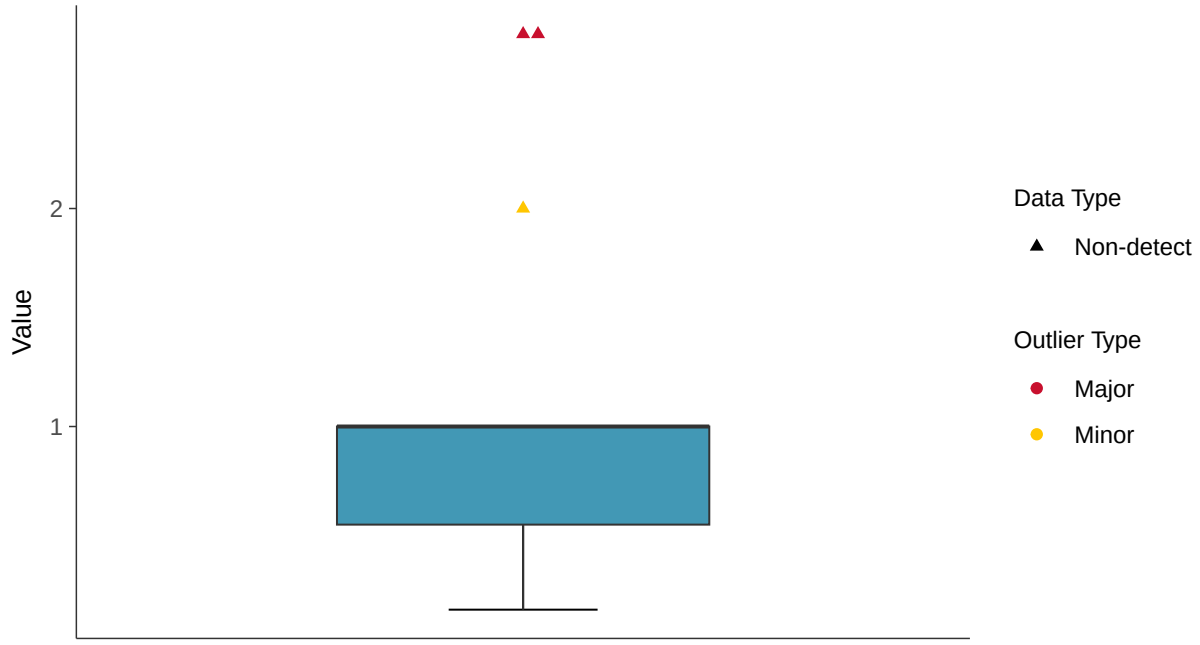
ID: 09_2_116



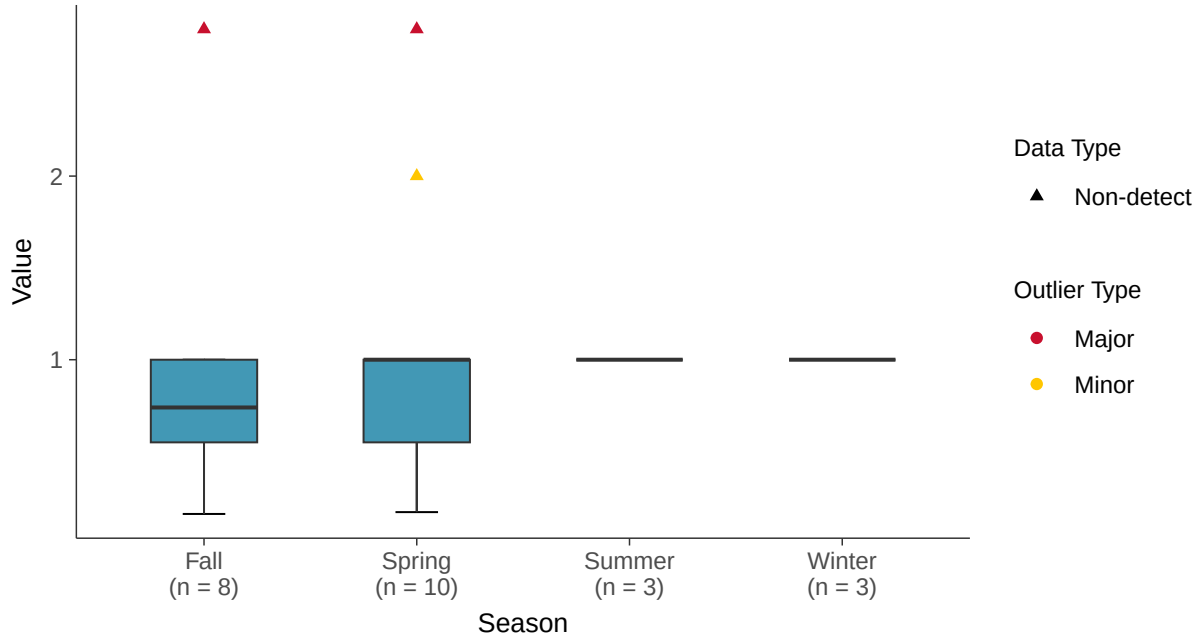
## Boxplot

Lead, MW-15019 (ug/L)



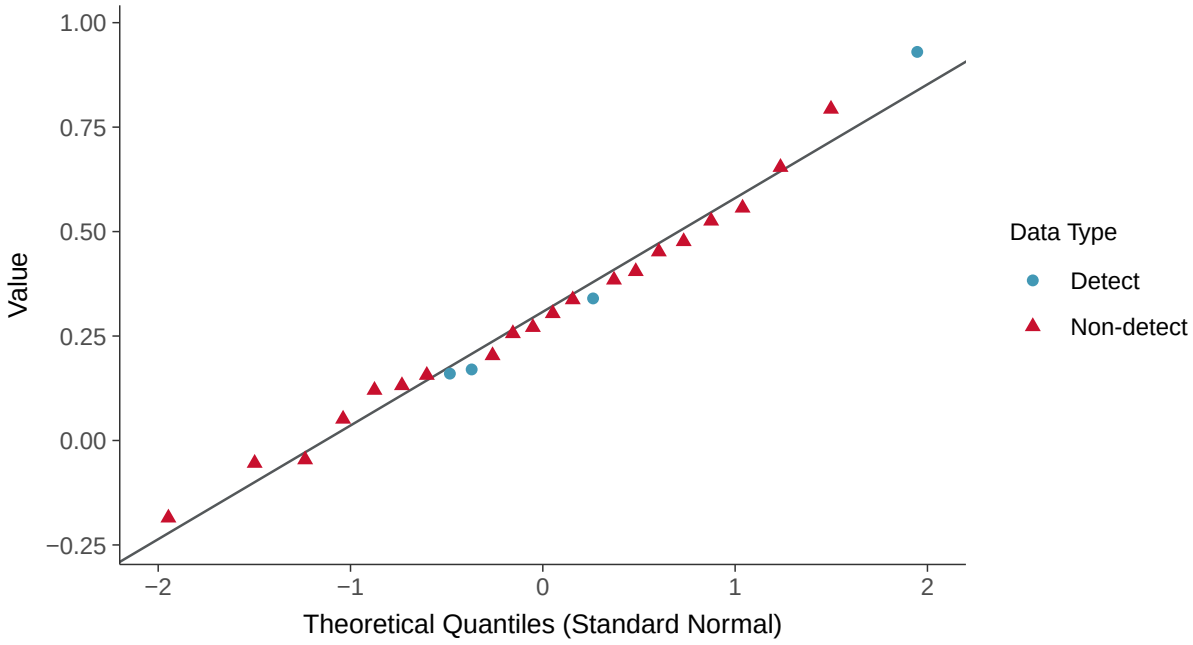

## Boxplot by Season

Lead, MW-15019 (ug/L)



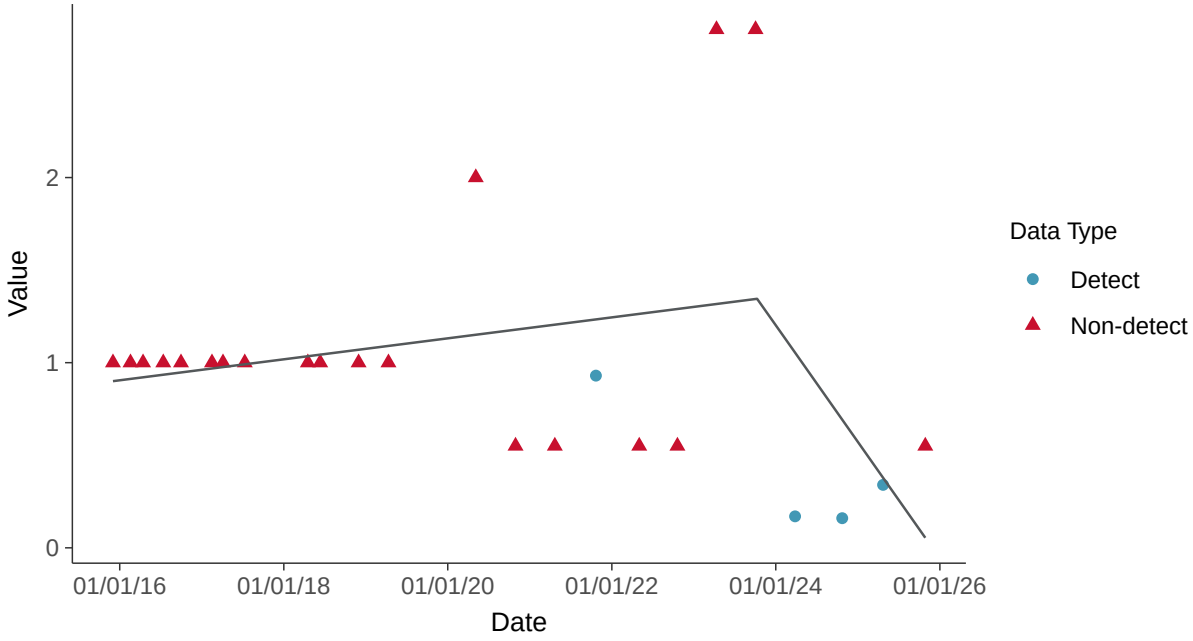
**Normal Q-Q plot using ROS Imputed Estimates**

Lead, MW-15019 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Lead, MW-15019 (ug/L)

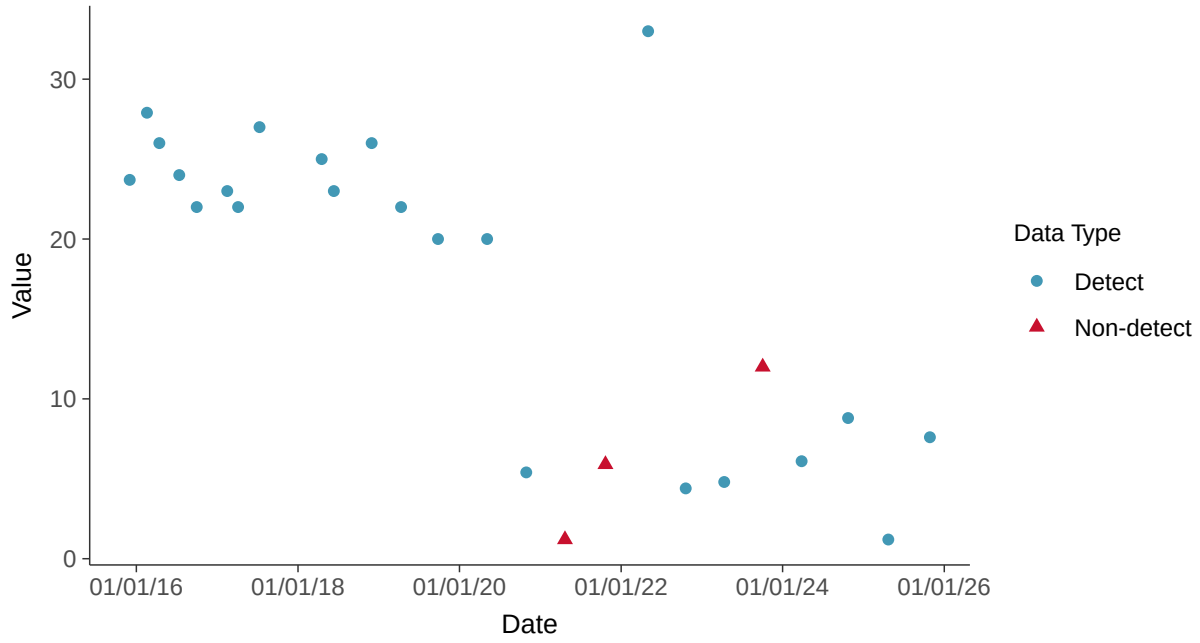


## Appendix IV: Lithium, MW-15019

ID: 09_2_117

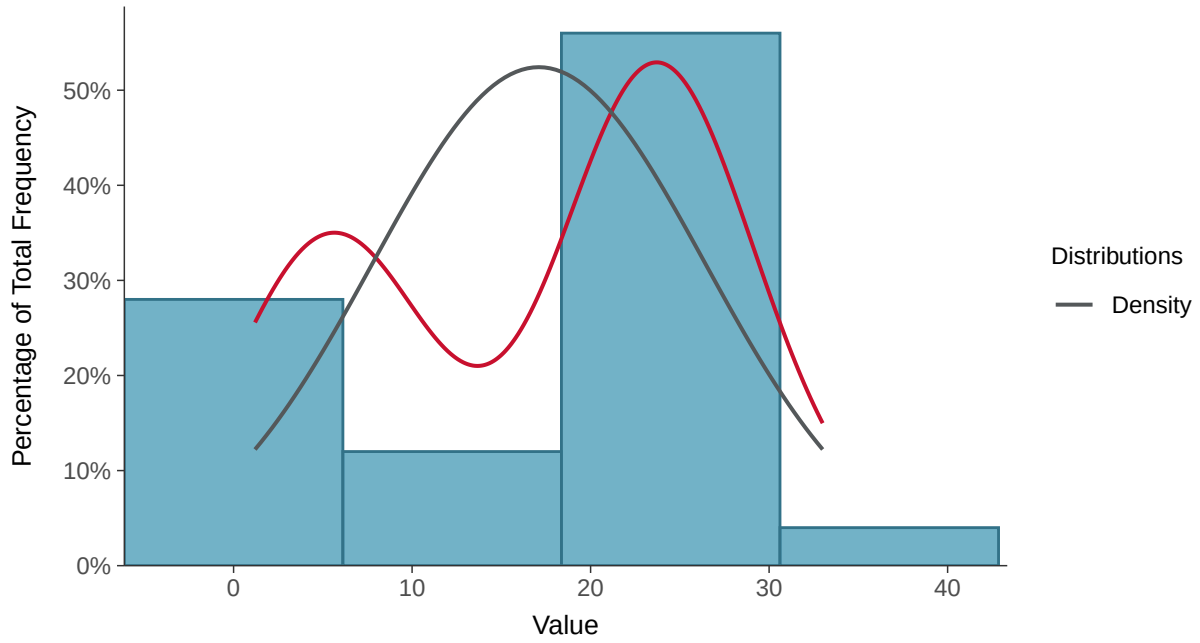
**Scatter Plot**

Lithium, MW-15019 (ug/L)



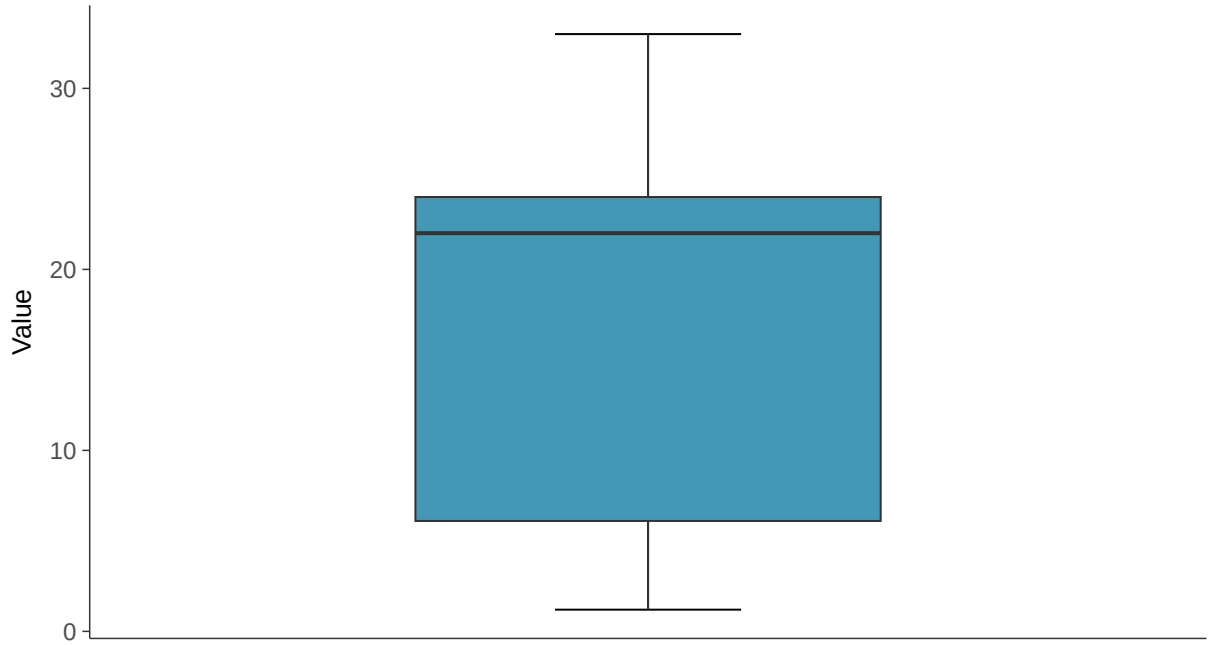

**Histogram**

Lithium, MW-15019 (ug/L)



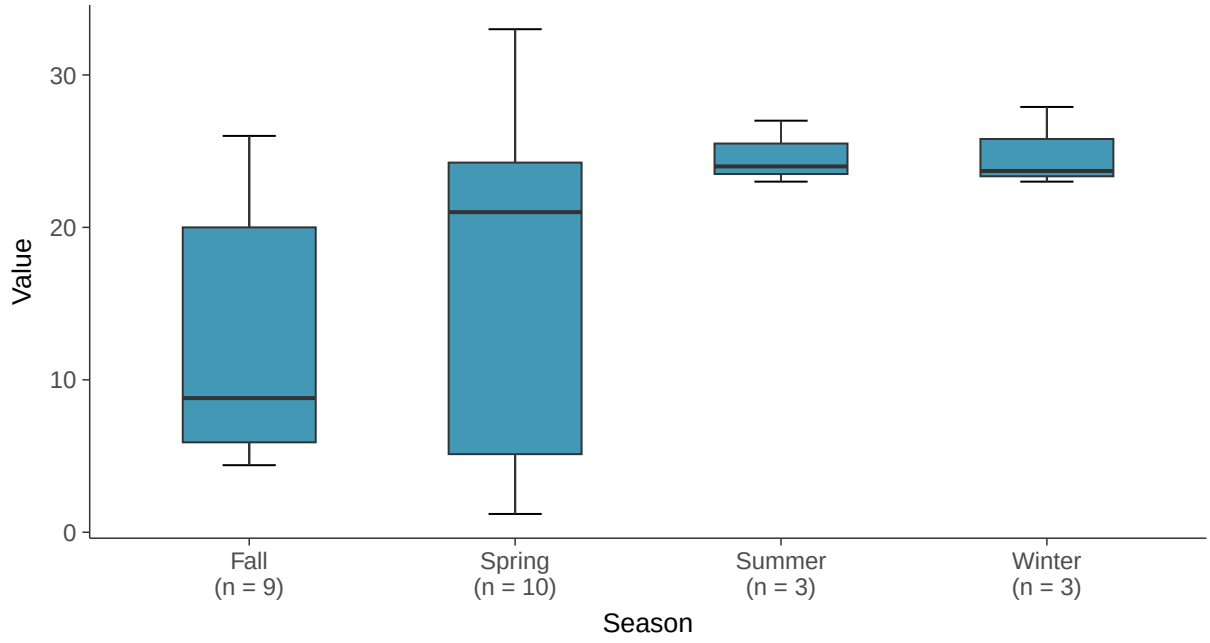
**Boxplot**

Lithium, MW-15019 (ug/L)



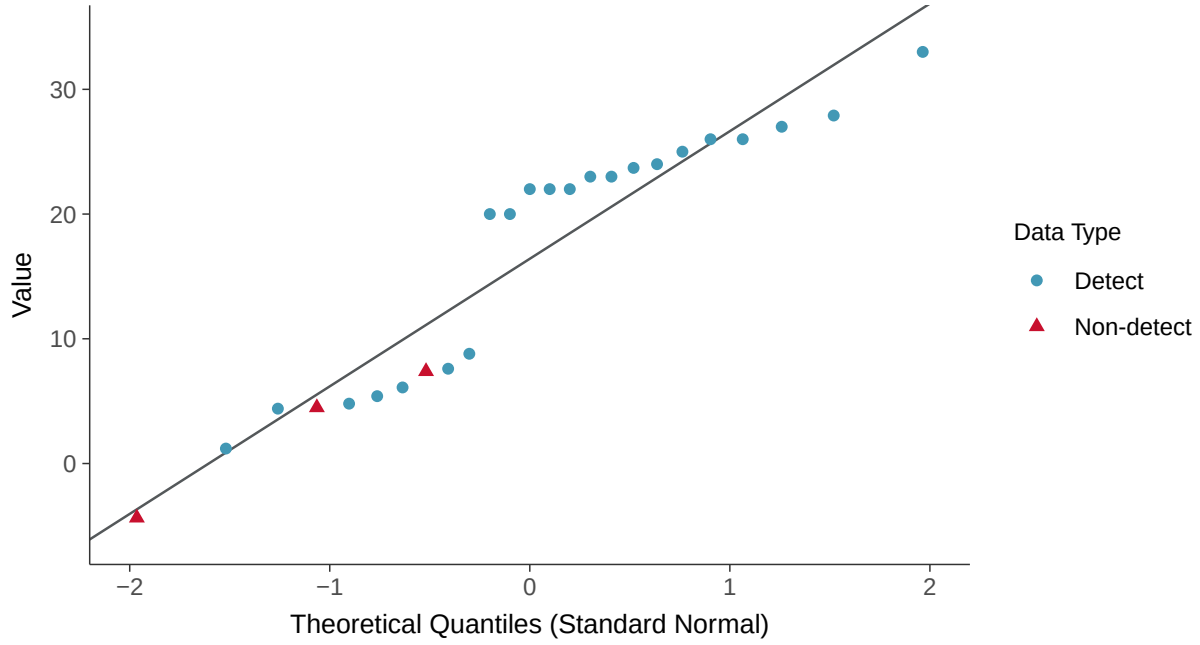

**Boxplot by Season**

Lithium, MW-15019 (ug/L)



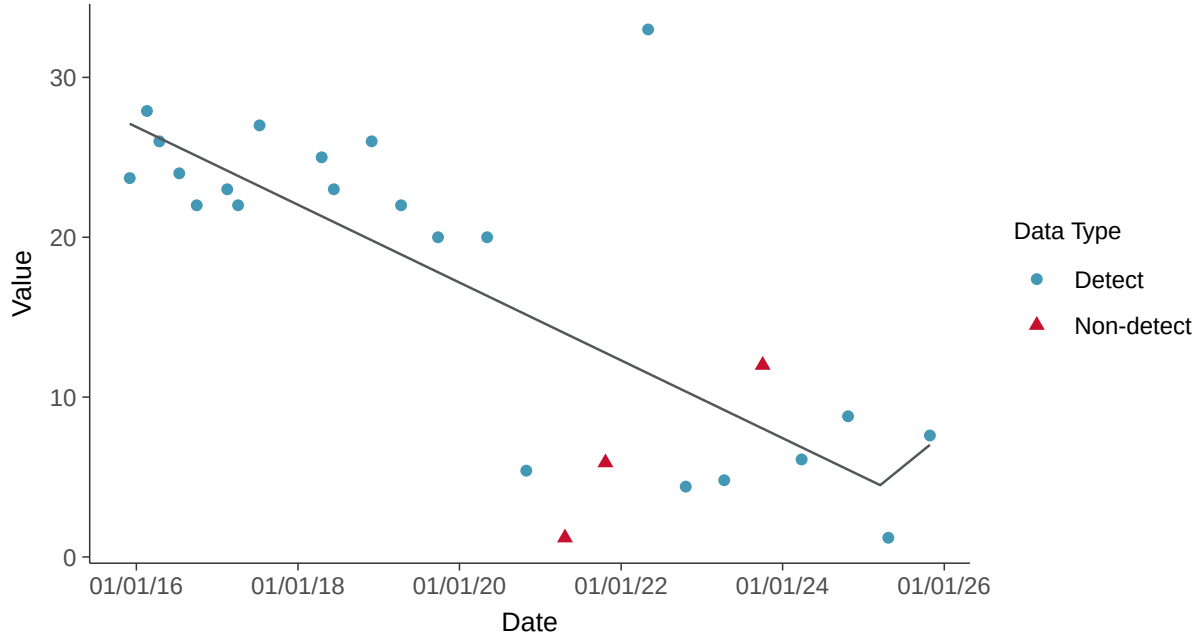
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15019 (ug/L)



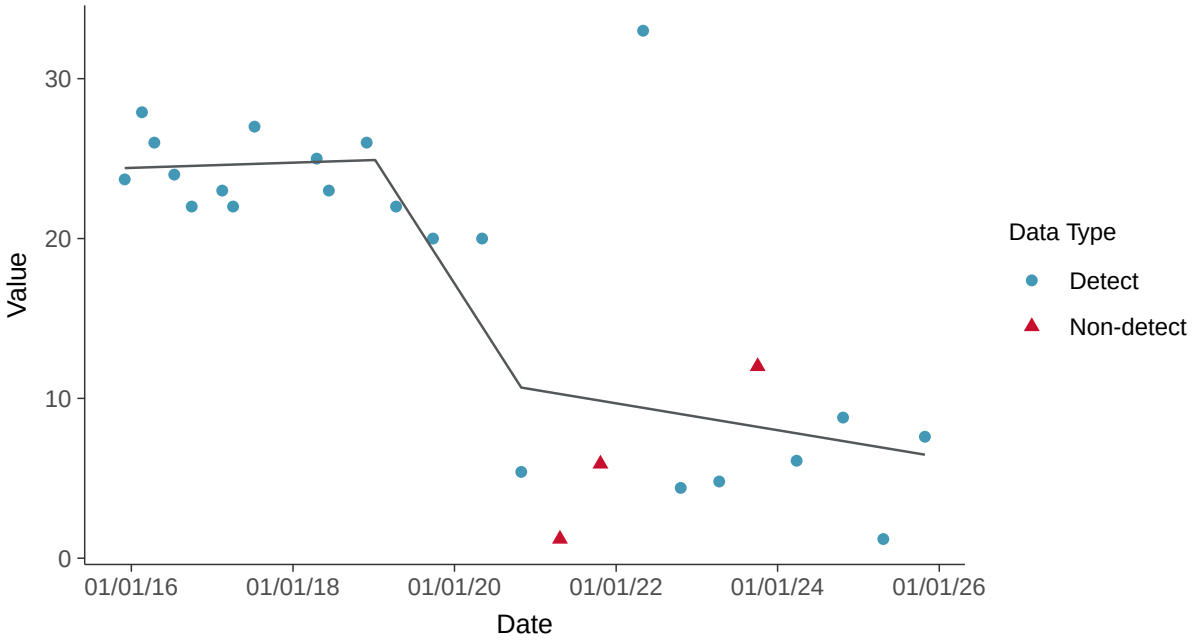

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15019 (ug/L)



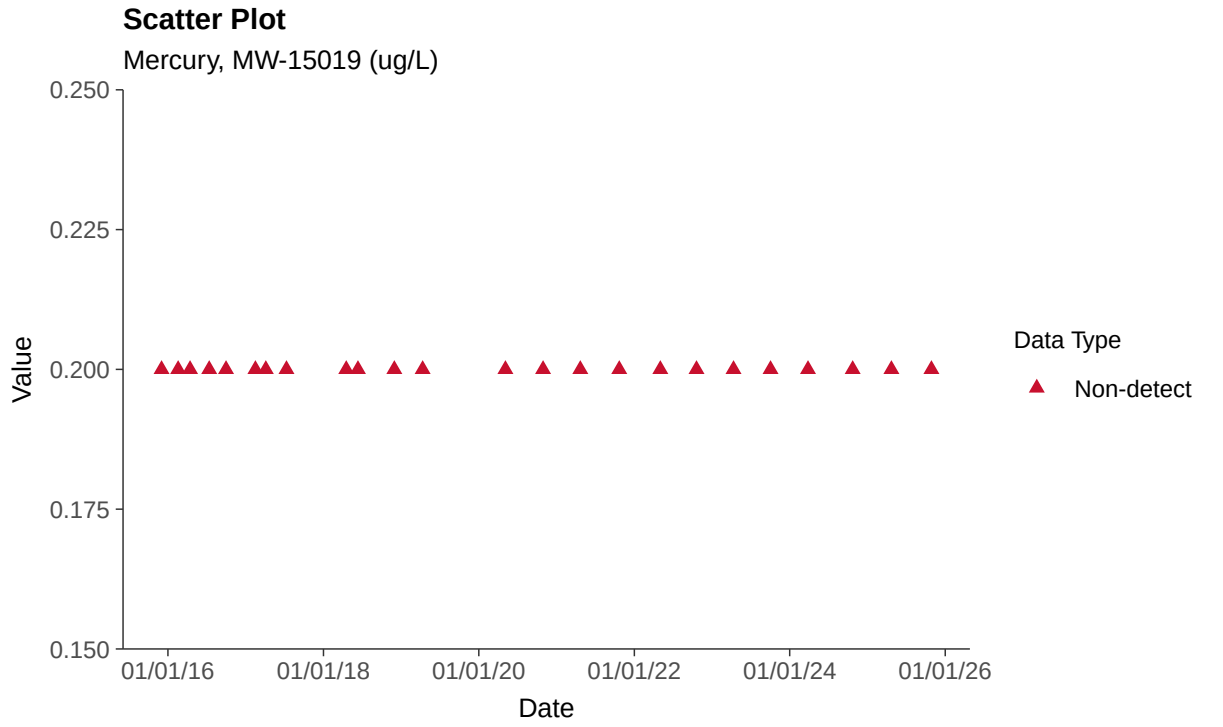
**Trend Regression: Piecewise Linear-Linear-Linear**

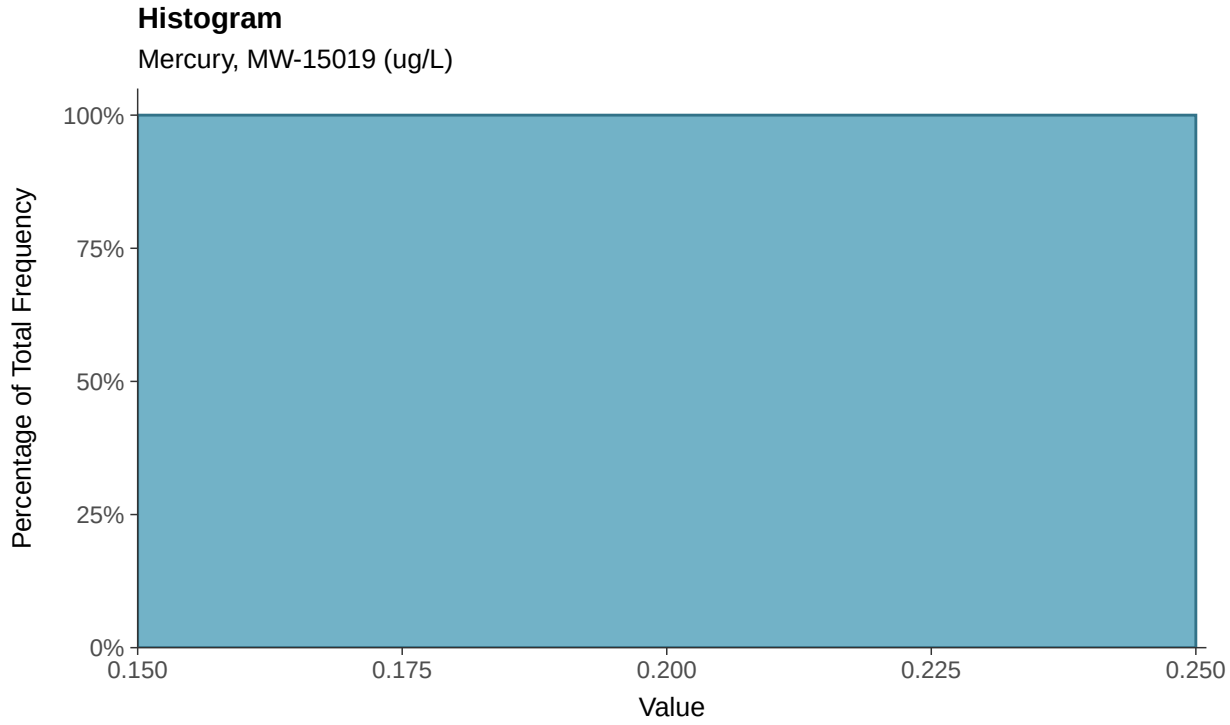
Lithium, MW-15019 (ug/L)



## Appendix IV: Mercury, MW-15019

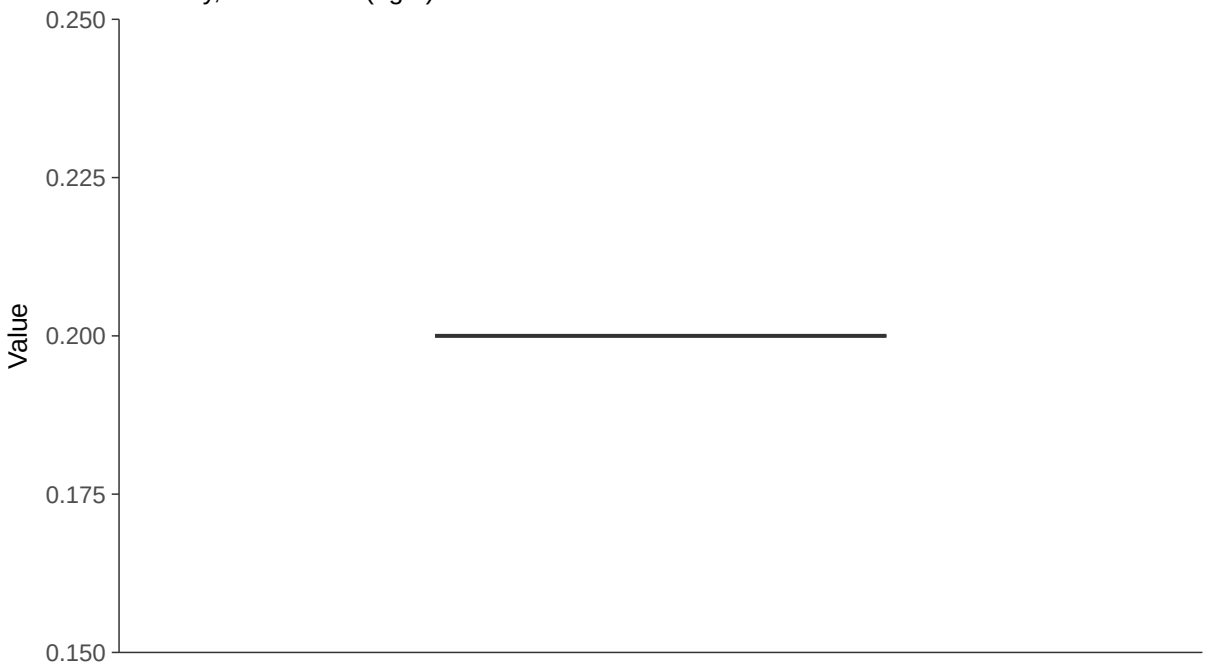
ID: 09_2_118



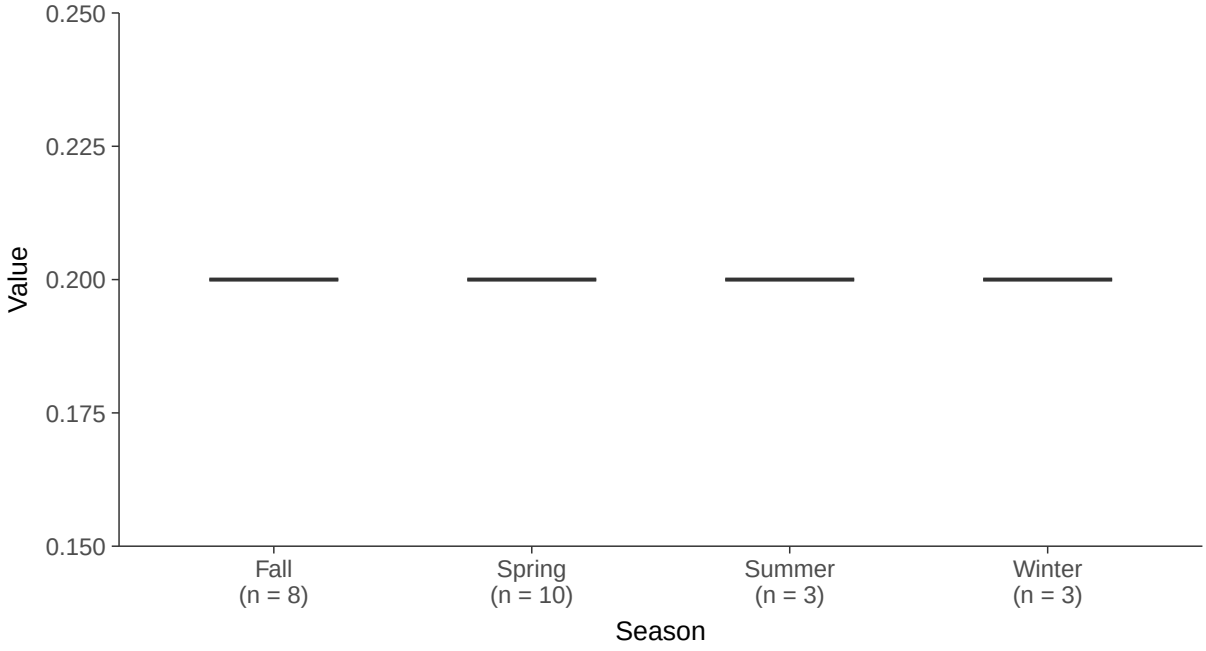
**Boxplot**

Mercury, MW-15019 (ug/L)




**Boxplot by Season**

Mercury, MW-15019 (ug/L)

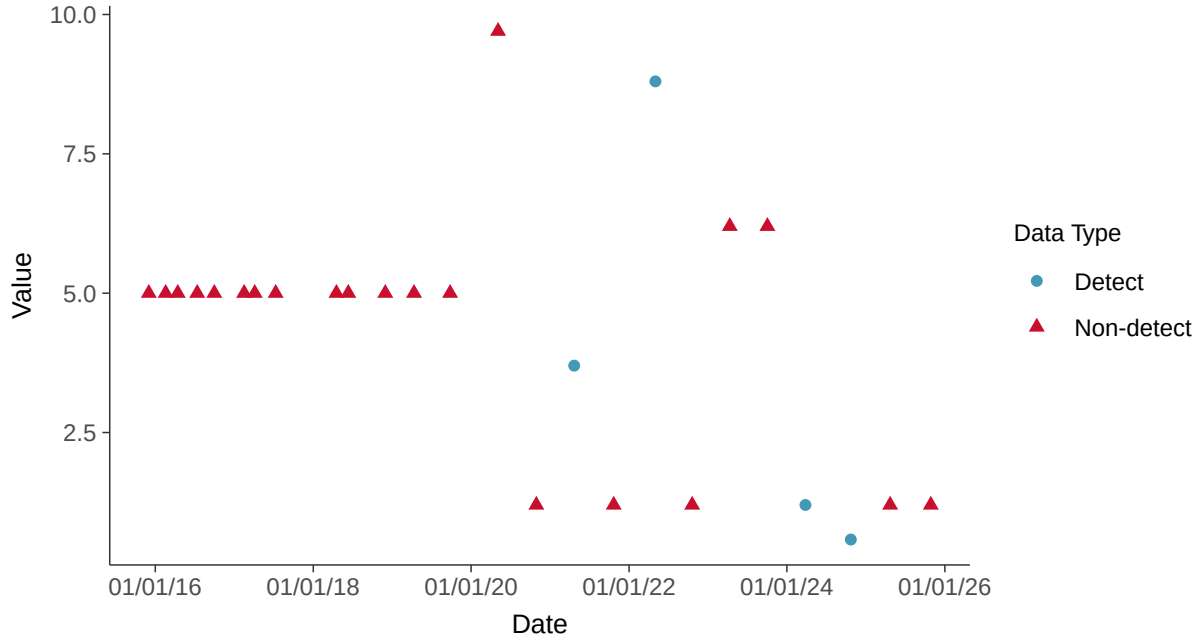


## Appendix IV: Molybdenum, MW-15019

ID: 09_2_119

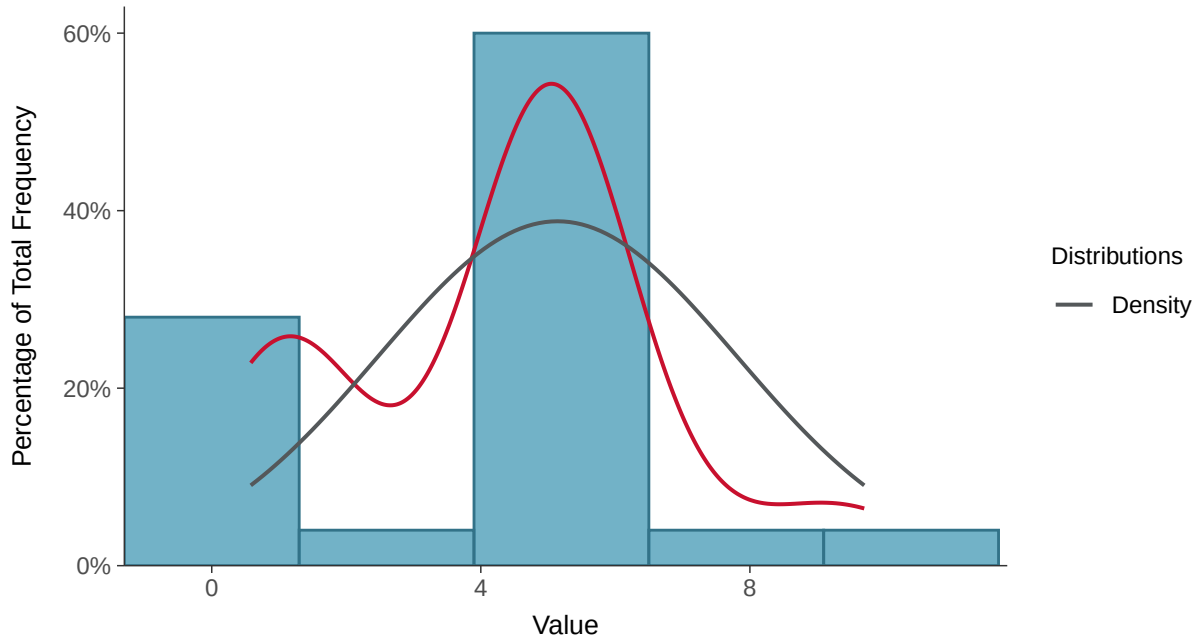
**Scatter Plot**

Molybdenum, MW-15019 (ug/L)



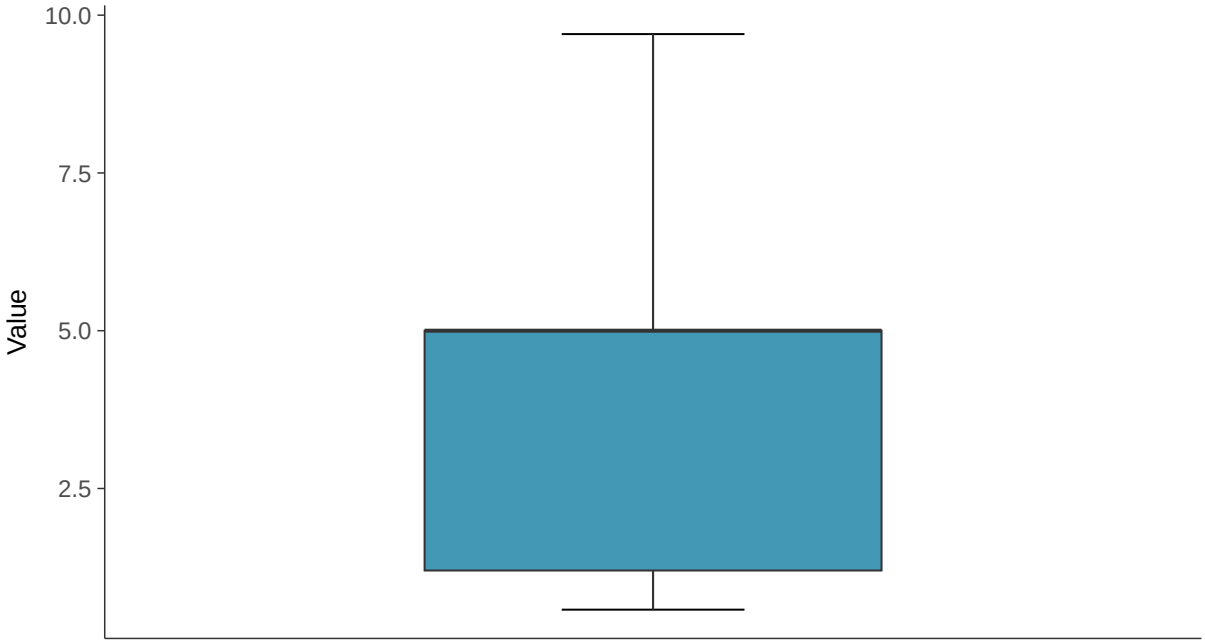

**Histogram**

Molybdenum, MW-15019 (ug/L)



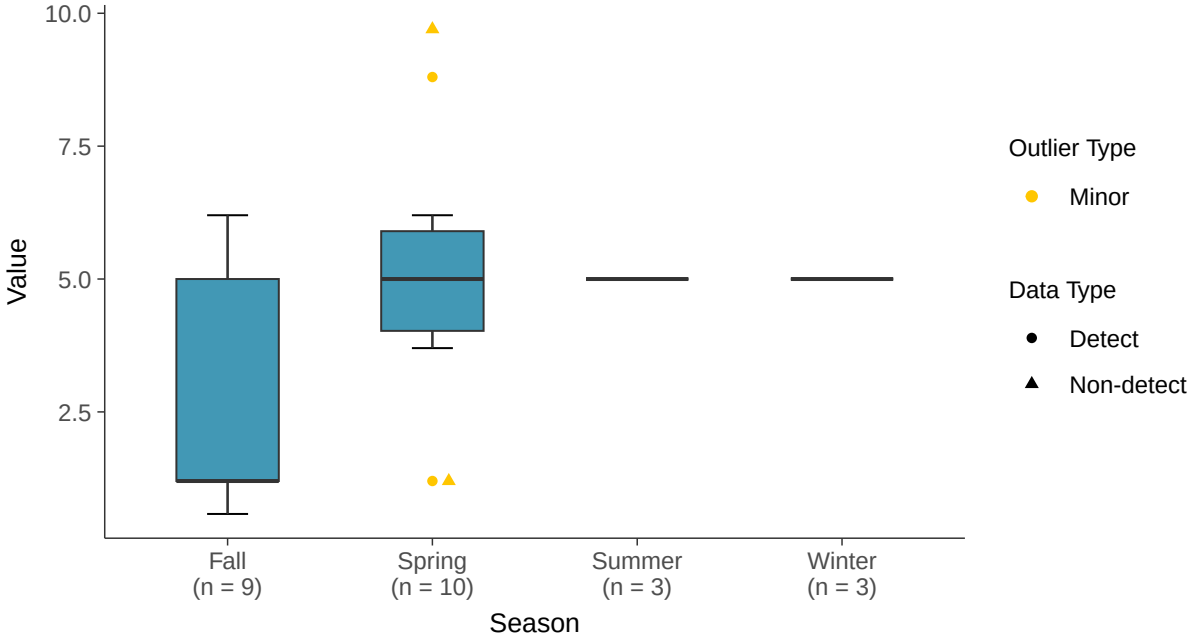
## Boxplot

Molybdenum, MW-15019 (ug/L)



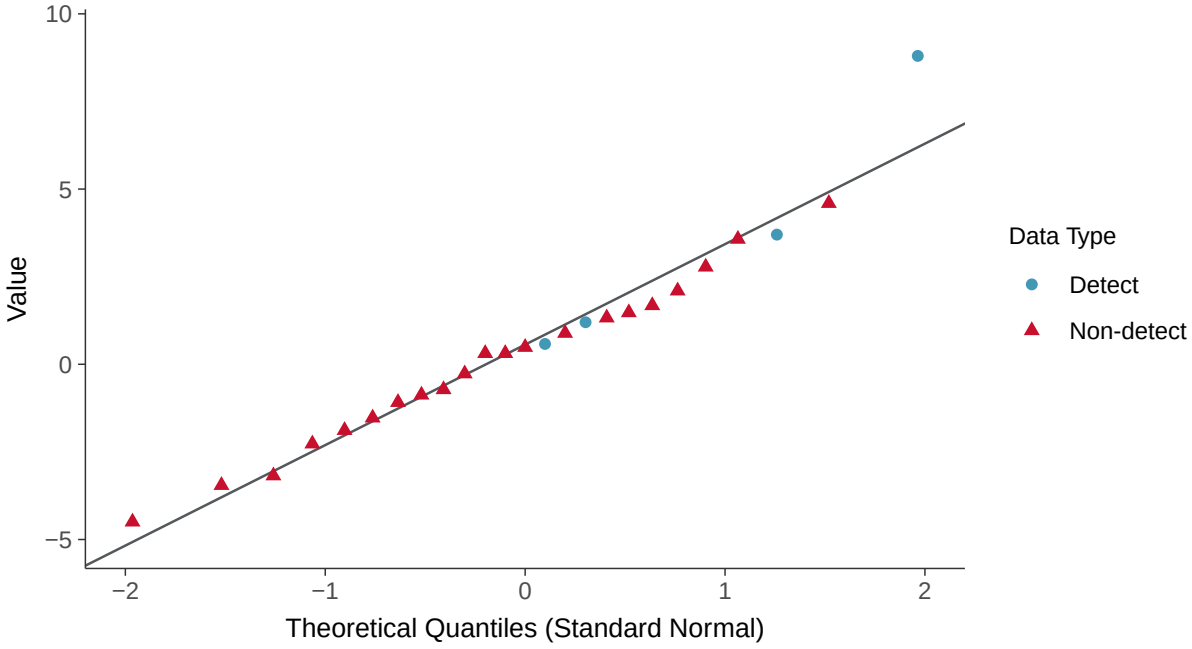

## Boxplot by Season

Molybdenum, MW-15019 (ug/L)



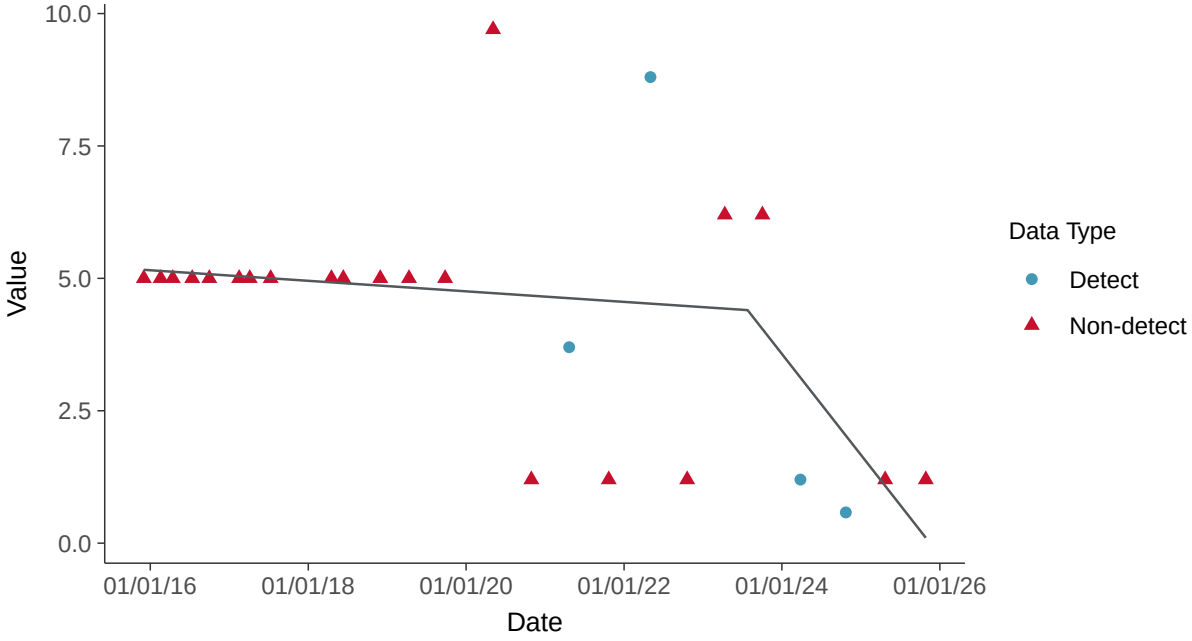
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15019 (ug/L)



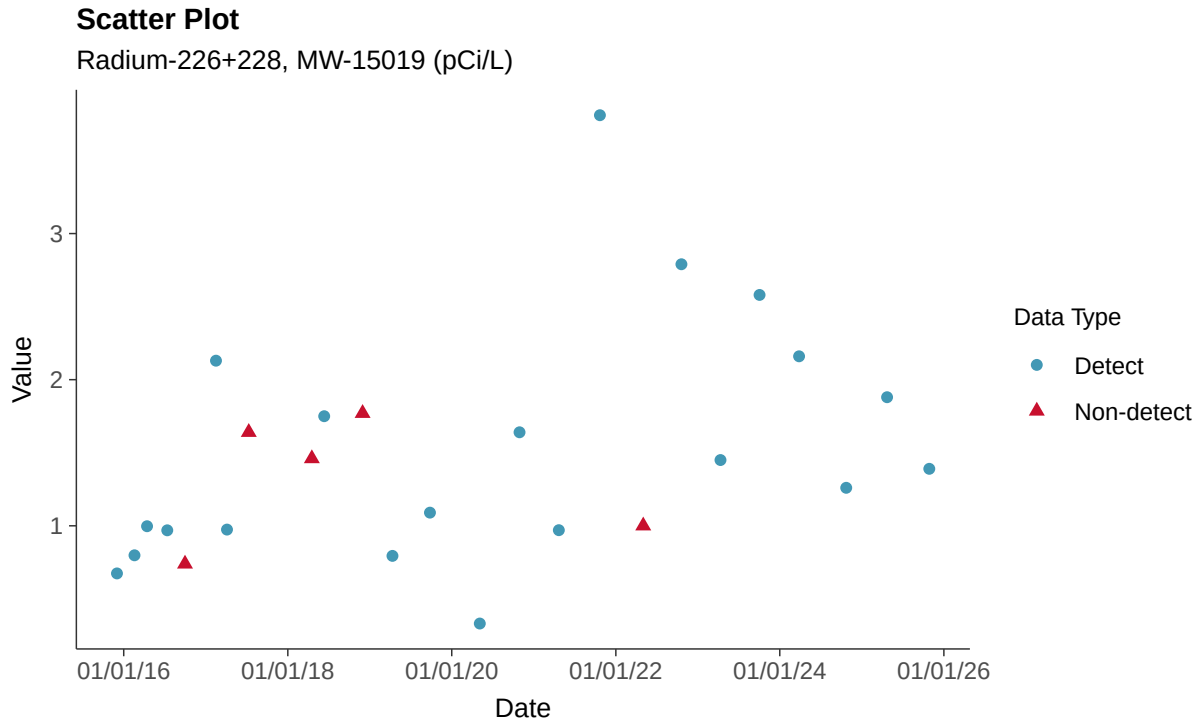

**Trend Regression: Piecewise Linear-Linear**

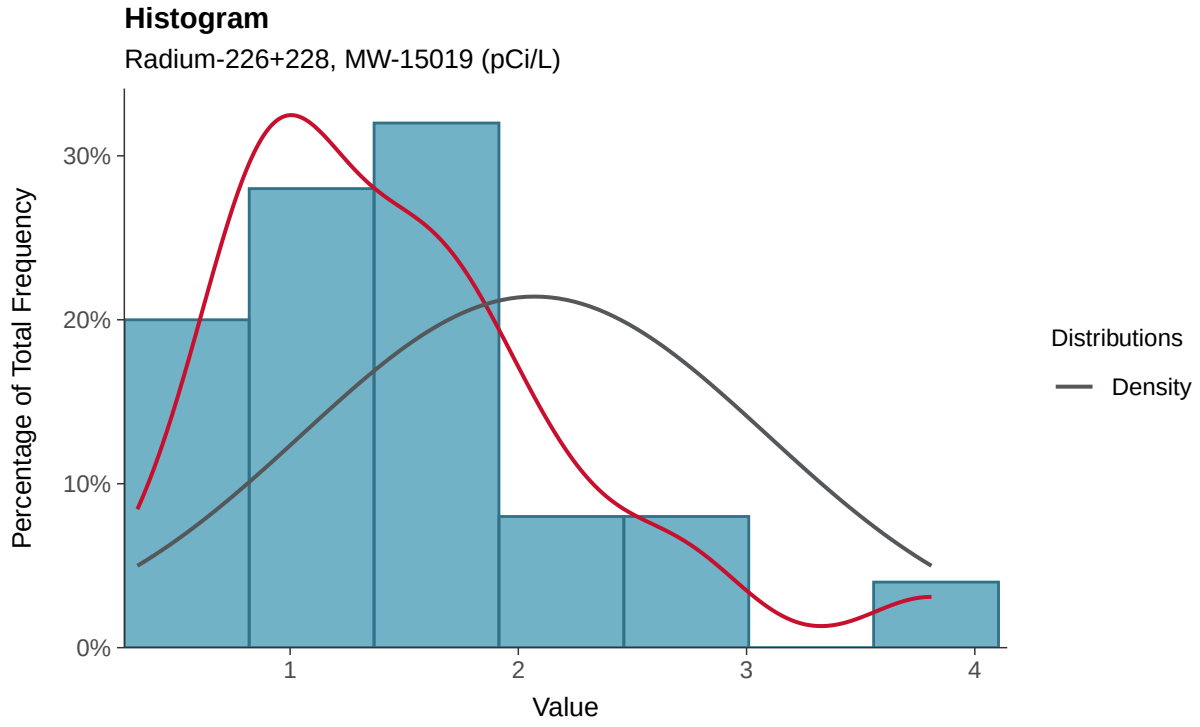
Molybdenum, MW-15019 (ug/L)



## Appendix IV: Radium-226+228, MW-15019

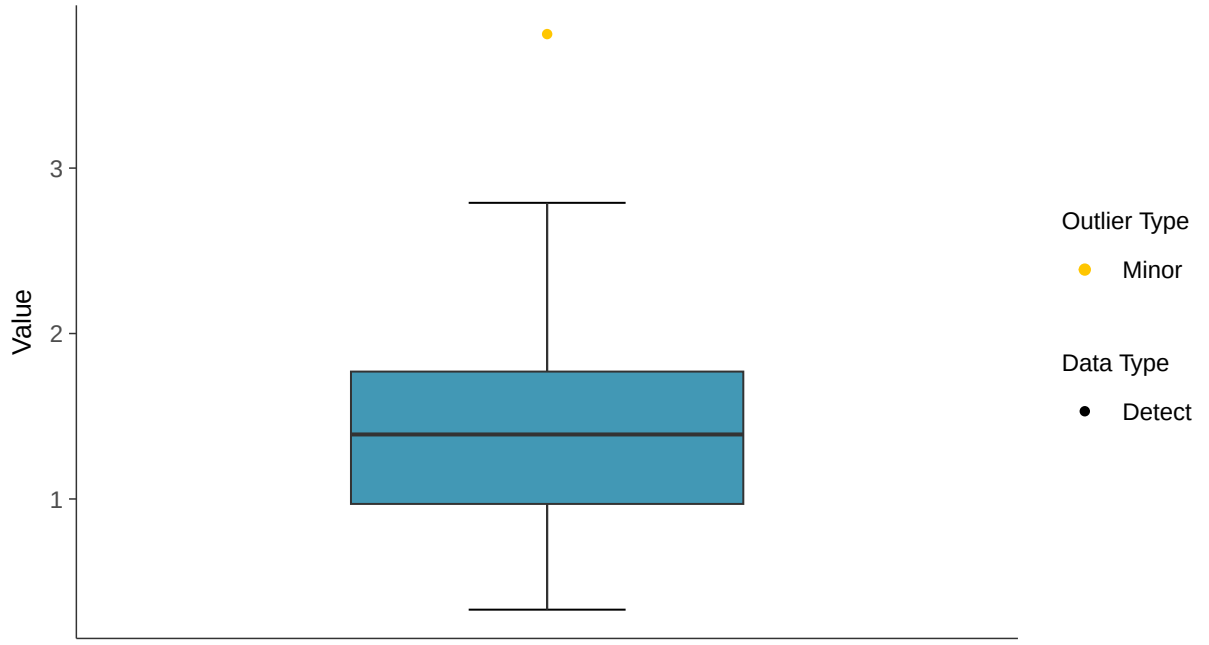
ID: 09_2_125



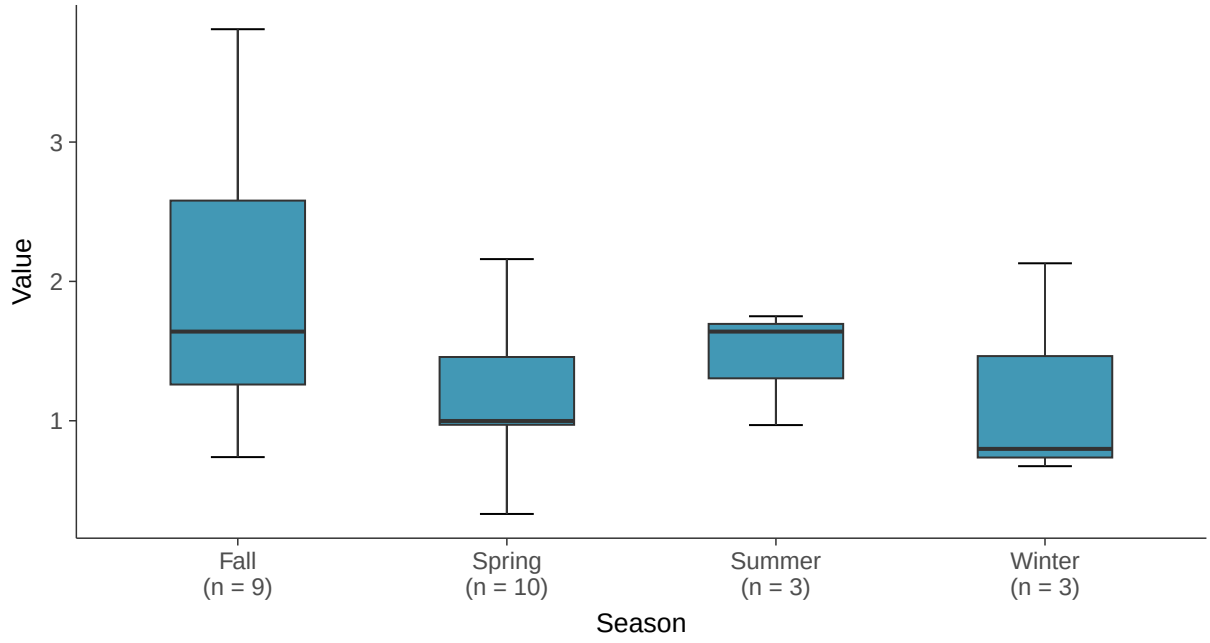
## Boxplot

Radium-226+228, MW-15019 (pCi/L)



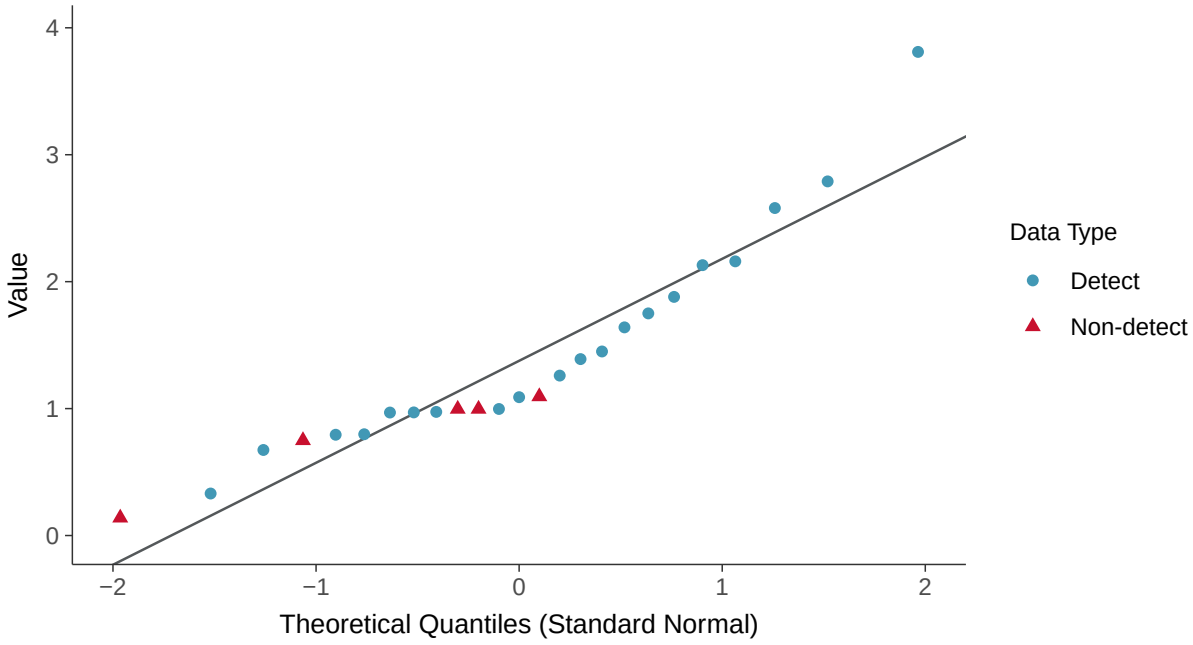

## Boxplot by Season

Radium-226+228, MW-15019 (pCi/L)



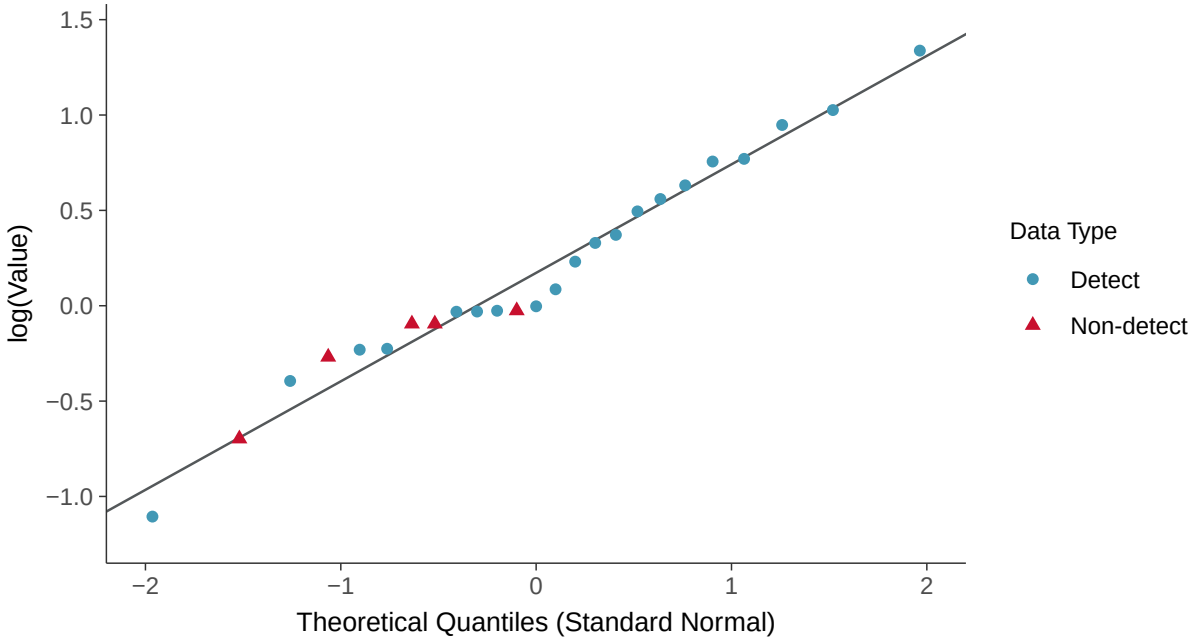
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15019 (pCi/L)



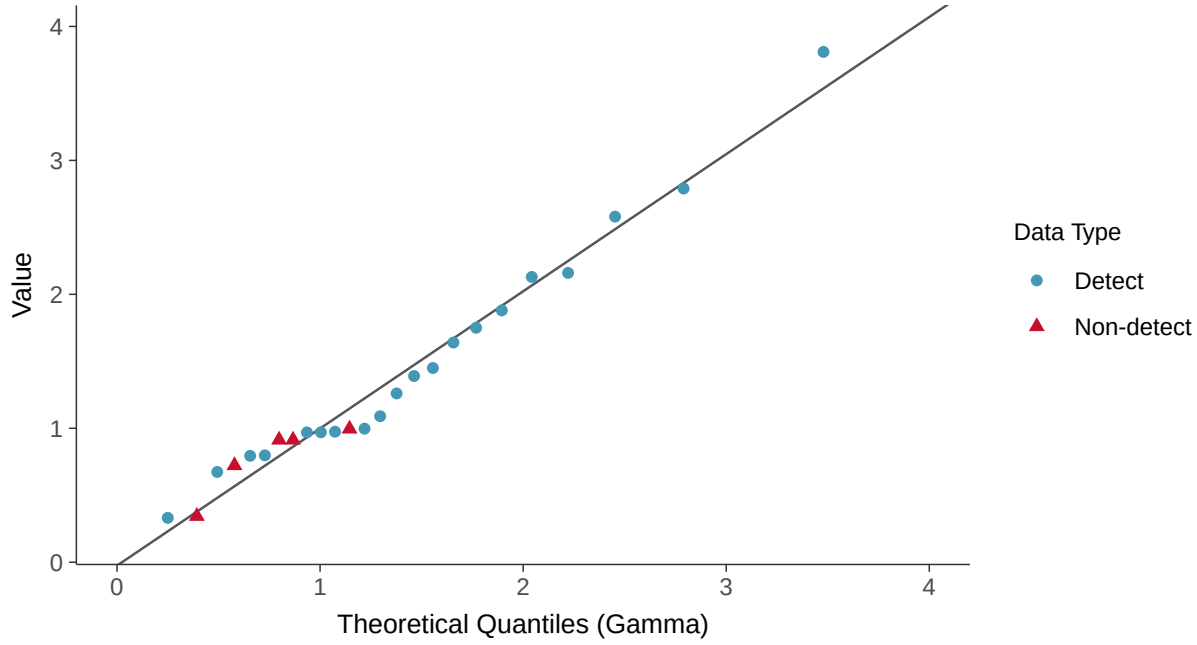

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15019 (pCi/L)



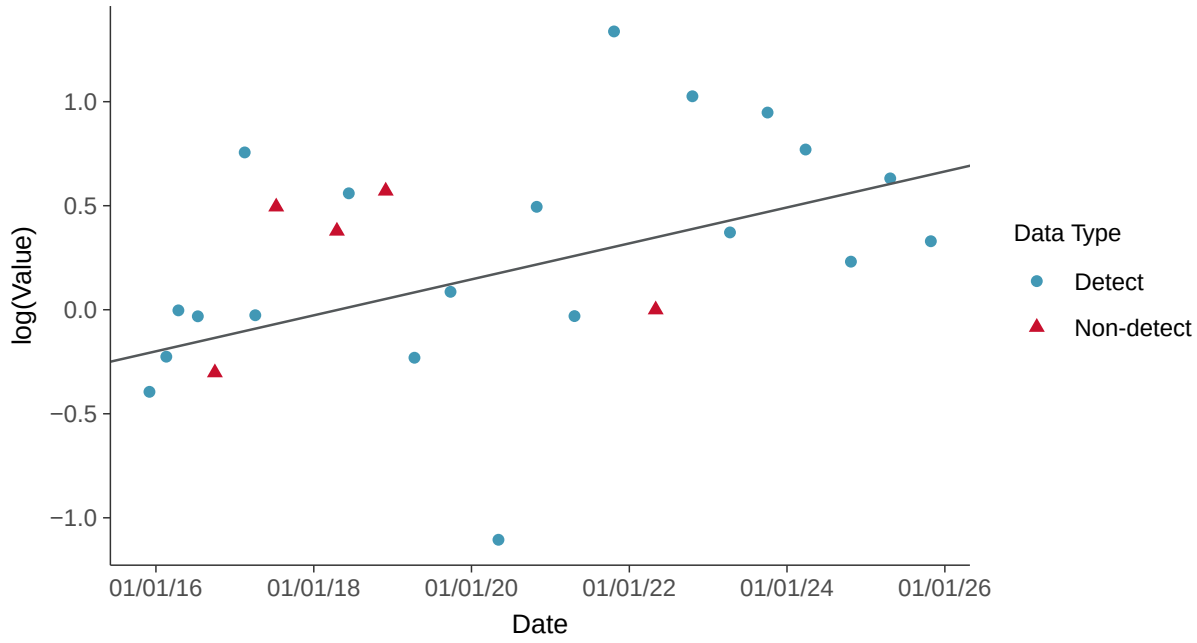
## Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15019 (pCi/L)



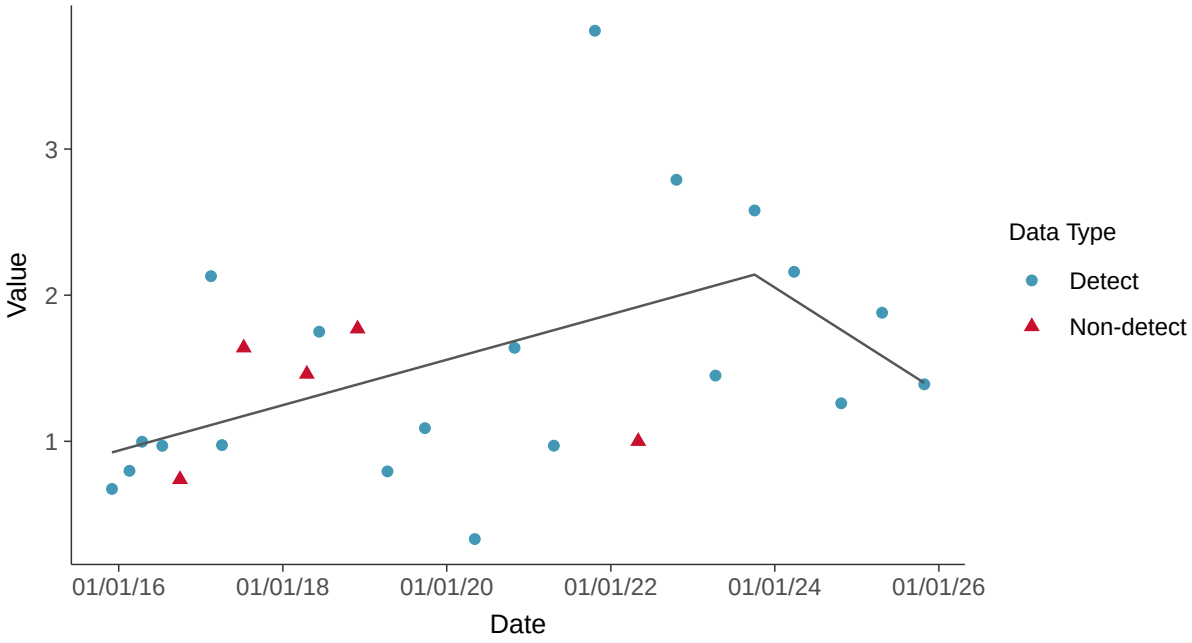

## Trend Regression: Lognormal MLE

Radium-226+228, MW-15019 (pCi/L)



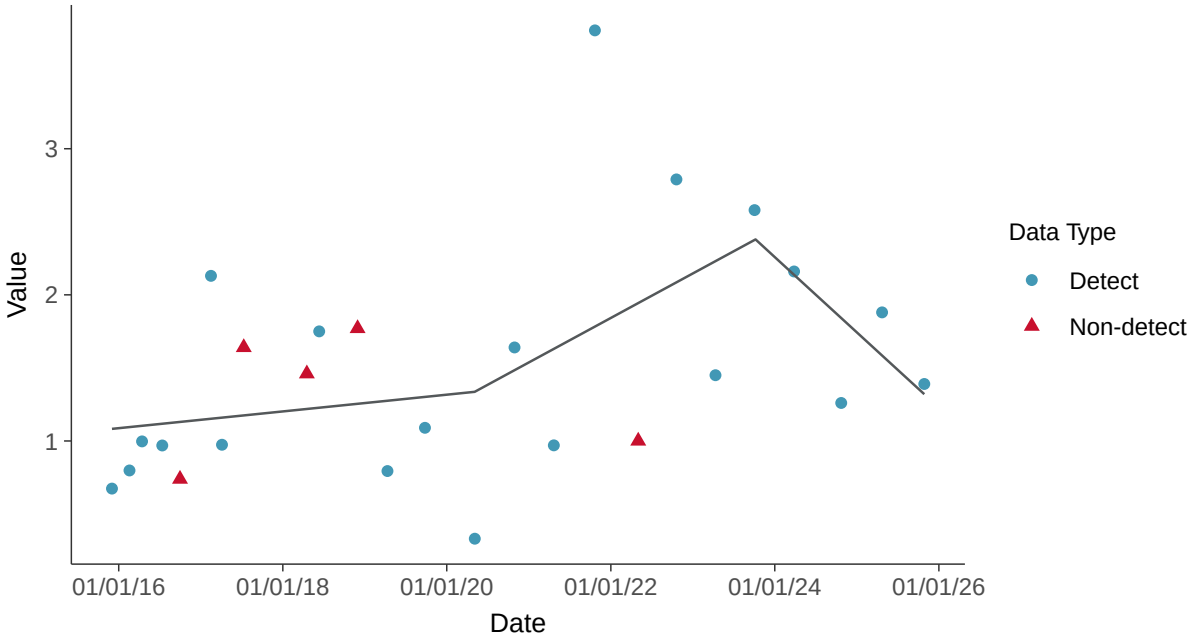
## Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15019 (pCi/L)




## Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-15019 (pCi/L)

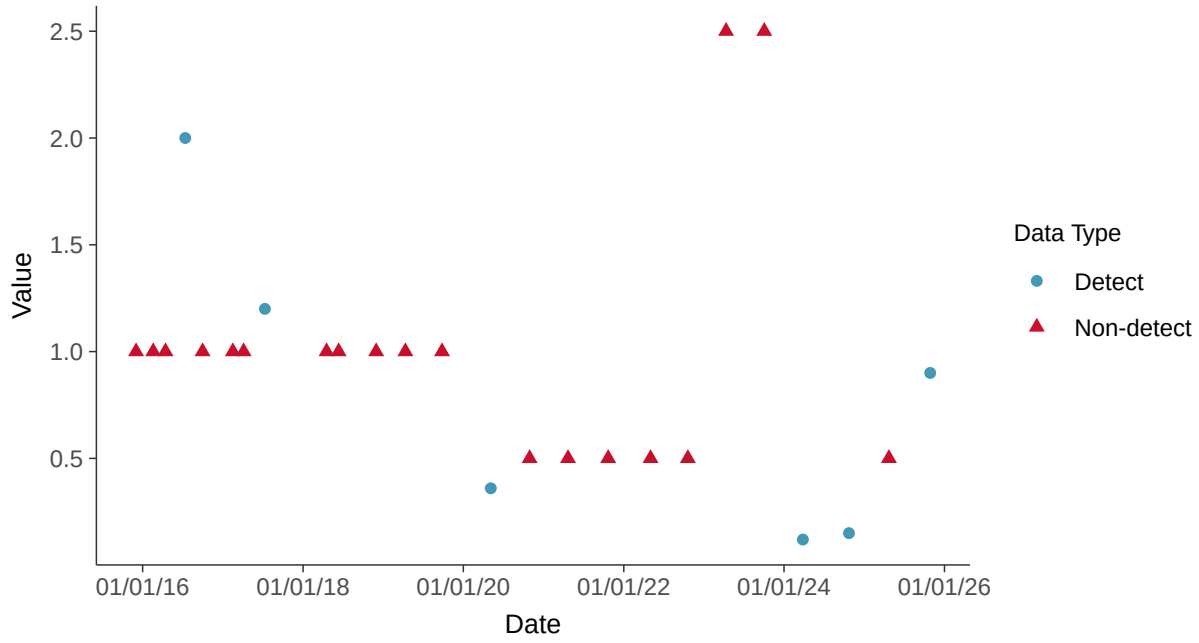


## Appendix IV: Selenium, MW-15019

ID: 09_2_127

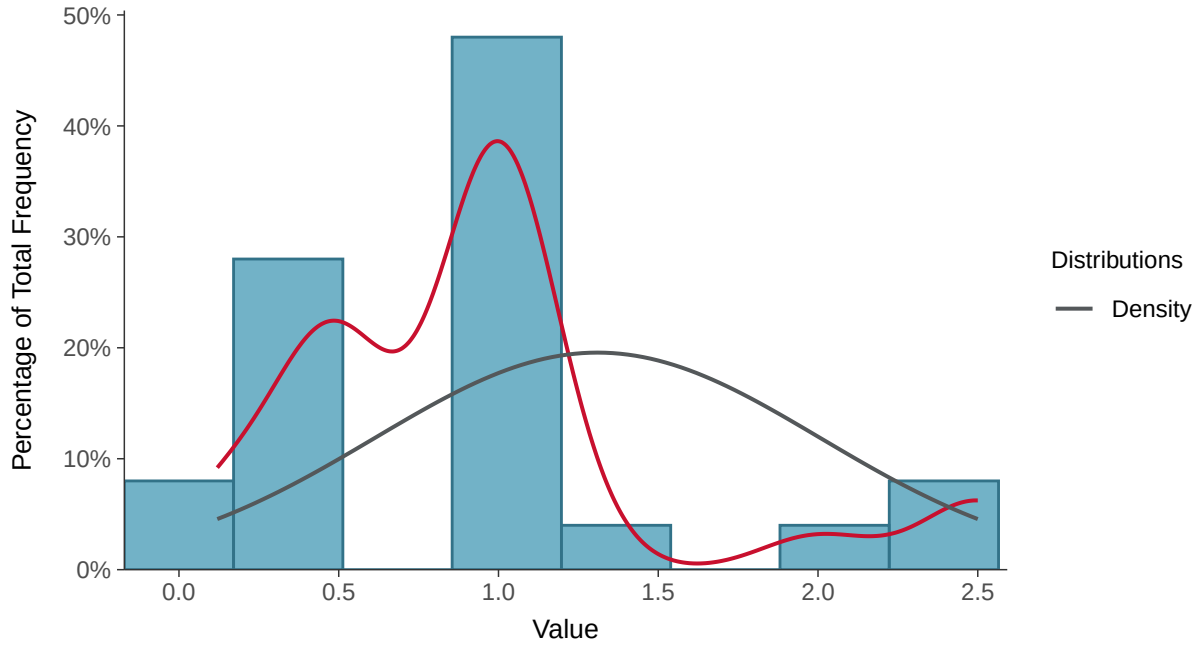
**Scatter Plot**

Selenium, MW-15019 (ug/L)



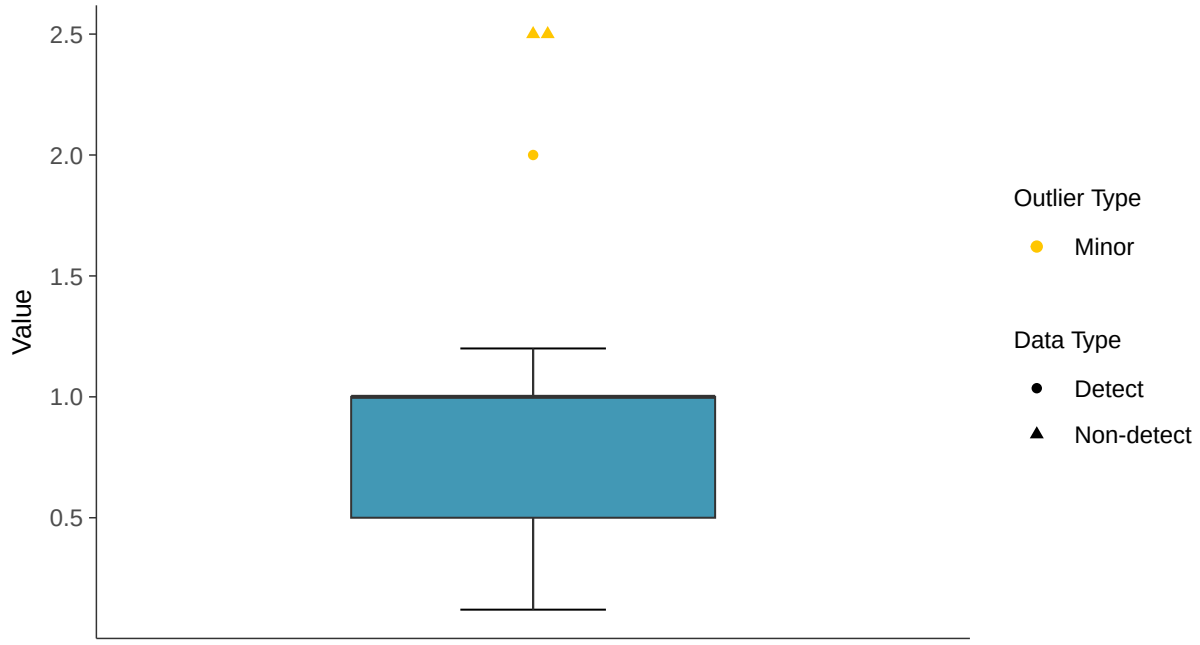

**Histogram**

Selenium, MW-15019 (ug/L)



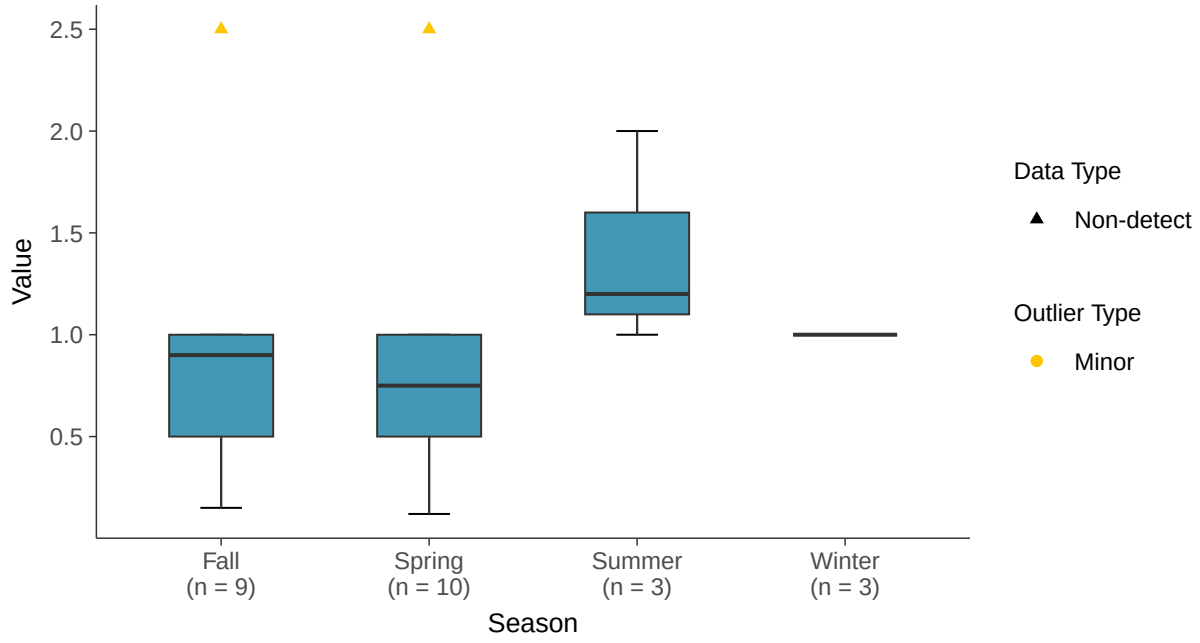
## Boxplot

Selenium, MW-15019 (ug/L)



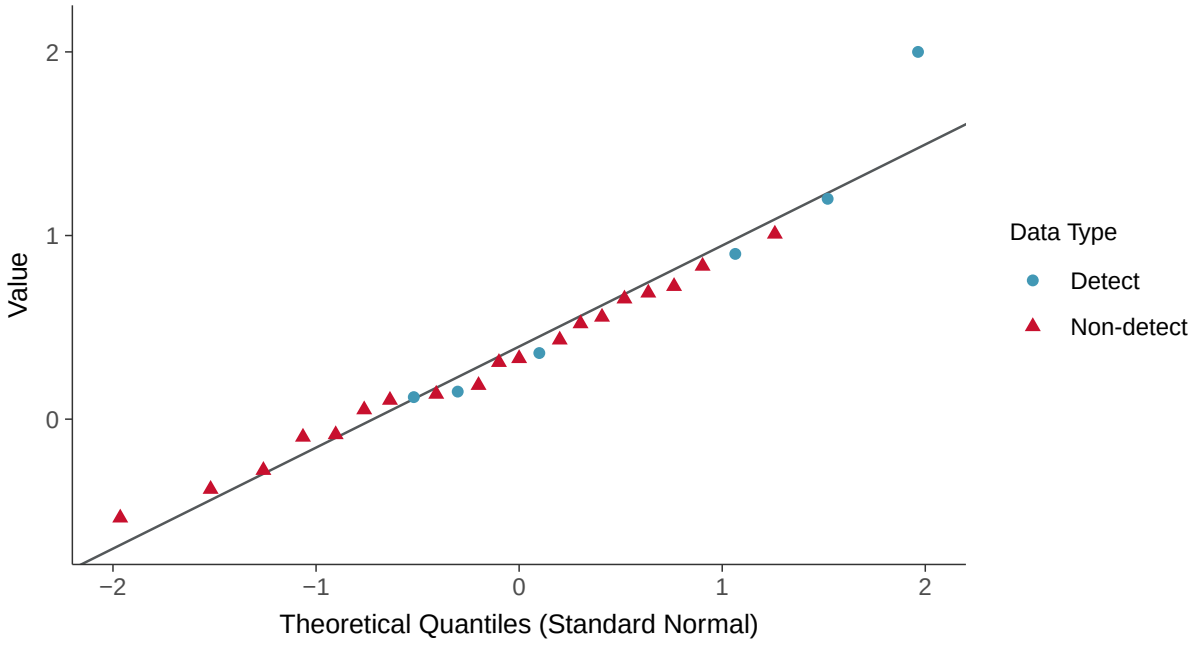

## Boxplot by Season

Selenium, MW-15019 (ug/L)



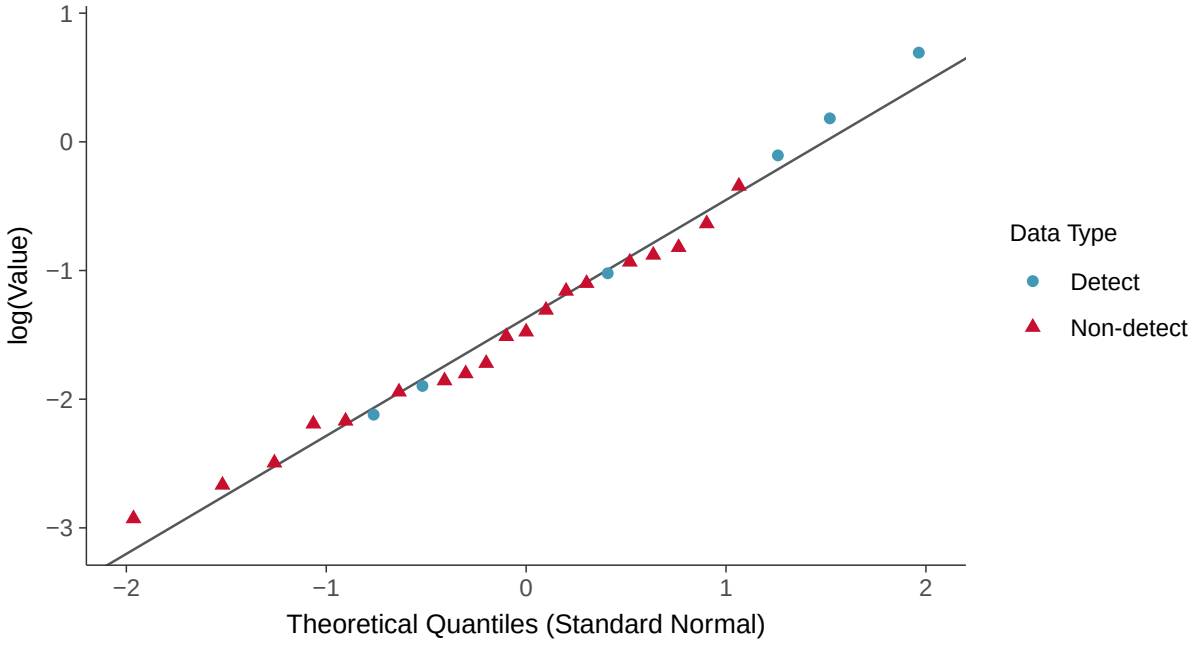
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15019 (ug/L)



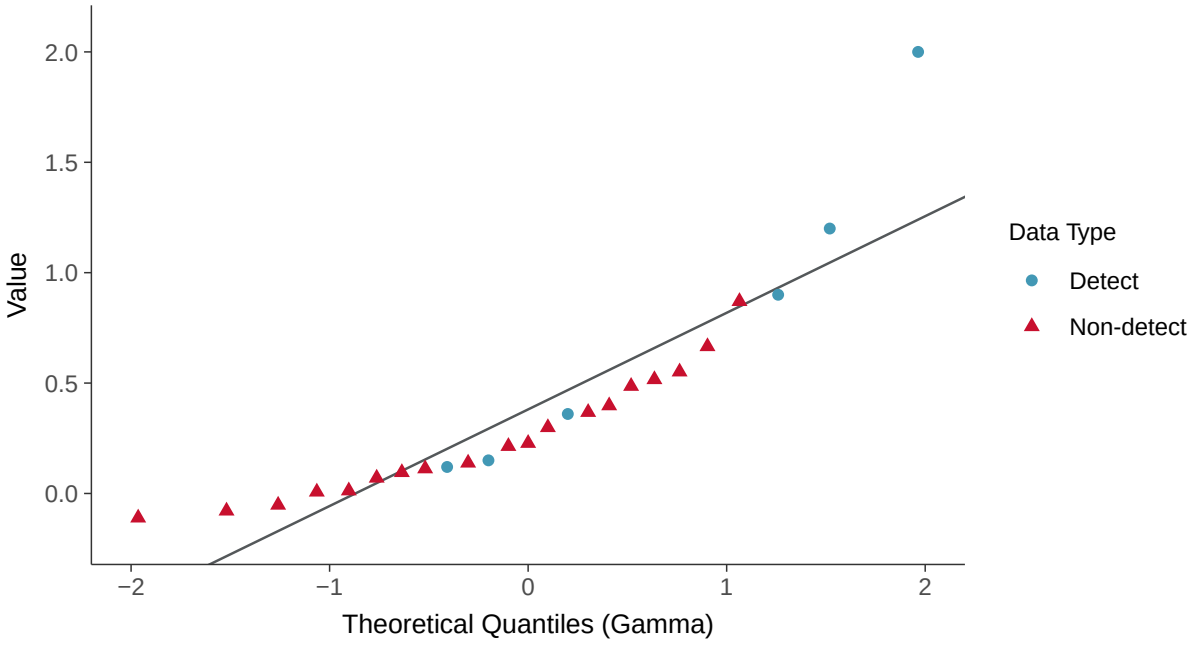

**Lognormal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15019 (ug/L)



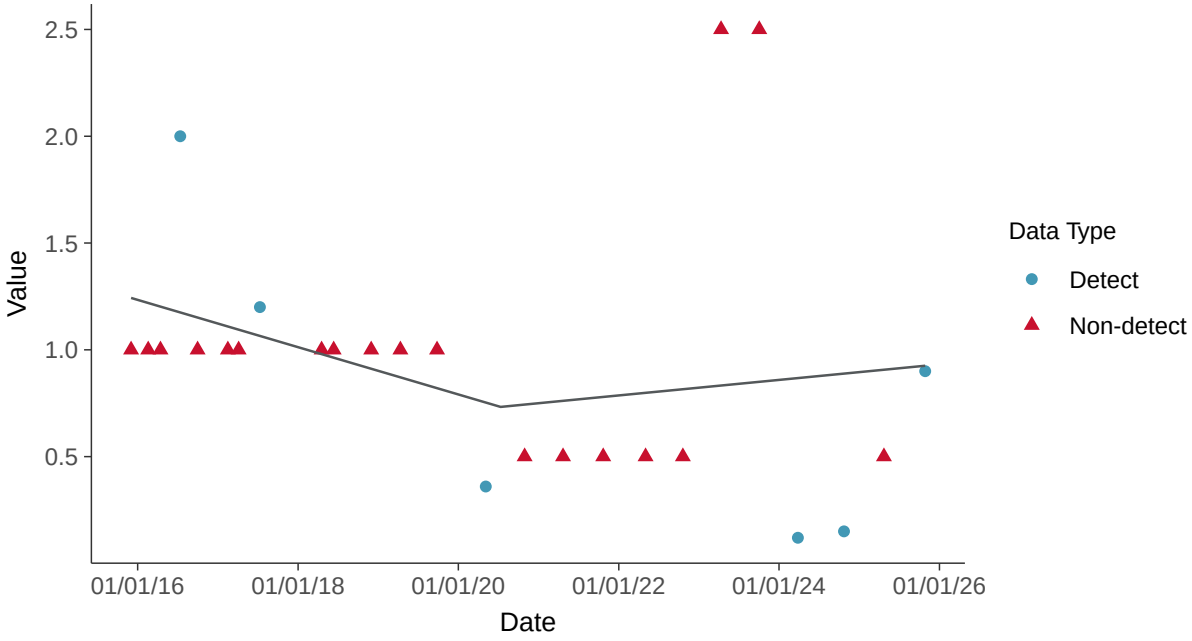
**Gamma Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15019 (ug/L)



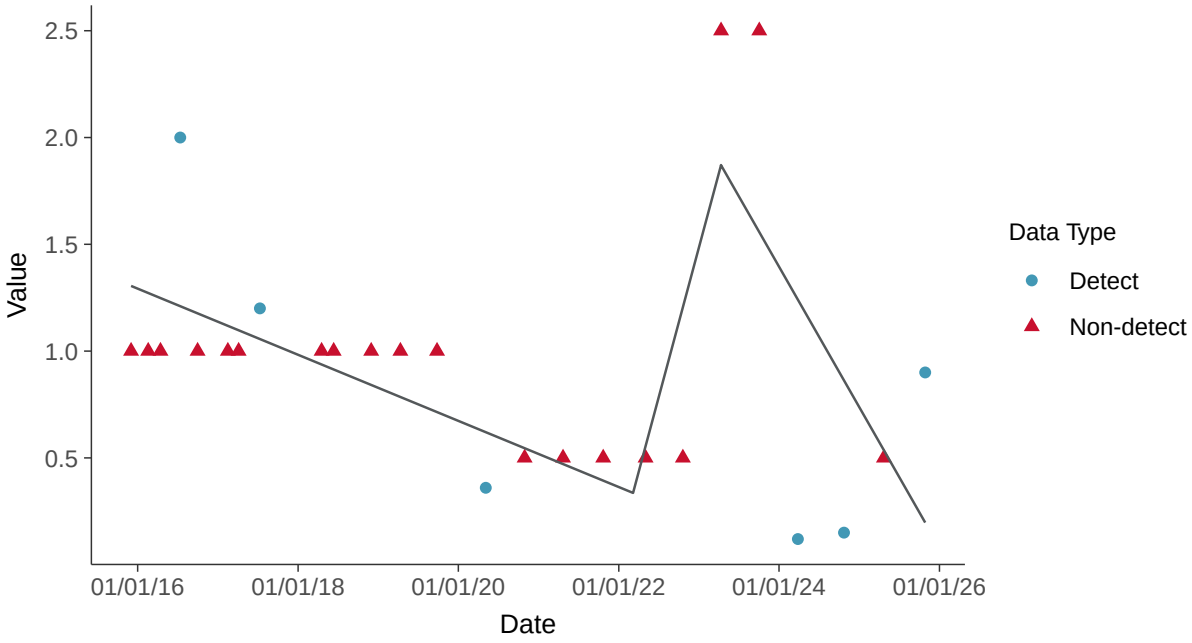

**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-15019 (ug/L)



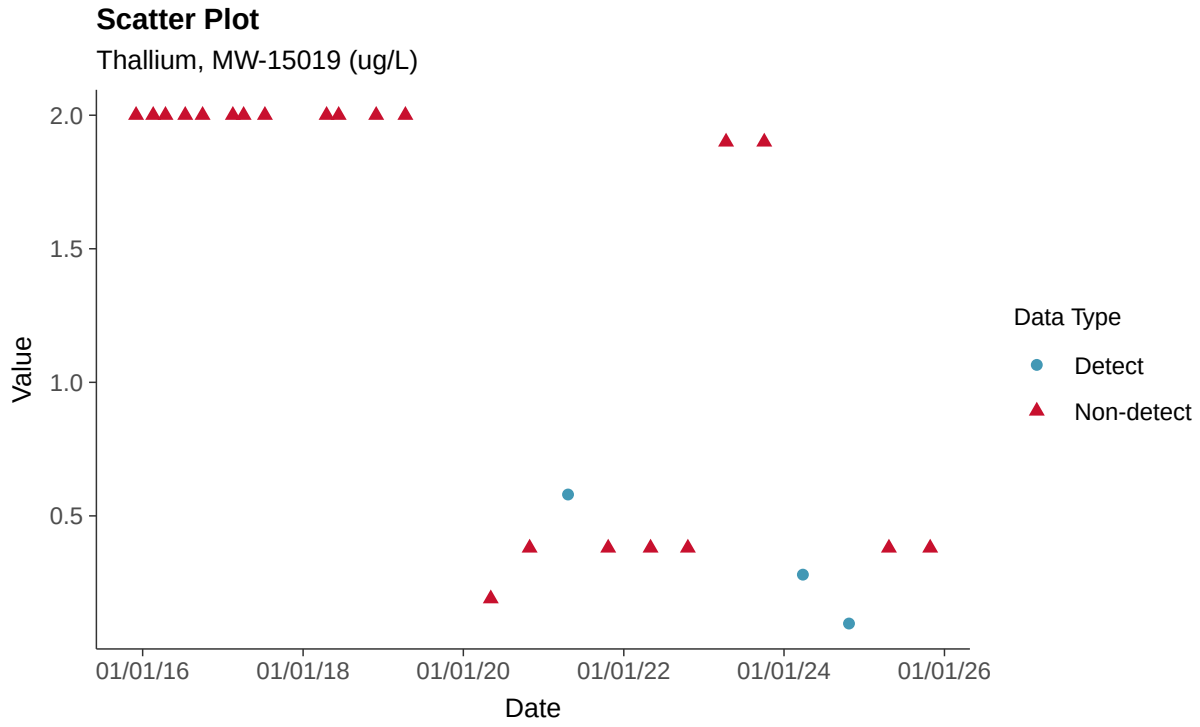
**Trend Regression: Piecewise Linear-Linear-Linear**

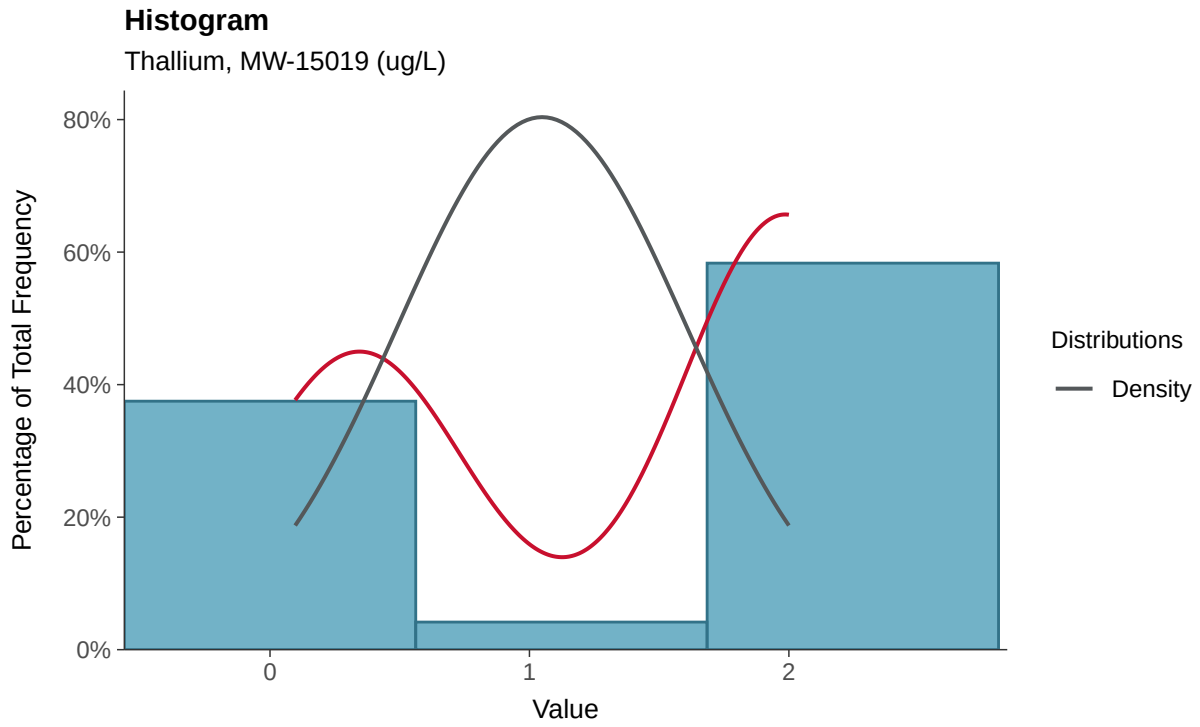
Selenium, MW-15019 (ug/L)



## Appendix IV: Thallium, MW-15019

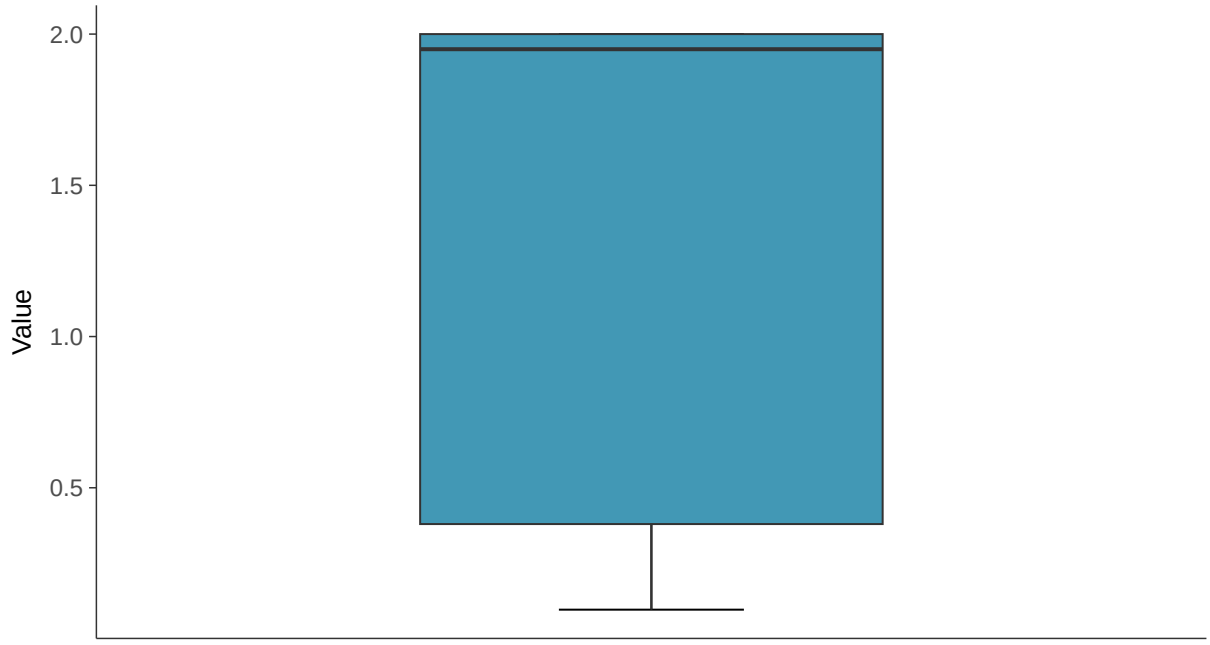
ID: 09_2_131



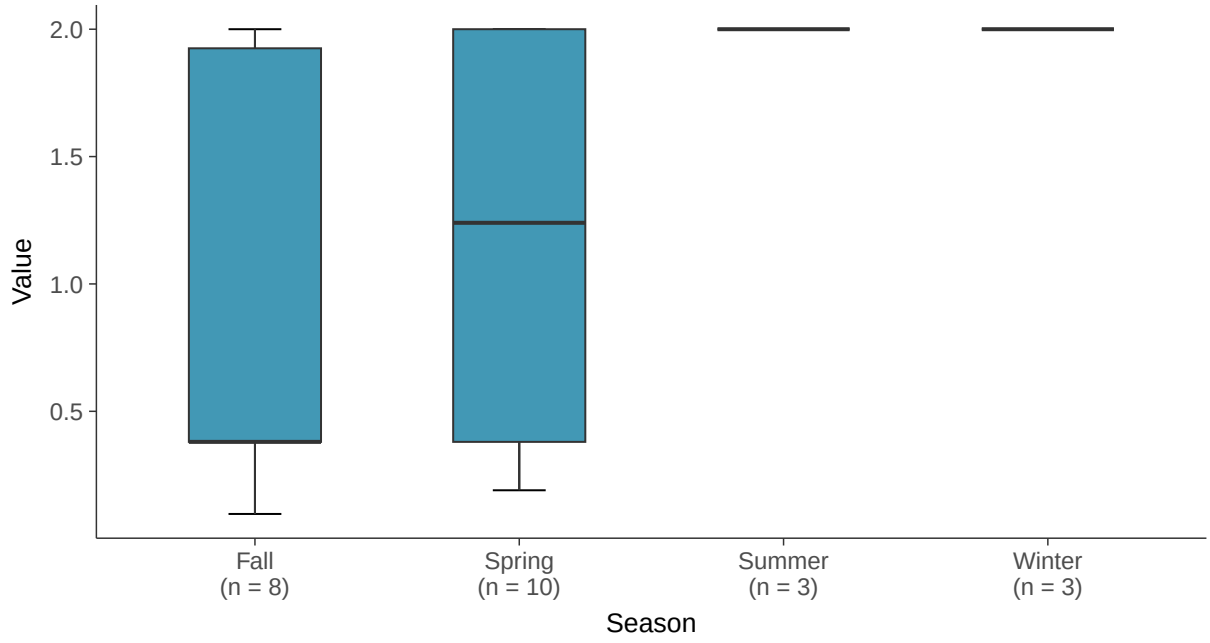
**Boxplot**

Thallium, MW-15019 (ug/L)



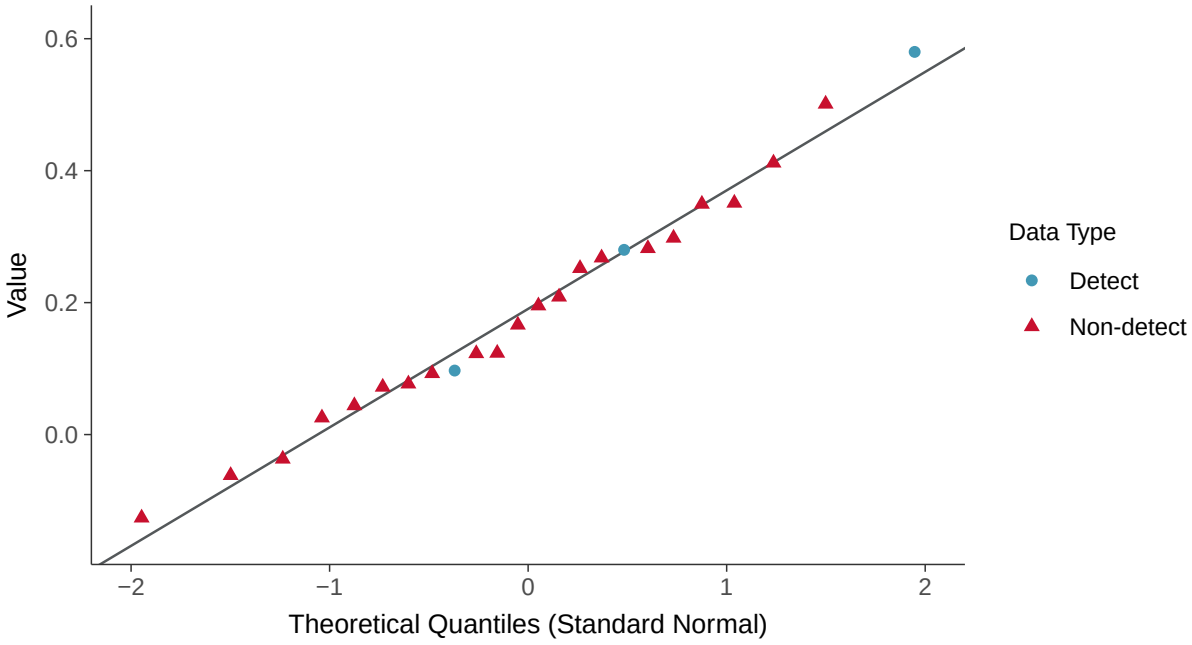

**Boxplot by Season**

Thallium, MW-15019 (ug/L)



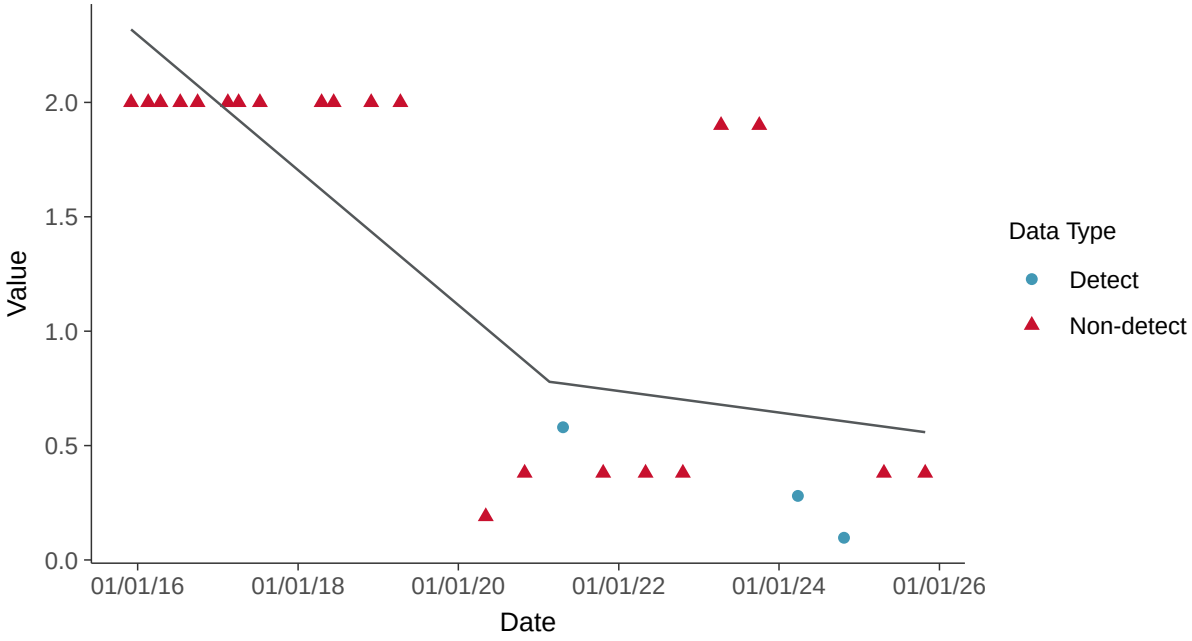
**Normal Q-Q plot using ROS Imputed Estimates**

Thallium, MW-15019 (ug/L)



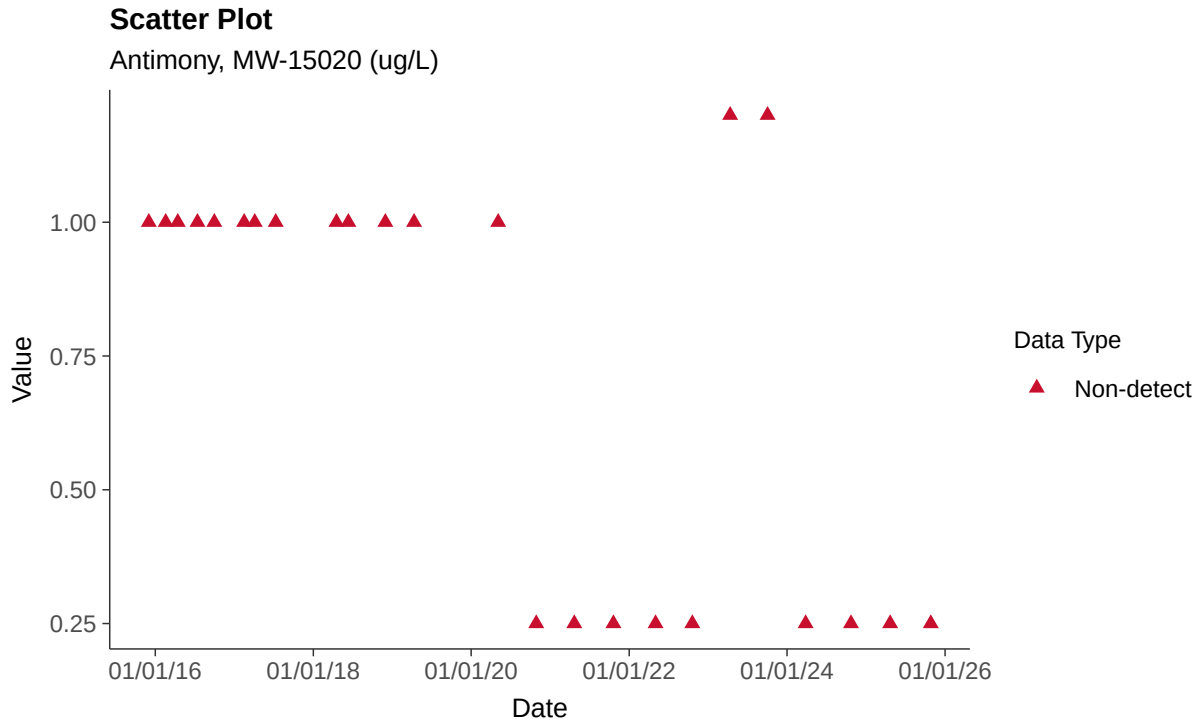

**Trend Regression: Piecewise Linear-Linear**

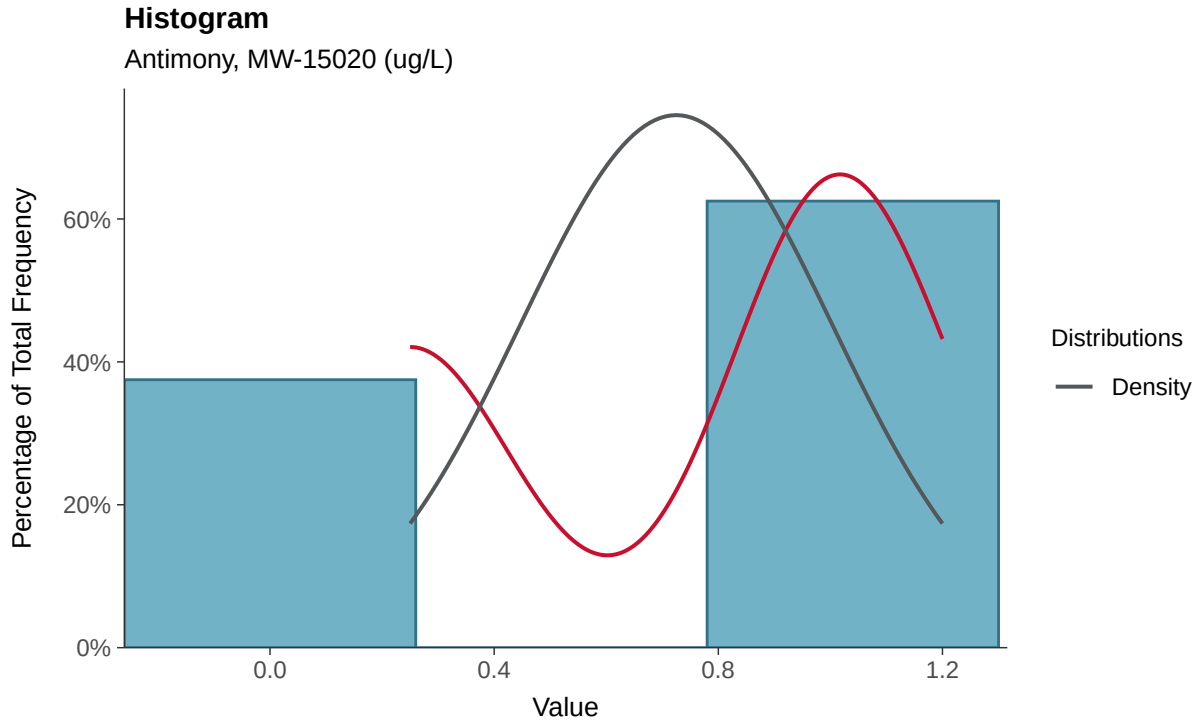
Thallium, MW-15019 (ug/L)



## Appendix IV: Antimony, MW-15020

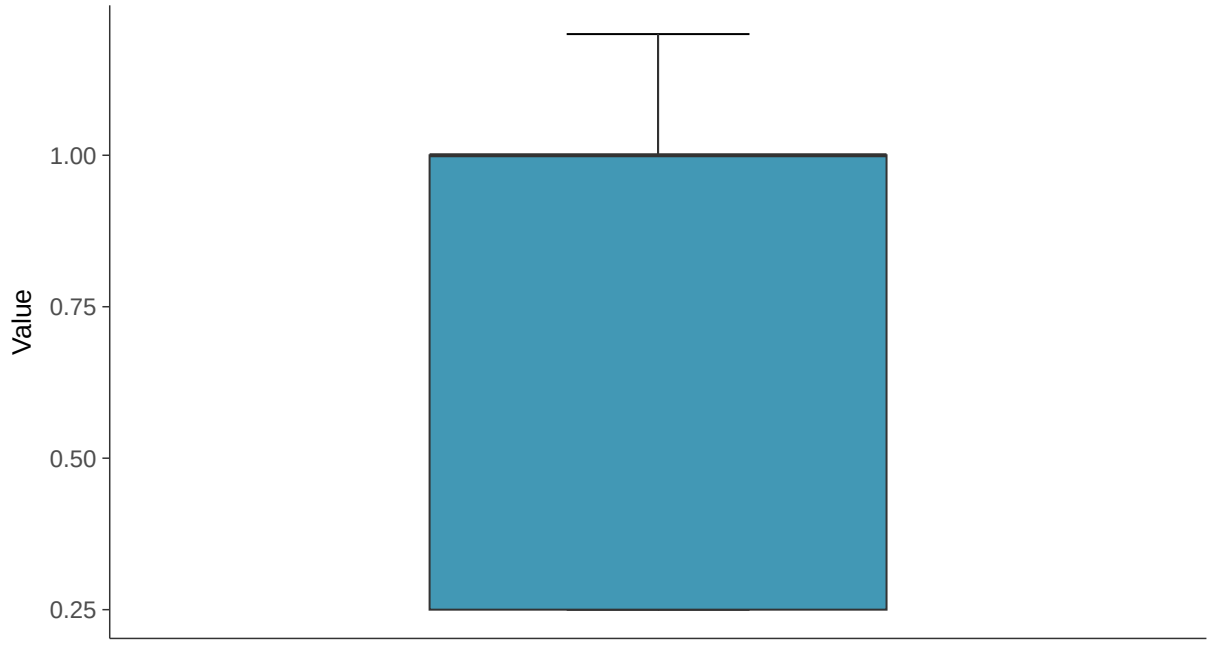
ID: 10_2_101



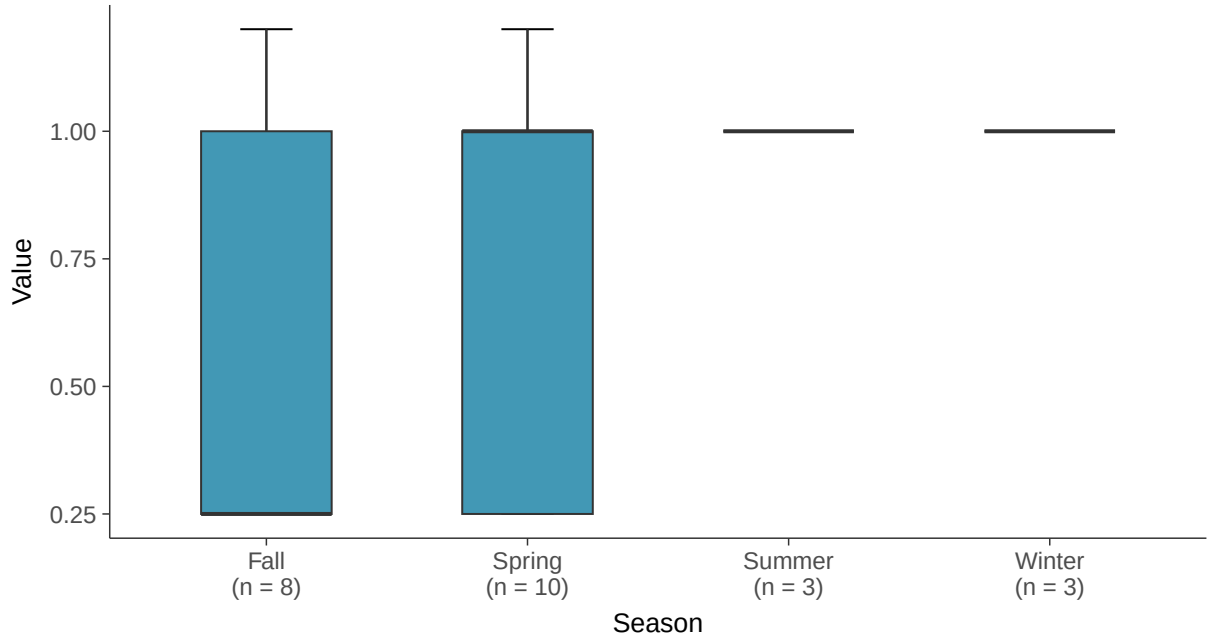
## Boxplot

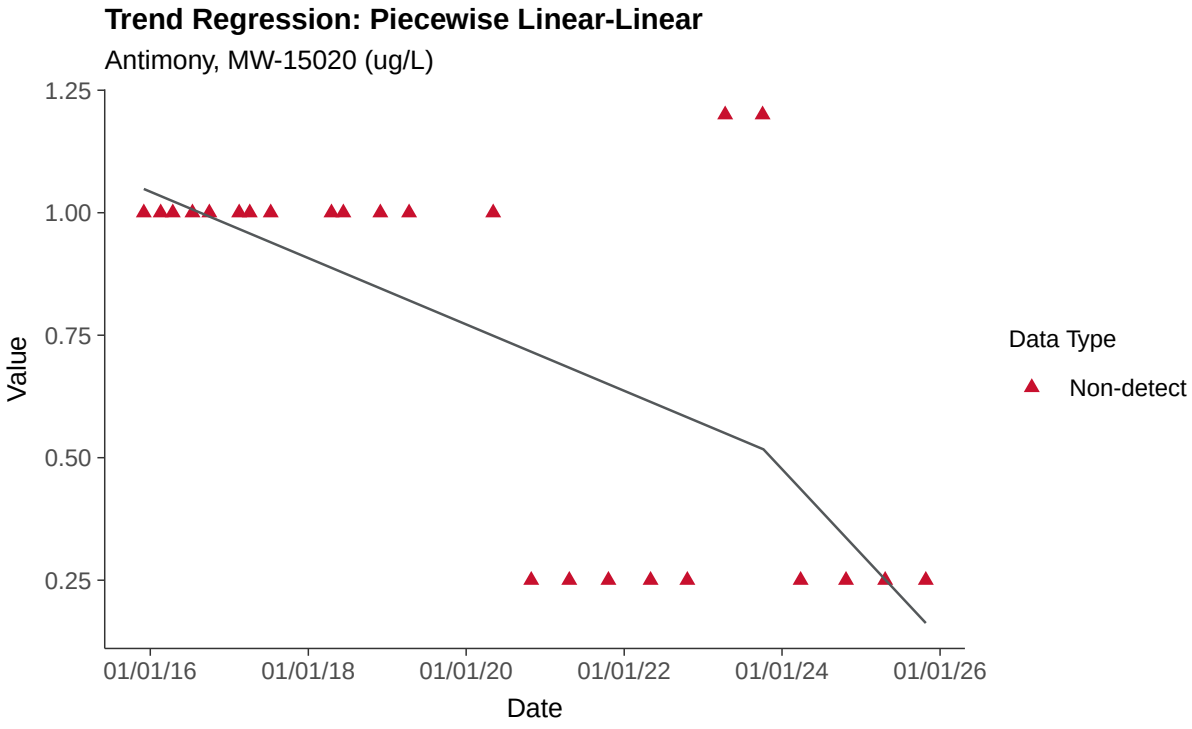
Antimony, MW-15020 (ug/L)




## Boxplot by Season

Antimony, MW-15020 (ug/L)



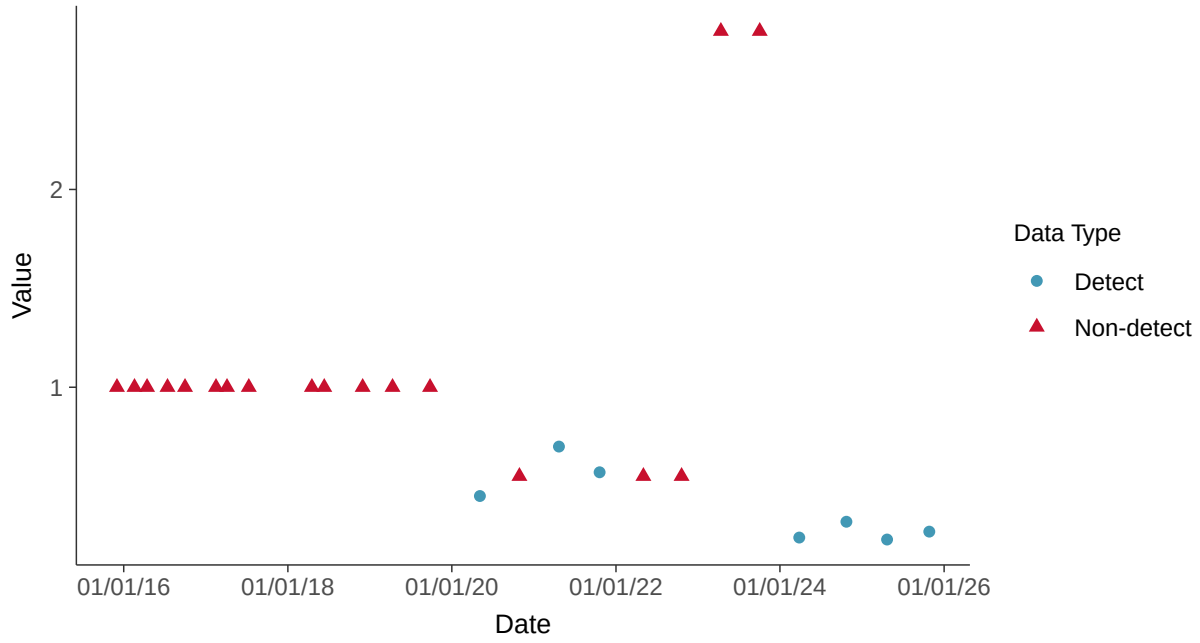

Trend Regression: Piecewise Linear-Linear
Antimony, MW-15020 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Arsenic, MW-15020

ID: 10_2_102

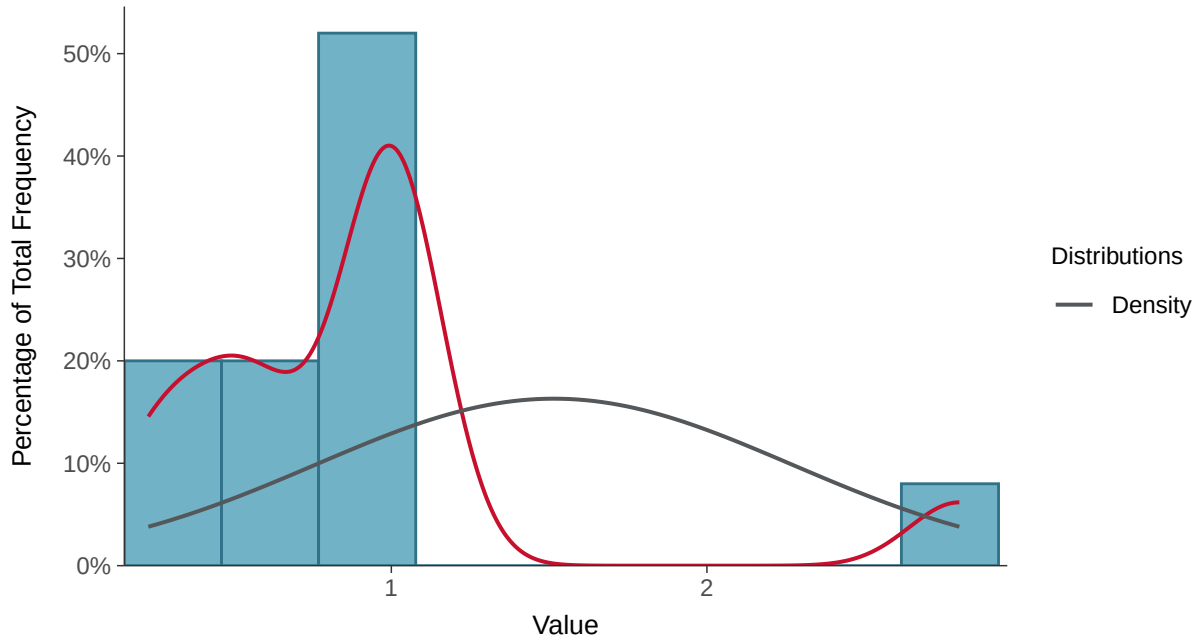
**Scatter Plot**

Arsenic, MW-15020 (ug/L)



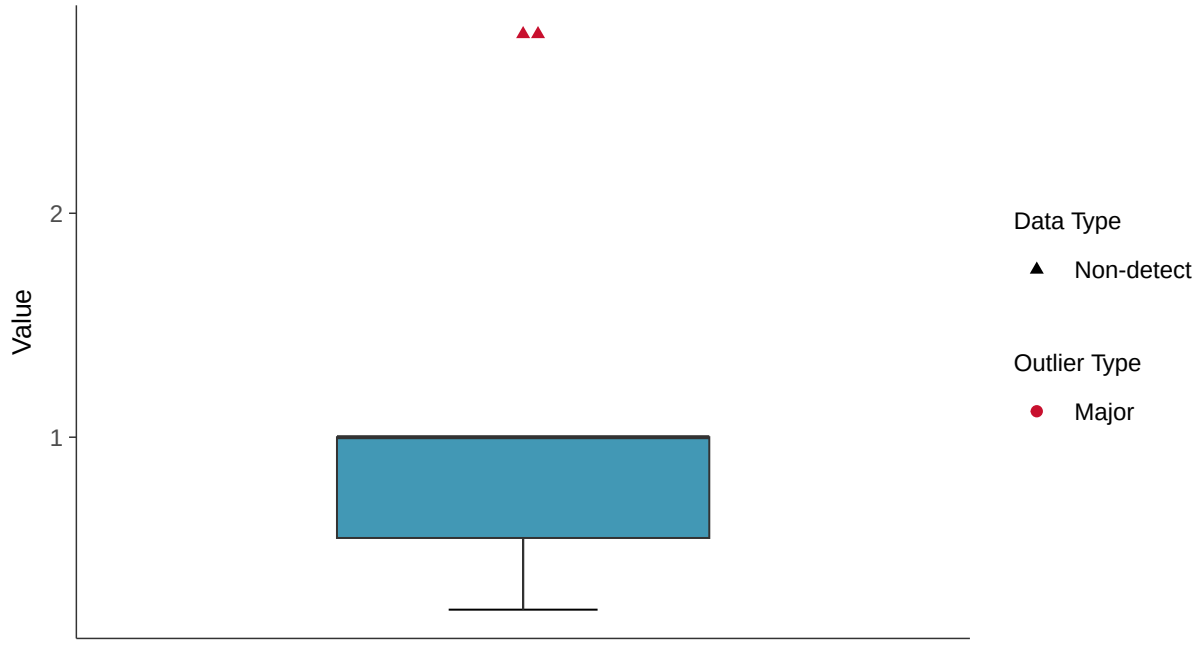

**Histogram**

Arsenic, MW-15020 (ug/L)



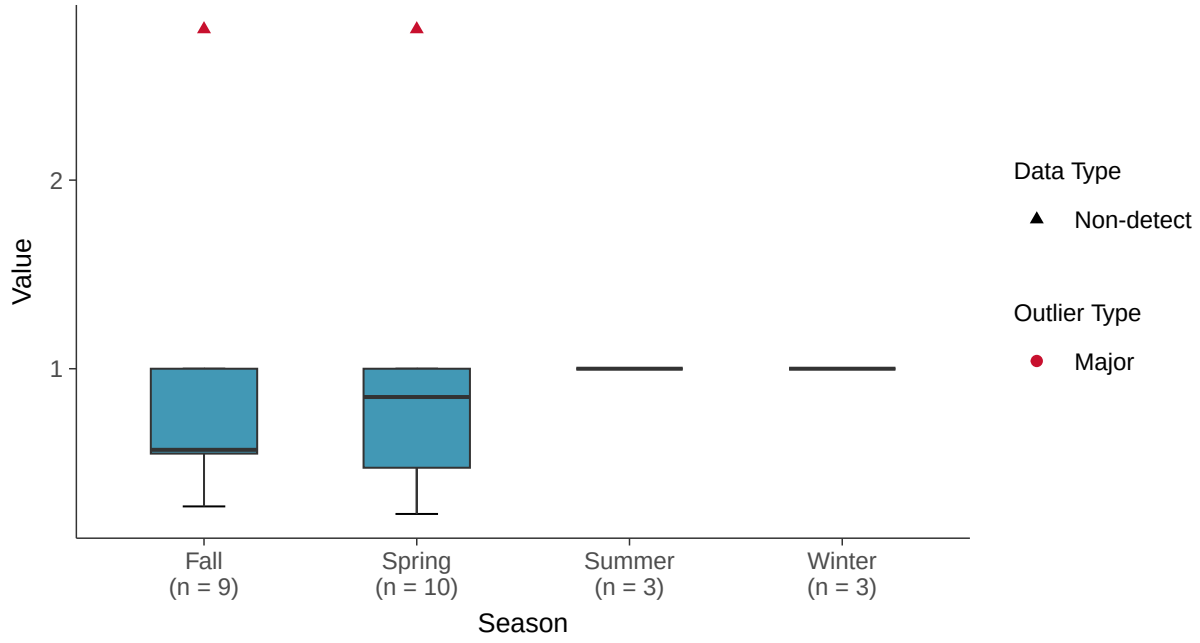
## Boxplot

Arsenic, MW-15020 (ug/L)



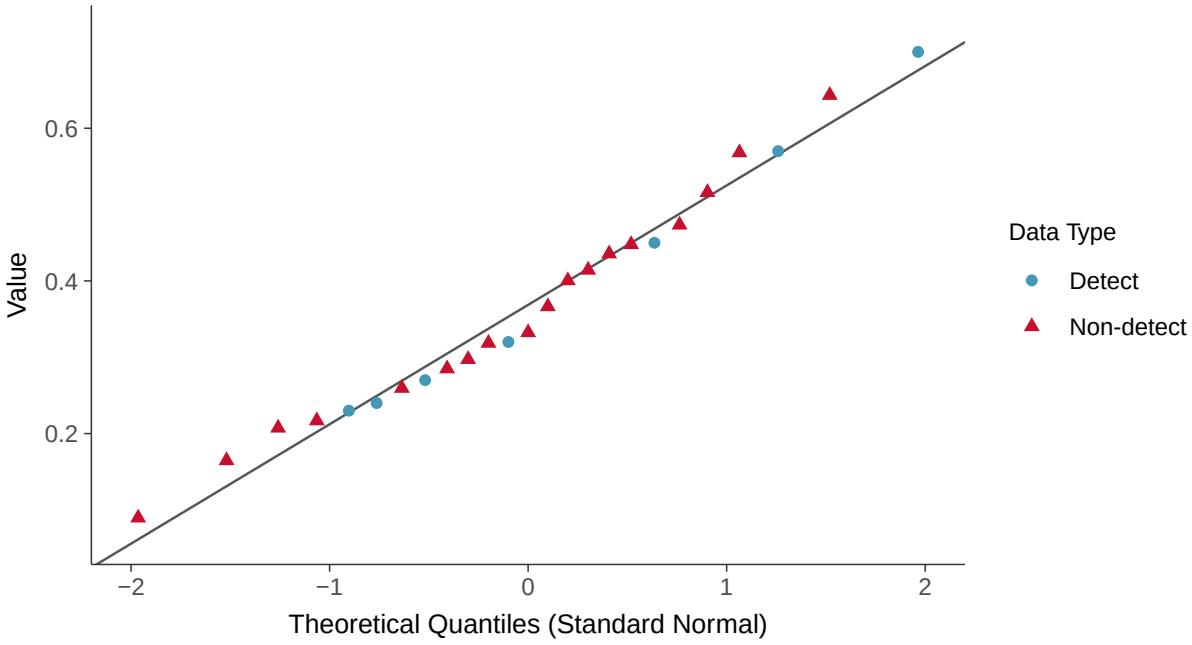

## Boxplot by Season

Arsenic, MW-15020 (ug/L)



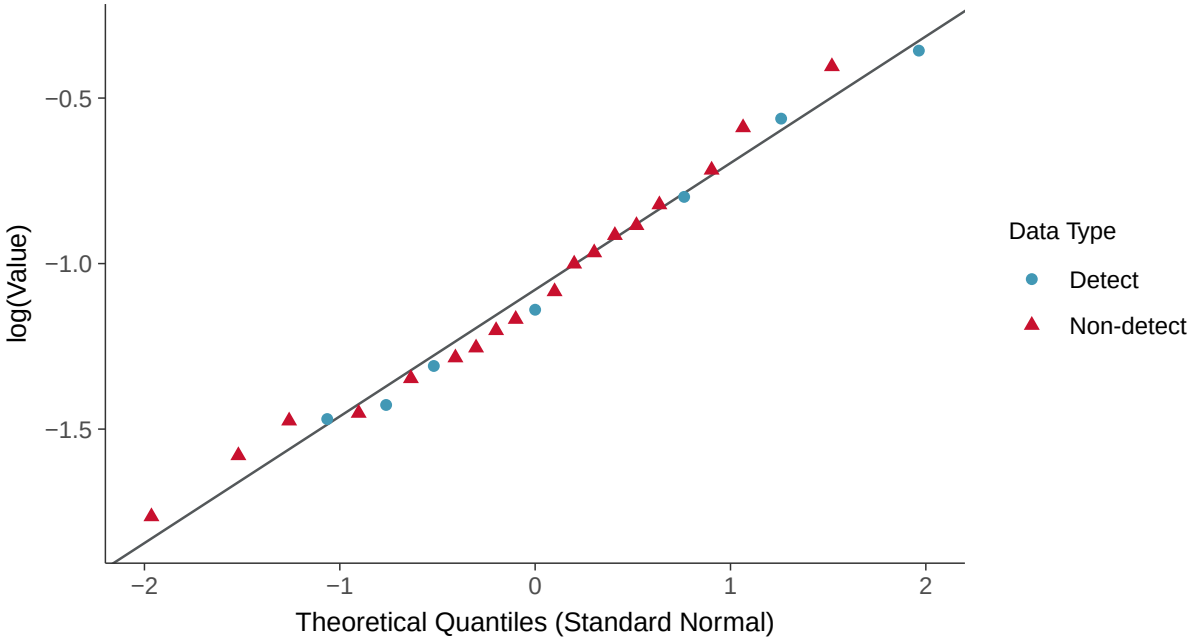
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15020 (ug/L)



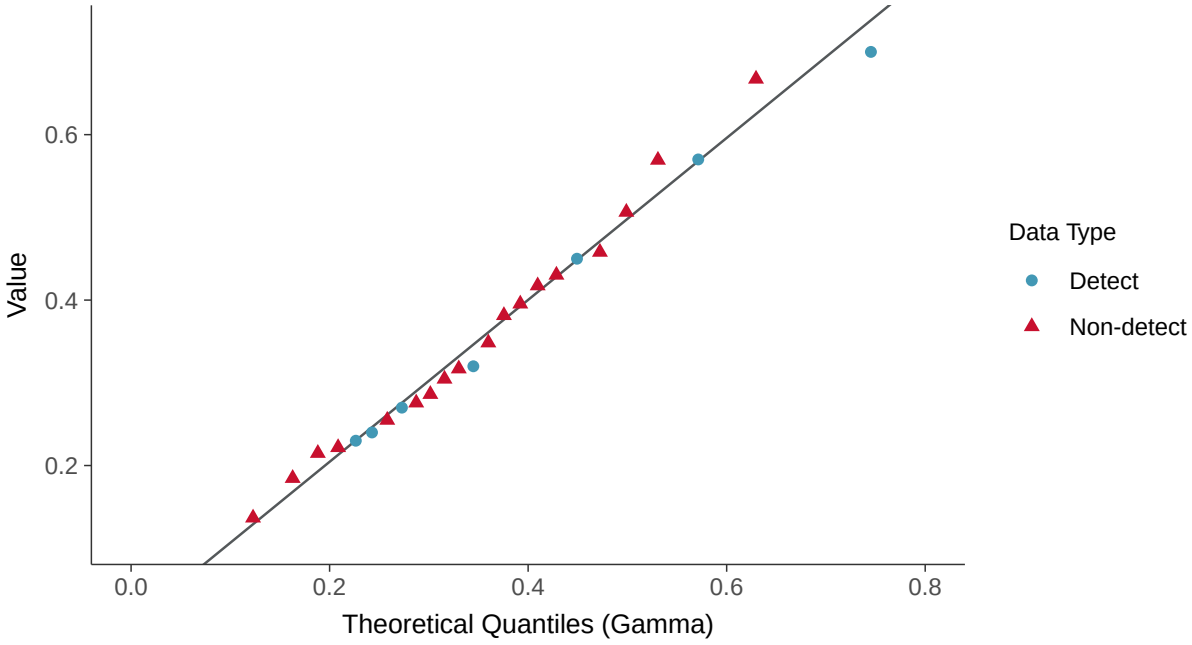

**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15020 (ug/L)



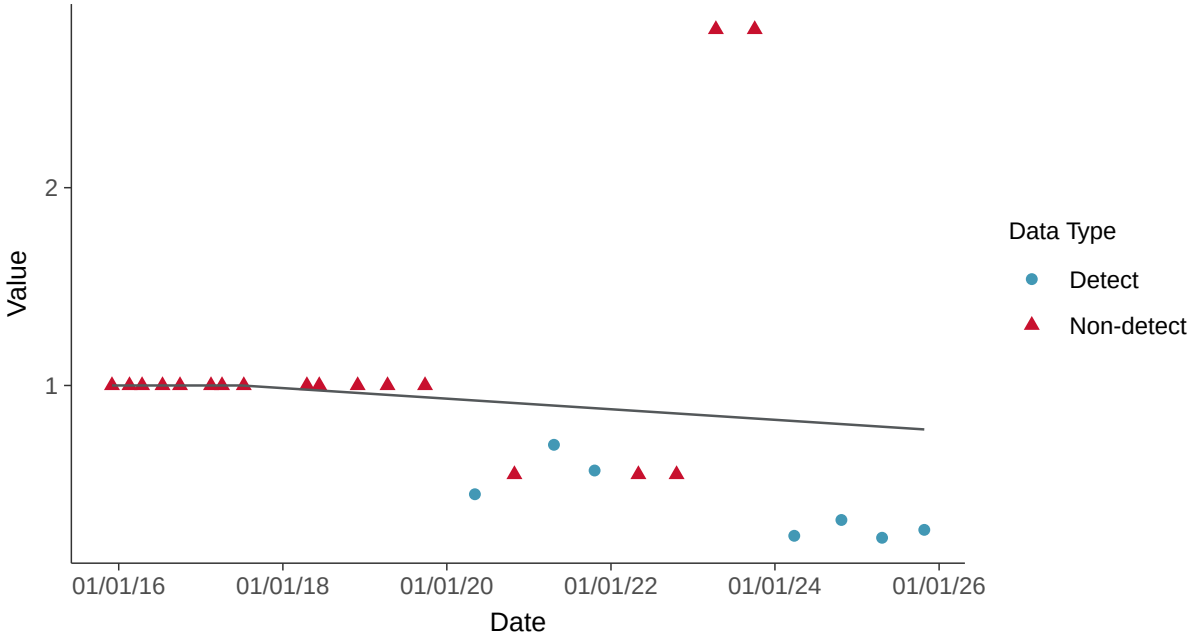
**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15020 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15020 (ug/L)

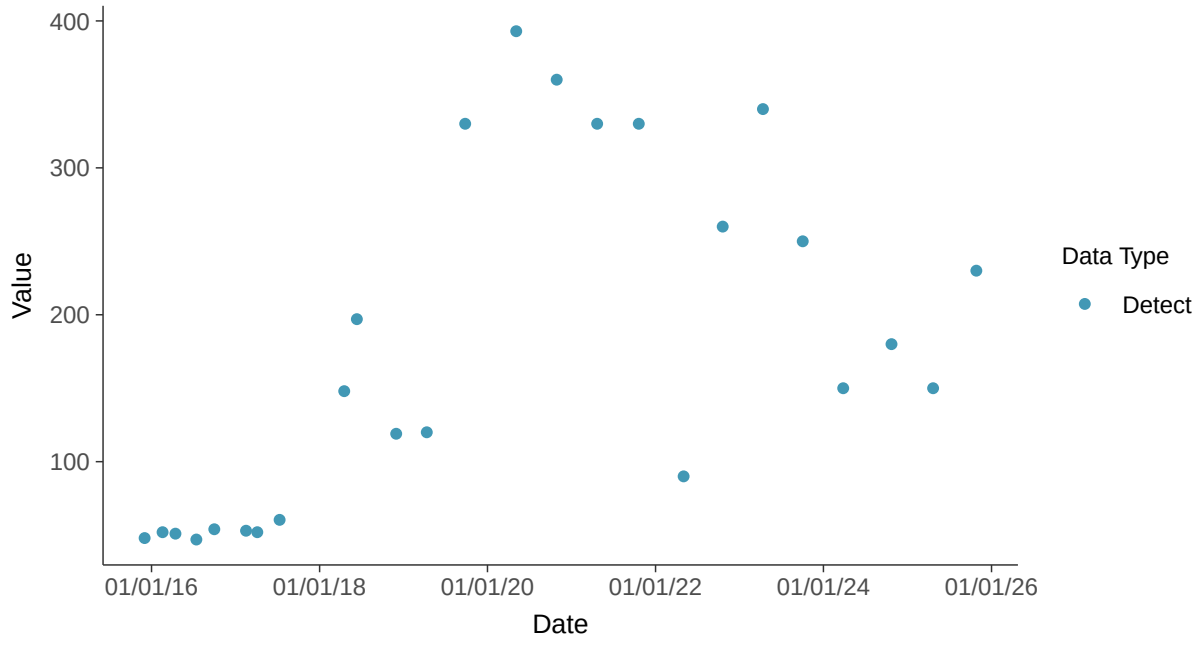


## Appendix IV: Barium, MW-15020

ID: 10_2_103

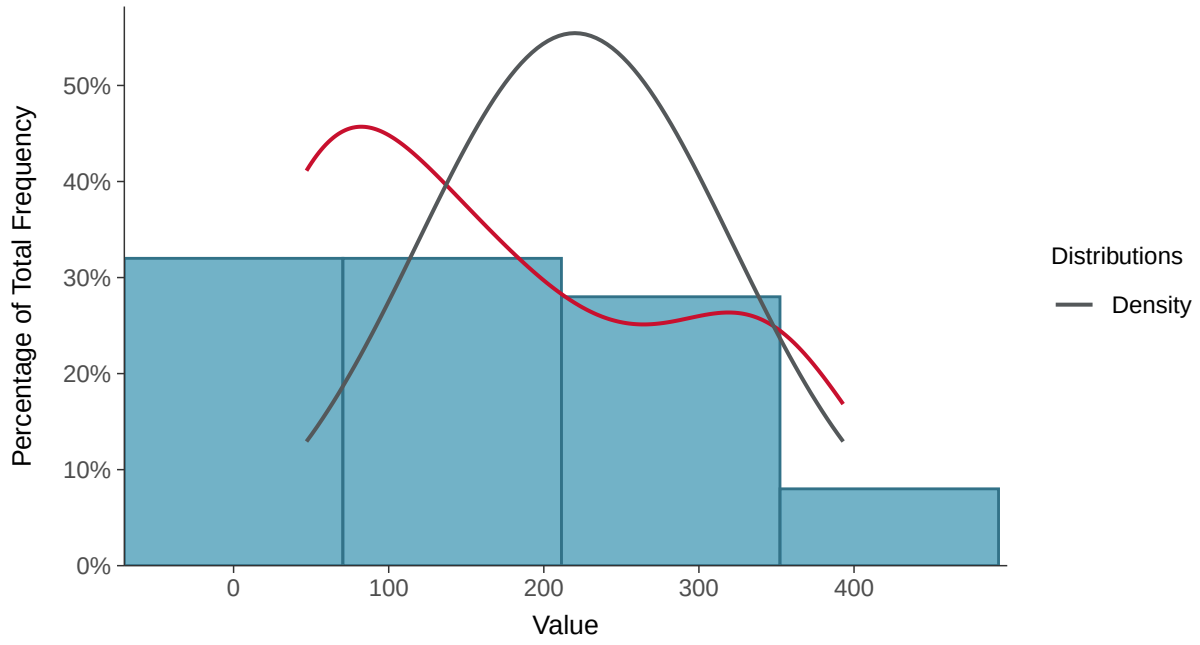
**Scatter Plot**

Barium, MW-15020 (ug/L)



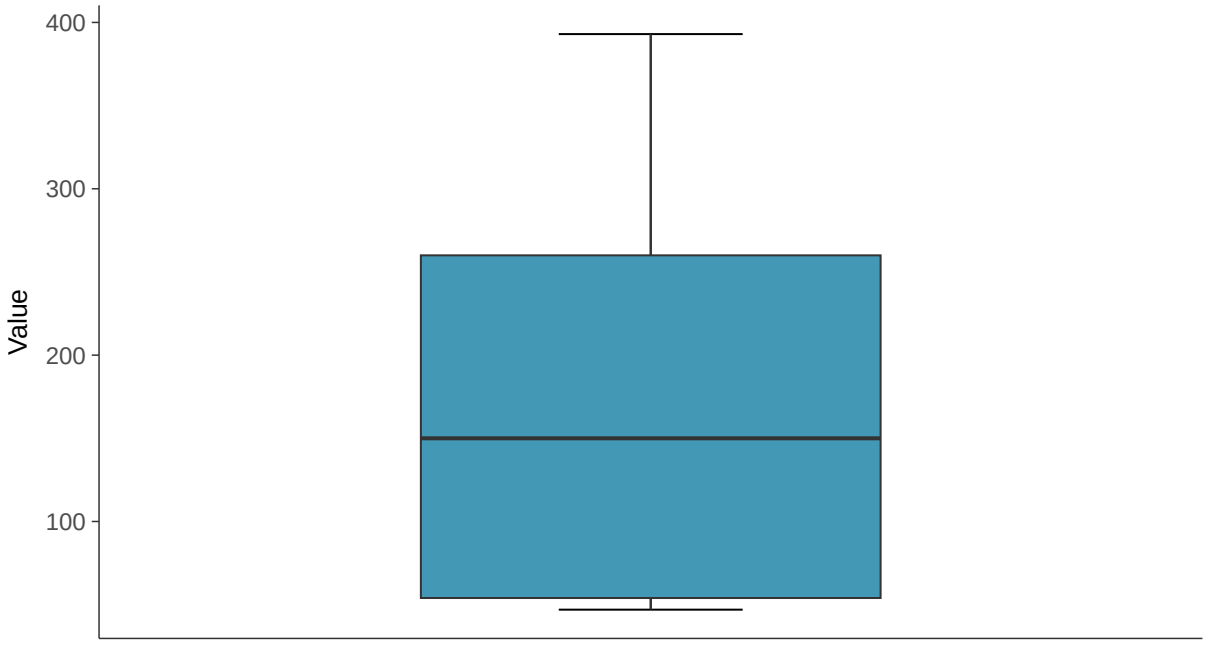

**Histogram**

Barium, MW-15020 (ug/L)



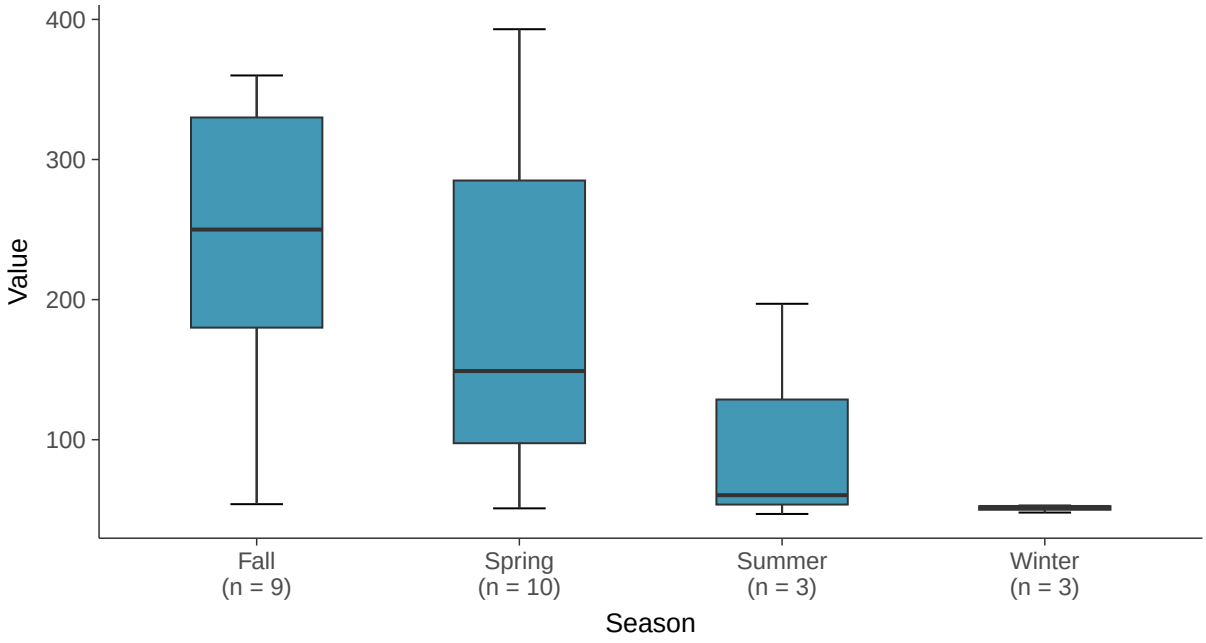
**Boxplot**

Barium, MW-15020 (ug/L)



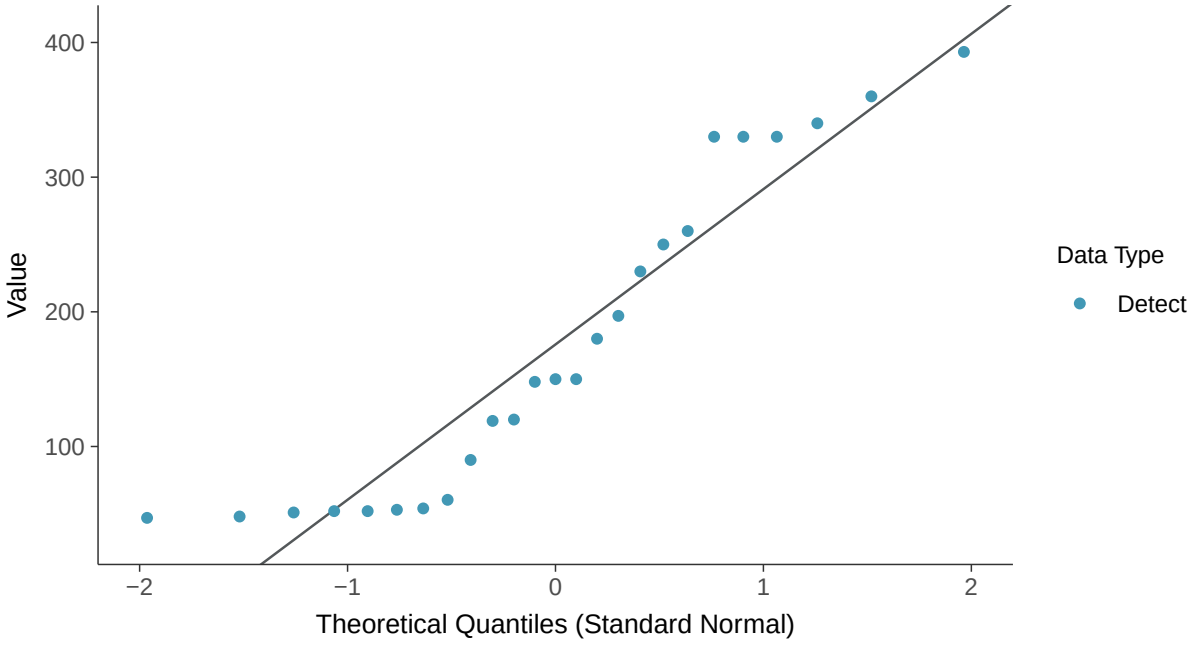

**Boxplot by Season**

Barium, MW-15020 (ug/L)



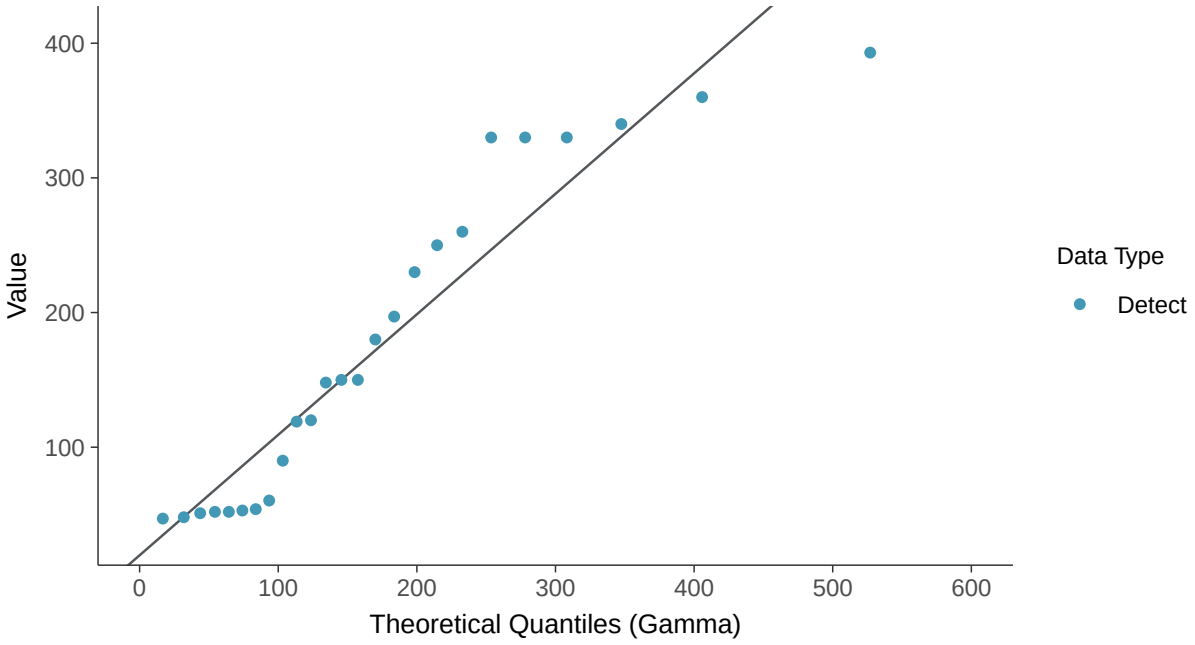
**Normal Q-Q plot**

Barium, MW-15020 (ug/L)



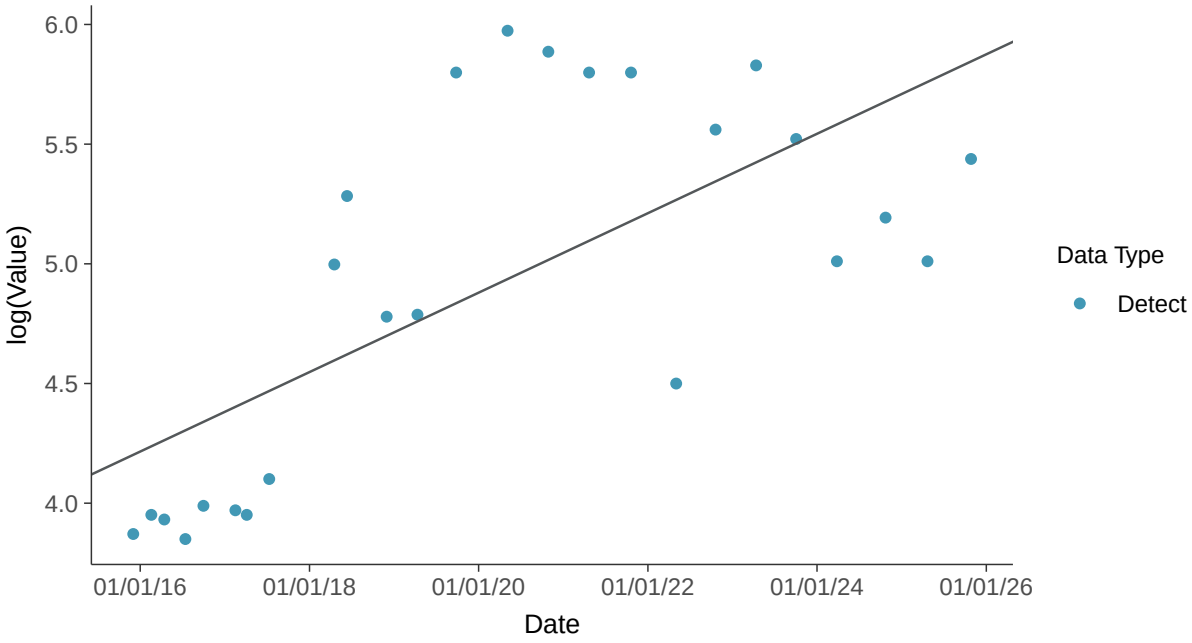

**Gamma Q-Q plot**

Barium, MW-15020 (ug/L)



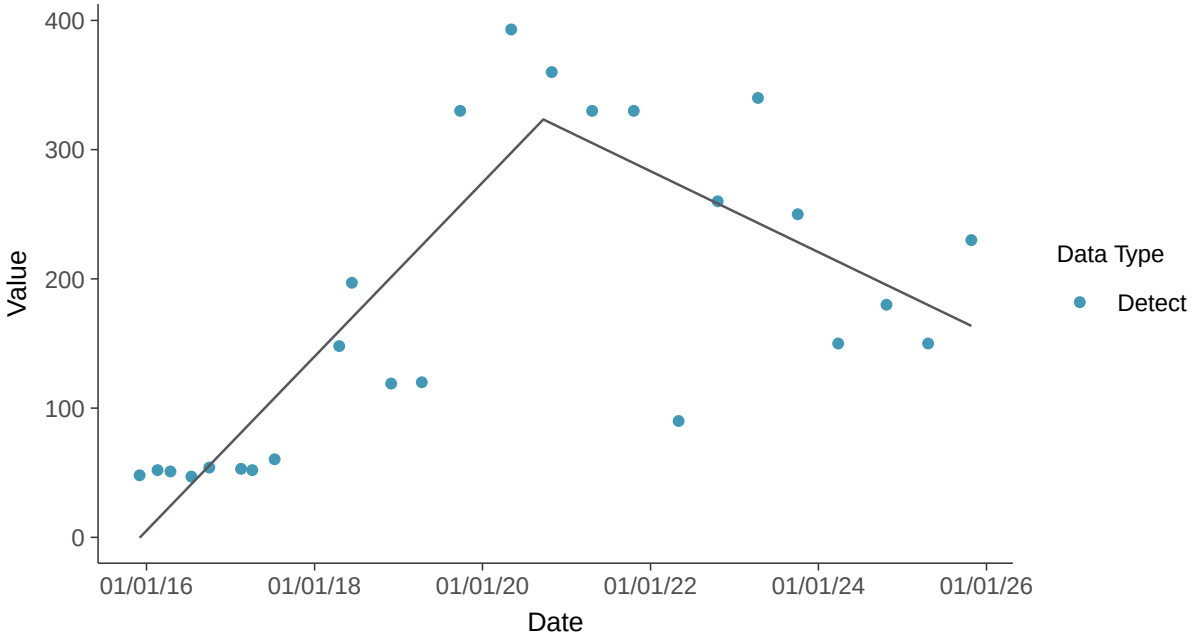
**Trend Regression: Lognormal MLE**

Barium, MW-15020 (ug/L)



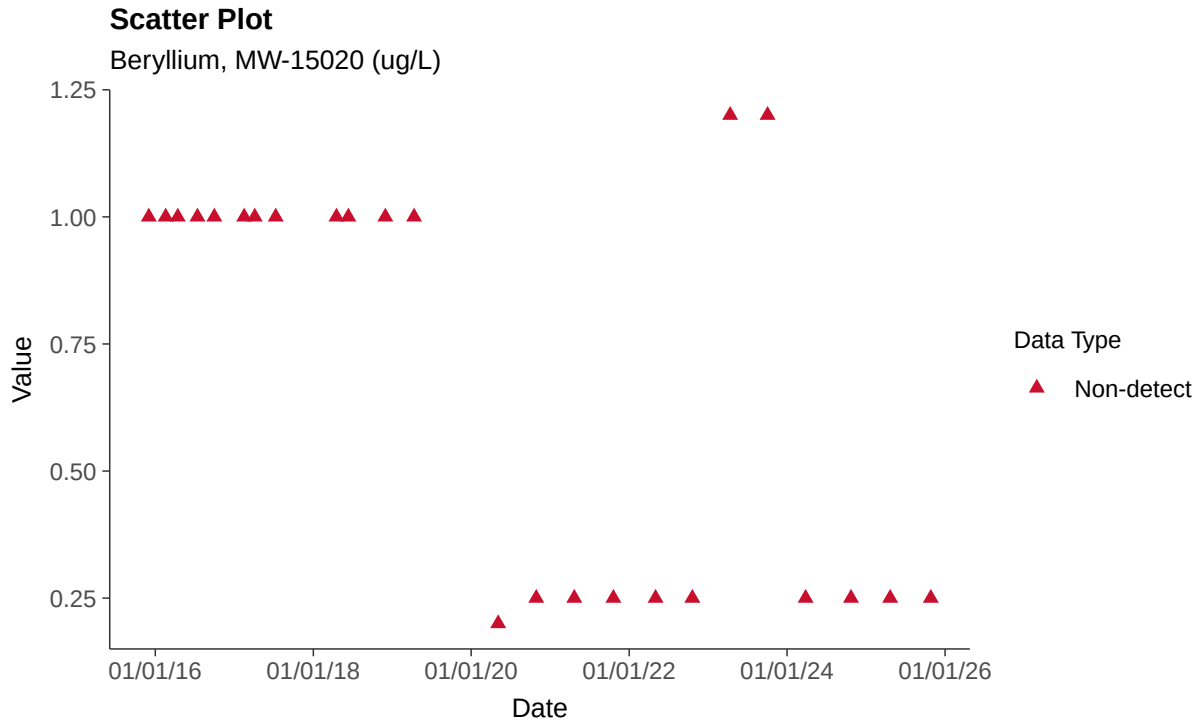

**Trend Regression: Piecewise Linear-Linear**

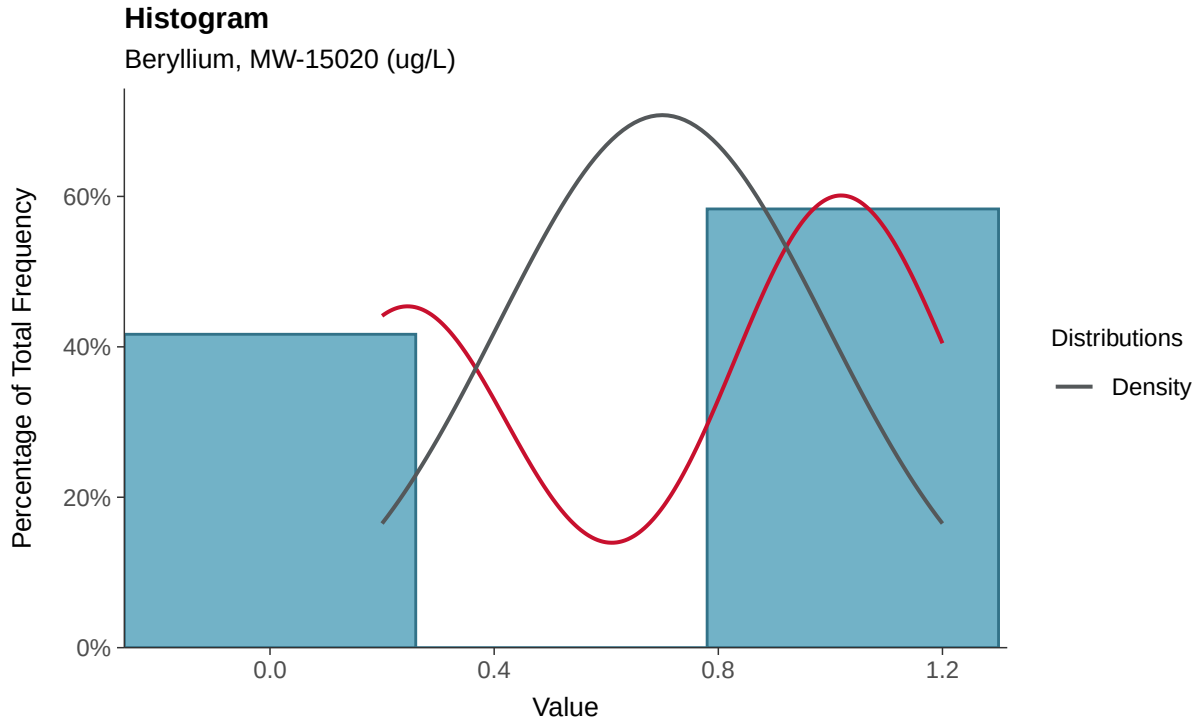
Barium, MW-15020 (ug/L)



## Appendix IV: Beryllium, MW-15020

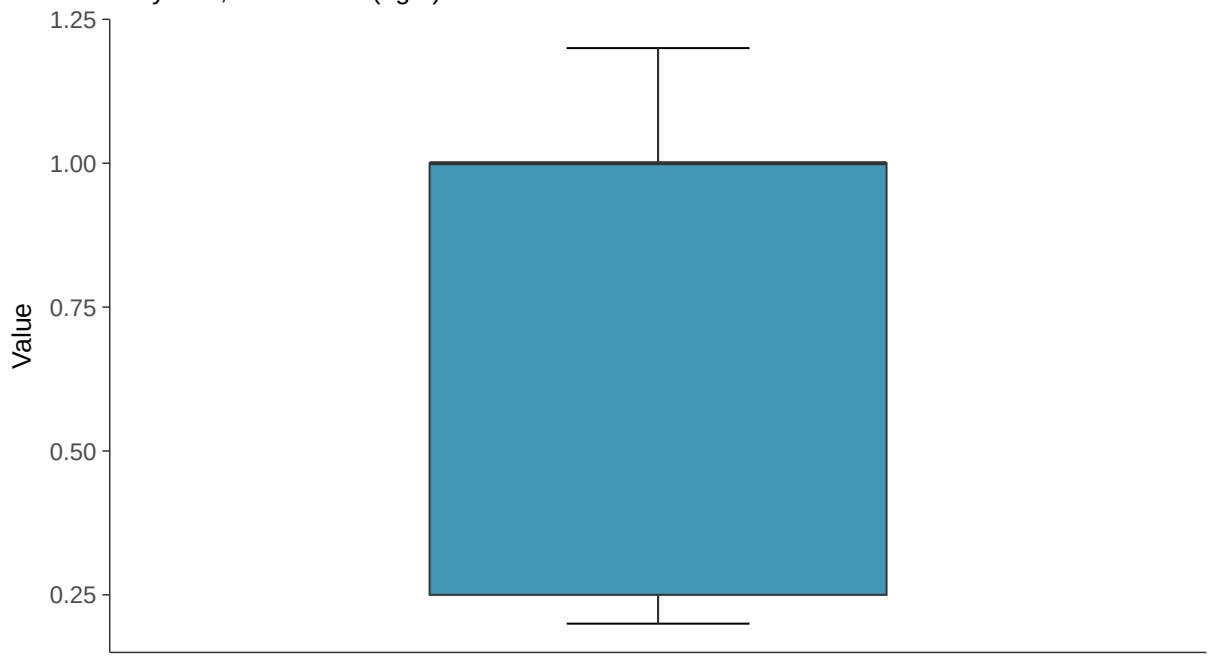
ID: 10_2_104



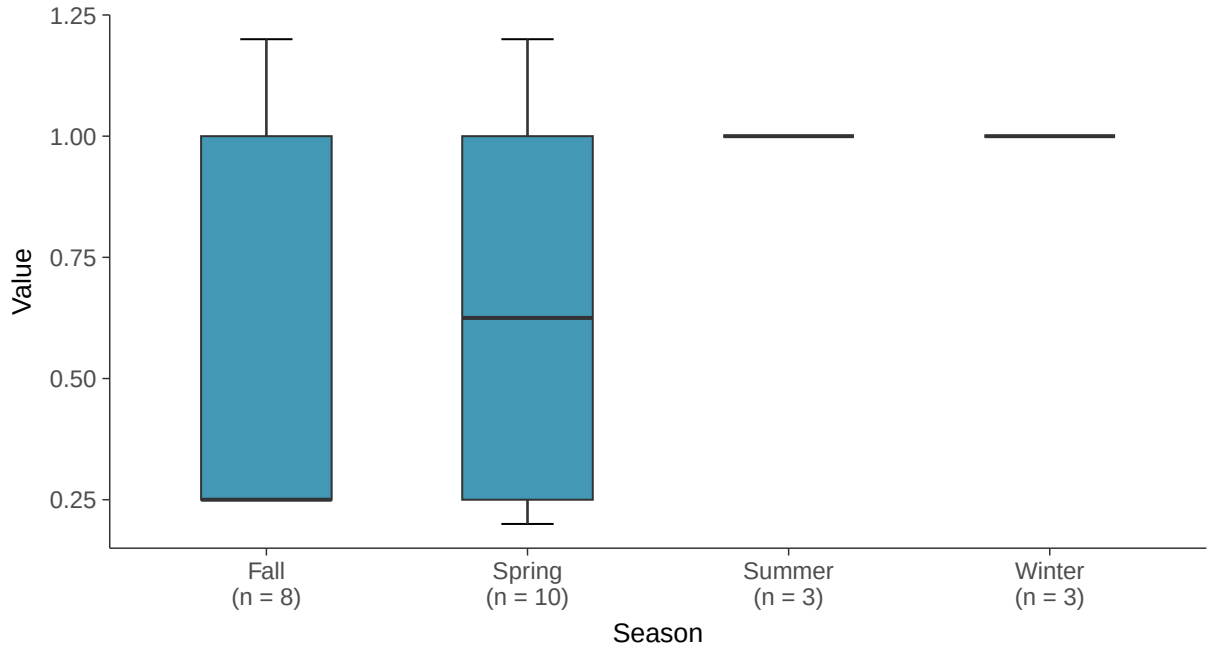
## Boxplot

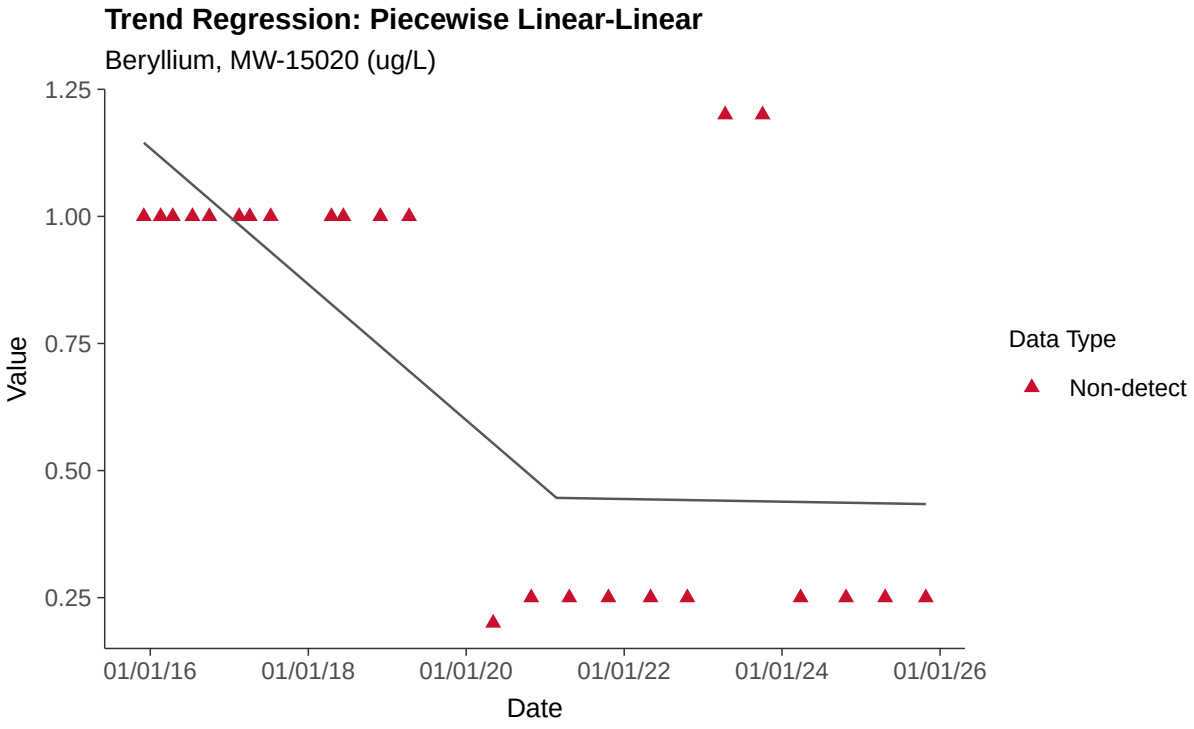
Beryllium, MW-15020 (ug/L)




## Boxplot by Season

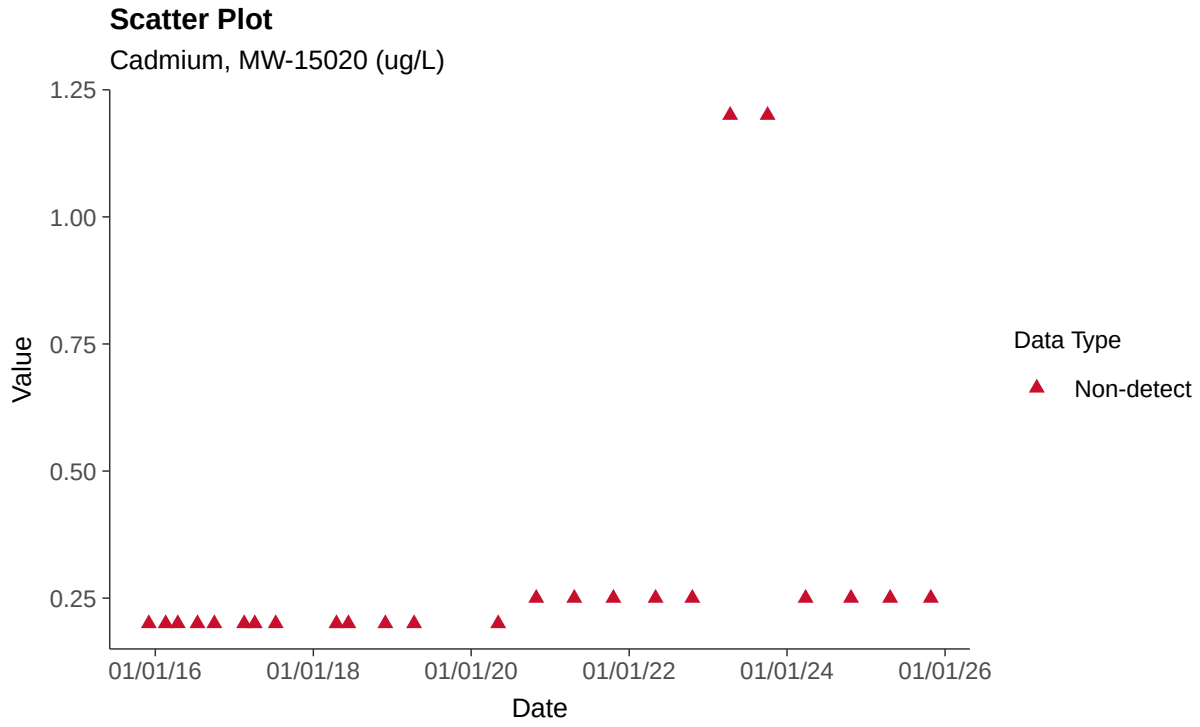
Beryllium, MW-15020 (ug/L)

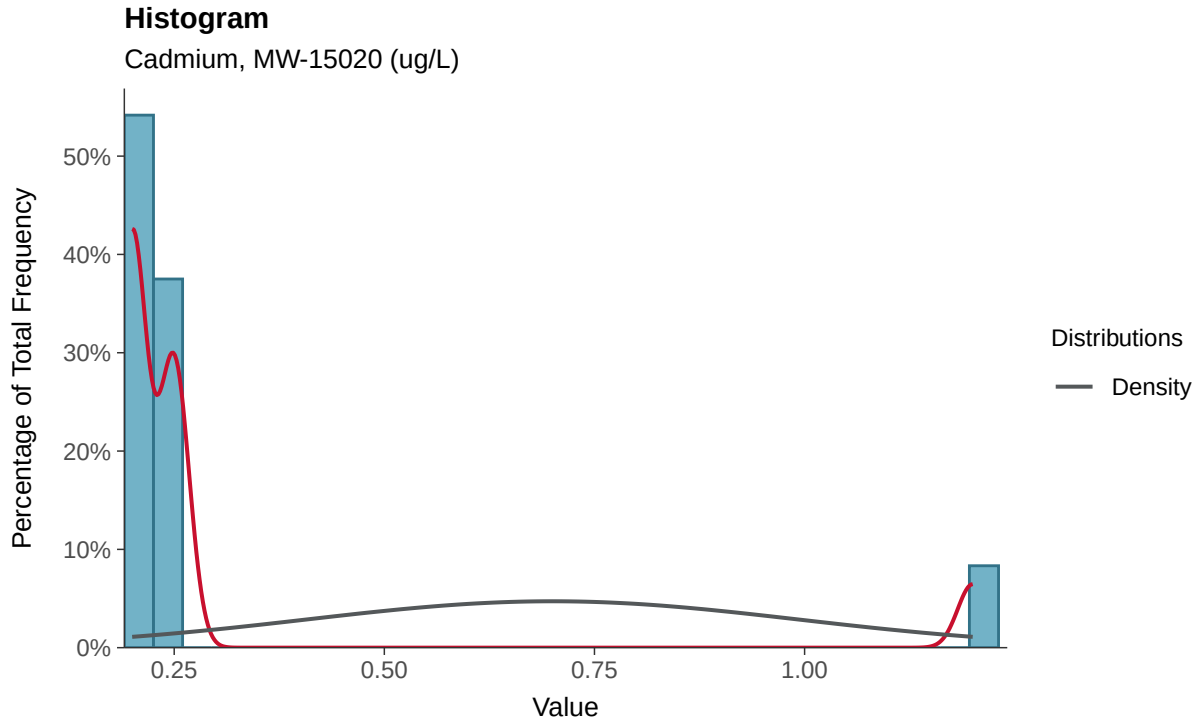



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15020 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Cadmium, MW-15020

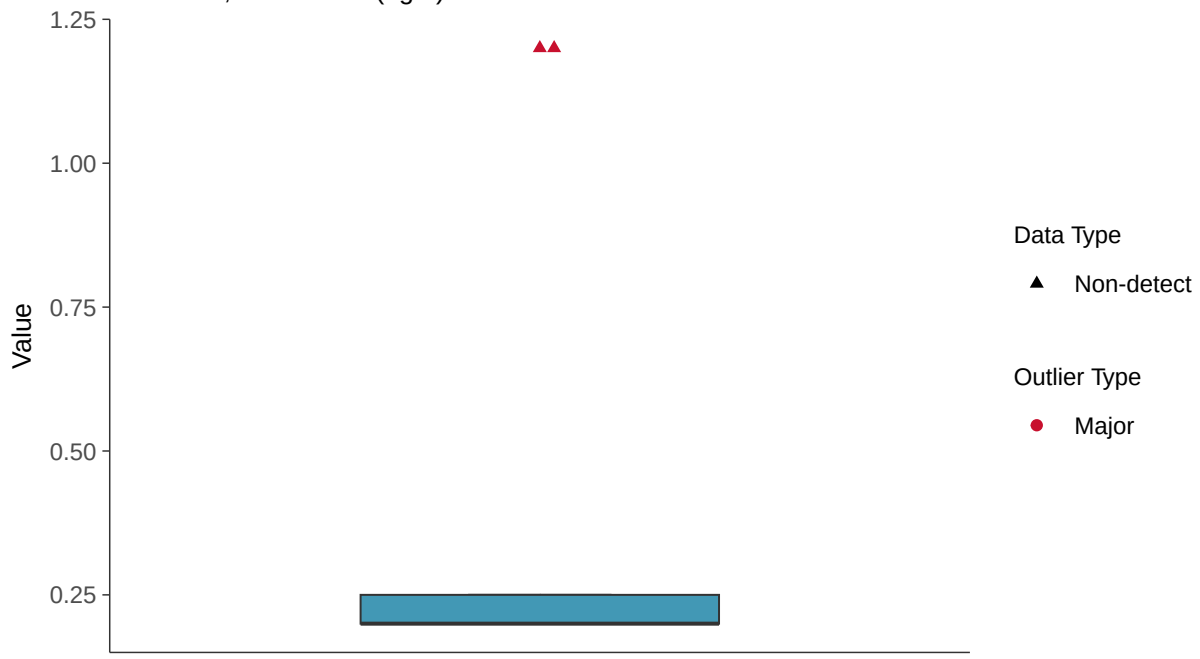
ID: 10_2_106



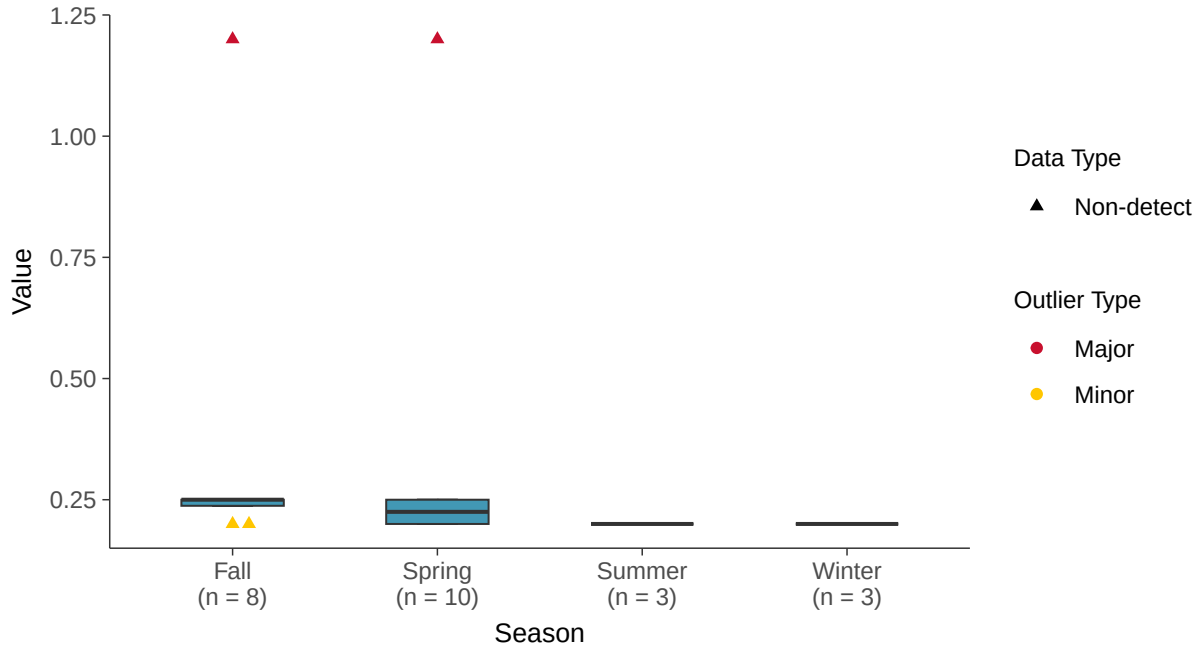
## Boxplot

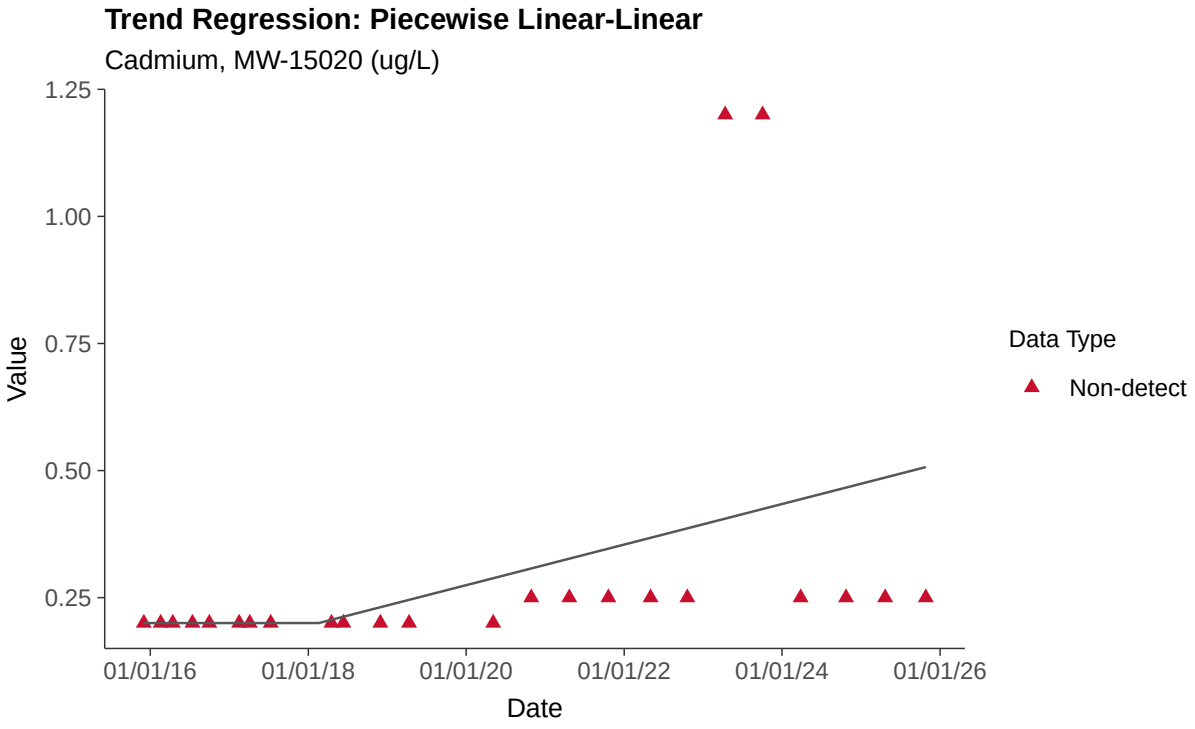
Cadmium, MW-15020 (ug/L)




## Boxplot by Season

Cadmium, MW-15020 (ug/L)



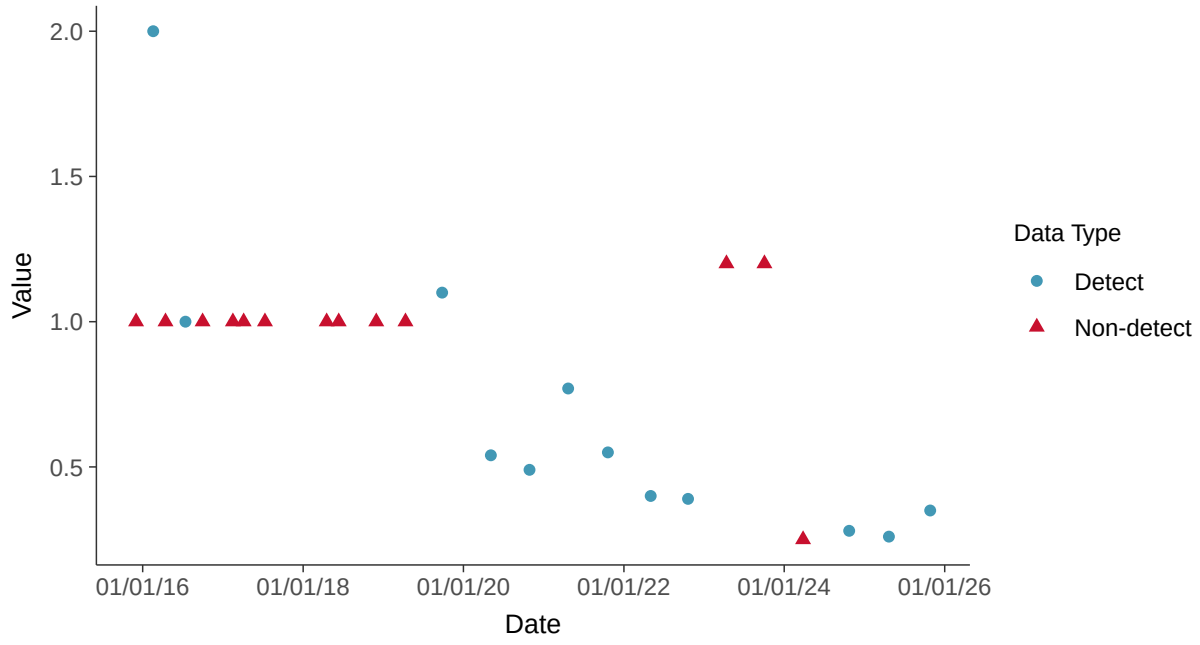

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15020 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15020

ID: 10_2_109

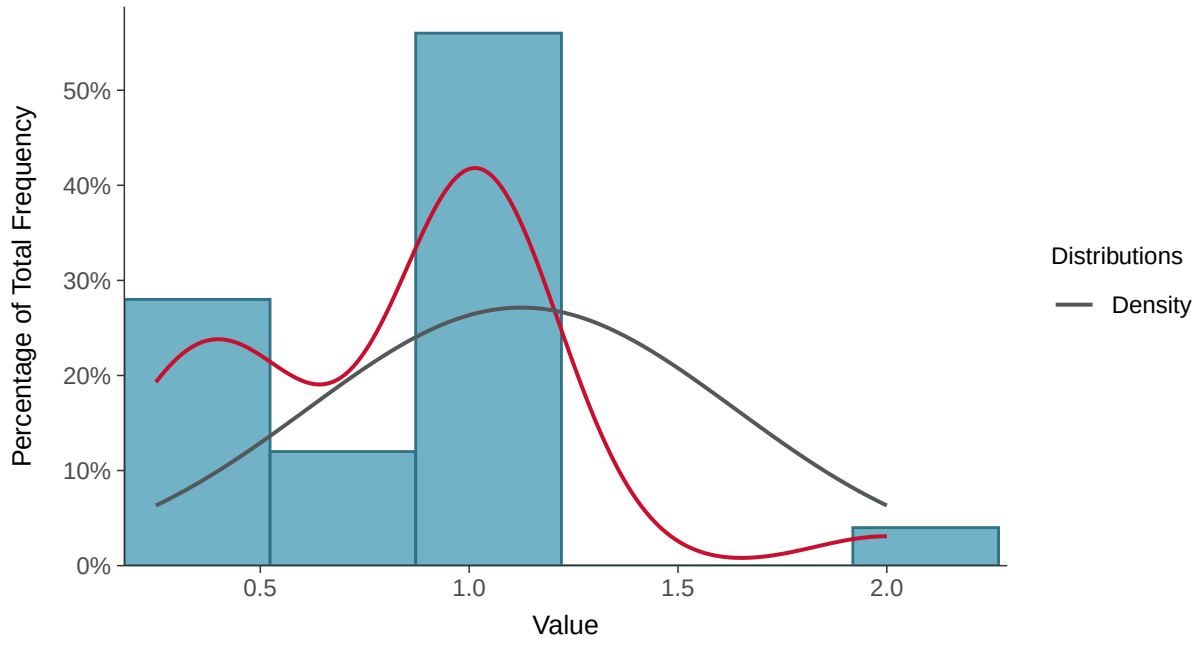
**Scatter Plot**

Chromium, MW-15020 (ug/L)



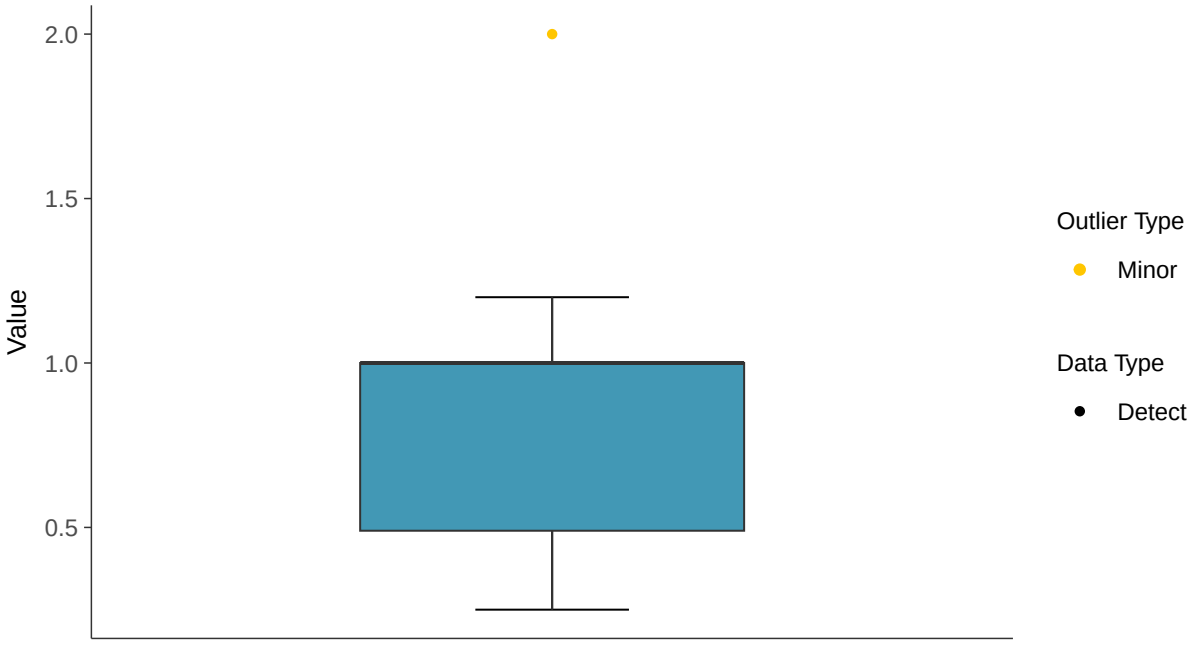

**Histogram**

Chromium, MW-15020 (ug/L)



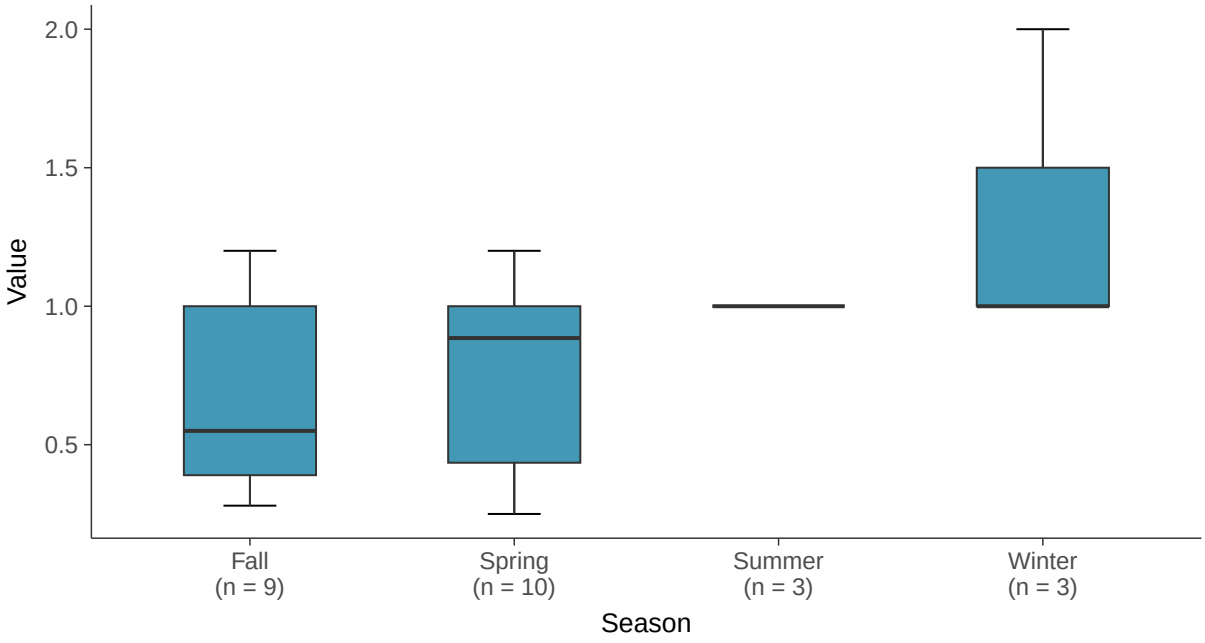
## Boxplot

Chromium, MW-15020 (ug/L)



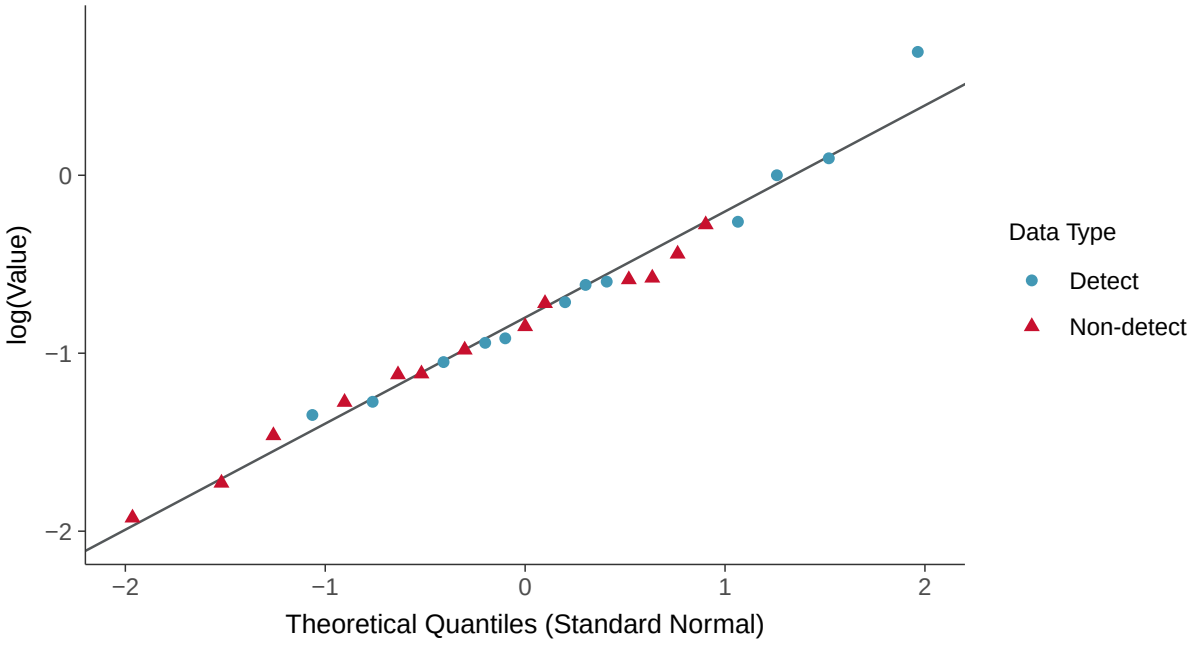

## Boxplot by Season

Chromium, MW-15020 (ug/L)



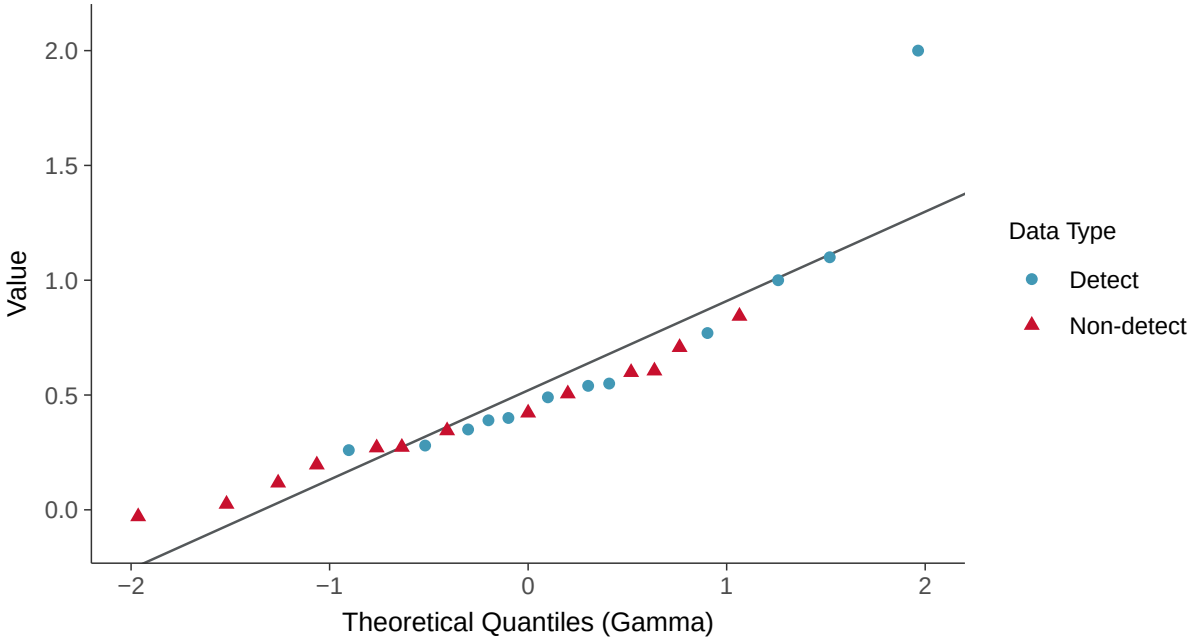
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15020 (ug/L)



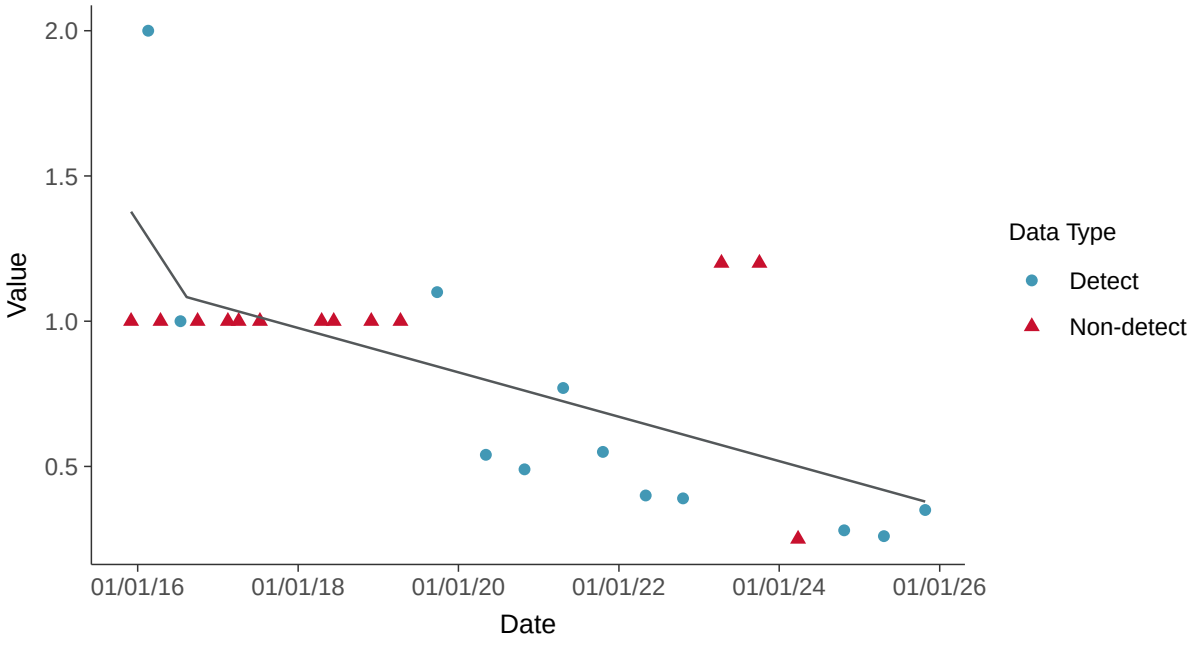

**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15020 (ug/L)



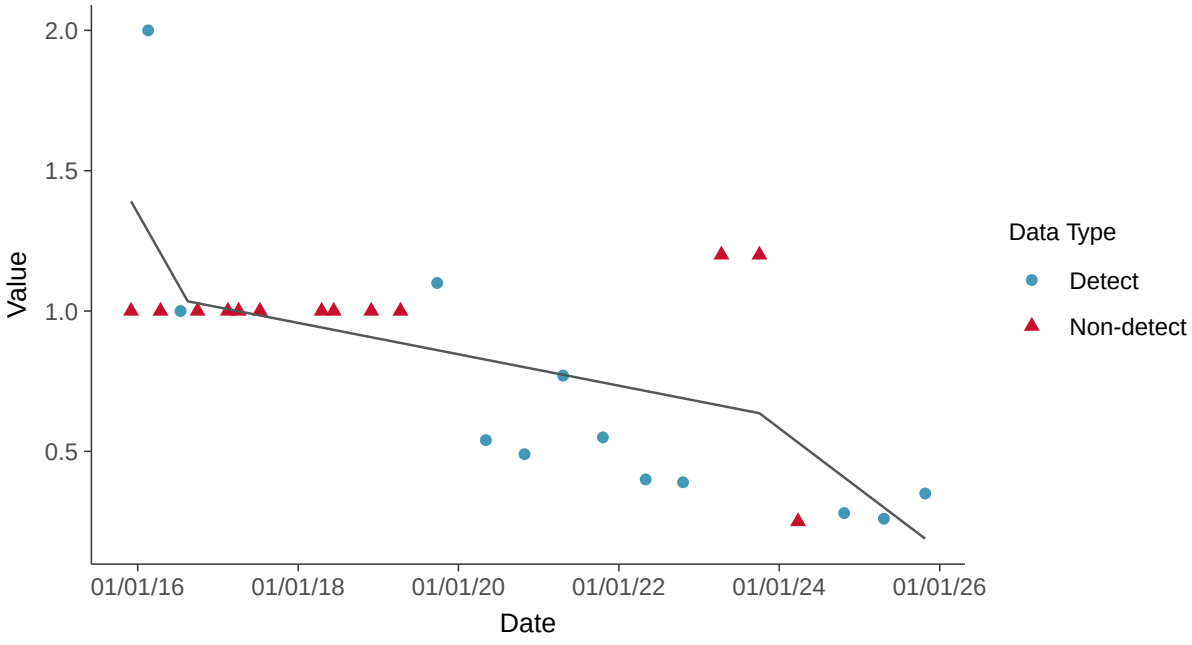
**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15020 (ug/L)



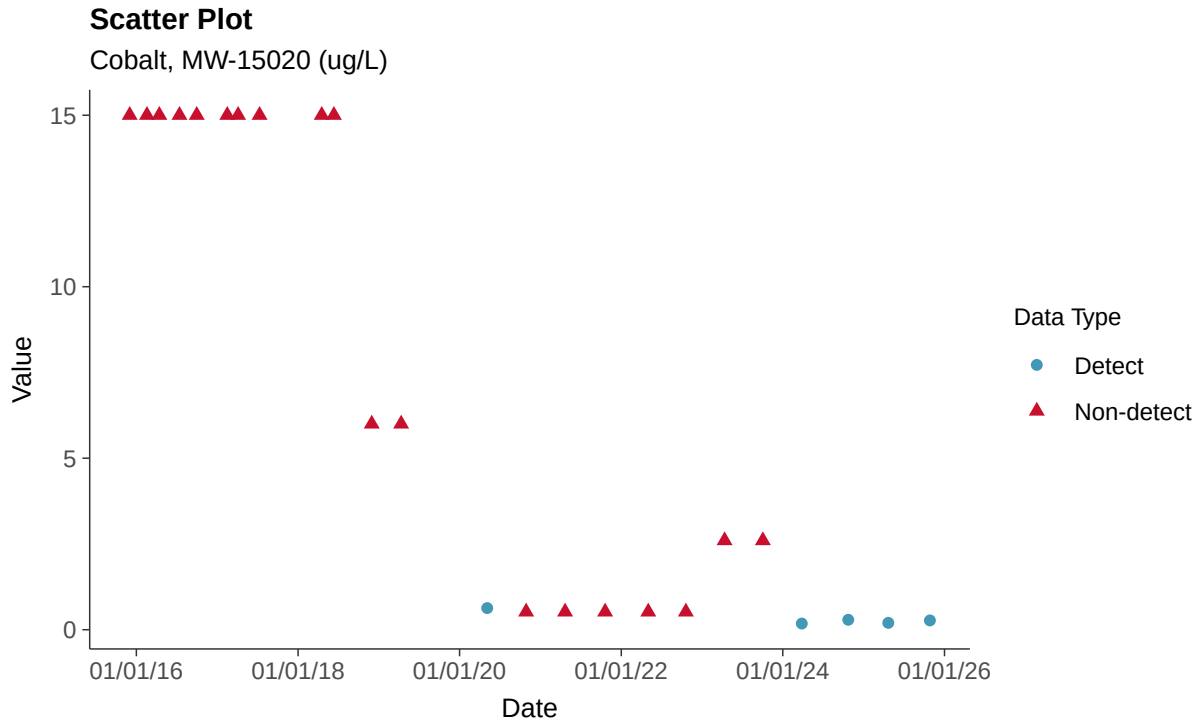

**Trend Regression: Piecewise Linear-Linear-Linear**

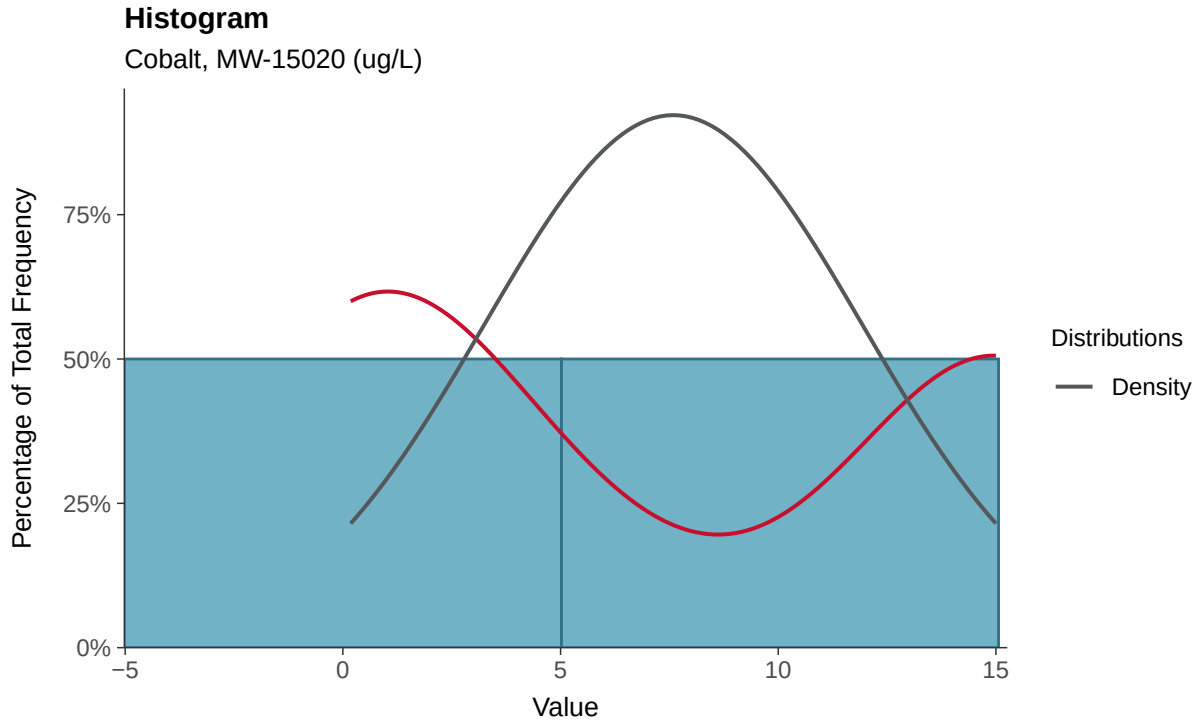
Chromium, MW-15020 (ug/L)



## Appendix IV: Cobalt, MW-15020

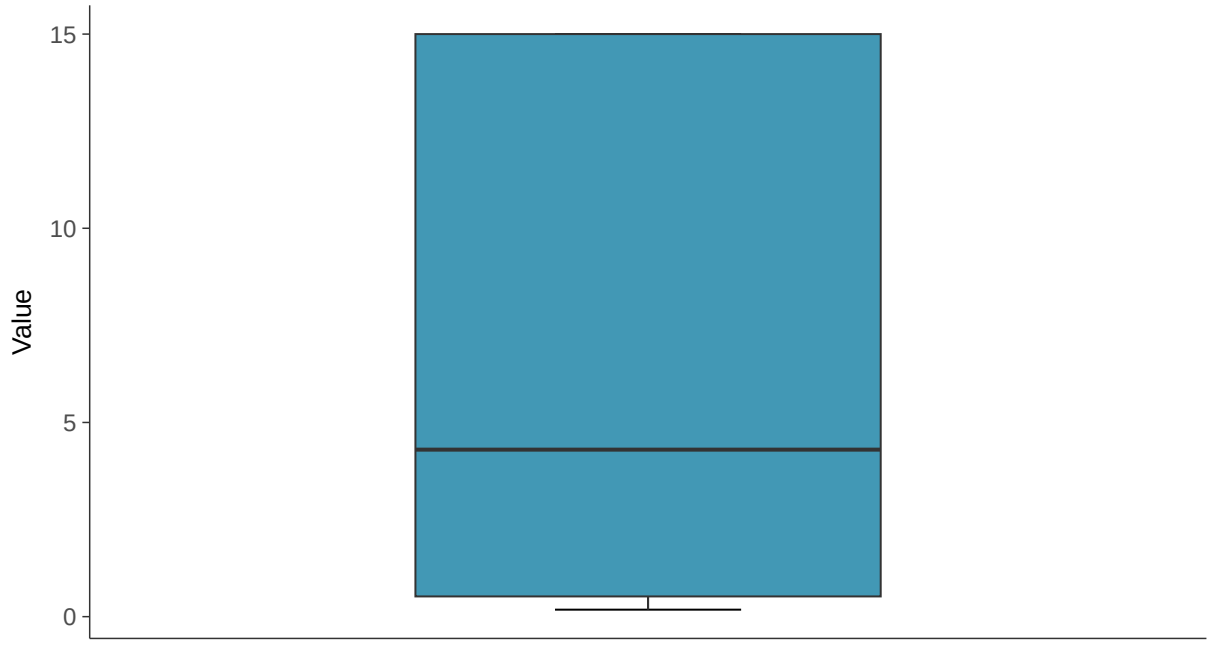
ID: 10_2_110



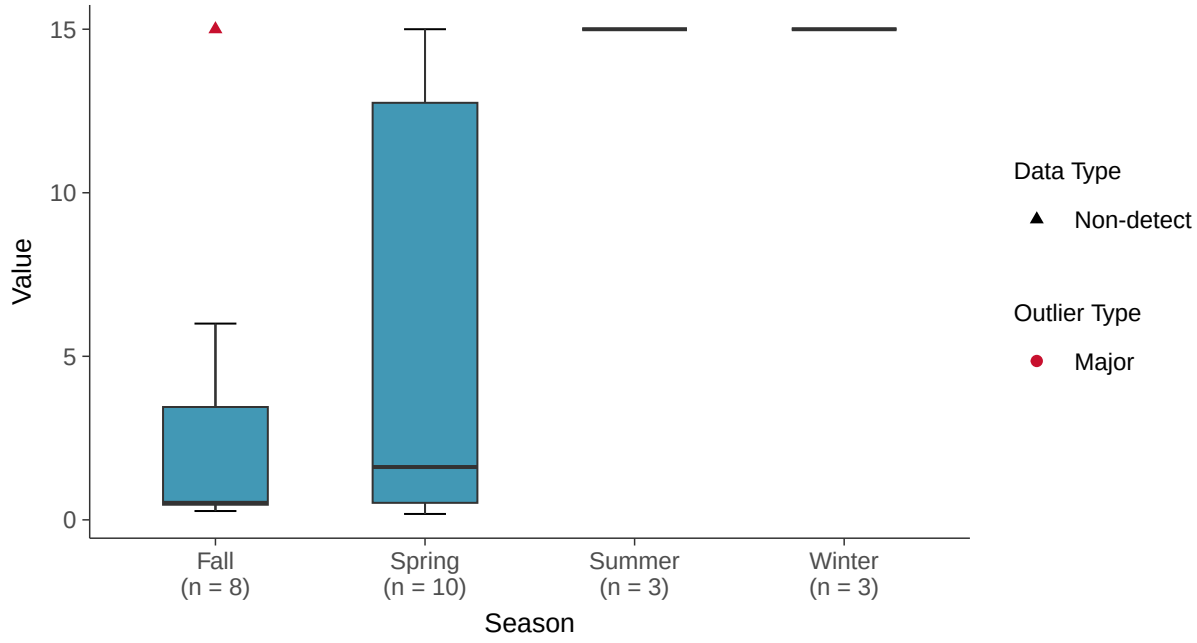
**Boxplot**

Cobalt, MW-15020 (ug/L)



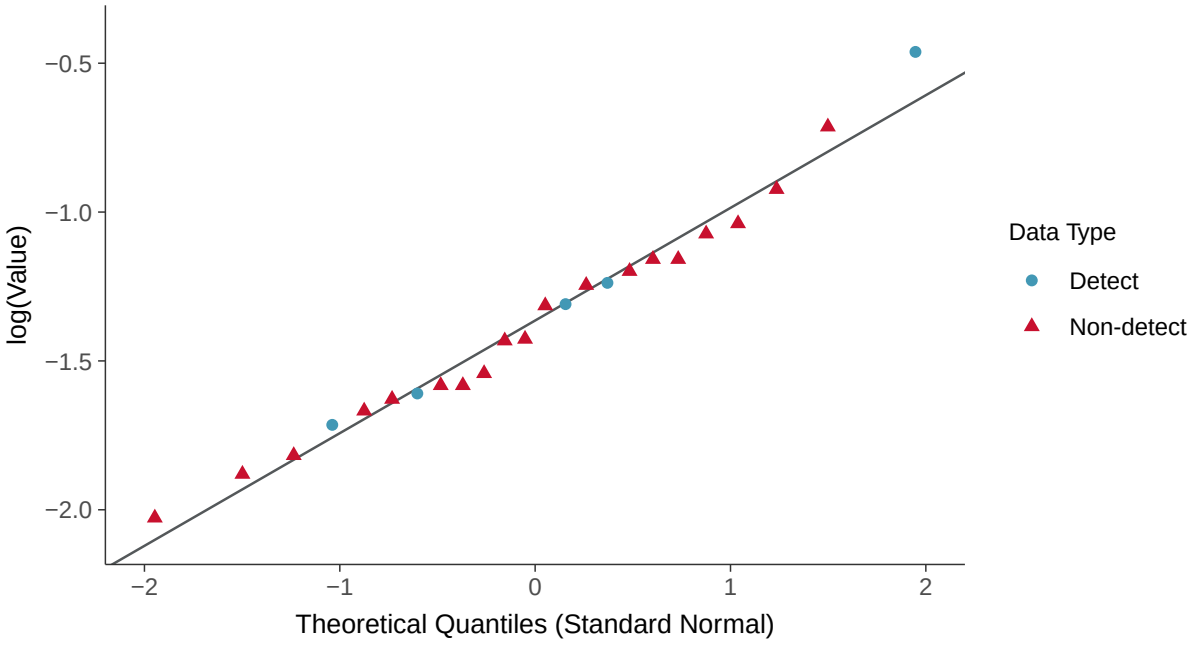

**Boxplot by Season**

Cobalt, MW-15020 (ug/L)



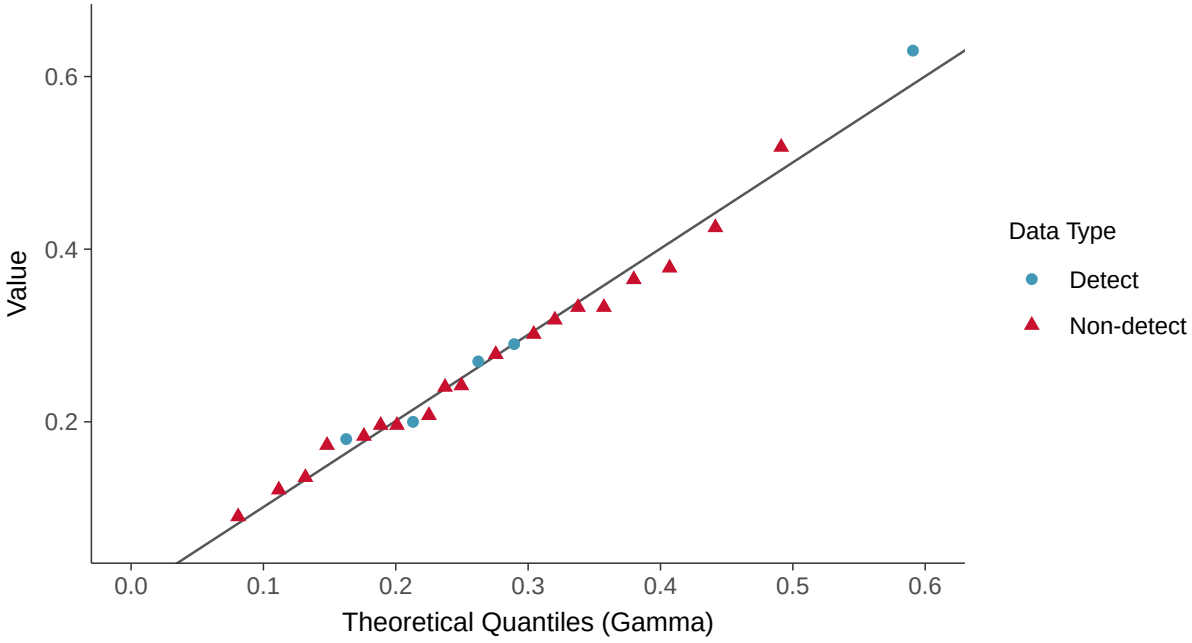
**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15020 (ug/L)



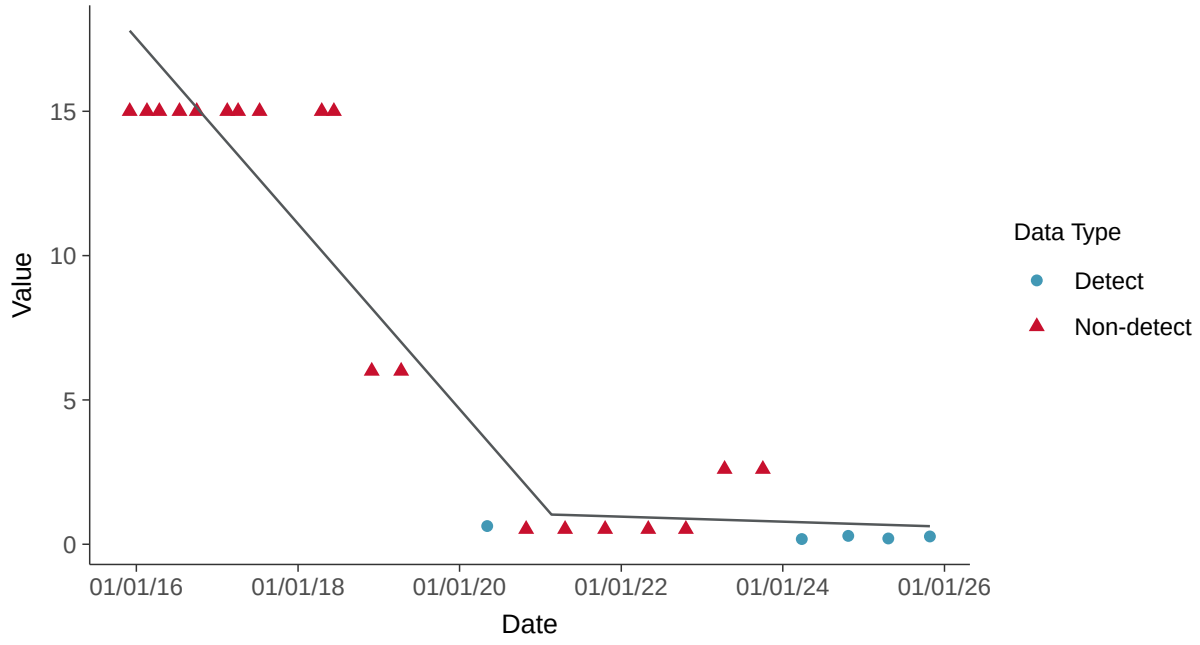

**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15020 (ug/L)



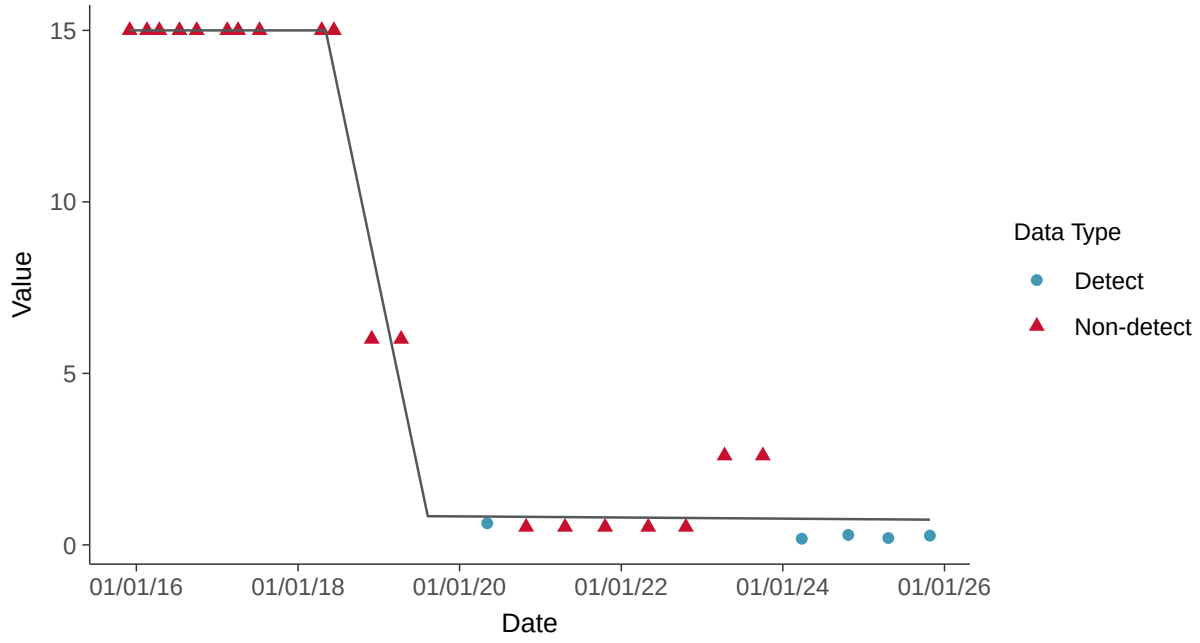
**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15020 (ug/L)



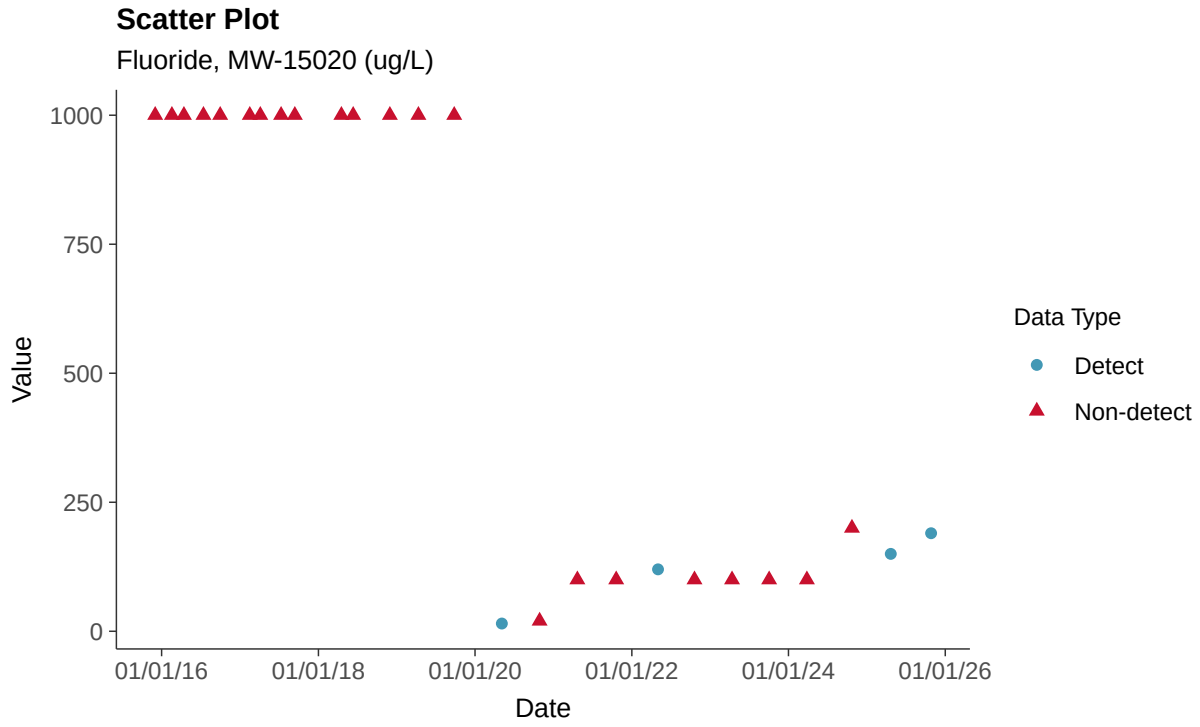

**Trend Regression: Piecewise Linear-Linear-Linear**

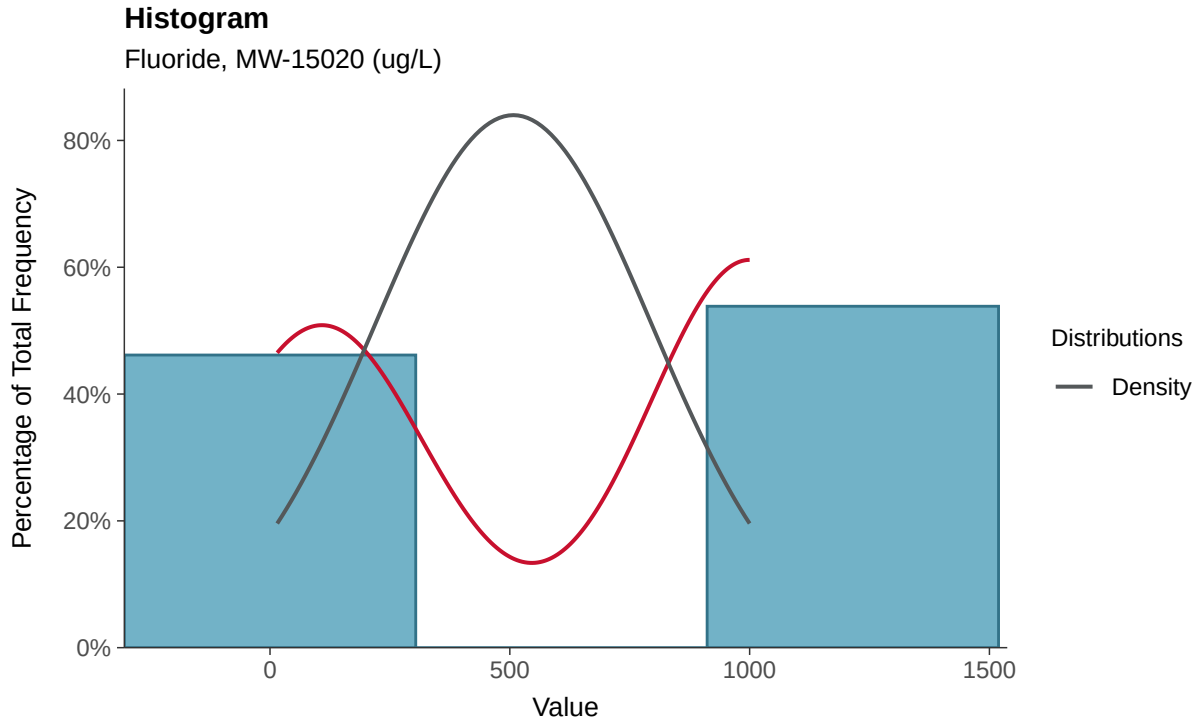
Cobalt, MW-15020 (ug/L)



## Appendix IV: Fluoride, MW-15020

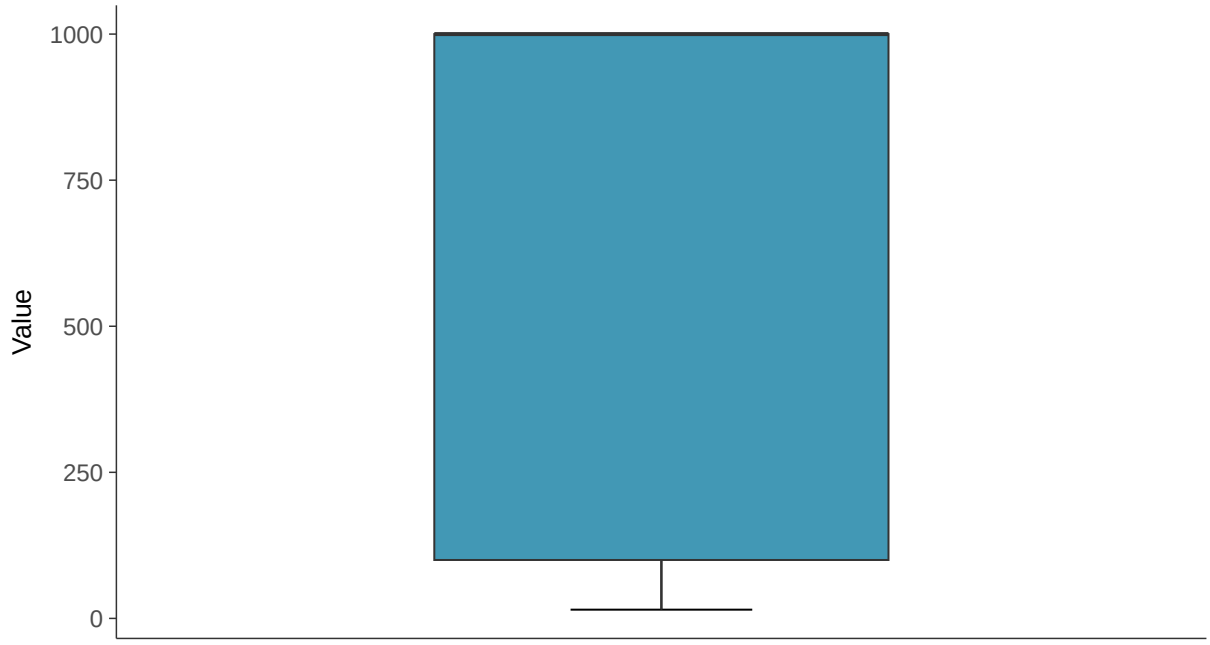
ID: 10_2_114



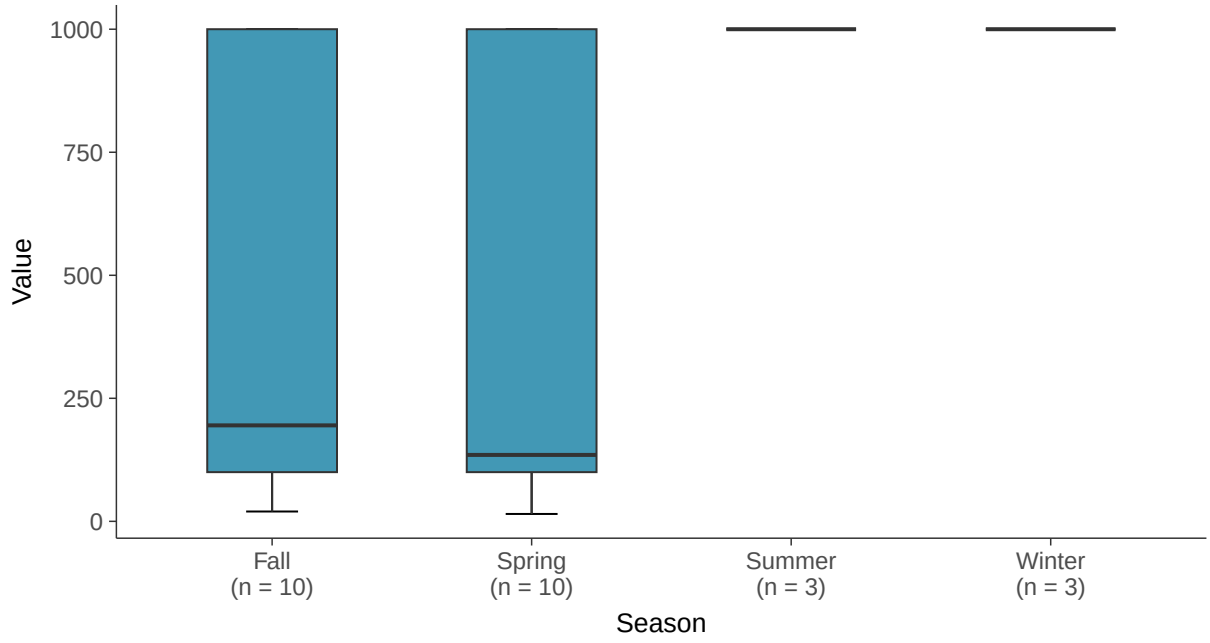
**Boxplot**

Fluoride, MW-15020 (ug/L)



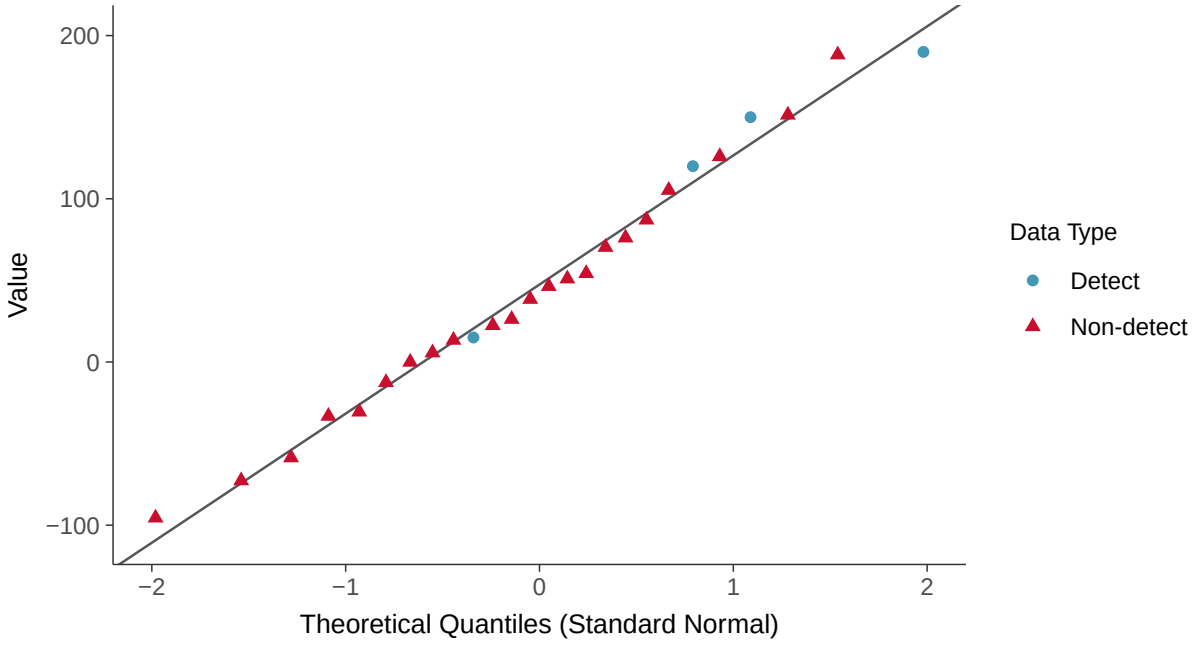

**Boxplot by Season**

Fluoride, MW-15020 (ug/L)



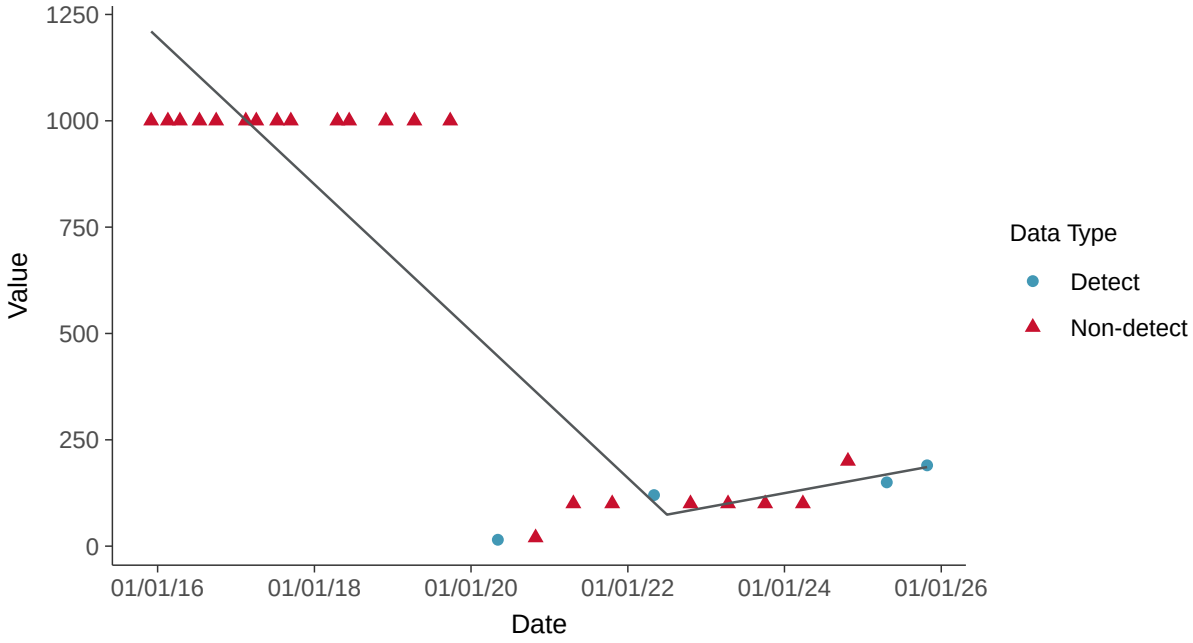
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15020 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15020 (ug/L)

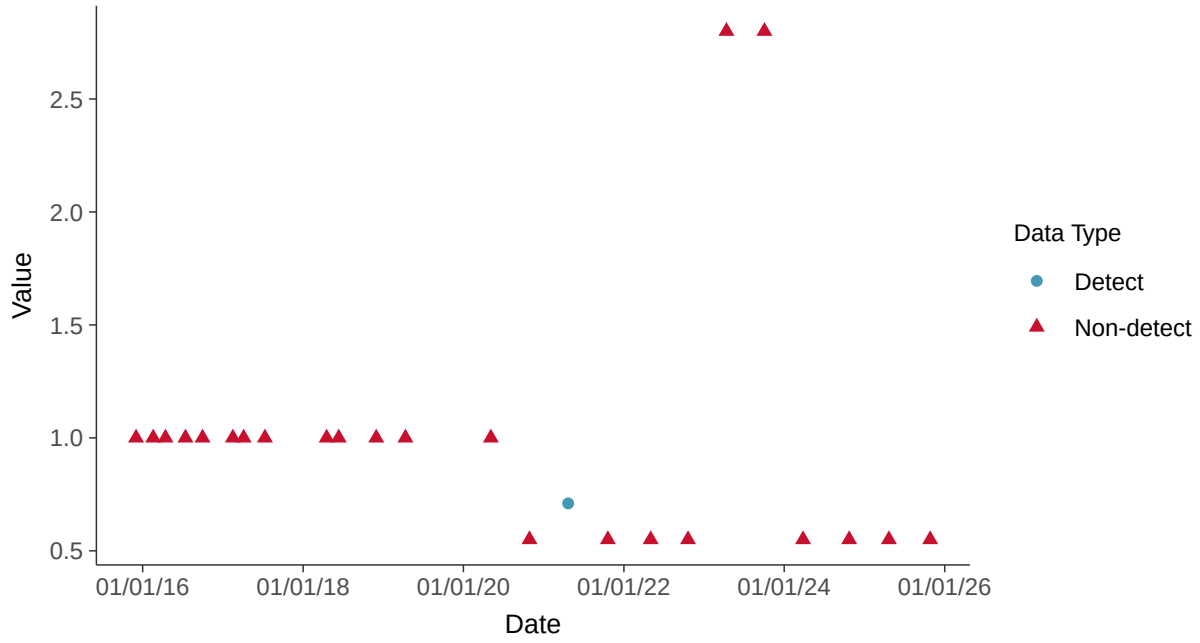


## Appendix IV: Lead, MW-15020

ID: 10_2_116

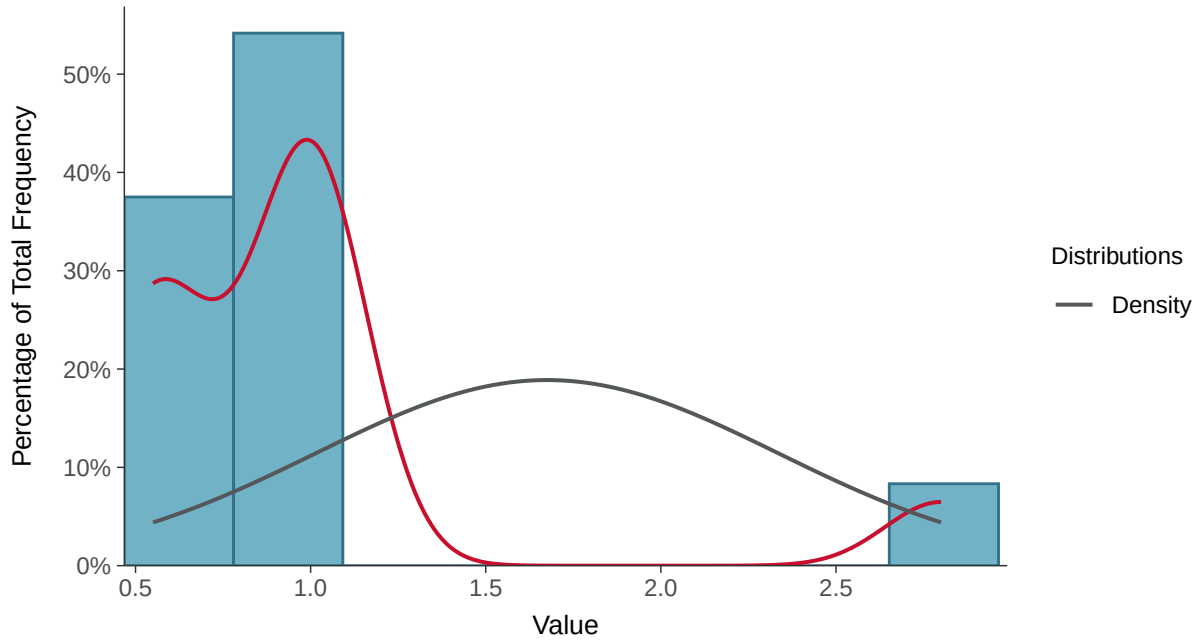
**Scatter Plot**

Lead, MW-15020 (ug/L)



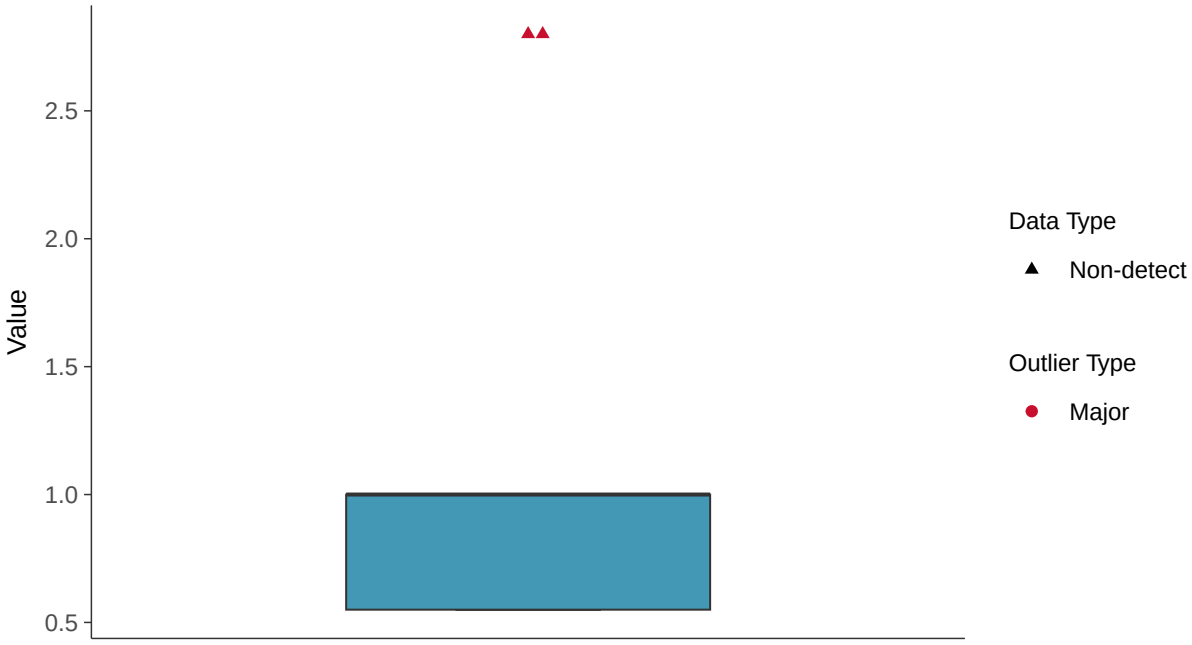

**Histogram**

Lead, MW-15020 (ug/L)



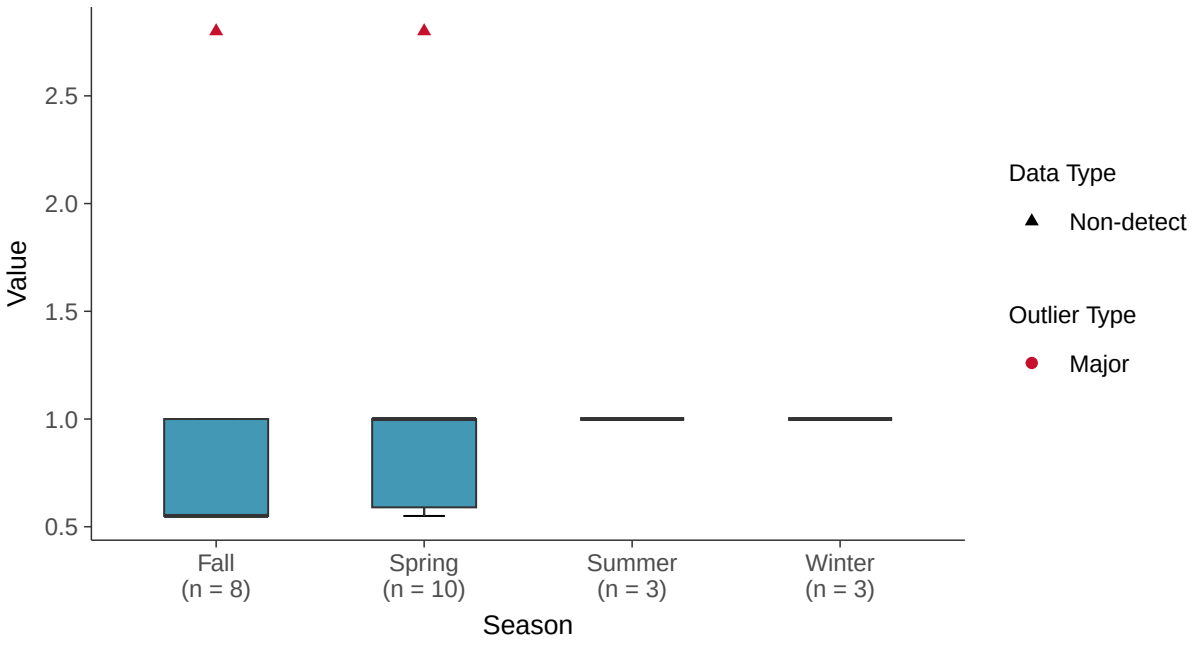
## Boxplot

Lead, MW-15020 (ug/L)



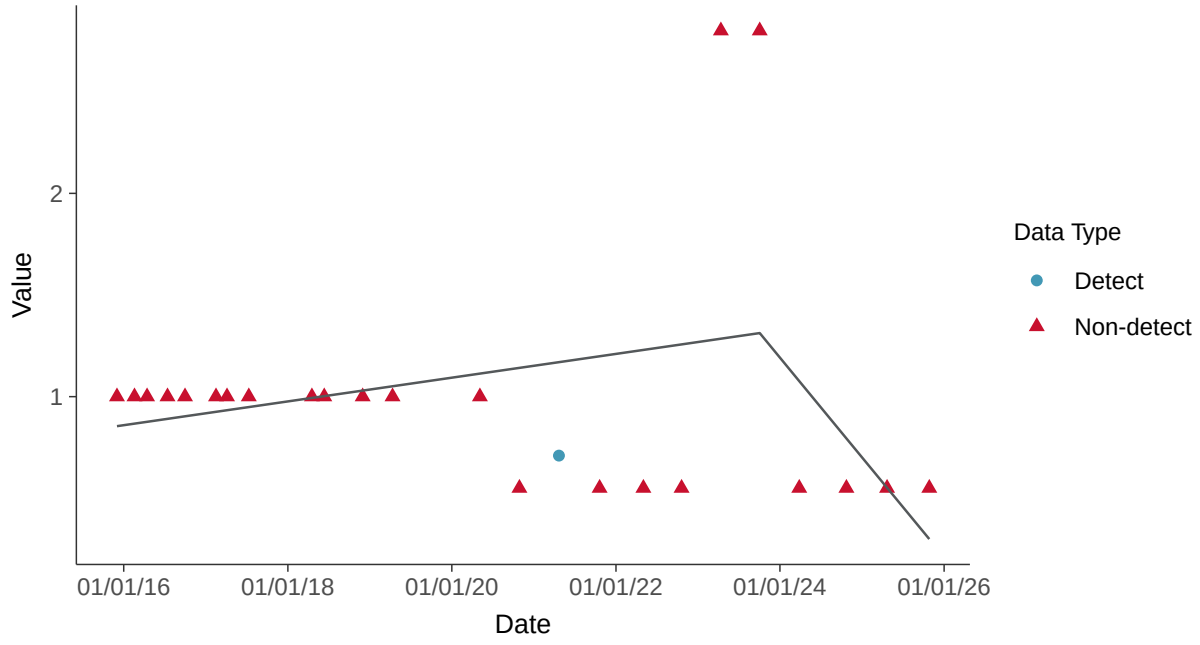

## Boxplot by Season

Lead, MW-15020 (ug/L)



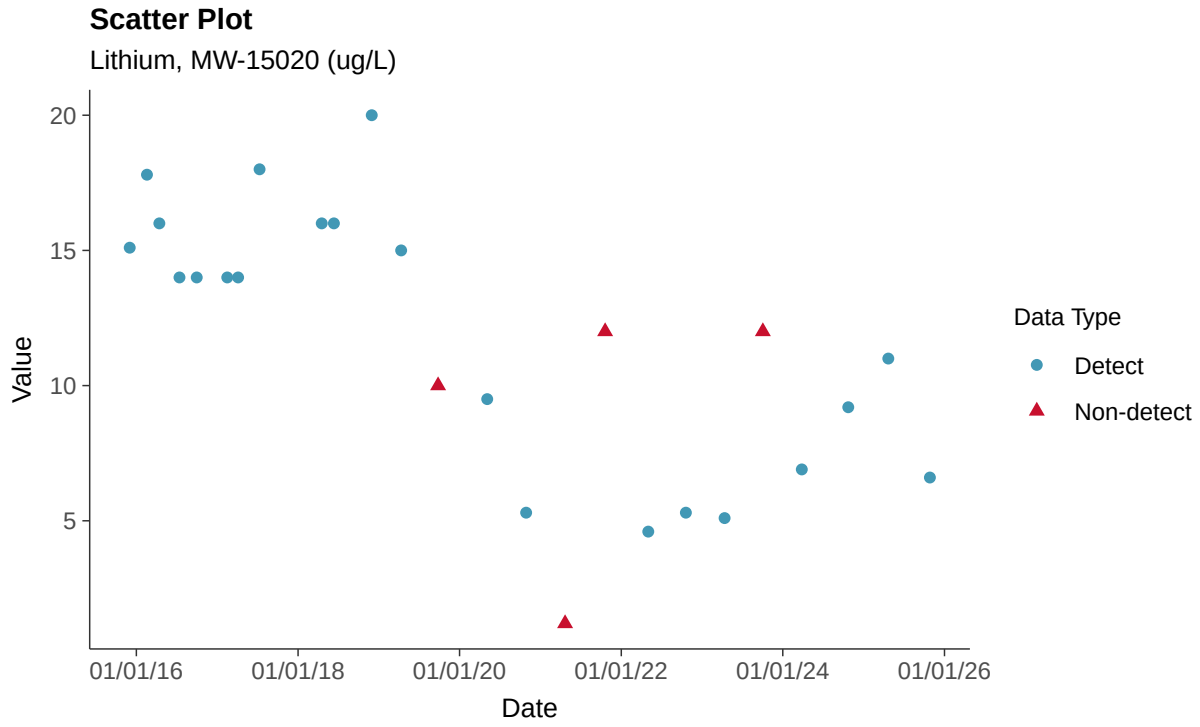
## Trend Regression: Piecewise Linear-Linear

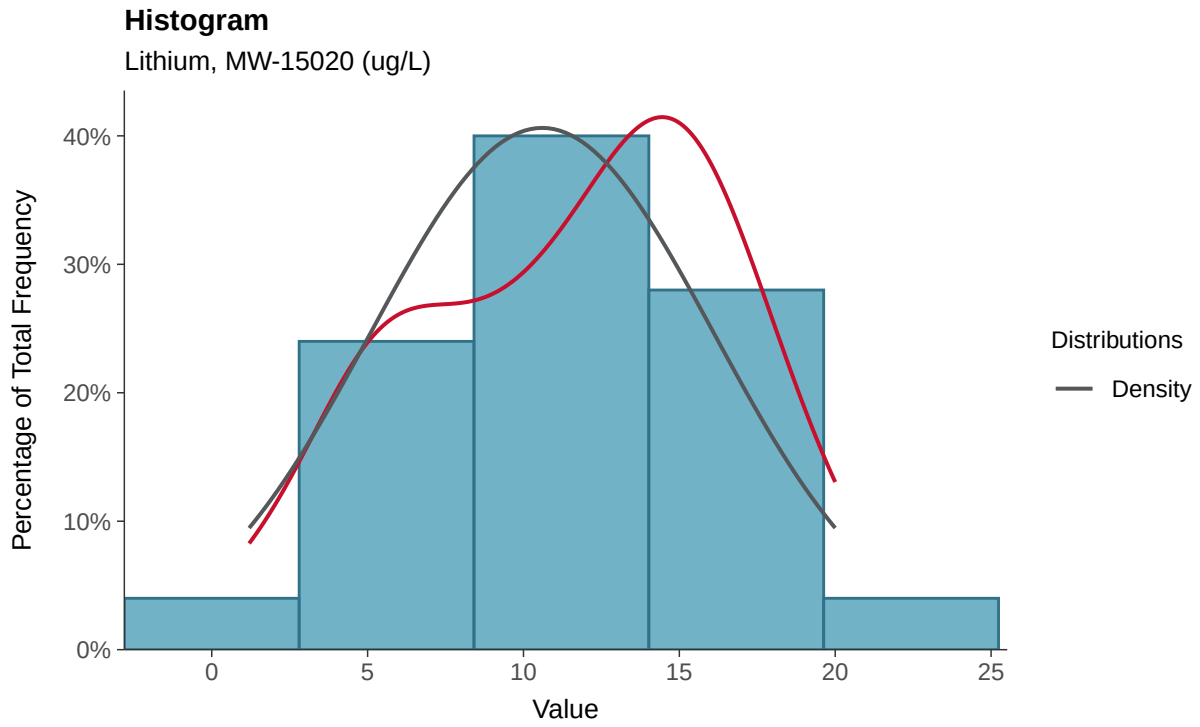
Lead, MW-15020 (ug/L)



## Appendix IV: Lithium, MW-15020

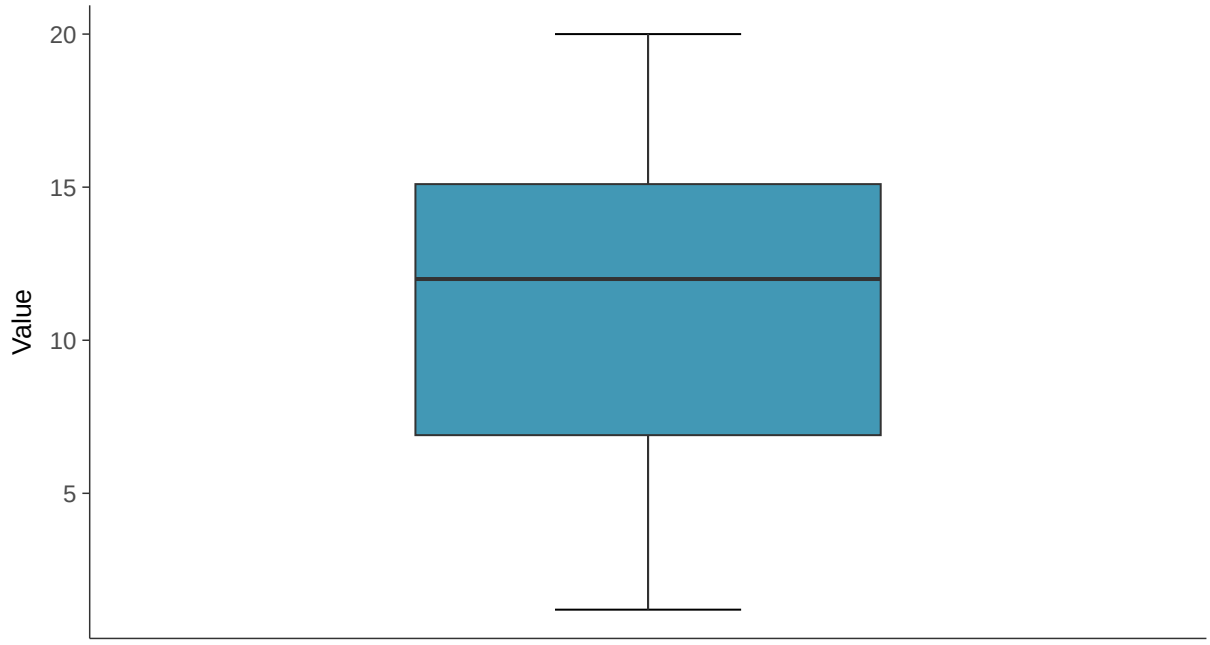
ID: 10_2_117



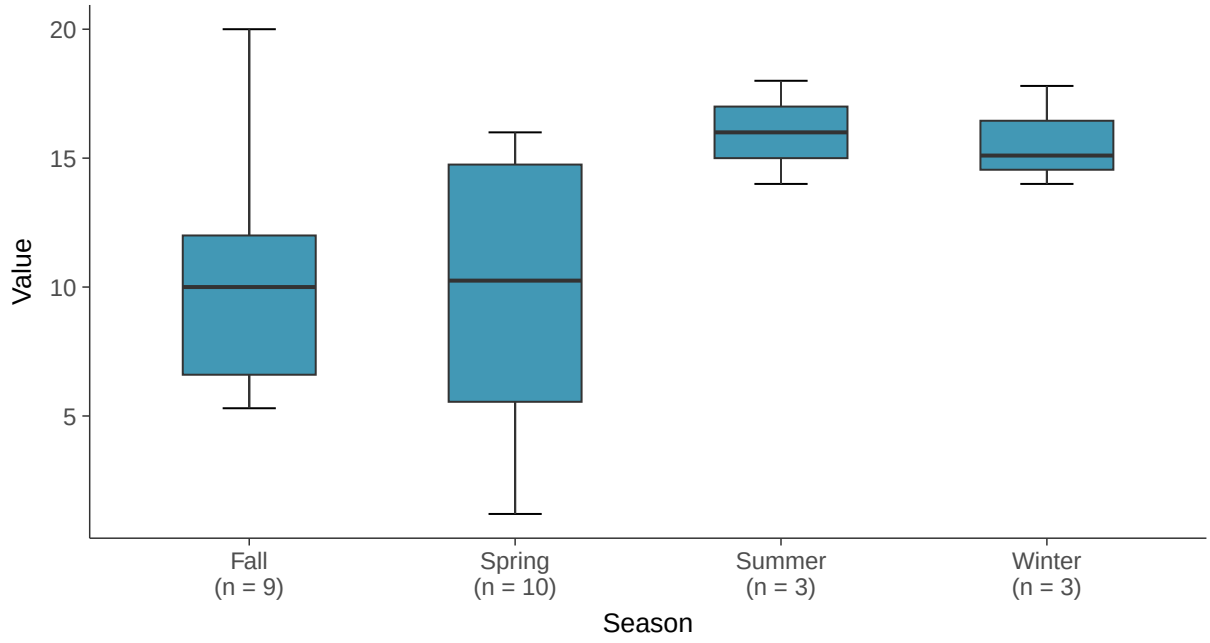
**Boxplot**

Lithium, MW-15020 (ug/L)



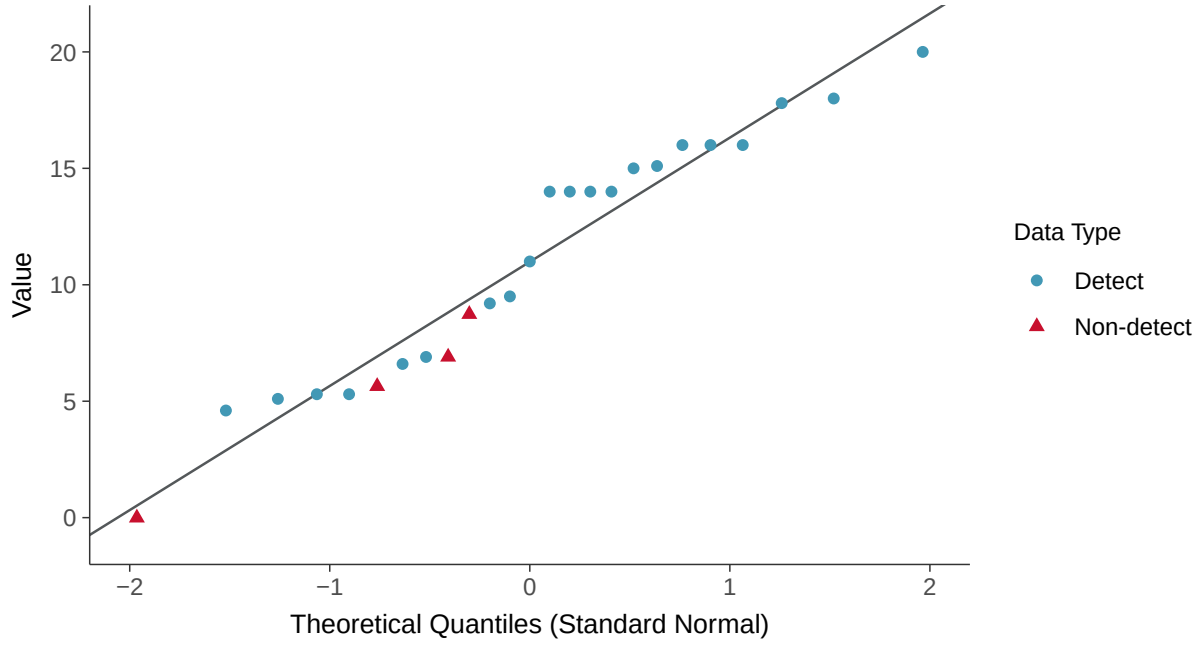

**Boxplot by Season**

Lithium, MW-15020 (ug/L)



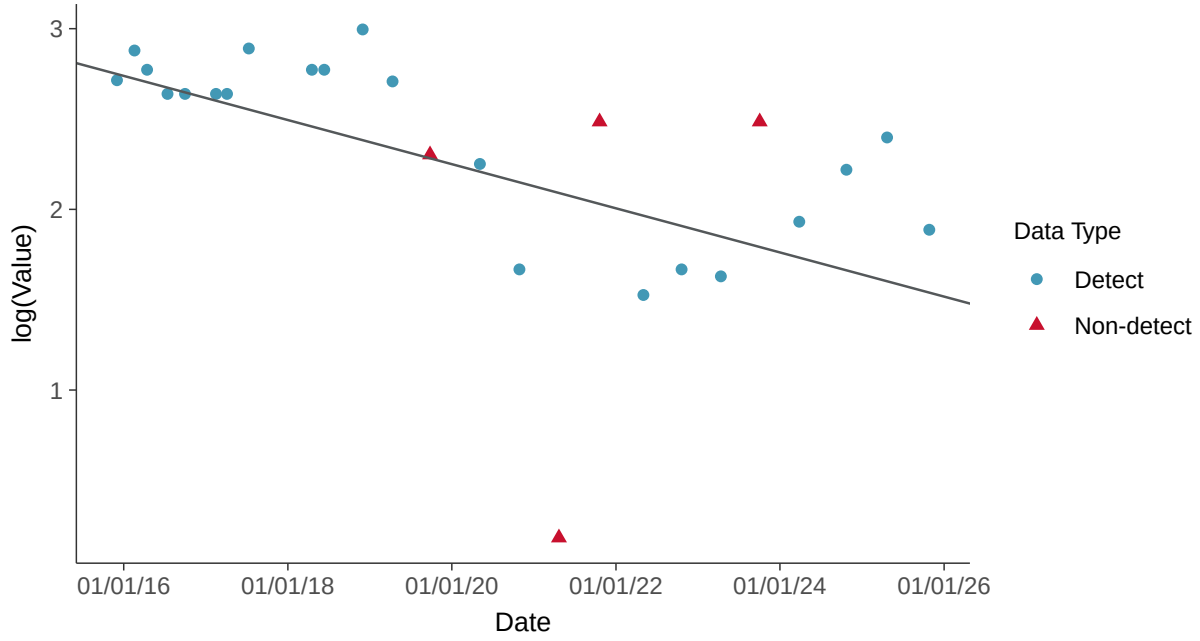
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15020 (ug/L)



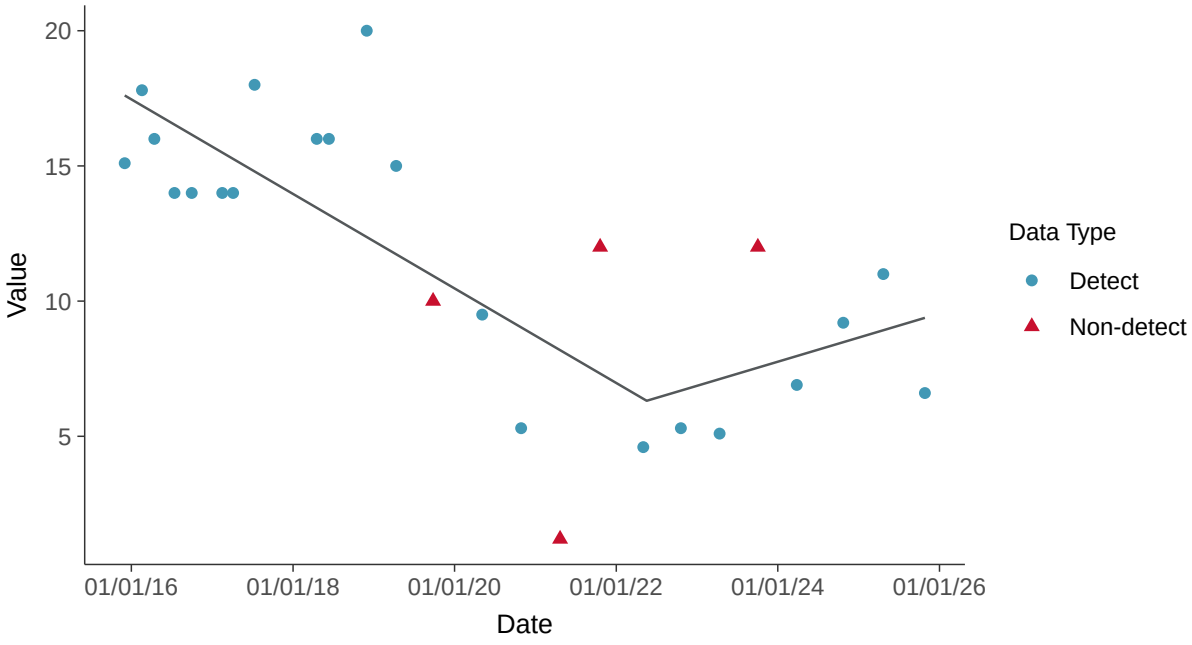

**Trend Regression: Lognormal MLE**

Lithium, MW-15020 (ug/L)



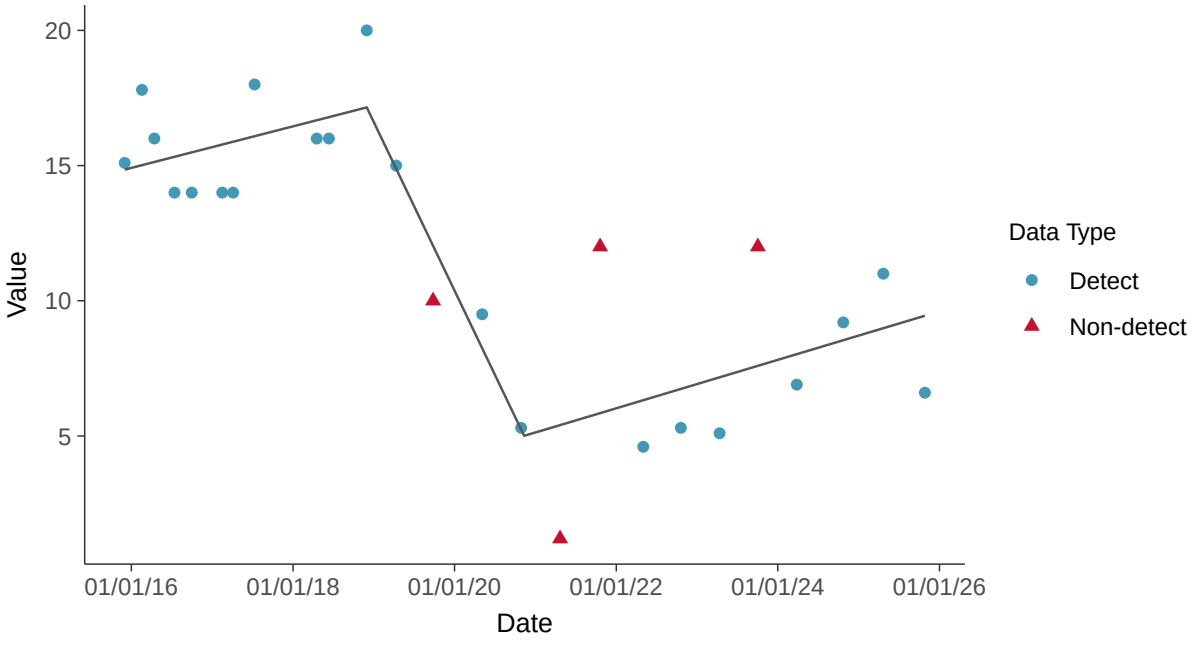
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15020 (ug/L)



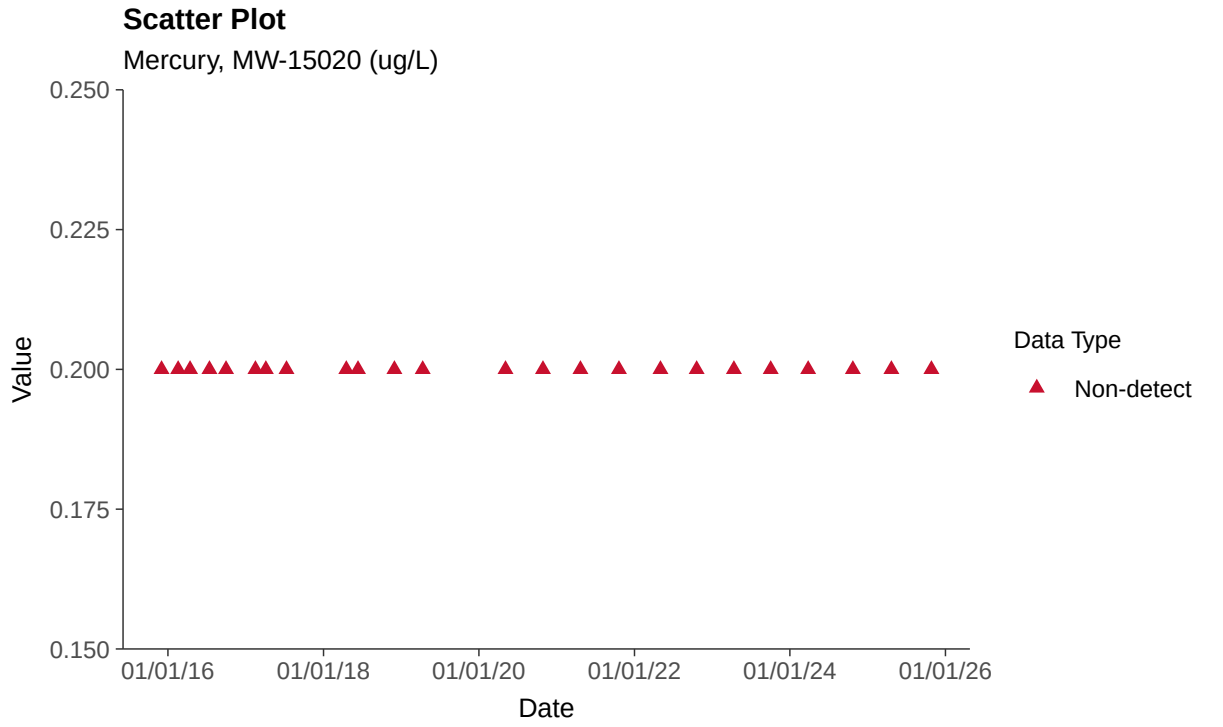

**Trend Regression: Piecewise Linear-Linear-Linear**

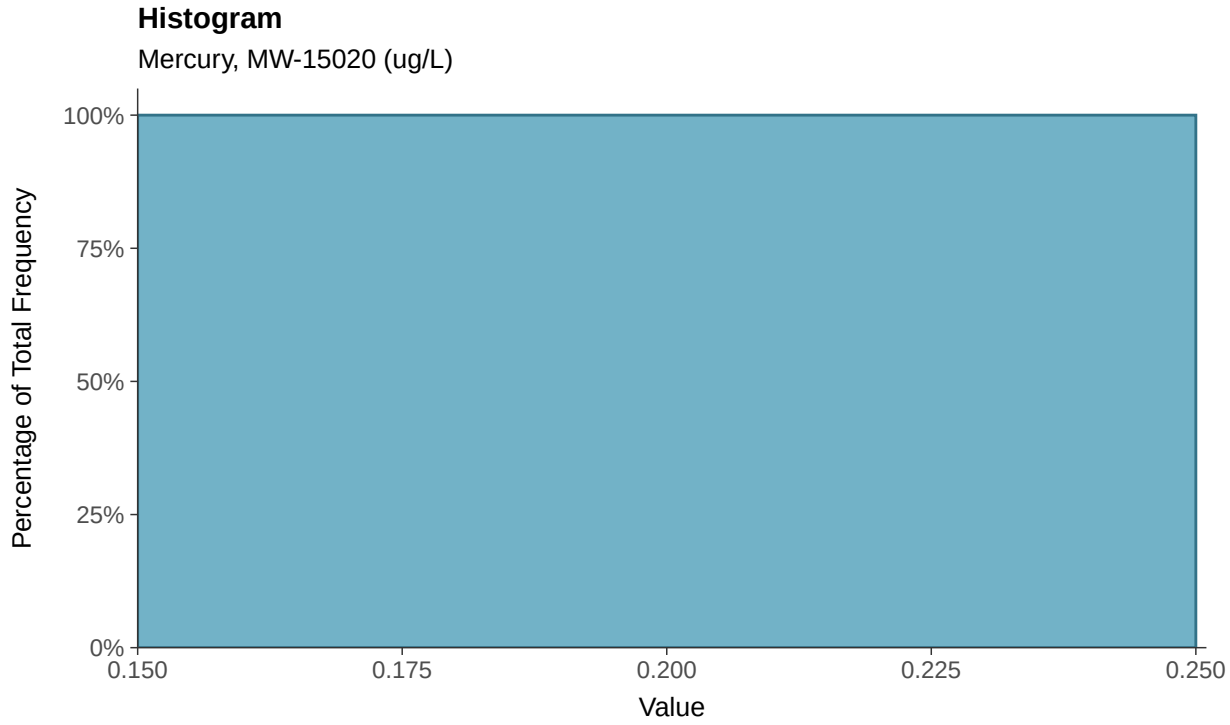
Lithium, MW-15020 (ug/L)



## Appendix IV: Mercury, MW-15020

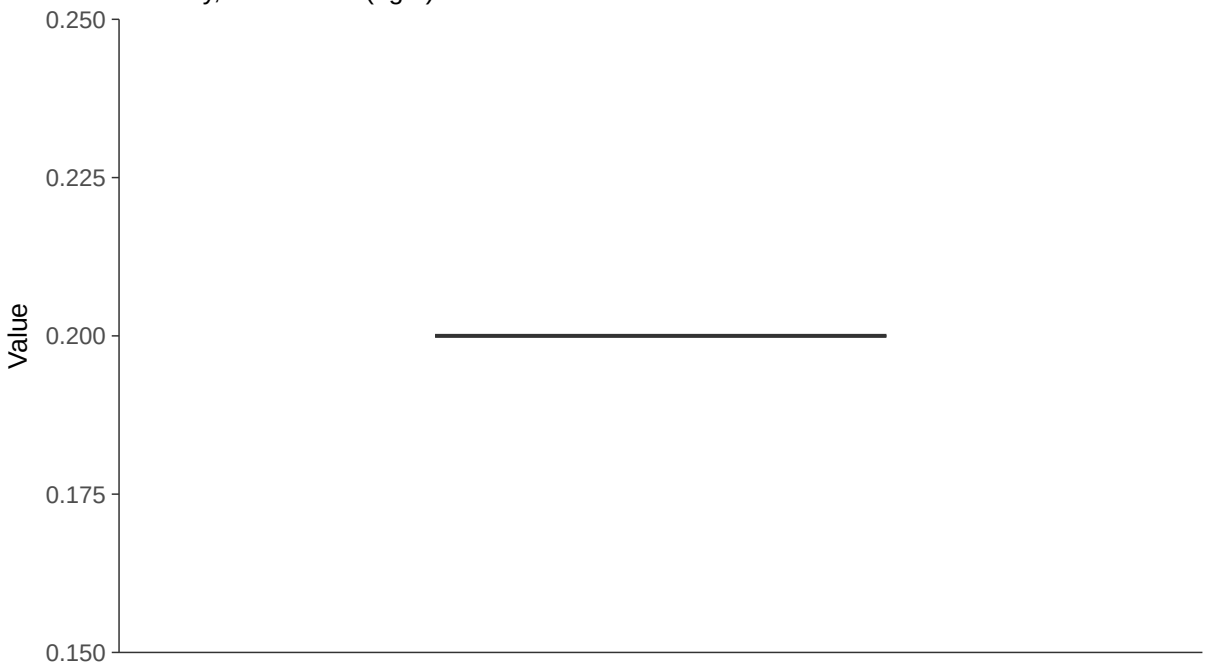
ID: 10_2_118



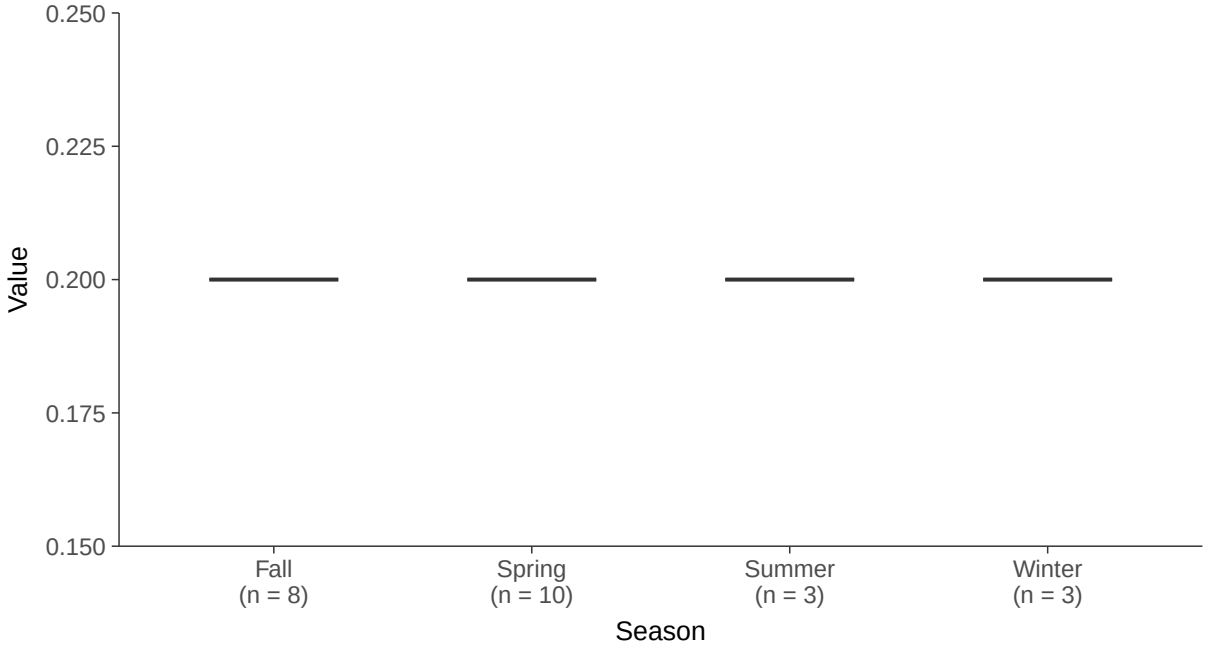
**Boxplot**

Mercury, MW-15020 (ug/L)



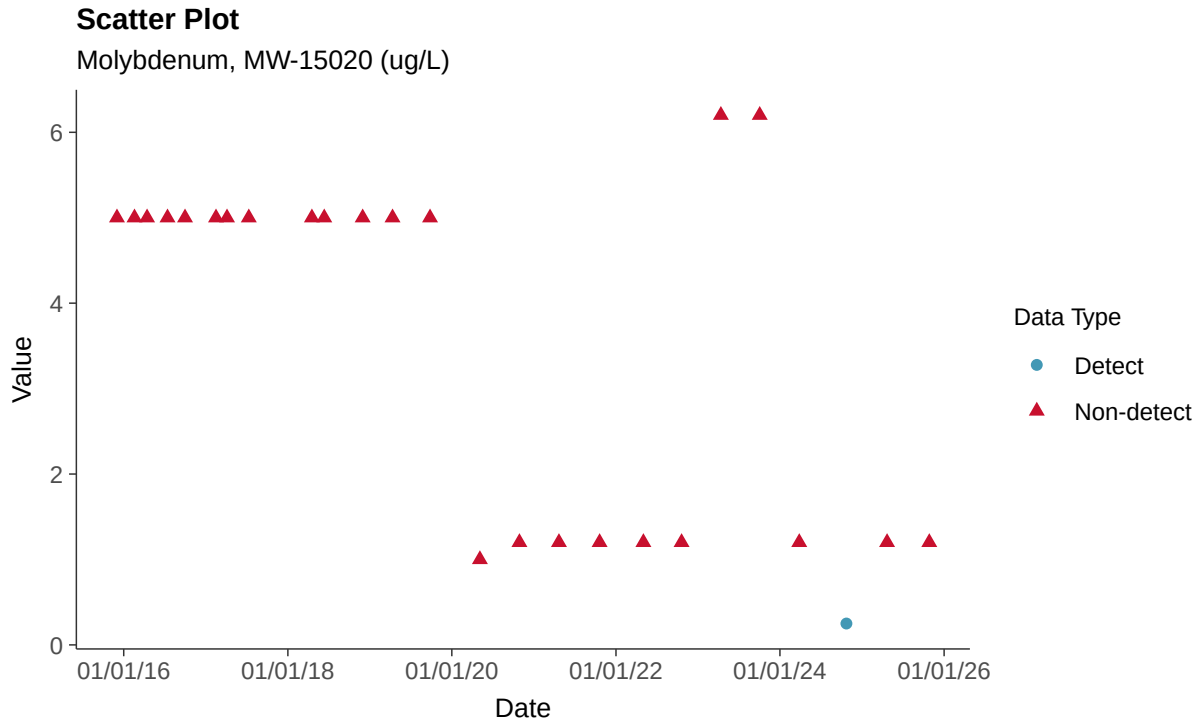

**Boxplot by Season**

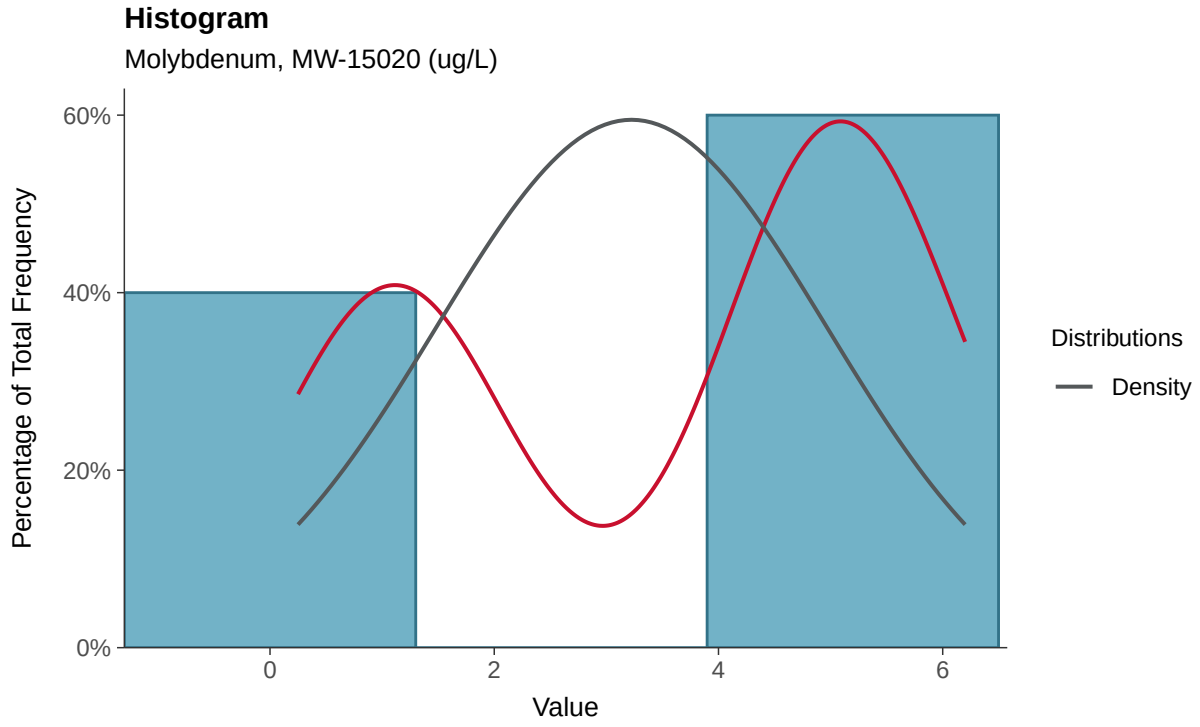
Mercury, MW-15020 (ug/L)



## Appendix IV: Molybdenum, MW-15020

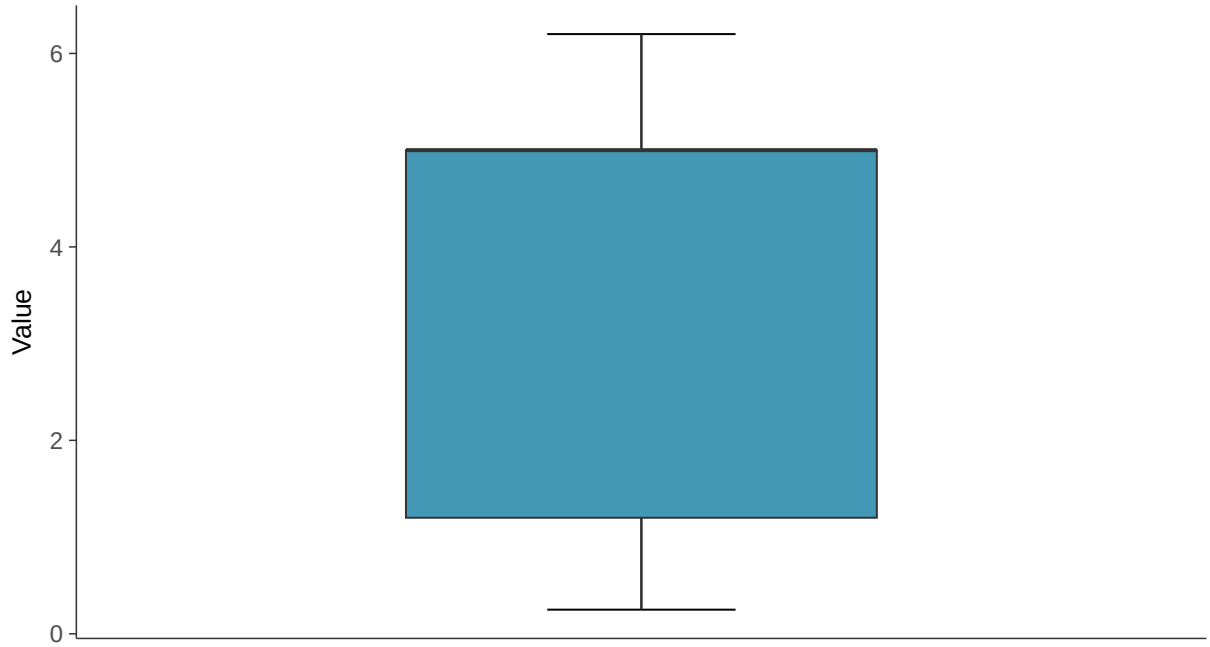
ID: 10_2_119



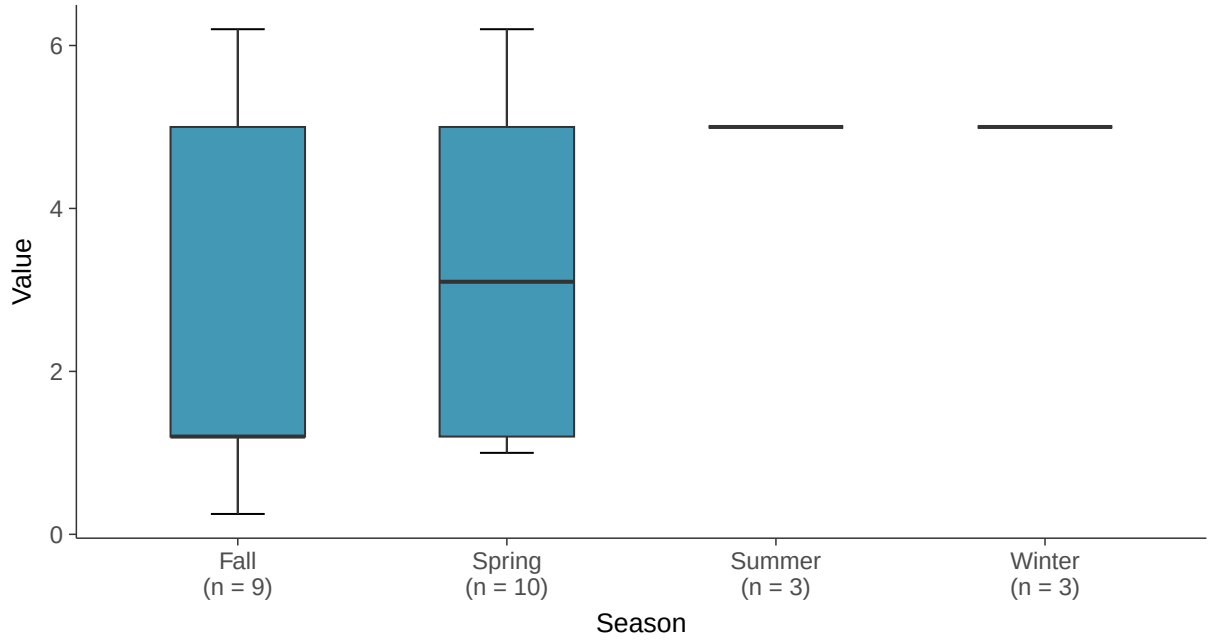
**Boxplot**

Molybdenum, MW-15020 (ug/L)



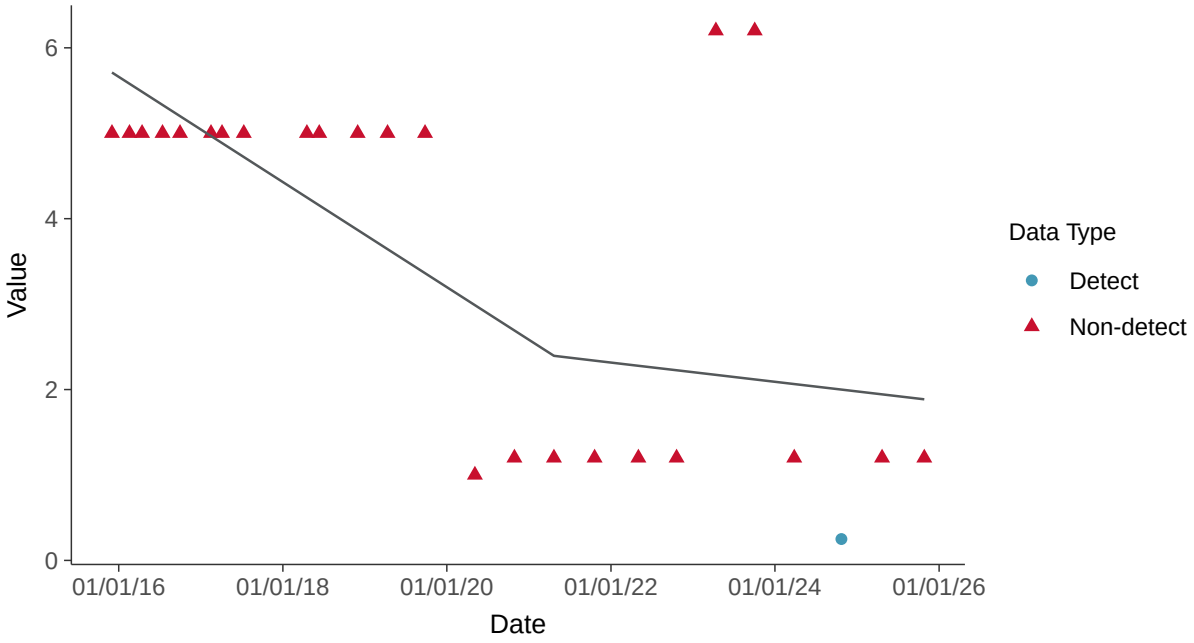

**Boxplot by Season**

Molybdenum, MW-15020 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15020 (ug/L)

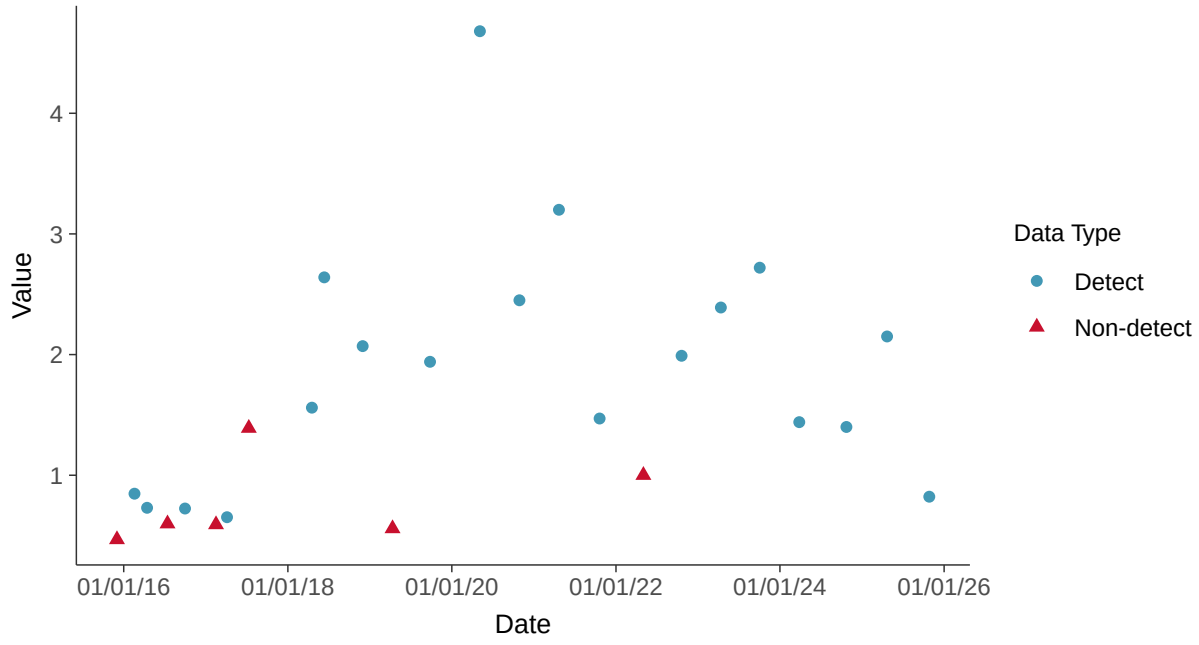


## Appendix IV: Radium-226+228, MW-15020

ID: 10_2_125

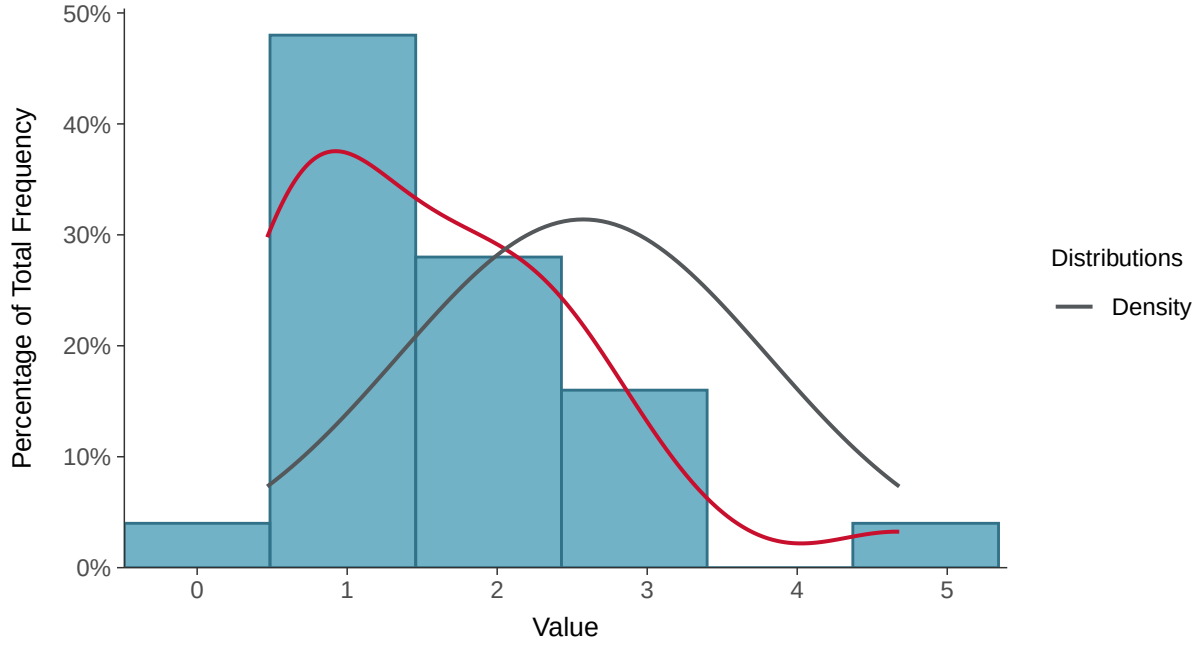
**Scatter Plot**

Radium-226+228, MW-15020 (pCi/L)



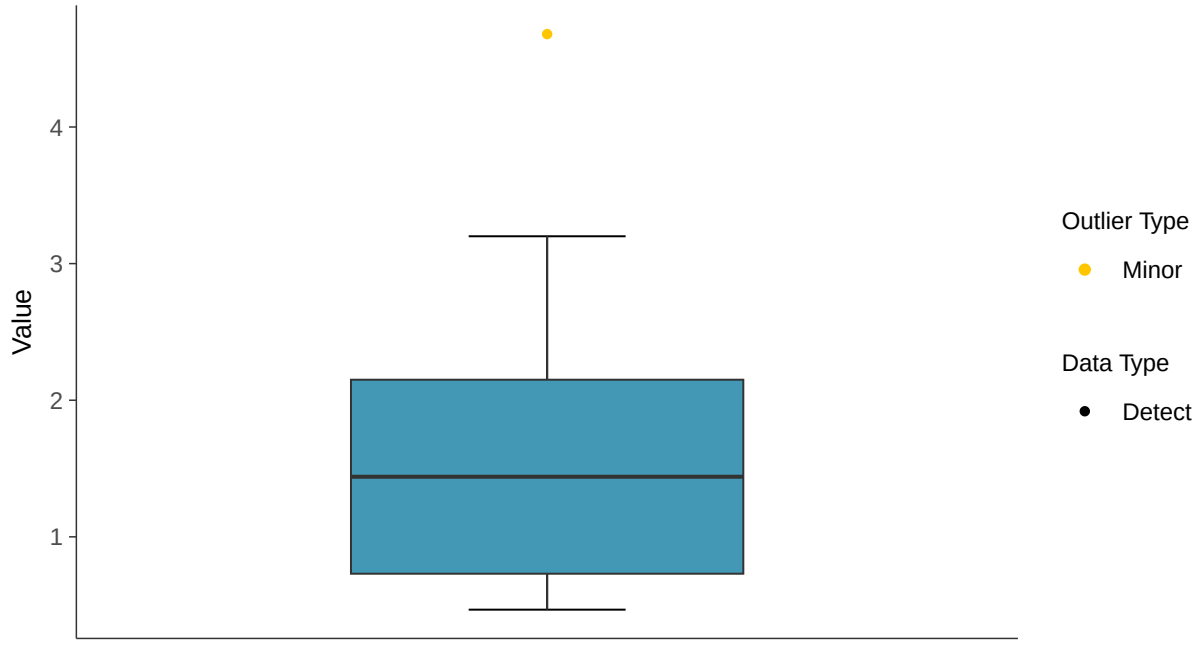

**Histogram**

Radium-226+228, MW-15020 (pCi/L)



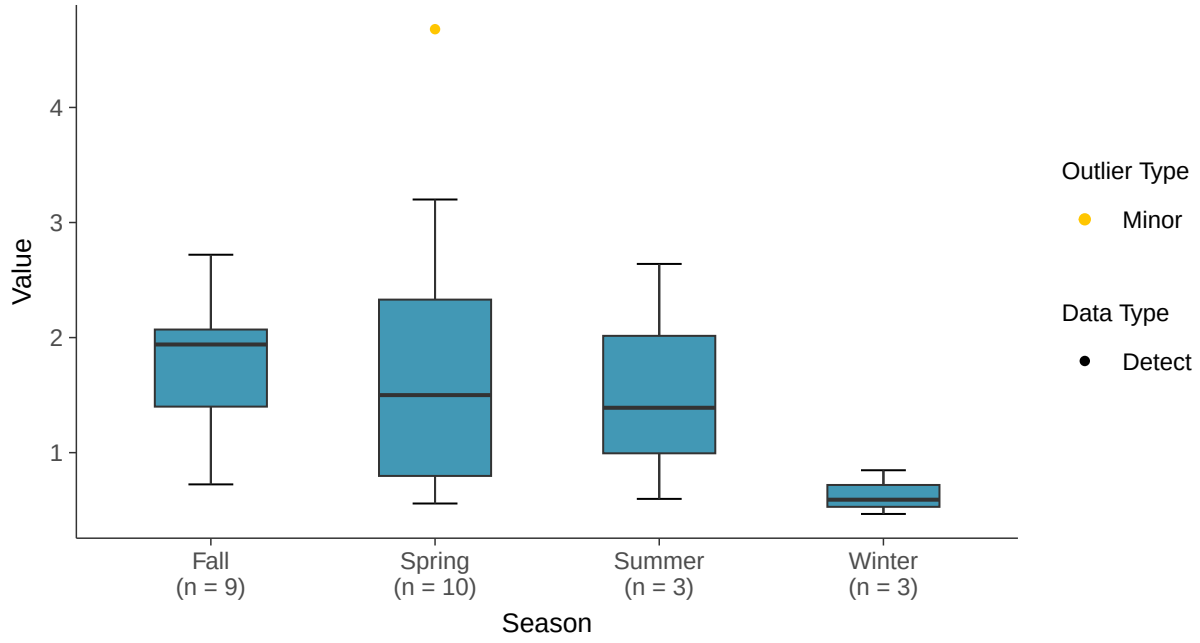
## Boxplot

Radium-226+228, MW-15020 (pCi/L)



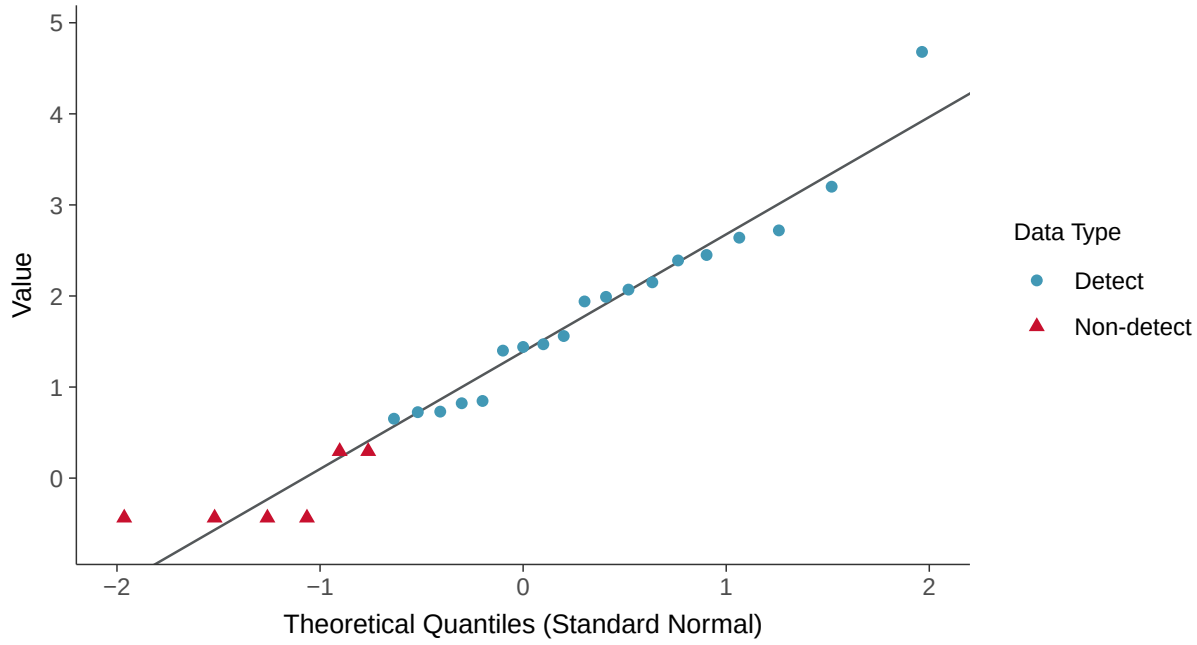

## Boxplot by Season

Radium-226+228, MW-15020 (pCi/L)



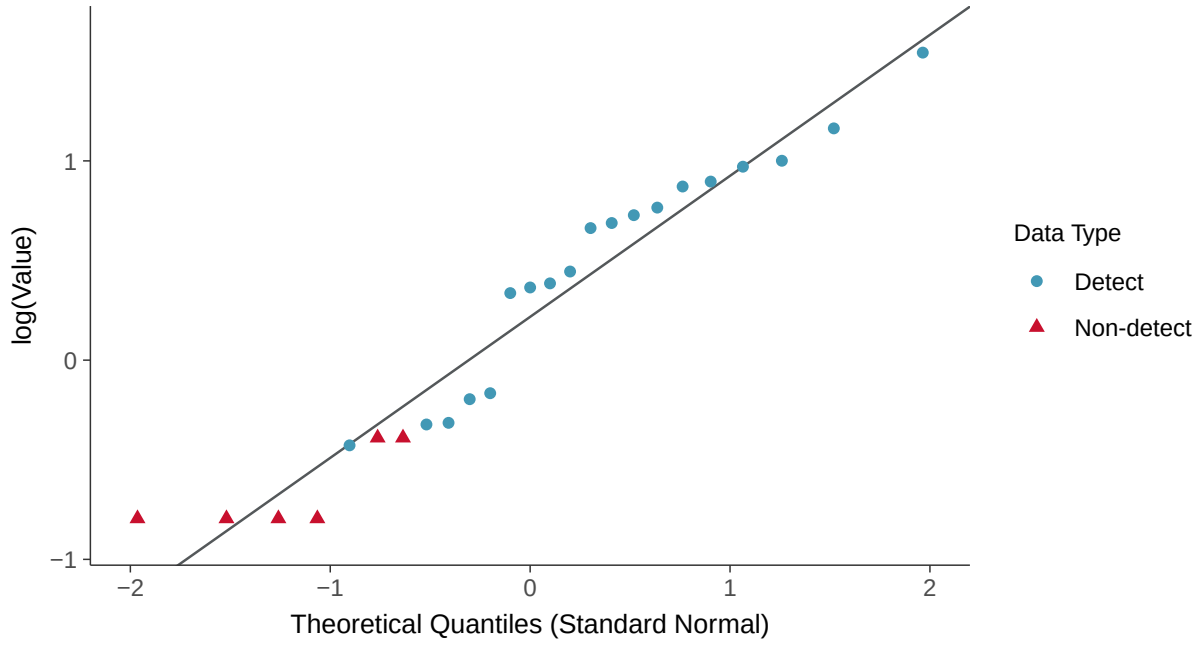
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15020 (pCi/L)



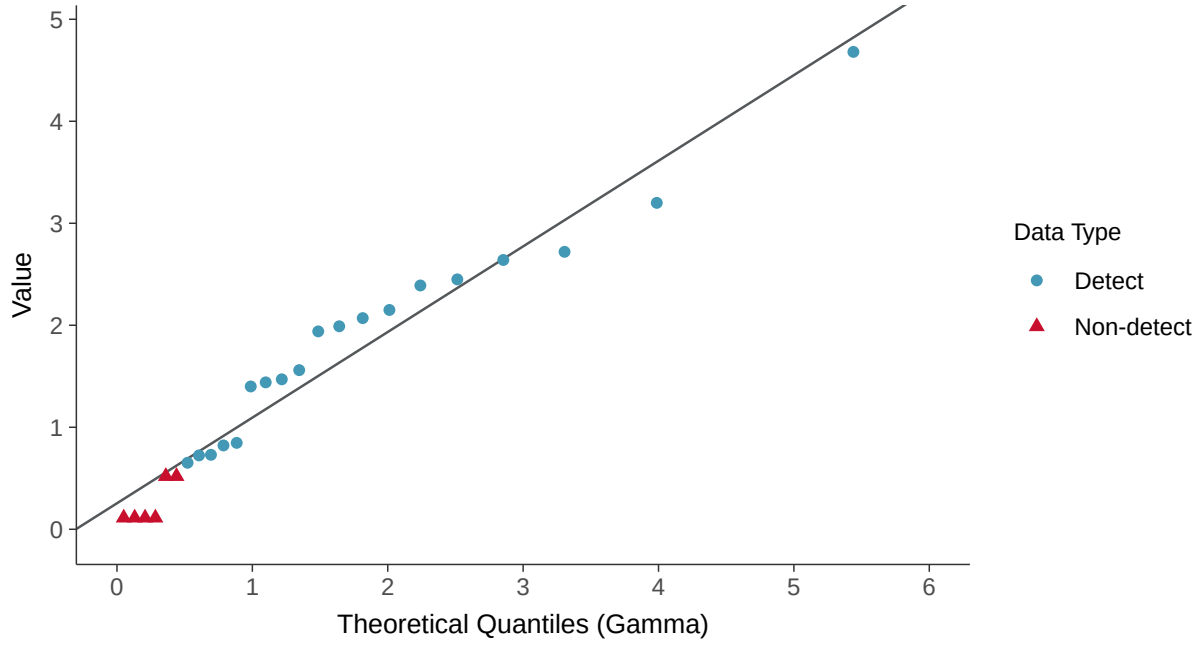

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15020 (pCi/L)



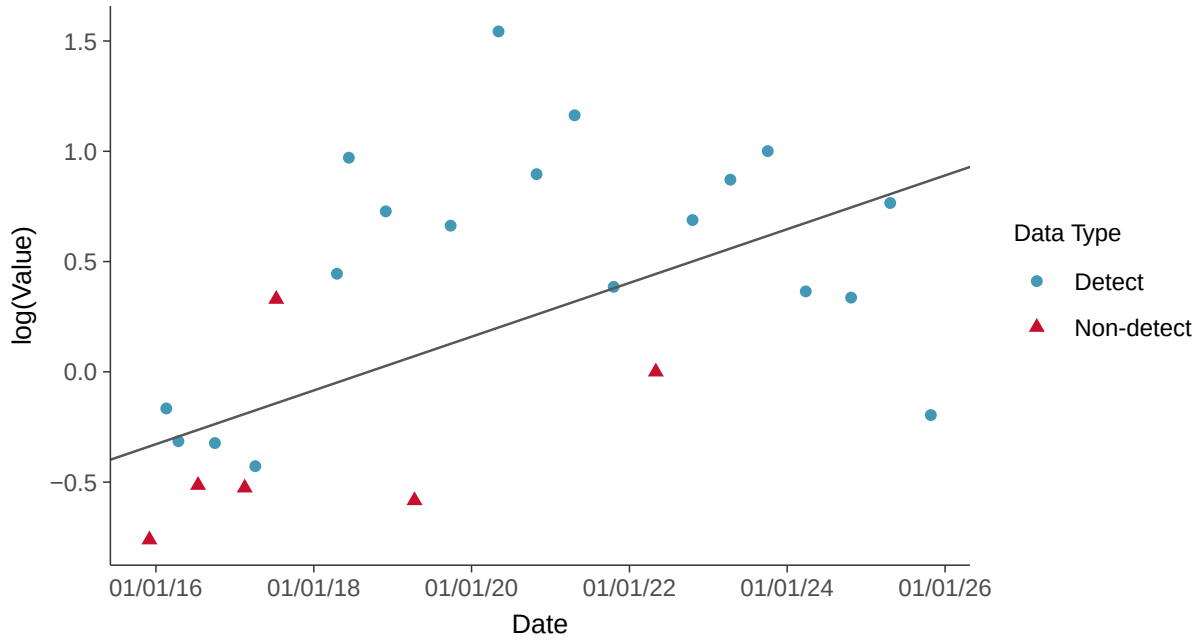
## Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15020 (pCi/L)



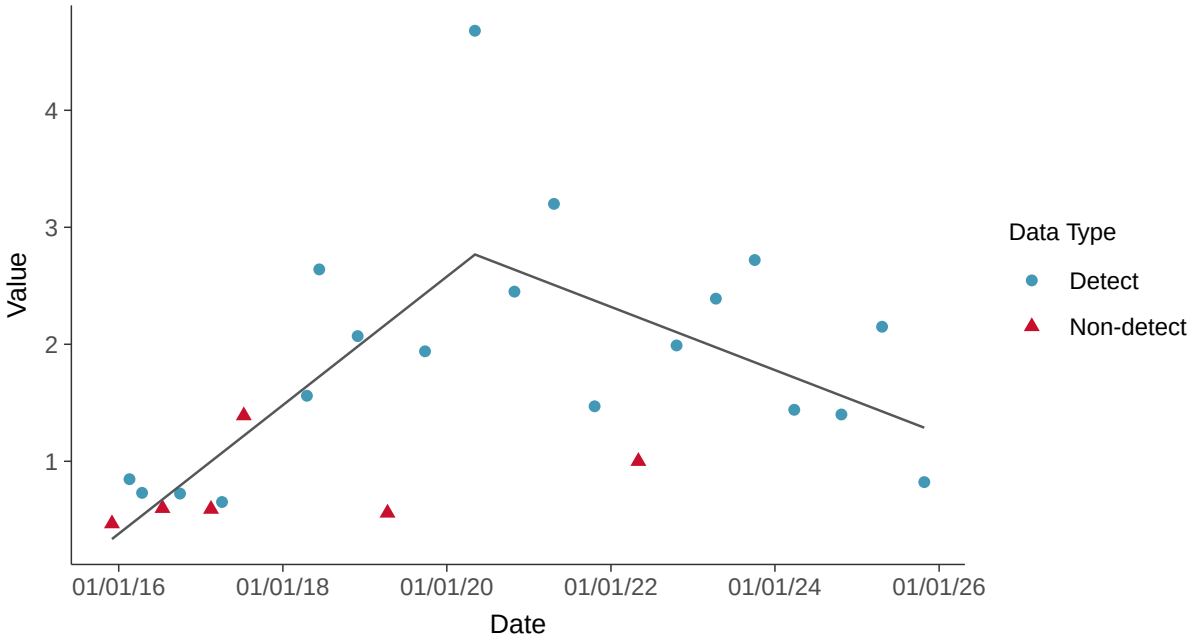

## Trend Regression: Lognormal MLE

Radium-226+228, MW-15020 (pCi/L)



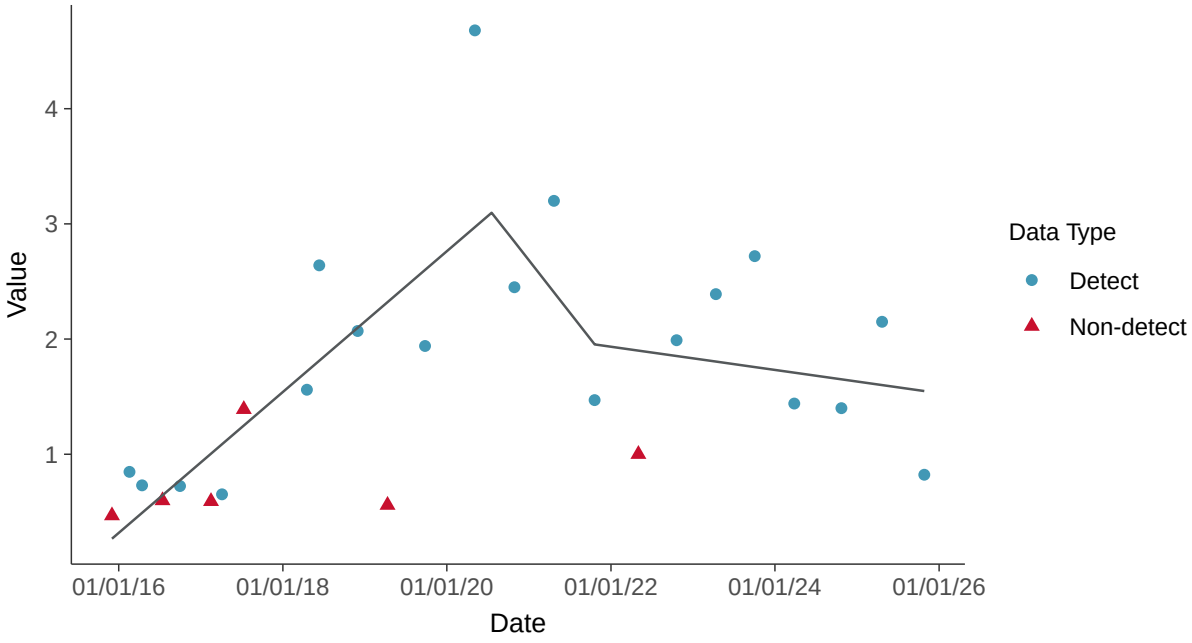
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15020 (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15020 (pCi/L)

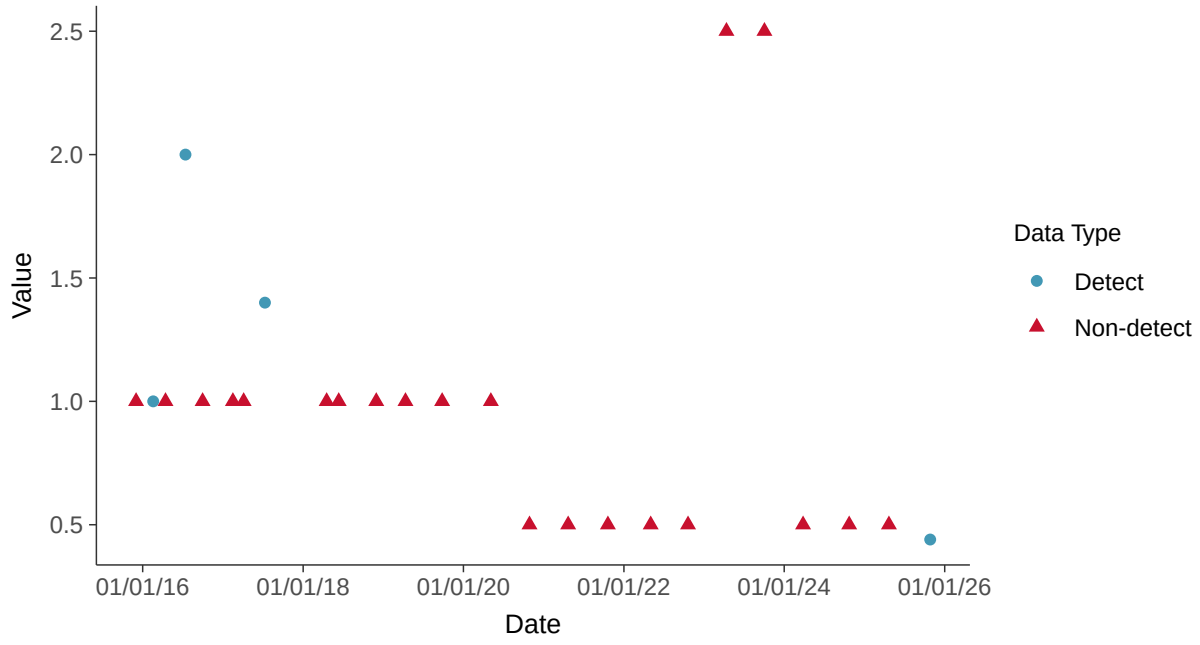


## Appendix IV: Selenium, MW-15020

ID: 10_2_127

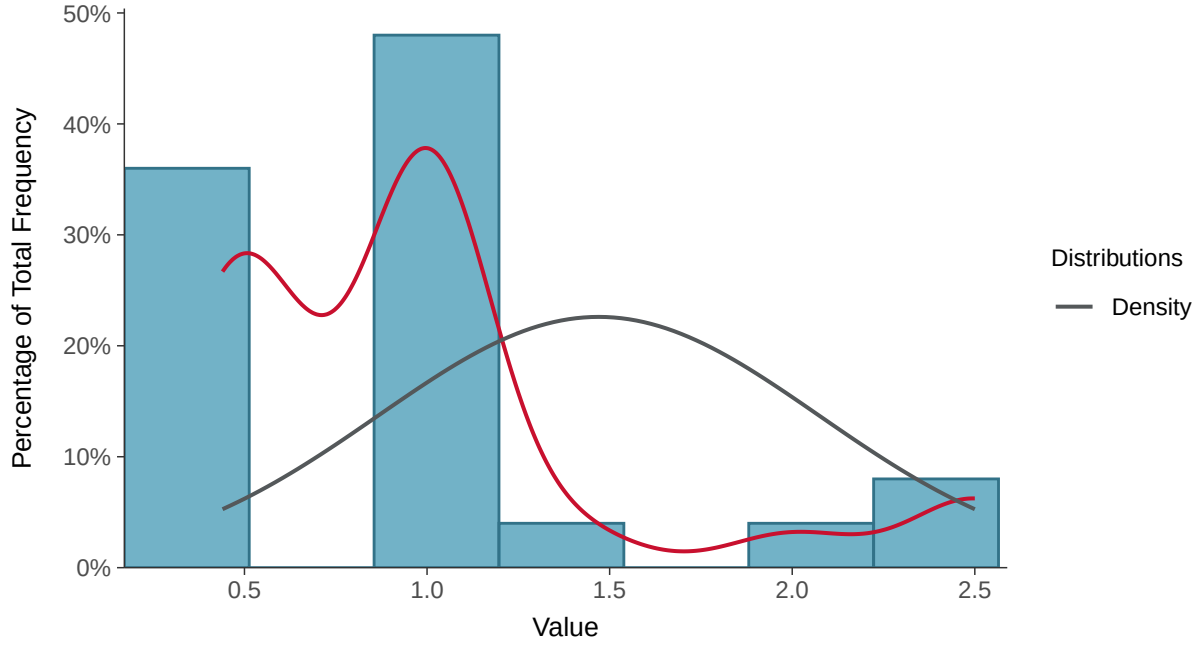
**Scatter Plot**

Selenium, MW-15020 (ug/L)



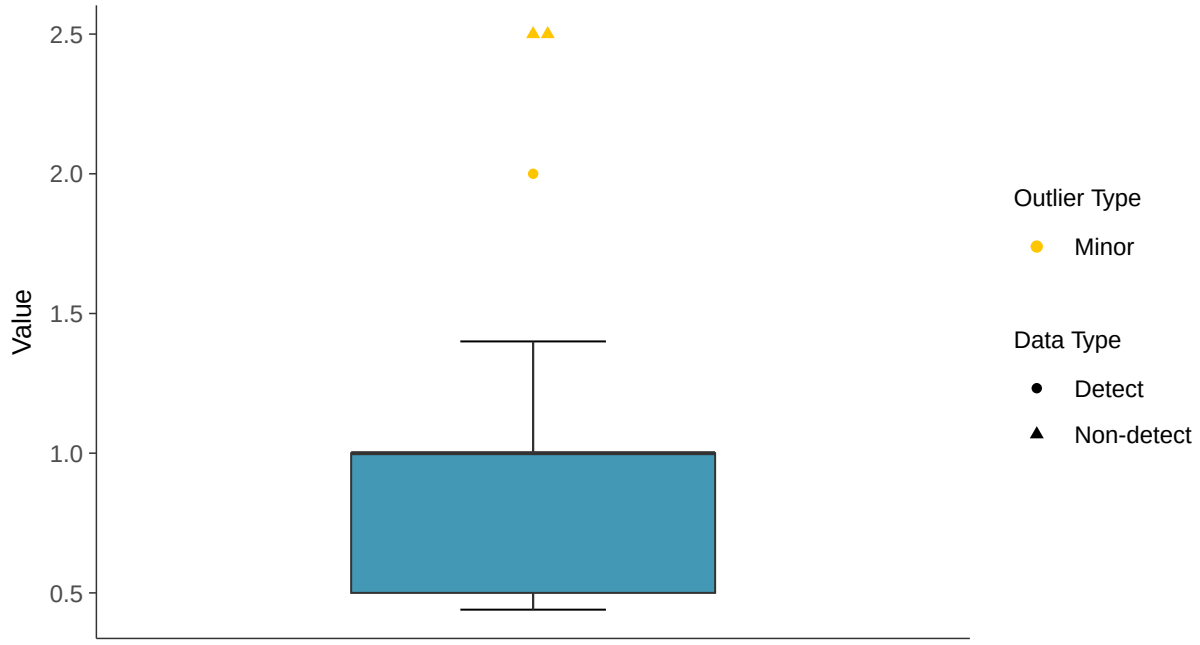

**Histogram**

Selenium, MW-15020 (ug/L)



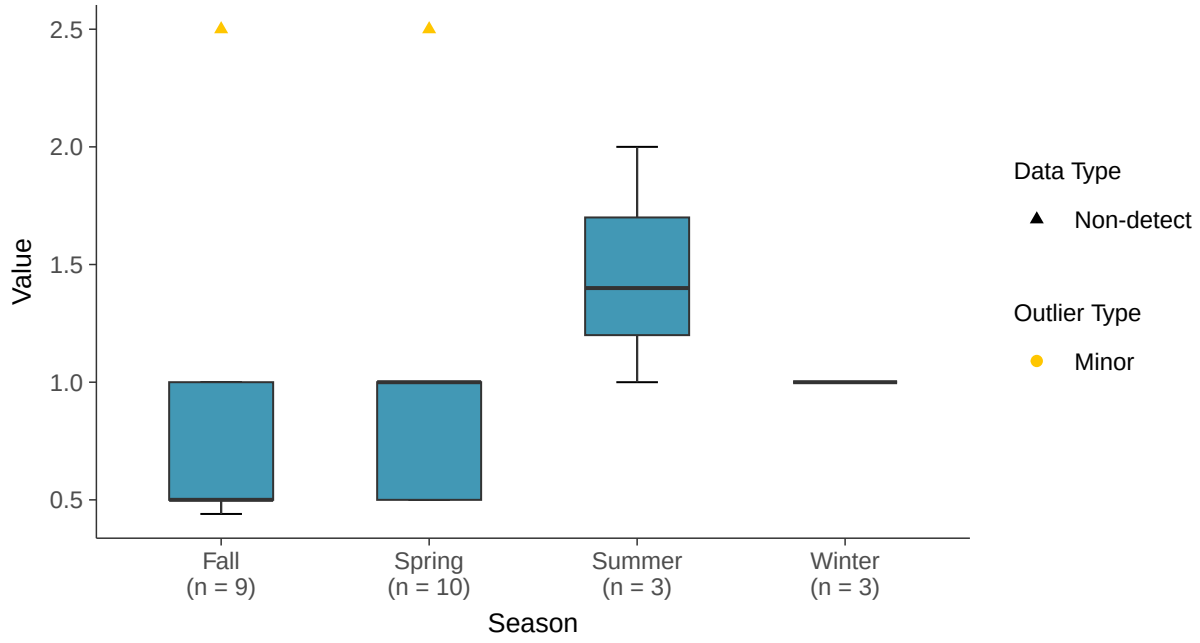
## Boxplot

Selenium, MW-15020 (ug/L)



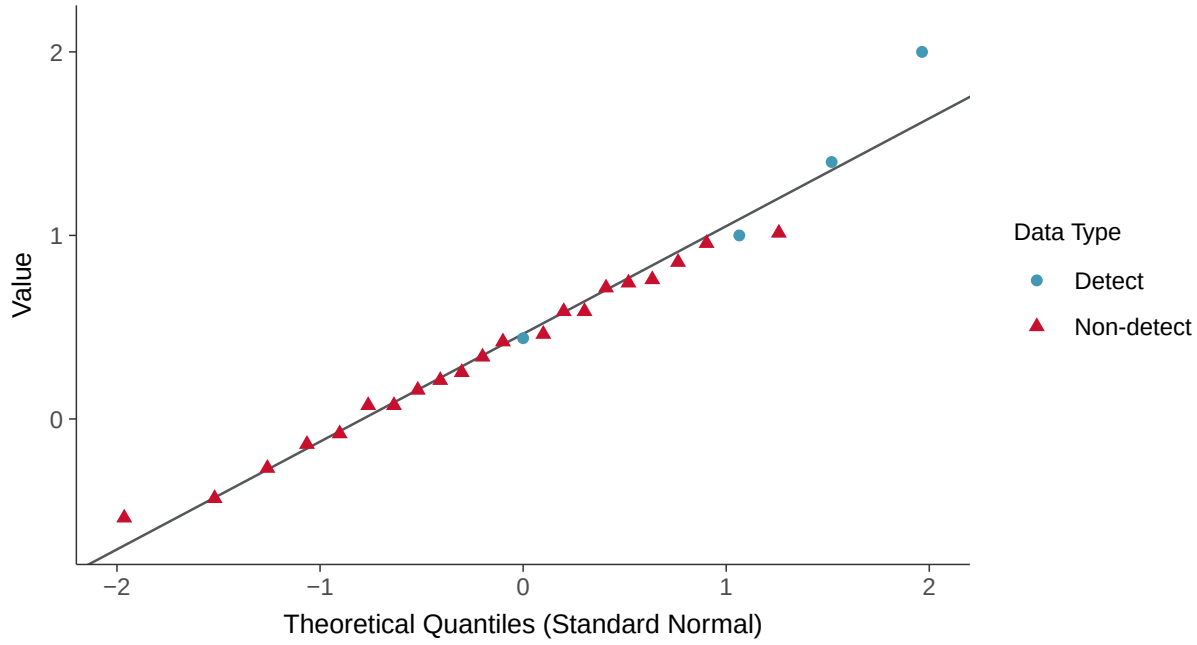

## Boxplot by Season

Selenium, MW-15020 (ug/L)



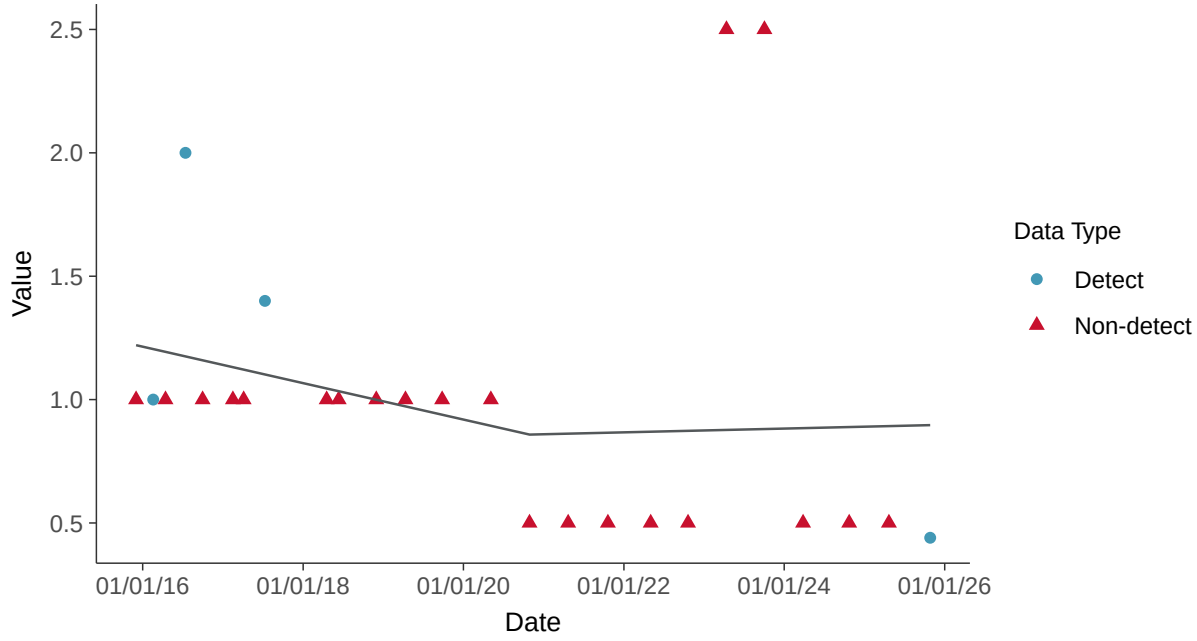
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15020 (ug/L)



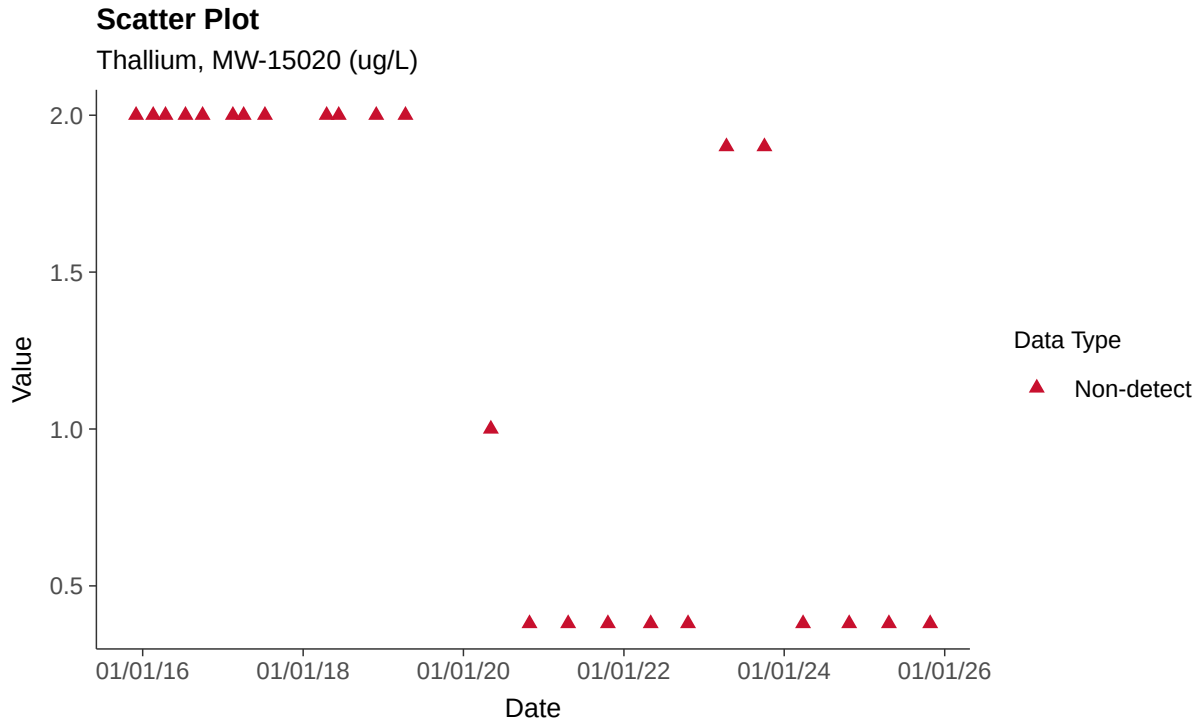

**Trend Regression: Piecewise Linear-Linear**

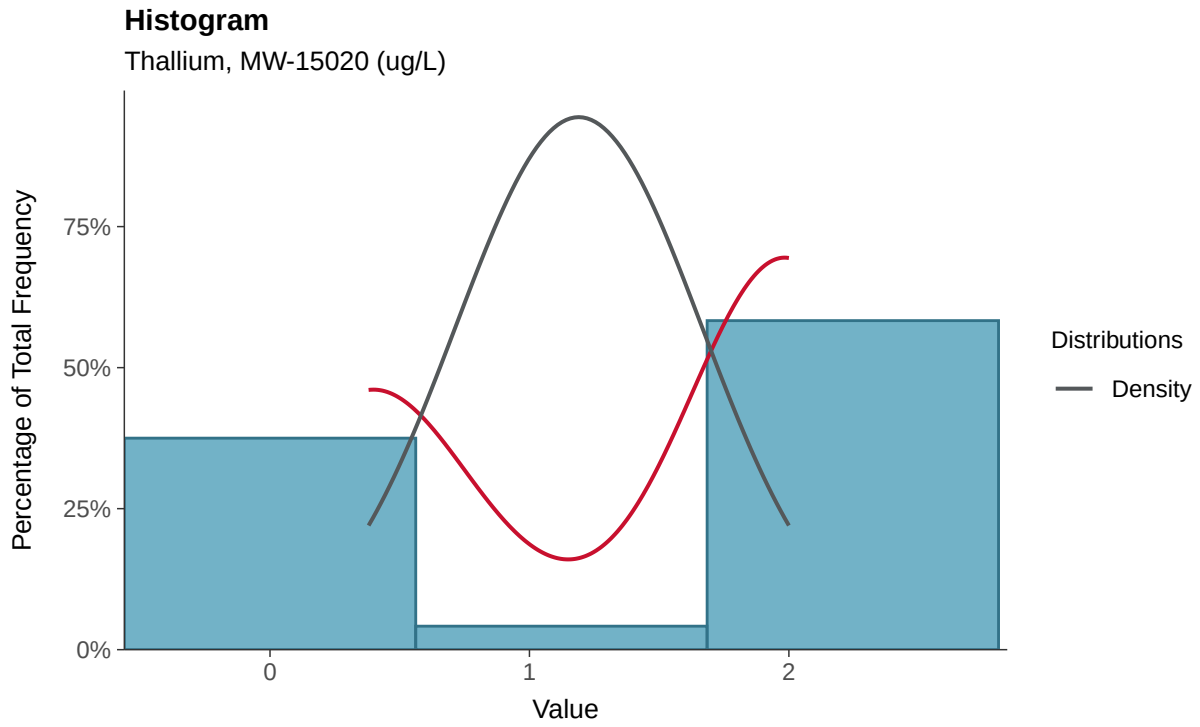
Selenium, MW-15020 (ug/L)



## Appendix IV: Thallium, MW-15020

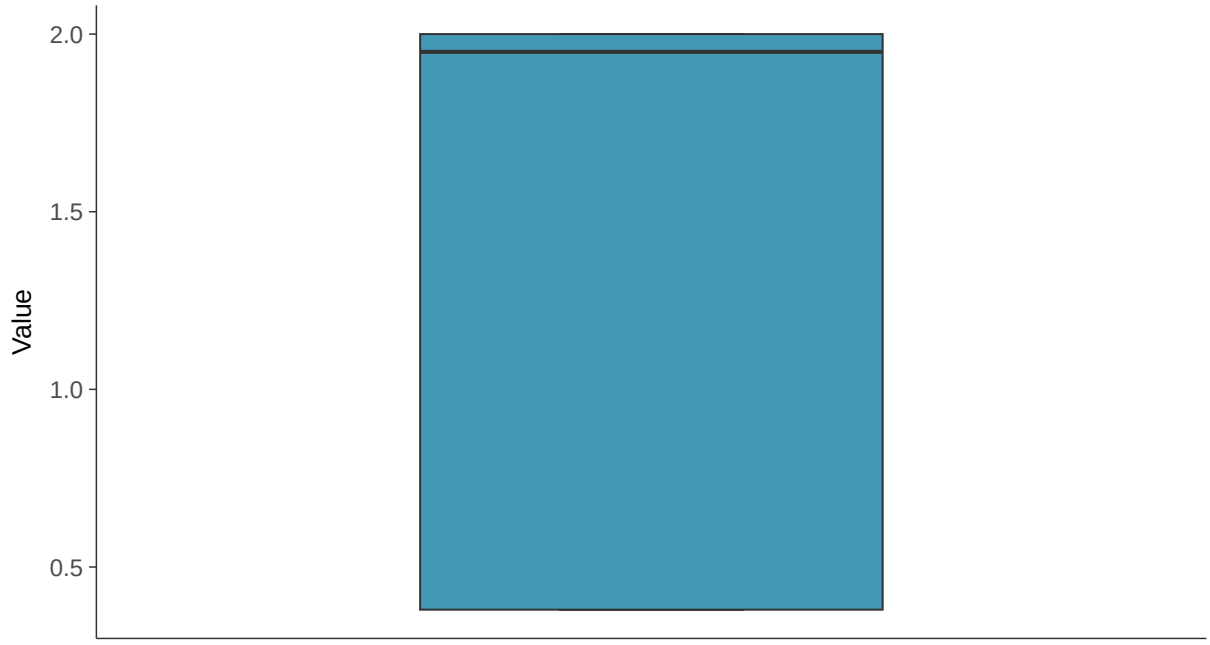
ID: 10_2_131



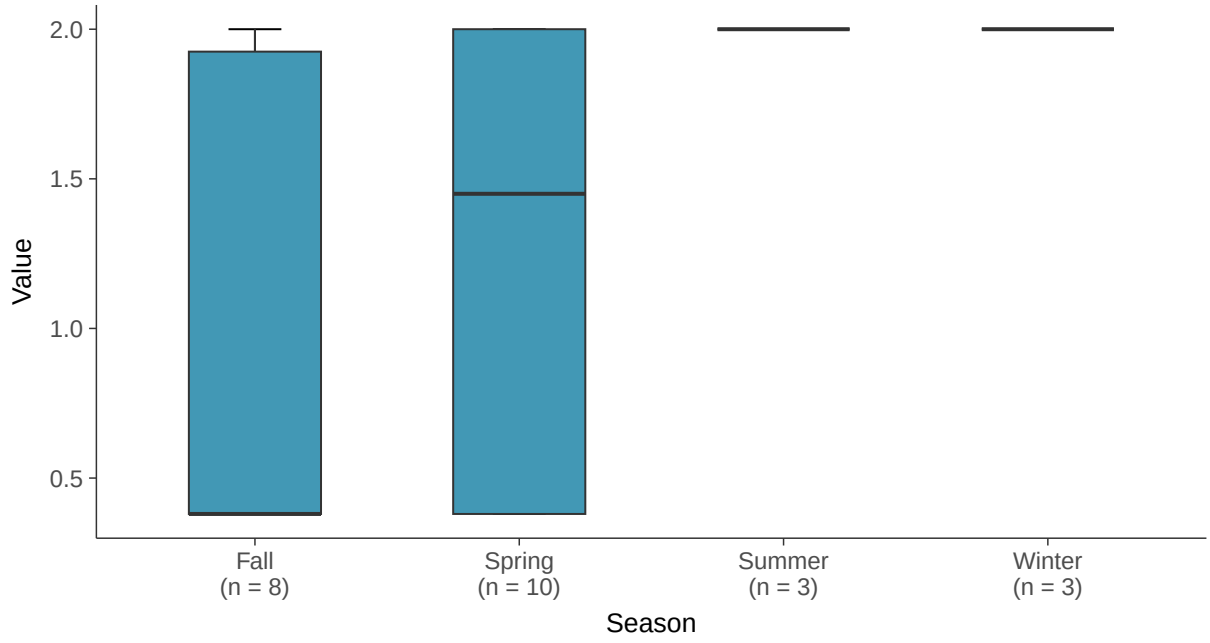
**Boxplot**

Thallium, MW-15020 (ug/L)



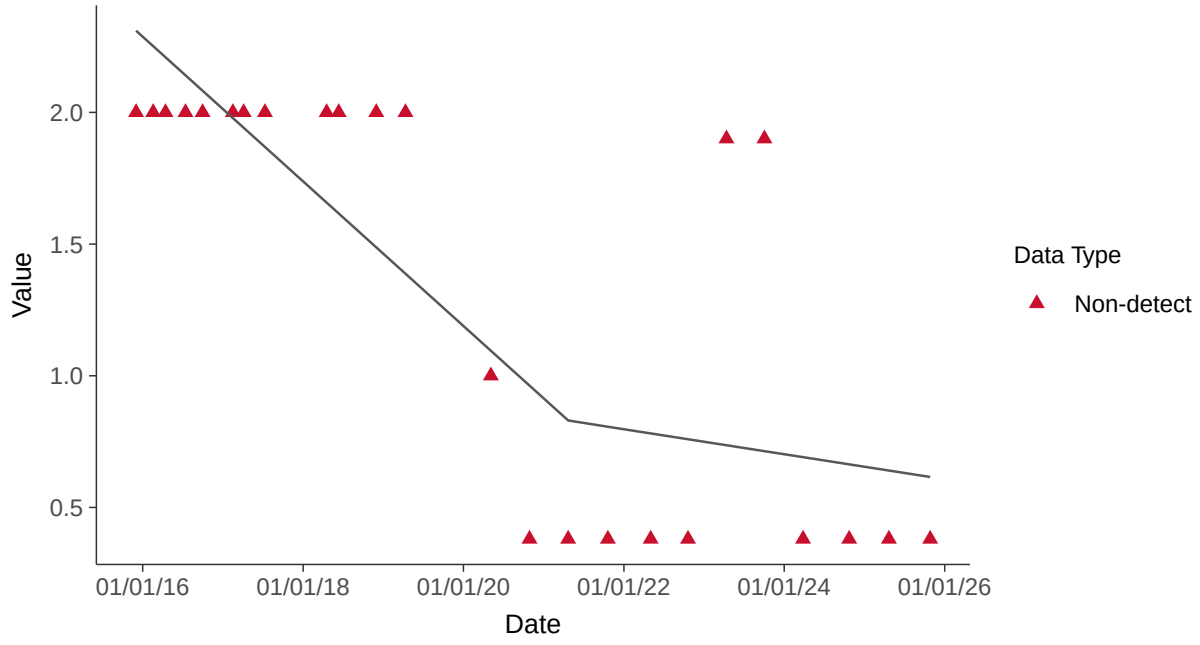

**Boxplot by Season**

Thallium, MW-15020 (ug/L)



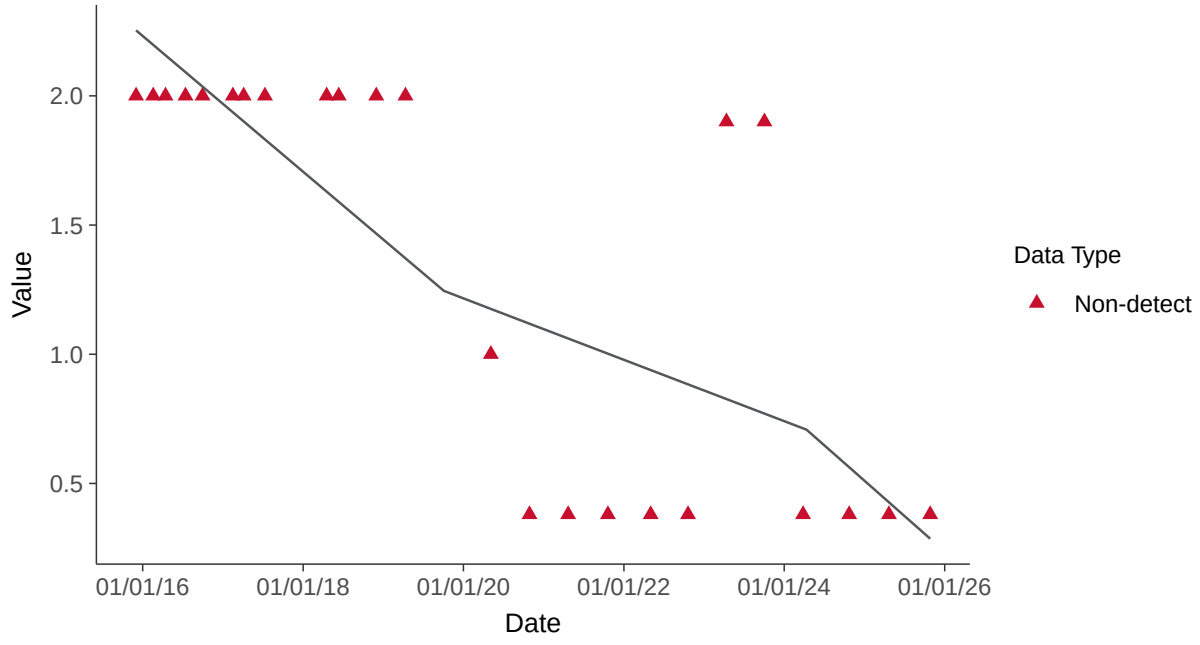
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15020 (ug/L)



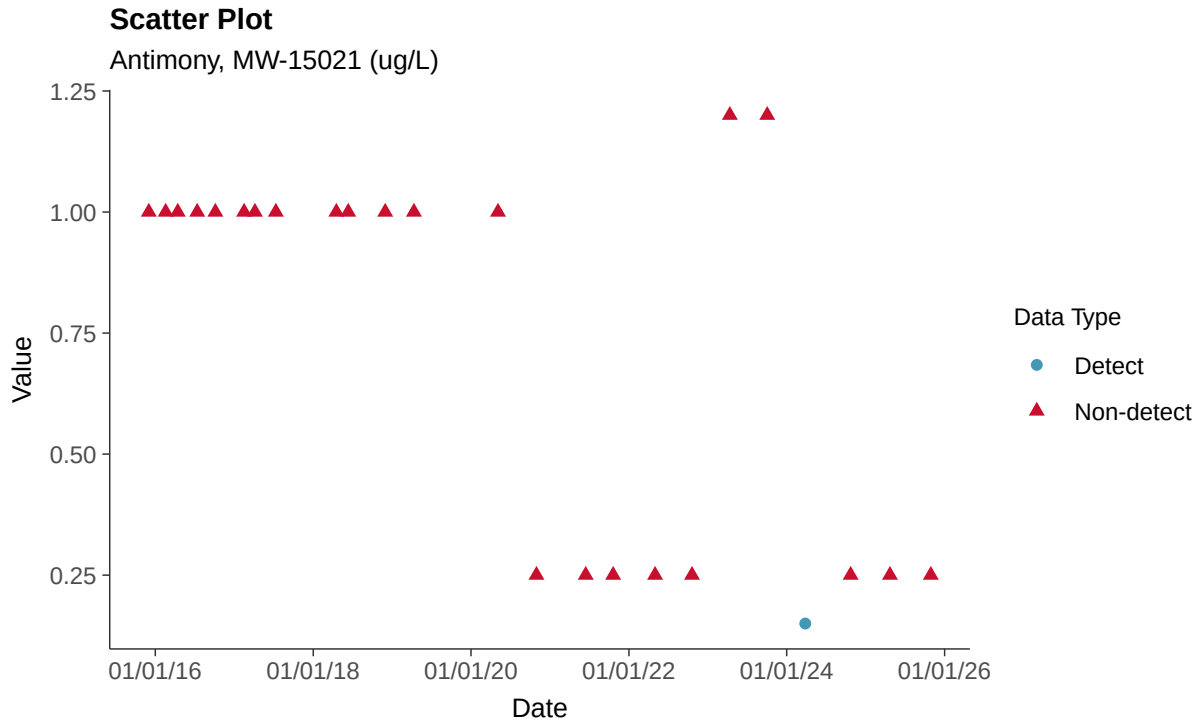

**Trend Regression: Piecewise Linear-Linear-Linear**

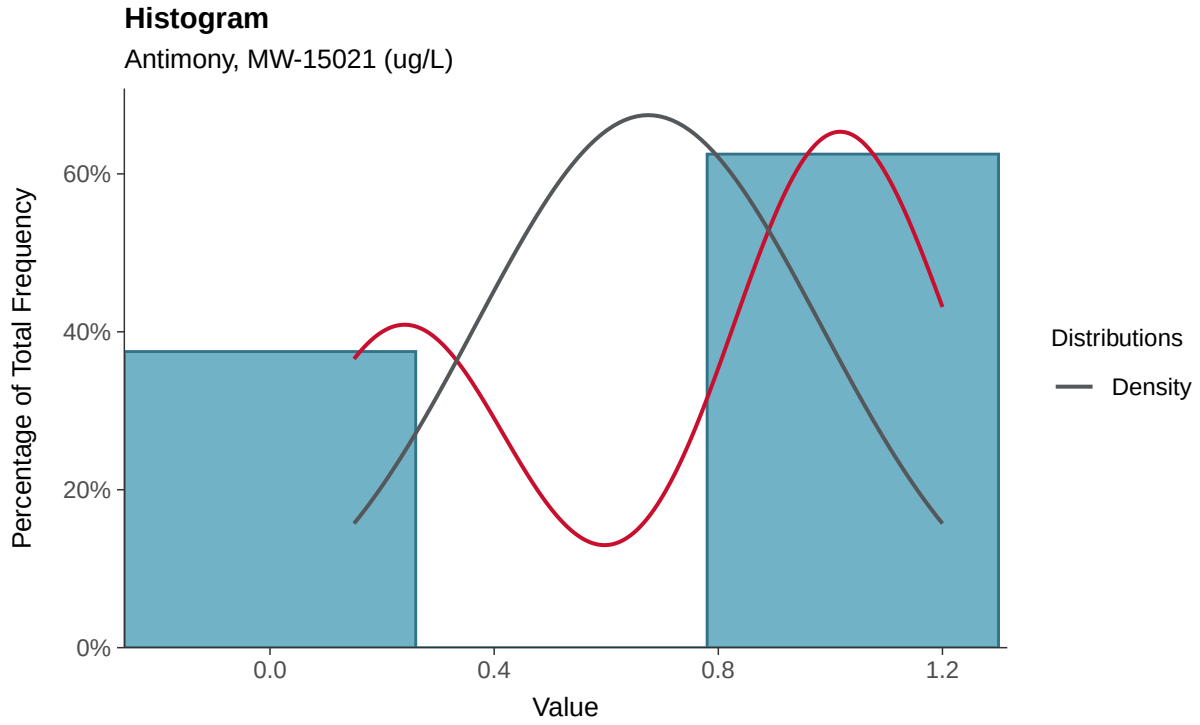
Thallium, MW-15020 (ug/L)



## Appendix IV: Antimony, MW-15021

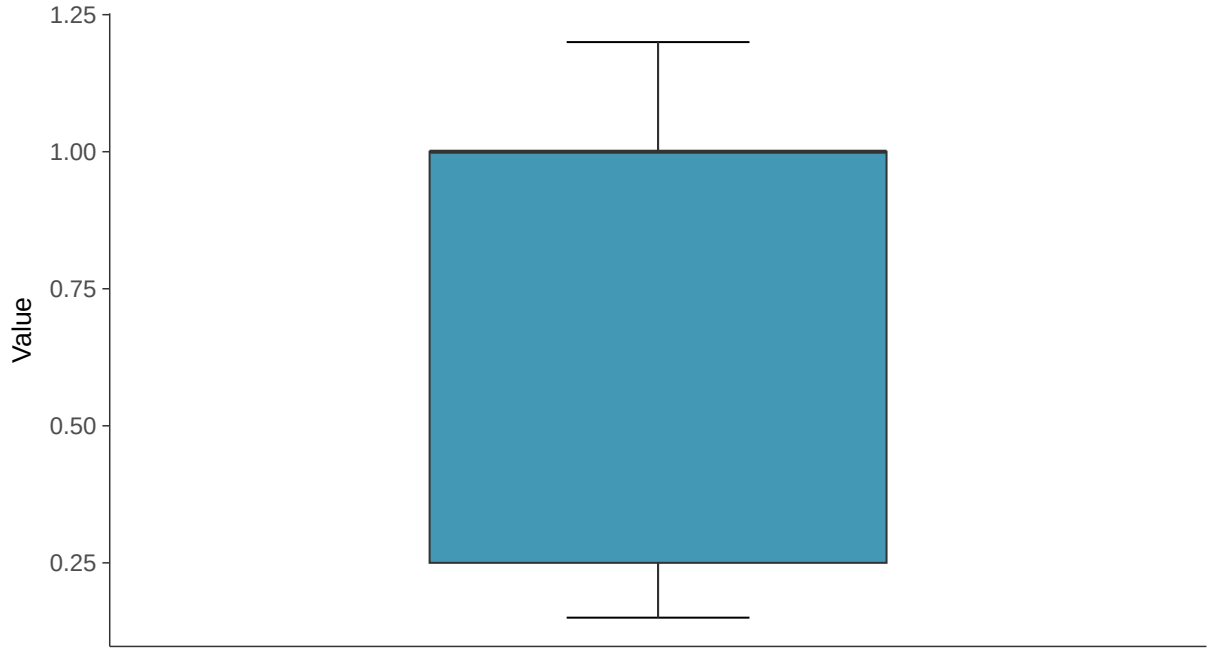
ID: 11_2_101



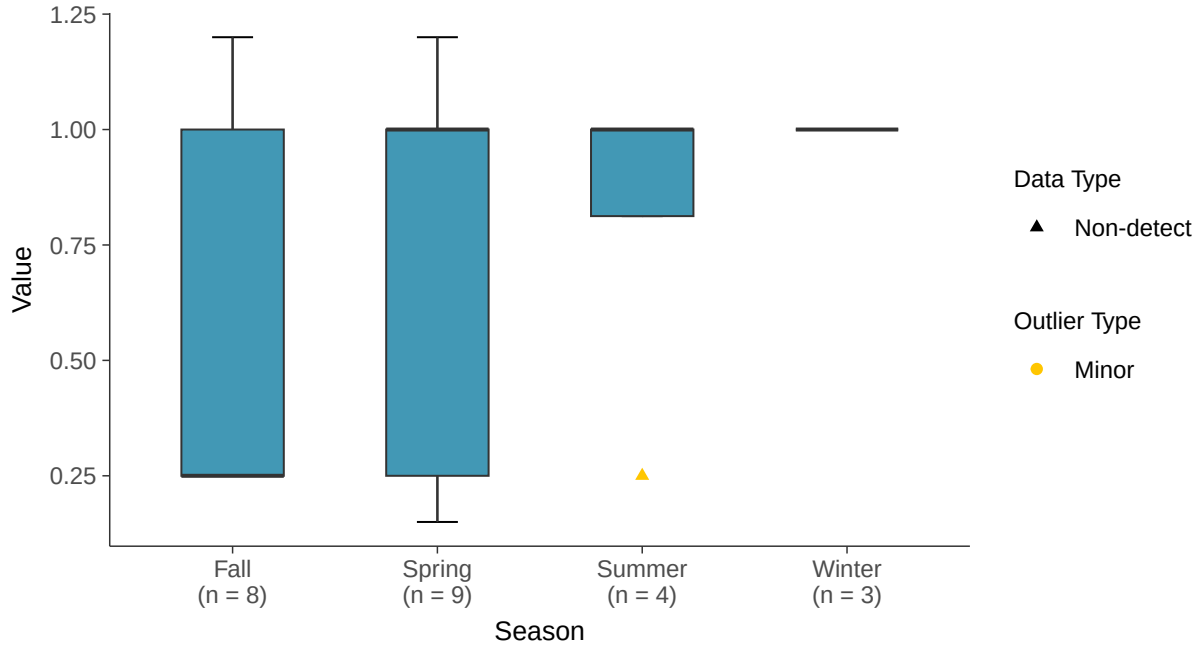
## Boxplot

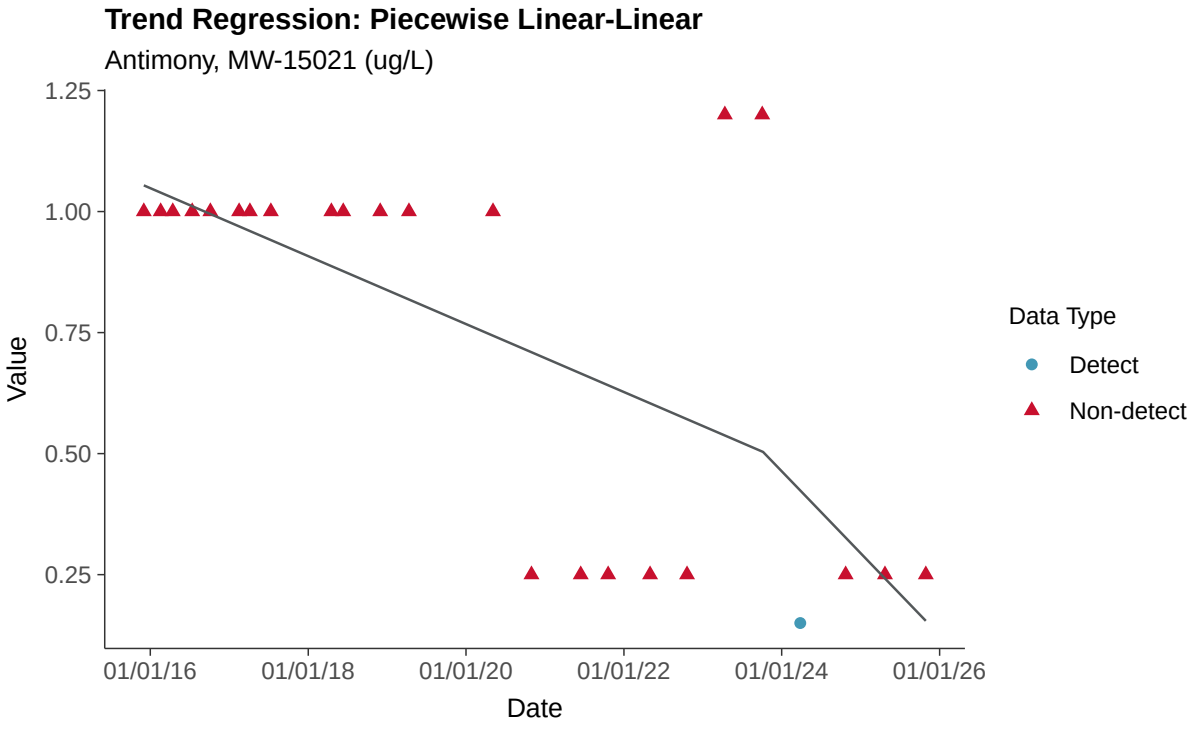
Antimony, MW-15021 (ug/L)




## Boxplot by Season

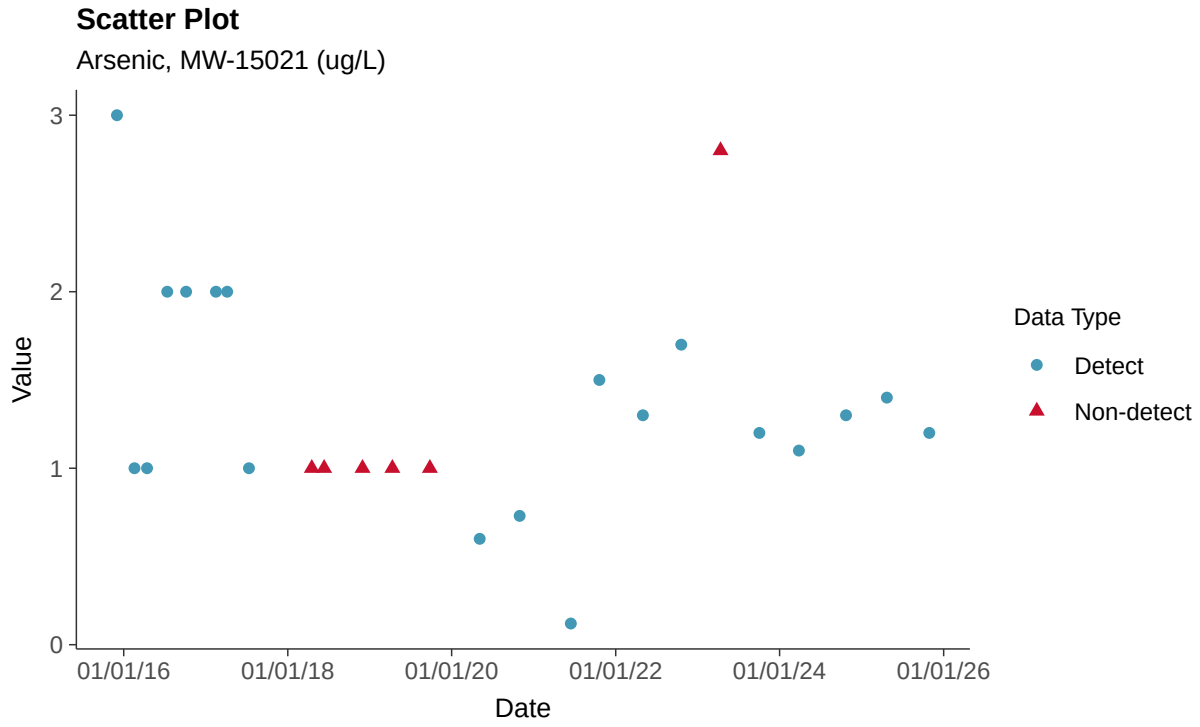
Antimony, MW-15021 (ug/L)

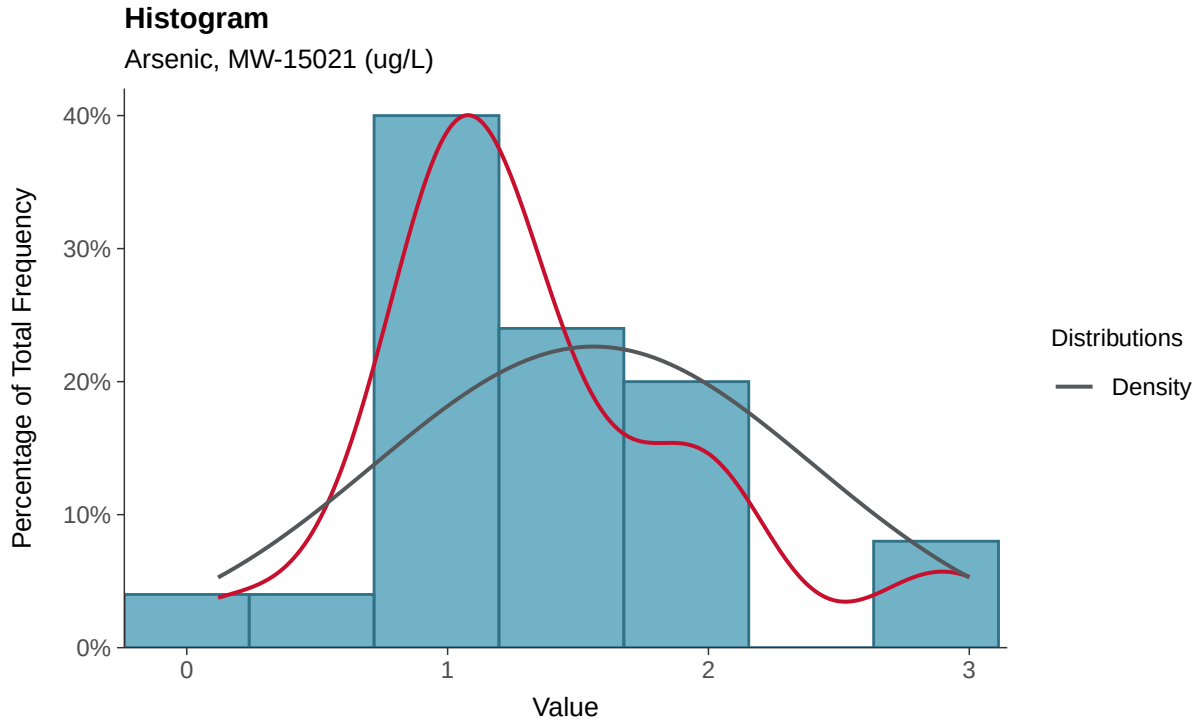



Trend Regression: Piecewise Linear-Linear
Antimony, MW-15021 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Arsenic, MW-15021

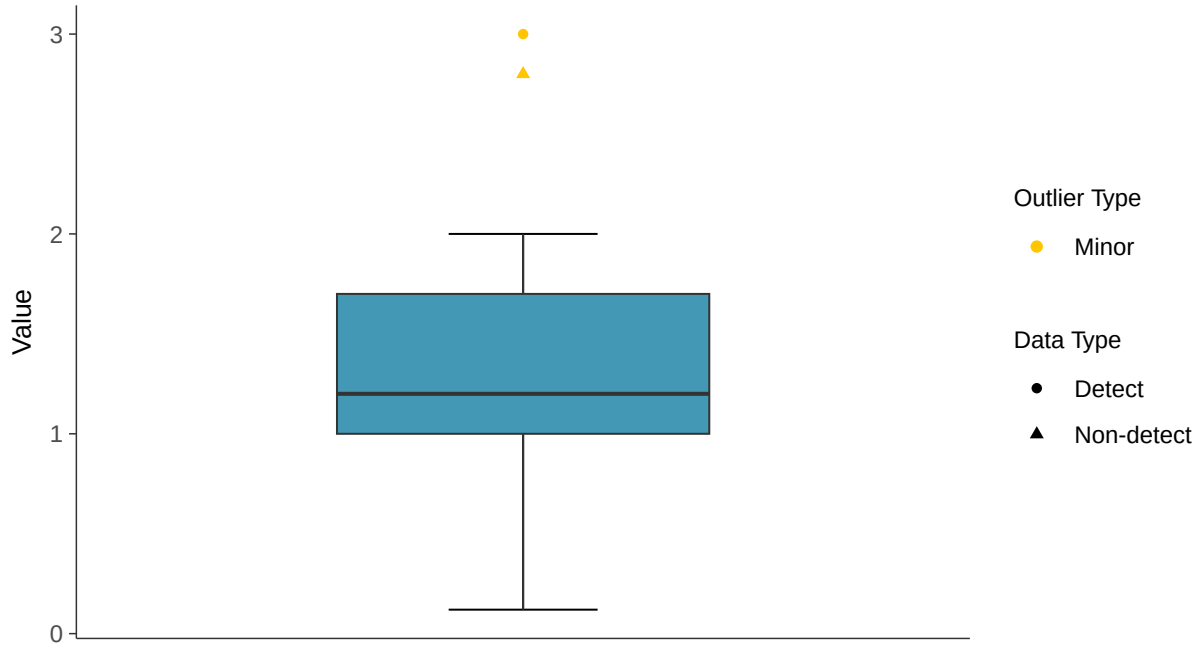
ID: 11_2_102



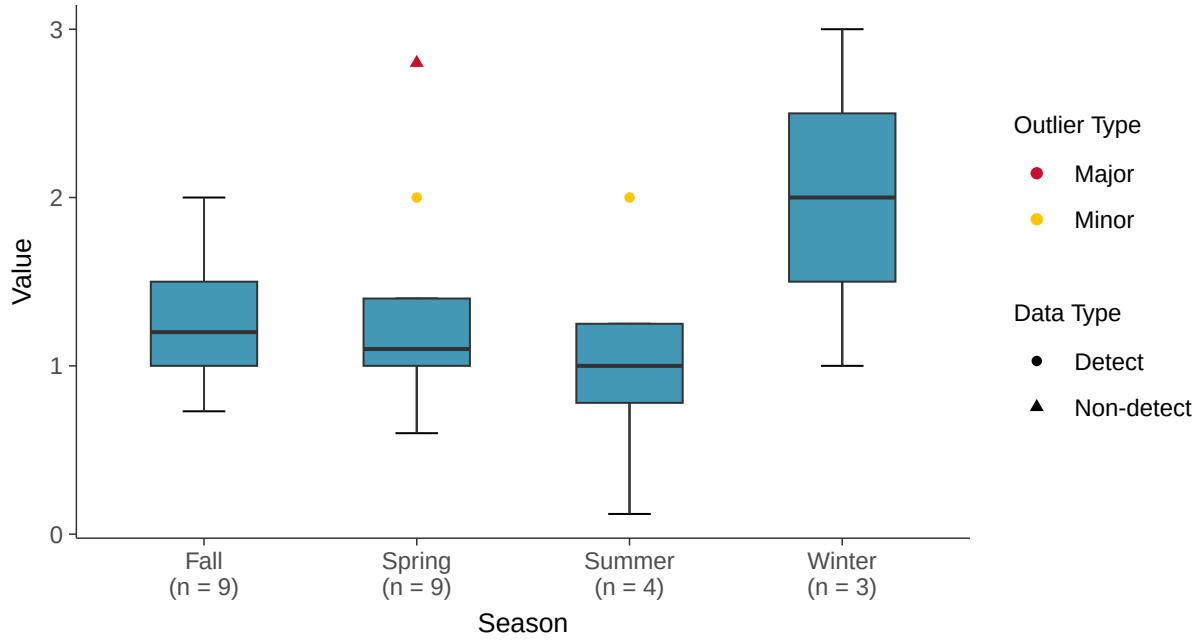
## Boxplot

Arsenic, MW-15021 (ug/L)



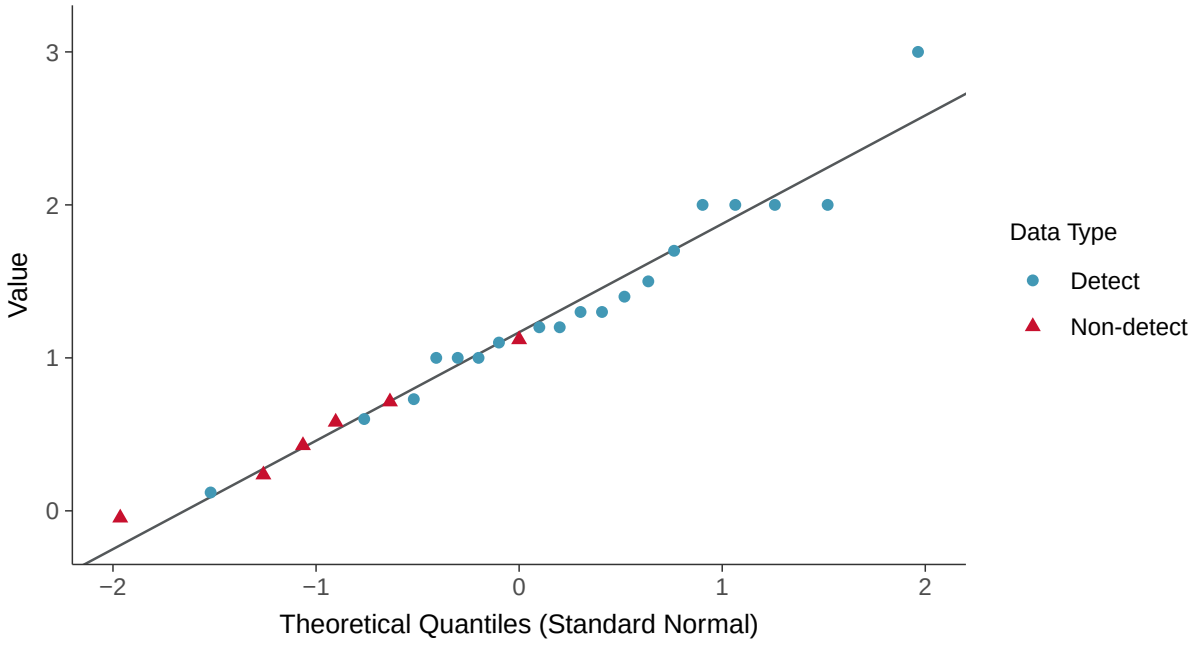

## Boxplot by Season

Arsenic, MW-15021 (ug/L)



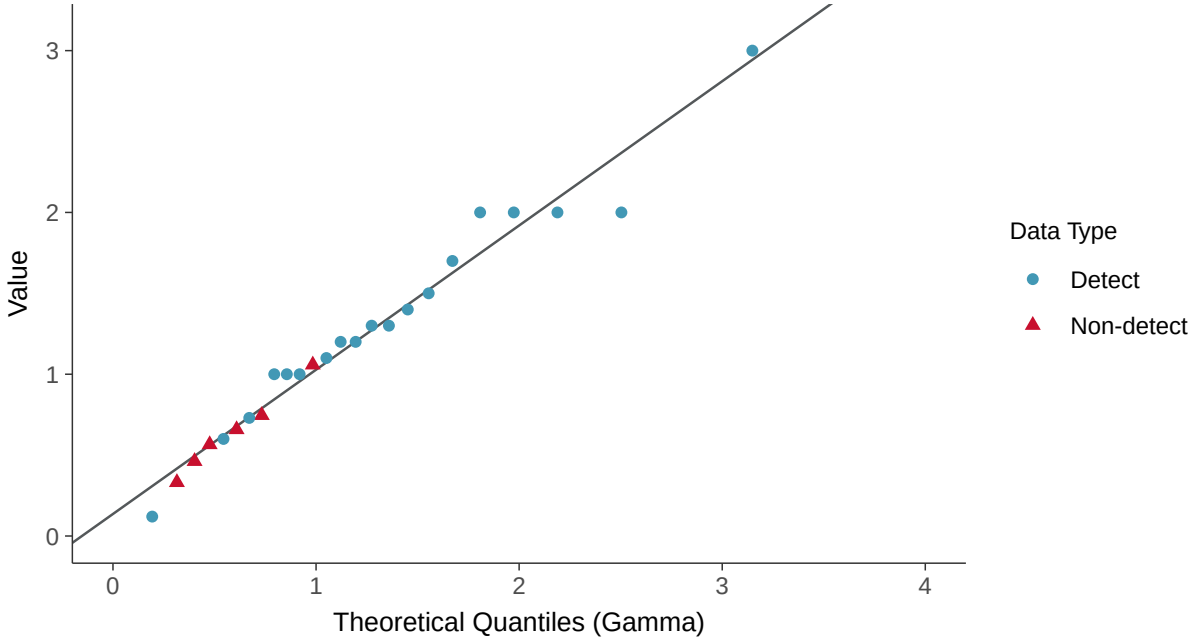
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15021 (ug/L)



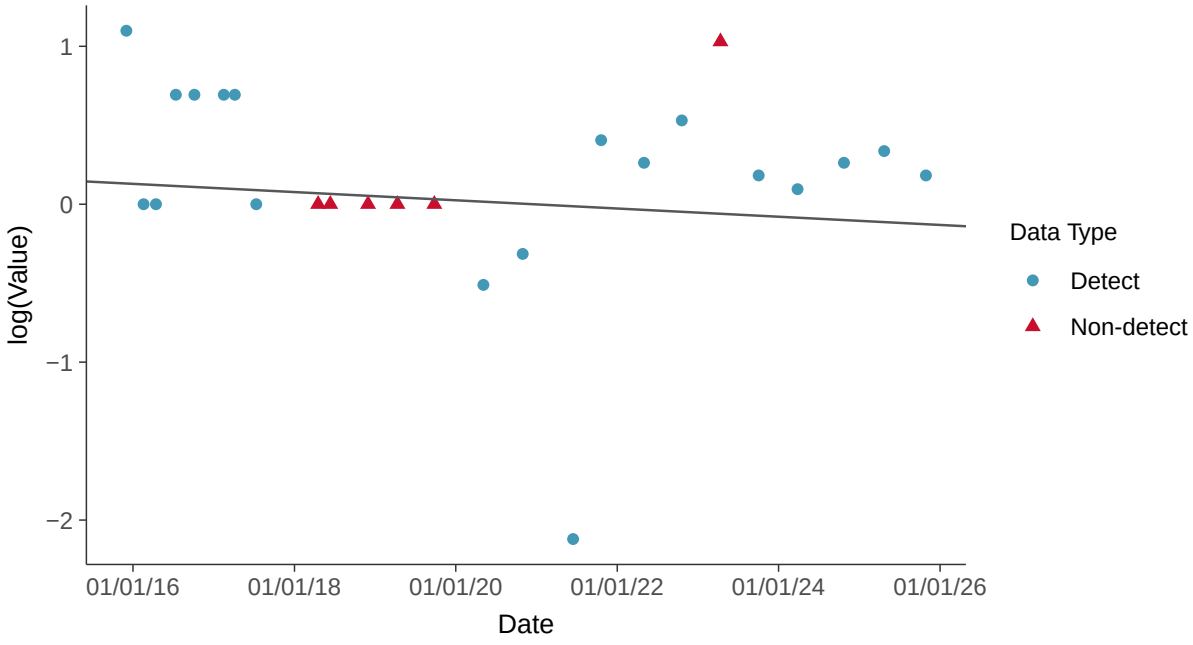

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15021 (ug/L)



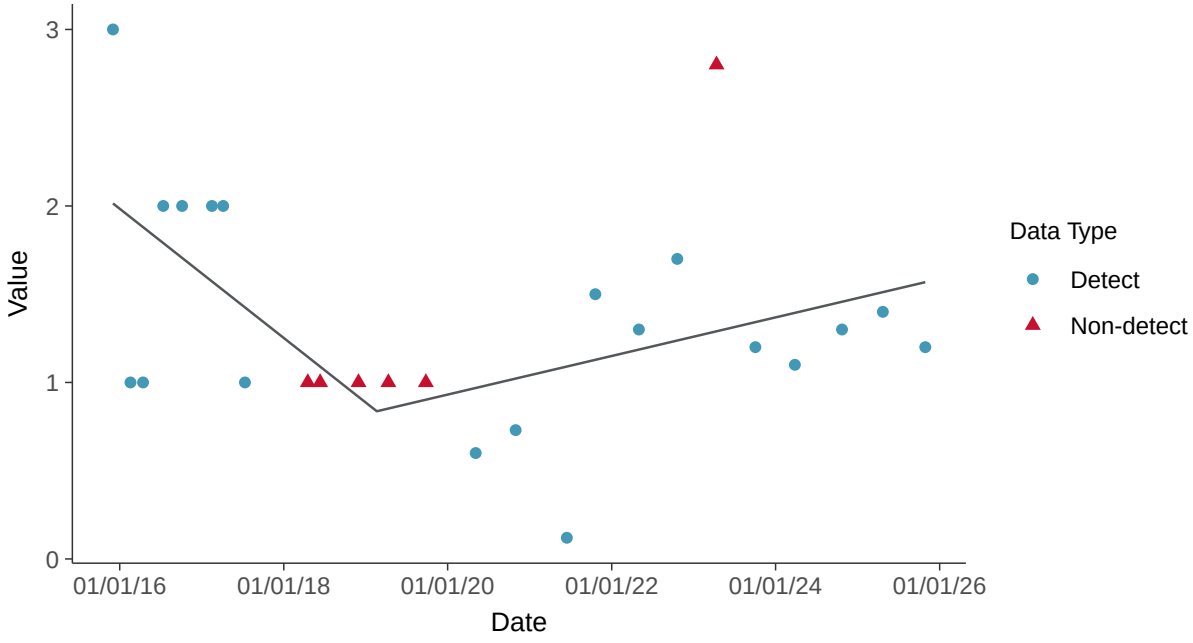
**Trend Regression: Lognormal MLE**

Arsenic, MW-15021 (ug/L)



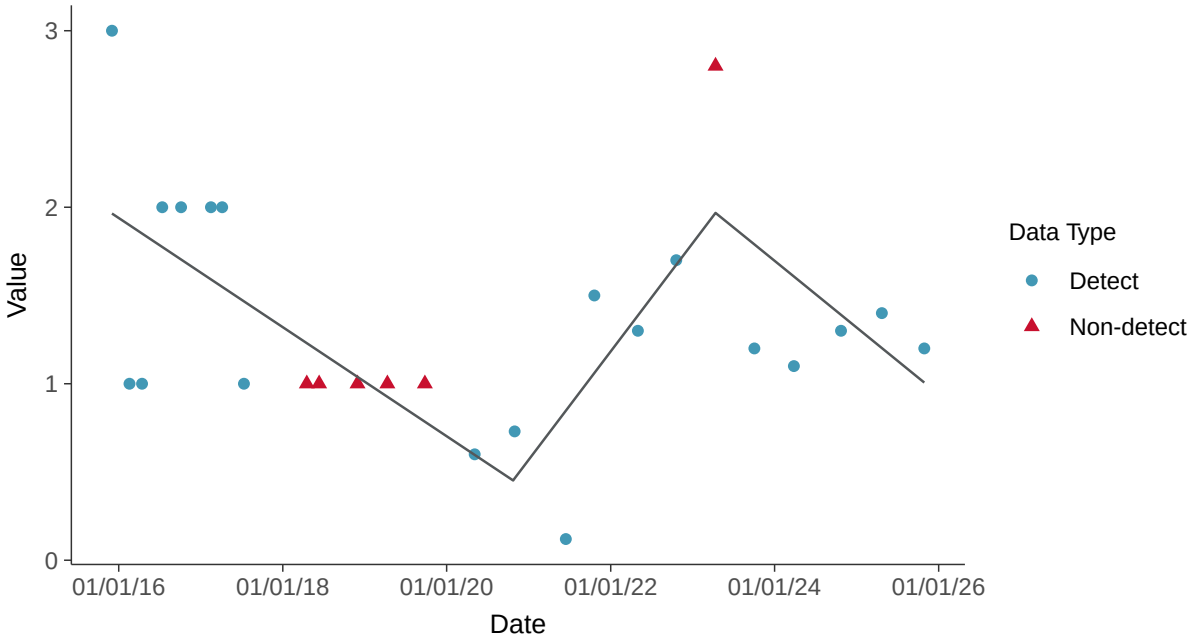

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15021 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15021 (ug/L)

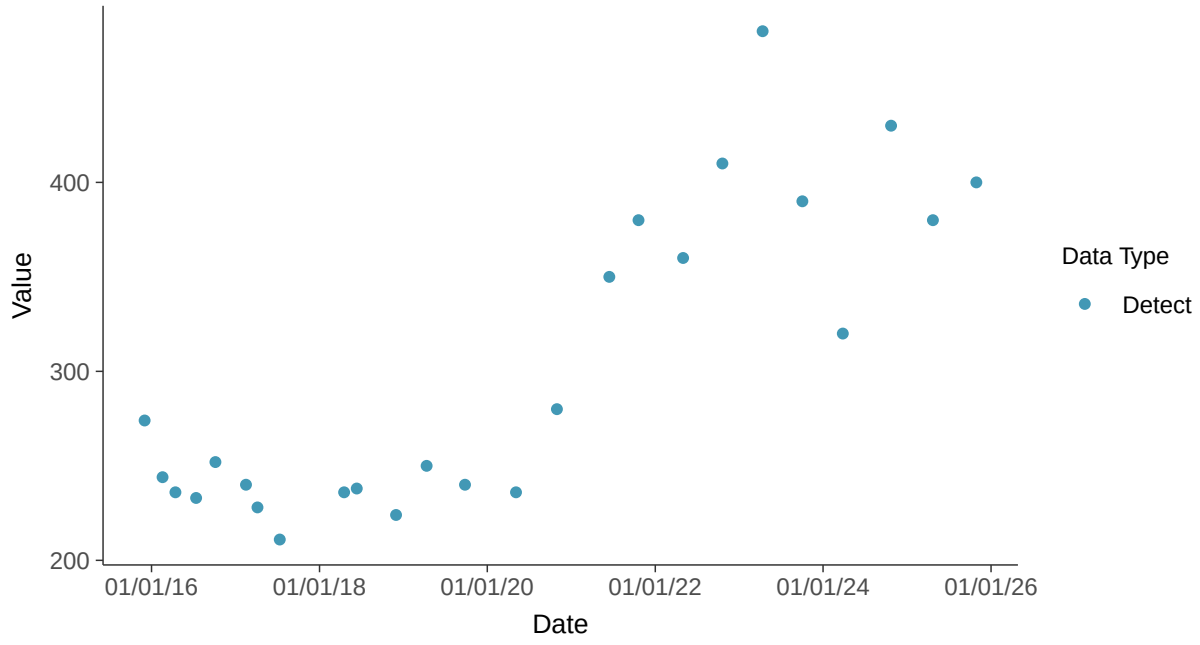


## Appendix IV: Barium, MW-15021

ID: 11_2_103

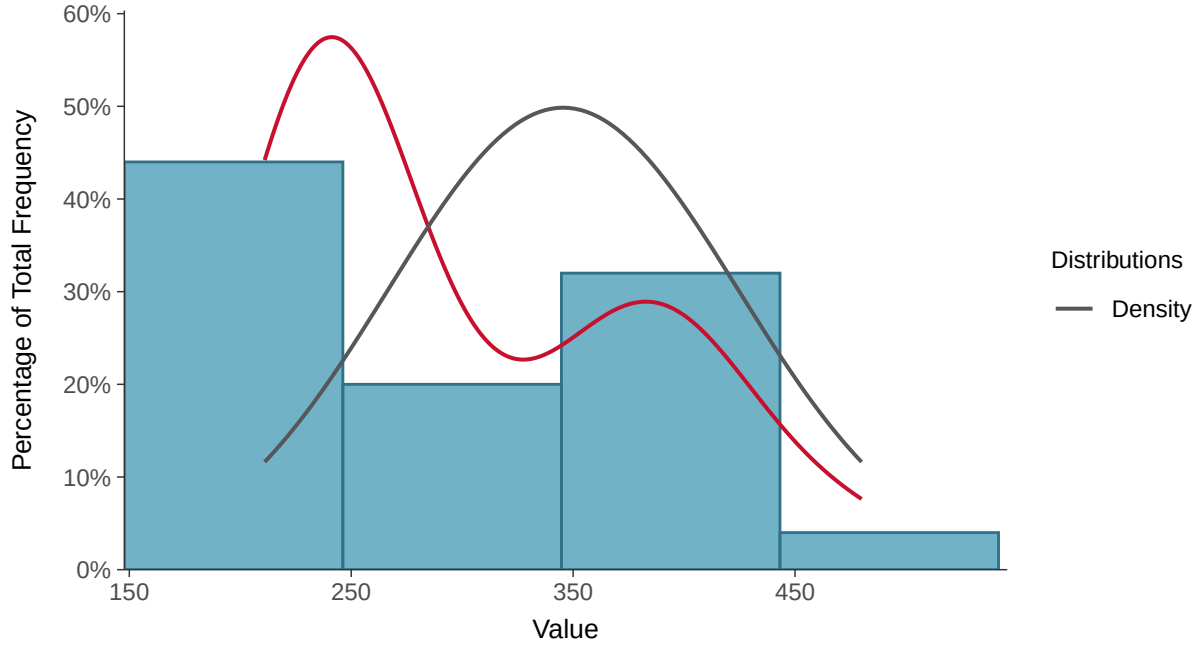
**Scatter Plot**

Barium, MW-15021 (ug/L)



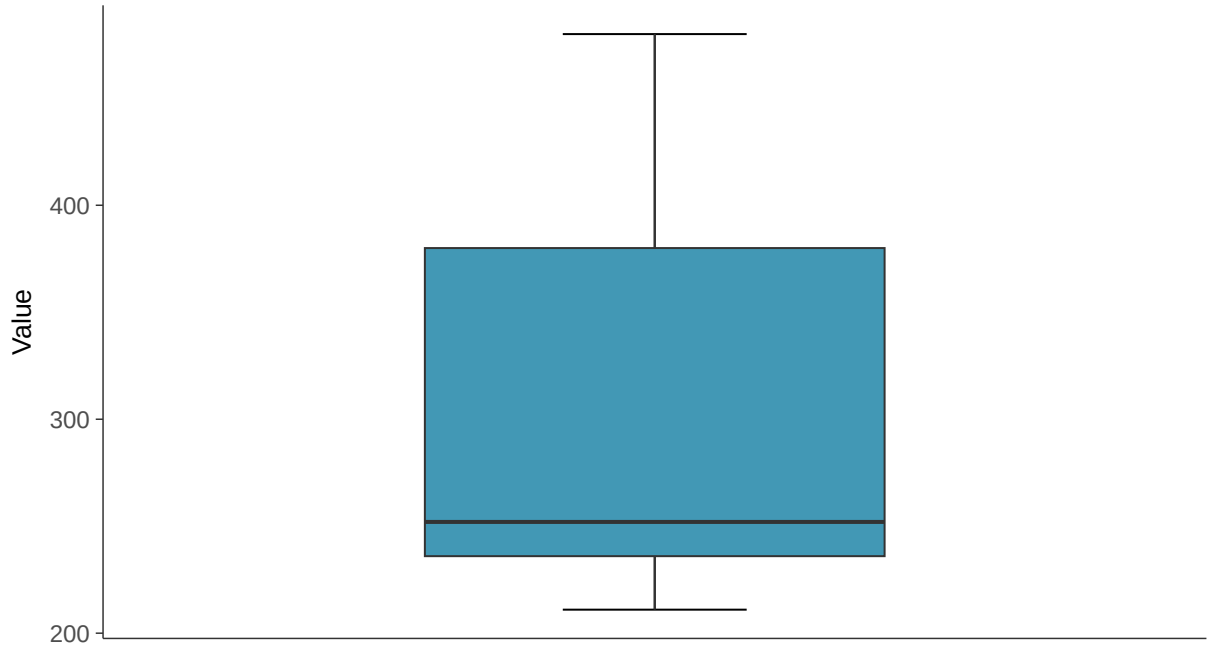

**Histogram**

Barium, MW-15021 (ug/L)



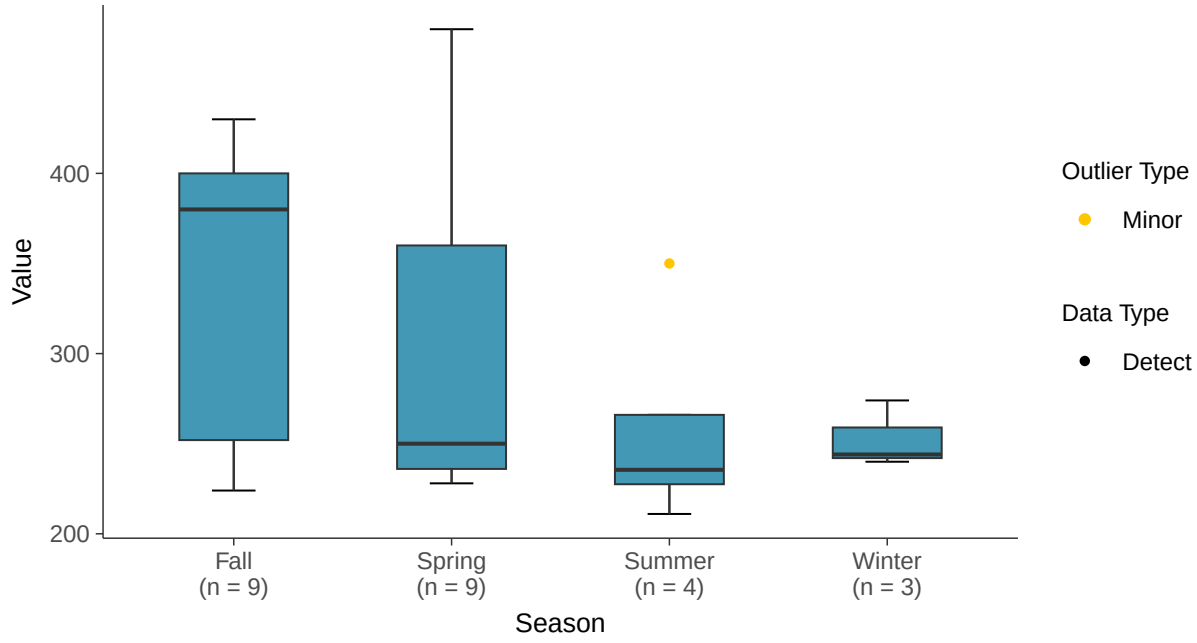
**Boxplot**

Barium, MW-15021 (ug/L)



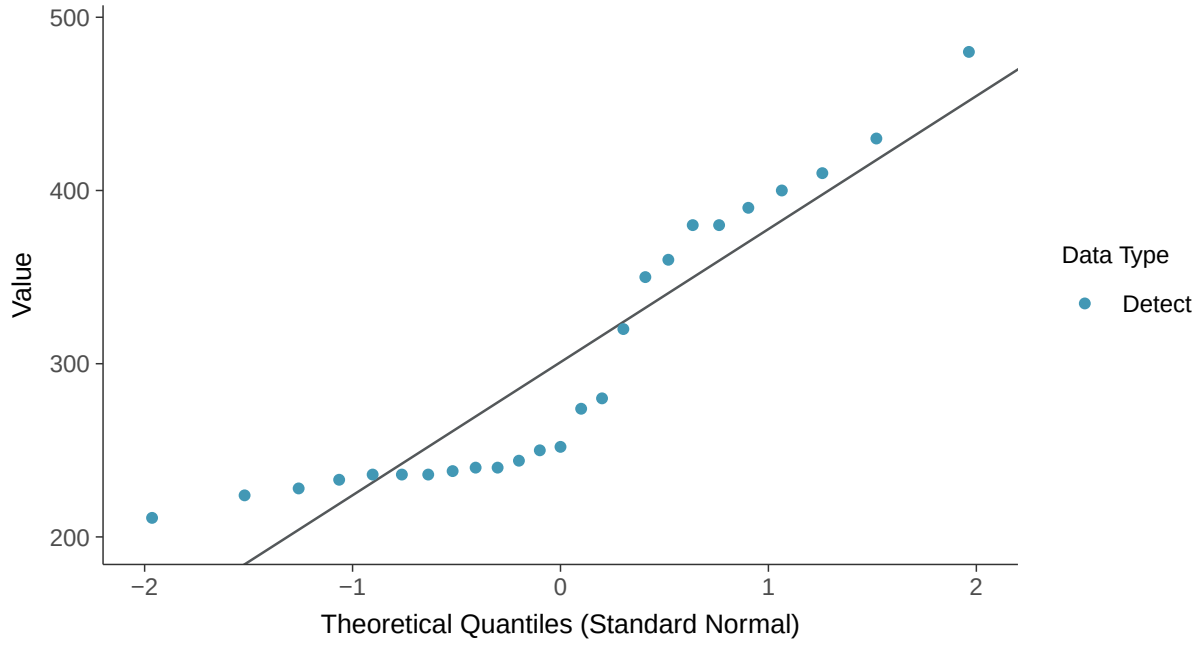

**Boxplot by Season**

Barium, MW-15021 (ug/L)



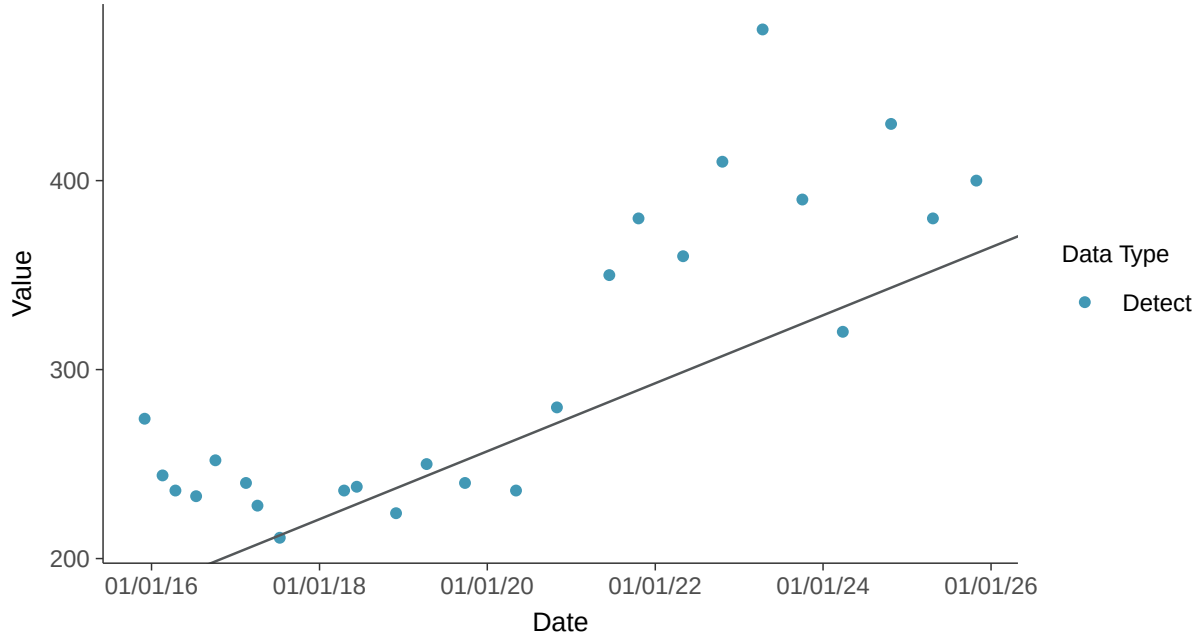
**Normal Q-Q plot**

Barium, MW-15021 (ug/L)



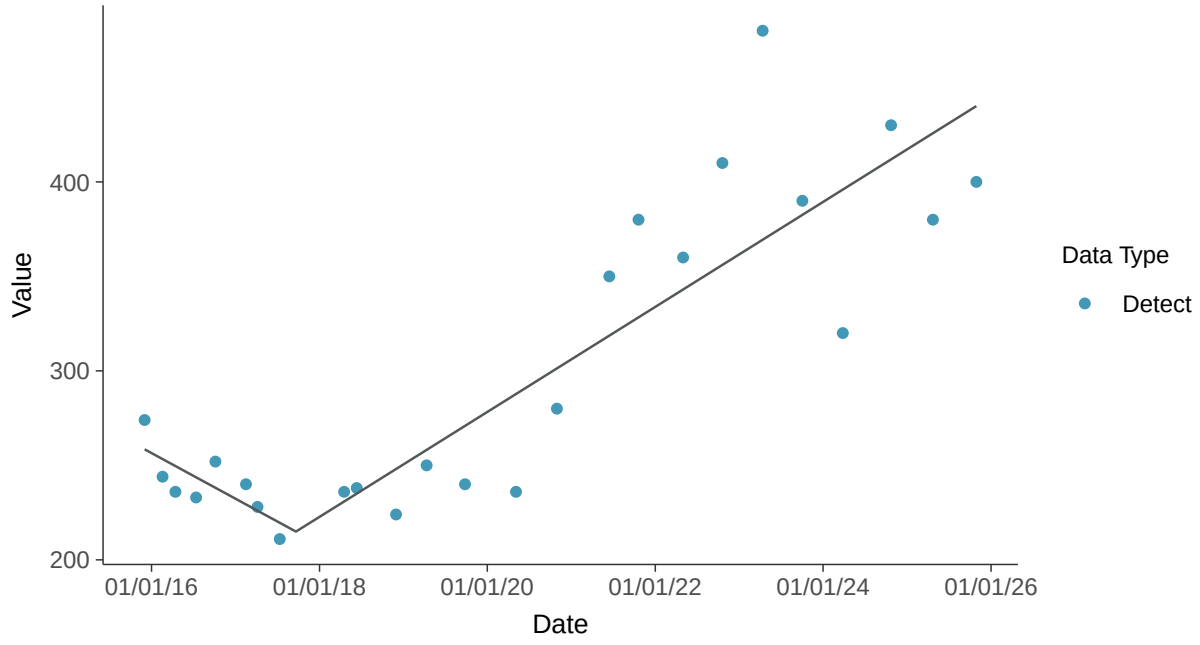

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Barium, MW-15021 (ug/L)



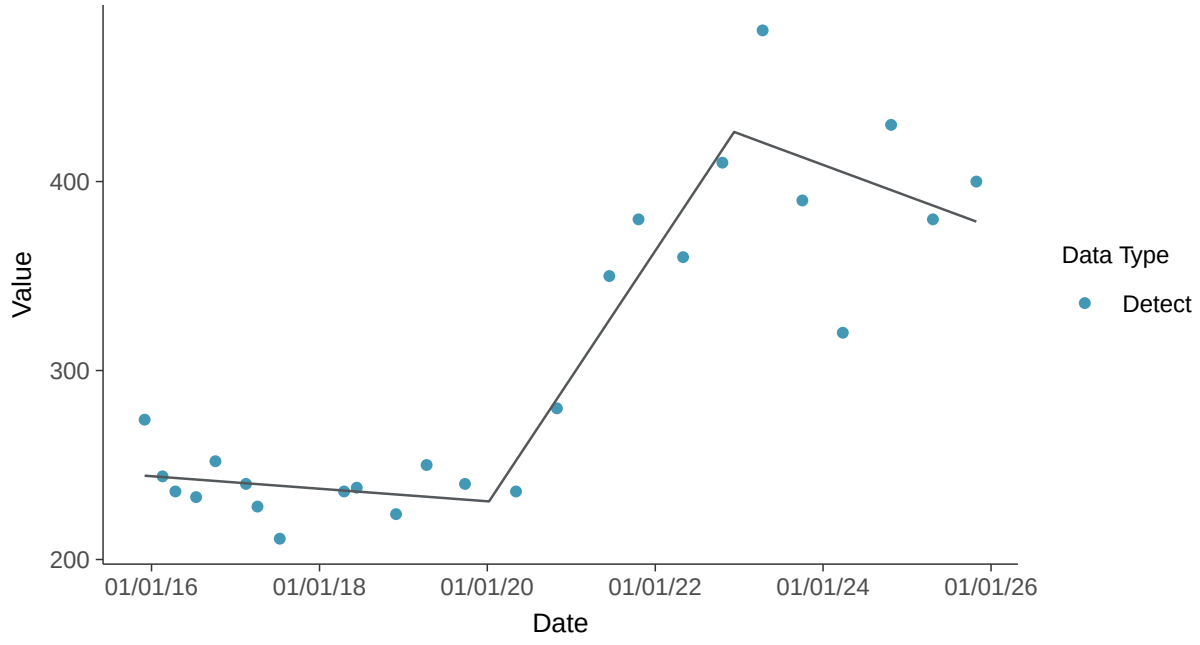
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15021 (ug/L)



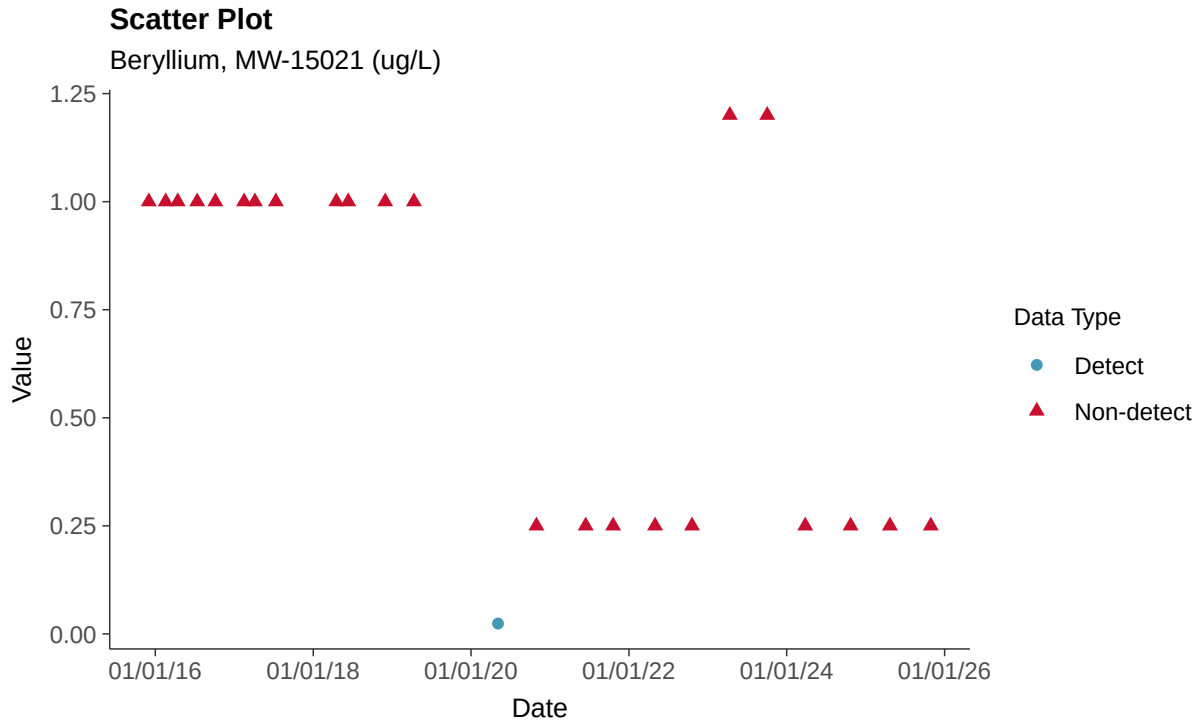

**Trend Regression: Piecewise Linear-Linear-Linear**

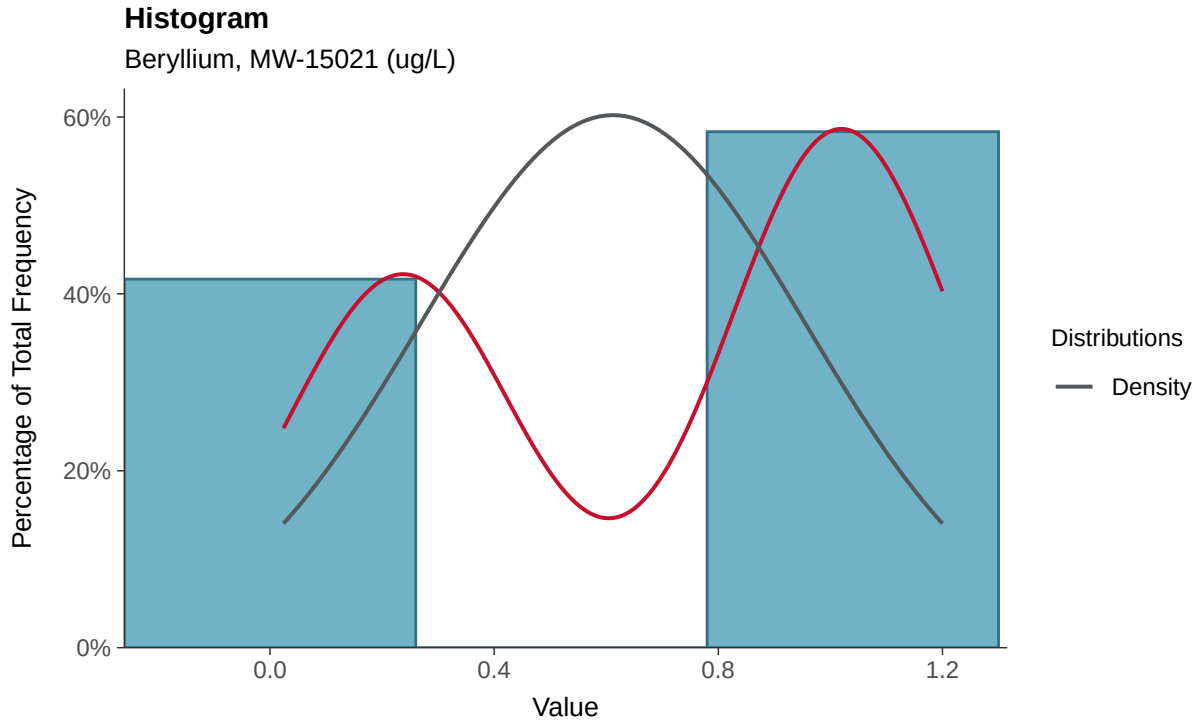
Barium, MW-15021 (ug/L)



## Appendix IV: Beryllium, MW-15021

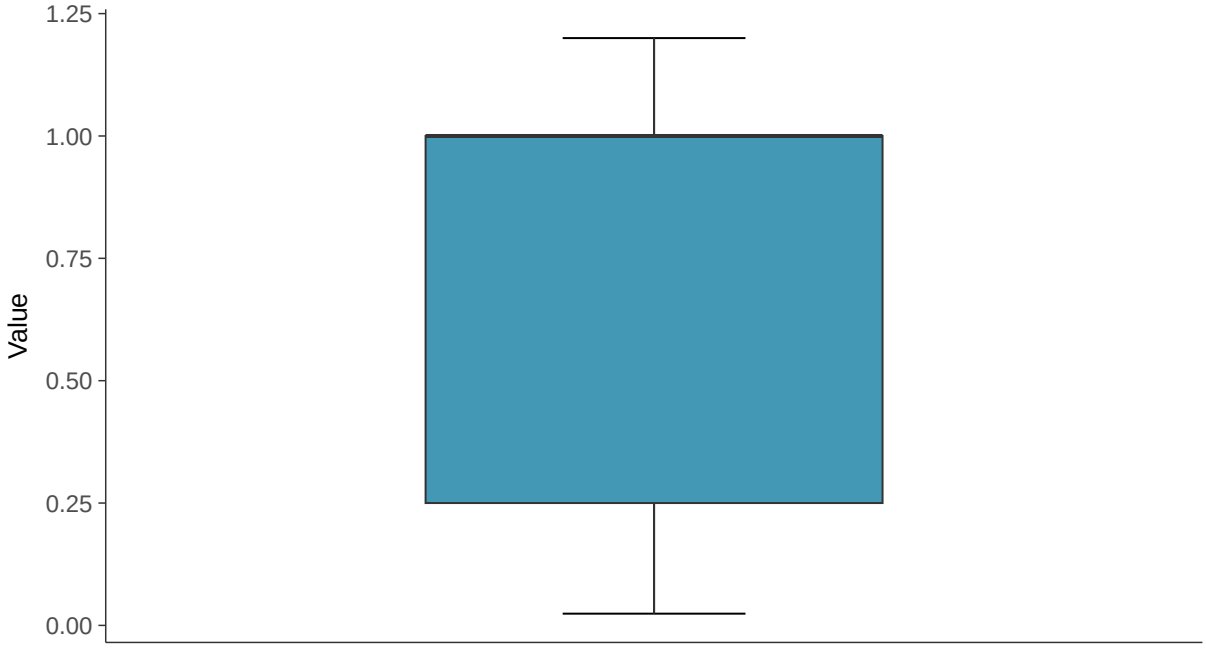
ID: 11_2_104



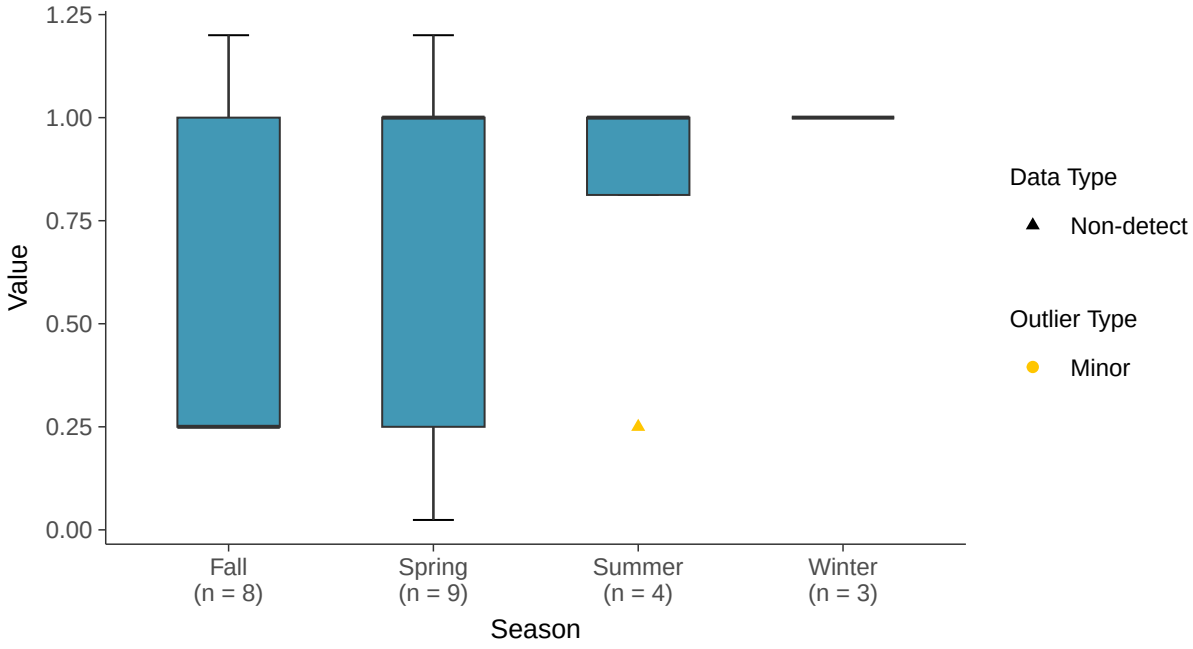
## Boxplot

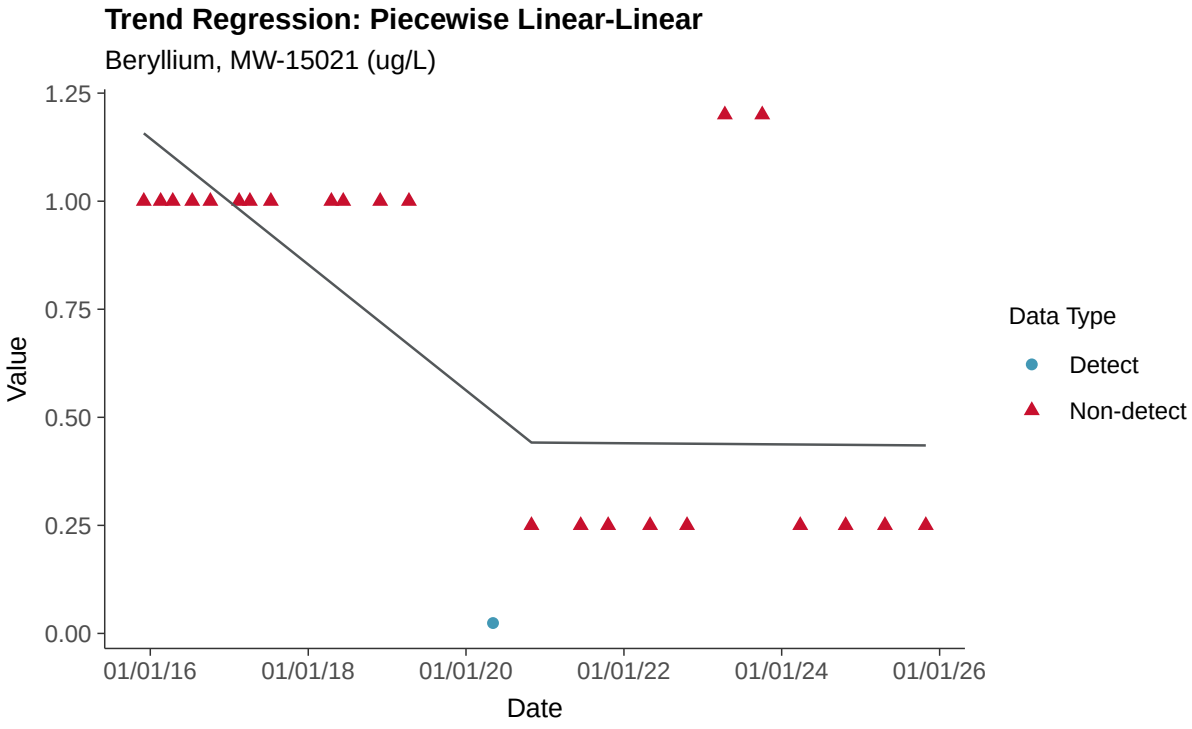
Beryllium, MW-15021 (ug/L)




## Boxplot by Season

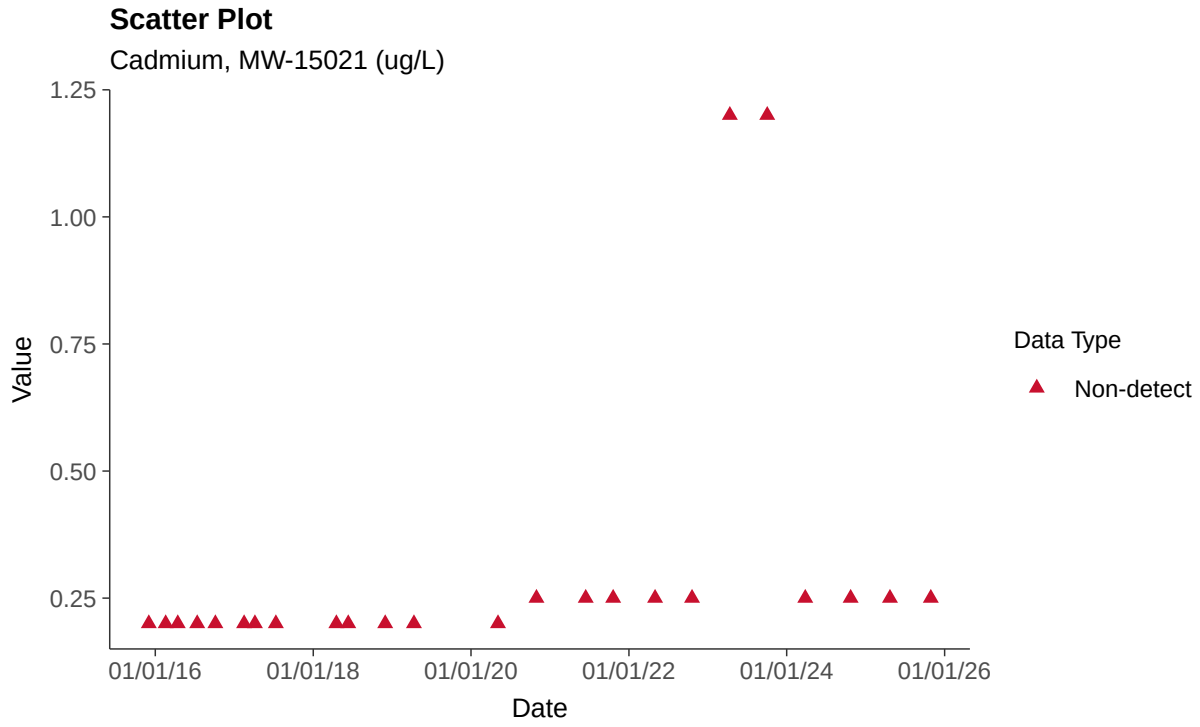
Beryllium, MW-15021 (ug/L)

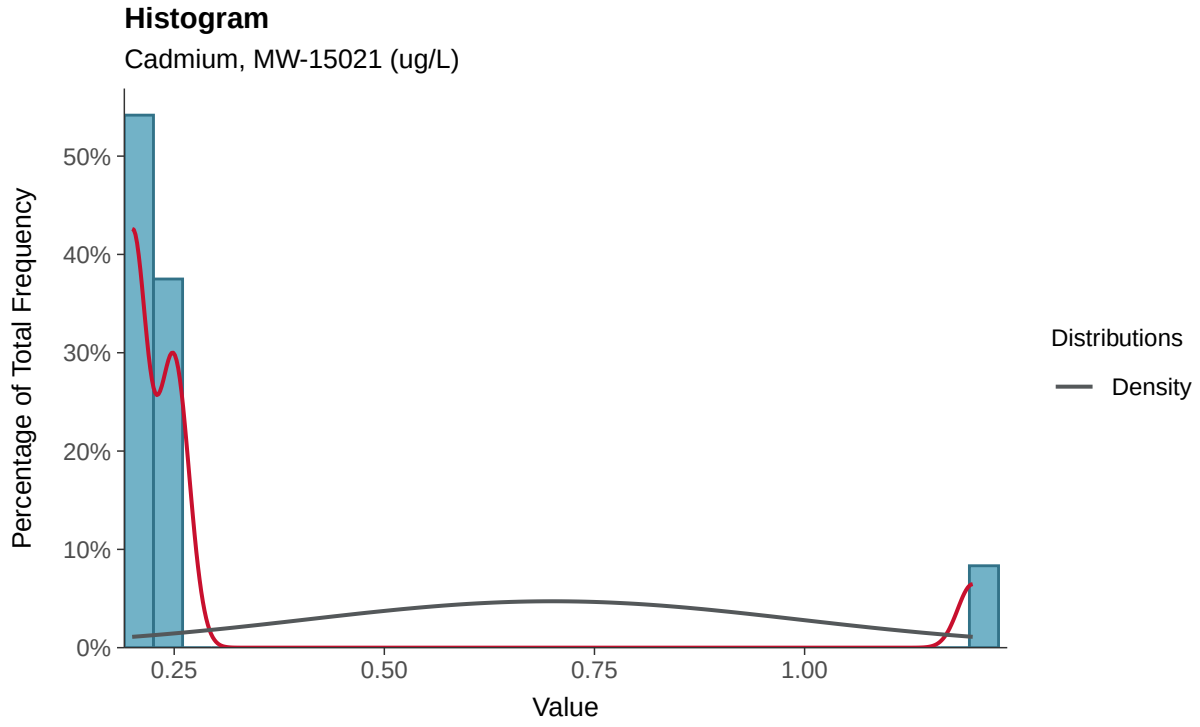



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15021 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
0.00
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-15021

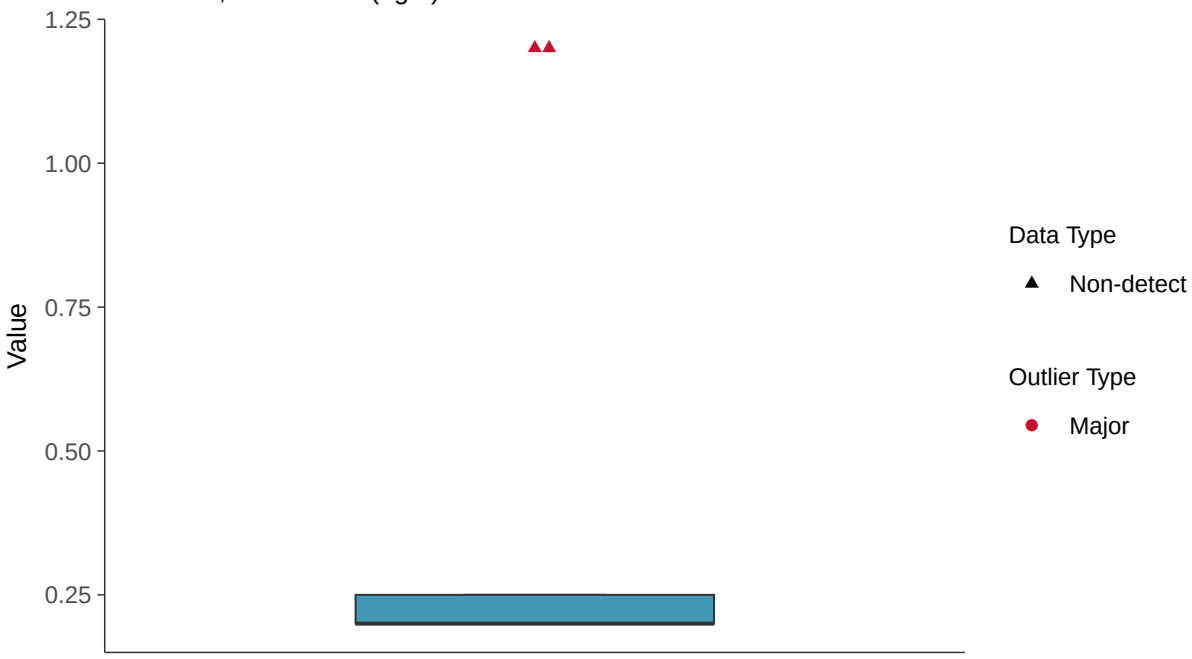
ID: 11_2_106



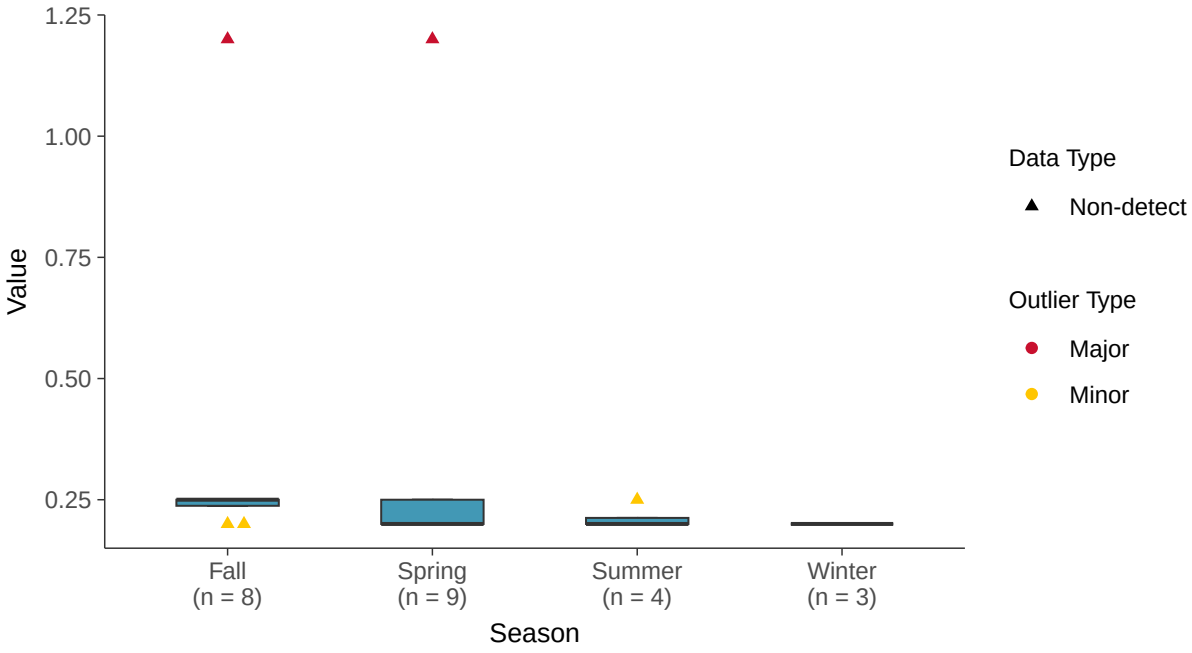
## Boxplot

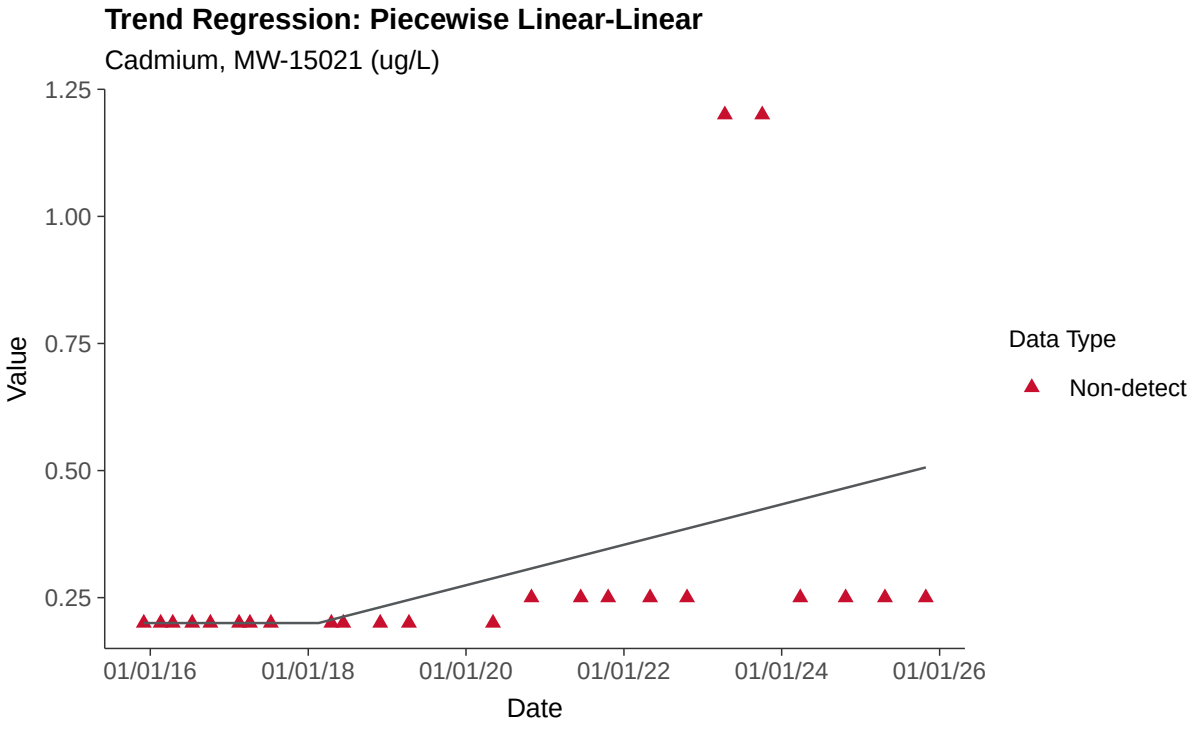
Cadmium, MW-15021 (ug/L)




## Boxplot by Season

Cadmium, MW-15021 (ug/L)



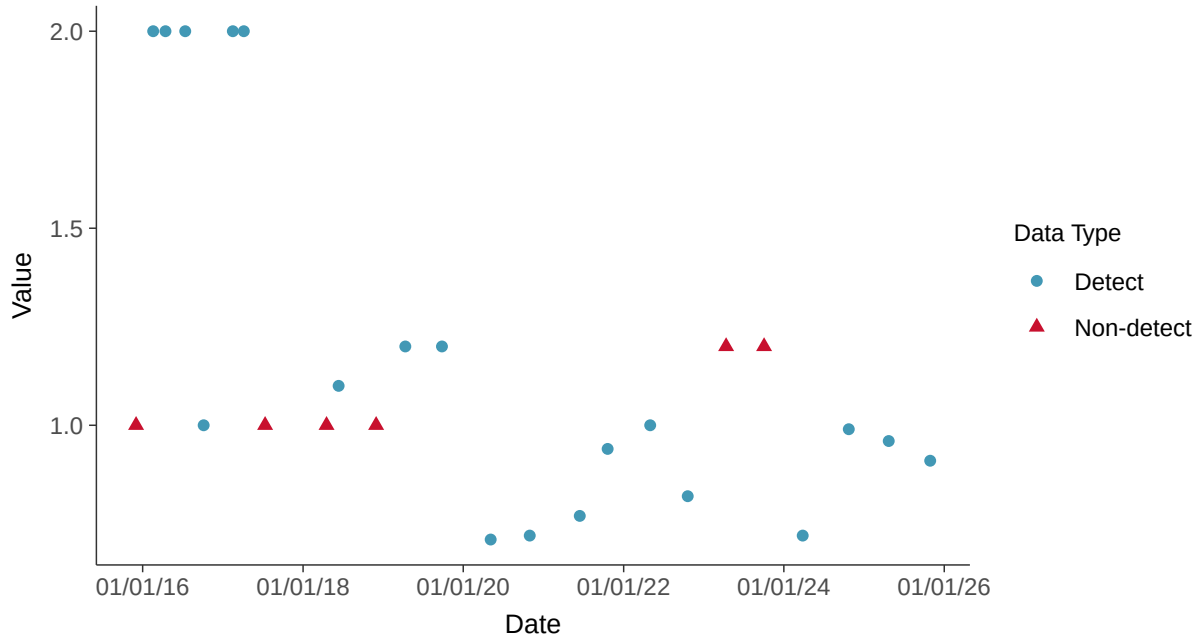

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15021 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15021

ID: 11_2_109

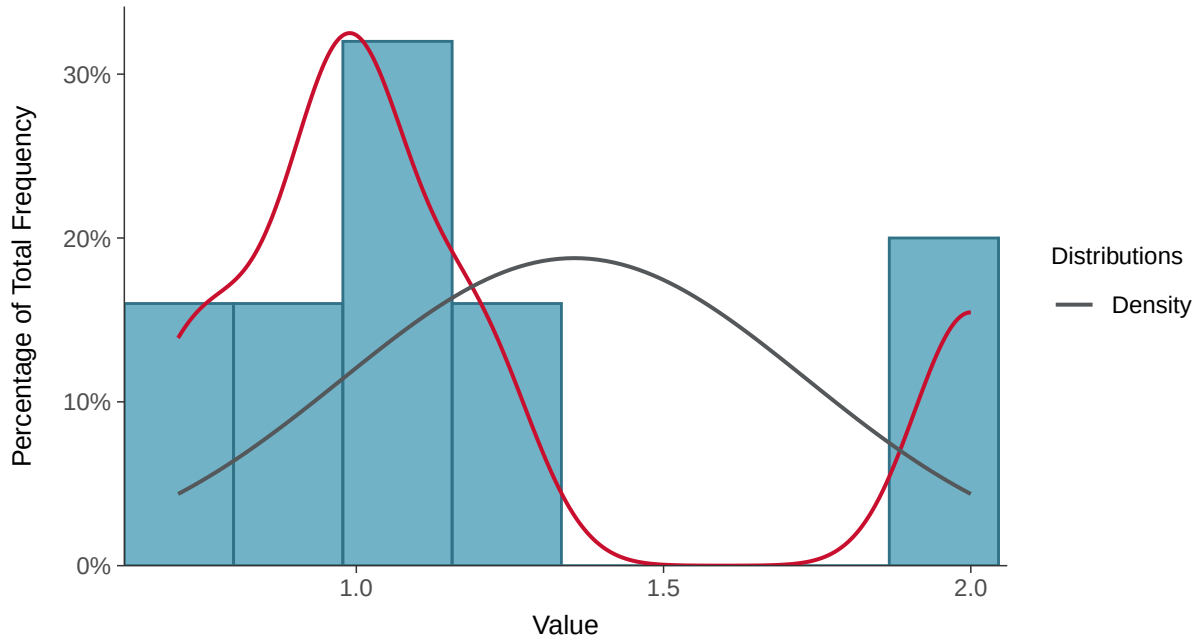
**Scatter Plot**

Chromium, MW-15021 (ug/L)



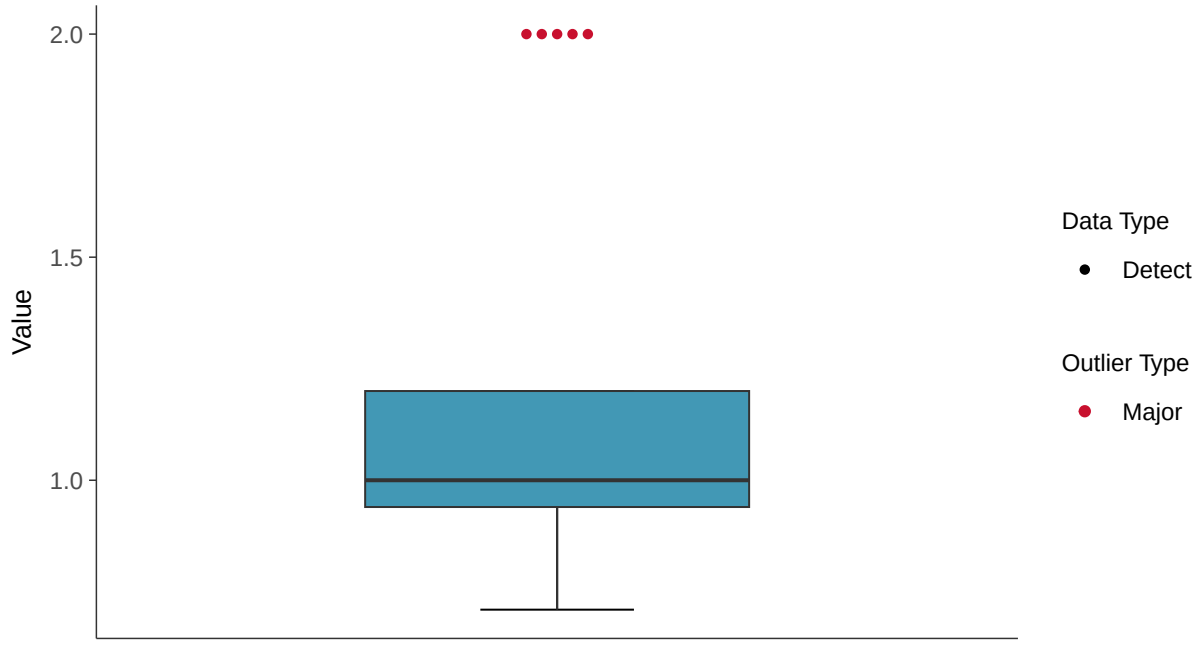

**Histogram**

Chromium, MW-15021 (ug/L)



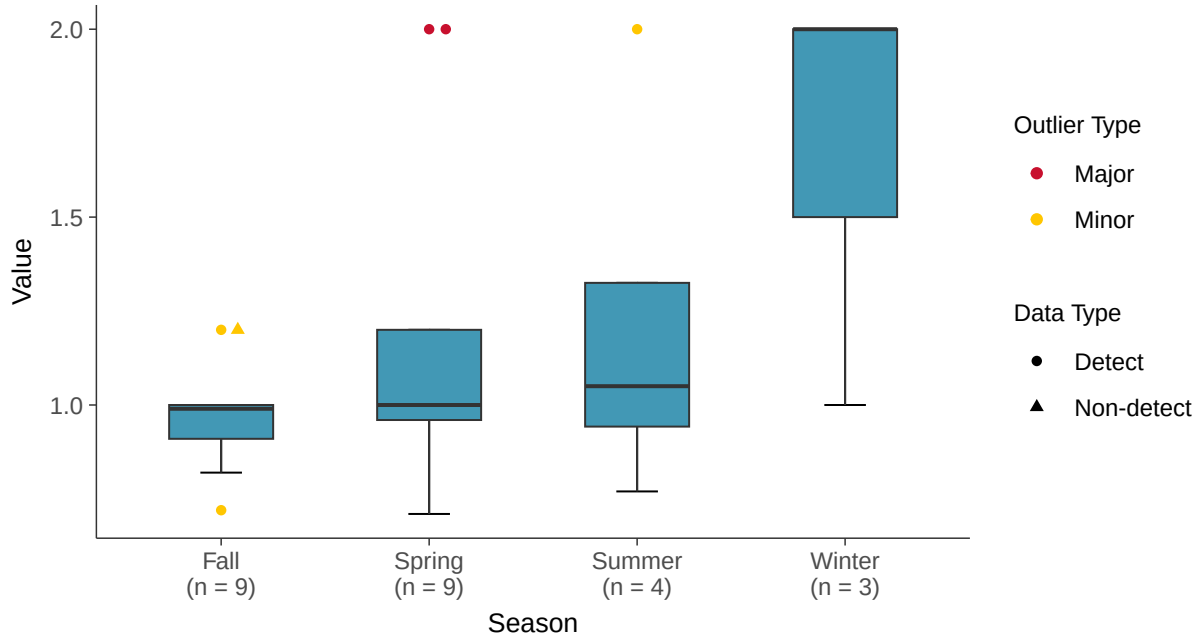
## Boxplot

Chromium, MW-15021 (ug/L)



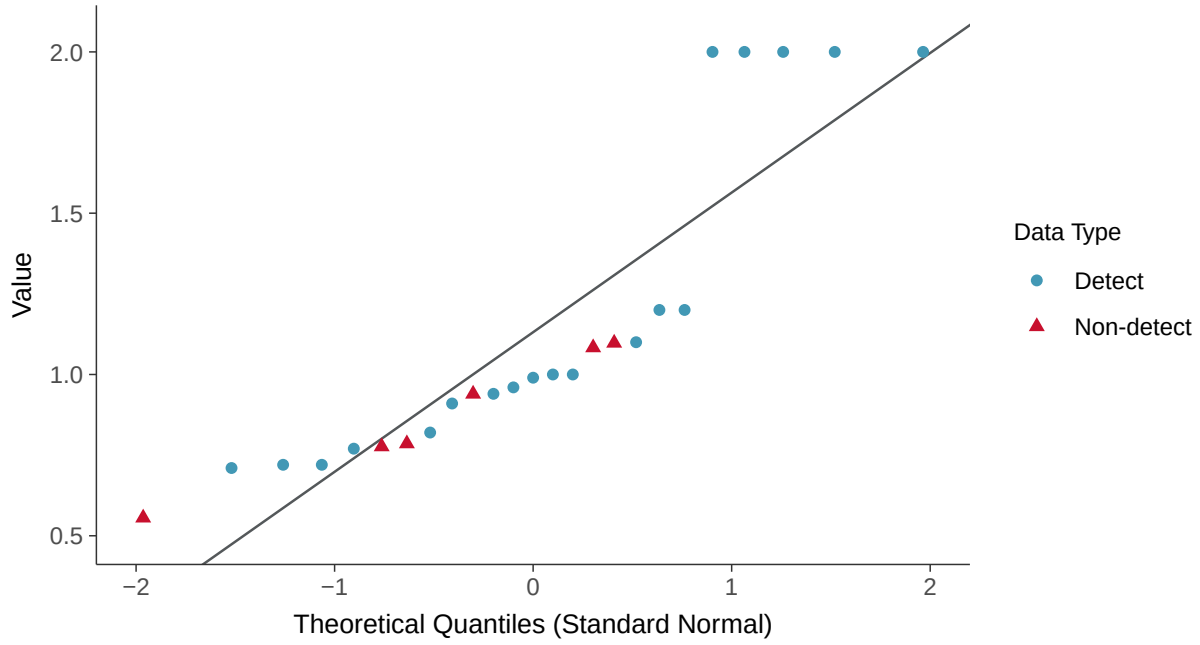

## Boxplot by Season

Chromium, MW-15021 (ug/L)



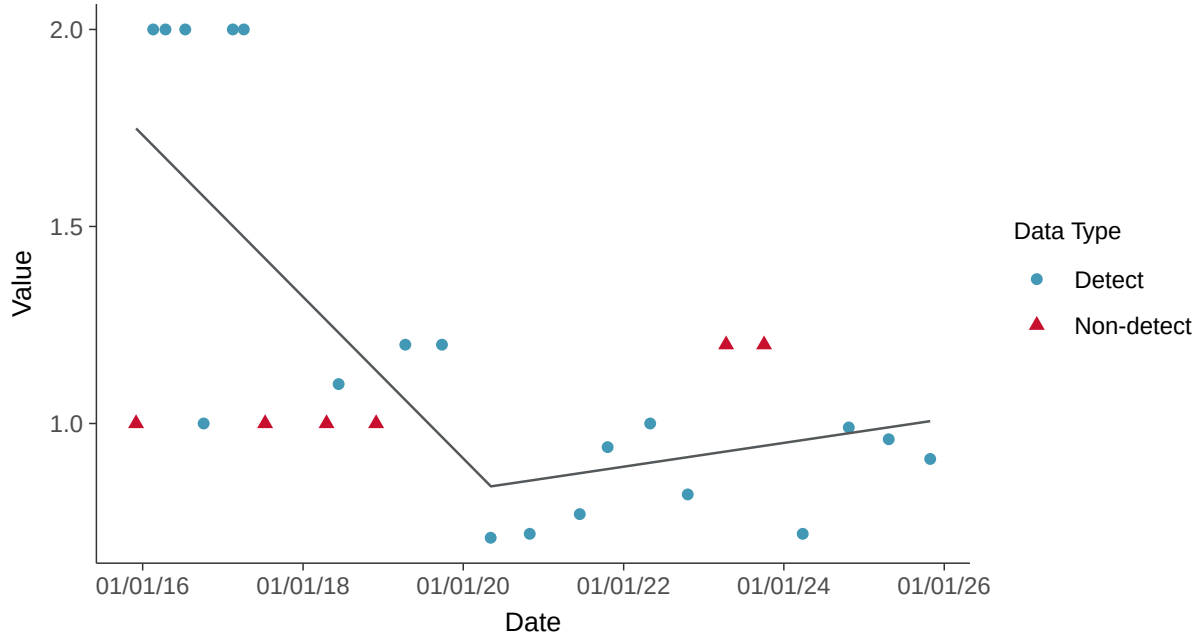
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15021 (ug/L)



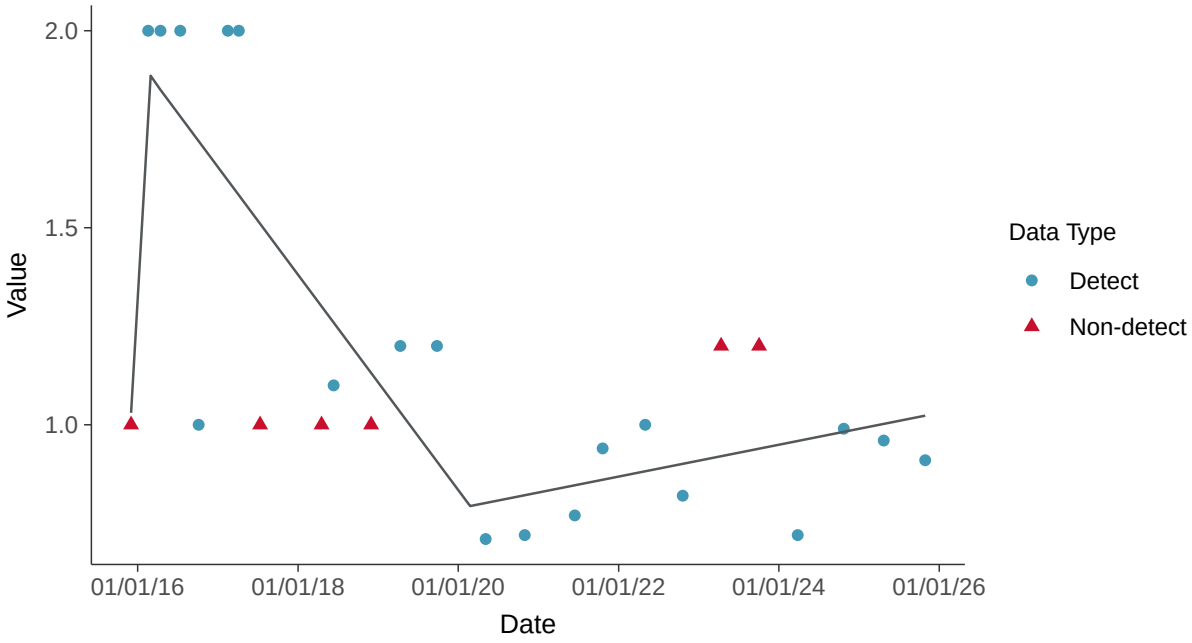

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15021 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Chromium, MW-15021 (ug/L)

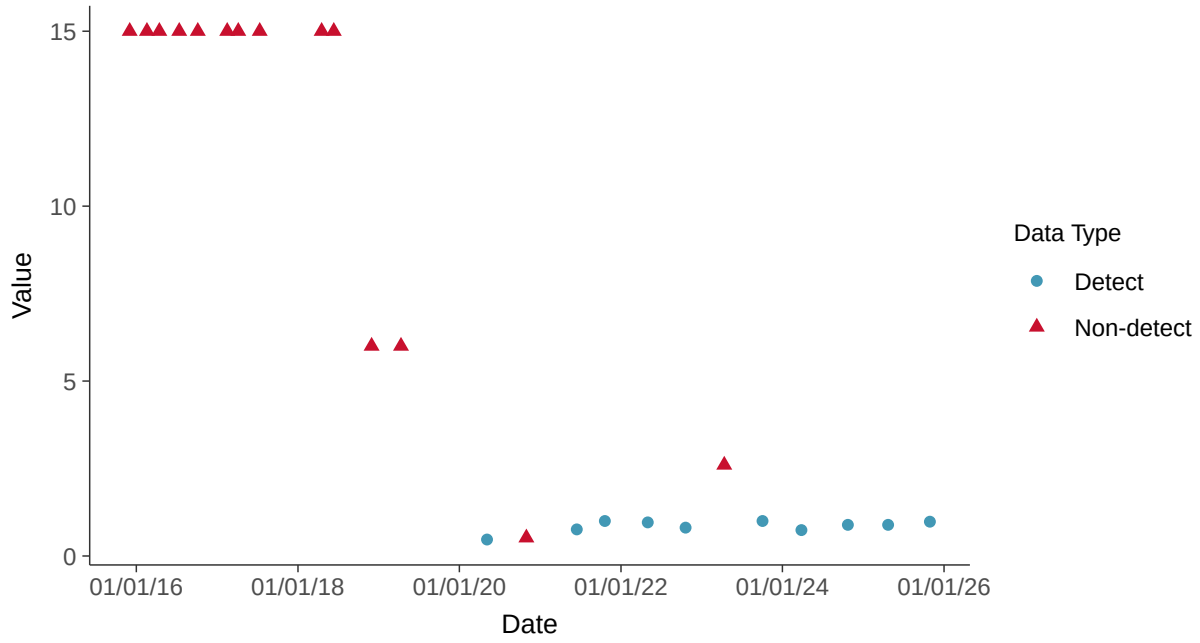


## Appendix IV: Cobalt, MW-15021

ID: 11_2_110

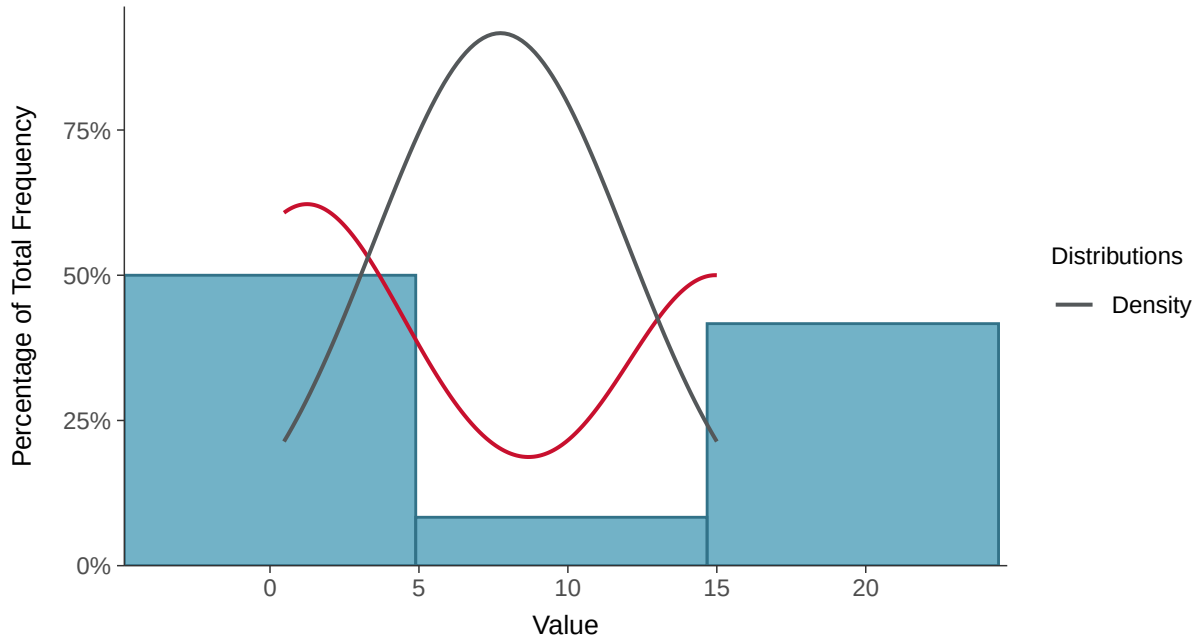
**Scatter Plot**

Cobalt, MW-15021 (ug/L)



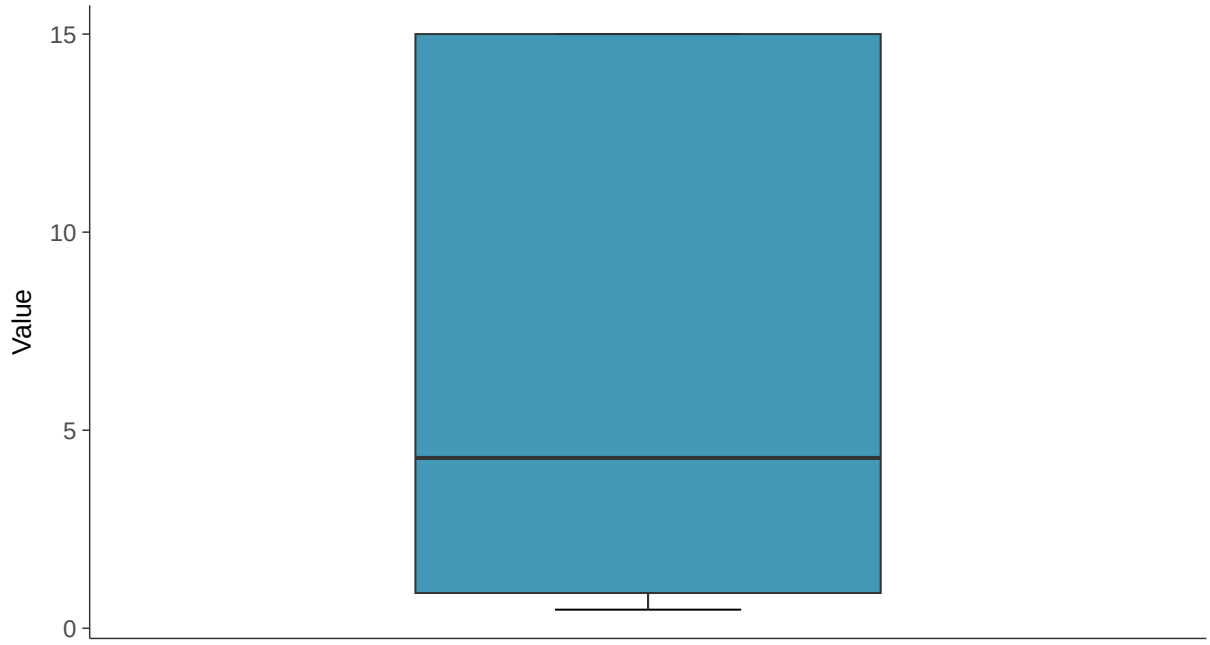

**Histogram**

Cobalt, MW-15021 (ug/L)



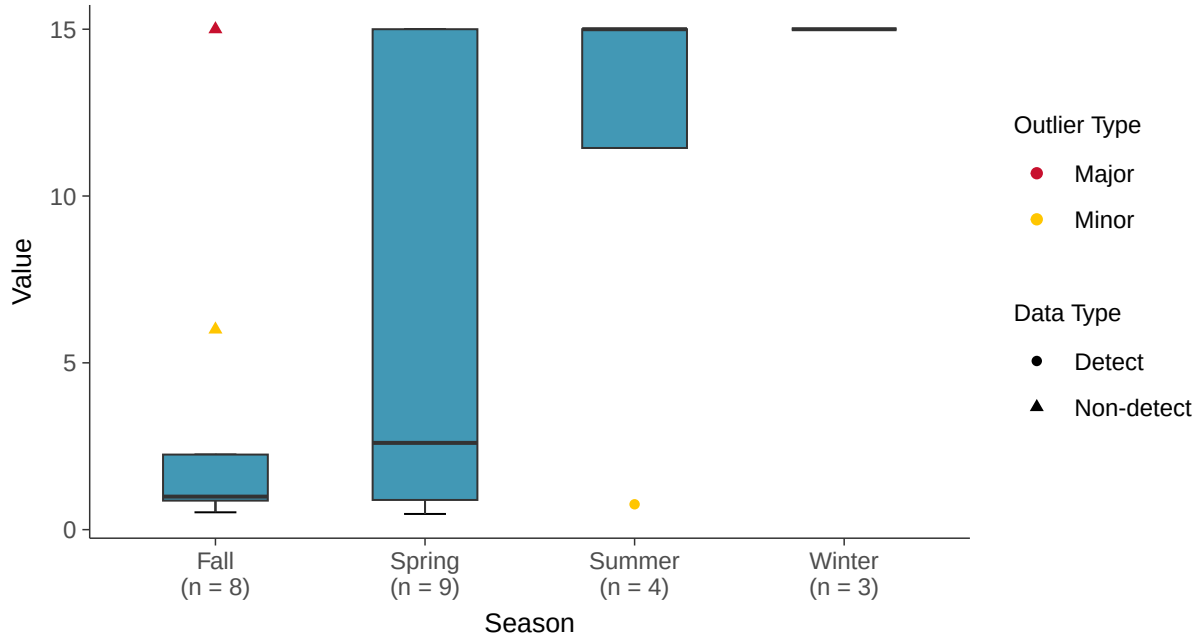
## Boxplot

Cobalt, MW-15021 (ug/L)



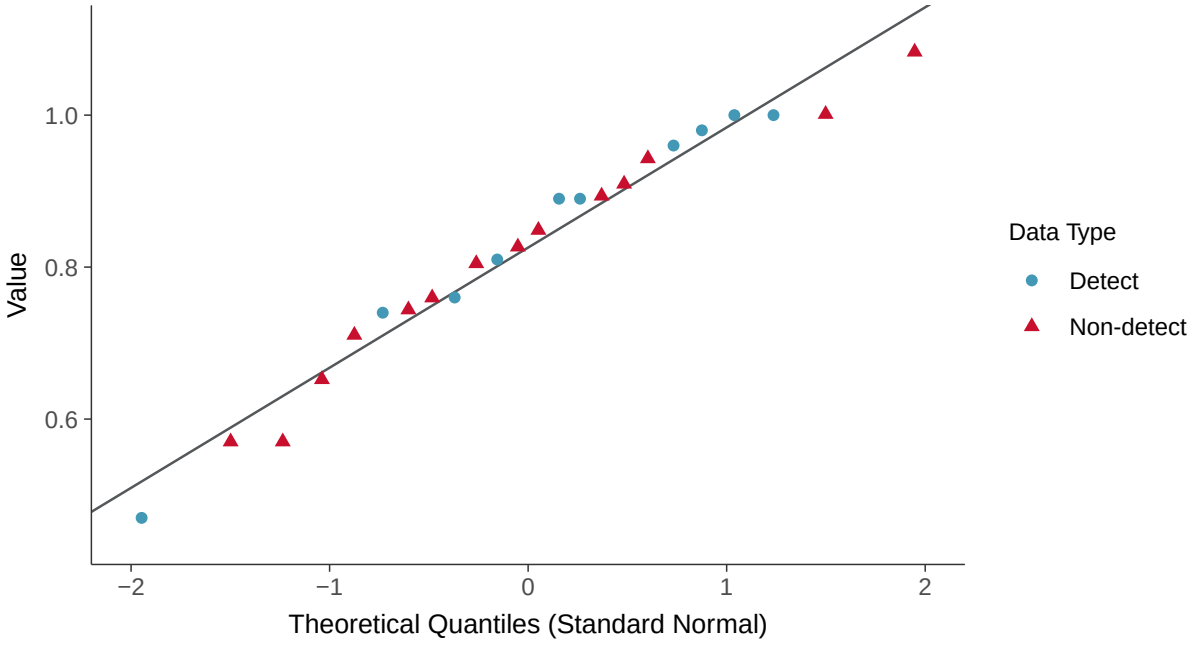

## Boxplot by Season

Cobalt, MW-15021 (ug/L)



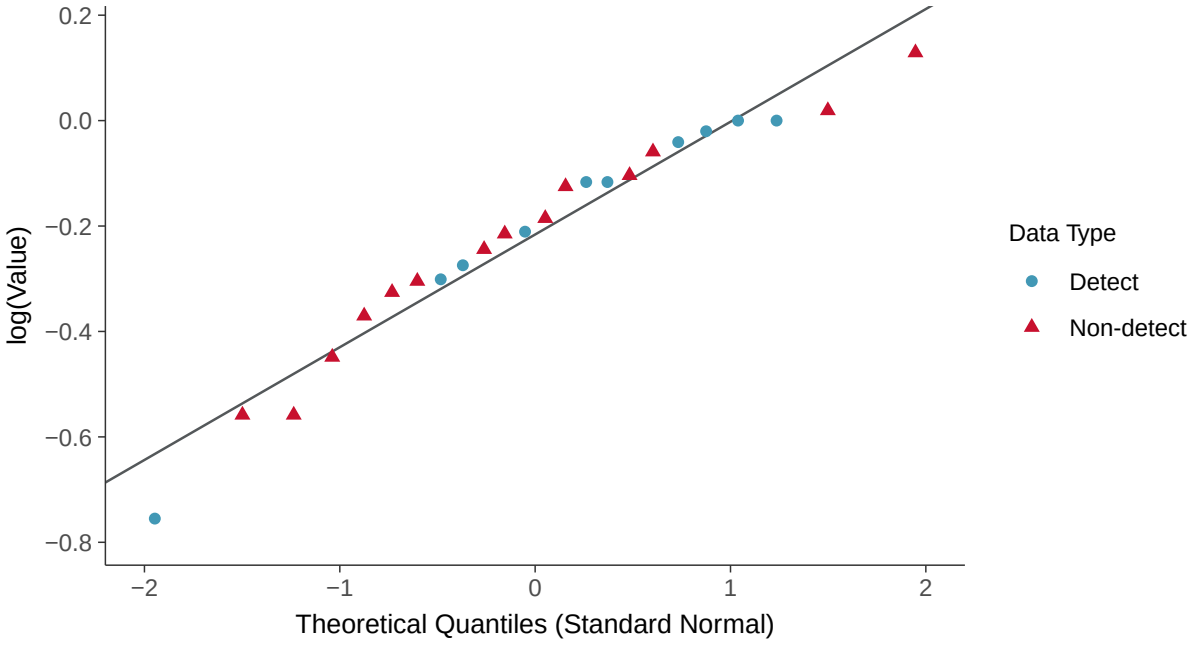
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15021 (ug/L)



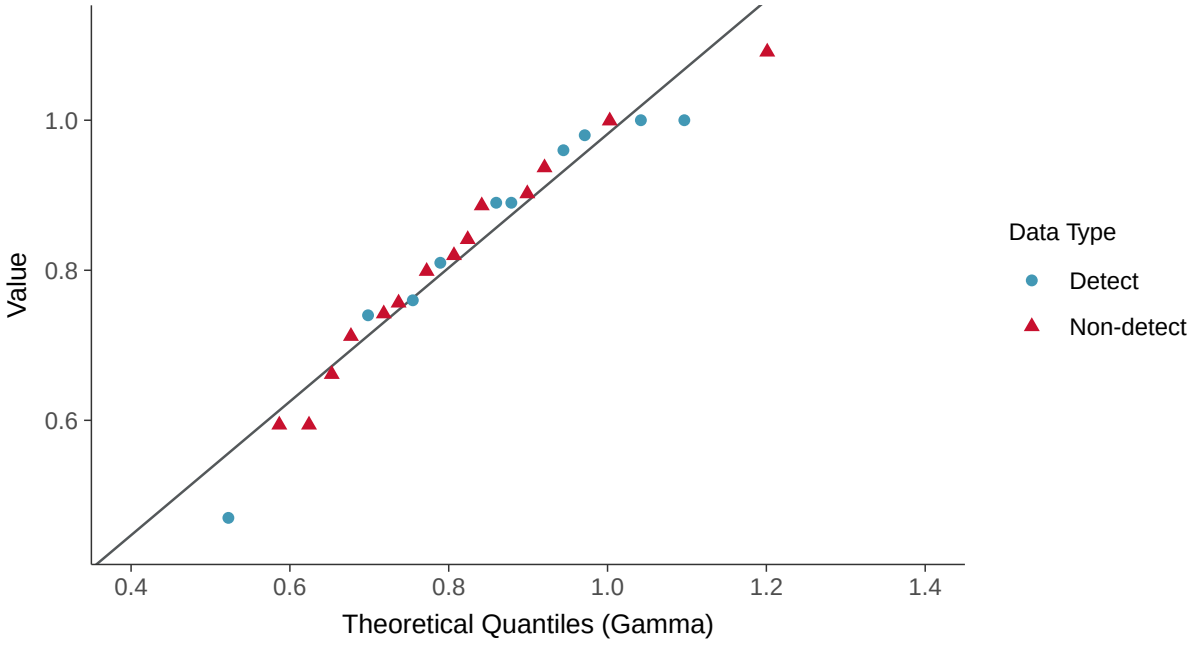

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15021 (ug/L)



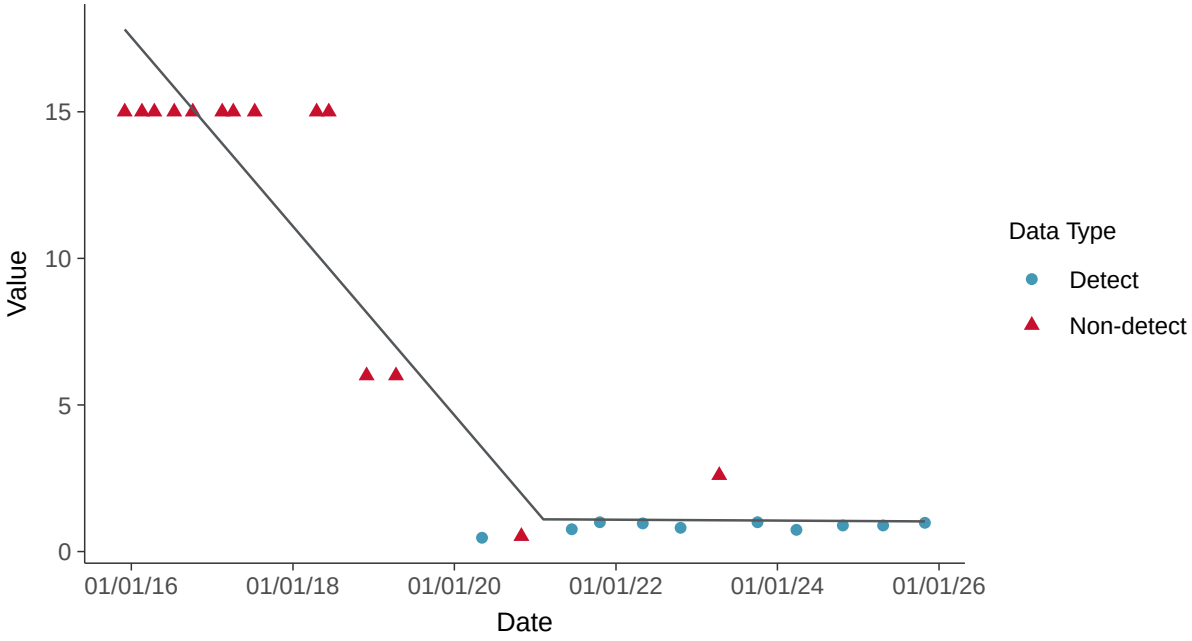
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15021 (ug/L)



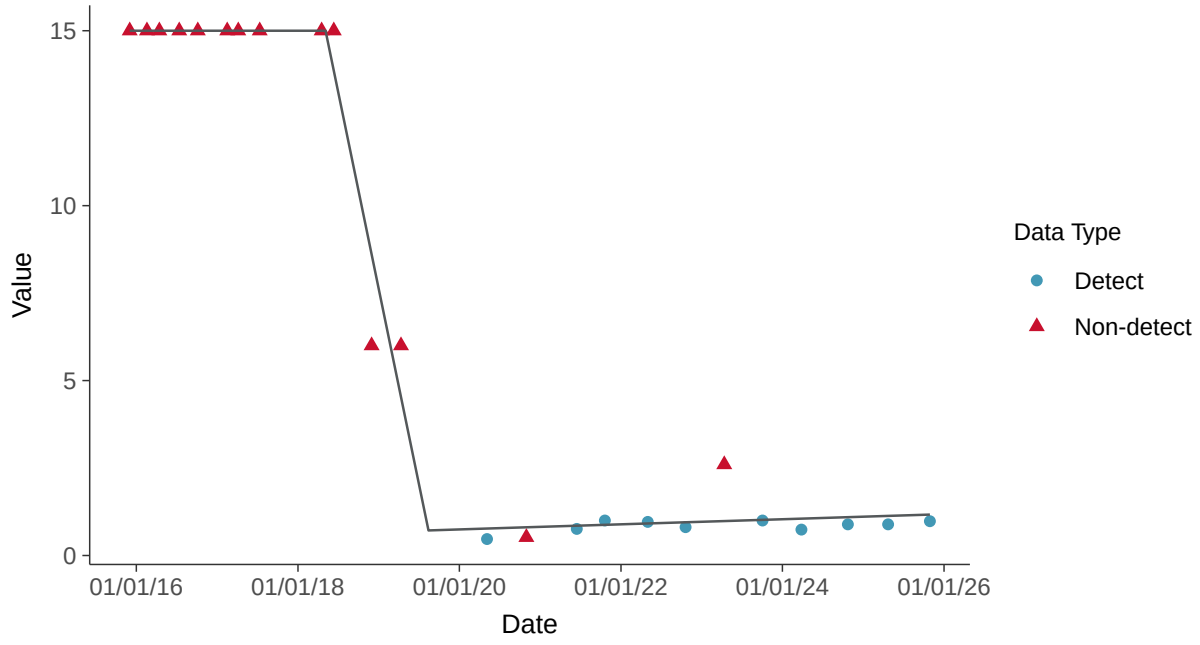

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15021 (ug/L)



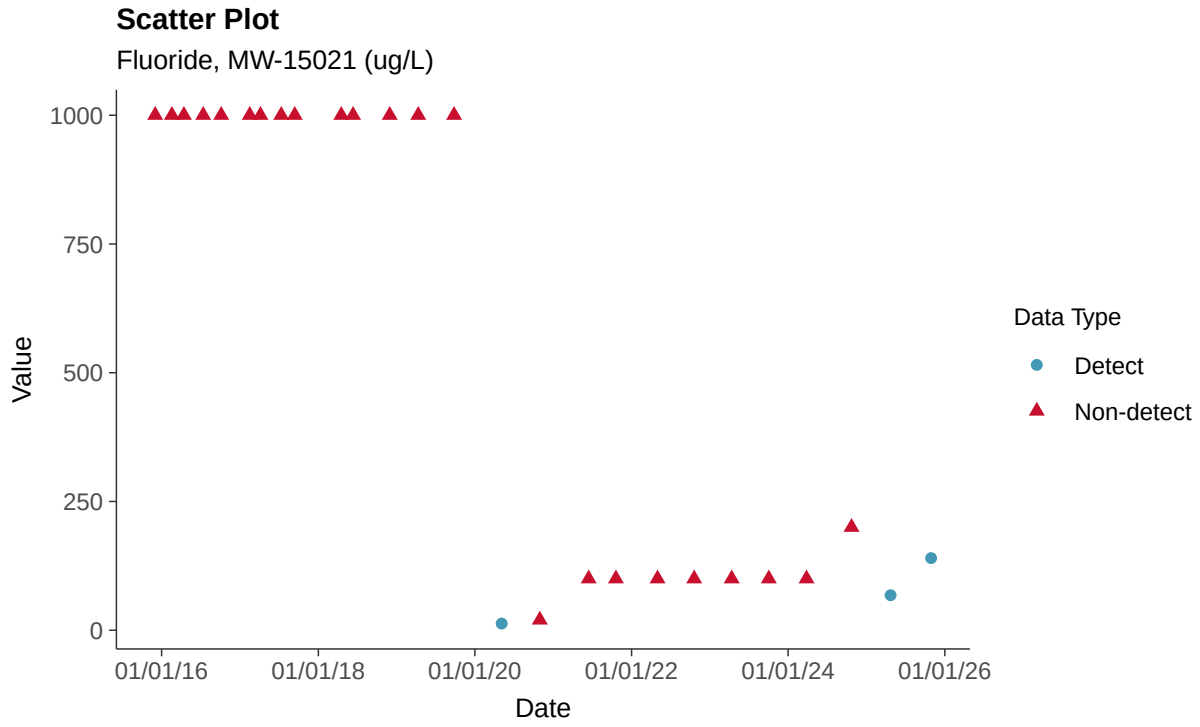
**Trend Regression: Piecewise Linear-Linear-Linear**

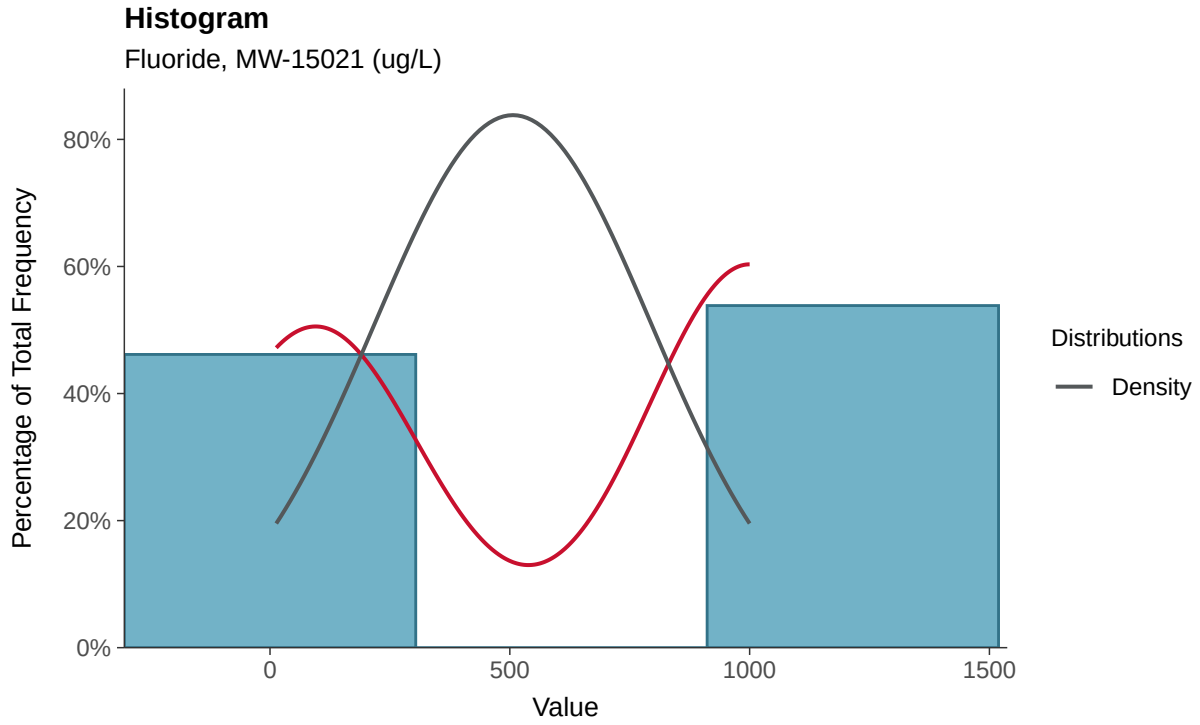
Cobalt, MW-15021 (ug/L)



## Appendix IV: Fluoride, MW-15021

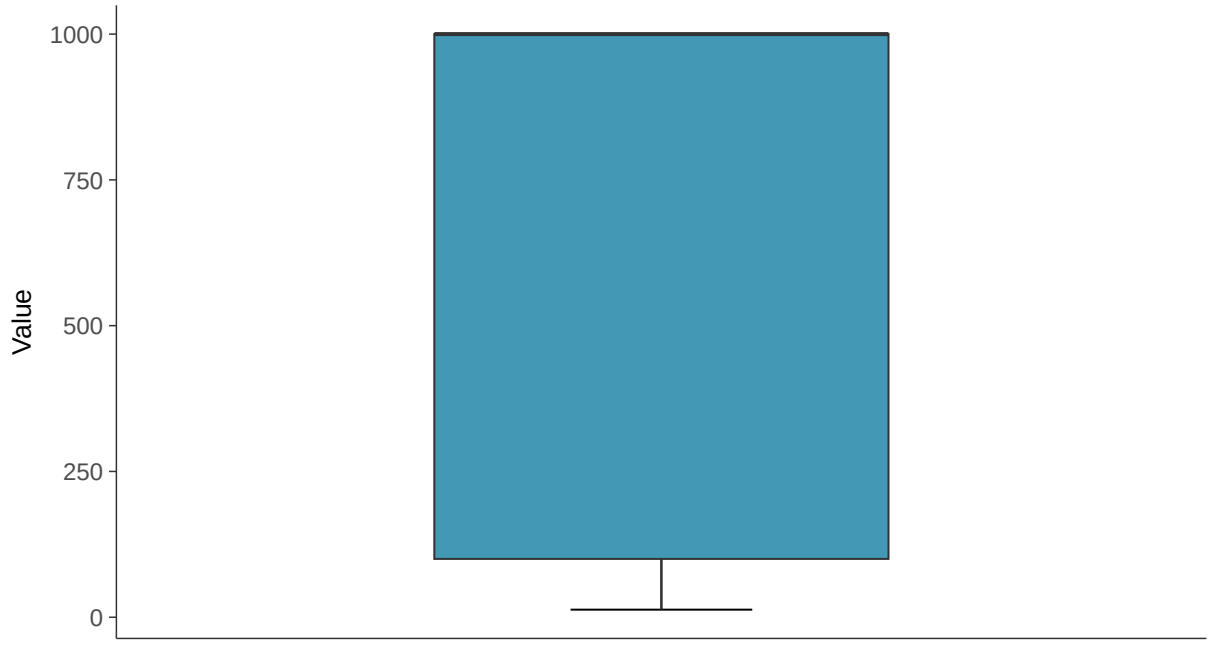
ID: 11_2_114



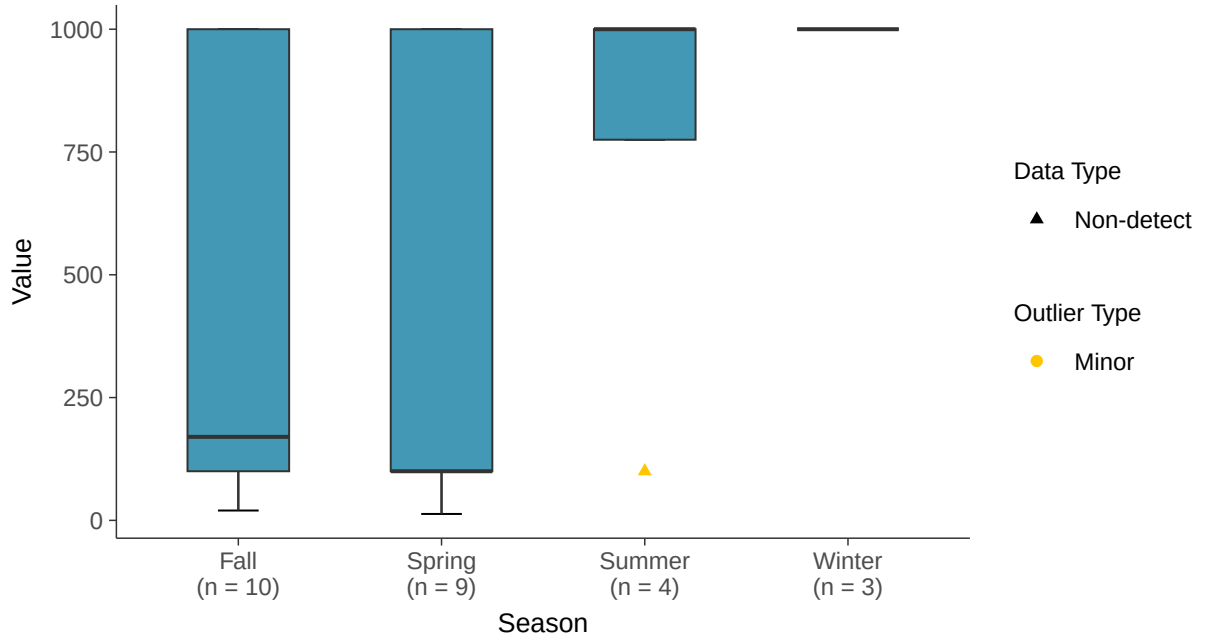
## Boxplot

Fluoride, MW-15021 (ug/L)



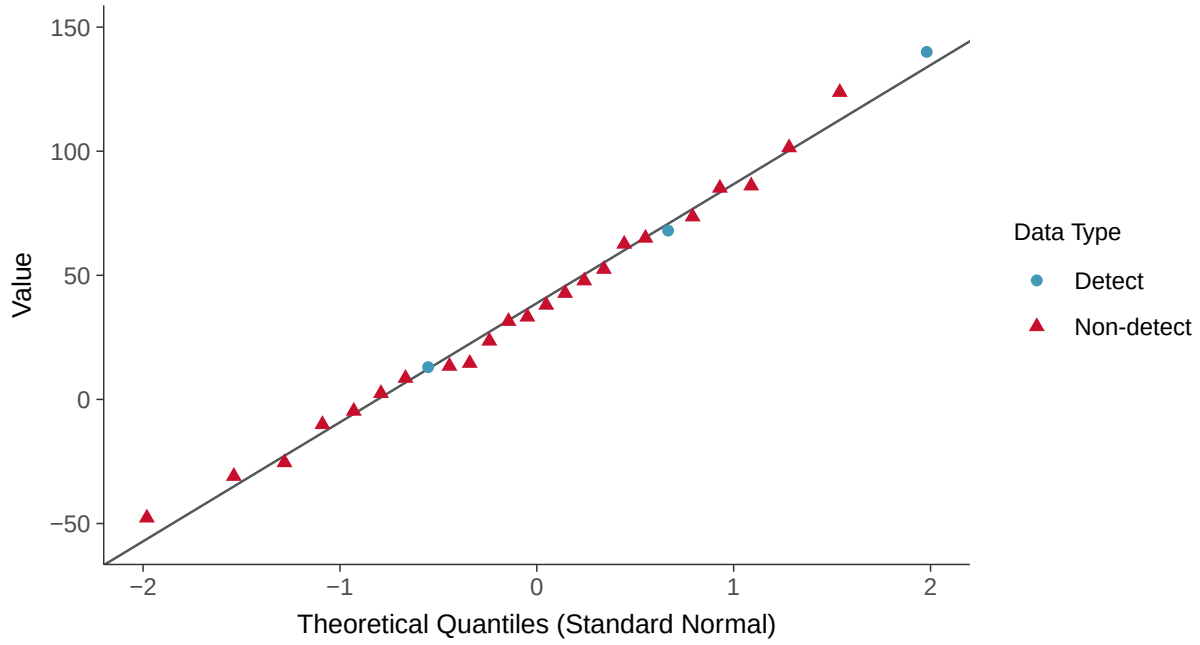

## Boxplot by Season

Fluoride, MW-15021 (ug/L)



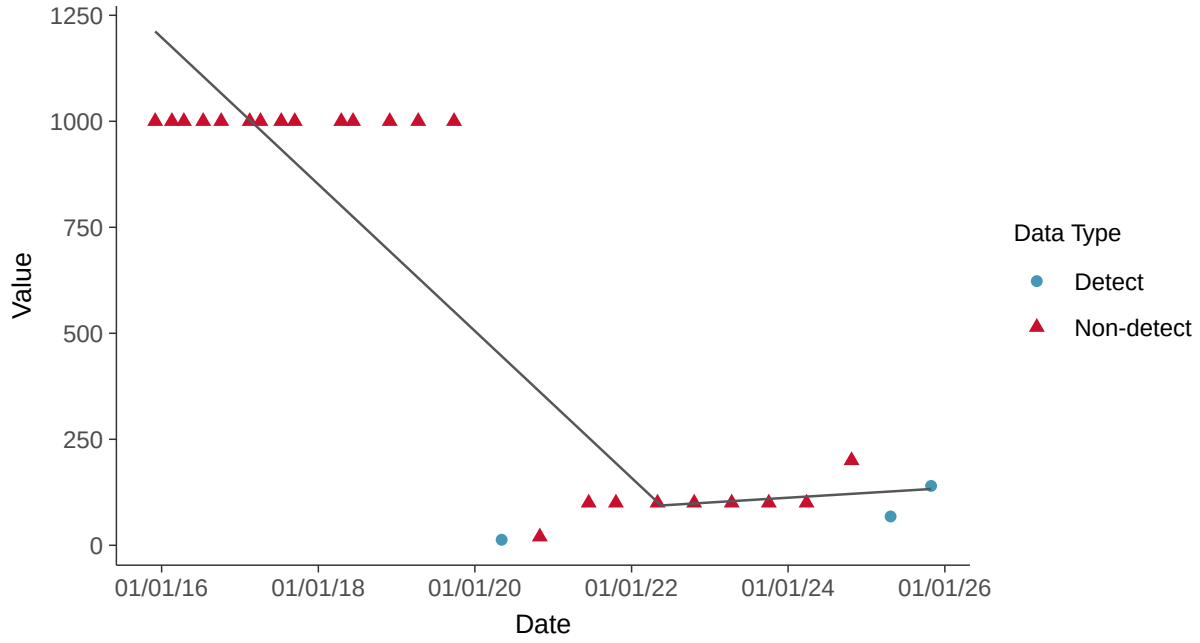
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15021 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15021 (ug/L)

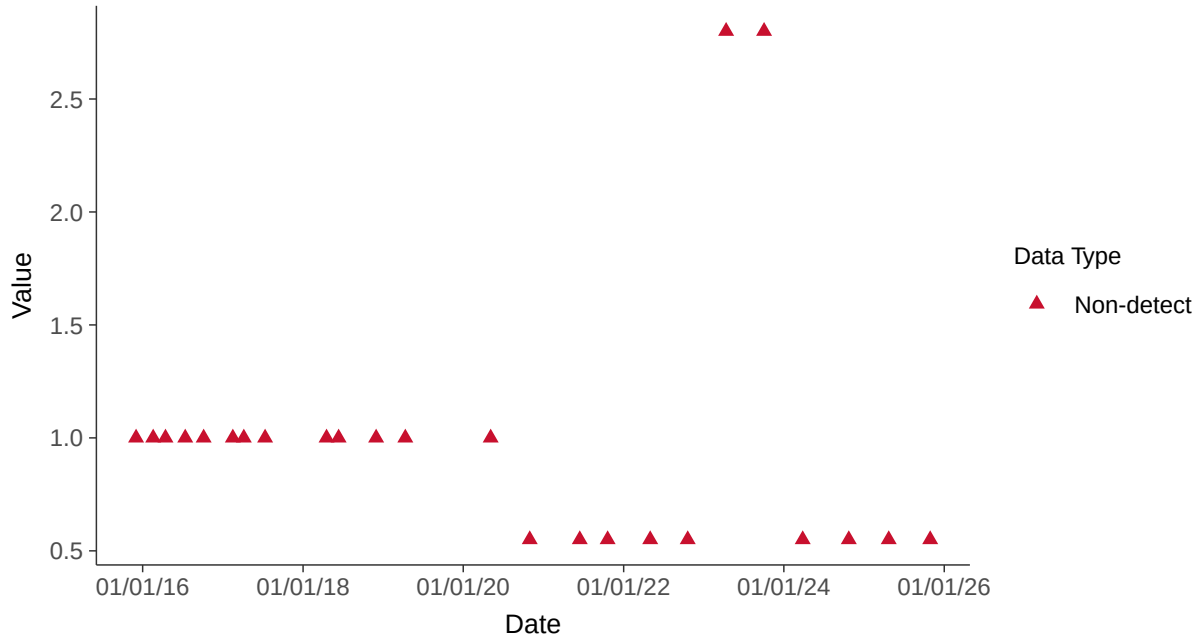


## Appendix IV: Lead, MW-15021

ID: 11_2_116

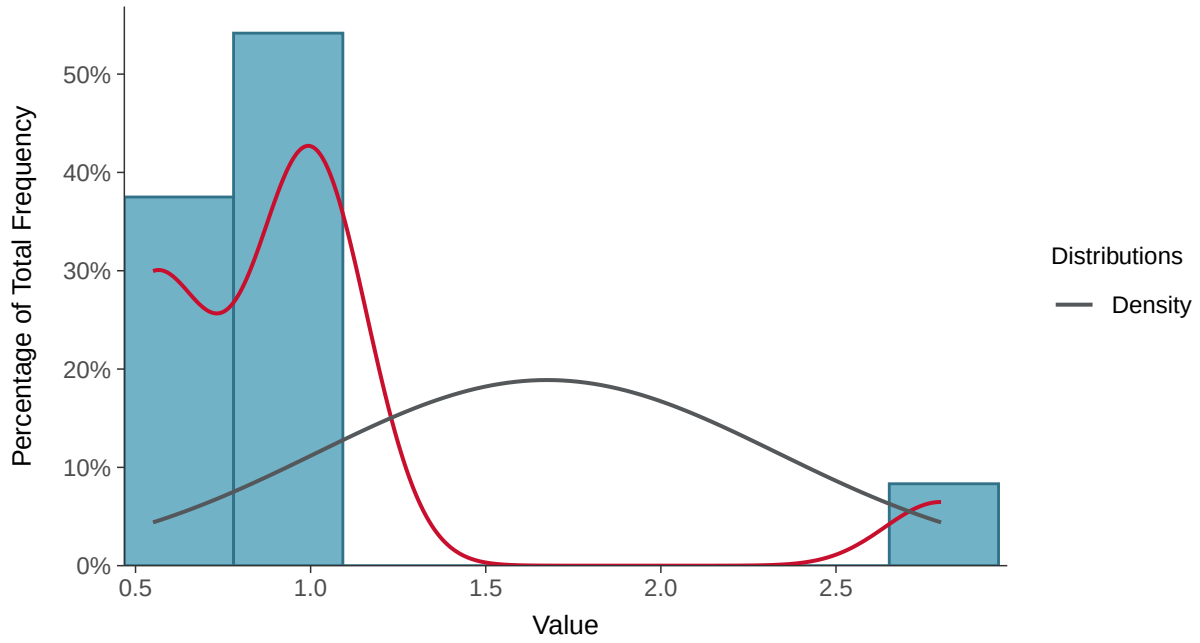
**Scatter Plot**

Lead, MW-15021 (ug/L)



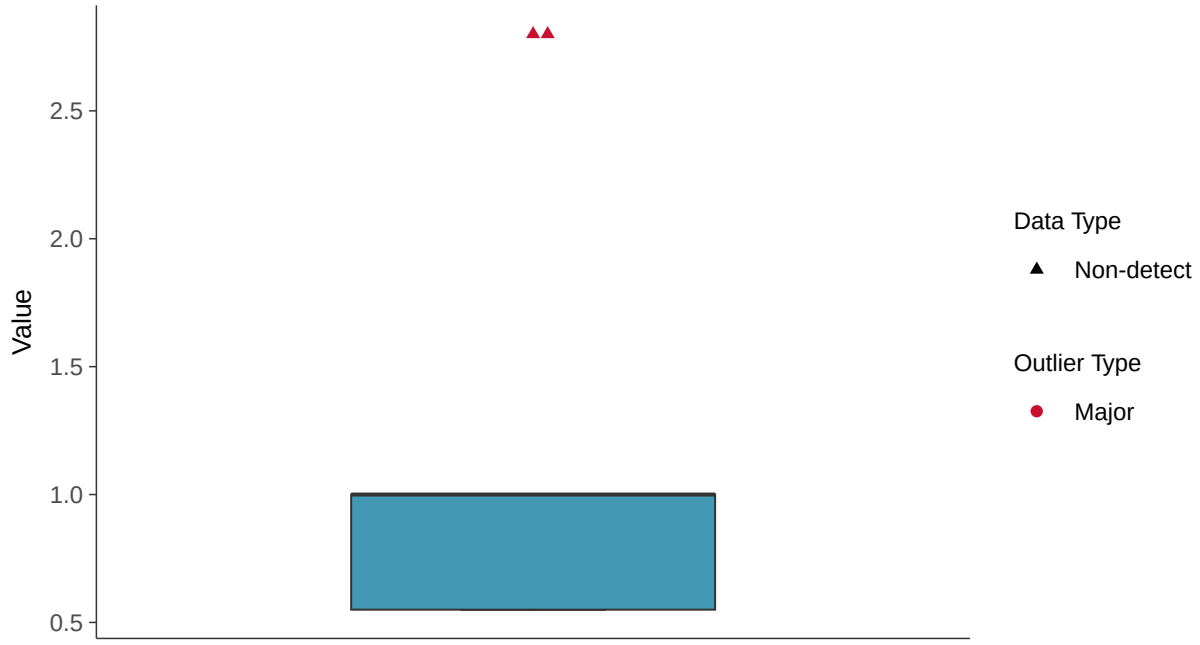

**Histogram**

Lead, MW-15021 (ug/L)



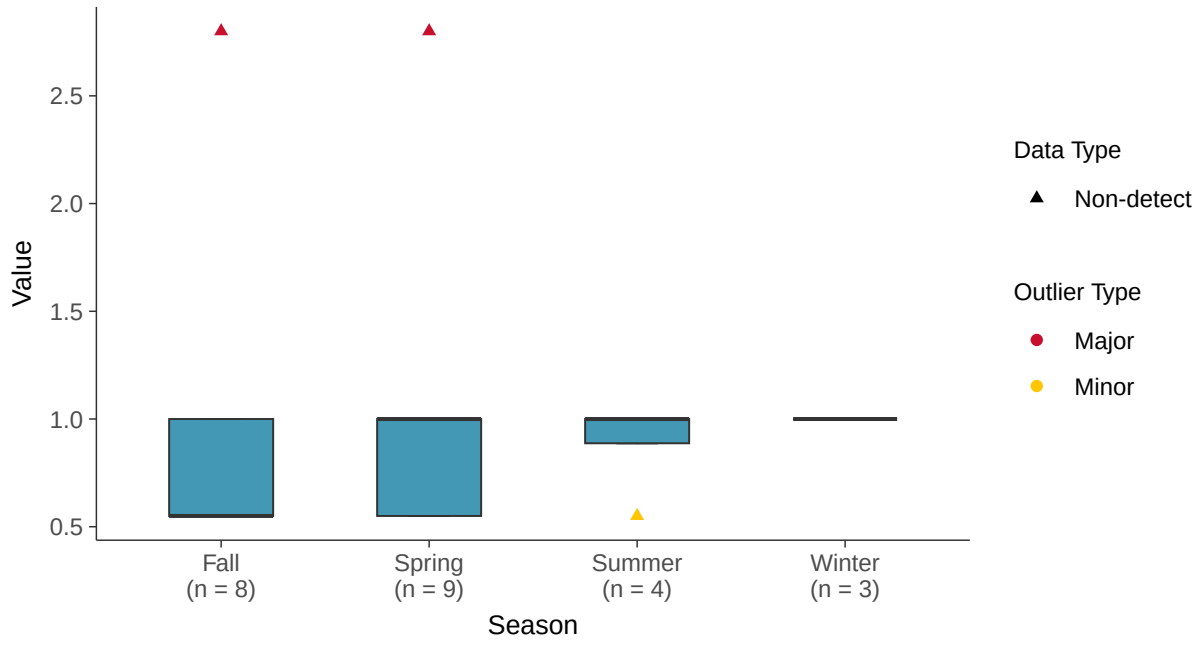
## Boxplot

Lead, MW-15021 (ug/L)



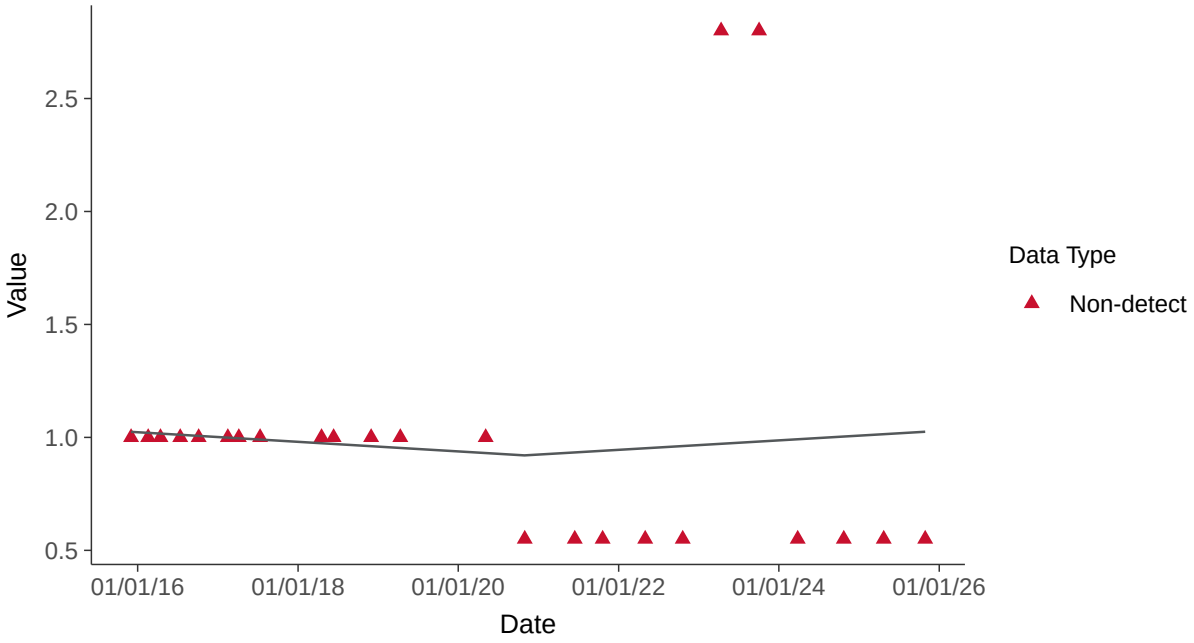

## Boxplot by Season

Lead, MW-15021 (ug/L)



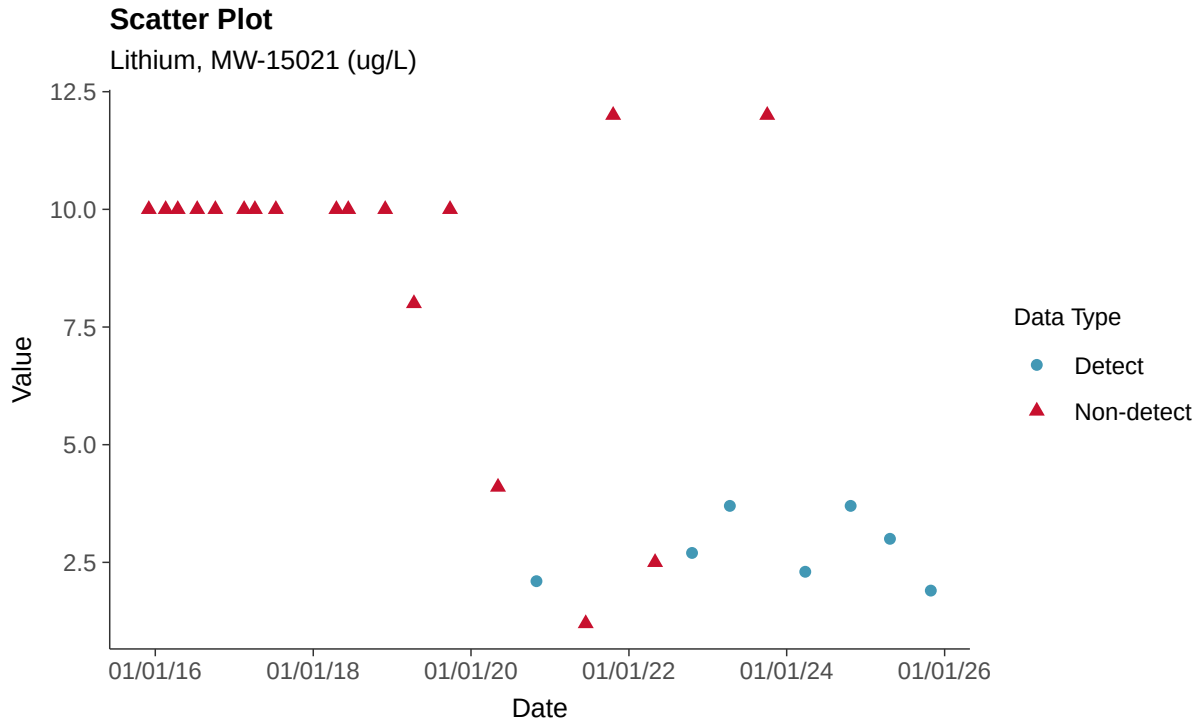
**Trend Regression: Piecewise Linear-Linear**

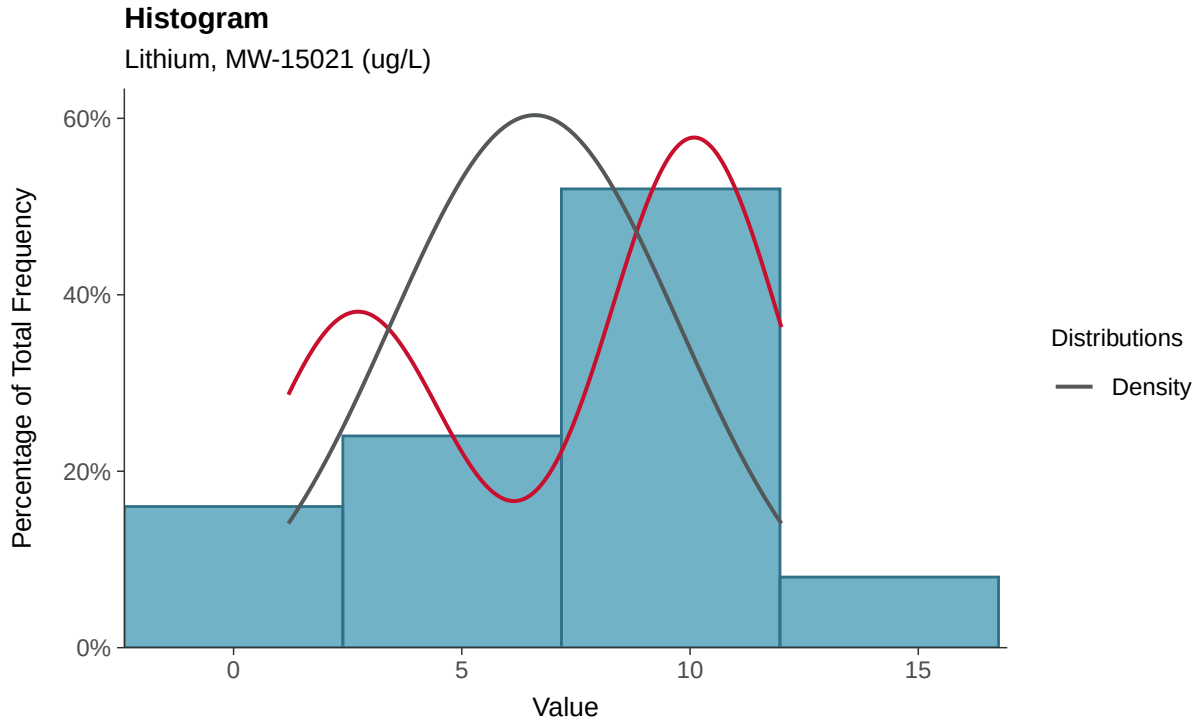
Lead, MW-15021 (ug/L)



## Appendix IV: Lithium, MW-15021

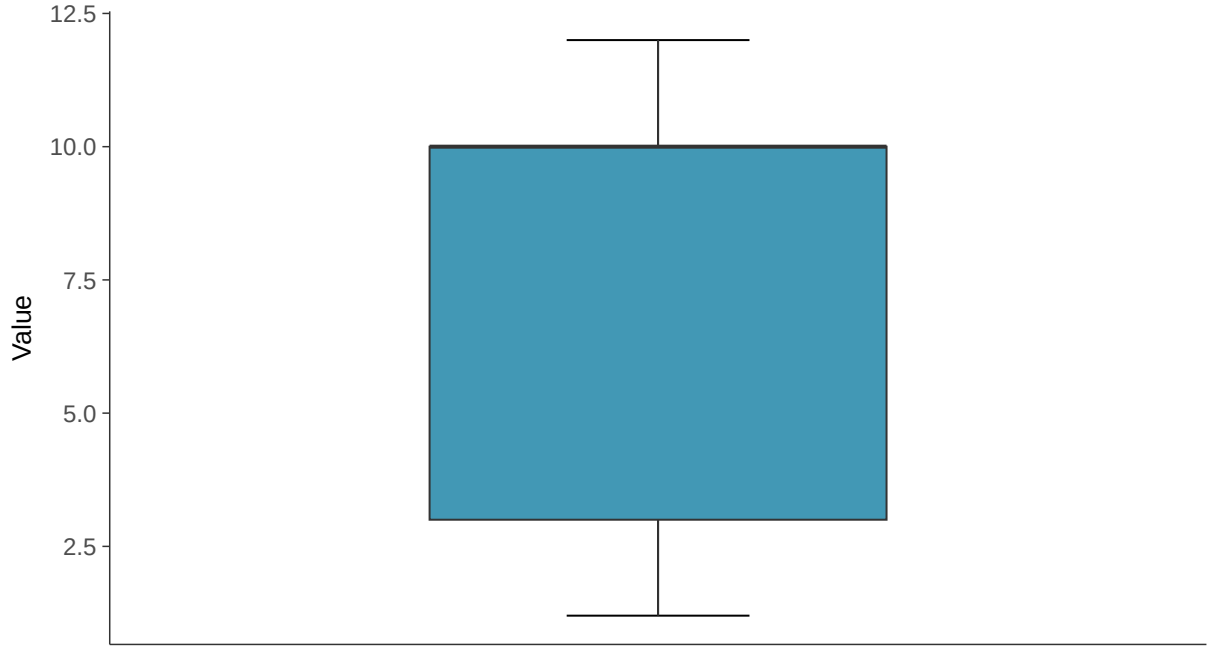
ID: 11_2_117



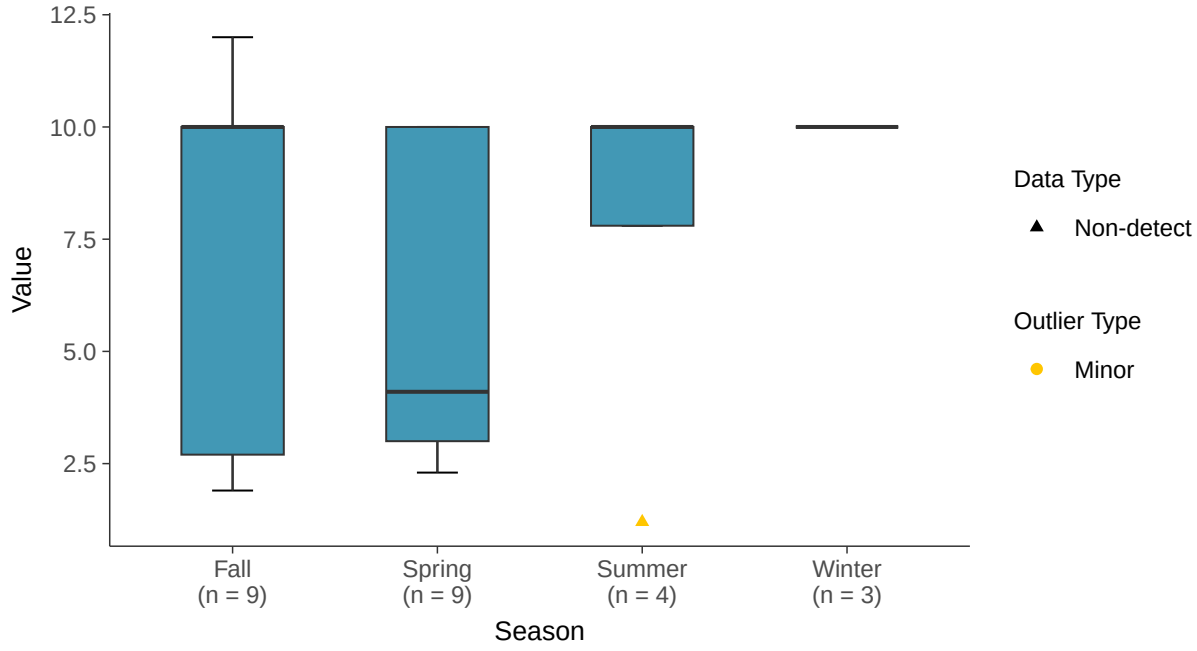
## Boxplot

Lithium, MW-15021 (ug/L)



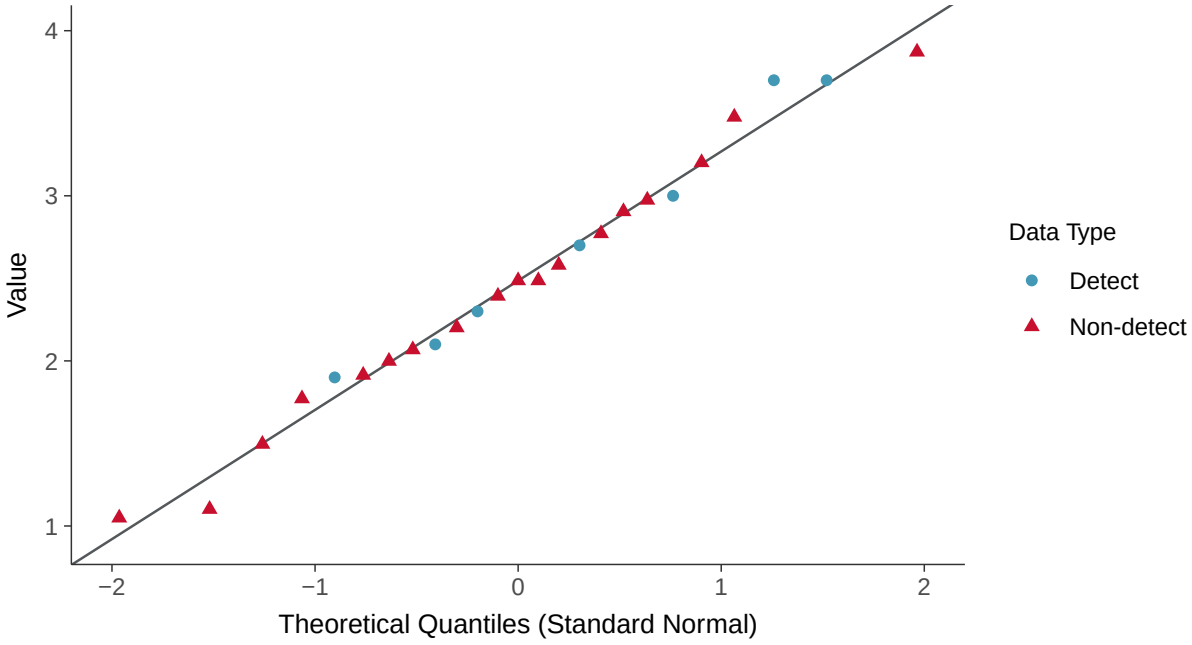

## Boxplot by Season

Lithium, MW-15021 (ug/L)



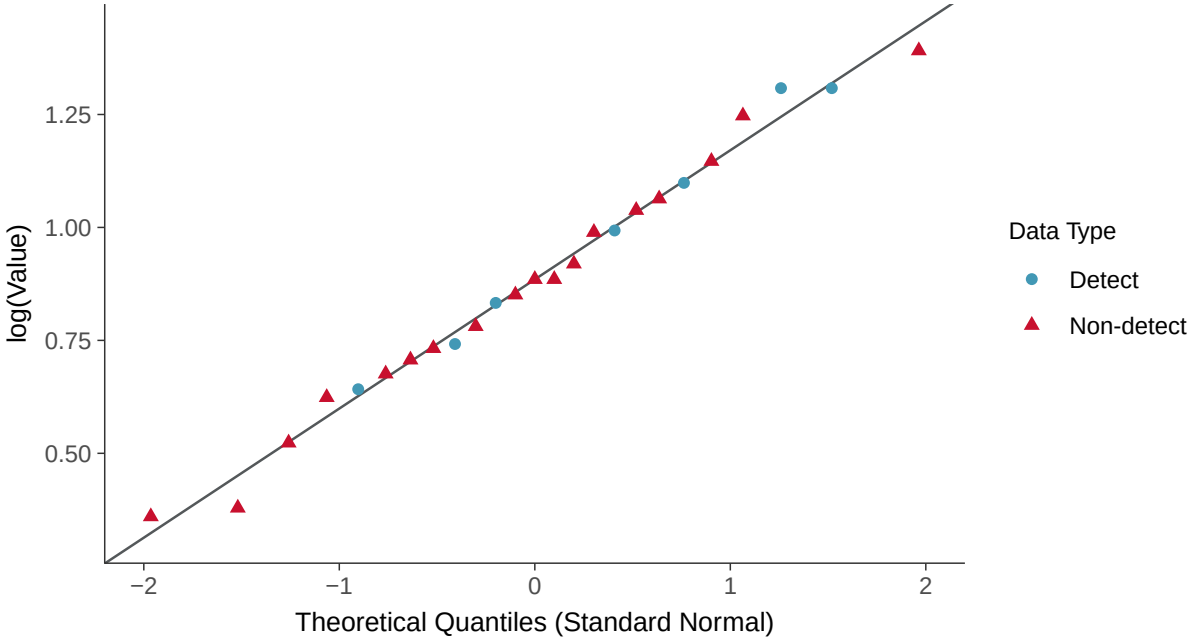
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15021 (ug/L)



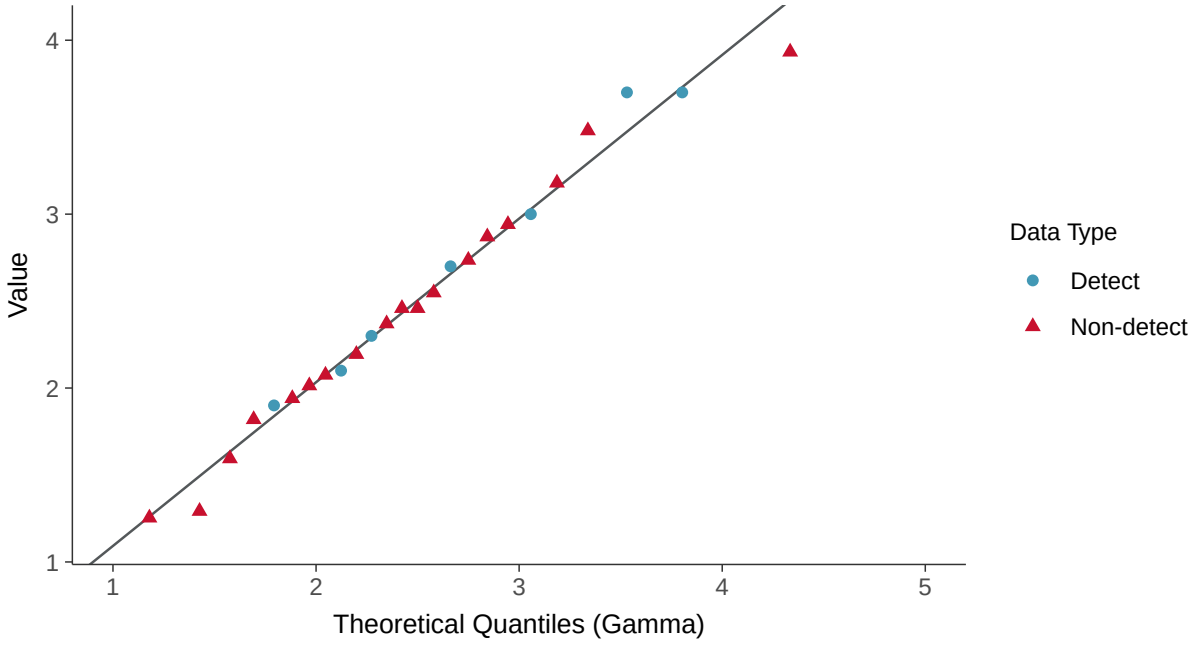

**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15021 (ug/L)



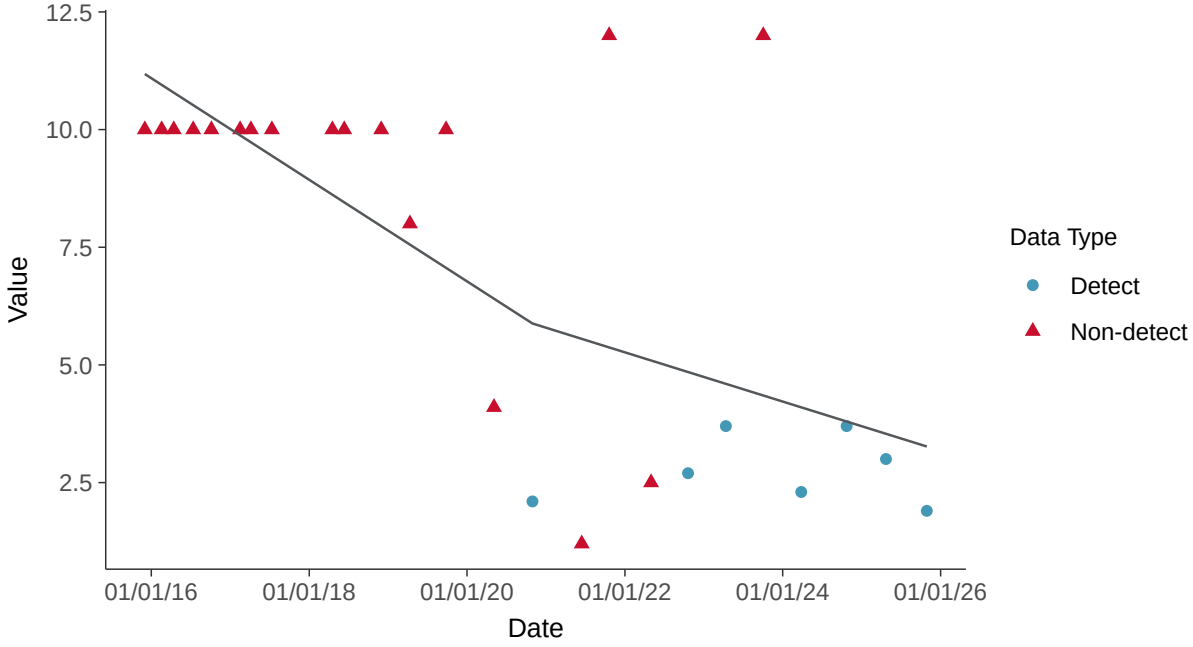
## Gamma Q-Q plot using ROS Imputed Estimates

Lithium, MW-15021 (ug/L)



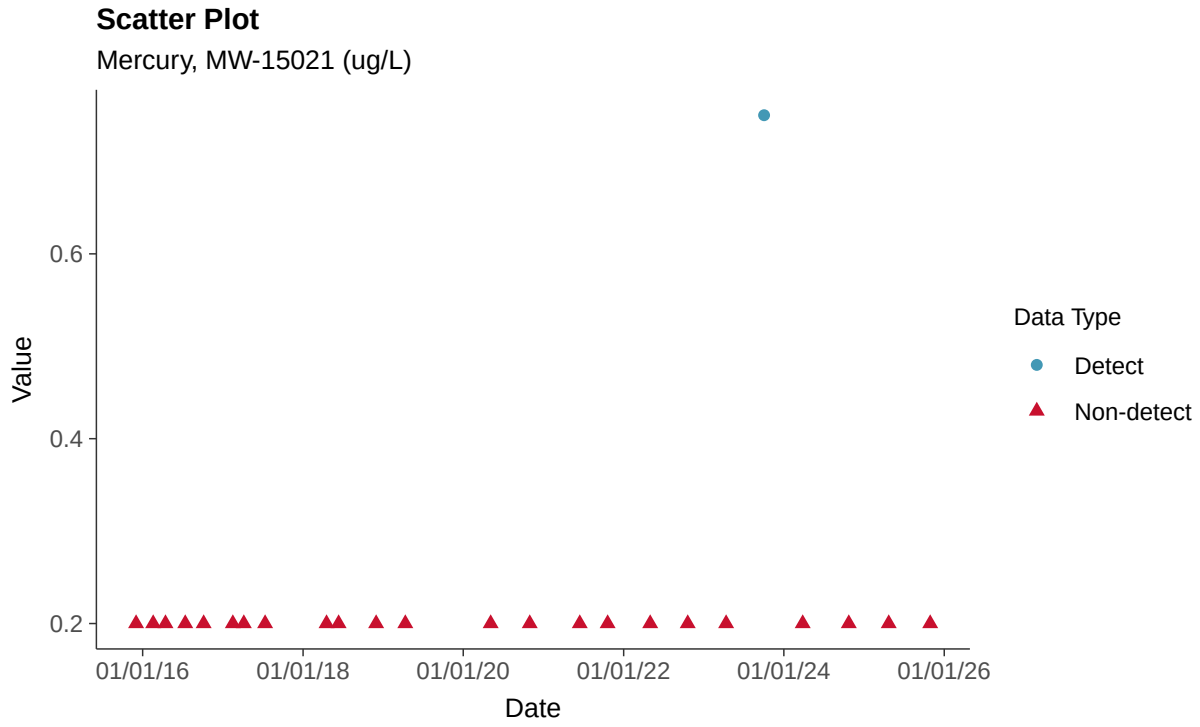

## Trend Regression: Piecewise Linear-Linear

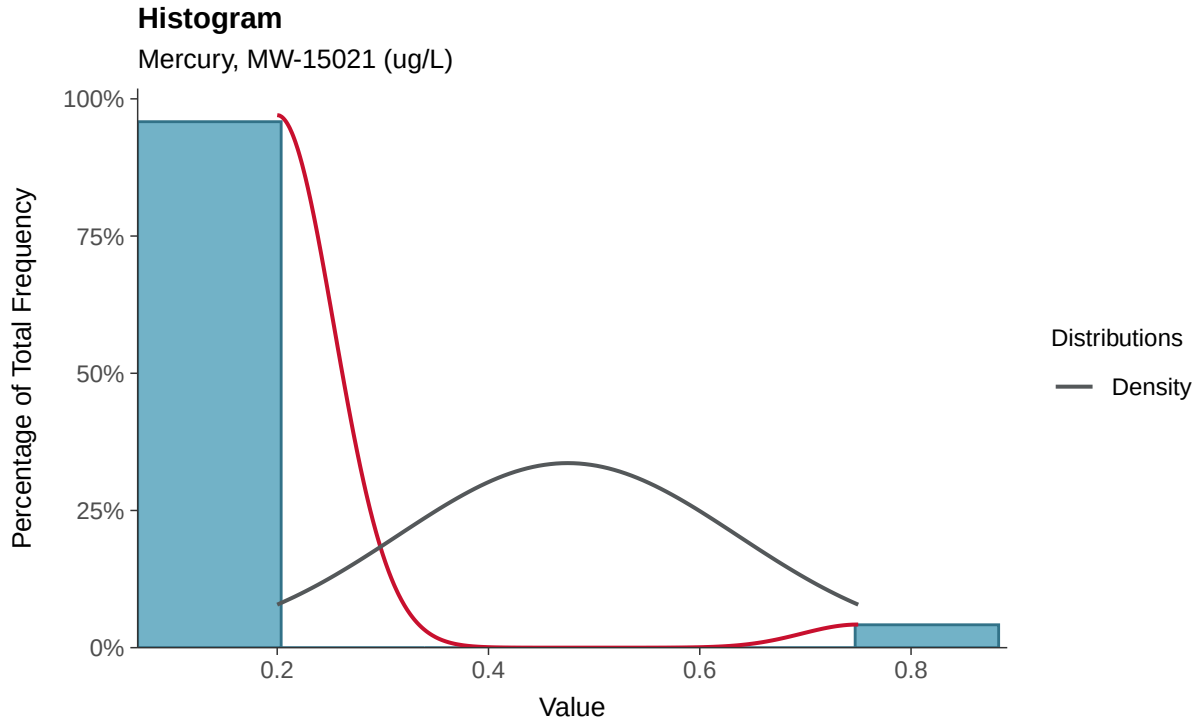
Lithium, MW-15021 (ug/L)



## Appendix IV: Mercury, MW-15021

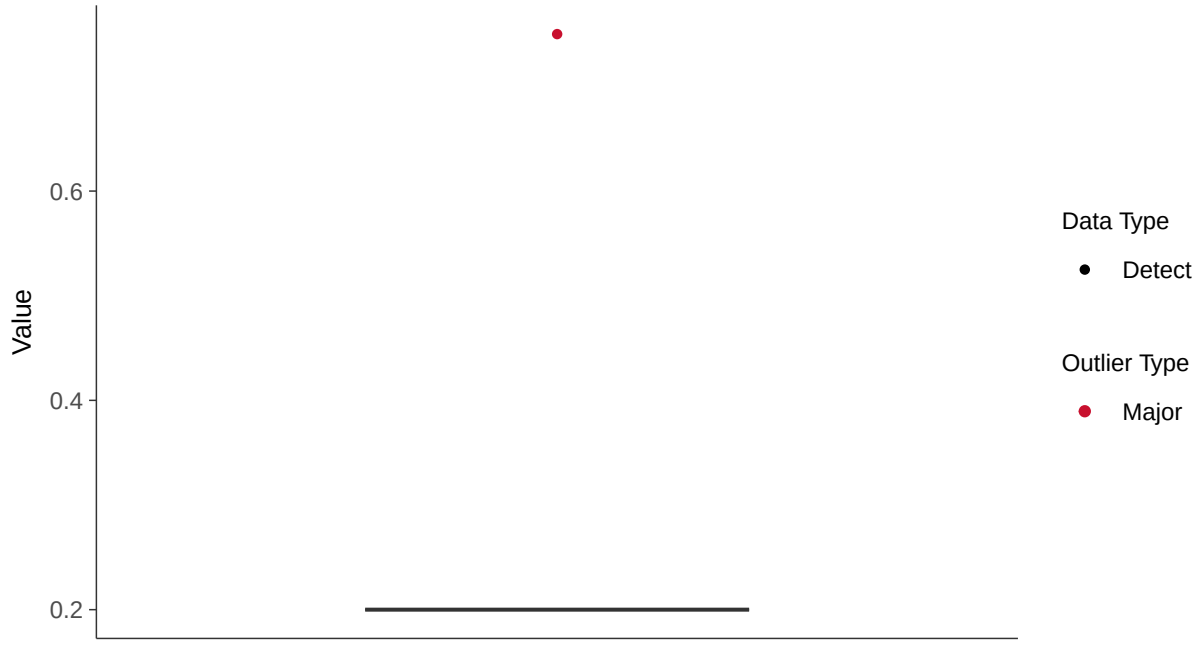
ID: 11_2_118



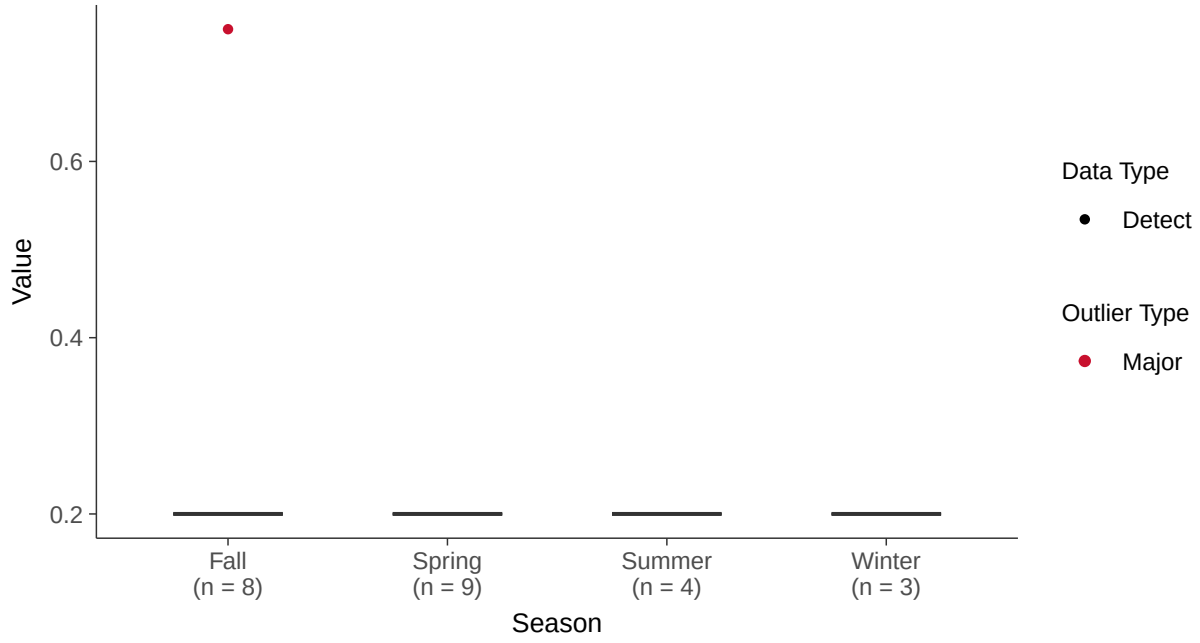
## Boxplot

Mercury, MW-15021 (ug/L)



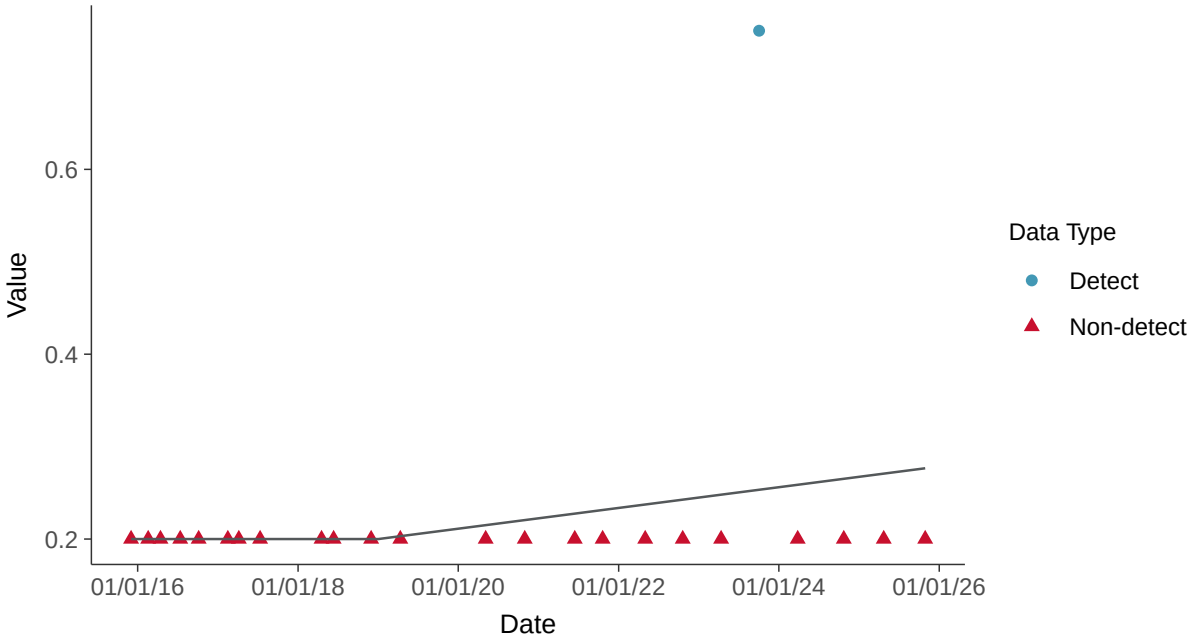

## Boxplot by Season

Mercury, MW-15021 (ug/L)



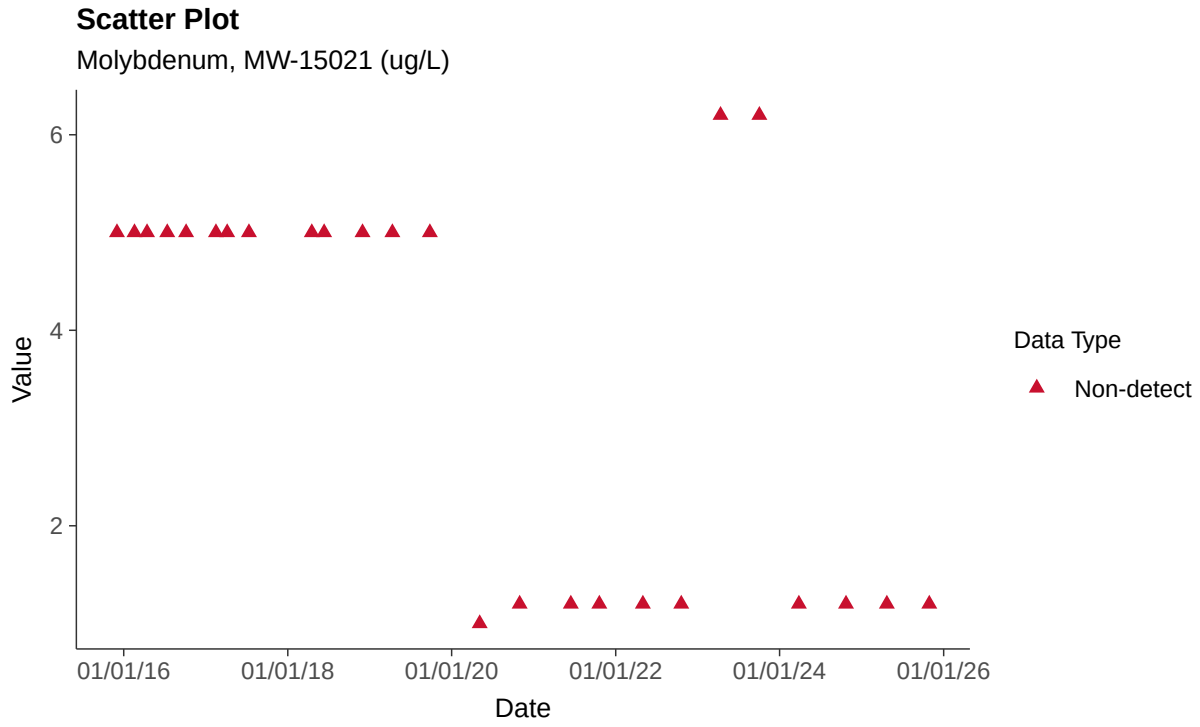
**Trend Regression: Piecewise Linear-Linear**

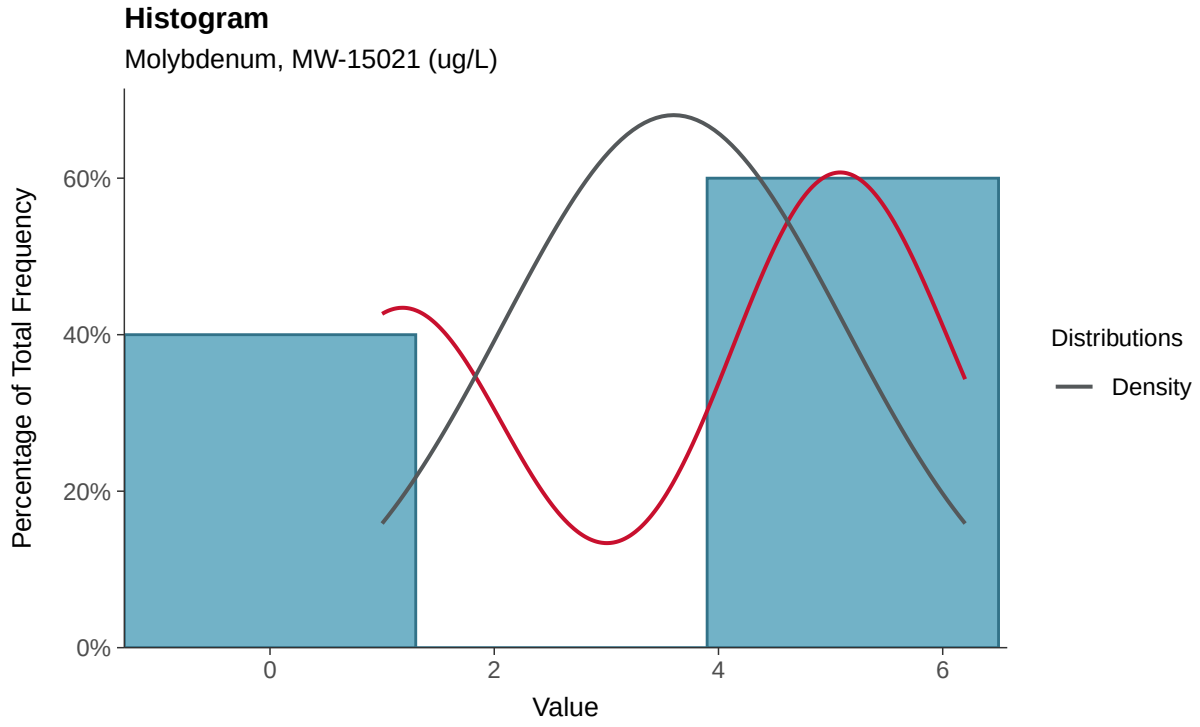
Mercury, MW-15021 (ug/L)



## Appendix IV: Molybdenum, MW-15021

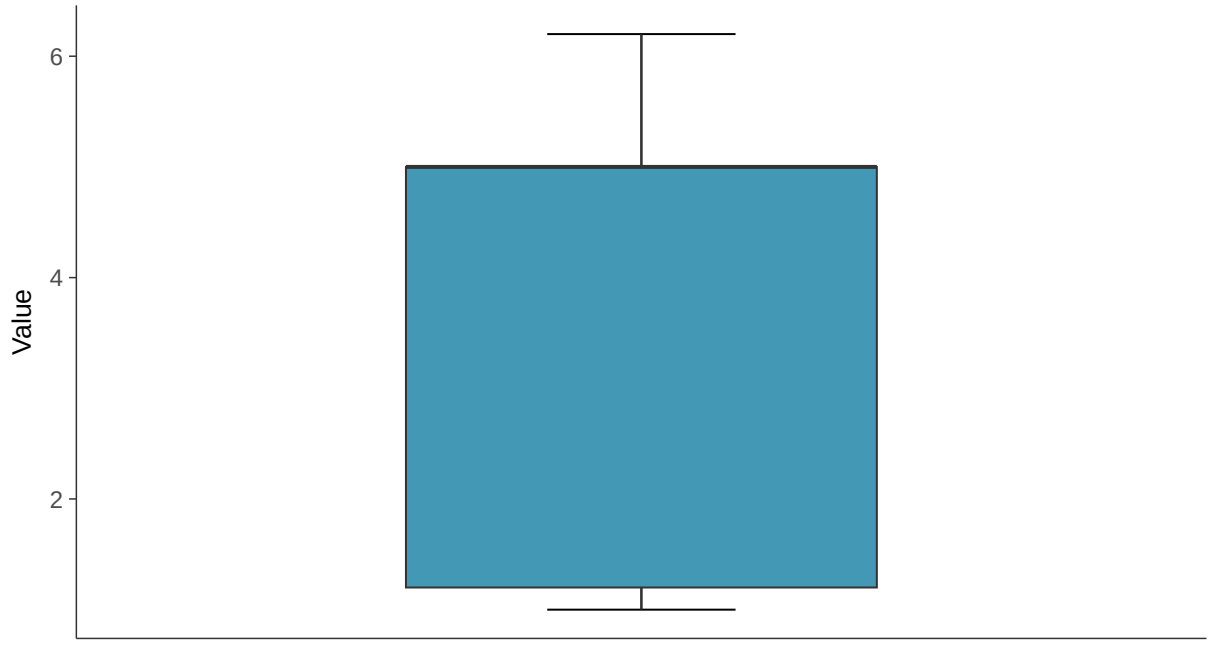
ID: 11_2_119



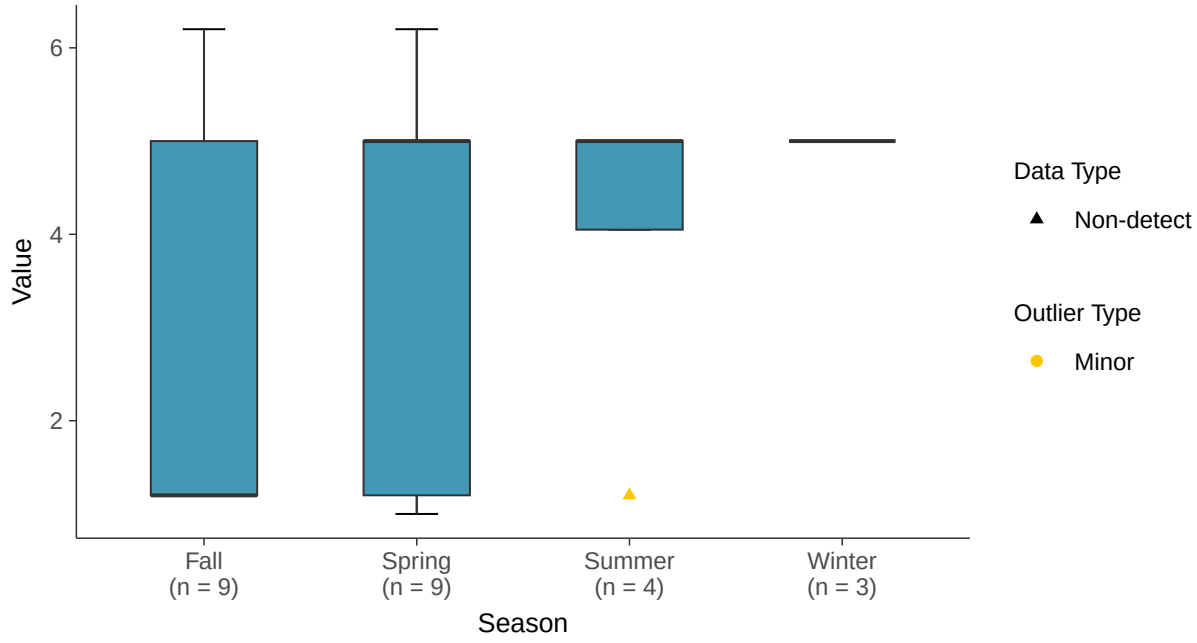
**Boxplot**

Molybdenum, MW-15021 (ug/L)



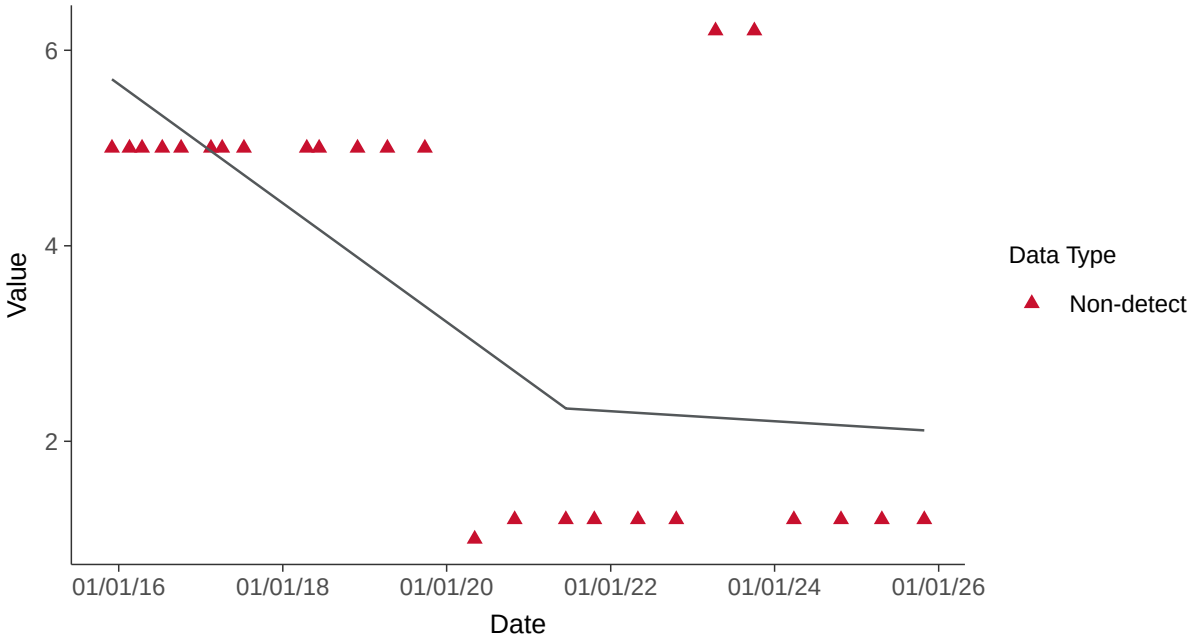

**Boxplot by Season**

Molybdenum, MW-15021 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15021 (ug/L)

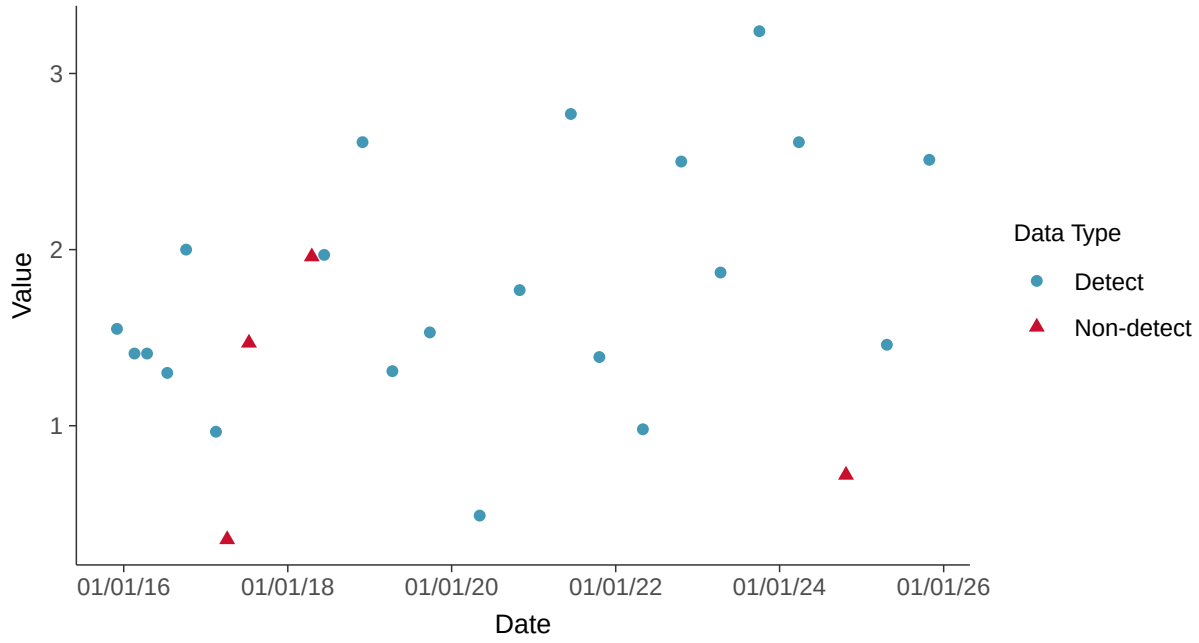


## Appendix IV: Radium-226+228, MW-15021

ID: 11_2_125

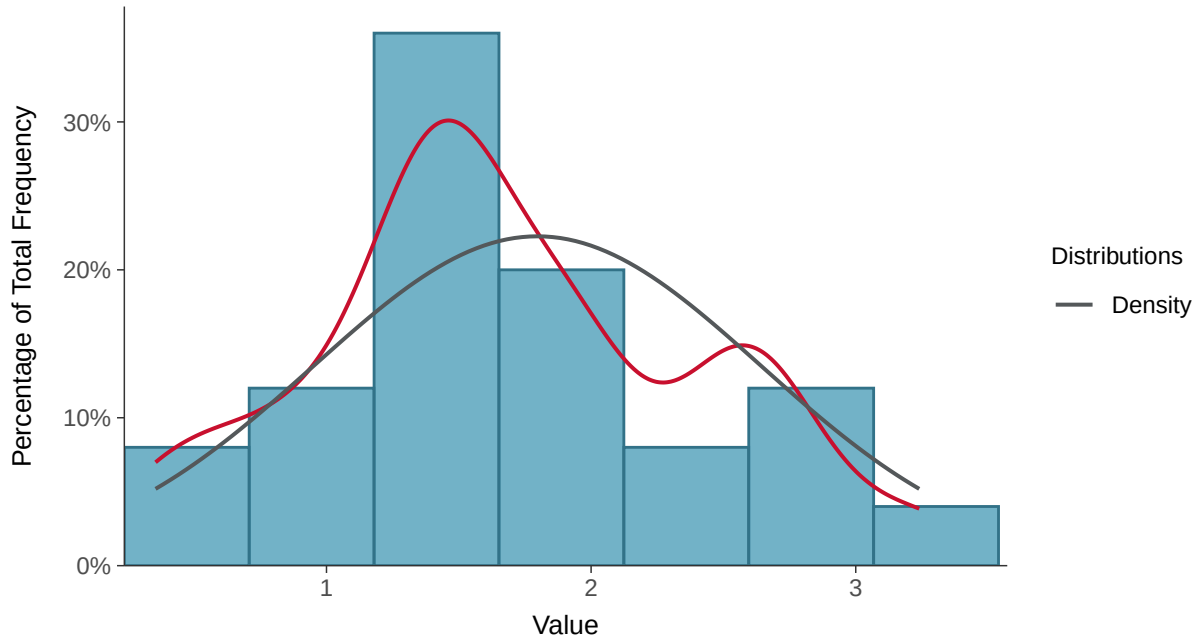
**Scatter Plot**

Radium-226+228, MW-15021 (pCi/L)



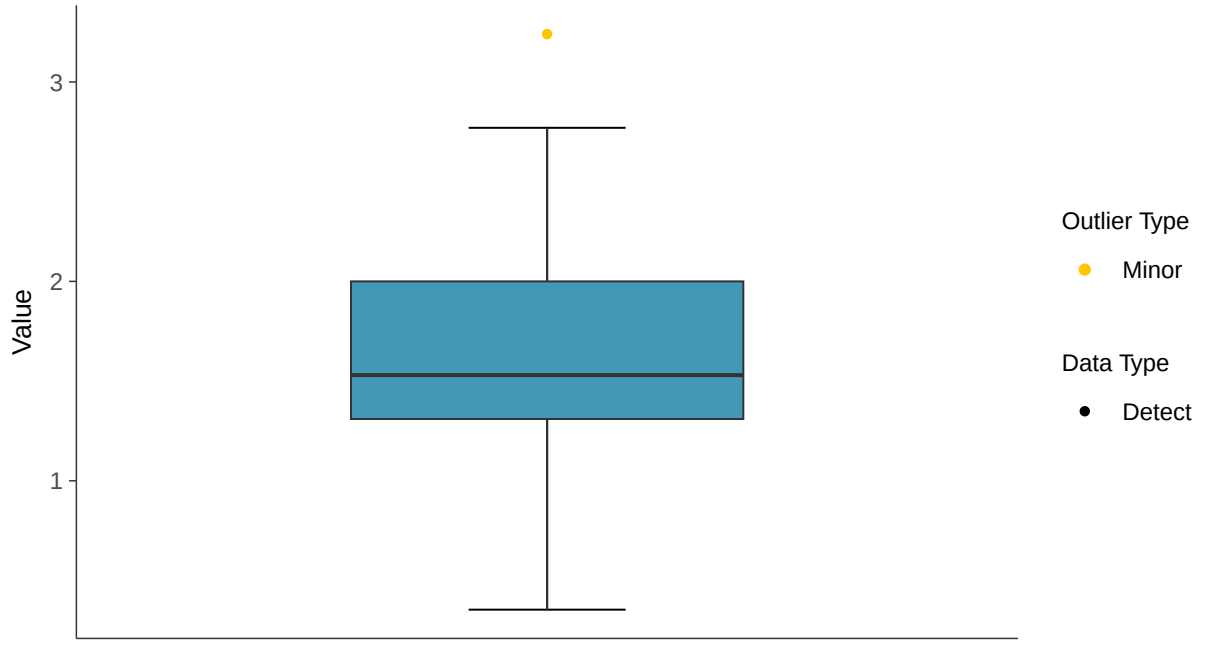

**Histogram**

Radium-226+228, MW-15021 (pCi/L)



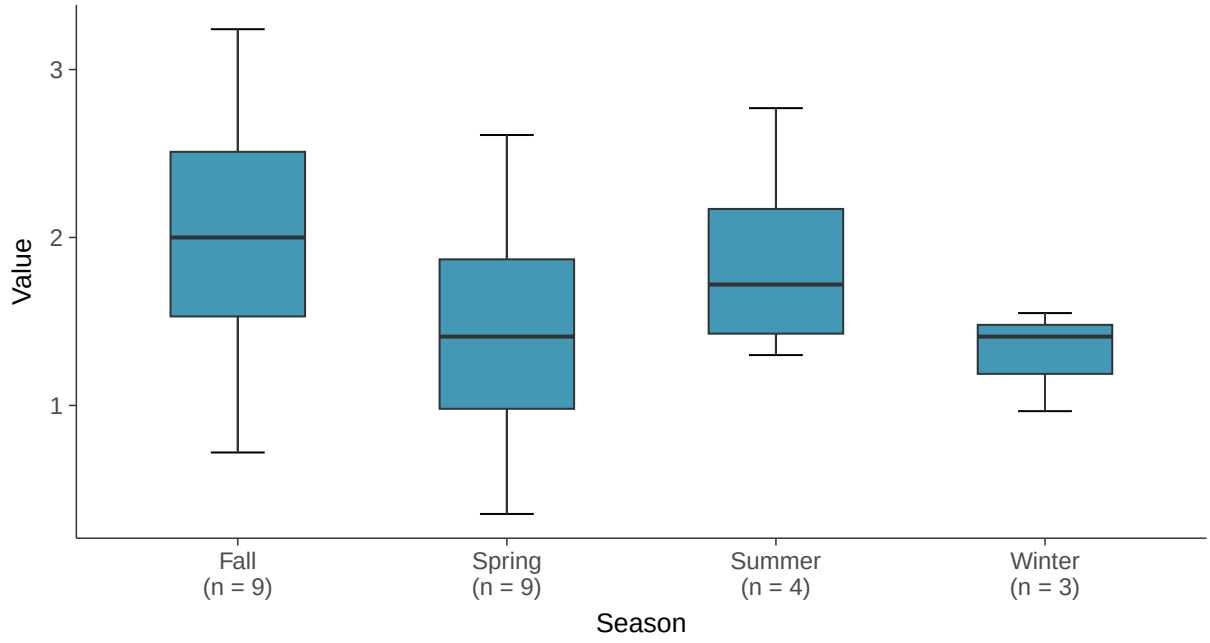
## Boxplot

Radium-226+228, MW-15021 (pCi/L)



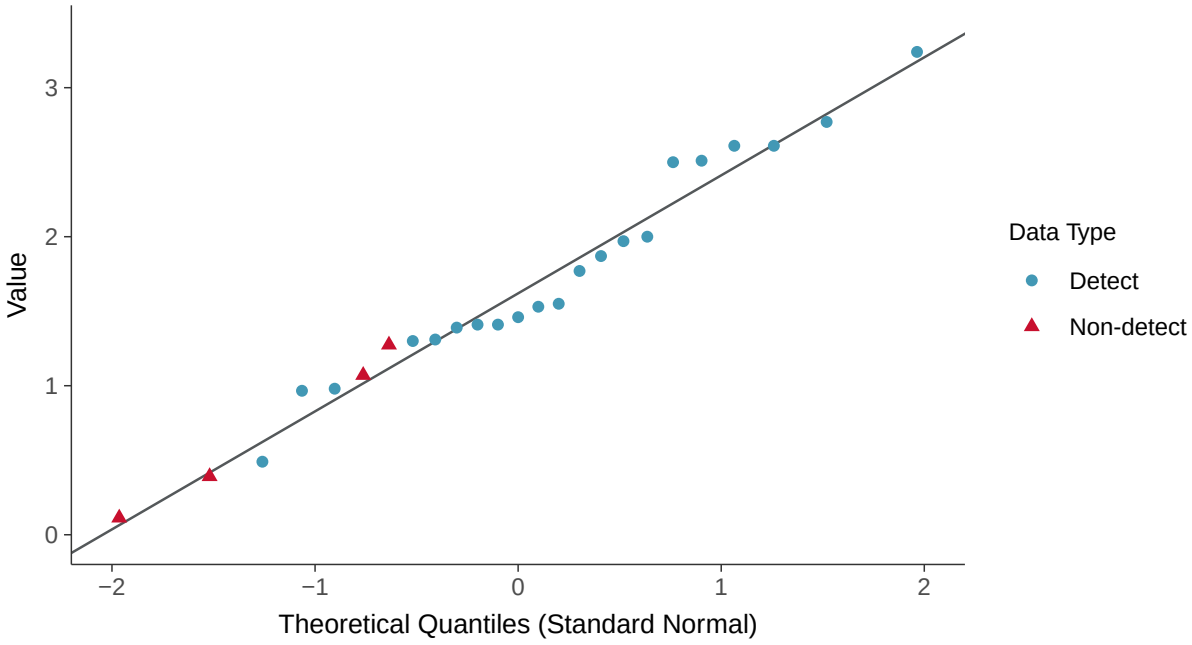

## Boxplot by Season

Radium-226+228, MW-15021 (pCi/L)



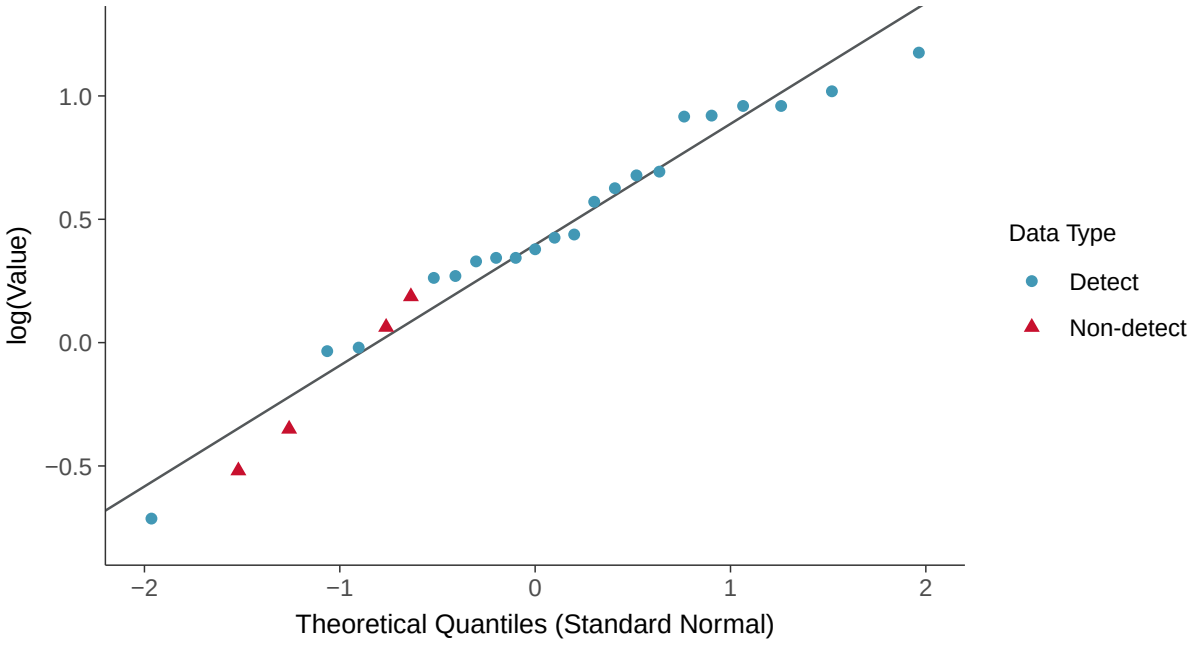
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15021 (pCi/L)



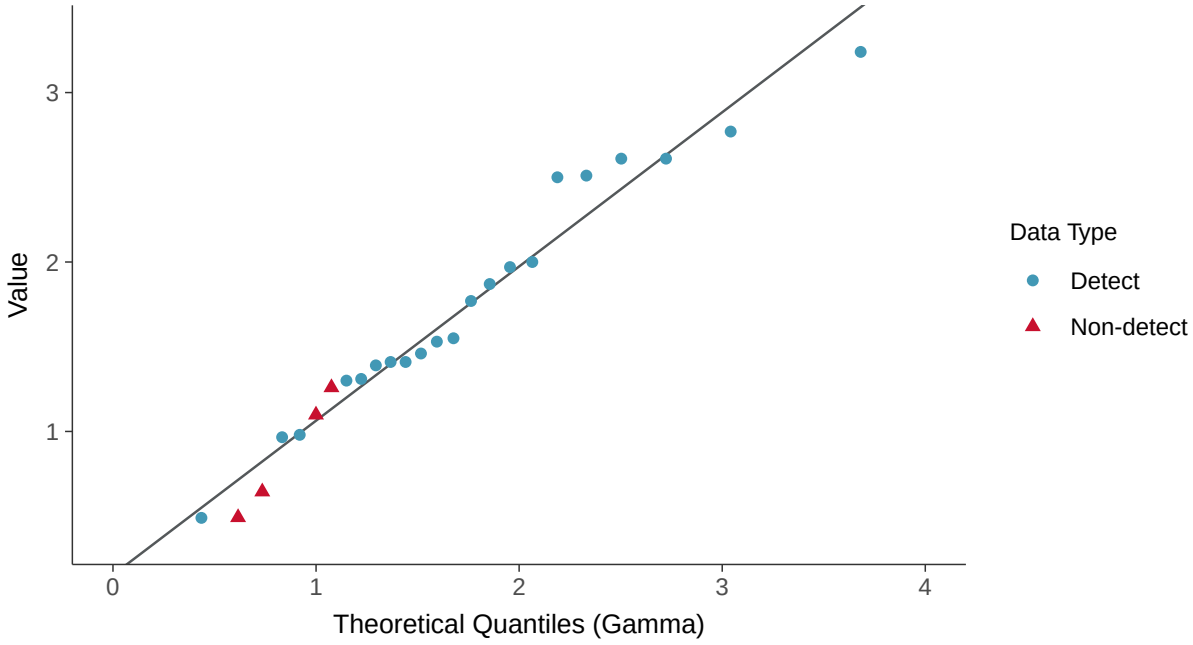

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15021 (pCi/L)



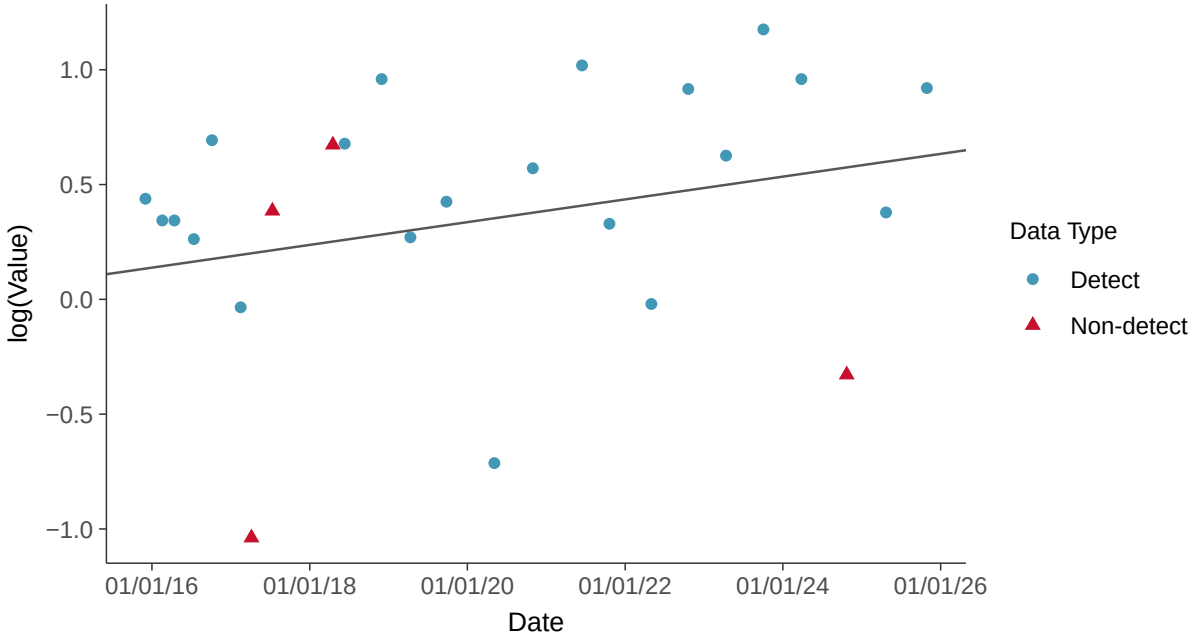
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15021 (pCi/L)



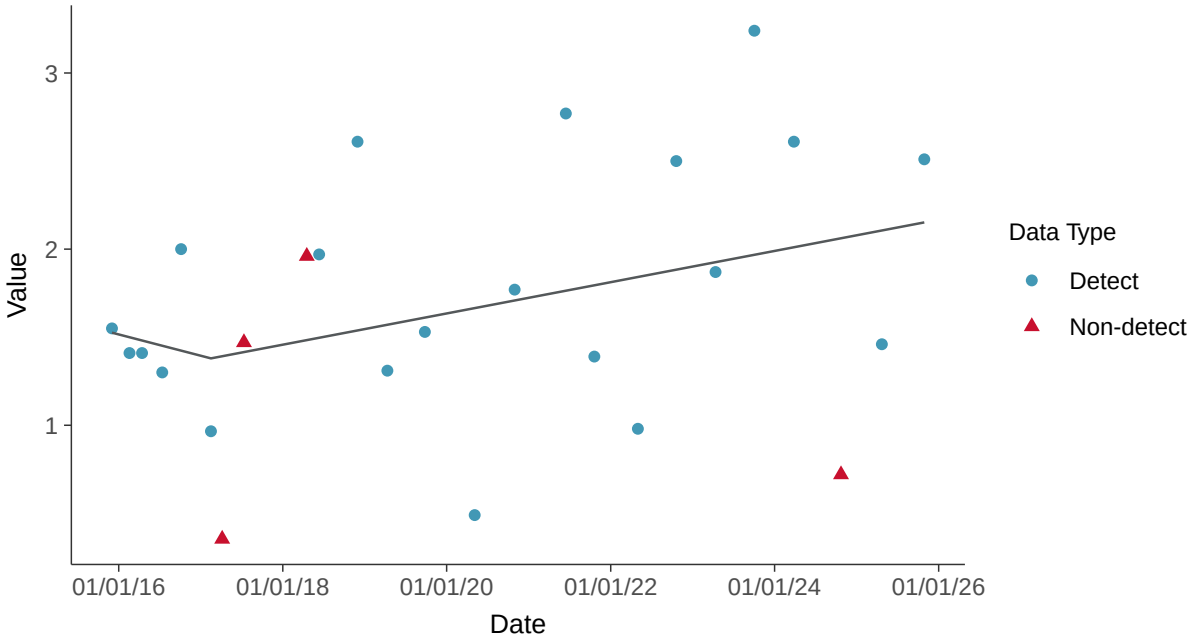

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15021 (pCi/L)



**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15021 (pCi/L)

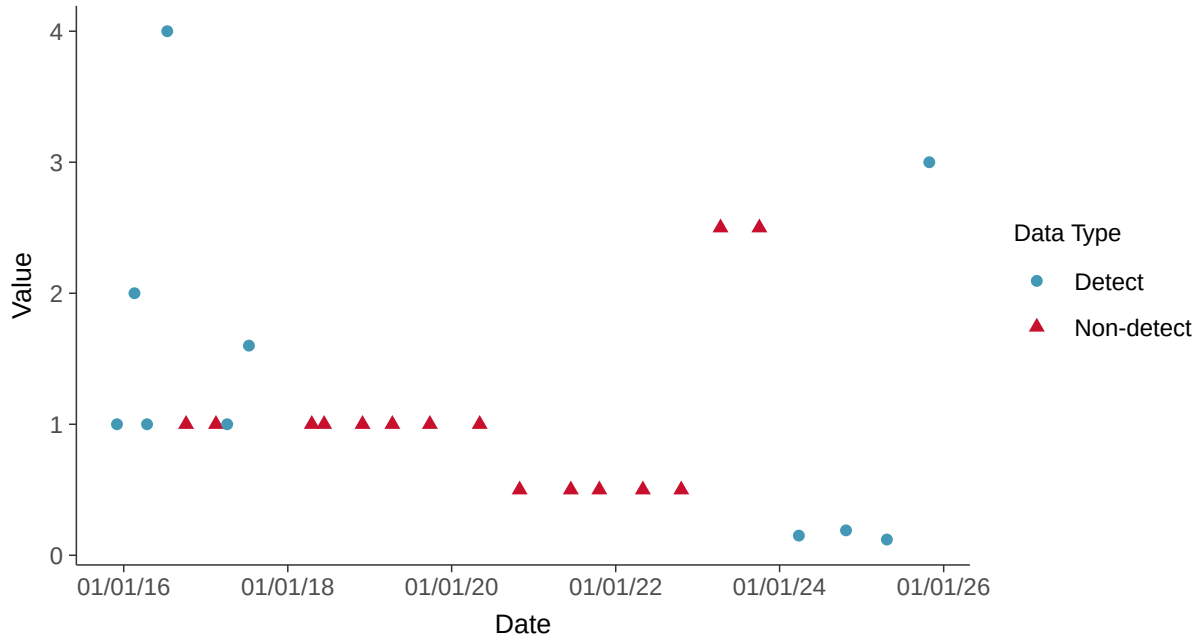


## Appendix IV: Selenium, MW-15021

ID: 11_2_127

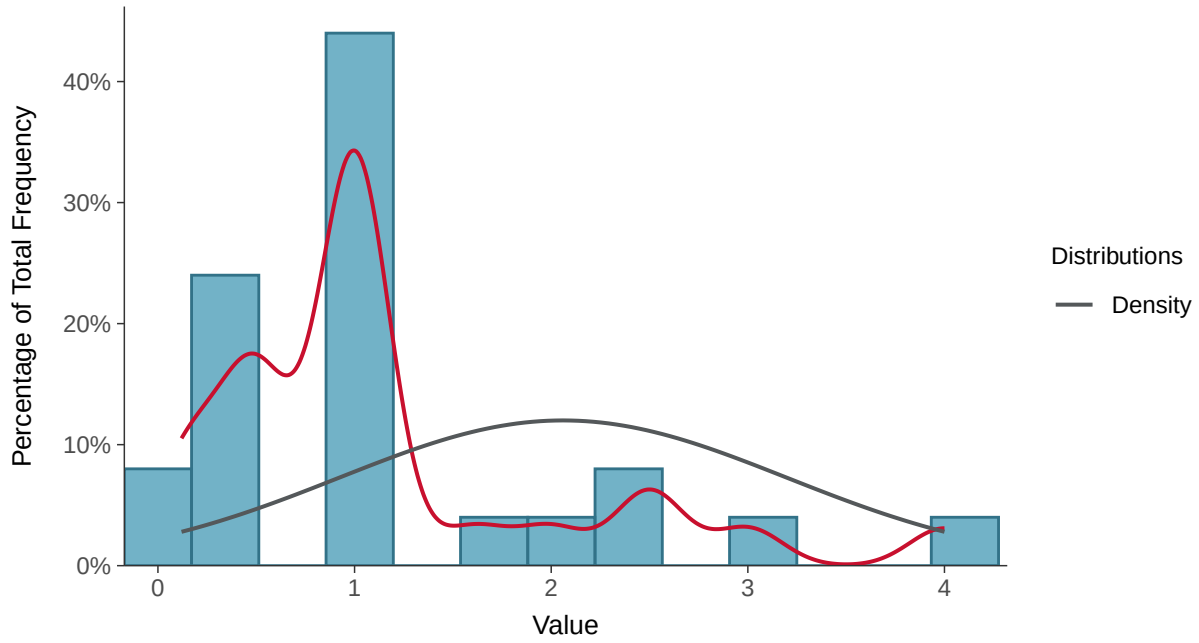
**Scatter Plot**

Selenium, MW-15021 (ug/L)



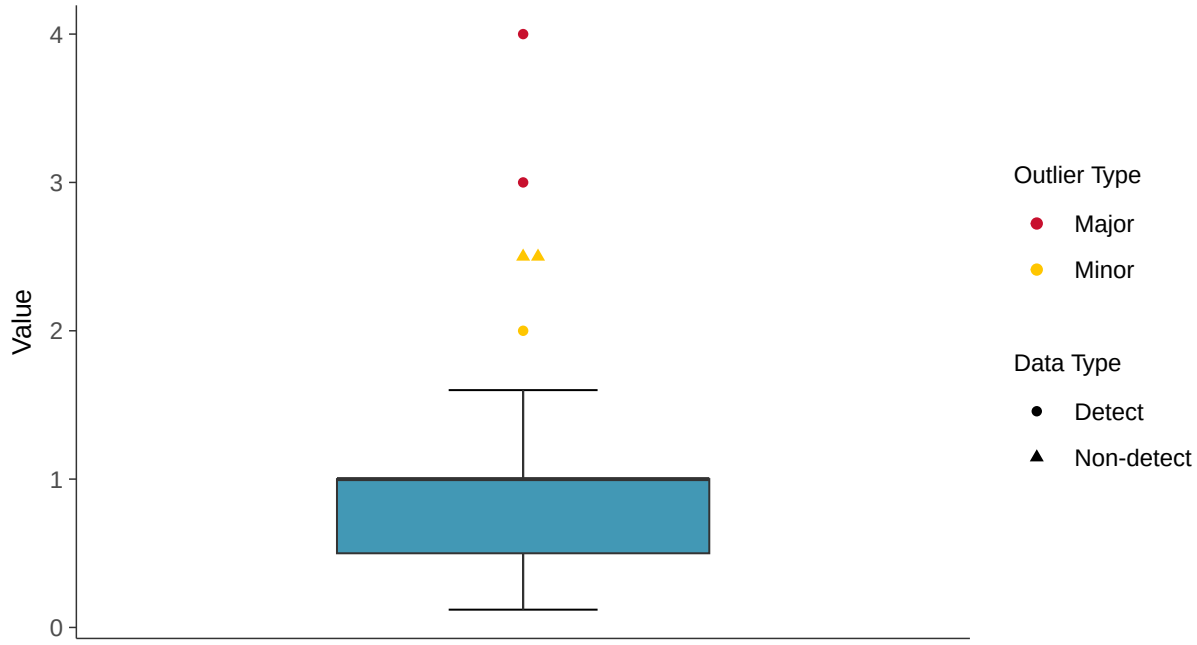

**Histogram**

Selenium, MW-15021 (ug/L)



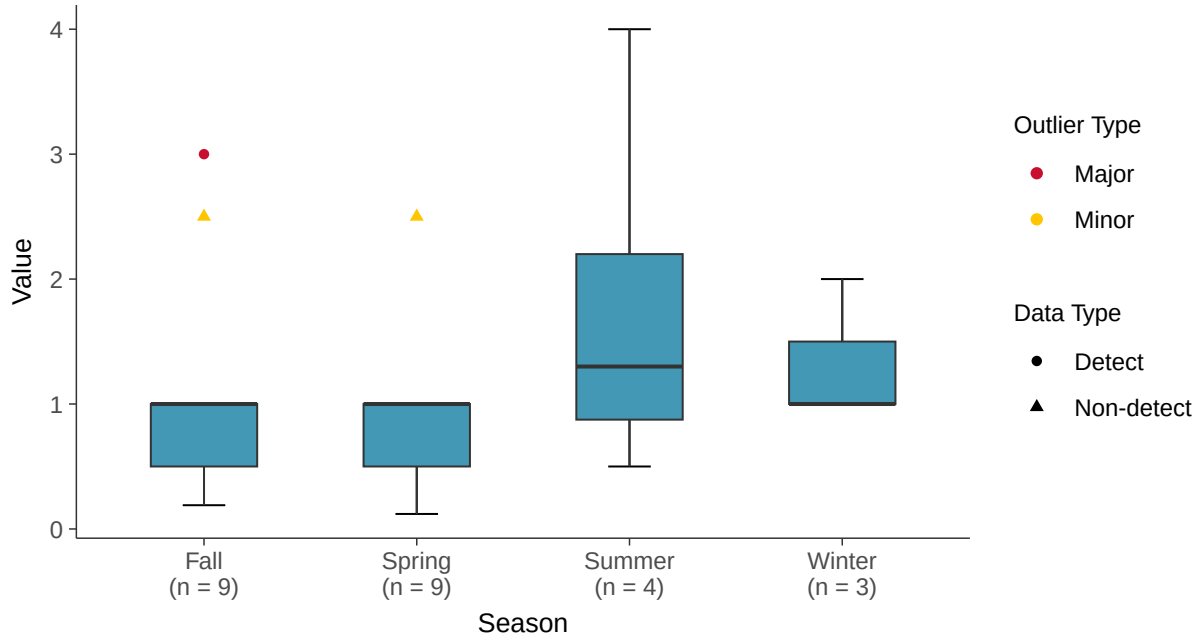
## Boxplot

Selenium, MW-15021 (ug/L)



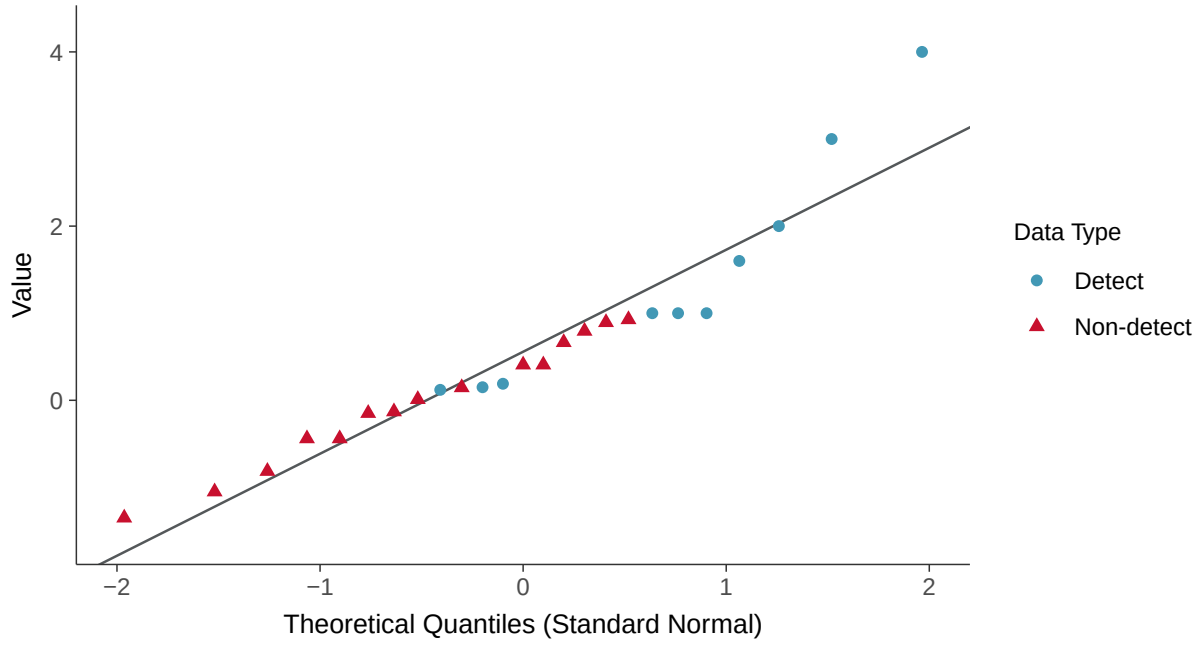

## Boxplot by Season

Selenium, MW-15021 (ug/L)



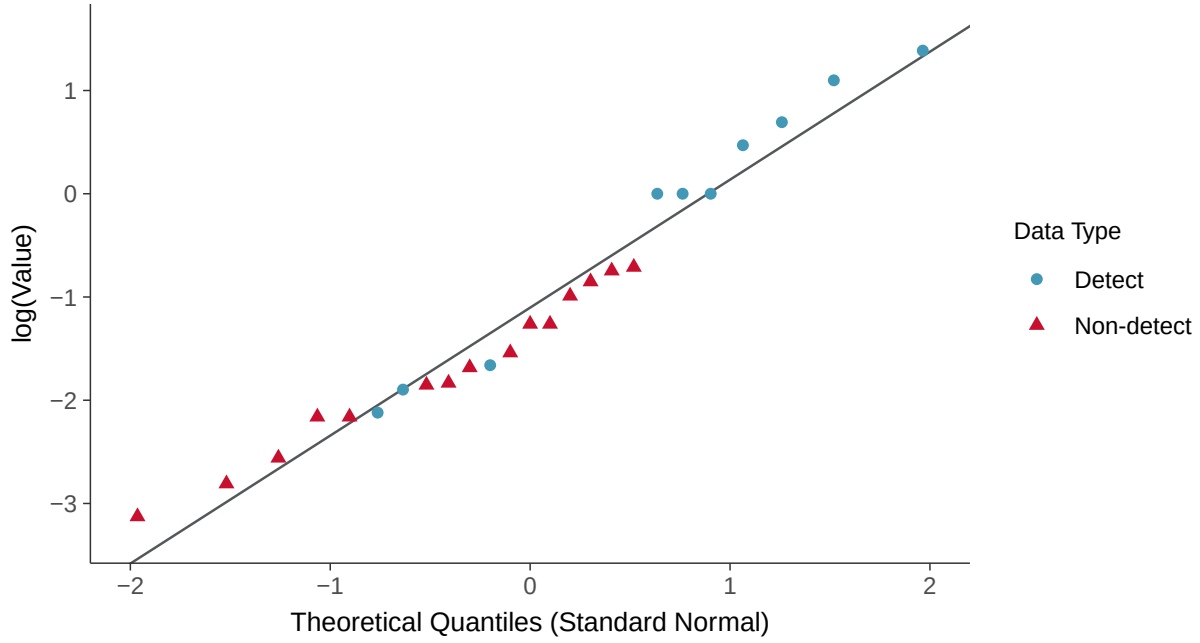
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15021 (ug/L)



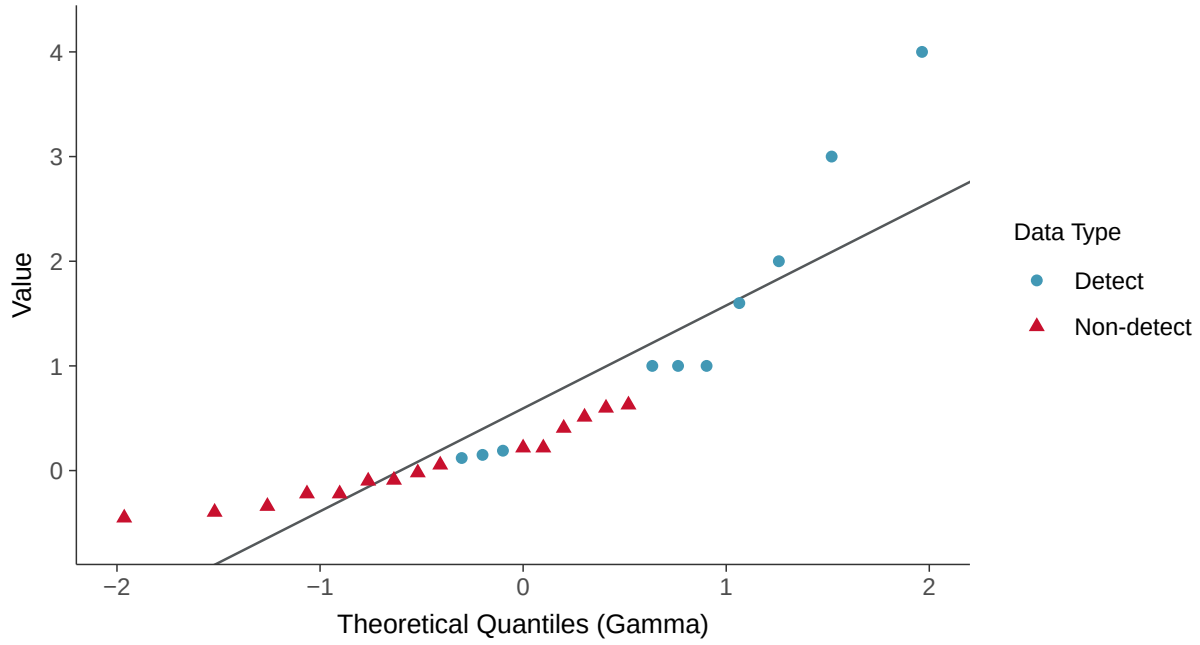

**Lognormal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15021 (ug/L)



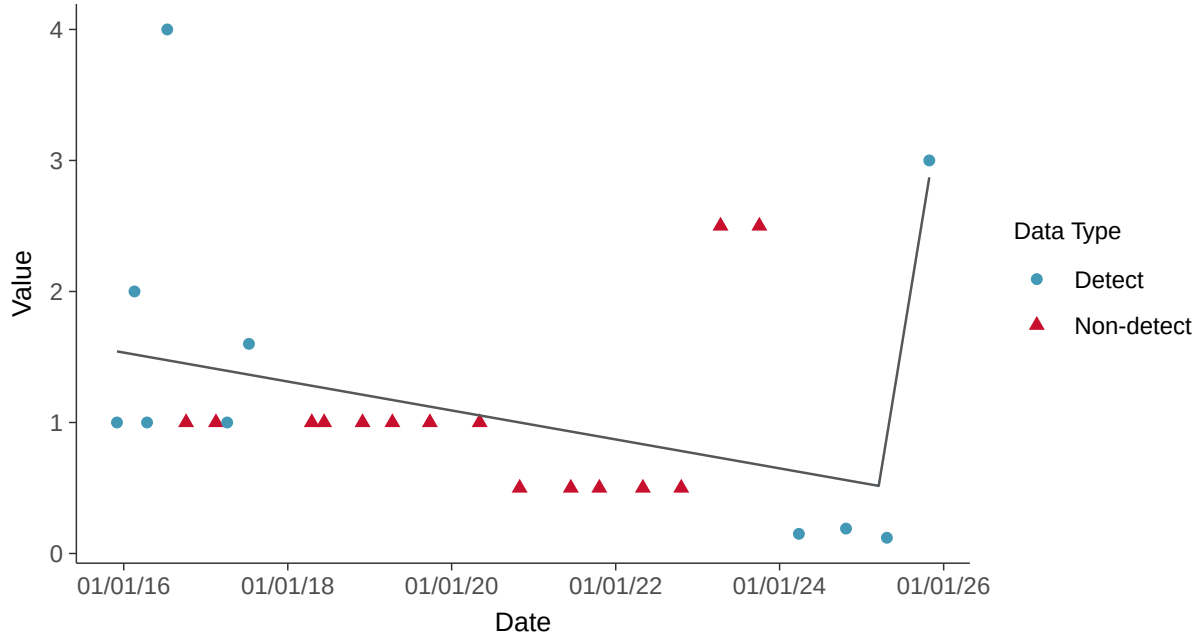
**Gamma Q-Q plot using ROS Imputed Estimates**

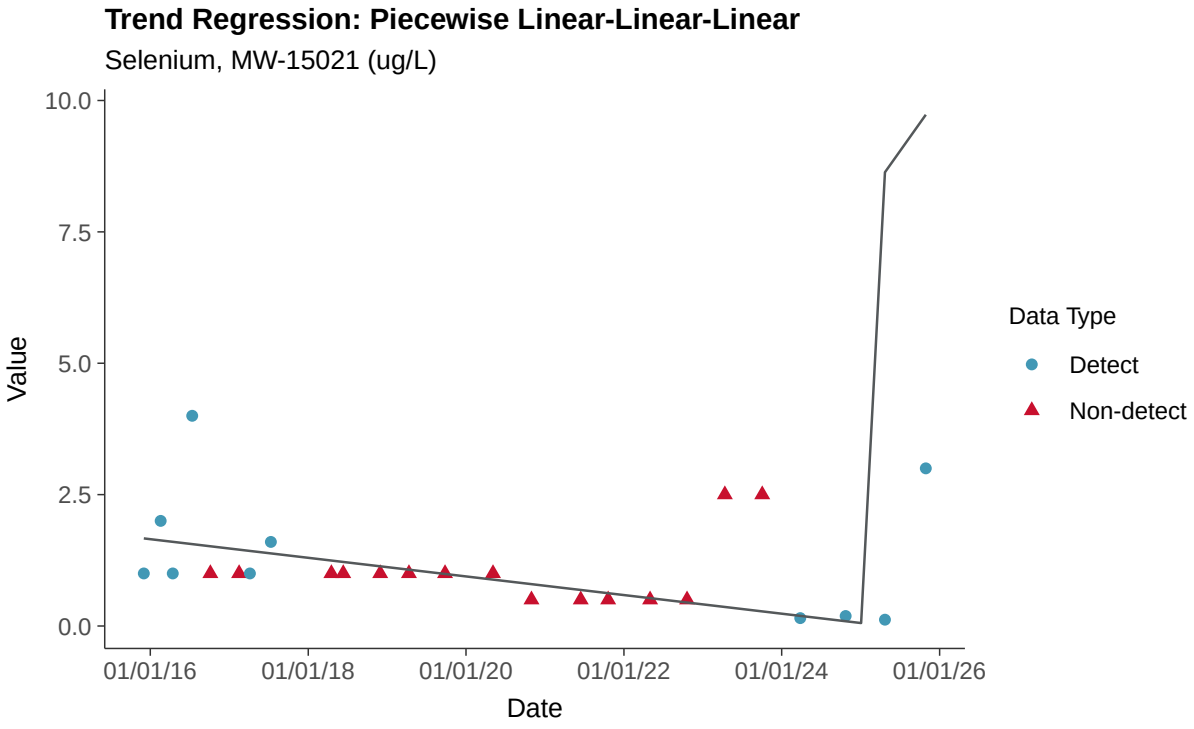
Selenium, MW-15021 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

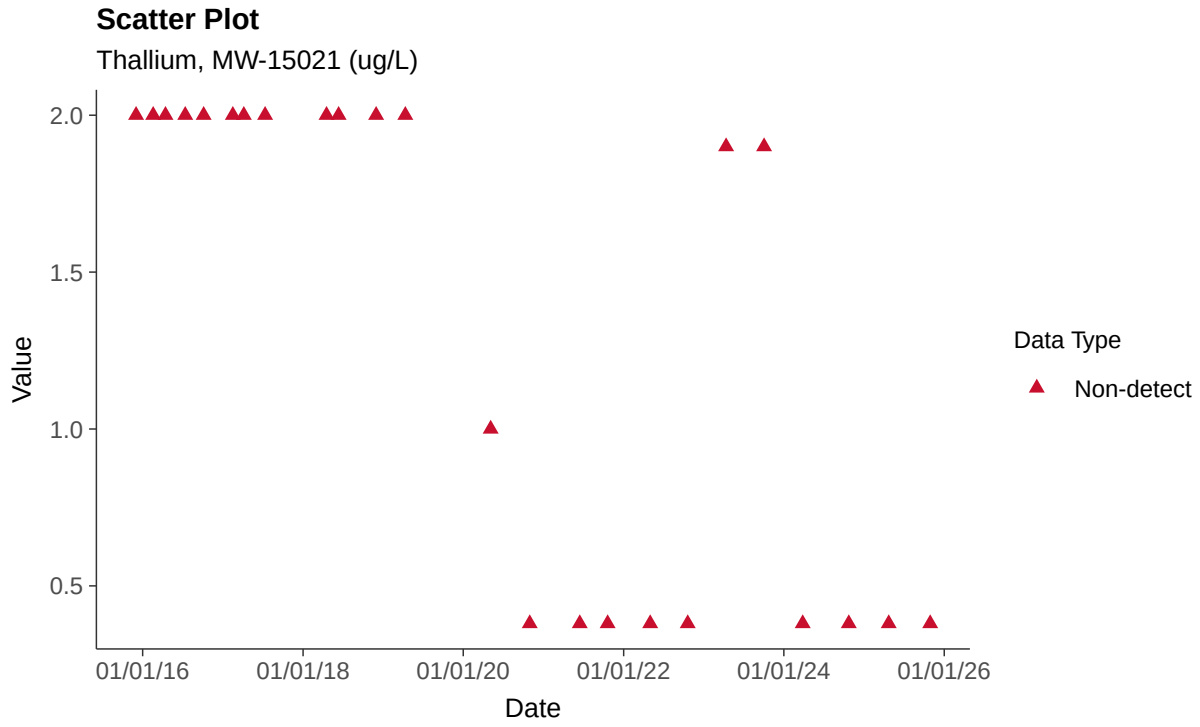
Selenium, MW-15021 (ug/L)

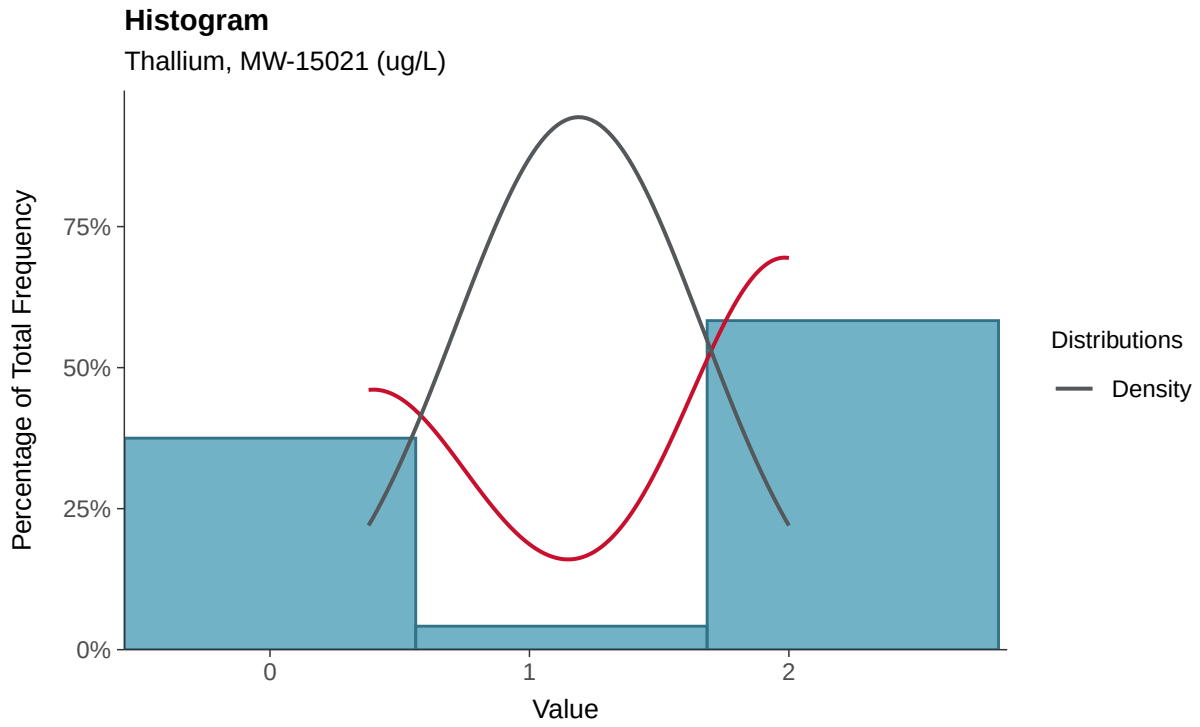



Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-15021 (ug/L)
Value
10.0
7.5
5.0
2.5
0.0
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Thallium, MW-15021

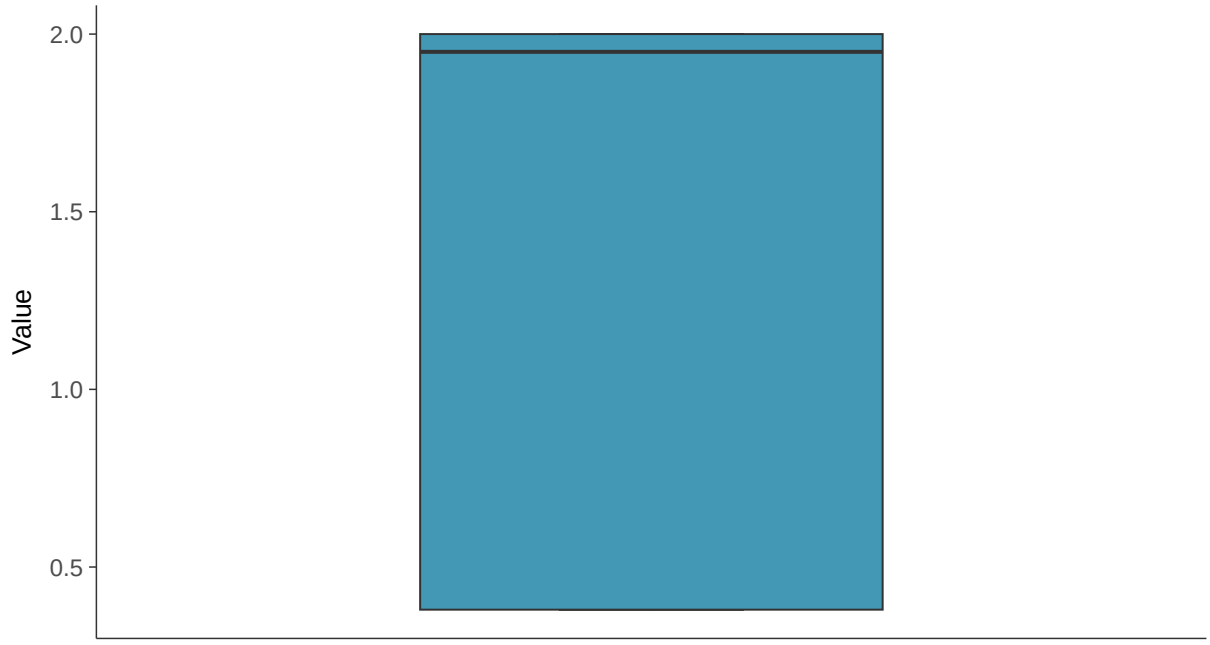
ID: 11_2_131



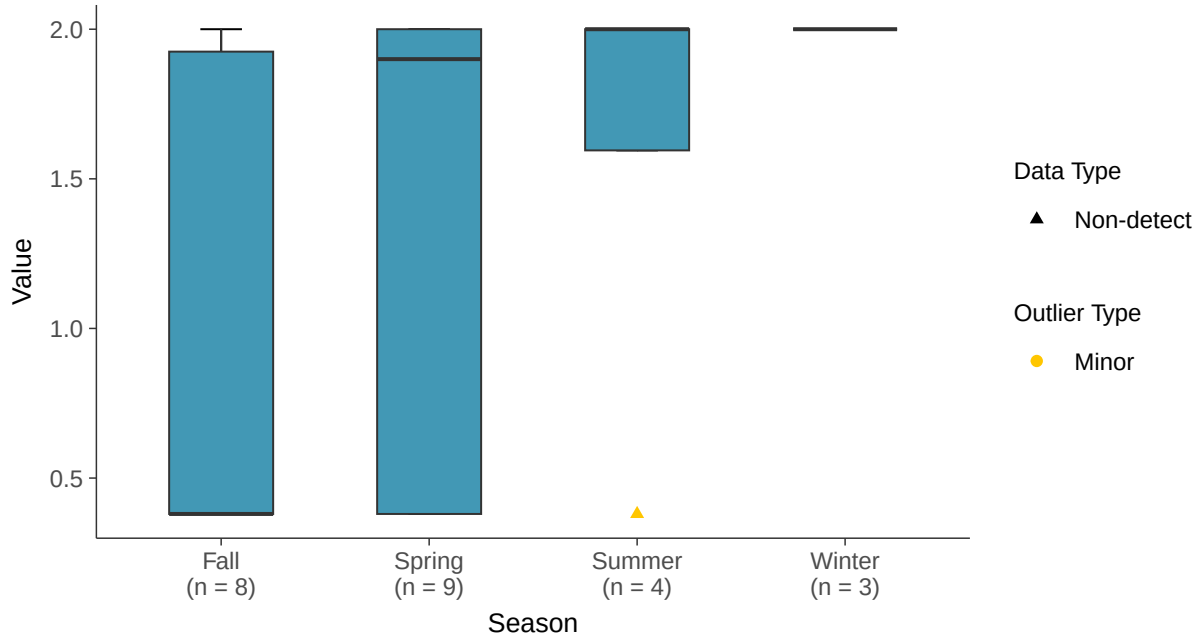
**Boxplot**

Thallium, MW-15021 (ug/L)



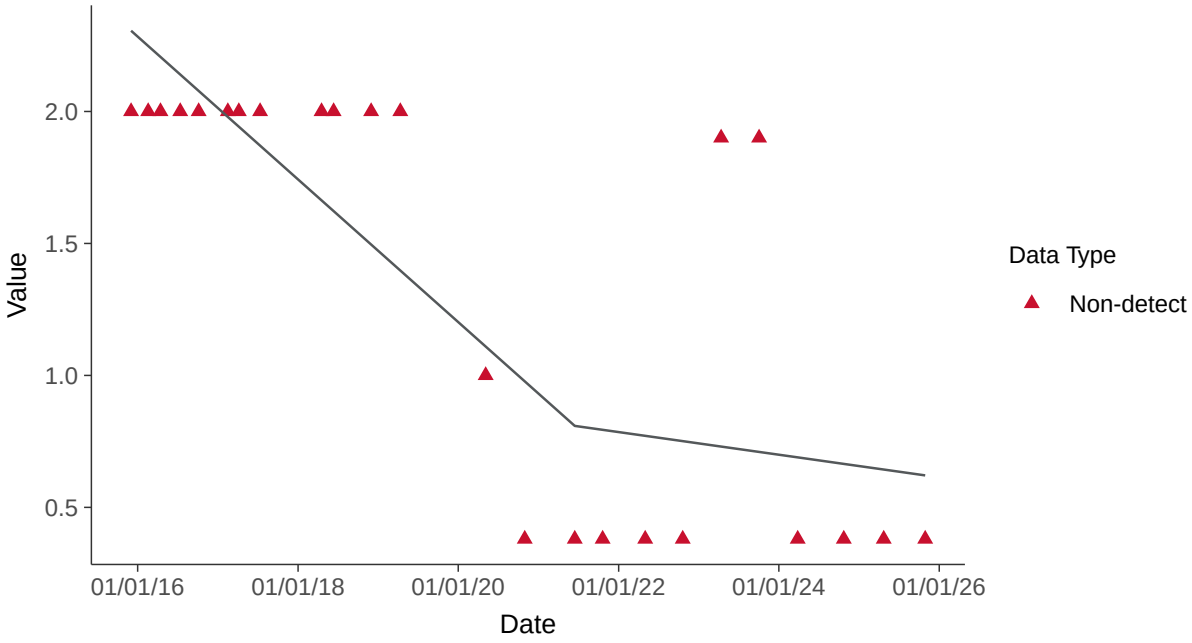

**Boxplot by Season**

Thallium, MW-15021 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15021 (ug/L)

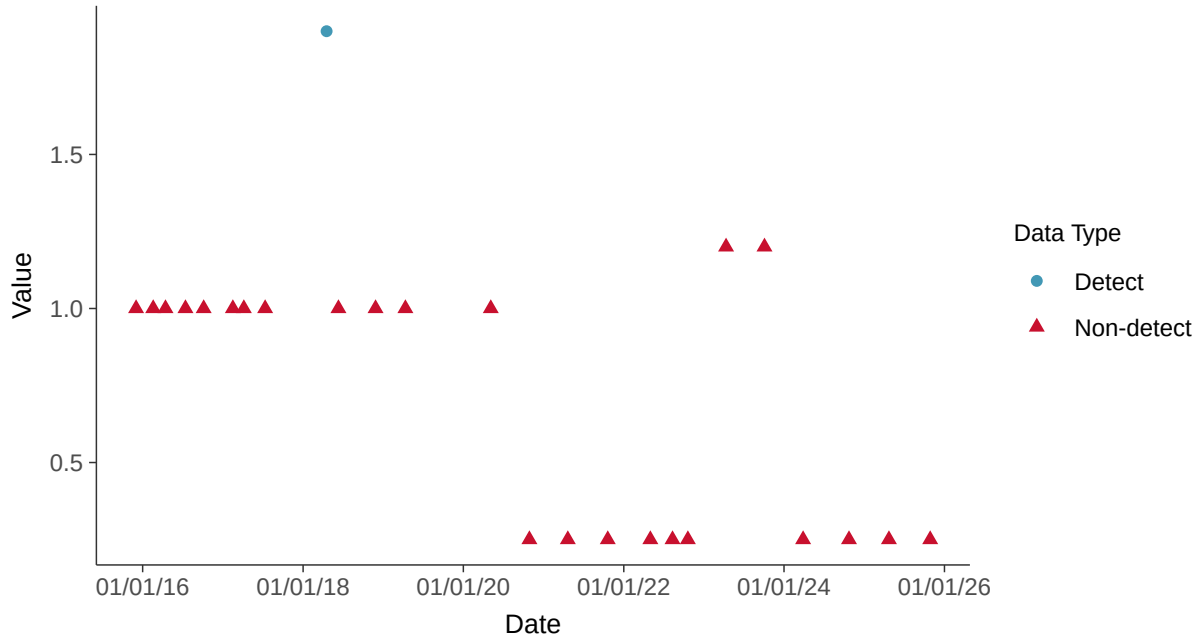


## Appendix IV: Antimony, MW-15022

ID: 12_2_101

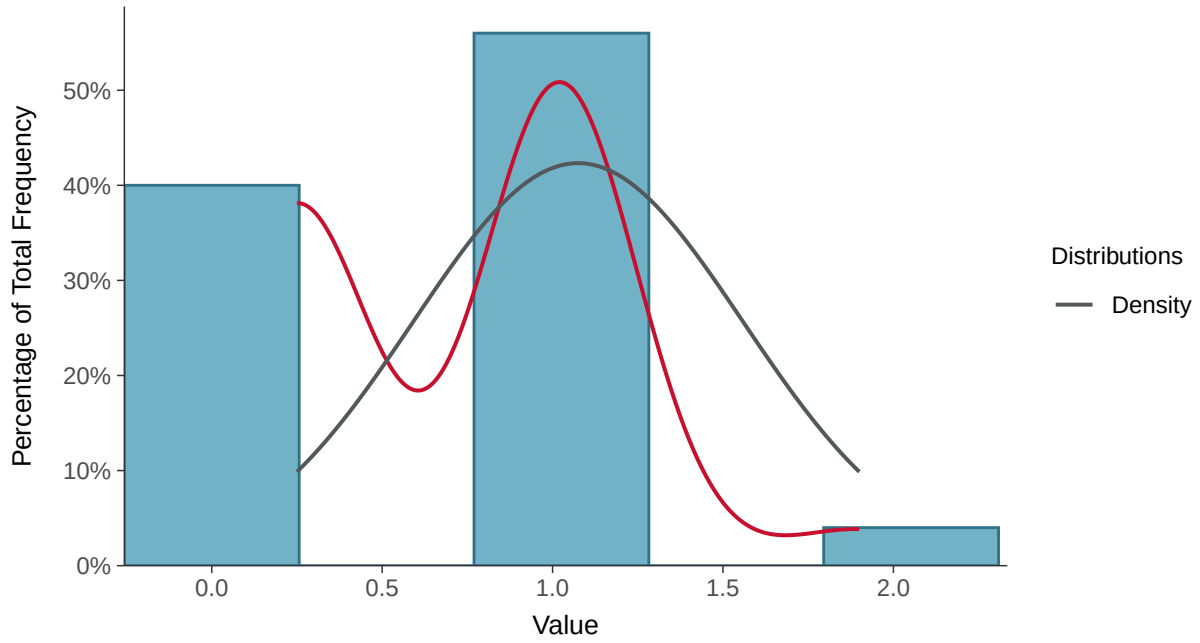
**Scatter Plot**

Antimony, MW-15022 (ug/L)



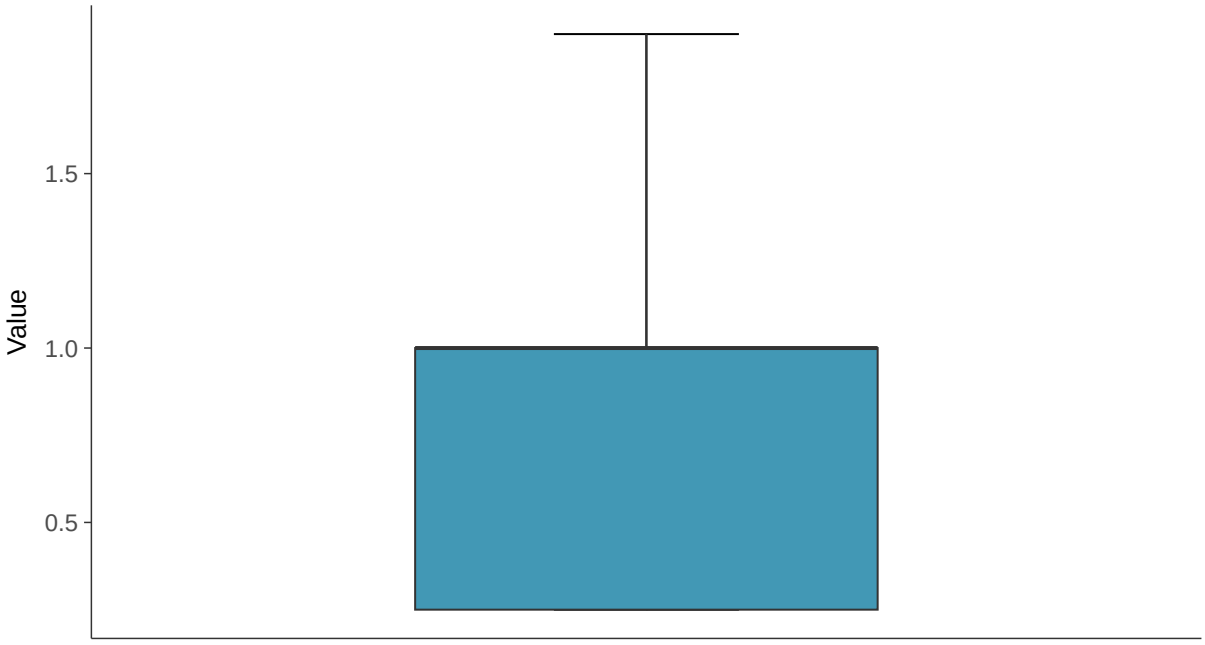

**Histogram**

Antimony, MW-15022 (ug/L)



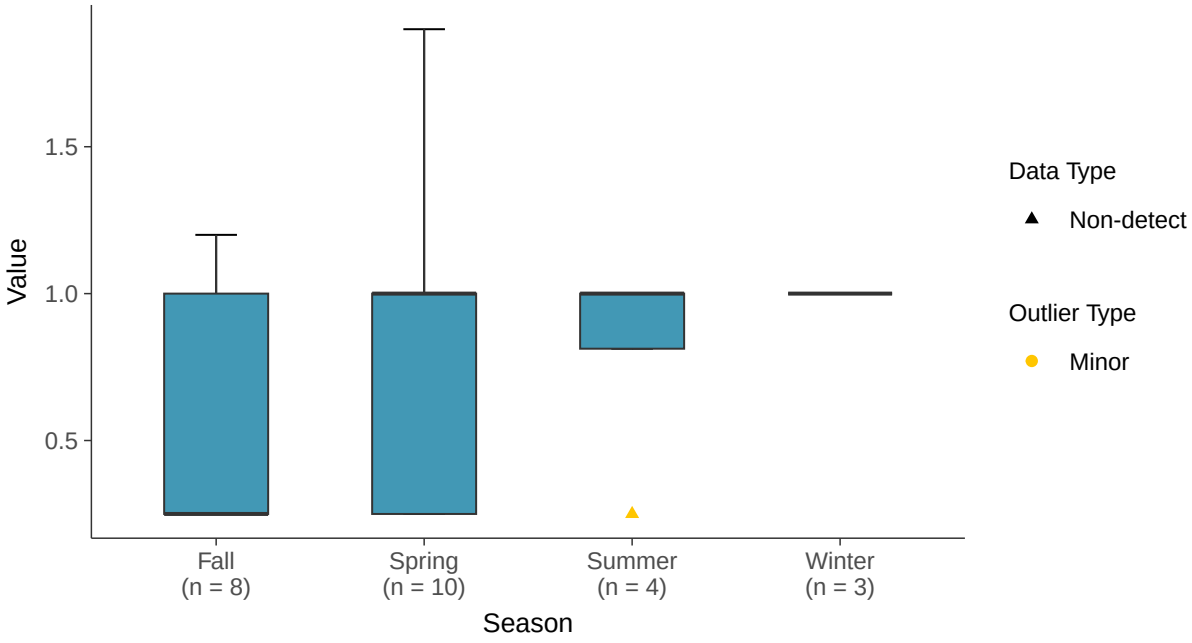
## Boxplot

Antimony, MW-15022 (ug/L)



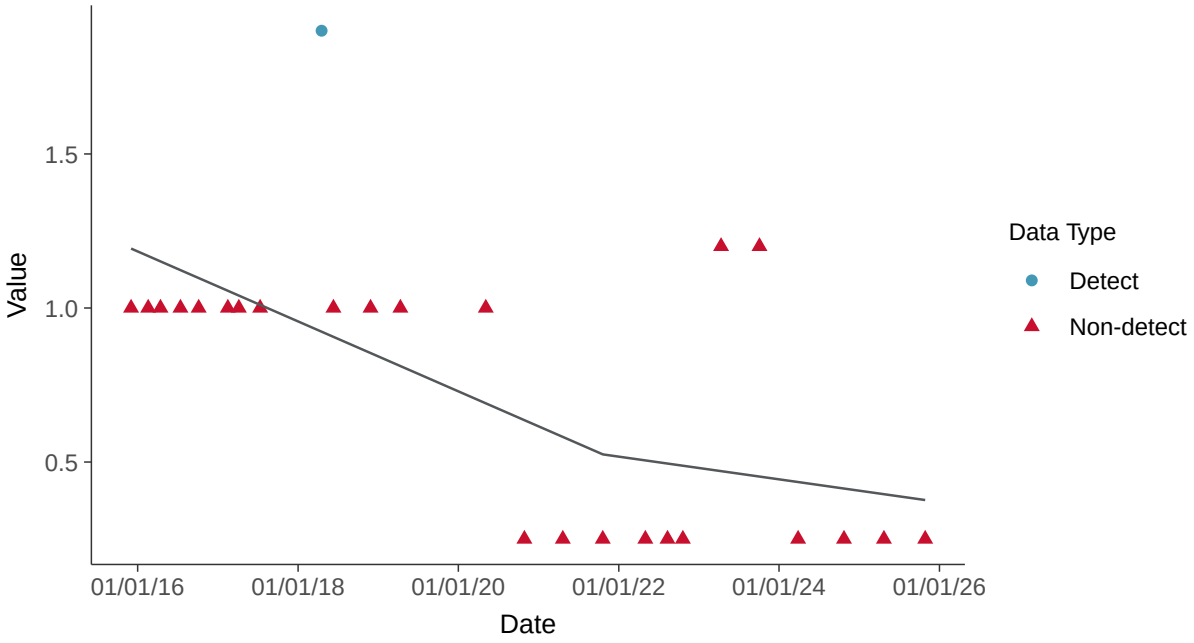

## Boxplot by Season

Antimony, MW-15022 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-15022 (ug/L)

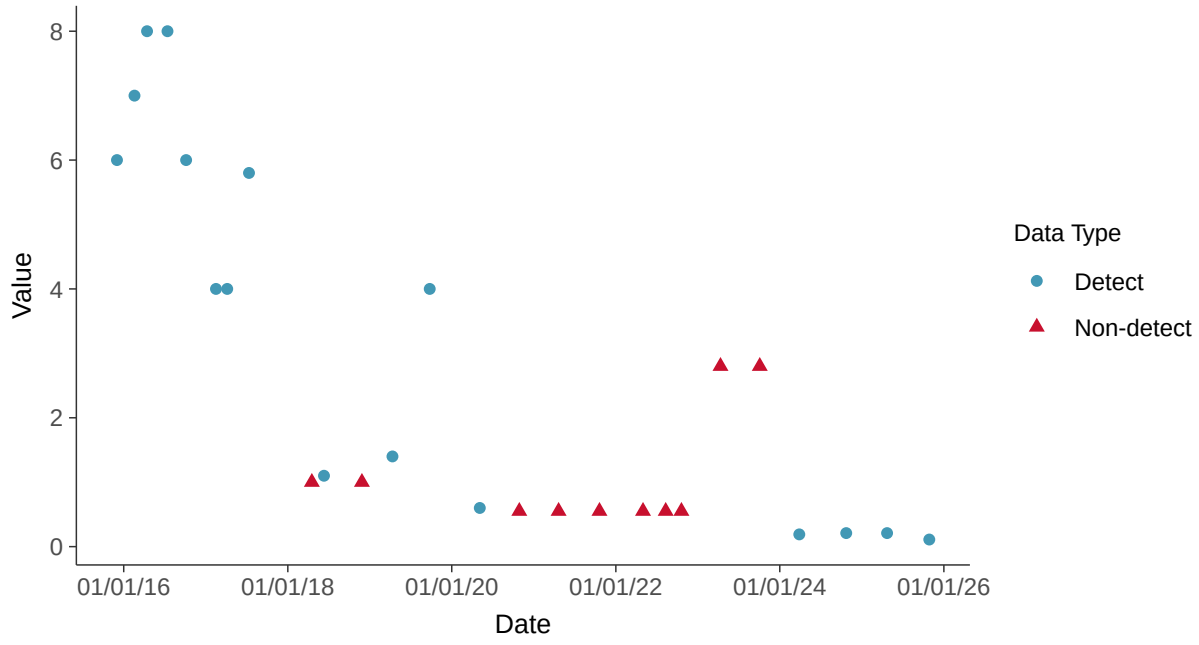


## Appendix IV: Arsenic, MW-15022

ID: 12_2_102

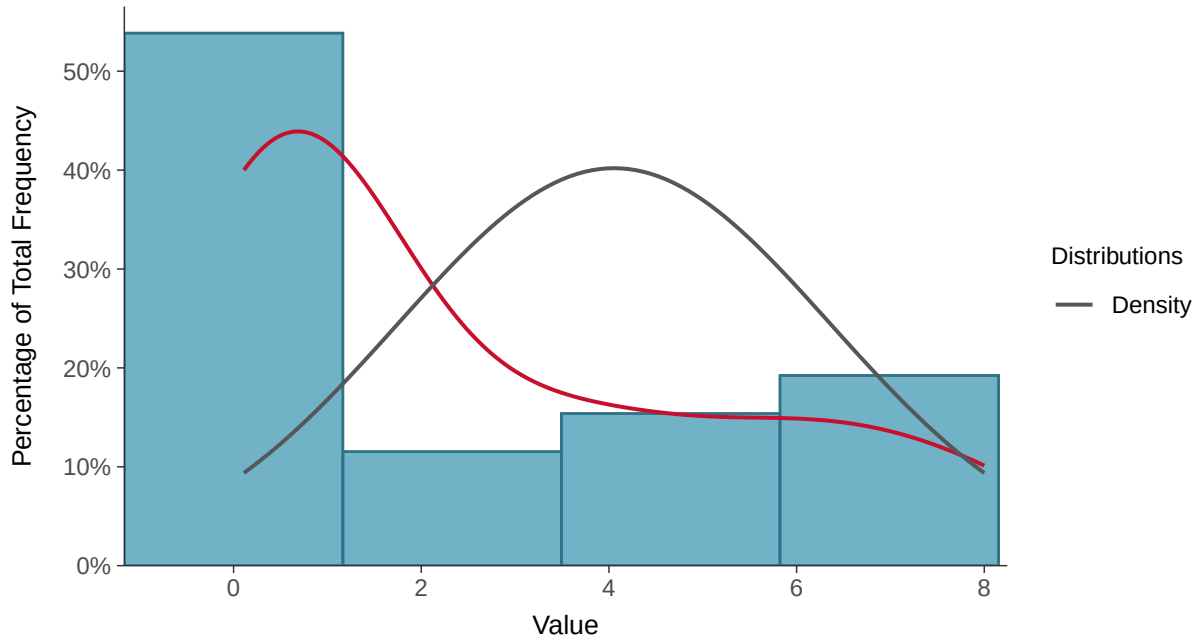
**Scatter Plot**

Arsenic, MW-15022 (ug/L)



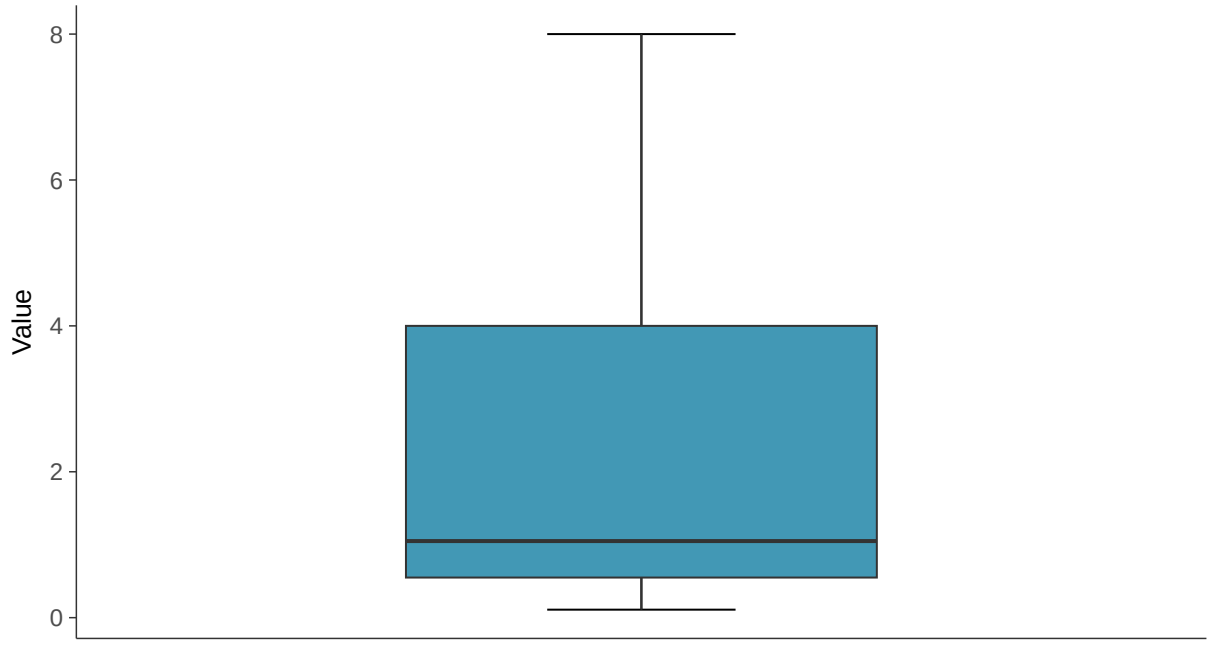

**Histogram**

Arsenic, MW-15022 (ug/L)



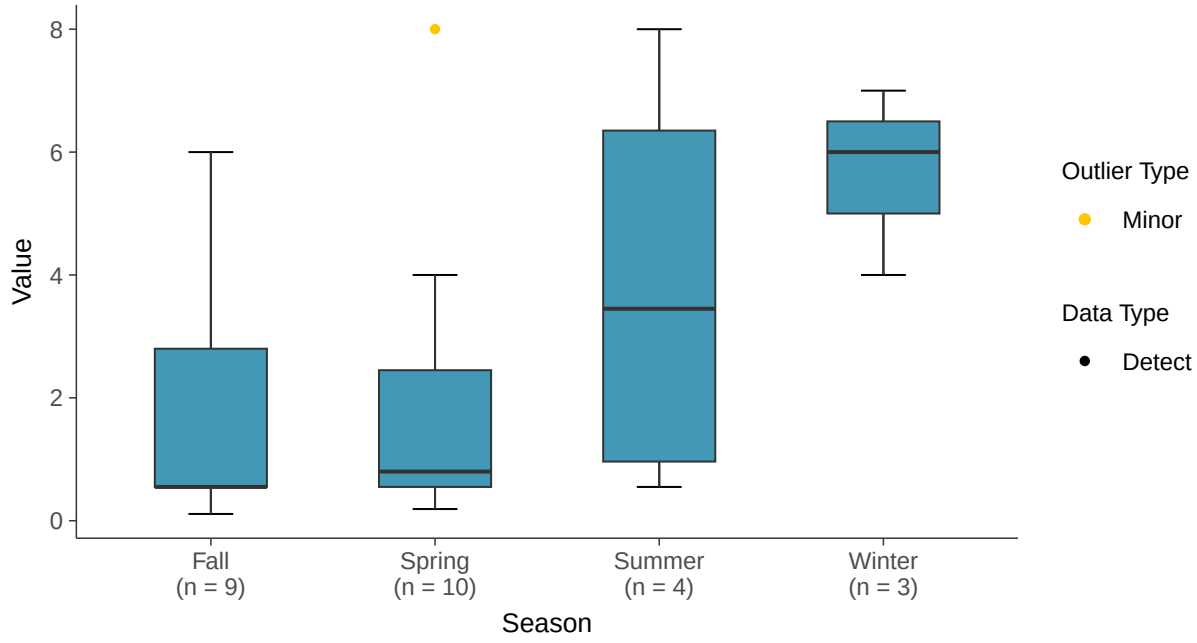
**Boxplot**

Arsenic, MW-15022 (ug/L)



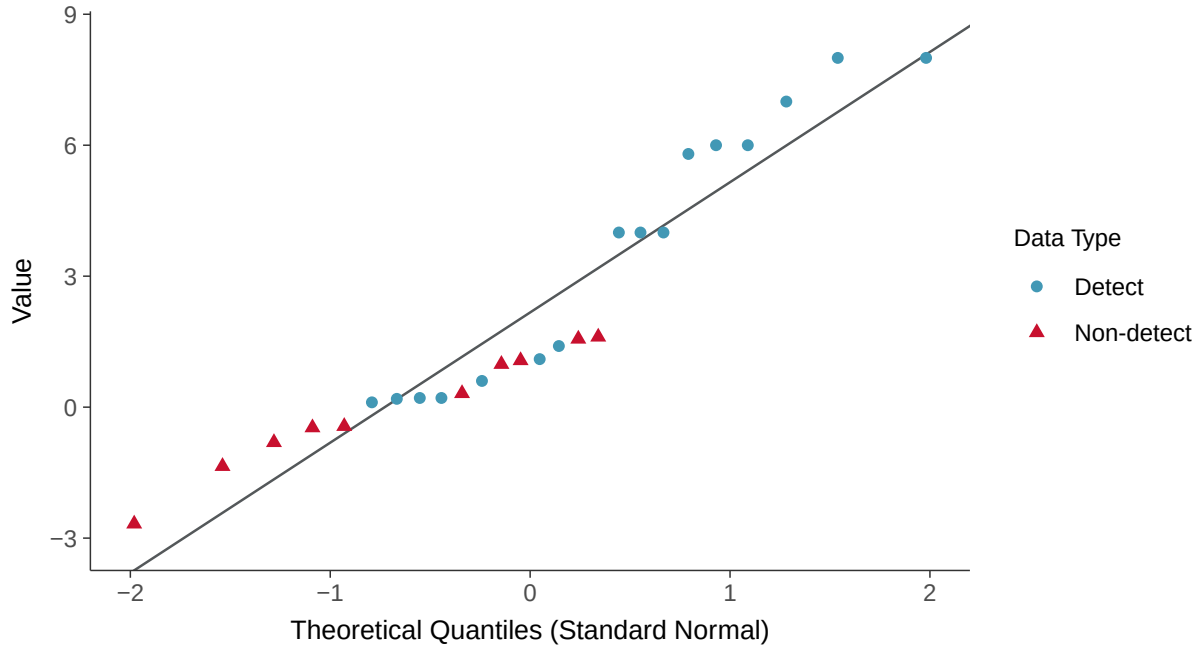

**Boxplot by Season**

Arsenic, MW-15022 (ug/L)



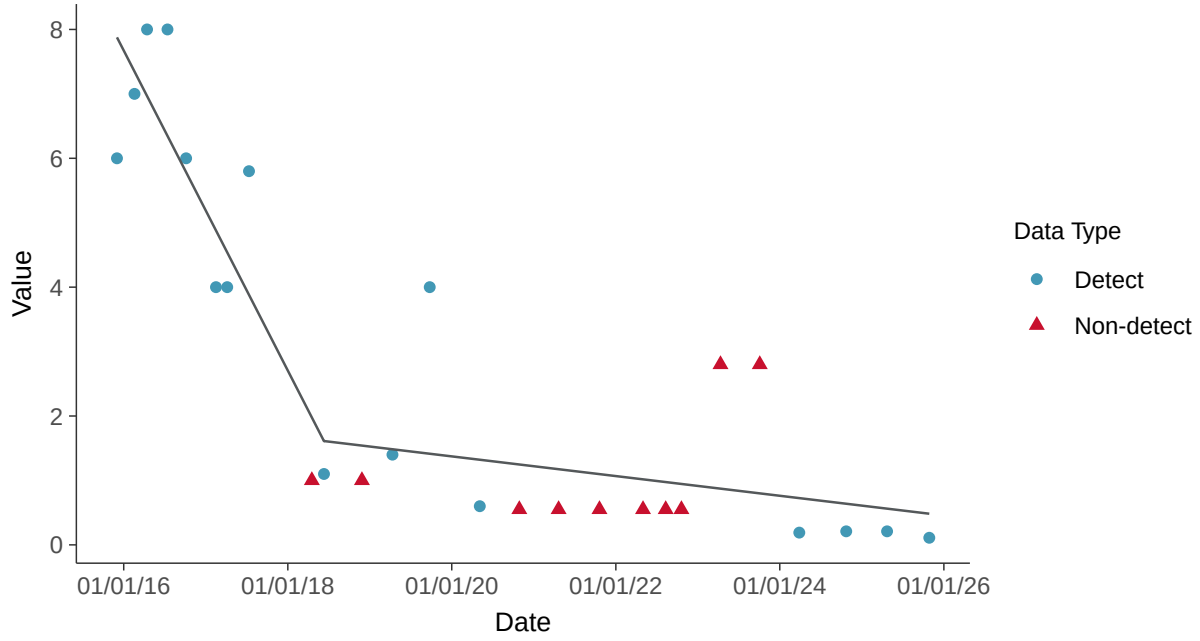
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15022 (ug/L)



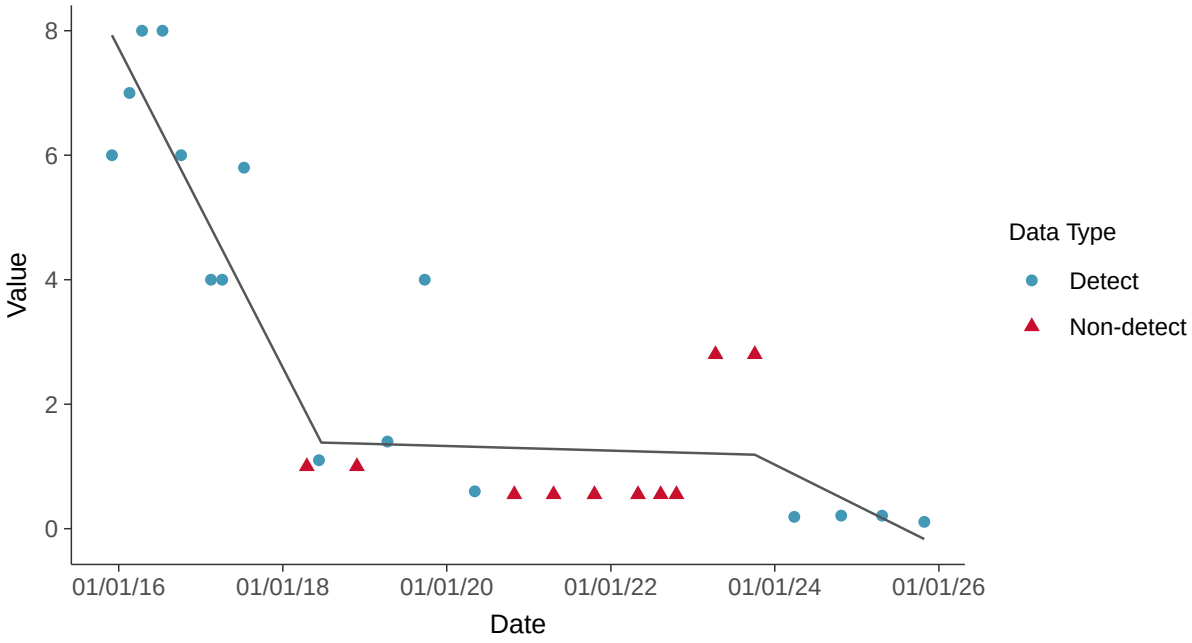

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15022 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15022 (ug/L)

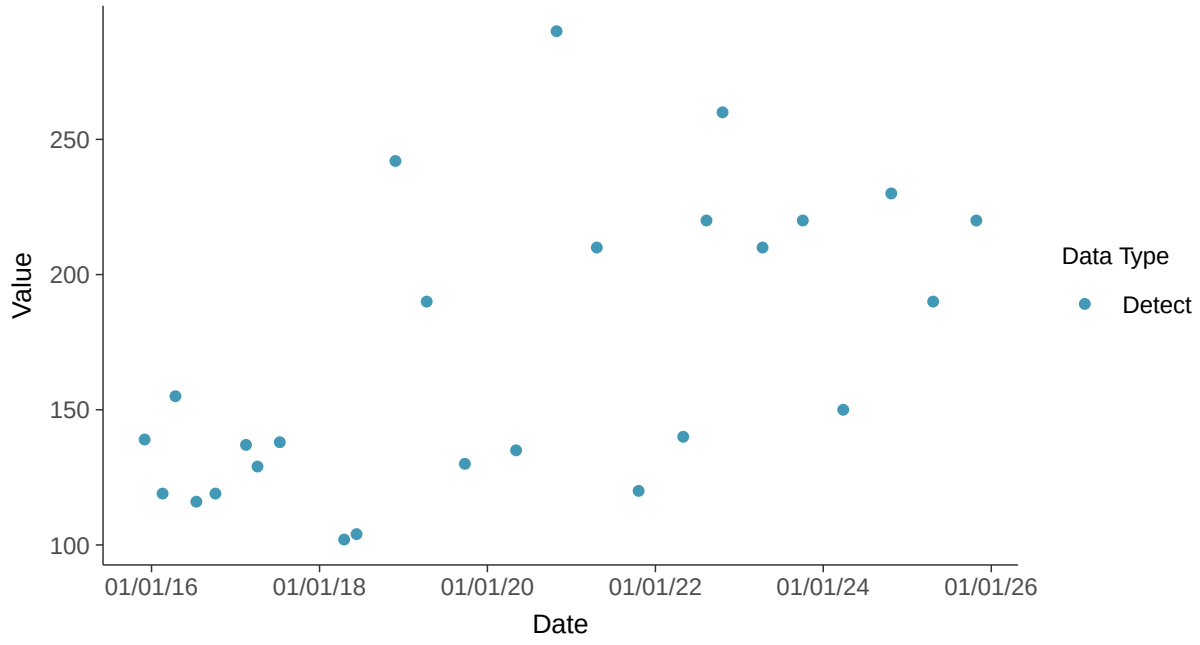


## Appendix IV: Barium, MW-15022

ID: 12_2_103

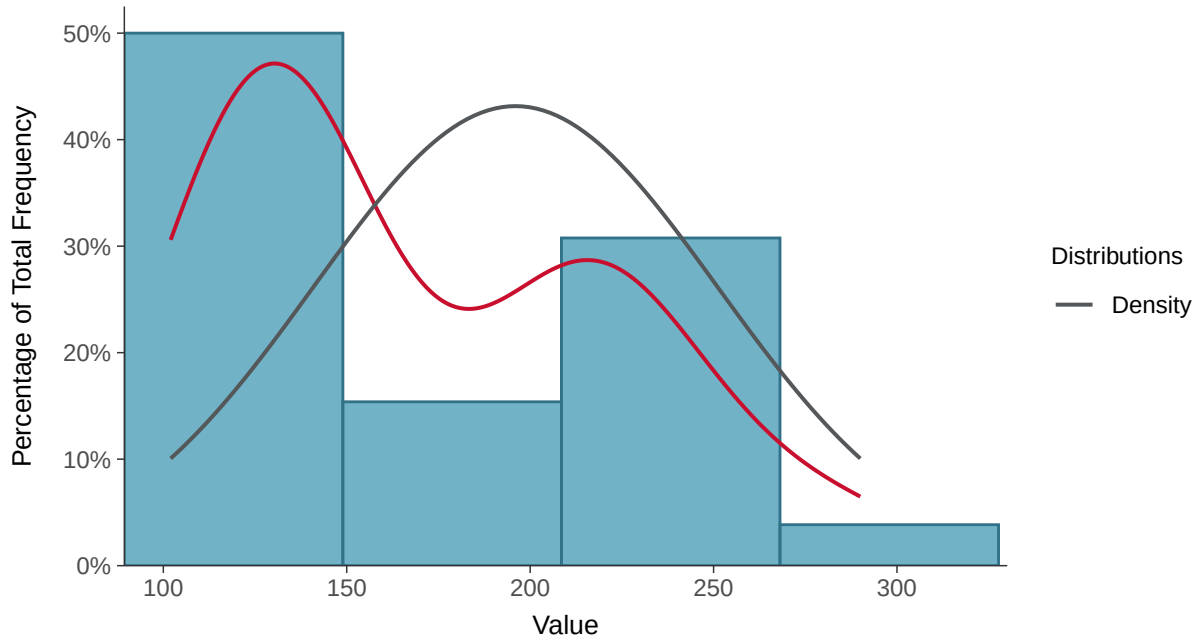
**Scatter Plot**

Barium, MW-15022 (ug/L)



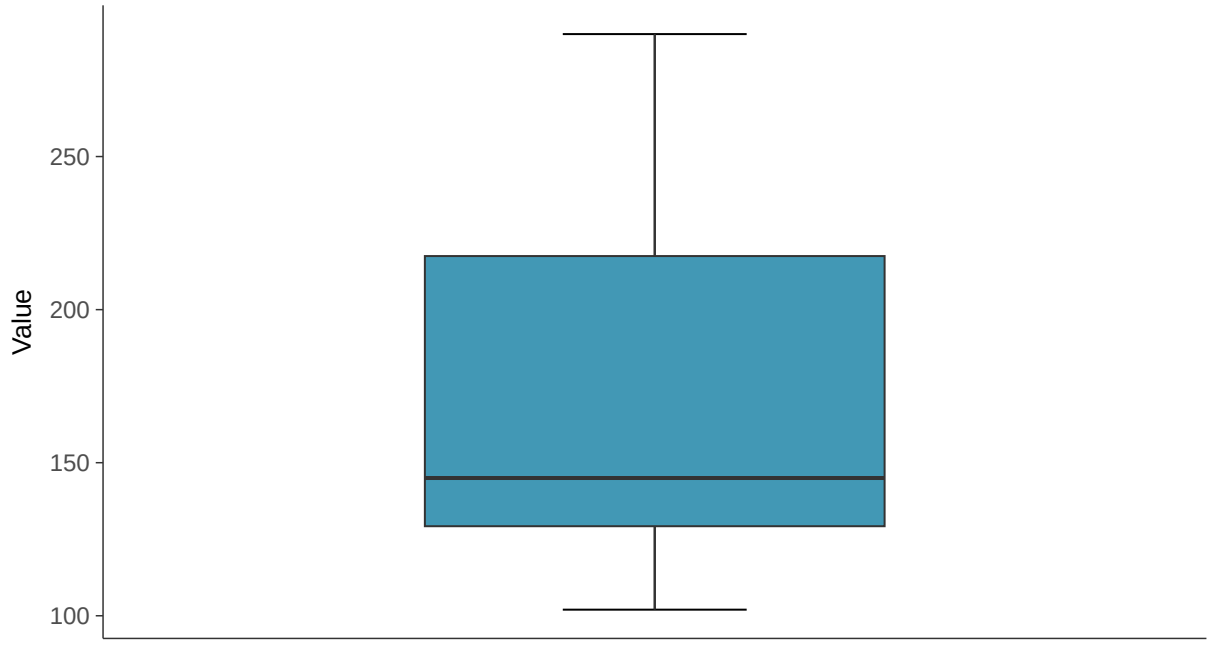

**Histogram**

Barium, MW-15022 (ug/L)



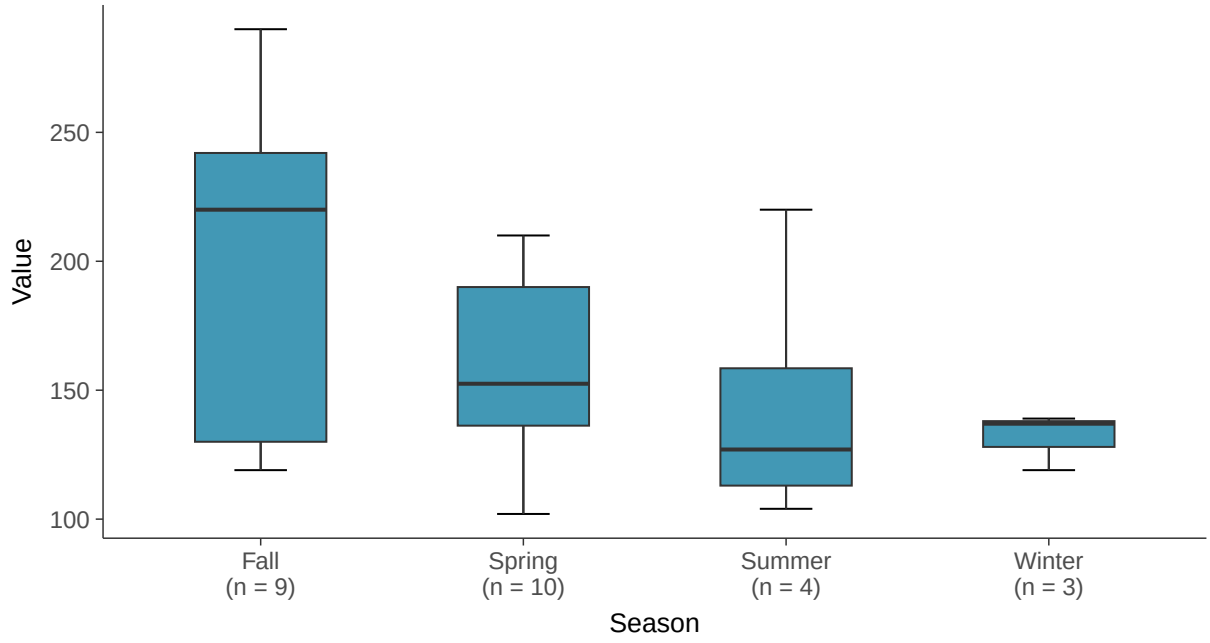
**Boxplot**

Barium, MW-15022 (ug/L)



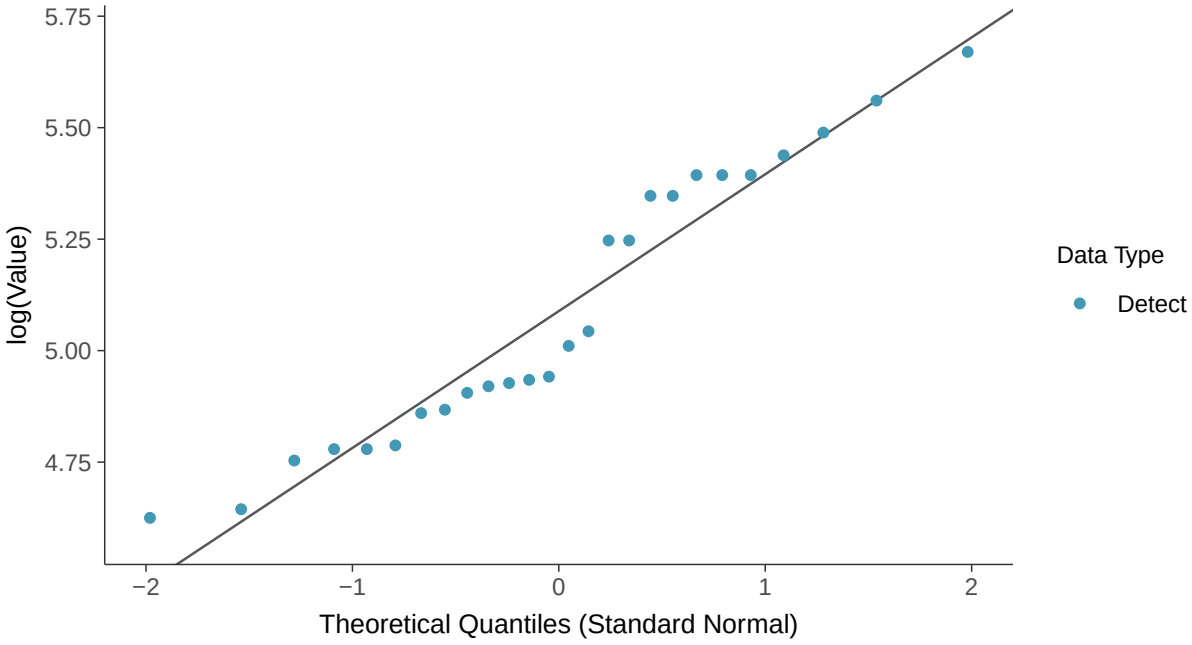

**Boxplot by Season**

Barium, MW-15022 (ug/L)



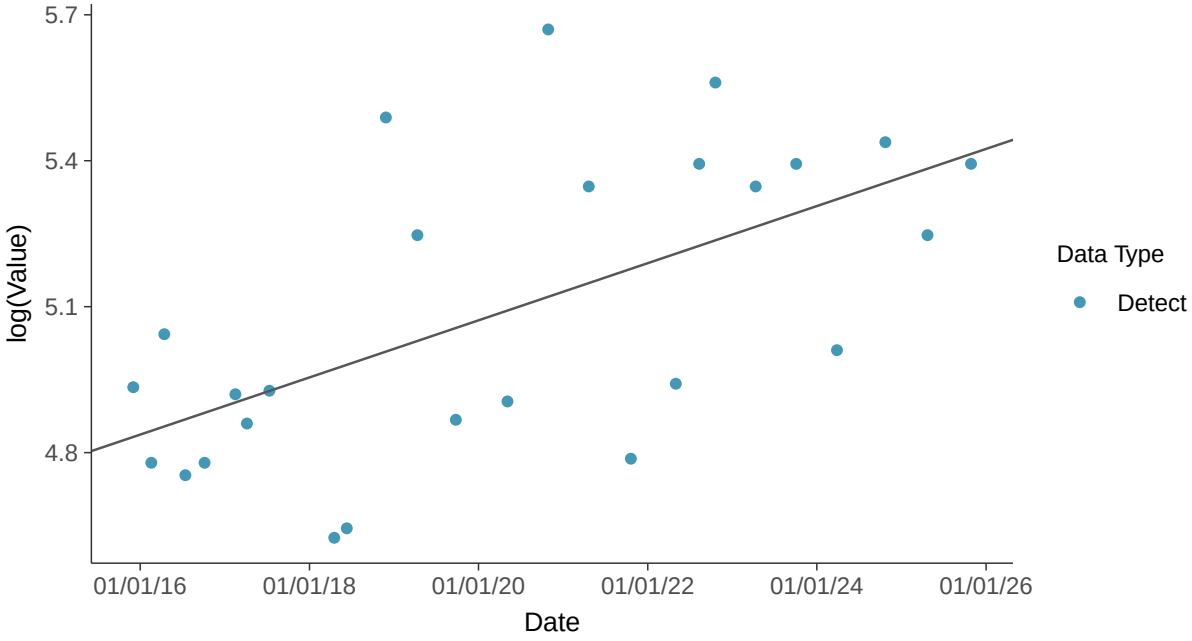
**Lognormal Q-Q plot**

Barium, MW-15022 (ug/L)



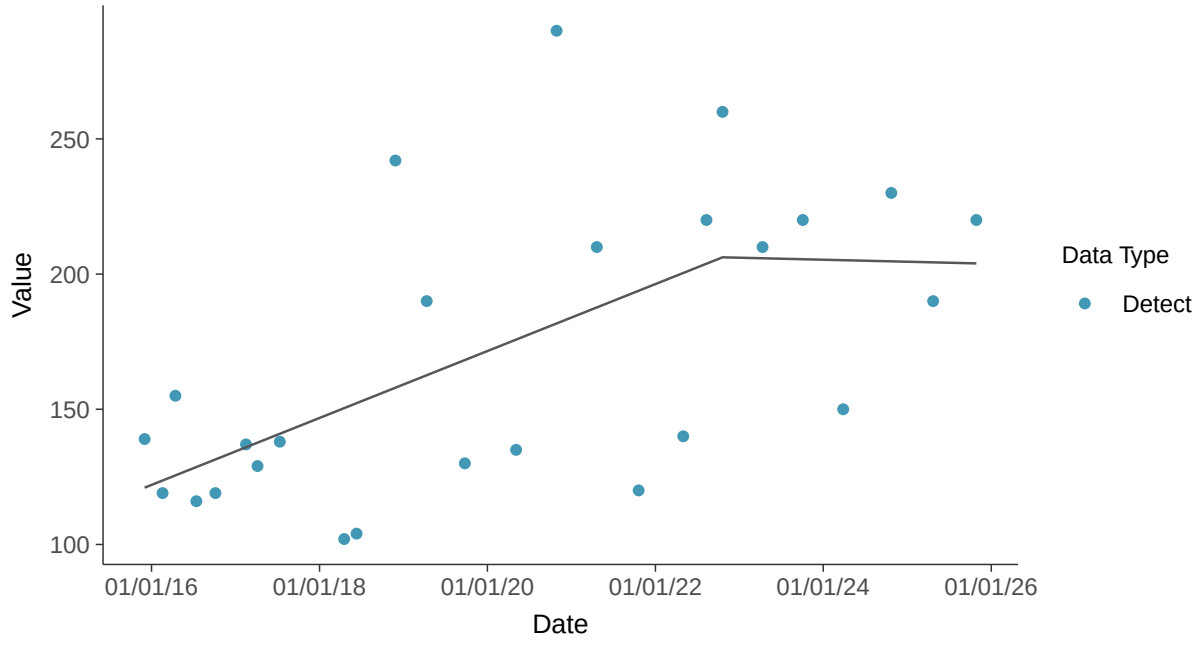

**Trend Regression: Lognormal MLE**

Barium, MW-15022 (ug/L)



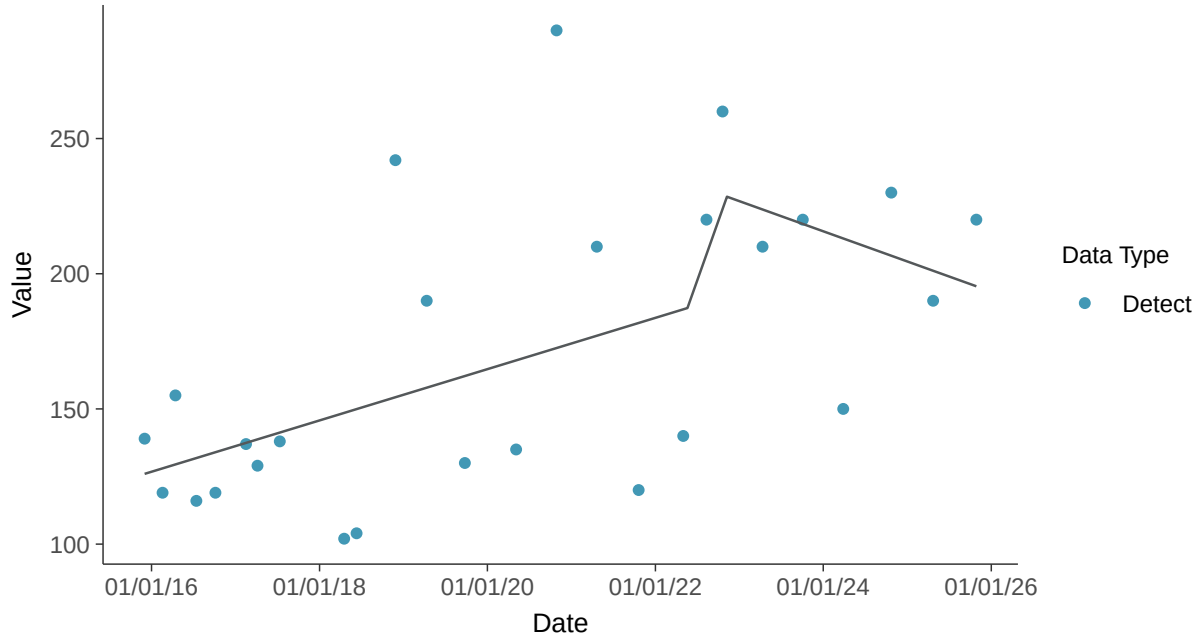
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15022 (ug/L)



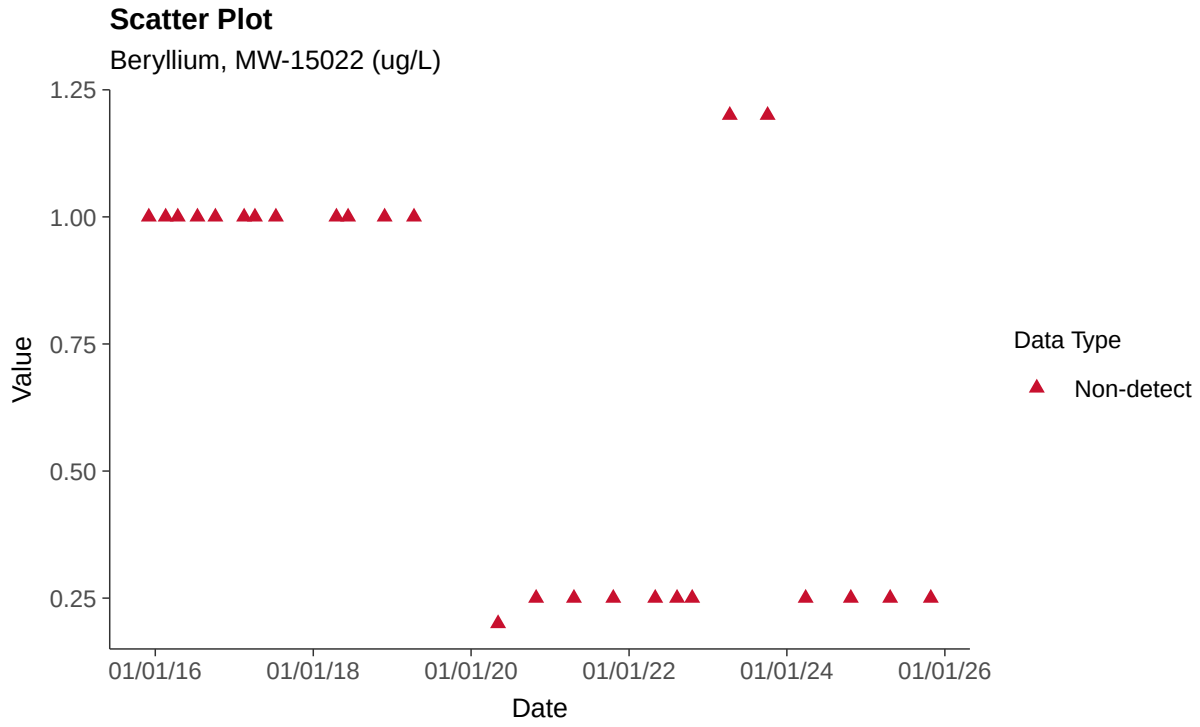

**Trend Regression: Piecewise Linear-Linear-Linear**

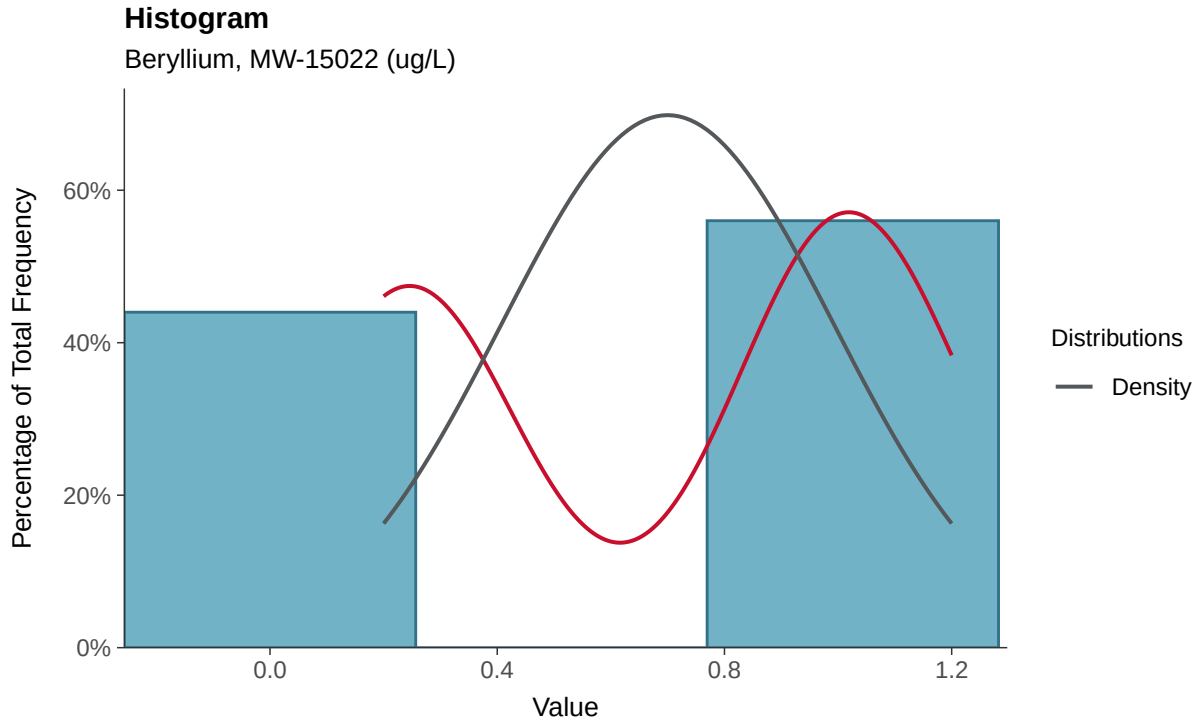
Barium, MW-15022 (ug/L)



## Appendix IV: Beryllium, MW-15022

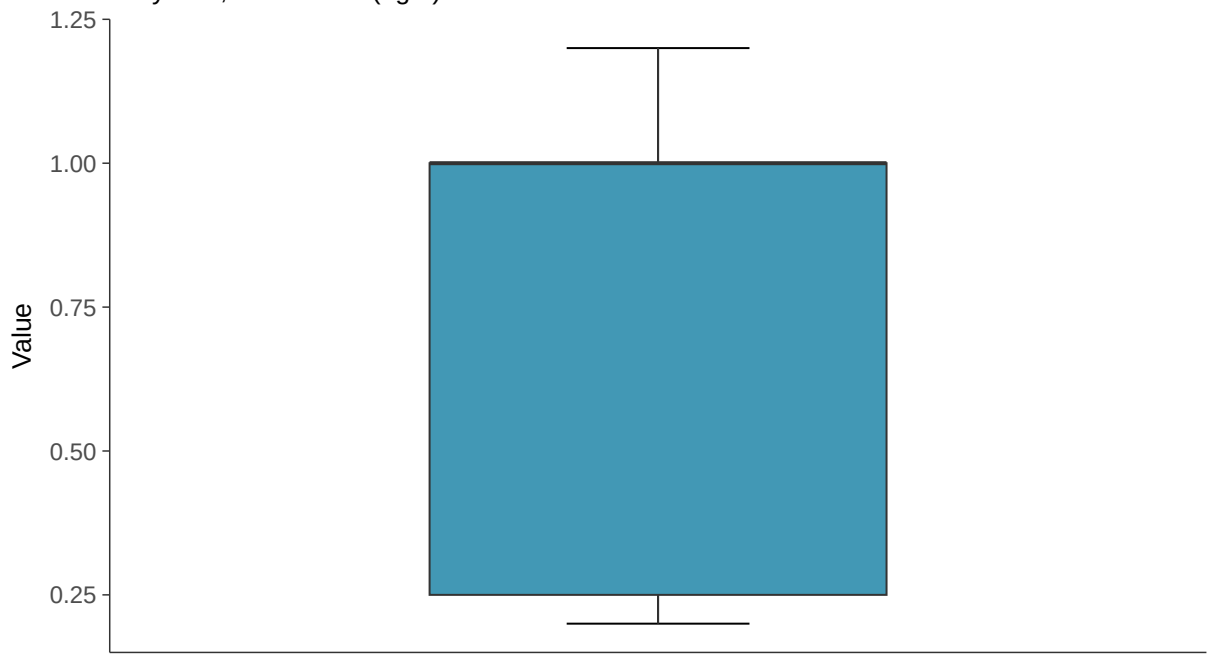
ID: 12_2_104



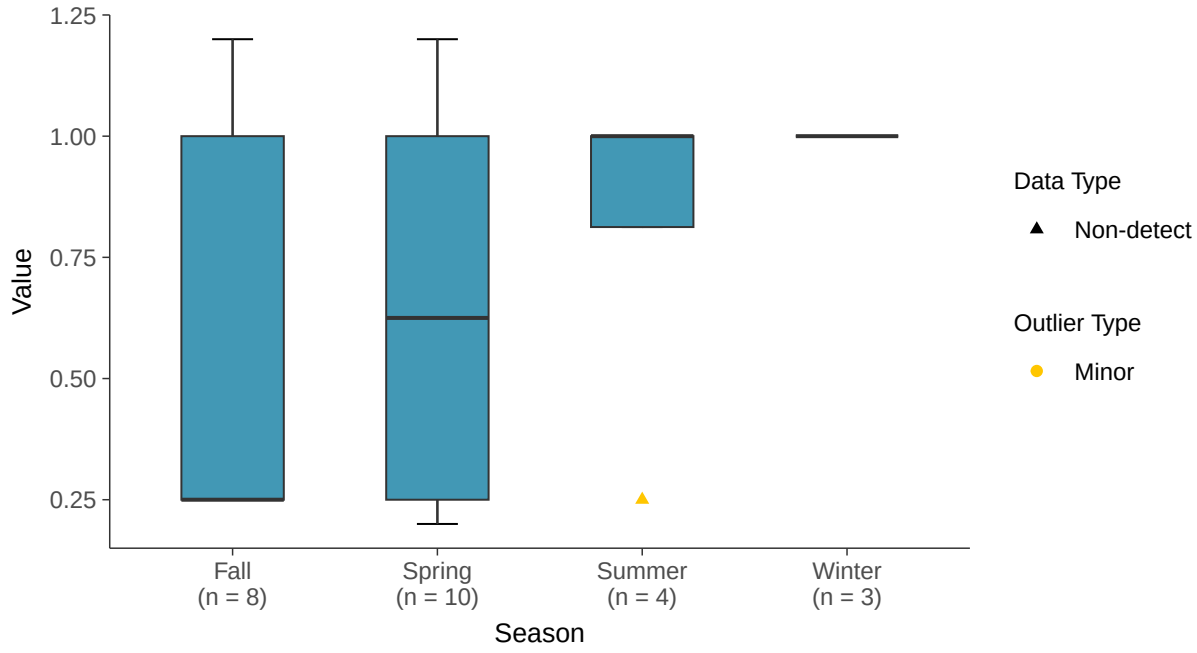
## Boxplot

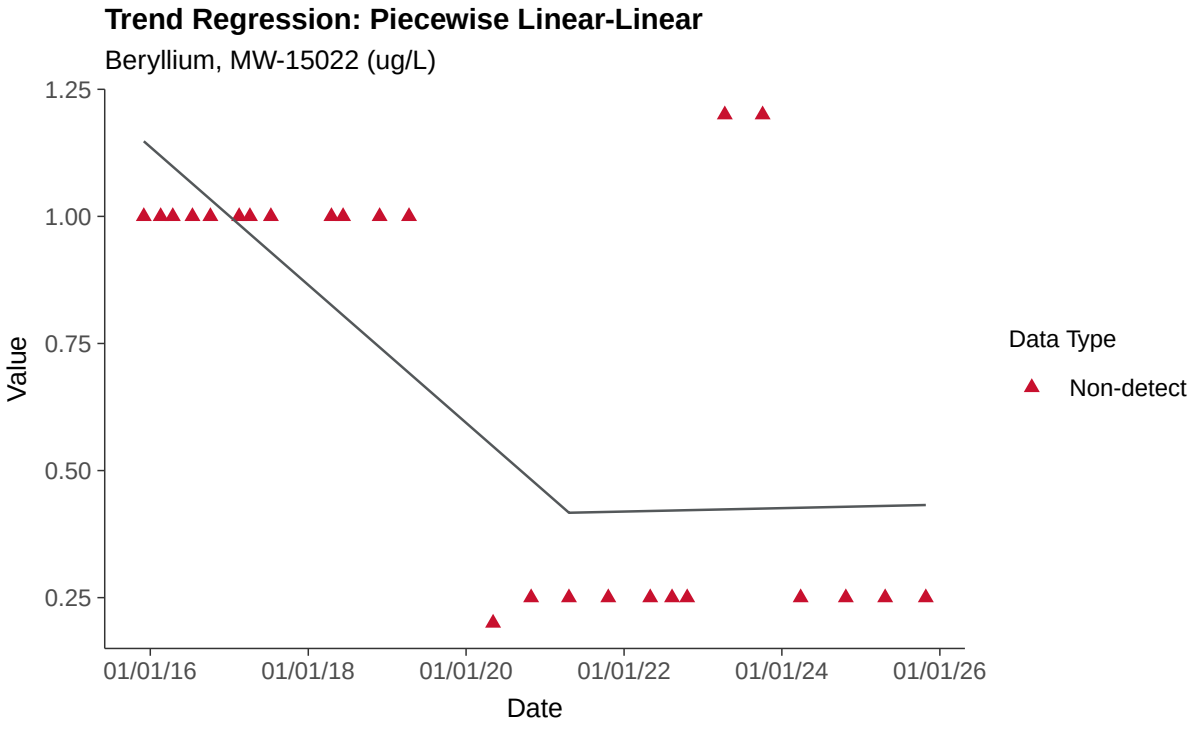
Beryllium, MW-15022 (ug/L)




## Boxplot by Season

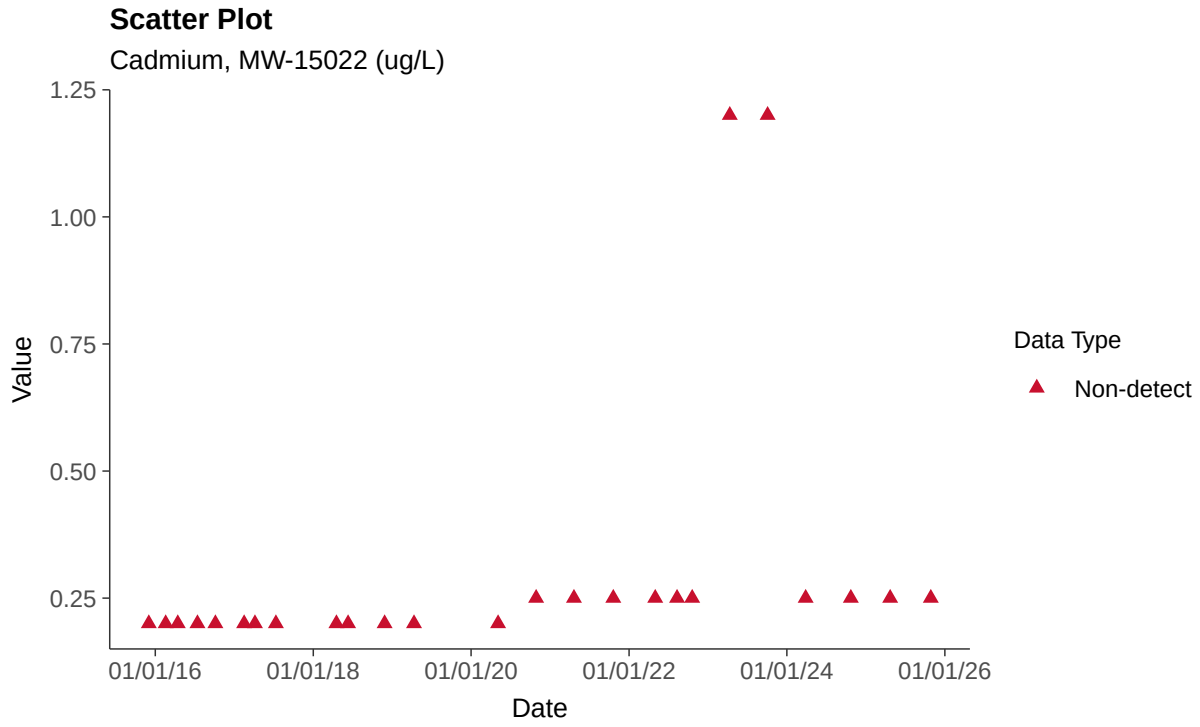
Beryllium, MW-15022 (ug/L)

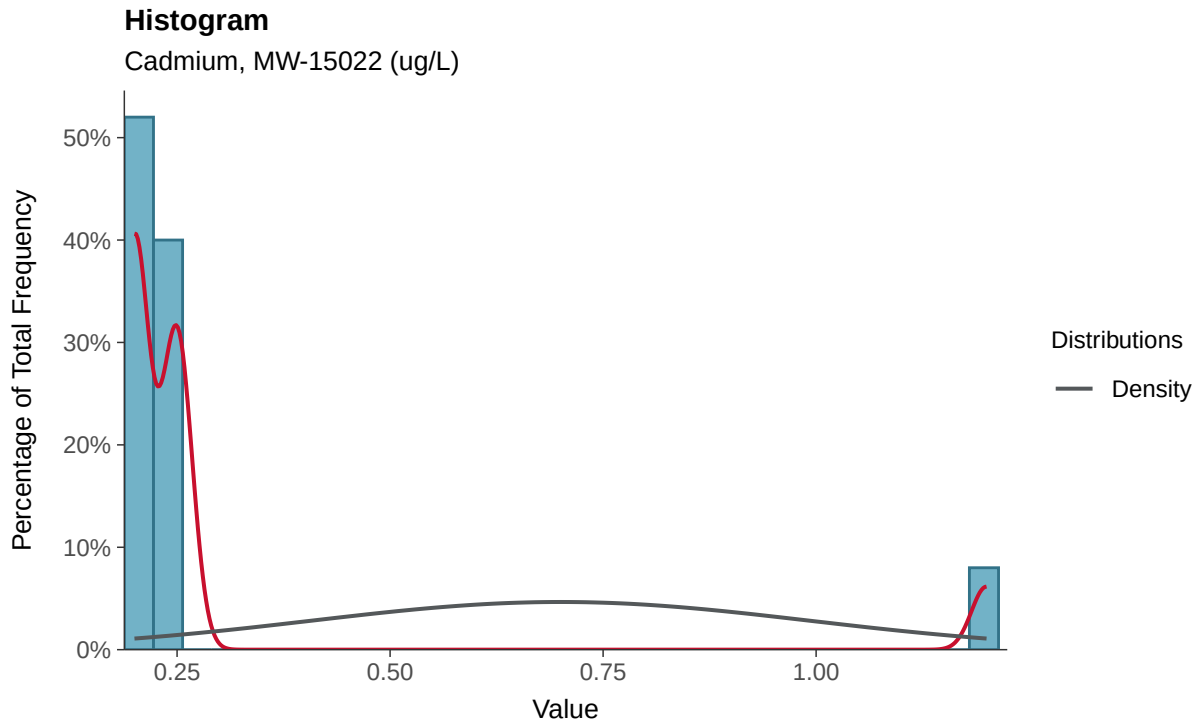



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15022 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Cadmium, MW-15022

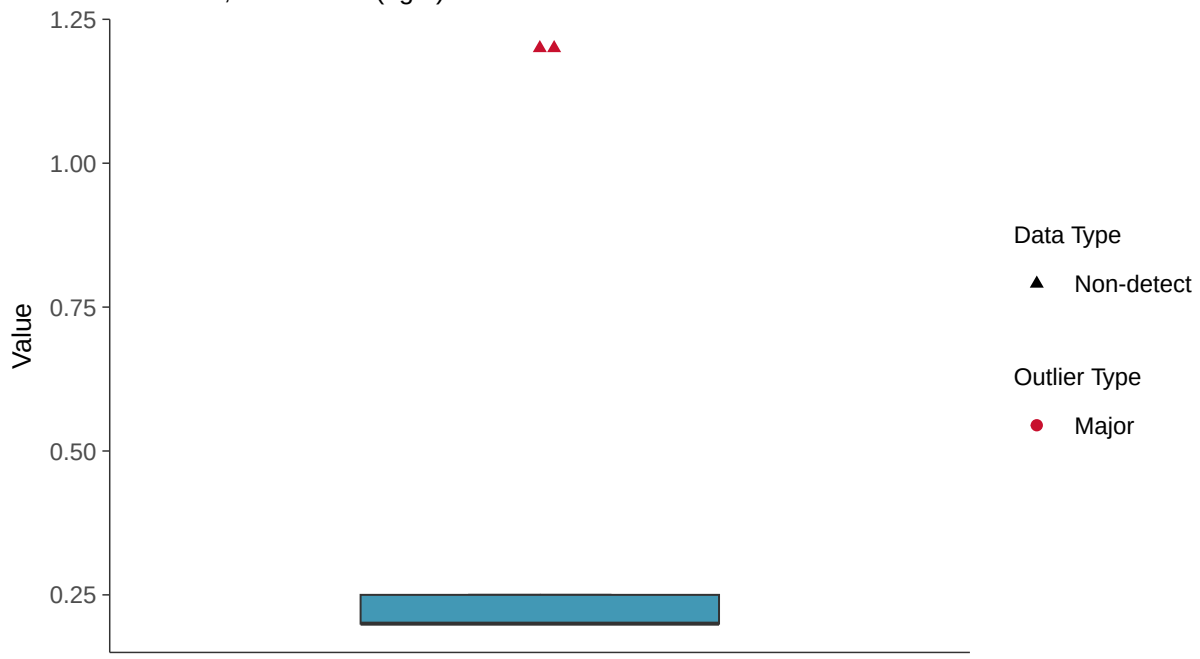
ID: 12_2_106



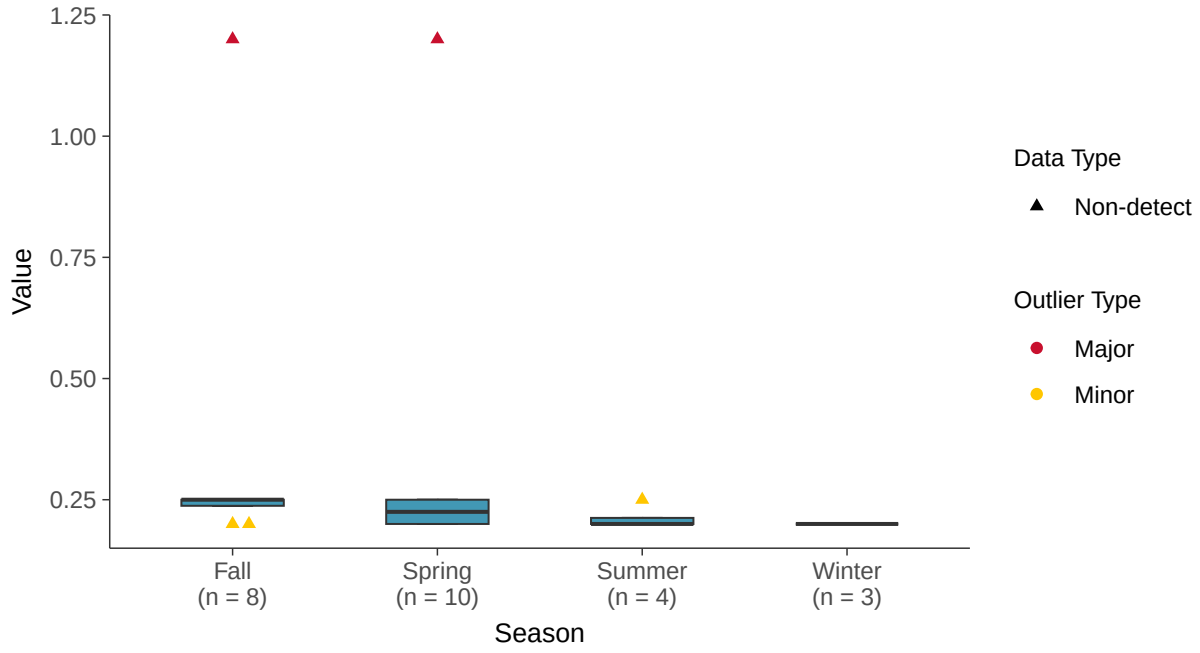
## Boxplot

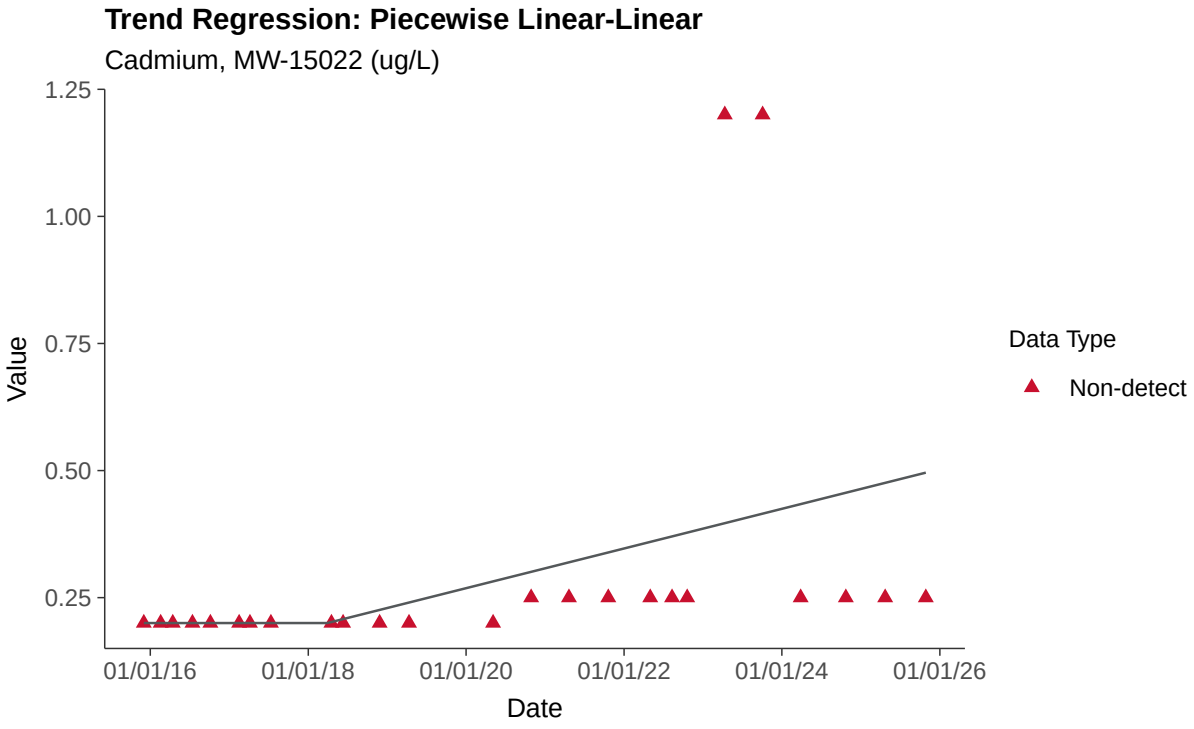
Cadmium, MW-15022 (ug/L)




## Boxplot by Season

Cadmium, MW-15022 (ug/L)



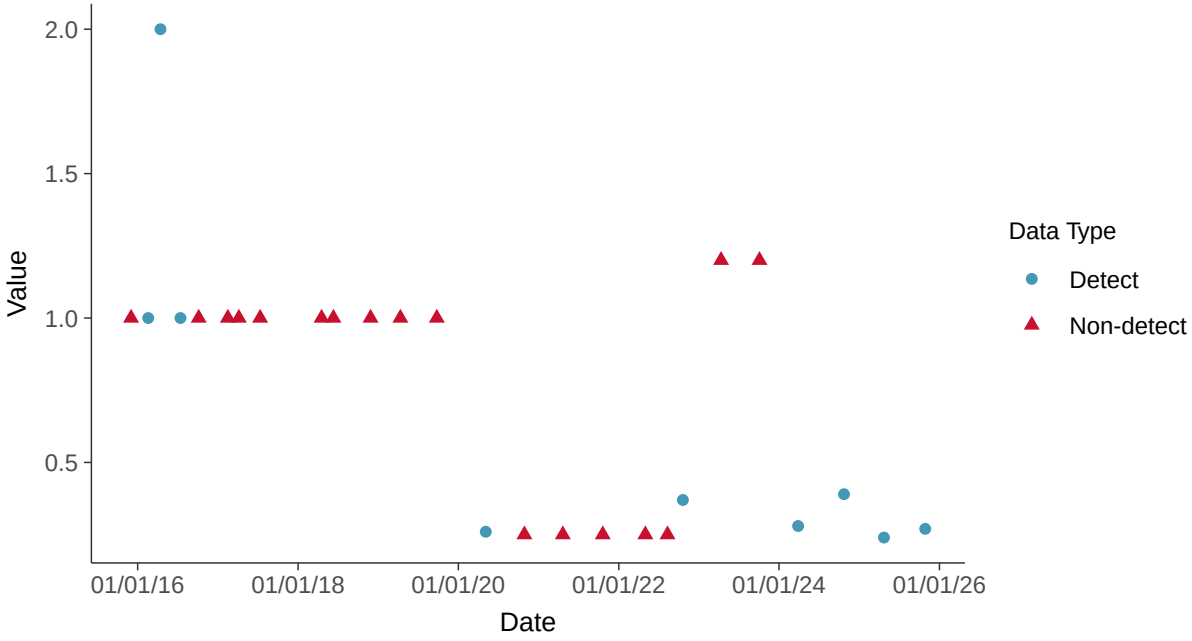

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15022 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15022

ID: 12_2_109

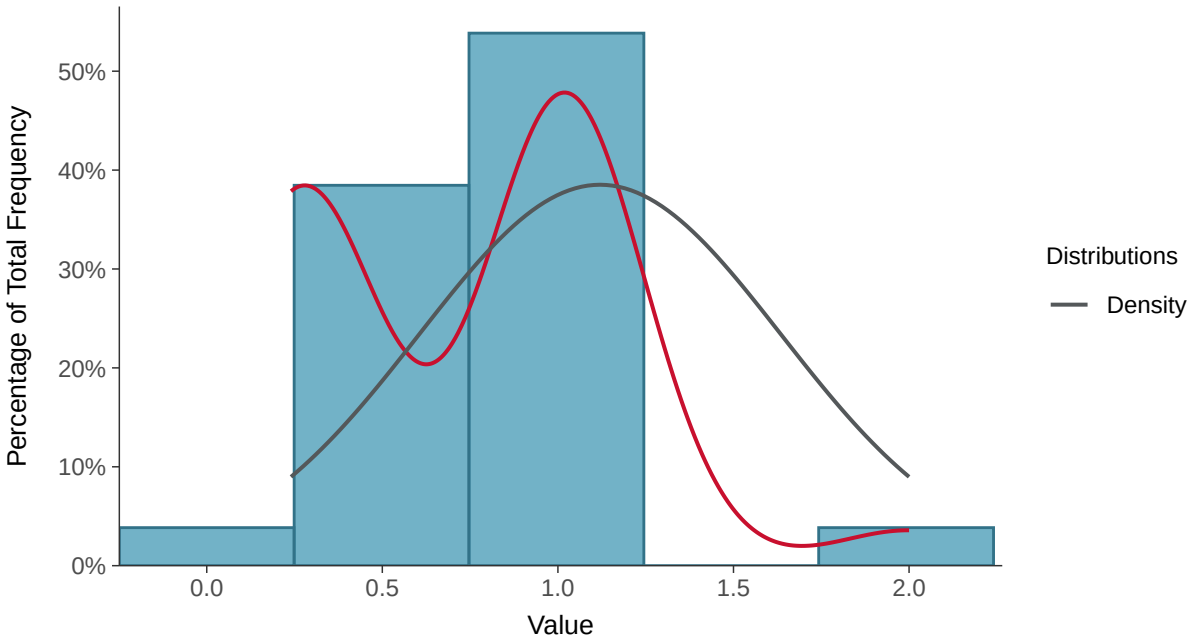
**Scatter Plot**

Chromium, MW-15022 (ug/L)



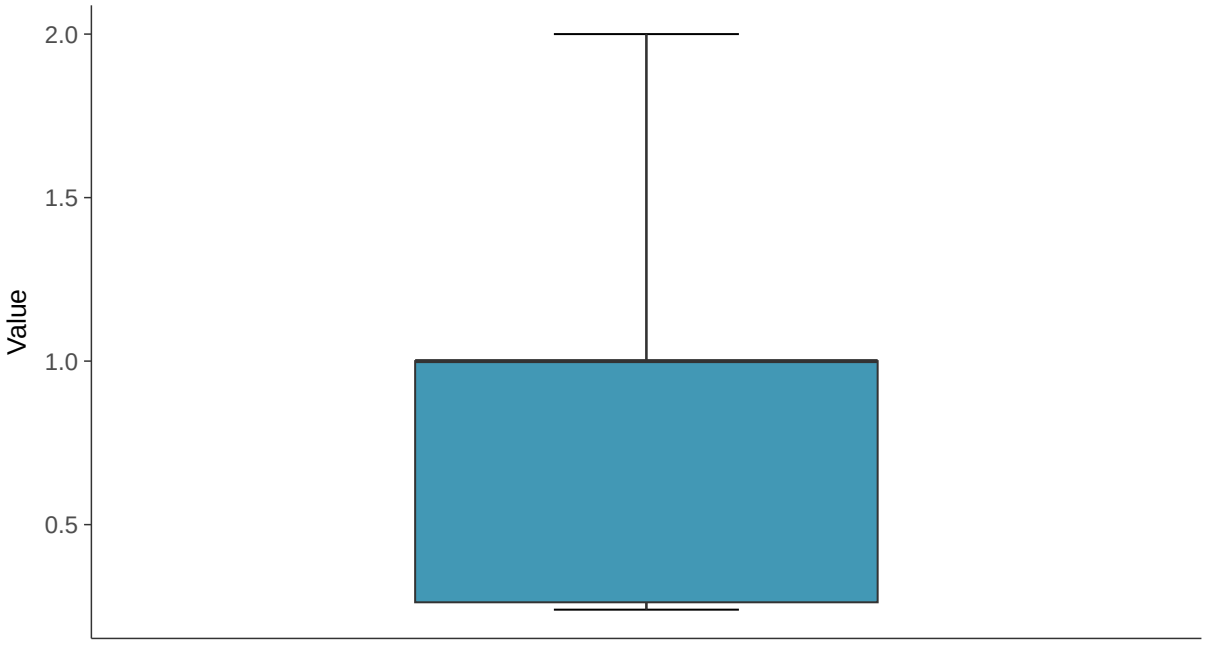

**Histogram**

Chromium, MW-15022 (ug/L)



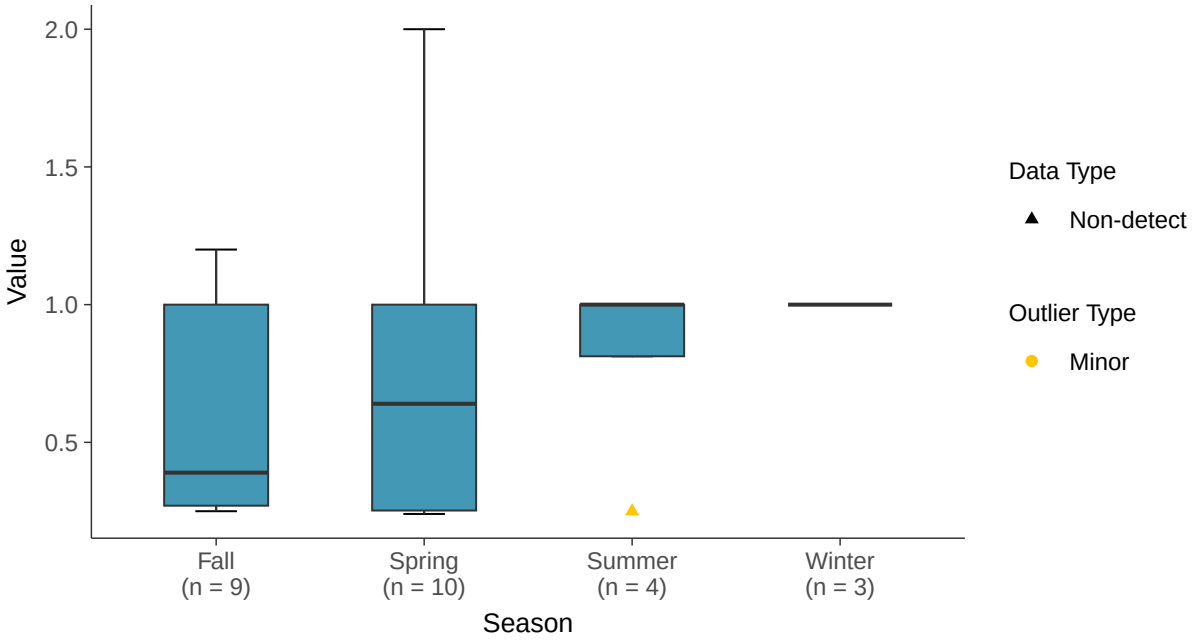
## Boxplot

Chromium, MW-15022 (ug/L)



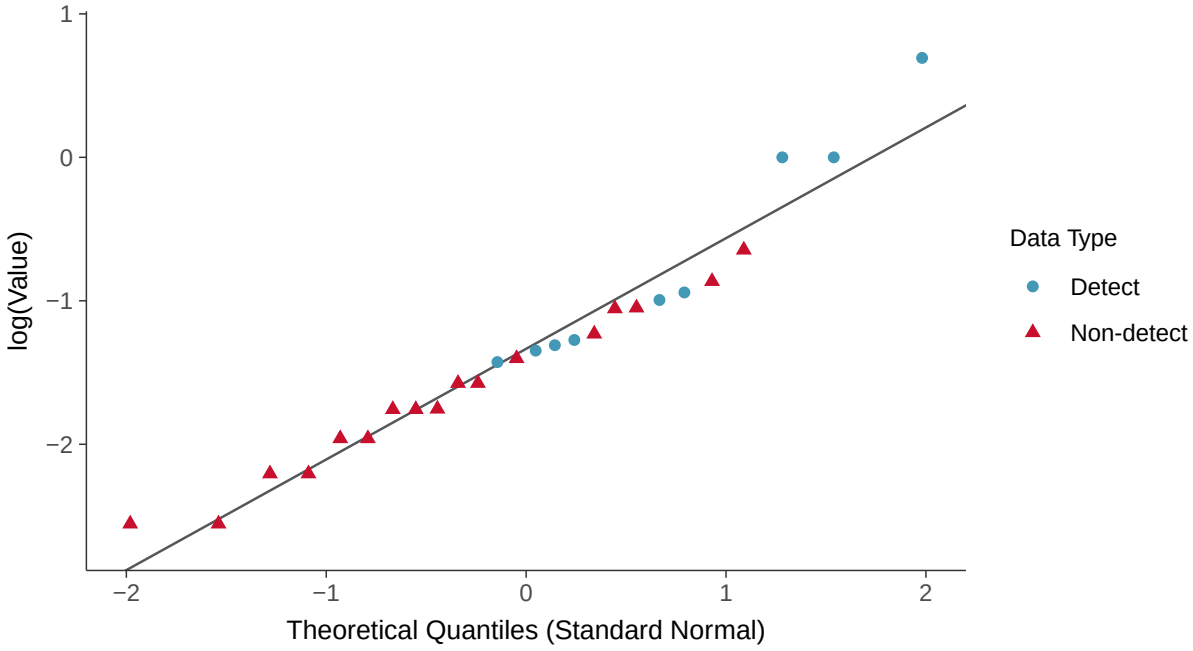

## Boxplot by Season

Chromium, MW-15022 (ug/L)



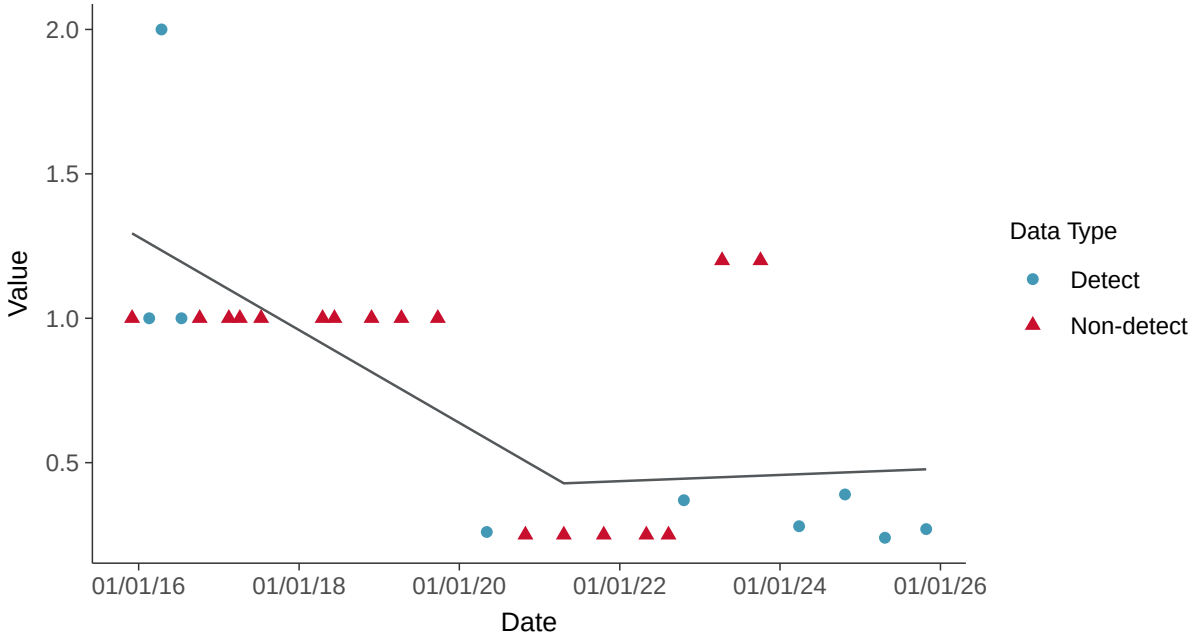
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15022 (ug/L)



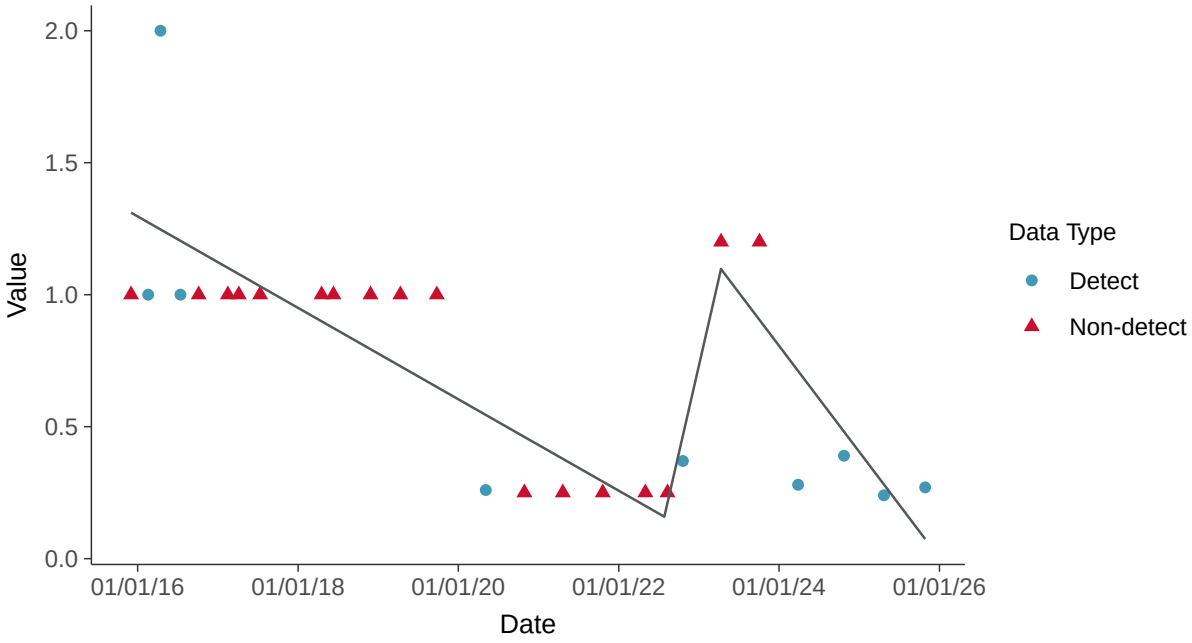

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15022 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Chromium, MW-15022 (ug/L)

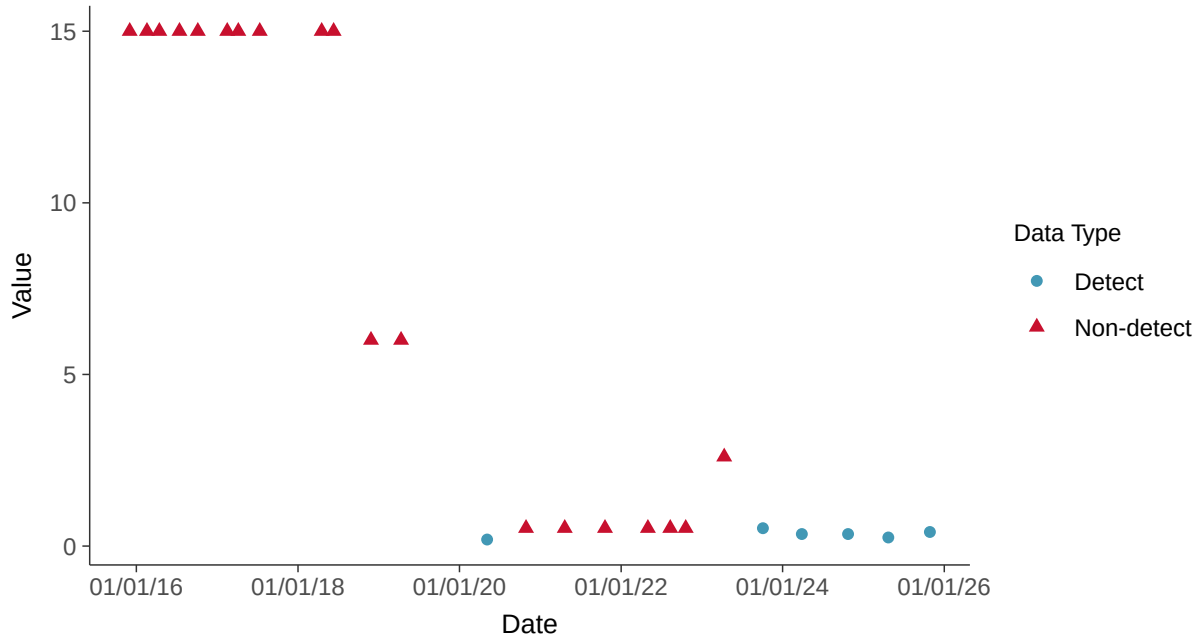


## Appendix IV: Cobalt, MW-15022

ID: 12_2_110

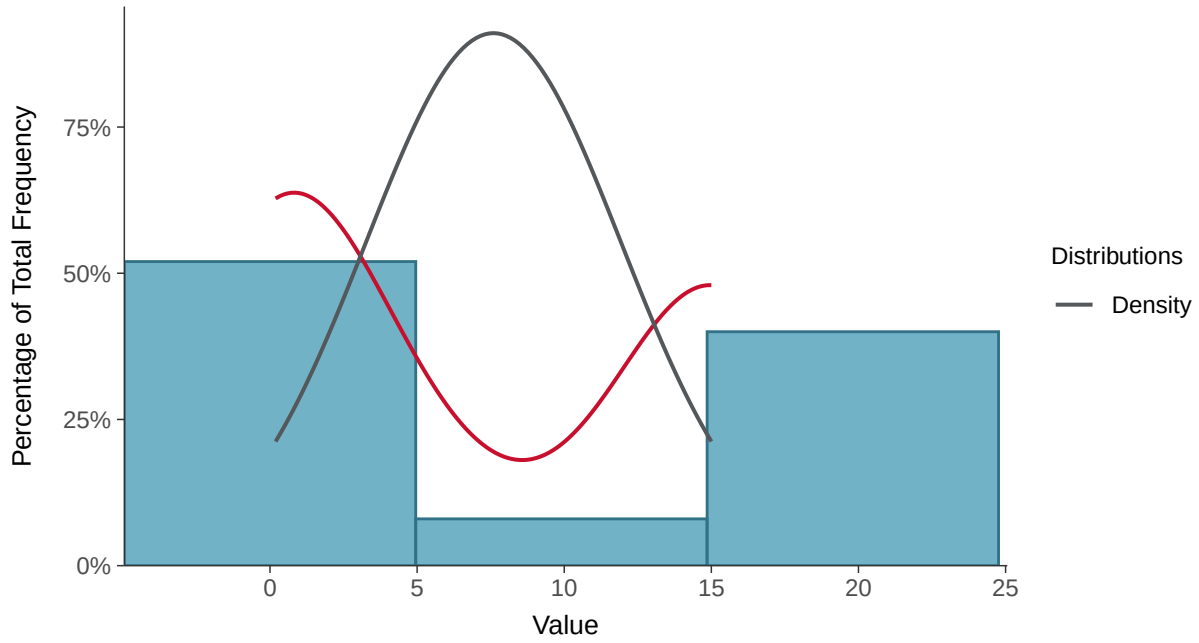
**Scatter Plot**

Cobalt, MW-15022 (ug/L)



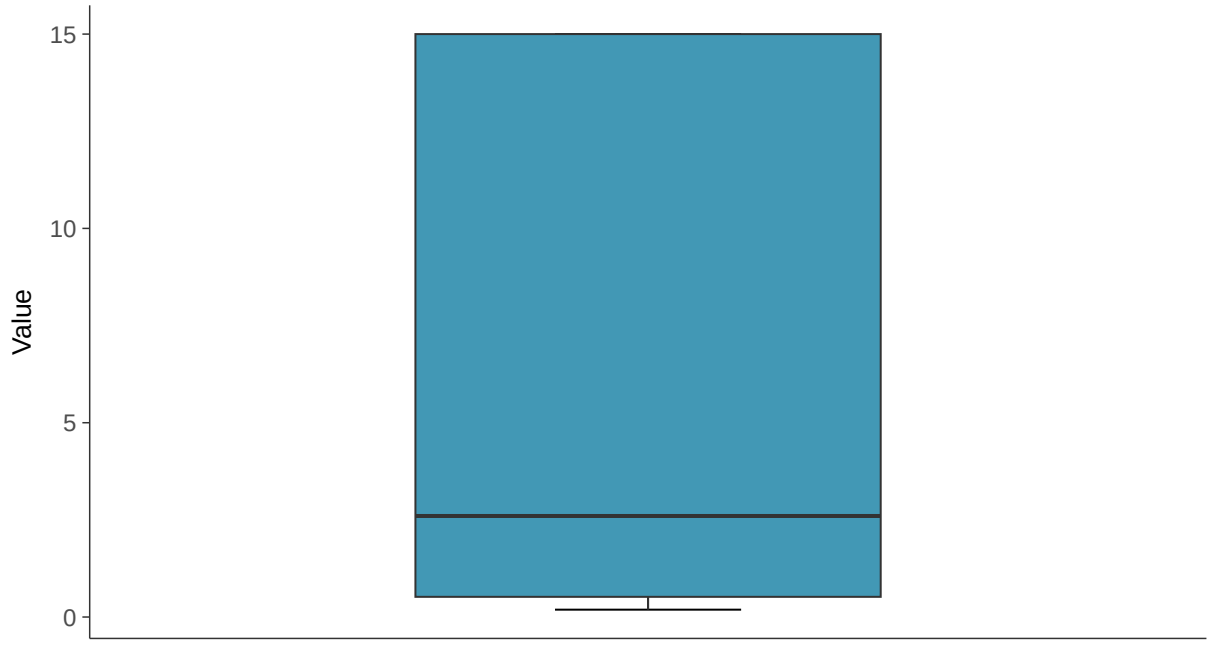

**Histogram**

Cobalt, MW-15022 (ug/L)



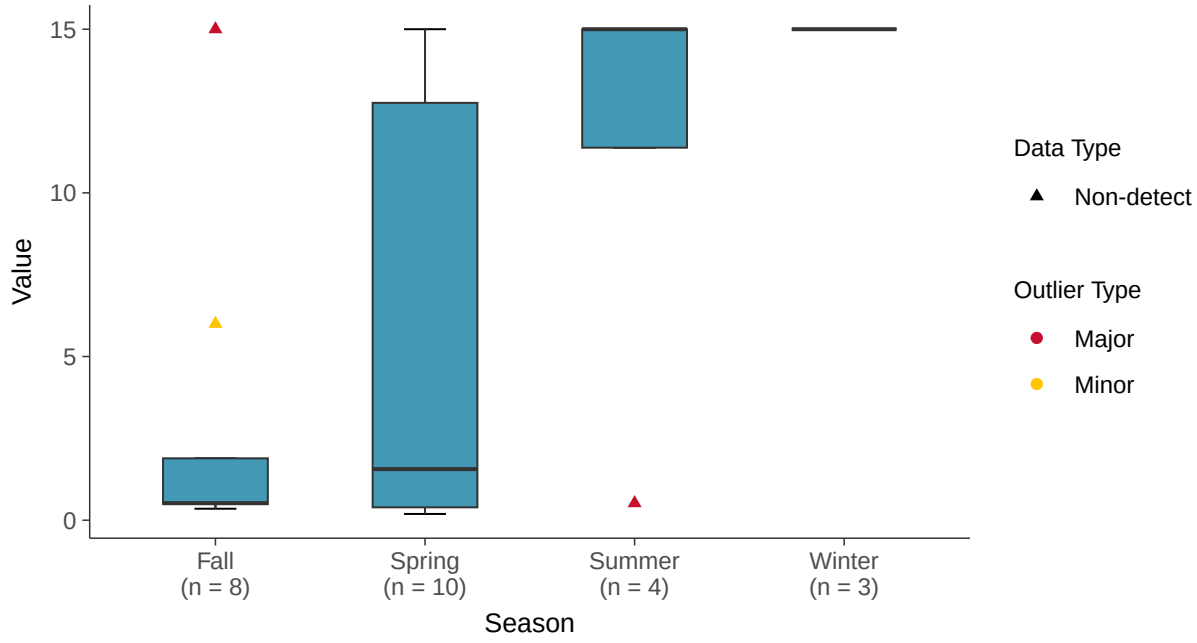
**Boxplot**

Cobalt, MW-15022 (ug/L)



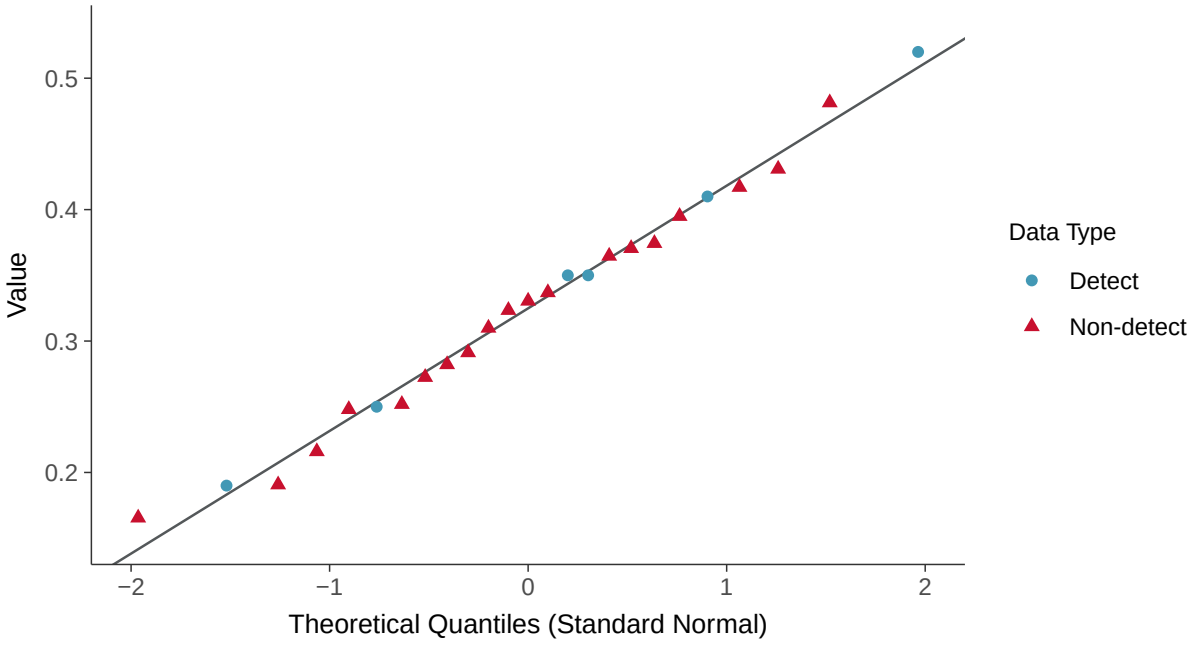

**Boxplot by Season**

Cobalt, MW-15022 (ug/L)



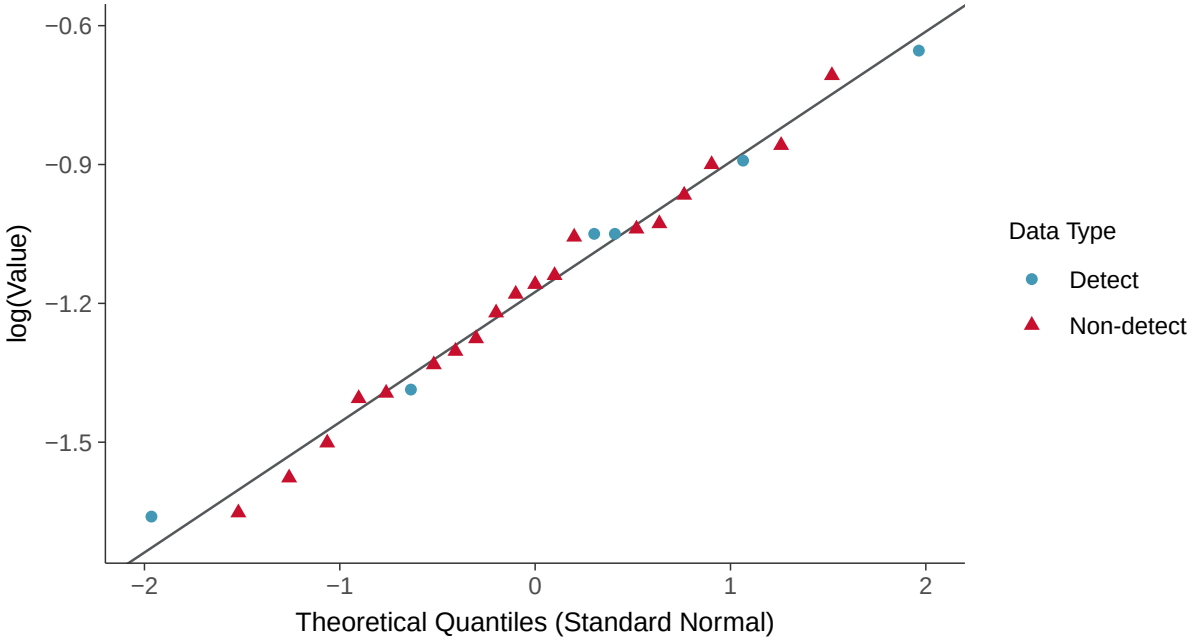
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15022 (ug/L)



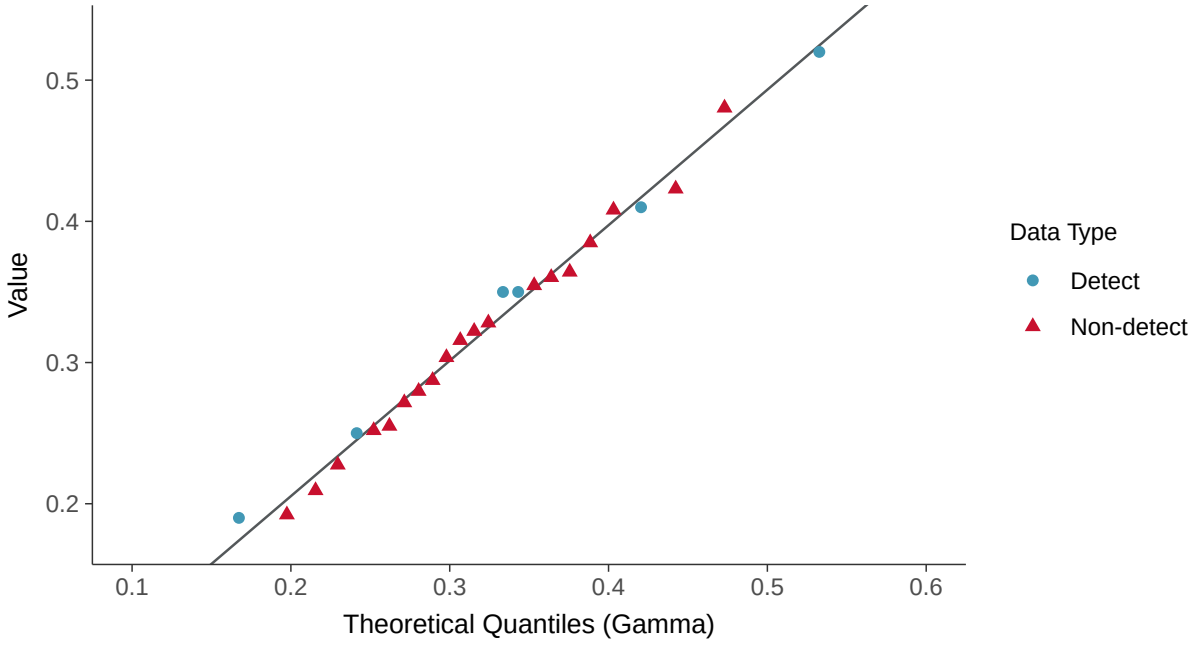

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15022 (ug/L)



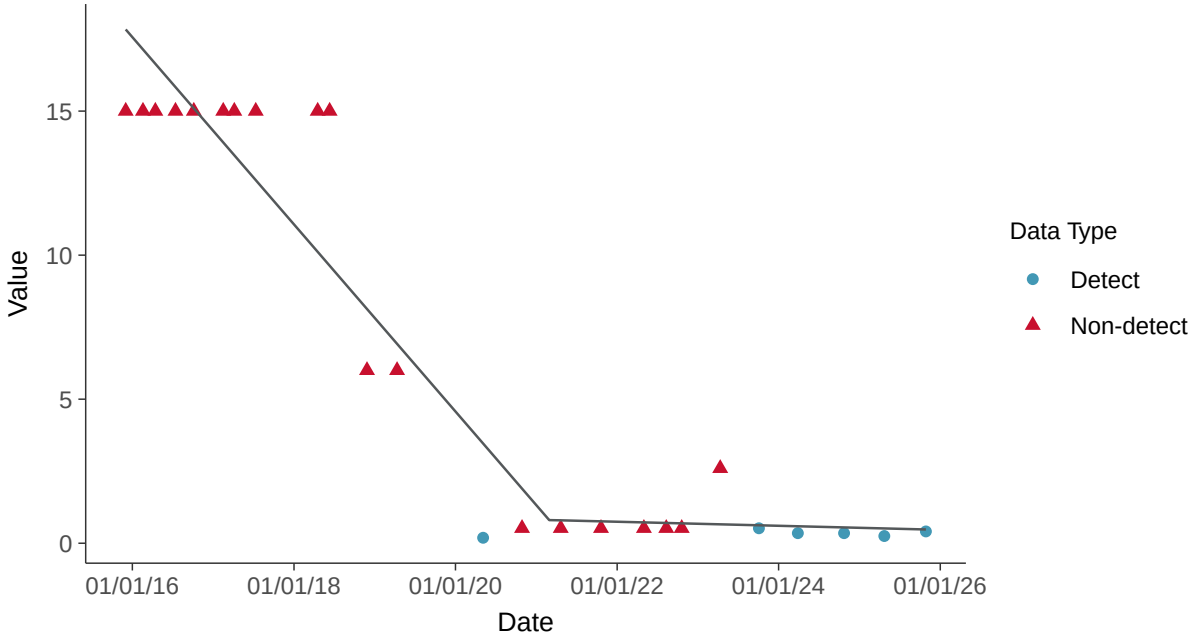
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15022 (ug/L)



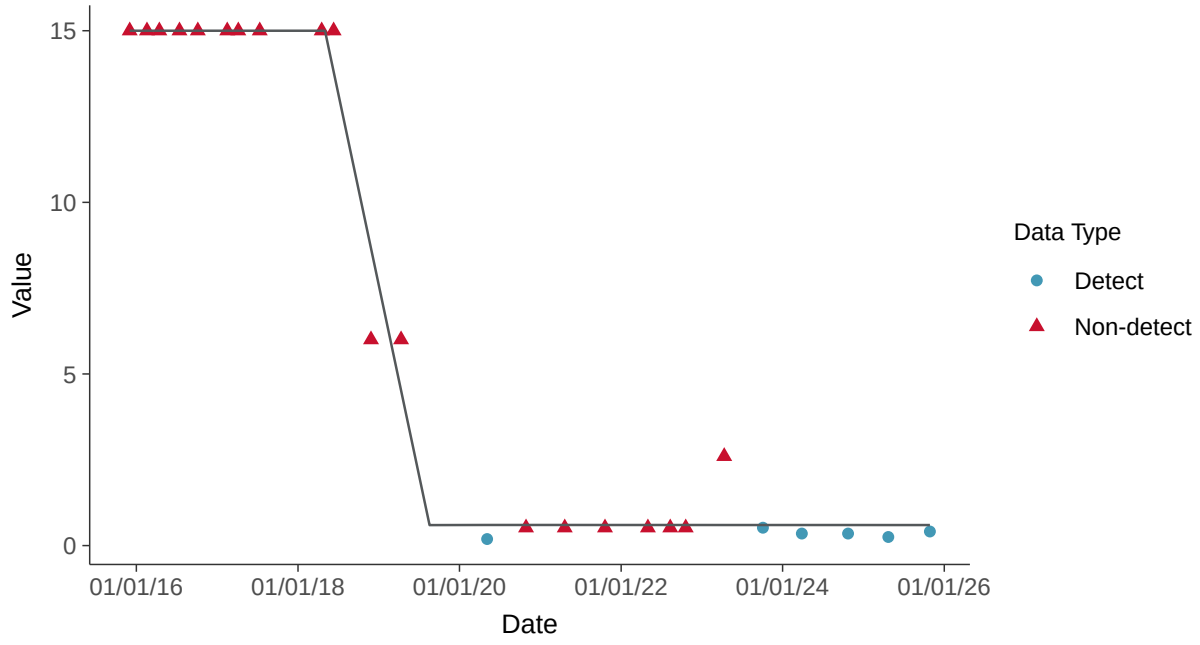

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15022 (ug/L)



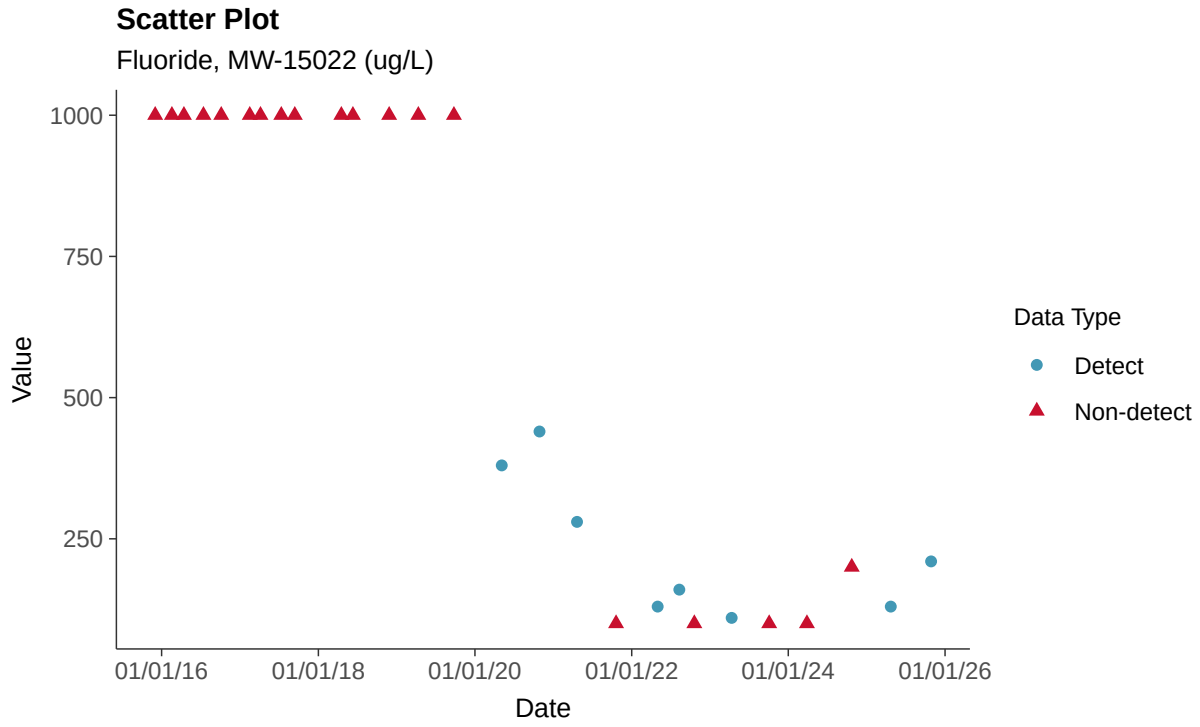
**Trend Regression: Piecewise Linear-Linear-Linear**

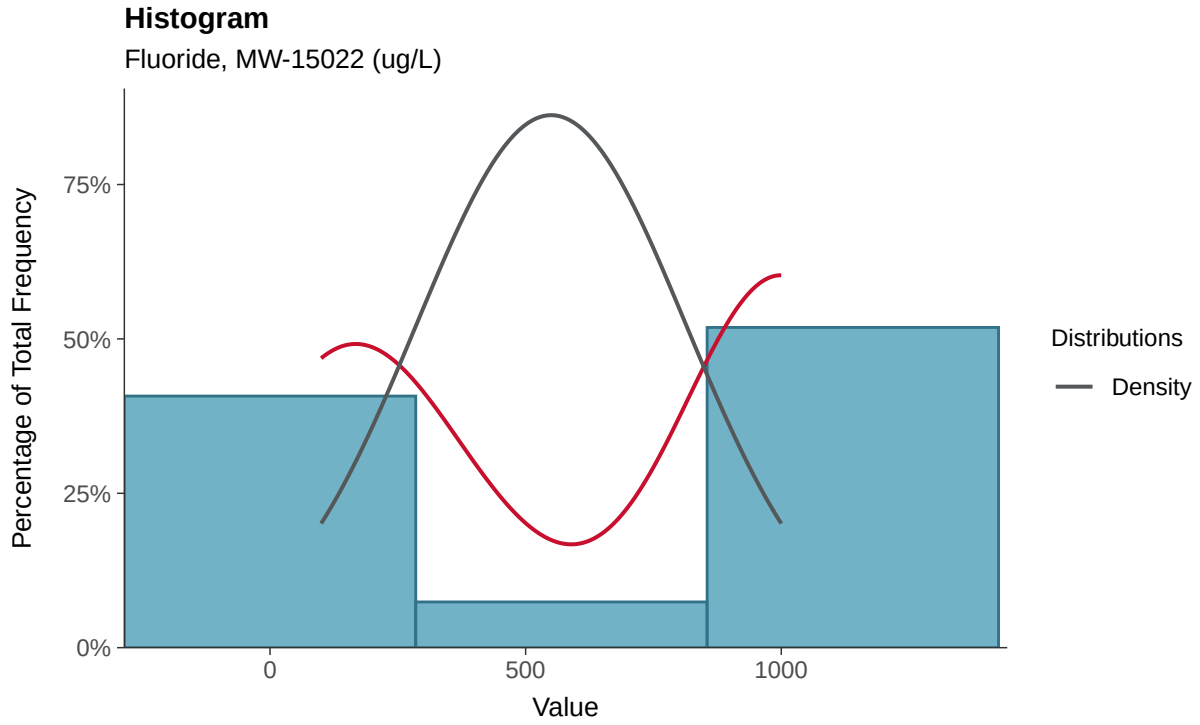
Cobalt, MW-15022 (ug/L)



## Appendix IV: Fluoride, MW-15022

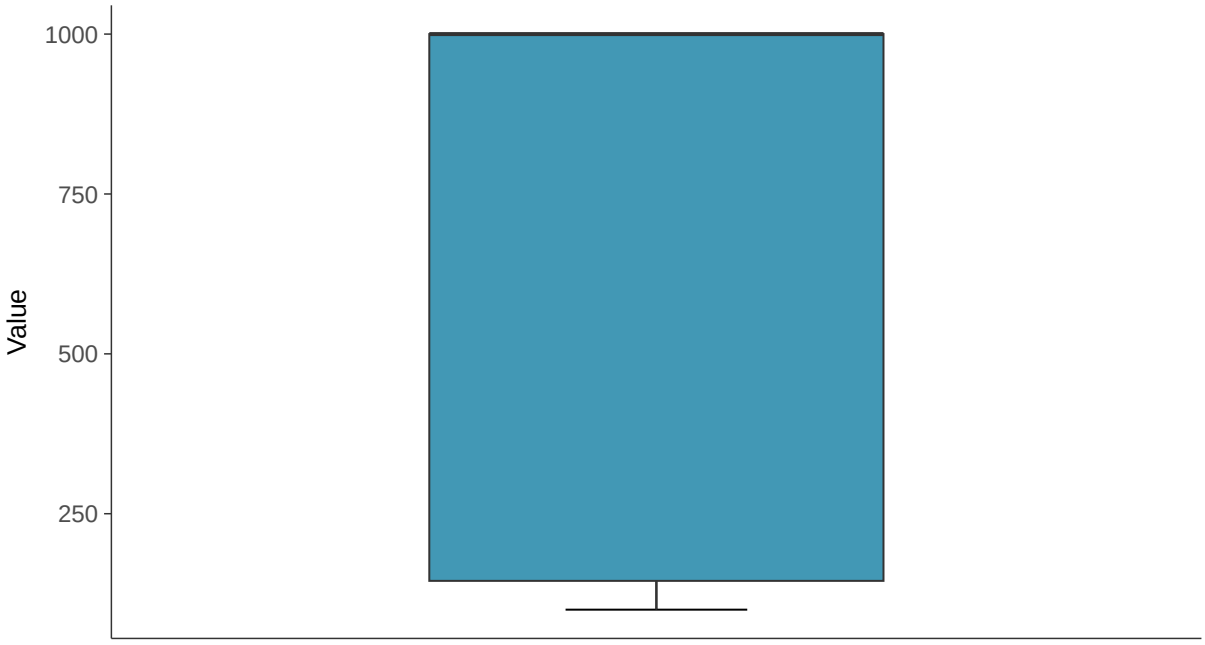
ID: 12_2_114



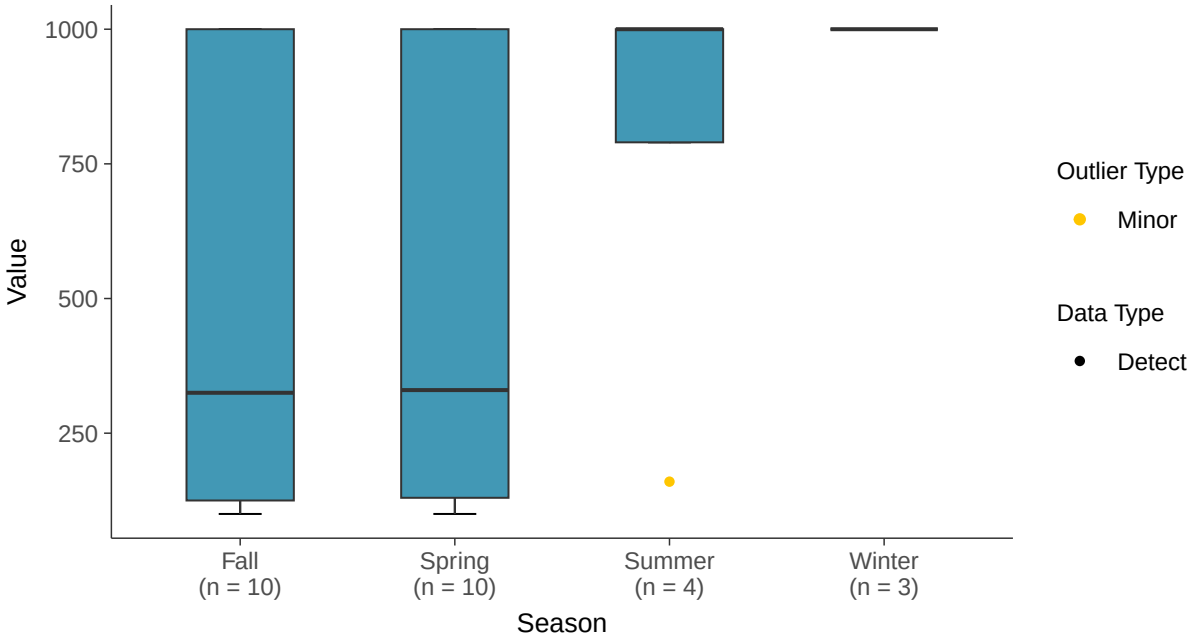
**Boxplot**

Fluoride, MW-15022 (ug/L)



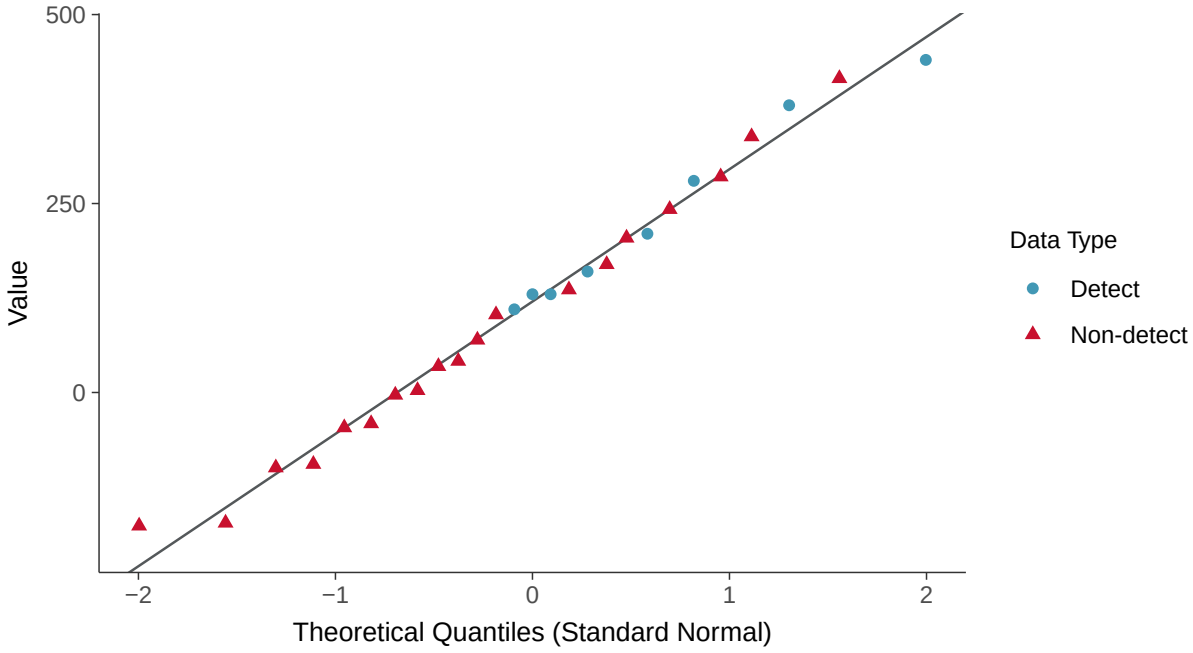

**Boxplot by Season**

Fluoride, MW-15022 (ug/L)



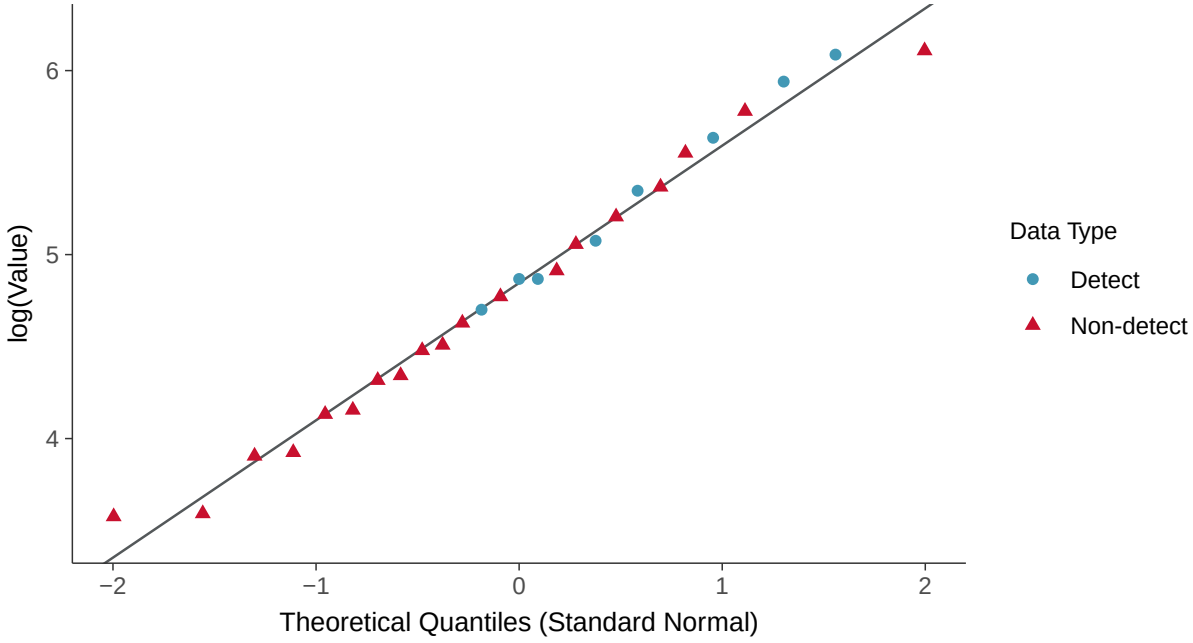
## Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15022 (ug/L)



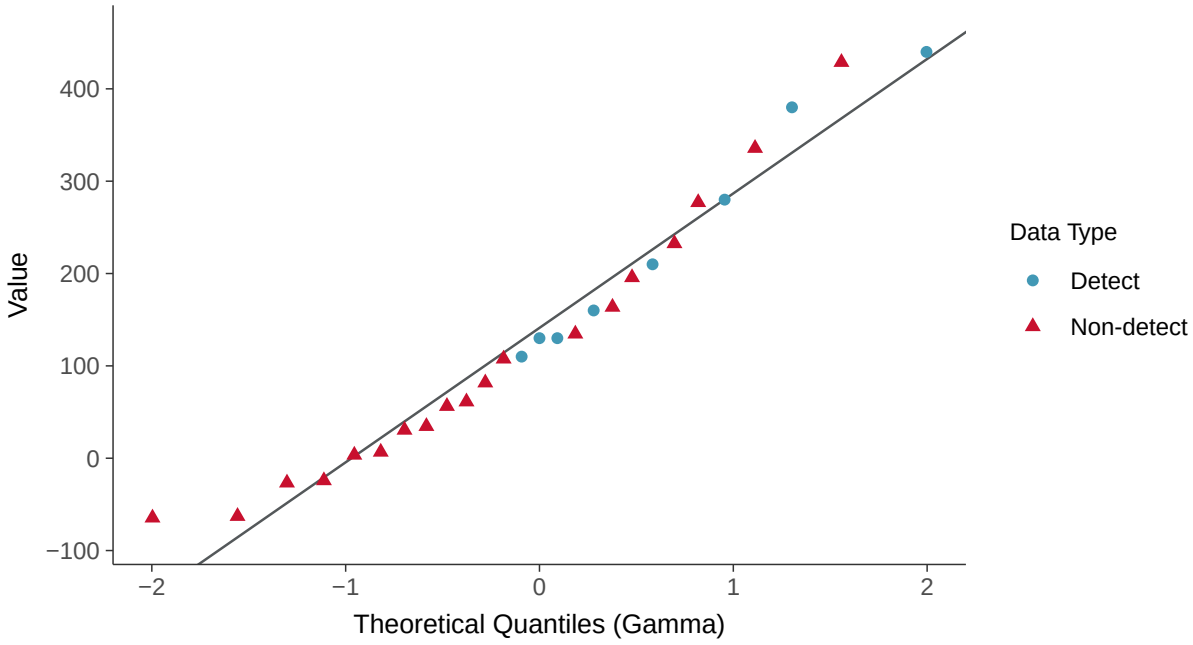

## Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15022 (ug/L)



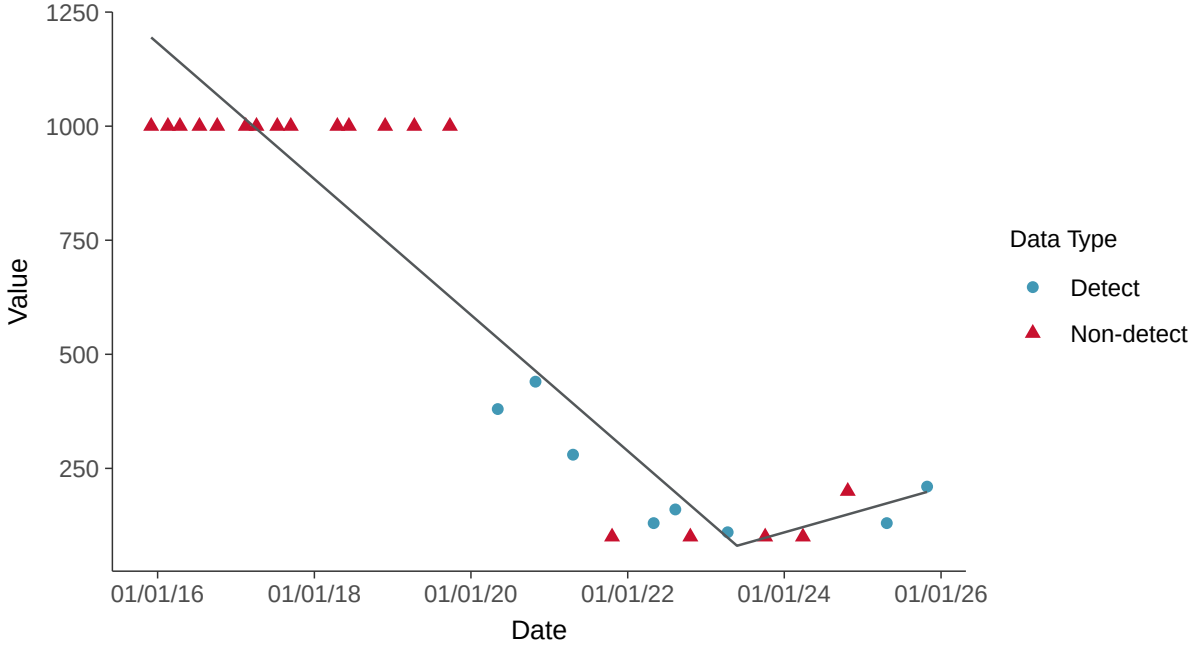
## Gamma Q-Q plot using ROS Imputed Estimates

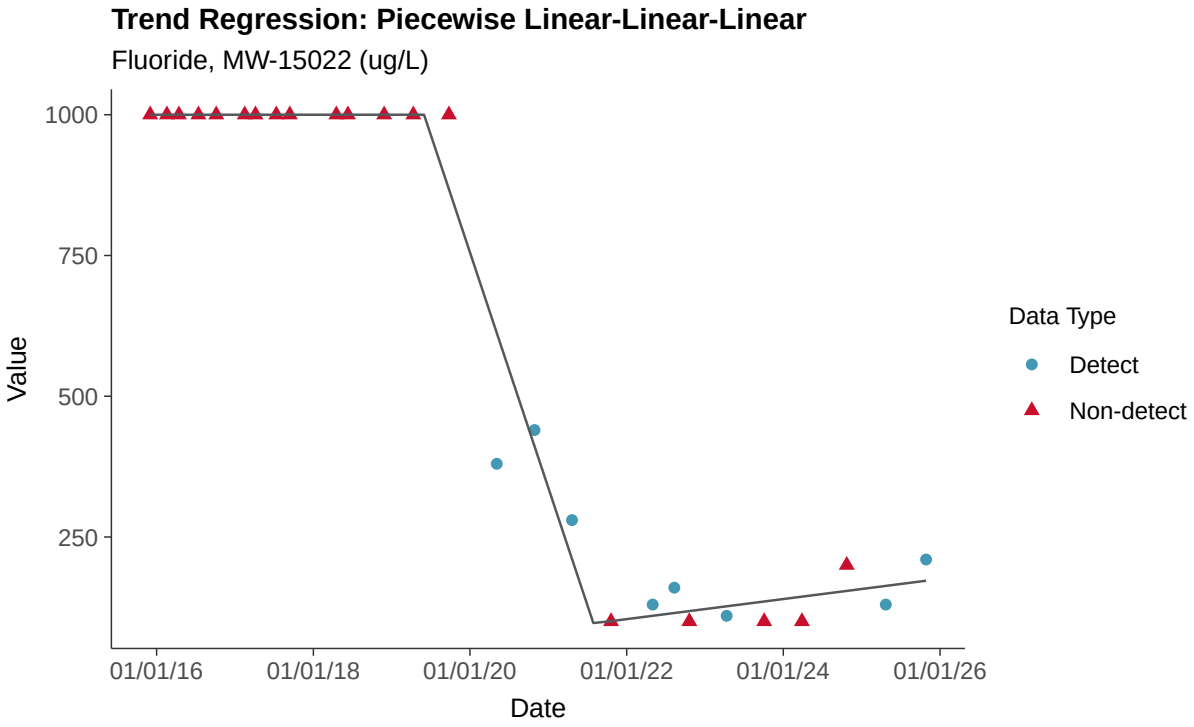
Fluoride, MW-15022 (ug/L)




## Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15022 (ug/L)



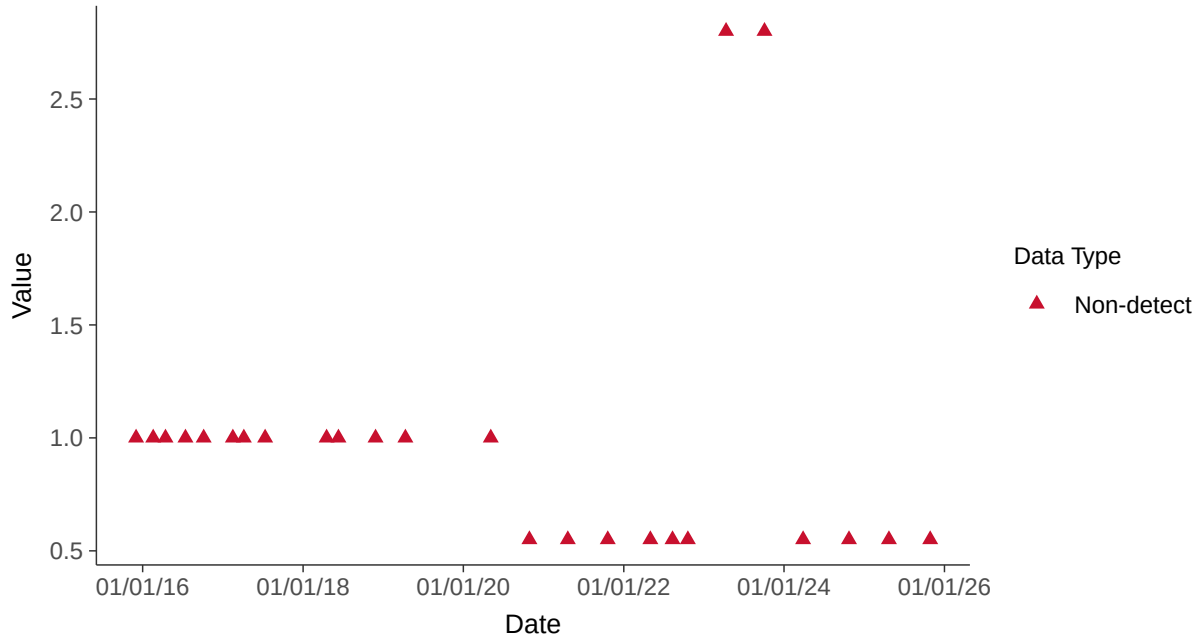

Trend Regression: Piecewise Linear-Linear-Linear
Fluoride, MW-15022 (ug/L)
Value
1000
750
500
250
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Lead, MW-15022

ID: 12_2_116

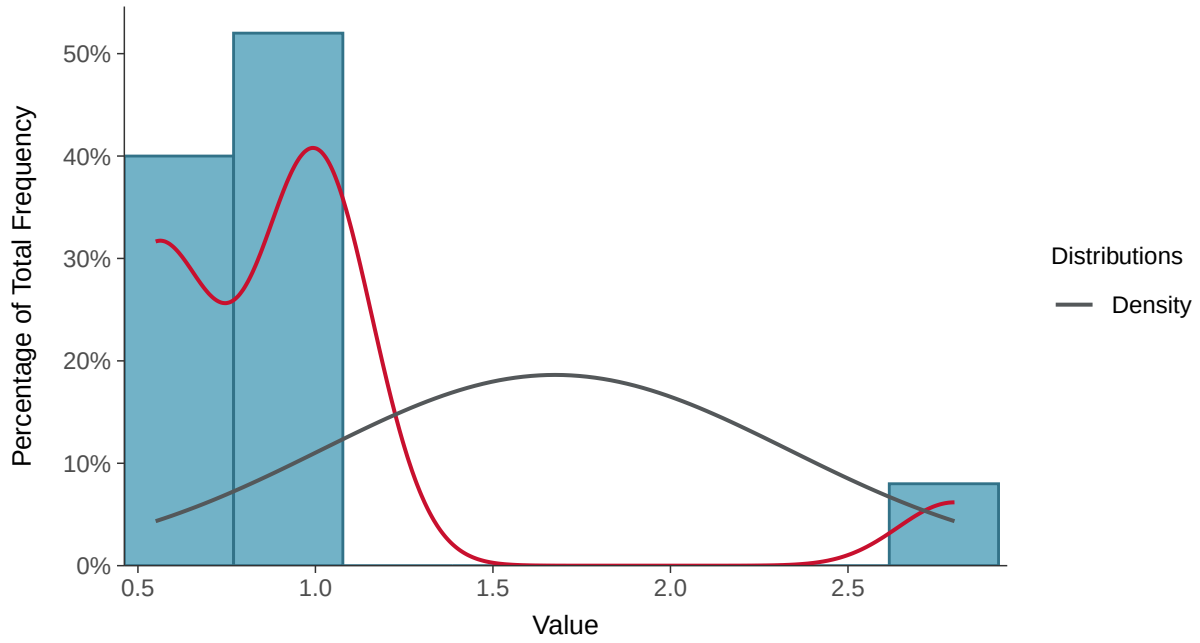
**Scatter Plot**

Lead, MW-15022 (ug/L)



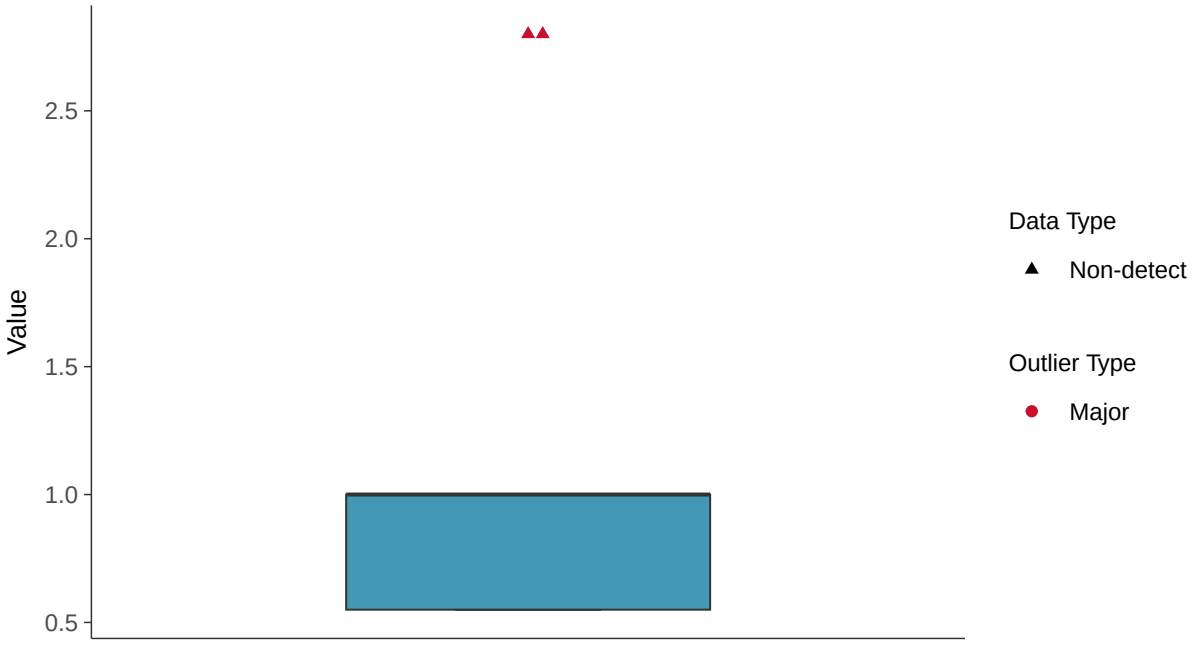

**Histogram**

Lead, MW-15022 (ug/L)



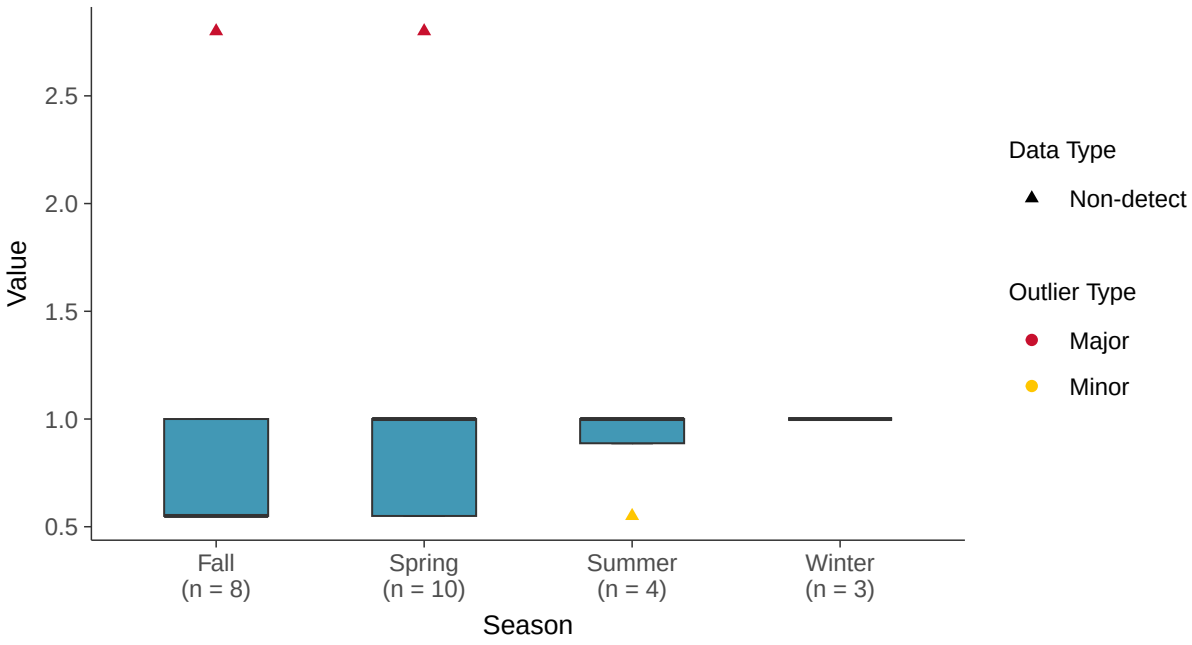
## Boxplot

Lead, MW-15022 (ug/L)



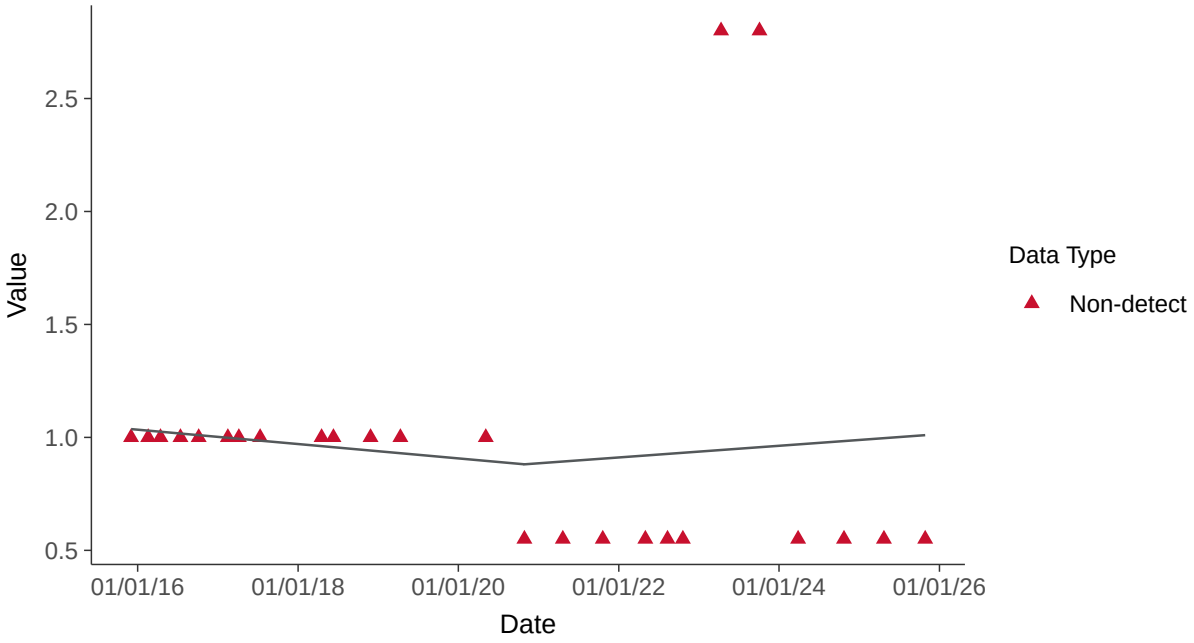

## Boxplot by Season

Lead, MW-15022 (ug/L)



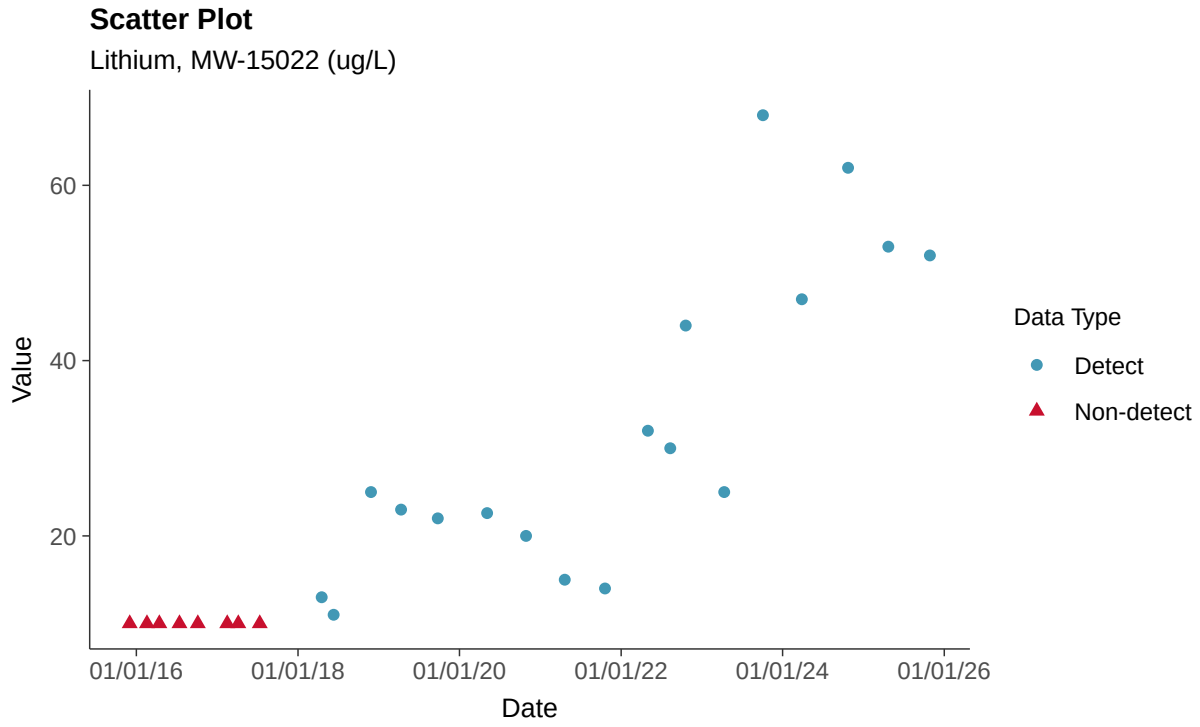
**Trend Regression: Piecewise Linear-Linear**

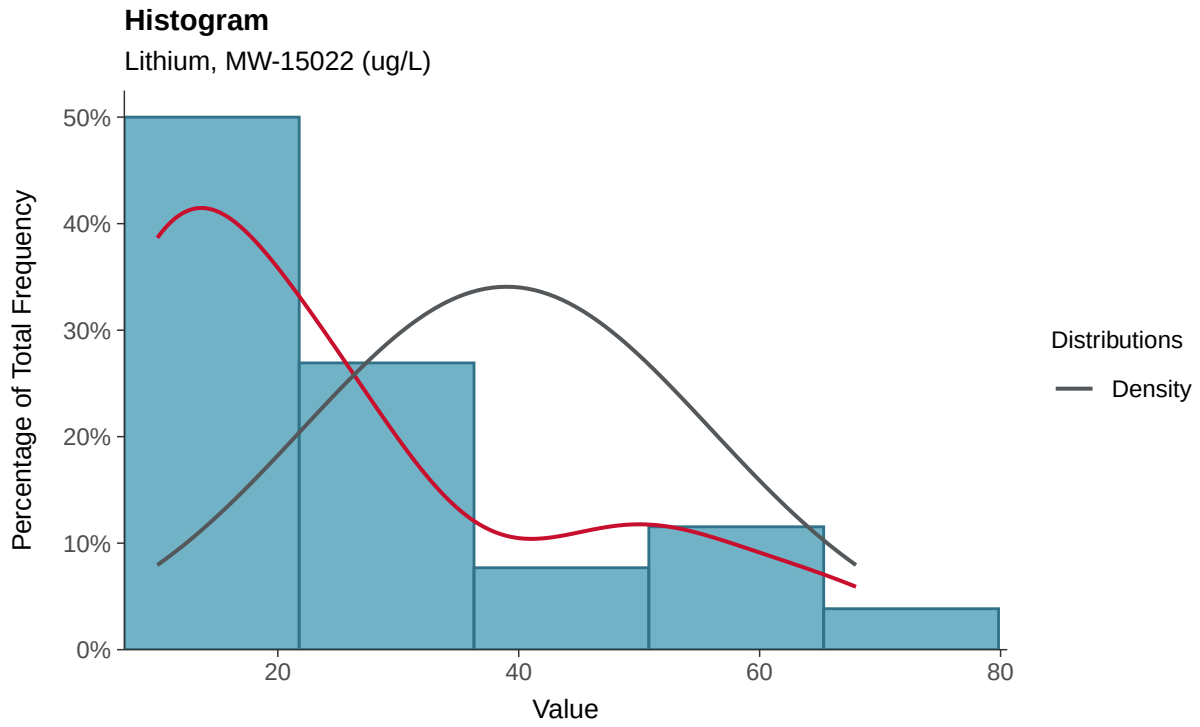
Lead, MW-15022 (ug/L)



## Appendix IV: Lithium, MW-15022

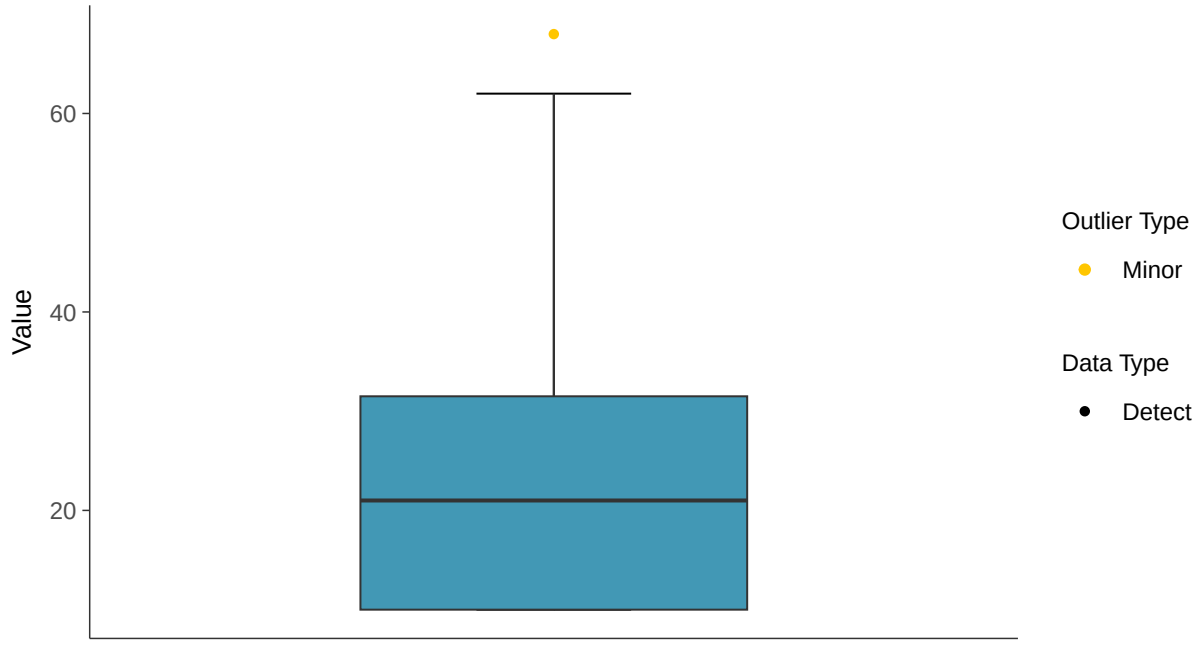
ID: 12_2_117



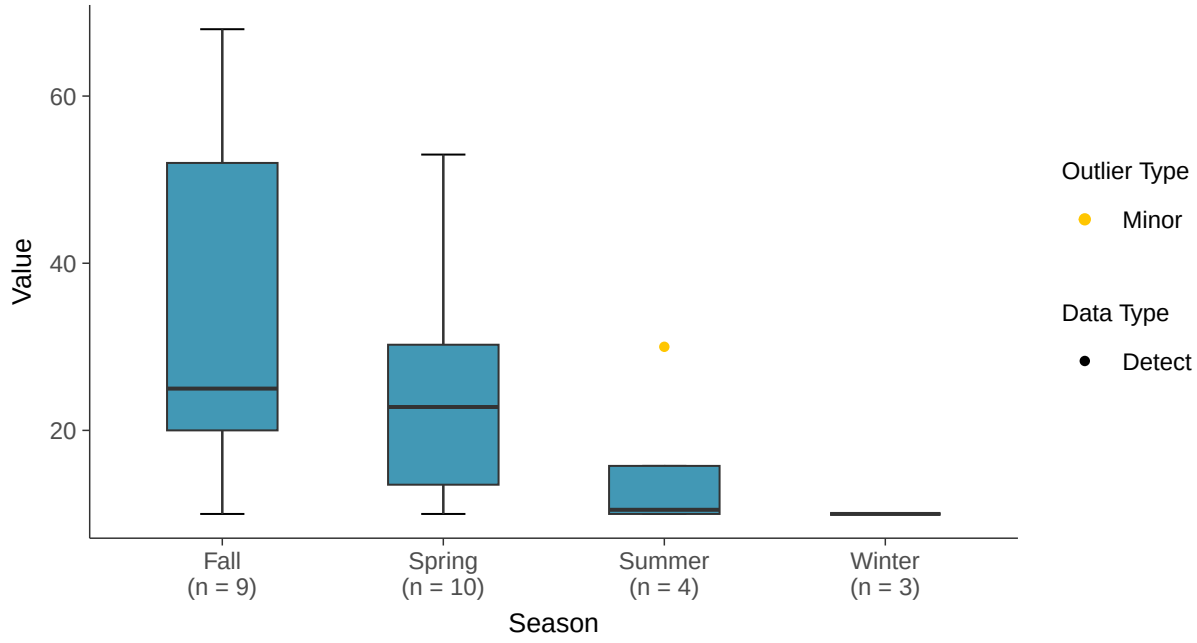
**Boxplot**

Lithium, MW-15022 (ug/L)



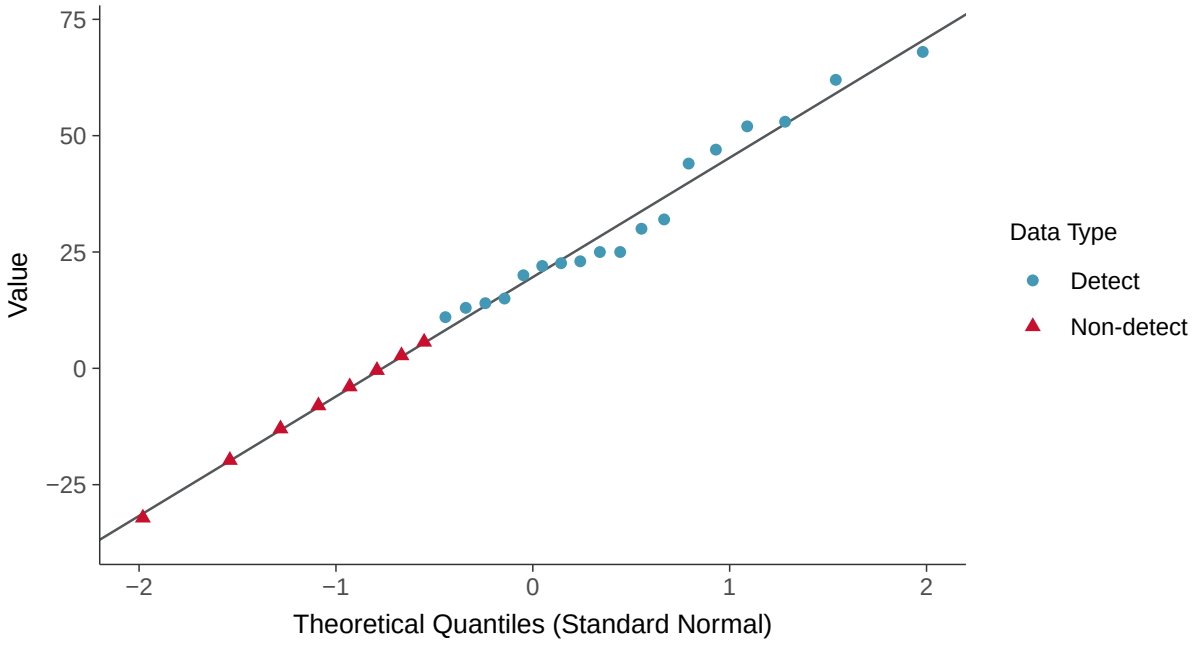

**Boxplot by Season**

Lithium, MW-15022 (ug/L)



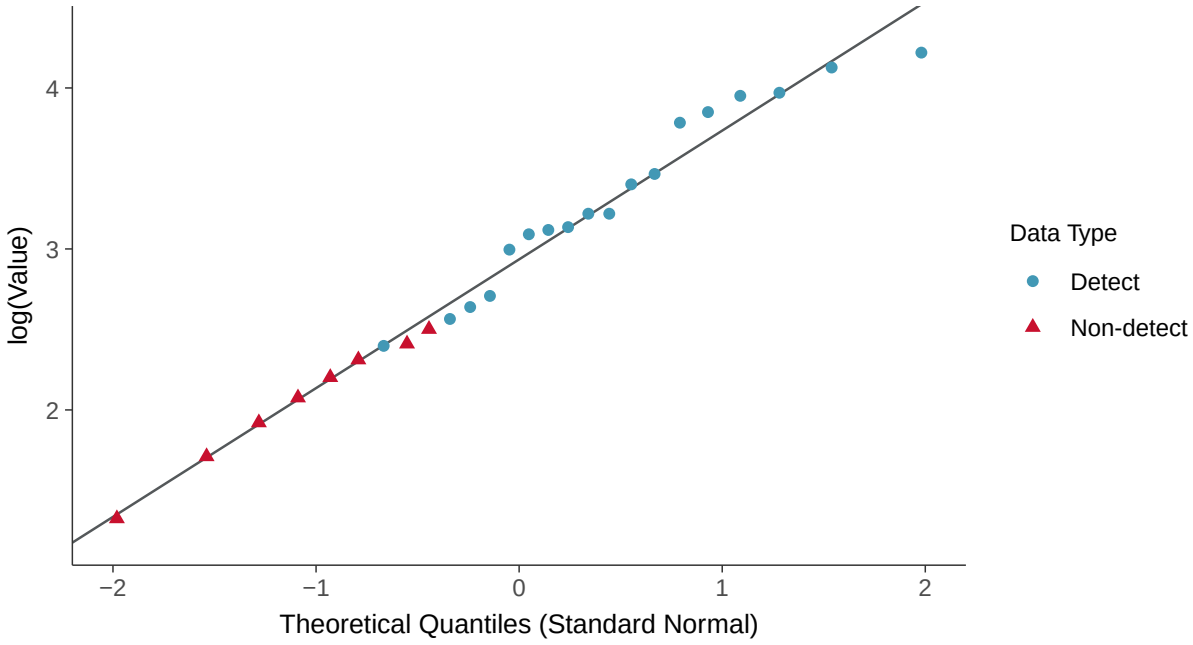
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15022 (ug/L)



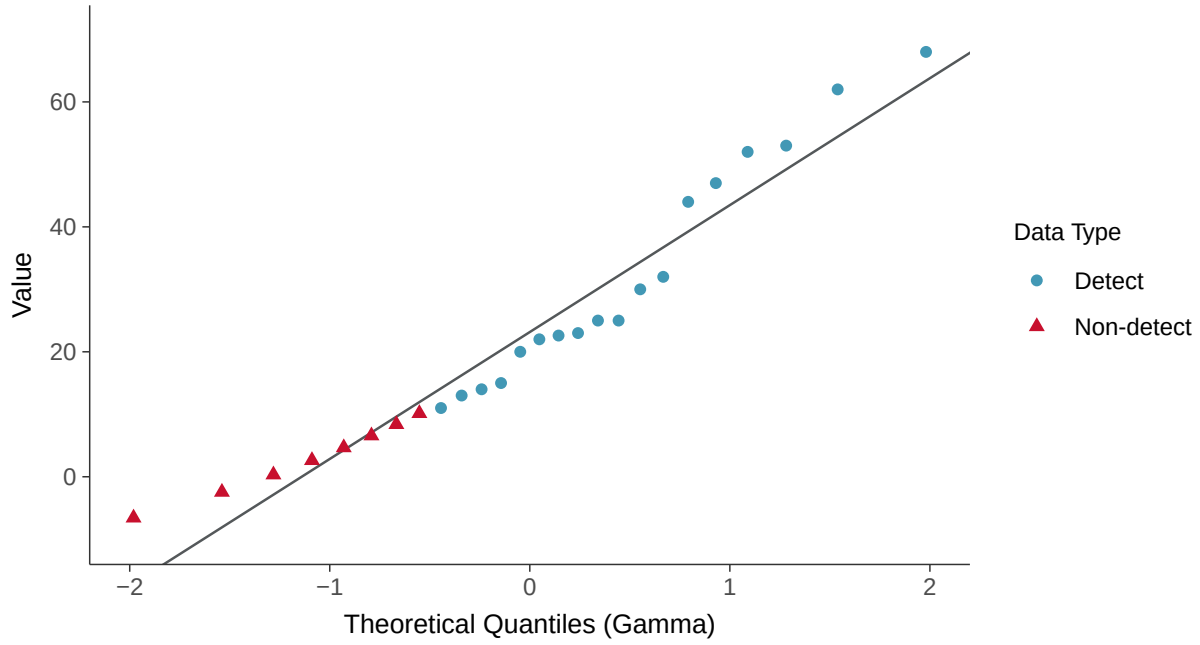

**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15022 (ug/L)



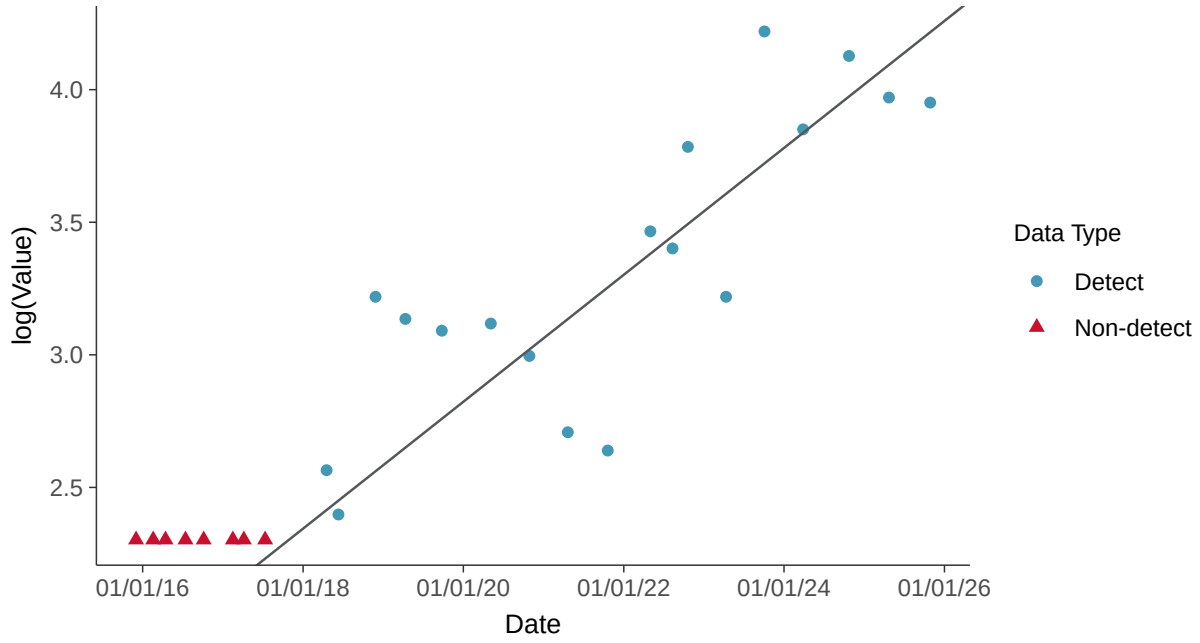
**Gamma Q-Q plot using ROS Imputed Estimates**

Lithium, MW-15022 (ug/L)



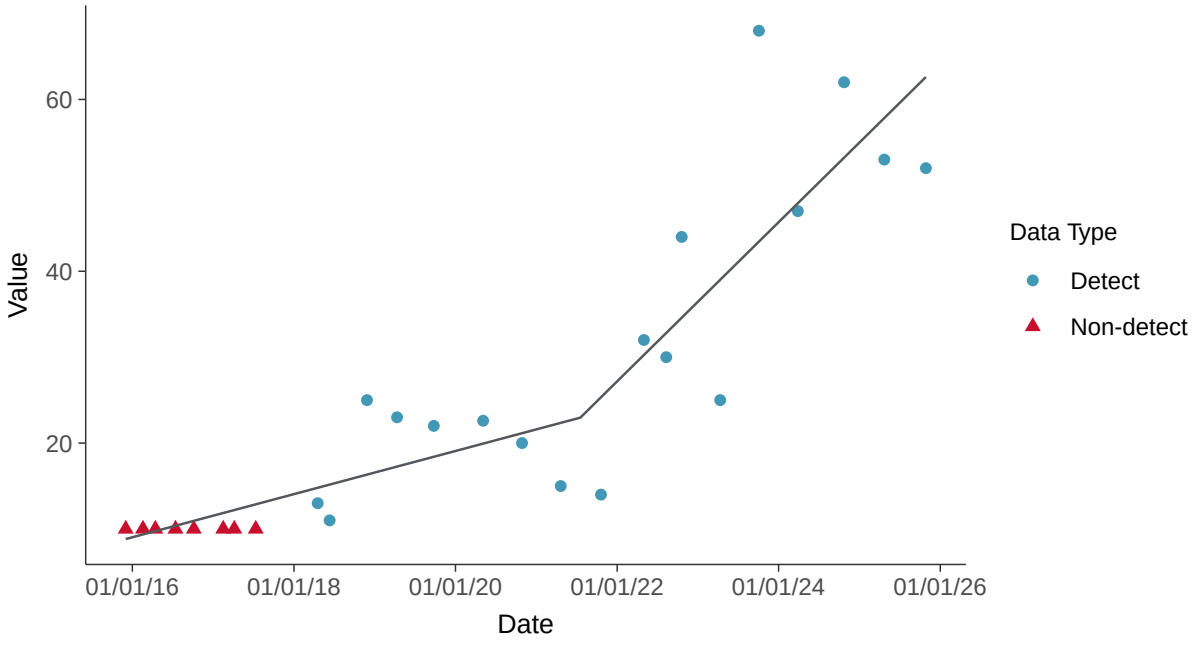

**Trend Regression: Lognormal MLE**

Lithium, MW-15022 (ug/L)



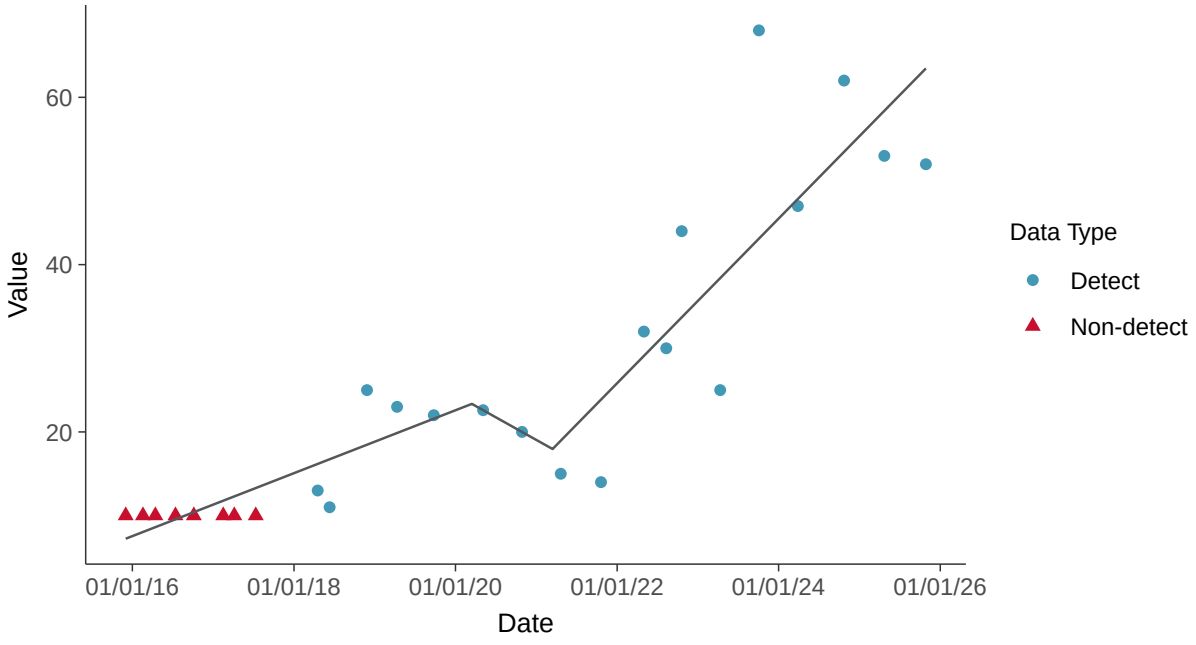
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15022 (ug/L)



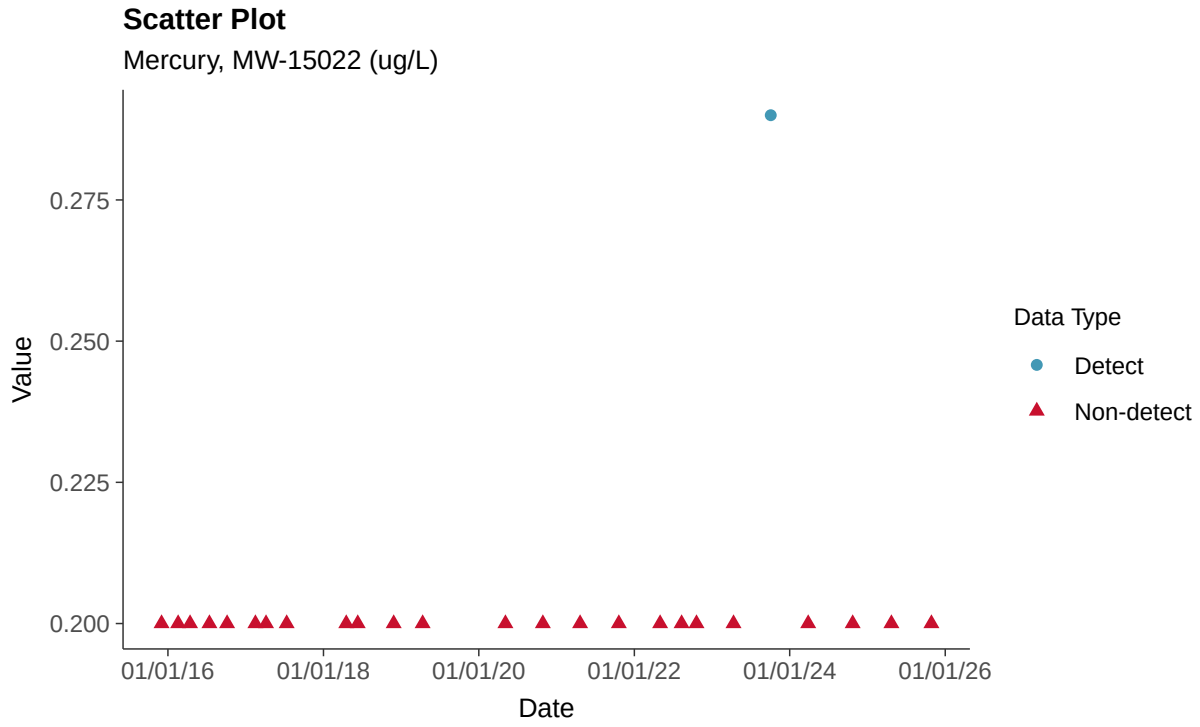

**Trend Regression: Piecewise Linear-Linear-Linear**

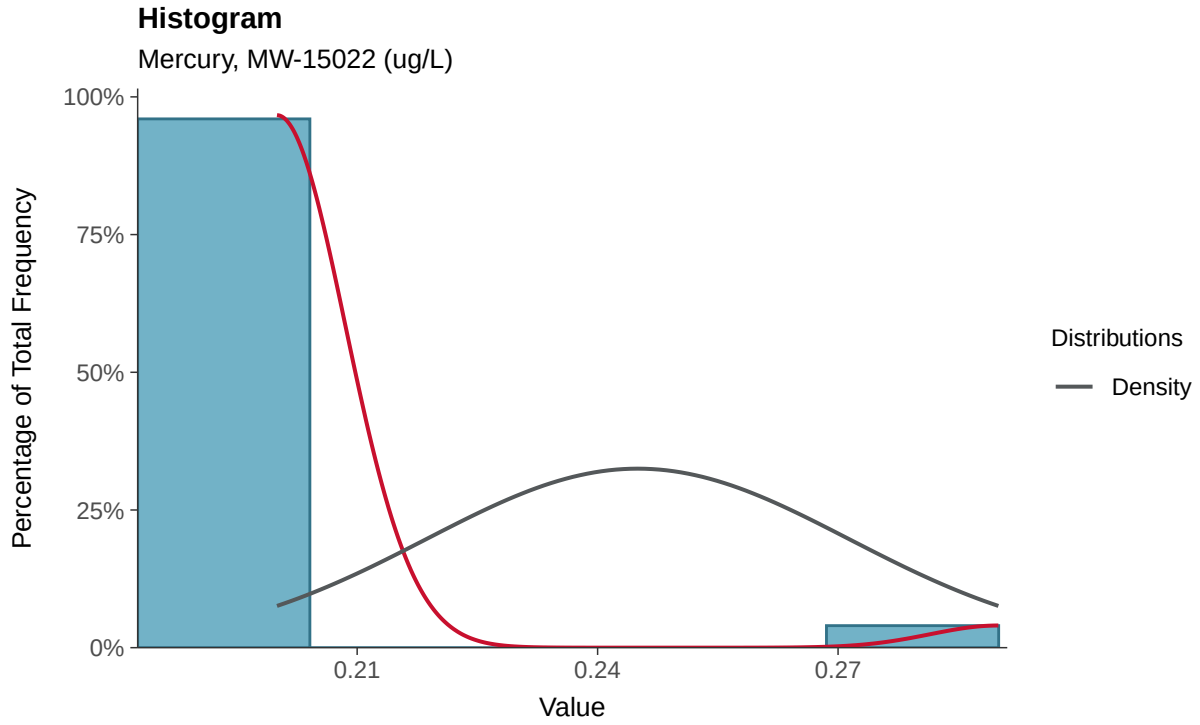
Lithium, MW-15022 (ug/L)



## Appendix IV: Mercury, MW-15022

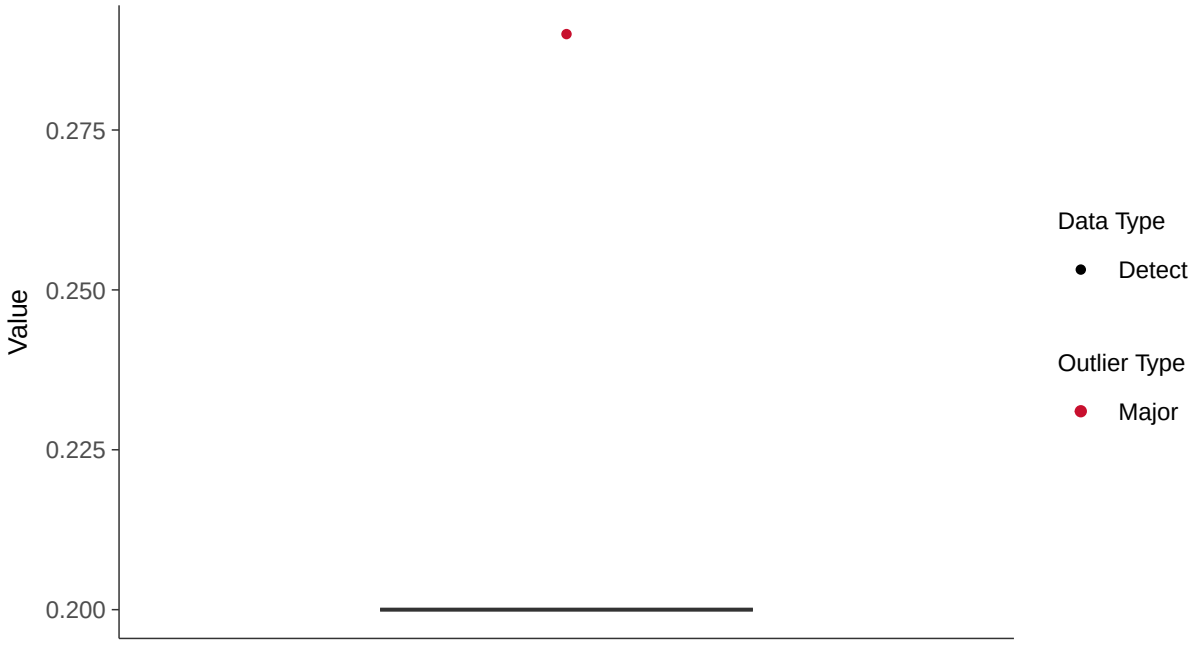
ID: 12_2_118



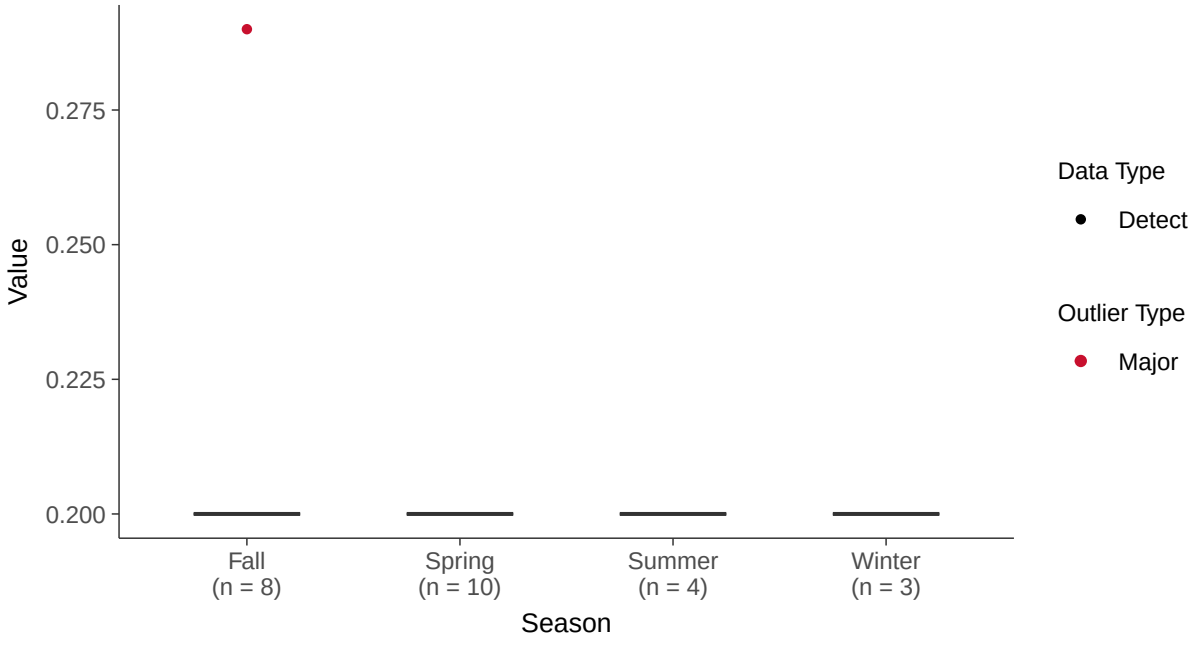
## Boxplot

Mercury, MW-15022 (ug/L)



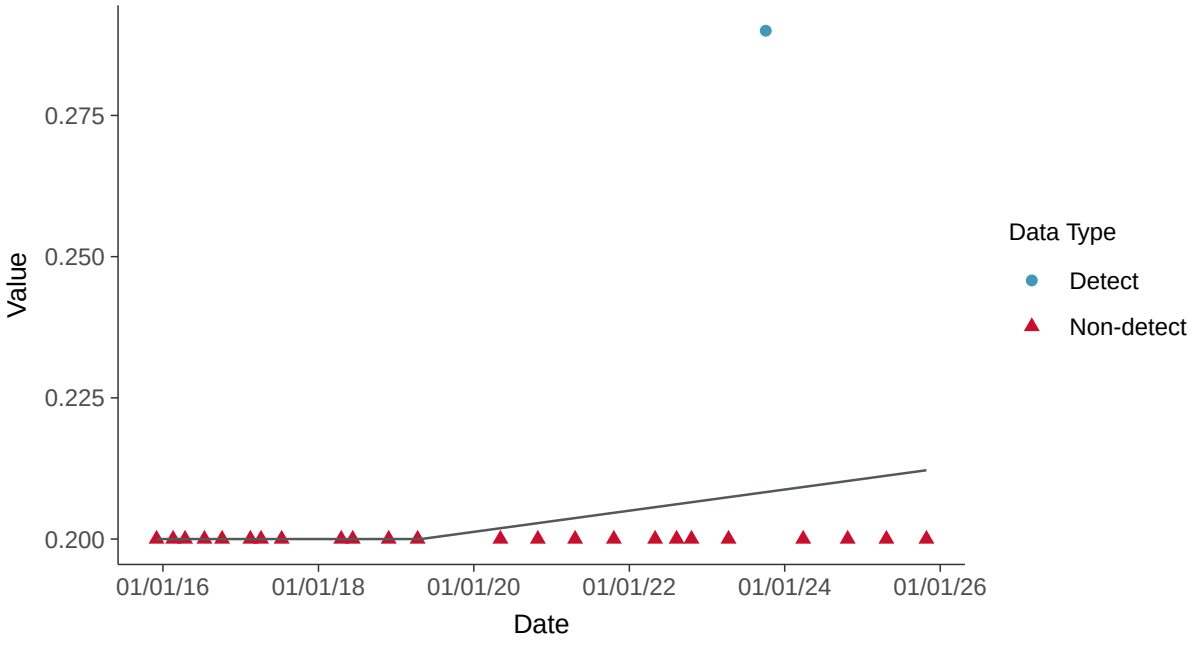

## Boxplot by Season

Mercury, MW-15022 (ug/L)



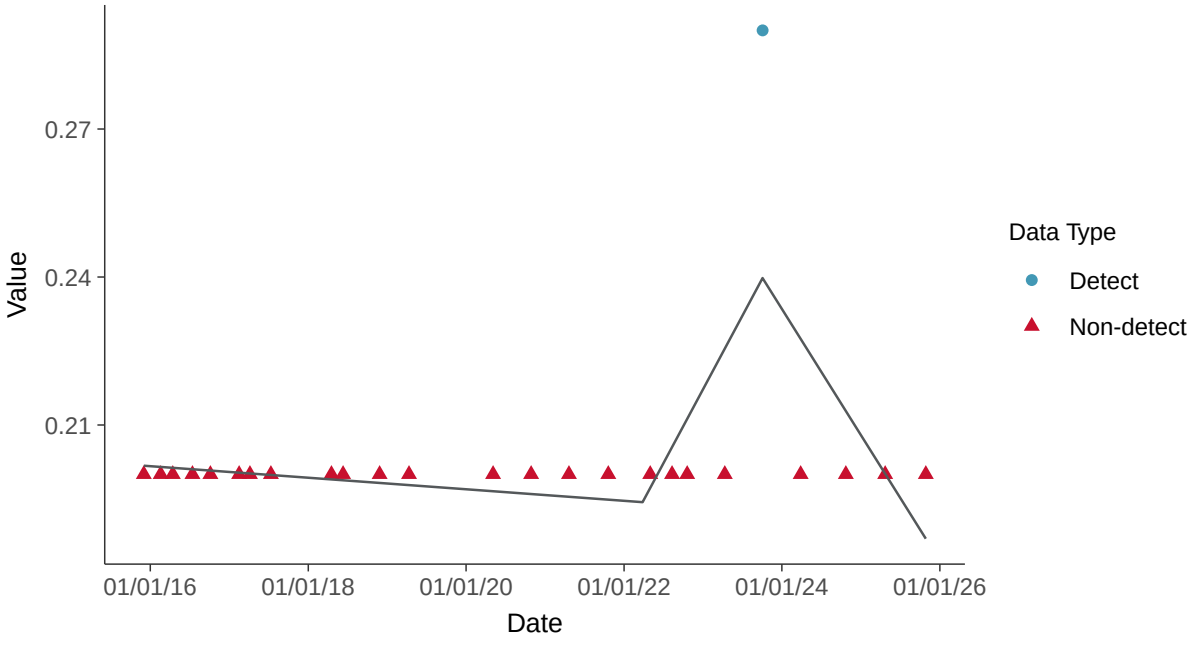
**Trend Regression: Piecewise Linear-Linear**

Mercury, MW-15022 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Mercury, MW-15022 (ug/L)

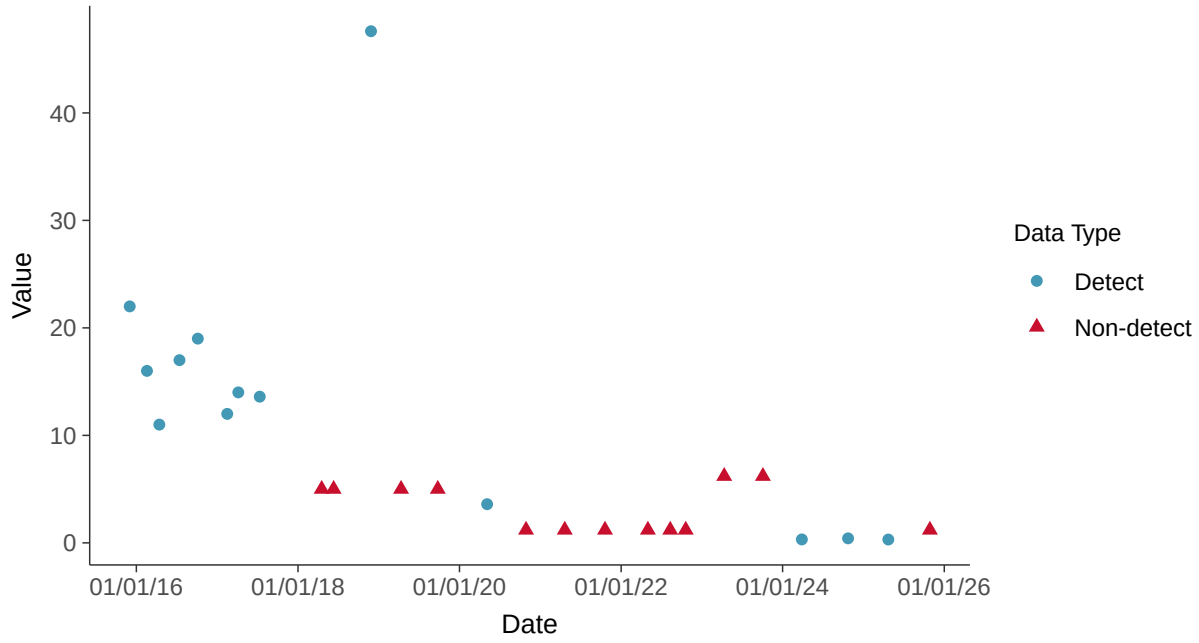


## Appendix IV: Molybdenum, MW-15022

ID: 12_2_119

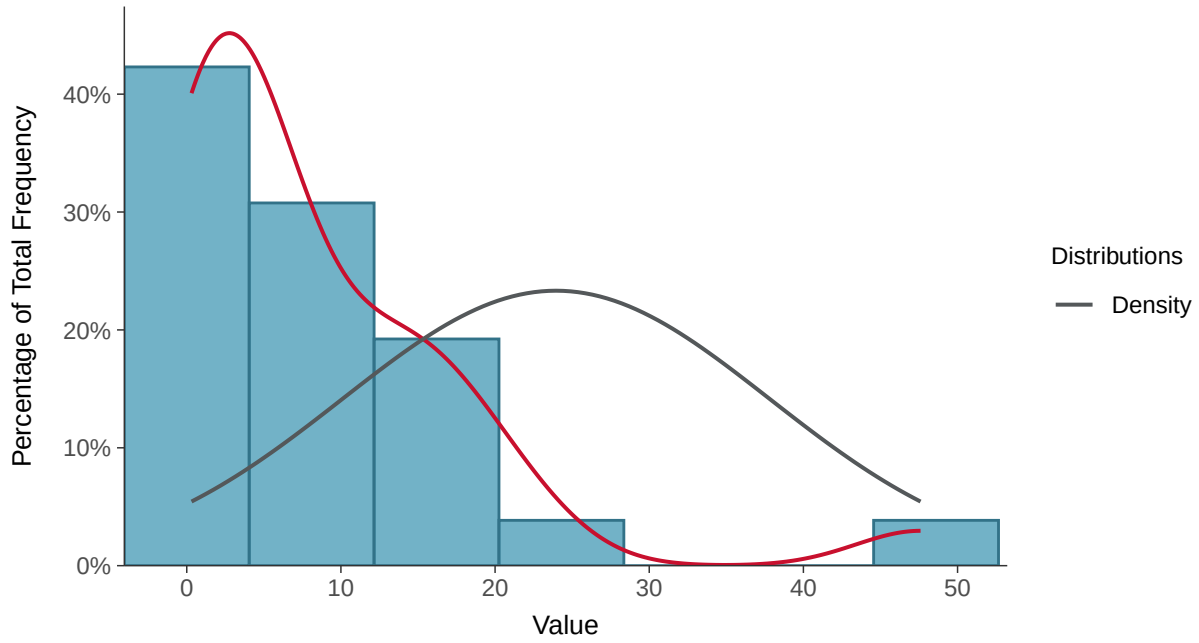
**Scatter Plot**

Molybdenum, MW-15022 (ug/L)



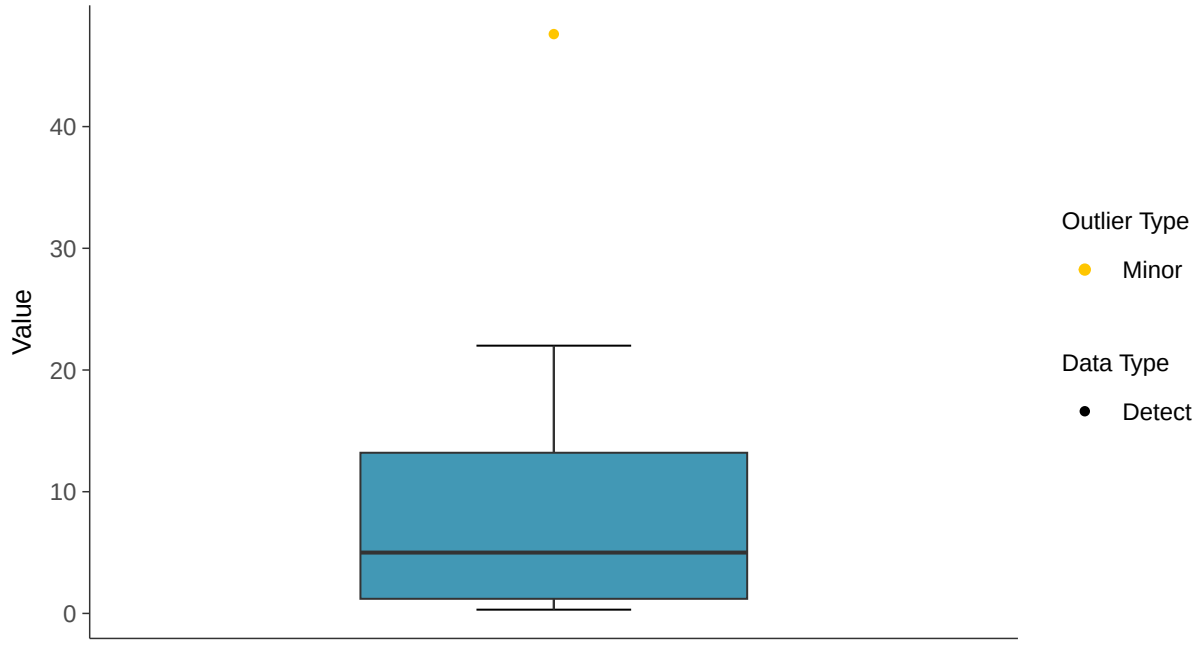

**Histogram**

Molybdenum, MW-15022 (ug/L)



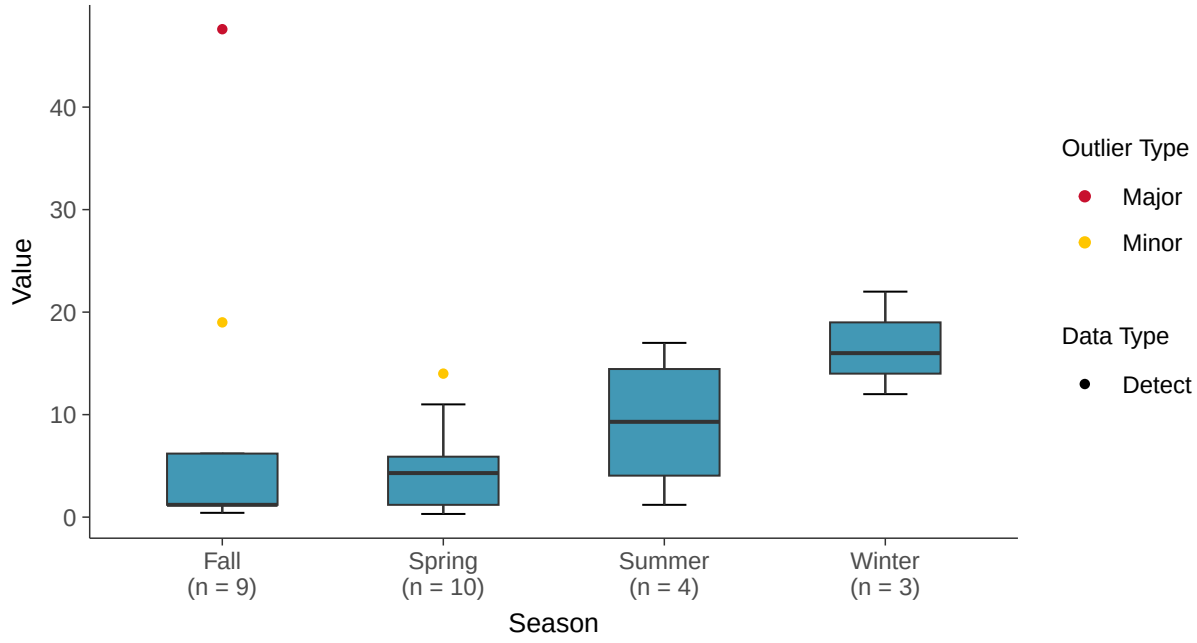
## Boxplot

Molybdenum, MW-15022 (ug/L)



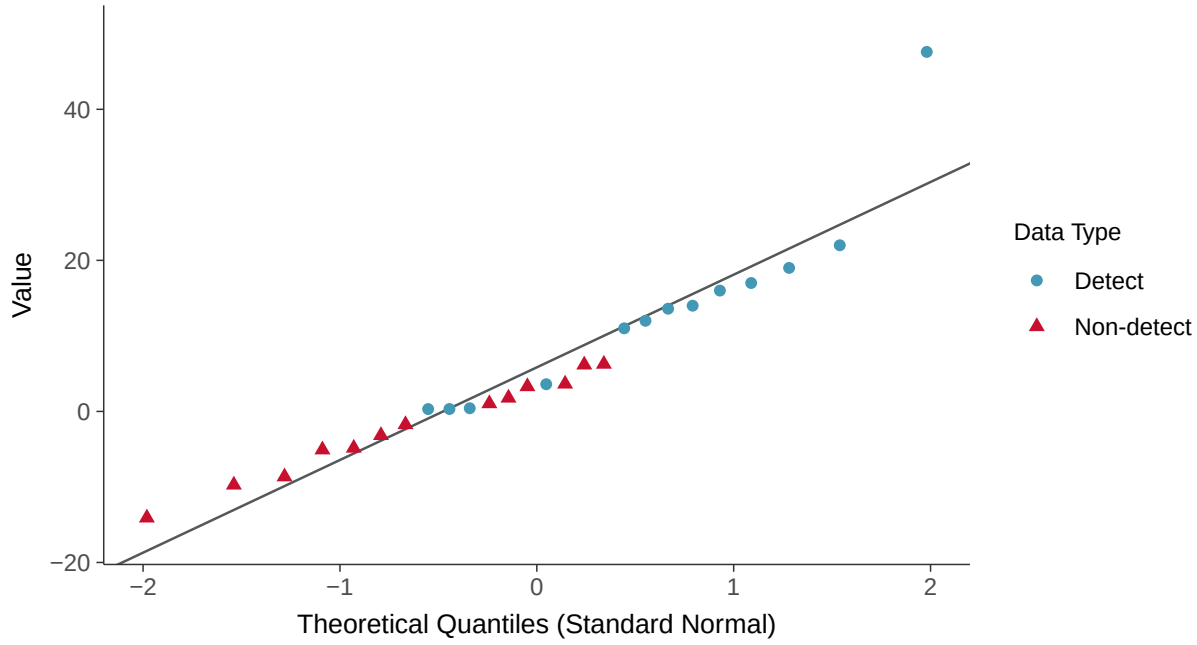

## Boxplot by Season

Molybdenum, MW-15022 (ug/L)



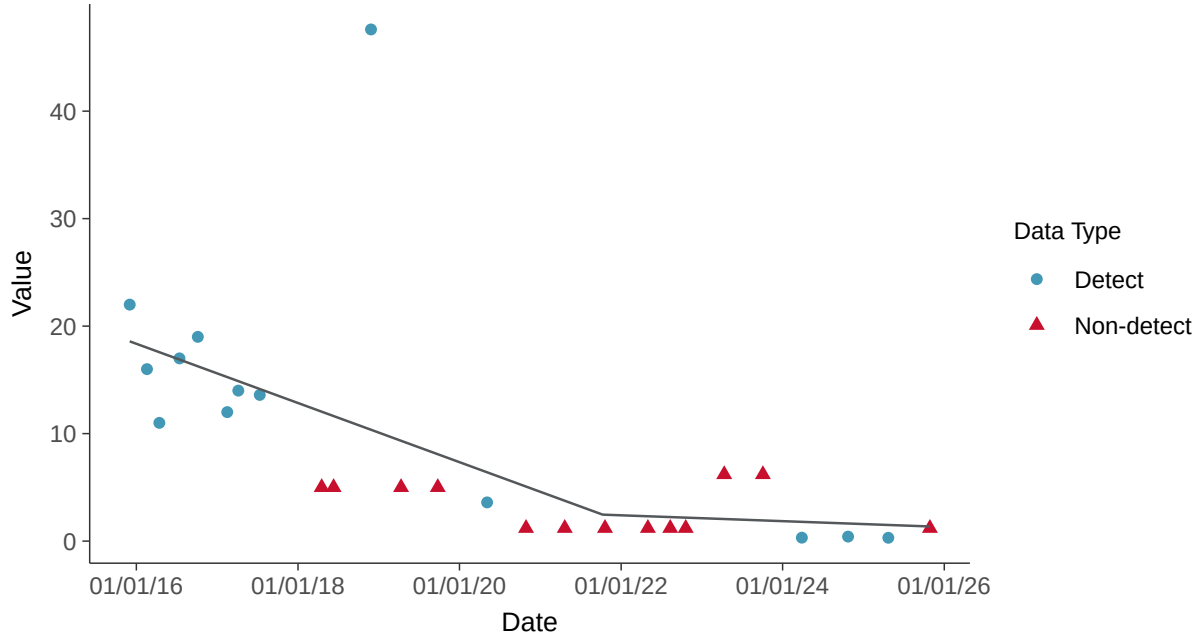
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15022 (ug/L)



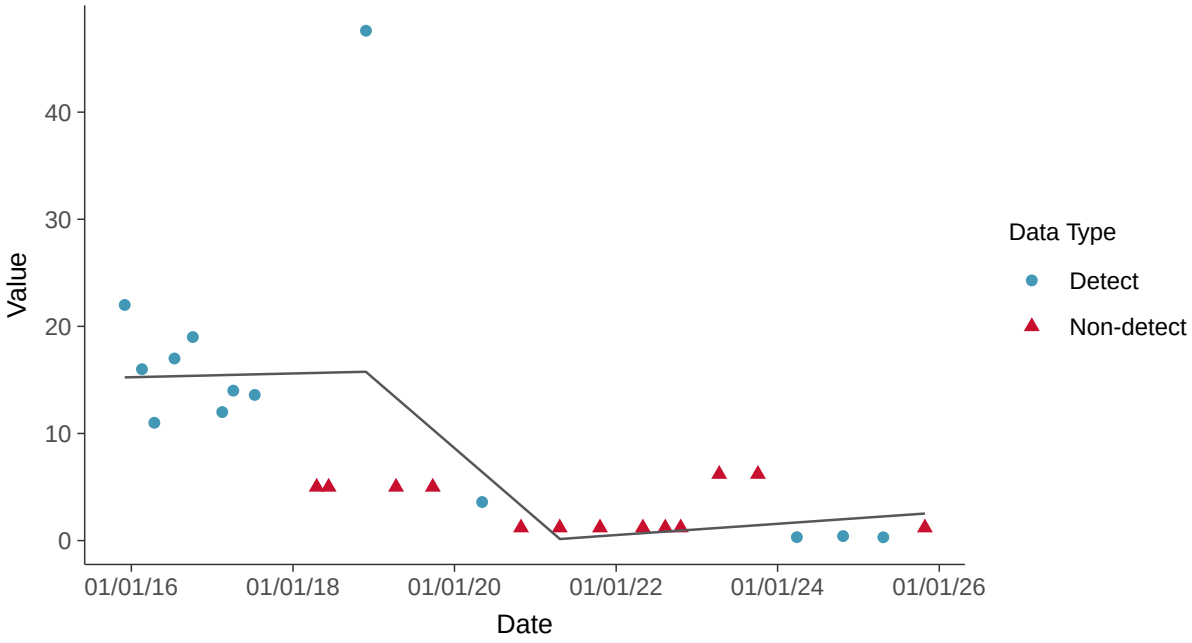

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15022 (ug/L)



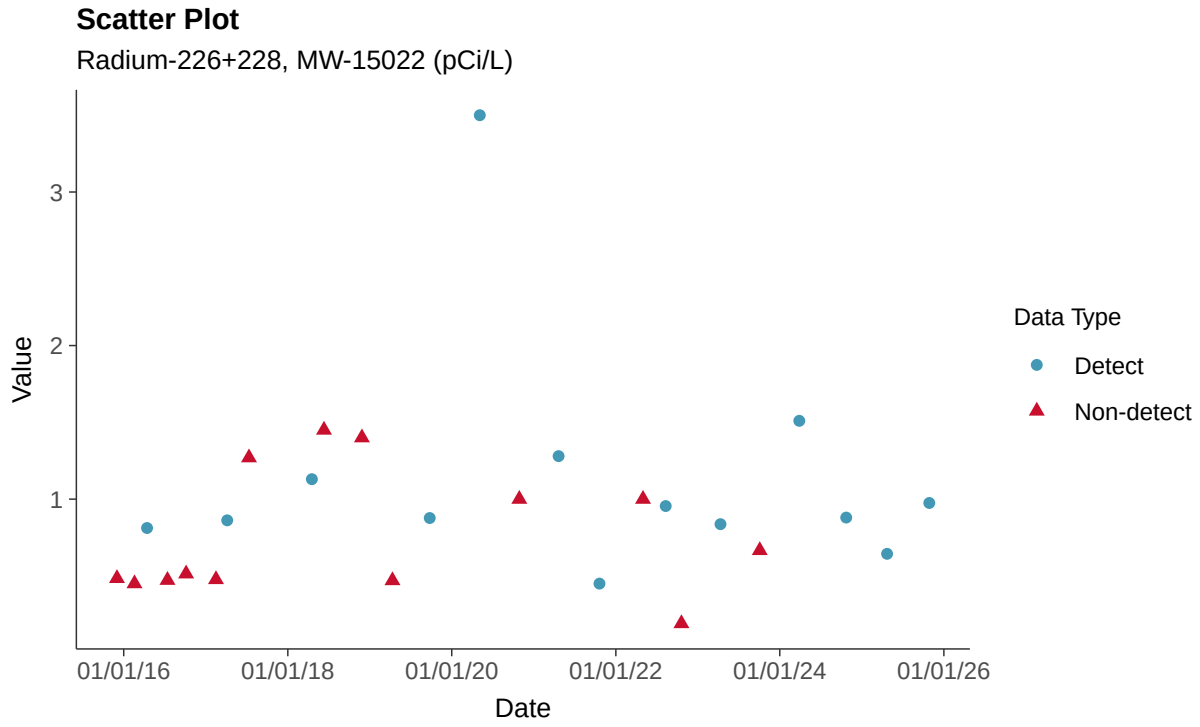
**Trend Regression: Piecewise Linear-Linear-Linear**

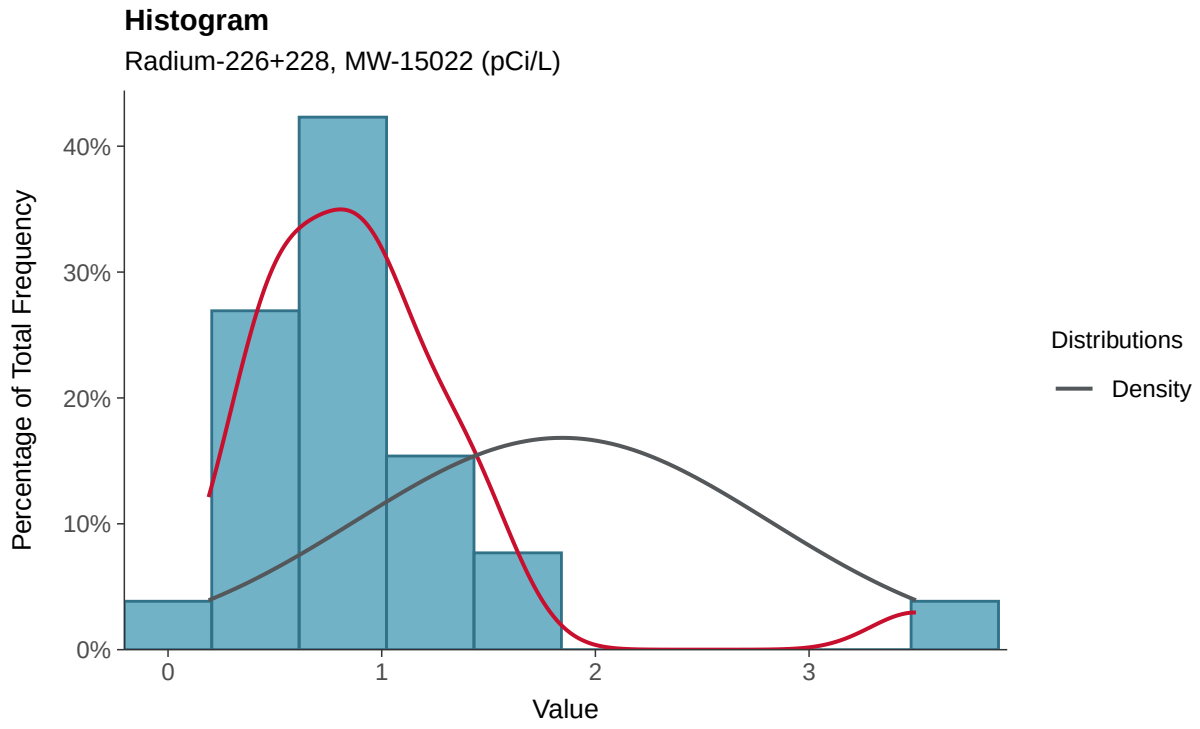
Molybdenum, MW-15022 (ug/L)



## Appendix IV: Radium-226+228, MW-15022

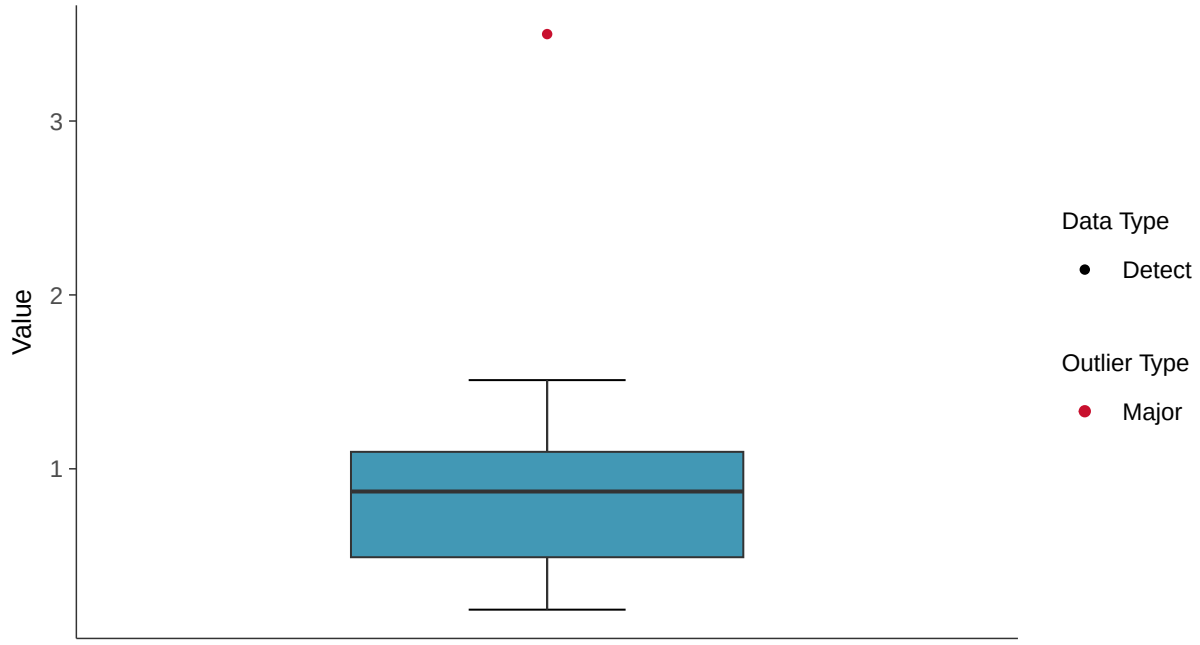
ID: 12_2_125



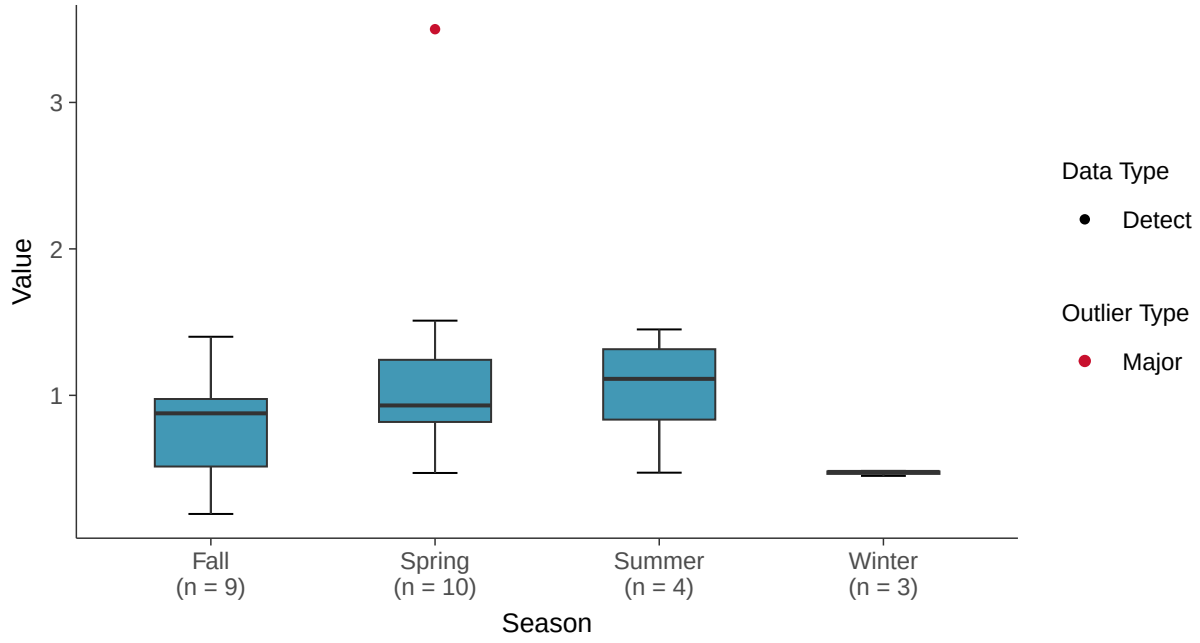
## Boxplot

Radium-226+228, MW-15022 (pCi/L)



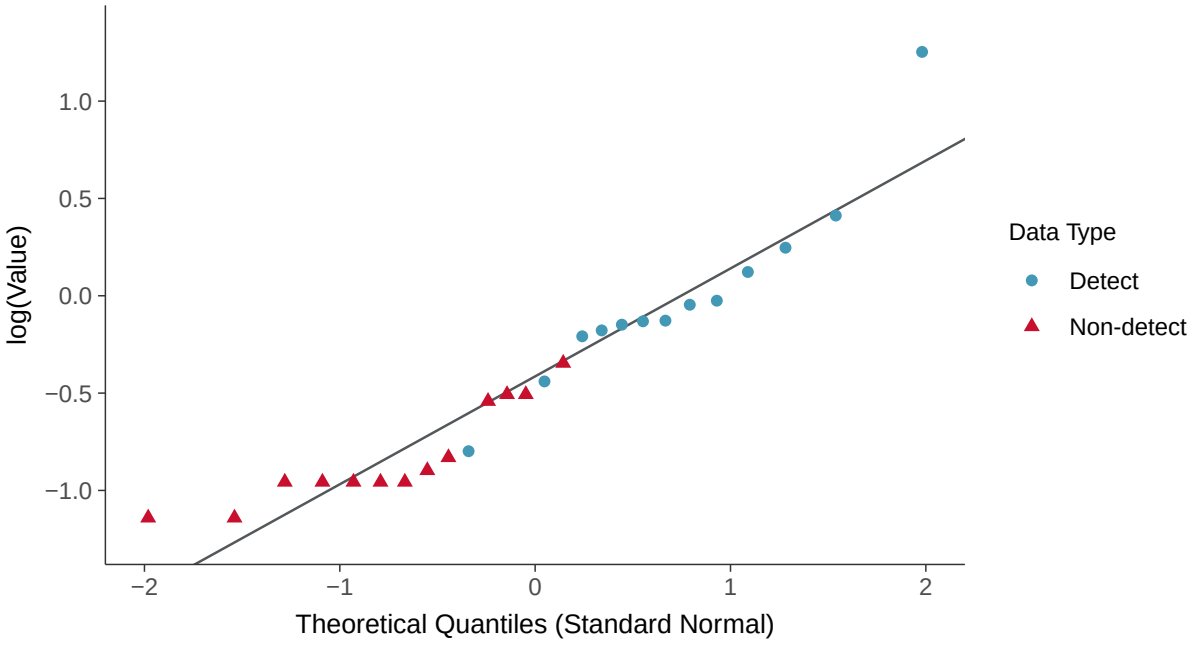

## Boxplot by Season

Radium-226+228, MW-15022 (pCi/L)



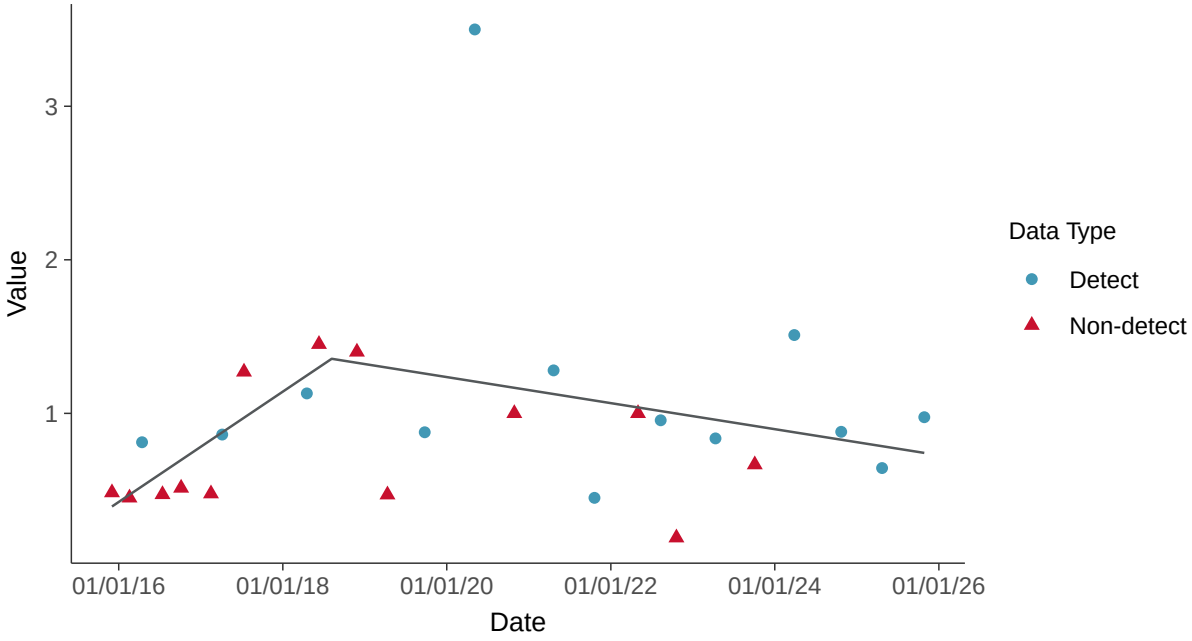
**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15022 (pCi/L)



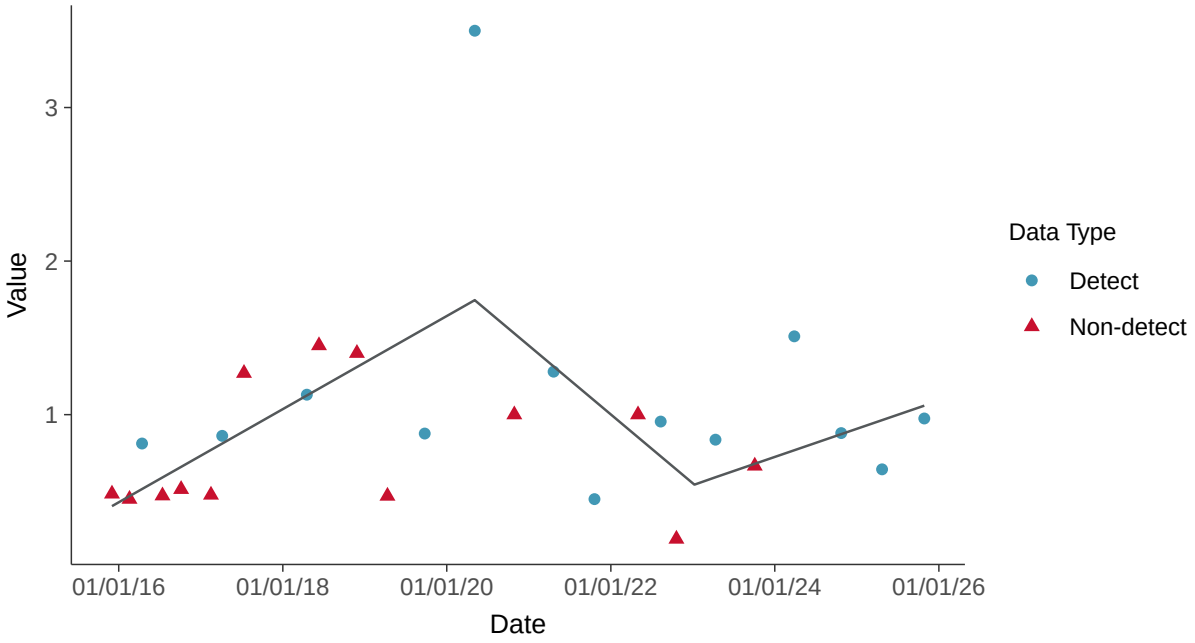

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15022 (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15022 (pCi/L)

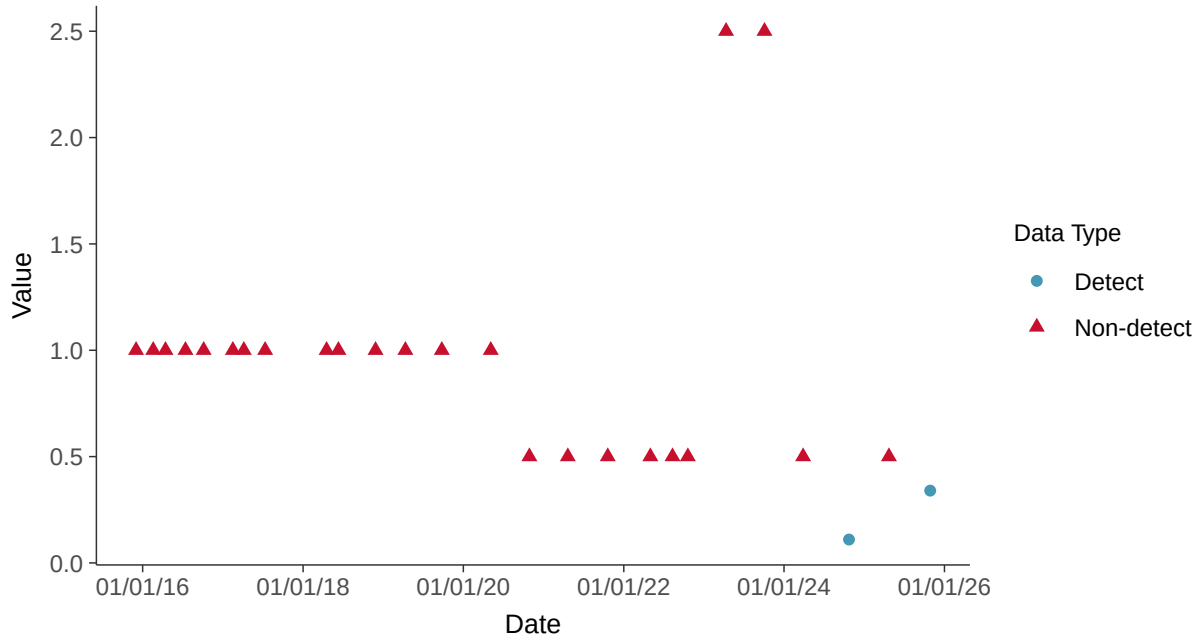


## Appendix IV: Selenium, MW-15022

ID: 12_2_127

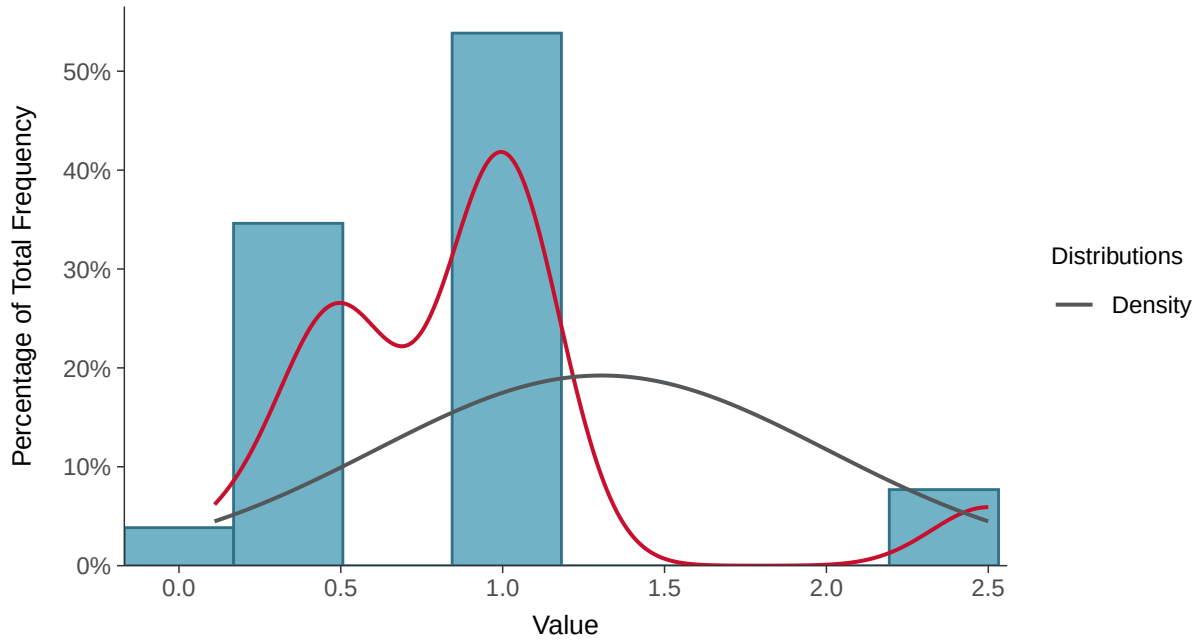
**Scatter Plot**

Selenium, MW-15022 (ug/L)



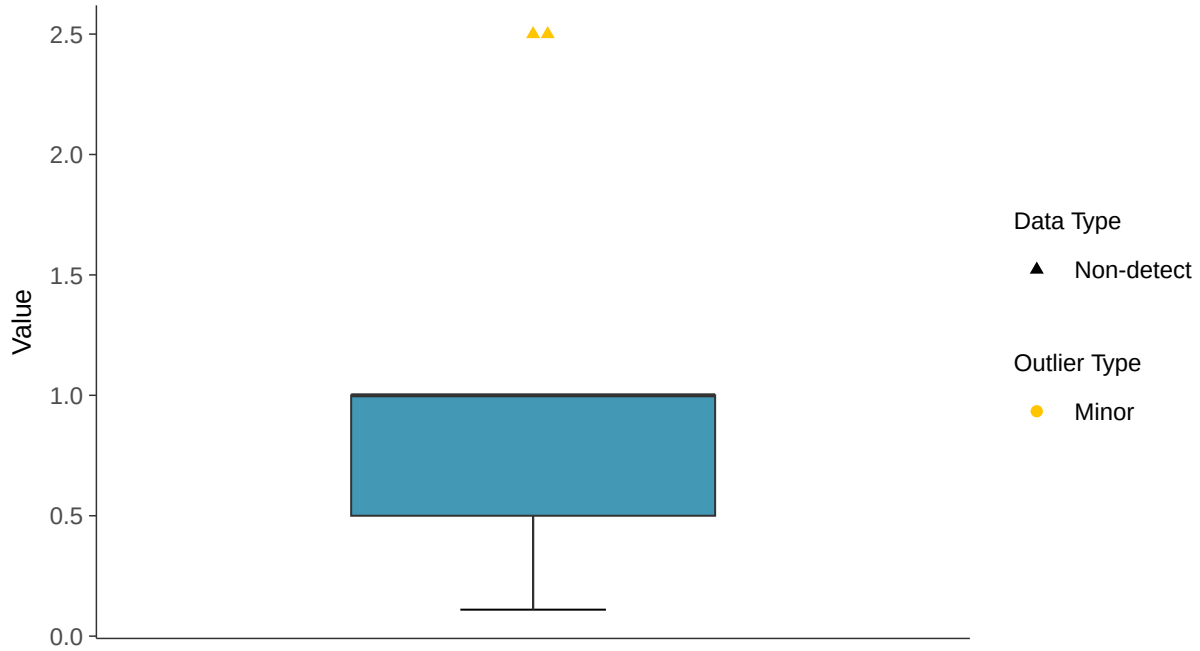

**Histogram**

Selenium, MW-15022 (ug/L)



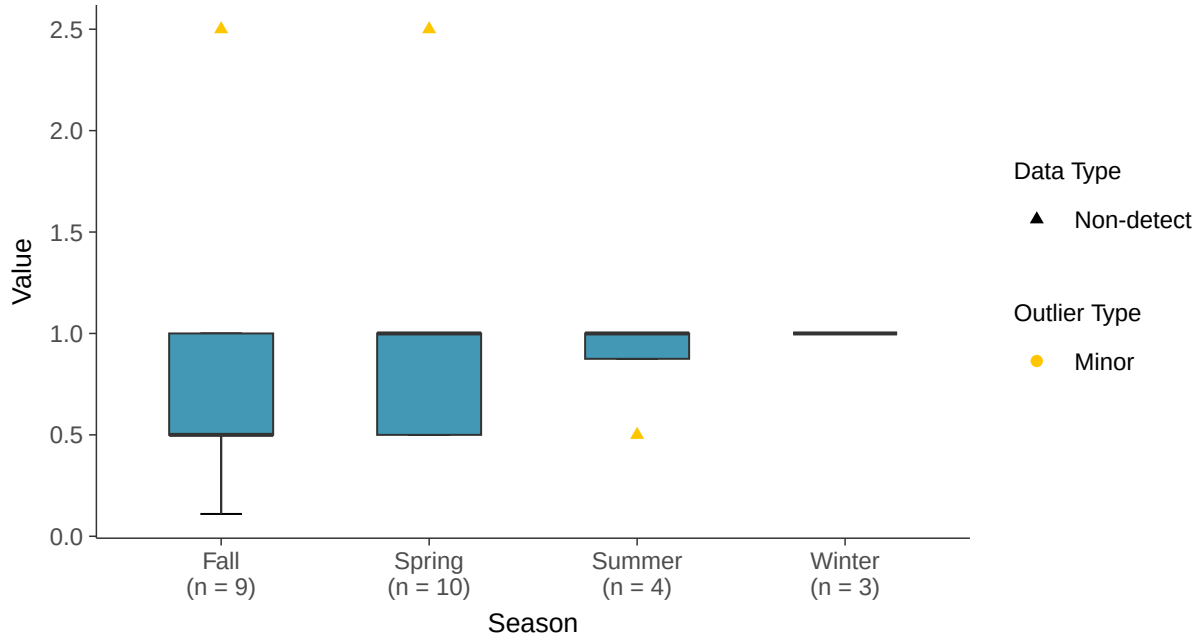
## Boxplot

Selenium, MW-15022 (ug/L)



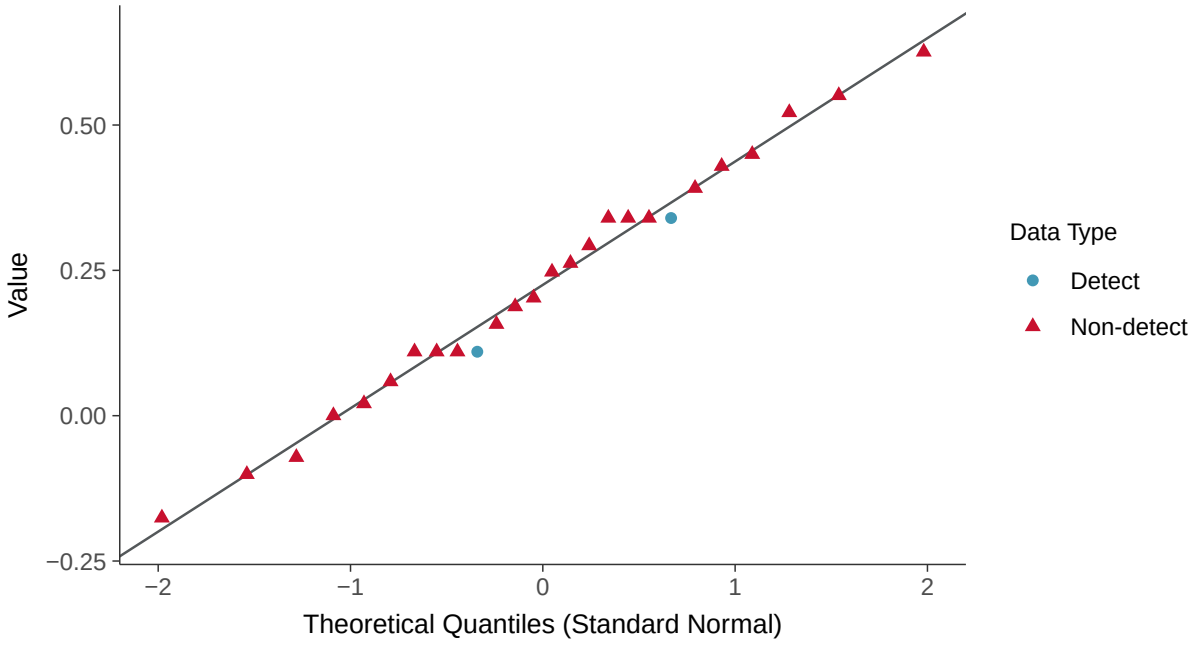

## Boxplot by Season

Selenium, MW-15022 (ug/L)



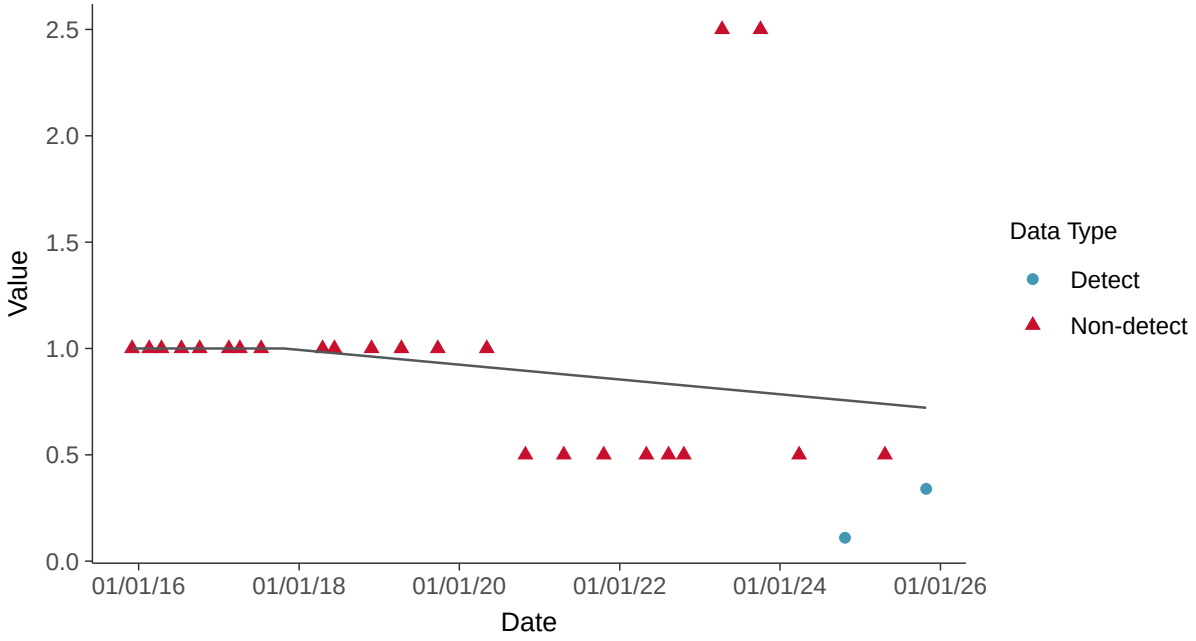
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15022 (ug/L)



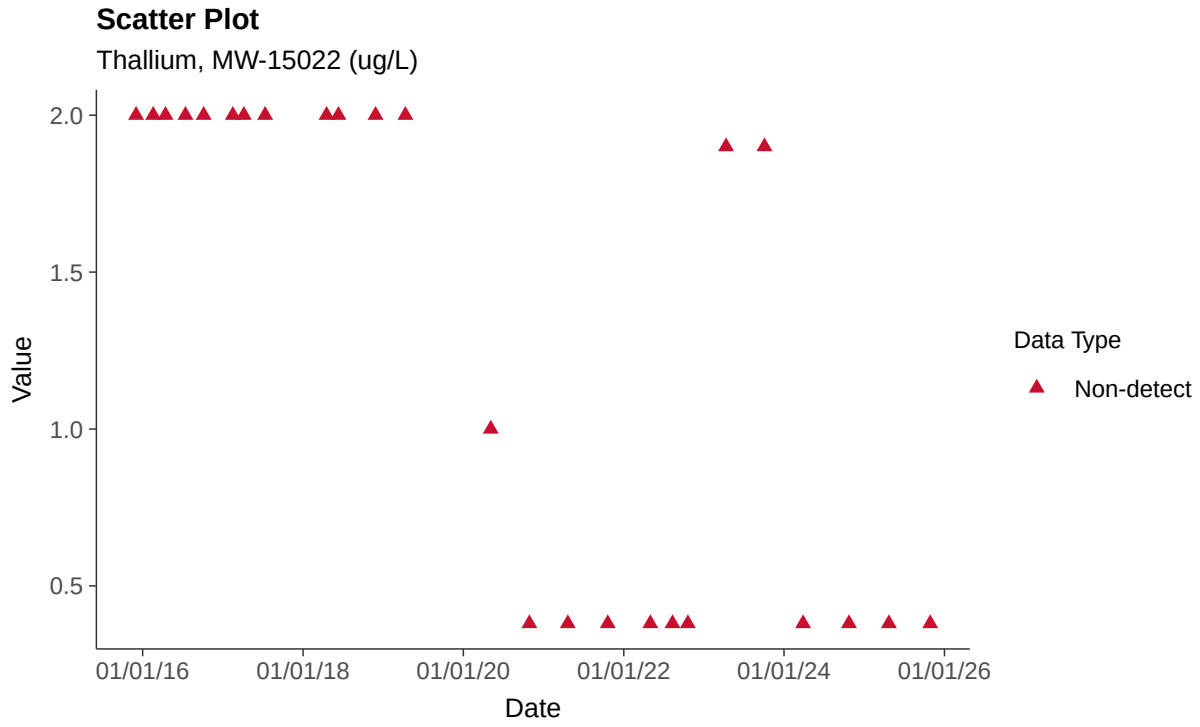

**Trend Regression: Piecewise Linear-Linear**

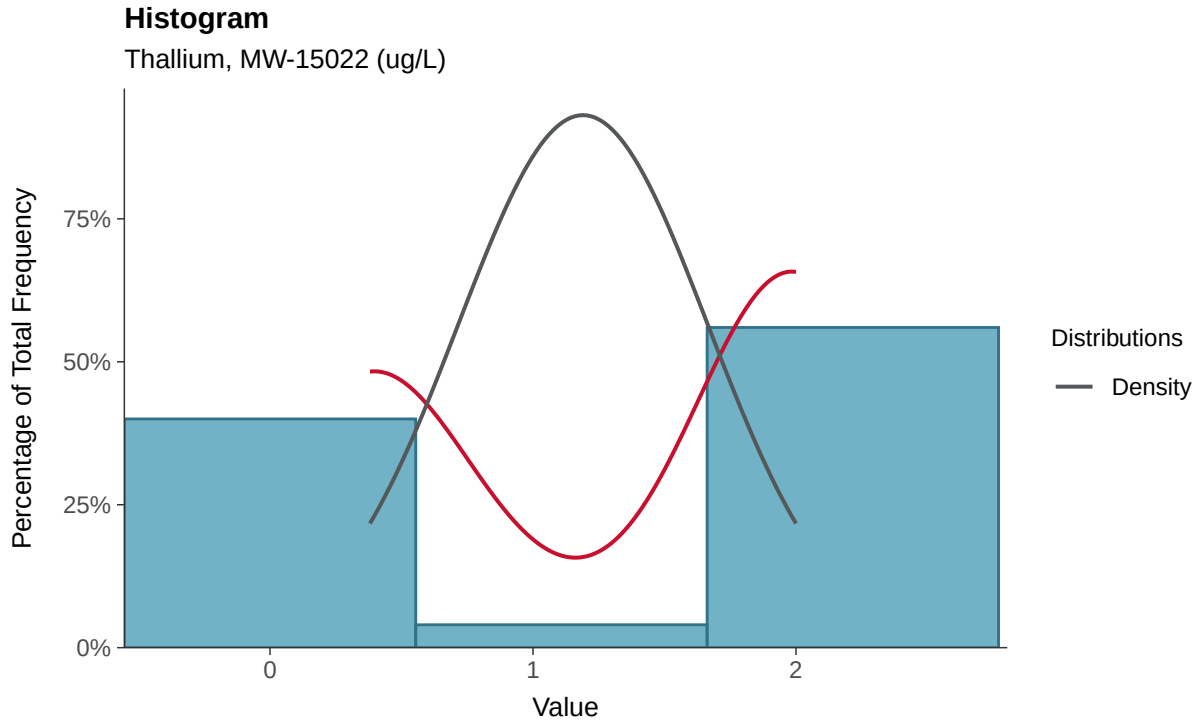
Selenium, MW-15022 (ug/L)



## Appendix IV: Thallium, MW-15022

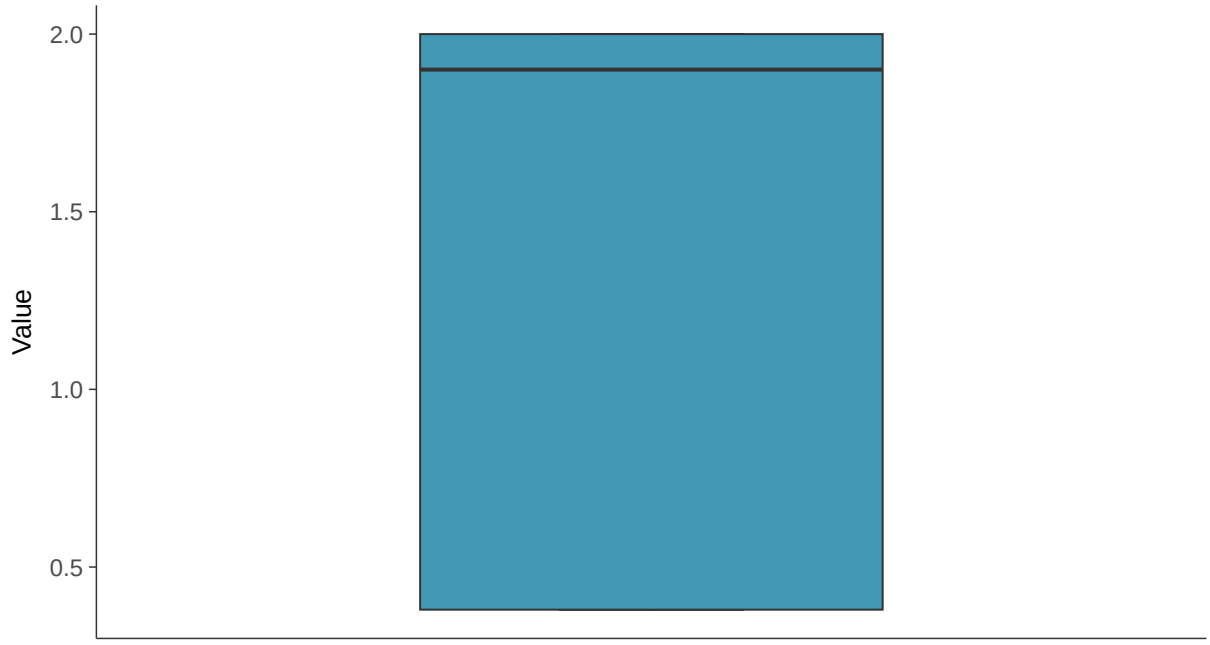
ID: 12_2_131



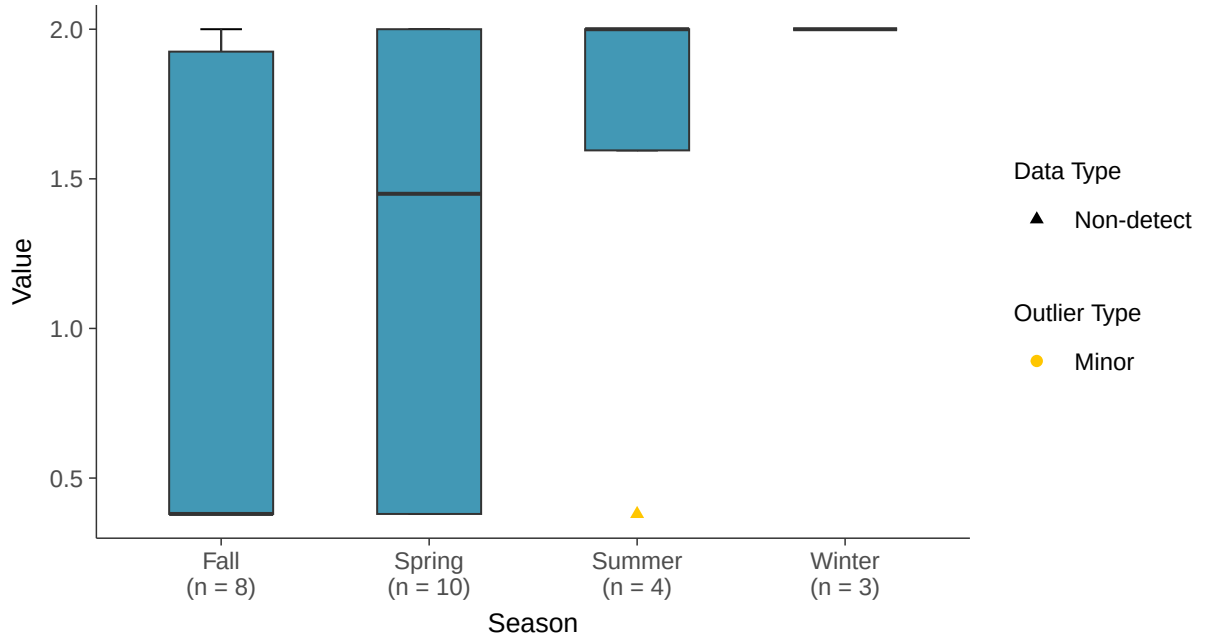
## Boxplot

Thallium, MW-15022 (ug/L)



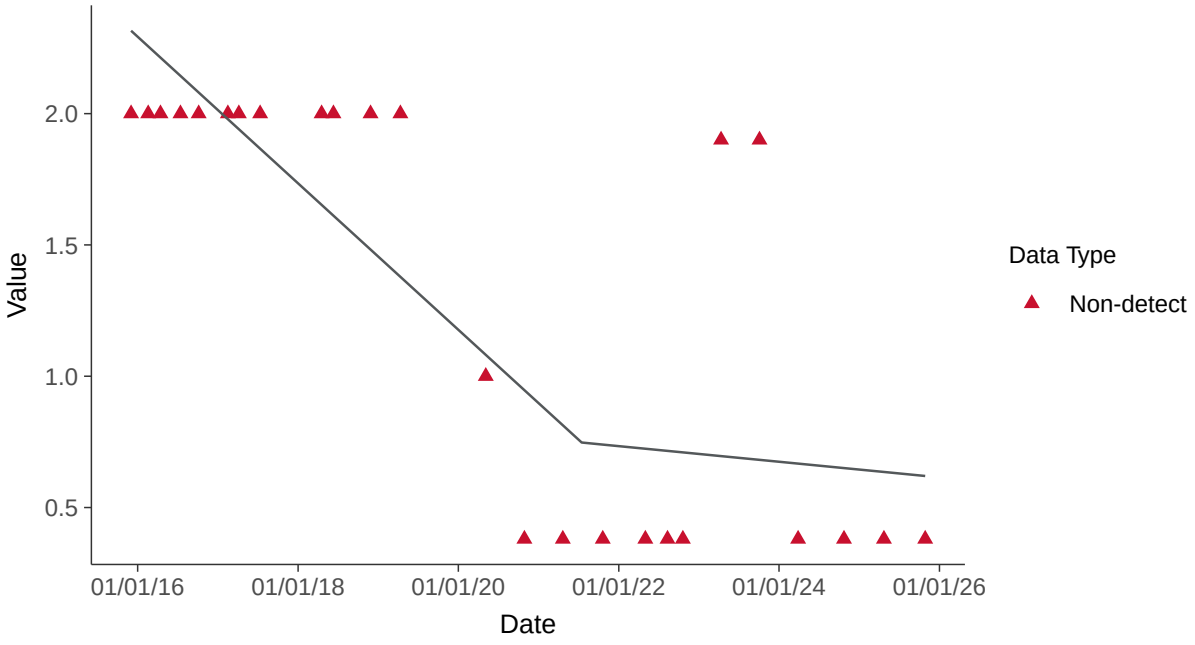

## Boxplot by Season

Thallium, MW-15022 (ug/L)



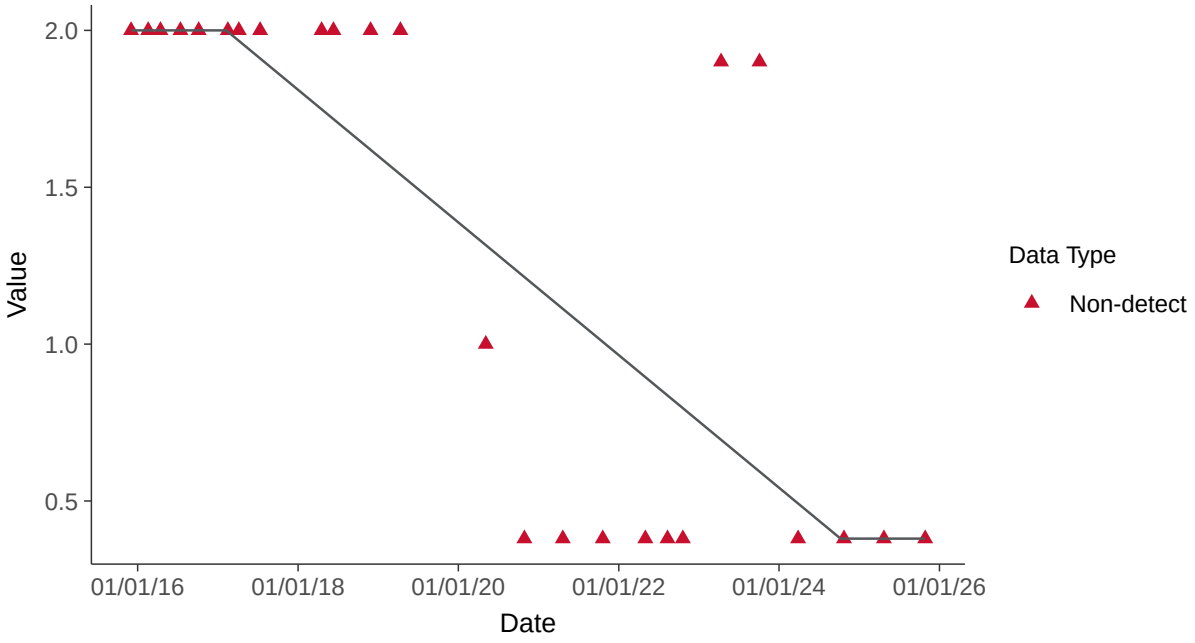
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-15022 (ug/L)



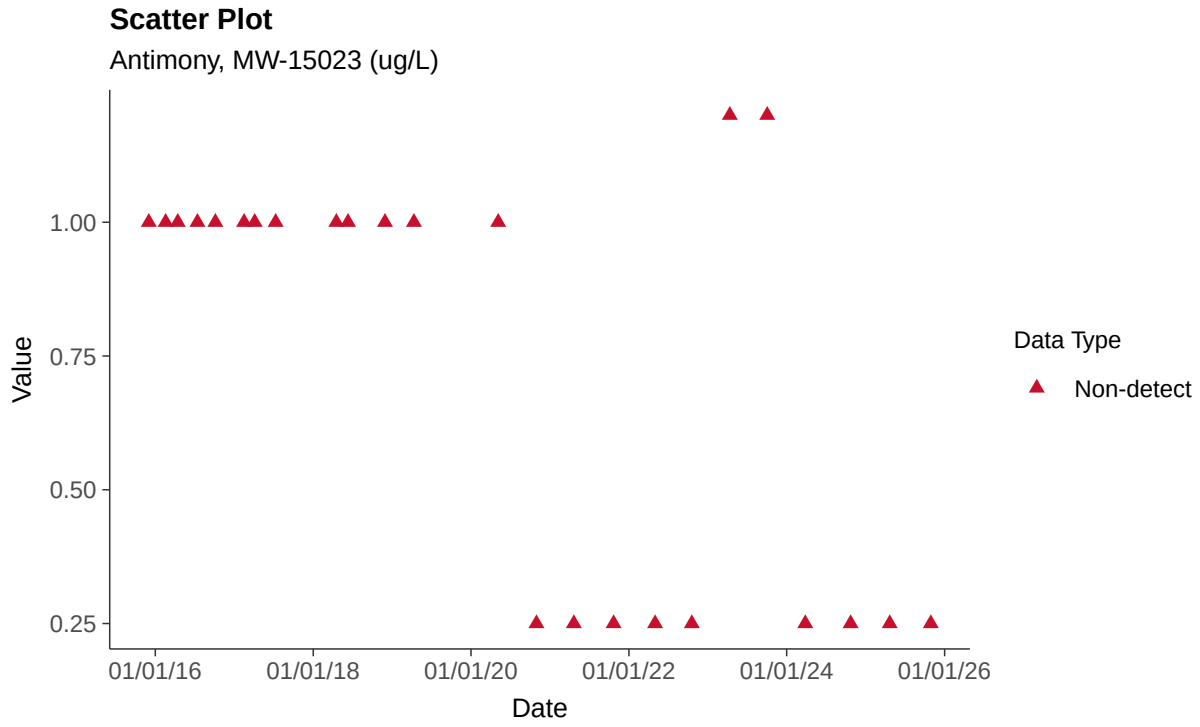

**Trend Regression: Piecewise Linear-Linear-Linear**

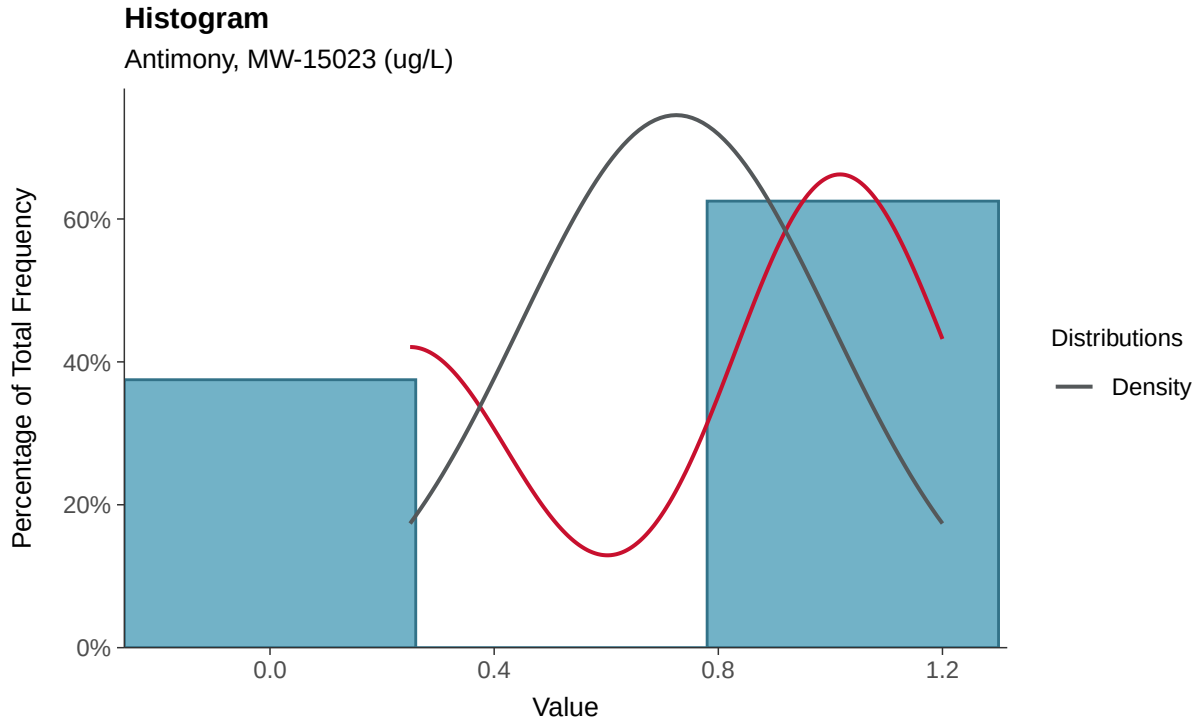
Thallium, MW-15022 (ug/L)



## Appendix IV: Antimony, MW-15023

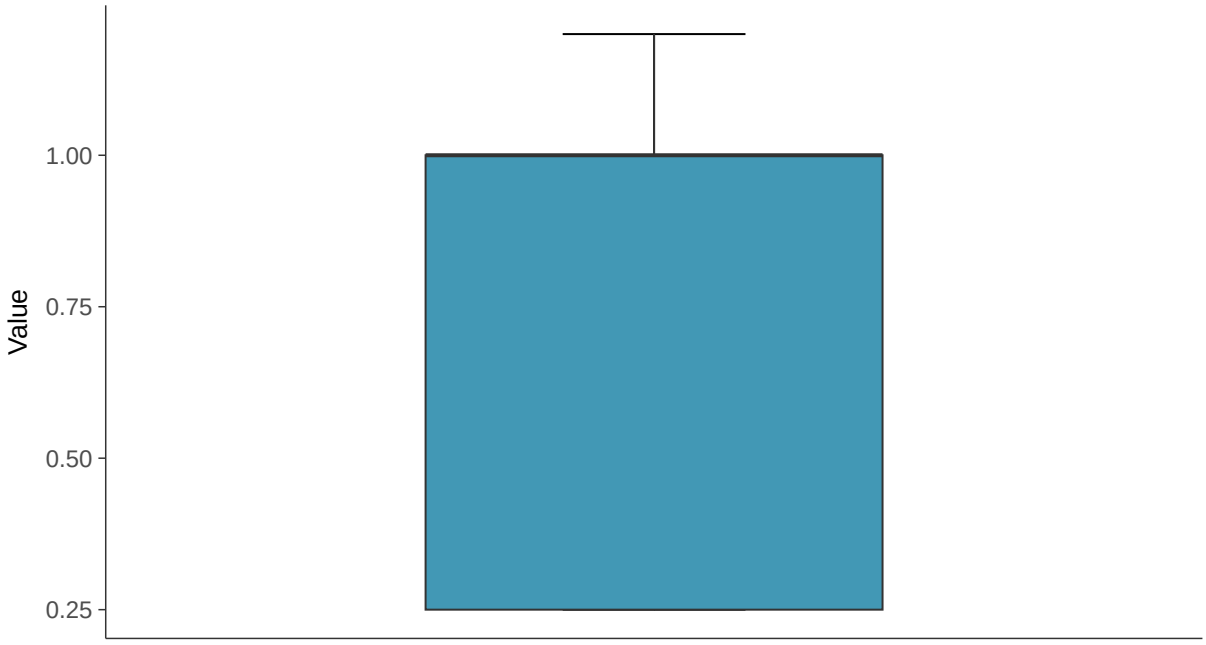
ID: 13_2_101



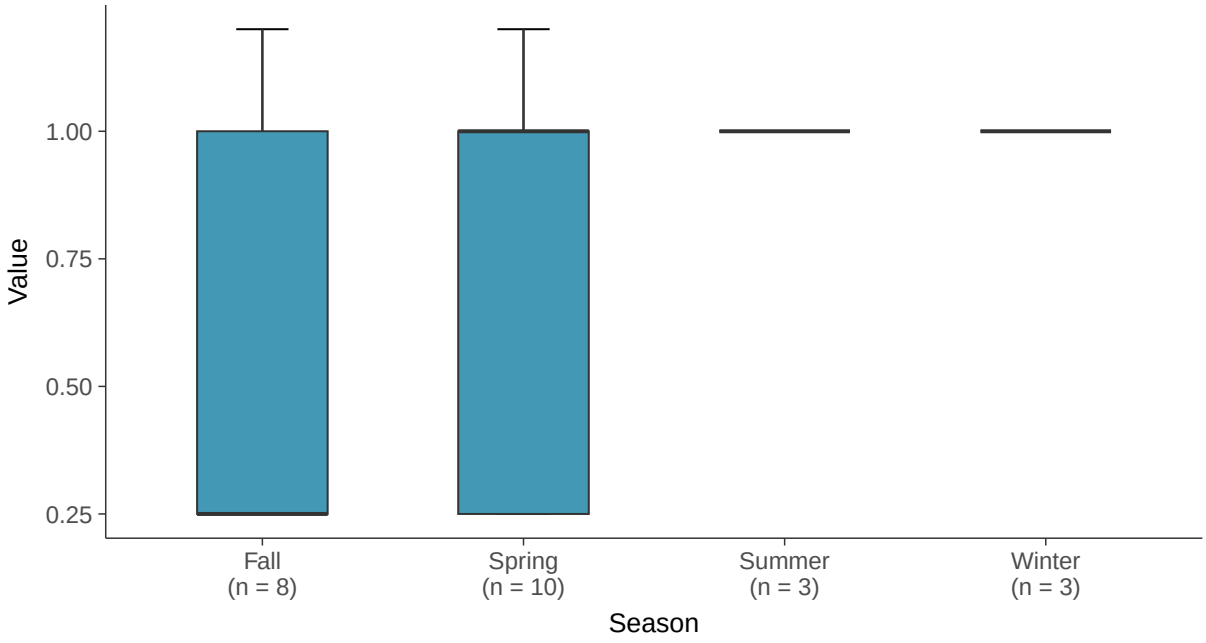
**Boxplot**

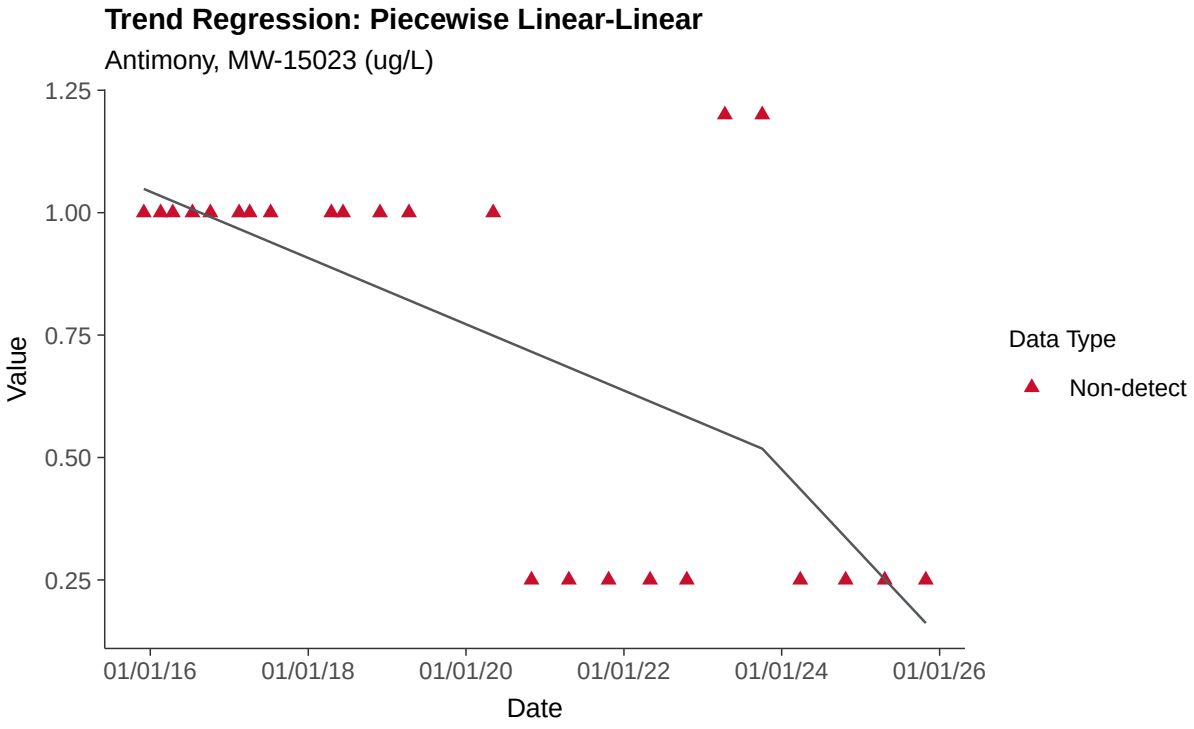
Antimony, MW-15023 (ug/L)




**Boxplot by Season**

Antimony, MW-15023 (ug/L)



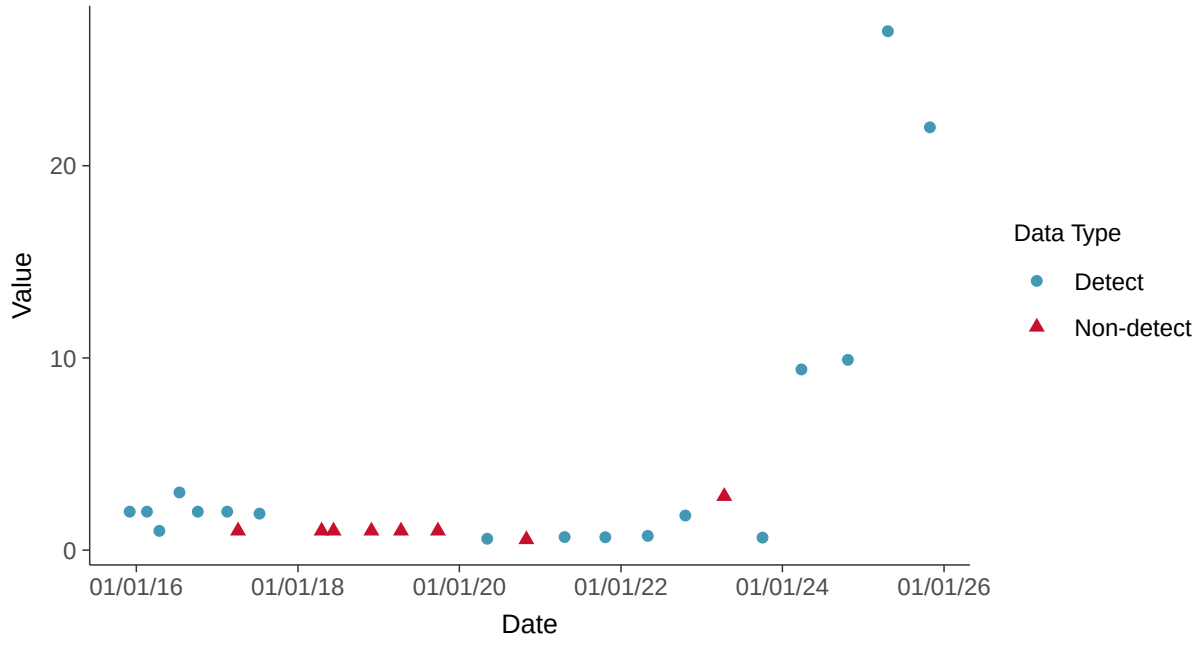

Trend Regression: Piecewise Linear-Linear
Antimony, MW-15023 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Arsenic, MW-15023

ID: 13_2_102

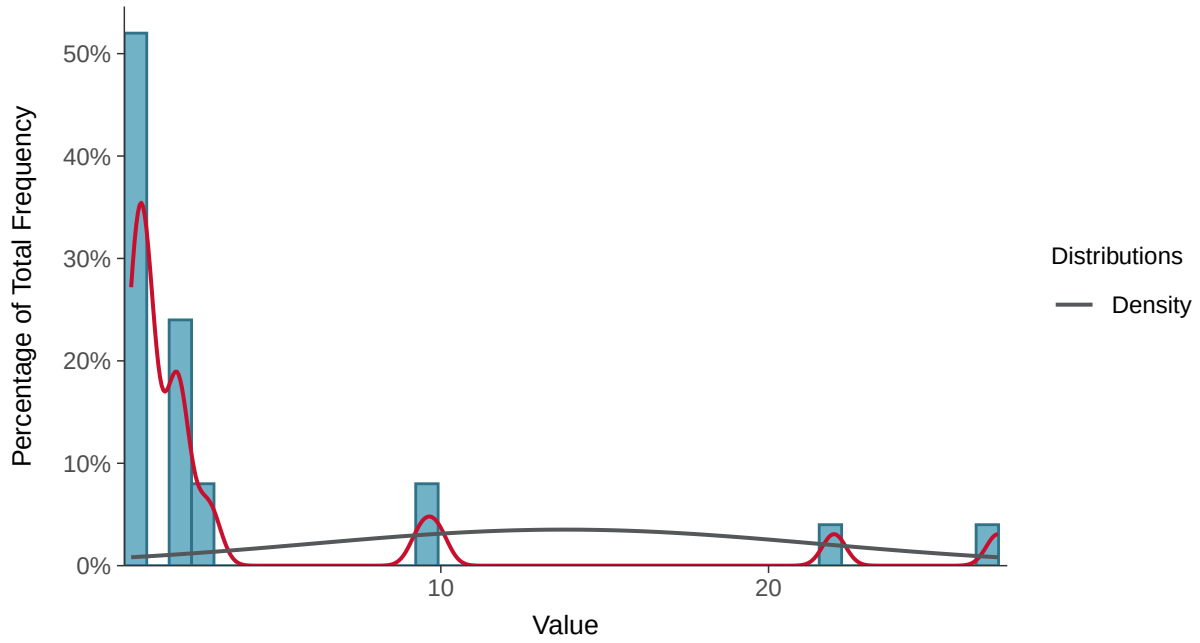
**Scatter Plot**

Arsenic, MW-15023 (ug/L)



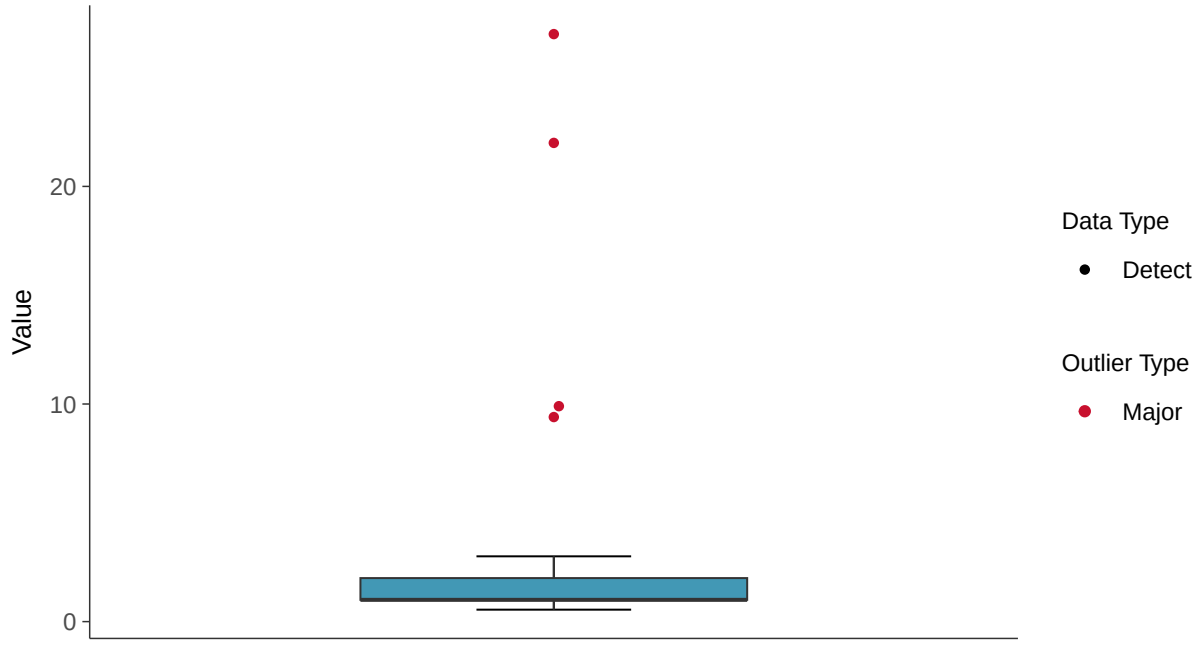

**Histogram**

Arsenic, MW-15023 (ug/L)



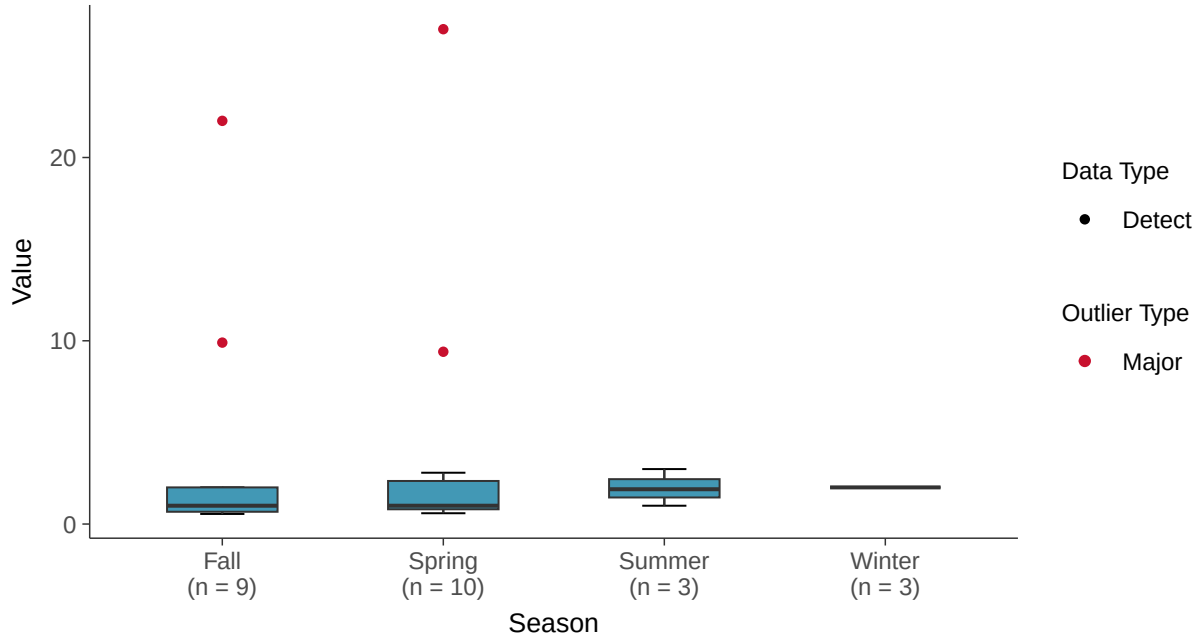
## Boxplot

Arsenic, MW-15023 (ug/L)



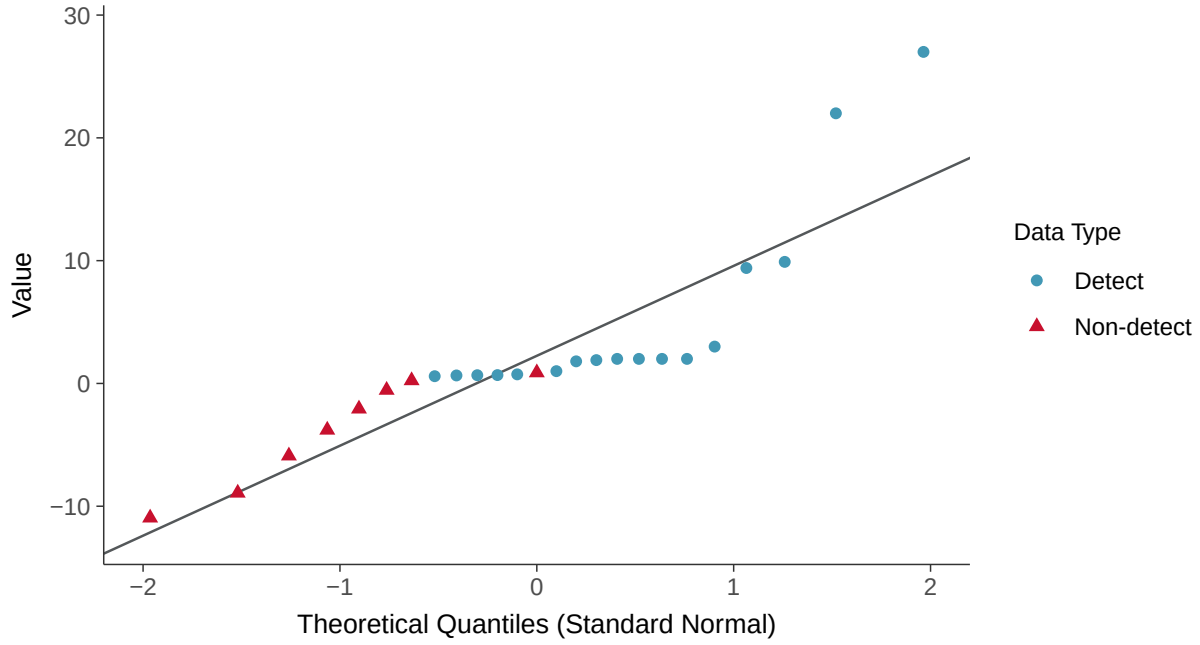

## Boxplot by Season

Arsenic, MW-15023 (ug/L)



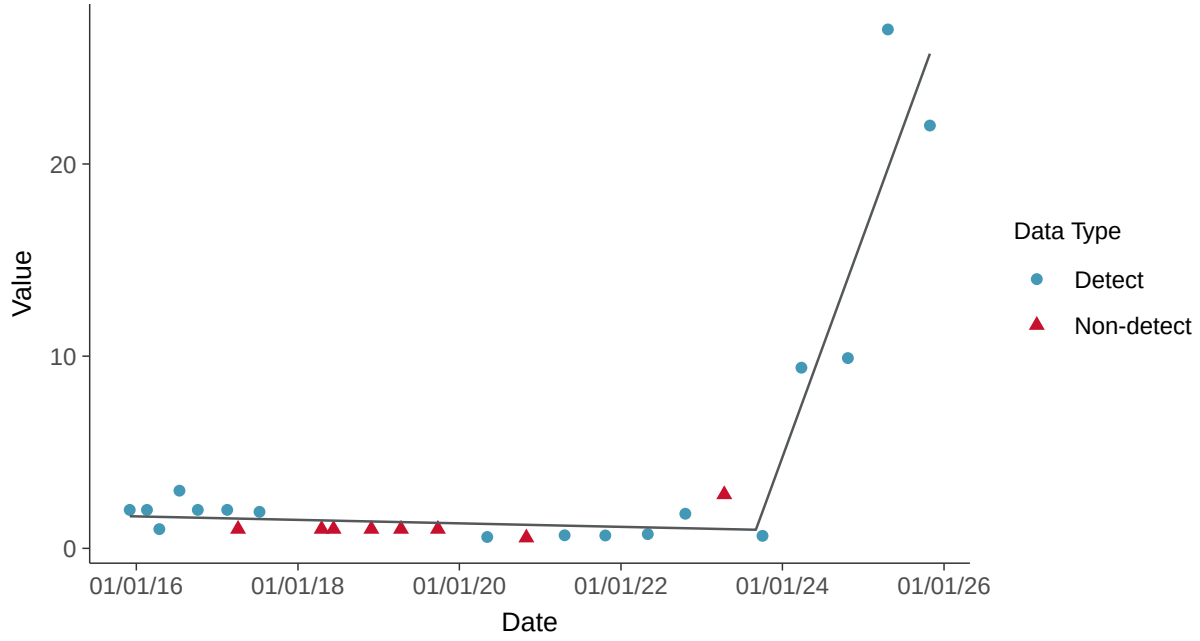
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-15023 (ug/L)



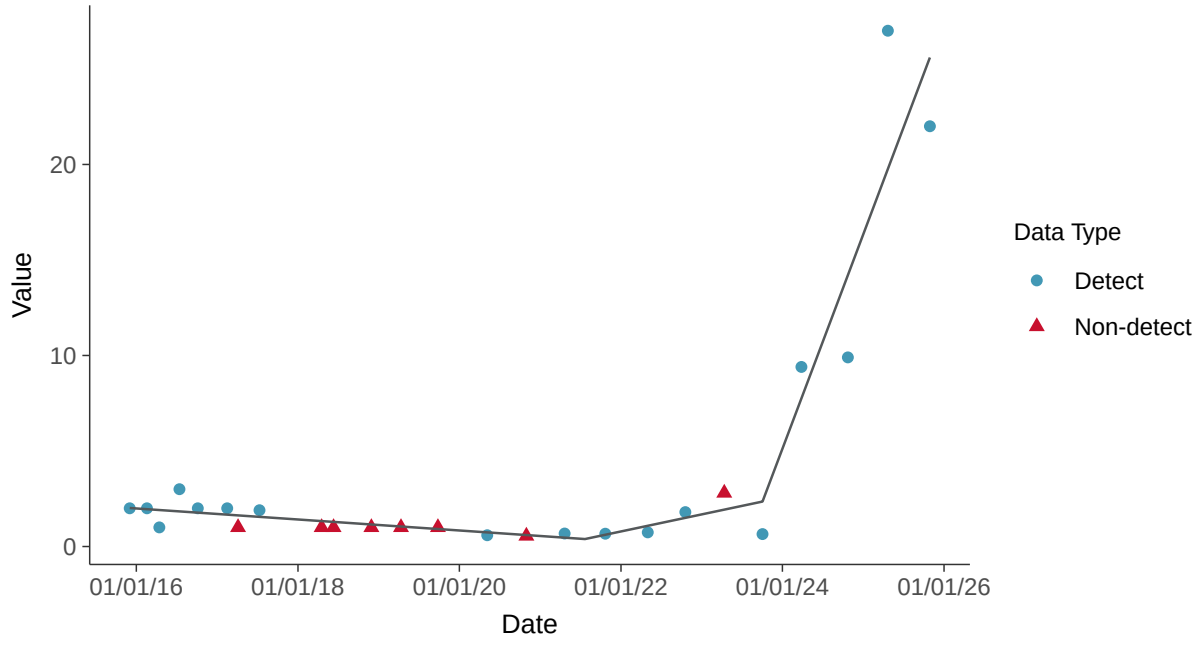

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-15023 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-15023 (ug/L)

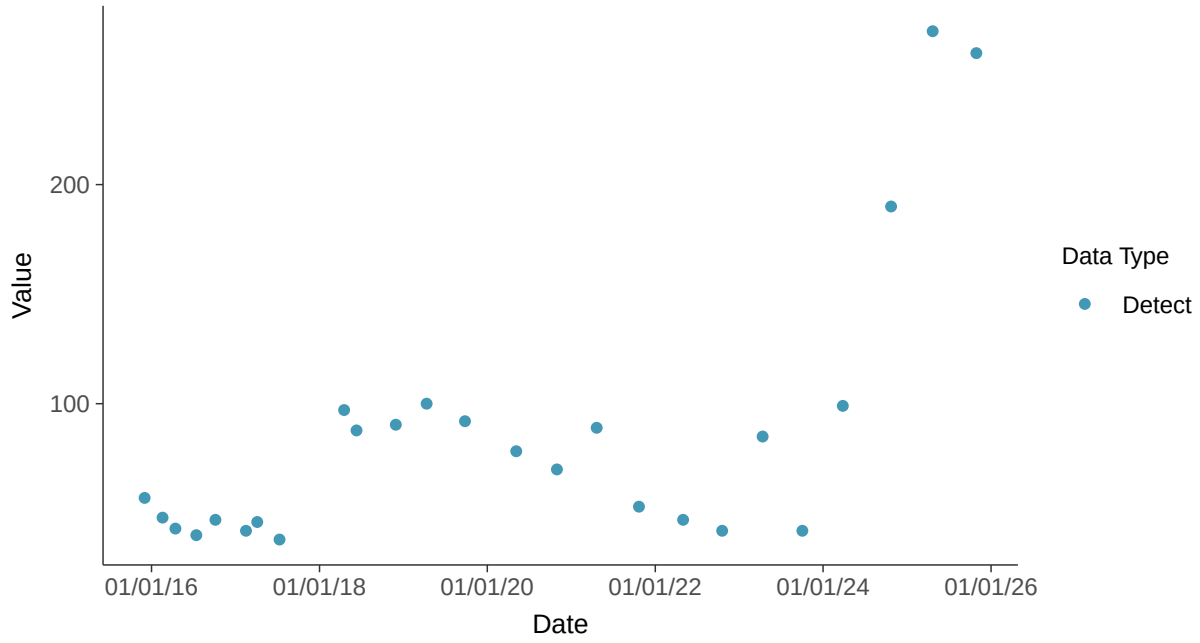


## Appendix IV: Barium, MW-15023

ID: 13_2_103

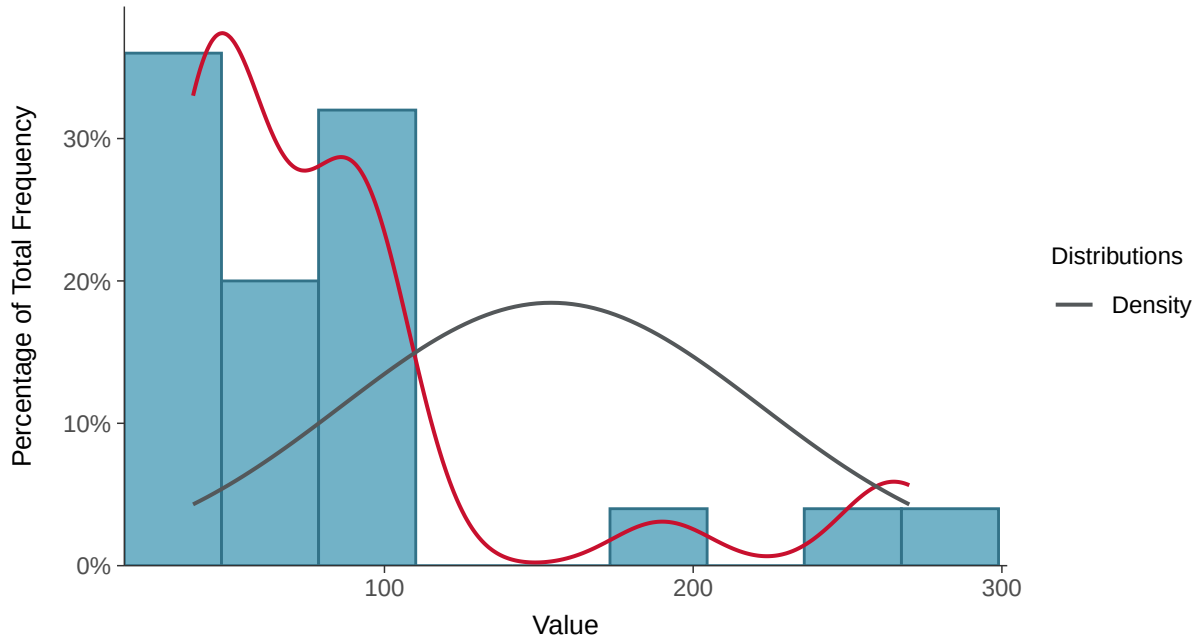
**Scatter Plot**

Barium, MW-15023 (ug/L)



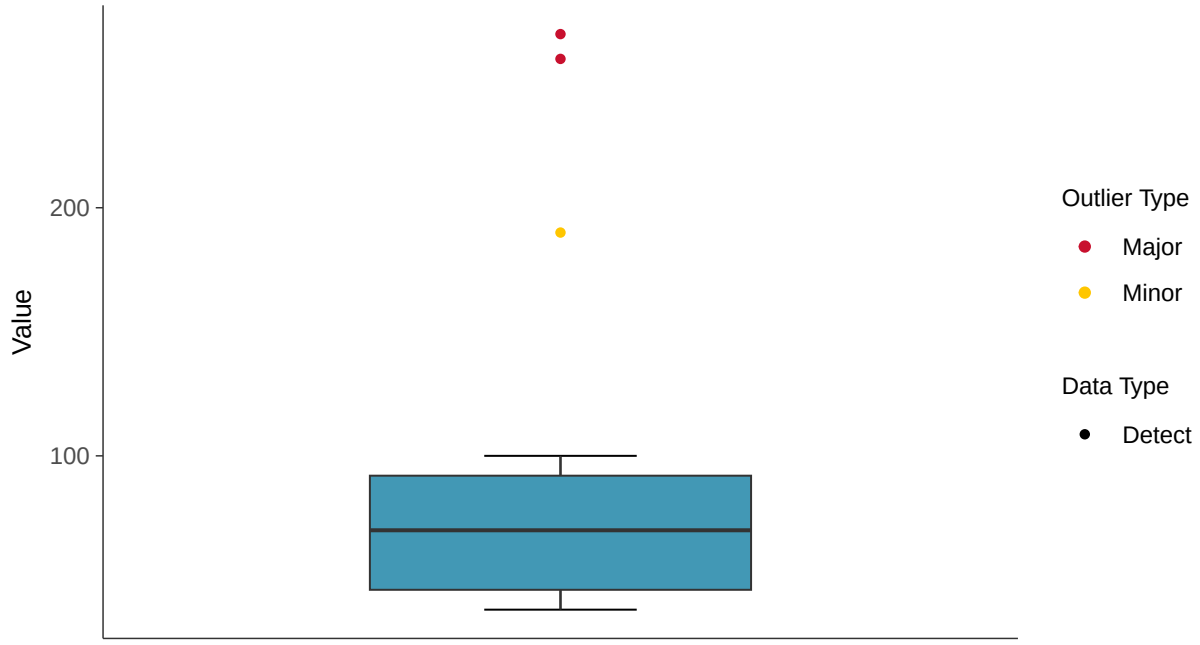

**Histogram**

Barium, MW-15023 (ug/L)



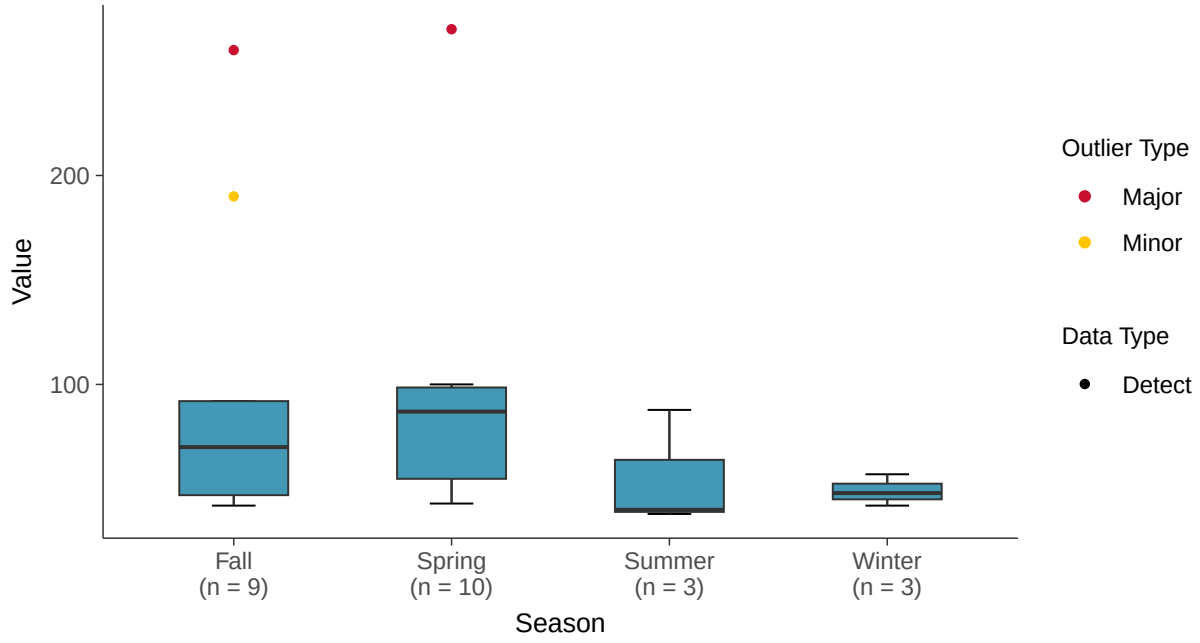
## Boxplot

Barium, MW-15023 (ug/L)



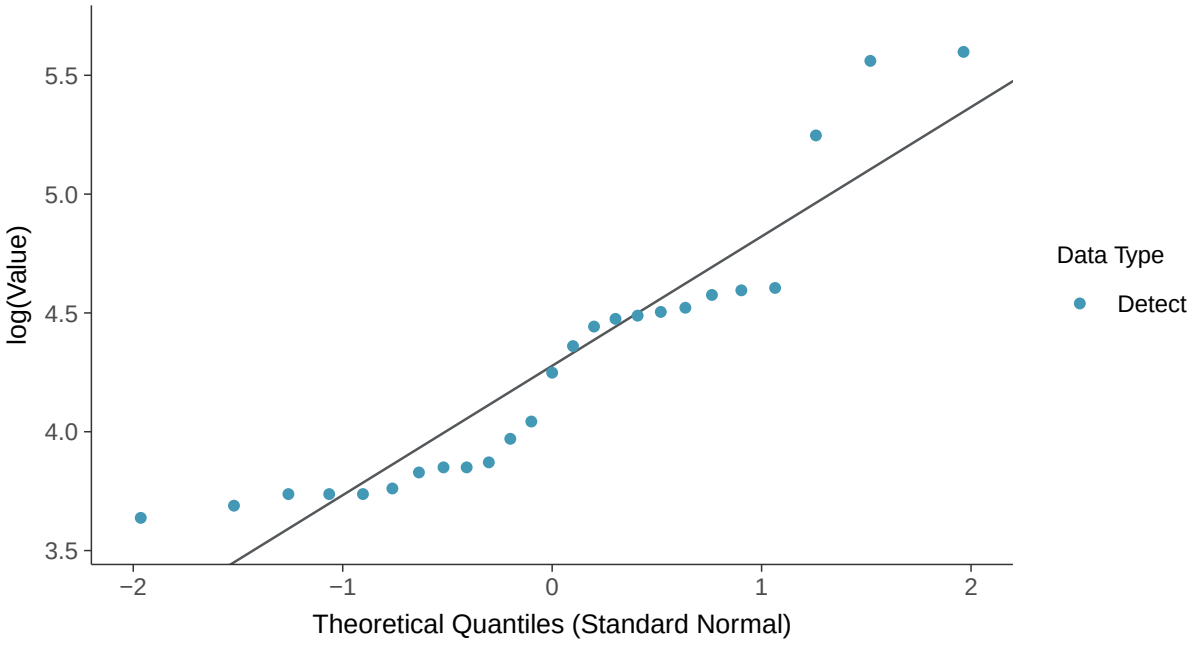

## Boxplot by Season

Barium, MW-15023 (ug/L)



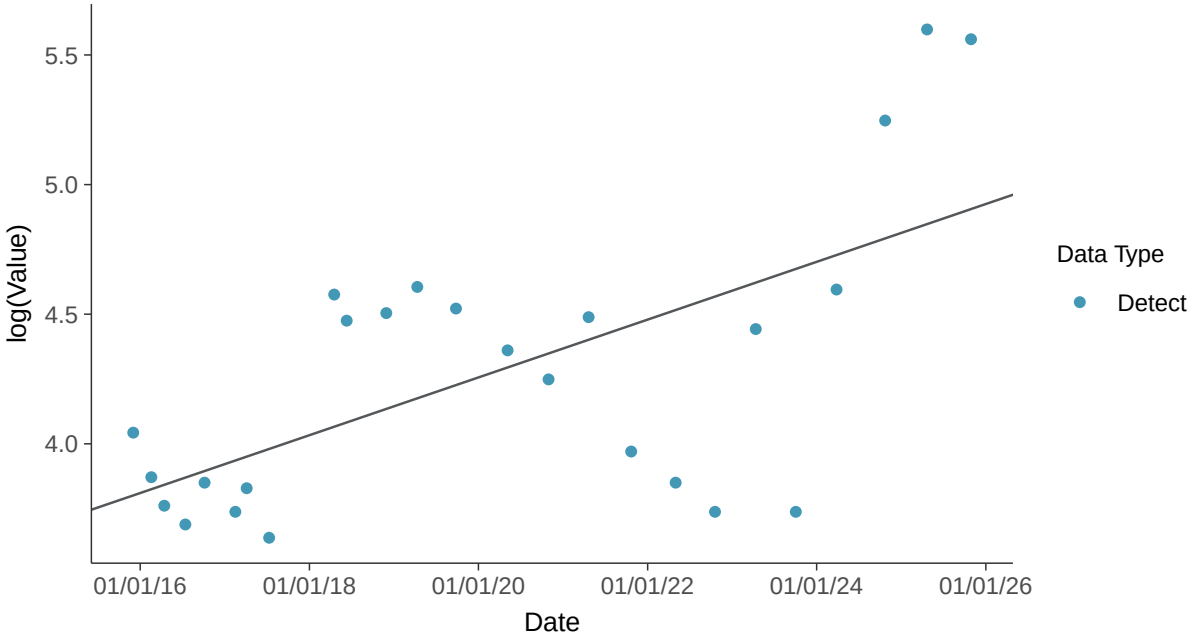
**Lognormal Q-Q plot**

Barium, MW-15023 (ug/L)



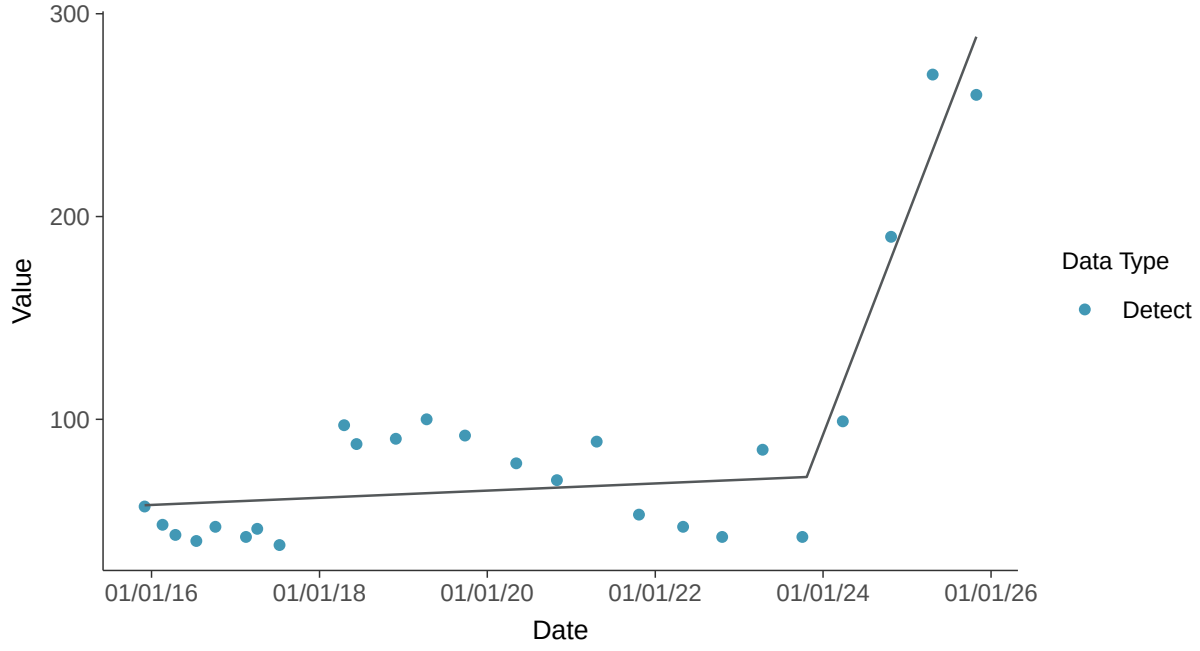

**Trend Regression: Lognormal MLE**

Barium, MW-15023 (ug/L)



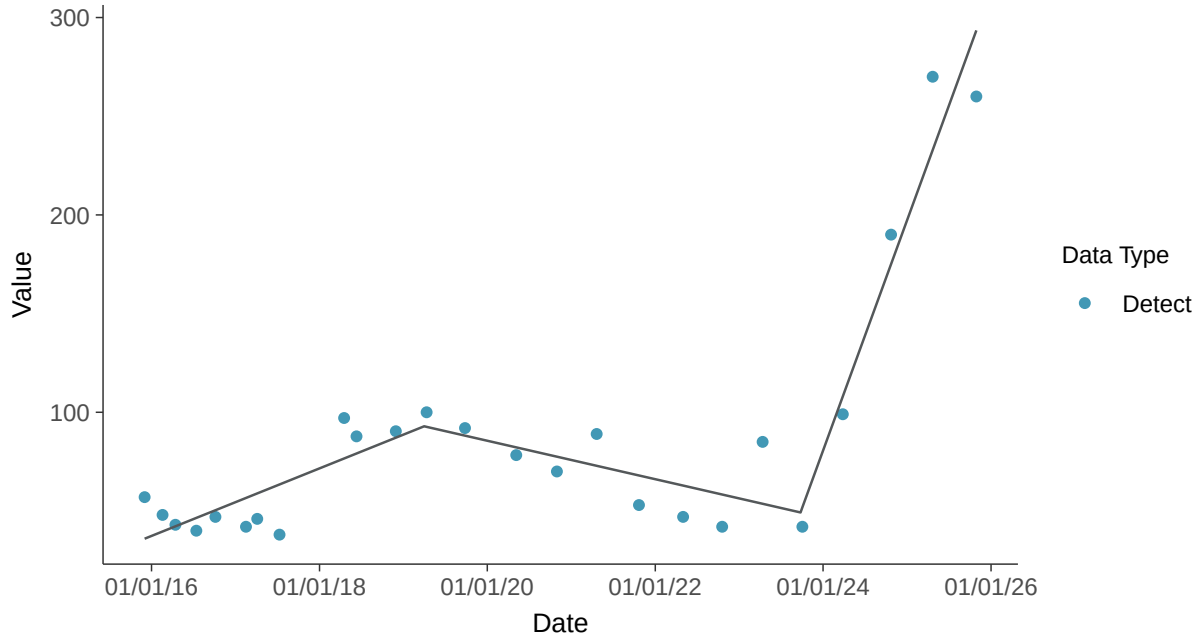
**Trend Regression: Piecewise Linear-Linear**

Barium, MW-15023 (ug/L)



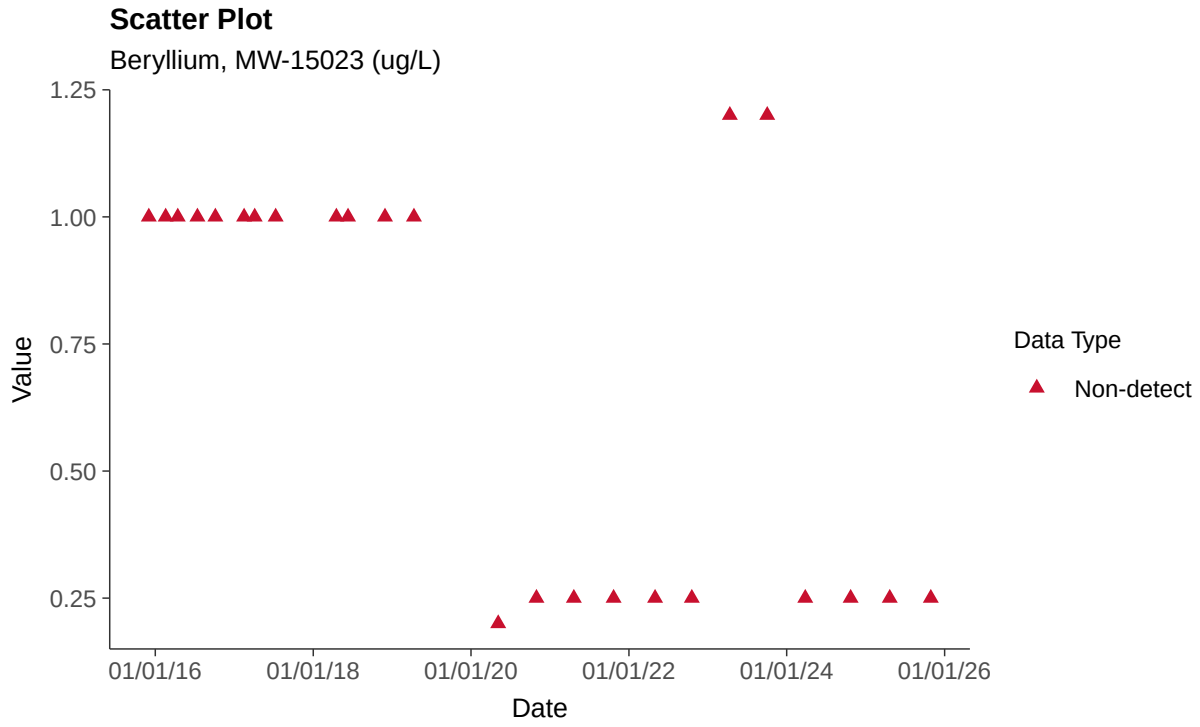

**Trend Regression: Piecewise Linear-Linear-Linear**

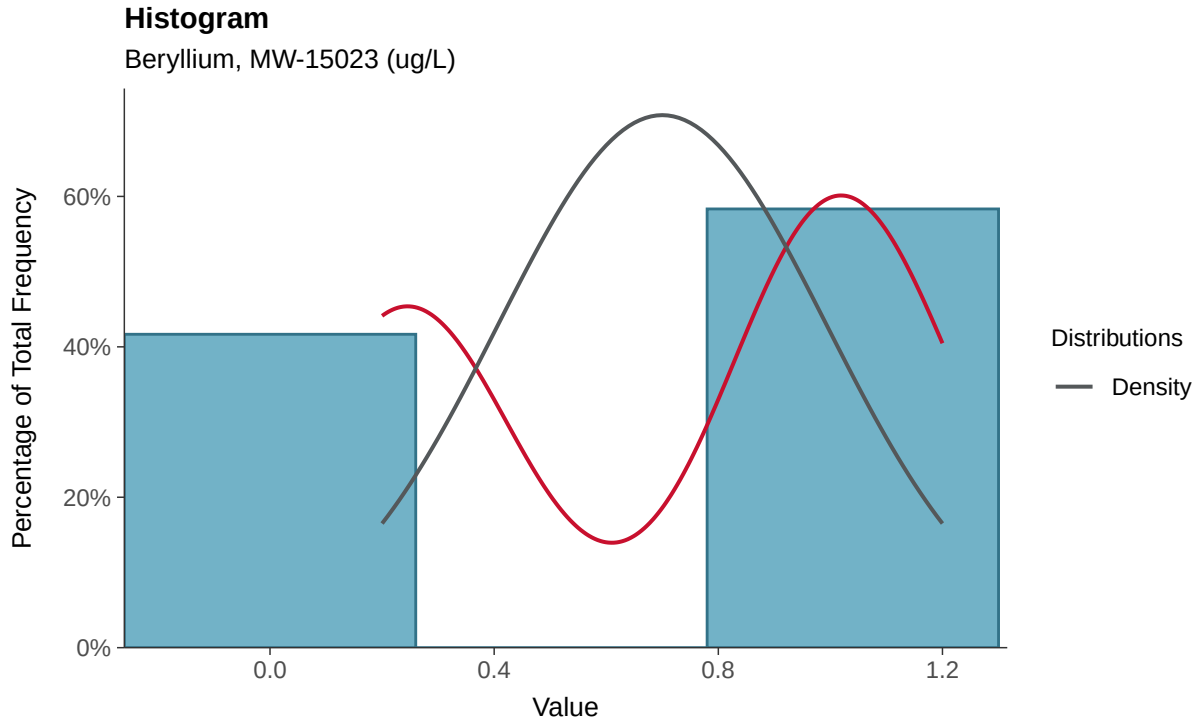
Barium, MW-15023 (ug/L)



## Appendix IV: Beryllium, MW-15023

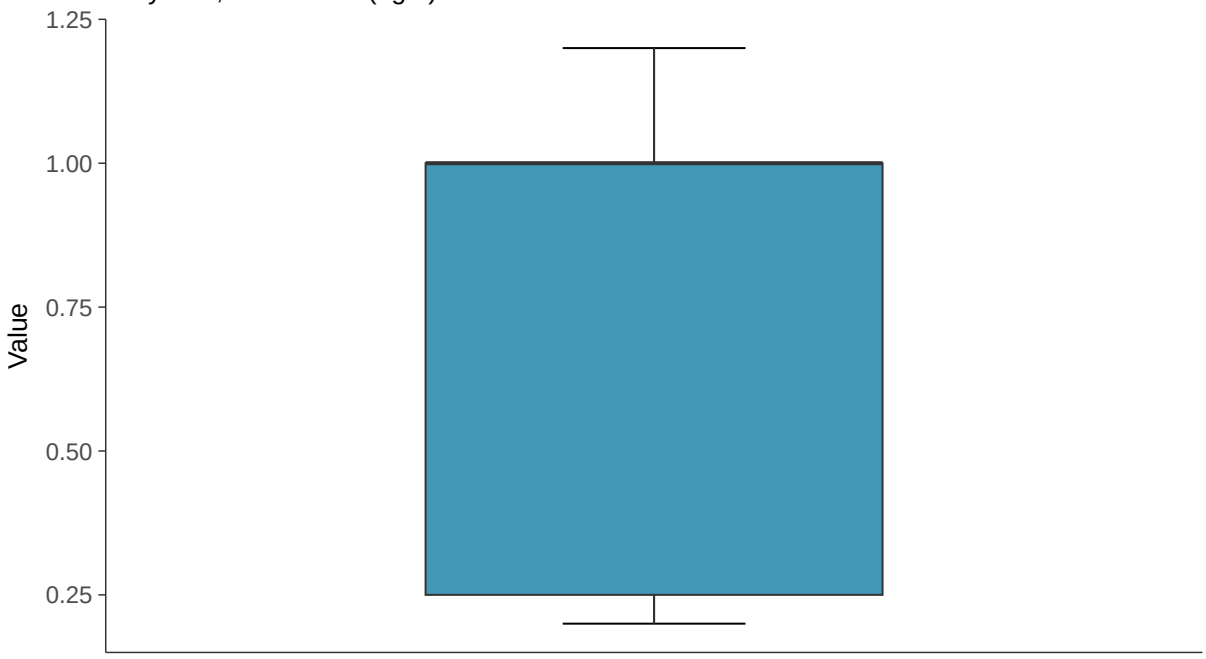
ID: 13_2_104



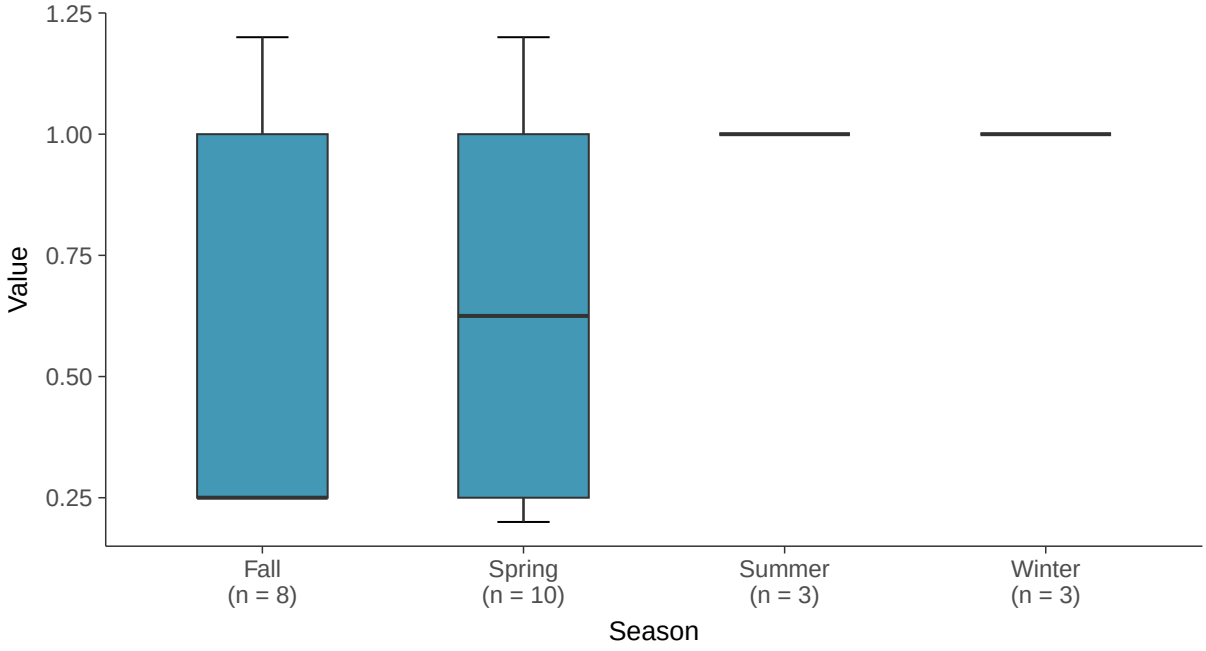
## Boxplot

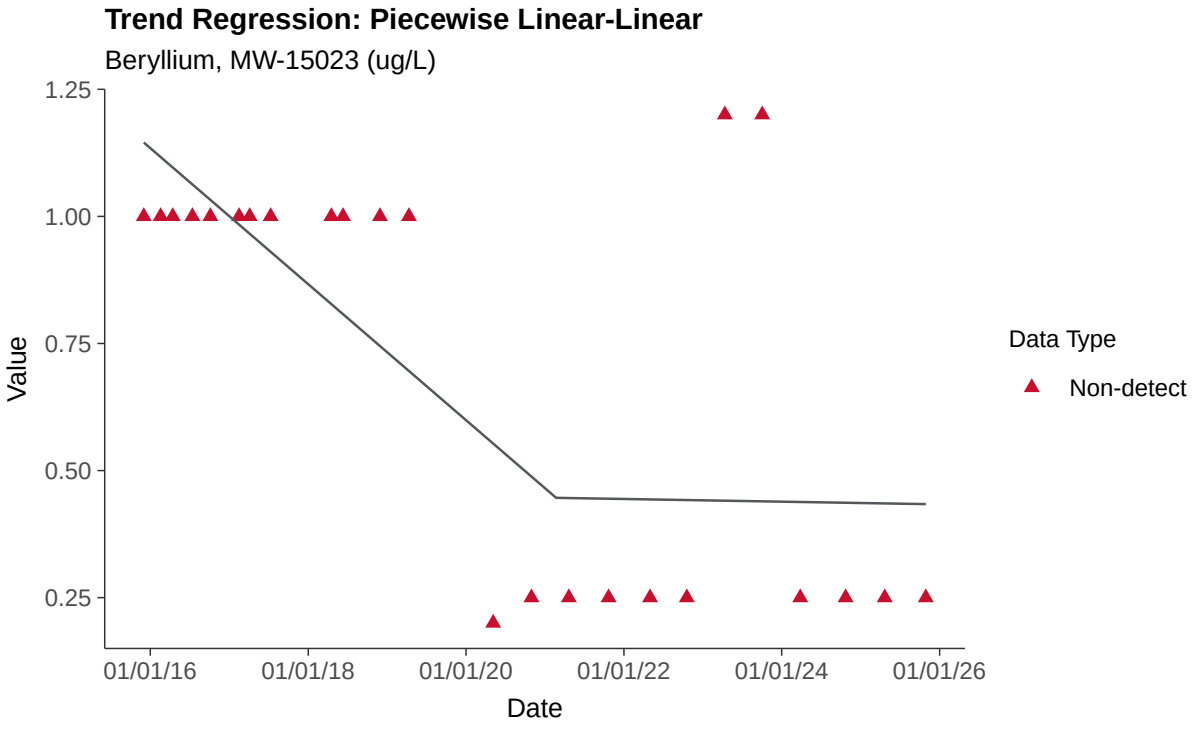
Beryllium, MW-15023 (ug/L)




## Boxplot by Season

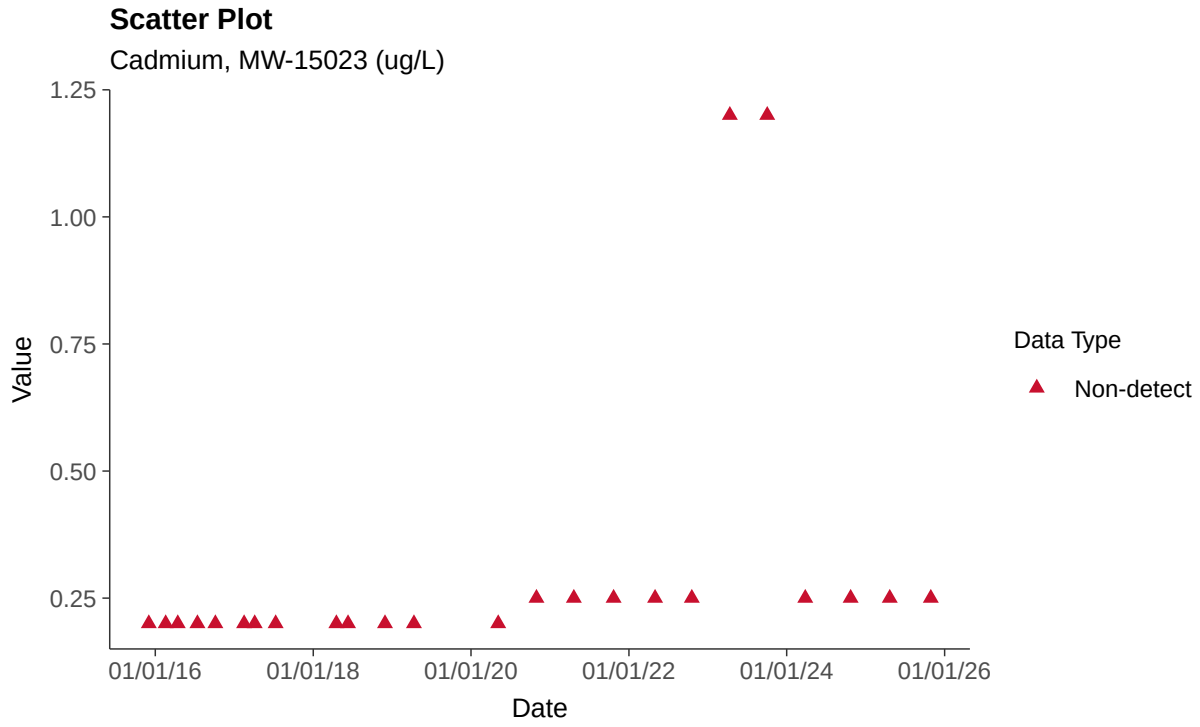
Beryllium, MW-15023 (ug/L)

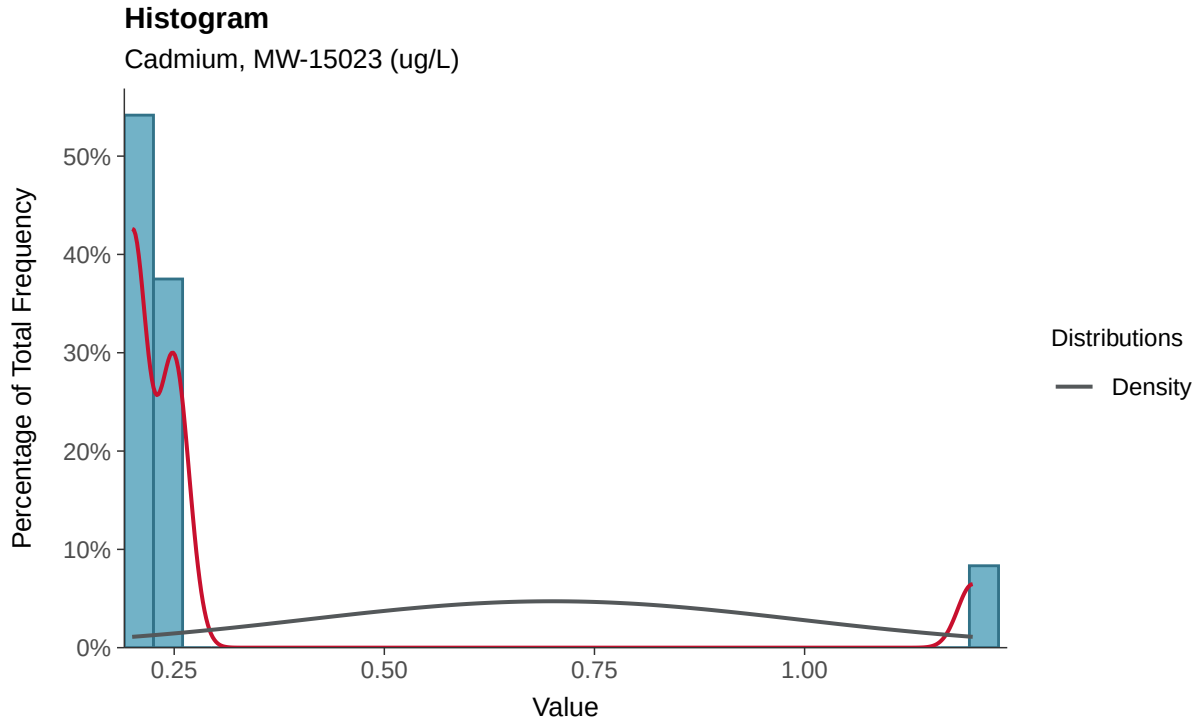



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15023 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Cadmium, MW-15023

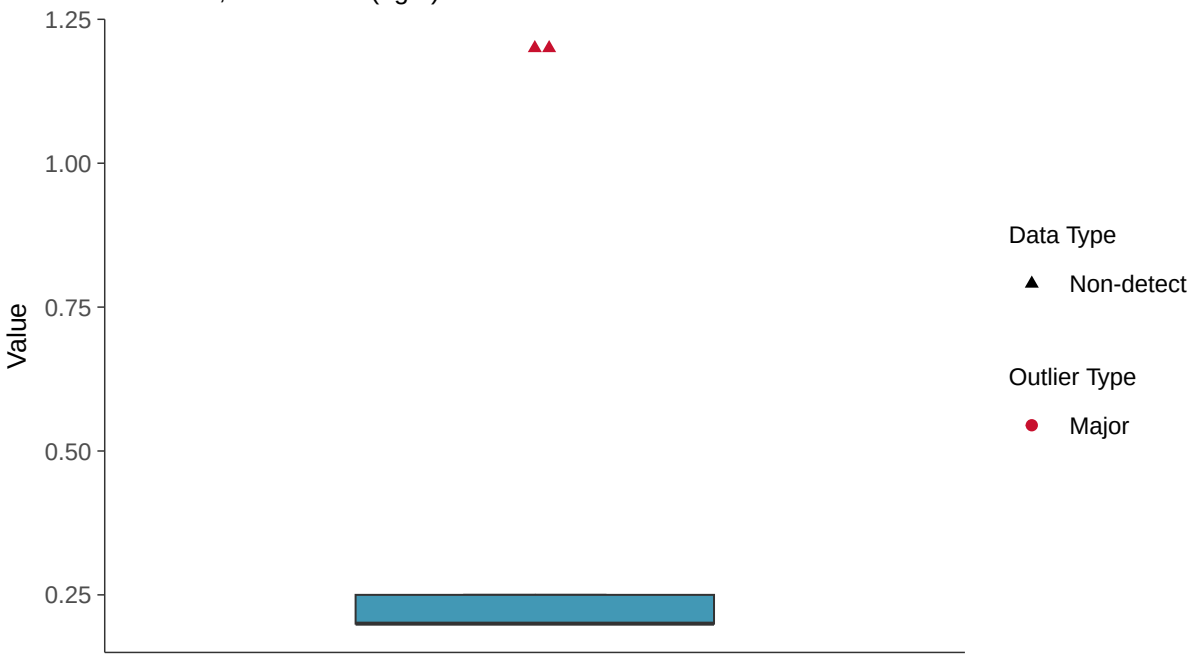
ID: 13_2_106



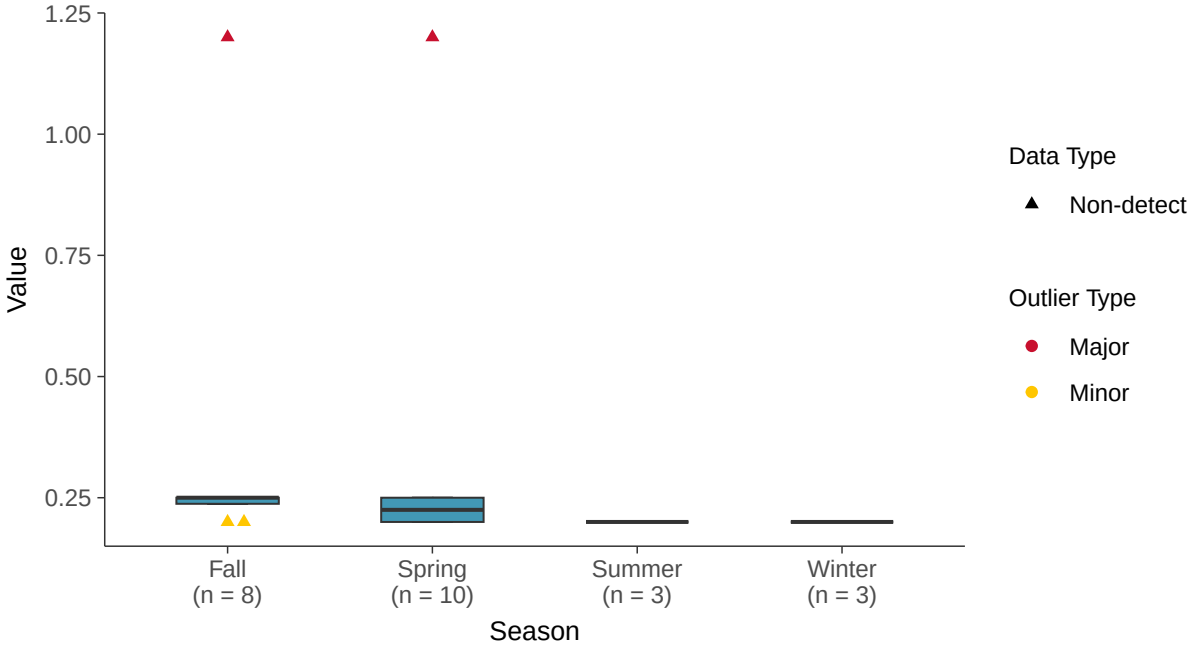
## Boxplot

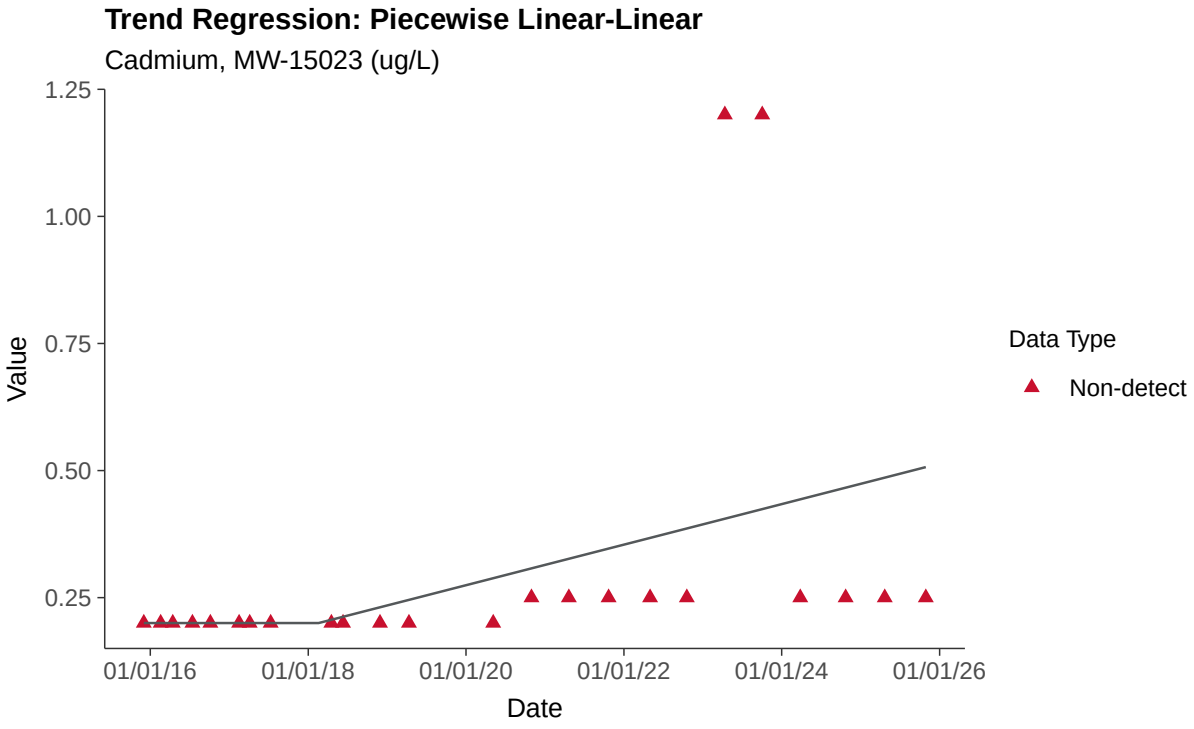
Cadmium, MW-15023 (ug/L)




## Boxplot by Season

Cadmium, MW-15023 (ug/L)



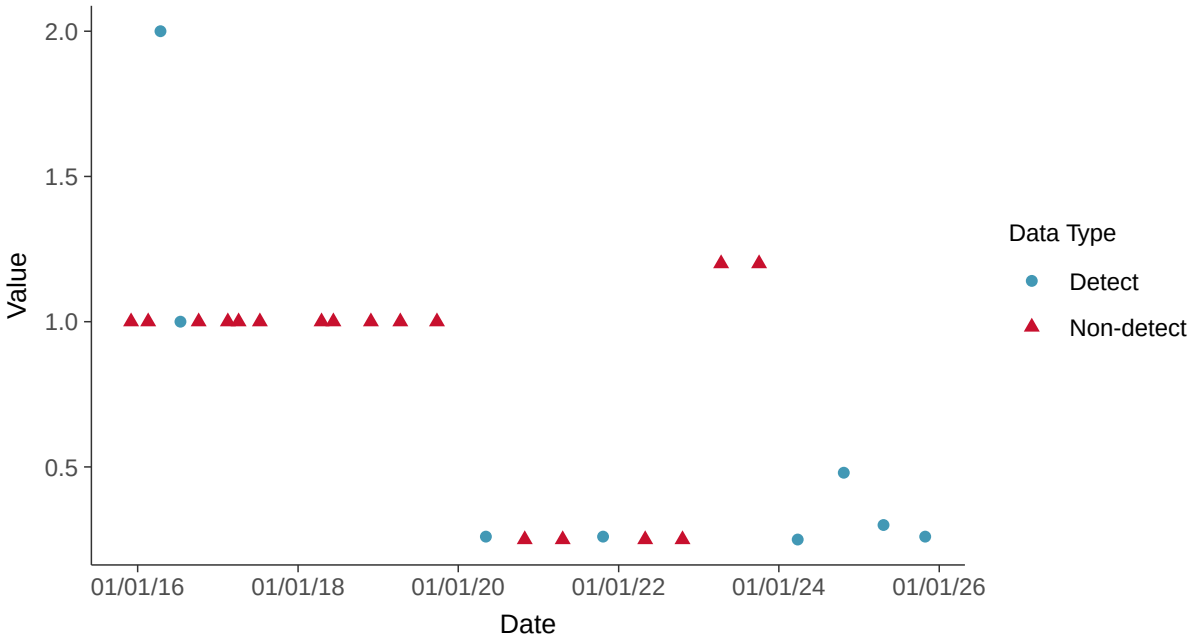

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15023 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-15023

ID: 13_2_109

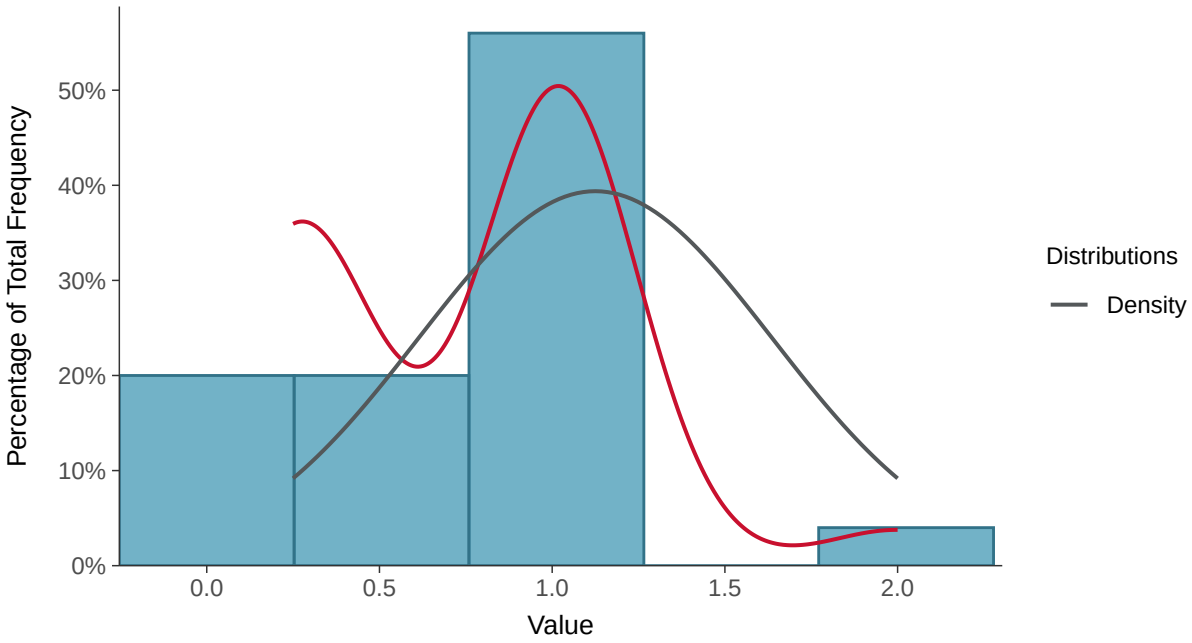
**Scatter Plot**

Chromium, MW-15023 (ug/L)



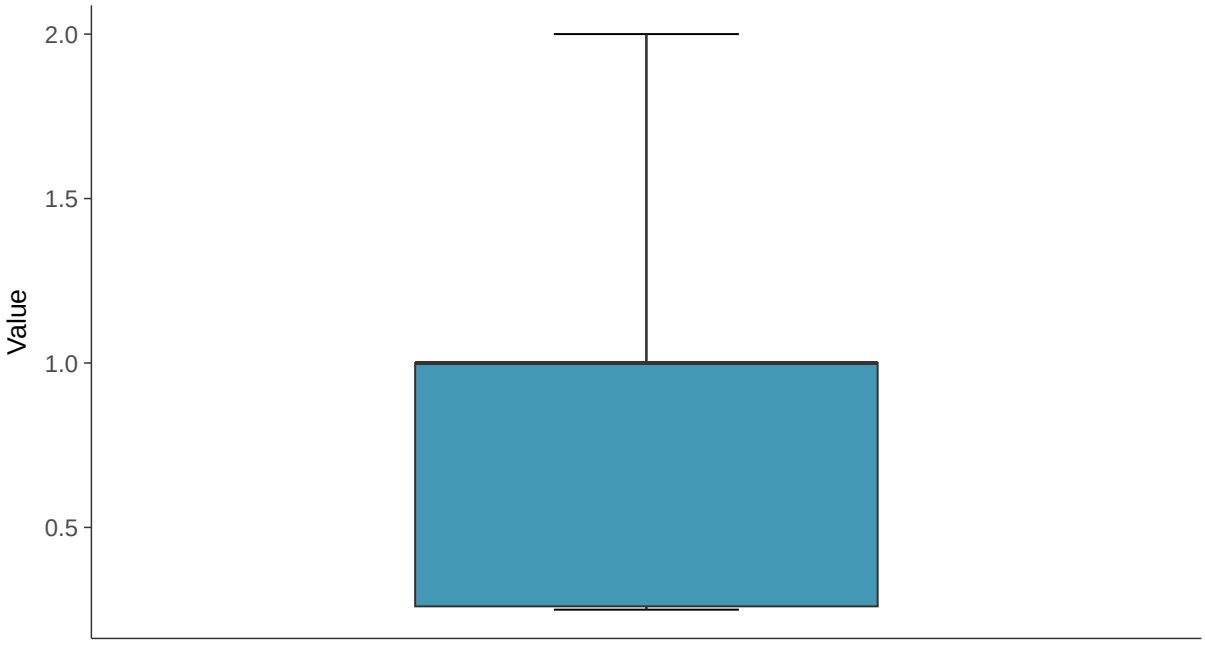

**Histogram**

Chromium, MW-15023 (ug/L)



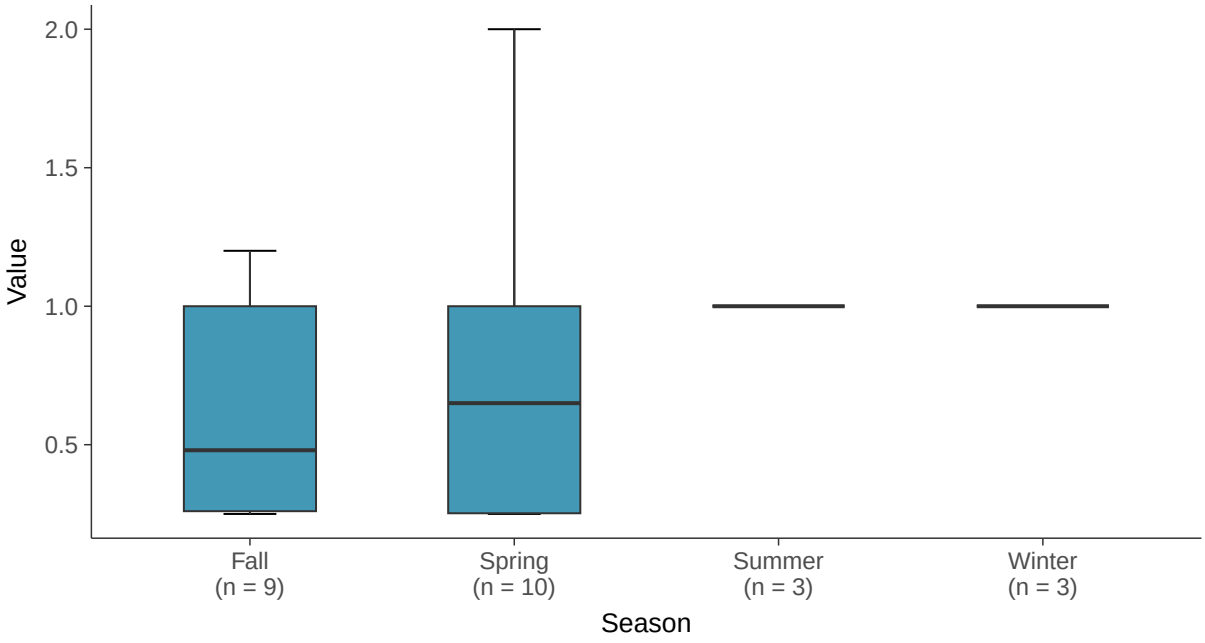
**Boxplot**

Chromium, MW-15023 (ug/L)



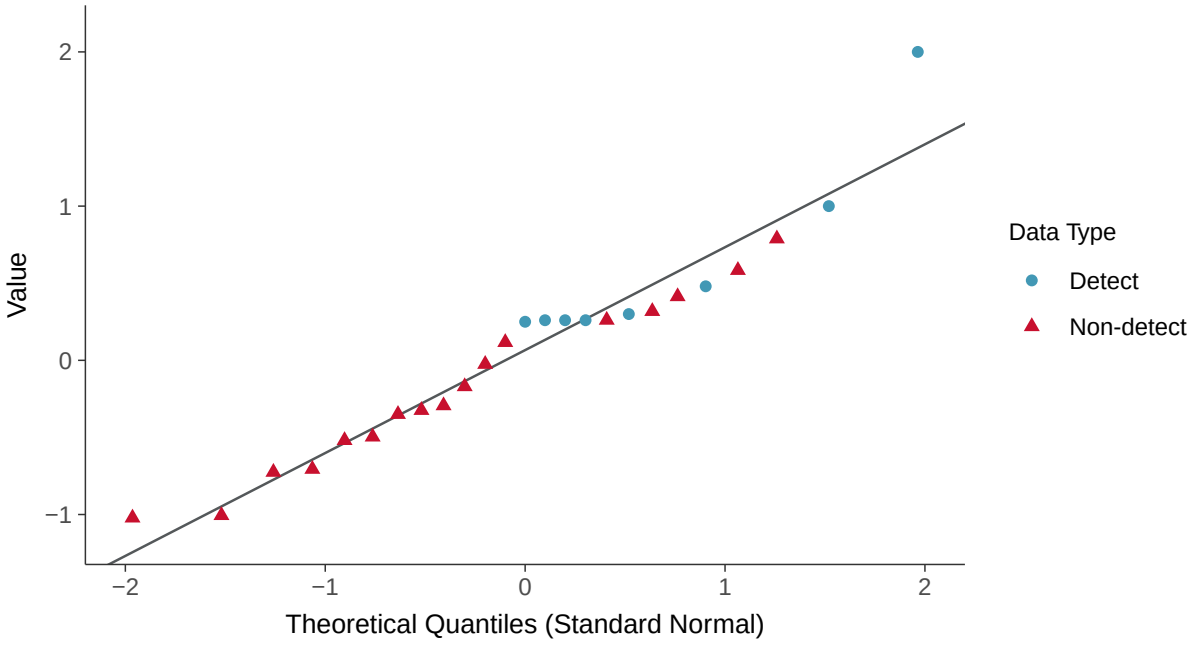

**Boxplot by Season**

Chromium, MW-15023 (ug/L)



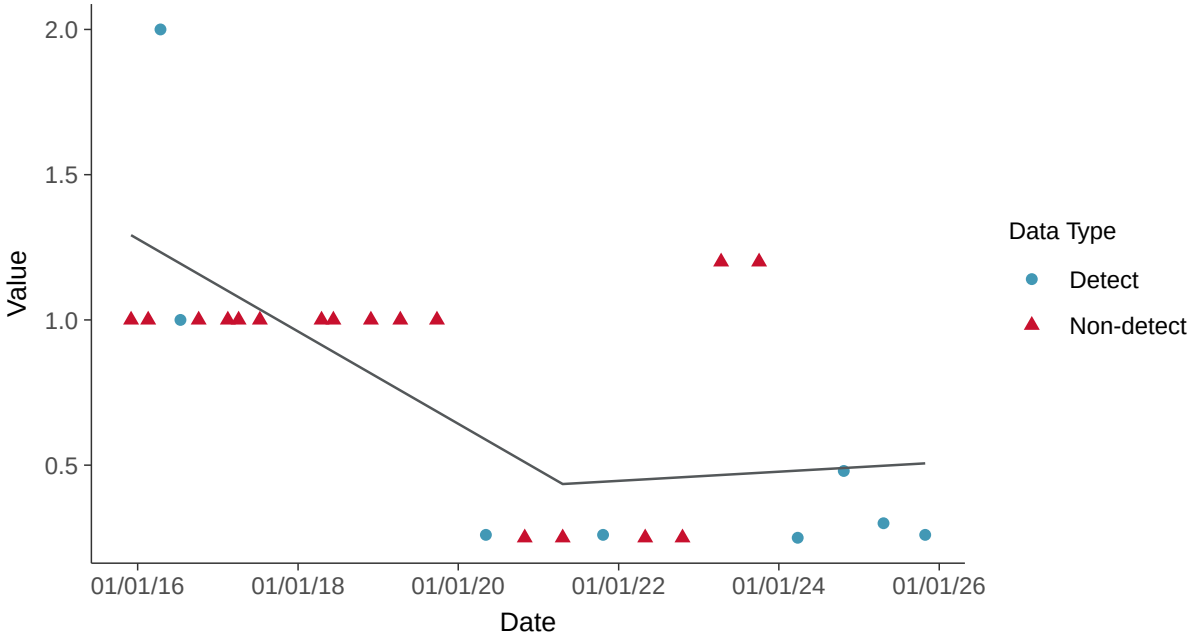
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-15023 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-15023 (ug/L)

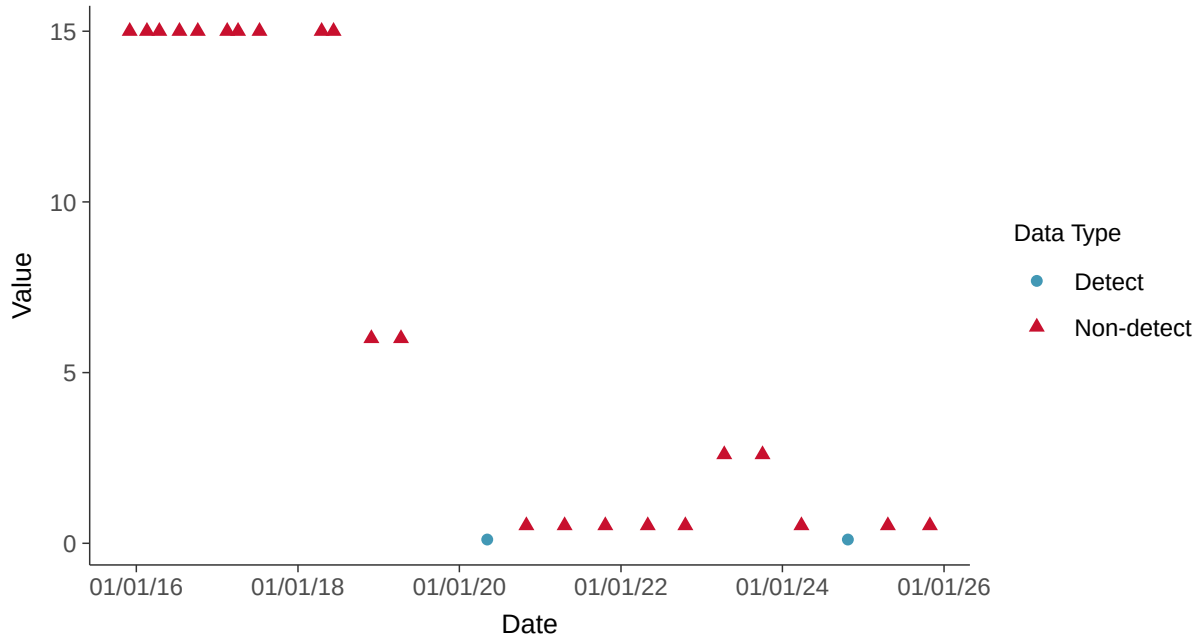


## Appendix IV: Cobalt, MW-15023

ID: 13_2_110

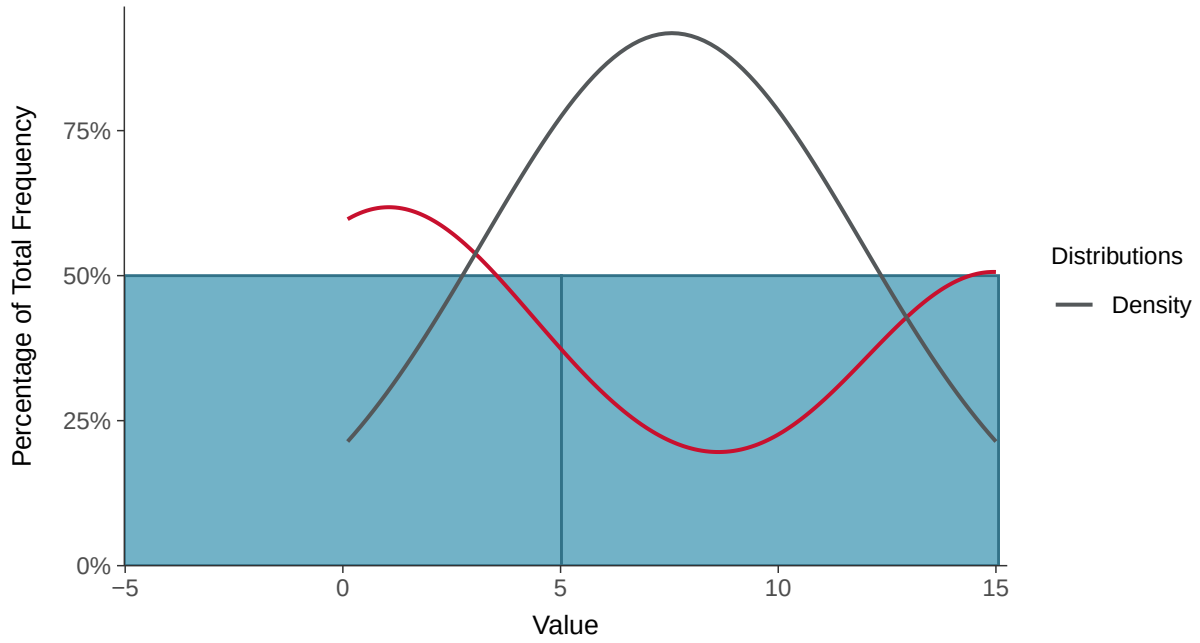
**Scatter Plot**

Cobalt, MW-15023 (ug/L)



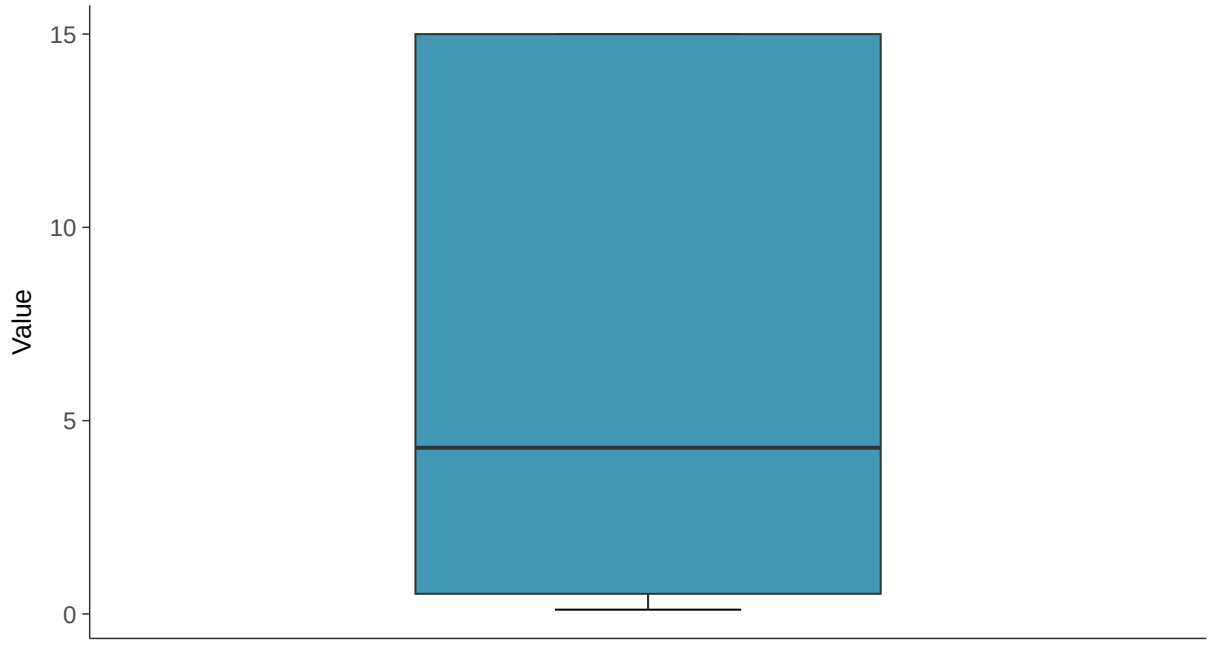

**Histogram**

Cobalt, MW-15023 (ug/L)



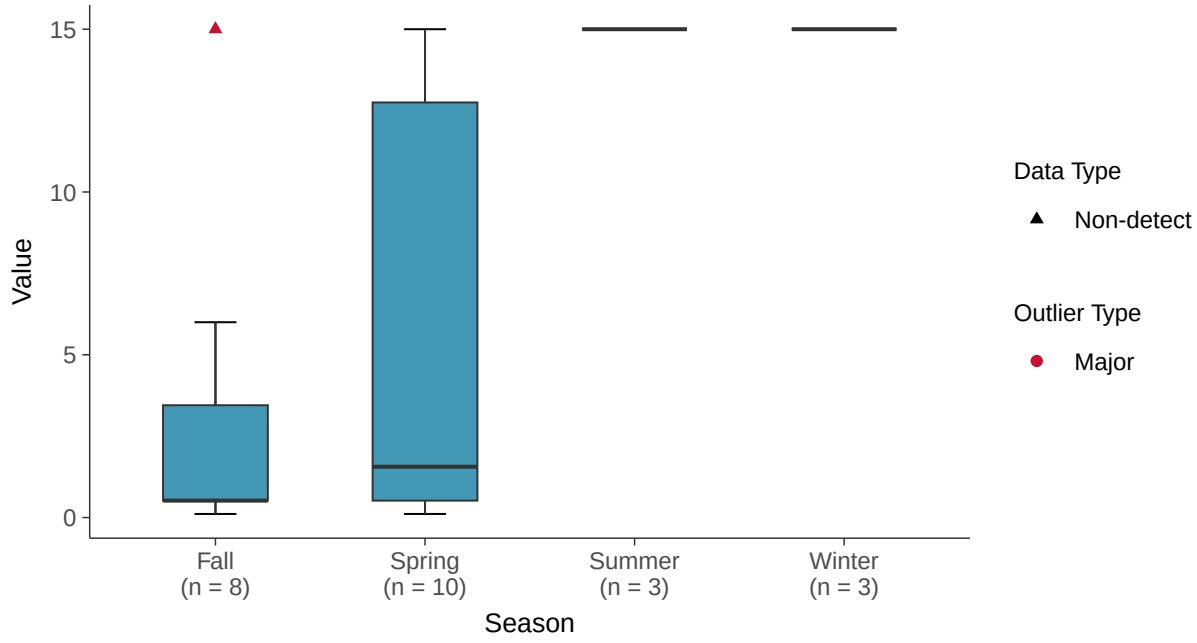
**Boxplot**

Cobalt, MW-15023 (ug/L)



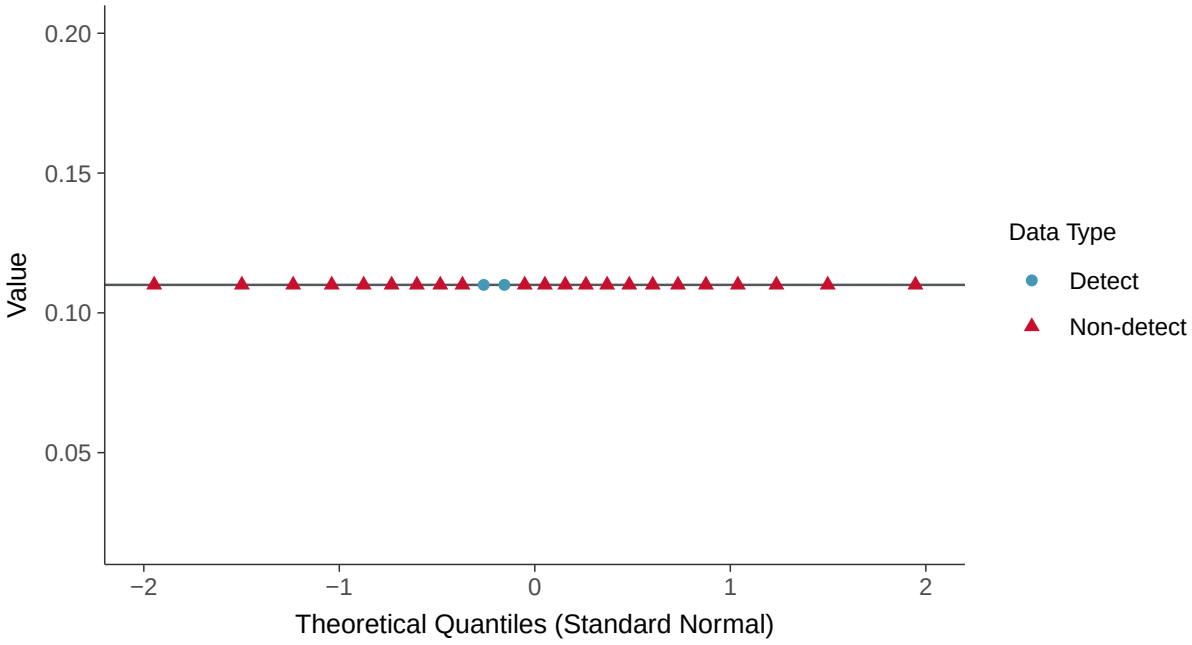

**Boxplot by Season**

Cobalt, MW-15023 (ug/L)



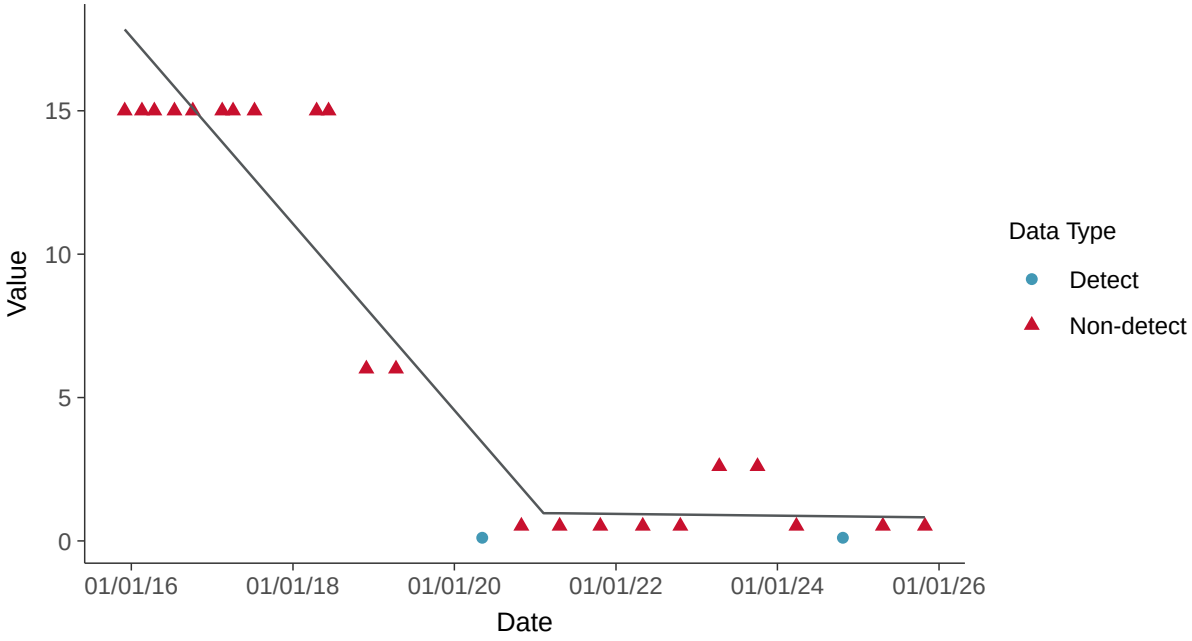
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-15023 (ug/L)



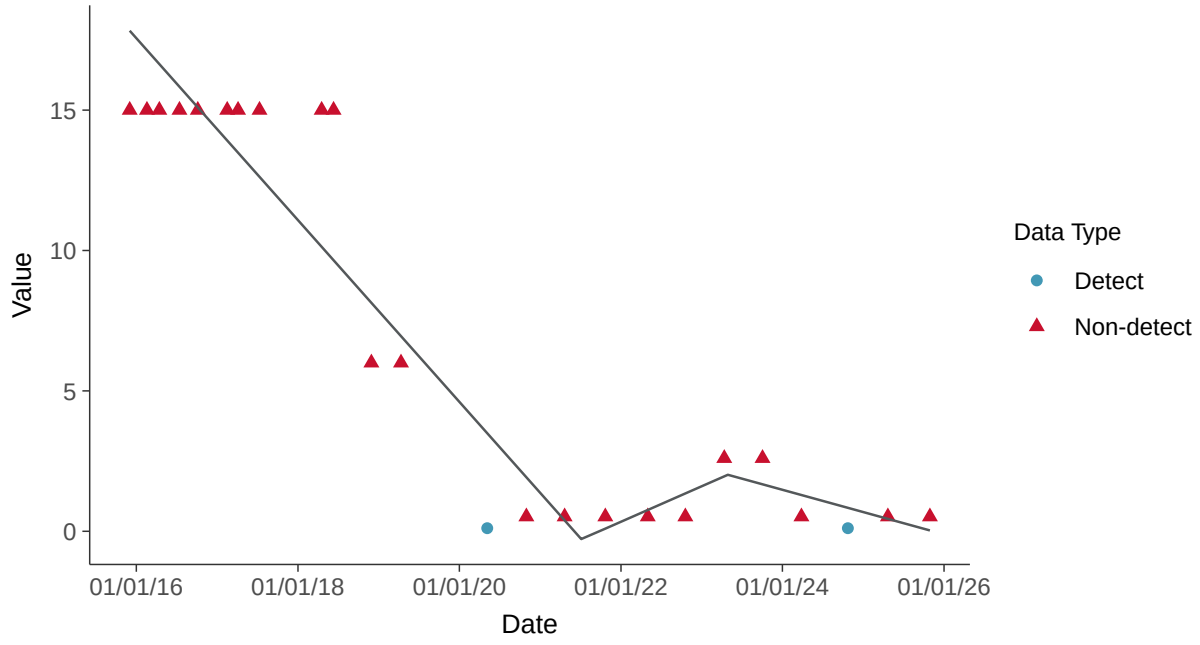

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-15023 (ug/L)



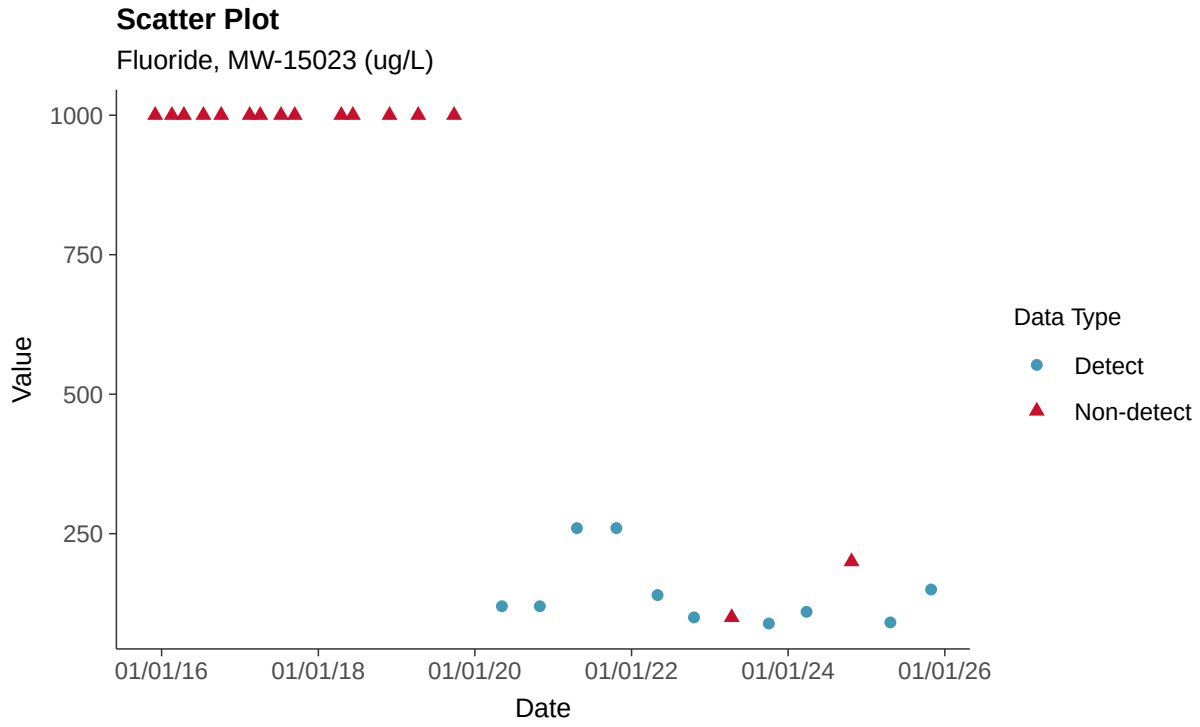
**Trend Regression: Piecewise Linear-Linear-Linear**

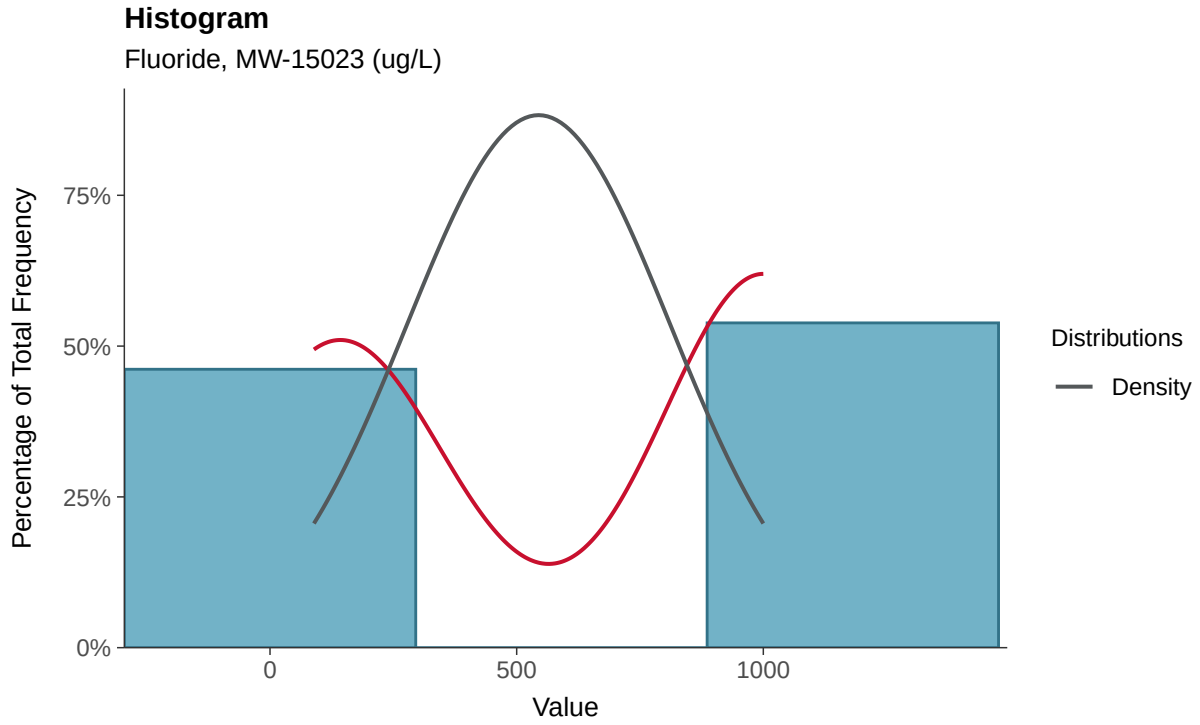
Cobalt, MW-15023 (ug/L)



## Appendix IV: Fluoride, MW-15023

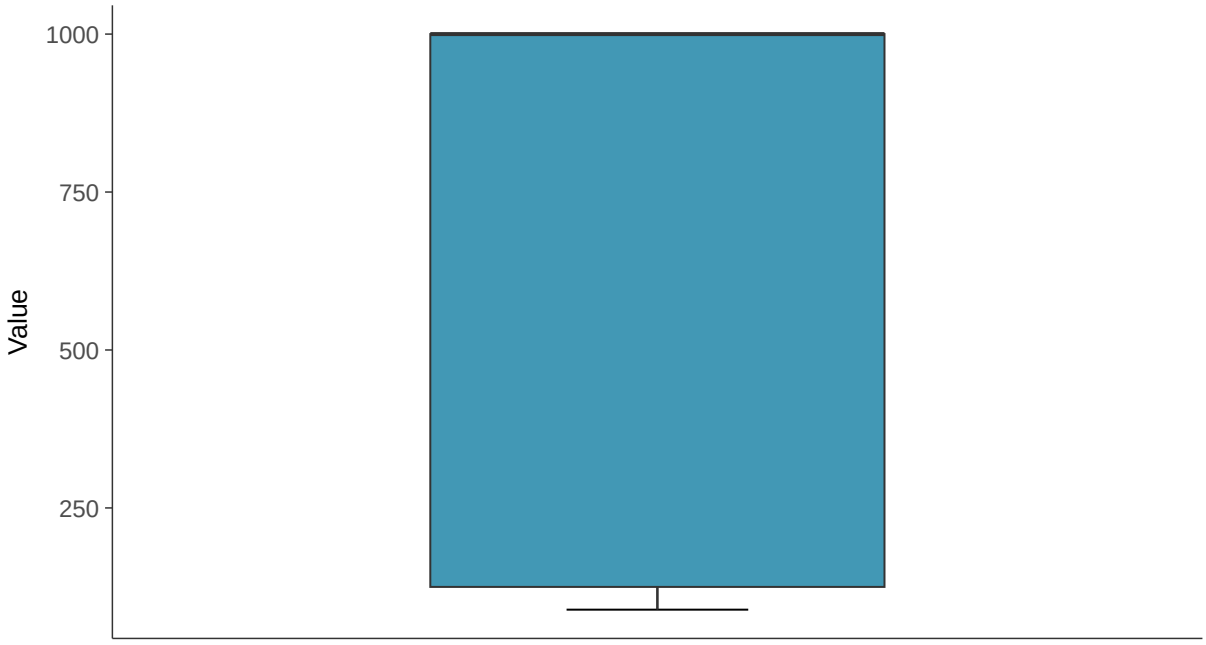
ID: 13_2_114



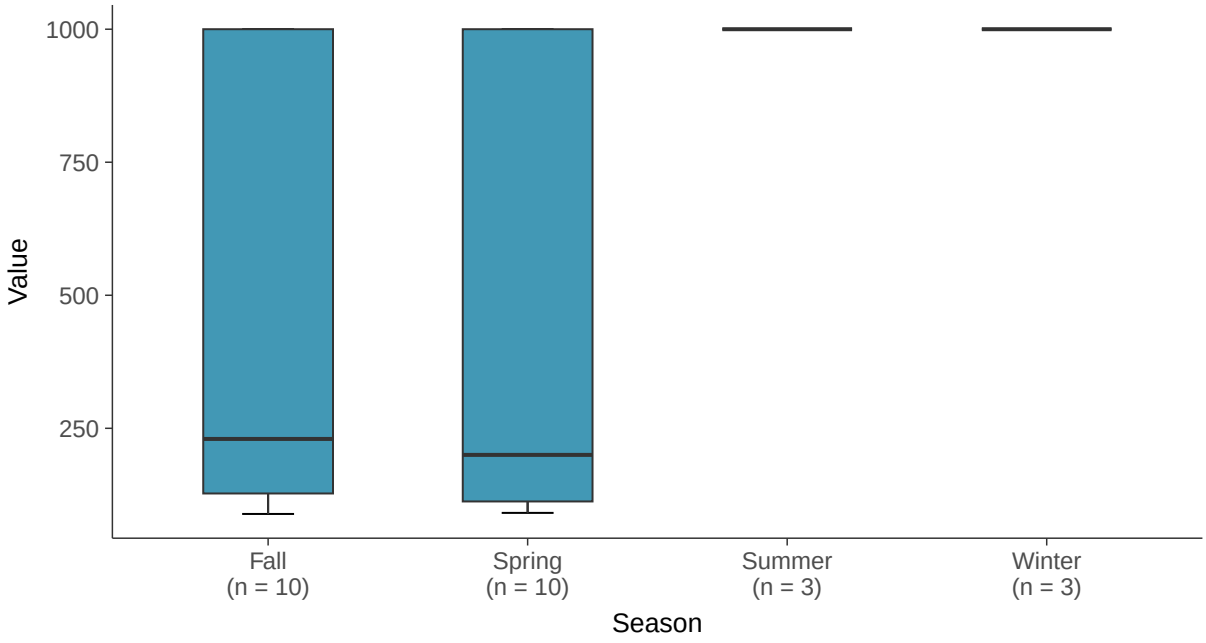
**Boxplot**

Fluoride, MW-15023 (ug/L)



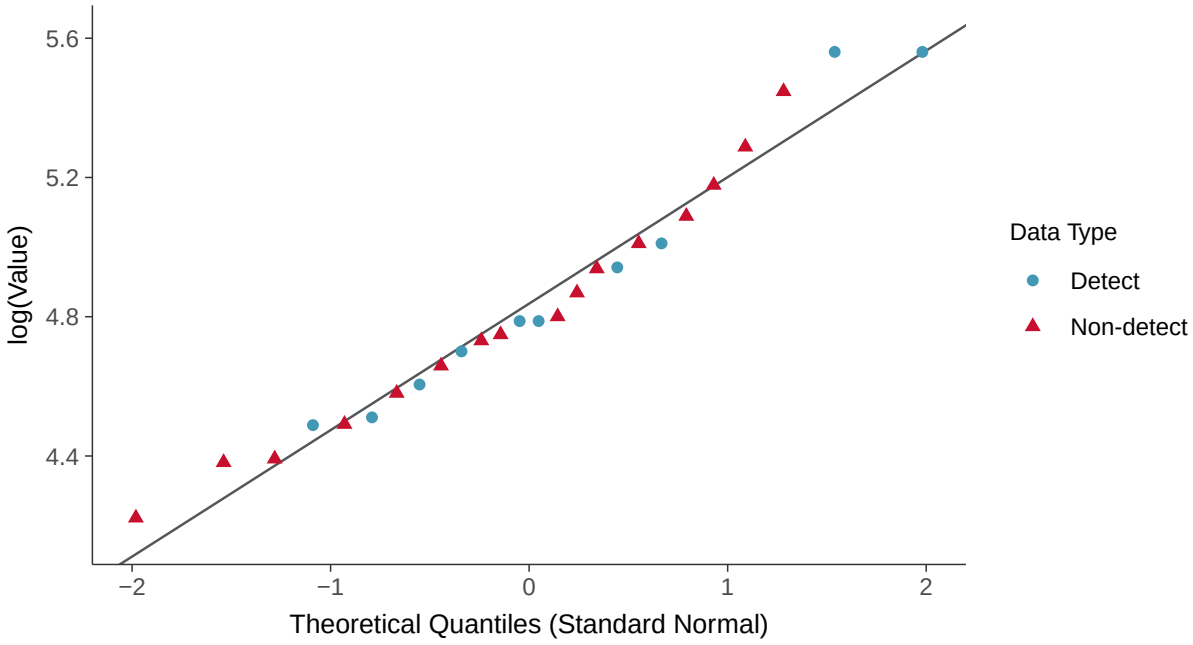

**Boxplot by Season**

Fluoride, MW-15023 (ug/L)



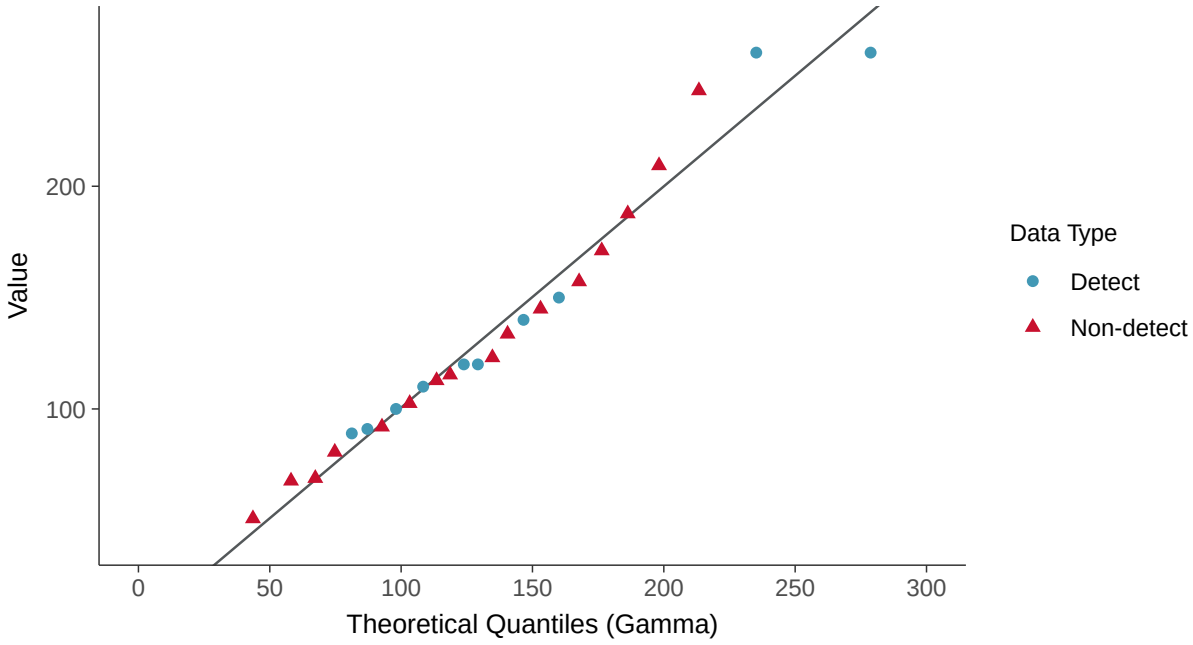
**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15023 (ug/L)



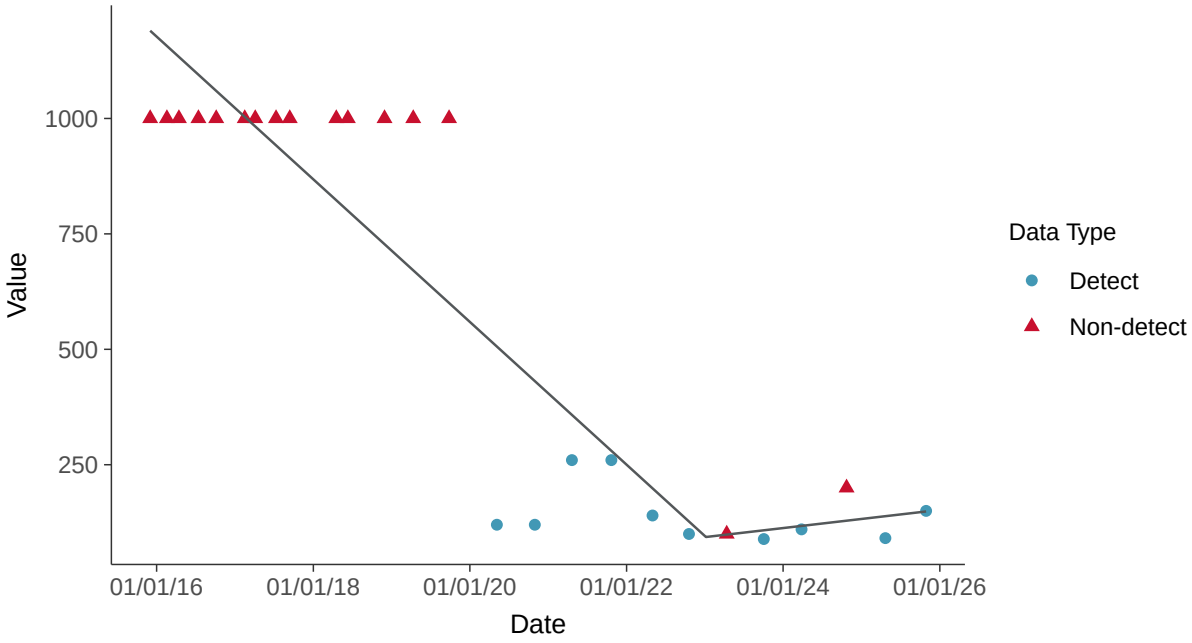

**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-15023 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-15023 (ug/L)

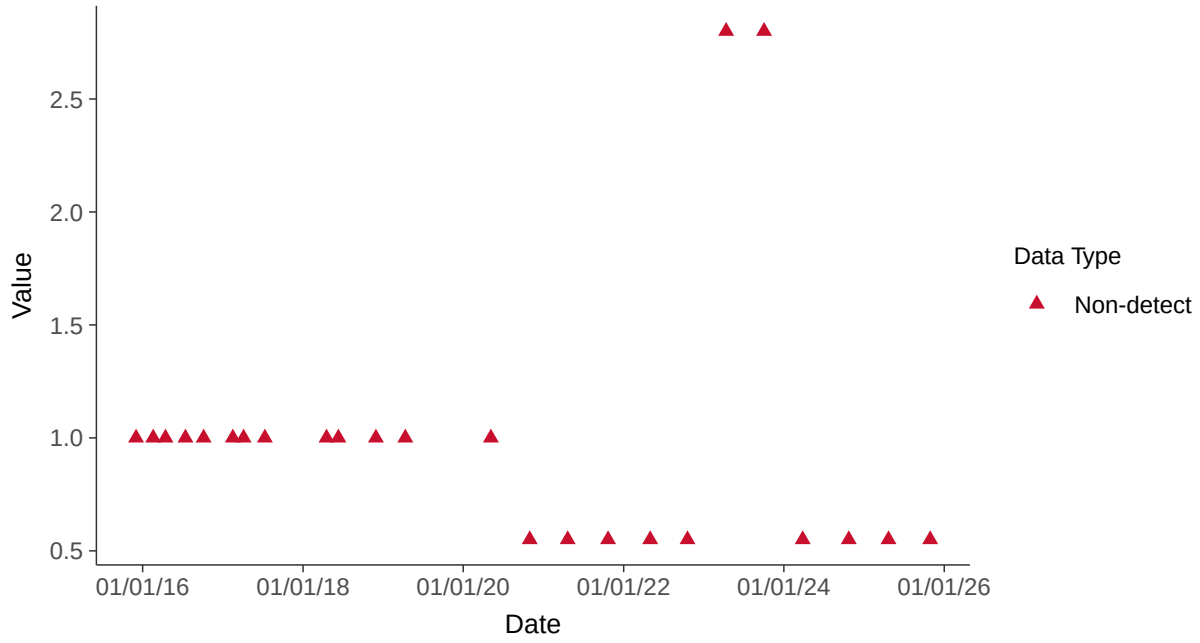


# Appendix IV: Lead, MW-15023

ID: 13_2_116

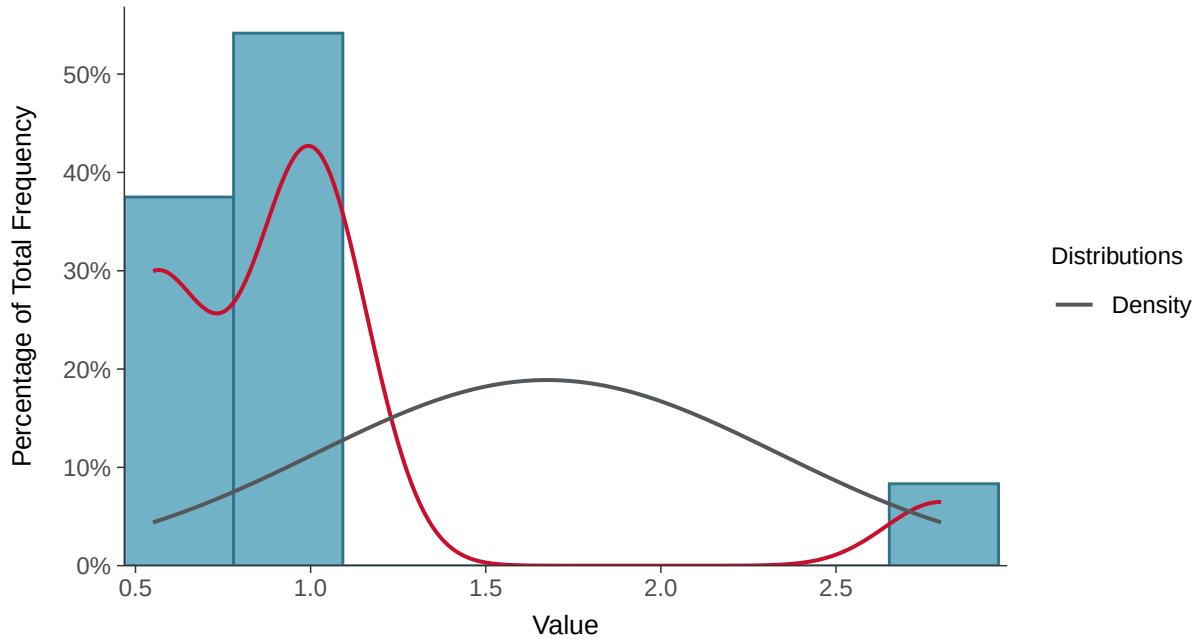
**Scatter Plot**

Lead, MW-15023 (ug/L)



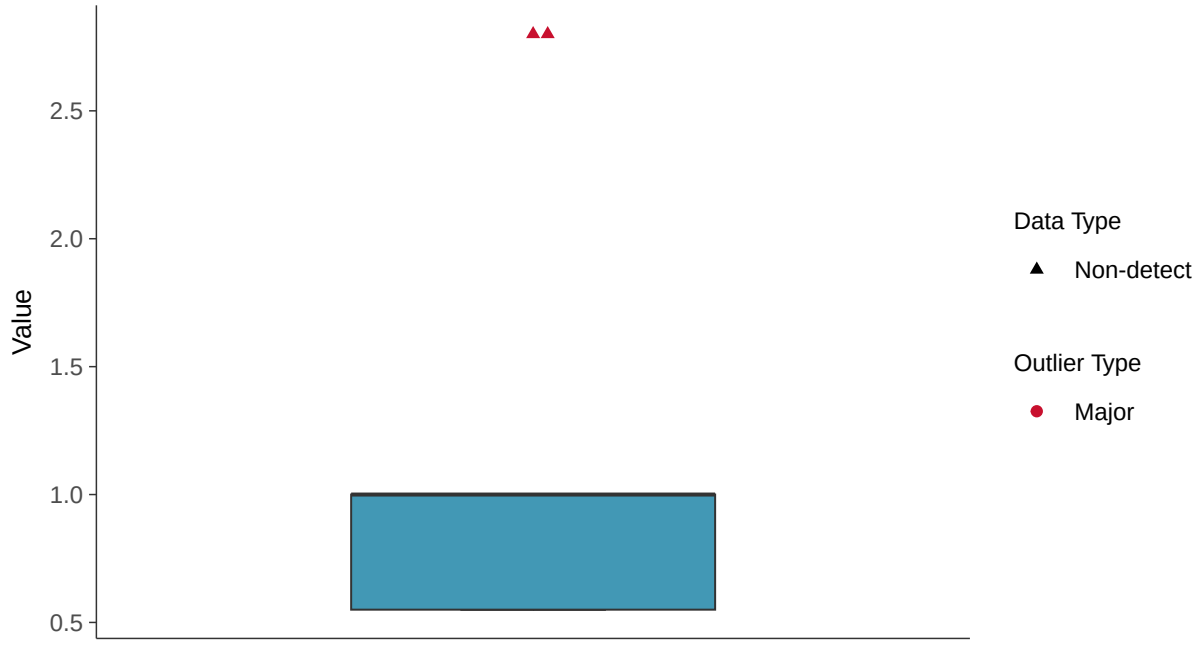

**Histogram**

Lead, MW-15023 (ug/L)



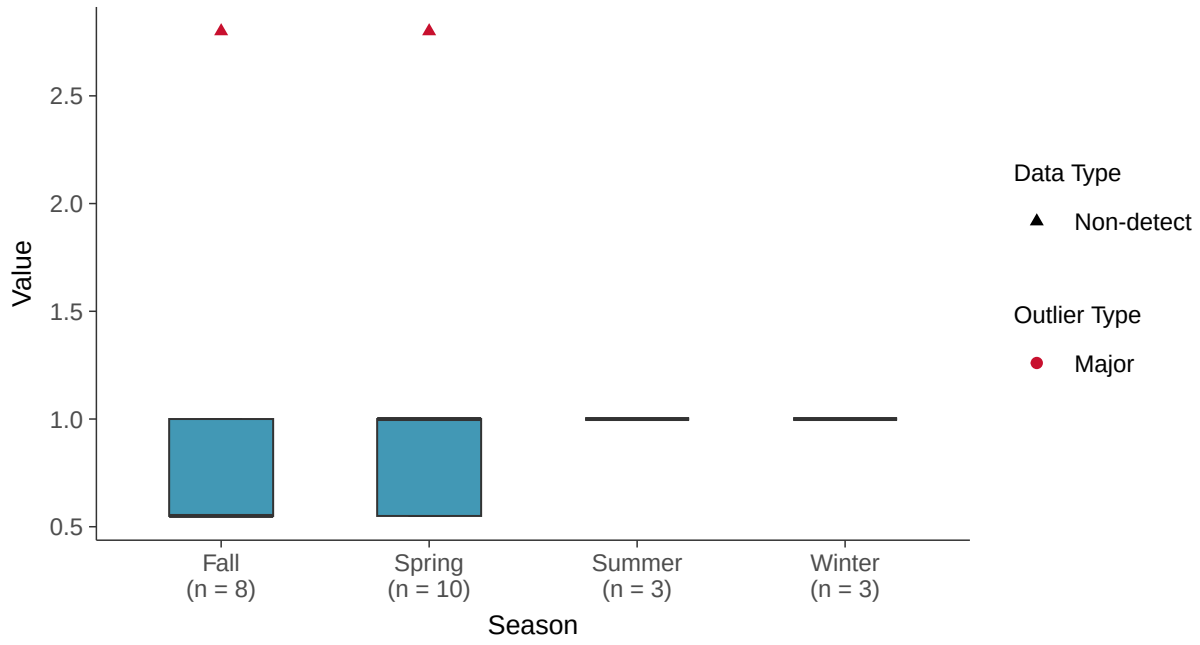
## Boxplot

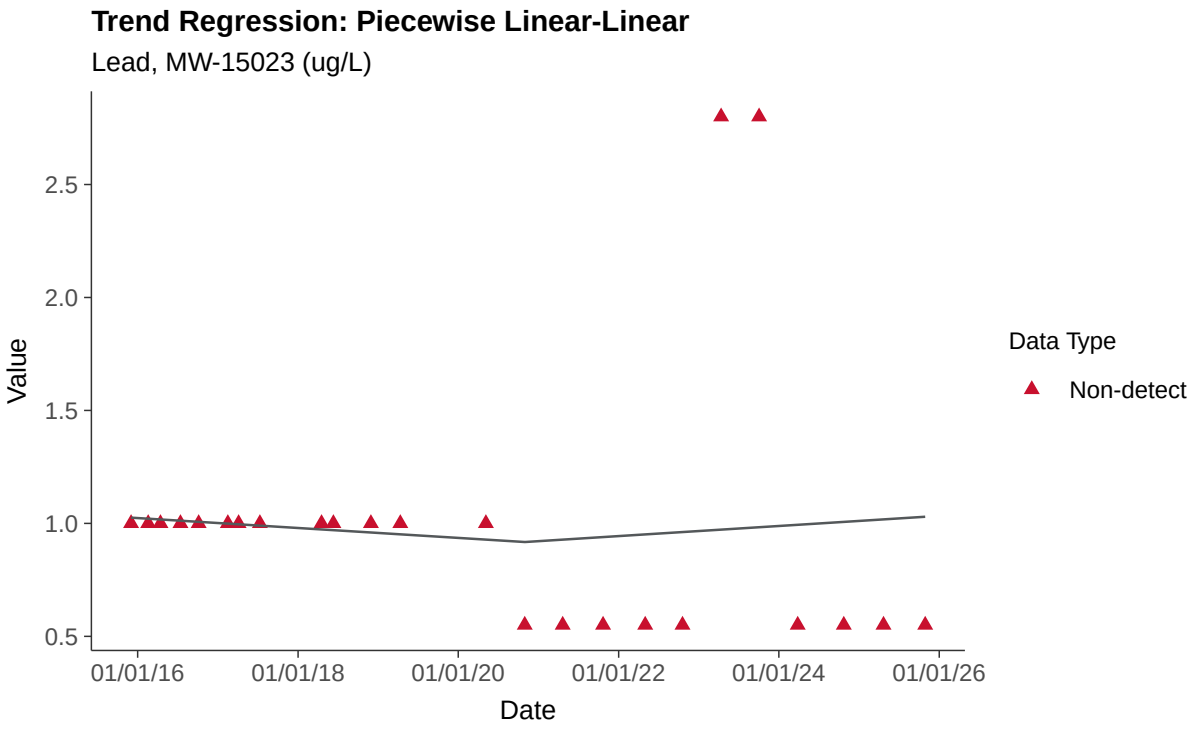
Lead, MW-15023 (ug/L)




## Boxplot by Season

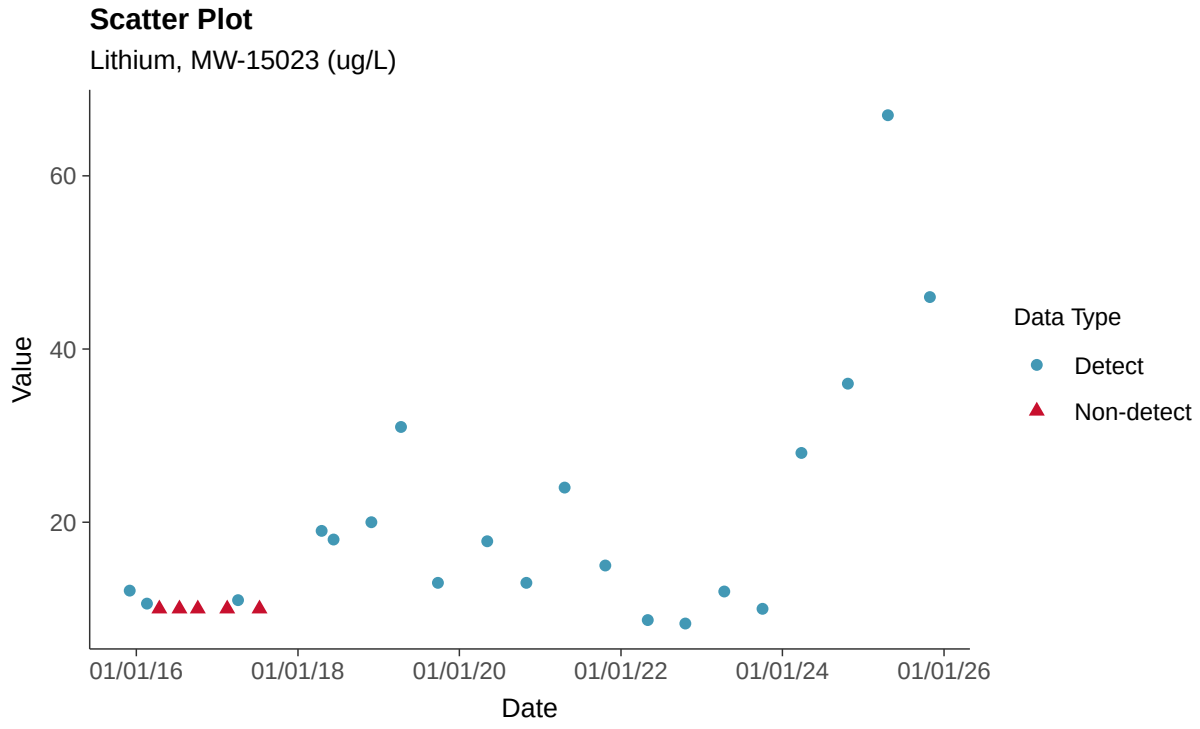
Lead, MW-15023 (ug/L)

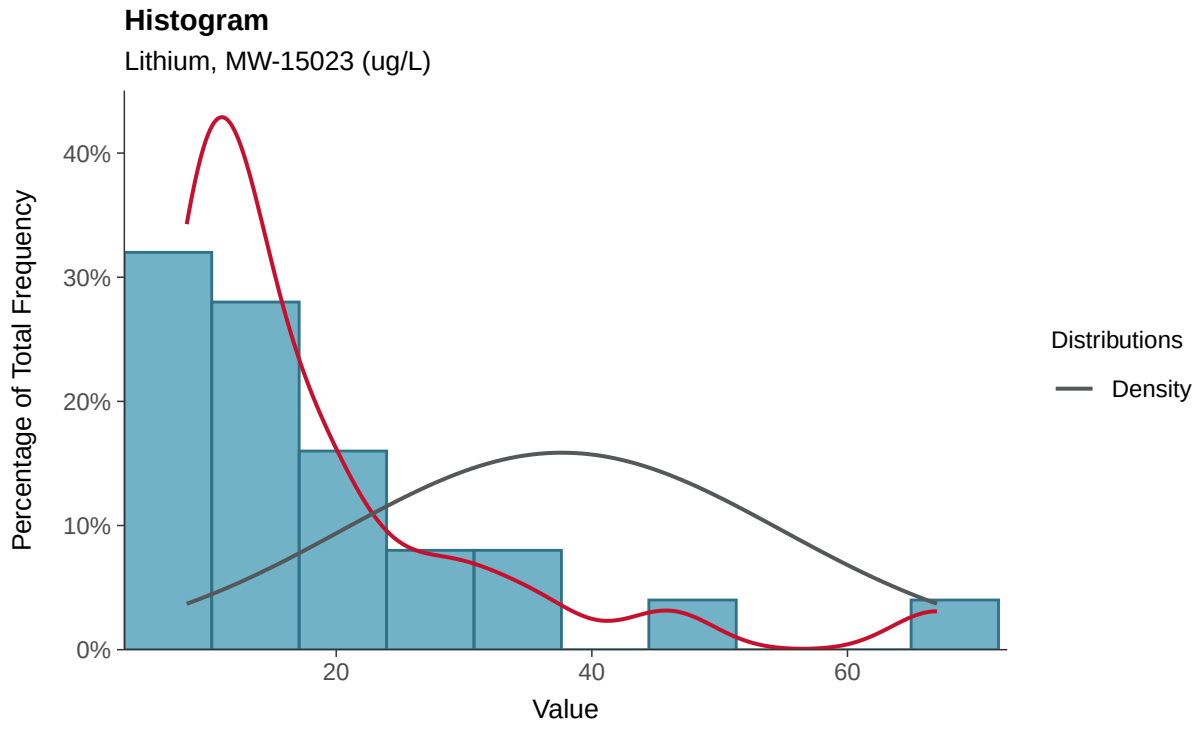



Trend Regression: Piecewise Linear-Linear
Lead, MW-15023 (ug/L)
Value
2.5
2.0
1.5
1.0
0.5
01/01/16
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Lithium, MW-15023

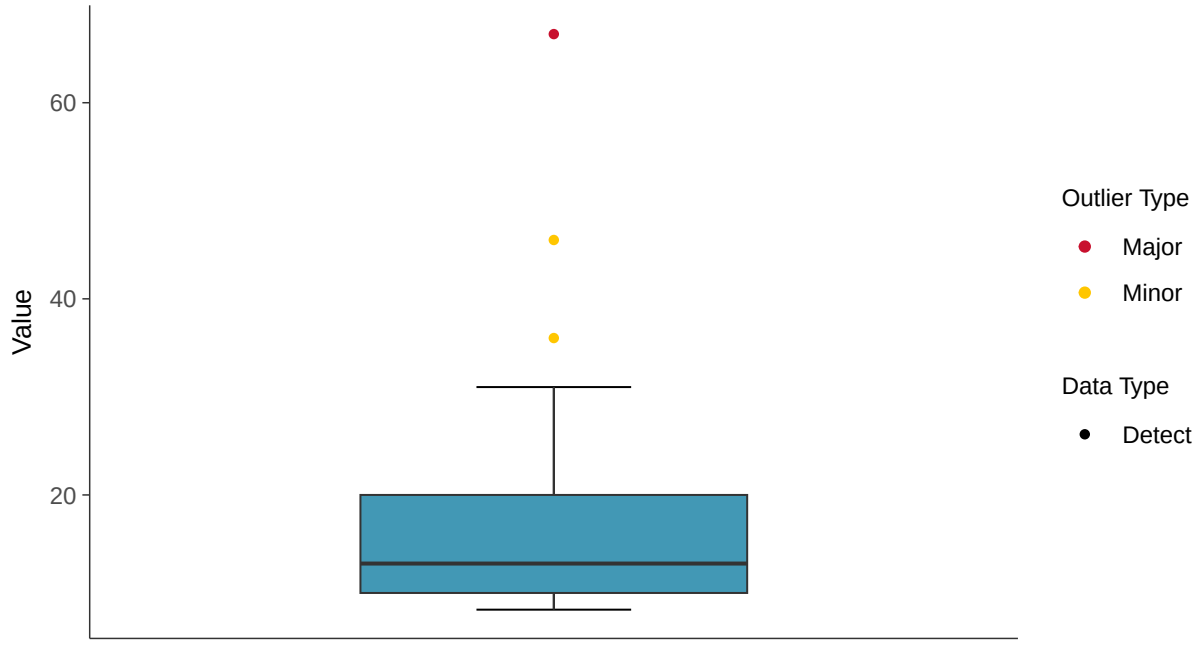
ID: 13_2_117



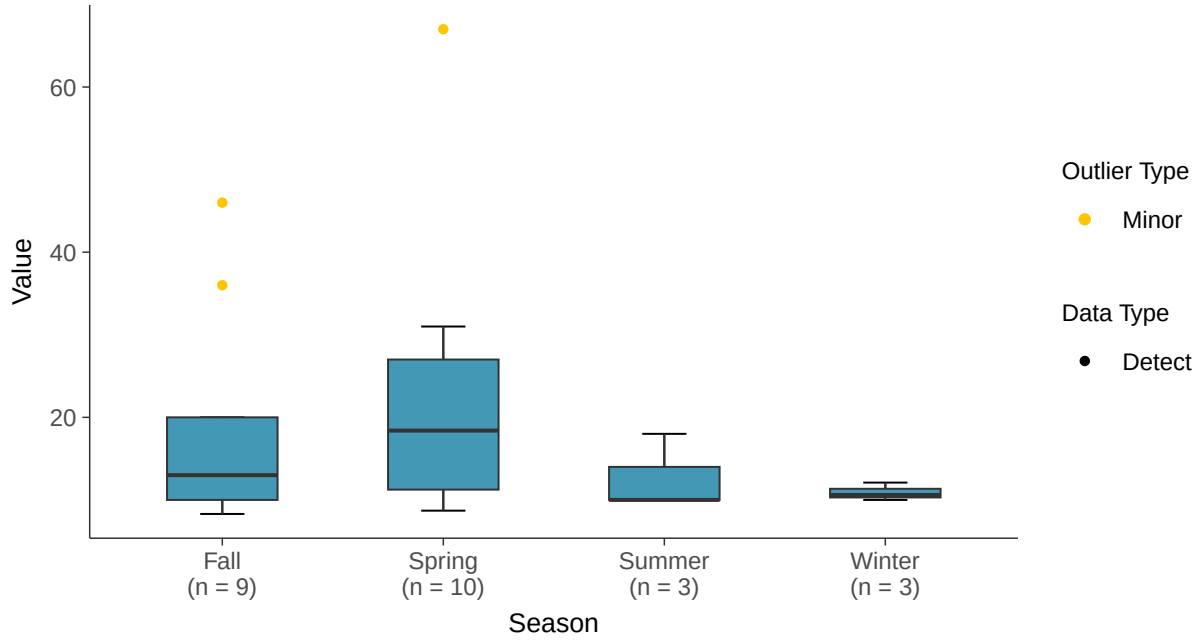
## Boxplot

Lithium, MW-15023 (ug/L)



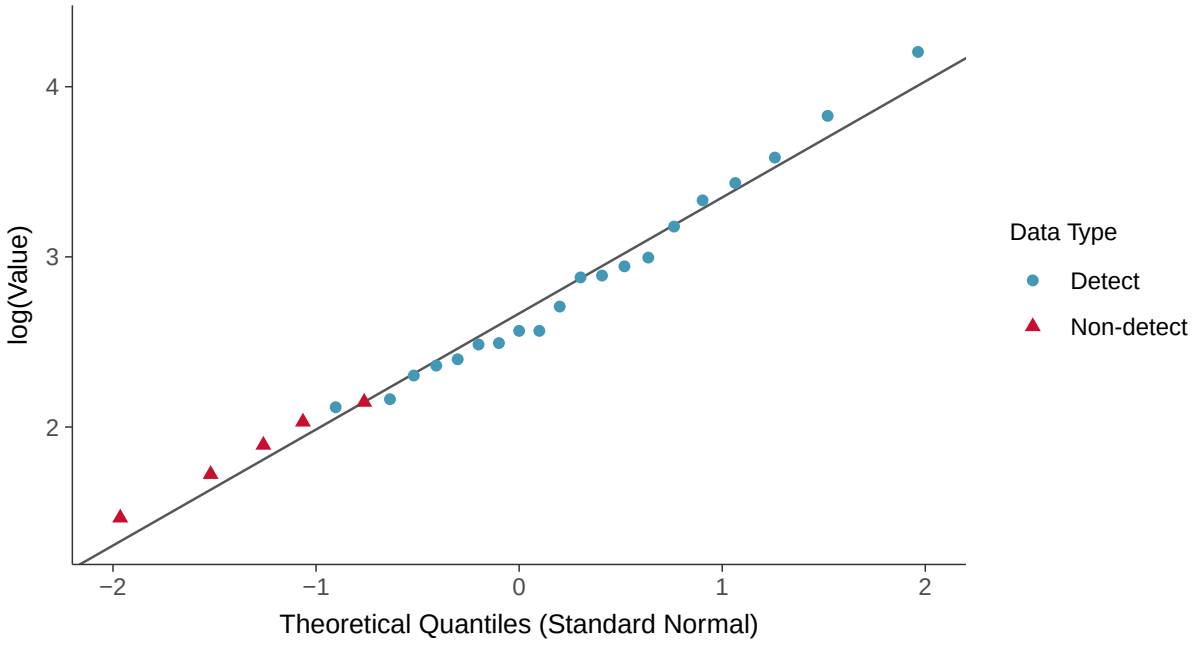

## Boxplot by Season

Lithium, MW-15023 (ug/L)



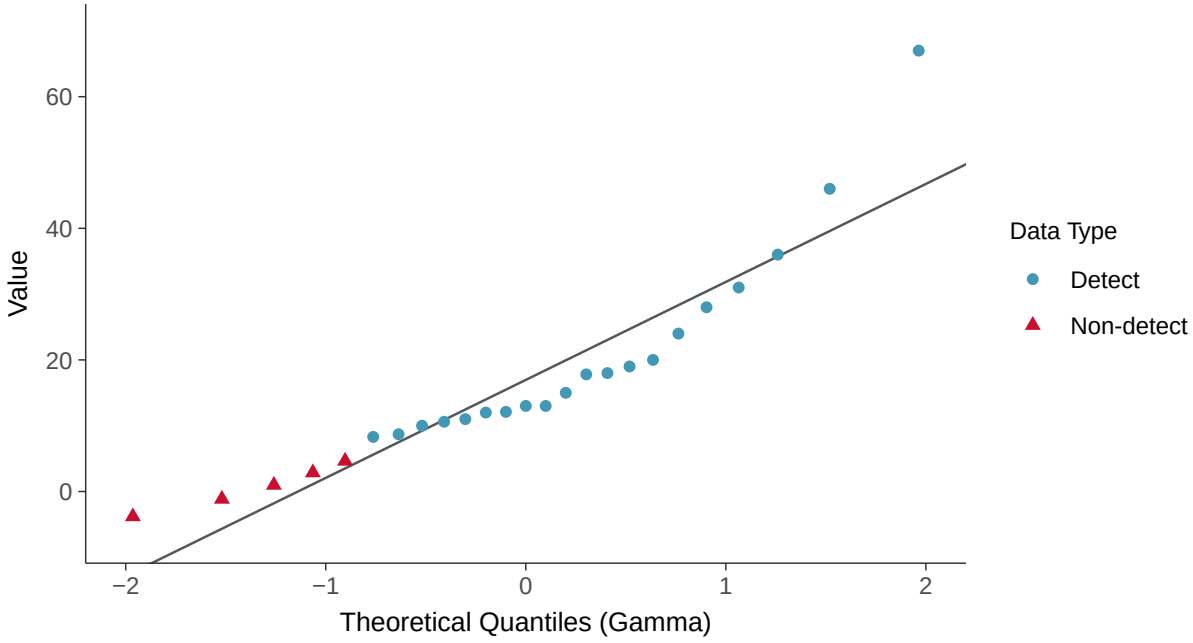
## Lognormal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15023 (ug/L)



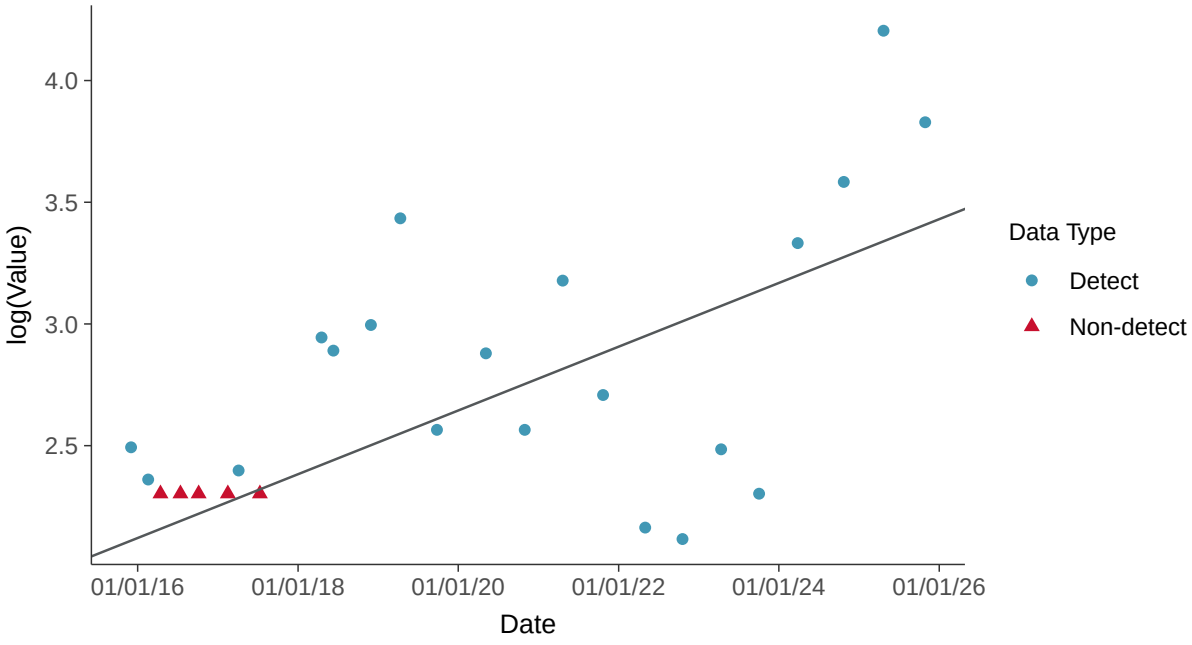

## Gamma Q-Q plot using ROS Imputed Estimates

Lithium, MW-15023 (ug/L)



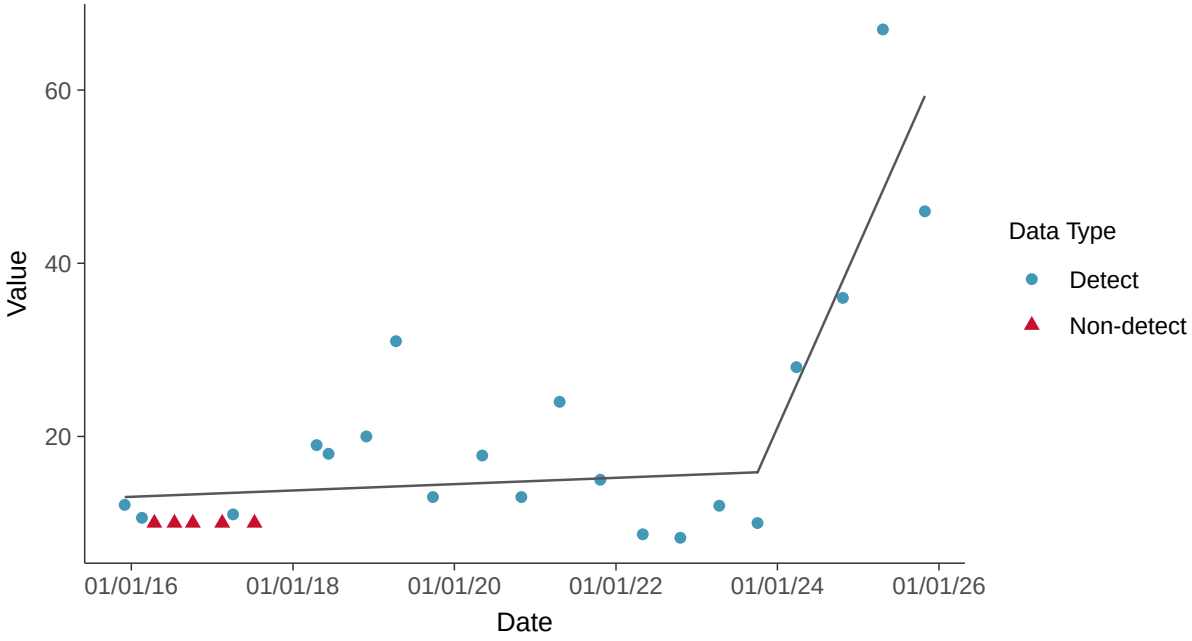
**Trend Regression: Lognormal MLE**

Lithium, MW-15023 (ug/L)



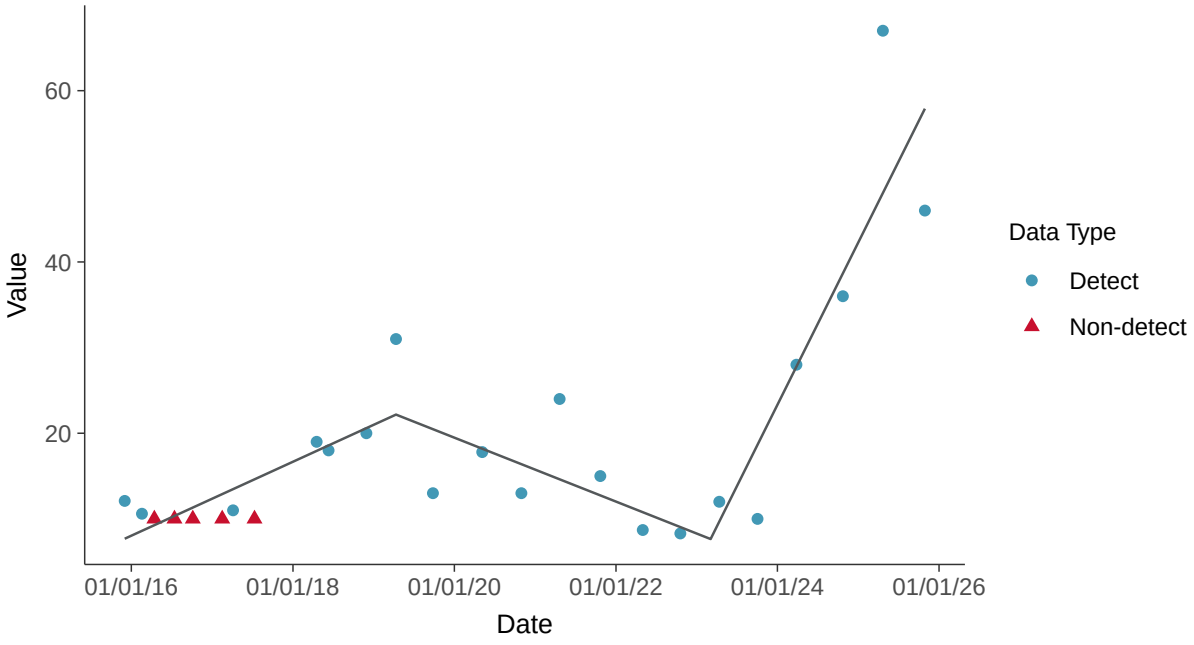

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-15023 (ug/L)



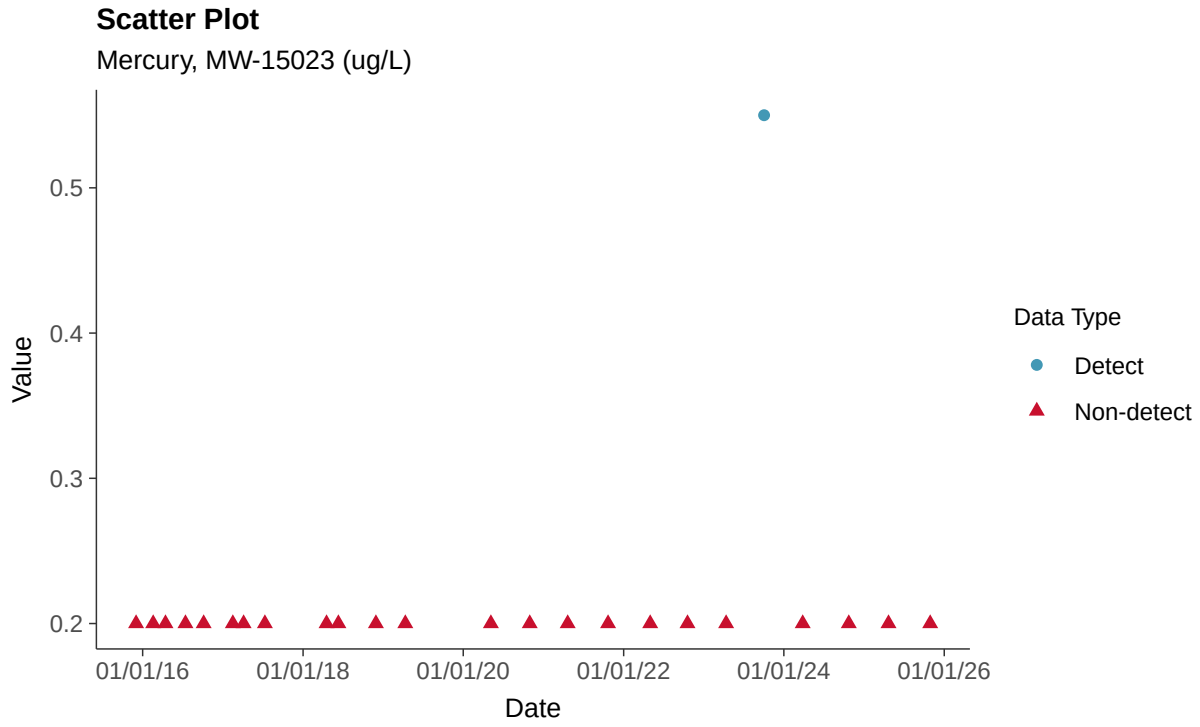
**Trend Regression: Piecewise Linear-Linear-Linear**

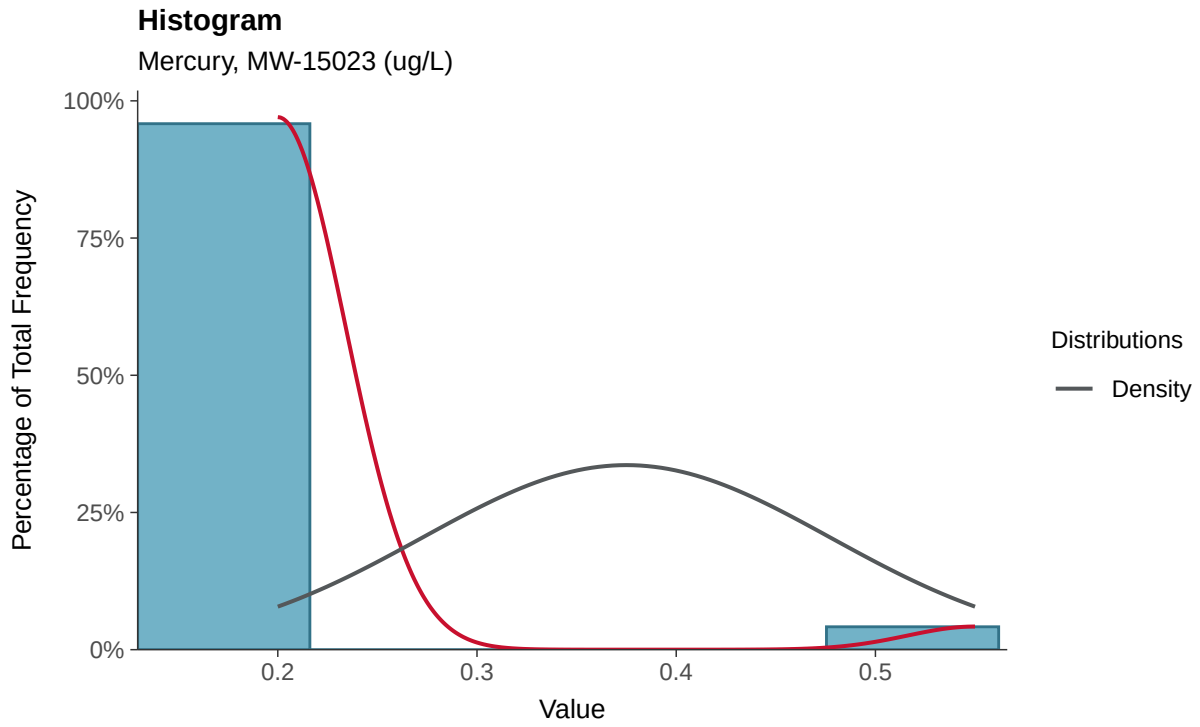
Lithium, MW-15023 (ug/L)



## Appendix IV: Mercury, MW-15023

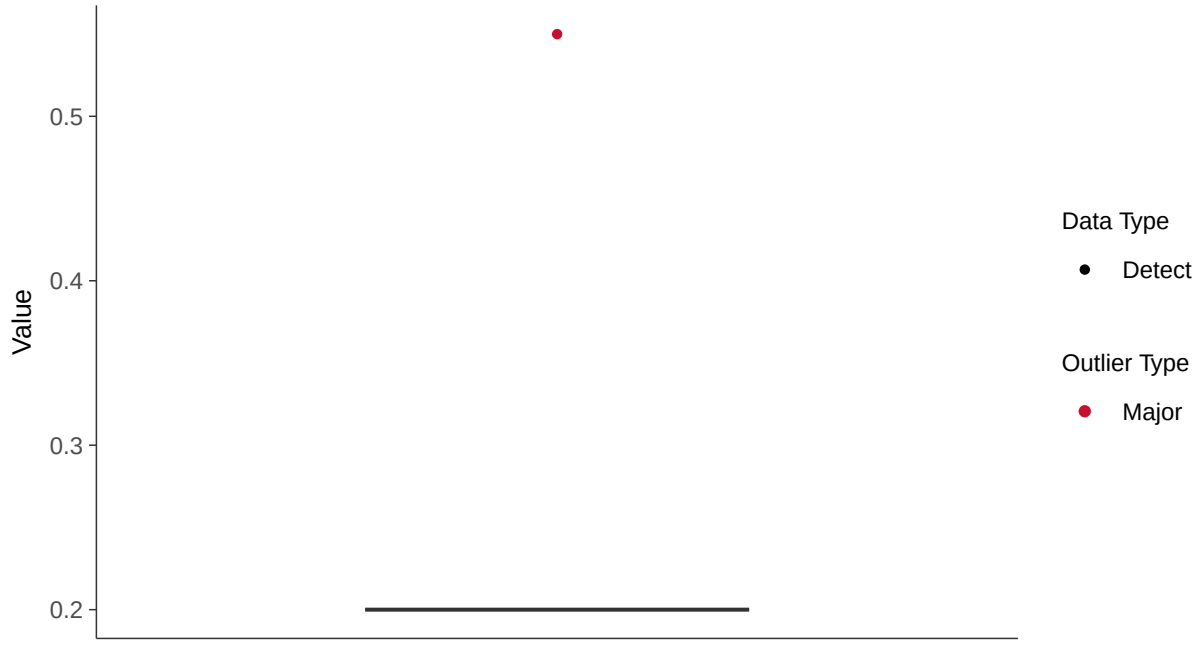
ID: 13_2_118



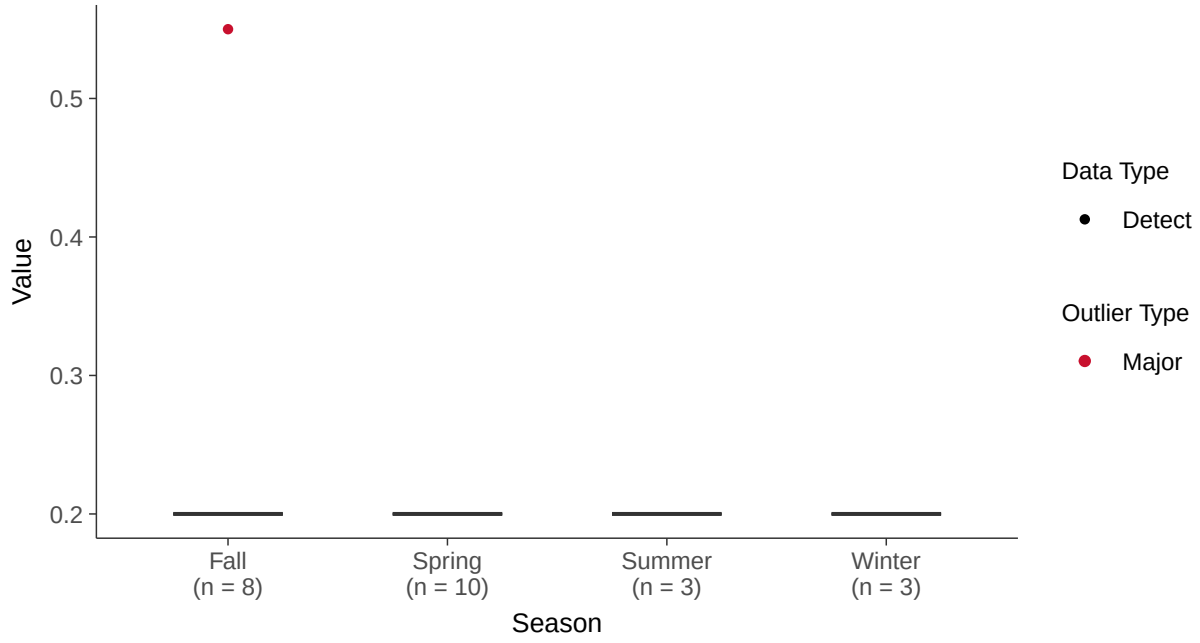
## Boxplot

Mercury, MW-15023 (ug/L)



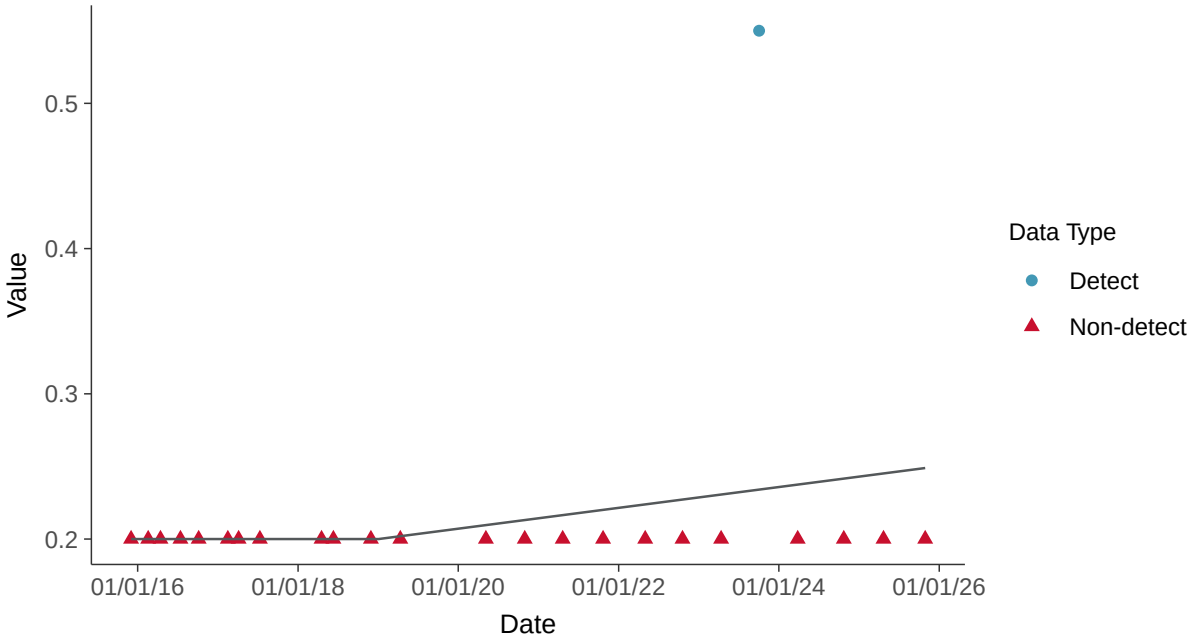

## Boxplot by Season

Mercury, MW-15023 (ug/L)



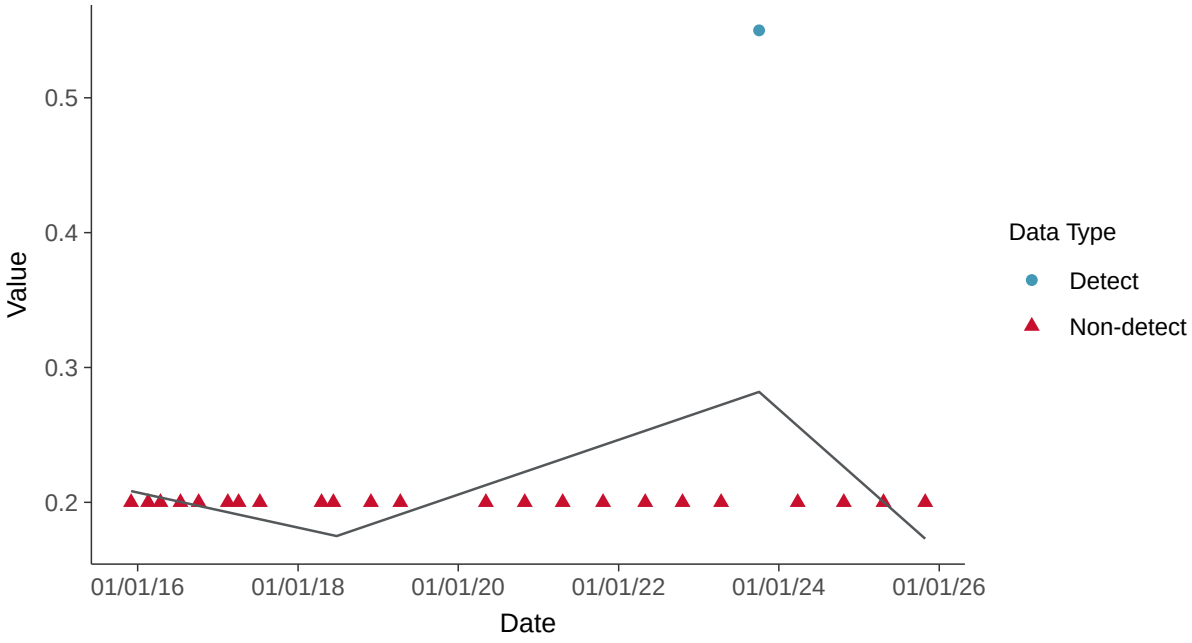
**Trend Regression: Piecewise Linear-Linear**

Mercury, MW-15023 (ug/L)



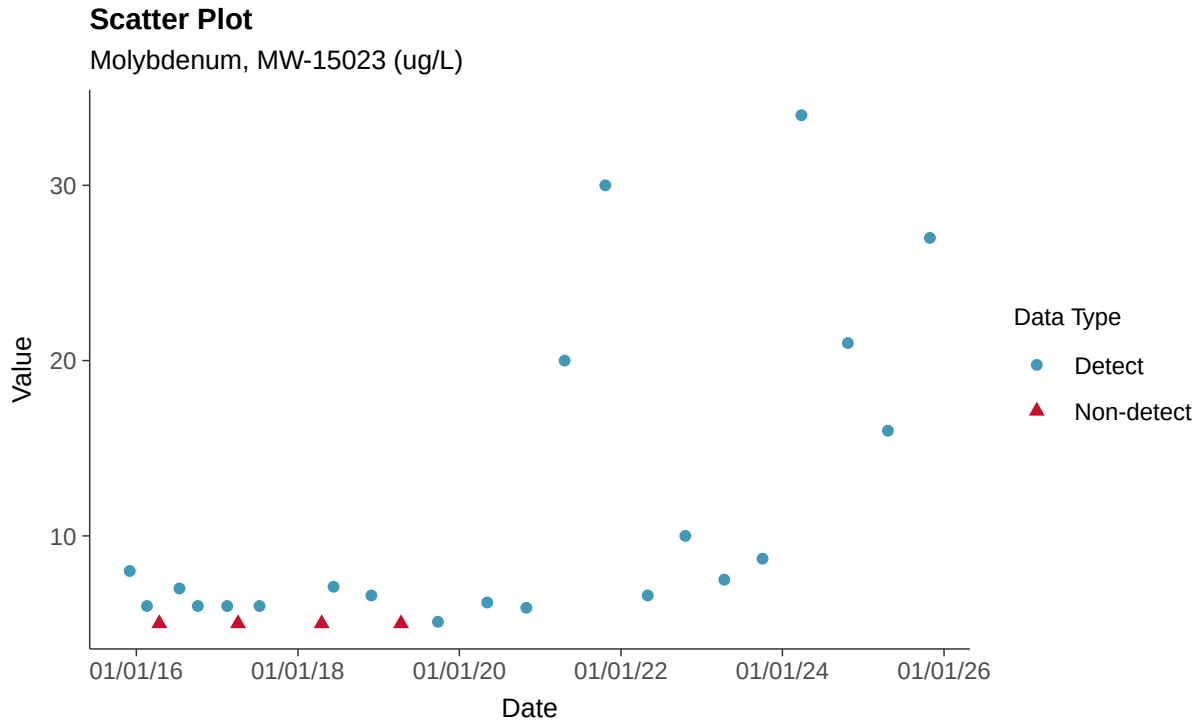

**Trend Regression: Piecewise Linear-Linear-Linear**

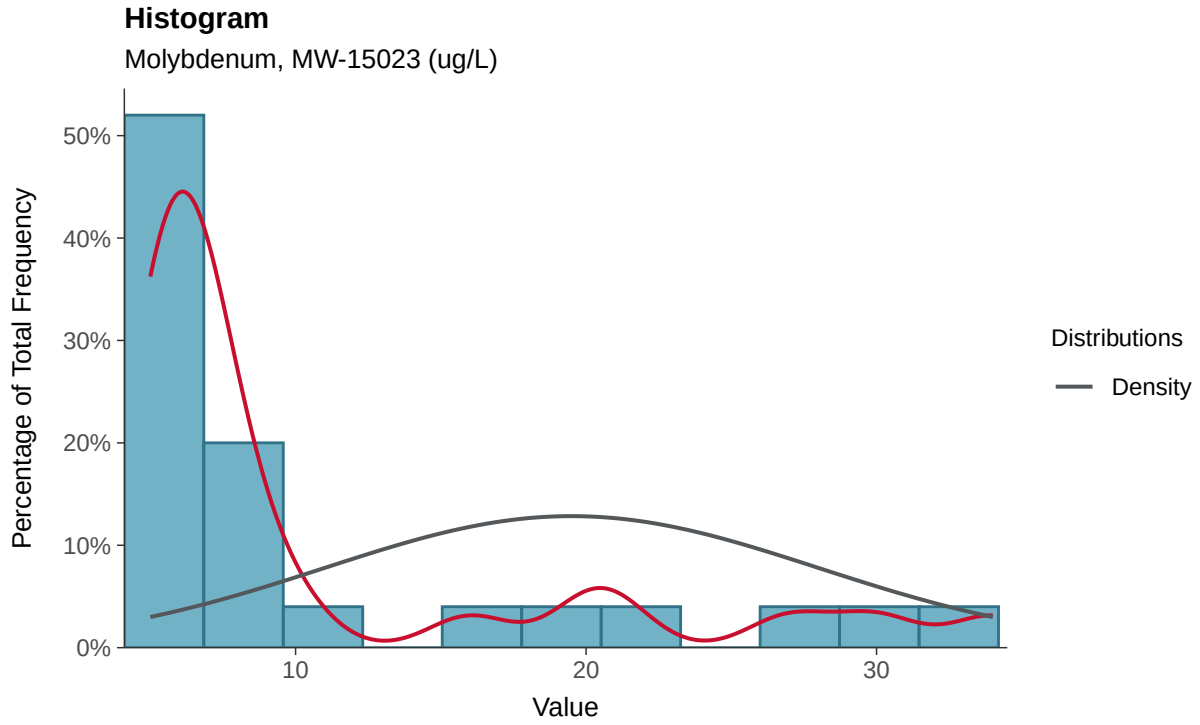
Mercury, MW-15023 (ug/L)



## Appendix IV: Molybdenum, MW-15023

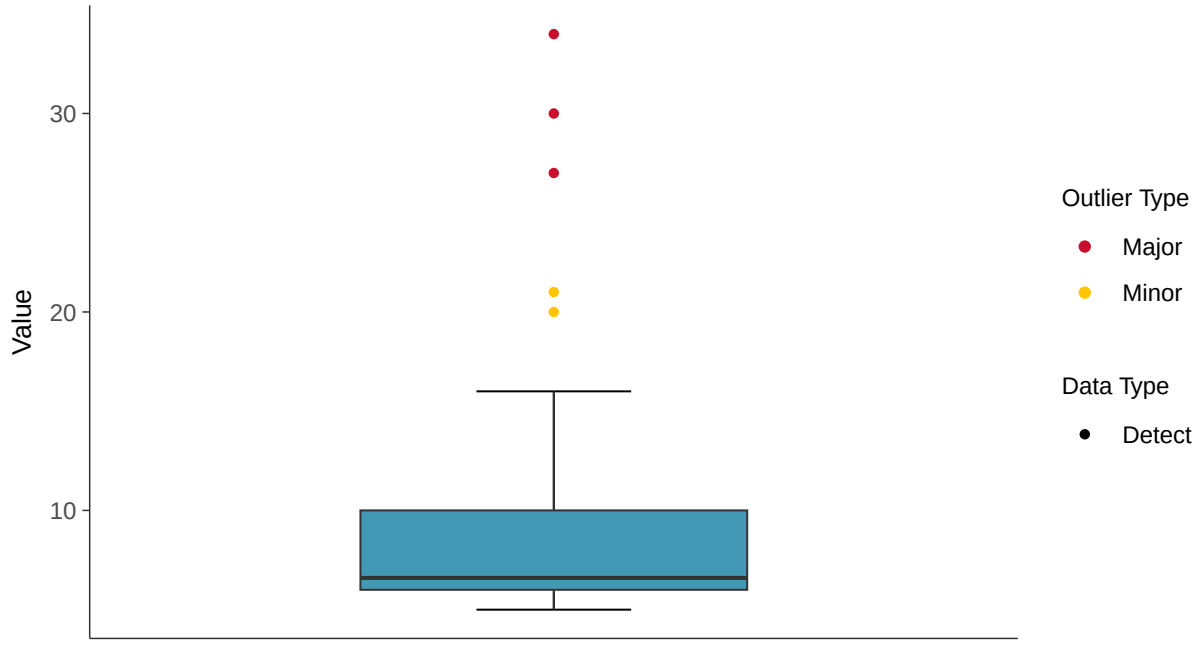
ID: 13_2_119



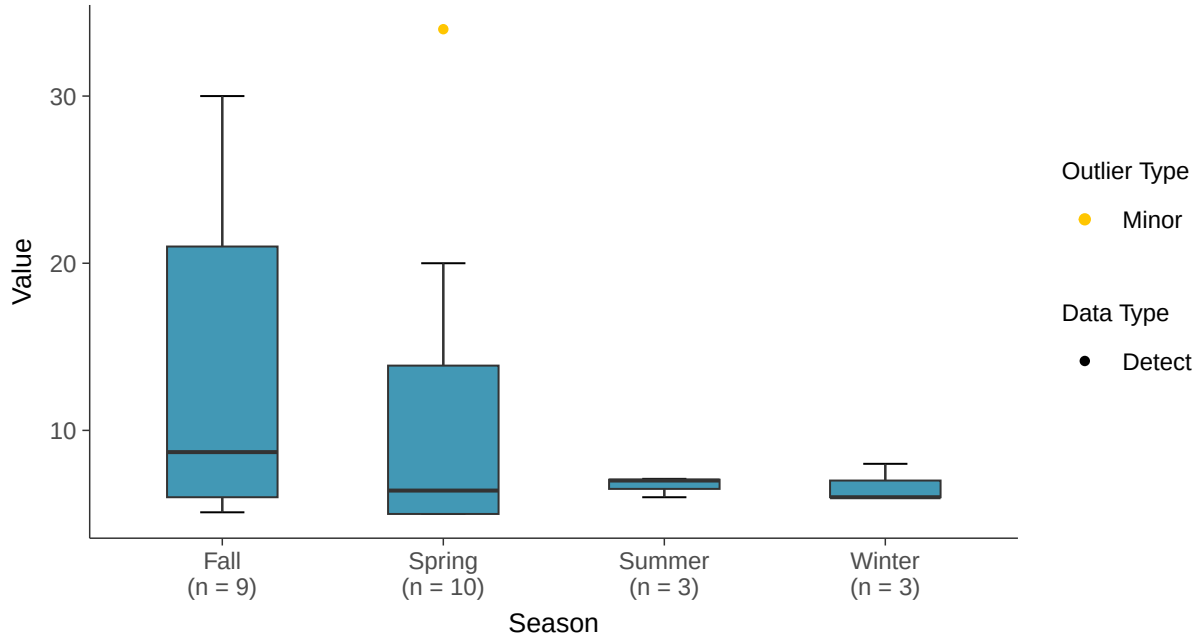
**Boxplot**

Molybdenum, MW-15023 (ug/L)



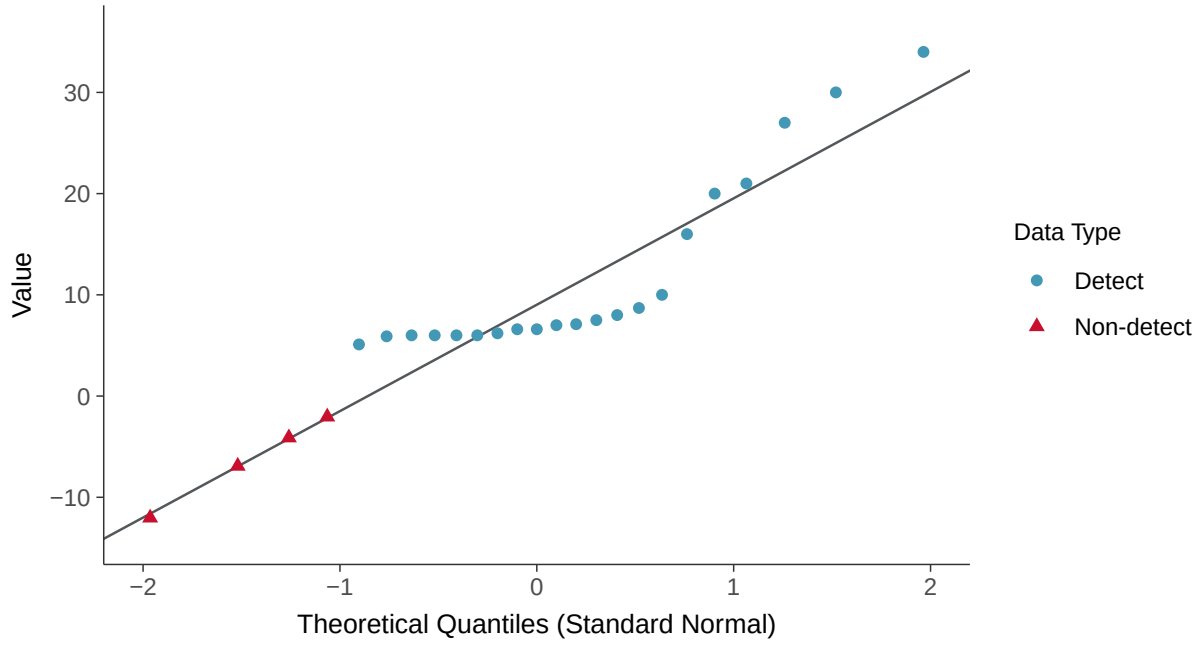

**Boxplot by Season**

Molybdenum, MW-15023 (ug/L)



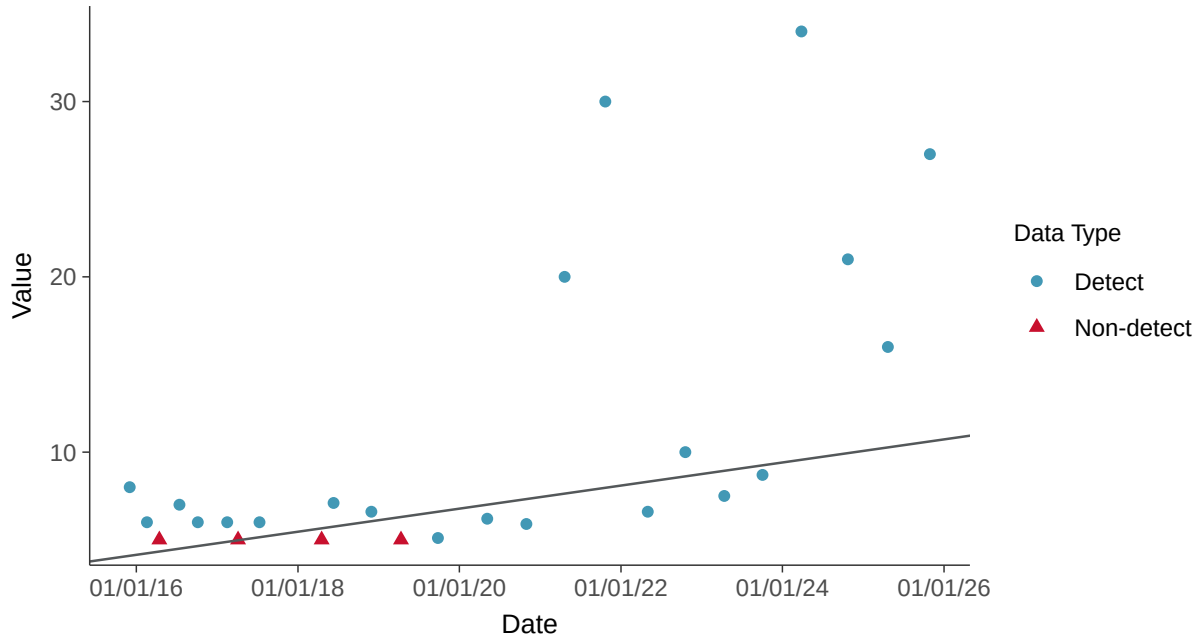
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-15023 (ug/L)



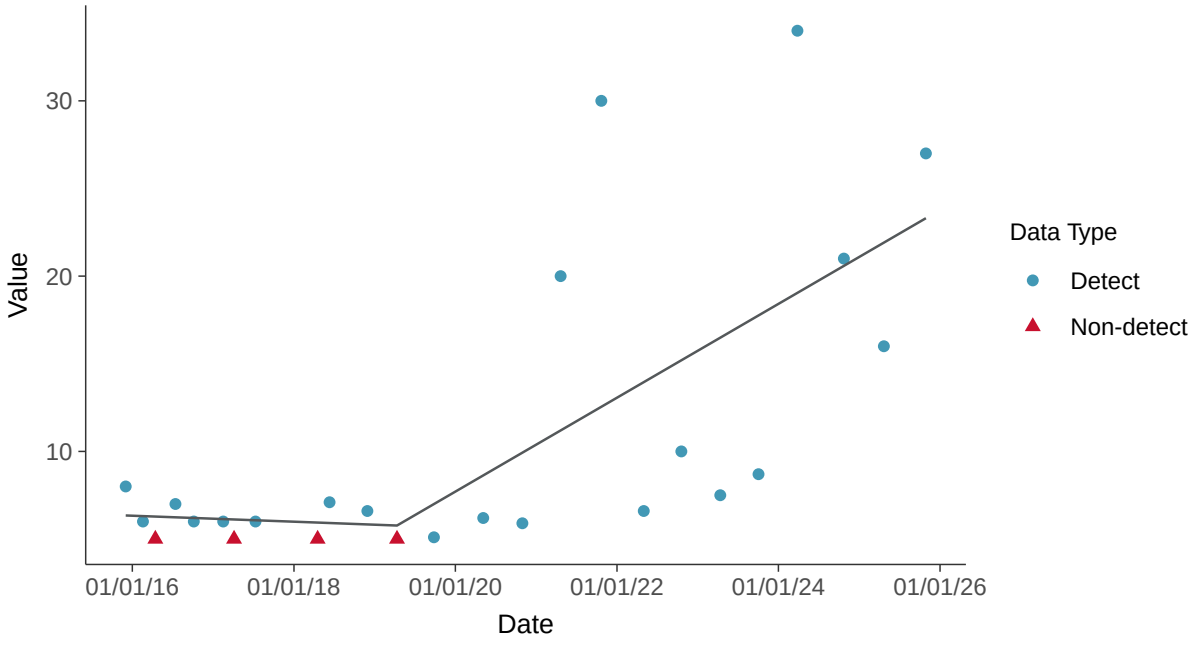

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Molybdenum, MW-15023 (ug/L)



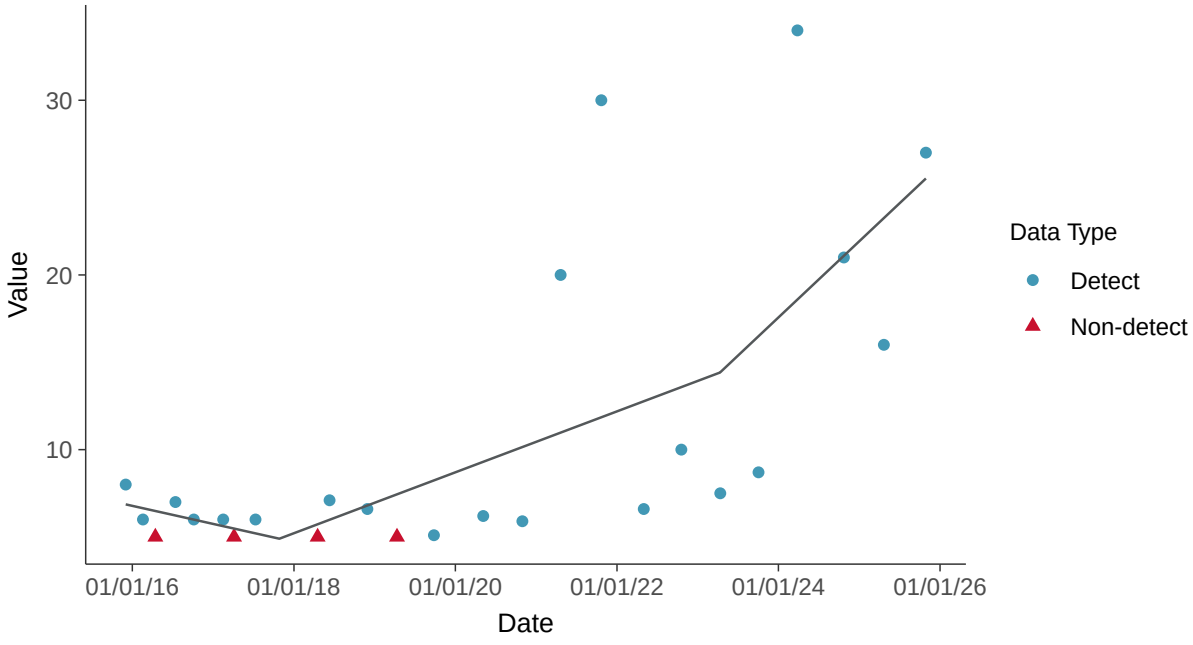
**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-15023 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-15023 (ug/L)

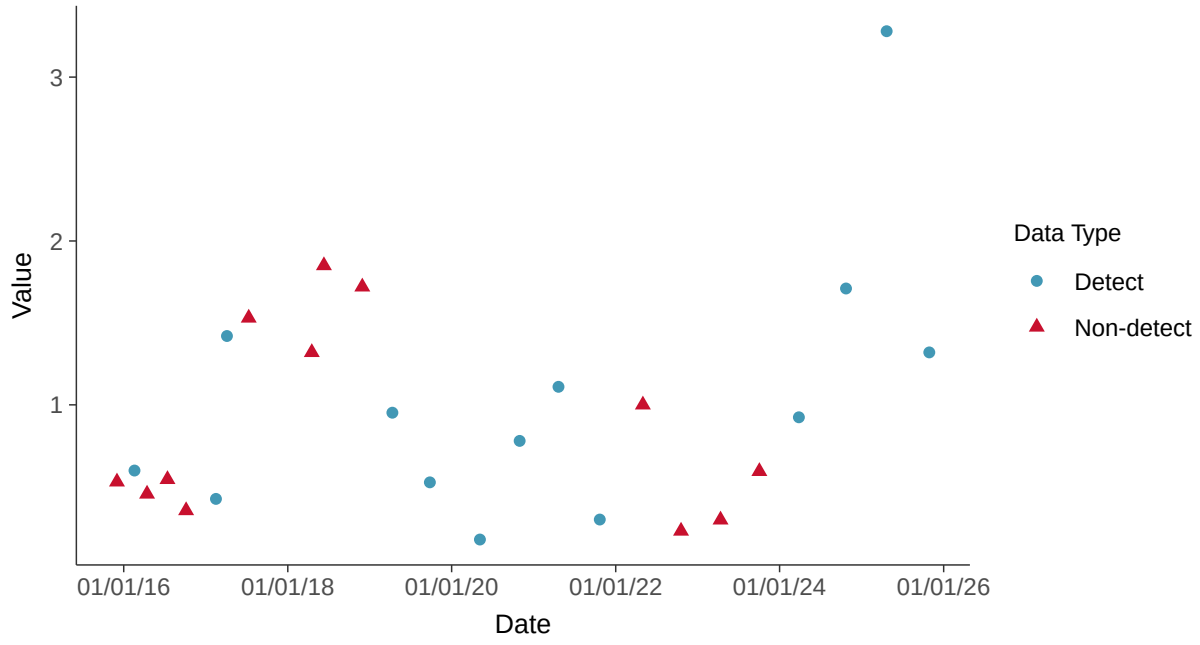


## Appendix IV: Radium-226+228, MW-15023

ID: 13_2_125

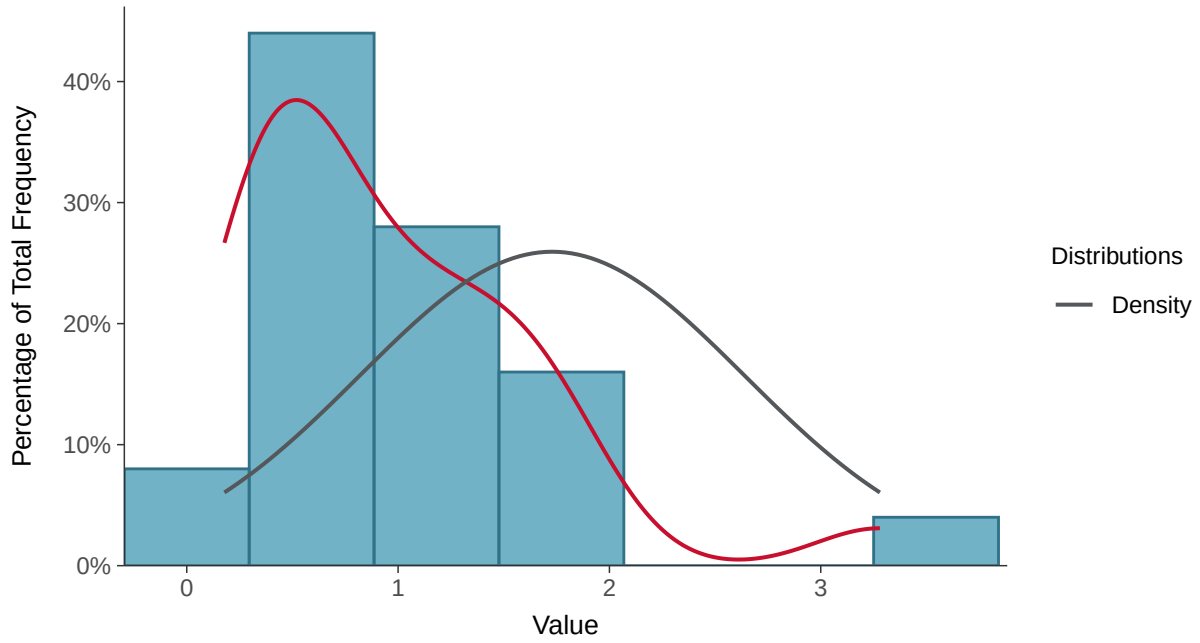
**Scatter Plot**

Radium-226+228, MW-15023 (pCi/L)



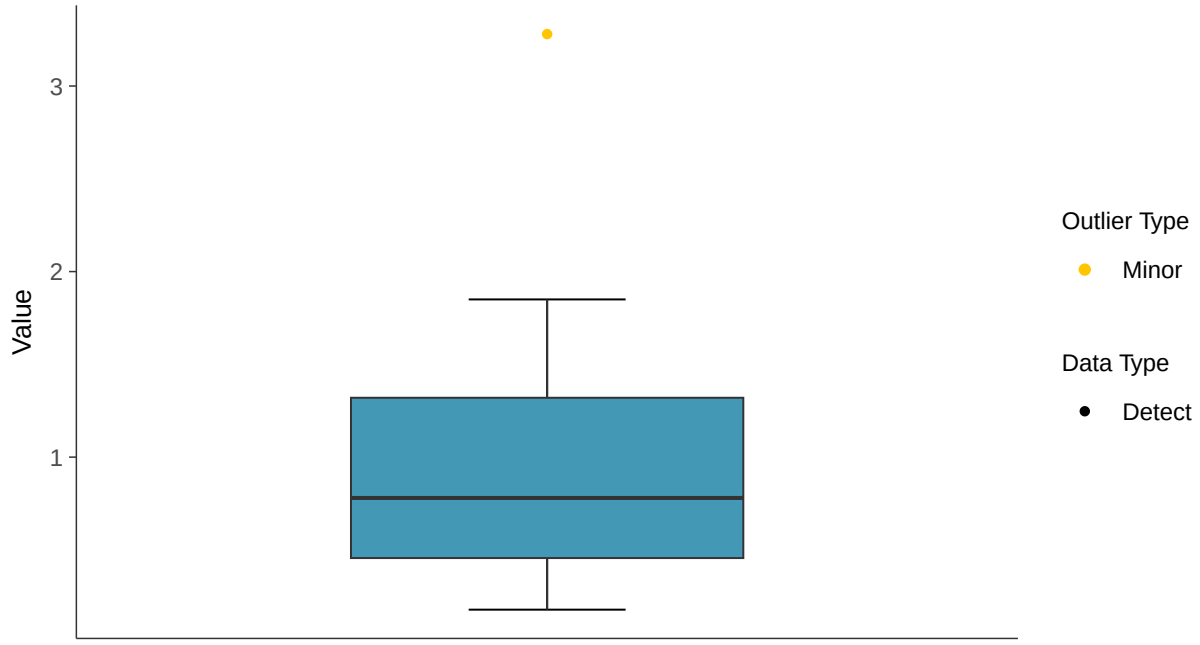

**Histogram**

Radium-226+228, MW-15023 (pCi/L)



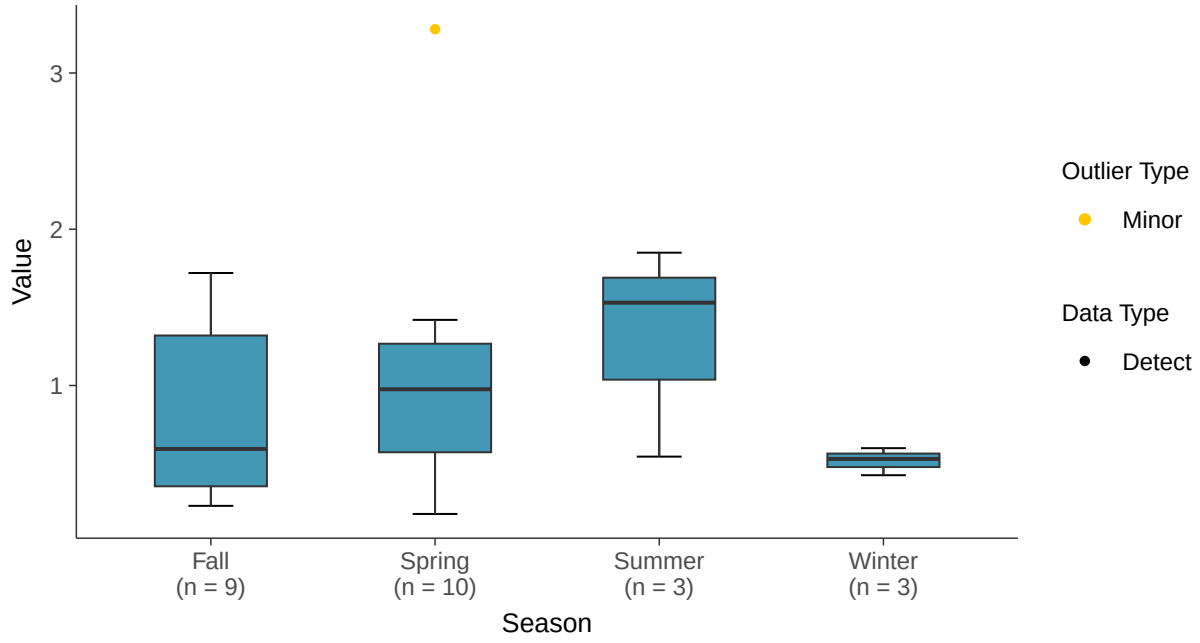
## Boxplot

Radium-226+228, MW-15023 (pCi/L)



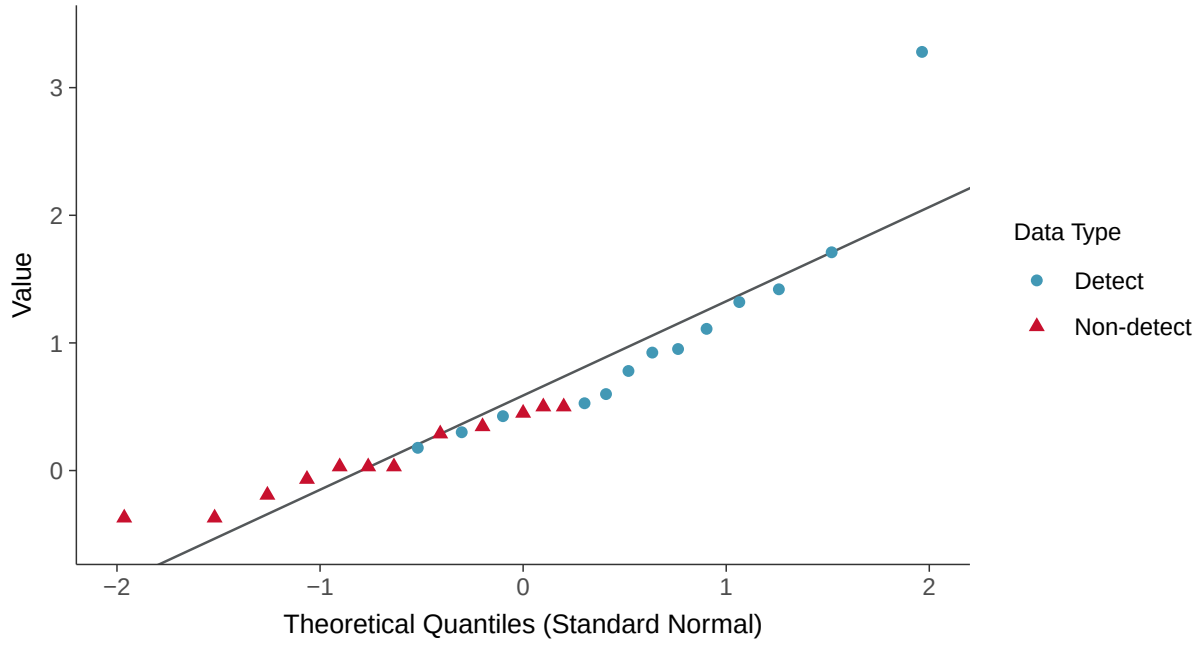

## Boxplot by Season

Radium-226+228, MW-15023 (pCi/L)



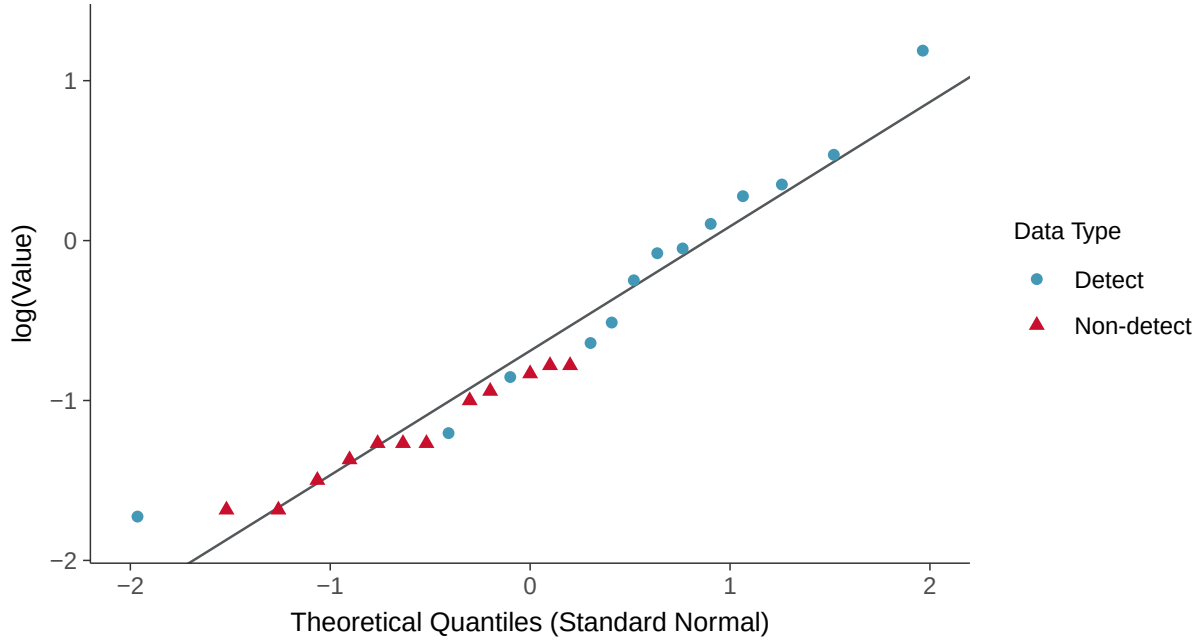
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15023 (pCi/L)



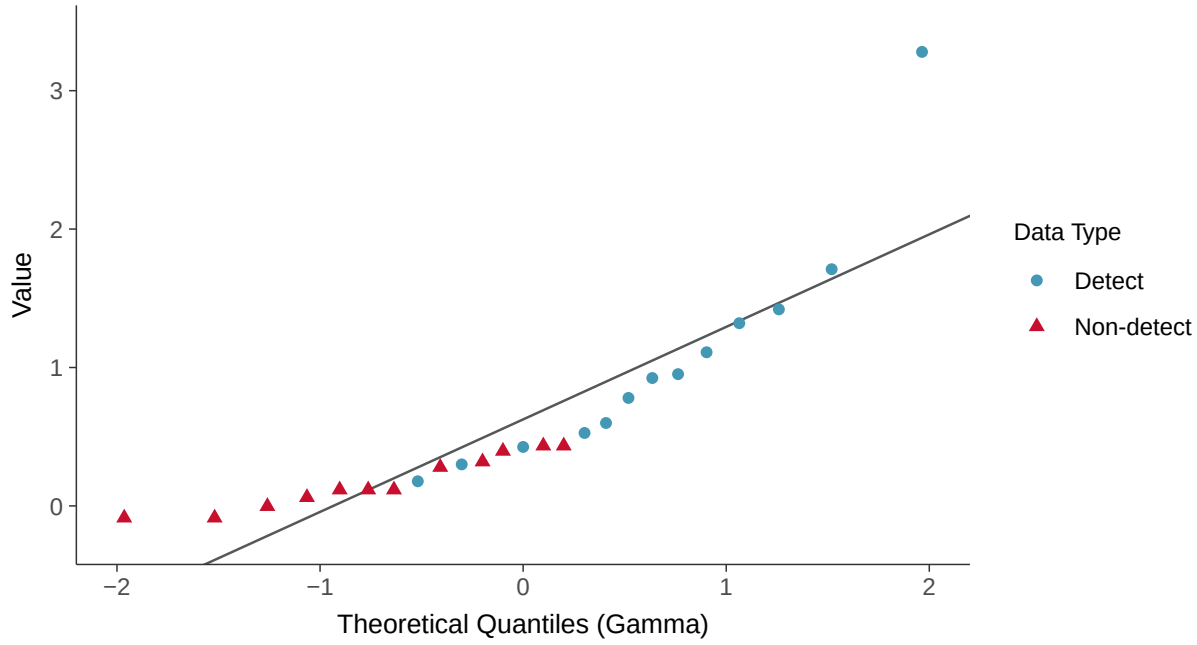

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15023 (pCi/L)



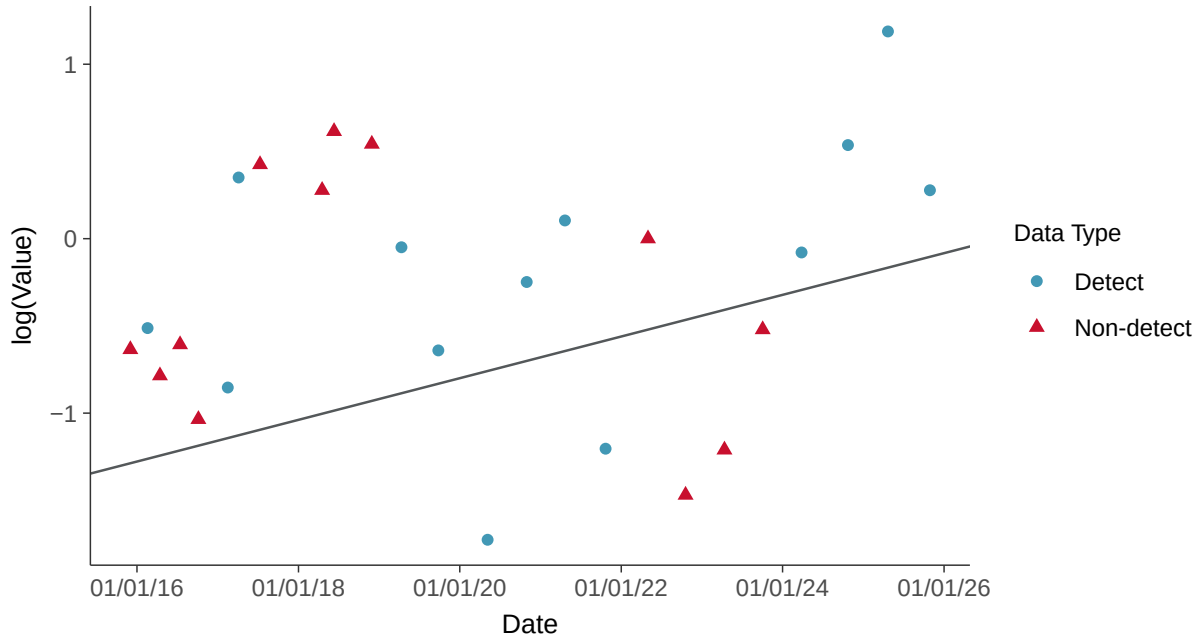
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-15023 (pCi/L)



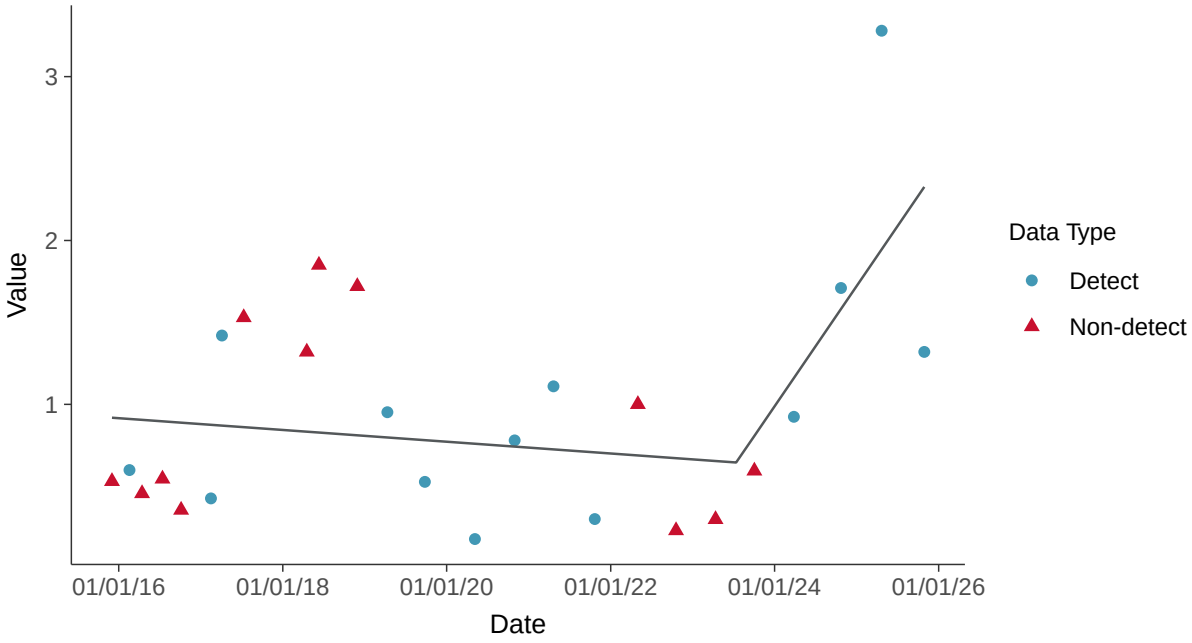

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-15023 (pCi/L)



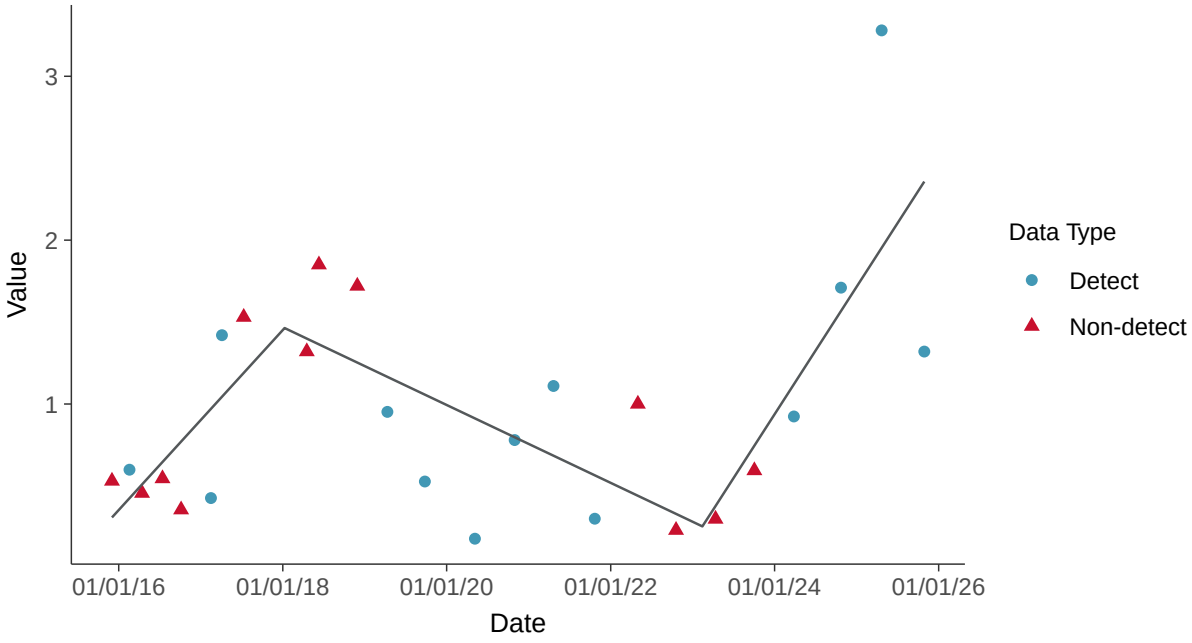
**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-15023 (pCi/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-15023 (pCi/L)

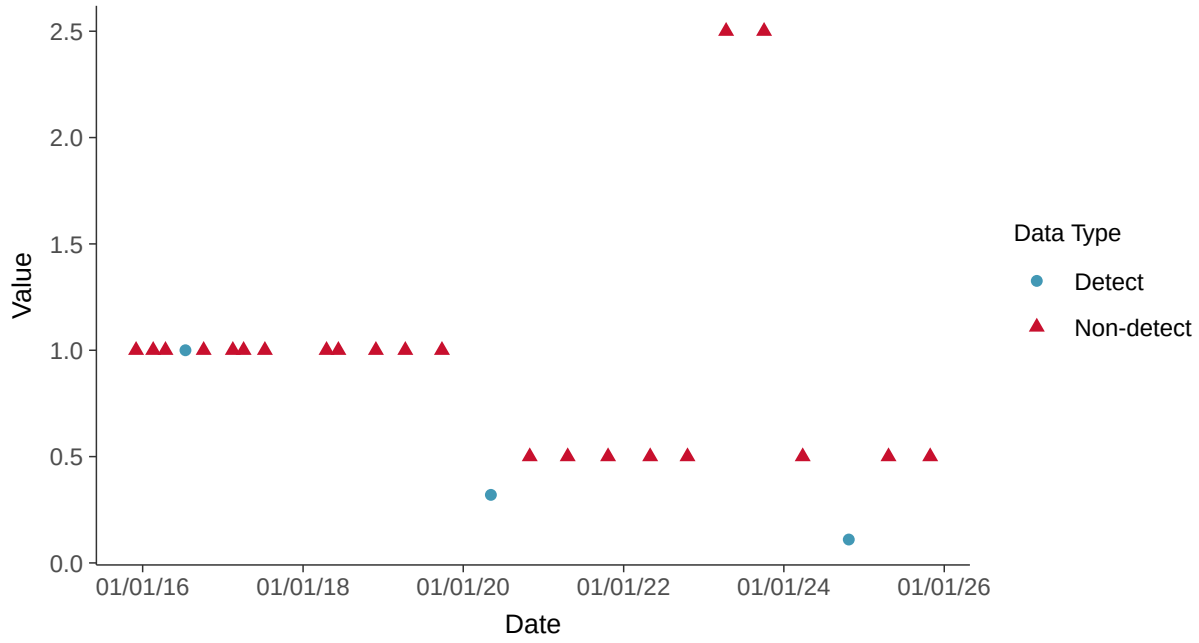


## Appendix IV: Selenium, MW-15023

ID: 13_2_127

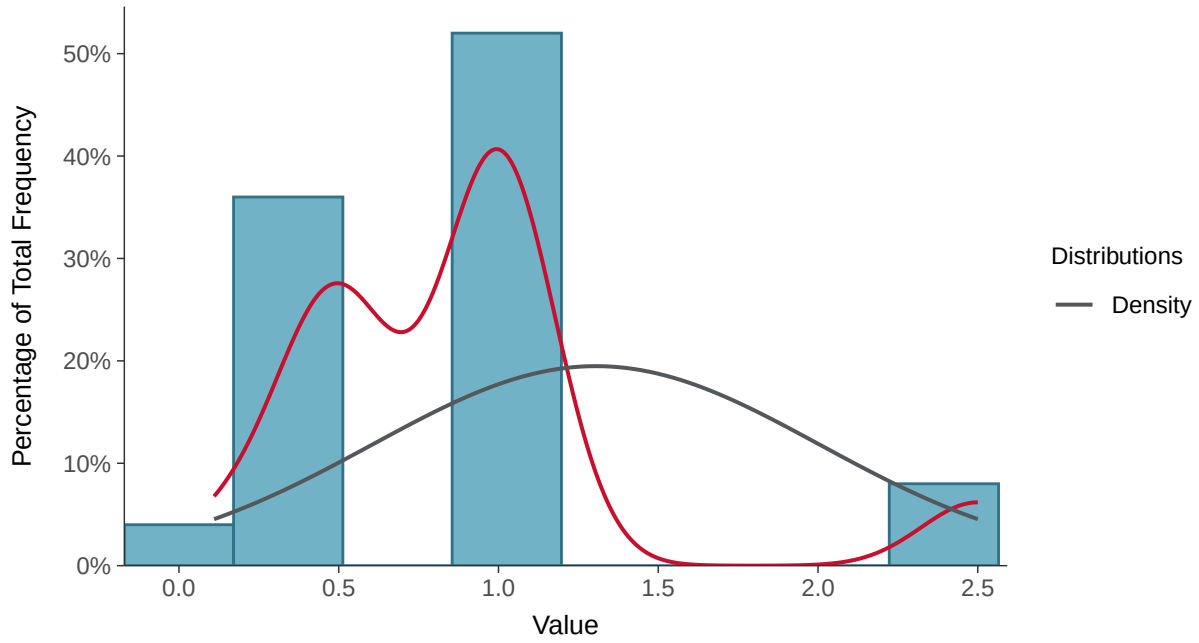
**Scatter Plot**

Selenium, MW-15023 (ug/L)



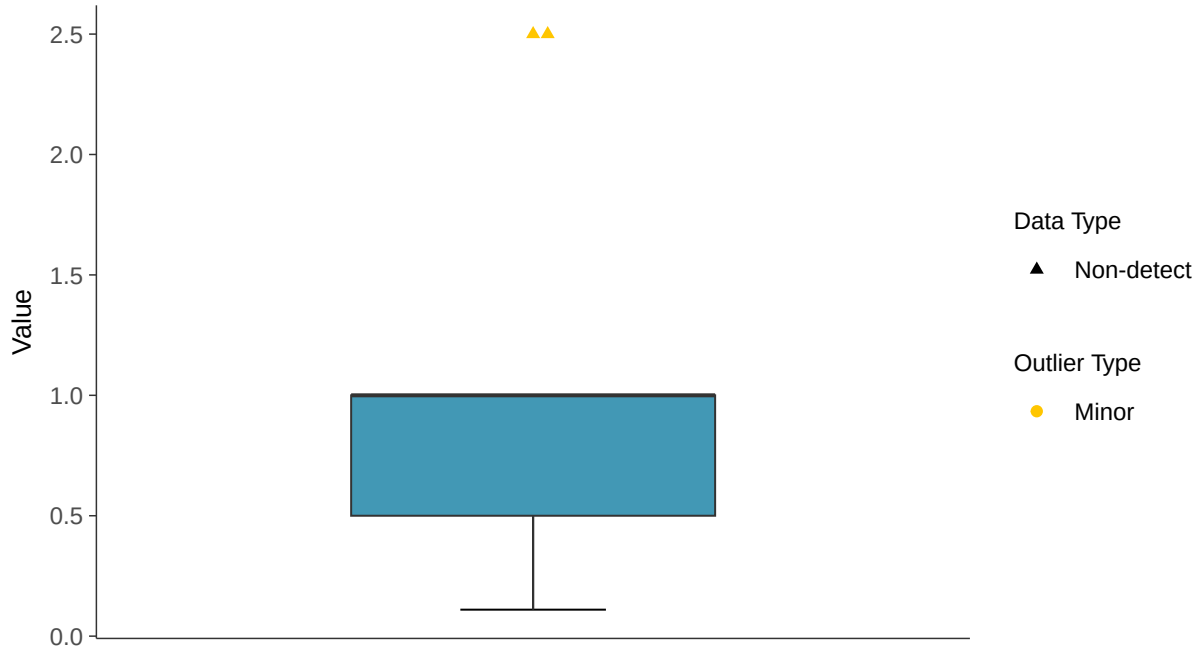

**Histogram**

Selenium, MW-15023 (ug/L)



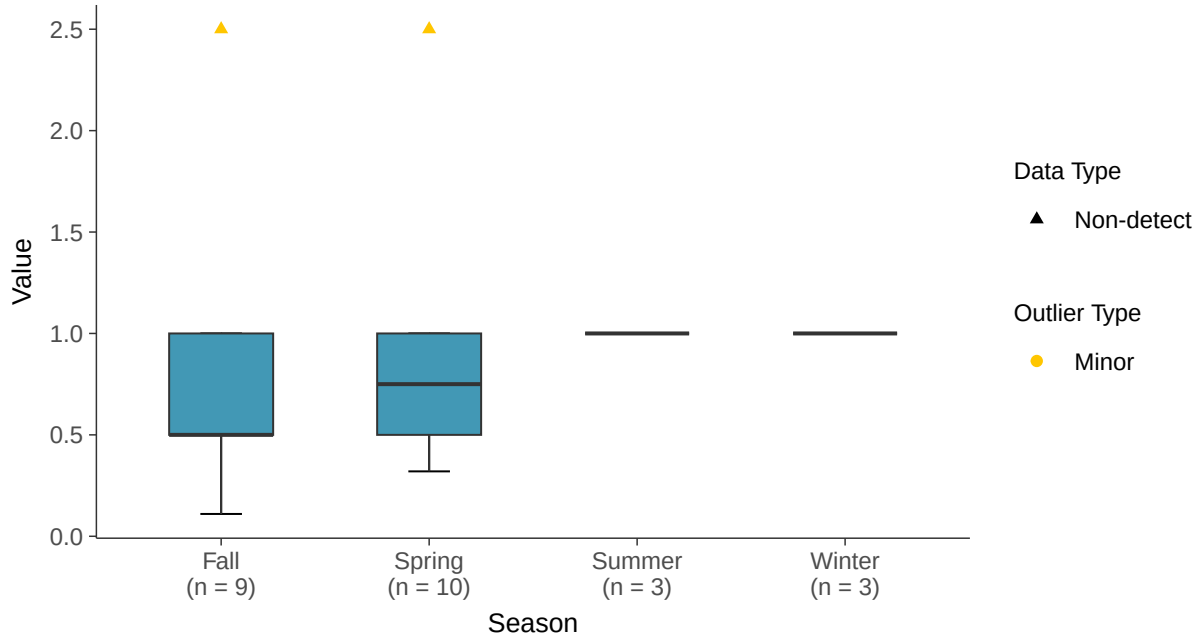
## Boxplot

Selenium, MW-15023 (ug/L)



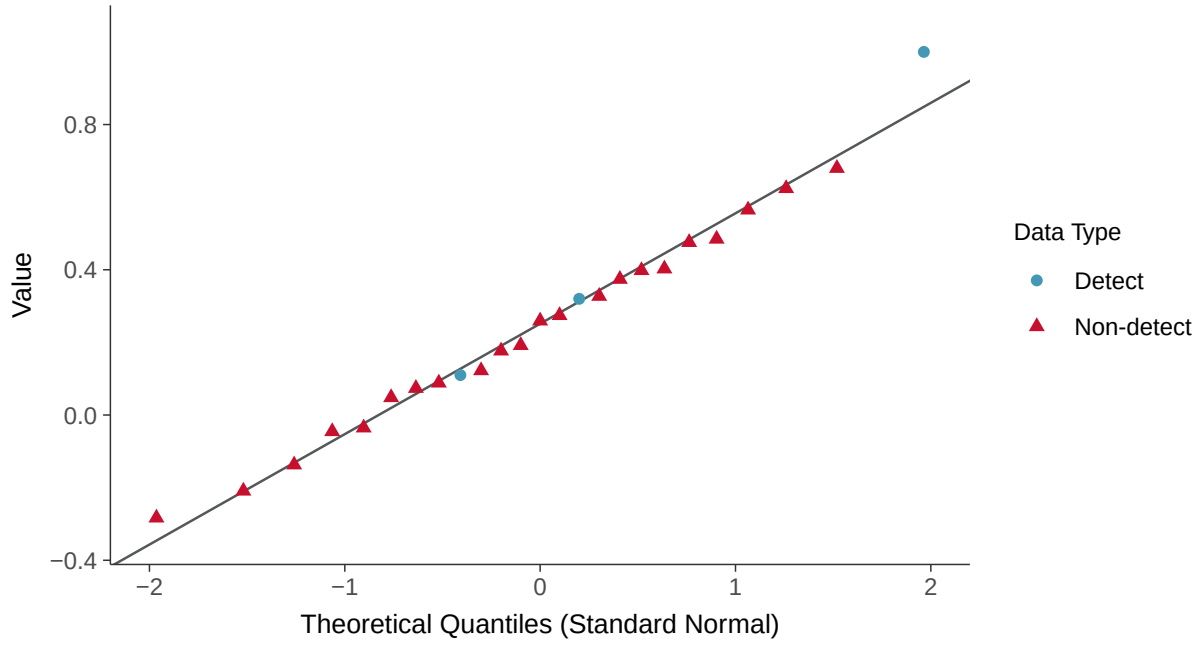

## Boxplot by Season

Selenium, MW-15023 (ug/L)



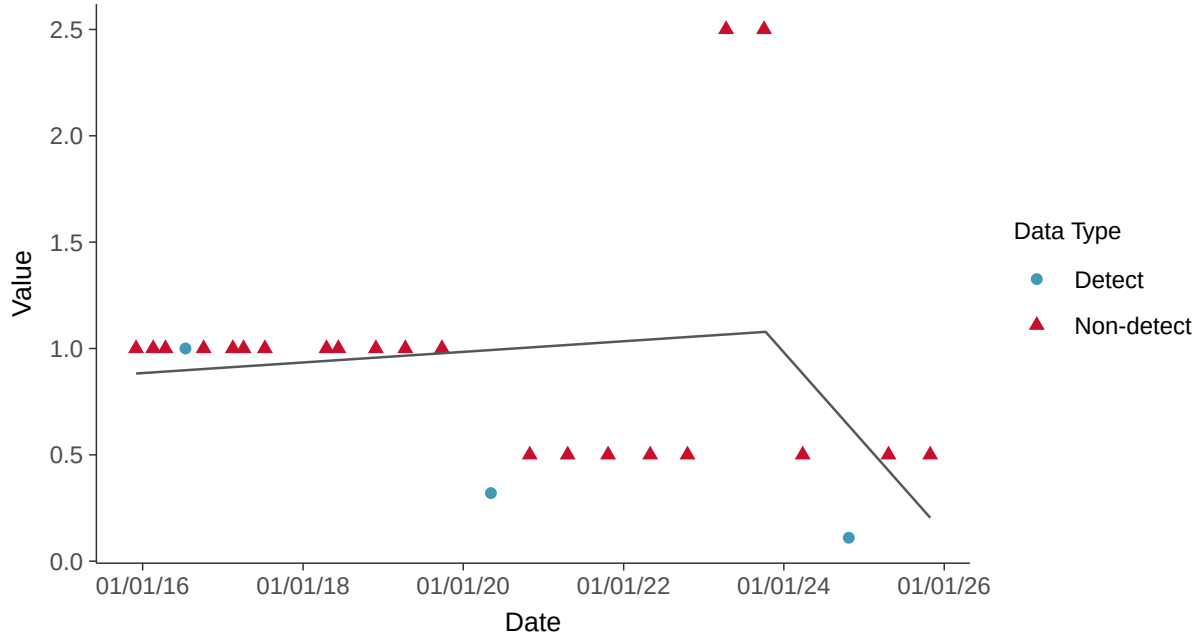
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-15023 (ug/L)



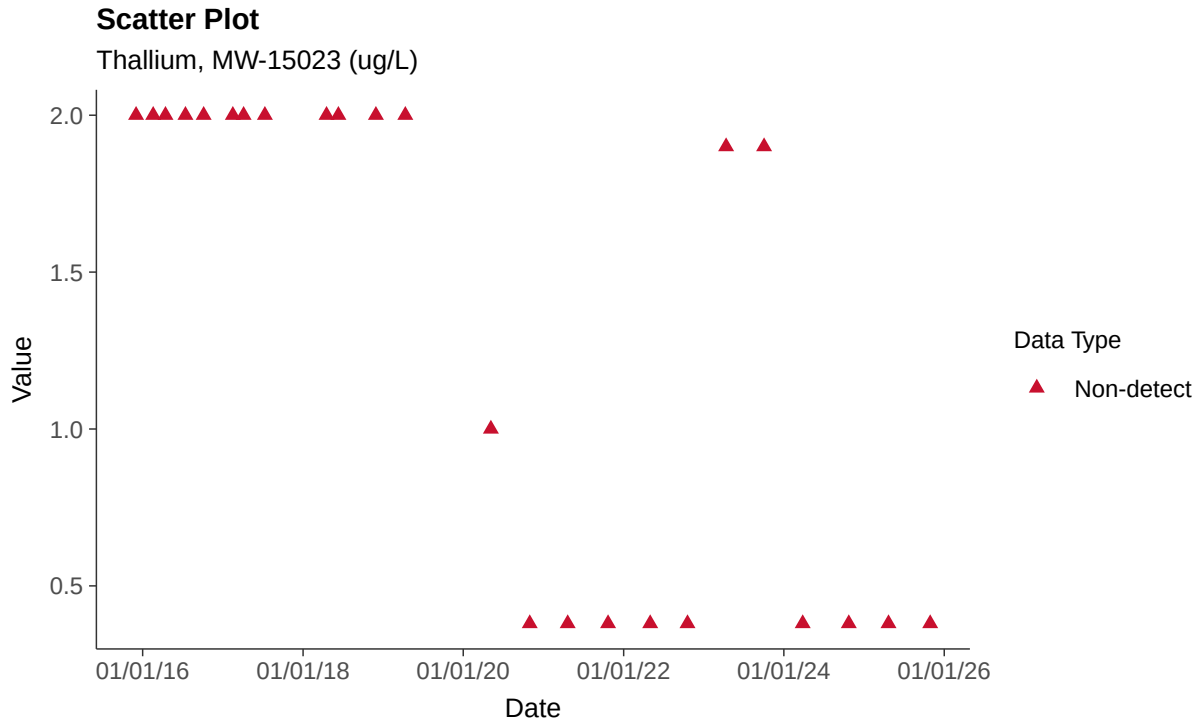

**Trend Regression: Piecewise Linear-Linear**

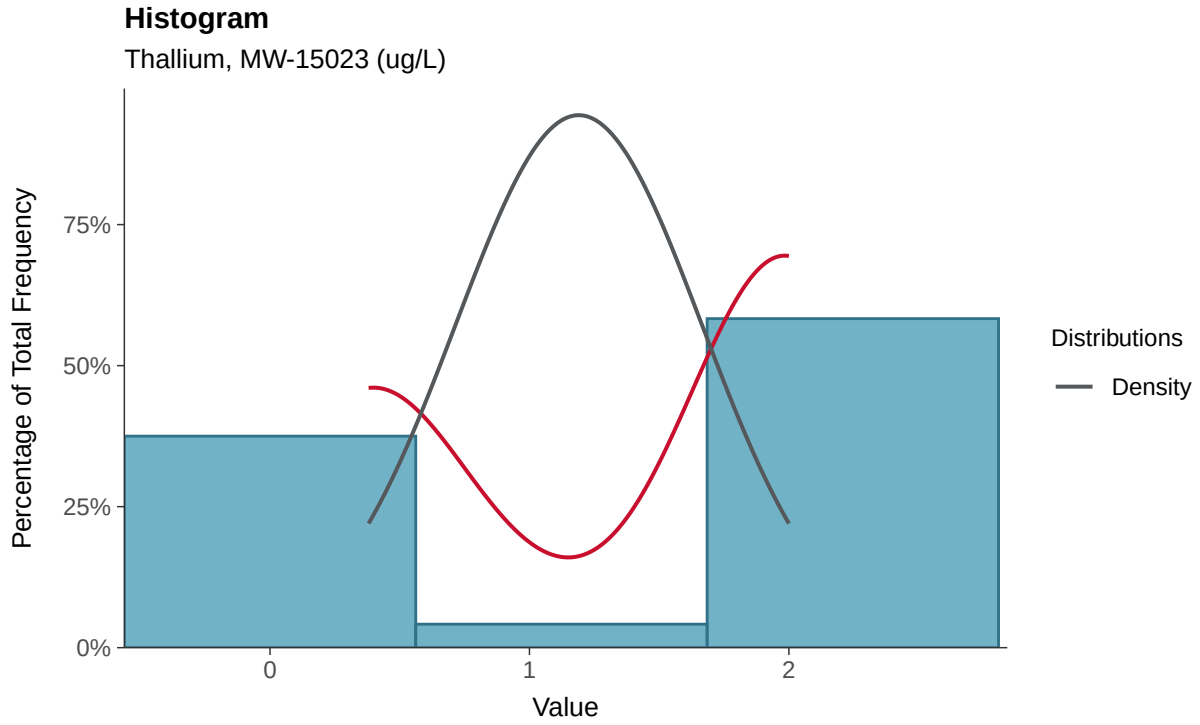
Selenium, MW-15023 (ug/L)



## Appendix IV: Thallium, MW-15023

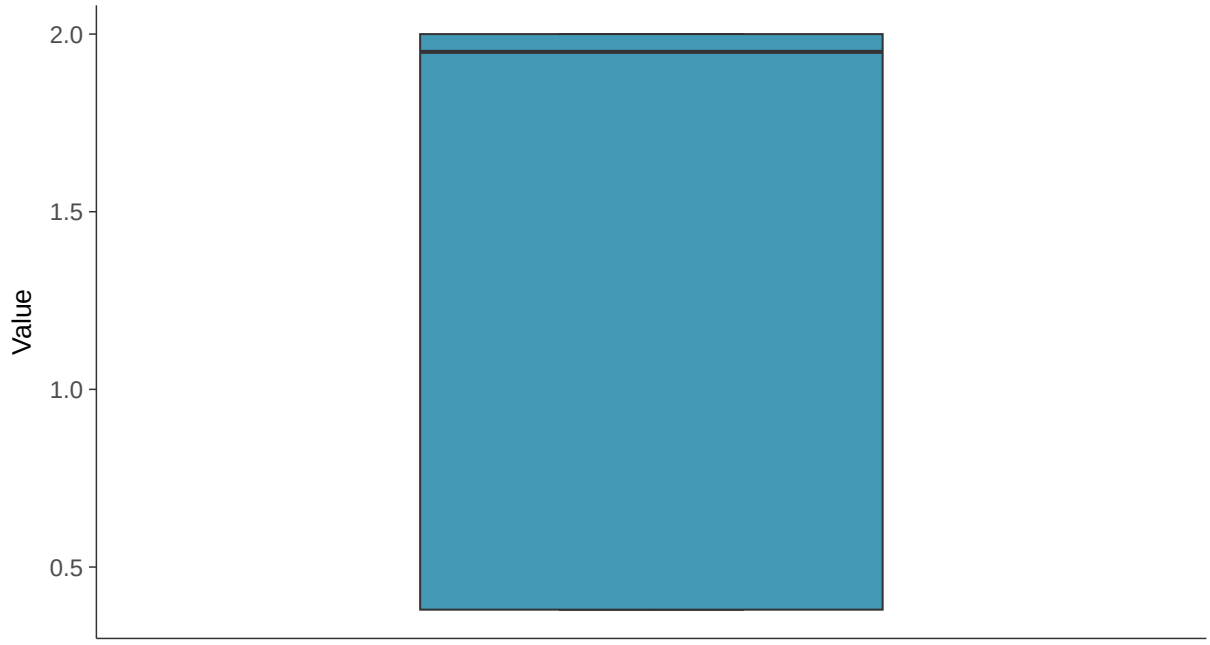
ID: 13_2_131



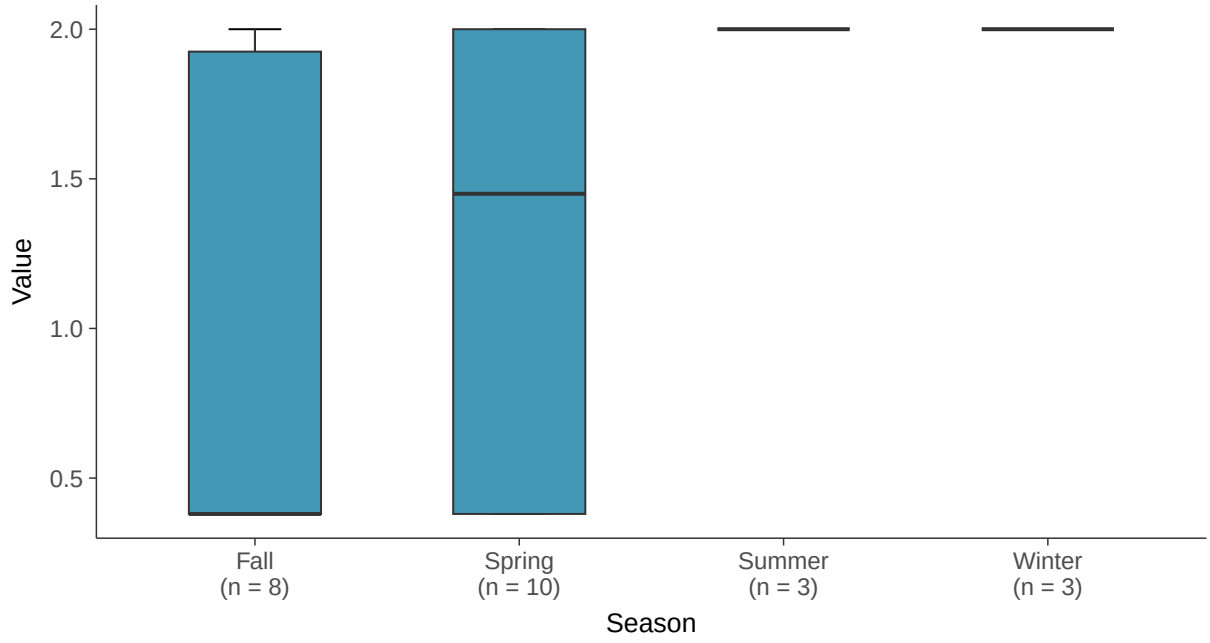
**Boxplot**

Thallium, MW-15023 (ug/L)



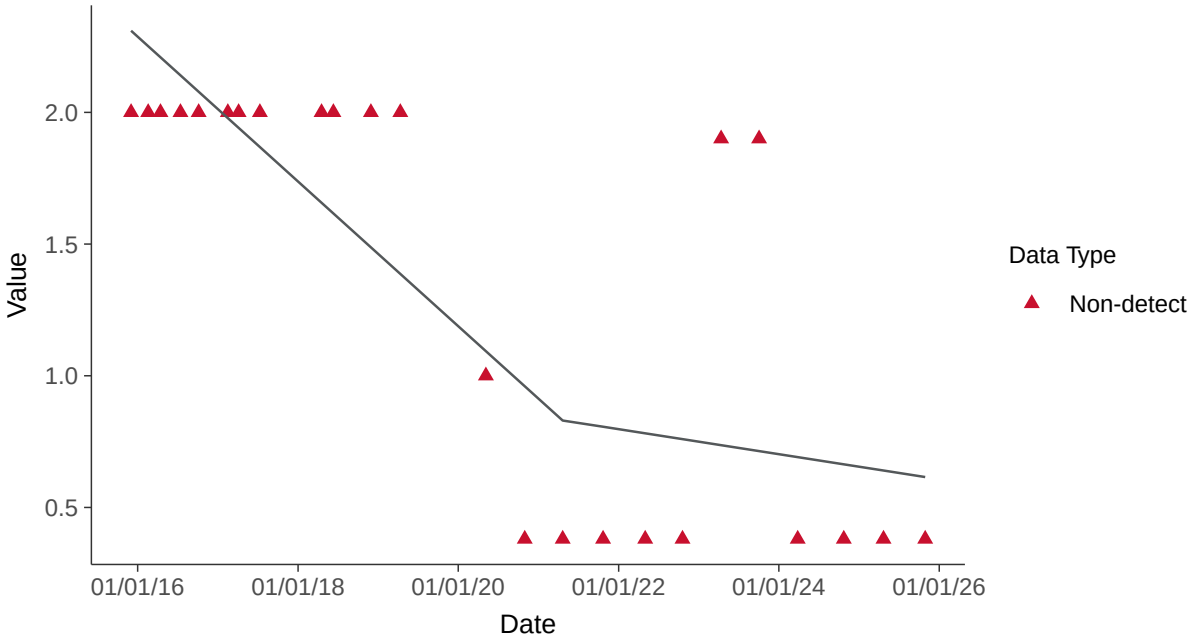

**Boxplot by Season**

Thallium, MW-15023 (ug/L)



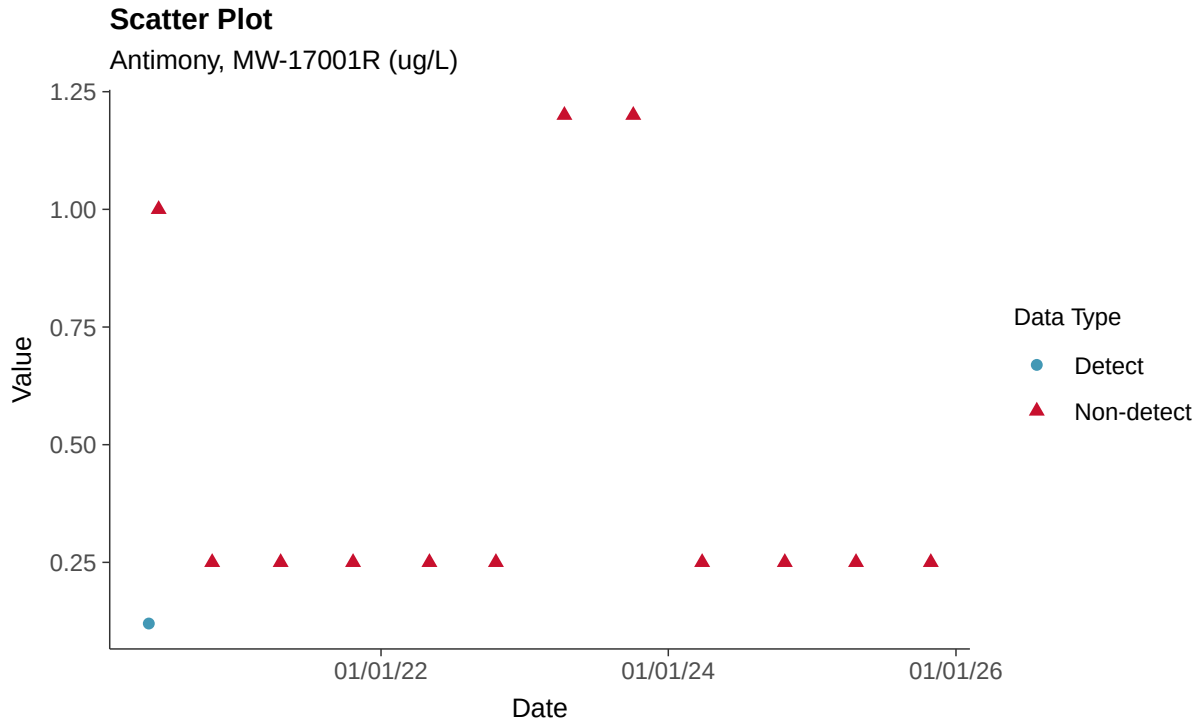
**Trend Regression: Piecewise Linear-Linear**

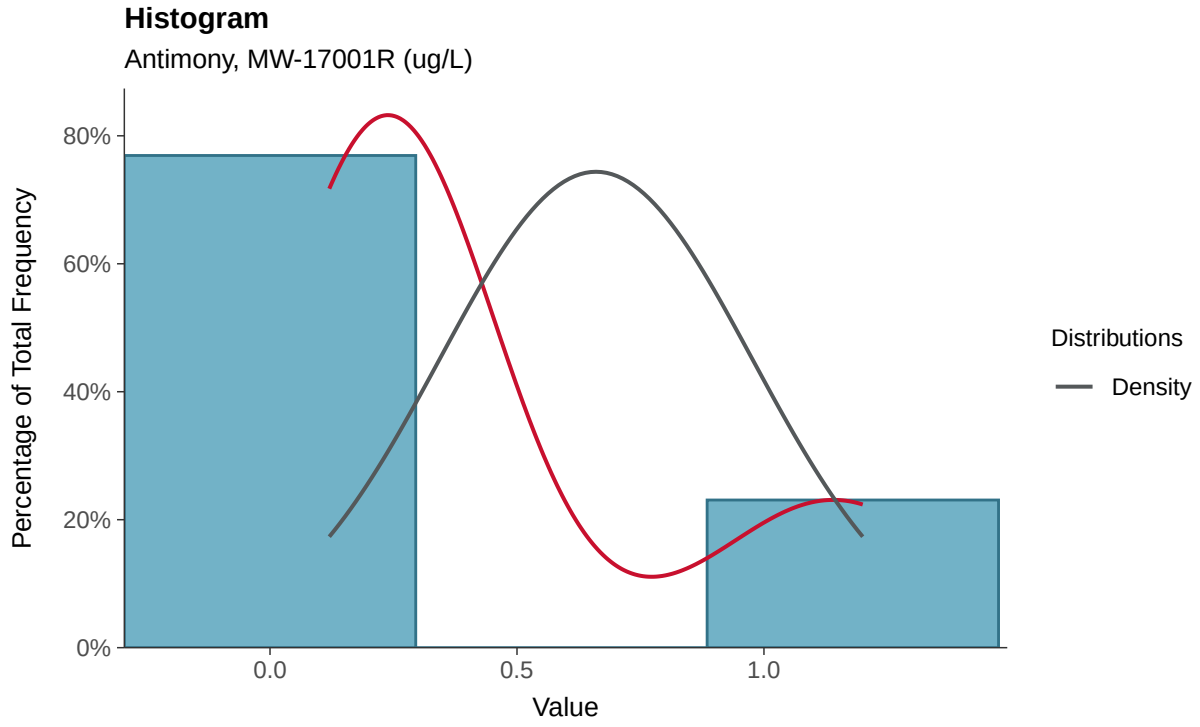
Thallium, MW-15023 (ug/L)



## Appendix IV: Antimony, MW-17001R

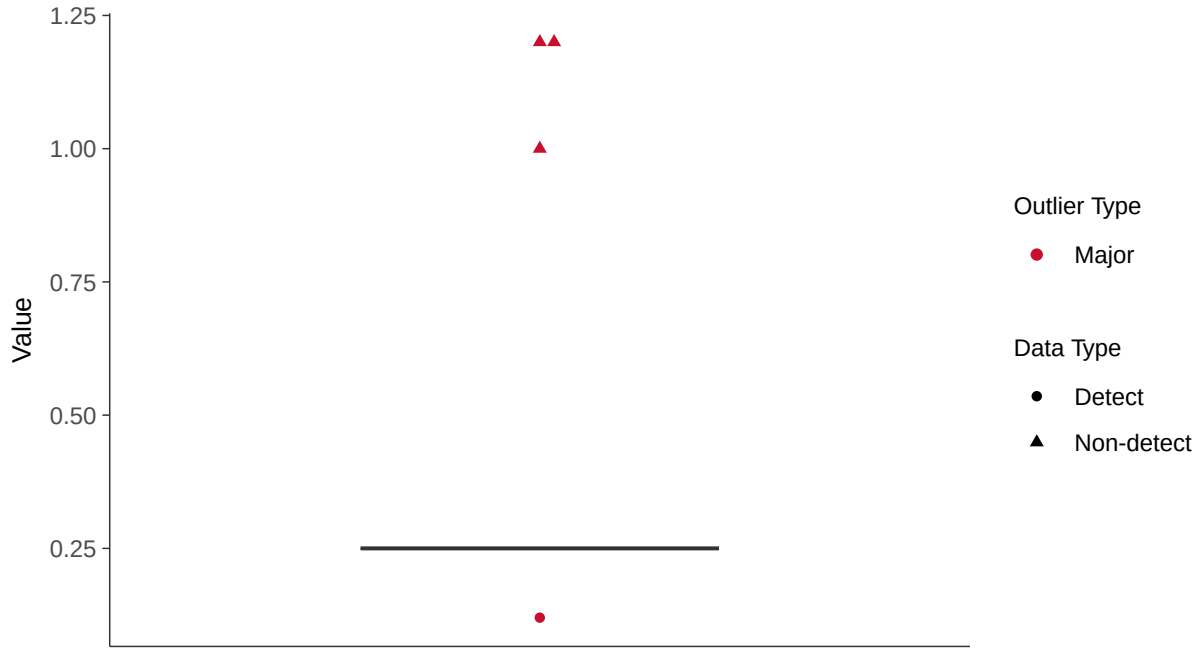
ID: 14_2_101



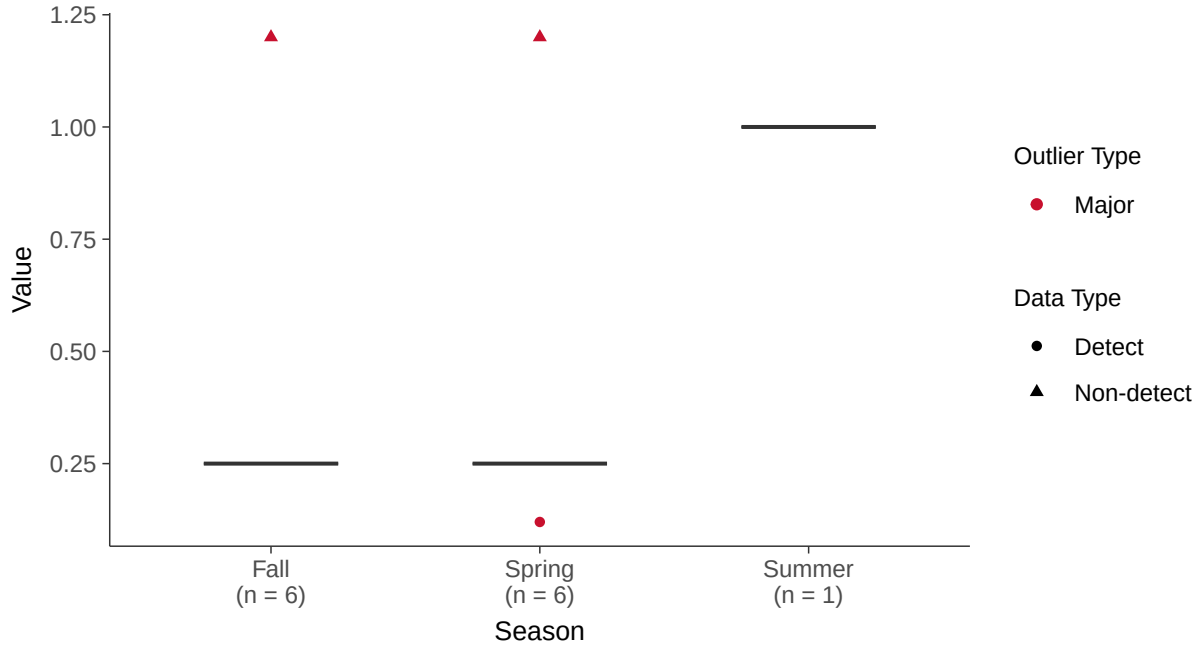
## Boxplot

Antimony, MW-17001R (ug/L)



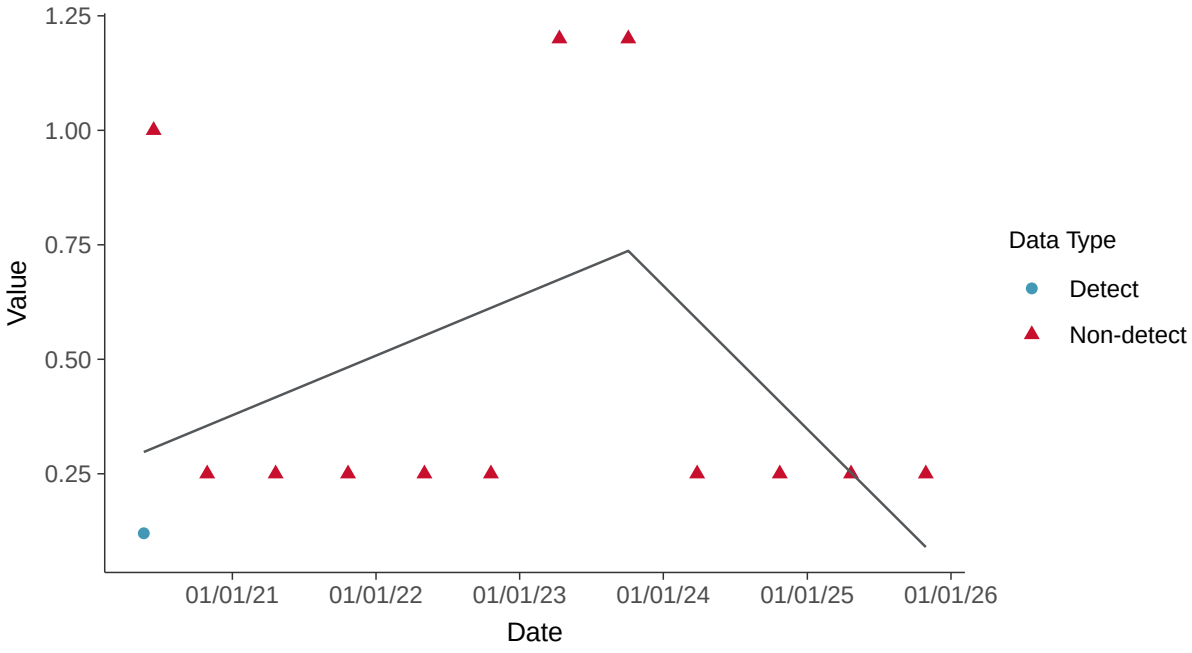

## Boxplot by Season

Antimony, MW-17001R (ug/L)



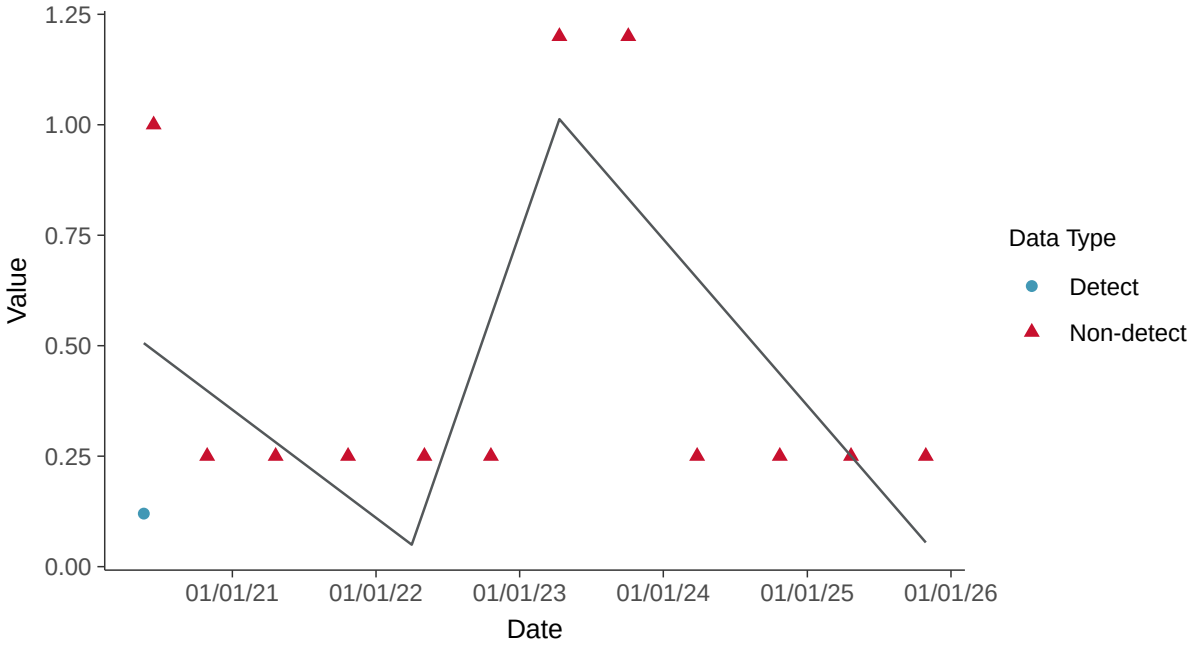
**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17001R (ug/L)



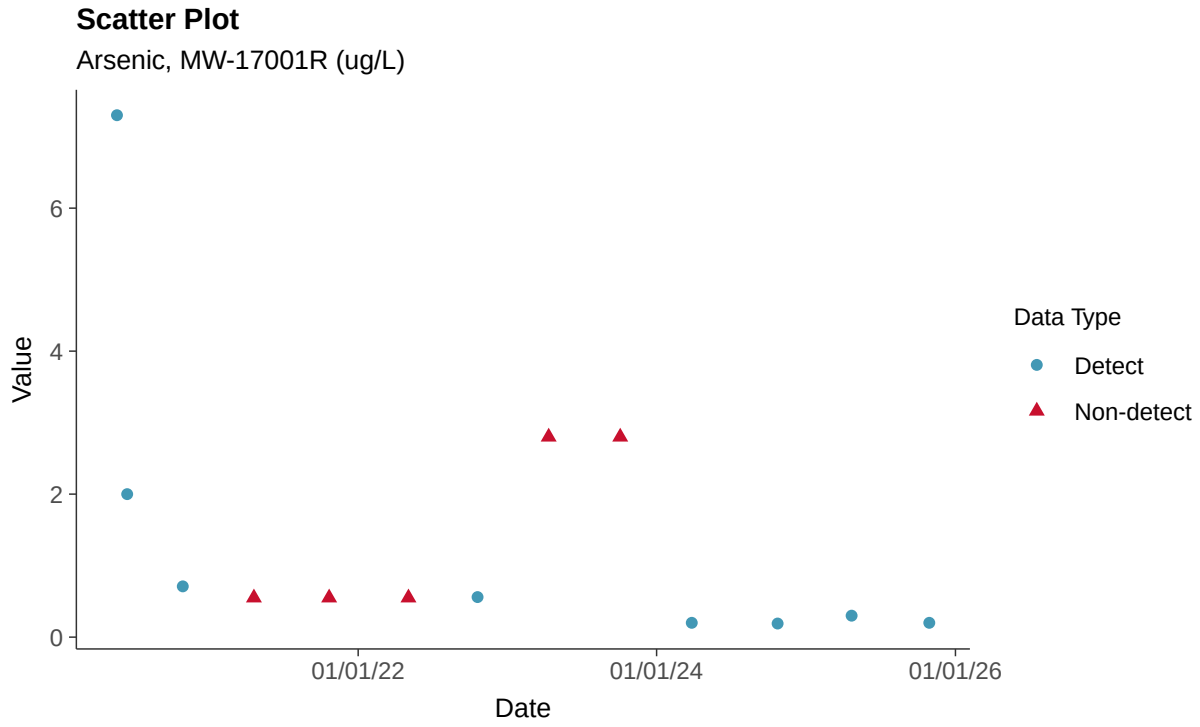

**Trend Regression: Piecewise Linear-Linear-Linear**

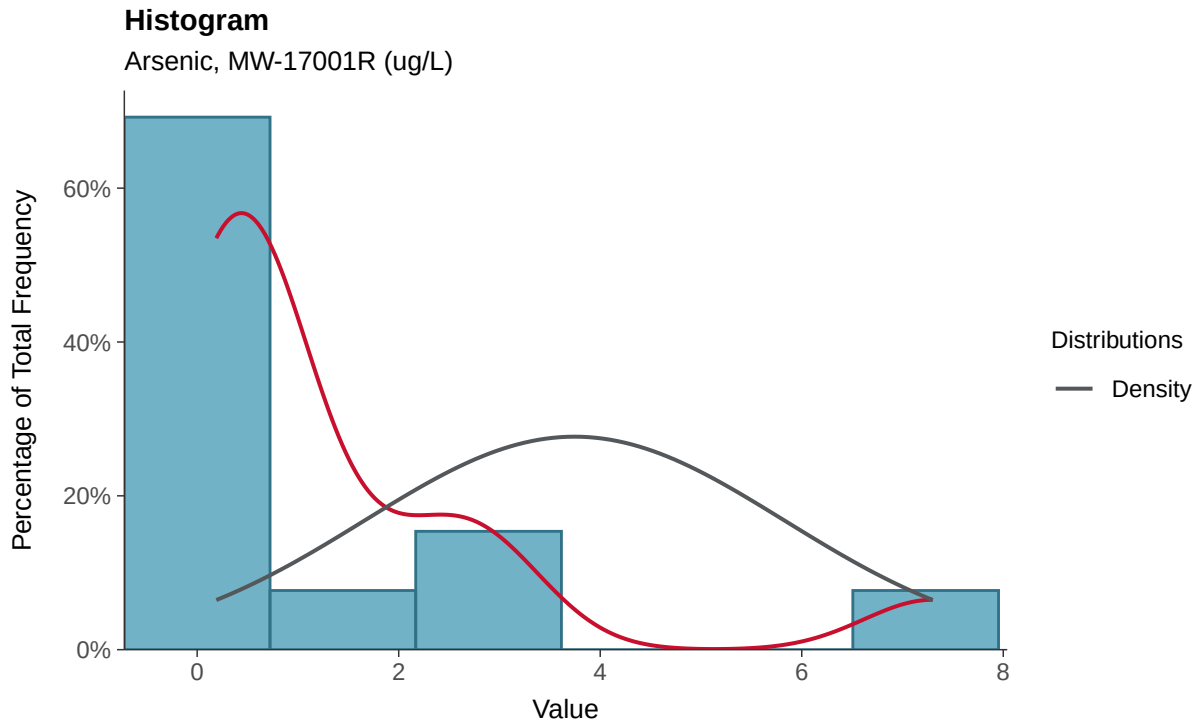
Antimony, MW-17001R (ug/L)



## Appendix IV: Arsenic, MW-17001R

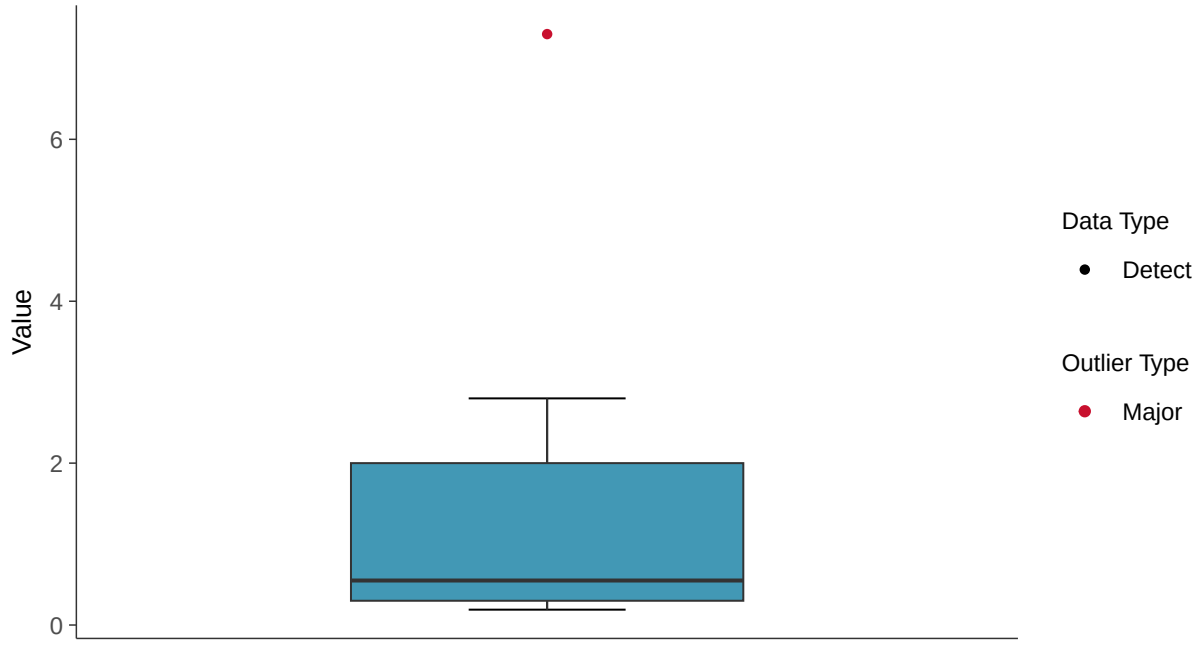
ID: 14_2_102



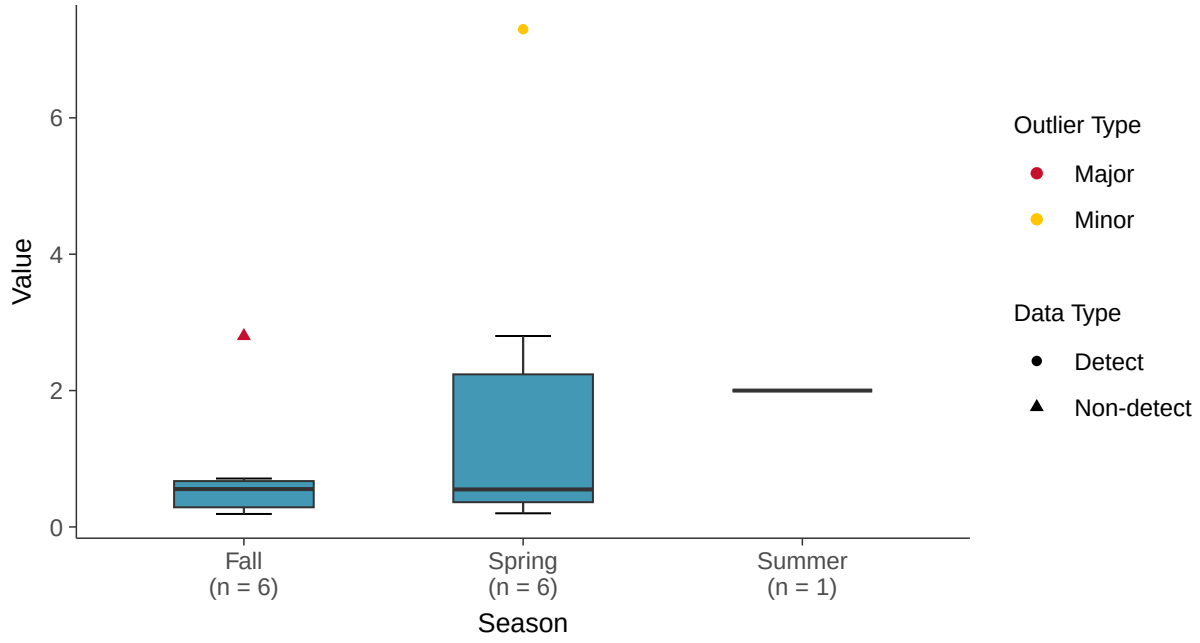
## Boxplot

Arsenic, MW-17001R (ug/L)



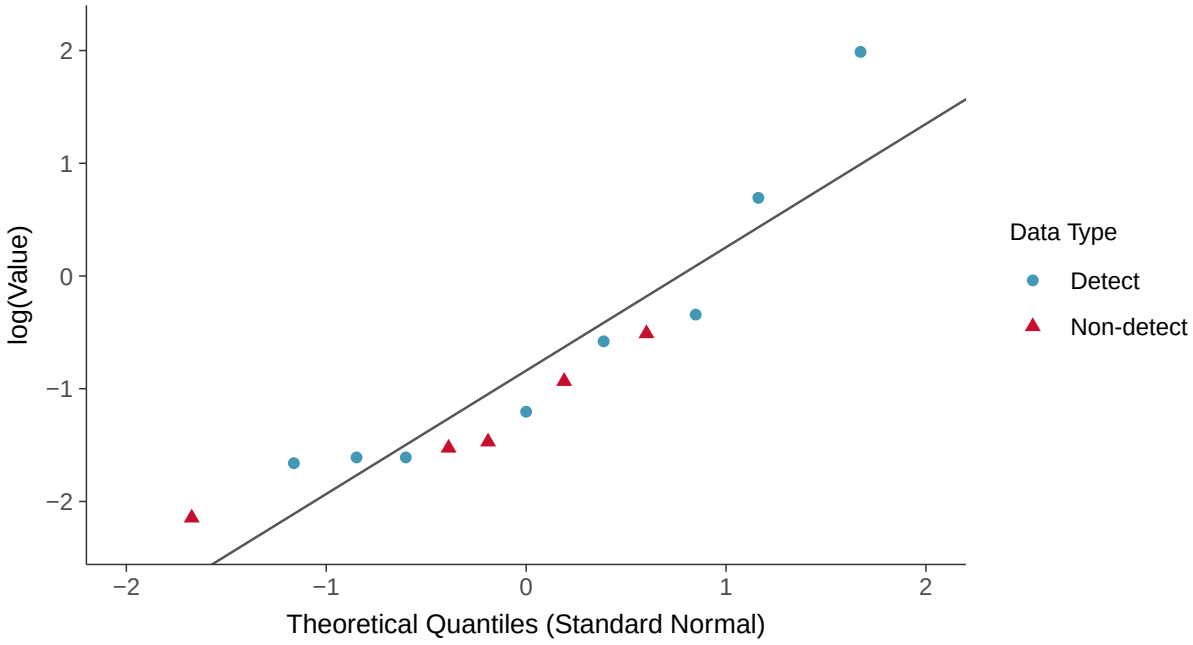

## Boxplot by Season

Arsenic, MW-17001R (ug/L)



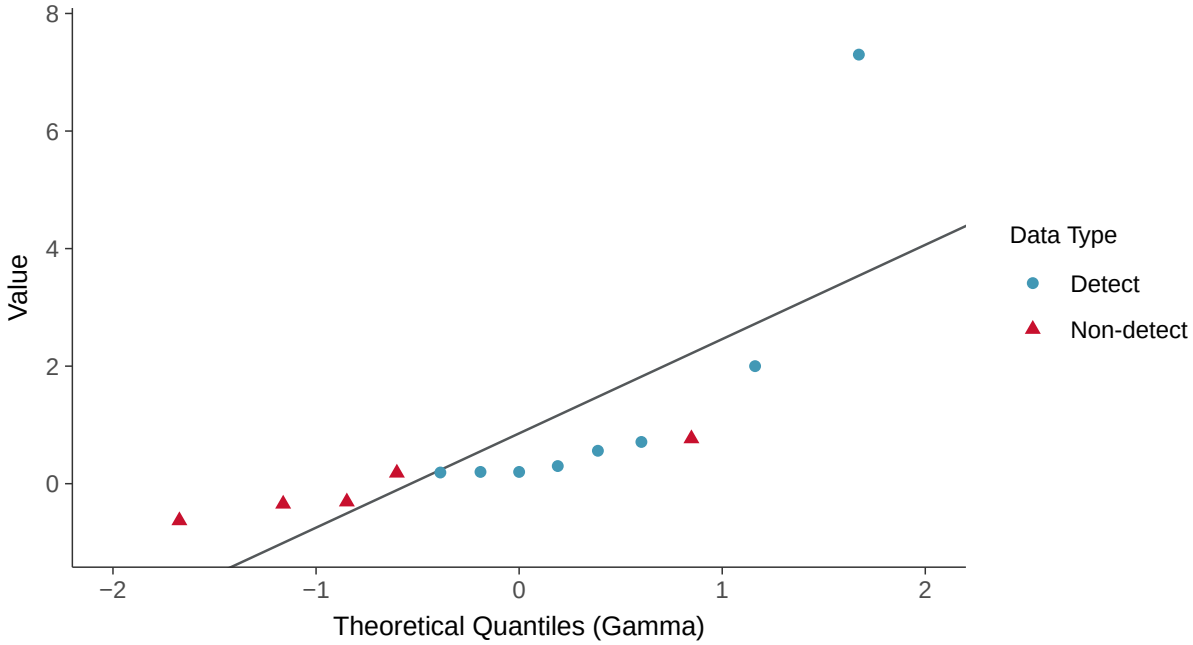
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17001R (ug/L)



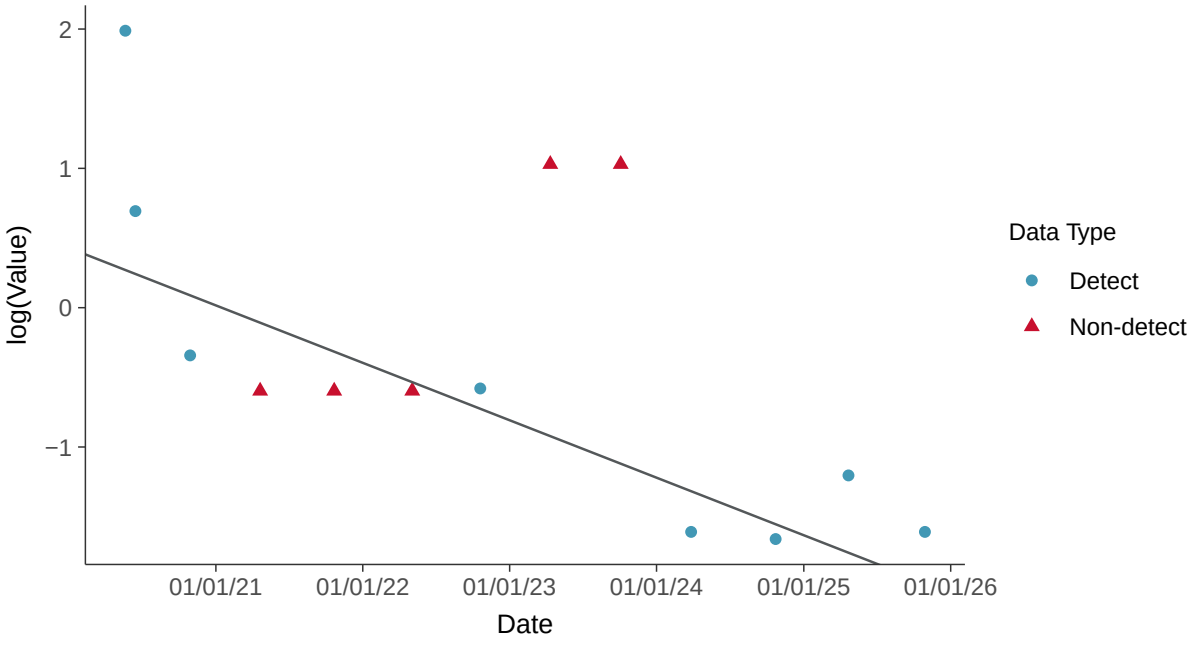

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17001R (ug/L)



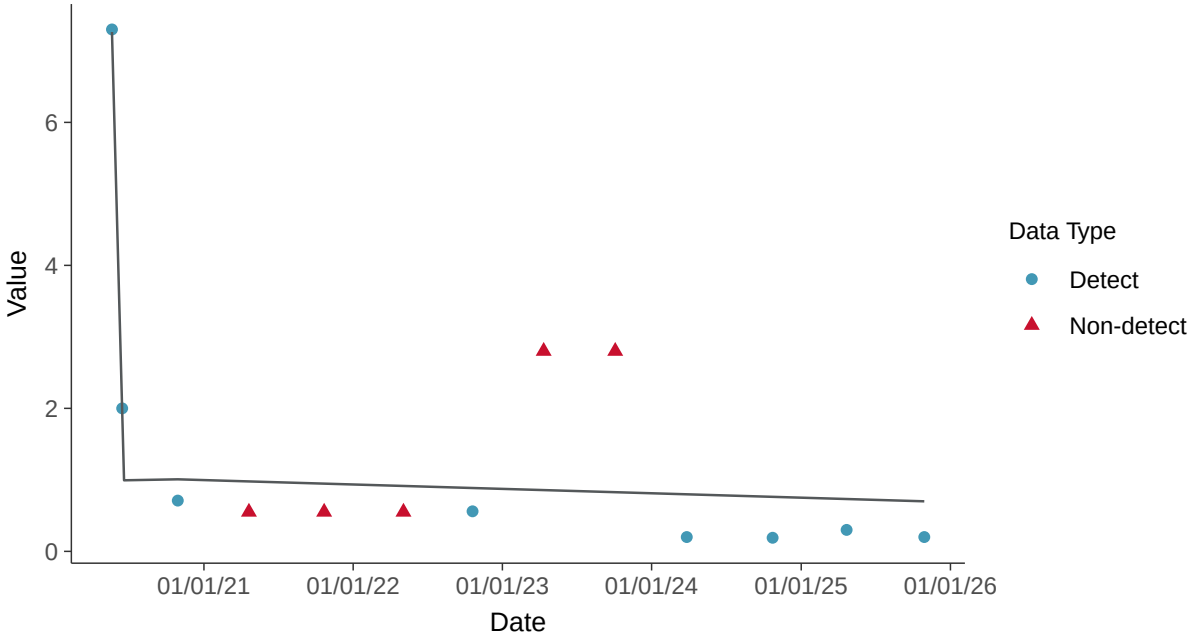
**Trend Regression: Lognormal MLE**

Arsenic, MW-17001R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17001R (ug/L)

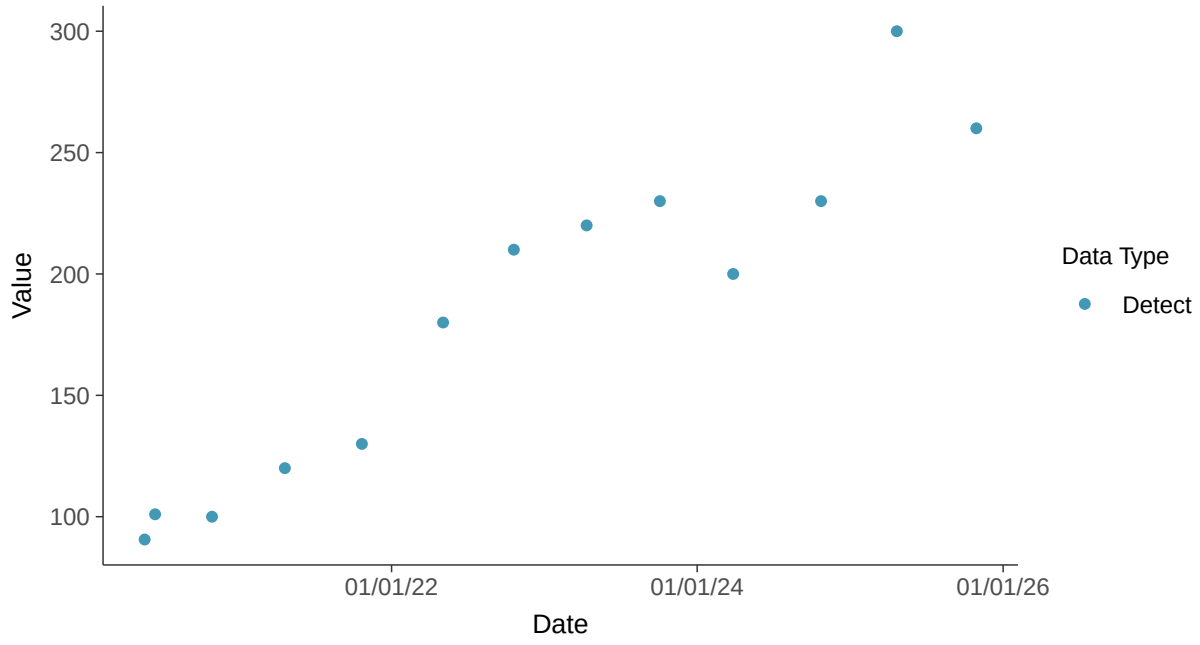


## Appendix IV: Barium, MW-17001R

ID: 14_2_103

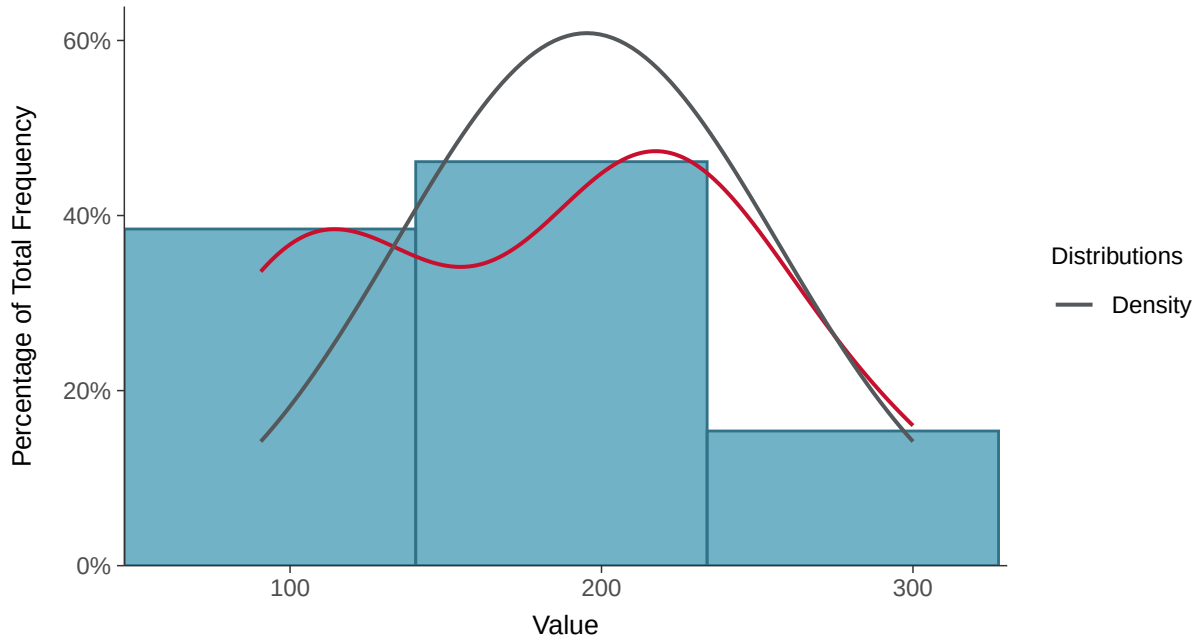
**Scatter Plot**

Barium, MW-17001R (ug/L)



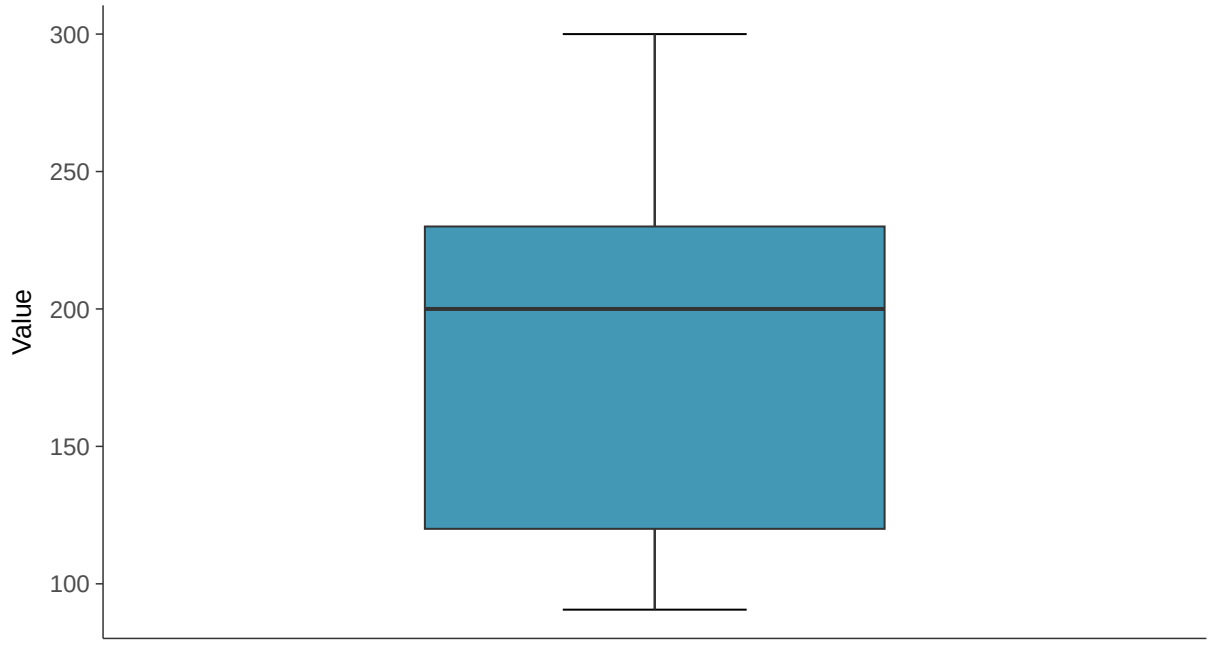

**Histogram**

Barium, MW-17001R (ug/L)



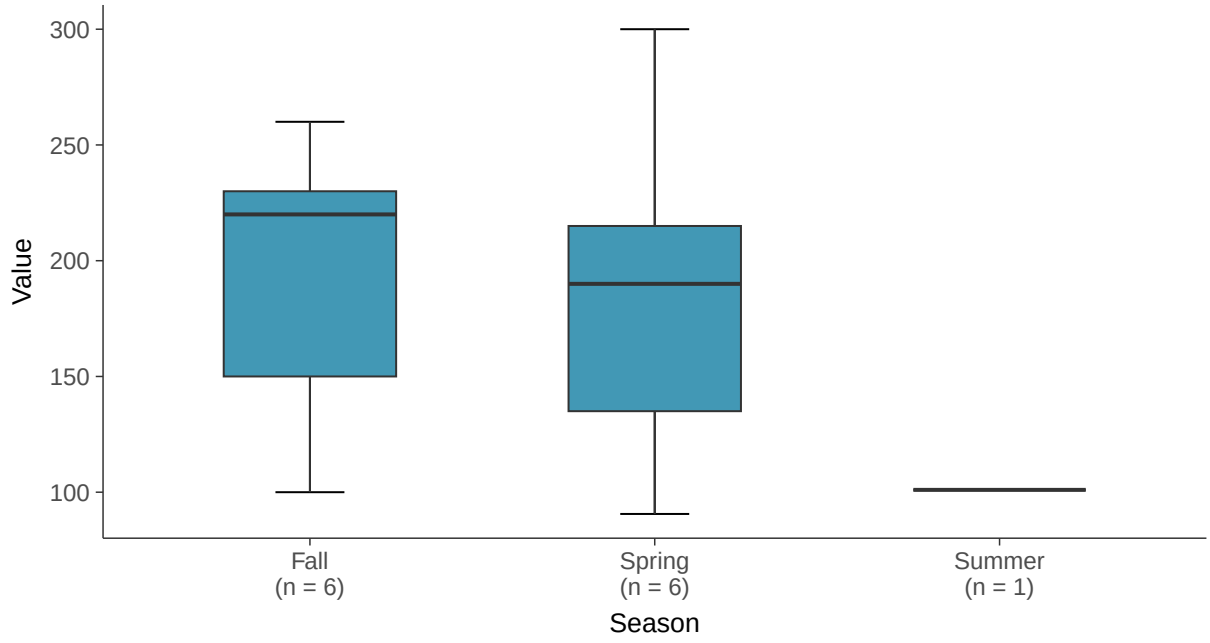
**Boxplot**

Barium, MW-17001R (ug/L)



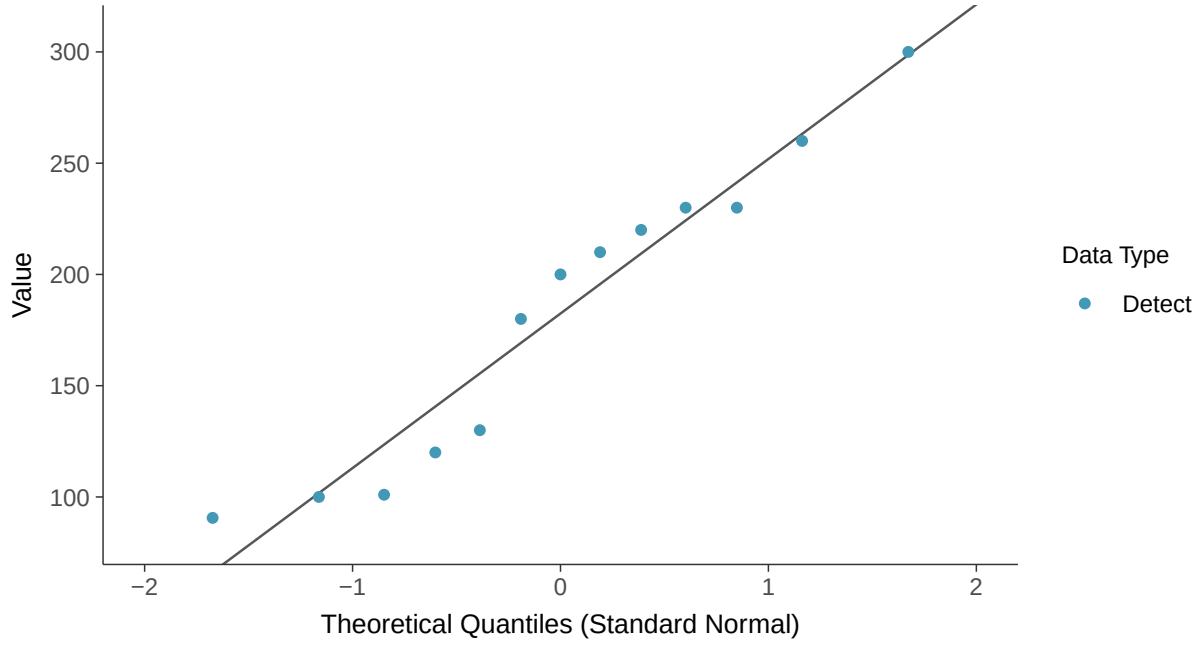

**Boxplot by Season**

Barium, MW-17001R (ug/L)



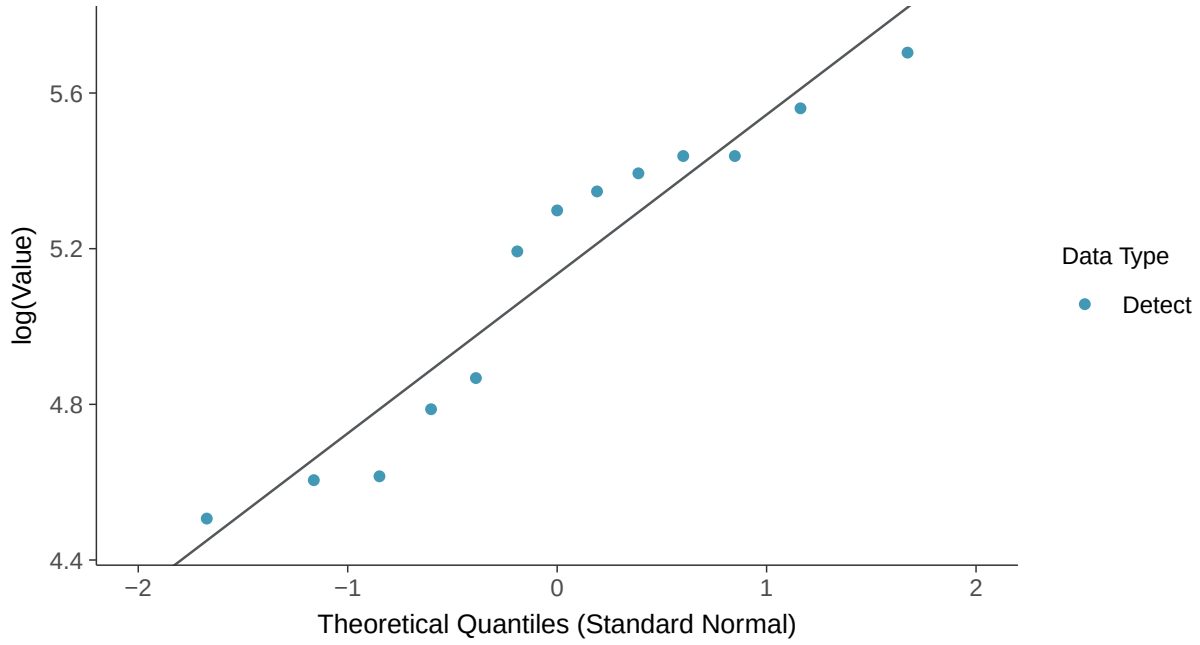
**Normal Q-Q plot**

Barium, MW-17001R (ug/L)



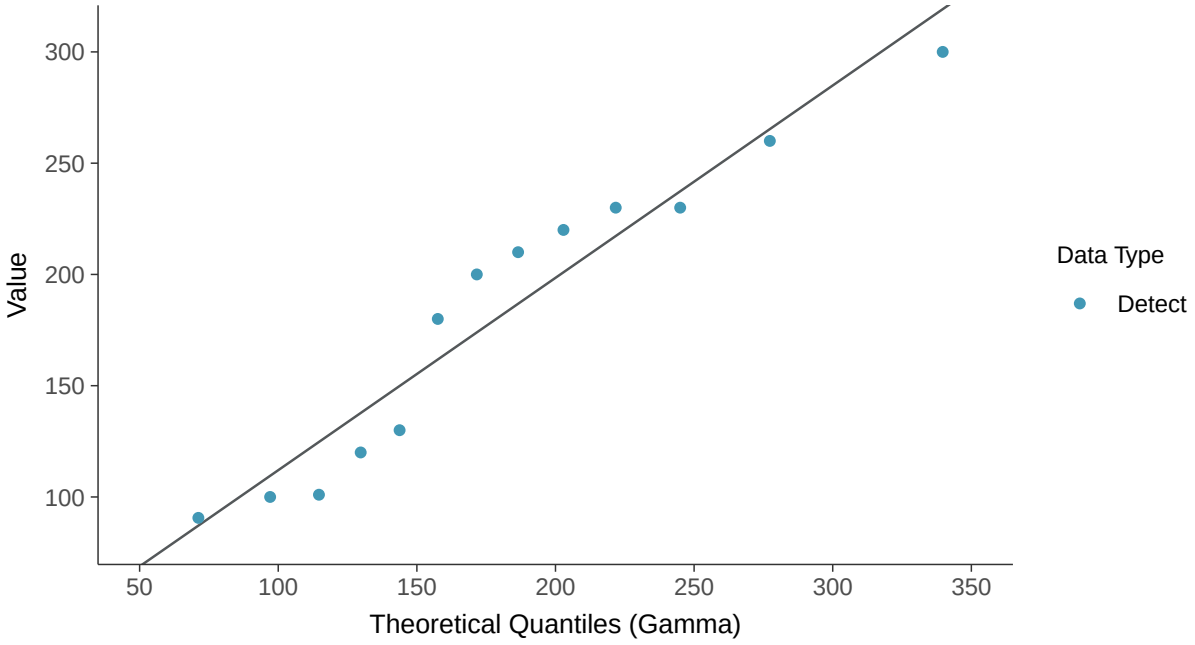

**Lognormal Q-Q plot**

Barium, MW-17001R (ug/L)



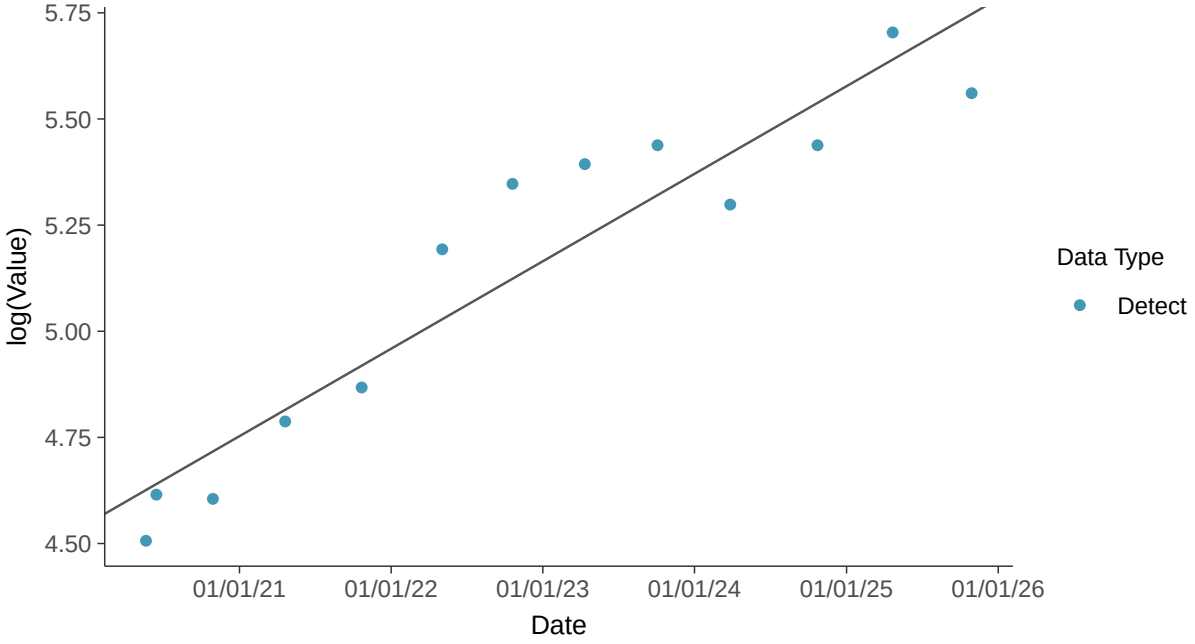
**Gamma Q-Q plot**

Barium, MW-17001R (ug/L)



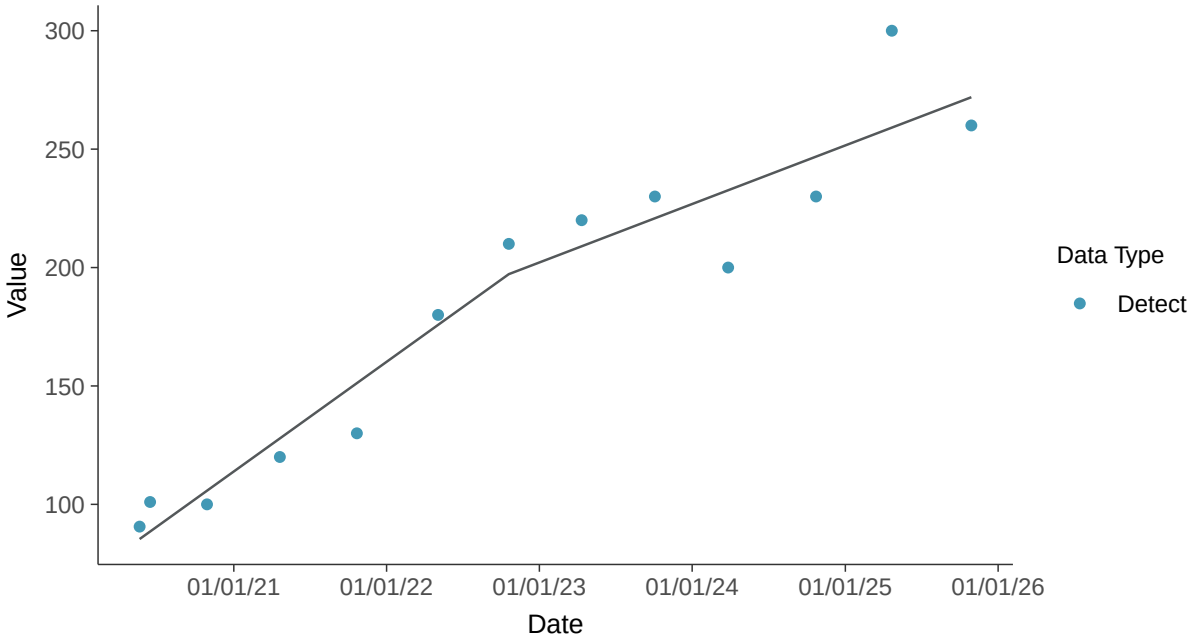

**Trend Regression: Lognormal MLE**

Barium, MW-17001R (ug/L)



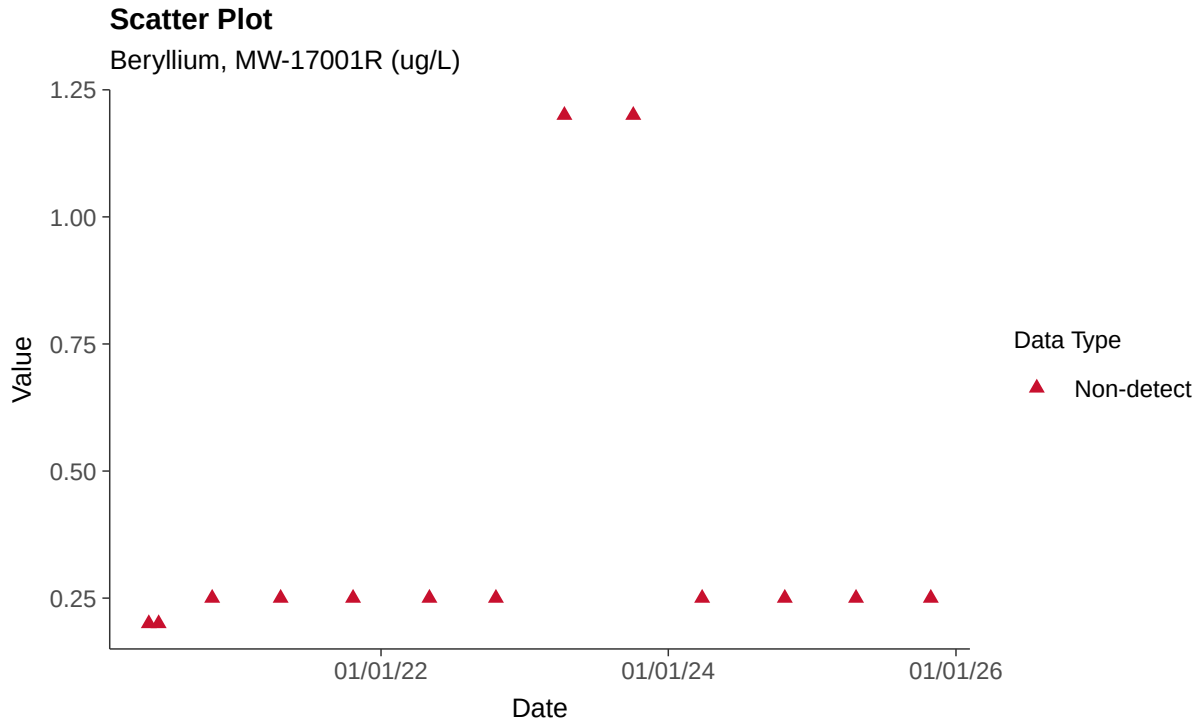
**Trend Regression: Piecewise Linear-Linear**

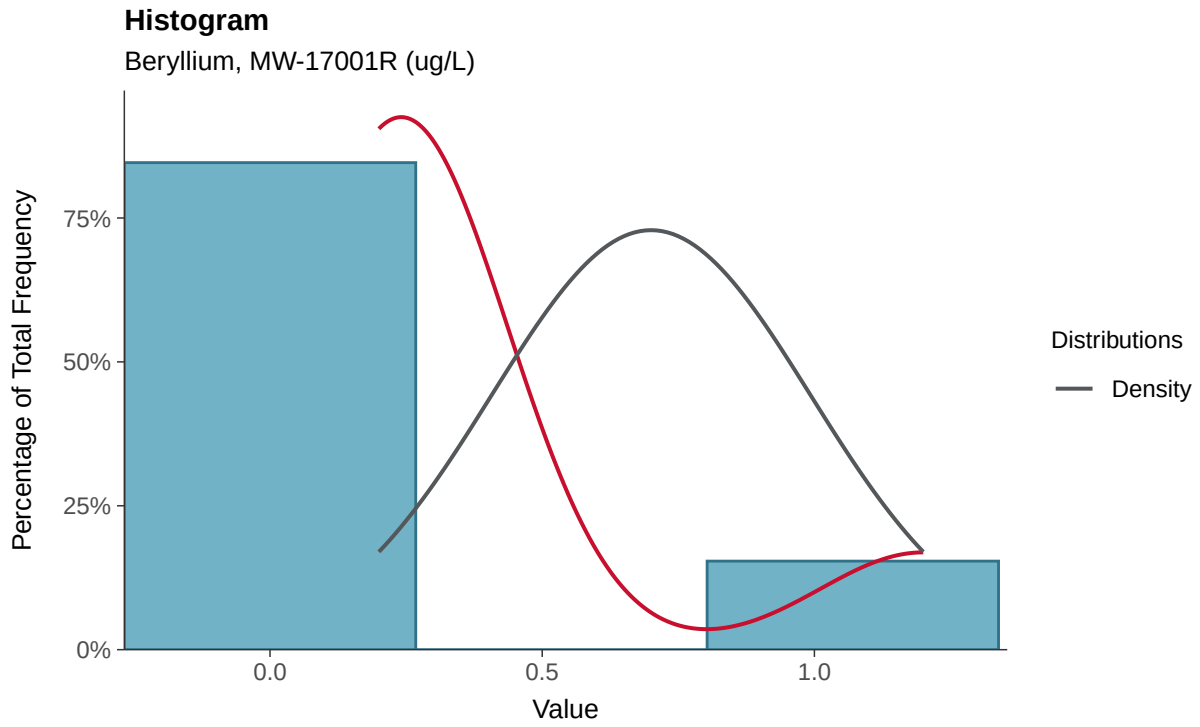
Barium, MW-17001R (ug/L)



## Appendix IV: Beryllium, MW-17001R

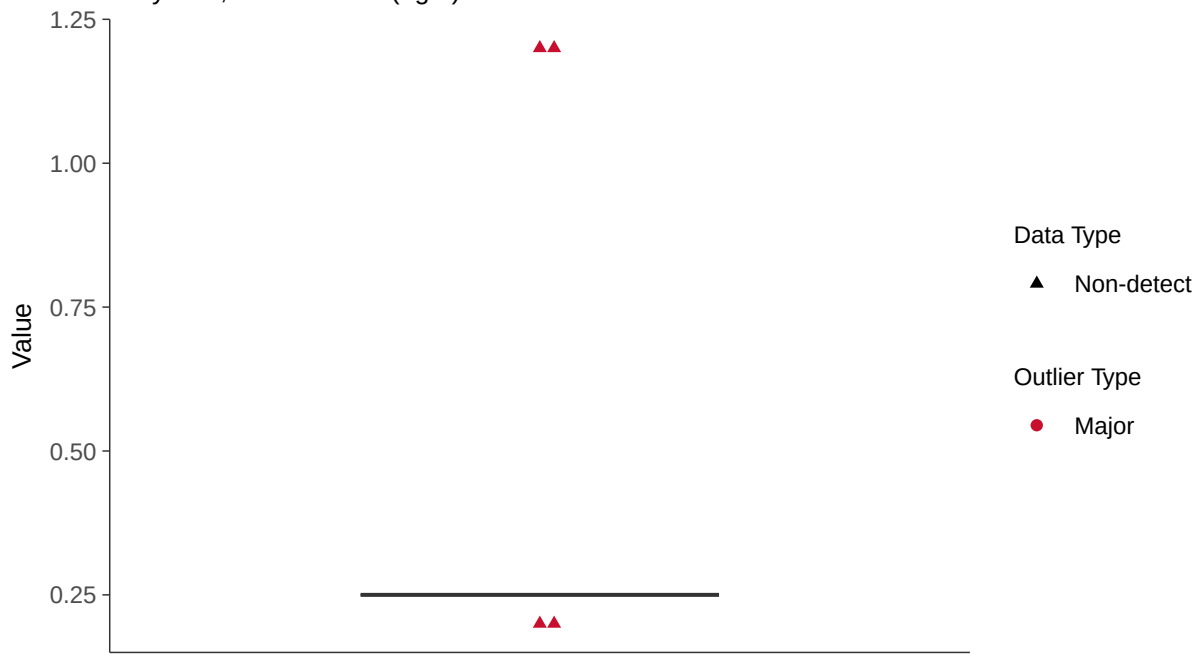
ID: 14_2_104



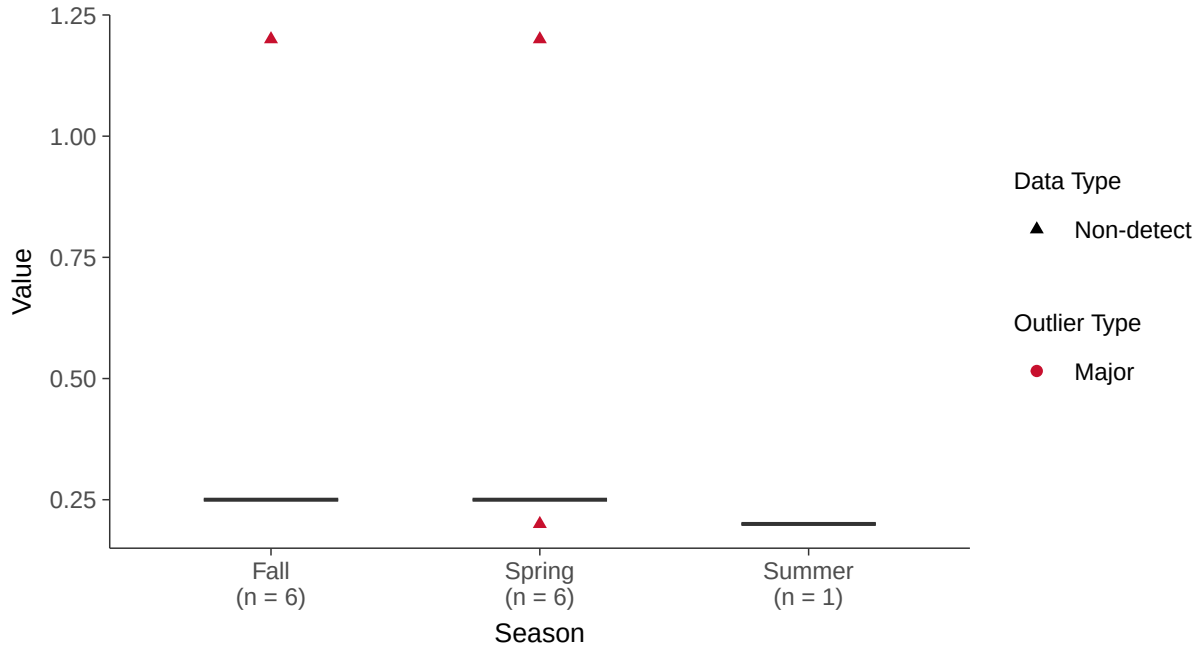
## Boxplot

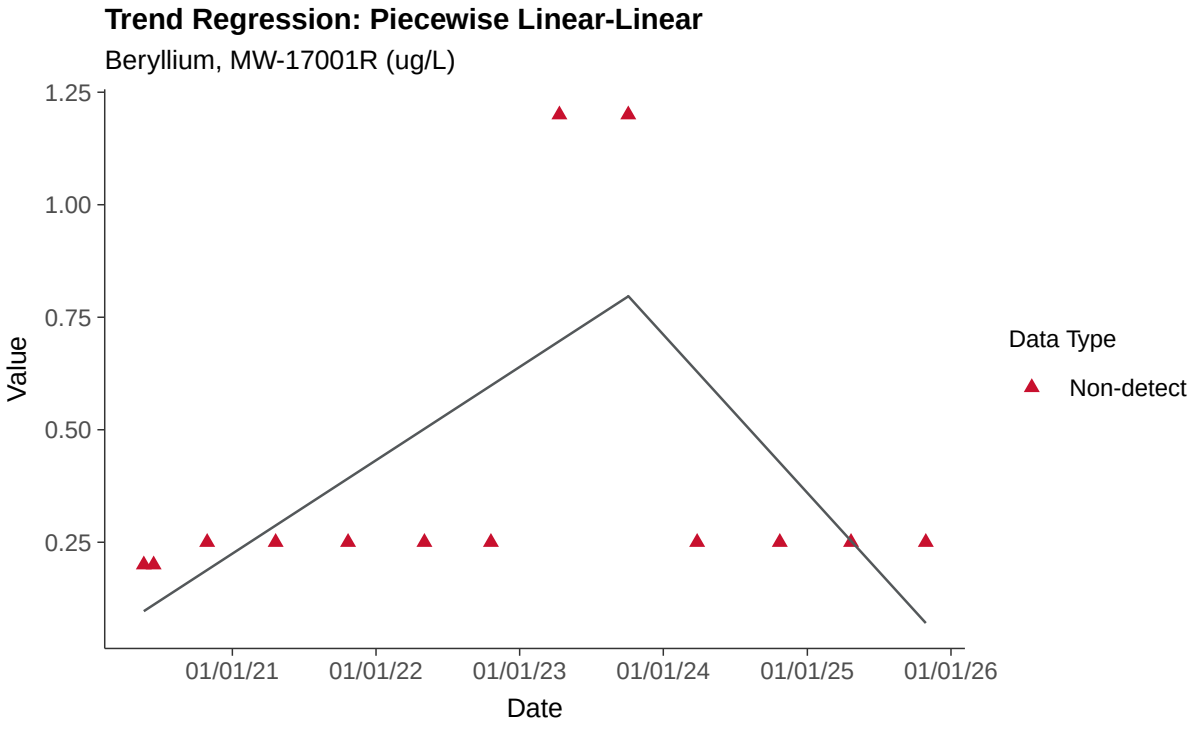
Beryllium, MW-17001R (ug/L)




## Boxplot by Season

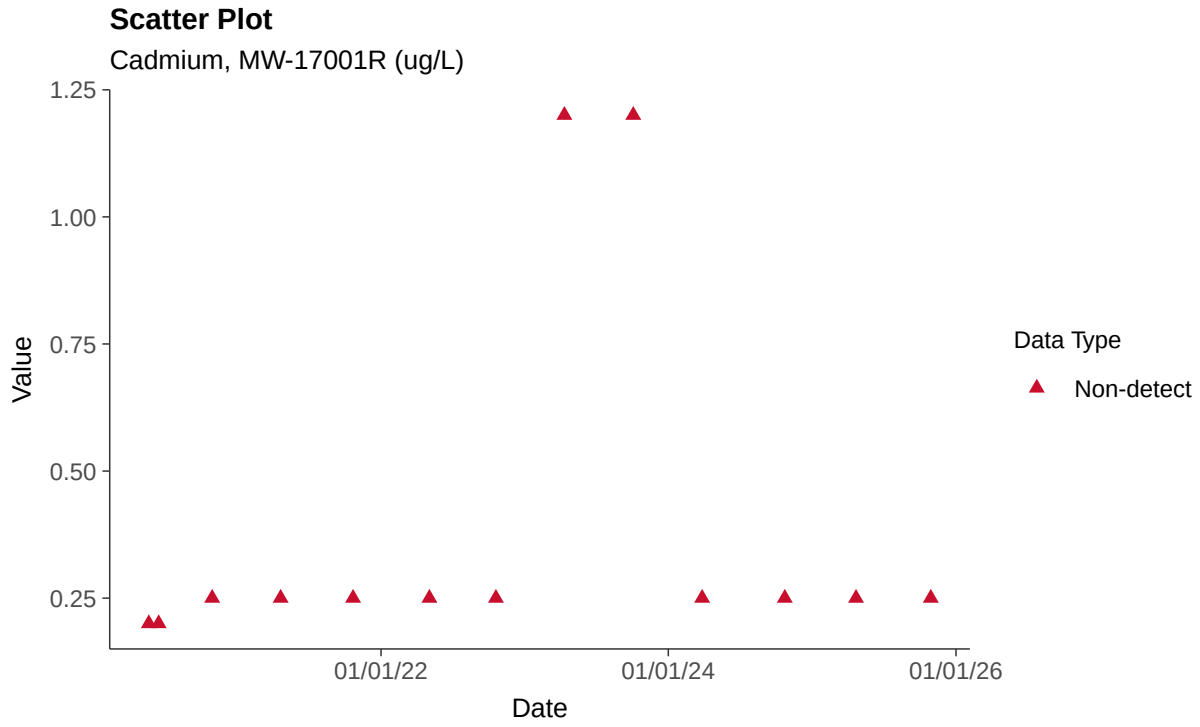
Beryllium, MW-17001R (ug/L)

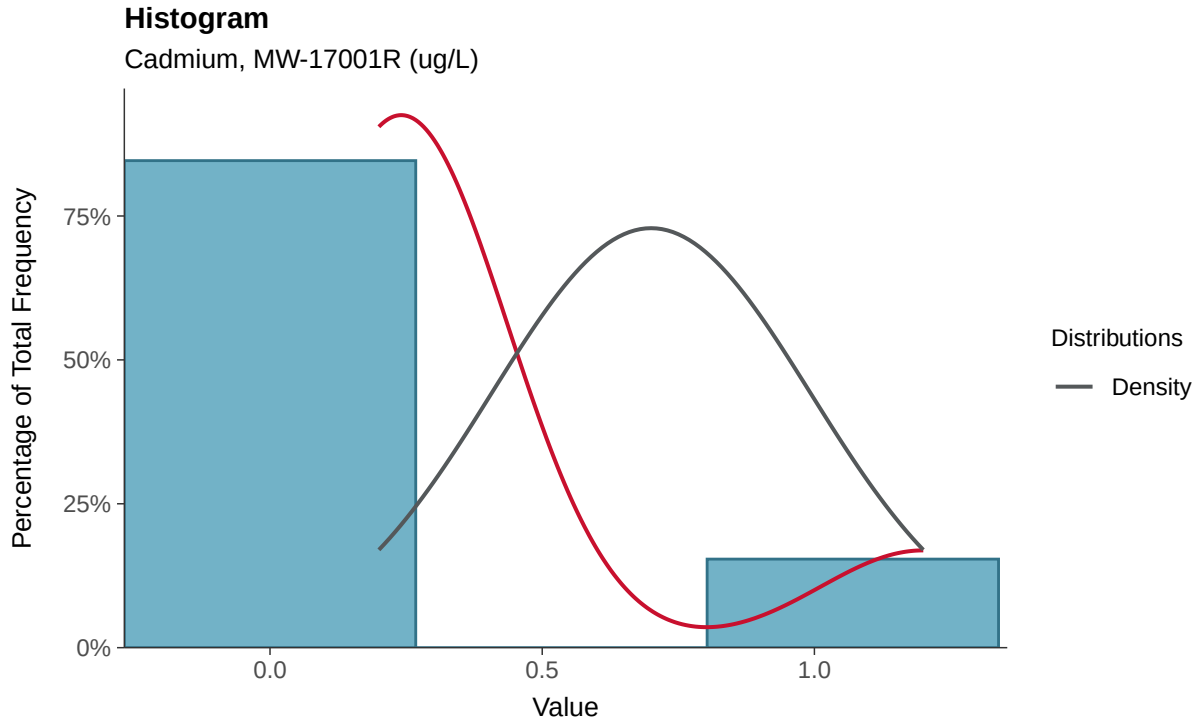



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-17001R (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Cadmium, MW-17001R

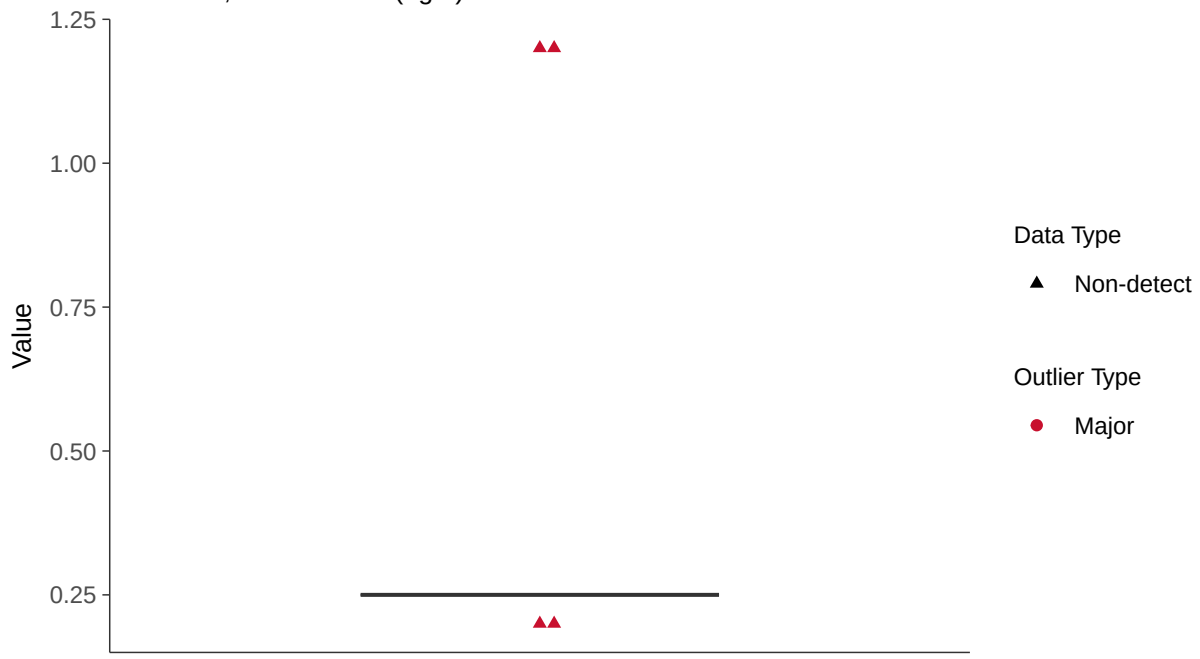
ID: 14_2_106



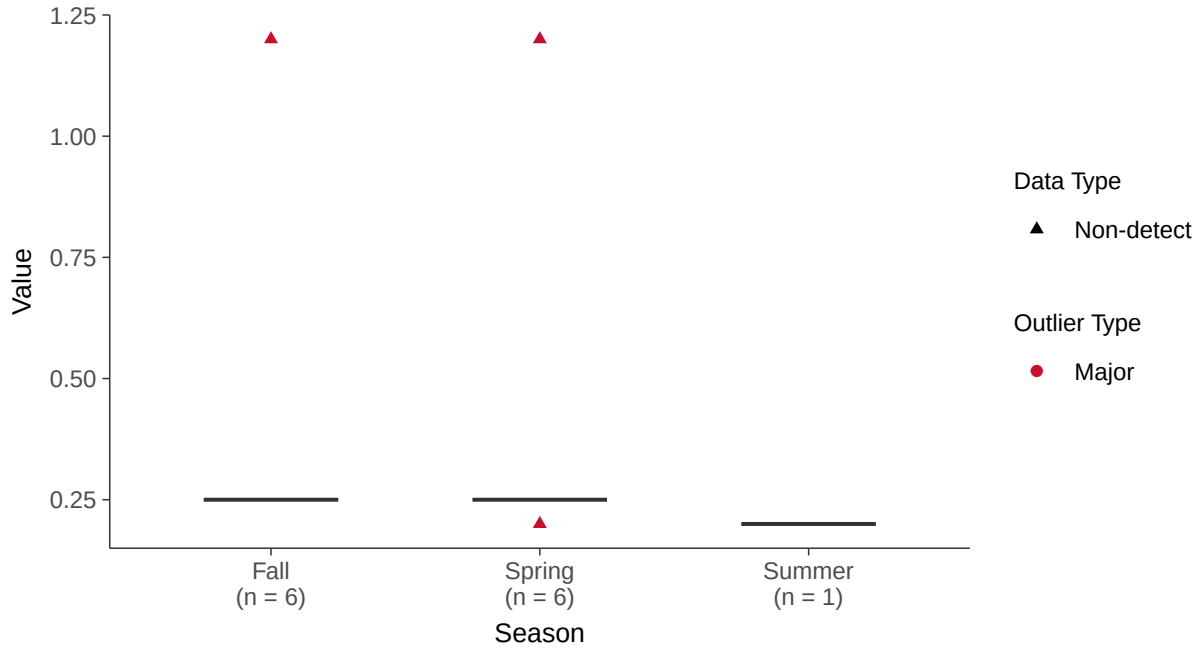
## Boxplot

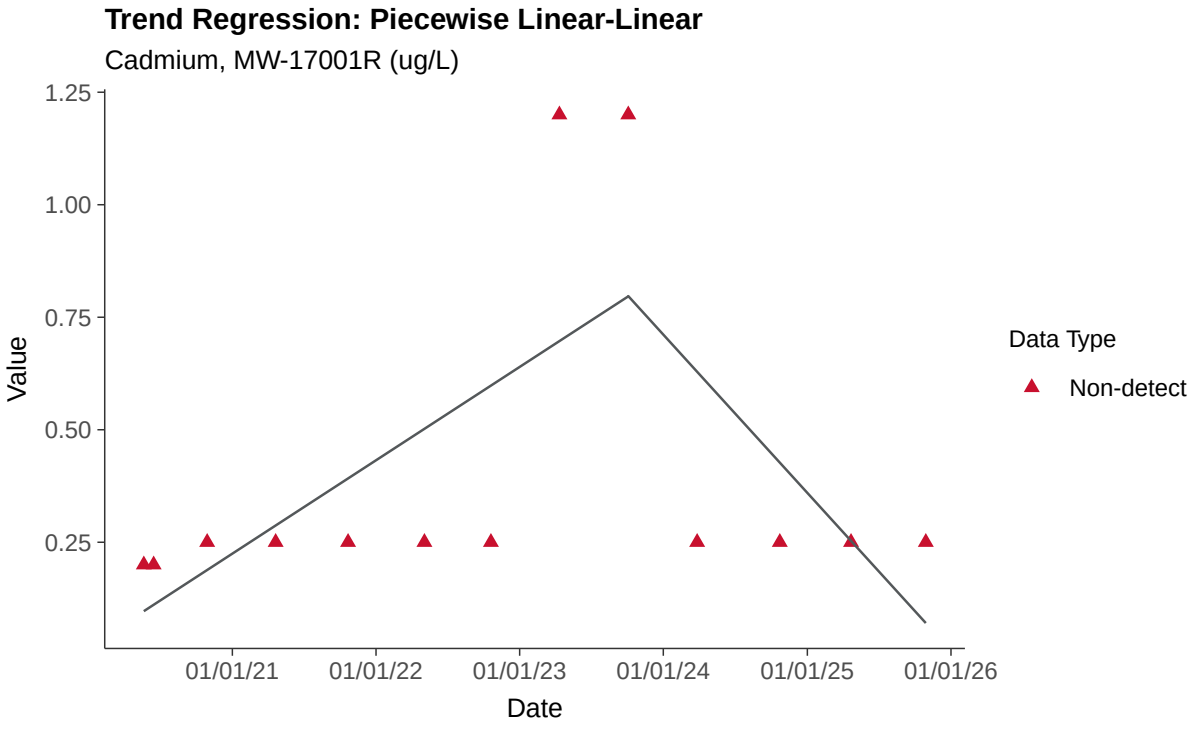
Cadmium, MW-17001R (ug/L)




## Boxplot by Season

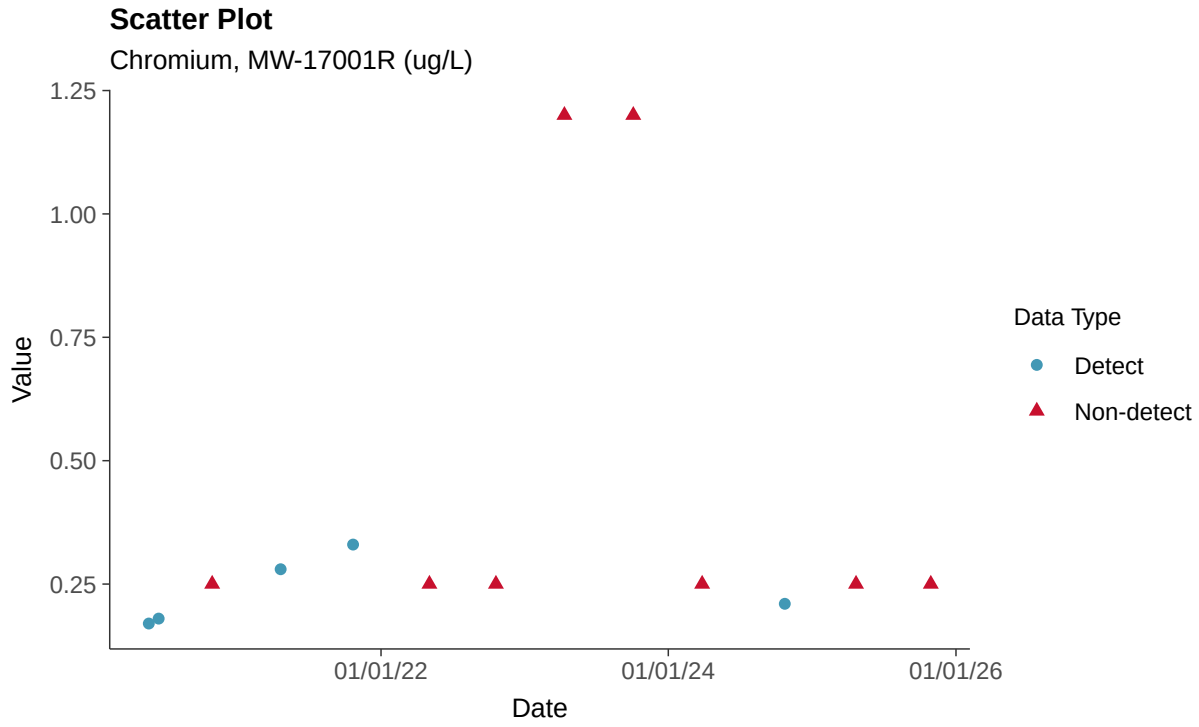
Cadmium, MW-17001R (ug/L)

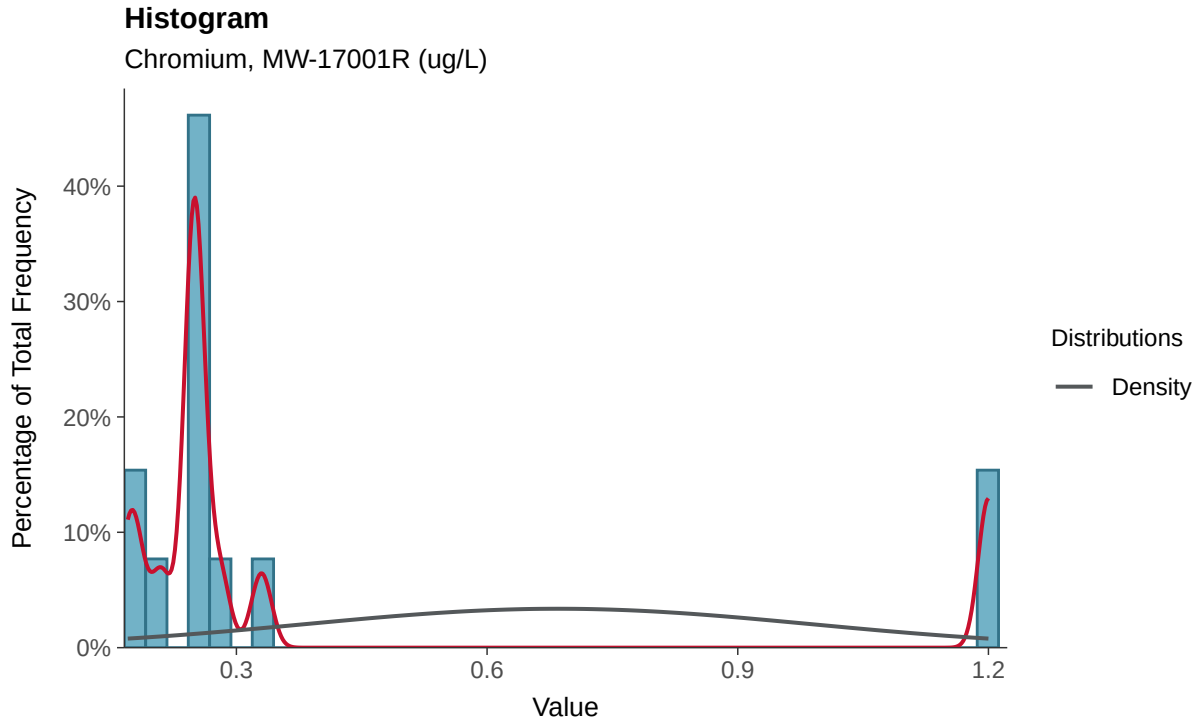



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-17001R (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-17001R

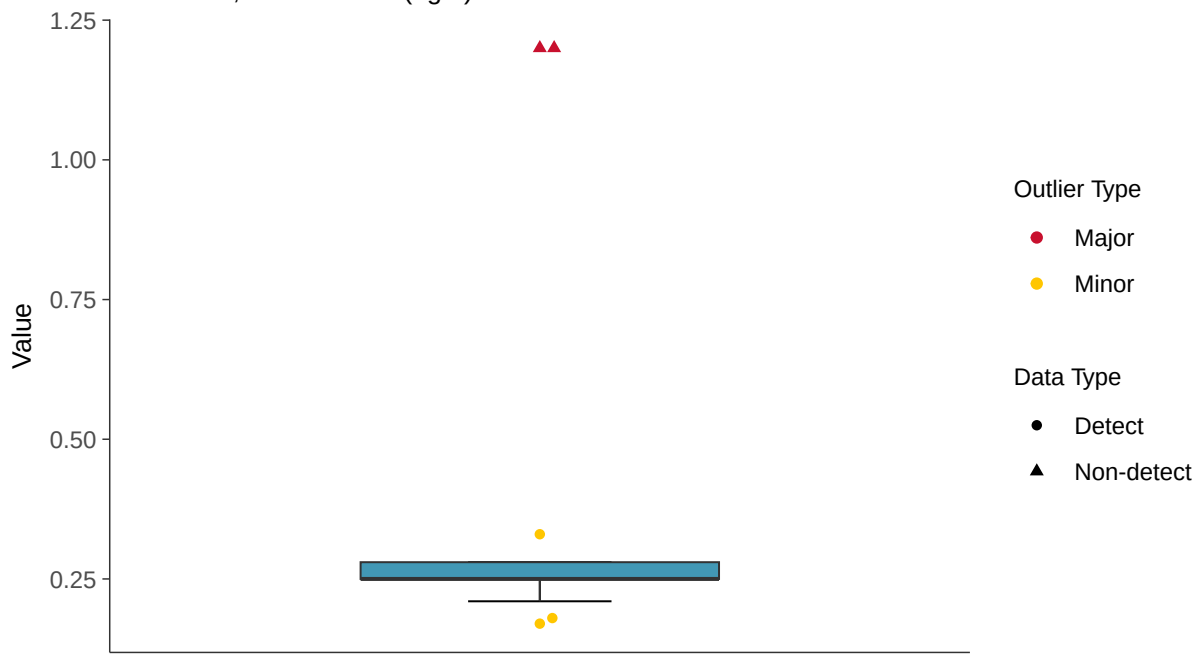
ID: 14_2_109



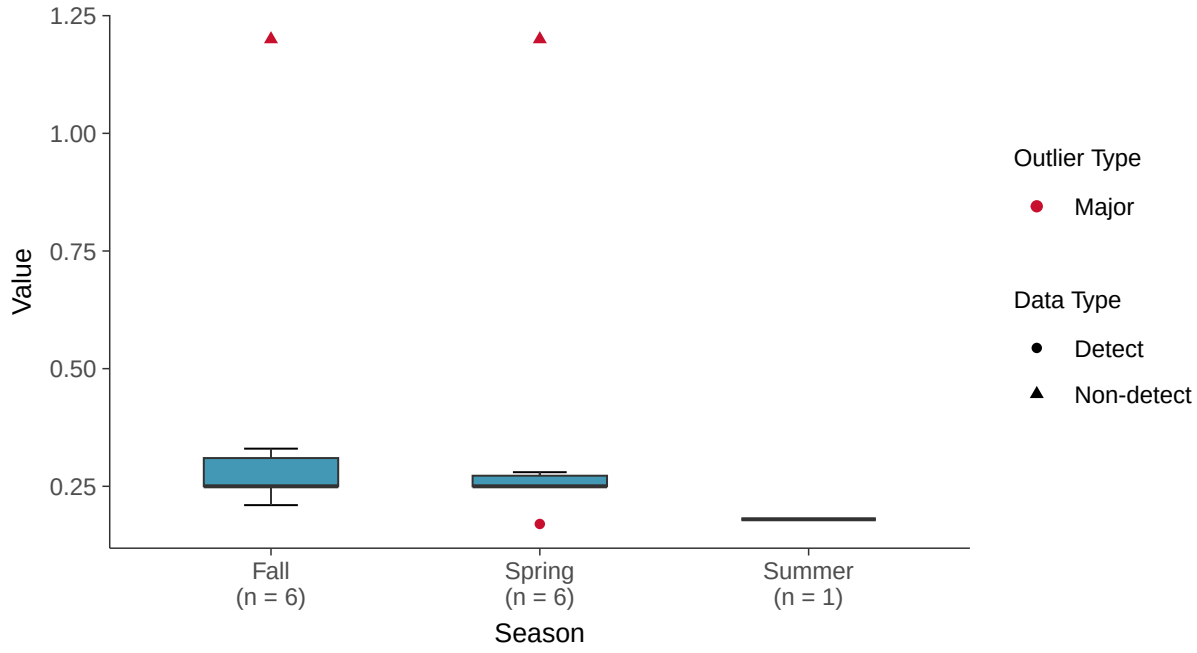
## Boxplot

Chromium, MW-17001R (ug/L)



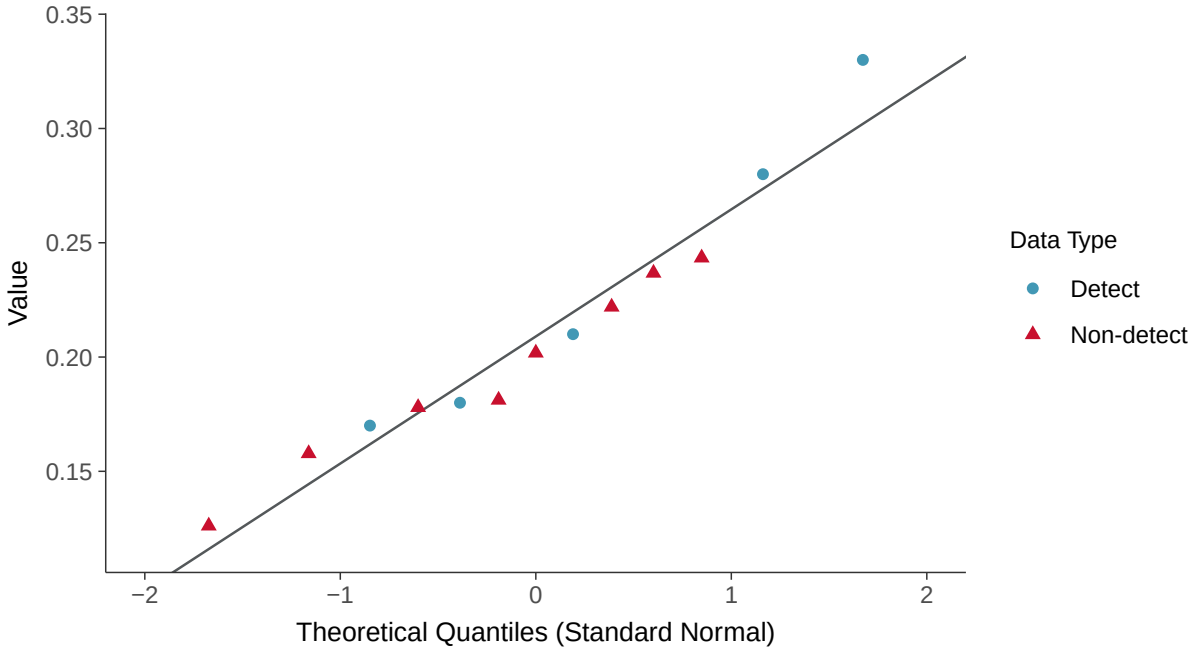

## Boxplot by Season

Chromium, MW-17001R (ug/L)



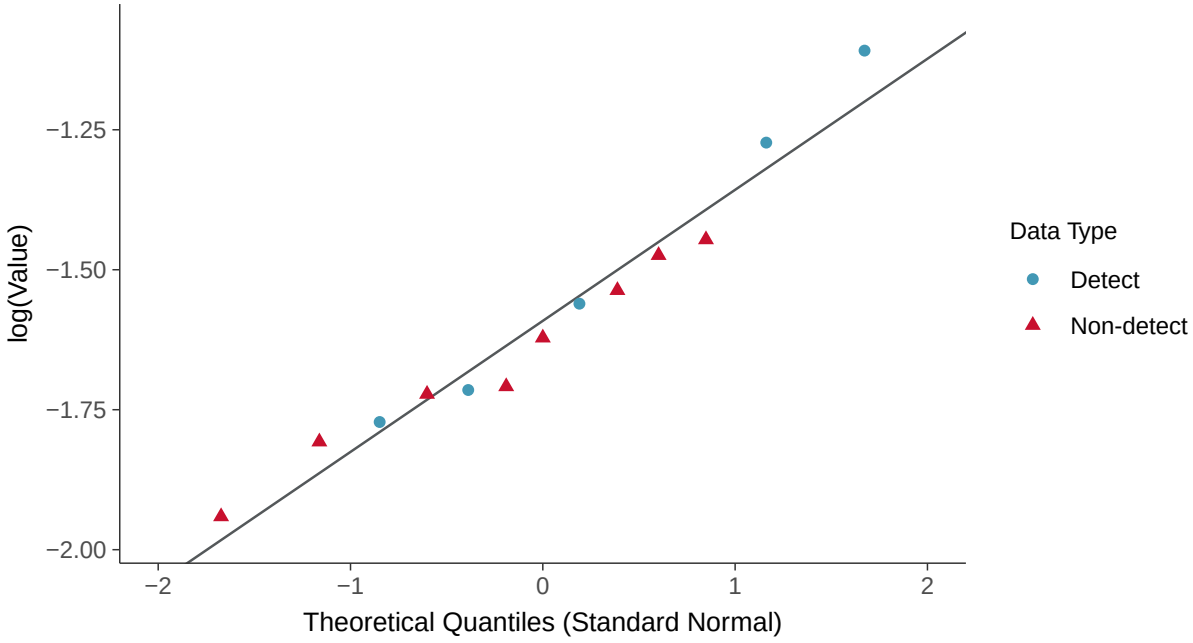
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17001R (ug/L)



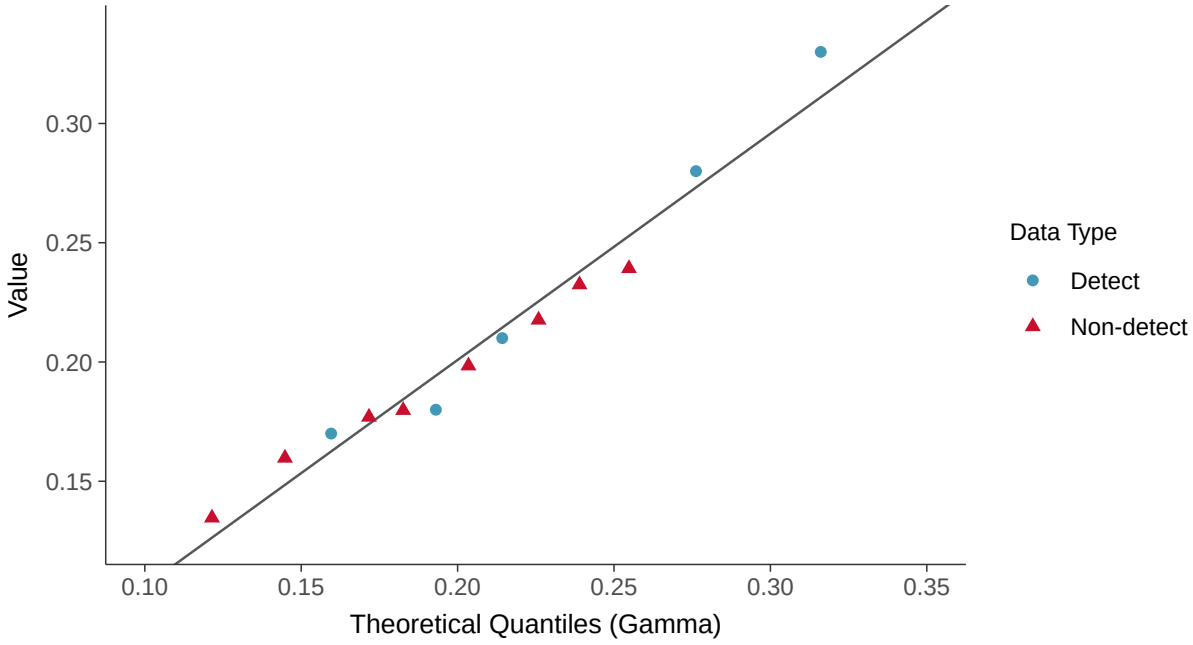

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17001R (ug/L)



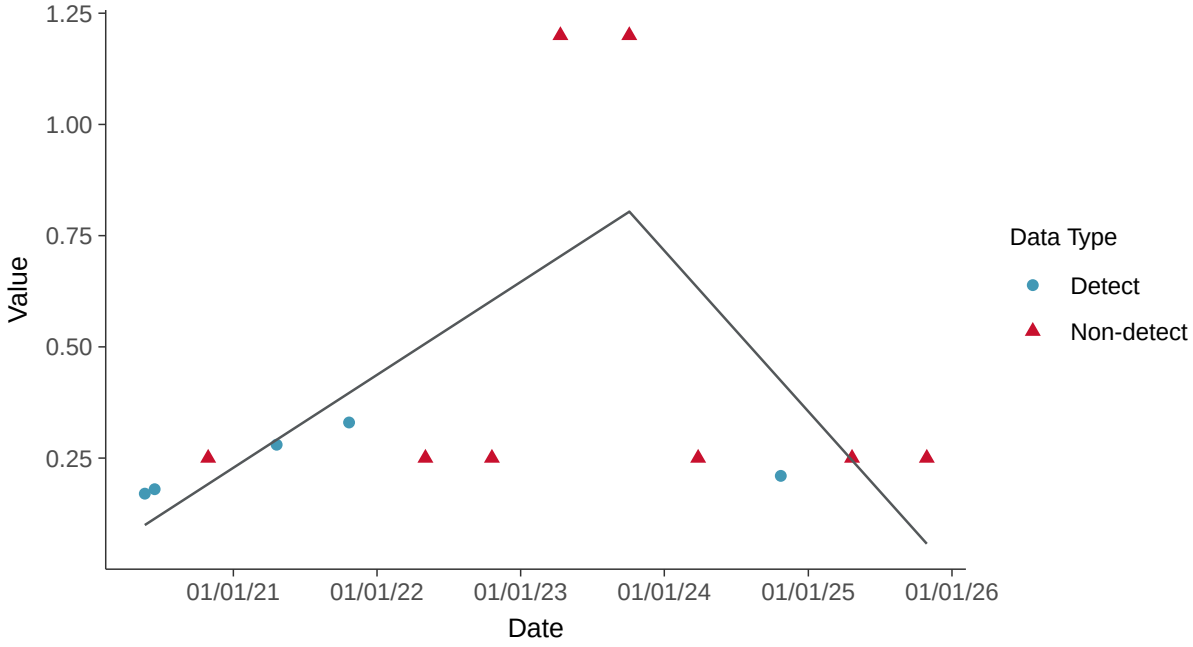
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17001R (ug/L)



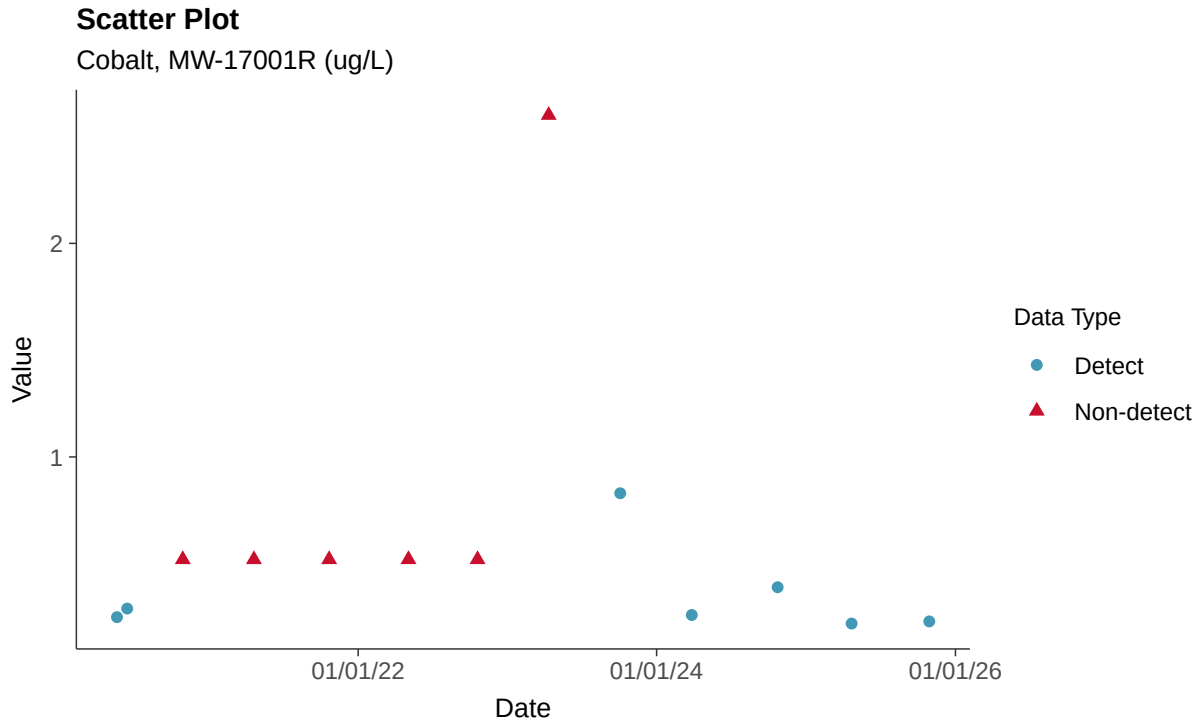

**Trend Regression: Piecewise Linear-Linear**

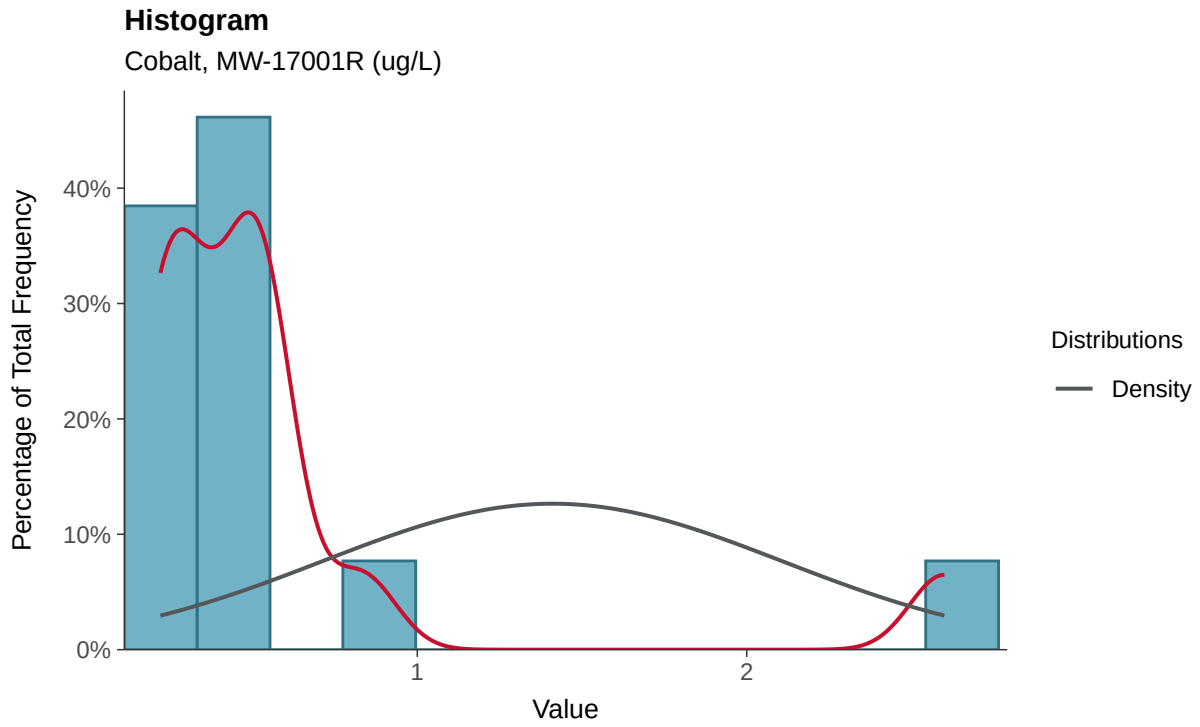
Chromium, MW-17001R (ug/L)



## Appendix IV: Cobalt, MW-17001R

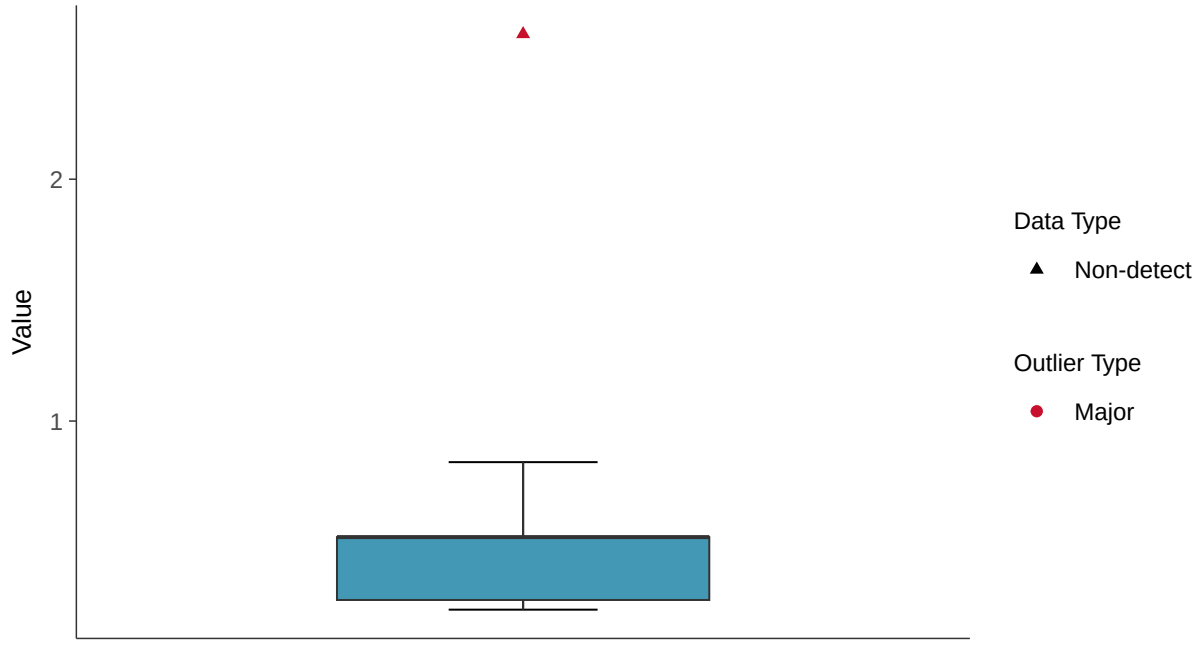
ID: 14_2_110



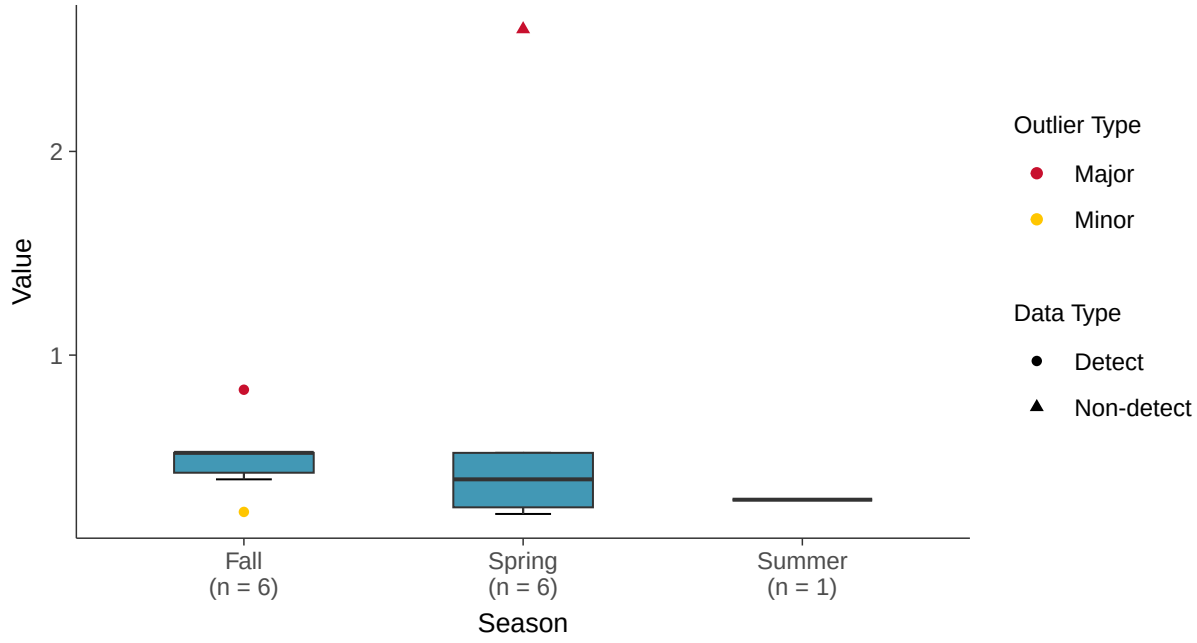
## Boxplot

Cobalt, MW-17001R (ug/L)



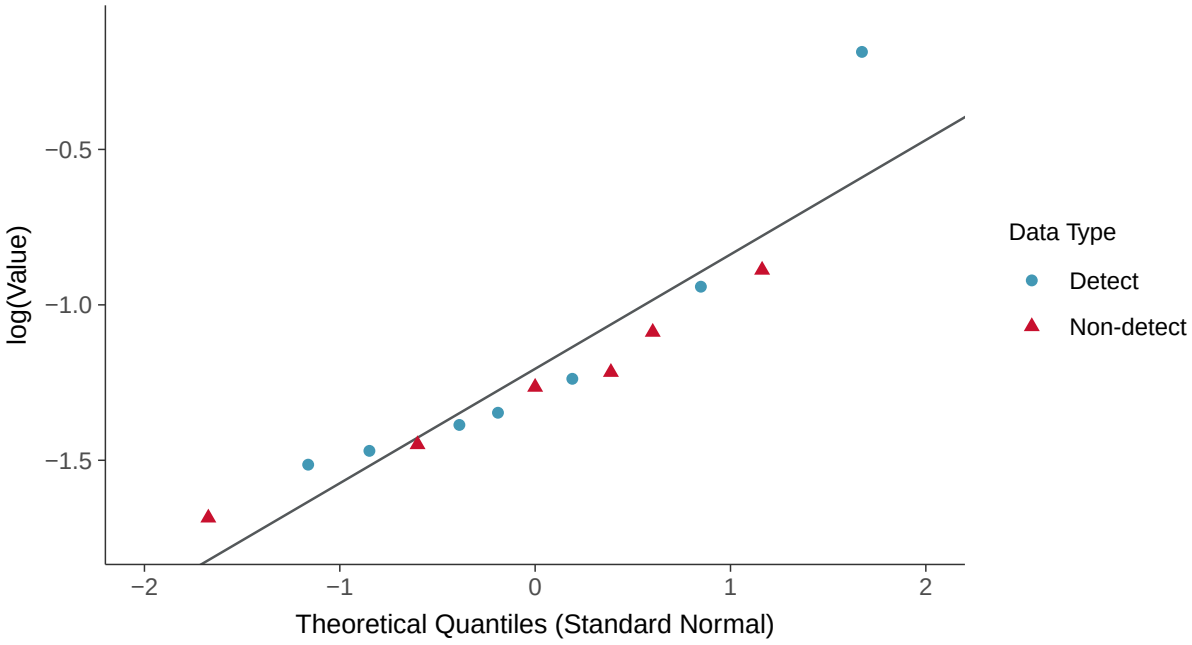

## Boxplot by Season

Cobalt, MW-17001R (ug/L)



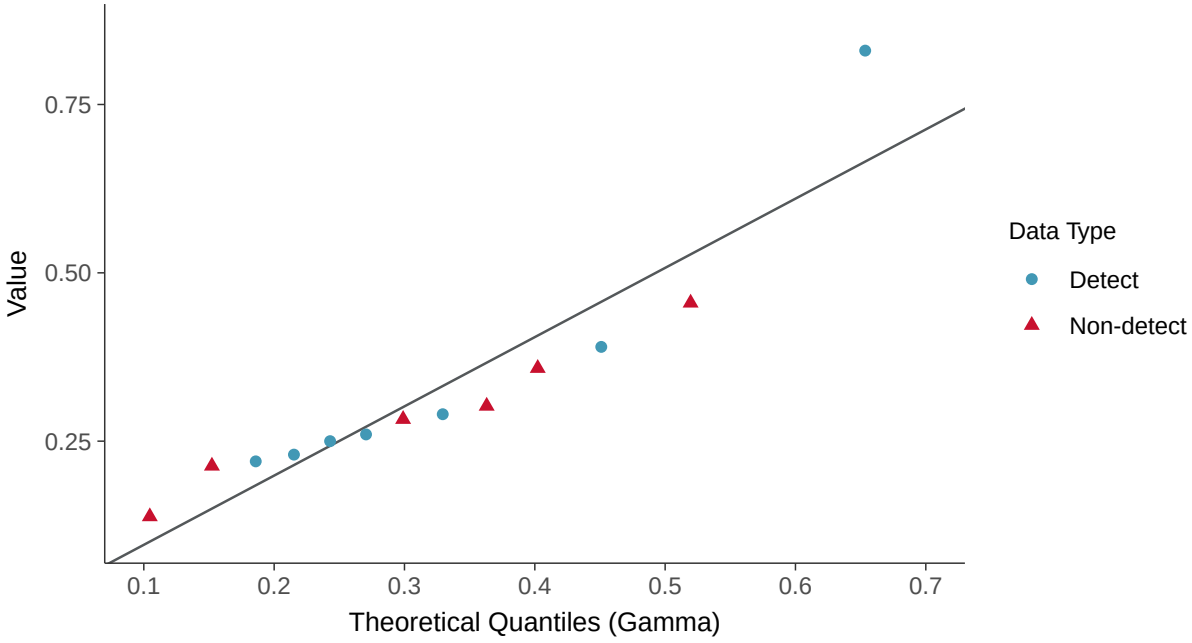
**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17001R (ug/L)



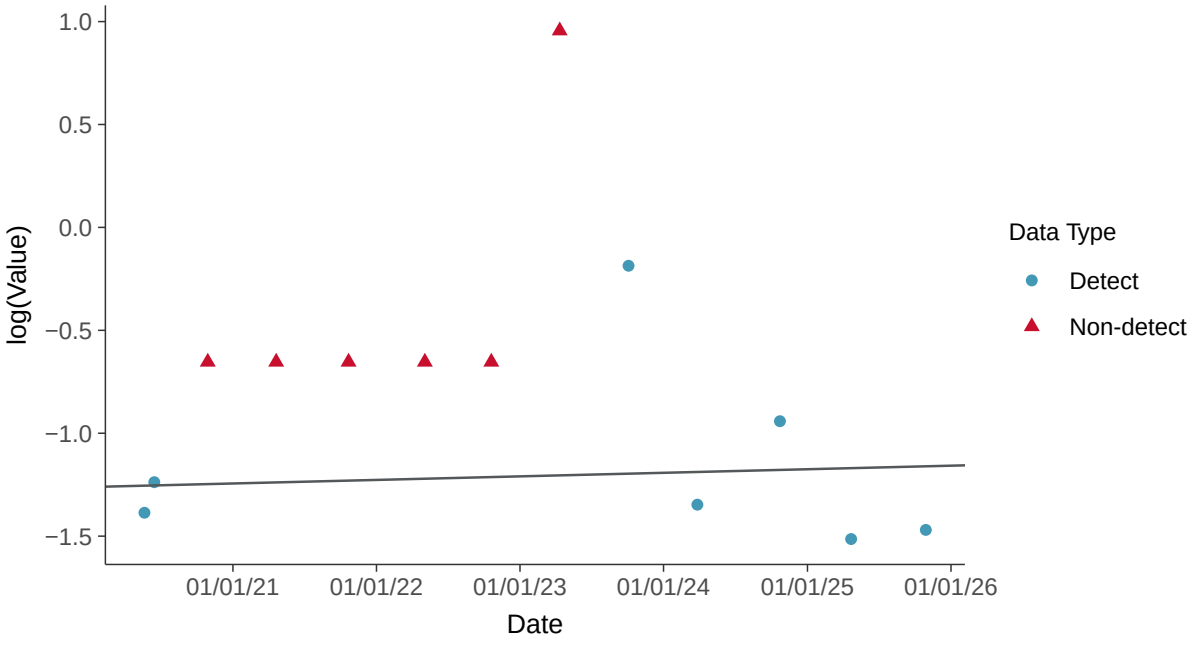

**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17001R (ug/L)



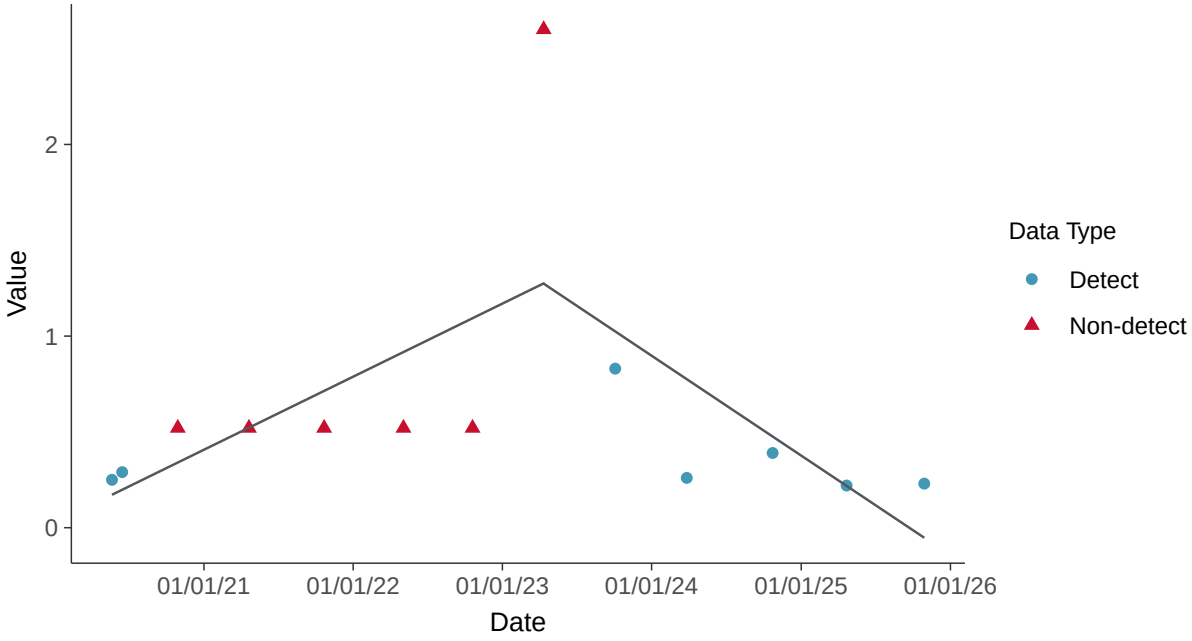
**Trend Regression: Lognormal MLE**

Cobalt, MW-17001R (ug/L)



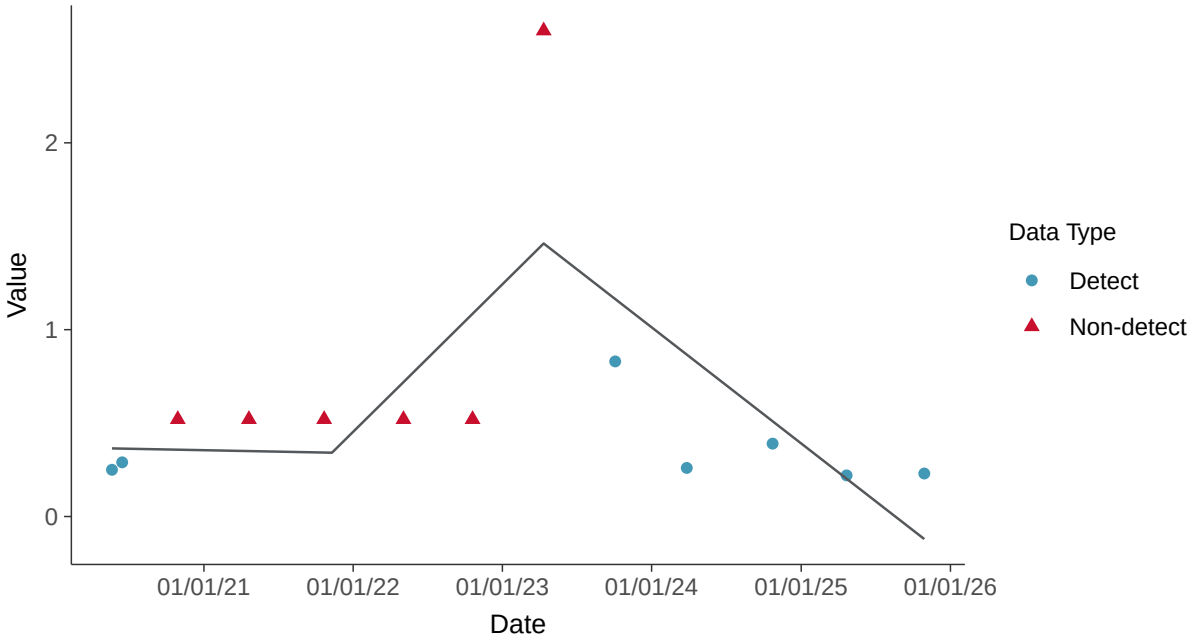

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17001R (ug/L)



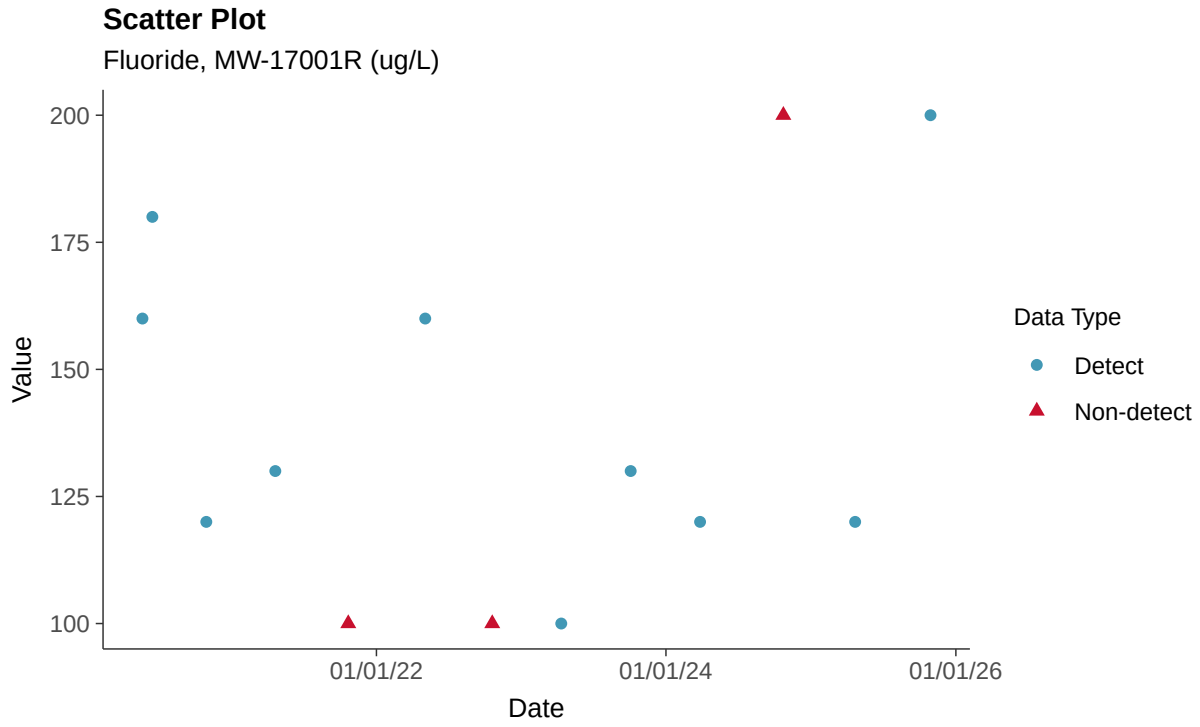
## Trend Regression: Piecewise Linear-Linear-Linear

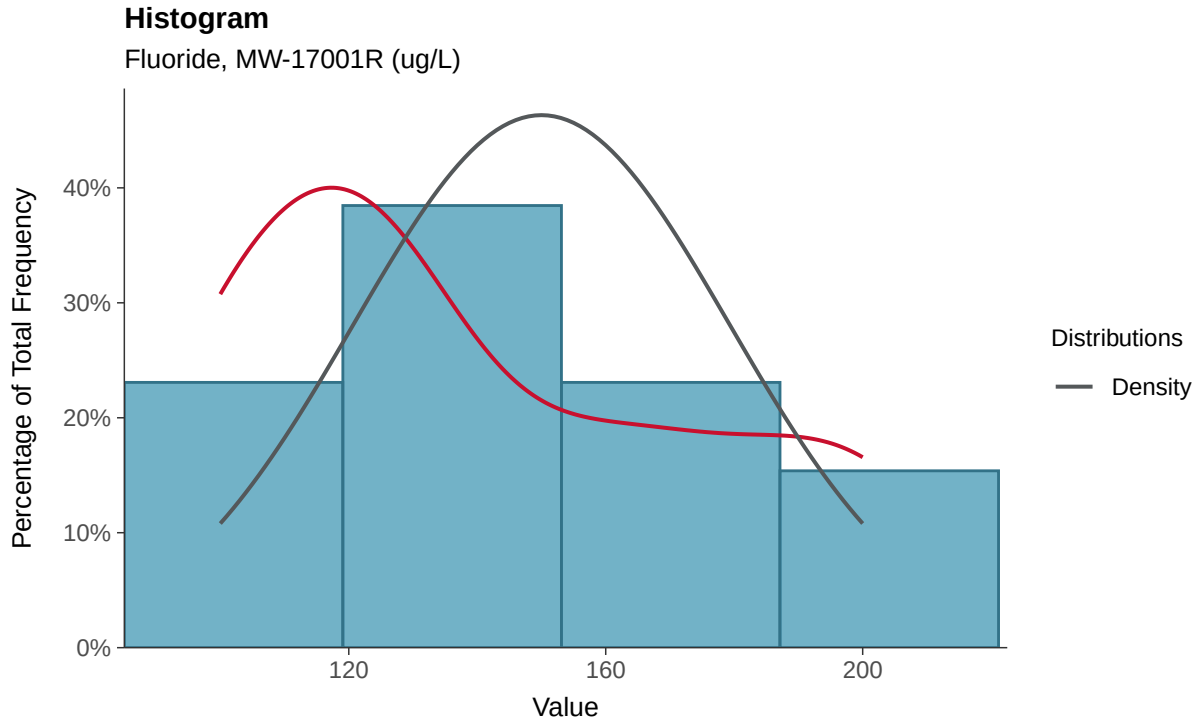
Cobalt, MW-17001R (ug/L)



## Appendix IV: Fluoride, MW-17001R

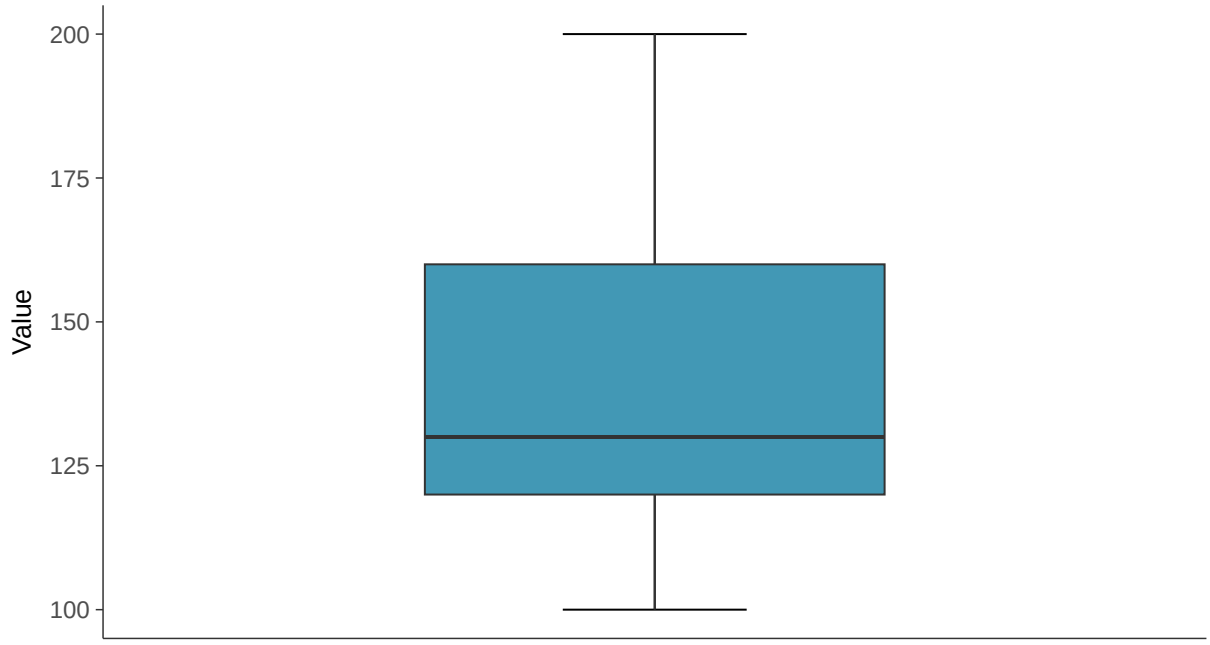
ID: 14_2_114



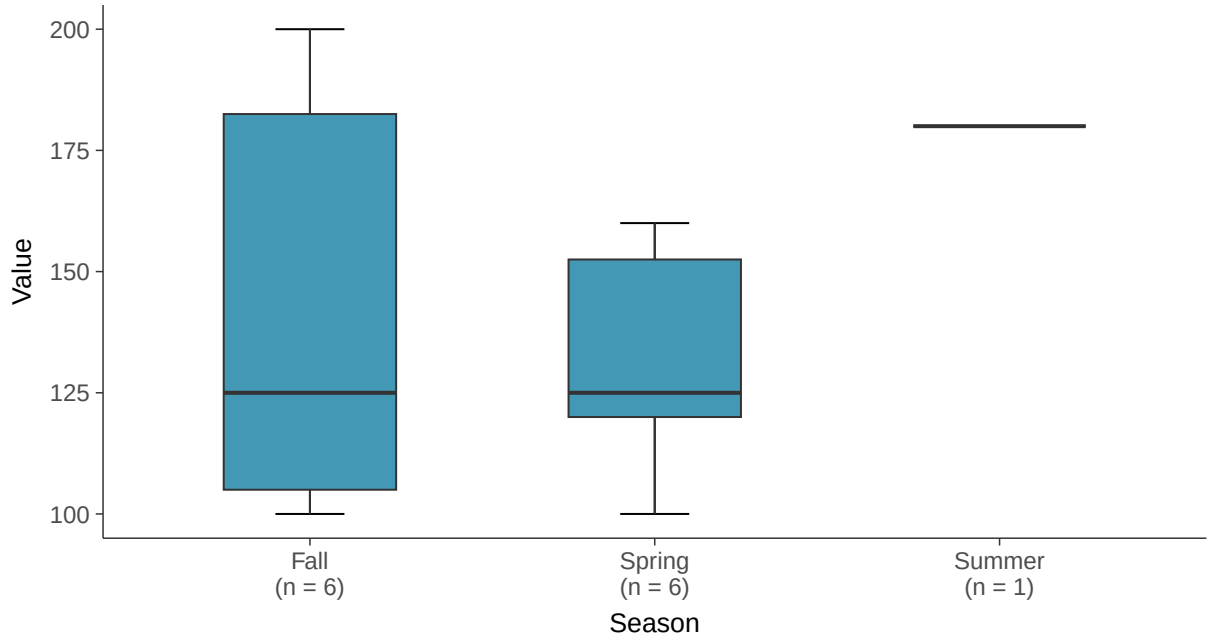
**Boxplot**

Fluoride, MW-17001R (ug/L)



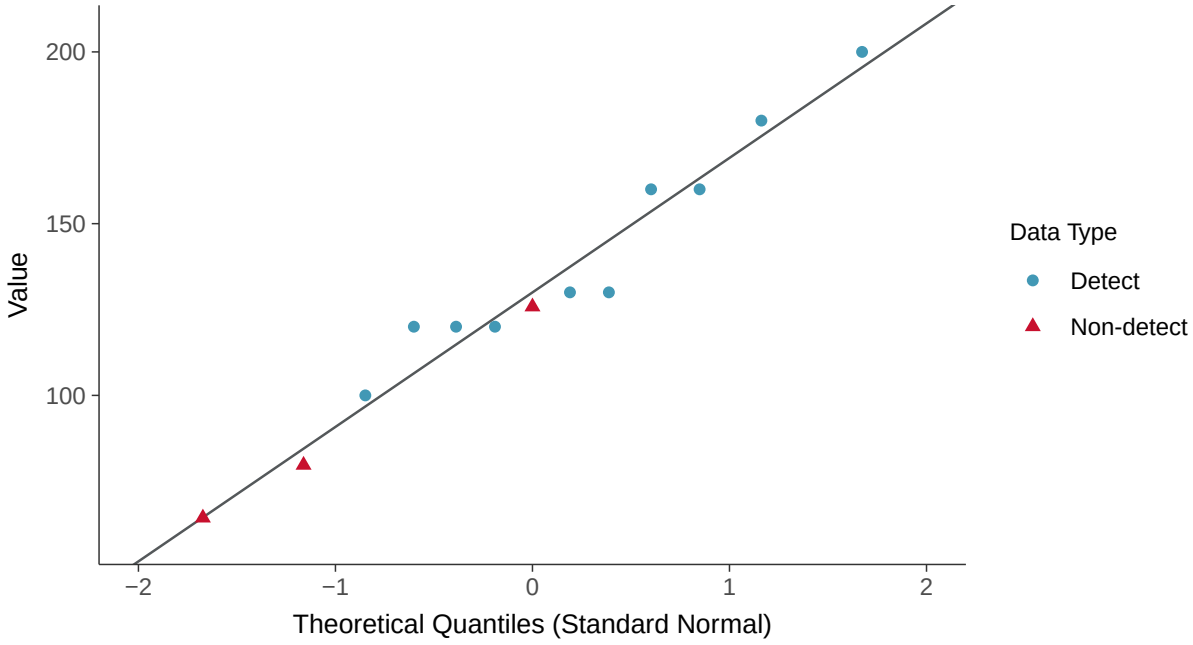

**Boxplot by Season**

Fluoride, MW-17001R (ug/L)



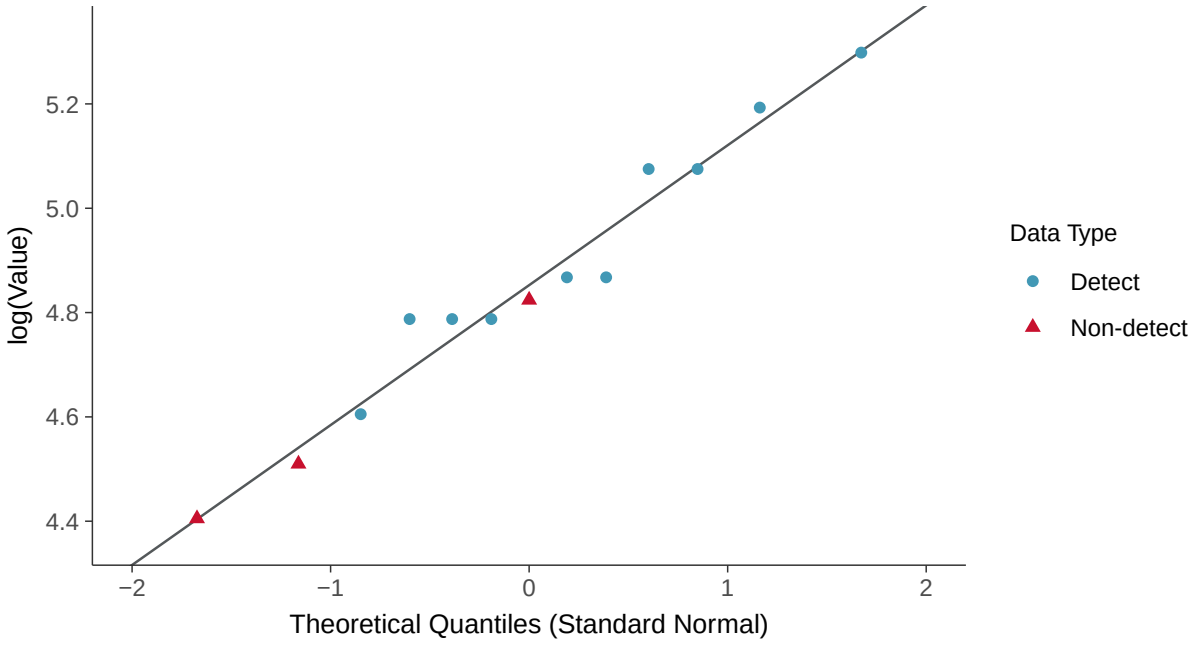
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17001R (ug/L)



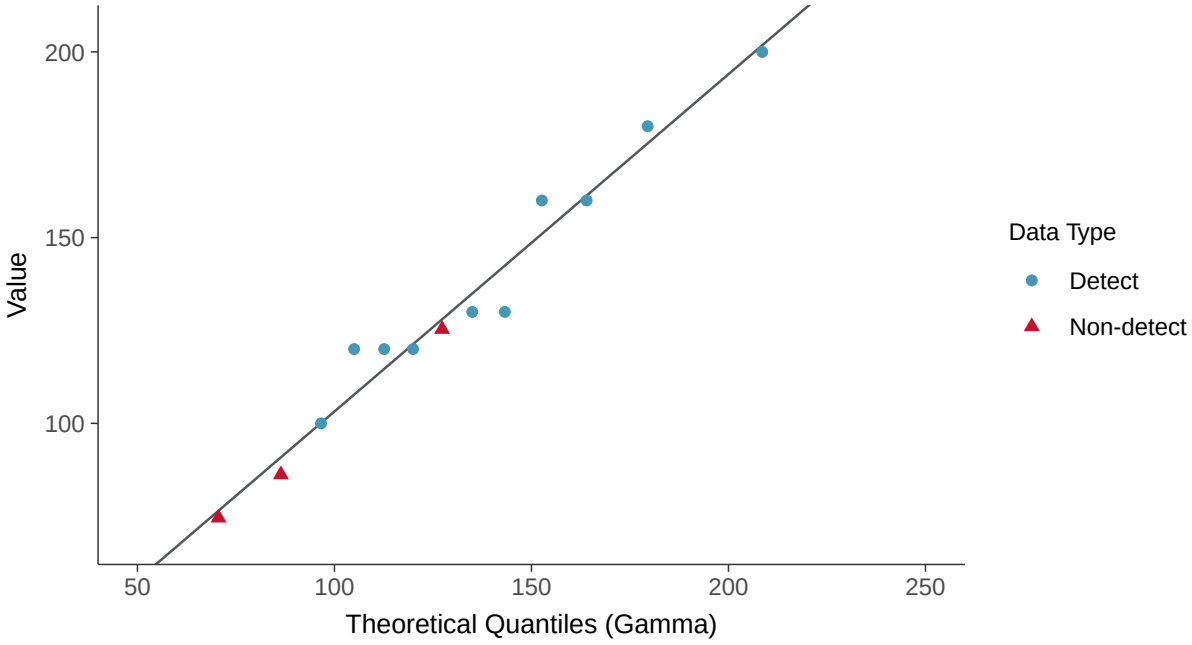

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17001R (ug/L)



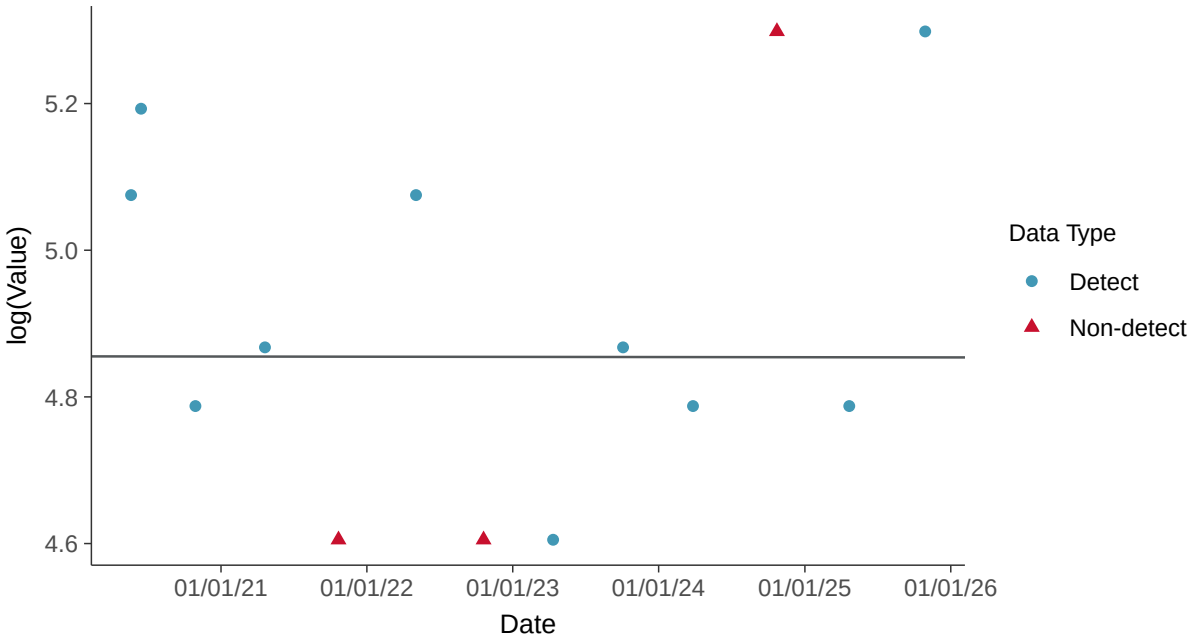
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17001R (ug/L)



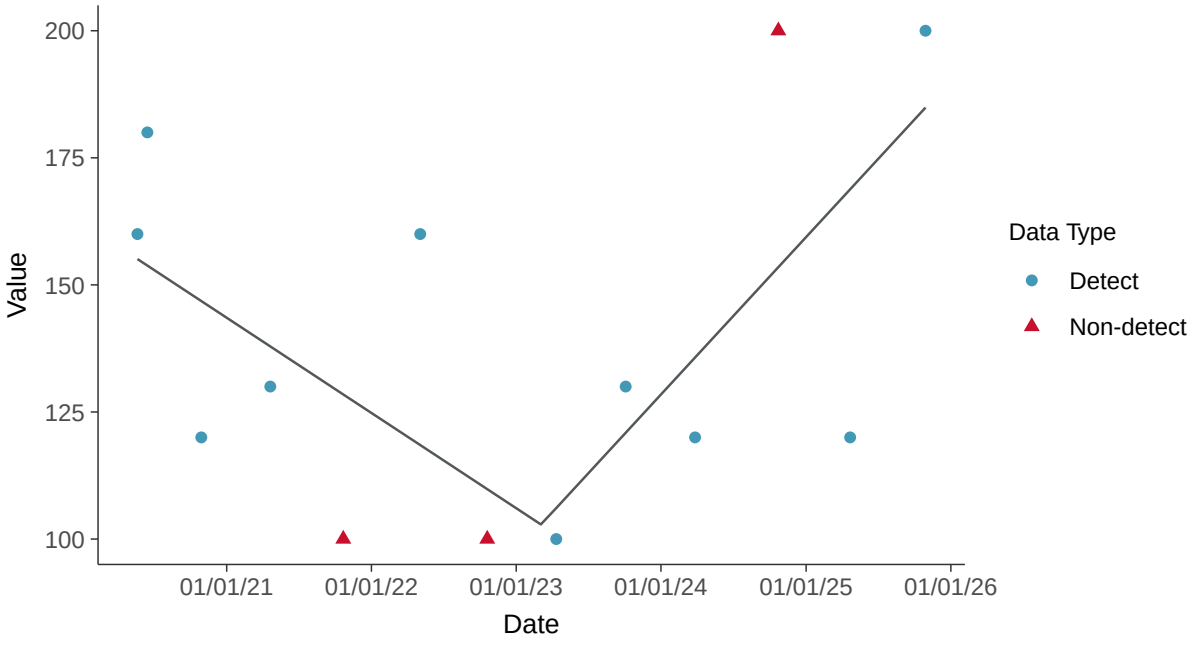

**Trend Regression: Lognormal MLE**

Fluoride, MW-17001R (ug/L)



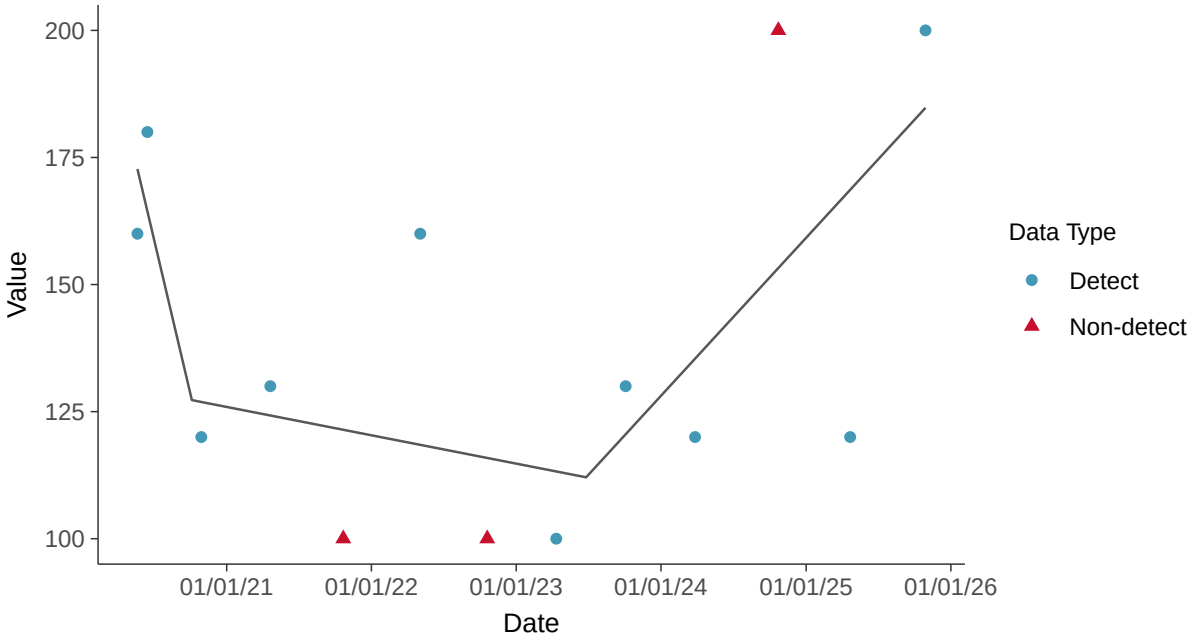
## Trend Regression: Piecewise Linear-Linear

Fluoride, MW-17001R (ug/L)




## Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-17001R (ug/L)

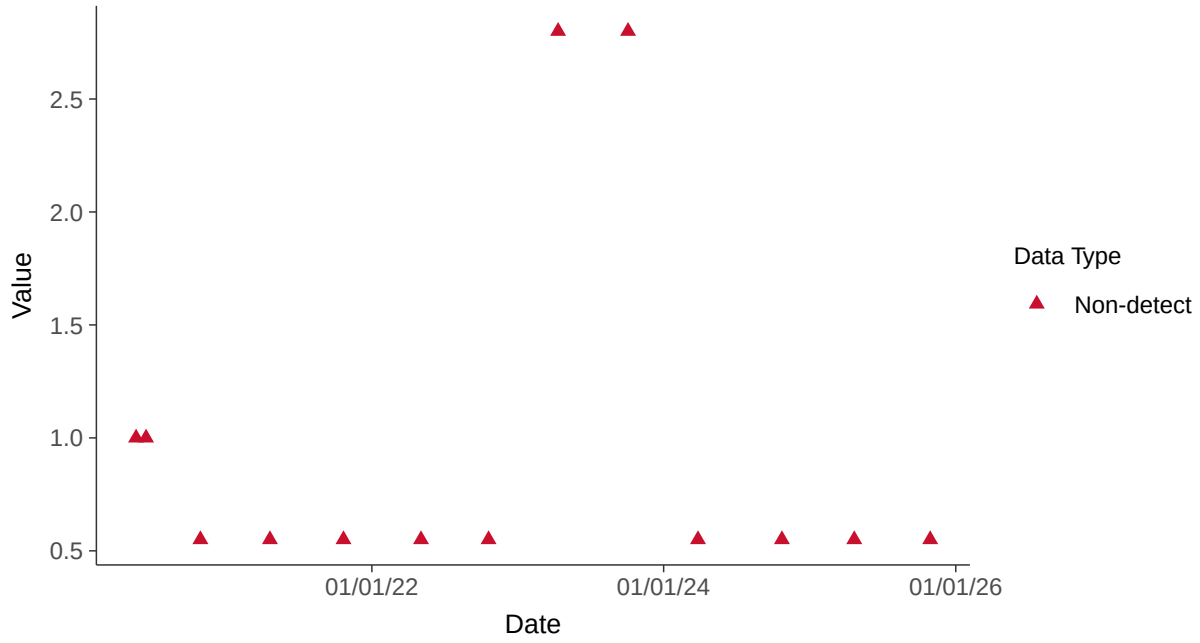


## Appendix IV: Lead, MW-17001R

ID: 14_2_116

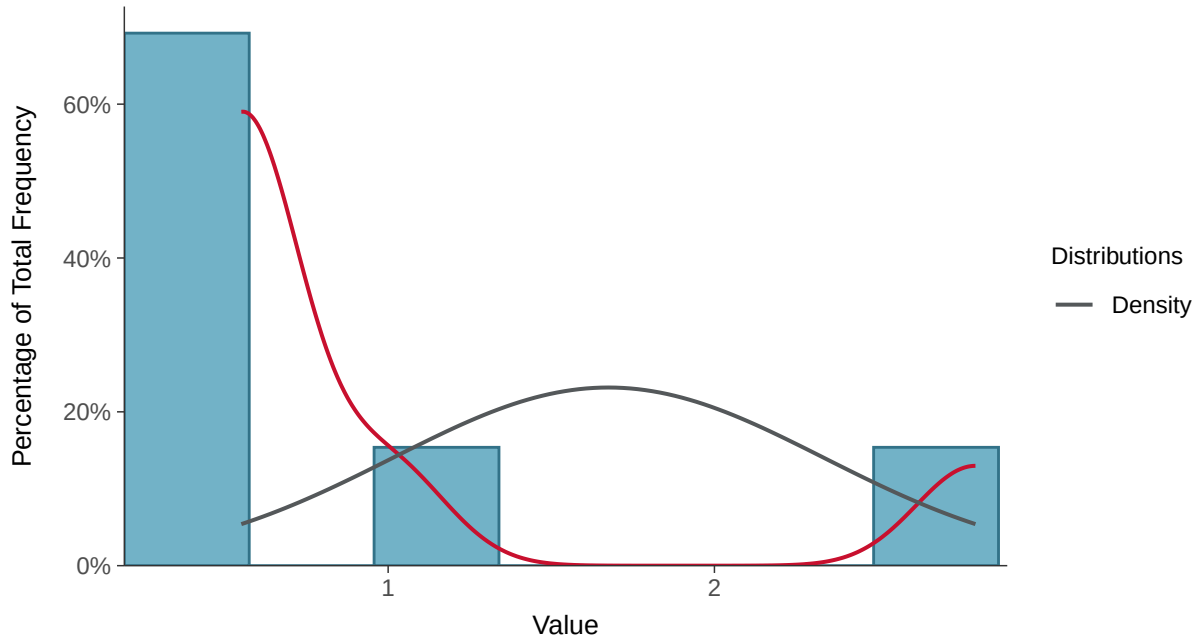
**Scatter Plot**

Lead, MW-17001R (ug/L)



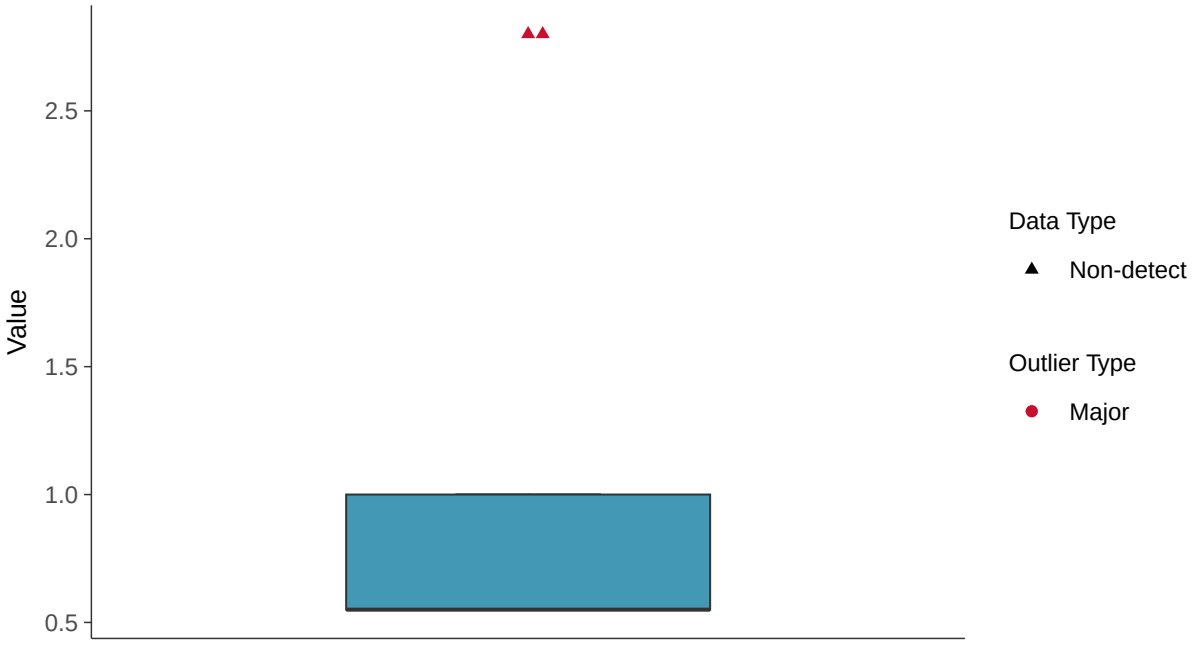

**Histogram**

Lead, MW-17001R (ug/L)



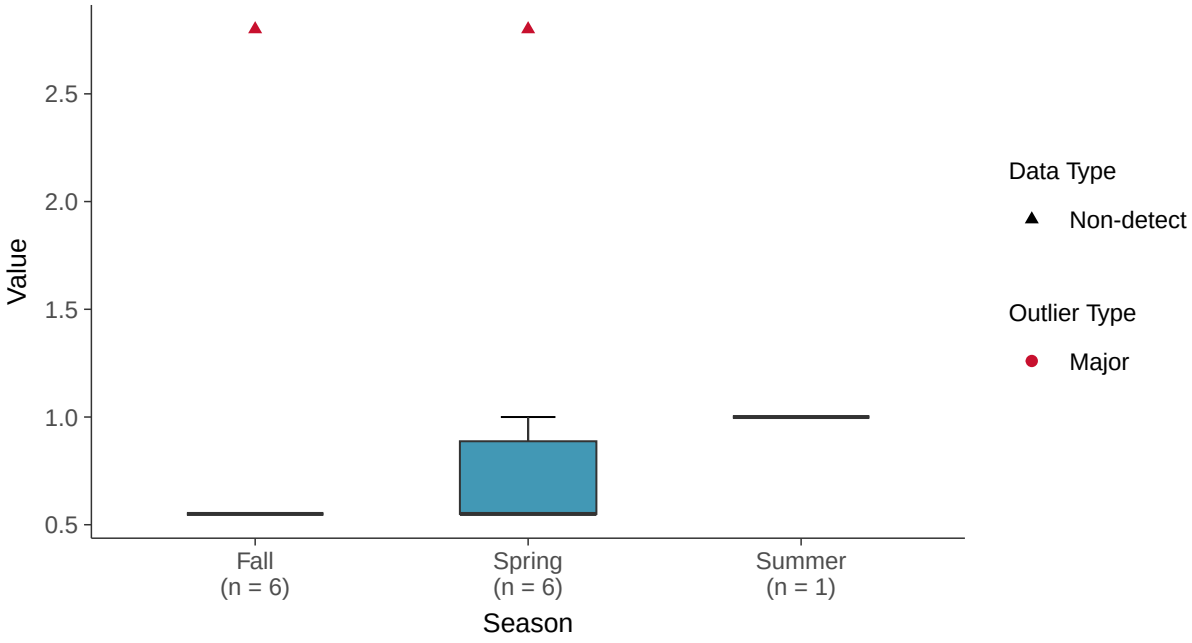
## Boxplot

Lead, MW-17001R (ug/L)



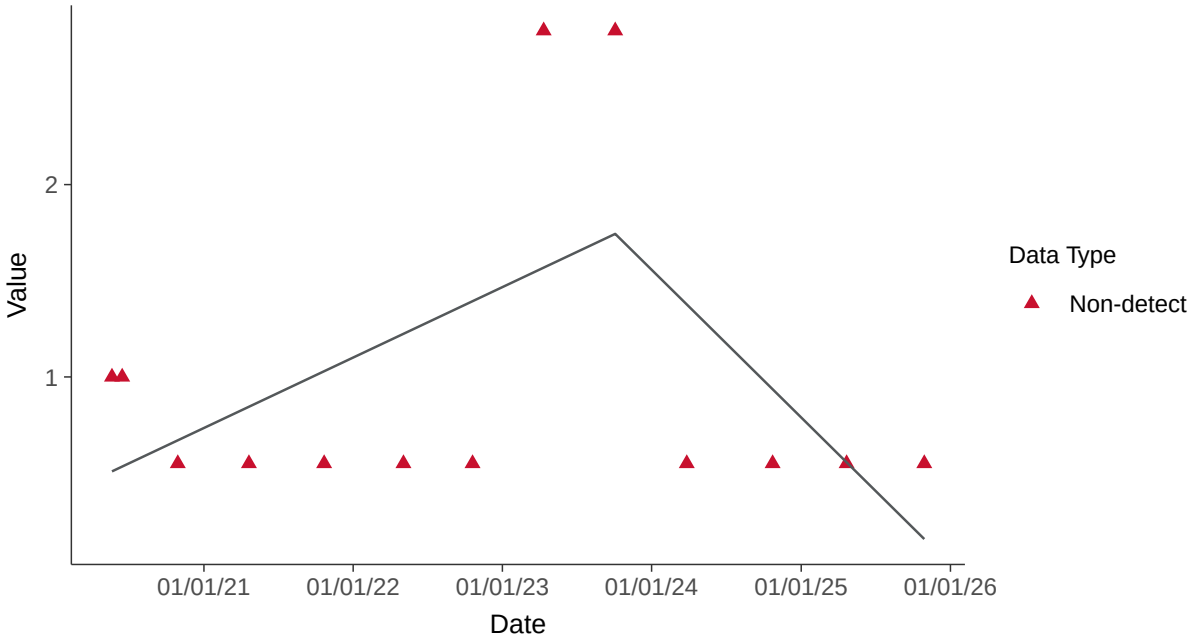

## Boxplot by Season

Lead, MW-17001R (ug/L)



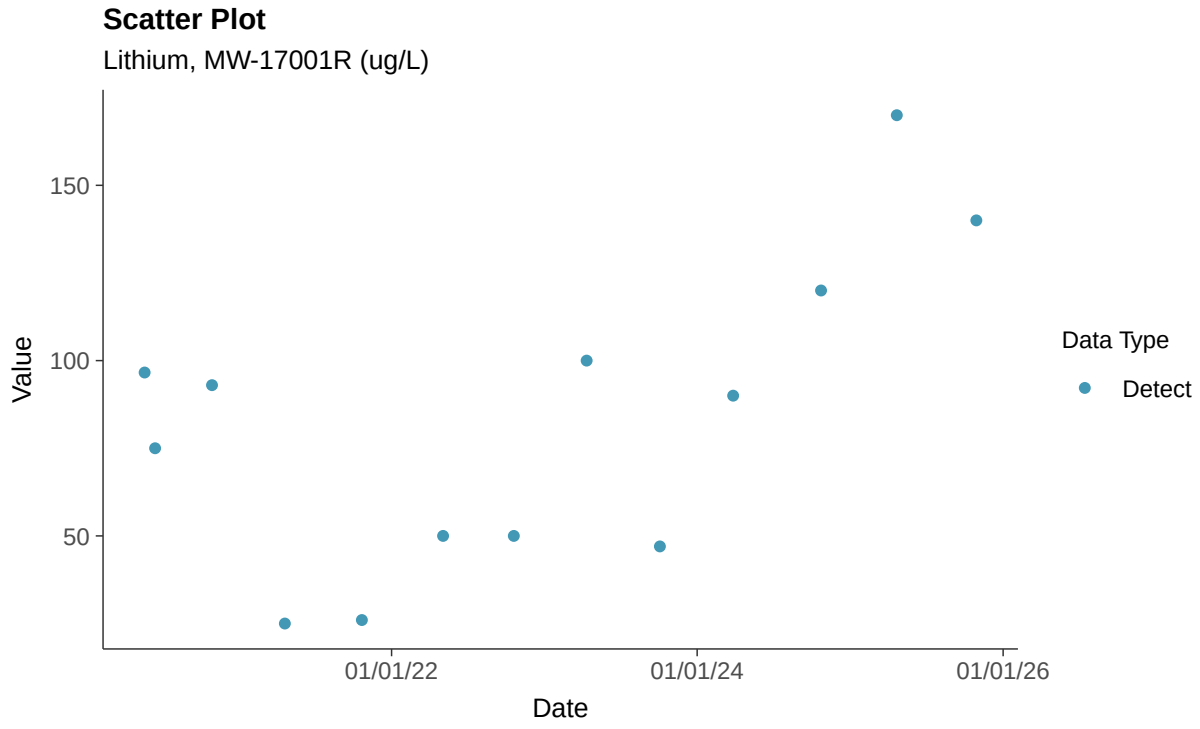
**Trend Regression: Piecewise Linear-Linear**

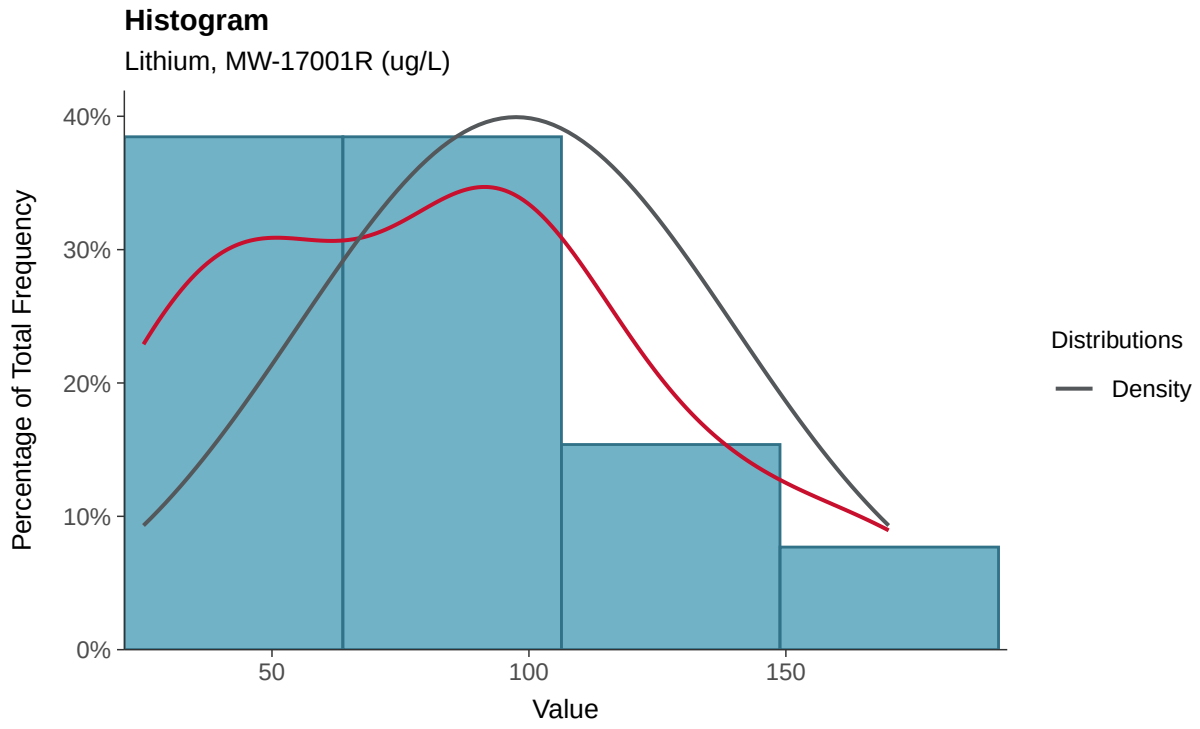
Lead, MW-17001R (ug/L)



## Appendix IV: Lithium, MW-17001R

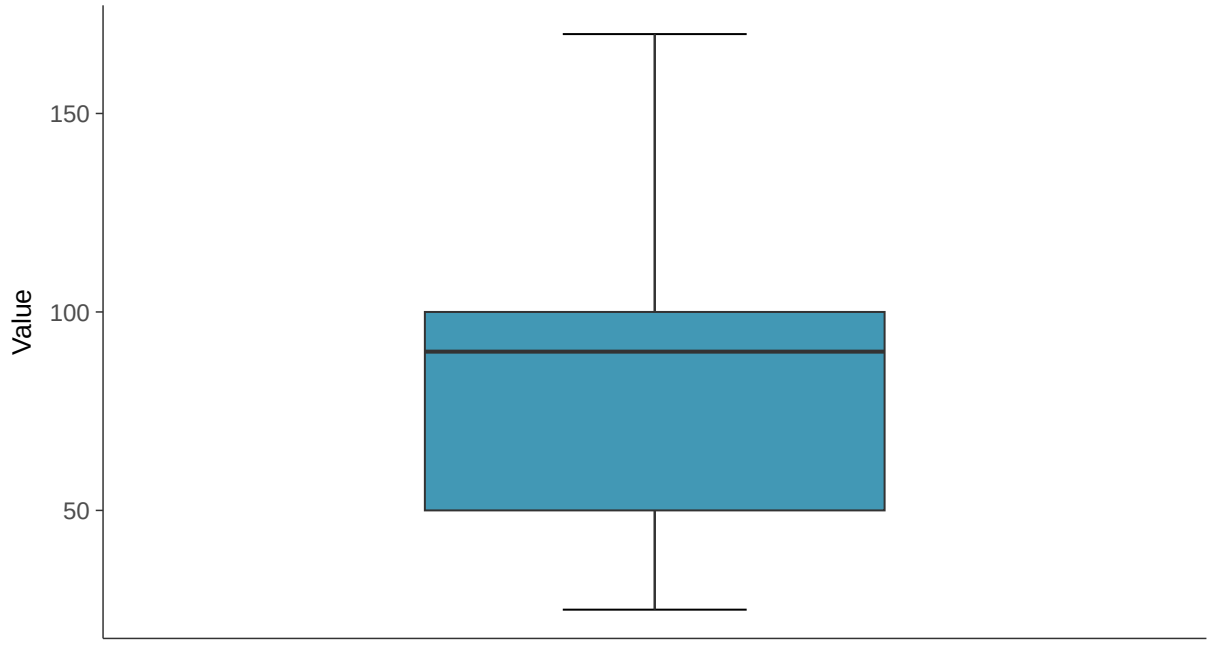
ID: 14_2_117



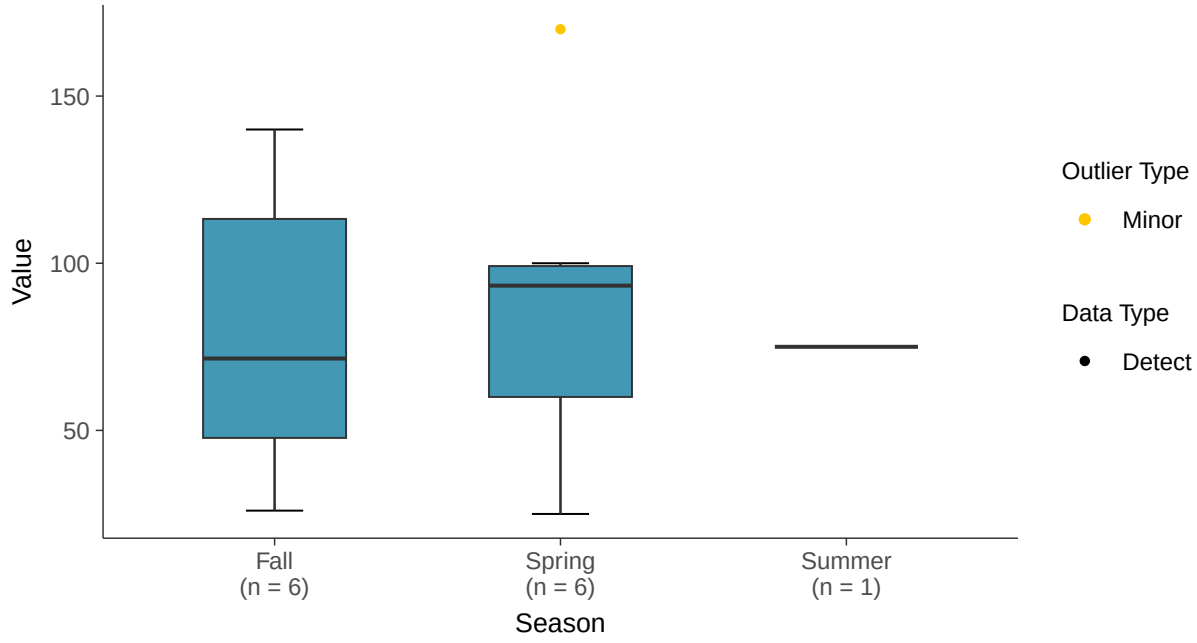
## Boxplot

Lithium, MW-17001R (ug/L)



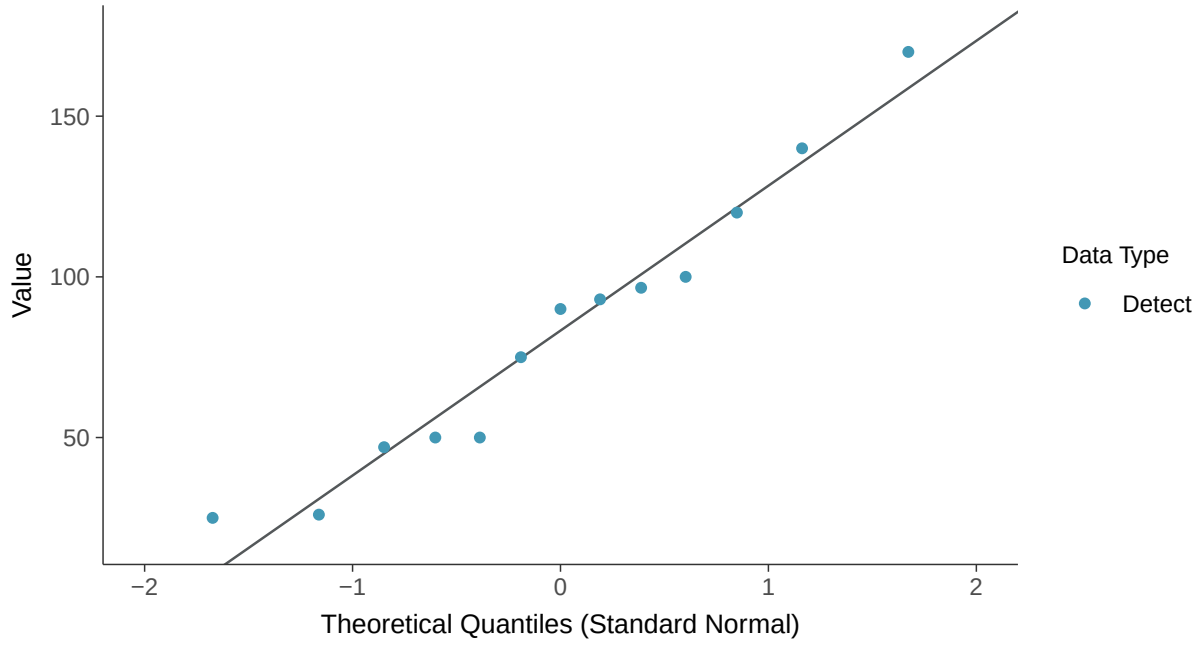

## Boxplot by Season

Lithium, MW-17001R (ug/L)



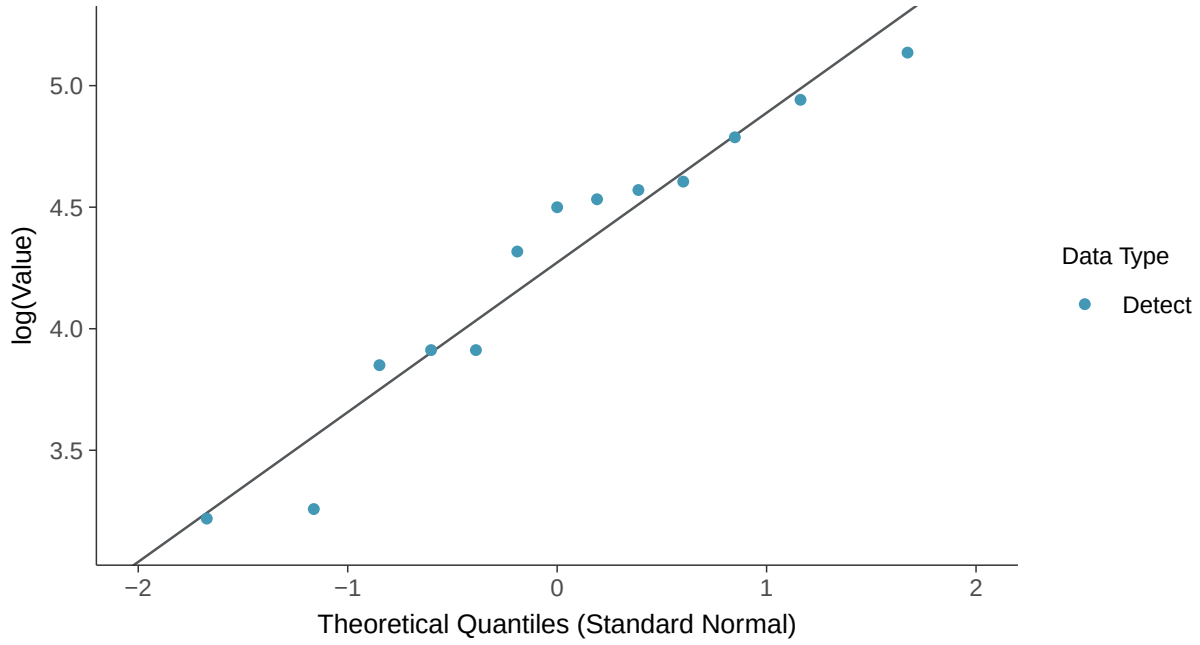
**Normal Q-Q plot**

Lithium, MW-17001R (ug/L)



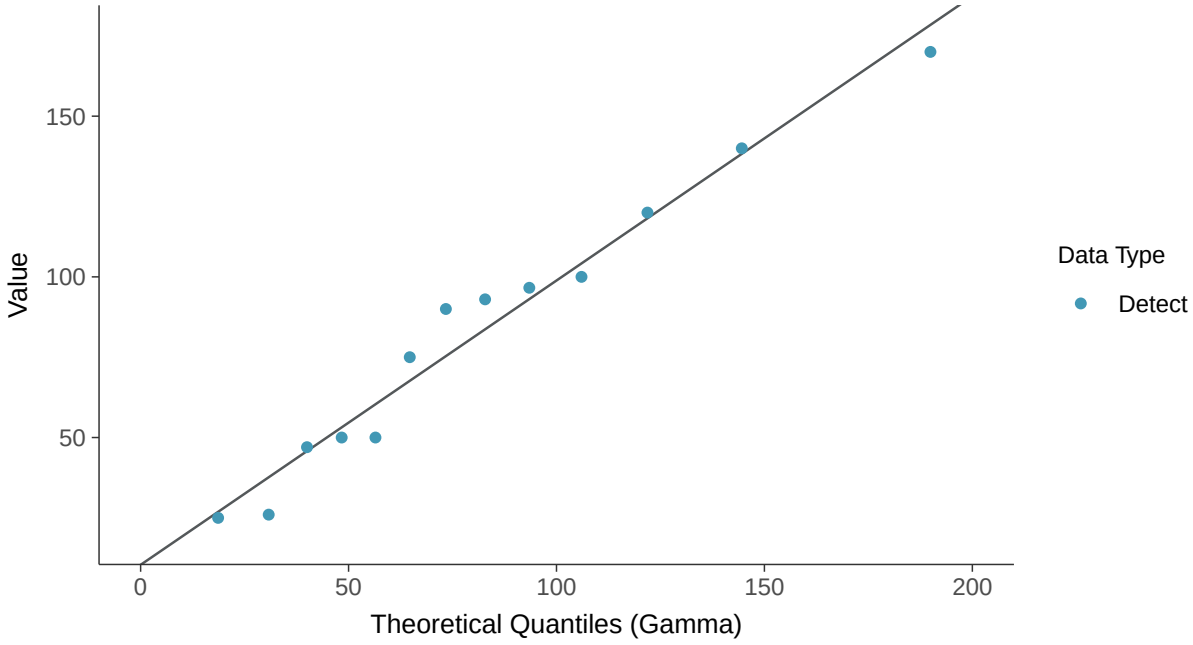

**Lognormal Q-Q plot**

Lithium, MW-17001R (ug/L)



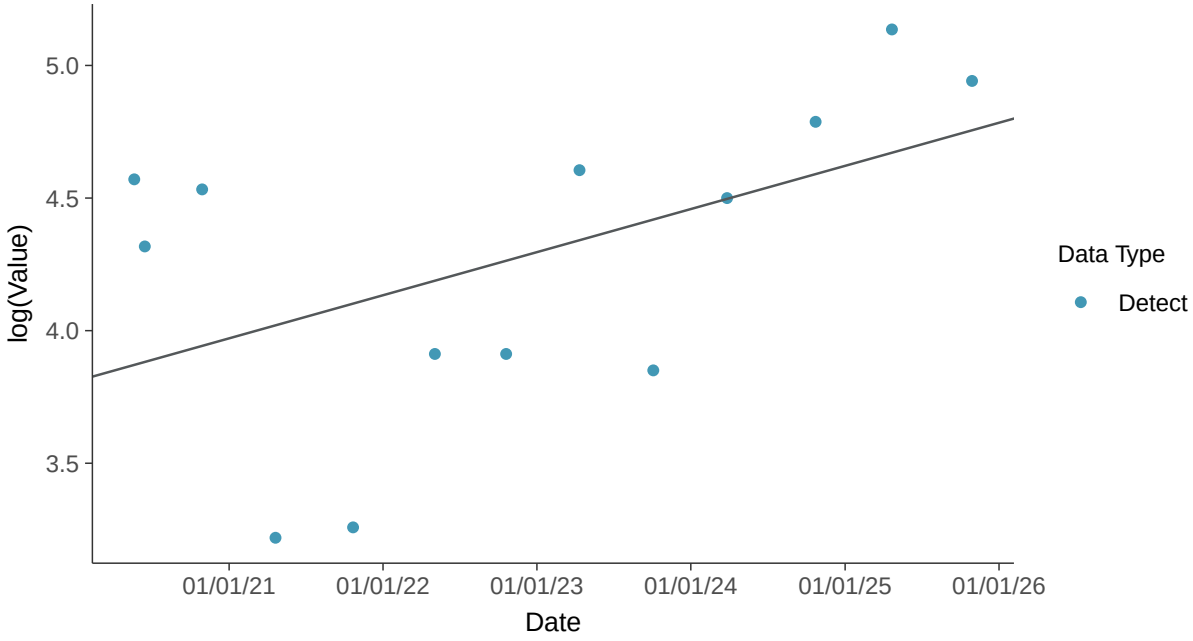
**Gamma Q-Q plot**

Lithium, MW-17001R (ug/L)



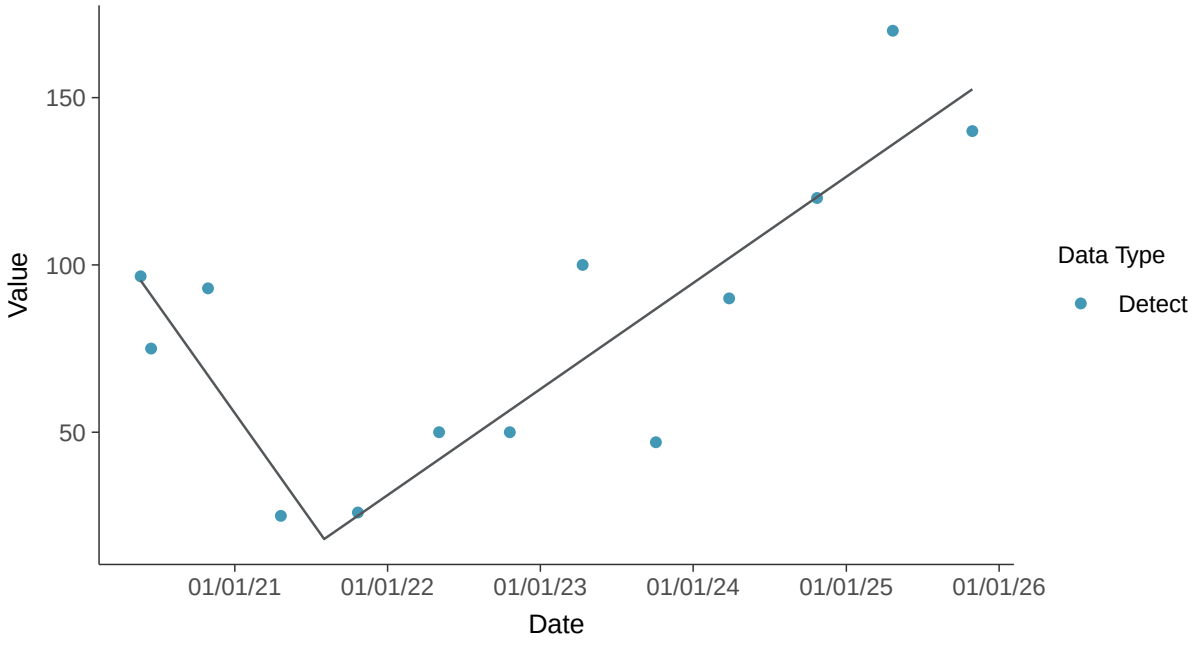

**Trend Regression: Lognormal MLE**

Lithium, MW-17001R (ug/L)



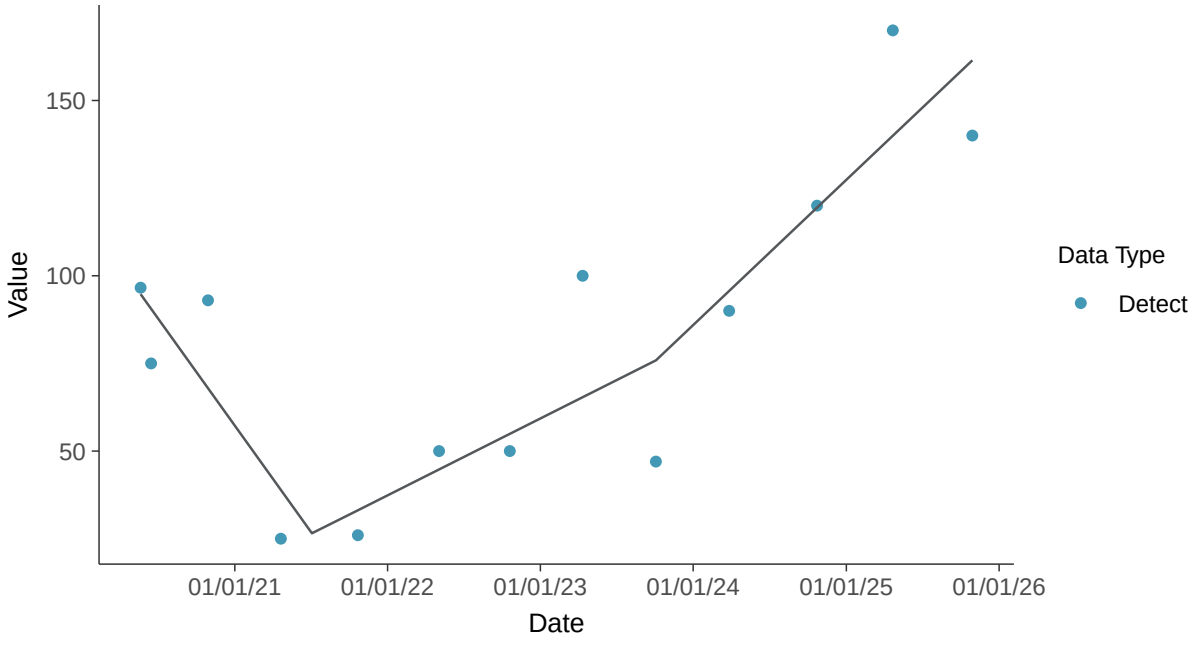
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-17001R (ug/L)



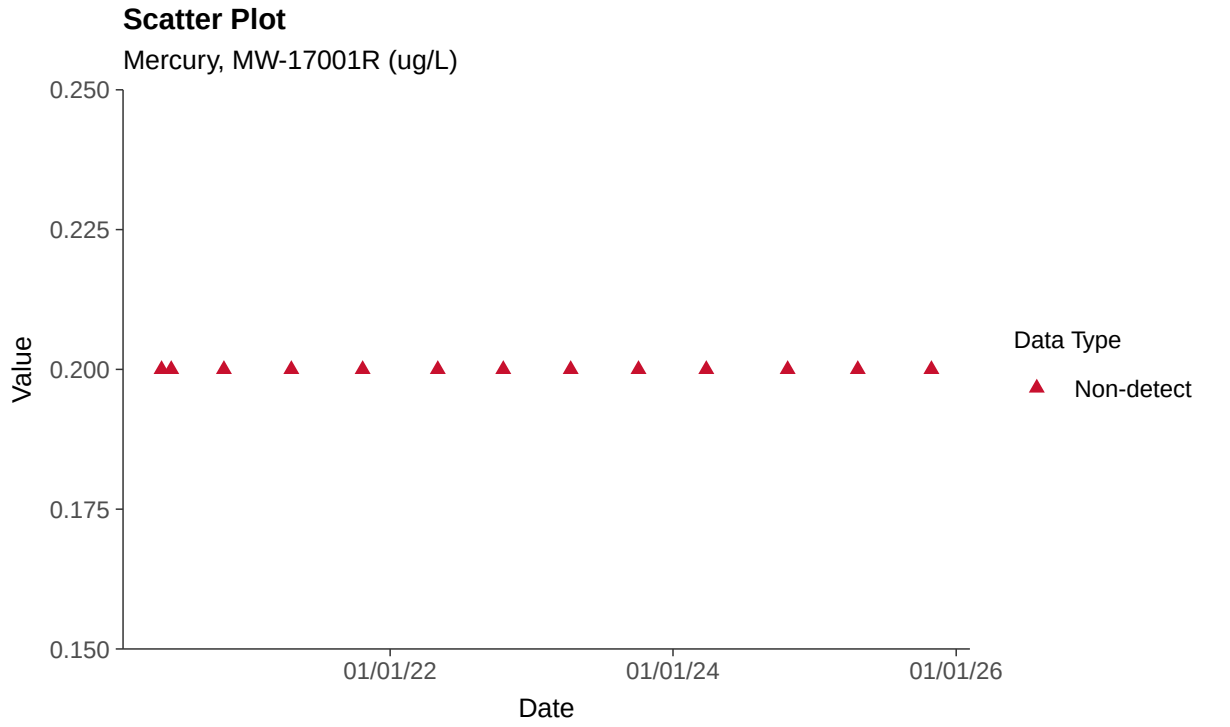

**Trend Regression: Piecewise Linear-Linear-Linear**

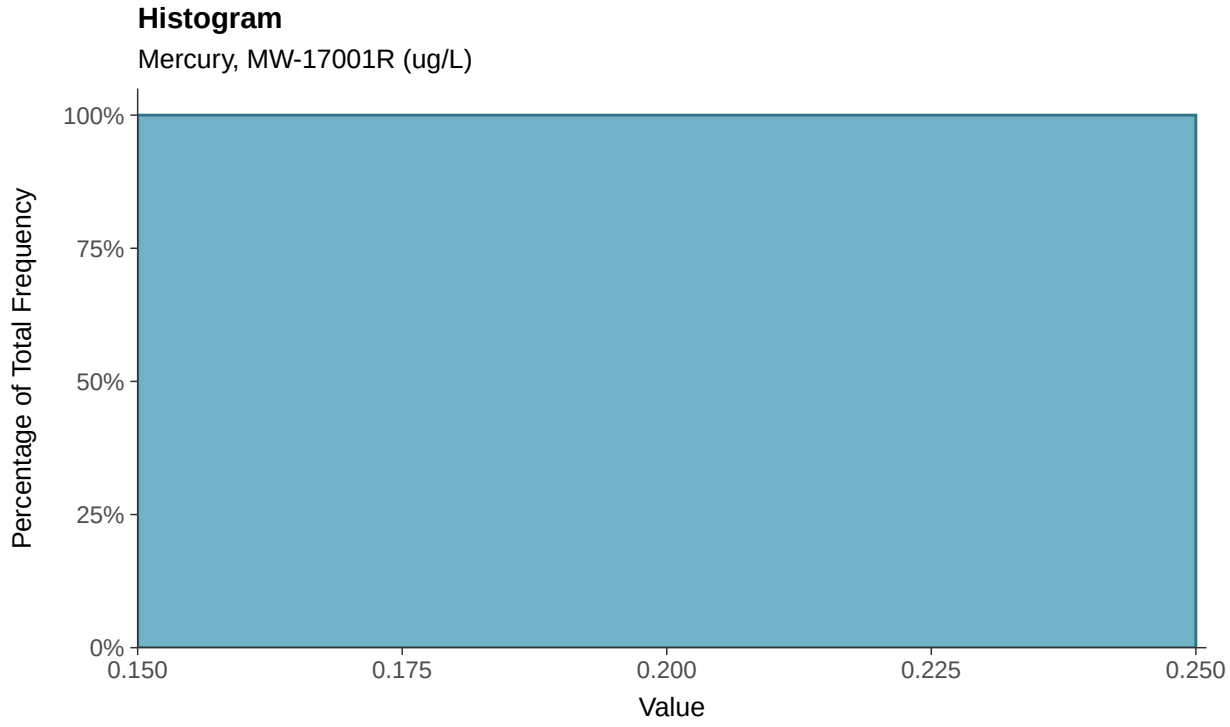
Lithium, MW-17001R (ug/L)



## Appendix IV: Mercury, MW-17001R

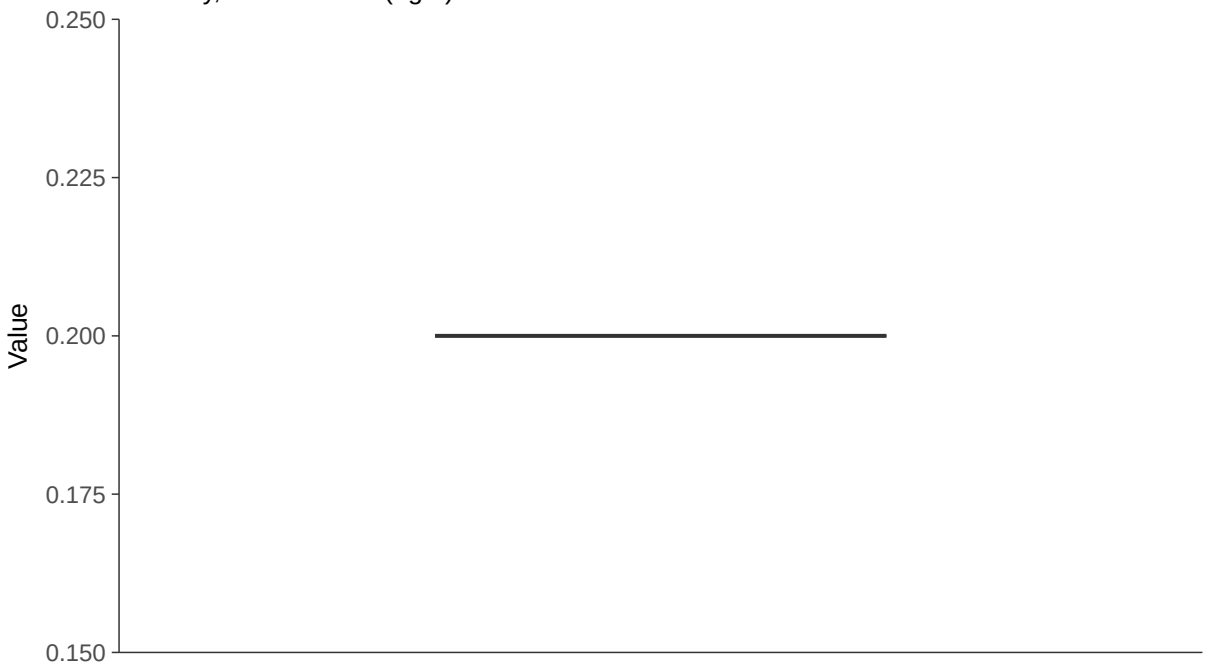
ID: 14_2_118



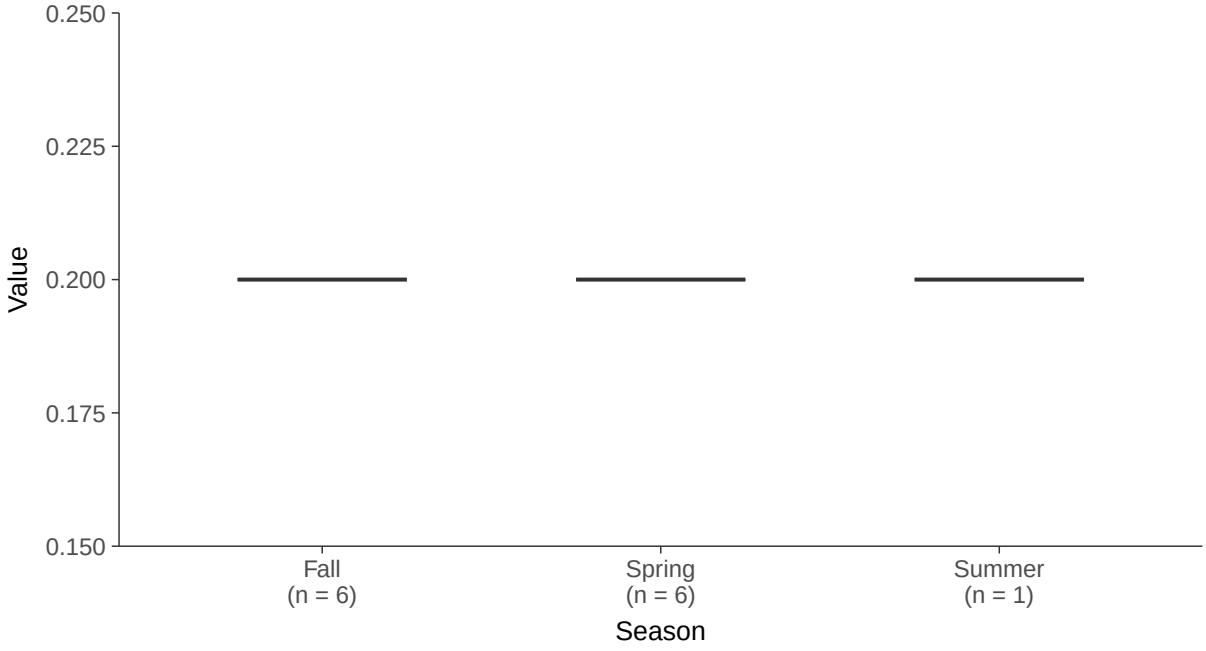
**Boxplot**

Mercury, MW-17001R (ug/L)




**Boxplot by Season**

Mercury, MW-17001R (ug/L)

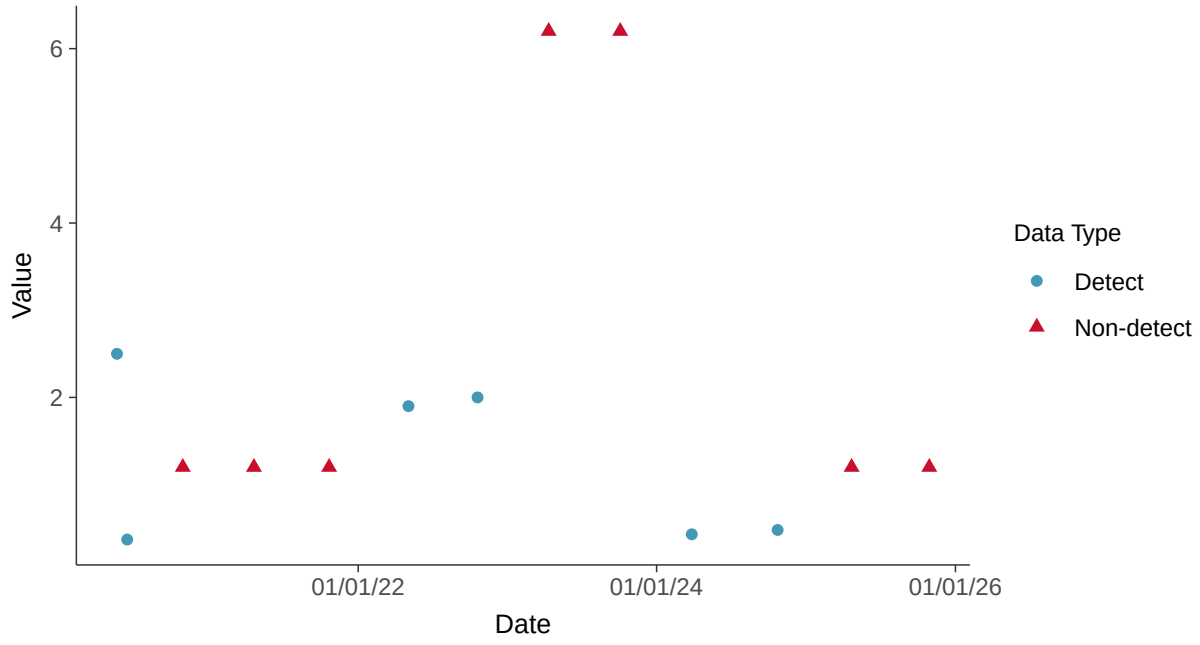


## Appendix IV: Molybdenum, MW-17001R

ID: 14_2_119

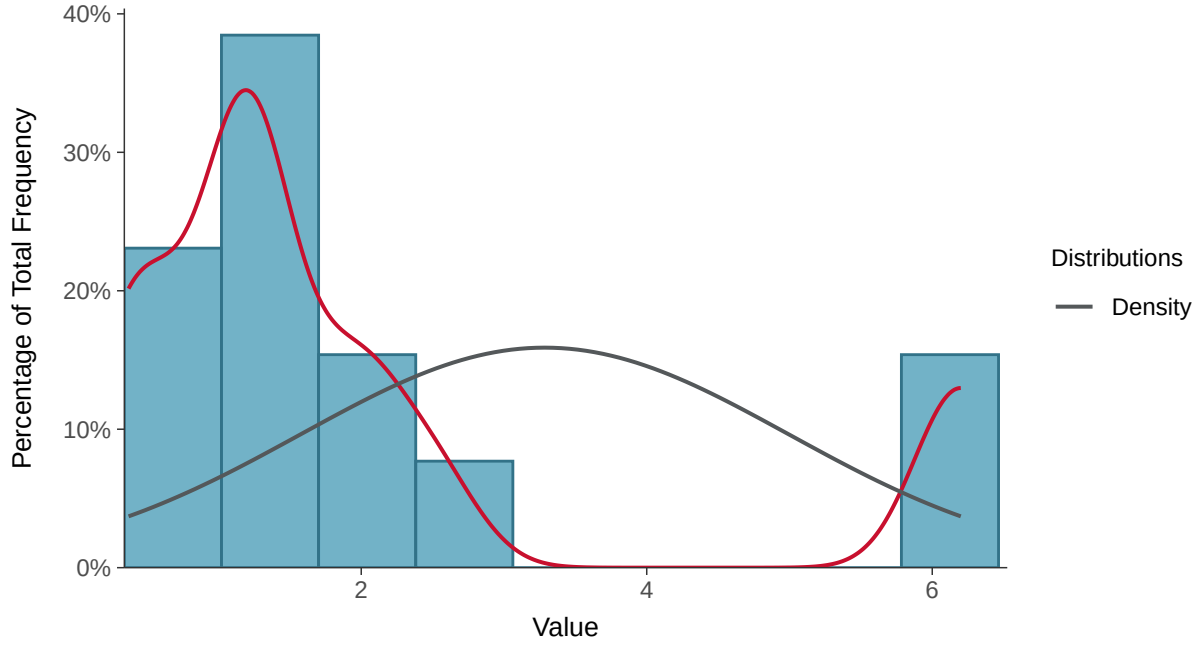
**Scatter Plot**

Molybdenum, MW-17001R (ug/L)



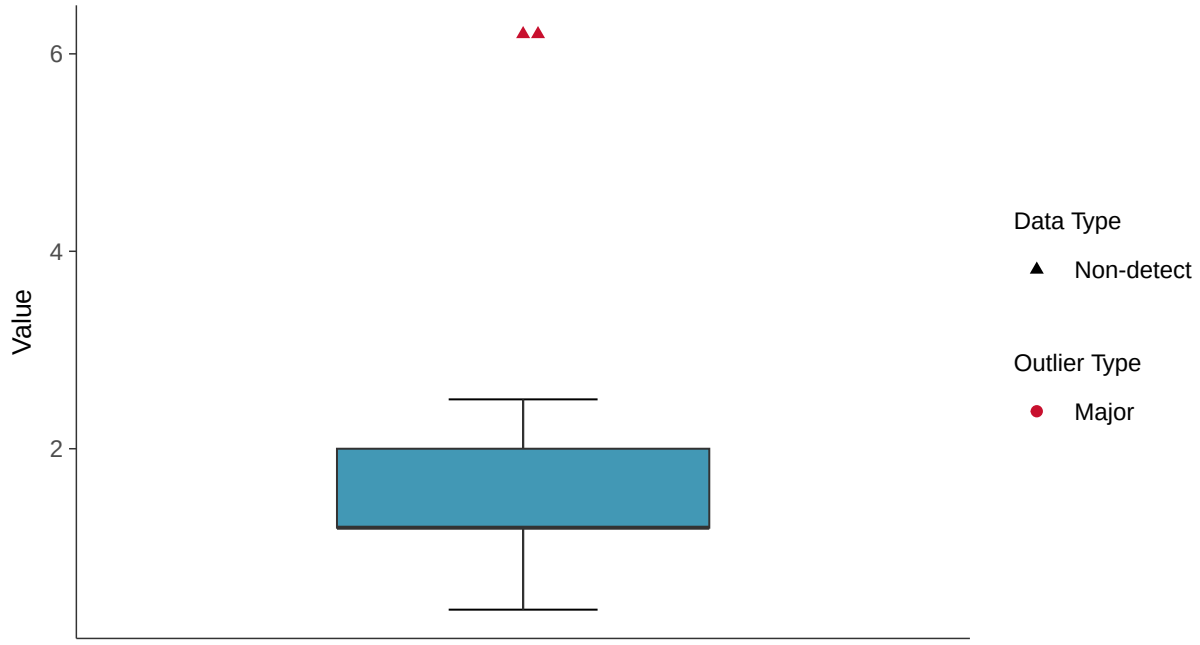

**Histogram**

Molybdenum, MW-17001R (ug/L)



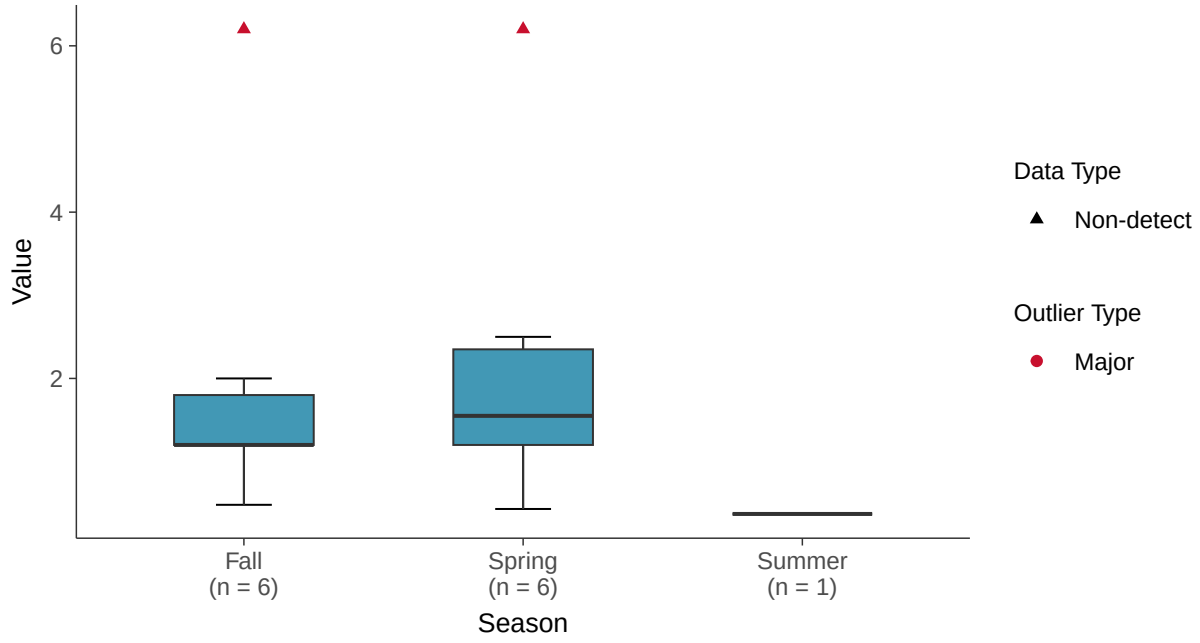
## Boxplot

Molybdenum, MW-17001R (ug/L)



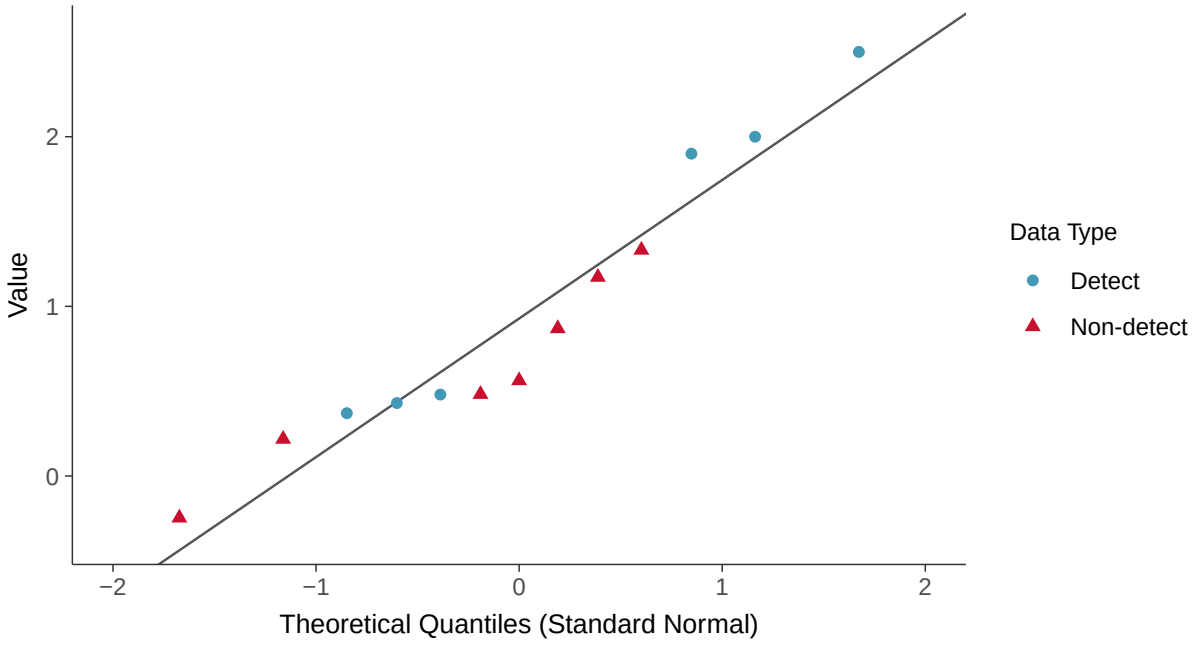

## Boxplot by Season

Molybdenum, MW-17001R (ug/L)



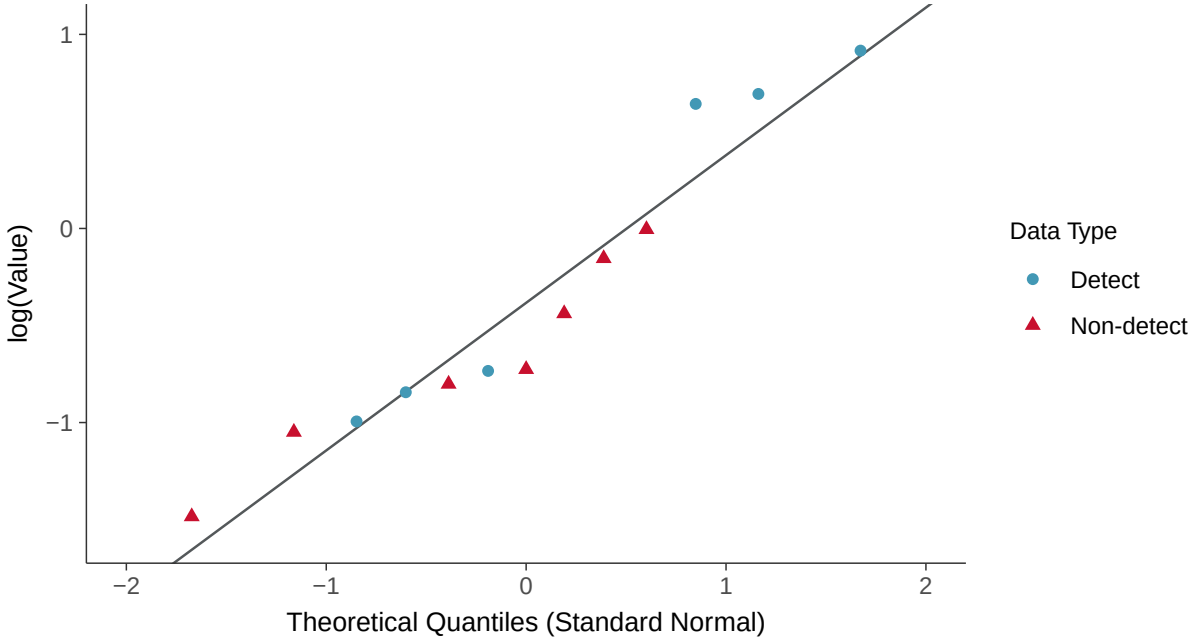
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17001R (ug/L)



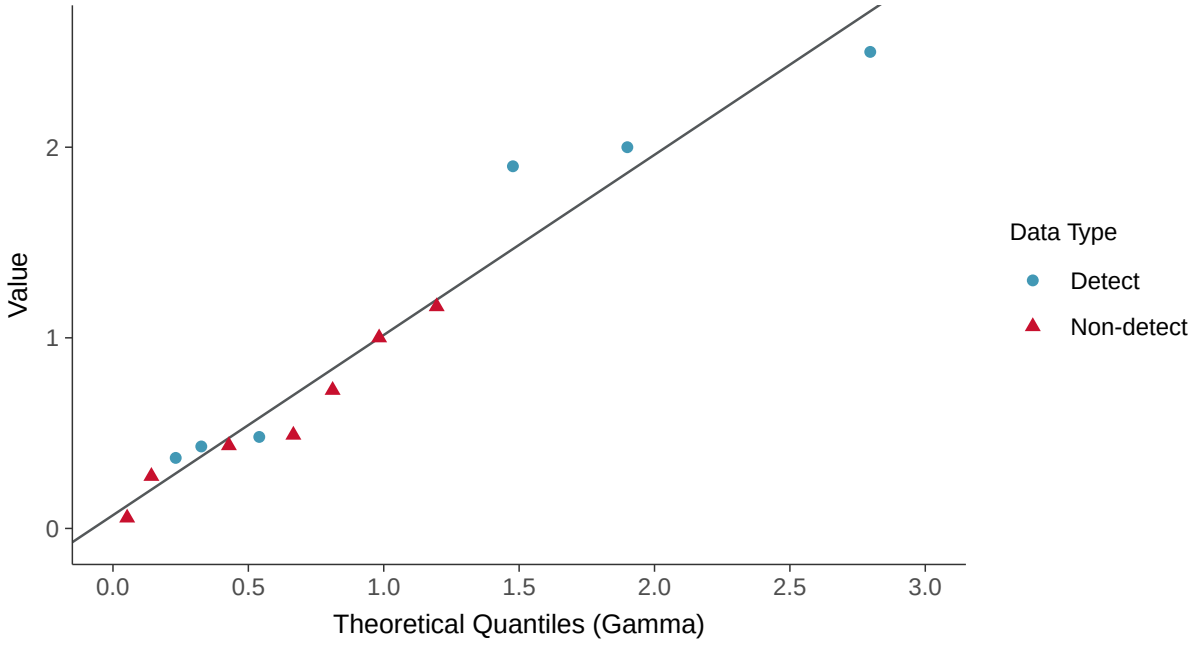

**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17001R (ug/L)



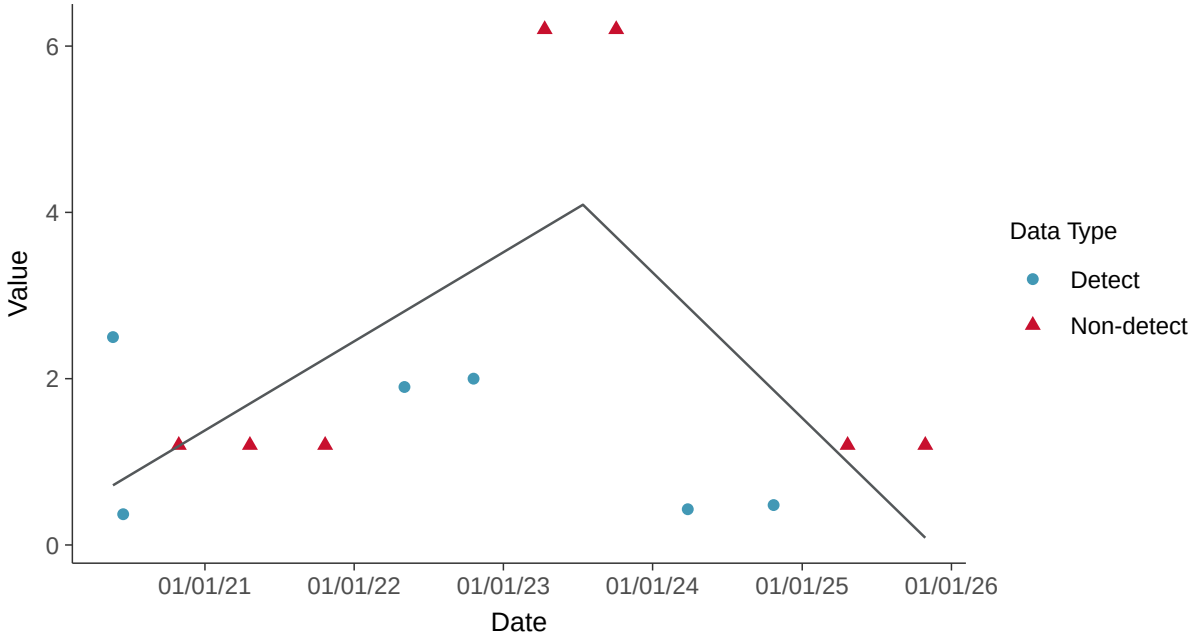
**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17001R (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17001R (ug/L)

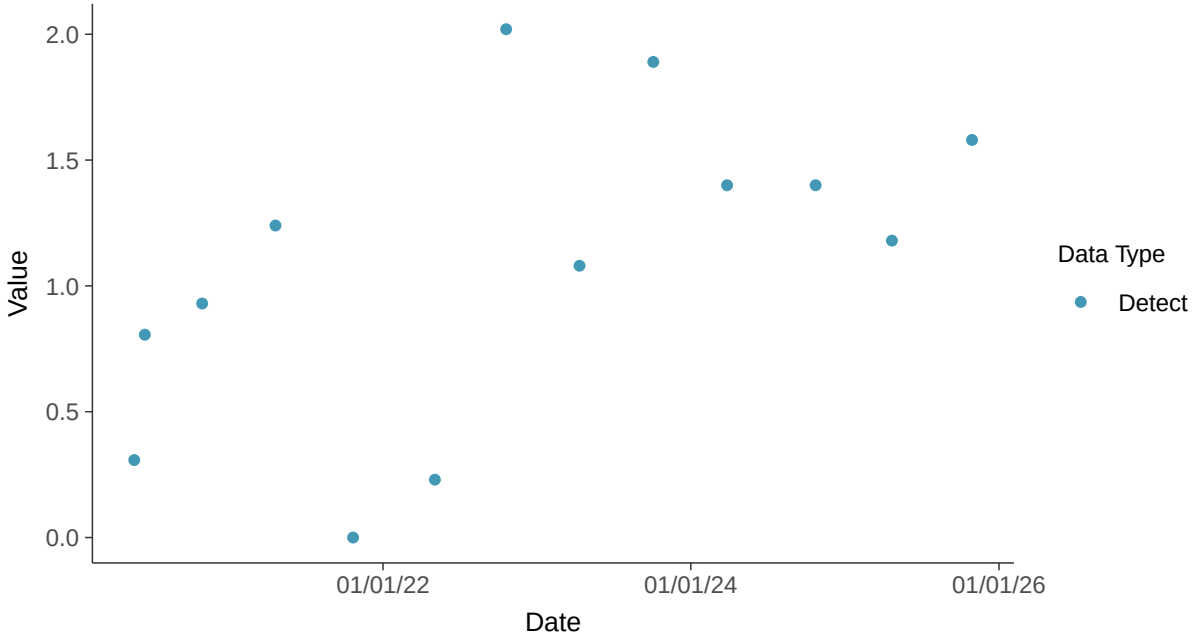


## Appendix IV: Radium-226+228, MW-17001R

ID: 14_2_125

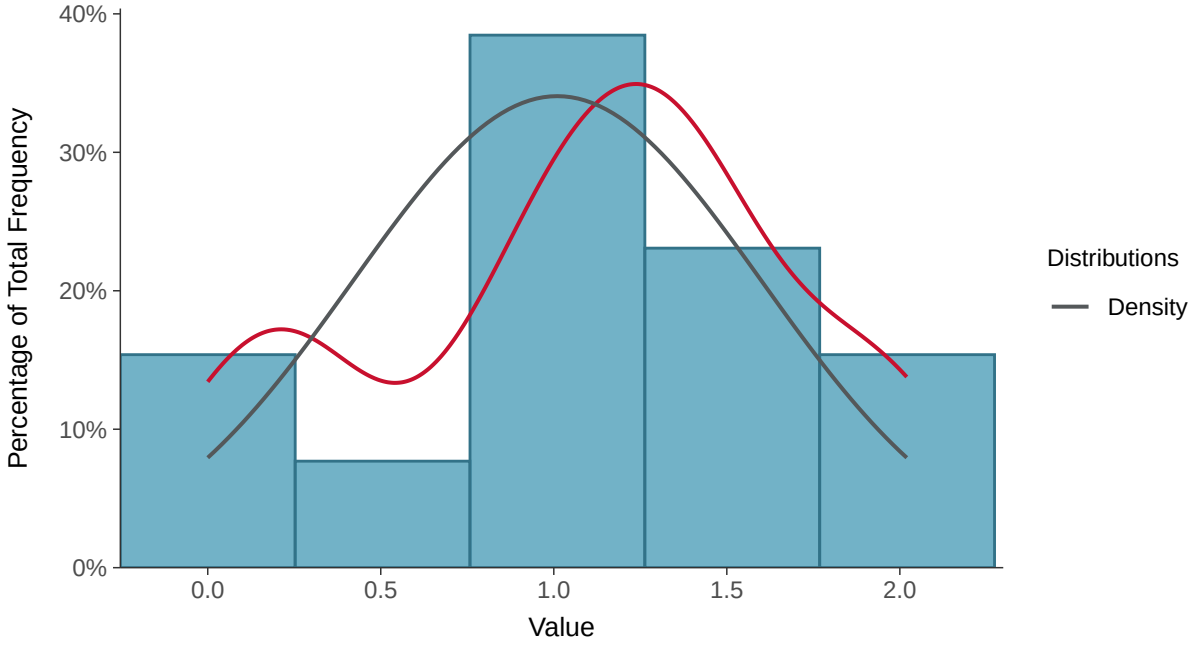
**Scatter Plot**

Radium-226+228, MW-17001R (pCi/L)



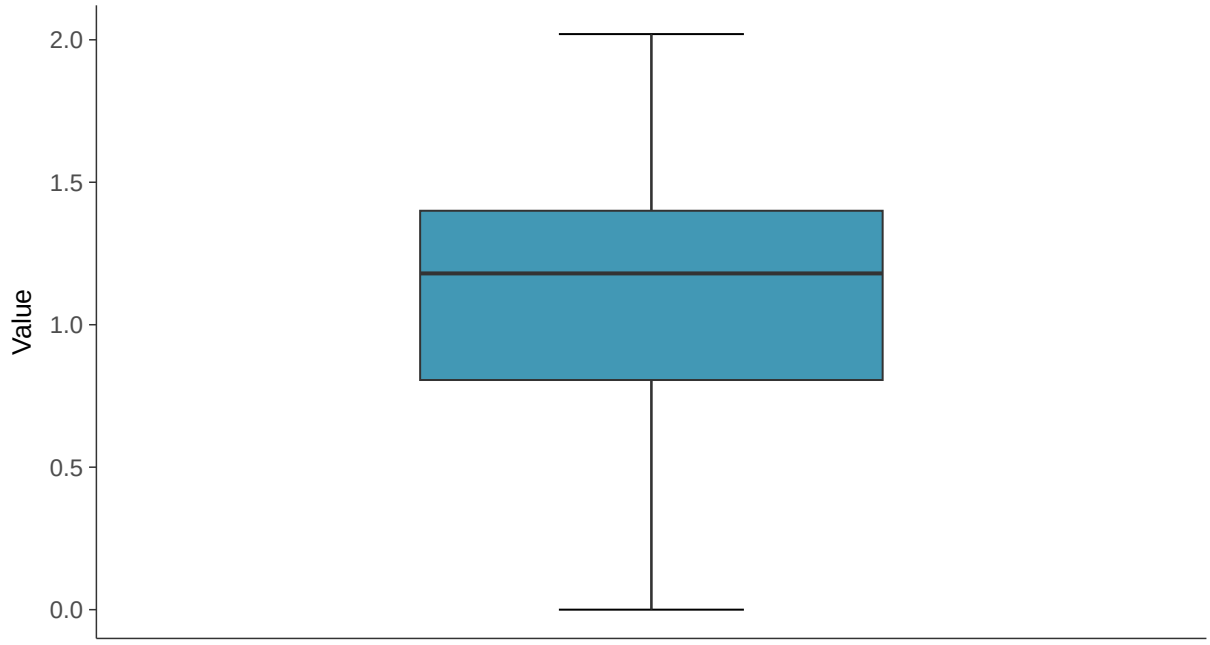

**Histogram**

Radium-226+228, MW-17001R (pCi/L)



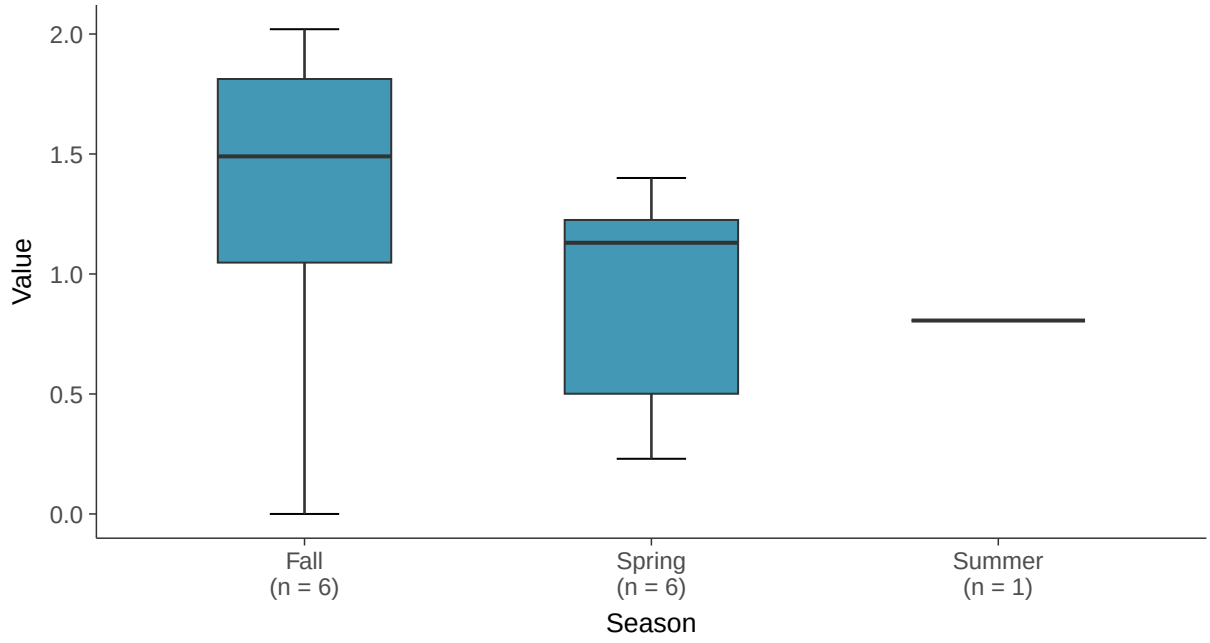
**Boxplot**

Radium-226+228, MW-17001R (pCi/L)



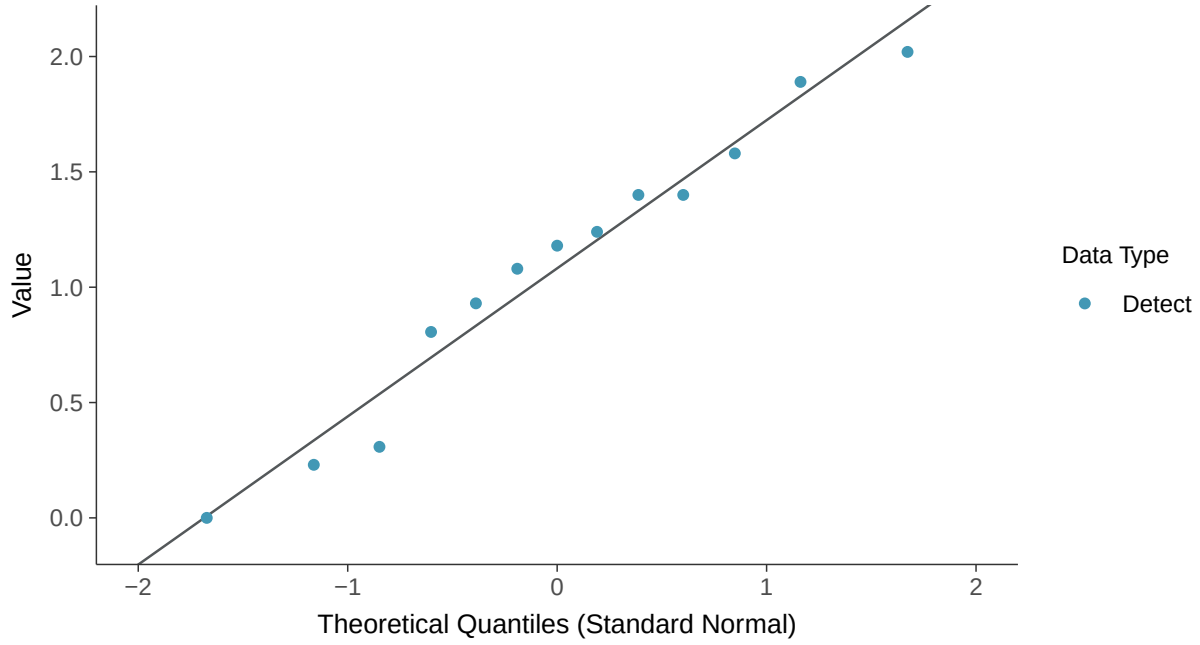

**Boxplot by Season**

Radium-226+228, MW-17001R (pCi/L)



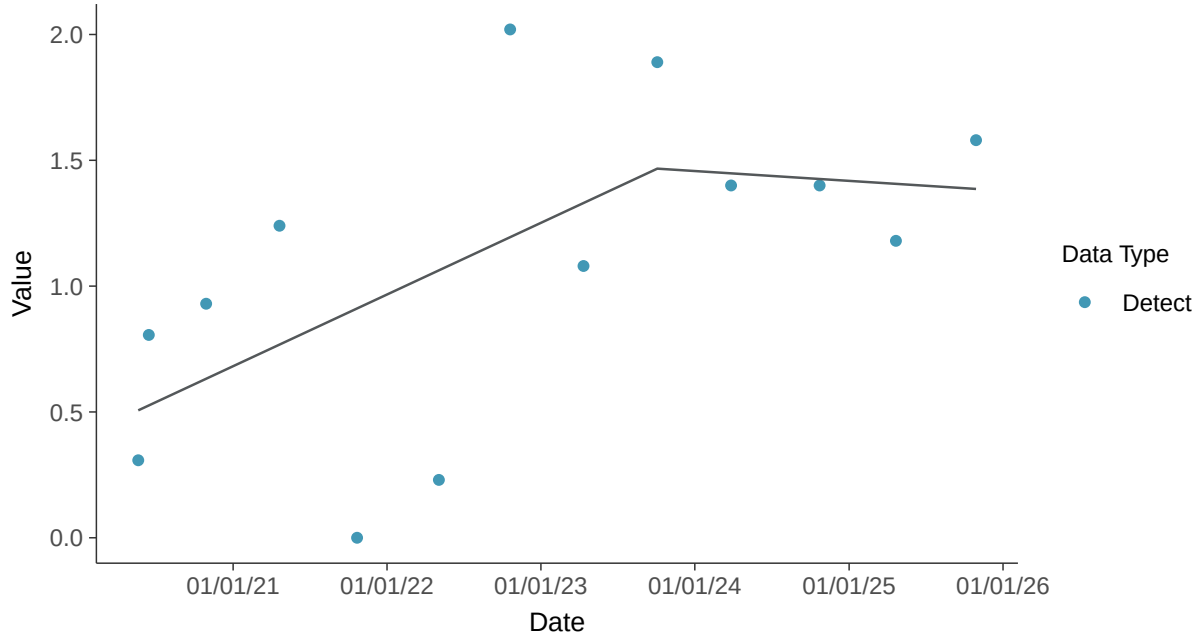
**Normal Q-Q plot**

Radium-226+228, MW-17001R (pCi/L)




**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17001R (pCi/L)

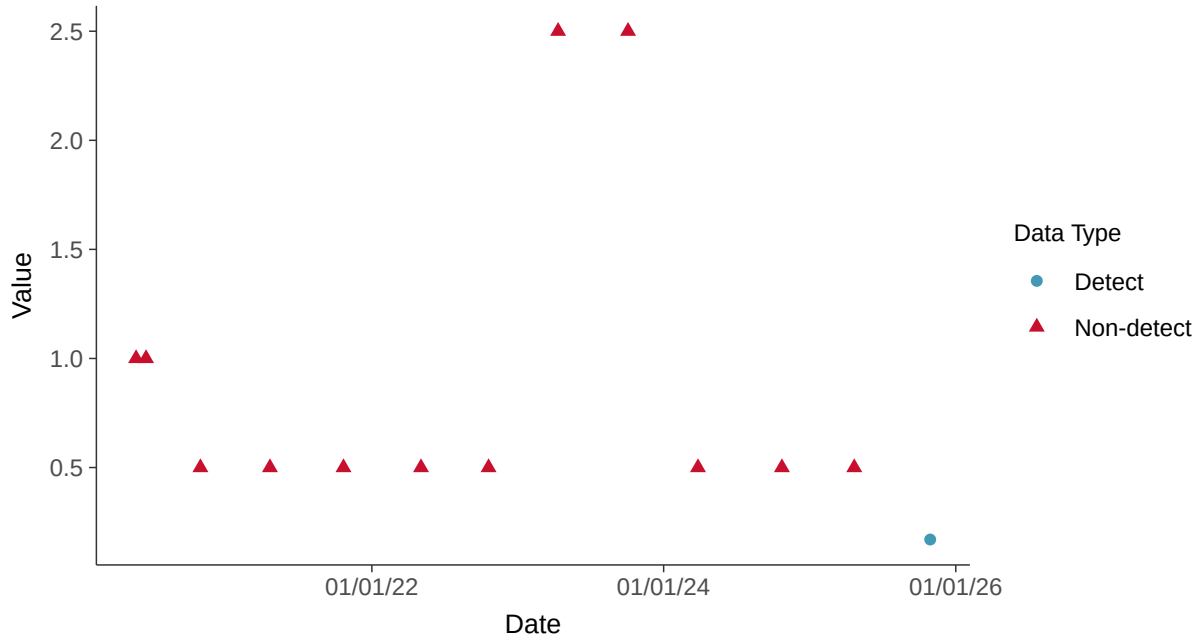


## Appendix IV: Selenium, MW-17001R

ID: 14_2_127

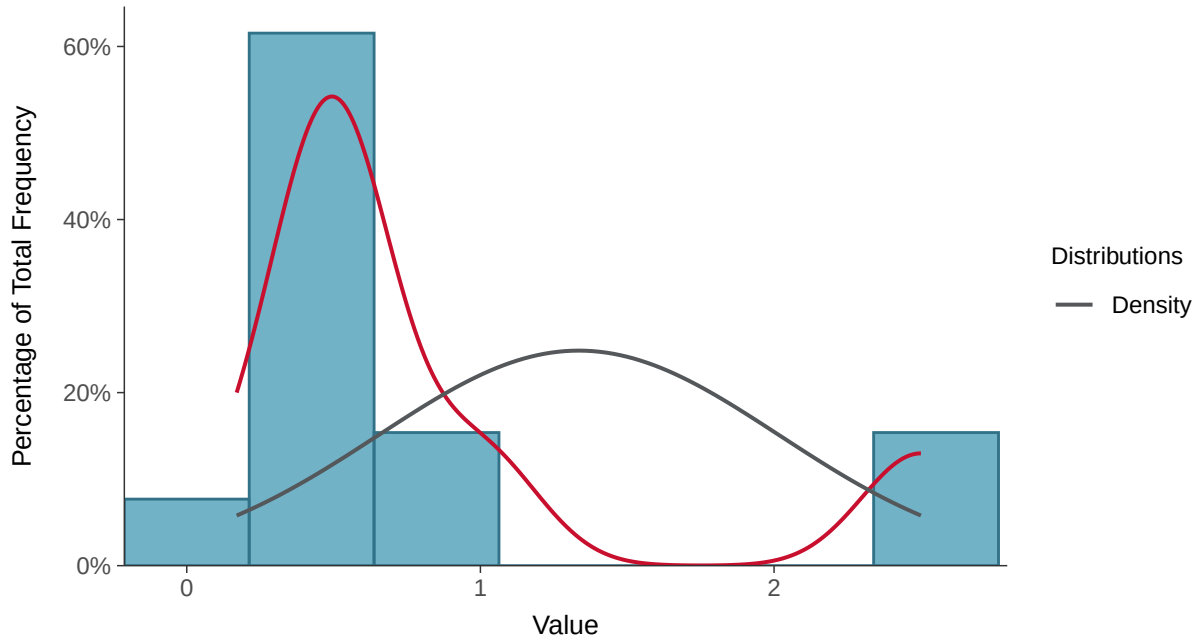
**Scatter Plot**

Selenium, MW-17001R (ug/L)



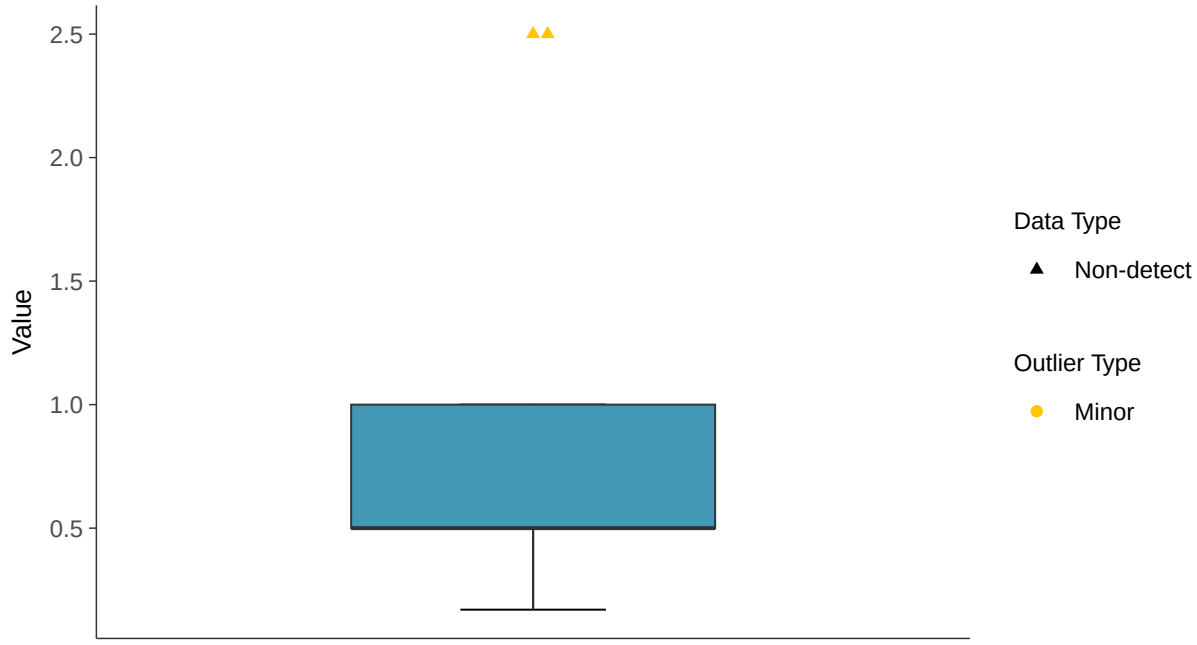

**Histogram**

Selenium, MW-17001R (ug/L)



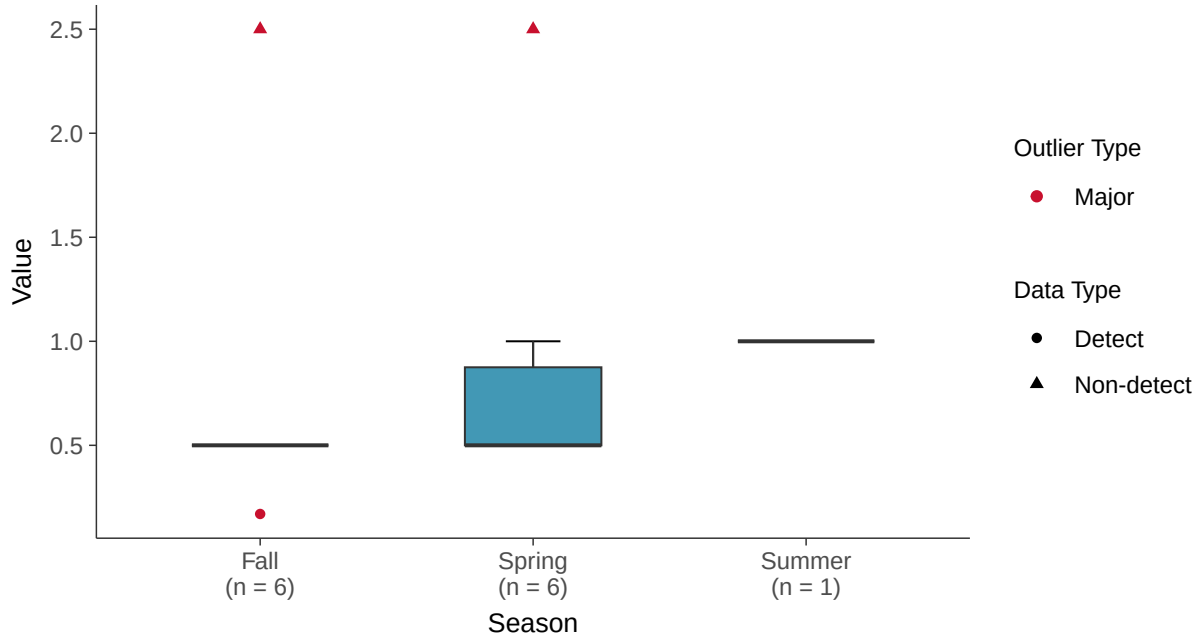
## Boxplot

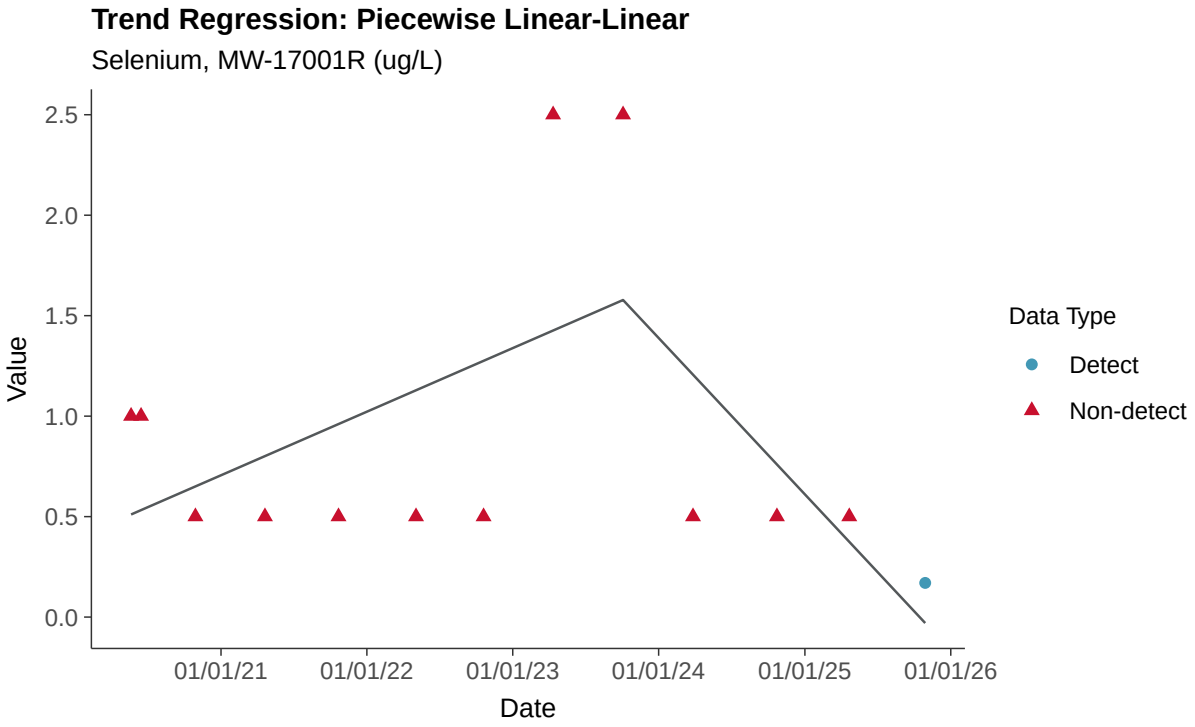
Selenium, MW-17001R (ug/L)




## Boxplot by Season

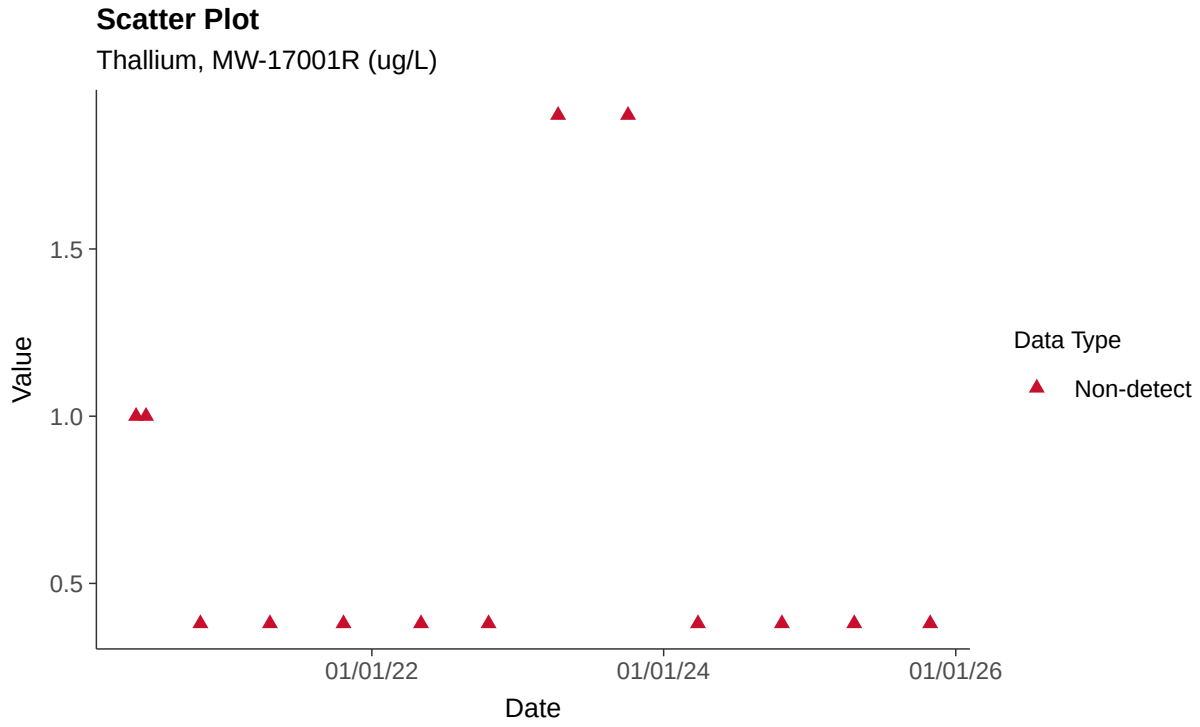
Selenium, MW-17001R (ug/L)

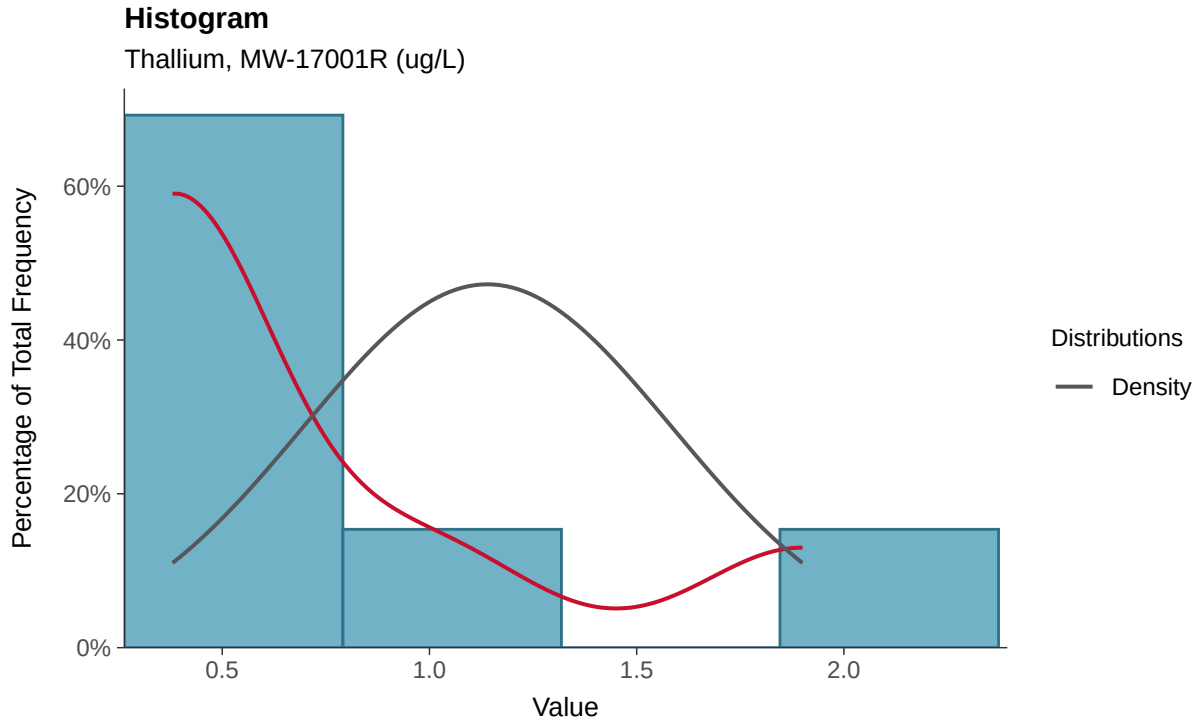



Trend Regression: Piecewise Linear-Linear
Selenium, MW-17001R (ug/L)
Value
2.5
2.0
1.5
1.0
0.5
0.0
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Thallium, MW-17001R

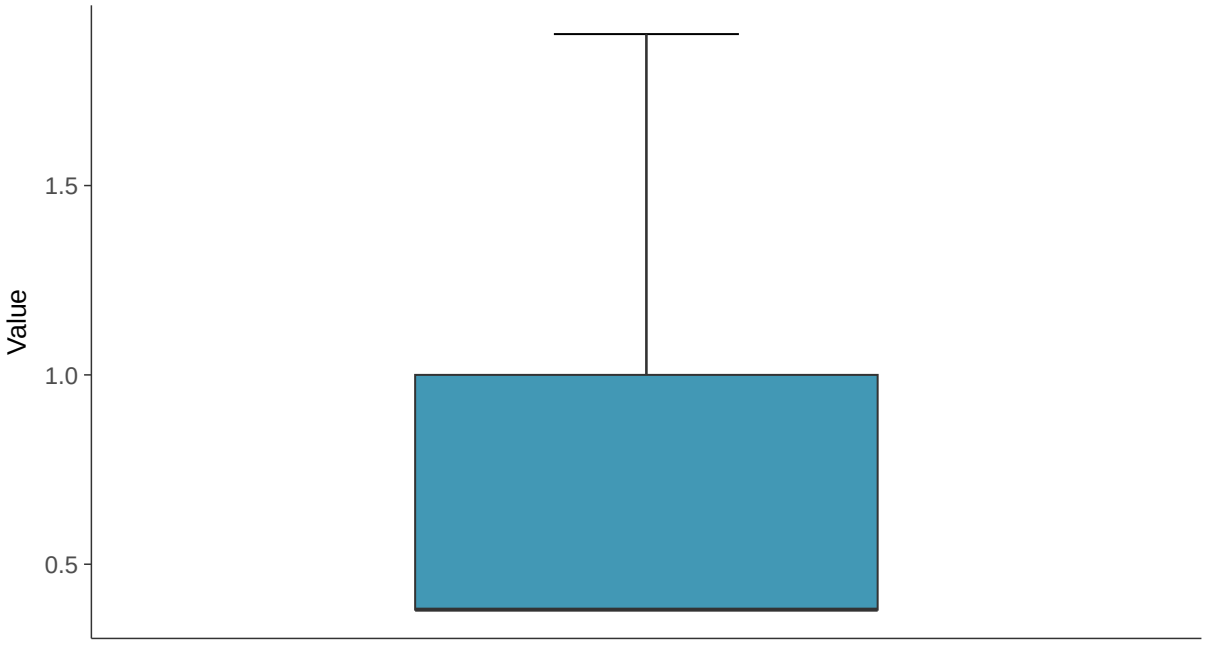
ID: 14_2_131



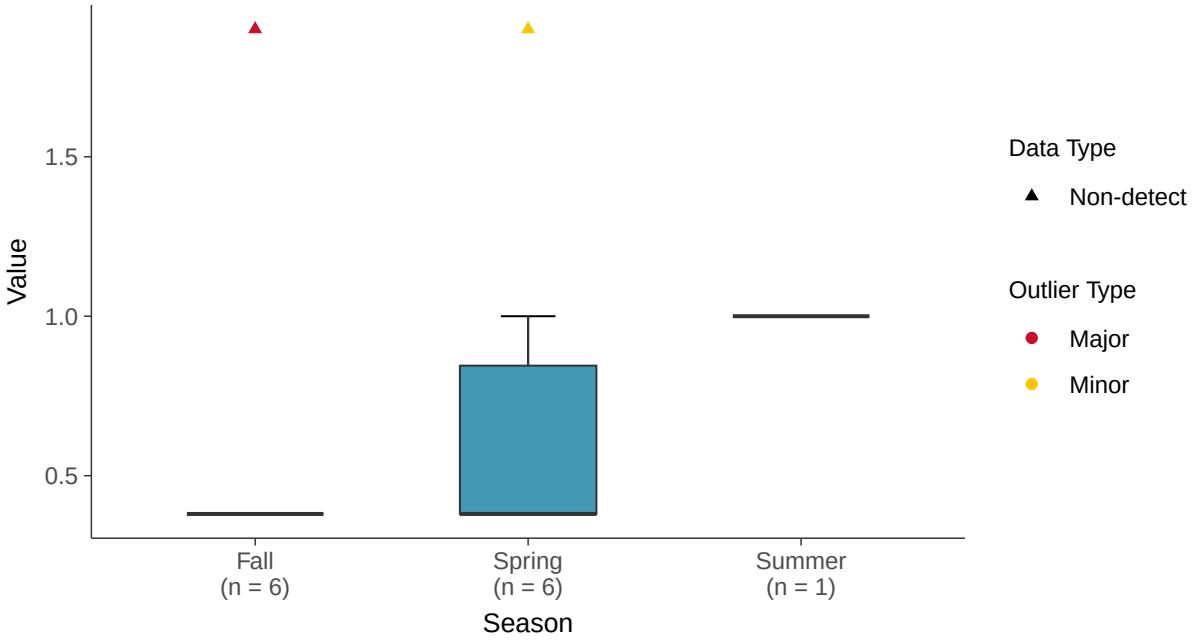
## Boxplot

Thallium, MW-17001R (ug/L)



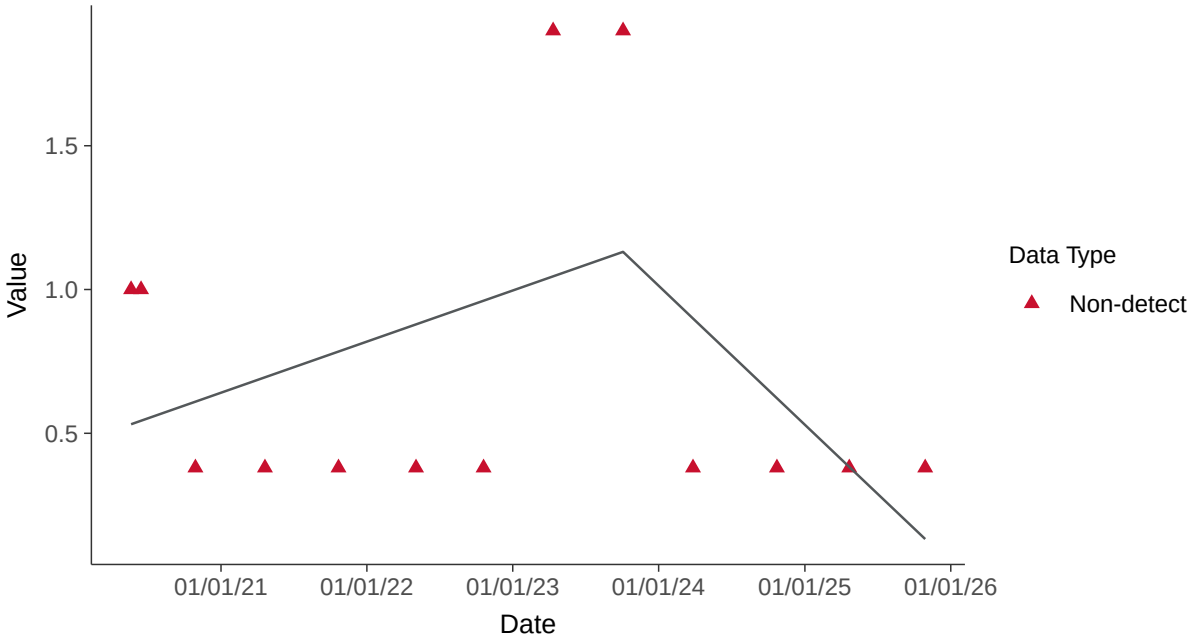

## Boxplot by Season

Thallium, MW-17001R (ug/L)



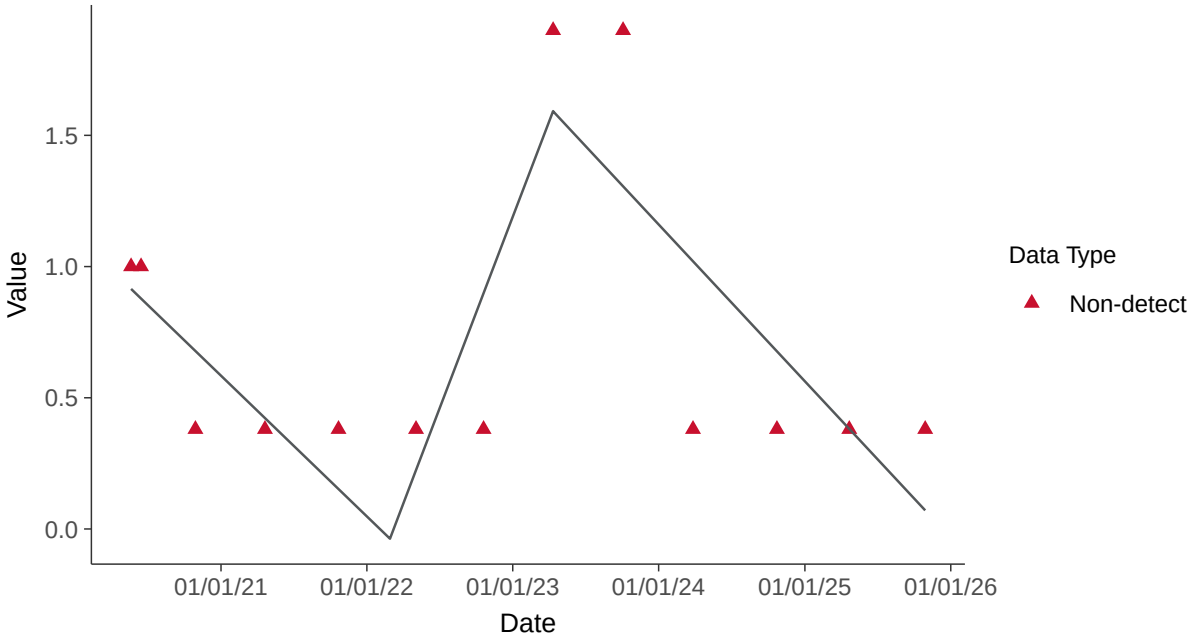
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17001R (ug/L)



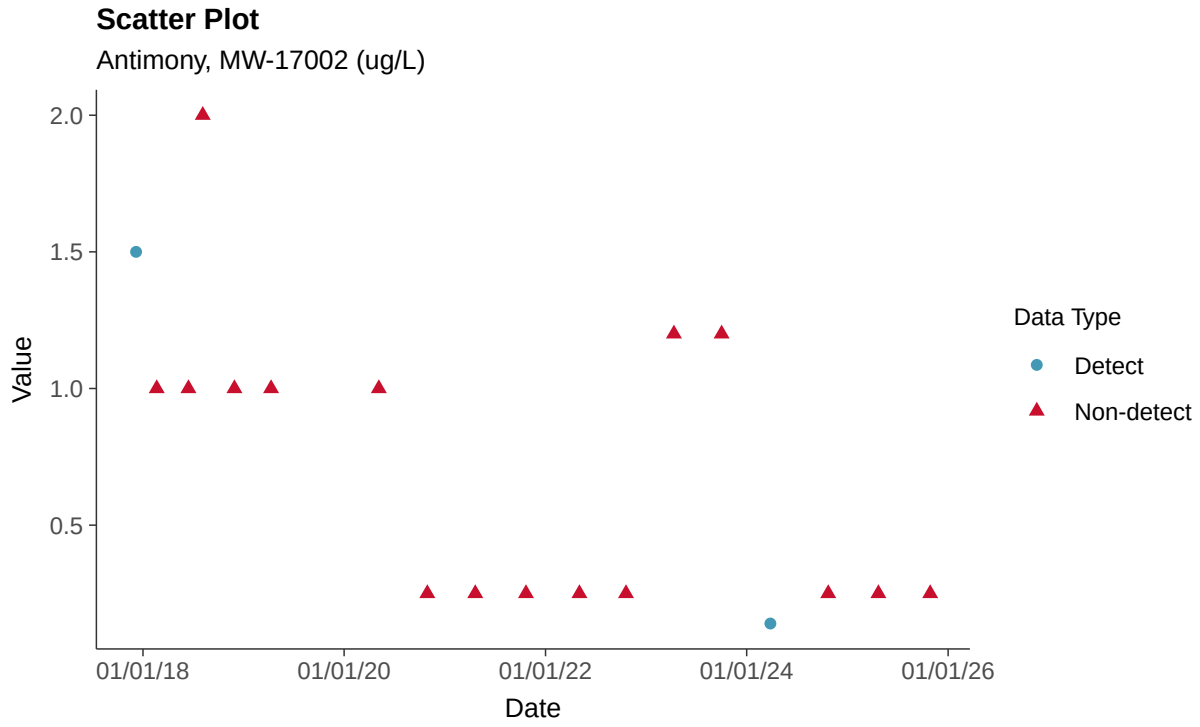

**Trend Regression: Piecewise Linear-Linear-Linear**

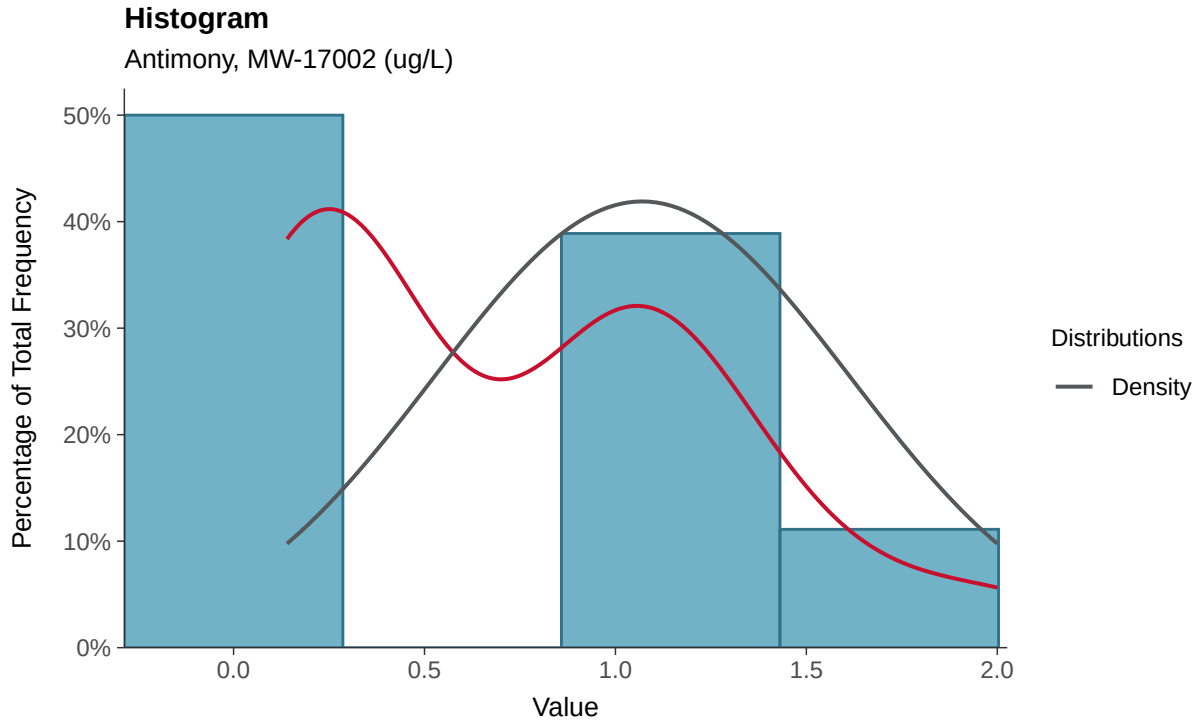
Thallium, MW-17001R (ug/L)



## Appendix IV: Antimony, MW-17002

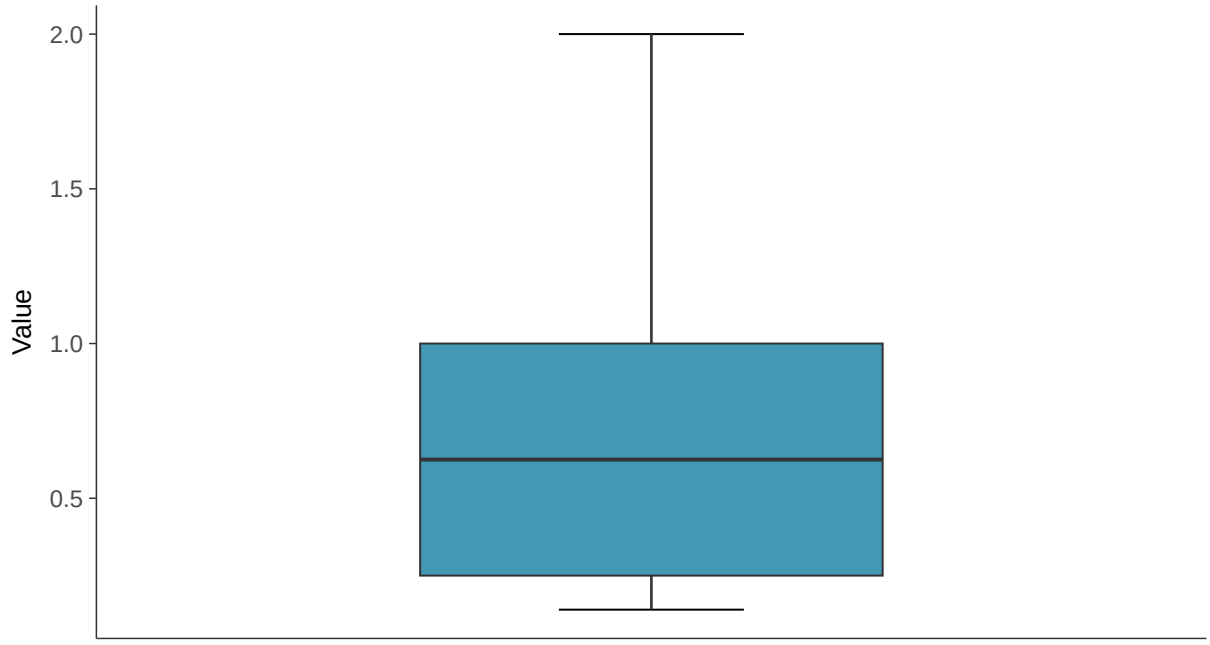
ID: 15_2_101



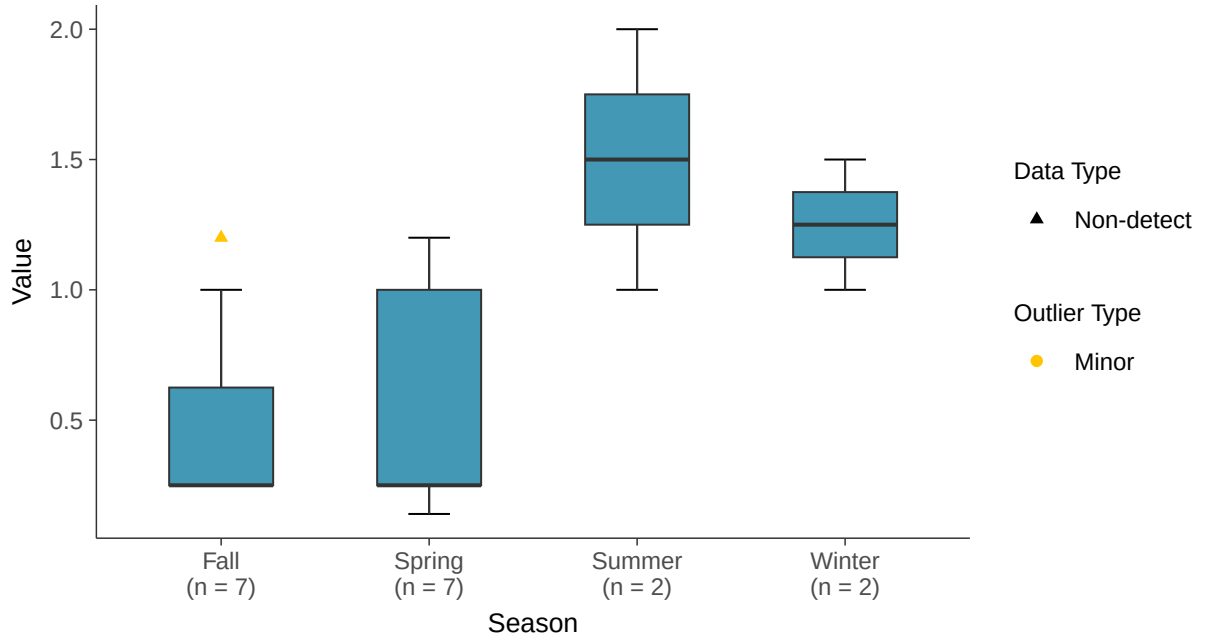
## Boxplot

Antimony, MW-17002 (ug/L)



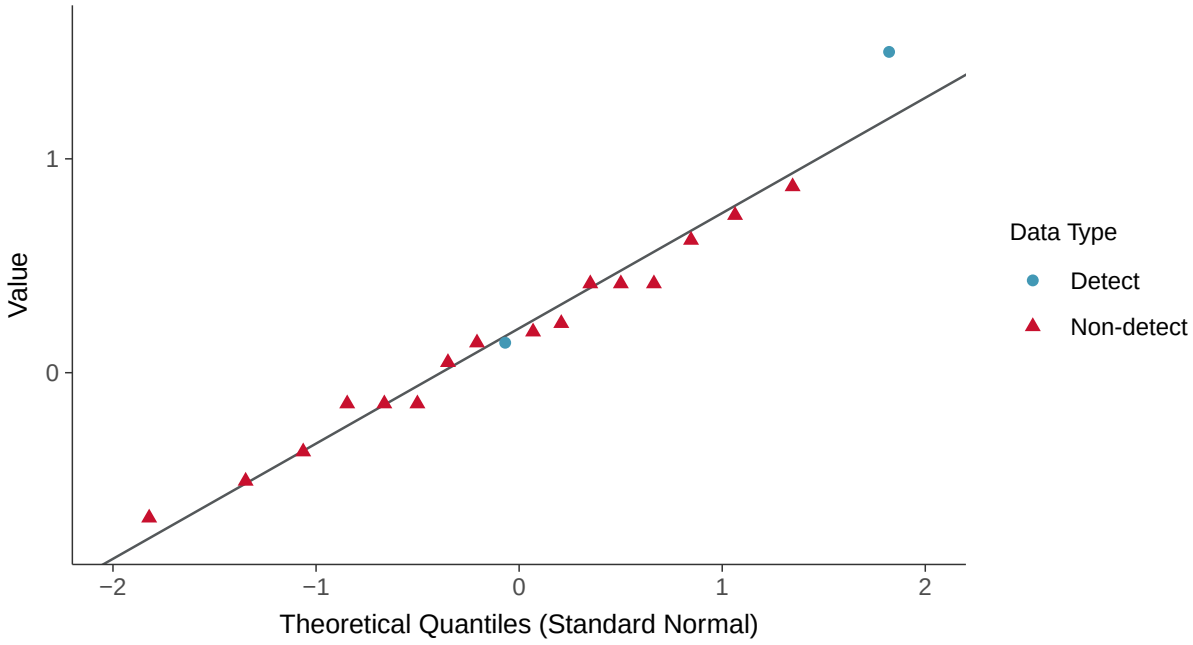

## Boxplot by Season

Antimony, MW-17002 (ug/L)



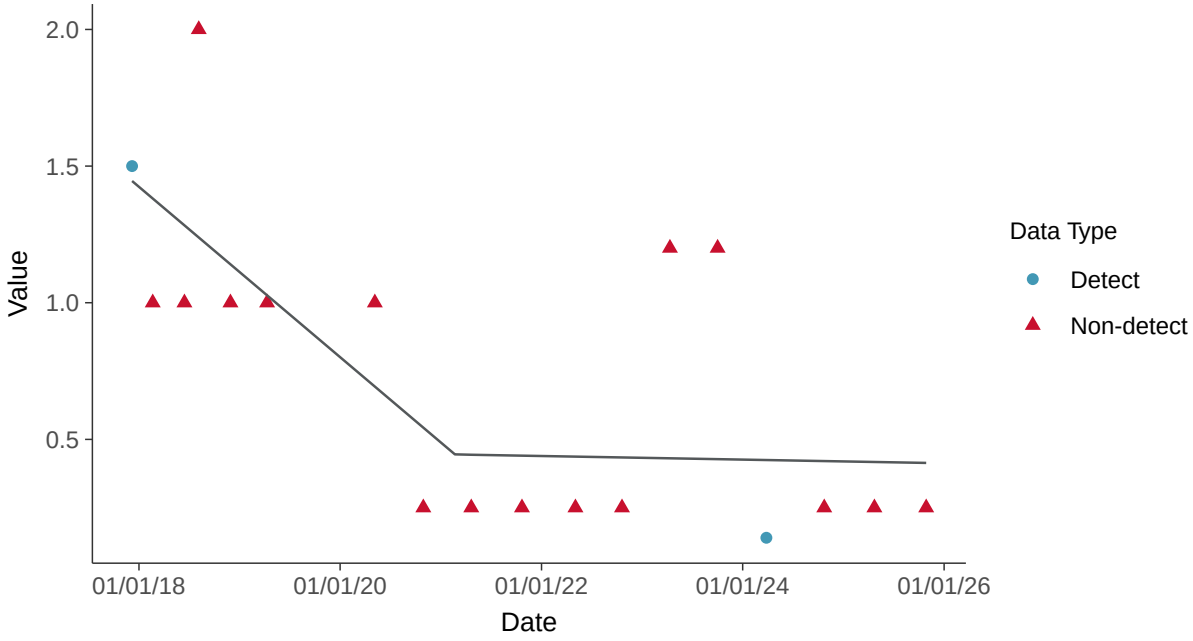
**Normal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-17002 (ug/L)



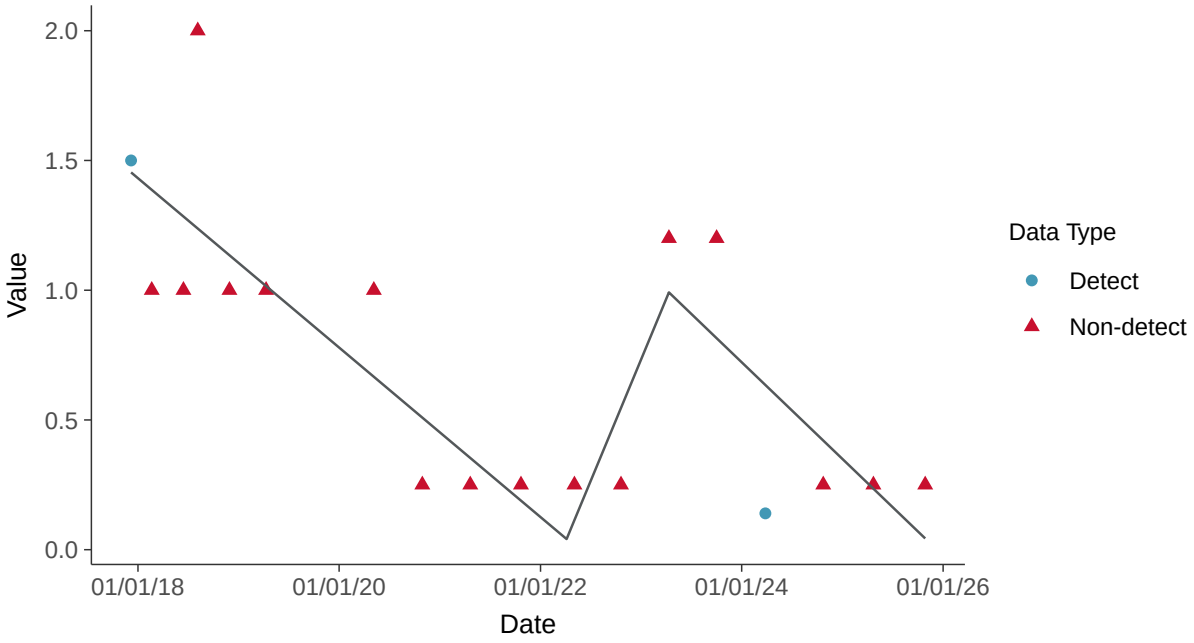

**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17002 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Antimony, MW-17002 (ug/L)

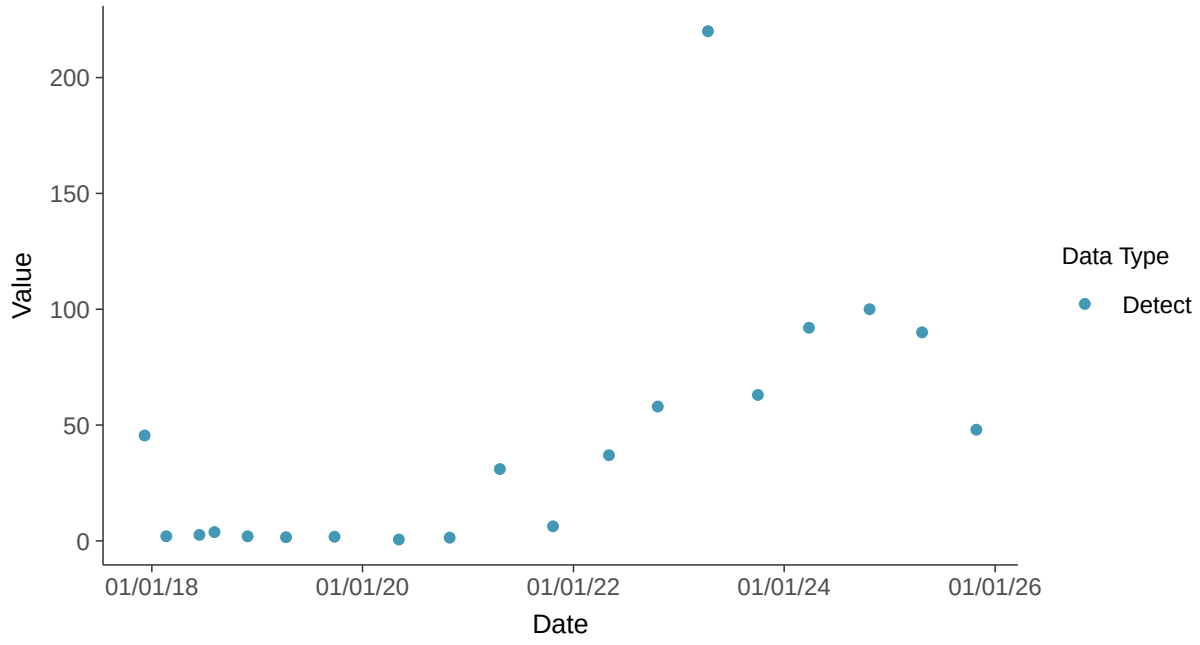


## Appendix IV: Arsenic, MW-17002

ID: 15_2_102

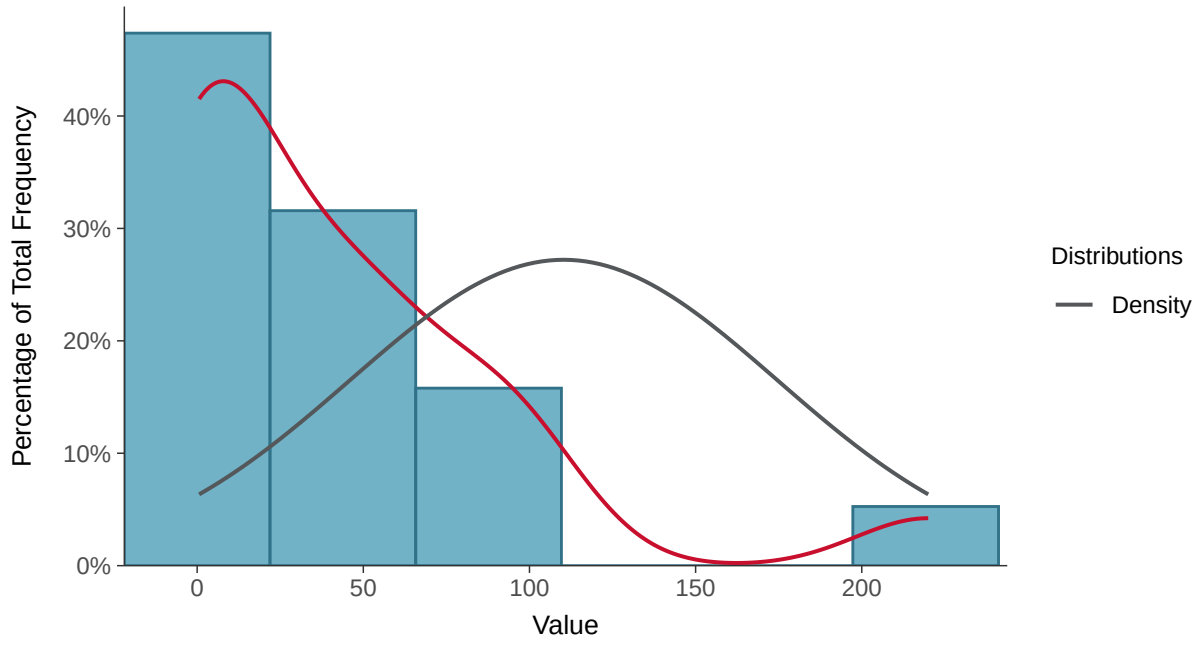
**Scatter Plot**

Arsenic, MW-17002 (ug/L)



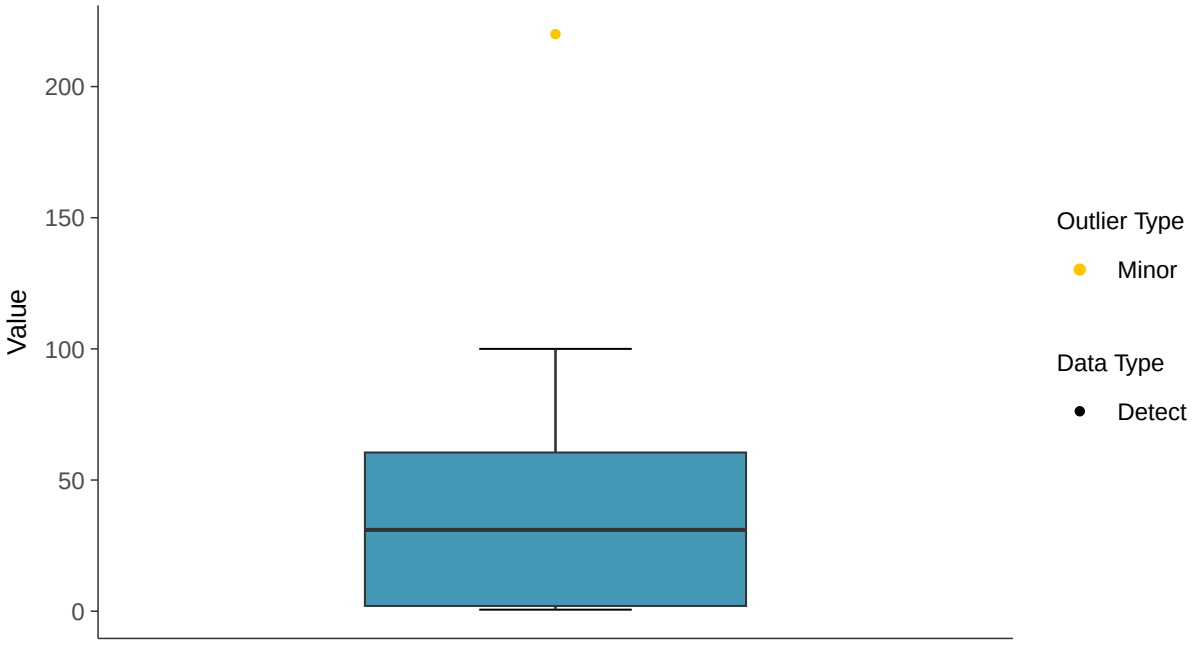

**Histogram**

Arsenic, MW-17002 (ug/L)



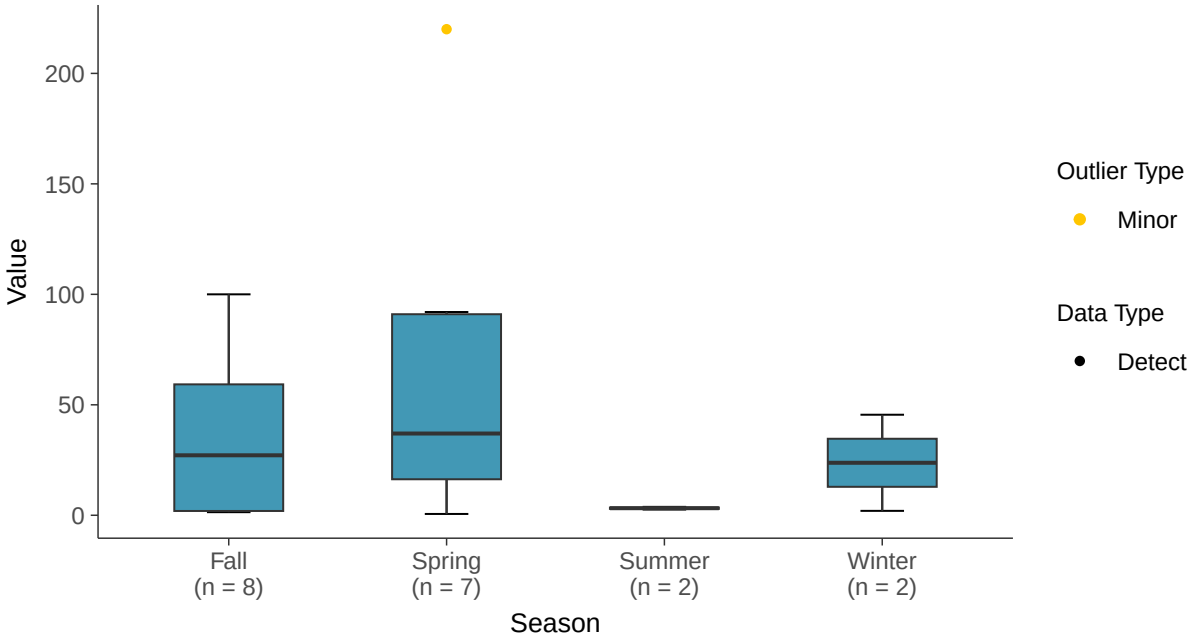
## Boxplot

Arsenic, MW-17002 (ug/L)



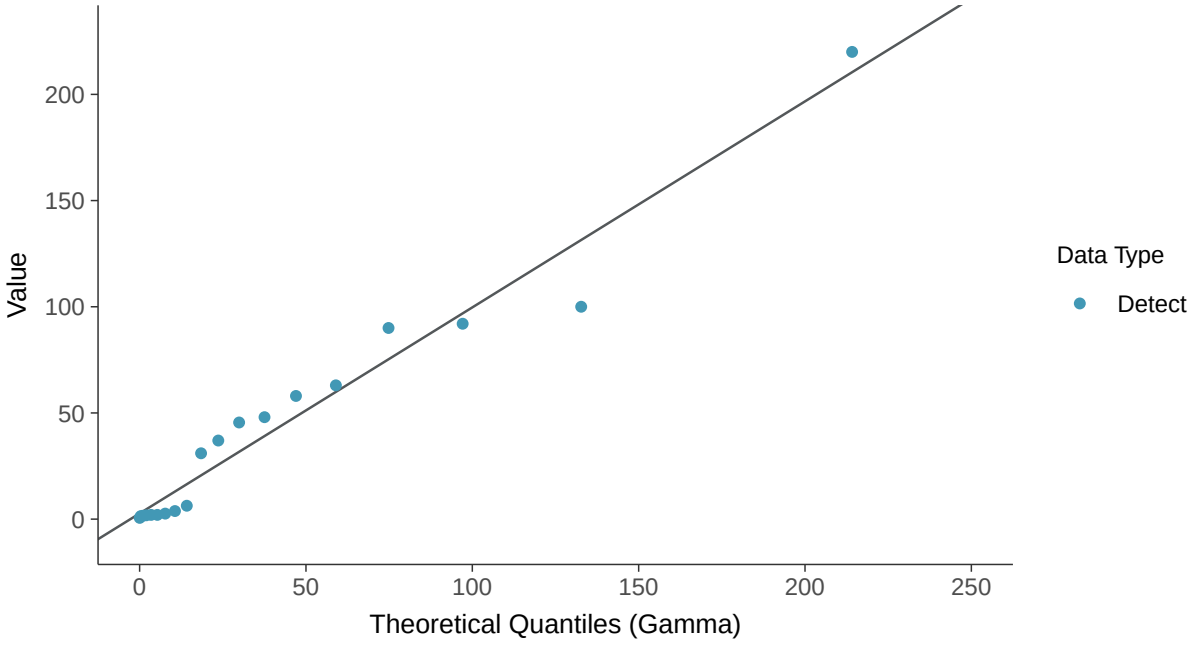

## Boxplot by Season

Arsenic, MW-17002 (ug/L)



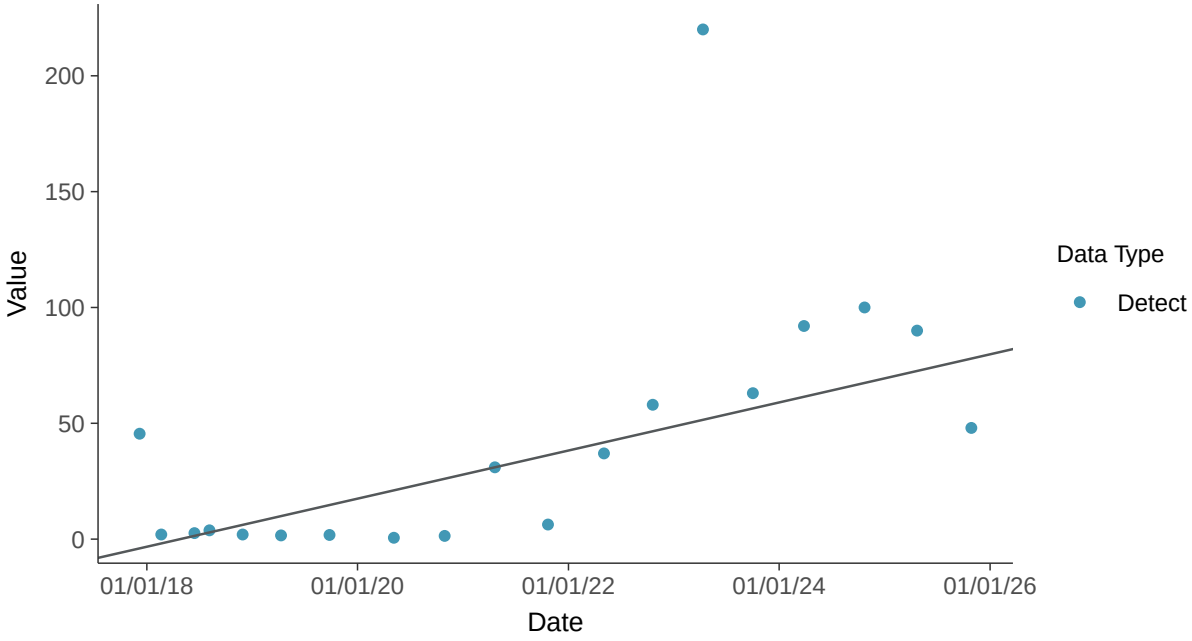
**Gamma Q-Q plot**

Arsenic, MW-17002 (ug/L)



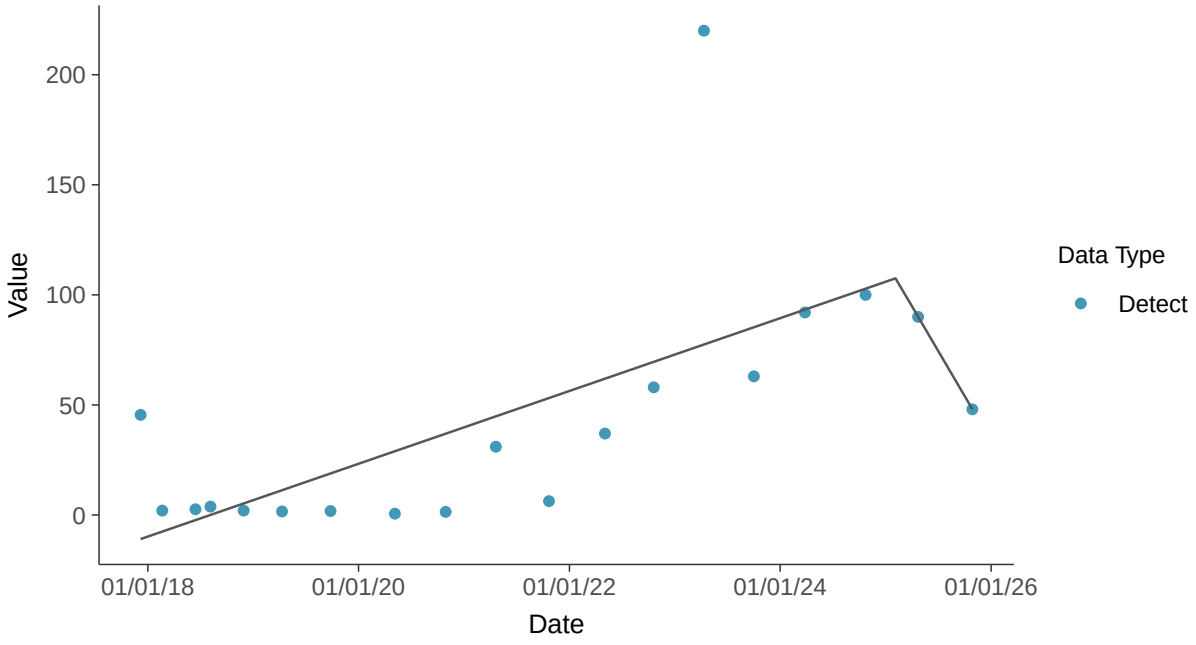

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Arsenic, MW-17002 (ug/L)



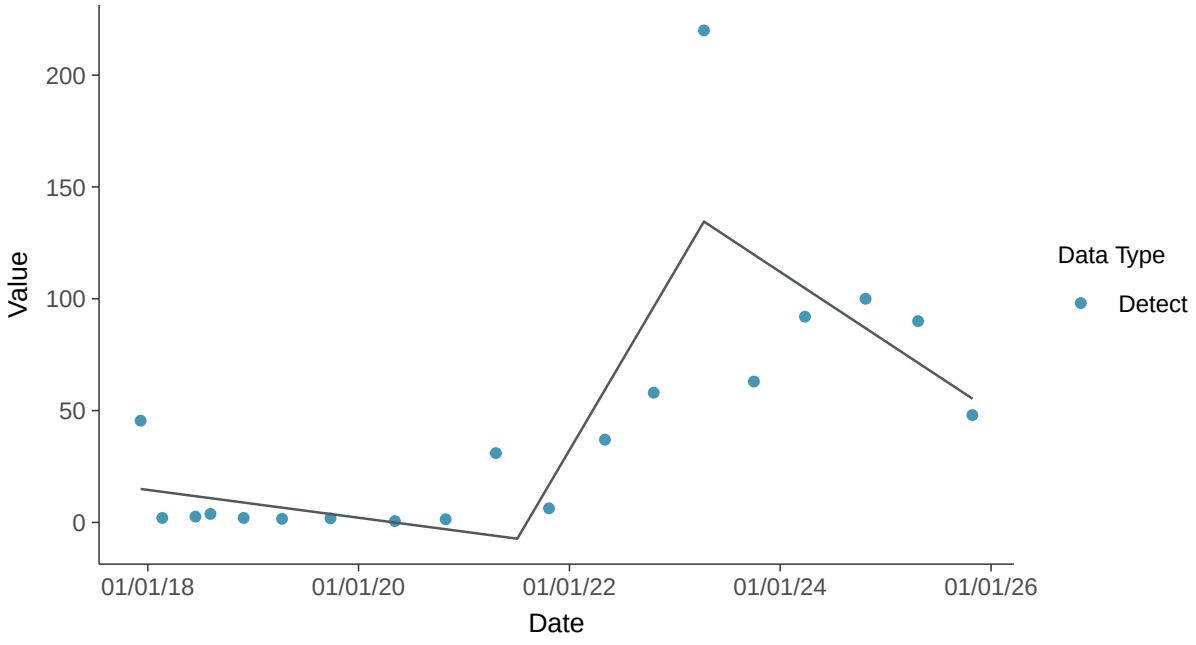
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17002 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-17002 (ug/L)

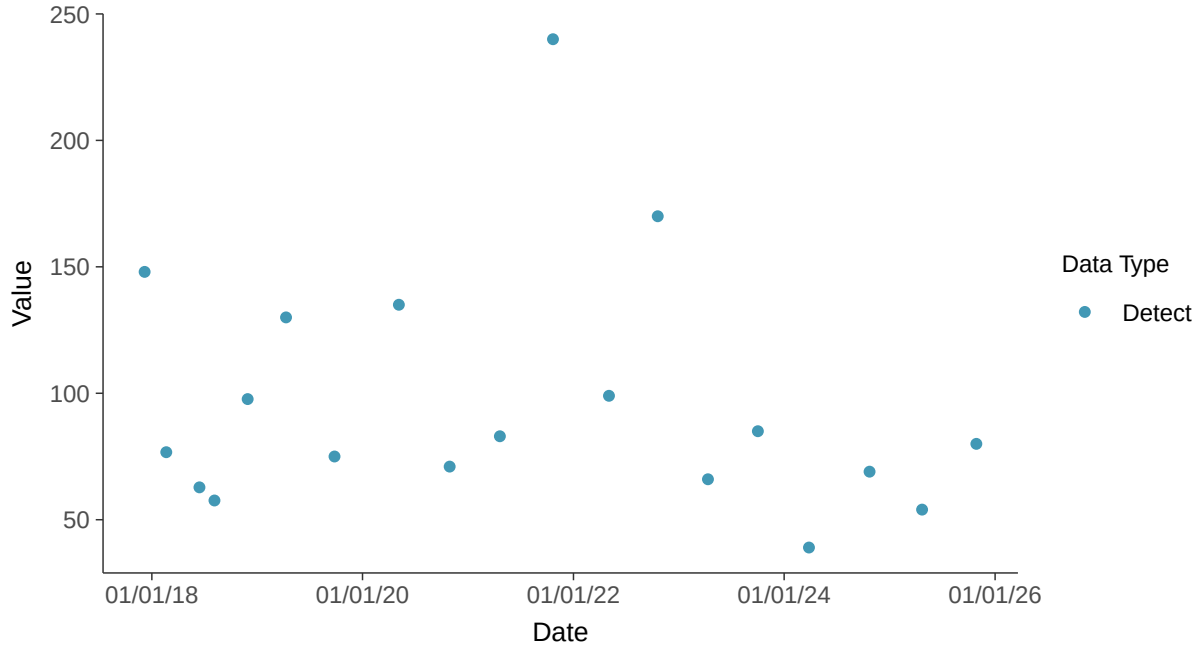


## Appendix IV: Barium, MW-17002

ID: 15_2_103

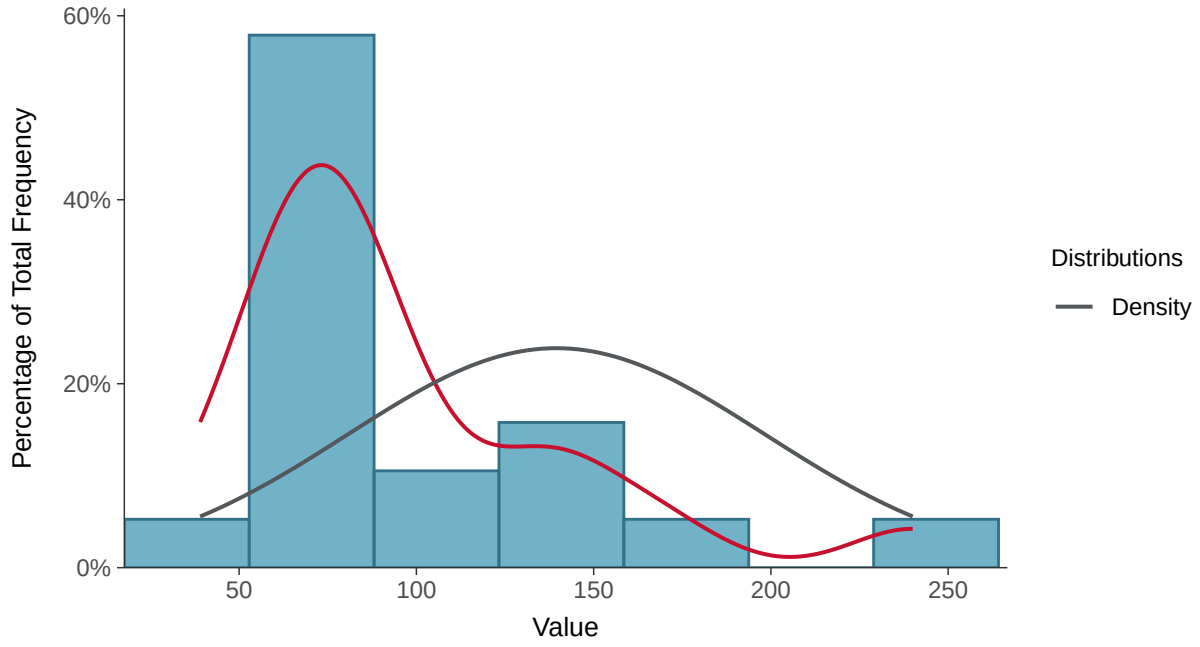
**Scatter Plot**

Barium, MW-17002 (ug/L)



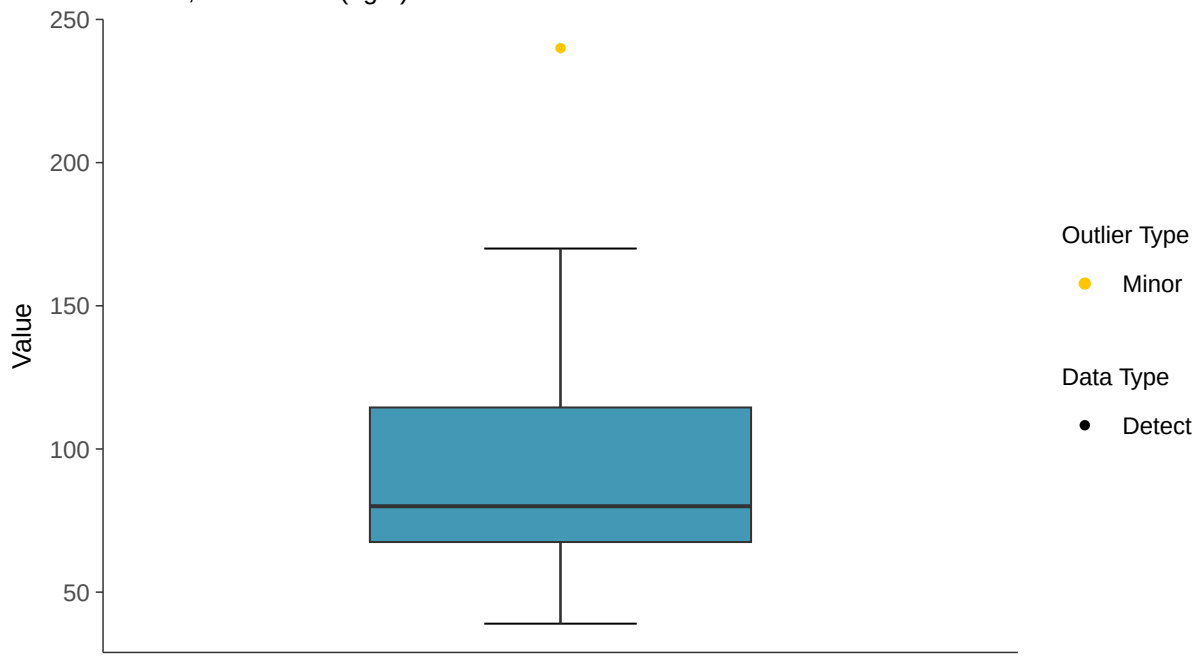

**Histogram**

Barium, MW-17002 (ug/L)



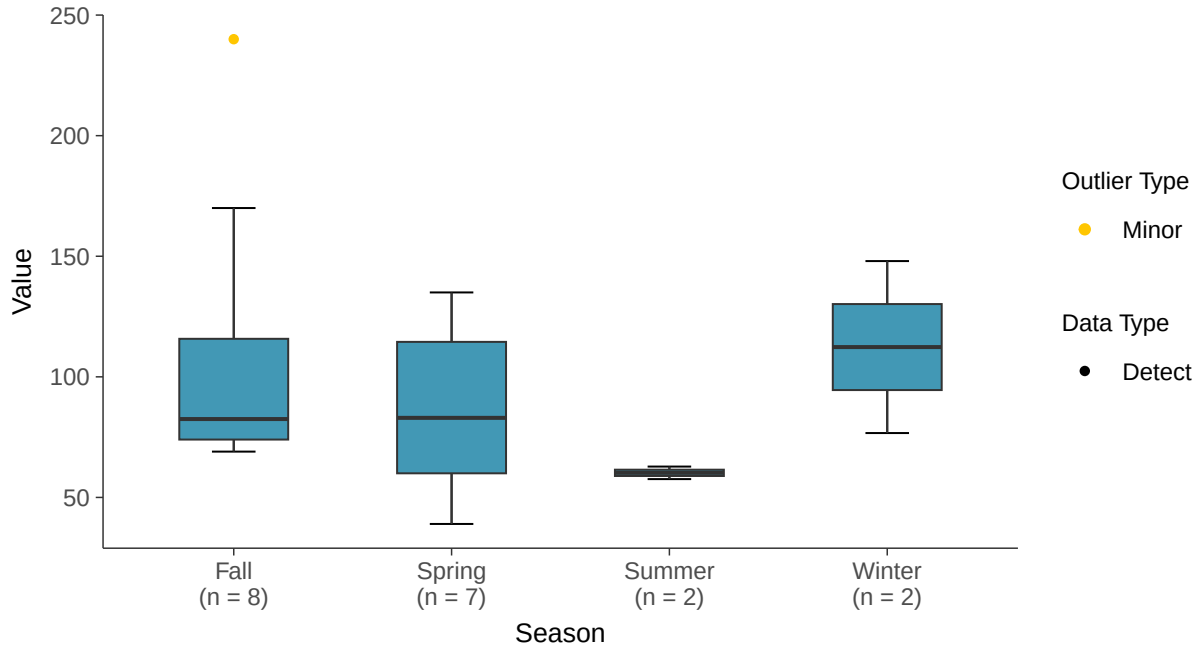
## Boxplot

Barium, MW-17002 (ug/L)



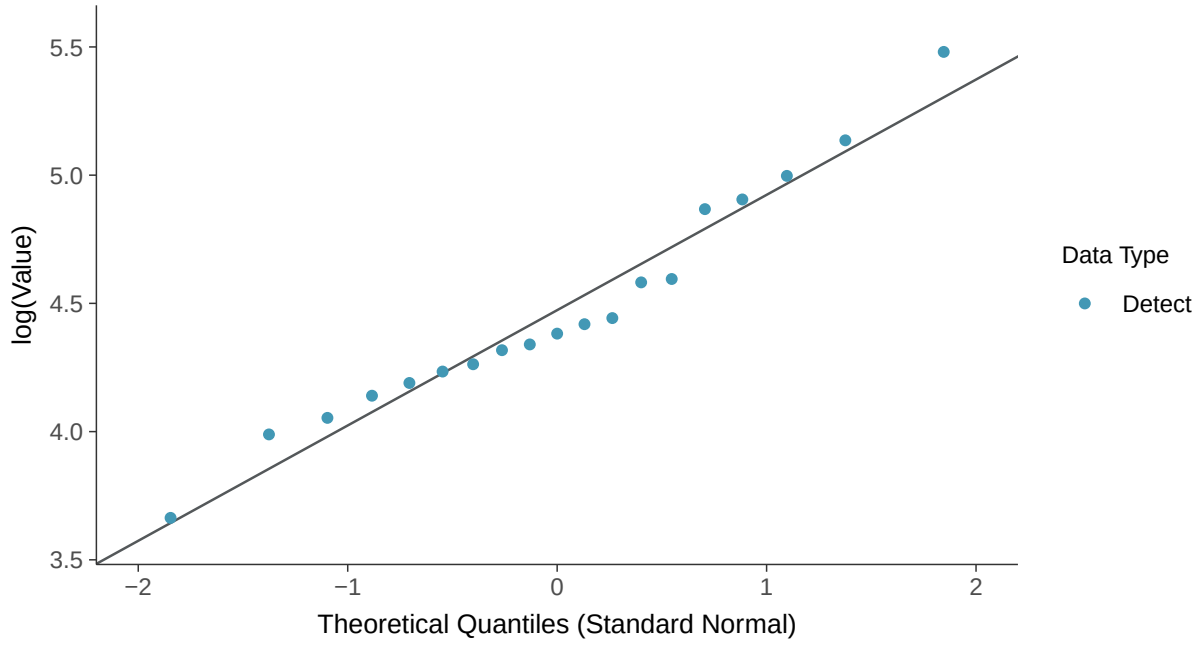

## Boxplot by Season

Barium, MW-17002 (ug/L)



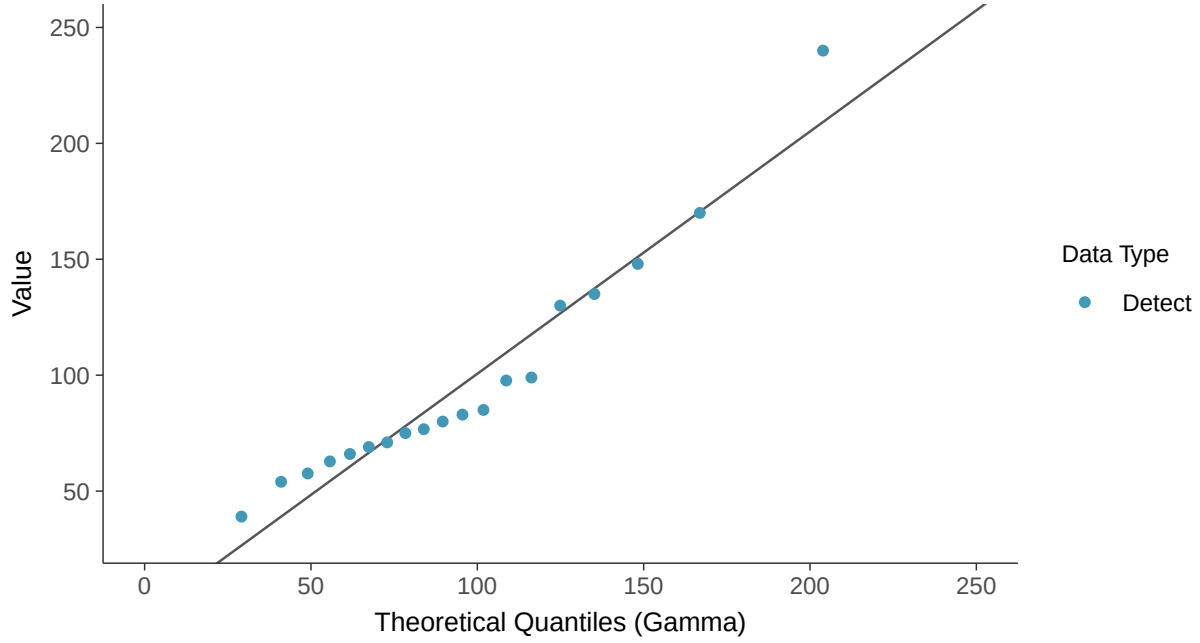
**Lognormal Q-Q plot**

Barium, MW-17002 (ug/L)



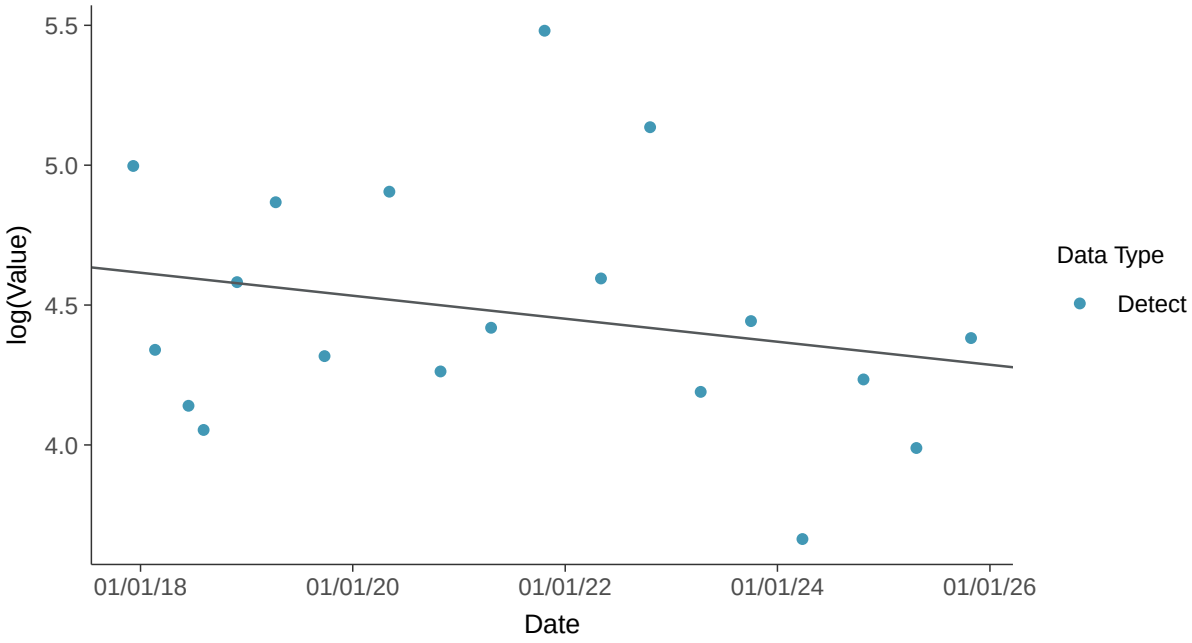

**Gamma Q-Q plot**

Barium, MW-17002 (ug/L)



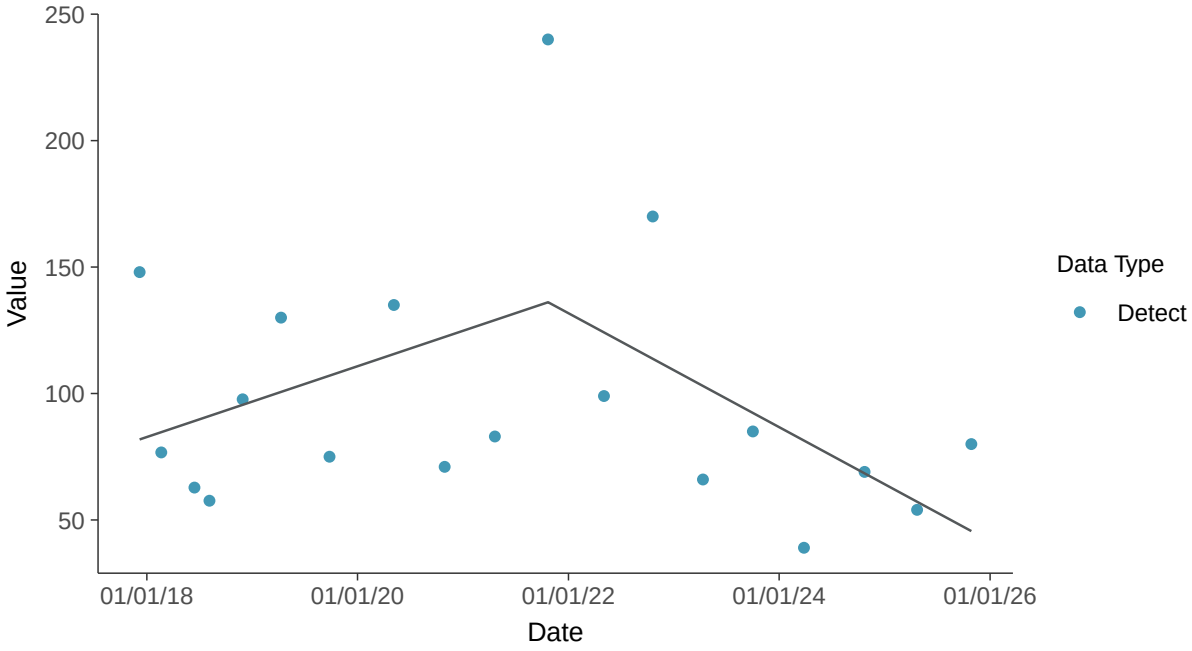
**Trend Regression: Lognormal MLE**

Barium, MW-17002 (ug/L)



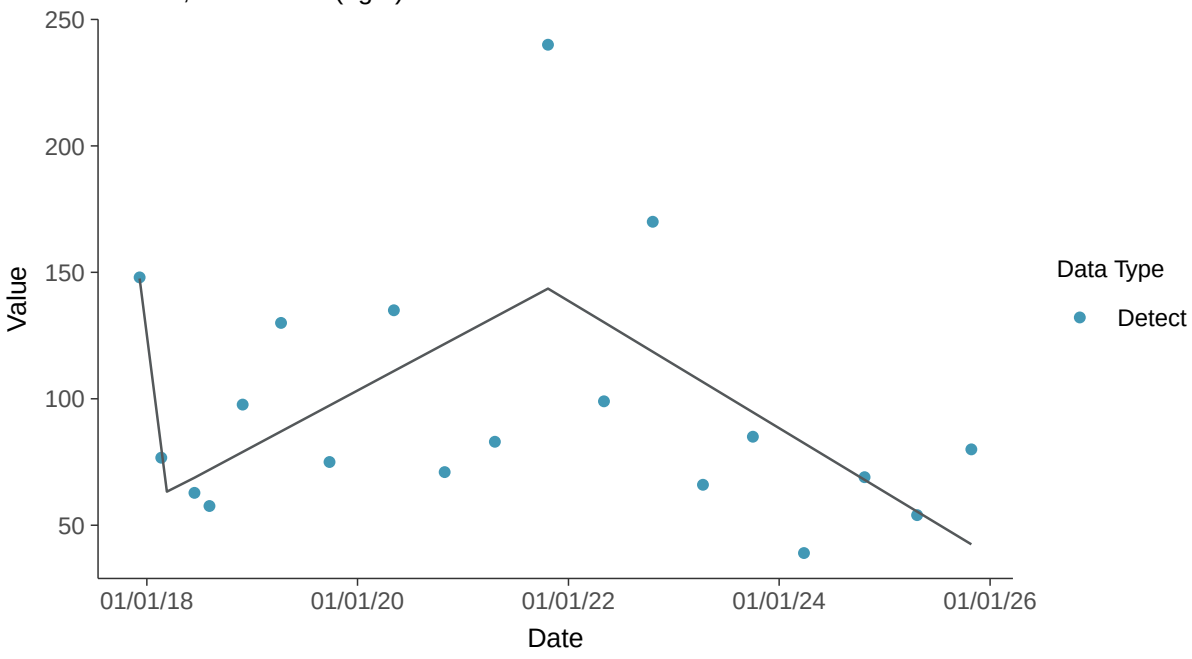

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17002 (ug/L)



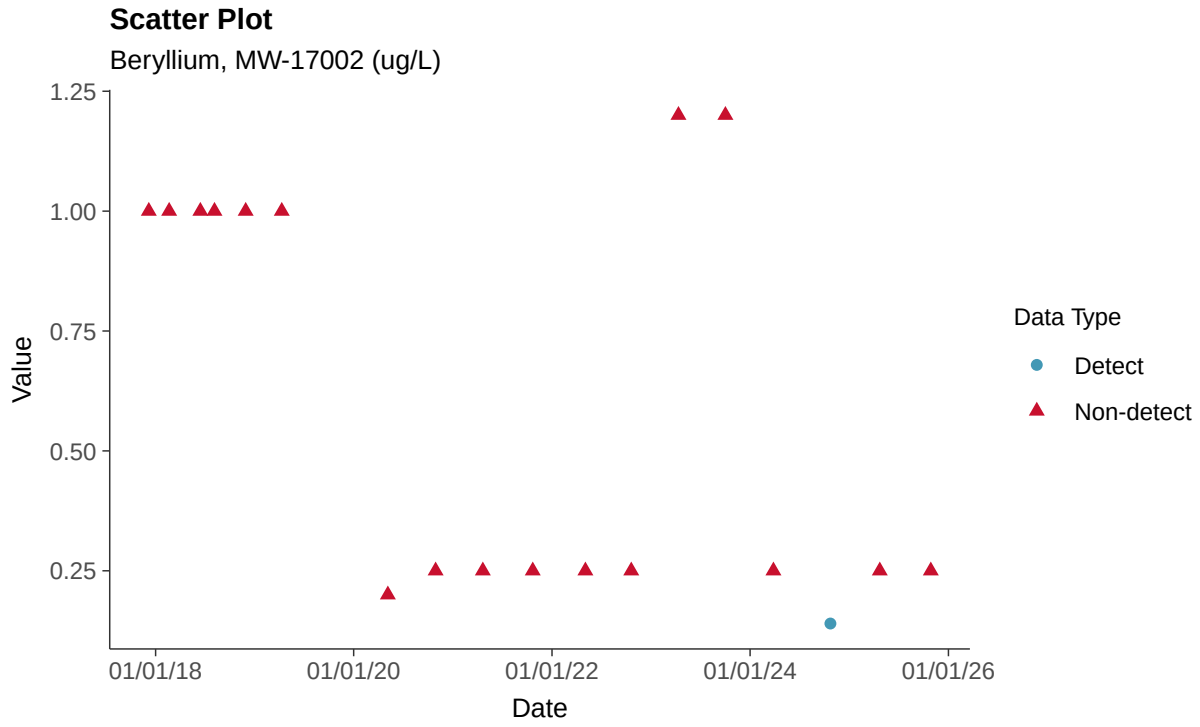
**Trend Regression: Piecewise Linear-Linear-Linear**

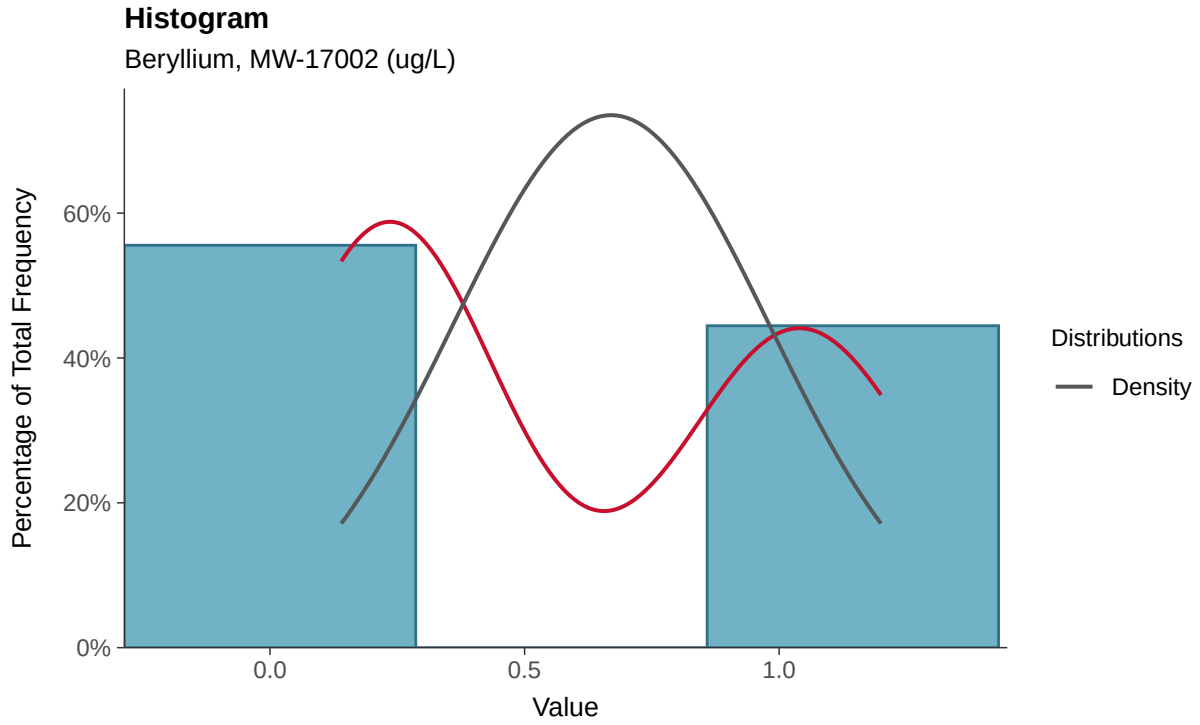
Barium, MW-17002 (ug/L)



## Appendix IV: Beryllium, MW-17002

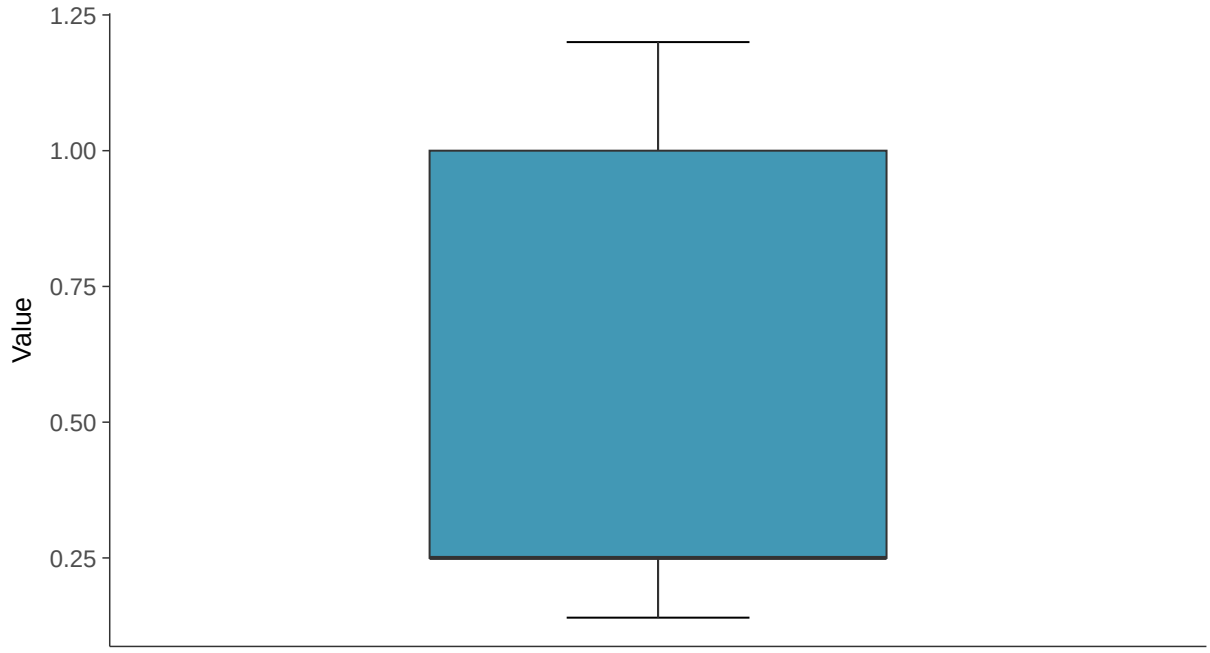
ID: 15_2_104



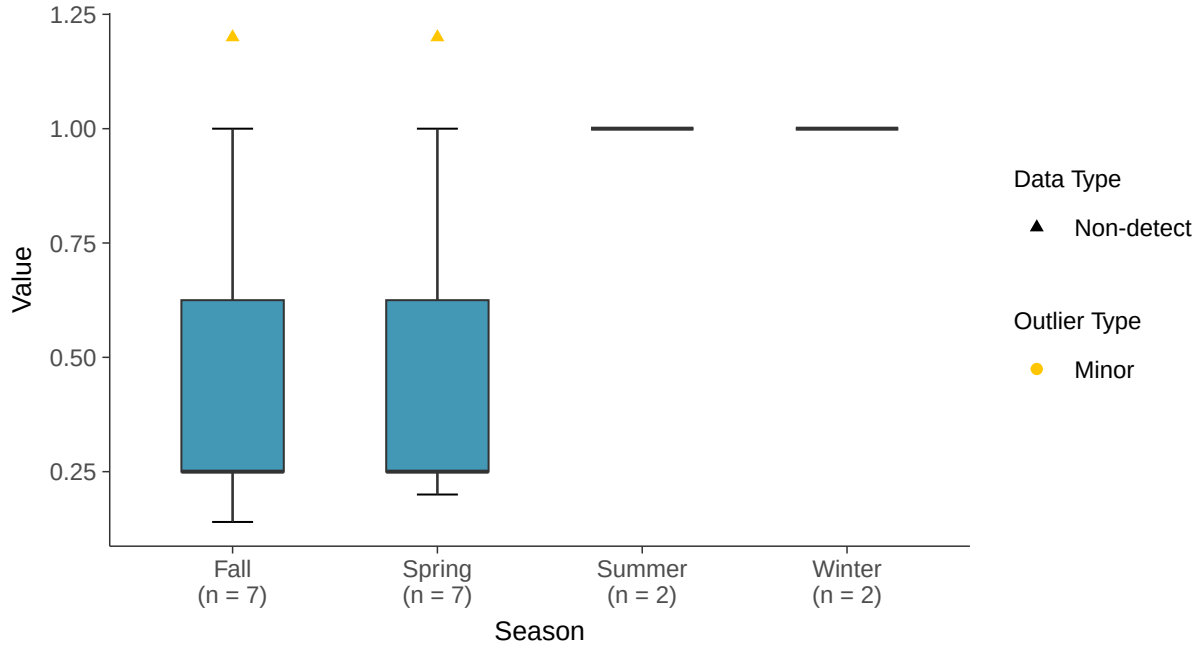
## Boxplot

Beryllium, MW-17002 (ug/L)



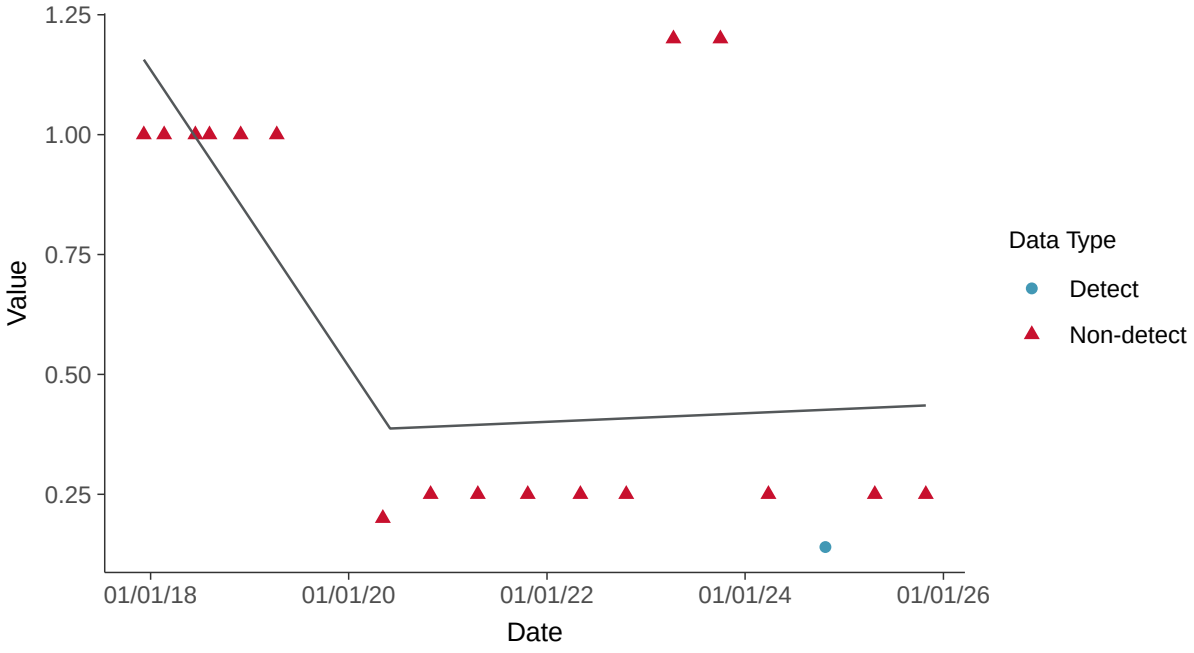

## Boxplot by Season

Beryllium, MW-17002 (ug/L)



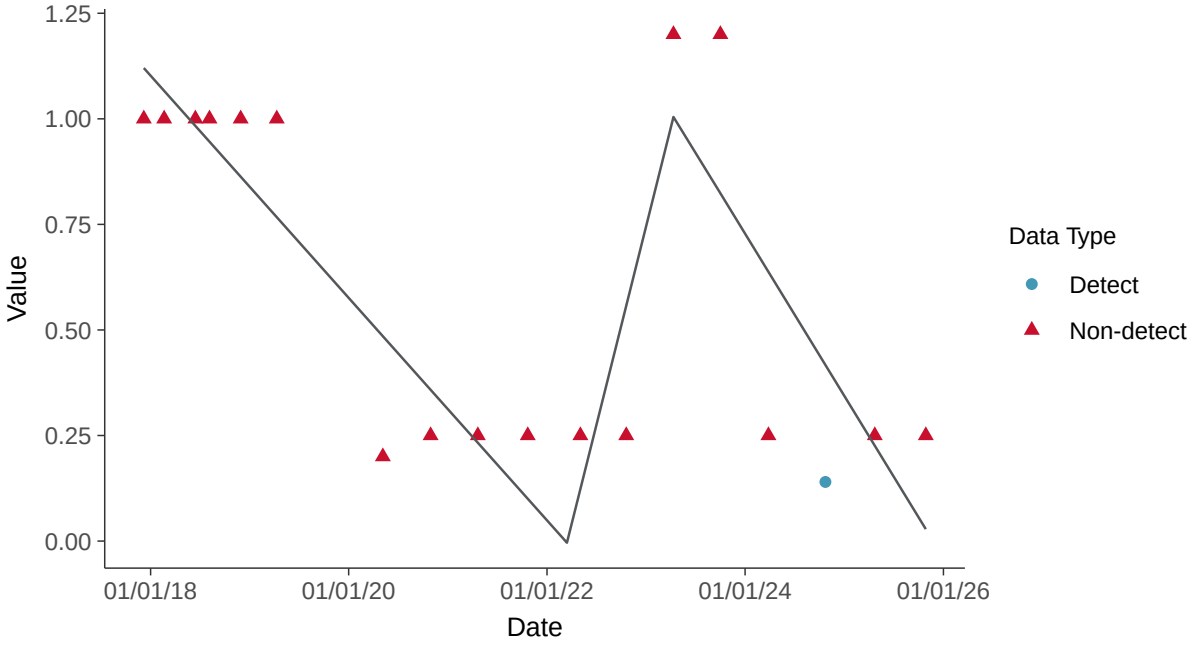
**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-17002 (ug/L)



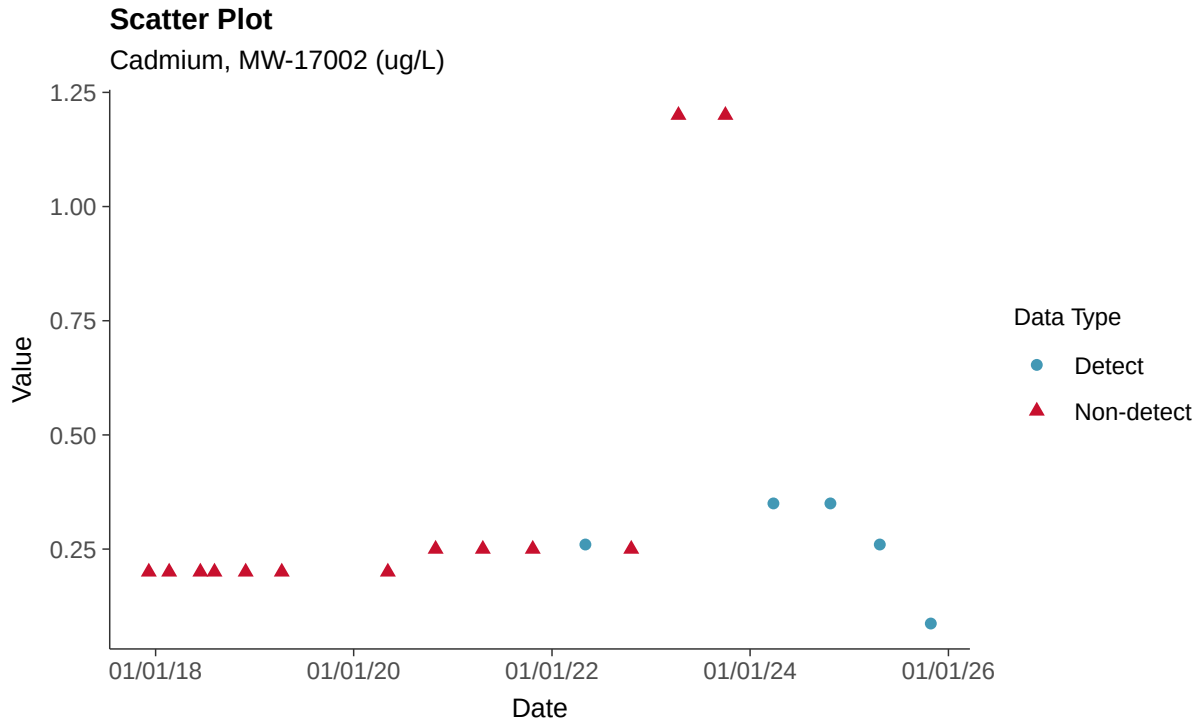

**Trend Regression: Piecewise Linear-Linear-Linear**

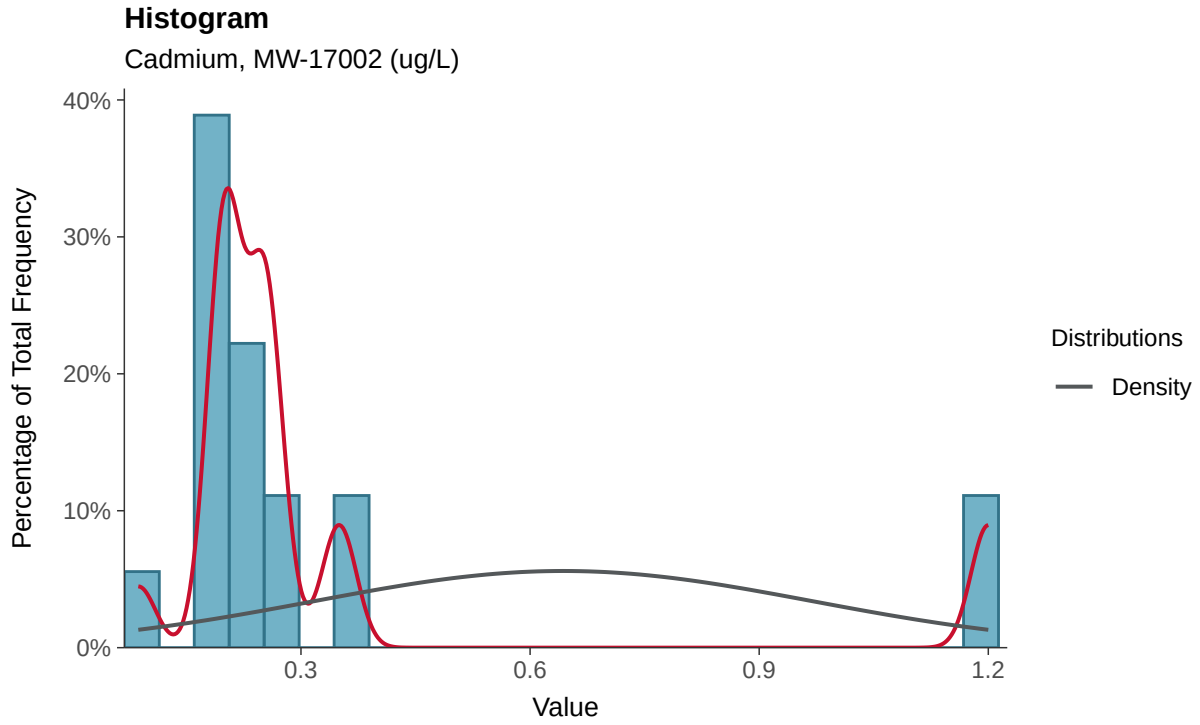
Beryllium, MW-17002 (ug/L)



## Appendix IV: Cadmium, MW-17002

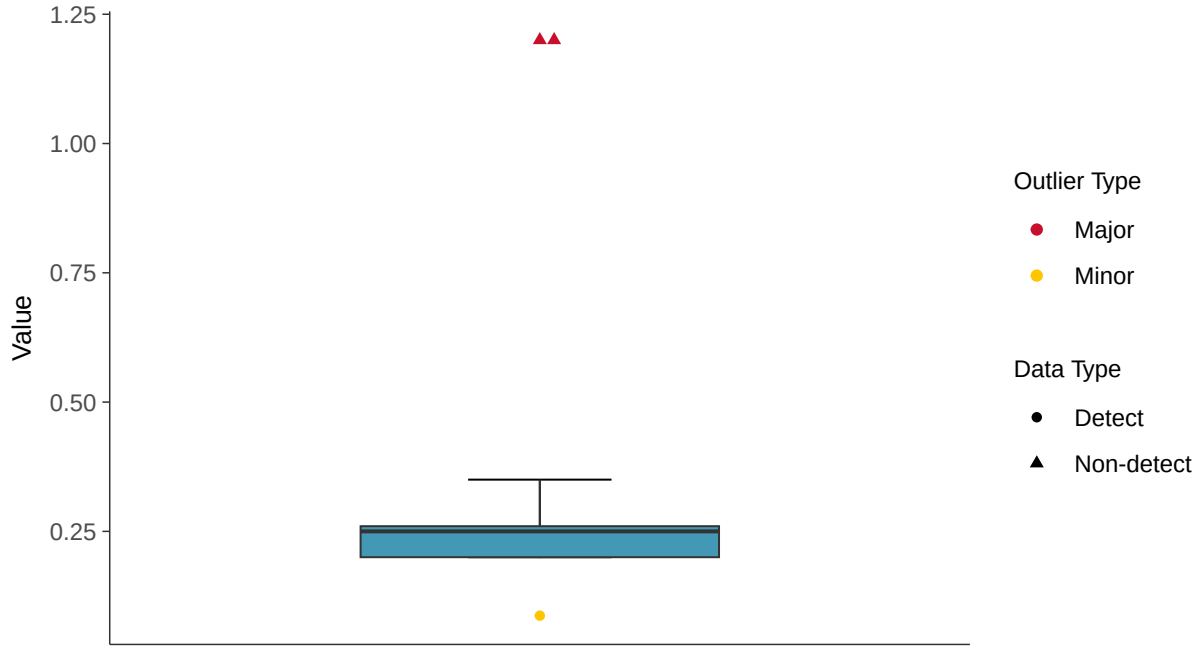
ID: 15_2_106



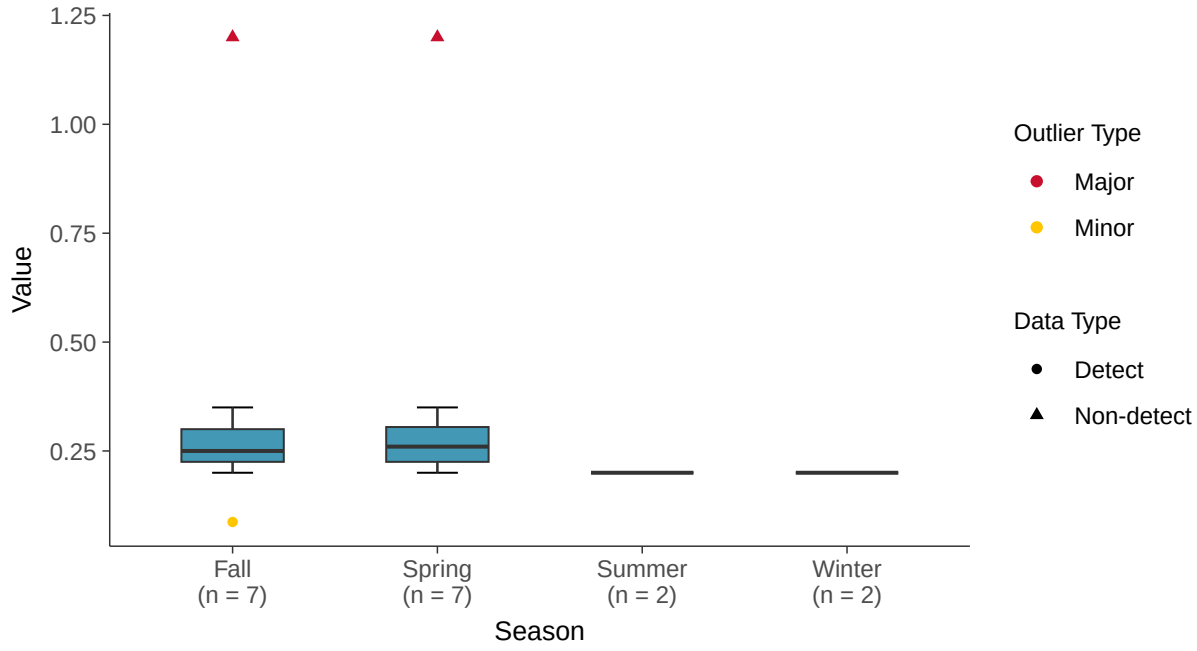
## Boxplot

Cadmium, MW-17002 (ug/L)



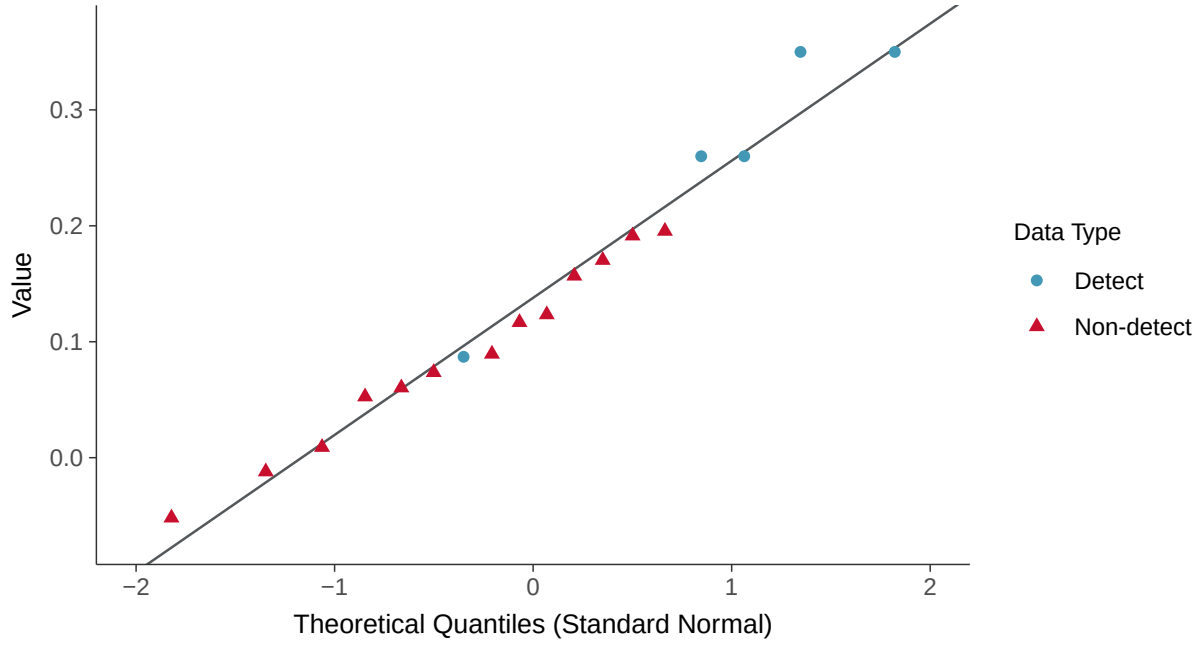

## Boxplot by Season

Cadmium, MW-17002 (ug/L)



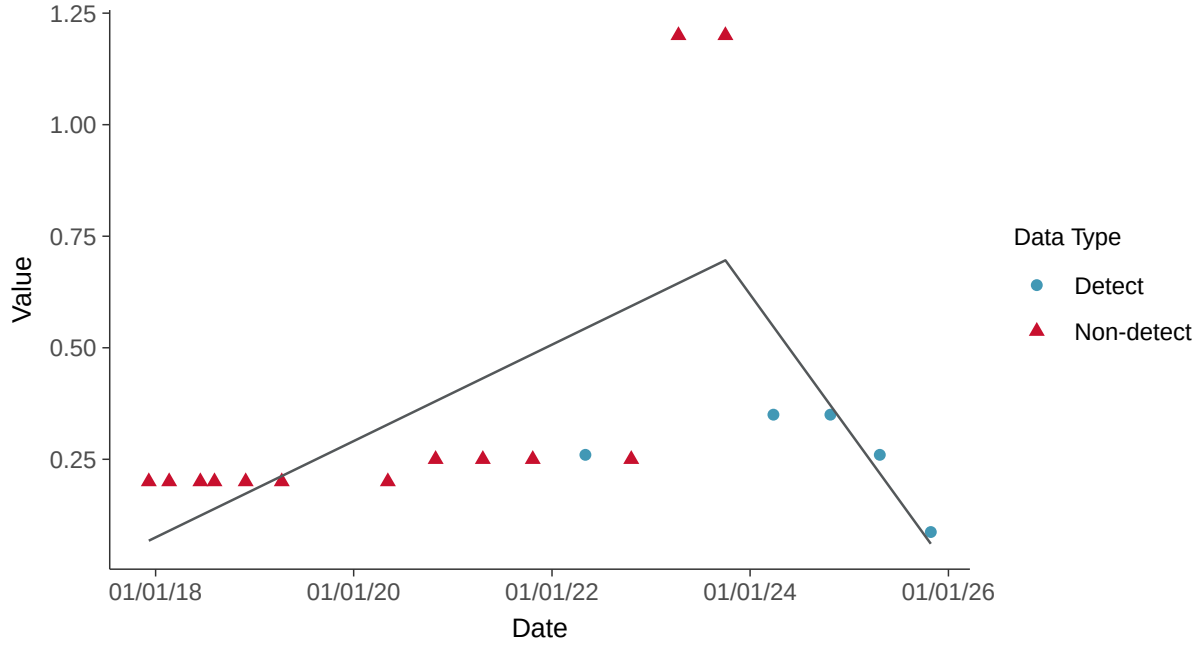
**Normal Q-Q plot using ROS Imputed Estimates**

Cadmium, MW-17002 (ug/L)



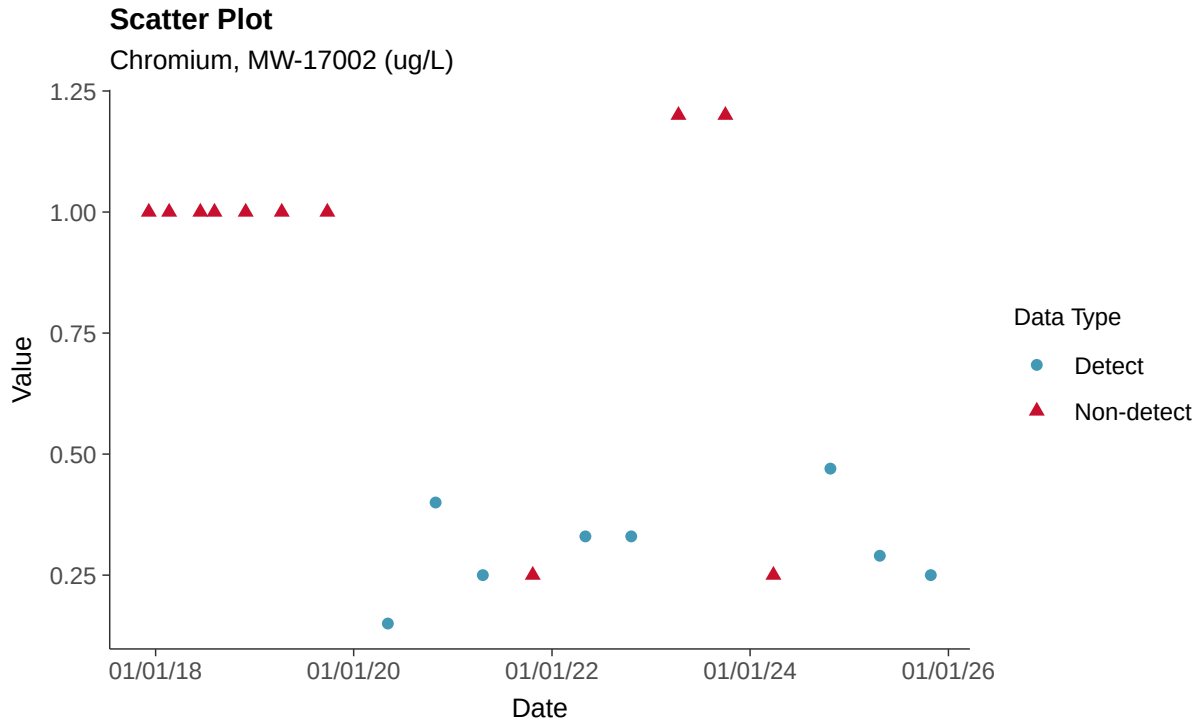

**Trend Regression: Piecewise Linear-Linear**

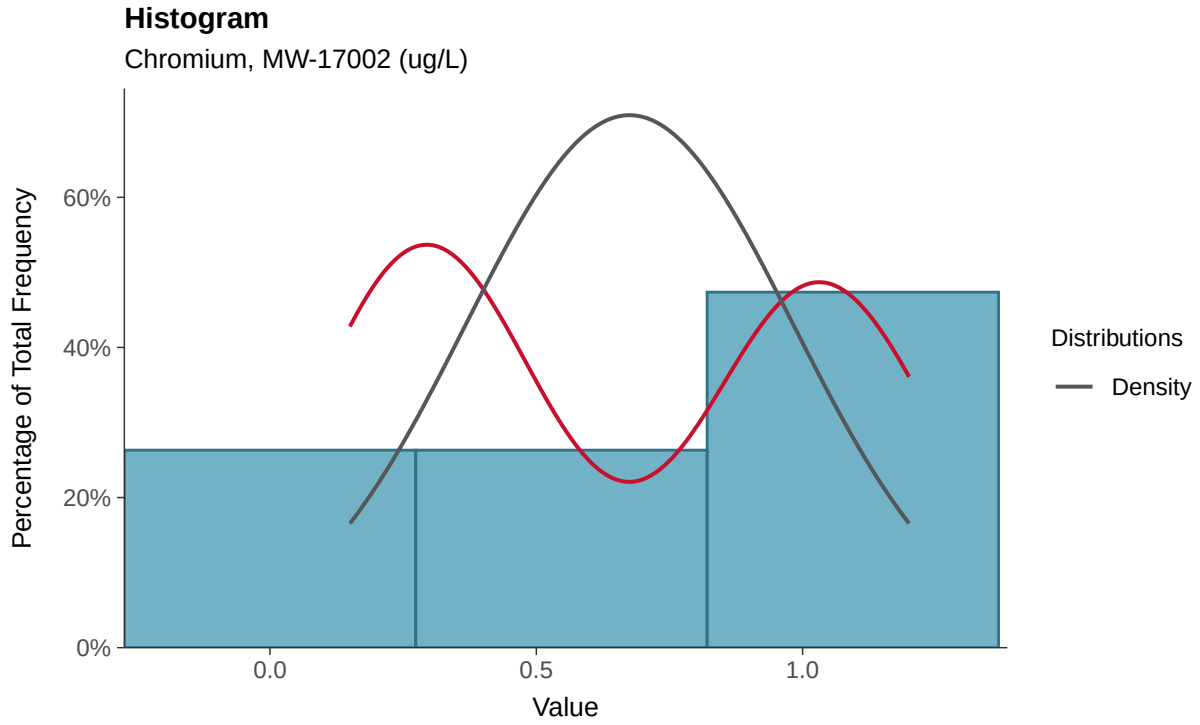
Cadmium, MW-17002 (ug/L)



## Appendix IV: Chromium, MW-17002

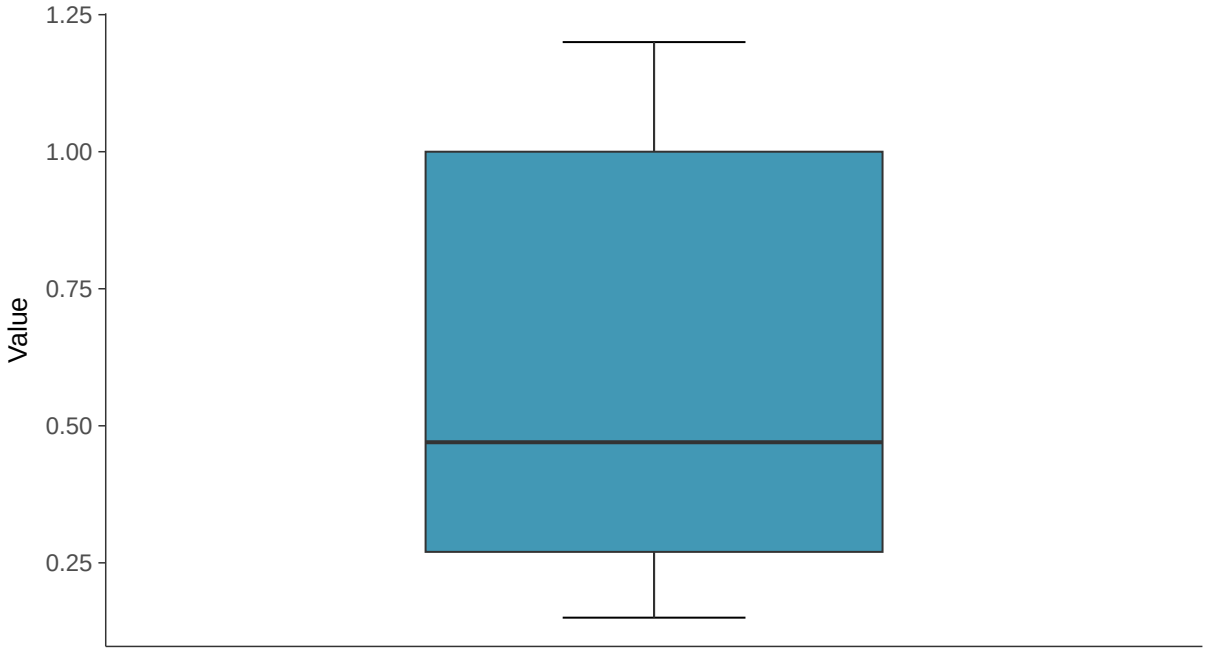
ID: 15_2_109



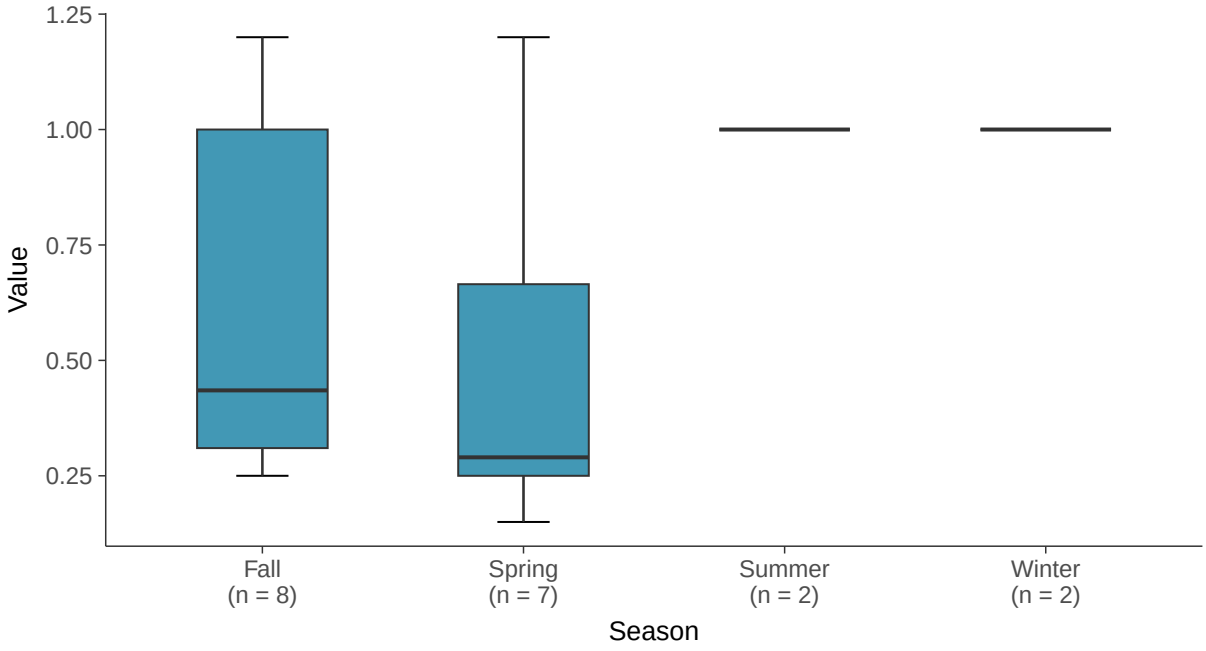
**Boxplot**

Chromium, MW-17002 (ug/L)



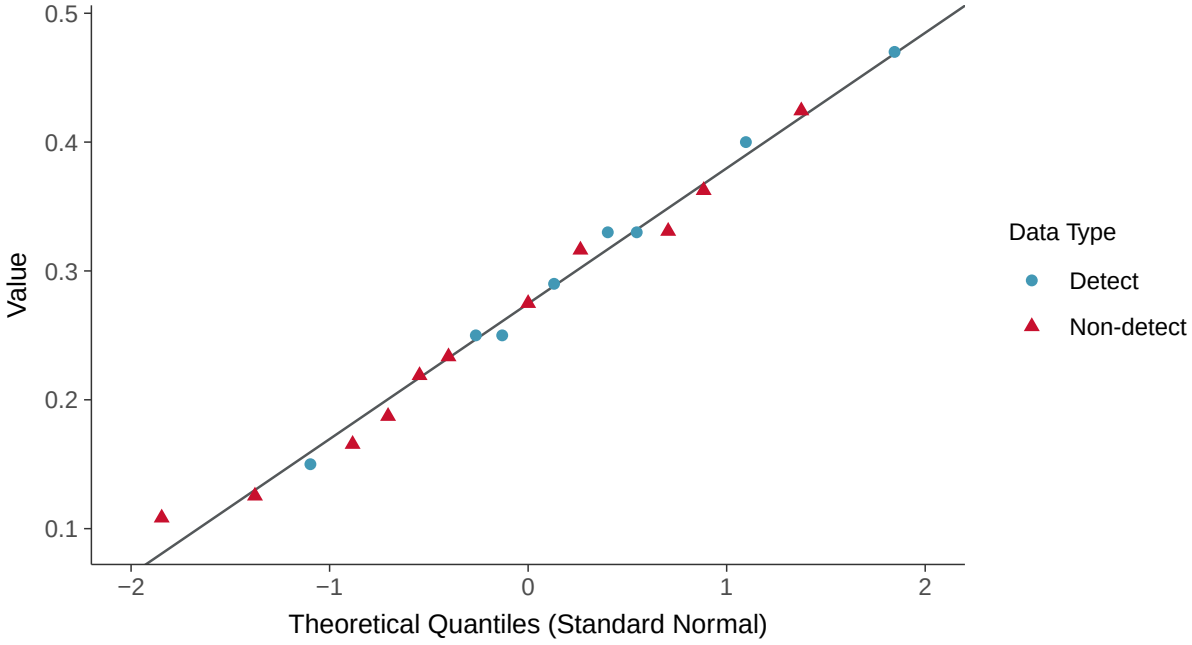

**Boxplot by Season**

Chromium, MW-17002 (ug/L)



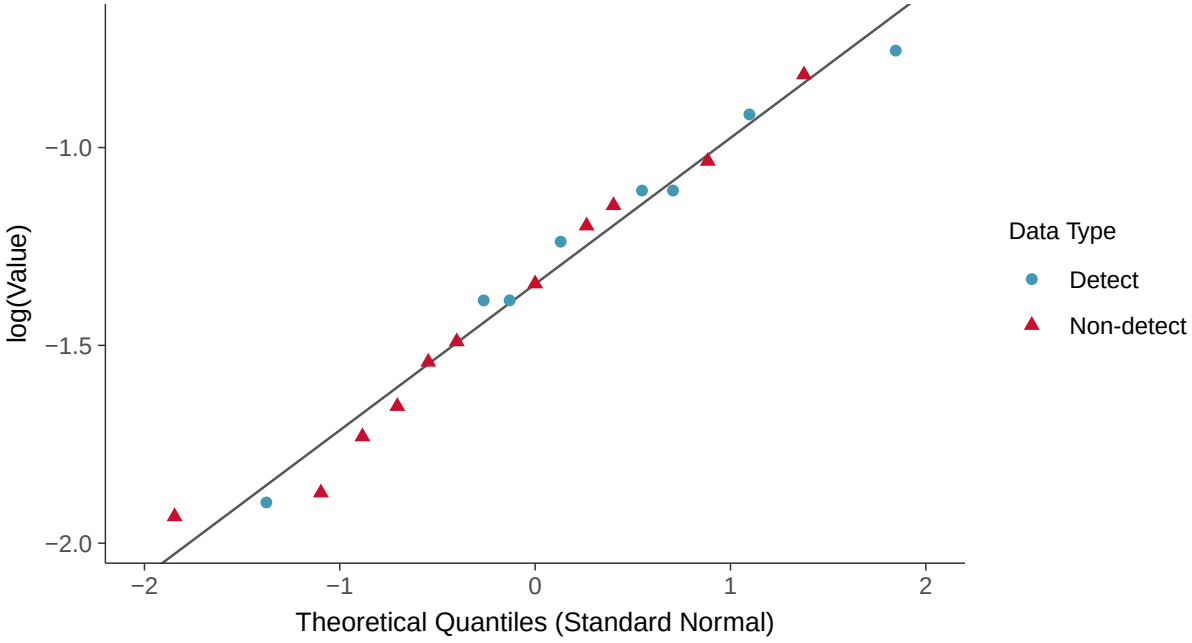
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17002 (ug/L)



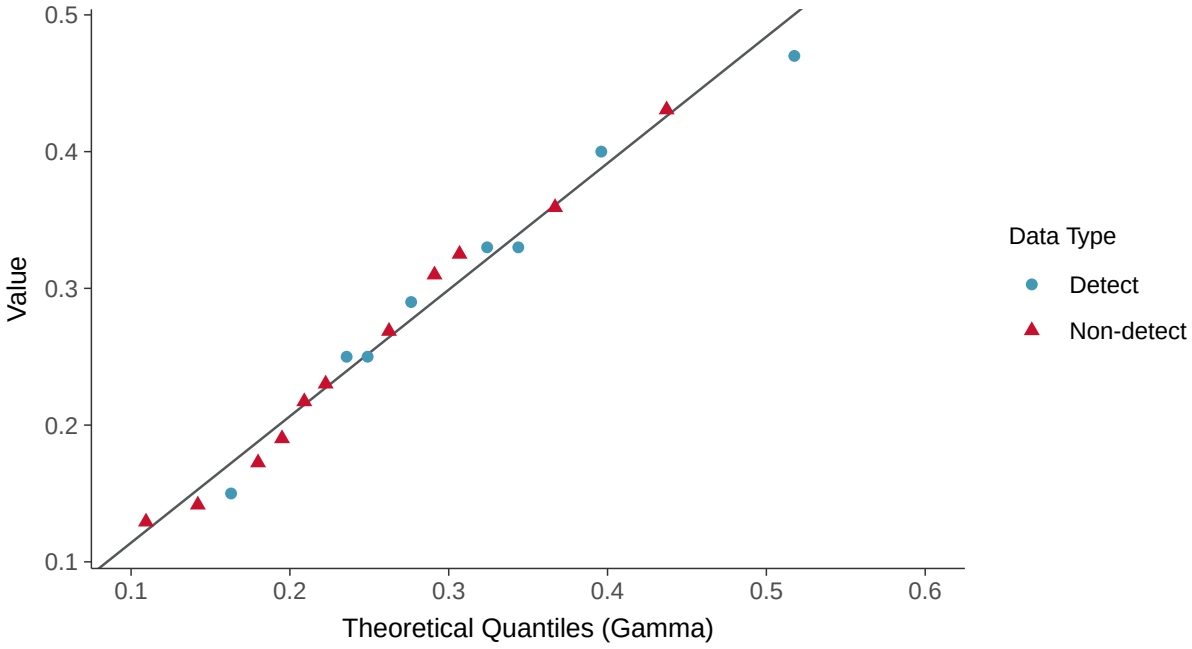

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17002 (ug/L)



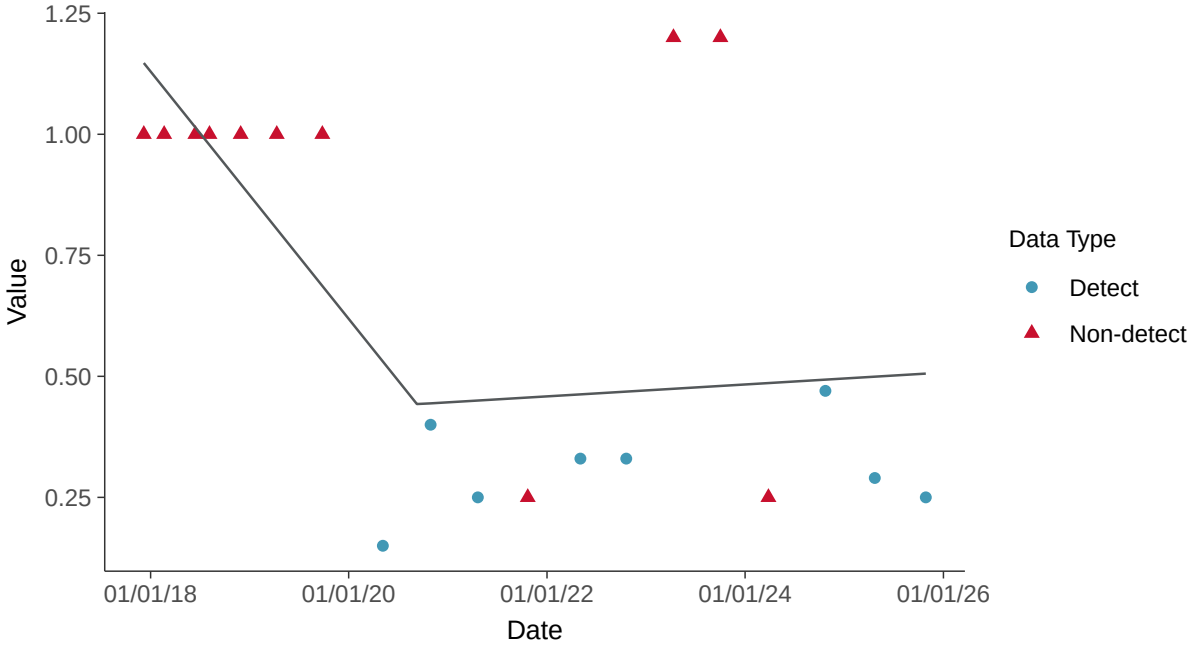
**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17002 (ug/L)



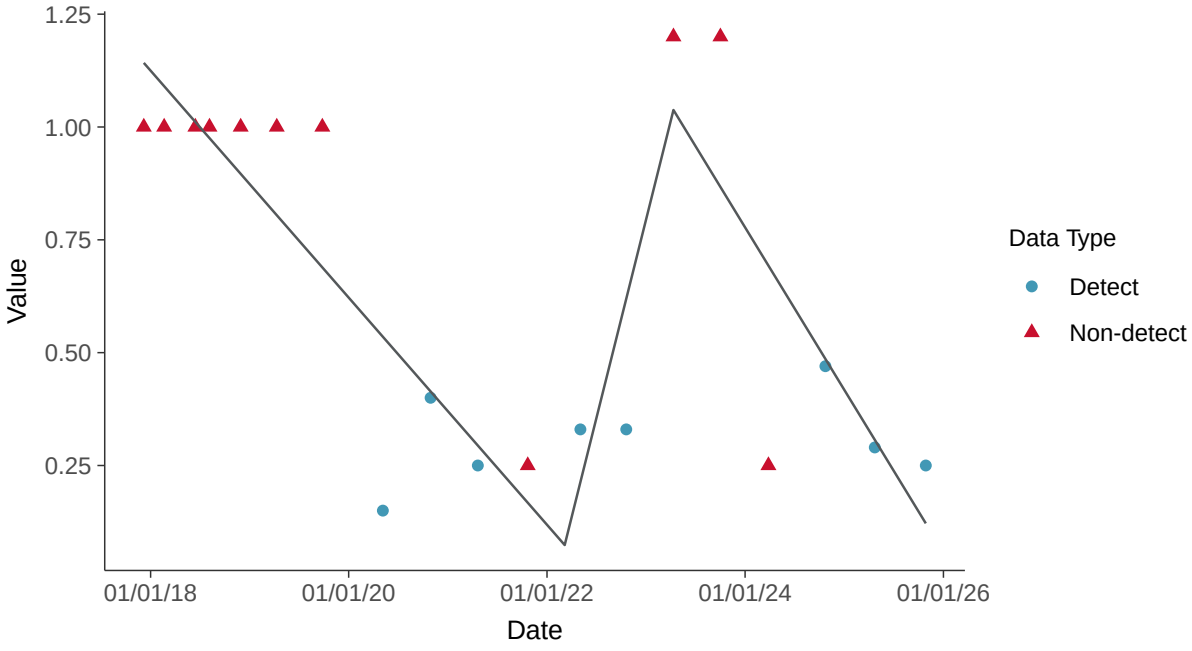

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-17002 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Chromium, MW-17002 (ug/L)

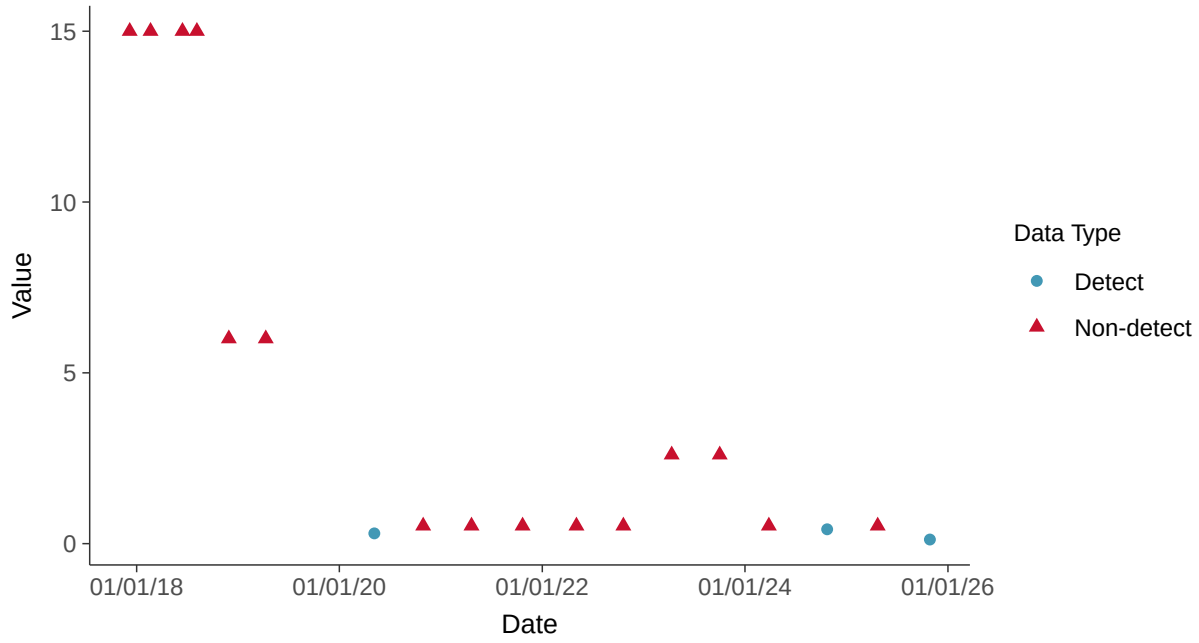


## Appendix IV: Cobalt, MW-17002

ID: 15_2_110

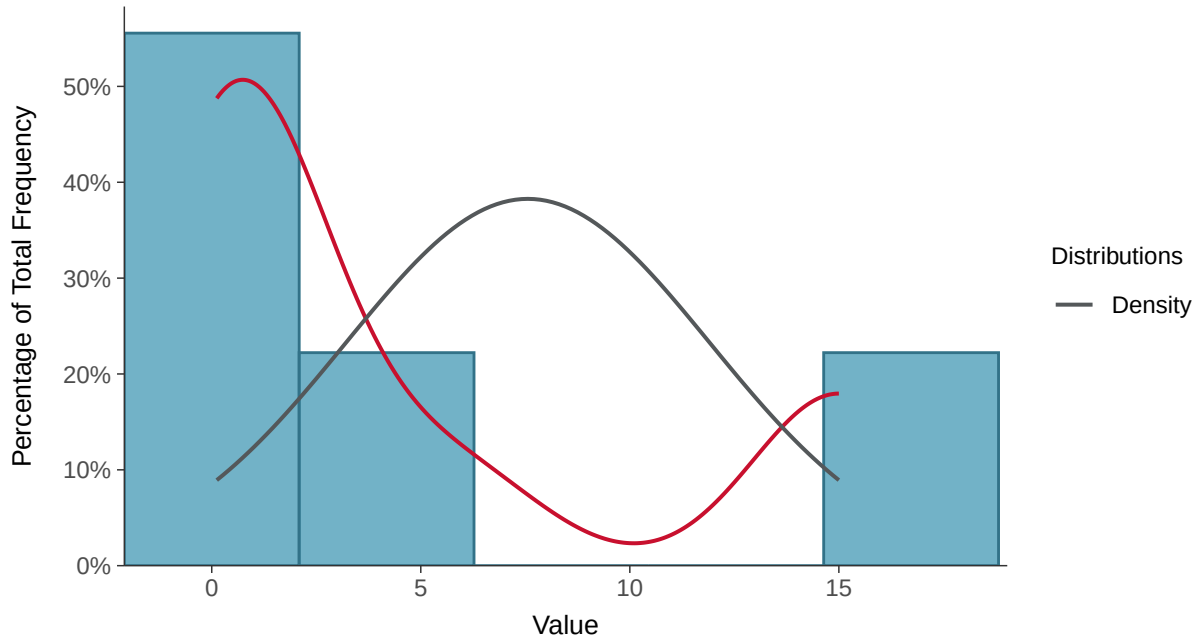
**Scatter Plot**

Cobalt, MW-17002 (ug/L)



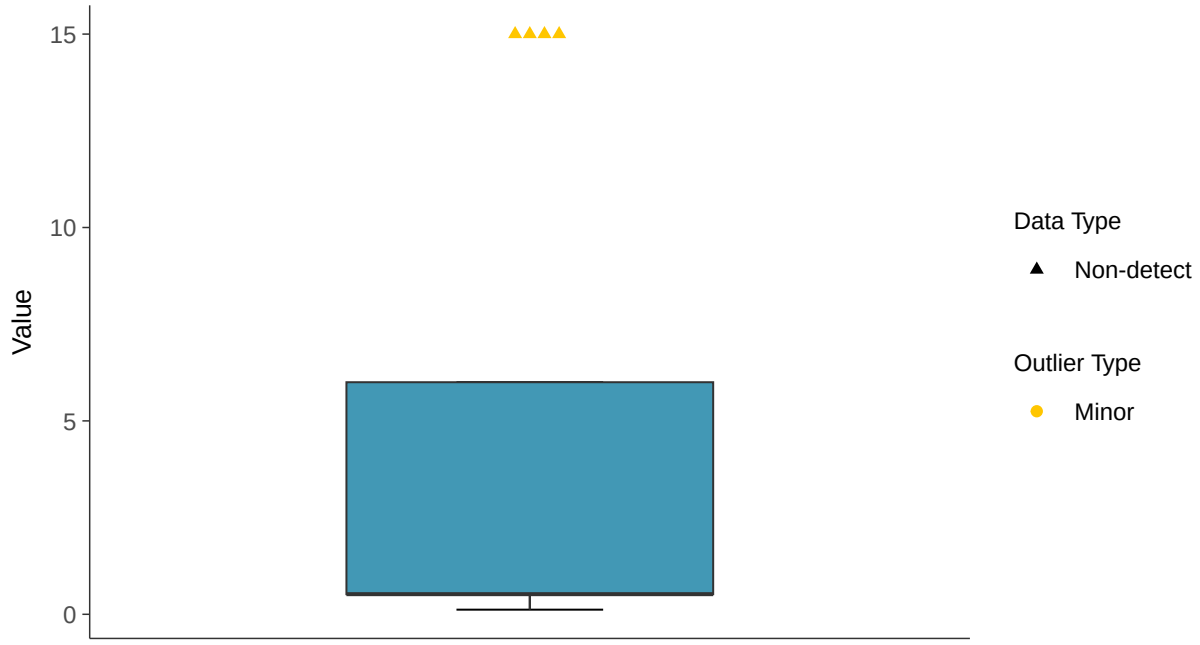

**Histogram**

Cobalt, MW-17002 (ug/L)



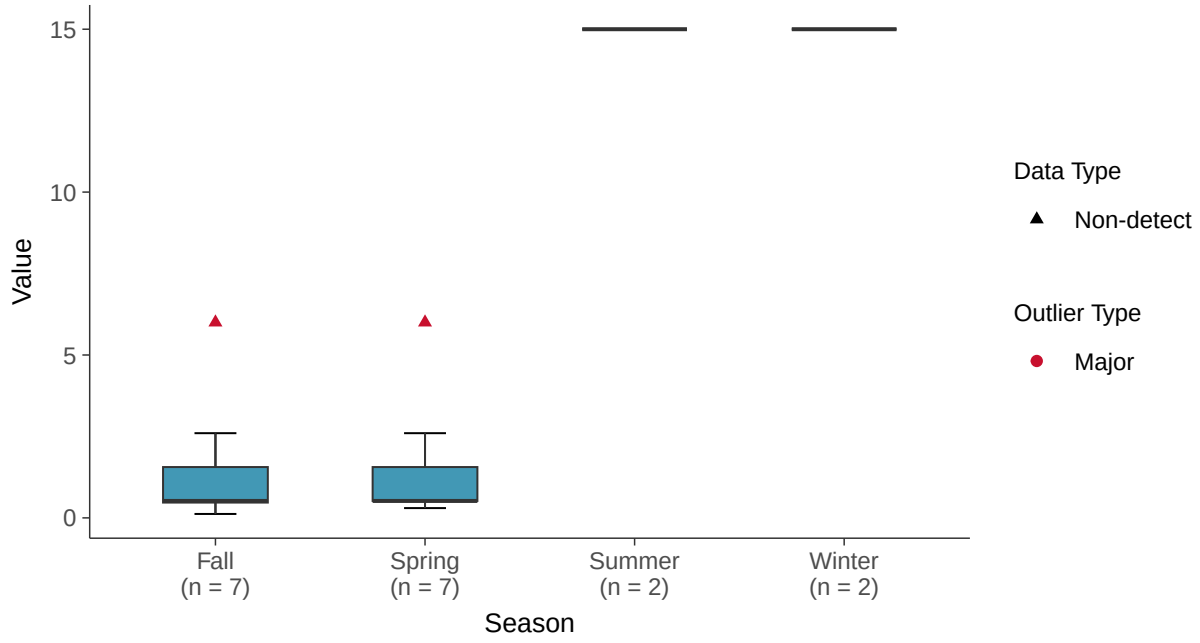
## Boxplot

Cobalt, MW-17002 (ug/L)



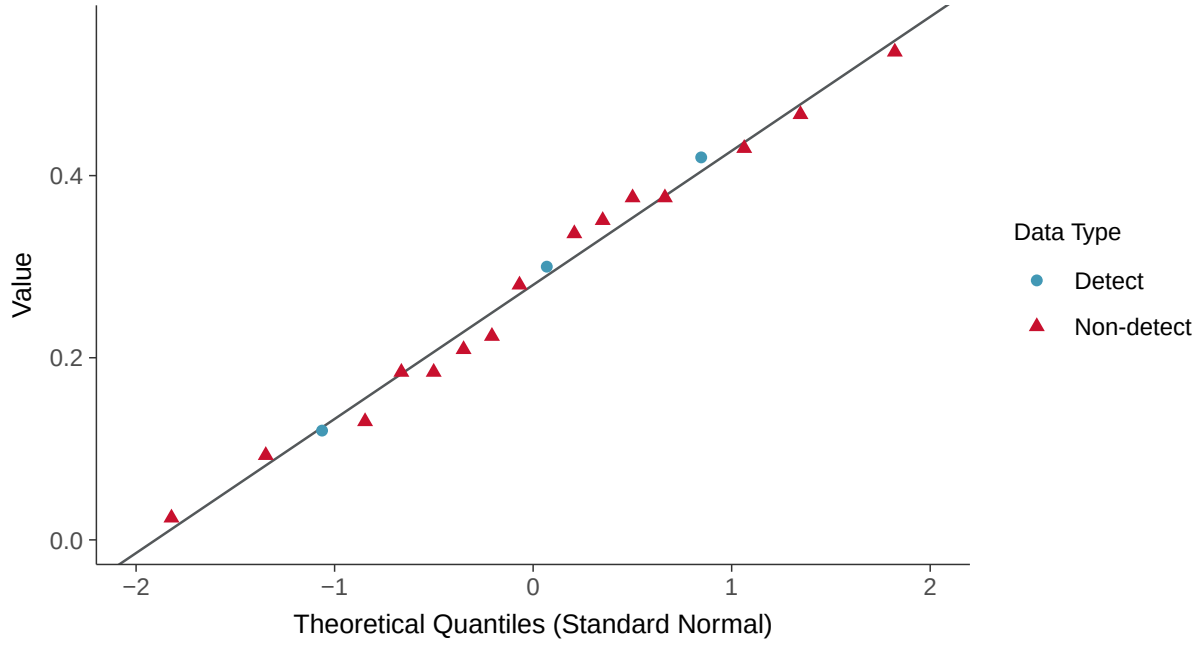

## Boxplot by Season

Cobalt, MW-17002 (ug/L)



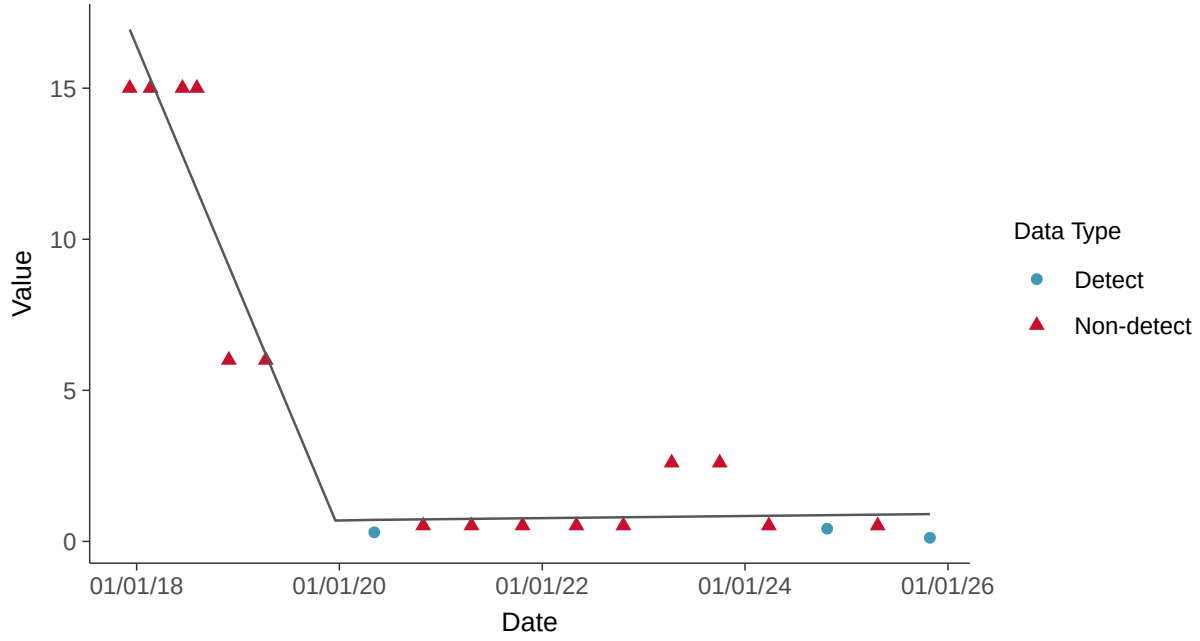
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17002 (ug/L)



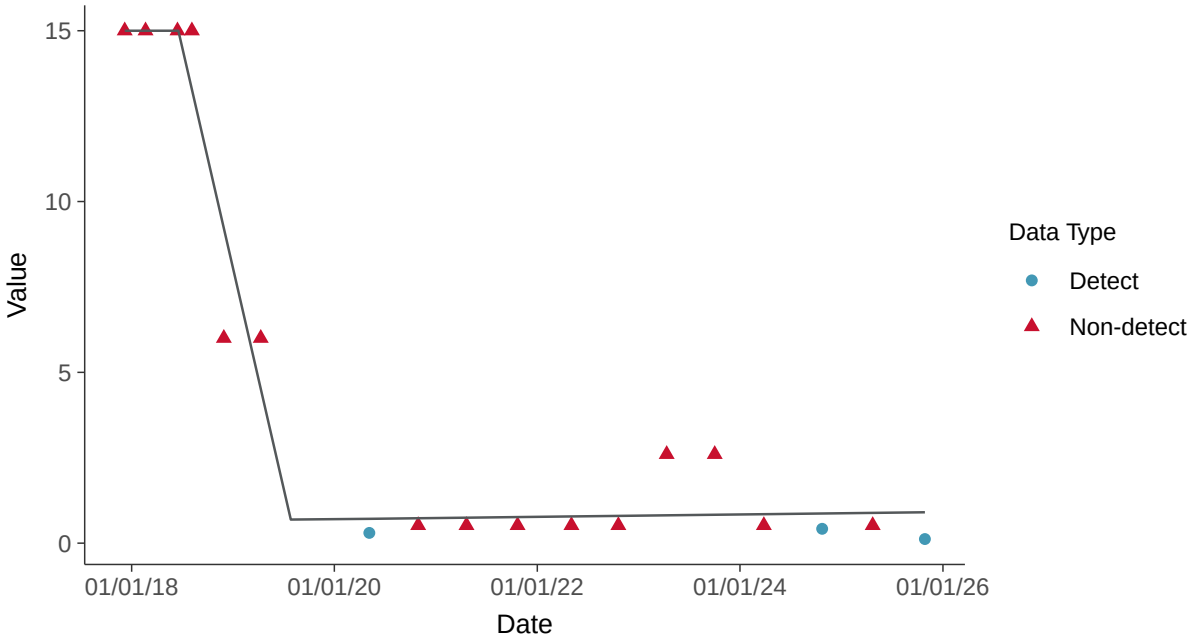

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17002 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Cobalt, MW-17002 (ug/L)

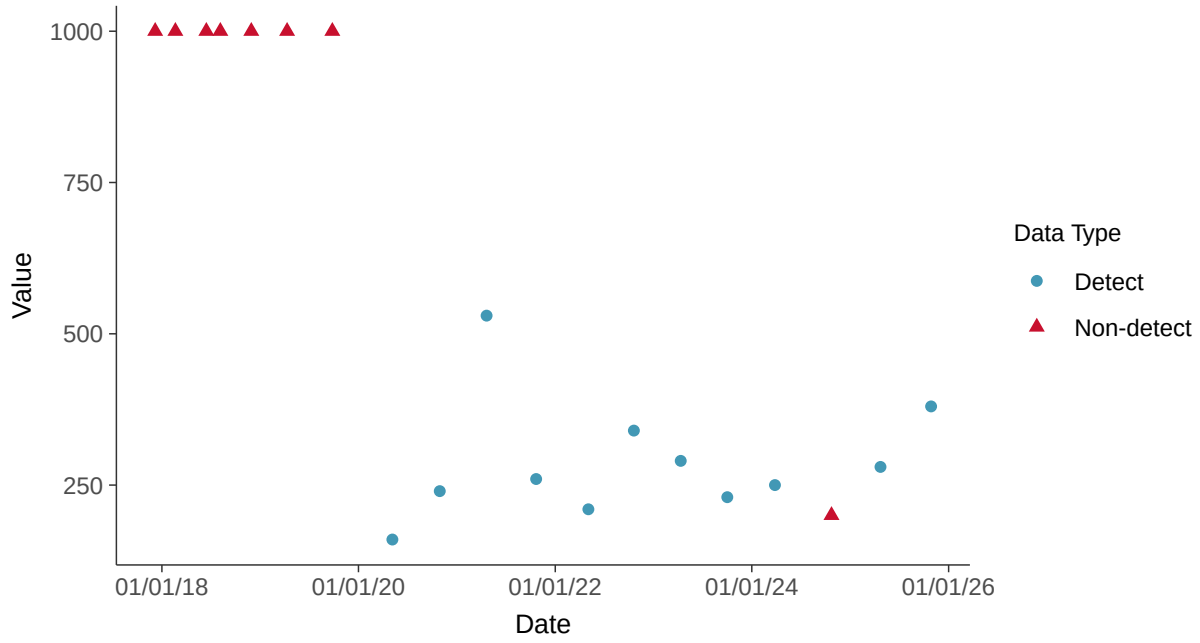


## Appendix IV: Fluoride, MW-17002

ID: 15_2_114

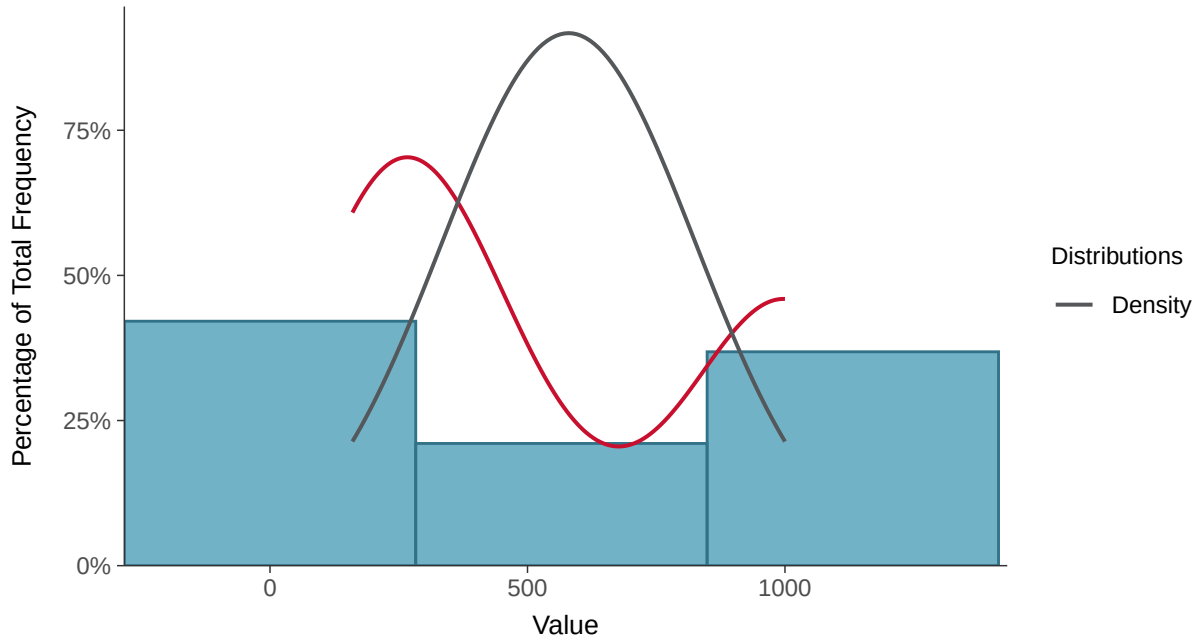
**Scatter Plot**

Fluoride, MW-17002 (ug/L)



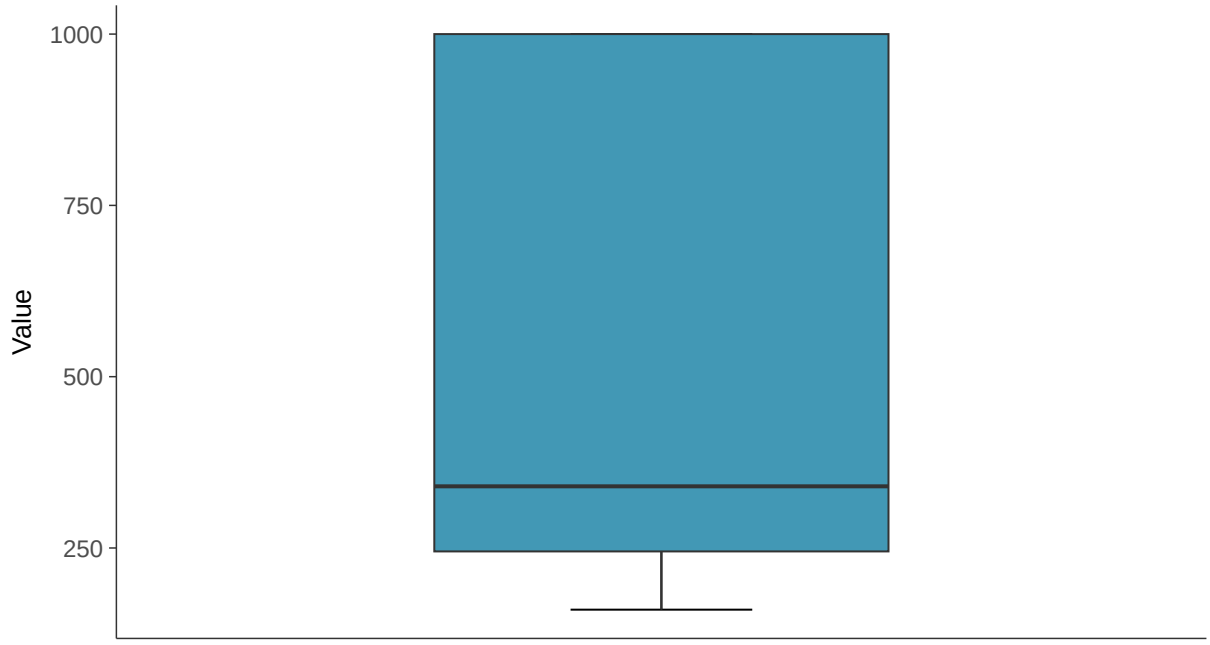

**Histogram**

Fluoride, MW-17002 (ug/L)



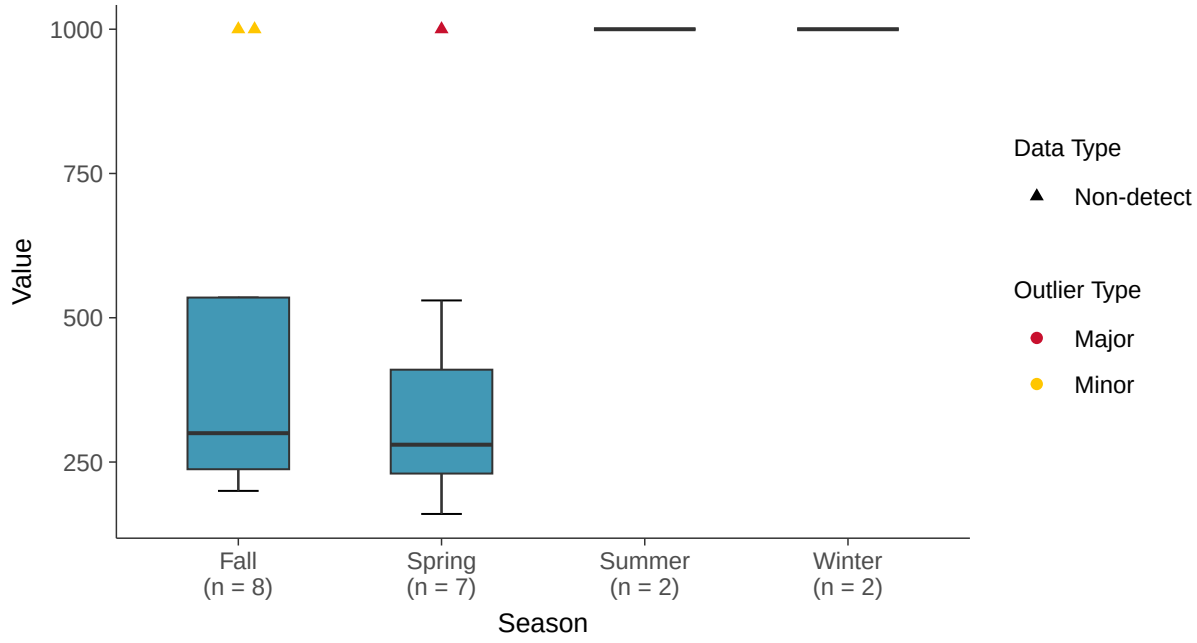
## Boxplot

Fluoride, MW-17002 (ug/L)



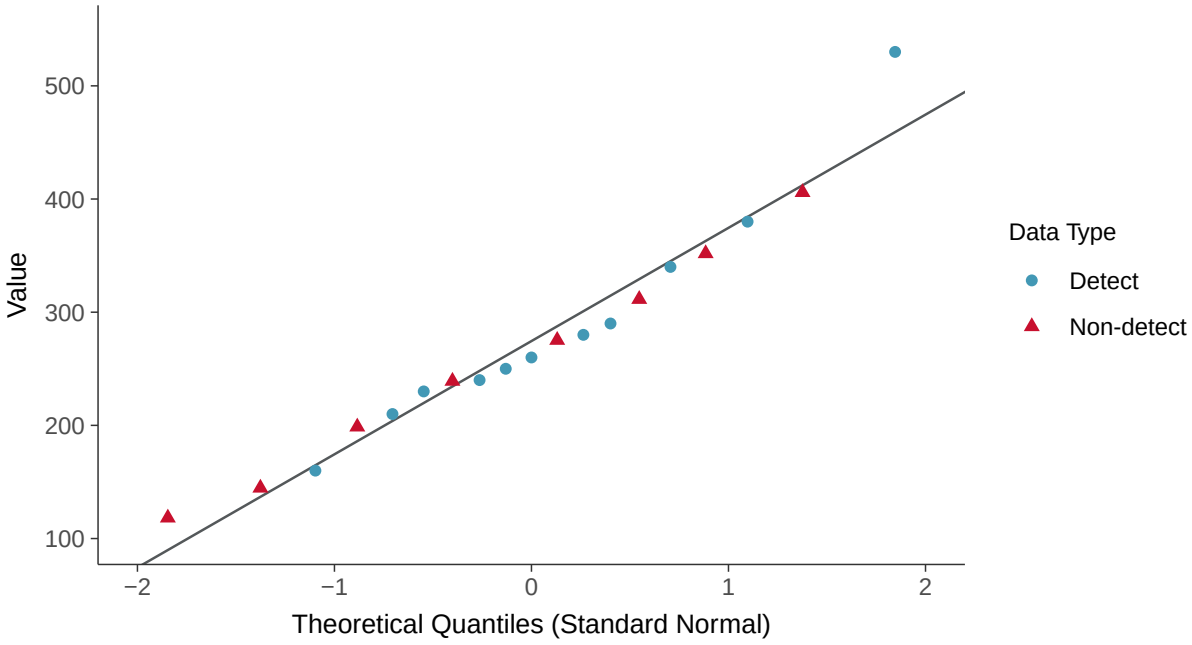

## Boxplot by Season

Fluoride, MW-17002 (ug/L)



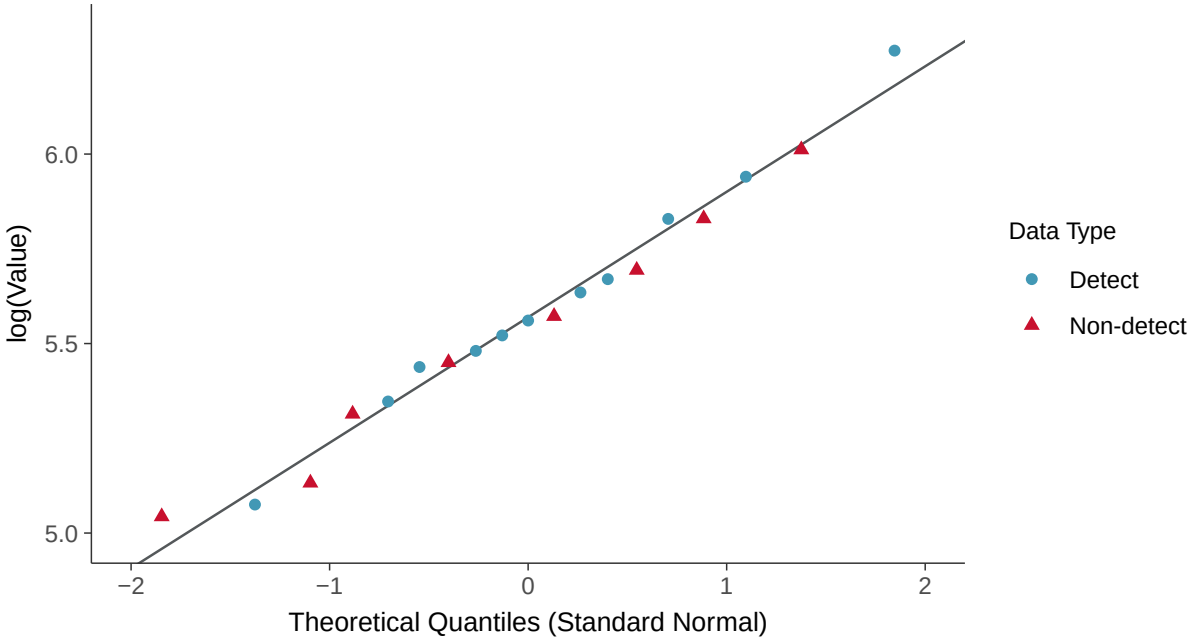
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17002 (ug/L)



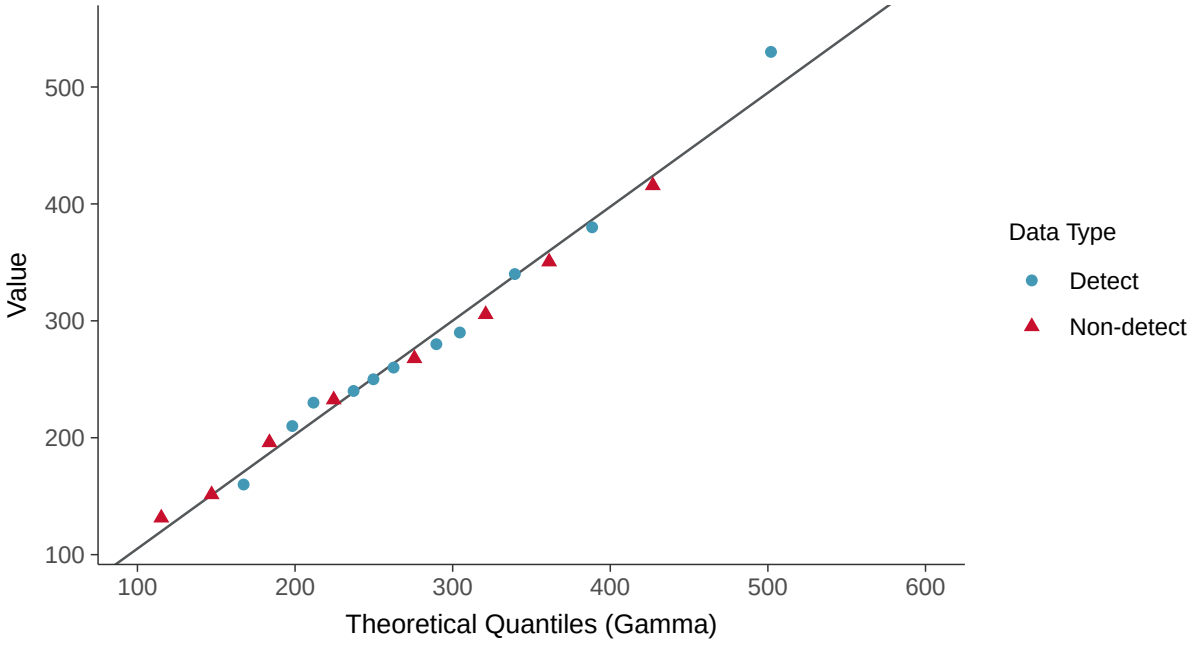

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17002 (ug/L)



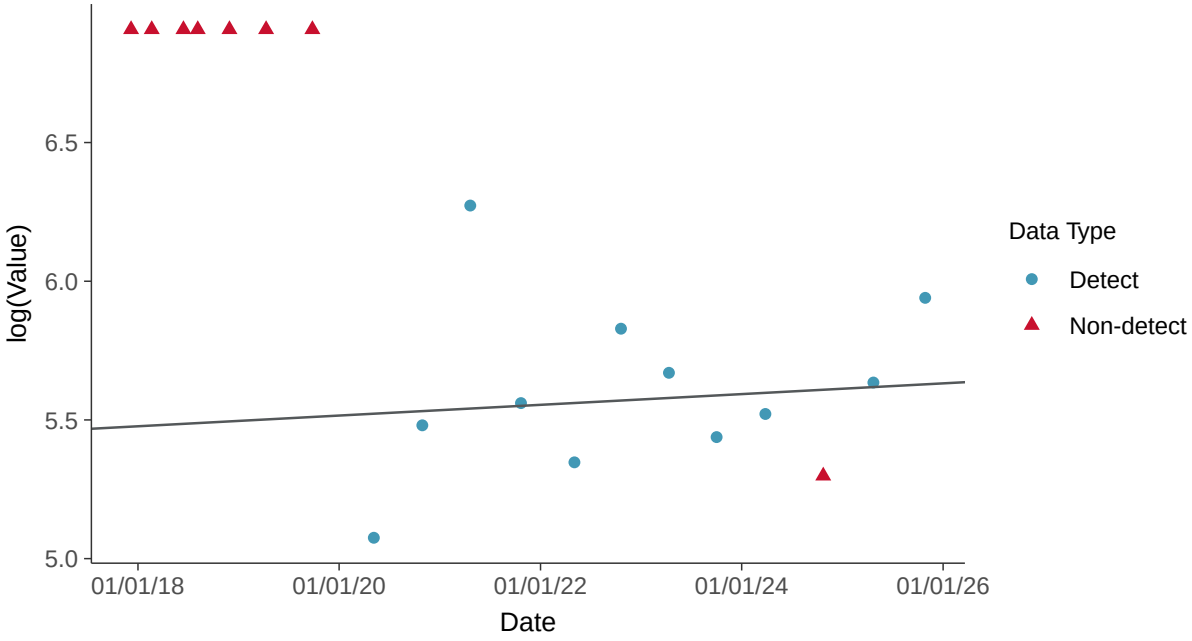
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17002 (ug/L)



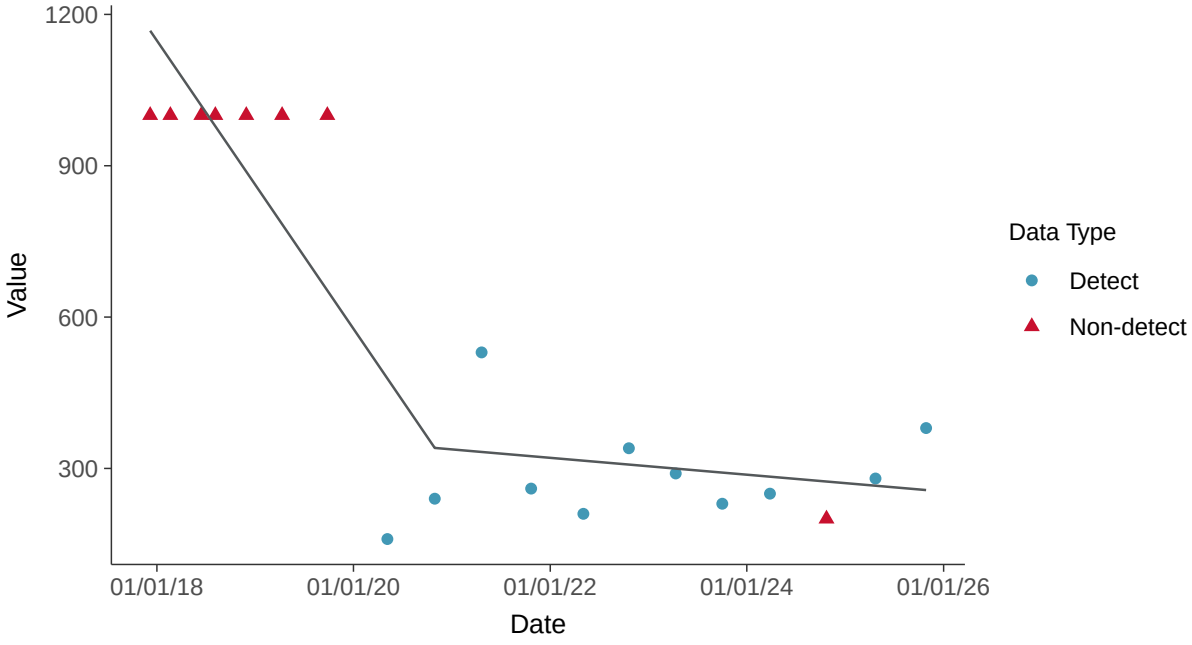

**Trend Regression: Lognormal MLE**

Fluoride, MW-17002 (ug/L)



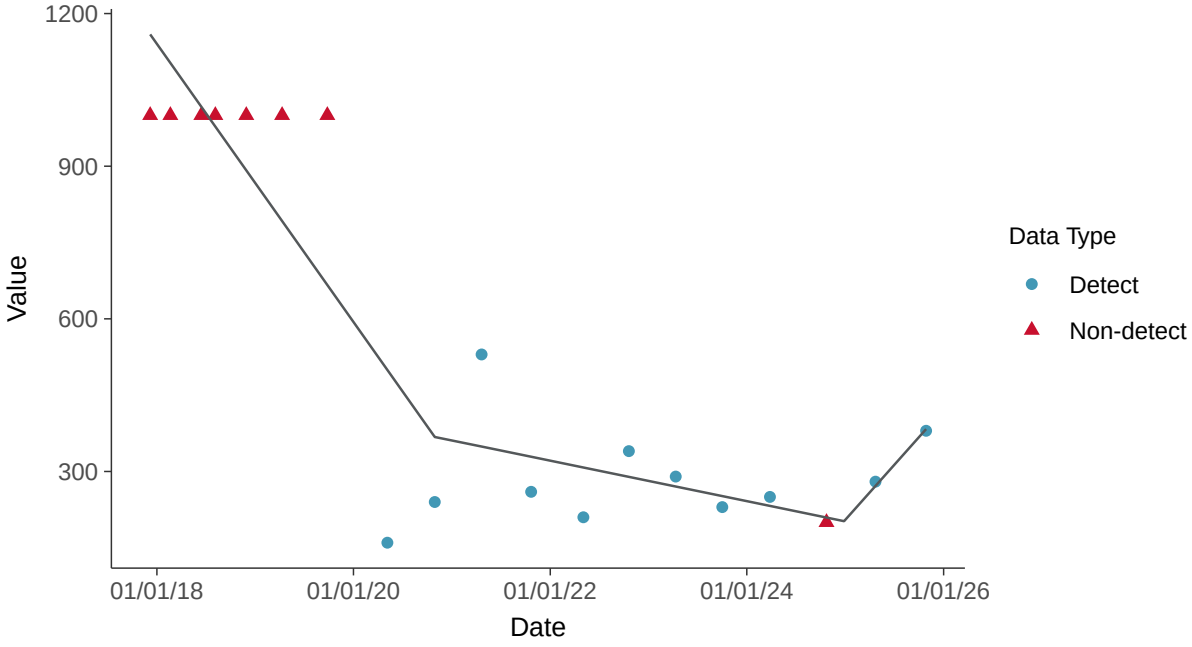
**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-17002 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Fluoride, MW-17002 (ug/L)

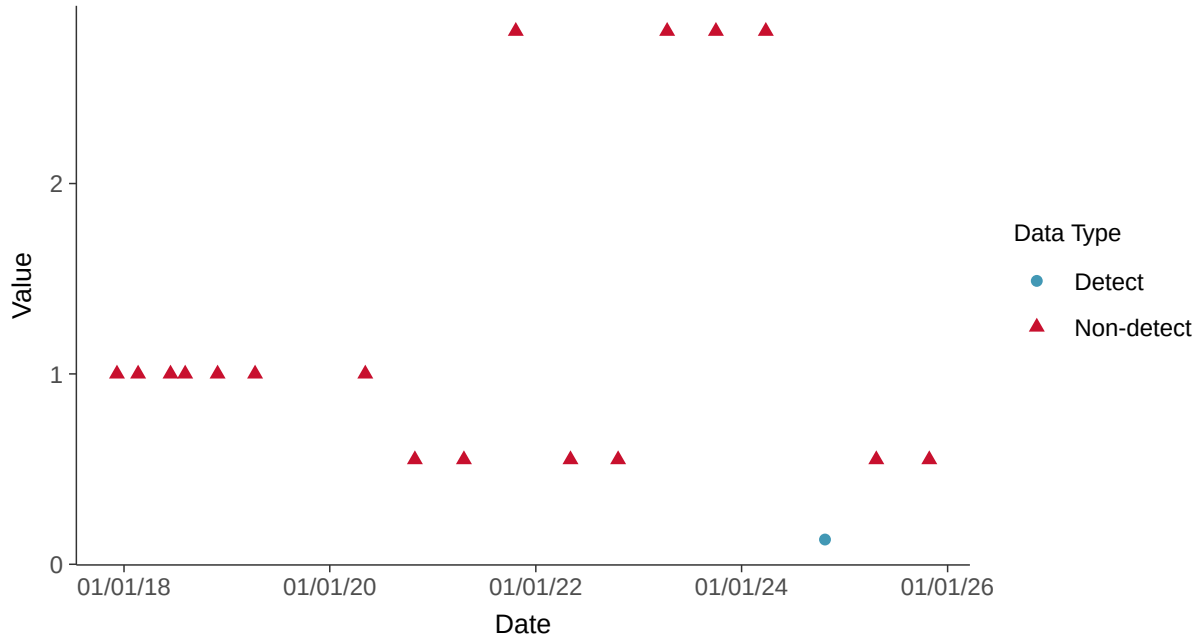


# Appendix IV: Lead, MW-17002

ID: 15_2_116

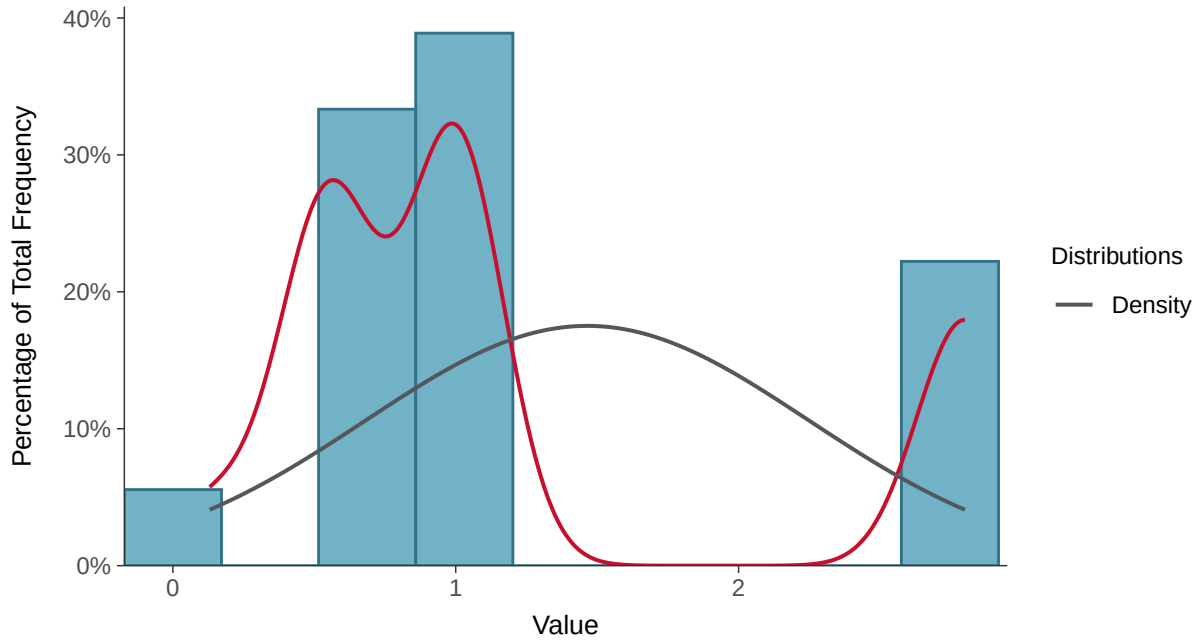
**Scatter Plot**

Lead, MW-17002 (ug/L)



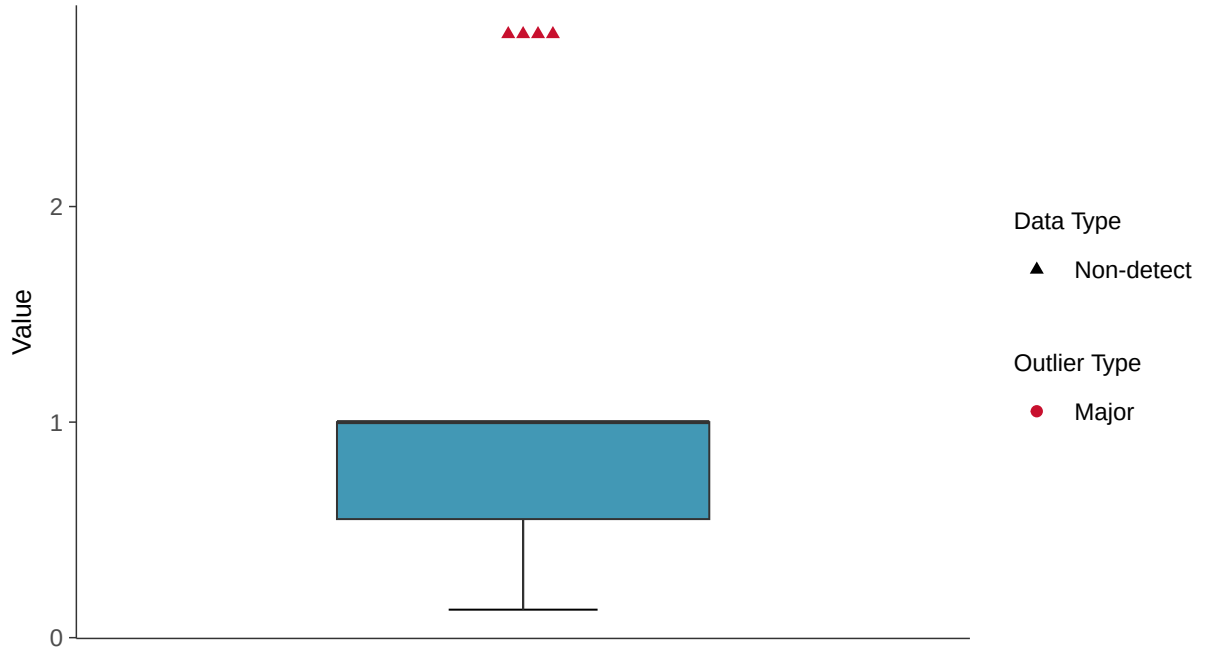

**Histogram**

Lead, MW-17002 (ug/L)



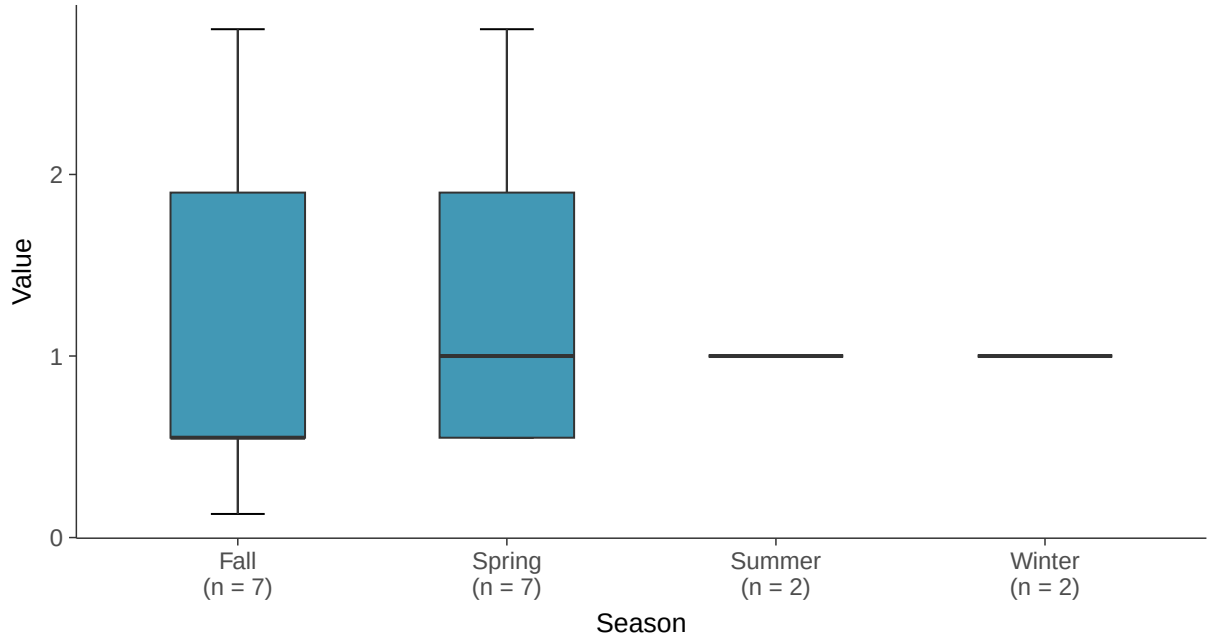
## Boxplot

Lead, MW-17002 (ug/L)



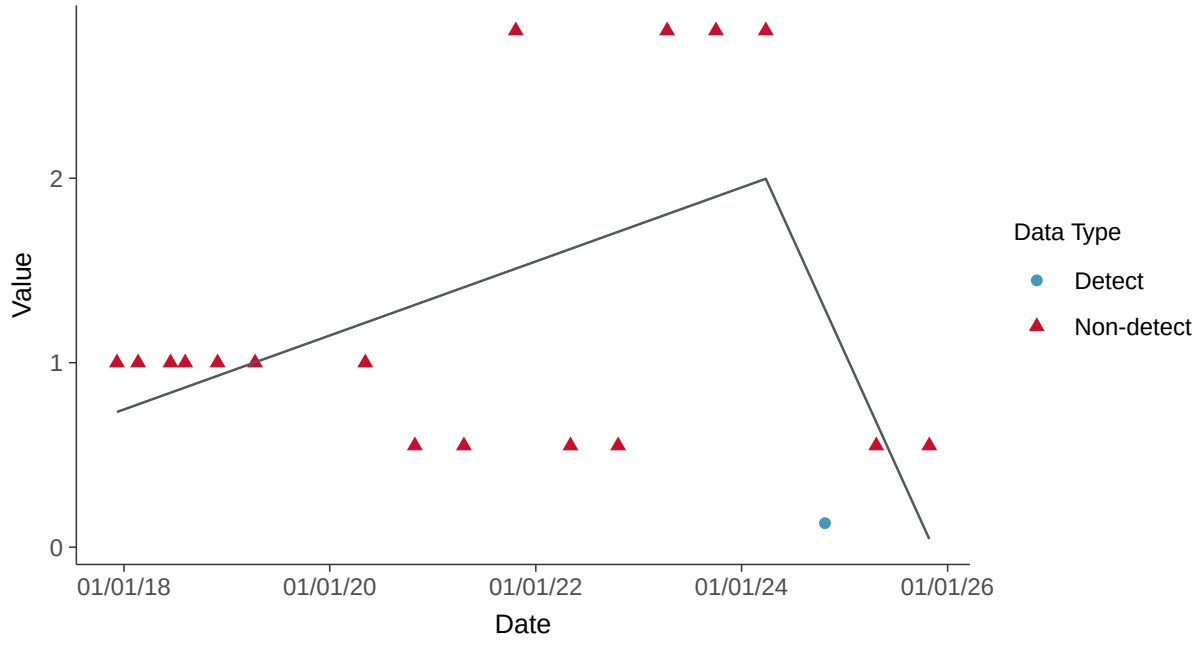

## Boxplot by Season

Lead, MW-17002 (ug/L)



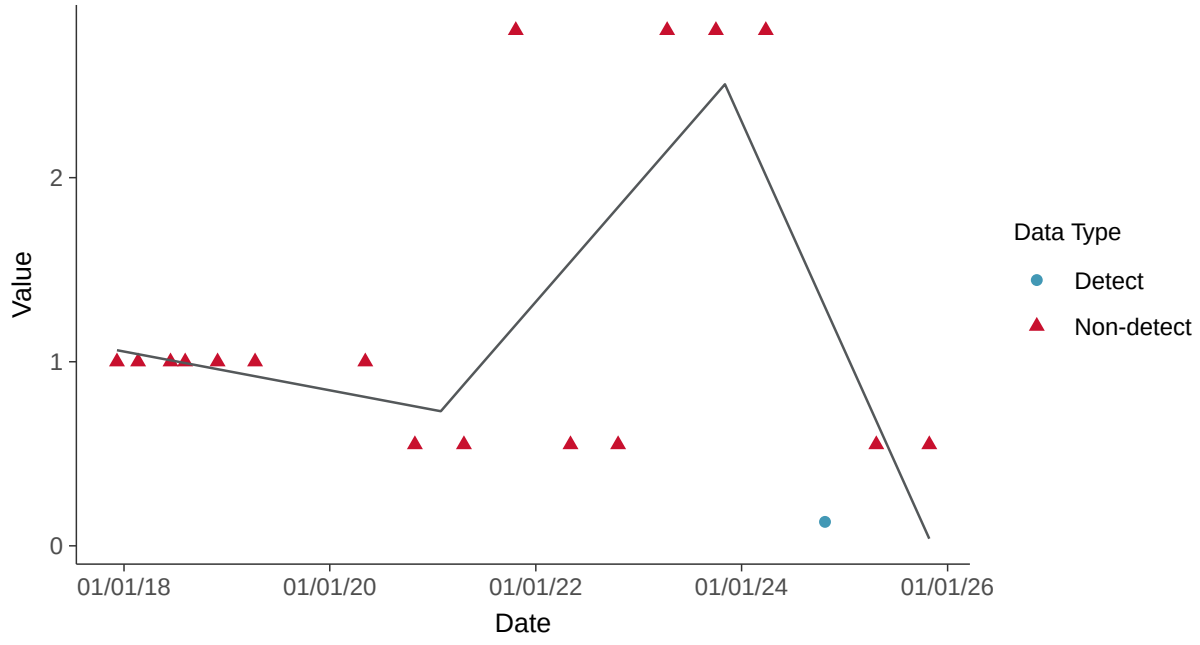
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-17002 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Lead, MW-17002 (ug/L)

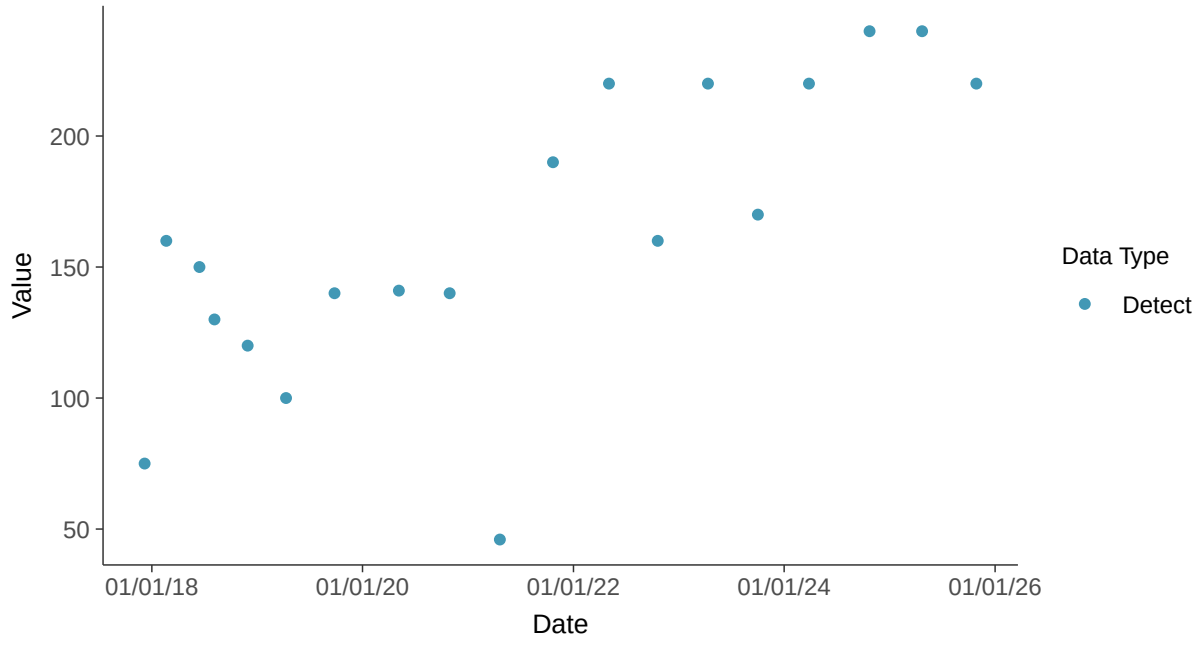


## Appendix IV: Lithium, MW-17002

ID: 15_2_117

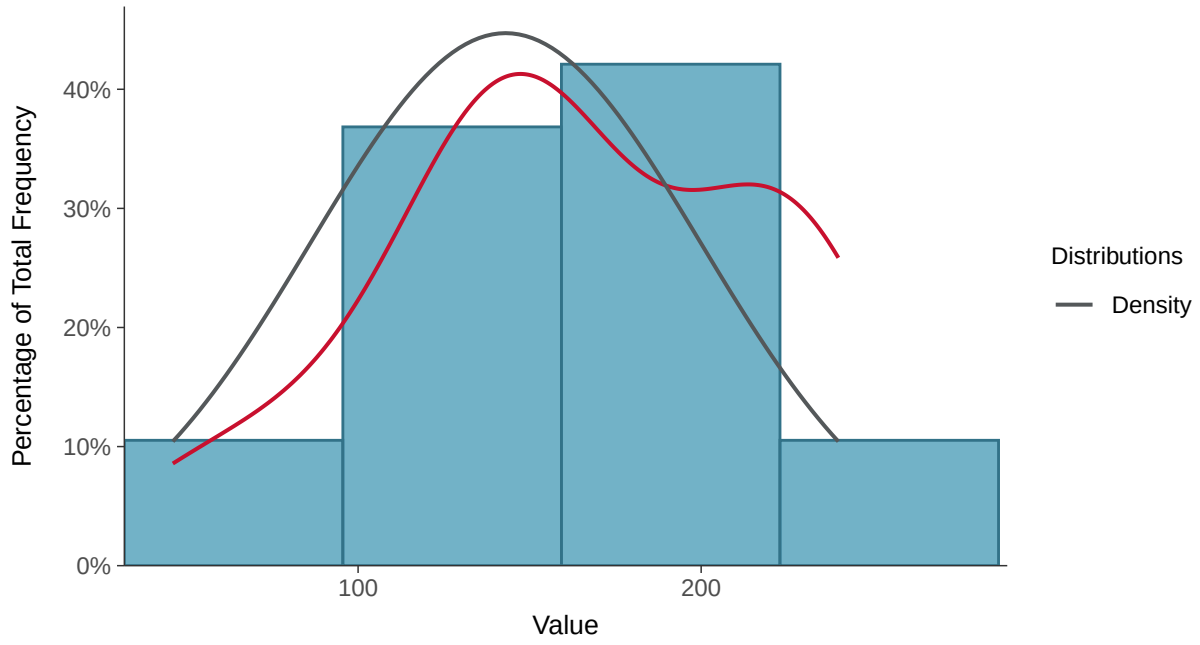
**Scatter Plot**

Lithium, MW-17002 (ug/L)



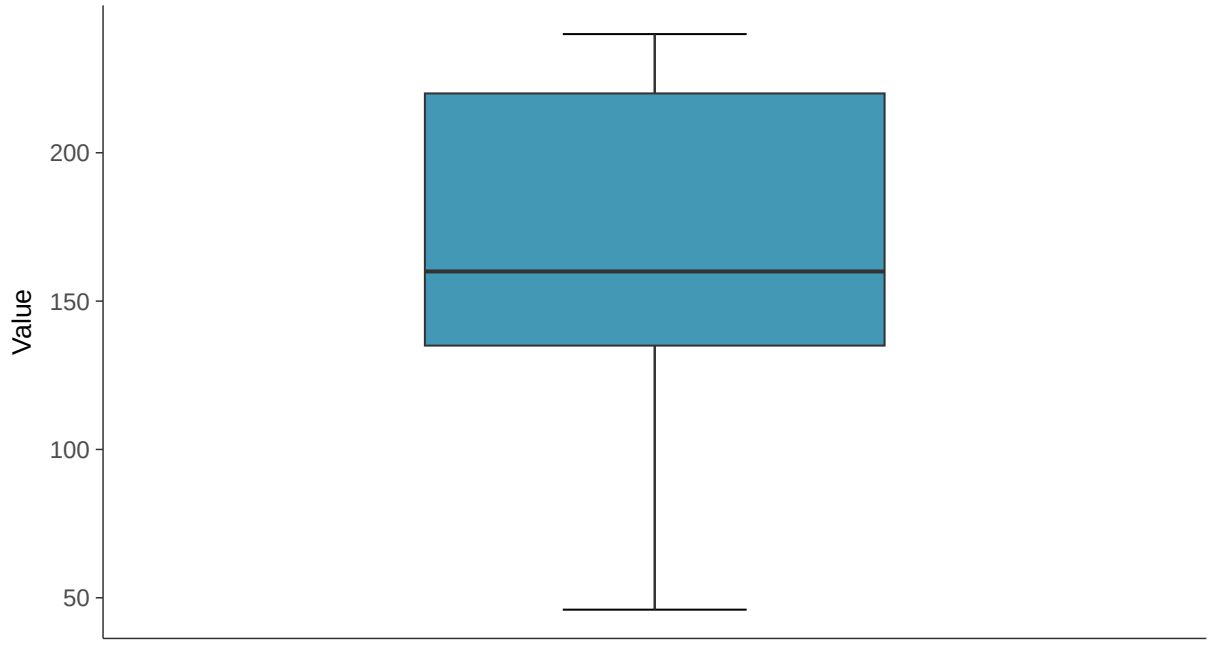

**Histogram**

Lithium, MW-17002 (ug/L)



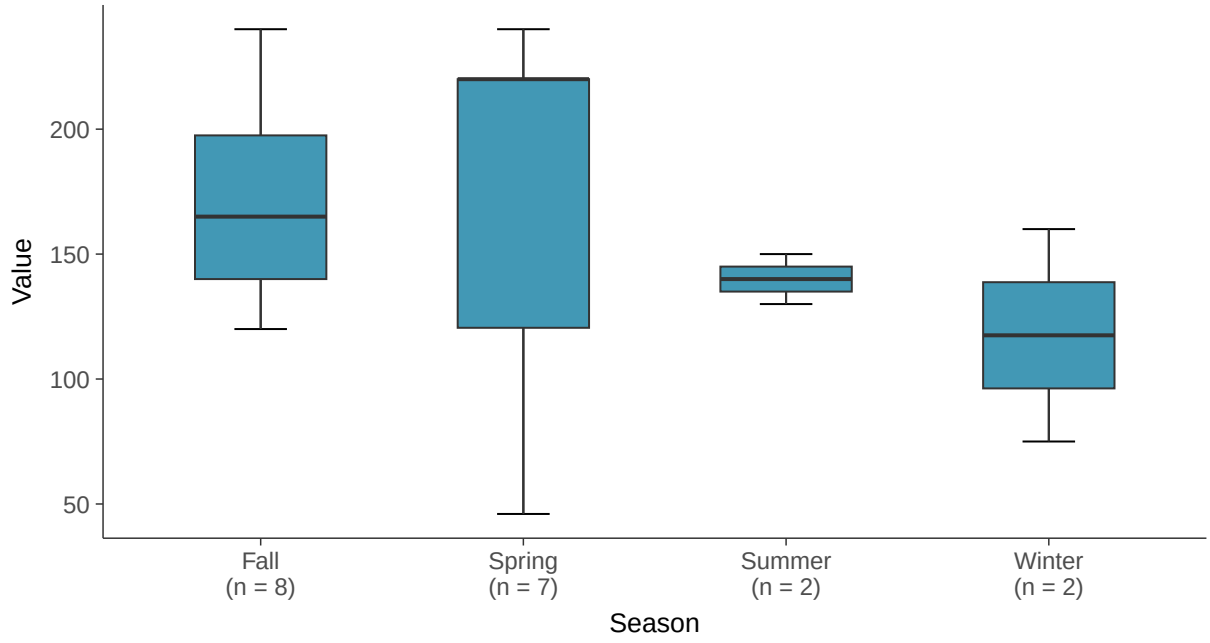
**Boxplot**

Lithium, MW-17002 (ug/L)



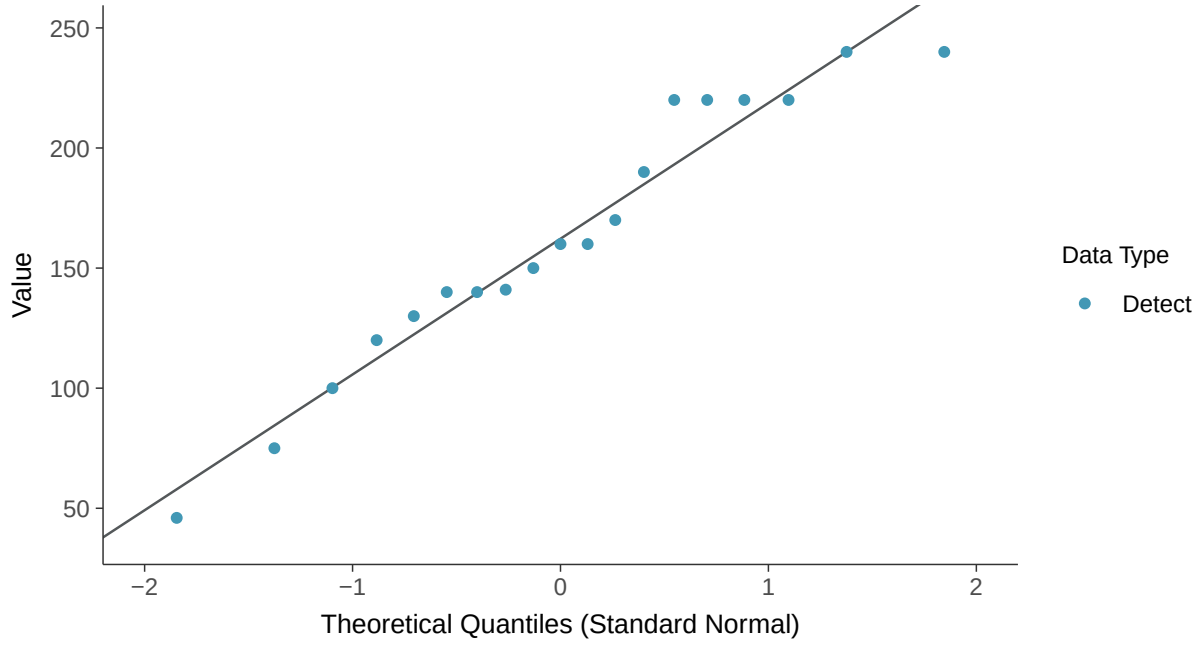

**Boxplot by Season**

Lithium, MW-17002 (ug/L)



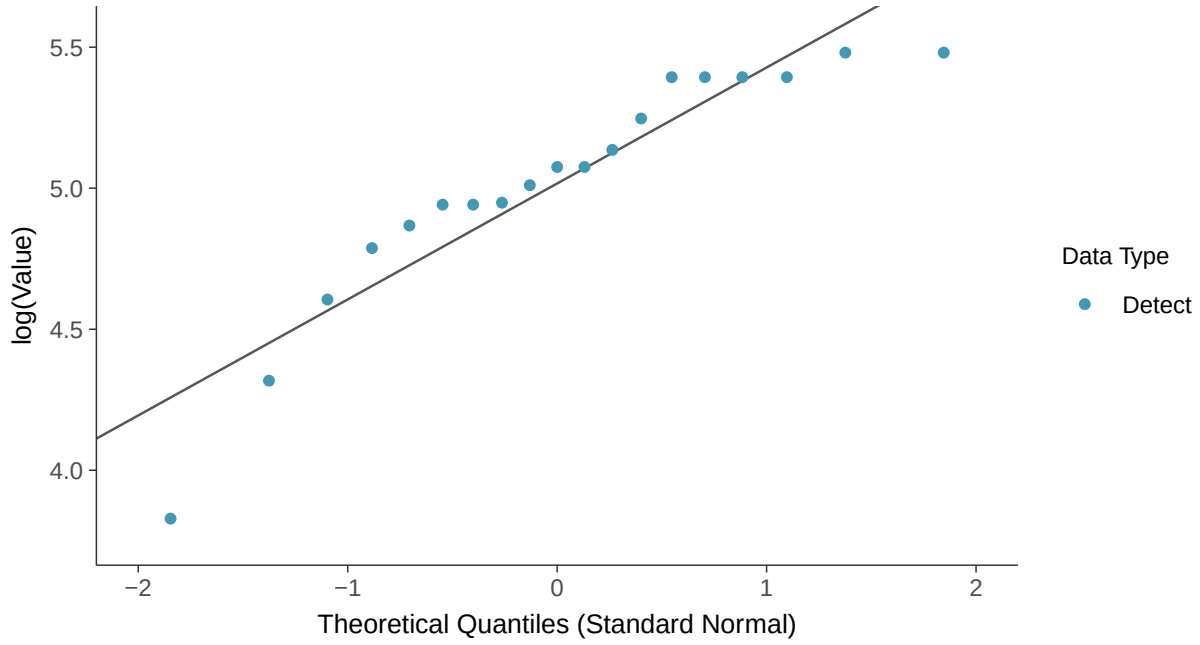
**Normal Q-Q plot**

Lithium, MW-17002 (ug/L)



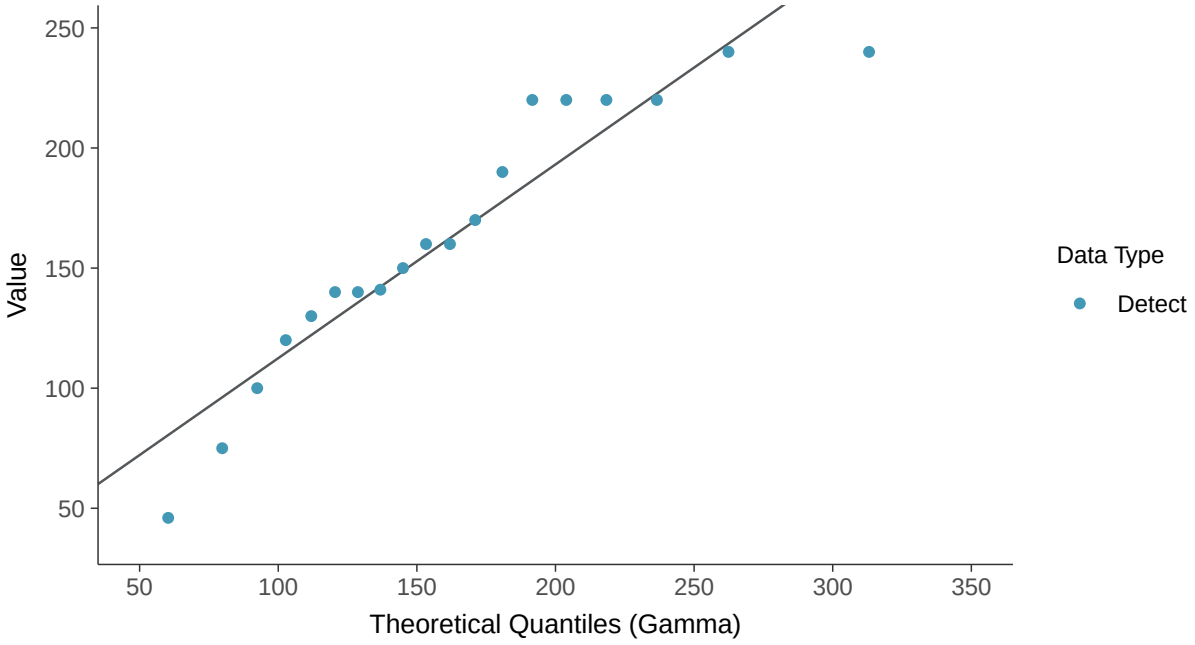

**Lognormal Q-Q plot**

Lithium, MW-17002 (ug/L)



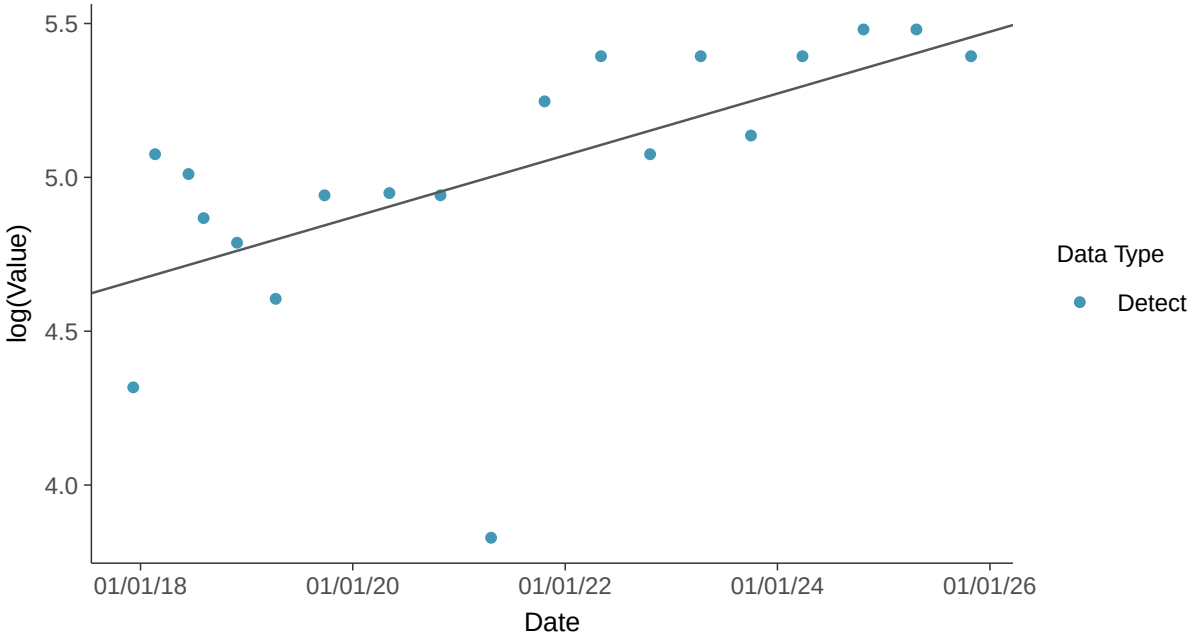
**Gamma Q-Q plot**

Lithium, MW-17002 (ug/L)



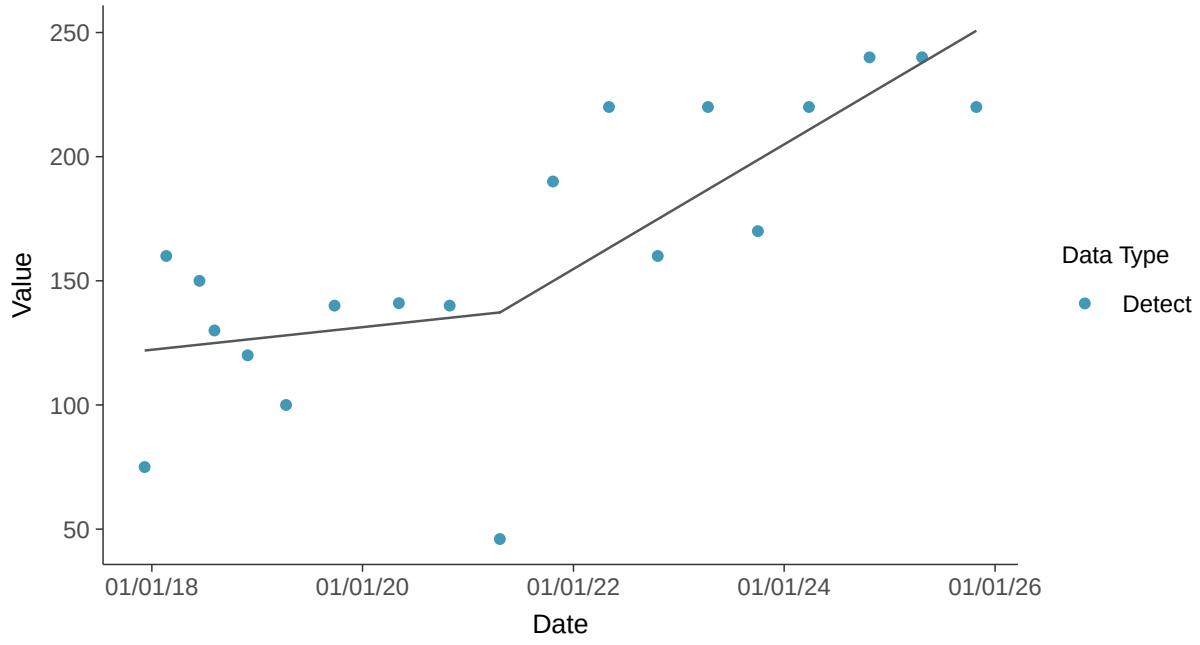

**Trend Regression: Lognormal MLE**

Lithium, MW-17002 (ug/L)



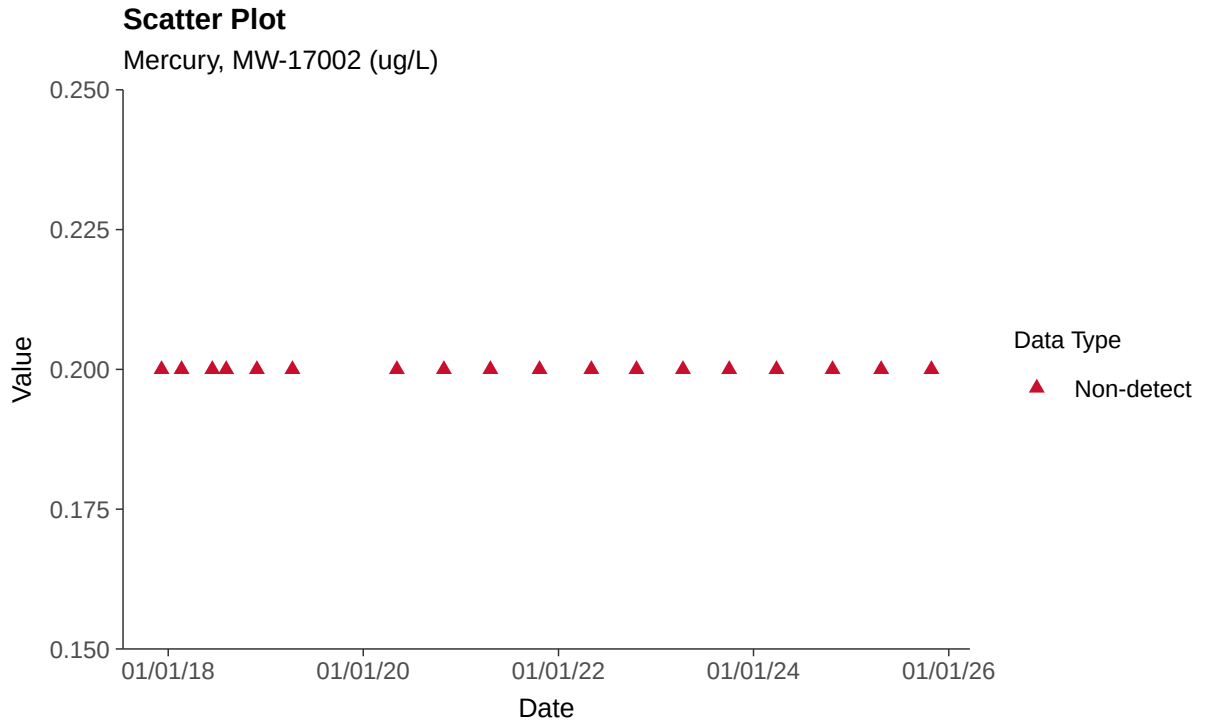
**Trend Regression: Piecewise Linear-Linear**

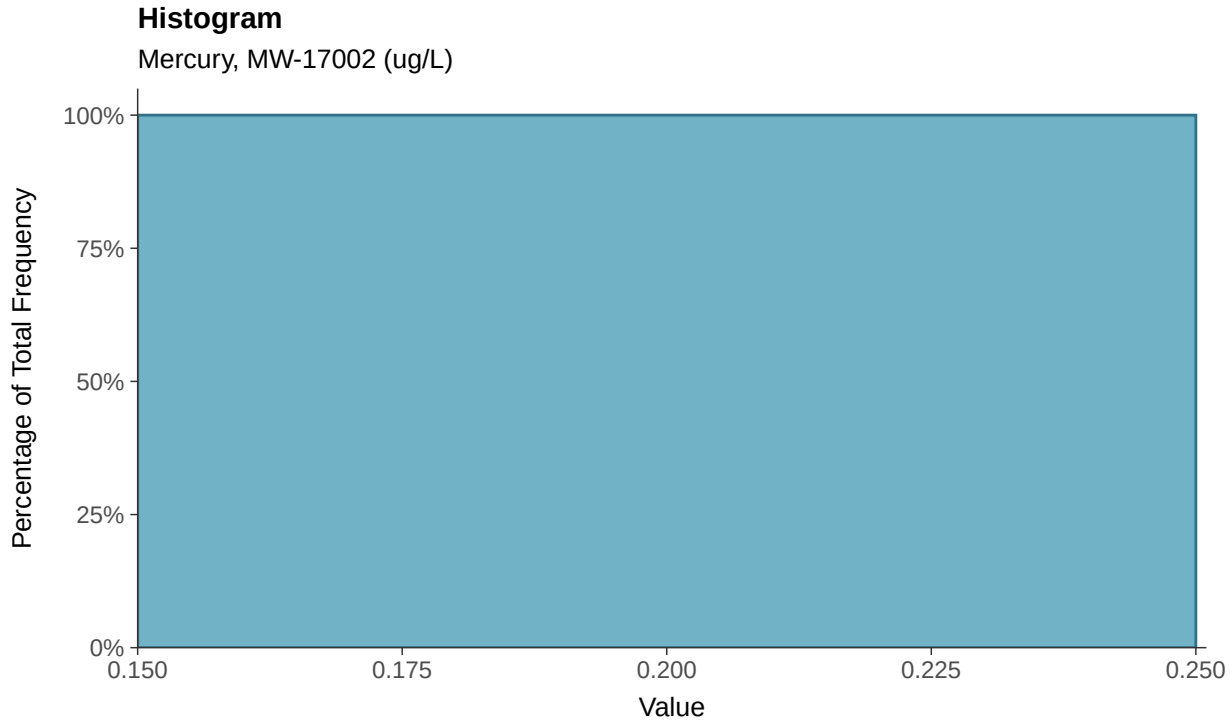
Lithium, MW-17002 (ug/L)



## Appendix IV: Mercury, MW-17002

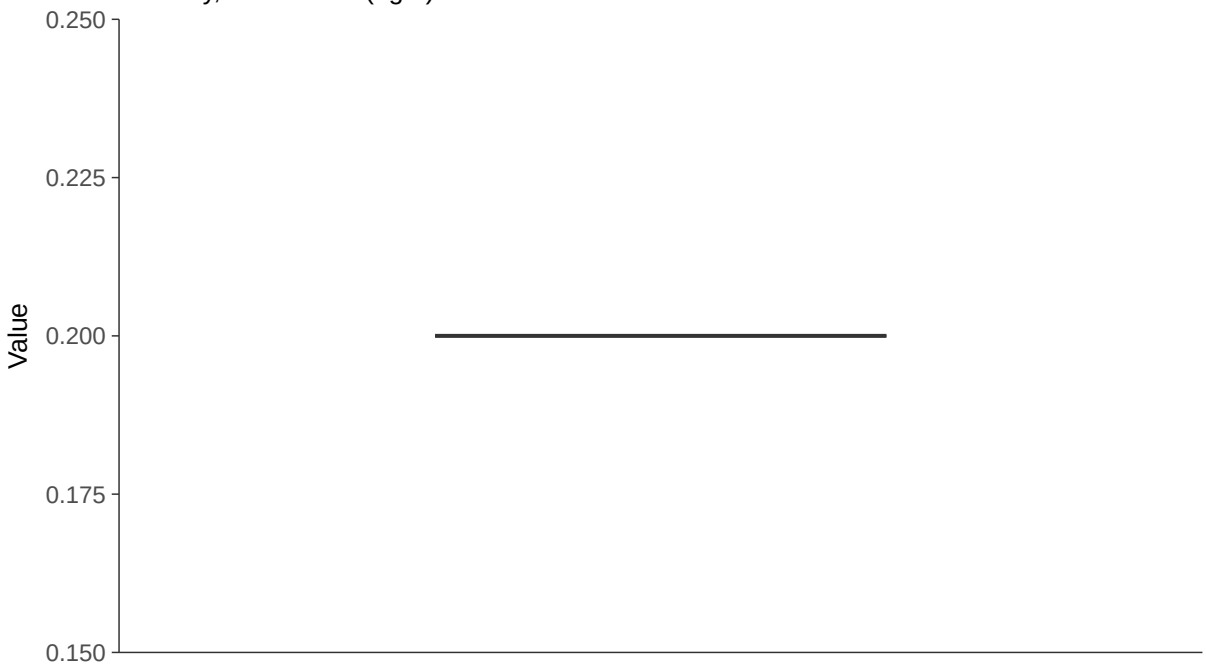
ID: 15_2_118



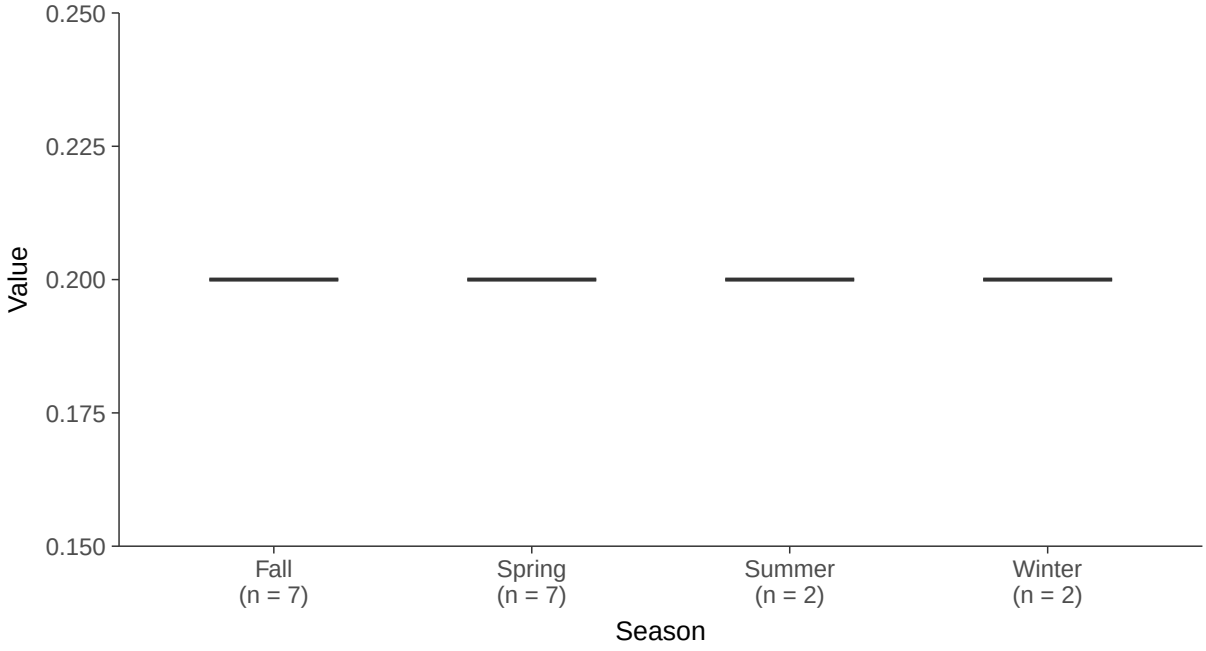
**Boxplot**

Mercury, MW-17002 (ug/L)




**Boxplot by Season**

Mercury, MW-17002 (ug/L)

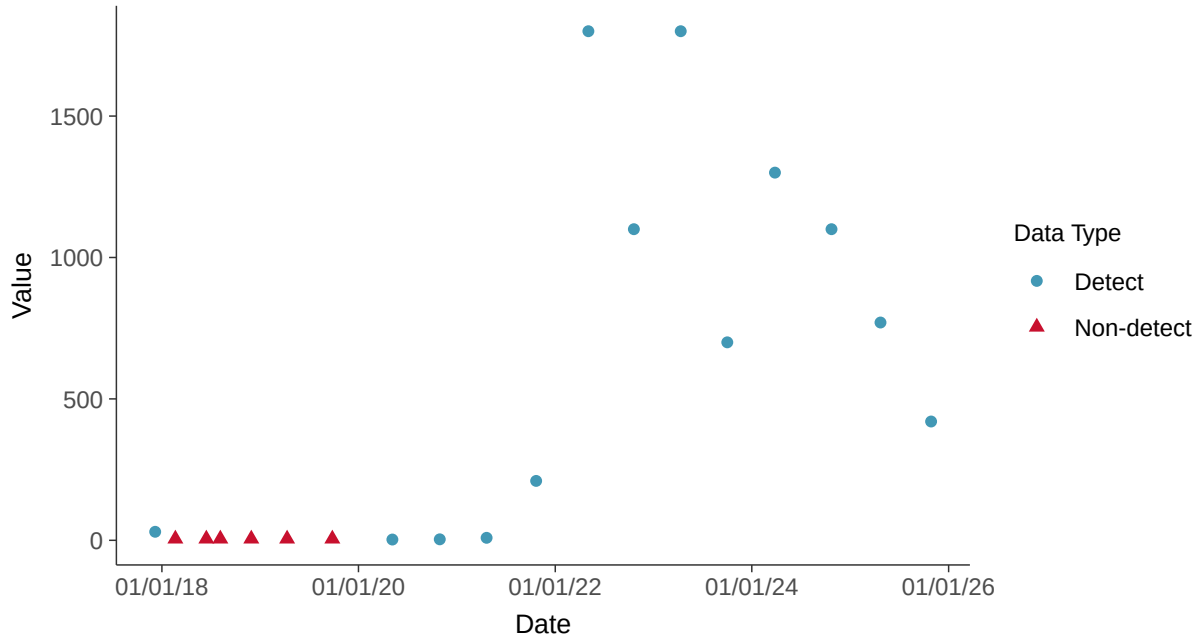


## Appendix IV: Molybdenum, MW-17002

ID: 15_2_119

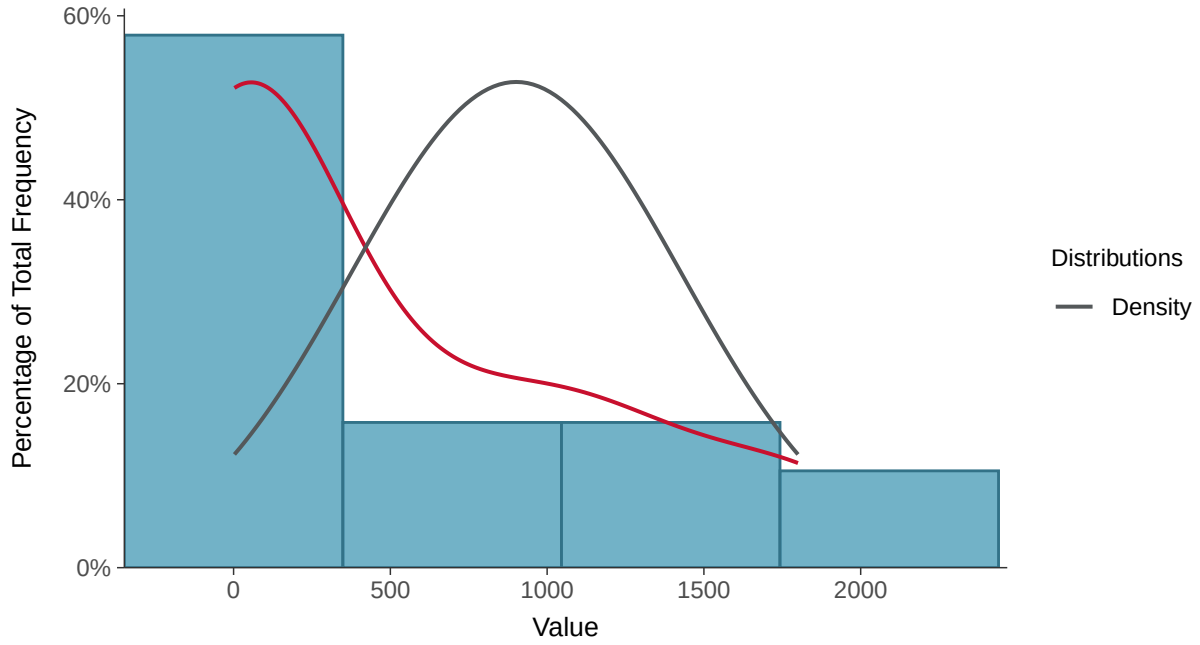
**Scatter Plot**

Molybdenum, MW-17002 (ug/L)



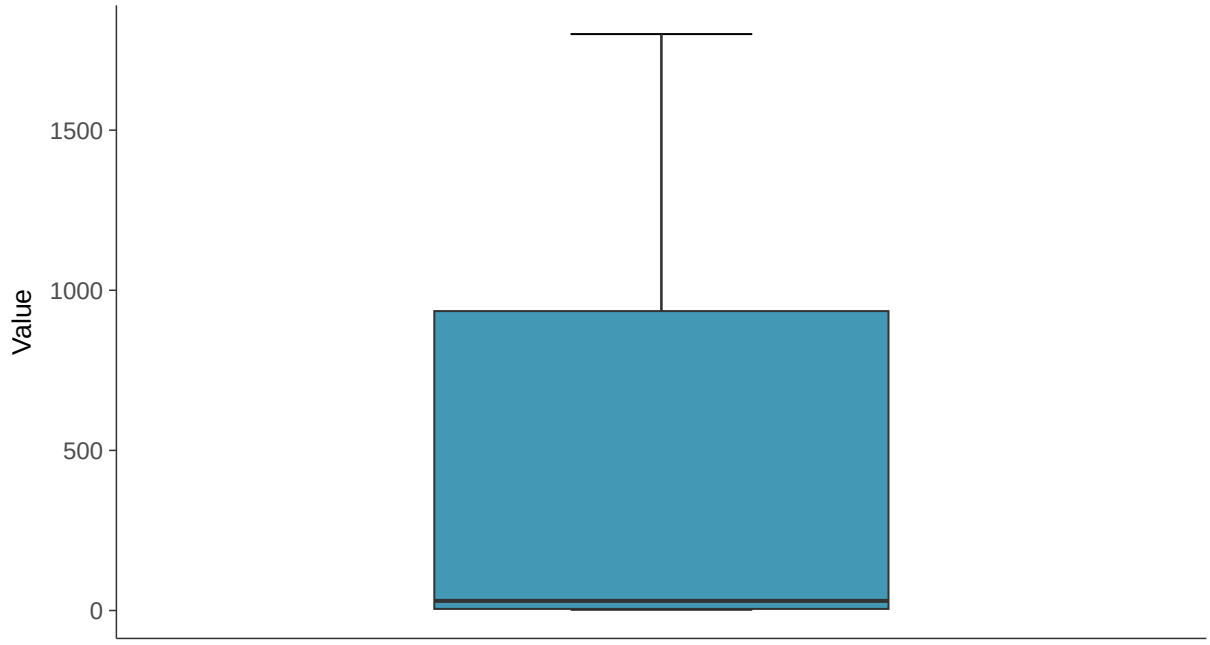

**Histogram**

Molybdenum, MW-17002 (ug/L)



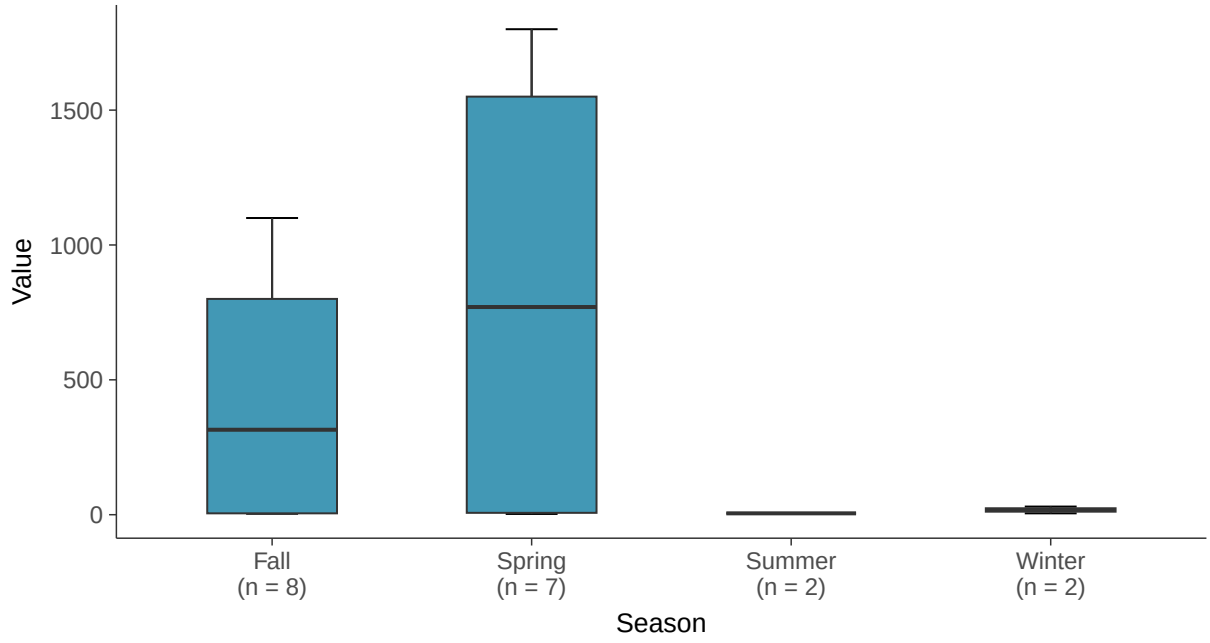
**Boxplot**

Molybdenum, MW-17002 (ug/L)



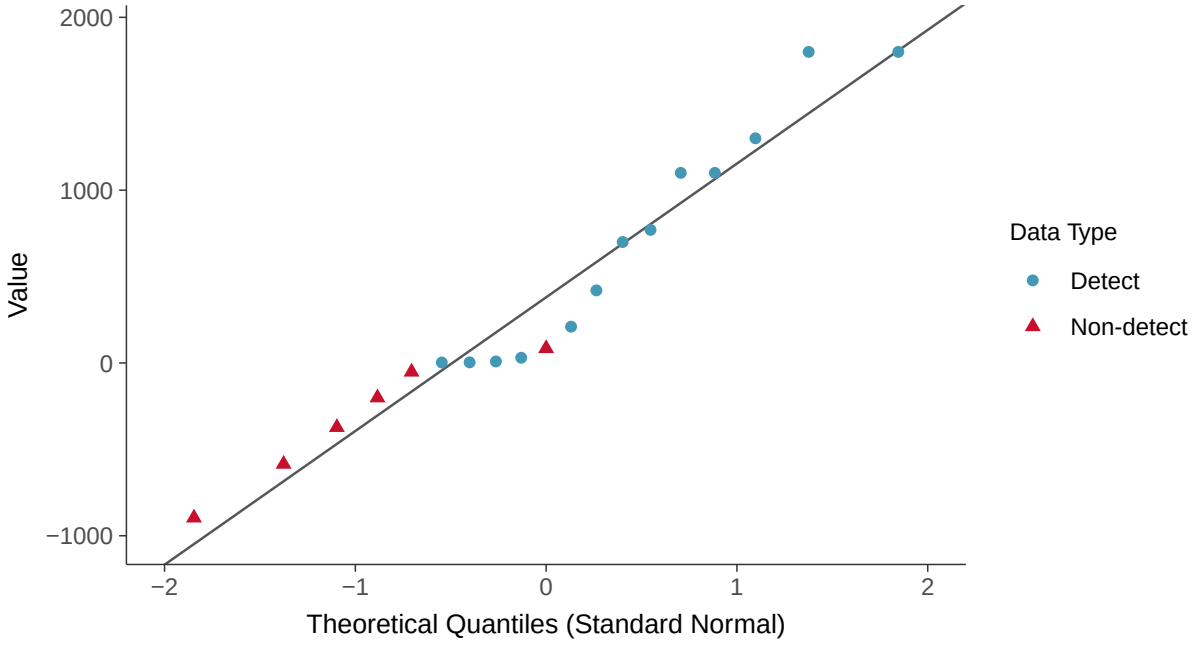

**Boxplot by Season**

Molybdenum, MW-17002 (ug/L)



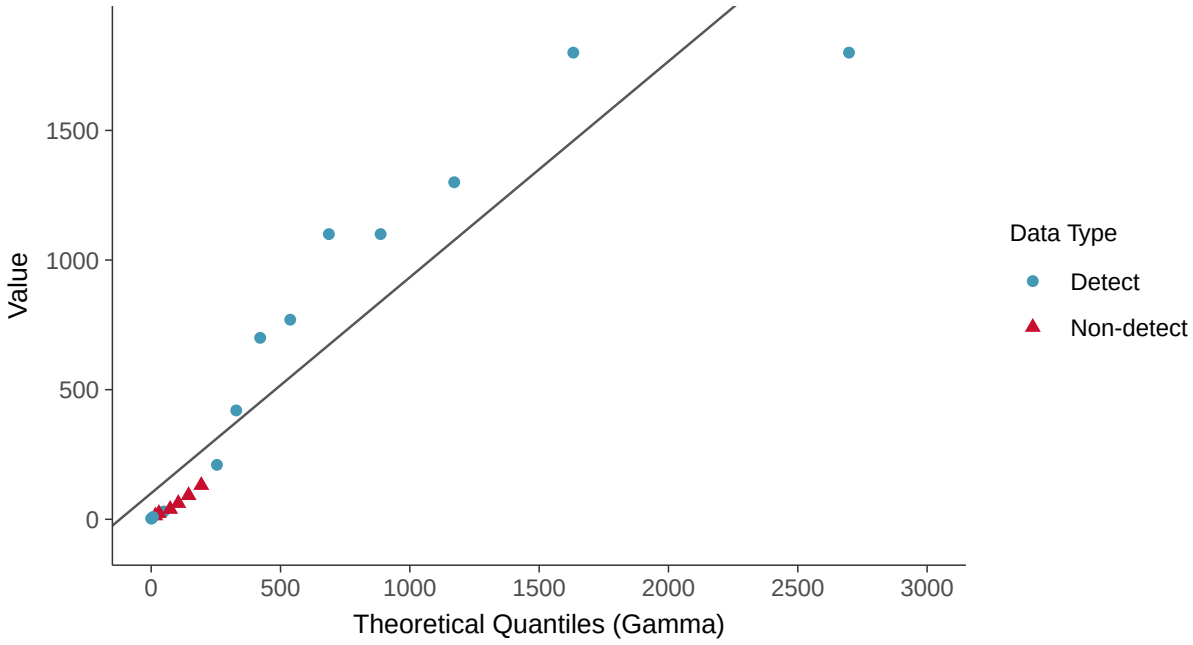
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17002 (ug/L)



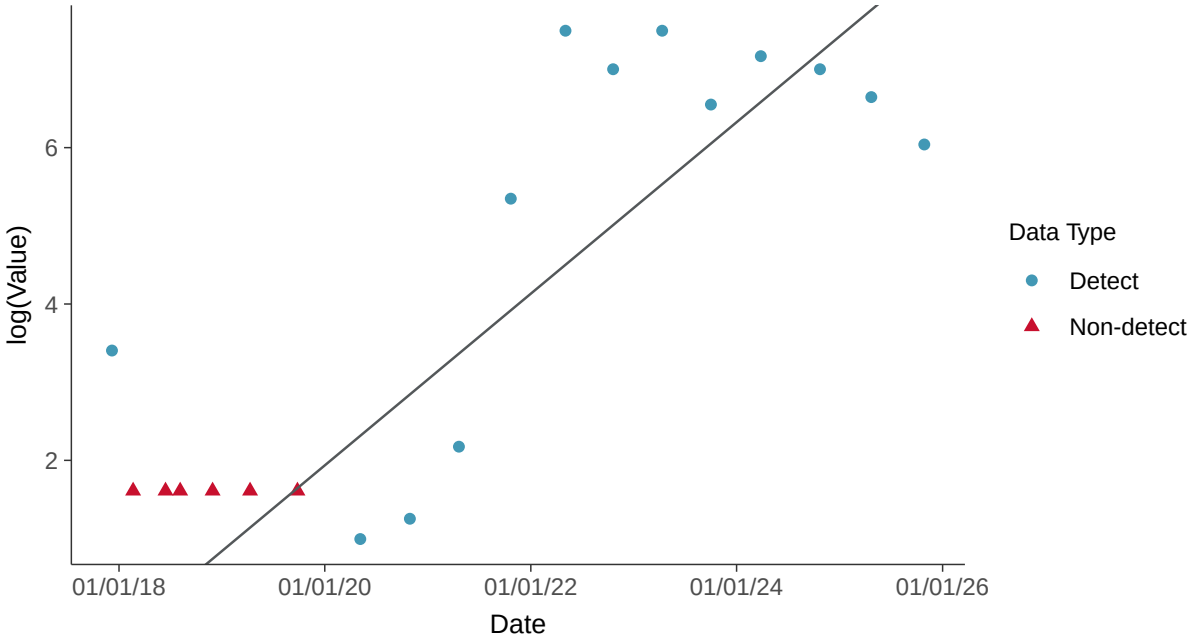

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17002 (ug/L)



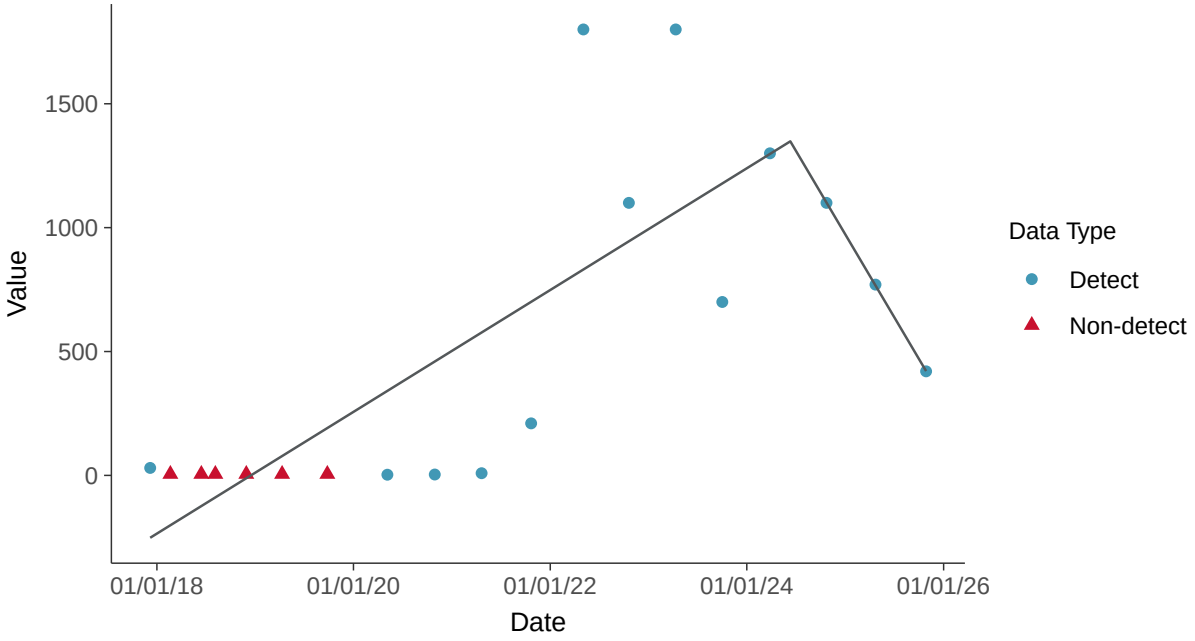
**Trend Regression: Lognormal MLE**

Molybdenum, MW-17002 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17002 (ug/L)

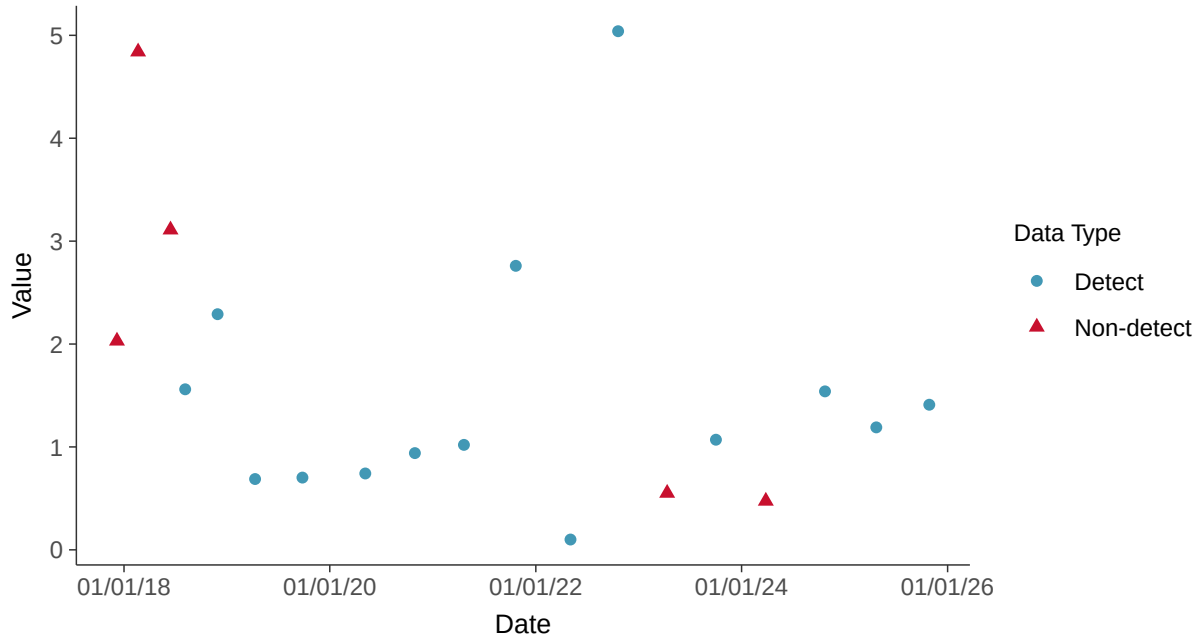


## Appendix IV: Radium-226+228, MW-17002

ID: 15_2_125

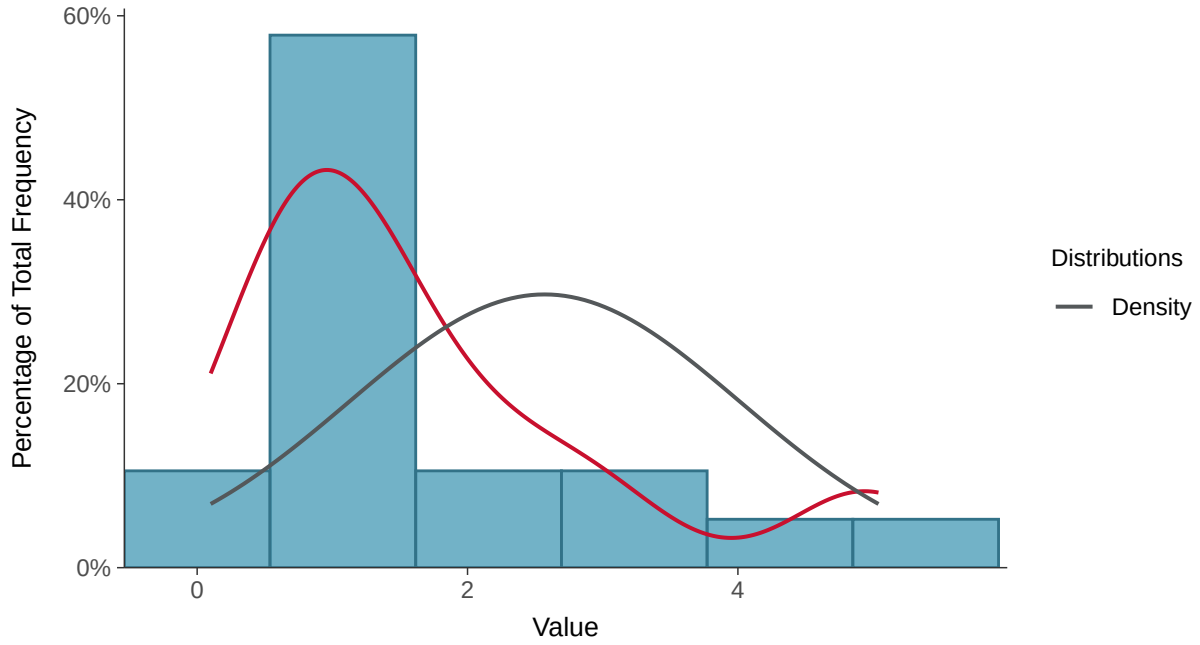
**Scatter Plot**

Radium-226+228, MW-17002 (pCi/L)



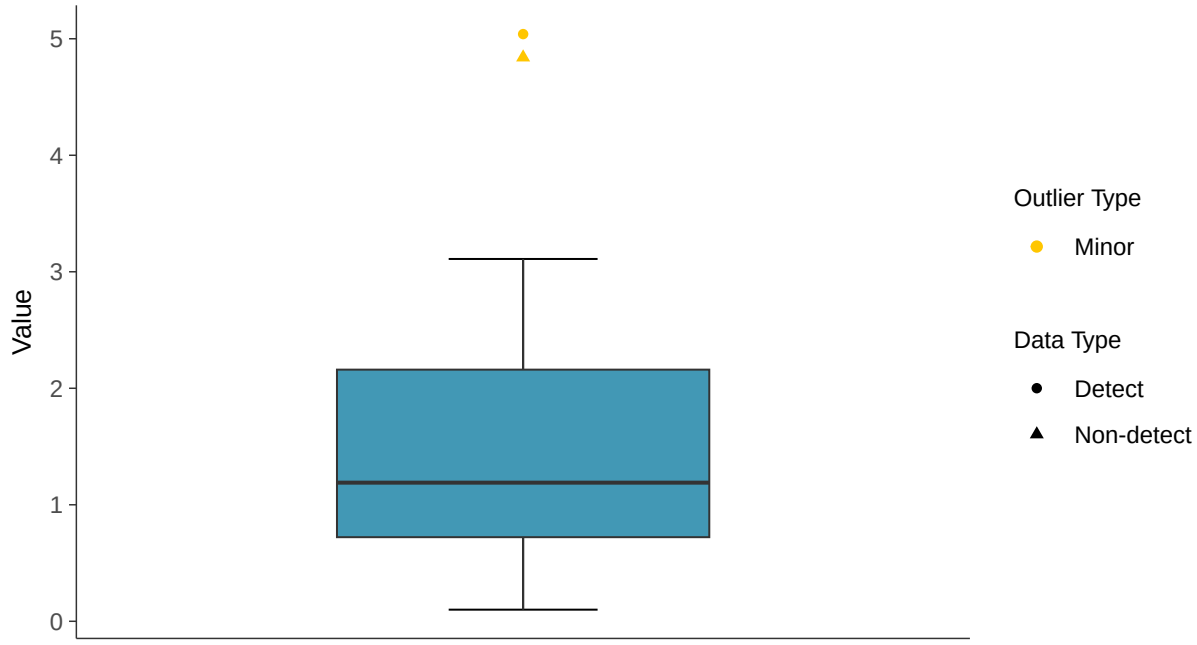

**Histogram**

Radium-226+228, MW-17002 (pCi/L)



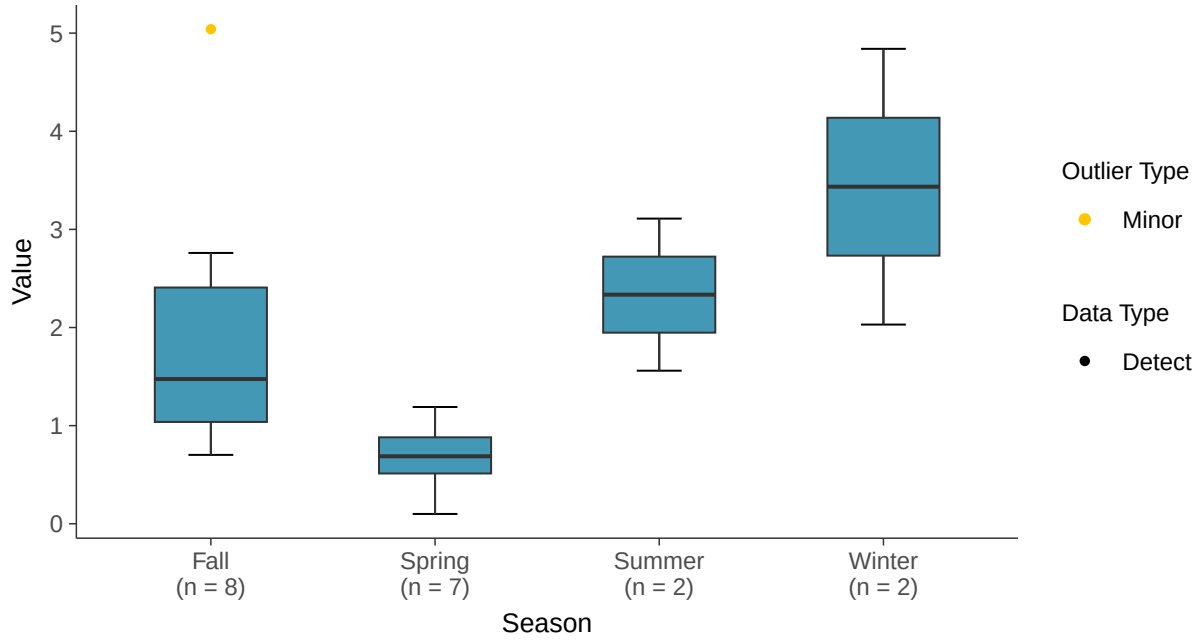
## Boxplot

Radium-226+228, MW-17002 (pCi/L)



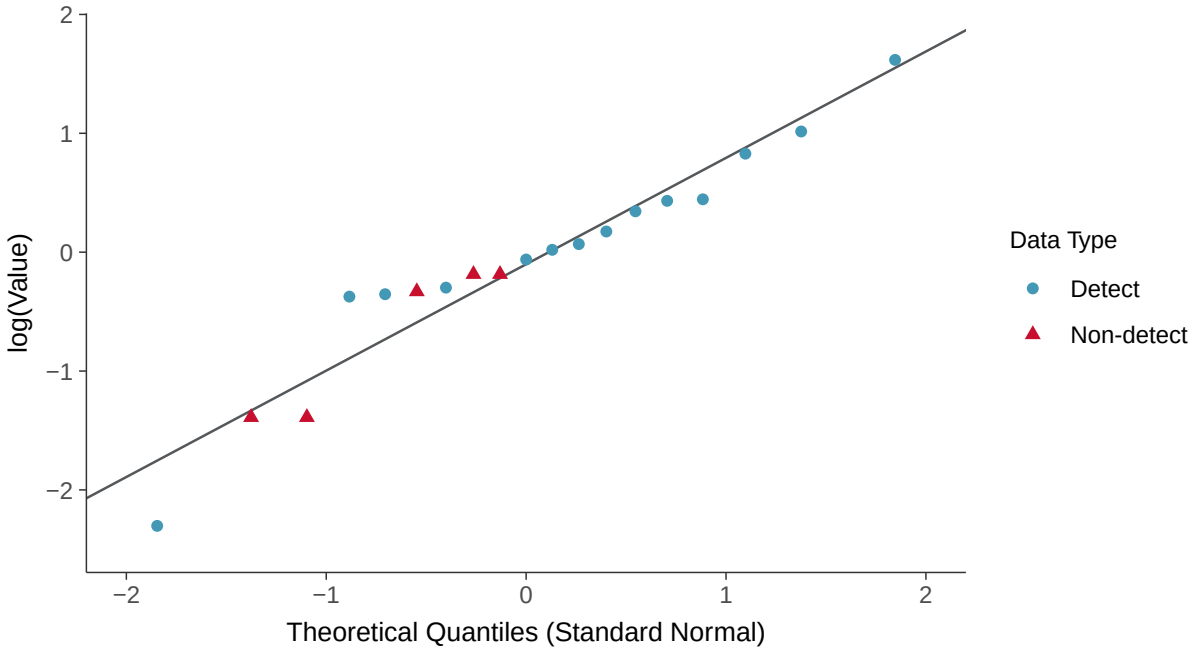

## Boxplot by Season

Radium-226+228, MW-17002 (pCi/L)



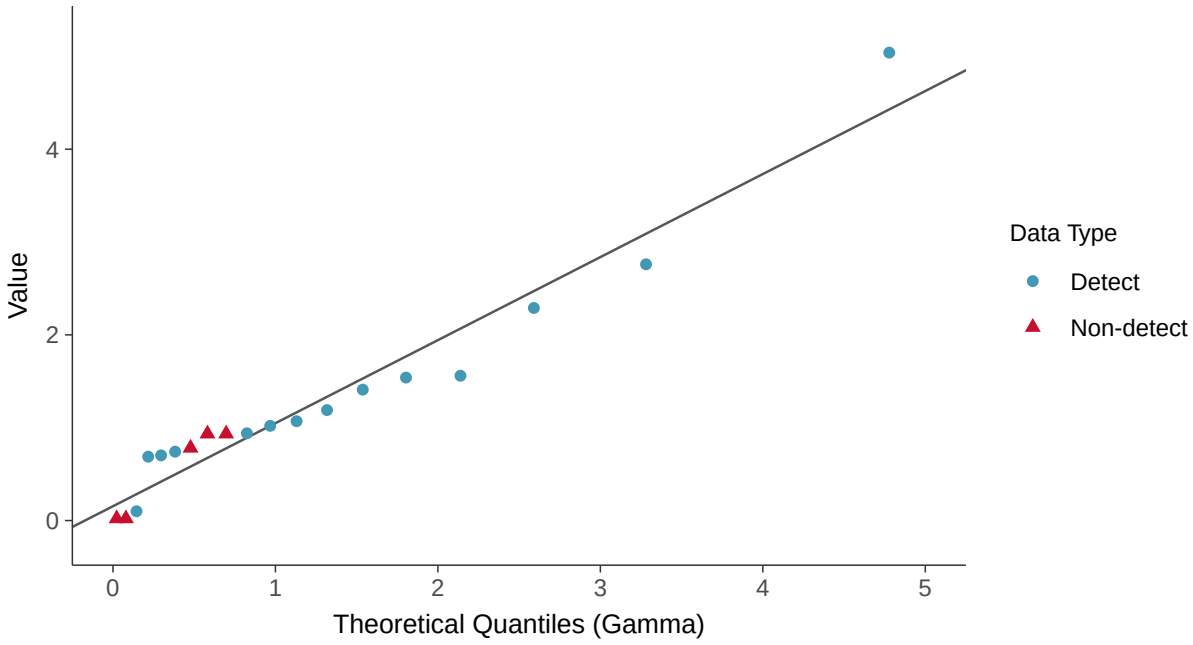
**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17002 (pCi/L)



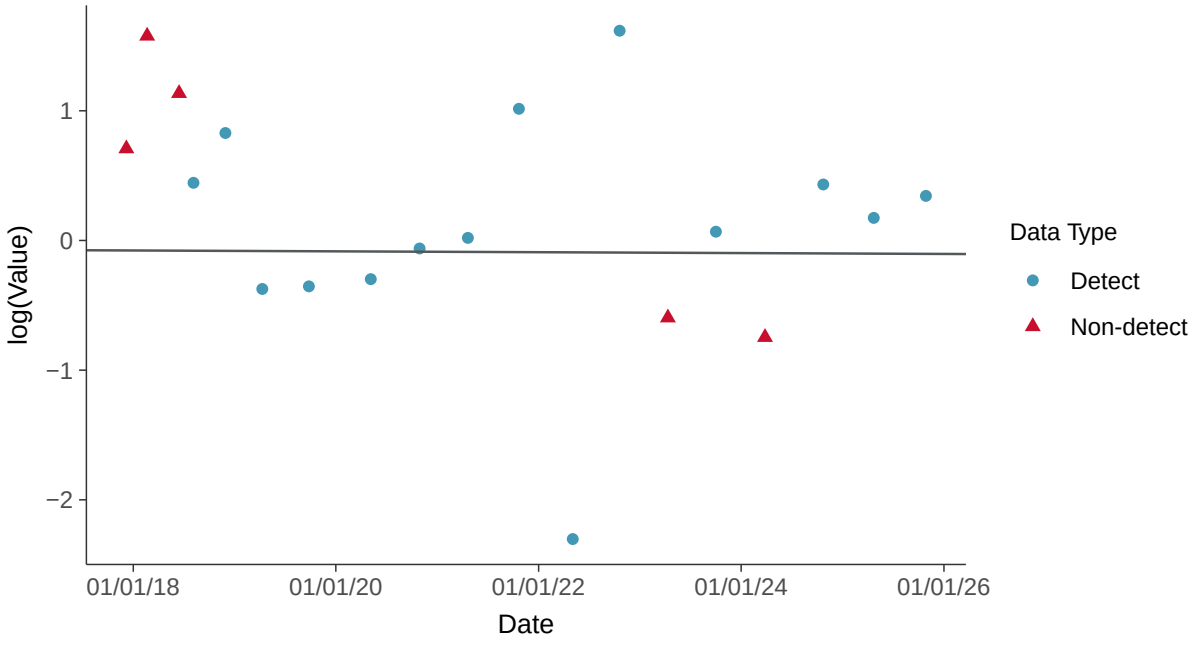

**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17002 (pCi/L)



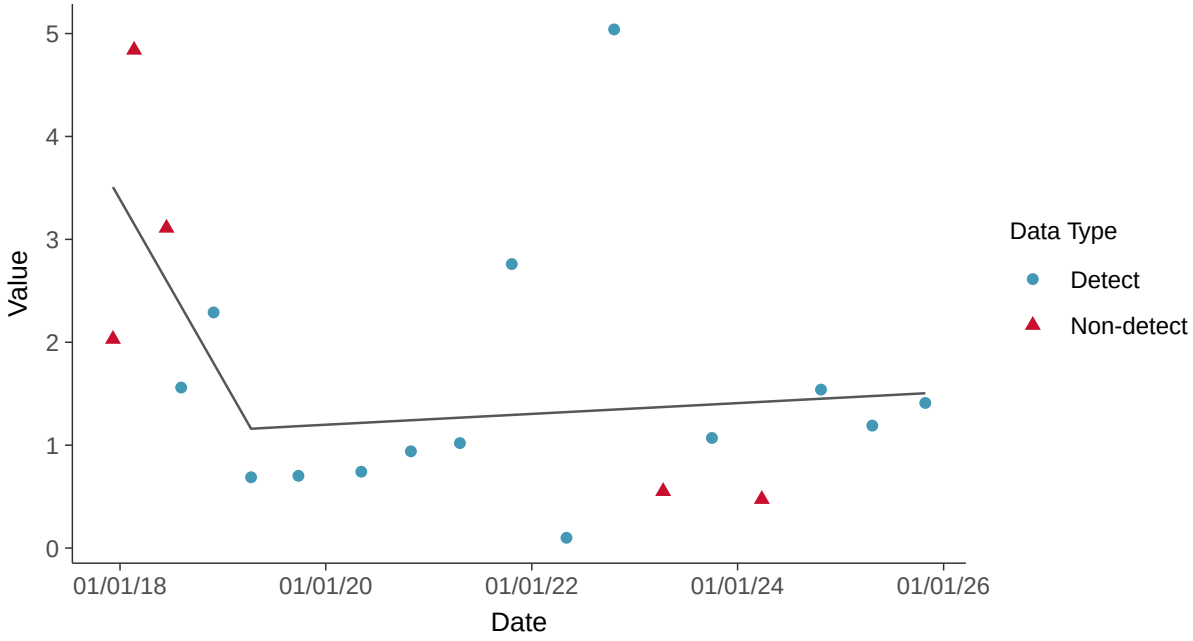
**Trend Regression: Lognormal MLE**

Radium-226+228, MW-17002 (pCi/L)



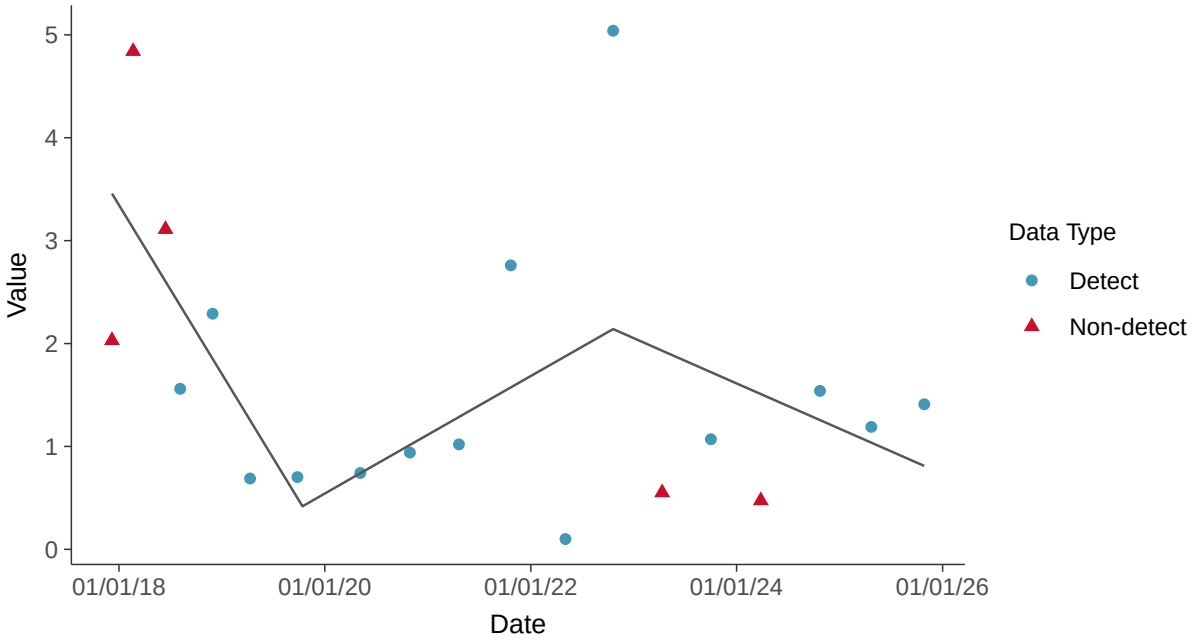

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17002 (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-17002 (pCi/L)

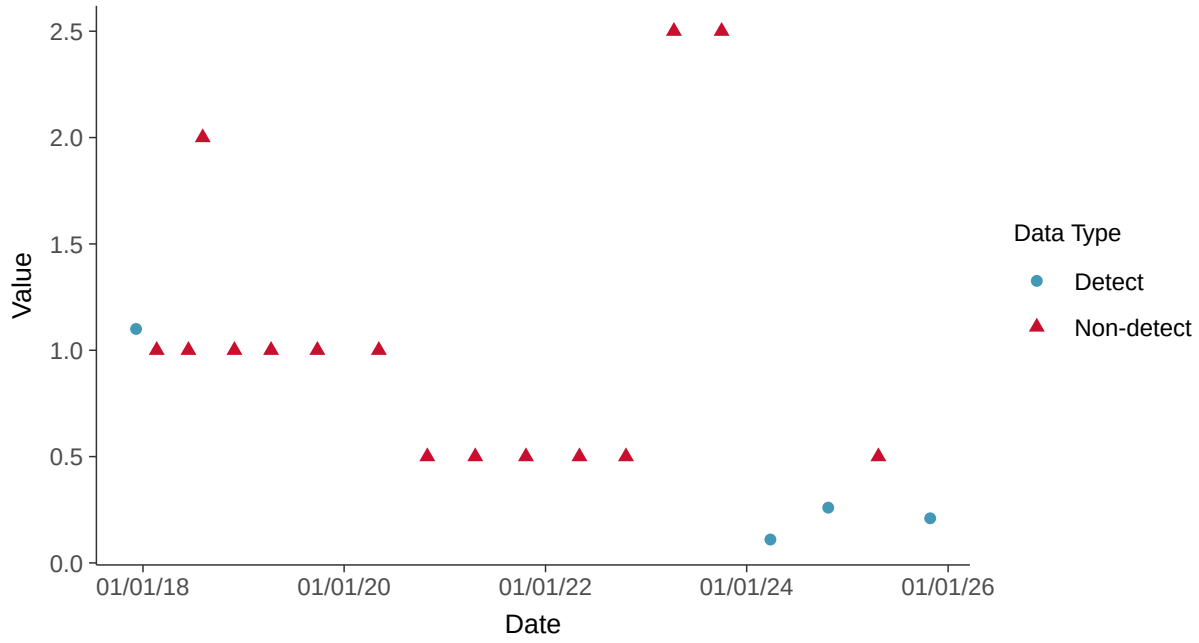


## Appendix IV: Selenium, MW-17002

ID: 15_2_127

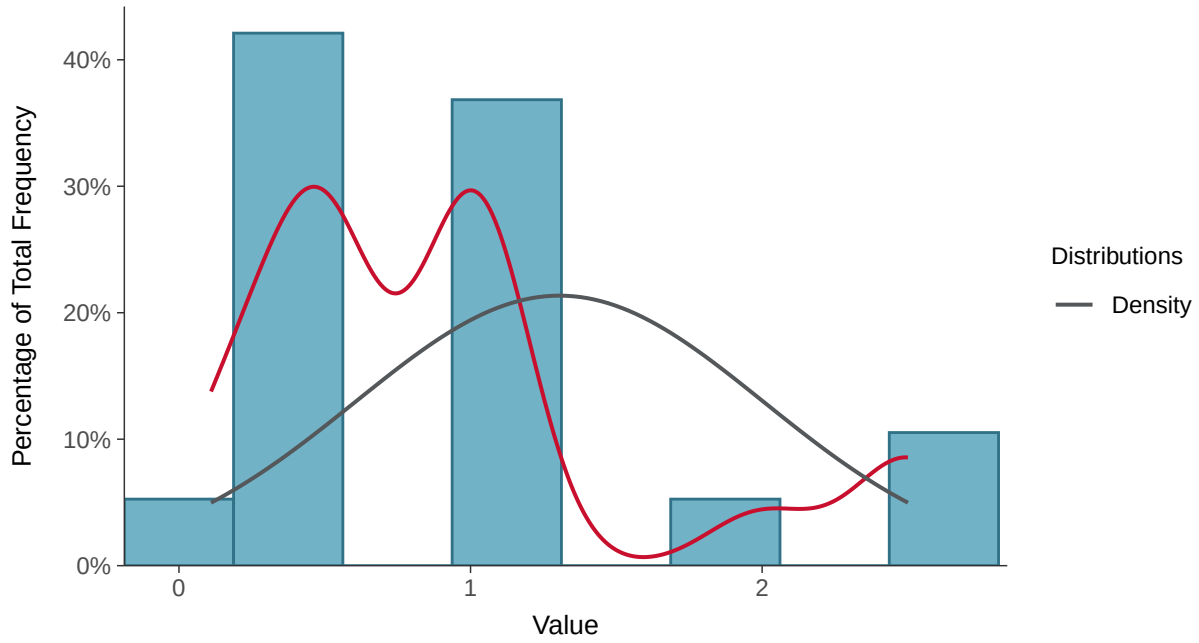
**Scatter Plot**

Selenium, MW-17002 (ug/L)



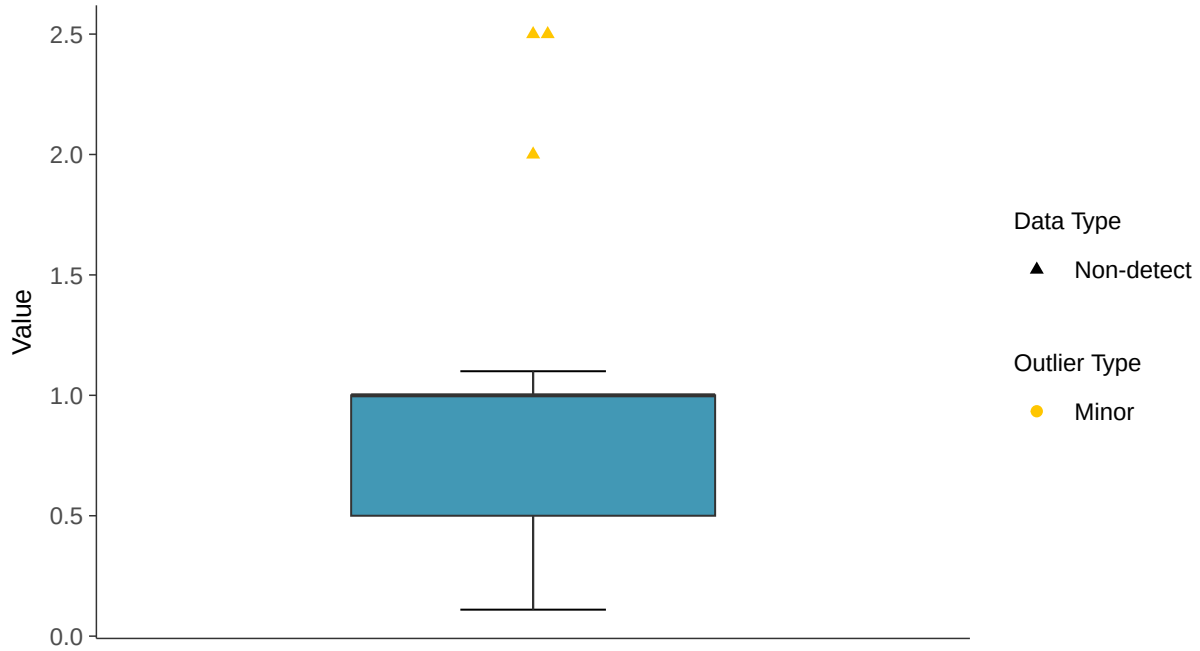

**Histogram**

Selenium, MW-17002 (ug/L)



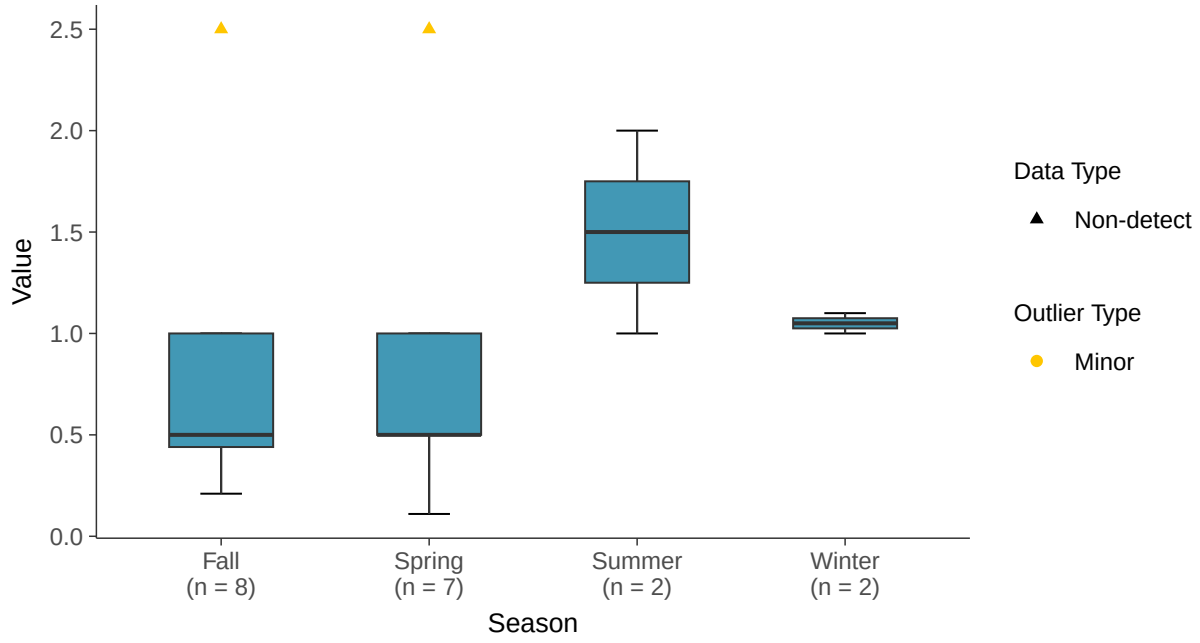
## Boxplot

Selenium, MW-17002 (ug/L)



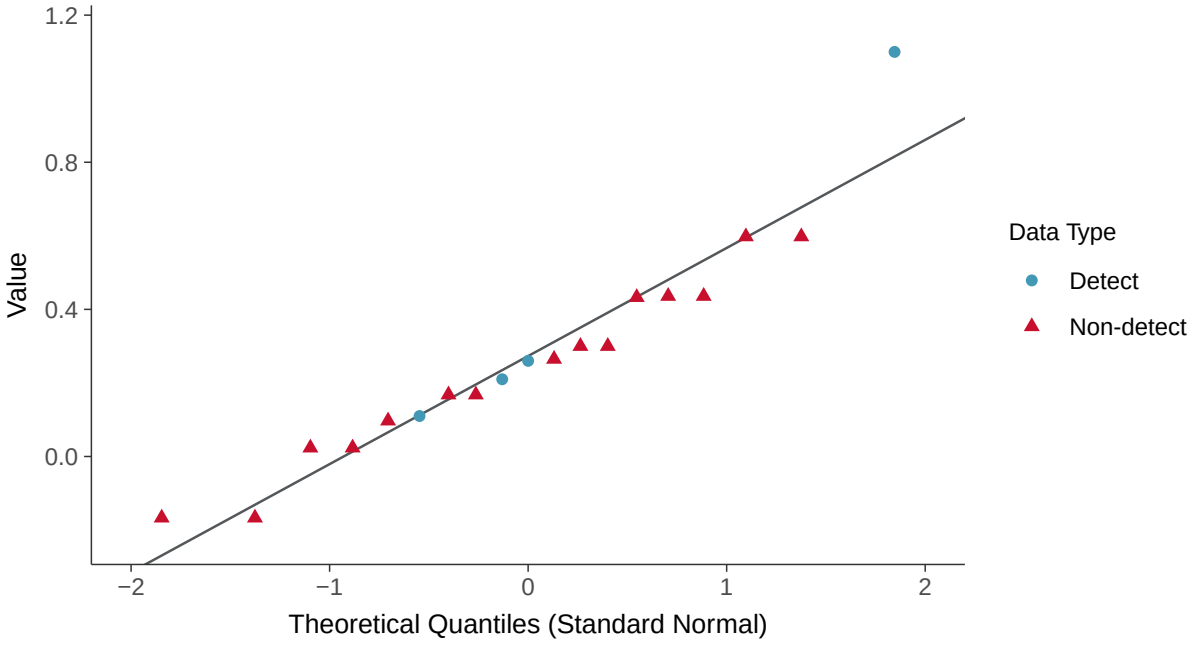

## Boxplot by Season

Selenium, MW-17002 (ug/L)



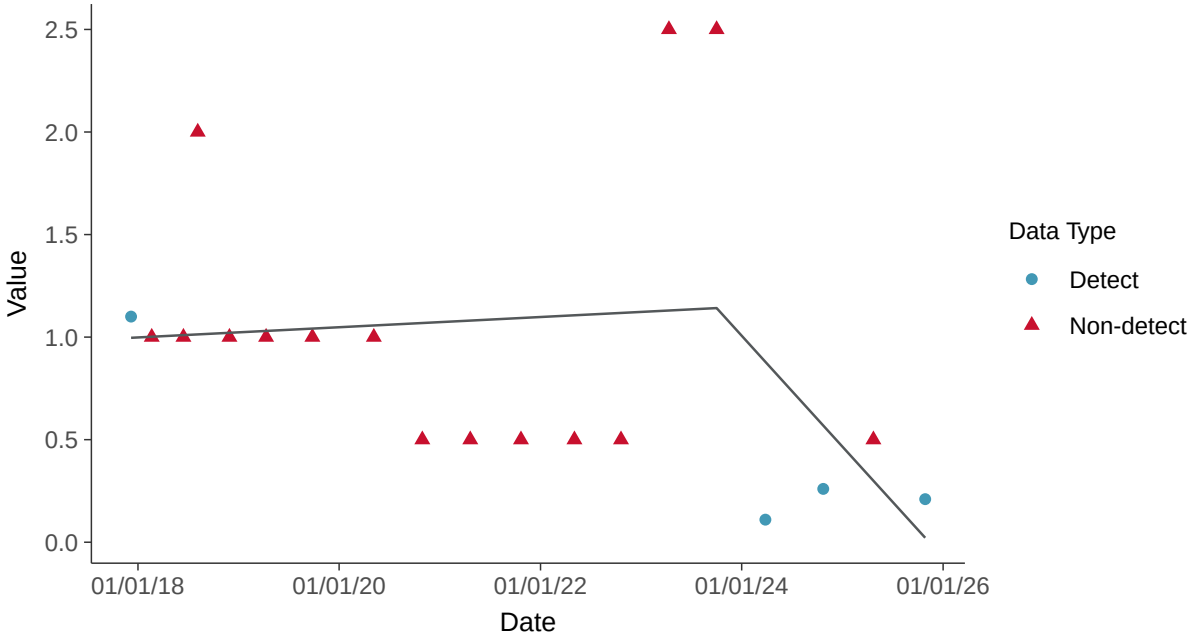
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-17002 (ug/L)



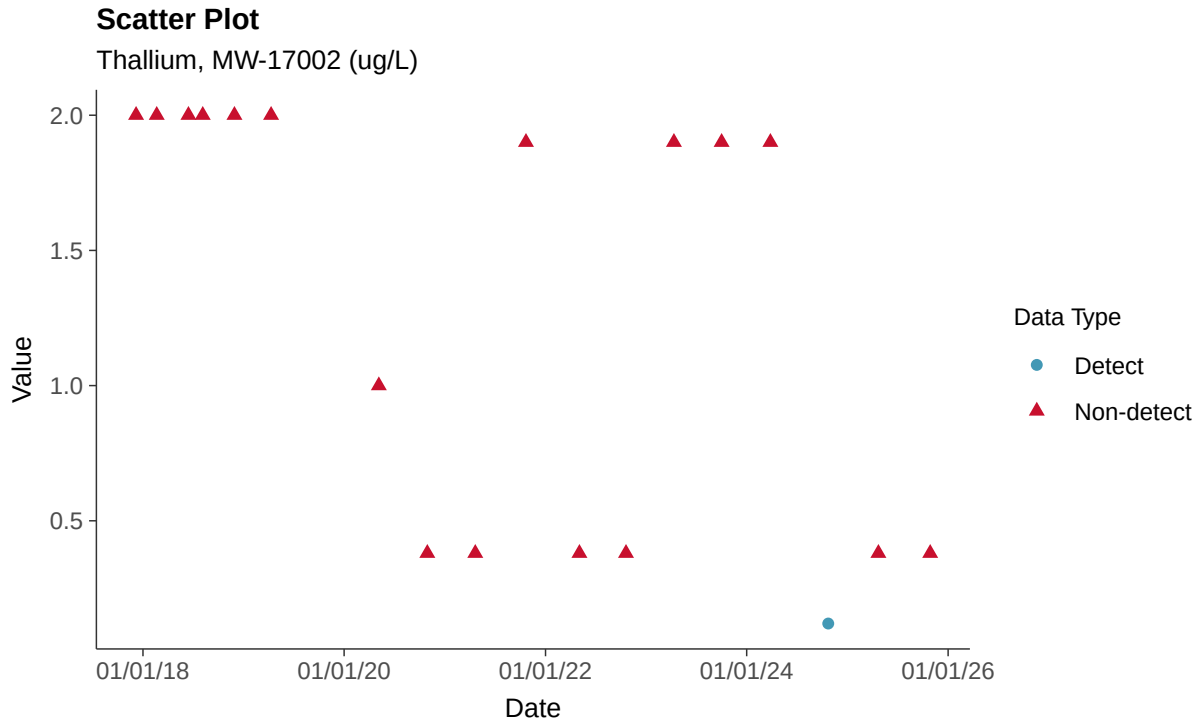

**Trend Regression: Piecewise Linear-Linear**

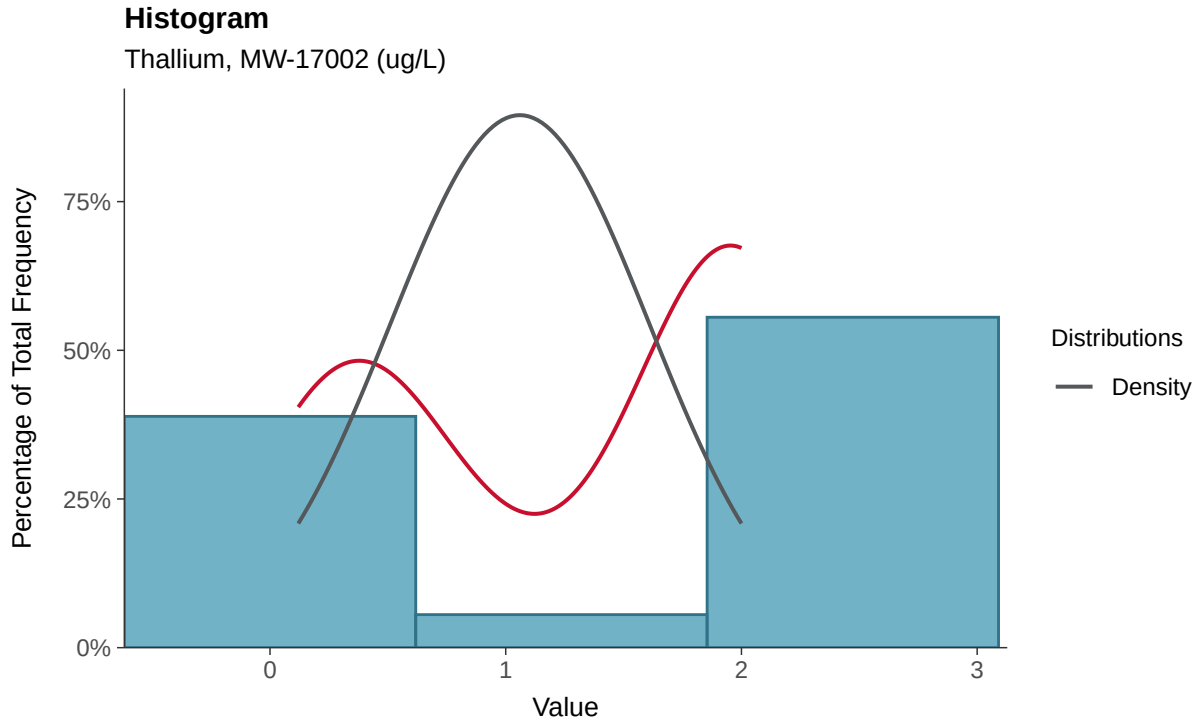
Selenium, MW-17002 (ug/L)



## Appendix IV: Thallium, MW-17002

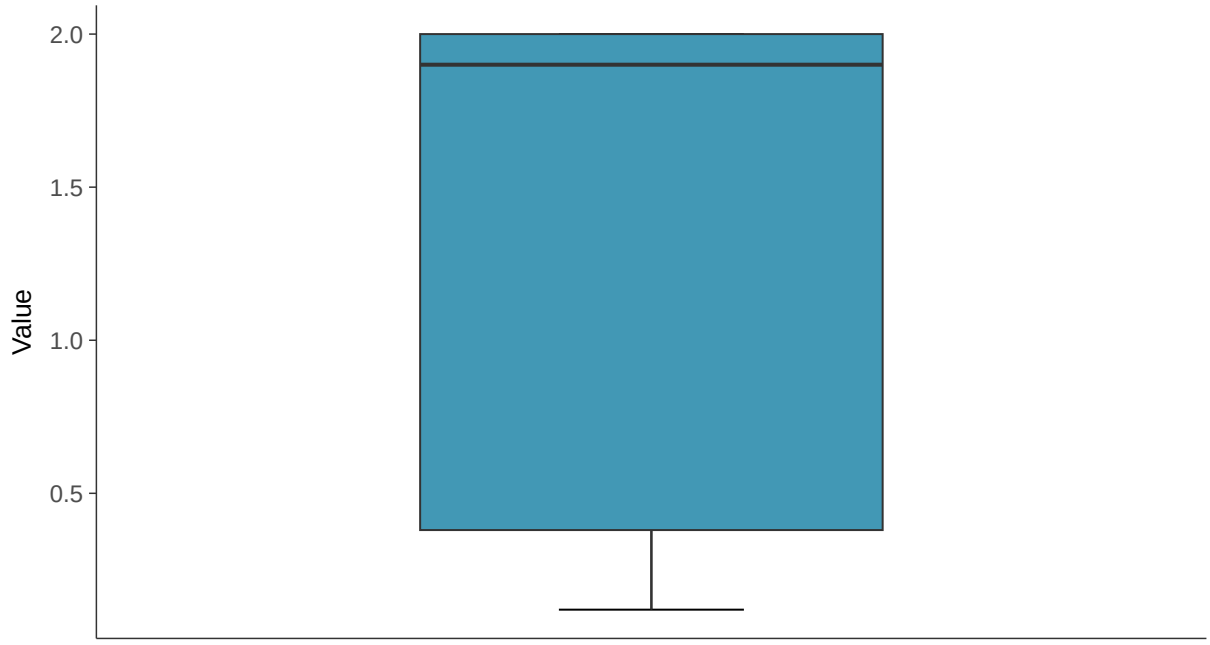
ID: 15_2_131



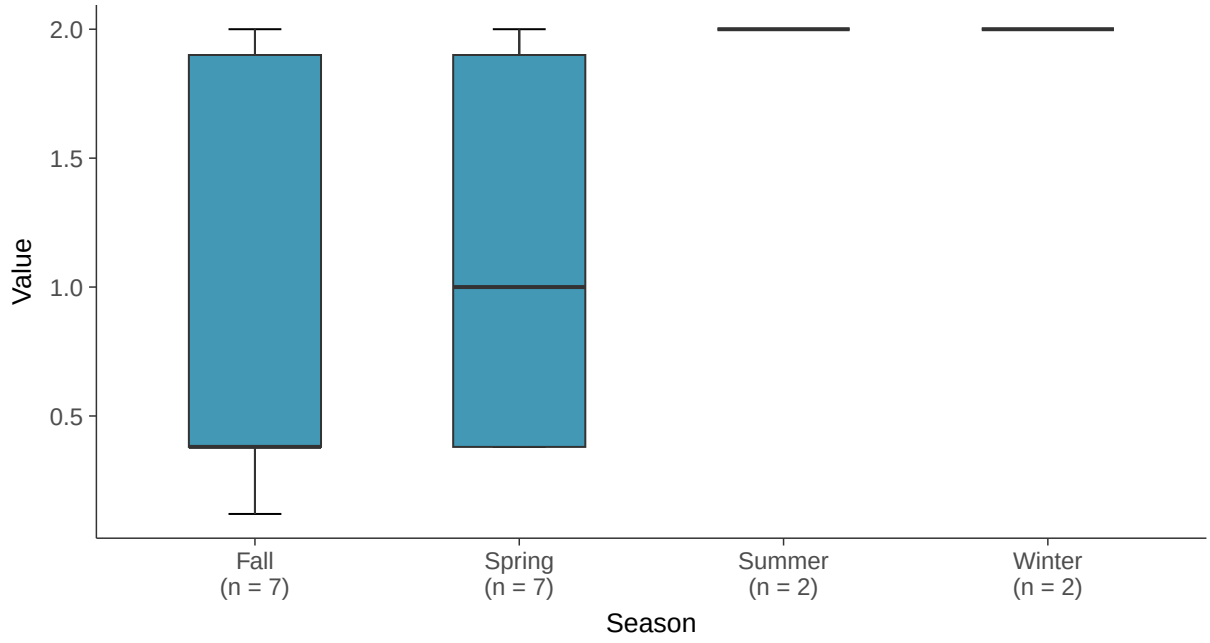
**Boxplot**

Thallium, MW-17002 (ug/L)



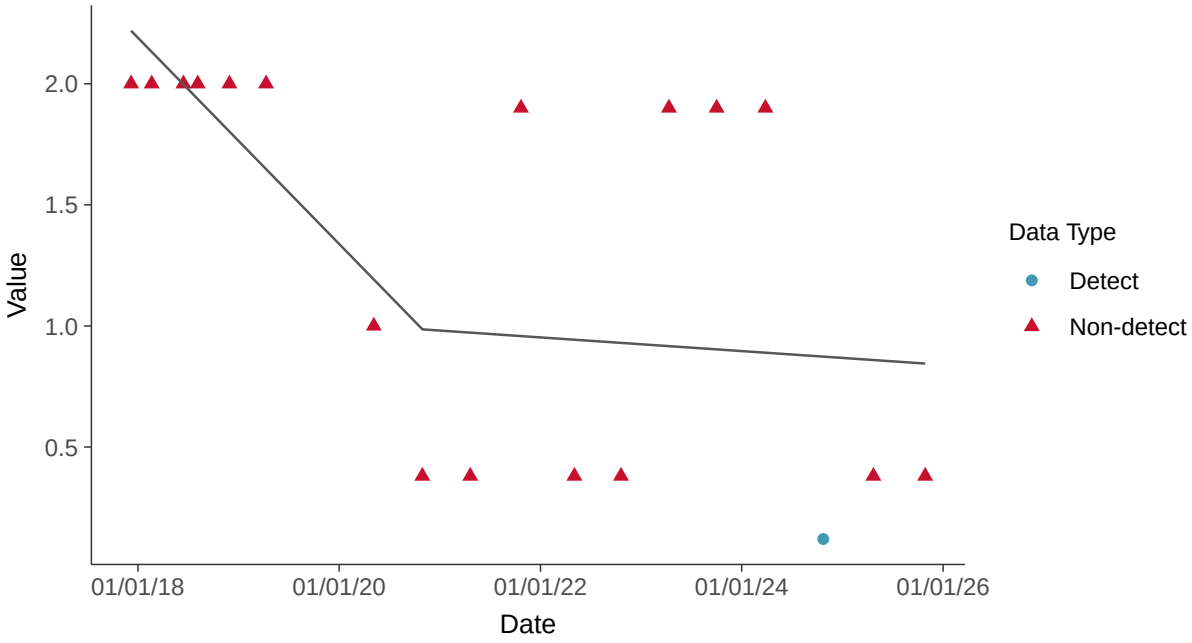

**Boxplot by Season**

Thallium, MW-17002 (ug/L)



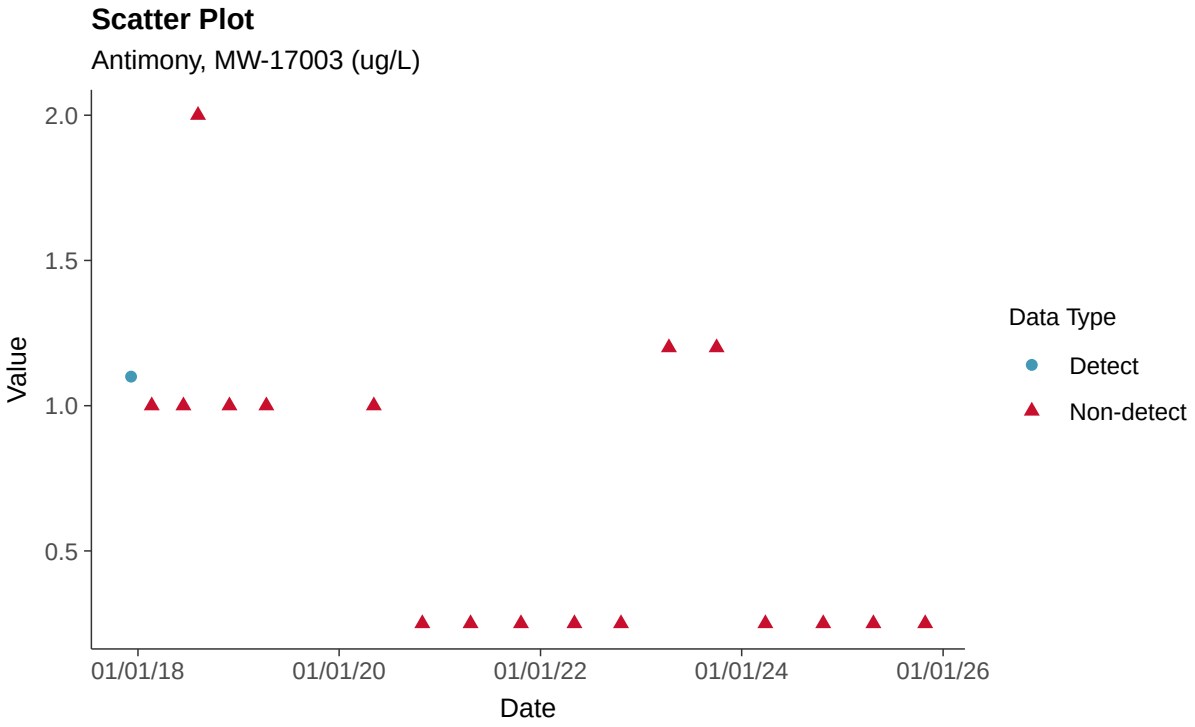
**Trend Regression: Piecewise Linear-Linear**

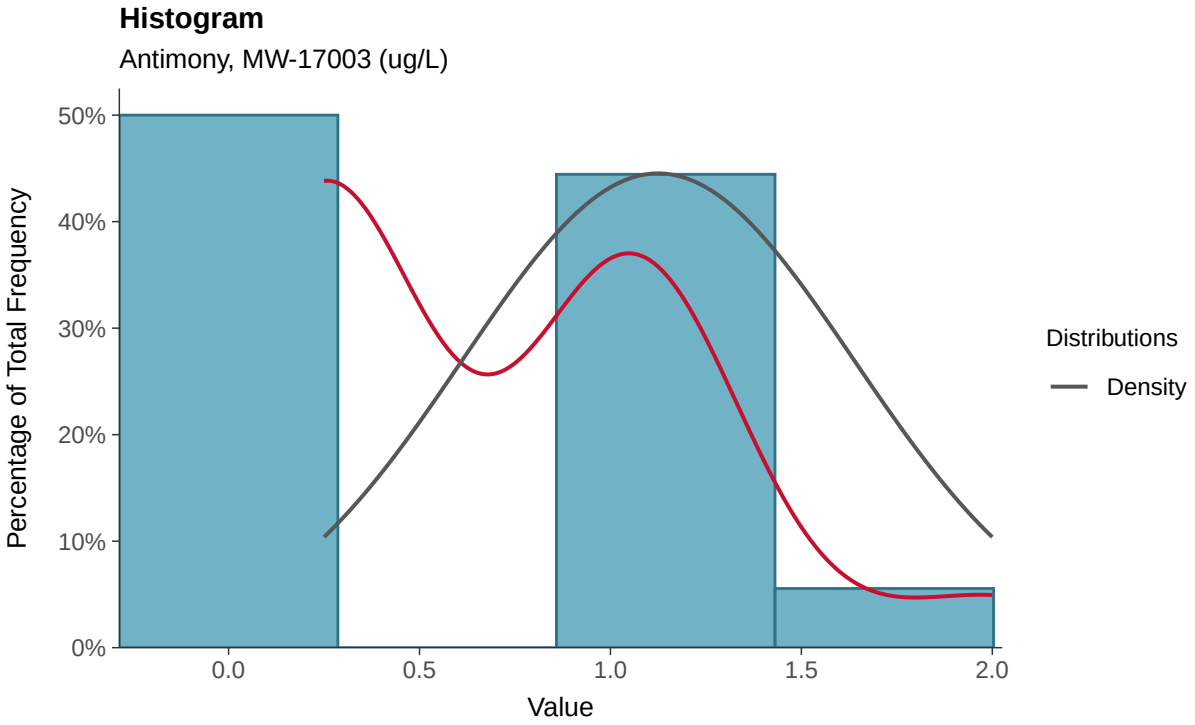
Thallium, MW-17002 (ug/L)



## Appendix IV: Antimony, MW-17003

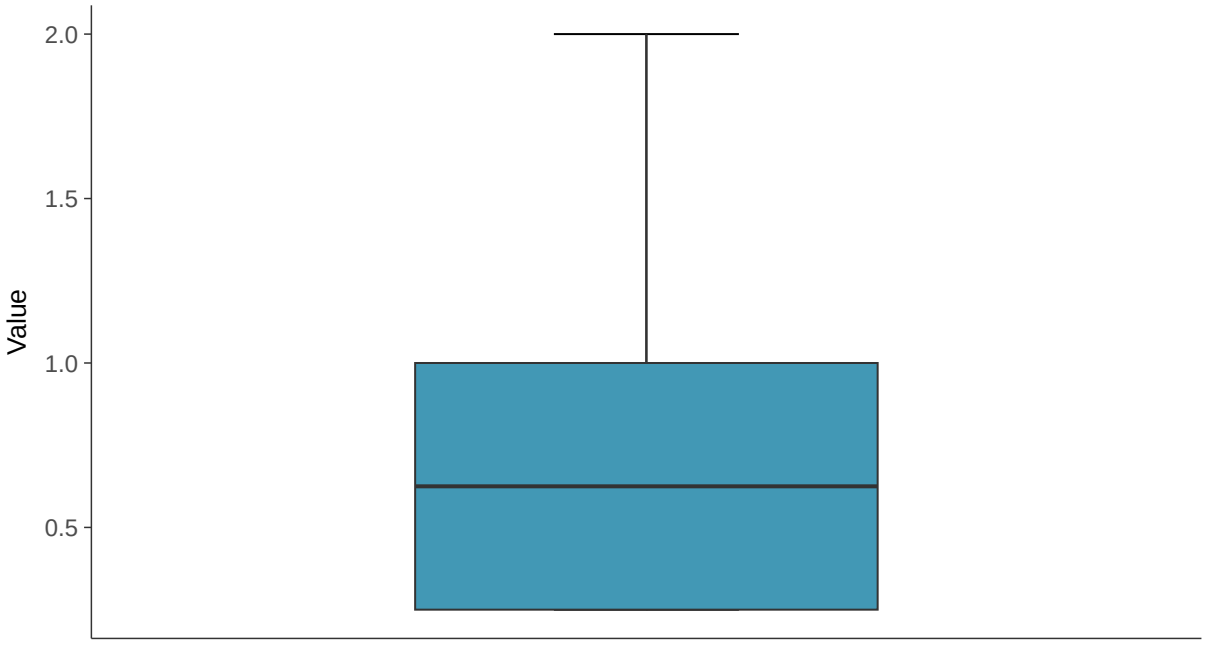
ID: 16_2_101



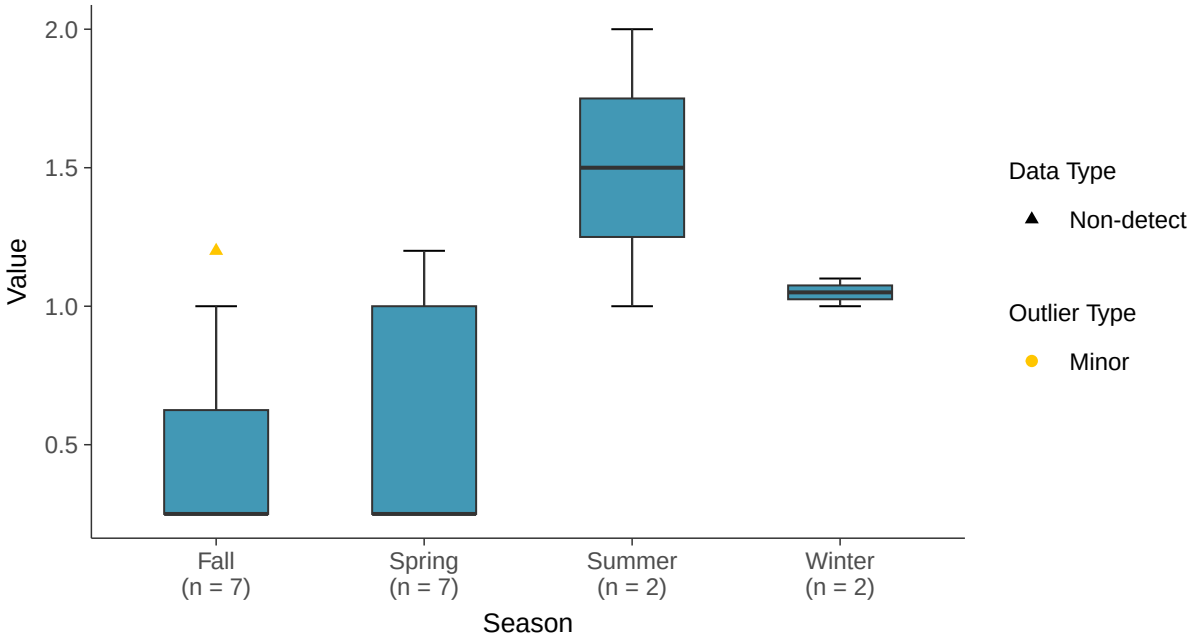
## Boxplot

Antimony, MW-17003 (ug/L)



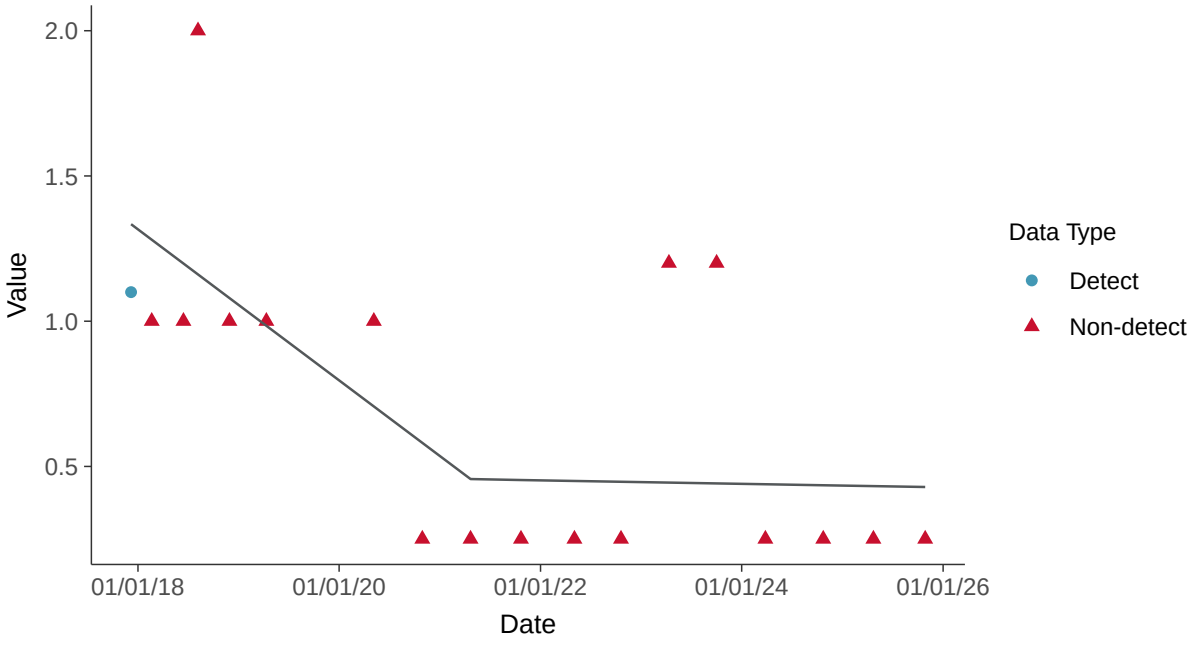

## Boxplot by Season

Antimony, MW-17003 (ug/L)



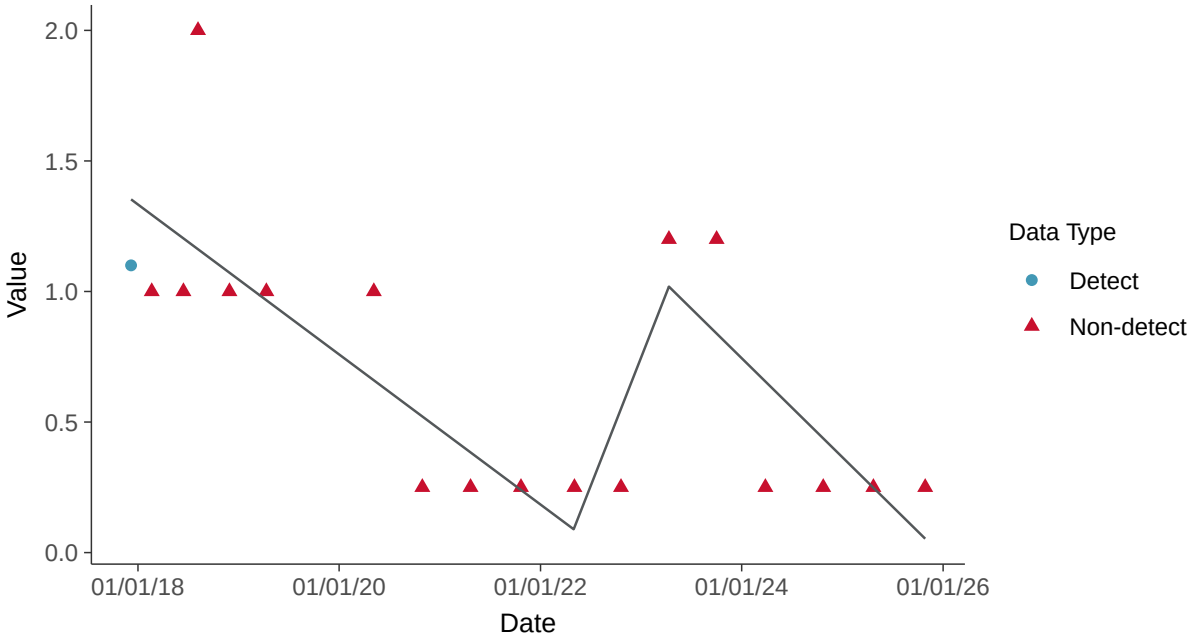
**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17003 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Antimony, MW-17003 (ug/L)

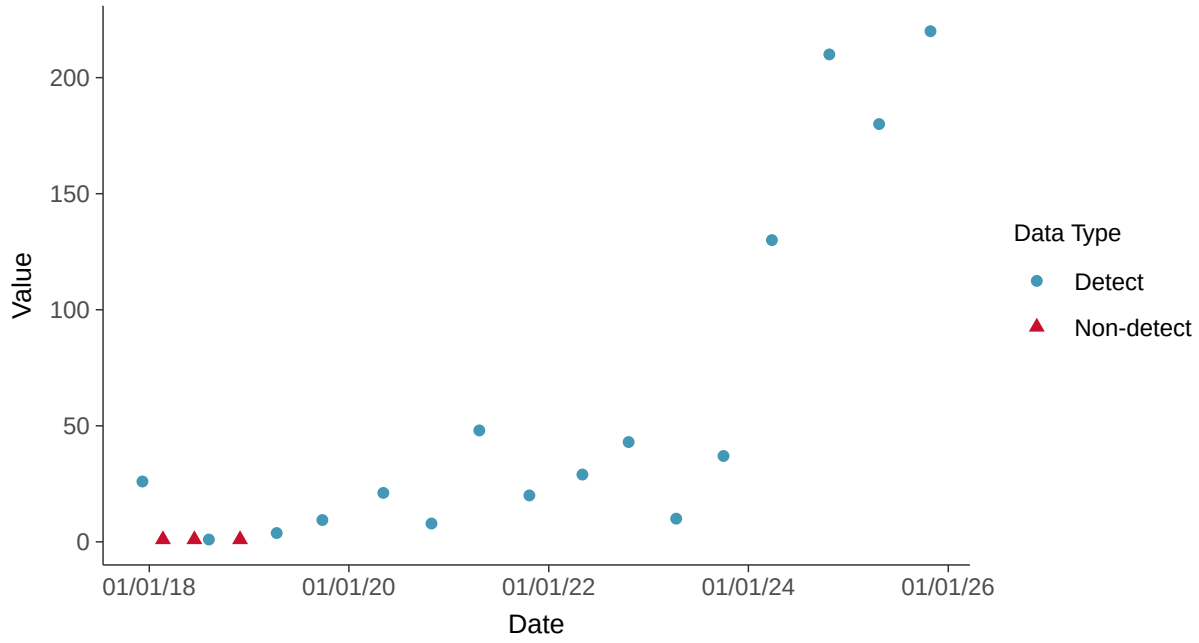


## Appendix IV: Arsenic, MW-17003

ID: 16_2_102

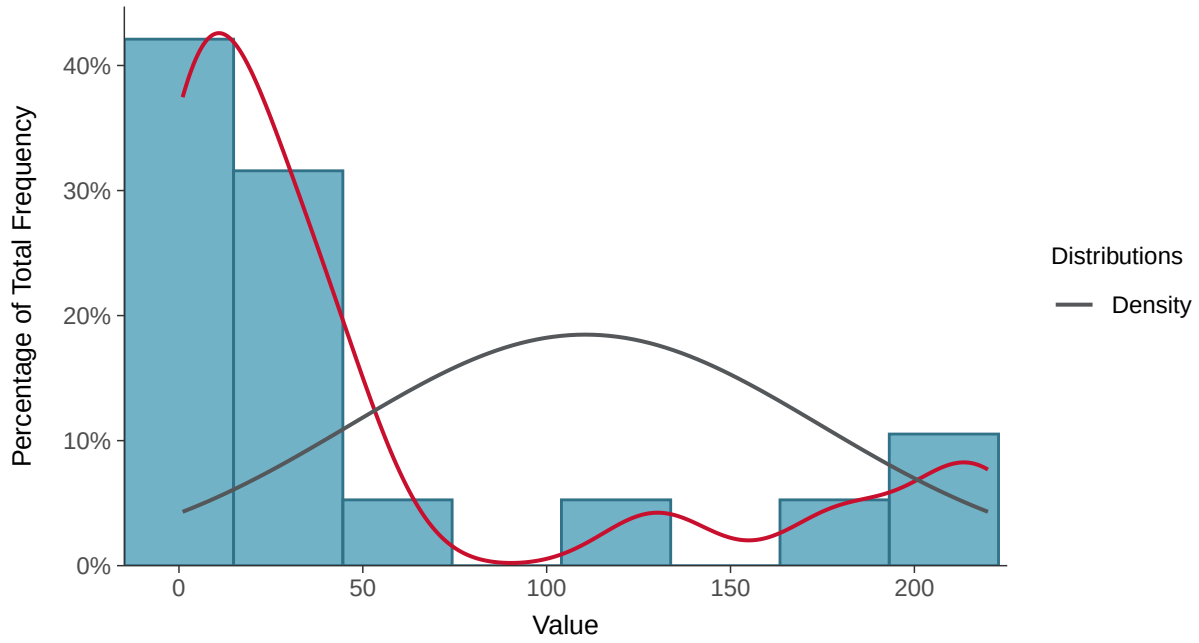
**Scatter Plot**

Arsenic, MW-17003 (ug/L)



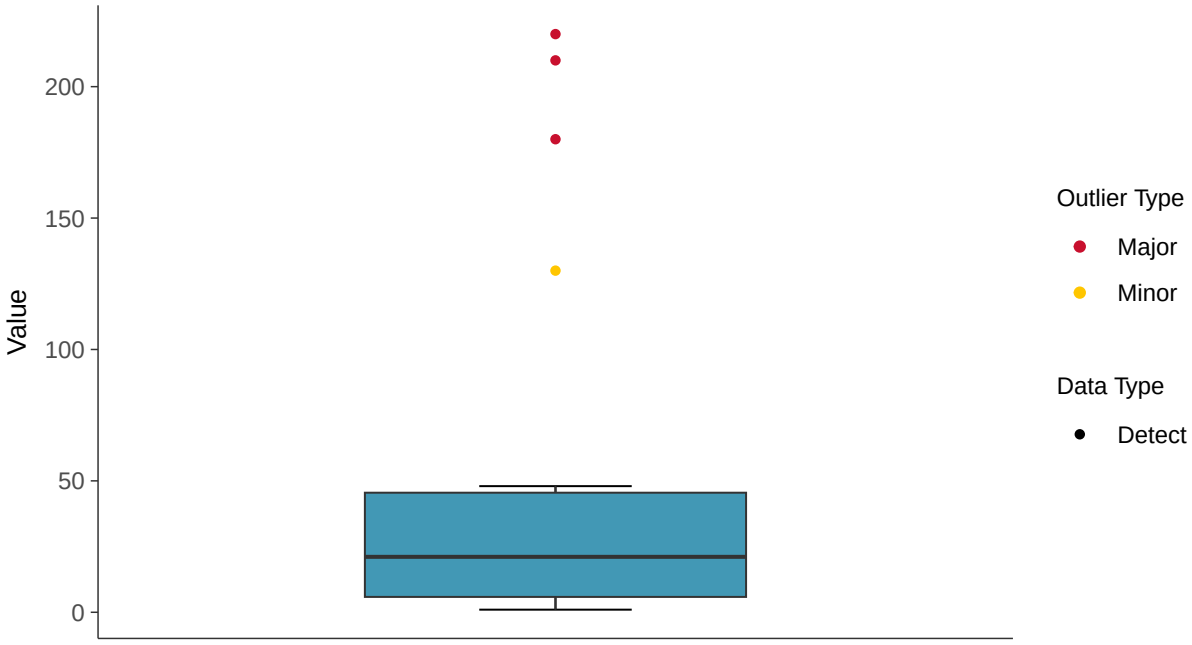

**Histogram**

Arsenic, MW-17003 (ug/L)



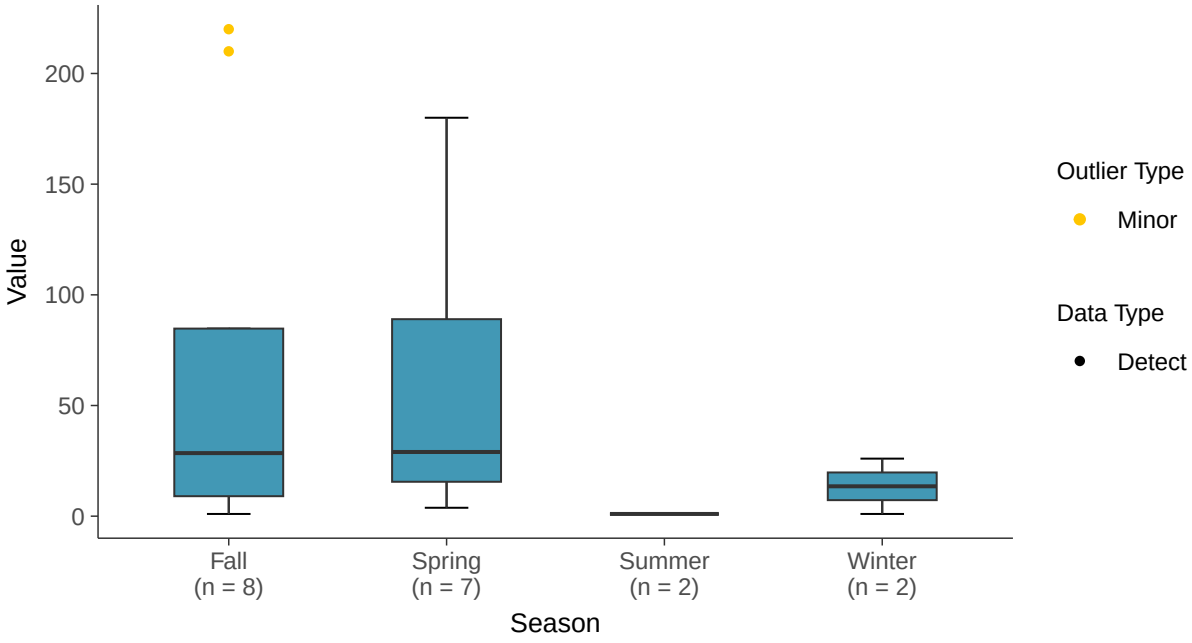
## Boxplot

Arsenic, MW-17003 (ug/L)



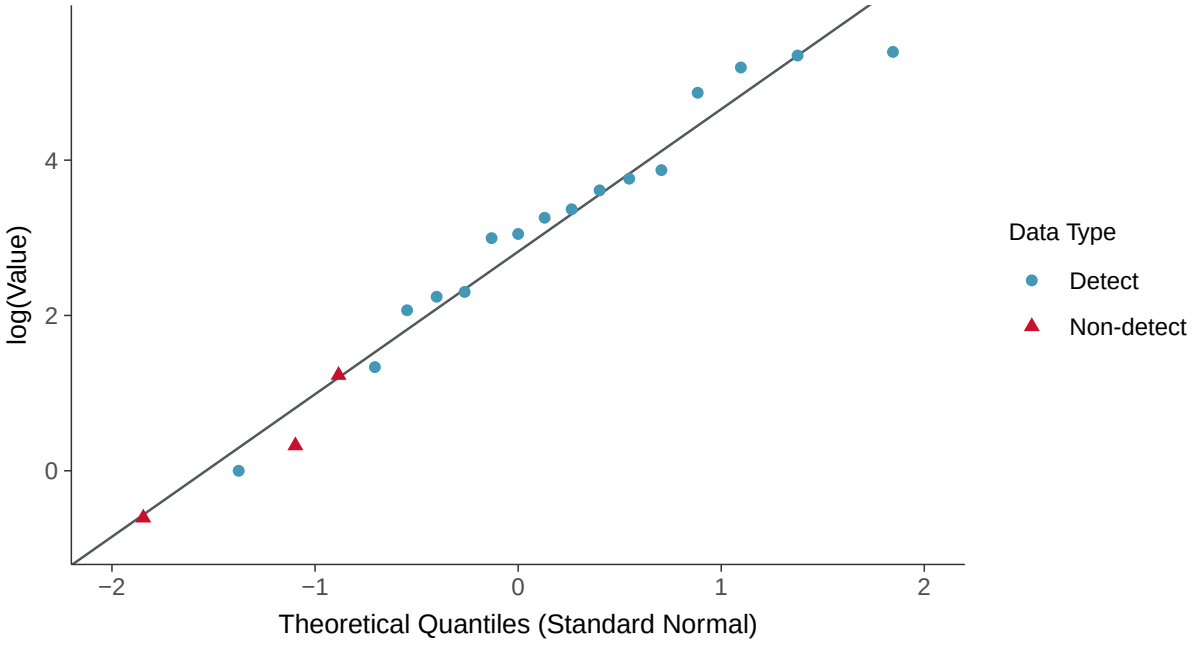

## Boxplot by Season

Arsenic, MW-17003 (ug/L)



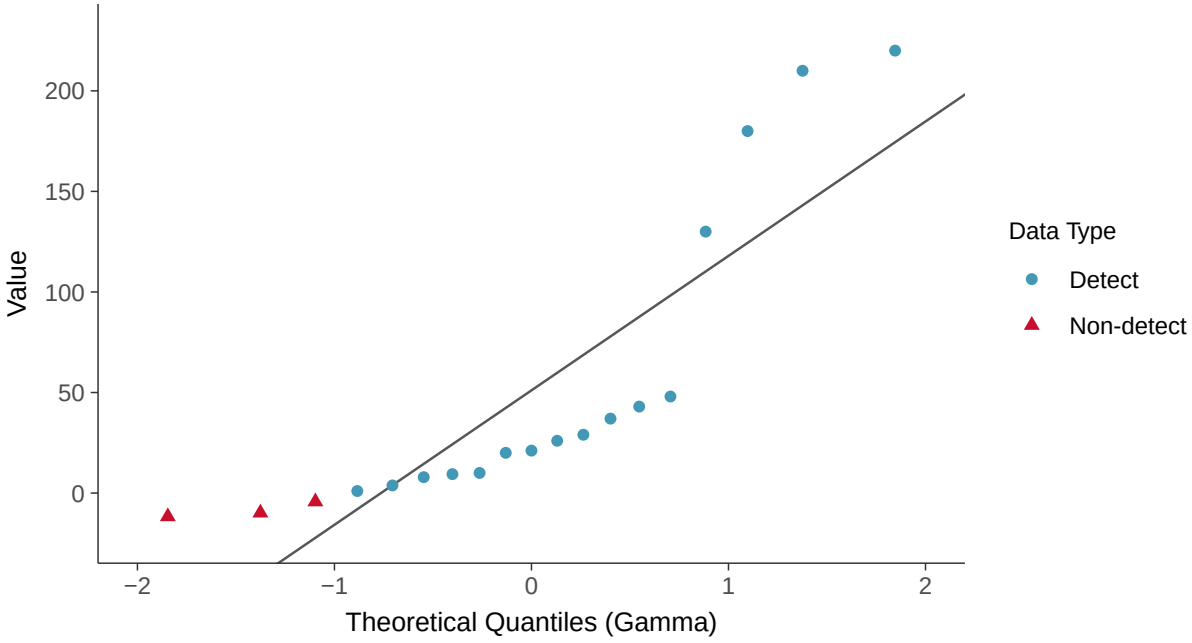
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17003 (ug/L)



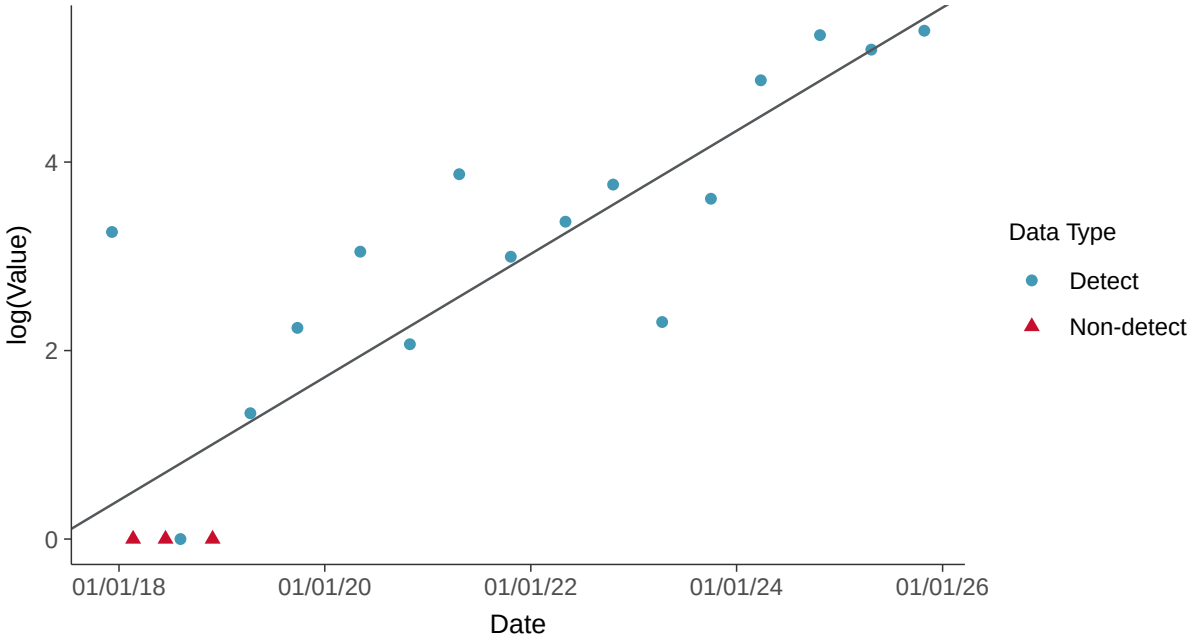

**Gamma Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17003 (ug/L)



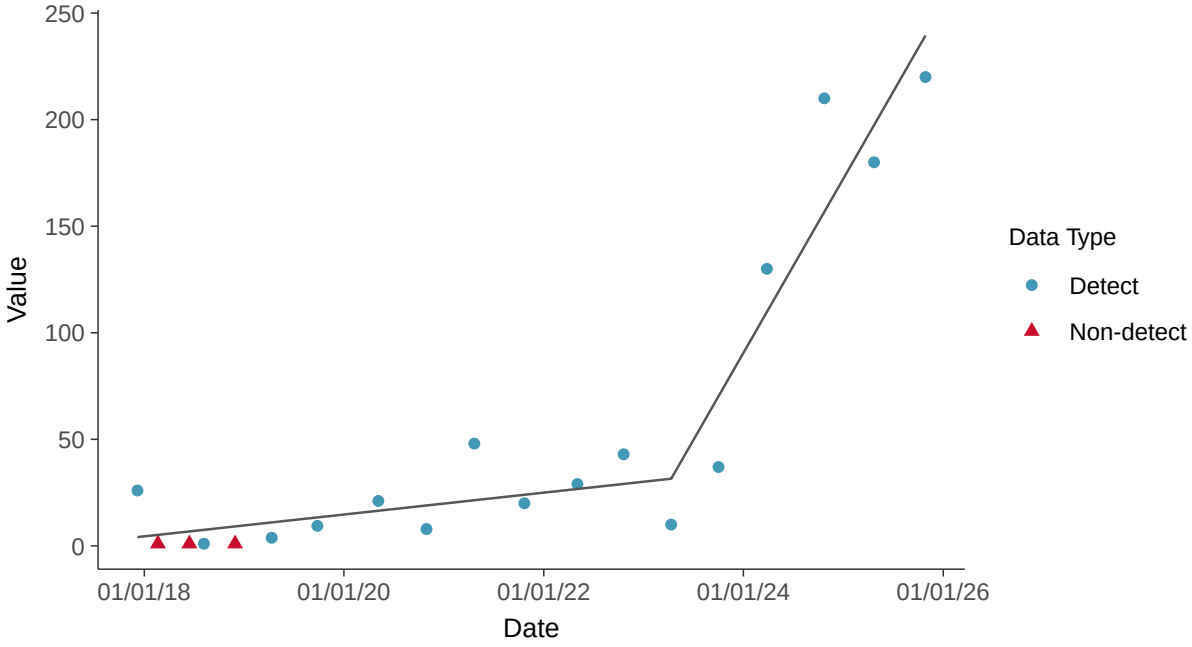
**Trend Regression: Lognormal MLE**

Arsenic, MW-17003 (ug/L)



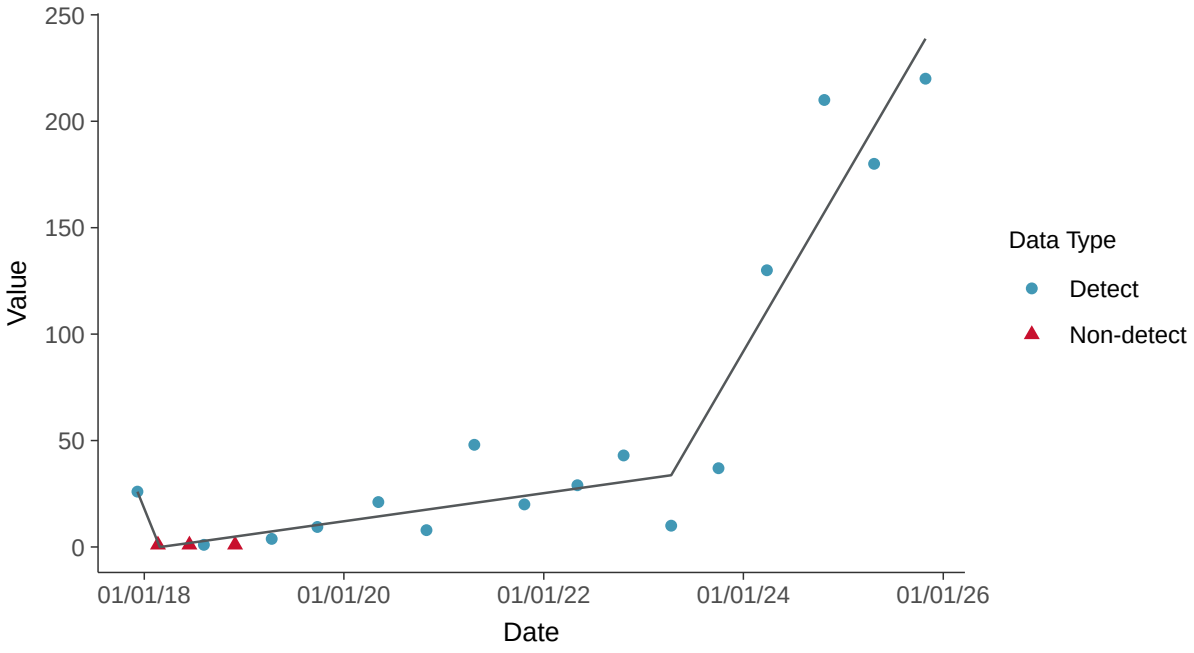

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17003 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-17003 (ug/L)

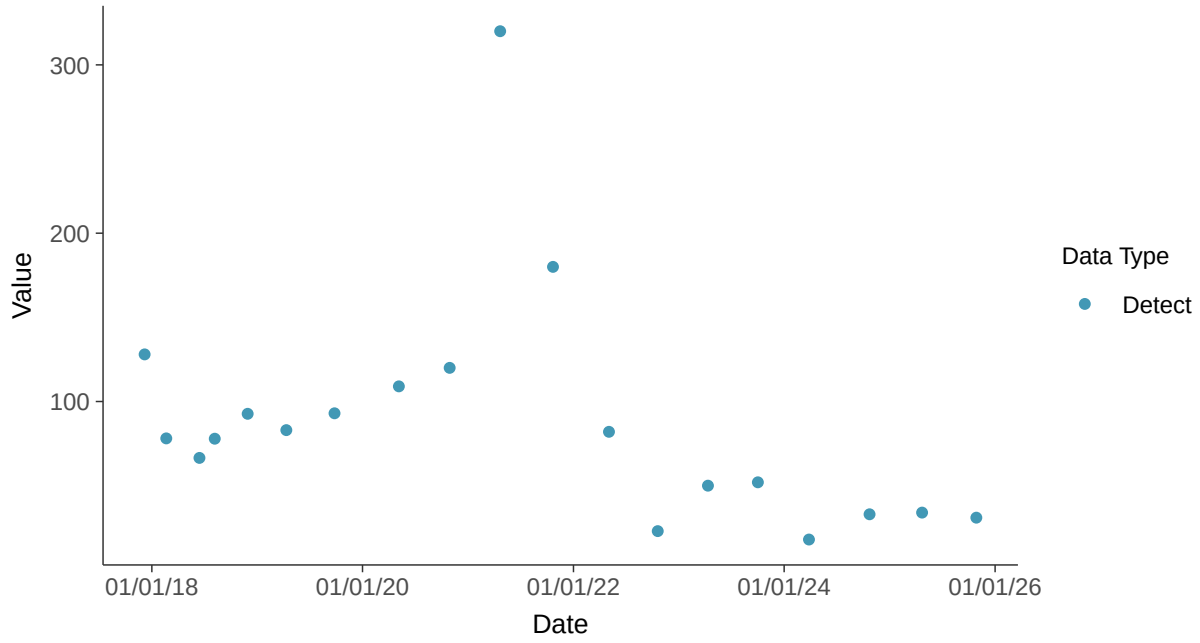


## Appendix IV: Barium, MW-17003

ID: 16_2_103

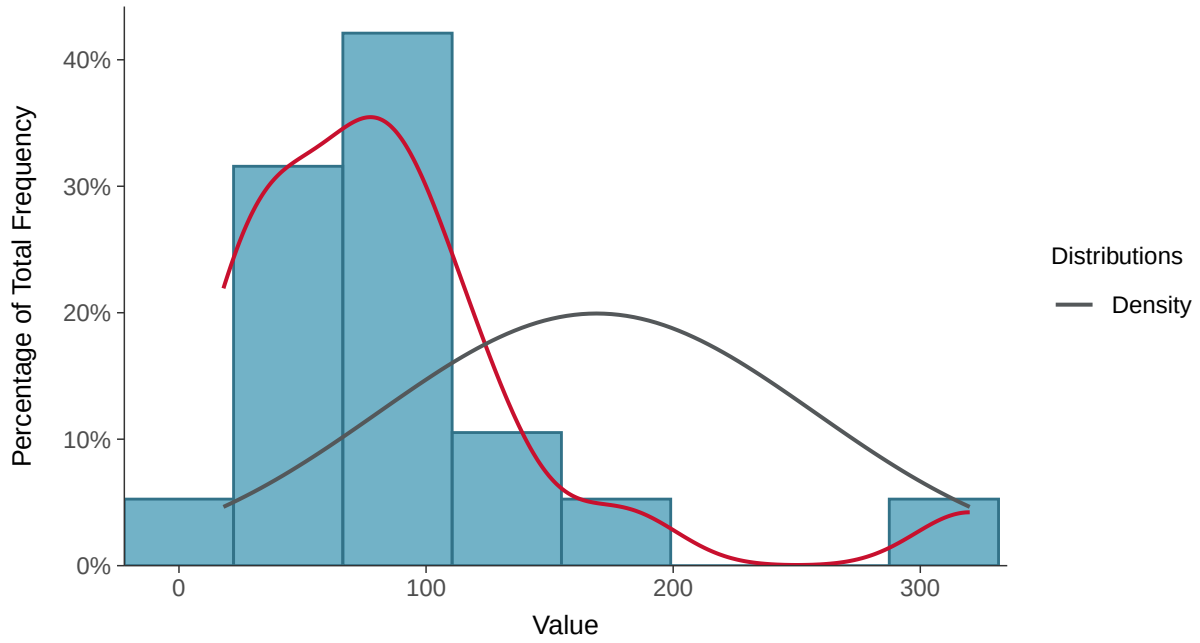
**Scatter Plot**

Barium, MW-17003 (ug/L)



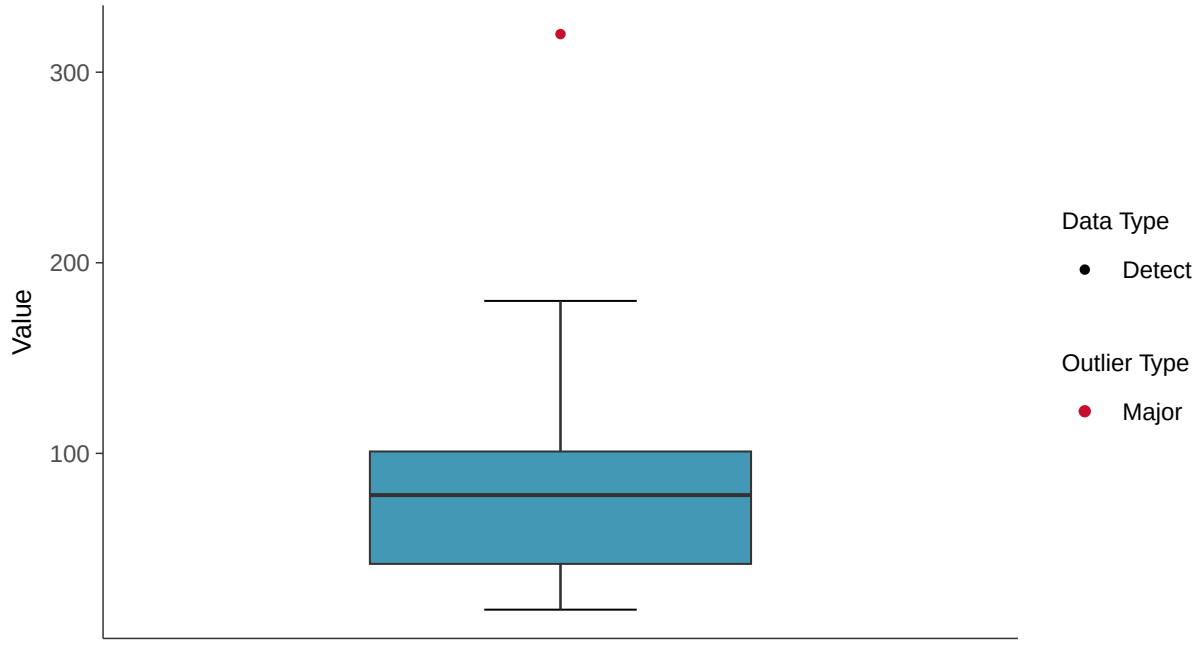

**Histogram**

Barium, MW-17003 (ug/L)



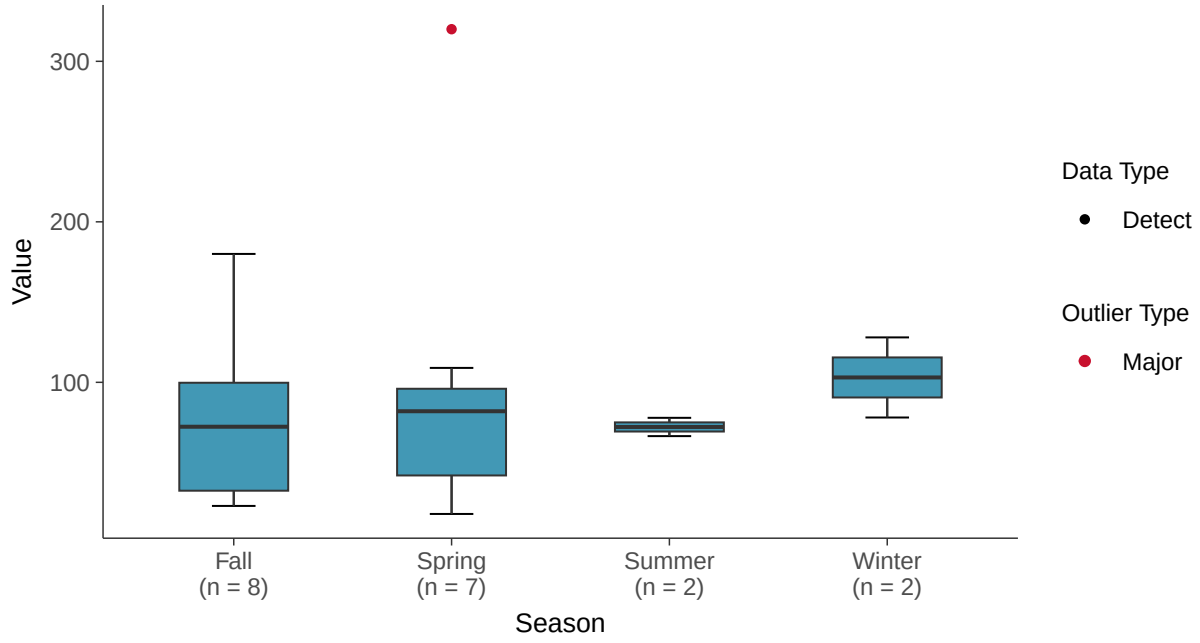
## Boxplot

Barium, MW-17003 (ug/L)



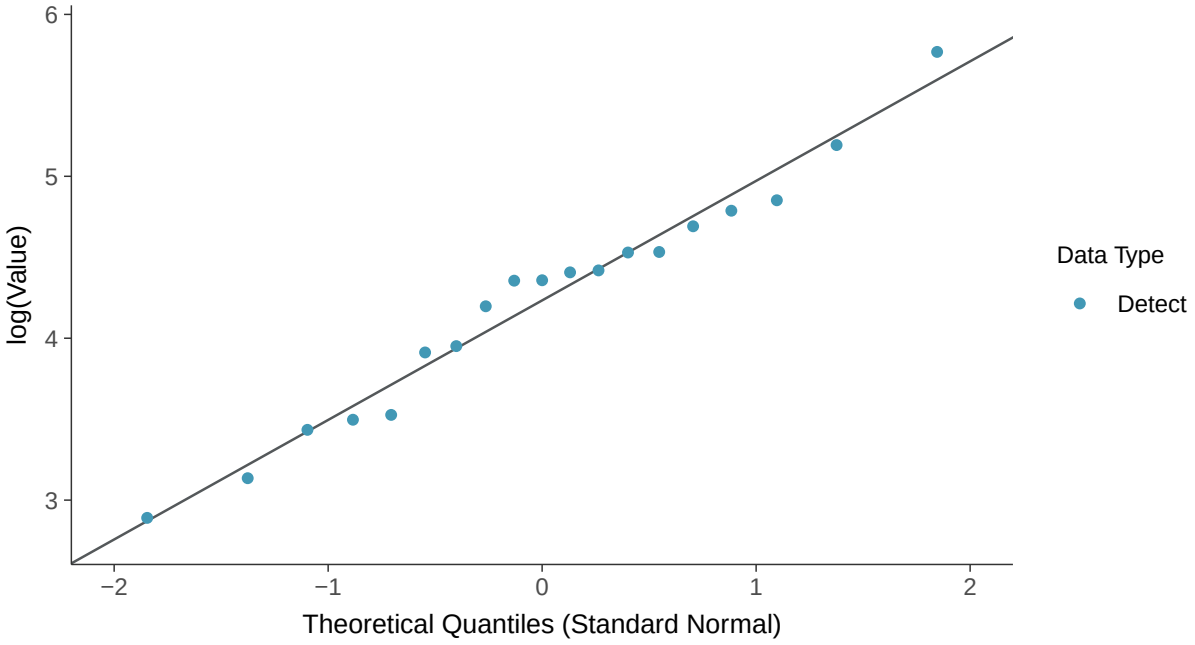

## Boxplot by Season

Barium, MW-17003 (ug/L)



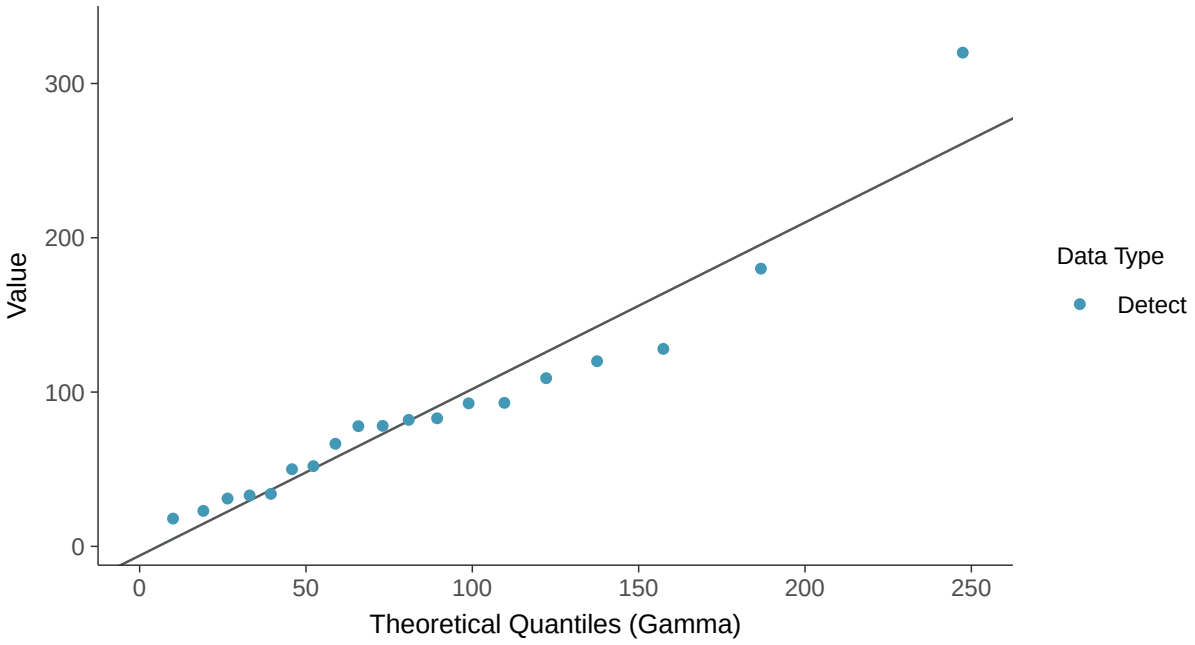
**Lognormal Q-Q plot**

Barium, MW-17003 (ug/L)



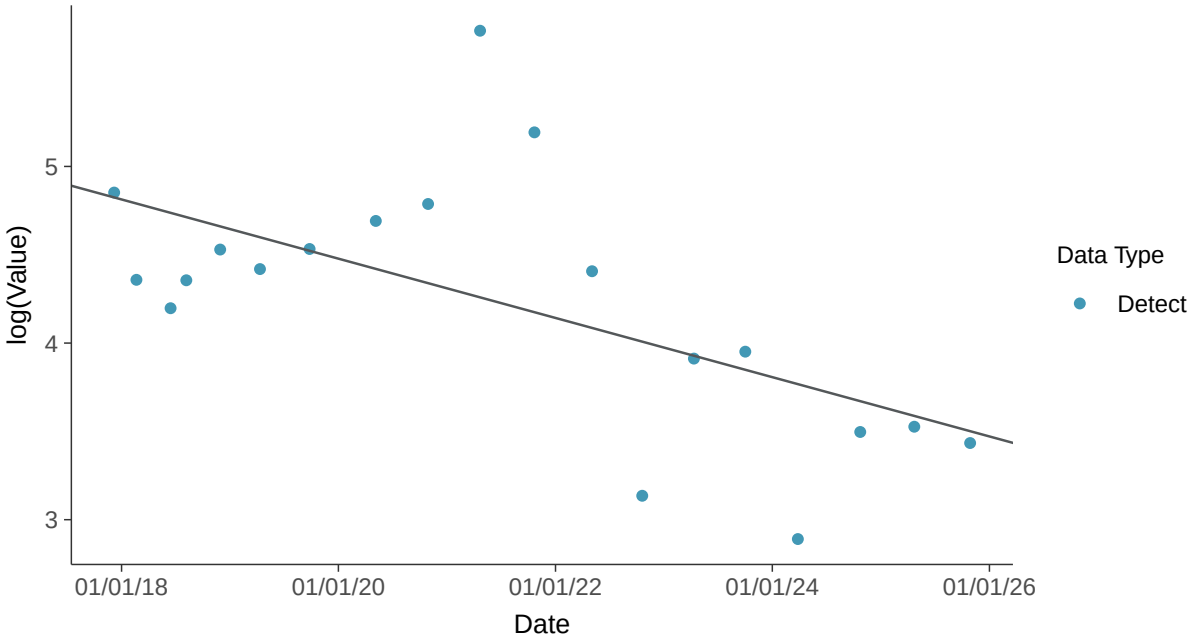

**Gamma Q-Q plot**

Barium, MW-17003 (ug/L)



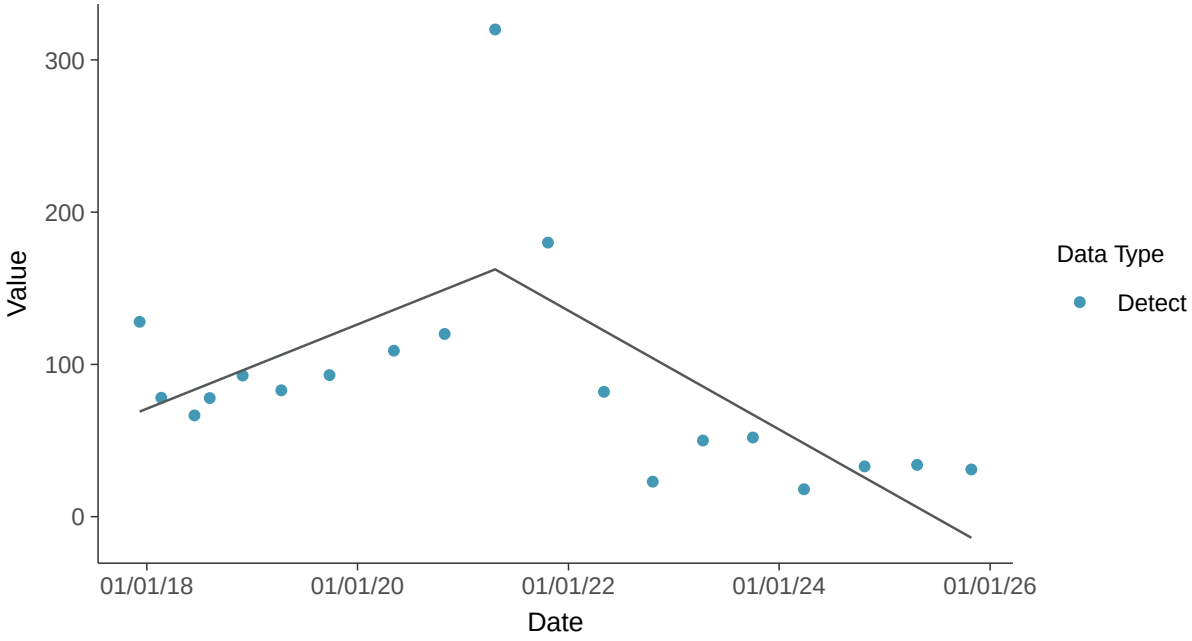
**Trend Regression: Lognormal MLE**

Barium, MW-17003 (ug/L)



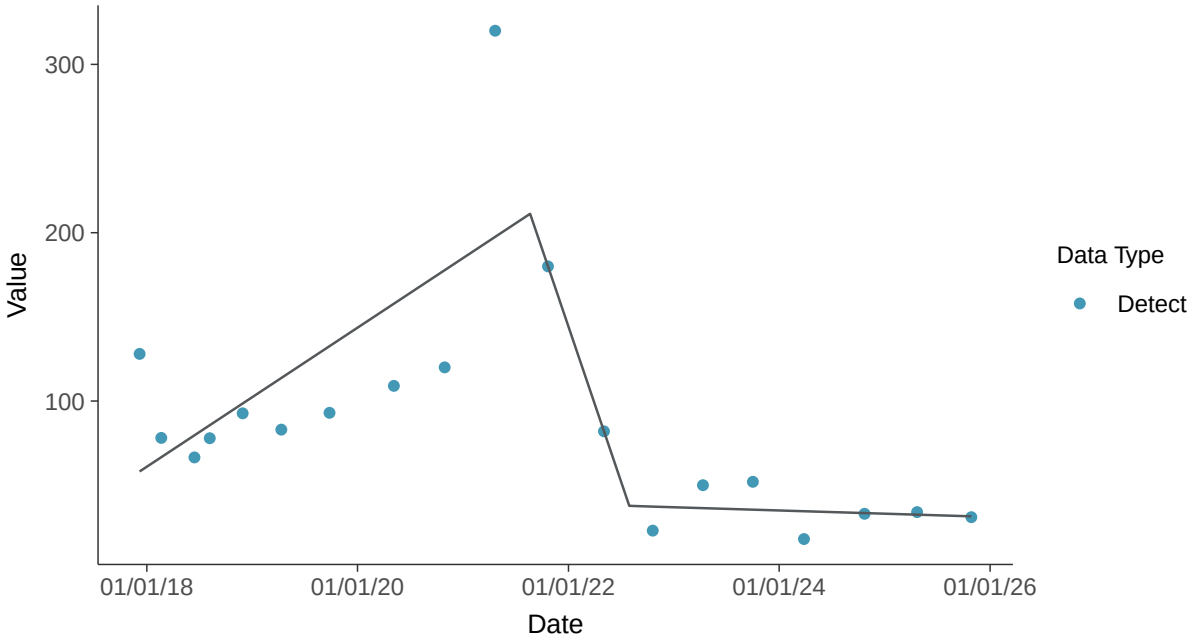

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17003 (ug/L)



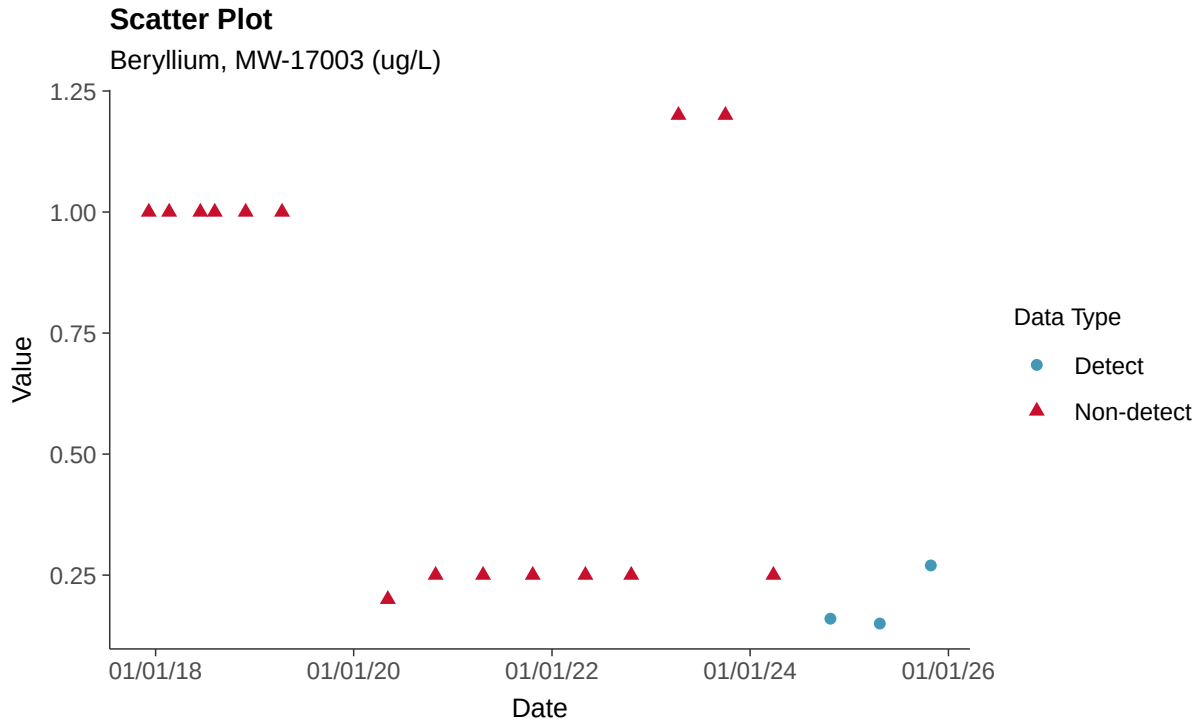
**Trend Regression: Piecewise Linear-Linear-Linear**

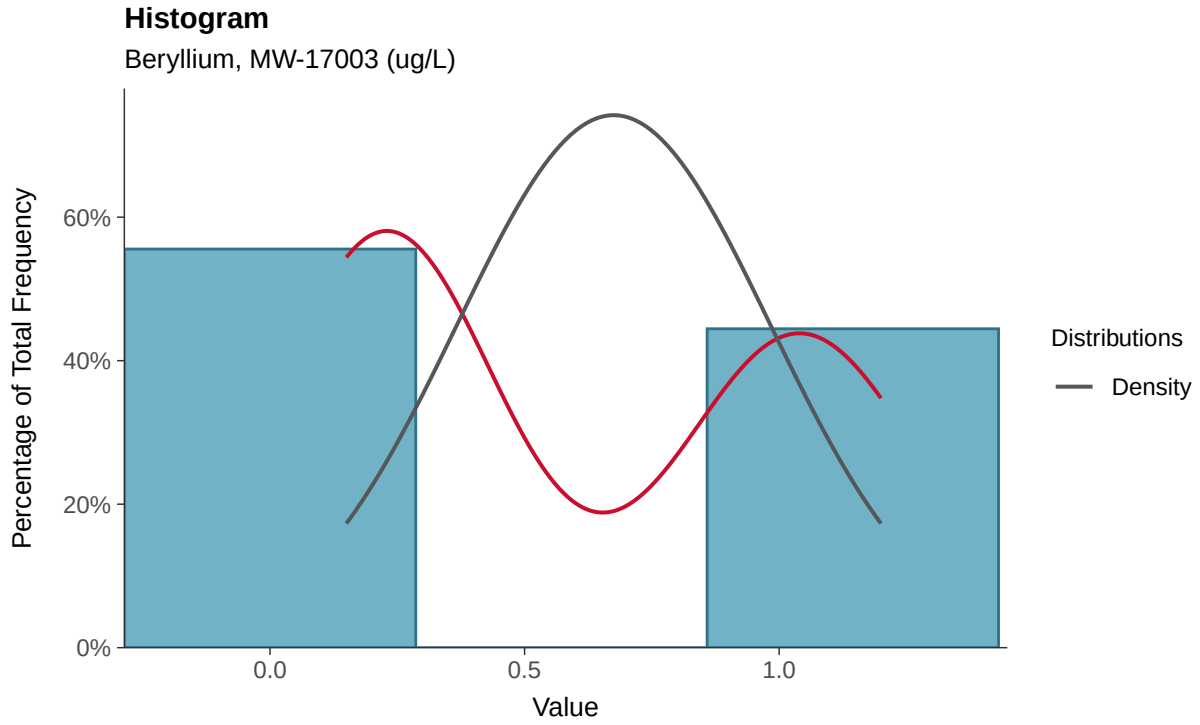
Barium, MW-17003 (ug/L)



## Appendix IV: Beryllium, MW-17003

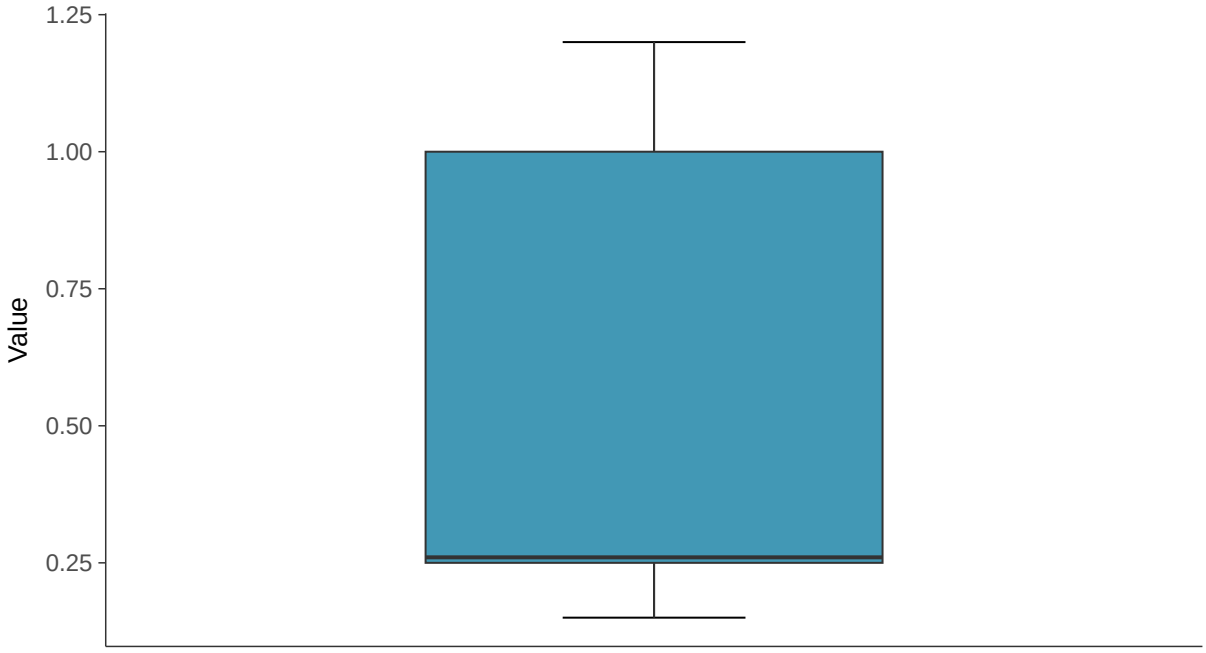
ID: 16_2_104



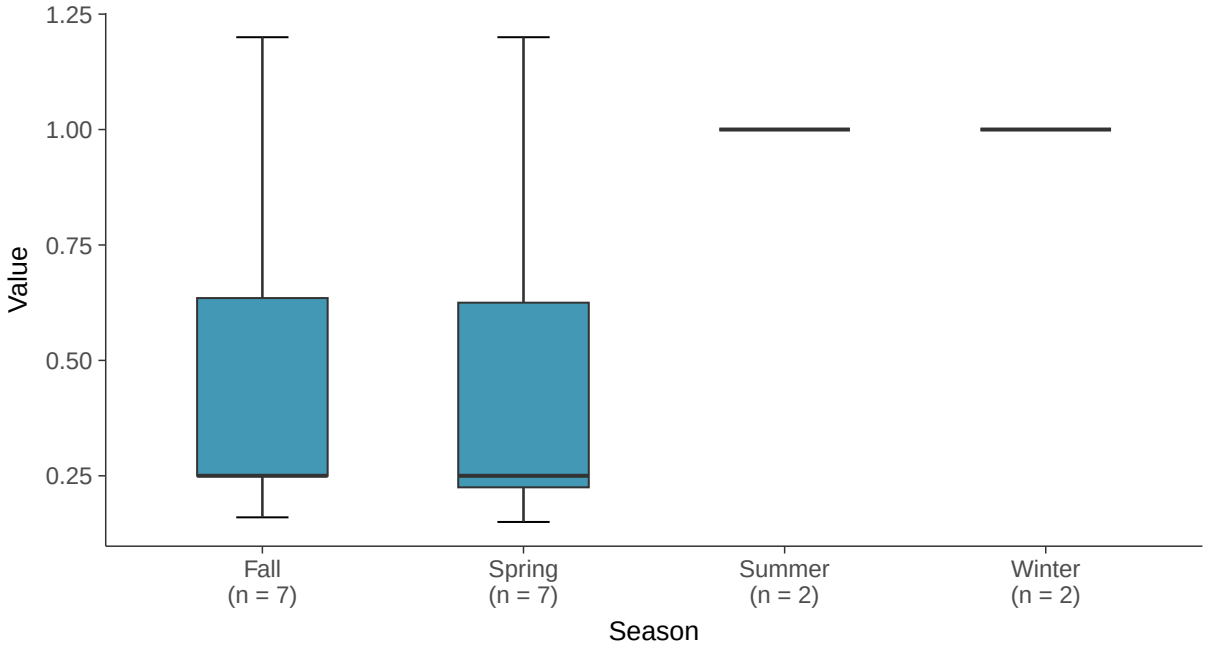
## Boxplot

Beryllium, MW-17003 (ug/L)



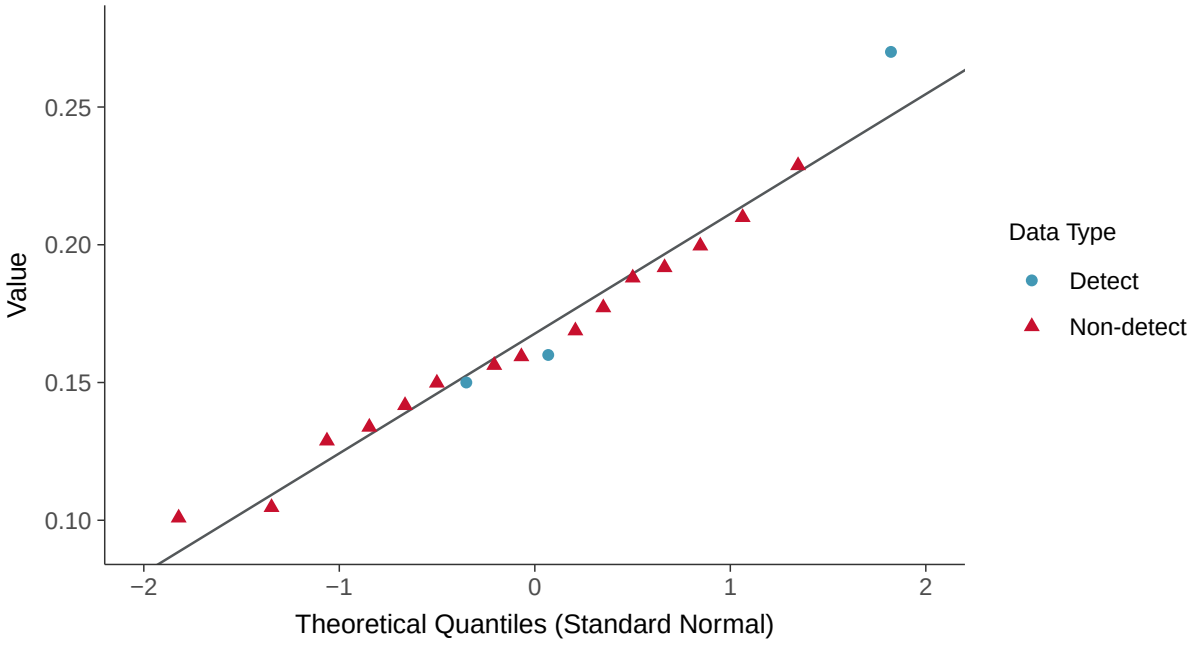

## Boxplot by Season

Beryllium, MW-17003 (ug/L)



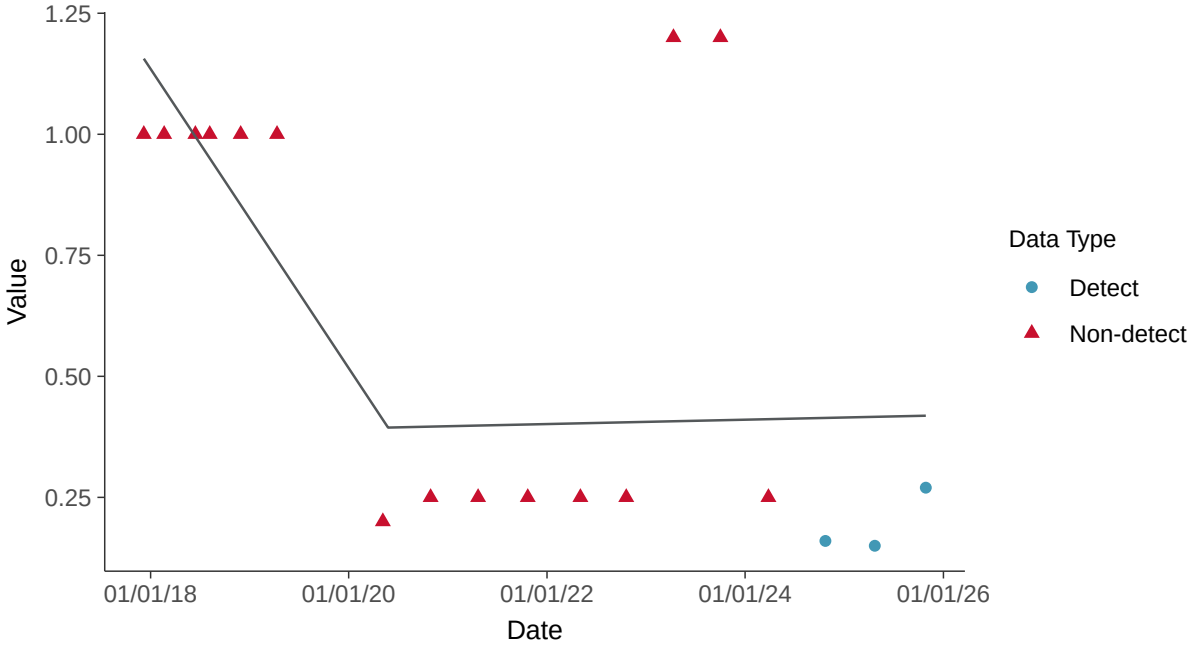
**Normal Q-Q plot using ROS Imputed Estimates**

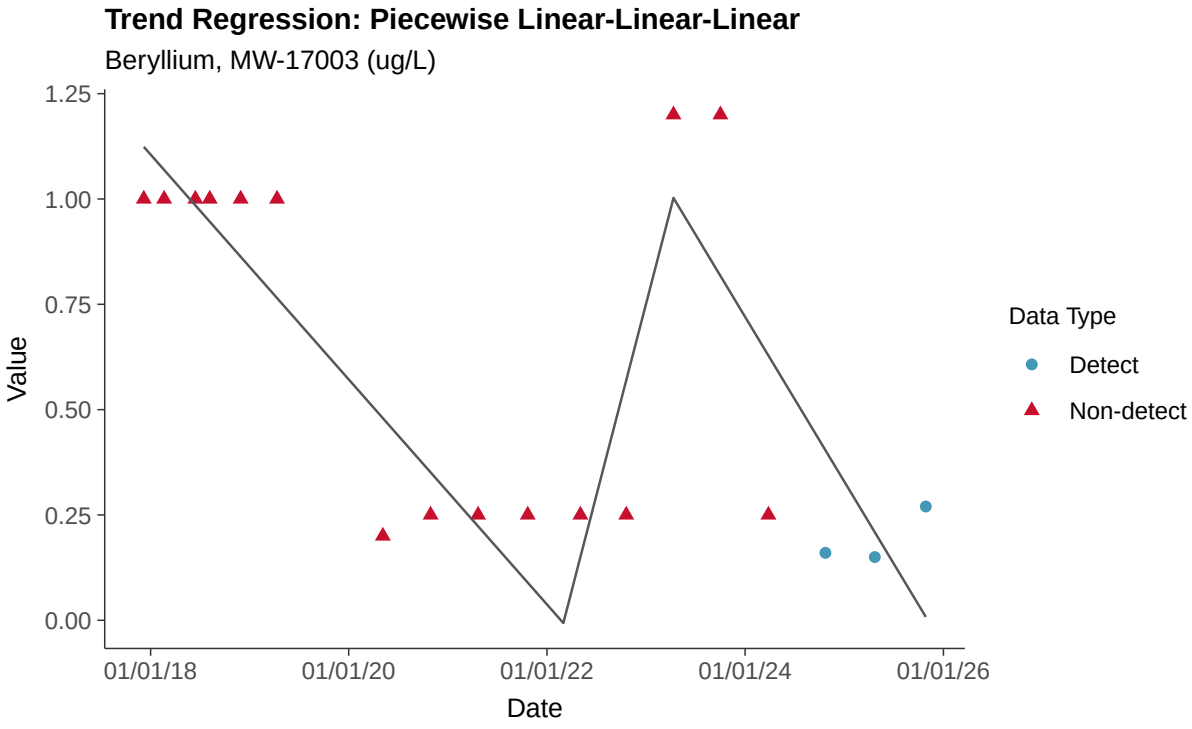
Beryllium, MW-17003 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

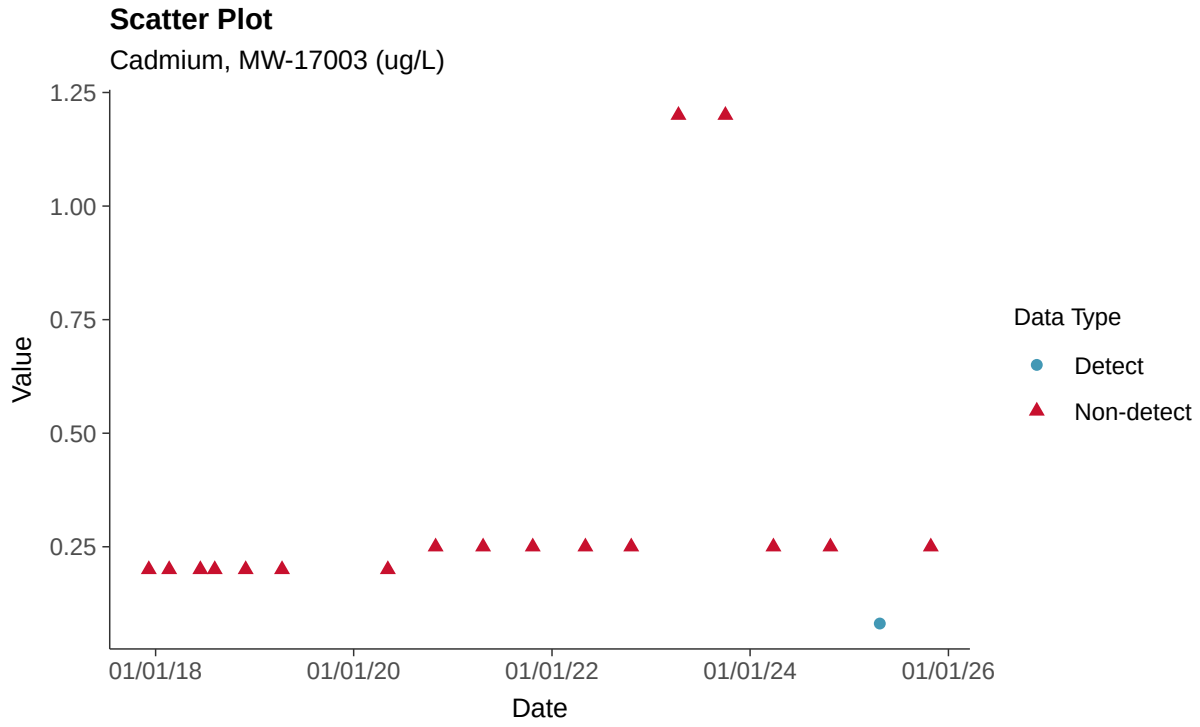
Beryllium, MW-17003 (ug/L)

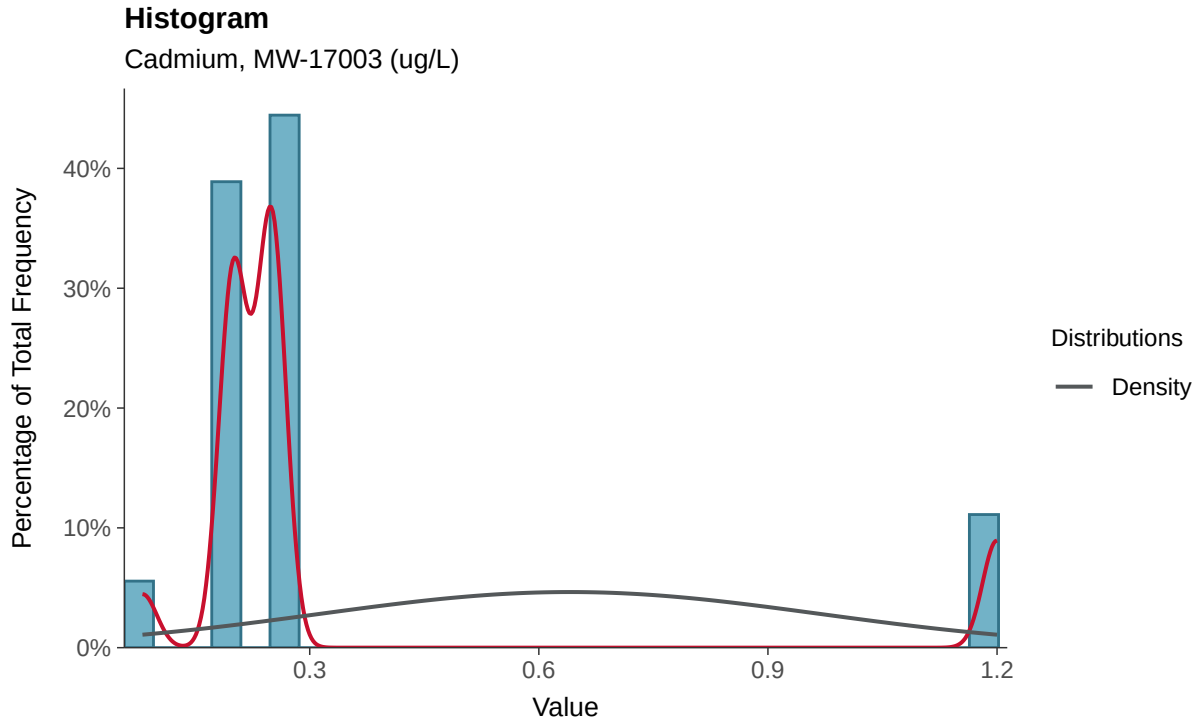



Trend Regression: Piecewise Linear-Linear-Linear
Beryllium, MW-17003 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
0.00
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-17003

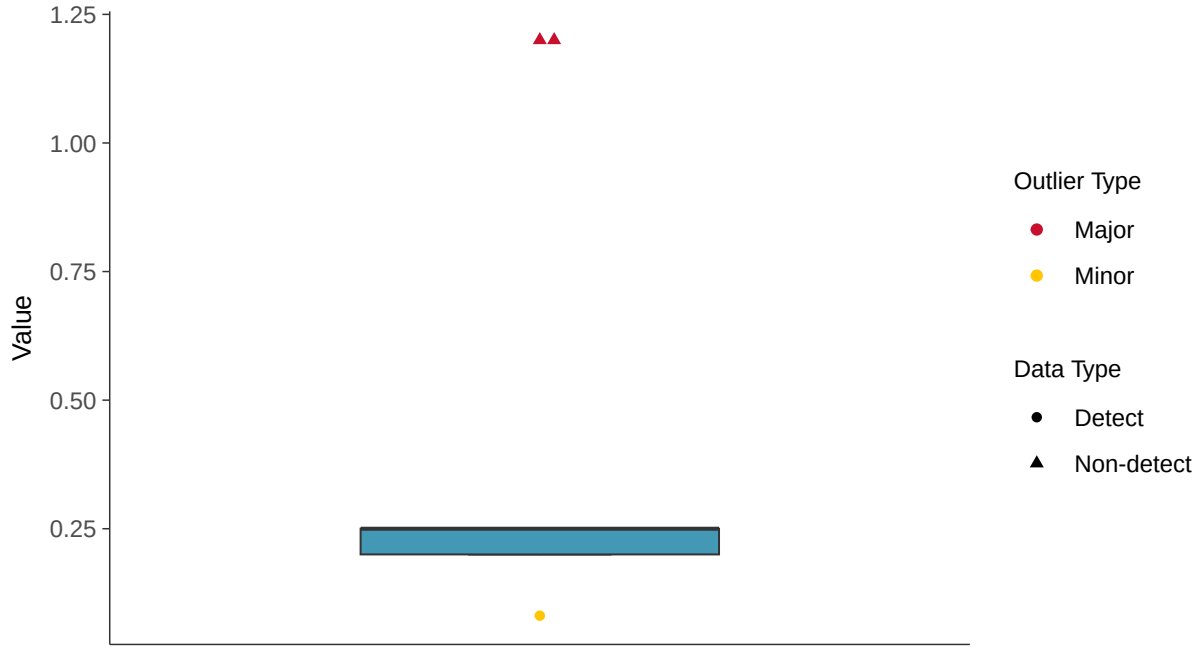
ID: 16_2_106



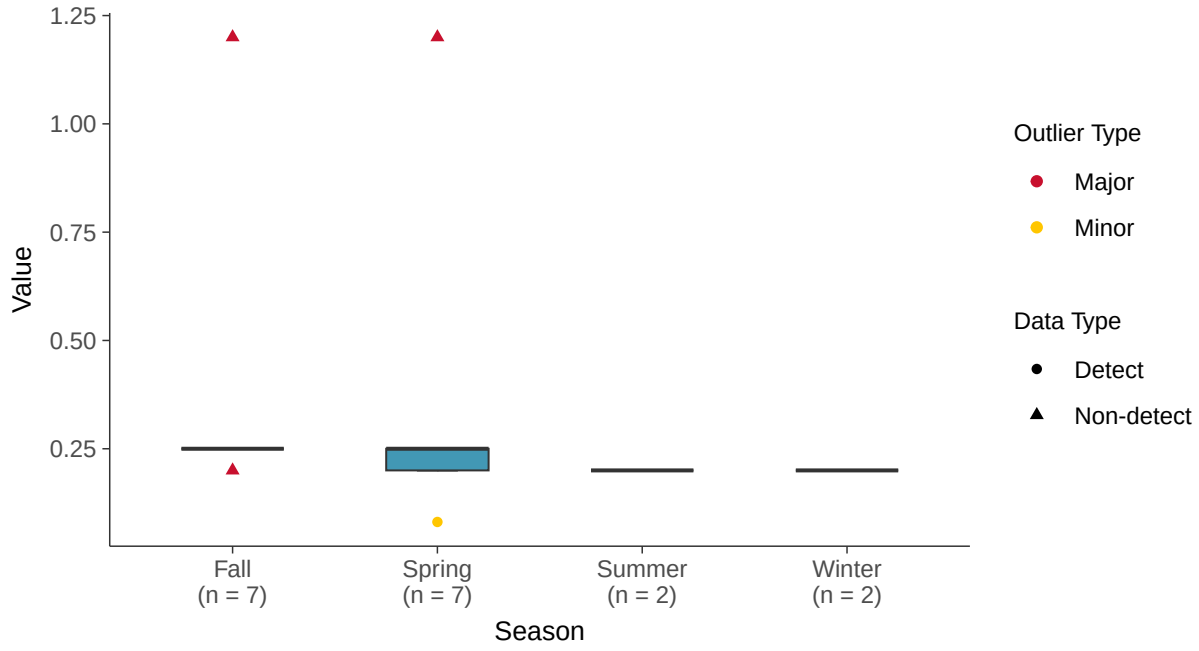
## Boxplot

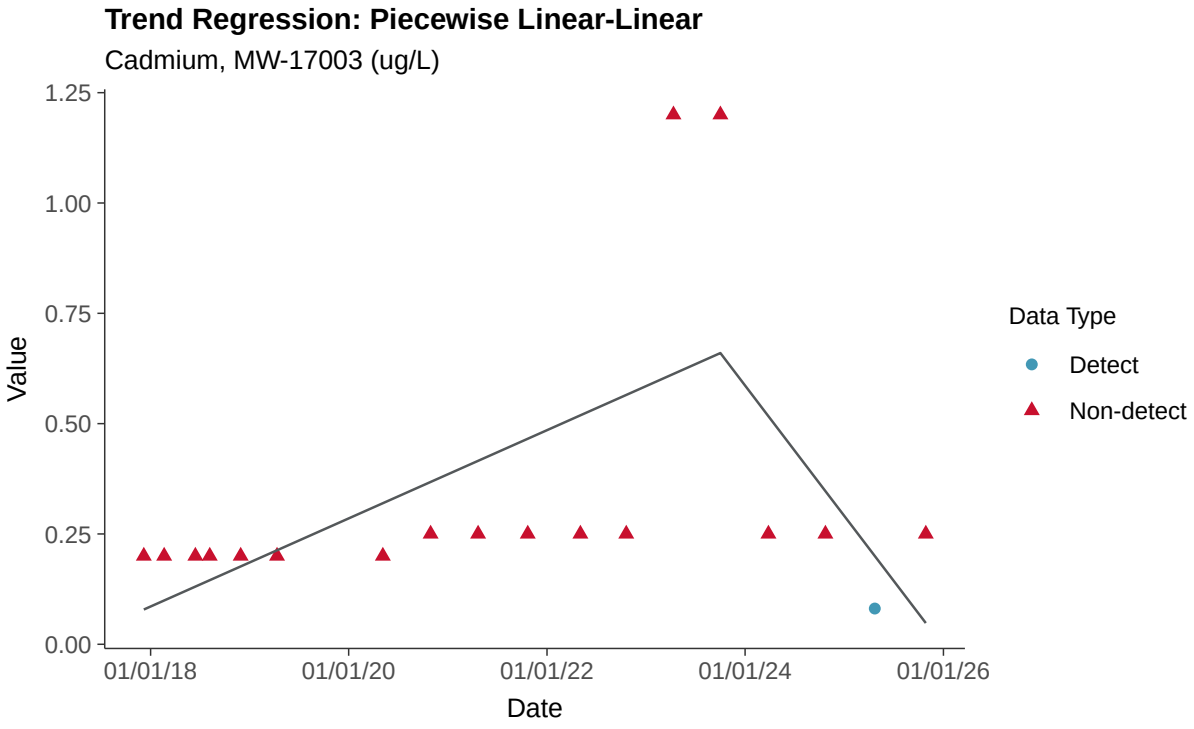
Cadmium, MW-17003 (ug/L)




## Boxplot by Season

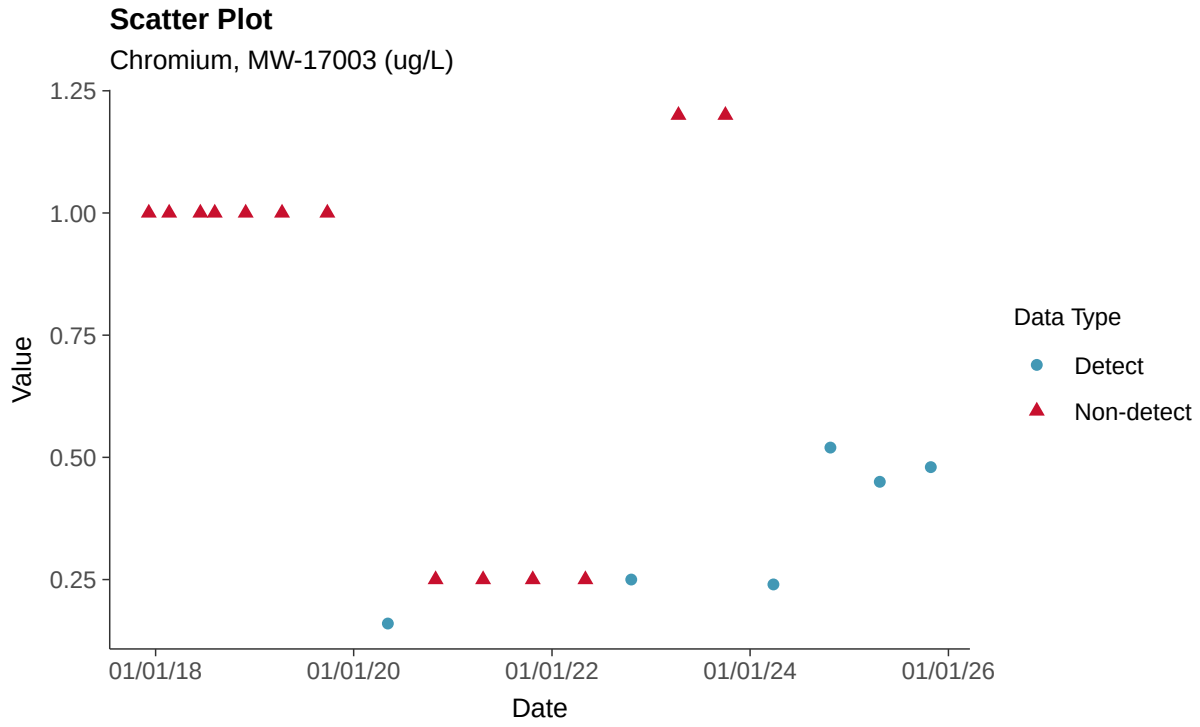
Cadmium, MW-17003 (ug/L)

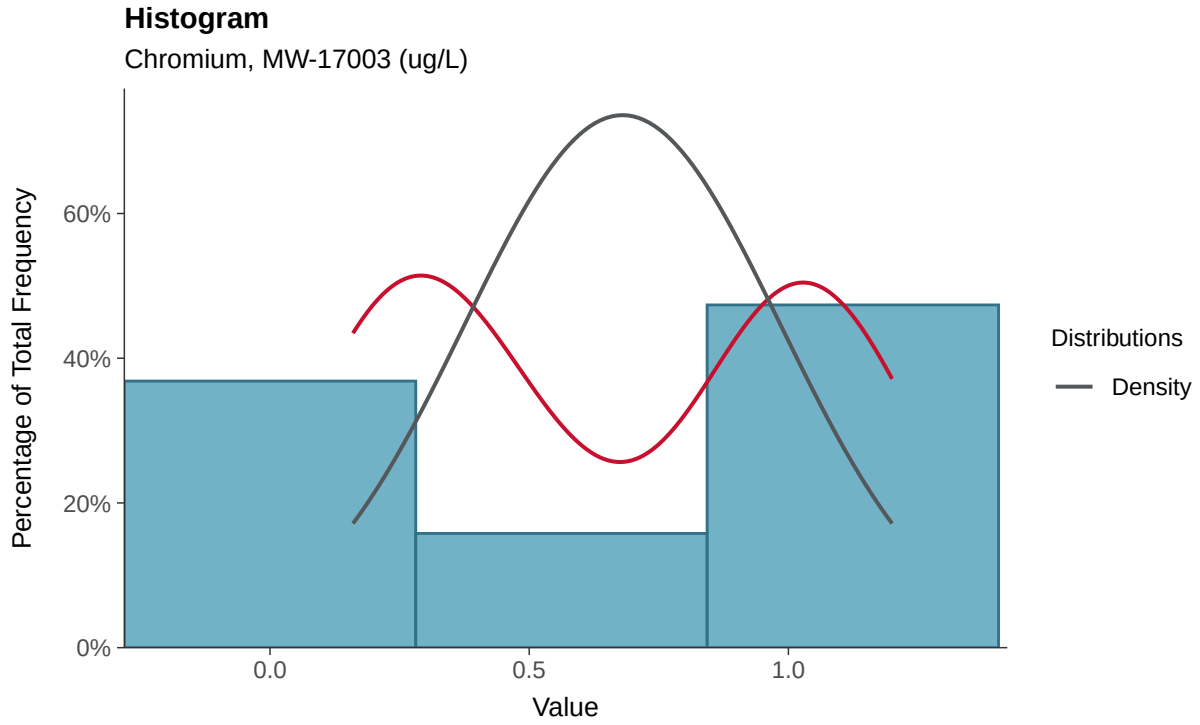



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-17003 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
0.00
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Chromium, MW-17003

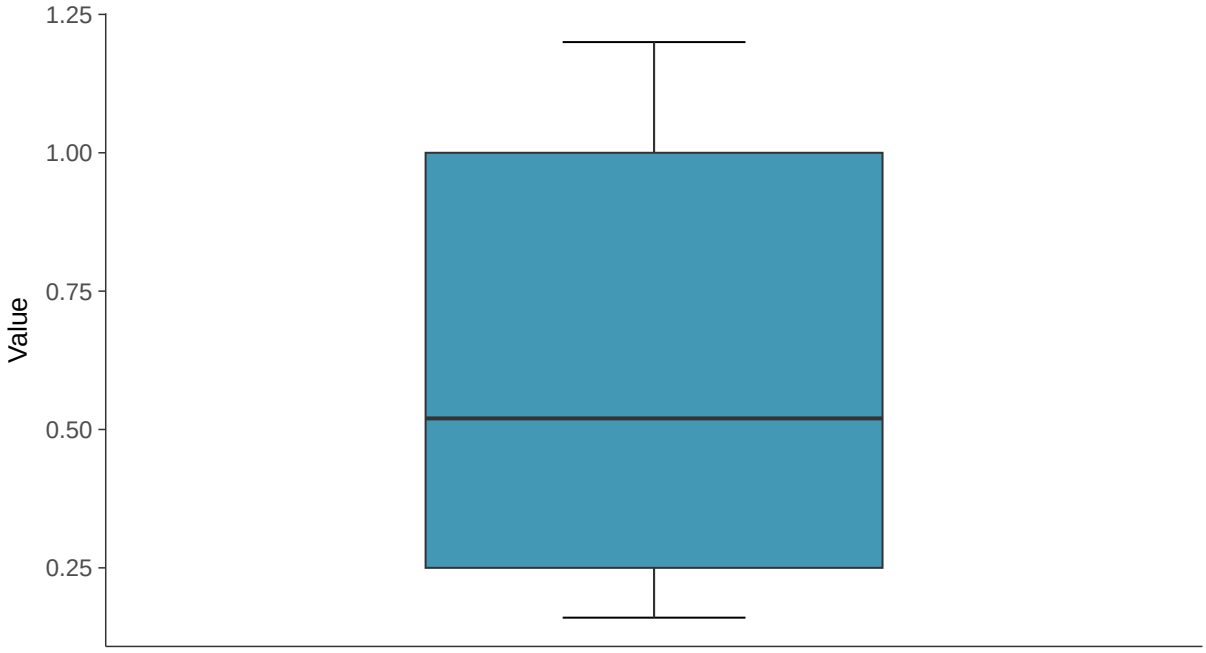
ID: 16_2_109



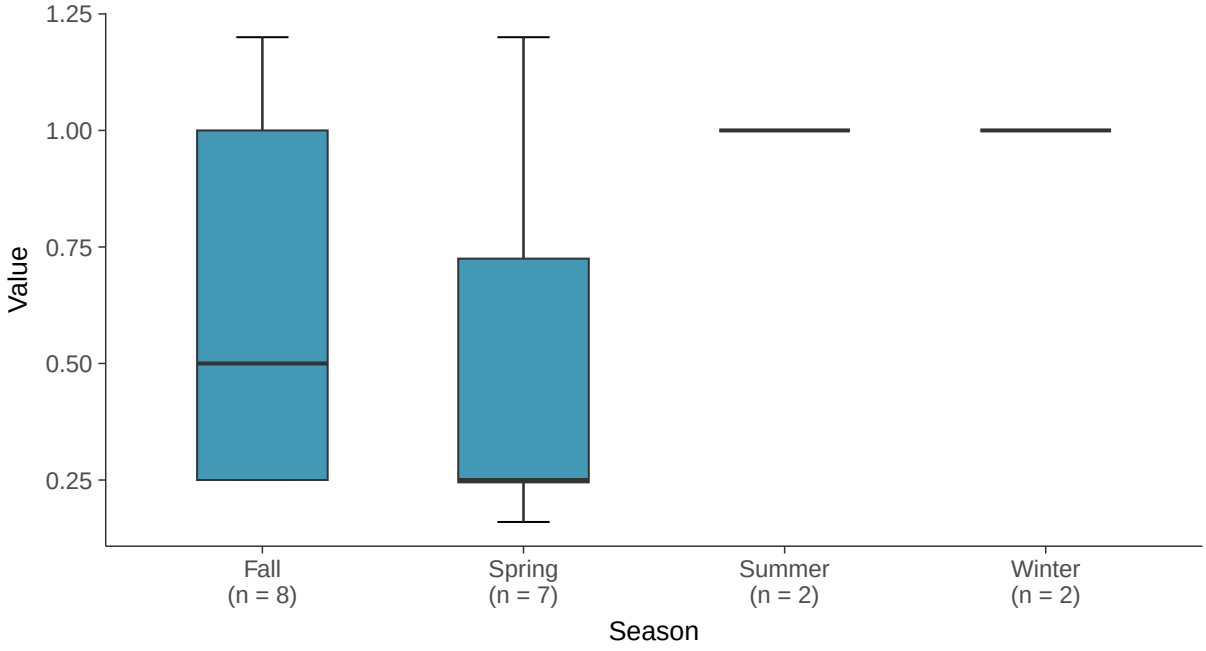
**Boxplot**

Chromium, MW-17003 (ug/L)



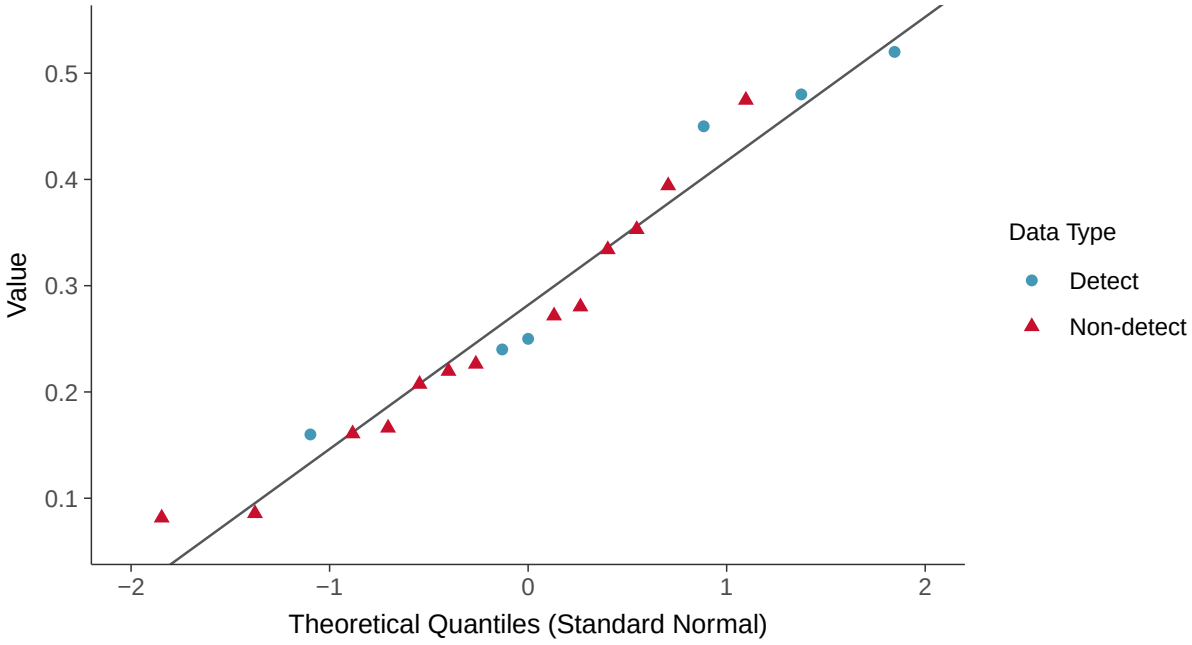

**Boxplot by Season**

Chromium, MW-17003 (ug/L)



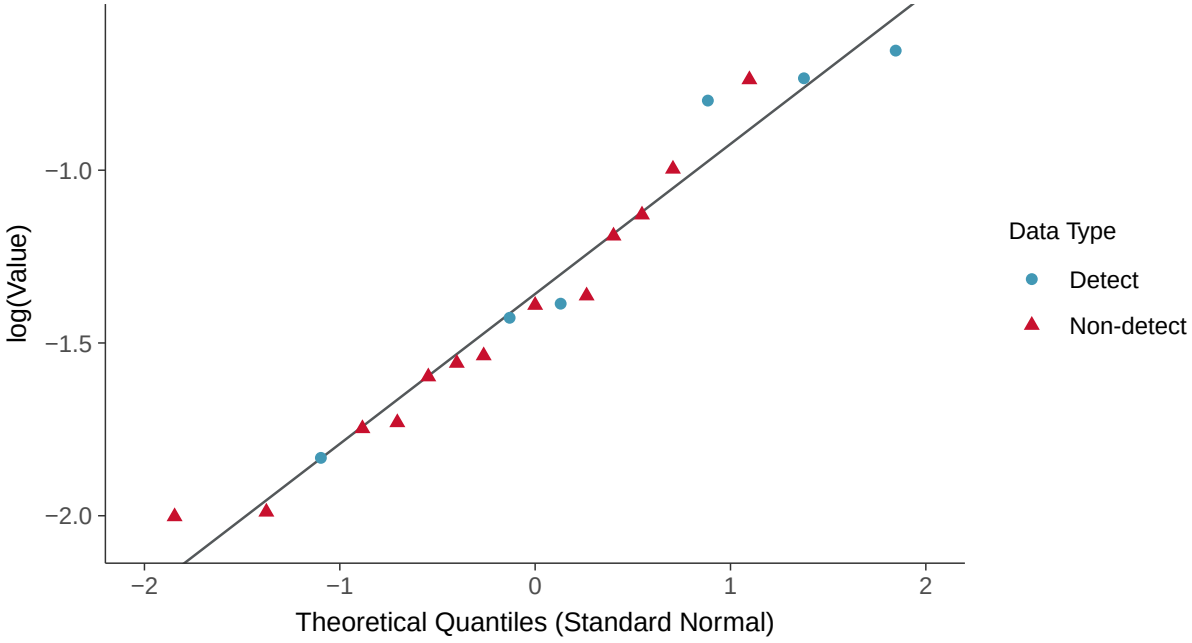
**Normal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17003 (ug/L)



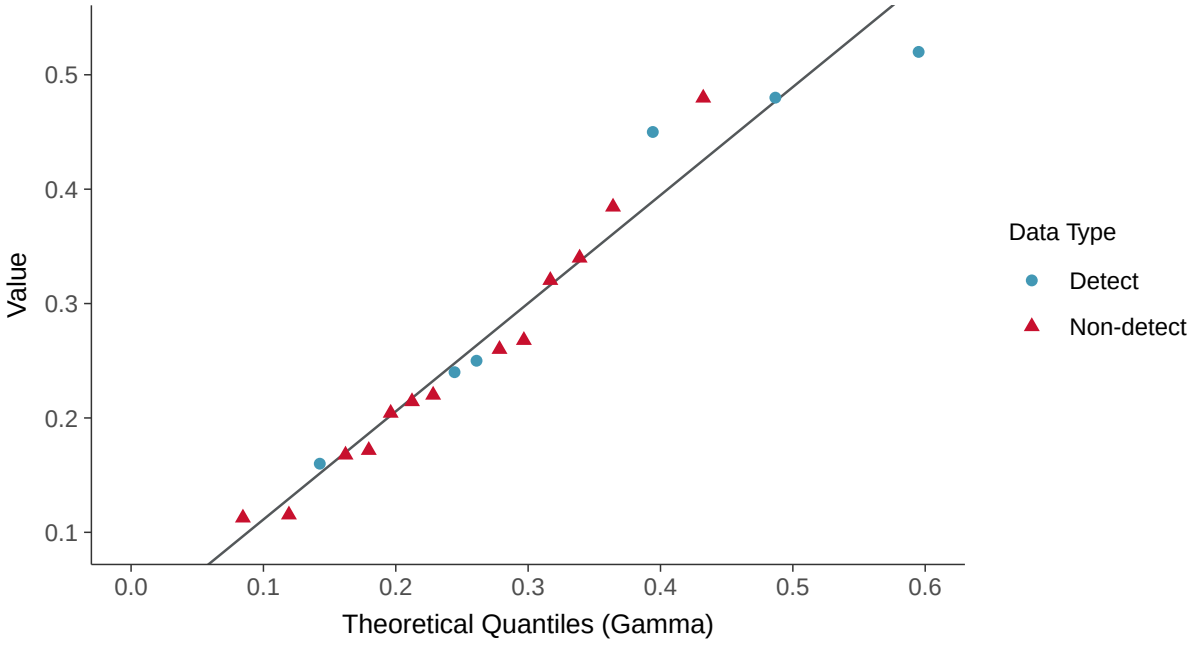

**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17003 (ug/L)



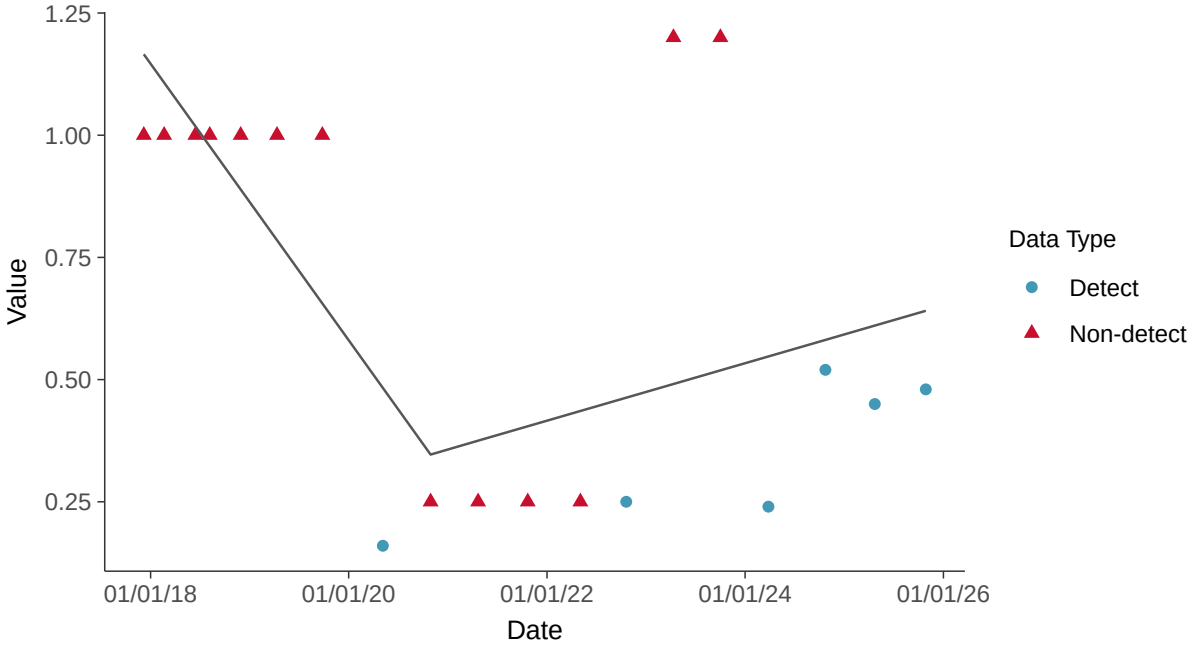
**Gamma Q-Q plot using ROS Imputed Estimates**

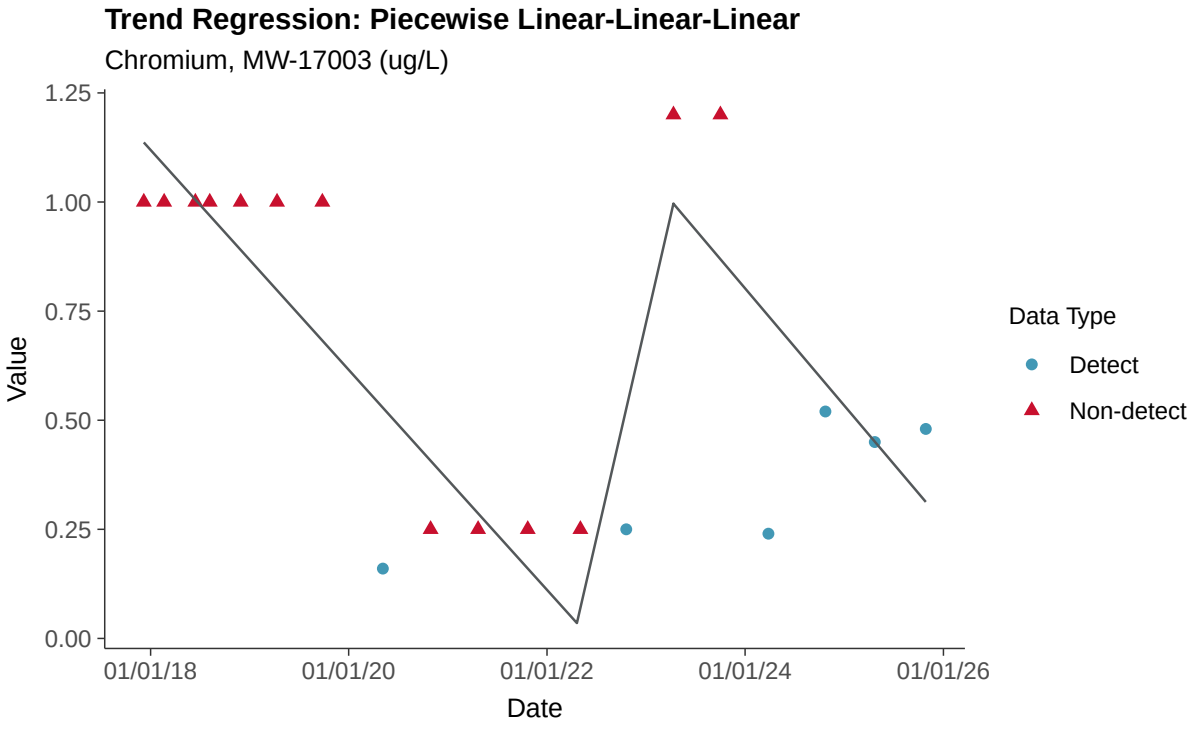
Chromium, MW-17003 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

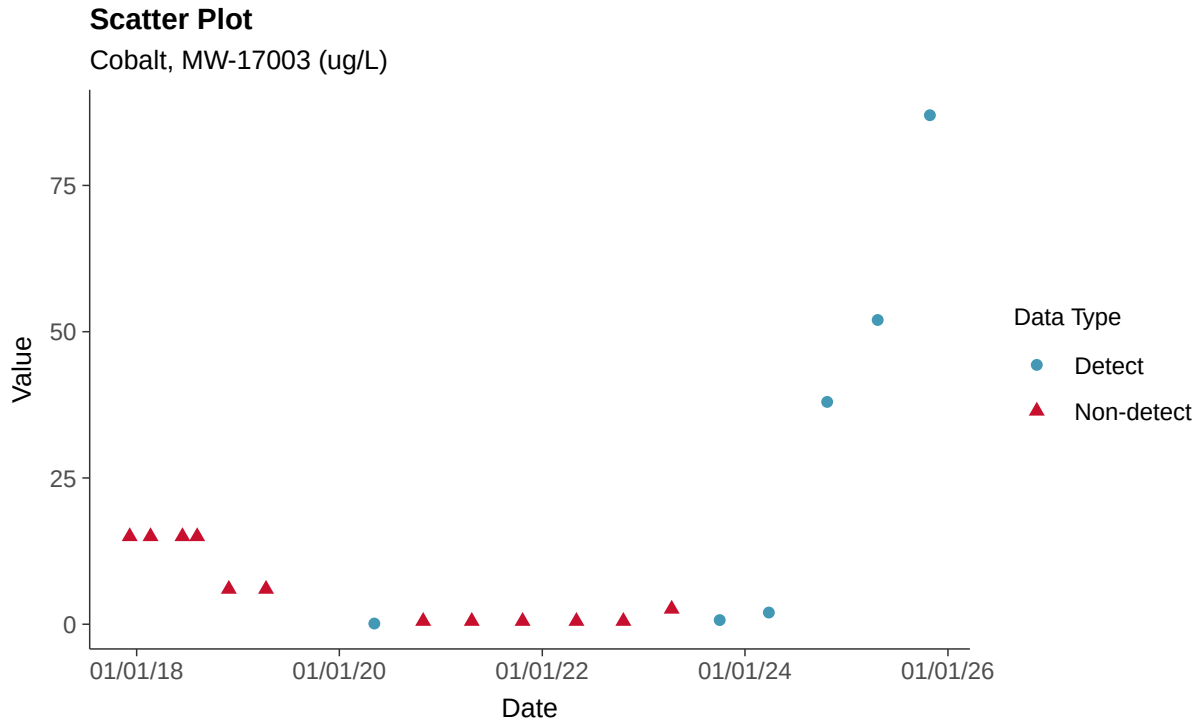
Chromium, MW-17003 (ug/L)

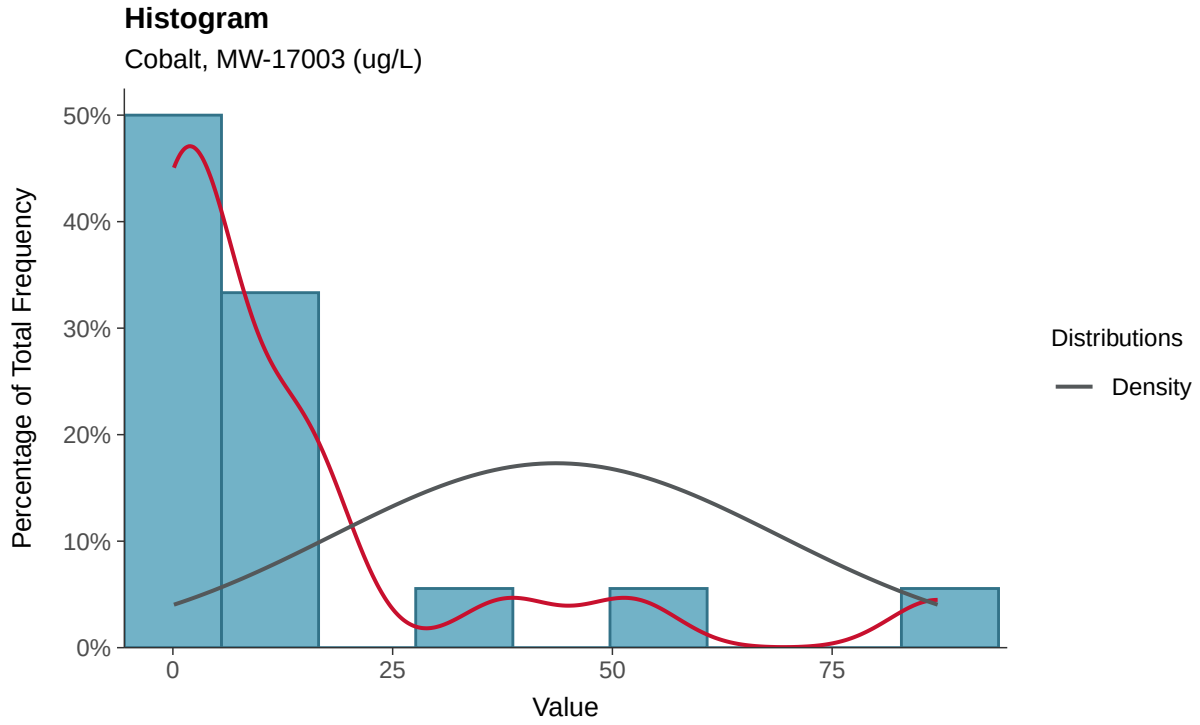



Trend Regression: Piecewise Linear-Linear-Linear
Chromium, MW-17003 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
0.00
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cobalt, MW-17003

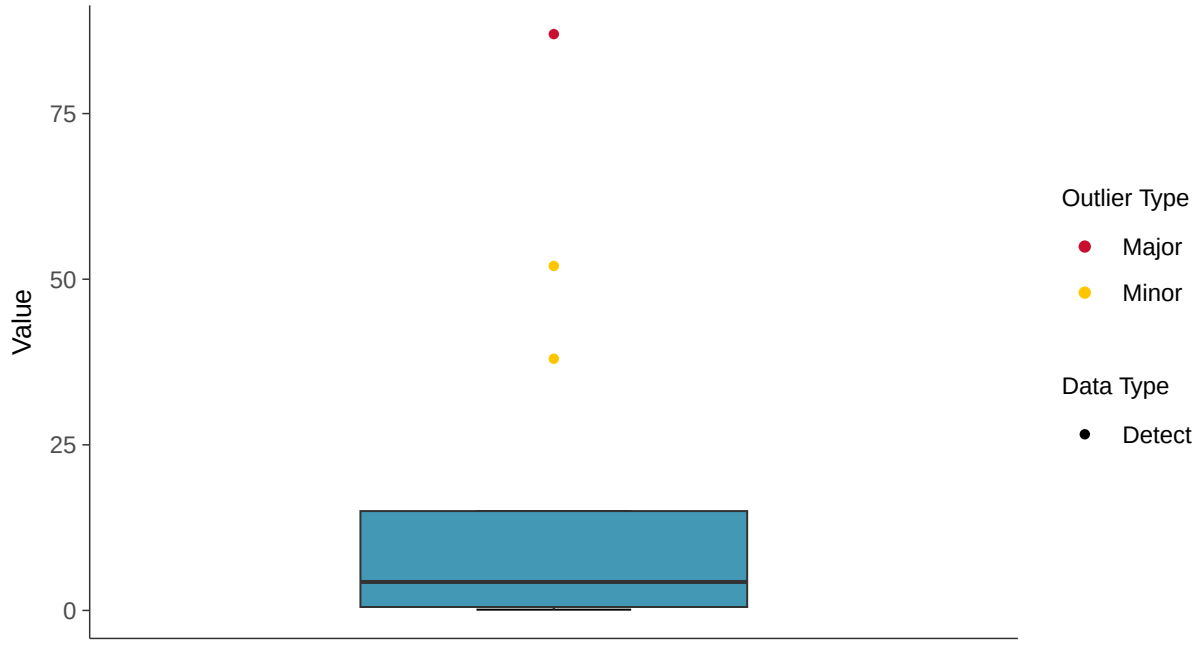
ID: 16_2_110



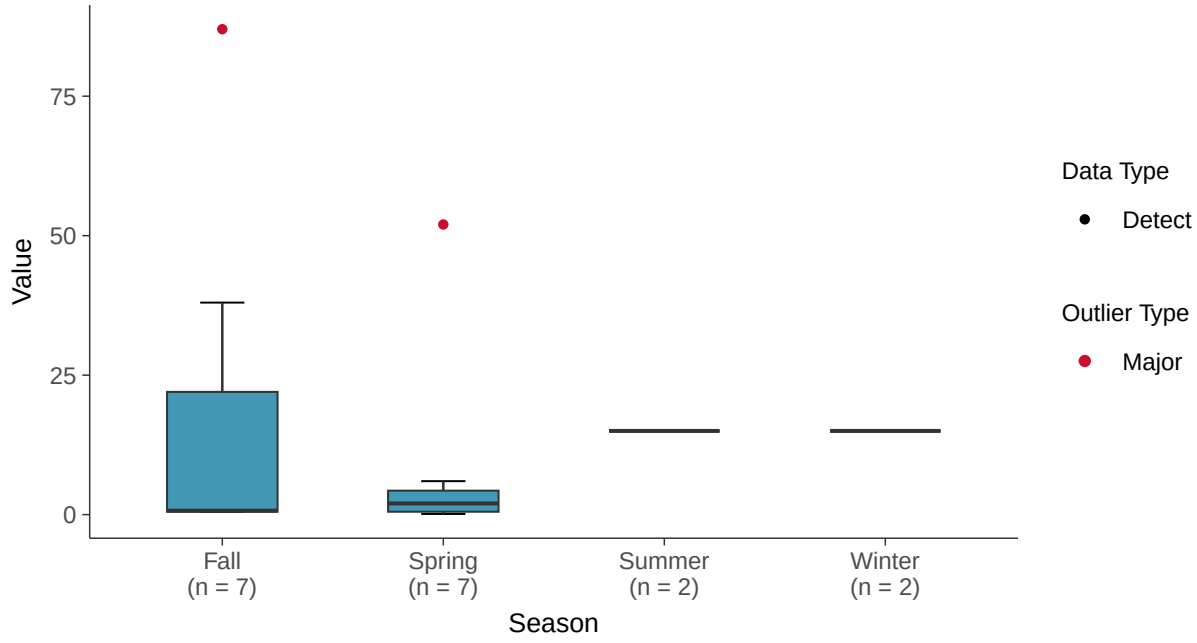
## Boxplot

Cobalt, MW-17003 (ug/L)



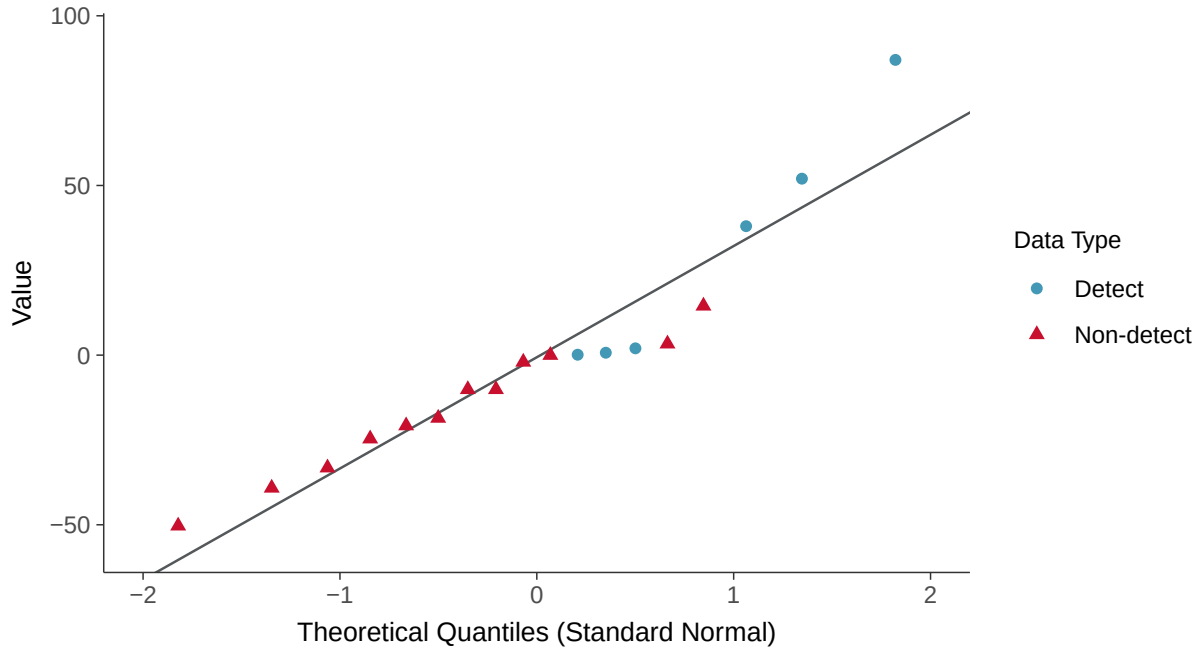

## Boxplot by Season

Cobalt, MW-17003 (ug/L)



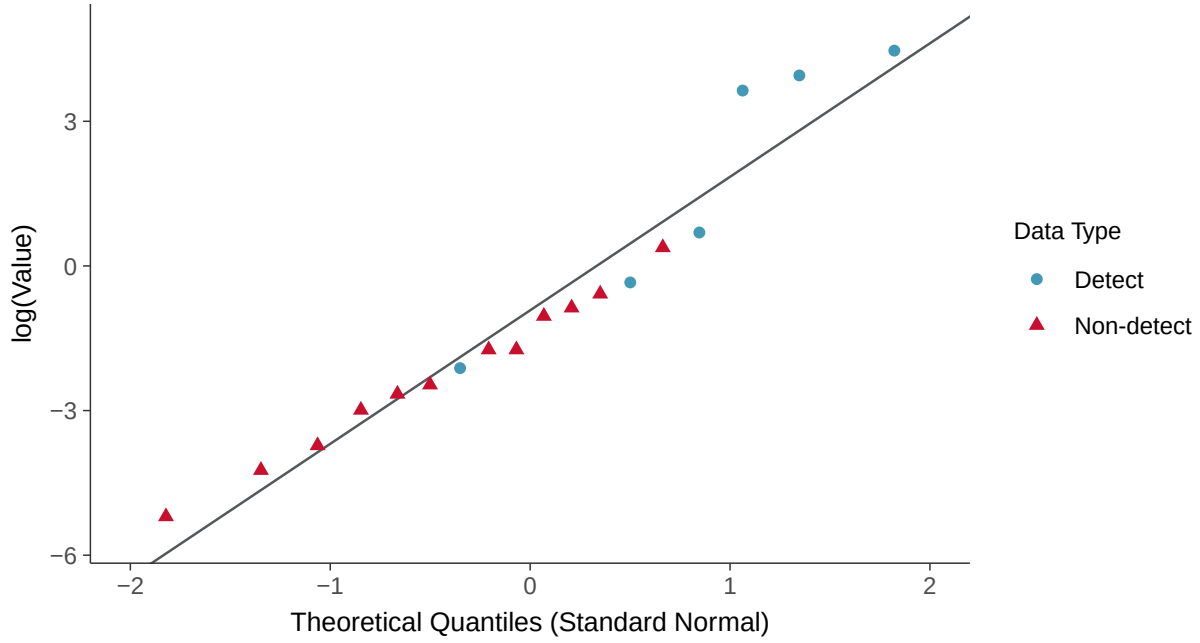
**Normal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17003 (ug/L)



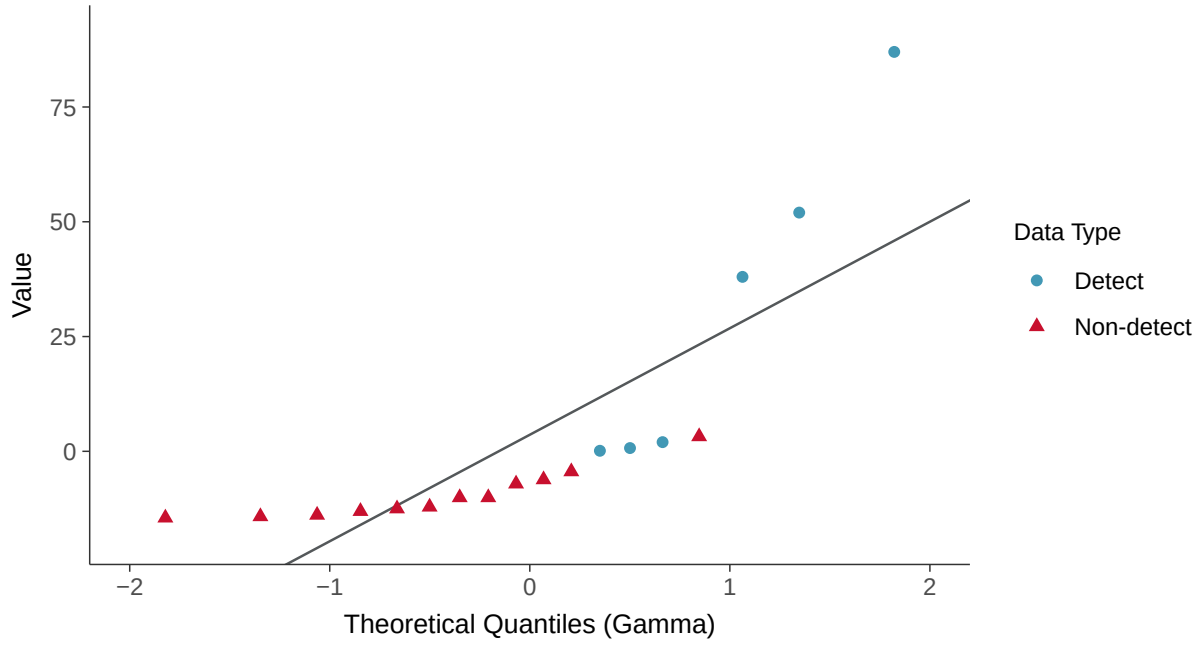

**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17003 (ug/L)



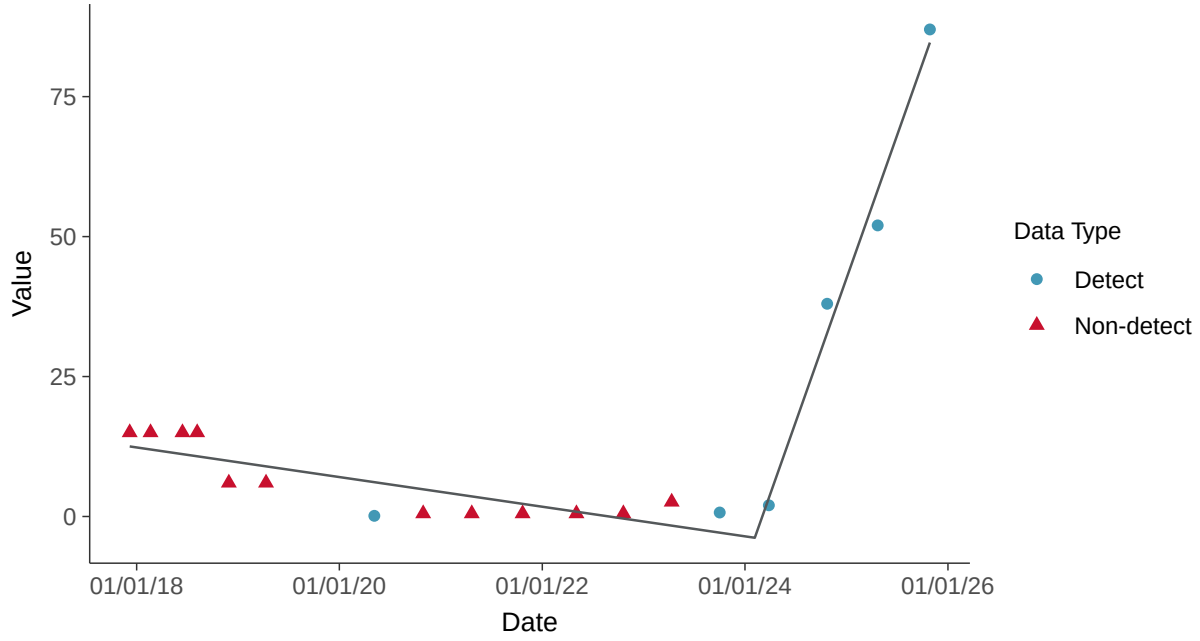
**Gamma Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17003 (ug/L)



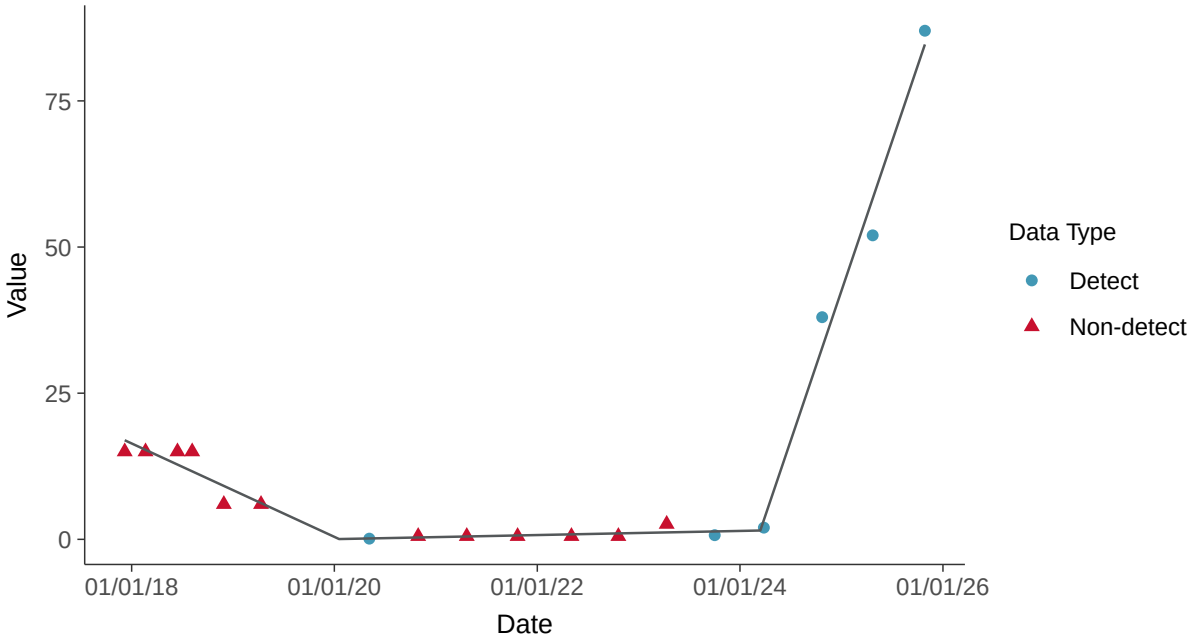

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17003 (ug/L)



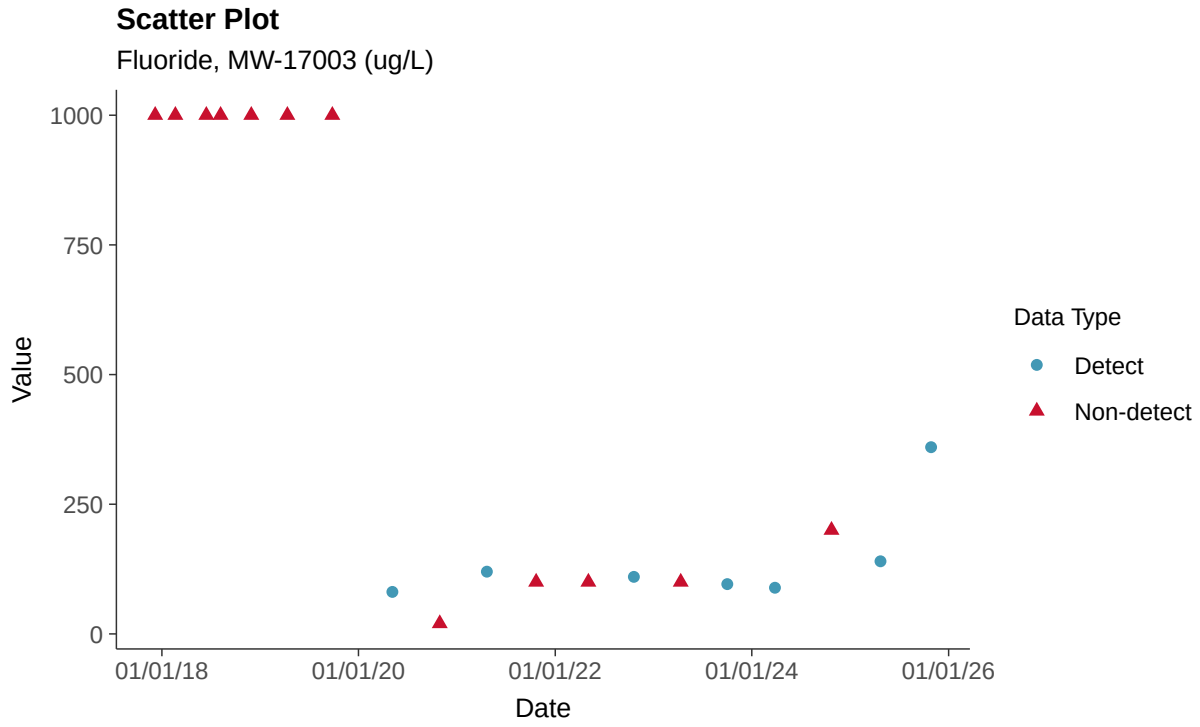
**Trend Regression: Piecewise Linear-Linear-Linear**

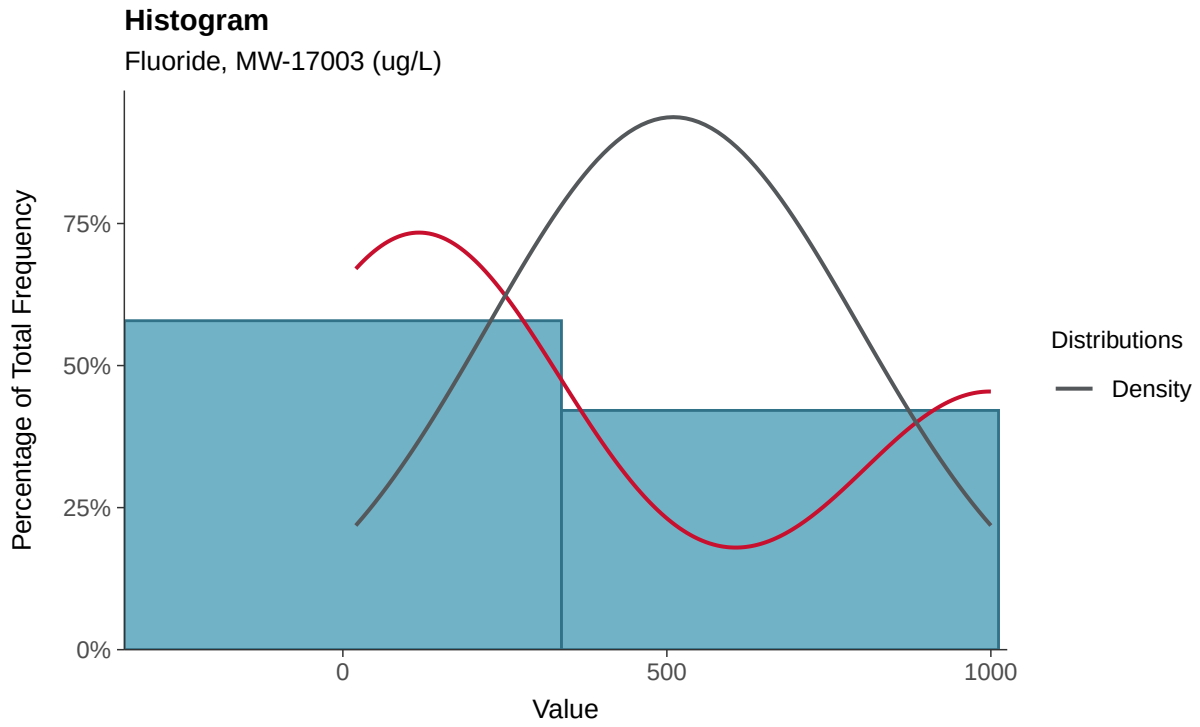
Cobalt, MW-17003 (ug/L)



## Appendix IV: Fluoride, MW-17003

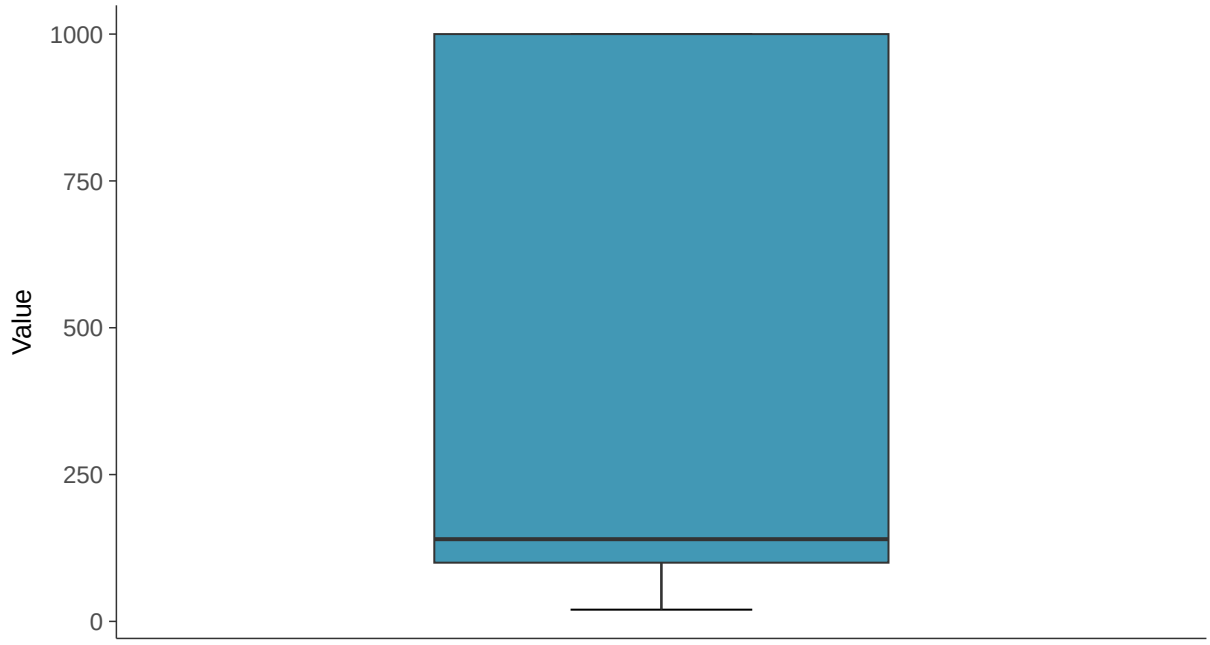
ID: 16_2_114



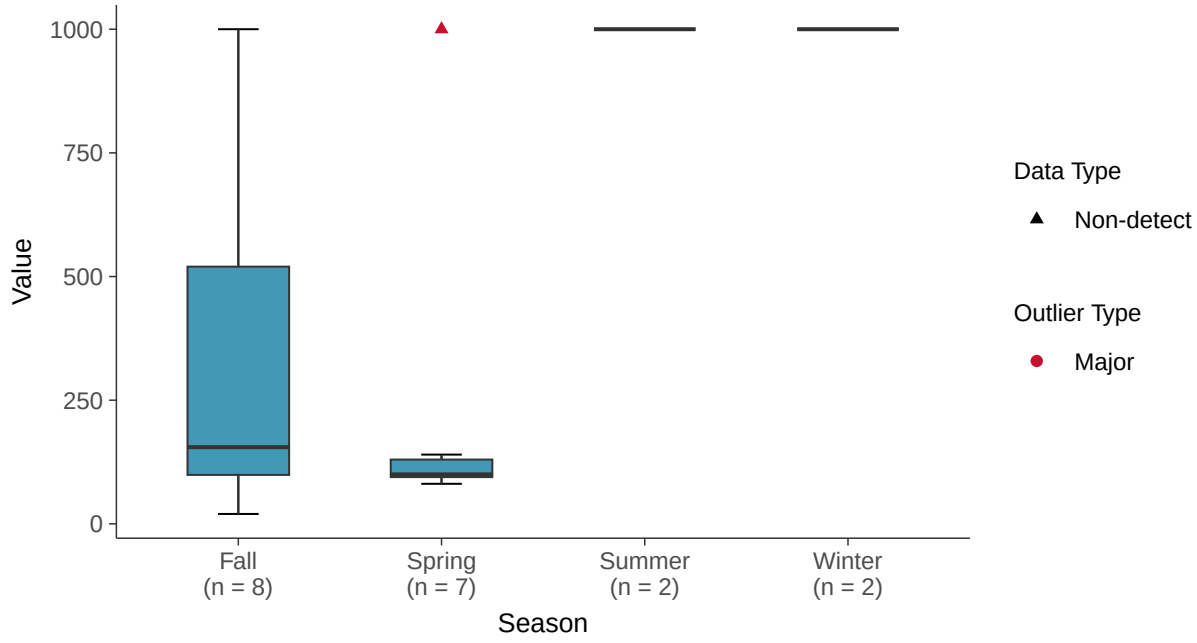
## Boxplot

Fluoride, MW-17003 (ug/L)



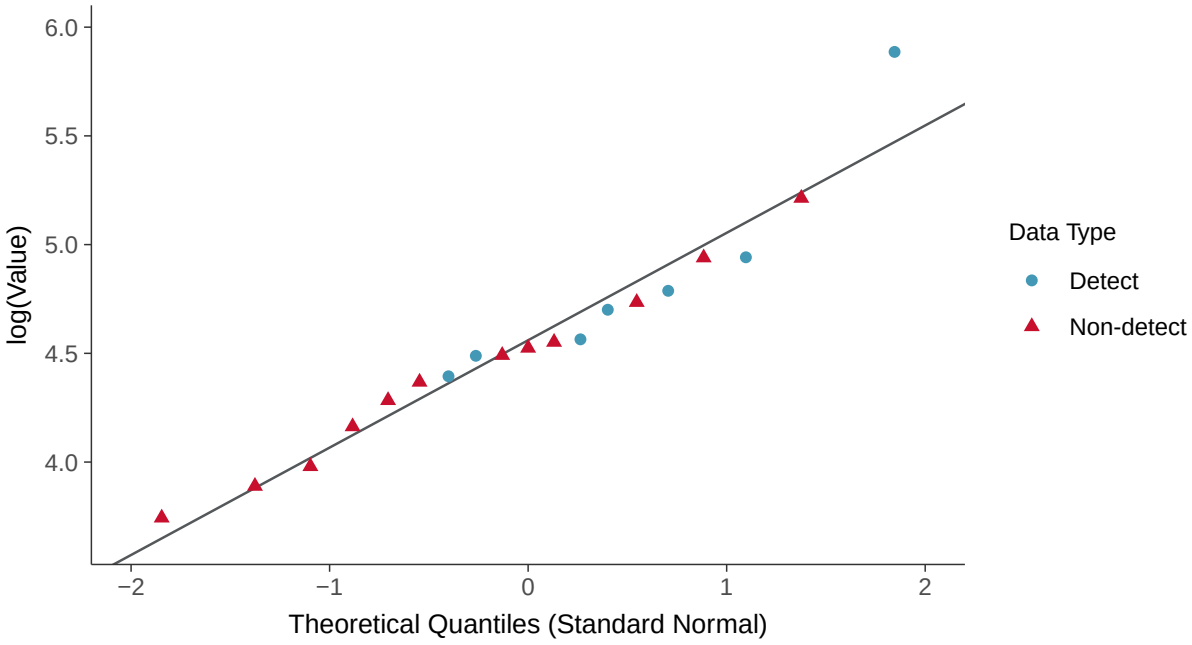

## Boxplot by Season

Fluoride, MW-17003 (ug/L)



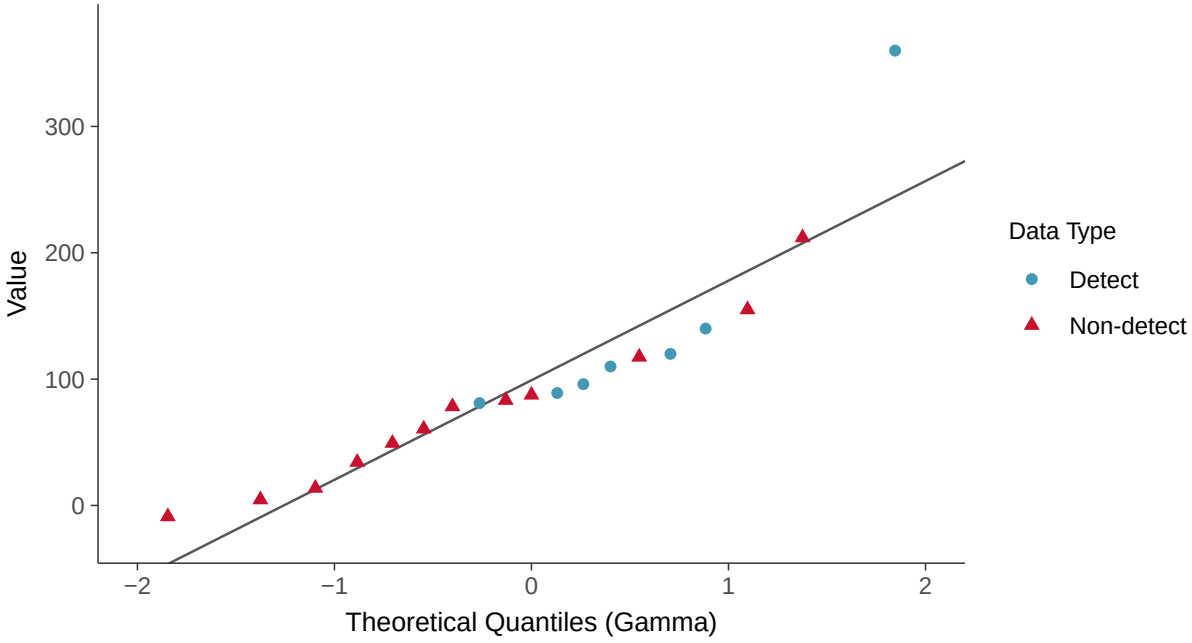
**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17003 (ug/L)



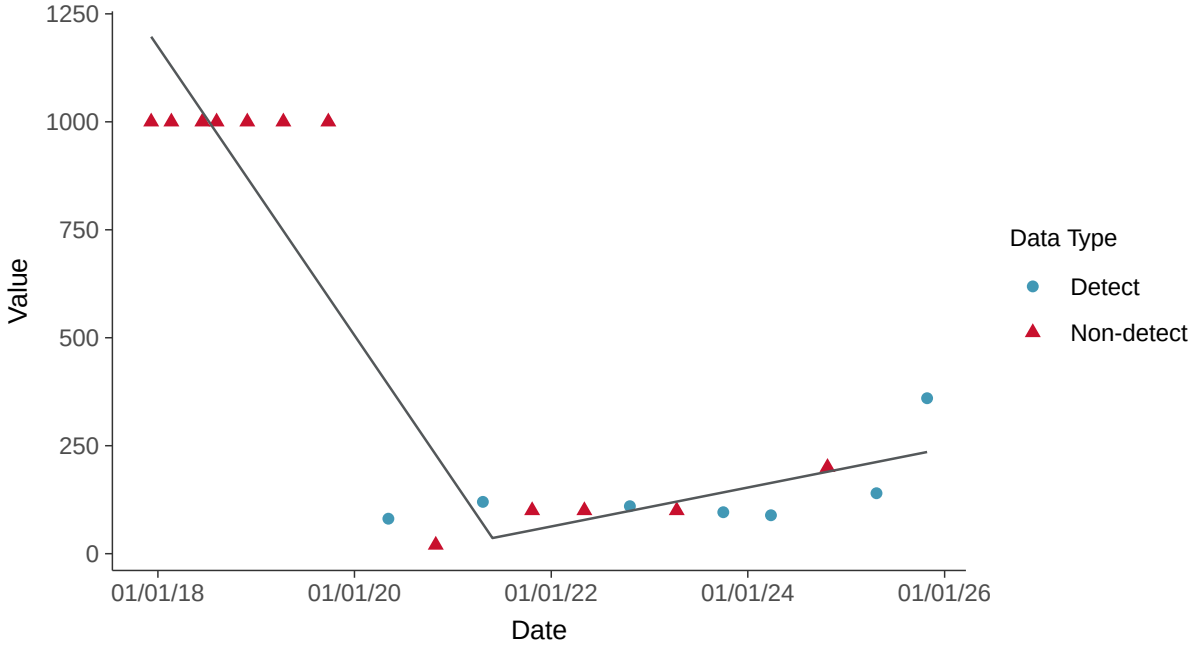

**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17003 (ug/L)



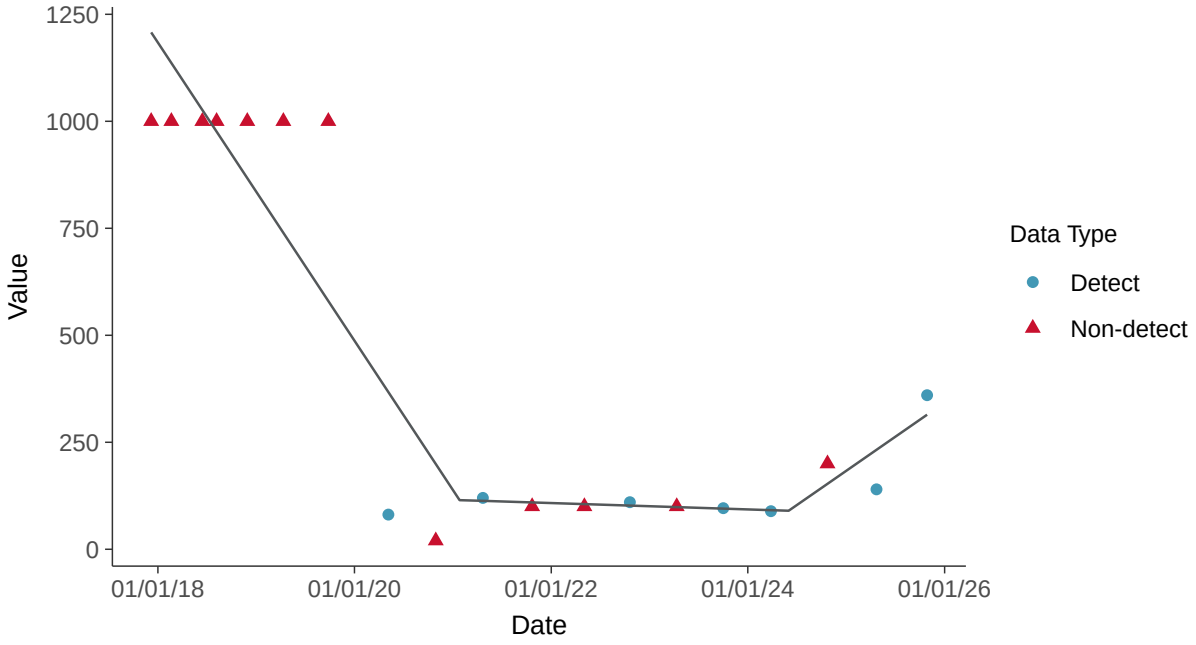
**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-17003 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Fluoride, MW-17003 (ug/L)

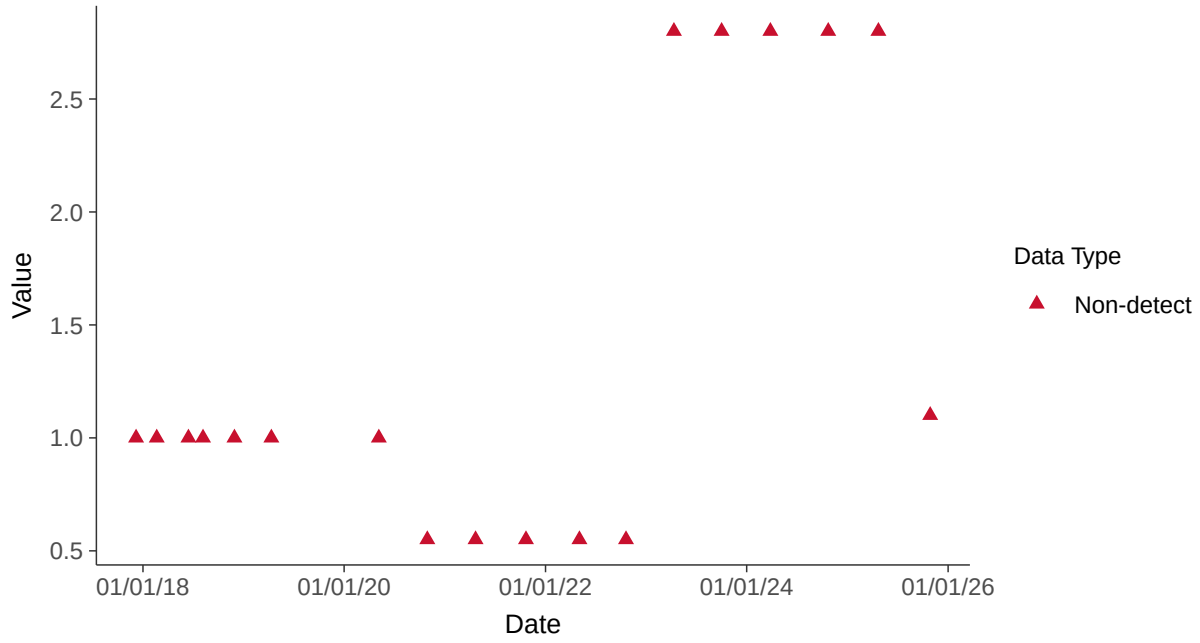


## Appendix IV: Lead, MW-17003

ID: 16_2_116

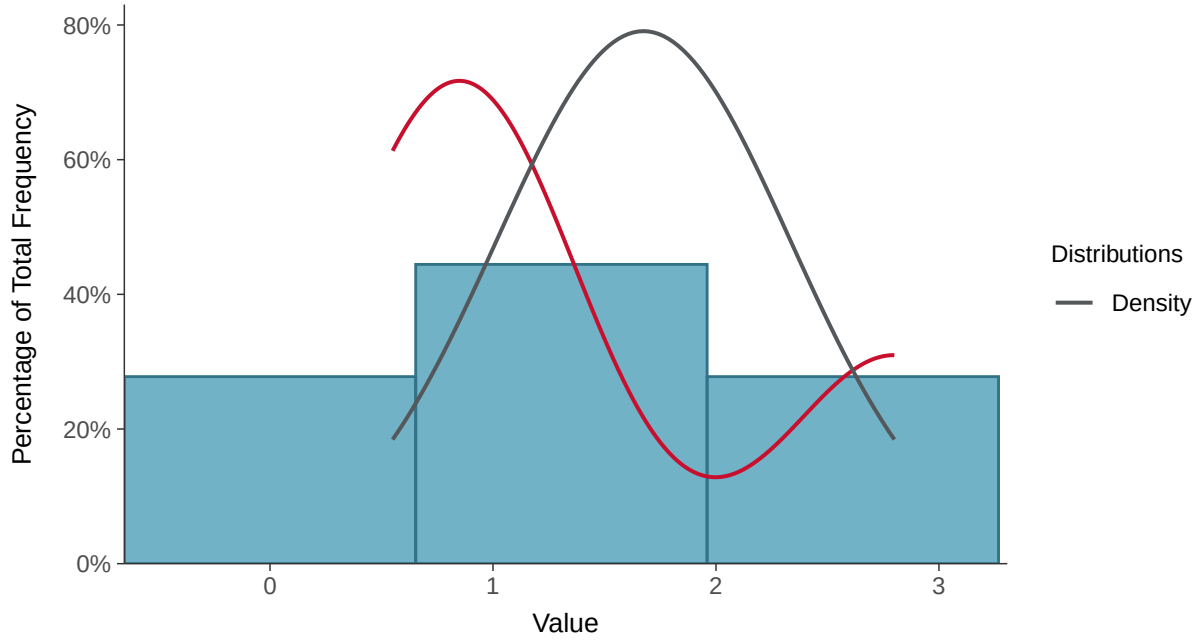
**Scatter Plot**

Lead, MW-17003 (ug/L)



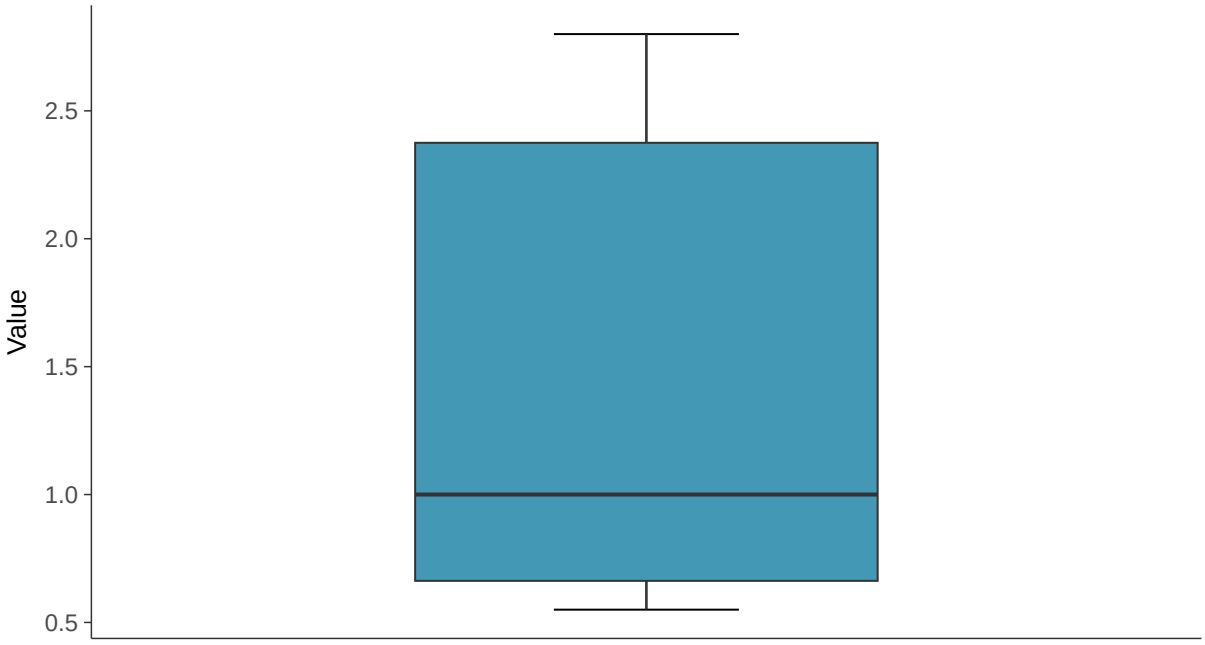

**Histogram**

Lead, MW-17003 (ug/L)



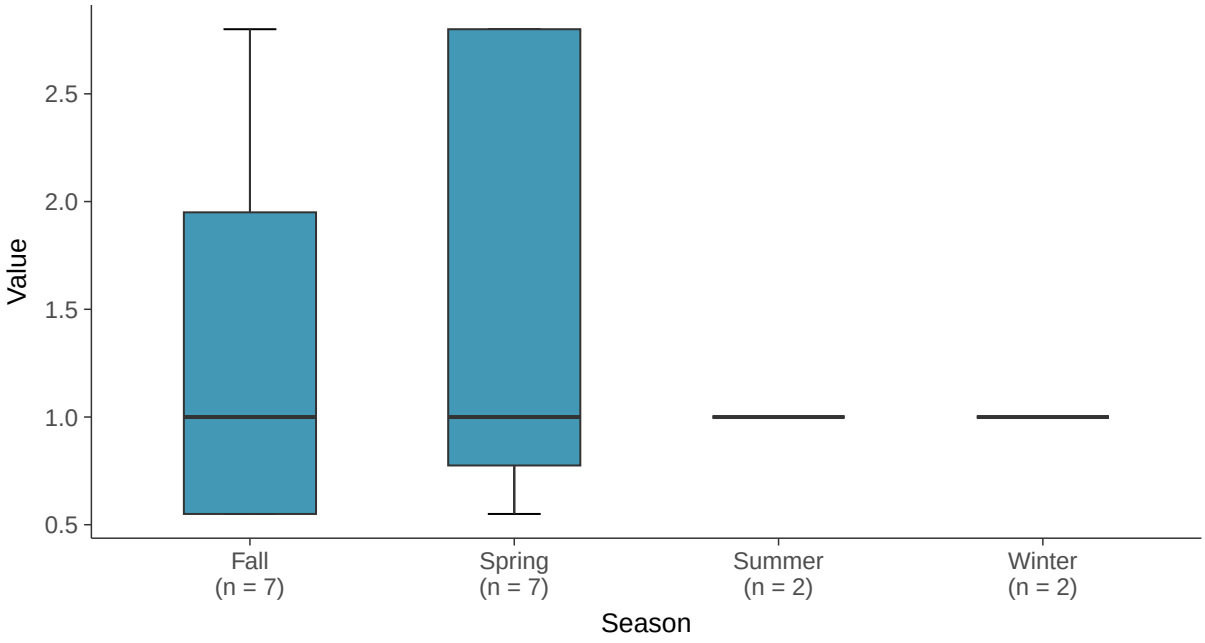
**Boxplot**

Lead, MW-17003 (ug/L)



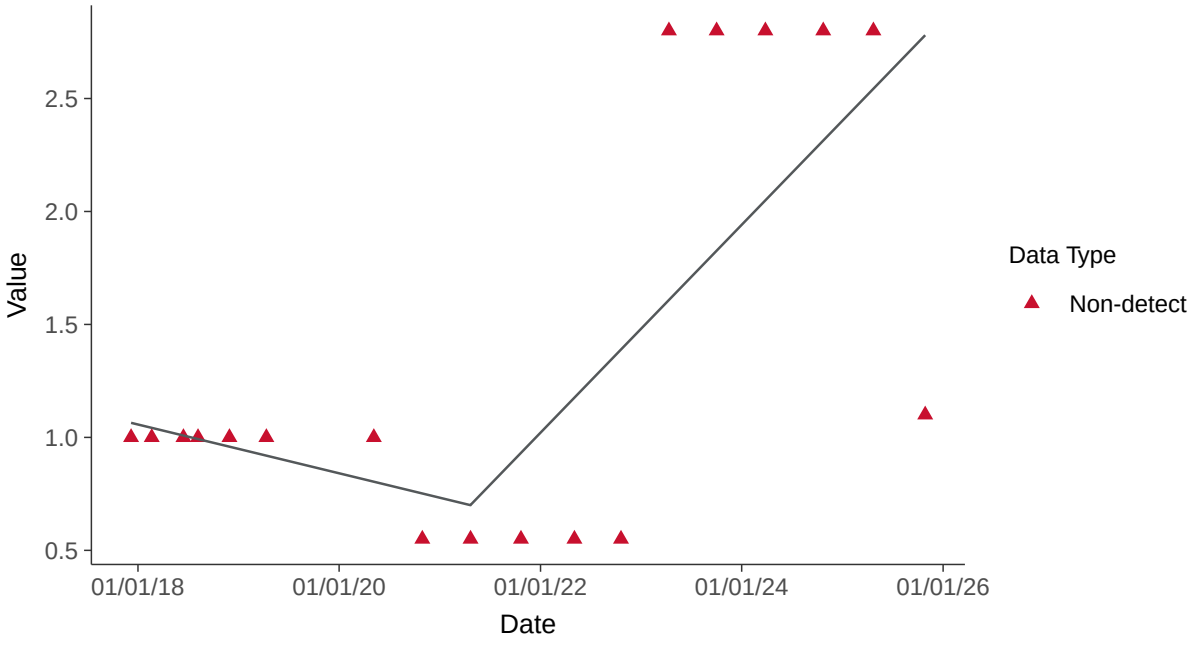

**Boxplot by Season**

Lead, MW-17003 (ug/L)



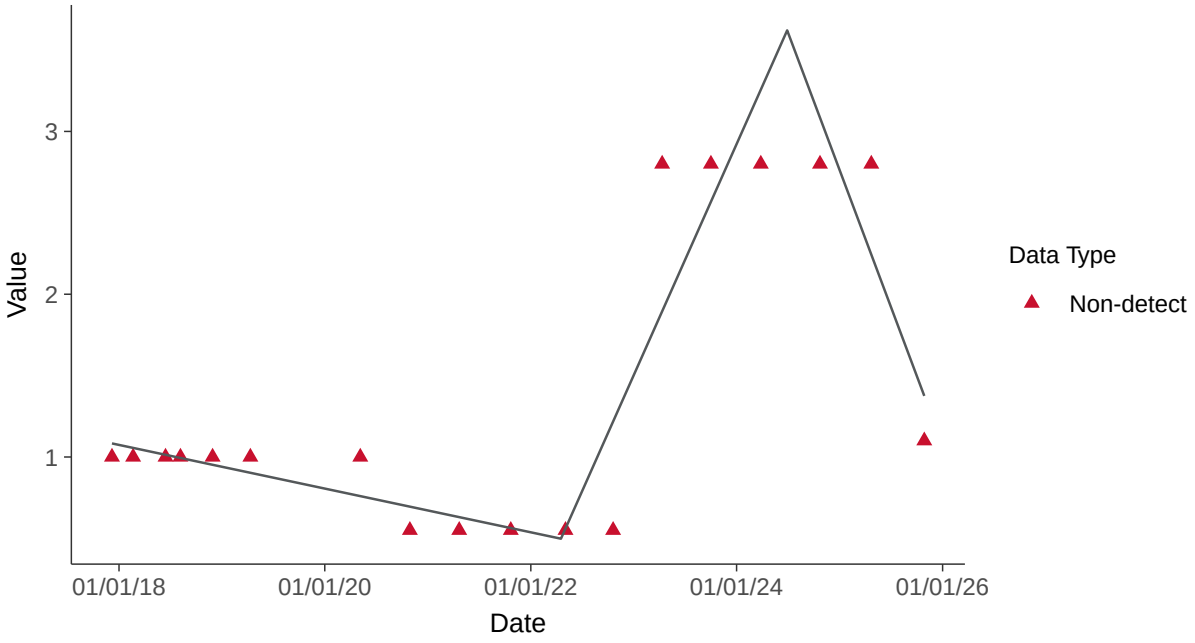
**Trend Regression: Piecewise Linear-Linear**

Lead, MW-17003 (ug/L)



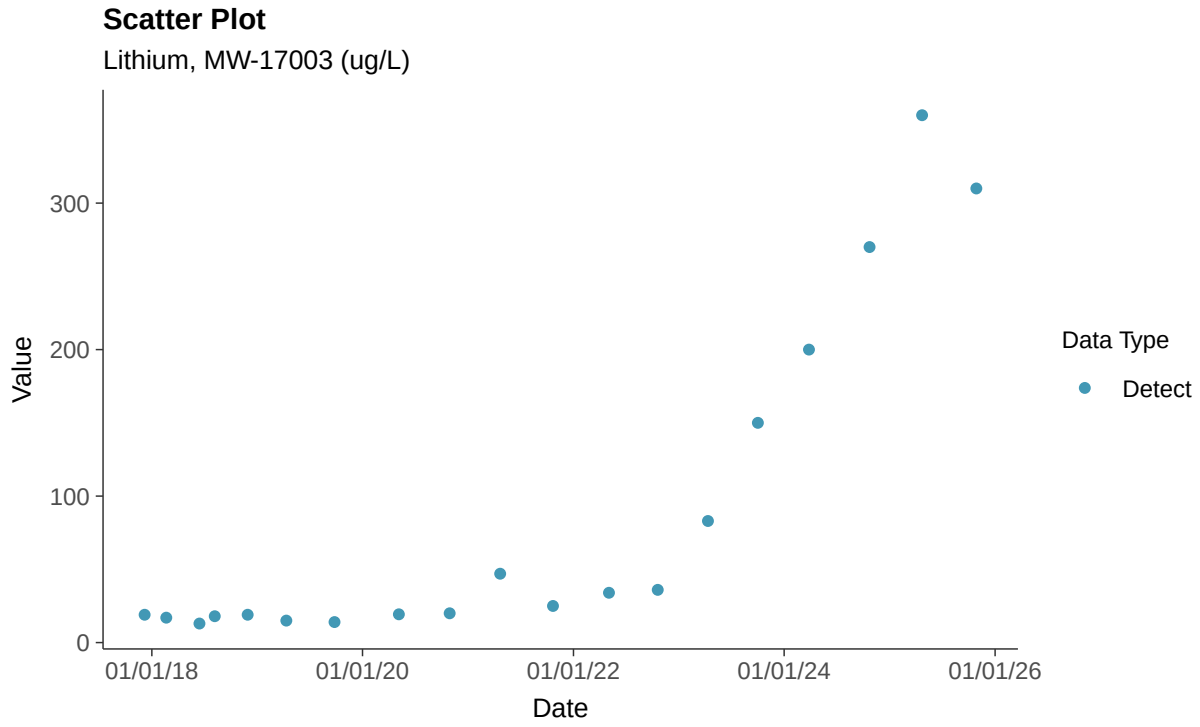

**Trend Regression: Piecewise Linear-Linear-Linear**

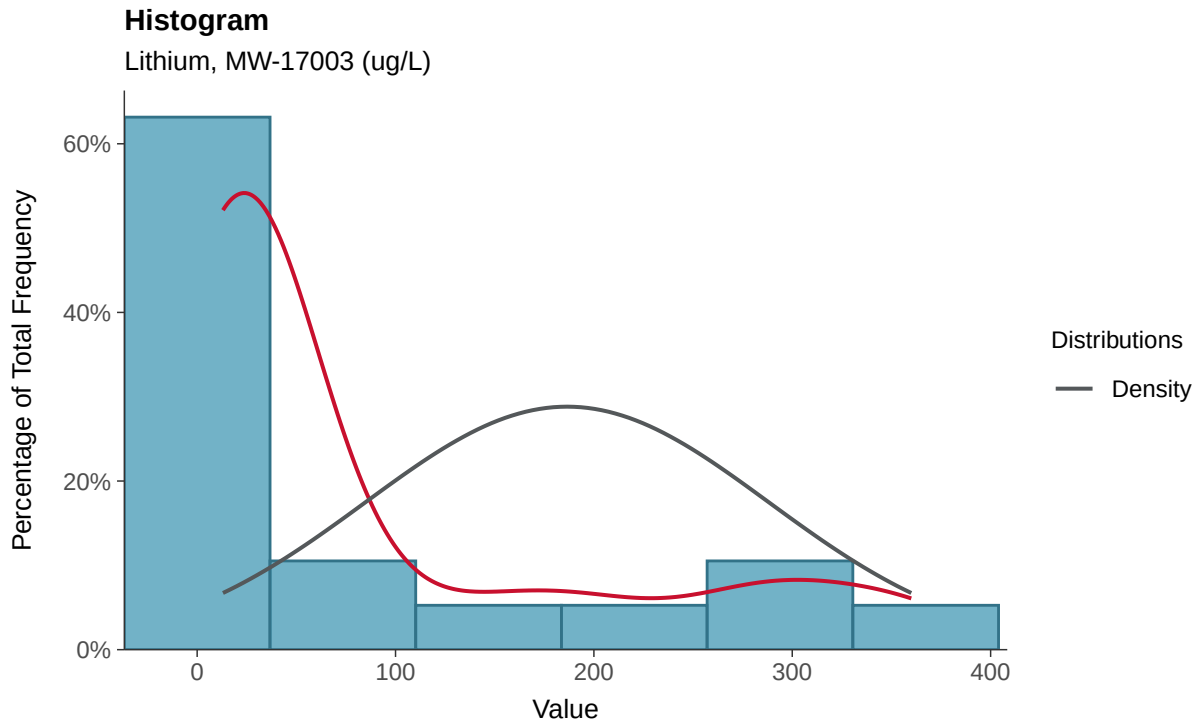
Lead, MW-17003 (ug/L)



## Appendix IV: Lithium, MW-17003

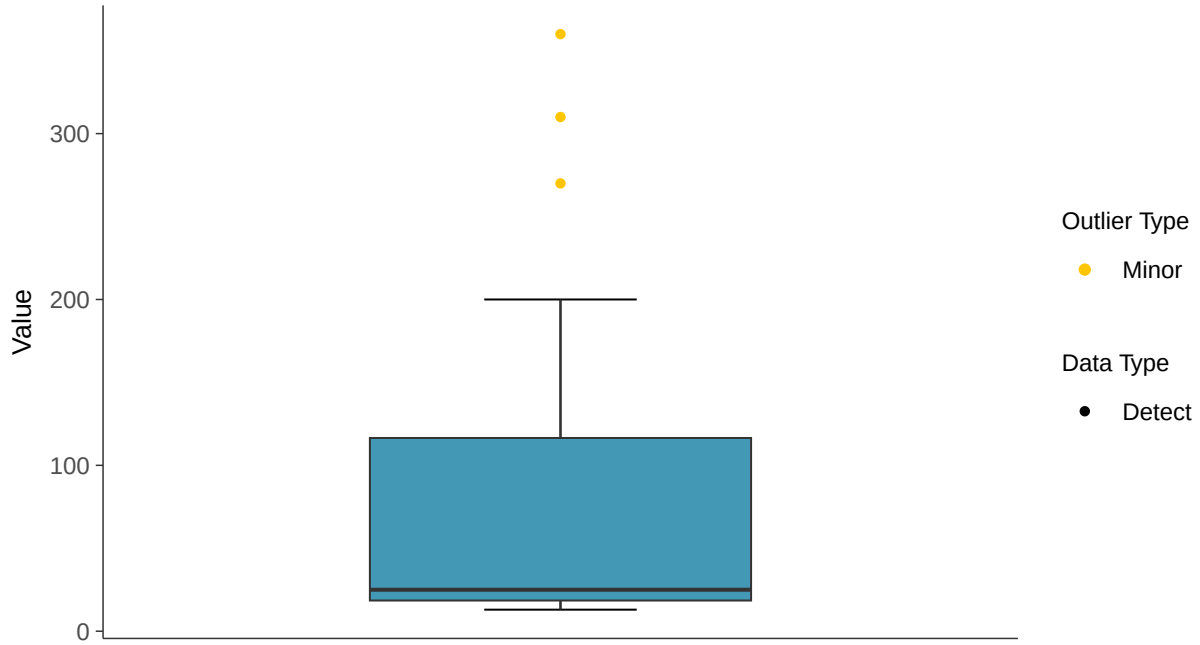
ID: 16_2_117



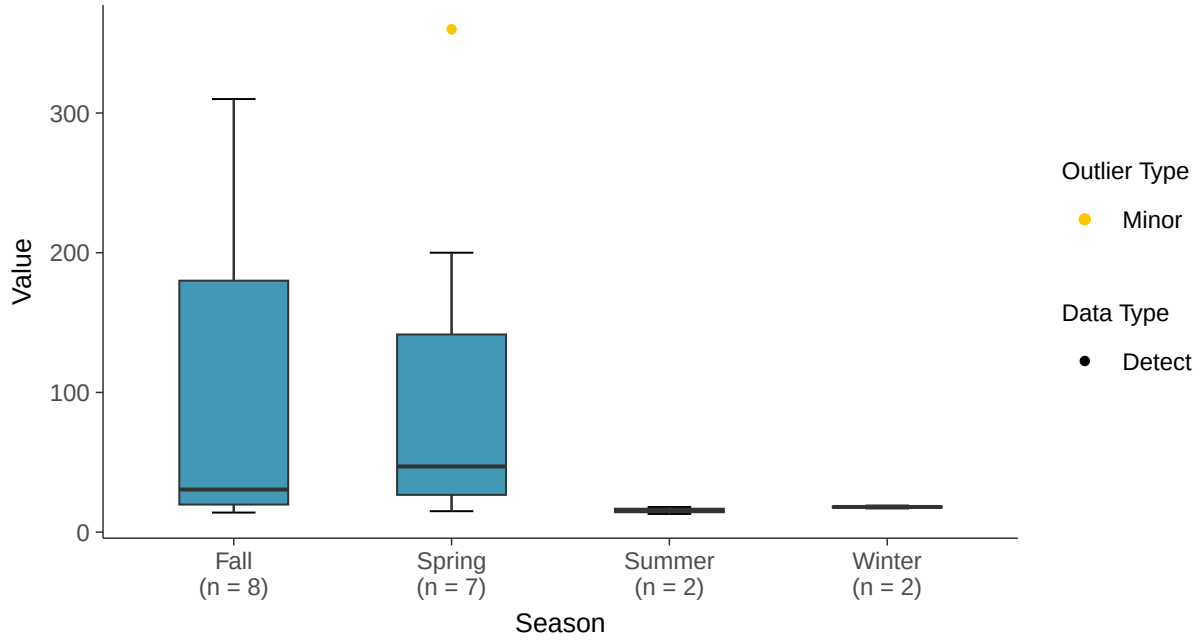
## Boxplot

Lithium, MW-17003 (ug/L)



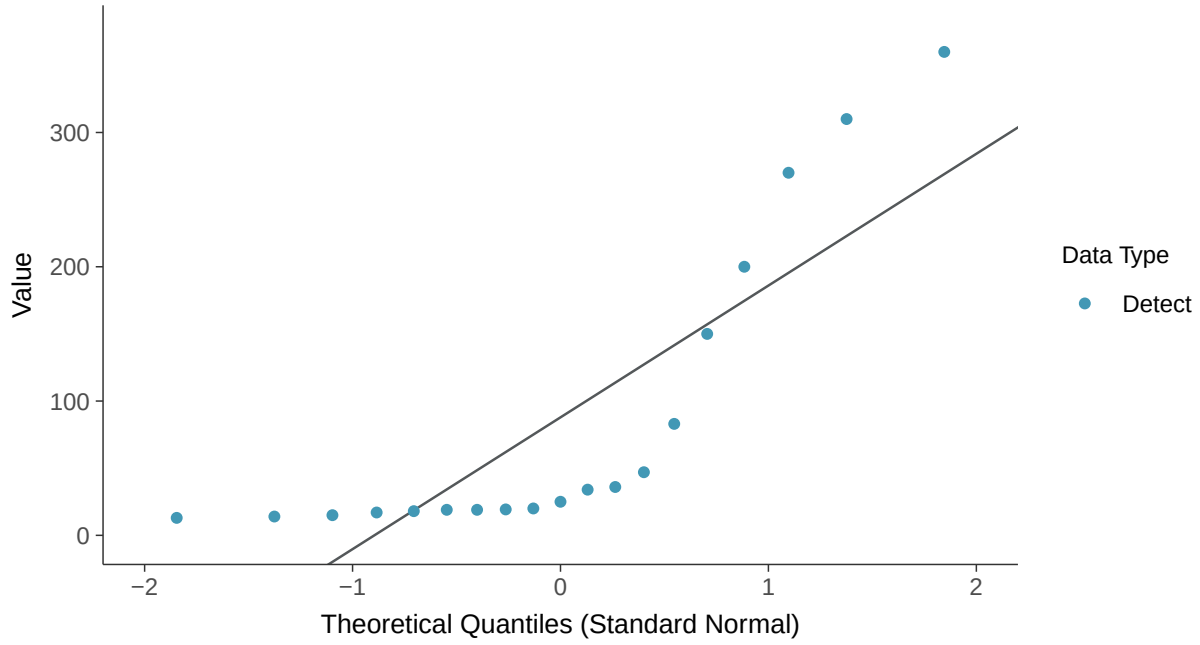

## Boxplot by Season

Lithium, MW-17003 (ug/L)



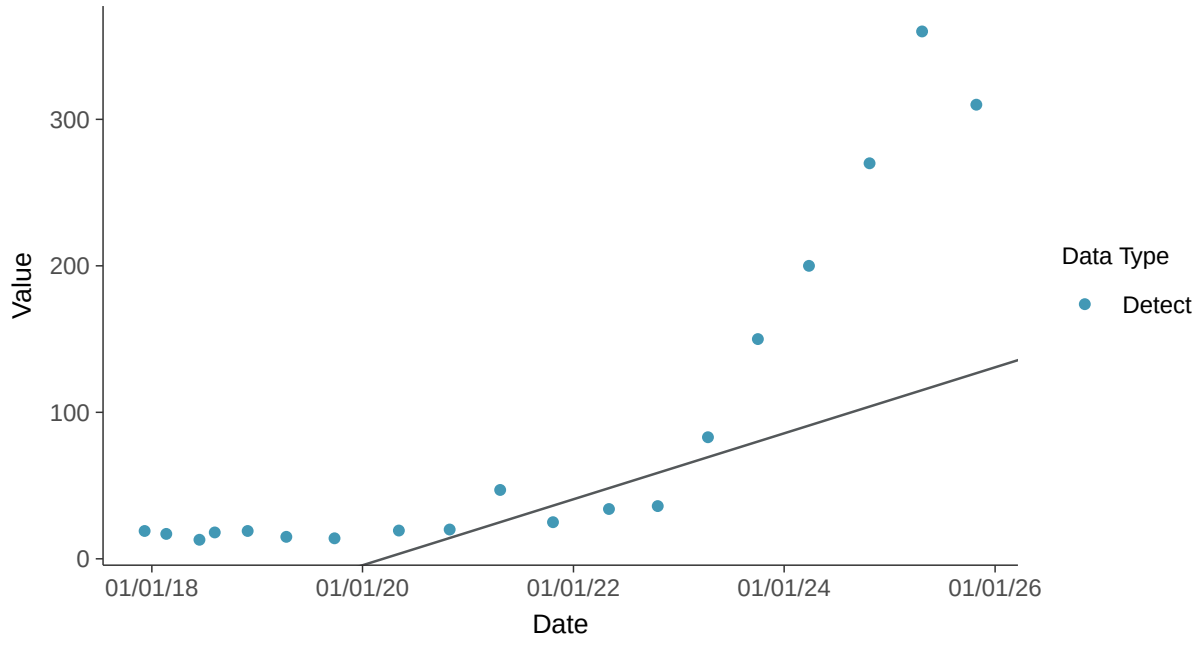
**Normal Q-Q plot**

Lithium, MW-17003 (ug/L)



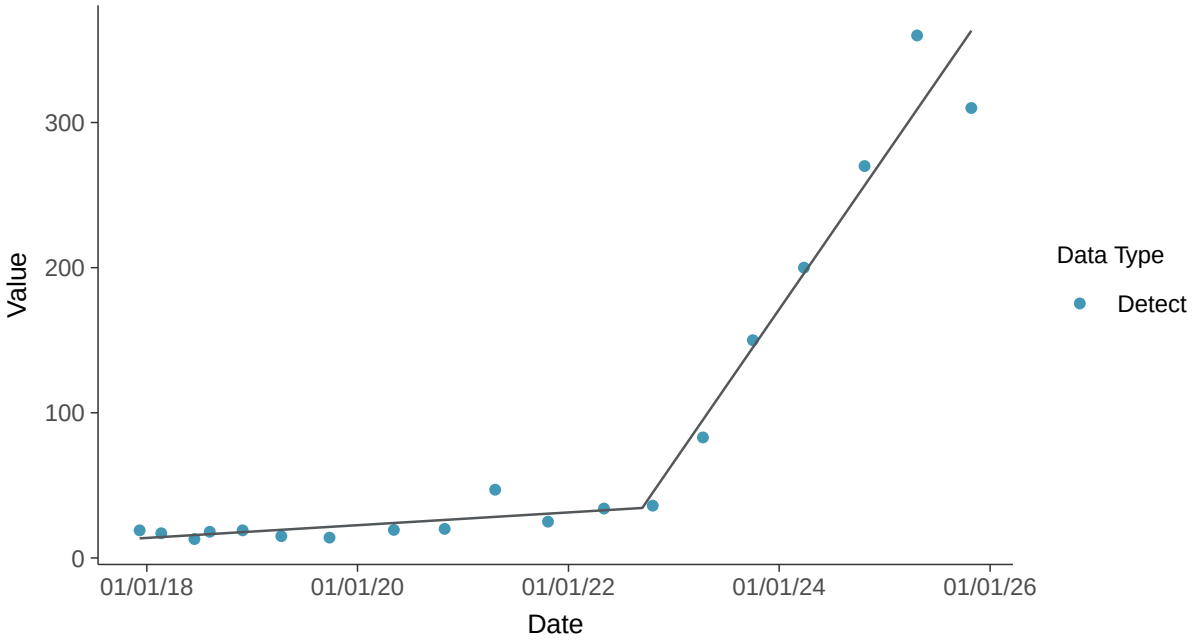

**Trend Regression: Mann-Kendall/Theil-Sen Estimate**

Lithium, MW-17003 (ug/L)



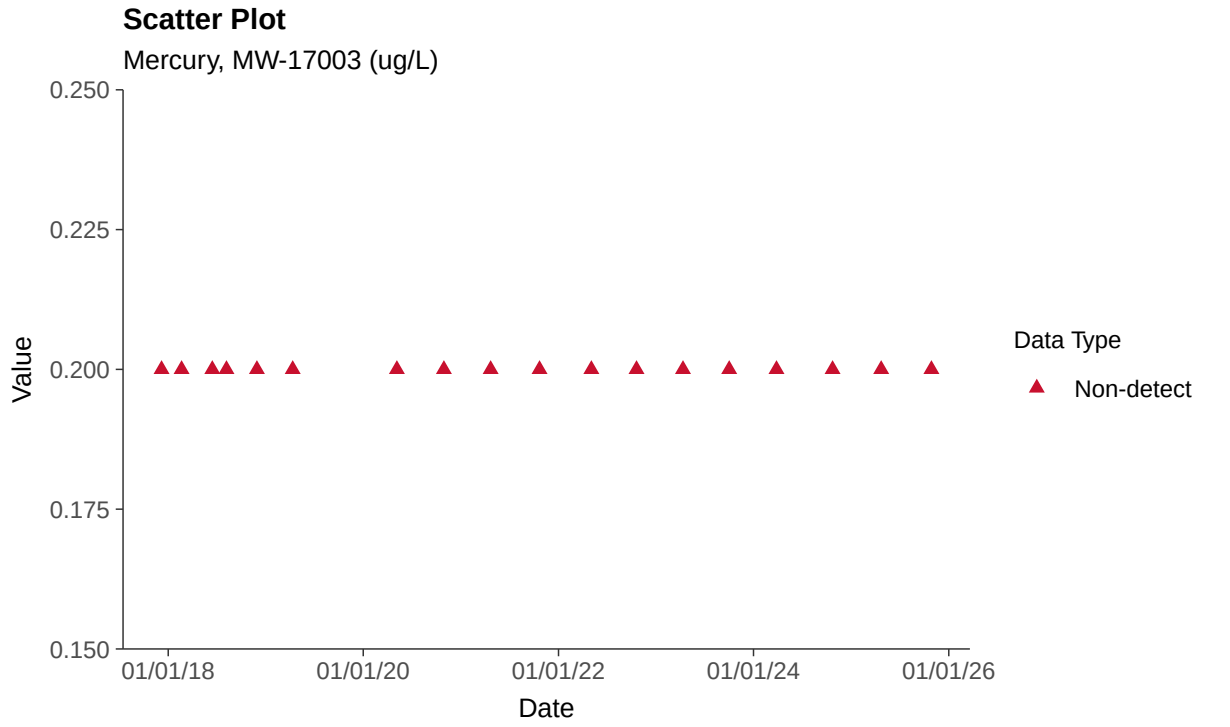
**Trend Regression: Piecewise Linear-Linear**

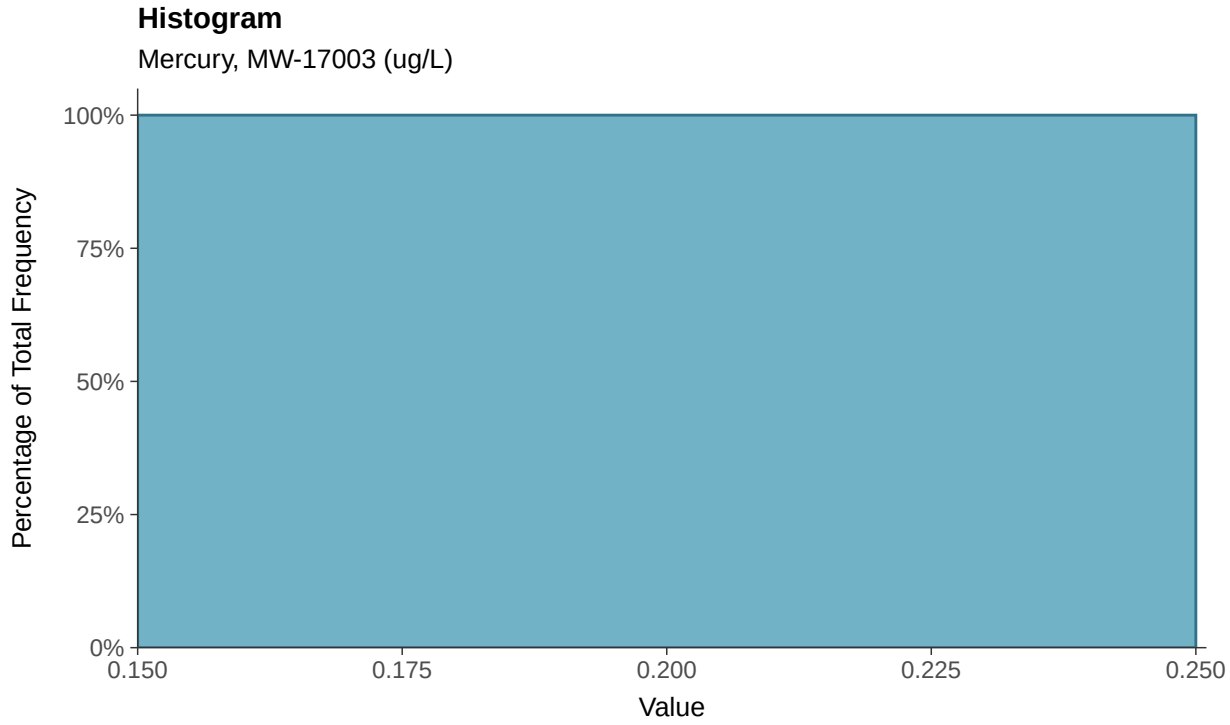
Lithium, MW-17003 (ug/L)



## Appendix IV: Mercury, MW-17003

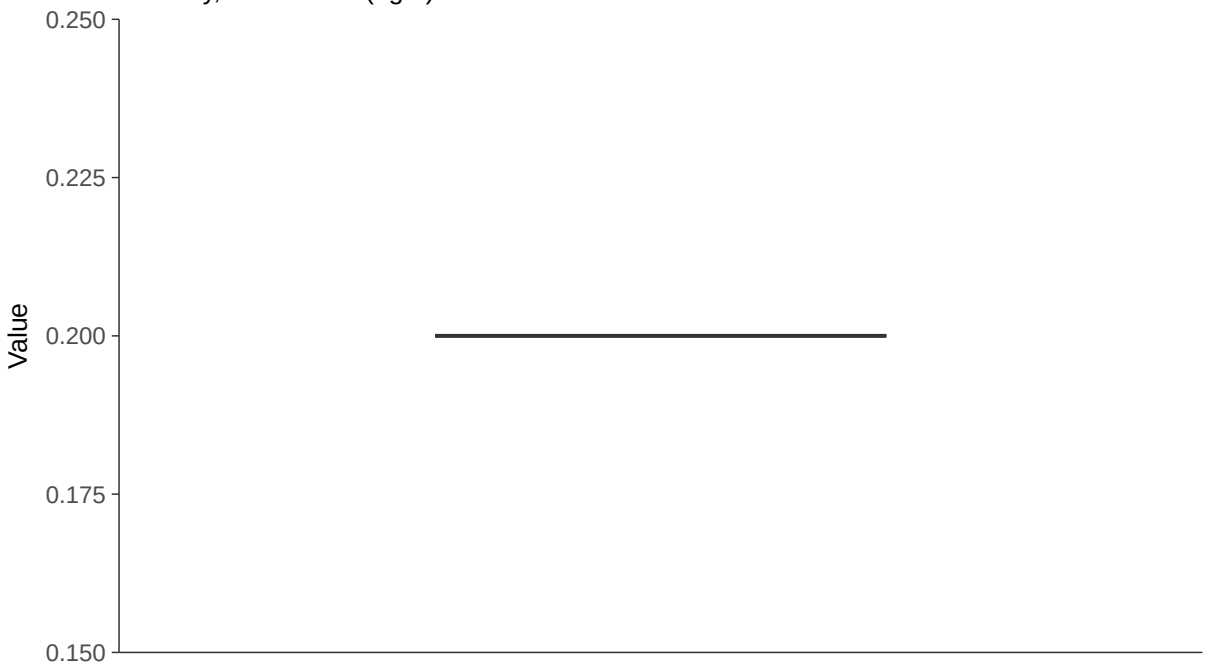
ID: 16_2_118



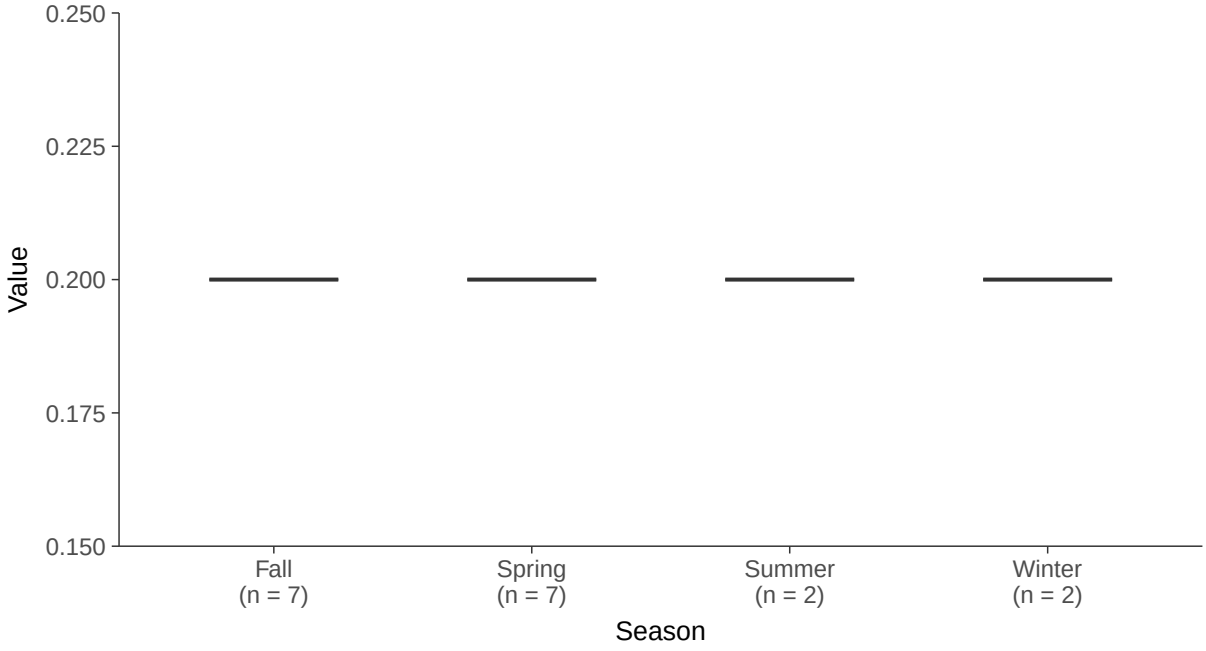
**Boxplot**

Mercury, MW-17003 (ug/L)




**Boxplot by Season**

Mercury, MW-17003 (ug/L)

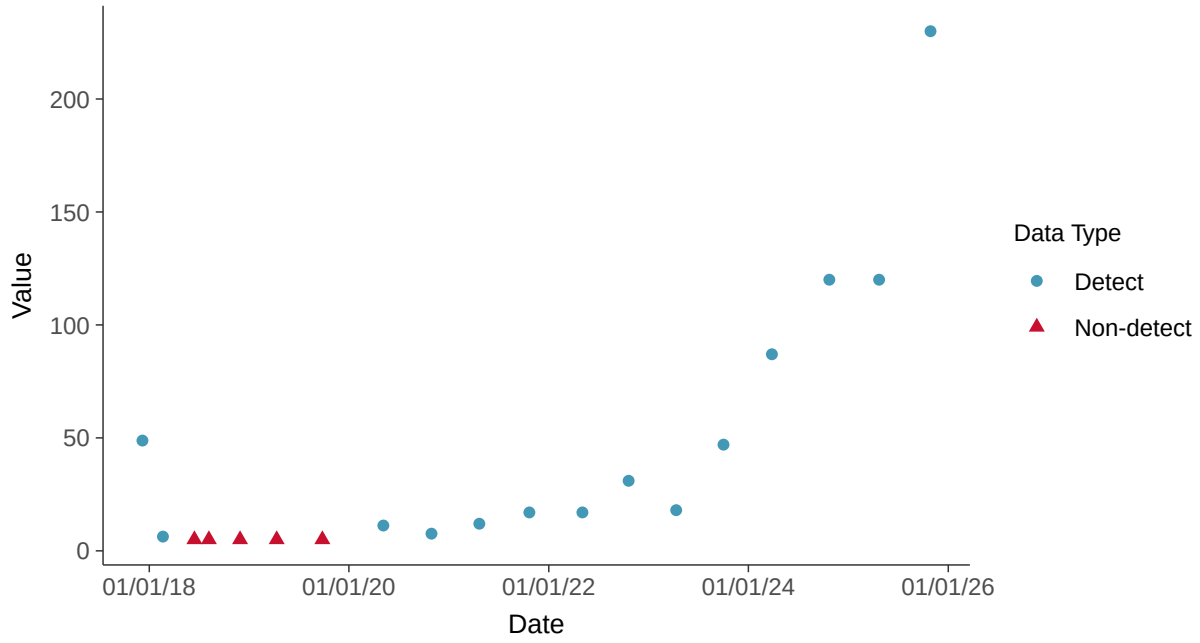


## Appendix IV: Molybdenum, MW-17003

ID: 16_2_119

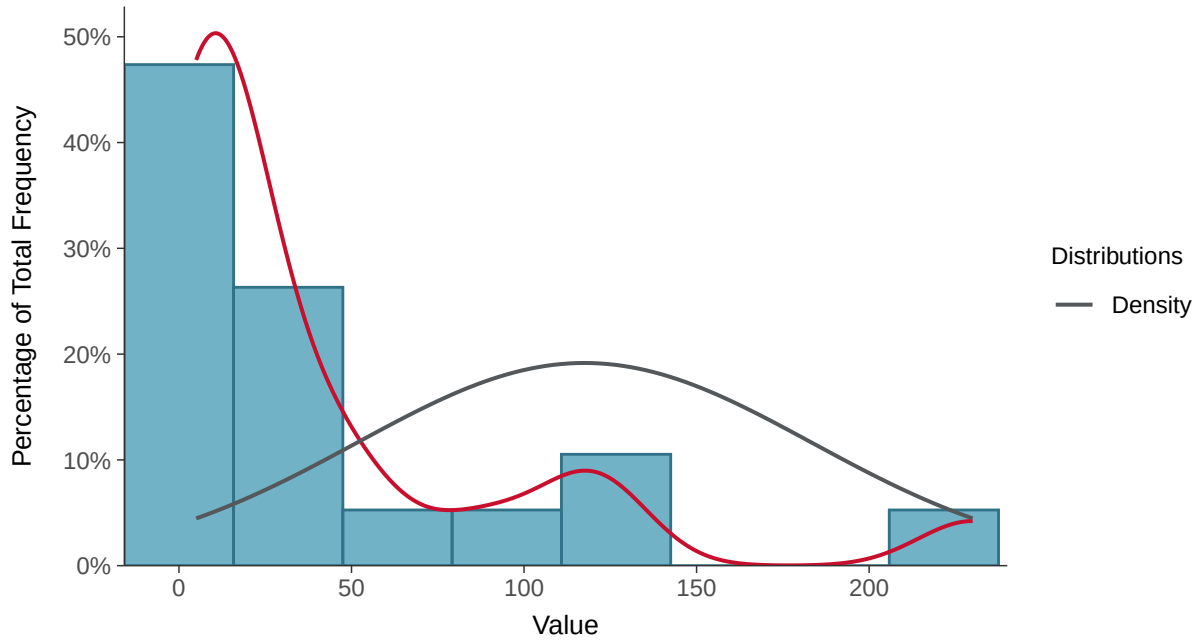
**Scatter Plot**

Molybdenum, MW-17003 (ug/L)



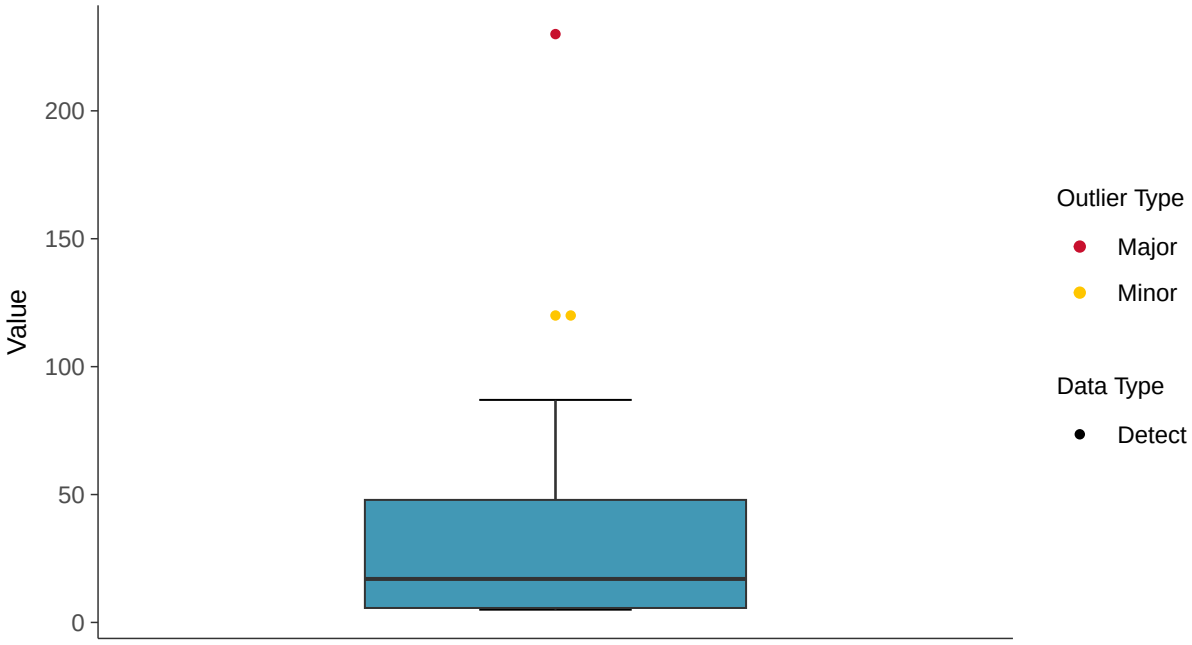

**Histogram**

Molybdenum, MW-17003 (ug/L)



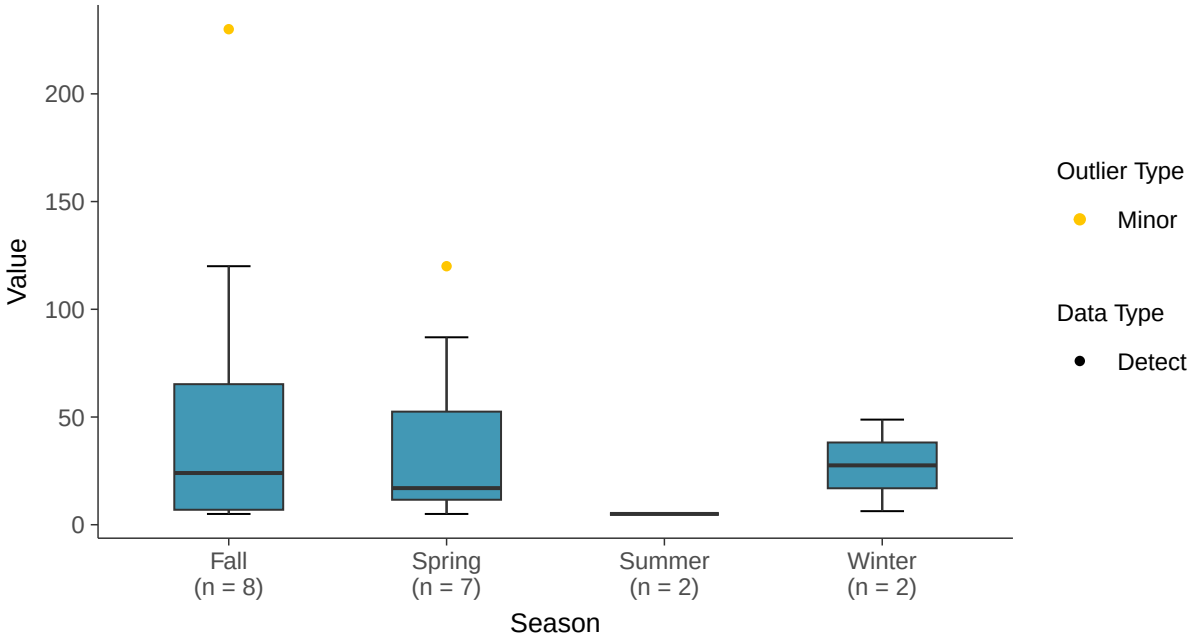
## Boxplot

Molybdenum, MW-17003 (ug/L)



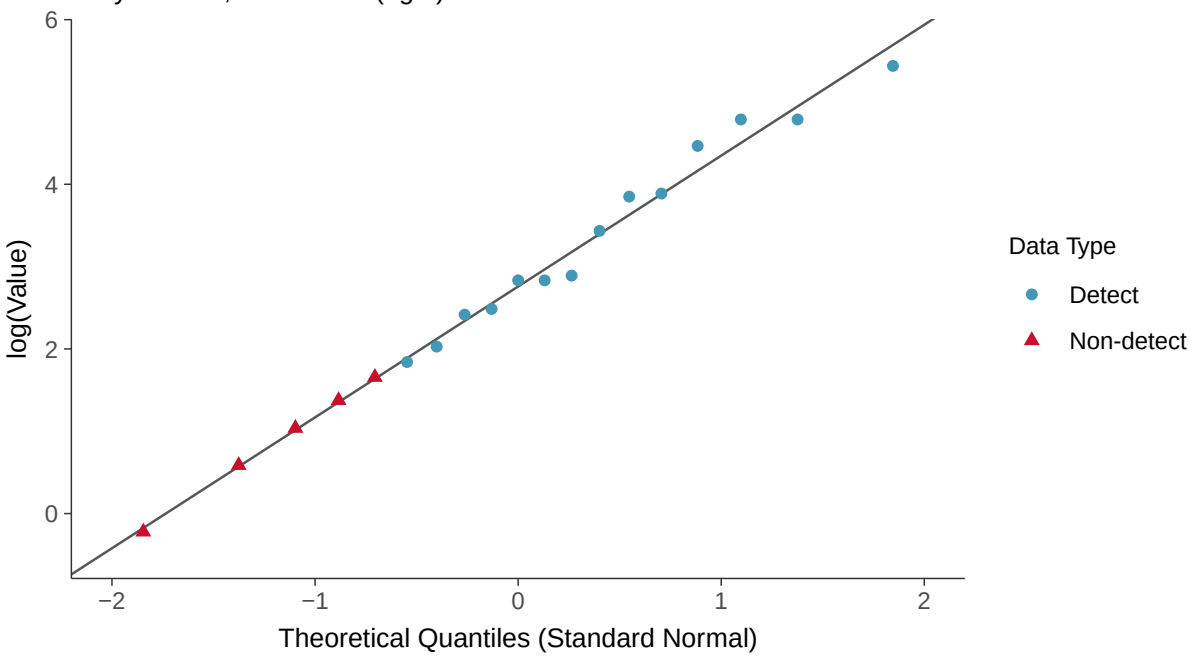

## Boxplot by Season

Molybdenum, MW-17003 (ug/L)



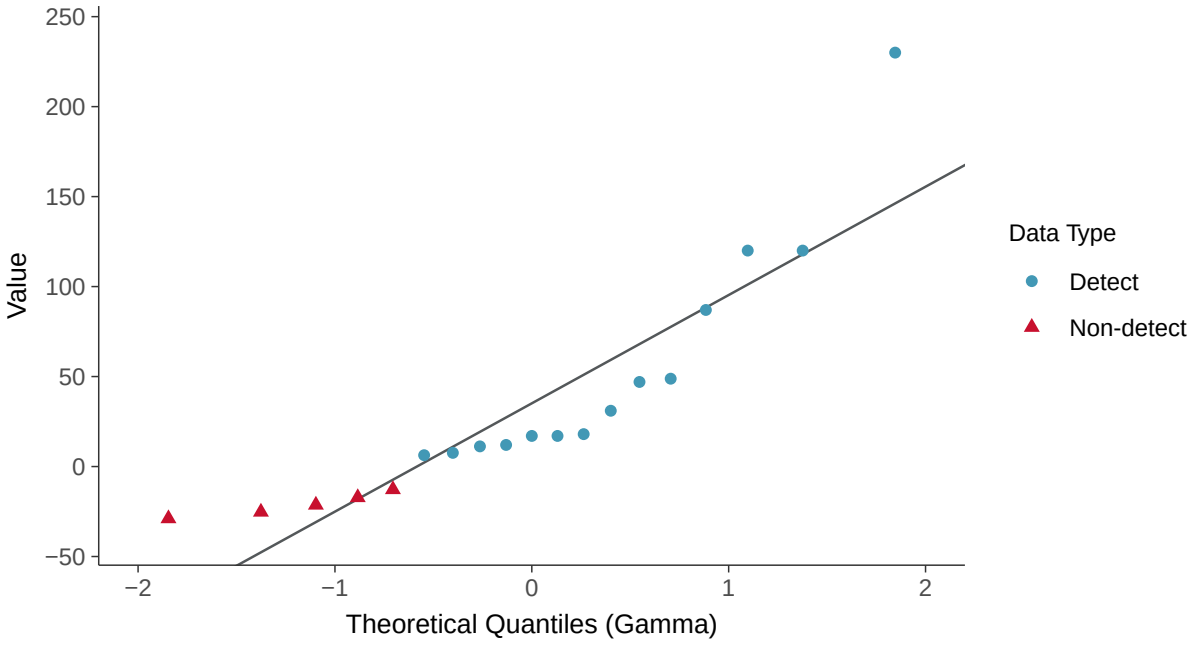
**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17003 (ug/L)



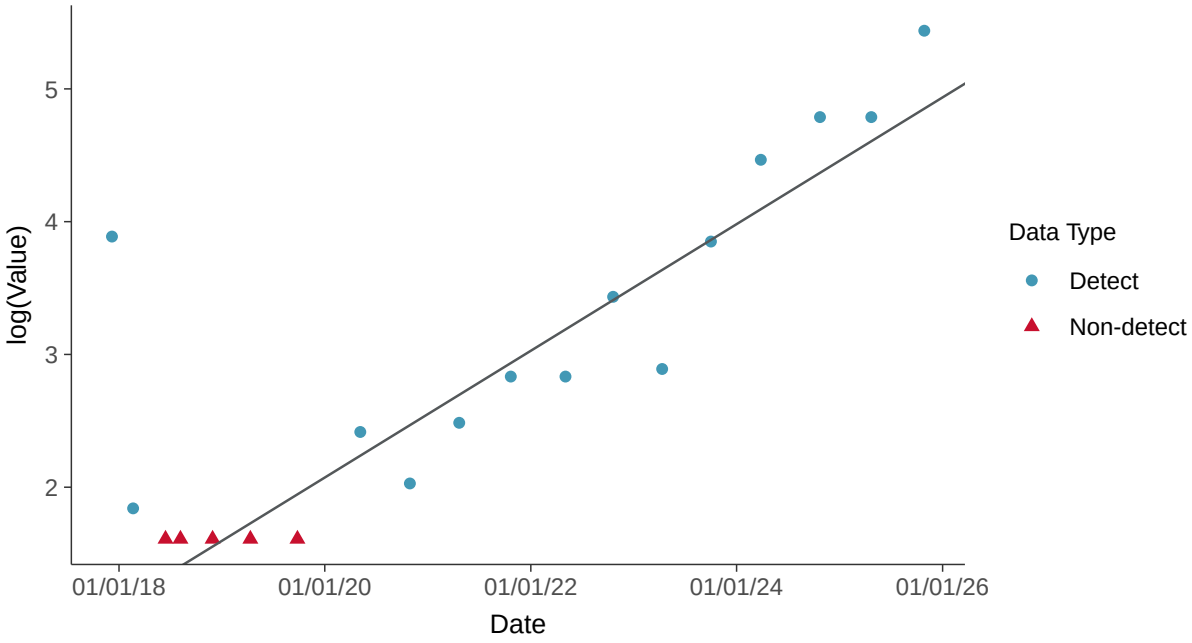

**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17003 (ug/L)



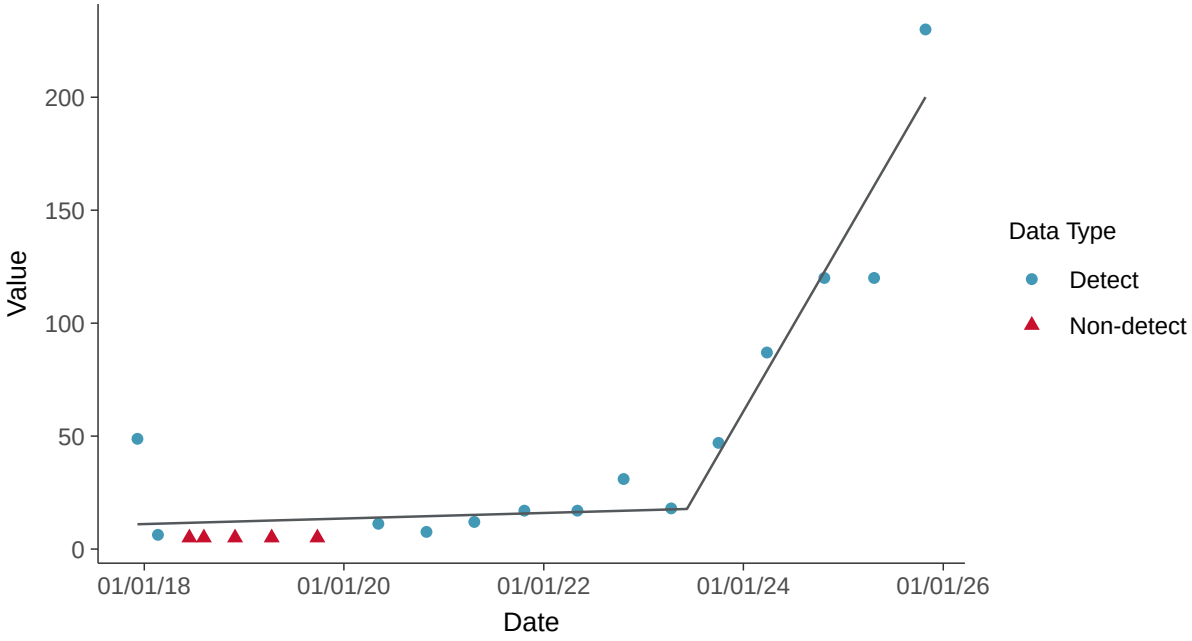
**Trend Regression: Lognormal MLE**

Molybdenum, MW-17003 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17003 (ug/L)

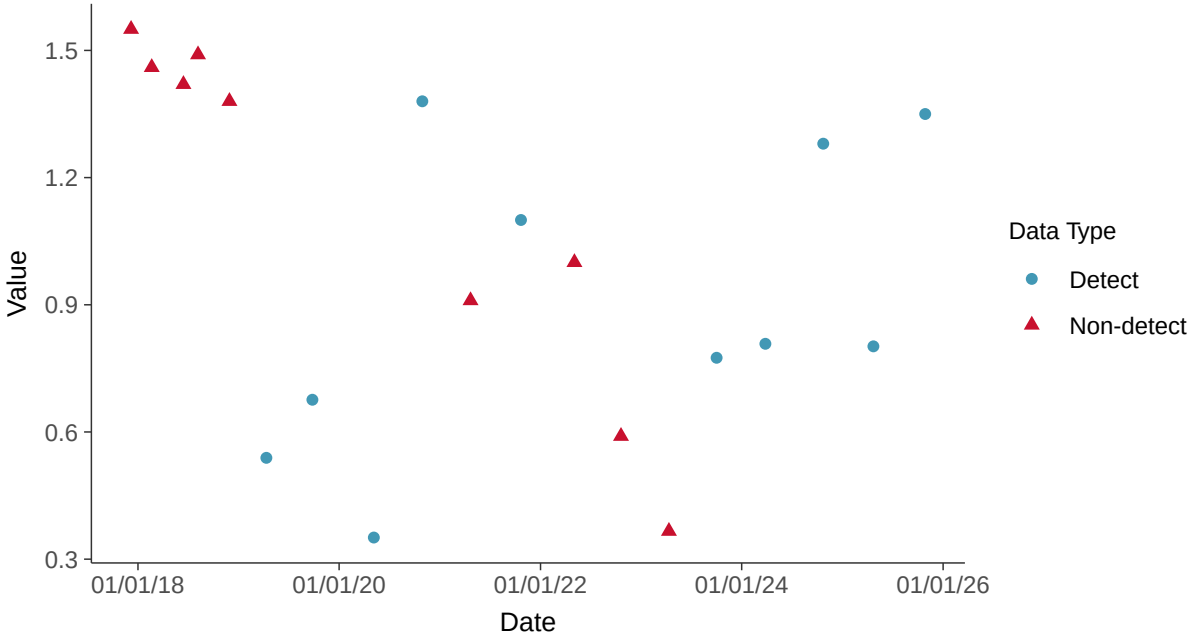


## Appendix IV: Radium-226+228, MW-17003

ID: 16_2_125

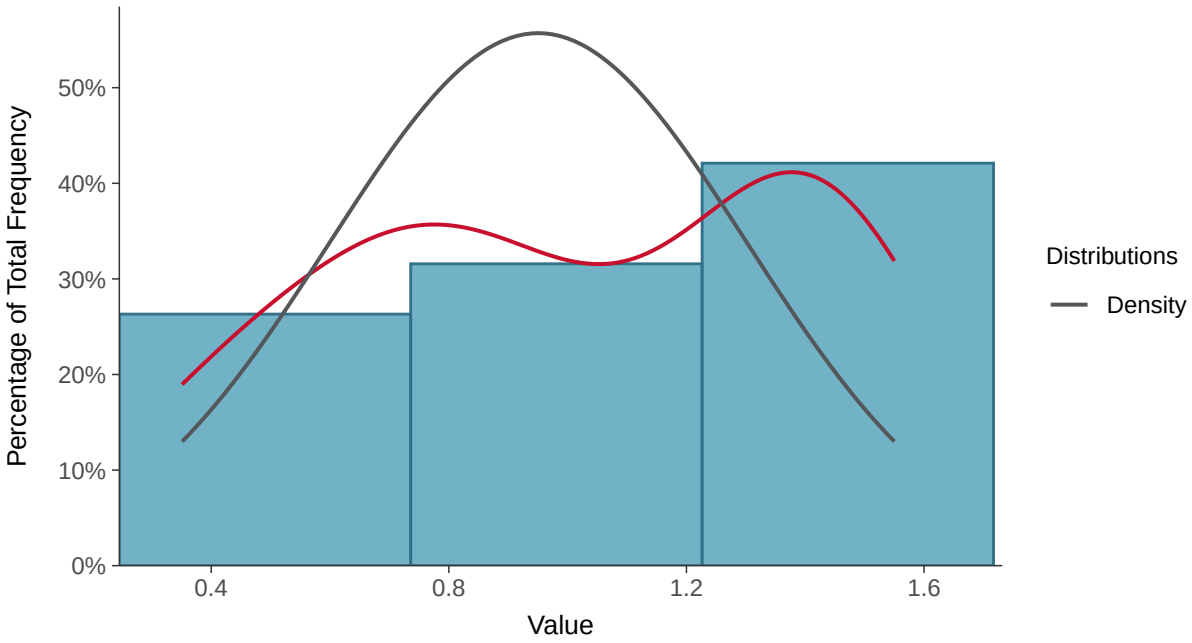
**Scatter Plot**

Radium-226+228, MW-17003 (pCi/L)



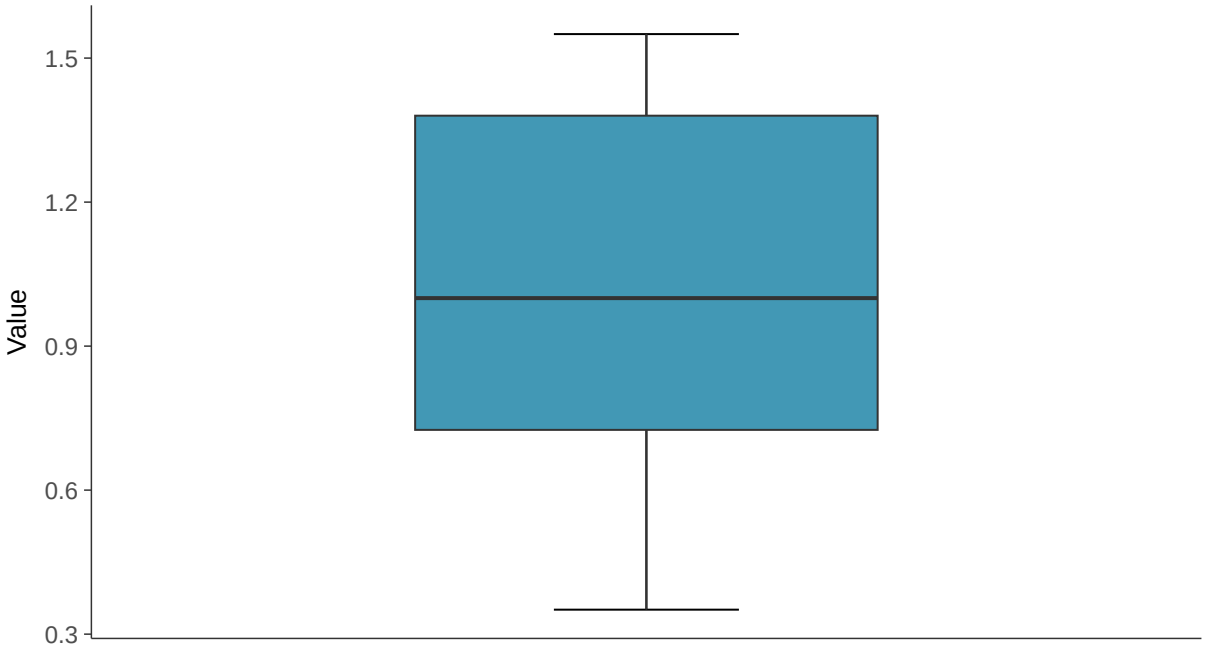

**Histogram**

Radium-226+228, MW-17003 (pCi/L)



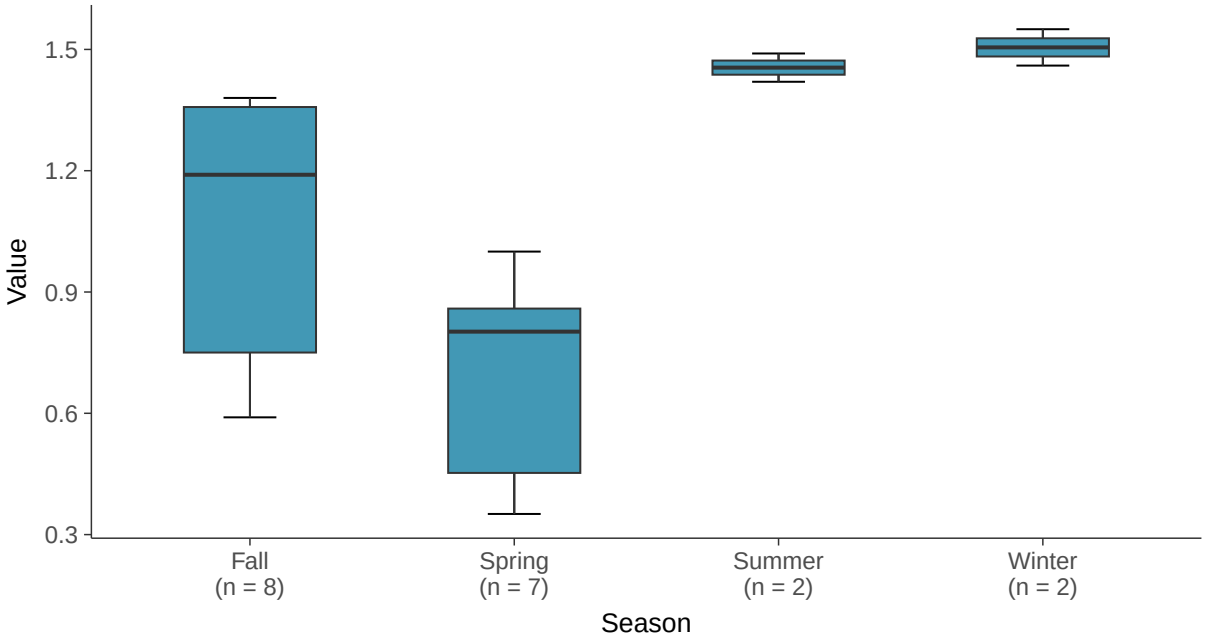
## Boxplot

Radium-226+228, MW-17003 (pCi/L)



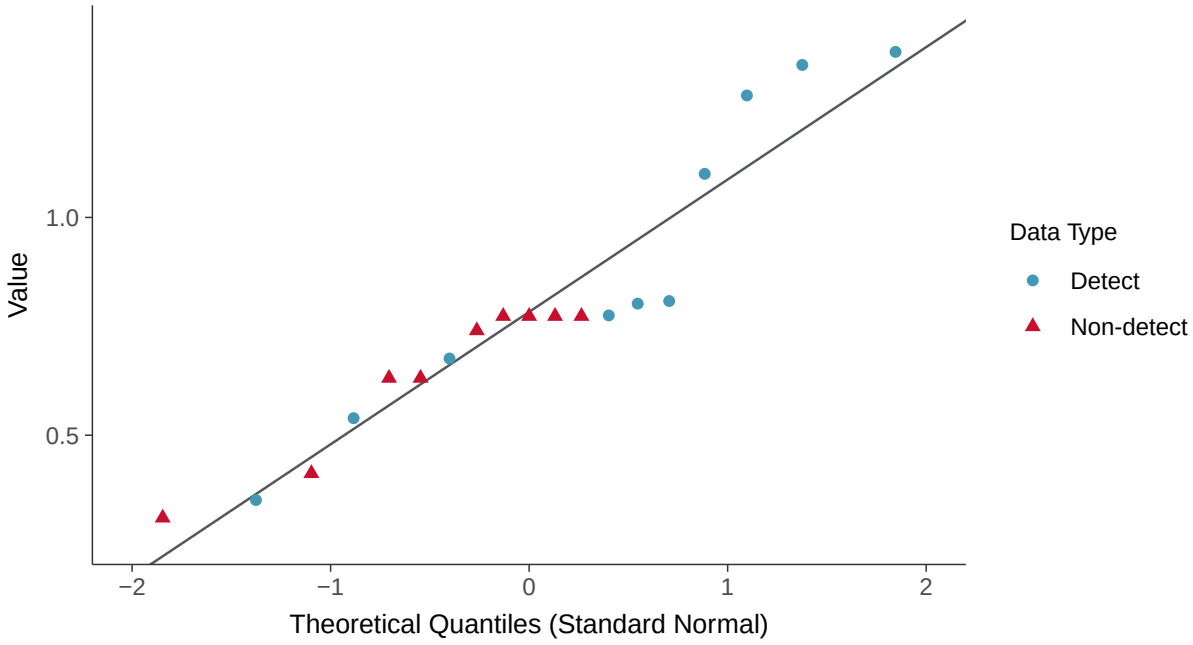

## Boxplot by Season

Radium-226+228, MW-17003 (pCi/L)



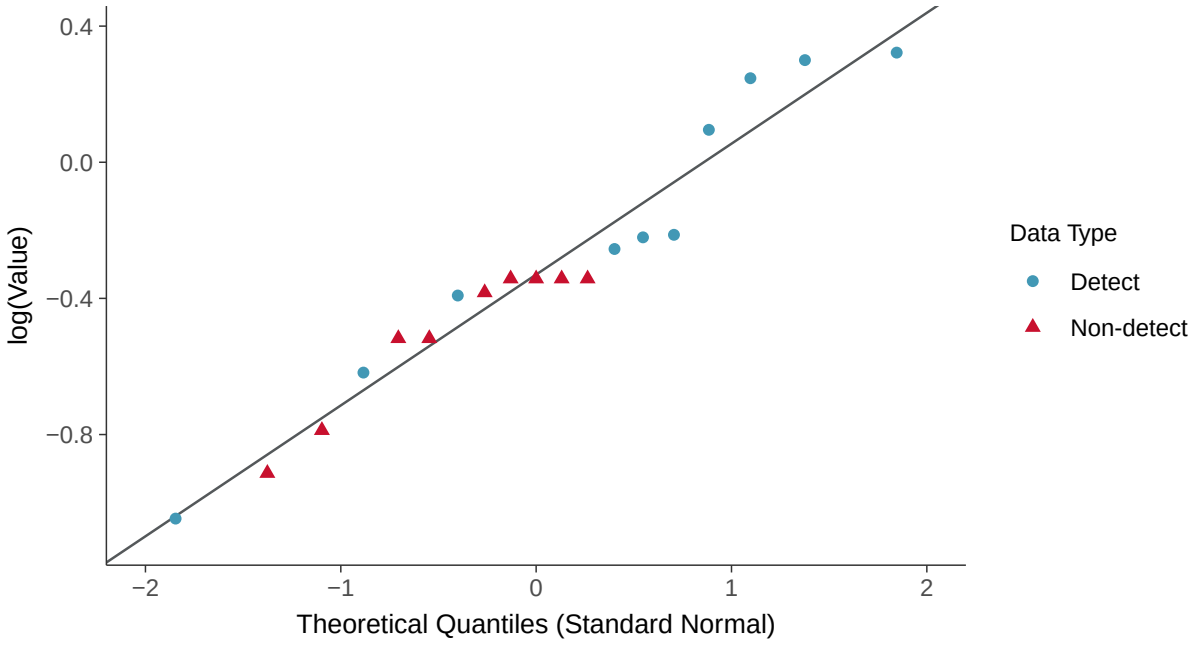
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17003 (pCi/L)



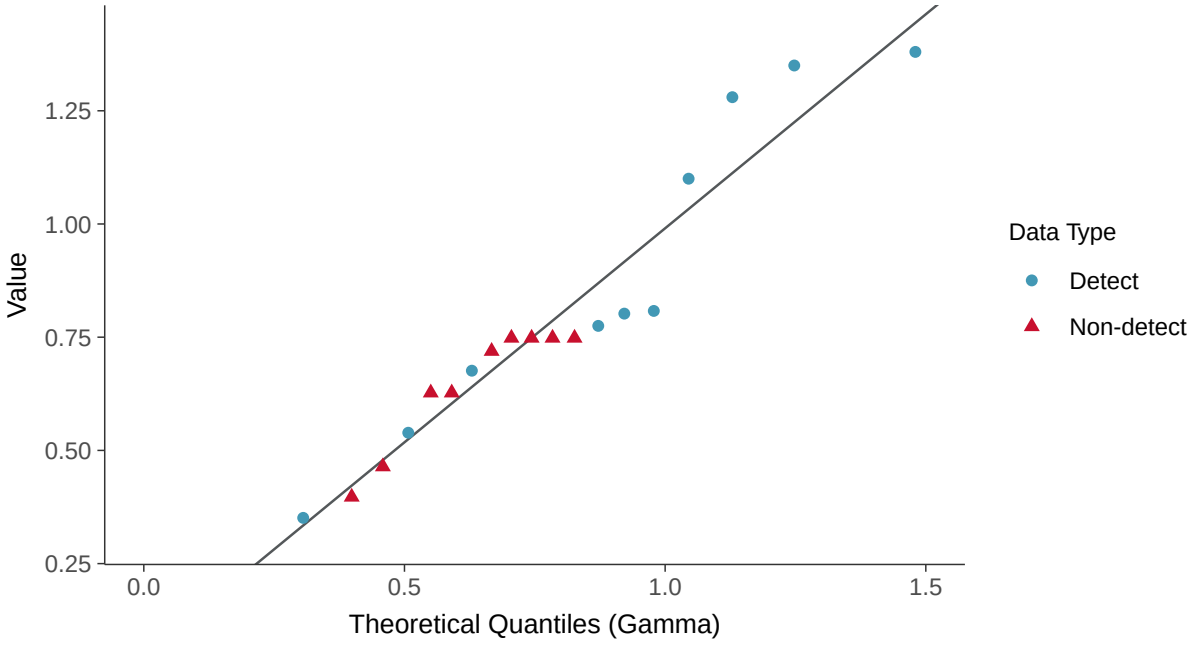

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17003 (pCi/L)



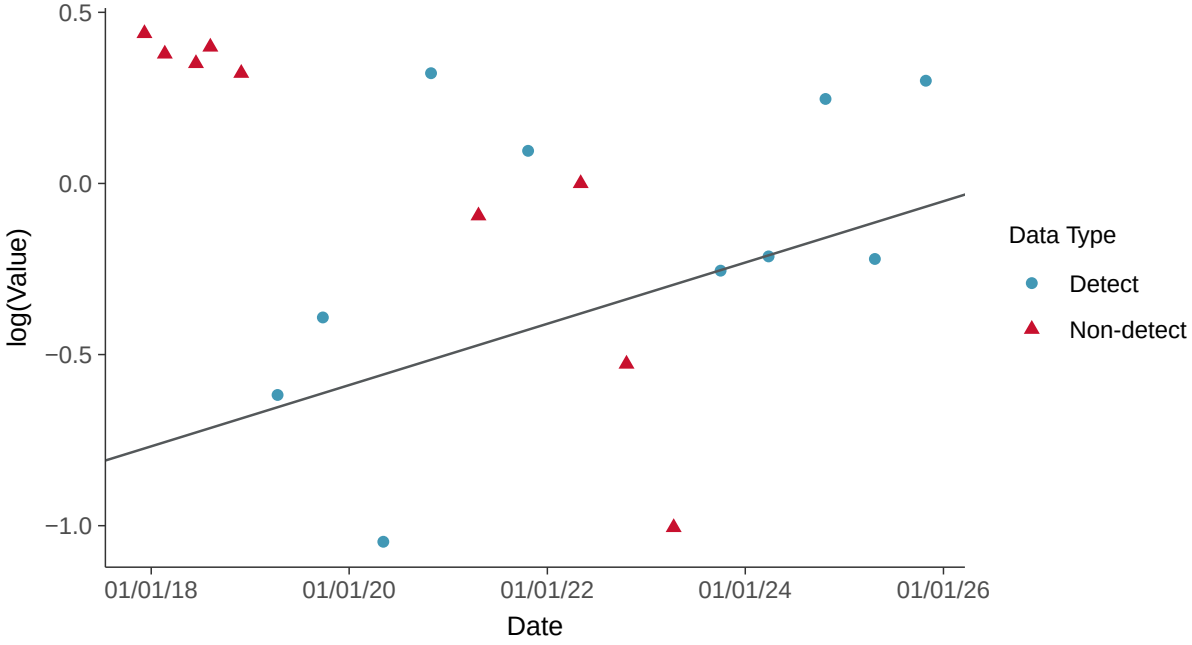
## Gamma Q-Q plot using ROS Imputed Estimates

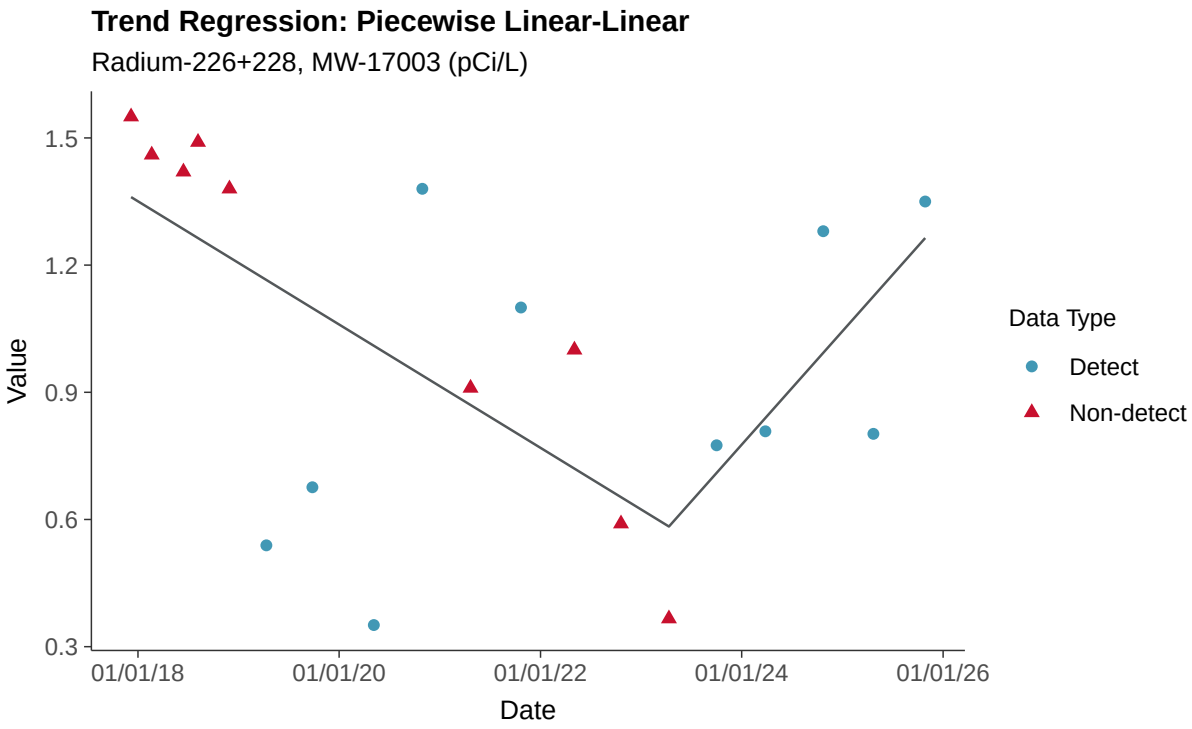
Radium-226+228, MW-17003 (pCi/L)




## Trend Regression: Lognormal MLE

Radium-226+228, MW-17003 (pCi/L)



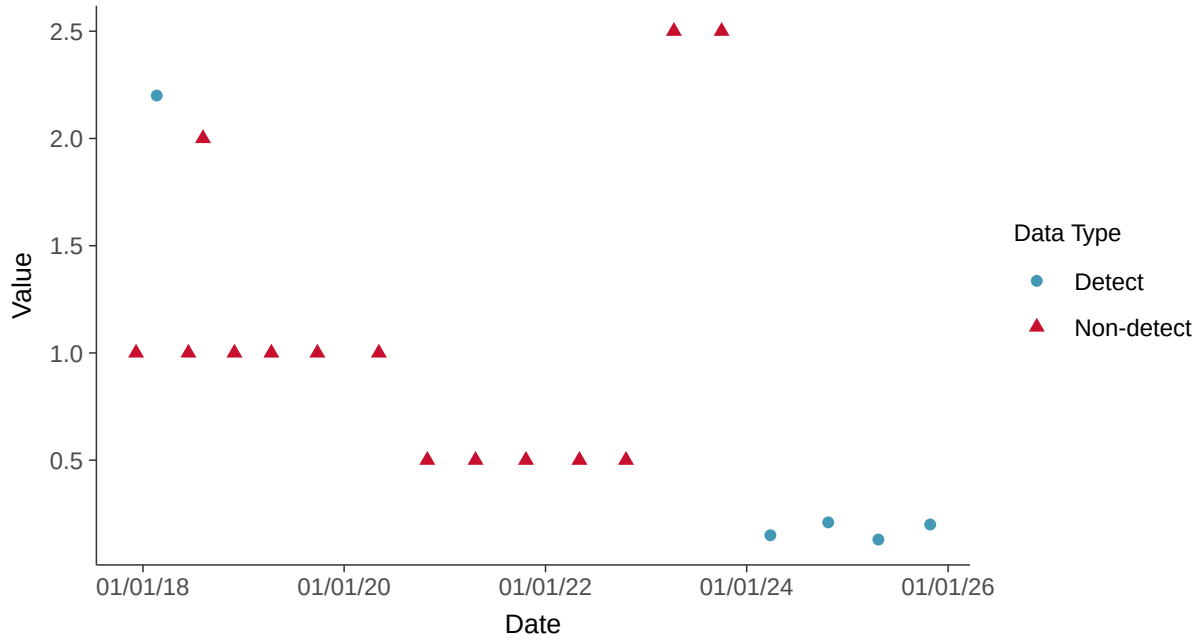

Trend Regression: Piecewise Linear-Linear
Radium-226+228, MW-17003 (pCi/L)
Value
1.5
1.2
0.9
0.6
0.3
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Selenium, MW-17003

ID: 16_2_127

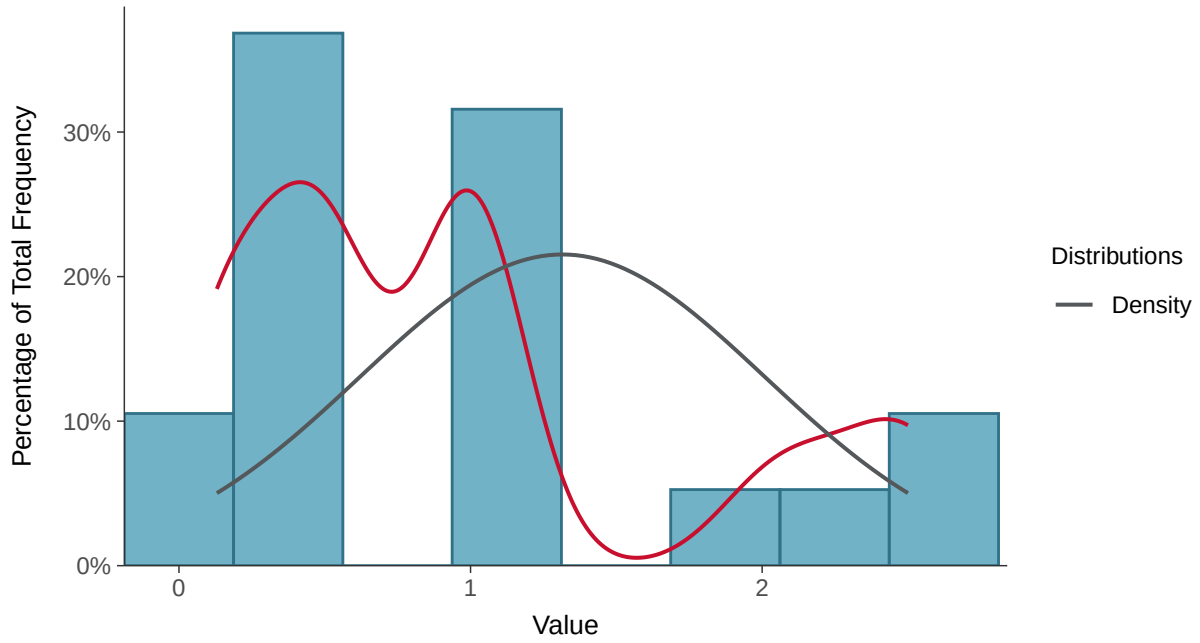
**Scatter Plot**

Selenium, MW-17003 (ug/L)



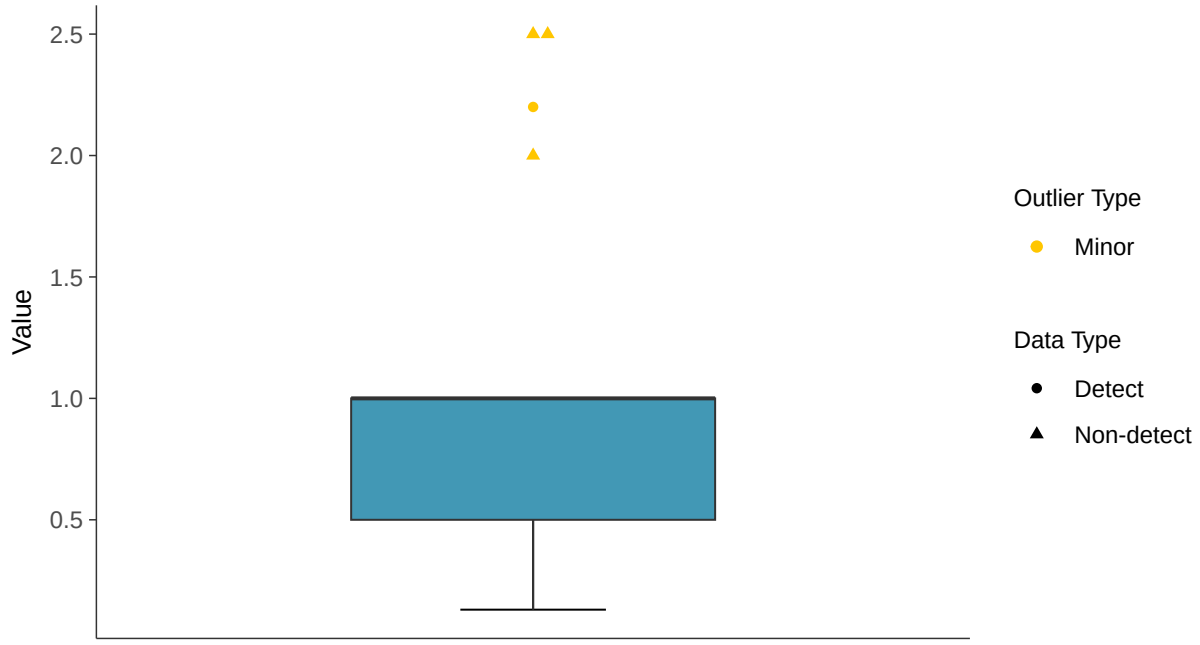

**Histogram**

Selenium, MW-17003 (ug/L)



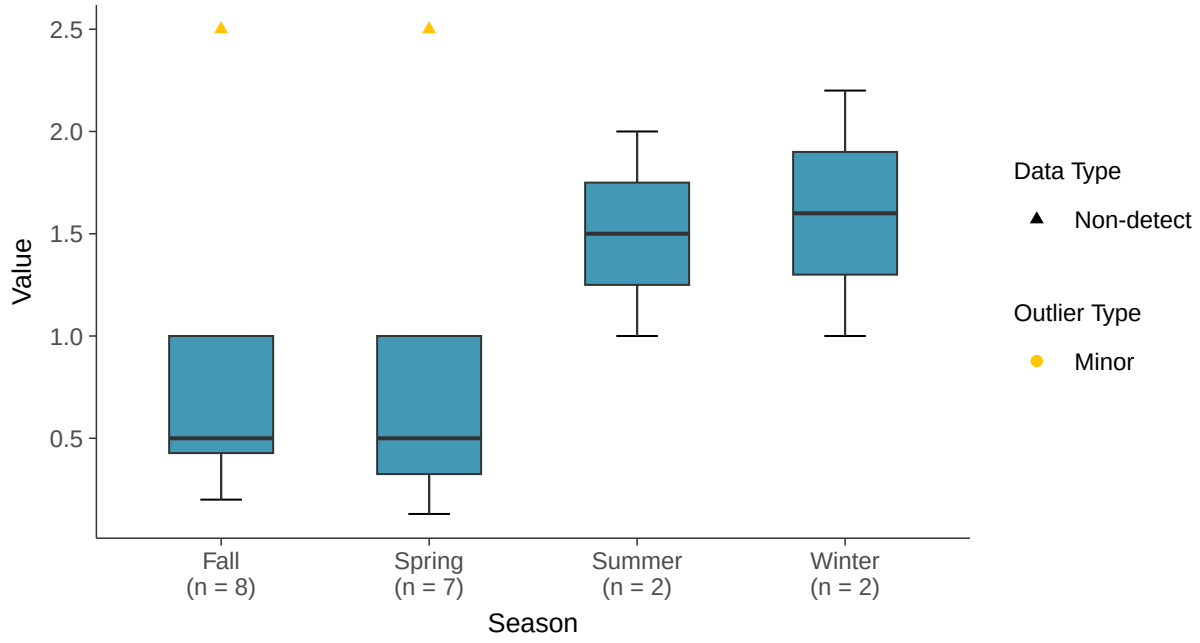
## Boxplot

Selenium, MW-17003 (ug/L)



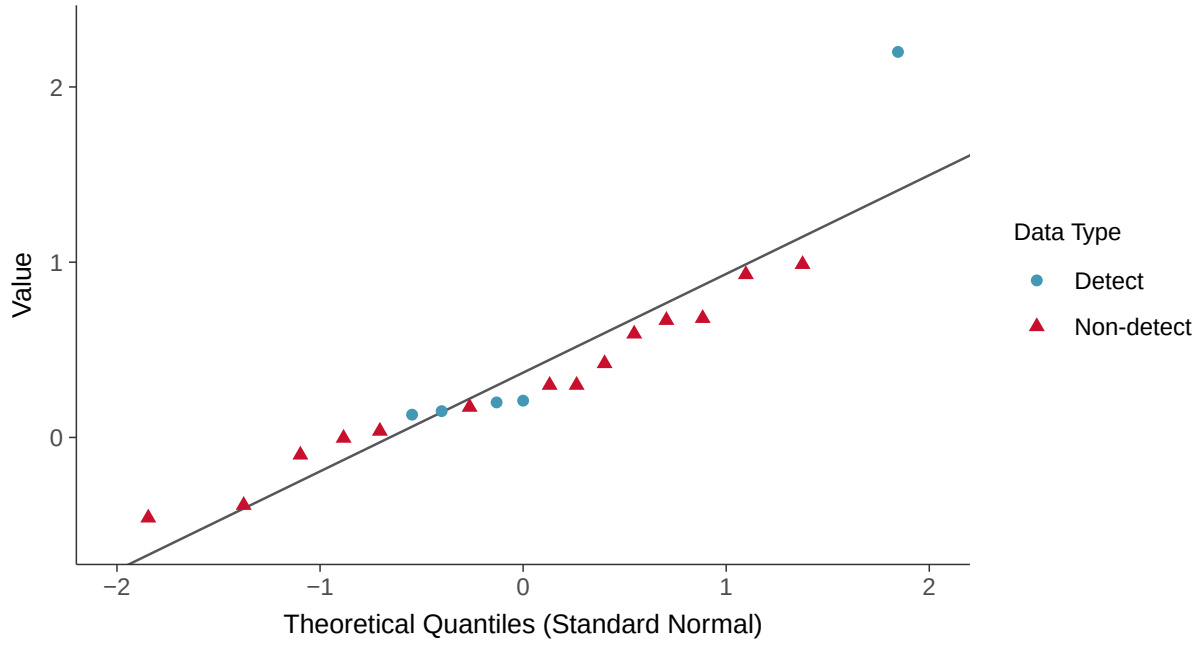

## Boxplot by Season

Selenium, MW-17003 (ug/L)



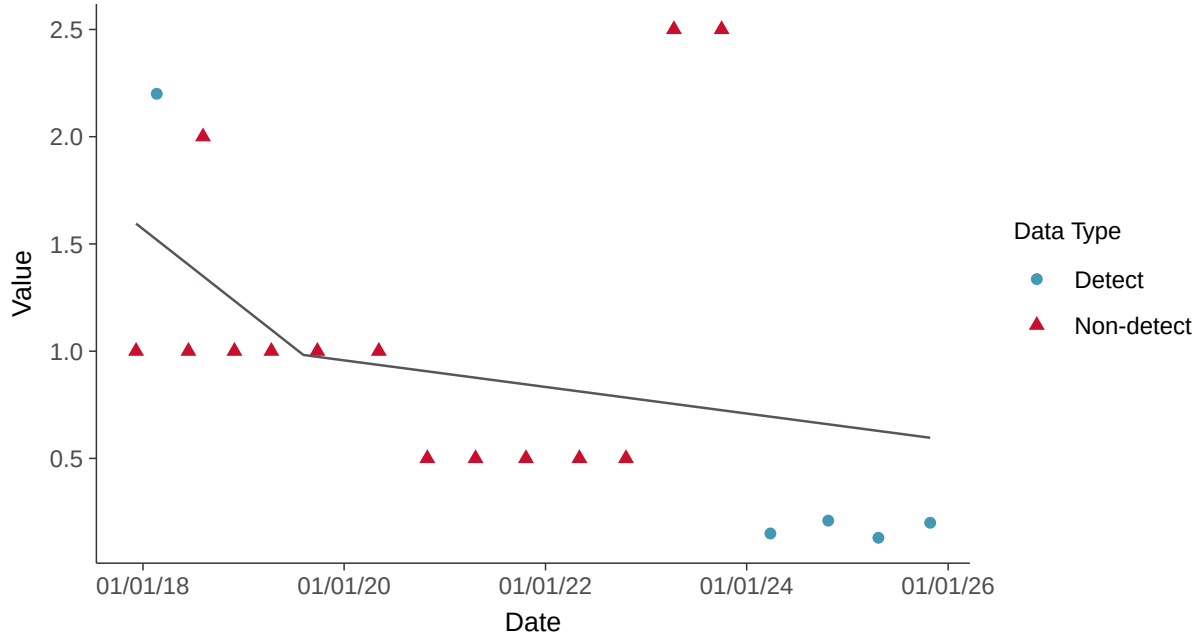
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-17003 (ug/L)



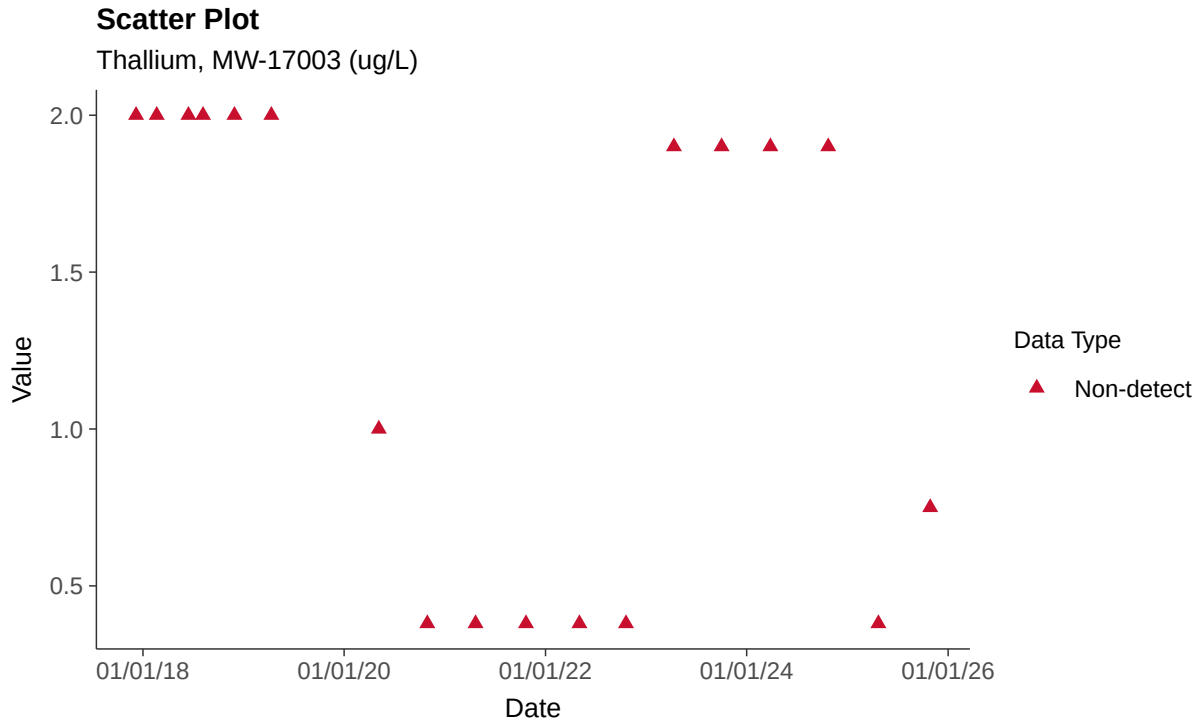

**Trend Regression: Piecewise Linear-Linear**

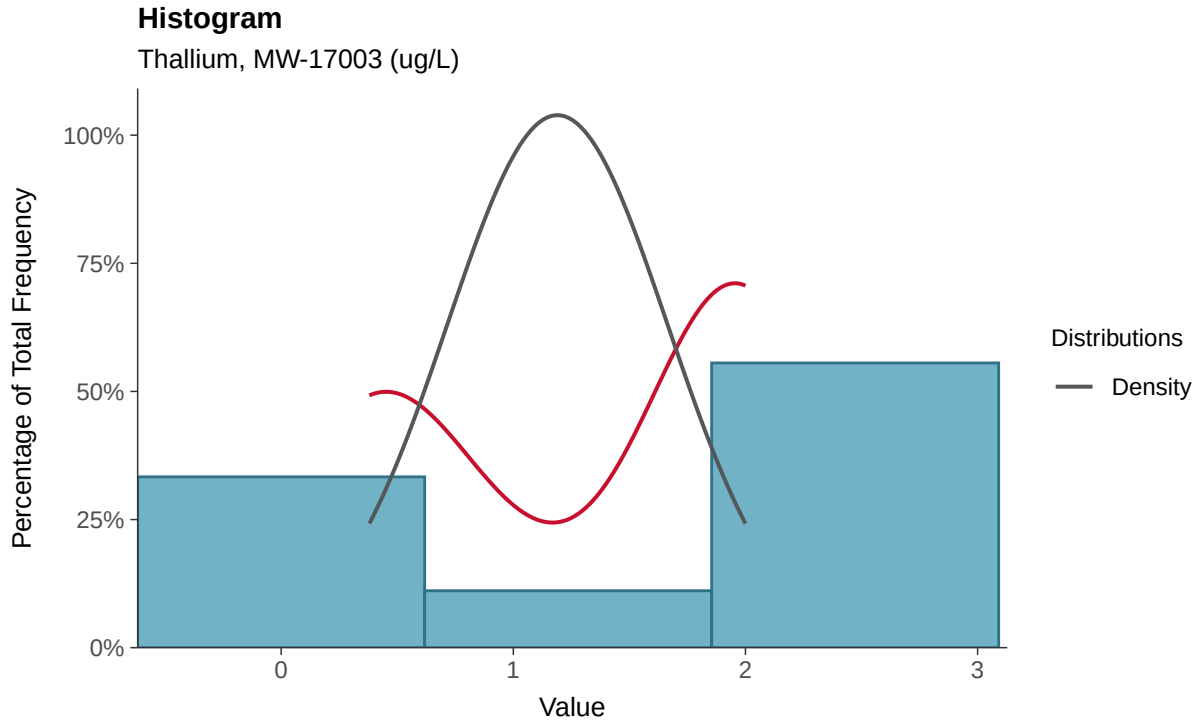
Selenium, MW-17003 (ug/L)



## Appendix IV: Thallium, MW-17003

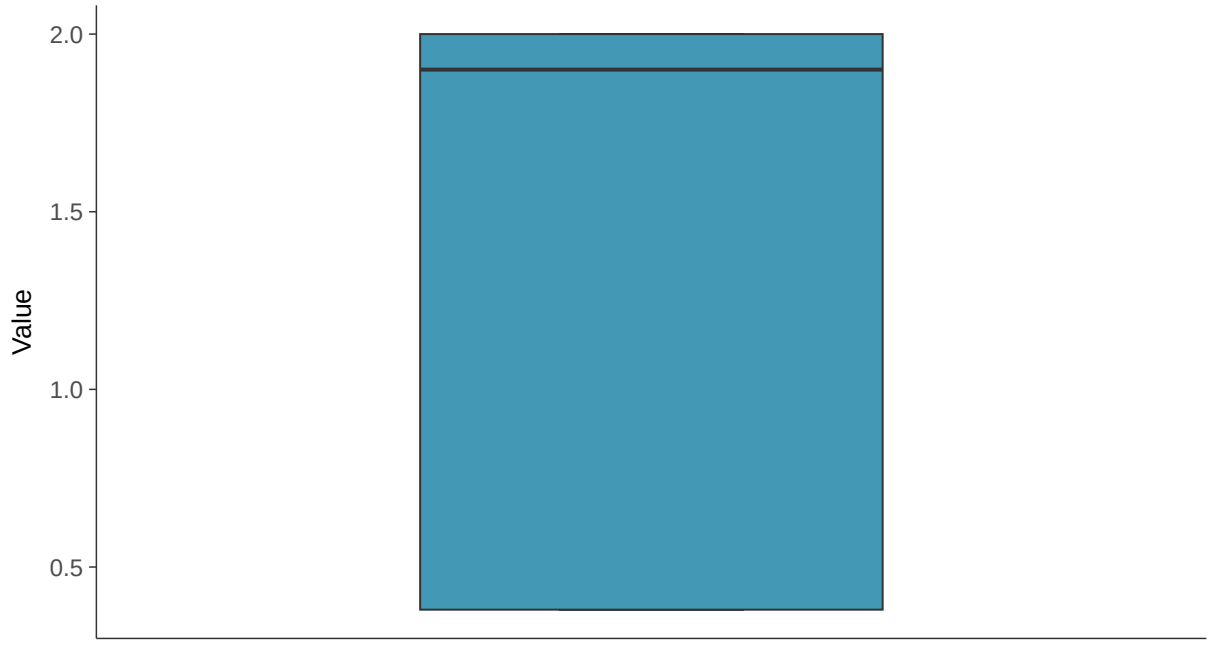
ID: 16_2_131



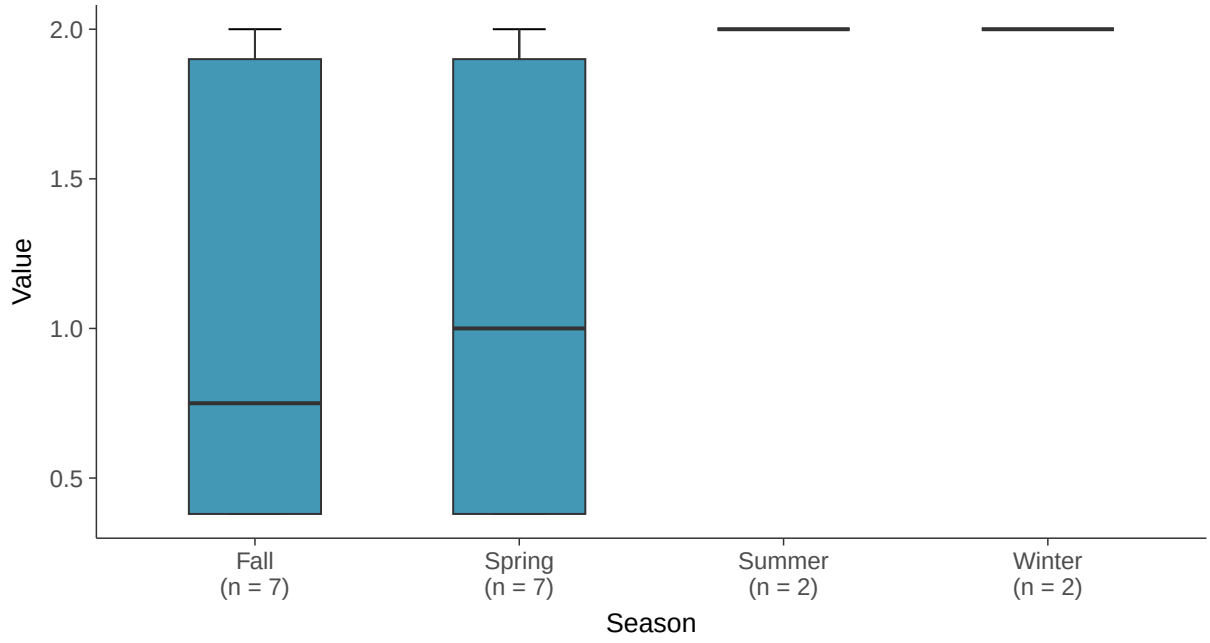
**Boxplot**

Thallium, MW-17003 (ug/L)



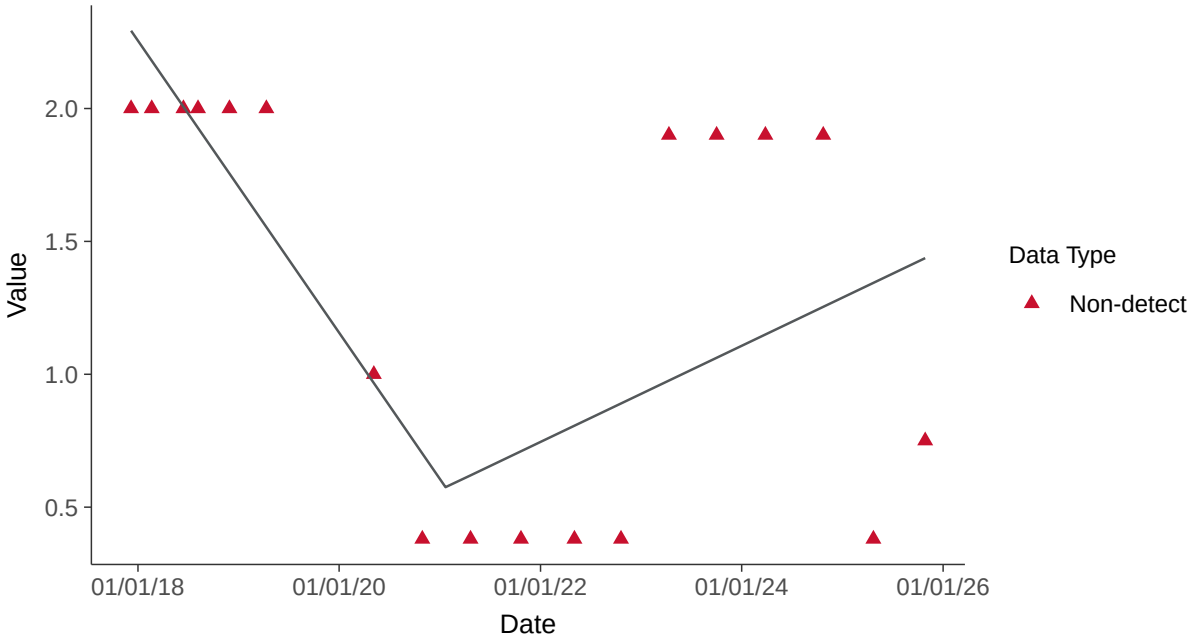

**Boxplot by Season**

Thallium, MW-17003 (ug/L)



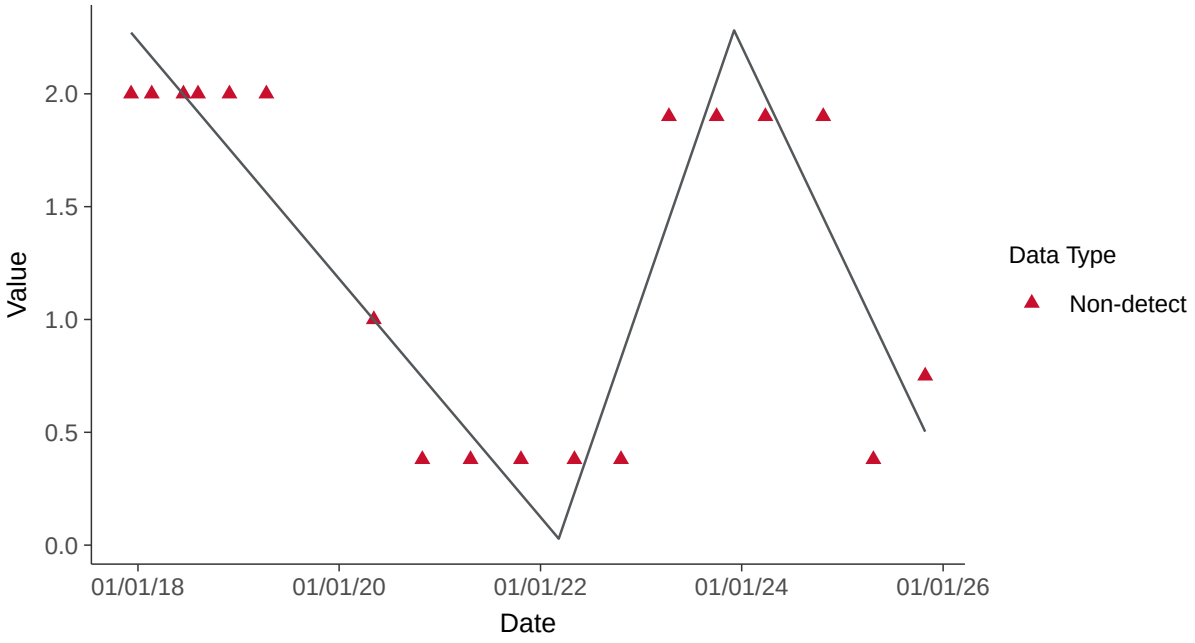
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17003 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Thallium, MW-17003 (ug/L)

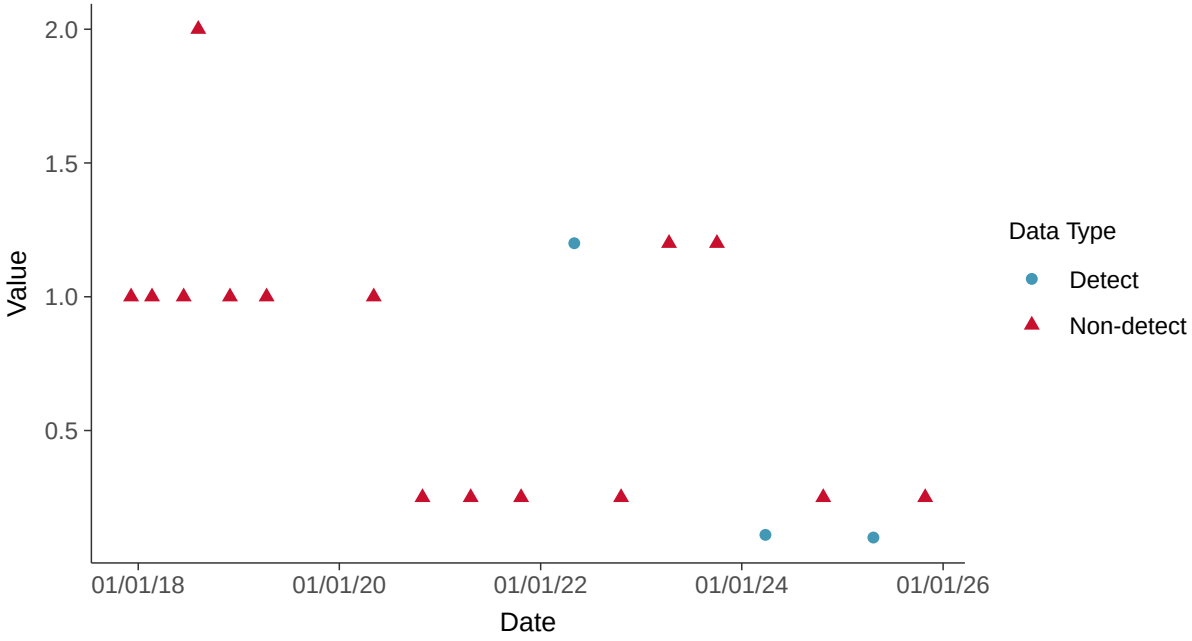


## Appendix IV: Antimony, MW-17004

ID: 17_2_101

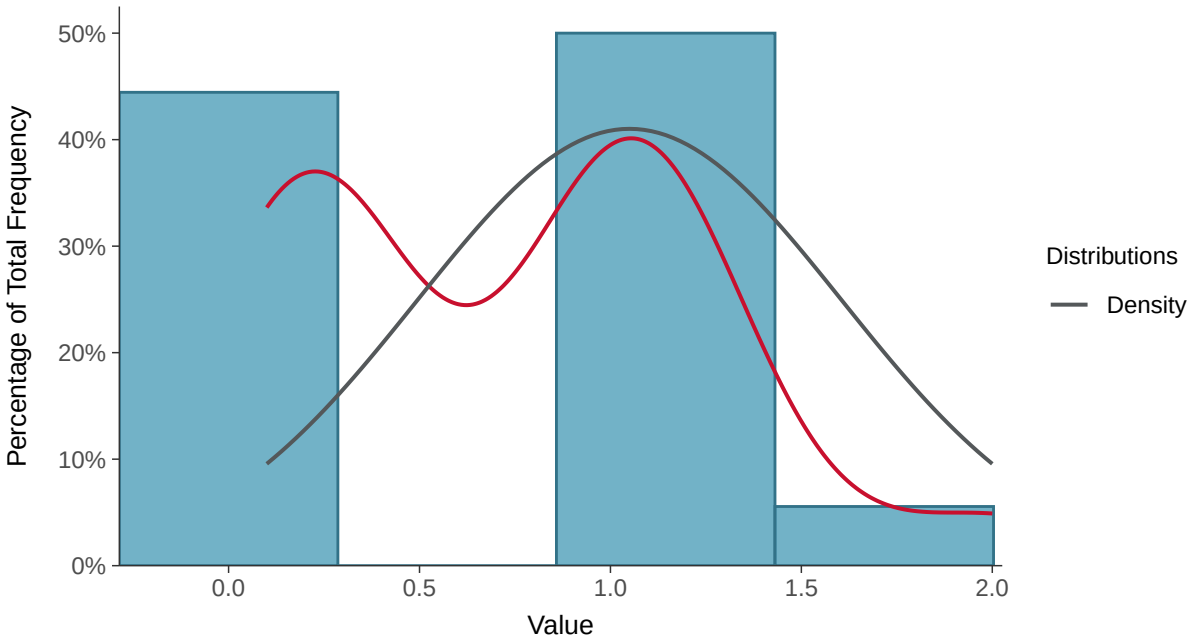
**Scatter Plot**

Antimony, MW-17004 (ug/L)



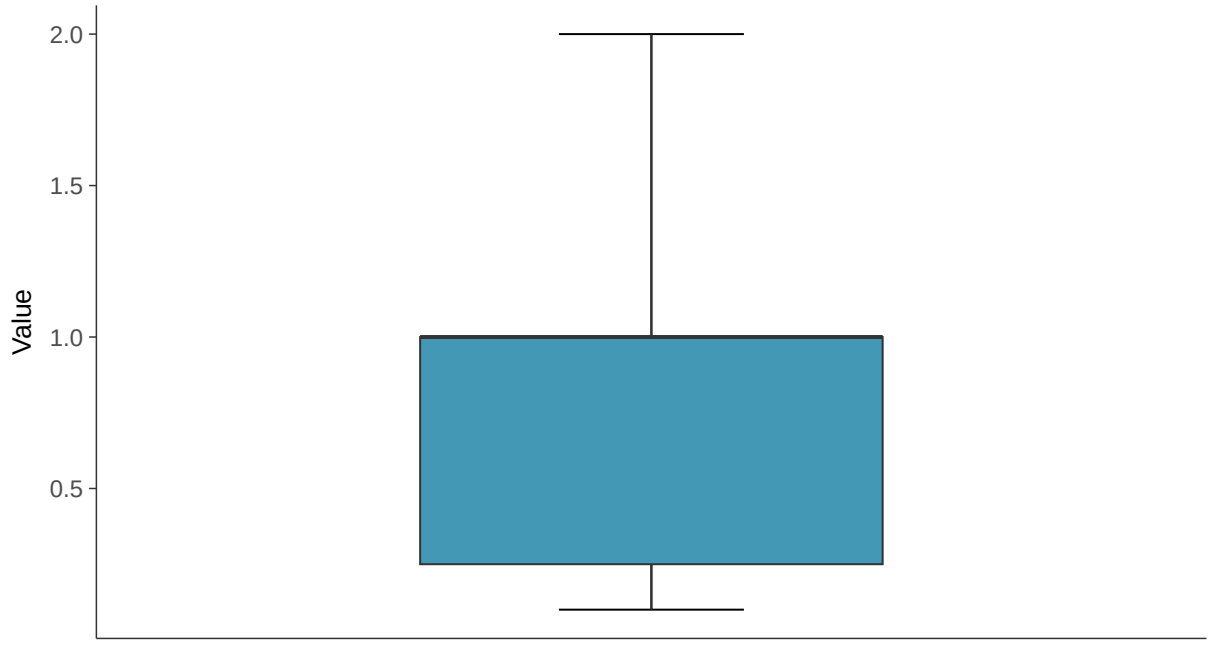

**Histogram**

Antimony, MW-17004 (ug/L)



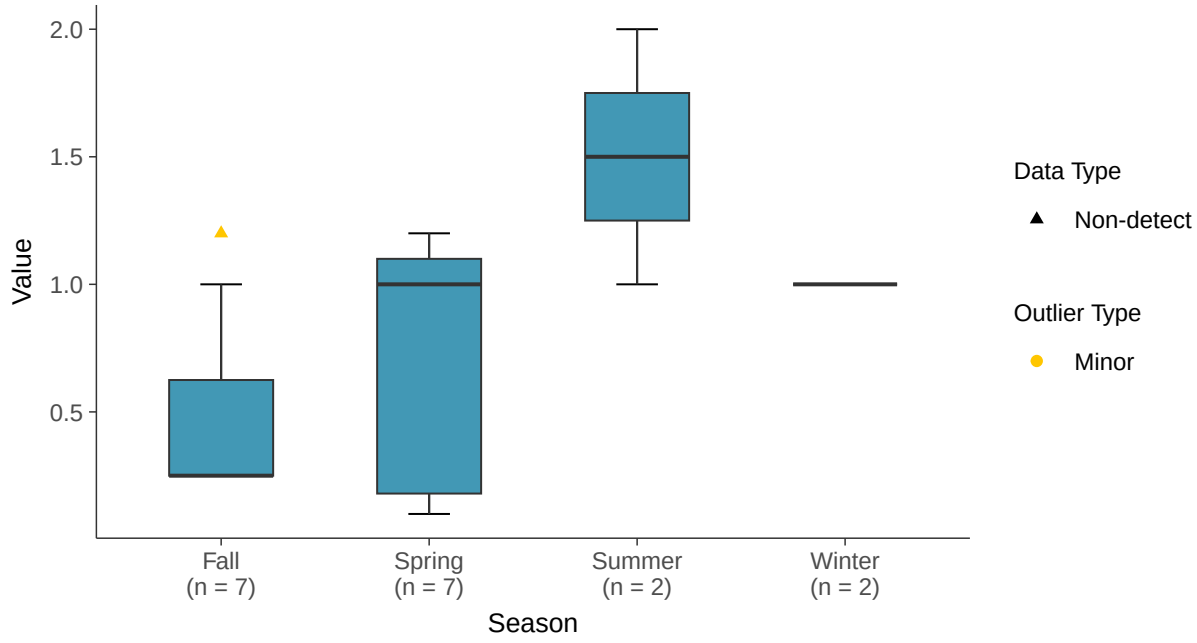
## Boxplot

Antimony, MW-17004 (ug/L)



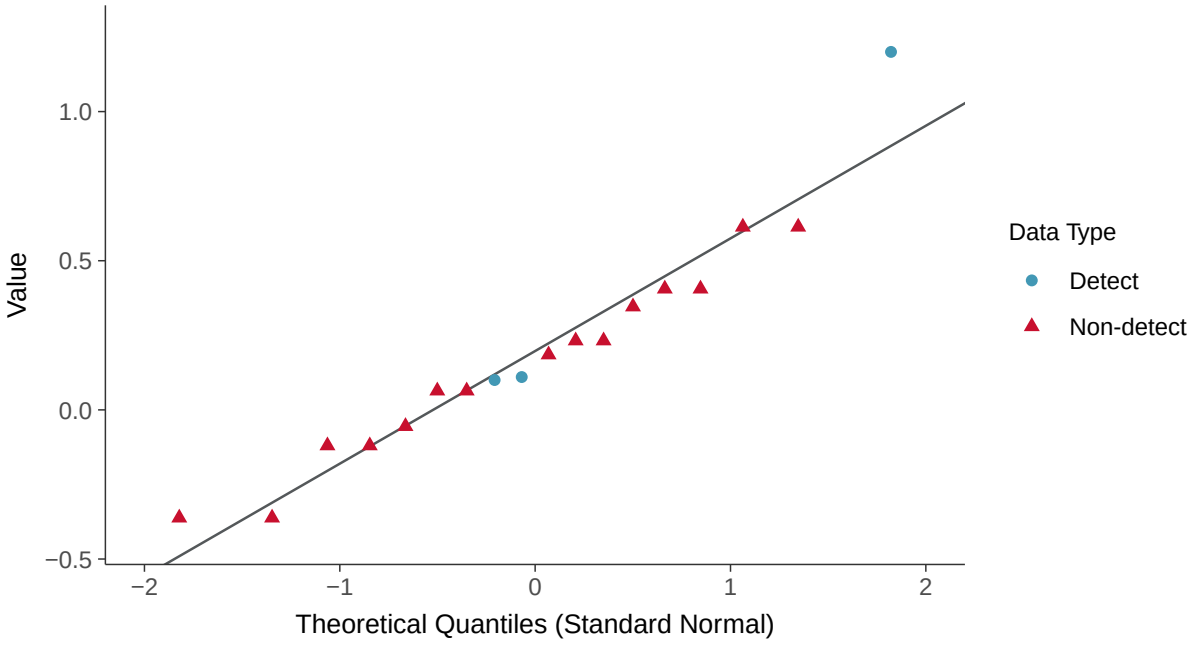

## Boxplot by Season

Antimony, MW-17004 (ug/L)



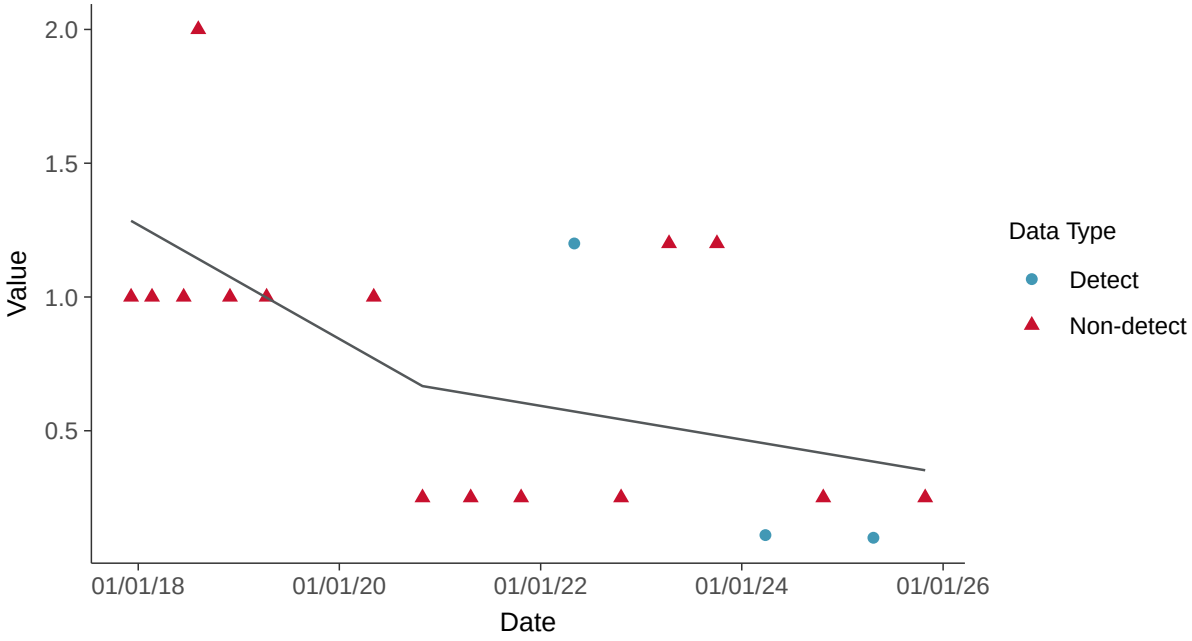
**Normal Q-Q plot using ROS Imputed Estimates**

Antimony, MW-17004 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17004 (ug/L)

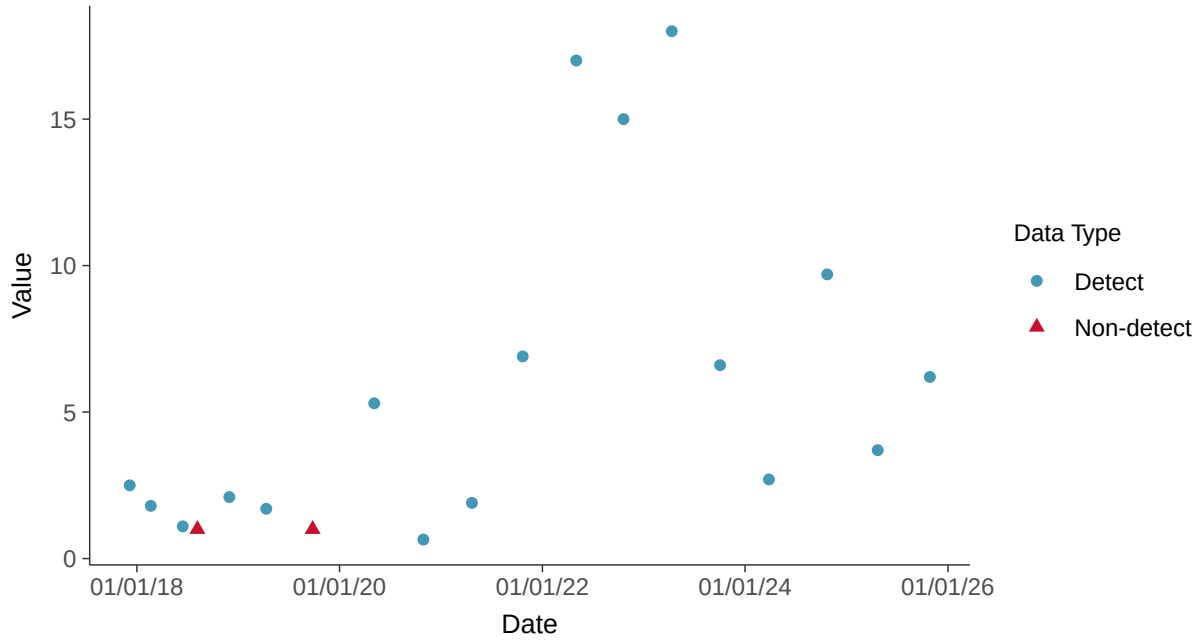


## Appendix IV: Arsenic, MW-17004

ID: 17_2_102

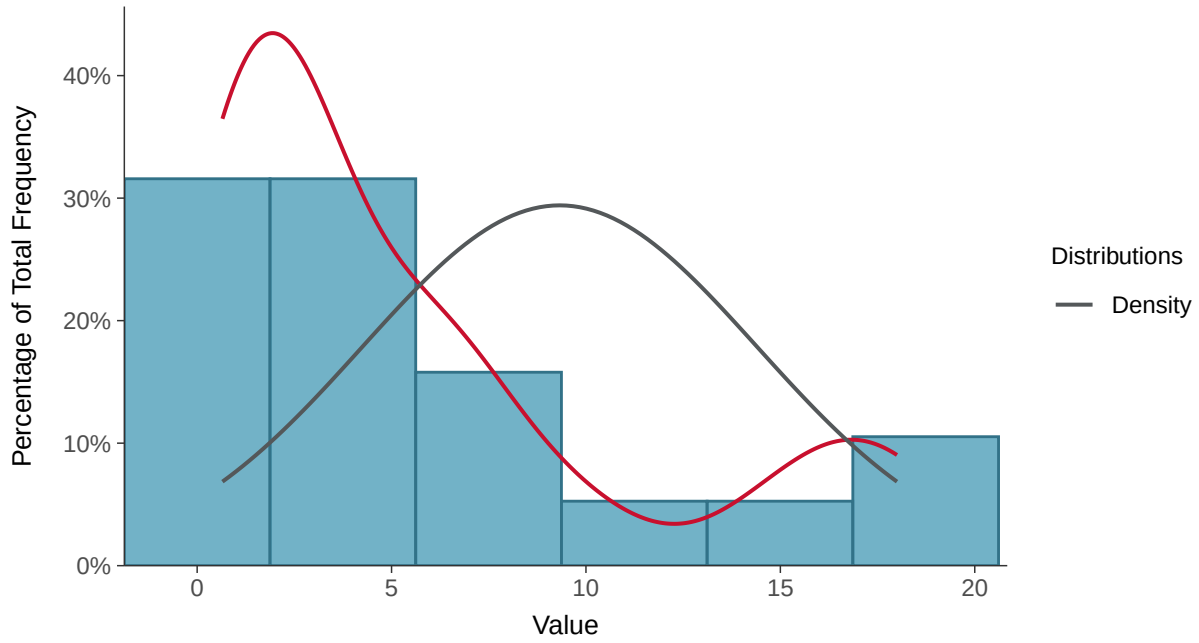
**Scatter Plot**

Arsenic, MW-17004 (ug/L)



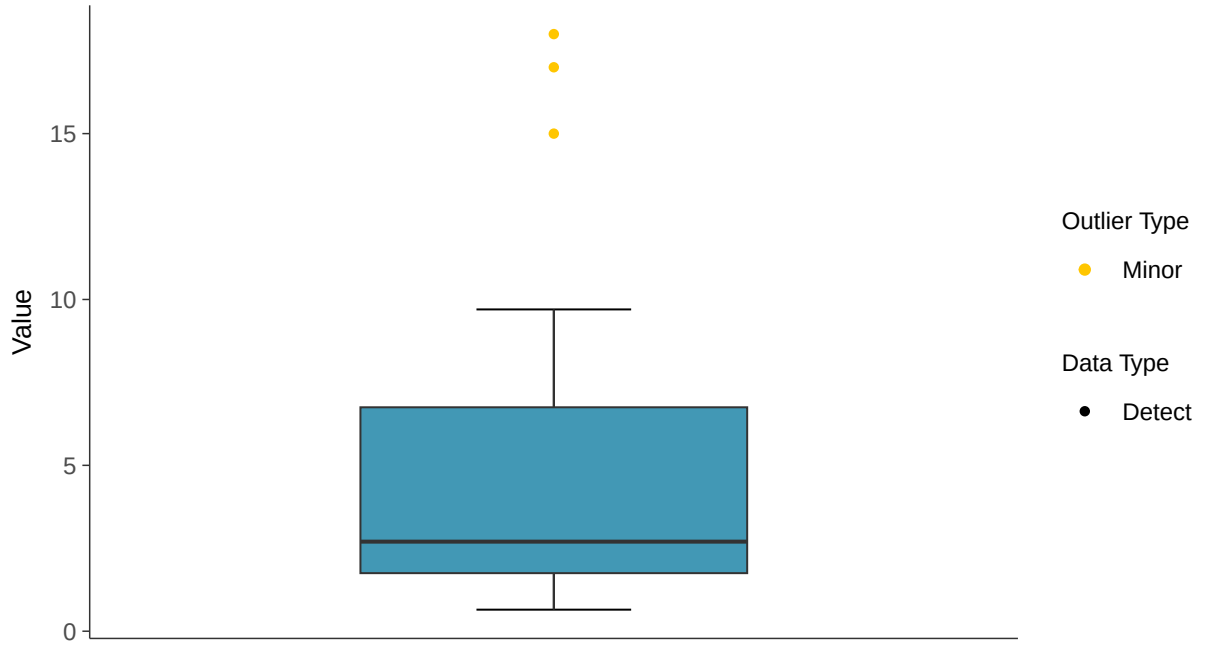

**Histogram**

Arsenic, MW-17004 (ug/L)



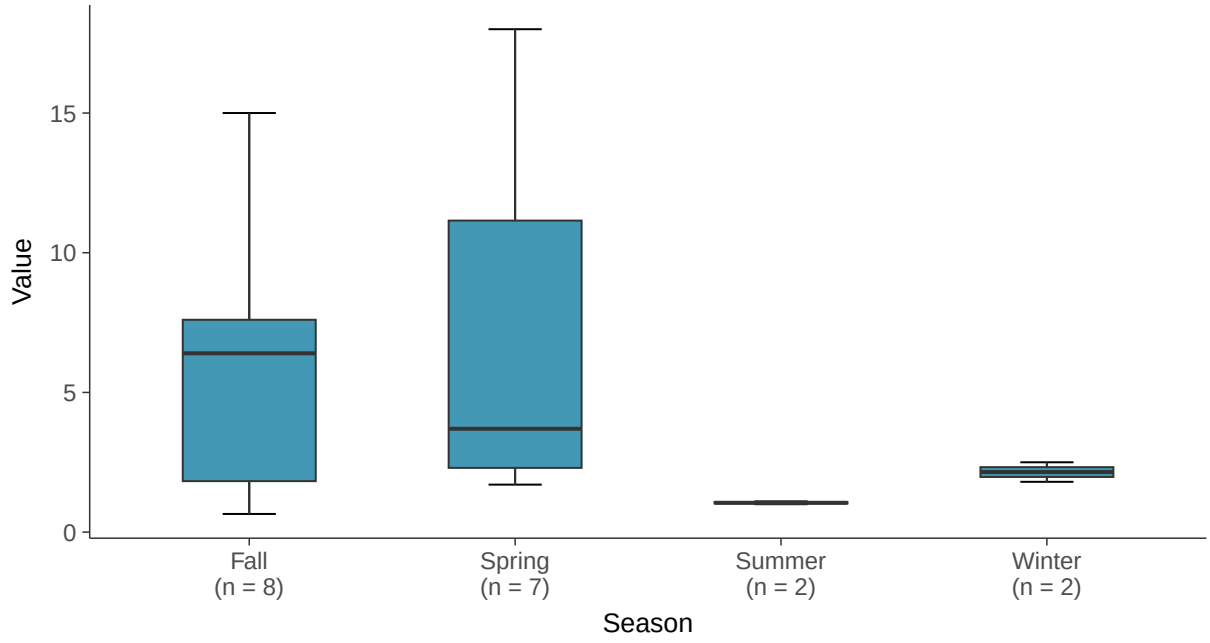
## Boxplot

Arsenic, MW-17004 (ug/L)



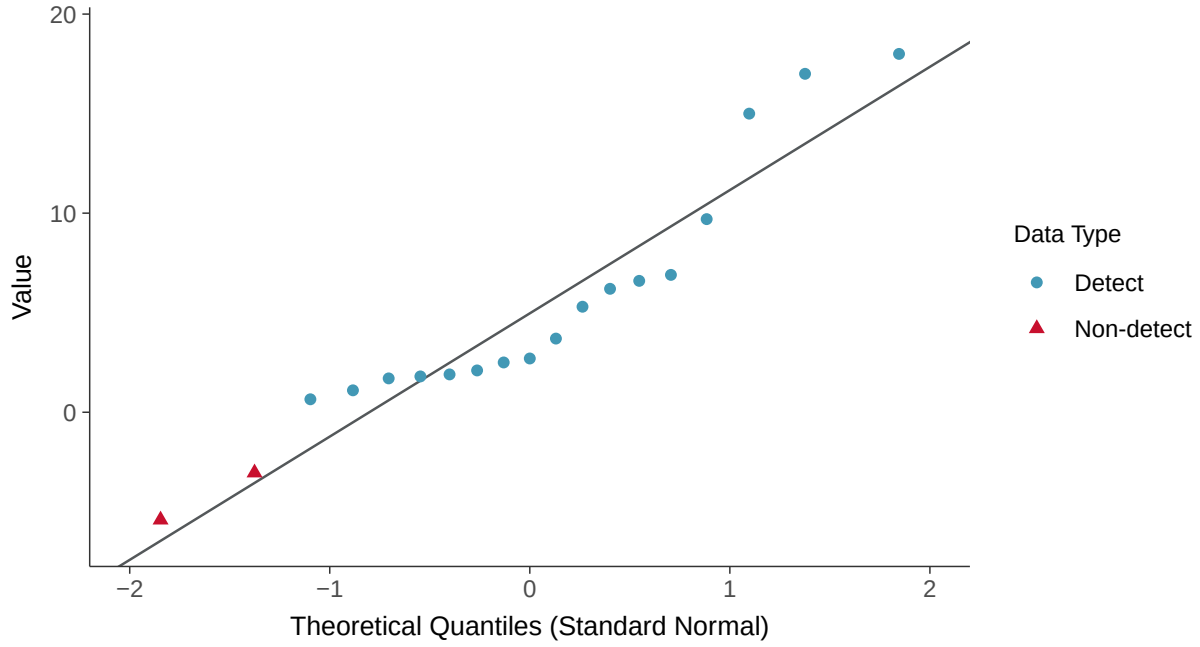

## Boxplot by Season

Arsenic, MW-17004 (ug/L)



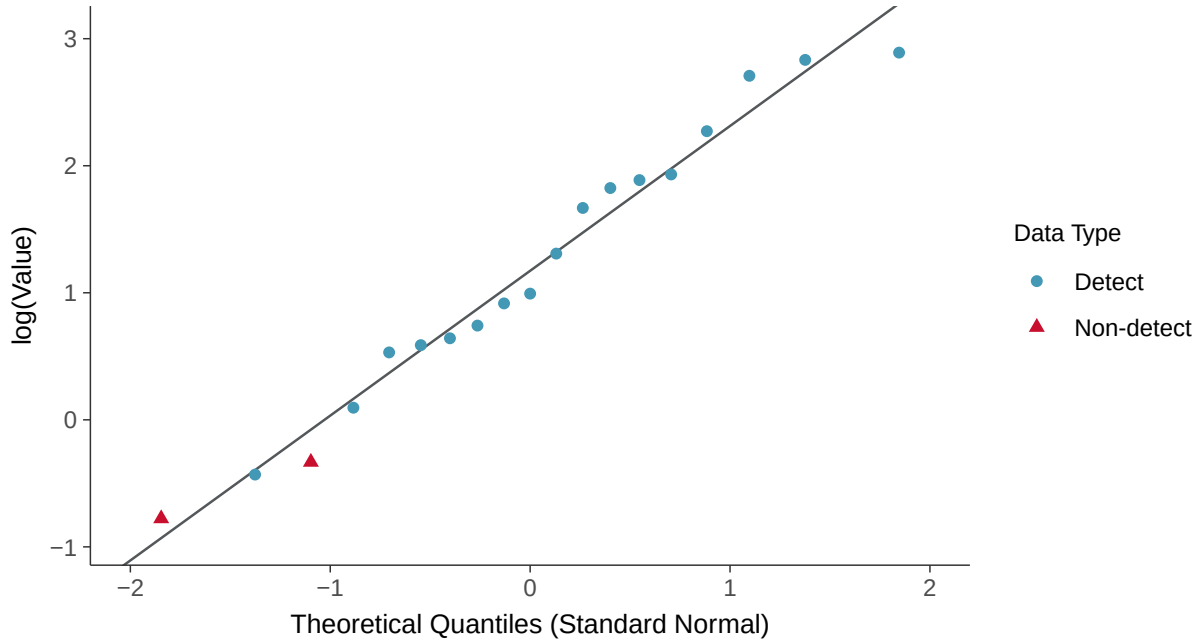
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17004 (ug/L)



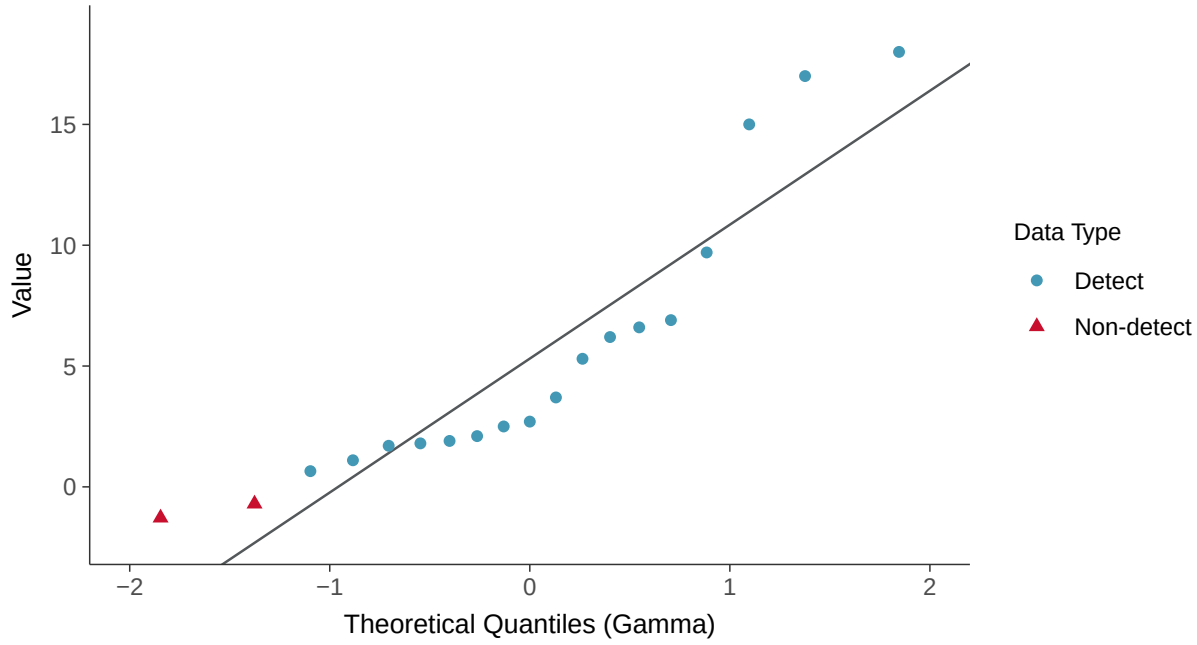

**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17004 (ug/L)



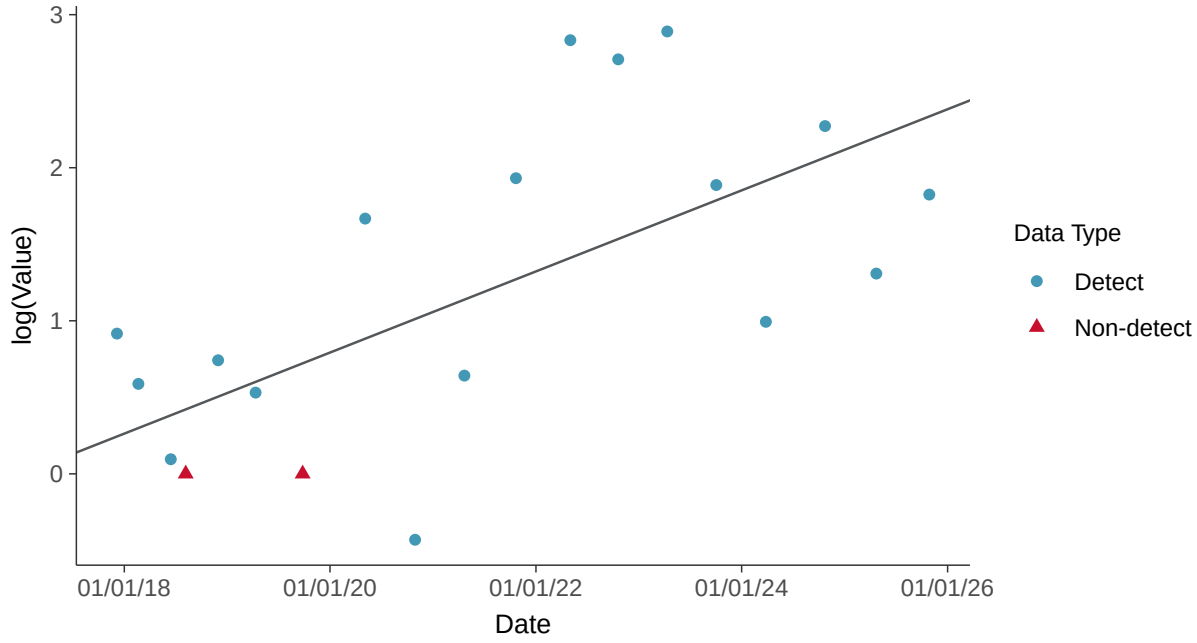
## Gamma Q-Q plot using ROS Imputed Estimates

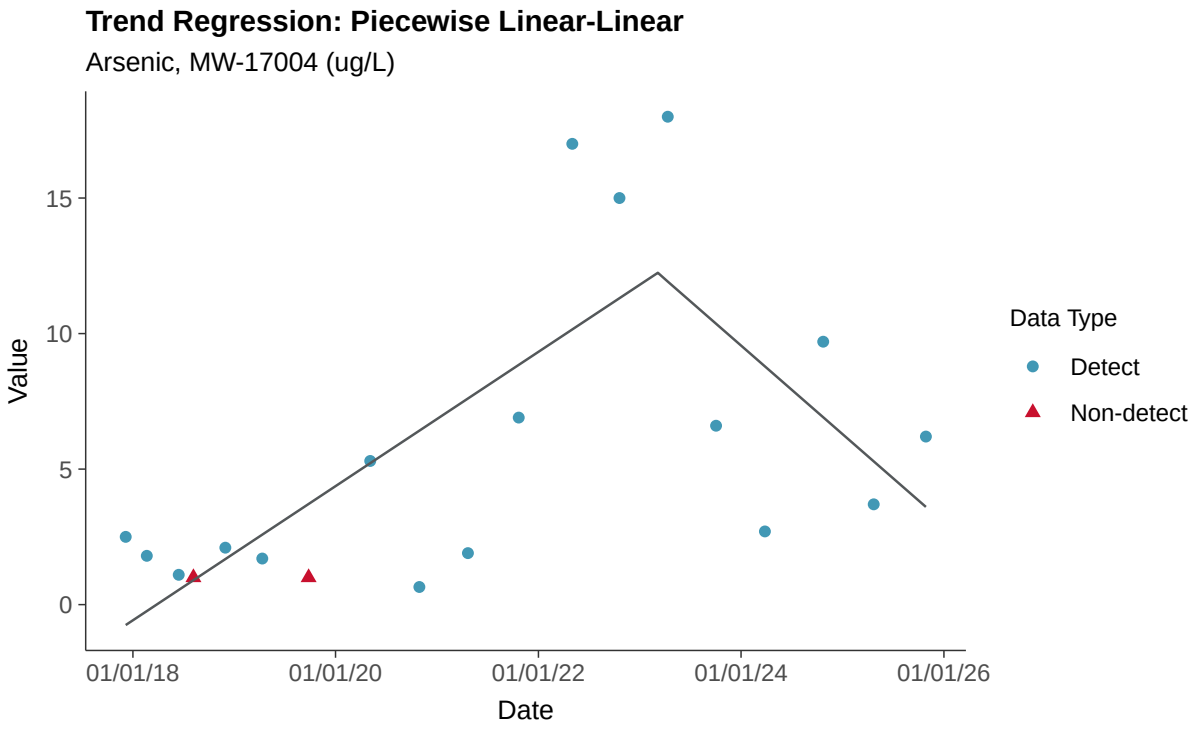
Arsenic, MW-17004 (ug/L)




## Trend Regression: Lognormal MLE

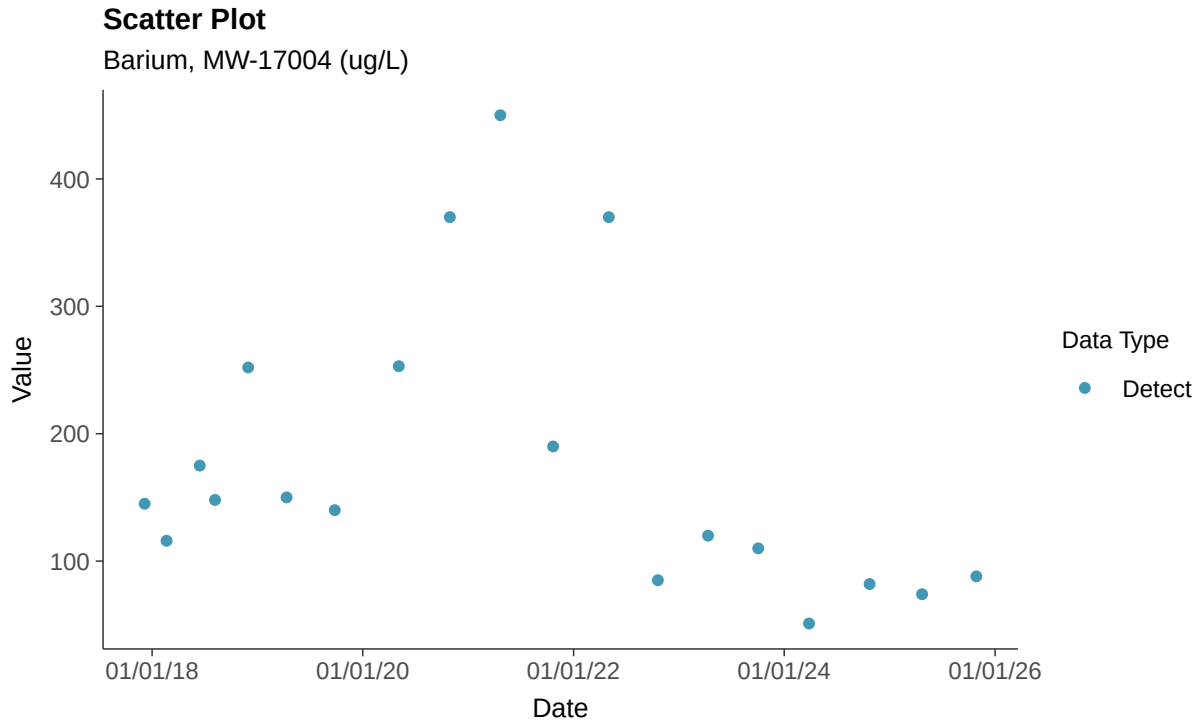
Arsenic, MW-17004 (ug/L)

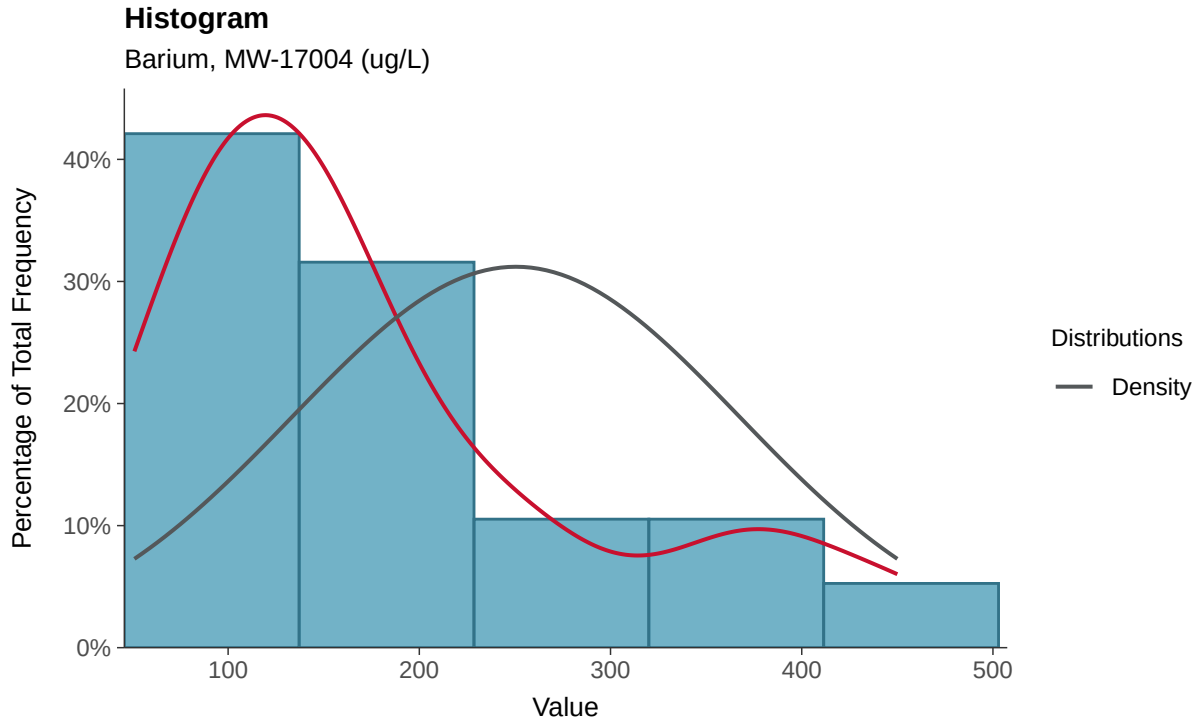



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-17004 (ug/L)
Value
15
10
5
0
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Barium, MW-17004

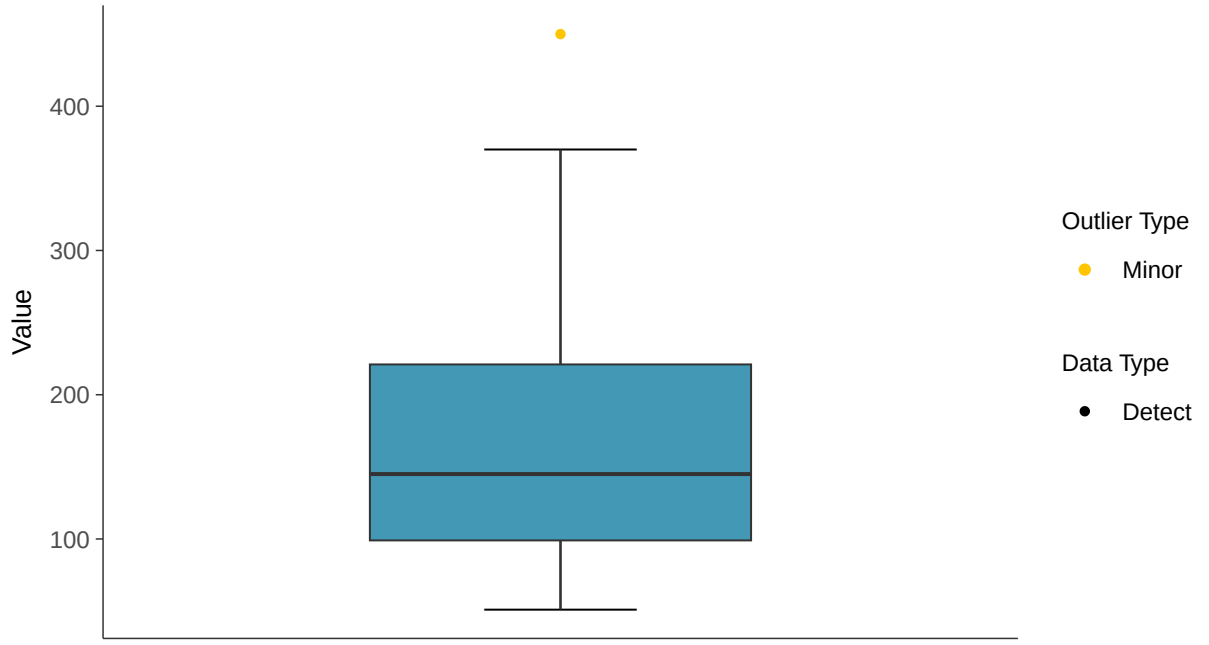
ID: 17_2_103



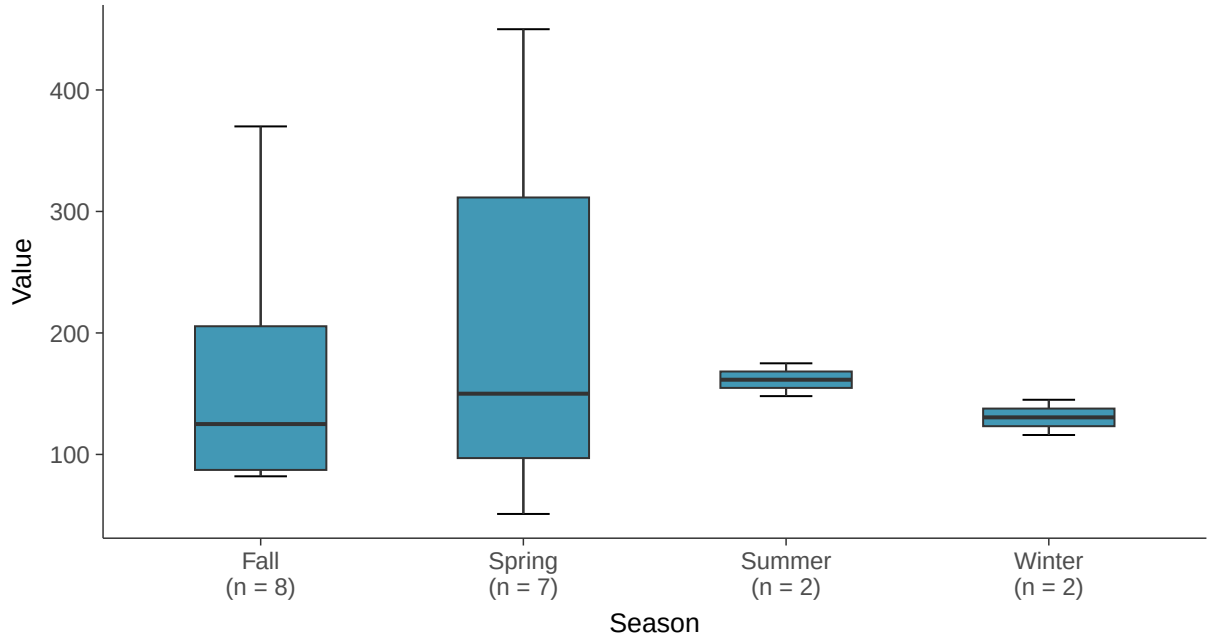
## Boxplot

Barium, MW-17004 (ug/L)



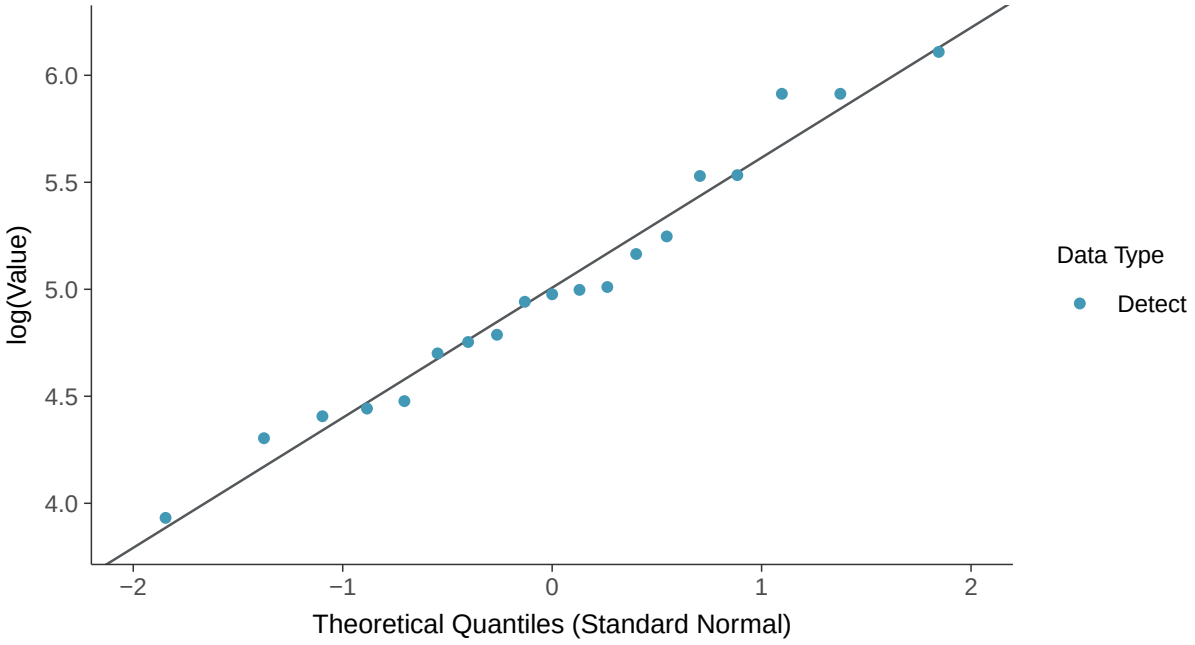

## Boxplot by Season

Barium, MW-17004 (ug/L)



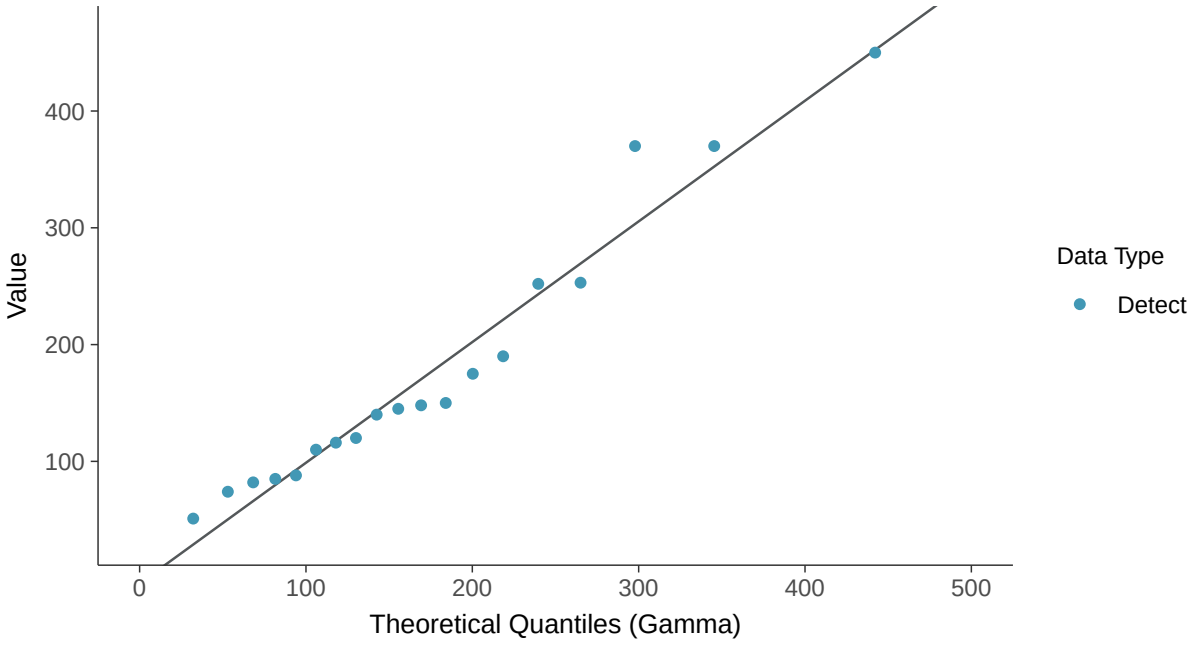
**Lognormal Q-Q plot**

Barium, MW-17004 (ug/L)



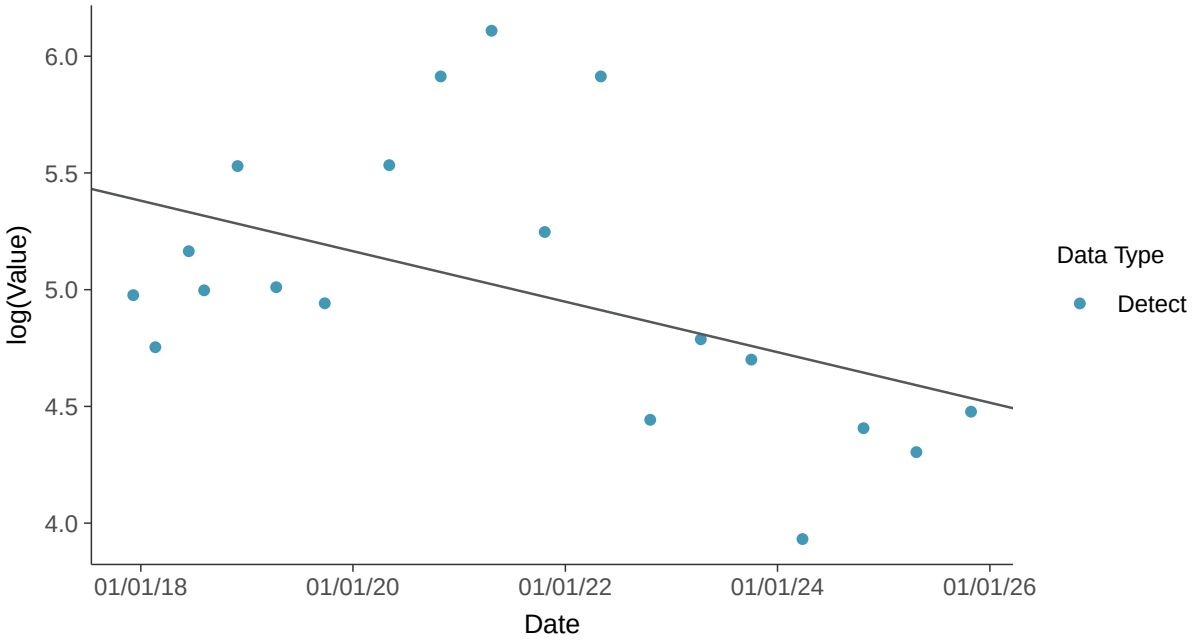

**Gamma Q-Q plot**

Barium, MW-17004 (ug/L)



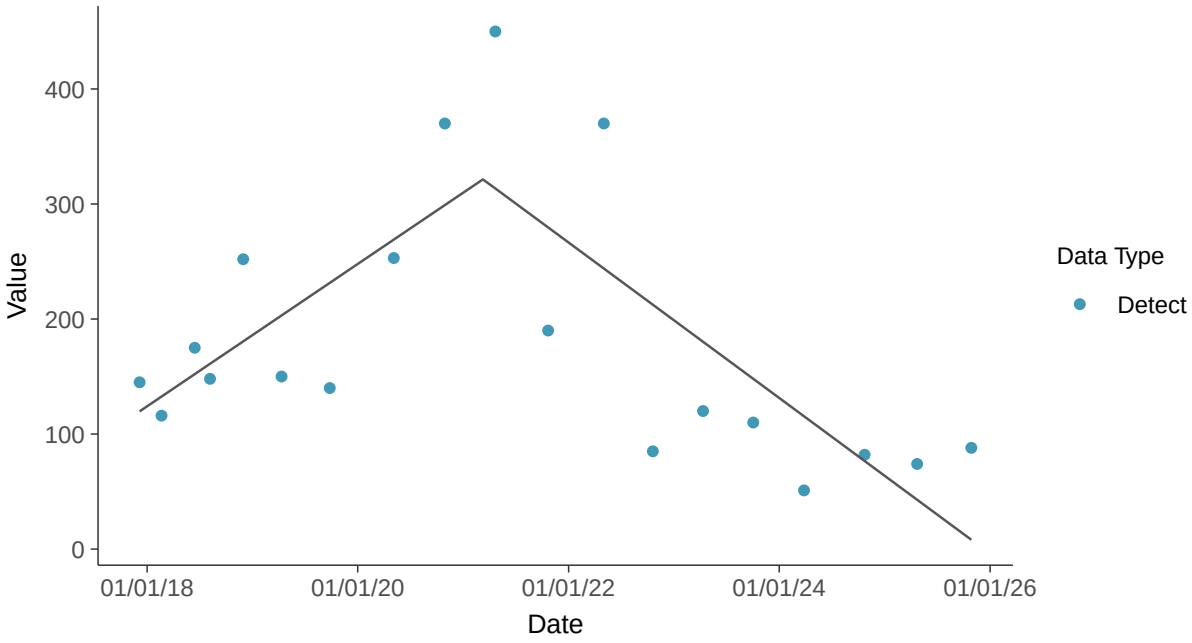
**Trend Regression: Lognormal MLE**

Barium, MW-17004 (ug/L)



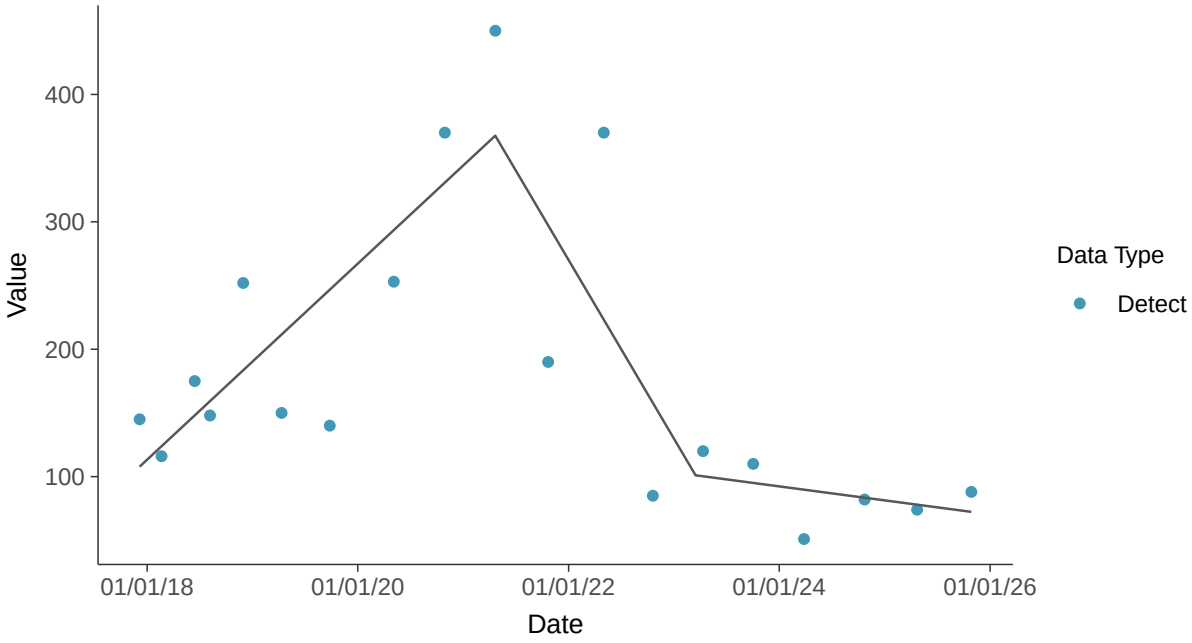

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17004 (ug/L)



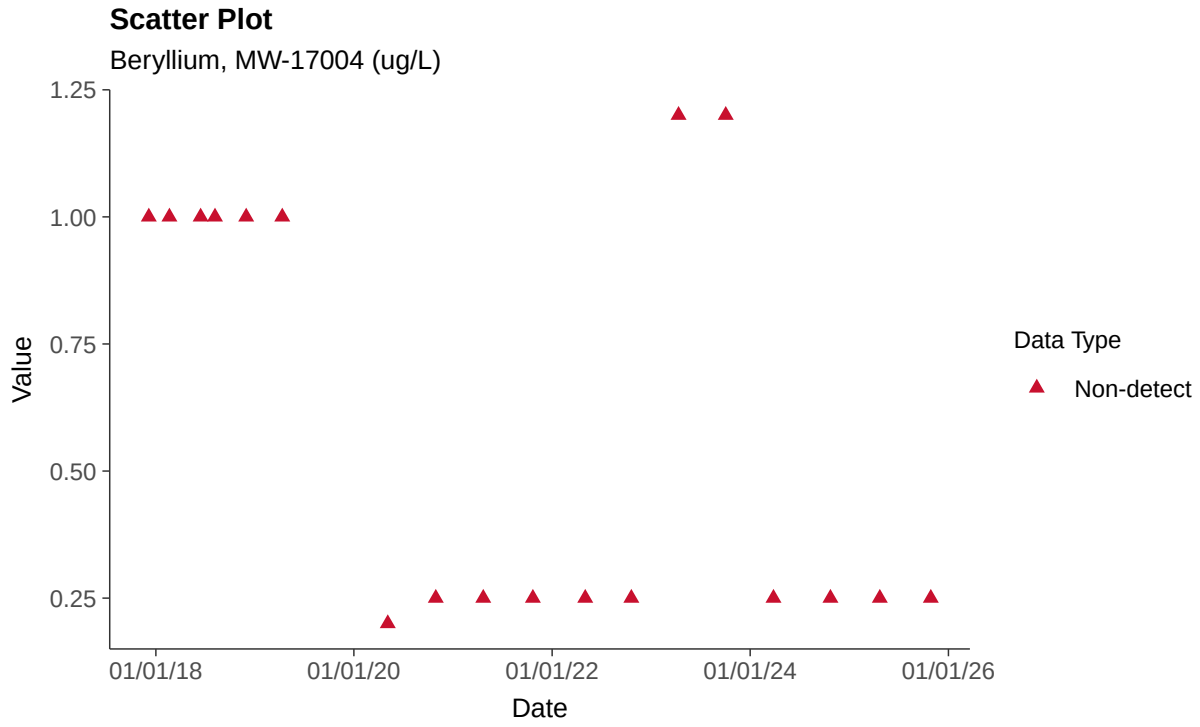
**Trend Regression: Piecewise Linear-Linear-Linear**

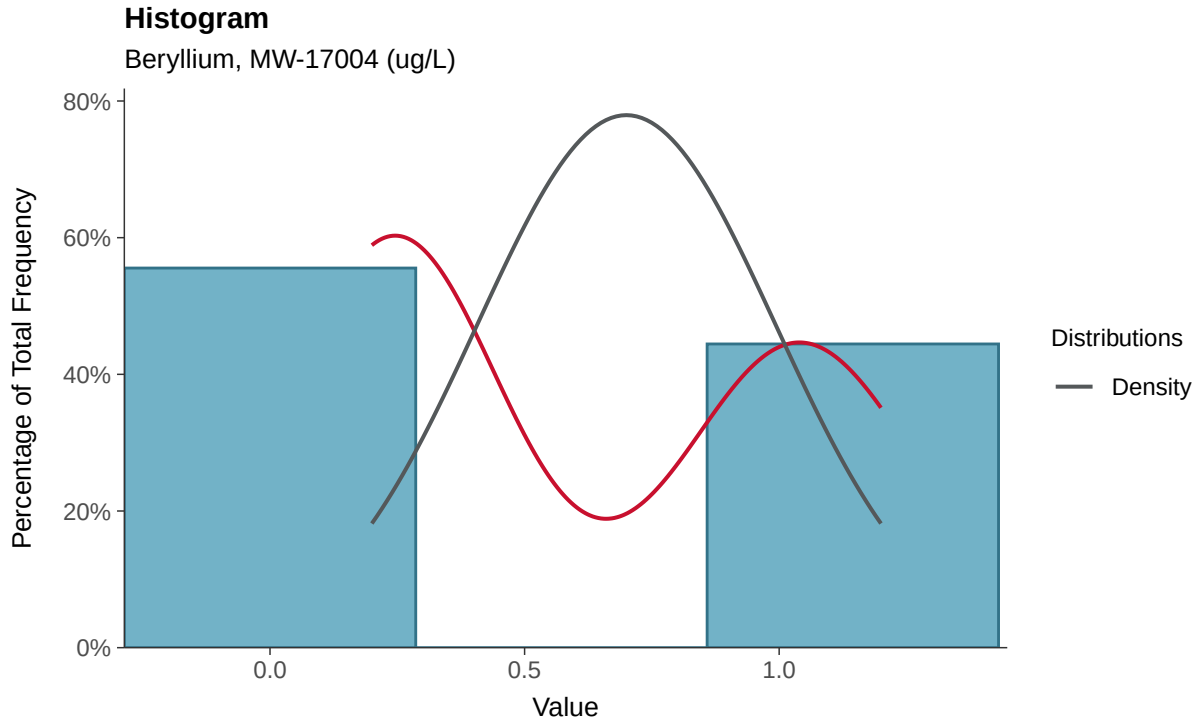
Barium, MW-17004 (ug/L)



## Appendix IV: Beryllium, MW-17004

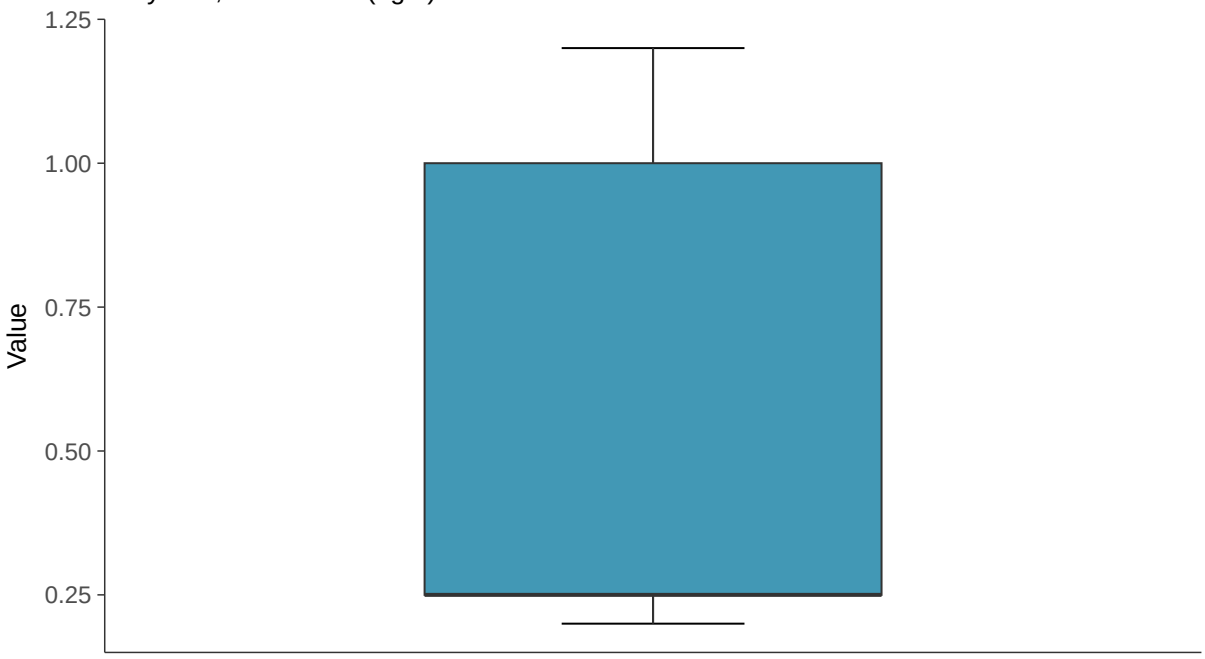
ID: 17_2_104



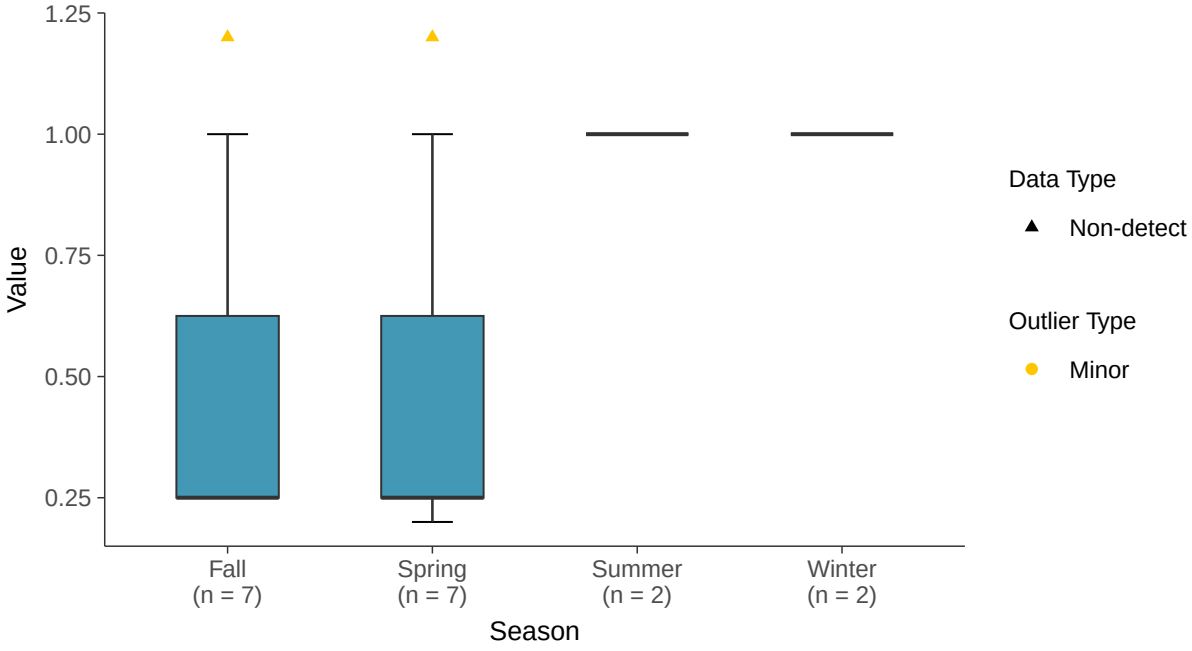
## Boxplot

Beryllium, MW-17004 (ug/L)



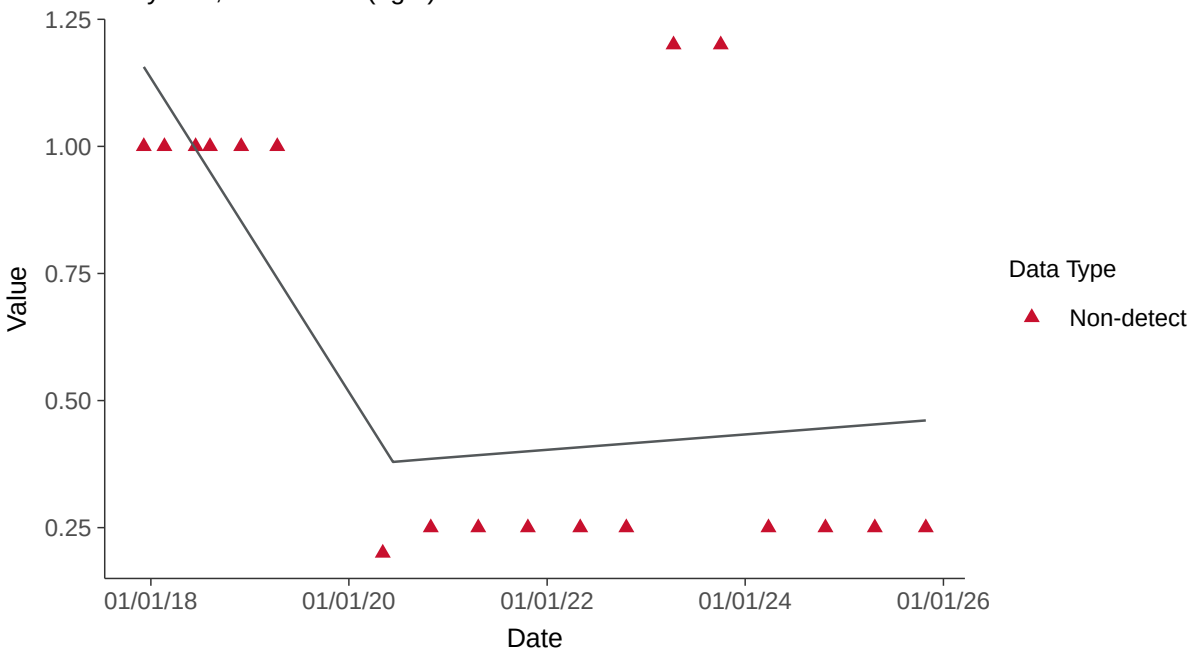

## Boxplot by Season

Beryllium, MW-17004 (ug/L)



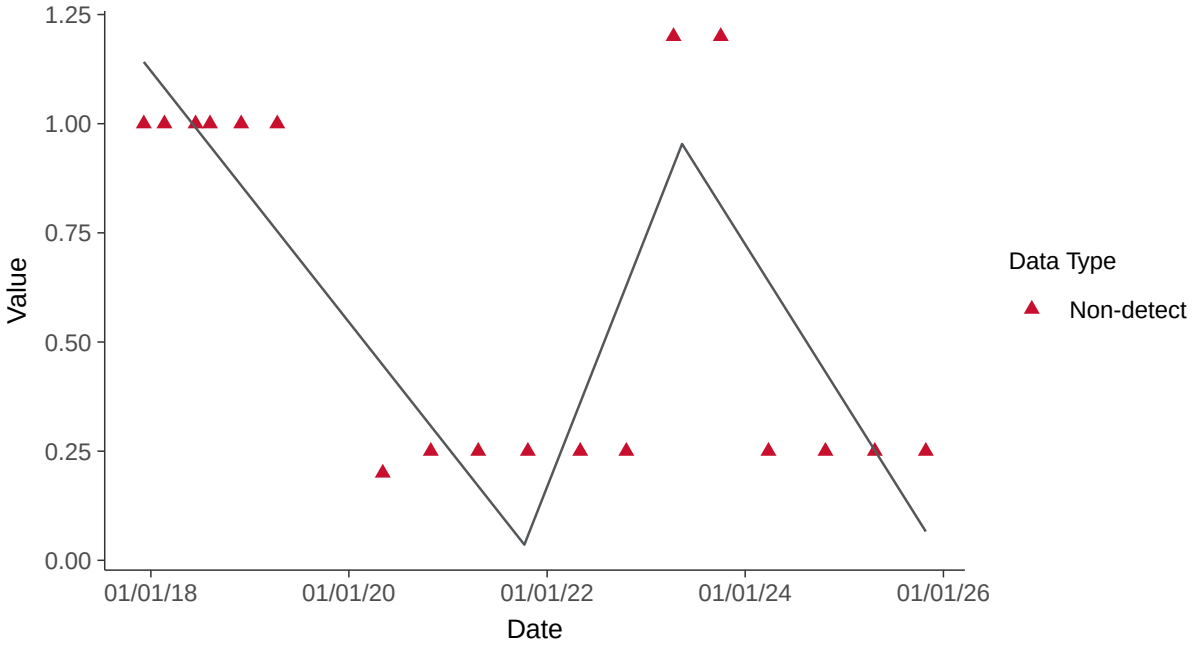
**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-17004 (ug/L)



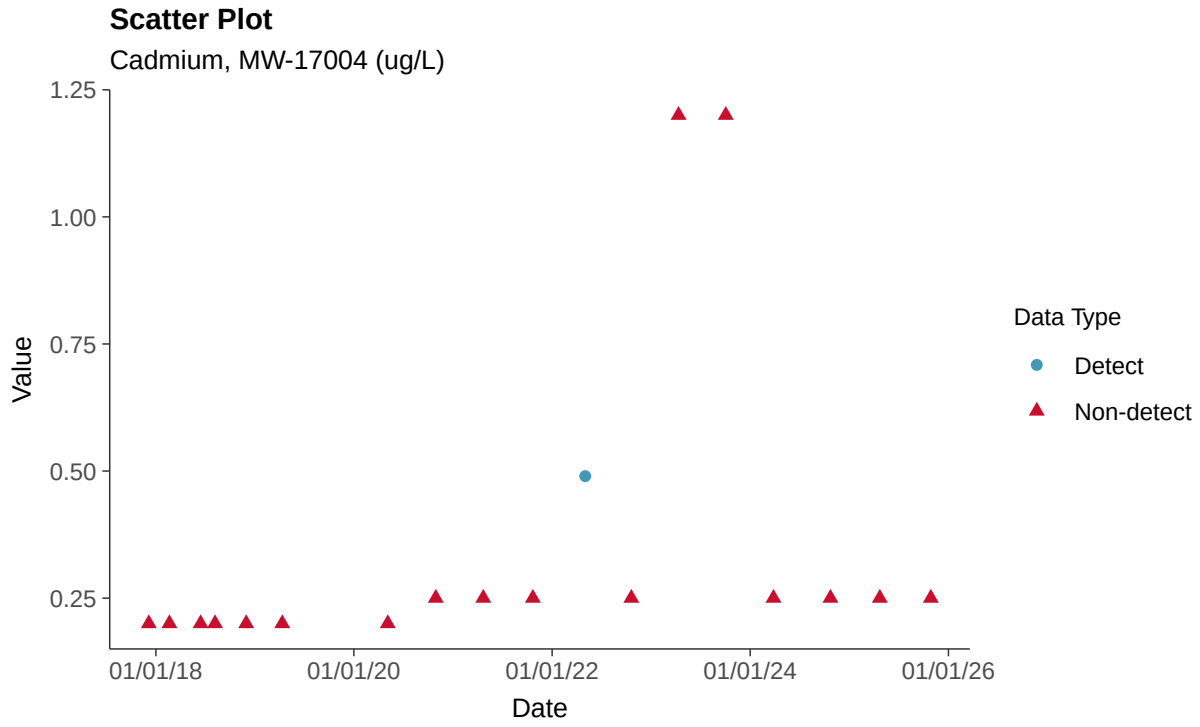

**Trend Regression: Piecewise Linear-Linear-Linear**

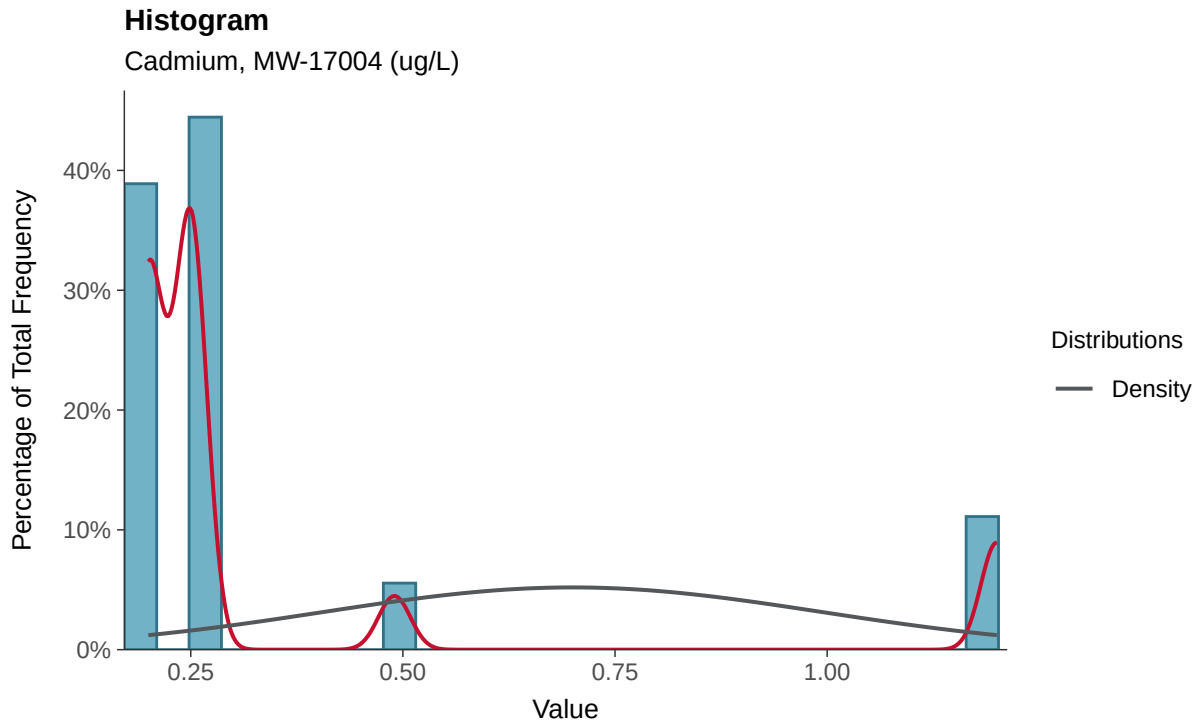
Beryllium, MW-17004 (ug/L)



## Appendix IV: Cadmium, MW-17004

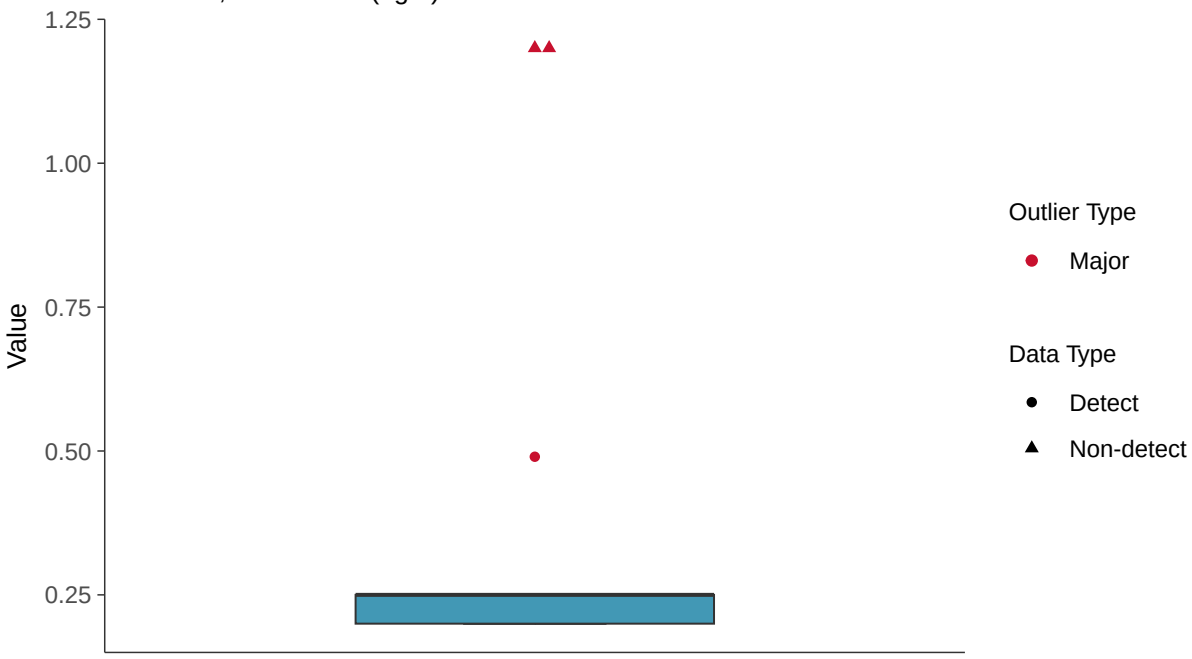
ID: 17_2_106



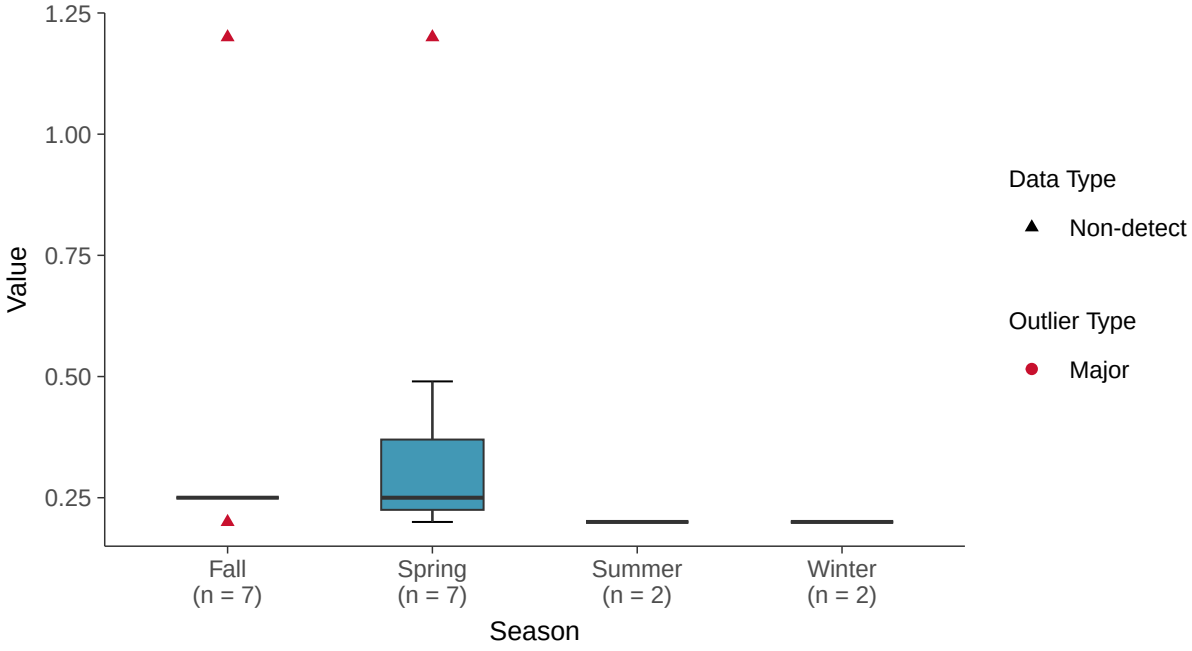
## Boxplot

Cadmium, MW-17004 (ug/L)



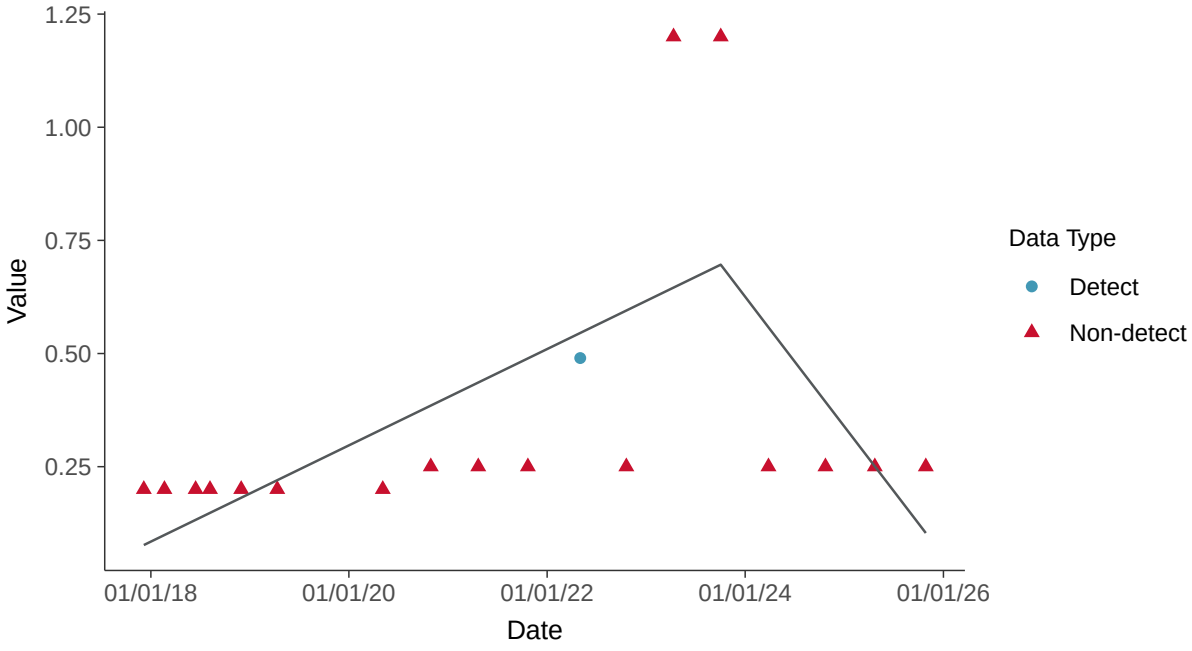

## Boxplot by Season

Cadmium, MW-17004 (ug/L)



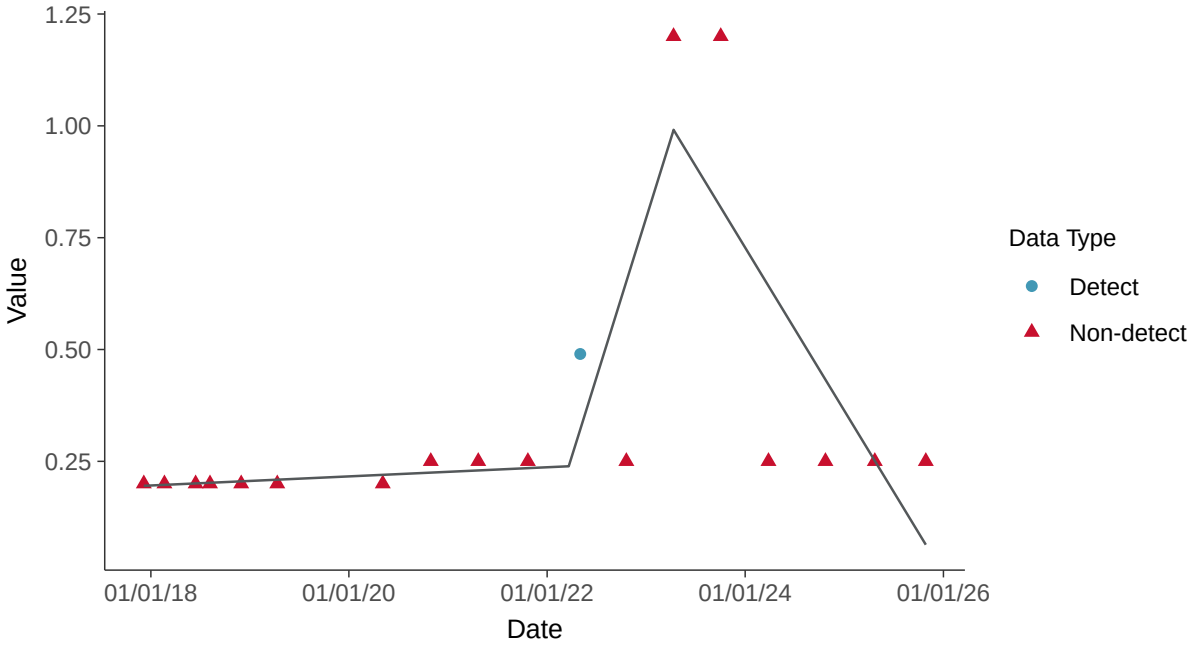
**Trend Regression: Piecewise Linear-Linear**

Cadmium, MW-17004 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Cadmium, MW-17004 (ug/L)

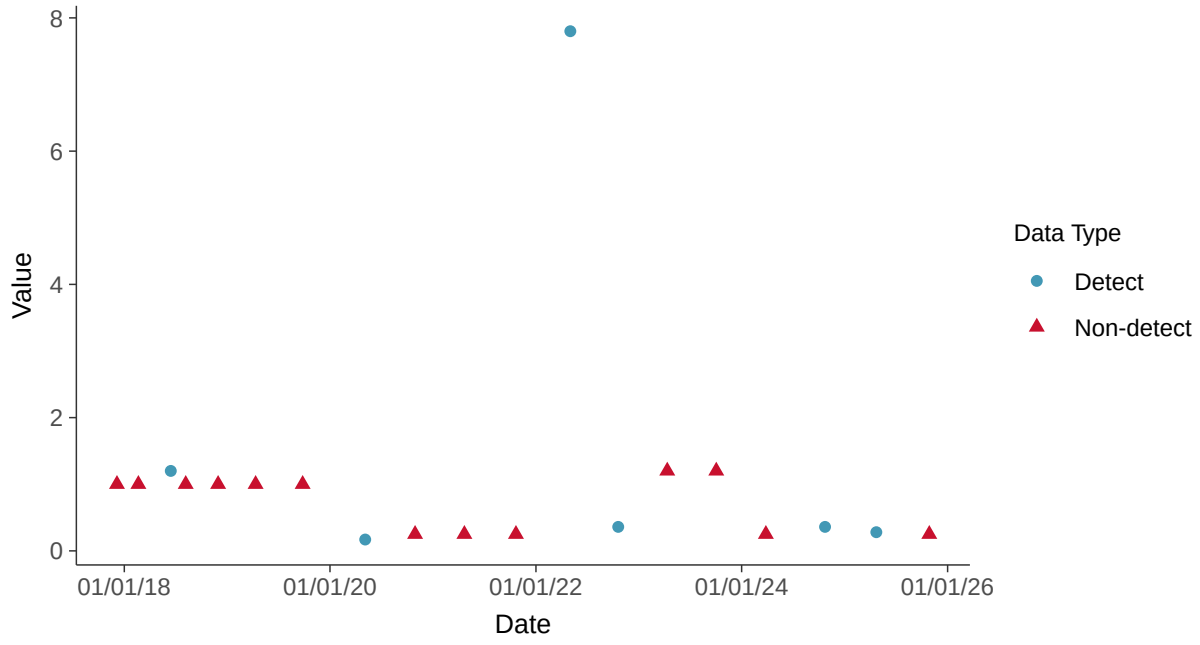


## Appendix IV: Chromium, MW-17004

ID: 17_2_109

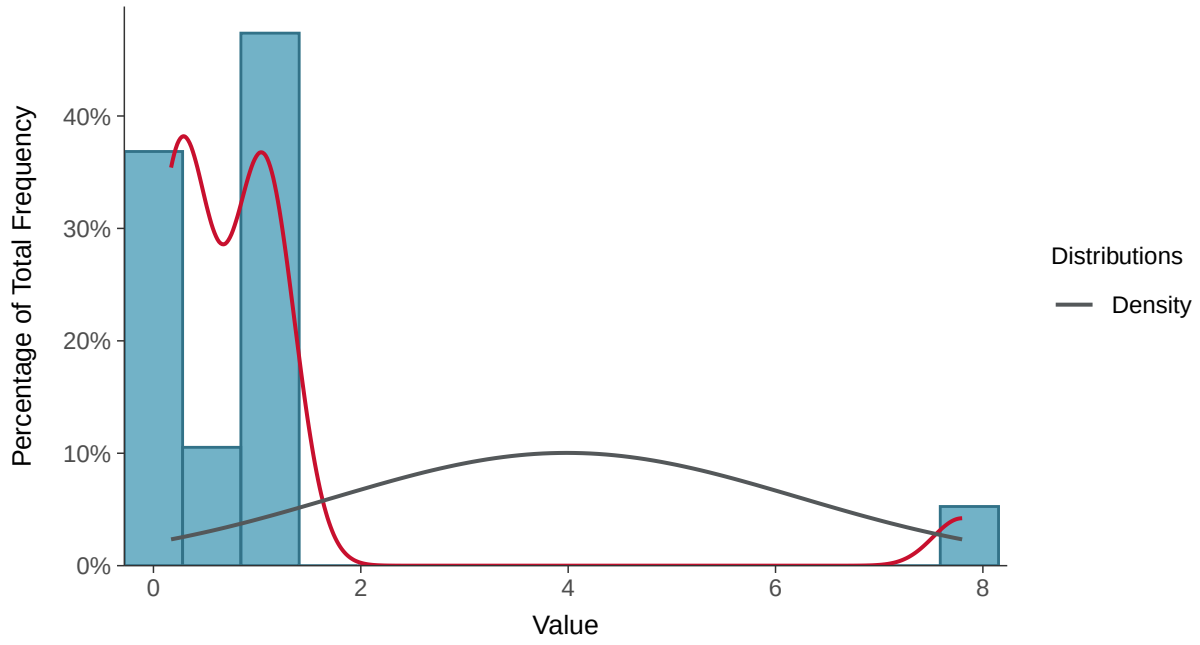
**Scatter Plot**

Chromium, MW-17004 (ug/L)



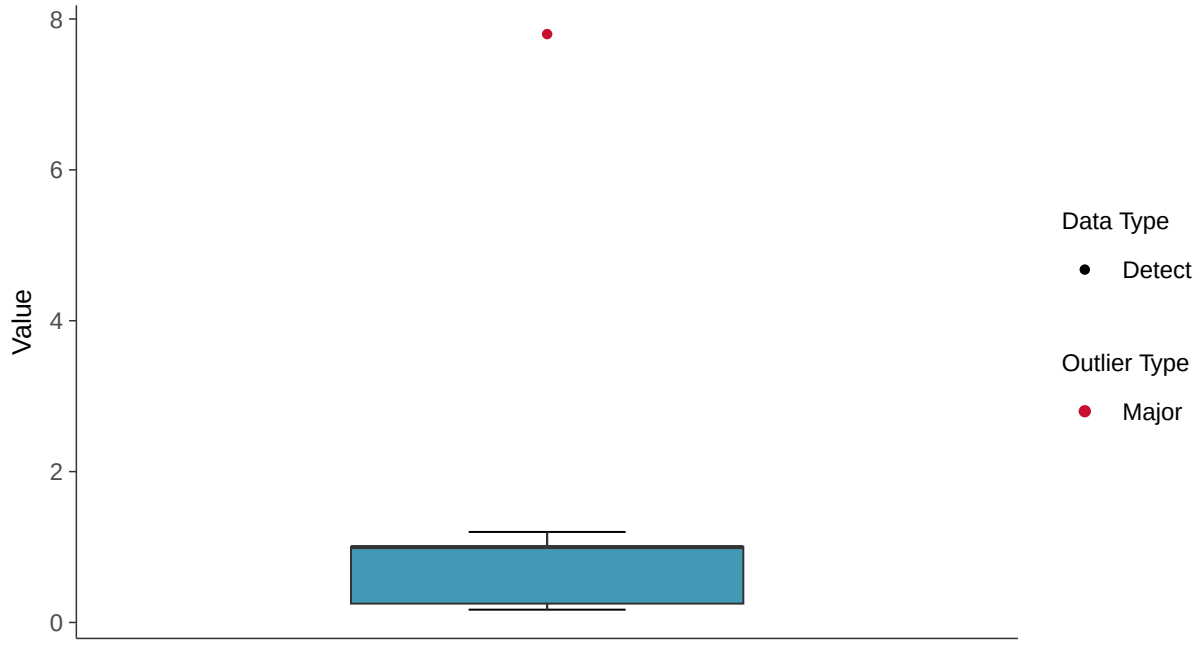

**Histogram**

Chromium, MW-17004 (ug/L)



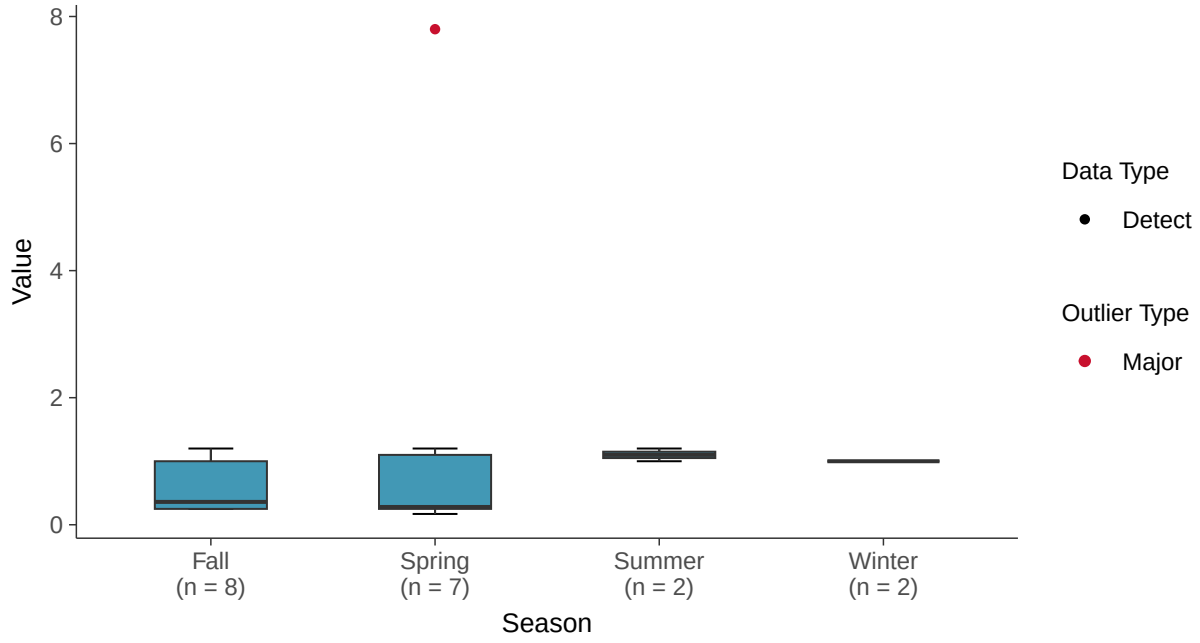
## Boxplot

Chromium, MW-17004 (ug/L)



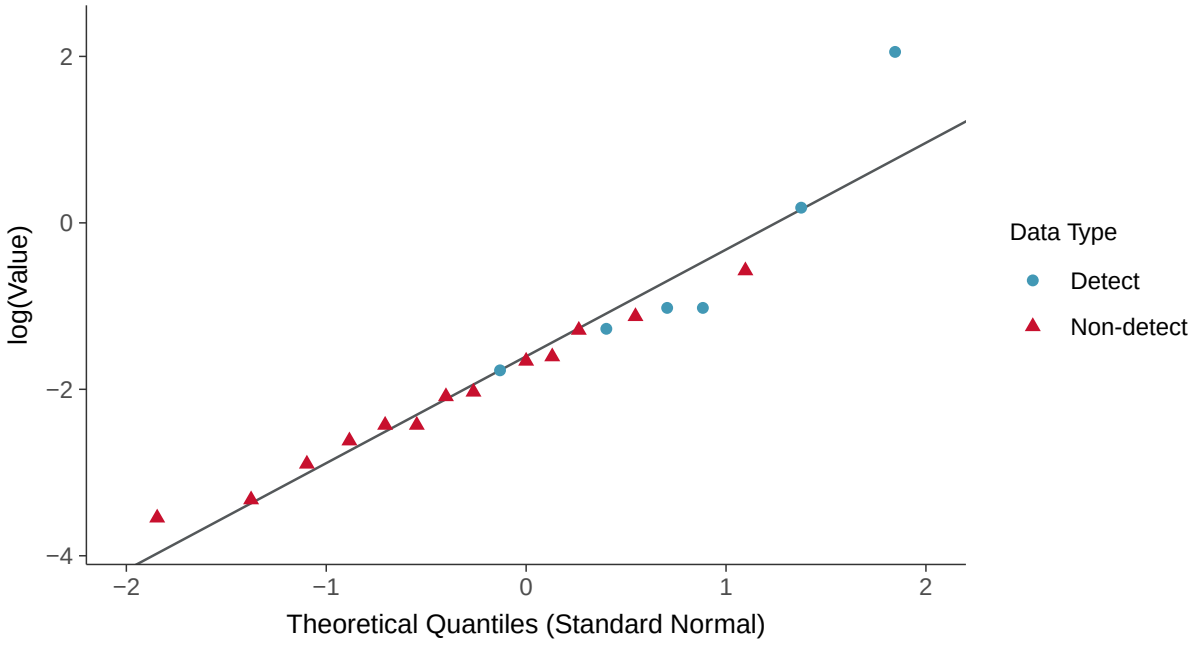

## Boxplot by Season

Chromium, MW-17004 (ug/L)



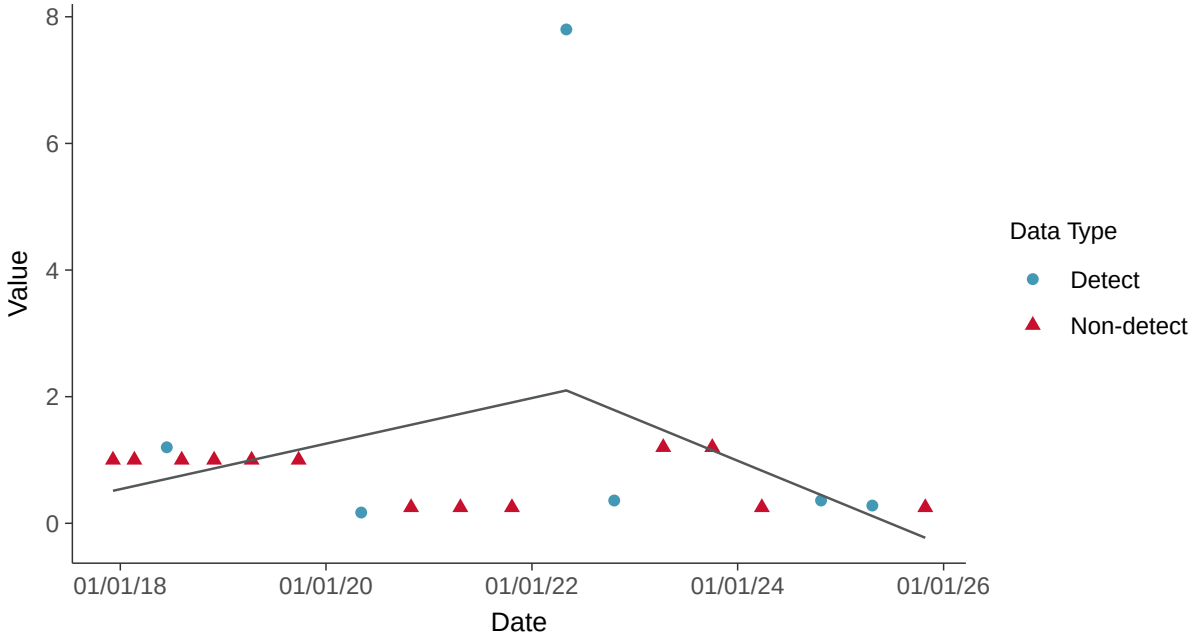
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17004 (ug/L)



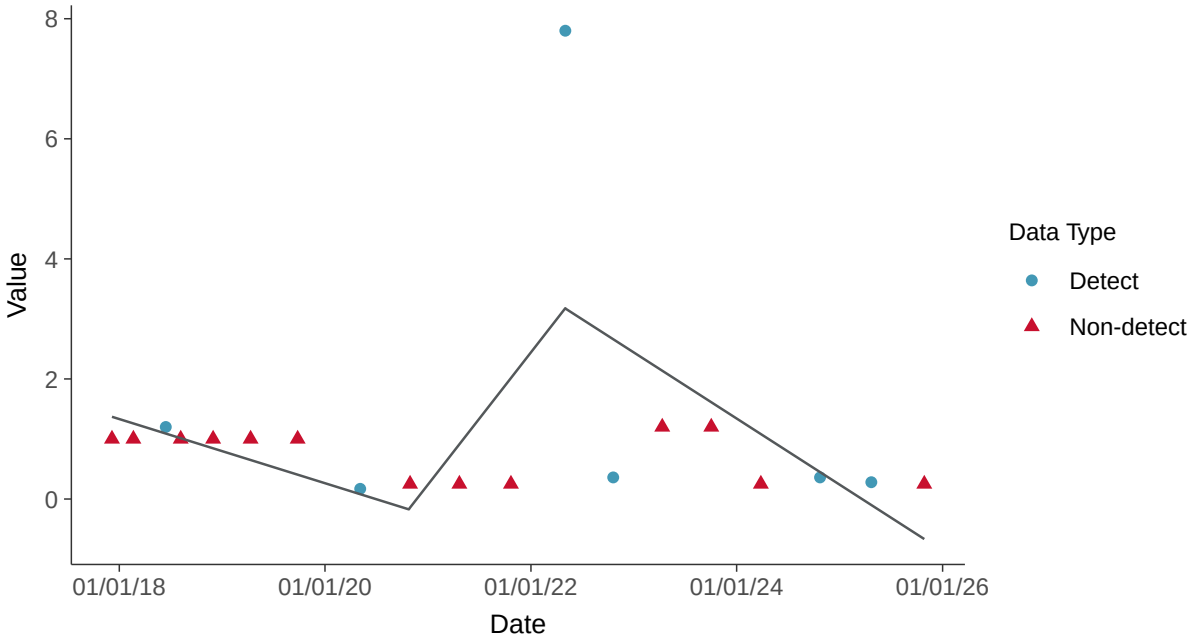

**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-17004 (ug/L)



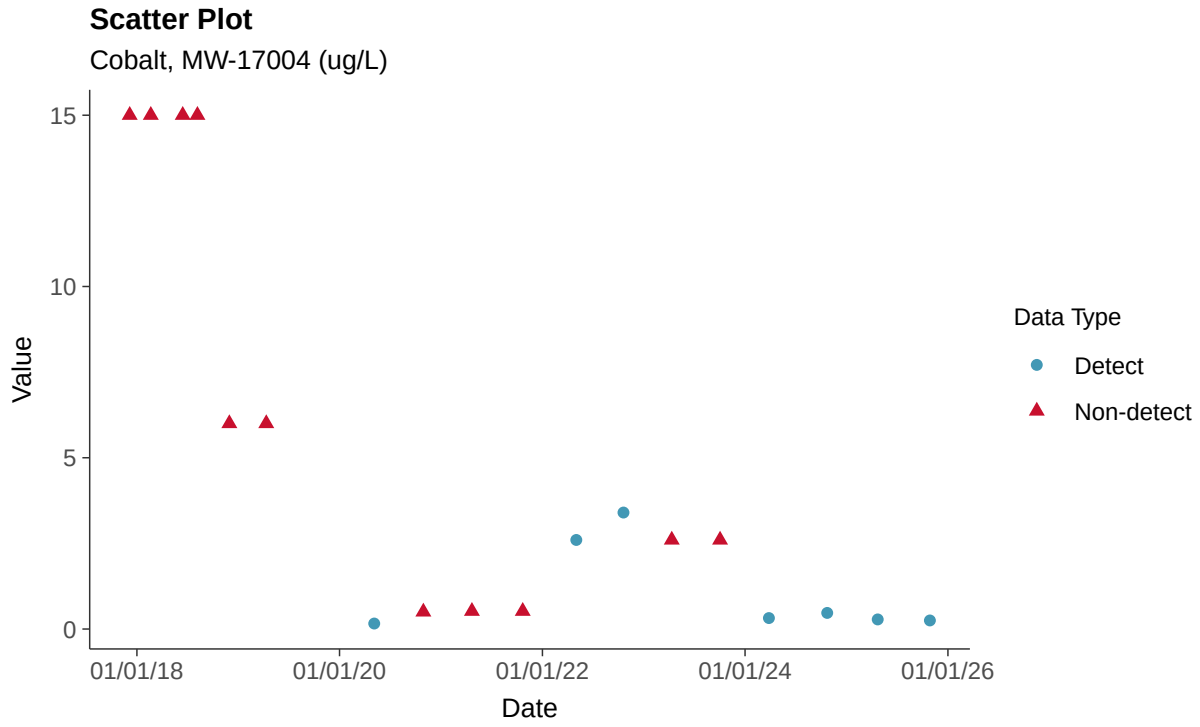
**Trend Regression: Piecewise Linear-Linear-Linear**

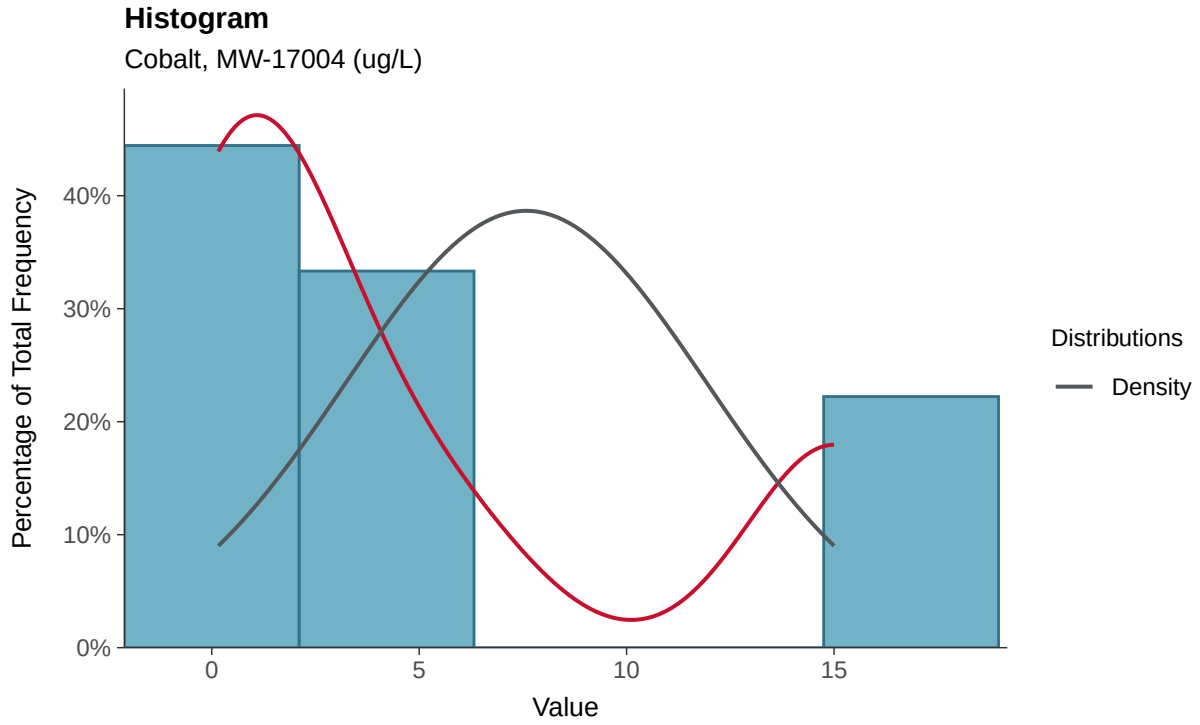
Chromium, MW-17004 (ug/L)



## Appendix IV: Cobalt, MW-17004

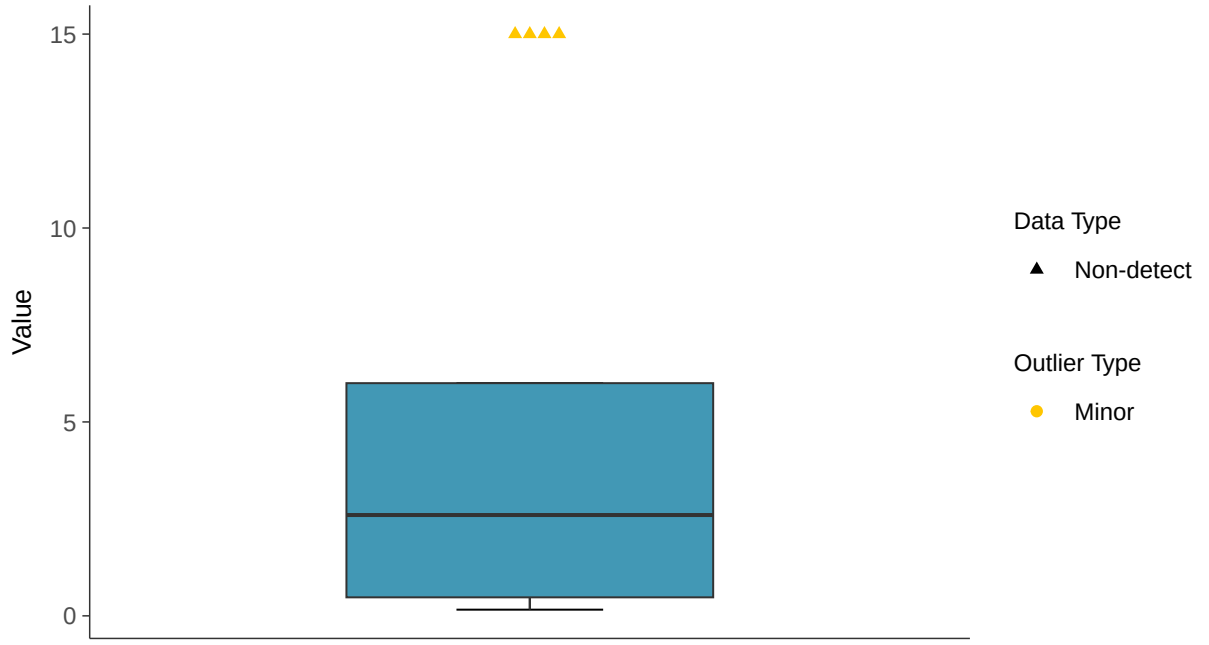
ID: 17_2_110



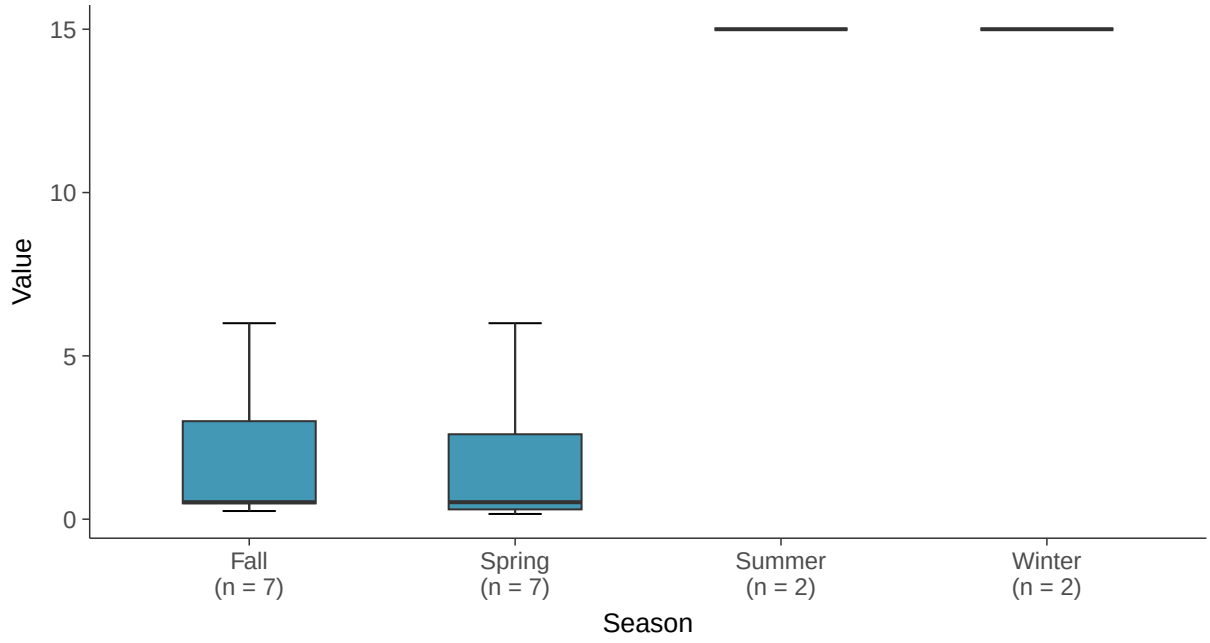
**Boxplot**

Cobalt, MW-17004 (ug/L)



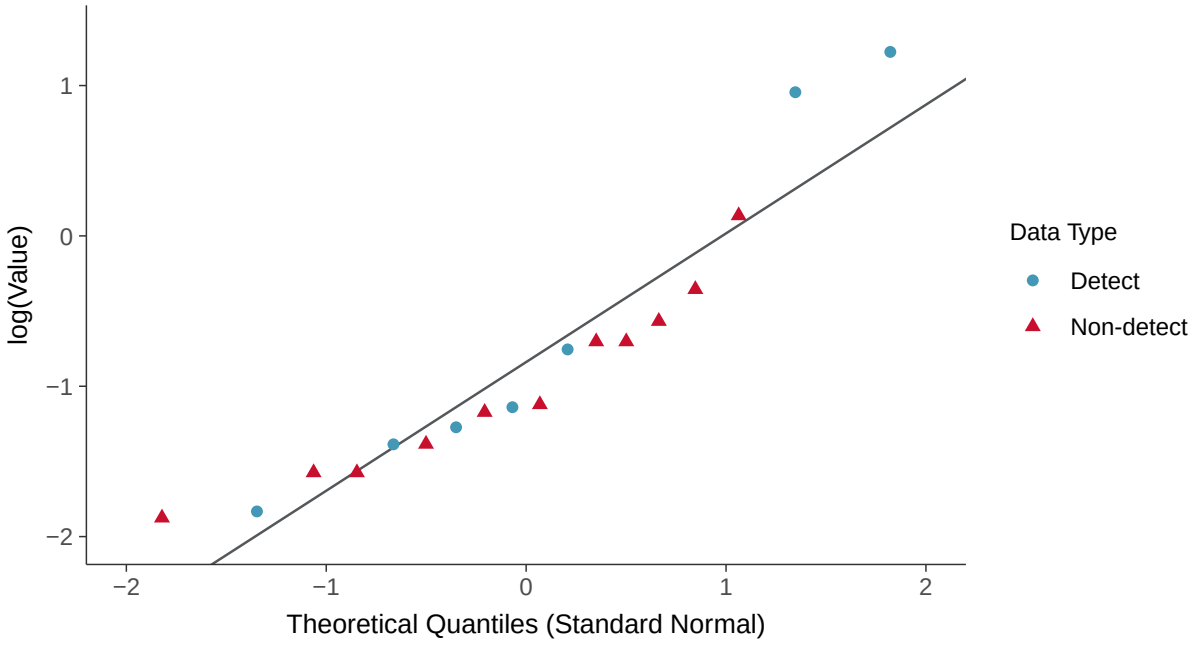

**Boxplot by Season**

Cobalt, MW-17004 (ug/L)



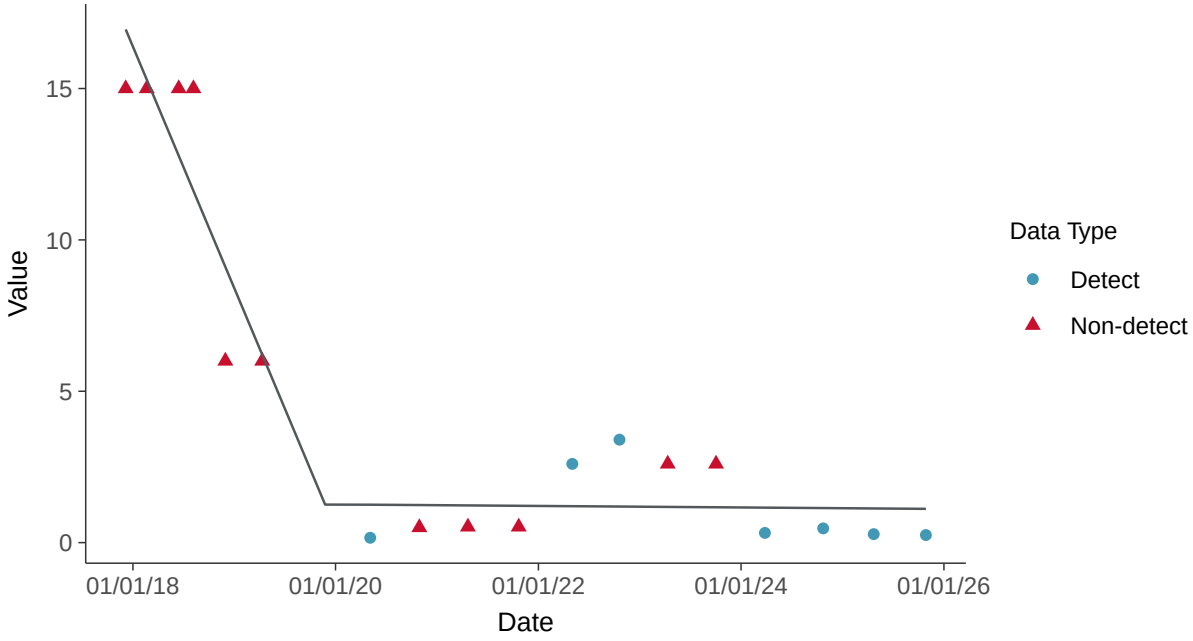
**Lognormal Q-Q plot using ROS Imputed Estimates**

Cobalt, MW-17004 (ug/L)



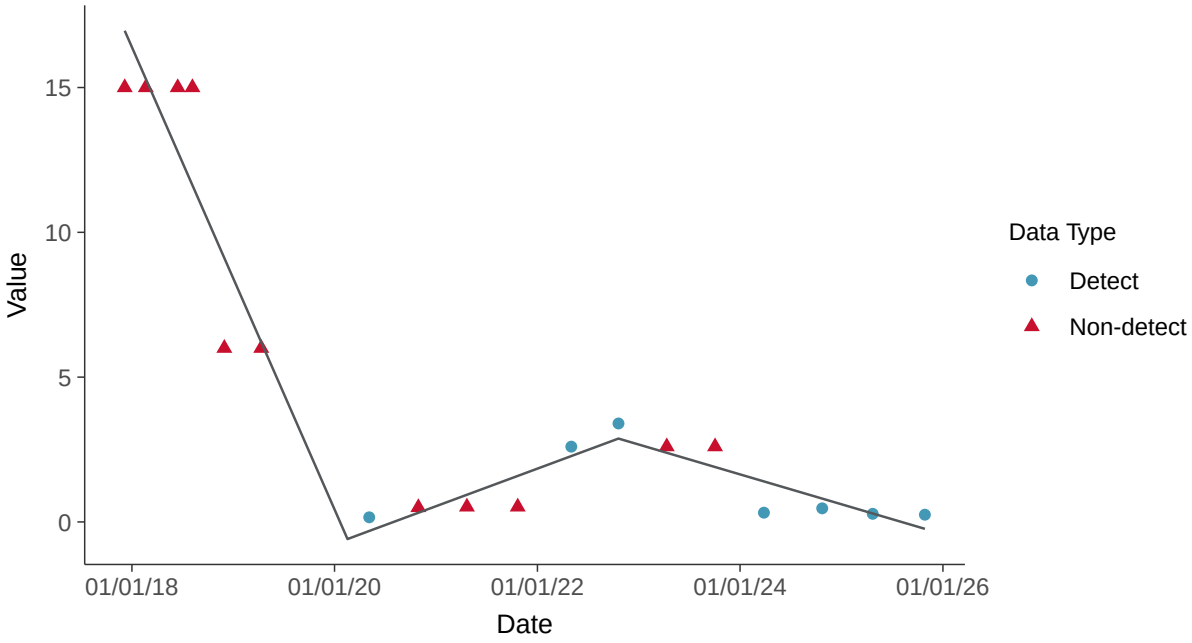

**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17004 (ug/L)



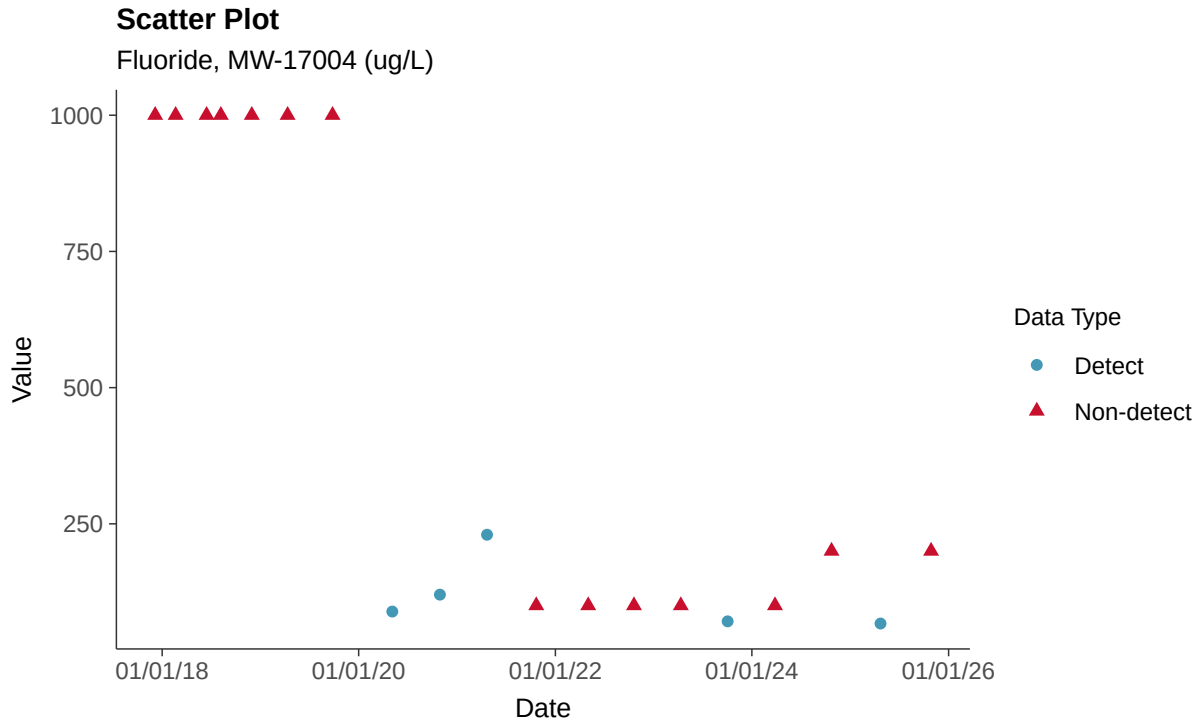
**Trend Regression: Piecewise Linear-Linear-Linear**

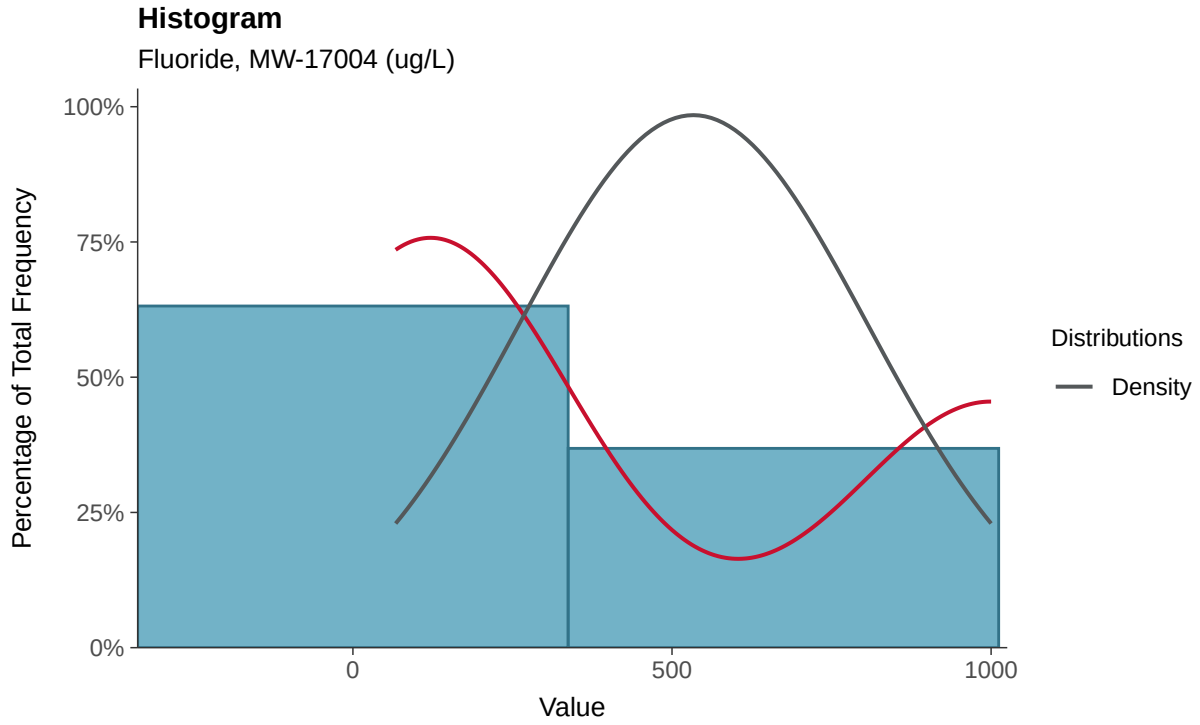
Cobalt, MW-17004 (ug/L)



## Appendix IV: Fluoride, MW-17004

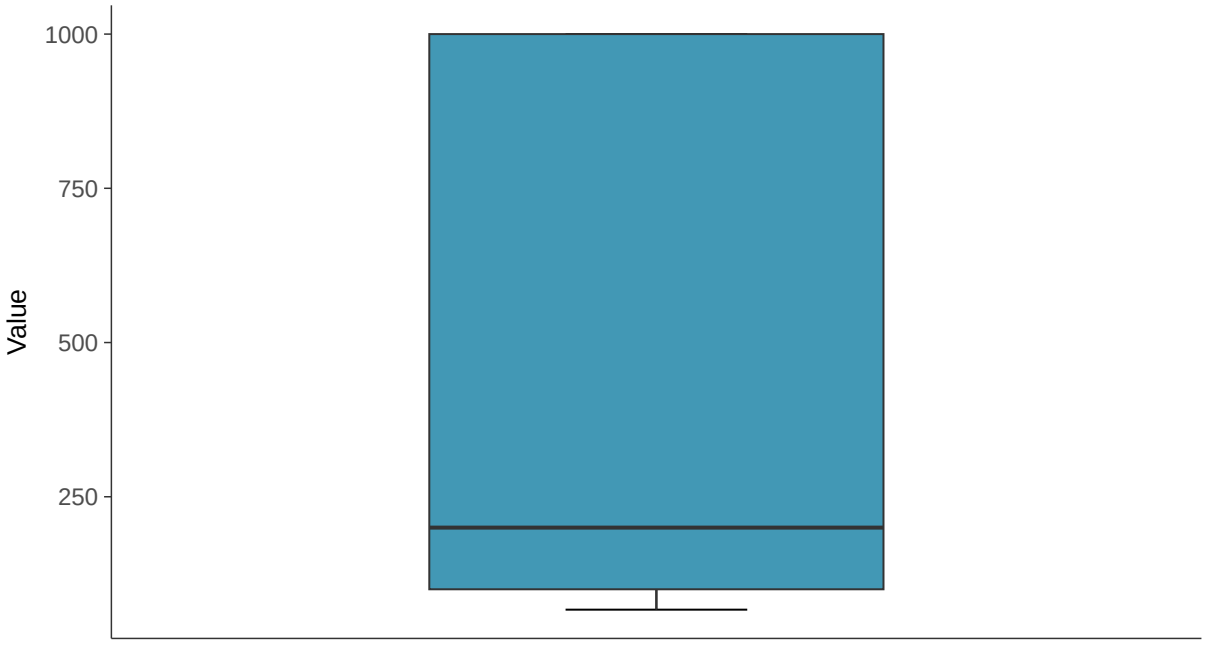
ID: 17_2_114



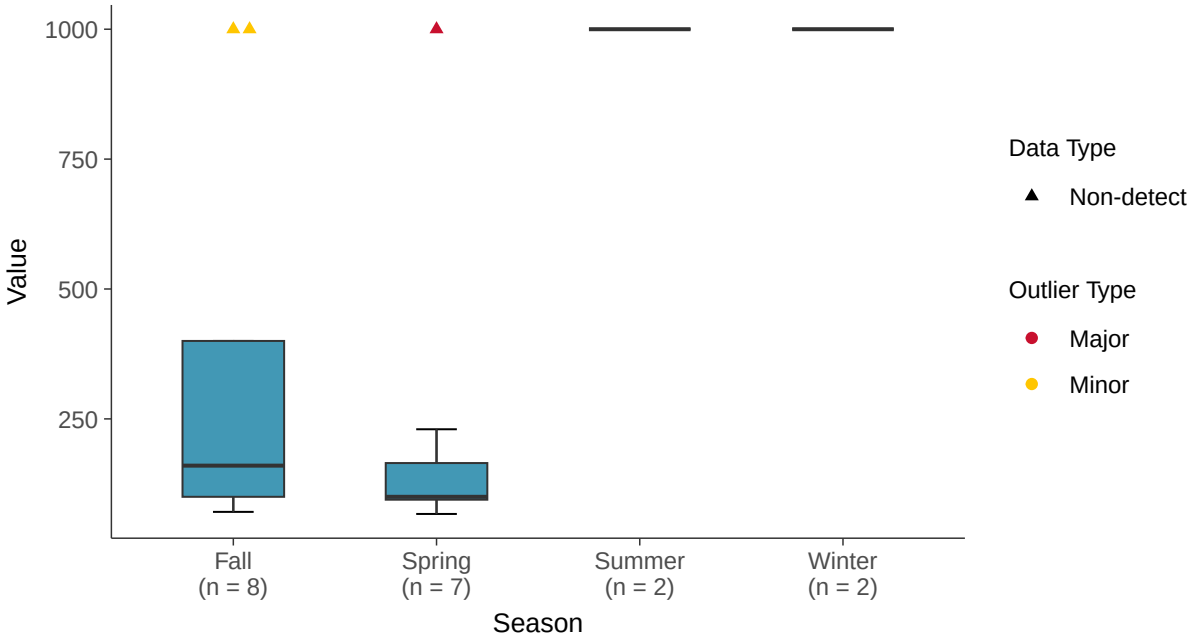
## Boxplot

Fluoride, MW-17004 (ug/L)



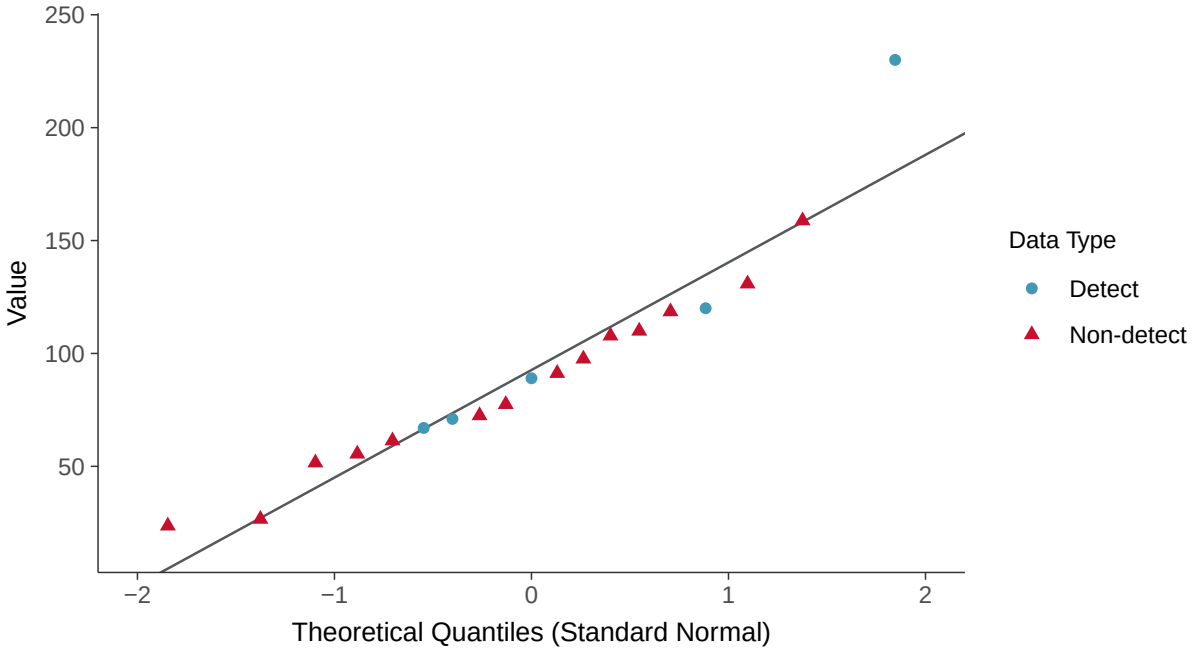

## Boxplot by Season

Fluoride, MW-17004 (ug/L)



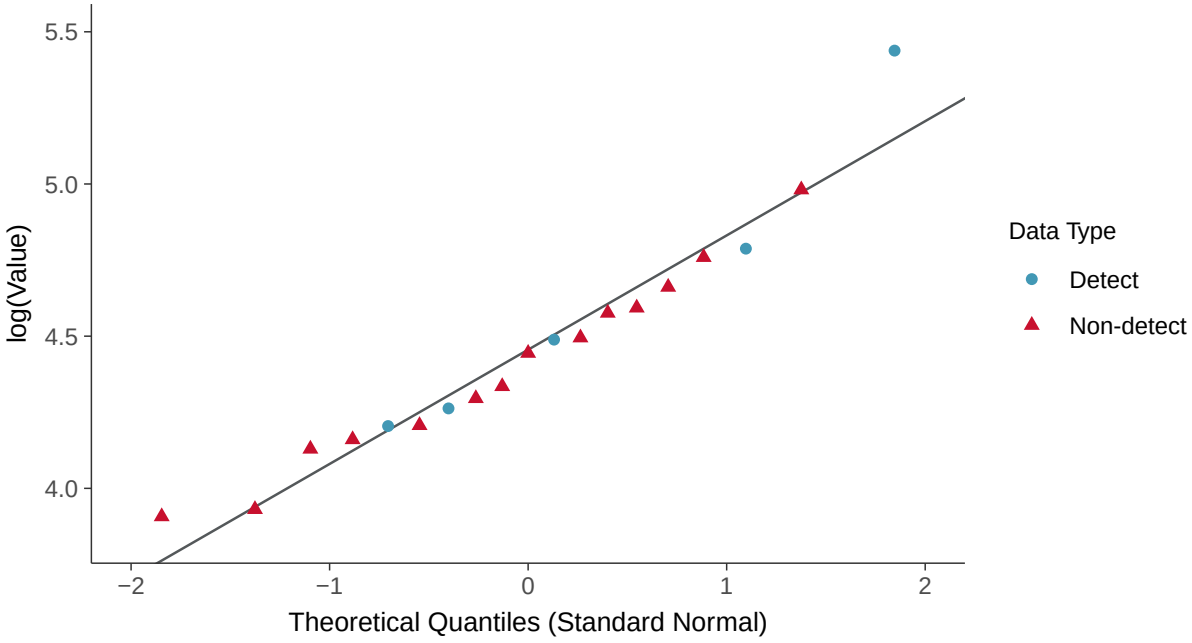
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17004 (ug/L)



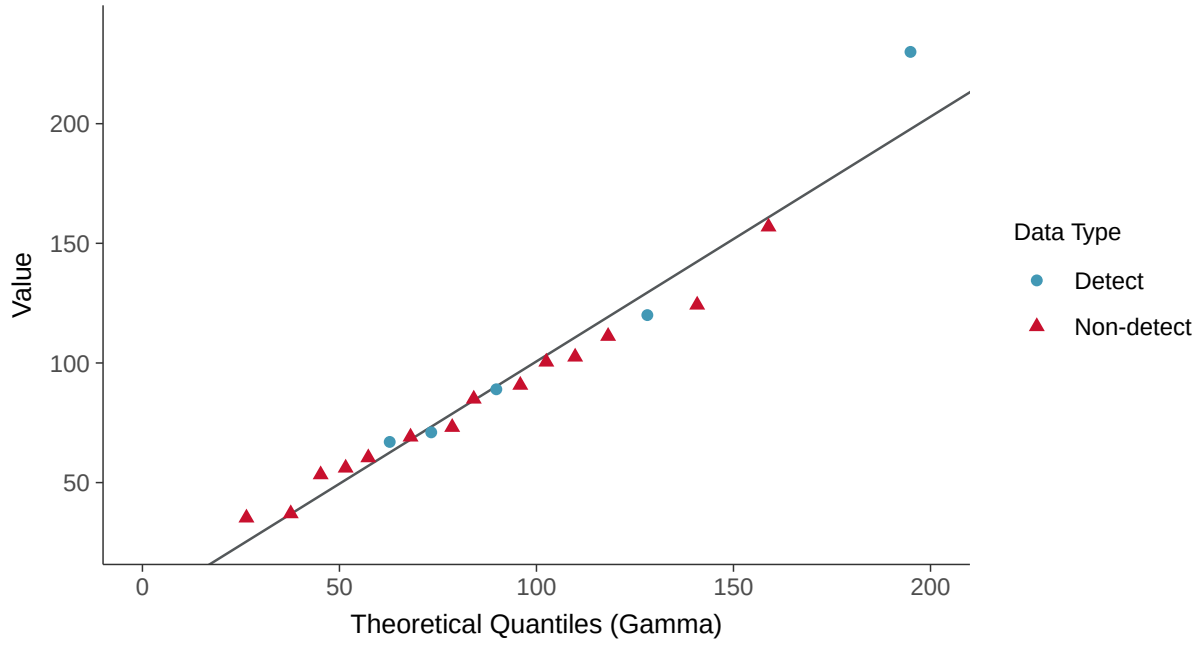

**Lognormal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17004 (ug/L)



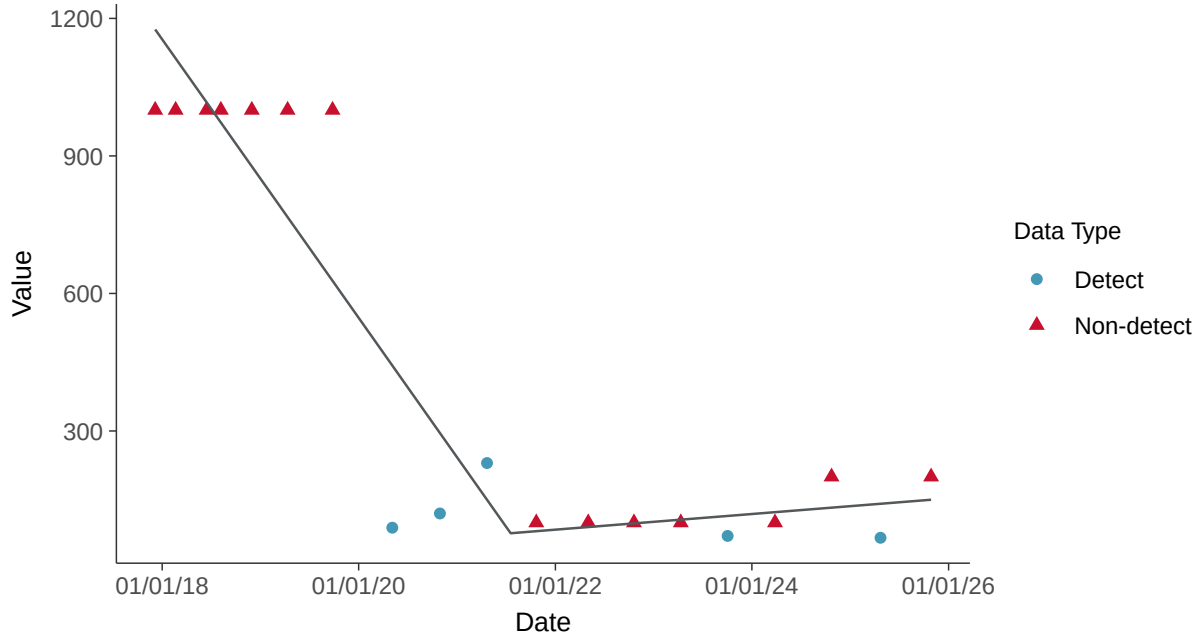
**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17004 (ug/L)



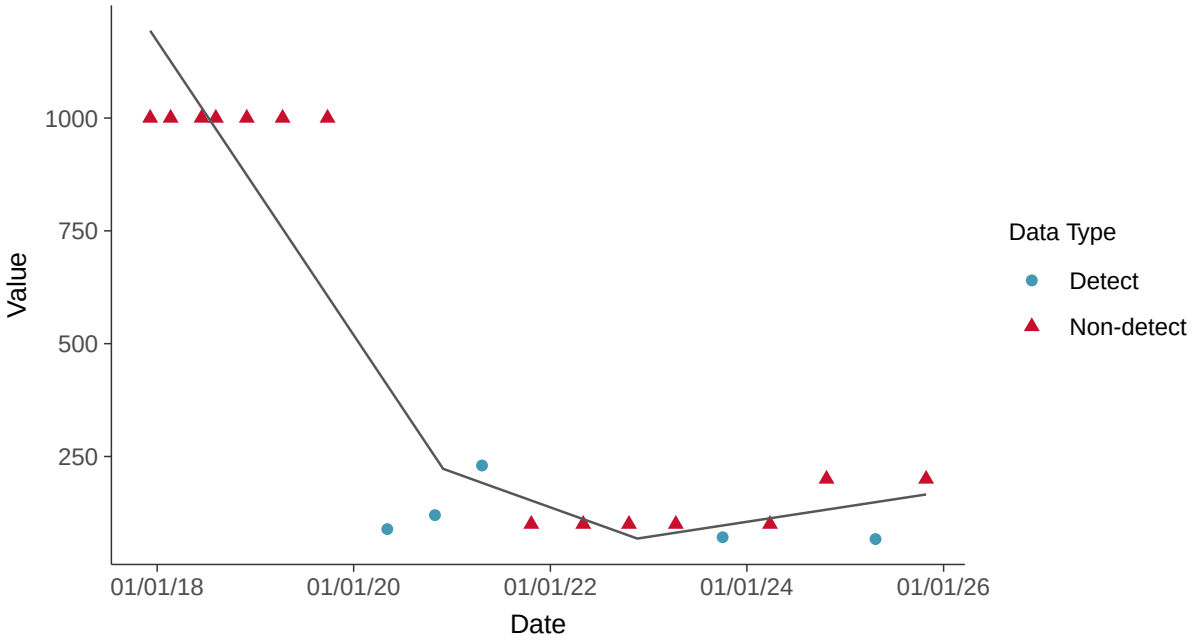

**Trend Regression: Piecewise Linear-Linear**

Fluoride, MW-17004 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Fluoride, MW-17004 (ug/L)

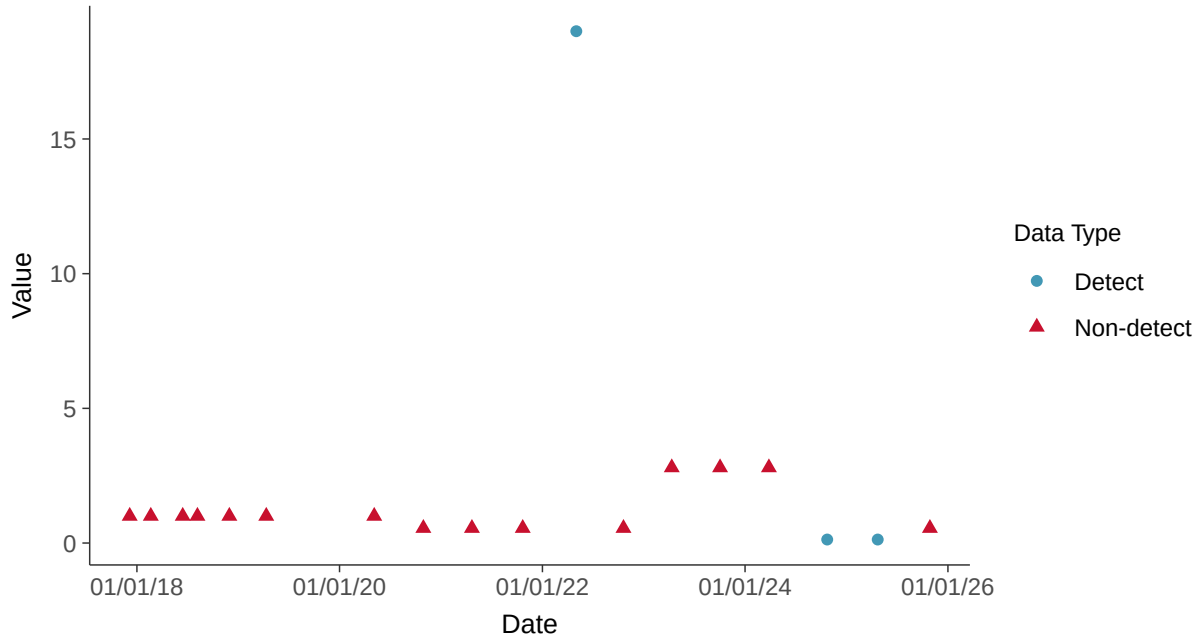


## Appendix IV: Lead, MW-17004

ID: 17_2_116

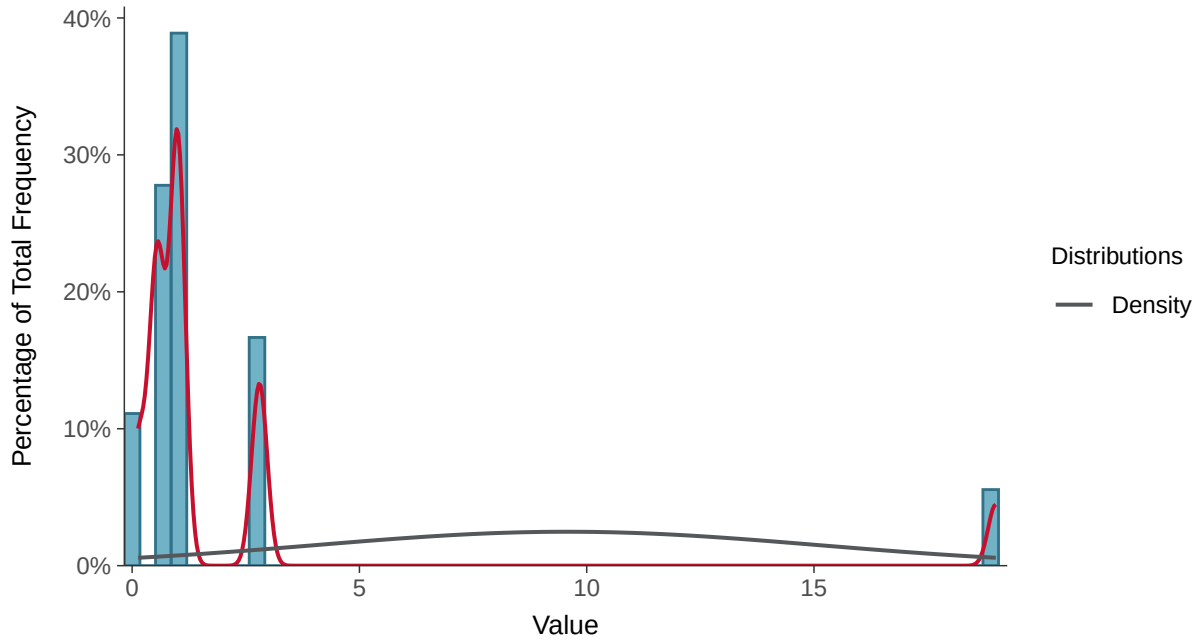
**Scatter Plot**

Lead, MW-17004 (ug/L)



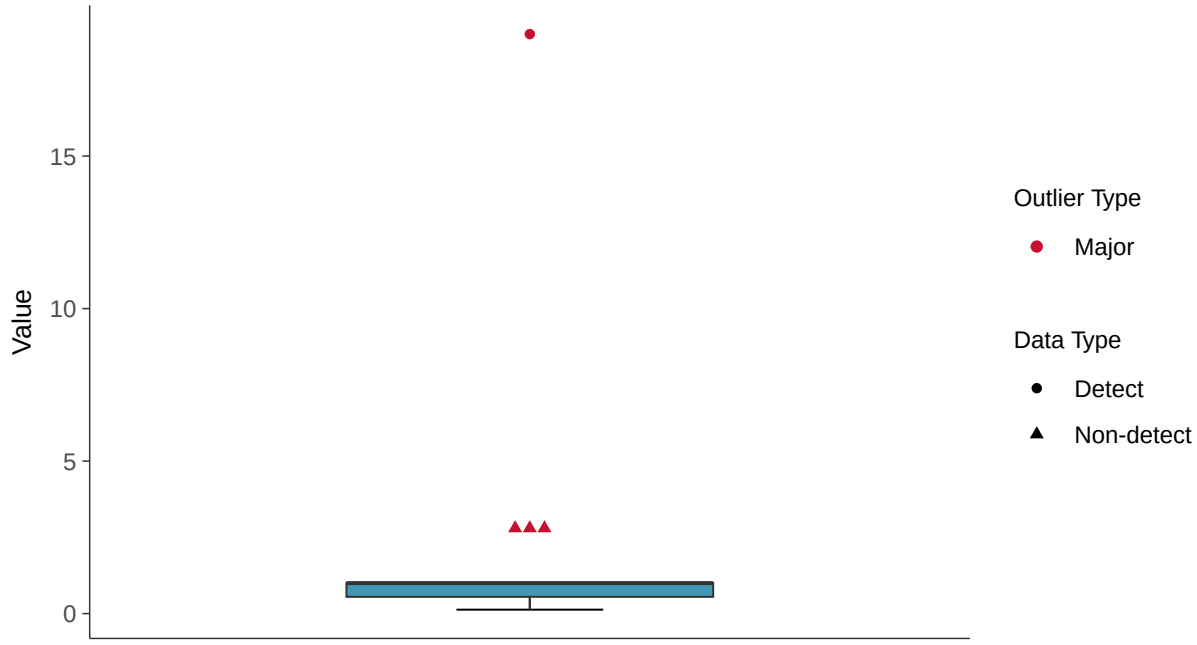

**Histogram**

Lead, MW-17004 (ug/L)



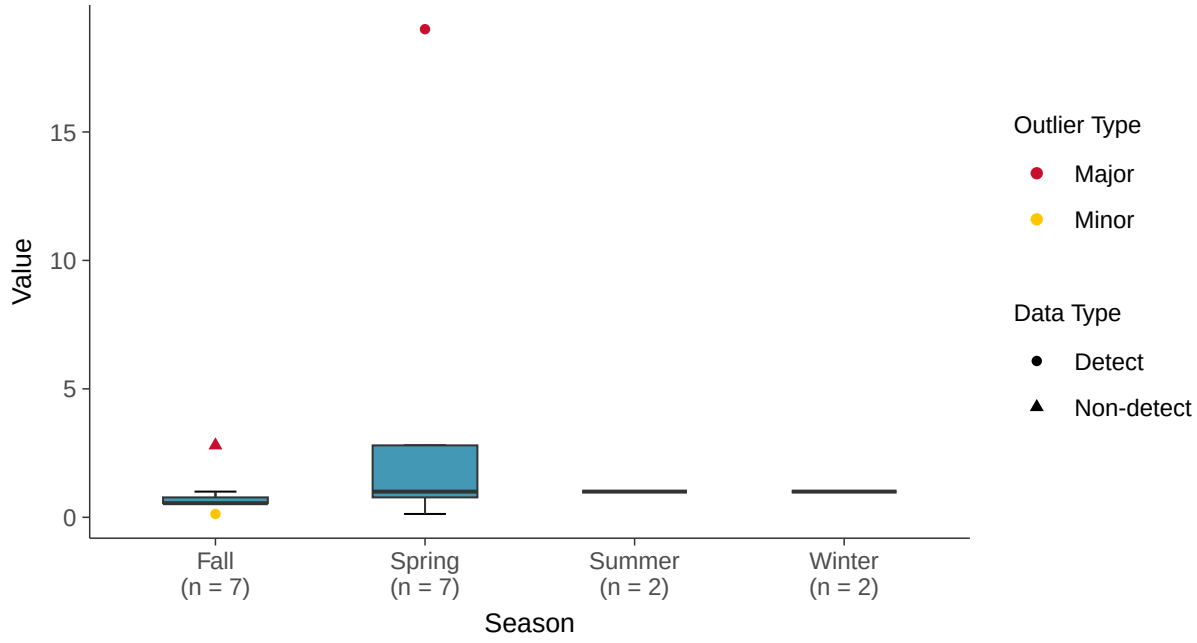
## Boxplot

Lead, MW-17004 (ug/L)



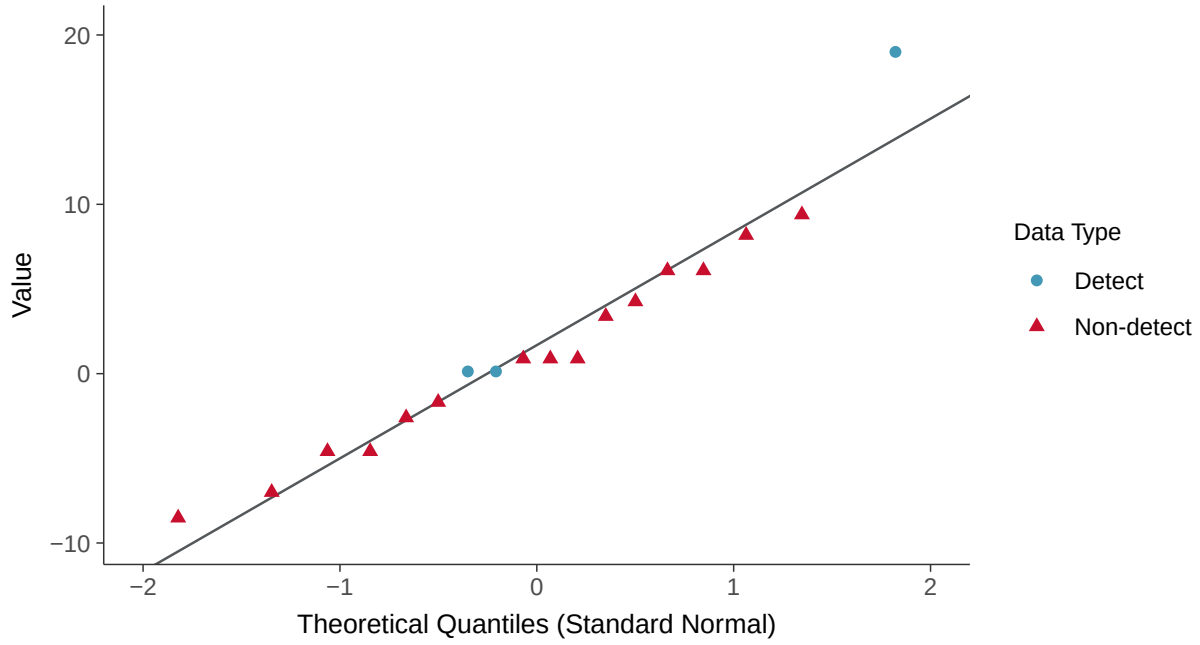

## Boxplot by Season

Lead, MW-17004 (ug/L)



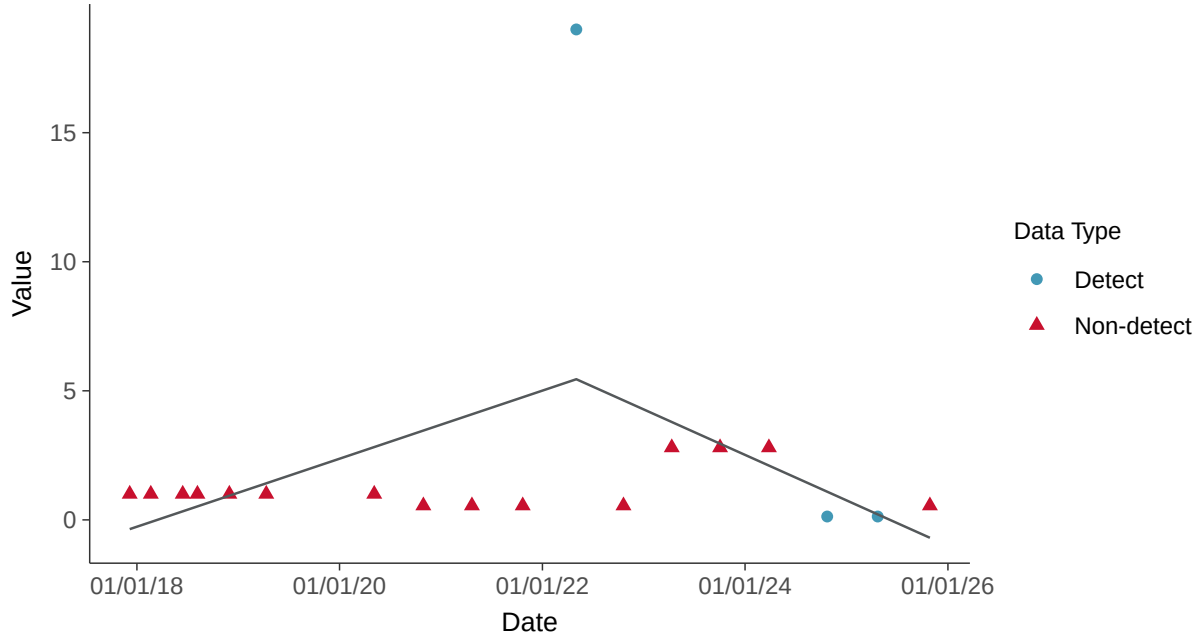
**Normal Q-Q plot using ROS Imputed Estimates**

Lead, MW-17004 (ug/L)



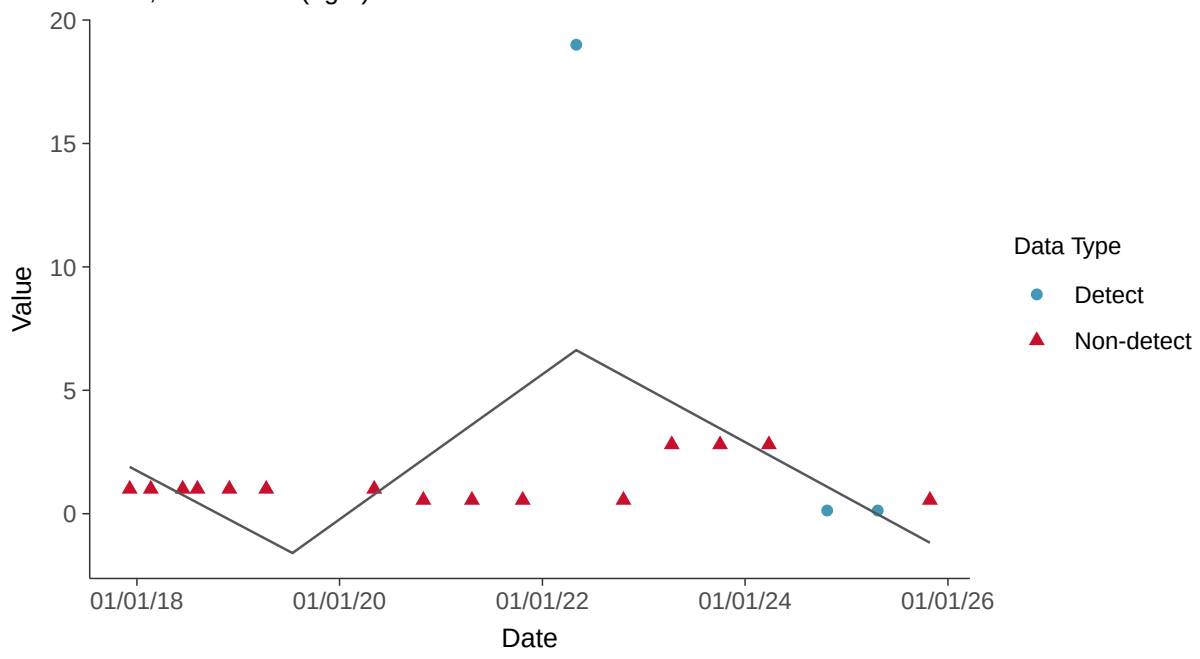

**Trend Regression: Piecewise Linear-Linear**

Lead, MW-17004 (ug/L)



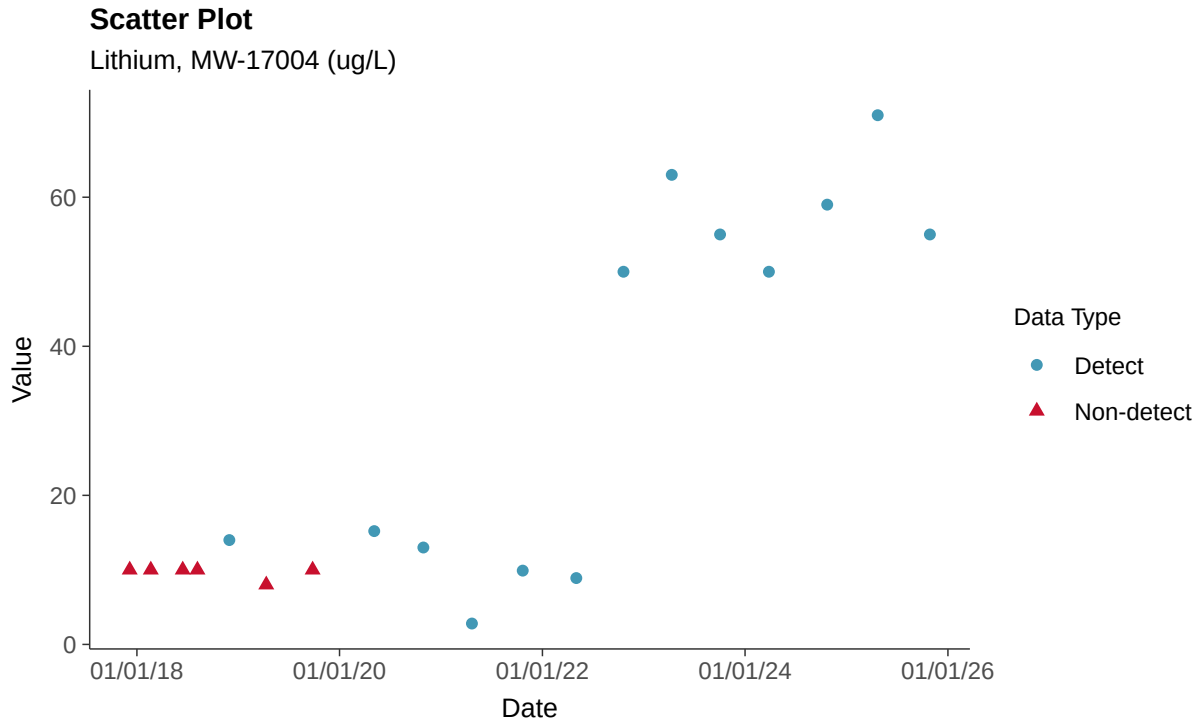
**Trend Regression: Piecewise Linear-Linear-Linear**

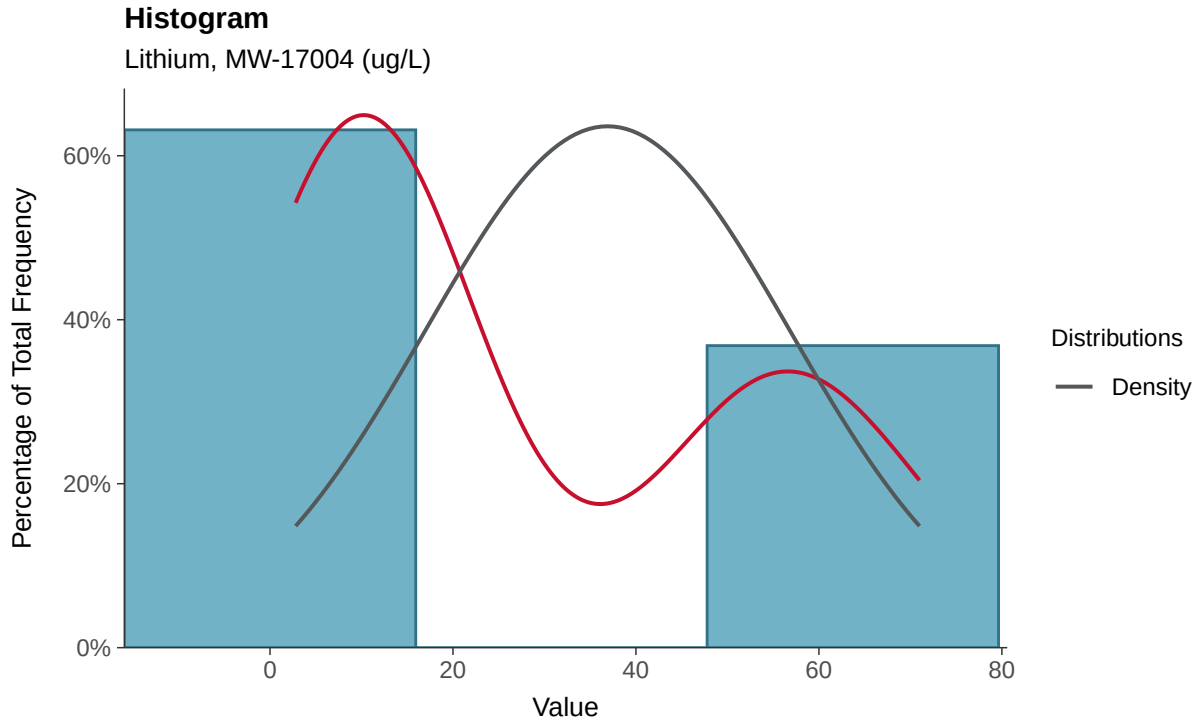
Lead, MW-17004 (ug/L)



## Appendix IV: Lithium, MW-17004

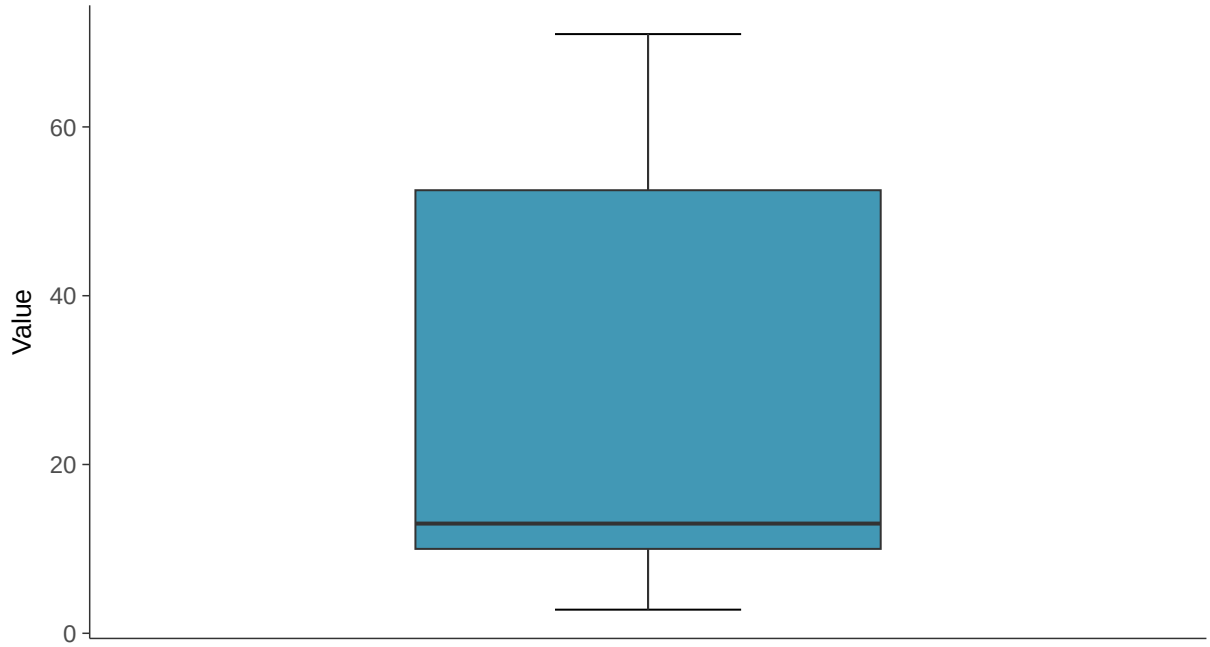
ID: 17_2_117



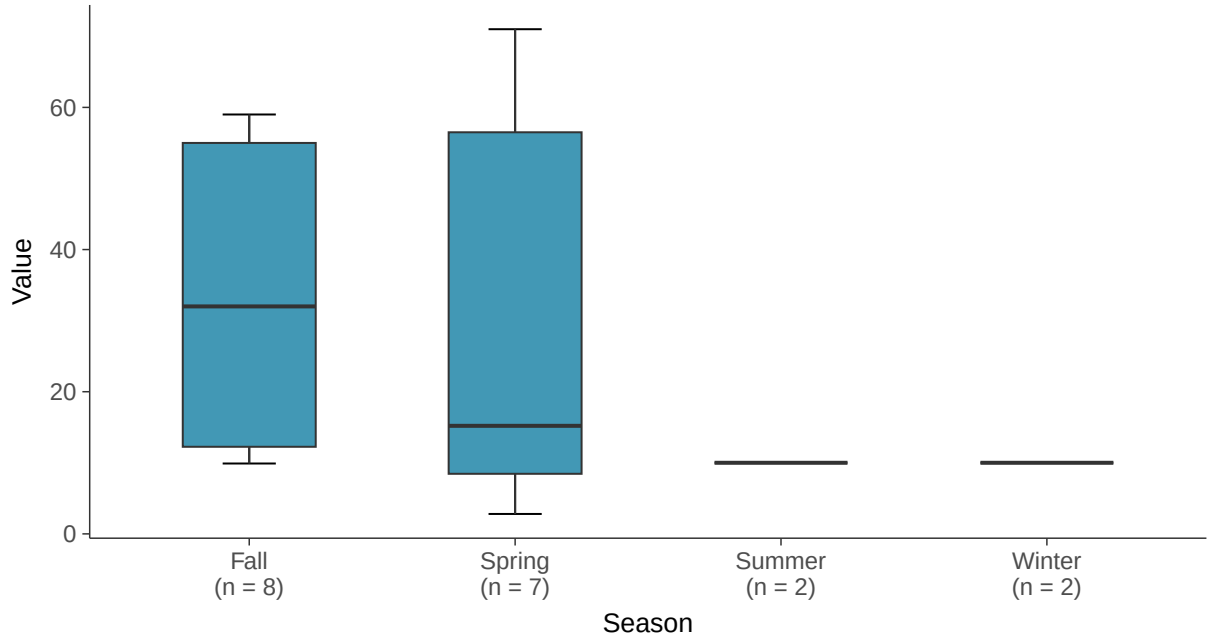
**Boxplot**

Lithium, MW-17004 (ug/L)



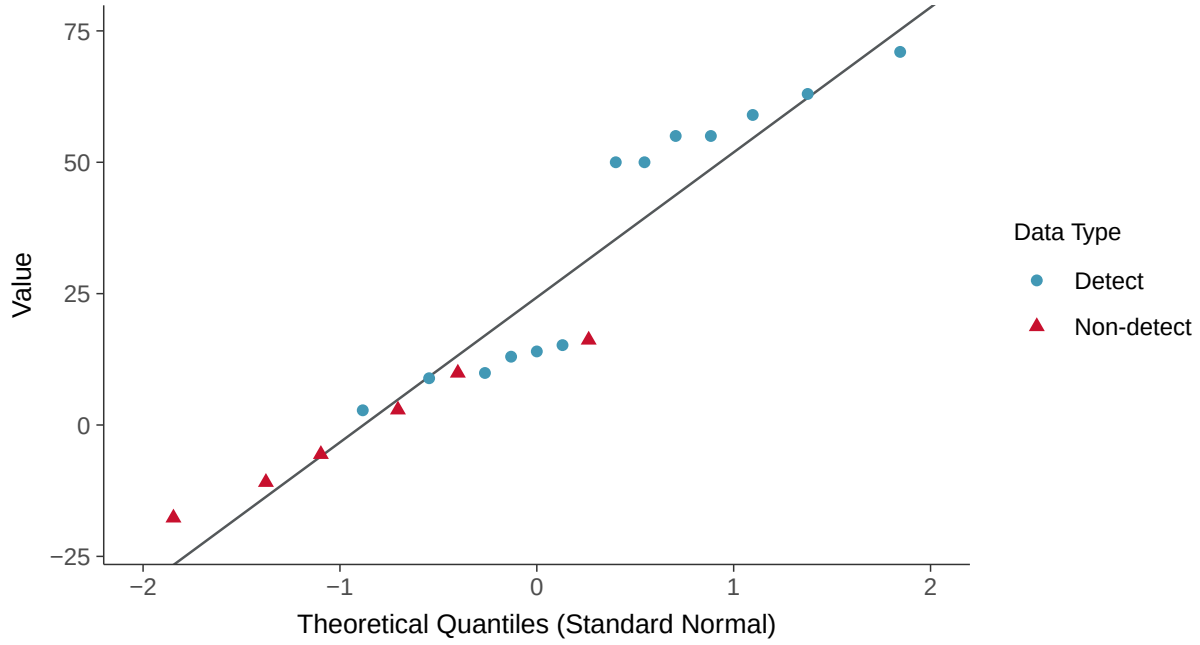

**Boxplot by Season**

Lithium, MW-17004 (ug/L)



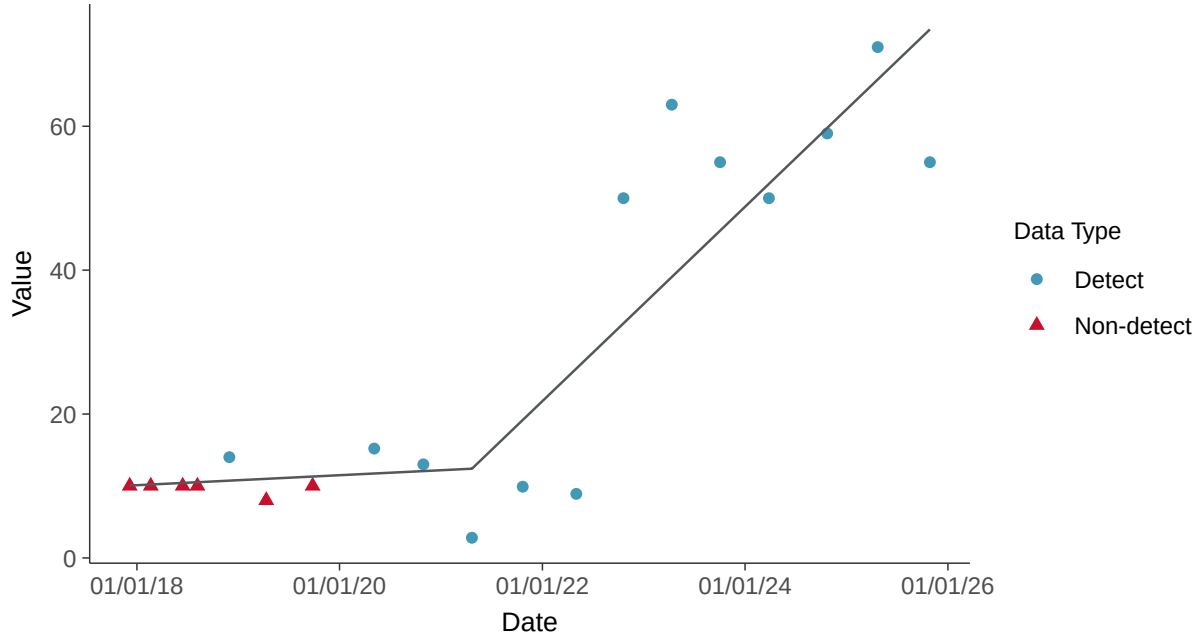
**Normal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-17004 (ug/L)



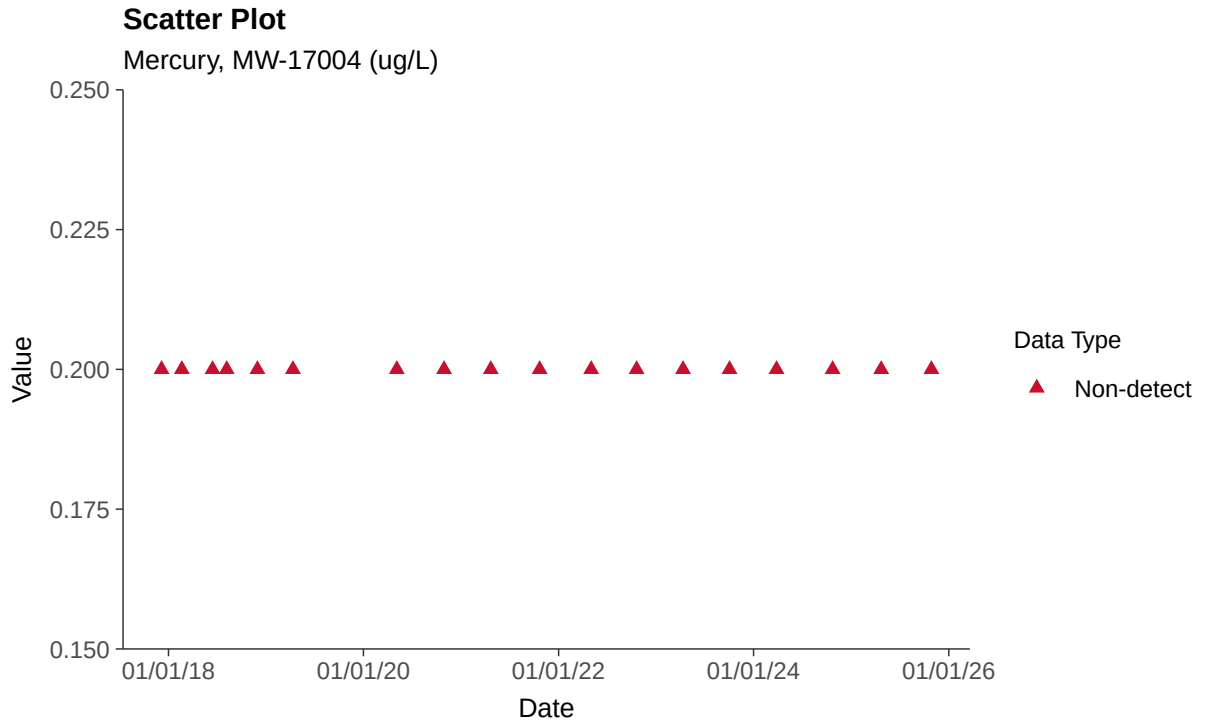

**Trend Regression: Piecewise Linear-Linear**

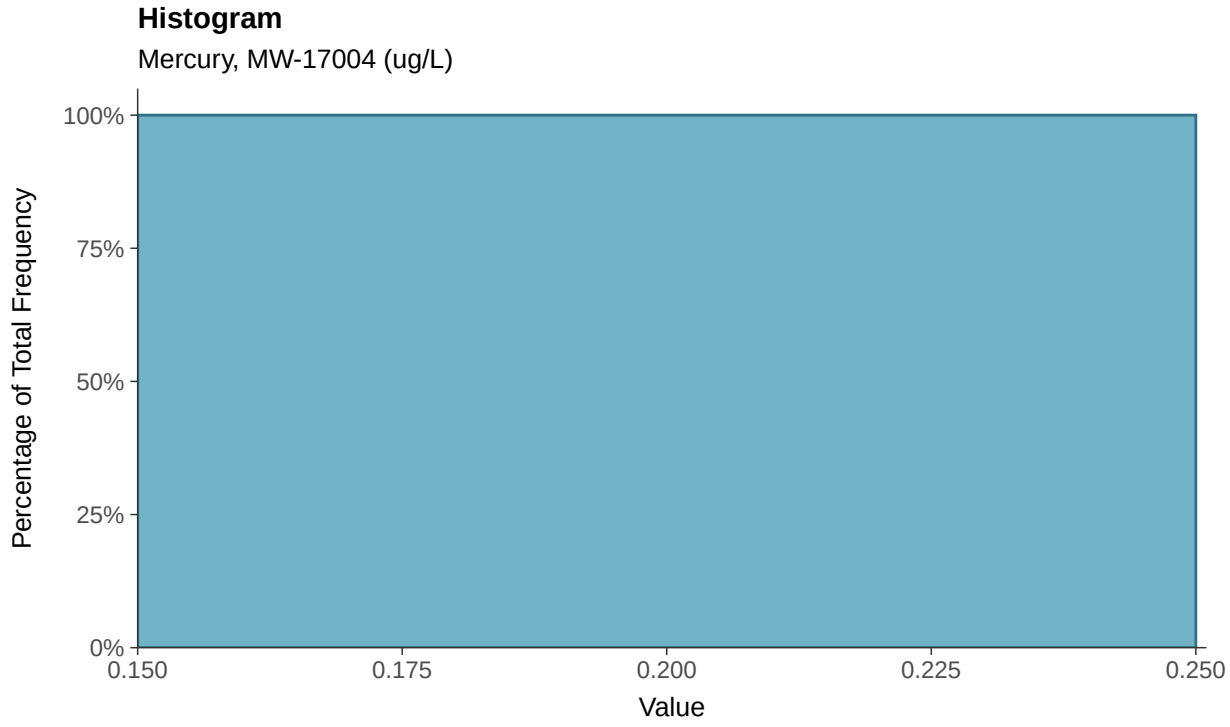
Lithium, MW-17004 (ug/L)



## Appendix IV: Mercury, MW-17004

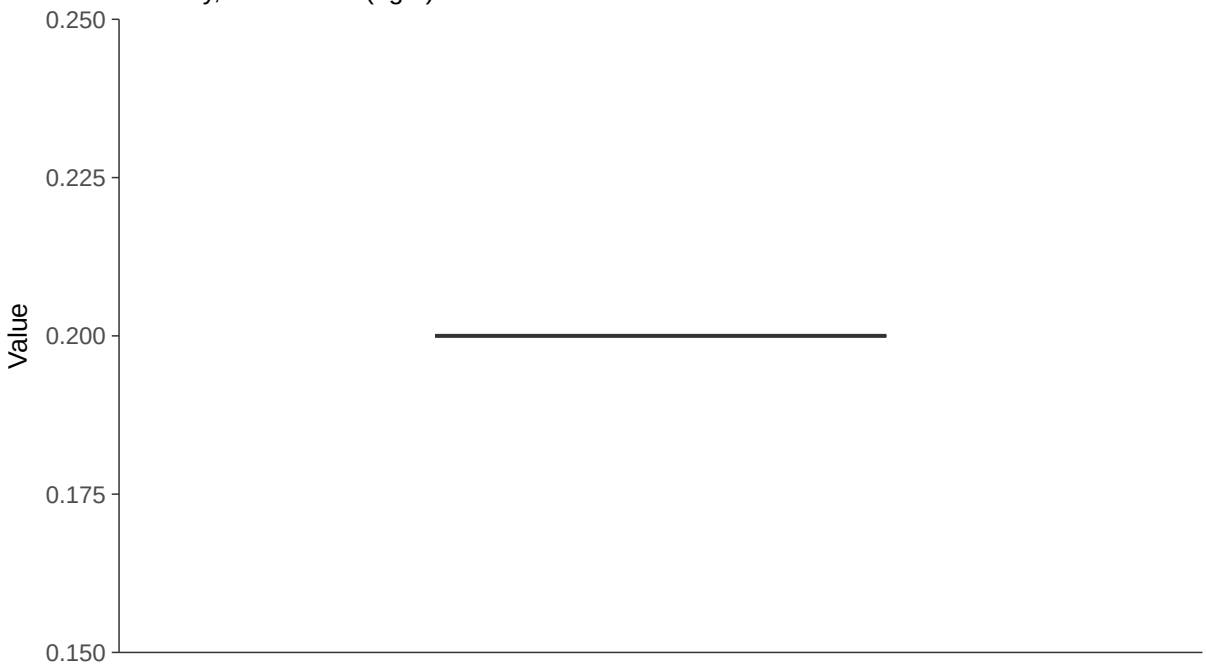
ID: 17_2_118



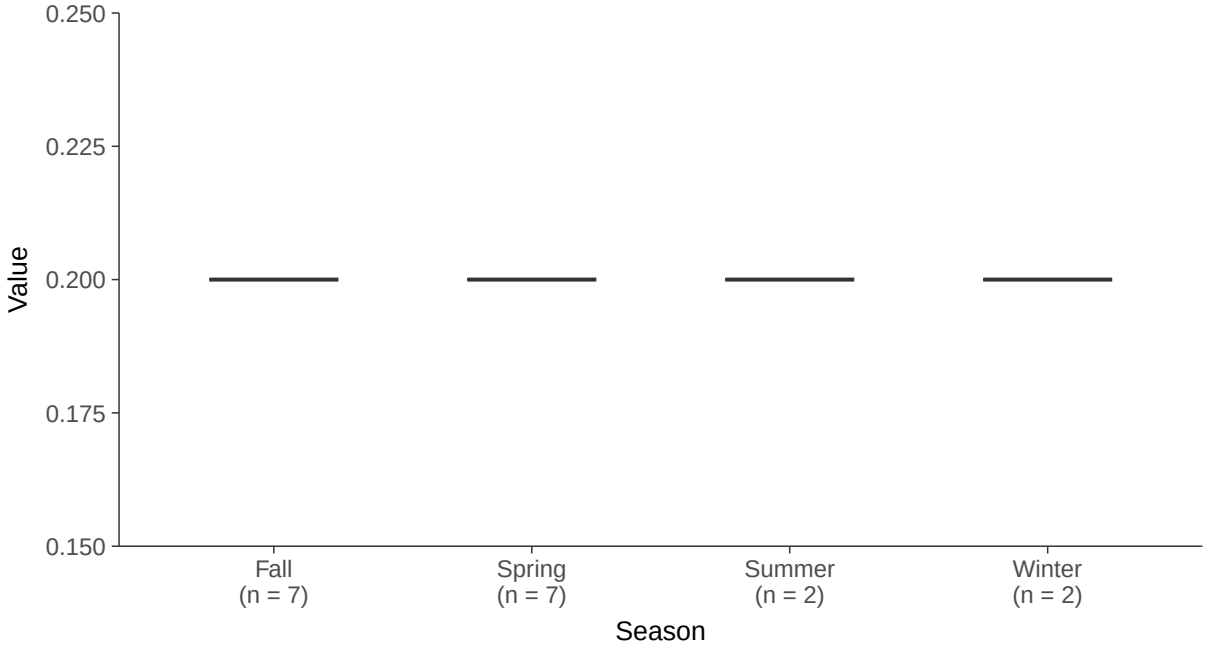
**Boxplot**

Mercury, MW-17004 (ug/L)




**Boxplot by Season**

Mercury, MW-17004 (ug/L)

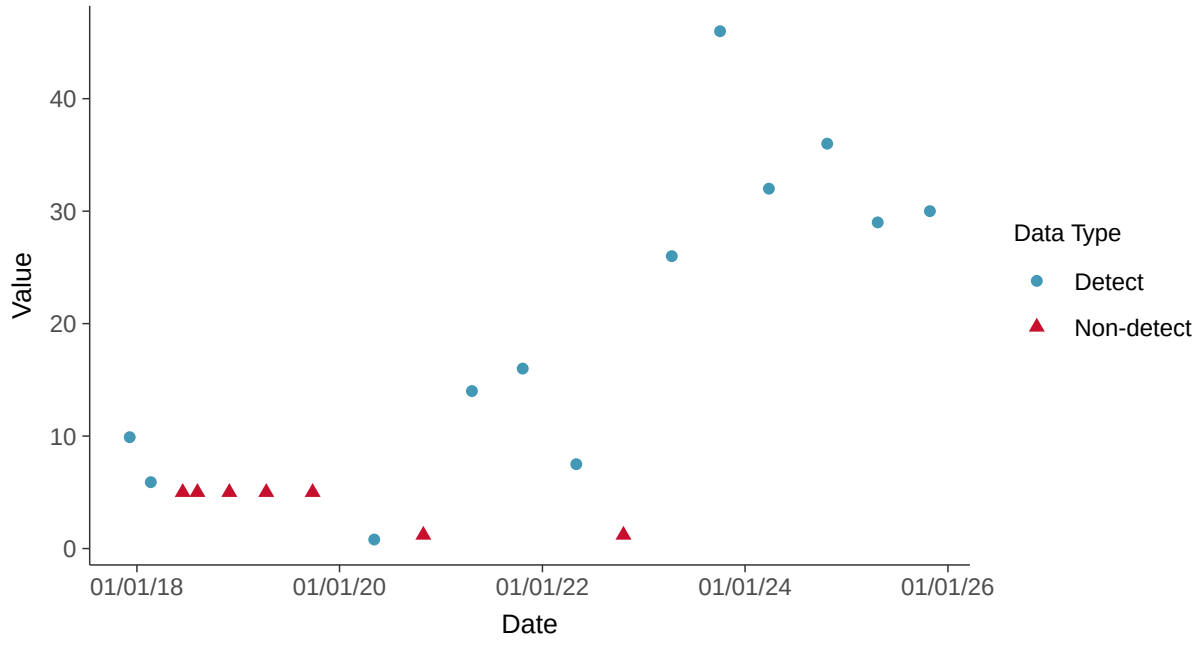


## Appendix IV: Molybdenum, MW-17004

ID: 17_2_119

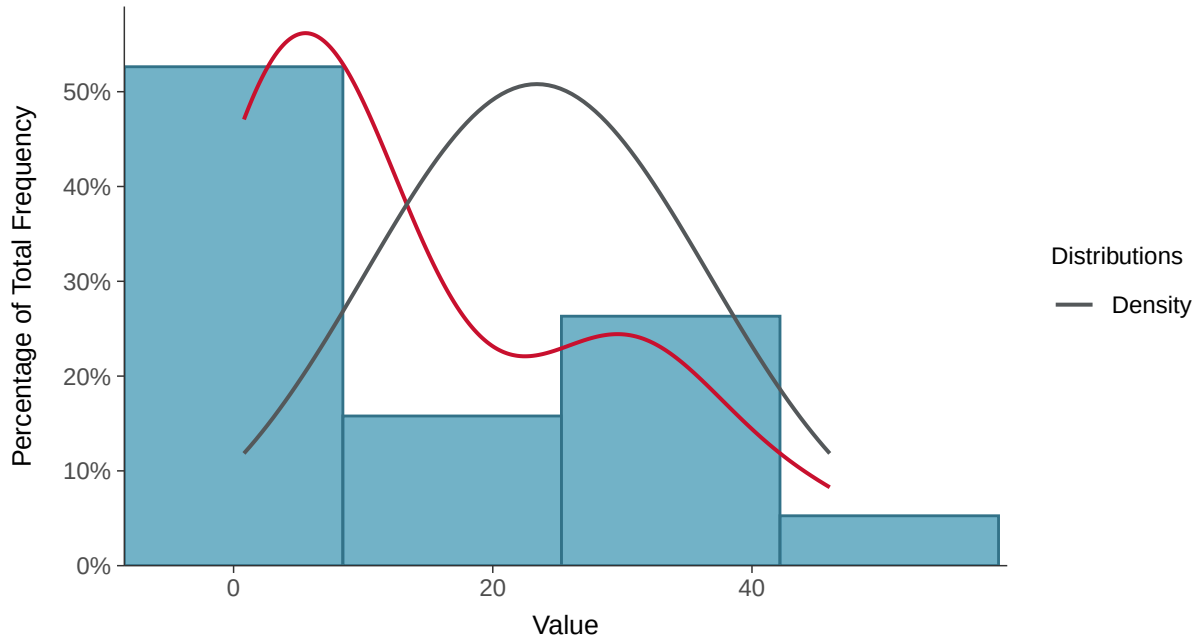
**Scatter Plot**

Molybdenum, MW-17004 (ug/L)



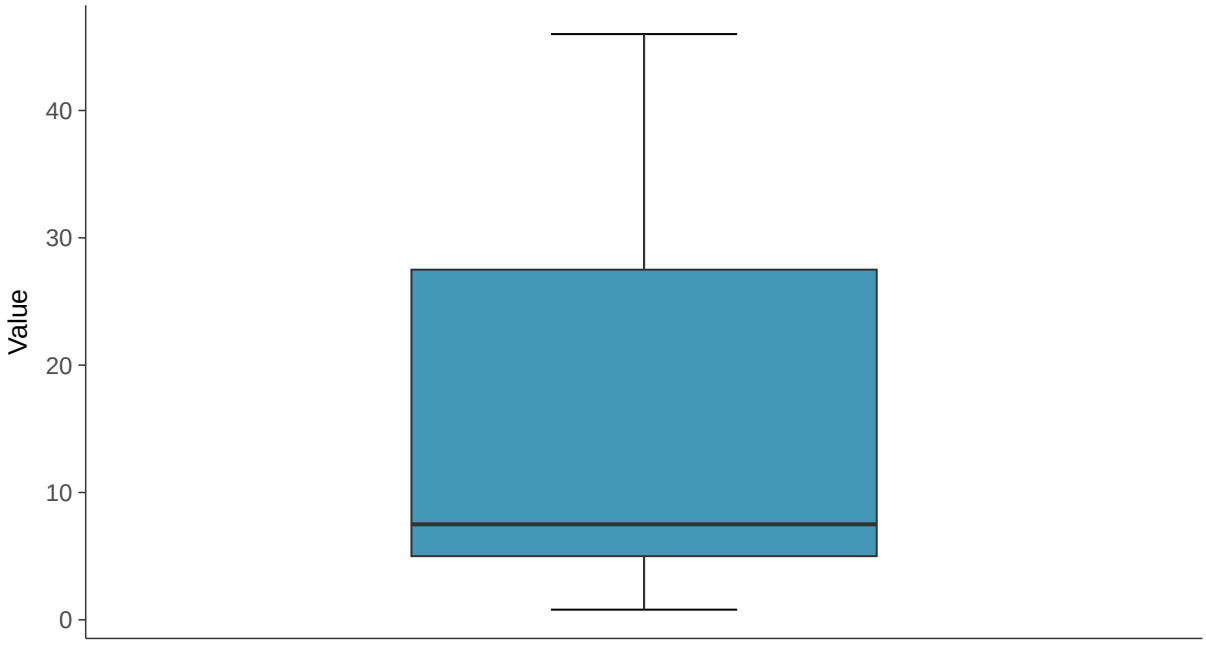

**Histogram**

Molybdenum, MW-17004 (ug/L)



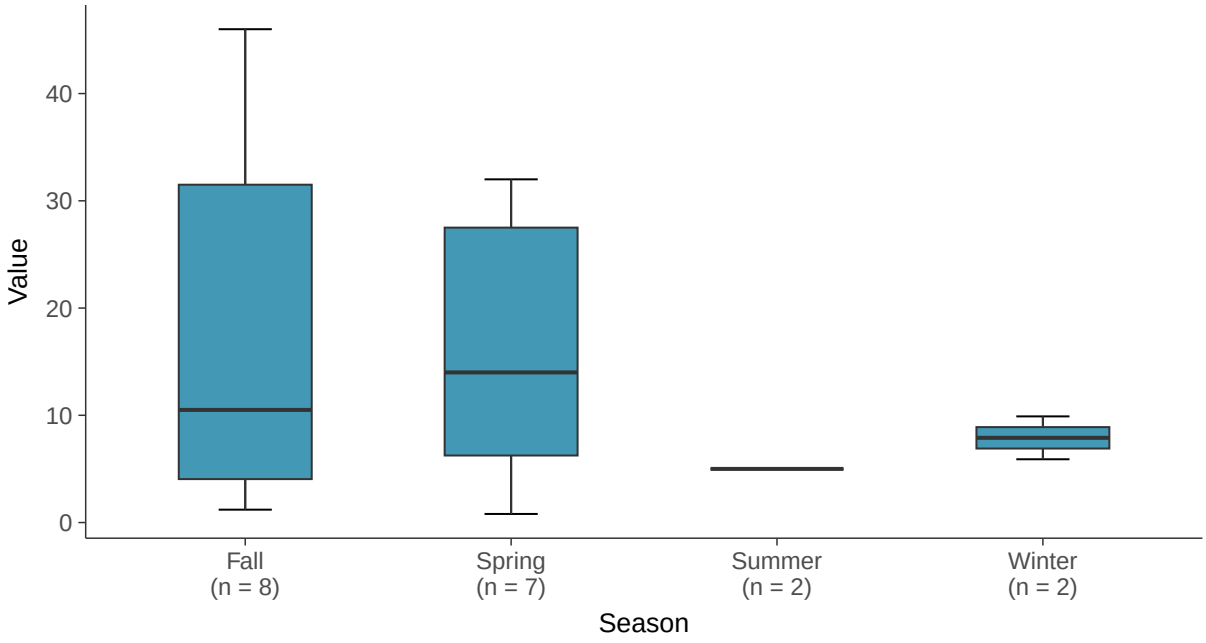
**Boxplot**

Molybdenum, MW-17004 (ug/L)



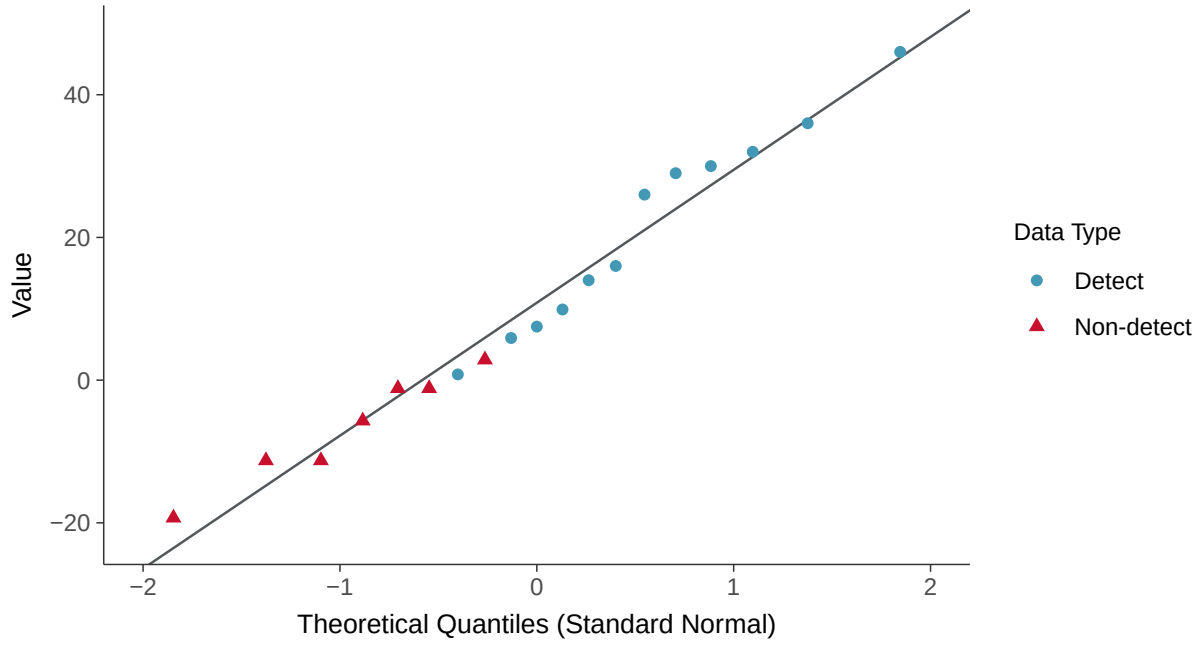

**Boxplot by Season**

Molybdenum, MW-17004 (ug/L)



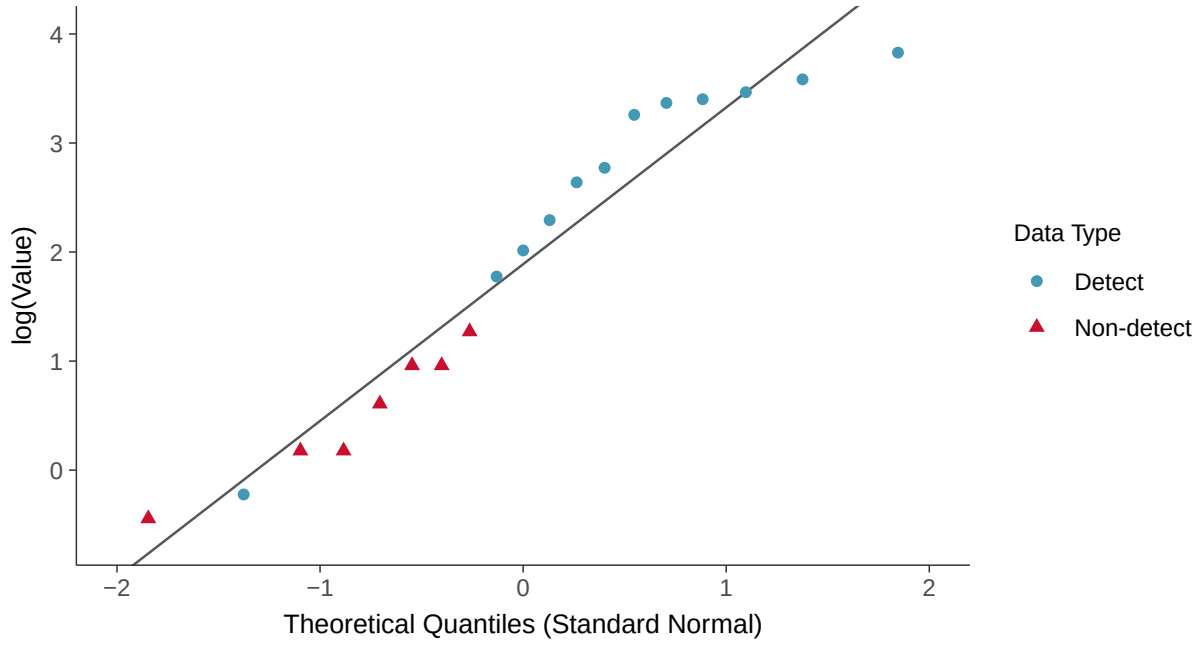
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17004 (ug/L)



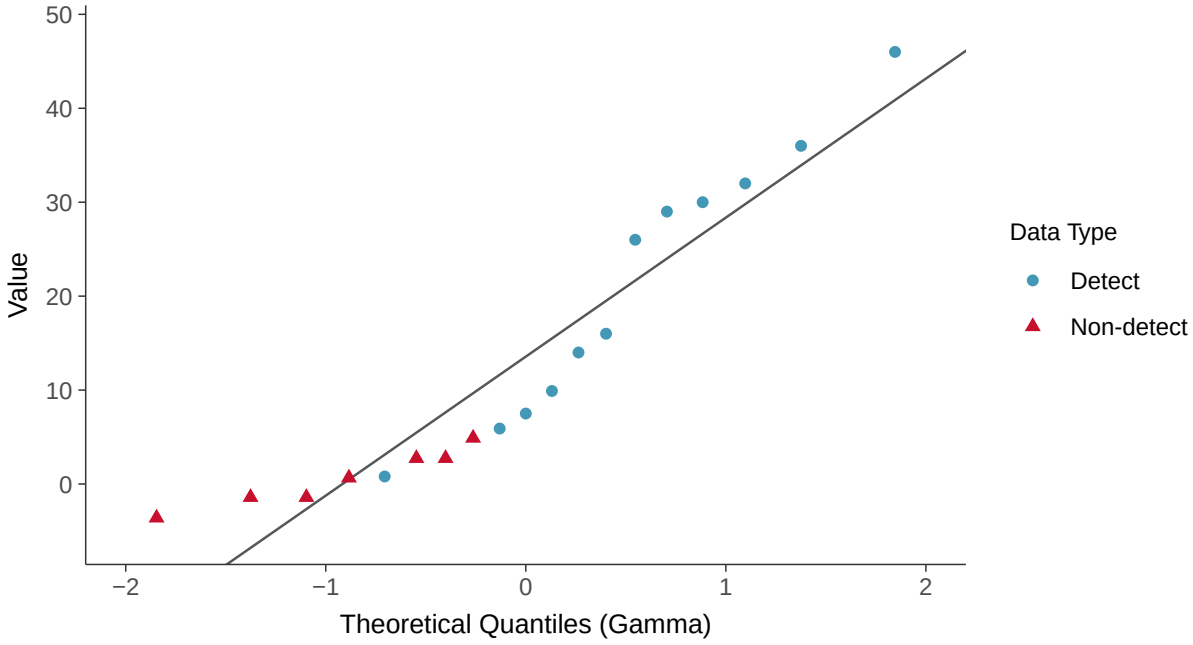

**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17004 (ug/L)



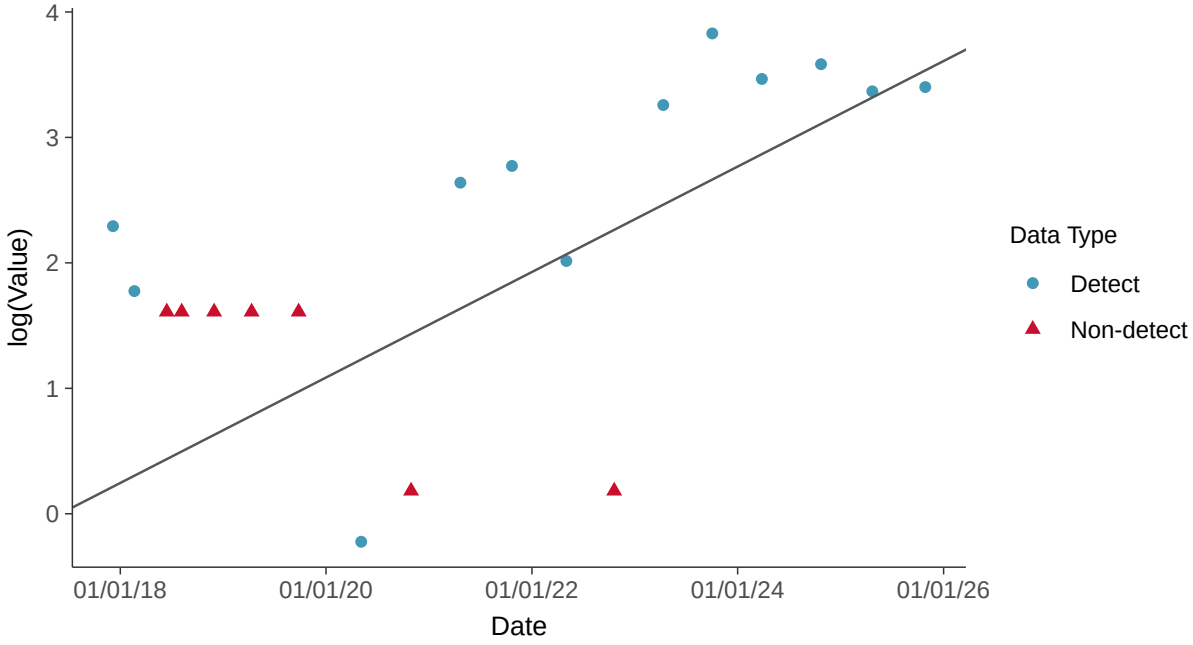
**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17004 (ug/L)



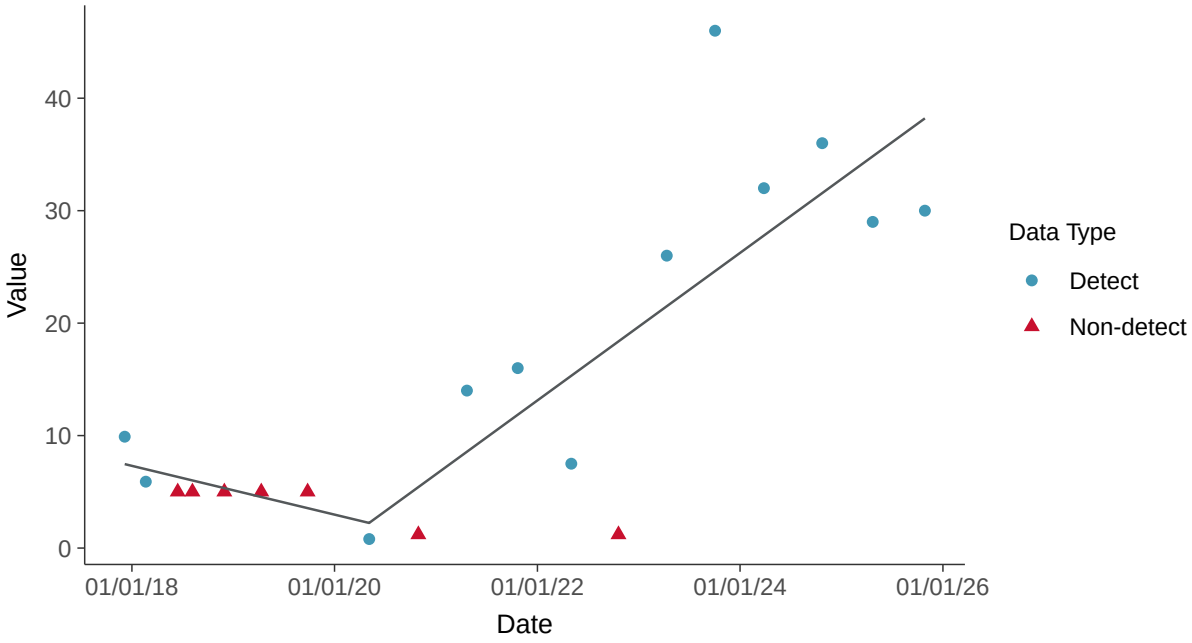

**Trend Regression: Lognormal MLE**

Molybdenum, MW-17004 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17004 (ug/L)

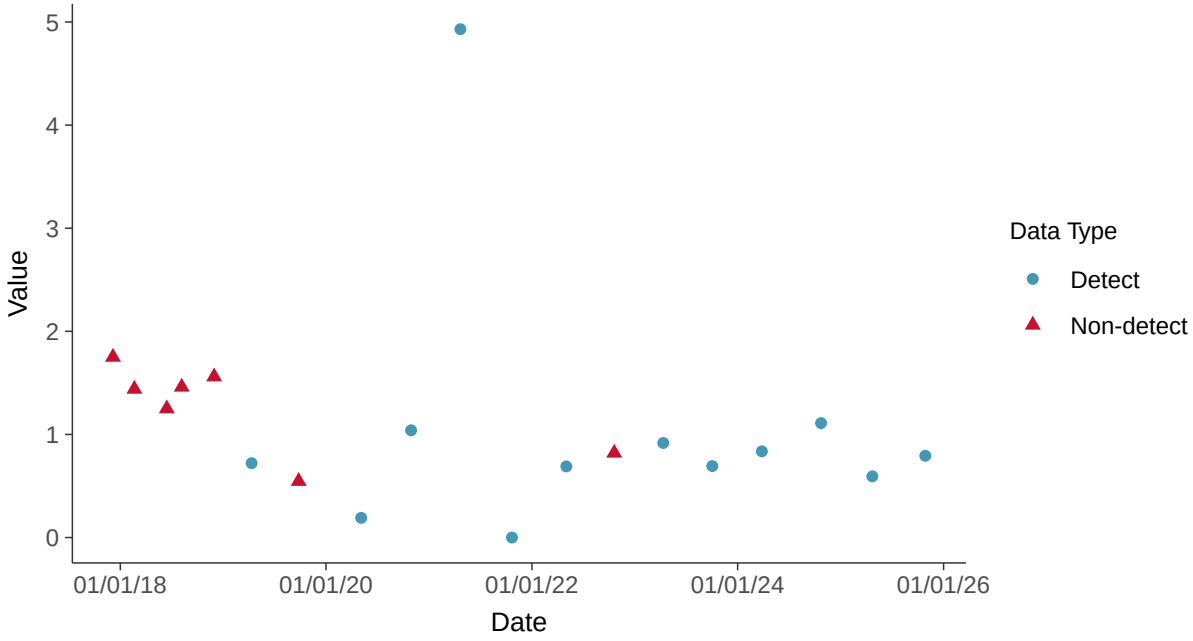


## Appendix IV: Radium-226+228, MW-17004

ID: 17_2_125

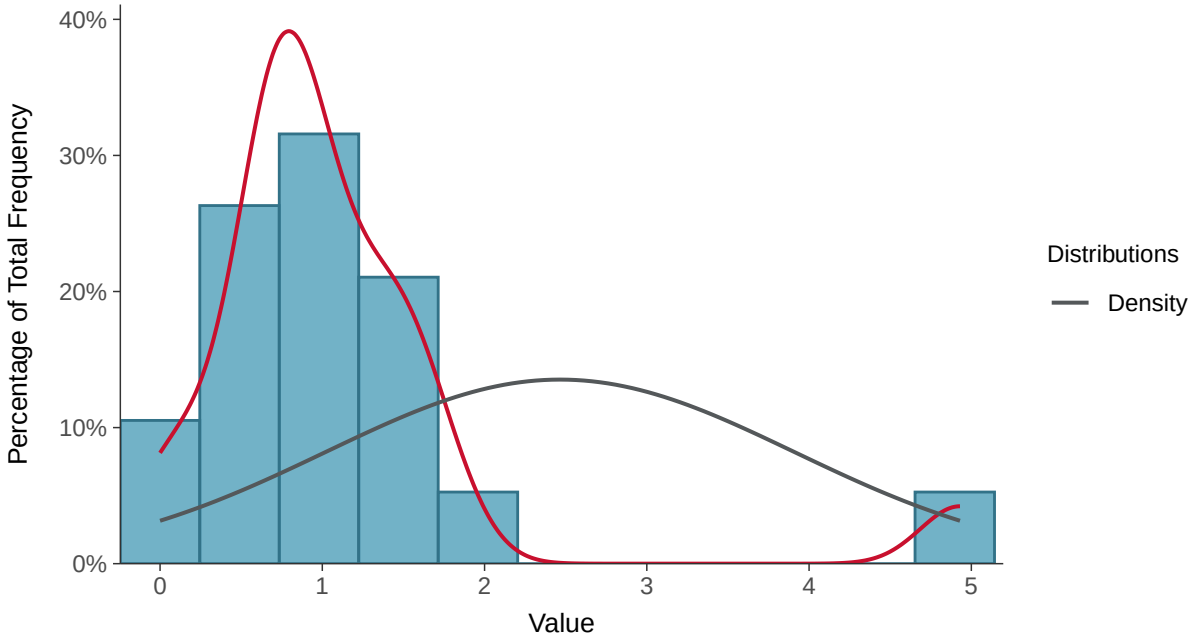
**Scatter Plot**

Radium-226+228, MW-17004 (pCi/L)



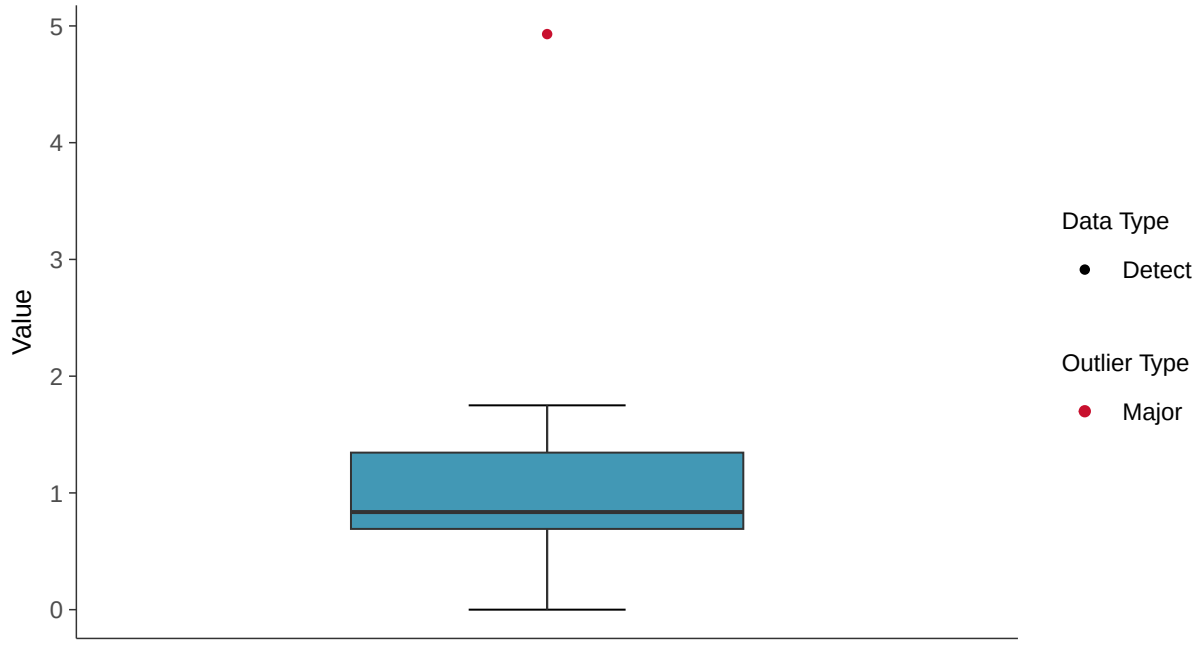

**Histogram**

Radium-226+228, MW-17004 (pCi/L)



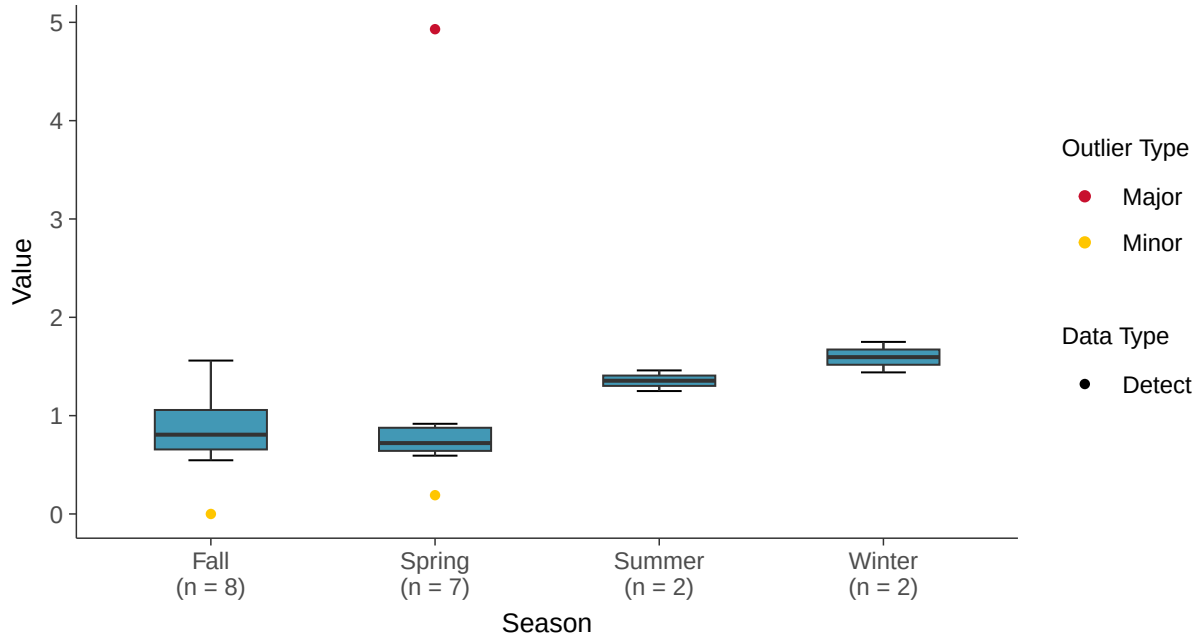
## Boxplot

Radium-226+228, MW-17004 (pCi/L)



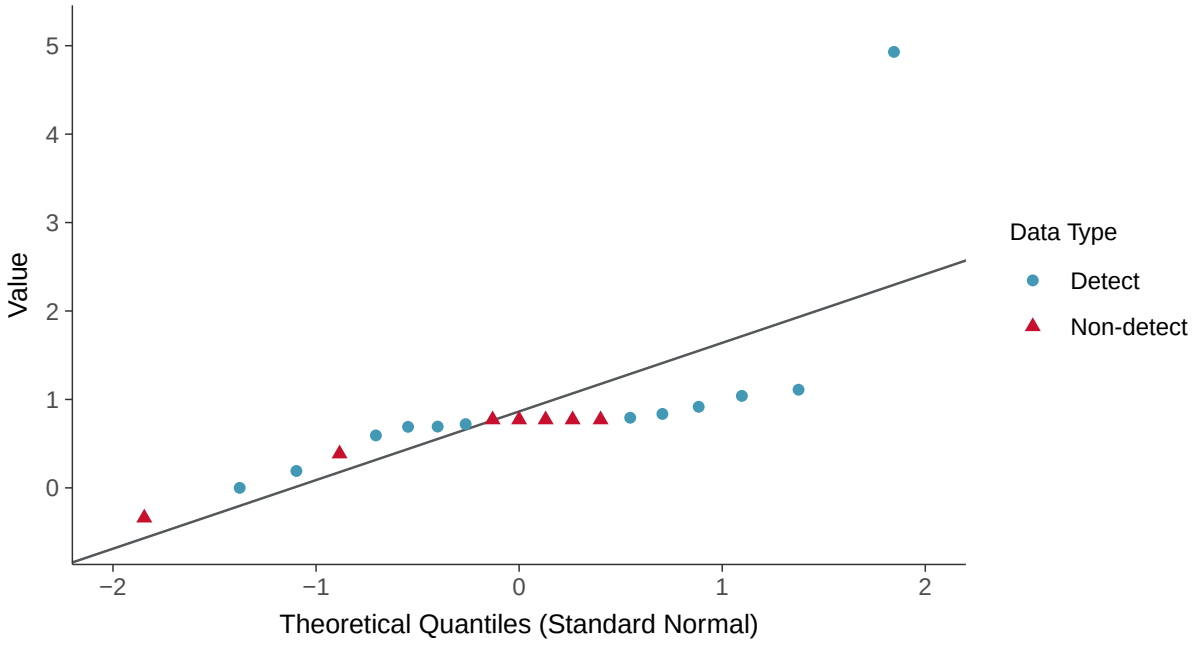

## Boxplot by Season

Radium-226+228, MW-17004 (pCi/L)



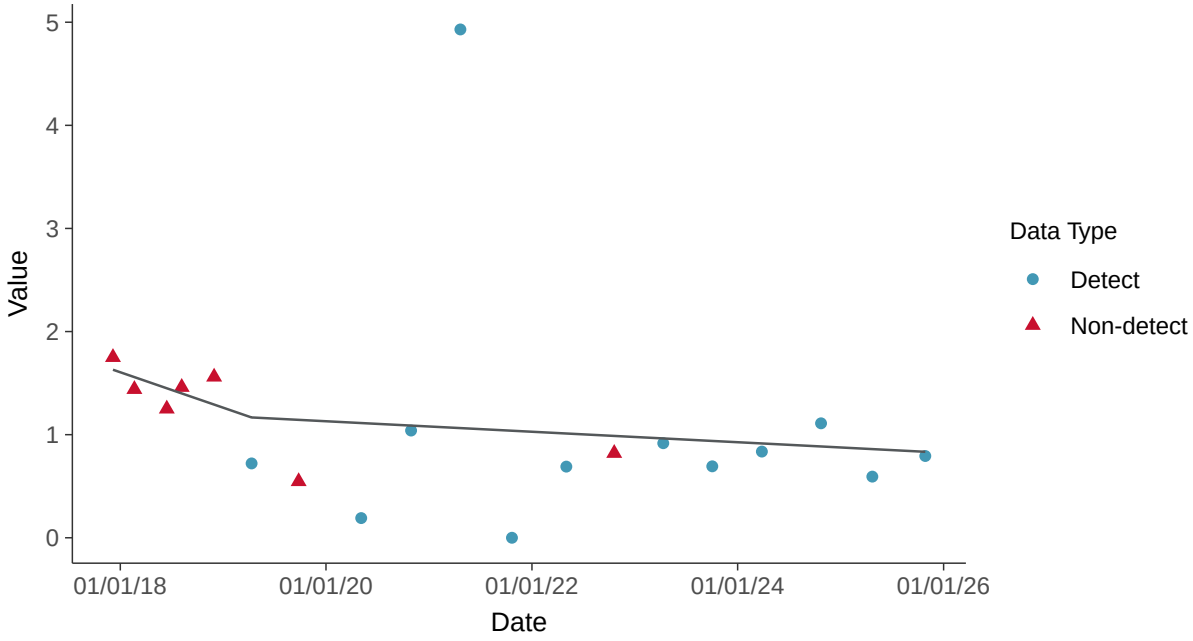
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17004 (pCi/L)



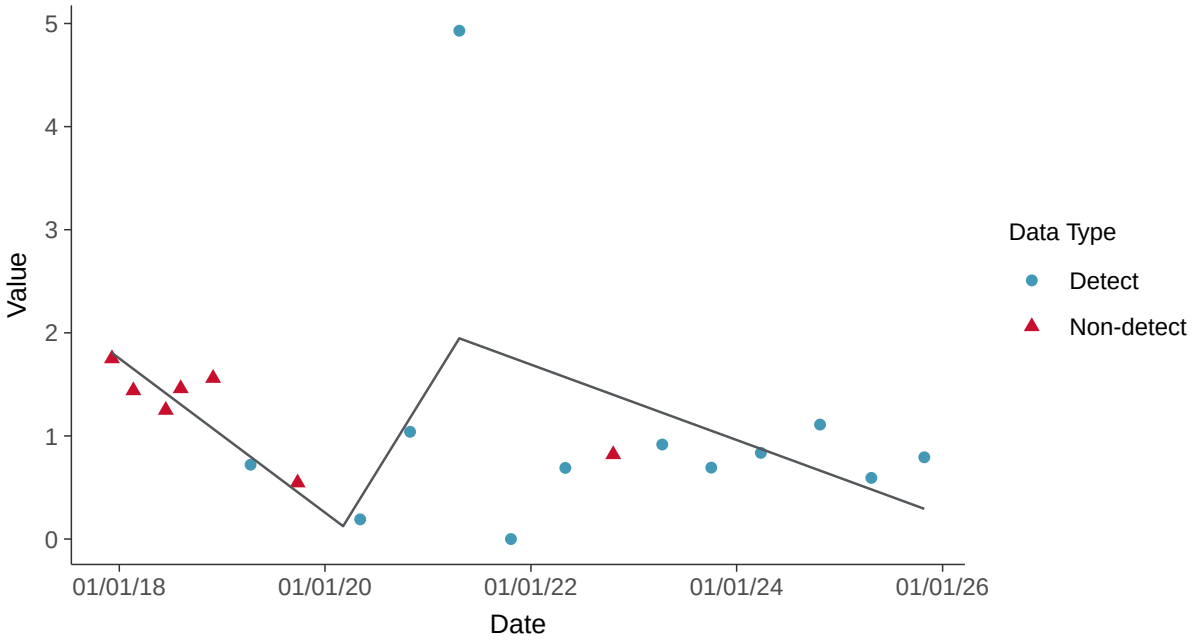

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17004 (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-17004 (pCi/L)

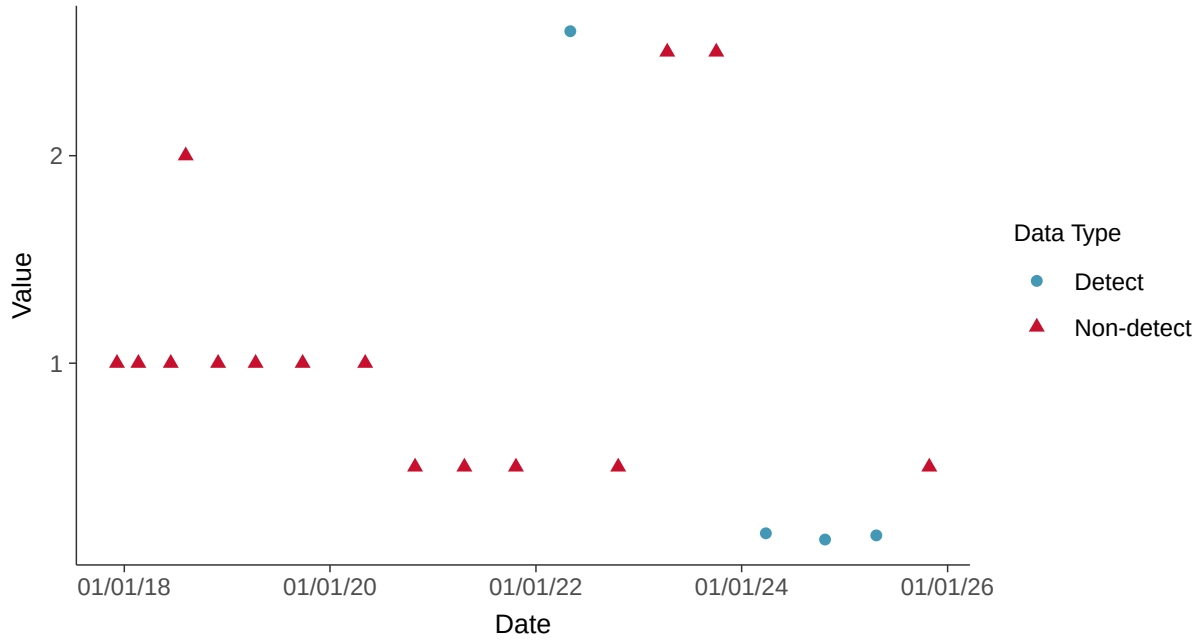


## Appendix IV: Selenium, MW-17004

ID: 17_2_127

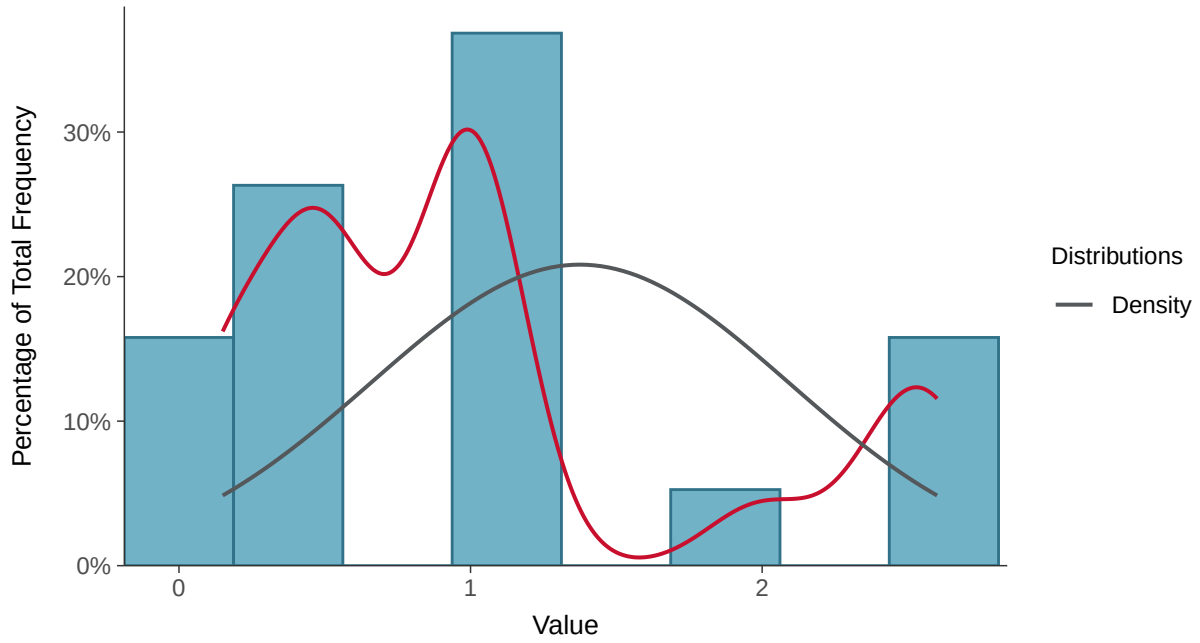
**Scatter Plot**

Selenium, MW-17004 (ug/L)



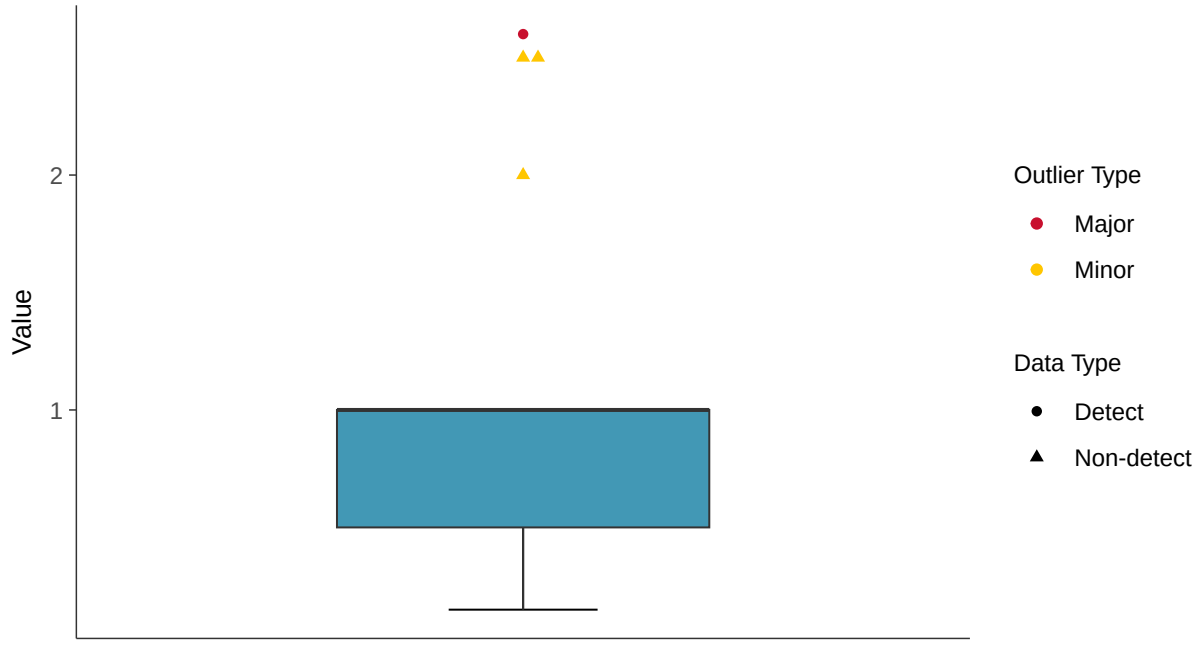

**Histogram**

Selenium, MW-17004 (ug/L)



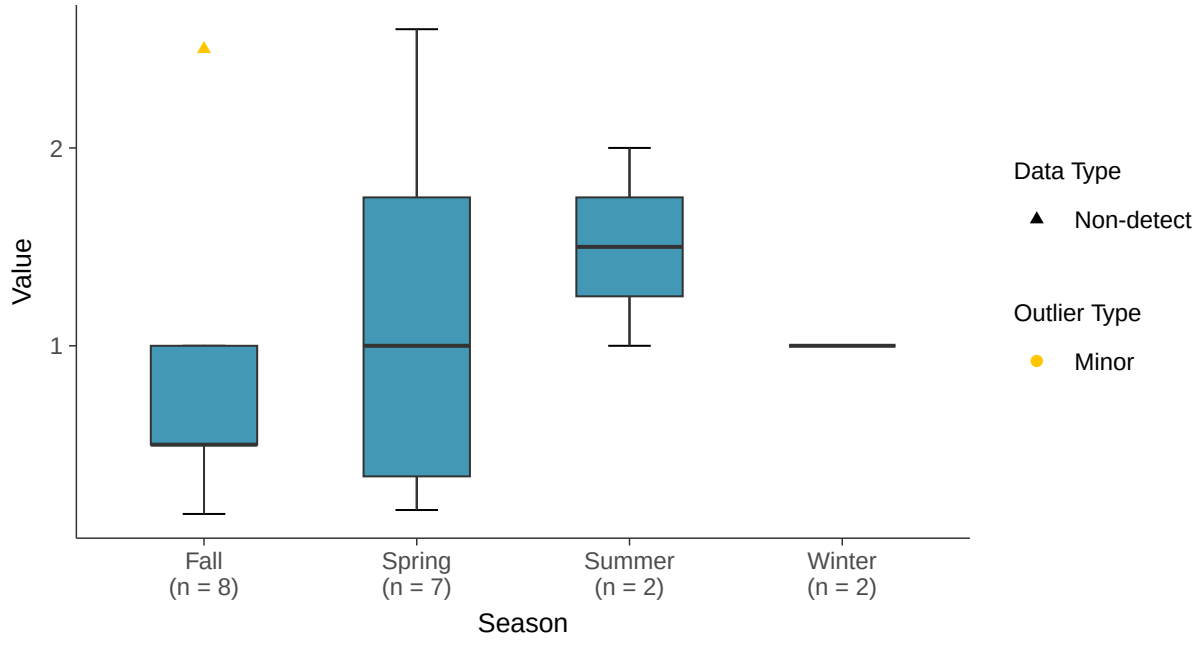
## Boxplot

Selenium, MW-17004 (ug/L)



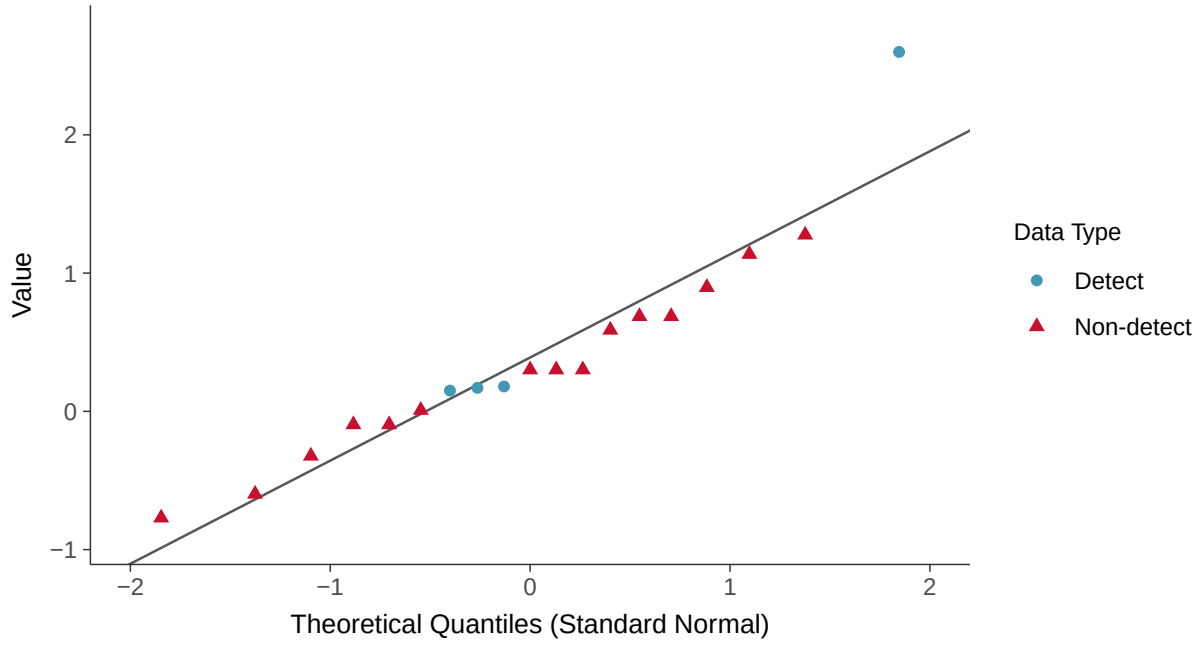

## Boxplot by Season

Selenium, MW-17004 (ug/L)



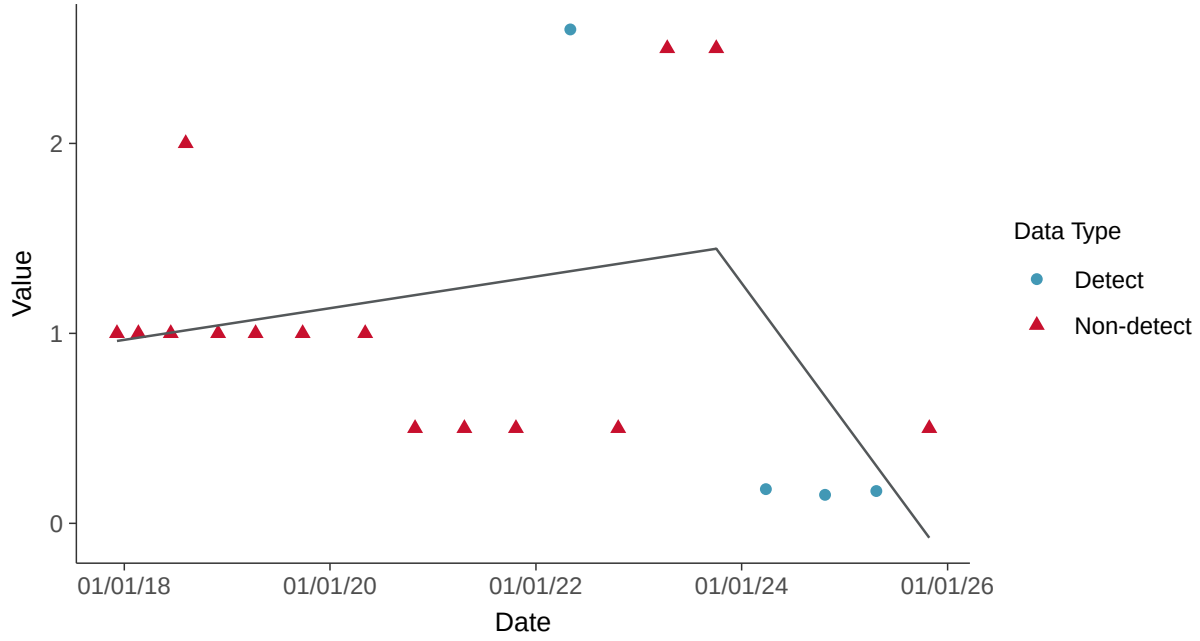
**Normal Q-Q plot using ROS Imputed Estimates**

Selenium, MW-17004 (ug/L)



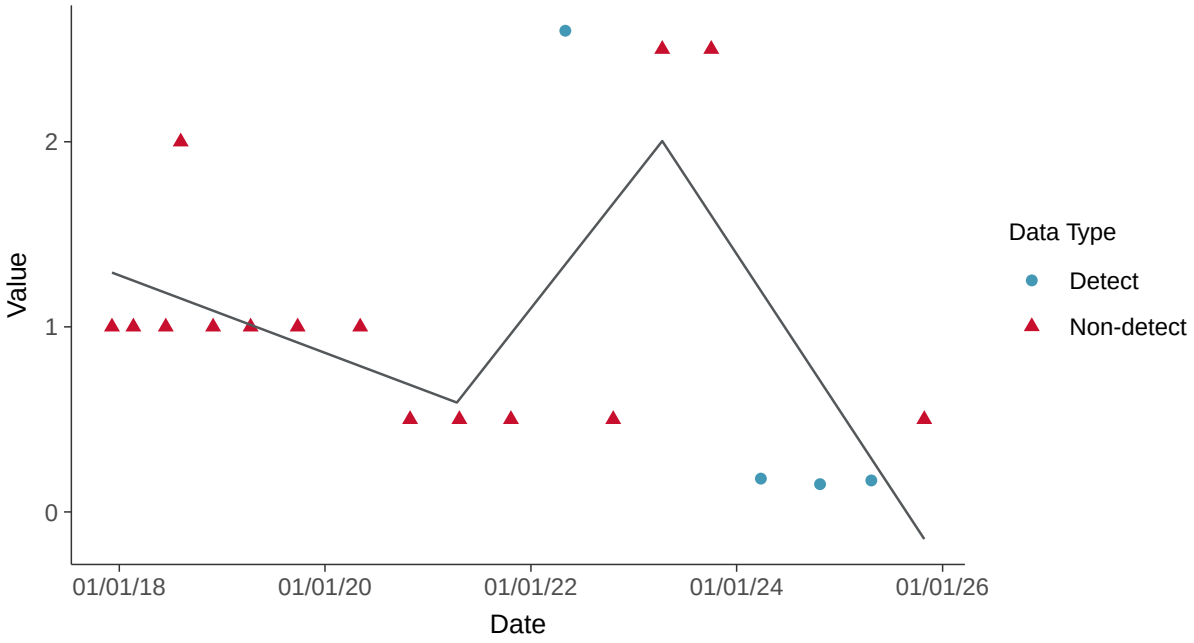

**Trend Regression: Piecewise Linear-Linear**

Selenium, MW-17004 (ug/L)



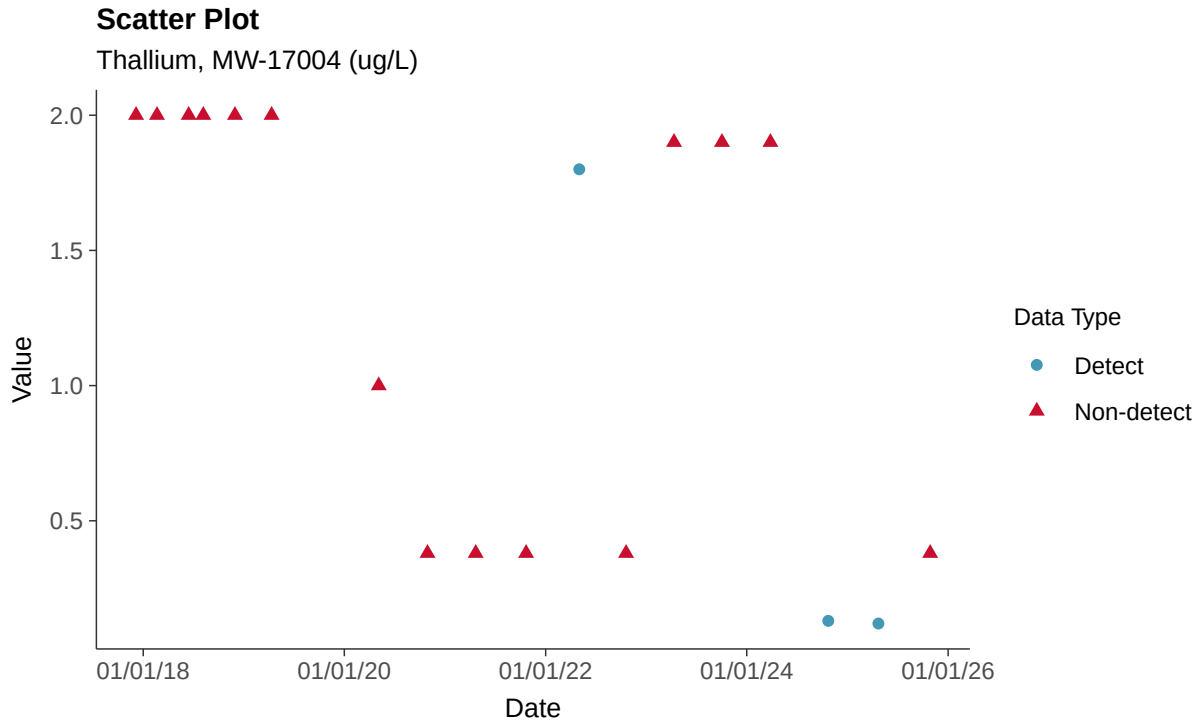
**Trend Regression: Piecewise Linear-Linear-Linear**

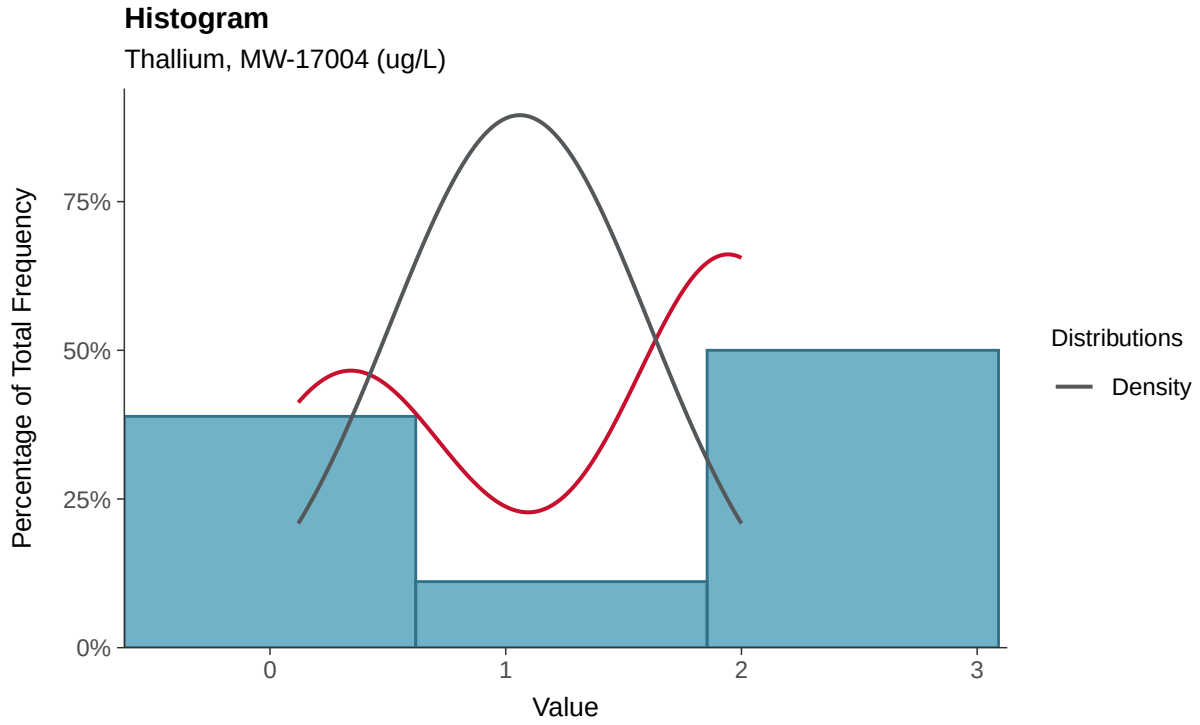
Selenium, MW-17004 (ug/L)



## Appendix IV: Thallium, MW-17004

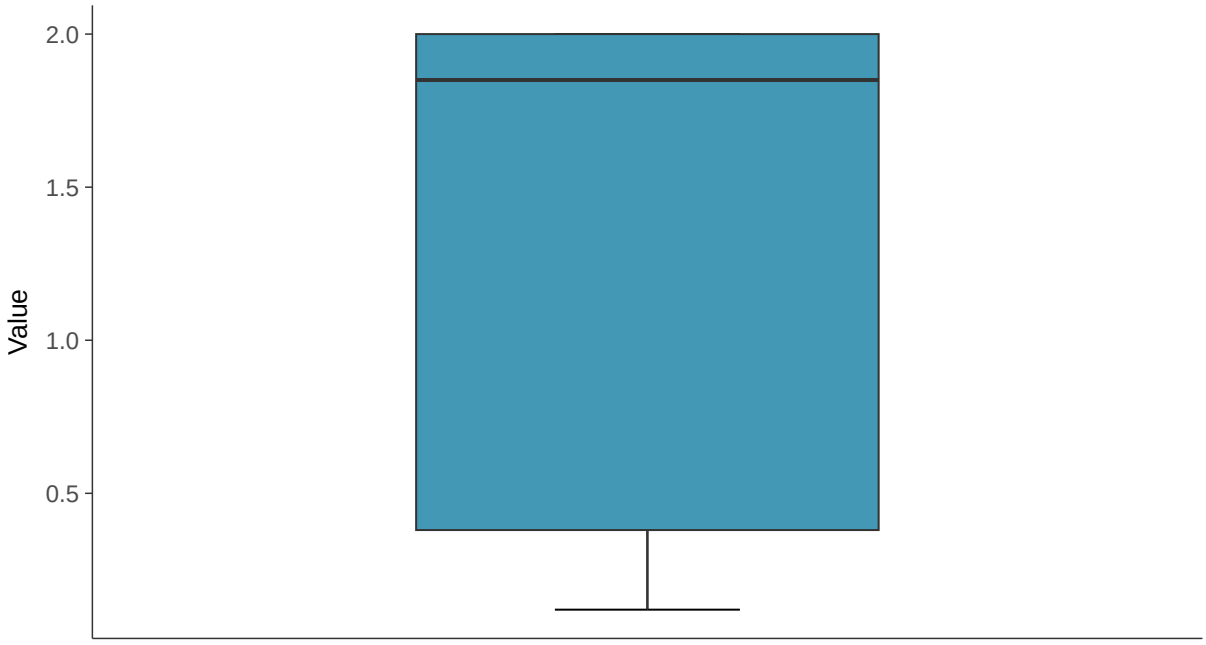
ID: 17_2_131



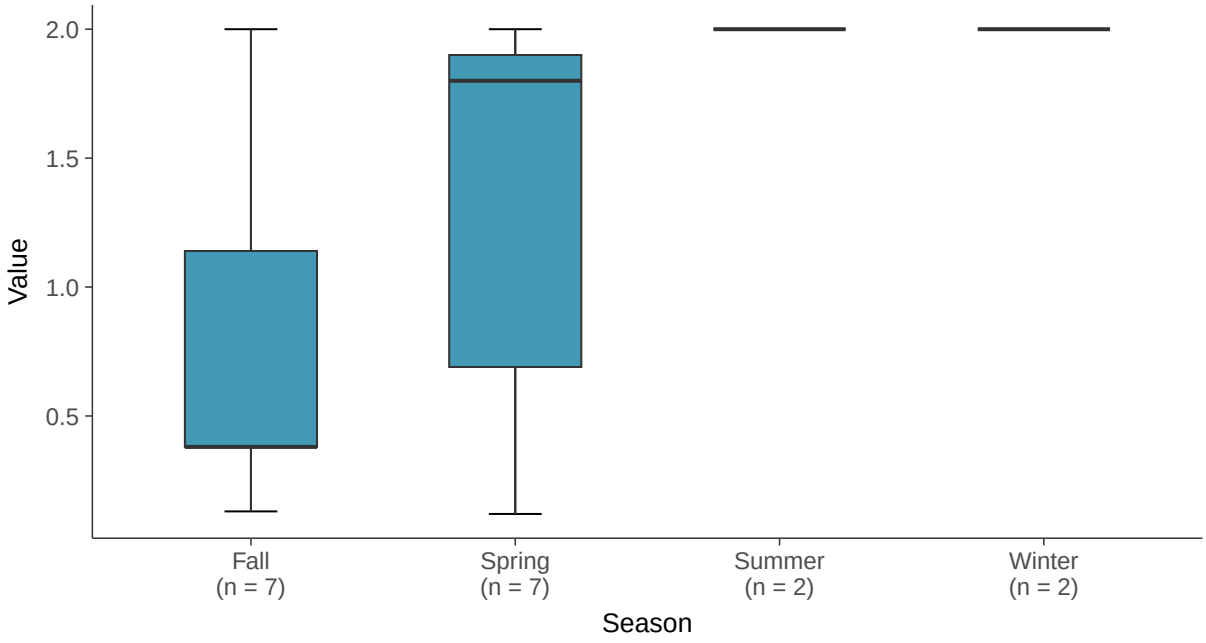
**Boxplot**

Thallium, MW-17004 (ug/L)



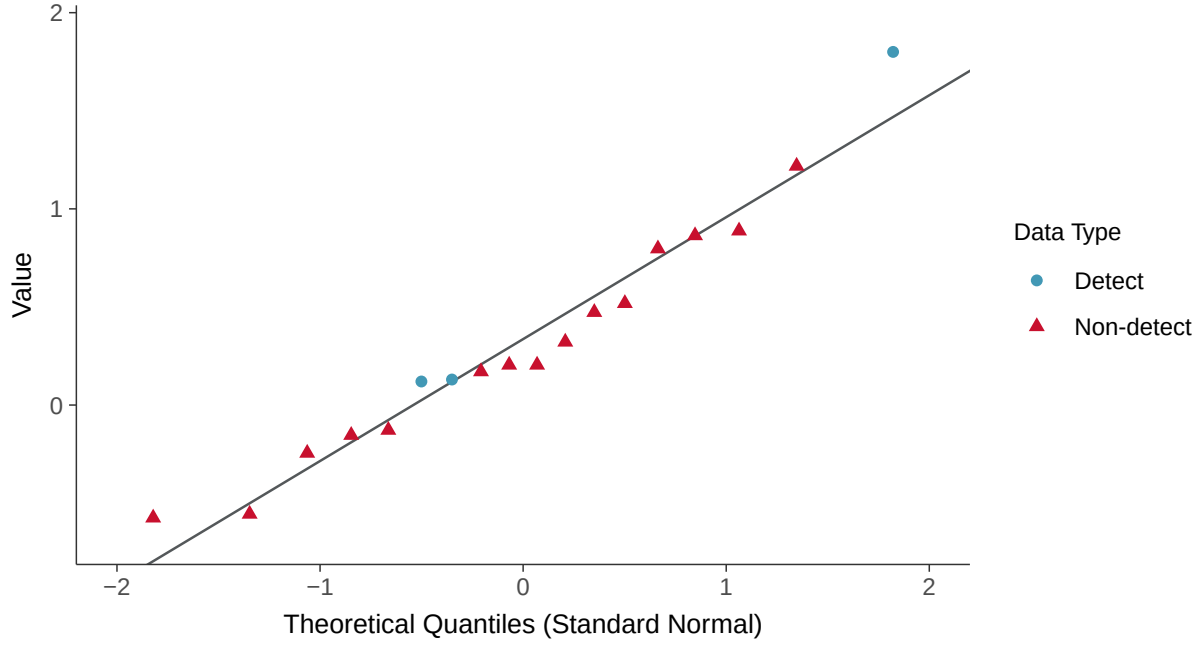

**Boxplot by Season**

Thallium, MW-17004 (ug/L)



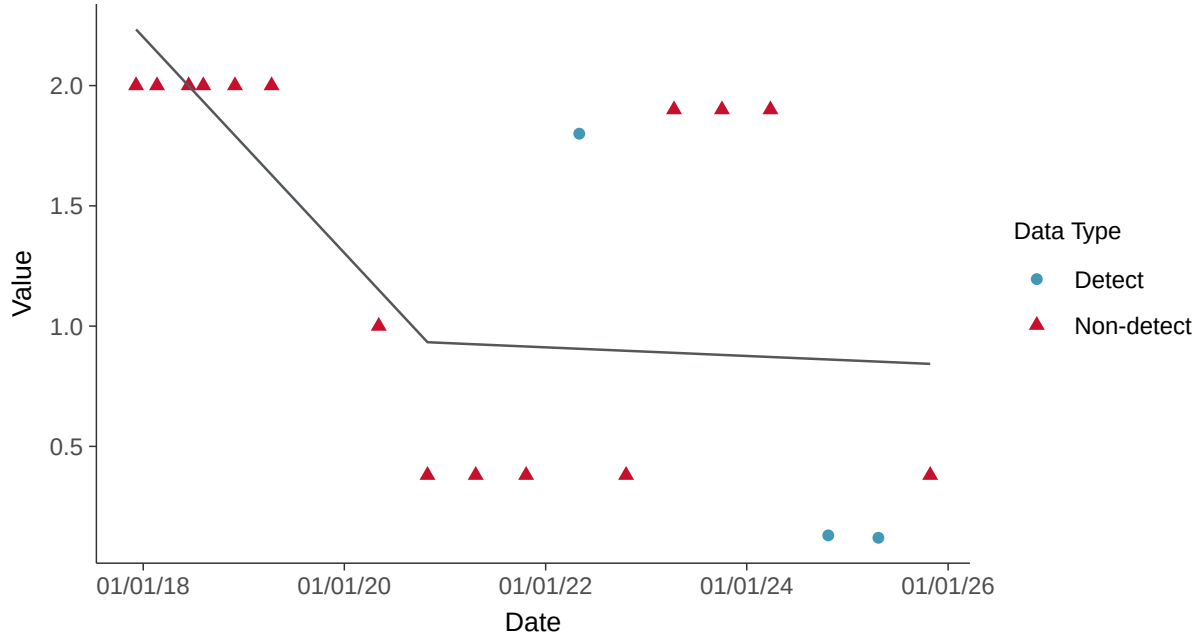
**Normal Q-Q plot using ROS Imputed Estimates**

Thallium, MW-17004 (ug/L)



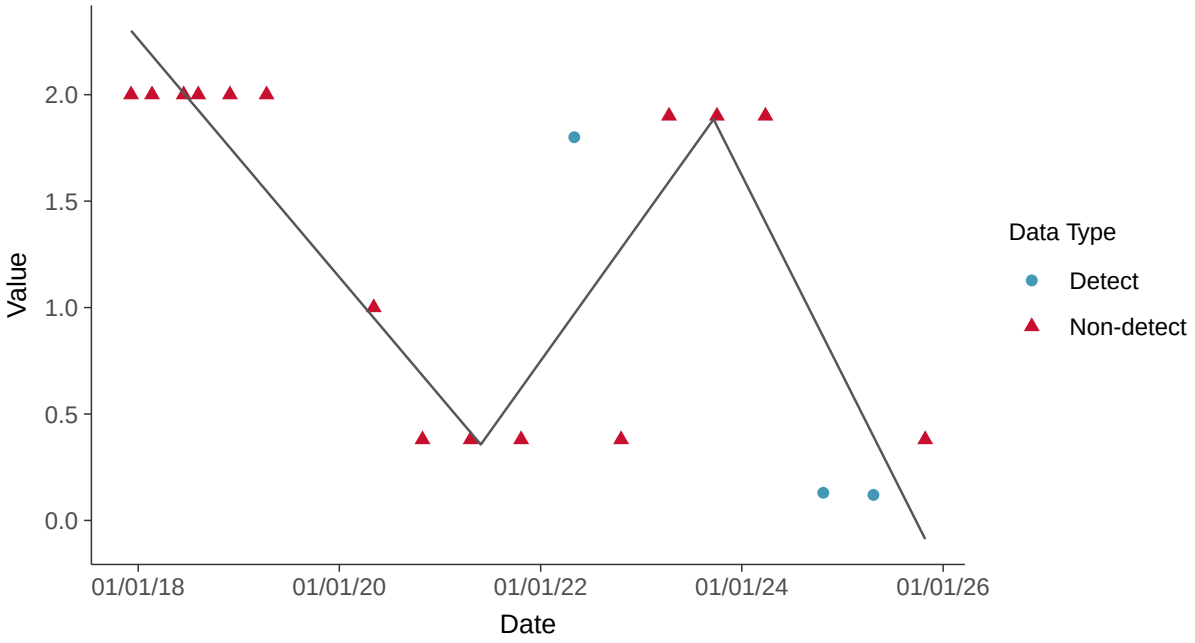

**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17004 (ug/L)



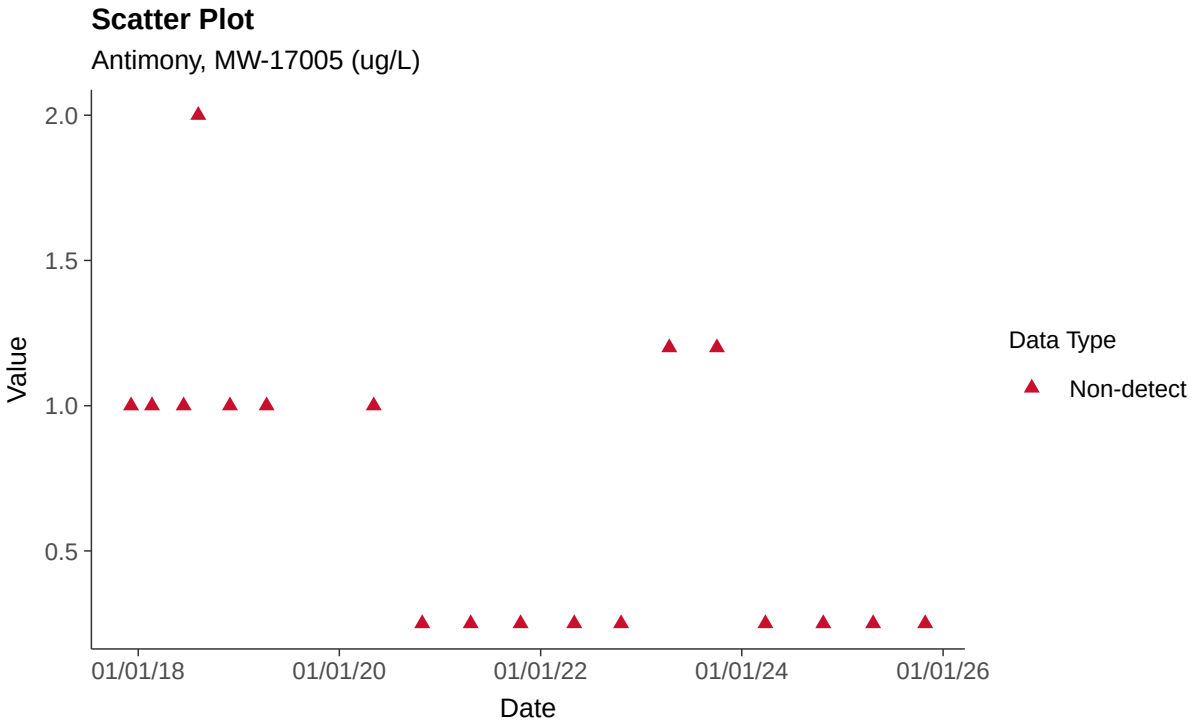
**Trend Regression: Piecewise Linear-Linear-Linear**

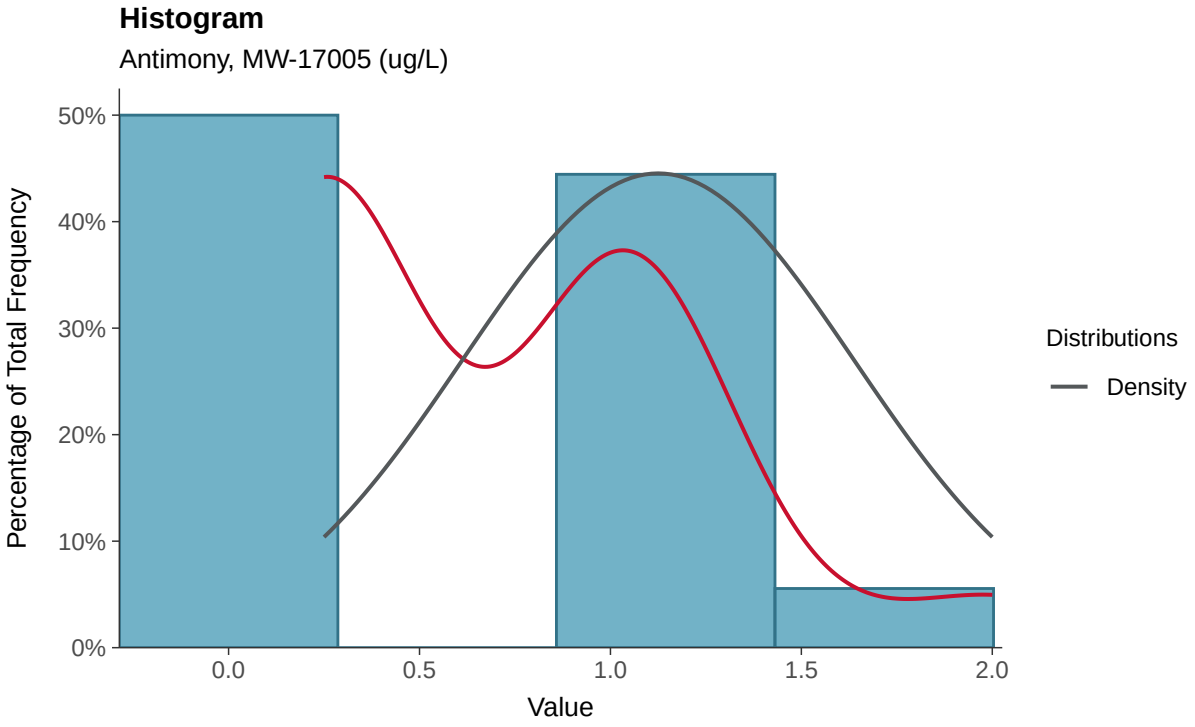
Thallium, MW-17004 (ug/L)



## Appendix IV: Antimony, MW-17005

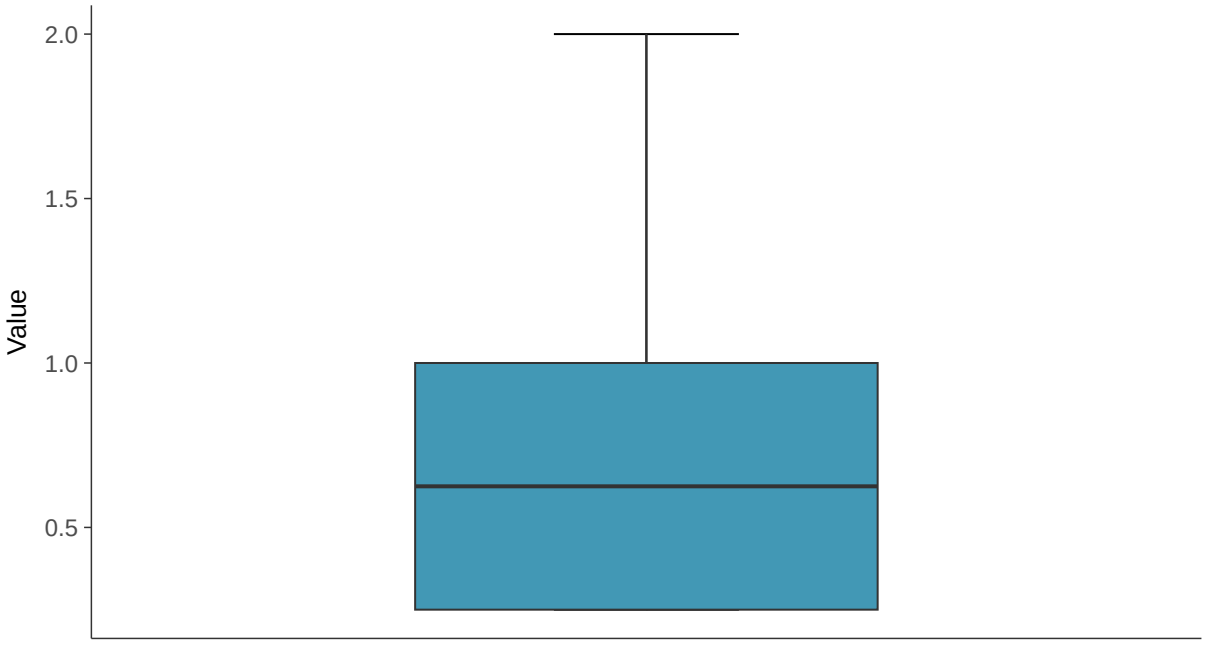
ID: 18_2_101



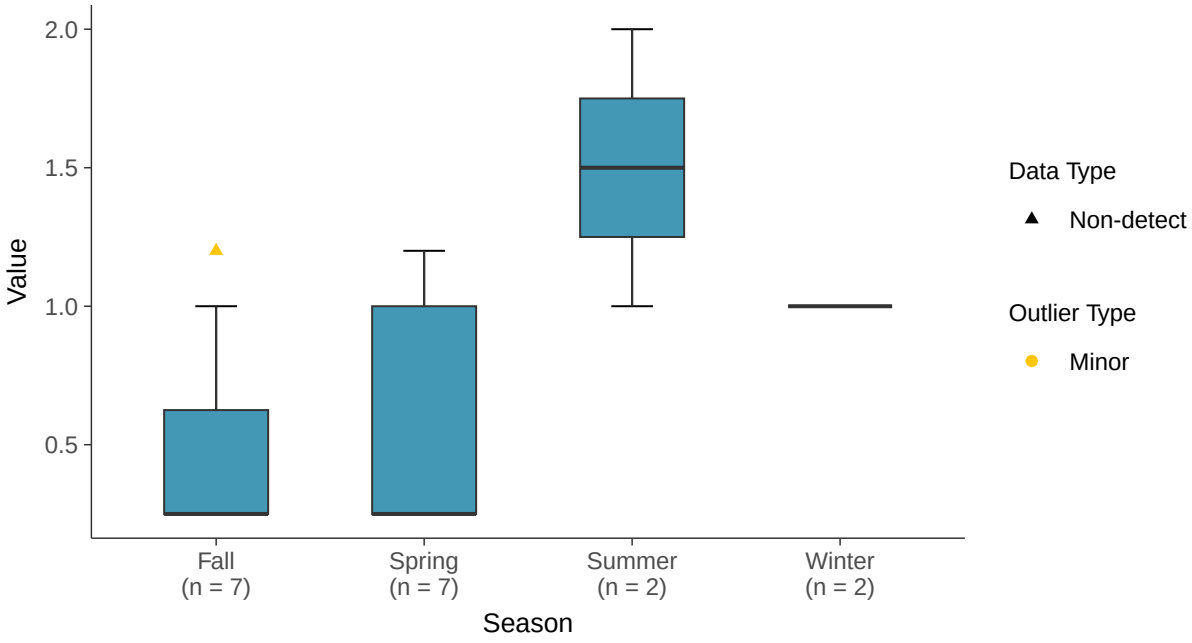
## Boxplot

Antimony, MW-17005 (ug/L)



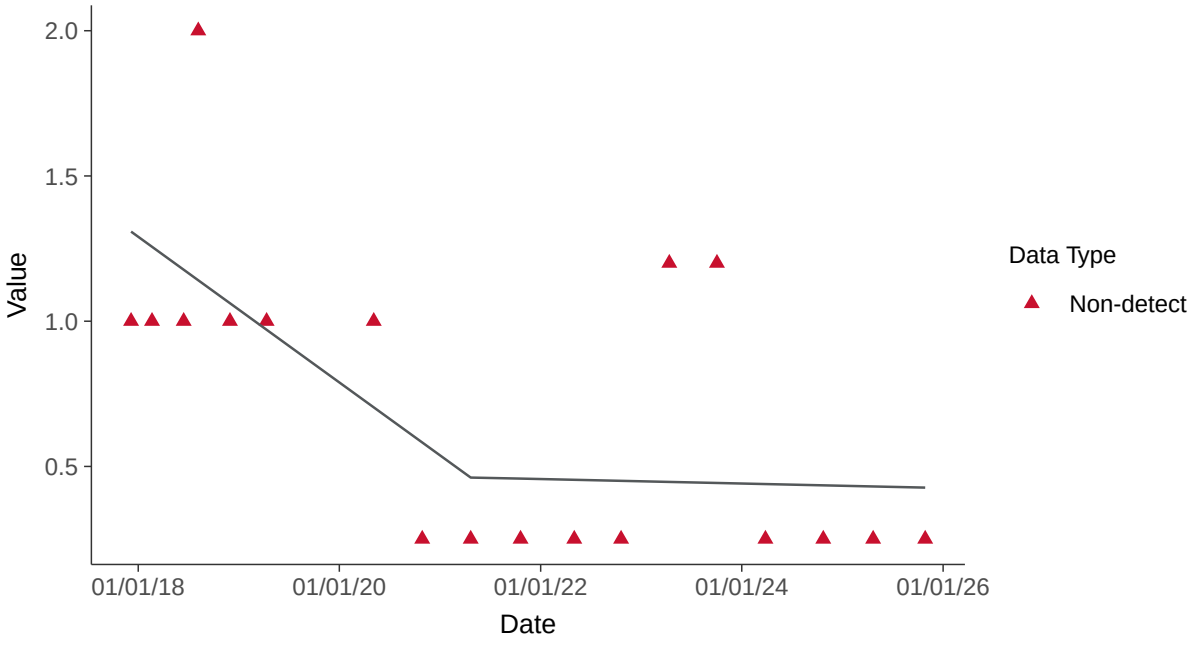

## Boxplot by Season

Antimony, MW-17005 (ug/L)



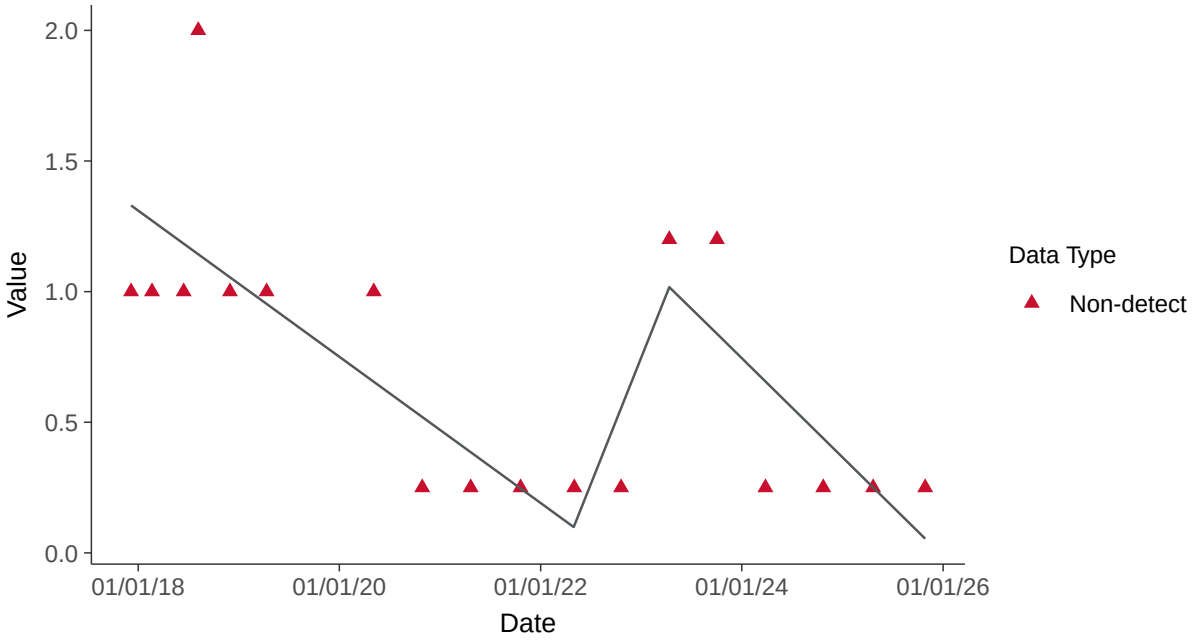
**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17005 (ug/L)



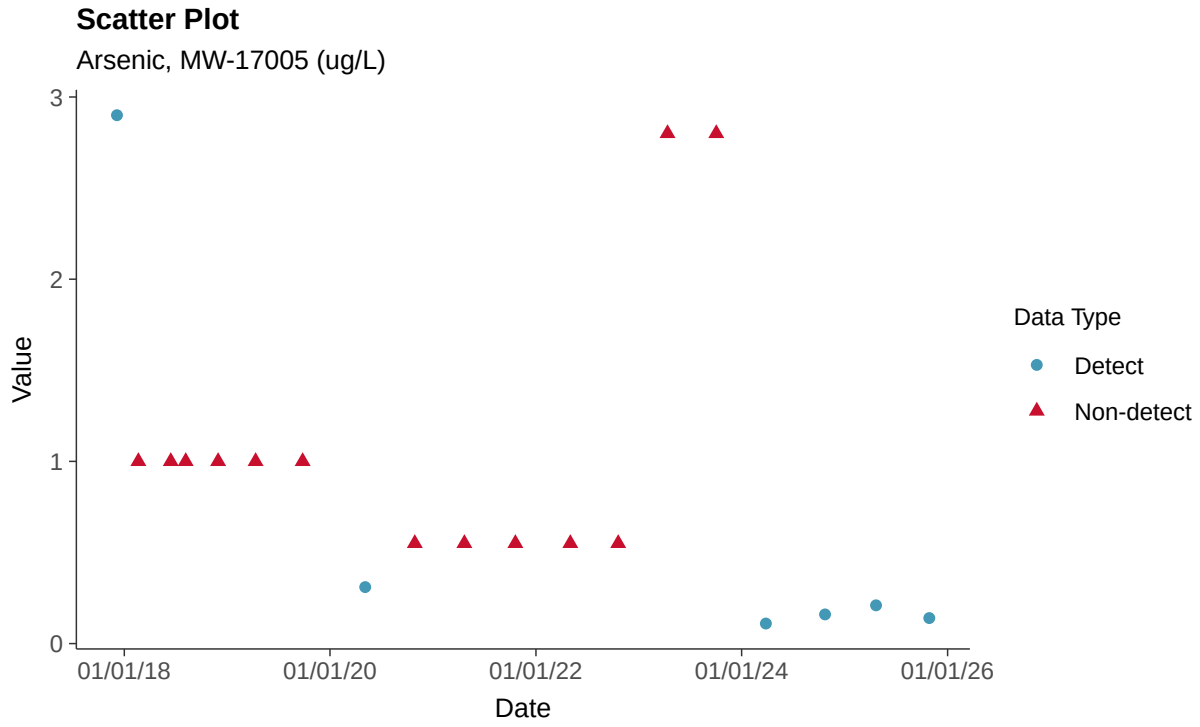

**Trend Regression: Piecewise Linear-Linear-Linear**

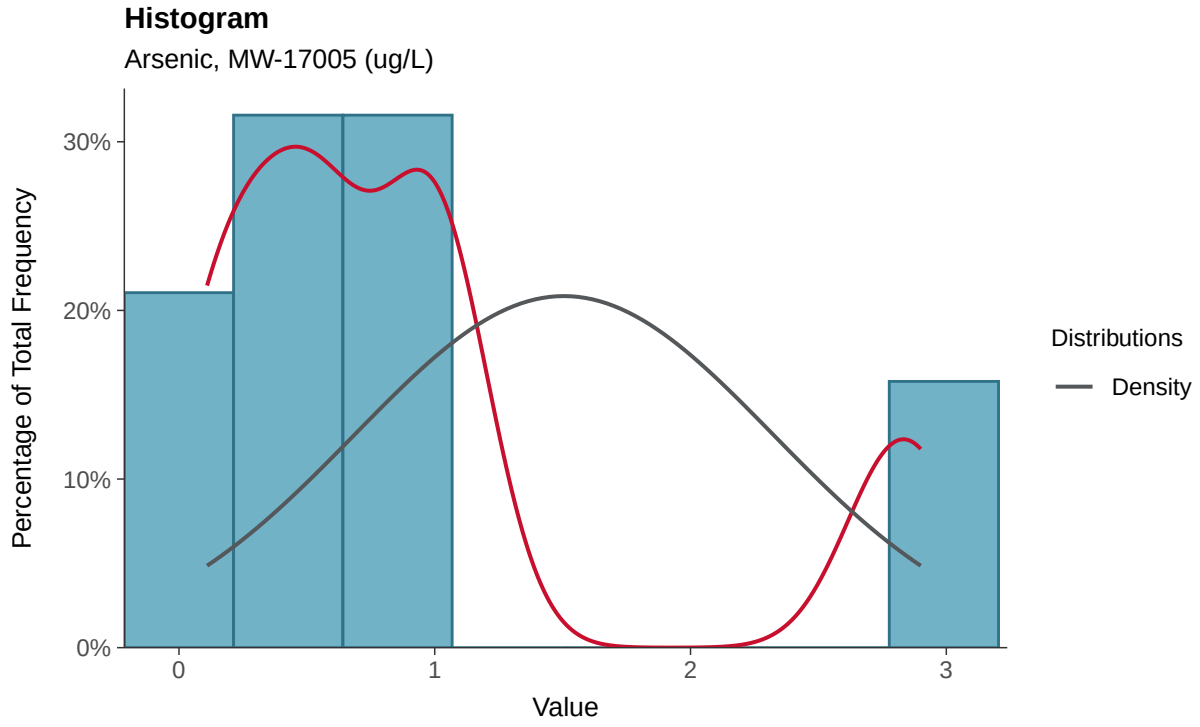
Antimony, MW-17005 (ug/L)



## Appendix IV: Arsenic, MW-17005

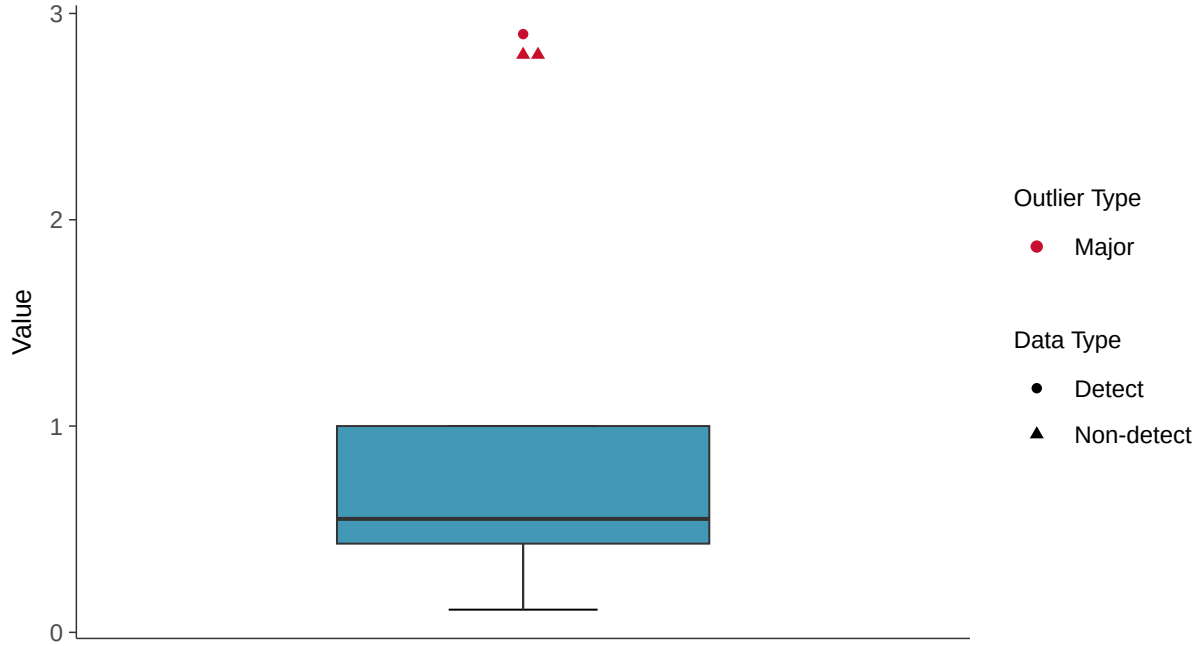
ID: 18_2_102



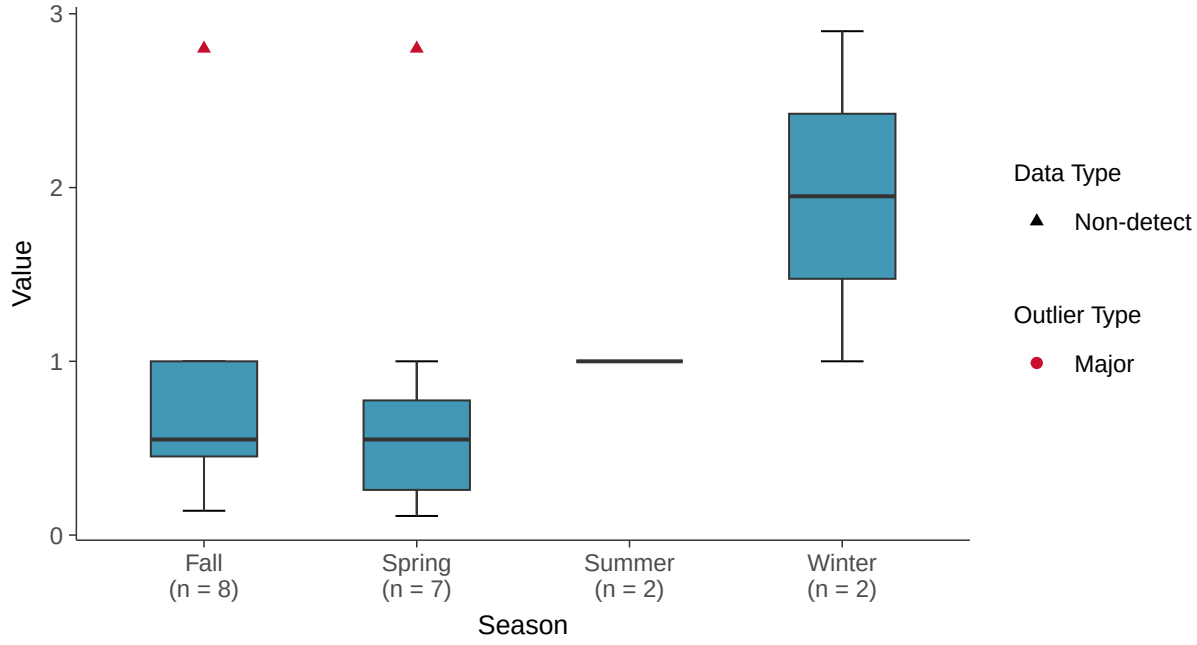
## Boxplot

Arsenic, MW-17005 (ug/L)



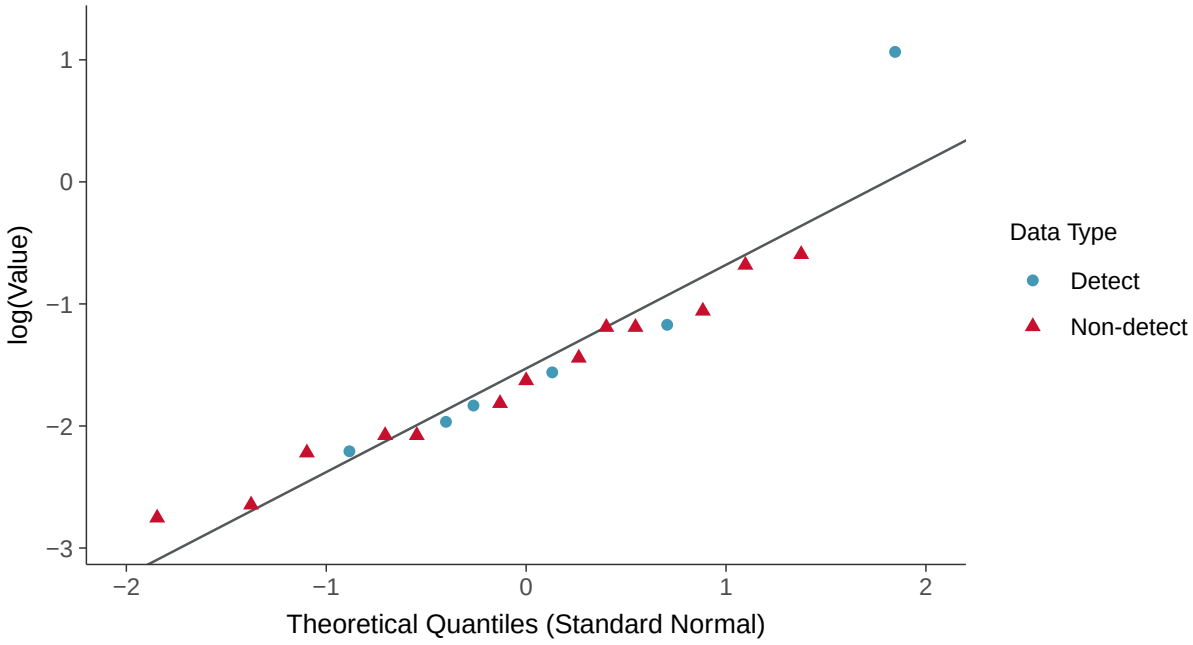

## Boxplot by Season

Arsenic, MW-17005 (ug/L)



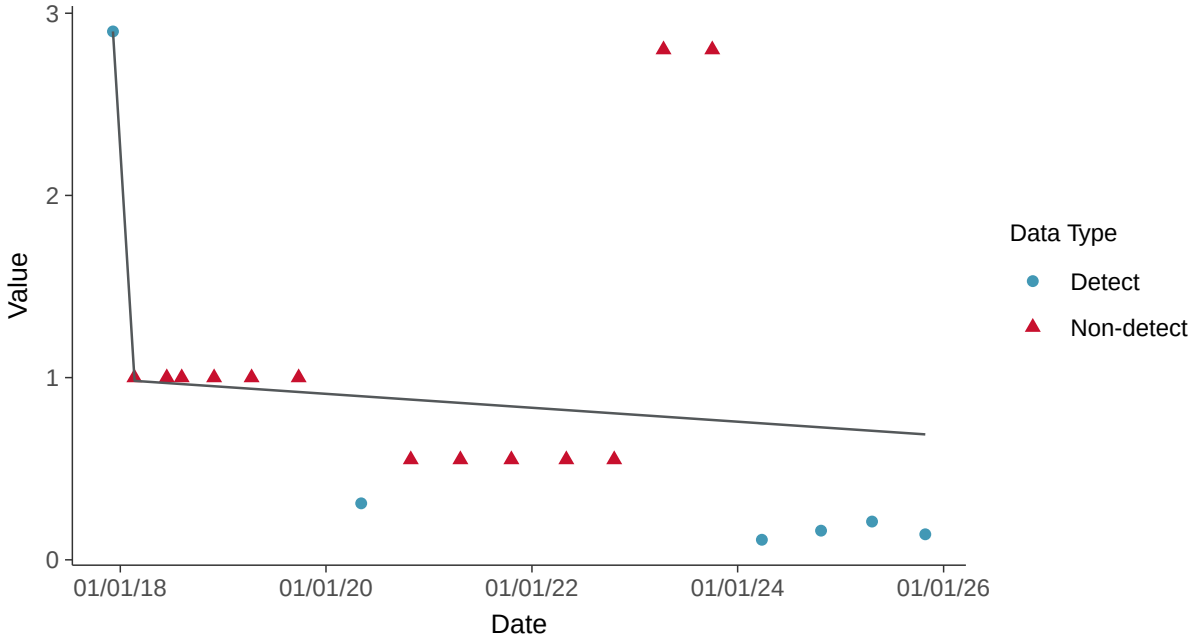
**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17005 (ug/L)



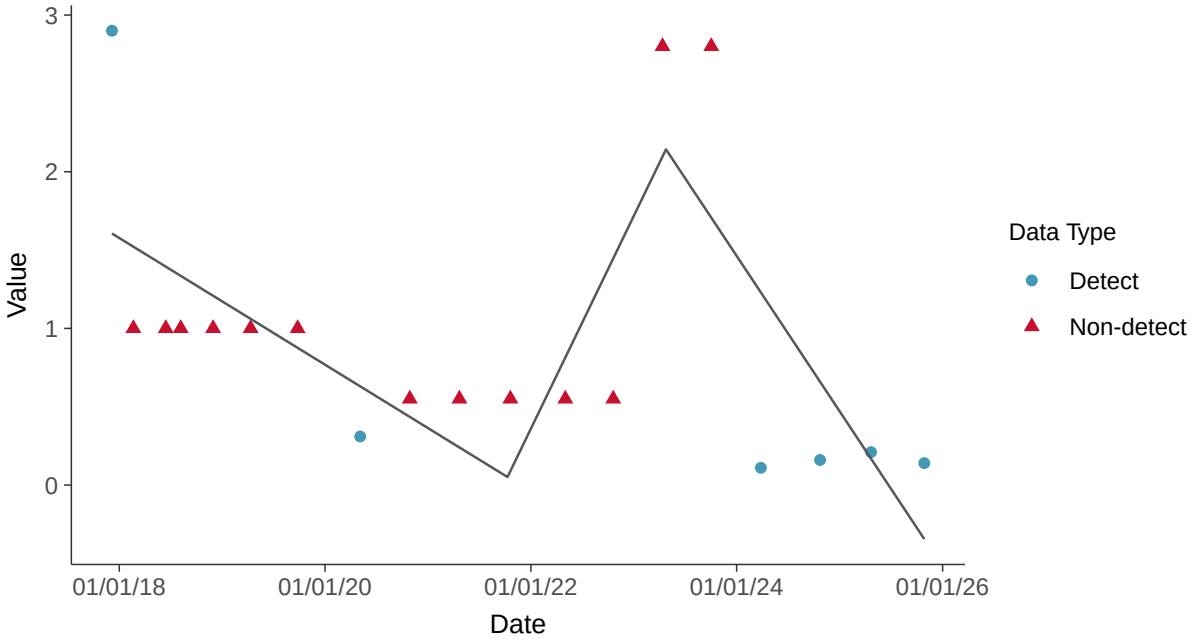

**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17005 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-17005 (ug/L)

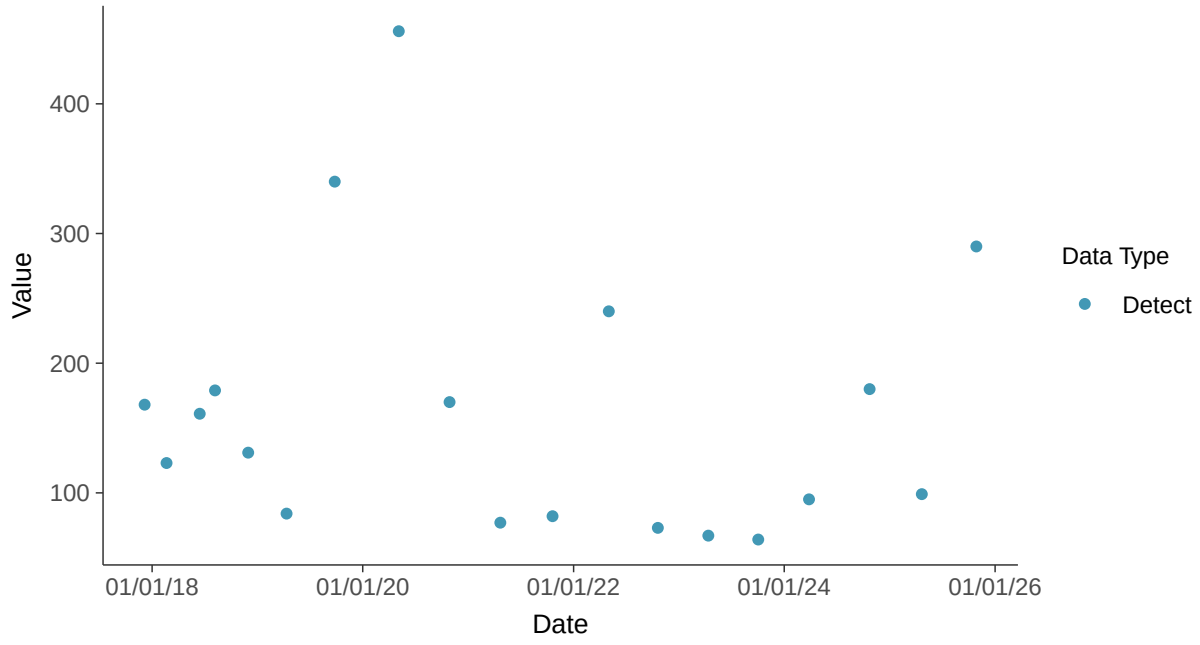


## Appendix IV: Barium, MW-17005

ID: 18_2_103

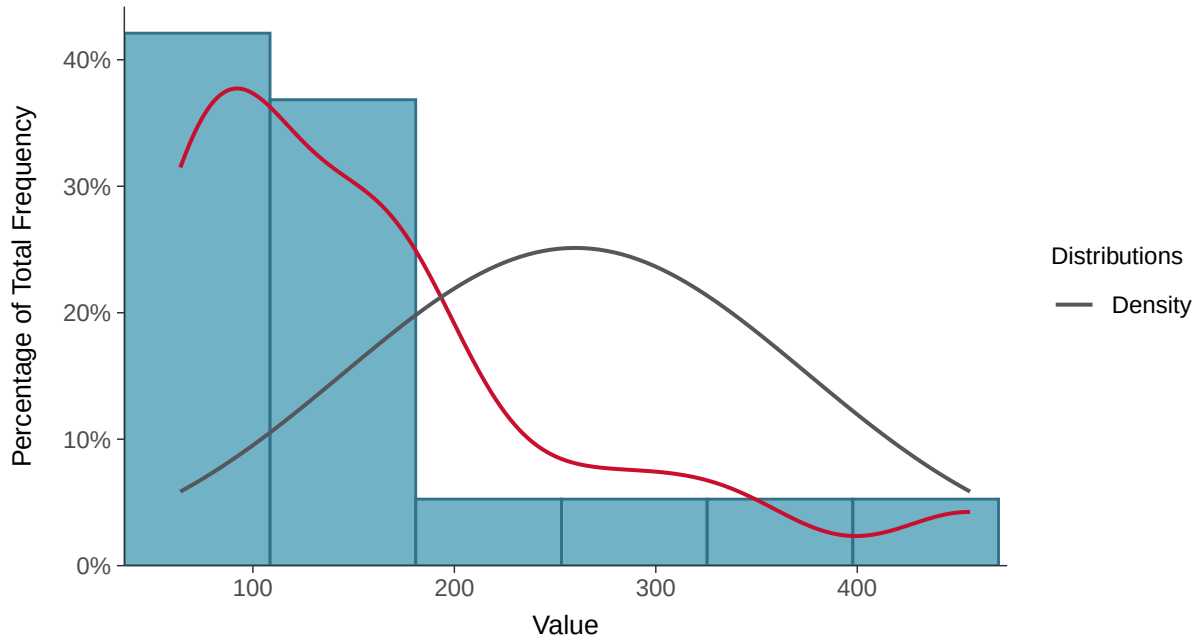
**Scatter Plot**

Barium, MW-17005 (ug/L)



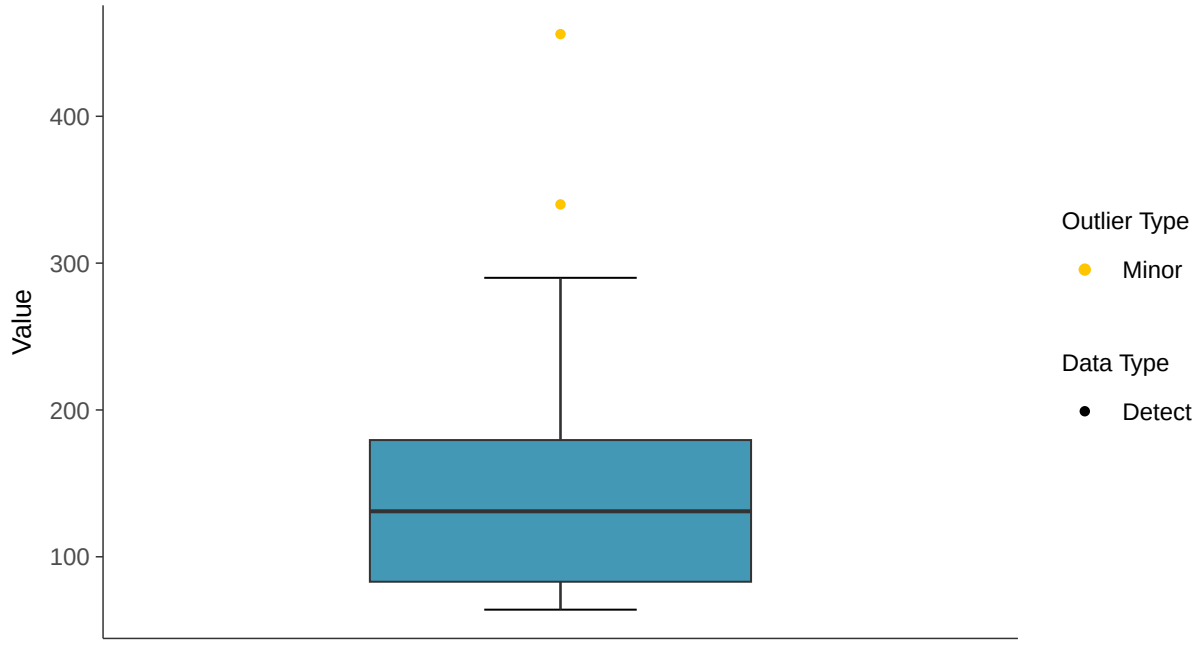

**Histogram**

Barium, MW-17005 (ug/L)



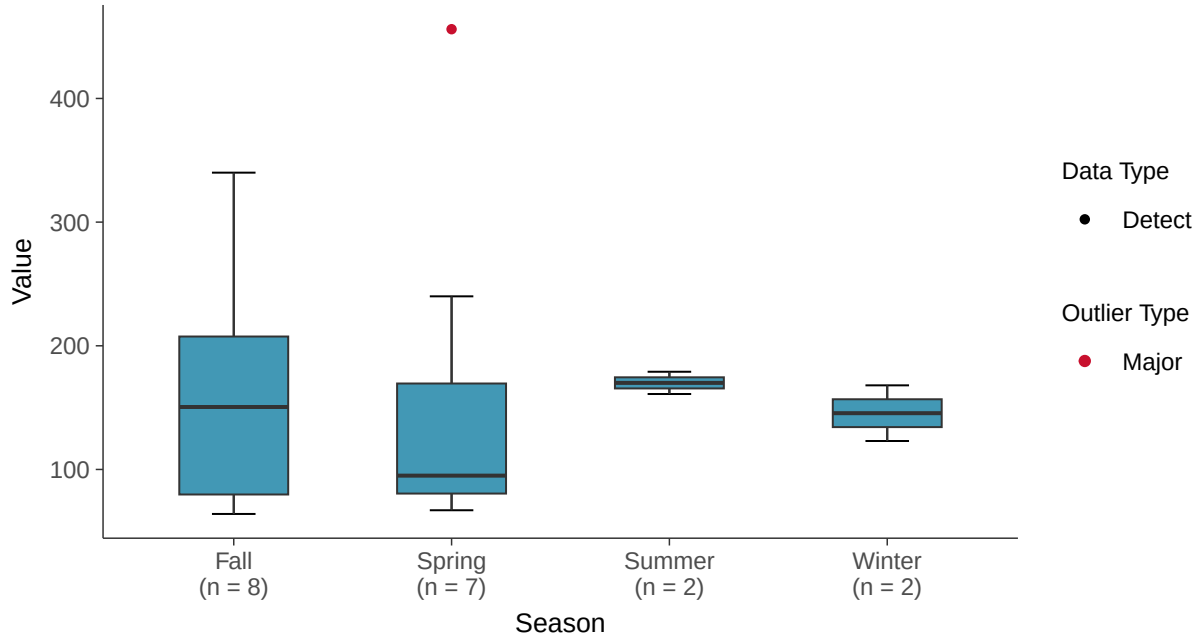
## Boxplot

Barium, MW-17005 (ug/L)



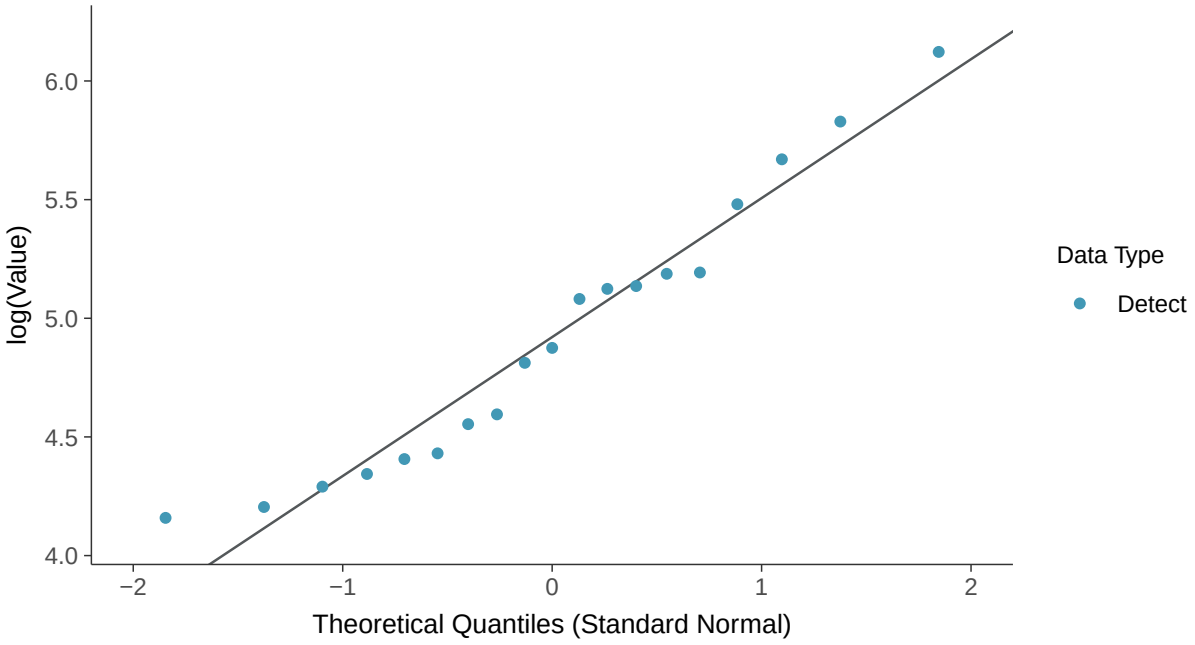

## Boxplot by Season

Barium, MW-17005 (ug/L)



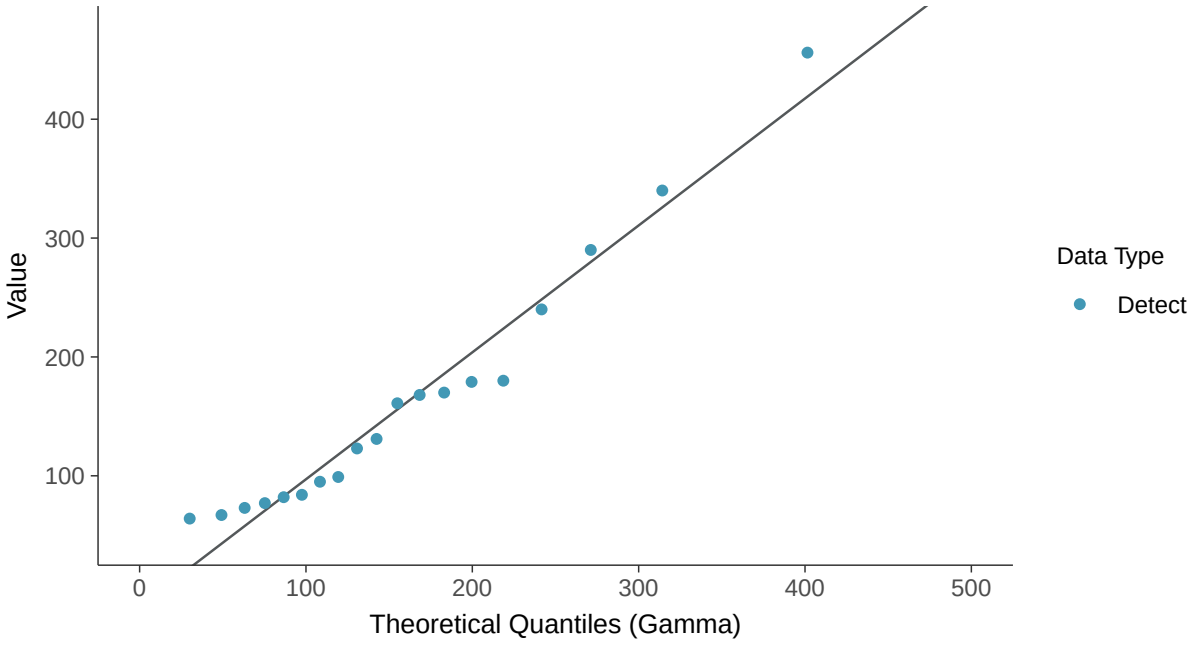
**Lognormal Q-Q plot**

Barium, MW-17005 (ug/L)



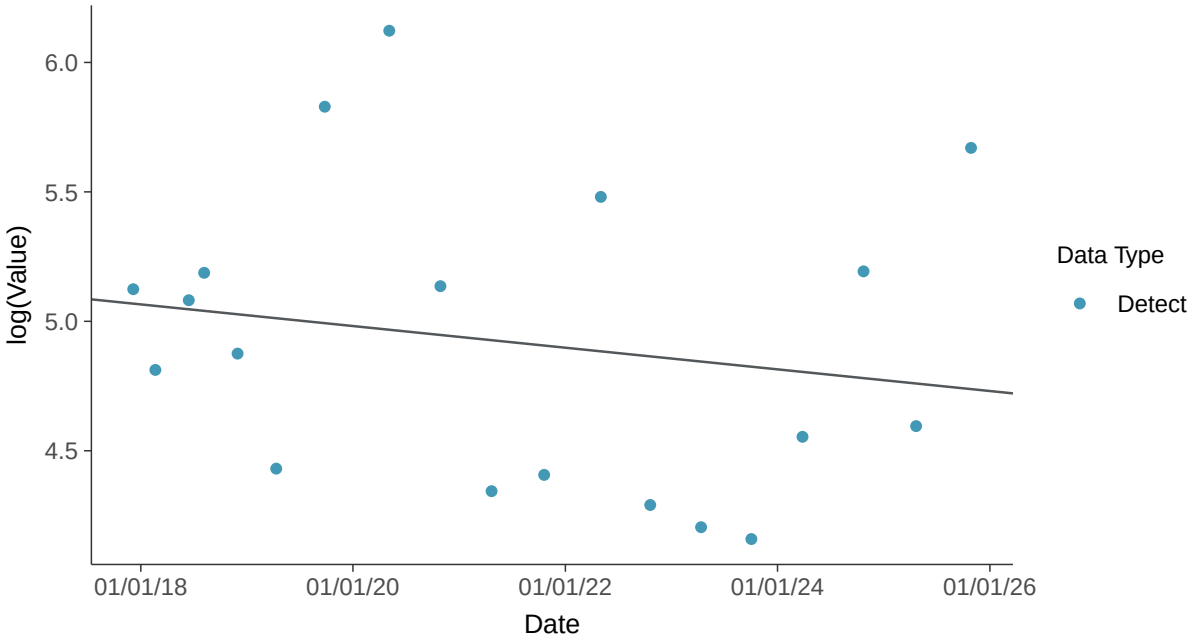

**Gamma Q-Q plot**

Barium, MW-17005 (ug/L)



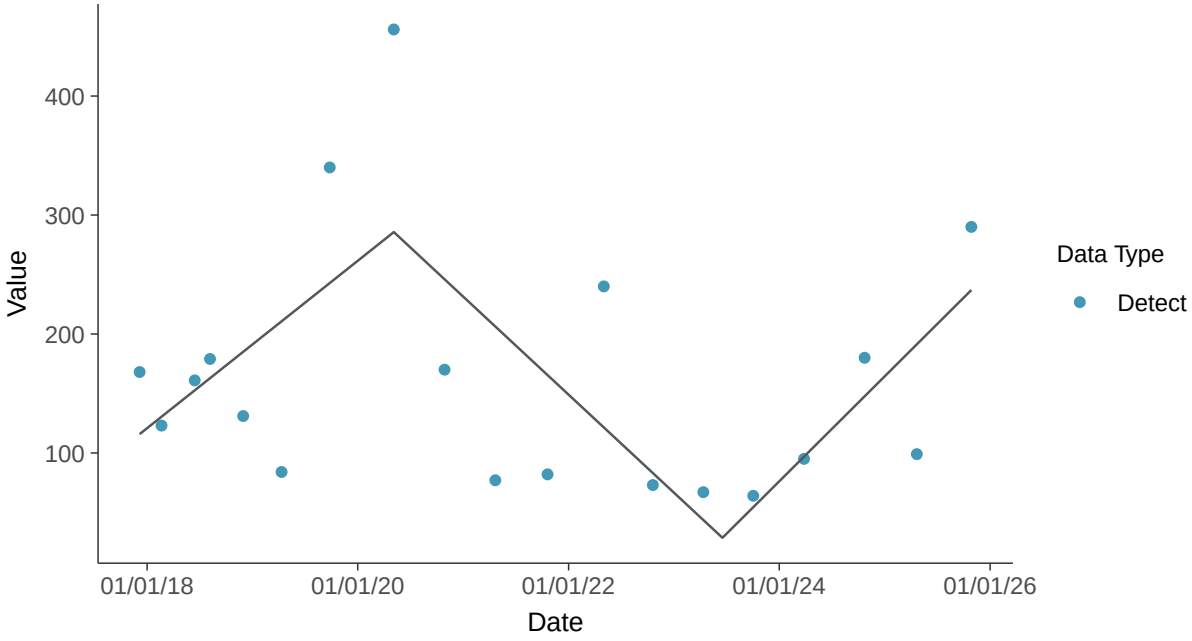
**Trend Regression: Lognormal MLE**

Barium, MW-17005 (ug/L)



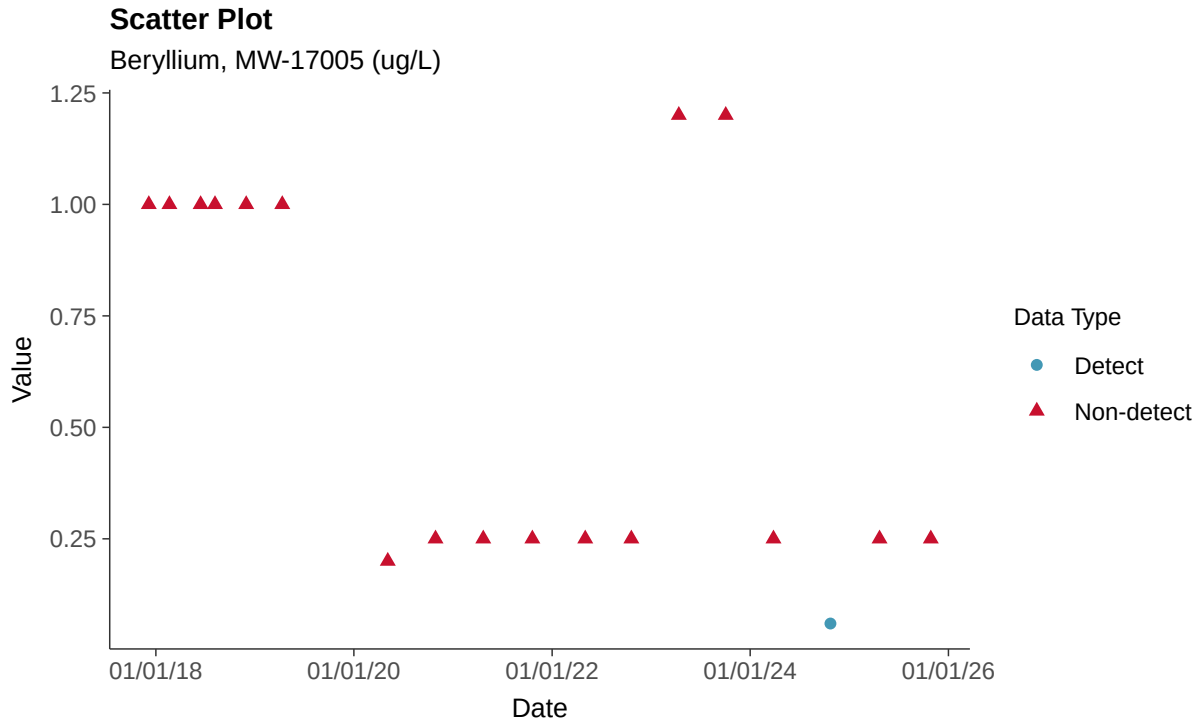

**Trend Regression: Piecewise Linear-Linear-Linear**

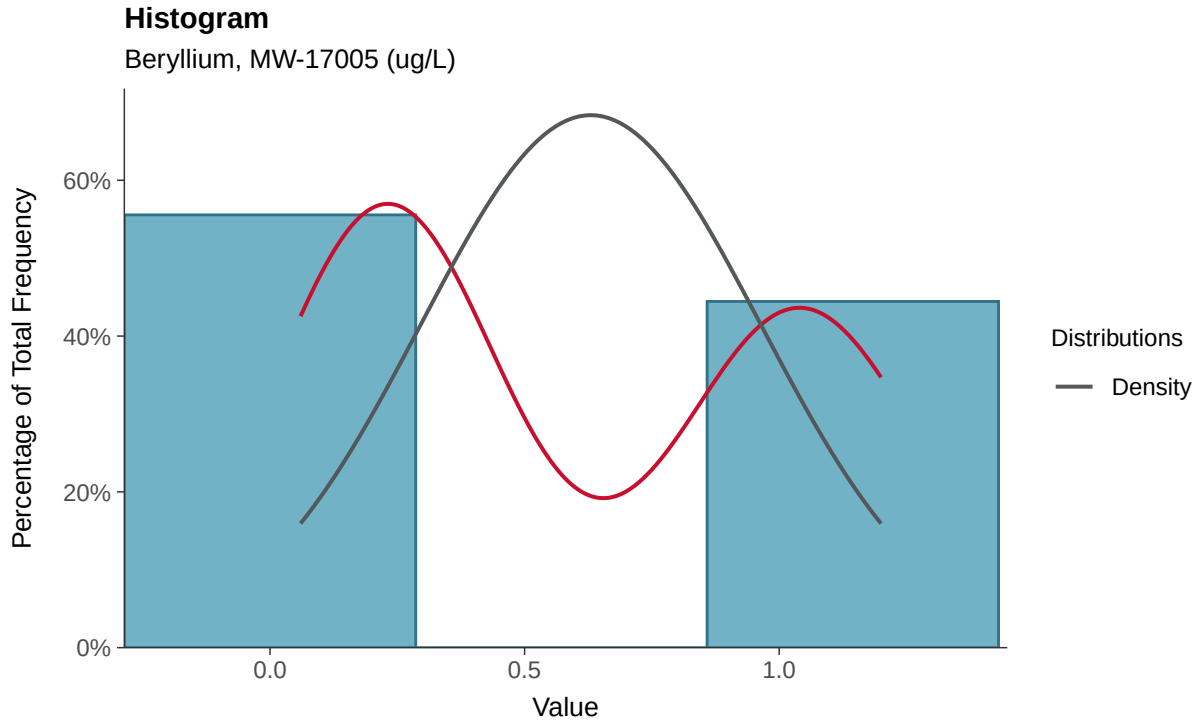
Barium, MW-17005 (ug/L)



## Appendix IV: Beryllium, MW-17005

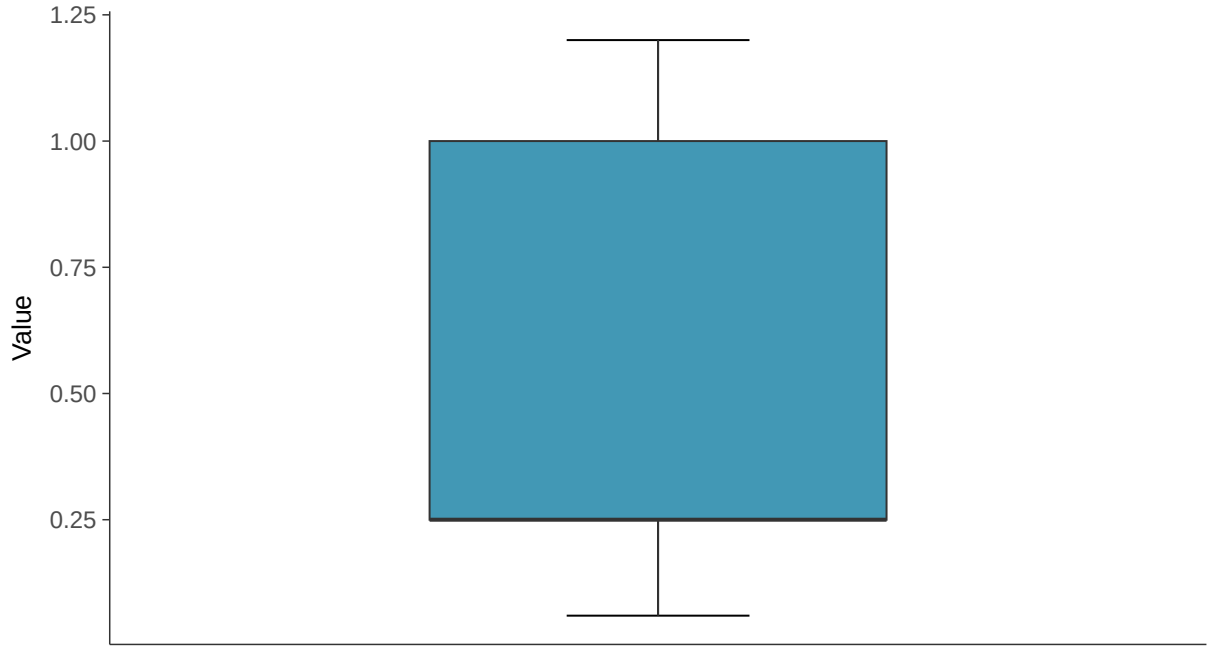
ID: 18_2_104



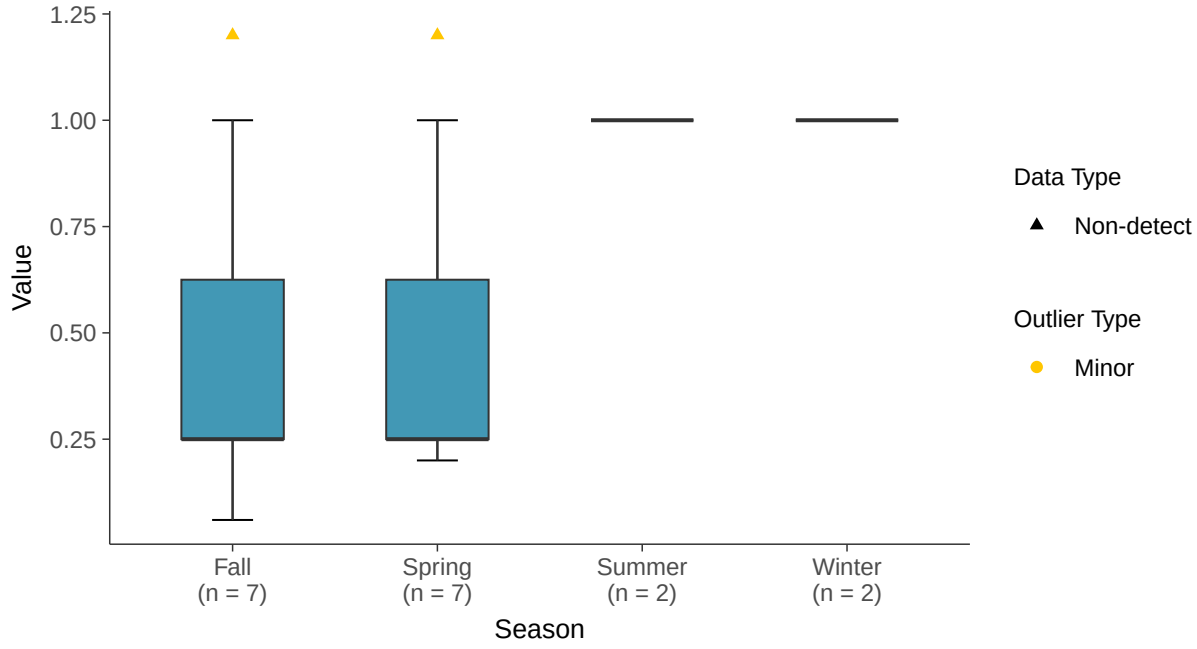
## Boxplot

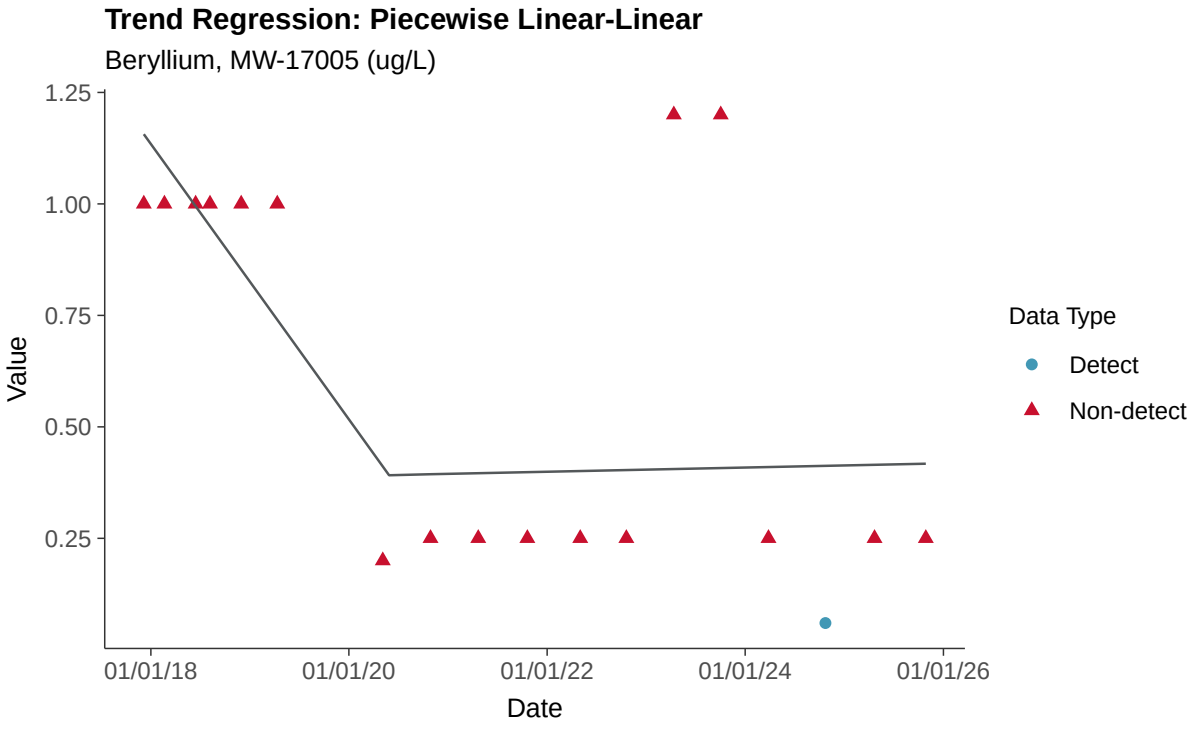
Beryllium, MW-17005 (ug/L)




## Boxplot by Season

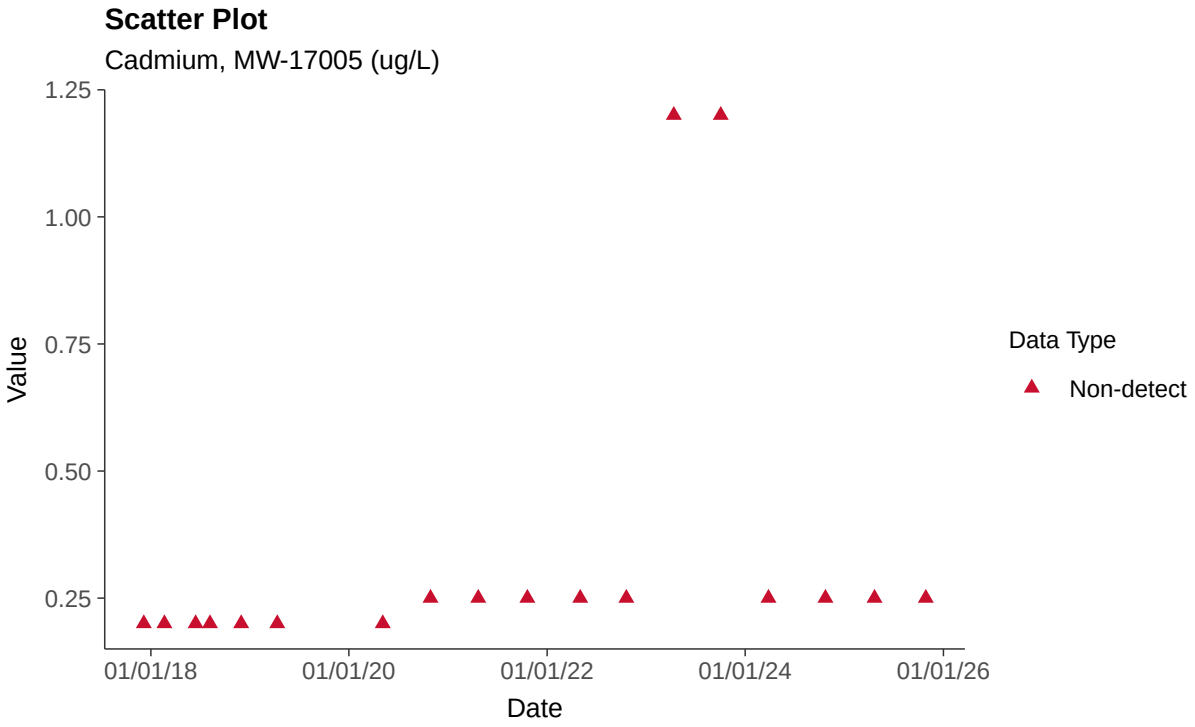
Beryllium, MW-17005 (ug/L)

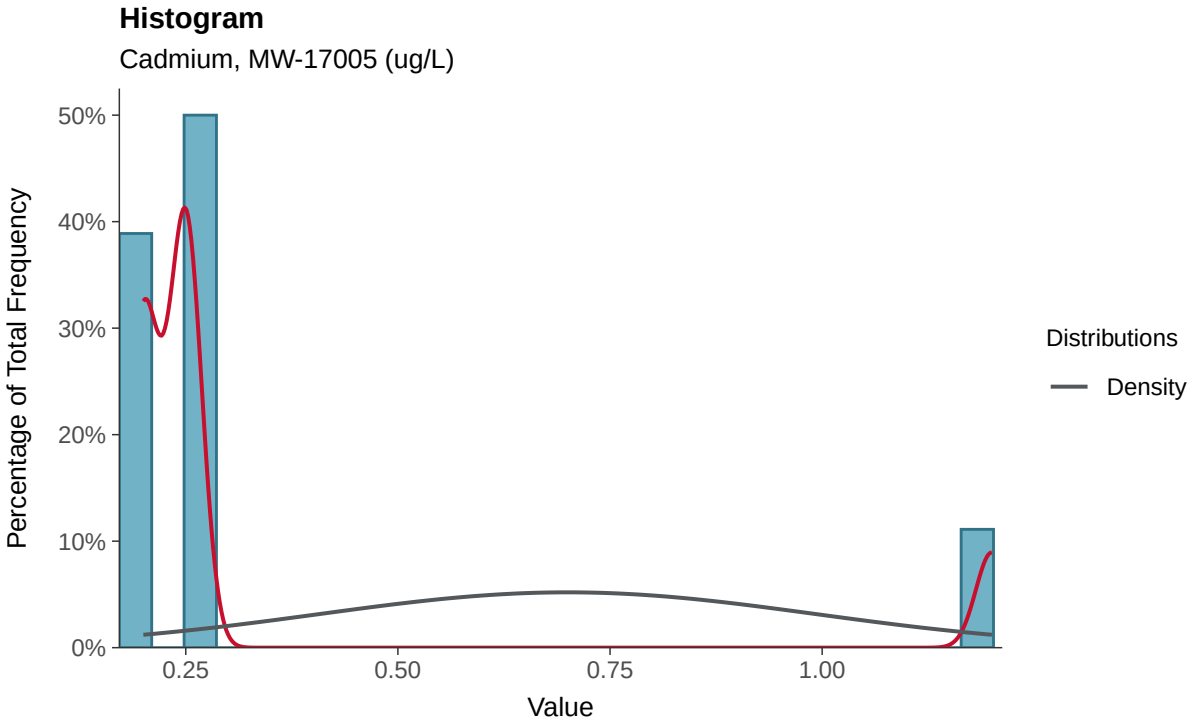



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-17005 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cadmium, MW-17005

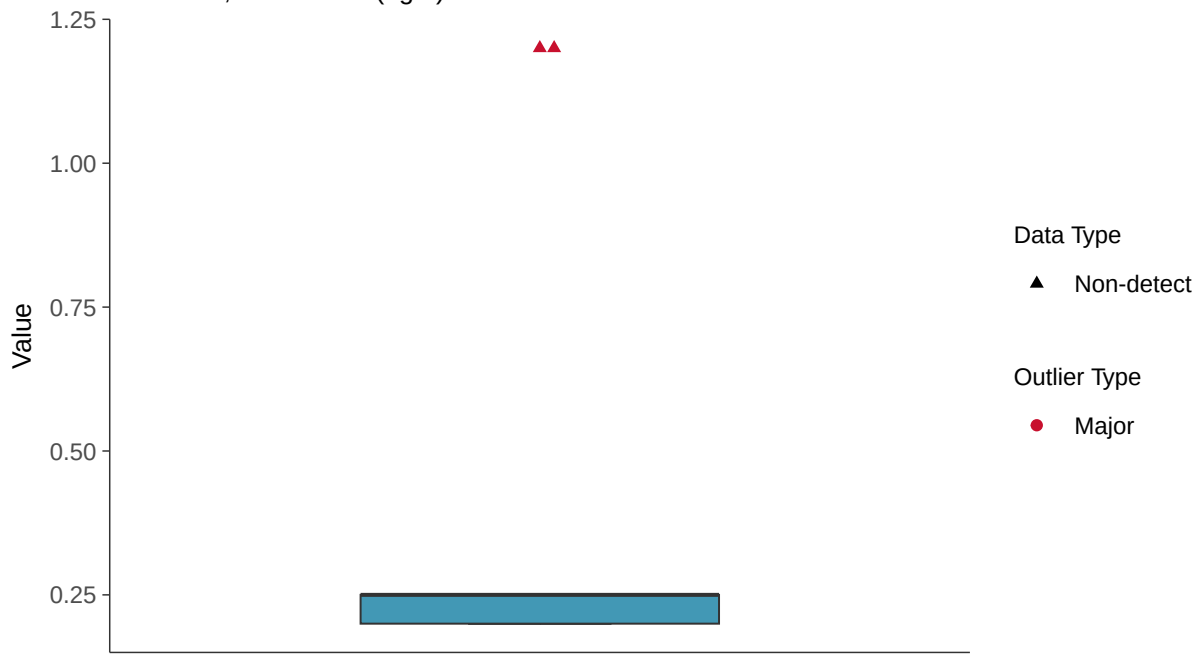
ID: 18_2_106



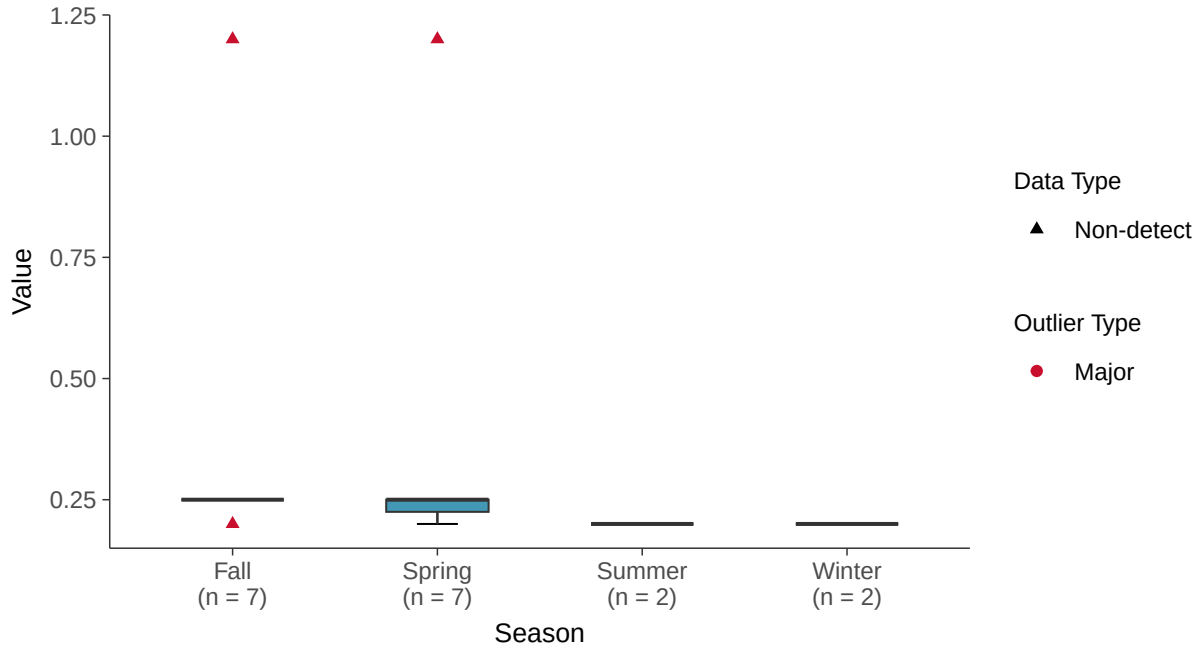
## Boxplot

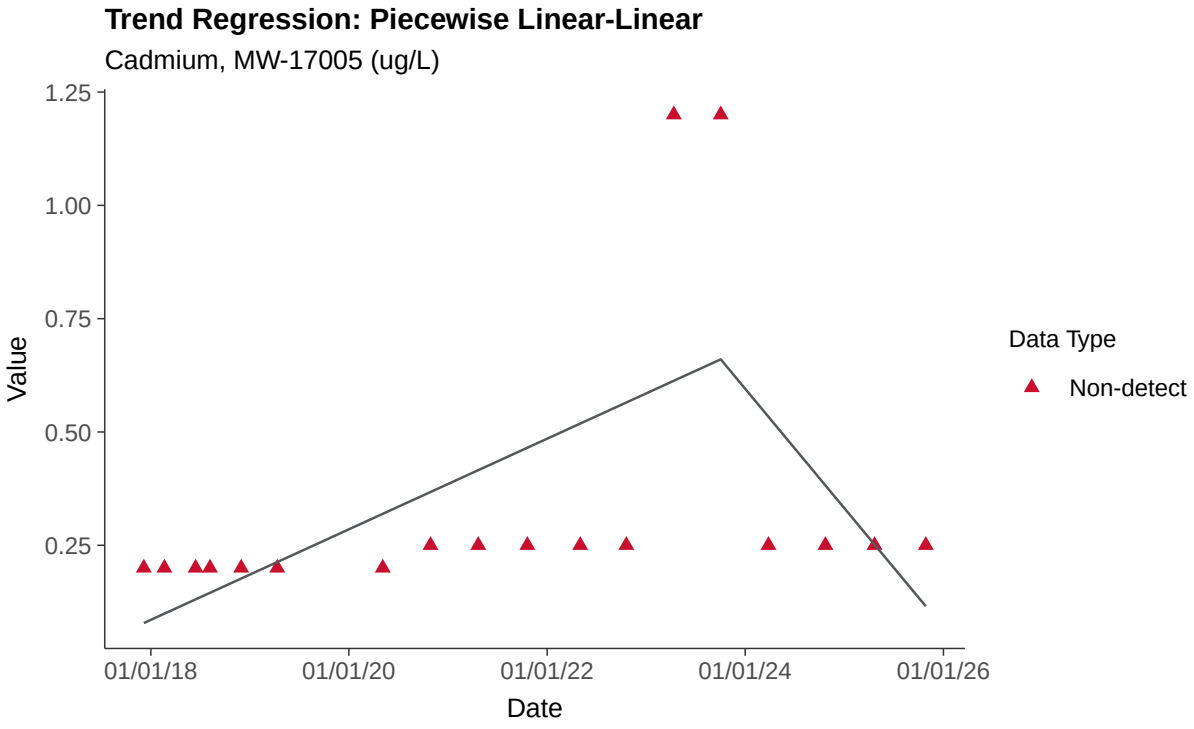
Cadmium, MW-17005 (ug/L)




## Boxplot by Season

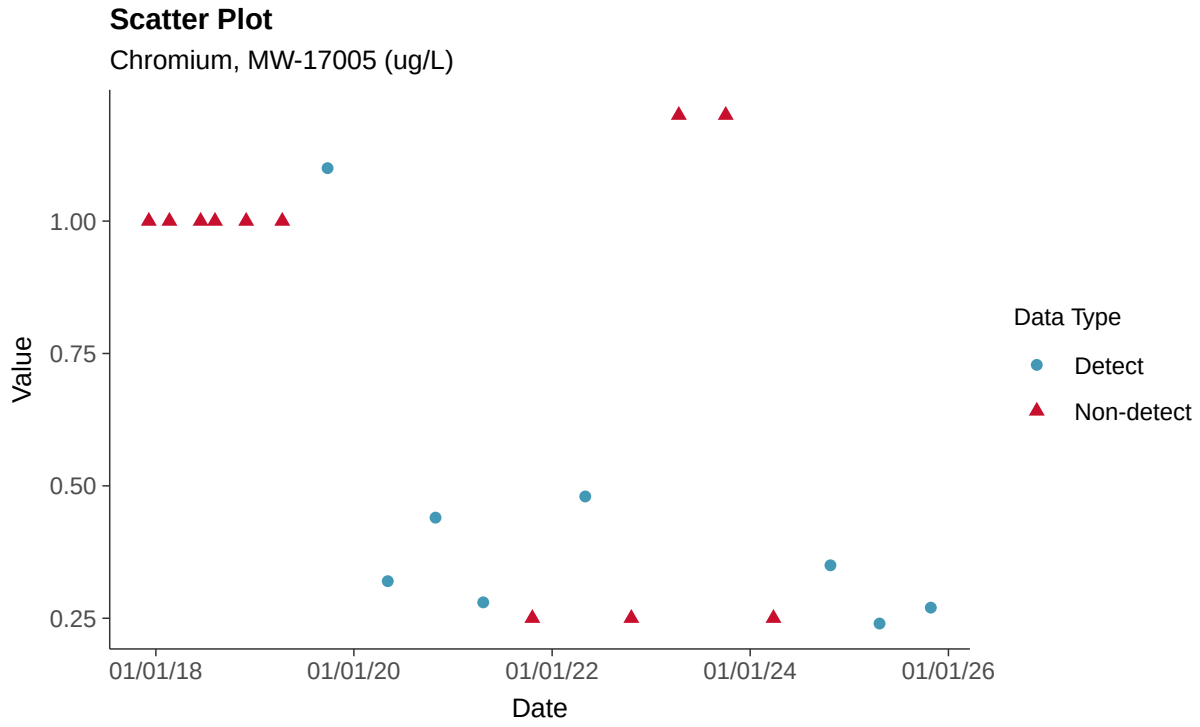
Cadmium, MW-17005 (ug/L)

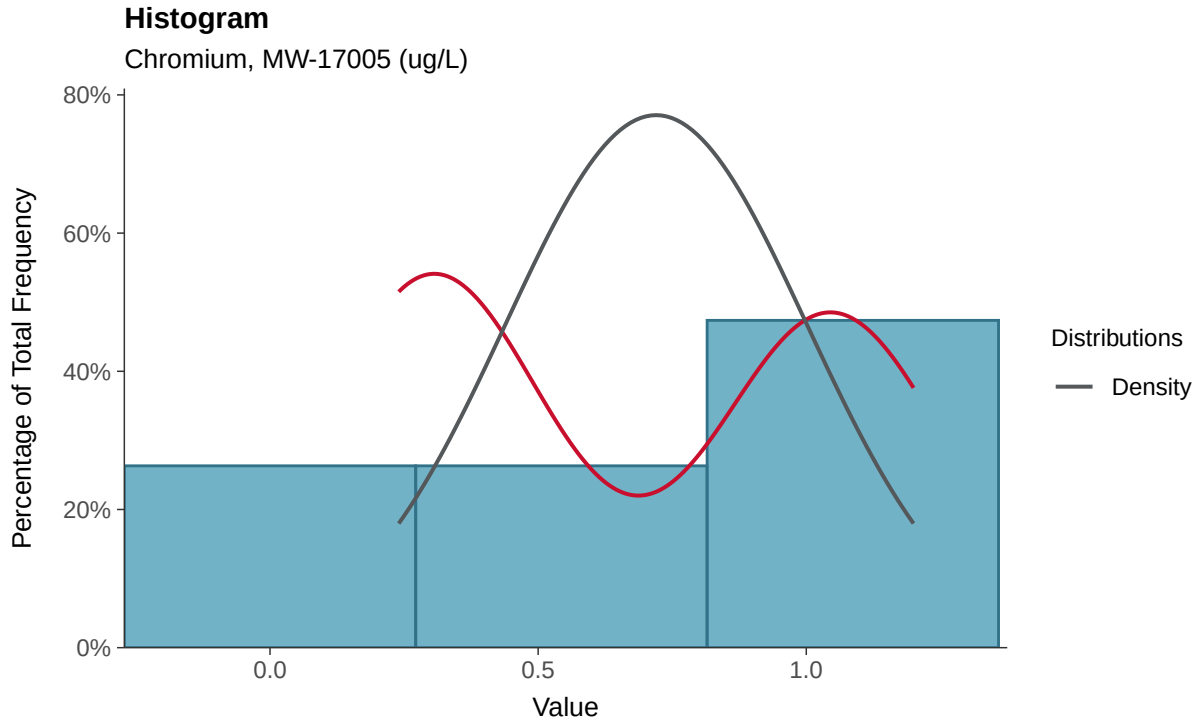



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-17005 (ug/L)
Value
1.25
1.00
0.75
0.50
0.25
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-17005

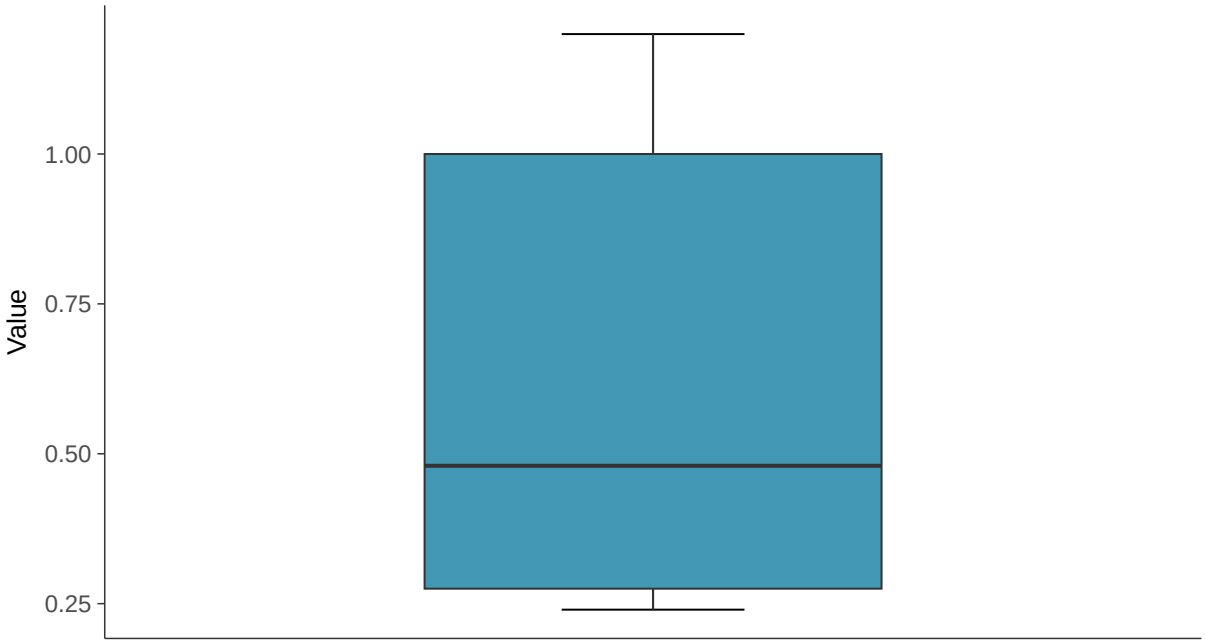
ID: 18_2_109



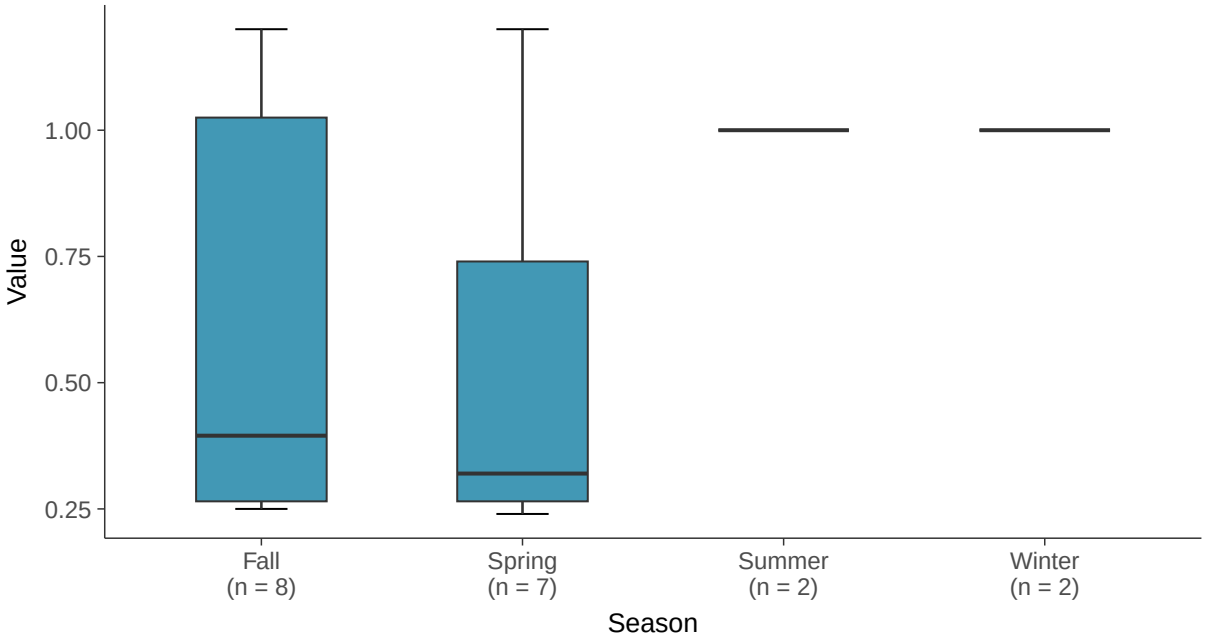
## Boxplot

Chromium, MW-17005 (ug/L)



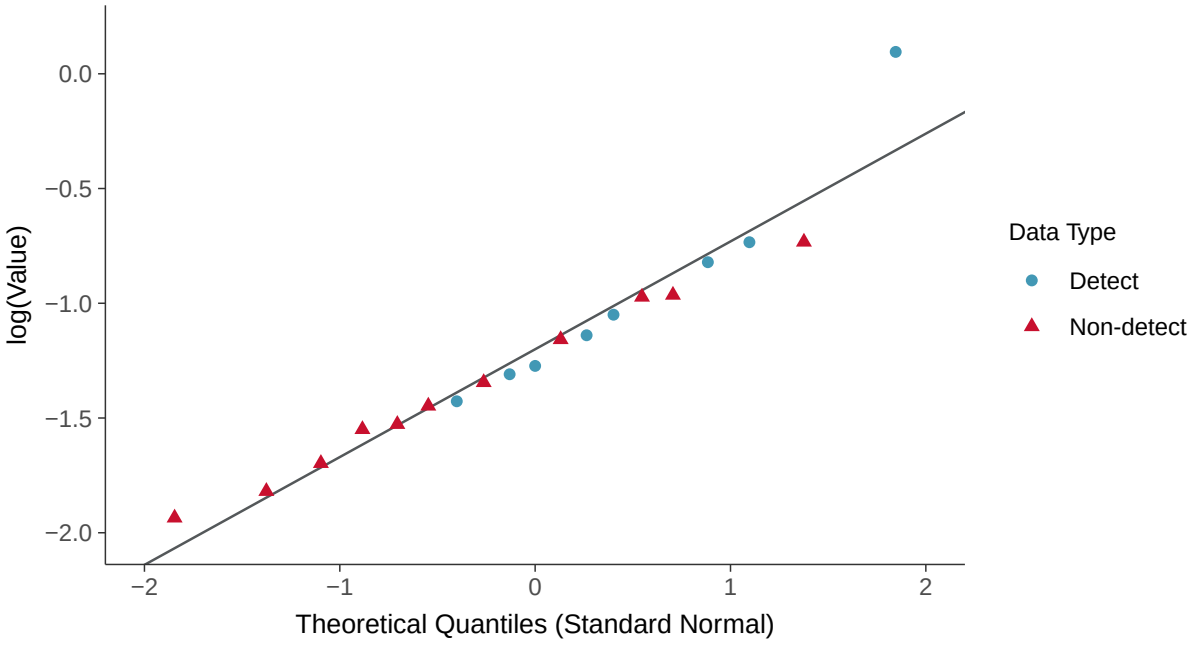

## Boxplot by Season

Chromium, MW-17005 (ug/L)



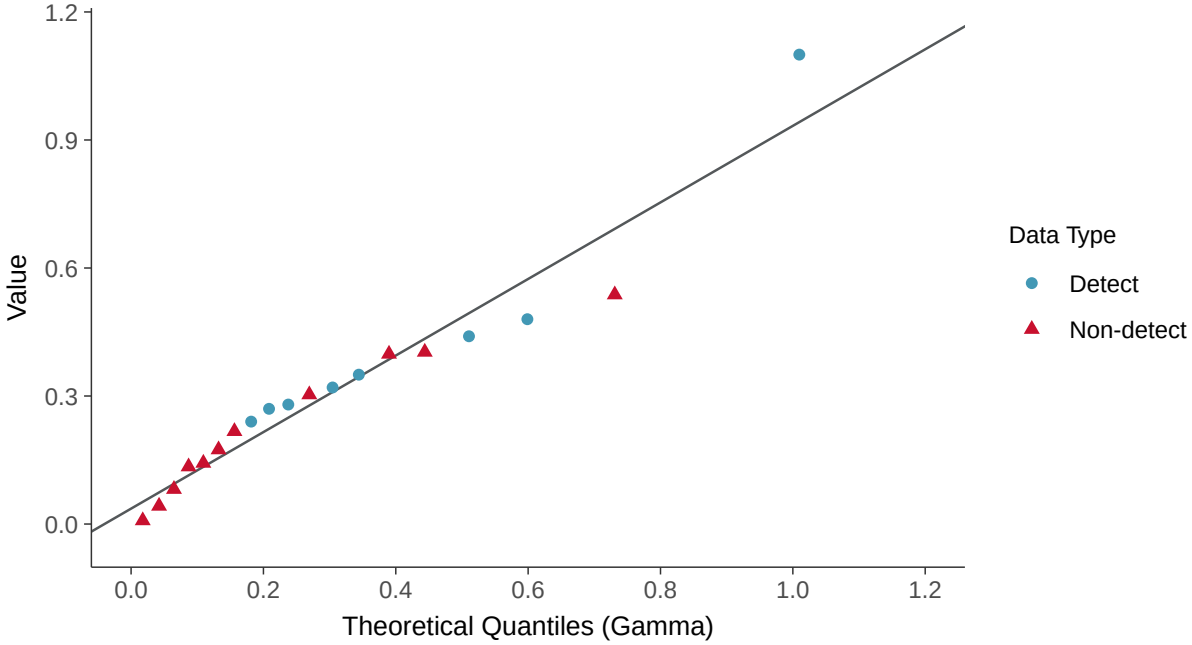
**Lognormal Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17005 (ug/L)



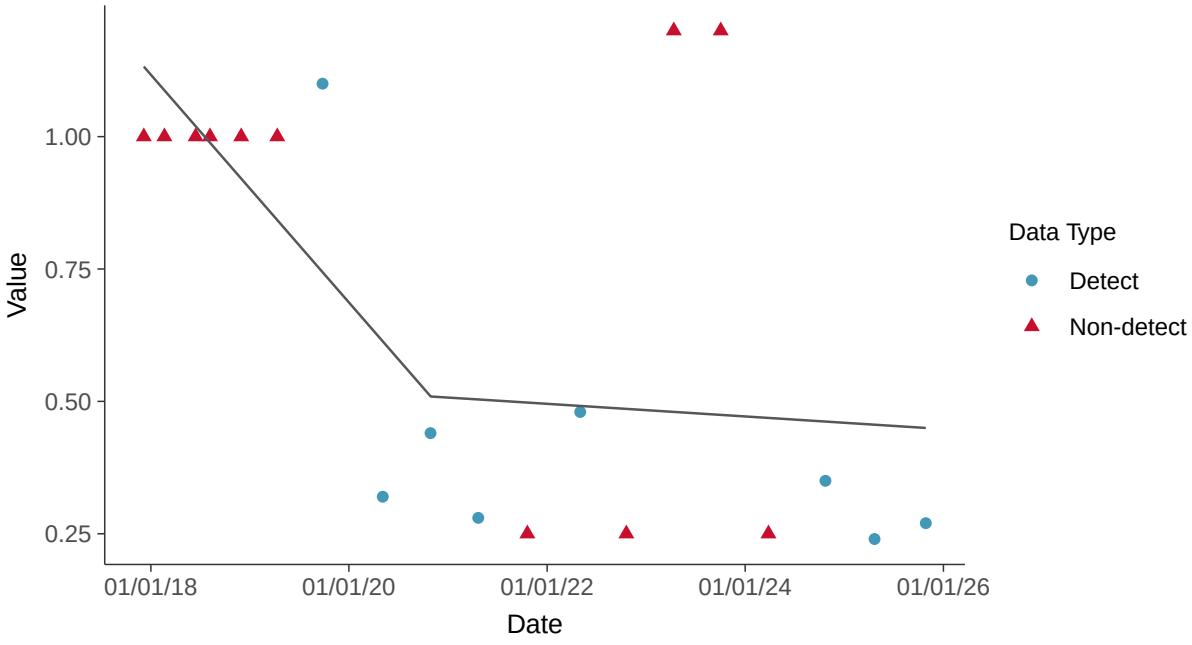

**Gamma Q-Q plot using ROS Imputed Estimates**

Chromium, MW-17005 (ug/L)



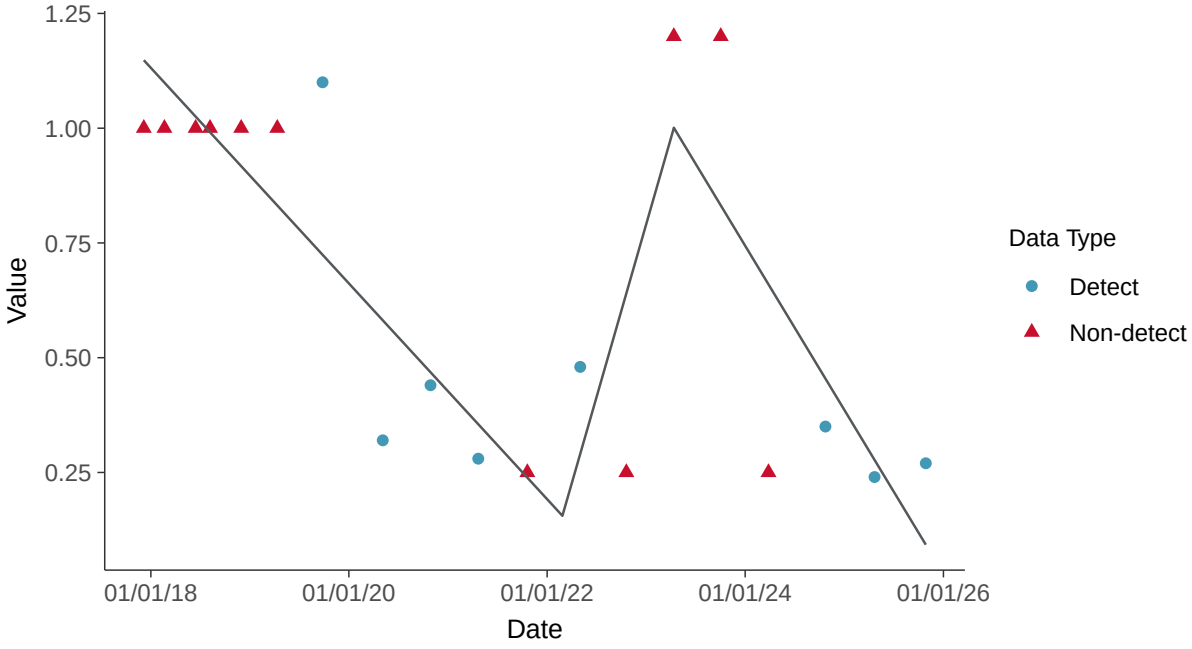
## Trend Regression: Piecewise Linear-Linear

Chromium, MW-17005 (ug/L)




## Trend Regression: Piecewise Linear-Linear-Linear

Chromium, MW-17005 (ug/L)

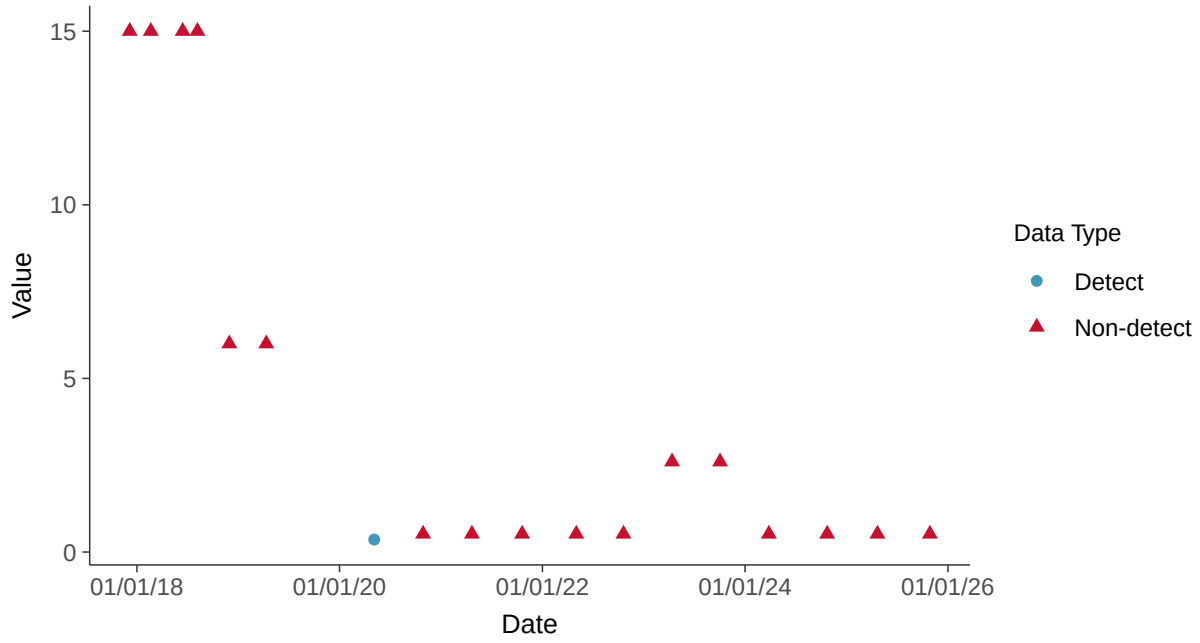


## Appendix IV: Cobalt, MW-17005

ID: 18_2_110

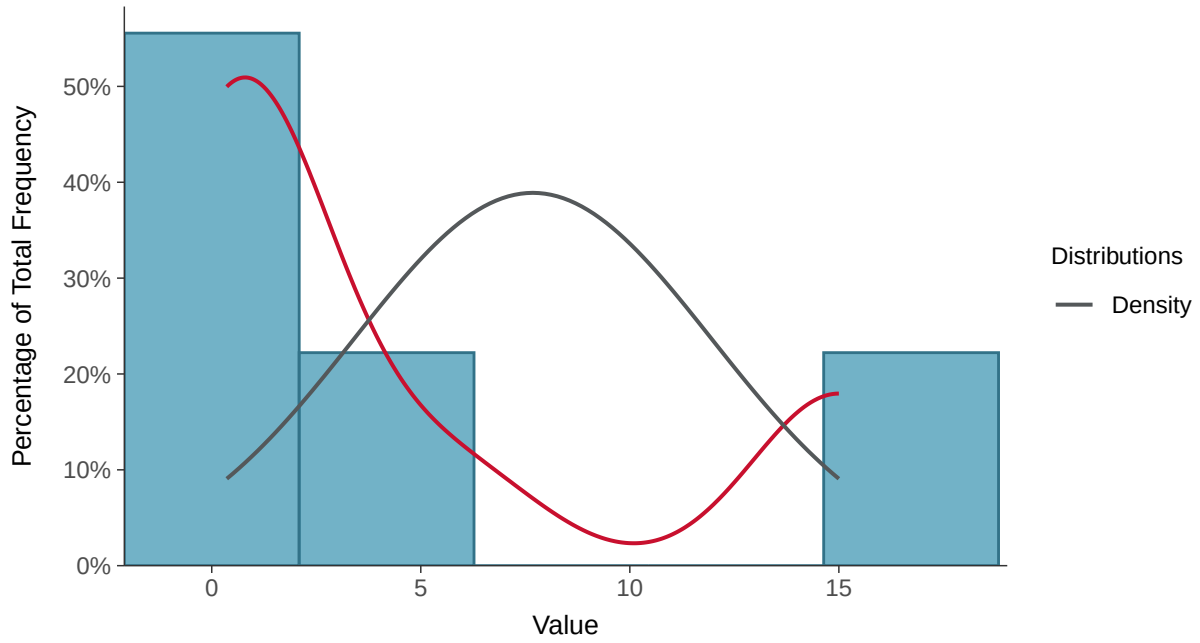
**Scatter Plot**

Cobalt, MW-17005 (ug/L)



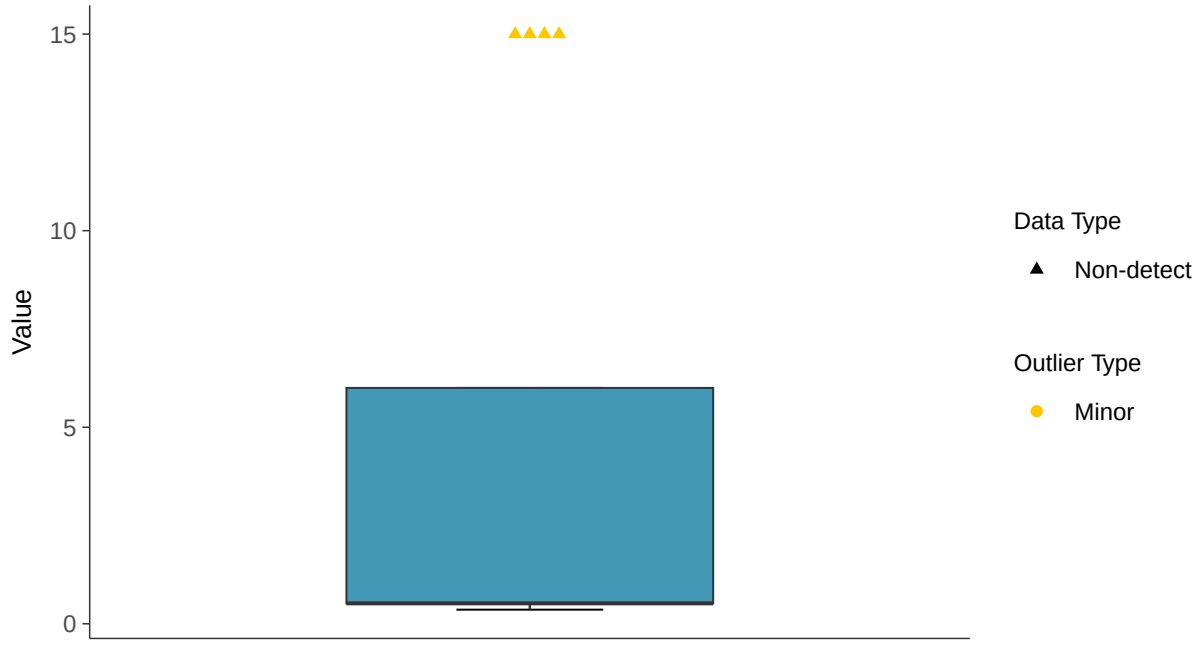

**Histogram**

Cobalt, MW-17005 (ug/L)



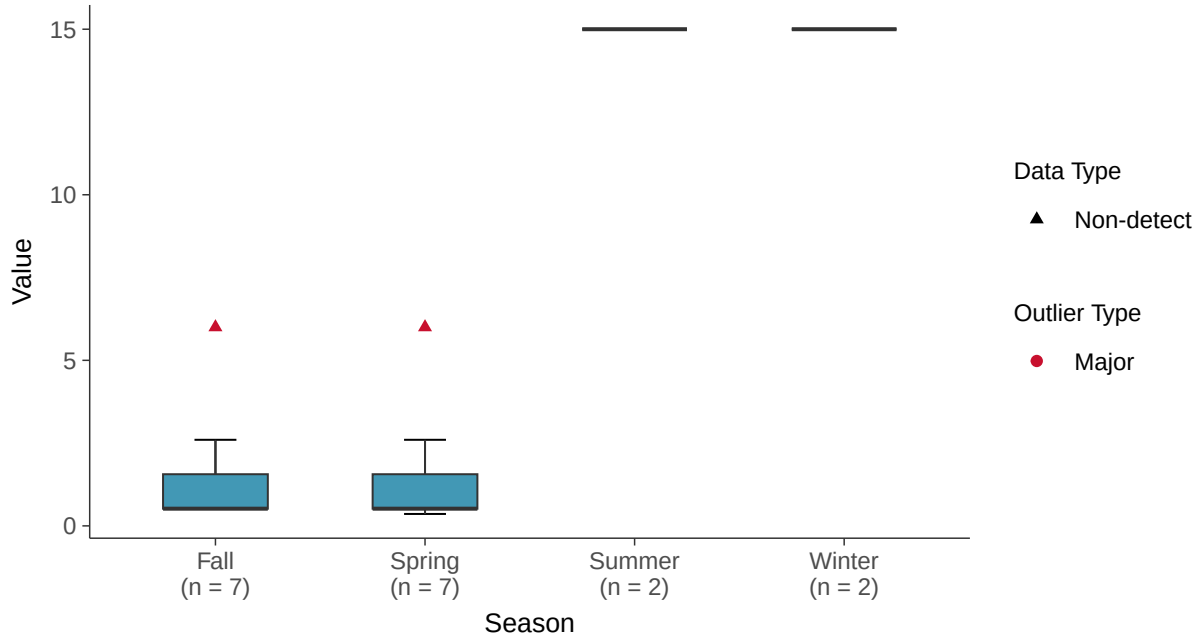
## Boxplot

Cobalt, MW-17005 (ug/L)



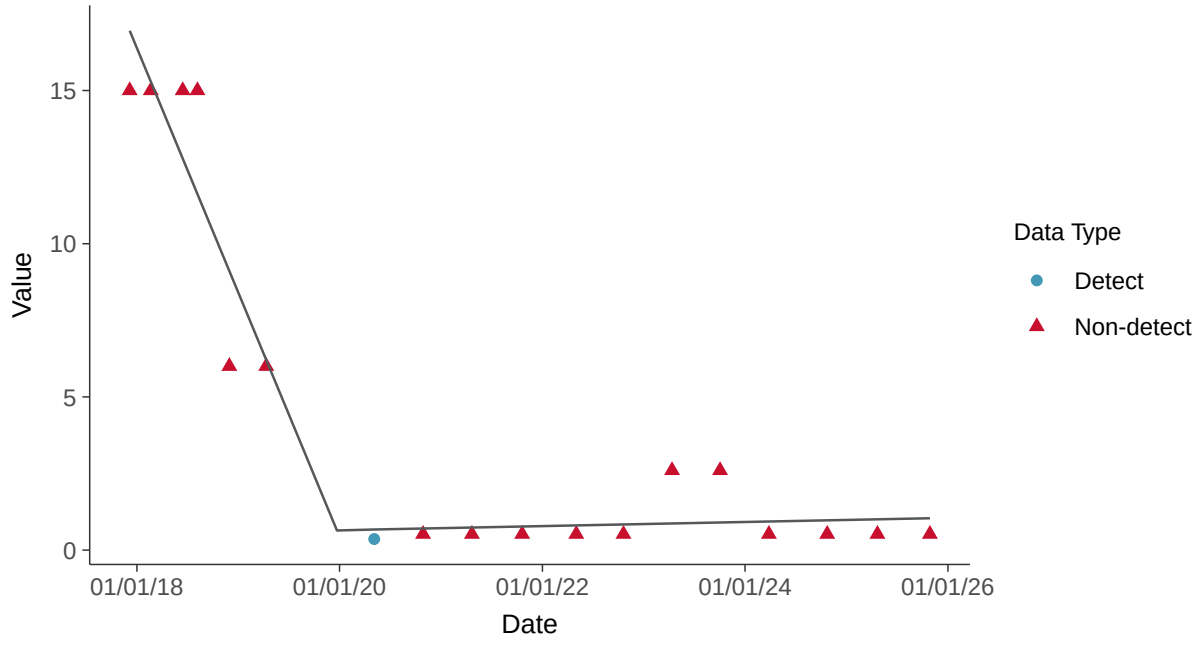

## Boxplot by Season

Cobalt, MW-17005 (ug/L)



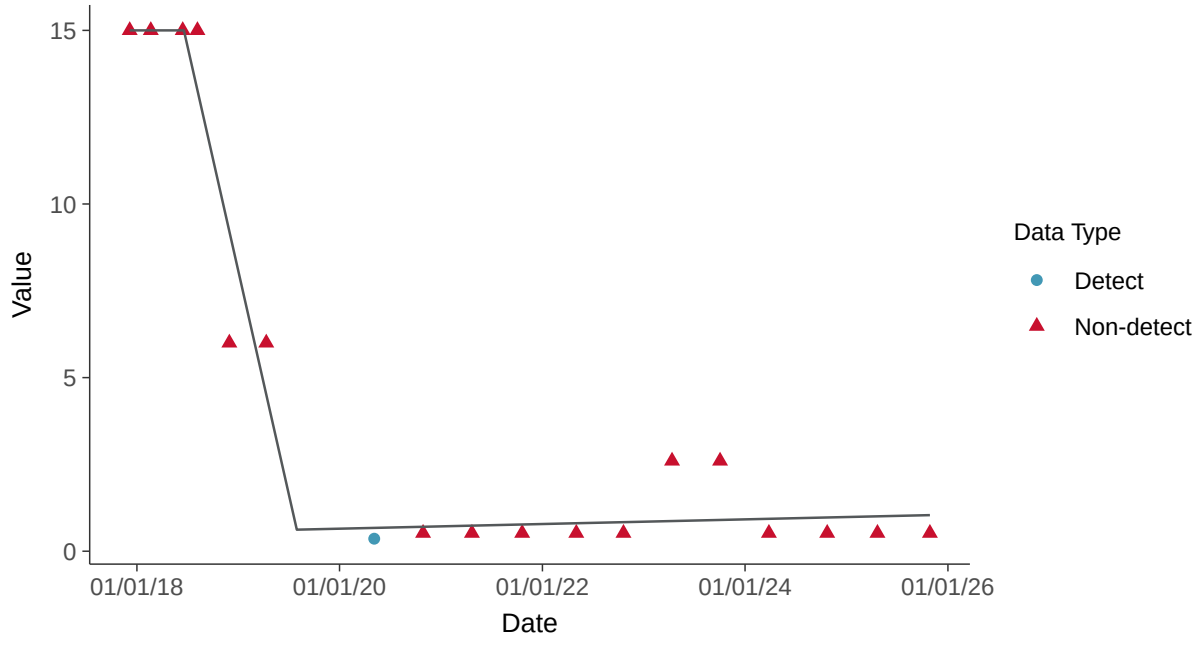
**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17005 (ug/L)



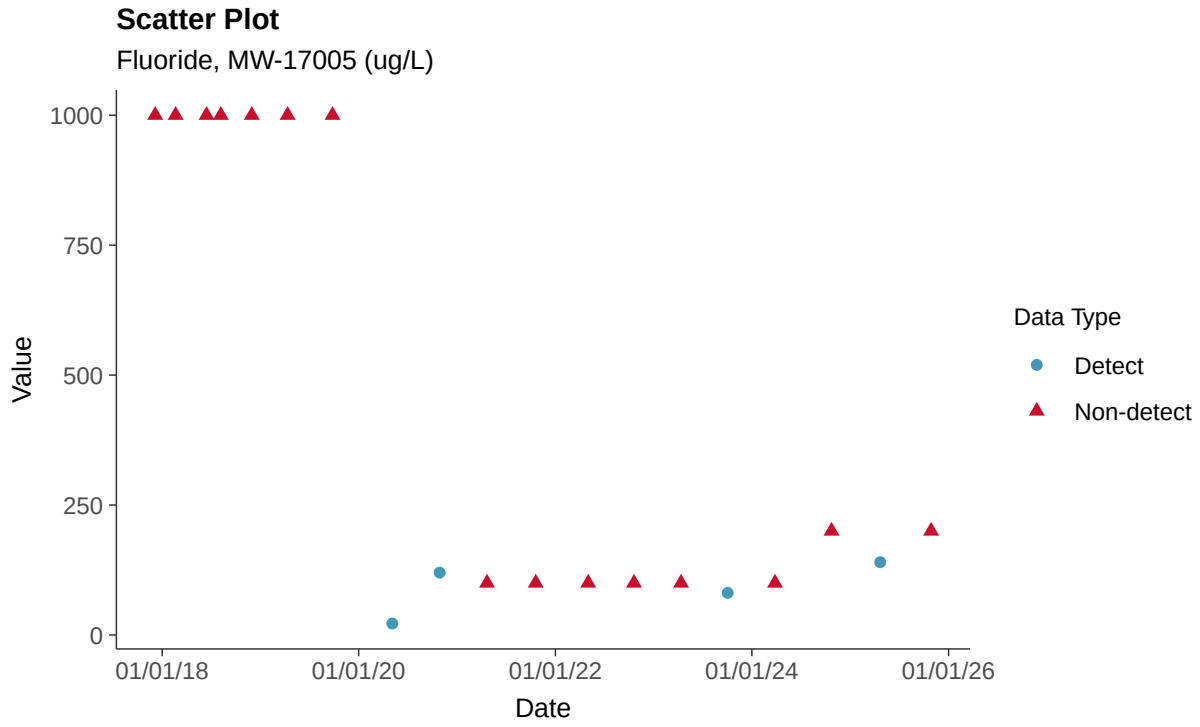

**Trend Regression: Piecewise Linear-Linear-Linear**

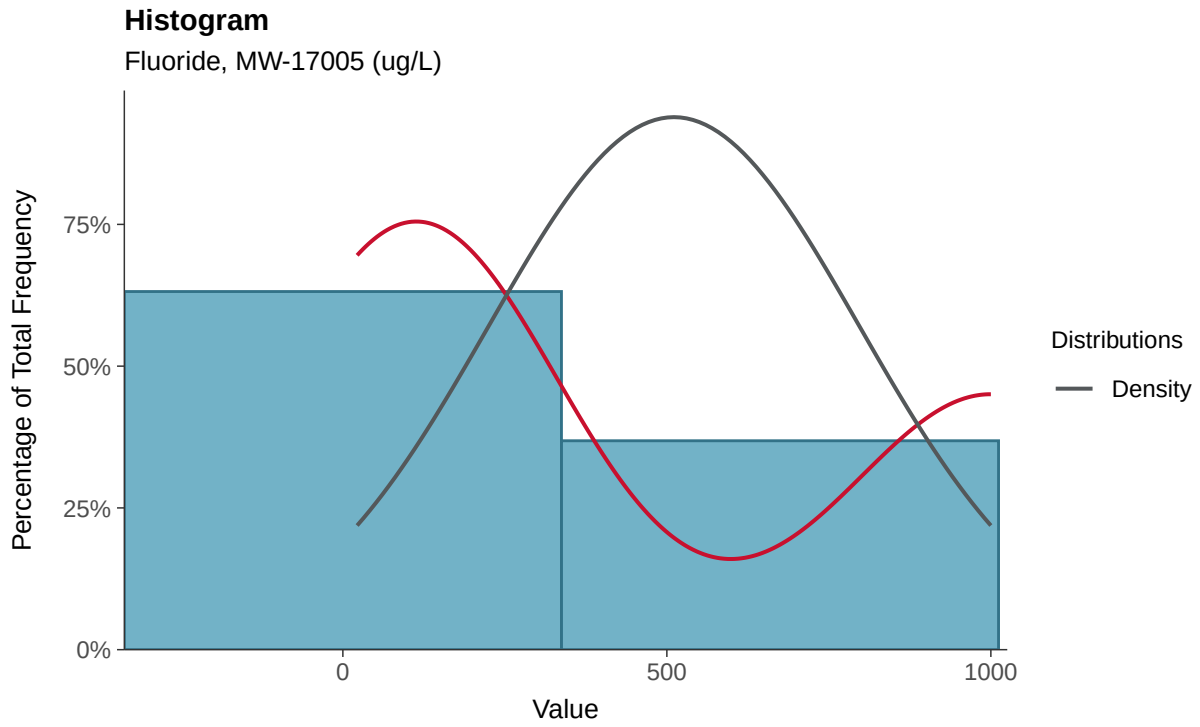
Cobalt, MW-17005 (ug/L)



## Appendix IV: Fluoride, MW-17005

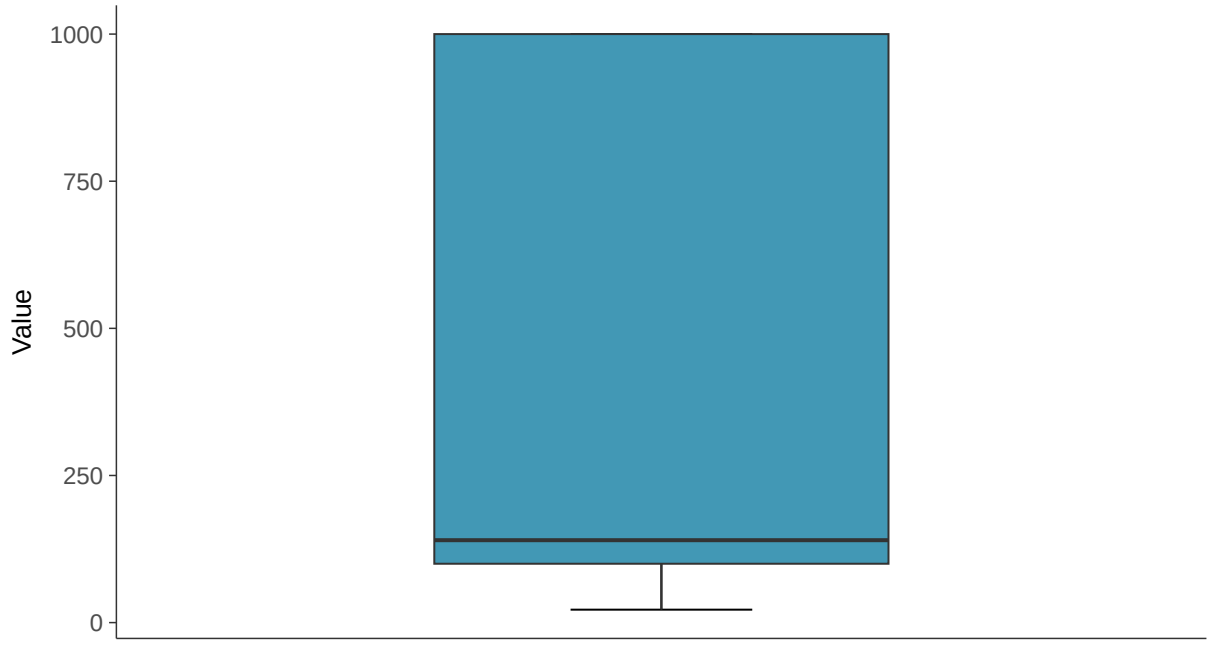
ID: 18_2_114



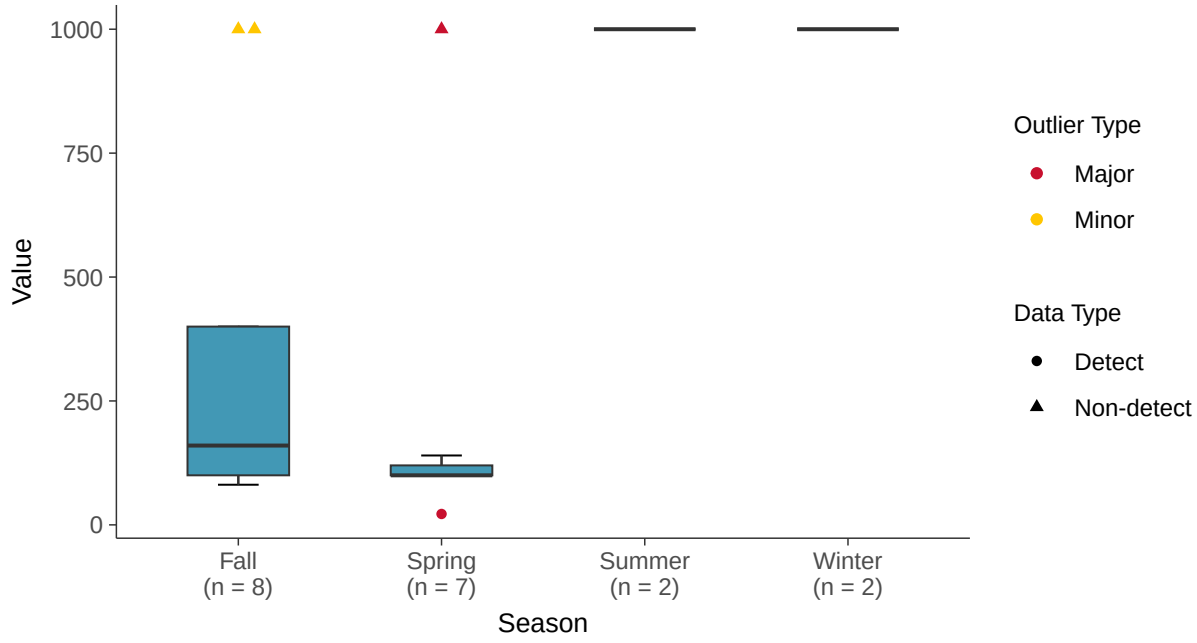
## Boxplot

Fluoride, MW-17005 (ug/L)



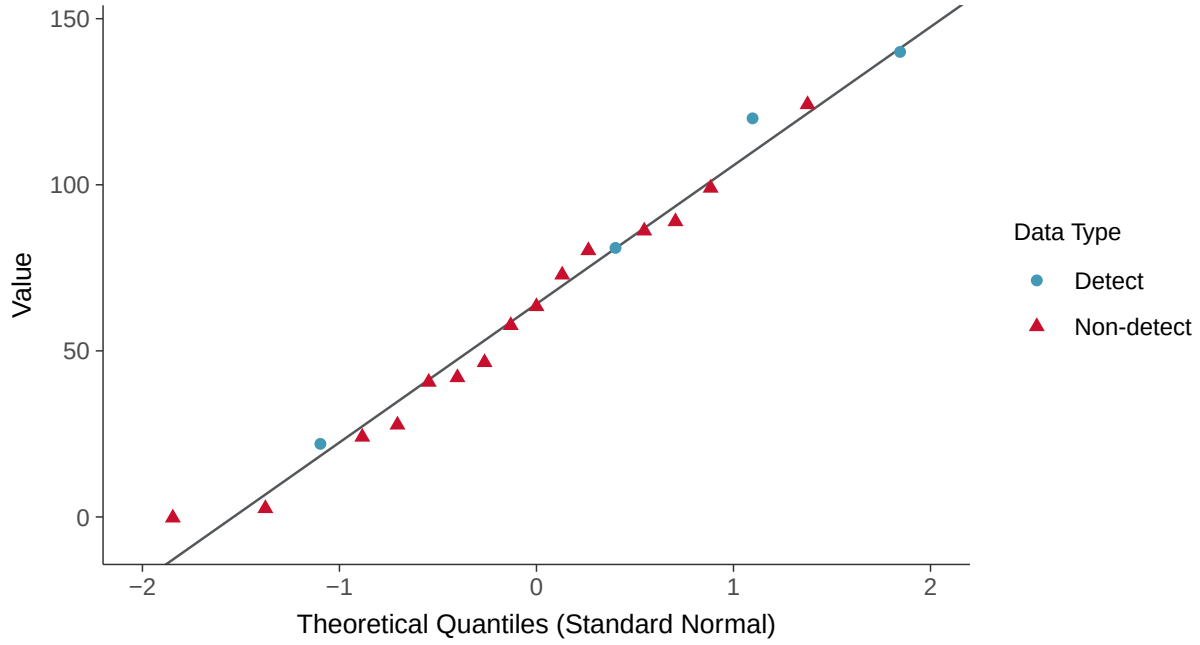

## Boxplot by Season

Fluoride, MW-17005 (ug/L)



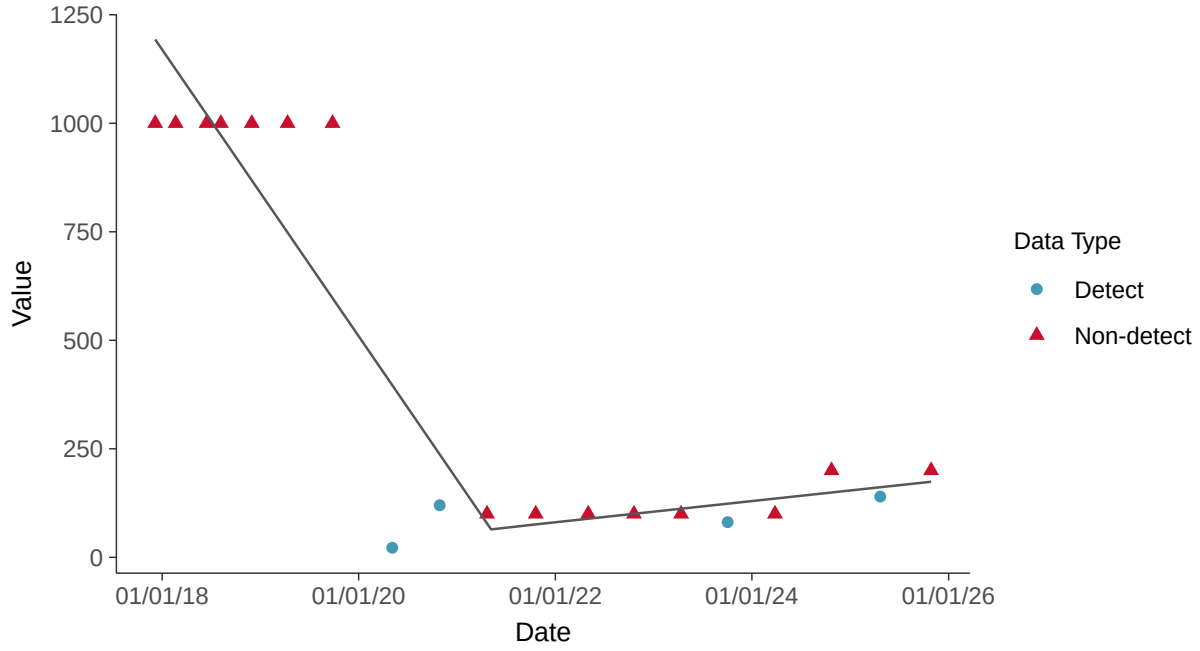
## Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17005 (ug/L)




## Trend Regression: Piecewise Linear-Linear

Fluoride, MW-17005 (ug/L)

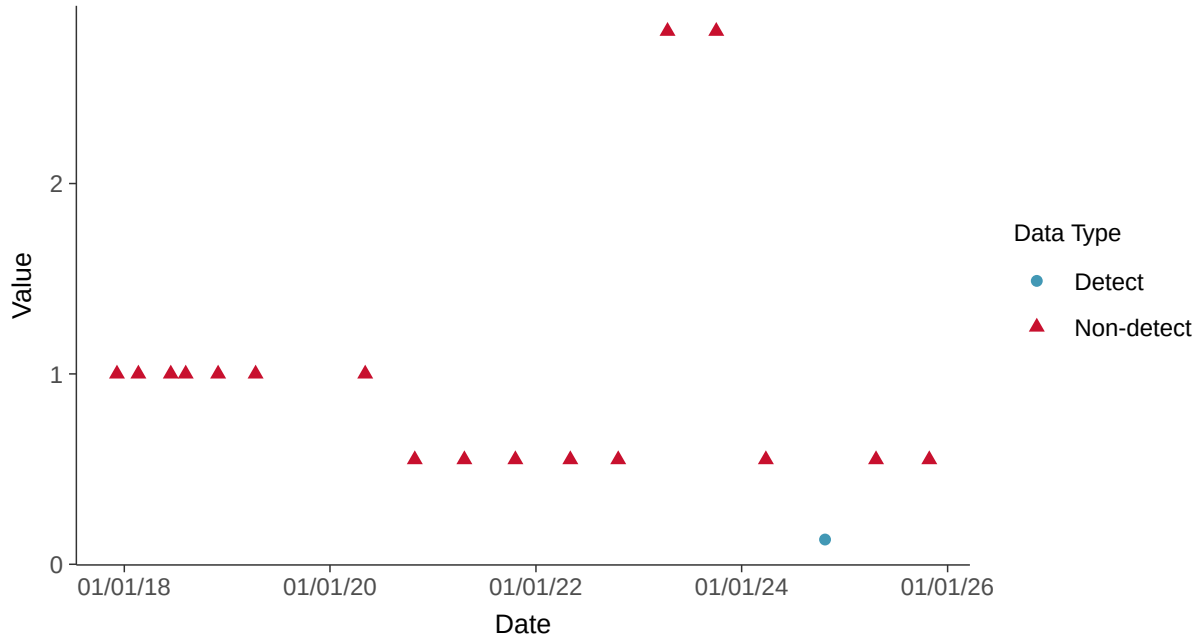


## Appendix IV: Lead, MW-17005

ID: 18_2_116

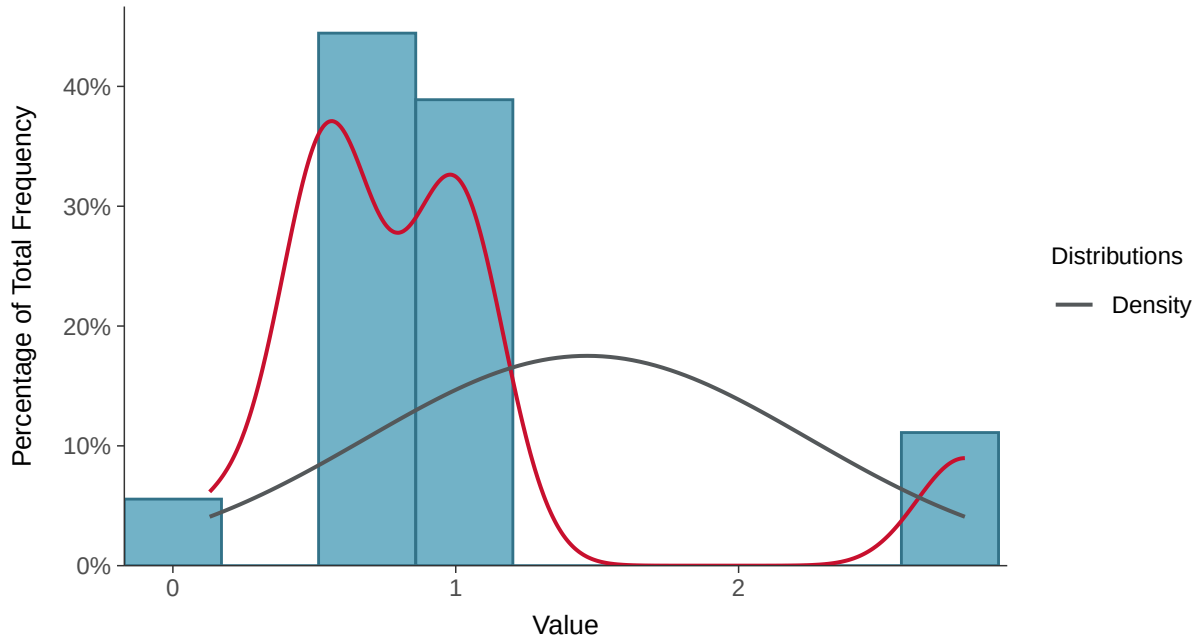
**Scatter Plot**

Lead, MW-17005 (ug/L)



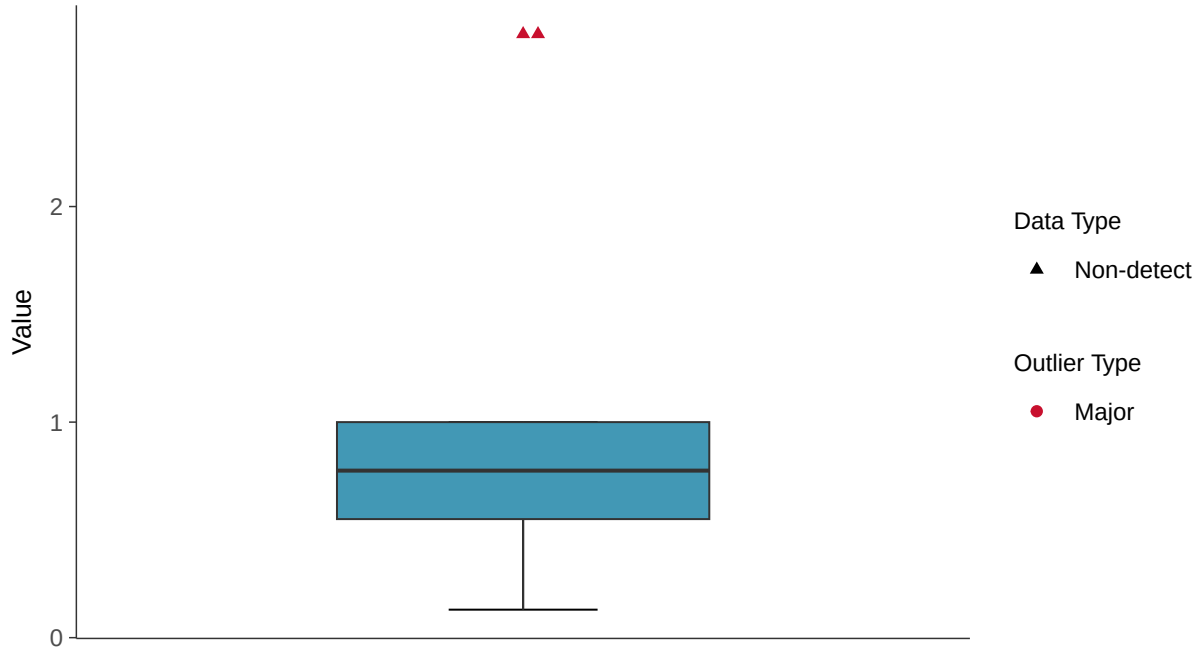

**Histogram**

Lead, MW-17005 (ug/L)



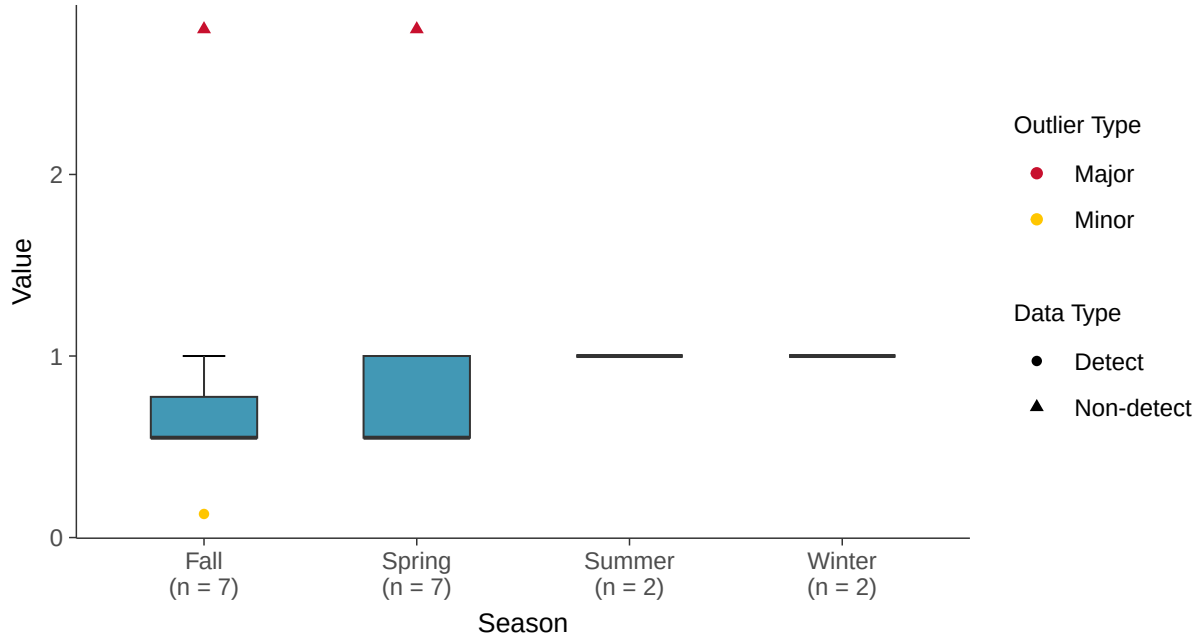
## Boxplot

Lead, MW-17005 (ug/L)



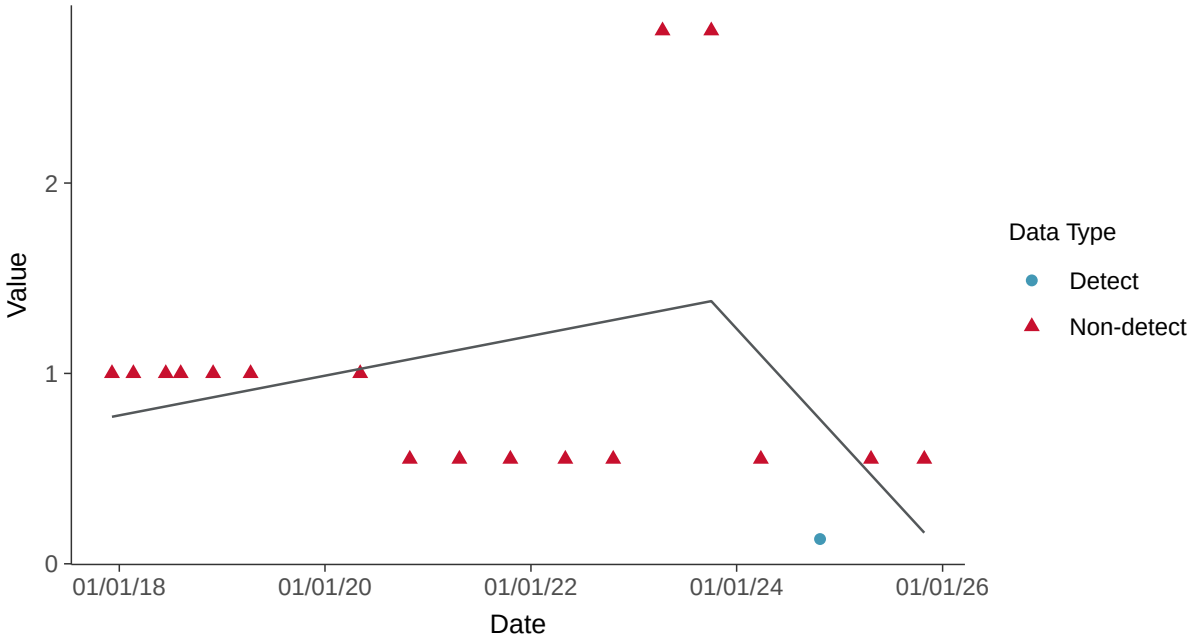

## Boxplot by Season

Lead, MW-17005 (ug/L)



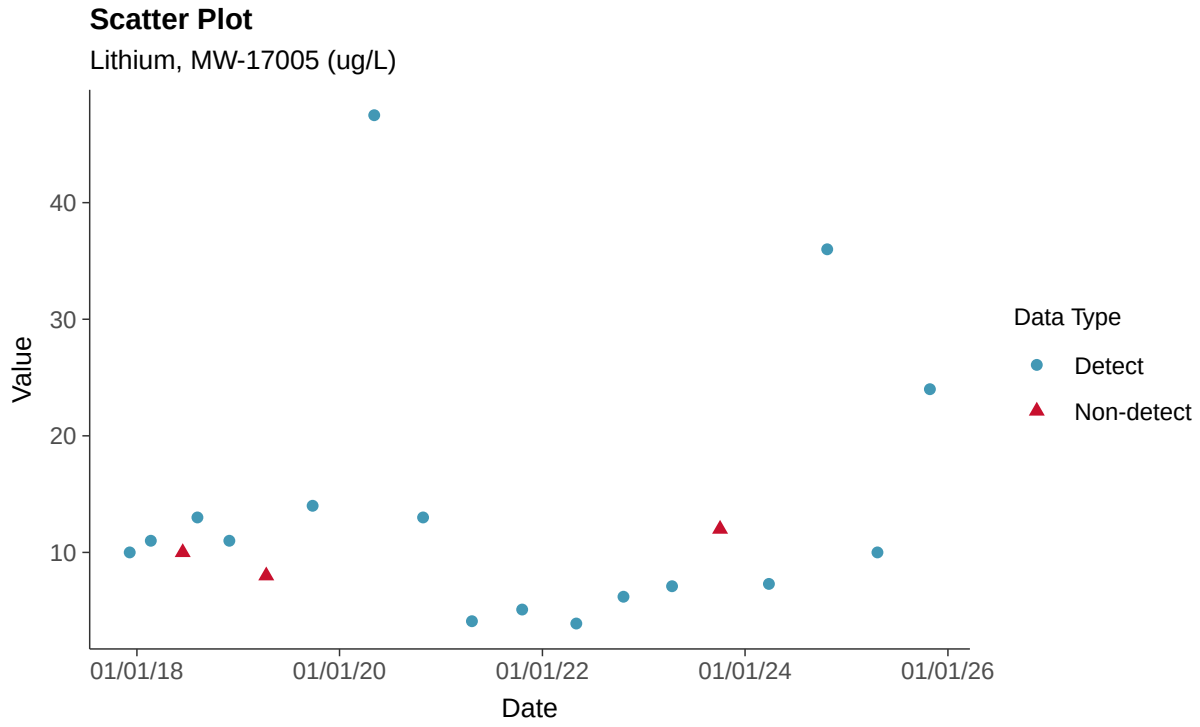
**Trend Regression: Piecewise Linear-Linear**

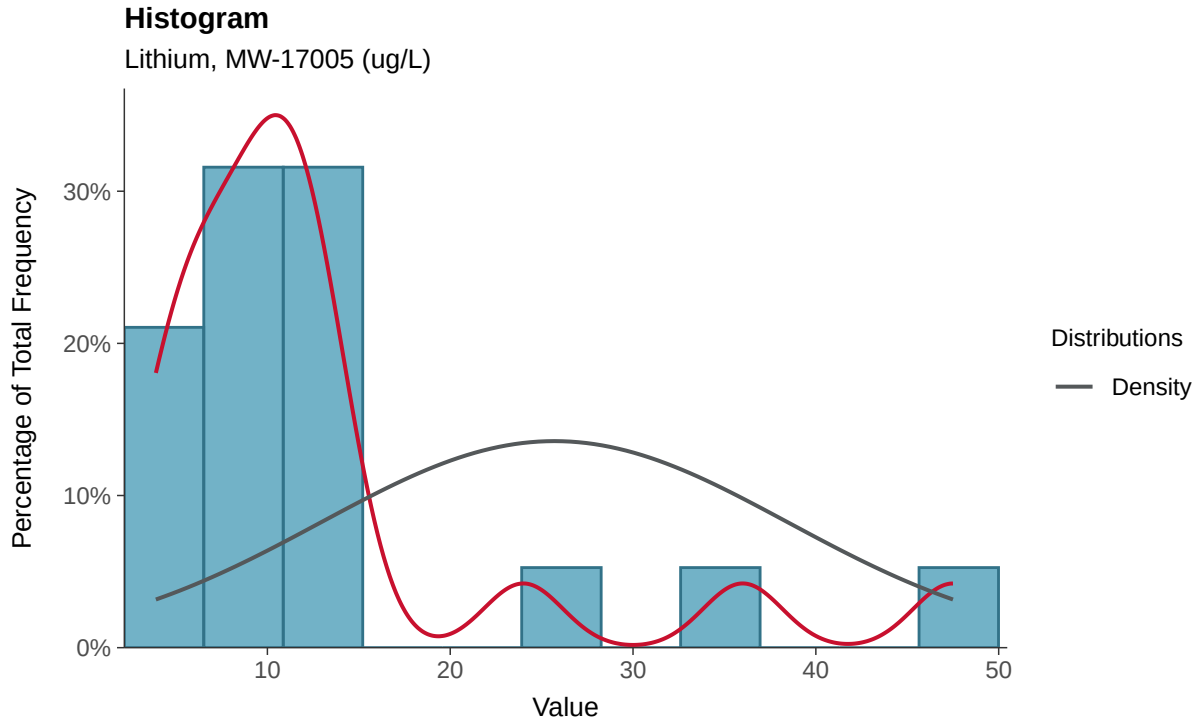
Lead, MW-17005 (ug/L)



## Appendix IV: Lithium, MW-17005

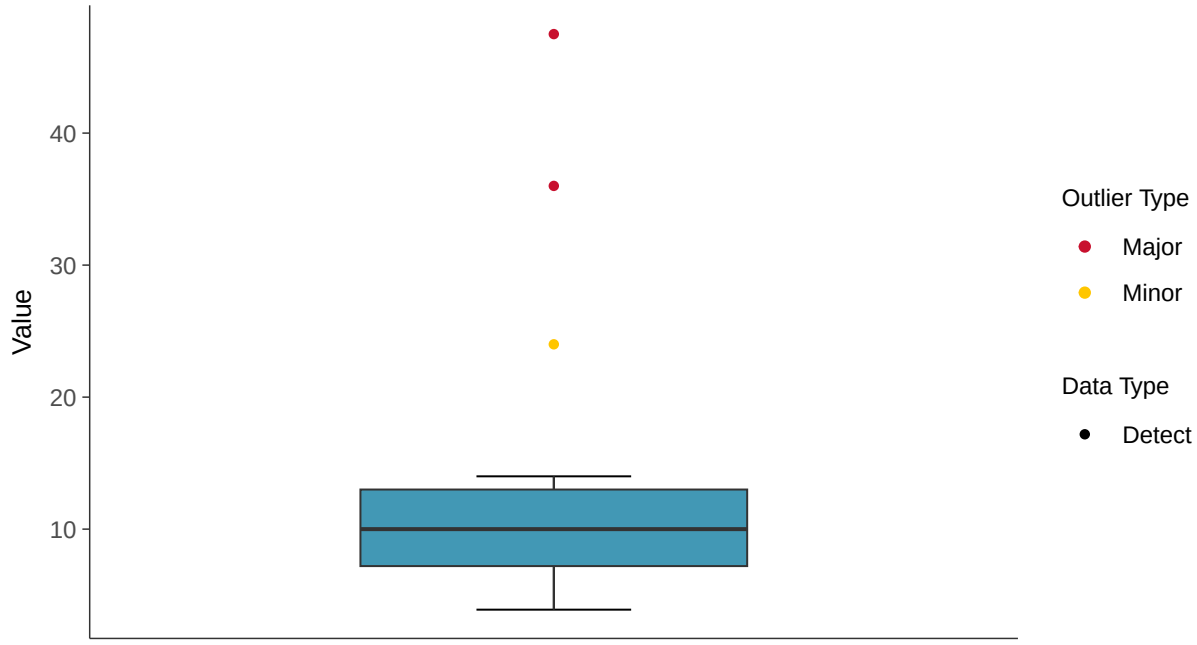
ID: 18_2_117



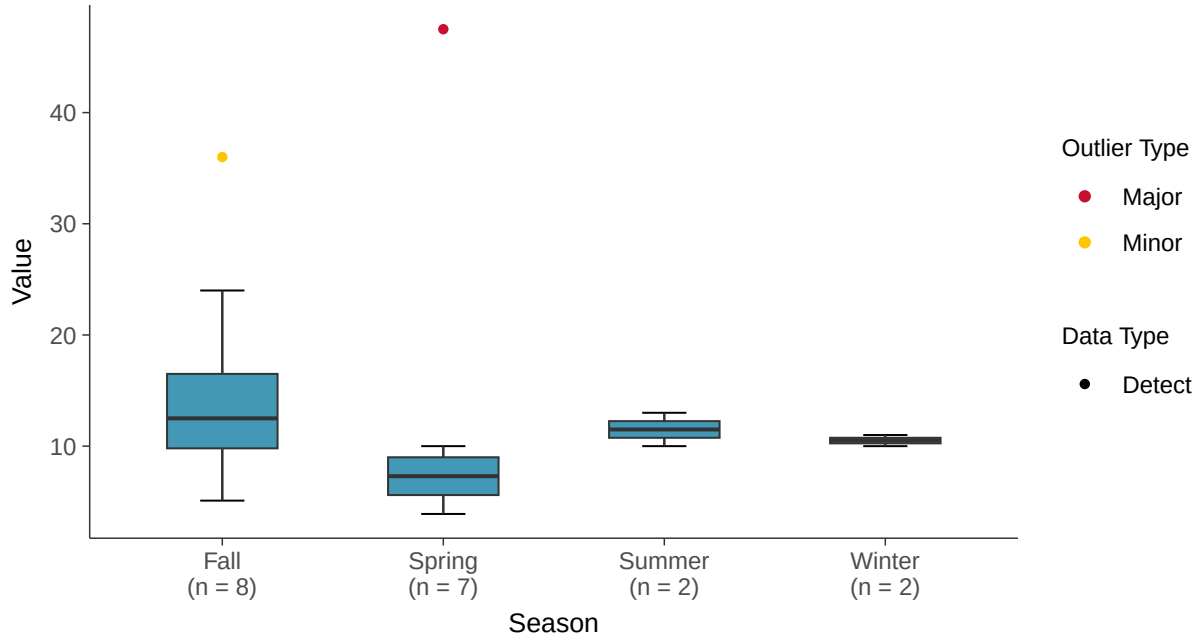
## Boxplot

Lithium, MW-17005 (ug/L)



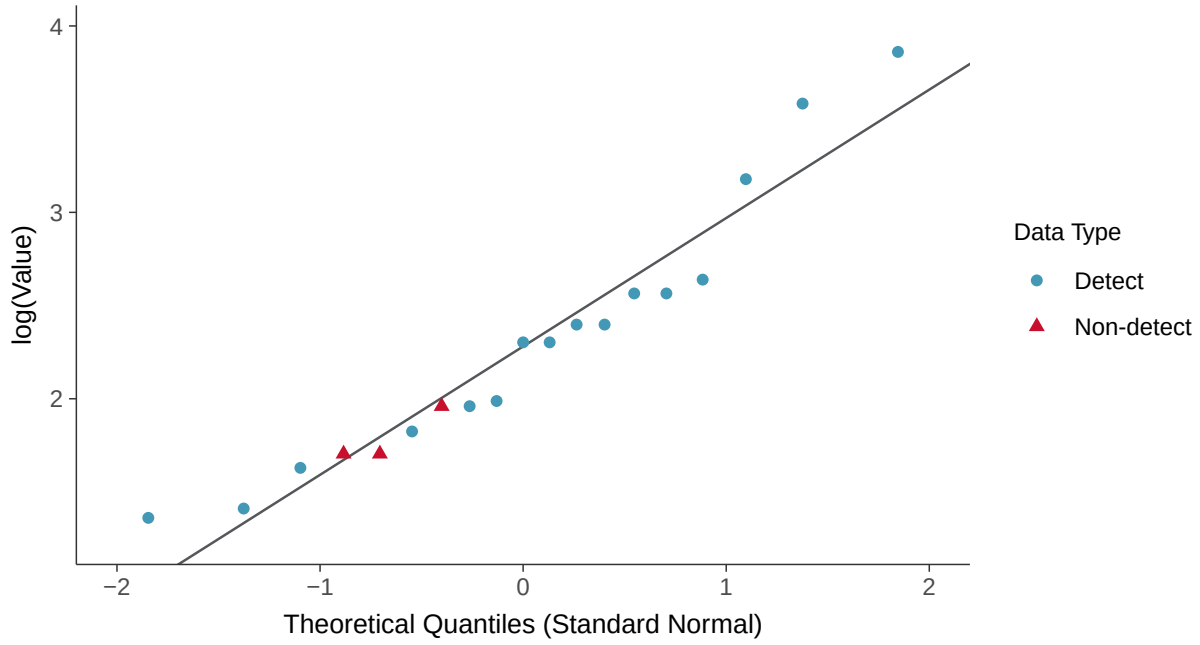

## Boxplot by Season

Lithium, MW-17005 (ug/L)



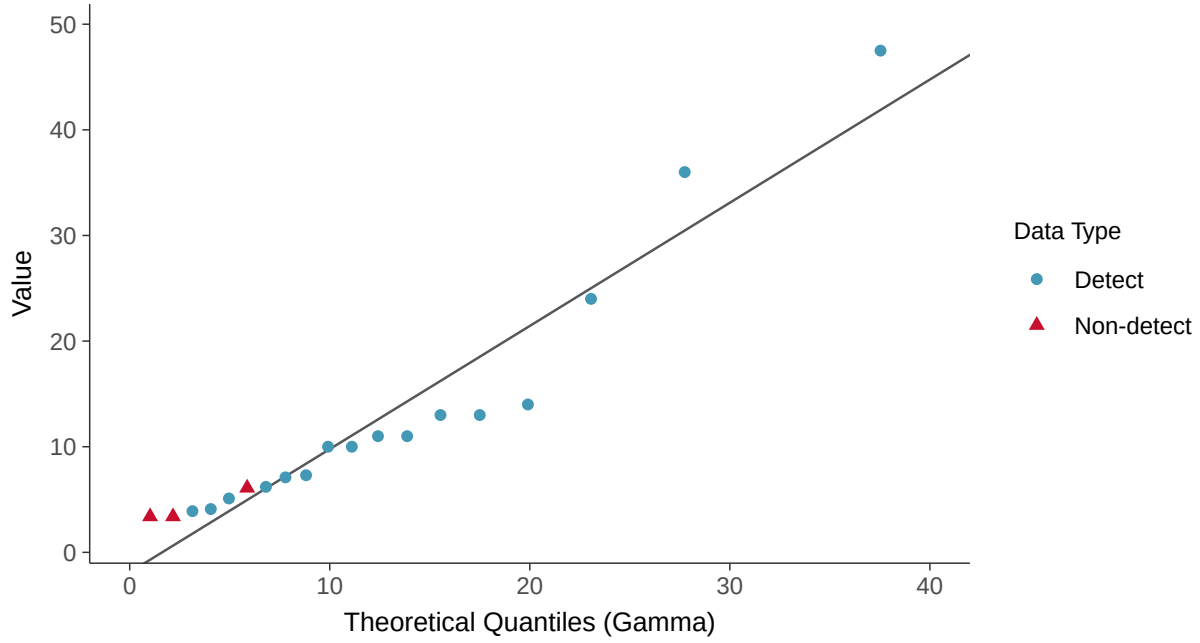
**Lognormal Q-Q plot using ROS Imputed Estimates**

Lithium, MW-17005 (ug/L)



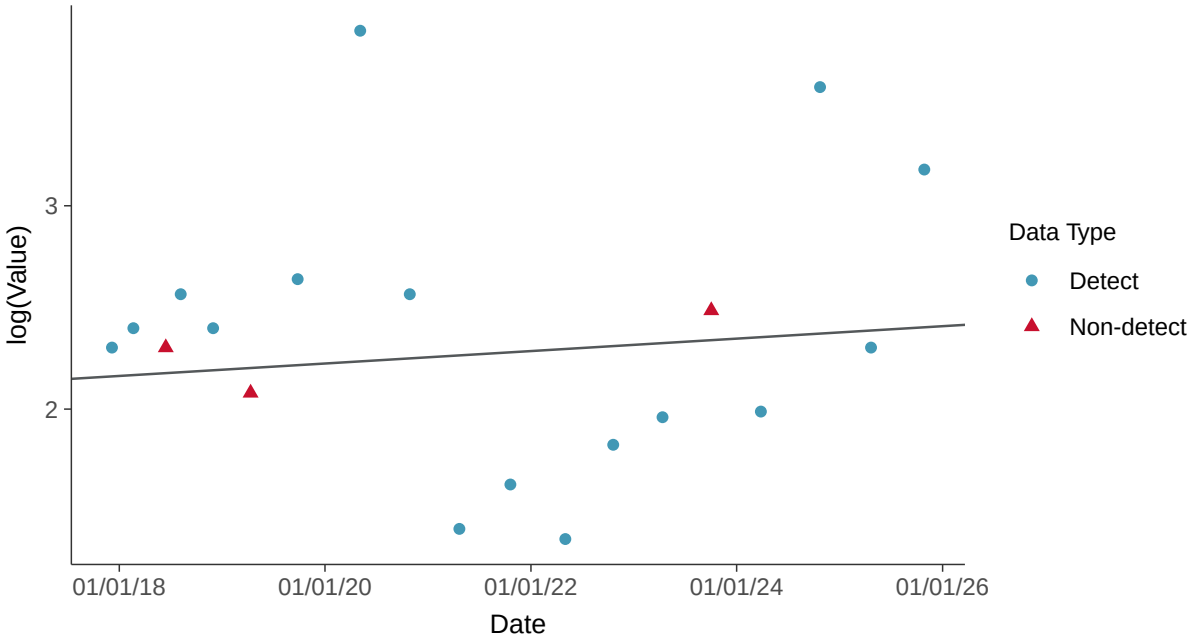

**Gamma Q-Q plot using ROS Imputed Estimates**

Lithium, MW-17005 (ug/L)



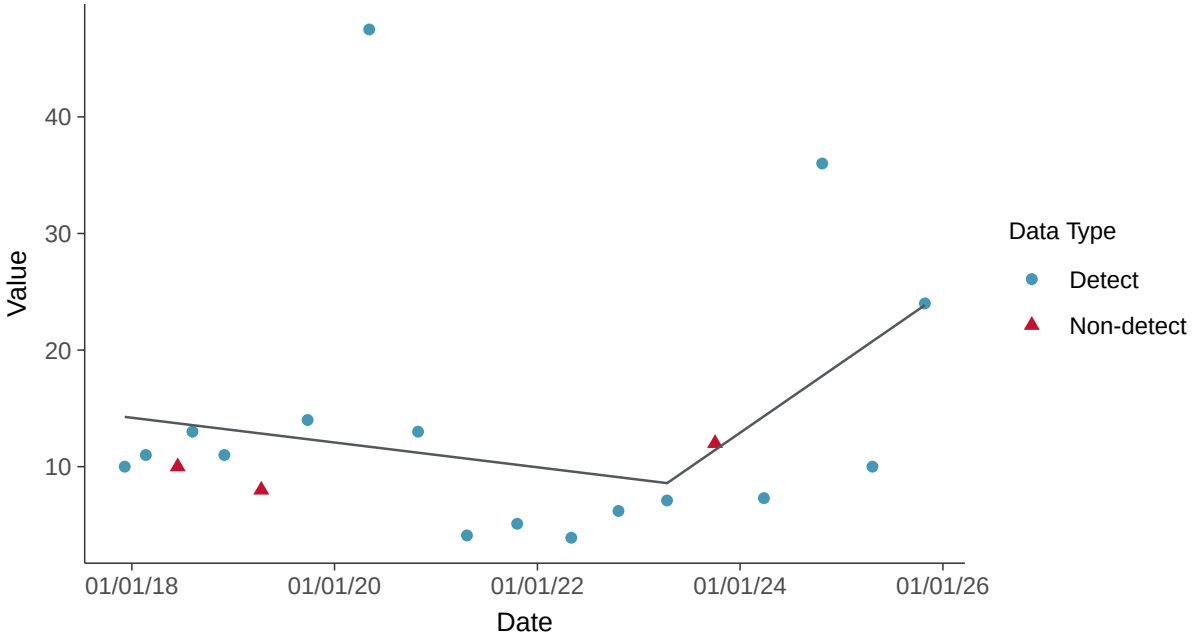
**Trend Regression: Lognormal MLE**

Lithium, MW-17005 (ug/L)



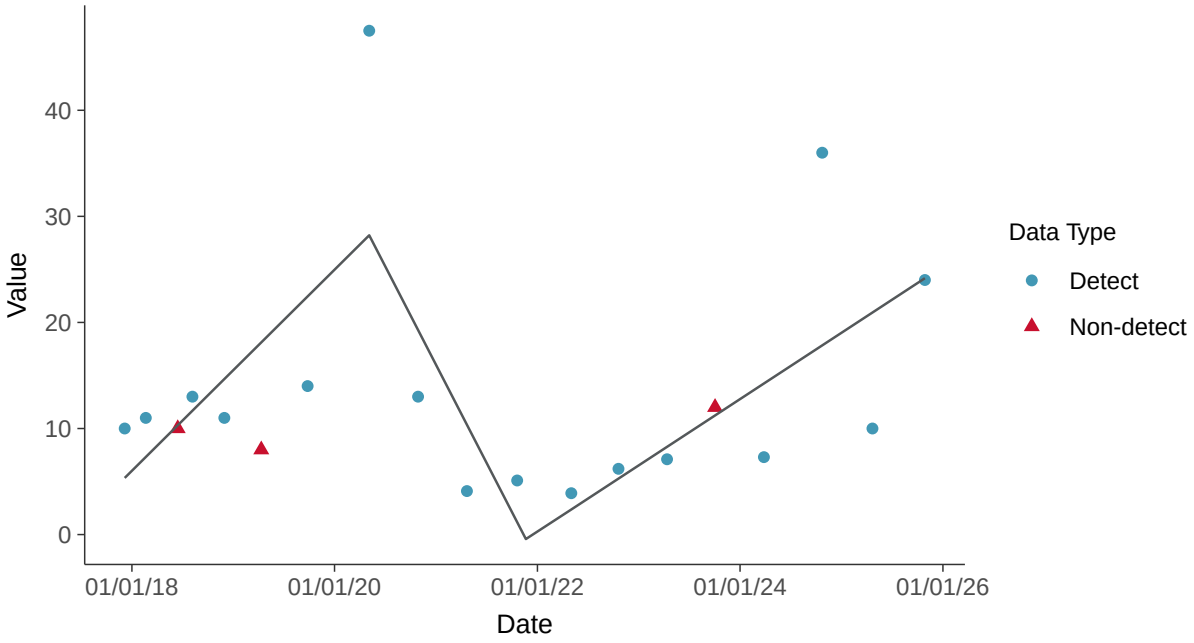

**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-17005 (ug/L)



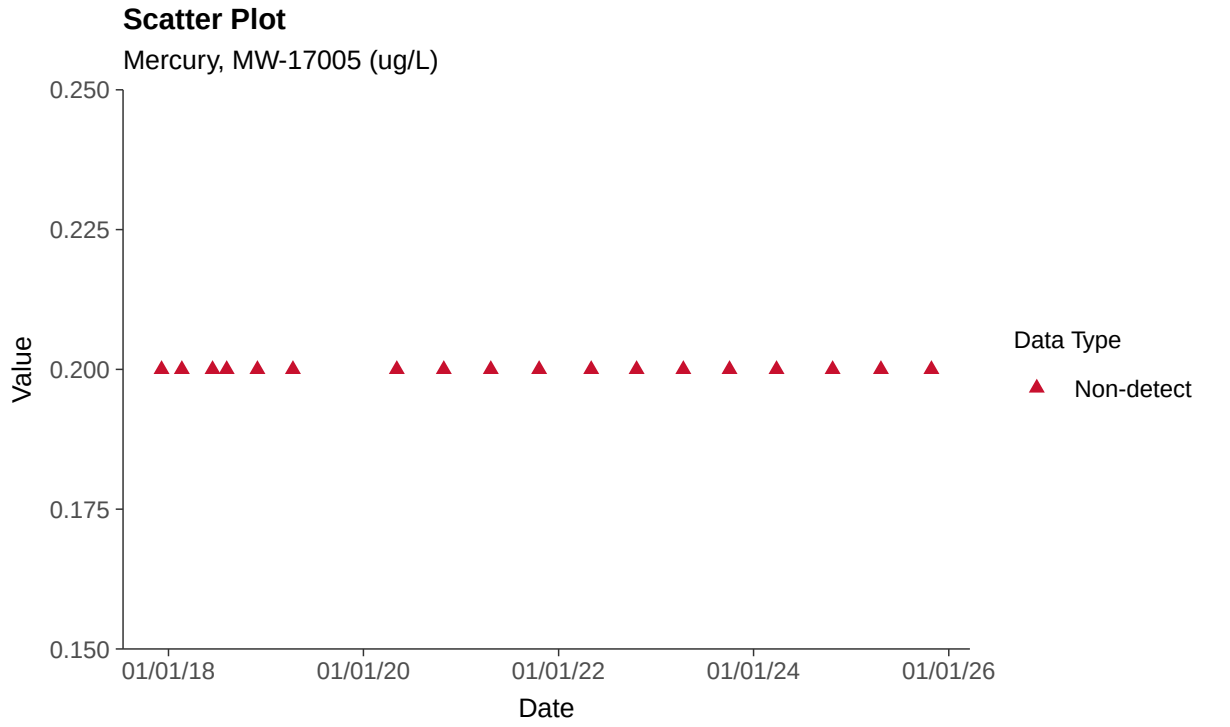
**Trend Regression: Piecewise Linear-Linear-Linear**

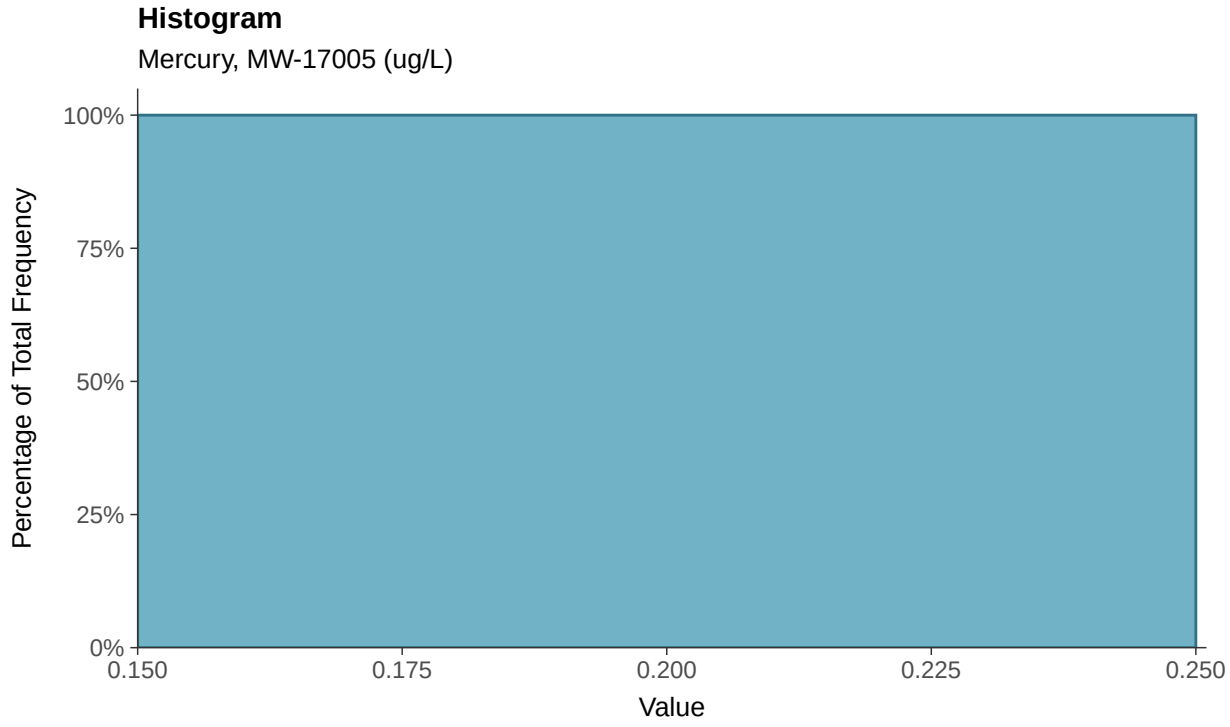
Lithium, MW-17005 (ug/L)



## Appendix IV: Mercury, MW-17005

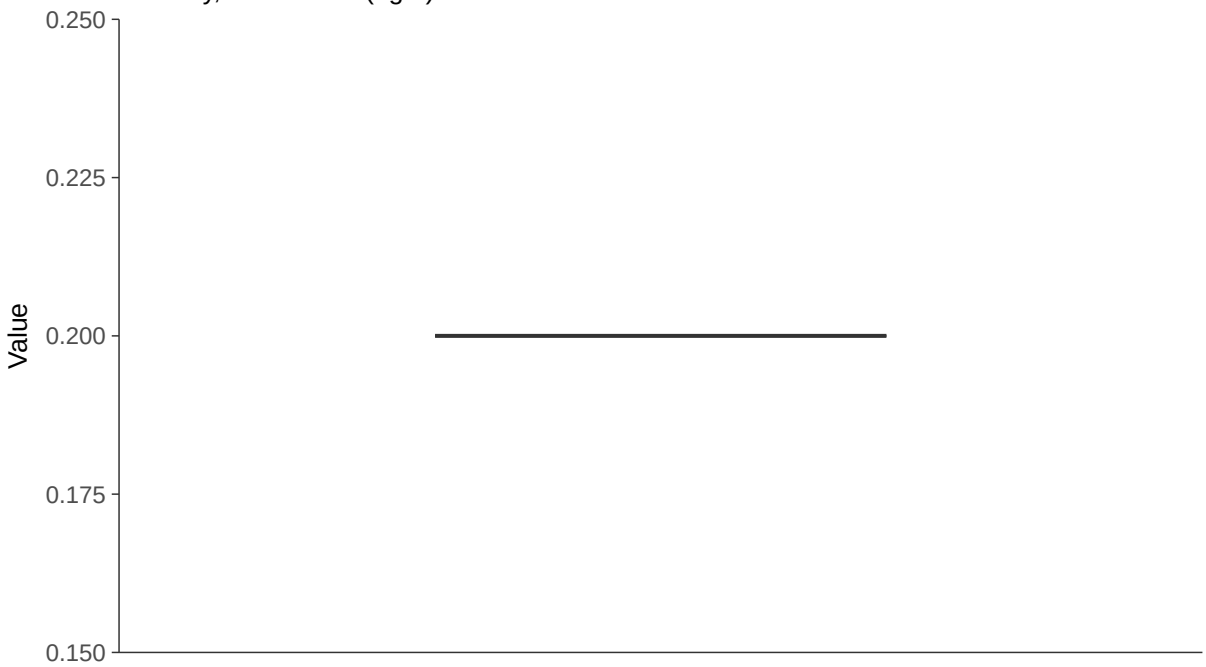
ID: 18_2_118



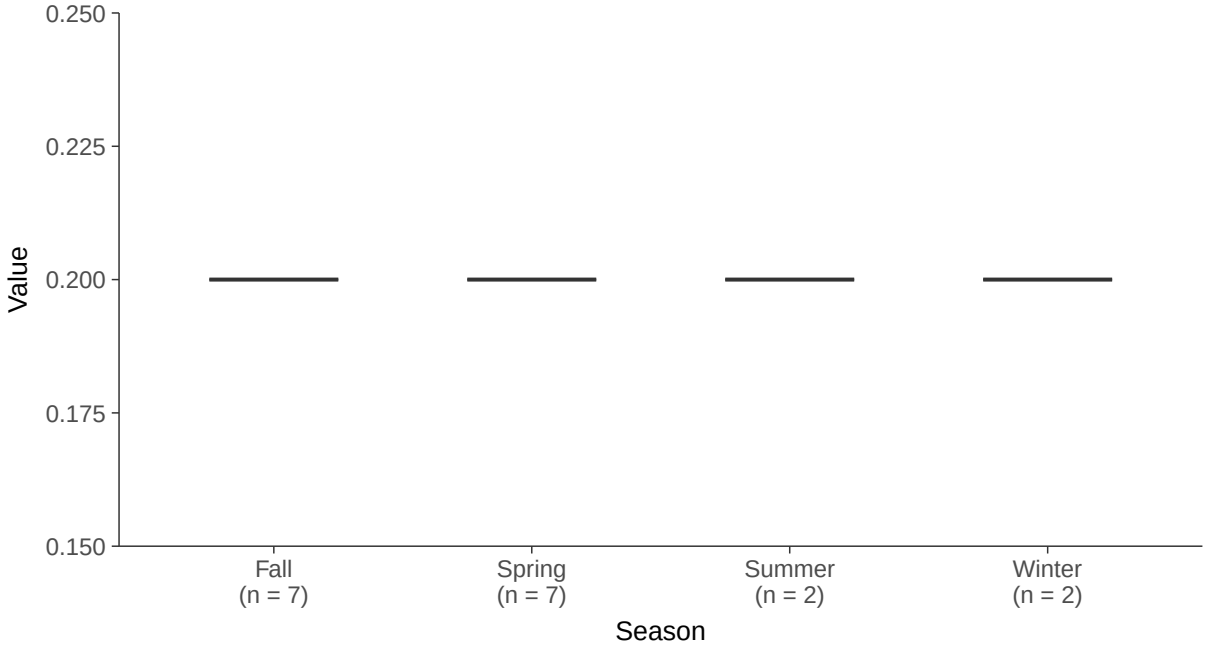
**Boxplot**

Mercury, MW-17005 (ug/L)



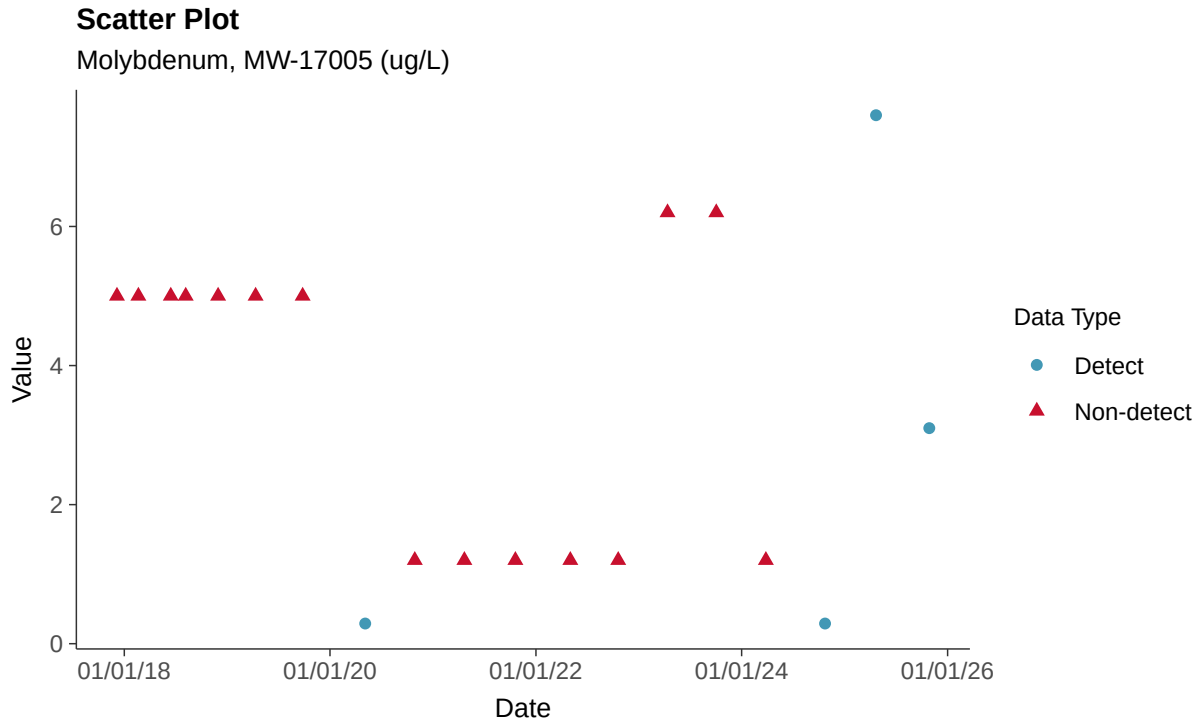

**Boxplot by Season**

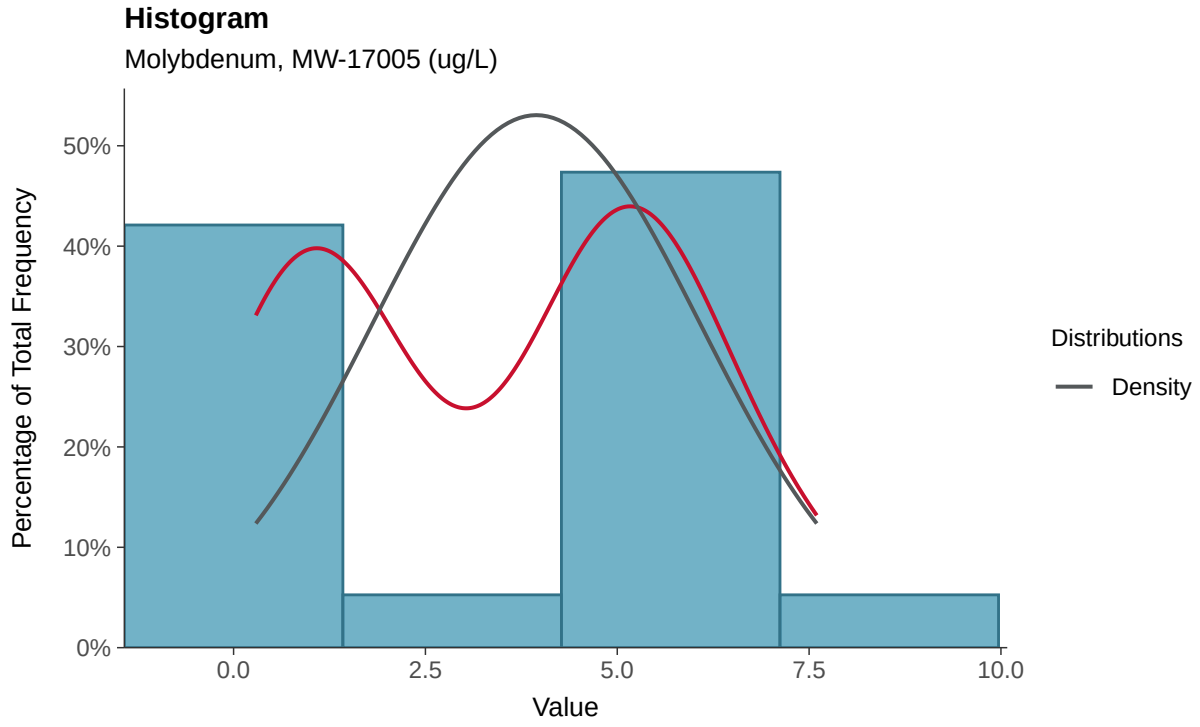
Mercury, MW-17005 (ug/L)



## Appendix IV: Molybdenum, MW-17005

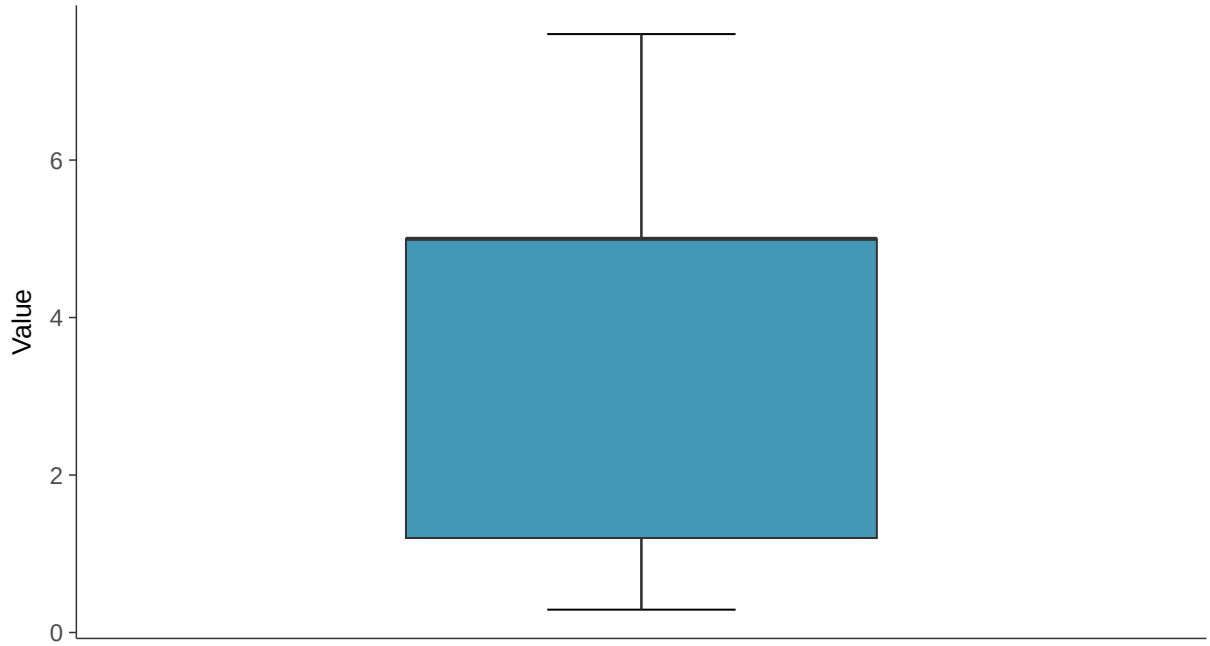
ID: 18_2_119



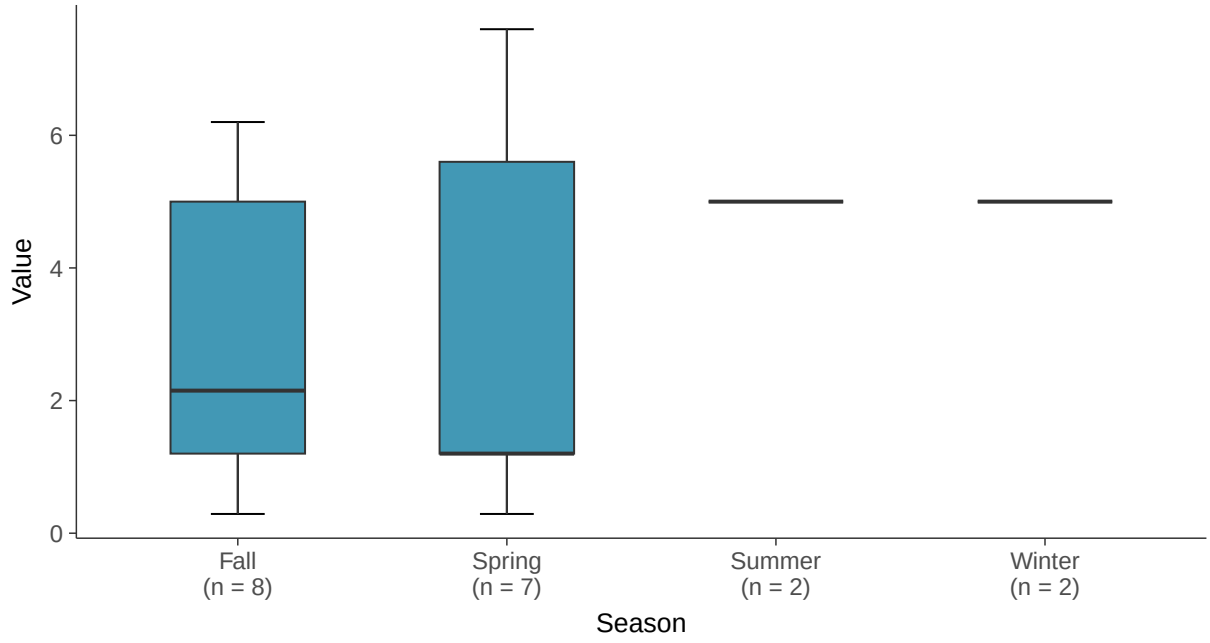
**Boxplot**

Molybdenum, MW-17005 (ug/L)



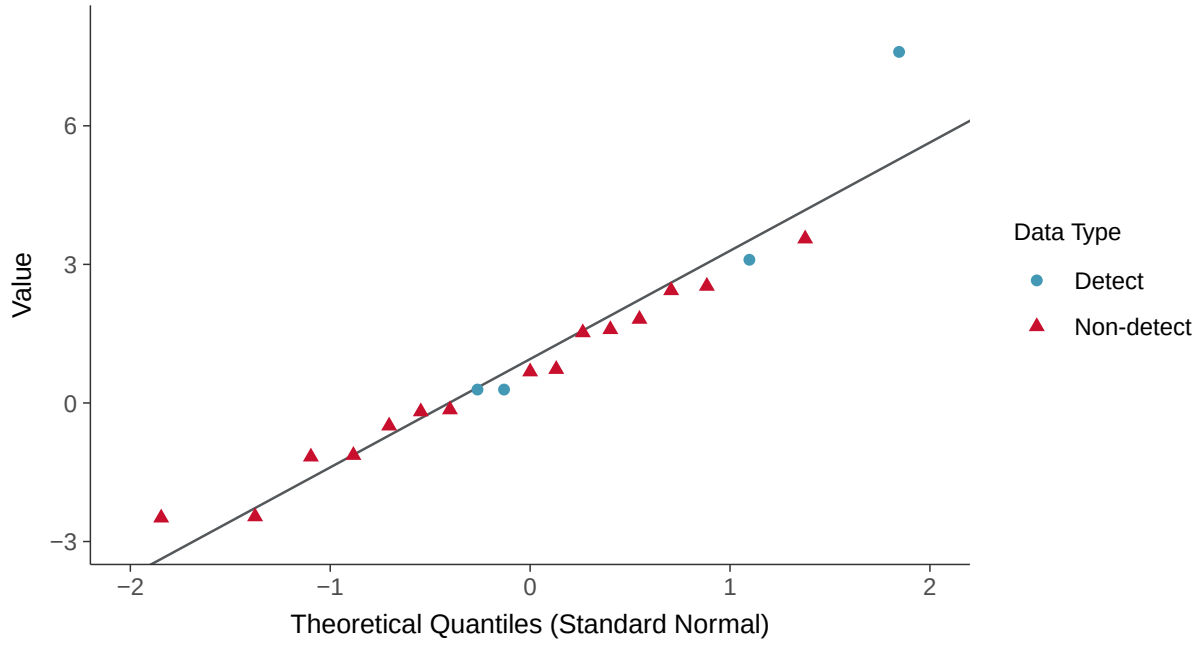

**Boxplot by Season**

Molybdenum, MW-17005 (ug/L)



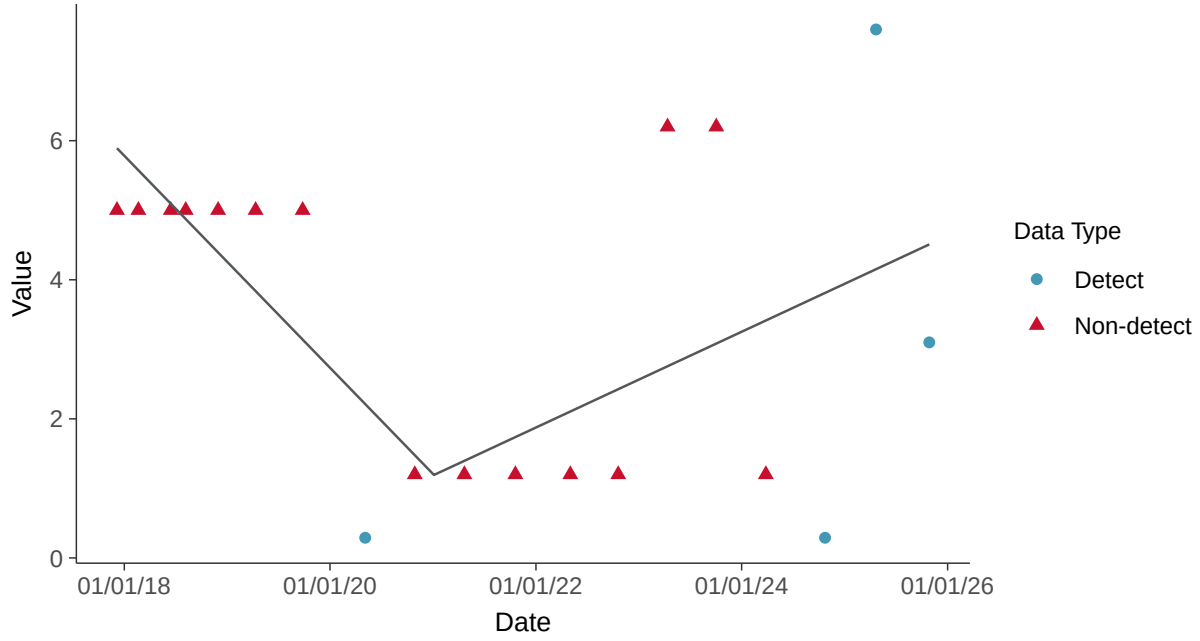
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17005 (ug/L)



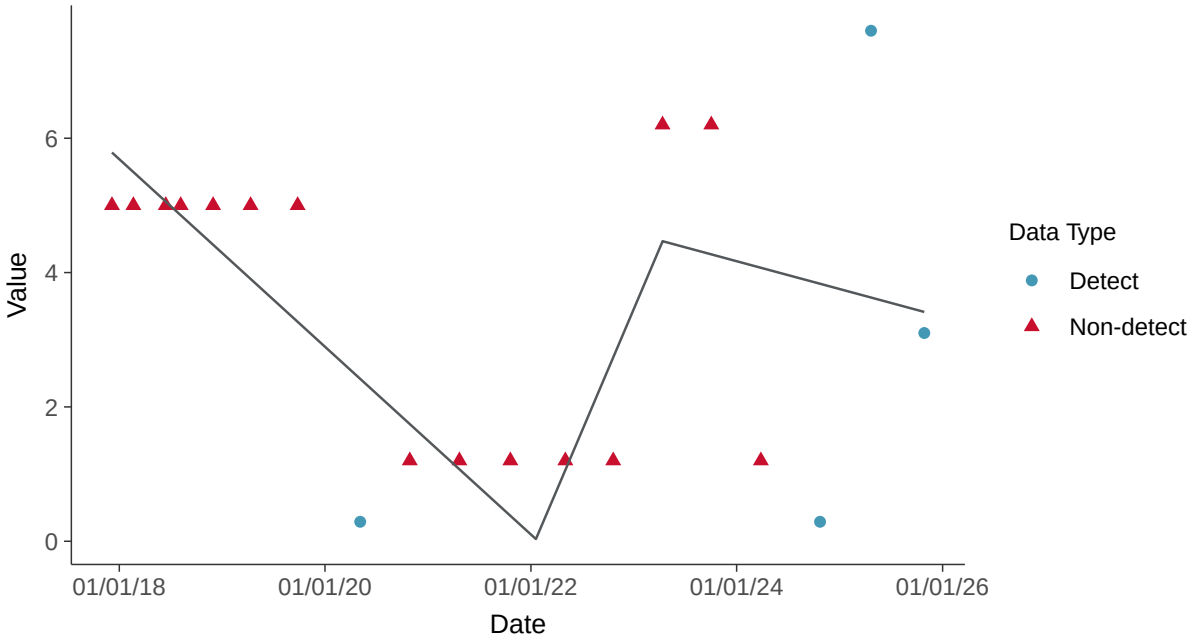

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17005 (ug/L)



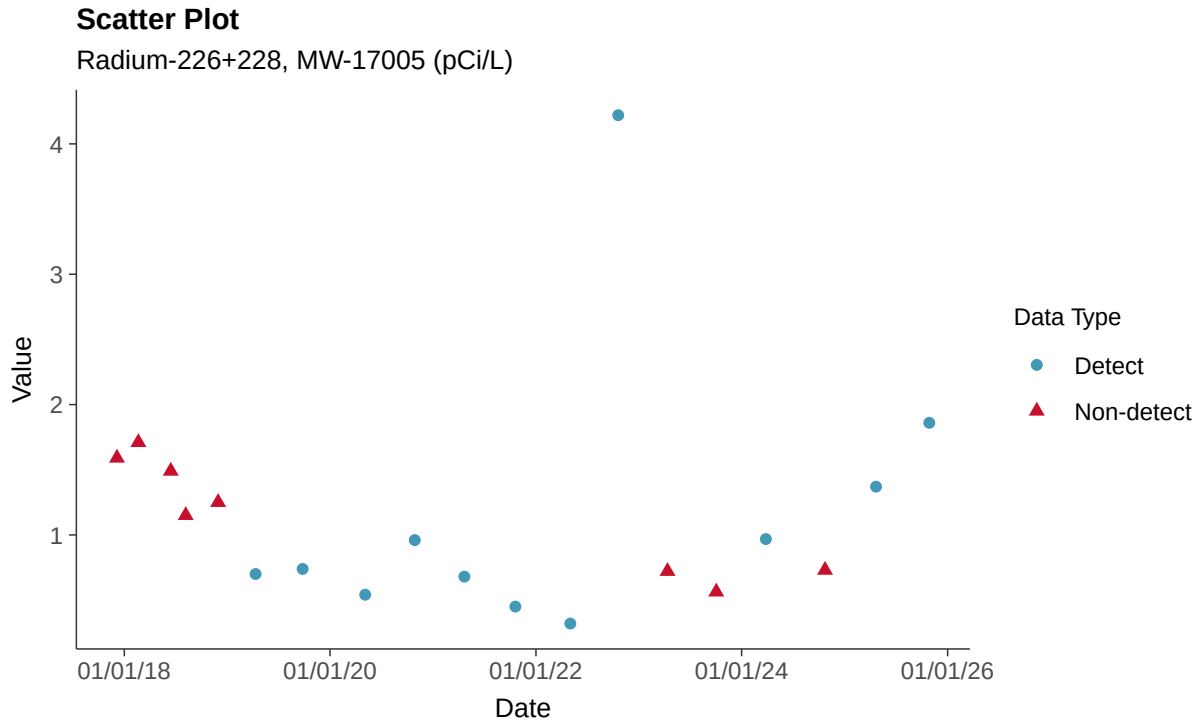
**Trend Regression: Piecewise Linear-Linear-Linear**

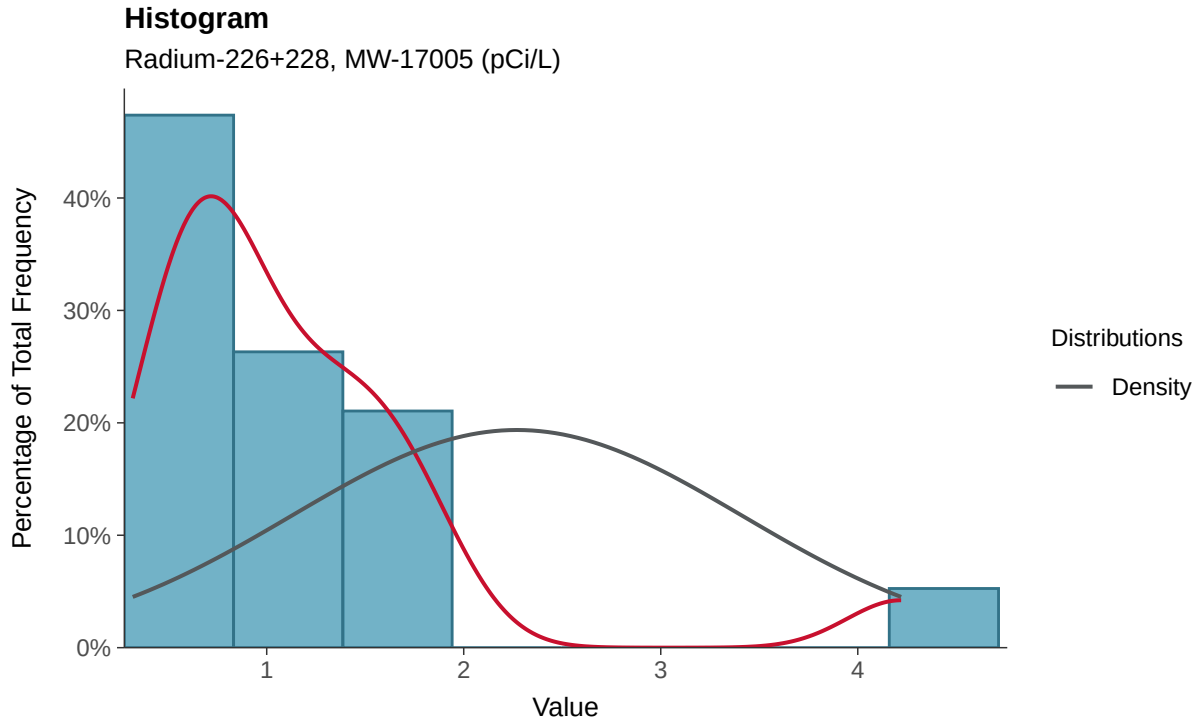
Molybdenum, MW-17005 (ug/L)



## Appendix IV: Radium-226+228, MW-17005

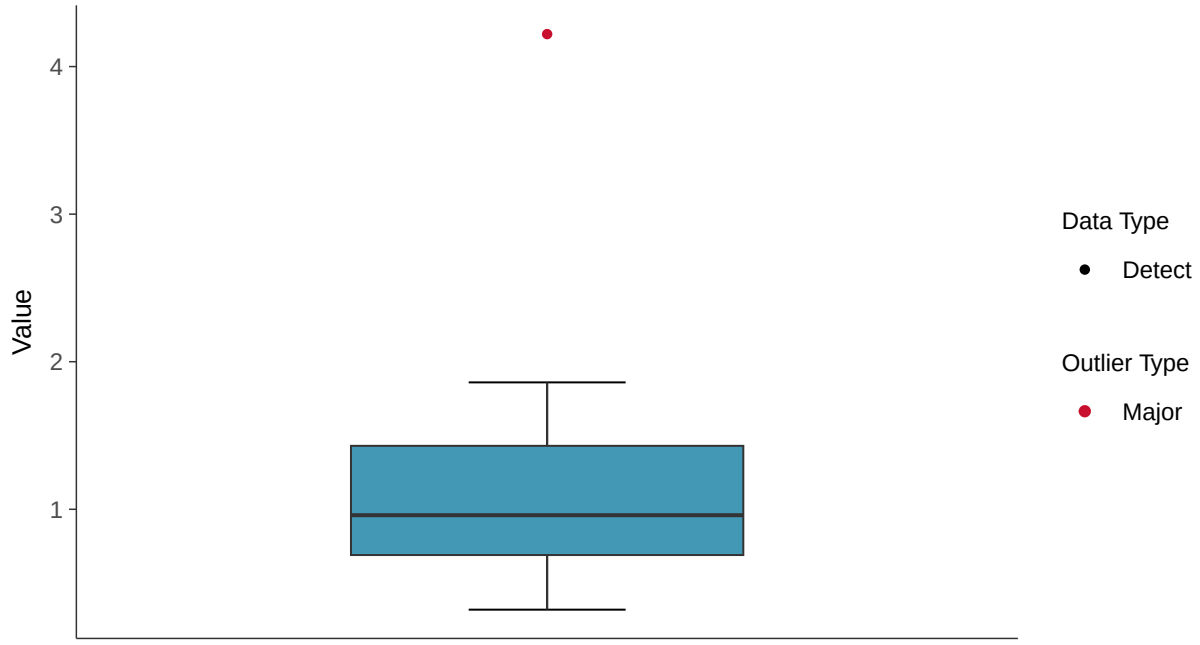
ID: 18_2_125



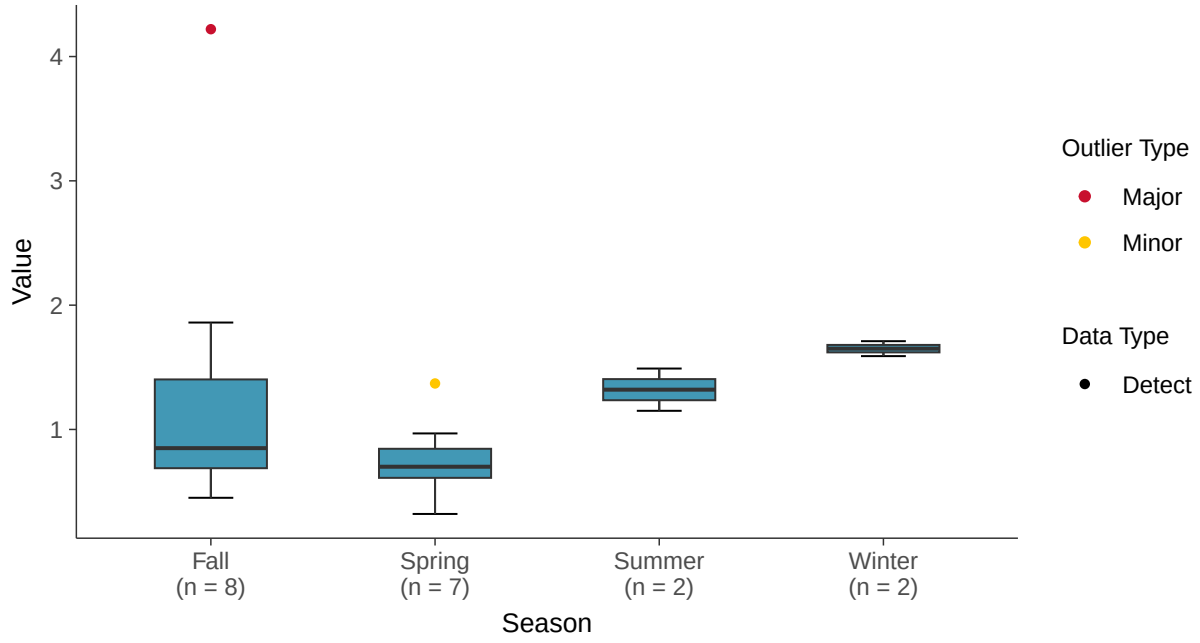
## Boxplot

Radium-226+228, MW-17005 (pCi/L)



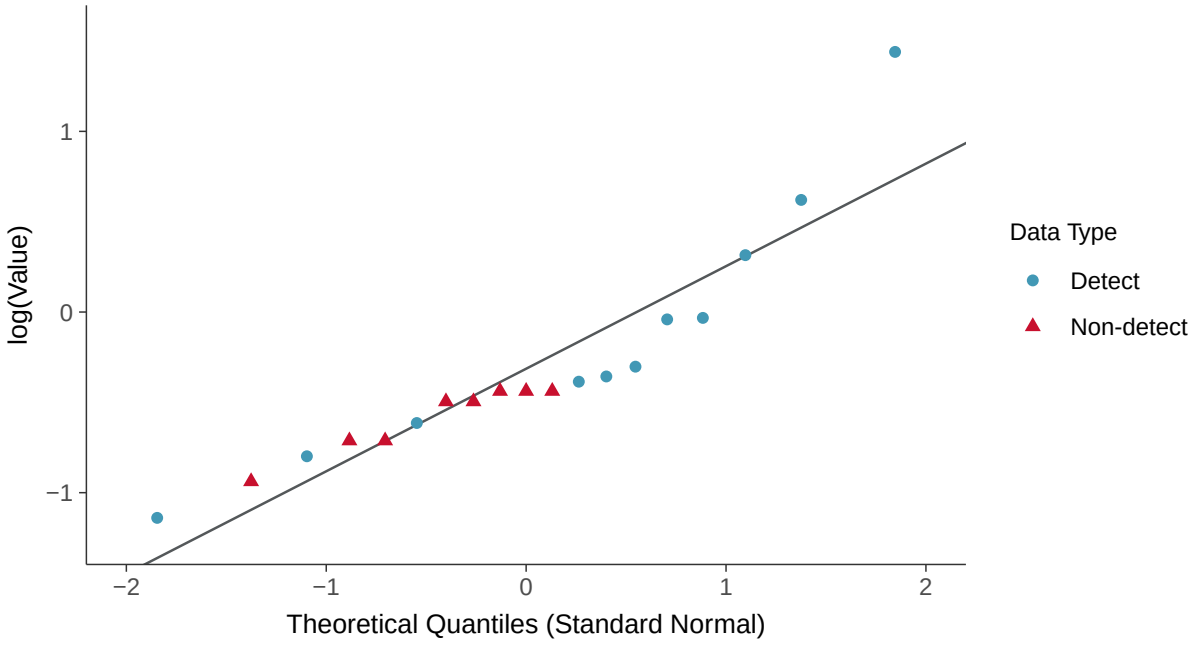

## Boxplot by Season

Radium-226+228, MW-17005 (pCi/L)



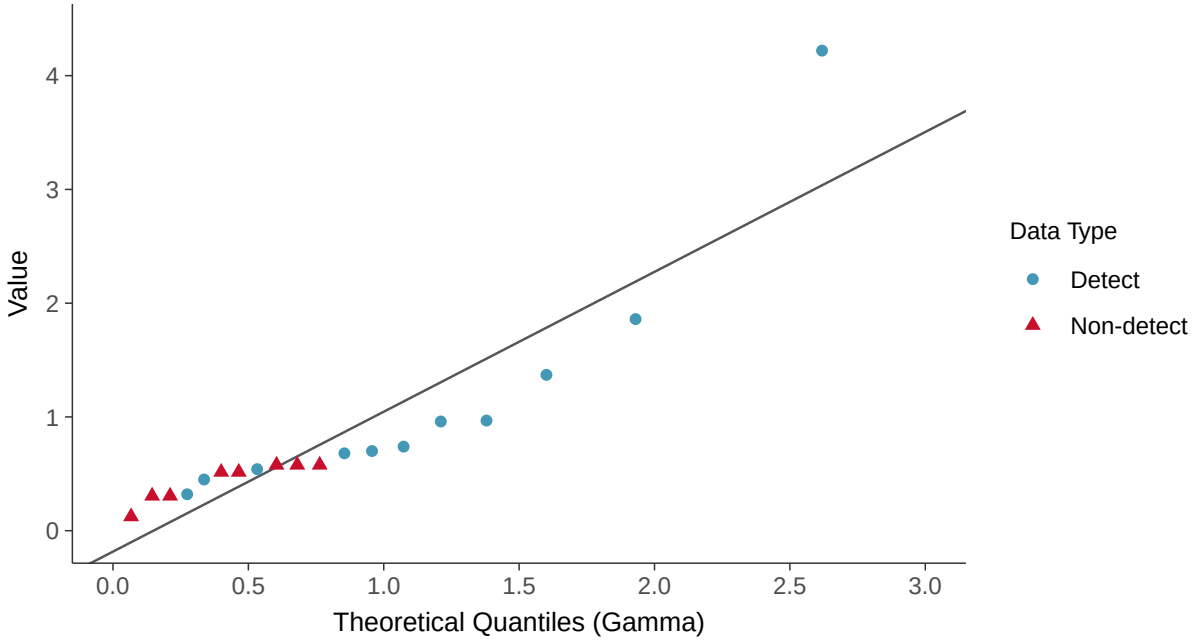
**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17005 (pCi/L)



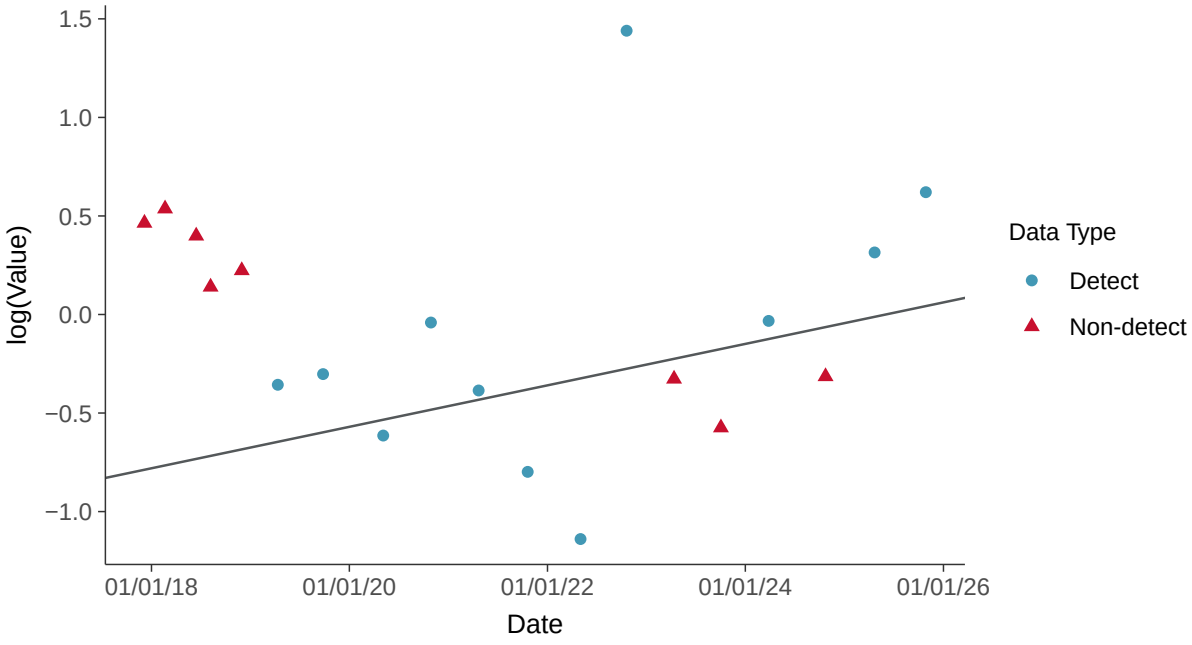

**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17005 (pCi/L)



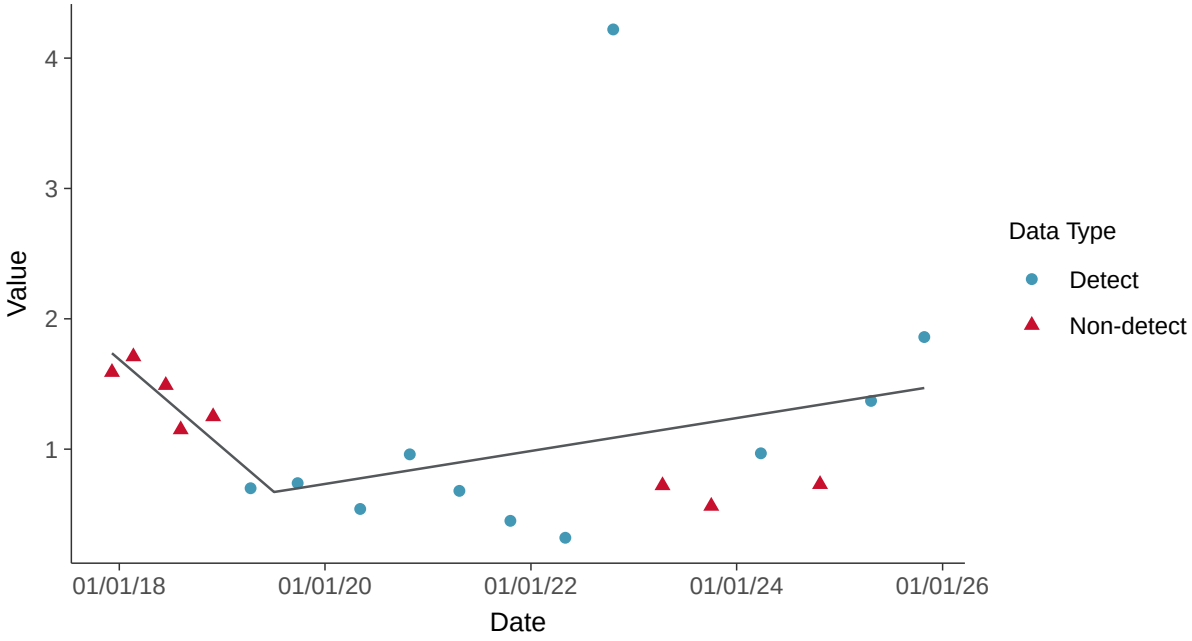
**Trend Regression: Lognormal MLE**

Radium-226+228, MW-17005 (pCi/L)



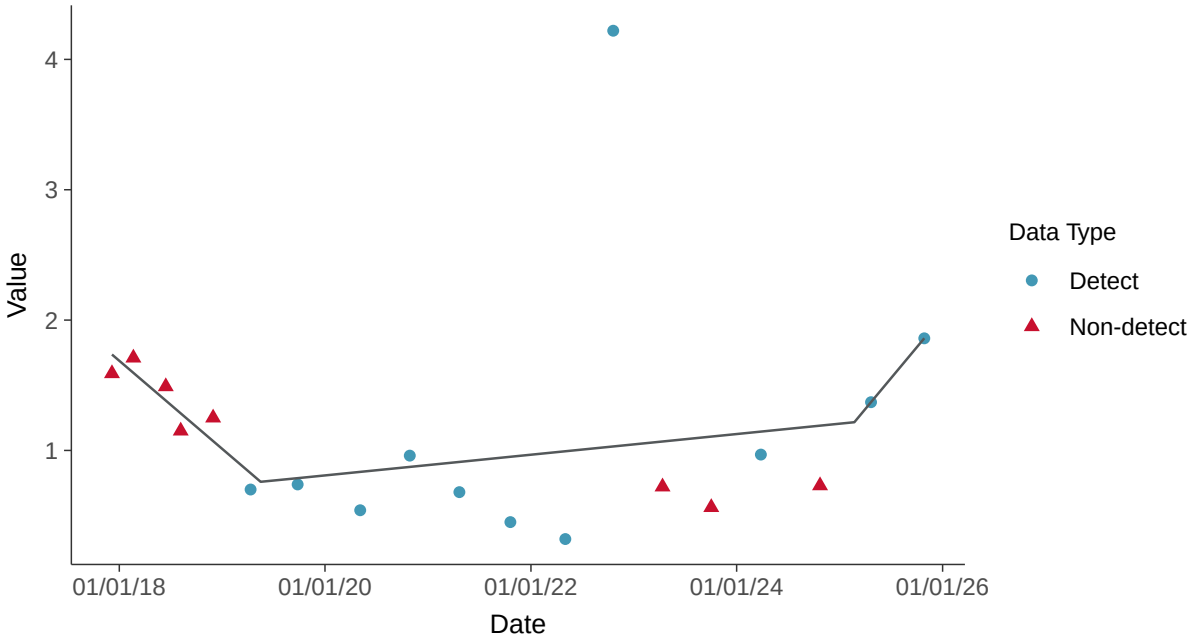

**Trend Regression: Piecewise Linear-Linear**

Radium-226+228, MW-17005 (pCi/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Radium-226+228, MW-17005 (pCi/L)

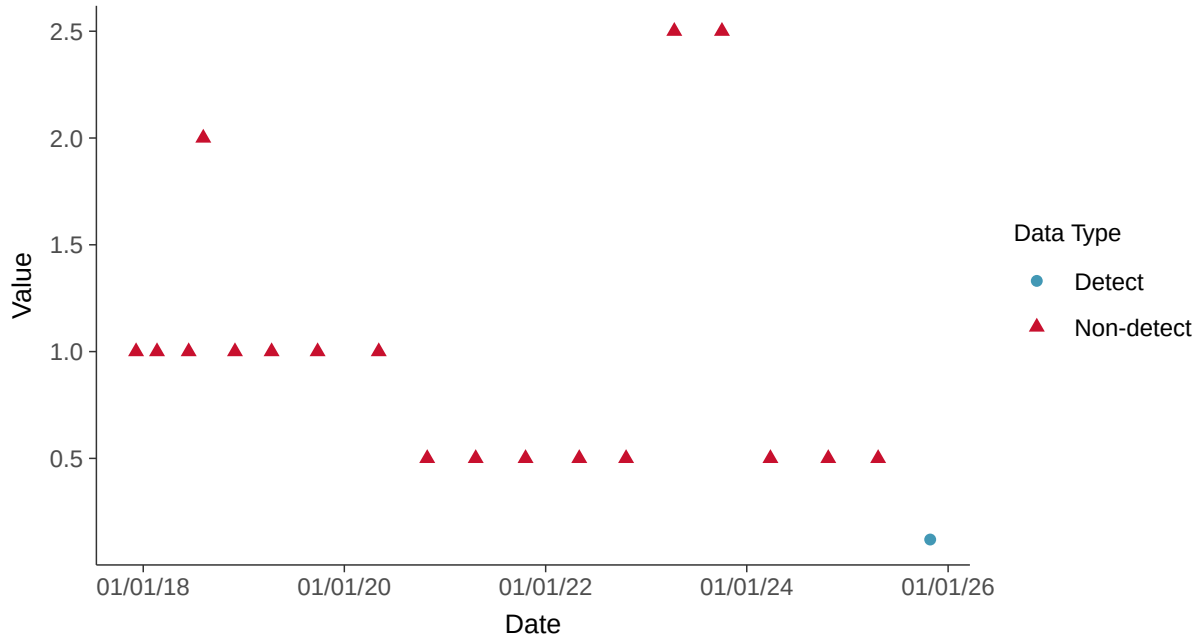


## Appendix IV: Selenium, MW-17005

ID: 18_2_127

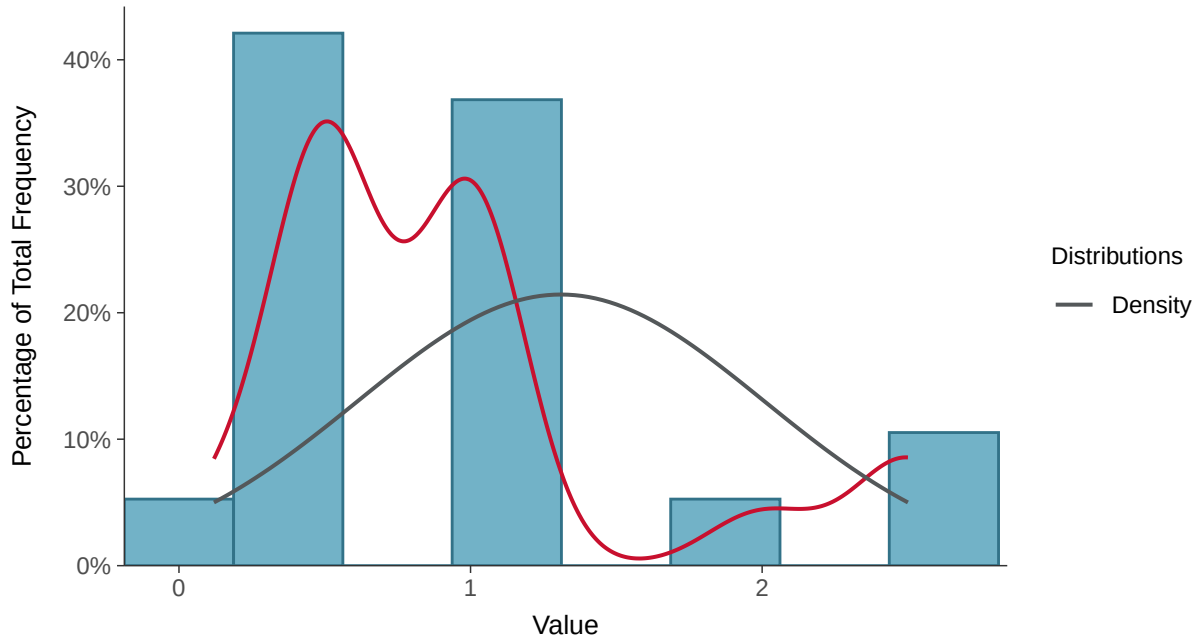
**Scatter Plot**

Selenium, MW-17005 (ug/L)



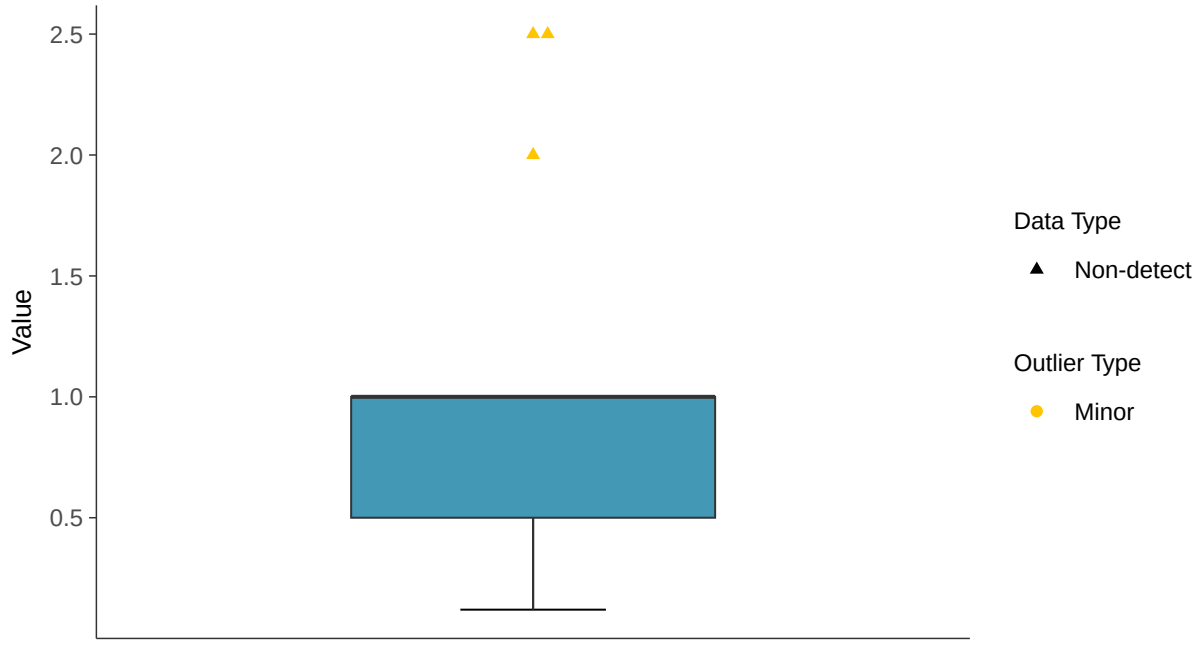

**Histogram**

Selenium, MW-17005 (ug/L)



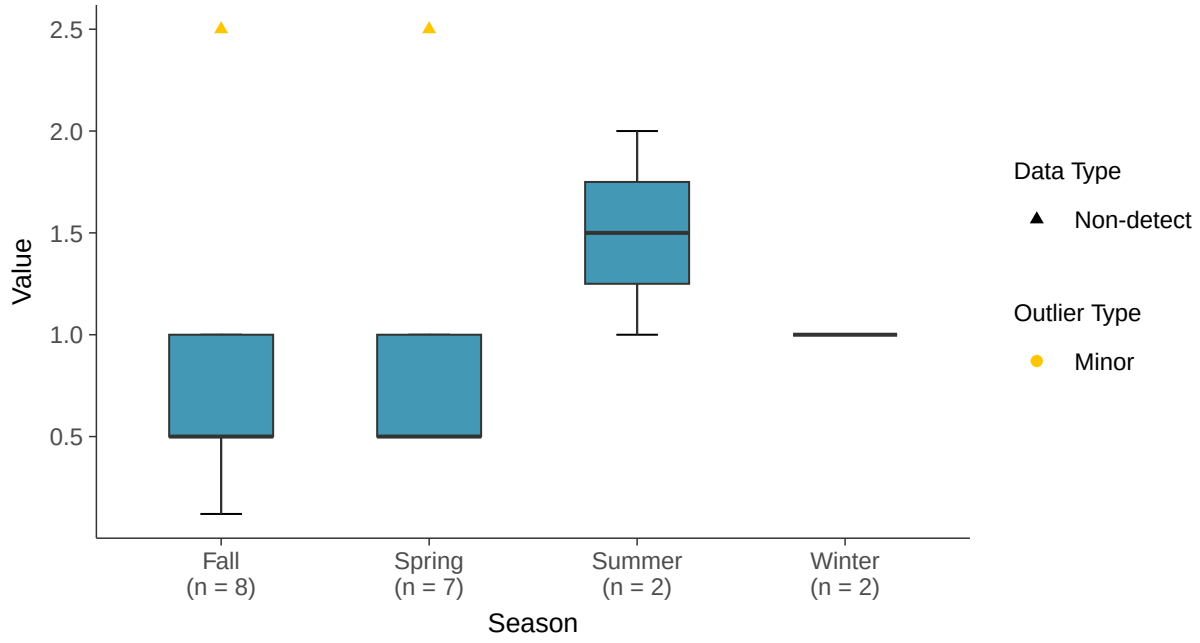
## Boxplot

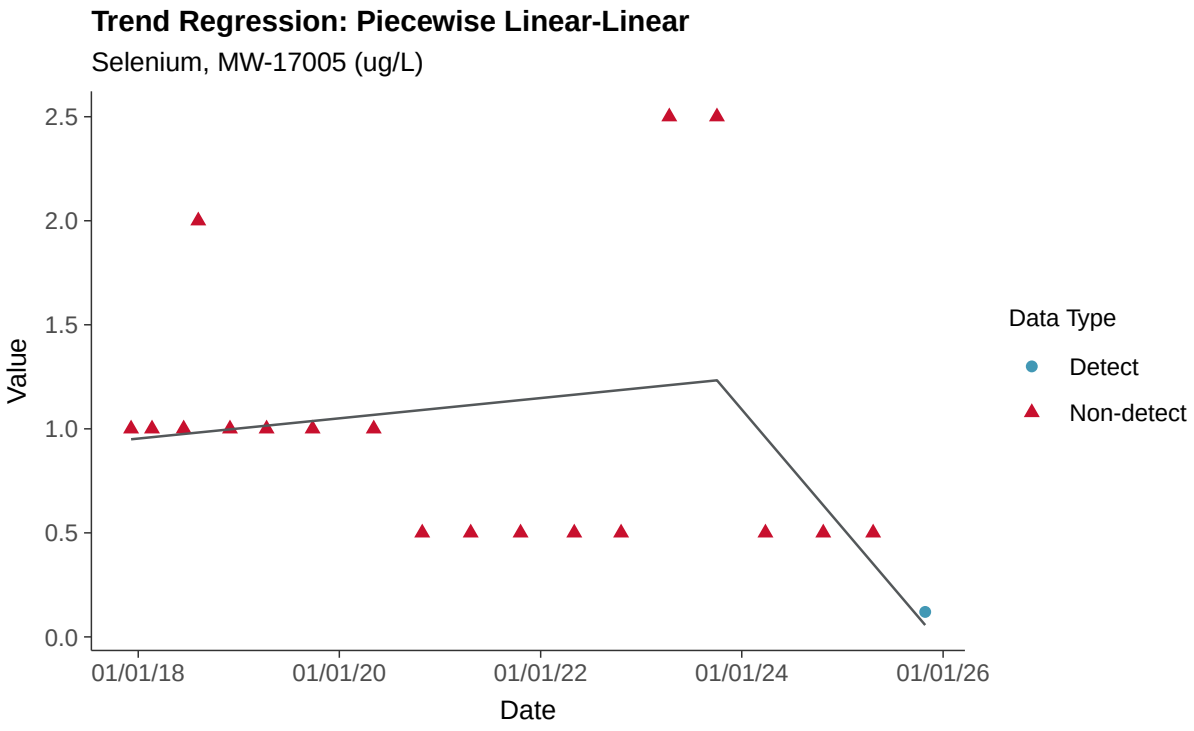
Selenium, MW-17005 (ug/L)




## Boxplot by Season

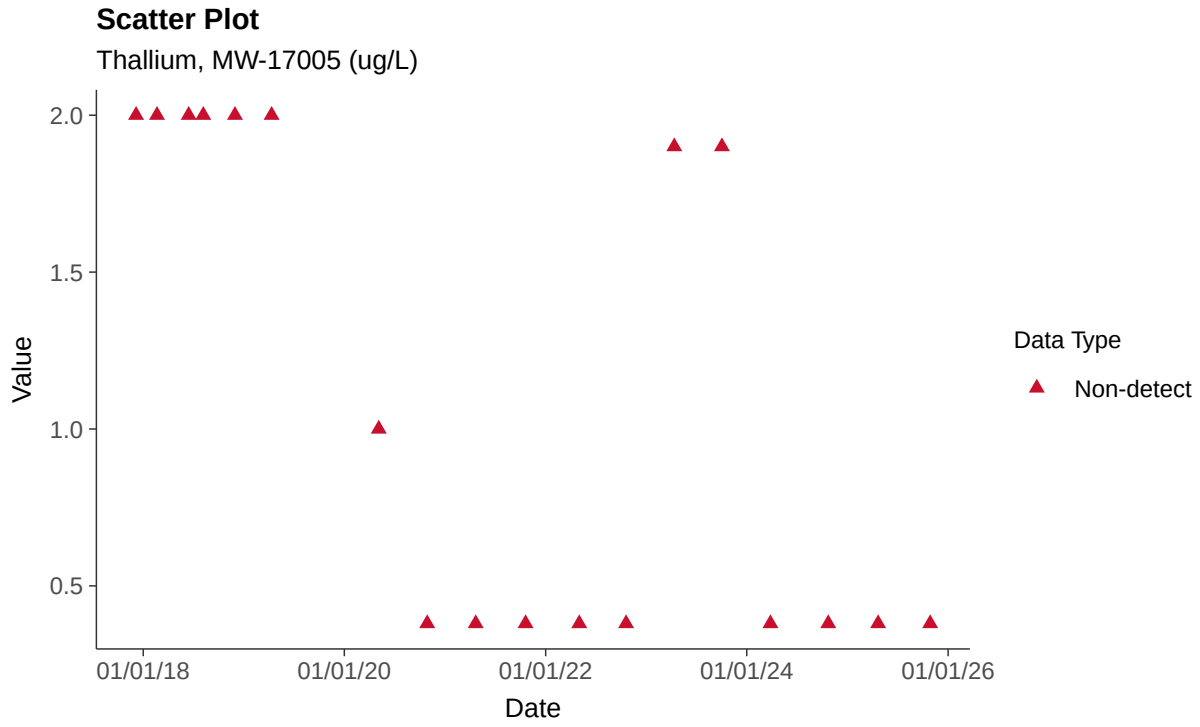
Selenium, MW-17005 (ug/L)

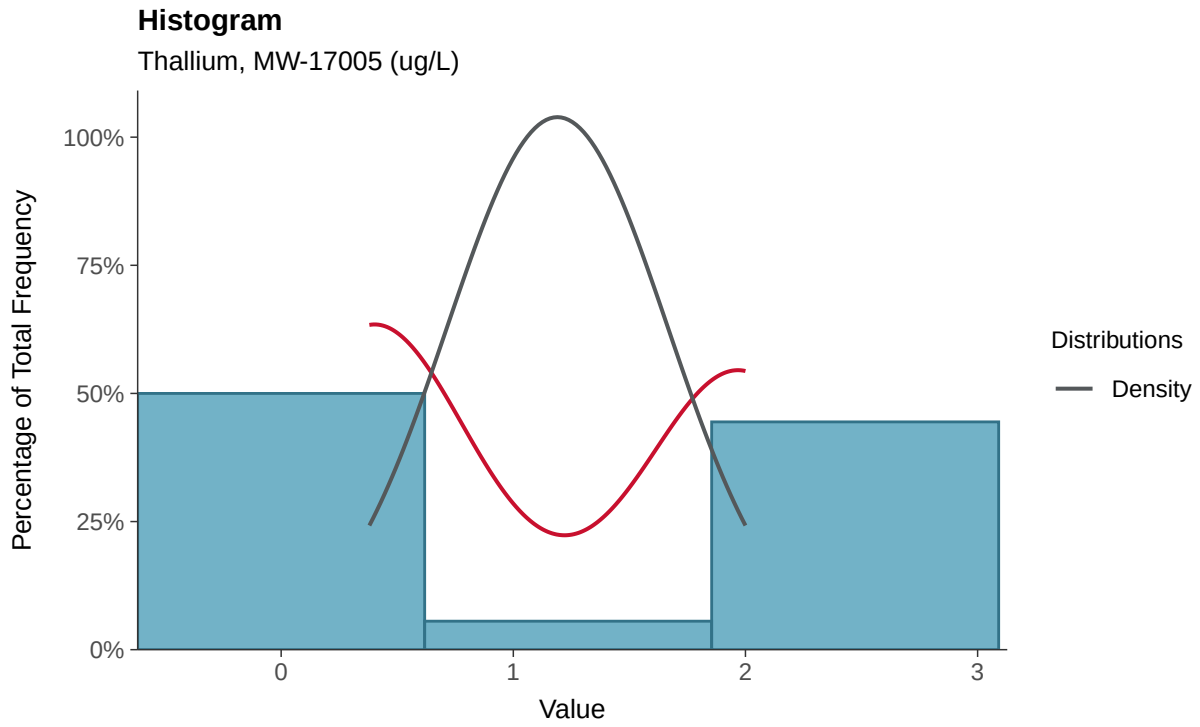



Trend Regression: Piecewise Linear-Linear
Selenium, MW-17005 (ug/L)
Value
2.5
2.0
1.5
1.0
0.5
0.0
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Thallium, MW-17005

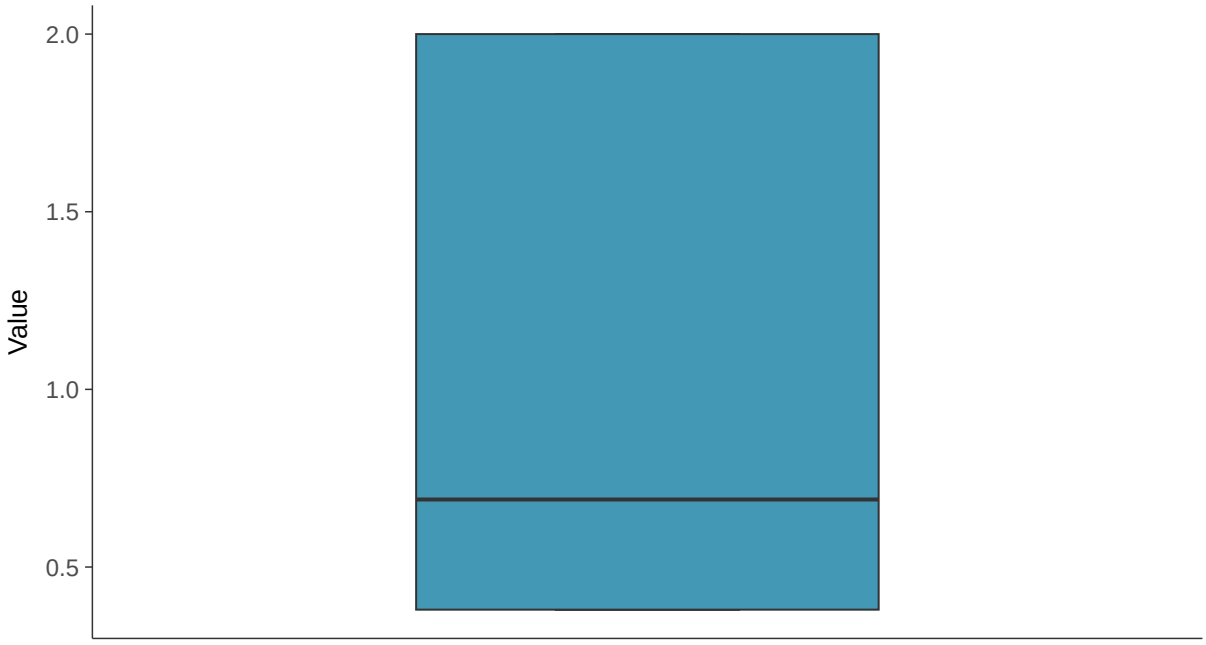
ID: 18_2_131



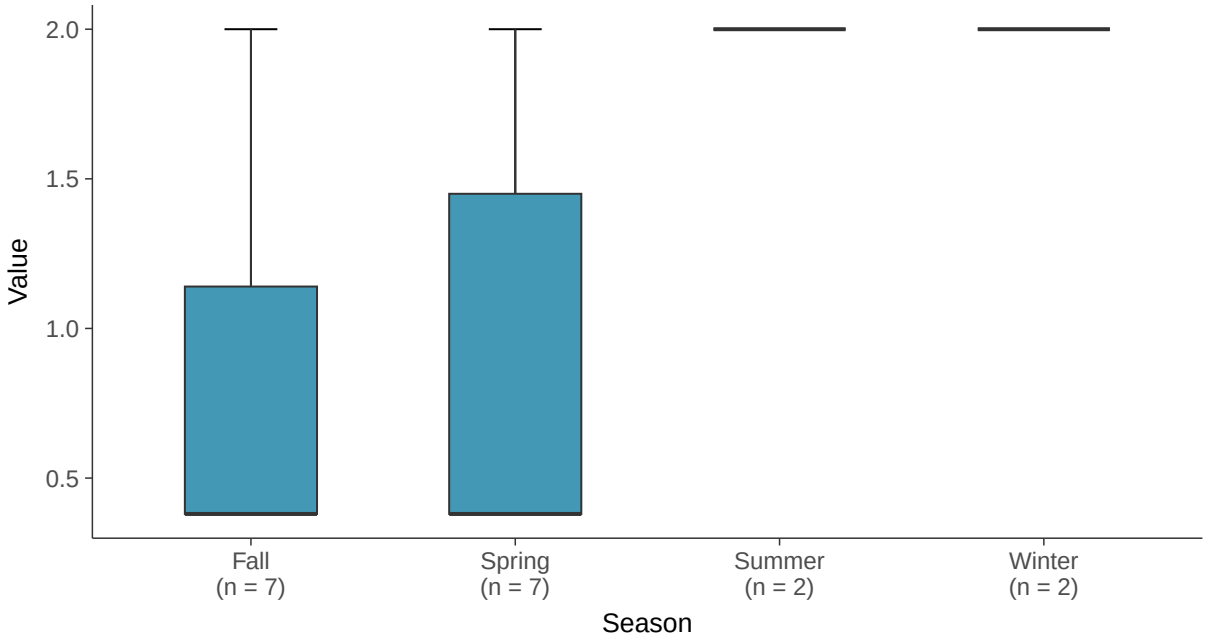
**Boxplot**

Thallium, MW-17005 (ug/L)



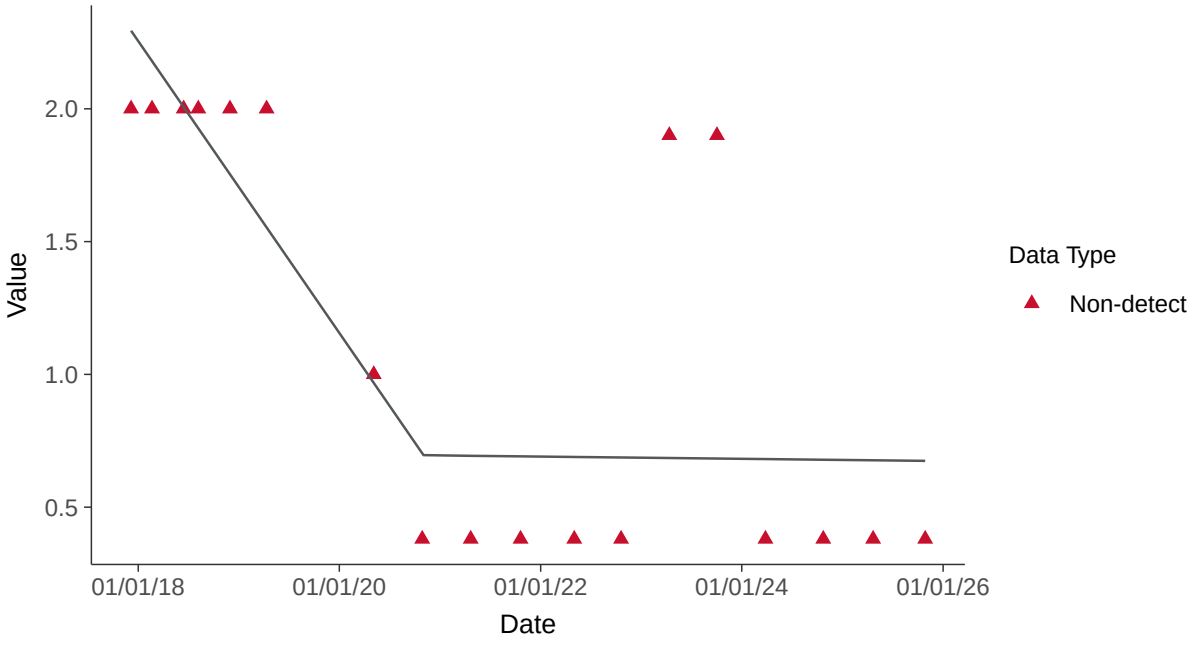

**Boxplot by Season**

Thallium, MW-17005 (ug/L)



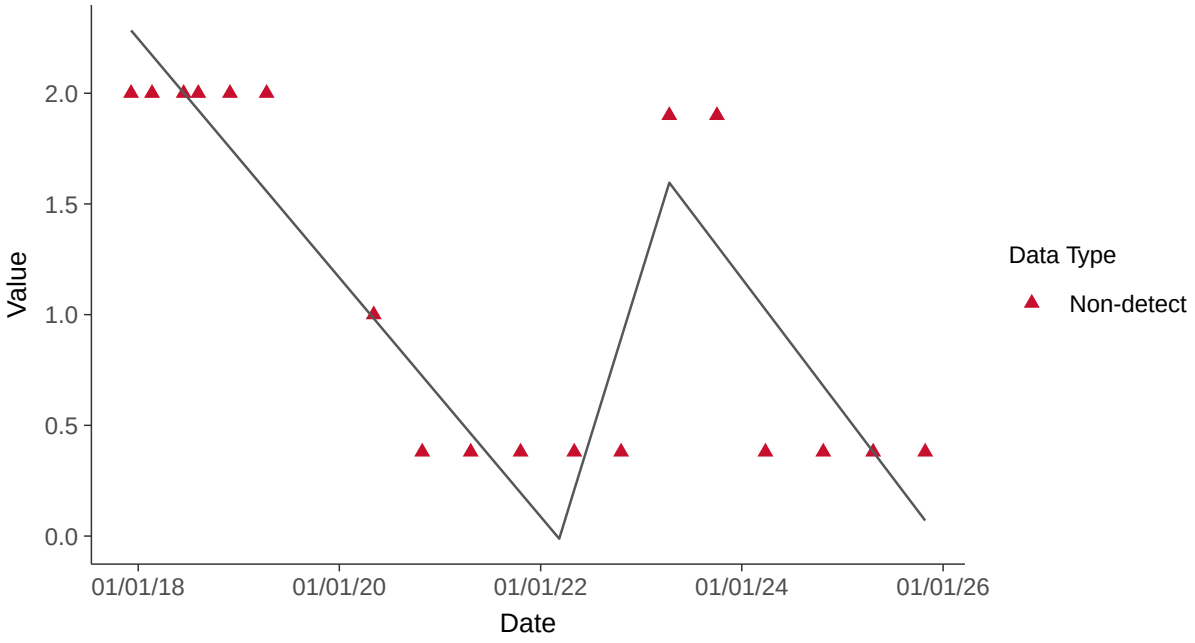
**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17005 (ug/L)



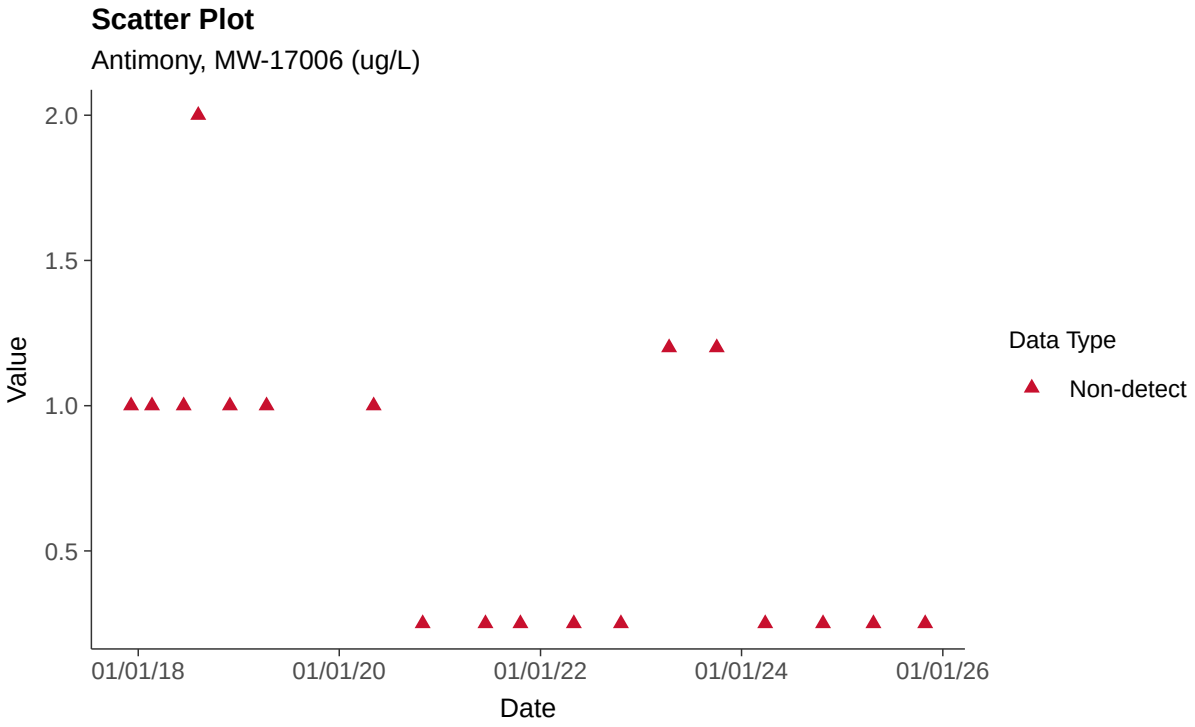

**Trend Regression: Piecewise Linear-Linear-Linear**

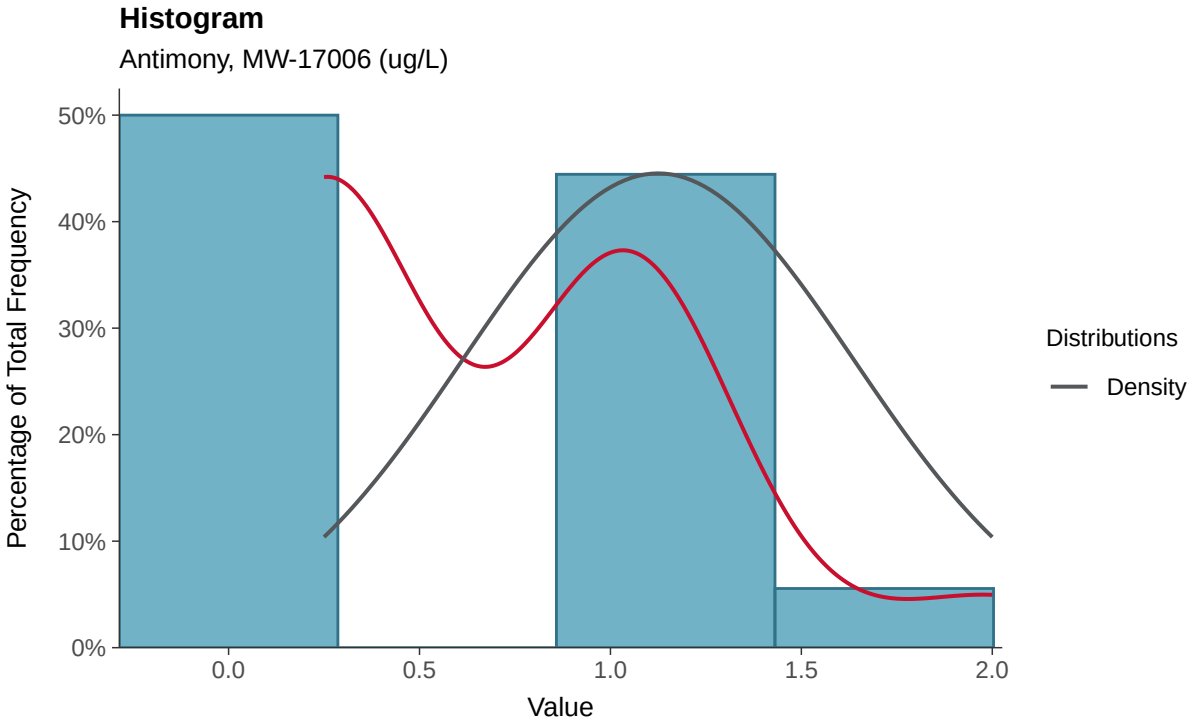
Thallium, MW-17005 (ug/L)



## Appendix IV: Antimony, MW-17006

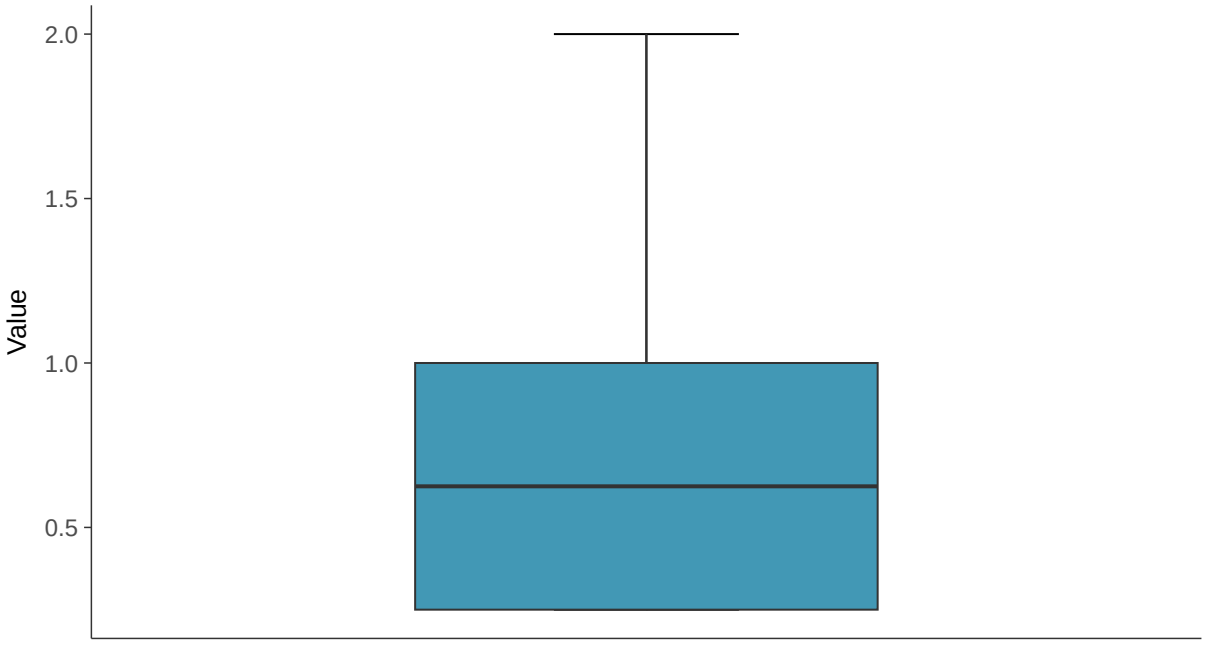
ID: 19_2_101



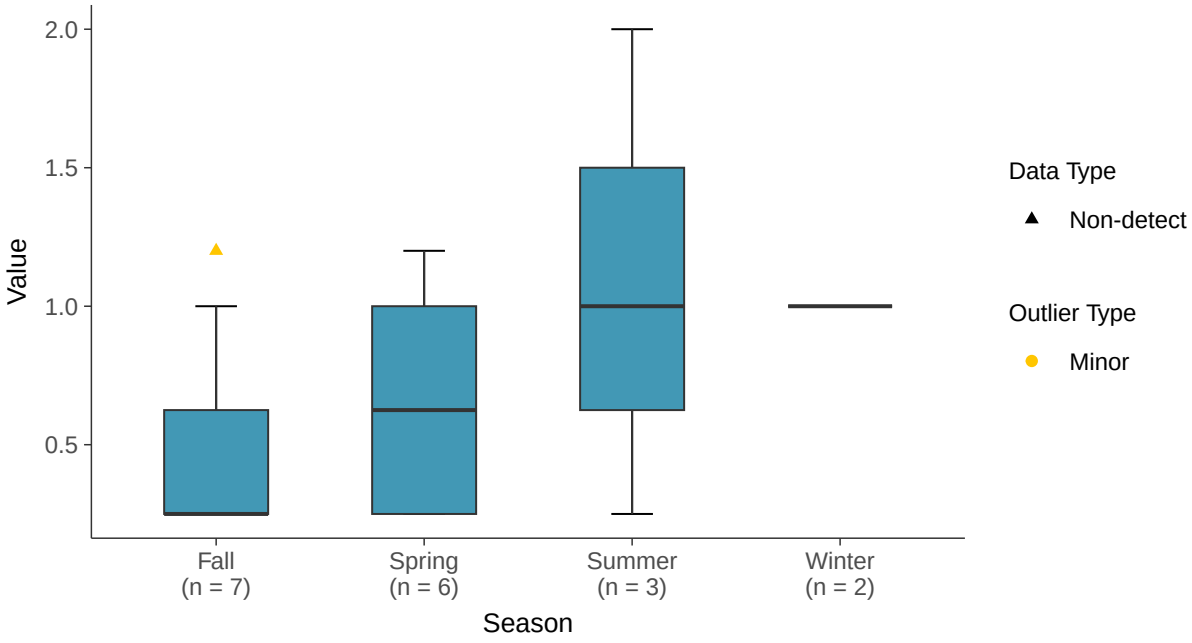
## Boxplot

Antimony, MW-17006 (ug/L)



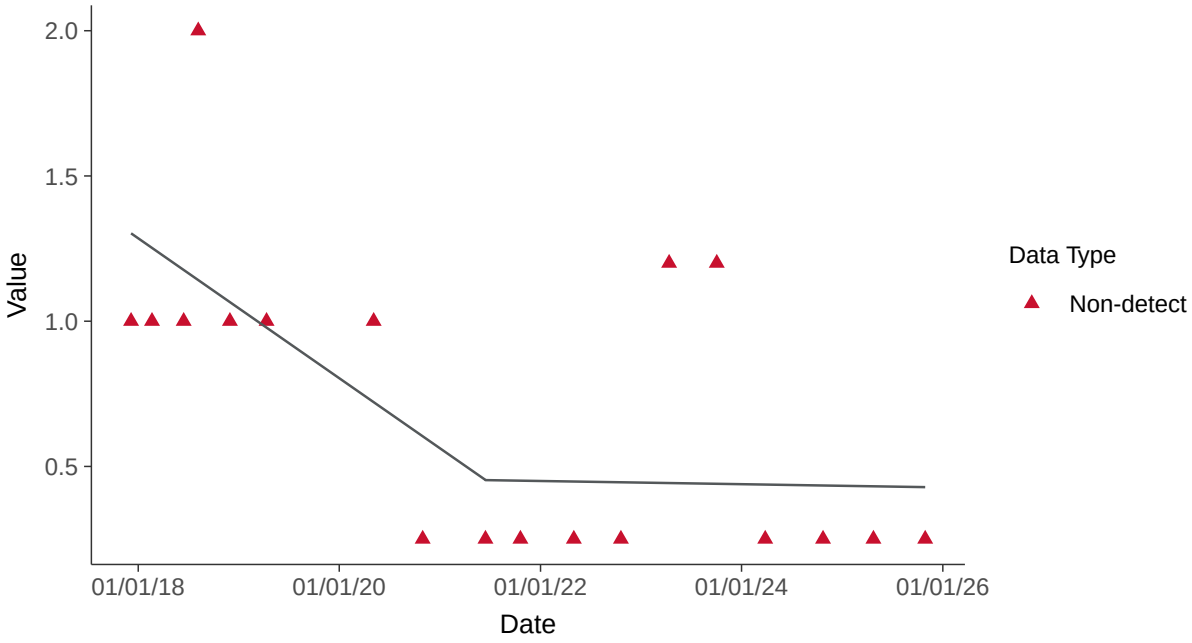

## Boxplot by Season

Antimony, MW-17006 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Antimony, MW-17006 (ug/L)

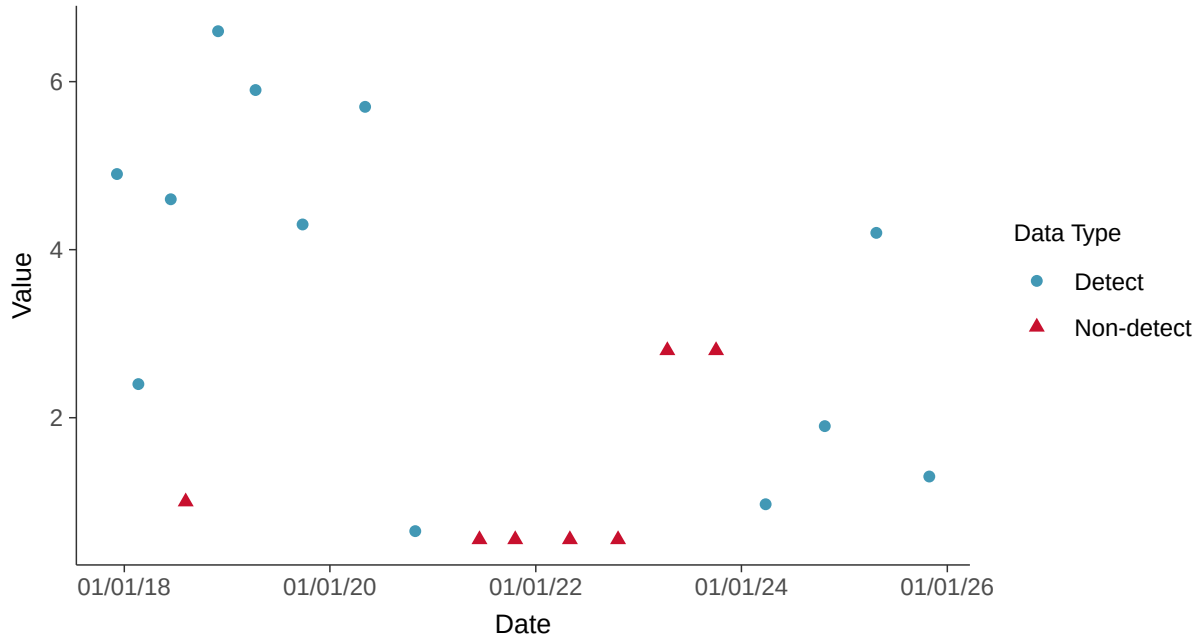


## Appendix IV: Arsenic, MW-17006

ID: 19_2_102

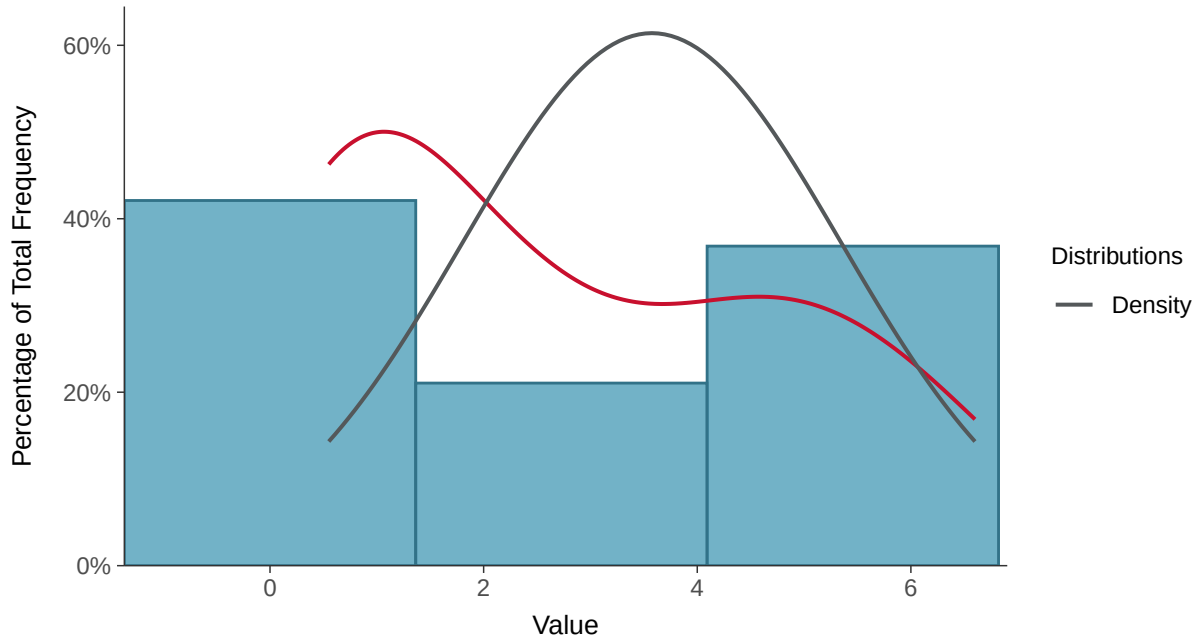
**Scatter Plot**

Arsenic, MW-17006 (ug/L)



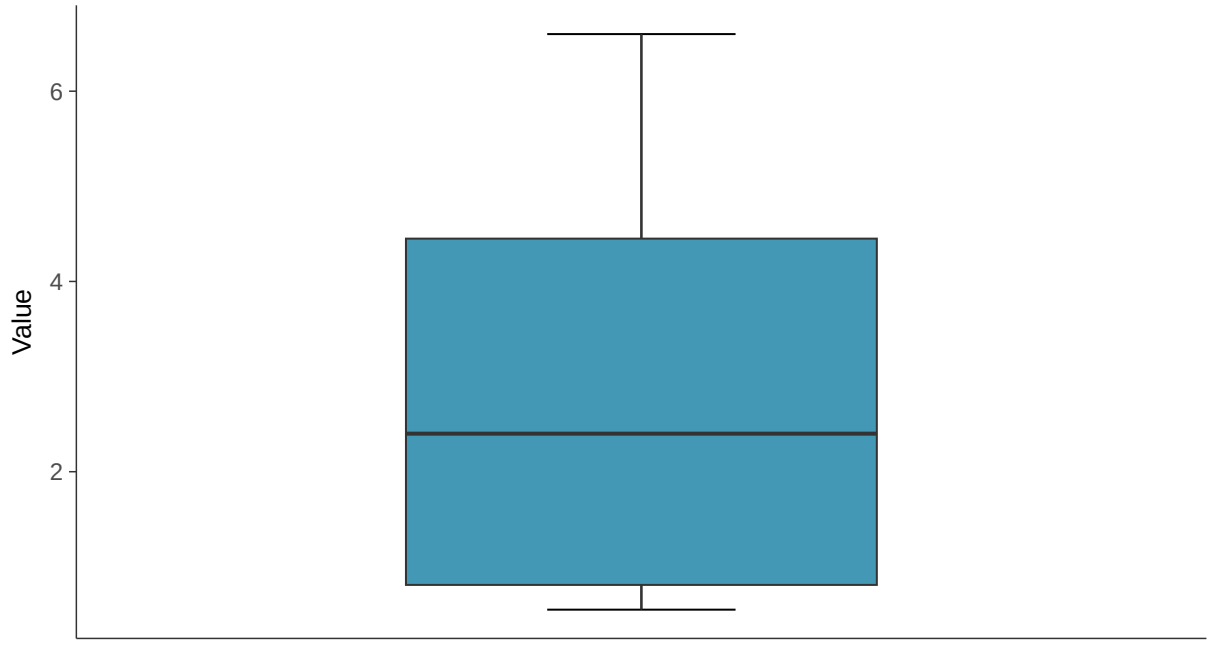

**Histogram**

Arsenic, MW-17006 (ug/L)



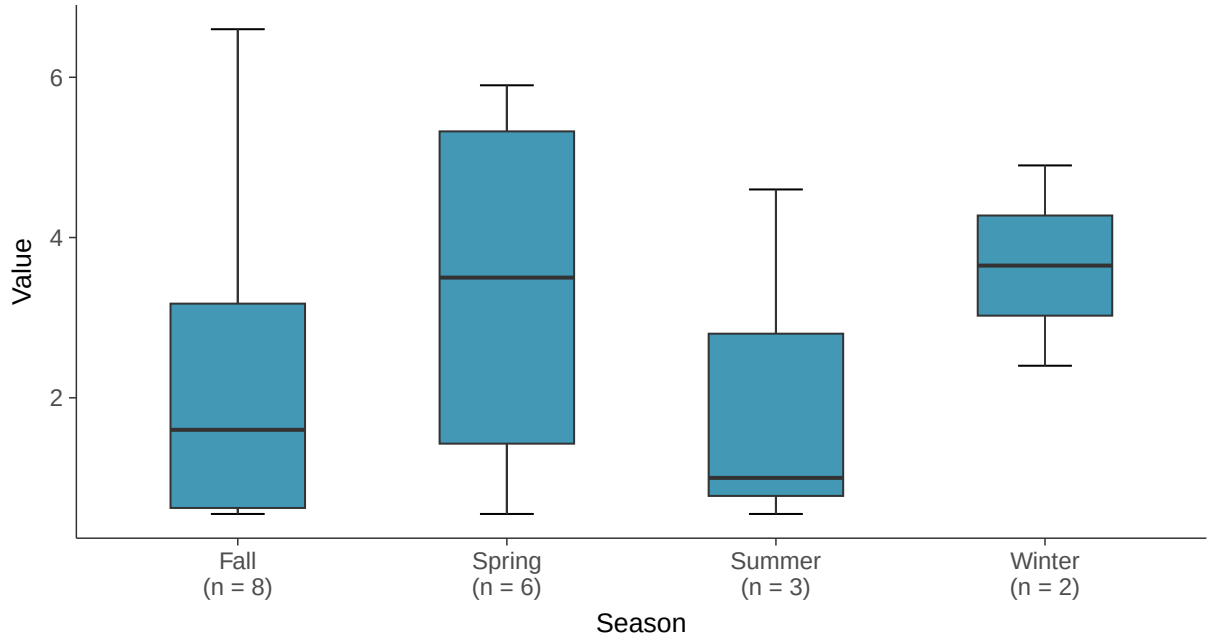
**Boxplot**

Arsenic, MW-17006 (ug/L)



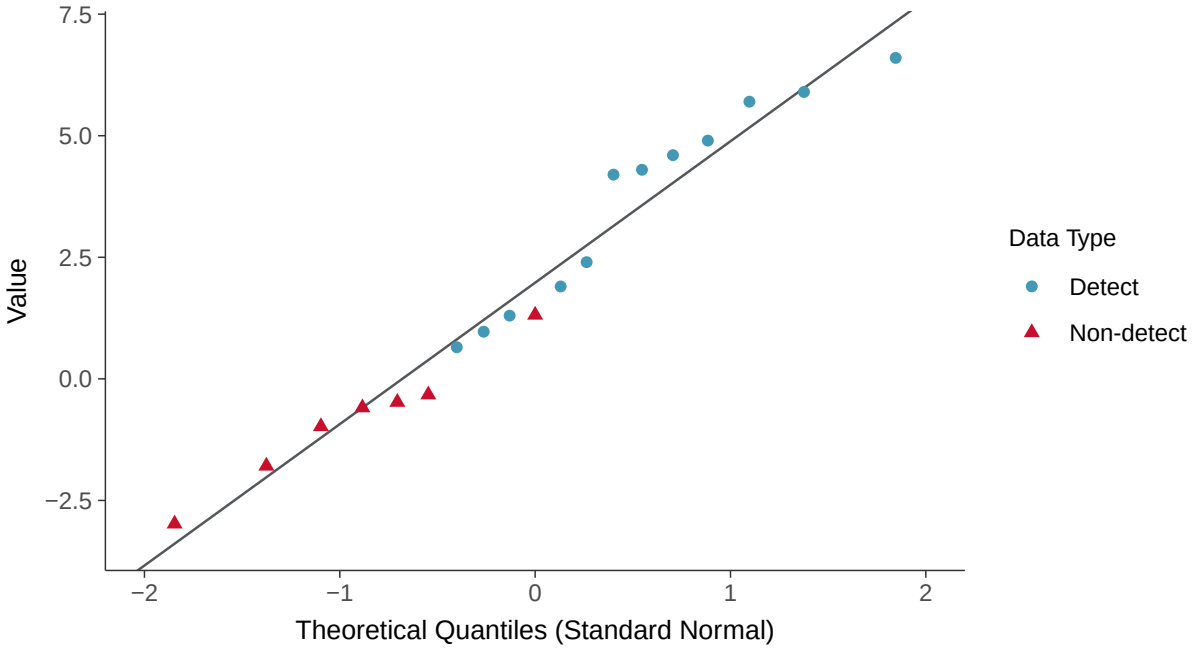

**Boxplot by Season**

Arsenic, MW-17006 (ug/L)



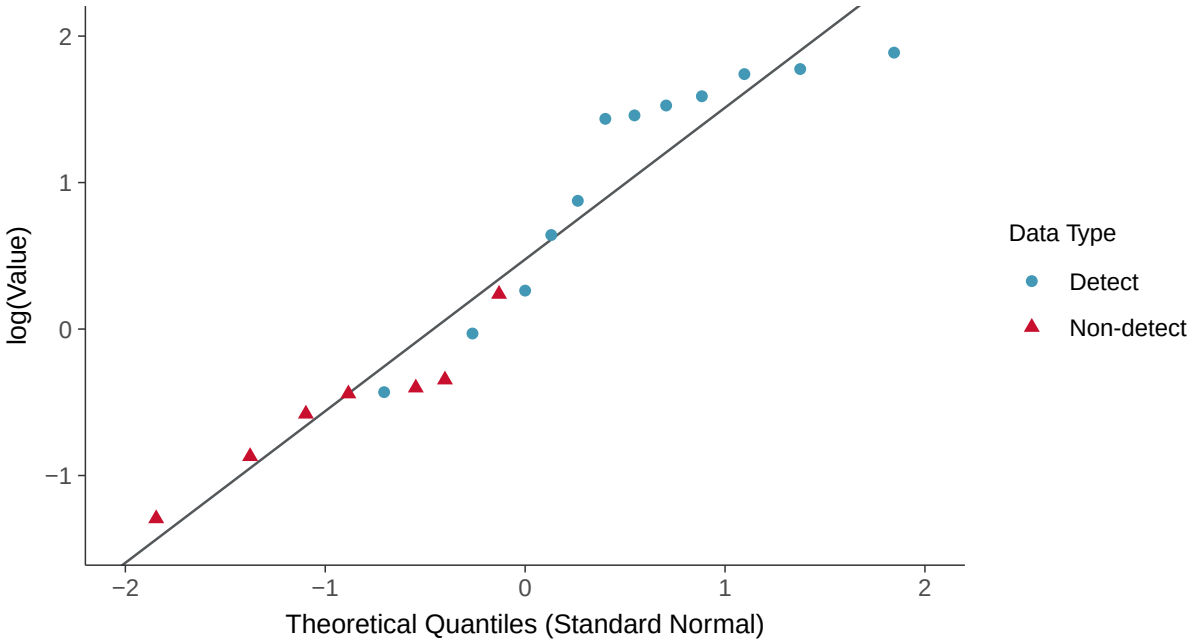
**Normal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17006 (ug/L)



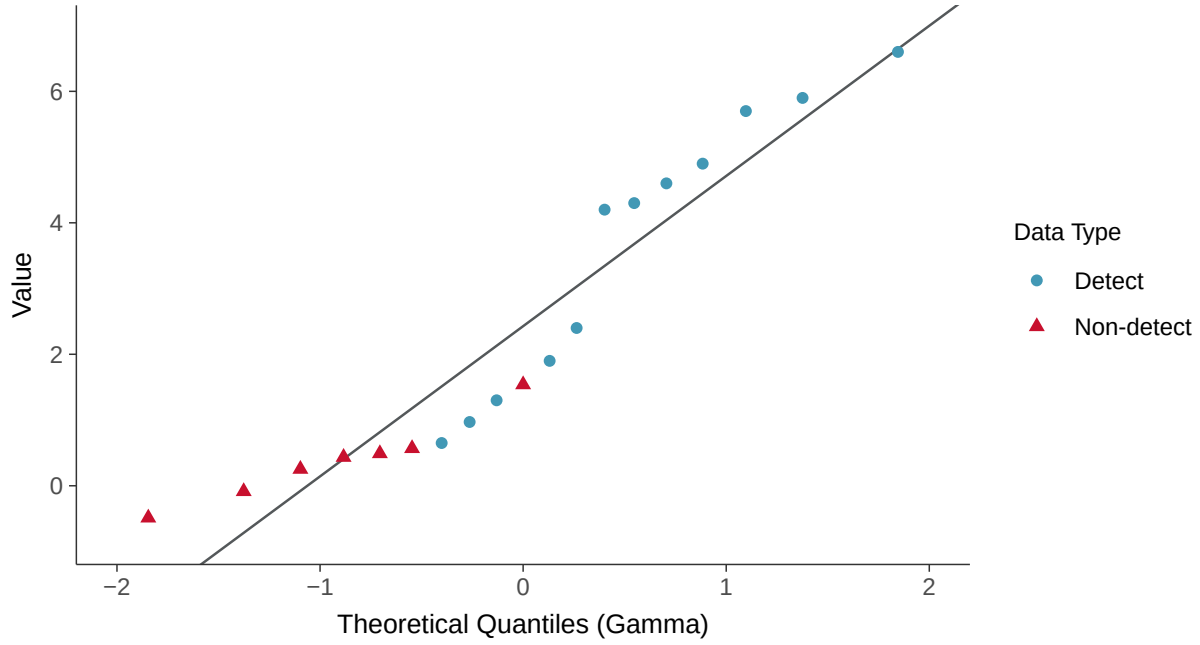

**Lognormal Q-Q plot using ROS Imputed Estimates**

Arsenic, MW-17006 (ug/L)



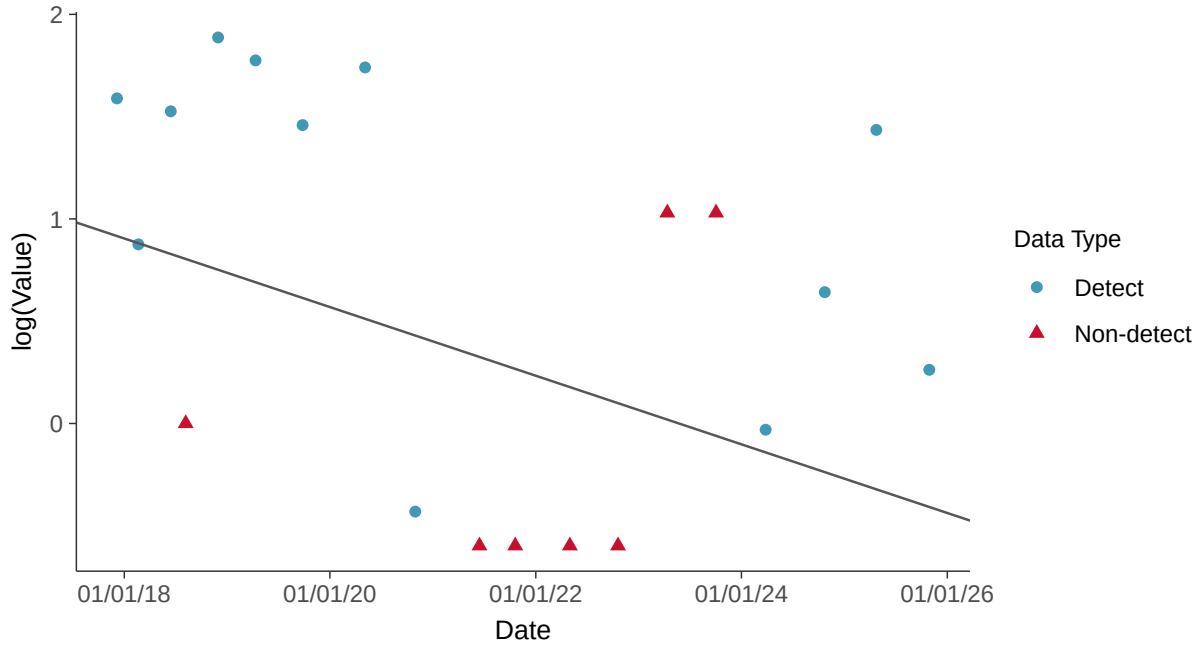
## Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17006 (ug/L)



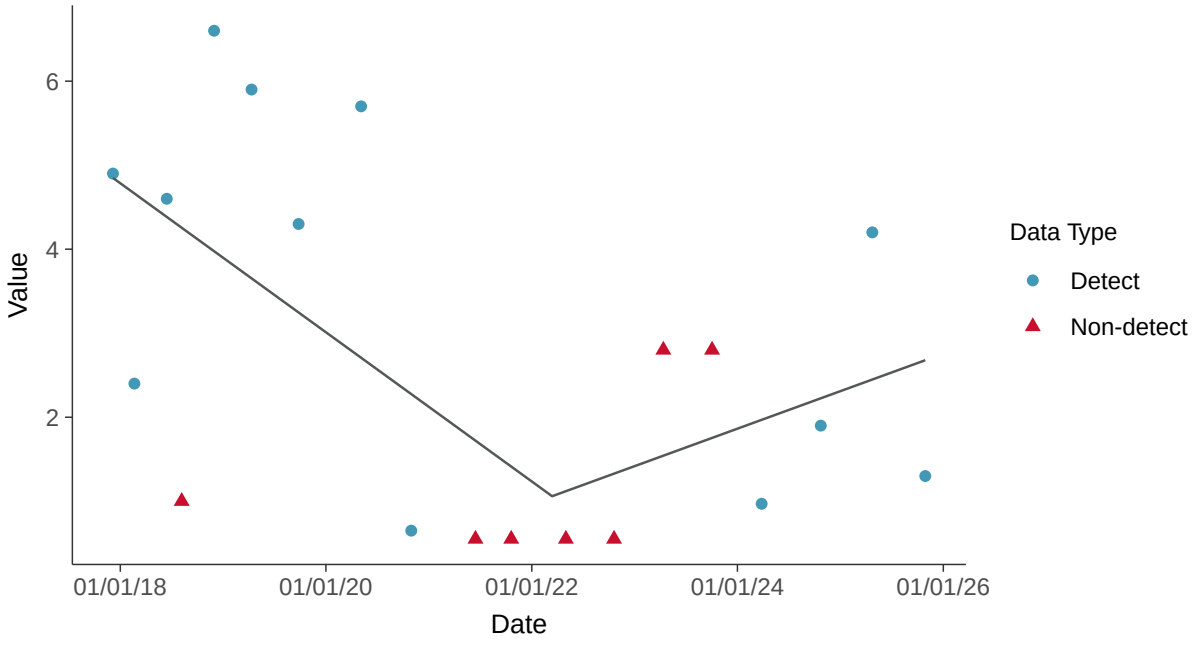

## Trend Regression: Lognormal MLE

Arsenic, MW-17006 (ug/L)



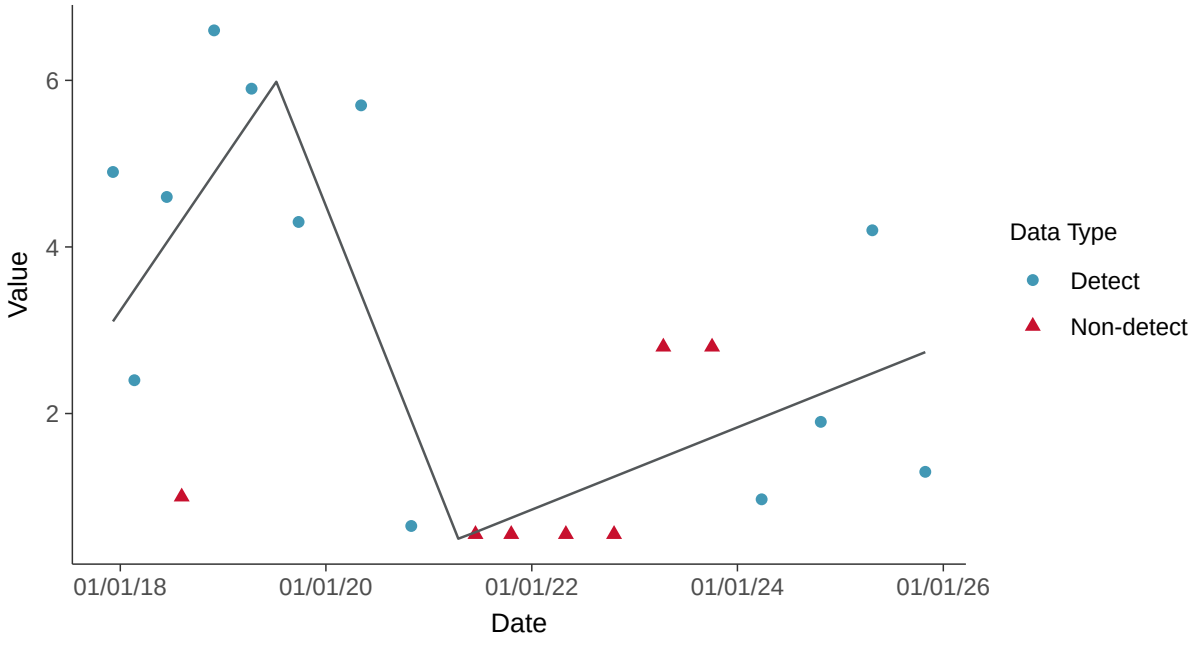
**Trend Regression: Piecewise Linear-Linear**

Arsenic, MW-17006 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Arsenic, MW-17006 (ug/L)

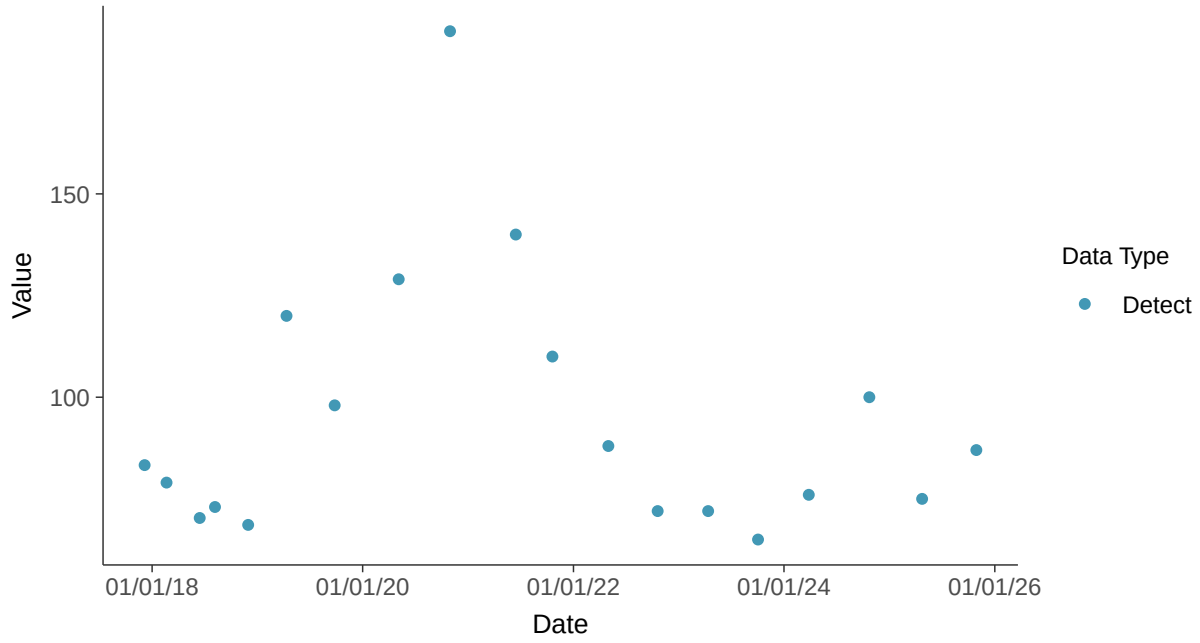


## Appendix IV: Barium, MW-17006

ID: 19_2_103

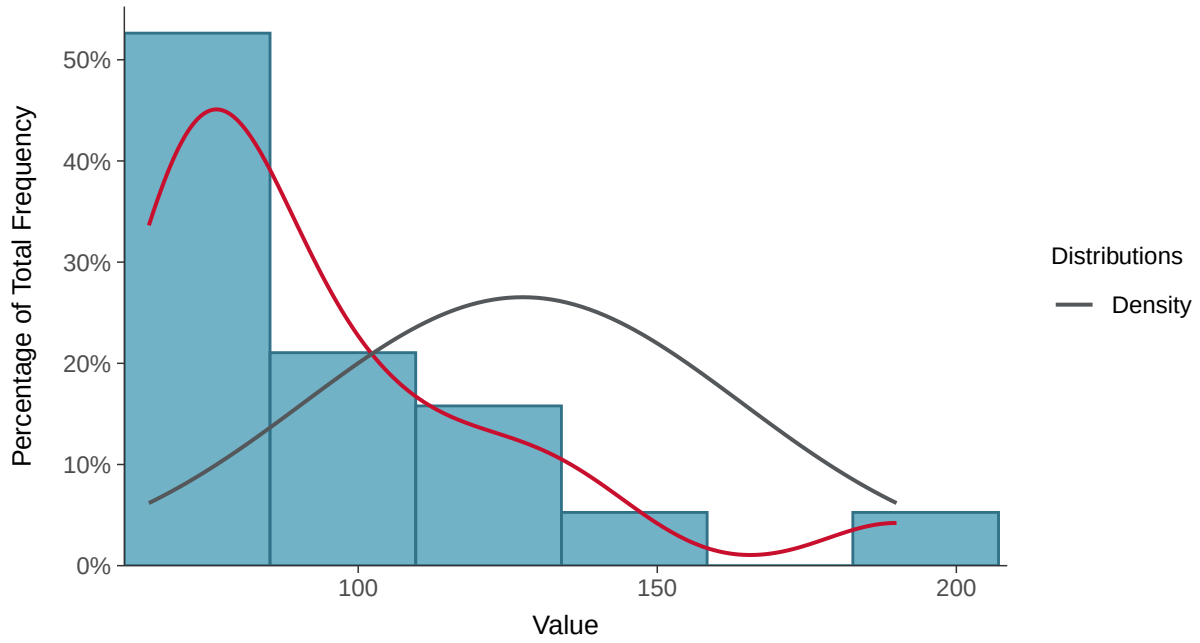
**Scatter Plot**

Barium, MW-17006 (ug/L)



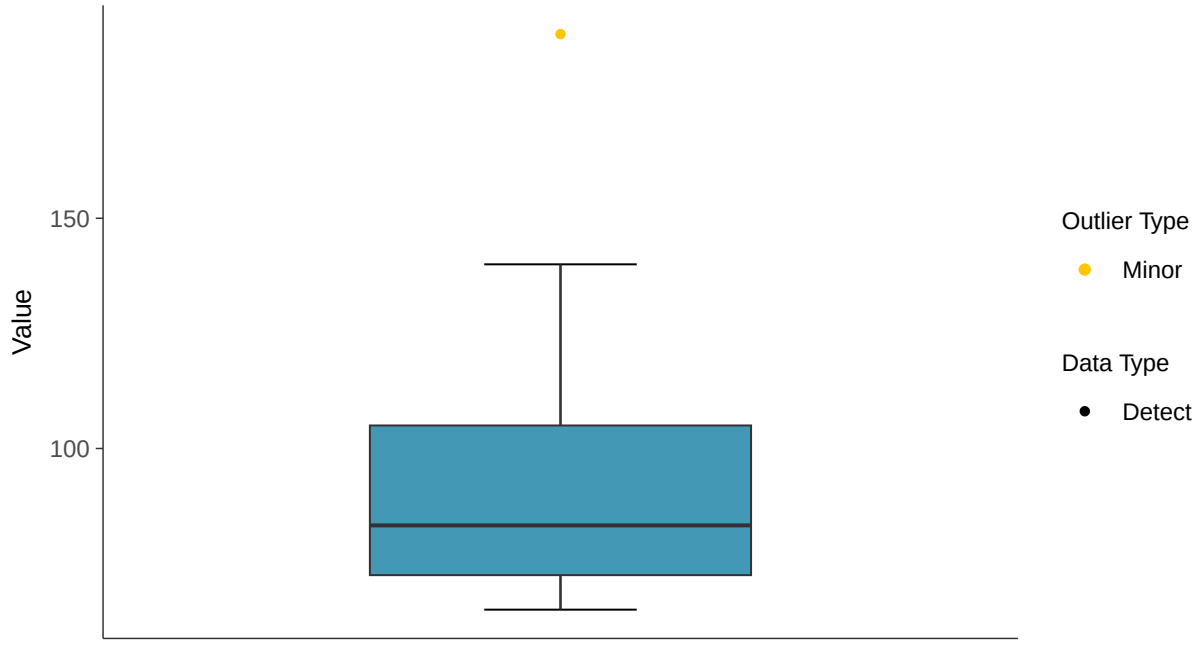

**Histogram**

Barium, MW-17006 (ug/L)



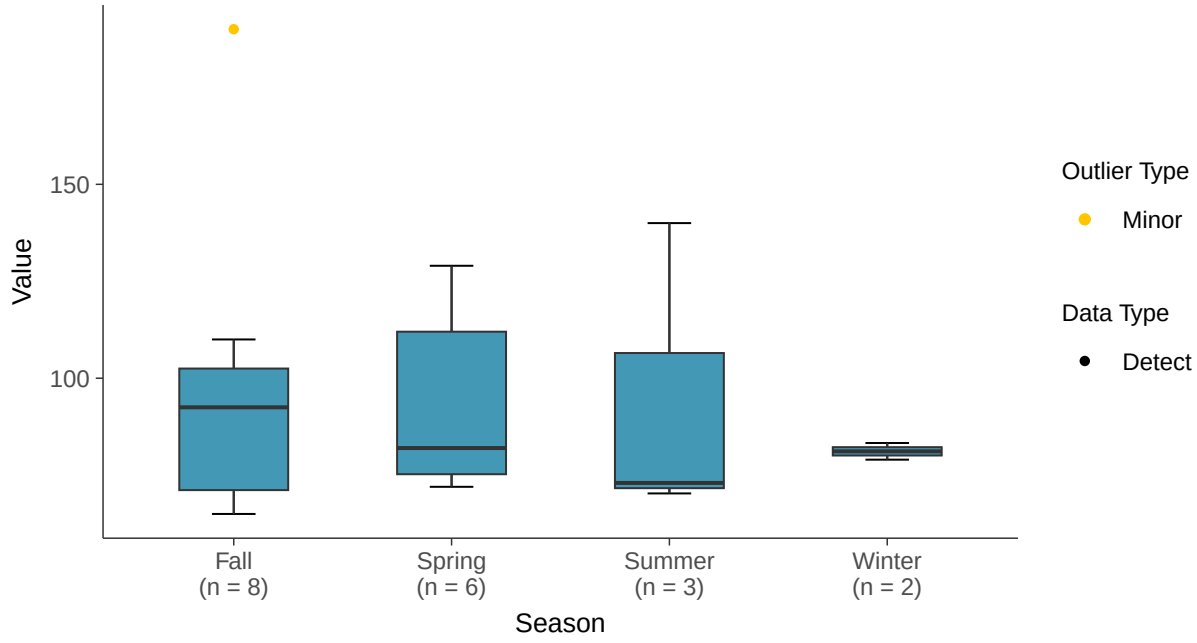
## Boxplot

Barium, MW-17006 (ug/L)



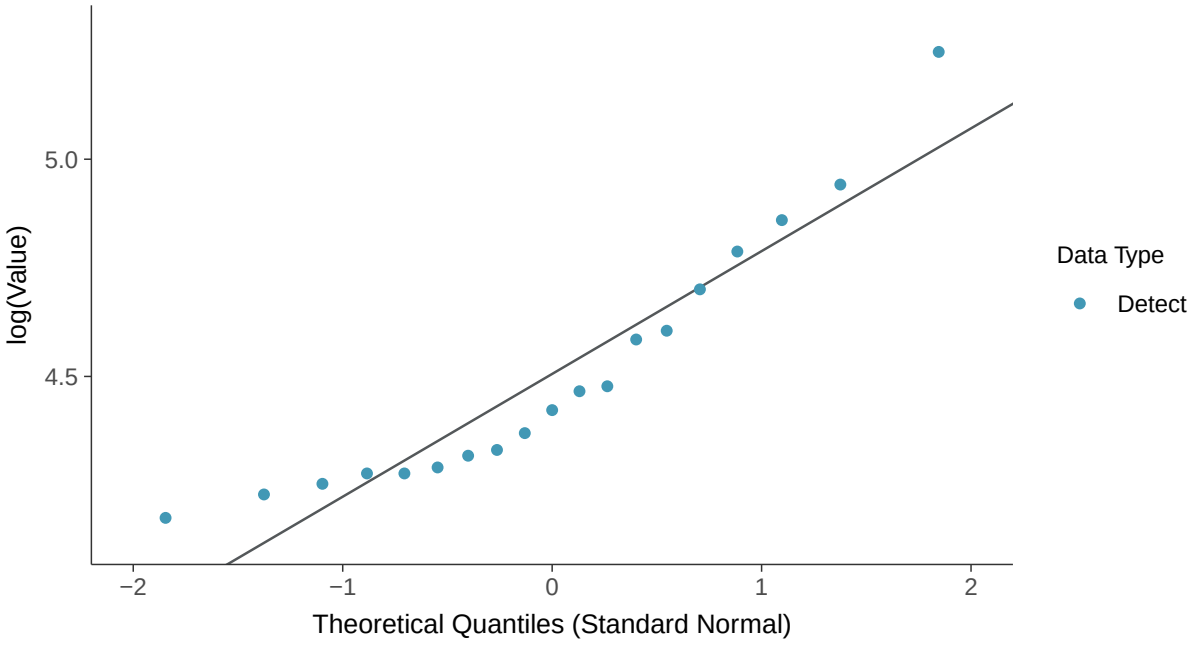

## Boxplot by Season

Barium, MW-17006 (ug/L)



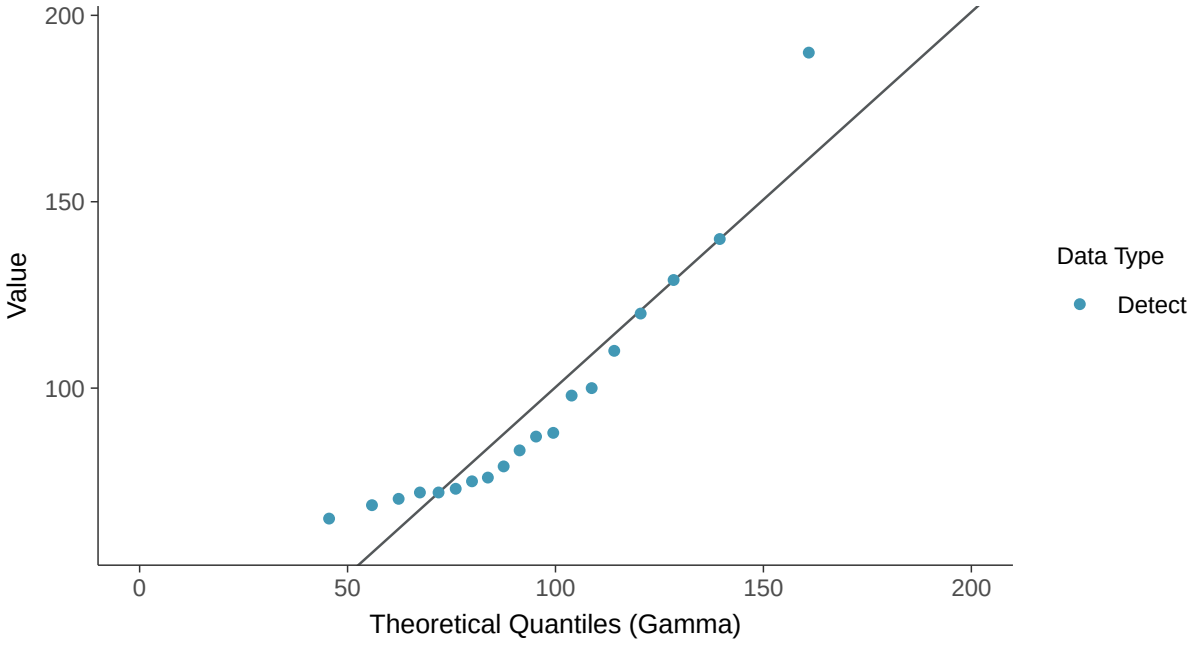
**Lognormal Q-Q plot**

Barium, MW-17006 (ug/L)



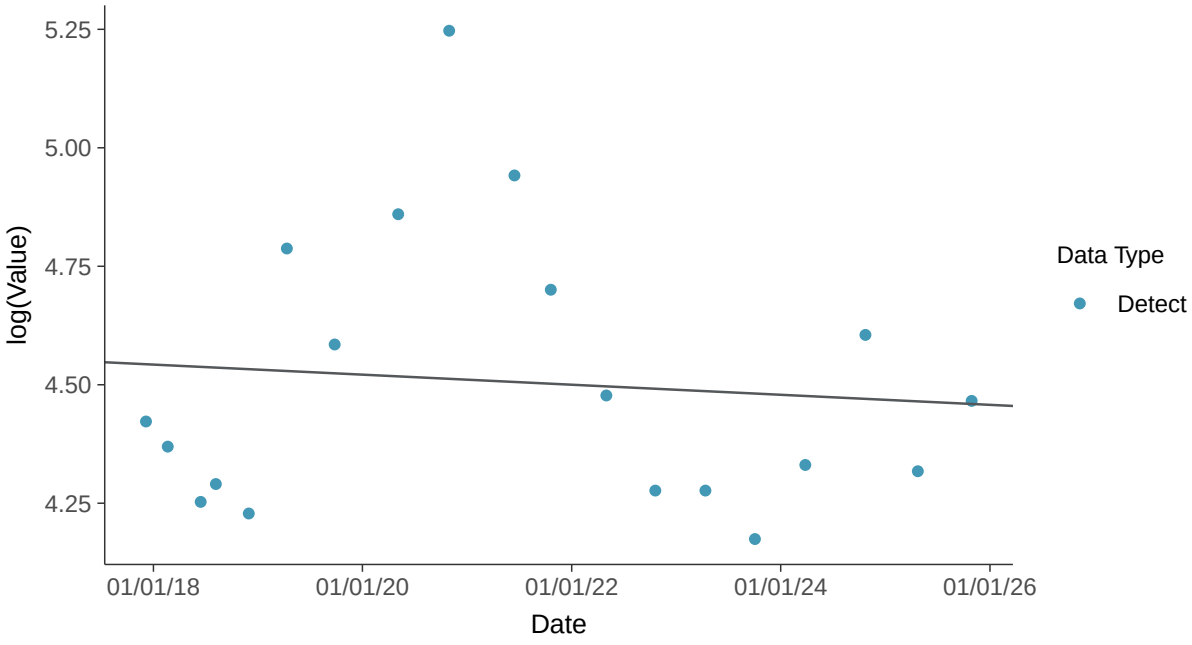

**Gamma Q-Q plot**

Barium, MW-17006 (ug/L)



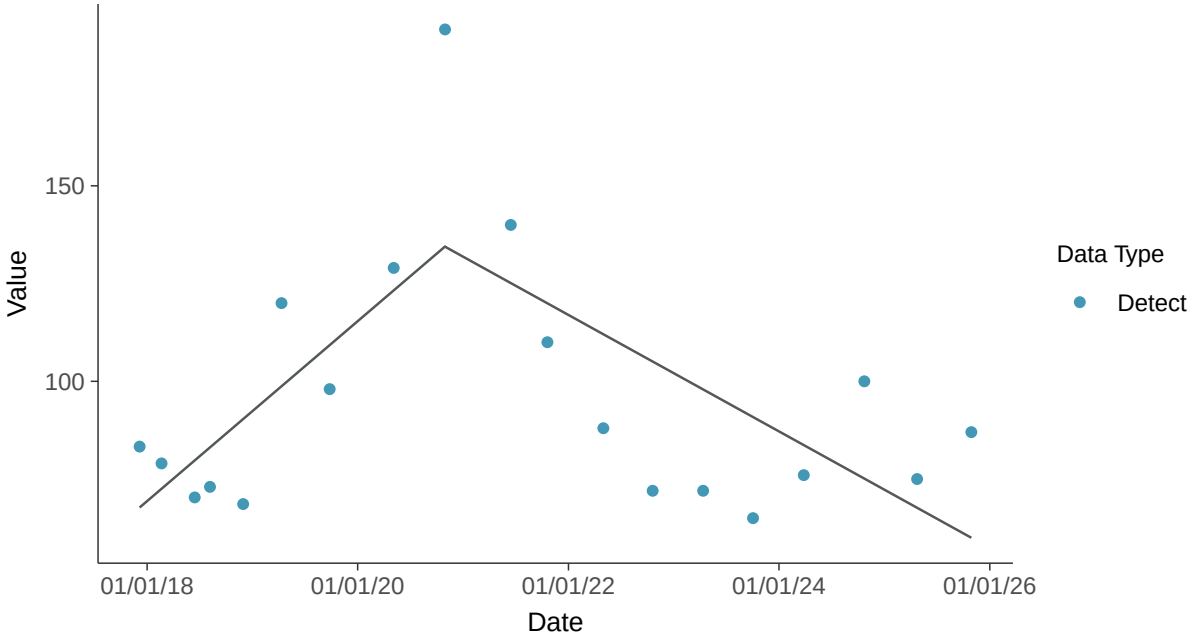
**Trend Regression: Lognormal MLE**

Barium, MW-17006 (ug/L)



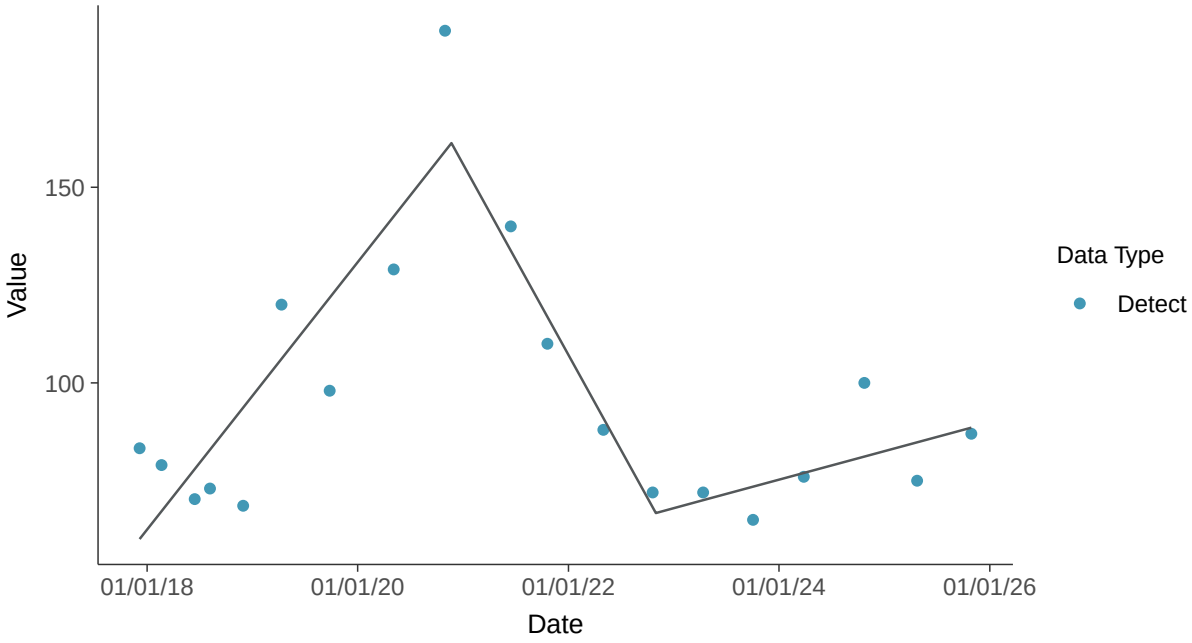

**Trend Regression: Piecewise Linear-Linear**

Barium, MW-17006 (ug/L)



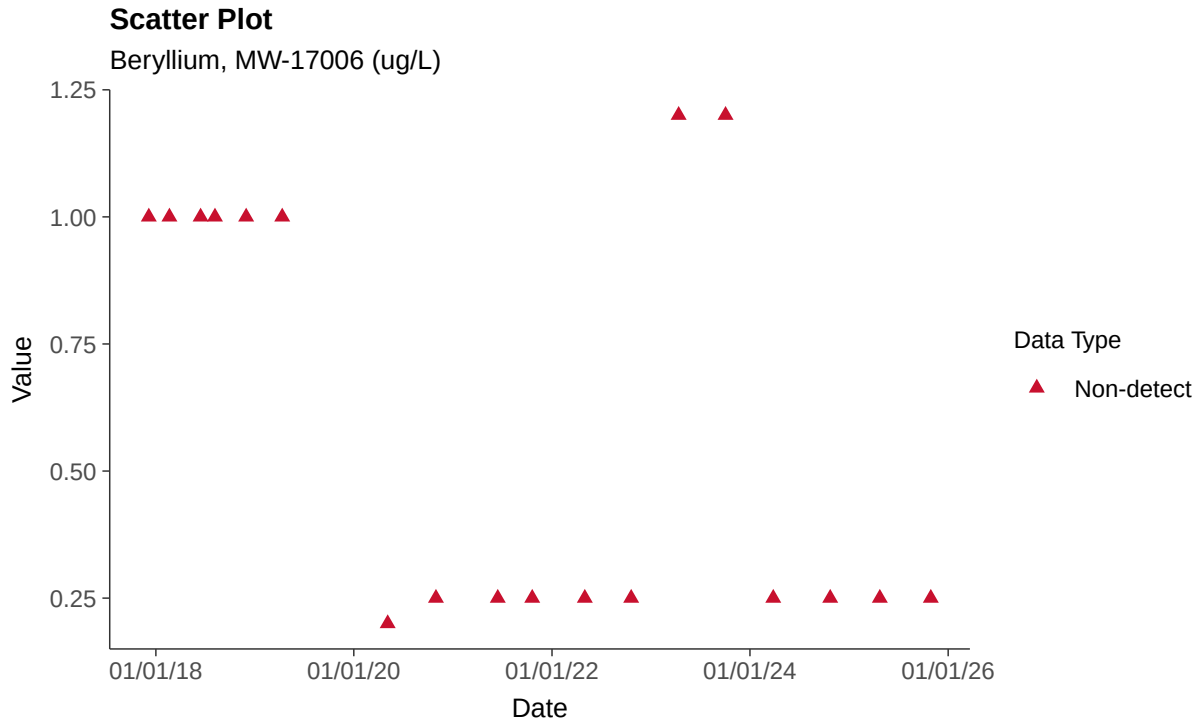
**Trend Regression: Piecewise Linear-Linear-Linear**

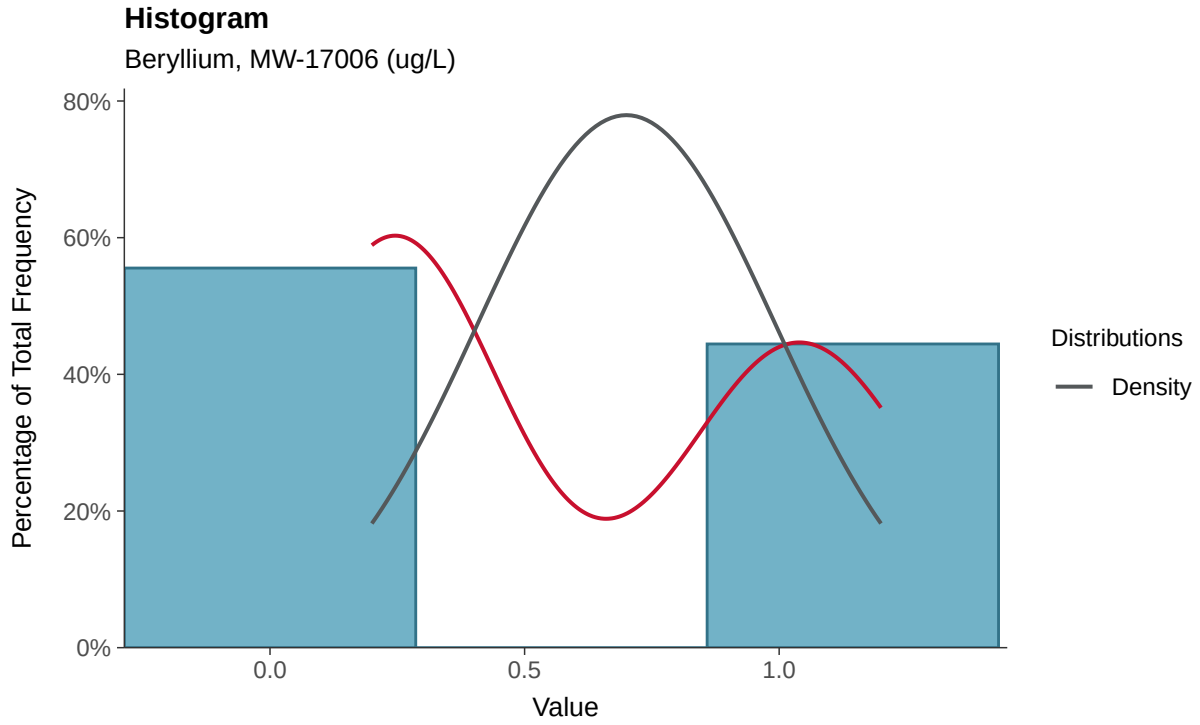
Barium, MW-17006 (ug/L)



## Appendix IV: Beryllium, MW-17006

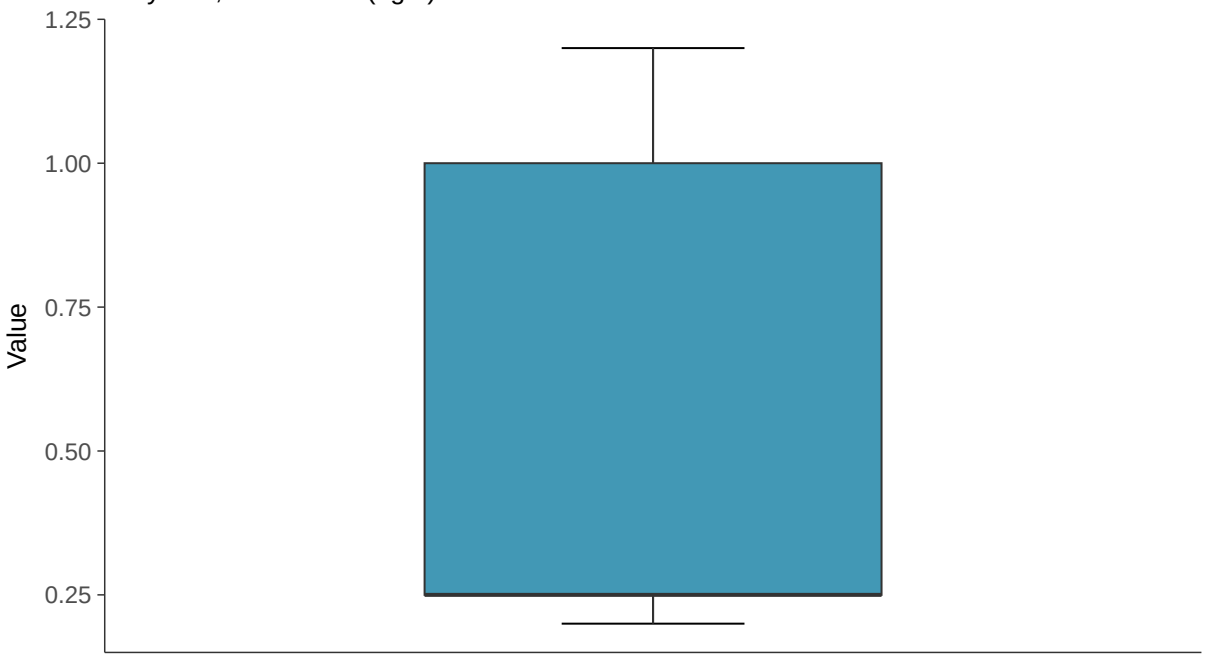
ID: 19_2_104



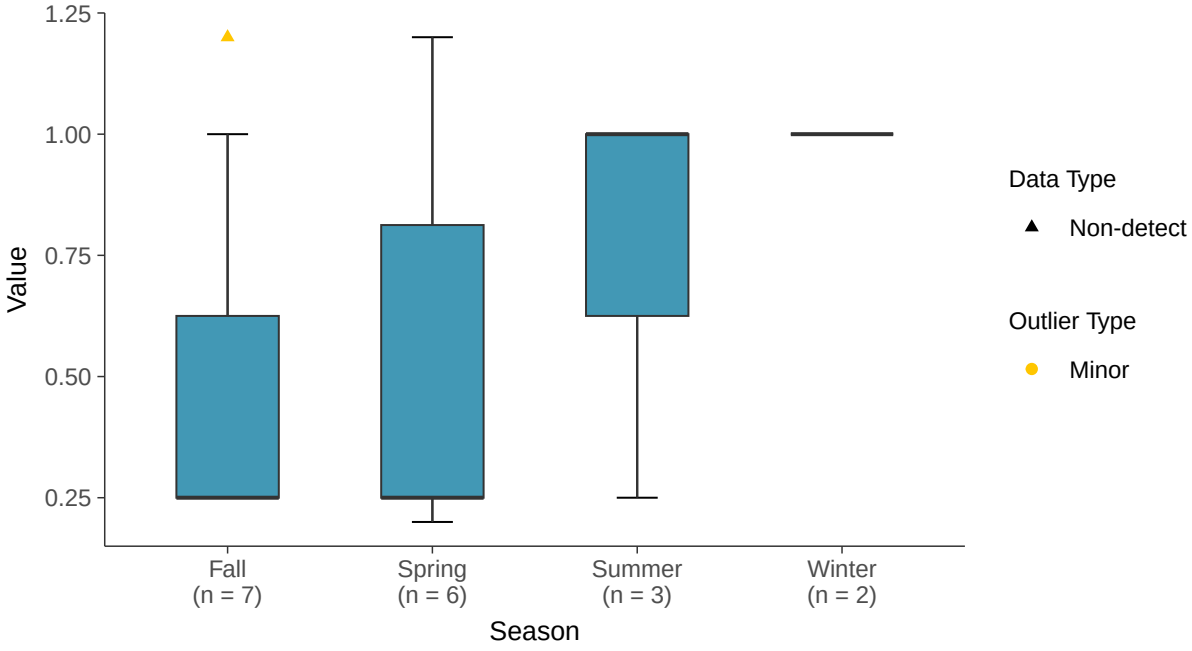
## Boxplot

Beryllium, MW-17006 (ug/L)



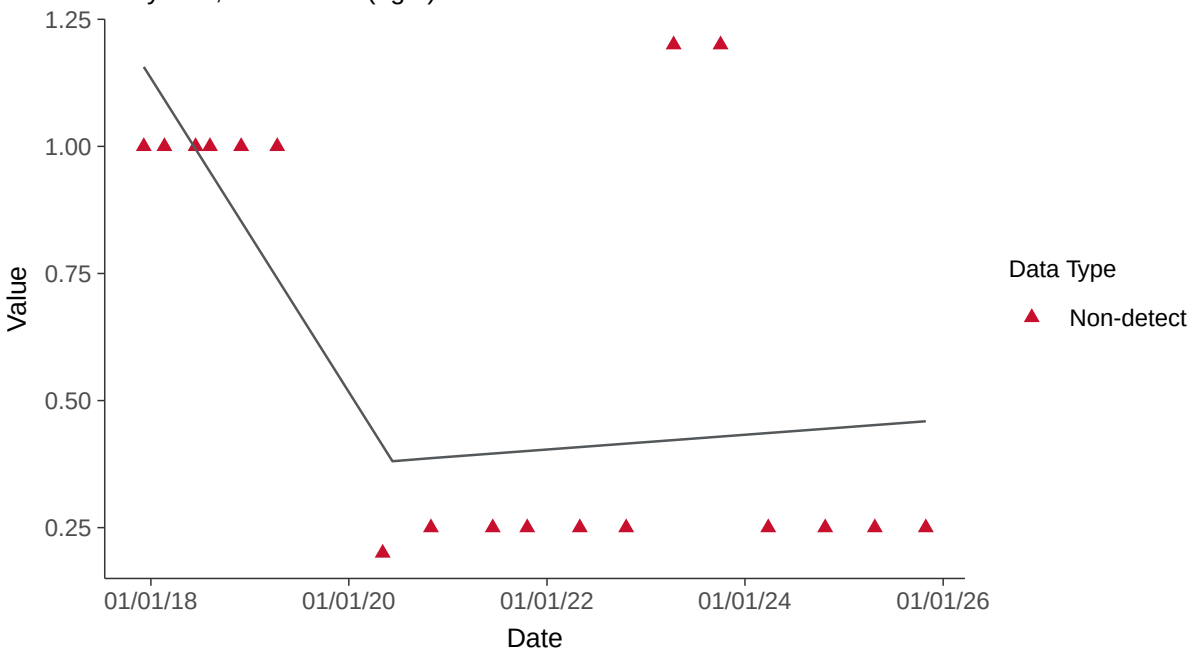

## Boxplot by Season

Beryllium, MW-17006 (ug/L)



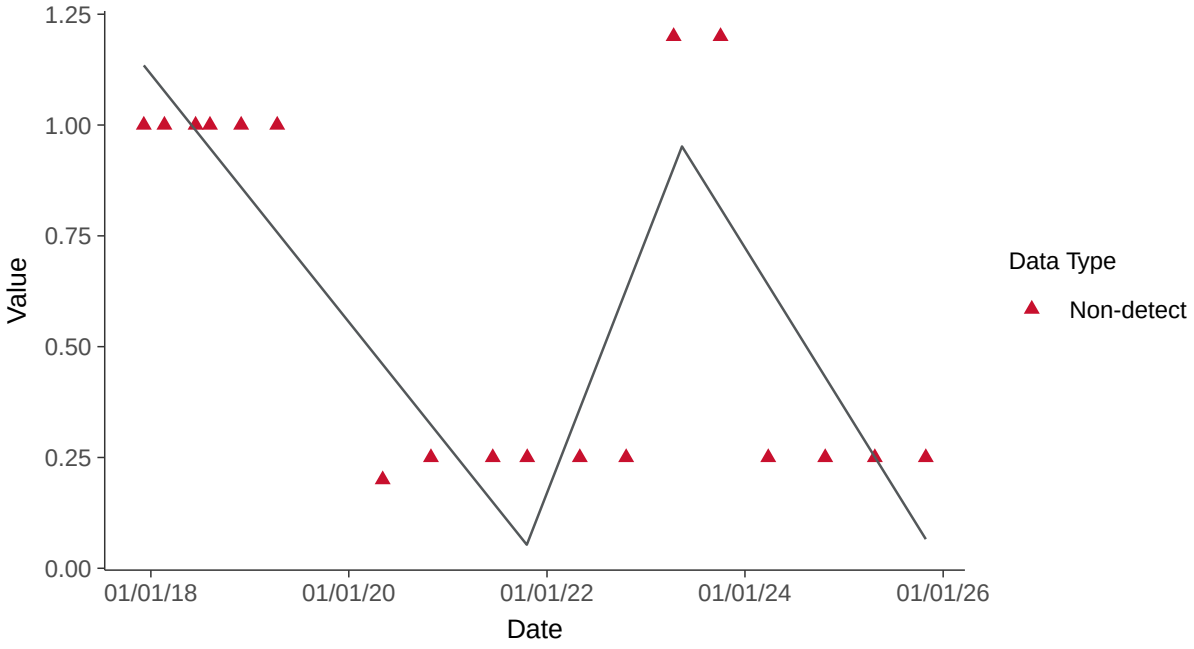
**Trend Regression: Piecewise Linear-Linear**

Beryllium, MW-17006 (ug/L)



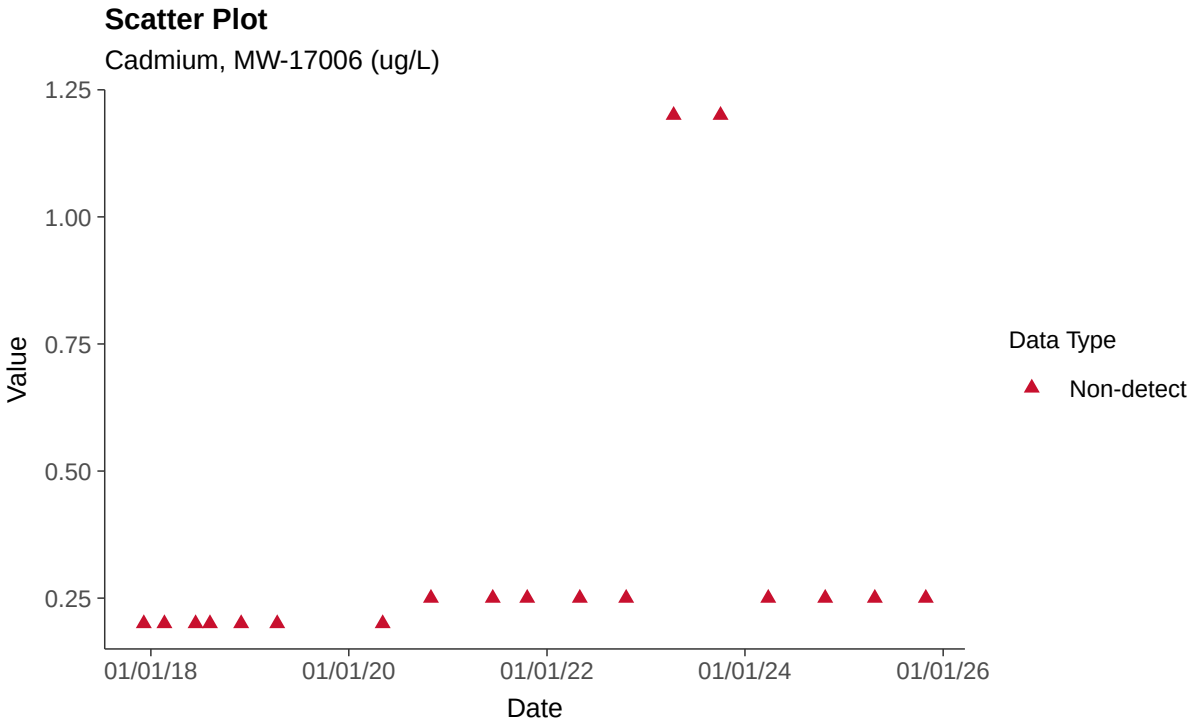

**Trend Regression: Piecewise Linear-Linear-Linear**

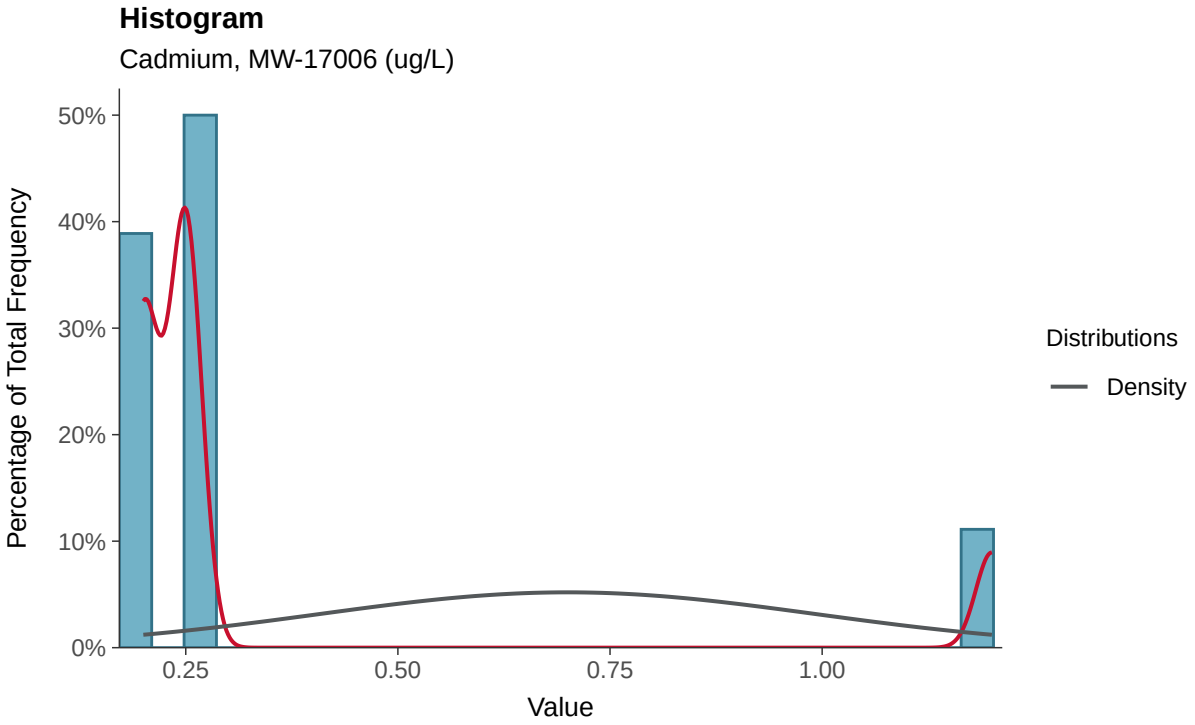
Beryllium, MW-17006 (ug/L)



## Appendix IV: Cadmium, MW-17006

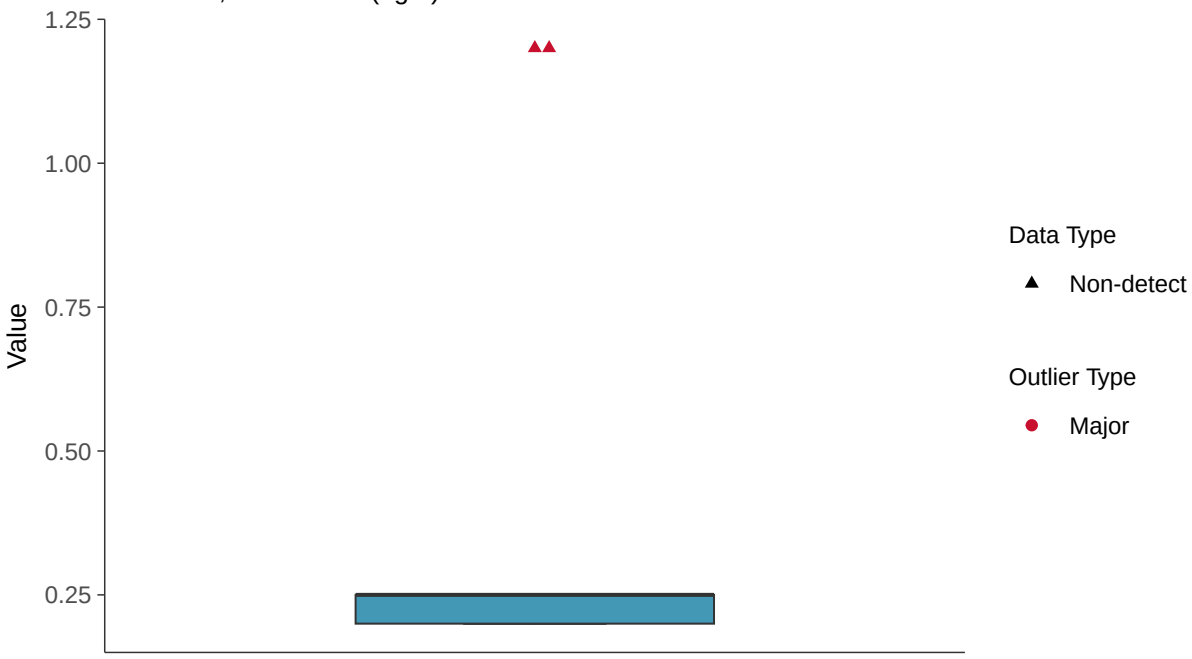
ID: 19_2_106



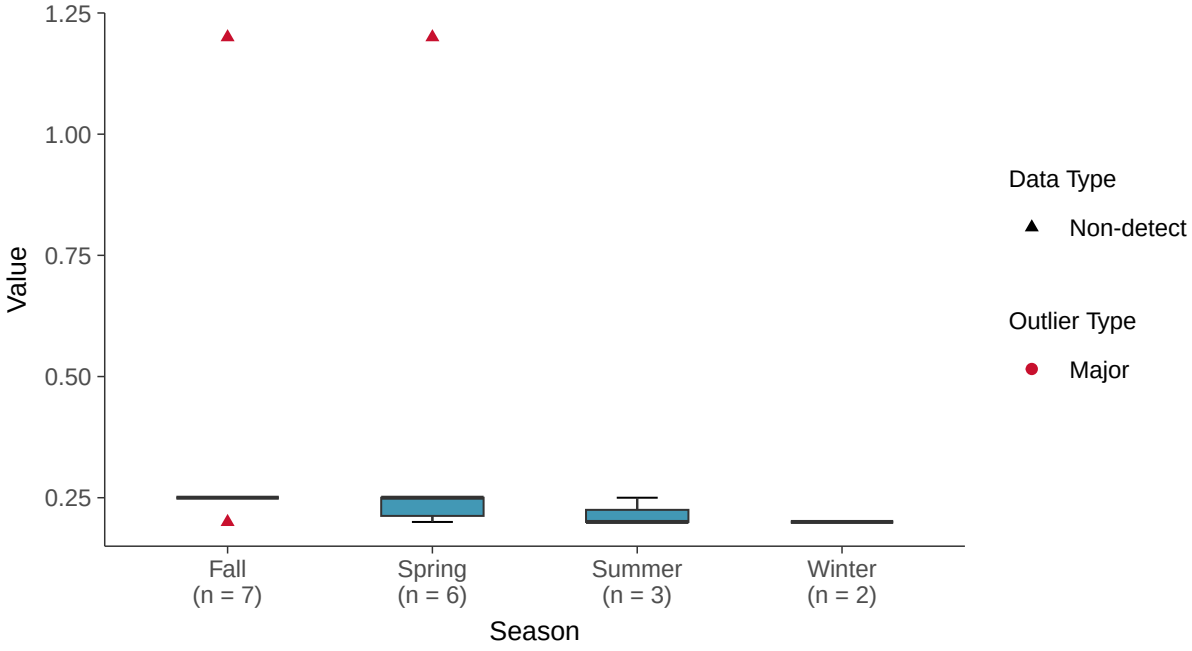
## Boxplot

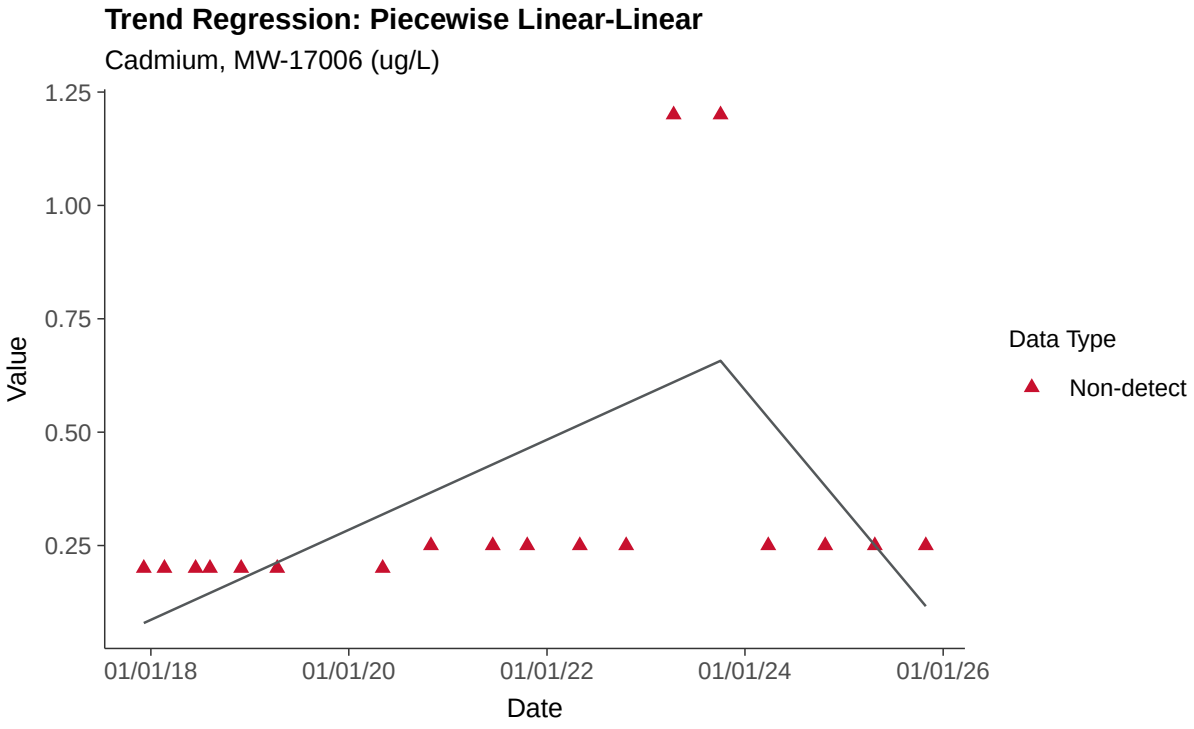
Cadmium, MW-17006 (ug/L)




## Boxplot by Season

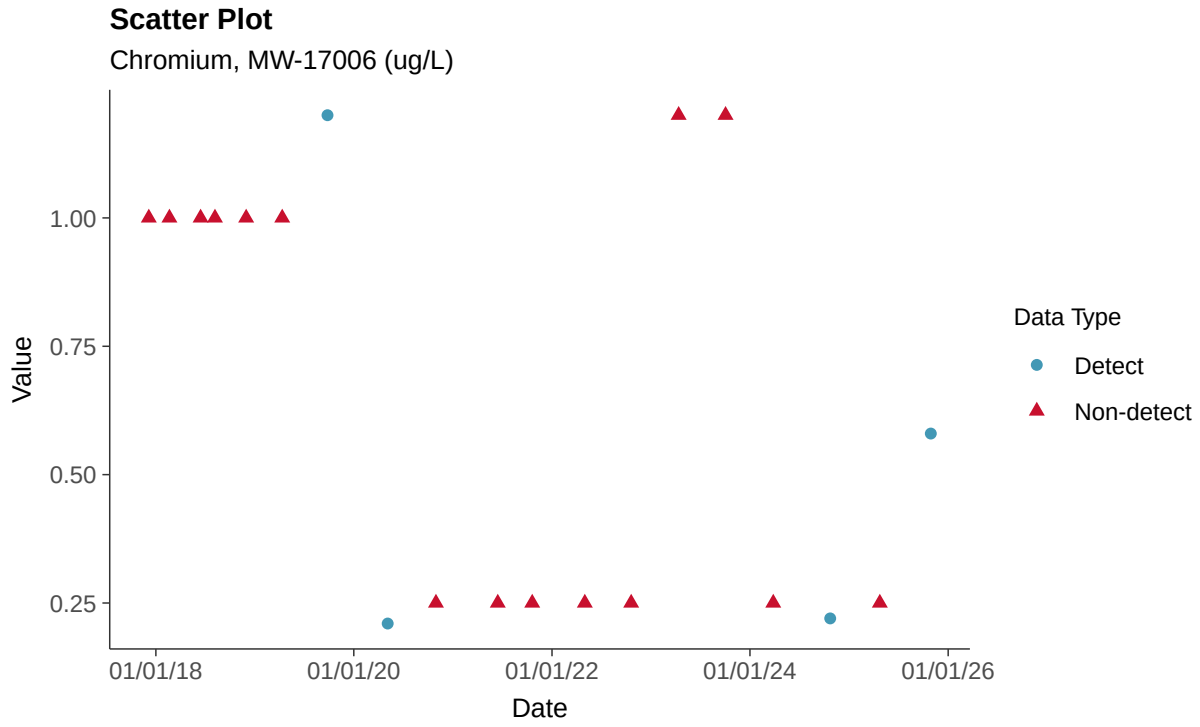
Cadmium, MW-17006 (ug/L)

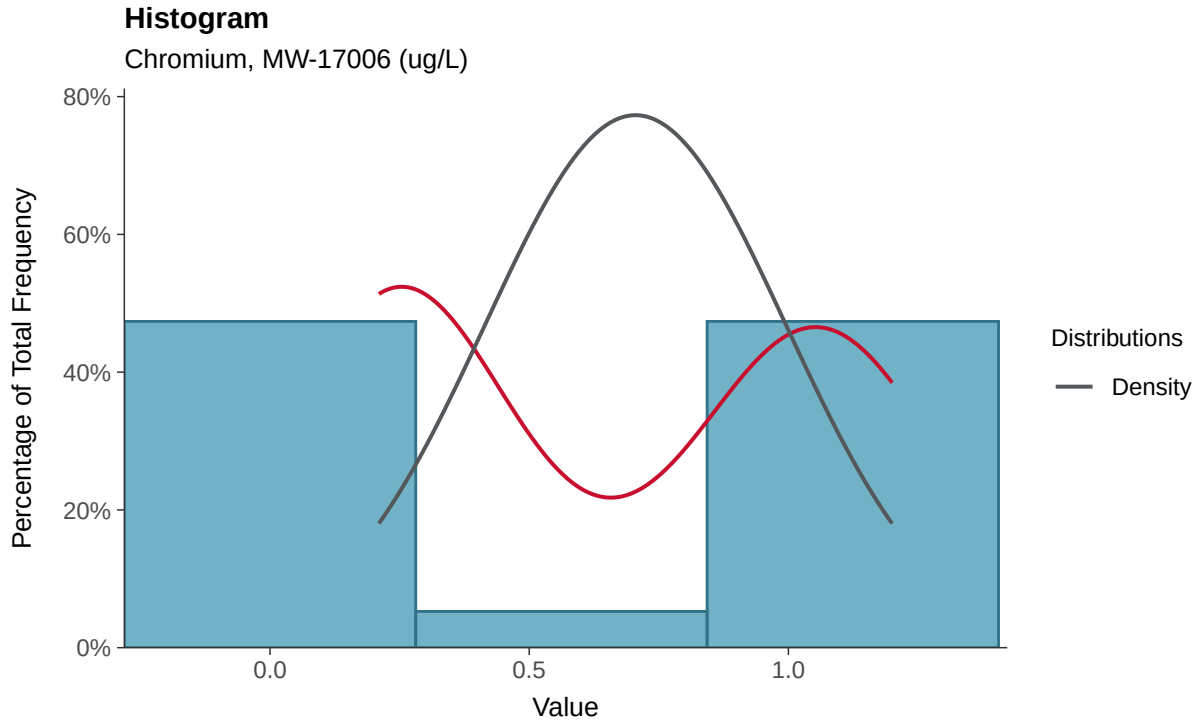



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-17006 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Non-detect

## Appendix IV: Chromium, MW-17006

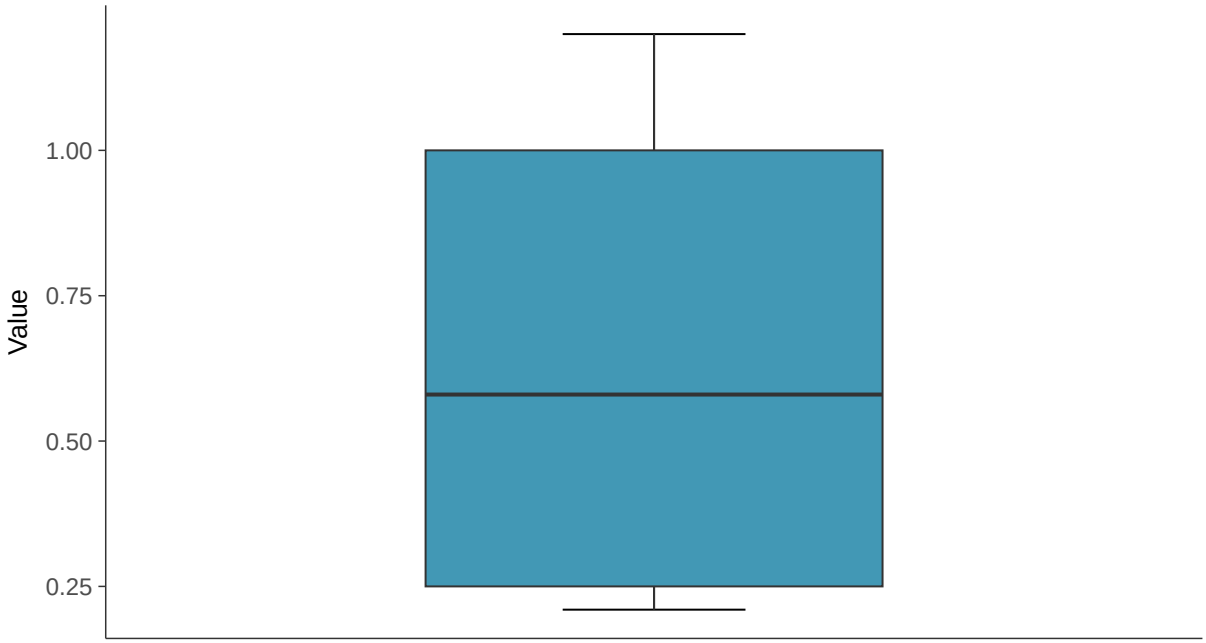
ID: 19_2_109



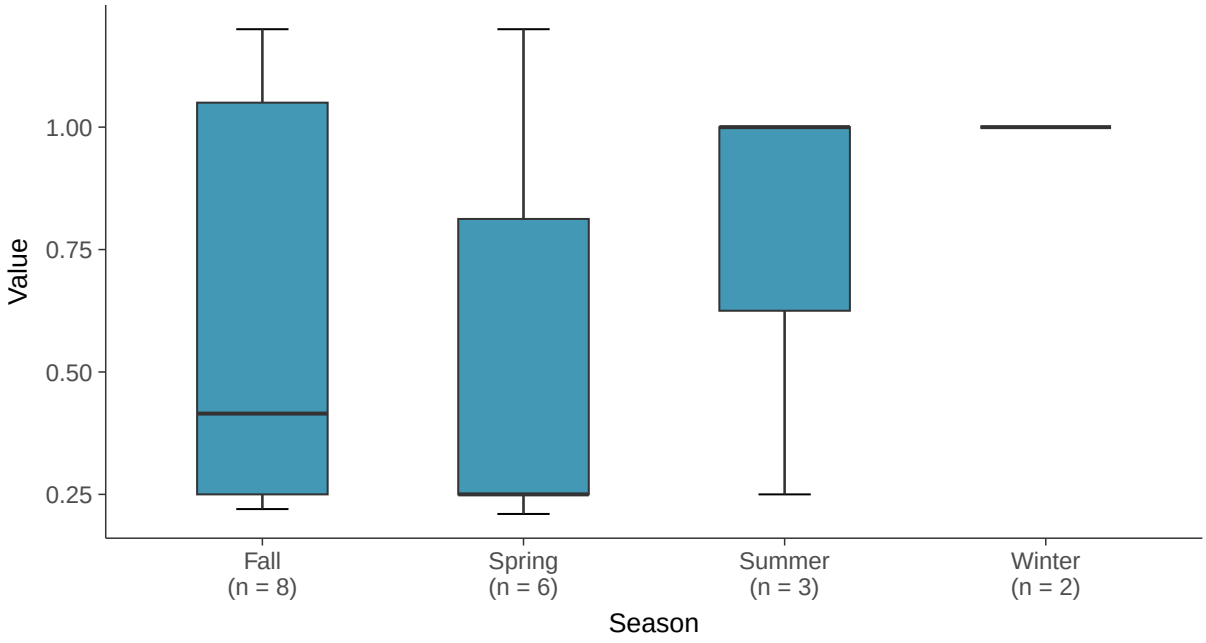
## Boxplot

Chromium, MW-17006 (ug/L)



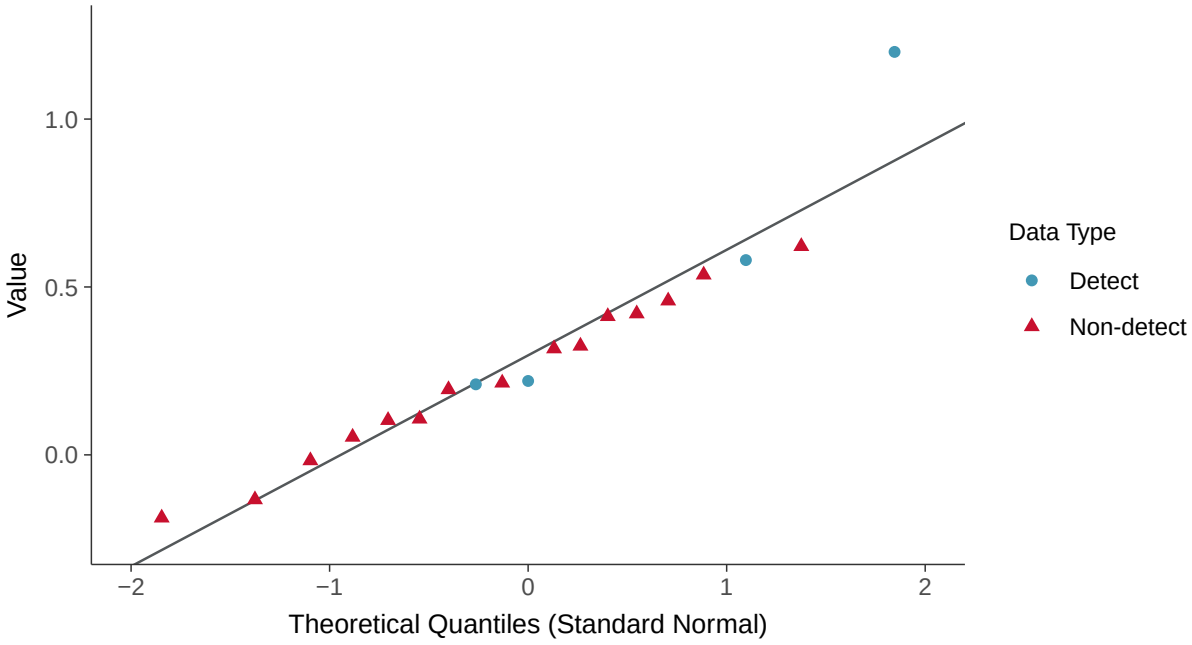

## Boxplot by Season

Chromium, MW-17006 (ug/L)



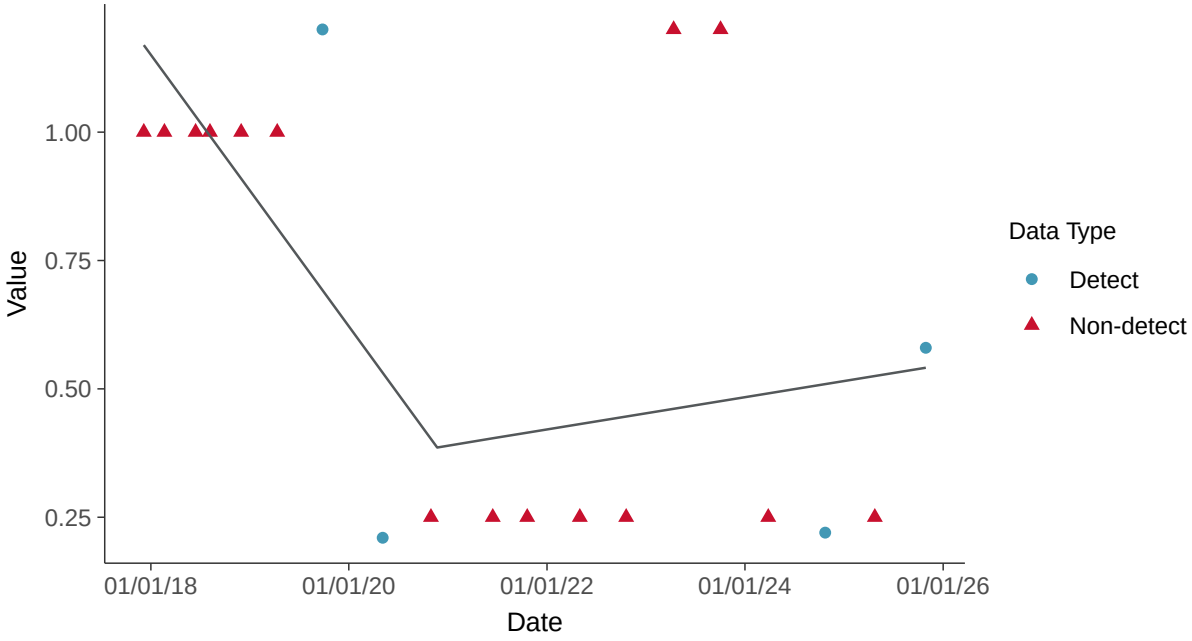
**Normal Q-Q plot using ROS Imputed Estimates**

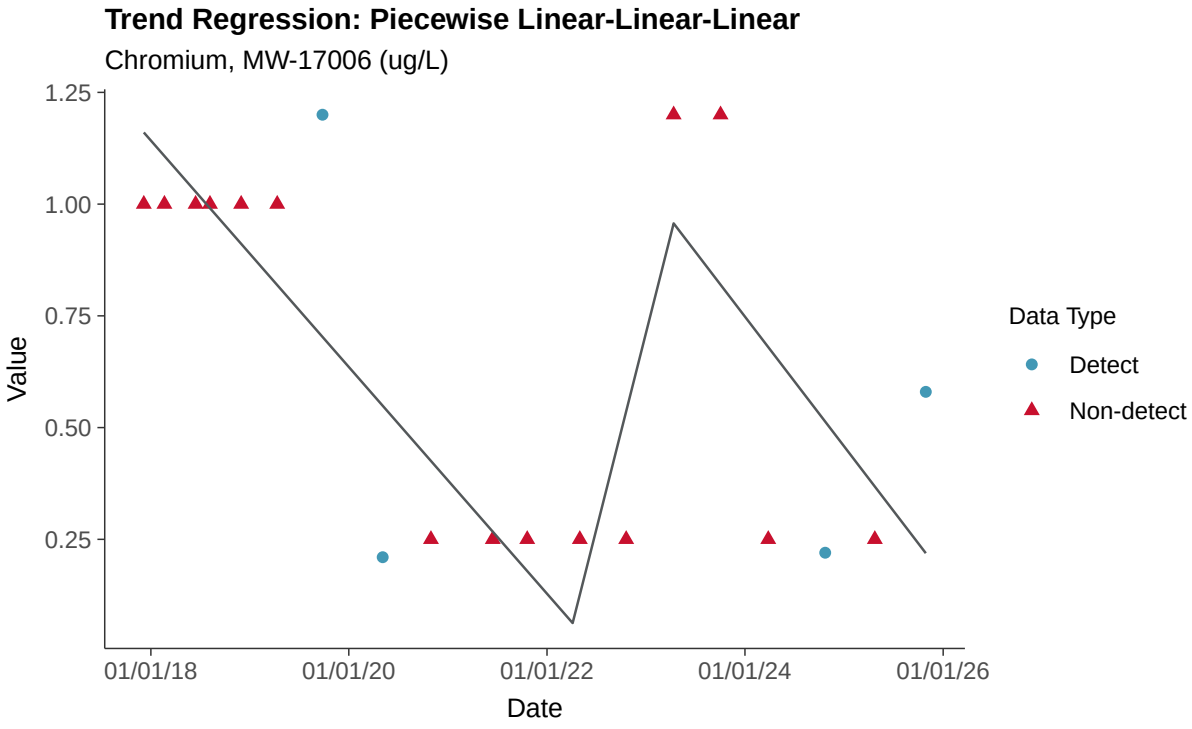
Chromium, MW-17006 (ug/L)




**Trend Regression: Piecewise Linear-Linear**

Chromium, MW-17006 (ug/L)



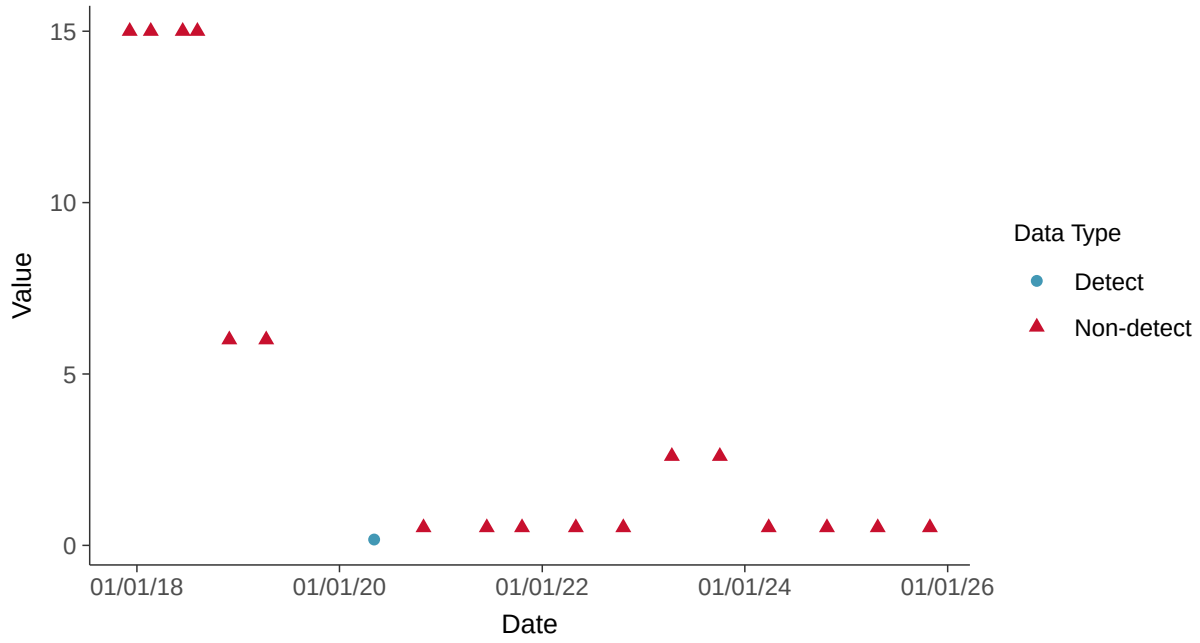

Trend Regression: Piecewise Linear-Linear-Linear
Chromium, MW-17006 (ug/L)
1.25
1.00
0.75
0.50
0.25
Value
01/01/18
01/01/20
01/01/22
01/01/24
01/01/26
Date
Data Type
Detect
Non-detect

## Appendix IV: Cobalt, MW-17006

ID: 19_2_110

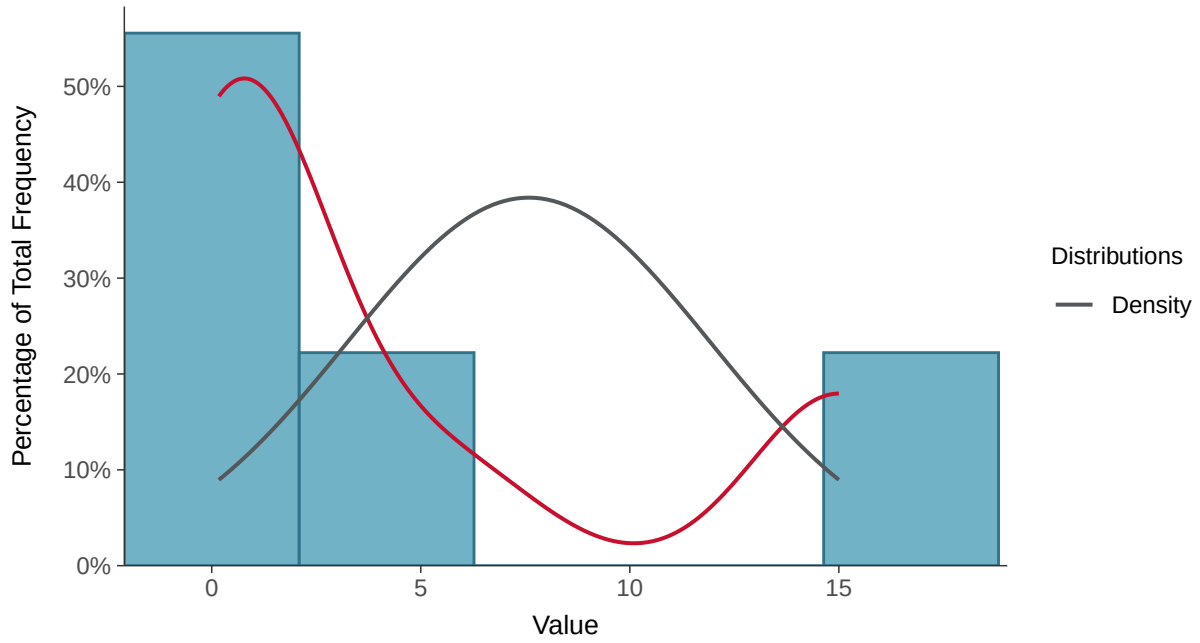
**Scatter Plot**

Cobalt, MW-17006 (ug/L)



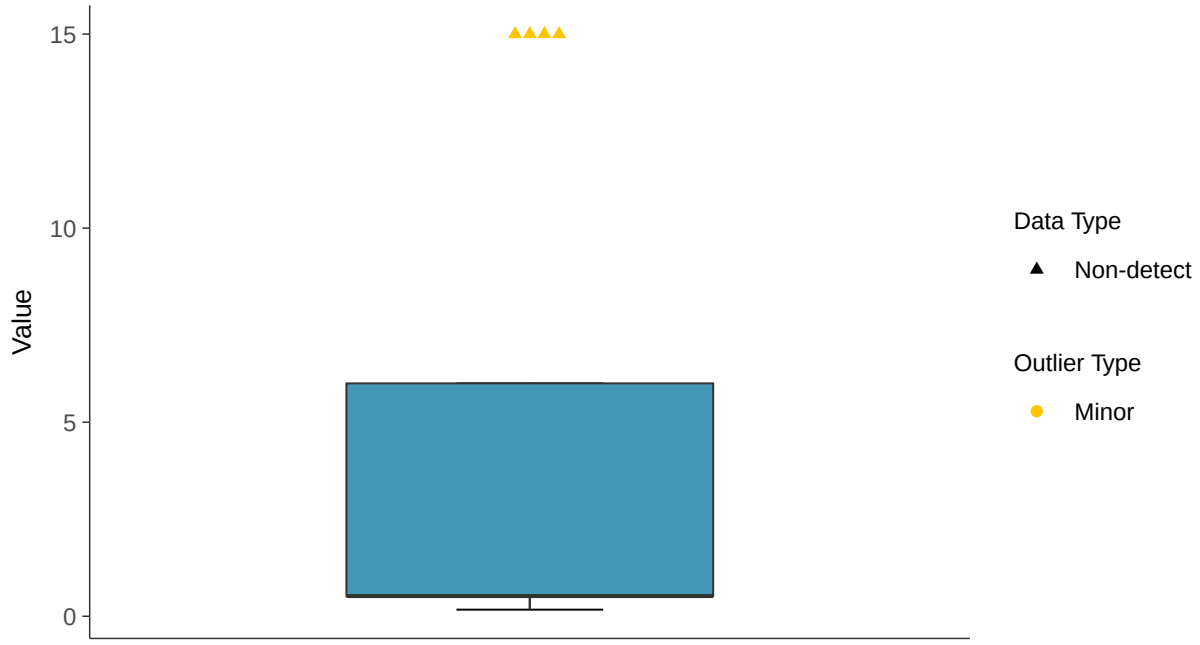

**Histogram**

Cobalt, MW-17006 (ug/L)



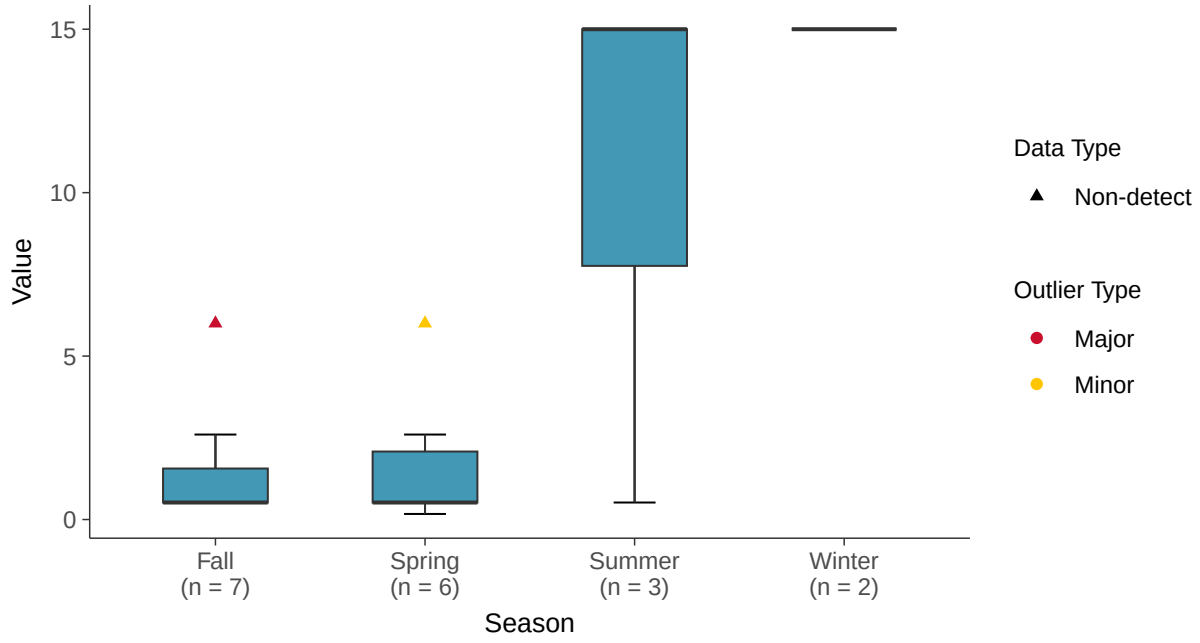
## Boxplot

Cobalt, MW-17006 (ug/L)



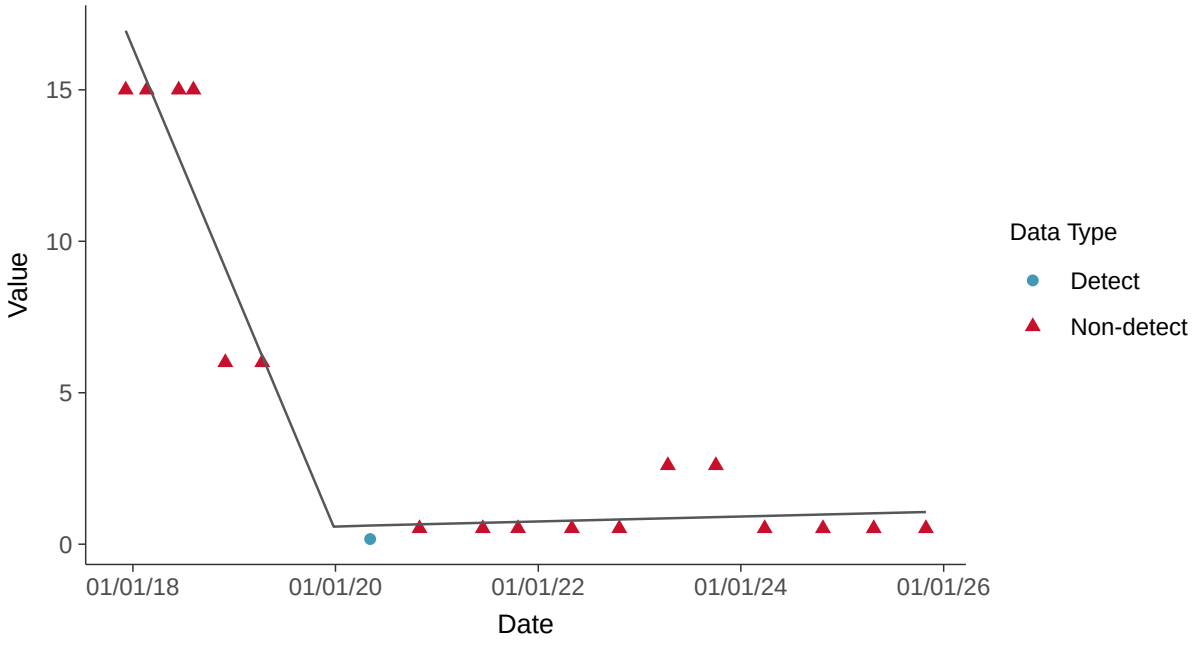

## Boxplot by Season

Cobalt, MW-17006 (ug/L)



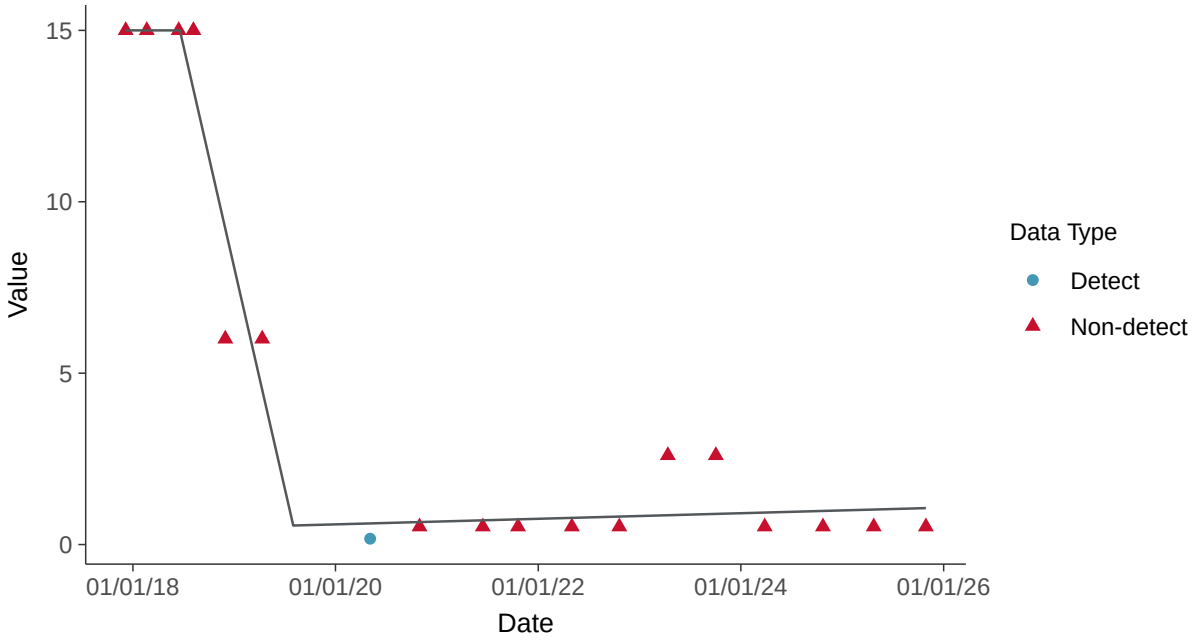
**Trend Regression: Piecewise Linear-Linear**

Cobalt, MW-17006 (ug/L)



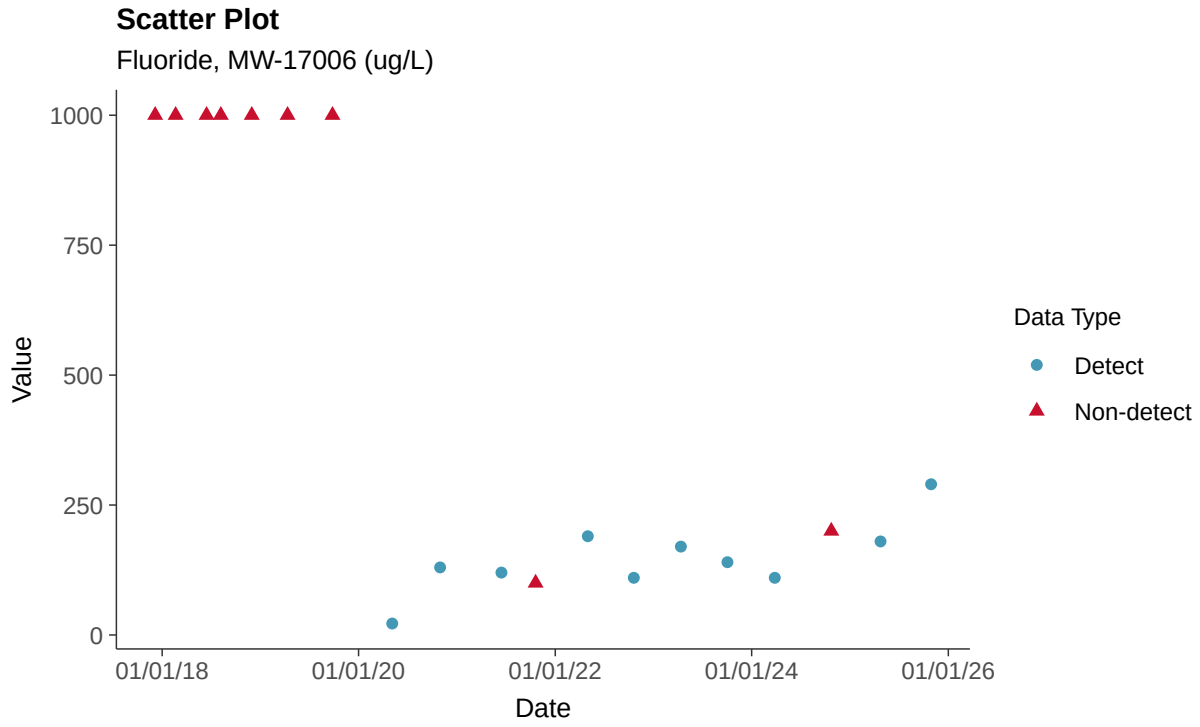

**Trend Regression: Piecewise Linear-Linear-Linear**

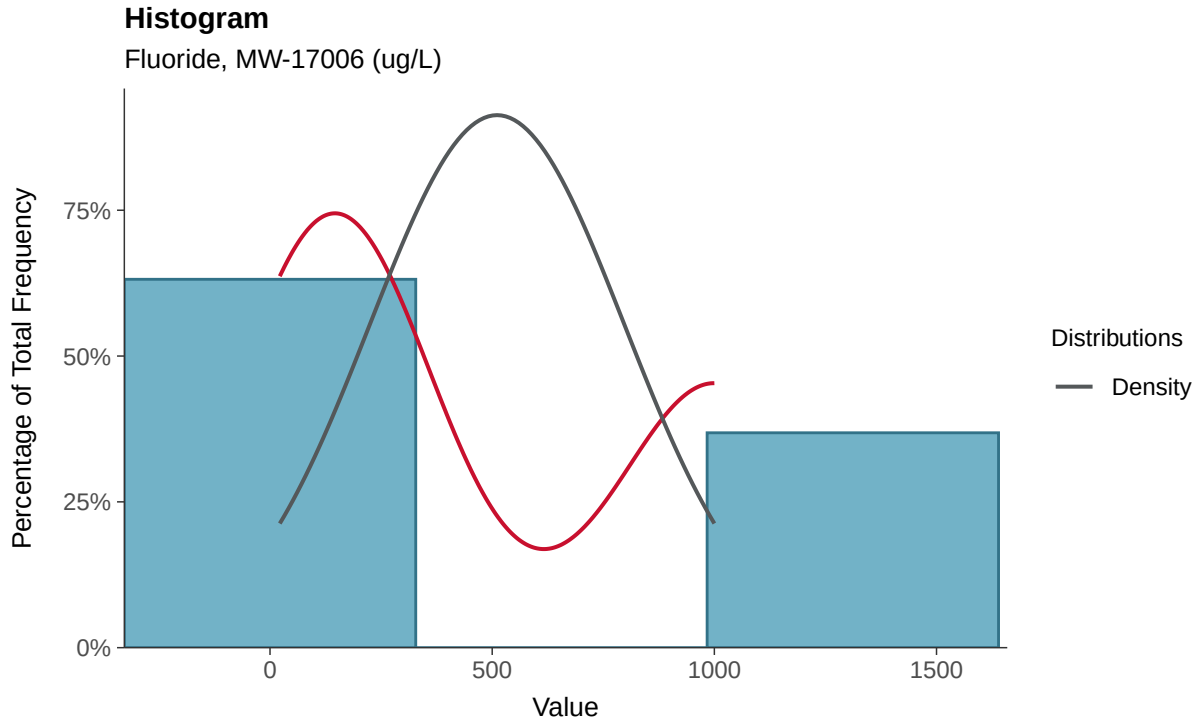
Cobalt, MW-17006 (ug/L)



## Appendix IV: Fluoride, MW-17006

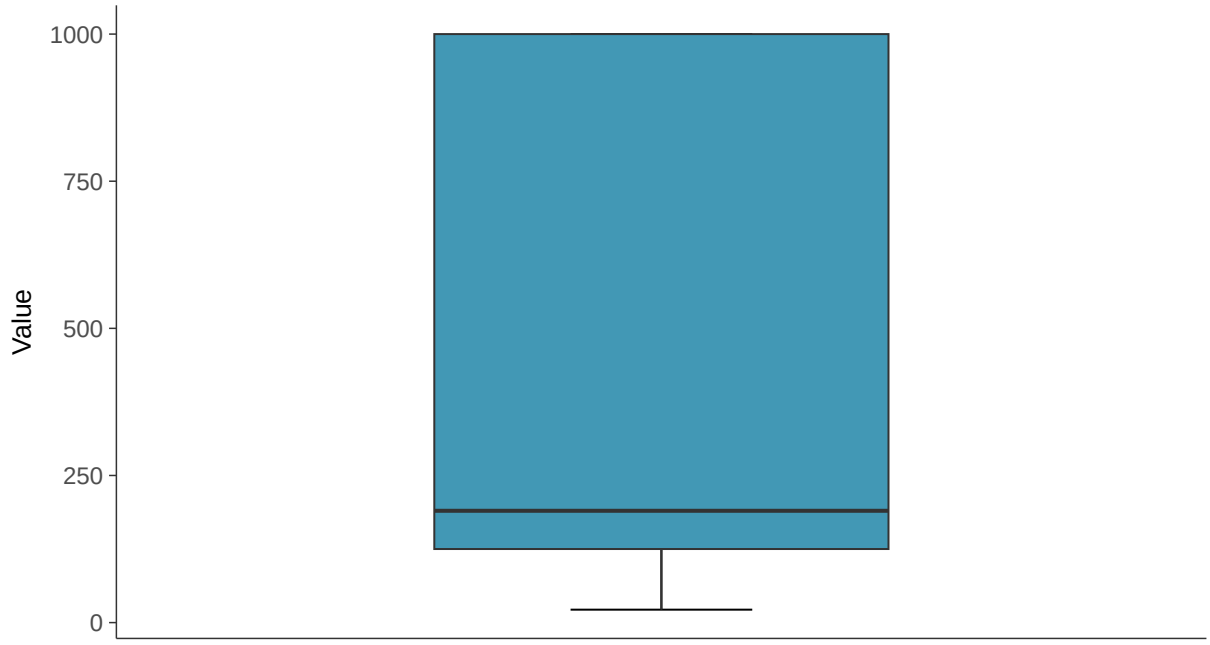
ID: 19_2_114



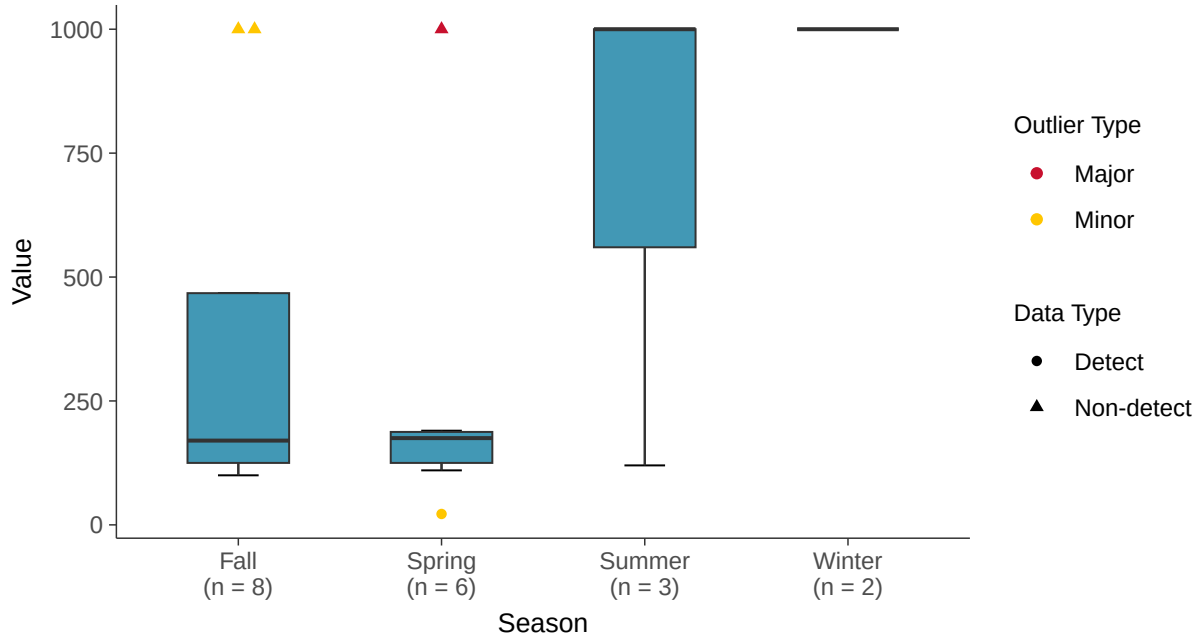
## Boxplot

Fluoride, MW-17006 (ug/L)



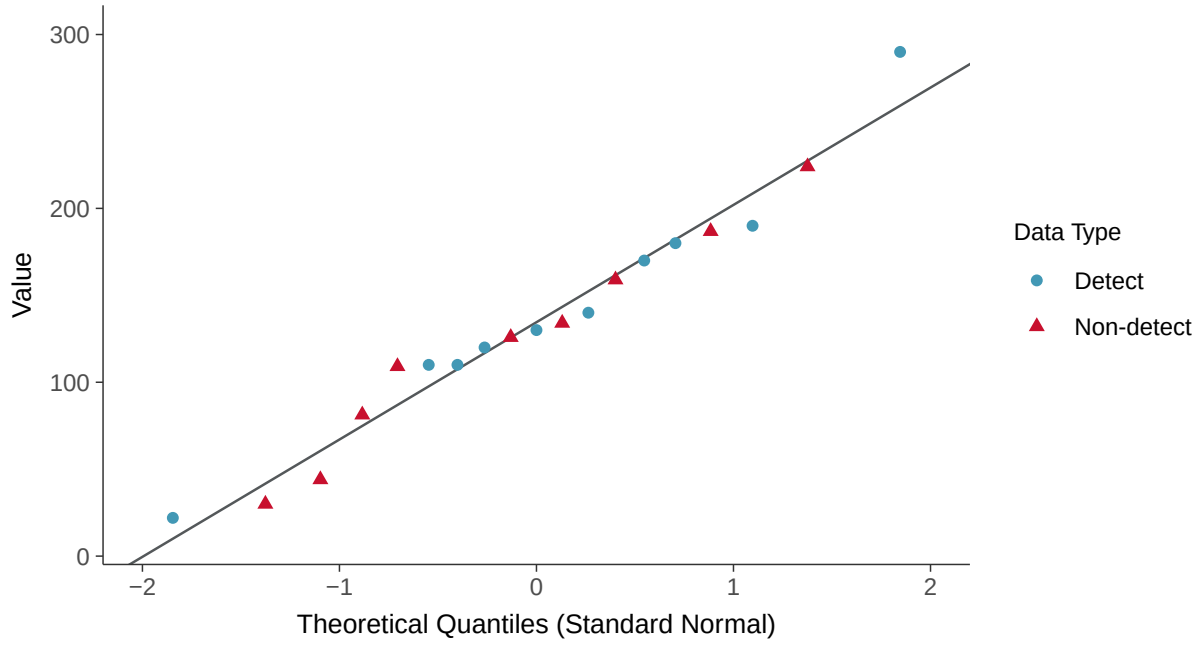

## Boxplot by Season

Fluoride, MW-17006 (ug/L)



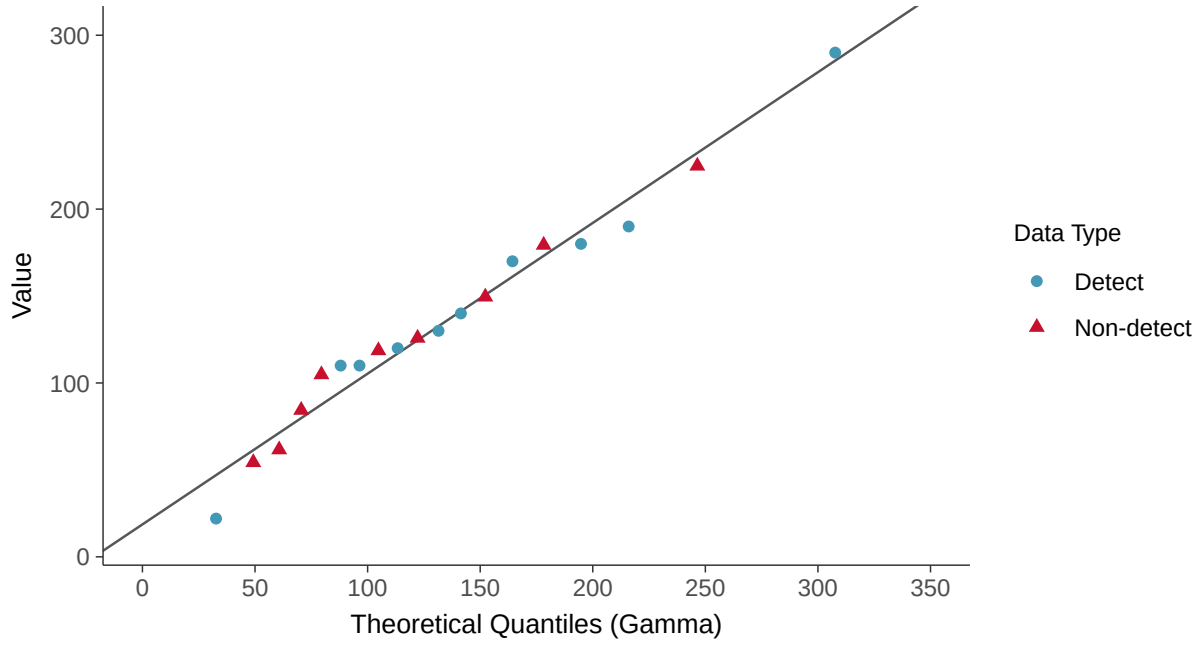
**Normal Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17006 (ug/L)



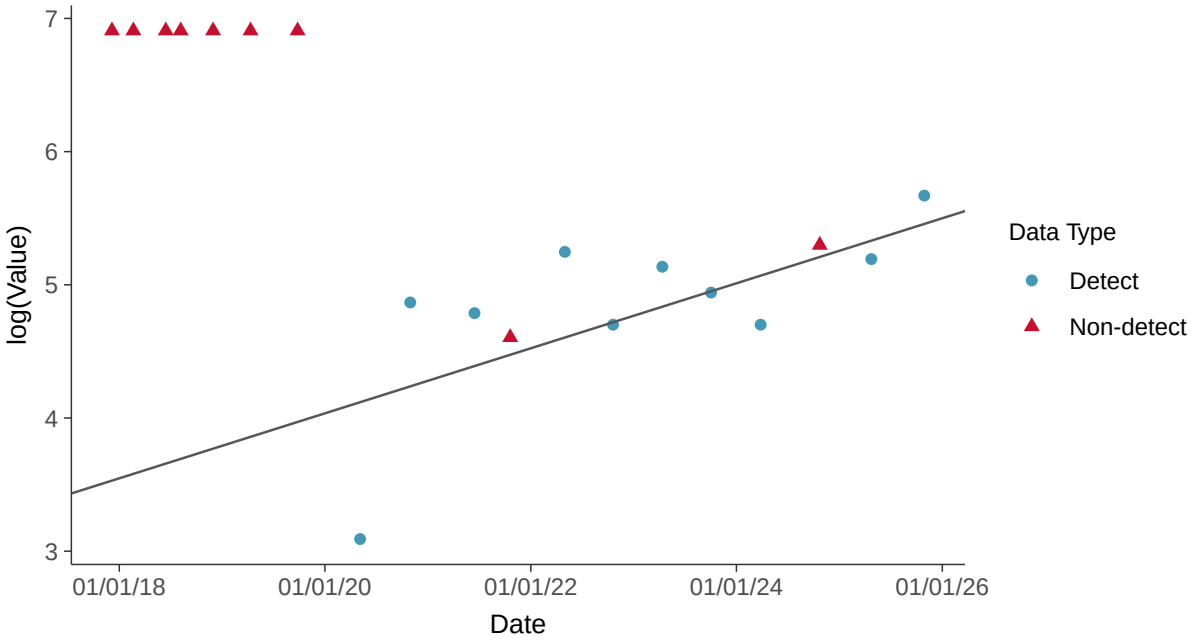

**Gamma Q-Q plot using ROS Imputed Estimates**

Fluoride, MW-17006 (ug/L)



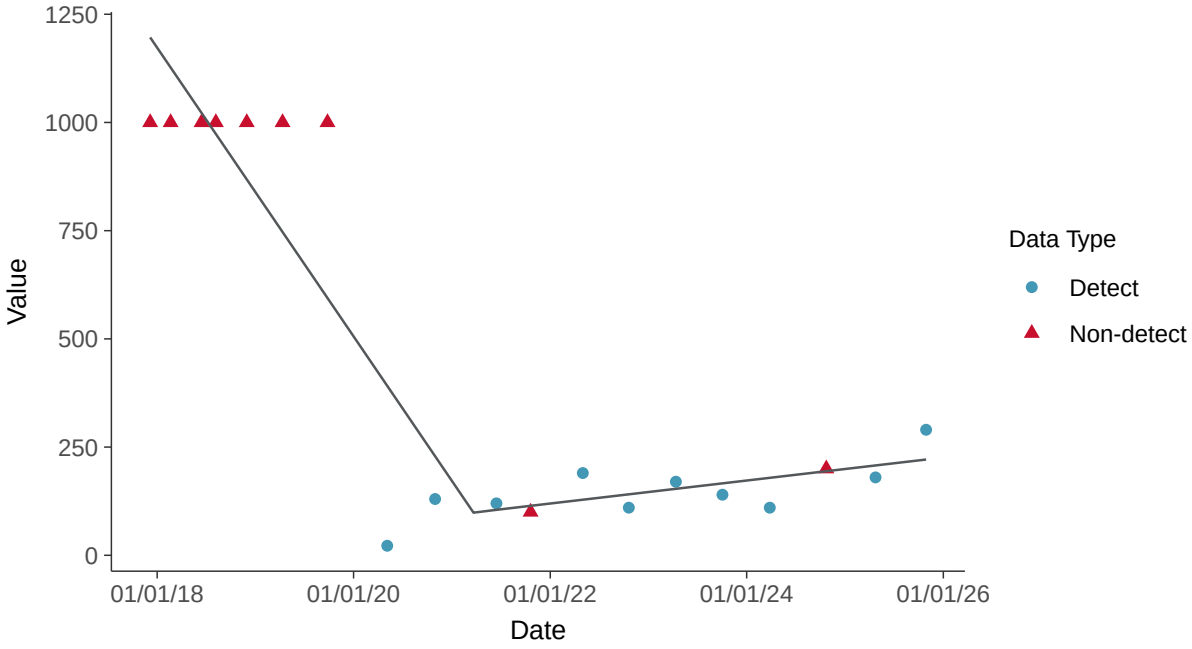
**Trend Regression: Lognormal MLE**

Fluoride, MW-17006 (ug/L)



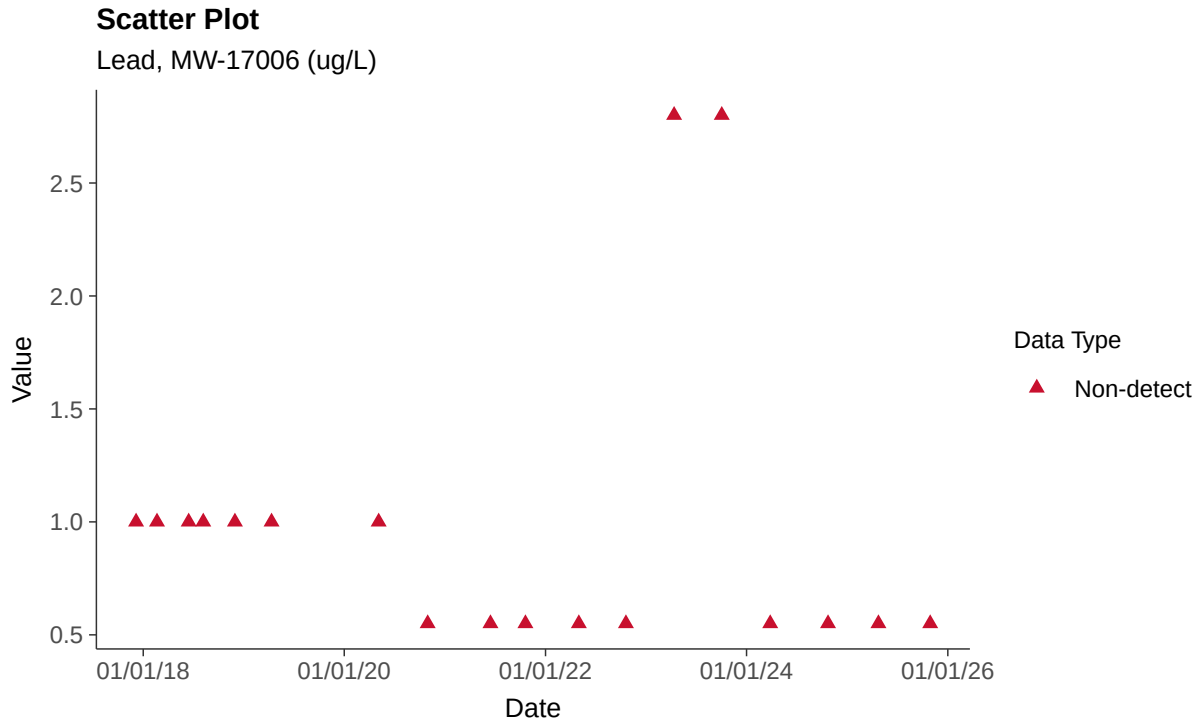

**Trend Regression: Piecewise Linear-Linear**

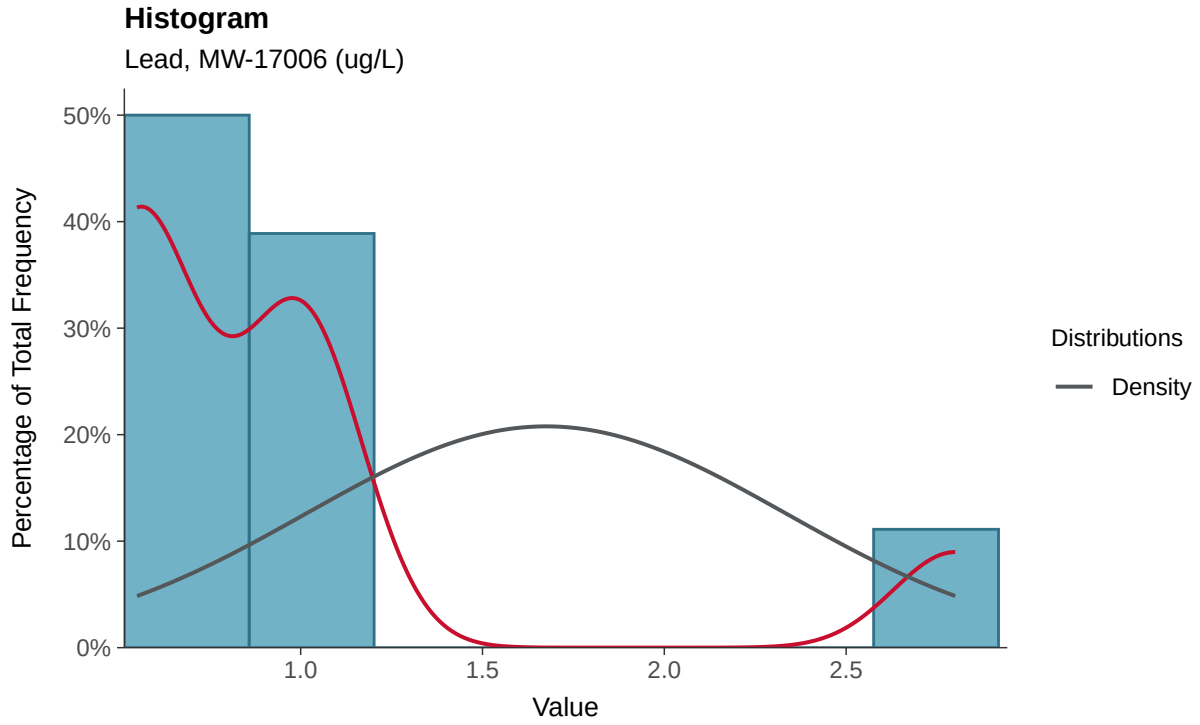
Fluoride, MW-17006 (ug/L)



## Appendix IV: Lead, MW-17006

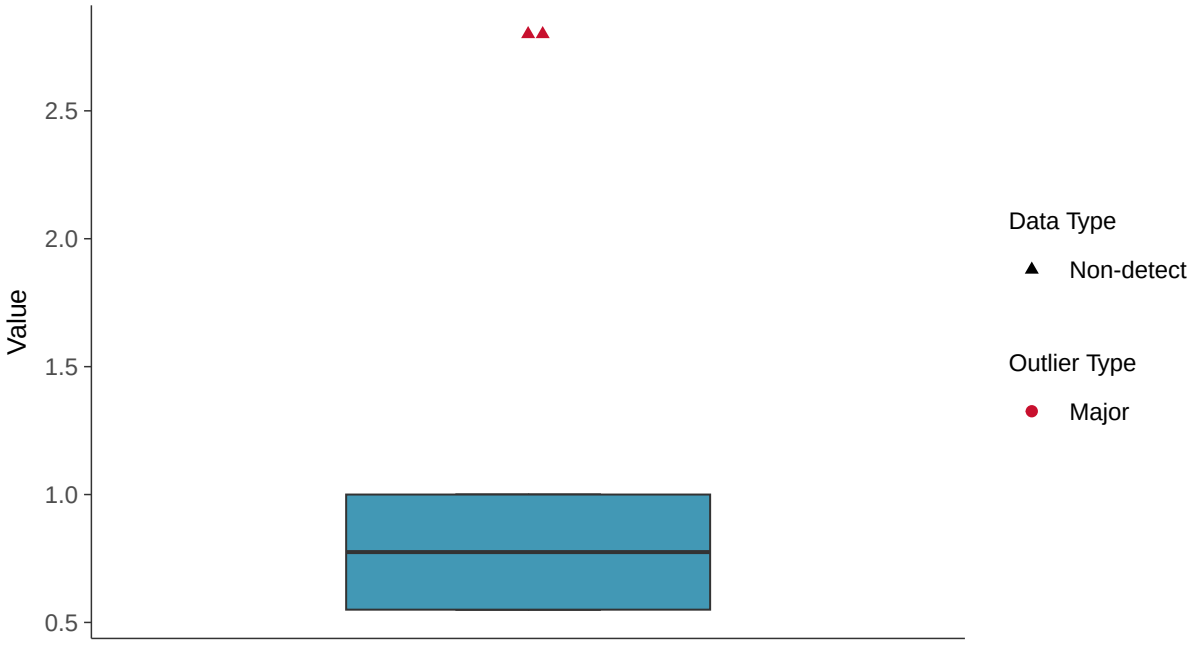
ID: 19_2_116



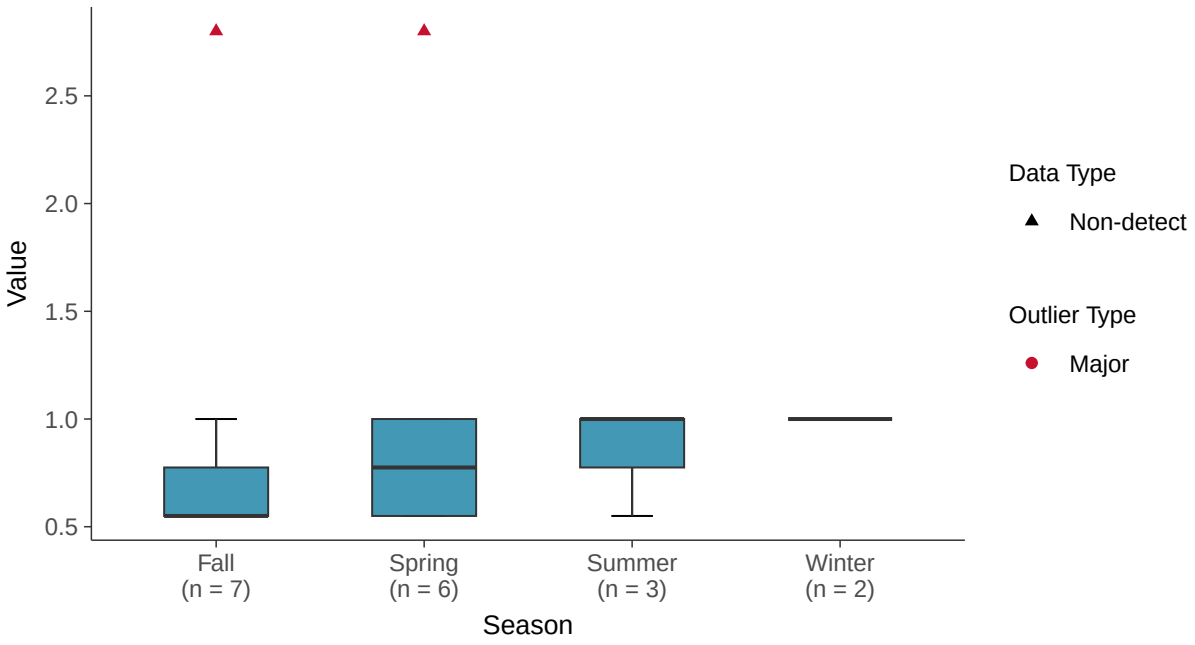
## Boxplot

Lead, MW-17006 (ug/L)



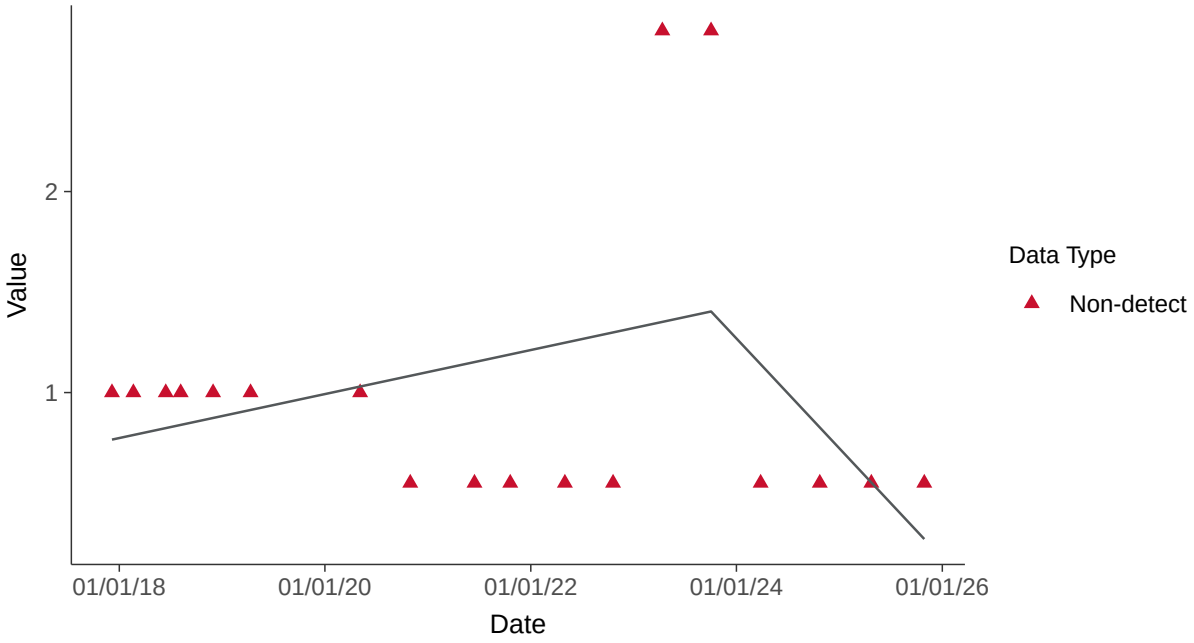

## Boxplot by Season

Lead, MW-17006 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Lead, MW-17006 (ug/L)

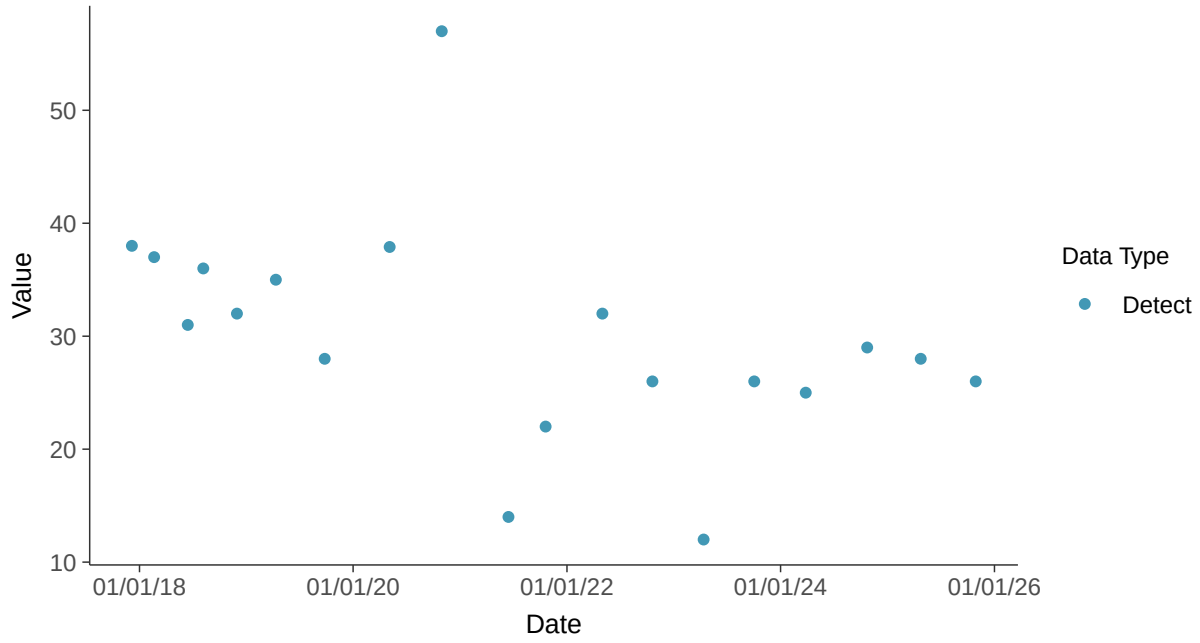


## Appendix IV: Lithium, MW-17006

ID: 19_2_117

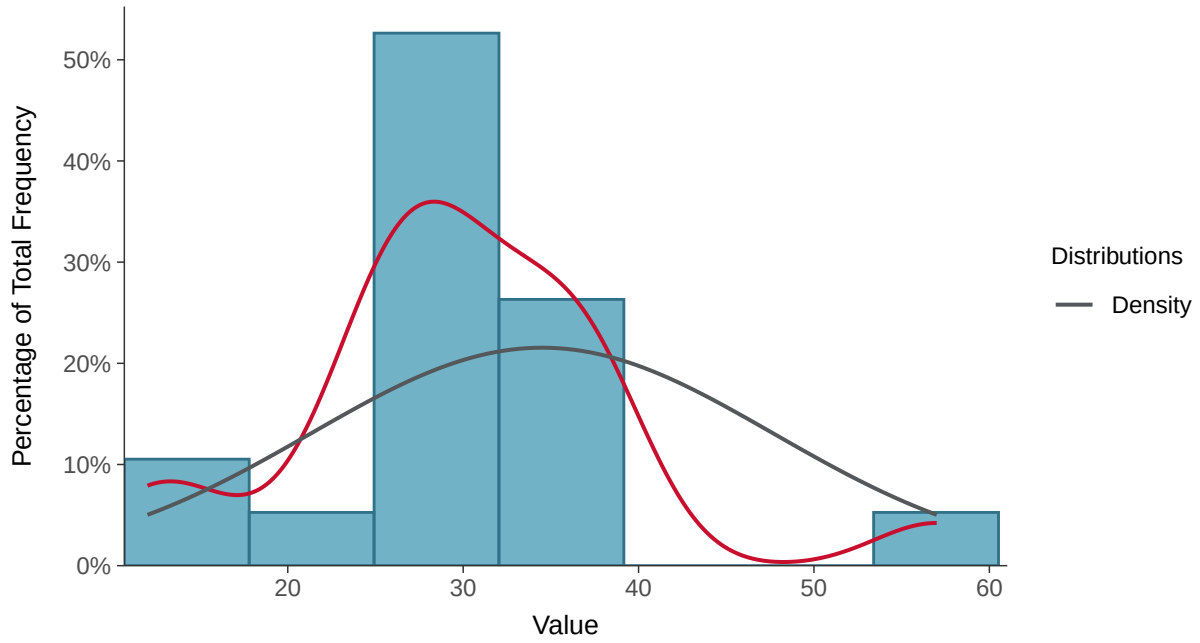
**Scatter Plot**

Lithium, MW-17006 (ug/L)



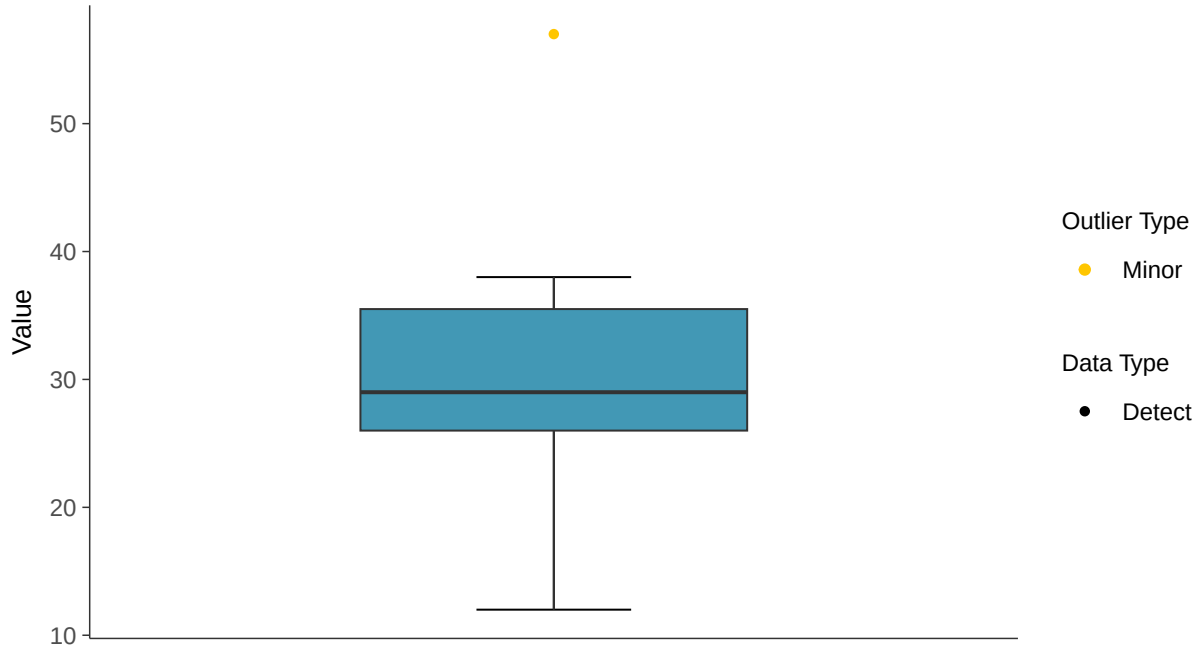

**Histogram**

Lithium, MW-17006 (ug/L)



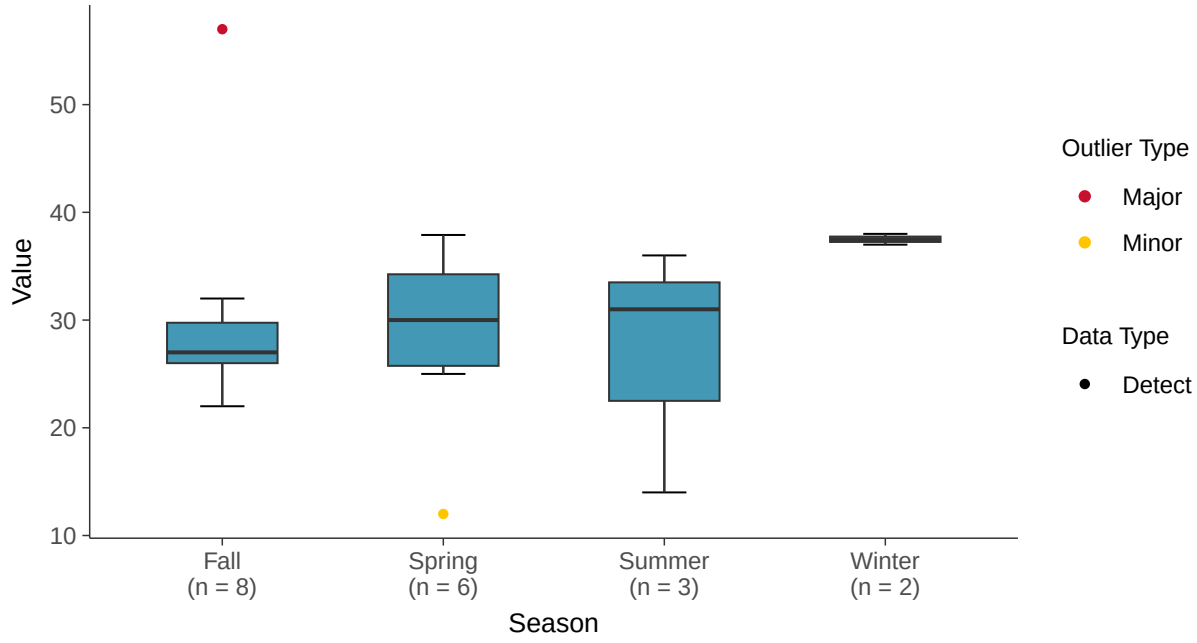
## Boxplot

Lithium, MW-17006 (ug/L)



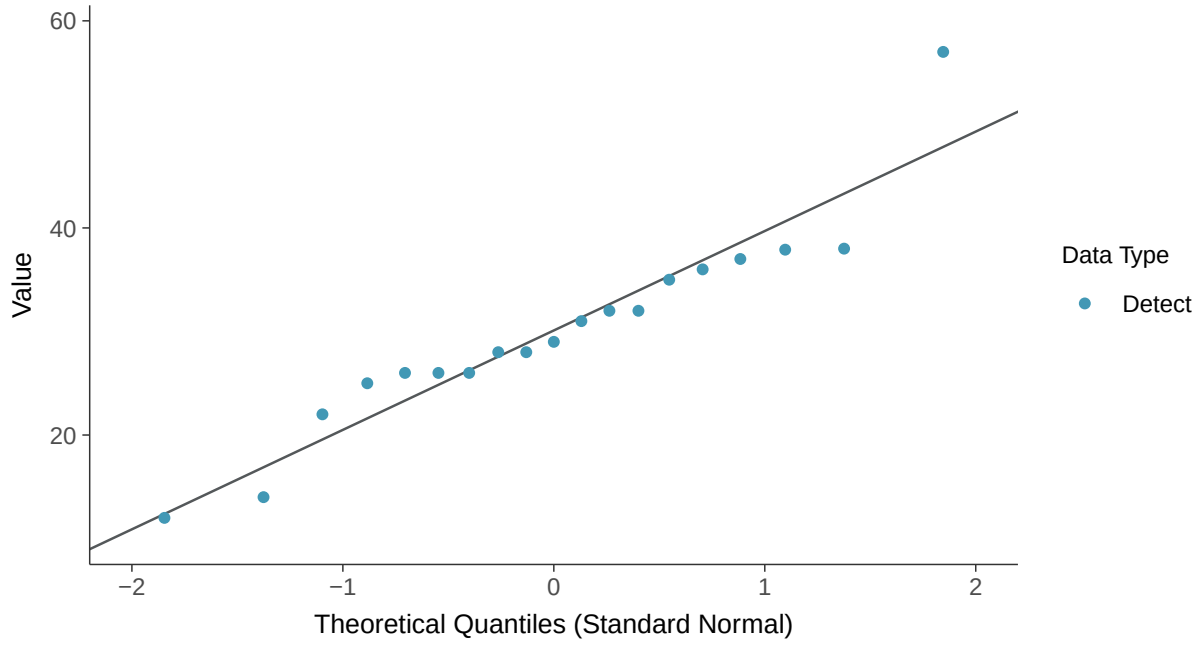

## Boxplot by Season

Lithium, MW-17006 (ug/L)



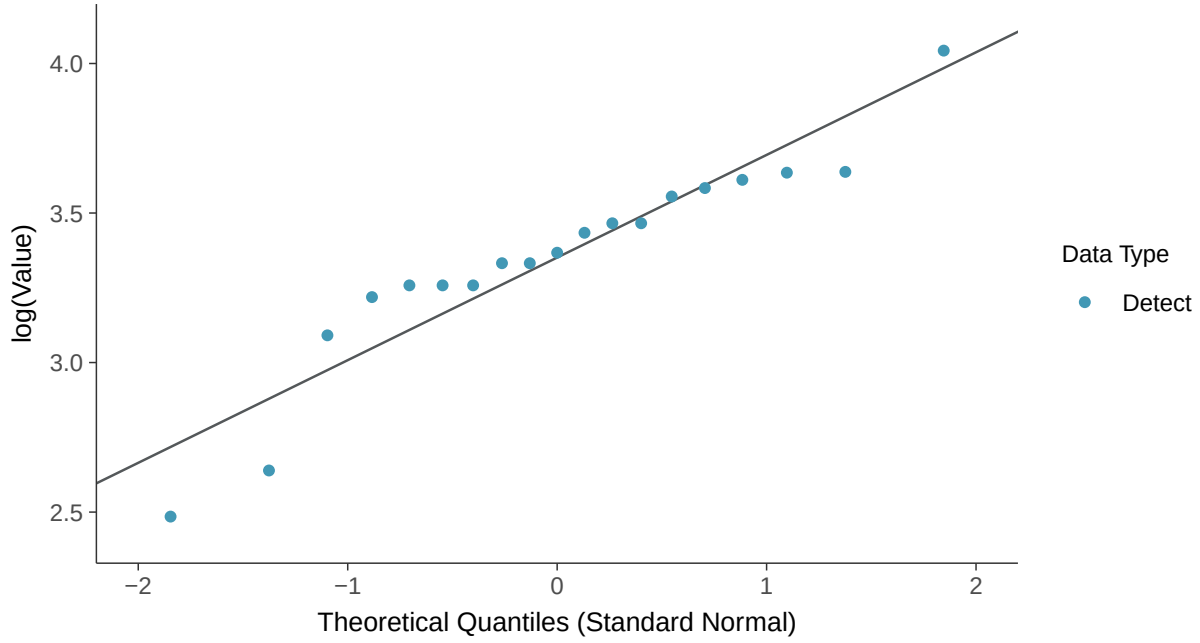
**Normal Q-Q plot**

Lithium, MW-17006 (ug/L)



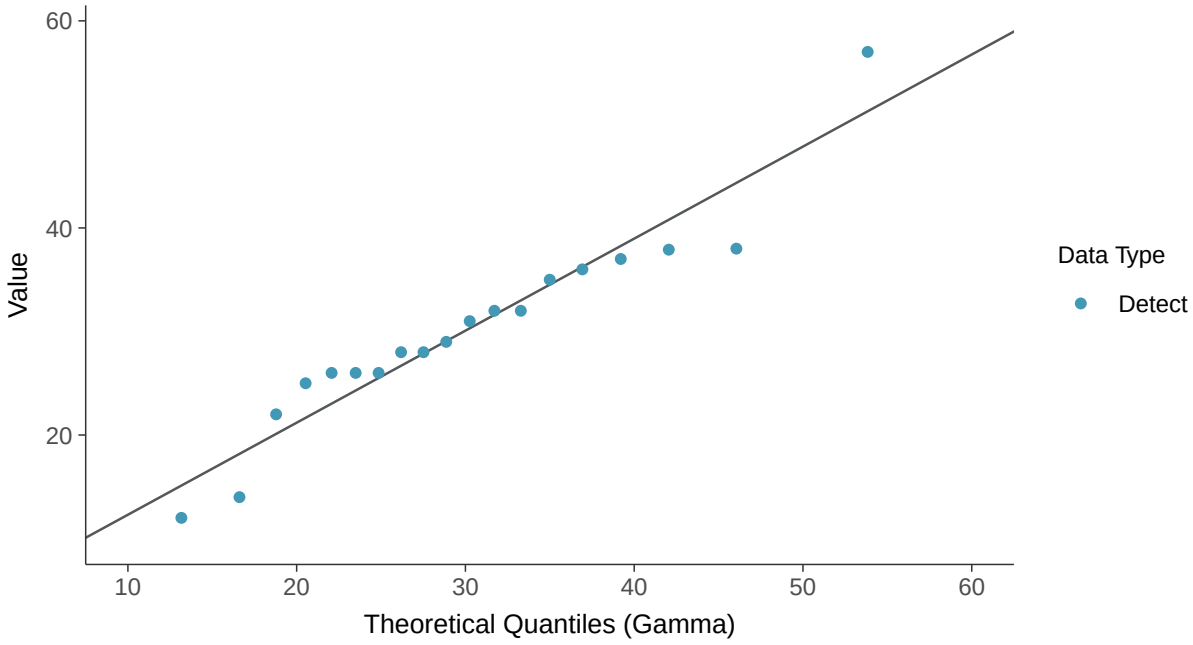

**Lognormal Q-Q plot**

Lithium, MW-17006 (ug/L)



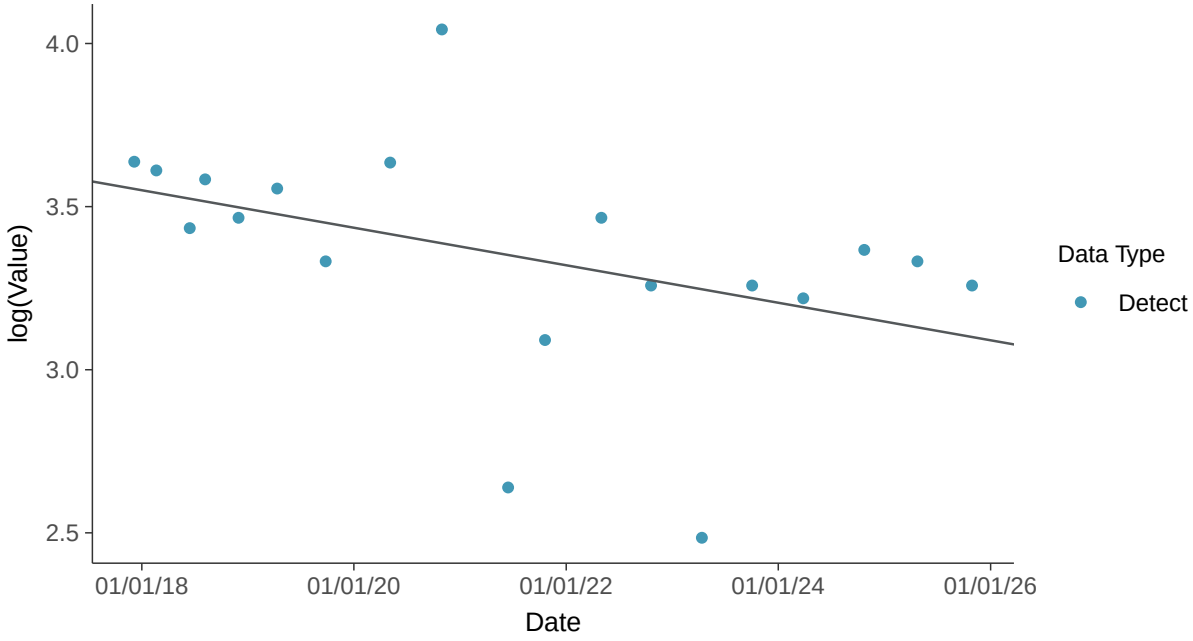
**Gamma Q-Q plot**

Lithium, MW-17006 (ug/L)



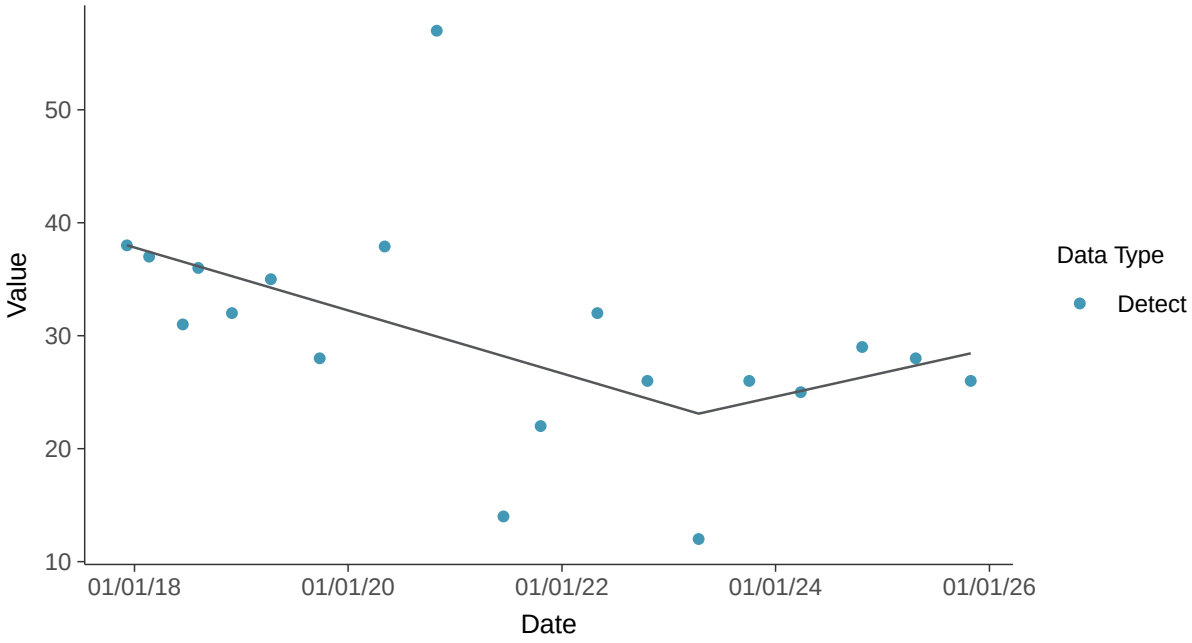

**Trend Regression: Lognormal MLE**

Lithium, MW-17006 (ug/L)



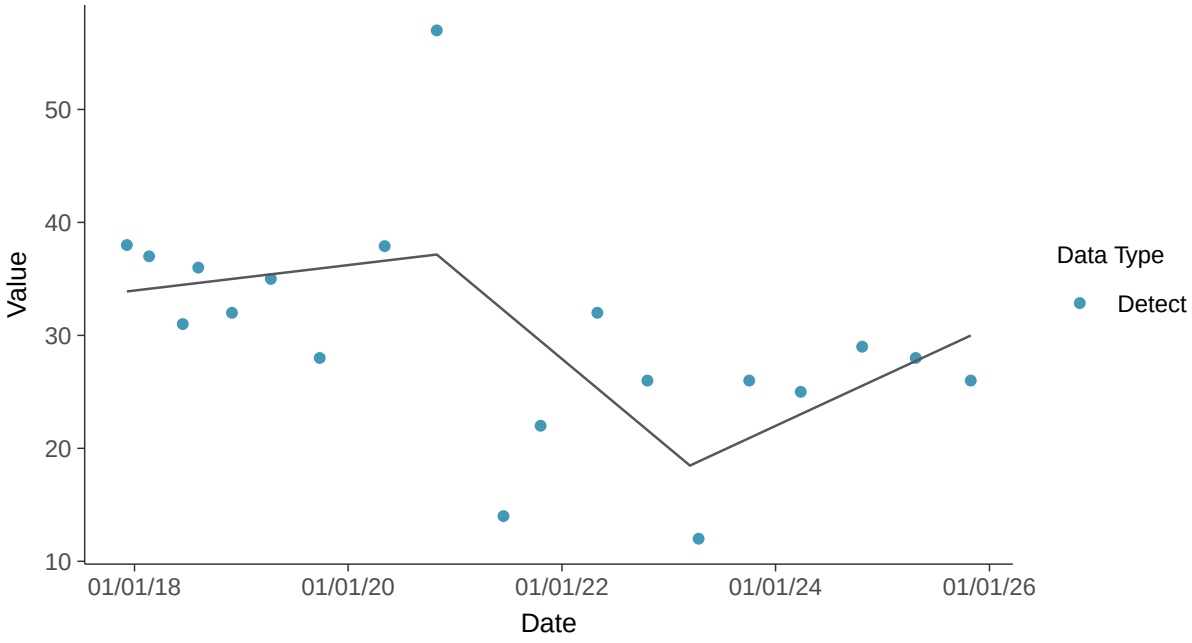
**Trend Regression: Piecewise Linear-Linear**

Lithium, MW-17006 (ug/L)



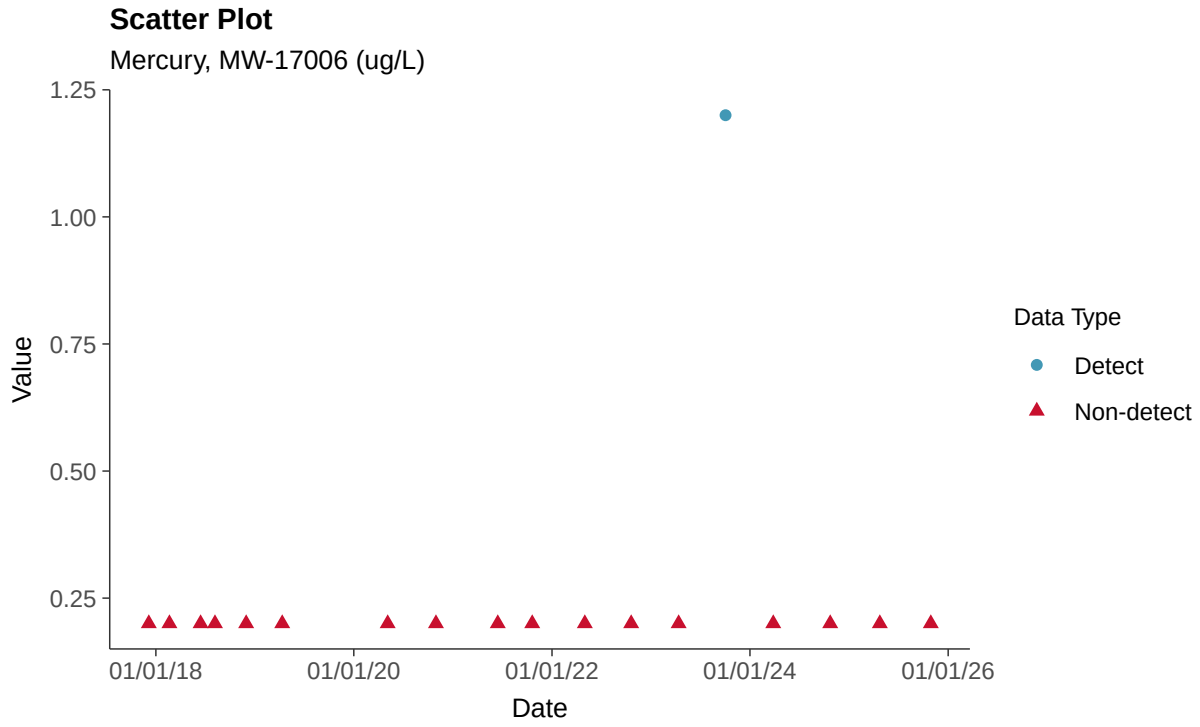

**Trend Regression: Piecewise Linear-Linear-Linear**

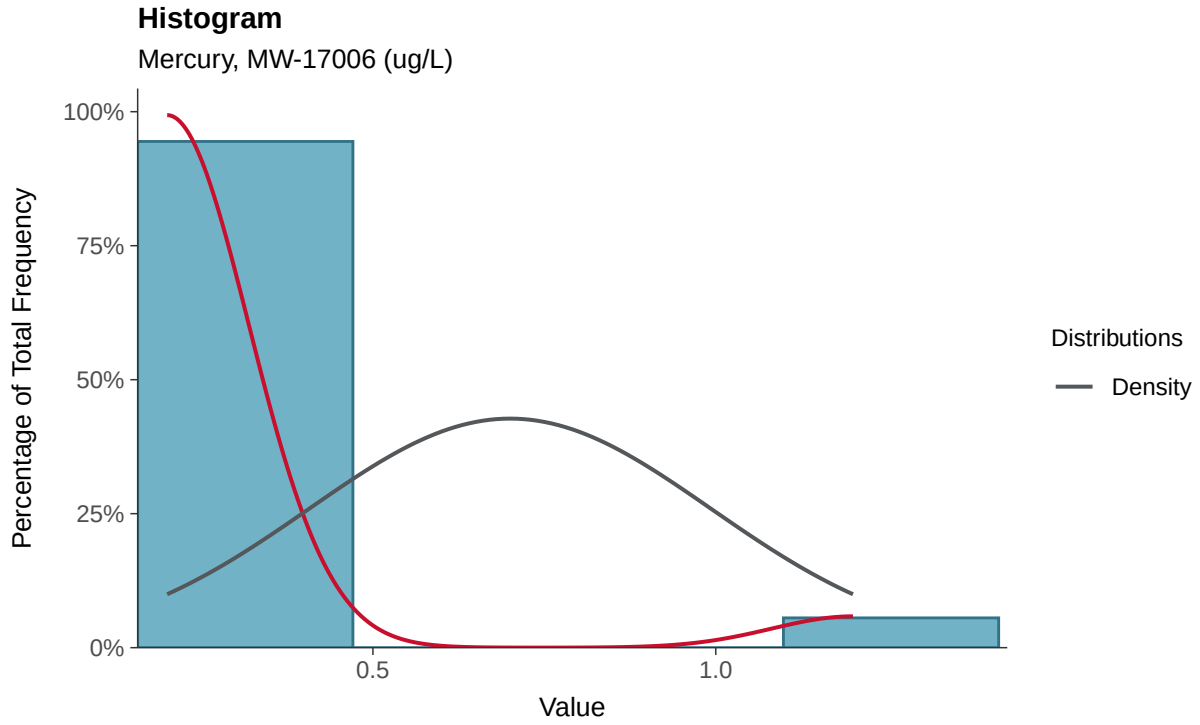
Lithium, MW-17006 (ug/L)



## Appendix IV: Mercury, MW-17006

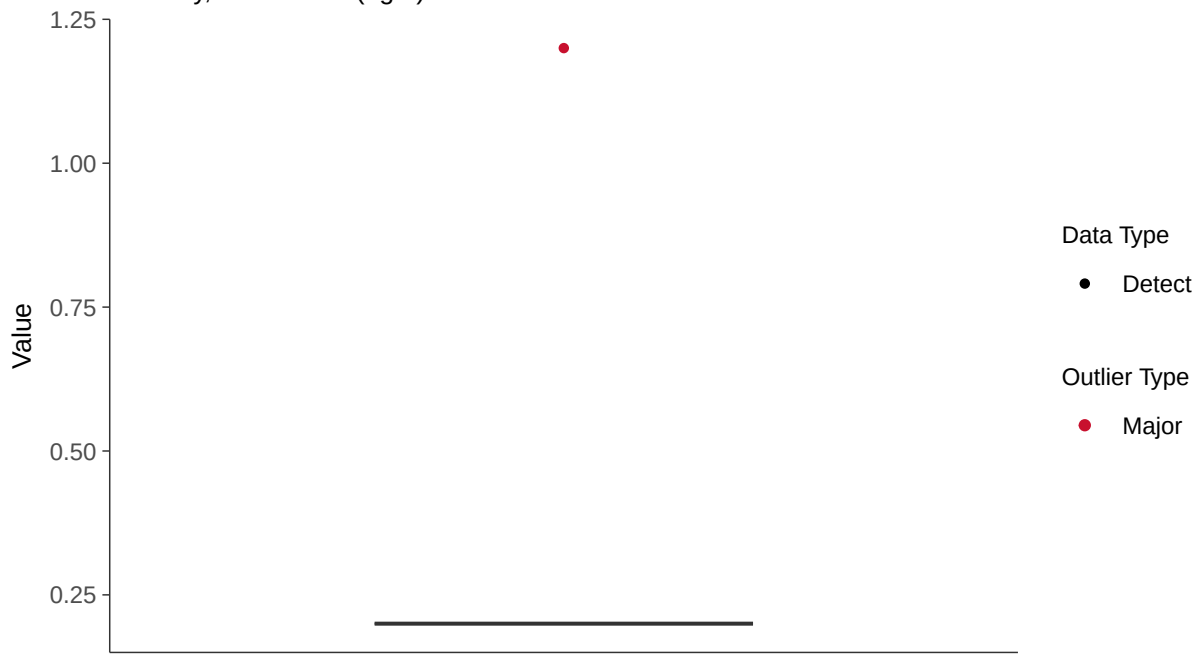
ID: 19_2_118



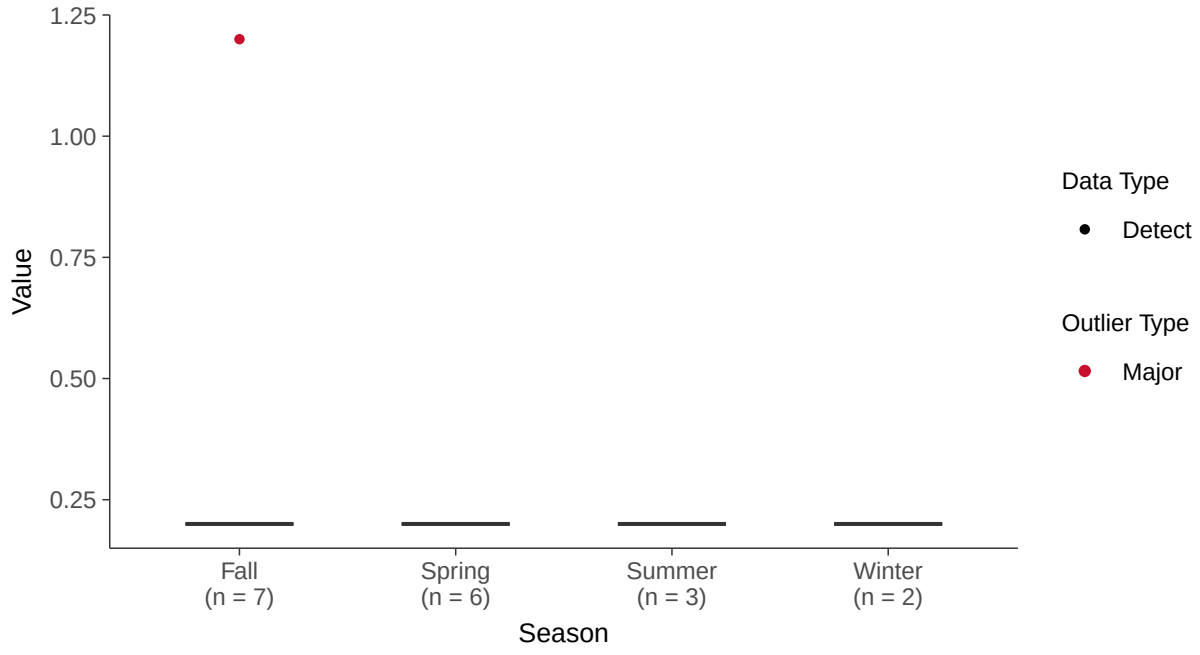
## Boxplot

Mercury, MW-17006 (ug/L)



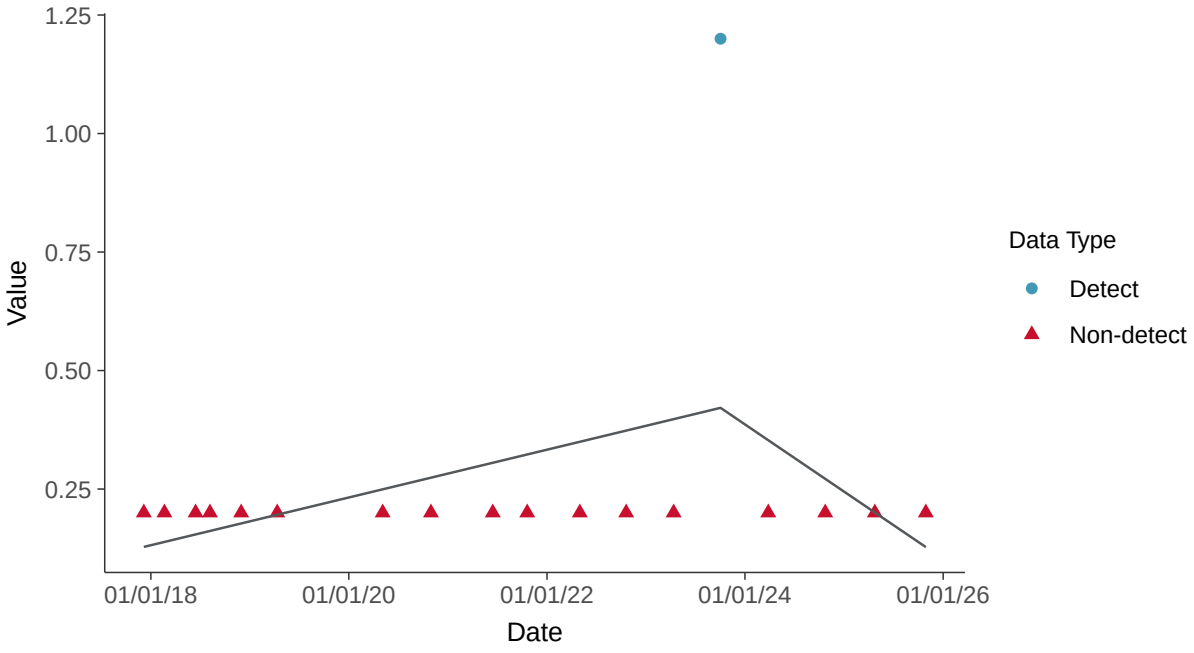

## Boxplot by Season

Mercury, MW-17006 (ug/L)



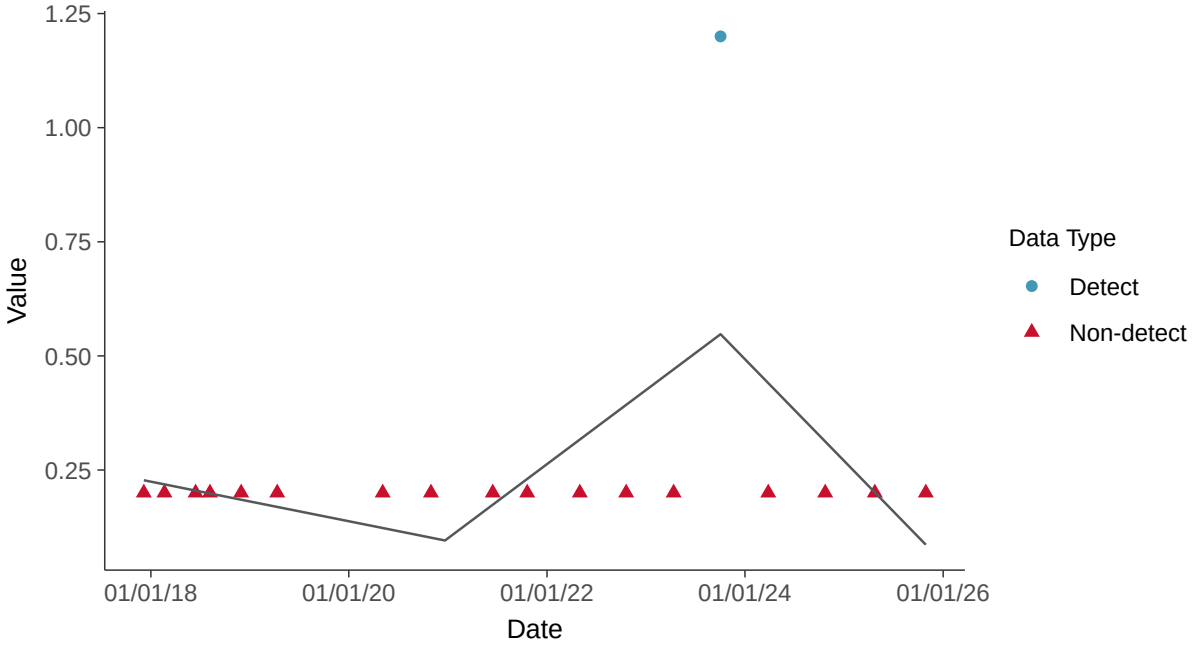
**Trend Regression: Piecewise Linear-Linear**

Mercury, MW-17006 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Mercury, MW-17006 (ug/L)

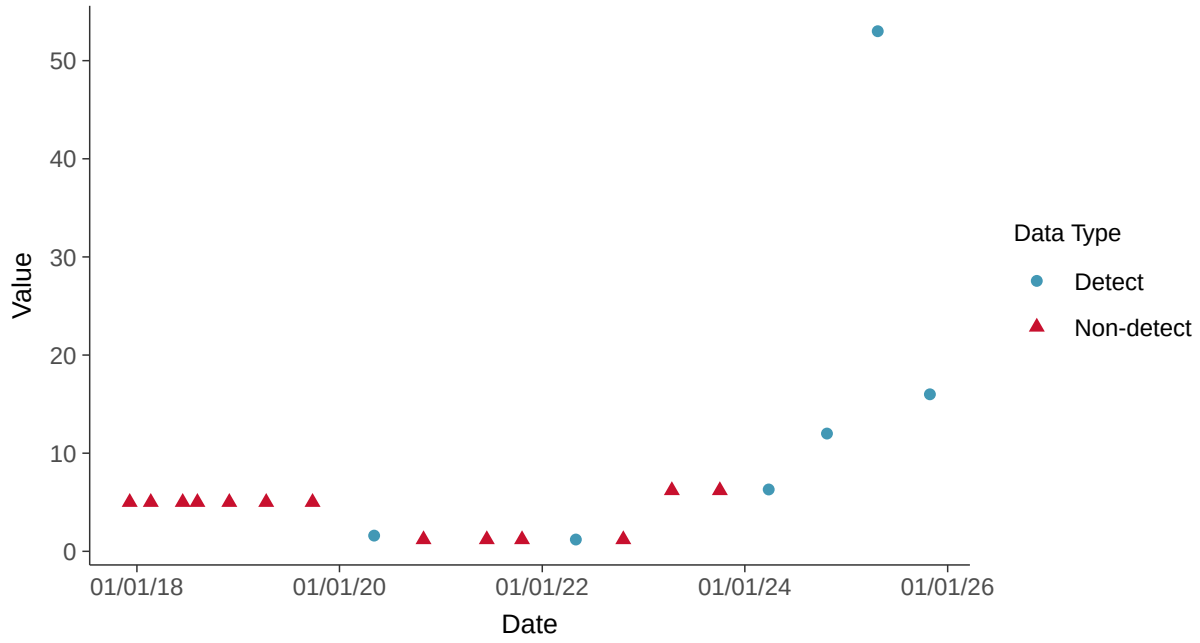


## Appendix IV: Molybdenum, MW-17006

ID: 19_2_119

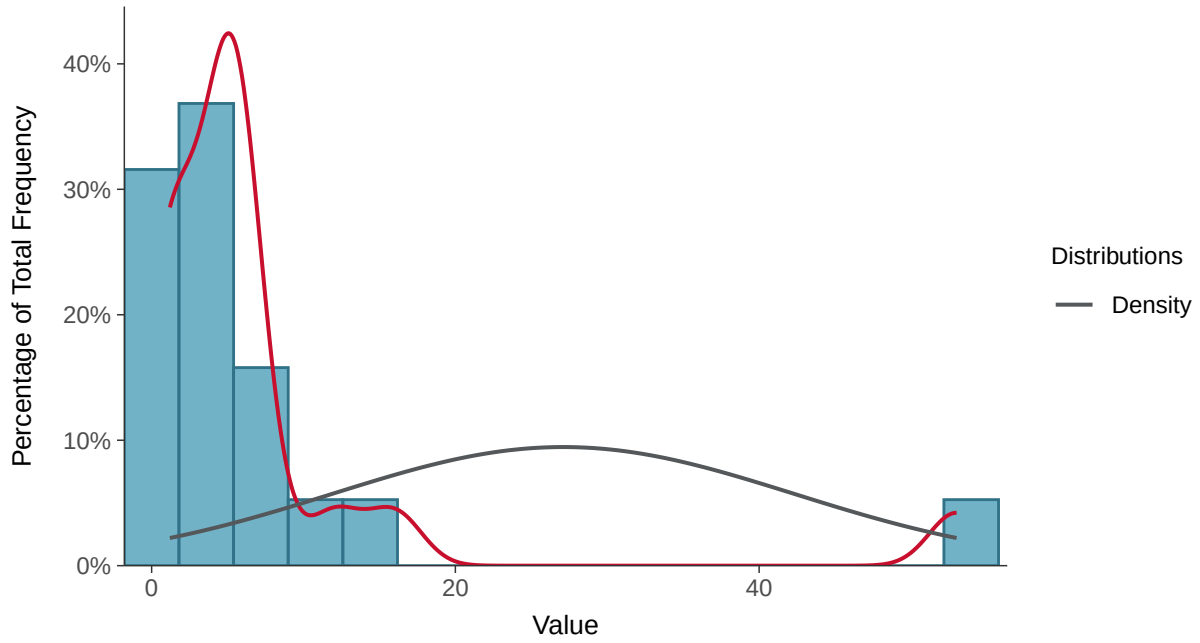
**Scatter Plot**

Molybdenum, MW-17006 (ug/L)



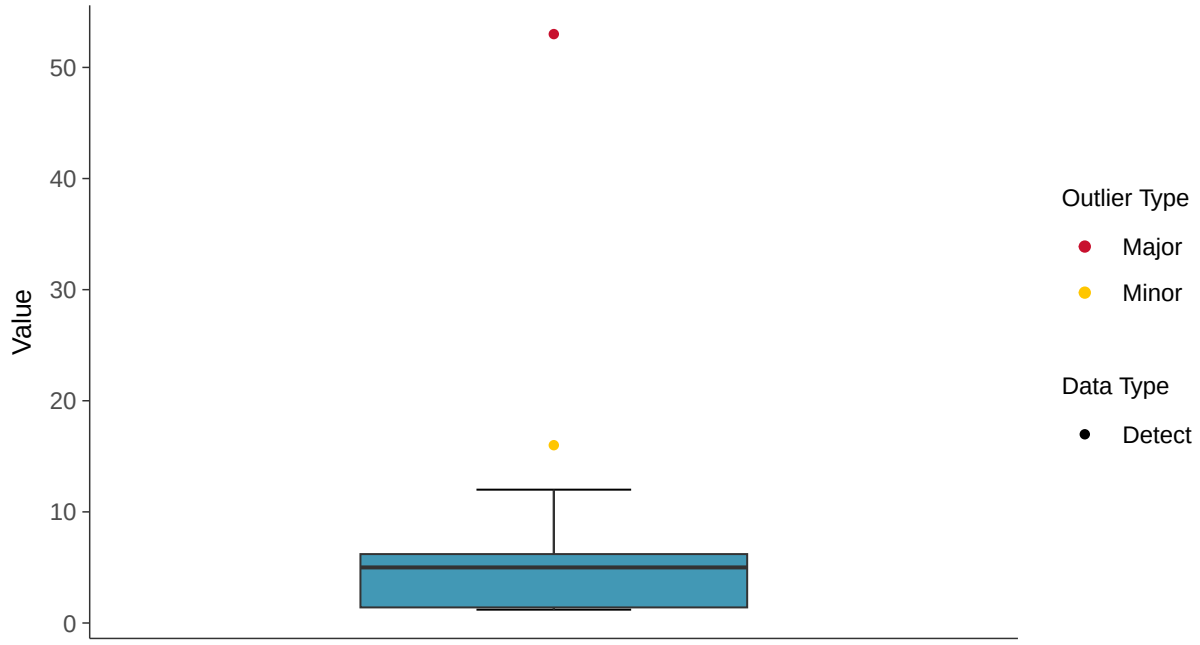

**Histogram**

Molybdenum, MW-17006 (ug/L)



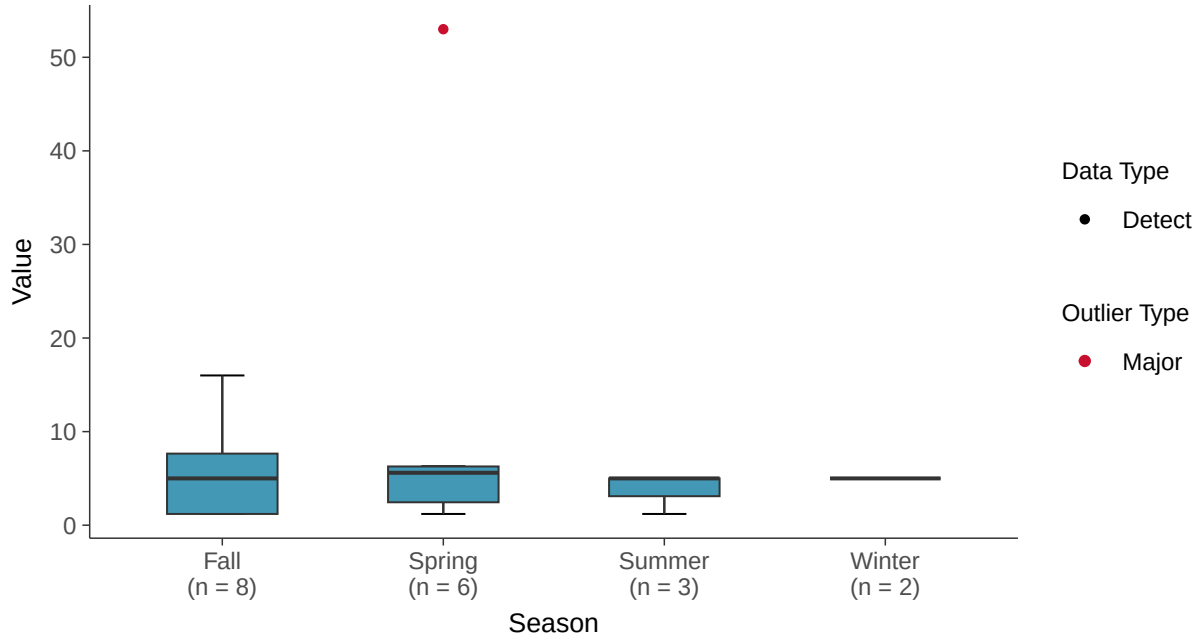
## Boxplot

Molybdenum, MW-17006 (ug/L)



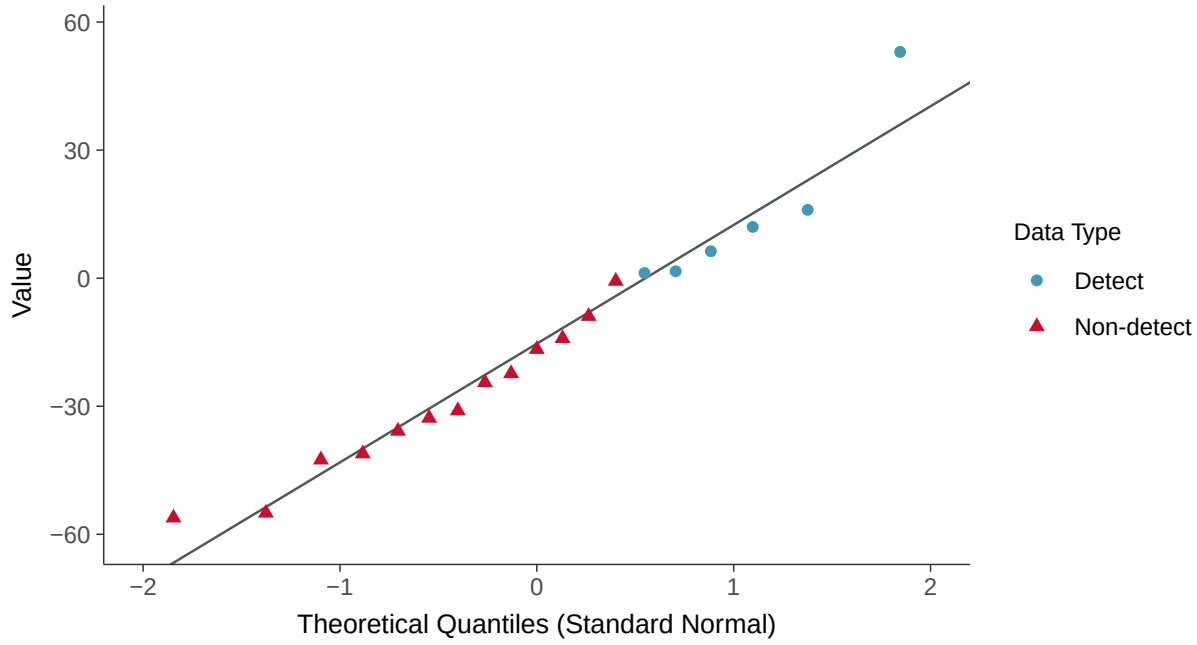

## Boxplot by Season

Molybdenum, MW-17006 (ug/L)



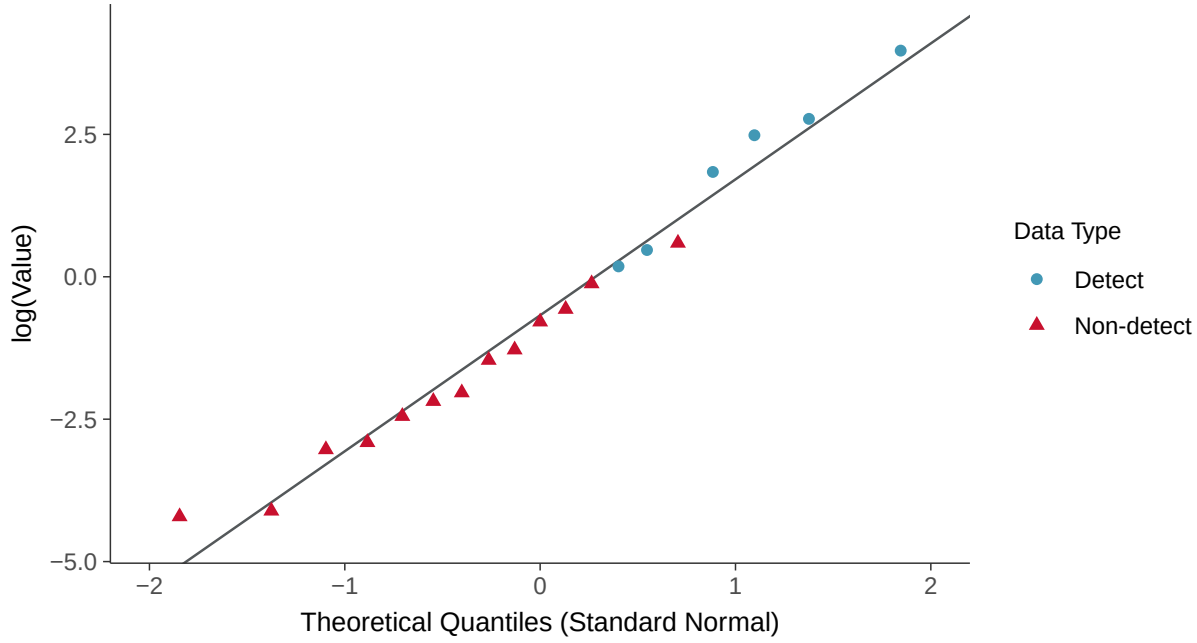
**Normal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17006 (ug/L)



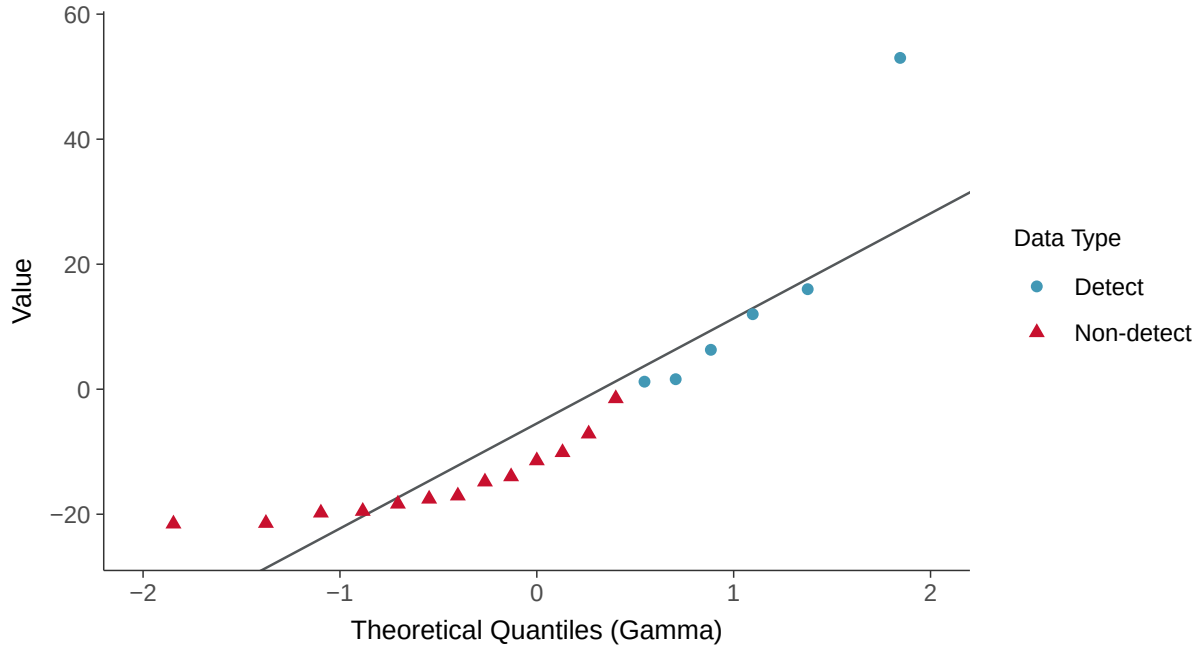

**Lognormal Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17006 (ug/L)



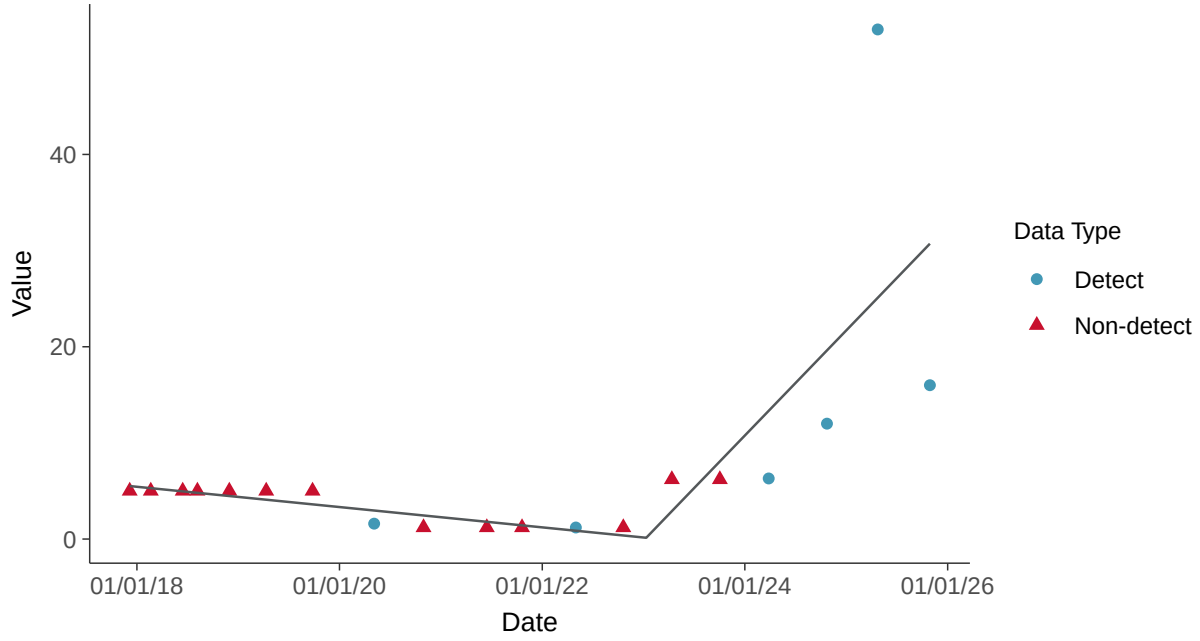
**Gamma Q-Q plot using ROS Imputed Estimates**

Molybdenum, MW-17006 (ug/L)



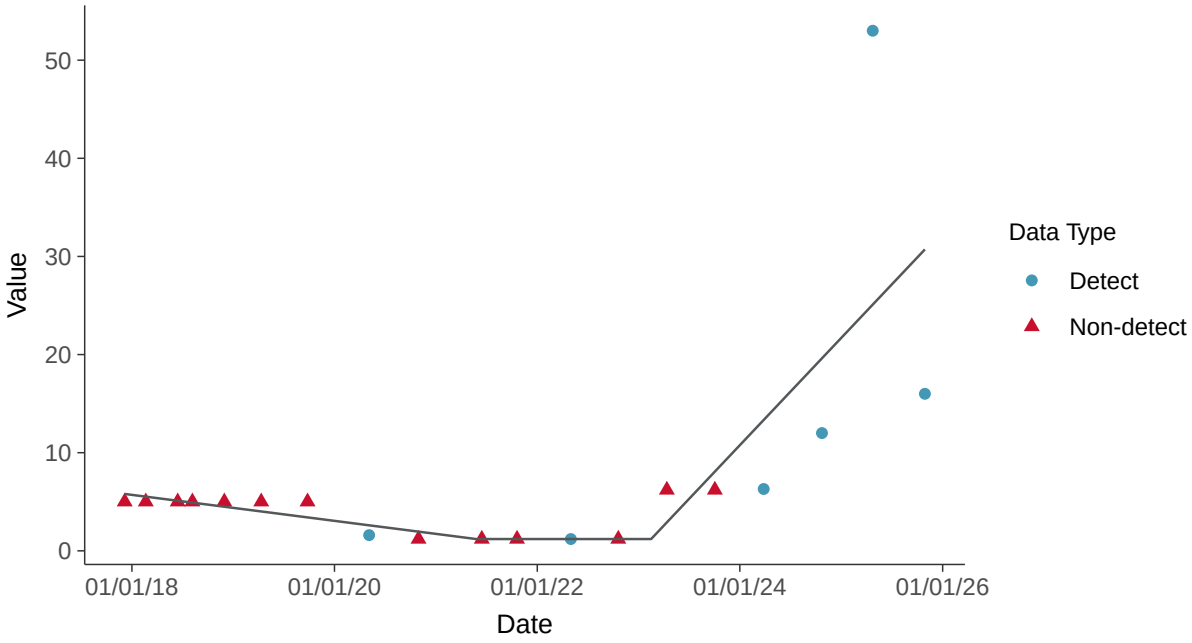

**Trend Regression: Piecewise Linear-Linear**

Molybdenum, MW-17006 (ug/L)



**Trend Regression: Piecewise Linear-Linear-Linear**

Molybdenum, MW-17006 (ug/L)

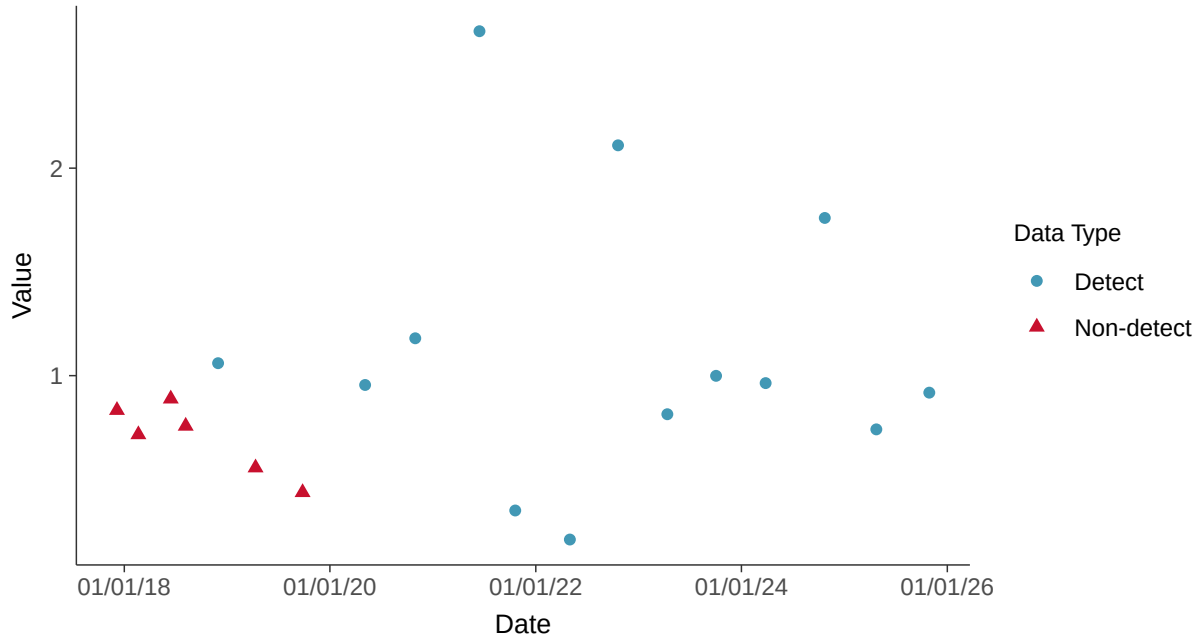


## Appendix IV: Radium-226+228, MW-17006

ID: 19_2_125

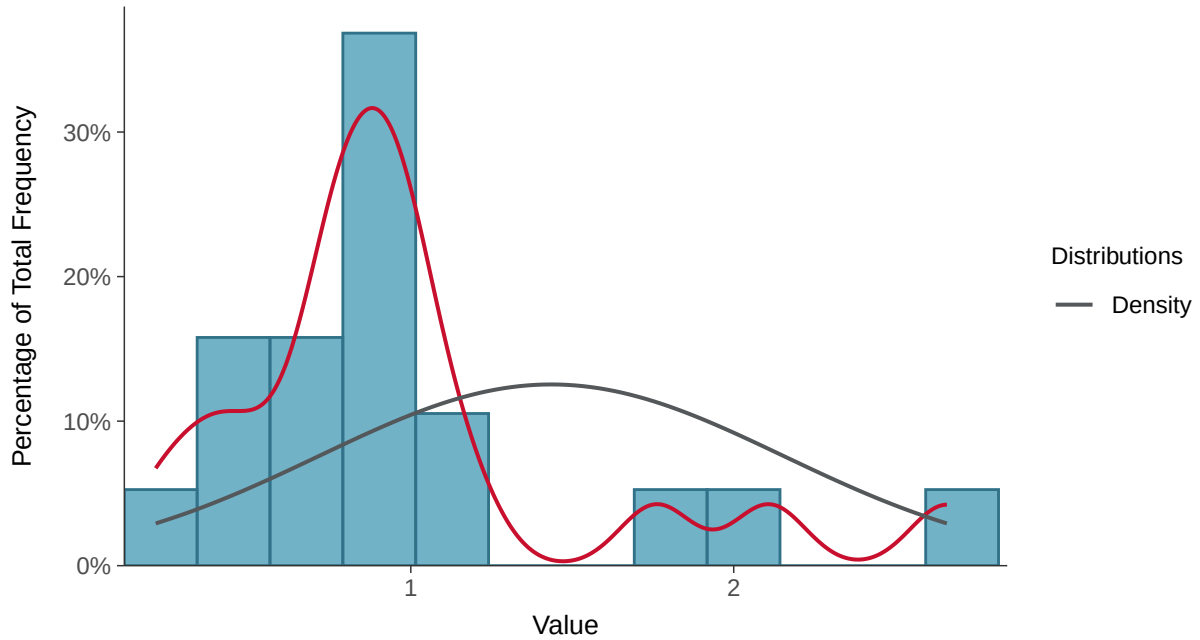
**Scatter Plot**

Radium-226+228, MW-17006 (pCi/L)



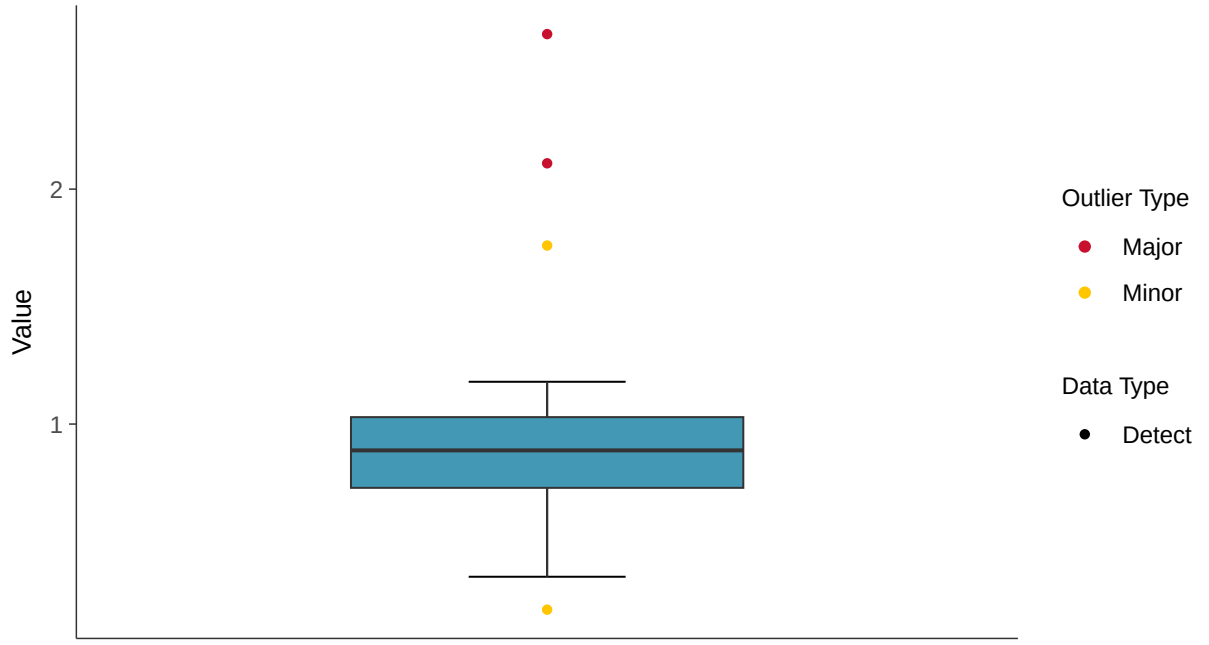

**Histogram**

Radium-226+228, MW-17006 (pCi/L)



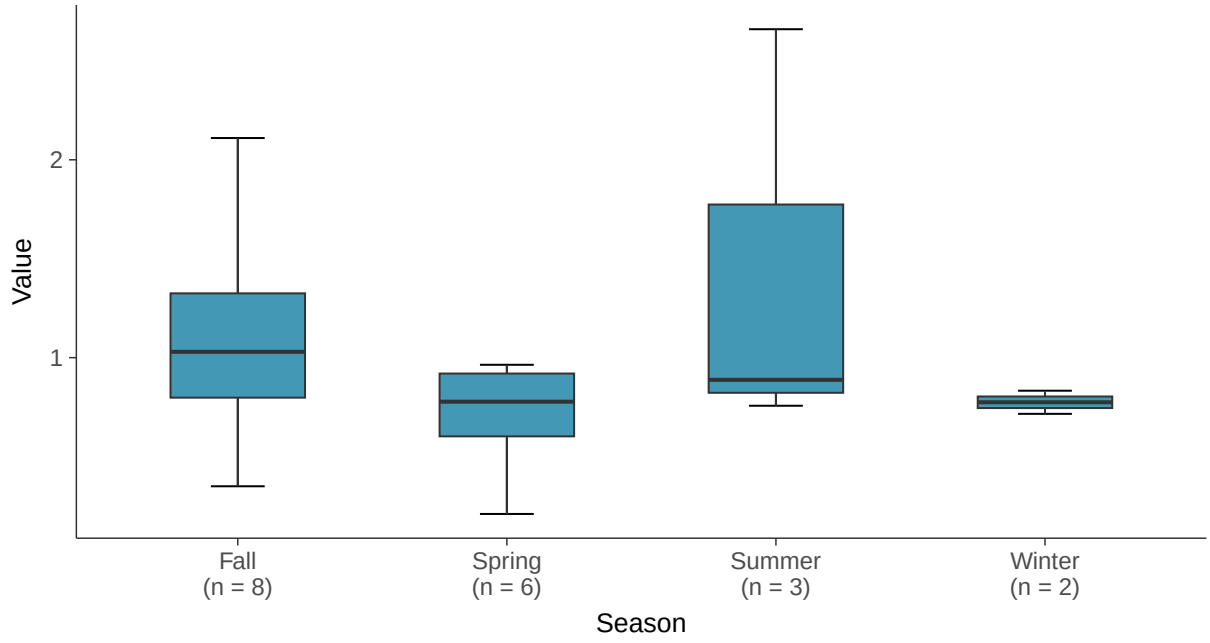
## Boxplot

Radium-226+228, MW-17006 (pCi/L)



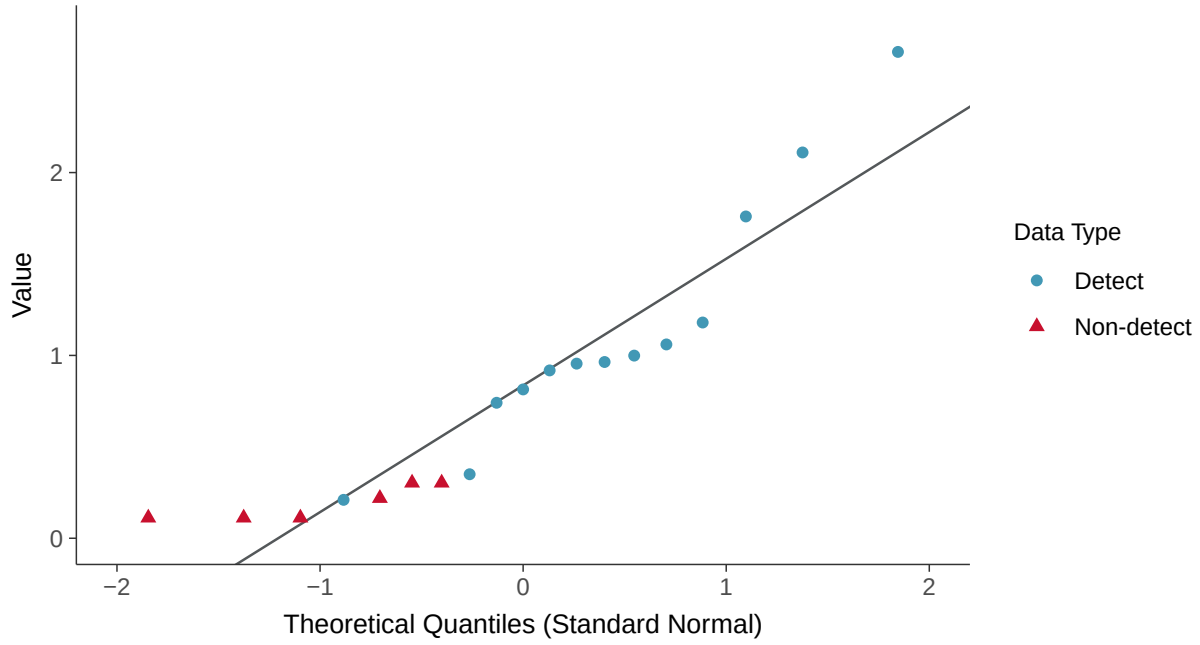

## Boxplot by Season

Radium-226+228, MW-17006 (pCi/L)



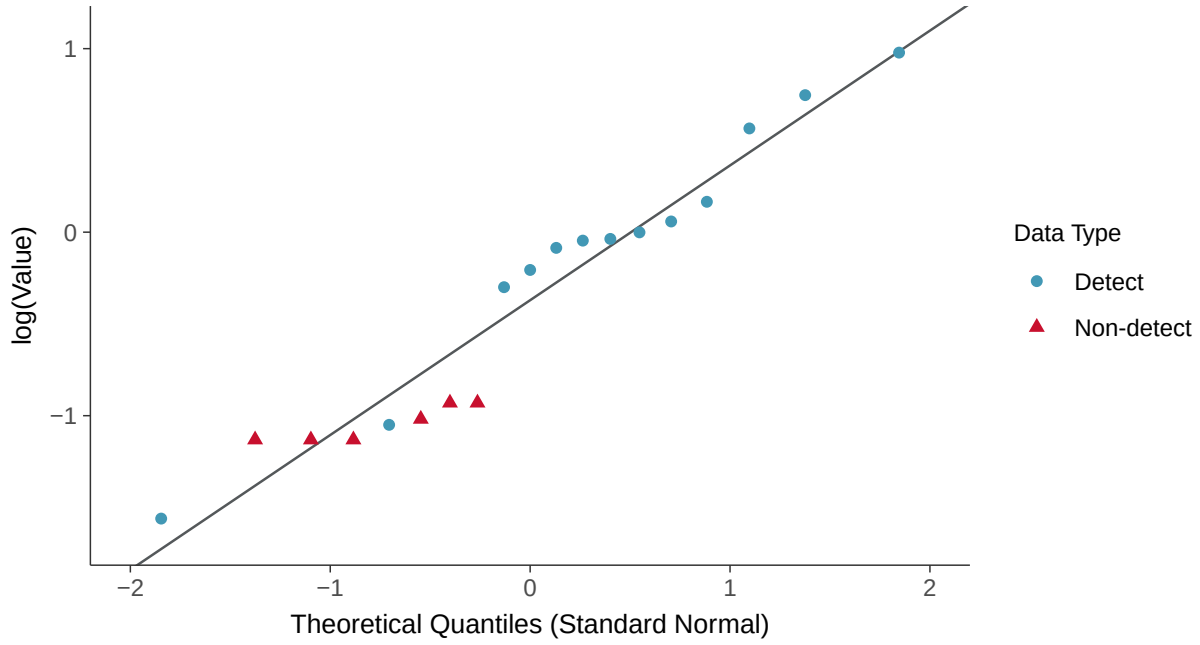
**Normal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17006 (pCi/L)



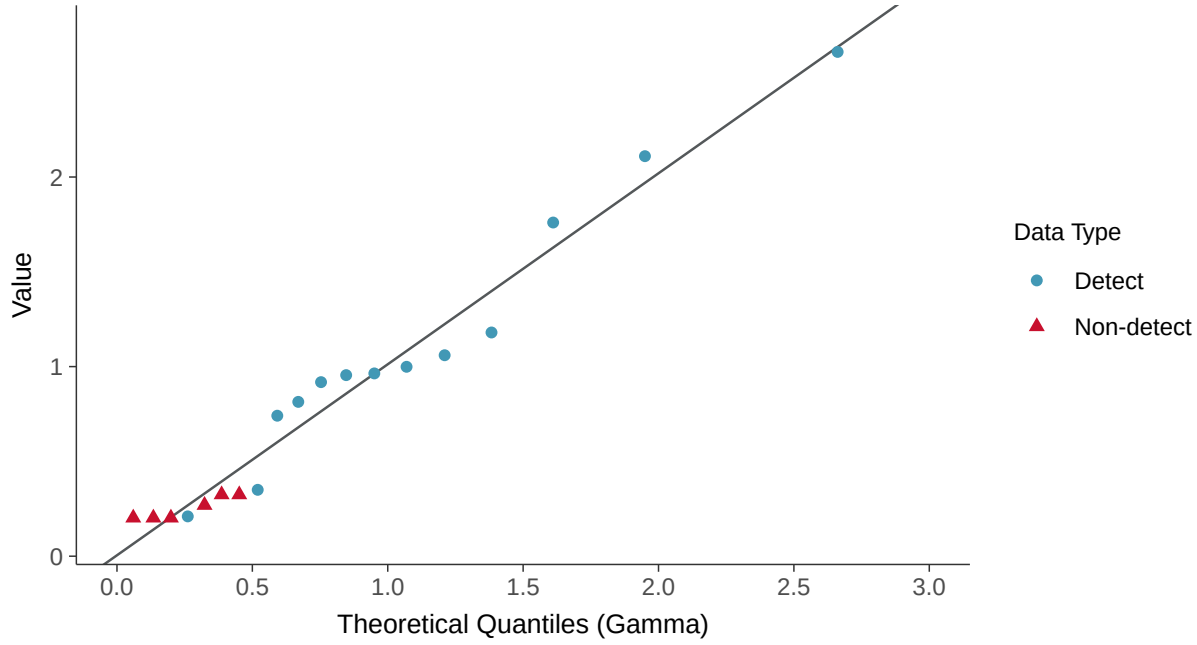

**Lognormal Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17006 (pCi/L)



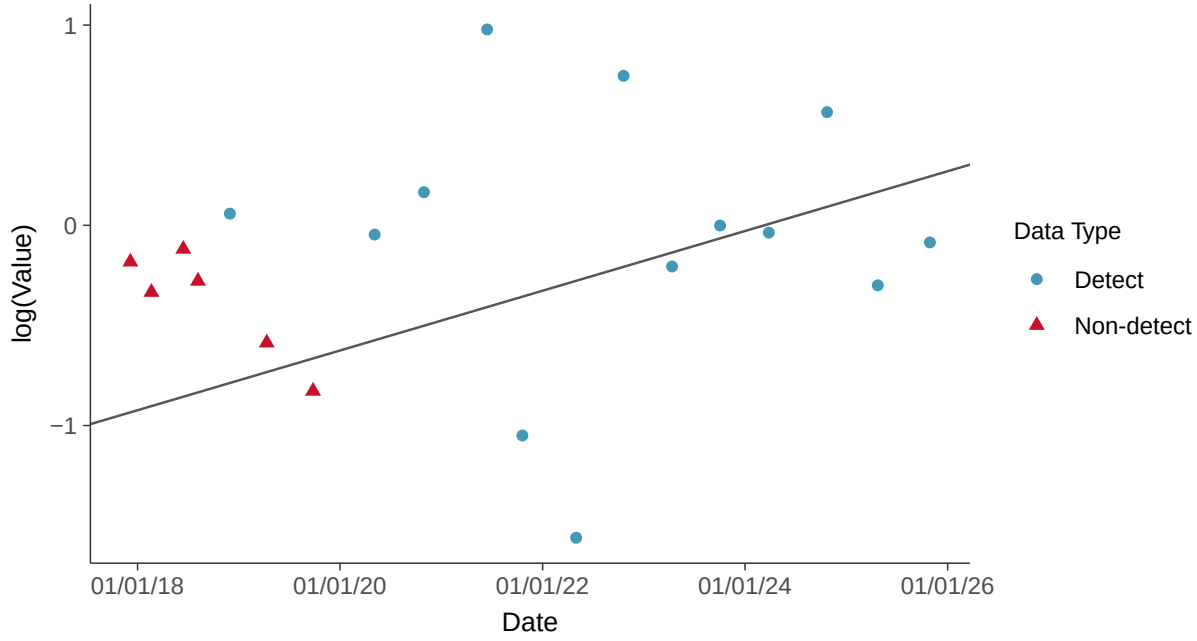
**Gamma Q-Q plot using ROS Imputed Estimates**

Radium-226+228, MW-17006 (pCi/L)



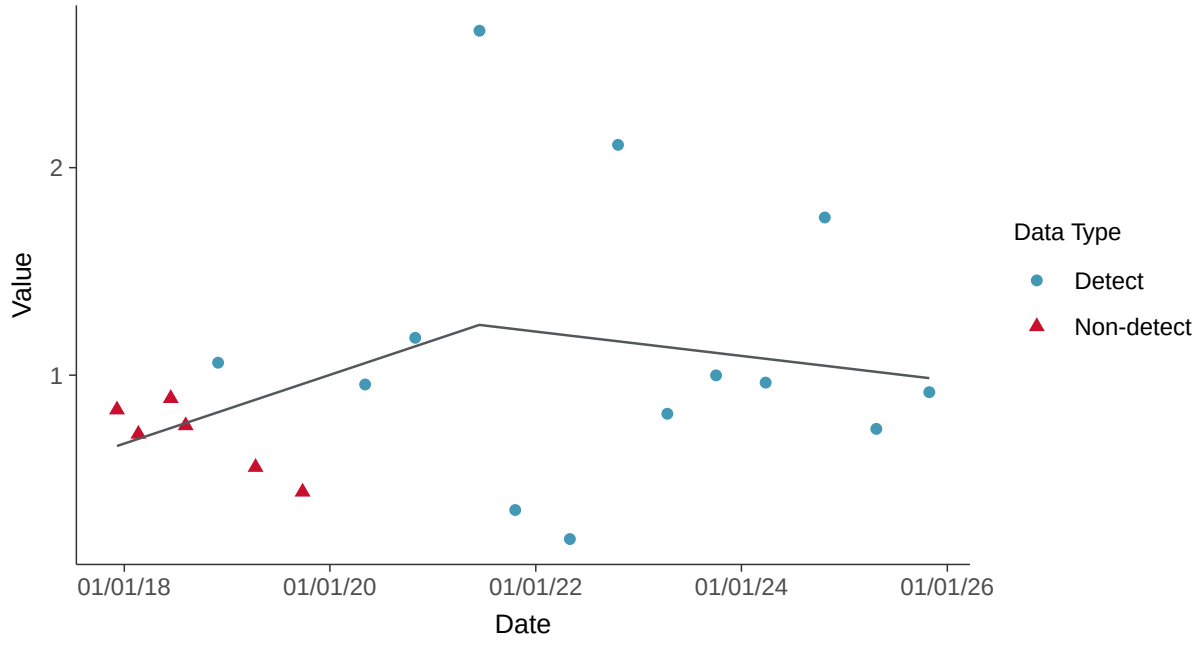

**Trend Regression: Lognormal MLE**

Radium-226+228, MW-17006 (pCi/L)



## Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-17006 (pCi/L)

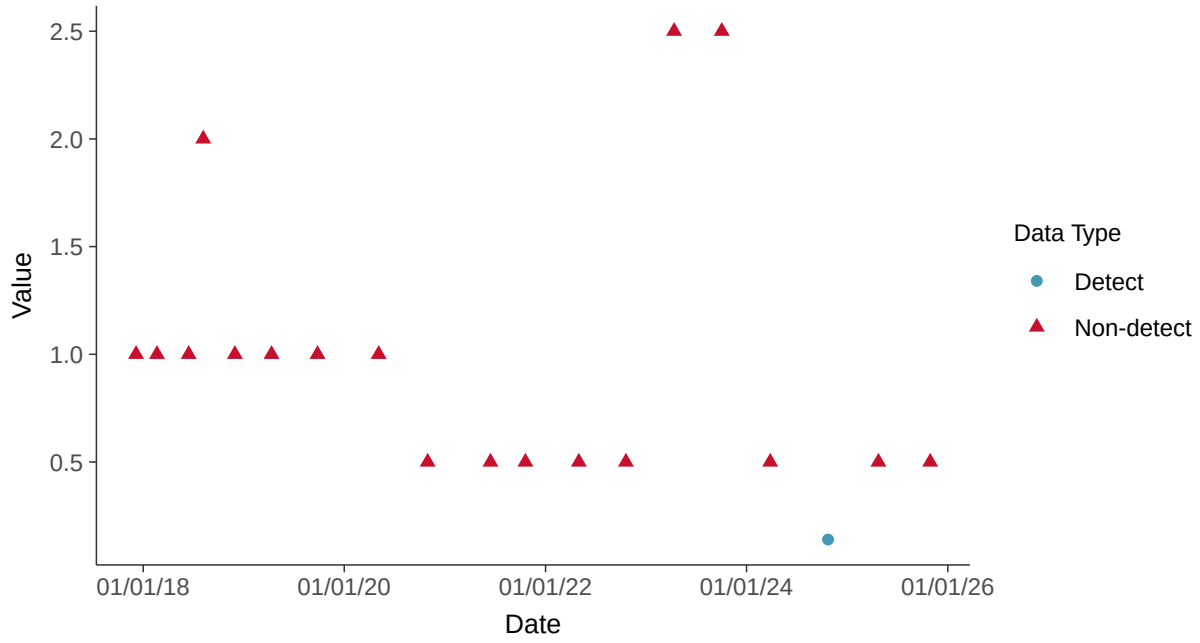


## Appendix IV: Selenium, MW-17006

ID: 19_2_127

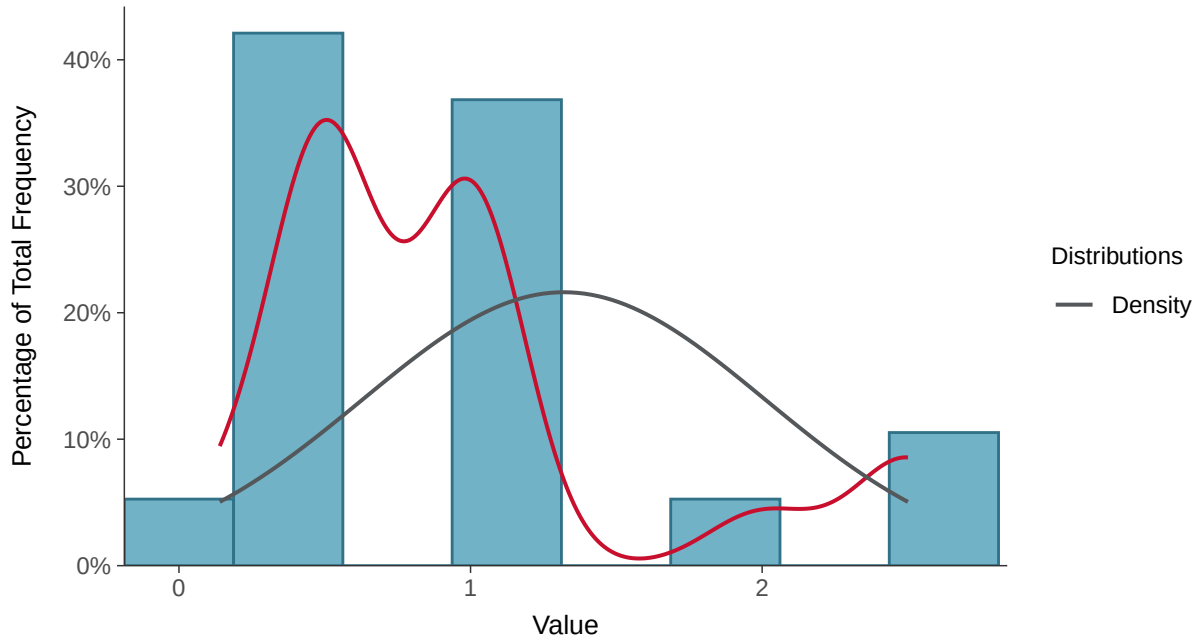
**Scatter Plot**

Selenium, MW-17006 (ug/L)



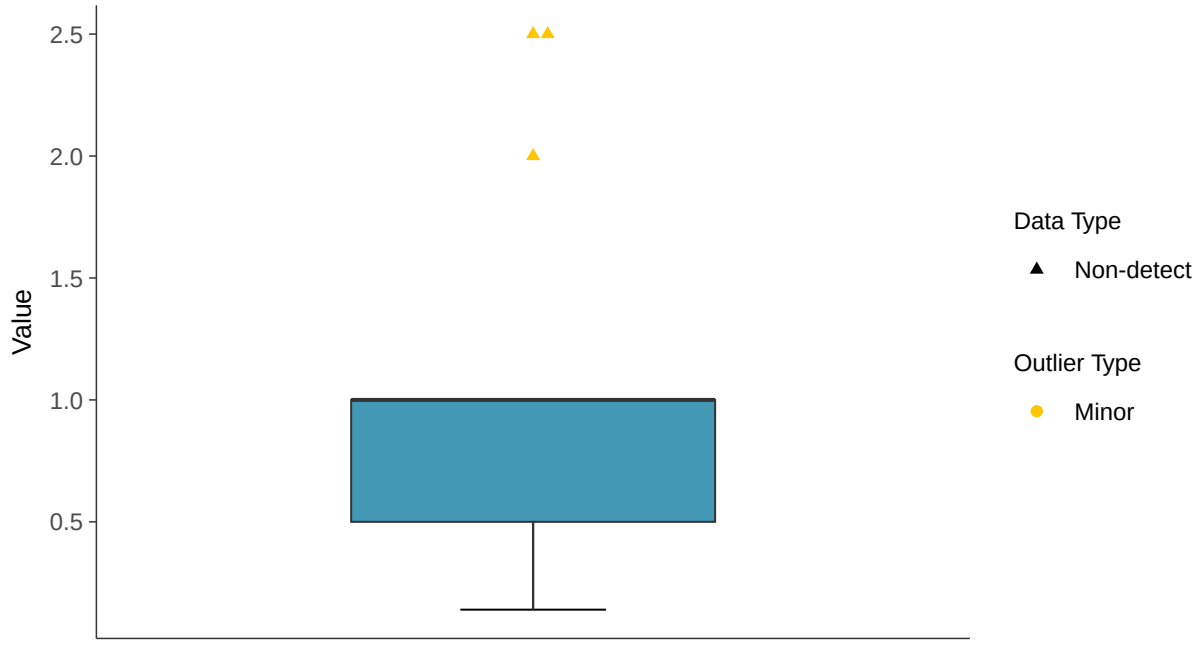

**Histogram**

Selenium, MW-17006 (ug/L)



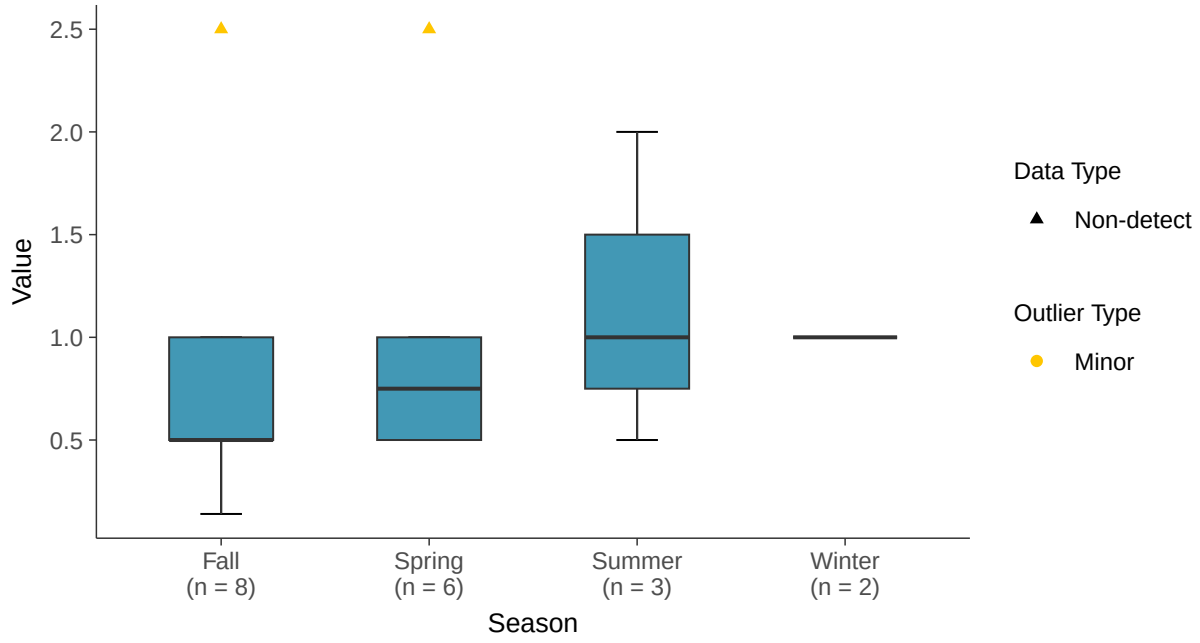
## Boxplot

Selenium, MW-17006 (ug/L)



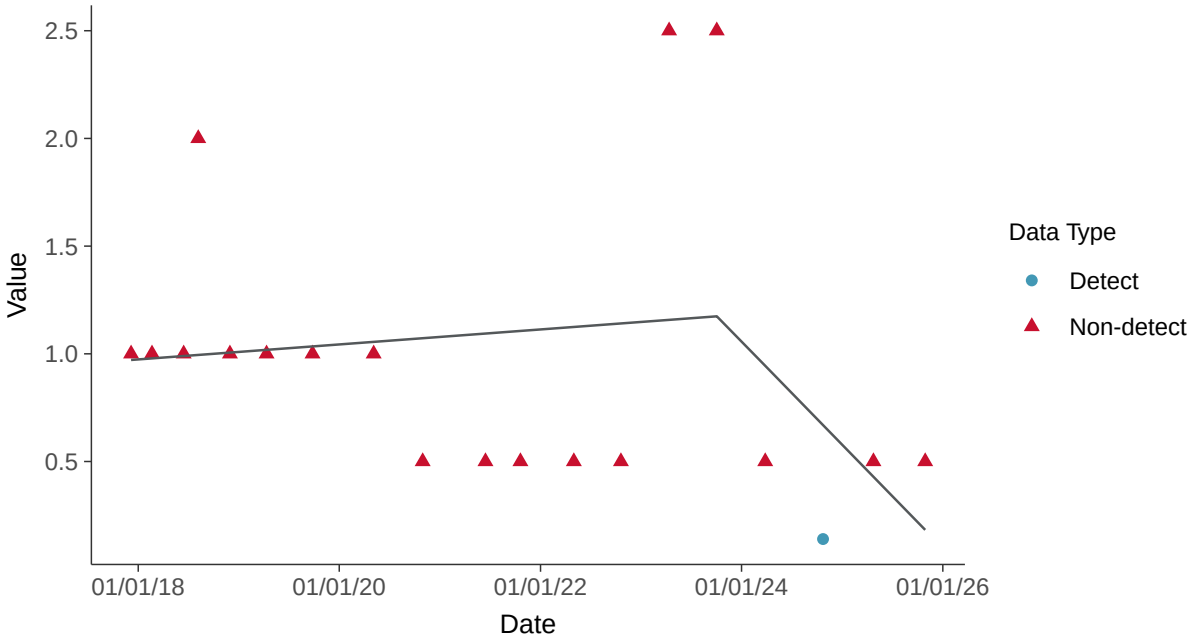

## Boxplot by Season

Selenium, MW-17006 (ug/L)



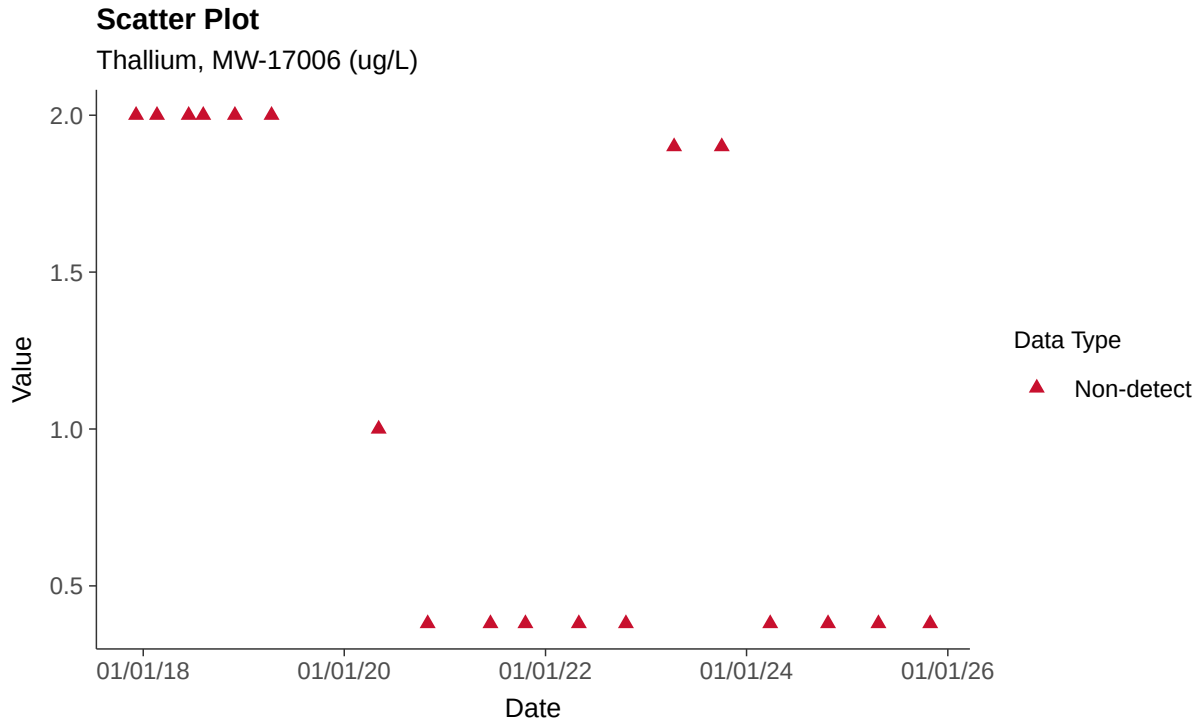
**Trend Regression: Piecewise Linear-Linear**

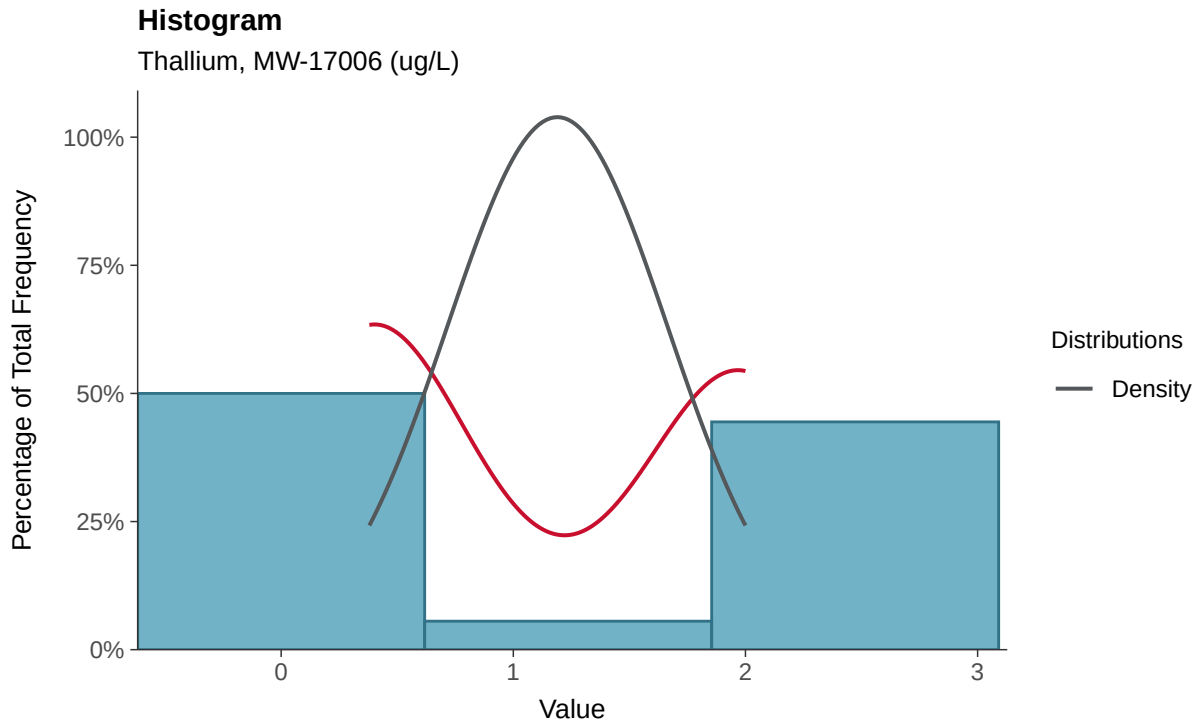
Selenium, MW-17006 (ug/L)



## Appendix IV: Thallium, MW-17006

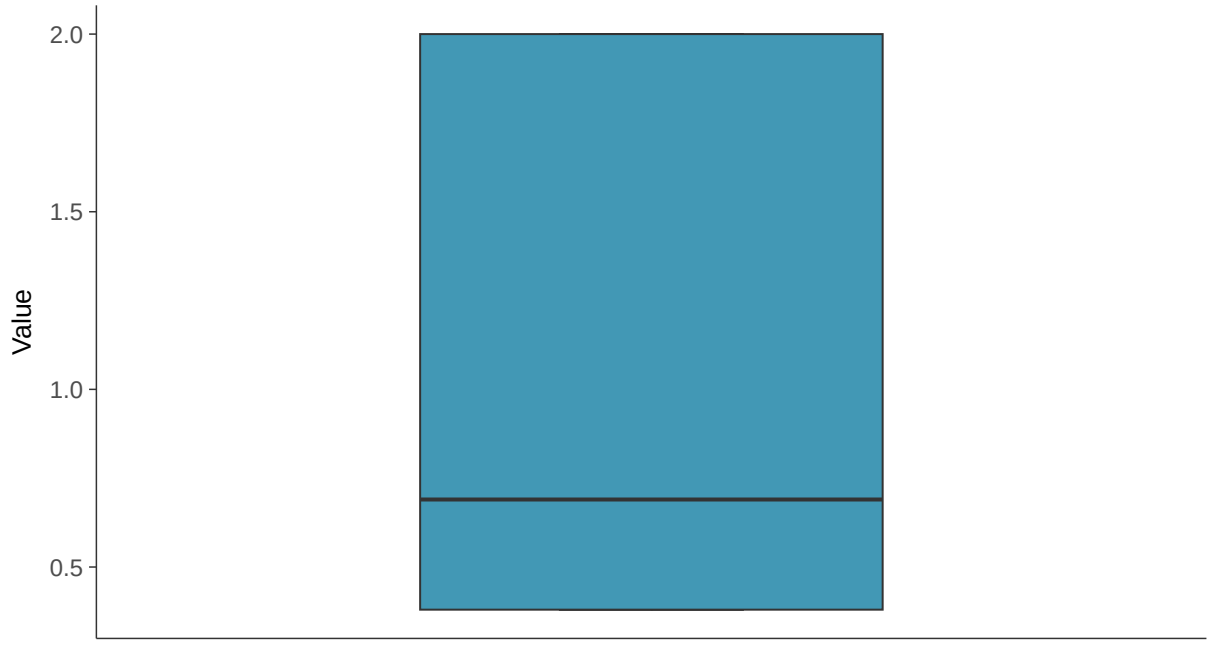
ID: 19_2_131



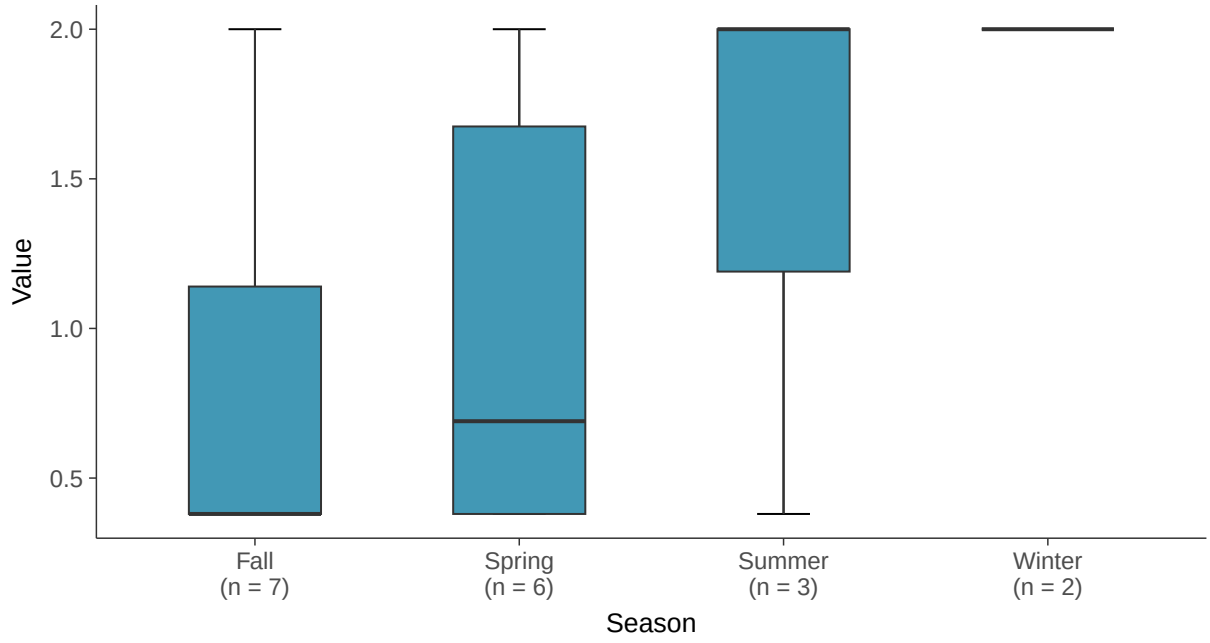
**Boxplot**

Thallium, MW-17006 (ug/L)



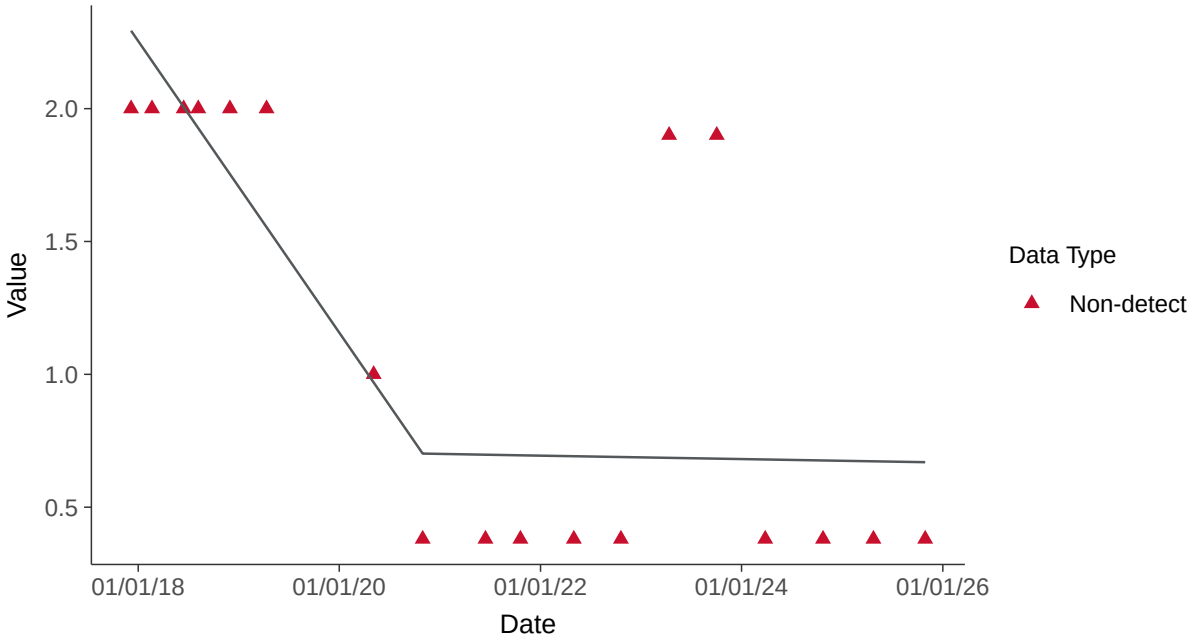

**Boxplot by Season**

Thallium, MW-17006 (ug/L)



**Trend Regression: Piecewise Linear-Linear**

Thallium, MW-17006 (ug/L)




**Trend Regression: Piecewise Linear-Linear-Linear**

Thallium, MW-17006 (ug/L)

