



2024 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 31, 2025







Table of Contents

1.0	Introduction	1
2.0	Facility Description	4
2.1	Hydrogeology	4
2.2	Monitoring Well Network.....	5
3.0	Monitoring.....	6
3.2	Water Levels and Sample Collection	7
3.3	Analytical Testing	7
3.4	Data Validation and Data Management	8
4.0	Monitoring Results	8
4.1	Water Levels and Groundwater Flow Direction	8
4.2	Water Quality.....	10
5.0	Remedy Selection Progress Update	13
5.1	Source Control Measures Undertaken.....	13
5.2	Progress Towards Remedy Selection.....	14
6.0	Summary	14
7.0	References	15

List of Tables

Table 1. Dates of groundwater samples collected for each well in 2024 and the required monitoring programs for the BC Cobb facility.....	6
Table 2. Constituents of Interest	7
Table 3. Groundwater elevations measured in 2024	10
Table 4. CCR Rule GPS Values.....	11
Table 5. March 2024 Exceedances of Federal GPS.....	12
Table 6. October 2024 Exceedances of Federal GPS.....	12
Table 7. LCLs for Appendix IV Constituents for Wells with SSLs over GPS in March and October 2024	13



List of Figures

Figure 1. Vicinity Map for the former BC Cobb Power Plant	2
Figure 2. BC Cobb CCR Unit and Monitoring Wells	3
Figure 3. Groundwater Elevations in Impoundment Monitoring Wells.....	9

List of Appendices

Appendix A: Potentiometric Surface Maps
Appendix B: Laboratory Results Summary Tables
Appendix C: Laboratory Reports
Appendix D: Statistical Reports



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. These SSIs are from the original triggering event.	<ul style="list-style-type: none"> • MW-15009 – boron, pH • MW-15010 - boron • MW-15011 – boron, pH • MW-15012 – fluoride, pH • MW-15014 – boron, pH <ul style="list-style-type: none"> • MW-15015 – pH • 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. These SSLs are through the October 2024 sampling event.	MW-17001R – lithium MW-17002 – lithium
§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 unit is subject to the U.S. Environmental Protection Agency's (EPA) CCR Rule (40 CFR Part §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 and has been dewatering and removing CCR material from the ponds as part of closure efforts since August 2020. 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 2024, 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 in 2024:

- The status of the groundwater monitoring program for the CCR ponds at the end of 2024 is assessment monitoring and evaluation of potential remedies.



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



Figure 2. B.C. Cobb 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. 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. 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). In 2024 the groundwater elevations appear to have equilibrated following the dewatering, construction, and impoundments infill. 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 measurement required.

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-15016 through MW-15021 to better characterize shallow groundwater quality and flow direction (**Figure 2**). MW-15016R through MW-15021 now provide data on deeper groundwater while MW-17001R through MW-17006 provide shallow groundwater data.

There were no well installations, repairs, or abandonments in 2024.

3.0 Monitoring

The CEC initiated sample collection for background monitoring between December 2015 and July 2017. A detection monitoring event was completed by CEC in September 2017, which identified three COIs 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 semiannual assessment monitoring took place in June 2018.

Two rounds of semiannual groundwater sampling for assessment monitoring were conducted in 2024 in March and October. **Table 1** provides the well identification number, well location, the dates the samples were collected.

Table 1. Dates of groundwater samples collected for each well in 2024 and the required monitoring programs for the BC Cobb facility

Monitoring Well I.D.	Well Location	Dates Monitored	CCR Rule Monitoring Purpose
MW-15001	Water Level Only	March 28, 2024 October 22, 2024	Water Level Monitoring
MW-15002	Background/Upgradient	March 28, 2024 October 22, 2024	Assessment Monitoring
MW-15003	Background/Upgradient	March 28, 2024 October 22, 2024	Assessment Monitoring
MW-15004	Background/Upgradient	March 28, 2024 October 22, 2024	Assessment Monitoring
MW-15005	Background/Upgradient	March 28, 2024 October 22, 2024	Assessment Monitoring
MW-15006	Background/Upgradient	March 28, 2024 October 22, 2024	Assessment Monitoring
MW-15007	Background/Upgradient	March 28, 2024 October 22, 2024	Assessment Monitoring
MW-15008	Background/Upgradient	March 28, 2024 October 24, 2024	Assessment Monitoring
MW-15009	Downgradient	March 28, 2024 October 23, 2024	Assessment Monitoring
MW-15010	Downgradient	March 28, 2024 October 22, 2024	Assessment Monitoring
MW-15013	Downgradient	March 28, 2024 October 24, 2024	Assessment Monitoring
MW-15014R	Downgradient	March 28, 2024 October 23, 2024	Assessment Monitoring
MW-15015R	Downgradient	March 28, 2024 October 23, 2024	Assessment Monitoring
MW-15016R	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-15017	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-15018	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-15019	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-15020	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring



Monitoring Well I.D.	Well Location	Dates Monitored	CCR Rule Monitoring Purpose
MW-15021	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-15022	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-15023	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-17001R	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-17002	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-17003	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-17004	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-17005	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring
MW-17006	Downgradient	March 27, 2024 October 23, 2024	Assessment Monitoring

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

3.2 Water Levels and Sample Collection

Water levels and sample collection were performed following the procedures in the HMP (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 2024. For quality control, one field duplicate sample was collected during each sample event. Samples for both events were delivered to Trace Analytical Laboratories in Muskegon, Michigan.

3.3 Analytical Testing

Samples were taken for assessment monitoring in March and October 2024. Samples 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

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



Constituents for Assessment Monitoring	
Cadmium	Vanadium
Chromium	Zinc
Cobalt	Additional Parameters
Copper	Total Suspended Solids (TSS)

3.4 Data Validation and Data Management

Data validation was conducted to eliminate data that did not meet validation criteria and designate a data qualifier for any 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 data were usable, even when qualified. Qualifiers are included in the footnotes of the reporting tables, contained in **Appendix B** and data validation reports are included in **Appendix C**.

4.0 Monitoring Results

4.1 Water Levels and Groundwater Flow Direction

Water level measurements collected in 2024 are provided in **Table 3**. Potentiometric surface maps have been developed based on water levels measured in March and October 2024, provided in **Appendix A**. The maps display the groundwater elevations at the wells and groundwater contours for the shallow screened wells (MW-1700x) and deeper screened wells (MW-150xx).

The water levels in May 2020 (**Figure 3**) represent groundwater elevations prior to construction and dewatering efforts. The impacts of CCR removal and dewatering are seen between July 2020 through October 2023 with lower groundwater elevations. Measurements collected in 2024 show groundwater elevations are trending back to pre-construction levels, as anticipated.

Prior to dewatering for construction, the site had a groundwater flow direction generally northeast. During the ash removal period when dewatering and excavation was initiated, the groundwater flow direction was controlled by the dewatering. During dewatering, the groundwater flow direction was towards the center of the Site, as expected due to the dewatering wells spaced around the CCR unit. In 2024, the observed flow direction in the shallow wells appeared to be from the north branch of the Muskegon River in the southwest corner into the impoundment.

Sloughing on the interior slope of the North Embankment was observed in January 2023 (HDR, 2023a). MERG partially dewatered the excavation from January through June 2023 in order to complete the repair. Water was pumped from the Discharge Channel to refill the excavation from July to November in order to meet the minimum recommended pond level for stability of the embankments.

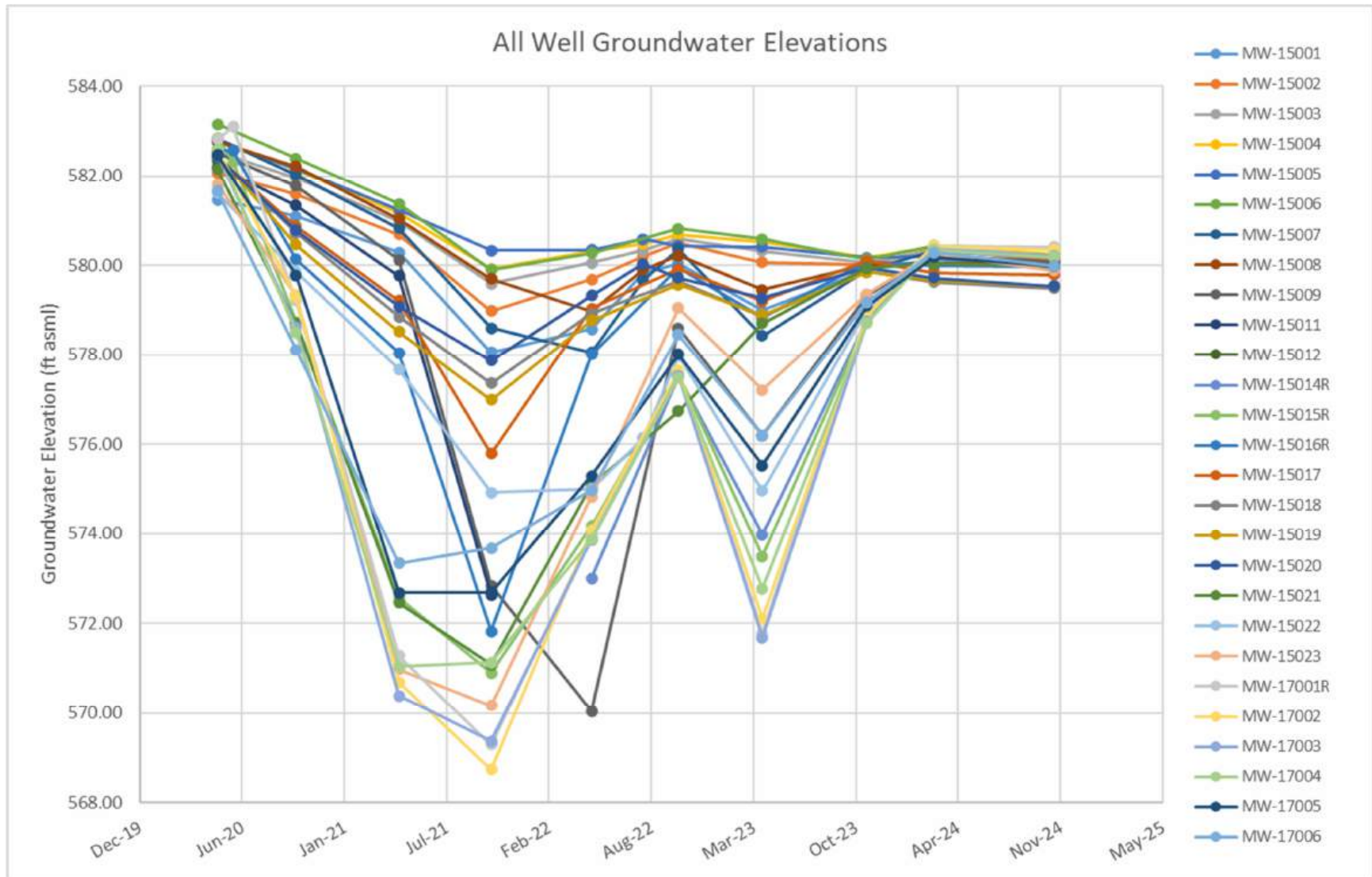


Figure 3. Groundwater Elevations in Impoundment Monitoring Wells



Table 3. Groundwater elevations measured in 2024

Well ID	TOC Elevation (ft amsl)	Groundwater Elevation (ft amsl) Week of March 27, 2024	Groundwater Elevation (ft amsl) Week of October 22, 2024
MW-15001	586.52	580.14	579.94
MW-15002	586.87	580.36	580.11
MW-15003	587.12	580.35	580.18
MW-15004	590.57	580.41	580.25
MW-15005	587.77	580.21	580.02
MW-15006	587.81	580.44	580.38
MW-15007	587.43	580.32	580.22
MW-15008	587.76	580.03	580.07
MW-15009	589.27	580.23	580.09
MW-15010	588.11	580.23	580.08
MW-15013	590.00	580.08	579.94
MW-15014R	589.70	580.31	580.17
MW-15015R	586.52	580.37	580.22
MW-15016R	586.62	579.98	579.97
MW-15017	586.33	579.84	579.79
MW-15018	586.33	579.63	579.49
MW-15019	586.32	579.68	579.54
MW-15020	586.26	579.72	579.54
MW-15021	593.73	580.03	579.99
MW-15022	595.82	580.41	580.21
MW-15023	588.08	580.28	579.88
MW-17001R	586.61	580.43	580.41
MW-17002	586.26	580.44	580.35
MW-17003	586.31	580.36	580.21
MW-17004	586.27	580.35	580.19
MW-17005	586.33	580.18	579.98
MW-17006	593.78	580.28	579.98

4.2 Water Quality

Background groundwater sampling was completed by CEC between December 2015 and July 2017. 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 CCR Rule Appendix IV constituents and compared to the GPS values. Lithium was found to be present at statistically significant levels (SSLs) above the GPS in MW-17001 and MW-17002. This discovery prompted CCR removal and closure activities as detailed in the Assessment of Corrective Measures and Response Action Plan (TRC, 2019a).



Background statistical threshold values were updated in 2024. The statistics and updated background values are documented in the Background Water Quality Statistical Certification dated November 1, 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 2024 water quality analysis below.

Table 4. CCR Rule GPS Values

Constituent	Units	Maximum Contaminant Level	Background Concentrations (UTL)	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	40
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.

In March 2024, 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**. In accordance with CCR Rule §257.95(e), downgradient well concentrations from the March 2024 assessment monitoring event were compared against background values, and some concentrations were found to be above background values. In accordance with CCR Rule §257.95(f), detected Appendix IV COI concentrations in downgradient wells were compared against GPS and were found to exceed GPS. Wells in **Table 5** had concentrations of one of more COIs that exceeded GPS during the March 2024 sampling event and are considered one-time exceedances (SSLs above GPS are addressed separately).



Table 5. March 2024 Exceedances of Federal GPS

March 2024 Sampling Event	Arsenic	Lithium	Molybdenum	Radium-226/228
Federal GPS	18 (ug/L)	48 (ug/L)	100 (ug/L)	5.0 (pCi/L)
MW-15009	21	--	--	--
MW-15010	--	--	--	--
MW-15014R	--	--	--	--
MW-15015R	23	--	240	--
MW-15016R	--	--	--	5.45
MW-17001R	--	90	--	--
MW-17002	92	220	1,300	--
MW-17003	210	270	120	--
MW-17004	18.0	--	--	--

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 7**. Downgradient well MW-17002 had an SSL of lithium over the GPS.

In October 2024, annual assessment monitoring samples were collected from the certified monitoring well network wells and all samples were analyzed for Appendix III and Appendix IV COIs. Water quality data tables are included in **Appendix B** and laboratory reports are provided in **Appendix C**. Downgradient well concentrations from the October 2024 assessment monitoring event were found to be above background values. In accordance with CCR Rule §257.95(f), concentrations in downgradient wells were found to exceed GPS. Wells in **Table 6** had concentrations of one of more COIs that exceeded GPS during the October 2024 sampling event and are considered one-time exceedances (SSLs are addressed separately below).

Table 6. October 2024 Exceedances of Federal GPS

October 2024 Sampling Event	Arsenic	Lithium	Molybdenum
Federal GPS	18 (ug/L)	48 (ug/L)	100 (ug/L)
MW-15009	22	--	--
MW-15015R	43	58	480
MW-15022	--	62	--
MW-17001R	--	120	--
MW-17002	100	240	1,100
MW-17003	230	330	170
MW-17004	--	55.0	--



Therefore, in accordance with CCR Rule §257.95(g), downgradient well concentrations were statistically evaluated to determine if constituents are detected at SSL above the GPS. The October 2022 statistical results that exceeded the respective GPS are provided in **Table 7**. Downgradient wells MW-17001R and MW-17002 had SSLs of lithium over the GPS.

Table 7. LCLs for Appendix IV Constituents for Wells with SSLs over GPS in March and October 2024

Appendix IV Constituent		Lithium
Units		ug/l
GPS		48
March 2024 95% LCL	MW-17002	130
October 2024 95% LCL	MW-17001R	53
	MW-17002	130

In 2025, MERG will continue to monitor groundwater at the Site in accordance with the assessment monitoring program and consistent with §257.93(e). Pending approval from EGLE on the CCR Removal Report and supplements as detailed in Section 5.1, future statistical analyses will include a comparison of upper confidence limits (UCLs) from each well to the GPS values. In accordance with §257.97(a), MERG will also complete semi-annual progress reporting in 2025 to document work completed towards remedy selection and design.

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 Measures Undertaken

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 the Michigan Department of Environment, Great Lakes, and Energy (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 excavated the CCR material continuously from the impoundments from 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. 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 by CEC. MERG intends to follow the CEC developed ACM for the Site, and follow the adaptive management strategy, which includes measures to remove source material, reduce infiltration, and minimize the potential 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 is equilibrating. 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 wells 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.

Additionally, between July and December 2024 MERG has been in coordination with CEC 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. These and other complicating factors will take time to evaluate.

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 2024:

- Water levels were measured at all monitoring wells in March and October 2024. Potentiometric surface was contoured. Groundwater flow direction appears to be coming from the southwest corner of the impoundment. Groundwater levels have equilibrated after the dewatering, construction, and infilling of the impoundments.
- The wells of the certified well network were sampled in March 2024 for the assessment monitoring event. Assessment monitoring data was statistically evaluated, and SSLs above GPS were observed at MW-17002 for lithium.
- The wells of the certified well network were sampled in October 2024 for the assessment monitoring event. Assessment monitoring data was statistically evaluated, and SSLs of GPS were observed MW-17001R and MW-17002 for lithium.
- The CCR status at the end of 2024 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.

It is anticipated that the remedy selection process for addressing affected groundwater will proceed following the CCR source removal. 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).

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

- Continued semiannual groundwater assessment monitoring.
- Evaluation of potential remedies.

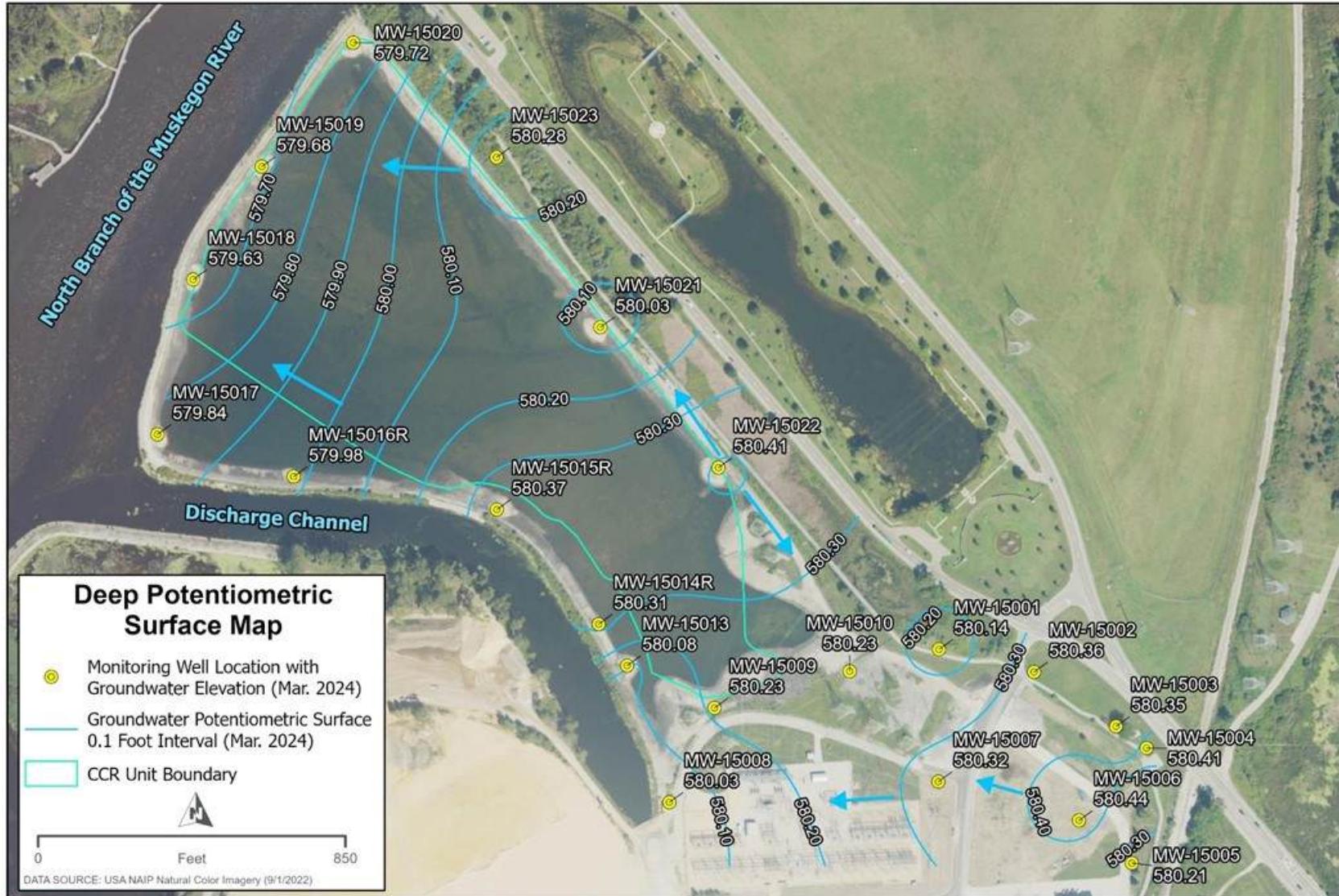
7.0 References

- 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.

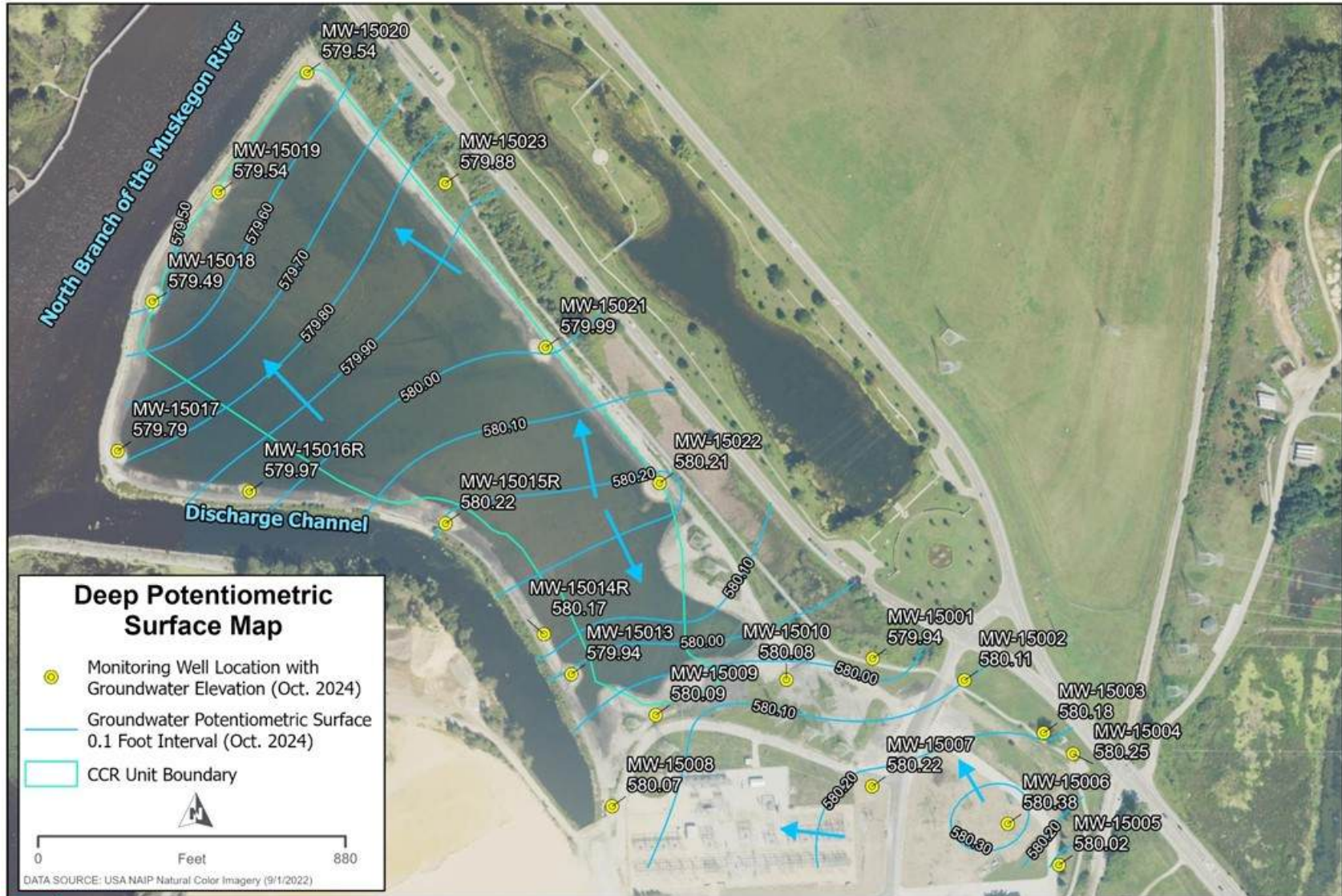


Appendix A

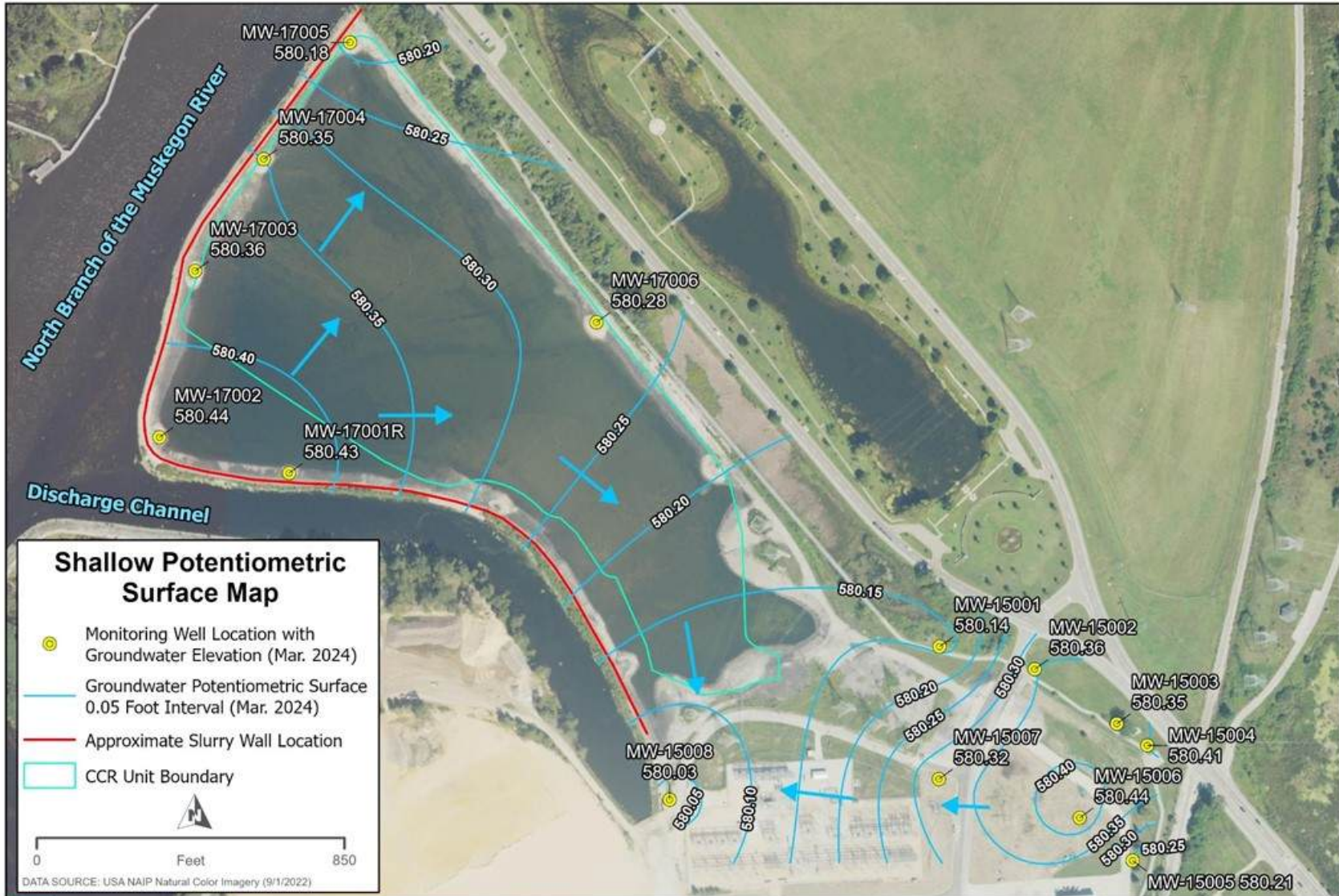
Potentiometric Surface Maps



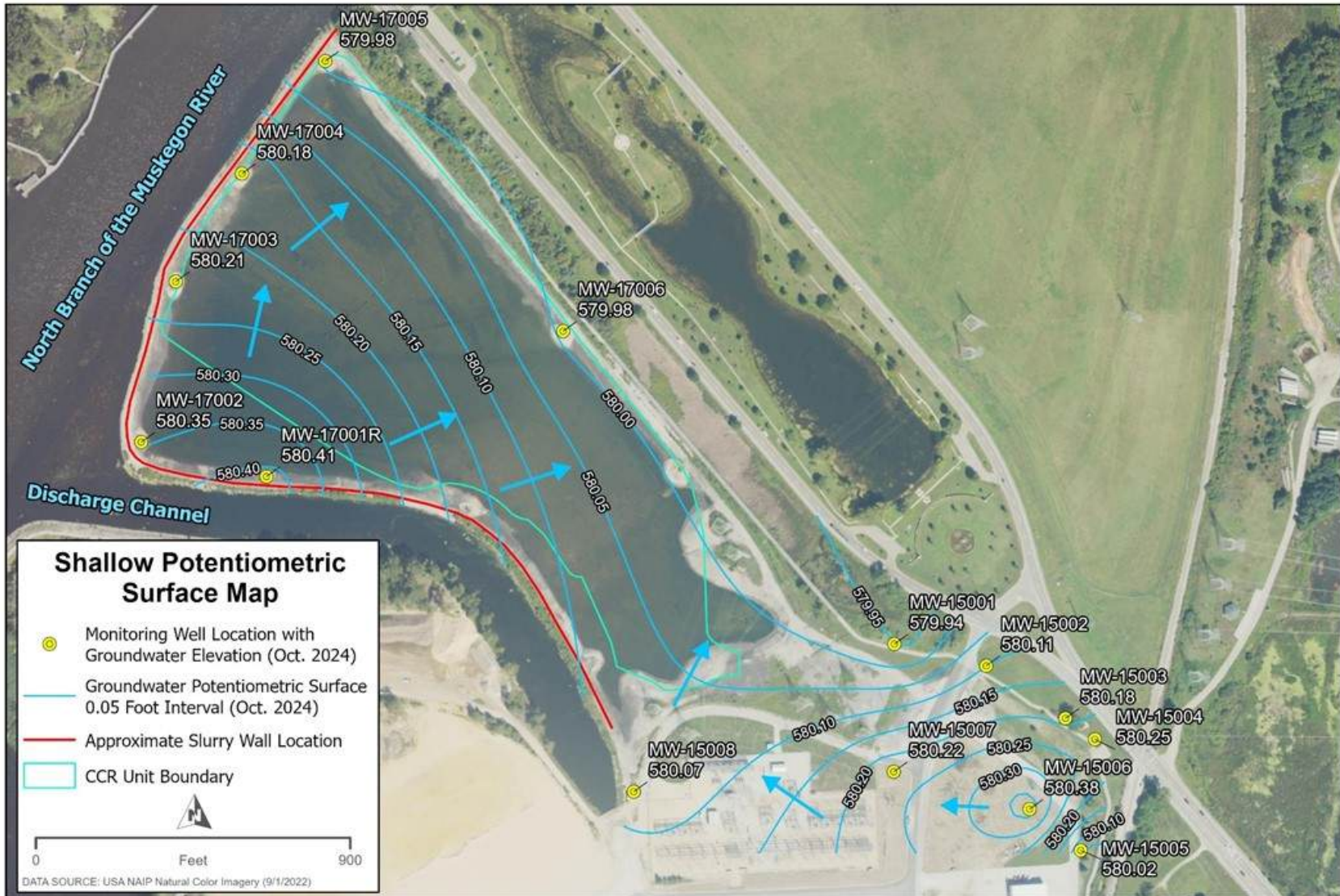
FORMER BC COBB POWER PLANT
MUSKEGON COUNTY, MICHIGAN



FORMER BC COBB POWER PLANT
MUSKEGON COUNTY, MICHIGAN



FORMER BC COBB POWER PLANT
MUSKEGON COUNTY, MICHIGAN



FORMER BC COBB POWER PLANT
MUSKEGON COUNTY, MICHIGAN



Appendix B

Lab Results Summary Tables

Sample Location:	MW-15001							
Compliance Phase:	Background Monitoring							
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	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	Background							
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	1,320	5	1,120	1,290	1,310	1,290	1,010	1,060	1,080	1,100
Calcium	mg/L	500	1	118	129	105	113	130	105	107	91.1
Chloride	mg/L	5,980	5	35.0	22.4	21.3	19.7	19.9	23.2	22.3	27.0
Fluoride	ug/L	2,000	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	250	2	67.0	46.2	33.8	33.5	35.6	41.9	37.0	44.8
Total Dissolved Solids	mg/L	5,170	10	580	520	460	470	520	470	470	526
Appendix IV											
Antimony	ug/L	6	1	<1	<1	<1	<1	<1	<1	<1	<1.0
Arsenic	ug/L	10	1	<1	<1	<1	<1	<1	<1	<1	<1.0
Barium	ug/L	690	1	127	118	114	98	116	102	105	109
Beryllium	ug/L	4.0	1.0	<1	<1	<1	<1	<1	<1	<1	<1.0
Cadmium	ug/L	3.1	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20
Chromium	ug/L	11	1	<1	1	3	2	<1	1	1	<1.0
Cobalt	ug/L	15	15	<15	<15	<15	<15	<15	<15	<15	<15.0
Fluoride	ug/L	2,000	1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Lead	ug/L	4	1	<1	<1	<1	<1	<1	<1	<1	<1.0
Lithium	ug/L	40	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	<0.2	<0.20
Molybdenum	ug/L	100	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	NV	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	5	1	<1	<1	<1	1	<1	<1	<1	<1.0
Thallium	ug/L	2.0	2.5	<2	<2	<2	<2	<2	<2	<2	<2.0

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - Picocuries per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

				MW-15011																					
				Background Monitoring								Detection		Initial A.M.		Assessment Monitoring									
				12/1/2015	2/17/2016	4/13/2016	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	4/10/2019	9/25/2019	9/25/2019	5/7/2020	10/27/2020	10/27/2020	4/20/2021	4/20/2021	10/21/2021	10/21/2021
Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	Downgradient																					
Field Parameters																		Field Dup			Field Dup		Field Dup		Field Dup
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	8.23	8.34	8.34	8.08	8.08	7.51	7.51
Conductivity	µS/cm	--	--	391	346	323	371	390	389	427	346	247	272	251	332	300	655	655	708	820	820	650	650	970	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	46.18	0.14	0.14	0.02	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	0.13	0.19	0.19	0.5	0.5	4.77	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	13.8	13.1	13.1	13.2	13.2	13.9	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	-248.7	-135.9	-135.9	-53.3	-53.3	-129.1	-129.1
Appendix III																									
Boron	ug/L	1,320	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	1,870	1,500	1,400	1,200	1,200	2,000	1,900
Calcium	mg/L	500	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	90	120	120	98	98	170	170
Chloride	mg/L	5,980	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	31	42	43	34	34	17	17
Fluoride	ug/L	2,000	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	<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	7.51
Sulfate	mg/L	250	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	170
Total Dissolved Solids	mg/L	5,170	10	270	230	210	240	230	230	240	224	140	--	244	182	260	380	400	464	610	600	410	430	520	400
Appendix IV																									
Antimony	ug/L	6	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	<0.25
Arsenic	ug/L	10	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	<0.55
Barium	ug/L	690	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	90
Beryllium	ug/L	4.0	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	<0.25
Cadmium	ug/L	3.1	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	<0.25
Chromium	ug/L	11	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	0.41
Cobalt	ug/L	15	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	<0.52
Fluoride	ug/L	2,000	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	<100
Lead	ug/L	4	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	<0.55
Lithium	ug/L	40	10	17.2	16	14	15	16	17	17	20	--	21	11	18	18	13	13	20	24	23	27	27	9	8.8
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	<0.2	<0.2
Molybdenum	ug/L	100	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	3.7
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	0.42
Radium-226/228	pCi/L	NV	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	1.14
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	0.72
Selenium	ug/L	5	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	<0.5
Thallium	ug/L	2.0	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	<0.38
Total Suspended Solids	mg/L	--	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.5	<4	<4	<4	<4	<8	<8
Michigan CCR																									
Copper	ug/L	13 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1	<0.25	<0.25	0.31	<0.25
Iron	ug/L	5,600 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<200	140	110	260	260
Nickel	ug/L	75 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<50	<0.25	<0.25	12	12
Silver	ug/L	0.2 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.2	<0.05	<0.05	<0.05	<0.05
Vanadium	ug/L	27 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<10	<1.2	<1.2	<1.2	<1.2
Zinc	ug/L	170 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<10	1.2	<1.2	<1.2	<1.2

Notes:
 ug/L - micrograms per liter
 mg/L - milligrams per liter
 SU - Standard units for pH
 pCi/L - Picocuries per liter
 BOLD values indicate GPS exceedance
 -- not analyzed
 All metals analyzed as total unless otherwise specified.
 U qualifier indicates the result is less than sample detection limit.
 G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
 J qualifier indicates that the value is estimated because QC criteria were not met
 R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

				MW-15012															
				Background Monitoring							Detection	Initial A.M.	Assessment Monitoring						
				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	4/10/2019	9/25/2019	5/7/2020
Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	Downgradient															
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	1,320	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	500	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	5,980	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	2,000	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	250	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	5,170	10	300	370	340	250	210	190	200	168	318	--	902	302	380	380	850	1,260
Appendix IV																			
Antimony	ug/L	6	1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	0.18
Arsenic	ug/L	10	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	690	1	40	63	68	34	22	25	28	14.3	--	109	105	51.7	79	79	190	234
Beryllium	ug/L	4.0	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	3.1	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	11	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	--	<15.0	<15.0	<6.0	<6.0	<6.0	--	0.26
Fluoride	ug/L	2,000	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	4	1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0
Lithium	ug/L	40	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	<0.2	--	<0.20	<0.20	<0.20	<0.20	<0.20	--	<0.20
Molybdenum	ug/L	100	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	NV	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	5	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	2.0	<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	13 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	ug/L	5,600 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	ug/L	75 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	ug/L	0.2 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	ug/L	27 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	ug/L	170 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - Picocuries per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

				MW-15014																			
				Background Monitoring								Detection	Initial A.M.	Assessment Monitoring									
				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	4/11/2019	9/25/2019	5/6/2020	10/28/2020	4/21/2021	10/21/2021	
Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	Downgradient																			
Field Parameters																							
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	1,320	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	500	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	5,980	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	2,000	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	250	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	5,170	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	6	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	10	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	690	1	329	376	257	508	357	571	546	732	--	779	607	604	620	630	560	468	480	130	410	
Beryllium	ug/L	4.0	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	3.1	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	11	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	--	<15.0	<15.0	<6.0	<6.0	<6.0	--	0.081	<0.5	<0.52	<0.52	
Fluoride	ug/L	2,000	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	4	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	40	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	<0.2	--	<0.20	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.2	<0.2	<0.2	
Molybdenum	ug/L	100	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	NV	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	5	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	2.0	<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	13 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1	<0.25	0.37	
Iron	ug/L	5,600 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<200	11	20	
Nickel	ug/L	75 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<50	0.29	0.43	
Silver	ug/L	0.2 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.2	<0.05	<0.05	
Vanadium	ug/L	27 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<10	11	5.9	
Zinc	ug/L	170 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<10	<1.2	<1.2	

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - Pico curies per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

Sample Location: MW-15014R
 Compliance Phase: Background Monitoring
 Sample Dates: 2/1/2022 3/10/2022 5/4/2022 10/19/2022 4/11/2023 4/11/2023 10/3/2023 3/28/2024 10/23/2024

Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	MDL (Trace)	RDL (Trace 03/2024)	RDL (Trace 10/2024)	Downgradient									
						2/1/2022	3/10/2022	5/4/2022	10/19/2022	4/11/2023	4/11/2023	10/3/2023	3/28/2024	10/23/2024	
Field Parameters															
pH	su	--	--	--	--	7.14	7	7.18	7.10	6.83	Field Dup	6.83	6.97	7.12	7.04
Conductivity	µS/cm	--	--	--	--	3,400	2,820	2,620	1,270	2,140	2,140	2,280	1,820	2,000	
Turbidity	NTU	--	--	--	--	0.1	7.93	3.98	0.02	0.87	0.87	1.31	0.63	1.17	
Dissolved Oxygen	mg/L	--	--	--	--	0.32	0.08	0.04	0.02	0.14	0.14	0.09	0.01	0.08	
Temperature	°C	--	--	--	--	12.9	13.0	13.9	10.9	13.6	13.6	14.8	12	13.9	
Oxidation Reduction Potential	mV	--	--	--	--	-119	-110	-90.2	-130.4	-116.2	-116.2	-132.5	117.6	-118.9	
Appendix III															
Boron	ug/L	1,320	0.018	44	44	1,400	1,300	1,500	1,400	1,600	1,600	1,500	1,300	1,400	
Calcium	mg/L	500	2.6	1.3	1.3	460	340	350	340	300	300	330	290	320	
Chloride	mg/L	5,980	0.75	3.8	1.5	27	28	28	98	130	120	280	140	130	
Fluoride	ug/L	2,000	100	100	200	270	300	270	180	250	200	200	290	< 200	
pH, Field	SU	--	1	--	--	7.14	7	7.02	7.10	6.83	6.83	6.97	7.12	7.04	
Sulfate	mg/L	250	120	15	30	1,700	1,400	1,300	1,100	510	520	250	350	410	
Total Dissolved Solids	mg/L	5,170	20	40	50	2,900	2,300	1,600	1,800	1,400	2,000 R	1,500	1,400	1400	
Appendix IV															
Antimony	ug/L	6	1.2	0.25	0.25	<1.2	< 0.25	< 0.25	< 0.25	< 1.2	< 1.2	< 1.2	< 0.25	< 0.25	
Arsenic	ug/L	10	0.55	0.55	0.55	2	< 0.55	< 0.55	< 0.55	< 2.8	< 2.8	< 2.8	0.28	0.26	
Barium	ug/L	690	12	2.5	2.5	190	160	170	170	170	160	200	160	180	
Beryllium	ug/L	4.0	0.25	0.25	0.25	<0.25	< 0.25	< 0.25	< 0.25	< 1.2	< 1.2	< 1.2	< 0.25	0.1	
Cadmium	ug/L	3.1	1.2	0.25	0.25	<1.2	< 0.25	< 0.25	< 0.25	< 1.2	< 1.2	< 1.2	< 0.25	< 0.25	
Chromium	ug/L	11	0.25	0.25	0.25	<0.25	< 0.25	< 0.25	< 0.25	< 1.2	< 1.2	< 1.2	< 0.25	< 0.25	
Cobalt	ug/L	15	0.52	0.52	0.52	<0.52	< 0.52	< 0.52	< 0.52	< 2.6	< 2.6	< 2.6	< 0.52	0.13	
Fluoride	ug/L	2,000	100	100	200	270	300	270	180	250	200	200	290	< 200	
Lead	ug/L	4	2.8	0.55	0.55	<2.8	< 0.55	< 0.55	< 0.55	< 2.8	< 2.8	< 2.8	< 0.55	< 0.55	
Lithium	ug/L	40	2.5	2.5	12	67	36	39	43	130	130	56	48	48	
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	100	6.2	1.2	1.2	11	3	3.3	2.0	< 6.2	< 6.2	< 6.2	0.68 ^{J+}	1.1	
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	
Radium-226/228	pCi/L	NV		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	
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	
Selenium	ug/L	5	0.5	0.5	0.5	<0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 2.5	< 2.5	< 0.5	0.11	
Thallium	ug/L	2.0	2	0.38	0.38	<1.9	< 0.38	< 0.38	< 0.38	< 1.9	< 1.9	< 1.9	< 0.38	< 0.38	
Total Suspended Solids	mg/L	--	4	4	4.0	15	18	35	30 ^J	28 ^{J+}	< 4 UR	30	14	26	
Michigan CCR															
Copper	ug/L	13 or UTL	0.25	0.25	0.25	<0.25	1.8000	0.29	< 0.25	< 1.2	< 1.2	< 1.2	< 0.25	< 0.25	
Iron	ug/L	300 or UTL	50	50	250	1,600	1,200	1,200	1,200	1,200	1,200	1,200	6,100	7,300	
Nickel	ug/L	75 or UTL	0.25	1.2	1.2	3	2.5	2	< 1.2	< 6.2	< 6.2	< 6.2	< 1.2	< 1.2	
Silver	ug/L	0.2 or UTL	0.25	0.05	0.05	<0.25	< 0.05	< 0.05	< 0.05	< 0.25	< 0.25	< 0.25	< 0.05	< 0.05	
Vanadium	ug/L	27 or UTL	1.2	1.2	1.2	<1.2	< 1.2	< 1.2	< 1.2	< 6.2	< 6.2	< 6.2	< 1.2	< 1.2	
Zinc	ug/L	170 or UTL	1.2	1.2	1.2	<1.2	< 1.2	< 1.2	< 1.2	16	16	13	13	7	

Notes:
 ug/L - micrograms per liter
 mg/L - milligrams per liter
 SU - Standard units for pH
 pCi/L - PicoCuries per liter
 BOLD values indicate GPS exceedance
 -- not analyzed
 All metals analyzed as total unless otherwise specified.
 U qualifier indicates the result is less than sample detection limit.
 G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
 J qualifier indicates that the value is estimated because QC criteria were not met
 R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

				MW-15015																	
				Background Monitoring								Detection Monitoring		Initial A.M.	Assessment Monitoring						
				12/1/2015	2/18/2016	4/13/2016	7/13/2016	9/29/2016	2/14/2017	4/5/2017	7/12/2017	7/12/2017	9/13/2017	9/13/2017	4/17/2018	6/13/2018	11/29/2018	4/11/2019	9/26/2019	5/6/2020	
Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	Downgradient																	
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	1,320	125	1,190	1,170	963	614	656	662	599	489	678	433	433	--	398	505	630	510	512	
Calcium	mg/L	500	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	5,980	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	2,000	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	250	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	5,170	10	220	200	190	180	180	200	190	166	190	192	192	--	316	238	360	250	646	
Appendix IV																					
Antimony	ug/L	6	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	< 1.0	< 1.0	< 1.0	< 1.0	--	0.18
Arsenic	ug/L	10	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	690	1	23	22	21	25	28	30	28	30.1	33.6	--	--	39.9	37.9	41.0	63	44	135	
Beryllium	ug/L	4.0	1.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	< 1.0	< 1.0	< 1.0	< 1.0	--	< 0.20
Cadmium	ug/L	3.1	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
Chromium	ug/L	11	1	<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	<15	--	--	< 15.0	< 15.0	< 6.0	< 6.0	--	0.16
Fluoride	ug/L	2,000	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	< 1,000	140
Lead	ug/L	4	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	< 1.0	< 1.0	< 1.0	< 1.0	--	0.074
Lithium	ug/L	40	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	<0.2	<0.2	--	--	< 0.20	< 0.20	< 0.20	< 0.20	--	< 0.20
Molybdenum	ug/L	100	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	NV	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	5	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	2.0	<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	13 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	ug/L	5,600 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	ug/L	75 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	ug/L	0.2 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	ug/L	27 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	ug/L	170 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - PicoCuries per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

Sample Location:	MW-15015R											
Compliance Phase:	Assessment Monitoring											
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	4/11/2023	10/3/2023	3/28/2024	10/23/2024

Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Trace 03/2024)	RDL (Trace 10/2024)	Downgradient											
					5/21/2020	6/15/2020	10/30/2020	4/21/2021	10/21/2021	5/4/2022	10/19/2022	4/11/2023	4/11/2023	10/3/2023	3/28/2024	10/23/2024
Field Parameters																
pH	su	--	--	--	7.67	6.84	7.89	7.41	7.5	7.37	7.20	7.07	Field Dup	7.19	7.15	7.09
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
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
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
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
Oxidation Reduction Potential	mV	--	--	--	-151.9	-321.1	-233.3	-83.4	-142	-50	-108.9	-81	-81	-119.4	122.4	-90.2
Appendix III																
Boron	ug/L	1,320	44	88	718	675	870	1,100	1,400	1,600	1,400	2,000	1,900	1,600	1,700	2,200
Calcium	mg/L	500	1.3	2.6	282	228	240	250	330	510	340	510	460 ^J	430	400	540
Chloride	mg/L	5980	0.75	1.5	17	17	20	21	24	29	25	33	32	26	29	37
Fluoride	ug/L	2000	100	200	84	12	140	180	< 100	110	< 100	< 100	< 100	110	< 100	< 200
pH, Field	SU	--	--	--	7.7	7.8	7.9	7.41	7.5	7.49	7.20	7.07	7.07	7.19	7.15	7.09
Sulfate	mg/L	250	60	60	825	636	670	670	1,200	1,700	1,300	1,400	1,300	1,100	1,100	1300
Total Dissolved Solids	mg/L	5170	40	50	1,460	1,140	1,200	1,300	860	1,600	2,000	2,400	2,300	2,000	2,300	2400
Appendix IV																
Antimony	ug/L	6	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
Arsenic	ug/L	10	0.55	0.55	12.7	8.8	12.0	3.2	8.6	25	24	38	37	19	23	43
Barium	ug/L	690	2.5	2.5	107	108	140	150	120	120	170	83	79	150	60	82
Beryllium	ug/L	4.0	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
Cadmium	ug/L	3.1	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
Chromium	ug/L	11	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
Cobalt	ug/L	15	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
Fluoride	ug/L	2000	100	200	84	12	140	180	< 100	110	< 100	< 100	< 100	110	< 100	< 200
Lead	ug/L	4	0.55	0.55	< 1.0	< 1.0	< 0.55	< 0.55	< 2.8	< 0.55	< 0.55	< 2.8	< 2.8	< 2.8	< 0.55	< 0.55
Lithium	ug/L	40	2.5	25	36	23.2	27	3.8	55	40	41	120	140	52	48	58
Mercury	ug/L	0.2	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
Molybdenum	ug/L	100	1.2	1.2	27.7	23.1	18	4.4	2	430	240	230	180	30	240	180
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
Radium-226/228	pCi/L	5.0	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
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
Selenium	ug/L	5	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
Thallium	ug/L	2.0	0.38	0.38	< 1.0	< 1.0	< 0.38	< 0.38	< 1.9	< 0.38	< 0.38	< 1.9	< 1.9	< 1.9	< 0.38	< 0.38
Total Suspended Solids	mg/L	--	4	4.0	4	< 2.5	< 4	9	46	10	16	5	6	31	4	17
Michigan CCR																
Copper	ug/L	13 or UTL	0.25	0.25	--	--	< 1	< 0.25	< 0.25	0.91	0.42	< 1.2	< 1.2	< 1.2	< 0.25	< 0.25
Iron	ug/L	300 or UTL	50	500	--	--	390	660	24,000	3,600	8,400	4,100	4,100	16,000	3,000	5,000
Nickel	ug/L	75 or UTL	1.2	1.2	--	--	< 50	< 0.25	< 0.25	0.65	< 1.2	< 6.2	< 6.2	< 6.2	1.2	0.7
Silver	ug/L	0.2 or UTL	0.05	0.05	--	--	< 0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.25	< 0.25	< 0.25	< 0.05	< 0.05
Vanadium	ug/L	27 or UTL	1.2	1.2	--	--	< 10	9.4	< 1.2	660	66	240 ^{J+}	150 ^{J-}	19	34	51
Zinc	ug/L	170 or UTL	1.2	1.2	--	--	< 10	< 1.2	< 1.2	< 1.2	< 1.2	9.5	8.4	10	4.3	2.5

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - Picocuries per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

				MW-15016															
				Background Monitoring							Detection	Initial A.M.	Assessment Monitoring						
				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	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	Downgradient															
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	1,320	125	108	119	86	100	88	92	83	85.9	83.0	--	76.6	80.8	110	100	89	
Calcium	mg/L	500	1	172	184	164	172	181	176	172	170	182	--	168	169	170	160	176	
Chloride	mg/L	5,980	5	200	204	203	165	204	196	200	10.4	226	--	197	201	190	230	239	
Fluoride	ug/L	2,000	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	250	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	--	<2.0	<2.0	<2.0	<20	<0.041	
Total Dissolved Solids	mg/L	5,170	10	980	1,000	980	920	930	990	1,000	1,050	995	--	986	968	1,000	980	944	
Appendix IV																			
Antimony	ug/L	6	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1.0	<1.0	<1.0	<1.0	--	<1.0
Arsenic	ug/L	10	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	690	1	656	647	614	619	621	666	613	596	--	649	652	548	700	630	678	
Beryllium	ug/L	4.0	1.0	<1	<1	<1	<1	<1	<1	<1	<1	--	<1.0	<1.0	<1.0	<1.0	--	<0.20	
Cadmium	ug/L	3.1	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	11	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	--	<15.0	<15.0	<6.0	<6.0	--	1.6	
Fluoride	ug/L	2,000	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	4	1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1.0	<1.0	<1.0	<1.0	--	0.045	
Lithium	ug/L	40	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	<0.2	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	
Molybdenum	ug/L	100	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	NV	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	5	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	2.0	<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	13 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Iron	ug/L	5,600 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Nickel	ug/L	75 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Silver	ug/L	0.2 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Vanadium	ug/L	27 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Zinc	ug/L	170 or UTL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - PicoCuries per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

Sample Location: MW-15016R
 Compliance Phase: Assessment Monitoring
 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

Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Trace 03/2024)	RDL (Trace 10/2024)	Downgradient										
					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
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
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
Turbidity	NTU	--	--	--	20.54	0.02	0.02	0.06	0.8	6.31	0.02	5.23	2.13	0.02	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
Temperature	°C	--	--	--	13.7	14.4	12.3	13.2	13.1	13.2	12.9	12.6	15.1	10.2	14.3
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
Appendix III															
Boron	ug/L	1,320	8.8	8.8	112	109	150	130	170	1,800	230	130	140	120	150
Calcium	mg/L	500	2.6	1.3	192	195	200	220	240	270	250	250	250	210	250
Chloride	mg/L	5,980	3.8	3.8	314	293	320	340	400	470	440	460	500	420	410
Fluoride	ug/L	2,000	100	200	81	140	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 200
pH, Field	SU	--	--	--	6.6	6.6	6.7	6.6	6.5	6.83	6.57	6.48	6.57	6.58	
Sulfate	mg/L	250	3	6.0	2.8	5.8	< 0.6	< 3	< 3	< 3	< 3	< 3	< 3	4.0	2.9
Total Dissolved Solids	mg/L	5,170	40	48	1,190	1,130	1,200	1,200	1,200	1,600	1,600	1,400	1,700	1,500	1300
Appendix IV															
Antimony	ug/L	6	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
Arsenic	ug/L	10	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
Barium	ug/L	690	12	120	806	789	890	960	950	1,200	1,100	1,300	1,100	910	1,100
Beryllium	ug/L	4.0	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
Cadmium	ug/L	3.1	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
Chromium	ug/L	11	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
Cobalt	ug/L	15	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
Fluoride	ug/L	2,000	100	200	81	140	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 200
Lead	ug/L	4	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
Lithium	ug/L	40	2.5	2.5	10.9	3.7	5.0	< 5.9	< 12	5.2	6.1	110	< 12	4.8	6.2
Mercury	ug/L	0.2	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
Molybdenum	ug/L	100	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
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
Radium-226/228	pCi/L	NV	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
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
Selenium	ug/L	5	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
Thallium	ug/L	2.0	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
Total Suspended Solids	mg/L	--	8	4.0	104	74	120	120	100	130	100	120	120	130	110
Michigan CCR															
Copper	ug/L	13 or UTL	0.25	0.25	--	--	< 1	< 0.25	< 0.25	0.25	< 0.25	< 1.2	1.4	0.35	0.43
Iron	ug/L	300 or UTL	50	250	--	--	49,000	54,000	60,000	74,000	67,000	65,000	64,000	55,000	73,000
Nickel	ug/L	75 or UTL	1.2	1.2	--	--	< 50	< 0.25	< 0.25	< 0.25	< 1.2	< 6.2	< 6.2	< 1.2	< 1.2
Silver	ug/L	0.2 or UTL	0.05	0.05	--	--	< 0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.25	< 0.25	< 0.05	< 0.05
Vanadium	ug/L	27 or UTL	1.2	1.2	--	--	< 10	< 1.2	< 1.2	< 1.2	< 1.2	< 6.2	< 6.2	< 1.2	1.6
Zinc	ug/L	170 or UTL	1.2	1.2	--	--	< 10	17	< 1.2	< 1.2	< 1.2	110	73	< 1.2	43

Notes:
 ug/L - micrograms per liter
 mg/L - milligrams per liter
 SU - Standard units for pH
 pCi/L - Picocuries per liter
 BOLD values indicate GPS exceedance
 -- not analyzed
 All metals analyzed as total unless otherwise specified.
 U qualifier indicates the result is less than sample detection limit.
 G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
 J qualifier indicates that the value is estimated because QC criteria were not met
 R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

MW-17001												
				Assessment Monitoring								
				12/7/2017	2/20/2018	6/15/2018	8/6/2018	11/29/2018	11/29/2018	4/11/2019	9/26/2019	5/6/2020
Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	Downgradient (Shallow 2017 Wells)								
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	1,320	125	991	827	1,100	1,220	1,480	1,550	1,700	1,800	1,780
Calcium	mg/L	500	1	118	118	124	117	135	134	130	120	167
Chloride	mg/L	5,980	5	27.3	28.5	29.1	29.1	29.0	29.2	31	28	31
Fluoride	ug/L	2,000	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	250	2	156	135	90.8	18.7	148	140	64	17	138
Total Dissolved Solids	mg/L	5,170	10	558	552	566	476	568	554	570	490	682
Appendix IV												
Antimony	ug/L	6	1	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	--	< 1.0
Arsenic	ug/L	10	1	5.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.72
Barium	ug/L	690	1	85.6	71.3	65.8	73.8	74.4	70.6	82	81	92
Beryllium	ug/L	4.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	< 0.20
Cadmium	ug/L	3.1	0.2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	--	< 0.20
Chromium	ug/L	11	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.3	< 1.0	0.18
Cobalt	ug/L	15	15	< 15.0	< 15.0	< 15.0	< 15.0	< 6.0	< 6.0	< 6.0	--	0.21
Fluoride	ug/L	2,000	1000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	97
Lead	ug/L	4	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	< 1.0
Lithium	ug/L	40	10	55	73	65	62	64	63	43	60	77
Mercury	ug/L	0.2	0.2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	--	< 0.20
Molybdenum	ug/L	100	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	NV	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	5	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	< 2.0	--	< 1.0
Total Suspended Solids	mg/L	--	2.5	--	--	--	--	--	--	--	--	< 2.5
Michigan CCR												
Copper	ug/L	13 or UTL	--	--	--	--	--	--	--	--	--	--
Iron	ug/L	5,600 or UTL	--	--	--	--	--	--	--	--	--	--
Nickel	ug/L	75 or UTL	--	--	--	--	--	--	--	--	--	--
Silver	ug/L	0.2 or UTL	--	--	--	--	--	--	--	--	--	--
Vanadium	ug/L	27 or UTL	--	--	--	--	--	--	--	--	--	--
Zinc	ug/L	170 or UTL	--	--	--	--	--	--	--	--	--	--

Notes:

ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - Picocuries per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

Sample Location: MW-17001R					Assessment Monitoring													
Compliance Phase:					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	10/4/2023	3/27/2024	3/27/2024	10/23/2024	
Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Trace 03/2024)	RDL (Trace 10/2024)	Downgradient (Shallow 2017 Wells)													
Field Parameters																		
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	
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	
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	
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	
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	
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	
Appendix III																		
Boron	ug/L	1,320	88	44	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	
Calcium	mg/L	500	2.6	1.3	158	150	160	130	140	210	200	210	210	220	270	280	380	
Chloride	mg/L	5,980	0.75	1.5	30	28	21	36	39	35	46	46	59	59	34	34	30	
Fluoride	ug/L	2,000	100	200	160	180	120	130 J	< 100	160	< 100	100	130	150	120	78	< 200	
pH, Field	SU	--	--	--	7.5	7.1	7.0	6.7	6.6	6.7	6.68	6.54	6.61	6.61	6.84	6.84	6.8	
Sulfate	mg/L	250	6	6.0	220	122	4	3	< 3	140	140	120	90	88	150	150	150	
Total Dissolved Solids	mg/L	5,170	40	50	751	622	620	520	340	810	850	900	940	940	1,300	1,300	1500	
Appendix IV																		
Antimony	ug/L	6	0.25	0.25	0.12	< 1.0	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 1.2	< 1.2	< 1.2	< 0.25	< 0.25	< 0.25
Arsenic	ug/L	10	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	
Barium	ug/L	690	2.5	2.5	91	101	100	120	130	180	210	220	230	240	200	200	230	
Beryllium	ug/L	4.0	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	
Cadmium	ug/L	3.1	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	
Chromium	ug/L	11	0.25	0.25	0.17	0.18	< 0.25	0.28	0.33	< 0.25	< 0.25 ^{UU}	< 1.2	< 1.2	< 1.2	< 0.25	< 0.25	0.21	
Cobalt	ug/L	15	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	
Fluoride	ug/L	2,000	100	200	160	180	120	130	< 100	160	< 100	100	130	150	120 ^{J+}	78 ^{J-}	< 200	
Lead	ug/L	4	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	
Lithium	ug/L	40	2.5	12	97	75	93	25	26	50	50	100	47	48	90	89	120	
Mercury	ug/L	0.2	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	100	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 ^{UU}	0.48	
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	
Radium-226/228	pCi/L	NV	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	
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 ^{UU}	1.02	1.49	0.8	
Selenium	ug/L	5	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	
Thallium	ug/L	2.0	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	
Total Suspended Solids	mg/L	--	8	4.0	< 2.5	< 2.5	< 4	44	42	72	56	42	54	51	< 8 ^{UU}	10 ^{J+}	7.0	
Michigan CCR																		
Copper	ug/L	13 or UTL	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	
Iron	ug/L	300 or UTL	50	250	--	--	< 200	17,000	22,000	28,000	24,000	17,000	17,000	18,000^J	5,000	4,900	880	
Nickel	ug/L	75 or UTL	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	
Silver	ug/L	0.2 or UTL	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	
Vanadium	ug/L	27 or UTL	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	
Zinc	ug/L	170 or UTL	1.2	1.2	--	--	< 10	< 1.2	< 1.2	< 1.2	< 1.2	21	16	16	< 1.2	< 1.2	9	

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - Picocuries per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

Sample Location: MW-17002 Compliance Phase: Background & Detection Sample Dates:						Assessment Monitoring																				
						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			
						Downgradient (Shallow 2017 Wells)																				
Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	RDL (Trace 03/2024)	RDL (Trace 10/2024)																					
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			
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			
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			
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			
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			
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			
Appendix III																										
Boron	ug/L	1,320	125	880	88	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			
Calcium	mg/L	500	1	26	2.6	178	201	224	194	197	220	200	254	220	210	410	590	570	450	440	380	400	490			
Chloride	mg/L	5,980	5	0.75	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			
Fluoride	ug/L	2,000	1000	100	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			
pH, Field	SU	--	0.1	--	--	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			
Sulfate	mg/L	250	2	60	30	330	325	332	226	402	690	540	483	280	260	960	1,400	-	1,100	770	720	680	590			
Total Dissolved Solids	mg/L	5,170	10	40	53	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			
Appendix IV																										
Antimony	ug/L	6	1	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 ⁺	< 0.25			
Arsenic	ug/L	10	1	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			
Barium	ug/L	690	1	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			
Beryllium	ug/L	4.0	1.0	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			
Cadmium	ug/L	3.1	0.2	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			
Chromium	ug/L	11	1	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			
Cobalt	ug/L	15	15	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			
Fluoride	ug/L	2,000	1000	100	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			
Lead	ug/L	4	1	2.8	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			
Lithium	ug/L	40	10	2.5	25	75	160	150	130	120	100	140	141	140	46	190	220	230	160	220	170	220	240			
Mercury	ug/L	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	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2			
Molybdenum	ug/L	100	5	6.2	62	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			
Radium-226	pCi/L	--	N/A	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			
Radium-226/228	pCi/L	NV	N/A	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			
Radium-228	pCi/L	--	N/A	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			
Selenium	ug/L	5	1	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			
Thallium	ug/L	2.0	2.0	1.9	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			
Total Suspended Solids	mg/L	--	2.5	8	4.0	--	--	--	--	--	--	--	--	< 2.5	< 4	< 4	< 8	84	-	66	79	57	110	99		
Michigan CCR																										
Copper	ug/L	13 or UTL	--	0.25	0.25	--	--	--	--	--	--	--	--	< 1	7.4	1.4	15	< 0.25	0.4	< 1.2	< 1.2	0.25	0.39			
Iron	ug/L	300 or UTL	--	50	500	--	--	--	--	--	--	--	--	220	180	3,300	39,000	11,000	31,000	39,000	27,000	39,000	42,000			
Nickel	ug/L	75 or UTL	--	1.2	1.2	--	--	--	--	--	--	--	--	< 50	< 0.25	< 0.25	0.53	< 0.25	< 1.2	< 6.2	< 6.2	< 1.2	< 1.2			
Silver	ug/L	0.2 or UTL	--	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	27 or UTL	--	1.2	1.2	--	--	--	--	--	--	--	--	< 10	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 6.2	< 6.2	< 1.2	1.2			
Zinc	ug/L	170 or UTL	--	1.2	1.2	--	--	--	--	--	--	--	--	< 10	< 1.2	< 1.2	1.4	< 1.2	< 1.2 ^{UJ}	6.3	5.9	< 1.2	2.5			

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - Picocuries per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error

						MW-17006																	
						Background & Detection		Assessment Monitoring															
						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
Constituent	Unit	State Groundwater Protection Standards for Site (ug/L)	RDL (Most Common from Previous Data)	RDL (Trace 03/2024)	RDL (Trace10/2024)	Downgradient (Shallow 2017 Wells)																	
Field Parameters																							
pH	su	--	--	--	--	7.7	7.3	7.5	7.5	7.7	7.5	7.8	7.03	7.02	No sample	7.00	7.41	7.21	7.00	7.25	6.9	7.26	7.14
Conductivity	µS/cm	--	--	--	--	794	11	717	693	686	732	975	1,029	1,320		1,100	970	770	490	615	620	840	890
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
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
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
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
Appendix III																							
Boron	ug/L	1,320	125	8.8	44	669	594	653	765	630	650	600	745	980		800	740	820	710	680	640	550	690
Calcium	mg/L	500	1	2.6	1.3	106	95.0	97.5	90.4	99.8	150	130	153	220		170	140	98	80	79	75	100	130
Chloride	mg/L	5,980	5	0.75	1.5	19.0	20.3	20.9	21.5	20.4	19	18	25	19		36	76	45	47	40	38	43	48
Fluoride	ug/L	2,000	1000	100	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
pH, Field	SU	--	0.1	--	--	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
Sulfate	mg/L	250	2	3	6.0	129	93.1	69.8	46.2	102	290	220	182	340		240	97	50	19	12	5.2	96	97
Total Dissolved Solids	mg/L	5,170	10	40	50	474	472	478	438	432	800	680	631	940		690	570	500	390	350	360	510	560
Appendix IV																							
Antimony	ug/L	6	1	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
Arsenic	ug/L	10	1	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
Barium	ug/L	690	1	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
Beryllium	ug/L	4.0	1.0	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
Cadmium	ug/L	3.1	0.2	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
Chromium	ug/L	11	1	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
Cobalt	ug/L	15	15	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
Fluoride	ug/L	2,000	1000	100	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
Lead	ug/L	4	1	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
Lithium	ug/L	40	10	2.5	12	38	37	31	36	32	35	28	38	57		14	22	32	26	12	26	25	29
Mercury	ug/L	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	< 0.2	< 0.2	< 0.2	1.2	< 0.2	< 0.2
Molybdenum	ug/L	100	5	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
Radium-226	pCi/L	--	N/A	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
Radium-226/228	pCi/L	NV	N/A	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
Radium-228	pCi/L	--	N/A	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
Selenium	ug/L	5	1	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
Thallium	ug/L	2.0	2.0	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
Total Suspended Solids	mg/L	--	2.5	8	4.0	--	--	--	--	--	--	--	< 2.5	< 4		11	< 8	< 8	< 8	< 8	< 4	< 4	< 4.0
Michigan CCR																							
Copper	ug/L	13 or UTL	--	0.25	0.25	--	--	--	--	--	--	--	--	< 1		< 0.25	< 0.25	< 0.25	< 0.25	< 1.2	< 1.2	1.2	< 0.25
Iron	ug/L	300 or UTL	--	50	250	--	--	--	--	--	--	--	--	2,100		2,100	1,900	2,900	1,600	1,700	1,500	1,000	940
Nickel	ug/L	75 or UTL	--	1.2	1.2	--	--	--	--	--	--	--	--	< 50		< 0.25	0.37	0.27	< 1.2	< 6.2	< 6.2	< 1.2	< 1.2
Silver	ug/L	0.2 or UTL	--	0.05	0.05	--	--	--	--	--	--	--	--	< 0.2		< 0.05	< 0.05	< 0.05	< 0.05	< 0.25	< 0.25	< 0.05	< 0.05
Vanadium	ug/L	27 or UTL	--	1.2	1.2	--	--	--	--	--	--	--	--	< 10		< 1.2	< 1.2	< 1.2	< 1.2	< 6.2	< 6.2	< 1.2	< 1.2
Zinc	ug/L	170 or UTL	--	1.2	1.2	--	--	--	--	--	--	--	--	< 10		8.8	< 1.2	< 1.2	< 1.2	7	6.2	< 1.2	3.7

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
SU - Standard units for pH
pCi/L - Pico-curie per liter
BOLD values indicate GPS exceedance
-- not analyzed
All metals analyzed as total unless otherwise specified.
U qualifier indicates the result is less than sample detection limit.
G qualifier indicates sample minimum detectable concentration is greater than the reporting limit (Radium only)
J qualifier indicates that the value is estimated because QC criteria were not met
R qualifier indicates that the value was rejected from statistical analysis due to laboratory error



Appendix C

Lab Reports

Data Validation Checklist

Site Name: Cobb Sampling Personnel: Andrew Byks & Tanten Buszka

Data Validation: Aryka Thomson

Sample Date(s): 03/27/2024-03/28/2024 Lab Drop-off Date(s): 03/28/2024-03/29/2024

Lab Report Number: 24C1523; 24C1544

Lab Report Date: 04/10/2024 (CCR & Part 115); 05/23/2024 (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	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Chain-of-Custody forms	<input checked="" type="radio"/> Yes / No	N/A
Field decontamination documentation	N/A	N/A
Sample collection field forms	<input checked="" type="radio"/> Yes / No	N/A
Drilling logs	<input checked="" type="radio"/> Yes / No	N/A
Well construction logs	<input checked="" type="radio"/> Yes / No	N/A
Well development field forms	<input checked="" type="radio"/> 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)	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Case narrative	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Internal laboratory Chain-of-Custody forms	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Sample chronology and consistency (that is, dates and times of receipt, preparation, and analysis)	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Communication records with laboratory	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
EDD format consistency	<input checked="" type="radio"/> Yes / No	N/A
Sample identification, results nomenclature, and data qualifier consistency	<input checked="" type="radio"/> Yes / No	N/A
Method detection limit consistency RLs as requested; MDLs < RLs	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Instrument calibration records	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Laboratory Report	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Field QC sample results and calculation of accuracy and precision	<input checked="" type="radio"/> Yes / No Duplicate Well ID: MW-15019	Yes <input checked="" type="radio"/> No Duplicate RPD: 0-14% + NDs

	MW-17001R	0-21% + NDs
--	-----------	-------------

Corrections Needed:

Calcium was detected in method blank T149058-BLK1. The MB was not associated with project samples; no qualification was required.

Antimony was detected in method blank T149003-BLK1. Antimony in MW-15006, MW-15021, MW-17002, and MW-17004 required qualification as estimated with high bias (J+).

Molybdenum and thallium were detected in method blank T149058-BLK1. Molybdenum in MW-15003, MW-15005, MW-15008, MW-15013, MW-15014R, MW-15022, and MW-17001R required qualification as estimated with high bias (J+). Thallium in MW-15003 and MW-15019 required qualification as estimated with high bias (J+).

Parent sample MW-15019 required qualification as estimated with high bias (J+) and field duplicate MWT-15019 required qualification as estimated but not detected (UJ) for molybdenum, thallium, and copper, which were detected in MW-15019 and not detected in MWT-15019. MW-15019 required qualification as estimated but not detected (UJ) and MWT-15019 required qualification as estimated with high bias (J+) for zinc.

Parent sample MW-17001R required qualification as estimated with high bias (J+) and field duplicate MWT-17001R required qualification as estimated with low bias (J-) for fluoride due to RPD outside control limits at 21%. MW-17001R required qualification as estimated with high bias (J+) and MWT-17001R required qualification as estimated but not detected (UJ) for molybdenum. MW-17001 required qualification as estimated but not detected (UJ) and MWT-17001R required qualification as estimated with high bias (J+) for TSS.

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



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

April 10, 2024

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

Phone: (734) 263-7138

RE: Trace Project 24C1523
Client Project Charah - BC Cobb

Dear Ms. Reeves:

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Mink".

Jon Mink
Senior Project Manager
Enclosures



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

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

SAMPLE SUMMARY

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
24C1523-01	MW-15019	Ground Water	AB/TB	03/27/24 09:10	03/28/24 08:03
24C1523-02	MWT-15019	Ground Water	AB/TB	03/27/24 09:10	03/28/24 08:03
24C1523-03	MW-17004	Ground Water	AB/TB	03/27/24 10:32	03/28/24 08:03
24C1523-04	MW-15018	Ground Water	AB/TB	03/27/24 11:30	03/28/24 08:03
24C1523-05	MW-17003	Ground Water	AB/TB	03/27/24 12:20	03/28/24 08:03
24C1523-06	MW-17002	Ground Water	AB/TB	03/27/24 13:48	03/28/24 08:03
24C1523-07	MW-15017	Ground Water	AB/TB	03/27/24 14:38	03/28/24 08:03
24C1523-08	MW-17001R	Ground Water	AB/TB	03/27/24 15:40	03/28/24 08:03
24C1523-09	MWT-17001R	Ground Water	AB/TB	03/27/24 15:40	03/28/24 08:03
24C1523-10	MW-15016R	Ground Water	AB/TB	03/27/24 16:52	03/28/24 08:03
24C1523-11	MW-17006	Ground Water	AB/TB	03/27/24 16:00	03/28/24 08:03
24C1523-12	MW-15023	Ground Water	AB/TB	03/27/24 14:30	03/28/24 08:03
24C1523-13	MW-15020	Ground Water	AB/TB	03/27/24 13:00	03/28/24 08:03
24C1523-14	MW-17005	Ground Water	AB/TB	03/27/24 11:20	03/28/24 08:03
24C1523-15	MW-15021	Ground Water	AB/TB	03/27/24 18:00	03/28/24 08:03
24C1523-16	MW-15002	Ground Water	AB/TB	03/28/24 15:30	03/29/24 08:40
24C1523-17	MW-15003	Ground Water	AB/TB	03/28/24 16:20	03/29/24 08:40
24C1523-18	MW-15004	Ground Water	AB/TB	03/28/24 15:00	03/29/24 08:40
24C1523-19	MW-15005	Ground Water	AB/TB	03/28/24 12:00	03/29/24 08:40
24C1523-20	MW-15006	Ground Water	AB/TB	03/28/24 13:45	03/29/24 08:40
24C1523-21	MW-15007	Ground Water	AB/TB	03/28/24 14:30	03/29/24 08:40
24C1523-22	MW-15008	Ground Water	AB/TB	03/28/24 13:30	03/29/24 08:40
24C1523-23	MW-15009	Ground Water	AB/TB	03/28/24 12:12	03/29/24 08:40
24C1523-24	MW-15010	Ground Water	AB/TB	03/28/24 10:30	03/29/24 08:40
24C1523-25	MW-15013	Ground Water	AB/TB	03/28/24 11:10	03/29/24 08:40
24C1523-26	MW-15014R	Ground Water	AB/TB	03/28/24 10:12	03/29/24 08:40
24C1523-27	MW-15015R	Ground Water	AB/TB	03/28/24 09:12	03/29/24 08:40
24C1523-28	MW-15022	Ground Water	AB/TB	03/28/24 09:30	03/29/24 08:40

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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: 24C1523-01

Analysis: SM 4500-H+ B-11

pH	Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .
pH	Note PH01m : The pH was analyzed at 12:49

Trace ID: 24C1523-02

Analysis: SM 4500-H+ B-11

pH	Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .
pH	Note PH01o : The pH was analyzed at 12:56

Trace ID: 24C1523-03

Analysis: SM 4500-H+ B-11

pH	Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .
pH	Note PH01o : The pH was analyzed at 12:56

Trace ID: 24C1523-04

Analysis: SM 4500-H+ B-11

pH	Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .
----	--

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

pH Note PH01p : The pH was analyzed at 13:03

Trace ID: 24C1523-05

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01q : The pH was analyzed at 13:05

Trace ID: 24C1523-06

Analysis: SM 4500-H+ B-11

pH Note PH01r : The pH was analyzed at 13:07

Trace ID: 24C1523-07

Analysis: SM 4500-H+ B-11

pH Note PH01s : The pH was analyzed at 13:12

Trace ID: 24C1523-08

Analysis: SM 4500-H+ B-11

pH Note PH01t : The pH was analyzed at 13:13

Trace ID: 24C1523-09

Analysis: SM 4500-H+ B-11

pH Note PH01u : The pH was analyzed at 13:15

Trace ID: 24C1523-10

Analysis: SM 4500-H+ B-11

pH Note PH01v : The pH was analyzed at 13:17

Trace ID: 24C1523-11

Analysis: SM 4500-H+ B-11

pH Note PH01w : The pH was analyzed at 13:20

Trace ID: 24C1523-12

Analysis: SM 4500-H+ B-11

pH Note PH01x : The pH was analyzed at 13:30

Trace ID: 24C1523-13

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01y : The pH was analyzed at 13:32

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace ID: 24C1523-14

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01z : The pH was analyzed at 13:34

Trace ID: 24C1523-15

Analysis: SM 4500-H+ B-11

pH Note PH01aa : The pH was analyzed at 13:36

Trace ID: 24C1523-16

Analysis: SM 4500-H+ B-11

pH Note PH01 : The pH was analyzed at 11:26

Trace ID: 24C1523-17

Analysis: SM 4500-H+ B-11

pH Note PH01a : The pH was analyzed at 11:28

Trace ID: 24C1523-18

Analysis: SM 4500-H+ B-11

pH Note PH01b : The pH was analyzed at 11:29

Trace ID: 24C1523-19

Analysis: SM 4500-H+ B-11

pH Note PH01c : The pH was analyzed at 11:31

Trace ID: 24C1523-20

Analysis: SM 4500-H+ B-11

pH Note PH01d : The pH was analyzed at 11:32

Trace ID: 24C1523-21

Analysis: SM 4500-H+ B-11

pH Note PH01e : The pH was analyzed at 11:34

Trace ID: 24C1523-22

Analysis: SM 4500-H+ B-11

pH Note PH01f : The pH was analyzed at 11:35

Trace ID: 24C1523-23

Analysis: SM 4500-H+ B-11

pH Note PH01g : The pH was analyzed at 11:37

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace ID: 24C1523-24

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01h : The pH was analyzed at 11:38

Trace ID: 24C1523-25

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01i : The pH was analyzed at 11:39

Trace ID: 24C1523-26

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01j : The pH was analyzed at 11:41

Trace ID: 24C1523-27

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01k : The pH was analyzed at 11:42

Trace ID: 24C1523-28

Analysis: SM 4500-H+ B-11

pH Note H02 : The sample result and reporting limit must be considered estimated. The analysis was performed beyond the analyte EPA established hold time .

pH Note PH01l : The pH was analyzed at 11:44

Trace ID: T148956-DUP1

Analysis: SM 4500-H+ B-11

pH Note PH01n : The pH was analyzed at 12:52

Trace ID: T149060-DUP1

Analysis: SM 4500-H+ B-11

pH Note PH01 : The pH was analyzed at 11:26

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-01 Date Collected: 03/27/24 09:10 Matrix: Ground Water
 Sample ID: MW-15019 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	0.30 mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	97 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.0061 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00045 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Barium	0.28 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00040 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00066 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	0.00017 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Molybdenum	0.0012 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	0.00012 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs	J	0.00010
Thallium	0.00028 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs	J	0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	<0.055 mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	80 mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO4	<1.1 mg/L	3.0	5	03/28/24	ljs	03/28/24	ljs		1.1

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-01 Date Collected: 03/27/24 09:10 Matrix: Ground Water
 Sample ID: MW-15019 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	550 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	36 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.58 pH Units		1	03/27/24	sb	03/28/24	bsv	H02, PH01m	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-02 Date Collected: 03/27/24 09:10 Matrix: Ground Water
 Sample ID: MWT-15019 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	0.30 mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	94 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.0062 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00042 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Barium	0.28 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00037 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00050 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs	J	0.00010
Lead	0.00020 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	0.00012 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	<0.055 mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	81 mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO4	<1.1 mg/L	3.0	5	03/28/24	ljs	03/28/24	ljs		1.1

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-02 Date Collected: 03/27/24 09:10 Matrix: Ground Water
 Sample ID: MWT-15019 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	570 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	30 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.66 pH Units		1	03/27/24	sb	03/28/24	bsv	H02, PH01o	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-03 Date Collected: 03/27/24 10:32 Matrix: Ground Water
 Sample ID: MW-17004 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	0.98 mg/L	0.088	10	04/02/24	jma	04/08/24	jlh		0.016
Calcium	290 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.050 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	0.00011 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs	J	0.00010
Arsenic	0.0027 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Barium	0.051 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00032 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00050 mg/L	0.0028	5	04/02/24	jma	04/02/24	acs		0.00050
Molybdenum	0.032 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	0.00018 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs	J	0.00010
Thallium	<0.00038 mg/L	0.0019	5	04/02/24	jma	04/02/24	acs		0.00038

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	<0.055 mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	22 mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO4	1000 mg/L	60	100	04/01/24	bm	04/02/24	bm		22

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-03 Date Collected: 03/27/24 10:32 Matrix: Ground Water
 Sample ID: MW-17004 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1900 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	<8.0 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.69 pH Units		1	03/27/24	sb	03/28/24	bsv	H02, PH01o	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-04 Date Collected: 03/27/24 11:30 Matrix: Ground Water
 Sample ID: MW-15018 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T148916

Mercury	<0.00016	mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	----------	------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T149058

Boron	0.13	mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	59	mg/L	0.26	1	04/02/24	jma	04/08/24	jlh		0.076
Lithium	0.013	mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T149058

Antimony	<0.00010	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00044	mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Barium	0.093	mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00028	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	<0.00010	mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	0.00031	mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Molybdenum	<0.00025	mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010	mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T148929

Fluoride	0.24	mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	32	mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO ₄	3.7	mg/L	3.0	5	03/28/24	ljs	03/28/24	ljs		1.1

Analysis Method: SM 2540 C-15

Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-04 Date Collected: 03/27/24 11:30 Matrix: Ground Water
 Sample ID: MW-15018 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	320 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
<i>Analysis Method: SM 2540 D-15</i>									
<i>Batch: T149021</i>									
Total Suspended Solids	<8.0 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
<i>Analysis Method: SM 4500-H+ B-11</i>									
<i>Batch: T148956</i>									
pH	7.19 pH Units		1	03/27/24	sb	03/28/24	bsv	H02, PH01p	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-05 Date Collected: 03/27/24 12:20 Matrix: Ground Water
 Sample ID: MW-17003 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016	mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	----------	------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	1.7	mg/L	0.088	10	04/02/24	jma	04/08/24	jlh		0.016
Calcium	380	mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.20	mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.13	mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Barium	0.018	mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00024	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs	J	0.00020
Cobalt	0.0020	mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	<0.00050	mg/L	0.0028	5	04/02/24	jma	04/02/24	acs		0.00050
Molybdenum	0.087	mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	0.00015	mg/L	0.00050	1	04/02/24	jma	04/02/24	acs	J	0.00010
Thallium	<0.00038	mg/L	0.0019	5	04/02/24	jma	04/02/24	acs		0.00038

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	0.089	mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	J, N	0.055
Chloride	55	mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO4	1500	mg/L	60	100	04/01/24	bm	04/02/24	bm		22

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-05 Date Collected: 03/27/24 12:20 Matrix: Ground Water
 Sample ID: MW-17003 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	2700 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	90 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.33 pH Units		1	03/27/24	sb	03/28/24	bsv	H02, PH01q	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-06 Date Collected: 03/27/24 13:48 Matrix: Ground Water
 Sample ID: MW-17002 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	14 mg/L	0.88	100	04/02/24	jma	04/08/24	jlh		0.16
Calcium	400 mg/L	26	100	04/02/24	jma	04/08/24	jlh		7.6
Lithium	0.22 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	0.00014 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs	J	0.00010
Arsenic	0.092 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Barium	0.039 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	0.00035 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	<0.00050 mg/L	0.0028	5	04/02/24	jma	04/02/24	acs		0.00050
Molybdenum	1.3 mg/L	0.0062	5	04/02/24	jma	04/02/24	acs		0.0012
Selenium	0.00011 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs	J	0.00010
Thallium	<0.00038 mg/L	0.0019	5	04/02/24	jma	04/02/24	acs		0.00038

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	0.25 mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	8.4 mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO4	680 mg/L	60	100	04/01/24	bm	04/02/24	bm		22

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-06 Date Collected: 03/27/24 13:48 Matrix: Ground Water
 Sample ID: MW-17002 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1900 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	110 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.89 pH Units		1	03/27/24	sb	03/28/24	bsv	PH01r	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-07 Date Collected: 03/27/24 14:38 Matrix: Ground Water
 Sample ID: MW-15017 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016	mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	----------	------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	0.052	mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	230	mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.0044	mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.0016	mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Barium	0.88	mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00067	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00050	mg/L	0.00052	1	04/02/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	0.0015	mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010	mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	<0.055	mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	310	mg/L	3.8	25	03/28/24	ljs	03/29/24	ljs		3.0
Sulfate as SO4	1.4	mg/L	3.0	5	03/28/24	ljs	03/28/24	ljs	J	1.1

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-07 Date Collected: 03/27/24 14:38 Matrix: Ground Water
 Sample ID: MW-15017 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1300 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	160 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.39 pH Units		1	03/27/24	sb	03/28/24	bsv	PH01s	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-08 Date Collected: 03/27/24 15:40 Matrix: Ground Water
 Sample ID: MW-17001R Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	2.0 mg/L	0.088	10	04/02/24	jma	04/08/24	jlh		0.016
Calcium	270 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.090 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00020 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Barium	0.20 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00026 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	0.00043 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs	J	0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	0.12 mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	34 mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO4	150 mg/L	6.0	10	03/28/24	ljs	03/29/24	ljs		2.2

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-08 Date Collected: 03/27/24 15:40 Matrix: Ground Water
 Sample ID: MW-17001R Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1300 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	<8.0 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.70 pH Units		1	03/27/24	sb	03/28/24	bsv	PH01t	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-09 Date Collected: 03/27/24 15:40 Matrix: Ground Water
 Sample ID: MWT-17001R Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	2.0 mg/L	0.088	10	04/02/24	jma	04/08/24	jlh		0.016
Calcium	280 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.089 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00018 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Barium	0.20 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00026 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	0.078 mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	J, N	0.055
Chloride	34 mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO4	150 mg/L	6.0	10	03/28/24	ljs	03/29/24	ljs		2.2

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-09 Date Collected: 03/27/24 15:40 Matrix: Ground Water
 Sample ID: MWT-17001R Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1300 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	10 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.72 pH Units		1	03/27/24	sb	03/28/24	bsv	PH01u	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-10 Date Collected: 03/27/24 16:52 Matrix: Ground Water
 Sample ID: MW-15016R Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	0.12 mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	210 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.0048 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.0018 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Barium	0.91 mg/L	0.012	5	04/02/24	jma	04/02/24	acs		0.0034
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00065 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00066 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	0.00012 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148929

Fluoride	<0.055 mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	420 mg/L	3.8	25	03/28/24	ljs	03/29/24	ljs		3.0
Sulfate as SO ₄	4.0 mg/L	3.0	5	03/28/24	ljs	03/28/24	ljs		1.1

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-10 Date Collected: 03/27/24 16:52 Matrix: Ground Water
 Sample ID: MW-15016R Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1500 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	130 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.40 pH Units		1	03/27/24	sb	03/28/24	bsv	PH01v	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-11 Date Collected: 03/27/24 16:00 Matrix: Ground Water
 Sample ID: MW-17006 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T149058

Boron	0.55 mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	100 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.025 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00097 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Barium	0.076 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	0.0063 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T148929

Fluoride	0.11 mg/L	0.10	5	03/28/24	ljs	03/28/24	ljs	N	0.055
Chloride	43 mg/L	0.75	5	03/28/24	ljs	03/28/24	ljs		0.60
Sulfate as SO4	96 mg/L	3.0	5	03/28/24	ljs	03/28/24	ljs		1.1

Analysis Method: SM 2540 C-15

Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-11 Date Collected: 03/27/24 16:00 Matrix: Ground Water
 Sample ID: MW-17006 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	510 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	<8.0 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	7.14 pH Units		1	03/27/24	sb	03/28/24	bsv	PH01w	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-12 Date Collected: 03/27/24 14:30 Matrix: Ground Water
 Sample ID: MW-15023 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	1.3 mg/L	0.088	10	04/02/24	jma	04/08/24	jlh		0.016
Calcium	110 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.028 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.0094 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Barium	0.099 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00025 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	0.034 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	0.11 mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	140 mg/L	3.8	25	03/29/24	ljs	04/01/24	aeo		3.0
Sulfate as SO4	130 mg/L	15	25	03/29/24	ljs	04/01/24	aeo		5.5

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-12 Date Collected: 03/27/24 14:30 Matrix: Ground Water
 Sample ID: MW-15023 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	740 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	<8.0 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	7.51 pH Units		1	03/27/24	sb	03/28/24	bsv	PH01x	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-13 Date Collected: 03/27/24 13:00 Matrix: Ground Water
 Sample ID: MW-15020 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	0.30 mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	71 mg/L	0.26	1	04/02/24	jma	04/08/24	jlh		0.076
Lithium	0.0069 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00024 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Barium	0.15 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00018 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	<0.055 mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	62 mg/L	0.75	5	03/29/24	ljs	03/29/24	aeo		0.60
Sulfate as SO4	<1.1 mg/L	3.0	5	03/29/24	ljs	03/29/24	aeo		1.1

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-13 Date Collected: 03/27/24 13:00 Matrix: Ground Water
 Sample ID: MW-15020 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	420 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	10 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.83 pH Units		1	03/27/24	sb	03/28/24	bsv	H02, PH01y	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-14 Date Collected: 03/27/24 11:20 Matrix: Ground Water
 Sample ID: MW-17005 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	0.22 mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	76 mg/L	0.26	1	04/02/24	jma	04/08/24	jlh		0.076
Lithium	0.0073 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	<0.00010 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00011 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Barium	0.095 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	<0.055 mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	21 mg/L	0.75	5	03/29/24	ljs	03/29/24	aeo		0.60
Sulfate as SO4	110 mg/L	15	25	03/29/24	ljs	04/01/24	aeo		5.5

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-14 Date Collected: 03/27/24 11:20 Matrix: Ground Water
 Sample ID: MW-17005 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	430 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	<8.0 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.88 pH Units		1	03/27/24	sb	03/28/24	bsv	H02, PH01z	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-15 Date Collected: 03/27/24 18:00 Matrix: Ground Water
 Sample ID: MW-15021 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148916

Mercury	<0.00016 mg/L	0.00020	1	03/29/24	fs	04/01/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149058

Boron	0.20 mg/L	0.0088	1	04/02/24	jma	04/08/24	jlh		0.0016
Calcium	110 mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.0023 mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	J, N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149058

Antimony	0.00015 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs	J	0.00010
Arsenic	0.0011 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Barium	0.32 mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00072 mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00074 mg/L	0.00052	1	04/02/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	0.00015 mg/L	0.00050	1	04/02/24	jma	04/02/24	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	<0.055 mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	280 mg/L	3.8	25	03/29/24	ljs	04/01/24	aeo		3.0
Sulfate as SO4	<1.1 mg/L	3.0	5	03/29/24	ljs	03/29/24	aeo		1.1

Analysis Method: SM 2540 C-15
 Batch: T149132

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-15 Date Collected: 03/27/24 18:00 Matrix: Ground Water
 Sample ID: MW-15021 Date Received: 03/28/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	970 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	30 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T148956									
pH	6.46 pH Units		1	03/27/24	sb	03/28/24	bsv	PH01aa	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-16 Date Collected: 03/28/24 15:30 Matrix: Ground Water
 Sample ID: MW-15002 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T148979

Mercury	<0.00016	mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	----------	------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T149058

Boron	3.8	mg/L	0.088	10	04/02/24	jma	04/08/24	jlh		0.016
Calcium	180	mg/L	2.6	10	04/02/24	jma	04/08/24	jlh		0.76
Lithium	0.034	mg/L	0.0025	1	04/02/24	jma	04/08/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T149058

Antimony	<0.00010	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00010
Arsenic	0.00012	mg/L	0.00055	1	04/02/24	jma	04/02/24	acs	J	0.00010
Barium	0.13	mg/L	0.0025	1	04/02/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.000075
Chromium	0.00034	mg/L	0.00025	1	04/02/24	jma	04/02/24	acs		0.00020
Cobalt	0.00011	mg/L	0.00052	1	04/02/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	04/02/24	jma	04/02/24	acs		0.00010
Molybdenum	<0.00025	mg/L	0.0012	1	04/02/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010	mg/L	0.00050	1	04/02/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/02/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T148966

Fluoride	0.36	mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	340	mg/L	3.8	25	03/29/24	ljs	04/01/24	aeo		3.0
Sulfate as SO4	30	mg/L	3.0	5	03/29/24	ljs	03/29/24	aeo		1.1

Analysis Method: SM 2540 C-15

Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-16 Date Collected: 03/28/24 15:30 Matrix: Ground Water
 Sample ID: MW-15002 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1100 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149021									
Total Suspended Solids	<8.0 mg/L	8.0	2	04/01/24	tjh	04/01/24	tjh		8.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	7.37 pH Units		1	03/28/24	nc	03/29/24	bsv	PH01	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-17 Date Collected: 03/28/24 16:20 Matrix: Ground Water
 Sample ID: MW-15003 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016	mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	----------	------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	0.44	mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	74	mg/L	0.26	1	04/01/24	jma	04/02/24	jlh		0.076
Lithium	0.0084	mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	<0.00010	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.00016	mg/L	0.00055	1	04/01/24	jma	04/02/24	acs	J	0.00010
Barium	0.077	mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	0.00078	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00023	mg/L	0.00052	1	04/01/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.00071	mg/L	0.0012	1	04/01/24	jma	04/02/24	acs	J	0.00025
Selenium	0.00011	mg/L	0.00050	1	04/01/24	jma	04/02/24	acs	J	0.00010
Thallium	0.00019	mg/L	0.00038	1	04/01/24	jma	04/02/24	acs	J	0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	0.58	mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	350	mg/L	3.8	25	03/29/24	ljs	04/01/24	aeo		3.0
Sulfate as SO4	<1.1	mg/L	3.0	5	03/29/24	ljs	03/29/24	aeo		1.1

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-17 Date Collected: 03/28/24 16:20 Matrix: Ground Water
 Sample ID: MW-15003 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1000 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	7.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	6.88 pH Units		1	03/28/24	nc	03/29/24	bsv	PH01a	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-18 Date Collected: 03/28/24 15:00 Matrix: Ground Water
 Sample ID: MW-15004 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	0.10 mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	70 mg/L	0.26	1	04/01/24	jma	04/02/24	jlh		0.076
Lithium	<0.0019 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	<0.00010 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.00039 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs	J	0.00010
Barium	0.039 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	0.00031 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00012 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.0012 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs		0.00025
Selenium	0.00053 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	0.63 mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	190 mg/L	3.8	25	03/29/24	ljs	04/01/24	aeo		3.0
Sulfate as SO4	3.9 mg/L	3.0	5	03/29/24	ljs	03/29/24	aeo		1.1

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-18 Date Collected: 03/28/24 15:00 Matrix: Ground Water
 Sample ID: MW-15004 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	650 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
<i>Analysis Method: SM 2540 D-15</i> <i>Batch: T149090</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
<i>Analysis Method: SM 4500-H+ B-11</i> <i>Batch: T149060</i>									
pH	7.03 pH Units		1	03/28/24	nc	03/29/24	bsv	PH01b	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-19 Date Collected: 03/28/24 12:00 Matrix: Ground Water
 Sample ID: MW-15005 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016	mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	----------	------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	0.048	mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	68	mg/L	0.26	1	04/01/24	jma	04/02/24	jlh		0.076
Lithium	0.0022	mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	J, N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	<0.00010	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.00041	mg/L	0.00055	1	04/01/24	jma	04/02/24	acs	J	0.00010
Barium	0.11	mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	0.000078	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs	J	0.000075
Chromium	<0.00020	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00026	mg/L	0.00052	1	04/01/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.00075	mg/L	0.0012	1	04/01/24	jma	04/02/24	acs	J	0.00025
Selenium	0.00024	mg/L	0.00050	1	04/01/24	jma	04/02/24	acs	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	0.17	mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	16	mg/L	0.75	5	03/29/24	ljs	03/29/24	aeo		0.60
Sulfate as SO4	1.9	mg/L	3.0	5	03/29/24	ljs	03/29/24	aeo	J	1.1

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-19 Date Collected: 03/28/24 12:00 Matrix: Ground Water
 Sample ID: MW-15005 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	300 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	5.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	6.95 pH Units		1	03/28/24	nc	03/29/24	bsv	PH01c	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-20 Date Collected: 03/28/24 13:45 Matrix: Ground Water
 Sample ID: MW-15006 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	0.025 mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	62 mg/L	0.26	1	04/01/24	jma	04/02/24	jlh		0.076
Lithium	<0.0019 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	0.00014 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs	J	0.00010
Arsenic	0.0016 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Barium	0.014 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00052 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.0051 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs		0.00025
Selenium	0.00079 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	0.37 mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	4.3 mg/L	0.75	5	03/29/24	ljs	03/29/24	aeo		0.60
Sulfate as SO4	17 mg/L	3.0	5	03/29/24	ljs	03/29/24	aeo		1.1

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-20 Date Collected: 03/28/24 13:45 Matrix: Ground Water
 Sample ID: MW-15006 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	260 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
<i>Analysis Method: SM 2540 D-15</i> <i>Batch: T149090</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
<i>Analysis Method: SM 4500-H+ B-11</i> <i>Batch: T149060</i>									
pH	7.16 pH Units		1	03/28/24	nc	03/29/24	bsv	PH01d	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-21 Date Collected: 03/28/24 14:30 Matrix: Ground Water
 Sample ID: MW-15007 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T148979

Mercury	<0.00016	mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	----------	------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T149003

Boron	0.065	mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	72	mg/L	0.26	1	04/01/24	jma	04/02/24	jlh		0.076
Lithium	<0.0019	mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T149003

Antimony	<0.00010	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.0010	mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Barium	0.020	mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020	mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00053	mg/L	0.00052	1	04/01/24	jma	04/02/24	acs		0.00010
Lead	<0.00010	mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.0076	mg/L	0.0012	1	04/01/24	jma	04/02/24	acs		0.00025
Selenium	0.00098	mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T148966

Fluoride	0.30	mg/L	0.10	5	03/29/24	ljs	03/29/24	aeo	N	0.055
Chloride	99	mg/L	0.75	5	03/29/24	ljs	03/29/24	aeo		0.60
Sulfate as SO4	27	mg/L	3.0	5	03/29/24	ljs	03/29/24	aeo		1.1

Analysis Method: SM 2540 C-15

Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-21 Date Collected: 03/28/24 14:30 Matrix: Ground Water
 Sample ID: MW-15007 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	600 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	<4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	6.86 pH Units		1	03/28/24	nc	03/29/24	bsv	PH01e	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-22 Date Collected: 03/28/24 13:30 Matrix: Ground Water
 Sample ID: MW-15008 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	0.24 mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	74 mg/L	0.26	1	04/01/24	jma	04/02/24	jlh		0.076
Lithium	0.010 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	<0.00010 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.0027 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Barium	0.047 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.00072 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs	J	0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	0.32 mg/L	0.10	5	03/29/24	ljs	04/01/24	aeo	N	0.055
Chloride	22 mg/L	0.75	5	03/29/24	ljs	04/01/24	aeo		0.60
Sulfate as SO4	9.2 mg/L	3.0	5	03/29/24	ljs	04/01/24	aeo		1.1

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-22 Date Collected: 03/28/24 13:30 Matrix: Ground Water
 Sample ID: MW-15008 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	400 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	<4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	7.17 pH Units		1	03/28/24	nc	03/29/24	bsv	PH01f	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-23 Date Collected: 03/28/24 12:12 Matrix: Ground Water
 Sample ID: MW-15009 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	0.70 mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	140 mg/L	0.26	1	04/01/24	jma	04/02/24	jlh		0.076
Lithium	0.028 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	<0.00010 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.021 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Barium	0.10 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.0065 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T149026

Fluoride	0.088 mg/L	0.10	5	04/01/24	bm	04/02/24	bm	J, N	0.055
Chloride	45 mg/L	0.75	5	04/01/24	bm	04/02/24	bm		0.60
Sulfate as SO4	200 mg/L	15	25	04/01/24	bm	04/02/24	bm		5.5

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-23 Date Collected: 03/28/24 12:12 Matrix: Ground Water
 Sample ID: MW-15009 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	740 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
<i>Analysis Method: SM 2540 D-15</i>									
<i>Batch: T149090</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
<i>Analysis Method: SM 4500-H+ B-11</i>									
<i>Batch: T149060</i>									
pH	7.51 pH Units		1	03/28/24	nc	03/29/24	bsv	PH01g	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-24 Date Collected: 03/28/24 10:30 Matrix: Ground Water
 Sample ID: MW-15010 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T149003

Boron	0.86 mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	160 mg/L	2.6	10	04/01/24	jma	04/04/24	jlh		0.76
Lithium	0.029 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T149003

Antimony	<0.00010 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.00041 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs	J	0.00010
Barium	0.12 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00011 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.0017 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs		0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T148966

Fluoride	0.30 mg/L	0.10	5	03/29/24	ljs	04/01/24	aeo	N	0.055
Chloride	330 mg/L	3.8	25	03/29/24	ljs	04/01/24	aeo		3.0
Sulfate as SO4	70 mg/L	3.0	5	03/29/24	ljs	04/01/24	aeo		1.1

Analysis Method: SM 2540 C-15

Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-24 Date Collected: 03/28/24 10:30 Matrix: Ground Water
 Sample ID: MW-15010 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1200 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	6.83 pH Units		1	03/28/24	nc	03/29/24	bsv	H02, PH01h	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-25 Date Collected: 03/28/24 11:10 Matrix: Ground Water
 Sample ID: MW-15013 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	0.70 mg/L	0.0088	1	04/01/24	jma	04/02/24	jlh		0.0016
Calcium	97 mg/L	2.6	10	04/01/24	jma	04/04/24	jlh		0.76
Lithium	0.028 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	<0.00010 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.00020 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs	J	0.00010
Barium	0.093 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00011 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.00062 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs	J	0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	0.23 mg/L	0.10	5	03/29/24	ljs	04/01/24	aeo	N	0.055
Chloride	48 mg/L	0.75	5	03/29/24	ljs	04/01/24	aeo		0.60
Sulfate as SO4	74 mg/L	3.0	5	03/29/24	ljs	04/01/24	aeo		1.1

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-25 Date Collected: 03/28/24 11:10 Matrix: Ground Water
 Sample ID: MW-15013 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	460 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	7.39 pH Units		1	03/28/24	nc	03/29/24	bsv	H02, PH01i	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-26 Date Collected: 03/28/24 10:12 Matrix: Ground Water
 Sample ID: MW-15014R Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	1.3 mg/L	0.044	5	04/01/24	jma	04/02/24	jlh		0.0082
Calcium	290 mg/L	1.3	5	04/01/24	jma	04/02/24	jlh		0.38
Lithium	0.048 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	<0.00010 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.00028 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs	J	0.00010
Barium	0.16 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	<0.00010 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs		0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.00068 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs	J	0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	0.29 mg/L	0.10	5	03/29/24	ljs	04/01/24	aeo	N	0.055
Chloride	140 mg/L	3.8	25	03/29/24	ljs	04/02/24	aeo		3.0
Sulfate as SO4	350 mg/L	15	25	03/29/24	ljs	04/02/24	aeo		5.5

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-26 Date Collected: 03/28/24 10:12 Matrix: Ground Water
 Sample ID: MW-15014R Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1400 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	14 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	6.96 pH Units		1	03/28/24	nc	03/29/24	bsv	H02, PH01j	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-27 Date Collected: 03/28/24 09:12 Matrix: Ground Water
 Sample ID: MW-15015R Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	1.7 mg/L	0.044	5	04/01/24	jma	04/02/24	jlh		0.0082
Calcium	400 mg/L	1.3	5	04/01/24	jma	04/02/24	jlh		0.38
Lithium	0.048 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	0.0017 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.023 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Barium	0.060 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	<0.00020 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00022 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.24 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs		0.00025
Selenium	0.00027 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	<0.055 mg/L	0.10	5	03/29/24	ljs	04/01/24	aeo	N	0.055
Chloride	29 mg/L	0.75	5	03/29/24	ljs	04/01/24	aeo		0.60
Sulfate as SO4	1100 mg/L	60	100	03/29/24	ljs	04/02/24	aeo		22

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-27 Date Collected: 03/28/24 09:12 Matrix: Ground Water
 Sample ID: MW-15015R Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	2300 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	7.31 pH Units		1	03/28/24	nc	03/29/24	bsv	H02, PH01k	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-28 Date Collected: 03/28/24 09:30 Matrix: Ground Water
 Sample ID: MW-15022 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T148979

Mercury	<0.00016 mg/L	0.00020	1	04/02/24	fs	04/02/24	jma		0.00016
---------	---------------	---------	---	----------	----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T149003

Boron	1.2 mg/L	0.044	5	04/01/24	jma	04/02/24	jlh		0.0082
Calcium	150 mg/L	1.3	5	04/01/24	jma	04/02/24	jlh		0.38
Lithium	0.047 mg/L	0.0025	1	04/01/24	jma	04/02/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T149003

Antimony	<0.00010 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00010
Arsenic	0.00019 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs	J	0.00010
Barium	0.15 mg/L	0.0025	1	04/01/24	jma	04/02/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.000075
Chromium	0.00028 mg/L	0.00025	1	04/01/24	jma	04/02/24	acs		0.00020
Cobalt	0.00035 mg/L	0.00052	1	04/01/24	jma	04/02/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	04/01/24	jma	04/02/24	acs		0.00010
Molybdenum	0.00032 mg/L	0.0012	1	04/01/24	jma	04/02/24	acs	J	0.00025
Selenium	<0.00010 mg/L	0.00050	1	04/01/24	jma	04/02/24	acs		0.00010
Thallium	<0.000075 mg/L	0.00038	1	04/01/24	jma	04/02/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T148966

Fluoride	<0.055 mg/L	0.10	5	03/29/24	ljs	04/01/24	aeo	N	0.055
Chloride	97 mg/L	0.75	5	03/29/24	ljs	04/01/24	aeo		0.60
Sulfate as SO4	<1.1 mg/L	3.0	5	03/29/24	ljs	04/01/24	aeo		1.1

Analysis Method: SM 2540 C-15
 Batch: T149134

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

Trace ID: 24C1523-28 Date Collected: 03/28/24 09:30 Matrix: Ground Water
 Sample ID: MW-15022 Date Received: 03/29/24 08:40

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	800 mg/L	40	4	04/03/24	tjh	04/03/24	tjh	N	
Analysis Method: SM 2540 D-15 Batch: T149090									
Total Suspended Solids	4.0 mg/L	4.0	1	04/02/24	tjh	04/02/24	tjh		4.0
Analysis Method: SM 4500-H+ B-11 Batch: T149060									
pH	7.02 pH Units		1	03/28/24	nc	03/29/24	bsv	H02, PH011	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

QUALITY CONTROL RESULTS

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T148916	Analysis Description: Mercury, Total, EPA 7470/7471
QC Batch Method: EPA 7470A Prep	Analysis Method: EPA 7470A

METHOD BLANK: T148916-BLK1

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

LABORATORY CONTROL SAMPLE: T148916-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00214	107	77-122	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T148916-MSD1 Original: 24C1523-01

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	0.00214	0.00216	107	108	76-123	0.9	20	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T148979	Analysis Description: Mercury, Total, EPA 7470/7471
QC Batch Method: EPA 7470A Prep	Analysis Method: EPA 7470A

METHOD BLANK: T148979-BLK1

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

LABORATORY CONTROL SAMPLE: T148979-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00194	97	77-122	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T148979-MSD1 Original: 24C1523-16

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	0.00195	0.00191	97	96	76-123	2	20	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T149003	Analysis Description: Boron, Total
QC Batch Method: EPA 200.2	Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T149003-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: T149003-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.55	97	85-115	
Calcium	mg/L	16.0	15.6	97	85-115	
Lithium	mg/L	1.60	1.60	100	85-115	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T149058	Analysis Description: Calcium, Total
QC Batch Method: EPA 200.2	Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T149058-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Boron	mg/L	<0.0088	0.0088	
Calcium	mg/L	0.0781	0.26	J
Lithium	mg/L	<0.0025	0.0025	

LABORATORY CONTROL SAMPLE: T149058-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.58	99	85-115	
Calcium	mg/L	16.0	15.6	98	85-115	
Lithium	mg/L	1.60	1.59	100	85-115	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

QC Batch: T149003

Analysis Description: Barium, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T149003-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	0.000441	0.00025	
Selenium	mg/L	<0.00050	0.00050	
Thallium	mg/L	<0.00038	0.00038	

LABORATORY CONTROL SAMPLE: T149003-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0907	91	85-115	
Barium	mg/L	1.60	1.53	96	85-115	
Beryllium	mg/L	0.200	0.179	89	85-115	
Cadmium	mg/L	0.0500	0.0425	85	85-115	
Cobalt	mg/L	1.60	1.53	96	85-115	
Chromium	mg/L	0.0500	0.0471	94	85-115	
Molybdenum	mg/L	1.60	1.44	90	85-115	
Lead	mg/L	0.100	0.0915	92	85-115	
Antimony	mg/L	0.100	0.0943	94	85-115	
Selenium	mg/L	0.100	0.0936	94	85-115	
Thallium	mg/L	0.100	0.0855	85	85-115	

Trace Project ID: 24C1523

Client Project ID: Charah - BC Cobb

QC Batch: T149058

Analysis Description: Molybdenum, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T149058-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
-----------	-------	--------------	-----------------	-------

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

METHOD BLANK: T149058-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	0.000789	0.0012	J
Lead	mg/L	<0.00055	0.00055	
Antimony	mg/L	<0.00025	0.00025	
Selenium	mg/L	<0.00050	0.00050	
Thallium	mg/L	0.000266	0.00038	J

LABORATORY CONTROL SAMPLE: T149058-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0971	97	85-115	
Barium	mg/L	1.60	1.52	95	85-115	
Beryllium	mg/L	0.200	0.191	96	85-115	
Cadmium	mg/L	0.0500	0.0469	94	85-115	
Cobalt	mg/L	1.60	1.48	92	85-115	
Chromium	mg/L	0.0500	0.0462	92	85-115	
Molybdenum	mg/L	1.60	1.55	97	85-115	
Lead	mg/L	0.100	0.0924	92	85-115	
Antimony	mg/L	0.100	0.103	103	85-115	
Selenium	mg/L	0.100	0.0936	94	85-115	
Thallium	mg/L	0.100	0.0902	90	85-115	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T148929
 QC Batch Method: IC Prep W

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

METHOD BLANK: T148929-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	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

LABORATORY CONTROL SAMPLE: T148929-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	4.81	96	90-110	
Fluoride	mg/L	1.00	1.04	104	90-110	
Sulfate as SO4	mg/L	5.00	4.89	98	90-110	

MATRIX SPIKE: T148929-MS2 Original: **24C1523-04**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	31.7	25.0	58.0	105	80-120	
Fluoride	mg/L	0.237	5.00	5.12	98	80-120	
Sulfate as SO4	mg/L	3.71	25.0	28.8	100	80-120	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T148966

Analysis Description: Fluoride

QC Batch Method: IC Prep W

Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T148966-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: T148966-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	4.67	93	90-110	
Fluoride	mg/L	1.00	1.03	103	90-110	
Sulfate as SO4	mg/L	5.00	4.77	95	90-110	

MATRIX SPIKE: T148966-MS1 Original: **24C1523-19**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	16.3	25.0	39.6	93	80-120	
Fluoride	mg/L	0.174	5.00	4.72	91	80-120	
Sulfate as SO4	mg/L	1.90	25.0	24.9	92	80-120	

MATRIX SPIKE: T148966-MS2 Original: **24C1523-20**

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

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

MATRIX SPIKE: T148966-MS2 Original: **24C1523-20**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	4.32	25.0	26.5	89	80-120	
Fluoride	mg/L	0.366	5.00	4.96	92	80-120	
Sulfate as SO4	mg/L	16.6	25.0	40.5	96	80-120	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T149026	Analysis Description: Sulfate
QC Batch Method: IC Prep W	Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T149026-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: T149026-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	4.87	97	90-110	
Fluoride	mg/L	1.00	0.996	100	90-110	
Sulfate as SO4	mg/L	5.00	4.70	94	90-110	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T149132	Analysis Description: Total Dissolved Solids
QC Batch Method: SM 2540 C-15	Analysis Method: SM 2540 C-15

METHOD BLANK: T149132-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	mg/L	4.00	10	J

LABORATORY CONTROL SAMPLE: T149132-BS1

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

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

SAMPLE DUPLICATE: T149132-DUP1

Original: **24C1523-01**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Dissolved Solids	mg/L	548	536	2	10	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T149134	Analysis Description: Total Dissolved Solids
QC Batch Method: SM 2540 C-15	Analysis Method: SM 2540 C-15

METHOD BLANK: T149134-BLK1

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

LABORATORY CONTROL SAMPLE: T149134-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	494	99	80-120	

SAMPLE DUPLICATE: T149134-DUP1

Original: **24C1523-16**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Dissolved Solids	mg/L	1140	1190	4	10	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

QC Batch: T149021	Analysis Description: Total Suspended Solids
QC Batch Method: SM 2540 D-15	Analysis Method: SM 2540 D-15

METHOD BLANK: T149021-BLK1

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

LABORATORY CONTROL SAMPLE: T149021-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	85.0	85	85-115	

Trace Project ID: 24C1523
 Client Project ID: Charah - BC Cobb

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

QC Batch: T149090

Analysis Description: Total Suspended Solids

QC Batch Method: SM 2540 D-15

Analysis Method: SM 2540 D-15

METHOD BLANK: T149090-BLK1

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

LABORATORY CONTROL SAMPLE: T149090-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	104	104	85-115	

Trace Project ID: 24C1523

Client Project ID: Charah - BC Cobb

QC Batch: T148956

Analysis Description: pH, SM 4500

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

Analysis Method: SM 4500-H+ B-11

SAMPLE DUPLICATE: T148956-DUP1

Original: 24C1523-01

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	pH Units	6.58	6.58	0	20	PH01n

Trace Project ID: 24C1523

Client Project ID: Charah - BC Cobb

QC Batch: T149060

Analysis Description: pH, SM 4500

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

Analysis Method: SM 4500-H+ B-11

SAMPLE DUPLICATE: T149060-DUP1

Original: 24C1523-16

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
pH	pH Units	7.37	7.41	0.5	20	PH01

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

TRACE

ANALYTICAL LABORATORIES, INC.

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

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Report Results To:

Company Name: HDR Inc
Report To: Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor, MI 48104
Office Phone:
Cell Phone: 734.223.7138
Email Address: molly.reeves@hdrinc.com

PO #: 10220433
Contact Name: Lara Zawalden
Billing Address (if different): 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor, MI 48104
Phone Number: 734.223.9074
Billing Email Address: lara.zawalden@hdrinc.com

Trace Use:

Logged By: *MLC*
Checked By:
Soil Vials Preserved (circle if applicable):
MeOH Low Level Lab
Sample Collection Time (hrs):

Trace ID No.
24C1523

Requested Turnaround Times (TAT)

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

Matrix Key:

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

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals	Field Filtered (Y or N)	Matrix	Number of Containers	Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other	40 CFR Part 257 Appendix III	40 CFR Part 257 Appendix IV	Additional Part 115 Metals	Total Suspended Solids (TSS)	Remarks/Notes	Possible Health Hazards?
1	3/27/24	9:10	MW-15019	N	GW	→	6										X	X	X	X		
2	3/27/24	9:10	MW-T-15019	N	GW		6										X	X	X	X		
3	3/27/24	10:32	MW-17004	N	GW		6										X	X	X	X		
4	3/27/24	11:30	MW-15018	N	GW		6										X	X	X	X		
5	3/27/24	12:20	MW-17003	N	GW		6										X	X	X	X		
6	3/27/24	3:48	MW-17002	N	GW		6										X	X	X	X		
7	3/27/24	14:38	MW-15017	N	GW		6										X	X	X	X		
8	3/27/24	15:40	MW-17001R	N	GW		6										X	X	X	X		
9	3/27/24	15:40	MW-T-17001R	N	GW		6										X	X	X	X		
10	3/27/24	16:52	MW-15018R	N	GW		6										X	X	X	X		
Please Sign				Released By: <i>MLC</i>	Date: 3/28/24	Time: 8:03	Received By:	Date:														

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

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

TRACE

ANALYTICAL LABORATORIES, INC.

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

Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Report Results To:

Bill To:

Trace Use:

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

PO #: 10220433
 Contact Name: Lara Zawalden
 Billing Address (if different): 1000 Oakbrook Drive, Suite 200
 City, State, Zip Code: Ann Arbor, MI 48104
 Phone Number: 734.223.9074
 Billing Email Address: lara.zawalden@hdrinc.com

Logged By: ML
 Checked By: ML
 Soil Vials/ies Preserved (circle if applicable):
 MeOH Low Level Lab
 Sample Collection Time (hrs):

Requested Turnaround Times (TAT)

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

Matrix Key:

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

Analysis Requested

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filter (Y or N)	Matrix - see above	Number of Containers	Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other	40 CFR Part 257 Appendix III	40 CFR Part 257 Appendix IV	Additional Part 115 Metals	Total Suspended Solids (TSS)	Remarks/Notes	Possible Health Hazards?
11	3/27/24	1600	MW-17006	N	GW	6										X	X	X	X		
12	3/27/24	1430	MW-15023	N	GW	6										X	X	X	X		
13	3/27/24	1300	MW-15020	N	GW	6										X	X	X	X		
14	3/27/24	1120	MW-17005	N	GW	6										X	X	X	X		
15	3/27/24	1800	MW-15021	N	GW	6										X	X	X	X		

Please Sign

Released By	Received By	Date / Time	Released By	Received By	Date / Time
<u>[Signature]</u>	<u>[Signature]</u>	3/28/24 8:03			

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.

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.



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

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Report Results To:

Bill To:

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

PO #: 10220433
Contact Name: Lara Zawalden
Billing Address (if different): 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor, MI 48104
Phone Number: 734.223.9074
Billing Email Address: lara.zawalden@hdrinc.com

Trace Use:
Logged By: [Signature]
Checked By: [Signature]
Soil Variables Preserved (circle if applicable):
MeOH Low Level Lab
Sample Collection Time (hrs):

Trace ID No.
24C1523

Requested Turnaround Times (TAT)

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

* Rush TAT Requires Prior Approval

Matrix Key:

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

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals	Field Filter (Y or N)	Matrix - see above →	Number of Containers	Cool ≤ 4°C	Preservation										40 CFR Part 257 Appendix III	40 CFR Part 257 Appendix IV	Additional Part 115 Metals	Total Suspended Solids (TSS)	Analysis Requested	Remarks/Notes	Possible Health Hazards?									
									Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other																		
16	3/28/24	1530	NNN-15002	N	GW	6	6	5																										
17	3/28/24	1620	NNN-15003	N	GW	6	6	5																										
18	3/28/24	1500	NNN-15004	N	GW	6	6	5																										
19	3/28/24	1200	NNN-15005	N	GW	6	6	5																										
20	3/28/24	1345	NNN-15006	N	GW	6	6	5																										
21	3/28/24	1430	NNN-15007	N	GW	6	6	5																										
22	3/28/24	1330	NNN-15008	N	GW	6	6	5																										
23	3/28/24	1212	NNN-15009	N	GW	6	6	5																										
24	3/28/24	1030	NNN-15010	N	GW	6	6	5																										
25	3/28/24	1110	NNN-15013	N	GW	6	6	5																										
Please Sign				Released By: [Signature]	Received By: [Signature]	Date: 3/27/24	Time: 8:40	Released By: [Signature]		Received By: [Signature]	Date: []	Time: []																						

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.

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

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.



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

Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Report Results To:

Company Name: HDR Inc.	PO #: 10220433
Report To: Molly Reeves	Contact Name: Lara Zawalden
Mailing Address: 1000 Oakbrook Drive, Suite 200	Billing Address (if different): 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor, MI 48104	City, State, Zip Code: Ann Arbor, MI 48104
Office Phone:	Cell Phone: 734.263.7138
Email Address: molly.reeves@hdrinc.com	Phone Number: 734.223.9074
	Billing Email Address: lara.zawalden@hdrinc.com

Trace Use:

Logged By: <i>AV</i>	Checked By: <i>AV</i>
Soil Volatiles Preserved (circle if applicable):	MeOH Low Level Lab
Sample Collection Time (hrs):	

Trace ID No.
24C1523

Requested Turnaround Times (TAT)

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

Matrix Key:

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

Project Name: **Charah - BC Cobb**

Sampled By (print): **Andrew Bays / Tankn Buszka**

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filtered (Y or N)		Matrix - see above →	Number of Containers										Analysis Requested				Remarks/Notes	Possible Health Hazards?			
				Metals	Field Filtered		Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other	40 CFR Part 257 Appendix III	40 CFR Part 257 Appendix IV	Additional Part 115 Metals	Total Suspended Solids (TSS)						
26	3/28/24	1012	MW-15014R	N		GW	6	6	5																
27	3/28/24	912	MW-15015R	N		GW	6	6	5																
28	3/28/24	930	MW-15022	N		GW	6	6	5																

Please Sign

Released By: <i>Andrew Bays</i>	Received By: <i>[Signature]</i>	Date: 3/29/24	Time: 8:40
Released By: <i>[Signature]</i>	Received By: <i>[Signature]</i>	Date:	Time:

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.

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24C1523

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/28/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:03									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	6.0	5.9							

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

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

Notes:

Pt 9, 10, 15

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24C1523
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/28/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:26									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	7.4	7.3							

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

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

Notes:

P4. 1, 2, 3, 4

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24C1523
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/28/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:30									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.2	0.2				✓			
Representative Sample Temp °C	7.4	7.4				✓			✓

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace _____

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

Pt. 7, 8, 5, 6

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24C1523
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/28/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:43									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.3	0.3							
Representative Sample Temp °C	6.6	6.5							

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

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

Notes:

Pt. 11, 12, 13, 14

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24C1523

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/29/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:40									
Initials: BV									
Package Description: cooler									
Package Temp °C	-0.1	-0.1							
Representative Sample Temp °C	2.8	2.6							

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off
 BV 3/29/24

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

Pt. 21, 22, 23, 25

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24C1523
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/29/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:50									
Initials: BV									
Package Description: Cooler									
Package Temp °C	-0.1	-0.1							
Representative Sample Temp °C	5.3	5.1							

Sample Receipt

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

Sample Condition

Yes No N/A All sample containers arrived unbroken and labeled
 Yes No N/A Sufficient sample to run requested analyses
 Yes No N/A Correct chemical preservative added to samples
 Yes No N/A Samples preserved at Trace
 Yes No N/A 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
 Yes No Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No All bottle labels agree with COC
 Yes No COC filled out properly
 Yes No COC signed by client

Notes:

Pt. 19, 20, 24, 28

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24C1523
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/29/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:56									
Initials: BV									
Package Description: Cooler									
Package Temp °C	-0.2	-0.2							
Representative Sample Temp °C	3.6	3.4							

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

Pt. 16, 17, 18

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24C1523

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/29/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:01									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.1	0.1							
Representative Sample Temp °C	6.5	6.5							

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

- Yes / No
- All bottle labels agree with COC
 - COC filled out properly
 - COC signed by client

Notes:

Pt. 26, 27

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

May 23, 2024

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

RE: Trace Project 24C1544
Client Project Charah - BC Cobb - 3/27/24

Dear Ms. Reeves:

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

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

The results were obtained from Eurofins Eaton East Analytical.

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

Sincerely,

A handwritten signature in black ink that reads "Jon Mink". The signature is written in a cursive style with a large initial "J" and a long, sweeping underline.

Jon Mink
Senior Project Manager

Enclosures

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



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

SAMPLE SUMMARY

Trace Project ID: 24C1544
Client Project ID: Charah - BC Cobb - 3/27/24

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
24C1544-01	MW-15019	Ground Water	AB/TB	03/27/24 09:10	03/28/24 08:03
24C1544-02	MWT-15019	Ground Water	AB/TB	03/27/24 09:10	03/28/24 08:03
24C1544-03	MW-17004	Ground Water	AB/TB	03/27/24 10:32	03/28/24 08:03
24C1544-04	MW-15018	Ground Water	AB/TB	03/27/24 11:30	03/28/24 08:03
24C1544-05	MW-17003	Ground Water	AB/TB	03/27/24 12:20	03/28/24 08:03
24C1544-06	MW-17002	Ground Water	AB/TB	03/27/24 13:48	03/28/24 08:03
24C1544-07	MW-15017	Ground Water	AB/TB	03/27/24 14:38	03/28/24 08:03
24C1544-08	MW-17001R	Ground Water	AB/TB	03/27/24 15:40	03/28/24 08:03
24C1544-09	MWT-17001R	Ground Water	AB/TB	03/27/24 15:40	03/28/24 08:03
24C1544-10	MW-15016R	Ground Water	AB/TB	03/27/24 16:52	03/28/24 08:03
24C1544-11	MW-17006	Ground Water	AB/TB	03/27/24 16:00	03/28/24 08:03
24C1544-12	MW-15023	Ground Water	AB/TB	03/27/24 14:30	03/28/24 08:03
24C1544-13	MW-15020	Ground Water	AB/TB	03/27/24 13:00	03/28/24 08:03
24C1544-14	MW-17005	Ground Water	AB/TB	03/27/24 11:20	03/28/24 08:03
24C1544-15	MW-15021	Ground Water	AB/TB	03/27/24 18:00	03/28/24 08:03
24C1544-16	MW-15002	Ground Water	AB/TB	03/28/24 15:30	03/29/24 08:40
24C1544-17	MW-15003	Ground Water	AB/TB	03/28/24 16:20	03/29/24 08:40
24C1544-18	MW-15004	Ground Water	AB/TB	03/28/24 15:00	03/29/24 08:40
24C1544-19	MW-15005	Ground Water	AB/TB	03/28/24 12:00	03/29/24 08:40
24C1544-20	MW-15006	Ground Water	AB/TB	03/28/24 13:45	03/29/24 08:40
24C1544-21	MW-15007	Ground Water	AB/TB	03/28/24 14:30	03/29/24 08:40

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



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

24C1544-22	MW-15008	Ground Water	AB/TB	03/28/24 13:30	03/29/24 08:40
24C1544-23	MW-15009	Ground Water	AB/TB	03/28/24 12:12	03/29/24 08:40
24C1544-24	MW-15010	Ground Water	AB/TB	03/28/24 10:30	03/29/24 08:40
24C1544-25	MW-15013	Ground Water	AB/TB	03/28/24 11:10	03/29/24 08:40
24C1544-26	MW-15014R	Ground Water	AB/TB	03/28/24 10:12	03/29/24 08:40
24C1544-27	MW-15015R	Ground Water	AB/TB	03/28/24 09:12	03/29/24 08:40
24C1544-28	MW-15022	Ground Water	AB/TB	03/28/24 09:30	03/29/24 08:40



ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/23/2024 9:57:54 AM

JOB DESCRIPTION

24C1544

JOB NUMBER

810-99088-1

Eurofins Eaton Analytical South Bend

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



Generated
5/23/2024 9:57:54 AM

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



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Tracer Carrier Summary	20
QC Sample Results	22
QC Association Summary	25
Lab Chronicle	27
Certification Summary	34
Method Summary	35
Sample Summary	36
Chain of Custody	37
Receipt Checklists	43

Definitions/Glossary

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

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

Case Narrative

Client: Trace Analytical Laboratories
Project: 24C1544

Job ID: 810-99088-1

Job ID: 810-99088-1

Eurofins Eaton Analytical South Bend

Job Narrative 810-99088-1

Receipt

The samples were received on 4/3/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice.

RAD

Methods 904.0, 9320: Radium-228 prep batch 160-655853:

The sample duplicate (DUP) precision for Ra-228 was outside the control limits. However the original sample and DUP activity is below the RL making the measurement of precision less critical. The lab does not believe this discrepancy to have a negative impact on the data being reported. (380-89603-D-1-B DU)

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



Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15019

Lab Sample ID: 810-99088-1

Date Collected: 03/27/24 09:10

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.650		0.163	0.173	1.00	0.126	pCi/L	04/08/24 10:24	05/22/24 09:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					04/08/24 10:24	05/22/24 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	1.51		0.577	0.593	1.00	0.722	pCi/L	04/08/24 10:27	05/10/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					04/08/24 10:27	05/10/24 11:54	1
Y Carrier	79.3		30 - 110					04/08/24 10:27	05/10/24 11:54	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	2.16		0.600	0.618	5.00	0.722	pCi/L		05/22/24 17:23	1

Client Sample ID: MWT-15019

Lab Sample ID: 810-99088-2

Date Collected: 03/27/24 09:10

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.505		0.152	0.158	1.00	0.138	pCi/L	04/08/24 10:24	05/22/24 09:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					04/08/24 10:24	05/22/24 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	1.91		0.627	0.652	1.00	0.742	pCi/L	04/08/24 10:27	05/10/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					04/08/24 10:27	05/10/24 11:54	1
Y Carrier	80.7		30 - 110					04/08/24 10:27	05/10/24 11:54	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	2.42		0.645	0.671	5.00	0.742	pCi/L		05/22/24 17:23	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-17004

Lab Sample ID: 810-99088-3

Date Collected: 03/27/24 10:32

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.175		0.0852	0.0866	1.00	0.105	pCi/L	04/08/24 10:24	05/22/24 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		30 - 110					04/08/24 10:24	05/22/24 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	0.660		0.370	0.375	1.00	0.534	pCi/L	04/08/24 10:27	05/10/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		30 - 110					04/08/24 10:27	05/10/24 11:54	1
Y Carrier	86.0		30 - 110					04/08/24 10:27	05/10/24 11:54	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	0.836		0.380	0.385	5.00	0.534	pCi/L		05/22/24 17:23	1

Client Sample ID: MW-15018

Lab Sample ID: 810-99088-4

Date Collected: 03/27/24 11:30

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.244		0.108	0.110	1.00	0.119	pCi/L	04/08/24 10:24	05/22/24 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					04/08/24 10:24	05/22/24 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	0.396	U	0.422	0.424	1.00	0.685	pCi/L	04/08/24 10:27	05/10/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					04/08/24 10:27	05/10/24 11:54	1
Y Carrier	81.1		30 - 110					04/08/24 10:27	05/10/24 11:54	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	0.640	U	0.436	0.438	5.00	0.685	pCi/L		05/22/24 17:23	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-17003

Lab Sample ID: 810-99088-5

Date Collected: 03/27/24 12:20

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.220		0.0851	0.0873	1.00	0.0809	pCi/L	04/08/24 10:24	05/22/24 09:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		30 - 110					04/08/24 10:24	05/22/24 09:39	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.588		0.345	0.349	1.00	0.495	pCi/L	04/08/24 10:27	05/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		30 - 110					04/08/24 10:27	05/10/24 11:55	1
Y Carrier	82.6		30 - 110					04/08/24 10:27	05/10/24 11:55	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.808		0.355	0.360	5.00	0.495	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-17002

Lab Sample ID: 810-99088-6

Date Collected: 03/27/24 13:48

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.267		0.0964	0.0994	1.00	0.0887	pCi/L	04/08/24 10:24	05/22/24 09:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		30 - 110					04/08/24 10:24	05/22/24 09:39	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.207	U	0.335	0.335	1.00	0.571	pCi/L	04/08/24 10:27	05/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		30 - 110					04/08/24 10:27	05/10/24 11:55	1
Y Carrier	83.4		30 - 110					04/08/24 10:27	05/10/24 11:55	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.474	U	0.349	0.349	5.00	0.571	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15017

Lab Sample ID: 810-99088-7

Date Collected: 03/27/24 14:38

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.66		0.254	0.295	1.00	0.113	pCi/L	04/08/24 10:24	05/22/24 09:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		30 - 110					04/08/24 10:24	05/22/24 09:39	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.53		0.735	0.803	1.00	0.667	pCi/L	04/08/24 10:27	05/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		30 - 110					04/08/24 10:27	05/10/24 11:55	1
Y Carrier	86.4		30 - 110					04/08/24 10:27	05/10/24 11:55	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	5.19		0.778	0.855	5.00	0.667	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-17001R

Lab Sample ID: 810-99088-8

Date Collected: 03/27/24 15:40

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.378		0.130	0.135	1.00	0.127	pCi/L	04/08/24 10:24	05/22/24 09:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					04/08/24 10:24	05/22/24 09:39	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.02		0.493	0.502	1.00	0.663	pCi/L	04/08/24 10:27	05/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					04/08/24 10:27	05/10/24 11:55	1
Y Carrier	80.0		30 - 110					04/08/24 10:27	05/10/24 11:55	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.40		0.510	0.520	5.00	0.663	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MWT-17001R

Lab Sample ID: 810-99088-9

Date Collected: 03/27/24 15:40

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.452		0.137	0.142	1.00	0.109	pCi/L	04/08/24 10:24	05/22/24 09:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					04/08/24 10:24	05/22/24 09:40	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		0.562	0.579	1.00	0.694	pCi/L	04/08/24 10:27	05/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					04/08/24 10:27	05/10/24 11:55	1
Y Carrier	80.7		30 - 110					04/08/24 10:27	05/10/24 11:55	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.94		0.578	0.596	5.00	0.694	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15016R

Lab Sample ID: 810-99088-10

Date Collected: 03/27/24 16:52

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.74		0.247	0.292	1.00	0.109	pCi/L	04/08/24 10:24	05/22/24 09:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		30 - 110					04/08/24 10:24	05/22/24 09:40	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	3.71		0.734	0.810	1.00	0.664	pCi/L	04/08/24 10:27	05/10/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		30 - 110					04/08/24 10:27	05/10/24 12:08	1
Y Carrier	83.4		30 - 110					04/08/24 10:27	05/10/24 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	5.45		0.774	0.861	5.00	0.664	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-17006

Date Collected: 03/27/24 16:00

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-11

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	0.187		0.0834	0.0851	1.00	0.0909	pCi/L	04/08/24 10:24	05/22/24 09:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					04/08/24 10:24	05/22/24 09:40	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	0.777		0.423	0.429	1.00	0.608	pCi/L	04/08/24 10:27	05/10/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					04/08/24 10:27	05/10/24 12:08	1
Y Carrier	82.6		30 - 110					04/08/24 10:27	05/10/24 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.964		0.431	0.437	5.00	0.608	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15023

Date Collected: 03/27/24 14:30

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-12

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	0.244		0.0894	0.0921	1.00	0.0816	pCi/L	04/08/24 10:24	05/22/24 09:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		30 - 110					04/08/24 10:24	05/22/24 09:40	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	0.680		0.415	0.420	1.00	0.614	pCi/L	04/08/24 10:27	05/10/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		30 - 110					04/08/24 10:27	05/10/24 12:08	1
Y Carrier	80.0		30 - 110					04/08/24 10:27	05/10/24 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.924		0.425	0.430	5.00	0.614	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15020

Lab Sample ID: 810-99088-13

Date Collected: 03/27/24 13:00

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.410		0.130	0.135	1.00	0.108	pCi/L	04/08/24 10:24	05/22/24 09:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		30 - 110					04/08/24 10:24	05/22/24 09:40	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	1.03		0.493	0.502	1.00	0.667	pCi/L	04/08/24 10:27	05/10/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		30 - 110					04/08/24 10:27	05/10/24 12:08	1
Y Carrier	84.9		30 - 110					04/08/24 10:27	05/10/24 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.44		0.510	0.520	5.00	0.667	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-17005

Lab Sample ID: 810-99088-14

Date Collected: 03/27/24 11:20

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.232		0.0897	0.0921	1.00	0.0937	pCi/L	04/08/24 10:24	05/22/24 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.3		30 - 110					04/08/24 10:24	05/22/24 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	0.735		0.396	0.402	1.00	0.564	pCi/L	04/08/24 10:27	05/10/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.3		30 - 110					04/08/24 10:27	05/10/24 12:08	1
Y Carrier	78.5		30 - 110					04/08/24 10:27	05/10/24 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.968		0.406	0.412	5.00	0.564	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15021

Lab Sample ID: 810-99088-15

Date Collected: 03/27/24 18:00

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.577		0.152	0.161	1.00	0.114	pCi/L	04/08/24 10:24	05/22/24 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		30 - 110					04/08/24 10:24	05/22/24 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	2.03		0.622	0.649	1.00	0.710	pCi/L	04/08/24 10:27	05/10/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		30 - 110					04/08/24 10:27	05/10/24 12:09	1
Y Carrier	80.4		30 - 110					04/08/24 10:27	05/10/24 12:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.61		0.640	0.669	5.00	0.710	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15002

Lab Sample ID: 810-99088-16

Date Collected: 03/28/24 15:30

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.360		0.121	0.126	1.00	0.0987	pCi/L	04/08/24 10:24	05/22/24 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		30 - 110					04/08/24 10:24	05/22/24 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	0.511	U	0.449	0.452	1.00	0.708	pCi/L	04/08/24 10:27	05/10/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		30 - 110					04/08/24 10:27	05/10/24 12:09	1
Y Carrier	82.2		30 - 110					04/08/24 10:27	05/10/24 12:09	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	0.871		0.465	0.469	5.00	0.708	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15003

Lab Sample ID: 810-99088-17

Date Collected: 03/28/24 16:20

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.194		0.0904	0.0921	1.00	0.0890	pCi/L	04/08/24 10:24	05/22/24 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		30 - 110					04/08/24 10:24	05/22/24 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	0.943		0.499	0.506	1.00	0.702	pCi/L	04/08/24 10:27	05/10/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		30 - 110					04/08/24 10:27	05/10/24 12:09	1
Y Carrier	81.5		30 - 110					04/08/24 10:27	05/10/24 12:09	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	1.14		0.507	0.514	5.00	0.702	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15004

Lab Sample ID: 810-99088-18

Date Collected: 03/28/24 15:00

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.139		0.0970	0.0978	1.00	0.136	pCi/L	04/08/24 10:24	05/22/24 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		30 - 110					04/08/24 10:24	05/22/24 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	0.434	U	0.412	0.414	1.00	0.655	pCi/L	04/08/24 10:27	05/10/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		30 - 110					04/08/24 10:27	05/10/24 12:09	1
Y Carrier	81.5		30 - 110					04/08/24 10:27	05/10/24 12:09	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	0.573	U	0.423	0.425	5.00	0.655	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15005

Lab Sample ID: 810-99088-19

Date Collected: 03/28/24 12:00

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.141		0.0697	0.0709	1.00	0.0759	pCi/L	04/08/24 10:24	05/22/24 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.8		30 - 110					04/08/24 10:24	05/22/24 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	0.165	U	0.246	0.247	1.00	0.419	pCi/L	04/08/24 10:27	05/10/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.8		30 - 110					04/08/24 10:27	05/10/24 12:09	1
Y Carrier	86.7		30 - 110					04/08/24 10:27	05/10/24 12:09	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	0.306	U	0.256	0.257	5.00	0.419	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15006

Lab Sample ID: 810-99088-20

Date Collected: 03/28/24 13:45

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0861	U	0.0684	0.0689	1.00	0.102	pCi/L	04/08/24 10:24	05/22/24 11:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					04/08/24 10:24	05/22/24 11:30	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.201	U	0.289	0.290	1.00	0.488	pCi/L	04/08/24 10:27	05/10/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					04/08/24 10:27	05/10/24 12:09	1
Y Carrier	83.7		30 - 110					04/08/24 10:27	05/10/24 12:09	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	0.287	U	0.297	0.298	5.00	0.488	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15007

Lab Sample ID: 810-99088-21

Date Collected: 03/28/24 14:30

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00361	U	0.100	0.100	1.00	0.221	pCi/L	04/08/24 10:35	04/30/24 17:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		30 - 110					04/08/24 10:35	04/30/24 17:07	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	0.0996	U	0.414	0.414	1.00	0.751	pCi/L	04/08/24 10:40	04/28/24 11:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		30 - 110					04/08/24 10:40	04/28/24 11:41	1
Y Carrier	83.7		30 - 110					04/08/24 10:40	04/28/24 11:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0996	U	0.426	0.426	5.00	0.751	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15008

Lab Sample ID: 810-99088-22

Date Collected: 03/28/24 13:30

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.221		0.141	0.143	1.00	0.184	pCi/L	04/08/24 10:35	04/30/24 17:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		30 - 110					04/08/24 10:35	04/30/24 17:08	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.106	U	0.319	0.319	1.00	0.573	pCi/L	04/08/24 10:40	04/28/24 11:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		30 - 110					04/08/24 10:40	04/28/24 11:41	1
Y Carrier	84.9		30 - 110					04/08/24 10:40	04/28/24 11:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.327	U	0.349	0.350	5.00	0.573	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15009

Lab Sample ID: 810-99088-23

Date Collected: 03/28/24 12:12

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.182		0.132	0.133	1.00	0.182	pCi/L	04/08/24 10:35	04/30/24 17:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110					04/08/24 10:35	04/30/24 17:08	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.305	U	0.361	0.362	1.00	0.595	pCi/L	04/08/24 10:40	04/28/24 11:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110					04/08/24 10:40	04/28/24 11:41	1
Y Carrier	81.1		30 - 110					04/08/24 10:40	04/28/24 11:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.487	U	0.384	0.386	5.00	0.595	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15010

Lab Sample ID: 810-99088-24

Date Collected: 03/28/24 10:30

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.211		0.140	0.142	1.00	0.192	pCi/L	04/08/24 10:35	04/30/24 17:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					04/08/24 10:35	04/30/24 17:09	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		0.454	0.465	1.00	0.605	pCi/L	04/08/24 10:40	04/28/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					04/08/24 10:40	04/28/24 11:56	1
Y Carrier	88.2		30 - 110					04/08/24 10:40	04/28/24 11:56	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.30		0.475	0.486	5.00	0.605	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15013

Lab Sample ID: 810-99088-25

Date Collected: 03/28/24 11:10

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.181		0.115	0.116	1.00	0.138	pCi/L	04/08/24 10:35	04/30/24 17:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		30 - 110					04/08/24 10:35	04/30/24 17:09	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		0.452	0.460	1.00	0.642	pCi/L	04/08/24 10:40	04/28/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		30 - 110					04/08/24 10:40	04/28/24 11:56	1
Y Carrier	84.1		30 - 110					04/08/24 10:40	04/28/24 11:56	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.06		0.466	0.474	5.00	0.642	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15014R

Lab Sample ID: 810-99088-26

Date Collected: 03/28/24 10:12

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.348		0.160	0.163	1.00	0.175	pCi/L	04/08/24 10:35	04/30/24 17:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					04/08/24 10:35	04/30/24 17:09	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		0.437	0.448	1.00	0.558	pCi/L	04/08/24 10:40	04/28/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					04/08/24 10:40	04/28/24 11:56	1
Y Carrier	85.6		30 - 110					04/08/24 10:40	04/28/24 11:56	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.43		0.465	0.477	5.00	0.558	pCi/L		05/22/24 17:40	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15015R

Lab Sample ID: 810-99088-27

Date Collected: 03/28/24 09:12

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.148	U	0.129	0.130	1.00	0.195	pCi/L	04/08/24 10:35	04/30/24 17:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110					04/08/24 10:35	04/30/24 17:09	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	0.482	U	0.362	0.365	1.00	0.556	pCi/L	04/08/24 10:40	04/28/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110					04/08/24 10:40	04/28/24 11:56	1
Y Carrier	85.6		30 - 110					04/08/24 10:40	04/28/24 11:56	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.630		0.384	0.387	5.00	0.556	pCi/L		05/22/24 17:40	1

Client Sample ID: MW-15022

Lab Sample ID: 810-99088-28

Date Collected: 03/28/24 09:30

Matrix: Ground Water

Date Received: 04/03/24 09:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.617		0.250	0.257	1.00	0.281	pCi/L	04/08/24 10:35	04/30/24 17:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					04/08/24 10:35	04/30/24 17:14	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.891		0.538	0.544	1.00	0.784	pCi/L	04/08/24 10:40	04/28/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					04/08/24 10:40	04/28/24 11:57	1
Y Carrier	80.7		30 - 110					04/08/24 10:40	04/28/24 11:57	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		0.593	0.602	5.00	0.784	pCi/L		05/22/24 17:40	1

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Drinking Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
LCS 160-655849/2-A	Lab Control Sample	97.3
LCS 160-655852/2-A	Lab Control Sample	94.0
MB 160-655849/1-A	Method Blank	96.8
MB 160-655852/1-A	Method Blank	102

Tracer/Carrier Legend

Ba = Ba Carrier

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)
810-99088-1	MW-15019	93.5
810-99088-2	MWT-15019	91.5
810-99088-3	MW-17004	97.8
810-99088-3 DU	MW-17004	93.0
810-99088-4	MW-15018	94.8
810-99088-5	MW-17003	96.3
810-99088-6	MW-17002	88.3
810-99088-7	MW-15017	90.3
810-99088-8	MW-17001R	94.8
810-99088-9	MWT-17001R	93.5
810-99088-10	MW-15016R	98.8
810-99088-11	MW-17006	92.5
810-99088-12	MW-15023	93.8
810-99088-13	MW-15020	97.8
810-99088-14	MW-17005	99.3
810-99088-15	MW-15021	95.3
810-99088-16	MW-15002	98.5
810-99088-17	MW-15003	98.3
810-99088-18	MW-15004	96.8
810-99088-19	MW-15005	99.8
810-99088-20	MW-15006	101
810-99088-21	MW-15007	82.3
810-99088-22	MW-15008	76.3
810-99088-23	MW-15009	81.3
810-99088-24	MW-15010	84.8
810-99088-25	MW-15013	84.5
810-99088-26	MW-15014R	85.8
810-99088-27	MW-15015R	91.0
810-99088-28	MW-15022	88.5

Tracer/Carrier Legend

Ba = Ba Carrier

Tracer/Carrier Summary

Client: Trace Analytical Laboratories
 Project/Site: 24C1544

Job ID: 810-99088-1

Method: 904.0 - Radium-228 (GFPC)

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
LCS 160-655850/2-A	Lab Control Sample	97.3	85.2
LCS 160-655853/2-A	Lab Control Sample	94.0	86.0
MB 160-655850/1-A	Method Blank	96.8	84.1
MB 160-655853/1-A	Method Blank	102	89.3

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
810-99088-1	MW-15019	93.5	79.3
810-99088-2	MWT-15019	91.5	80.7
810-99088-3	MW-17004	97.8	86.0
810-99088-3 DU	MW-17004	93.0	84.5
810-99088-4	MW-15018	94.8	81.1
810-99088-5	MW-17003	96.3	82.6
810-99088-6	MW-17002	88.3	83.4
810-99088-7	MW-15017	90.3	86.4
810-99088-8	MW-17001R	94.8	80.0
810-99088-9	MWT-17001R	93.5	80.7
810-99088-10	MW-15016R	98.8	83.4
810-99088-11	MW-17006	92.5	82.6
810-99088-12	MW-15023	93.8	80.0
810-99088-13	MW-15020	97.8	84.9
810-99088-14	MW-17005	99.3	78.5
810-99088-15	MW-15021	95.3	80.4
810-99088-16	MW-15002	98.5	82.2
810-99088-17	MW-15003	98.3	81.5
810-99088-18	MW-15004	96.8	81.5
810-99088-19	MW-15005	99.8	86.7
810-99088-20	MW-15006	101	83.7
810-99088-21	MW-15007	82.3	83.7
810-99088-22	MW-15008	76.3	84.9
810-99088-23	MW-15009	81.3	81.1
810-99088-24	MW-15010	84.8	88.2
810-99088-25	MW-15013	84.5	84.1
810-99088-26	MW-15014R	85.8	85.6
810-99088-27	MW-15015R	91.0	85.6
810-99088-28	MW-15022	88.5	80.7

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-655849/1-A
Matrix: Drinking Water
Analysis Batch: 662960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655849

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.05678	U	0.0644	0.0646	1.00	0.105	pCi/L	04/08/24 10:24	05/22/24 09:41	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	96.8		30 - 110				04/08/24 10:24		05/22/24 09:41	1

Lab Sample ID: LCS 160-655849/2-A
Matrix: Drinking Water
Analysis Batch: 662960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655849

Analyte	LCS		Spike	LCS	Total	RL	MDC	Unit	%Rec	%Rec Limits
	Result	LCS Qualifier	Added	Result	Uncert. (2σ+/-)					
Radium-226			11.3	10.34	1.06	1.00	0.110	pCi/L	91	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	97.3		30 - 110							

Lab Sample ID: 810-99088-3 DU
Matrix: Ground Water
Analysis Batch: 662960

Client Sample ID: MW-17004
Prep Type: Total/NA
Prep Batch: 655849

Analyte	Sample		DU		Total	RL	MDC	Unit	RER	RER Limit
	Result	Sample Qual	Result	DU Qual	Uncert. (2σ+/-)					
Radium-226	0.175		0.1995		0.0888	1.00	0.0966	pCi/L	0.14	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	93.0		30 - 110							

Lab Sample ID: MB 160-655852/1-A
Matrix: Drinking Water
Analysis Batch: 659273

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655852

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.07913	U	0.0935	0.0938	1.00	0.152	pCi/L	04/08/24 10:35	04/30/24 09:41	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	102		30 - 110				04/08/24 10:35		04/30/24 09:41	1

Lab Sample ID: LCS 160-655852/2-A
Matrix: Drinking Water
Analysis Batch: 659273

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655852

Analyte	LCS		Spike	LCS	Total	RL	MDC	Unit	%Rec	%Rec Limits
	Result	LCS Qualifier	Added	Result	Uncert. (2σ+/-)					
Radium-226			11.3	9.865	1.14	1.00	0.146	pCi/L	87	90 - 110

QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

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

Lab Sample ID: LCS 160-655852/2-A
Matrix: Drinking Water
Analysis Batch: 659273

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655852

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	94.0		30 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-655850/1-A
Matrix: Drinking Water
Analysis Batch: 661114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655850

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.1865	U	0.333	0.334	1.00	0.571	pCi/L	04/08/24 10:27	05/10/24 11:54	1

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	96.8		30 - 110	04/08/24 10:27	05/10/24 11:54	1
Y Carrier	84.1		30 - 110	04/08/24 10:27	05/10/24 11:54	1

Lab Sample ID: LCS 160-655850/2-A
Matrix: Drinking Water
Analysis Batch: 661114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655850

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	97.3		30 - 110
Y Carrier	85.2		30 - 110

Lab Sample ID: 810-99088-3 DU
Matrix: Ground Water
Analysis Batch: 661114

Client Sample ID: MW-17004
Prep Type: Total/NA
Prep Batch: 655850

Analyte	Sample Sample		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
	Result	Qual								
Radium-228	0.660		0.9608		0.390	1.00	0.468	pCi/L	0.39	1

Carrier	DU DU		Limits
	%Yield	Qualifier	
Ba Carrier	93.0		30 - 110
Y Carrier	84.5		30 - 110

Lab Sample ID: MB 160-655853/1-A
Matrix: Drinking Water
Analysis Batch: 659062

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655853

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.08801	U	0.276	0.276	1.00	0.490	pCi/L	04/08/24 10:40	04/28/24 11:39	1

QC Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

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

Lab Sample ID: MB 160-655853/1-A
Matrix: Drinking Water
Analysis Batch: 659062

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655853

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	102		30 - 110
Y Carrier	89.3		30 - 110

Prepared	Analyzed	Dil Fac
04/08/24 10:40	04/28/24 11:39	1
04/08/24 10:40	04/28/24 11:39	1

Lab Sample ID: LCS 160-655853/2-A
Matrix: Drinking Water
Analysis Batch: 659062

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655853

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec
									Limits
Radium-228	8.99	9.634		1.28	1.00	0.435	pCi/L	107	80 - 120

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	94.0		30 - 110
Y Carrier	86.0		30 - 110

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Rad

Prep Batch: 655849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-99088-1	MW-15019	Total/NA	Ground Water	PrecSep-21	
810-99088-2	MWT-15019	Total/NA	Ground Water	PrecSep-21	
810-99088-3	MW-17004	Total/NA	Ground Water	PrecSep-21	
810-99088-4	MW-15018	Total/NA	Ground Water	PrecSep-21	
810-99088-5	MW-17003	Total/NA	Ground Water	PrecSep-21	
810-99088-6	MW-17002	Total/NA	Ground Water	PrecSep-21	
810-99088-7	MW-15017	Total/NA	Ground Water	PrecSep-21	
810-99088-8	MW-17001R	Total/NA	Ground Water	PrecSep-21	
810-99088-9	MWT-17001R	Total/NA	Ground Water	PrecSep-21	
810-99088-10	MW-15016R	Total/NA	Ground Water	PrecSep-21	
810-99088-11	MW-17006	Total/NA	Ground Water	PrecSep-21	
810-99088-12	MW-15023	Total/NA	Ground Water	PrecSep-21	
810-99088-13	MW-15020	Total/NA	Ground Water	PrecSep-21	
810-99088-14	MW-17005	Total/NA	Ground Water	PrecSep-21	
810-99088-15	MW-15021	Total/NA	Ground Water	PrecSep-21	
810-99088-16	MW-15002	Total/NA	Ground Water	PrecSep-21	
810-99088-17	MW-15003	Total/NA	Ground Water	PrecSep-21	
810-99088-18	MW-15004	Total/NA	Ground Water	PrecSep-21	
810-99088-19	MW-15005	Total/NA	Ground Water	PrecSep-21	
810-99088-20	MW-15006	Total/NA	Ground Water	PrecSep-21	
MB 160-655849/1-A	Method Blank	Total/NA	Drinking Water	PrecSep-21	
LCS 160-655849/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep-21	
810-99088-3 DU	MW-17004	Total/NA	Ground Water	PrecSep-21	

Prep Batch: 655850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-99088-1	MW-15019	Total/NA	Ground Water	PrecSep_0	
810-99088-2	MWT-15019	Total/NA	Ground Water	PrecSep_0	
810-99088-3	MW-17004	Total/NA	Ground Water	PrecSep_0	
810-99088-4	MW-15018	Total/NA	Ground Water	PrecSep_0	
810-99088-5	MW-17003	Total/NA	Ground Water	PrecSep_0	
810-99088-6	MW-17002	Total/NA	Ground Water	PrecSep_0	
810-99088-7	MW-15017	Total/NA	Ground Water	PrecSep_0	
810-99088-8	MW-17001R	Total/NA	Ground Water	PrecSep_0	
810-99088-9	MWT-17001R	Total/NA	Ground Water	PrecSep_0	
810-99088-10	MW-15016R	Total/NA	Ground Water	PrecSep_0	
810-99088-11	MW-17006	Total/NA	Ground Water	PrecSep_0	
810-99088-12	MW-15023	Total/NA	Ground Water	PrecSep_0	
810-99088-13	MW-15020	Total/NA	Ground Water	PrecSep_0	
810-99088-14	MW-17005	Total/NA	Ground Water	PrecSep_0	
810-99088-15	MW-15021	Total/NA	Ground Water	PrecSep_0	
810-99088-16	MW-15002	Total/NA	Ground Water	PrecSep_0	
810-99088-17	MW-15003	Total/NA	Ground Water	PrecSep_0	
810-99088-18	MW-15004	Total/NA	Ground Water	PrecSep_0	
810-99088-19	MW-15005	Total/NA	Ground Water	PrecSep_0	
810-99088-20	MW-15006	Total/NA	Ground Water	PrecSep_0	
MB 160-655850/1-A	Method Blank	Total/NA	Drinking Water	PrecSep_0	
LCS 160-655850/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep_0	
810-99088-3 DU	MW-17004	Total/NA	Ground Water	PrecSep_0	

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Rad

Prep Batch: 655852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-99088-21	MW-15007	Total/NA	Ground Water	PrecSep-21	
810-99088-22	MW-15008	Total/NA	Ground Water	PrecSep-21	
810-99088-23	MW-15009	Total/NA	Ground Water	PrecSep-21	
810-99088-24	MW-15010	Total/NA	Ground Water	PrecSep-21	
810-99088-25	MW-15013	Total/NA	Ground Water	PrecSep-21	
810-99088-26	MW-15014R	Total/NA	Ground Water	PrecSep-21	
810-99088-27	MW-15015R	Total/NA	Ground Water	PrecSep-21	
810-99088-28	MW-15022	Total/NA	Ground Water	PrecSep-21	
MB 160-655852/1-A	Method Blank	Total/NA	Drinking Water	PrecSep-21	
LCS 160-655852/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep-21	

Prep Batch: 655853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-99088-21	MW-15007	Total/NA	Ground Water	PrecSep_0	
810-99088-22	MW-15008	Total/NA	Ground Water	PrecSep_0	
810-99088-23	MW-15009	Total/NA	Ground Water	PrecSep_0	
810-99088-24	MW-15010	Total/NA	Ground Water	PrecSep_0	
810-99088-25	MW-15013	Total/NA	Ground Water	PrecSep_0	
810-99088-26	MW-15014R	Total/NA	Ground Water	PrecSep_0	
810-99088-27	MW-15015R	Total/NA	Ground Water	PrecSep_0	
810-99088-28	MW-15022	Total/NA	Ground Water	PrecSep_0	
MB 160-655853/1-A	Method Blank	Total/NA	Drinking Water	PrecSep_0	
LCS 160-655853/2-A	Lab Control Sample	Total/NA	Drinking Water	PrecSep_0	

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15019

Date Collected: 03/27/24 09:10

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662960	SCB	EET SL	05/22/24 09:41
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:54
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:23

Client Sample ID: MWT-15019

Date Collected: 03/27/24 09:10

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662960	SCB	EET SL	05/22/24 09:41
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:54
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:23

Client Sample ID: MW-17004

Date Collected: 03/27/24 10:32

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662960	SCB	EET SL	05/22/24 09:42
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:54
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:23

Client Sample ID: MW-15018

Date Collected: 03/27/24 11:30

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662960	SCB	EET SL	05/22/24 09:42
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:54
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:23

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-17003

Lab Sample ID: 810-99088-5

Date Collected: 03/27/24 12:20

Matrix: Ground Water

Date Received: 04/03/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:39
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:55
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-17002

Lab Sample ID: 810-99088-6

Date Collected: 03/27/24 13:48

Matrix: Ground Water

Date Received: 04/03/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:39
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:55
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15017

Lab Sample ID: 810-99088-7

Date Collected: 03/27/24 14:38

Matrix: Ground Water

Date Received: 04/03/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:39
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:55
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-17001R

Lab Sample ID: 810-99088-8

Date Collected: 03/27/24 15:40

Matrix: Ground Water

Date Received: 04/03/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:39
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:55
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MWT-17001R

Date Collected: 03/27/24 15:40

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-9

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:40
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661114	SCB	EET SL	05/10/24 11:55
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15016R

Date Collected: 03/27/24 16:52

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-10

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:40
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:08
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-17006

Date Collected: 03/27/24 16:00

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:40
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:08
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15023

Date Collected: 03/27/24 14:30

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-12

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:40
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:08
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15020

Date Collected: 03/27/24 13:00

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-13

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:40
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:08
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-17005

Date Collected: 03/27/24 11:20

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-14

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:42
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:08
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15021

Date Collected: 03/27/24 18:00

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-15

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:42
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15002

Date Collected: 03/28/24 15:30

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-16

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:42
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15003

Date Collected: 03/28/24 16:20

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-17

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:42
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15004

Date Collected: 03/28/24 15:00

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-18

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:42
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15005

Date Collected: 03/28/24 12:00

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-19

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662786	FLC	EET SL	05/22/24 09:42
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15006

Date Collected: 03/28/24 13:45

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-20

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655849	KAK	EET SL	04/08/24 10:24
Total/NA	Analysis	903.0		1	662960	SCB	EET SL	05/22/24 11:30
Total/NA	Prep	PrecSep_0			655850	KAK	EET SL	04/08/24 10:27
Total/NA	Analysis	904.0		1	661118	SCB	EET SL	05/10/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15007
Date Collected: 03/28/24 14:30
Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-21
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655852	KAK	EET SL	04/08/24 10:35
Total/NA	Analysis	903.0		1	659273	SCB	EET SL	04/30/24 17:07
Total/NA	Prep	PrecSep_0			655853	KAK	EET SL	04/08/24 10:40
Total/NA	Analysis	904.0		1	659062	SCB	EET SL	04/28/24 11:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15008
Date Collected: 03/28/24 13:30
Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-22
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655852	KAK	EET SL	04/08/24 10:35
Total/NA	Analysis	903.0		1	659273	SCB	EET SL	04/30/24 17:08
Total/NA	Prep	PrecSep_0			655853	KAK	EET SL	04/08/24 10:40
Total/NA	Analysis	904.0		1	659062	SCB	EET SL	04/28/24 11:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15009
Date Collected: 03/28/24 12:12
Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-23
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655852	KAK	EET SL	04/08/24 10:35
Total/NA	Analysis	903.0		1	659273	SCB	EET SL	04/30/24 17:08
Total/NA	Prep	PrecSep_0			655853	KAK	EET SL	04/08/24 10:40
Total/NA	Analysis	904.0		1	659062	SCB	EET SL	04/28/24 11:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15010
Date Collected: 03/28/24 10:30
Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-24
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655852	KAK	EET SL	04/08/24 10:35
Total/NA	Analysis	903.0		1	659273	SCB	EET SL	04/30/24 17:09
Total/NA	Prep	PrecSep_0			655853	KAK	EET SL	04/08/24 10:40
Total/NA	Analysis	904.0		1	659061	SCB	EET SL	04/28/24 11:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Lab Chronicle

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

Client Sample ID: MW-15013

Date Collected: 03/28/24 11:10

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-25

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655852	KAK	EET SL	04/08/24 10:35
Total/NA	Analysis	903.0		1	659273	SCB	EET SL	04/30/24 17:09
Total/NA	Prep	PrecSep_0			655853	KAK	EET SL	04/08/24 10:40
Total/NA	Analysis	904.0		1	659061	SCB	EET SL	04/28/24 11:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15014R

Date Collected: 03/28/24 10:12

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-26

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655852	KAK	EET SL	04/08/24 10:35
Total/NA	Analysis	903.0		1	659273	SCB	EET SL	04/30/24 17:09
Total/NA	Prep	PrecSep_0			655853	KAK	EET SL	04/08/24 10:40
Total/NA	Analysis	904.0		1	659061	SCB	EET SL	04/28/24 11:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15015R

Date Collected: 03/28/24 09:12

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-27

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655852	KAK	EET SL	04/08/24 10:35
Total/NA	Analysis	903.0		1	659273	SCB	EET SL	04/30/24 17:09
Total/NA	Prep	PrecSep_0			655853	KAK	EET SL	04/08/24 10:40
Total/NA	Analysis	904.0		1	659061	SCB	EET SL	04/28/24 11:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

Client Sample ID: MW-15022

Date Collected: 03/28/24 09:30

Date Received: 04/03/24 09:00

Lab Sample ID: 810-99088-28

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			655852	KAK	EET SL	04/08/24 10:35
Total/NA	Analysis	903.0		1	659271	SCB	EET SL	04/30/24 17:14
Total/NA	Prep	PrecSep_0			655853	KAK	EET SL	04/08/24 10:40
Total/NA	Analysis	904.0		1	659061	SCB	EET SL	04/28/24 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	662914	FLC	EET SL	05/22/24 17:40

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: 24C1544

Job ID: 810-99088-1

Laboratory: Eurofins St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

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

Method Summary

Client: Trace Analytical Laboratories
Project/Site: 24C1544

Job ID: 810-99088-1

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: 24C1544

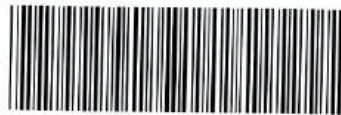
Job ID: 810-99088-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-99088-1	MW-15019	Ground Water	03/27/24 09:10	04/03/24 09:00
810-99088-2	MWT-15019	Ground Water	03/27/24 09:10	04/03/24 09:00
810-99088-3	MW-17004	Ground Water	03/27/24 10:32	04/03/24 09:00
810-99088-4	MW-15018	Ground Water	03/27/24 11:30	04/03/24 09:00
810-99088-5	MW-17003	Ground Water	03/27/24 12:20	04/03/24 09:00
810-99088-6	MW-17002	Ground Water	03/27/24 13:48	04/03/24 09:00
810-99088-7	MW-15017	Ground Water	03/27/24 14:38	04/03/24 09:00
810-99088-8	MW-17001R	Ground Water	03/27/24 15:40	04/03/24 09:00
810-99088-9	MWT-17001R	Ground Water	03/27/24 15:40	04/03/24 09:00
810-99088-10	MW-15016R	Ground Water	03/27/24 16:52	04/03/24 09:00
810-99088-11	MW-17006	Ground Water	03/27/24 16:00	04/03/24 09:00
810-99088-12	MW-15023	Ground Water	03/27/24 14:30	04/03/24 09:00
810-99088-13	MW-15020	Ground Water	03/27/24 13:00	04/03/24 09:00
810-99088-14	MW-17005	Ground Water	03/27/24 11:20	04/03/24 09:00
810-99088-15	MW-15021	Ground Water	03/27/24 18:00	04/03/24 09:00
810-99088-16	MW-15002	Ground Water	03/28/24 15:30	04/03/24 09:00
810-99088-17	MW-15003	Ground Water	03/28/24 16:20	04/03/24 09:00
810-99088-18	MW-15004	Ground Water	03/28/24 15:00	04/03/24 09:00
810-99088-19	MW-15005	Ground Water	03/28/24 12:00	04/03/24 09:00
810-99088-20	MW-15006	Ground Water	03/28/24 13:45	04/03/24 09:00
810-99088-21	MW-15007	Ground Water	03/28/24 14:30	04/03/24 09:00
810-99088-22	MW-15008	Ground Water	03/28/24 13:30	04/03/24 09:00
810-99088-23	MW-15009	Ground Water	03/28/24 12:12	04/03/24 09:00
810-99088-24	MW-15010	Ground Water	03/28/24 10:30	04/03/24 09:00
810-99088-25	MW-15013	Ground Water	03/28/24 11:10	04/03/24 09:00
810-99088-26	MW-15014R	Ground Water	03/28/24 10:12	04/03/24 09:00
810-99088-27	MW-15015R	Ground Water	03/28/24 09:12	04/03/24 09:00
810-99088-28	MW-15022	Ground Water	03/28/24 09:30	04/03/24 09:00





Eaton Analytical



810-99088 Chain of Custody

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #

Batch #

www.EurofinsUS.com/Eaton

CHAIN OF CUSTODY RECORD

Page ____ of ____

Shaded area for EEA use only					REPORT TO:					SAMPLER (Signature)		PWS ID #	STATE (sample origin)	PROJECT NAME	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
BILL TO:					COMPLIANCE MONITORING		Yes	No	POPULATION SERVED	SOURCE WATER	24C1544	24C1544						
LAB Number		COLLECTION			SAMPLING SITE			TEST NAME			SAMPLE REMARKS		CHLORINATED		# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	
		DATE	TIME	AM	PM							YES	NO					
1		03/27/24	9:10			MW-15019			Radium 226/228					4	GW	SW		
2		03/27/24	9:10			MWT-15019			Radium 226/228					4	GW	SW		
3		03/27/24	10:32			MW-17004			Radium 226/228					4	GW	SW		
4		03/27/24	11:30			MW-15018			Radium 226/228					4	GW	SW		
5		03/27/24	12:20			MW-17003			Radium 226/228					4	GW	SW		
6		03/27/24	13:48			MW-17002			Radium 226/228					4	GW	SW		
7		03/27/24	14:38			MW-15017			Radium 226/228					4	GW	SW		
8		03/27/24	15:40			MW-17001R			Radium 226/228					4	GW	SW		
9		03/27/24	15:40			MWT-17001R			Radium 226/228					4	GW	SW		
10		03/27/24	16:52			MW-15016R			Radium 226/228					4	GW	SW		
11		03/27/24	16:00			MW-17006			Radium 226/228					4	GW	SW		
12		03/27/24	14:30			MW-15023			Radium 226/228					4	GW	SW		
13		03/27/24	13:00			MW-15020			Radium 226/228					4	GW	SW		
14		03/27/24	11:20			MW17005			Radium 226/228					4	GW	SW		

pH verified < 7

226/228 *KW

4/3/24

RELINQUISHED BY: (Signature) <i>BV/L</i>	DATE 3/28/24	TIME AM PM	RECEIVED BY: (Signature) Fedex	DATE 3/28/24	TIME AM PM	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT LAB COMMENTS <i>Level II with EDD from St. Louis</i>
RELINQUISHED BY: (Signature) Fedex	DATE	TIME AM PM	RECEIVED BY: (Signature) <i>Kamecon Williams</i>	DATE 4/3/24	TIME 0900 AM PM	
RELINQUISHED BY: (Signature)	DATE	TIME AM PM	RECEIVED FOR LABORATORY BY:	DATE	TIME AM PM	

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

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

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





Eaton Analytical

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #

Batch #

www.EurofinsUS.com/Eaton

CHAIN OF CUSTODY RECORD

Page ____ of ____

Shaded area for EEA use only

REPORT TO:					SAMPLER (Signature)		PWS ID #	STATE (sample origin)	PROJECT NAME	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
Jon Mink, Tim Brewer (jmink@trace-labs.com, tbrewer@trace-labs.com) Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-773-5998								MI					
BILL TO:					COMPLIANCE MONITORING	Yes	No	POPULATION SERVED	SOURCE WATER	24C1544	24C1544		
Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444						X							
LAB Number	COLLECTION				SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED		# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	
	DATE	TIME	AM	PM				YES	NO				
1	03/27/24	18:00			MW-15021	Radium 226/228				4	GW	SW	
2	03/28/24	15:30			MW-15002	Radium 226/228				4	GW	SW	
3	03/28/24	16:20			MW-15003	Radium 226/228				4	GW	SW	
4	03/28/24	15:00			MW-15004	Radium 226/228				4	GW	SW	
5	03/28/24	12:00			MW-15005	Radium 226/228				4	GW	SW	
6	03/28/24	13:45			MW-15006	Radium 226/228				4	GW	SW	
7	03/28/24	14:30			MW-15007	Radium 226/228				4	GW	SW	
8	03/28/24	13:30			MW-15008	Radium 226/228				4	GW	SW	
9	03/28/24	12:12			MW-15009	Radium 226/228				4	GW	SW	
10	03/28/24	10:30			MW-15010	Radium 226/228				4	GW	SW	
11	03/28/24	11:10			MW-15013	Radium 226/228				4	GW	SW	
12	03/28/24	10:12			MW-15014R	Radium 226/228				4	GW	SW	
13	03/28/24	9:12			MW-15015R	Radium 226/228				4	GW	SW	
14	03/28/24	9:30			MW-15022	Radium 226/228				4	GW	SW	

pH verified < 2

226/228 1KW 4/3/24

RELINQUISHED BY:(Signature) <i>BV</i>	DATE 3/29/24	TIME	RECEIVED BY:(Signature) Fedex	DATE 3/29/24	TIME	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT LAB COMMENTS Level II with EDD from St. Louis
RELINQUISHED BY:(Signature) Fedex	DATE	TIME	RECEIVED BY:(Signature) <i>Kameron Williams</i>	DATE 4/3/24	TIME 0900	
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	

CONDITIONS UPON RECEIPT (check one):
___ Iced: Wet/Blue ___ Ambient ___ °C Upon Receipt ___ N/A

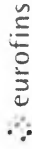
MATRIX CODES: DW-DRINKING WATER RW-REAGENT WATER GW-GROUND WATER EW-EXPOSURE WATER SW-SURFACE WATER PW-POOL WATER WW-WASTE WATER	TURN-AROUND TIME (TAT) - SURCHARGES SW = Standard Written: (15 working days) 0% RV* = Rush Verbal: (5 working days) 50% RW* = Rush Written: (5 working days) 75%	IV* = Immediate 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

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.

Chain of Custody Record



Client Information (Sub Contract Lab)			Lab PM Fullimer, Karen	Carrier Tracking No(s) 810-38427-1	
Shipping/Receiving Company: TestAmerica Laboratories, Inc.			E-Mail Karen.Fullimer@et.eurofins.com	Page Page 1 of 4	
Address 13715 Rider Trail North, City: Earth City State, Zip MO, 63045 Phone 314-298-8566(Tel) 314-298-8757(Fax) Email			State of Origin Michigan	Job # 810-99088-1	
Project Name: 24C1544 Site:			Accreditations Required (See note) State - Michigan	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA Other: M - Hexane N - None O - ASNaO2 P - Na2SO4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Y - Trizma Z - other (specify)	
Due Date Requested: 4/30/2024 TAT Requested (days):			Analysis Requested		
PO #	WO #	Project # 81000263	903.0/precSep_21 EPA 903.0 - Radium 226 (St. Louis)	904.0/precSep_0 EPA 904.0 - Radium 228 (St. Louis)	Ra226_228GFP_C/P/Combined Ra226 & Ra228 Calc (St. Louis)
SSOW#			Form MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, B=Trisub, AA=)	Total Number of containers
MWT-15019 (810-99088-1)	3/27/24	09:10 Eastern	Drinking Water	Drinking Water	4
MWT-15019 (810-99088-2)	3/27/24	09:10 Eastern	Drinking Water	Drinking Water	4
MWT-17004 (810-99088-3)	3/27/24	10:32 Eastern	Drinking Water	Drinking Water	4
MWT-15018 (810-99088-4)	3/27/24	11:30 Eastern	Drinking Water	Drinking Water	4
MWT-17003 (810-99088-5)	3/27/24	12:20 Eastern	Drinking Water	Drinking Water	4
MWT-17002 (810-99088-6)	3/27/24	13:48 Eastern	Drinking Water	Drinking Water	4
MWT-15017 (810-99088-7)	3/27/24	14:38 Eastern	Drinking Water	Drinking Water	4
MWT-17001R (810-99088-8)	3/27/24	15:40 Eastern	Drinking Water	Drinking Water	4
MWT-17001R (810-99088-9)	3/27/24	15:40 Eastern	Drinking Water	Drinking Water	4

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

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

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

Special Instructions/QC Requirements:

Received by <i>Kameron Williams</i>	Date/Time 4/11/24 1600	Company EA-SB Company
Received by <i>M. Punetto</i>	Date/Time APR 05 2024 0850	Company
Received by	Date/Time	Company

Empty Kit Relinquished by: _____ Date: _____ Time: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

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

Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: Fullmer, Karen Shipping/Receiving: Karen.Fullmer@et.eurofins.com Company: TestAmerica Laboratories, Inc. Address: 13715 Rider Trail North, Earth City, MO, 63045 Phone: 314-298-8566 (Tel) 314-298-8757 (Fax) Email: [Blank] Project Name: 24C1544 Site: [Blank]		Lab PM: Fullmer, Karen E-Mail: Karen.Fullmer@et.eurofins.com State: Michigan Accreditation Required (See note): State - Michigan		Carrier Tracking No(s): 810-38427.2 Page: Page 2 of 4 Job #: 810-99088-1	
Due Date Requested: 4/30/2024 TAT Requested (days): [Blank]		Analysis Requested: [Blank]		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: [Blank]	
Matrix (W/water, Solid, Over-sat, AHA) Preservation Code: [Blank]		Field Filtered Sample (Yes or No) [X]		Perform MS/MSD (Yes or No) [X]	
Sample Date: 3/27/24 Sample Time: 16:52 Eastern Sample Type (C=Comp, G=grab): [Blank]		903.0/Prescp_21 EPA 903.0 - Radium 226 (St. Louis) [X]		Radium 226, 228GFP_C/P/Combined Ra226 & Ra228 Calc (St. Louis) [X]	
Sample Identification - Client ID (Lab ID) MW-15016R (810-99088-10) MW-17006 (810-99088-11) MW-15023 (810-99088-12) MW-15020 (810-99088-13) MW-17005 (810-99088-14) MW-15021 (810-99088-15) MW-15002 (810-99088-16) MW-15003 (810-99088-17) MW-15004 (810-99088-18)		Total Number of Containers: 4 4 4 4 4 4 4 4		Special Instructions/Note: [Blank]	
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.					
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) [Blank] Primary Deliverable Rank: 2 Empty Kit Relinquished by: [Blank] Date: [Blank] Time: [Blank] Method of Shipment: [Blank]					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For [Blank] Months Special Instructions/QC Requirements: [Blank]					
Relinquished by: <i>Kameron Williams</i> Date/Time: 4/4/24 16:00 Company: CEA-SB		Relinquished by: <i>M. Pinette</i> Date/Time: APR 05 2024 08:50 Company: [Blank]		Relinquished by: [Blank] Date/Time: [Blank] Company: [Blank]	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: [Blank]		Cooler Temperature(s) °C and Other Remarks: [Blank]	



Client Information (Sub Contract Lab)		Lab PM: Fullmer, Karen		Carrier Tracking No(s): 810-38427 3	
Client Contact: Karen Fullmer@et.eurofins.com		E-Mail: Karen.Fullmer@et.eurofins.com		Page: 3 of 4	
Shipping/Receiving		State of Origin: Michigan		Job #: 810-99088-1	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Michigan		Preservation Codes:	
Address: 13715 Rider Trail North,		Due Date Requested: 4/30/2024		A - HCL	
City: Earth City		TAT Requested (days):		B - NaOH	
State, Zip: MO 63045		PO #:		C - Zn Acetate	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:		D - Nitric Acid	
Email:		Project #:		E - NaHSO4	
Project Name: 24C1544		SSOW#:		F - MeOH	
Site:		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>		G - Amchlor	
		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>		H - Ascorbic Acid	
		90.0/PrecSep_Z1 EPA 903.0 - Radium 226 (St. Louis)		I - Ice	
		90.0/PrecSep_EPA 904.0 - Radium 228 (St. Louis)		J - DI Water	
		Raz26_Z28GFP_C/P Combined Raz26 & Raz28 Calc (St. Louis)		K - EDTA	
		Total Number of Containers		L - EDA	
		Special Instructions/Note:		M - Hexane	
				N - None	
				O - AsNaO2	
				P - Na2O4S	
				Q - Na2SO3	
				R - Na2S2O3	
				S - H2SO4	
				T - TSP Dodecahydrate	
				U - Acetone	
				V - MCAA	
				W - pH 4-5	
				Y - Trizma	
				Z - other (specify)	
				Other:	

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Overstabil, BT=Telex, A=AU)	Preservation Code:	Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>	90.0/PrecSep_Z1 EPA 903.0 - Radium 226 (St. Louis)	90.0/PrecSep_EPA 904.0 - Radium 228 (St. Louis)	Raz26_Z28GFP_C/P Combined Raz26 & Raz28 Calc (St. Louis)	Total Number of Containers	Special Instructions/Note:
MW-15005 (810-99088-19)	3/28/24	12:00 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	
MW-15006 (810-99088-20)	3/28/24	13:45 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	
MW-15007 (810-99088-21)	3/28/24	14:30 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	
MW-15008 (810-99088-22)	3/28/24	13:30 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	
MW-15009 (810-99088-23)	3/28/24	12:12 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	
MW-15010 (810-99088-24)	3/28/24	10:30 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	
MW-15013 (810-99088-25)	3/28/24	11:10 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	
MW-15014R (810-99088-26)	3/28/24	10:12 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	
MW-15015R (810-99088-27)	3/28/24	09:12 Eastern	Drinking Water	Drinking Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	4	

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

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested I, II, III, IV, Other (specify) _____

Primary Deliverable Rank: 2

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

Special Instructions/OC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>Kameron Williams</i>	4/14/24	1600	
Relinquished by: <i>MM Pometto</i>	APR 05 2024	0850	Company
Relinquished by:	Date/Time:	Date/Time:	Company

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



Client Information (Sub Contract Lab) Client Contact: _____ Shipping/Receiving: _____ Company: TestAmerica Laboratories, Inc. Address: 13715 Rider Trail North, City: _____ State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email: _____		Lab PM: Fullimer, Karen E-Mail: Karen.Fullimer@et.eurofins.com Carrier Tracking No(s): 810-38427 4 State of Origin: Michigan Page: 4 of 4 Job #: 810-99088-1	
Due Date Requested: 4/30/2024 TAT Requested (days): _____ PO #: _____ WO #: _____ Project #: 81000263 SSOW#: _____		Accreditations Required (See note): State - Michigan Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: _____ M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
Sample Identification - Client ID (Lab ID) MW-15022 (810-99088-28)		Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> 903.0/PreSep_21 EPA 903.0 - Radium 226 (St. Louis) X 904.0/PreSep_0 EPA 904.0 - Radium 228 (St. Louis) X RAZ26_228GFPC_P/Combined RAZ26 & RAZ28 Calc (St. Louis) X Total Number of Containers: 4	
Sample Date: 3/28/24 Sample Time: 09:30 Eastern Matrix (W=water, S=solid, O=soil, B=biological, BT=biota, A=air)	Sample Type (C=Comp, G=grab)	Preservation Code: _____	Special Instructions/Note: _____
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC			
Possible Hazard Identification Unconfirmed _____ Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: _____			
Relinquished by: <i>Kameron Williams</i> Date/Time: 4/14/24 1600 Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____		Received by: <i>M. Pinette</i> Date/Time: APR 05 2024 0850 Received by: _____ Date/Time: _____	
Relinquished by: _____ Date: _____ Empty Kit Relinquished by: _____ Date: _____		Method of Shipment: _____ Date/Time: _____ Company: _____ Date/Time: _____ Company: _____ Date/Time: _____ Company: _____	
Custody Seals Intact: _____ Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: _____	

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-99088-1

Login Number: 99088

List Number: 1

Creator: Williams, Kameron

List Source: Eurofins Eaton Analytical South Bend

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	False	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	



Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-99088-1

Login Number: 99088
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 04/05/24 02:58 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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	
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL LABORATORIES, INC.

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

Phone 231.773.5998
Fax 888.979.4469
www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Report Results To:

Bill To:

Trace Use:

Company Name: HDR Inc.

PO #: 10220433

Logged By: *BY*

Report To: Mely Reeves

Contact Name: Lara Zawaidh

Checked By: *MC*

Mailing Address: 1000 Oakbrook Drive, Suite 200

Billing Address (if different): 1000 Oakbrook Drive, Suite 200

Soil Volatiles Preserved (circle if applicable):
MeOH Low Level Lab

City, State, Zip Code: Ann Arbor, MI 48104

City, State, Zip Code: Ann Arbor, MI 48104

Sample Collection Time (hrs):

Office Phone: Call phone: 734.223.7138

Phone Number: 734.223.9074

Sample Collection Time (hrs):

Email Address: molly.reeves@hdrinc.com

Billing Email Address: lara.zawaidh@hdrinc.com

Requested Turnaround Times (TAT)

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

* Rush TAT Requires Prior Approval

Matrix Key:

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

Project Name: Charah - BC Cobb

Sampled By (print): Andrew Byks / Tansen Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filter (Y or N)	Matrix - see above →	Number of Containers	Cool to 4°C	Preservation	40 CFR Part 257 Appendix III	40 CFR Part 257 Appendix IV	Additional Part 115 Metals	Total Suspended Solids (TSS)	Remarks/Notes	Possible Health Hazards?
1	3/27/24	910	WW-15019	N	GW	6	6	S	X	X	X	X		
2	3/27/24	910	MWT-15019	N	GW	6	6	S	X	X	X	X		
3	3/27/24	1032	WW-17004	N	GW	6	6	S	X	X	X	X		
4	3/27/24	1130	WW-15018	N	GW	6	6	S	X	X	X	X		
5	3/27/24	1220	WW-17003	N	GW	6	6	S	X	X	X	X		
6	3/27/24	1348	WW-17002	N	GW	6	6	S	X	X	X	X		
7	3/27/24	1438	WW-15017	N	GW	6	6	S	X	X	X	X		
8	3/27/24	1540	WW-17001R	N	GW	6	6	S	X	X	X	X		
9	3/27/24	1540	MWT-17001R	N	GW	6	6	S	X	X	X	X		
10	3/27/24	1652	WW-15016R	N	GW	6	6	S	X	X	X	X		
Please Sign				Released By	Received By	Date	Time	Released By	Received By	Date	Time			
				<i>[Signature]</i>	<i>[Signature]</i>	3/28/24	8:03							

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.

TRACE

ANALYTICAL LABORATORIES, INC.

CHAIN-OF-CUSTODY RECORD

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

Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

Report Results To:

Company Name: HDR Inc.

Report To: Mely Reeves

Mailing Address: 1000 Oakbrook Drive, Suite 200

City, State, Zip Code: Ann Arbor, MI 48104

Office Phone:

Email Address: mlyreeves@hdrinc.com

Bill To:

PO #: 10220433

Contact Name: Lara Zawaldah

Billing Address (if different): 1000 Oakbrook Drive, Suite 200

City, State, Zip Code: Ann Arbor, MI 48104

Phone Number: 734.223.9074

Billing Email Address: larazawaldah@hdrinc.com

Trace Use:

Logged By: RV

Checked By: NVC

Soil Volatiles Preserved (circle if applicable):

MeOH Low Level Lab

Sample Collection Time (hrs):

24C1544

Requested Turnaround Times (TAT)

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

* Rush TAT Requires Prior Approval

Matrix Key:

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

Project Name: Charrah - BC Cobb

Sampled By (pmi): Andrew Bygs / Tereza Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filterd (Y or N)	Matrix - see above →	Number of Containers	Preservation										Analysis Requested				Remarks/Notes	Possible Health Hazards?										
							Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other	40 CFR Part 257 Appendix III	40 CFR Part 257 Appendix IV	Additional Part 115 Metals	Total Suspended Solids (TSS)													
11	3/27/24	1600	WW-17006	N	GW	6	6																									
12	3/27/24	1430	WW-15023	N	GW	6	6																									
13	3/27/24	1300	WW-15020	N	GW	6	6																									
14	3/27/24	1120	WW-17005	N	GW	6	6																									
15	3/27/24	1800	WW-15021	N	GW	6	6																									

Please Sign

Released By	Received By	Date	Time	Released By	Received By	Date	Time
	<u>[Signature]</u>	3/28/24	8:03		<u>[Signature]</u>		

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.

TRACE

ANALYTICAL LABORATORIES, INC.

CHAIN-OF-CUSTODY RECORD

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

Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

Page 1 of 2

Trace ID No.
24C1544

Report Results To:

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

PO #: 10220433
 Contact Name: Lara Zawalden
 Billing Address (if different): 1000 Oakbrook Drive, Suite 200
 City, State, Zip Code: Ann Arbor, MI 48104
 Phone Number: 734.223.9074
 Billing Email Address: lara.zawalden@hdrinc.com

Requested Turnaround Times (TAT)

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

Matrix Key:

WW = Wastewater
 DW = Drinking Water
 GW = Groundwater
 LW = Liquid Waste

O = Oil
 WI = Wipes
 S = Solid
 SL = Sludge

A = Air
 U = Unknown

Project Name: **Charrah - BC Cobb**

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filtered (Y or N)	Matrix - see above →	Number of Containers	Preservation	Analysis Requested	Remarks/Notes	
16	3/28/24	1530	MMN-15002	N	GW	6	5	X		
17	3/28/24	1020	MMN-15003	N	GW	6	5	X		
18	3/28/24	1500	MMN-15004	N	GW	6	5	X		
19	3/28/24	1200	MMN-15005	N	GW	6	5	X		
20	3/28/24	1345	MMN-15006	N	GW	6	5	X		
21	3/28/24	1430	MMN-15007	N	GW	6	5	X		
22	3/28/24	1336	MMN-15008	N	GW	6	5	X		
23	3/28/24	1212	MMN-15009	N	GW	6	5	X		
24	3/28/24	1030	MMN-15010	N	GW	6	5	X		
25	3/28/24	1110	MMN-15013	N	GW	6	5	X		
Released By: <i>Andrew J. Byls</i>				Received By: <i>[Signature]</i>				Date: <i>3/29/24</i> Time: <i>8:40</i>		

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.



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

Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Trace ID No.
 24C1544

Report Results To:

Bill To:

Trace Use:

Company Name: HDR Inc.

PO #: 10220433

Logged By: *AV*

Report To: Molly Reeves

Contact Name: Lara Zawaiden

Checked By: *AV*

Mailing Address: 1000 Oakbrook Drive, Suite 200

Billing Address (if different): 1000 Oakbrook Drive, Suite 200

Soil Vials Preserved (circle if applicable):
 MeOH Low Level Lab

City, State, Zip Code: Ann Arbor, MI 48104

City, State, Zip Code: Ann Arbor, MI 48104

Sample Collection Time (hrs):

Office Phone: Cell Phone: 734.263.7138

Phone Number: 734.223.9074

Sample Collection Time (hrs):

Email Address: molly.reeves@hdrinc.com

Billing Email Address: lara.zawaiden@hdrinc.com

Requested Turnaround Times (TAT)

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

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

* Rush TAT Requires Prior Approval

Project Name: Charrah - BC Cobb

Analysis Requested

Sampled By (pm): Andrew Bygs / Tanku Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name
26	3/28/24	1012	MW-15014R
27	3/28/24	912	MW-15015R
28	3/28/24	930	MW-15022

Metals	Field Filtered (Y or N)	Matrix	Number of Containers	Preservation
		see above →		
			Cool ≤ 4°C	
			Hydrochloric Acid (HCl)	
			Nitric Acid (HNO3)	
			Sulfuric Acid (H2SO4)	
			Sodium Thiosulfate	
			Sodium Hydroxide (NaOH)	
			Ascorbic Acid	
			Trizma	
			Other	

Analysis Requested
40 CFR Part 257 Appendix III
40 CFR Part 257 Appendix IV
Additional Part 115 Metals
Total Suspended Solids (TSS)

Remarks/Notes

Possible Health Hazards?

Please Sign

Released By	Received By	Date	Time	Released By	Received By	Date	Time
<i>Andrew Bygs</i>	<i>AV</i>	3/29/24	8:40		<i>AV</i>		

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.

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

24C1544
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: <u>3/28/24</u>	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: <u>8:03</u>									
Initials: <u>BV</u>									
Package Description: <u>Cooler</u>									
Package Temp °C	<u>0.0</u>	<u>0.0</u>				<input checked="" type="checkbox"/>			
Representative Sample Temp °C	<u>6.0</u>	<u>5.9</u>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

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

Notes:

NC 3/28/24
pt 9, 10, 15

24C1544
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/28/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:26									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.0	0.0							
Representative Sample Temp °C	7.4	7.3							

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

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

Notes:

NC 3/28/24
 Pt. 1, 2, 3, 4

24C1544

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/28/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:30									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.2	0.2			✓				
Representative Sample Temp °C	7.4	7.4			✓				✓

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

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

Notes:

NC 3/28/24
 Pt. 7, 8, 5, 6

24C1544
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/28/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:43									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.3	0.3			✓				
Representative Sample Temp °C	6.6	6.5					✓	✓	

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

Pt. 11, 12, 13, 14

24C1544

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/29/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:40									
Initials: BV									
Package Description: Cooler									
Package Temp °C	-0.1	-0.1							
Representative Sample Temp °C	2.8	2.6							

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off
 BV 3/29/24

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

Pt. 21, 22, 23, 25

24C1544
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/29/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:50									
Initials: BV									
Package Description: Cooler									
Package Temp °C	-0.1	-0.1				✓			
Representative Sample Temp °C	5.3	5.1				✓		✓	

Sample Receipt

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

Sample Condition

Yes No N/A All sample containers arrived unbroken and labeled
 Yes No N/A Sufficient sample to run requested analyses
 Yes No N/A Correct chemical preservative added to samples
 Yes No N/A Samples preserved at Trace
 Yes No N/A 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
 Yes No N/A Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No All bottle labels agree with COC
 Yes No COC filled out properly
 Yes No COC signed by client

Notes:

P+. 19, 20, 24, 28

24C1544

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/29/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 8:56									
Initials: BV									
Package Description: Cooler									
Package Temp °C	-0.2	-0.2			✓				
Representative Sample Temp °C	3.6	3.4				✓		✓	

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

Pt. 16, 17, 18

24C1544

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 3/29/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -0.2°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:01									
Initials: BV									
Package Description: Cooler									
Package Temp °C	0.7	0.1							
Representative Sample Temp °C	6.5	6.5							

Sample Receipt

Yes / No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes / No / N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes / No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

Pt. 26, 27

Data Validation Checklist

Site Name: Cobb Sampling Personnel: Andrew Byks & Tanten Buszka

Data Validation: Andrew Byks

Sample Date(s): 10/22/2024-10/24/2024 Lab Drop-off Date(s): 10/23/2024-10/24/2024

Lab Report Number: 24J1498; 24J1501

Lab Report Date: 11/07/2024 (CCR & Part 115); 12/05/2024 (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	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Chain-of-Custody forms	<input checked="" type="radio"/> Yes / No	N/A
Field decontamination documentation	N/A	N/A
Sample collection field forms	<input checked="" type="radio"/> Yes / No	N/A
Drilling logs	<input checked="" type="radio"/> Yes / No	N/A
Well construction logs	<input checked="" type="radio"/> Yes / No	N/A
Well development field forms	<input checked="" type="radio"/> 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)	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Case narrative	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Internal laboratory Chain-of-Custody forms	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Sample chronology and consistency (that is, dates and times of receipt, preparation, and analysis)	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Communication records with laboratory	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
EDD format consistency	<input checked="" type="radio"/> Yes / No	N/A
Sample identification, results nomenclature, and data qualifier consistency	<input checked="" type="radio"/> Yes / No	N/A
Method detection limit consistency RLs as requested; MDLs < RLs	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Instrument calibration records	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Laboratory Report	<input checked="" type="radio"/> Yes / No	<input checked="" type="radio"/> Yes / No
Field QC sample results and calculation of accuracy and precision	<input checked="" type="radio"/> Yes / No Duplicate Well ID: MW-15003 MW-17003	Yes <input checked="" type="radio"/> No Duplicate RPD: Over 20% + NDs Over 20%

Corrections Needed:

Parent sample

Parent sample MW-15003 required qualification as estimated with low bias, or as estimated but not detected (J+, UJ) and field duplicate MWT-15003 required qualification as estimated with high bias (J+) for arsenic, cadmium, cobalt, fluoride, lead, molybdenum, selenium, thallium, copper, nickel, zinc, and Ra-266 due to RPDs outside of control limits and analytes being detected in the duplicate sample but not the parent sample. MW-15003 required qualification as estimated but not detected (UJ) and MWT-15003 required qualification as estimated with high bias (J+) for Ra-228 due to RPDs outside of control limits.

Parent sample MW-17003 required qualification as estimated with low bias (J-) and field duplicate MWT-17003 required qualification as estimated with high bias (J+) for fluoride and Ra-226 due to RPD outside control limits. MW-17003 required qualification as estimated with high bias (J+) and MWT-17003 required qualification as estimated with low bias (J-) for Ra-228 and combined Ra-226+228 due to RPDs outside of control limits.

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



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

November 11, 2024

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

Phone: (734) 263-7138

RE: Trace Project 24J1498
Client Project BC Cobb

Dear Ms. Reeves:

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Mink".

Jon Mink
Senior Project Manager
Enclosures



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

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

SAMPLE SUMMARY

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
24J1498-01	MW-15010	Ground Water	AB/TB	10/22/24 17:00	10/23/24 08:03
24J1498-02	MW-15006	Ground Water	AB/TB	10/22/24 15:30	10/23/24 08:03
24J1498-03	MW-15005	Ground Water	AB/TB	10/22/24 14:30	10/23/24 08:03
24J1498-04	MW-15007	Ground Water	AB/TB	10/22/24 16:42	10/23/24 08:03
24J1498-05	MW-15003	Ground Water	AB/TB	10/22/24 12:44	10/23/24 08:03
24J1498-06	MWT-15003	Ground Water	AB/TB	10/22/24 12:44	10/23/24 08:03
24J1498-07	MW-15004	Ground Water	AB/TB	10/22/24 14:04	10/23/24 08:03
24J1498-08	MW-15002	Ground Water	AB/TB	10/22/24 15:10	10/23/24 08:03
24J1498-09	MW-17003	Ground Water	AB/TB	10/23/24 09:04	10/24/24 08:58
24J1498-10	MWT-17003	Ground Water	AB/TB	10/23/24 09:04	10/24/24 08:58
24J1498-11	MW-15018	Ground Water	AB/TB	10/23/24 10:22	10/24/24 08:58
24J1498-12	MW-15017	Ground Water	AB/TB	10/23/24 11:24	10/24/24 08:58
24J1498-13	MW-17002	Ground Water	AB/TB	10/23/24 12:20	10/24/24 08:58
24J1498-14	MW-17001R	Ground Water	AB/TB	10/23/24 14:08	10/24/24 08:58
24J1498-15	MW-15016R	Ground Water	AB/TB	10/23/24 15:02	10/24/24 08:58
24J1498-16	MW-15015R	Ground Water	AB/TB	10/23/24 16:08	10/24/24 08:58
24J1498-17	MW-15014R	Ground Water	AB/TB	10/23/24 17:20	10/24/24 08:58
24J1498-18	MW-15009	Ground Water	AB/TB	10/23/24 17:45	10/24/24 08:58
24J1498-19	MW-17004	Ground Water	AB/TB	10/23/24 16:15	10/24/24 08:58
24J1498-20	MW-15019	Ground Water	AB/TB	10/23/24 15:00	10/24/24 08:58
24J1498-21	MW-17005	Ground Water	AB/TB	10/23/24 13:45	10/24/24 08:58
24J1498-22	MW-15020	Ground Water	AB/TB	10/23/24 12:30	10/24/24 08:58
24J1498-23	MW-15023	Ground Water	AB/TB	10/23/24 11:00	10/24/24 08:58
24J1498-24	MW-17006	Ground Water	AB/TB	10/23/24 10:00	10/24/24 08:58
24J1498-25	MW-15021	Ground Water	AB/TB	10/23/24 09:00	10/24/24 08:58
24J1498-26	MW-15022	Ground Water	AB/TB	10/23/24 07:30	10/24/24 08:58
24J1498-27	MW-15008	Ground Water	AB/TB	10/24/24 07:45	10/24/24 08:58
24J1498-28	MW-15013	Ground Water	AB/TB	10/24/24 08:06	10/24/24 08:58

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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: 24J1498-09

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: 24J1498-21

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: T158432-DUP1

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: T158574-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: T158625-MS2

Analysis: EPA 200.7 Rev. 4.4

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

Boron

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

Calcium

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

Trace ID: T158628-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: T158628-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.

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-01 Date Collected: 10/22/24 17:00 Matrix: Ground Water
 Sample ID: MW-15010 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158574

Boron	1.1	mg/L	0.0088	1	10/31/24	ejb	11/01/24	jlh		0.0051
Calcium	180	mg/L	1.3	5	10/31/24	ejb	11/01/24	jlh		0.18
Lithium	0.029	mg/L	0.0025	1	10/31/24	ejb	11/01/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158574

Antimony	<0.00010	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.00010
Arsenic	0.00033	mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs	J	0.00010
Barium	0.14	mg/L	0.0025	1	10/31/24	ejb	11/01/24	acs		0.00068
Beryllium	0.000058	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs	J	0.000052
Cadmium	<0.000075	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.000075
Chromium	0.00021	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs	J	0.00020
Cobalt	0.00050	mg/L	0.00052	1	10/31/24	ejb	11/01/24	acs	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs		0.00010
Molybdenum	0.0032	mg/L	0.0012	1	10/31/24	ejb	11/01/24	acs		0.00025
Selenium	<0.00010	mg/L	0.00050	1	10/31/24	ejb	11/01/24	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	10/31/24	ejb	11/01/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	300	mg/L	3.8	25	10/24/24	ljs	10/25/24	bm		3.0
Sulfate as SO4	51	mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-01 Date Collected: 10/22/24 17:00 Matrix: Ground Water
 Sample ID: MW-15010 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1000 mg/L	40	4	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	7.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-02 Date Collected: 10/22/24 15:30 Matrix: Ground Water
 Sample ID: MW-15006 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158574

Boron	0.048	mg/L	0.0088	1	10/31/24	ejb	11/01/24	jlh		0.0051
Calcium	80	mg/L	0.26	1	10/31/24	ejb	11/01/24	jlh		0.037
Lithium	<0.0019	mg/L	0.0025	1	10/31/24	ejb	11/01/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158574

Antimony	0.00033	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.00010
Arsenic	0.0050	mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs		0.00010
Barium	0.022	mg/L	0.0025	1	10/31/24	ejb	11/01/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.000075
Chromium	<0.00020	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.00020
Cobalt	0.0012	mg/L	0.00052	1	10/31/24	ejb	11/01/24	acs		0.00010
Lead	<0.00010	mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs		0.00010
Molybdenum	0.0081	mg/L	0.0012	1	10/31/24	ejb	11/01/24	acs		0.00025
Selenium	0.00052	mg/L	0.00050	1	10/31/24	ejb	11/01/24	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	10/31/24	ejb	11/01/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	5.1	mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	11	mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-02 Date Collected: 10/22/24 15:30 Matrix: Ground Water
 Sample ID: MW-15006 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	330 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	4.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-03 Date Collected: 10/22/24 14:30 Matrix: Ground Water
 Sample ID: MW-15005 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158574

Boron	0.095 mg/L	0.0088	1	10/31/24	ejb	11/01/24	jlh		0.0051
Calcium	85 mg/L	0.26	1	10/31/24	ejb	11/01/24	jlh		0.037
Lithium	0.0040 mg/L	0.0025	1	10/31/24	ejb	11/01/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158574

Antimony	<0.00010 mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.00010
Arsenic	0.00074 mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs		0.00010
Barium	0.19 mg/L	0.0025	1	10/31/24	ejb	11/01/24	acs		0.00068
Beryllium	0.000059 mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.000075
Chromium	0.00021 mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs	J	0.00020
Cobalt	0.00027 mg/L	0.00052	1	10/31/24	ejb	11/01/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs		0.00010
Molybdenum	0.00086 mg/L	0.0012	1	10/31/24	ejb	11/01/24	acs	J	0.00025
Selenium	0.00015 mg/L	0.00050	1	10/31/24	ejb	11/01/24	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	10/31/24	ejb	11/01/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	19 mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	<2.2 mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-03 Date Collected: 10/22/24 14:30 Matrix: Ground Water
 Sample ID: MW-15005 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	360 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20									
<i>Batch: T158427</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-04 Date Collected: 10/22/24 16:42 Matrix: Ground Water
 Sample ID: MW-15007 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158574

Boron	0.13	mg/L	0.0088	1	10/31/24	ejb	11/01/24	jlh		0.0051
Calcium	77	mg/L	0.26	1	10/31/24	ejb	11/01/24	jlh		0.037
Lithium	0.0021	mg/L	0.0025	1	10/31/24	ejb	11/01/24	jlh	J, N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158574

Antimony	0.00048	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.00010
Arsenic	0.0033	mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs		0.00010
Barium	0.034	mg/L	0.0025	1	10/31/24	ejb	11/01/24	acs		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.000075
Chromium	0.00026	mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.00020
Cobalt	0.00056	mg/L	0.00052	1	10/31/24	ejb	11/01/24	acs		0.00010
Lead	0.00010	mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs	J	0.00010
Molybdenum	0.013	mg/L	0.0012	1	10/31/24	ejb	11/01/24	acs		0.00025
Selenium	0.0011	mg/L	0.00050	1	10/31/24	ejb	11/01/24	acs		0.00010
Thallium	<0.000075	mg/L	0.00038	1	10/31/24	ejb	11/01/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	57	mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	17	mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-04 Date Collected: 10/22/24 16:42 Matrix: Ground Water
 Sample ID: MW-15007 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	500 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	4.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-05 Date Collected: 10/22/24 12:44 Matrix: Ground Water
 Sample ID: MW-15003 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T158574

Boron	0.50 mg/L	0.0088	1	10/31/24	ejb	11/01/24	jlh		0.0051
Calcium	88 mg/L	0.26	1	10/31/24	ejb	11/01/24	jlh		0.037
Lithium	0.011 mg/L	0.0025	1	10/31/24	ejb	11/01/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T158574

Antimony	<0.00010 mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.00010
Arsenic	0.00017 mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs	J	0.00010
Barium	0.093 mg/L	0.0025	1	10/31/24	ejb	11/01/24	acs		0.00068
Beryllium	0.000089 mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.000075
Chromium	0.00077 mg/L	0.00025	1	10/31/24	ejb	11/01/24	acs		0.00020
Cobalt	0.00018 mg/L	0.00052	1	10/31/24	ejb	11/01/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	10/31/24	ejb	11/01/24	acs		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	10/31/24	ejb	11/01/24	acs		0.00025
Selenium	0.00011 mg/L	0.00050	1	10/31/24	ejb	11/01/24	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	10/31/24	ejb	11/01/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158399

Fluoride	<0.11 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	330 mg/L	3.8	25	10/24/24	ljs	10/25/24	bm		3.0
Sulfate as SO4	<2.2 mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20

Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-05 Date Collected: 10/22/24 12:44 Matrix: Ground Water
 Sample ID: MW-15003 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	970 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20									
<i>Batch: T158427</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-06 Date Collected: 10/22/24 12:44 Matrix: Ground Water
 Sample ID: MWT-15003 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T158625

Boron	0.51 mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	96 mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.011 mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T158625

Antimony	<0.00010 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00034 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Barium	0.097 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	0.00011 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	0.00014 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000075
Chromium	0.00097 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00065 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma		0.00010
Lead	0.00013 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Molybdenum	0.0011 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	0.00020 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	0.00015 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma	J	0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158399

Fluoride	0.37 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	330 mg/L	3.8	25	10/24/24	ljs	10/25/24	bm		3.0
Sulfate as SO4	<2.2 mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20

Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-06 Date Collected: 10/22/24 12:44 Matrix: Ground Water
 Sample ID: MWT-15003 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	980 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 <i>Batch: T158427</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-07 Date Collected: 10/22/24 14:04 Matrix: Ground Water
 Sample ID: MW-15004 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T158625

Boron	0.18 mg/L	0.0088	1	11/01/24	ejb	11/06/24	jlh		0.0051
Calcium	71 mg/L	0.26	1	11/01/24	ejb	11/06/24	jlh		0.037
Lithium	0.0025 mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T158625

Antimony	0.00011 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Arsenic	0.0013 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.040 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00051 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00017 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.00077 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	0.00024 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158399

Fluoride	0.18 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	J, N	0.11
Chloride	89 mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	3.9 mg/L	6.0	10	10/24/24	ljs	10/24/24	bm	J	2.2

Analysis Method: SM 2540 C-20

Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-07 Date Collected: 10/22/24 14:04 Matrix: Ground Water
 Sample ID: MW-15004 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	460 mg/L	48	4.761905	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20									
<i>Batch: T158427</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-08 Date Collected: 10/22/24 15:10 Matrix: Ground Water
 Sample ID: MW-15002 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158628

Boron	3.3 mg/L	0.0088	1	11/01/24	ejb	11/04/24	jlh		0.0051
Calcium	160 mg/L	2.6	10	11/01/24	ejb	11/04/24	jlh		0.37
Lithium	0.027 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158628

Antimony	<0.00010 mg/L	0.00025	1	11/01/24	ejb	11/01/24	acs		0.00010
Arsenic	0.00018 mg/L	0.00055	1	11/01/24	ejb	11/01/24	acs	J	0.00010
Barium	0.14 mg/L	0.0025	1	11/01/24	ejb	11/01/24	acs		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	11/01/24	ejb	11/01/24	acs		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/01/24	acs		0.000075
Chromium	0.00061 mg/L	0.00025	1	11/01/24	ejb	11/01/24	acs		0.00020
Cobalt	0.00039 mg/L	0.00052	1	11/01/24	ejb	11/01/24	acs	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	11/01/24	ejb	11/01/24	acs		0.00010
Molybdenum	0.0030 mg/L	0.0012	1	11/01/24	ejb	11/01/24	acs		0.00025
Selenium	0.00012 mg/L	0.00050	1	11/01/24	ejb	11/01/24	acs	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	11/01/24	ejb	11/01/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	480 mg/L	7.5	50	10/24/24	ljs	10/25/24	bm		6.0
Sulfate as SO4	<2.2 mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-08 Date Collected: 10/22/24 15:10 Matrix: Ground Water
 Sample ID: MW-15002 Date Received: 10/23/24 08:03

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1300 mg/L	48	4.761905	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20									
<i>Batch: T158427</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-09 Date Collected: 10/23/24 09:04 Matrix: Ground Water
 Sample ID: MW-17003 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158312

Boron	2.8	mg/L	0.044	5	10/25/24	ejb	10/30/24	jlh		0.026
Calcium	410	mg/L	1.3	5	10/25/24	ejb	10/30/24	jlh		0.18
Lithium	0.27	mg/L	0.012	5	10/25/24	ejb	10/30/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158312

Antimony	<0.00010	mg/L	0.00025	1	10/25/24	ejb	10/29/24	jma		0.00010
Arsenic	0.21	mg/L	0.00055	1	10/25/24	ejb	10/29/24	jma		0.00010
Barium	0.033	mg/L	0.0025	1	10/25/24	ejb	10/29/24	jma		0.00068
Beryllium	0.00016	mg/L	0.00025	1	10/25/24	ejb	10/29/24	jma	J	0.000052
Cadmium	<0.000075	mg/L	0.00025	1	10/25/24	ejb	10/29/24	jma		0.000075
Chromium	0.00052	mg/L	0.00025	1	10/25/24	ejb	10/29/24	jma		0.00020
Cobalt	0.038	mg/L	0.00052	1	10/25/24	ejb	10/29/24	jma		0.00010
Lead	<0.00050	mg/L	0.0028	5	10/25/24	ejb	10/29/24	jma	DL02	0.00050
Molybdenum	0.12	mg/L	0.0012	1	10/25/24	ejb	10/29/24	jma		0.00025
Selenium	0.00021	mg/L	0.00050	1	10/25/24	ejb	10/29/24	jma	J	0.00010
Thallium	<0.00038	mg/L	0.0019	5	10/25/24	ejb	10/29/24	jma	DL02	0.00038

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	55	mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	1700	mg/L	60	100	10/24/24	ljs	10/25/24	bm		22

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-09 Date Collected: 10/23/24 09:04 Matrix: Ground Water
 Sample ID: MW-17003 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	3100 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	42 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-10 Date Collected: 10/23/24 09:04 Matrix: Ground Water
 Sample ID: MWT-17003 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158628

Boron	3.3	mg/L	0.0088	1	11/01/24	ejb	11/04/24	jlh		0.0051
Calcium	470	mg/L	2.6	10	11/01/24	ejb	11/04/24	jlh		0.37
Lithium	0.33	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158628

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/01/24	acs		0.00010
Arsenic	0.23	mg/L	0.00055	1	11/01/24	ejb	11/01/24	acs		0.00010
Barium	0.038	mg/L	0.0025	1	11/01/24	ejb	11/01/24	acs		0.00068
Beryllium	0.00015	mg/L	0.00025	1	11/01/24	ejb	11/01/24	acs	J	0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/01/24	acs		0.000075
Chromium	0.00048	mg/L	0.00025	1	11/01/24	ejb	11/01/24	acs		0.00020
Cobalt	0.043	mg/L	0.00052	1	11/01/24	ejb	11/01/24	acs		0.00010
Lead	<0.00010	mg/L	0.00055	1	11/01/24	ejb	11/01/24	acs		0.00010
Molybdenum	0.17	mg/L	0.0012	1	11/01/24	ejb	11/01/24	acs		0.00025
Selenium	0.00022	mg/L	0.00050	1	11/01/24	ejb	11/01/24	acs	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/01/24	acs		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	54	mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO ₄	1700	mg/L	60	100	10/24/24	ljs	10/25/24	bm		22

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-10 Date Collected: 10/23/24 09:04 Matrix: Ground Water
 Sample ID: MWT-17003 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	2800 mg/L	48	4.761905	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	50 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-11 Date Collected: 10/23/24 10:22 Matrix: Ground Water
 Sample ID: MW-15018 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.18 mg/L	0.0088	1	11/01/24	ejb	11/06/24	jlh		0.0051
Calcium	76 mg/L	0.26	1	11/01/24	ejb	11/06/24	jlh		0.037
Lithium	0.019 mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00064 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.12 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	0.00014 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00058 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00045 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	0.00083 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.00053 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	0.00019 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	0.00017 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma	J	0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	43 mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO ₄	3.5 mg/L	6.0	10	10/24/24	ljs	10/24/24	bm	J	2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-11 Date Collected: 10/23/24 10:22 Matrix: Ground Water
 Sample ID: MW-15018 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	360 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	24 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-12 Date Collected: 10/23/24 11:24 Matrix: Ground Water
 Sample ID: MW-15017 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.054	mg/L	0.0088	1	11/01/24	ejb	11/06/24	jlh		0.0051
Calcium	270	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.0055	mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.0018	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.98	mg/L	0.12	50	11/01/24	ejb	11/04/24	jma		0.034
Beryllium	0.000066	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.0012	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00086	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma		0.00010
Lead	<0.00010	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.00036	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	0.00015	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	320	mg/L	3.8	25	10/24/24	ljs	10/25/24	bm		3.0
Sulfate as SO4	<2.2	mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-12 Date Collected: 10/23/24 11:24 Matrix: Ground Water
 Sample ID: MW-15017 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1200 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	140 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-13 Date Collected: 10/23/24 12:20 Matrix: Ground Water
 Sample ID: MW-17002 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	18 mg/L	0.088	10	11/01/24	ejb	11/06/24	jlh		0.051
Calcium	490 mg/L	2.6	10	11/01/24	ejb	11/06/24	jlh		0.37
Lithium	0.24 mg/L	0.025	10	11/01/24	ejb	11/06/24	jlh	N	0.019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.10 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.069 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	0.00014 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	0.00035 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00047 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00042 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	0.00013 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Molybdenum	1.1 mg/L	0.062	50	11/01/24	ejb	11/04/24	jma		0.012
Selenium	0.00026 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	0.00012 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma	J	0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	9.2 mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	590 mg/L	30	50	10/24/24	ljs	10/25/24	bm		11

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-13 Date Collected: 10/23/24 12:20 Matrix: Ground Water
 Sample ID: MW-17002 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1800 mg/L	53	5.263158	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	99 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-14 Date Collected: 10/23/24 14:08 Matrix: Ground Water
 Sample ID: MW-17001R Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	4.0	mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	380	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.12	mg/L	0.012	5	11/01/24	ejb	11/06/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00019	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Barium	0.23	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00021	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.00020
Cobalt	0.00039	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.00048	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	<0.00010	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma		0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	30	mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO ₄	150	mg/L	6.0	10	10/24/24	ljs	10/24/24	bm		2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-14 Date Collected: 10/23/24 14:08 Matrix: Ground Water
 Sample ID: MW-17001R Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1500 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	7.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-15 Date Collected: 10/23/24 15:02 Matrix: Ground Water
 Sample ID: MW-15016R Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.15	mg/L	0.0088	1	11/01/24	ejb	11/06/24	jlh		0.0051
Calcium	250	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.0062	mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.0022	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	1.1	mg/L	0.12	50	11/01/24	ejb	11/04/24	jma		0.034
Beryllium	0.000085	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.0012	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.0011	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma		0.00010
Lead	0.00010	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Molybdenum	0.00039	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	0.00019	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	410	mg/L	3.8	25	10/24/24	ljs	10/25/24	bm		3.0
Sulfate as SO ₄	2.9	mg/L	6.0	10	10/24/24	ljs	10/24/24	bm	J	2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-15 Date Collected: 10/23/24 15:02 Matrix: Ground Water
 Sample ID: MW-15016R Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1300 mg/L	48	4.761905	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	110 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-16 Date Collected: 10/23/24 16:08 Matrix: Ground Water
 Sample ID: MW-15015R Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	2.2 mg/L	0.088	10	11/01/24	ejb	11/06/24	jlh		0.051
Calcium	540 mg/L	2.6	10	11/01/24	ejb	11/06/24	jlh		0.37
Lithium	0.058 mg/L	0.025	10	11/01/24	ejb	11/06/24	jlh	N	0.019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	0.00041 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.043 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.082 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	0.000058 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	<0.00020 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00021 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.18 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma		0.00025
Selenium	0.00029 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	37 mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	1300 mg/L	60	100	10/24/24	ljs	10/25/24	bm		22

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-16 Date Collected: 10/23/24 16:08 Matrix: Ground Water
 Sample ID: MW-15015R Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	2400 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	17 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-17 Date Collected: 10/23/24 17:20 Matrix: Ground Water
 Sample ID: MW-15014R Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016	mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	1.4	mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	320	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.048	mg/L	0.012	5	11/01/24	ejb	11/06/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00026	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Barium	0.18	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	<0.00020	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00013	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.0011	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	0.00011	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	130	mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO ₄	410	mg/L	30	50	10/24/24	ljs	10/25/24	bm		11

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-17 Date Collected: 10/23/24 17:20 Matrix: Ground Water
 Sample ID: MW-15014R Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1400 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	26 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-18 Date Collected: 10/23/24 17:45 Matrix: Ground Water
 Sample ID: MW-15009 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158515

Mercury	<0.00016 mg/L	0.00020	1	10/29/24	cma	10/30/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.80 mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	150 mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.032 mg/L	0.012	5	11/01/24	ejb	11/06/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.022 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.12 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	<0.00020 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00010 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.0044 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma		0.00025
Selenium	<0.00010 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma		0.00010
Thallium	<0.000075 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11 mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	44 mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	210 mg/L	15	25	10/24/24	ljs	10/25/24	bm		5.5

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-18 Date Collected: 10/23/24 17:45 Matrix: Ground Water
 Sample ID: MW-15009 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	700 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	5.0 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-19 Date Collected: 10/23/24 16:15 Matrix: Ground Water
 Sample ID: MW-17004 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158707

Mercury	<0.00016	mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	1.1	mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	320	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.059	mg/L	0.012	5	11/01/24	ejb	11/06/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.0097	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.082	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00036	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00047	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	0.00013	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Molybdenum	0.036	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma		0.00025
Selenium	0.00015	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	0.00013	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma	J	0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	22	mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO ₄	900	mg/L	60	100	10/24/24	ljs	10/25/24	bm		22

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-19 Date Collected: 10/23/24 16:15 Matrix: Ground Water
 Sample ID: MW-17004 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1700 mg/L	48	4.761905	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	16 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-20 Date Collected: 10/23/24 15:00 Matrix: Ground Water
 Sample ID: MW-15019 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158707

Mercury	<0.00016	mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.39	mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	110	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.0088	mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00053	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Barium	0.32	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	0.000058	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	0.000078	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000075
Chromium	0.00054	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00072	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma		0.00010
Lead	0.00016	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Molybdenum	0.00058	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	0.00015	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	0.000097	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma	J	0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158399

Fluoride	<0.11	mg/L	0.20	10	10/24/24	ljs	10/24/24	bm	N	0.11
Chloride	78	mg/L	1.5	10	10/24/24	ljs	10/24/24	bm		1.2
Sulfate as SO4	2.5	mg/L	6.0	10	10/24/24	ljs	10/24/24	bm	J	2.2

Analysis Method: SM 2540 C-20
 Batch: T158418

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-20 Date Collected: 10/23/24 15:00 Matrix: Ground Water
 Sample ID: MW-15019 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	600 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158427									
Total Suspended Solids	73 mg/L	4.0	1	10/25/24	cdj	10/25/24	cdj		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-21 Date Collected: 10/23/24 13:45 Matrix: Ground Water
 Sample ID: MW-17005 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158707

Mercury	<0.00016	mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	1.3	mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	270	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.036	mg/L	0.012	5	11/01/24	ejb	11/06/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00016	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Barium	0.18	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	0.000060	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00035	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	<0.00010	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma		0.00010
Lead	0.00013	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Molybdenum	0.00029	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	<0.00010	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma		0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158534

Fluoride	<0.11	mg/L	0.20	10	10/29/24	aeo	10/29/24	aeo	N	0.11
Chloride	27	mg/L	1.5	10	10/29/24	aeo	10/29/24	aeo		1.2
Sulfate as SO4	730	mg/L	30	50	10/29/24	aeo	10/30/24	aeo		11

Analysis Method: SM 2540 C-20
 Batch: T158432

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-21 Date Collected: 10/23/24 13:45 Matrix: Ground Water
 Sample ID: MW-17005 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1300 mg/L	50	5	10/25/24	ans	10/25/24	ans	RPD	
Analysis Method: SM 2540 D-20 Batch: T158493									
Total Suspended Solids	54 mg/L	4.0	1	10/28/24	ch	10/28/24	ch		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-22 Date Collected: 10/23/24 12:30 Matrix: Ground Water
 Sample ID: MW-15020 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158707

Mercury	<0.00016 mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.38 mg/L	0.0088	1	11/01/24	ejb	11/06/24	jlh		0.0051
Calcium	88 mg/L	0.26	1	11/01/24	ejb	11/06/24	jlh		0.037
Lithium	0.0092 mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00032 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Barium	0.18 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00028 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00029 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.00025 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	<0.00010 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma		0.00010
Thallium	<0.000075 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158534

Fluoride	<0.11 mg/L	0.20	10	10/29/24	aeo	10/29/24	aeo	N	0.11
Chloride	62 mg/L	1.5	10	10/29/24	aeo	10/29/24	aeo		1.2
Sulfate as SO4	<2.2 mg/L	6.0	10	10/29/24	aeo	10/29/24	aeo		2.2

Analysis Method: SM 2540 C-20
 Batch: T158432

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-22 Date Collected: 10/23/24 12:30 Matrix: Ground Water
 Sample ID: MW-15020 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	430 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158493									
Total Suspended Solids	8.0 mg/L	4.0	1	10/28/24	ch	10/28/24	ch		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-23 Date Collected: 10/23/24 11:00 Matrix: Ground Water
 Sample ID: MW-15023 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T158707

Mercury	<0.00016	mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T158625

Boron	3.1	mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	180	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.036	mg/L	0.012	5	11/01/24	ejb	11/06/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.0099	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.19	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00048	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00011	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.021	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma		0.00025
Selenium	0.00011	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158534

Fluoride	<0.11	mg/L	0.20	10	10/29/24	aeo	10/29/24	aeo	N	0.11
Chloride	160	mg/L	1.5	10	10/29/24	aeo	10/29/24	aeo		1.2
Sulfate as SO ₄	290	mg/L	15	25	10/29/24	aeo	10/29/24	aeo		5.5

Analysis Method: SM 2540 C-20

Batch: T158432

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-23 Date Collected: 10/23/24 11:00 Matrix: Ground Water
 Sample ID: MW-15023 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	1100 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158493									
Total Suspended Solids	7.1 mg/L	4.0	1.010101	10/28/24	ch	10/28/24	ch		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-24 Date Collected: 10/23/24 10:00 Matrix: Ground Water
 Sample ID: MW-17006 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158707

Mercury	<0.00016	mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.69	mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	130	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.029	mg/L	0.012	5	11/01/24	ejb	11/06/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.0019	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.10	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00022	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.00020
Cobalt	<0.00010	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma		0.00010
Lead	<0.00010	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.012	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma		0.00025
Selenium	0.00014	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158534

Fluoride	<0.11	mg/L	0.20	10	10/29/24	aeo	10/29/24	aeo	N	0.11
Chloride	48	mg/L	1.5	10	10/29/24	aeo	10/29/24	aeo		1.2
Sulfate as SO4	97	mg/L	6.0	10	10/29/24	aeo	10/29/24	aeo		2.2

Analysis Method: SM 2540 C-20
 Batch: T158432

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-24 Date Collected: 10/23/24 10:00 Matrix: Ground Water
 Sample ID: MW-17006 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	560 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20									
<i>Batch: T158493</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/28/24	ch	10/28/24	ch		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-25 Date Collected: 10/23/24 09:00 Matrix: Ground Water
 Sample ID: MW-15021 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A

Batch: T158707

Mercury	<0.00016 mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4

Batch: T158625

Boron	0.25 mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	140 mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.0037 mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T158625

Antimony	<0.00010 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.0013 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.43 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00099 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00089 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma		0.00010
Lead	<0.00010 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	<0.00025 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma		0.00025
Selenium	0.00019 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1

Batch: T158534

Fluoride	<0.11 mg/L	0.20	10	10/29/24	aeo	10/29/24	aeo	N	0.11
Chloride	280 mg/L	3.8	25	10/29/24	aeo	10/29/24	aeo		3.0
Sulfate as SO4	<2.2 mg/L	6.0	10	10/29/24	aeo	10/29/24	aeo		2.2

Analysis Method: SM 2540 C-20

Batch: T158432

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-25 Date Collected: 10/23/24 09:00 Matrix: Ground Water
 Sample ID: MW-15021 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	950 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20 Batch: T158493									
Total Suspended Solids	10 mg/L	4.1	1.020408	10/28/24	ch	10/28/24	ch		4.1

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-26 Date Collected: 10/23/24 07:30 Matrix: Ground Water
 Sample ID: MW-15022 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS	UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------	-------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158707

Mercury	<0.00016	mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	----------	------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	1.2	mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	240	mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.062	mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00021	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Barium	0.23	mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00039	mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00035	mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010	mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.00042	mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	0.00011	mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Thallium	<0.000075	mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158534

Fluoride	<0.11	mg/L	0.20	10	10/29/24	aeo	10/29/24	aeo	N	0.11
Chloride	94	mg/L	1.5	10	10/29/24	aeo	10/29/24	aeo		1.2
Sulfate as SO ₄	250	mg/L	15	25	10/29/24	aeo	10/29/24	aeo		5.5

Analysis Method: SM 2540 C-20
 Batch: T158432

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-26 Date Collected: 10/23/24 07:30 Matrix: Ground Water
 Sample ID: MW-15022 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	960 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20									
<i>Batch: T158493</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1	10/28/24	ch	10/28/24	ch		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-27 Date Collected: 10/24/24 07:45 Matrix: Ground Water
 Sample ID: MW-15008 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158707

Mercury	<0.00016 mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.37 mg/L	0.0088	1	11/01/24	ejb	11/06/24	jlh		0.0051
Calcium	78 mg/L	0.26	1	11/01/24	ejb	11/06/24	jlh		0.037
Lithium	0.015 mg/L	0.0025	1	11/01/24	ejb	11/06/24	jlh	N	0.0019

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	0.00014 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Arsenic	0.0058 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Barium	0.053 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	0.00027 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00012 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.0030 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma		0.00025
Selenium	<0.00010 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma		0.00010
Thallium	<0.000075 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158534

Fluoride	<0.11 mg/L	0.20	10	10/29/24	aeo	10/29/24	aeo	N	0.11
Chloride	18 mg/L	1.5	10	10/29/24	aeo	10/29/24	aeo		1.2
Sulfate as SO4	5.4 mg/L	6.0	10	10/29/24	aeo	10/29/24	aeo	J	2.2

Analysis Method: SM 2540 C-20
 Batch: T158432

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-27 Date Collected: 10/24/24 07:45 Matrix: Ground Water
 Sample ID: MW-15008 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	340 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20									
<i>Batch: T158606</i>									
Total Suspended Solids	<3.9 mg/L	4.0	0.9803922	10/30/24	ch	10/30/24	ch		3.9

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-28 Date Collected: 10/24/24 08:06 Matrix: Ground Water
 Sample ID: MW-15013 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
------------	---------------	-----	----------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 7470A
 Batch: T158707

Mercury	<0.00016 mg/L	0.00020	1	11/01/24	cma	11/01/24	jlh		0.00016
---------	---------------	---------	---	----------	-----	----------	-----	--	---------

METALS, TOTAL

Analysis Method: EPA 200.7 Rev. 4.4
 Batch: T158625

Boron	0.83 mg/L	0.044	5	11/01/24	ejb	11/06/24	jlh		0.026
Calcium	220 mg/L	1.3	5	11/01/24	ejb	11/06/24	jlh		0.18
Lithium	0.046 mg/L	0.012	5	11/01/24	ejb	11/06/24	jlh	N	0.0094

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T158625

Antimony	<0.00010 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00010
Arsenic	0.00024 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Barium	0.18 mg/L	0.0025	1	11/01/24	ejb	11/04/24	jma		0.00068
Beryllium	<0.000052 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000052
Cadmium	<0.000075 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.000075
Chromium	<0.00020 mg/L	0.00025	1	11/01/24	ejb	11/04/24	jma		0.00020
Cobalt	0.00012 mg/L	0.00052	1	11/01/24	ejb	11/04/24	jma	J	0.00010
Lead	<0.00010 mg/L	0.00055	1	11/01/24	ejb	11/04/24	jma		0.00010
Molybdenum	0.0011 mg/L	0.0012	1	11/01/24	ejb	11/04/24	jma	J	0.00025
Selenium	<0.00010 mg/L	0.00050	1	11/01/24	ejb	11/04/24	jma		0.00010
Thallium	<0.000075 mg/L	0.00038	1	11/01/24	ejb	11/04/24	jma		0.000075

WET CHEMISTRY

Analysis Method: EPA 300.0 Rev. 2.1
 Batch: T158534

Fluoride	<0.11 mg/L	0.20	10	10/29/24	aeo	10/29/24	aeo	N	0.11
Chloride	39 mg/L	1.5	10	10/29/24	aeo	10/29/24	aeo		1.2
Sulfate as SO4	360 mg/L	15	25	10/29/24	aeo	10/29/24	aeo		5.5

Analysis Method: SM 2540 C-20
 Batch: T158432

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

ANALYTICAL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

Trace ID: 24J1498-28 Date Collected: 10/24/24 08:06 Matrix: Ground Water
 Sample ID: MW-15013 Date Received: 10/24/24 08:58

PARAMETERS	RESULTS UNITS	LOQ	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	LOD
WET CHEMISTRY									
Total Dissolved Solids	810 mg/L	50	5	10/25/24	ans	10/25/24	ans		
Analysis Method: SM 2540 D-20									
<i>Batch: T158606</i>									
Total Suspended Solids	<4.0 mg/L	4.0	1.010101	10/30/24	ch	10/30/24	ch		4.0

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

QUALITY CONTROL RESULTS

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158515	Analysis Description: Mercury, Total, EPA 7470/7471
QC Batch Method: EPA 7470A Prep	Analysis Method: EPA 7470A

METHOD BLANK: T158515-BLK1

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

LABORATORY CONTROL SAMPLE: T158515-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00202	101	77-122	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T158515-MSD1 Original: 24J1498-01

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: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158707	Analysis Description: Mercury, Total, EPA 7470/7471
QC Batch Method: EPA 7470A Prep	Analysis Method: EPA 7470A

METHOD BLANK: T158707-BLK1

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

LABORATORY CONTROL SAMPLE: T158707-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	0.00193	96	77-122	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T158707-MSD1 Original: 24J1498-19

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	0.00198	0.00196	99	98	76-123	0.9	20	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158312	Analysis Description: Calcium, Total
QC Batch Method: EPA 200.2	Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T158312-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: T158312-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.54	96	85-115	
Calcium	mg/L	16.0	15.2	95	85-115	
Lithium	mg/L	1.60	1.54	96	85-115	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158574	Analysis Description: Boron, Total
QC Batch Method: EPA 200.2	Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T158574-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: T158574-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.45	91	85-115	
Calcium	mg/L	16.0	14.4	90	85-115	
Lithium	mg/L	1.60	1.46	92	85-115	

MATRIX SPIKE: T158574-MS1 Original: 24J1498-01

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	1.08	1.60	2.34	78	70-130	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

MATRIX SPIKE: T158574-MS1 Original: **24J1498-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Calcium	mg/L	176	16.0	187	67	70-130	MS09
Lithium	mg/L	0	1.60	1.41	88	70-130	

MATRIX SPIKE: T158574-MS2 Original: **24J1498-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	0	1.60	1.48	93	70-130	
Calcium	mg/L	80.3	16.0	93.6	83	70-130	
Lithium	mg/L	0	1.60	1.47	92	70-130	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158625
 QC Batch Method: EPA 200.2

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

METHOD BLANK: T158625-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: T158625-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.45	91	85-115	
Calcium	mg/L	16.0	14.7	92	85-115	
Lithium	mg/L	1.60	1.49	93	85-115	

MATRIX SPIKE: T158625-MS1 Original: **24J1498-12**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	0.0539	1.60	1.60	96	70-130	
Calcium	mg/L	271	16.0	291	125	70-130	
Lithium	mg/L	0	1.60	1.54	96	70-130	

MATRIX SPIKE: T158625-MS2 Original: **24J1498-13**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	17.8	1.60	16.8	-59	70-130	MS09
Calcium	mg/L	491	16.0	449	-263	70-130	MS09

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

MATRIX SPIKE: T158625-MS2 Original: **24J1498-13**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Lithium	mg/L	0.241	1.60	1.75	94	70-130	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158628	Analysis Description: Boron, Total
QC Batch Method: EPA 200.2	Analysis Method: EPA 200.7 Rev. 4.4

METHOD BLANK: T158628-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: T158628-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Boron	mg/L	1.60	1.45	91	85-115	
Calcium	mg/L	16.0	14.8	93	85-115	
Lithium	mg/L	1.60	1.47	92	85-115	

MATRIX SPIKE: T158628-MS1 Original: **24J1498-08**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	3.27	1.60	4.55	80	70-130	
Calcium	mg/L	164	16.0	164	-2	70-130	MS09
Lithium	mg/L	0.0268	1.60	1.52	93	70-130	

MATRIX SPIKE: T158628-MS2 Original: **24J1498-10**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Boron	mg/L	3.26	1.60	4.63	85	70-130	
Calcium	mg/L	471	16.0	473	14	70-130	MS09
Lithium	mg/L	0.327	1.60	1.82	93	70-130	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158312	Analysis Description: Cadmium, Total
QC Batch Method: EPA 200.2	Analysis Method: EPA 200.8 Rev. 5.4

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

METHOD BLANK: T158312-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Arsenic	mg/L	<0.00050	0.00050	
Barium	mg/L	<0.0025	0.0025	
Beryllium	mg/L	<0.00025	0.00025	
Cadmium	mg/L	<0.00010	0.00010	
Cobalt	mg/L	0.000112	0.00052	J
Chromium	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	<0.0012	0.0012	
Lead	mg/L	<0.00025	0.00025	
Antimony	mg/L	<0.00025	0.00025	
Selenium	mg/L	<0.00050	0.00050	
Thallium	mg/L	<0.00038	0.00038	

LABORATORY CONTROL SAMPLE: T158312-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0988	99	85-115	
Barium	mg/L	1.60	1.66	104	85-115	
Beryllium	mg/L	0.200	0.175	87	85-115	
Cadmium	mg/L	0.0500	0.0468	94	85-115	
Cobalt	mg/L	1.60	1.47	92	85-115	
Chromium	mg/L	0.0500	0.0455	91	85-115	
Molybdenum	mg/L	1.60	1.56	97	85-115	
Lead	mg/L	0.100	0.0944	94	85-115	
Antimony	mg/L	0.100	0.0969	97	85-115	
Selenium	mg/L	0.100	0.0961	96	85-115	
Thallium	mg/L	0.100	0.0948	95	85-115	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158574
 QC Batch Method: EPA 200.2

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

METHOD BLANK: T158574-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	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

METHOD BLANK: T158574-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Cobalt	mg/L	<0.00052	0.00052	
Chromium	mg/L	<0.00025	0.00025	
Molybdenum	mg/L	0.000499	0.0012	J
Lead	mg/L	<0.00055	0.00055	
Antimony	mg/L	<0.00025	0.00025	
Selenium	mg/L	<0.00050	0.00050	
Thallium	mg/L	0.000115	0.00038	J

LABORATORY CONTROL SAMPLE: T158574-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0923	92	85-115	
Barium	mg/L	1.60	1.60	100	85-115	
Beryllium	mg/L	0.200	0.181	90	85-115	
Cadmium	mg/L	0.0500	0.0487	97	85-115	
Cobalt	mg/L	1.60	1.42	89	85-115	
Chromium	mg/L	0.0500	0.0450	90	85-115	
Molybdenum	mg/L	1.60	1.49	93	85-115	
Lead	mg/L	0.100	0.0916	92	85-115	
Antimony	mg/L	0.100	0.114	114	85-115	
Selenium	mg/L	0.100	0.0898	90	85-115	
Thallium	mg/L	0.100	0.0897	90	85-115	

MATRIX SPIKE: T158574-MS1 Original: **24J1498-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0	0.100	0.0940	94	70-130	
Barium	mg/L	0.139	1.60	1.72	99	70-130	
Beryllium	mg/L	0	0.200	0.185	93	70-130	
Cadmium	mg/L	0	0.0500	0.0457	91	70-130	
Cobalt	mg/L	0.000499	1.60	1.39	87	70-130	
Chromium	mg/L	0	0.0500	0.0452	90	70-130	
Molybdenum	mg/L	0.00318	1.60	1.55	97	70-130	
Lead	mg/L	0	0.100	0.0859	86	70-130	
Antimony	mg/L	0	0.100	0.112	112	70-130	
Selenium	mg/L	0	0.100	0.0824	82	70-130	
Thallium	mg/L	0	0.100	0.0845	85	70-130	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

MATRIX SPIKE: T158574-MS2 Original: **24J1498-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.00497	0.100	0.0989	94	70-130	
Barium	mg/L	0.0218	1.60	1.64	101	70-130	
Beryllium	mg/L	0	0.200	0.185	93	70-130	
Cadmium	mg/L	0	0.0500	0.0482	96	70-130	
Cobalt	mg/L	0.00122	1.60	1.41	88	70-130	
Chromium	mg/L	0	0.0500	0.0453	91	70-130	
Molybdenum	mg/L	0.00811	1.60	1.55	97	70-130	
Lead	mg/L	0	0.100	0.0910	91	70-130	
Antimony	mg/L	0	0.100	0.117	117	70-130	
Selenium	mg/L	0.000525	0.100	0.0911	91	70-130	
Thallium	mg/L	0	0.100	0.0906	91	70-130	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158625

Analysis Description: Arsenic, Total

QC Batch Method: EPA 200.2

Analysis Method: EPA 200.8 Rev. 5.4

METHOD BLANK: T158625-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Arsenic	mg/L	0.000202	0.00055	J
Barium	mg/L	<0.0025	0.0025	
Beryllium	mg/L	0.0000625	0.00025	J
Cadmium	mg/L	0.000164	0.00025	J
Cobalt	mg/L	0.000232	0.00052	J
Chromium	mg/L	0.000241	0.00025	J
Molybdenum	mg/L	0.000379	0.0012	J
Lead	mg/L	0.000166	0.00055	J
Antimony	mg/L	<0.00025	0.00025	
Selenium	mg/L	0.000120	0.00050	J
Thallium	mg/L	0.000162	0.00038	J

LABORATORY CONTROL SAMPLE: T158625-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0931	93	85-115	
Barium	mg/L	1.60	1.54	97	85-115	
Beryllium	mg/L	0.200	0.177	89	85-115	
Cadmium	mg/L	0.0500	0.0469	94	85-115	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

LABORATORY CONTROL SAMPLE: T158625-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Cobalt	mg/L	1.60	1.40	88	85-115	
Chromium	mg/L	0.0500	0.0459	92	85-115	
Molybdenum	mg/L	1.60	1.45	90	85-115	
Lead	mg/L	0.100	0.0963	96	85-115	
Antimony	mg/L	0.100	0.110	110	85-115	
Selenium	mg/L	0.100	0.0894	89	85-115	
Thallium	mg/L	0.100	0.0952	95	85-115	

MATRIX SPIKE: T158625-MS1 Original: **24J1498-12**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.00181	0.100	0.0964	95	70-130	
Barium	mg/L	0.983	1.60	2.49	94	70-130	
Beryllium	mg/L	0	0.200	0.160	80	70-130	
Cadmium	mg/L	0	0.0500	0.0442	88	70-130	
Cobalt	mg/L	0.000861	1.60	1.36	85	70-130	
Chromium	mg/L	0.00115	0.0500	0.0448	87	70-130	
Molybdenum	mg/L	0	1.60	1.57	98	70-130	
Lead	mg/L	0	0.100	0.0994	99	70-130	
Antimony	mg/L	0	0.100	0.112	112	70-130	
Selenium	mg/L	0	0.100	0.0881	88	70-130	
Thallium	mg/L	0	0.100	0.100	100	70-130	

MATRIX SPIKE: T158625-MS2 Original: **24J1498-13**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.104	0.100	0.199	95	70-130	
Barium	mg/L	0.0694	1.60	1.63	97	70-130	
Beryllium	mg/L	0	0.200	0.141	71	70-130	
Cadmium	mg/L	0.000354	0.0500	0.0422	84	70-130	
Cobalt	mg/L	0.000421	1.60	1.25	78	70-130	
Chromium	mg/L	0	0.0500	0.0407	81	70-130	
Molybdenum	mg/L	1.06	1.60	2.29	76	70-130	
Lead	mg/L	0	0.100	0.0947	95	70-130	
Antimony	mg/L	0	0.100	0.108	108	70-130	
Selenium	mg/L	0	0.100	0.0793	79	70-130	
Thallium	mg/L	0	0.100	0.0949	95	70-130	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158628
 QC Batch Method: EPA 200.2

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

METHOD BLANK: T158628-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: T158628-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Arsenic	mg/L	0.100	0.0949	95	85-115	
Barium	mg/L	1.60	1.73	108	85-115	
Beryllium	mg/L	0.200	0.181	90	85-115	
Cadmium	mg/L	0.0500	0.0475	95	85-115	
Cobalt	mg/L	1.60	1.52	95	85-115	
Chromium	mg/L	0.0500	0.0478	96	85-115	
Molybdenum	mg/L	1.60	1.52	95	85-115	
Lead	mg/L	0.100	0.108	108	85-115	
Antimony	mg/L	0.100	0.112	112	85-115	
Selenium	mg/L	0.100	0.0967	97	85-115	
Thallium	mg/L	0.100	0.108	108	85-115	

MATRIX SPIKE: T158628-MS1 Original: 24J1498-08

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0	0.100	0.0966	97	70-130	
Barium	mg/L	0.143	1.60	1.72	98	70-130	
Beryllium	mg/L	0	0.200	0.196	98	70-130	
Cadmium	mg/L	0	0.0500	0.0463	93	70-130	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

MATRIX SPIKE: T158628-MS1 Original: **24J1498-08**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Cobalt	mg/L	0	1.60	1.56	98	70-130	
Chromium	mg/L	0	0.0500	0.0502	100	70-130	
Molybdenum	mg/L	0.00299	1.60	1.61	100	70-130	
Lead	mg/L	0	0.100	0.0840	84	70-130	
Antimony	mg/L	0	0.100	0.109	109	70-130	
Selenium	mg/L	0	0.100	0.0931	93	70-130	
Thallium	mg/L	0	0.100	0.0841	84	70-130	

MATRIX SPIKE: T158628-MS2 Original: **24J1498-10**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Arsenic	mg/L	0.233	0.100	0.339	106	70-130	
Barium	mg/L	0.0380	1.60	1.60	97	70-130	
Beryllium	mg/L	0	0.200	0.180	90	70-130	
Cadmium	mg/L	0	0.0500	0.0442	88	70-130	
Cobalt	mg/L	0.0428	1.60	1.53	93	70-130	
Chromium	mg/L	0	0.0500	0.0497	99	70-130	
Molybdenum	mg/L	0.166	1.60	1.74	98	70-130	
Lead	mg/L	0	0.100	0.0835	83	70-130	
Antimony	mg/L	0	0.100	0.106	106	70-130	
Selenium	mg/L	0	0.100	0.0954	95	70-130	
Thallium	mg/L	0	0.100	0.0852	85	70-130	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158399
 QC Batch Method: IC Prep W

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

METHOD BLANK: T158399-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: T158399-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	<10	98	90-110	J

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

LABORATORY CONTROL SAMPLE: T158399-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Fluoride	mg/L	1.00	0.969	97	90-110	
Sulfate as SO4	mg/L	5.00	4.84	97	90-110	

MATRIX SPIKE: T158399-MS1 Original: **24J1498-02**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	5.05	50.0	52.7	95	80-120	
Fluoride	mg/L	0	10.0	10.2	102	80-120	
Sulfate as SO4	mg/L	10.7	50.0	59.3	97	80-120	

MATRIX SPIKE: T158399-MS2 Original: **24J1498-03**

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Unit	Notes
Chloride	mg/L	19.1	50.0	65.5	93	80-120	
Fluoride	mg/L	0	10.0	10.1	101	80-120	
Sulfate as SO4	mg/L	0	50.0	47.1	94	80-120	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158534	Analysis Description: Sulfate
QC Batch Method: IC Prep W	Analysis Method: EPA 300.0 Rev. 2.1

METHOD BLANK: T158534-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: T158534-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Chloride	mg/L	5.00	<10	98	90-110	J
Fluoride	mg/L	1.00	1.04	104	90-110	
Sulfate as SO4	mg/L	5.00	4.85	97	90-110	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

QC Batch: T158418

Analysis Description: Total Dissolved Solids

QC Batch Method: SM 2540 C-20

Analysis Method: SM 2540 C-20

METHOD BLANK: T158418-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	mg/L	7.50	25	J

LABORATORY CONTROL SAMPLE: T158418-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	508	102	80-120	

SAMPLE DUPLICATE: T158418-DUP1

Original: 24J1498-01

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Dissolved Solids	mg/L	1040	1030	0.6	10	

Trace Project ID: 24J1498

Client Project ID: BC Cobb

QC Batch: T158432

Analysis Description: Total Dissolved Solids

QC Batch Method: SM 2540 C-20

Analysis Method: SM 2540 C-20

METHOD BLANK: T158432-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Total Dissolved Solids	mg/L	<25	25	

LABORATORY CONTROL SAMPLE: T158432-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Dissolved Solids	mg/L	500	520	104	80-120	

SAMPLE DUPLICATE: T158432-DUP1

Original: 24J1498-21

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Dissolved Solids	mg/L	1310	1040	23	10	RPD

Trace Project ID: 24J1498

Client Project ID: BC Cobb

QC Batch: T158427

Analysis Description: Total Suspended Solids

QC Batch Method: SM 2540 D-20

Analysis Method: SM 2540 D-20

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

METHOD BLANK: T158427-BLK1

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

LABORATORY CONTROL SAMPLE: T158427-BS1

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

SAMPLE DUPLICATE: T158427-DUP1

Original: 24J1498-20

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Notes
Total Suspended Solids	mg/L	73.0	74.0	1	10	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158493
 QC Batch Method: SM 2540 D-20

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

METHOD BLANK: T158493-BLK1

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

LABORATORY CONTROL SAMPLE: T158493-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	94.4	94	85-115	

Trace Project ID: 24J1498
 Client Project ID: BC Cobb

QC Batch: T158606
 QC Batch Method: SM 2540 D-20

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

METHOD BLANK: T158606-BLK1

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

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

LABORATORY CONTROL SAMPLE: T158606-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Total Suspended Solids	mg/L	100	92.3	92	85-115	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.



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

CHAIN-OF-CUSTODY RECORD

Report Results To:

Company Name: HDR INC
 Report To: Molly Reeves
 PO #: 10220433

Mailing Address: 1000 Oakbrook Drive, Suite 200
 Billing Address (if different):
 Contact Name: Lara Javardian

City, State, Zip Code: Ann Arbor MI 48104
 Billing Address (if different):
 City, State, Zip Code:

Office Phone:
 Call Phone: 734.263.7138
 Phone Number: 734.223.9574

Email Address: molly.reeves@hdrinc.com
 Billing Email Address: lara.javardian@hdrinc.com

Trace Use:

Logged By: *SR*
 Checked By: *BT*

Soil Volatiles Preserved (circle if applicable):
 MeOH Low Level Lab

Sample Collection Time (Hrs):

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

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

Project Name: BC Cobb
 Sampled By (print): Andrew Byks / Tanten Buszka

Trace No	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filtered (Y or N)	Matrix - see above →	Number of Containers	Preservation							Analysis Requested	Remarks/Notes	Possible Health Hazards?			
							Cool ≤ 4°C	Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid				Trizma	Other	
1	10/22/24	1700	MW-1501D	N	GW	3	3	2											
2	10/22/24	1530	MW-15006	N	GW	3	3	2											
3	10/22/24	1430	MW-15005	N	GW	3	3	2											
4	10/22/24	1412	MW-15007	N	GW	3	3	2											
5	10/22/24	1244	MW-15003	N	GW	3	3	2											
6	10/22/24	1244	MW-T-15003	N	GW	3	3	2											
7	10/22/24	1404	MW-15004	N	GW	3	3	2											
8	10/22/24	1510	MW-15002	N	GW	3	3	2											
Please Sign Released By: <i>Andrew Byks</i> Date: 10/23/24 Time: 0803 Received By: <i>BT</i> Date: 10/23/24 Time: 0803 Released By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____													In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-labs.com/terms-of-agreement.						

Page 1 of 1
 Trace ID No. 24-71498

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.



TRACE

ANALYTICAL LABORATORIES, INC.

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

Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Trace ID No.
 24J1498

Company Name: HDR Inc	PO #: 10220933
Report To: Molly Reeves	Contact Name: Lara Zawajdah
Mailing Address: 1000 Outbrook Drive, Suite 200	Billing Address (if different):
City, State, Zip Code: Ann Arbor, MI 48104	City, State, Zip Code:
Office Phone:	Phone Number: 734-263-7138
Email Address: molly.reeves@hdrinc.com	Billing Email Address: lara.zawajdah@hdrinc.com

Requested Turnaround Times (TAT)

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

Project Name: RC Cobo

Sampled By (print): Andrew Byts I Tanten Baska

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filtered (Y or N)	Matrix - see above →	Number of Containers	Preservation	Analysis Requested	Remarks/Notes
9	10/23/24	904	MW-17003	N	CW	3	Cool ≤ 4°C Hydrochloric Acid (HCl) Nitric Acid (HNO3) Sulfuric Acid (H2SO4) Sodium Thiosulfate Sodium Hydroxide (NaOH) Ascorbic Acid Trizma Other		
10	10/23/24	904	MW-17003	N	CW	3		40 CFR Part 257 App II	
11	10/23/24	1022	MW-15018	N	CW	3		40 CFR Part 257 App IV	
12	10/23/24	1124	MW-15017	N	CW	3		Par + 118 Metals	
13	10/23/24	1220	MW-17002	N	CW	3		Total Suspended Solids	
14	10/23/24	1408	MW-17001R	N	CW	3			
15	10/23/24	1502	MW-15016R	N	CW	3			
16	10/23/24	1608	MW-15015R	N	CW	3			
17	10/23/24	1720	MW-15014R	N	CW	3			
18	10/23/24	1745	MW-15009	N	CW	3			

Please Sign

Released By (Signature)	Received By (Signature)	Date	Time	Released By	Date	Time
(Signature)	(Signature)	10/24/24	05:58			

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.

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

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.



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

Phone 231.773.5998
 Fax 888.979.4469
 www.trace-labs.com

CHAIN-OF-CUSTODY RECORD

Trace ID No.
 24J1498

Report Results To:

Company Name: HDR Inc
 Report To: Molly Reeves
 Mailing Address: 1080 Oakbrook Drive, Suite 200
 City, State, Zip Code: Ann Arbor, MI 48104
 Office Phone: Cell Phone: 734-263-7138
 Email Address: molly_reeves@ndrinc.com
 Billing Email Address: Lara.Zawajden@ndrinc.com

PO #: 10220433
 Contact Name: Lara Zawajden
 Billing Address (if different):
 City, State, Zip Code:
 Phone Number: 734-223-9074

Requested Turnaround Times (TAT)

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

Matrix Key:

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

Analysis Requested

40 CFR Part 257 App I			
40 CFR Part 257 App II			
Part 115 Metals			
Total suspended solids			

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filtered (Y or N)	Matrix - see above →	Number of Containers	Preservation	Analysis Requested	Remarks/Notes	
19	10/23/24	1015	MW-17004	N	GW	3	2			
20	10/23/24	1500	MW-15019	N	GW	3	2			
21	10/23/24	1345	MW-17005	N	GW	3	2			
22	10/23/24	1230	MW-15020	N	GW	3	2			
23	10/23/24	1100	MW-15023	N	GW	3	2			
24	10/23/24	1000	MW-17000	N	GW	3	2			
25	10/23/24	900	MW-15021	N	GW	3	2			
26	10/23/24	730	MW-15022	N	GW	3	2			
27	10/24/24	745	MW-15008	N	GW	3	2			
28	10/24/24	800	MW-15013	N	GW	3	2			
Please Sign				Released By: <i>[Signature]</i>	Date: 10/24/24	Time: 858	Released By: <i>[Signature]</i>			

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.

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24J1498
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/23/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 803									
Initials: SB									
Package Description: cooler									
Package Temp °C	3.6	3.6			✓				
Representative Sample Temp °C	6.8	6.4				✓		✓	

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: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15005, MW-15006, MW-15010

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24J1498
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date:	10/23/24		Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time:	803										
Initials:	SK										
Package Description:	cooler										
Package Temp °C	0.4	0.4									
Representative Sample Temp °C	11.4	11.2									

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace _____

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs _____

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15003, MWT-15003, MW-15004, MW-15002, MW-15007

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24J1498
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/24/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:30									
Initials: JM									
Package Description: Cooler									
Package Temp °C	2.5	2.5							
Representative Sample Temp °C	10.7	10.6							

Sample Receipt

12/12/01

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15017
 MW-15018
 MWT-17003
 MW-17003
 MW-15013

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24J1498
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/24/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:30									
Initials: NC									
Package Description: Cooler									
Package Temp °C	2.3	2.3							
Representative Sample Temp °C	10.4	10.3							

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

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

Notes: MW-15020
 MW-15023
 MW-15022
 MW-17006
 MW-15021

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24J1498
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/24/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:30									
Initials: 9:30 NC 10/24/24									
Package Description: Cooler									
Package Temp °C	2.1	2.1							
Representative Sample Temp °C	10.4	10.3							

Sample Receipt

Yes No Received on ice or other coolant
 Yes No Ice still present upon receipt
 Yes No 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
 Yes No N/A Sufficient sample to run requested analyses
 Yes No N/A Correct chemical preservative added to samples
 Yes No N/A Samples preserved at Trace
 Yes No N/A Chemical preservation verified, check EMD pH test strip used (if applicable)
 pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other
 Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No All bottle labels agree with COC
 Yes No COC filled out properly
 Yes No COC signed by client

Notes:

MW-15015R
 MW-17001R
 MW 15016R
 MW-15014R
 MW-17002

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

24J1498

HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/24/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:30									
Initials: NC									
Package Description: Cooler									
Package Temp °C	3.2	3.2							
Representative Sample Temp °C	9.0	8.9							

Sample Receipt

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

Sample Condition

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

Chain of Custody (COC)

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

Notes:

MW-15019
 MW-15008
 MW-17004
 MW-17005
 MW-15009

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

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



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

December 05, 2024

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

RE: Trace Project 24J1501
Client Project BC Cobb- MW Radium Analysis- October 2024

Dear Ms. Reeves:

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

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

The results were obtained from Eurofins Eaton East Analytical.

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

Sincerely,

A handwritten signature in black ink that reads "Jon Mink". The signature is stylized with a large, looped initial "J" and a cursive "Mink".

Jon Mink
Senior Project Manager

Enclosures

SAMPLE SUMMARY

Trace Project ID: 24J1501
Client Project ID: BC Cobb- MW Radium Analysis- October 2024

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
24J1501-01	MW-15010	Ground Water	AB/TB	10/22/24 17:00	10/23/24 08:03
24J1501-02	MW-15006	Ground Water	AB/TB	10/22/24 15:30	10/23/24 08:03
24J1501-03	MW-15005	Ground Water	AB/TB	10/22/24 14:30	10/23/24 08:03
24J1501-04	MW-15007	Ground Water	AB/TB	10/22/24 16:42	10/23/24 08:03
24J1501-05	MW-15003	Ground Water	AB/TB	10/22/24 12:44	10/23/24 08:03
24J1501-06	MWT-15003	Ground Water	AB/TB	10/22/24 12:44	10/23/24 08:03
24J1501-07	MW-15004	Ground Water	AB/TB	10/22/24 14:04	10/23/24 08:03
24J1501-08	MW-15002	Ground Water	AB/TB	10/22/24 15:10	10/23/24 08:03
24J1501-09	MW-17003	Ground Water	AB/TB	10/23/24 09:04	10/24/24 08:58
24J1501-10	MWT-17003	Ground Water	AB/TB	10/23/24 09:04	10/24/24 08:58
24J1501-11	MW-15018	Ground Water	AB/TB	10/23/24 10:22	10/24/24 08:58
24J1501-12	MW-15017	Ground Water	AB/TB	10/23/24 11:24	10/24/24 08:58
24J1501-13	MW-17002	Ground Water	AB/TB	10/23/24 12:20	10/24/24 08:58
24J1501-14	MW-17001R	Ground Water	AB/TB	10/23/24 14:08	10/24/24 08:58
24J1501-15	MW-15016R	Ground Water	AB/TB	10/23/24 15:02	10/24/24 08:58
24J1501-16	MW-15015R	Ground Water	AB/TB	10/23/24 16:08	10/24/24 08:58
24J1501-17	MW-15014R	Ground Water	AB/TB	10/23/24 17:20	10/24/24 08:58
24J1501-18	MW-15009	Ground Water	AB/TB	10/23/24 17:45	10/24/24 08:58
24J1501-19	MW-17004	Ground Water	AB/TB	10/23/24 16:15	10/24/24 08:58
24J1501-20	MW-15019	Ground Water	AB/TB	10/23/24 15:00	10/24/24 08:58
24J1501-21	MW-17005	Ground Water	AB/TB	10/23/24 13:45	10/24/24 08:58

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



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

24J1501-22	MW-15020	Ground Water	AB/TB	10/23/24 12:30	10/24/24 08:58
24J1501-23	MW-15023	Ground Water	AB/TB	10/23/24 11:00	10/24/24 08:58
24J1501-24	MW-17006	Ground Water	AB/TB	10/23/24 10:00	10/24/24 08:58
24J1501-25	MW-15021	Ground Water	AB/TB	10/23/24 09:00	10/24/24 08:58
24J1501-26	MW-15022	Ground Water	AB/TB	10/23/24 07:30	10/24/24 08:58
24J1501-27	MW-15008	Ground Water	AB/TB	10/24/24 07:45	10/24/24 08:58
24J1501-28	MW-15013	Ground Water	AB/TB	10/24/24 08:06	10/24/24 08:58



ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/5/2024 4:33:45 PM

JOB DESCRIPTION

24J1501 BC Cobb

JOB NUMBER

810-125778-1

Eurofins Eaton Analytical South Bend

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



Generated
12/5/2024 4:33:45 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	8
QC Sample Results	20
QC Association Summary	24
Lab Chronicle	26
Certification Summary	33
Method Summary	34
Sample Summary	35
Chain of Custody	36
Receipt Checklists	38

Definitions/Glossary

Client: Trace Analytical Laboratories
Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

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

Case Narrative

Client: Trace Analytical Laboratories
Project: 24J1501 BC Cobb

Job ID: 810-125778-1

Job ID: 810-125778-1

Eurofins Eaton Analytical South Bend

Job Narrative 810-125778-1

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

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

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

Receipt

The samples were received on 10/25/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Rad

Method SM7500_Ra_D: Sample had a low biased barium carrier recovery. Results may be high biased, but because result is less than the detection limit of 1pCi/L sample is unaffected. The barium carrier limits are 43.7-63.9mg. The sample barium precipitate is 40.8 mg.

Method SM7500_Ra_D: The RPD (recovery percent difference) is high biased at 24.1 with limits of <20.0. Sample result may have matrix effects.

Method SM7500_Ra_D: Sample had a low biased yttrium carrier recovery. Results may be high biased, but because result is less than the detection limit of 1pCi/L sample is unaffected. The yttrium carrier limits are 21.7-32.7g. The sample yttrium precipitate is 19.1mg

Method SM7500_Ra_D: Sample had a low biased yttrium carrier recovery. Results may be high biased, but because result is equal to the detection limit of 1pCi/L sample is unaffected. The yttrium carrier limits are 21.7-32.7g. The sample yttrium precipitate is 19.6mg

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

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15016R	Lab Sample ID: 810-125778-1
No Detections.	
Client Sample ID: MW-15015R	Lab Sample ID: 810-125778-2
No Detections.	
Client Sample ID: MW-15014R	Lab Sample ID: 810-125778-3
No Detections.	
Client Sample ID: MW-15009	Lab Sample ID: 810-125778-4
No Detections.	
Client Sample ID: MW-17004	Lab Sample ID: 810-125778-5
No Detections.	
Client Sample ID: MW-15019	Lab Sample ID: 810-125778-6
No Detections.	
Client Sample ID: MW-17005	Lab Sample ID: 810-125778-7
No Detections.	
Client Sample ID: MW-15020	Lab Sample ID: 810-125778-8
No Detections.	
Client Sample ID: MW-15023	Lab Sample ID: 810-125778-9
No Detections.	
Client Sample ID: MW-17006	Lab Sample ID: 810-125778-10
No Detections.	
Client Sample ID: MW-15021	Lab Sample ID: 810-125778-11
No Detections.	
Client Sample ID: MW-15022	Lab Sample ID: 810-125778-12
No Detections.	
Client Sample ID: MW-15008	Lab Sample ID: 810-125778-13
No Detections.	
Client Sample ID: MW-15013	Lab Sample ID: 810-125778-14
No Detections.	
Client Sample ID: MW-15010	Lab Sample ID: 810-125778-15
No Detections.	
Client Sample ID: MW-15006	Lab Sample ID: 810-125778-16
No Detections.	

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical South Bend

Detection Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15005 **Lab Sample ID: 810-125778-17**

No Detections.

Client Sample ID: MW-15007 **Lab Sample ID: 810-125778-18**

No Detections.

Client Sample ID: MW-15003 **Lab Sample ID: 810-125778-19**

No Detections.

Client Sample ID: MWT-15003 **Lab Sample ID: 810-125778-20**

No Detections.

Client Sample ID: MW-15004 **Lab Sample ID: 810-125778-21**

No Detections.

Client Sample ID: MW-15002 **Lab Sample ID: 810-125778-22**

No Detections.

Client Sample ID: MW-17003 **Lab Sample ID: 810-125778-23**

No Detections.

Client Sample ID: MWT-17003 **Lab Sample ID: 810-125778-24**

No Detections.

Client Sample ID: MW-15018 **Lab Sample ID: 810-125778-25**

No Detections.

Client Sample ID: MW-15017 **Lab Sample ID: 810-125778-26**

No Detections.

Client Sample ID: MW-17002 **Lab Sample ID: 810-125778-27**

No Detections.

Client Sample ID: MW-17001R **Lab Sample ID: 810-125778-28**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical South Bend



Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15016R

Lab Sample ID: 810-125778-1

Date Collected: 10/23/24 15:02

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	4.08		1.1942		1.00	0.580	pCi/L		11/27/24 12:56	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	2.20		1.06		1.00	0.580	pCi/L	10/28/24 09:57	11/26/24 10:58	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	1.88		0.550		1.00	0.470	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-15015R

Lab Sample ID: 810-125778-2

Date Collected: 10/23/24 16:08

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.000	U	0.61620		1.00	0.520	pCi/L		11/27/24 12:56	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.160	U	0.410		1.00	0.520	pCi/L	10/28/24 09:57	11/22/24 11:06	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.300	U	0.460		1.00	0.470	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-15014R

Lab Sample ID: 810-125778-3

Date Collected: 10/23/24 17:20

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.000	U	0.79906		1.00	0.590	pCi/L		11/27/24 12:56	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15014R

Lab Sample ID: 810-125778-3

Date Collected: 10/23/24 17:20

Matrix: Ground Water

Date Received: 10/25/24 09:00

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.540	U	0.560		1.00	0.560	pCi/L	10/28/24 09:57	11/22/24 11:06	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.210	U	0.570		1.00	0.590	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-15009

Lab Sample ID: 810-125778-4

Date Collected: 10/23/24 17:45

Matrix: Ground Water

Date Received: 10/25/24 09:00

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.610		0.75743		1.00	0.570	pCi/L		11/27/24 12:56	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.400	U	0.510		1.00	0.570	pCi/L	10/28/24 09:57	11/22/24 11:06	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.610		0.560		1.00	0.550	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-17004

Lab Sample ID: 810-125778-5

Date Collected: 10/23/24 16:15

Matrix: Ground Water

Date Received: 10/25/24 09:00

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		0.79906		1.00	0.570	pCi/L		11/27/24 12:56	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.710		0.570		1.00	0.500	pCi/L	10/28/24 09:57	11/22/24 11:06	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-17004

Lab Sample ID: 810-125778-5

Date Collected: 10/23/24 16:15

Matrix: Ground Water

Date Received: 10/25/24 09:00

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.400	U	0.560		1.00	0.570	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-15019

Lab Sample ID: 810-125778-6

Date Collected: 10/23/24 15:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.830		1.0823		1.00	0.550	pCi/L		11/27/24 12:56	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.430	U	0.920		1.00	0.550	pCi/L	10/28/24 09:57	11/26/24 10:58	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.830		0.570		1.00	0.550	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-17005

Lab Sample ID: 810-125778-7

Date Collected: 10/23/24 13:45

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.000	U	1.0186		1.00	0.750	pCi/L		11/27/24 12:56	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.0700	U	0.700		1.00	0.480	pCi/L	10/28/24 09:57	11/26/24 10:58	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.660	U	0.740		1.00	0.750	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15020

Lab Sample ID: 810-125778-8

Date Collected: 10/23/24 12:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.05		0.85440		1.00	0.690	pCi/L		11/27/24 12:56	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.350	U	0.460		1.00	0.510	pCi/L	10/28/24 09:57	11/22/24 11:06	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	1.05		0.720		1.00	0.690	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-15023

Lab Sample ID: 810-125778-9

Date Collected: 10/23/24 11:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	1.71		0.79931		1.00	0.560	pCi/L		11/27/24 12:56	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.740		0.550		1.00	0.470	pCi/L	10/28/24 09:57	11/22/24 11:06	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.970		0.580		1.00	0.560	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-17006

Lab Sample ID: 810-125778-10

Date Collected: 10/23/24 10:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	1.76		0.86556		1.00	0.550	pCi/L		11/27/24 12:56	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-17006

Lab Sample ID: 810-125778-10

Date Collected: 10/23/24 10:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.970		0.660		1.00	0.550	pCi/L	10/28/24 09:57	11/22/24 11:06	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.790		0.560		1.00	0.550	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Client Sample ID: MW-15021

Lab Sample ID: 810-125778-11

Date Collected: 10/23/24 09:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.660	U	1.0420		1.00	0.870	pCi/L		12/04/24 09:27	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.660		0.630		1.00	0.610	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.0600	U	0.830		1.00	0.870	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Client Sample ID: MW-15022

Lab Sample ID: 810-125778-12

Date Collected: 10/23/24 07:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.880		0.96208		1.00	0.740	pCi/L		12/04/24 09:27	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.880		0.660		1.00	0.580	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15022

Lab Sample ID: 810-125778-12

Date Collected: 10/23/24 07:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	-0.0400	U	0.700		1.00	0.740	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Client Sample ID: MW-15008

Lab Sample ID: 810-125778-13

Date Collected: 10/24/24 07:45

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.000	U	0.82219		1.00	0.670	pCi/L		12/04/24 09:27	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.470	U	0.620		1.00	0.670	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.200	U	0.540		1.00	0.560	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Client Sample ID: MW-15013

Lab Sample ID: 810-125778-14

Date Collected: 10/24/24 08:06

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.520	U	0.92114		1.00	0.810	pCi/L		12/04/24 09:27	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.520		0.490		1.00	0.470	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.110	U	0.780		1.00	0.810	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15010

Lab Sample ID: 810-125778-15

Date Collected: 10/22/24 17:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.000	U	1.1011		1.00	0.810	pCi/L		12/04/24 09:27	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.280	U	0.850		1.00	0.560	pCi/L	10/28/24 10:13	11/25/24 16:45	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	-0.800	U	0.700		1.00	0.810	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Client Sample ID: MW-15006

Lab Sample ID: 810-125778-16

Date Collected: 10/22/24 15:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	1.55		0.87321		1.00	0.660	pCi/L		12/04/24 09:27	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.700		0.560		1.00	0.490	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.850		0.670		1.00	0.660	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Client Sample ID: MW-15005

Lab Sample ID: 810-125778-17

Date Collected: 10/22/24 14:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.610	U	0.93600		1.00	0.810	pCi/L		12/04/24 09:27	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15005

Lab Sample ID: 810-125778-17

Date Collected: 10/22/24 14:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.610		0.560		1.00	0.530	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	-0.250	U	0.750		1.00	0.810	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Client Sample ID: MW-15007

Lab Sample ID: 810-125778-18

Date Collected: 10/22/24 16:42

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.670	U	0.90427		1.00	0.800	pCi/L		12/04/24 09:27	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.670		0.560		1.00	0.510	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	-0.850	U	0.710		1.00	0.800	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Client Sample ID: MW-15003

Lab Sample ID: 810-125778-19

Date Collected: 10/22/24 12:44

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.000	U	1.0486		1.00	0.630	pCi/L		12/04/24 09:30	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.310	U	0.860		1.00	0.560	pCi/L	10/28/24 10:13	11/25/24 16:45	1

Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15003

Lab Sample ID: 810-125778-19

Date Collected: 10/22/24 12:44

Matrix: Ground Water

Date Received: 10/25/24 09:00

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.210	U	0.600		1.00	0.630	pCi/L	10/28/24 10:18	12/04/24 09:30	1

Client Sample ID: MWT-15003

Lab Sample ID: 810-125778-20

Date Collected: 10/22/24 12:44

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.000	U	0.86556		1.00	0.750	pCi/L		12/04/24 09:30	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.490	U	0.560		1.00	0.590	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	-0.930	U	0.660		1.00	0.750	pCi/L	10/28/24 10:18	12/04/24 09:30	1

Client Sample ID: MW-15004

Lab Sample ID: 810-125778-21

Date Collected: 10/22/24 14:04

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	0.640	U	0.61522		1.00	0.670	pCi/L		11/20/24 13:14	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	-0.0700	U	0.440		1.00	0.670	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.640		0.430		1.00	0.420	pCi/L	10/28/24 11:14	11/20/24 13:14	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15002

Lab Sample ID: 810-125778-22

Date Collected: 10/22/24 15:10

Matrix: Ground Water

Date Received: 10/25/24 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium 226 and 228	0.860		0.78390		1.00	0.610	pCi/L		11/20/24 13:14	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Ra-226	0.860		0.680		1.00	0.610	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Ra-228	0.140	U	0.390		1.00	0.410	pCi/L	10/28/24 11:14	11/20/24 13:14	1

Client Sample ID: MW-17003

Lab Sample ID: 810-125778-23

Date Collected: 10/23/24 09:04

Matrix: Ground Water

Date Received: 10/25/24 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium 226 and 228	1.23		0.55973		1.00	0.540	pCi/L		11/20/24 13:14	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Ra-226	0.0500	U	0.370		1.00	0.540	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Ra-228	1.23		0.420		1.00	0.360	pCi/L	10/28/24 11:14	11/20/24 13:14	1

Client Sample ID: MWT-17003

Lab Sample ID: 810-125778-24

Date Collected: 10/23/24 09:04

Matrix: Ground Water

Date Received: 10/25/24 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium 226 and 228	0.360	U	0.57628		1.00	0.490	pCi/L		11/20/24 13:14	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MWT-17003

Lab Sample ID: 810-125778-24

Date Collected: 10/23/24 09:04

Matrix: Ground Water

Date Received: 10/25/24 09:00

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.360	U	0.450		1.00	0.490	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.360		0.360		1.00	0.360	pCi/L	10/28/24 11:14	11/20/24 13:14	1

Client Sample ID: MW-15018

Lab Sample ID: 810-125778-25

Date Collected: 10/23/24 10:22

Matrix: Ground Water

Date Received: 10/25/24 09:00

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		0.70937		1.00	0.520	pCi/L		11/20/24 13:14	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.450	U	0.460		1.00	0.460	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.800		0.540		1.00	0.520	pCi/L	10/28/24 11:14	11/20/24 13:14	1

Client Sample ID: MW-15017

Lab Sample ID: 810-125778-26

Date Collected: 10/23/24 11:24

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	3.98		1.0153		1.00	0.460	pCi/L		11/20/24 13:14	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	2.30		0.900		1.00	0.460	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Client Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15017

Lab Sample ID: 810-125778-26

Date Collected: 10/23/24 11:24

Matrix: Ground Water

Date Received: 10/25/24 09:00

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	1.68		0.470		1.00	0.390	pCi/L	10/28/24 11:14	11/20/24 13:14	1

Client Sample ID: MW-17002

Lab Sample ID: 810-125778-27

Date Collected: 10/23/24 12:20

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	1.54		0.73817		1.00	0.600	pCi/L		11/20/24 13:14	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.610		0.600		1.00	0.600	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.930		0.430		1.00	0.390	pCi/L	10/28/24 11:14	11/20/24 13:14	1

Client Sample ID: MW-17001R

Lab Sample ID: 810-125778-28

Date Collected: 10/23/24 14:08

Matrix: Ground Water

Date Received: 10/25/24 09:00

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	1.40		0.65605		1.00	0.490	pCi/L		11/20/24 13:14	1

Method: SM7500 Ra B - Radium-226

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-226	0.600		0.520		1.00	0.490	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Method: SM7500 Ra D - Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Ra-228	0.800		0.400		1.00	0.370	pCi/L	10/28/24 11:14	11/20/24 13:14	1

QC Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Method: SM7500 Ra B - Radium-226

Lab Sample ID: MB 810-120456/1-A
Matrix: Water
Analysis Batch: 123940

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120456

Analyte	MB Result	MB Qualifier	Count		RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Total Uncert. (2σ+/-)						
Ra-226	0.5700		0.540		1.00	0.530	pCi/L	10/28/24 09:57	11/22/24 11:06	1

Lab Sample ID: LCS 810-120456/2-A
Matrix: Water
Analysis Batch: 123940

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 120456

Analyte	Spike Added	LCS Result	LCS Qual	Total		RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)						
Ra-226	5.06	5.580				1.00	0.560	pCi/L	110	90 - 110

Lab Sample ID: 810-125778-1 MS
Matrix: Ground Water
Analysis Batch: 123940

Client Sample ID: MW-15016R
Prep Type: Total/NA
Prep Batch: 120456

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total		RL	MDC	Unit	%Rec	%Rec Limits
						Uncert. (2σ+/-)						
Ra-226	Err		5.33	8.200				1.00	0.490	pCi/L	111	80 - 120

Lab Sample ID: 810-125778-1 MSD
Matrix: Ground Water
Analysis Batch: 123940

Client Sample ID: MW-15016R
Prep Type: Total/NA
Prep Batch: 120456

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total		RL	MDC	Unit	%Rec	%Rec Limits	RER	Limit
						Uncert. (2σ+/-)								
Ra-226	Err		5.33	7.780				1.00	0.570	pCi/L	103	80 - 120	0.13	

Lab Sample ID: MB 810-120458/1-A
Matrix: Water
Analysis Batch: 123842

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120458

Analyte	MB Result	MB Qualifier	Count		RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Total Uncert. (2σ+/-)						
Ra-226	0.4400	U	0.540		1.00	0.590	pCi/L	10/28/24 10:13	11/21/24 11:36	1

Lab Sample ID: LCS 810-120458/2-A
Matrix: Water
Analysis Batch: 123842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 120458

Analyte	Spike Added	LCS Result	LCS Qual	Total		RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)						
Ra-226	5.06	5.480				1.00	0.450	pCi/L	108	90 - 110

Lab Sample ID: 810-125778-11 MS
Matrix: Ground Water
Analysis Batch: 123842

Client Sample ID: MW-15021
Prep Type: Total/NA
Prep Batch: 120458

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total		RL	MDC	Unit	%Rec	%Rec Limits
						Uncert. (2σ+/-)						
Ra-226	0.660		5.33	6.330				1.00	0.570	pCi/L	119	80 - 120

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Method: SM7500 Ra B - Radium-226

Lab Sample ID: 810-125778-11 MSD
 Matrix: Ground Water
 Analysis Batch: 123842

Client Sample ID: MW-15021
 Prep Type: Total/NA
 Prep Batch: 120458

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	RER	RER
	Result	Qual		Result	Qual	Uncert.							
Ra-226	0.660		5.33	5.930		(2σ+/-)	1.00	0.640	pCi/L	111	80 - 120	0.13	

Lab Sample ID: MB 810-120469/1-A
 Matrix: Water
 Analysis Batch: 123485

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120469

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Ra-226	0.3300	U	0.480	(2σ+/-)	1.00	0.550	pCi/L	10/28/24 11:08	11/19/24 16:02	1

Lab Sample ID: LCS 810-120469/2-A
 Matrix: Water
 Analysis Batch: 123485

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 120469

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec
		Result	Qual	Uncert.					
Ra-226	5.06	5.100		(2σ+/-)	1.00	0.430	pCi/L	101	90 - 110

Method: SM7500 Ra D - Radium-228

Lab Sample ID: MB 810-120457/1-A
 Matrix: Water
 Analysis Batch: 124789

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120457

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Ra-228	-0.1600	U	0.420	(2σ+/-)	1.00	0.470	pCi/L	10/28/24 10:00	11/27/24 12:56	1

Lab Sample ID: LCS 810-120457/2-A
 Matrix: Water
 Analysis Batch: 124789

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 120457

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec
		Result	Qual	Uncert.					
Ra-228	4.17	3.360		(2σ+/-)	1.00	0.450	pCi/L	81	80 - 120

Lab Sample ID: 810-125778-2 MS
 Matrix: Ground Water
 Analysis Batch: 124789

Client Sample ID: MW-15015R
 Prep Type: Total/NA
 Prep Batch: 120457

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec
	Result	Qual		Result	Qual	Uncert.					
Ra-228	0.300	U	4.62	5.110		(2σ+/-)	1.00	0.560	pCi/L	111	70 - 130

QC Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Method: SM7500 Ra D - Radium-228 (Continued)

Lab Sample ID: 810-125778-2 MSD
Matrix: Ground Water
Analysis Batch: 124789

Client Sample ID: MW-15015R
Prep Type: Total/NA
Prep Batch: 120457

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	RER	Limit
	Result	Qual		Result	Qual	Uncert. (2σ+/-)							
Ra-228	0.300	U	4.62	4.300			1.00	0.490	pCi/L	93	70 - 130	0.54	

Lab Sample ID: MB 810-120460/1-A
Matrix: Water
Analysis Batch: 125285

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120460

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Ra-228	-0.9500	U	0.540		1.00	0.640	pCi/L	10/28/24 10:18	12/04/24 09:27	1

Lab Sample ID: LCS 810-120460/2-A
Matrix: Water
Analysis Batch: 125285

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 120460

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec
		Added	Result	Qual					
Ra-228	4.16	3.470			1.00	0.680	pCi/L	83	80 - 120

Lab Sample ID: 810-125778-12 MS
Matrix: Ground Water
Analysis Batch: 125285

Client Sample ID: MW-15022
Prep Type: Total/NA
Prep Batch: 120460

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec
	Result	Qual		Result	Qual	Uncert. (2σ+/-)					
Ra-228	-0.0400	U	4.60	4.080			1.00	0.660	pCi/L	89	70 - 130

Lab Sample ID: 810-125778-12 MSD
Matrix: Ground Water
Analysis Batch: 125285

Client Sample ID: MW-15022
Prep Type: Total/NA
Prep Batch: 120460

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	RER	Limit
	Result	Qual		Result	Qual	Uncert. (2σ+/-)							
Ra-228	-0.0400	U	4.61	3.900			1.00	0.890	pCi/L	85	70 - 130	0.1	

Lab Sample ID: MB 810-120470/1-A
Matrix: Water
Analysis Batch: 123836

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 120470

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Ra-228	0.1400	U	0.350		1.00	0.360	pCi/L	10/28/24 11:14	11/20/24 13:14	1

Lab Sample ID: LCS 810-120470/2-A
Matrix: Water
Analysis Batch: 123836

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 120470

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec
		Added	Result	Qual					
Ra-228	4.18	3.360			1.00	0.400	pCi/L	80	80 - 120

QC Sample Results

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Method: SM7500 Ra D - Radium-228

Lab Sample ID: 810-125778-21 MS
Matrix: Ground Water
Analysis Batch: 123836

Client Sample ID: MW-15004
Prep Type: Total/NA
Prep Batch: 120470

Analyte	Sample	Sample	Spike Added	MS	MS	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
	Result	Qual		Result	Qual						
Ra-228	0.640		4.60	4.280			1.00	0.440	pCi/L	93	70 - 130

Lab Sample ID: 810-125778-21 MSD
Matrix: Ground Water
Analysis Batch: 123836

Client Sample ID: MW-15004
Prep Type: Total/NA
Prep Batch: 120470

Analyte	Sample	Sample	Spike Added	MSD	MSD	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
	Result	Qual		Result	Qual								
Ra-228	0.640		4.45	3.360			1.00	0.490	pCi/L	76	70 - 130	0.72	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Association Summary

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Rad

Prep Batch: 120456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125778-1	MW-15016R	Total/NA	Ground Water	RAD Prep	
810-125778-2	MW-15015R	Total/NA	Ground Water	RAD Prep	
810-125778-3	MW-15014R	Total/NA	Ground Water	RAD Prep	
810-125778-4	MW-15009	Total/NA	Ground Water	RAD Prep	
810-125778-5	MW-17004	Total/NA	Ground Water	RAD Prep	
810-125778-6	MW-15019	Total/NA	Ground Water	RAD Prep	
810-125778-7	MW-17005	Total/NA	Ground Water	RAD Prep	
810-125778-8	MW-15020	Total/NA	Ground Water	RAD Prep	
810-125778-9	MW-15023	Total/NA	Ground Water	RAD Prep	
810-125778-10	MW-17006	Total/NA	Ground Water	RAD Prep	
MB 810-120456/1-A	Method Blank	Total/NA	Water	RAD Prep	
LCS 810-120456/2-A	Lab Control Sample	Total/NA	Water	RAD Prep	
810-125778-1 MS	MW-15016R	Total/NA	Ground Water	RAD Prep	
810-125778-1 MSD	MW-15016R	Total/NA	Ground Water	RAD Prep	

Prep Batch: 120457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125778-1	MW-15016R	Total/NA	Ground Water	RAD Prep	
810-125778-2	MW-15015R	Total/NA	Ground Water	RAD Prep	
810-125778-3	MW-15014R	Total/NA	Ground Water	RAD Prep	
810-125778-4	MW-15009	Total/NA	Ground Water	RAD Prep	
810-125778-5	MW-17004	Total/NA	Ground Water	RAD Prep	
810-125778-6	MW-15019	Total/NA	Ground Water	RAD Prep	
810-125778-7	MW-17005	Total/NA	Ground Water	RAD Prep	
810-125778-8	MW-15020	Total/NA	Ground Water	RAD Prep	
810-125778-9	MW-15023	Total/NA	Ground Water	RAD Prep	
810-125778-10	MW-17006	Total/NA	Ground Water	RAD Prep	
MB 810-120457/1-A	Method Blank	Total/NA	Water	RAD Prep	
LCS 810-120457/2-A	Lab Control Sample	Total/NA	Water	RAD Prep	
810-125778-2 MS	MW-15015R	Total/NA	Ground Water	RAD Prep	
810-125778-2 MSD	MW-15015R	Total/NA	Ground Water	RAD Prep	

Prep Batch: 120458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125778-11	MW-15021	Total/NA	Ground Water	RAD Prep	
810-125778-12	MW-15022	Total/NA	Ground Water	RAD Prep	
810-125778-13	MW-15008	Total/NA	Ground Water	RAD Prep	
810-125778-14	MW-15013	Total/NA	Ground Water	RAD Prep	
810-125778-15	MW-15010	Total/NA	Ground Water	RAD Prep	
810-125778-16	MW-15006	Total/NA	Ground Water	RAD Prep	
810-125778-17	MW-15005	Total/NA	Ground Water	RAD Prep	
810-125778-18	MW-15007	Total/NA	Ground Water	RAD Prep	
810-125778-19	MW-15003	Total/NA	Ground Water	RAD Prep	
810-125778-20	MWT-15003	Total/NA	Ground Water	RAD Prep	
MB 810-120458/1-A	Method Blank	Total/NA	Water	RAD Prep	
LCS 810-120458/2-A	Lab Control Sample	Total/NA	Water	RAD Prep	
810-125778-11 MS	MW-15021	Total/NA	Ground Water	RAD Prep	
810-125778-11 MSD	MW-15021	Total/NA	Ground Water	RAD Prep	

QC Association Summary

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Rad

Prep Batch: 120460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125778-11	MW-15021	Total/NA	Ground Water	RAD Prep	
810-125778-12	MW-15022	Total/NA	Ground Water	RAD Prep	
810-125778-13	MW-15008	Total/NA	Ground Water	RAD Prep	
810-125778-14	MW-15013	Total/NA	Ground Water	RAD Prep	
810-125778-15	MW-15010	Total/NA	Ground Water	RAD Prep	
810-125778-16	MW-15006	Total/NA	Ground Water	RAD Prep	
810-125778-17	MW-15005	Total/NA	Ground Water	RAD Prep	
810-125778-18	MW-15007	Total/NA	Ground Water	RAD Prep	
810-125778-19	MW-15003	Total/NA	Ground Water	RAD Prep	
810-125778-20	MWT-15003	Total/NA	Ground Water	RAD Prep	
MB 810-120460/1-A	Method Blank	Total/NA	Water	RAD Prep	
LCS 810-120460/2-A	Lab Control Sample	Total/NA	Water	RAD Prep	
810-125778-12 MS	MW-15022	Total/NA	Ground Water	RAD Prep	
810-125778-12 MSD	MW-15022	Total/NA	Ground Water	RAD Prep	

Prep Batch: 120469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125778-21	MW-15004	Total/NA	Ground Water	RAD Prep	
810-125778-22	MW-15002	Total/NA	Ground Water	RAD Prep	
810-125778-23	MW-17003	Total/NA	Ground Water	RAD Prep	
810-125778-24	MWT-17003	Total/NA	Ground Water	RAD Prep	
810-125778-25	MW-15018	Total/NA	Ground Water	RAD Prep	
810-125778-26	MW-15017	Total/NA	Ground Water	RAD Prep	
810-125778-27	MW-17002	Total/NA	Ground Water	RAD Prep	
810-125778-28	MW-17001R	Total/NA	Ground Water	RAD Prep	
MB 810-120469/1-A	Method Blank	Total/NA	Water	RAD Prep	
LCS 810-120469/2-A	Lab Control Sample	Total/NA	Water	RAD Prep	

Prep Batch: 120470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-125778-21	MW-15004	Total/NA	Ground Water	RAD Prep	
810-125778-22	MW-15002	Total/NA	Ground Water	RAD Prep	
810-125778-23	MW-17003	Total/NA	Ground Water	RAD Prep	
810-125778-24	MWT-17003	Total/NA	Ground Water	RAD Prep	
810-125778-25	MW-15018	Total/NA	Ground Water	RAD Prep	
810-125778-26	MW-15017	Total/NA	Ground Water	RAD Prep	
810-125778-27	MW-17002	Total/NA	Ground Water	RAD Prep	
810-125778-28	MW-17001R	Total/NA	Ground Water	RAD Prep	
MB 810-120470/1-A	Method Blank	Total/NA	Water	RAD Prep	
LCS 810-120470/2-A	Lab Control Sample	Total/NA	Water	RAD Prep	
810-125778-21 MS	MW-15004	Total/NA	Ground Water	RAD Prep	
810-125778-21 MSD	MW-15004	Total/NA	Ground Water	RAD Prep	

Lab Chronicle

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15016R

Lab Sample ID: 810-125778-1

Date Collected: 10/23/24 15:02

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	124395	SM	EA SB	11/26/24 10:58 - 11/26/24 11:28 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-15015R

Lab Sample ID: 810-125778-2

Date Collected: 10/23/24 16:08

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	123940	SM	EA SB	11/22/24 11:06 - 11/22/24 11:36 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-15014R

Lab Sample ID: 810-125778-3

Date Collected: 10/23/24 17:20

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	123940	SM	EA SB	11/22/24 11:06 - 11/22/24 11:36 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-15009

Lab Sample ID: 810-125778-4

Date Collected: 10/23/24 17:45

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	123940	SM	EA SB	11/22/24 11:06 - 11/22/24 11:36 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-17004

Lab Sample ID: 810-125778-5

Date Collected: 10/23/24 16:15

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56

Lab Chronicle

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-17004

Lab Sample ID: 810-125778-5

Date Collected: 10/23/24 16:15

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	123940	SM	EA SB	11/22/24 11:06 - 11/22/24 11:36 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-15019

Lab Sample ID: 810-125778-6

Date Collected: 10/23/24 15:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	124395	SM	EA SB	11/26/24 10:58 - 11/26/24 11:28 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-17005

Lab Sample ID: 810-125778-7

Date Collected: 10/23/24 13:45

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	124395	SM	EA SB	11/26/24 10:58 - 11/26/24 11:28 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-15020

Lab Sample ID: 810-125778-8

Date Collected: 10/23/24 12:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	123940	SM	EA SB	11/22/24 11:06 - 11/22/24 11:36 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-15023

Lab Sample ID: 810-125778-9

Date Collected: 10/23/24 11:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56

Lab Chronicle

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15023

Lab Sample ID: 810-125778-9

Date Collected: 10/23/24 11:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	123940	SM	EA SB	11/22/24 11:06 - 11/22/24 11:36 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-17006

Lab Sample ID: 810-125778-10

Date Collected: 10/23/24 10:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/27/24 12:56
Total/NA	Prep	RAD Prep			120456	SB	EA SB	10/28/24 09:57
Total/NA	Analysis	SM7500 Ra B		1	123940	SM	EA SB	11/22/24 11:06 - 11/22/24 11:36 ¹
Total/NA	Prep	RAD Prep			120457	SB	EA SB	10/28/24 10:00
Total/NA	Analysis	SM7500 Ra D		1	124789	OO	EA SB	11/27/24 12:56 - 11/27/24 15:56 ¹

Client Sample ID: MW-15021

Lab Sample ID: 810-125778-11

Date Collected: 10/23/24 09:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:27
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	123842	SM	EA SB	11/21/24 11:36 - 11/21/24 12:06 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:27 - 12/04/24 12:27 ¹

Client Sample ID: MW-15022

Lab Sample ID: 810-125778-12

Date Collected: 10/23/24 07:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:27
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	123842	SM	EA SB	11/21/24 11:36 - 11/21/24 12:06 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:27 - 12/04/24 12:27 ¹

Client Sample ID: MW-15008

Lab Sample ID: 810-125778-13

Date Collected: 10/24/24 07:45

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:27

Lab Chronicle

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15008

Lab Sample ID: 810-125778-13

Date Collected: 10/24/24 07:45

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	123842	SM	EA SB	11/21/24 11:36 - 11/21/24 12:06 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:27 - 12/04/24 12:27 ¹

Client Sample ID: MW-15013

Lab Sample ID: 810-125778-14

Date Collected: 10/24/24 08:06

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:27
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	123842	SM	EA SB	11/21/24 11:36 - 11/21/24 12:06 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:27 - 12/04/24 12:27 ¹

Client Sample ID: MW-15010

Lab Sample ID: 810-125778-15

Date Collected: 10/22/24 17:00

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:27
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	124416	SM	EA SB	11/25/24 16:45 - 11/25/24 17:15 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:27 - 12/04/24 12:27 ¹

Client Sample ID: MW-15006

Lab Sample ID: 810-125778-16

Date Collected: 10/22/24 15:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:27
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	123842	SM	EA SB	11/21/24 11:36 - 11/21/24 12:06 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:27 - 12/04/24 12:27 ¹

Client Sample ID: MW-15005

Lab Sample ID: 810-125778-17

Date Collected: 10/22/24 14:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:27

Lab Chronicle

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15005

Lab Sample ID: 810-125778-17

Date Collected: 10/22/24 14:30

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	123842	SM	EA SB	11/21/24 11:36 - 11/21/24 12:06 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:27 - 12/04/24 12:27 ¹

Client Sample ID: MW-15007

Lab Sample ID: 810-125778-18

Date Collected: 10/22/24 16:42

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:27
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	123842	SM	EA SB	11/21/24 11:36 - 11/21/24 12:06 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:27 - 12/04/24 12:27 ¹

Client Sample ID: MW-15003

Lab Sample ID: 810-125778-19

Date Collected: 10/22/24 12:44

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:30
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	124416	SM	EA SB	11/25/24 16:45 - 11/25/24 17:15 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:30 - 12/04/24 12:30 ¹

Client Sample ID: MWT-15003

Lab Sample ID: 810-125778-20

Date Collected: 10/22/24 12:44

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	12/04/24 09:30
Total/NA	Prep	RAD Prep			120458	SB	EA SB	10/28/24 10:13
Total/NA	Analysis	SM7500 Ra B		1	123842	SM	EA SB	11/21/24 11:36 - 11/21/24 12:06 ¹
Total/NA	Prep	RAD Prep			120460	SB	EA SB	10/28/24 10:18
Total/NA	Analysis	SM7500 Ra D		1	125285	OO	EA SB	12/04/24 09:30 - 12/04/24 12:30 ¹

Client Sample ID: MW-15004

Lab Sample ID: 810-125778-21

Date Collected: 10/22/24 14:04

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/20/24 13:14

Lab Chronicle

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15004

Lab Sample ID: 810-125778-21

Date Collected: 10/22/24 14:04

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RAD Prep			120469	SB	EA SB	10/28/24 11:08
Total/NA	Analysis	SM7500 Ra B		1	123485	SM	EA SB	11/19/24 16:02 - 11/19/24 16:32 ¹
Total/NA	Prep	RAD Prep			120470	SB	EA SB	10/28/24 11:14
Total/NA	Analysis	SM7500 Ra D		1	123836	SM	EA SB	11/20/24 13:14 - 11/20/24 16:14 ¹

Client Sample ID: MW-15002

Lab Sample ID: 810-125778-22

Date Collected: 10/22/24 15:10

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/20/24 13:14
Total/NA	Prep	RAD Prep			120469	SB	EA SB	10/28/24 11:08
Total/NA	Analysis	SM7500 Ra B		1	123485	SM	EA SB	11/19/24 16:02 - 11/19/24 16:32 ¹
Total/NA	Prep	RAD Prep			120470	SB	EA SB	10/28/24 11:14
Total/NA	Analysis	SM7500 Ra D		1	123836	SM	EA SB	11/20/24 13:14 - 11/20/24 16:14 ¹

Client Sample ID: MW-17003

Lab Sample ID: 810-125778-23

Date Collected: 10/23/24 09:04

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/20/24 13:14
Total/NA	Prep	RAD Prep			120469	SB	EA SB	10/28/24 11:08
Total/NA	Analysis	SM7500 Ra B		1	123485	SM	EA SB	11/19/24 16:02 - 11/19/24 16:32 ¹
Total/NA	Prep	RAD Prep			120470	SB	EA SB	10/28/24 11:14
Total/NA	Analysis	SM7500 Ra D		1	123836	SM	EA SB	11/20/24 13:14 - 11/20/24 16:14 ¹

Client Sample ID: MWT-17003

Lab Sample ID: 810-125778-24

Date Collected: 10/23/24 09:04

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/20/24 13:14
Total/NA	Prep	RAD Prep			120469	SB	EA SB	10/28/24 11:08
Total/NA	Analysis	SM7500 Ra B		1	123485	SM	EA SB	11/19/24 16:02 - 11/19/24 16:32 ¹
Total/NA	Prep	RAD Prep			120470	SB	EA SB	10/28/24 11:14
Total/NA	Analysis	SM7500 Ra D		1	123836	SM	EA SB	11/20/24 13:14 - 11/20/24 16:14 ¹

Client Sample ID: MW-15018

Lab Sample ID: 810-125778-25

Date Collected: 10/23/24 10:22

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/20/24 13:14

Lab Chronicle

Client: Trace Analytical Laboratories
 Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Client Sample ID: MW-15018

Lab Sample ID: 810-125778-25

Date Collected: 10/23/24 10:22

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RAD Prep			120469	SB	EA SB	10/28/24 11:08
Total/NA	Analysis	SM7500 Ra B		1	123485	SM	EA SB	11/19/24 16:02 - 11/19/24 16:32 ¹
Total/NA	Prep	RAD Prep			120470	SB	EA SB	10/28/24 11:14
Total/NA	Analysis	SM7500 Ra D		1	123836	SM	EA SB	11/20/24 13:14 - 11/20/24 16:14 ¹

Client Sample ID: MW-15017

Lab Sample ID: 810-125778-26

Date Collected: 10/23/24 11:24

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/20/24 13:14
Total/NA	Prep	RAD Prep			120469	SB	EA SB	10/28/24 11:08
Total/NA	Analysis	SM7500 Ra B		1	123485	SM	EA SB	11/19/24 16:02 - 11/19/24 16:32 ¹
Total/NA	Prep	RAD Prep			120470	SB	EA SB	10/28/24 11:14
Total/NA	Analysis	SM7500 Ra D		1	123836	SM	EA SB	11/20/24 13:14 - 11/20/24 16:14 ¹

Client Sample ID: MW-17002

Lab Sample ID: 810-125778-27

Date Collected: 10/23/24 12:20

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/20/24 13:14
Total/NA	Prep	RAD Prep			120469	SB	EA SB	10/28/24 11:08
Total/NA	Analysis	SM7500 Ra B		1	123485	SM	EA SB	11/19/24 16:02 - 11/19/24 16:32 ¹
Total/NA	Prep	RAD Prep			120470	SB	EA SB	10/28/24 11:14
Total/NA	Analysis	SM7500 Ra D		1	123836	SM	EA SB	11/20/24 13:14 - 11/20/24 16:14 ¹

Client Sample ID: MW-17001R

Lab Sample ID: 810-125778-28

Date Collected: 10/23/24 14:08

Matrix: Ground Water

Date Received: 10/25/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	123523	SB	EA SB	11/20/24 13:14
Total/NA	Prep	RAD Prep			120469	SB	EA SB	10/28/24 11:08
Total/NA	Analysis	SM7500 Ra B		1	123485	SM	EA SB	11/19/24 16:02 - 11/19/24 16:32 ¹
Total/NA	Prep	RAD Prep			120470	SB	EA SB	10/28/24 11:14
Total/NA	Analysis	SM7500 Ra D		1	123836	SM	EA SB	11/20/24 13:14 - 11/20/24 16:14 ¹

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Accreditation/Certification Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Laboratory: Eurofins Eaton Analytical South Bend

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Michigan	State	9926	12-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Ra226_Ra228 Pos		Ground Water	Radium 226 and 228
SM7500 Ra B	RAD Prep	Ground Water	Ra-226
SM7500 Ra D	RAD Prep	Ground Water	Ra-228



Method Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Method	Method Description	Protocol	Laboratory
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EA SB
SM7500 Ra B	Radium-226	SM	EA SB
SM7500 Ra D	Radium-228	SM	EA SB
RAD Prep	Preparation, Radiologicals	None	EA SB

Protocol References:

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

Laboratory References:

- EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777



Sample Summary

Client: Trace Analytical Laboratories
Project/Site: 24J1501 BC Cobb

Job ID: 810-125778-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-125778-1	MW-15016R	Ground Water	10/23/24 15:02	10/25/24 09:00
810-125778-2	MW-15015R	Ground Water	10/23/24 16:08	10/25/24 09:00
810-125778-3	MW-15014R	Ground Water	10/23/24 17:20	10/25/24 09:00
810-125778-4	MW-15009	Ground Water	10/23/24 17:45	10/25/24 09:00
810-125778-5	MW-17004	Ground Water	10/23/24 16:15	10/25/24 09:00
810-125778-6	MW-15019	Ground Water	10/23/24 15:00	10/25/24 09:00
810-125778-7	MW-17005	Ground Water	10/23/24 13:45	10/25/24 09:00
810-125778-8	MW-15020	Ground Water	10/23/24 12:30	10/25/24 09:00
810-125778-9	MW-15023	Ground Water	10/23/24 11:00	10/25/24 09:00
810-125778-10	MW-17006	Ground Water	10/23/24 10:00	10/25/24 09:00
810-125778-11	MW-15021	Ground Water	10/23/24 09:00	10/25/24 09:00
810-125778-12	MW-15022	Ground Water	10/23/24 07:30	10/25/24 09:00
810-125778-13	MW-15008	Ground Water	10/24/24 07:45	10/25/24 09:00
810-125778-14	MW-15013	Ground Water	10/24/24 08:06	10/25/24 09:00
810-125778-15	MW-15010	Ground Water	10/22/24 17:00	10/25/24 09:00
810-125778-16	MW-15006	Ground Water	10/22/24 15:30	10/25/24 09:00
810-125778-17	MW-15005	Ground Water	10/22/24 14:30	10/25/24 09:00
810-125778-18	MW-15007	Ground Water	10/22/24 16:42	10/25/24 09:00
810-125778-19	MW-15003	Ground Water	10/22/24 12:44	10/25/24 09:00
810-125778-20	MWT-15003	Ground Water	10/22/24 12:44	10/25/24 09:00
810-125778-21	MW-15004	Ground Water	10/22/24 14:04	10/25/24 09:00
810-125778-22	MW-15002	Ground Water	10/22/24 15:10	10/25/24 09:00
810-125778-23	MW-17003	Ground Water	10/23/24 09:04	10/25/24 09:00
810-125778-24	MWT-17003	Ground Water	10/23/24 09:04	10/25/24 09:00
810-125778-25	MW-15018	Ground Water	10/23/24 10:22	10/25/24 09:00
810-125778-26	MW-15017	Ground Water	10/23/24 11:24	10/25/24 09:00
810-125778-27	MW-17002	Ground Water	10/23/24 12:20	10/25/24 09:00
810-125778-28	MW-17001R	Ground Water	10/23/24 14:08	10/25/24 09:00





810-125778 Chain of Custody

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #
Batch #

www.EurofinsUS.com/Eaton

Shaded area for EEA use only

CHAIN OF CUSTODY RECORD

Page _____ of _____

REPORT TO:		SAMPLER (Signature)		PWS ID #		STATE (sample origin)		PROJECT NAME		PO#		# OF CONTAINERS		MATRIX CODE	
Jon Mink, Tim Brewer (jmink@trace-labs.com, tbrewer@trace-labs.com) Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444 231-773-9398						MI		24J1501		24J1501					
BILL TO:		COMPLIANCE MONITORING		SAMPLING SITE		TEST NAME		SAMPLE REMARKS		CHLORINATED		TURNAROUND TIME			
Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444		Yes No		X		RADIUM 226/228				YES NO		GW SW			
LAB Number		COLLECTION		DATE		TIME		DATE		TIME		DATE		TIME	
1		10/23/24	15:02	X	MM-15016R										
2		10/23/24	16:08	X	MM-15019R										
3		10/23/24	17:20	X	MM-15014R										
4		10/23/24	17:45	X	MM-15009										
5		10/23/24	16:15	X	MM-17004										
6		10/23/24	15:00	X	MM-15019										
7		10/23/24	13:45	X	MM-17005										
8		10/23/24	12:30	X	MM-15020										
9		10/23/24	11:00	X	MM-15023										
10		10/23/24	10:00	X	MM-17006										
11		10/23/24	9:00	X	MM-15021										
12		10/23/24	7:30	X	MM-15022										
13		10/24/24	7:45	X	MM-15008										
14		10/24/24	8:06	X	MM-15013										
RELINQUISHED BY: (Signature)		DATE		TIME		RECEIVED BY: (Signature)		DATE		TIME		LAB COMMENTS		LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT	
Sydney Boyce		10/24/24		17:00		Fedex									
RELINQUISHED BY: (Signature)		DATE		TIME		RECEIVED BY: (Signature)		DATE		TIME		LAB COMMENTS		LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT	
Fedex						Deyton Tanc		10/25/24		0900		Fedex			
RELINQUISHED BY: (Signature)		DATE		TIME		RECEIVED FOR LABORATORY BY:		DATE		TIME		CONDITIONS UPON RECEIPT (check one):		LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT	
												Iced: <input type="checkbox"/> Well/Blue <input type="checkbox"/> Ambient <input type="checkbox"/> °C Upon Receipt: _____ N/A			
MATRIX CODES:		TURN-AROUND TIME (TAT) - SURCHARGES		IV* = Immediate Verbal: (3 working days) 100%		SW = Standard Written: (15 working days) 0%		RV* = Rush Verbal: (5 working days) 50%		MM* = Immediate Written: (3 working days) 125%		SP* = Weekend, Holiday CALL		STAT* = Less than 48 hours CALL	
DW-DRINKING WATER RW-REAGENT WATER GW-GROUND WATER EW-EXPOSURE WATER SW-SURFACE WATER PW-POOL WATER WW-WASTE WATER		* Please call, expedited service not available for all testing		0%		50%		75%		100%		CALL		CALL	
														Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.	
														06-LO-F0435 Issue 6.0 Effective Date: 2016-09-20	

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





Eaton Analytical

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order #
Batch #

www.EurofinsUS.com/Eaton

CHAIN OF CUSTODY RECORD

Page _____ of _____

Shaded area for EEA use only

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

BILL TO:

Accounts Payable, Trace Analytical Laboratories, Inc., 2241 Black Creek Rd., Muskegon, MI 49444

LAB Number	COLLECTION		COMPLIANCE MONITORING	SAMPLER (Signature)		PWS ID #	STATE (sample origin)	PROJECT NAME	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
	DATE	TIME		AM	PM							
1	10/22/24	17:00	X			MW-15010	MI	24J1501	24J1501	1	GW	SW
2	10/22/24	15:30	X			MW-15006				1	GW	SW
3	10/22/24	14:30	X			MW-15005				1	GW	SW
4	10/22/24	16:42	X			MW-15007				1	GW	SW
5	10/22/24	12:44	X			MW-15003				1	GW	SW
6	10/22/24	12:44	X			MW-15004				1	GW	SW
7	10/22/24	14:04	X			MW-15002				1	GW	SW
8	10/22/24	15:10	X			MW-17003				1	GW	SW
9	10/23/24	9:04	X			MW-17003				1	GW	SW
10	10/23/24	9:04	X			MW-17003				1	GW	SW
11	10/23/24	10:22	X			MW-15018				1	GW	SW
12	10/23/24	11:24	X			MW-15017				1	GW	SW
13	10/23/24	12:20	X			MW-17002				1	GW	SW
14	10/23/24	14:08	X			MW-17001R				1	GW	SW

RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME	LAB COMMENTS
Sydney Boyce	10/24/24	17:00	Fedex			
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME	LAB COMMENTS
Fedex			<i>Rayla Tru</i>	10/25/24	09:00	Fedex
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	CONDITIONS UPON RECEIPT (check one): Iced: <input type="checkbox"/> Wet/Blue <input type="checkbox"/> Ambient <input type="checkbox"/> °C Upon Receipt <input type="checkbox"/> N/A

MATRIX CODES:	TURN-AROUND TIME (TAT) - SURCHARGES
DW-DRINKING WATER	SW = Standard Written: (15 working days) 0%
RW-REAGENT WATER	RV* = Rush Verbal: (5 working days) 50%
GW-GROUND WATER	RW* = Rush Written: (5 working days) 75%
EW-EXPOSURE WATER	
SW-SURFACE WATER	
PW-POOL WATER	
WW-WASTE WATER	

* 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.

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



Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 810-125778-1

Login Number: 125778

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: Trowbridge, Peyton

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	False	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	





TRACE ANALYTICAL LABORATORIES, INC.

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

CHAIN-OF-CUSTODY RECORD

Trace ID No.
2471501

Report Results To:
Company Name: HDR Inc
Report To: Molly Reeves
Mailing Address: 1000 Oakbrook Drive, Suite 200
City, State, Zip Code: Ann Arbor MI 48104
Office Phone: Call Phone: 734-263-7136
Email Address: molly.reeves@hdrinc.com

Bill To:
PO #: 10220433
Billing Address: Lara Zawajda
City, State, Zip Code: Phone Number: 734.223.9574
Billing Email Address: Lara.Zawajda@hdrinc.com

Trace Use:
Logged By: SRB
Checked By: BRV
Soil Vials/ies Preserved (circle if applicable):
MeOH Low Level Lab
Sample Collection Time (Hrs):

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

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

Project Name: BC Cobb
Sampled By (print): Andrew Bygs / Tanten Buszka

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals	Field Filtered (Y or N)	Matrix	Number of Containers	Preservation	Analysis Requested	Remarks/Notes
1	10/22/24	1700	MW-1501D	N		Matrix - see above →	3	Cool ≤ 4°C Hydrochloric Acid (HCl) Nitric Acid (HNO3) Sulfuric Acid (H2SO4) Sodium Thiosulfate Sodium Hydroxide (NaOH) Ascorbic Acid Trizma Other	CFR Part 257 App III CFR Part 257 App IV Part 115 Metals Total Suspended Solids	
2	10/22/24	1530	MW-15006	N			3			
3	10/22/24	1430	MW-15005	N			3			
4	10/22/24	1072	MW-15007	N			3			
5	10/22/24	1244	MW-15003	N			3			
6	10/22/24	1244	MW-T-15003	N			3			
7	10/22/24	1404	MW-15004	N			3			
8	10/22/24	1510	MW-15002	N			3			
Released By: [Signature]				Date:	Time:	Released By: [Signature]				
31										

Please Sign
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 70-22



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.
2471501

CHAIN-OF-CUSTODY RECORD

Page 1 of 2

Report Results To:

Bill To:

Trace Use:

Company Name: HDR Inc	PO #: 10220933
Report To: Molly Reeves	Contact Name: Lara Zawadzki
Mailing Address: 1000 Oakbrook Drive Suite 200	Billing Address (if different):
City, State, Zip Code: Ann Arbor, MI 48104	City, State, Zip Code:
Office Phone:	Phone Number: 734-223-9079
Email Address: Molly.Reeves@hdrinc.com	Billing Email Address: Lara.zawadzki@hdrinc.com
Cell Phone: 734-263-7138	

Requested Turnaround Times (TAT)

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

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

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filterd (Y or N)	Matrix - see above →	Number of Containers	Preservation	Analysis Requested	Remarks/Notes	Possible Health Hazards?
9	10/23/24	904	MW-17003	N	GW	3	Cool ≤ 4°C Hydrochloric Acid (HCl) Nitric Acid (HNO3) Sulfuric Acid (H2SO4) Sodium Thiosulfate Sodium Hydroxide (NaOH) Ascorbic Acid Trizma Other	40 CFR Part 257 App II 40 CFR Part 257 App IV Part 118 Metals Total Suspended Solids		
10	10/23/24	904	MW-T-17003	N	GW	3				
11	10/23/24	1022	MW-15018	N	GW	3				
12	10/23/24	1124	MW-15017	N	GW	3				
13	10/23/24	1220	MW-17002	N	GW	3				
14	10/23/24	1408	MW-17001R	N	GW	3				
15	10/23/24	1502	MW-15016R	N	GW	3				
16	10/23/24	1608	MW-15015R	N	GW	3				
17	10/23/24	1720	MW-15014R	N	GW	3				
18	10/23/24	1745	MW-15009	N	GW	3				
Please Sign		Released By	Received By	Date	Time	Released By	Received By	Date	Time	
1) <i>[Signature]</i>		<i>[Signature]</i>	<i>[Signature]</i>	10/29/24	8:58					
3) <i>[Signature]</i>										

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.

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

Form 70-2.2

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



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

Page 2 of 2
Trace ID No. 2431501

Report Results To:

Bill To:

Company Name: HDR Inc	PO #: 10220433
Report To: Molly Reeves	Contact Name: Lara Zawajidoh
Mailing Address: 1000 Oakbrook Drive, Suite 200	Billing Address: (if different):
City, State, Zip Code: Ann Arbor, MI 48104	City, State, Zip Code:
Office Phone:	Phone Number: 734-223-9074
Email Address: molly_reeves@hdrinc.com	Billing Email Address: lara.zawajidoh@hdrinc.com

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

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

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

Trace No.	Sample Collection Date	Sample Collection Time	Sample ID/Name	Metals Field Filter (Y or N)	Matrix - see above →	Number of Containers	Cool ≤ 4°C	Preservation											Analysis Requested	Remarks/Notes						
								Hydrochloric Acid (HCl)	Nitric Acid (HNO3)	Sulfuric Acid (H2SO4)	Sodium Thiosulfate	Sodium Hydroxide (NaOH)	Ascorbic Acid	Trizma	Other											
19	10/23/24	1615	MW-17004	N	GW	3	2									X	40 CFR Part 257 App III									
20	10/23/24	1500	MW-15019	N	GW	3	2									X	40 CFR Part 257 App III									
21	10/23/24	1345	MW-17005	N	GW	3	2									X	Port 115 Metals									
22	10/23/24	1230	MW-15020	N	GW	3	2									X	Total suspended solids III									
23	10/23/24	1100	MW-15023	N	GW	3	2									X										
24	10/23/24	1000	MW-17006	N	GW	3	2									X										
25	10/23/24	900	MW-15021	N	GW	3	2									X										
26	10/23/24	730	MW-15022	N	GW	3	2									X										
27	10/21/24	745	MW-15008	N	GW	3	2									X										
28	10/21/24	806	MW-15013	N	GW	3	2									X										

Please Sign
 Released By: [Signature]
 Received By: [Signature]
 Date: 10/24/24
 Time: 858
 Released By: [Signature]

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.

24J1501
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/23/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 803									
Initials: SB									
Package Description: Cooler									
Package Temp °C	3.6	3.6							
Representative Sample Temp °C	6.6	6.6							

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: HC311850) pH 11.0-13.0 (Lot: HCO22540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15005, MW-15006, MW-15010

24J1501
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/23/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 803									
Initials: SB									
Package Description: cooler									
Package Temp °C	0.4	0.4			x				
Representative Sample Temp °C	11.4	11.2				x		x	

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15003, MWT-15003, MW-15004, MW-15002, MW-15007

24J1501
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/24/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:30									
Initials: NC									
Package Description: Cooler									
Package Temp °C	3.2	3.2							
Representative Sample Temp °C	9.0	8.9							

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15019
 MW-15008
 MW-17004
 MW-17005
 MW-15009

24J1501
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/24/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:30									
Initials: 9:30 NC 10/24/24									
Package Description: Cooler									
Package Temp °C	2.1	2.1							
Representative Sample Temp °C	10.4	10.3							

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15015R
 MW-17001R
 MW 15016R
 MW-15014R
 MW-17002

24J1501
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/24/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:30									
Initials: NC									
Package Description: Cooler									
Package Temp °C	2.3	2.3							
Representative Sample Temp °C	10.4	10.3							

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15020
 MW-15023
 MW-15022
 MW-17006
 MW-15021

24J1501
 HDR Michigan Inc.
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/24/24	Original Observation	Corrected Temperature	IR-9 (CF: 0.0°C)	IR-10 (CF: -1.0°C)	IR-12 (CF: 0.0°C)	SR1 (CF: -0.2°C)	SR2 (CF: -0.1°C)	Temp Blank	Client Sample
Time: 9:30									
Initials: NL									
Package Description: Cooler									
Package Temp °C	2.5	2.5							
Representative Sample Temp °C	10.7	10.6							

Sample Receipt

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Trace Courier Client Drop-off

Yes No Custody seals intact (if applicable)

UPS Fed Ex US Mail Other

Sample Condition

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC311850) pH 11.0-13.0 (Lot: HC022540) Other

Air bubbles absent from VOAs

Chain of Custody (COC)

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

Notes:

MW-15017
 MW-15018
 MWT-17003
 MW-17003
 MW-15013



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	MAD/0.675	Skewness	Kurtosis
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.805	1.00	0.250	1.20	0.364	0.453	0	-0.919	-1.07
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	22	1	5%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Gamma	12.2	10.7	0.550	45.0	11.6	0.955	13.1	1.20	1.49
01_2_103	MW-15009	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	46.9	16.2	9.00	250	56.3	1.20	10.0	2.49	7.63
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.767	1.00	0.200	1.20	0.384	0.501	0	-0.677	-1.53
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.310	0.200	0.200	1.20	0.297	0.959	0	2.94	7.44
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	0.862	1.00	0.250	2.00	0.433	0.502	0	0.178	1.02
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	8.16	6.00	0.520	15.0	6.86	0.841	8.12	-0.0345	-2.08
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	23	20	87%	2015-12-01 to 2024-03-27		Nonparametric	645	1000	20.0	1000	453	0.703	0	-0.482	-1.94
01_2_116	MW-15009	Appendix IV	Lead	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.04	1.00	0.550	2.80	0.619	0.593	0	2.36	5.44
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	23.7	21.0	11.0	63.9	12.3	0.517	10.4	1.96	4.75
01_2_118	MW-15009	Appendix IV	Mercury	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	22	9	41%	2015-12-01 to 2024-03-27	Normal	Nonparametric	20.7	6.35	1.00	60.0	22.1	1.07	7.70	0.666	-1.40
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	1.02	0.777	0.0300	3.85	0.858	0.844	0.435	2.17	5.31
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	1.05	1.00	0.500	2.50	0.575	0.550	0	1.66	2.48
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.48	2.00	0.380	2.00	0.745	0.503	0	-0.838	-1.36
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	0.780	1.00	0.250	1.20	0.375	0.481	0	-0.748	-1.41
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	23	22	96%	2015-12-01 to 2024-03-27		Nonparametric	1.01	1.00	0.410	2.80	0.604	0.596	0	2.39	5.84
02_2_103	MW-15010	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Gamma	73.7	60.0	28.0	210	46.1	0.625	26.7	1.46	1.96
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	0.743	1.00	0.200	1.20	0.391	0.526	0	-0.532	-1.74
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	0.307	0.200	0.200	1.20	0.290	0.945	0	3.02	7.94
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	23	16	70%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	0.845	1.00	0.250	2.00	0.430	0.509	0	0.287	0.927
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	22	20	91%	2015-12-01 to 2024-03-27		Nonparametric	7.79	6.00	0.110	15.0	6.91	0.886	8.42	0.0603	-2.07
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	24	14	58%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	719	1000	260	1000	341	0.475	0	-0.388	-1.99
02_2_116	MW-15010	Appendix IV	Lead	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	1.02	1.00	0.550	2.80	0.613	0.601	0	2.40	5.69
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	23	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	29.8	25.0	14.0	54.0	12.0	0.404	10.4	0.631	-0.887
02_2_118	MW-15010	Appendix IV	Mercury	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	23	11	48%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Gamma	8.90	5.00	1.10	33.0	9.71	1.09	5.63	1.43	0.945
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	23	13	57%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.13	1.06	0.363	2.03	0.551	0.488	0.806	0.0532	-1.38
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	23	21	91%	2015-12-01 to 2024-03-27		Nonparametric	0.978	1.00	0.500	2.50	0.533	0.544	0	2.07	4.78
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	1.43	2.00	0.380	2.00	0.764	0.534	0	-0.677	-1.63
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.805	1.00	0.250	1.20	0.364	0.453	0	-0.919	-1.07
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	1.05	1.00	0.200	2.80	0.618	0.589	0	2.14	5.04
03_2_103	MW-15013	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	67.4	50.0	31.0	140	34.2	0.507	14.3	1.17	0.0552
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.767	1.00	0.200	1.20	0.384	0.501	0	-0.677	-1.53
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.310	0.200	0.200	1.20	0.297	0.959	0	2.94	7.44
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	0.859	1.00	0.250	2.00	0.437	0.509	0	0.153	0.939
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	8.14	6.00	0.110	15.0	6.88	0.845	8.73	-0.0375	-2.07
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	23	18	78%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	843	1000	100	4000	796	0.944	0	2.87	11.6
03_2_116	MW-15013	Appendix IV	Lead	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.04	1.00	0.550	2.80	0.619	0.593	0	2.36	5.44
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	22	1	5%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	22.9	20.5	13.0	38.0	7.08	0.309	5.19	0.940	-0.0726
03_2_118	MW-15013	Appendix IV	Mercury	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	5	23%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Gamma	10.9	6.20	0.620	77.2	15.9	1.45	5.56	3.77	15.9

(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	MAD/0.675	Skewness	Kurtosis
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	22	15	68%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.952	1.00	0.450	1.56	0.360	0.378	0.513	0.170	-1.05
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	1.00	1.00	0.500	2.50	0.535	0.535	0	2.06	4.67
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.48	2.00	0.380	2.00	0.745	0.503	0	-0.838	-1.36
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	0.657	0.250	0.250	1.20	0.508	0.773	0	0.374	-2.80
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	7	5	71%	2022-02-01 to 2024-03-27		Nonparametric	1.30	0.550	0.280	2.80	1.10	0.847	0.400	0.755	-1.61
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	7	0	0%	2022-02-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	174	170	160	200	15.1	0.0867	14.8	1.00	-0.197
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	0.521	0.250	0.250	1.20	0.464	0.889	0	1.23	-0.840
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	0.657	0.250	0.250	1.20	0.508	0.773	0	0.374	-2.80
04_2_109	MW-15014R	Appendix IV	Chromium	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	0.521	0.250	0.250	1.20	0.464	0.889	0	1.23	-0.840
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	1.11	0.520	0.520	2.60	1.01	0.911	0	1.23	-0.840
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	7	0	0%	2022-02-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	251	270	180	300	45.3	0.180	29.6	-0.795	-0.832
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	1.51	0.550	0.550	2.80	1.20	0.794	0	0.374	-2.80
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	7	0	0%	2022-02-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	59.9	48.0	36.0	130	32.7	0.546	13.3	2.11	4.73
04_2_118	MW-15014R	Appendix IV	Mercury	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	7	2	29%	2022-02-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	4.63	3.30	0.680	11.0	3.47	0.751	3.88	1.00	0.883
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	7	3	43%	2022-02-01 to 2024-03-27		Nonparametric	1.08	1.00	0.230	1.76	0.520	0.483	0.637	-0.434	-0.344
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	1.07	0.500	0.500	2.50	0.976	0.911	0	1.23	-0.840
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	7	7	100%	2022-02-01 to 2024-03-27		Nonparametric	1.03	0.380	0.380	1.90	0.812	0.788	0	0.374	-2.80
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	10	6	60%	2020-05-21 to 2024-03-27		Nonparametric	2.35	1.00	0.250	13.0	3.90	1.66	1.07	2.75	7.85
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	17.4	15.8	3.20	38.0	10.3	0.594	10.7	0.641	0.211
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	121	120	60.0	170	33.3	0.276	37.0	-0.405	-0.214
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.430	0.250	0.200	1.20	0.406	0.945	0	1.77	1.38
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.430	0.250	0.200	1.20	0.406	0.945	0	1.77	1.38
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	0.512	0.250	0.220	1.20	0.432	0.844	0	1.09	-0.963
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	10	7	70%	2020-05-21 to 2024-03-27		Nonparametric	0.873	0.520	0.220	2.60	0.916	1.05	0.0889	1.72	1.30
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	10	4	40%	2020-05-21 to 2024-03-27	Gamma; Normal	Normal	104	100	12.0	180	42.3	0.408	14.8	-0.518	2.94
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	1.31	0.775	0.550	2.80	1.04	0.791	0.333	0.928	-1.30
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal	Gamma	44.6	40.5	3.80	120	30.6	0.685	18.5	1.69	4.53
05_2_118	MW-15015R	Appendix IV	Mercury	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal	Gamma	125	28.9	2.00	430	149	1.20	38.0	1.05	0.0688
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	10	6	60%	2020-05-21 to 2024-03-27		Nonparametric	1.18	1.00	0.470	2.12	0.558	0.474	0.335	0.810	-0.416
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	10	7	70%	2020-05-21 to 2024-03-27		Nonparametric	1.09	1.00	0.270	2.50	0.797	0.733	0.741	1.23	0.406
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.960	0.690	0.380	1.90	0.694	0.723	0.459	0.630	-1.60
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	0.426	0.250	0.140	1.20	0.409	0.961	0	1.75	1.35
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	10	2	20%	2020-05-21 to 2024-03-27	Nonparametric	Nonparametric	3.10	1.90	1.30	10.1	2.75	0.888	0.815	2.24	5.04
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1000	955	789	1300	169	0.169	215	0.510	-0.715
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.430	0.250	0.200	1.20	0.406	0.945	0	1.77	1.38
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.430	0.250	0.200	1.20	0.406	0.945	0	1.77	1.38
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	10	2	20%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	0.877	0.820	0.650	1.20	0.214	0.244	0.185	0.699	-1.23
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	10	2	20%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.43	1.15	0.660	2.60	0.725	0.508	0.593	0.830	-0.768
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	94.1	100	20.0	140	29.8	0.317	0	-1.63	5.19
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	10	9	90%	2020-05-21 to 2024-03-27		Nonparametric	0.996	0.550	0.0590	2.80	0.976	0.980	0	1.55	0.990

(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	MAD/0.675	Skewness	Kurtosis
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	10	3	30%	2020-05-21 to 2024-03-27	Nonparametric	Nonparametric	17.6	6.00	3.70	110	32.6	1.86	2.59	3.11	9.74
06_2_118	MW-15016R	Appendix IV	Mercury	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	3.14	1.20	1.20	7.50	2.62	0.834	0	0.758	-1.44
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	4.12	4.12	1.60	5.64	1.29	0.314	1.59	-0.638	-0.0129
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	1.04	0.750	0.120	2.50	0.840	0.806	0.370	1.12	0.0978
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.808	0.380	0.380	1.90	0.629	0.778	0	1.20	-0.0822
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.805	1.00	0.250	1.20	0.364	0.453	0	-0.919	-1.07
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	22	2	9%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	4.11	2.25	1.60	13.0	3.60	0.877	0.741	1.77	1.90
07_2_103	MW-15017	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	980	974	772	1200	100	0.103	78.5	0.109	0.203
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.767	1.00	0.200	1.20	0.384	0.501	0	-0.677	-1.53
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.310	0.200	0.200	1.20	0.297	0.959	0	2.94	7.44
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	22	1	5%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	3.39	3.25	0.510	11.0	2.65	0.783	2.59	1.44	2.56
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	21	14	67%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	8.27	6.00	0.500	15.0	6.72	0.813	8.15	-0.0220	-2.09
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	23	100%	2015-12-01 to 2024-03-27		Nonparametric	644	1000	20.0	1000	454	0.704	0	-0.481	-1.94
07_2_116	MW-15017	Appendix IV	Lead	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.15	1.00	0.550	2.80	0.716	0.623	0	1.86	2.37
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	22	17	77%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	10.0	10.0	3.50	20.0	3.85	0.384	0	0.647	1.92
07_2_118	MW-15017	Appendix IV	Mercury	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	3.90	5.00	1.00	6.20	1.91	0.490	0	-0.717	-1.37
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	22	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	4.82	4.84	3.00	5.89	0.667	0.138	0.748	-0.672	1.14
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	22	12	55%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Nonparametric	1.99	1.85	0.500	8.00	1.71	0.861	1.48	2.13	6.48
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.55	2.00	0.380	2.00	0.705	0.454	0	-1.11	-0.759
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.805	1.00	0.250	1.20	0.364	0.453	0	-0.919	-1.07
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	22	16	73%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.26	1.00	0.440	3.80	0.834	0.663	0	2.04	3.64
08_2_103	MW-15018	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	150	146	93.0	280	40.2	0.267	17.0	2.06	5.33
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.767	1.00	0.200	1.20	0.384	0.501	0	-0.677	-1.53
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.310	0.200	0.200	1.20	0.297	0.959	0	2.94	7.44
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	22	11	50%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.932	1.00	0.280	1.80	0.323	0.347	0	0.000173	2.29
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	8.16	6.00	0.520	15.0	6.86	0.840	8.12	-0.0342	-2.08
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	23	14	61%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	678	1000	110	1000	412	0.608	0	-0.498	-1.89
08_2_116	MW-15018	Appendix IV	Lead	ug/L	21	17	81%	2015-12-01 to 2024-03-27		Nonparametric	1.21	1.00	0.310	3.90	0.868	0.720	0	2.20	4.44
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	20.9	21.2	12.0	33.0	5.50	0.263	6.22	0.171	-0.408
08_2_118	MW-15018	Appendix IV	Mercury	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	3.89	5.00	1.00	6.20	1.93	0.497	0	-0.716	-1.39
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	22	8	36%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.21	1.16	0.586	1.84	0.324	0.268	0.244	0.204	0.0865
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	22	20	91%	2015-12-01 to 2024-03-27		Nonparametric	1.14	1.00	0.500	4.00	0.834	0.734	0	2.44	6.39
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.48	2.00	0.380	2.00	0.745	0.503	0	-0.838	-1.36
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.04	1.00	0.250	6.00	1.19	1.14	0	3.88	16.8
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	22	16	73%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Nonparametric	1.47	1.00	0.450	8.10	1.60	1.09	0	3.74	15.4
09_2_103	MW-15019	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	196	112	78.0	640	153	0.781	43	1.61	2.05
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.948	1.00	0.250	4.00	0.787	0.831	0	2.99	12.0
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.448	0.200	0.200	3.10	0.676	1.51	0	3.45	12.7
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	22	14	64%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.869	1.00	0.250	1.20	0.274	0.315	0	-1.23	0.429

(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	MAD/0.675	Skewness	Kurtosis
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	21	14	67%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	8.27	6.00	0.610	15.0	6.73	0.813	7.99	-0.0254	-2.08
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	23	22	96%	2015-12-01 to 2024-03-27		Nonparametric	642	1000	20.0	1000	457	0.711	0	-0.482	-1.94
09_2_116	MW-15019	Appendix IV	Lead	ug/L	21	19	90%	2015-12-01 to 2024-03-27		Nonparametric	1.19	1.00	0.170	4.00	0.902	0.760	0	2.15	4.47
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	22	3	14%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	18.5	22.5	1.20	33.0	9.51	0.513	5.19	-0.660	-1.04
09_2_118	MW-15019	Appendix IV	Mercury	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	8.85	5.00	1.20	100	20.4	2.31	0	4.63	21.6
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	22	5	23%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Gamma	1.50	1.27	0.674	3.81	0.801	0.534	0.702	1.38	1.92
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	22	18	82%	2015-12-01 to 2024-03-27		Nonparametric	1.01	1.00	0.120	2.50	0.617	0.613	0.148	1.33	1.79
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	21	19	90%	2015-12-01 to 2024-03-27		Nonparametric	1.53	2.00	0.280	2.00	0.738	0.482	0	-1.03	-1.01
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.805	1.00	0.250	1.20	0.364	0.453	0	-0.919	-1.07
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	1.03	1.00	0.240	2.80	0.614	0.593	0	2.27	5.47
10_2_103	MW-15020	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Normal	Nonparametric	174	134	47.0	393	125	0.719	122	0.485	-1.44
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.767	1.00	0.200	1.20	0.384	0.501	0	-0.677	-1.53
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.310	0.200	0.200	1.20	0.297	0.959	0	2.94	7.44
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	22	14	64%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.925	1.00	0.250	2.00	0.364	0.393	0	0.599	2.94
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	8.14	6.00	0.180	15.0	6.88	0.845	8.62	-0.0369	-2.07
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	23	22	96%	2015-12-01 to 2024-03-27		Nonparametric	645	1000	20.0	1000	453	0.702	0	-0.482	-1.94
10_2_116	MW-15020	Appendix IV	Lead	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	1.05	1.00	0.550	2.80	0.613	0.584	0	2.41	5.59
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	22	5	23%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	12.4	14.0	1.20	20.0	5.42	0.438	4.30	-0.567	-0.733
10_2_118	MW-15020	Appendix IV	Mercury	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	3.89	5.00	1.00	6.20	1.93	0.497	0	-0.716	-1.39
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	22	6	27%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.64	1.46	0.467	4.68	1.07	0.652	1.14	1.14	1.51
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	1.06	1.00	0.500	2.50	0.580	0.546	0	1.53	2.06
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.48	2.00	0.380	2.00	0.745	0.503	0	-0.838	-1.36
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.800	1.00	0.150	1.20	0.372	0.466	0	-0.935	-1.02
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	22	8	36%	2015-12-01 to 2024-03-27	Gamma; Normal	Normal	1.46	1.05	0.120	3.00	0.742	0.510	0.422	0.703	-0.0565
11_2_103	MW-15021	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	287	247	211	480	74.8	0.261	31.1	1.22	0.502
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.767	1.00	0.200	1.20	0.384	0.501	0	-0.677	-1.53
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.310	0.200	0.200	1.20	0.297	0.959	0	2.94	7.44
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	22	7	32%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	1.22	1.00	0.720	2.00	0.454	0.372	0.296	1.03	-0.428
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	21	16	76%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	8.24	6.00	0.520	15.0	6.77	0.821	8.12	-0.0252	-2.09
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	23	23	100%	2015-12-01 to 2024-03-27		Nonparametric	644	1000	20.0	1000	454	0.704	0	-0.481	-1.94
11_2_116	MW-15021	Appendix IV	Lead	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.04	1.00	0.550	2.80	0.619	0.593	0	2.36	5.44
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	22	18	82%	2015-12-01 to 2024-03-27		Nonparametric	8.48	10.0	1.20	20.0	4.42	0.521	0	0.161	0.995
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.226	0.200	0.200	0.750	0.120	0.531	0	4.58	21.0
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	3.89	5.00	1.00	6.20	1.93	0.497	0	-0.716	-1.39
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	22	5	23%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.74	1.54	0.354	3.24	0.685	0.395	0.578	0.390	0.0666
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	22	15	68%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.19	1.00	0.150	4.00	0.873	0.732	0.370	1.91	4.23
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.48	2.00	0.380	2.00	0.745	0.503	0	-0.838	-1.36
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	0.820	1.00	0.250	1.90	0.443	0.540	0	0.0829	0.0689
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	23	11	48%	2015-12-01 to 2024-03-27	Normal	Nonparametric	2.93	1.40	0.190	8.00	2.67	0.911	1.79	0.733	-0.929
12_2_103	MW-15022	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-03-27	Lognormal	Lognormal	164	139	102	290	54.0	0.329	29.6	0.912	-0.287

(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	MAD/0.675	Skewness	Kurtosis
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	0.743	1.00	0.200	1.20	0.391	0.526	0	-0.532	-1.74
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	0.307	0.200	0.200	1.20	0.290	0.945	0	3.02	7.94
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	23	18	78%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.839	1.00	0.250	2.00	0.438	0.521	0	0.245	0.791
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	7.80	6.00	0.350	15.0	6.90	0.884	8.24	0.0618	-2.07
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	24	19	79%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	811	1000	100	4000	795	0.981	0	2.82	11.4
12_2_116	MW-15022	Appendix IV	Lead	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	1.02	1.00	0.550	2.80	0.613	0.601	0	2.40	5.69
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	23	8	35%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Gamma	21.4	15.0	10.0	68.0	14.9	0.696	7.41	1.78	3.36
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	0.204	0.200	0.200	0.290	0.0192	0.0940	0	4.69	22.0
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	23	12	52%	2015-12-01 to 2024-03-27	Gamma; Normal	Nonparametric	9.38	5.00	0.320	47.6	10.6	1.13	5.63	2.29	6.96
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	23	16	70%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Nonparametric	1.01	1.00	0.190	3.50	0.654	0.650	0.415	2.56	9.53
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	23	23	100%	2015-12-01 to 2024-03-27		Nonparametric	0.978	1.00	0.500	2.50	0.533	0.544	0	2.07	4.78
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	22	22	100%	2015-12-01 to 2024-03-27		Nonparametric	1.43	2.00	0.380	2.00	0.764	0.534	0	-0.677	-1.63
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.805	1.00	0.250	1.20	0.364	0.453	0	-0.919	-1.07
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	22	10	45%	2015-12-01 to 2024-03-27	Lognormal	Lognormal	1.83	1.00	0.550	9.40	1.85	1.01	0.578	3.53	14.4
13_2_103	MW-15023	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	65.2	55.0	38.0	100	23.3	0.358	22.2	0.305	-1.76
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.767	1.00	0.200	1.20	0.384	0.501	0	-0.677	-1.53
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	0.310	0.200	0.200	1.20	0.297	0.959	0	2.94	7.44
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	22	18	82%	2015-12-01 to 2024-03-27		Nonparametric	0.860	1.00	0.250	2.00	0.437	0.508	0	0.157	0.949
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	8.16	6.00	0.520	15.0	6.86	0.841	8.12	-0.0345	-2.08
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	23	16	70%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Nonparametric	666	1000	100	1000	428	0.643	0	-0.504	-1.88
13_2_116	MW-15023	Appendix IV	Lead	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.04	1.00	0.550	2.80	0.619	0.593	0	2.36	5.44
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	22	7	32%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	14.8	12.1	8.30	31.0	6.40	0.432	3.04	1.29	0.860
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.217	0.200	0.200	0.550	0.0764	0.353	0	4.58	21.0
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	22	4	18%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	9.40	6.40	5.00	34.0	7.99	0.850	1.78	2.48	5.28
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	22	14	64%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.894	0.976	0.178	1.85	0.473	0.529	0.648	0.377	-0.616
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	1.00	1.00	0.500	2.50	0.535	0.535	0	2.06	4.67
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	21	21	100%	2015-12-01 to 2024-03-27		Nonparametric	1.48	2.00	0.380	2.00	0.745	0.503	0	-0.838	-1.36
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	10	9	90%	2020-05-21 to 2024-03-27		Nonparametric	0.502	0.250	0.120	1.20	0.441	0.878	0	1.06	-0.979
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	10	5	50%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.80	0.635	0.200	7.30	2.17	1.20	0.385	2.12	4.90
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	158	155	90.6	230	55.1	0.349	80.7	0.0501	-2.04
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.430	0.250	0.200	1.20	0.406	0.945	0	1.77	1.38
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.430	0.250	0.200	1.20	0.406	0.945	0	1.77	1.38
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	10	6	60%	2020-05-21 to 2024-03-27		Nonparametric	0.436	0.250	0.170	1.20	0.405	0.929	0.0741	1.72	1.30
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	10	7	70%	2020-05-21 to 2024-03-27		Nonparametric	0.860	0.520	0.250	2.60	0.924	1.07	0.170	1.71	1.27
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	10	2	20%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	130	125	100	180	28.3	0.218	37.0	0.589	-0.820
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	1.09	0.550	0.550	2.80	0.920	0.844	0	1.62	1.03
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	65.3	62.5	25.0	100	29.1	0.446	43	-0.162	-1.72
14_2_118	MW-17001R	Appendix IV	Mercury	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	10	5	50%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	2.32	1.55	0.370	6.20	2.15	0.926	1.04	1.38	0.628
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	10	3	30%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.17	1.04	0.308	2.02	0.502	0.428	0.321	0.292	0.334
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	1.00	0.500	0.500	2.50	0.816	0.816	0	1.53	0.817
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	10	10	100%	2020-05-21 to 2024-03-27		Nonparametric	0.808	0.380	0.380	1.90	0.629	0.778	0	1.20	-0.0822

(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	MAD/0.675	Skewness	Kurtosis
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	15	13	87%	2017-12-07 to 2024-03-27		Nonparametric	0.819	1.00	0.140	2.00	0.560	0.684	0.741	0.406	-0.483
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	16	1	6%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	35.6	5.05	1.00	220	56.8	1.60	5.70	2.56	7.56
15_2_103	MW-17002	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Normal	102	84.0	39.0	240	51.3	0.502	29.0	1.44	2.25
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.673	1.00	0.200	1.20	0.422	0.627	0.296	-0.0657	-2.16
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	15	13	87%	2017-12-07 to 2024-03-27		Nonparametric	0.361	0.250	0.200	1.20	0.343	0.952	0.0741	2.34	4.14
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	16	12	75%	2017-12-07 to 2024-03-27		Nonparametric	0.763	1.00	0.250	1.20	0.377	0.494	0.148	-0.489	-1.76
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	5.42	2.60	0.520	15.0	6.25	1.15	3.08	0.903	-1.06
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	16	7	44%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Normal	594	435	160	1000	378	0.635	370	0.159	-2.14
15_2_116	MW-17002	Appendix IV	Lead	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	1.36	1.00	0.550	2.80	0.919	0.676	0.667	1.01	-0.837
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Normal	149	146	46.0	220	49.9	0.335	37.0	-0.294	-0.0519
15_2_118	MW-17002	Appendix IV	Mercury	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	16	6	38%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	437	6.90	2.70	1800	677	1.55	5.63	1.28	0.0995
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	16	8	50%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.85	1.07	0.474	5.04	1.43	0.769	0.646	1.39	1.02
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	1.04	1.00	0.110	2.50	0.708	0.678	0.741	1.16	0.657
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	1.47	1.90	0.380	2.00	0.727	0.493	0.148	-0.896	-1.26
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	0.800	1.00	0.250	2.00	0.525	0.657	0.296	0.525	0.109
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	16	3	19%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Gamma	24.3	15.0	1.00	130	32.2	1.33	20.7	2.57	7.98
16_2_103	MW-17003	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	98.3	82.5	18.0	320	71.3	0.725	42.2	2.16	6.10
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.673	1.00	0.200	1.20	0.422	0.627	0.296	-0.0657	-2.16
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.353	0.250	0.200	1.20	0.345	0.975	0.0741	2.38	4.28
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	0.743	1.00	0.240	1.20	0.401	0.540	0.148	-0.473	-1.86
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	5.52	2.60	0.520	15.0	6.18	1.12	3.08	0.907	-1.05
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	16	12	75%	2017-12-07 to 2024-03-27		Nonparametric	491	120	20.0	1000	464	0.945	97.0	0.271	-2.21
16_2_116	MW-17003	Appendix IV	Lead	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	1.21	1.00	0.550	2.80	0.848	0.701	0.667	1.43	0.507
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	16	1	6%	2017-12-07 to 2024-03-27	Nonparametric	Nonparametric	45.6	20.0	13.0	200	54.2	1.19	8.15	2.22	4.30
16_2_118	MW-17003	Appendix IV	Mercury	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	16	5	31%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	20.5	11.6	5.00	87.0	22.8	1.11	9.78	2.00	4.07
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	16	11	69%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.10	1.05	0.539	1.55	0.334	0.304	0.489	-0.267	-1.22
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	1.12	1.00	0.150	2.50	0.762	0.683	0.741	0.897	-0.471
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	1.37	1.90	0.380	2.00	0.768	0.559	0.148	-0.552	-1.86
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	15	13	87%	2017-12-07 to 2024-03-27		Nonparametric	0.847	1.00	0.110	2.00	0.522	0.616	0.296	0.250	0.113
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	16	2	12%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	5.33	2.30	0.650	18.0	5.97	1.12	1.93	1.43	0.632
17_2_103	MW-17004	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	195	149	51.0	450	114	0.584	59.3	1.09	0.314
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.673	1.00	0.200	1.20	0.422	0.627	0.296	-0.0657	-2.16
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	0.369	0.250	0.200	1.20	0.345	0.934	0.0741	2.22	3.67
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	16	13	81%	2017-12-07 to 2024-03-27		Nonparametric	1.24	1.00	0.250	7.80	1.79	1.45	0.296	3.69	14.3
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	15	12	80%	2017-12-07 to 2024-03-27		Nonparametric	5.74	2.60	0.320	15.0	6.05	1.05	3.11	0.887	-1.03
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	503	175	100	1000	454	0.902	111	0.264	-2.21
17_2_116	MW-17004	Appendix IV	Lead	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	2.44	1.00	0.550	19.0	4.66	1.91	0.667	3.67	13.8
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	16	7	44%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	21.5	10.0	2.80	63.0	20.1	0.935	3.70	1.24	-0.187
17_2_118	MW-17004	Appendix IV	Mercury	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	16	8	50%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	11.6	5.45	1.00	46.0	12.7	1.10	6.30	1.74	2.60

(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	MAD/0.675	Skewness	Kurtosis
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	16	12	75%	2017-12-07 to 2024-03-27		Nonparametric	1.35	1.02	0.546	4.93	1.01	0.747	0.333	3.33	12.2
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	1.17	1.00	0.180	2.60	0.785	0.669	0.741	0.927	-0.408
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	1.47	1.90	0.380	2.00	0.723	0.493	0.148	-0.887	-1.26
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.793	1.00	0.250	2.00	0.522	0.658	0.296	0.569	0.241
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	1.15	1.00	0.110	2.90	0.877	0.765	0.667	1.38	0.688
18_2_103	MW-17005	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	157	127	64.0	456	109	0.693	70.4	1.76	3.05
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.673	1.00	0.200	1.20	0.422	0.627	0.296	-0.0657	-2.16
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.353	0.250	0.200	1.20	0.345	0.975	0.0741	2.38	4.28
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	16	12	75%	2017-12-07 to 2024-03-27		Nonparametric	0.778	1.00	0.250	1.20	0.373	0.480	0.222	-0.542	-1.62
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	5.42	2.60	0.520	15.0	6.25	1.15	3.08	0.903	-1.06
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	16	15	94%	2017-12-07 to 2024-03-27		Nonparametric	495	110	100	1000	460	0.929	14.8	0.278	-2.22
18_2_116	MW-17005	Appendix IV	Lead	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	1.06	1.00	0.550	2.80	0.739	0.697	0.667	1.99	3.14
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	16	3	19%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	11.4	10.0	3.90	47.5	10.1	0.886	4.37	3.32	12.3
18_2_118	MW-17005	Appendix IV	Mercury	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	0.200	0.200	0.200	0.200	0	0	0	NA	NA
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	16	16	100%	2017-12-07 to 2024-03-27		Nonparametric	3.48	5.00	1.00	6.20	2.13	0.614	1.78	-0.161	-2.04
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	16	11	69%	2017-12-07 to 2024-03-27	Nonparametric	Nonparametric	1.28	1.00	0.680	4.22	0.838	0.655	0.296	3.20	11.4
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	16	16	100%	2017-12-07 to 2024-03-27		Nonparametric	1.06	1.00	0.500	2.50	0.680	0.640	0.741	1.38	0.909
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	1.27	1.90	0.380	2.00	0.794	0.624	0.148	-0.242	-2.16
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	14	14	100%	2017-12-07 to 2024-03-27		Nonparametric	0.832	1.00	0.250	2.00	0.519	0.623	0.296	0.472	0.344
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	15	6	40%	2017-12-07 to 2024-03-27	Normal	Normal	2.95	2.80	0.550	6.60	2.21	0.750	3.11	0.306	-1.51
19_2_103	MW-17006	Appendix IV	Barium	ug/L	15	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	92.9	79.0	65.0	190	33.3	0.358	13.3	2.01	4.53
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	14	14	100%	2017-12-07 to 2024-03-27		Nonparametric	0.704	1.00	0.200	1.20	0.421	0.598	0.296	-0.233	-2.11
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	14	14	100%	2017-12-07 to 2024-03-27		Nonparametric	0.361	0.225	0.200	1.20	0.356	0.988	0.0370	2.27	3.73
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	0.790	1.00	0.250	1.20	0.403	0.510	0.296	-0.651	-1.58
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	14	14	100%	2017-12-07 to 2024-03-27		Nonparametric	5.77	2.60	0.520	15.0	6.33	1.10	3.08	0.794	-1.29
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	15	9	60%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	541	190	100	1000	445	0.824	133	0.139	-2.29
19_2_116	MW-17006	Appendix IV	Lead	ug/L	14	14	100%	2017-12-07 to 2024-03-27		Nonparametric	1.10	1.00	0.550	2.80	0.753	0.686	0.333	1.91	2.76
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	15	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Normal	31.7	32.0	12.0	57.0	9.94	0.314	8.74	0.658	2.76
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	14	13	93%	2017-12-07 to 2024-03-27		Nonparametric	0.271	0.200	0.200	1.20	0.267	0.985	0	3.74	14.0
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	15	12	80%	2017-12-07 to 2024-03-27		Nonparametric	4.01	5.00	1.20	6.30	2.05	0.513	1.78	-0.593	-1.53
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	15	11	73%	2017-12-07 to 2024-03-27		Nonparametric	0.981	1.00	0.437	2.11	0.378	0.386	0.247	1.81	5.68
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	15	15	100%	2017-12-07 to 2024-03-27		Nonparametric	1.10	1.00	0.500	2.50	0.687	0.624	0.741	1.31	0.675
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	14	14	100%	2017-12-07 to 2024-03-27		Nonparametric	1.34	1.90	0.380	2.00	0.783	0.586	0.148	-0.428	-2.03

^a Non-detects are excluded from goodness-of-fit tests.

**Table 2:** Summary Statistics, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	1.00	1.00	1.00	1.00	NA	NA	0	NA	NA
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	22	1	5%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Gamma	12.7	12.0	0.740	45.0	11.6	0.912	13.3	1.17	1.45
01_2_103	MW-15009	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	46.9	16.2	9.00	250	56.3	1.20	10.0	2.49	7.63
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	1.11	1.00	0.320	2.00	0.845	0.764	1.01	0.559	NA
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	23	20	87%	2015-12-01 to 2024-03-27		Nonparametric	103	100	88.0	120	16.2	0.157	17.8	0.722	NA
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	23.7	21.0	11.0	63.9	12.3	0.517	10.4	1.96	4.75
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	22	9	41%	2015-12-01 to 2024-03-27	Normal	Nonparametric	32.9	40.0	1.40	60.0	21.4	0.652	25.2	-0.360	-1.67
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	0.861	0.807	0.747	1.03	0.149	0.173	0.0889	1.42	NA
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	2.00	2.00	2.00	2.00	NA	NA	0	NA	NA
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	23	22	96%	2015-12-01 to 2024-03-27		Nonparametric	0.410	0.410	0.410	0.410	NA	NA	0	NA	NA
02_2_103	MW-15010	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Gamma	73.7	60.0	28.0	210	46.1	0.625	26.7	1.46	1.96
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	23	16	70%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	0.647	0.350	0.250	2.00	0.652	1.01	0.148	1.95	3.50
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	22	20	91%	2015-12-01 to 2024-03-27		Nonparametric	0.335	0.335	0.110	0.560	0.318	0.950	0.333	NA	NA
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	24	14	58%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	325	315	260	410	50.4	0.155	66.7	0.342	-1.09
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	23	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	29.8	25.0	14.0	54.0	12.0	0.404	10.4	0.631	-0.887
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	23	11	48%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Gamma	13.5	12.0	1.10	33.0	11.6	0.860	15.2	0.454	-1.28
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	23	13	57%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.35	1.32	0.451	2.03	0.528	0.391	0.689	-0.254	-1.07
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	23	21	91%	2015-12-01 to 2024-03-27		Nonparametric	1.00	1.00	1.00	1.00	0	0	0	NA	NA
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	0.760	0.780	0.200	1.30	0.550	0.724	0.770	-0.163	NA
03_2_103	MW-15013	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	67.4	50.0	31.0	140	34.2	0.507	14.3	1.17	0.0552
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	1.33	1.00	1.00	2.00	0.577	0.433	0	1.73	NA
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.110	0.110	0.110	0.110	NA	NA	0	NA	NA
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	23	18	78%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	218	230	140	280	61.4	0.282	74.1	-0.368	-2.33
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	22	1	5%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	23.1	21.0	13.0	38.0	7.22	0.313	5.93	0.873	-0.245
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	5	23%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Gamma	12.7	9.00	0.620	77.2	17.7	1.39	7.85	3.34	12.4
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	22	15	68%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.878	0.900	0.508	1.19	0.253	0.288	0.237	-0.440	-1.19
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	1.00	1.00	1.00	1.00	NA	NA	0	NA	NA
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	7	5	71%	2022-02-01 to 2024-03-27		Nonparametric	0.940	0.940	0.280	1.60	0.933	0.993	0.978	NA	NA
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	7	0	0%	2022-02-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	174	170	160	200	15.1	0.0867	14.8	1.00	-0.197
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	7	0	0%	2022-02-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	251	270	180	300	45.3	0.180	29.6	-0.795	-0.832
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	7	0	0%	2022-02-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	59.9	48.0	36.0	130	32.7	0.546	13.3	2.11	4.73
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	7	2	29%	2022-02-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	4.0	3.00	0.680	11.0	4.05	1.01	1.48	1.87	3.86
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	7	3	43%	2022-02-01 to 2024-03-27		Nonparametric	1.33	1.44	0.670	1.76	0.464	0.349	0.244	-1.34	2.53
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	10	6	60%	2020-05-21 to 2024-03-27		Nonparametric	4.89	2.85	0.850	13.0	5.57	1.14	2.33	1.68	2.78
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	17.4	15.8	3.20	38.0	10.3	0.594	10.7	0.641	0.211
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	121	120	60.0	170	33.3	0.276	37.0	-0.405	-0.214
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	0.235	0.235	0.220	0.250	0.0212	0.0903	0.0222	NA	NA
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	10	7	70%	2020-05-21 to 2024-03-27		Nonparametric	0.317	0.310	0.220	0.420	0.100	0.316	0.133	0.298	NA
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	10	4	40%	2020-05-21 to 2024-03-27	Gamma; Normal	Normal	106	110	12.0	180	56.5	0.533	41.5	-0.658	1.26
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal	Gamma	44.6	40.5	3.80	120	30.6	0.685	18.5	1.69	4.53
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal	Gamma	125	28.9	2.00	430	149	1.20	38.0	1.05	0.0688
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	10	6	60%	2020-05-21 to 2024-03-27		Nonparametric	1.67	1.81	0.918	2.12	0.554	0.332	0.400	-1.07	-0.101
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	10	7	70%	2020-05-21 to 2024-03-27		Nonparametric	0.790	1.00	0.270	1.10	0.453	0.574	0.148	-1.64	NA

(Table continues on next page)



Table 2: Summary Statistics, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	0.180	0.180	0.140	0.220	0.0566	0.314	0.0593	NA	NA
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	10	2	20%	2020-05-21 to 2024-03-27	Nonparametric	Nonparametric	3.17	1.75	1.30	10.1	3.12	0.981	0.444	2.02	3.71
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1000	955	789	1300	169	0.169	215	0.510	-0.715
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	10	2	20%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	0.796	0.750	0.650	1.10	0.147	0.185	0.119	1.37	1.90
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	10	2	20%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.13	0.955	0.660	1.90	0.429	0.379	0.333	0.929	-0.247
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	110	110	81.0	140	41.7	0.378	43.7	NA	NA
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	10	9	90%	2020-05-21 to 2024-03-27		Nonparametric	0.0590	0.0590	0.0590	0.0590	NA	NA	0	NA	NA
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	10	3	30%	2020-05-21 to 2024-03-27	Nonparametric	Nonparametric	20.8	5.20	3.70	110	39.4	1.89	1.33	2.63	6.92
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	5.90	5.90	4.30	7.50	2.26	0.384	2.37	NA	NA
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	4.12	4.12	1.60	5.64	1.29	0.314	1.59	-0.638	-0.0129
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	10	8	80%	2020-05-21 to 2024-03-27		Nonparametric	0.710	0.710	0.120	1.30	0.834	1.18	0.874	NA	NA
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	22	2	9%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	4.24	2.20	1.60	13.0	3.76	0.888	0.593	1.63	1.33
07_2_103	MW-15017	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	980	974	772	1200	100	0.103	78.5	0.109	0.203
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	22	1	5%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	3.49	3.40	0.510	11.0	2.67	0.765	2.37	1.39	2.44
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	21	14	67%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.936	0.930	0.500	1.30	0.265	0.284	0.237	-0.257	0.178
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	22	17	77%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	6.96	4.40	3.50	18.0	6.19	0.889	0.593	2.20	4.88
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	1.50	1.50	1.50	1.50	NA	NA	0	NA	NA
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	22	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	4.82	4.84	3.00	5.89	0.667	0.138	0.748	-0.672	1.14
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	22	12	55%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Nonparametric	3.18	2.85	1.70	8.00	1.82	0.572	0.963	2.43	6.58
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	22	16	73%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.50	0.965	0.440	3.80	1.24	0.830	0.504	1.65	2.53
08_2_103	MW-15018	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	150	146	93.0	280	40.2	0.267	17.0	2.06	5.33
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	22	11	50%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.828	1.00	0.280	1.80	0.434	0.525	0.489	0.836	1.44
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.560	0.560	0.560	0.560	NA	NA	0	NA	NA
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	23	14	61%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	177	180	110	250	55.0	0.311	74.1	0.0863	-1.71
08_2_116	MW-15018	Appendix IV	Lead	ug/L	21	17	81%	2015-12-01 to 2024-03-27		Nonparametric	1.40	0.700	0.310	3.90	1.68	1.19	0.319	1.92	3.77
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	20.9	21.2	12.0	33.0	5.50	0.263	6.22	0.171	-0.408
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	1.20	1.20	1.20	1.20	NA	NA	0	NA	NA
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	22	8	36%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.30	1.28	0.915	1.77	0.253	0.194	0.230	0.605	-0.318
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	22	20	91%	2015-12-01 to 2024-03-27		Nonparametric	2.50	2.50	1.00	4.00	2.12	0.849	2.22	NA	NA
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	22	16	73%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Nonparametric	2.21	1.20	0.450	8.10	2.94	1.33	0.978	2.27	5.29
09_2_103	MW-15019	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	196	112	78.0	640	153	0.781	43	1.61	2.05
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	22	14	64%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.684	0.665	0.300	1.00	0.269	0.393	0.378	-0.0814	-1.53
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	21	14	67%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	0.937	0.700	0.610	1.80	0.469	0.501	0.0889	1.44	0.652
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	23	22	96%	2015-12-01 to 2024-03-27		Nonparametric	52.0	52.0	52.0	52.0	NA	NA	0	NA	NA
09_2_116	MW-15019	Appendix IV	Lead	ug/L	21	19	90%	2015-12-01 to 2024-03-27		Nonparametric	0.550	0.550	0.170	0.930	0.537	0.977	0.563	NA	NA
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	22	3	14%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	20.5	23.0	4.40	33.0	8.58	0.419	4.44	-1.09	0.0466
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	4.57	3.70	1.20	8.80	3.87	0.848	3.70	0.956	NA
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	22	5	23%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Gamma	1.55	1.09	0.674	3.81	0.884	0.570	0.533	1.24	1.10
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	22	18	82%	2015-12-01 to 2024-03-27		Nonparametric	0.915	0.770	0.120	2.00	0.860	0.940	0.800	0.636	-1.94
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	21	19	90%	2015-12-01 to 2024-03-27		Nonparametric	0.430	0.430	0.280	0.580	0.212	0.493	0.222	NA	NA
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	0.503	0.570	0.240	0.700	0.237	0.471	0.193	-1.17	NA
10_2_103	MW-15020	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Normal	Nonparametric	174	134	47.0	393	125	0.719	122	0.485	-1.44
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	22	14	64%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.838	0.660	0.390	2.00	0.541	0.646	0.393	1.63	2.84

(Table continues on next page)



Table 2: Summary Statistics, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.180	0.180	0.180	0.180	NA	NA	0	NA	NA
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	23	22	96%	2015-12-01 to 2024-03-27		Nonparametric	120	120	120	120	NA	NA	0	NA	NA
10_2_116	MW-15020	Appendix IV	Lead	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.710	0.710	0.710	0.710	NA	NA	0	NA	NA
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	22	5	23%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	12.8	14.0	4.60	20.0	5.15	0.403	2.96	-0.650	-1.09
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	22	6	27%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.97	1.97	0.652	4.68	1.07	0.542	0.889	0.931	1.40
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	22	19	86%	2015-12-01 to 2024-03-27		Nonparametric	1.47	1.40	1.00	2.00	0.503	0.343	0.593	0.586	NA
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.150	0.150	0.150	0.150	NA	NA	0	NA	NA
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	22	8	36%	2015-12-01 to 2024-03-27	Gamma; Normal	Normal	1.46	1.40	0.120	3.00	0.719	0.492	0.741	0.276	0.573
11_2_103	MW-15021	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	287	247	211	480	74.8	0.261	31.1	1.22	0.502
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	22	7	32%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	1.30	1.10	0.720	2.00	0.535	0.412	0.489	0.527	-1.62
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	21	16	76%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.854	0.810	0.740	1.00	0.119	0.139	0.104	0.475	-2.76
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	22	18	82%	2015-12-01 to 2024-03-27		Nonparametric	2.70	2.50	2.10	3.70	0.712	0.264	0.444	1.33	1.50
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.750	0.750	0.750	0.750	NA	NA	0	NA	NA
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	22	5	23%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.89	1.77	0.966	3.24	0.639	0.337	0.563	0.653	-0.535
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	22	15	68%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.54	1.00	0.150	4.00	1.23	0.801	0.889	1.50	2.94
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	1.90	1.90	1.90	1.90	NA	NA	0	NA	NA
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	23	11	48%	2015-12-01 to 2024-03-27	Normal	Nonparametric	4.62	4.90	0.190	8.00	2.65	0.573	2.37	-0.399	-0.998
12_2_103	MW-15022	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-03-27	Lognormal	Lognormal	164	139	102	290	54.0	0.329	29.6	0.912	-0.287
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	23	18	78%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.930	1.00	0.280	2.00	0.688	0.739	0.933	0.994	0.882
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	0.350	0.350	0.350	0.350	NA	NA	0	NA	NA
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	24	19	79%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	212	160	110	380	115	0.541	74.1	0.911	-0.946
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	23	8	35%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Gamma	27.4	23.0	11.0	68.0	15.3	0.558	11.9	1.52	2.44
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	0.290	0.290	0.290	0.290	NA	NA	0	NA	NA
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	23	12	52%	2015-12-01 to 2024-03-27	Gamma; Normal	Nonparametric	16.0	14.0	0.320	47.6	12.2	0.764	4.44	1.72	4.71
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	23	16	70%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Nonparametric	1.42	1.13	0.812	3.50	0.950	0.667	0.397	2.27	5.43
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	22	10	45%	2015-12-01 to 2024-03-27	Lognormal	Lognormal	2.27	1.95	0.670	9.40	2.36	1.04	0.815	2.92	9.32
13_2_103	MW-15023	Appendix IV	Barium	ug/L	22	0	0%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	65.2	55.0	38.0	100	23.3	0.358	22.2	0.305	-1.76
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	22	18	82%	2015-12-01 to 2024-03-27		Nonparametric	0.877	0.630	0.250	2.00	0.827	0.942	0.556	1.10	-0.0213
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	23	16	70%	2015-12-01 to 2024-03-27	Gamma; Lognormal	Nonparametric	159	120	100	260	70.3	0.444	29.6	1.11	-0.947
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	22	7	32%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Normal	16.2	13.0	8.30	31.0	6.96	0.428	6.37	0.955	-0.0124
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	21	20	95%	2015-12-01 to 2024-03-27		Nonparametric	0.550	0.550	0.550	0.550	NA	NA	0	NA	NA
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	22	4	18%	2015-12-01 to 2024-03-27	Nonparametric	Nonparametric	10.4	6.80	5.10	34.0	8.56	0.825	1.19	2.19	3.77
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	22	14	64%	2015-12-01 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.767	0.761	0.178	1.42	0.406	0.529	0.422	0.190	-0.653
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	22	21	95%	2015-12-01 to 2024-03-27		Nonparametric	1.00	1.00	1.00	1.00	NA	NA	0	NA	NA
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	10	9	90%	2020-05-21 to 2024-03-27		Nonparametric	0.120	0.120	0.120	0.120	NA	NA	0	NA	NA
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	10	5	50%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	2.15	0.710	0.200	7.30	2.96	1.37	0.756	1.96	3.90
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	158	155	90.6	230	55.1	0.349	80.7	0.0501	-2.04
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	10	6	60%	2020-05-21 to 2024-03-27		Nonparametric	0.240	0.230	0.170	0.330	0.0779	0.325	0.0815	0.330	-3.98
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	10	7	70%	2020-05-21 to 2024-03-27		Nonparametric	0.267	0.260	0.250	0.290	0.0208	0.0781	0.0148	1.29	NA
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	10	2	20%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	138	130	100	180	26.6	0.193	29.6	0.357	-0.823
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	10	0	0%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	65.3	62.5	25.0	100	29.1	0.446	43	-0.162	-1.72
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	10	5	50%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.44	1.90	0.370	2.50	0.976	0.678	0.889	-0.354	-2.83
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	10	3	30%	2020-05-21 to 2024-03-27	Gamma; Lognormal; Normal	Normal	1.25	1.24	0.308	2.02	0.597	0.478	0.643	-0.220	-0.455

(Table continues on next page)



Table 2: Summary Statistics, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	15	13	87%	2017-12-07 to 2024-03-27		Nonparametric	0.820	0.820	0.140	1.50	0.962	1.17	1.01	NA	NA
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	16	1	6%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	37.9	6.30	1.40	220	58.0	1.53	7.26	2.48	7.09
15_2_103	MW-17002	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Normal	102	84.0	39.0	240	51.3	0.502	29.0	1.44	2.25
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	15	13	87%	2017-12-07 to 2024-03-27		Nonparametric	0.305	0.305	0.260	0.350	0.0636	0.209	0.0667	NA	NA
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	16	12	75%	2017-12-07 to 2024-03-27		Nonparametric	0.328	0.330	0.250	0.400	0.0613	0.187	0.0519	-0.244	1.53
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	16	7	44%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Normal	279	250	160	530	107	0.382	59.3	1.84	4.19
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Normal	149	146	46.0	220	49.9	0.335	37.0	-0.294	-0.0519
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	16	6	38%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	696	455	2.70	1800	751	1.08	669	0.519	-1.55
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	16	8	50%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	1.89	1.31	0.688	5.04	1.48	0.780	0.919	1.62	2.63
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	0.605	0.605	0.110	1.10	0.700	1.16	0.733	NA	NA
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	1.10	1.10	1.10	1.10	NA	NA	0	NA	NA
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	16	3	19%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Gamma	29.7	21.1	1.00	130	33.6	1.13	19.6	2.45	7.17
16_2_103	MW-17003	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	98.3	82.5	18.0	320	71.3	0.725	42.2	2.16	6.10
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	0.245	0.245	0.240	0.250	0.00707	0.0289	0.00741	NA	NA
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	2.00	2.00	2.00	2.00	NA	NA	0	NA	NA
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	16	12	75%	2017-12-07 to 2024-03-27		Nonparametric	110	115	89.0	120	14.6	0.133	7.41	-1.45	1.66
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	16	1	6%	2017-12-07 to 2024-03-27	Nonparametric	Nonparametric	47.3	20.0	13.0	200	55.7	1.18	8.89	2.12	3.82
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	16	5	31%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	27.5	17.0	6.30	87.0	24.6	0.893	13.9	1.63	2.54
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	16	11	69%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	0.901	0.808	0.539	1.38	0.339	0.376	0.399	0.628	-0.975
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	1.18	1.18	0.150	2.20	1.45	1.23	1.52	NA	NA
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	15	13	87%	2017-12-07 to 2024-03-27		Nonparametric	0.655	0.655	0.110	1.20	0.771	1.18	0.807	NA	NA
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	16	2	12%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	5.95	2.60	0.650	18.0	6.15	1.03	2.56	1.25	0.0500
17_2_103	MW-17004	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	195	149	51.0	450	114	0.584	59.3	1.09	0.314
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	0.490	0.490	0.490	0.490	NA	NA	0	NA	NA
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	16	13	81%	2017-12-07 to 2024-03-27		Nonparametric	3.12	1.20	0.360	7.80	4.07	1.31	1.24	1.65	NA
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	15	12	80%	2017-12-07 to 2024-03-27		Nonparametric	2.11	2.60	0.320	3.40	1.60	0.759	1.19	-1.26	NA
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	175	175	120	230	77.8	0.444	81.5	NA	NA
17_2_116	MW-17004	Appendix IV	Lead	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	19.0	19.0	19.0	19.0	NA	NA	0	NA	NA
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	16	7	44%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	29.6	14.0	2.80	63.0	24.1	0.814	16.6	0.301	-2.20
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	16	8	50%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	19.7	15.0	5.90	46.0	14	0.710	12.3	1.04	0.282
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	16	12	75%	2017-12-07 to 2024-03-27		Nonparametric	1.88	0.938	0.721	4.93	2.04	1.08	0.236	1.98	3.91
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	1.39	1.39	0.180	2.60	1.71	1.23	1.79	NA	NA
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	1.80	1.80	1.80	1.80	NA	NA	0	NA	NA
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	16	14	88%	2017-12-07 to 2024-03-27		Nonparametric	1.50	1.50	0.110	2.90	1.97	1.31	2.07	NA	NA
18_2_103	MW-17005	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	157	127	64.0	456	109	0.693	70.4	1.76	3.05
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	16	12	75%	2017-12-07 to 2024-03-27		Nonparametric	0.575	0.460	0.280	1.10	0.361	0.627	0.148	1.65	3.07
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	16	15	94%	2017-12-07 to 2024-03-27		Nonparametric	120	120	120	120	NA	NA	0	NA	NA
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	16	3	19%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	11.8	10.0	3.90	47.5	11.3	0.957	4.44	3.02	10.0
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	16	11	69%	2017-12-07 to 2024-03-27		Nonparametric	1.46	0.739	0.680	4.22	1.55	1.06	0.0874	2.21	4.89
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	15	6	40%	2017-12-07 to 2024-03-27	Normal	Normal	4.00	4.60	0.650	6.60	2.16	0.541	1.93	-0.625	-1.09
19_2_103	MW-17006	Appendix IV	Barium	ug/L	15	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal	Gamma	92.9	79.0	65.0	190	33.3	0.358	13.3	2.01	4.53
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	15	14	93%	2017-12-07 to 2024-03-27		Nonparametric	1.20	1.20	1.20	1.20	NA	NA	0	NA	NA
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	15	9	60%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Nonparametric	152	155	110	190	29.9	0.197	29.6	-0.173	-1.34

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	MAD/0.675	Skewness	Kurtosis
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	15	0	0%	2017-12-07 to 2024-03-27	Gamma; Lognormal; Normal	Normal	31.7	32.0	12.0	57.0	9.94	0.314	8.74	0.658	2.76
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	14	13	93%	2017-12-07 to 2024-03-27		Nonparametric	1.20	1.20	1.20	1.20	NA	NA	0	NA	NA
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	15	12	80%	2017-12-07 to 2024-03-27		Nonparametric	3.03	1.60	1.20	6.30	2.84	0.935	0.593	1.69	NA
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	15	11	73%	2017-12-07 to 2024-03-27		Nonparametric	1.33	1.12	0.964	2.11	0.528	0.398	0.160	1.84	3.44



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	21	20	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric		
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	22	1	5%	0.885	0.018	0.152	0.230	0.916	0.073	0.180	0.073	0.133	>= 0.10	0.436	>= 0.10	1.262	Gamma; Lognormal; Normal	Gamma
01_2_103	MW-15009	Appendix IV	Barium	ug/L	22	0	0%	0.688	0.000	0.251	0.001	0.874	0.009	0.243	0.002	0.268	< 0.01	1.351	< 0.01	1.008	Nonparametric	Nonparametric
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.925	Nonparametric	Nonparametric
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	23	20	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.156	Nonparametric	Nonparametric
01_2_116	MW-15009	Appendix IV	Lead	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	22	0	0%	0.806	0.001	0.179	0.065	0.945	0.253	0.131	0.417	0.140	>= 0.10	0.607	>= 0.10	0.437	Gamma; Lognormal; Normal	Normal
01_2_118	MW-15009	Appendix IV	Mercury	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	22	9	41%	0.874	0.060	0.210	0.122	0.812	0.010	0.298	0.002	0.292	< 0.01	0.947	0.01 <= p < 0.05	1.178	Normal	Nonparametric
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.168	Nonparametric	Nonparametric
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
02_2_103	MW-15010	Appendix IV	Barium	ug/L	23	0	0%	0.820	0.001	0.244	0.001	0.938	0.164	0.140	0.291	0.179	0.05 <= p < 0.10	0.843	0.01 <= p < 0.05	0.559	Gamma; Lognormal	Gamma
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	23	16	70%	0.687	0.003	0.385	0.002	0.796	0.037	0.346	0.011	0.381	< 0.01	0.885	0.01 <= p < 0.05	0.793	Nonparametric	Nonparametric
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	22	20	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.151	Nonparametric	Nonparametric
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	24	14	58%	0.948	0.642	0.156	0.698	0.954	0.716	0.168	0.583	0.175	>= 0.10	0.264	>= 0.10	0.154	Gamma; Lognormal; Normal	Nonparametric
02_2_116	MW-15010	Appendix IV	Lead	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	23	0	0%	0.908	0.037	0.177	0.059	0.948	0.265	0.137	0.319	0.142	>= 0.10	0.616	>= 0.10	0.399	Gamma; Lognormal; Normal	Normal
02_2_118	MW-15010	Appendix IV	Mercury	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	23	11	48%	0.892	0.124	0.177	0.378	0.865	0.056	0.205	0.177	0.212	>= 0.10	0.560	>= 0.10	1.281	Gamma; Lognormal; Normal	Gamma
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	23	13	57%	0.946	0.627	0.187	0.409	0.903	0.236	0.177	0.506	0.196	>= 0.10	0.331	>= 0.10	0.471	Gamma; Lognormal; Normal	Nonparametric
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	23	21	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.000	Nonparametric	Nonparametric
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.968	Nonparametric	Nonparametric
03_2_103	MW-15013	Appendix IV	Barium	ug/L	22	0	0%	0.808	0.001	0.265	0.000	0.890	0.019	0.225	0.005	0.246	< 0.01	1.303	< 0.01	0.452	Nonparametric	Nonparametric
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.400	Nonparametric	Nonparametric
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	21	20	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	23	18	78%	0.911	0.471	0.201	0.724	0.902	0.421	0.215	0.625	0.224	>= 0.10	0.354	>= 0.10	0.301	Gamma; Lognormal; Normal	Nonparametric
03_2_116	MW-15013	Appendix IV	Lead	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	22	1	5%	0.887	0.020	0.187	0.053	0.931	0.146	0.183	0.064	0.191	0.01 <= p < 0.05	0.732	0.05 <= p < 0.10	0.297	Gamma; Lognormal; Normal	Normal
03_2_118	MW-15013	Appendix IV	Mercury	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	5	23%	0.581	0.000	0.281	0.001	0.977	0.930	0.114	0.803	0.155	>= 0.10	0.429	>= 0.10	1.131	Gamma; Lognormal	Gamma
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	22	15	68%	0.934	0.587	0.193	0.596	0.904	0.353	0.195	0.583	0.212	>= 0.10	0.373	>= 0.10	0.318	Gamma; Lognormal; Normal	Nonparametric
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	7	5	71%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.232	NA	Nonparametric
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	7	0	0%	0.844	0.107	0.326	0.024	0.853	0.131	0.316	0.033	0.325	0.01 <= p < 0.05	0.583	>= 0.10	0.084	Gamma; Lognormal; Normal	Nonparametric
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_109	MW-15014R	Appendix IV	Chromium	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	7	0	0%	0.895	0.302	0.231	0.313	0.870	0.187	0.244	0.234	0.259	>= 0.10	0.537	>= 0.10	0.193	Gamma; Lognormal; Normal	Nonparametric
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	7	0	0%	0.740	0.010	0.271	0.125	0.868	0.178	0.188	0.637	0.218	>= 0.10	0.583	>= 0.10	0.439	Gamma; Lognormal; Normal	Nonparametric
04_2_118	MW-15014R	Appendix IV	Mercury	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	7	2	29%	0.785	0.061	0.368	0.025	0.967	0.858	0.223	0.568	0.275	>= 0.10	0.321	>= 0.10	1.002	Gamma; Lognormal; Normal	Nonparametric
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	7	3	43%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.427	NA	Nonparametric
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	7	7	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	10	6	60%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.175	NA	Nonparametric
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	10	0	0%	0.948	0.640	0.176	0.510	0.938	0.526	0.153	0.731	0.151	>= 0.10	0.245	>= 0.10	0.717	Gamma; Lognormal; Normal	Normal
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	10	0	0%	0.969	0.877	0.139	0.842	0.919	0.351	0.197	0.331	0.171	>= 0.10	0.313	>= 0.10	0.312	Gamma; Lognormal; Normal	Normal
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090	NA	Nonparametric
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	10	7	70%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.324	NA	Nonparametric
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	10	4	40%	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	Normal
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	10	0	0%	0.840	0.044	0.267	0.042	0.830	0.033	0.230	0.141	0.194	>= 0.10	0.516	>= 0.10	0.894	Gamma; Lognormal	Gamma
05_2_118	MW-15015R	Appendix IV	Mercury	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	10	0	0%	0.783	0.009	0.337	0.002	0.911	0.290	0.224	0.168	0.256	0.05 <= p < 0.10	0.581	>= 0.10	1.829	Gamma; Lognormal	Gamma
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	10	6	60%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.387	NA	Nonparametric
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	10	7	70%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.785	NA	Nonparametric
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.320	NA	Nonparametric
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	10	2	20%	0.660	0.001	0.397	0.001	0.771	0.014	0.341	0.007	0.379	< 0.01	1.107	< 0.01	0.738	Nonparametric	Nonparametric
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	10	0	0%	0.942	0.576	0.195	0.348	0.954	0.710	0.169	0.579	0.182	>= 0.10	0.278	>= 0.10	0.166	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	10	2	20%	0.870	0.151	0.221	0.297	0.908	0.339	0.221	0.300	0.235	>= 0.10	0.420	>= 0.10	0.173	Gamma; Lognormal; Normal	Normal
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	10	2	20%	0.901	0.296	0.247	0.159	0.950	0.708	0.199	0.464	0.223	>= 0.10	0.341	>= 0.10	0.360	Gamma; Lognormal; Normal	Normal
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.387		Nonparametric	
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	10	9	90%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	10	3	30%	0.500	0.000	0.456	0.000	0.691	0.003	0.328	0.022	0.381	< 0.01	1.440	< 0.01	1.174	Nonparametric	Nonparametric
06_2_118	MW-15016R	Appendix IV	Mercury	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.393		Nonparametric	
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	10	0	0%	0.933	0.476	0.162	0.642	0.859	0.074	0.228	0.148	0.209	>= 0.10	0.441	>= 0.10	0.384	Gamma; Lognormal; Normal	Normal
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.685		Nonparametric	
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	22	2	9%	0.683	0.000	0.297	0.000	0.801	0.001	0.282	0.000	0.300	< 0.01	2.036	< 0.01	0.705	Nonparametric	Nonparametric
07_2_103	MW-15017	Appendix IV	Barium	ug/L	22	0	0%	0.977	0.855	0.112	0.678	0.976	0.851	0.106	0.748	0.114	>= 0.10	0.277	>= 0.10	0.103	Gamma; Lognormal; Normal	Normal
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	22	1	5%	0.858	0.006	0.186	0.056	0.911	0.058	0.225	0.007	0.176	>= 0.10	0.640	0.05 <= p < 0.10	0.883	Gamma; Lognormal; Normal	Normal
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	21	14	67%	0.965	0.862	0.178	0.722	0.924	0.505	0.201	0.536	0.180	>= 0.10	0.281	>= 0.10	0.314	Gamma; Lognormal; Normal	Nonparametric
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_116	MW-15017	Appendix IV	Lead	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	22	17	77%	0.627	0.001	0.436	0.002	0.720	0.015	0.391	0.012	0.427	< 0.01	0.941	< 0.01	0.664	Nonparametric	Nonparametric
07_2_118	MW-15017	Appendix IV	Mercury	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	22	0	0%	0.947	0.281	0.115	0.630	0.900	0.029	0.133	0.399	0.120	>= 0.10	0.415	>= 0.10	0.149	Gamma; Lognormal; Normal	Normal
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	22	12	55%	0.701	0.001	0.339	0.002	0.878	0.123	0.260	0.054	0.292	0.01 <= p < 0.05	0.726	0.05 <= p < 0.10	0.439	Gamma; Lognormal	Nonparametric
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	22	16	73%	0.811	0.073	0.322	0.051	0.953	0.765	0.248	0.297	0.292	>= 0.10	0.381	>= 0.10	0.754	Gamma; Lognormal; Normal	Nonparametric
08_2_103	MW-15018	Appendix IV	Barium	ug/L	22	0	0%	0.776	0.000	0.270	0.000	0.887	0.016	0.214	0.010	0.230	< 0.01	1.224	< 0.01	0.232	Nonparametric	Nonparametric
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	22	11	50%	0.877	0.096	0.255	0.043	0.896	0.164	0.260	0.036	0.254	0.05 <= p < 0.10	0.576	>= 0.10	0.576	Gamma; Lognormal; Normal	Nonparametric
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	21	20	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	23	14	61%	0.907	0.298	0.167	0.663	0.904	0.276	0.163	0.699	0.179	>= 0.10	0.376	>= 0.10	0.324	Gamma; Lognormal; Normal	Nonparametric
08_2_116	MW-15018	Appendix IV	Lead	ug/L	21	17	81%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.067		Nonparametric	
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	22	0	0%	0.970	0.708	0.096	0.860	0.960	0.482	0.146	0.255	0.131	>= 0.10	0.348	>= 0.10	0.274	Gamma; Lognormal; Normal	Normal
08_2_118	MW-15018	Appendix IV	Mercury	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	22	8	36%	0.932	0.330	0.181	0.247	0.956	0.657	0.147	0.565	0.155	>= 0.10	0.338	>= 0.10	0.191	Gamma; Lognormal; Normal	Normal
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	22	20	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.980		Nonparametric	
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	22	16	73%	0.661	0.002	0.388	0.005	0.904	0.397	0.206	0.586	0.280	>= 0.10	0.541	>= 0.10	1.070	Gamma; Lognormal	Nonparametric
09_2_103	MW-15019	Appendix IV	Barium	ug/L	22	0	0%	0.752	0.000	0.250	0.001	0.848	0.003	0.231	0.004	0.249	< 0.01	1.677	< 0.01	0.650	Nonparametric	Nonparametric
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	22	14	64%	0.925	0.468	0.175	0.667	0.921	0.435	0.171	0.704	0.190	>= 0.10	0.297	>= 0.10	0.441	Gamma; Lognormal; Normal	Nonparametric
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	21	14	67%	0.733	0.008	0.369	0.004	0.772	0.021	0.336	0.016	0.361	< 0.01	0.927	0.01 <= p < 0.05	0.432	Nonparametric	Nonparametric
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
09_2_116	MW-15019	Appendix IV	Lead	ug/L	21	19	90%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.202		Nonparametric	
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	22	3	14%	0.797	0.001	0.308	0.000	0.680	0.000	0.370	0.000	0.361	< 0.01	2.710	< 0.01	0.663	Nonparametric	Nonparametric
09_2_118	MW-15019	Appendix IV	Mercury	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.999		Nonparametric	
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	22	5	23%	0.855	0.013	0.228	0.019	0.926	0.190	0.192	0.096	0.214	0.01 <= p < 0.05	0.654	0.05 <= p < 0.10	0.522	Gamma; Lognormal	Gamma
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	22	18	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.268		Nonparametric	
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	21	19	90%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.515		Nonparametric	
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.568		Nonparametric	
10_2_103	MW-15020	Appendix IV	Barium	ug/L	22	0	0%	0.844	0.003	0.182	0.057	0.859	0.005	0.192	0.034	0.198	0.01 <= p < 0.05	1.145	< 0.01	0.811	Normal	Nonparametric
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	22	14	64%	0.822	0.049	0.204	0.422	0.927	0.488	0.180	0.620	0.206	>= 0.10	0.374	>= 0.10	0.570	Gamma; Lognormal; Normal	Nonparametric
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	21	20	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
10_2_116	MW-15020	Appendix IV	Lead	ug/L	21	20	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	22	5	23%	0.841	0.008	0.300	0.000	0.774	0.001	0.355	0.000	0.345	< 0.01	1.720	< 0.01	0.518	Nonparametric	Nonparametric
10_2_118	MW-15020	Appendix IV	Mercury	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	22	6	27%	0.923	0.191	0.116	0.820	0.937	0.314	0.152	0.410	0.136	>= 0.10	0.342	>= 0.10	0.582	Gamma; Lognormal; Normal	Normal
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.347		Nonparametric	
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	21	20	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	22	8	36%	0.955	0.638	0.155	0.479	0.772	0.002	0.257	0.013	0.201	>= 0.10	0.634	0.05 <= p < 0.10	0.770	Gamma; Normal	Normal
11_2_103	MW-15021	Appendix IV	Barium	ug/L	22	0	0%	0.815	0.001	0.271	0.000	0.849	0.003	0.256	0.001	0.266	< 0.01	1.631	< 0.01	0.237	Nonparametric	Nonparametric
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	22	7	32%	0.792	0.003	0.239	0.021	0.846	0.015	0.229	0.033	0.240	0.01 <= p < 0.05	1.075	< 0.01	0.406	Nonparametric	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution		
								S-W		Lilliefors		S-W		Lilliefors		K-S					A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	21	16	76%	0.868	0.258	0.245	0.418	0.875	0.285	0.229	0.523	0.250	>= 0.10	0.442	>= 0.10	0.137	Gamma; Lognormal; Normal	Nonparametric
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
11_2_116	MW-15021	Appendix IV	Lead	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	22	18	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.249	NA	Nonparametric
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	21	20	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	22	5	23%	0.925	0.180	0.176	0.176	0.958	0.586	0.143	0.467	0.161	>= 0.10	0.447	>= 0.10	0.332	Gamma; Lognormal; Normal	Normal
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	22	15	68%	0.856	0.139	0.240	0.258	0.875	0.206	0.321	0.029	0.262	>= 0.10	0.384	>= 0.10	1.013	Gamma; Lognormal; Normal	Nonparametric
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	23	11	48%	0.922	0.306	0.171	0.427	0.765	0.004	0.318	0.001	0.283	0.01 <= p < 0.05	0.838	0.01 <= p < 0.05	1.102	Normal	Nonparametric
12_2_103	MW-15022	Appendix IV	Barium	ug/L	23	0	0%	0.874	0.008	0.238	0.002	0.915	0.053	0.207	0.012	0.222	< 0.01	1.010	0.01 <= p < 0.05	0.308	Lognormal	Lognormal
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	23	18	78%	0.887	0.344	0.259	0.326	0.922	0.545	0.252	0.370	0.231	>= 0.10	0.341	>= 0.10	0.805	Gamma; Lognormal; Normal	Nonparametric
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	24	19	79%	0.883	0.322	0.275	0.245	0.923	0.551	0.226	0.549	0.261	>= 0.10	0.352	>= 0.10	0.525	Gamma; Lognormal; Normal	Nonparametric
12_2_116	MW-15022	Appendix IV	Lead	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	23	8	35%	0.855	0.021	0.230	0.032	0.968	0.822	0.142	0.576	0.175	>= 0.10	0.363	>= 0.10	0.506	Gamma; Lognormal	Gamma
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	23	12	52%	0.832	0.025	0.222	0.137	0.752	0.002	0.335	0.001	0.278	0.01 <= p < 0.05	0.741	0.05 <= p < 0.10	1.307	Gamma; Normal	Nonparametric
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	23	16	70%	0.687	0.003	0.321	0.028	0.826	0.073	0.211	0.455	0.245	>= 0.10	0.724	0.01 <= p < 0.05	0.509	Gamma; Lognormal	Nonparametric
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	22	10	45%	0.595	0.000	0.378	0.000	0.870	0.066	0.242	0.051	0.299	< 0.01	0.954	0.01 <= p < 0.05	0.741	Lognormal	Lognormal
13_2_103	MW-15023	Appendix IV	Barium	ug/L	22	0	0%	0.840	0.002	0.224	0.006	0.853	0.004	0.205	0.017	0.218	< 0.01	1.412	< 0.01	0.360	Nonparametric	Nonparametric
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	22	18	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.029	NA	Nonparametric
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	23	16	70%	0.738	0.009	0.318	0.031	0.796	0.038	0.266	0.140	0.290	0.05 <= p < 0.10	0.850	0.01 <= p < 0.05	0.402	Gamma; Lognormal	Nonparametric
13_2_116	MW-15023	Appendix IV	Lead	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	22	7	32%	0.897	0.085	0.213	0.066	0.954	0.594	0.172	0.275	0.194	>= 0.10	0.388	>= 0.10	0.406	Gamma; Lognormal; Normal	Normal
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	21	20	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	22	4	18%	0.592	0.000	0.355	0.000	0.717	0.000	0.266	0.002	0.307	< 0.01	2.667	< 0.01	0.567	Nonparametric	Nonparametric
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	22	14	64%	0.977	0.944	0.161	0.787	0.927	0.486	0.200	0.457	0.202	>= 0.10	0.234	>= 0.10	0.663	Gamma; Lognormal; Normal	Nonparametric
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	21	21	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	10	9	90%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric		
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	10	5	50%	0.734	0.021	0.321	0.092	0.974	0.903	0.207	0.682	0.271	>= 0.10	0.347	>= 0.10	1.367	Gamma; Lognormal; Normal	Nonparametric
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	10	0	0%	0.874	0.111	0.195	0.345	0.876	0.116	0.196	0.337	0.197	>= 0.10	0.601	>= 0.10	0.366	Gamma; Lognormal; Normal	Normal
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	10	6	60%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.327	NA	Nonparametric	
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	10	7	70%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.077	NA	Nonparametric	
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	10	2	20%	0.936	0.571	0.236	0.210	0.946	0.671	0.207	0.401	0.222	>= 0.10	0.350	>= 0.10	0.193	Gamma; Lognormal; Normal	Normal
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	10	0	0%	0.882	0.138	0.202	0.292	0.862	0.081	0.195	0.348	0.212	>= 0.10	0.570	>= 0.10	0.525	Gamma; Lognormal; Normal	Normal
14_2_118	MW-17001R	Appendix IV	Mercury	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	10	5	50%	0.844	0.178	0.281	0.216	0.792	0.070	0.328	0.084	0.339	0.05 <= p < 0.10	0.631	0.05 <= p < 0.10	0.922	Gamma; Lognormal; Normal	Nonparametric
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	10	3	30%	0.970	0.900	0.144	0.931	0.878	0.217	0.211	0.453	0.175	>= 0.10	0.302	>= 0.10	0.639	Gamma; Lognormal; Normal	Normal
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.677	NA	Nonparametric	
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	16	1	6%	0.674	0.000	0.265	0.006	0.868	0.032	0.190	0.152	0.223	0.05 <= p < 0.10	0.866	0.01 <= p < 0.05	1.781	Gamma; Lognormal	Gamma
15_2_103	MW-17002	Appendix IV	Barium	ug/L	16	0	0%	0.874	0.032	0.213	0.051	0.978	0.941	0.133	0.629	0.161	>= 0.10	0.370	>= 0.10	0.460	Gamma; Lognormal; Normal	Normal
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.210	NA	Nonparametric	
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	16	12	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.193	NA	Nonparametric	
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	16	7	44%	0.825	0.039	0.237	0.153	0.937	0.553	0.186	0.490	0.208	>= 0.10	0.450	>= 0.10	0.334	Gamma; Lognormal; Normal	Normal
15_2_116	MW-17002	Appendix IV	Lead	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	16	0	0%	0.952	0.516	0.117	0.808	0.874	0.032	0.194	0.112	0.170	>= 0.10	0.484	>= 0.10	0.413	Gamma; Lognormal; Normal	Normal
15_2_118	MW-17002	Appendix IV	Mercury	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	16	6	38%	0.828	0.031	0.241	0.102	0.840	0.044	0.233	0.128	0.203	>= 0.10	0.621	>= 0.10	2.671	Gamma; Lognormal; Normal	Nonparametric
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	16	8	50%	0.820	0.047	0.214	0.347	0.935	0.564	0.186	0.574	0.215	>= 0.10	0.359	>= 0.10	0.704	Gamma; Lognormal; Normal	Nonparametric
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.628	NA	Nonparametric	
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	16	3	19%	0.728	0.001	0.216	0.098	0.954	0.662	0.170	0.387	0.121	>= 0.10	0.211	>= 0.10	1.249	Gamma; Lognormal; Normal	Gamma
16_2_103	MW-17003	Appendix IV	Barium	ug/L	16	0	0%	0.792	0.002	0.217	0.042	0.945	0.414	0.177	0.198	0.137	>= 0.10	0.429	>= 0.10	0.699	Gamma; Lognormal	Gamma
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.029	NA	Nonparametric	
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	16	12	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.141	NA	Nonparametric	
16_2_116	MW-17003	Appendix IV	Lead	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution					
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D		
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value	
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	16	1	6%	0.650	0.000	0.314	0.000	0.844	0.014	0.225	0.039	0.243	0.01 <= p < 0.05	1.407	< 0.01	0.863	Nonparametric	Nonparametric	
16_2_118	MW-17003	Appendix IV	Mercury	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	16	5	31%	0.804	0.011	0.287	0.012	0.955	0.713	0.188	0.343	0.237	>= 0.10	0.425	>= 0.10	0.825	Gamma; Lognormal	Gamma	
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	16	11	69%	0.952	0.752	0.208	0.680	0.977	0.920	0.155	0.957	0.182	>= 0.10	0.215	>= 0.10	0.375	Gamma; Lognormal; Normal	Nonparametric	
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.899		Nonparametric	
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.690		Nonparametric	
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	16	2	12%	0.765	0.002	0.273	0.006	0.935	0.363	0.181	0.243	0.233	0.05 <= p < 0.10	0.678	0.05 <= p < 0.10	1.048	Gamma; Lognormal	Gamma	
17_2_103	MW-17004	Appendix IV	Barium	ug/L	16	0	0%	0.877	0.035	0.217	0.043	0.967	0.789	0.139	0.557	0.174	>= 0.10	0.414	>= 0.10	0.575	Gamma; Lognormal	Gamma	
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	16	13	81%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.550		Nonparametric	
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.294		Nonparametric	
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.460		Nonparametric	
17_2_116	MW-17004	Appendix IV	Lead	ug/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	16	7	44%	0.823	0.038	0.297	0.021	0.883	0.171	0.254	0.097	0.271	0.05 <= p < 0.10	0.635	0.05 <= p < 0.10	1.080	Gamma; Lognormal	Gamma	
17_2_118	MW-17004	Appendix IV	Mercury	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	16	8	50%	0.895	0.261	0.228	0.252	0.967	0.876	0.132	0.950	0.160	>= 0.10	0.233	>= 0.10	0.722	Gamma; Lognormal; Normal	Nonparametric	
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	16	12	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.888		Nonparametric	
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.888		Nonparametric	
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.314		Nonparametric	
18_2_103	MW-17005	Appendix IV	Barium	ug/L	16	0	0%	0.793	0.002	0.232	0.021	0.927	0.221	0.151	0.430	0.162	>= 0.10	0.603	>= 0.10	0.590	Gamma; Lognormal	Gamma	
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	16	12	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.570		Nonparametric	
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_116	MW-17005	Appendix IV	Lead	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	16	3	19%	0.603	0.000	0.345	0.000	0.907	0.165	0.187	0.246	0.236	0.05 <= p < 0.10	0.776	0.01 <= p < 0.05	0.658	Gamma; Lognormal	Gamma	
18_2_118	MW-17005	Appendix IV	Mercury	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	16	11	69%	0.611	0.001	0.425	0.003	0.691	0.008	0.354	0.040	0.400	0.01 <= p < 0.05	0.986	< 0.01	0.777	Nonparametric	Nonparametric	
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	15	6	40%	0.901	0.259	0.221	0.230	0.802	0.021	0.308	0.014	0.296	0.01 <= p < 0.05	0.738	0.01 <= p < 0.05	0.843	Normal	Normal	
19_2_103	MW-17006	Appendix IV	Barium	ug/L	15	0	0%	0.766	0.001	0.226	0.038	0.858	0.023	0.184	0.186	0.200	>= 0.10	0.945	0.01 <= p < 0.05	0.299	Gamma; Lognormal	Gamma	

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	15	9	60%	0.951	0.752	0.230	0.411	0.945	0.701	0.240	0.346	0.256	>= 0.10	0.290	>= 0.10	0.204	Gamma; Lognormal; Normal	Nonparametric
19_2_116	MW-17006	Appendix IV	Lead	ug/L	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	15	0	0%	0.925	0.232	0.195	0.130	0.901	0.098	0.182	0.199	0.174	>= 0.10	0.478	>= 0.10	0.343	Gamma; Lognormal; Normal	Normal
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.886	Nonparametric	
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.352	Nonparametric	
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	14	14	100%	NA	NA	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	21	20	95%	NA	NA	
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	22	1	5%	0.702	0.001	***
01_2_103	MW-15009	Appendix IV	Barium	ug/L	22	0	0%	0.429	0.031	*
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	22	19	86%	-0.559	0.126	
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	23	20	87%	-0.014	0.970	
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	22	0	0%	0.560	0.005	**
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	22	9	41%	0.785	0.002	**
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	22	19	86%	-0.066	0.856	
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	22	21	95%	NA	NA	
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	23	22	96%	NA	NA	
02_2_103	MW-15010	Appendix IV	Barium	ug/L	23	0	0%	0.741	0.000	***
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	23	16	70%	0.333	0.280	
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	22	20	91%	-0.500	0.157	
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	24	14	58%	0.010	0.971	
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	23	0	0%	0.627	0.001	**
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	23	11	48%	0.615	0.016	*
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	23	13	57%	0.389	0.155	
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	23	21	91%	NA	NA	
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	22	19	86%	-0.001	0.999	
03_2_103	MW-15013	Appendix IV	Barium	ug/L	22	0	0%	0.730	0.000	***
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	22	19	86%	-0.167	0.648	
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	21	20	95%	NA	NA	
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	23	18	78%	0.234	0.488	
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	22	1	5%	0.660	0.001	**
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	5	23%	-0.018	0.934	
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	22	15	68%	0.052	0.865	
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	22	21	95%	NA	NA	
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	7	5	71%	-0.500	0.157	
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	7	0	0%	-0.440	0.153	
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	7	0	0%	-0.108	0.726	
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	7	0	0%	-0.114	0.713	
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	7	2	29%	0.026	0.938	
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	7	3	43%	-0.546	0.122	
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	10	6	60%	-0.591	0.094	
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	10	0	0%	0.467	0.088	
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	10	0	0%	-0.432	0.115	
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	10	8	80%	-0.500	0.157	
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	10	7	70%	-0.002	0.995	
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	10	4	40%	0.106	0.742	
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	10	0	0%	0.135	0.622	
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	10	0	0%	0.186	0.497	
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	10	6	60%	-0.448	0.205	

(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_127	MW-15015R	Appendix IV	Selenium	ug/L	10	7	70%	-0.107	0.769	
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	10	8	80%	-0.500	0.157	
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	10	2	20%	0.255	0.389	
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	10	0	0%	0.512	0.061	
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	10	2	20%	-0.433	0.143	
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	10	2	20%	0.351	0.235	
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	10	8	80%	-0.500	0.157	
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	10	9	90%	NA	NA	
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	10	3	30%	-0.196	0.526	
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	10	8	80%	-0.500	0.157	
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	10	0	0%	0.230	0.402	
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	10	8	80%	-0.500	0.157	
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	22	2	9%	0.582	0.005	**
07_2_103	MW-15017	Appendix IV	Barium	ug/L	22	0	0%	0.478	0.017	*
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	22	1	5%	0.696	0.001	***
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	21	14	67%	0.034	0.913	
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	22	17	77%	-0.235	0.487	
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	22	21	95%	NA	NA	
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	22	0	0%	0.120	0.547	
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	22	12	55%	-0.110	0.687	
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	22	16	73%	0.093	0.773	
08_2_103	MW-15018	Appendix IV	Barium	ug/L	22	0	0%	0.530	0.008	**
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	22	11	50%	-0.065	0.807	
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	21	20	95%	NA	NA	
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	23	14	61%	0.163	0.565	
08_2_116	MW-15018	Appendix IV	Lead	ug/L	21	17	81%	-0.076	0.830	
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	22	0	0%	0.480	0.016	*
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	22	21	95%	NA	NA	
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	22	8	36%	0.075	0.754	
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	22	20	91%	-0.500	0.157	
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	22	16	73%	-0.199	0.538	
09_2_103	MW-15019	Appendix IV	Barium	ug/L	22	0	0%	0.129	0.517	
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	22	14	64%	-0.081	0.783	
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	21	14	67%	0.198	0.521	
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	23	22	96%	NA	NA	
09_2_116	MW-15019	Appendix IV	Lead	ug/L	21	19	90%	-0.500	0.157	
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	22	3	14%	0.160	0.452	
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	22	19	86%	-0.597	0.102	
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	22	5	23%	0.235	0.292	
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	22	18	82%	0.271	0.443	
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	21	19	90%	-0.500	0.157	
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	22	19	86%	-0.040	0.914	

(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.
10_2_103	MW-15020	Appendix IV	Barium	ug/L	22	0	0%	0.706	0.000	***
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	22	14	64%	0.247	0.404	
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	21	20	95%	NA	NA	
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	23	22	96%	NA	NA	
10_2_116	MW-15020	Appendix IV	Lead	ug/L	21	20	95%	NA	NA	
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	22	5	23%	0.748	0.001	***
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	22	6	27%	0.353	0.122	
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	22	19	86%	-0.561	0.124	
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	21	20	95%	NA	NA	
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	22	8	36%	0.151	0.532	
11_2_103	MW-15021	Appendix IV	Barium	ug/L	22	0	0%	0.858	0.000	***
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	22	7	32%	0.506	0.031	*
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	21	16	76%	0.037	0.912	
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	22	18	82%	-0.263	0.457	
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	21	20	95%	NA	NA	
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	22	5	23%	0.063	0.777	
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	22	15	68%	-0.359	0.244	
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	22	21	95%	NA	NA	
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	23	11	48%	0.494	0.054	
12_2_103	MW-15022	Appendix IV	Barium	ug/L	23	0	0%	0.333	0.089	
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	23	18	78%	0.251	0.458	
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	22	21	95%	NA	NA	
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	24	19	79%	0.293	0.387	
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	23	8	35%	0.390	0.096	
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	22	21	95%	NA	NA	
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	23	12	52%	-0.184	0.487	
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	23	16	70%	-0.144	0.642	
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	22	10	45%	0.039	0.879	
13_2_103	MW-15023	Appendix IV	Barium	ug/L	22	0	0%	0.380	0.056	
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	22	18	82%	0.219	0.535	
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	23	16	70%	0.334	0.279	
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	22	7	32%	0.127	0.587	
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	21	20	95%	NA	NA	
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	22	4	18%	0.165	0.449	
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	22	14	64%	-0.083	0.779	
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	22	21	95%	NA	NA	
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	10	9	90%	NA	NA	
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	10	5	50%	0.139	0.682	
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	10	0	0%	0.791	0.004	**
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	10	6	60%	0.297	0.401	
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	10	7	70%	-0.628	0.085	
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	10	2	20%	-0.052	0.861	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded (*continued*)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	10	0	0%	0.033	0.903	
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	10	5	50%	-0.507	0.134	
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	10	3	30%	0.127	0.680	
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	15	13	87%	-0.500	0.157	
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	16	1	6%	0.369	0.115	
15_2_103	MW-17002	Appendix IV	Barium	ug/L	16	0	0%	-0.113	0.621	
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	15	13	87%	-0.500	0.157	
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	16	12	75%	-0.515	0.145	
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	16	7	44%	-0.124	0.663	
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	16	0	0%	0.158	0.490	
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	16	6	38%	0.416	0.128	
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	16	8	50%	0.082	0.782	
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	16	14	88%	-0.500	0.157	
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	15	14	93%	NA	NA	
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	16	3	19%	0.109	0.659	
16_2_103	MW-17003	Appendix IV	Barium	ug/L	16	0	0%	0.440	0.054	
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	16	14	88%	-0.500	0.157	
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	15	14	93%	NA	NA	
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	16	12	75%	0.160	0.651	
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	16	1	6%	0.600	0.010	*
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	16	5	31%	0.282	0.286	
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	16	11	69%	0.110	0.744	
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	16	14	88%	-0.500	0.157	
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	15	13	87%	-0.500	0.157	
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	16	2	12%	0.648	0.007	**
17_2_103	MW-17004	Appendix IV	Barium	ug/L	16	0	0%	0.311	0.173	
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	15	14	93%	NA	NA	
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	16	13	81%	-0.660	0.071	
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	15	12	80%	-0.327	0.370	
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	16	14	88%	-0.500	0.157	
17_2_116	MW-17004	Appendix IV	Lead	ug/L	15	14	93%	NA	NA	
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	16	7	44%	0.703	0.013	*
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	16	8	50%	0.508	0.086	
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	16	12	75%	-0.384	0.278	
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	16	14	88%	-0.500	0.157	
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	15	14	93%	NA	NA	
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	16	14	88%	-0.500	0.157	
18_2_103	MW-17005	Appendix IV	Barium	ug/L	16	0	0%	0.336	0.141	
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	16	12	75%	-0.008	0.982	
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	16	15	94%	NA	NA	
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	16	3	19%	0.201	0.419	
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	16	11	69%	-0.251	0.458	

(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_102	MW-17006	Appendix IV	Arsenic	ug/L	15	6	40%	0.257	0.366	
19_2_103	MW-17006	Appendix IV	Barium	ug/L	15	0	0%	0.497	0.034	*
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	15	14	93%	NA	NA	
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	15	9	60%	-0.807	0.012	*
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	15	0	0%	0.118	0.614	
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	14	13	93%	NA	NA	
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	15	12	80%	-0.209	0.567	
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	15	11	73%	-0.431	0.223	

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 5: Outlier Counts by Date

Date	Count
2016-04-18	1
2016-07-12	1
2016-09-28	1
2020-05-07	4
2021-04-20	3
2022-05-05	2
2022-10-19	1
2023-04-11	5
2024-03-27	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	22	0	0%	22	2022-05-05	250
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	22	0	0%	22	2020-05-07	63.9
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	22	19	86%	3	2016-04-18	2.00
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	5	23%	17	2020-05-07	77.2
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	7	0	0%	7	2023-04-11	130
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	10	0	0%	10	2023-04-11	120
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	10	3	30%	7	2023-04-11	110
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	22	1	5%	21	2016-09-28	11.0
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	22	17	77%	5	2023-04-11	18.0
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	22	12	55%	10	2016-07-12	8.00
08_2_103	MW-15018	Appendix IV	Barium	ug/L	22	0	0%	22	2021-04-20	280
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	22	16	73%	6	2022-05-05	8.10
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	23	16	70%	7	2020-05-07	3.50
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	22	10	45%	12	2024-03-27	9.40
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	16	1	6%	15	2023-04-11	220
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	16	3	19%	13	2024-03-27	130
16_2_103	MW-17003	Appendix IV	Barium	ug/L	16	0	0%	16	2021-04-20	320
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	16	1	6%	15	2024-03-27	200
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	16	12	75%	4	2021-04-20	4.93
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	16	3	19%	13	2020-05-07	47.5
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	16	11	69%	5	2022-10-19	4.22



Table 7: Seasonality Tests

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value		Sample Size					p-Value			
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	95%	3	9	3	6	21	0.717	0.457	0.382	1	0	0	0	1	NA	NA	NA
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	5%	3	9	3	7	22	0.108	0.014 *	0.099	3	8	3	7	21	0.105	0.016 *	0.082
01_2_103	MW-15009	Appendix IV	Barium	ug/L	0%	3	9	3	7	22	0.210	0.290	0.134	3	9	3	7	22	0.210	0.290	0.134
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	100%	3	9	3	6	21	0.630	0.398	0.331	NA	NA	NA	NA	NA	NA	NA	NA
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	100%	3	9	3	6	21	0.145	0.757	0.627	NA	NA	NA	NA	NA	NA	NA	NA
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	86%	3	9	3	7	22	0.425	0.164	0.279	0	2	1	0	3	0.221	0.264	0.422
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	100%	3	9	3	6	21	0.049 *	0.019 *	0.057	NA	NA	NA	NA	NA	NA	NA	NA
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	87%	3	9	3	8	23	0.194	0.169	0.199	0	3	0	0	3	NA	NA	NA
01_2_116	MW-15009	Appendix IV	Lead	ug/L	100%	3	9	3	6	21	0.717	0.998	0.975	NA	NA	NA	NA	NA	NA	NA	NA
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	0%	3	9	3	7	22	0.158	0.308	0.195	3	9	3	7	22	0.158	0.308	0.195
01_2_118	MW-15009	Appendix IV	Mercury	ug/L	100%	3	9	3	6	21	NA	0.101	NA	NA	NA	NA	NA	NA	NA	NA	NA
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	41%	3	9	3	7	22	0.033 *	0.008 **	0.024 *	3	4	3	3	13	0.220	0.269	0.216
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	86%	3	9	3	7	22	0.331	0.021 *	0.393	1	0	0	2	3	0.221	0.538	0.519
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	95%	3	9	3	7	22	0.847	0.981	0.947	0	1	0	0	1	NA	NA	NA
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	100%	3	9	3	6	21	0.120	0.241	0.262	NA	NA	NA	NA	NA	NA	NA	NA
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	100%	3	9	4	6	22	0.831	0.668	0.605	NA	NA	NA	NA	NA	NA	NA	NA
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	96%	3	9	4	7	23	0.885	0.976	0.982	0	1	0	0	1	NA	NA	NA
02_2_103	MW-15010	Appendix IV	Barium	ug/L	0%	3	9	4	7	23	0.279	0.472	0.320	3	9	4	7	23	0.279	0.472	0.320
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	100%	3	9	4	6	22	0.775	0.622	0.556	NA	NA	NA	NA	NA	NA	NA	NA
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	100%	3	9	4	6	22	0.258	0.737	0.635	NA	NA	NA	NA	NA	NA	NA	NA
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	70%	3	9	4	7	23	0.876	0.808	0.721	1	3	1	2	7	0.617	0.829	0.747
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	91%	3	9	4	6	22	0.160	0.079	0.218	0	2	0	0	2	NA	NA	NA
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	58%	3	9	4	8	24	0.368	0.364	0.375	0	5	1	4	10	0.560	0.604	0.587
02_2_116	MW-15010	Appendix IV	Lead	ug/L	100%	3	9	4	6	22	0.831	0.973	0.979	NA	NA	NA	NA	NA	NA	NA	NA
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	0%	3	9	4	7	23	0.791	0.841	0.748	3	9	4	7	23	0.791	0.841	0.748
02_2_118	MW-15010	Appendix IV	Mercury	ug/L	100%	3	9	4	6	22	NA	0.085	0.085	NA	NA	NA	NA	NA	NA	NA	NA
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	48%	3	9	4	7	23	0.100	0.025 *	0.099	3	5	2	2	12	0.260	0.325	0.255
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	57%	3	9	4	7	23	0.262	0.378	0.316	1	3	2	4	10	0.194	0.166	0.159
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	91%	3	9	4	7	23	0.873	0.983	0.963	0	1	1	0	2	NA	NA	NA
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	100%	3	9	4	6	22	0.277	0.473	0.498	NA	NA	NA	NA	NA	NA	NA	NA
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	100%	3	9	3	6	21	0.717	0.457	0.382	NA	NA	NA	NA	NA	NA	NA	NA
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	86%	3	9	3	7	22	0.890	0.995	0.953	0	2	0	1	3	1.000	0.980	0.837
03_2_103	MW-15013	Appendix IV	Barium	ug/L	0%	3	9	3	7	22	0.389	0.528	0.584	3	9	3	7	22	0.389	0.528	0.584
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	100%	3	9	3	6	21	0.630	0.398	0.331	NA	NA	NA	NA	NA	NA	NA	NA
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	100%	3	9	3	6	21	0.145	0.757	0.627	NA	NA	NA	NA	NA	NA	NA	NA
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	86%	3	9	3	7	22	0.825	0.714	0.543	0	1	1	1	3	0.368	NA	NA
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	95%	3	9	3	6	21	0.055	0.019 *	0.082	0	1	0	0	1	NA	NA	NA
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	78%	3	9	3	8	23	0.361	0.621	0.412	0	4	0	1	5	0.480	0.462	0.508
03_2_116	MW-15013	Appendix IV	Lead	ug/L	100%	3	9	3	6	21	0.717	0.998	0.975	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value		Sample Size					p-Value			
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	5%	3	9	3	7	22	0.753	0.644	0.708	3	8	3	7	21	0.798	0.607	0.686
03_2_118	MW-15013	Appendix IV	Mercury	ug/L	100%	3	9	3	6	21	NA	0.101	NA	NA	NA	NA	NA	NA	NA	NA	NA
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23%	3	9	3	7	22	0.206	0.713	0.446	3	7	2	5	17	0.355	0.811	0.624
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	68%	3	9	3	7	22	0.505	0.460	0.531	1	3	1	2	7	0.376	0.463	0.498
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	95%	3	9	3	7	22	0.766	1.000	0.935	0	0	1	0	1	NA	NA	NA
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	100%	3	9	3	6	21	0.120	0.241	0.262	NA	NA	NA	NA	NA	NA	NA	NA
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	100%	1	4	0	2	7	0.444	0.532	0.532	NA	NA	NA	NA	NA	NA	NA	NA
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	71%	1	4	0	2	7	0.648	0.835	0.708	1	1	0	0	2	0.317	NA	NA
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	0%	1	4	0	2	7	0.176	0.161	0.155	1	4	0	2	7	0.176	0.161	0.155
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	100%	1	4	0	2	7	0.687	0.766	0.766	NA	NA	NA	NA	NA	NA	NA	NA
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	100%	1	4	0	2	7	0.444	0.532	0.532	NA	NA	NA	NA	NA	NA	NA	NA
04_2_109	MW-15014R	Appendix IV	Chromium	ug/L	100%	1	4	0	2	7	0.687	0.766	0.766	NA	NA	NA	NA	NA	NA	NA	NA
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	100%	1	4	0	2	7	0.687	0.766	0.766	NA	NA	NA	NA	NA	NA	NA	NA
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	0%	1	4	0	2	7	0.143	0.019 *	0.013 *	1	4	0	2	7	0.143	0.019 *	0.013 *
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	100%	1	4	0	2	7	0.444	0.532	0.532	NA	NA	NA	NA	NA	NA	NA	NA
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	0%	1	4	0	2	7	0.585	0.905	0.891	1	4	0	2	7	0.585	0.905	0.891
04_2_118	MW-15014R	Appendix IV	Mercury	ug/L	100%	1	4	0	2	7	NA	NA	0.000 ***	NA	NA	NA	NA	NA	NA	NA	NA
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	29%	1	4	0	2	7	0.312	0.111	0.430	1	3	0	1	5	0.344	0.063	0.391
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	43%	1	4	0	2	7	0.318	0.406	0.481	1	2	0	1	4	0.259	0.669	0.725
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	100%	1	4	0	2	7	0.687	0.766	0.766	NA	NA	NA	NA	NA	NA	NA	NA
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	100%	1	4	0	2	7	0.444	0.532	0.532	NA	NA	NA	NA	NA	NA	NA	NA
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	60%	0	5	1	4	10	0.289	0.464	0.348	0	3	0	1	4	0.180	0.517	0.295
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	0%	0	5	1	4	10	0.540	0.609	0.810	0	5	1	4	10	0.540	0.609	0.810
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	0%	0	5	1	4	10	0.155	0.175	0.211	0	5	1	4	10	0.155	0.175	0.211
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	100%	0	5	1	4	10	0.245	0.853	0.774	NA	NA	NA	NA	NA	NA	NA	NA
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	100%	0	5	1	4	10	0.245	0.853	0.774	NA	NA	NA	NA	NA	NA	NA	NA
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	80%	0	5	1	4	10	0.536	0.541	0.444	0	2	0	0	2	NA	NA	NA
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	70%	0	5	1	4	10	0.314	0.817	0.652	0	2	1	0	3	1.000	0.963	0.978
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	40%	0	5	1	4	10	0.253	0.048 *	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	5	1	4	10	0.783	0.721	0.803	NA	NA	NA	NA	NA	NA	NA	NA
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	0%	0	5	1	4	10	0.411	0.777	0.836	0	5	1	4	10	0.411	0.777	0.836
05_2_118	MW-15015R	Appendix IV	Mercury	ug/L	100%	0	5	1	4	10	NA	0.662	NA	NA	NA	NA	NA	NA	NA	NA	NA
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	0%	0	5	1	4	10	0.568	0.456	0.622	0	5	1	4	10	0.568	0.456	0.622
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	60%	0	5	1	4	10	0.160	0.203	0.264	0	2	1	1	4	0.407	0.834	0.848
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	70%	0	5	1	4	10	0.982	0.991	0.971	0	2	0	1	3	1.000	0.737	0.705
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	100%	0	5	1	4	10	0.783	0.815	0.819	NA	NA	NA	NA	NA	NA	NA	NA
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	80%	0	5	1	4	10	0.184	0.792	0.530	0	1	1	0	2	0.317	NA	NA
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	20%	0	5	1	4	10	0.249	0.003 **	0.038 *	0	4	1	3	8	0.256	0.012 *	0.061
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	0%	0	5	1	4	10	0.284	0.459	0.404	0	5	1	4	10	0.284	0.459	0.404

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects										
						Sample Size					p-Value		Sample Size					p-Value					
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA		
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	100%	0	5	1	4	10	0.245	0.853	0.774	NA	NA	NA	NA	NA	NA	NA	NA	NA	
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	100%	0	5	1	4	10	0.245	0.853	0.774	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	20%	0	5	1	4	10	0.983	0.903	0.929	0	4	1	3	8	0.973	0.841	0.877		
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	20%	0	5	1	4	10	0.857	0.942	0.873	0	4	1	3	8	0.499	0.408	0.438		
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	80%	0	5	1	4	10	0.150	0.204	0.424	0	1	1	0	2	0.317	NA	NA		
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	90%	0	5	1	4	10	0.536	0.960	0.747	0	1	0	0	1	NA	NA	NA		
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	30%	0	5	1	4	10	0.264	0.685	0.630	0	4	1	2	7	0.300	0.735	0.607		
06_2_118	MW-15016R	Appendix IV	Mercury	ug/L	100%	0	5	1	4	10	NA	0.662	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	80%	0	5	1	4	10	0.202	0.224	0.345	0	1	1	0	2	0.317	NA	NA		
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	0%	0	5	1	4	10	0.627	0.676	0.568	0	5	1	4	10	0.627	0.676	0.568		
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	80%	0	5	1	4	10	0.879	0.990	0.958	0	2	0	0	2	NA	NA	NA		
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	100%	0	5	1	4	10	0.704	0.955	0.811	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	100%	3	9	3	6	21	0.717	0.457	0.382	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	9%	3	9	3	7	22	0.069	0.082	0.042	3	8	3	6	20	0.076	0.122	0.063		
07_2_103	MW-15017	Appendix IV	Barium	ug/L	0%	3	9	3	7	22	0.617	0.514	0.480	3	9	3	7	22	0.617	0.514	0.480		
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	100%	3	9	3	6	21	0.630	0.398	0.331	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	100%	3	9	3	6	21	0.145	0.757	0.627	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	5%	3	9	3	7	22	0.073	0.252	0.159	3	9	3	6	21	0.090	0.280	0.207		
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	67%	3	9	3	6	21	0.054	0.019	0.051	0	4	0	3	7	1.000	0.946	0.854		
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	100%	3	9	3	8	23	0.181	0.169	0.198	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
07_2_116	MW-15017	Appendix IV	Lead	ug/L	100%	3	9	3	6	21	0.876	0.716	0.879	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	77%	3	9	3	7	22	0.956	0.800	0.846	0	3	0	2	5	0.564	0.488	0.474		
07_2_118	MW-15017	Appendix IV	Mercury	ug/L	100%	3	9	3	6	21	NA	0.101	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	95%	3	9	3	7	22	0.664	0.466	0.385	0	1	0	0	1	NA	NA	NA		
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	0%	3	9	3	7	22	0.380	0.517	0.578	3	9	3	7	22	0.380	0.517	0.578		
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	55%	3	9	3	7	22	0.047	0.014	0.023	3	3	3	1	10	0.687	0.641	0.640		
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	100%	3	9	3	6	21	0.134	0.347	0.395	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	100%	3	9	3	6	21	0.717	0.457	0.382	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	73%	3	9	3	7	22	0.676	0.674	0.730	1	2	1	2	6	0.543	0.742	0.666		
08_2_103	MW-15018	Appendix IV	Barium	ug/L	0%	3	9	3	7	22	0.450	0.988	0.949	3	9	3	7	22	0.450	0.988	0.949		
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	100%	3	9	3	6	21	0.630	0.398	0.331	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	100%	3	9	3	6	21	0.145	0.757	0.627	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	50%	3	9	3	7	22	0.850	0.808	0.790	1	5	1	4	11	0.723	0.842	0.845		
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	95%	3	9	3	6	21	0.055	0.019	0.057	0	0	0	1	1	NA	NA	NA		
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	61%	3	9	3	8	23	0.202	0.171	0.189	0	5	0	4	9	0.539	0.685	0.745		
08_2_116	MW-15018	Appendix IV	Lead	ug/L	81%	3	9	3	6	21	0.812	0.532	0.686	0	2	0	2	4	0.121	0.368	0.284		
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	0%	3	9	3	7	22	0.765	0.928	0.885	3	9	3	7	22	0.765	0.928	0.885		
08_2_118	MW-15018	Appendix IV	Mercury	ug/L	100%	3	9	3	6	21	NA	0.101	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	95%	3	9	3	7	22	0.648	0.462	0.379	0	0	0	1	1	NA	NA	NA		

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects									
						Sample Size					p-Value		Sample Size					p-Value				
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	36%	3	9	3	7	22	0.396	0.276	0.265	2	5	2	5	14	0.960	0.856	0.877	
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	91%	3	9	3	7	22	0.433	0.306	0.403	0	1	1	0	2	0.317	NA	NA	
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	100%	3	9	3	6	21	0.120	0.241	0.262	NA	NA	NA	NA	NA	NA	NA	NA	
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	100%	3	9	3	6	21	0.772	0.793	0.587	NA	NA	NA	NA	NA	NA	NA	NA	
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	73%	3	9	3	7	22	0.986	0.714	0.919	0	4	0	2	6	1.000	0.612	0.901	
09_2_103	MW-15019	Appendix IV	Barium	ug/L	0%	3	9	3	7	22	0.105	0.114	0.097	3	9	3	7	22	0.105	0.114	0.097	
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	100%	3	9	3	6	21	0.772	0.782	0.542	NA	NA	NA	NA	NA	NA	NA	NA	
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	100%	3	9	3	6	21	0.131	0.680	0.578	NA	NA	NA	NA	NA	NA	NA	NA	
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	64%	3	9	3	7	22	0.600	0.397	0.311	0	4	1	3	8	0.359	0.434	0.443	
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	67%	3	9	3	6	21	0.054	0.019	*	0.054	0	4	0	3	7	1.000	0.920	0.994
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	96%	3	9	3	8	23	0.187	0.168	0.199	0	1	0	0	1	NA	NA	NA	
09_2_116	MW-15019	Appendix IV	Lead	ug/L	90%	3	9	3	6	21	0.844	0.924	0.999	0	1	0	1	2	0.317	NA	NA	
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	14%	3	9	3	7	22	0.144	0.224	0.380	3	8	3	5	19	0.253	0.396	0.404	
09_2_118	MW-15019	Appendix IV	Mercury	ug/L	100%	3	9	3	6	21	NA	0.101	NA	NA	NA	NA	NA	NA	NA	NA	NA	
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	86%	3	9	3	7	22	0.559	0.679	0.386	0	3	0	0	3	NA	NA	NA	
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	23%	3	9	3	7	22	0.233	0.144	0.186	3	7	2	5	17	0.103	0.078	0.092	
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	82%	3	9	3	7	22	0.265	0.696	0.465	0	2	2	0	4	0.121	0.081	0.072	
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	90%	3	9	3	6	21	0.152	0.283	0.305	0	2	0	0	2	NA	NA	NA	
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	100%	3	9	3	6	21	0.717	0.457	0.382	NA	NA	NA	NA	NA	NA	NA	NA	
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	86%	3	9	3	7	22	0.777	0.998	0.964	0	2	0	1	3	1.000	0.843	0.782	
10_2_103	MW-15020	Appendix IV	Barium	ug/L	0%	3	9	3	7	22	0.068	0.095	0.045	*	3	9	3	7	22	0.068	0.095	0.045
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	100%	3	9	3	6	21	0.630	0.398	0.331	NA	NA	NA	NA	NA	NA	NA	NA	
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	100%	3	9	3	6	21	0.145	0.757	0.627	NA	NA	NA	NA	NA	NA	NA	NA	
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	64%	3	9	3	7	22	0.571	0.176	0.350	1	2	1	4	8	0.373	0.058	0.208	
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	95%	3	9	3	6	21	0.055	0.019	*	0.072	0	1	0	0	1	NA	NA	NA
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	96%	3	9	3	8	23	0.188	0.169	0.199	0	1	0	0	1	NA	NA	NA	
10_2_116	MW-15020	Appendix IV	Lead	ug/L	95%	3	9	3	6	21	0.688	0.997	0.975	0	1	0	0	1	NA	NA	NA	
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	23%	3	9	3	7	22	0.315	0.361	0.392	3	7	3	4	17	0.437	0.382	0.349	
10_2_118	MW-15020	Appendix IV	Mercury	ug/L	100%	3	9	3	6	21	NA	0.101	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	100%	3	9	3	7	22	0.648	0.462	0.379	NA	NA	NA	NA	NA	NA	NA	NA	
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	27%	3	9	3	7	22	0.140	0.364	0.136	1	7	1	7	16	0.612	0.700	0.607	
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	86%	3	9	3	7	22	0.303	0.674	0.492	1	0	2	0	3	0.221	0.407	0.344	
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	100%	3	9	3	6	21	0.120	0.241	0.262	NA	NA	NA	NA	NA	NA	NA	NA	
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	95%	3	8	4	6	21	0.855	0.654	0.640	0	1	0	0	1	NA	NA	NA	
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	36%	3	8	4	7	22	0.490	0.408	0.249	3	4	3	4	14	0.635	0.465	0.391	
11_2_103	MW-15021	Appendix IV	Barium	ug/L	0%	3	8	4	7	22	0.428	0.604	0.592	3	8	4	7	22	0.428	0.604	0.592	
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	100%	3	8	4	6	21	0.847	0.673	0.613	NA	NA	NA	NA	NA	NA	NA	NA	
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	100%	3	8	4	6	21	0.267	0.744	0.653	NA	NA	NA	NA	NA	NA	NA	NA	
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	32%	3	8	4	7	22	0.321	0.180	0.208	2	5	3	5	15	0.201	0.101	0.132	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value		Sample Size					p-Value			
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	76%	3	8	4	6	21	0.168	0.093	0.185	0	2	1	2	5	0.497	0.750	0.745
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	100%	3	8	4	8	23	0.395	0.424	0.418	NA	NA	NA	NA	NA	NA	NA	NA
11_2_116	MW-15021	Appendix IV	Lead	ug/L	100%	3	8	4	6	21	0.800	0.953	0.953	NA	NA	NA	NA	NA	NA	NA	NA
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	82%	3	8	4	7	22	0.787	0.937	0.828	0	2	0	2	4	0.439	0.513	0.529
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	95%	3	8	4	6	21	0.475	0.506	0.506	0	0	0	1	1	NA	NA	NA
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	100%	3	8	4	7	22	0.871	0.753	0.687	NA	NA	NA	NA	NA	NA	NA	NA
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	23%	3	8	4	7	22	0.162	0.157	0.196	3	4	3	7	17	0.360	0.299	0.220
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	68%	3	8	4	7	22	0.561	0.502	0.595	2	3	2	0	7	0.143	0.181	0.247
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	100%	3	8	4	6	21	0.291	0.490	0.498	NA	NA	NA	NA	NA	NA	NA	NA
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	95%	3	9	4	6	22	0.827	0.730	0.641	0	1	0	0	1	NA	NA	NA
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	48%	3	9	4	7	23	0.203	0.180	0.219	3	4	3	2	12	0.789	0.762	0.561
12_2_103	MW-15022	Appendix IV	Barium	ug/L	0%	3	9	4	7	23	0.430	0.230	0.307	3	9	4	7	23	0.430	0.230	0.307
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	100%	3	9	4	6	22	0.775	0.622	0.556	NA	NA	NA	NA	NA	NA	NA	NA
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	100%	3	9	4	6	22	0.258	0.737	0.635	NA	NA	NA	NA	NA	NA	NA	NA
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	78%	3	9	4	7	23	0.883	0.822	0.773	1	2	1	1	5	0.889	0.954	0.941
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	95%	3	9	4	6	22	0.161	0.079	0.194	0	1	0	0	1	NA	NA	NA
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	79%	3	9	4	8	24	0.532	0.654	0.600	0	4	1	0	5	1.000	0.681	0.773
12_2_116	MW-15022	Appendix IV	Lead	ug/L	100%	3	9	4	6	22	0.831	0.973	0.979	NA	NA	NA	NA	NA	NA	NA	NA
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	35%	3	9	4	7	23	0.099	0.239	0.117	0	7	2	6	15	0.777	0.609	0.605
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	95%	3	9	4	6	22	0.446	0.473	0.473	0	0	0	1	1	NA	NA	NA
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	52%	3	9	4	7	23	0.201	0.402	0.304	3	4	2	2	11	0.090	0.073	0.230
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	70%	3	9	4	7	23	0.146	0.266	0.140	0	6	0	1	7	0.617	0.582	0.506
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	100%	3	9	4	7	23	0.873	0.983	0.963	NA	NA	NA	NA	NA	NA	NA	NA
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	100%	3	9	4	6	22	0.277	0.473	0.498	NA	NA	NA	NA	NA	NA	NA	NA
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	100%	3	9	3	6	21	0.717	0.457	0.382	NA	NA	NA	NA	NA	NA	NA	NA
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	45%	3	9	3	7	22	0.325	0.918	0.669	3	4	2	3	12	0.431	0.903	0.845
13_2_103	MW-15023	Appendix IV	Barium	ug/L	0%	3	9	3	7	22	0.218	0.266	0.283	3	9	3	7	22	0.218	0.266	0.283
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	100%	3	9	3	6	21	0.630	0.398	0.331	NA	NA	NA	NA	NA	NA	NA	NA
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	100%	3	9	3	6	21	0.145	0.757	0.627	NA	NA	NA	NA	NA	NA	NA	NA
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	82%	3	9	3	7	22	0.859	0.716	0.547	0	2	1	1	4	0.861	0.864	0.825
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	100%	3	9	3	6	21	0.049 *	0.019 *	0.057	NA	NA	NA	NA	NA	NA	NA	NA
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	70%	3	9	3	8	23	0.201	0.170	0.190	0	4	0	3	7	0.719	0.968	0.970
13_2_116	MW-15023	Appendix IV	Lead	ug/L	100%	3	9	3	6	21	0.717	0.998	0.975	NA	NA	NA	NA	NA	NA	NA	NA
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	32%	3	9	3	7	22	0.461	0.216	0.292	2	7	1	5	15	0.577	0.461	0.538
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	95%	3	9	3	6	21	0.475	0.506	0.506	0	0	0	1	1	NA	NA	NA
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	18%	3	9	3	7	22	0.857	0.835	0.896	3	5	3	7	18	0.552	0.514	0.488
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	64%	3	9	3	7	22	0.281	0.231	0.463	2	5	0	1	8	0.407	0.471	0.784
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	95%	3	9	3	7	22	0.766	1.000	0.935	0	0	1	0	1	NA	NA	NA
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	100%	3	9	3	6	21	0.120	0.241	0.262	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value		Sample Size					p-Value			
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	90%	0	5	1	4	10	0.536	0.533	0.441	0	1	0	0	1	NA	NA	NA
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	50%	0	5	1	4	10	0.839	0.783	0.836	0	2	1	2	5	0.741	0.722	0.870
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	0%	0	5	1	4	10	0.627	0.602	0.585	0	5	1	4	10	0.627	0.602	0.585
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	100%	0	5	1	4	10	0.245	0.853	0.774	NA	NA	NA	NA	NA	NA	NA	NA
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	100%	0	5	1	4	10	0.245	0.853	0.774	NA	NA	NA	NA	NA	NA	NA	NA
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	60%	0	5	1	4	10	0.359	0.810	0.658	0	2	1	1	4	0.407	0.577	0.623
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	70%	0	5	1	4	10	0.311	0.806	0.607	0	2	1	0	3	0.221	0.154	0.164
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	20%	0	5	1	4	10	0.146	0.072	0.104	0	5	1	2	8	0.281	0.234	0.311
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	100%	0	5	1	4	10	0.704	0.995	0.975	NA	NA	NA	NA	NA	NA	NA	NA
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	0%	0	5	1	4	10	0.627	0.661	0.706	0	5	1	4	10	0.627	0.661	0.706
14_2_118	MW-17001R	Appendix IV	Mercury	ug/L	100%	0	5	1	4	10	NA	0.662	NA	NA	NA	NA	NA	NA	NA	NA	NA
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	50%	0	5	1	4	10	0.280	0.681	0.287	0	3	1	1	5	0.344	0.595	0.528
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	30%	0	5	1	4	10	0.347	0.310	0.435	0	4	1	2	7	0.134	0.111	0.364
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	100%	0	5	1	4	10	0.704	1.000	0.942	NA	NA	NA	NA	NA	NA	NA	NA
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	100%	0	5	1	4	10	0.704	0.955	0.811	NA	NA	NA	NA	NA	NA	NA	NA
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	87%	2	6	2	5	15	0.245	0.120	0.234	1	1	0	0	2	0.317	NA	NA
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	6%	2	6	2	6	16	0.947	0.508	0.686	2	5	2	6	15	0.663	0.352	0.386
15_2_103	MW-17002	Appendix IV	Barium	ug/L	0%	2	6	2	6	16	0.231	0.488	0.419	2	6	2	6	16	0.231	0.488	0.419
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	100%	2	6	2	5	15	0.543	0.374	0.287	NA	NA	NA	NA	NA	NA	NA	NA
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	87%	2	6	2	5	15	0.175	0.793	0.651	0	2	0	0	2	NA	NA	NA
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	75%	2	6	2	6	16	0.764	0.593	0.519	0	2	0	2	4	0.221	0.294	0.299
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	100%	2	6	2	5	15	0.035 *	0.000 ***	0.008 **	NA	NA	NA	NA	NA	NA	NA	NA
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	44%	2	6	2	6	16	0.133	0.075	0.096	0	5	0	4	9	0.806	0.795	0.999
15_2_116	MW-17002	Appendix IV	Lead	ug/L	100%	2	6	2	5	15	1.000	0.866	0.984	NA	NA	NA	NA	NA	NA	NA	NA
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	0%	2	6	2	6	16	0.817	0.815	0.849	2	6	2	6	16	0.817	0.815	0.849
15_2_118	MW-17002	Appendix IV	Mercury	ug/L	100%	2	6	2	5	15	NA	0.067	0.067	NA	NA	NA	NA	NA	NA	NA	NA
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	38%	2	6	2	6	16	0.654	0.326	0.571	1	5	0	4	10	0.731	0.463	0.873
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	50%	2	6	2	6	16	0.073	0.109	0.049 *	0	2	1	5	8	0.247	0.530	0.452
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	88%	2	6	2	6	16	0.502	0.836	0.653	1	1	0	0	2	0.317	NA	NA
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	100%	2	6	2	5	15	0.105	0.453	0.522	NA	NA	NA	NA	NA	NA	NA	NA
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	93%	2	6	2	5	15	0.341	0.147	0.248	1	0	0	0	1	NA	NA	NA
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	19%	2	6	2	6	16	0.159	0.449	0.084	1	6	1	5	13	0.416	0.735	0.112
16_2_103	MW-17003	Appendix IV	Barium	ug/L	0%	2	6	2	6	16	0.731	0.940	0.973	2	6	2	6	16	0.731	0.940	0.973
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	100%	2	6	2	5	15	0.543	0.374	0.287	NA	NA	NA	NA	NA	NA	NA	NA
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	100%	2	6	2	5	15	0.146	0.813	0.694	NA	NA	NA	NA	NA	NA	NA	NA
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	88%	2	6	2	6	16	0.764	0.580	0.501	0	1	0	1	2	0.317	NA	NA
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	93%	2	6	2	5	15	0.035 *	0.000 ***	0.009 **	0	1	0	0	1	NA	NA	NA
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	75%	2	6	2	6	16	0.151	0.062	0.106	0	3	0	1	4	0.637	0.989	0.955
16_2_116	MW-17003	Appendix IV	Lead	ug/L	100%	2	6	2	5	15	0.768	0.874	0.903	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects											
						Sample Size					p-Value		Sample Size					p-Value						
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA			
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	6%	2	6	2	6	16	0.156	0.612	0.365	2	5	2	6	15	0.171	0.514	0.276			
16_2_118	MW-17003	Appendix IV	Mercury	ug/L	100%	2	6	2	5	15	NA	0.067	0.067	NA	NA	NA	NA	NA	NA	NA	NA			
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	31%	2	6	2	6	16	0.315	0.750	0.506	2	5	0	4	11	0.972	0.983	0.975			
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	69%	2	6	2	6	16	0.030	*	0.041	*	0.106	0	2	0	3	5	0.248	0.273	0.266	
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	88%	2	6	2	6	16	0.502	0.667	0.508	1	1	0	0	2	0.317	NA	NA			
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	100%	2	6	2	5	15	0.099	0.287	0.315	NA	NA	NA	NA	NA	NA	NA	NA			
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	87%	2	6	2	5	15	0.518	0.209	0.405	0	2	0	0	2	NA	NA	NA			
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	12%	2	6	2	6	16	0.287	0.499	0.358	2	6	1	5	14	0.436	0.642	0.553			
17_2_103	MW-17004	Appendix IV	Barium	ug/L	0%	2	6	2	6	16	0.734	0.734	0.924	2	6	2	6	16	0.734	0.734	0.924			
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	100%	2	6	2	5	15	0.543	0.374	0.287	NA	NA	NA	NA	NA	NA	NA	NA			
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	93%	2	6	2	5	15	0.165	0.770	0.626	0	1	0	0	1	NA	NA	NA			
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	81%	2	6	2	6	16	0.658	0.726	0.712	0	1	1	1	3	0.368	NA	NA			
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	80%	2	6	2	5	15	0.036	*	0.000	***	0.019	*	0	2	0	1	3	0.221	0.506	0.601
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	88%	2	6	2	6	16	0.112	0.063	0.074	0	1	0	1	2	0.317	NA	NA			
17_2_116	MW-17004	Appendix IV	Lead	ug/L	93%	2	6	2	5	15	0.428	0.620	0.467	0	1	0	0	1	NA	NA	NA			
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	44%	2	6	2	6	16	0.756	0.671	0.756	0	4	0	5	9	0.712	0.876	0.740			
17_2_118	MW-17004	Appendix IV	Mercury	ug/L	100%	2	6	2	5	15	NA	0.067	0.067	NA	NA	NA	NA	NA	NA	NA	NA			
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	50%	2	6	2	6	16	0.721	0.837	0.903	2	4	0	2	8	0.177	0.289	0.217			
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	75%	2	6	2	6	16	0.212	0.770	0.586	0	3	0	1	4	0.655	0.724	0.818			
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	88%	2	6	2	6	16	0.755	0.859	0.865	0	2	0	0	2	NA	NA	NA			
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	93%	2	6	2	5	15	0.096	0.252	0.250	0	1	0	0	1	NA	NA	NA			
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	100%	2	6	2	5	15	0.384	0.155	0.261	NA	NA	NA	NA	NA	NA	NA	NA			
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	88%	2	6	2	6	16	0.412	0.631	0.602	1	1	0	0	2	0.317	NA	NA			
18_2_103	MW-17005	Appendix IV	Barium	ug/L	0%	2	6	2	6	16	0.759	0.979	0.919	2	6	2	6	16	0.759	0.979	0.919			
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	100%	2	6	2	5	15	0.543	0.374	0.287	NA	NA	NA	NA	NA	NA	NA	NA			
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	100%	2	6	2	5	15	0.146	0.813	0.694	NA	NA	NA	NA	NA	NA	NA	NA			
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	75%	2	6	2	6	16	0.900	0.643	0.573	0	2	0	2	4	0.439	0.375	0.351			
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	100%	2	6	2	5	15	0.035	*	0.000	***	0.008	**	NA	NA	NA	NA	NA	NA		
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	94%	2	6	2	6	16	0.079	0.058	0.057	0	0	0	1	1	NA	NA	NA			
18_2_116	MW-17005	Appendix IV	Lead	ug/L	100%	2	6	2	5	15	0.718	0.999	0.983	NA	NA	NA	NA	NA	NA	NA	NA			
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	19%	2	6	2	6	16	0.484	0.977	0.922	2	5	1	5	13	0.603	0.960	0.943			
18_2_118	MW-17005	Appendix IV	Mercury	ug/L	100%	2	6	2	5	15	NA	0.067	0.067	NA	NA	NA	NA	NA	NA	NA	NA			
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	100%	2	6	2	6	16	0.547	0.423	0.321	NA	NA	NA	NA	NA	NA	NA	NA			
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	69%	2	6	2	6	16	0.036	*	0.568	0.274	0	3	0	2	5	0.248	0.284	0.302		
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	100%	2	6	2	6	16	0.592	0.846	0.701	NA	NA	NA	NA	NA	NA	NA	NA			
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	100%	2	6	2	5	15	0.097	0.207	0.248	NA	NA	NA	NA	NA	NA	NA	NA			
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	100%	2	5	2	5	14	0.432	0.188	0.298	NA	NA	NA	NA	NA	NA	NA	NA			
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	40%	2	5	2	6	15	0.880	0.947	0.835	2	3	1	3	9	0.962	0.990	0.970			
19_2_103	MW-17006	Appendix IV	Barium	ug/L	0%	2	5	2	6	15	0.567	0.738	0.712	2	5	2	6	15	0.567	0.738	0.712			

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects									
						Sample Size					p-Value		Sample Size					p-Value				
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	100%	2	5	2	5	14	0.678	0.472	0.378	NA	NA	NA	NA	NA	NA	NA	NA	NA
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	100%	2	5	2	5	14	0.174	0.810	0.706	NA	NA	NA	NA	NA	NA	NA	NA	NA
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	93%	2	5	2	6	15	0.956	0.724	0.611	0	0	0	1	1	NA	NA	NA	NA
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	100%	2	5	2	5	14	0.038 *	0.000 ***	0.013 *	NA	NA	NA	NA	NA	NA	NA	NA	NA
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	60%	2	5	2	6	15	0.177	0.099	0.114	0	3	0	3	6	0.046 *	0.011 *	0.014 *	
19_2_116	MW-17006	Appendix IV	Lead	ug/L	100%	2	5	2	5	14	0.774	0.991	0.983	NA	NA	NA	NA	NA	NA	NA	NA	NA
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	0%	2	5	2	6	15	0.350	0.771	0.674	2	5	2	6	15	0.350	0.771	0.674	
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	93%	2	5	2	5	14	0.615	0.668	0.668	0	0	0	1	1	NA	NA	NA	NA
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	80%	2	5	2	6	15	0.734	0.697	0.582	0	3	0	0	3	NA	NA	NA	NA
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	73%	2	5	2	6	15	0.283	0.635	0.790	0	1	0	3	4	0.180	0.540	0.488	
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	100%	2	5	2	6	15	0.661	0.869	0.750	NA	NA	NA	NA	NA	NA	NA	NA	NA
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	100%	2	5	2	5	14	0.117	0.266	0.302	NA	NA	NA	NA	NA	NA	NA	NA	NA

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 8: Trend Tests: Lognormal MLE and MK

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	22	1	5%	Parametric	Lognormal MLE	-0.000724	0.006	↓
01_2_103	MW-15009	Appendix IV	Barium	ug/L	22	0	0%	Nonparametric	MK	0.0279	0.000	↑
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	22	0	0%	Parametric	Lognormal MLE	0.000241	0.002	↑
02_2_103	MW-15010	Appendix IV	Barium	ug/L	23	0	0%	Parametric	Lognormal MLE	0.000459	0.000	↑
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	23	0	0%	Parametric	Lognormal MLE	0.0000776	0.345	↔
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	23	11	48%	Parametric	Lognormal MLE	-0.00135	0.000	↓
03_2_103	MW-15013	Appendix IV	Barium	ug/L	22	0	0%	Nonparametric	MK	0.0122	0.225	↔
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	22	1	5%	Parametric	Lognormal MLE	0.000190	0.000	↑
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	5	23%	Parametric	Lognormal MLE	-0.000940	0.000	↓
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	10	0	0%	Parametric	Lognormal MLE	0.000907	0.009	↑
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	10	0	0%	Parametric	Lognormal MLE	-0.000207	0.260	↔
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	10	4	40%	Parametric	Lognormal MLE	-0.0000340	0.959	↔
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	10	0	0%	Parametric	Lognormal MLE	0.000878	0.070	↔
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	10	0	0%	Parametric	Lognormal MLE	0.00198	0.039	↔
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	10	2	20%	Nonparametric	MK	-0.000360	0.928	↔
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	10	0	0%	Parametric	Lognormal MLE	0.000212	0.008	↑
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	10	2	20%	Parametric	Lognormal MLE	-0.0000490	0.694	↔
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	10	2	20%	Parametric	Lognormal MLE	-0.000631	0.000	↓
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	10	0	0%	Parametric	Lognormal MLE	0.000405	0.047	↔
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	22	2	9%	Nonparametric	MK	-0.00140	0.001	↓
07_2_103	MW-15017	Appendix IV	Barium	ug/L	22	0	0%	Parametric	Lognormal MLE	0.0000490	0.013	↔
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	22	1	5%	Parametric	Lognormal MLE	-0.000793	0.000	↓
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	22	0	0%	Parametric	Lognormal MLE	-0.0000504	0.098	↔
08_2_103	MW-15018	Appendix IV	Barium	ug/L	22	0	0%	Nonparametric	MK	-0.00997	0.150	↔
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	22	0	0%	Parametric	Lognormal MLE	-0.0000790	0.164	↔
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	22	8	36%	Parametric	Lognormal MLE	-0.000121	0.155	↔
09_2_103	MW-15019	Appendix IV	Barium	ug/L	22	0	0%	Nonparametric	MK	0.0698	0.001	↑
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	22	5	23%	Parametric	Lognormal MLE	0.000311	0.001	↑
10_2_103	MW-15020	Appendix IV	Barium	ug/L	22	0	0%	Nonparametric	MK	0.0822	0.000	↑
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	22	6	27%	Parametric	Lognormal MLE	0.000502	0.001	↑
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	22	8	36%	Parametric	Lognormal MLE	-0.000263	0.144	↔
11_2_103	MW-15021	Appendix IV	Barium	ug/L	22	0	0%	Nonparametric	MK	0.0405	0.004	↑
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	22	5	23%	Parametric	Lognormal MLE	0.000225	0.039	↔
12_2_103	MW-15022	Appendix IV	Barium	ug/L	23	0	0%	Parametric	Lognormal MLE	0.000169	0.002	↑
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	23	8	35%	Parametric	Lognormal MLE	0.000703	0.000	↑
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	22	10	45%	Parametric	Lognormal MLE	-0.0000669	0.761	↔
13_2_103	MW-15023	Appendix IV	Barium	ug/L	22	0	0%	Nonparametric	MK	0.00422	0.429	↔
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	22	7	32%	Parametric	Lognormal MLE	0.000154	0.155	↔
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	22	4	18%	Nonparametric	MK	0.000973	0.021	↔
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	10	0	0%	Parametric	Lognormal MLE	0.000684	0.000	↑
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	10	2	20%	Parametric	Lognormal MLE	-0.000218	0.119	↔
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	10	0	0%	Parametric	Lognormal MLE	0.0000158	0.962	↔
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	10	3	30%	Parametric	Lognormal MLE	0.000846	0.002	↑

(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
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	16	1	6%	Parametric	Lognormal MLE	0.00165	0.000	↑
15_2_103	MW-17002	Appendix IV	Barium	ug/L	16	0	0%	Parametric	Lognormal MLE	-0.0000531	0.720	↔
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	16	7	44%	Parametric	Lognormal MLE	0.0000637	0.779	↔
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	16	0	0%	Parametric	Lognormal MLE	0.000252	0.032	↔
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	16	6	38%	Nonparametric	MK	0.327	0.023	↔
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	16	3	19%	Parametric	Lognormal MLE	0.00176	0.000	↑
16_2_103	MW-17003	Appendix IV	Barium	ug/L	16	0	0%	Parametric	Lognormal MLE	-0.000405	0.045	↔
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	16	1	6%	Nonparametric	MK	0.0194	0.000	↑
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	16	5	31%	Parametric	Lognormal MLE	0.00108	0.001	↑
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	16	2	12%	Parametric	Lognormal MLE	0.000969	0.001	↑
17_2_103	MW-17004	Appendix IV	Barium	ug/L	16	0	0%	Parametric	Lognormal MLE	-0.000191	0.288	↔
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	16	7	44%	Parametric	Lognormal MLE	0.00142	0.000	↑
18_2_103	MW-17005	Appendix IV	Barium	ug/L	16	0	0%	Parametric	Lognormal MLE	-0.000345	0.043	↔
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	16	3	19%	Parametric	Lognormal MLE	-0.000312	0.132	↔
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	15	6	40%	Parametric	Lognormal MLE	-0.00121	0.003	↓
19_2_103	MW-17006	Appendix IV	Barium	ug/L	15	0	0%	Parametric	Lognormal MLE	-0.0000389	0.686	↔
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	15	0	0%	Parametric	Lognormal MLE	-0.000242	0.008	↓

Table 9: Trend Tests: Piecewise Linear-Linear

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	21	20	95%	-0.000330	0.008	↓	0.000538	0.342	↔	2022-02-08	0.417	↔
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	22	1	5%	-0.0239	0.000	↓	0.0138	0.002	↑	2020-01-04	0.821	↔
01_2_103	MW-15009	Appendix IV	Barium	ug/L	22	0	0%	0.00207	0.962	↔	0.0563	0.008	↑	2018-07-11	0.550	↔
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	21	21	100%	-0.000404	0.004	↓	0.000608	0.147	↔	2021-10-20	0.498	↔
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000191	0.853	↔	0.000613	0.081	↔	2021-07-14	0.432	↔
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	22	19	86%	-0.000397	0.007	↓	0.000458	0.495	↔	2021-11-27	0.406	↔
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	21	21	100%	-0.00874	0.000	↓	0.00134	0.683	↔	2021-05-13	0.898	↔
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	23	20	87%	0	1.000	↔	-0.512	0.000	↓	2017-12-21	0.816	↔
01_2_116	MW-15009	Appendix IV	Lead	ug/L	21	21	100%	-0.000186	0.455	↔	0.00140	0.095	↔	2021-10-20	0.243	↔
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	22	0	0%	0.0175	0.003	↑	-0.0113	0.188	↔	2020-05-07	0.485	↔
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	22	9	41%	-0.0497	0.000	↓	0.00134	0.514	↔	2019-03-09	0.974	↔
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	22	19	86%	0.00242	0.081	↔	-0.000716	0.018	↔	2017-12-25	0.383	↔
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	22	21	95%	-0.000294	0.204	↔	0.00126	0.109	↔	2021-10-20	0.218	↔
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	21	21	100%	-0.000814	0.000	↓	0.000861	0.362	↔	2021-11-29	0.611	↔
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	22	22	100%	-0.000333	0.007	↓	0.000671	0.199	↔	2022-05-04	0.460	↔
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	23	22	96%	-0.000186	0.385	↔	0.00146	0.154	↔	2022-01-13	0.196	↔
02_2_103	MW-15010	Appendix IV	Barium	ug/L	23	0	0%	0.0137	0.272	↔	0.0882	0.005	↑	2021-01-22	0.721	↔
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	22	22	100%	-0.000410	0.001	↓	0.000683	0.182	↔	2021-12-11	0.525	↔
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	22	22	100%	0.0000191	0.851	↔	0.000665	0.053	↔	2021-10-13	0.410	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	23	16	70%	-0.000399	0.004	↓	0.000580	0.330	↔	2022-02-19	0.450	↔
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	22	20	91%	-0.00873	0.000	↓	0.00112	0.722	↔	2021-05-14	0.903	↔
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	24	14	58%	0	1.000	↔	-0.402	0.000	↓	2018-02-17	0.862	↔
02_2_116	MW-15010	Appendix IV	Lead	ug/L	22	22	100%	-0.000198	0.361	↔	0.00162	0.116	↔	2022-01-21	0.235	↔
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	23	0	0%	0.0256	0.028	↔	-0.00948	0.057	↔	2018-09-11	0.374	↔
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	23	11	48%	-0.0538	0.000	↓	-0.00251	0.023	↔	2017-03-15	0.900	↔
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	23	13	57%	0.000354	0.008	↑	-0.00187	0.629	↔	2023-09-14	0.350	↔
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	23	21	91%	-0.000207	0.270	↔	0.00144	0.110	↔	2022-02-21	0.215	↔
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	22	22	100%	-0.000814	0.000	↓	0.00109	0.209	↔	2022-02-28	0.639	↔
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	21	21	100%	-0.000330	0.008	↓	0.000538	0.342	↔	2022-02-08	0.417	↔
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	22	19	86%	0.000219	0.184	↔	-0.00636	0.205	↔	2023-09-23	0.179	↔
03_2_103	MW-15013	Appendix IV	Barium	ug/L	22	0	0%	-0.0155	0.305	↔	0.0542	0.000	↑	2019-05-30	0.706	↔
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	21	21	100%	-0.000404	0.004	↓	0.000608	0.147	↔	2021-10-20	0.498	↔
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000191	0.853	↔	0.000613	0.081	↔	2021-07-14	0.432	↔
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	22	19	86%	-0.000408	0.005	↓	0.000538	0.420	↔	2022-01-08	0.428	↔
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	21	20	95%	-0.00874	0.000	↓	0.00101	0.759	↔	2021-04-29	0.898	↔
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	23	18	78%	0.205	0.549	↔	-1.25	0.124	↔	2020-10-27	0.274	↔
03_2_116	MW-15013	Appendix IV	Lead	ug/L	21	21	100%	-0.000186	0.455	↔	0.00140	0.095	↔	2021-10-20	0.243	↔
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	22	1	5%	0.000890	0.784	↔	0.0103	0.012	↔	2020-04-23	0.551	↔
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	5	23%	-0.0255	0.805	↔	-0.00231	0.617	↔	2016-09-27	0.055	↔
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	22	15	68%	0.000486	0.309	↔	-0.0000666	0.663	↔	2018-04-16	0.125	↔
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	22	21	95%	-0.000203	0.284	↔	0.00118	0.223	↔	2021-10-21	0.216	↔
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	21	21	100%	-0.000814	0.000	↓	0.000861	0.362	↔	2021-11-29	0.611	↔
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	7	7	100%	0.00196	0.079	↔	-0.00537	0.089	↔	2023-09-16	0.830	↔
04_2_109	MW-15014R	Appendix IV	Chromium	ug/L	7	7	100%	0.00196	0.079	↔	-0.00537	0.089	↔	2023-09-16	0.830	↔
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	7	7	100%	0.00430	0.079	↔	-0.0118	0.089	↔	2023-09-16	0.830	↔
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	7	0	0%	-0.391	0.142	↔	0.148	0.418	↔	2022-10-19	0.623	↔
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	7	0	0%	0.143	0.450	↔	-0.169	0.292	↔	2023-04-10	0.494	↔
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	7	3	43%	-0.00703	0.363	↔	0.00231	0.129	↔	2022-07-25	0.651	↔
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	7	7	100%	0.00414	0.079	↔	-0.0113	0.089	↔	2023-09-16	0.830	↔
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	10	6	60%	0.00670	0.106	↔	-0.0167	0.594	↔	2023-04-11	0.396	↔
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	10	0	0%	0.0218	0.026	↔	-0.0254	0.698	↔	2023-04-11	0.619	↔
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	10	0	0%	0.0332	0.433	↔	-0.128	0.374	↔	2022-10-19	0.343	↔
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	10	10	100%	0.000166	0.918	↔	0.000613	0.312	↔	2021-10-16	0.327	↔
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	10	10	100%	0.000166	0.918	↔	0.000613	0.312	↔	2021-10-16	0.327	↔
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	10	8	80%	-0.00174	0.673	↔	0.000569	0.302	↔	2021-01-24	0.198	↔
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	10	7	70%	0.000487	0.898	↔	0.00110	0.435	↔	2021-08-11	0.256	↔
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	10	4	40%	0.553	0.098	↔	-0.0469	0.244	↔	2020-11-21	0.565	↔
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	10	10	100%	0.00164	0.727	↔	0.0000579	0.973	↔	2021-10-20	0.128	↔
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	10	0	0%	0.0578	0.066	↔	-0.0948	0.677	↔	2023-04-11	0.474	↔
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	10	0	0%	0.397	0.107	↔	-0.145	0.686	↔	2022-05-05	0.468	↔
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	10	6	60%	0.000422	0.492	↔	-0.00260	0.610	↔	2023-04-11	0.215	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	10	7	70%	-0.00332	0.658	↔	0.000955	0.338	↔	2020-10-27	0.217	↔
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	10	10	100%	-0.00246	0.959	↔	0.000499	0.506	↔	2020-10-26	0.078	↔
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	10	8	80%	0.000203	0.900	↔	0.000610	0.314	↔	2021-10-20	0.334	↔
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	10	2	20%	-0.0375	0.036	↔	0.000937	0.620	↔	2020-11-16	0.749	↔
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	10	0	0%	0.441	0.000	↑	-1.07	0.075	↔	2023-04-27	0.909	↔
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	10	10	100%	0.000166	0.918	↔	0.000613	0.312	↔	2021-10-16	0.327	↔
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	10	10	100%	0.000166	0.918	↔	0.000613	0.312	↔	2021-10-16	0.327	↔
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	10	2	20%	0.000662	0.744	↔	0.0000177	0.946	↔	2021-04-19	0.200	↔
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	10	2	20%	-0.00527	0.460	↔	0.000670	0.464	↔	2020-11-07	0.175	↔
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	10	8	80%	-0.266	0.886	↔	0.0350	0.245	↔	2020-10-26	0.264	↔
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	10	9	90%	0.000235	0.952	↔	0.00145	0.328	↔	2021-10-07	0.295	↔
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	10	3	30%	0.0518	0.141	↔	-0.146	0.590	↔	2023-04-11	0.354	↔
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	10	8	80%	-0.0287	0.205	↔	0.00300	0.291	↔	2020-11-29	0.423	↔
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	10	0	0%	-0.00432	0.603	↔	0.00315	0.021	↔	2021-04-19	0.639	↔
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	10	8	80%	-0.000364	0.925	↔	0.000828	0.559	↔	2021-10-20	0.080	↔
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	10	10	100%	-0.00414	0.473	↔	0.000910	0.238	↔	2020-12-11	0.277	↔
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	21	21	100%	-0.000330	0.008	↓	0.000538	0.342	↔	2022-02-08	0.417	↔
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	22	2	9%	-0.0122	0.003	↓	0.000132	0.863	↔	2017-12-16	0.739	↔
07_2_103	MW-15017	Appendix IV	Barium	ug/L	22	0	0%	0.0705	0.004	↑	-1.18	0.084	↔	2023-09-23	0.443	↔
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	21	21	100%	-0.000404	0.004	↓	0.000608	0.147	↔	2021-10-20	0.498	↔
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000191	0.853	↔	0.000613	0.081	↔	2021-07-14	0.432	↔
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	22	1	5%	-0.00265	0.002	↓	0.000630	0.801	↔	2021-10-14	0.599	↔
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	21	14	67%	-0.00848	0.000	↓	0.000837	0.795	↔	2021-05-05	0.898	↔
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	23	100%	0	1.000	↔	-0.510	0.000	↓	2017-12-16	0.813	↔
07_2_116	MW-15017	Appendix IV	Lead	ug/L	21	21	100%	-0.0000299	0.944	↔	0.000707	0.271	↔	2020-10-26	0.146	↔
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	22	17	77%	0.000325	0.756	↔	-0.0343	0.288	↔	2023-09-23	0.109	↔
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	22	21	95%	-0.00194	0.002	↓	0.00318	0.268	↔	2021-11-13	0.455	↔
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	22	0	0%	0.0113	0.349	↔	-0.000289	0.083	↔	2016-02-20	0.193	↔
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	22	12	55%	-0.00247	0.007	↓	0.000745	0.437	↔	2020-01-28	0.513	↔
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	21	21	100%	-0.000678	0.010	↓	0.000204	0.792	↔	2021-04-20	0.464	↔
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	21	21	100%	-0.000330	0.008	↓	0.000538	0.342	↔	2022-02-08	0.417	↔
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	22	16	73%	0.000364	0.104	↔	-0.00757	0.257	↔	2023-09-23	0.194	↔
08_2_103	MW-15018	Appendix IV	Barium	ug/L	22	0	0%	0.0321	0.038	↔	-0.107	0.005	↓	2021-04-19	0.489	↔
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	21	21	100%	-0.000404	0.004	↓	0.000608	0.147	↔	2021-10-20	0.498	↔
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000191	0.853	↔	0.000613	0.081	↔	2021-07-14	0.432	↔
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	22	11	50%	-0.0000172	0.836	↔	-0.00346	0.183	↔	2023-09-23	0.198	↔
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	21	20	95%	-0.00874	0.000	↓	0.00131	0.690	↔	2021-05-10	0.898	↔
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	23	14	61%	0	1.000	↔	-0.468	0.000	↓	2017-12-31	0.819	↔
08_2_116	MW-15018	Appendix IV	Lead	ug/L	21	17	81%	0.000406	0.077	↔	-0.00908	0.183	↔	2023-10-01	0.244	↔
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	22	0	0%	0.00333	0.137	↔	-0.0109	0.040	↔	2020-10-27	0.391	↔
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	22	21	95%	-0.00194	0.003	↓	0.00285	0.330	↔	2021-10-21	0.443	↔
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	22	8	36%	0.000918	0.042	↔	-0.000365	0.001	↓	2018-02-20	0.558	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	22	20	91%	-0.000468	0.180	↔	0.00129	0.266	↔	2021-09-03	0.154	↔
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	21	21	100%	-0.000814	0.000	↓	0.000861	0.362	↔	2021-11-29	0.611	↔
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	21	21	100%	0.000700	0.436	↔	-0.00126	0.166	↔	2020-05-06	0.141	↔
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	22	16	73%	0.000822	0.053	↔	-0.0130	0.297	↔	2023-09-23	0.232	↔
09_2_103	MW-15019	Appendix IV	Barium	ug/L	22	0	0%	0.116	0.001	↑	-0.547	0.569	↔	2023-09-23	0.489	↔
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	21	21	100%	0.000298	0.617	↔	-0.000767	0.203	↔	2020-05-06	0.124	↔
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	21	21	100%	0.000544	0.283	↔	-0.000274	0.580	↔	2020-05-06	0.164	↔
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	22	14	64%	-0.000244	0.025	↔	0.000219	0.522	↔	2021-04-20	0.302	↔
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	21	14	67%	-0.00874	0.000	↓	0.000684	0.790	↔	2021-02-23	0.894	↔
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	23	22	96%	0	1.000	↔	-0.508	0.000	↓	2017-12-05	0.805	↔
09_2_116	MW-15019	Appendix IV	Lead	ug/L	21	19	90%	0.000293	0.231	↔	-0.00876	0.239	↔	2023-10-01	0.158	↔
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	22	3	14%	-0.00146	0.913	↔	-0.00832	0.008	↓	2018-04-15	0.490	↔
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	22	19	86%	0.0159	0.224	↔	-0.0201	0.186	↔	2020-05-06	0.164	↔
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	22	5	23%	0.00135	0.663	↔	0.000343	0.123	↔	2017-02-13	0.298	↔
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	22	18	82%	-0.000366	0.153	↔	0.000982	0.247	↔	2021-06-11	0.177	↔
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	21	19	90%	-0.000684	0.003	↓	0.000745	0.468	↔	2022-04-24	0.529	↔
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	21	21	100%	-0.000330	0.008	↓	0.000538	0.342	↔	2022-02-08	0.417	↔
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	22	19	86%	-0.000143	0.568	↔	0.00113	0.190	↔	2021-10-20	0.157	↔
10_2_103	MW-15020	Appendix IV	Barium	ug/L	22	0	0%	0.186	0.000	↑	-0.111	0.090	↔	2020-10-26	0.721	↔
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	21	21	100%	-0.000404	0.004	↓	0.000608	0.147	↔	2021-10-20	0.498	↔
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000191	0.853	↔	0.000613	0.081	↔	2021-07-14	0.432	↔
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	22	14	64%	-0.000166	0.065	↔	-0.00222	0.398	↔	2023-09-23	0.334	↔
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	21	20	95%	-0.00874	0.000	↓	0.00107	0.746	↔	2021-05-01	0.898	↔
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	23	22	96%	0	1.000	↔	-0.509	0.000	↓	2017-12-16	0.812	↔
10_2_116	MW-15020	Appendix IV	Lead	ug/L	21	20	95%	-0.000168	0.441	↔	0.00135	0.221	↔	2021-10-21	0.234	↔
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	22	5	23%	0.000459	0.917	↔	-0.00523	0.014	↔	2018-06-13	0.493	↔
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	22	22	100%	-0.00194	0.003	↓	0.00285	0.330	↔	2021-10-21	0.443	↔
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	22	6	27%	0.00151	0.003	↑	-0.000771	0.286	↔	2020-05-07	0.508	↔
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	22	19	86%	-0.000301	0.199	↔	0.00124	0.119	↔	2021-10-20	0.210	↔
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	21	21	100%	-0.000814	0.000	↓	0.000861	0.362	↔	2021-11-29	0.611	↔
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	21	20	95%	-0.000329	0.010	↓	0.000422	0.469	↔	2022-01-03	0.403	↔
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	22	8	36%	-0.000702	0.028	↔	0.00142	0.058	↔	2020-11-25	0.367	↔
11_2_103	MW-15021	Appendix IV	Barium	ug/L	22	0	0%	-0.0255	0.548	↔	0.100	0.000	↑	2018-09-28	0.758	↔
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	21	21	100%	-0.000402	0.004	↓	0.000603	0.151	↔	2021-10-20	0.500	↔
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000190	0.851	↔	0.000613	0.081	↔	2021-07-13	0.432	↔
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	22	7	32%	-0.000500	0.008	↓	0.000158	0.695	↔	2020-10-27	0.459	↔
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	21	16	76%	-0.00871	0.000	↓	0.000984	0.709	↔	2021-04-01	0.897	↔
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	23	23	100%	0	1.000	↔	-0.512	0.000	↓	2017-12-24	0.816	↔
11_2_116	MW-15021	Appendix IV	Lead	ug/L	21	21	100%	-0.000186	0.391	↔	0.00140	0.207	↔	2021-10-21	0.244	↔
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	22	18	82%	-0.000314	0.905	↔	-0.00433	0.172	↔	2020-05-06	0.239	↔
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	21	20	95%	0	1.000	↔	0.000315	0.141	↔	2022-04-29	0.264	↔
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	22	22	100%	-0.00193	0.003	↓	0.00283	0.331	↔	2021-10-22	0.446	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	22	5	23%	0.000167	0.389	↔	0.00164	0.295	↔	2022-05-05	0.357	↔
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	22	15	68%	-0.000607	0.141	↔	0.00102	0.290	↔	2021-06-04	0.181	↔
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	21	21	100%	-0.000809	0.000	↓	0.000861	0.360	↔	2021-12-04	0.614	↔
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	22	21	95%	0.000153	0.832	↔	-0.000352	0.030	↔	2018-04-15	0.321	↔
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	23	11	48%	-0.00694	0.000	↓	-0.000199	0.732	↔	2018-06-13	0.810	↔
12_2_103	MW-15022	Appendix IV	Barium	ug/L	23	0	0%	0.0350	0.007	↑	-0.356	0.353	↔	2023-09-14	0.349	↔
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	22	22	100%	-0.000410	0.001	↓	0.000683	0.182	↔	2021-12-11	0.525	↔
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	22	22	100%	0.0000191	0.851	↔	0.000665	0.053	↔	2021-10-13	0.410	↔
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	23	18	78%	-0.000408	0.004	↓	0.000670	0.265	↔	2022-03-16	0.463	↔
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	22	21	95%	-0.00874	0.000	↓	0.00132	0.675	↔	2021-05-20	0.903	↔
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	24	19	79%	0.212	0.521	↔	-1.34	0.088	↔	2020-10-27	0.318	↔
12_2_116	MW-15022	Appendix IV	Lead	ug/L	22	22	100%	-0.000198	0.361	↔	0.00162	0.116	↔	2022-01-21	0.235	↔
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	23	8	35%	0.00572	0.052	↔	0.0378	0.009	↑	2021-10-21	0.771	↔
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	22	21	95%	0	1.000	↔	0.0000570	0.133	↔	2022-06-21	0.263	↔
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	23	12	52%	-0.00772	0.032	↔	0.00261	0.870	↔	2021-12-22	0.333	↔
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	23	16	70%	0.000716	0.073	↔	-0.000603	0.182	↔	2020-05-06	0.266	↔
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	23	23	100%	-0.000207	0.270	↔	0.00144	0.110	↔	2022-02-21	0.215	↔
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	22	22	100%	-0.000814	0.000	↓	0.00109	0.209	↔	2022-02-28	0.639	↔
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	21	21	100%	-0.000330	0.008	↓	0.000538	0.342	↔	2022-02-08	0.417	↔
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	22	10	45%	-0.000656	0.032	↔	0.0131	0.000	↑	2022-09-14	0.805	↔
13_2_103	MW-15023	Appendix IV	Barium	ug/L	22	0	0%	0.0468	0.011	↔	-0.0146	0.161	↔	2018-12-10	0.428	↔
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	21	21	100%	-0.000404	0.004	↓	0.000608	0.147	↔	2021-10-20	0.498	↔
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000191	0.853	↔	0.000613	0.081	↔	2021-07-14	0.432	↔
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	22	18	82%	-0.000407	0.005	↓	0.000538	0.420	↔	2022-01-11	0.427	↔
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	21	21	100%	-0.00874	0.000	↓	0.00134	0.683	↔	2021-05-13	0.898	↔
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	23	16	70%	0	1.000	↔	-0.501	0.000	↓	2018-02-02	0.842	↔
13_2_116	MW-15023	Appendix IV	Lead	ug/L	21	21	100%	-0.000186	0.455	↔	0.00140	0.095	↔	2021-10-20	0.243	↔
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	22	7	32%	0.00937	0.079	↔	-0.00340	0.282	↔	2019-04-08	0.286	↔
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	21	20	95%	0	1.000	↔	0.000201	0.141	↔	2022-04-29	0.264	↔
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	22	4	18%	0.00243	0.128	↔	0.117	0.022	↔	2023-09-23	0.548	↔
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	22	14	64%	0.00151	0.062	↔	-0.000257	0.125	↔	2017-09-20	0.318	↔
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	22	21	95%	-0.000203	0.284	↔	0.00118	0.223	↔	2021-10-21	0.216	↔
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	21	21	100%	-0.000814	0.000	↓	0.000861	0.362	↔	2021-11-29	0.611	↔
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	10	9	90%	-0.00132	0.755	↔	0.000569	0.314	↔	2021-02-17	0.184	↔
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	10	5	50%	-0.212	0.012	↔	0.000959	0.335	↔	2020-06-22	0.841	↔
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	10	0	0%	0.127	0.000	↑	-0.169	0.134	↔	2023-08-23	0.967	↔
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	10	10	100%	0.000166	0.918	↔	0.000613	0.312	↔	2021-10-16	0.327	↔
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	10	10	100%	0.000166	0.918	↔	0.000613	0.312	↔	2021-10-16	0.327	↔
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	10	6	60%	0.000307	0.753	↔	0.000542	0.494	↔	2021-10-21	0.325	↔
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	10	7	70%	0.000728	0.847	↔	0.00111	0.425	↔	2021-10-20	0.284	↔
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	10	2	20%	-0.311	0.164	↔	-0.00477	0.856	↔	2020-10-27	0.532	↔
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	10	10	100%	-0.00301	0.720	↔	0.00135	0.238	↔	2021-01-10	0.261	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	10	0	0%	-0.177	0.087	↔	0.0589	0.109	↔	2021-06-13	0.582	↔
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	10	5	50%	-0.00339	0.865	↔	0.00241	0.366	↔	2020-10-30	0.224	↔
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	10	3	30%	0.00338	0.346	↔	0.000467	0.315	↔	2020-10-28	0.576	↔
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	10	10	100%	-0.00334	0.656	↔	0.00120	0.238	↔	2020-12-31	0.259	↔
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	10	10	100%	-0.00414	0.473	↔	0.000910	0.238	↔	2020-12-11	0.277	↔
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	15	13	87%	-0.000919	0.024	↔	0.000524	0.403	↔	2021-07-08	0.509	↔
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	16	1	6%	-0.0264	0.639	↔	0.0972	0.024	↔	2020-07-11	0.529	↔
15_2_103	MW-17002	Appendix IV	Barium	ug/L	16	0	0%	0.0327	0.247	↔	-0.205	0.125	↔	2022-10-18	0.277	↔
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	15	15	100%	-0.000855	0.023	↔	0.000569	0.129	↔	2021-02-03	0.531	↔
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	15	13	87%	0.0000400	0.862	↔	0.000689	0.101	↔	2021-09-07	0.463	↔
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	16	12	75%	-0.000553	0.048	↔	0.000525	0.250	↔	2021-10-20	0.422	↔
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	15	15	100%	-0.0220	0.000	↓	0.000789	0.554	↔	2019-12-29	0.936	↔
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	16	7	44%	-0.751	0.006	↓	-0.107	0.502	↔	2020-10-26	0.821	↔
15_2_116	MW-17002	Appendix IV	Lead	ug/L	15	15	100%	-0.000288	0.702	↔	0.00178	0.044	↔	2021-01-31	0.496	↔
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	16	0	0%	0.00544	0.894	↔	0.0870	0.069	↔	2021-04-19	0.459	↔
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	16	6	38%	-0.0162	0.977	↔	1.13	0.011	↔	2020-06-08	0.675	↔
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	16	8	50%	-0.00476	0.195	↔	0.000323	0.711	↔	2019-04-09	0.235	↔
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	16	14	88%	-0.000586	0.327	↔	0.000974	0.346	↔	2021-06-27	0.147	↔
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	15	15	100%	-0.00151	0.017	↔	0.00120	0.058	↔	2021-02-20	0.573	↔
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	15	14	93%	-0.000793	0.043	↔	0.000613	0.325	↔	2021-09-08	0.454	↔
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	16	3	19%	0.0134	0.037	↔	0.525	0.000	↑	2023-09-24	0.857	↔
16_2_103	MW-17003	Appendix IV	Barium	ug/L	16	0	0%	0.100	0.039	↔	-0.178	0.035	↔	2021-04-20	0.523	↔
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	15	15	100%	-0.000855	0.023	↔	0.000569	0.129	↔	2021-02-03	0.531	↔
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	15	15	100%	0.0000400	0.870	↔	0.000613	0.163	↔	2021-08-05	0.398	↔
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	16	14	88%	-0.000596	0.019	↔	0.000576	0.369	↔	2021-10-21	0.432	↔
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	15	14	93%	-0.0183	0.000	↓	0.00179	0.274	↔	2020-05-22	0.934	↔
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	16	12	75%	-0.948	0.000	↓	-0.0225	0.913	↔	2021-01-26	0.868	↔
16_2_116	MW-17003	Appendix IV	Lead	ug/L	15	15	100%	-0.000367	0.172	↔	0.00389	0.000	↑	2022-04-17	0.837	↔
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	16	1	6%	0.0123	0.004	↑	0.333	0.000	↑	2022-11-10	0.986	↑
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	16	5	31%	-0.00145	0.856	↔	0.113	0.009	↑	2022-08-29	0.687	↔
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	16	11	69%	-0.00134	0.061	↔	-0.0000361	0.824	↔	2019-04-09	0.515	↔
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	16	14	88%	-0.000881	0.164	↔	0.00101	0.347	↔	2021-05-01	0.208	↔
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	15	15	100%	-0.00145	0.000	↓	0.00263	0.001	↑	2022-01-15	0.852	↔
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	15	13	87%	-0.000669	0.205	↔	0.000296	0.587	↔	2021-04-19	0.285	↔
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	16	2	12%	0.00771	0.000	↑	-0.0337	0.293	↔	2023-04-11	0.668	↔
17_2_103	MW-17004	Appendix IV	Barium	ug/L	16	0	0%	0.197	0.008	↑	-0.300	0.016	↔	2021-04-20	0.619	↔
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	15	15	100%	-0.000855	0.023	↔	0.000569	0.129	↔	2021-02-03	0.531	↔
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	15	14	93%	0.0000320	0.916	↔	0.000525	0.124	↔	2021-02-01	0.421	↔
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	16	13	81%	0.00120	0.264	↔	-0.00325	0.507	↔	2022-05-05	0.137	↔
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	15	12	80%	-0.0220	0.001	↓	0.00101	0.476	↔	2019-12-15	0.923	↔
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	16	14	88%	-0.889	0.000	↓	-0.0797	0.690	↔	2021-01-31	0.869	↔
17_2_116	MW-17004	Appendix IV	Lead	ug/L	15	14	93%	0.00383	0.170	↔	-0.00609	0.625	↔	2022-05-05	0.187	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	16	7	44%	-0.000282	0.972	↔	0.0569	0.001	↑	2021-08-23	0.796	↔
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	16	8	50%	-0.00651	0.544	↔	0.0264	0.003	↑	2020-10-05	0.662	↔
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	16	12	75%	0.000732	0.480	↔	-0.00139	0.230	↔	2021-04-19	0.157	↔
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	16	14	88%	-0.000419	0.616	↔	0.000701	0.445	↔	2020-10-27	0.093	↔
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	15	14	93%	-0.00153	0.001	↓	0.00155	0.026	↔	2021-04-25	0.703	↔
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	15	15	100%	-0.000762	0.052	↔	0.000613	0.331	↔	2021-09-20	0.432	↔
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	16	14	88%	-0.00105	0.245	↔	0.00108	0.270	↔	2021-01-11	0.191	↔
18_2_103	MW-17005	Appendix IV	Barium	ug/L	16	0	0%	0.168	0.348	↔	-0.166	0.036	↔	2020-04-24	0.359	↔
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	15	15	100%	-0.000855	0.023	↔	0.000569	0.129	↔	2021-02-03	0.531	↔
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	15	15	100%	0.0000400	0.870	↔	0.000613	0.163	↔	2021-08-05	0.398	↔
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	16	12	75%	-0.000523	0.063	↔	0.000460	0.319	↔	2021-10-20	0.391	↔
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	15	15	100%	-0.0220	0.000	↓	0.000789	0.554	↔	2019-12-29	0.936	↔
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	16	15	94%	-0.889	0.000	↓	0	1.000	↔	2021-04-17	0.876	↔
18_2_116	MW-17005	Appendix IV	Lead	ug/L	15	15	100%	-0.000360	0.540	↔	0.00145	0.166	↔	2021-09-08	0.252	↔
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	16	3	19%	0.0136	0.297	↔	-0.0124	0.174	↔	2020-05-07	0.231	↔
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	16	16	100%	-0.00382	0.015	↔	0.00322	0.192	↔	2021-05-31	0.482	↔
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	16	11	69%	-0.00187	0.415	↔	0.000436	0.436	↔	2019-04-11	0.103	↔
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	16	16	100%	-0.000555	0.314	↔	0.00129	0.183	↔	2021-09-05	0.217	↔
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	15	15	100%	-0.00153	0.004	↓	0.000980	0.197	↔	2021-06-17	0.655	↔
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	14	14	100%	-0.000702	0.063	↔	0.000568	0.516	↔	2021-10-21	0.389	↔
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	15	6	40%	0.00357	0.630	↔	-0.00212	0.071	↔	2018-12-31	0.349	↔
19_2_103	MW-17006	Appendix IV	Barium	ug/L	15	0	0%	0.0788	0.003	↑	-0.0771	0.023	↔	2020-10-27	0.674	↔
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	14	14	100%	-0.000855	0.031	↔	0.000613	0.216	↔	2021-03-01	0.493	↔
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	14	14	100%	0.0000320	0.921	↔	0.000613	0.184	↔	2021-07-21	0.394	↔
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	15	14	93%	-0.000534	0.066	↔	0.000538	0.433	↔	2021-12-16	0.364	↔
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	14	14	100%	-0.0220	0.001	↓	0.000736	0.613	↔	2019-12-26	0.933	↔
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	15	9	60%	-0.884	0.001	↓	0.0437	0.869	↔	2021-04-03	0.857	↔
19_2_116	MW-17006	Appendix IV	Lead	ug/L	14	14	100%	-0.000292	0.706	↔	0.00145	0.188	↔	2021-10-20	0.226	↔
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	15	0	0%	0.00590	0.491	↔	-0.0173	0.165	↔	2020-10-27	0.420	↔
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	14	13	93%	0	1.000	↔	0.000573	0.263	↔	2022-04-29	0.245	↔
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	15	12	80%	-0.00339	0.001	↓	0.00877	0.001	↑	2022-02-15	0.768	↔
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	15	11	73%	0.000408	0.030	↔	-0.00101	0.471	↔	2022-10-19	0.384	↔
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	15	15	100%	-0.000478	0.497	↔	0.00129	0.204	↔	2021-10-20	0.180	↔
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	14	14	100%	-0.00151	0.021	↔	0.000980	0.220	↔	2021-06-28	0.618	↔



Table 10: Trend Tests: Piecewise Linear-Linear-Linear

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	22	1	5%	-0.0750	0.000	↓	-0.00832	0.000	↓	0.0309	0.000	↑	2016-11-23	2022-02-05	0.956	↔
01_2_103	MW-15009	Appendix IV	Barium	ug/L	22	0	0%	-0.0134	0.733	↔	0.106	0.004	↑	-0.0740	0.444	↔	2018-11-26	2022-05-05	0.672	↔
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	21	21	100%	0	1.000	↔	-0.00144	0.041	↔	0.000569	0.061	↔	2019-03-02	2020-11-02	0.644	↔
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000232	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	21	21	100%	0	1.000	↔	-0.0311	0.000	↓	0.000789	0.304	↔	2018-05-06	2019-08-24	0.983	↔
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	23	20	87%	0	1.000	↔	-4.00	0.000	↓	0.0253	0.121	↔	2019-09-24	2020-05-14	0.999	↔
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	22	0	0%	0.00443	0.649	↔	0.0401	0.363	↔	-0.0169	0.021	↔	2018-08-26	2020-05-06	0.578	↔
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	22	9	41%	-0.0497	0.000	↓	-0.00622	0.336	↔	0.00748	0.160	↔	2018-12-26	2021-07-27	0.978	↔
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	22	21	95%	-0.000309	0.001	↓	0.0115	0.000	↑	-0.0113	0.000	↓	2022-10-16	2023-07-06	0.854	↔
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	21	21	100%	0	1.000	↔	-0.00358	0.306	↔	0.000910	0.056	↔	2019-08-01	2020-12-14	0.769	↔
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	22	22	100%	0	0.999	↔	-0.00215	0.064	↔	0.000665	0.079	↔	2020-03-08	2021-04-23	0.615	↔
02_2_103	MW-15010	Appendix IV	Barium	ug/L	23	0	0%	0.00744	0.285	↔	0.208	0.003	↑	-0.216	0.005	↓	2021-07-29	2023-04-10	0.899	↔
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	22	22	100%	0	1.000	↔	-0.00144	0.038	↔	0.000584	0.052	↔	2019-03-02	2020-11-22	0.657	↔
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	22	22	100%	0.0000236	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	22	20	91%	0	1.000	↔	-0.0311	0.000	↓	0.000600	0.431	↔	2018-05-06	2019-08-21	0.983	↔
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	24	14	58%	0.0275	0.526	↔	-1.56	0.000	↓	-0.0293	0.569	↔	2019-06-10	2020-08-27	0.977	↔
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	23	0	0%	0.0287	0.003	↑	-0.0300	0.080	↔	0.00896	0.493	↔	2019-01-15	2021-05-21	0.508	↔
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	23	11	48%	-0.0534	0.000	↓	-0.00724	0.011	↔	0.00247	0.344	↔	2017-01-22	2020-09-09	0.929	↔
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	23	21	91%	0	1.000	↔	-0.00143	0.509	↔	0.00140	0.061	↔	2020-03-09	2021-06-29	0.254	↔
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.00358	0.301	↔	0.000934	0.047	↔	2019-08-01	2020-12-28	0.780	↔
03_2_103	MW-15013	Appendix IV	Barium	ug/L	22	0	0%	-0.0169	0.112	↔	0.0854	0.000	↑	-0.153	0.252	↔	2019-11-21	2023-05-14	0.832	↔
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	21	21	100%	0	1.000	↔	-0.00144	0.041	↔	0.000569	0.061	↔	2019-03-02	2020-11-02	0.644	↔
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000232	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	22	19	86%	-0.000420	0.000	↓	0.00546	0.032	↔	-0.00537	0.032	↔	2022-10-17	2023-07-06	0.675	↔
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	21	20	95%	0	1.000	↔	-0.0311	0.000	↓	0.000637	0.417	↔	2018-05-06	2019-08-20	0.982	↔
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	23	18	78%	0.345	0.320	↔	-2.28	0.217	↔	1.20	0.689	↔	2020-10-27	2022-11-25	0.351	↔
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	22	1	5%	0.000688	0.661	↔	0.0816	0.009	↑	-0.0160	0.119	↔	2021-10-15	2022-06-03	0.780	↔
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	5	23%	-0.0219	0.279	↔	0.0375	0.207	↔	-0.0237	0.093	↔	2018-05-15	2020-05-07	0.293	↔
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	22	15	68%	-0.00166	0.233	↔	0.00571	0.534	↔	-0.000137	0.224	↔	2017-01-27	2017-07-10	0.405	↔
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	21	21	100%	0	1.000	↔	-0.00358	0.306	↔	0.000910	0.056	↔	2019-08-01	2020-12-14	0.769	↔
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	10	6	60%	-0.00772	0.826	↔	0.0126	0.145	↔	-0.0217	0.533	↔	2021-04-10	2023-04-11	0.538	↔
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	10	0	0%	-0.0221	0.399	↔	0.0436	0.146	↔	-0.0425	0.165	↔	2021-05-14	2023-04-06	0.840	↔
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	10	6	60%	-0.00304	0.179	↔	0.00191	0.200	↔	-0.00386	0.384	↔	2021-04-20	2023-04-11	0.651	↔
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	10	7	70%	-0.0000637	0.908	↔	0.00862	0.032	↔	-0.0126	0.009	↓	2022-09-17	2023-07-23	0.924	↔
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	10	8	80%	-0.630	0.750	↔	0.163	0.273	↔	-0.0143	0.821	↔	2020-09-18	2021-11-27	0.470	↔
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	22	2	9%	0.00219	0.781	↔	-0.0267	0.145	↔	0.000216	0.761	↔	2016-09-28	2017-07-30	0.801	↔
07_2_103	MW-15017	Appendix IV	Barium	ug/L	22	0	0%	-0.301	0.008	↓	0.144	0.000	↑	-1.21	0.014	↔	2017-07-11	2023-08-06	0.772	↔
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	21	21	100%	0	1.000	↔	-0.00144	0.041	↔	0.000569	0.061	↔	2019-03-02	2020-11-02	0.644	↔
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000232	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	22	1	5%	0.0249	0.002	↑	-0.0292	0.002	↓	-0.00146	0.001	↓	2016-09-27	2017-04-25	0.872	↔
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	21	14	67%	0	1.000	↔	-0.0311	0.000	↓	0.000422	0.566	↔	2018-05-06	2019-08-04	0.984	↔

(Table continues on next page)



Table 10: Trend Tests: Piecewise Linear-Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	23	100%	0	1.000	↔	-4.00	0.000	↓	0.0376	0.009	↑	2019-09-24	2020-05-16	0.999	↔
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	22	21	95%	0	1.000	↔	-0.00995	0.051	↔	0.00317	0.039	↔	2019-08-02	2020-11-04	0.632	↔
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	22	0	0%	0	0.988	↔	-0.00274	0.567	↔	0.00220	0.066	↔	2020-12-18	2022-05-04	0.363	↔
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	22	12	55%	0.00566	0.485	↔	-0.00364	0.025	↔	0.000575	0.478	↔	2016-07-12	2019-06-06	0.562	↔
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	21	21	100%	0	1.000	↔	-0.00254	0.191	↔	0.000502	0.279	↔	2019-04-08	2020-10-02	0.598	↔
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	22	16	73%	-0.000154	0.712	↔	0.00163	0.127	↔	-0.0117	0.074	↔	2020-10-26	2023-09-23	0.357	↔
08_2_103	MW-15018	Appendix IV	Barium	ug/L	22	0	0%	-0.00493	0.743	↔	0.497	0.020	↔	-0.136	0.000	↓	2020-04-11	2020-10-30	0.737	↔
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	21	21	100%	0	1.000	↔	-0.00144	0.041	↔	0.000569	0.061	↔	2019-03-02	2020-11-02	0.644	↔
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000232	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	22	11	50%	-0.000155	0.371	↔	0.000320	0.454	↔	-0.00456	0.089	↔	2020-10-26	2023-09-23	0.275	↔
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	21	20	95%	0	1.000	↔	-0.0311	0.000	↓	0.000786	0.305	↔	2018-05-06	2019-08-23	0.983	↔
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	23	14	61%	0.0229	0.459	↔	-3.38	0.000	↓	-0.00171	0.962	↔	2019-09-01	2020-05-08	0.992	↔
08_2_116	MW-15018	Appendix IV	Lead	ug/L	21	17	81%	-0.0000560	0.888	↔	0.00150	0.302	↔	-0.0126	0.069	↔	2020-10-27	2023-10-01	0.359	↔
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	22	0	0%	-0.0389	0.155	↔	0.0408	0.067	↔	-0.00569	0.003	↓	2016-09-08	2017-09-09	0.538	↔
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	22	21	95%	0	1.000	↔	-0.00995	0.057	↔	0.00300	0.056	↔	2019-08-02	2020-10-29	0.617	↔
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	22	8	36%	0.00632	0.145	↔	0.000590	0.138	↔	-0.000366	0.001	↓	2016-02-20	2018-06-12	0.624	↔
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	22	20	91%	-0.000456	0.060	↔	0.0115	0.062	↔	-0.0113	0.062	↔	2022-10-07	2023-07-06	0.457	↔
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	21	21	100%	0	1.000	↔	-0.00358	0.306	↔	0.000910	0.056	↔	2019-08-01	2020-12-14	0.769	↔
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	21	21	100%	0.00124	0.080	↔	-0.00458	0.323	↔	0.00159	0.455	↔	2020-05-07	2022-01-03	0.316	↔
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	22	16	73%	-0.000659	0.529	↔	0.00382	0.127	↔	-0.00459	0.091	↔	2019-09-03	2022-05-04	0.416	↔
09_2_103	MW-15019	Appendix IV	Barium	ug/L	22	0	0%	0.0471	0.601	↔	0.192	0.078	↔	-0.565	0.566	↔	2019-06-30	2023-07-08	0.524	↔
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	21	21	100%	0.000720	0.111	↔	-0.00345	0.250	↔	0.00121	0.378	↔	2020-05-07	2021-11-23	0.352	↔
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	21	21	100%	0.000809	0.052	↔	-0.00196	0.462	↔	0.000971	0.433	↔	2020-05-07	2021-11-23	0.286	↔
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	22	14	64%	0	1.000	↔	-0.00120	0.165	↔	0.000384	0.141	↔	2019-08-31	2020-12-02	0.445	↔
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	21	14	67%	0	1.000	↔	-0.0311	0.000	↓	0.000829	0.266	↔	2018-05-06	2019-08-16	0.984	↔
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	23	22	96%	0.0260	0.237	↔	-3.66	0.000	↓	0.0636	0.021	↔	2019-08-29	2020-05-26	0.997	↔
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	22	3	14%	-0.00103	0.849	↔	-0.0341	0.201	↔	0.000218	0.978	↔	2019-09-23	2020-11-04	0.561	↔
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	22	19	86%	0.0184	0.119	↔	-0.0330	0.378	↔	0.0167	0.846	↔	2020-05-07	2022-11-09	0.195	↔
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	22	5	23%	0.00162	0.232	↔	-0.00176	0.502	↔	0.000800	0.089	↔	2018-01-06	2019-05-09	0.375	↔
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	22	18	82%	-0.000352	0.001	↓	0.0115	0.000	↑	-0.0134	0.000	↓	2022-10-08	2023-07-13	0.856	↔
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	21	19	90%	0	1.000	↔	-0.00936	0.018	↔	0.000728	0.133	↔	2020-05-06	2020-11-03	0.744	↔
10_2_103	MW-15020	Appendix IV	Barium	ug/L	22	0	0%	0.0119	0.924	↔	0.319	0.062	↔	-0.114	0.035	↔	2017-10-12	2020-05-06	0.772	↔
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	21	21	100%	0	1.000	↔	-0.00144	0.041	↔	0.000569	0.061	↔	2019-03-02	2020-11-02	0.644	↔
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000232	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	22	14	64%	-0.00144	0.483	↔	-0.000114	0.312	↔	-0.00249	0.357	↔	2016-08-12	2023-09-23	0.377	↔
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	21	20	95%	0	1.000	↔	-0.0311	0.000	↓	0.000663	0.396	↔	2018-05-06	2019-08-21	0.983	↔
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	23	22	96%	0	1.000	↔	-4.0	0.000	↓	0.0365	0.020	↔	2019-09-24	2020-05-16	0.999	↔
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	22	5	23%	0.00238	0.478	↔	-0.0139	0.134	↔	0.00232	0.573	↔	2018-12-29	2021-04-19	0.627	↔
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	22	22	100%	0	1.000	↔	-0.00995	0.057	↔	0.00300	0.056	↔	2019-08-02	2020-10-29	0.617	↔
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	22	6	27%	-0.00116	0.895	↔	0.00163	0.013	↔	-0.000821	0.282	↔	2016-05-15	2020-05-07	0.515	↔
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	22	19	86%	-0.000316	0.002	↓	0.0115	0.000	↑	-0.0113	0.000	↓	2022-10-17	2023-07-06	0.835	↔
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	21	21	100%	0	1.000	↔	-0.00358	0.306	↔	0.000910	0.056	↔	2019-08-01	2020-12-14	0.769	↔

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	22	8	36%	-0.000711	0.003	↓	0.00317	0.027	↔	-0.00961	0.034	↔	2021-06-15	2023-09-06	0.630	↔
11_2_103	MW-15021	Appendix IV	Barium	ug/L	22	0	0%	-0.00923	0.439	↔	0.201	0.000	↑	-0.408	0.014	↔	2020-02-12	2023-04-11	0.953	↔
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	21	21	100%	0	1.000	↔	-0.00144	0.040	↔	0.000591	0.060	↔	2019-03-02	2020-11-12	0.644	↔
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000231	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	22	7	32%	0.0124	0.042	↔	-0.00122	0.032	↔	-0.0000637	0.627	↔	2016-02-20	2018-04-16	0.644	↔
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	21	16	76%	0	1.000	↔	-0.0311	0.000	↓	0.000814	0.271	↔	2018-05-06	2019-08-19	0.984	↔
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	23	23	100%	0	1.000	↔	-4.00	0.000	↓	0.0394	0.007	↑	2019-09-24	2020-05-17	0.999	↔
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	22	18	82%	-0.000402	0.866	↔	-0.00395	0.518	↔	-0.0103	0.773	↔	2020-05-07	2023-09-23	0.241	↔
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	21	20	95%	0	1.000	↔	0	1.000	↔	0.000315	0.167	↔	2016-11-08	2022-04-29	0.264	↔
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	22	22	100%	0	1.000	↔	-0.00995	0.057	↔	0.00311	0.055	↔	2019-08-02	2020-11-06	0.618	↔
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	22	5	23%	0.000290	0.470	↔	-0.000154	0.889	↔	0.00188	0.257	↔	2020-03-10	2022-05-05	0.365	↔
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	22	15	68%	-0.000570	0.021	↔	0.0115	0.060	↔	-0.0133	0.030	↔	2022-09-30	2023-07-13	0.514	↔
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	21	21	100%	0	1.000	↔	-0.00358	0.306	↔	0.000945	0.055	↔	2019-08-01	2020-12-21	0.769	↔
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	23	11	48%	-0.00663	0.001	↓	-0.000882	0.443	↔	0.00122	0.584	↔	2018-05-28	2021-11-27	0.820	↔
12_2_103	MW-15022	Appendix IV	Barium	ug/L	23	0	0%	0.0288	0.085	↔	0.145	0.606	↔	-0.327	0.416	↔	2022-05-05	2023-06-06	0.363	↔
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	22	22	100%	0	1.000	↔	-0.00144	0.038	↔	0.000584	0.052	↔	2019-03-02	2020-11-22	0.657	↔
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	22	22	100%	0.0000236	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	22	21	95%	0	1.000	↔	-0.0311	0.000	↓	0.000695	0.355	↔	2018-05-06	2019-08-23	0.984	↔
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	24	19	79%	-0.126	0.815	↔	1.21	0.794	↔	-1.60	0.021	↔	2019-05-23	2020-10-21	0.343	↔
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	23	8	35%	0.0103	0.047	↔	-0.0219	0.493	↔	0.0419	0.001	↑	2020-04-08	2021-06-18	0.795	↔
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	22	21	95%	0	0.367	↔	0.000115	0.064	↔	-0.000292	0.022	↔	2022-03-11	2023-09-23	0.573	↔
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	23	12	52%	0.00153	0.850	↔	-0.0236	0.287	↔	0.00460	0.645	↔	2018-11-28	2020-12-16	0.413	↔
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	23	16	70%	0.000912	0.009	↑	-0.00164	0.257	↔	0.00102	0.402	↔	2020-05-07	2022-05-17	0.393	↔
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	23	23	100%	0	1.000	↔	-0.00143	0.509	↔	0.00140	0.061	↔	2020-03-09	2021-06-29	0.254	↔
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.00358	0.301	↔	0.000934	0.047	↔	2019-08-01	2020-12-28	0.780	↔
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	22	10	45%	-0.000767	0.001	↓	0.00328	0.016	↔	0.0353	0.000	↑	2021-09-11	2023-09-23	0.947	↔
13_2_103	MW-15023	Appendix IV	Barium	ug/L	22	0	0%	0.0476	0.004	↑	-0.0290	0.023	↔	0.282	0.047	↔	2019-04-02	2023-09-23	0.624	↔
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	21	21	100%	0	1.000	↔	-0.00144	0.041	↔	0.000569	0.061	↔	2019-03-02	2020-11-02	0.644	↔
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	21	21	100%	0.0000232	0.000	↑	0.00546	0.000	↑	-0.00537	0.000	↓	2022-10-18	2023-07-06	0.999	↔
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	22	18	82%	-0.000419	0.000	↓	0.00546	0.032	↔	-0.00537	0.032	↔	2022-10-18	2023-07-06	0.674	↔
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	21	21	100%	0	1.000	↔	-0.0311	0.000	↓	0.000789	0.304	↔	2018-05-06	2019-08-24	0.983	↔
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	23	16	70%	0.0535	0.381	↔	-2.15	0.001	↓	-0.0560	0.438	↔	2019-05-16	2020-06-21	0.972	↔
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	22	7	32%	0.0118	0.003	↑	-0.00915	0.030	↔	0.0619	0.109	↔	2019-04-09	2023-06-05	0.612	↔
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	21	20	95%	0	1.000	↔	0	1.000	↔	0.000201	0.167	↔	2016-03-18	2022-04-29	0.264	↔
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	22	4	18%	-0.00313	0.820	↔	0.00314	0.245	↔	0.113	0.034	↔	2017-04-05	2023-09-23	0.556	↔
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	22	14	64%	0.00145	0.001	↑	-0.00582	0.132	↔	0.000224	0.299	↔	2018-11-03	2019-06-11	0.601	↔
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	21	21	100%	0	1.000	↔	-0.00358	0.306	↔	0.000910	0.056	↔	2019-08-01	2020-12-14	0.769	↔
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	10	0	0%	0.0739	0.110	↔	0.221	0.004	↑	-0.0573	0.211	↔	2021-10-17	2023-01-13	0.987	↔
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	10	0	0%	-0.176	0.151	↔	0.100	0.205	↔	-0.0111	0.961	↔	2021-08-05	2023-04-11	0.636	↔
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	10	5	50%	0.000340	0.801	↔	0.0241	0.021	↔	-0.0326	0.007	↓	2022-10-02	2023-07-20	0.938	↔
15_2_103	MW-17002	Appendix IV	Barium	ug/L	16	0	0%	-0.818	0.385	↔	0.0770	0.070	↔	-0.122	0.190	↔	2018-03-24	2021-10-21	0.423	↔
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	15	15	100%	-0.0220	0.001	↓	-0.00138	0.867	↔	0.00134	0.627	↔	2019-11-24	2021-05-18	0.937	↔

(Table continues on next page)

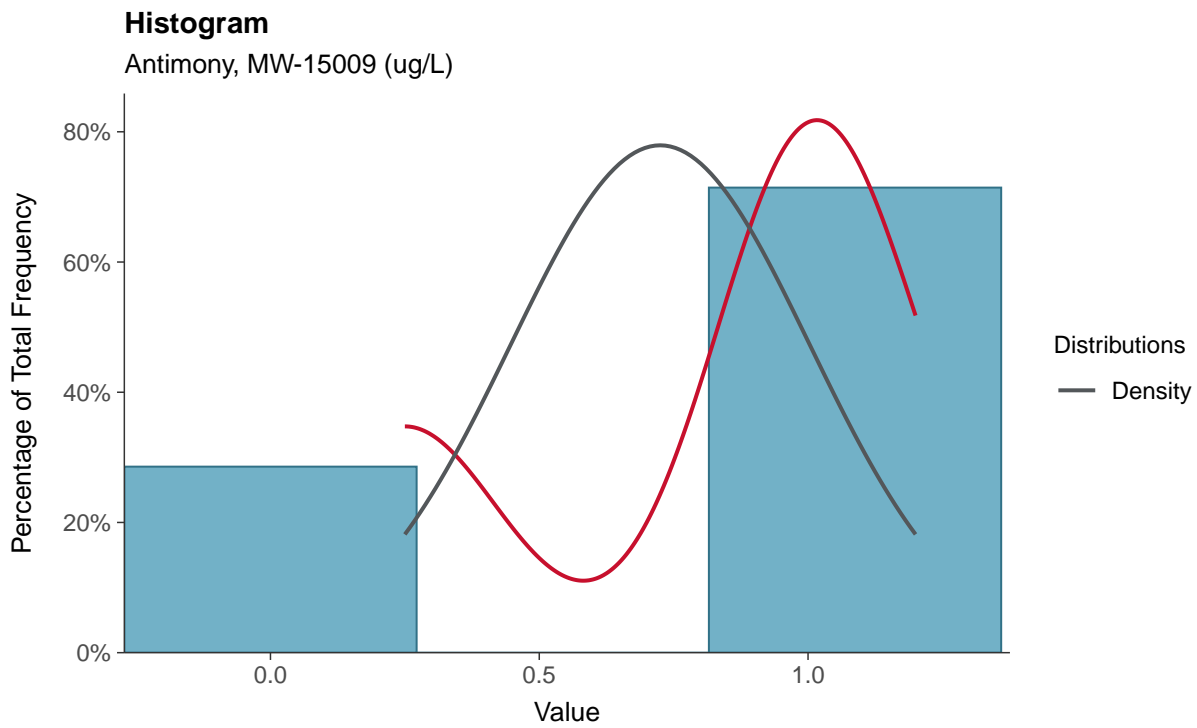
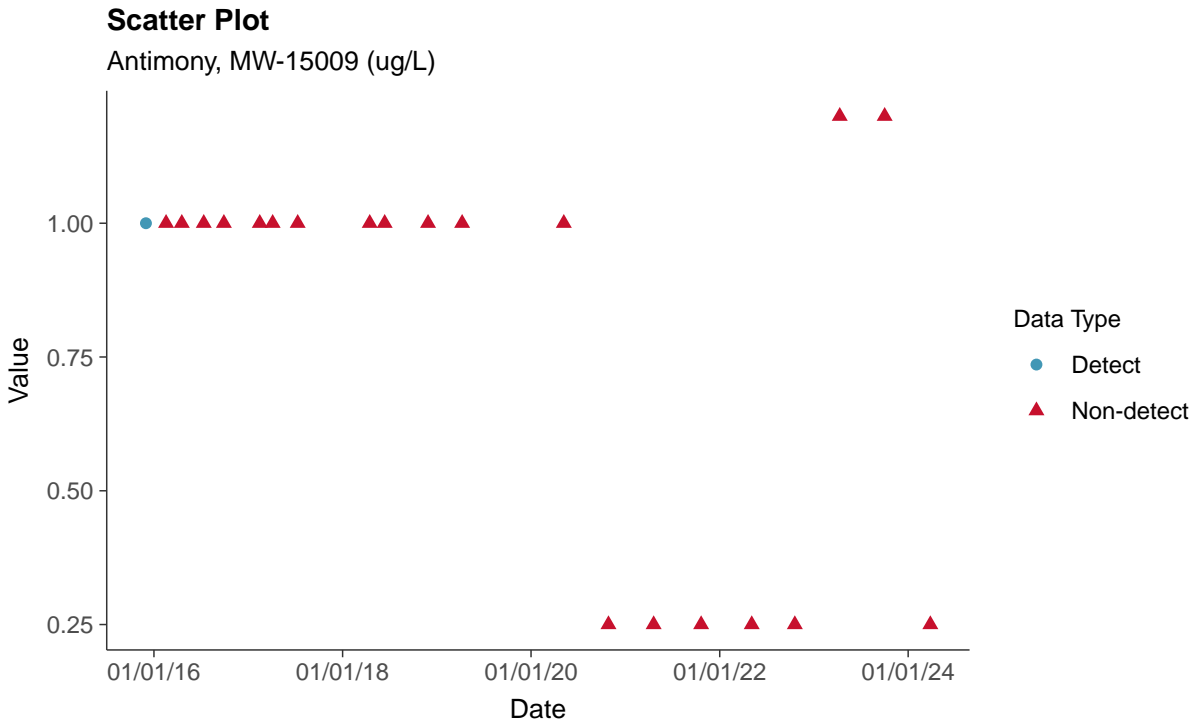
Table 10: Trend Tests: Piecewise Linear-Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
15_2_116	MW-17002	Appendix IV	Lead	ug/L	15	15	100%	-0.000126	0.906	↔	0.000512	0.787	↔	0.00360	0.097	↔	2020-07-07	2022-10-18	0.561	↔
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	16	8	50%	-0.00391	0.105	↔	0.00307	0.091	↔	-0.00592	0.264	↔	2020-02-20	2022-10-19	0.494	↔
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	16	14	88%	0.00169	0.779	↔	-0.000861	0.345	↔	0.00111	0.320	↔	2018-08-05	2021-07-07	0.183	↔
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	15	14	93%	0.00189	0.578	↔	-0.00113	0.045	↔	0.000716	0.261	↔	2018-08-05	2021-08-07	0.551	↔
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	16	3	19%	-0.333	0.199	↔	0.0176	0.019	↔	0.525	0.000	↑	2018-02-22	2023-09-30	0.894	↔
16_2_103	MW-17003	Appendix IV	Barium	ug/L	16	0	0%	-0.0426	0.642	↔	0.316	0.154	↔	-0.224	0.008	↓	2019-12-18	2021-04-20	0.667	↔
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	15	14	93%	-0.0220	0.001	↓	-0.000806	0.869	↔	0.00290	0.420	↔	2019-12-02	2022-01-20	0.940	↔
16_2_116	MW-17003	Appendix IV	Lead	ug/L	15	15	100%	-0.000351	0.000	↓	0.0129	0.000	↑	0	1.000	↔	2022-10-11	2023-04-11	0.989	↔
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	16	1	6%	-0.00341	0.854	↔	0.0191	0.027	↔	0.333	0.000	↑	2019-07-14	2022-11-21	0.988	↔
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	16	5	31%	-0.567	0.000	↓	0.0113	0.000	↑	0.226	0.000	↑	2018-02-28	2023-06-18	0.977	↔
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	15	15	100%	0	1.000	↔	-0.00186	0.003	↓	0.00263	0.002	↑	2018-12-25	2021-12-06	0.883	↔
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	15	13	87%	-0.000762	0.064	↔	0.00111	0.358	↔	-0.00616	0.126	↔	2021-07-21	2023-09-30	0.508	↔
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	16	2	12%	0.000627	0.776	↔	0.0273	0.000	↑	-0.0435	0.001	↓	2021-04-11	2023-01-22	0.909	↔
17_2_103	MW-17004	Appendix IV	Barium	ug/L	16	0	0%	0.0300	0.832	↔	0.676	0.314	↔	-0.322	0.003	↓	2020-01-12	2020-12-23	0.688	↔
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	15	14	93%	0.0000408	0.706	↔	0.00211	0.011	↔	-0.00537	0.002	↓	2022-04-18	2023-09-08	0.861	↔
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	16	13	81%	-0.00194	0.572	↔	0.00393	0.258	↔	-0.00493	0.329	↔	2020-01-02	2022-05-05	0.267	↔
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	15	12	80%	-0.0220	0.001	↓	0.00254	0.239	↔	-0.0129	0.422	↔	2020-01-17	2023-08-11	0.935	↔
17_2_116	MW-17004	Appendix IV	Lead	ug/L	15	14	93%	-0.00546	0.656	↔	0.0121	0.179	↔	-0.0107	0.403	↔	2020-01-03	2022-05-05	0.328	↔
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	16	7	44%	0.00734	0.603	↔	-0.0195	0.828	↔	0.0608	0.002	↑	2020-05-07	2021-07-30	0.807	↔
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	16	8	50%	-0.00392	0.777	↔	0.00941	0.373	↔	0.0576	0.090	↔	2020-04-25	2022-10-19	0.761	↔
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	16	12	75%	-0.00200	0.268	↔	0.00393	0.630	↔	-0.00215	0.063	↔	2019-10-16	2021-04-19	0.386	↔
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	16	14	88%	-0.0000800	0.843	↔	0.00443	0.464	↔	-0.0139	0.035	↔	2022-08-09	2023-09-21	0.447	↔
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	15	14	93%	0	1.000	↔	-0.00358	0.338	↔	0.00156	0.008	↑	2019-08-01	2020-12-17	0.769	↔
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	15	15	100%	0.00226	0.505	↔	-0.00119	0.036	↔	0.000668	0.287	↔	2018-08-05	2021-06-28	0.554	↔
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	15	15	100%	-0.0220	0.001	↓	-0.00138	0.867	↔	0.00134	0.627	↔	2019-11-24	2021-05-18	0.937	↔
18_2_116	MW-17005	Appendix IV	Lead	ug/L	15	15	100%	-0.000351	0.000	↓	0.0129	0.000	↑	-0.0127	0.000	↓	2022-10-11	2023-07-06	0.986	↔
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	16	3	19%	0.0256	0.118	↔	-0.0492	0.045	↔	0.0126	0.438	↔	2020-05-06	2021-11-21	0.531	↔
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	16	11	69%	-0.00250	0.249	↔	0.00152	0.101	↔	-0.00291	0.399	↔	2019-07-15	2022-10-19	0.361	↔
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	16	16	100%	0.00202	0.603	↔	-0.000888	0.369	↔	0.00140	0.180	↔	2018-08-06	2021-08-06	0.268	↔
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	15	15	100%	-0.00132	0.000	↓	0.00873	0.003	↑	-0.00859	0.003	↓	2022-08-29	2023-07-06	0.927	↔
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	14	14	100%	-0.000684	0.014	↔	0.00546	0.113	↔	-0.00537	0.114	↔	2022-09-23	2023-07-06	0.673	↔
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	15	6	40%	0.00258	0.404	↔	-0.0292	0.061	↔	0.00179	0.451	↔	2020-05-04	2020-11-19	0.633	↔
19_2_103	MW-17006	Appendix IV	Barium	ug/L	15	0	0%	0.0929	0.001	↑	-0.128	0.389	↔	0.00488	0.924	↔	2020-10-27	2022-09-23	0.779	↔
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	14	14	100%	-0.000714	0.002	↓	0.00280	0.012	↔	-0.00537	0.013	↔	2022-03-30	2023-08-21	0.846	↔
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	15	14	93%	0.000231	0.706	↔	-0.00434	0.149	↔	0.000613	0.212	↔	2020-03-31	2020-12-02	0.552	↔
19_2_116	MW-17006	Appendix IV	Lead	ug/L	14	14	100%	0	1.000	↔	-0.00260	0.714	↔	0.00145	0.238	↔	2020-05-06	2021-02-08	0.238	↔
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	15	12	80%	-0.00339	0.002	↓	0.0148	0.009	↑	0.000564	0.949	↔	2022-04-29	2023-05-30	0.824	↔
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	15	11	73%	0.000137	0.686	↔	0.00166	0.238	↔	-0.00160	0.270	↔	2021-09-06	2022-10-19	0.489	↔
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	15	15	100%	-0.000499	0.029	↔	0.0115	0.002	↑	-0.0113	0.002	↓	2022-10-09	2023-07-06	0.850	↔
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	14	14	100%	-0.00140	0.000	↓	0.00449	0.011	↔	-0.00859	0.012	↔	2022-04-13	2023-08-21	0.890	↔



Appendix IV: Antimony, MW-15009

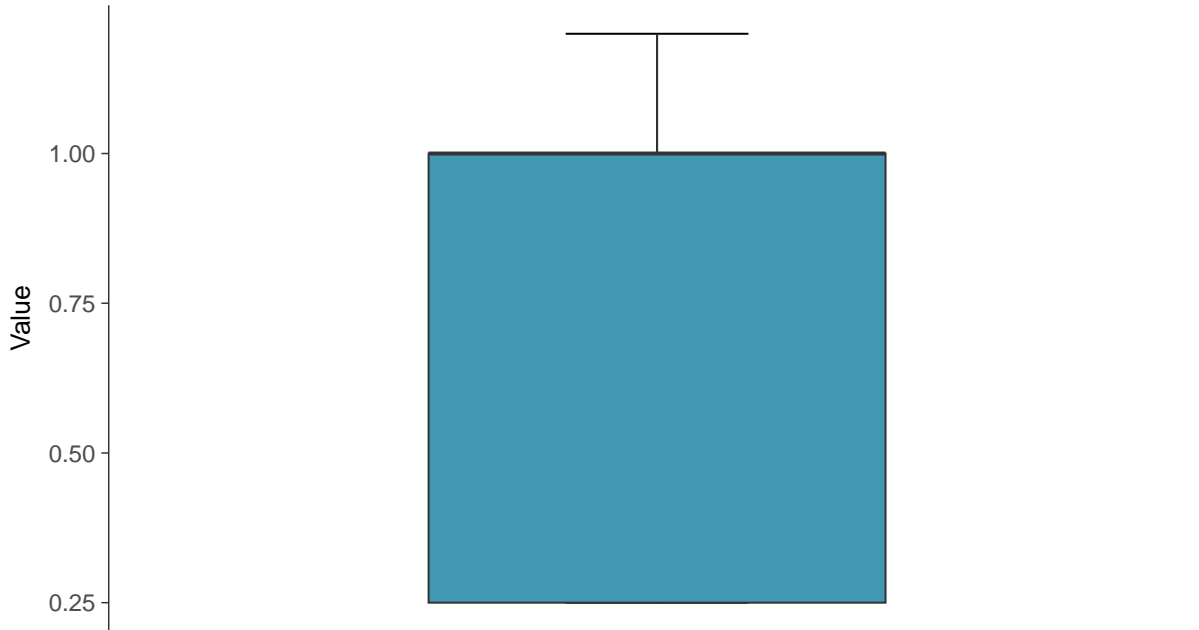
ID: 01_2_101





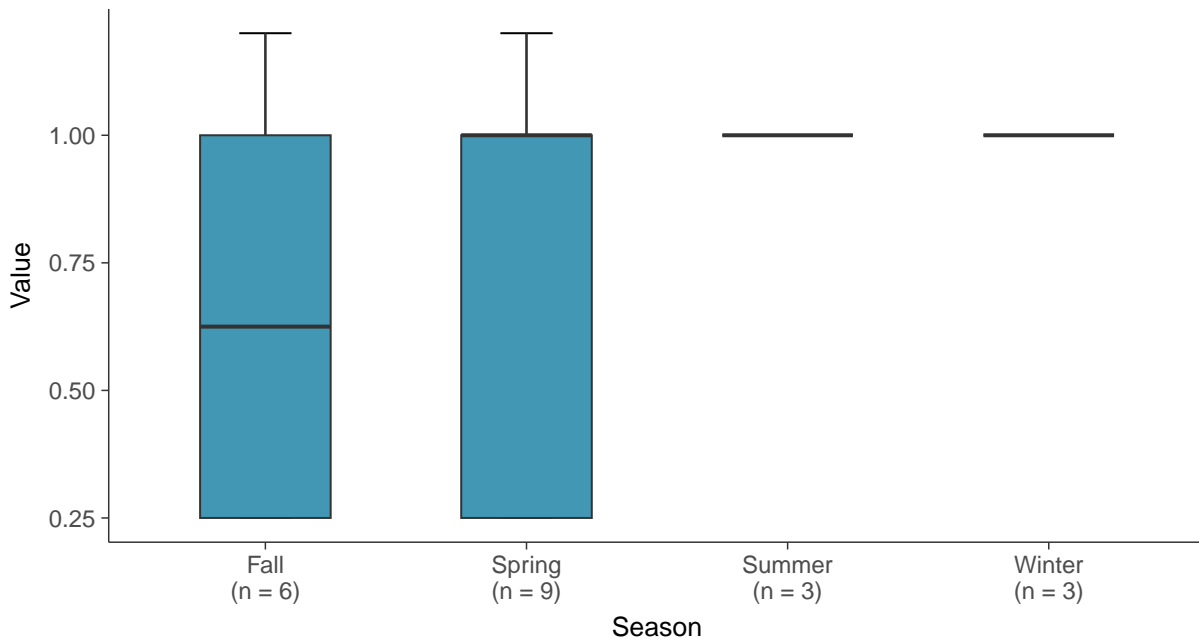
Boxplot

Antimony, MW-15009 (ug/L)



Boxplot by Season

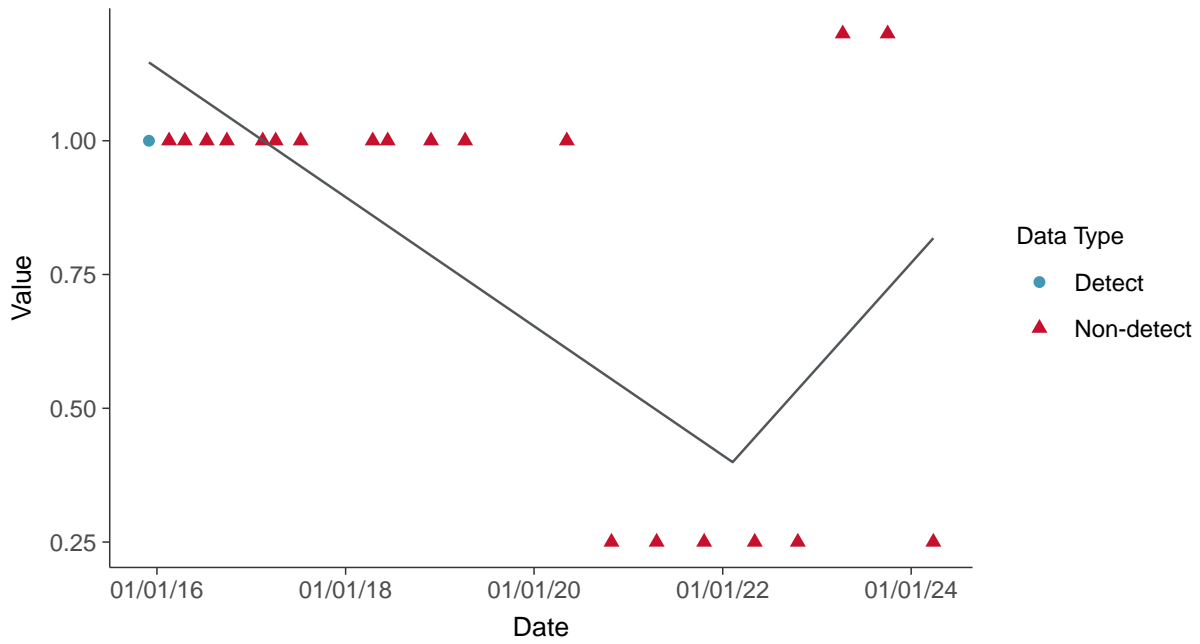
Antimony, MW-15009 (ug/L)





Trend Regression: Piecewise Linear-Linear

Antimony, MW-15009 (ug/L)



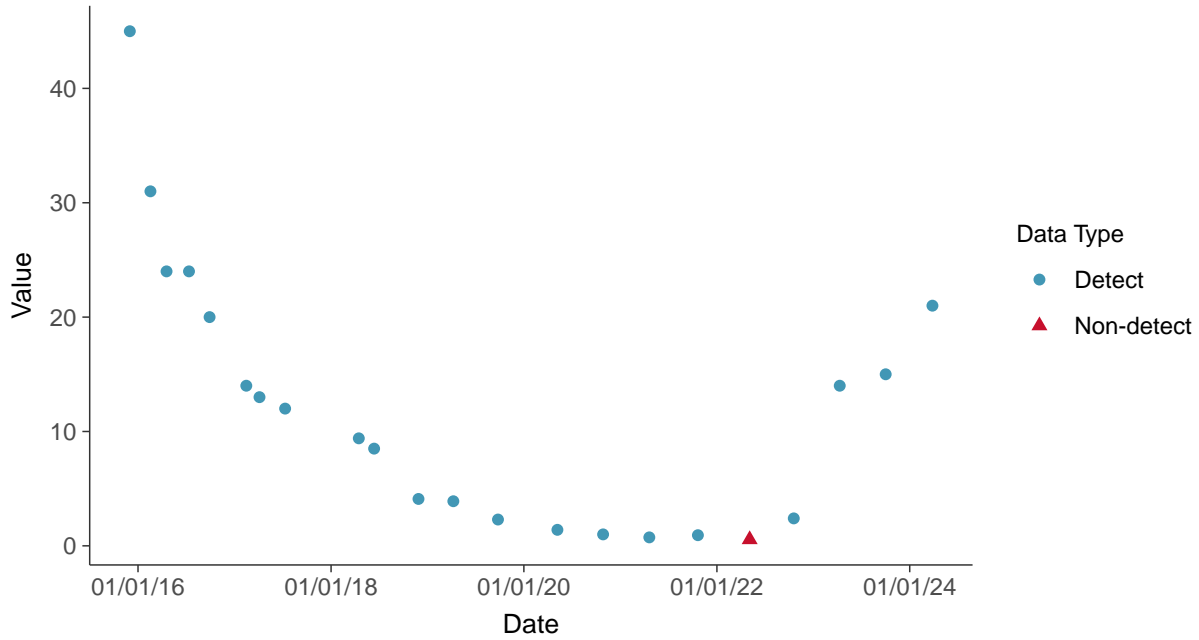


Appendix IV: Arsenic, MW-15009

ID: 01_2_102

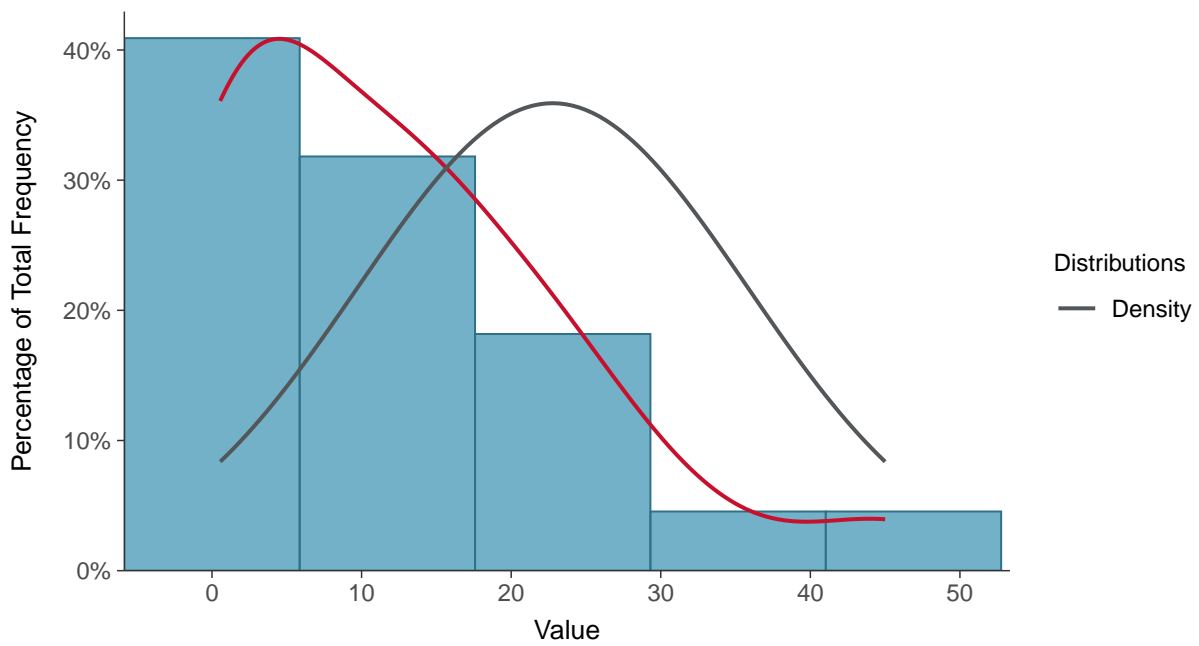
Scatter Plot

Arsenic, MW-15009 (ug/L)



Histogram

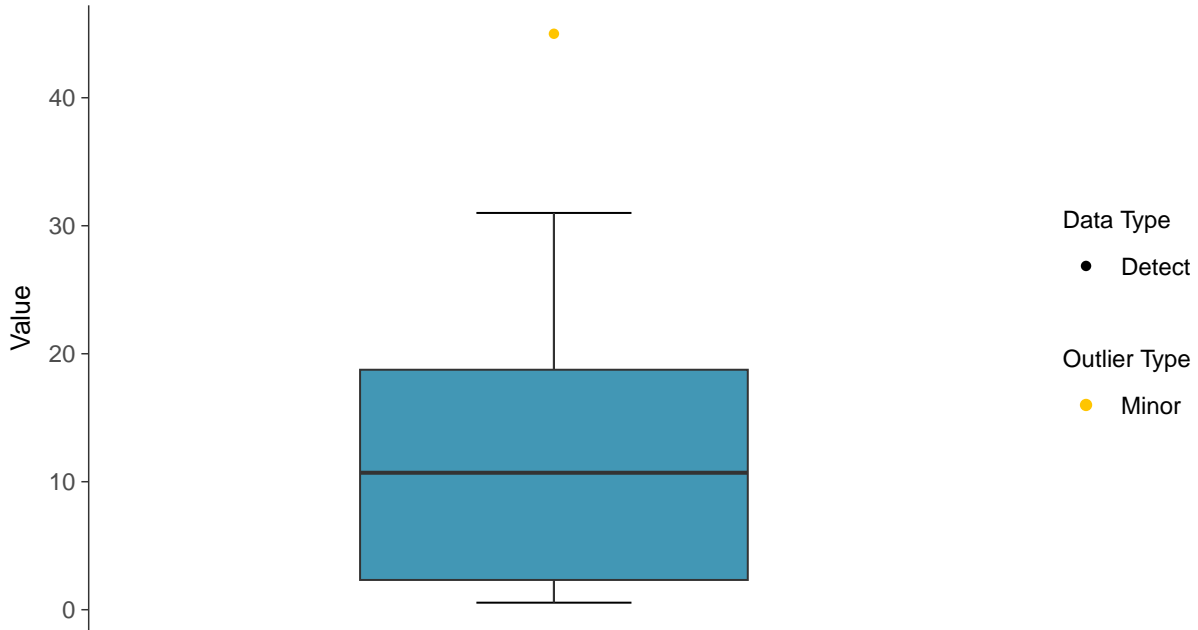
Arsenic, MW-15009 (ug/L)





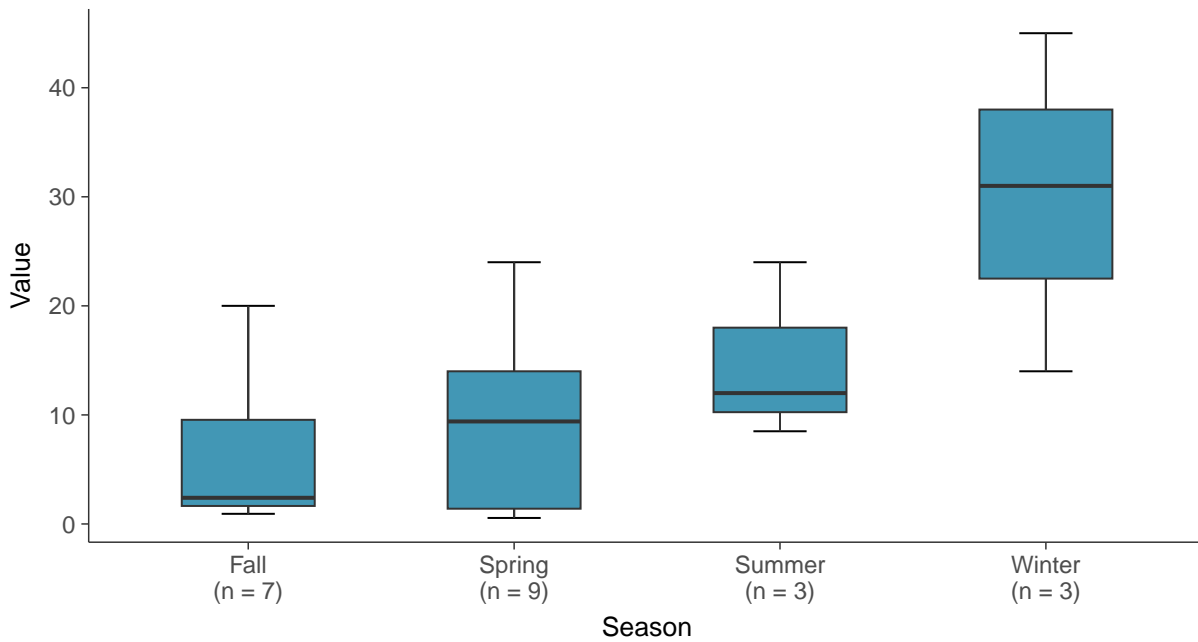
Boxplot

Arsenic, MW-15009 (ug/L)



Boxplot by Season

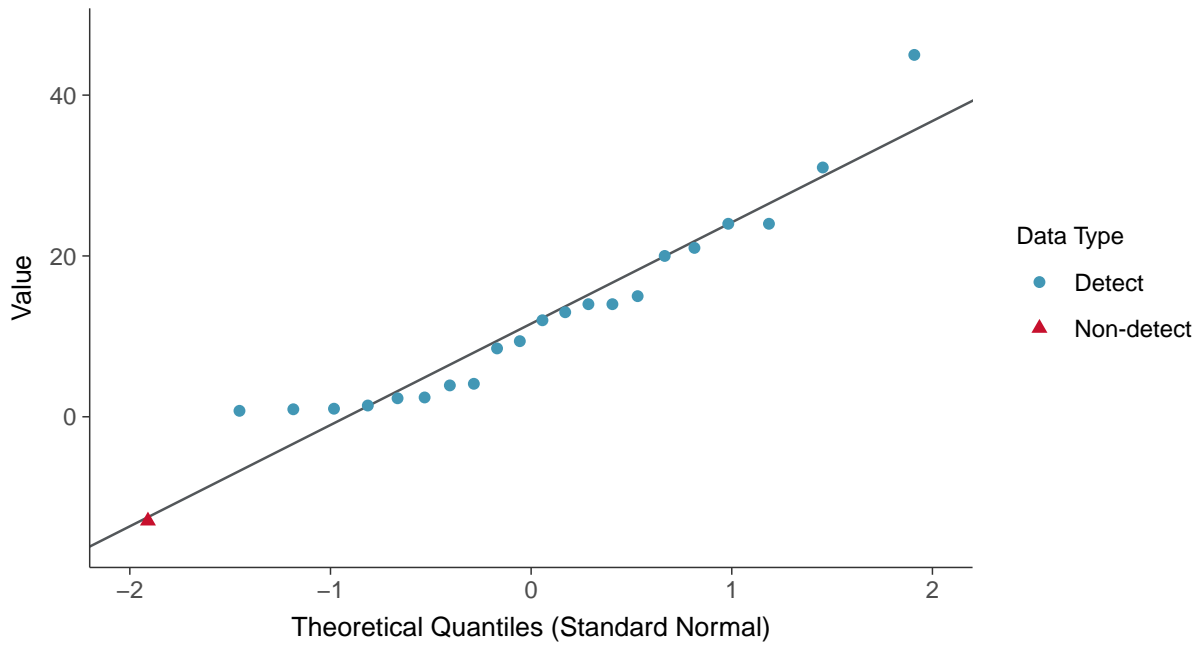
Arsenic, MW-15009 (ug/L)





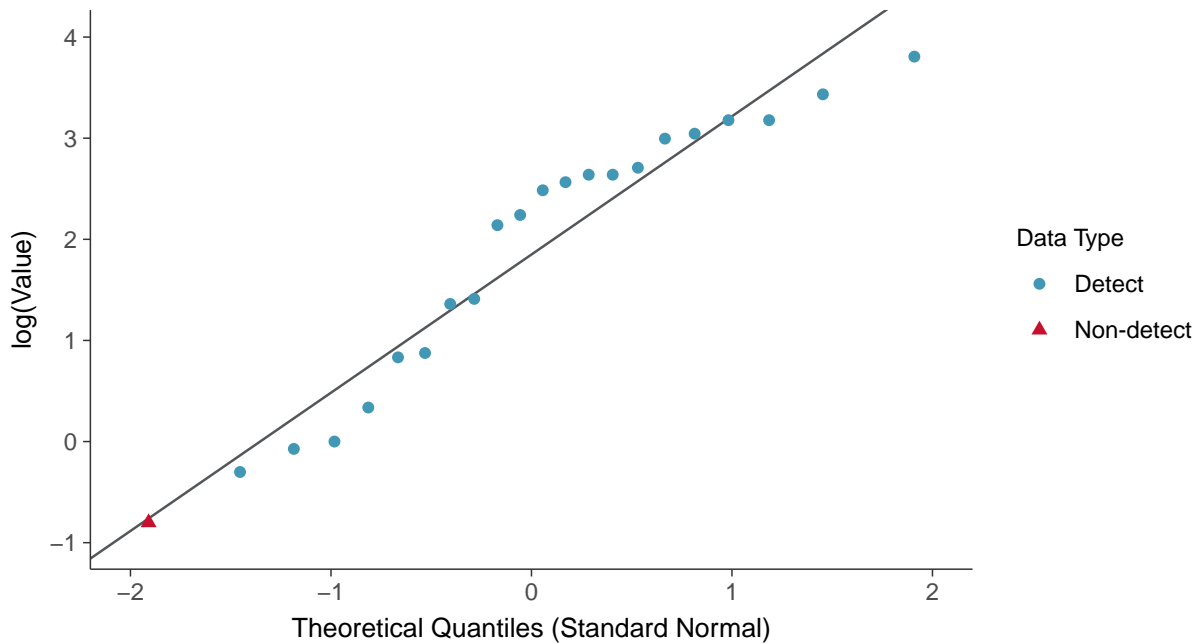
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15009 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

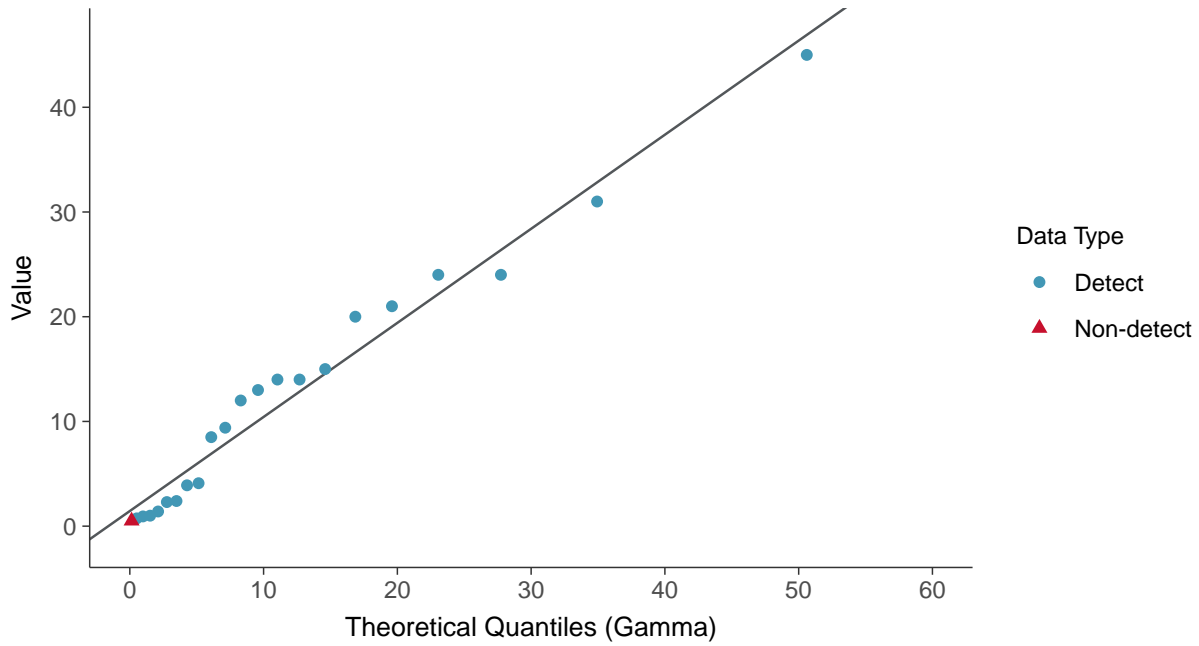
Arsenic, MW-15009 (ug/L)





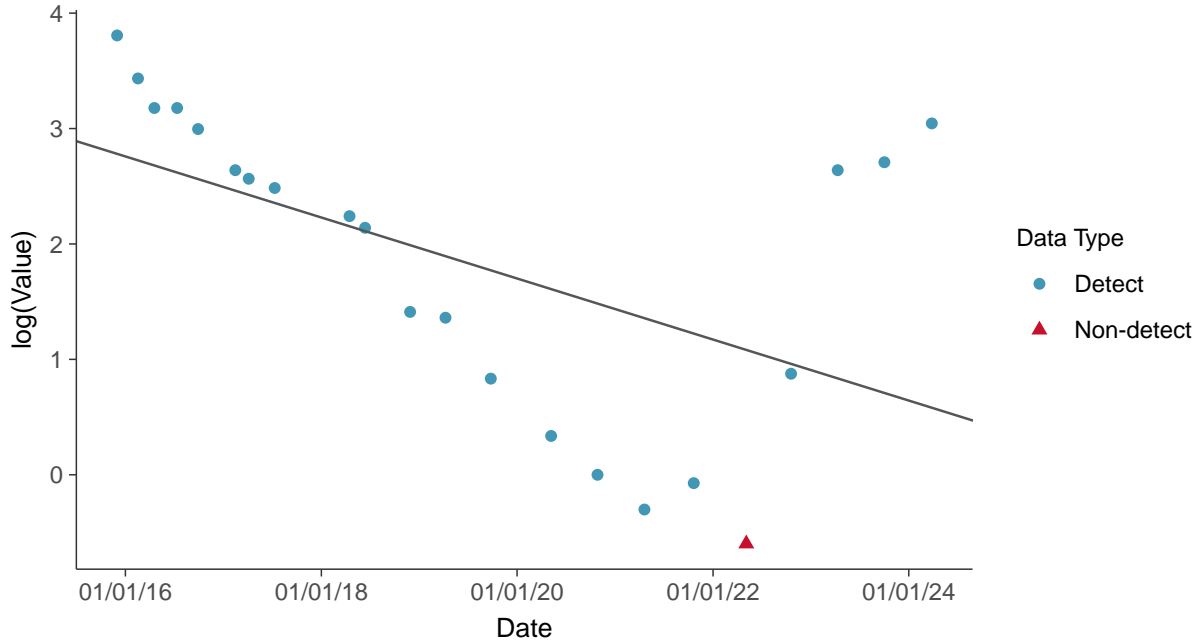
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15009 (ug/L)



Trend Regression: Lognormal MLE

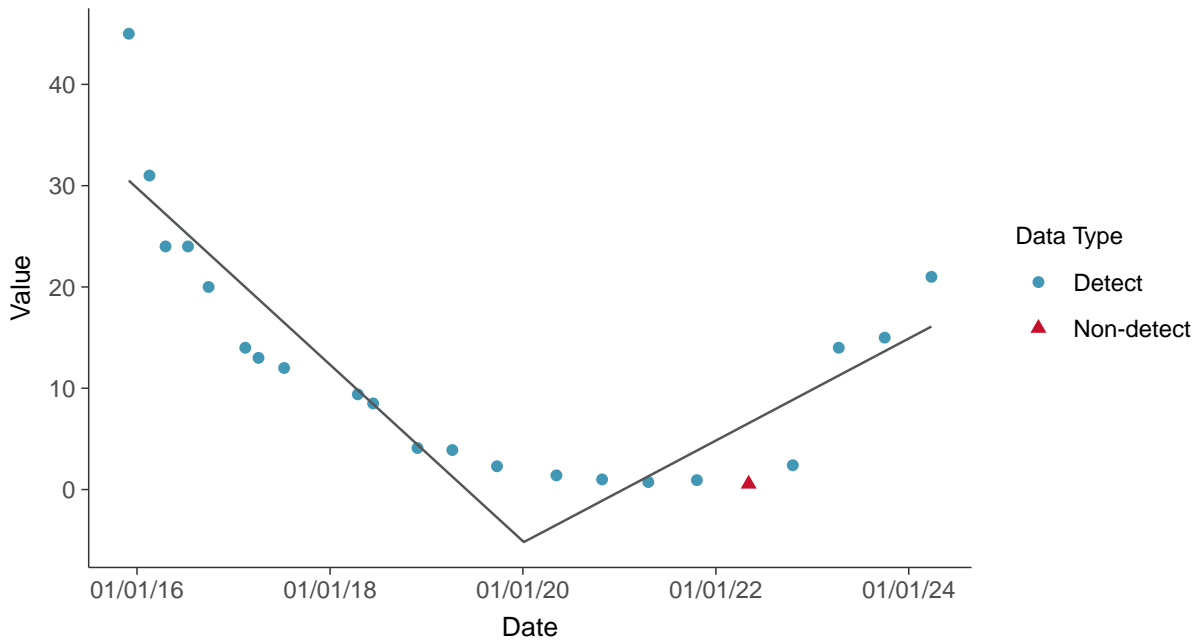
Arsenic, MW-15009 (ug/L)





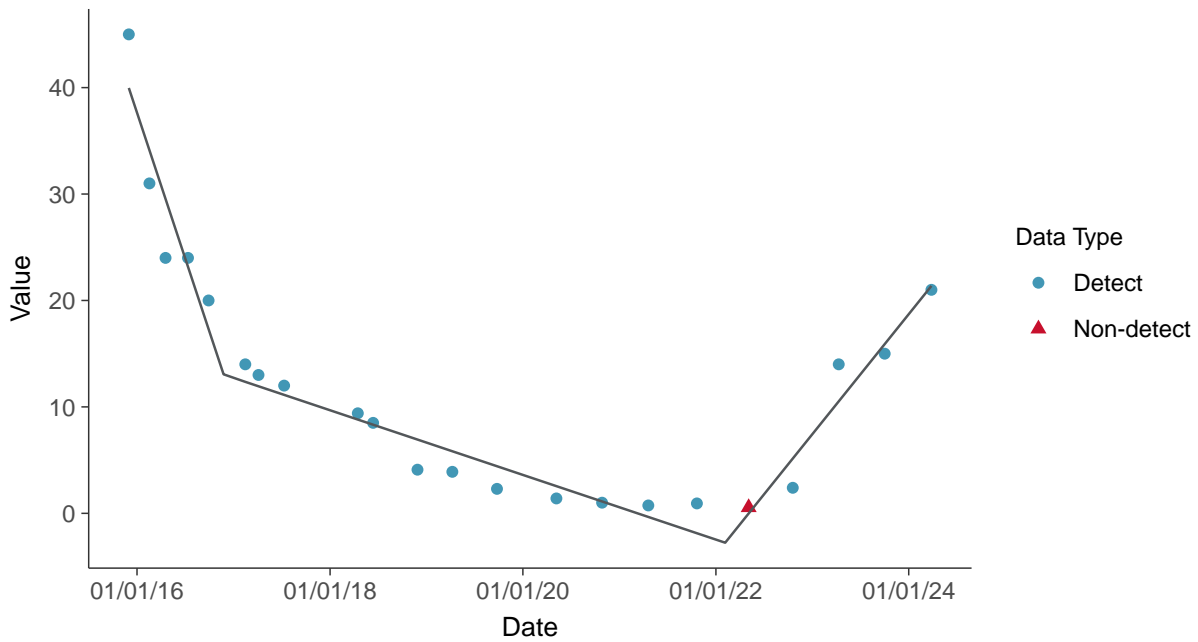
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15009 (ug/L)



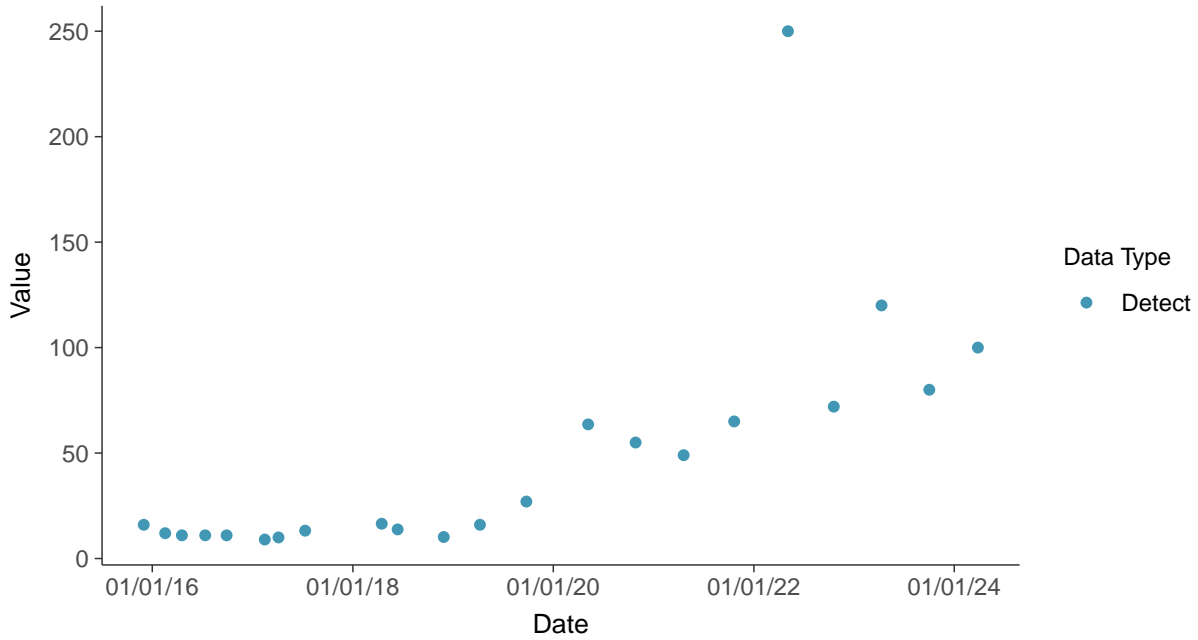


Appendix IV: Barium, MW-15009

ID: 01_2_103

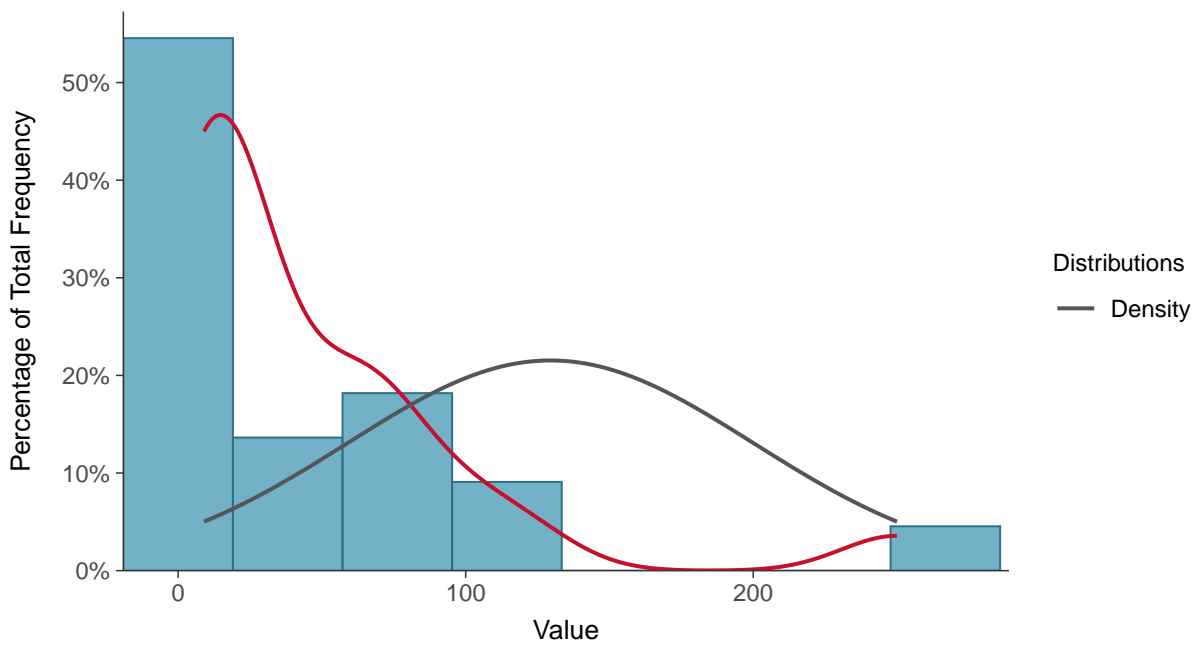
Scatter Plot

Barium, MW-15009 (ug/L)



Histogram

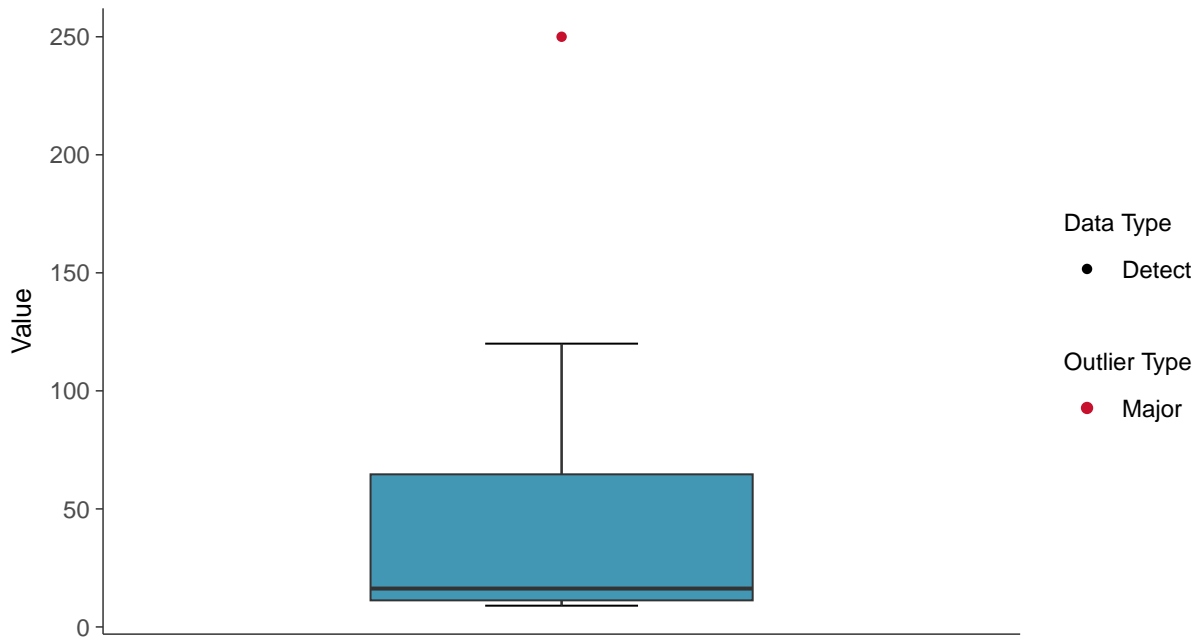
Barium, MW-15009 (ug/L)





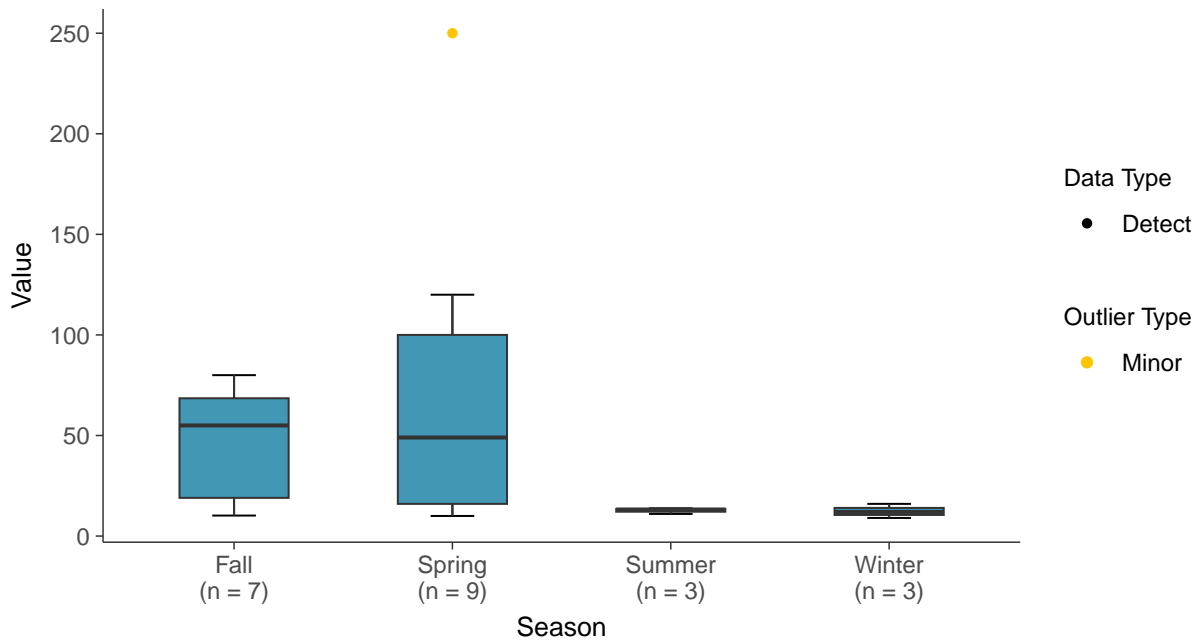
Boxplot

Barium, MW-15009 (ug/L)



Boxplot by Season

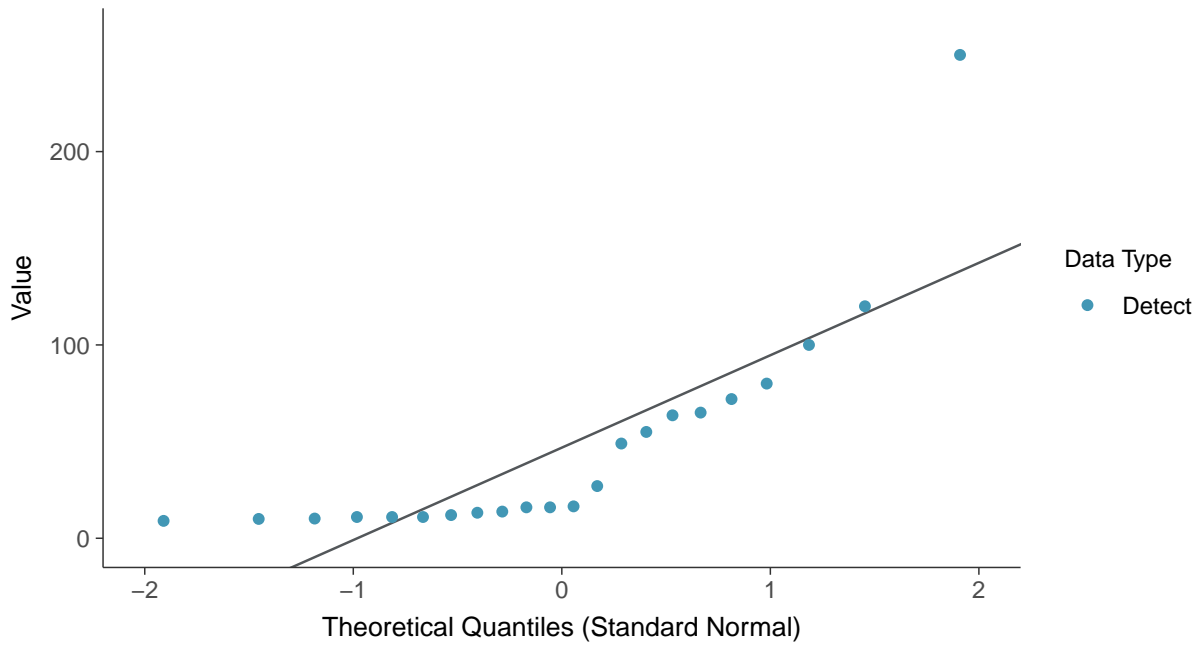
Barium, MW-15009 (ug/L)





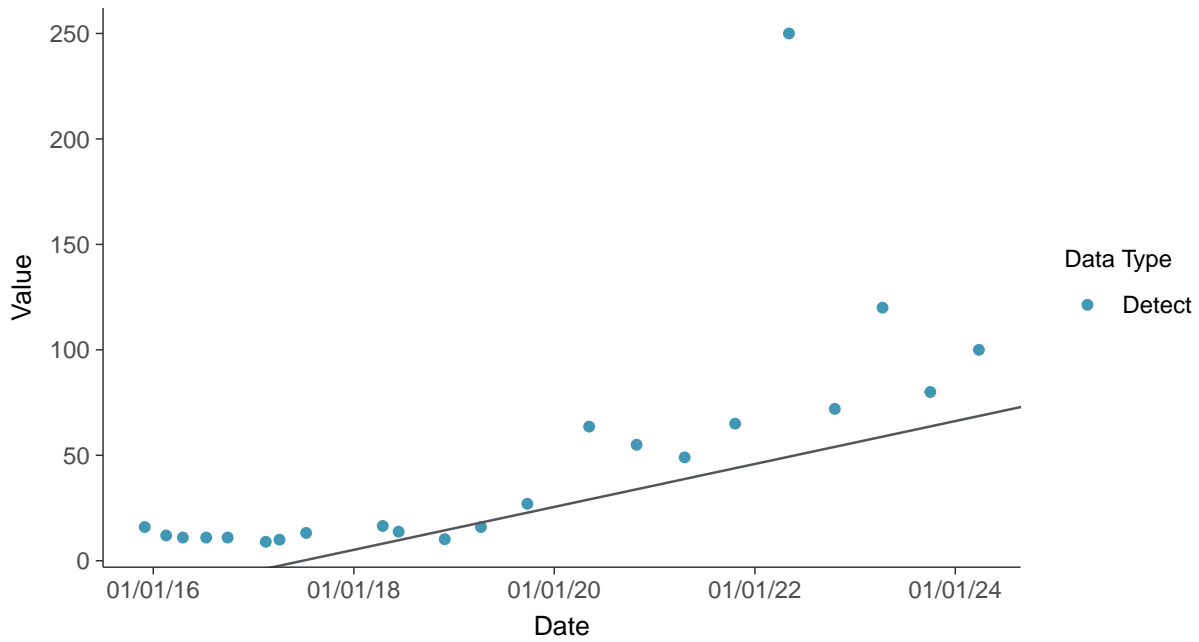
Normal Q-Q plot

Barium, MW-15009 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

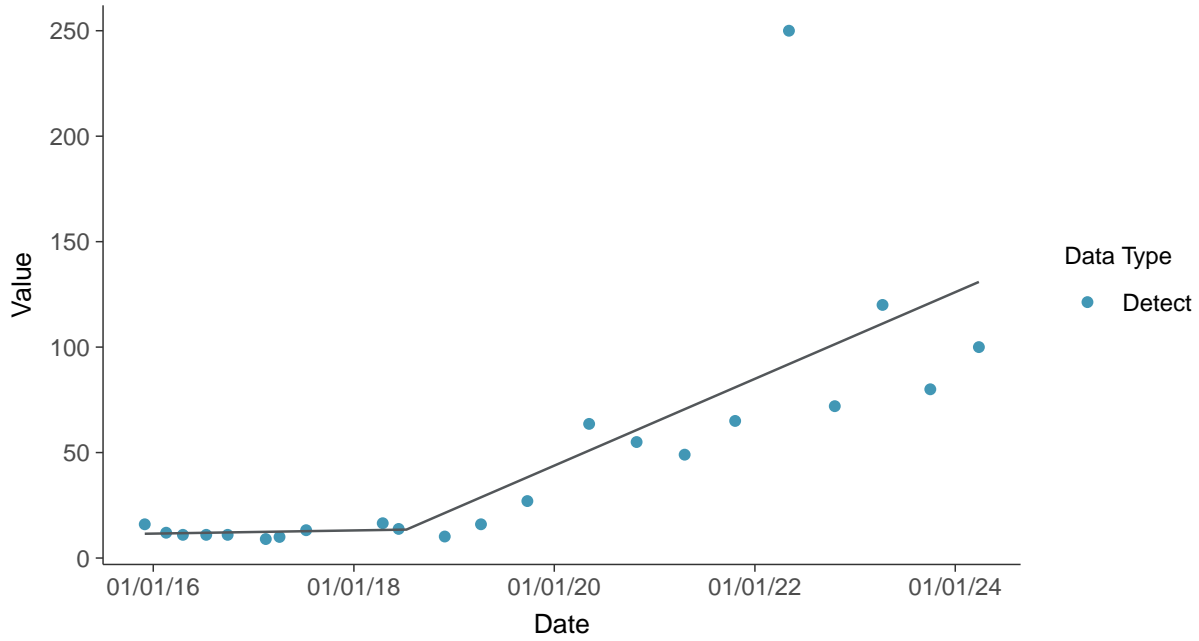
Barium, MW-15009 (ug/L)





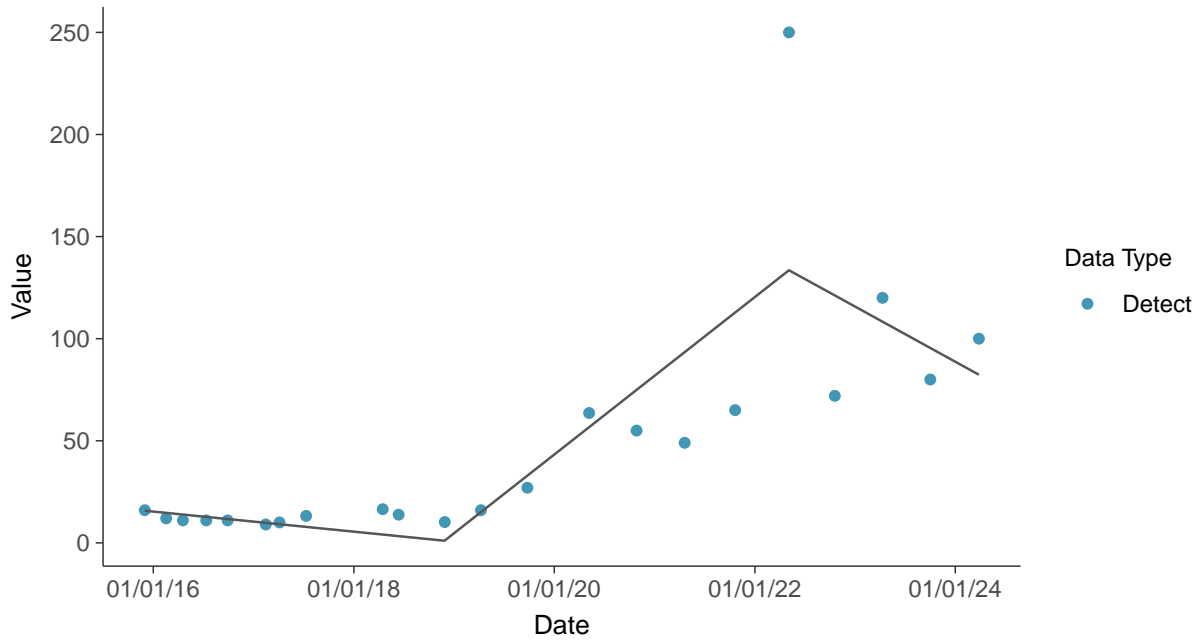
Trend Regression: Piecewise Linear-Linear

Barium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

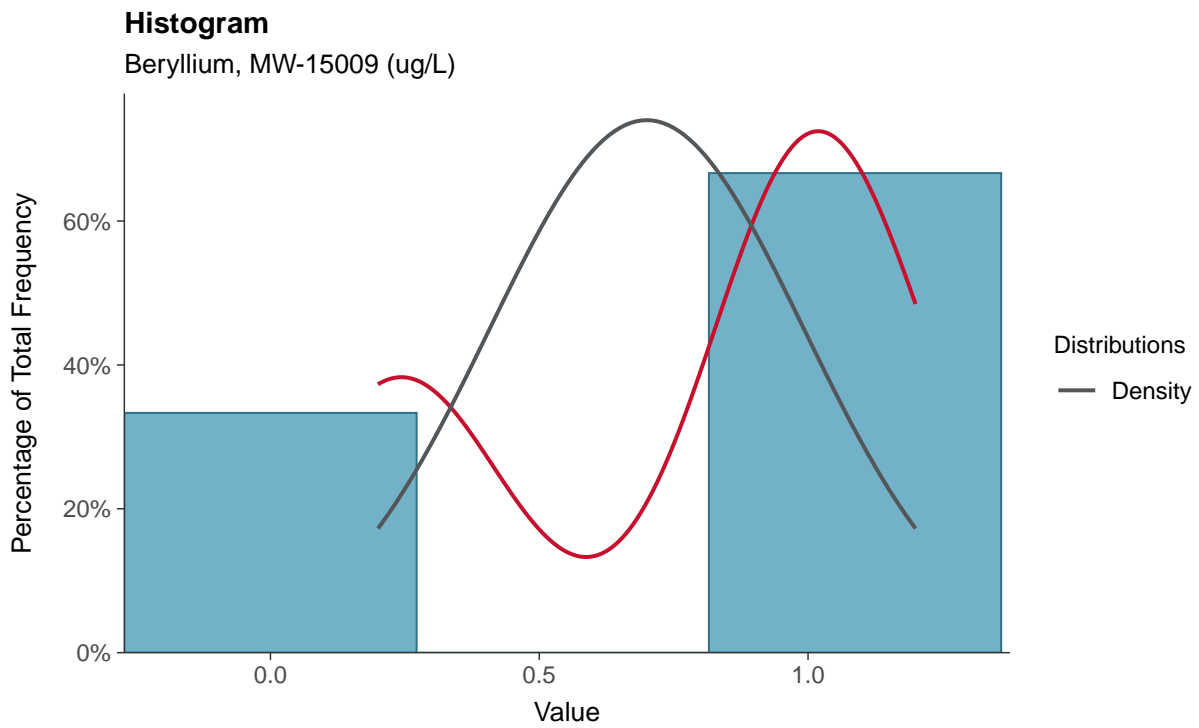
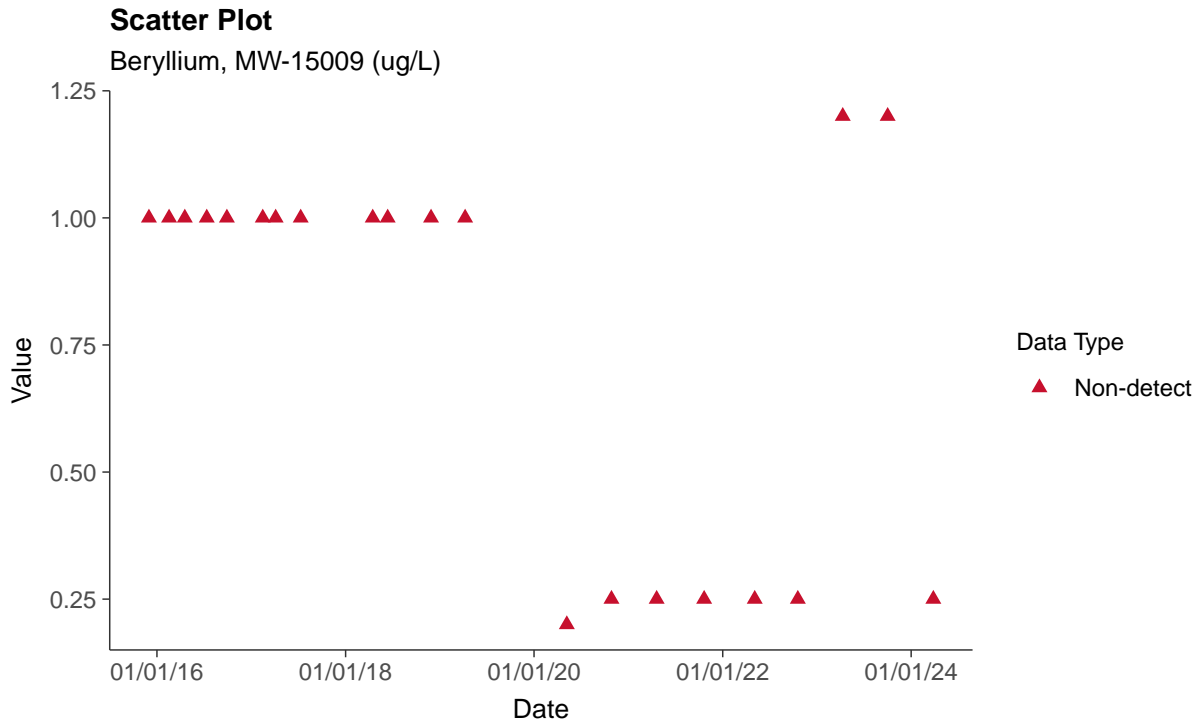
Barium, MW-15009 (ug/L)





Appendix IV: Beryllium, MW-15009

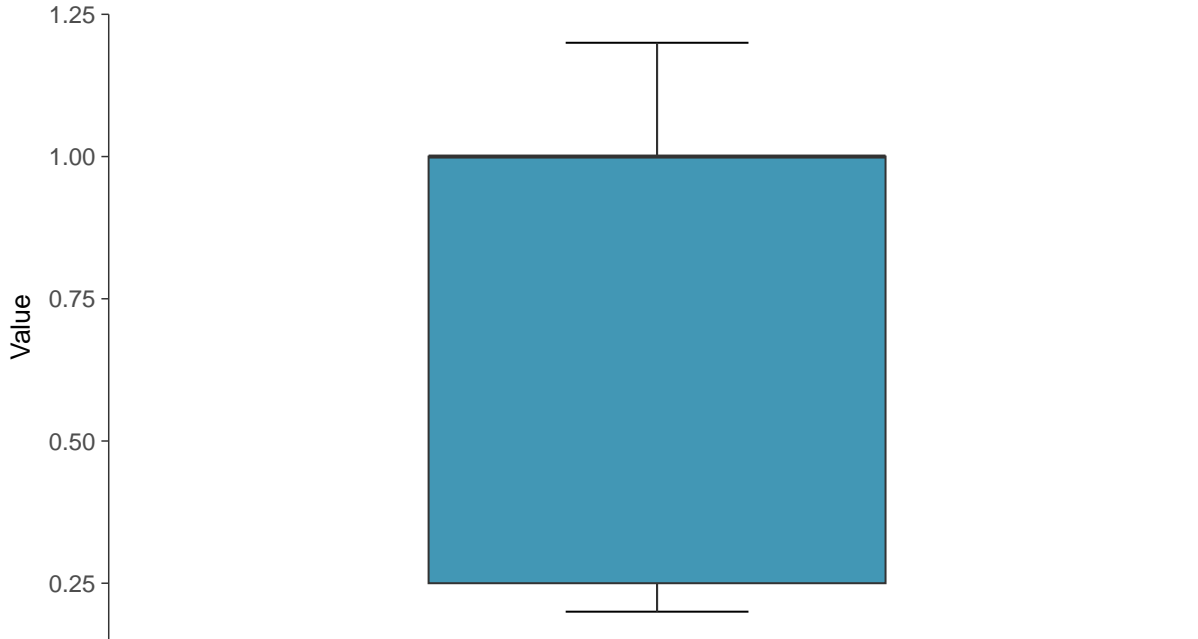
ID: 01_2_104





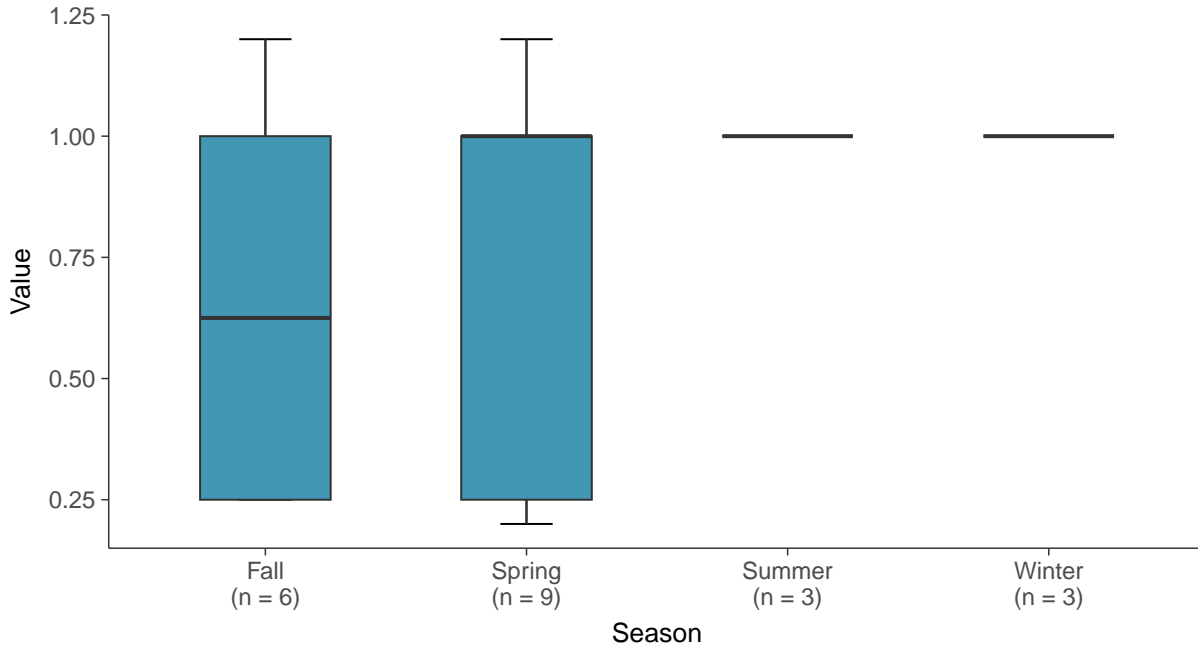
Boxplot

Beryllium, MW-15009 (ug/L)



Boxplot by Season

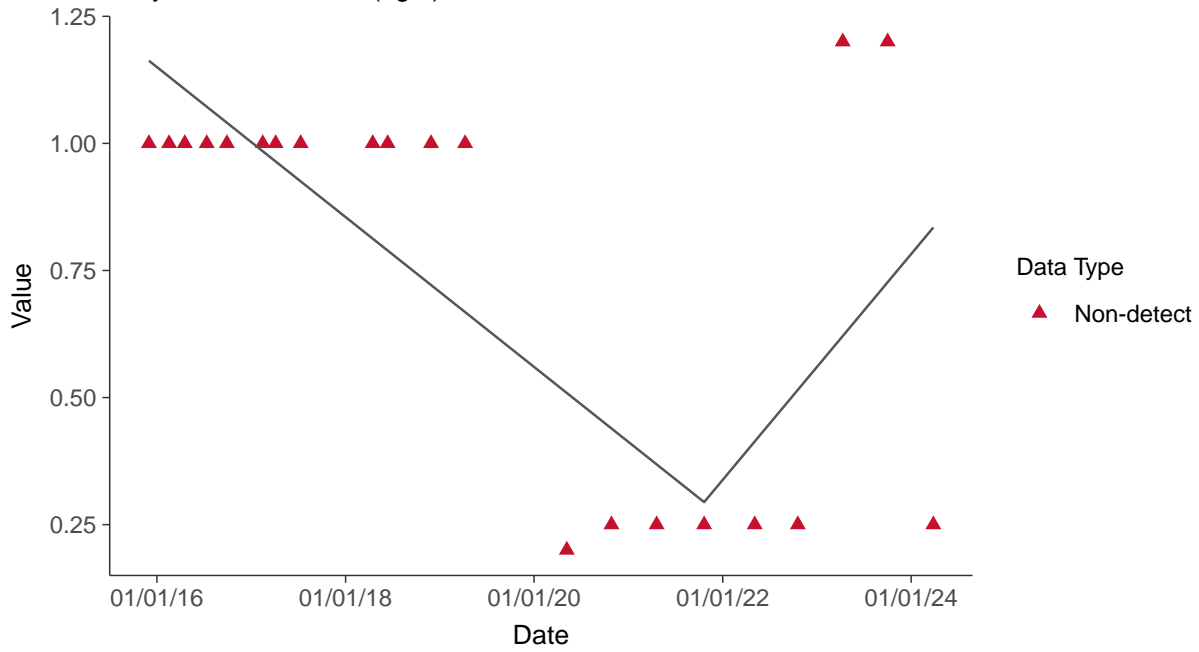
Beryllium, MW-15009 (ug/L)





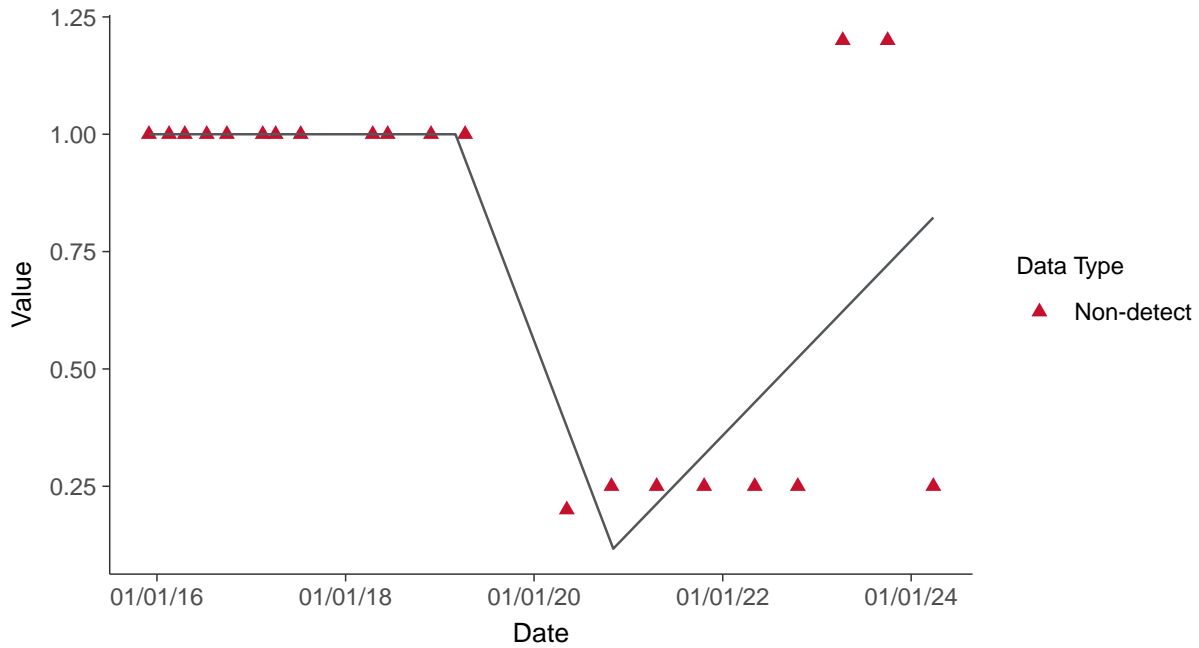
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

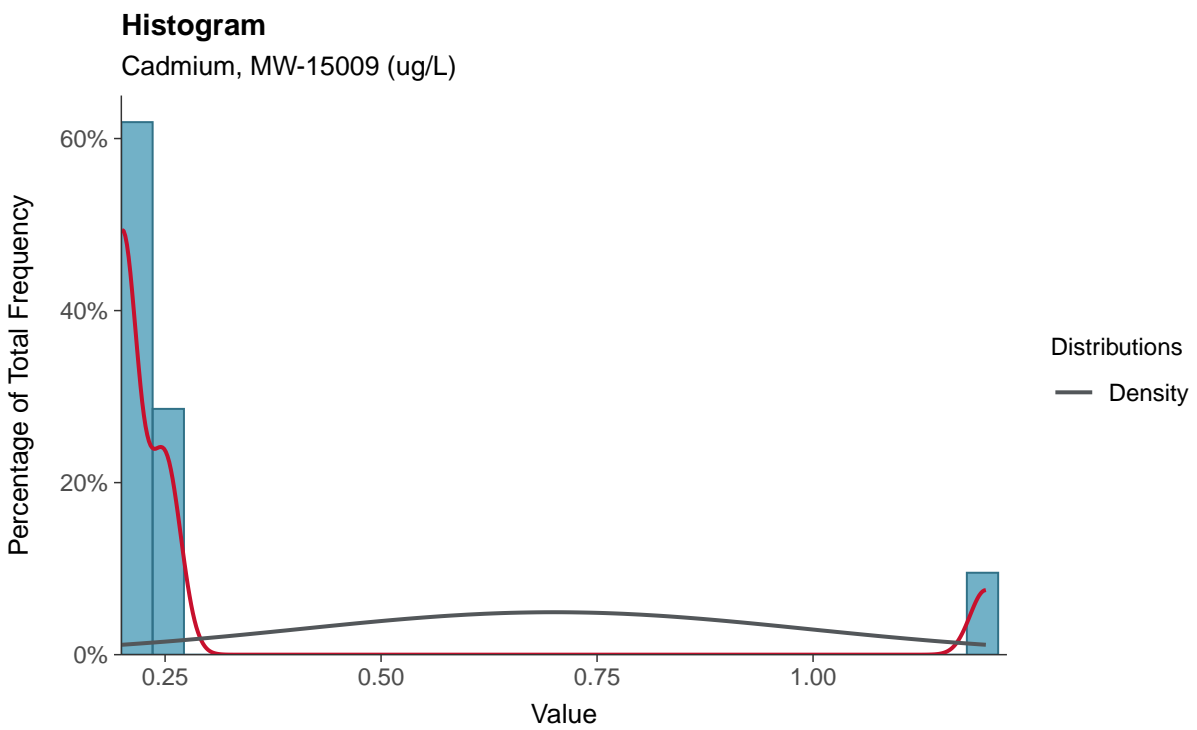
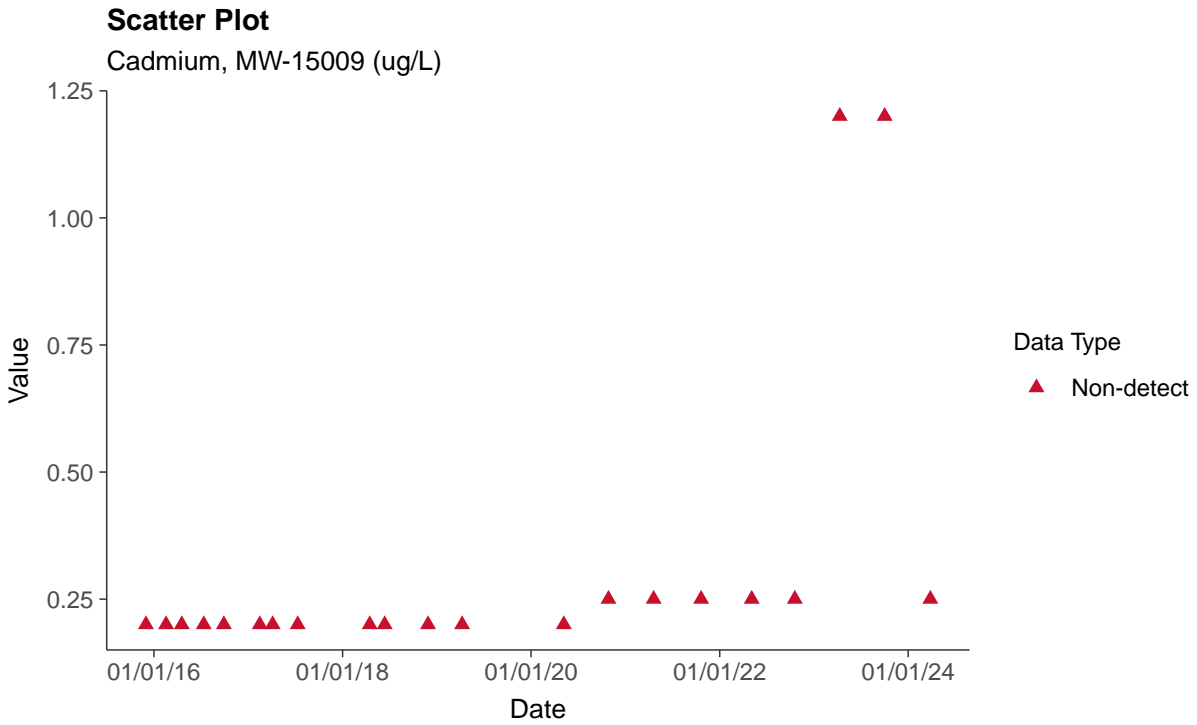
Beryllium, MW-15009 (ug/L)





Appendix IV: Cadmium, MW-15009

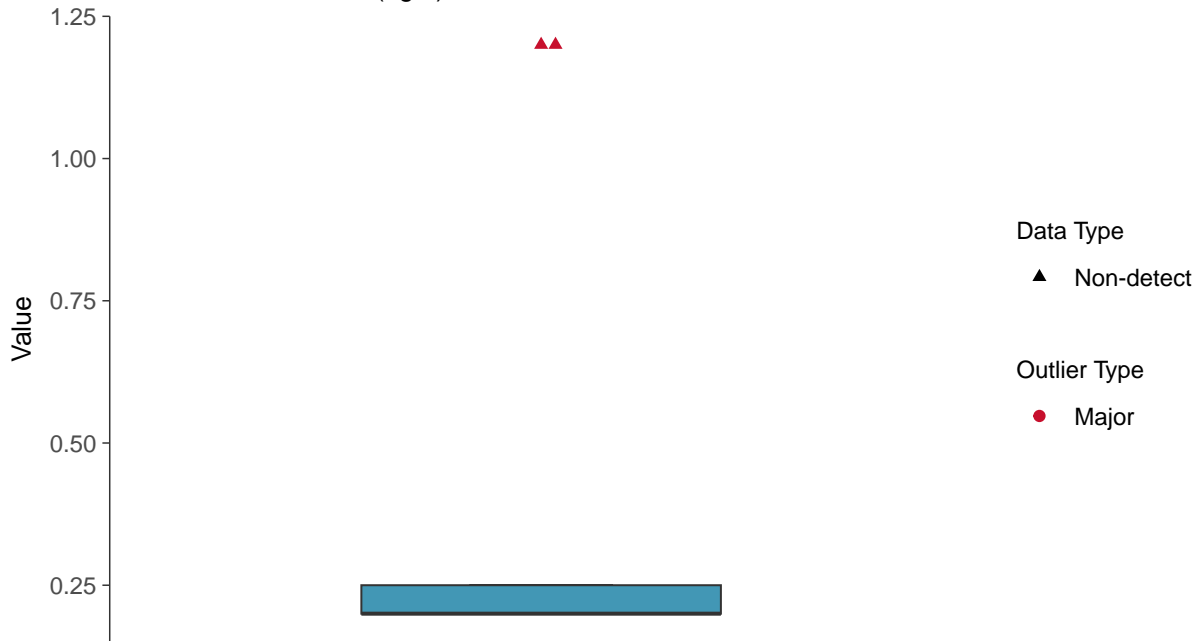
ID: 01_2_106





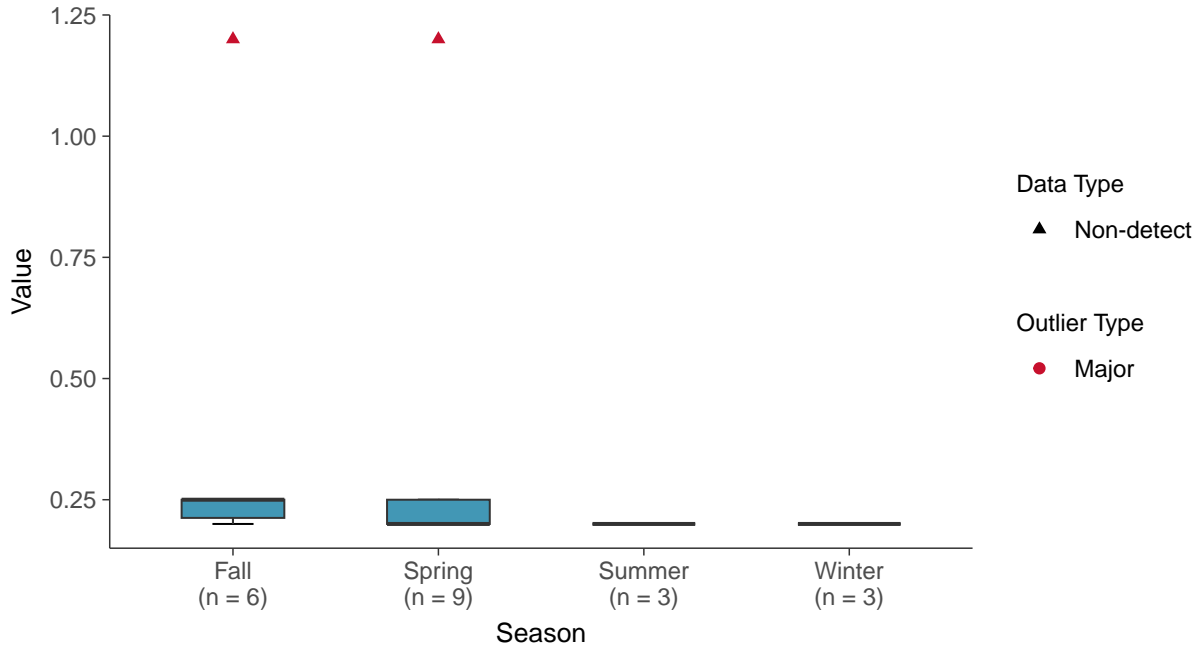
Boxplot

Cadmium, MW-15009 (ug/L)



Boxplot by Season

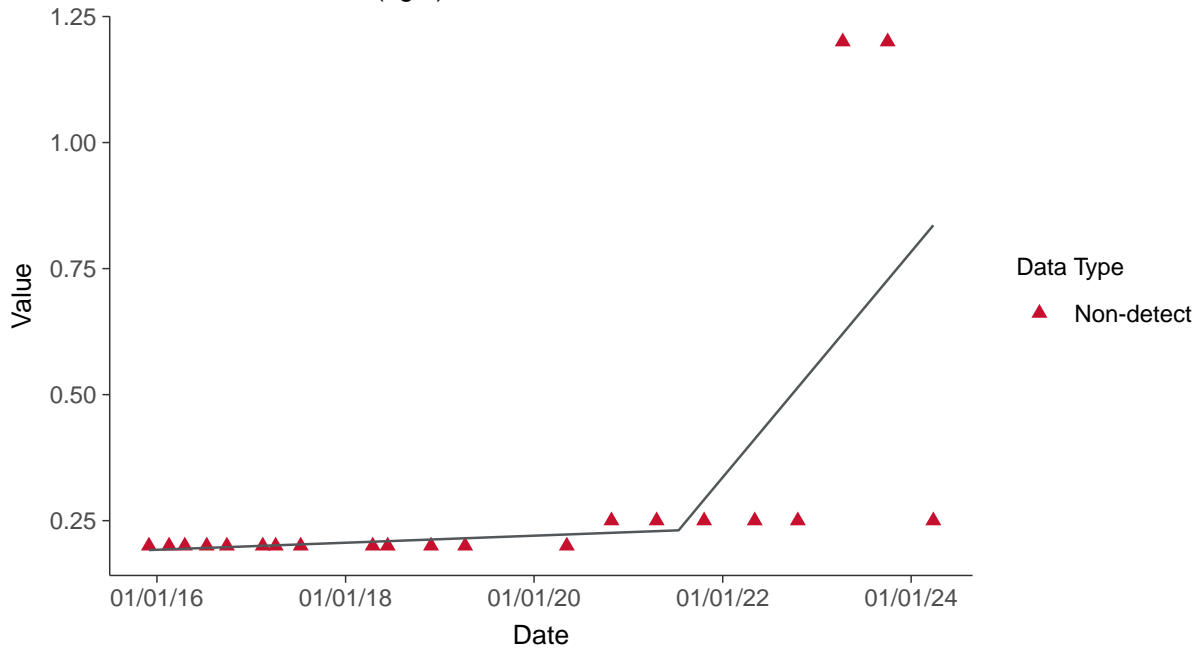
Cadmium, MW-15009 (ug/L)





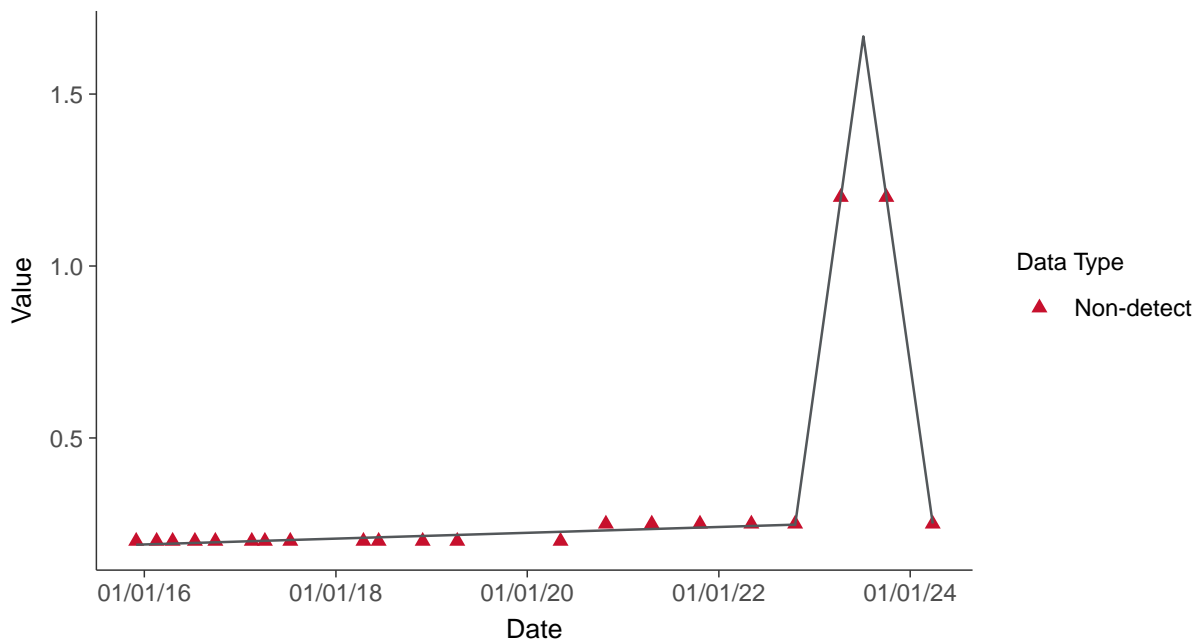
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

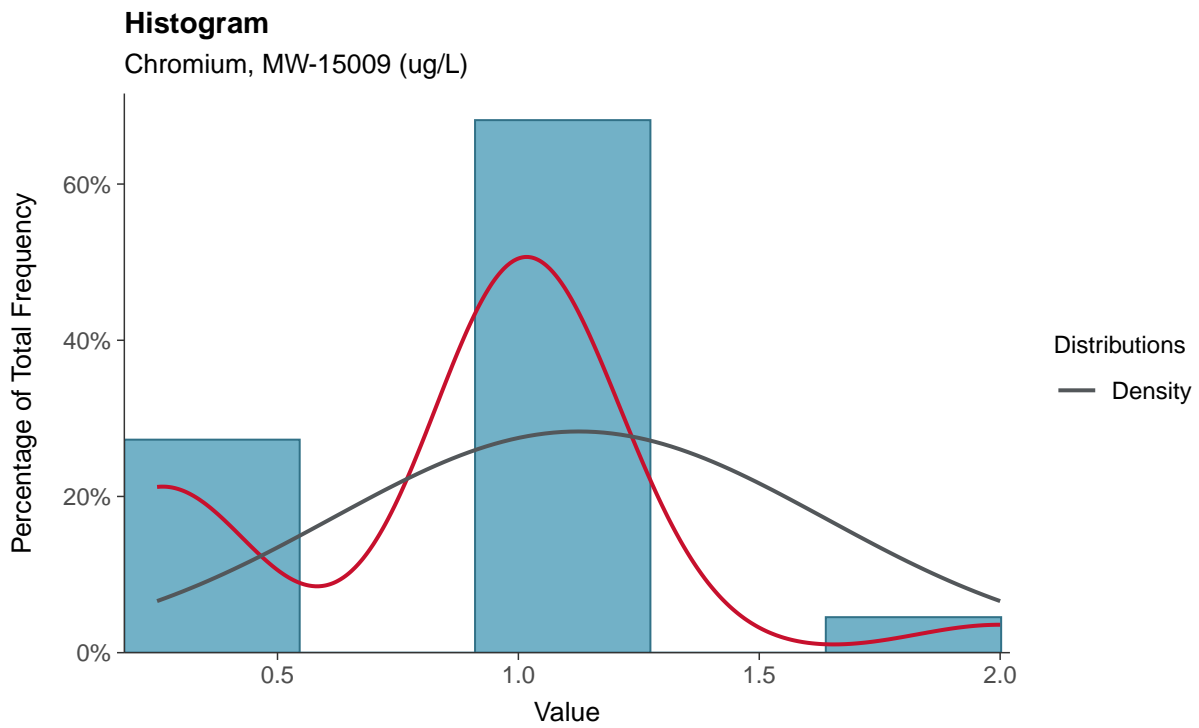
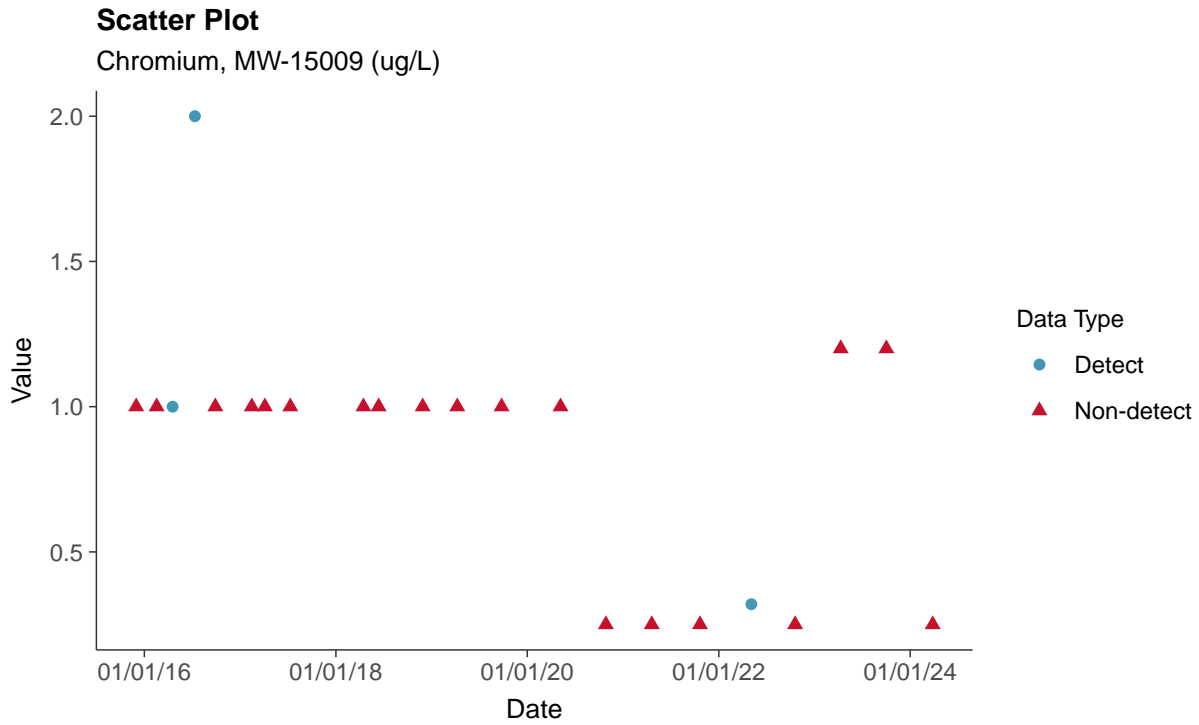
Cadmium, MW-15009 (ug/L)





Appendix IV: Chromium, MW-15009

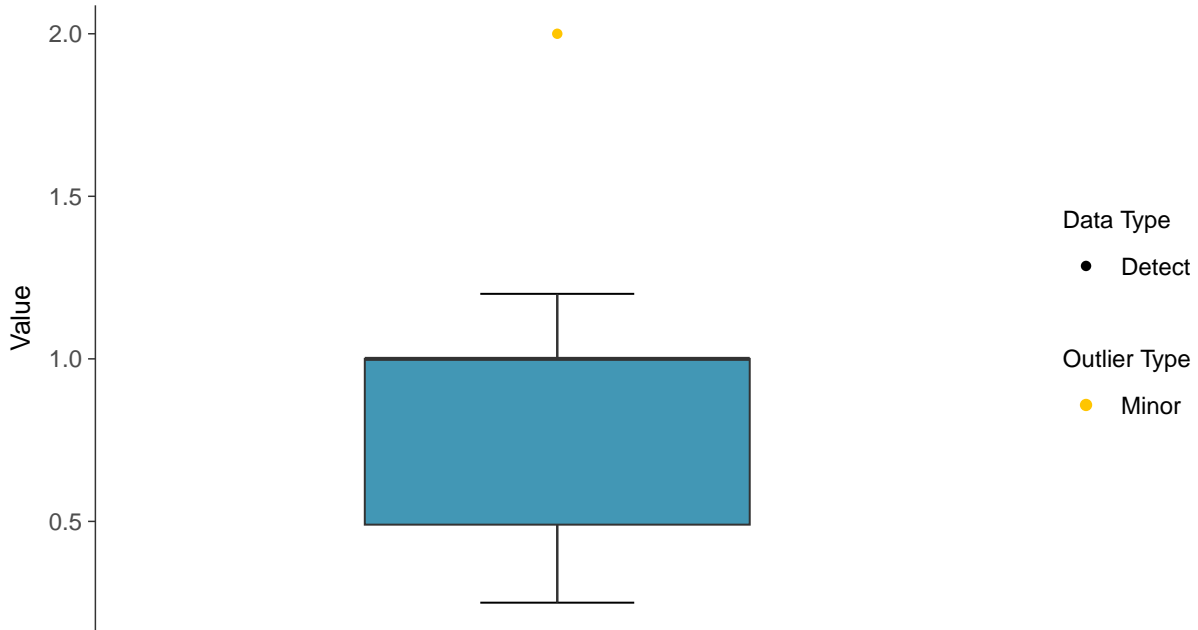
ID: 01_2_109





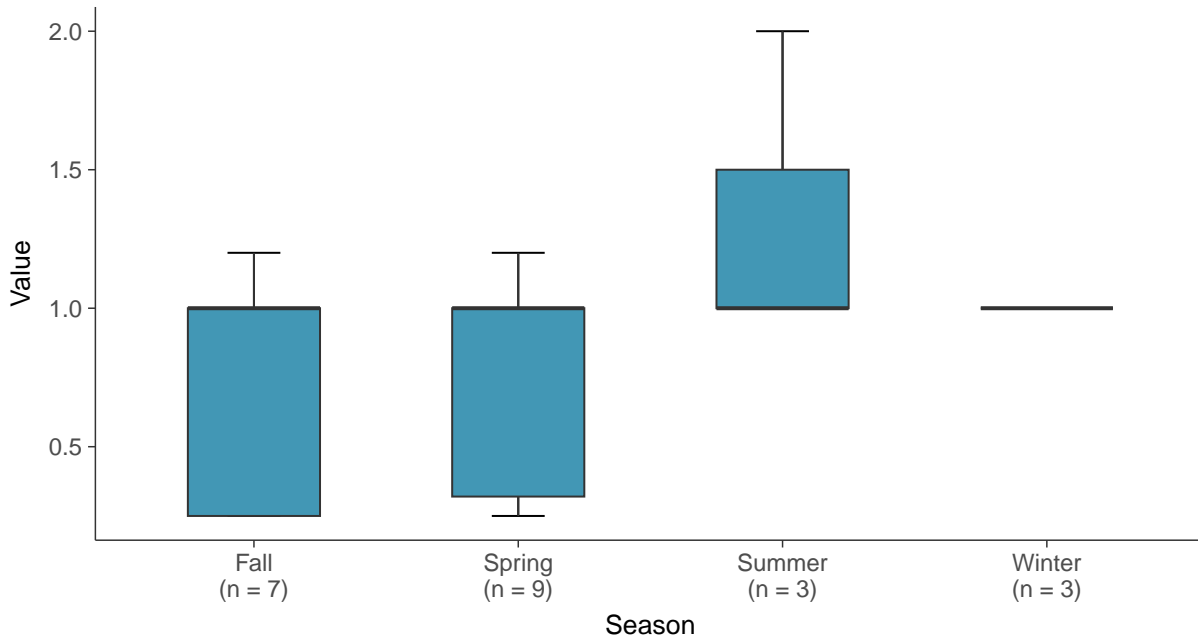
Boxplot

Chromium, MW-15009 (ug/L)



Boxplot by Season

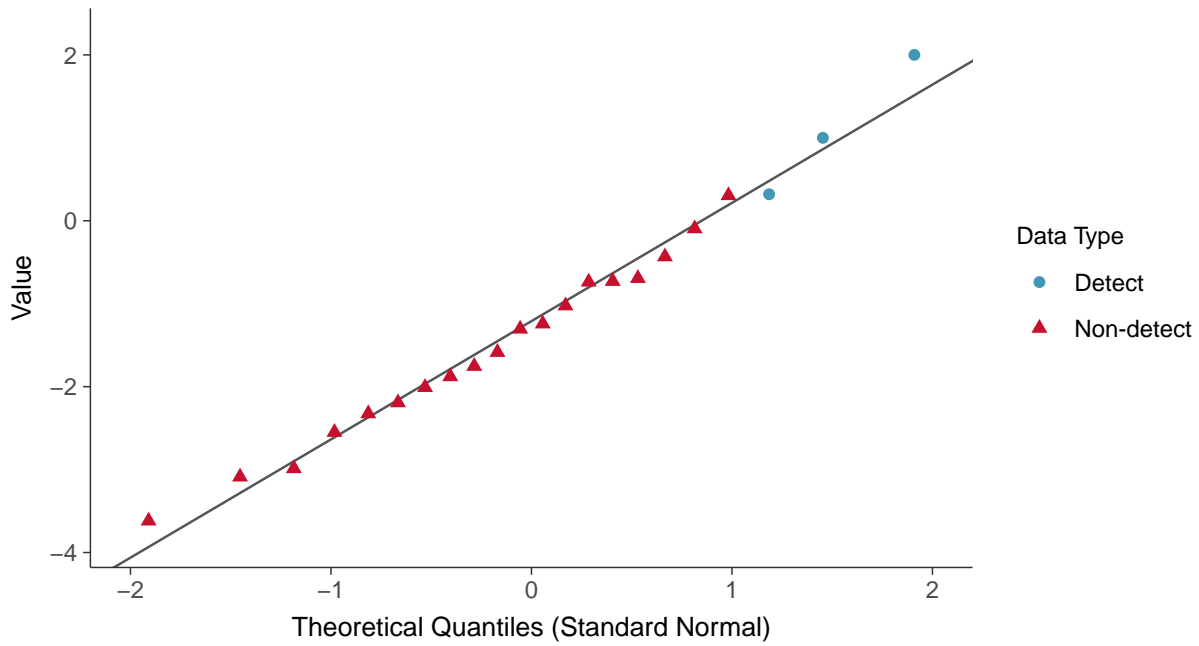
Chromium, MW-15009 (ug/L)





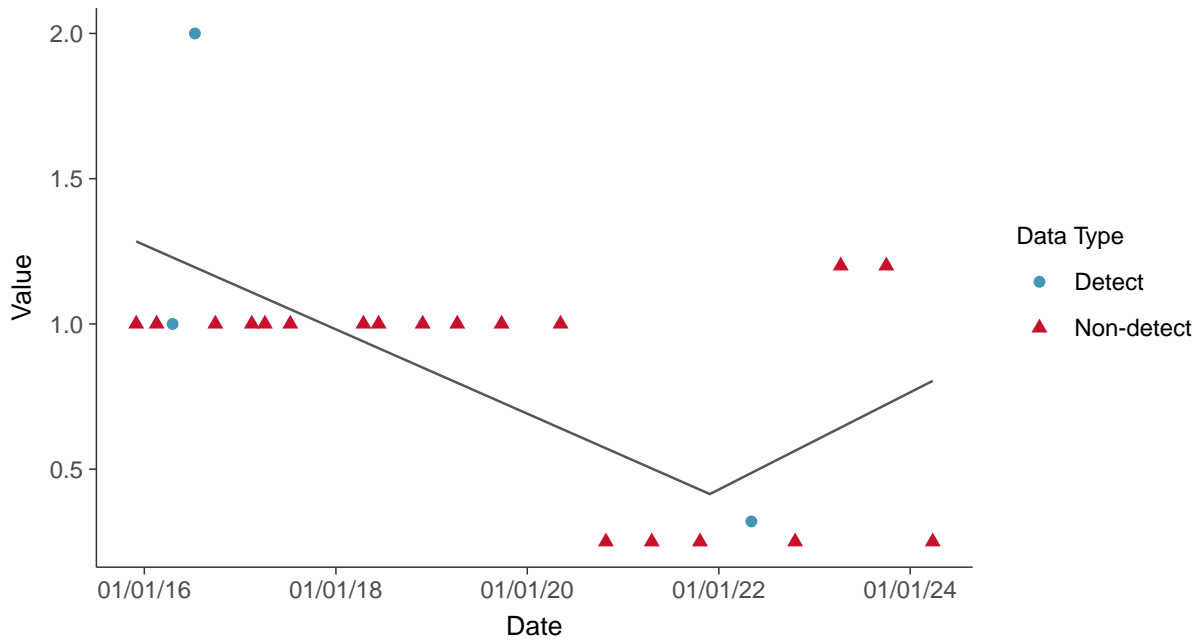
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear

Chromium, MW-15009 (ug/L)



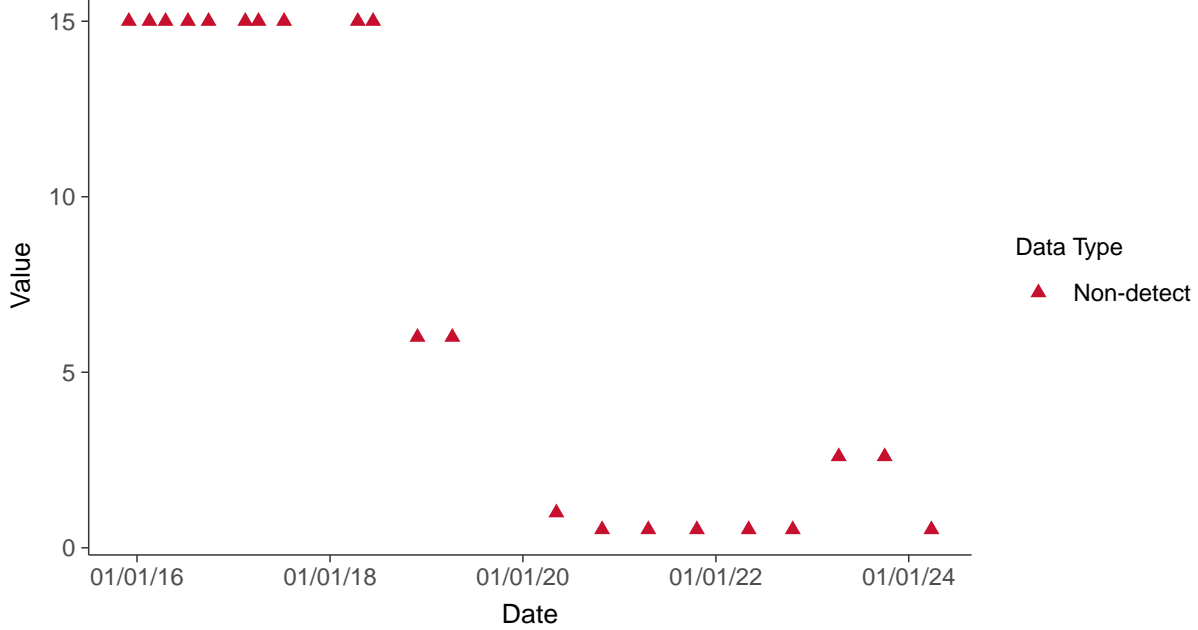


Appendix IV: Cobalt, MW-15009

ID: 01_2_110

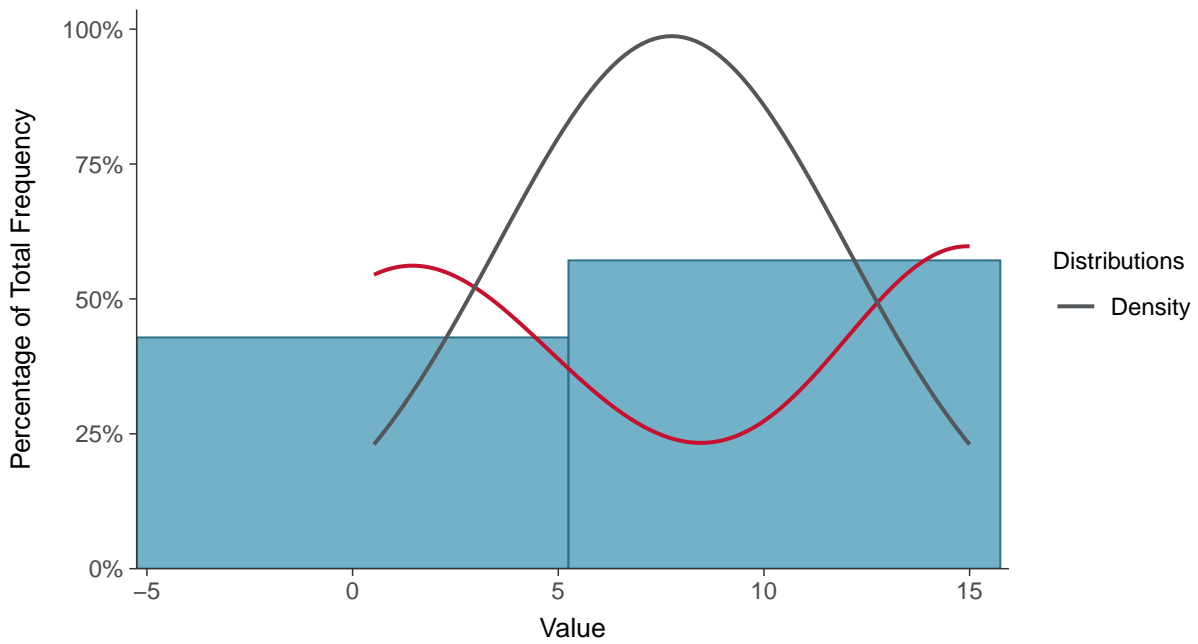
Scatter Plot

Cobalt, MW-15009 (ug/L)



Histogram

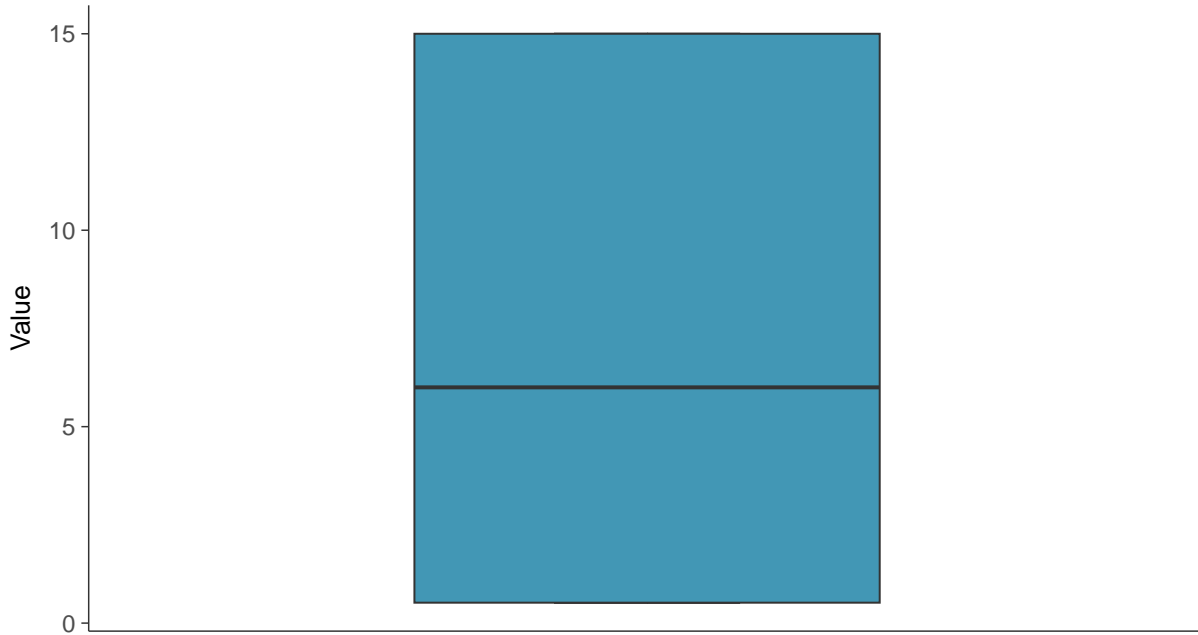
Cobalt, MW-15009 (ug/L)





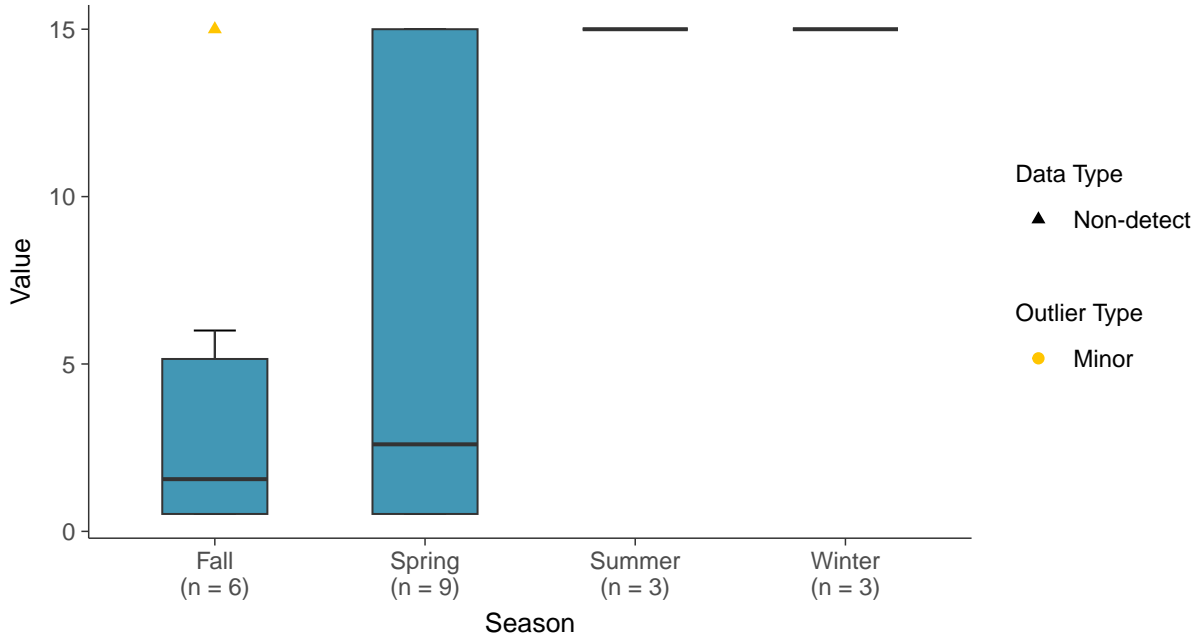
Boxplot

Cobalt, MW-15009 (ug/L)



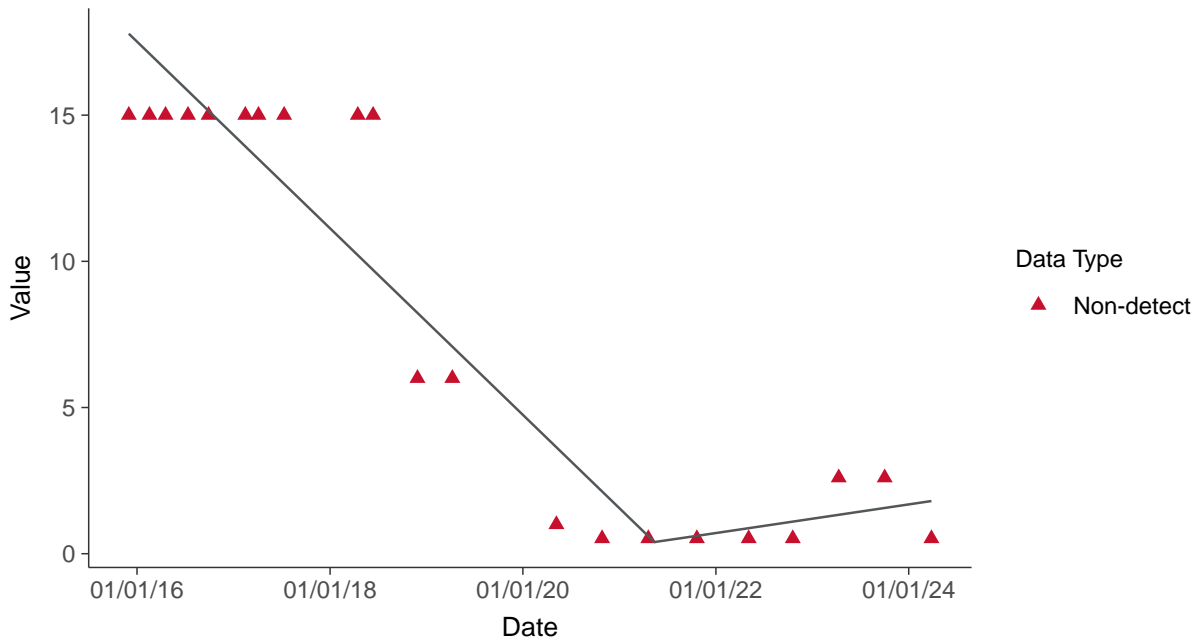
Boxplot by Season

Cobalt, MW-15009 (ug/L)

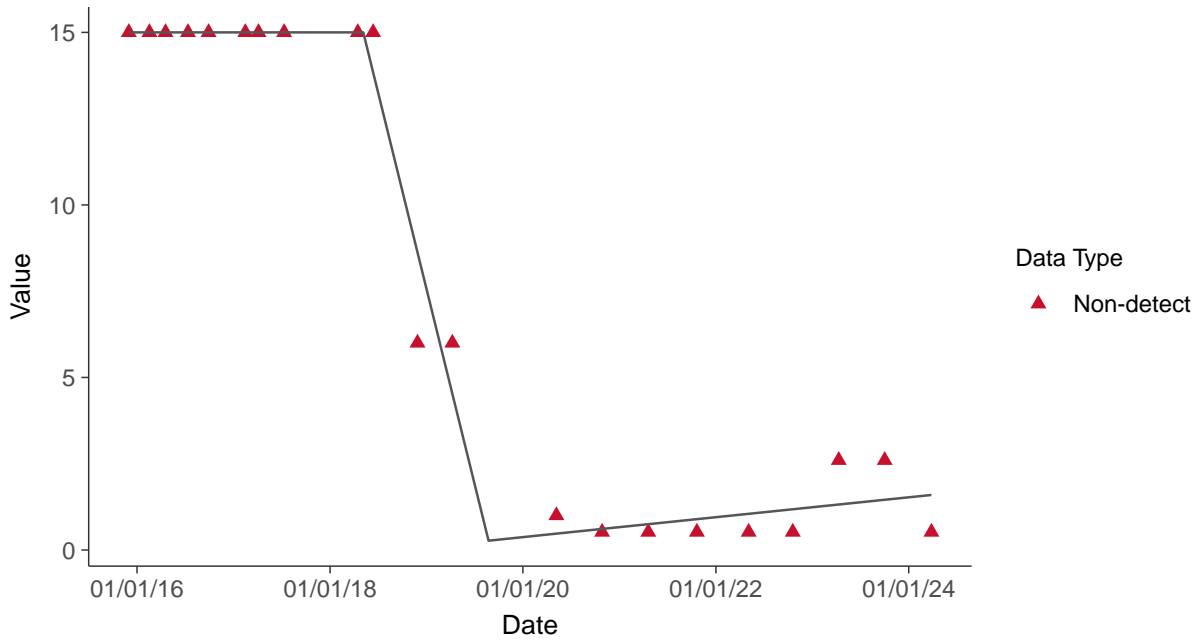




Trend Regression: Piecewise Linear-Linear
Cobalt, MW-15009 (ug/L)



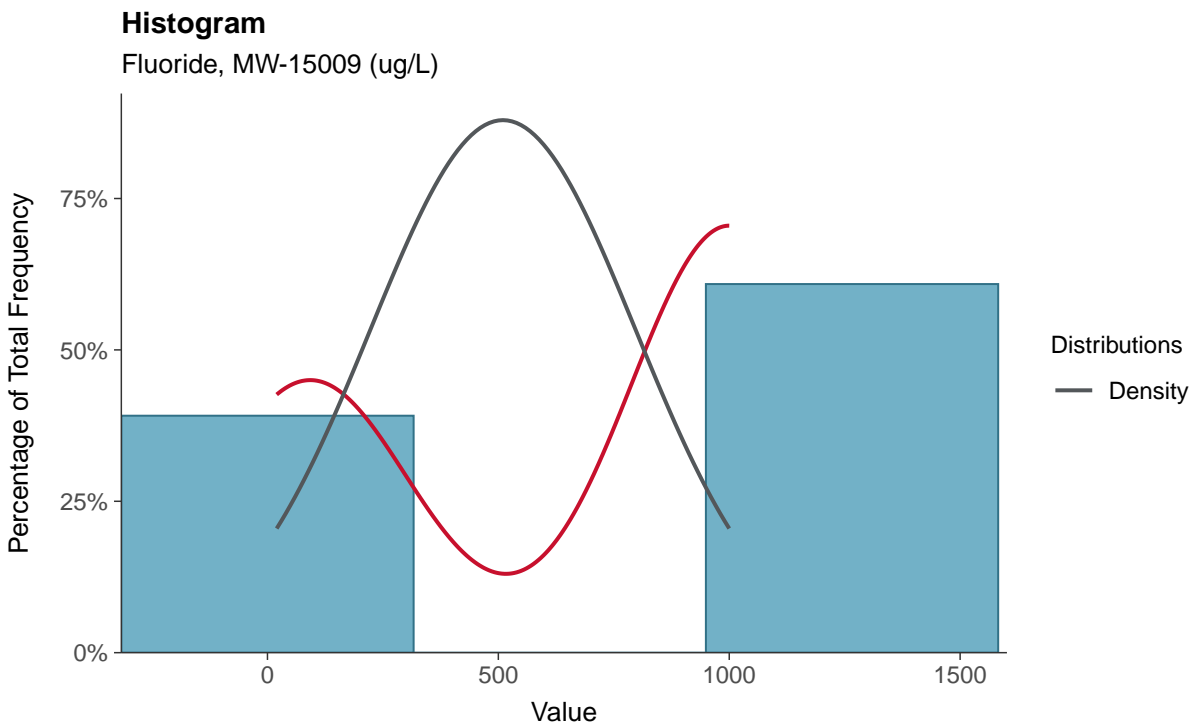
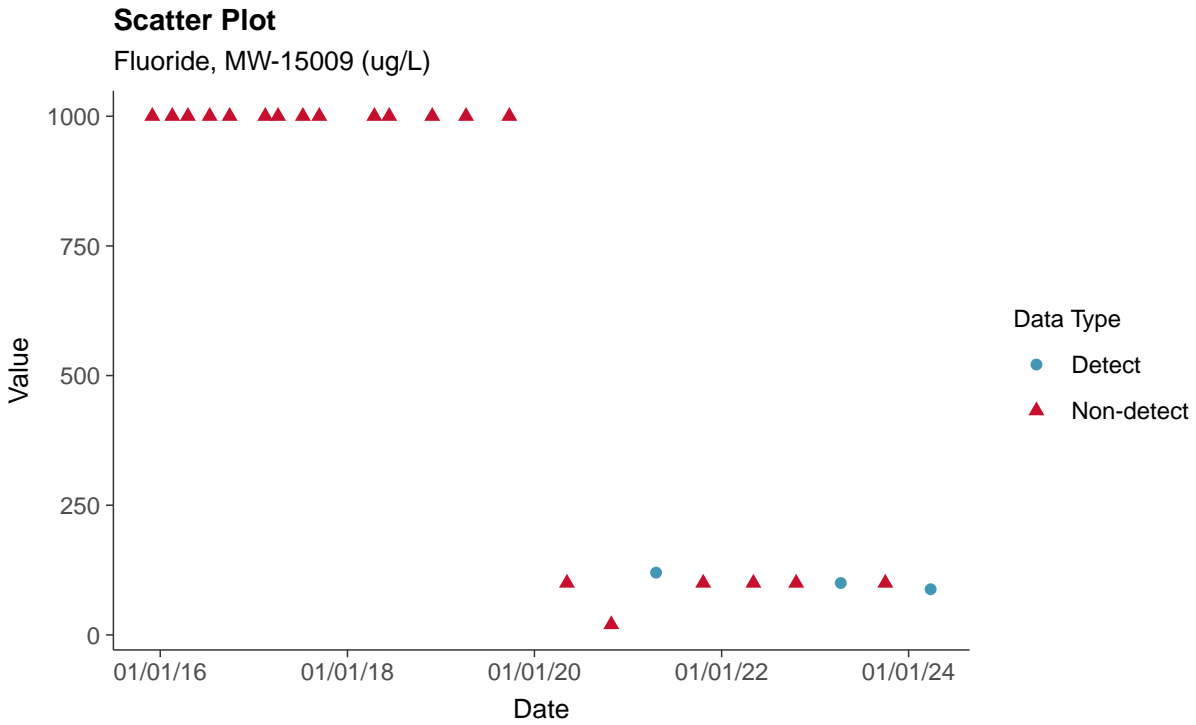
Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-15009 (ug/L)





Appendix IV: Fluoride, MW-15009

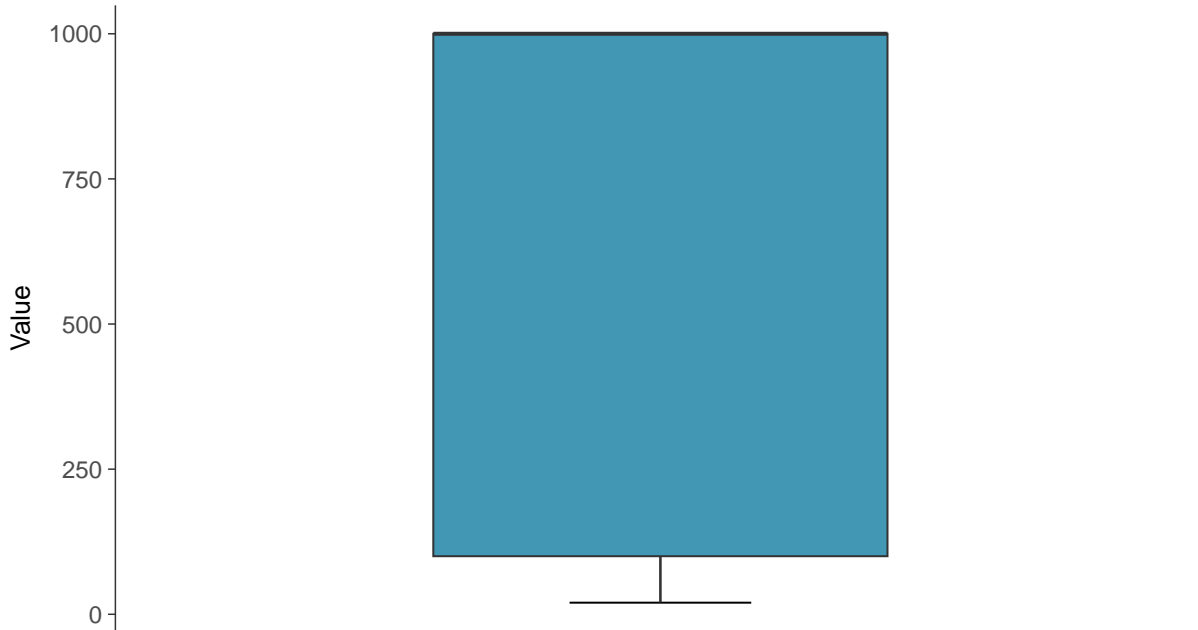
ID: 01_2_114





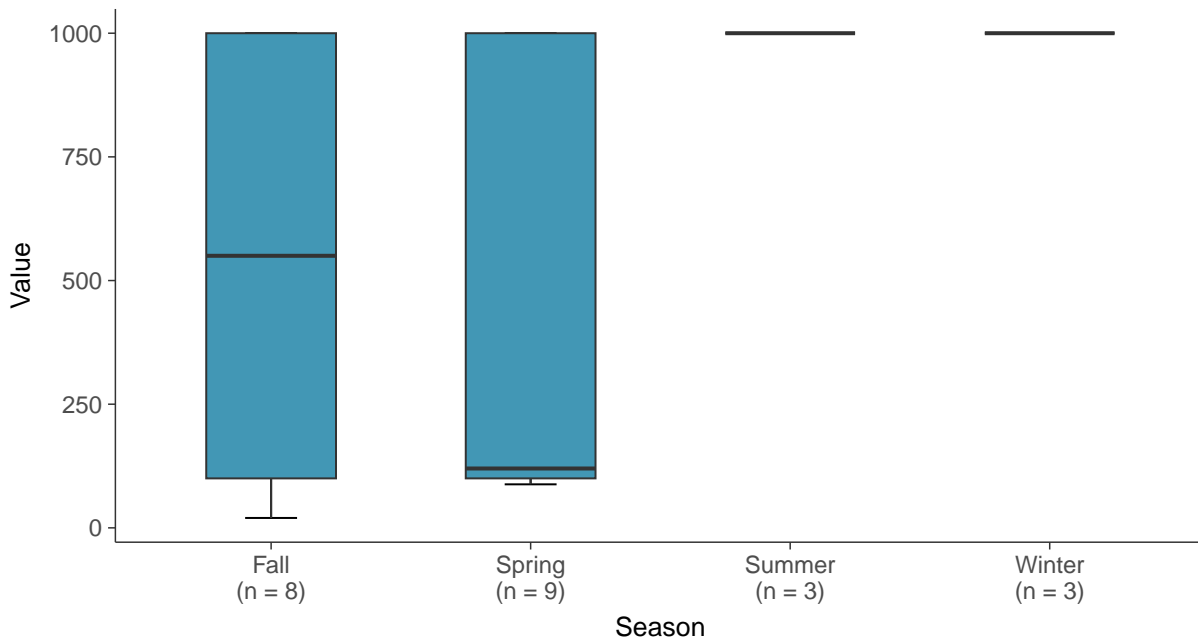
Boxplot

Fluoride, MW-15009 (ug/L)



Boxplot by Season

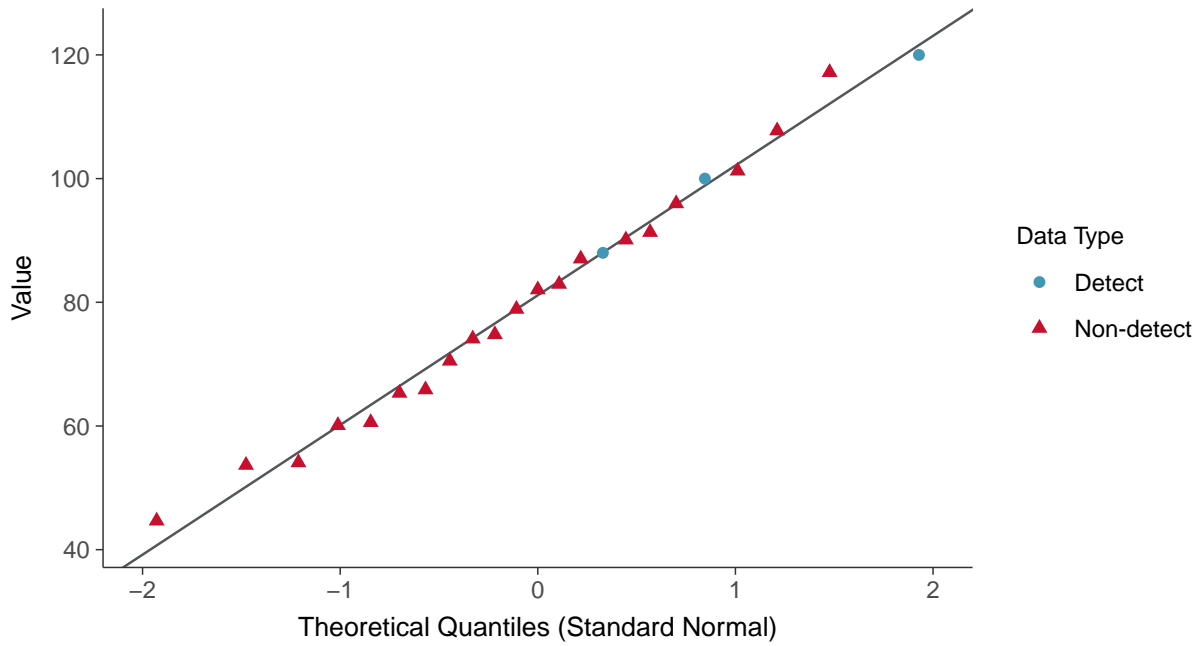
Fluoride, MW-15009 (ug/L)





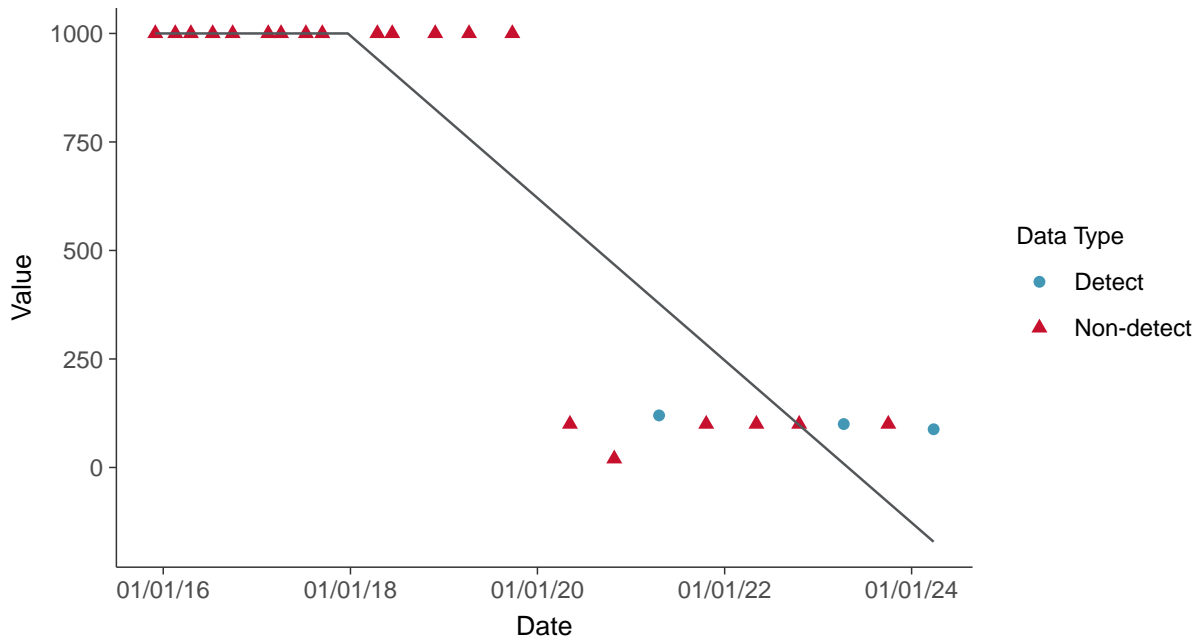
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear

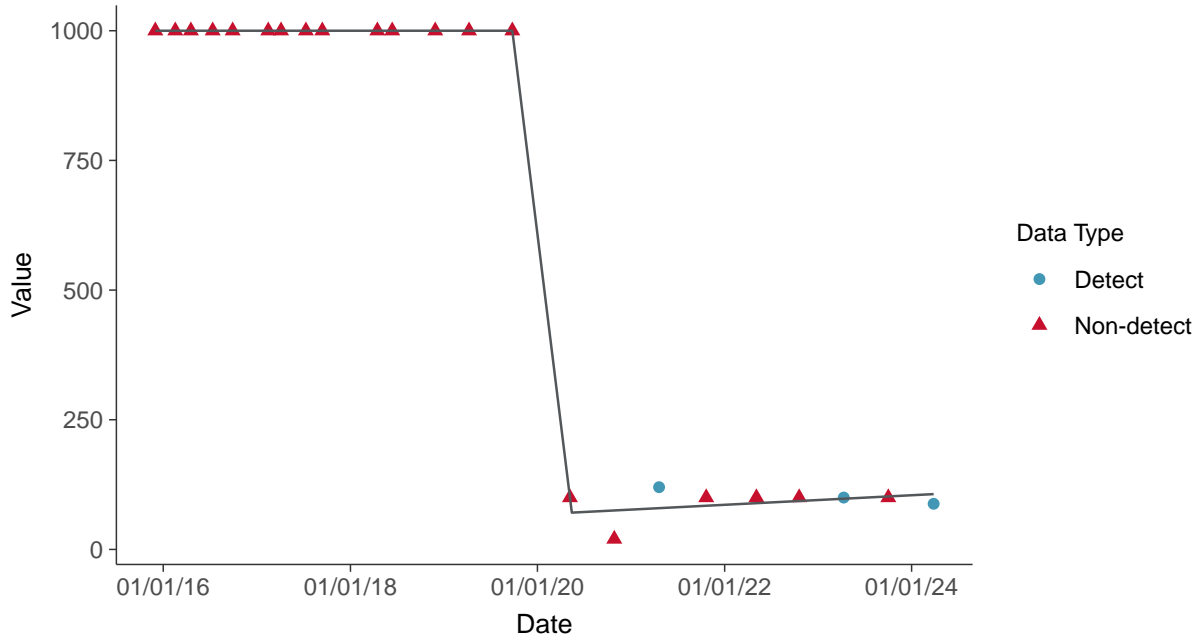
Fluoride, MW-15009 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-15009 (ug/L)



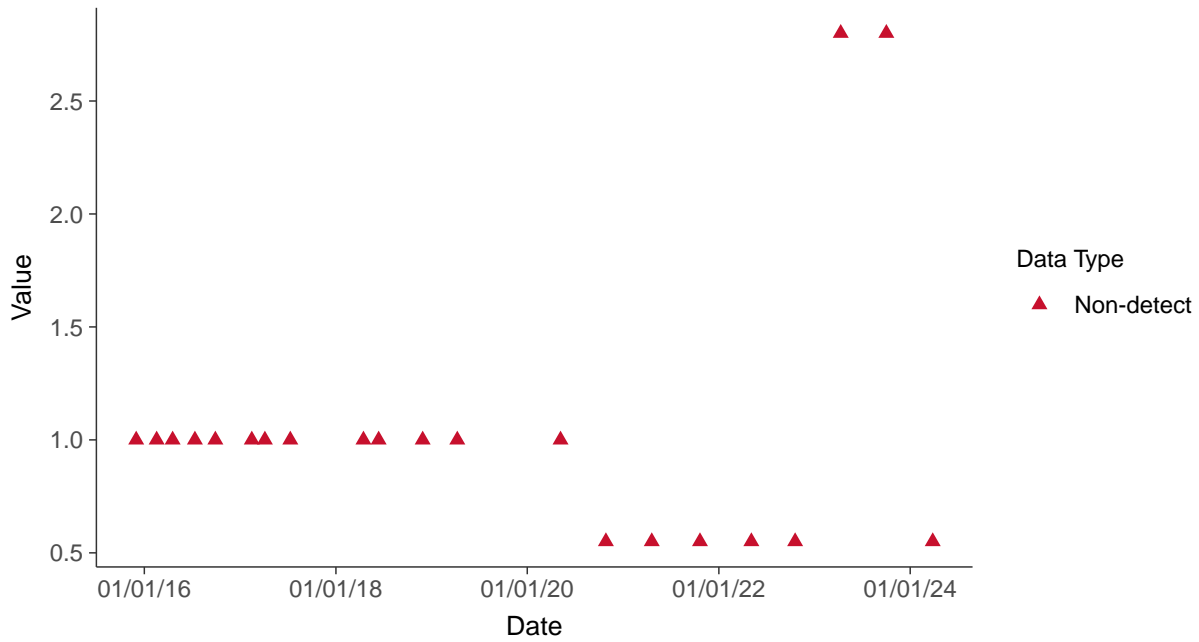


Appendix IV: Lead, MW-15009

ID: 01_2_116

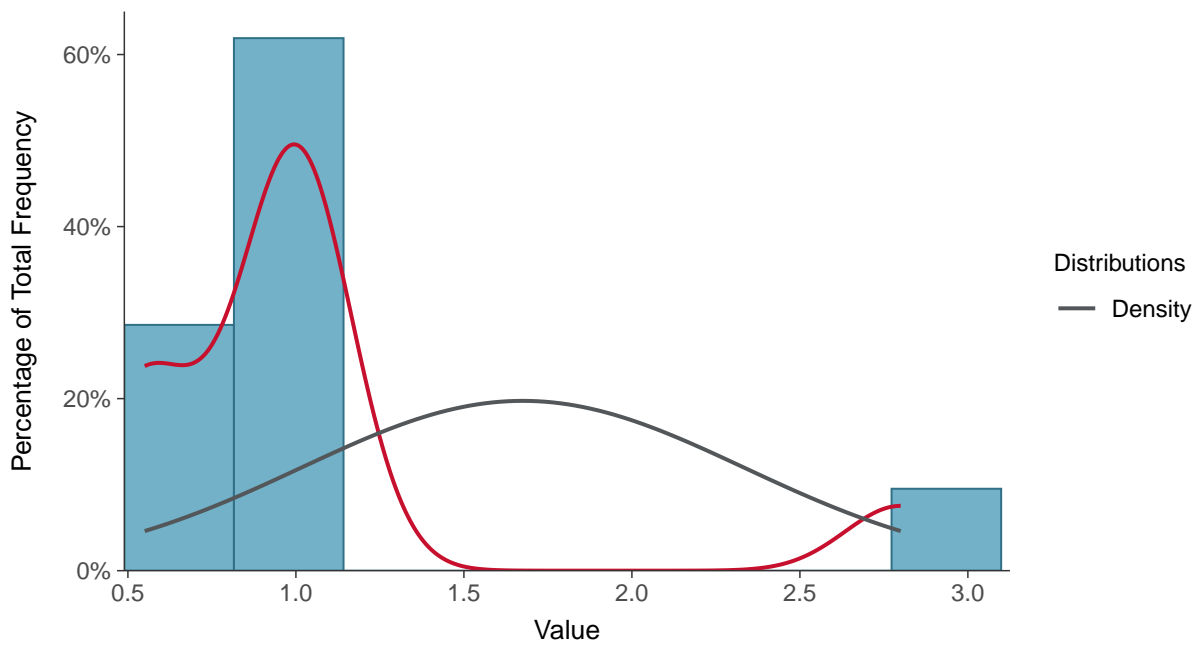
Scatter Plot

Lead, MW-15009 (ug/L)



Histogram

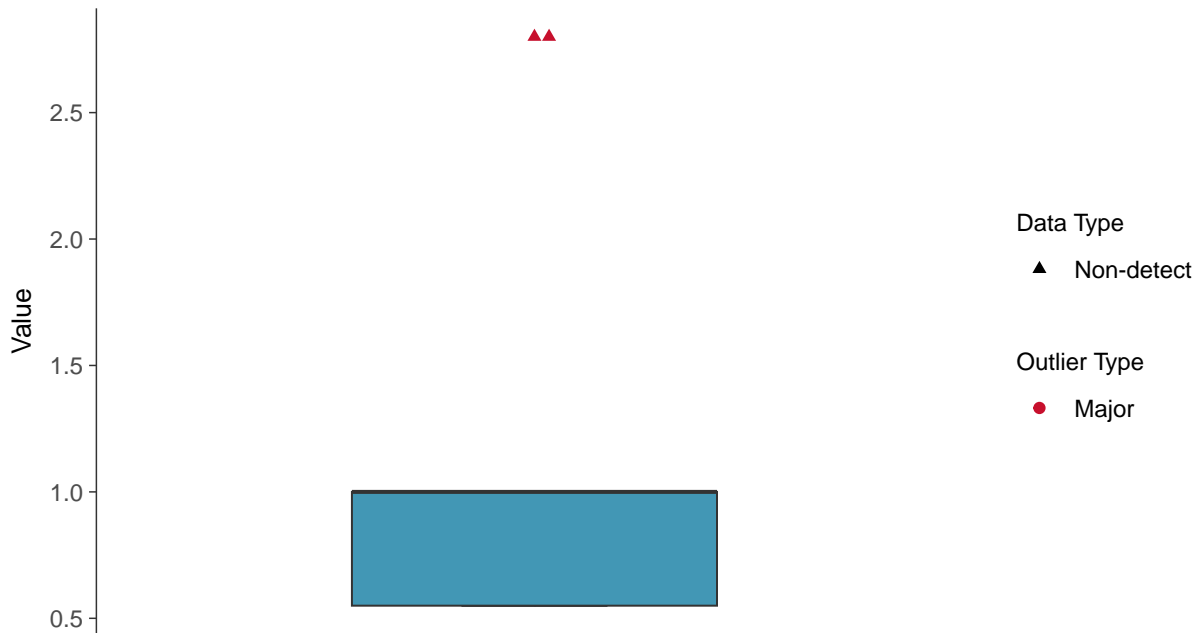
Lead, MW-15009 (ug/L)





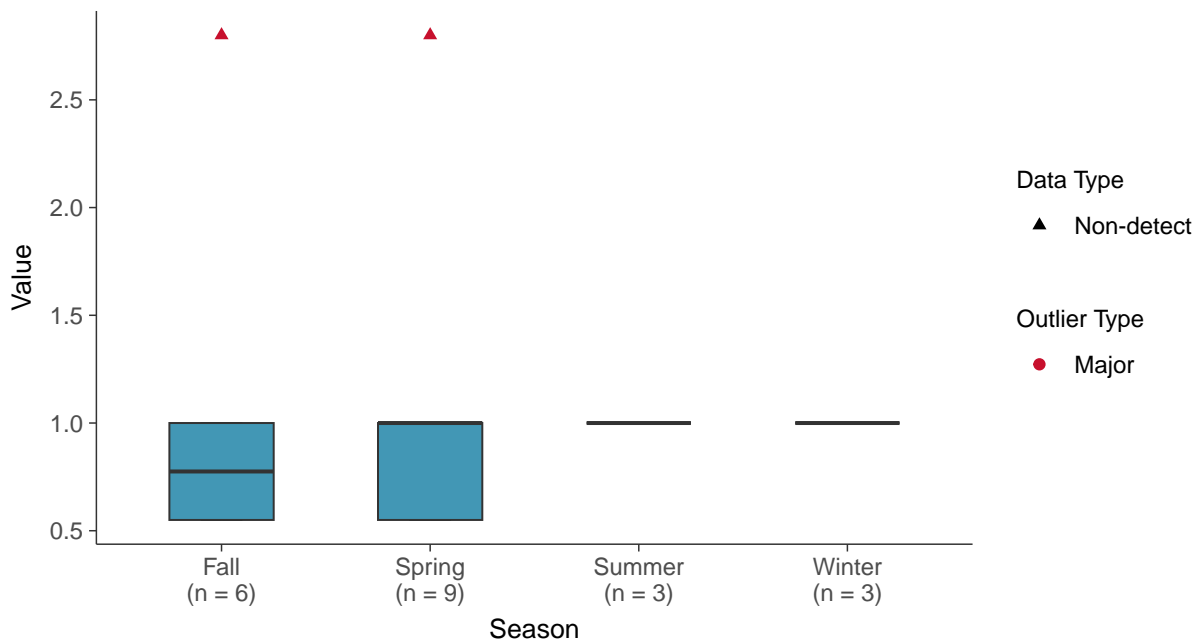
Boxplot

Lead, MW-15009 (ug/L)



Boxplot by Season

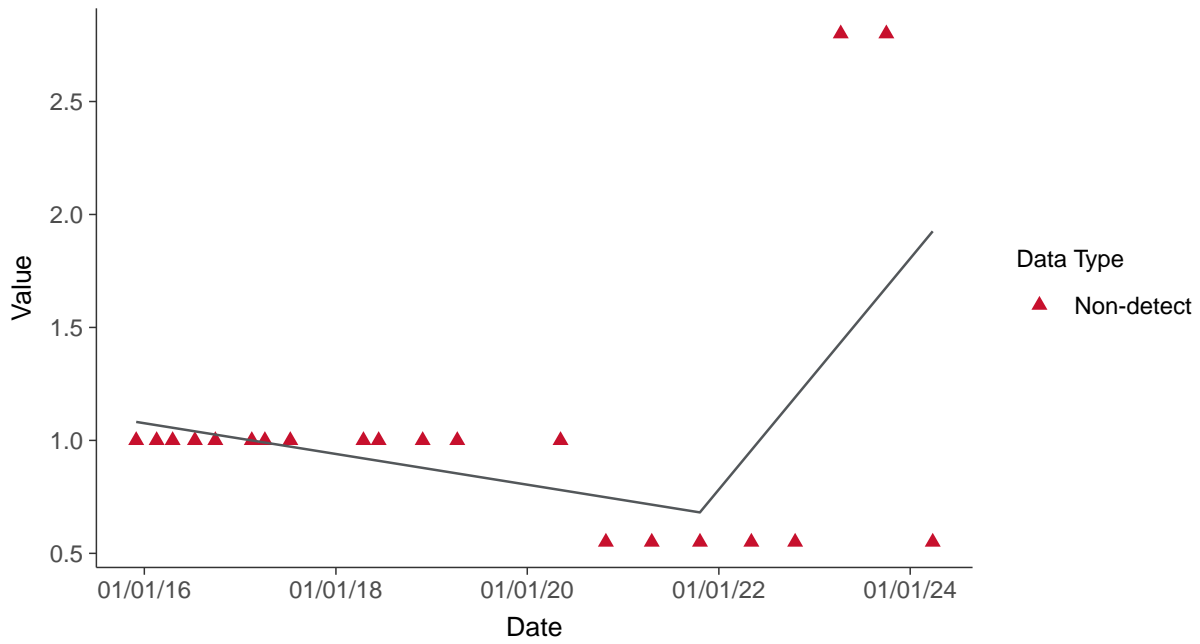
Lead, MW-15009 (ug/L)





Trend Regression: Piecewise Linear-Linear

Lead, MW-15009 (ug/L)



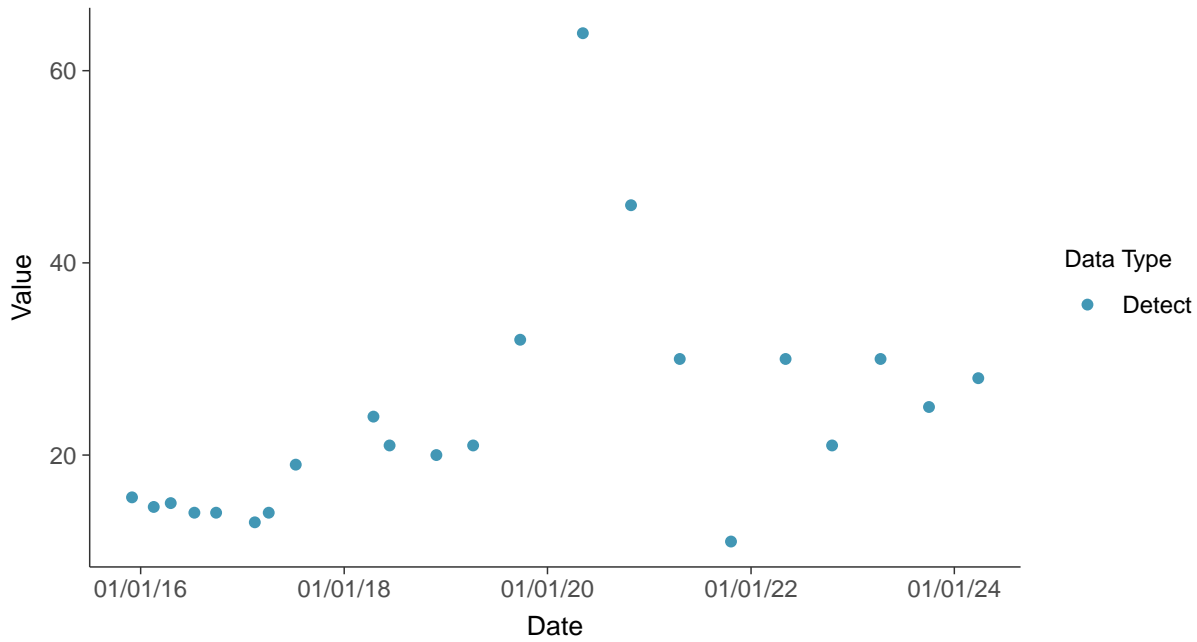


Appendix IV: Lithium, MW-15009

ID: 01_2_117

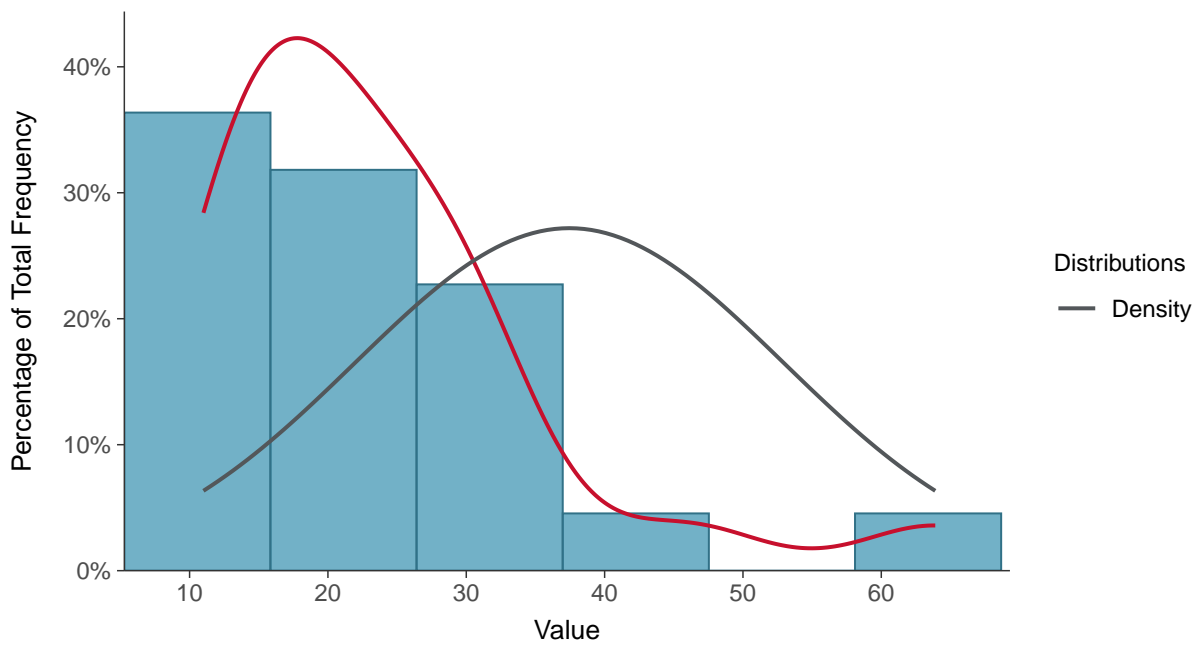
Scatter Plot

Lithium, MW-15009 (ug/L)



Histogram

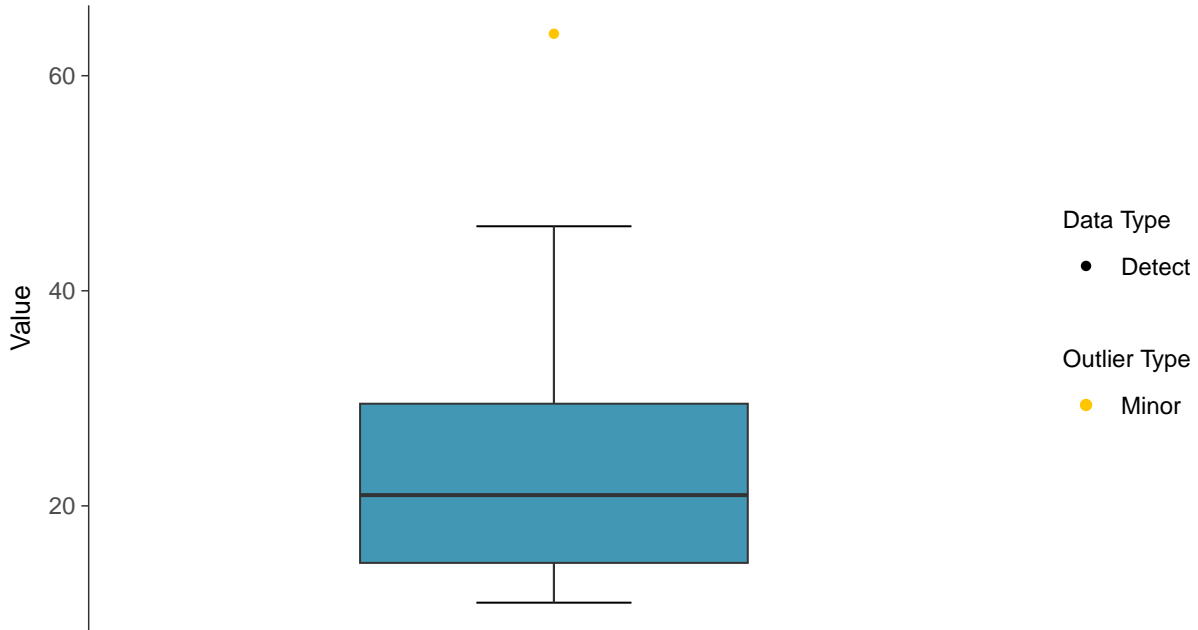
Lithium, MW-15009 (ug/L)





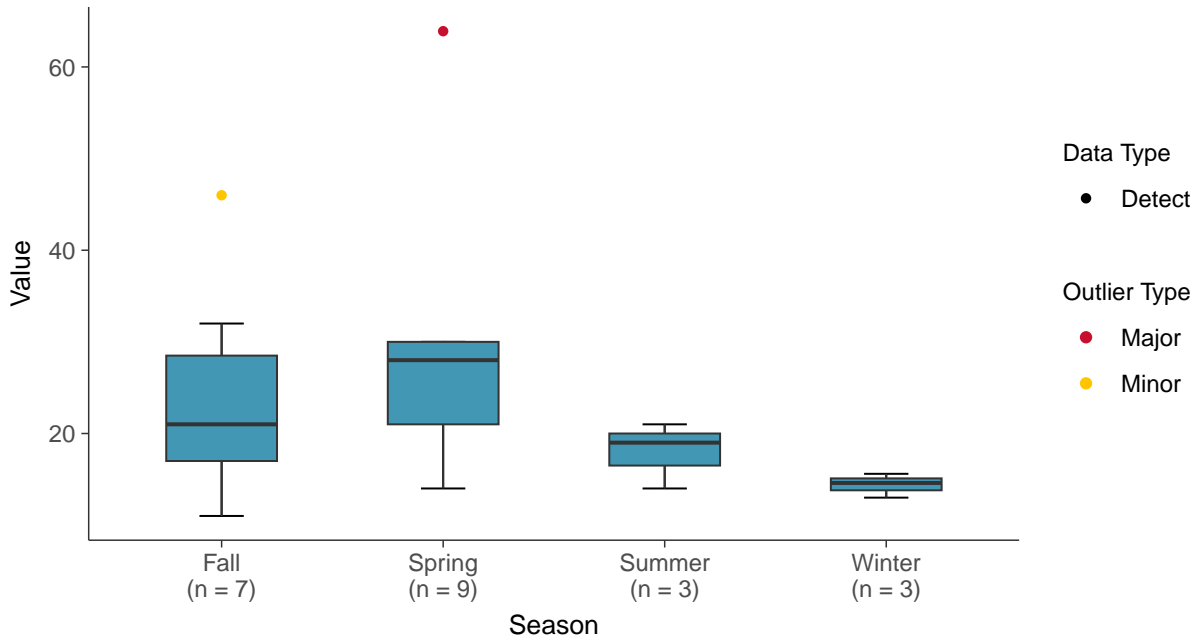
Boxplot

Lithium, MW-15009 (ug/L)



Boxplot by Season

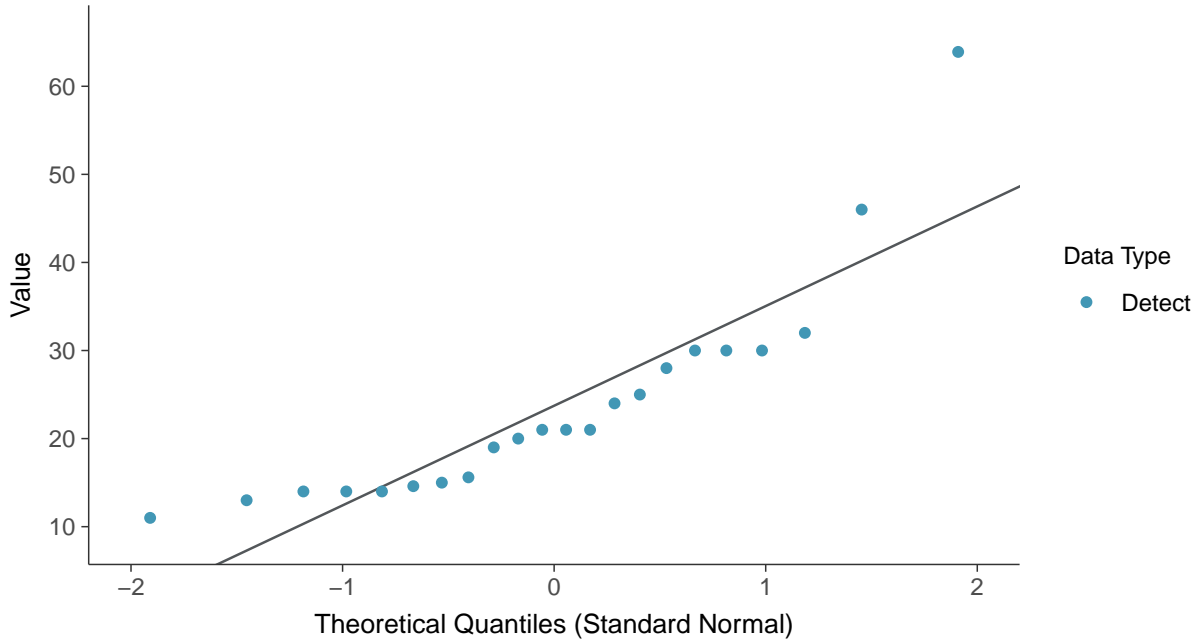
Lithium, MW-15009 (ug/L)





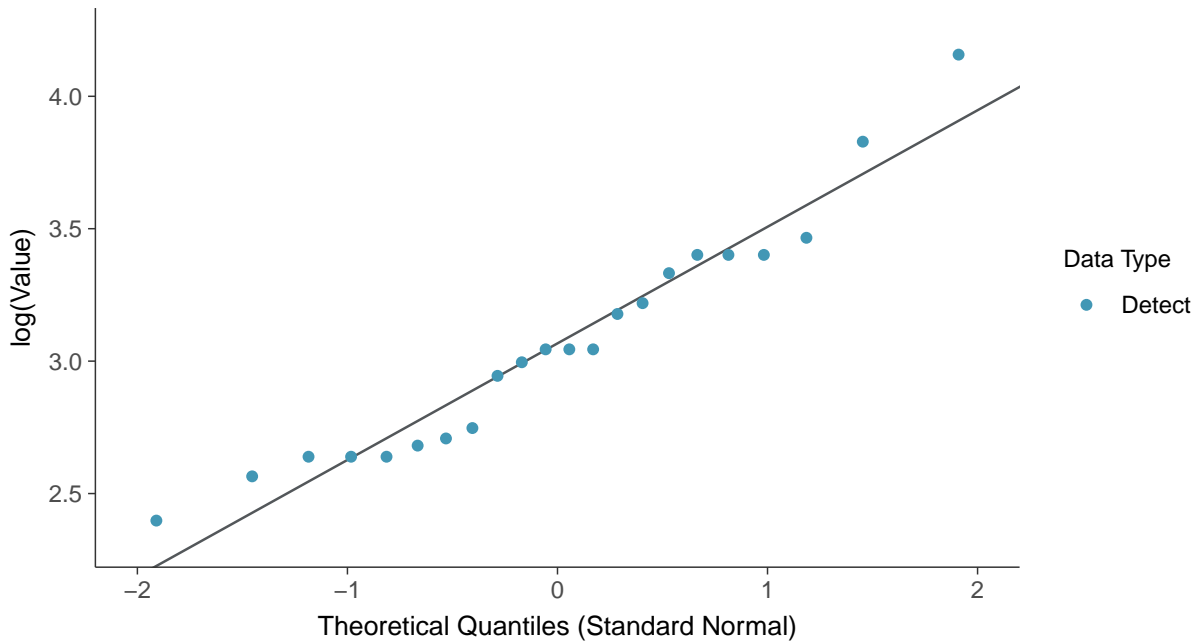
Normal Q-Q plot

Lithium, MW-15009 (ug/L)



Lognormal Q-Q plot

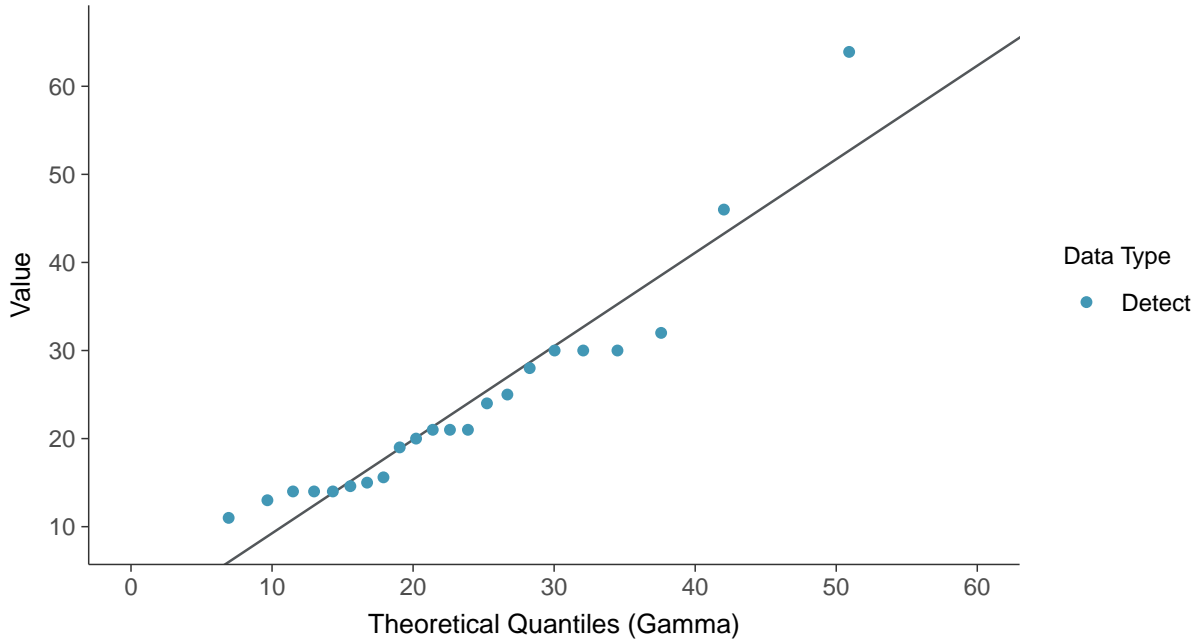
Lithium, MW-15009 (ug/L)





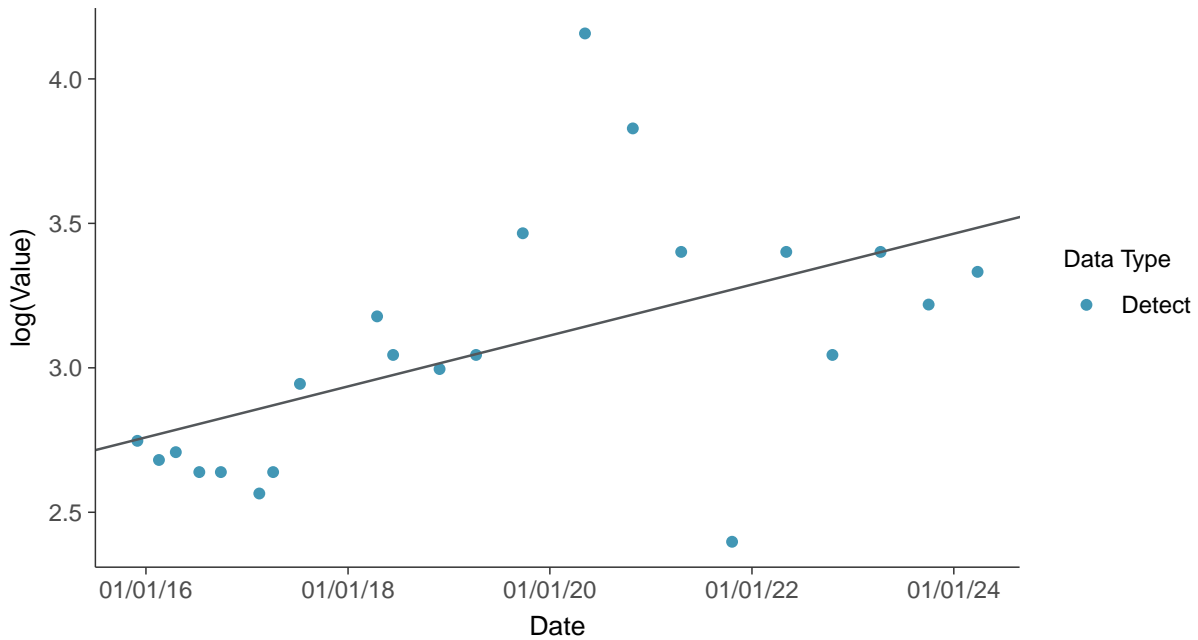
Gamma Q-Q plot

Lithium, MW-15009 (ug/L)



Trend Regression: Lognormal MLE

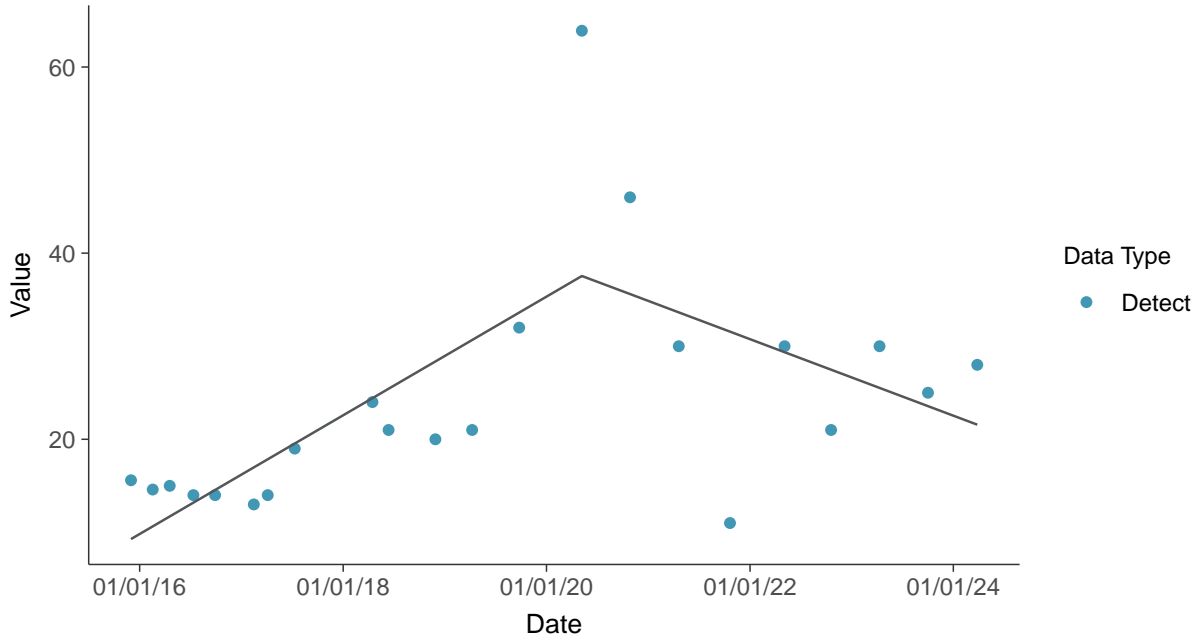
Lithium, MW-15009 (ug/L)





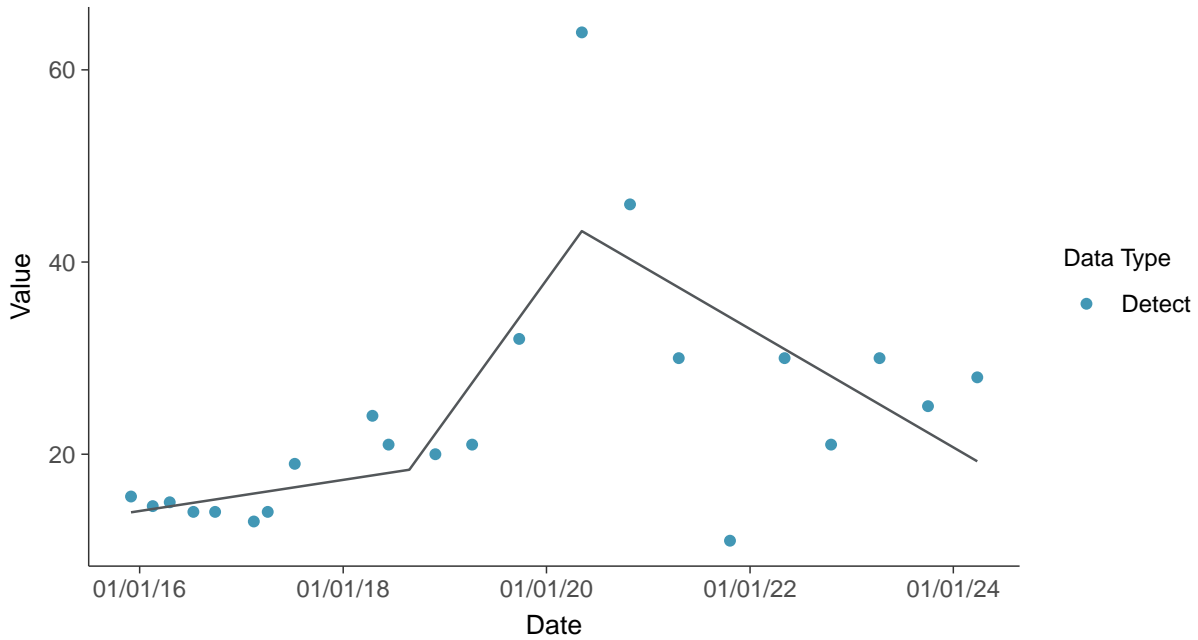
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

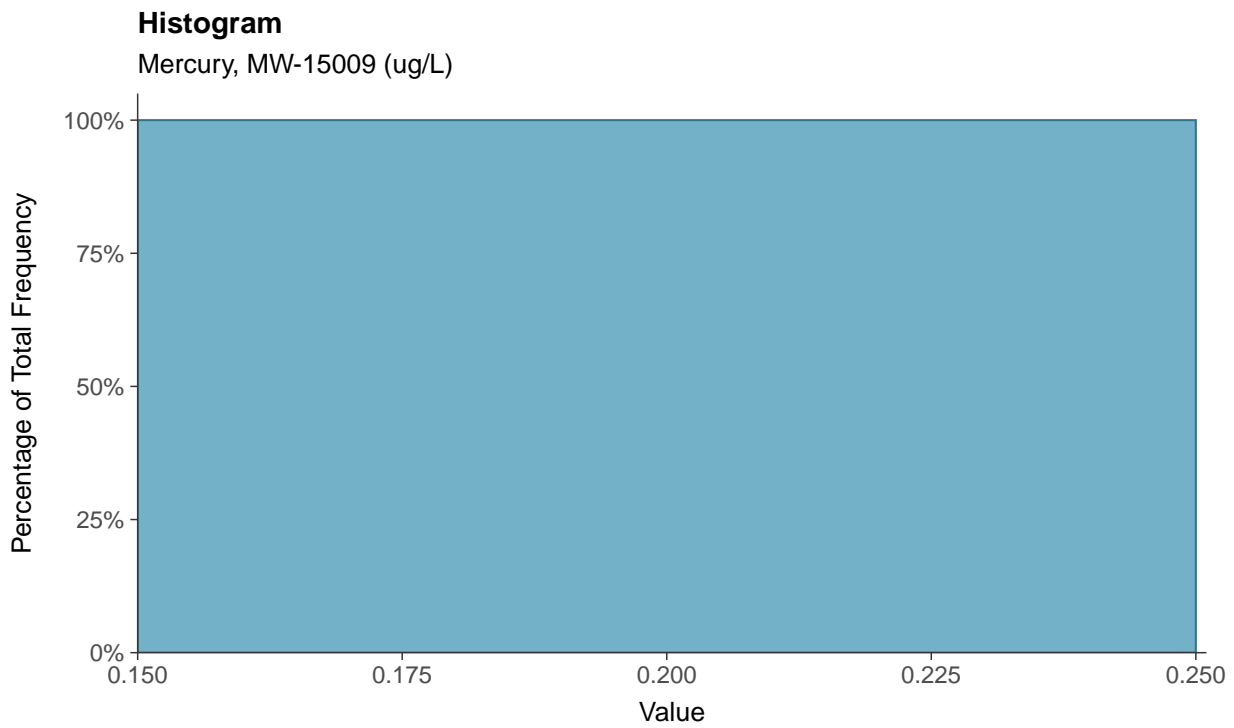
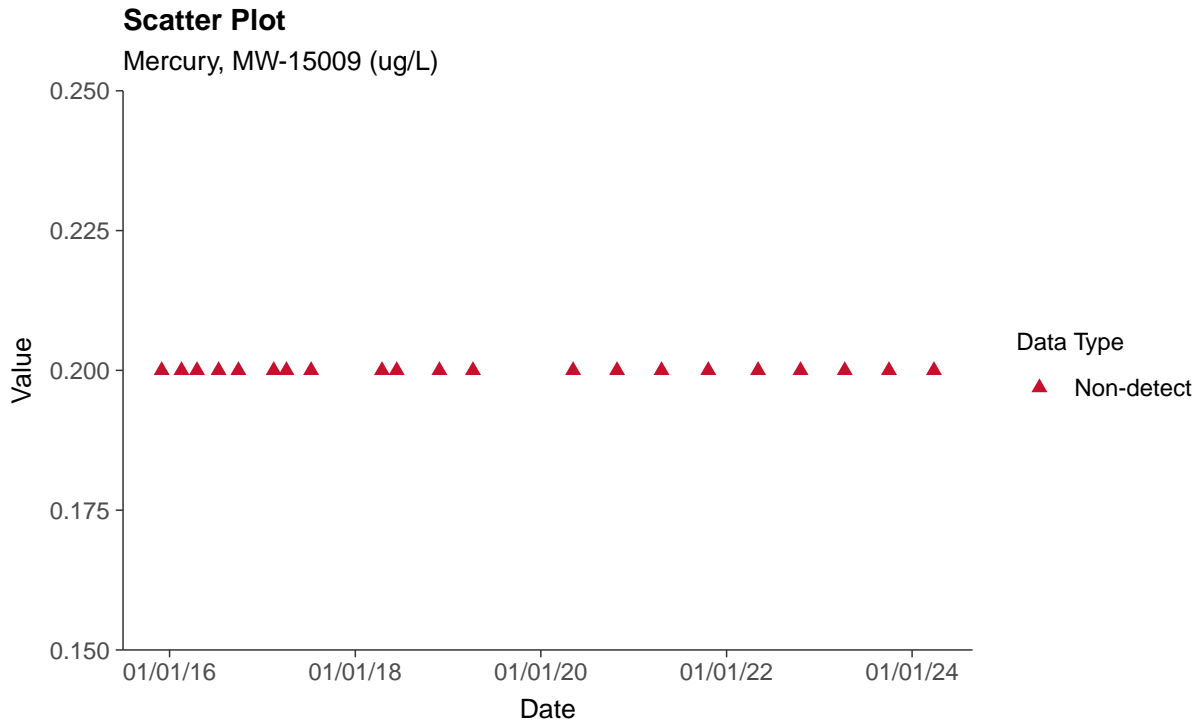
Lithium, MW-15009 (ug/L)





Appendix IV: Mercury, MW-15009

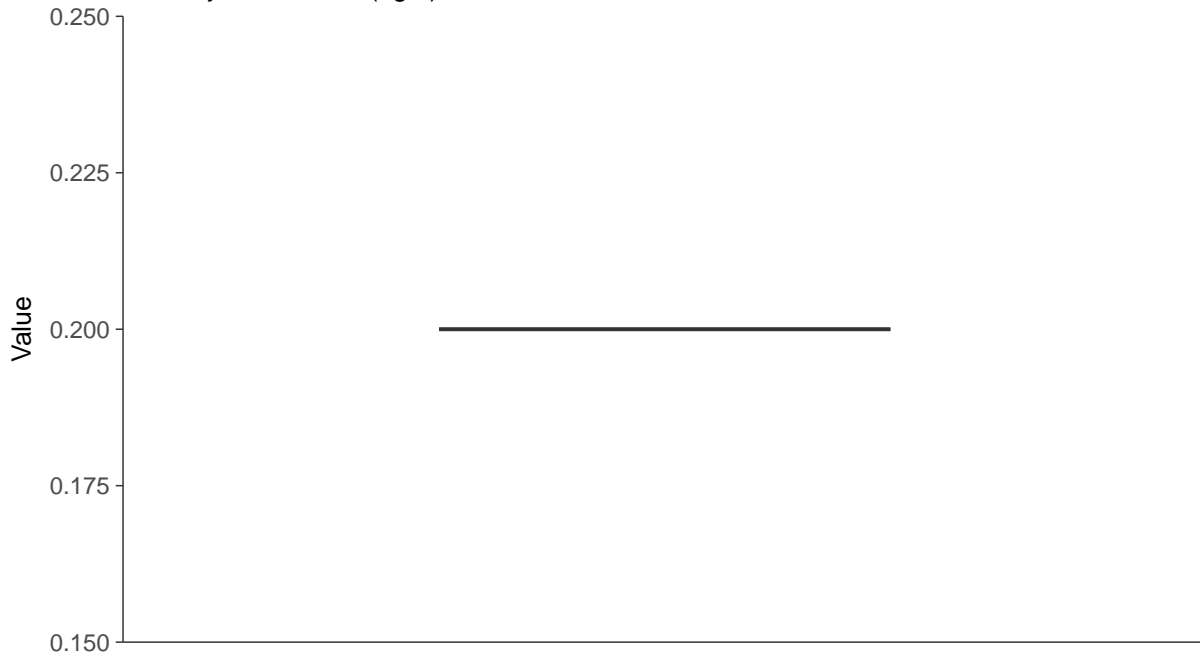
ID: 01_2_118





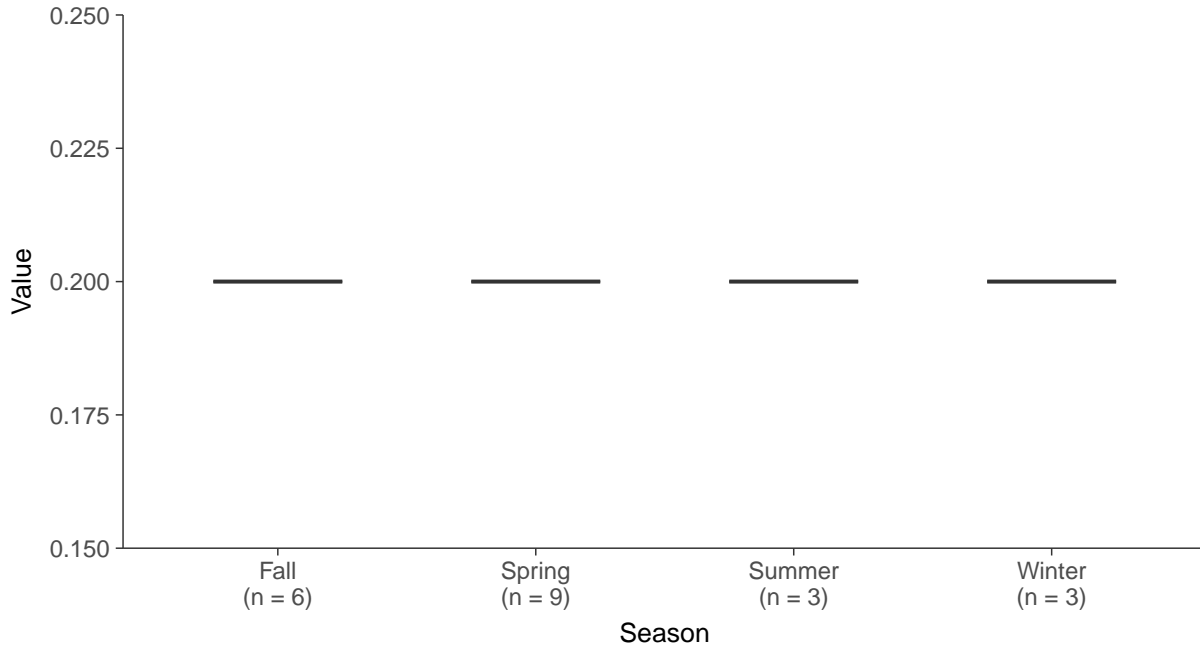
Boxplot

Mercury, MW-15009 (ug/L)



Boxplot by Season

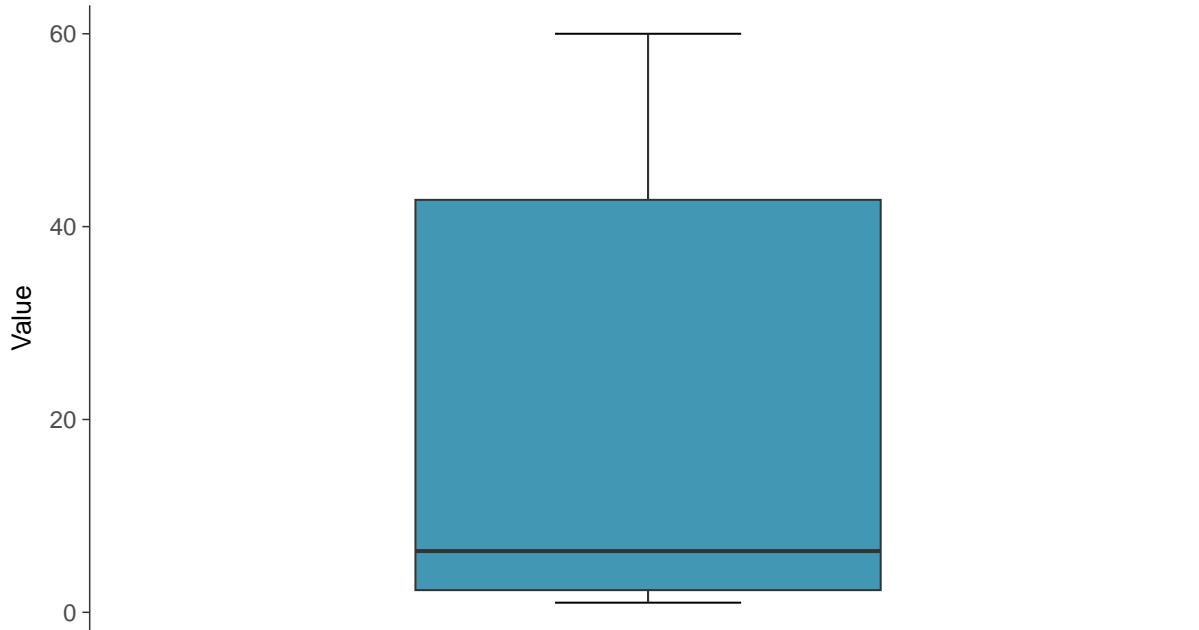
Mercury, MW-15009 (ug/L)





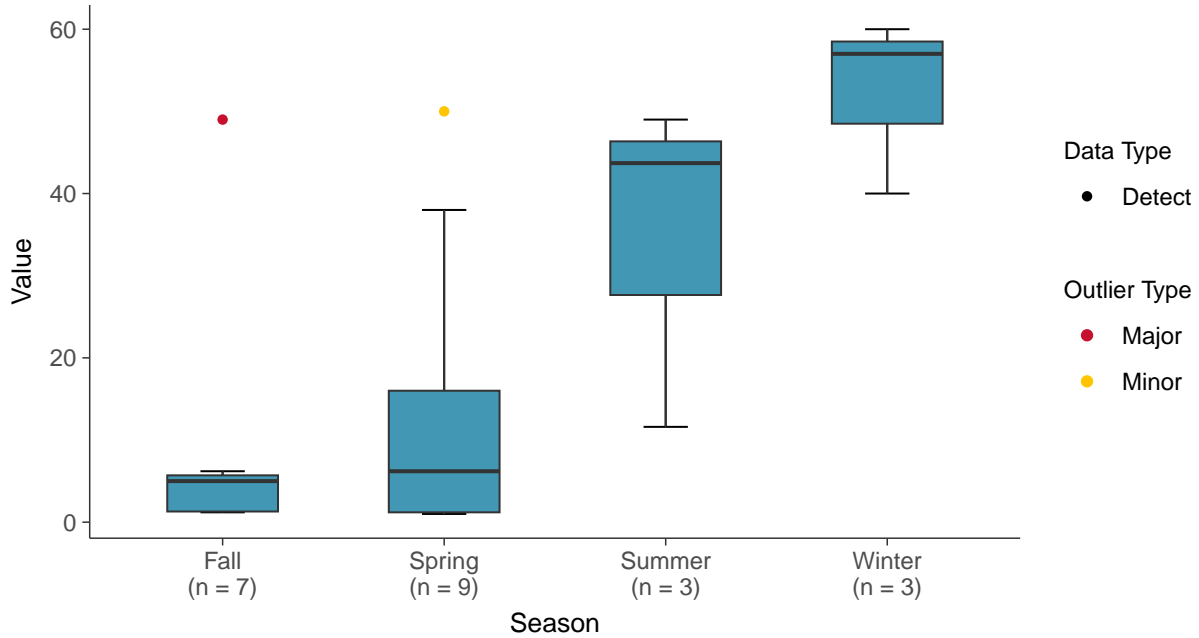
Boxplot

Molybdenum, MW-15009 (ug/L)



Boxplot by Season

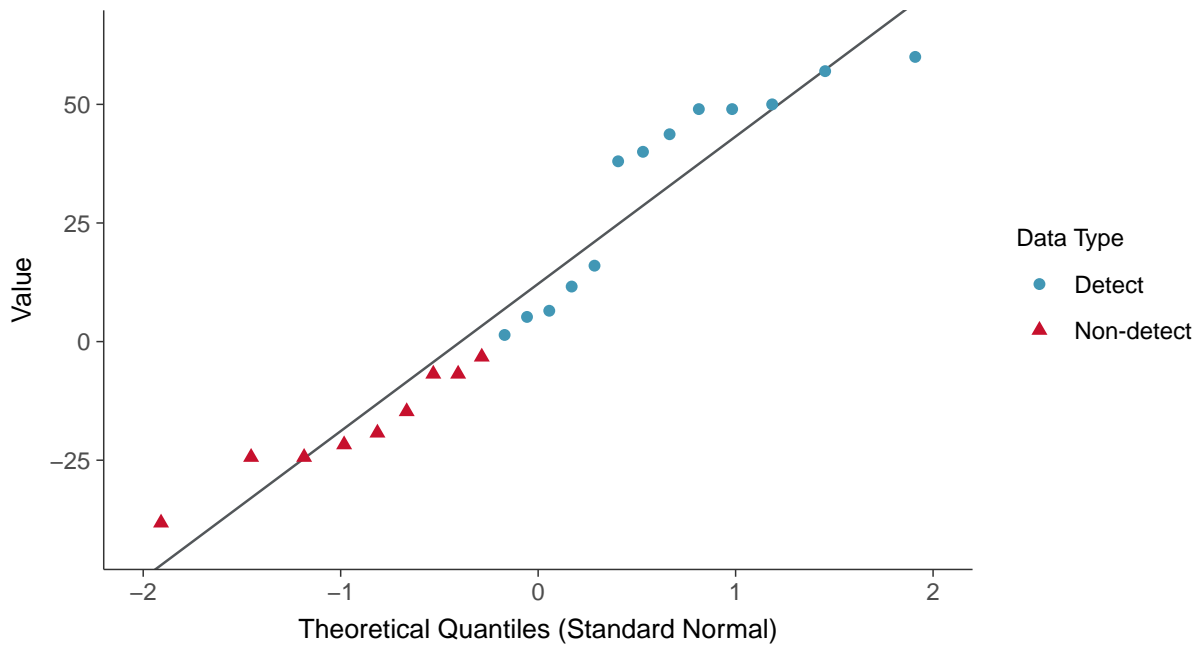
Molybdenum, MW-15009 (ug/L)





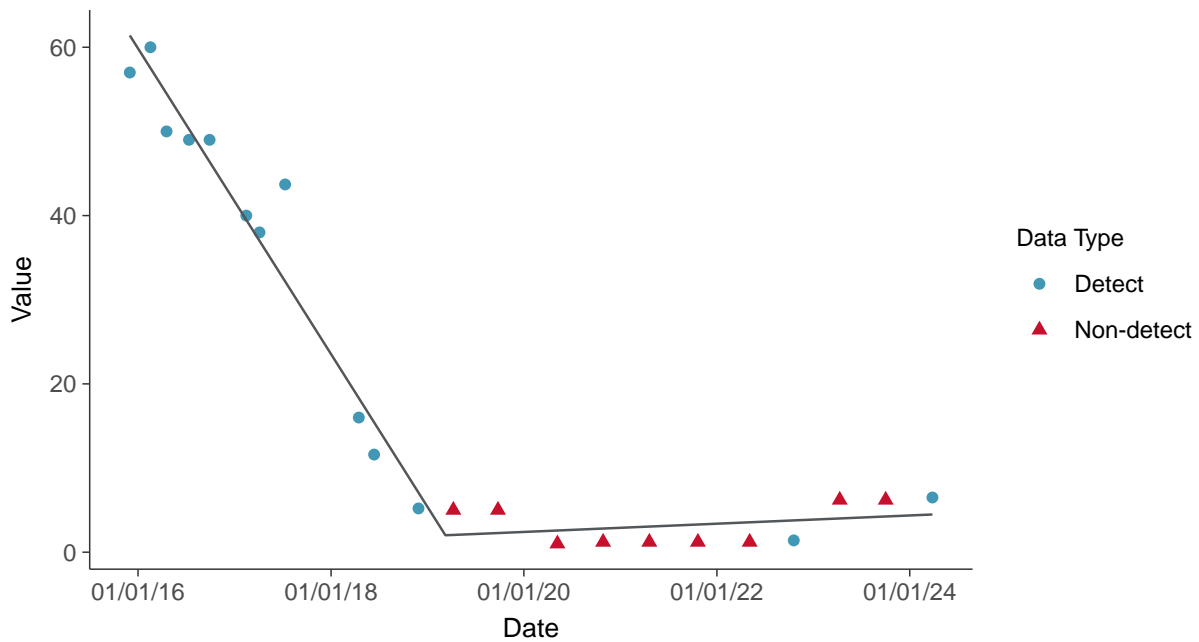
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear

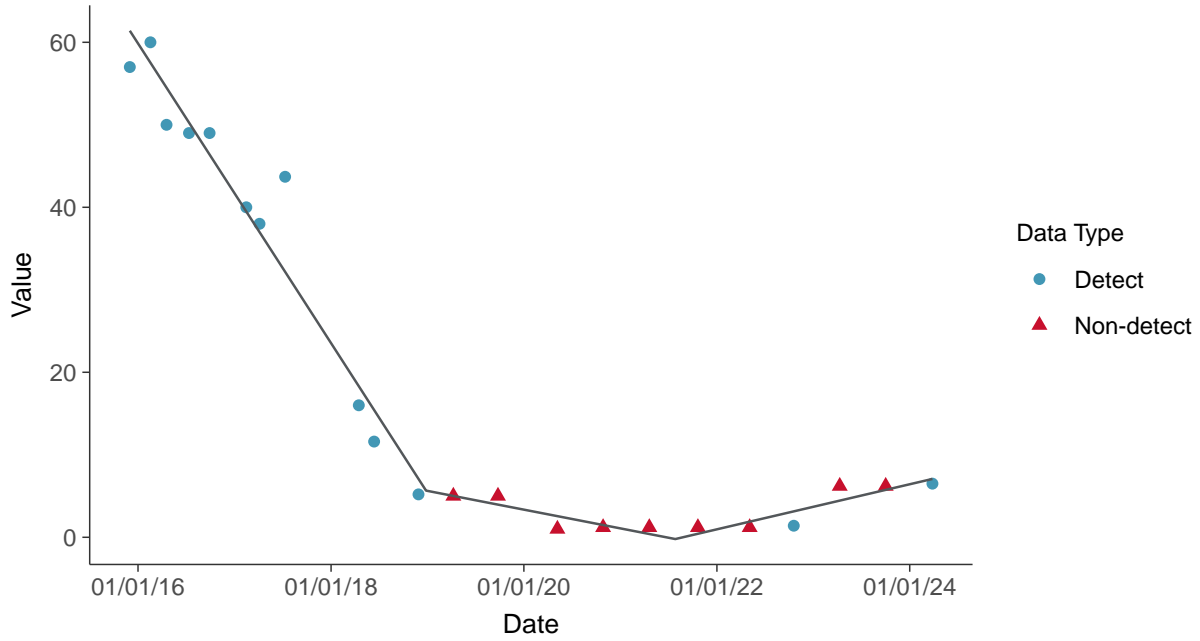
Molybdenum, MW-15009 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

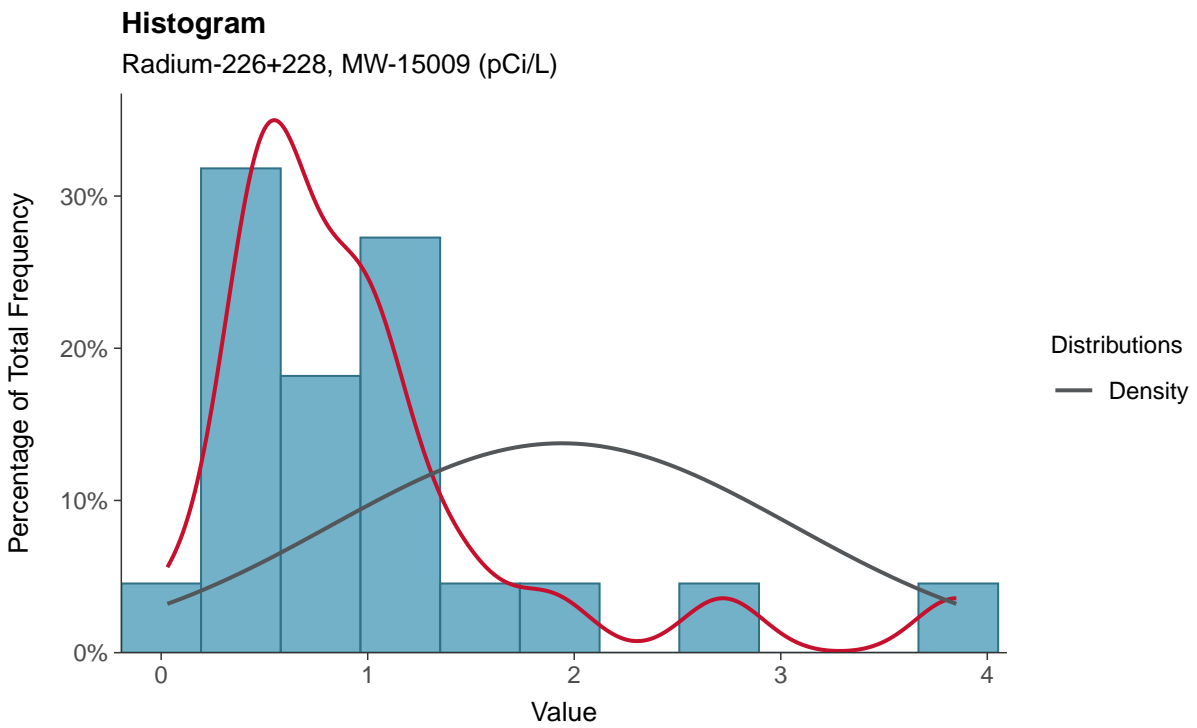
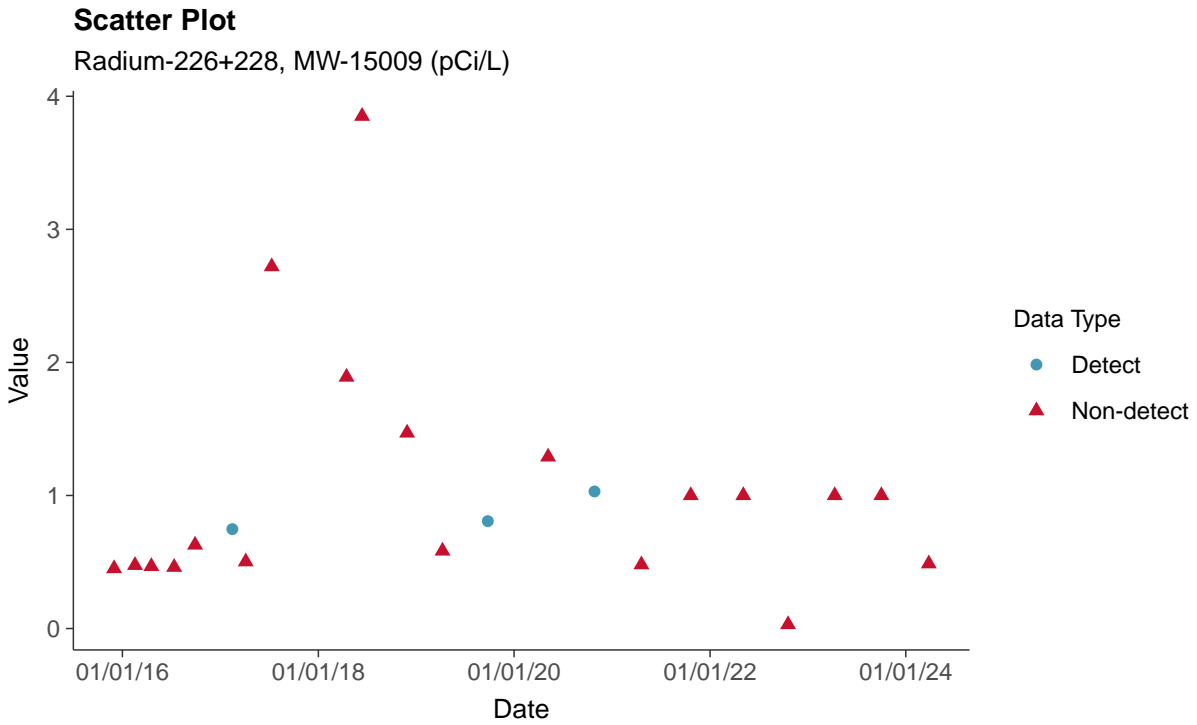
Molybdenum, MW-15009 (ug/L)





Appendix IV: Radium-226+228, MW-15009

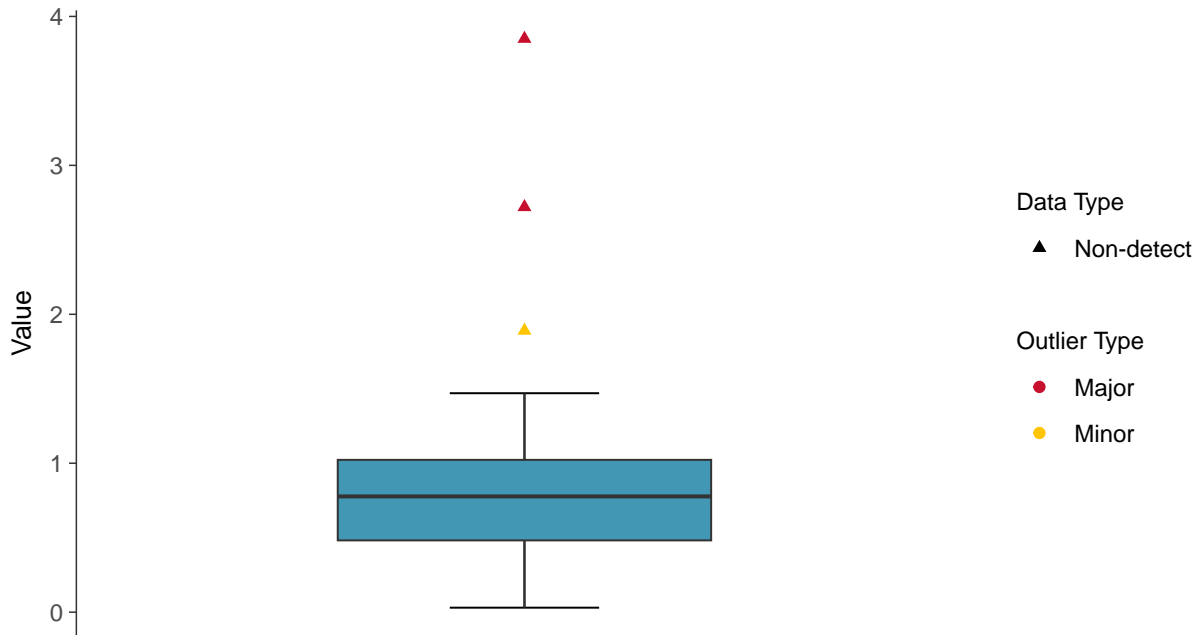
ID: 01_2_125





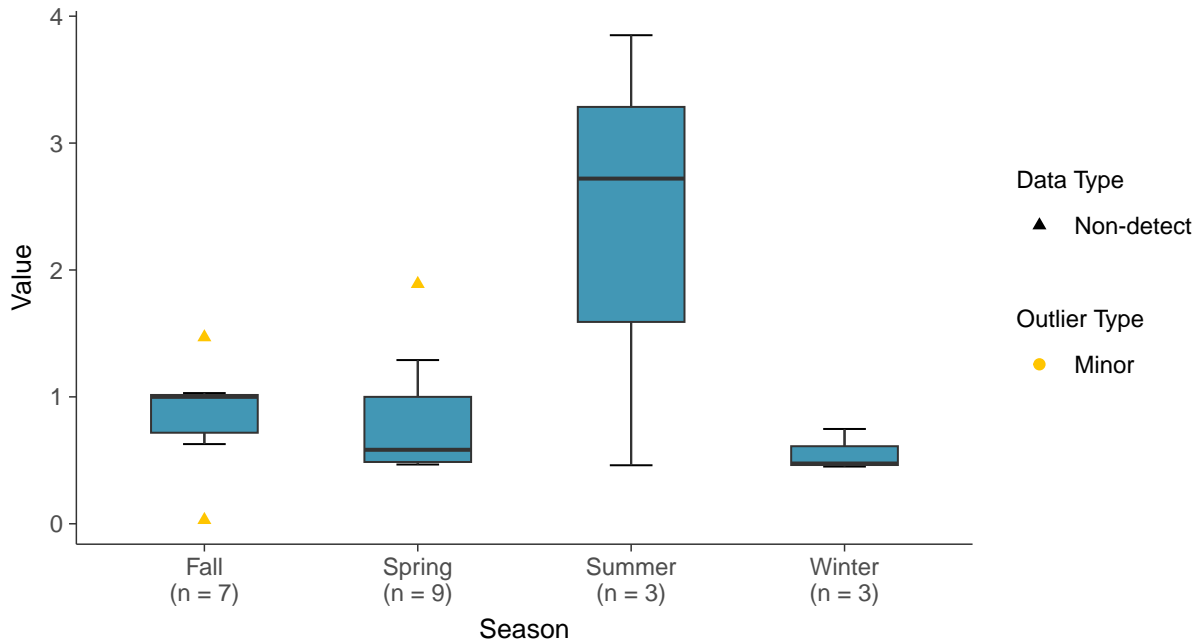
Boxplot

Radium-226+228, MW-15009 (pCi/L)



Boxplot by Season

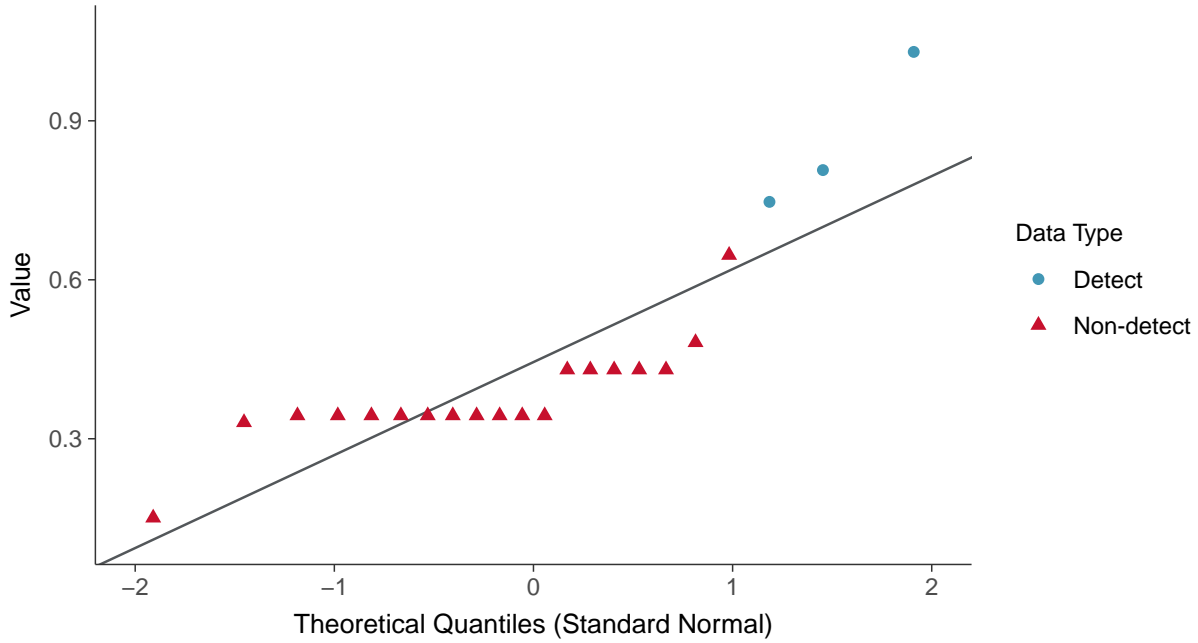
Radium-226+228, MW-15009 (pCi/L)





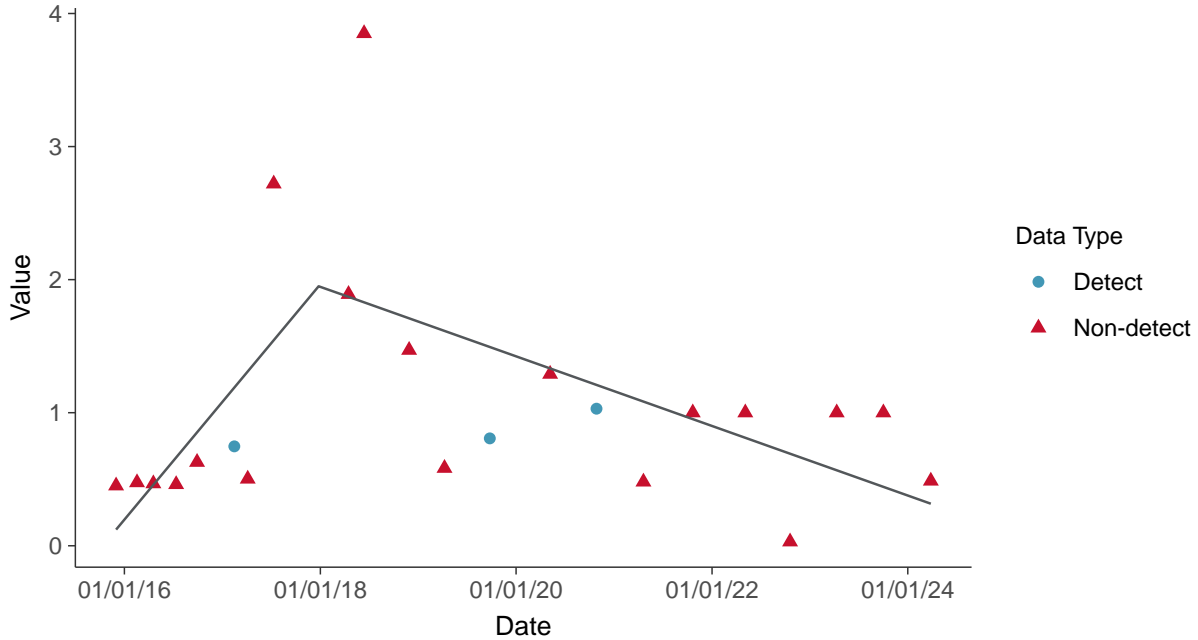
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15009 (pCi/L)



Trend Regression: Piecewise Linear-Linear

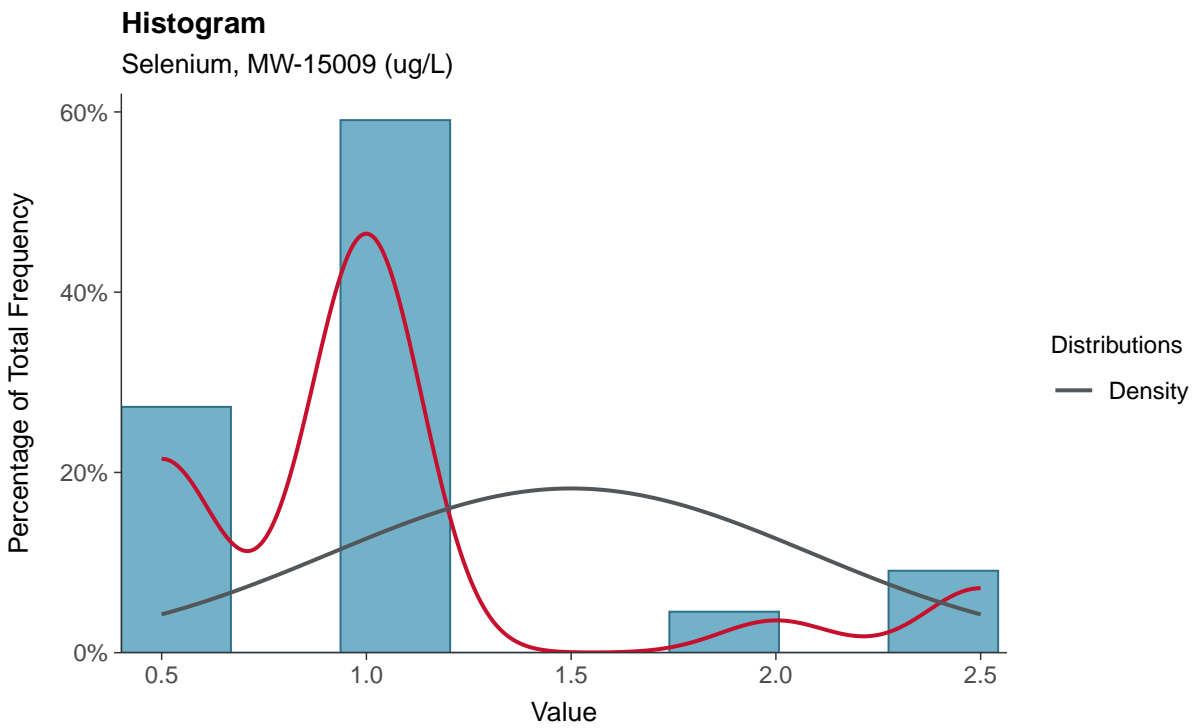
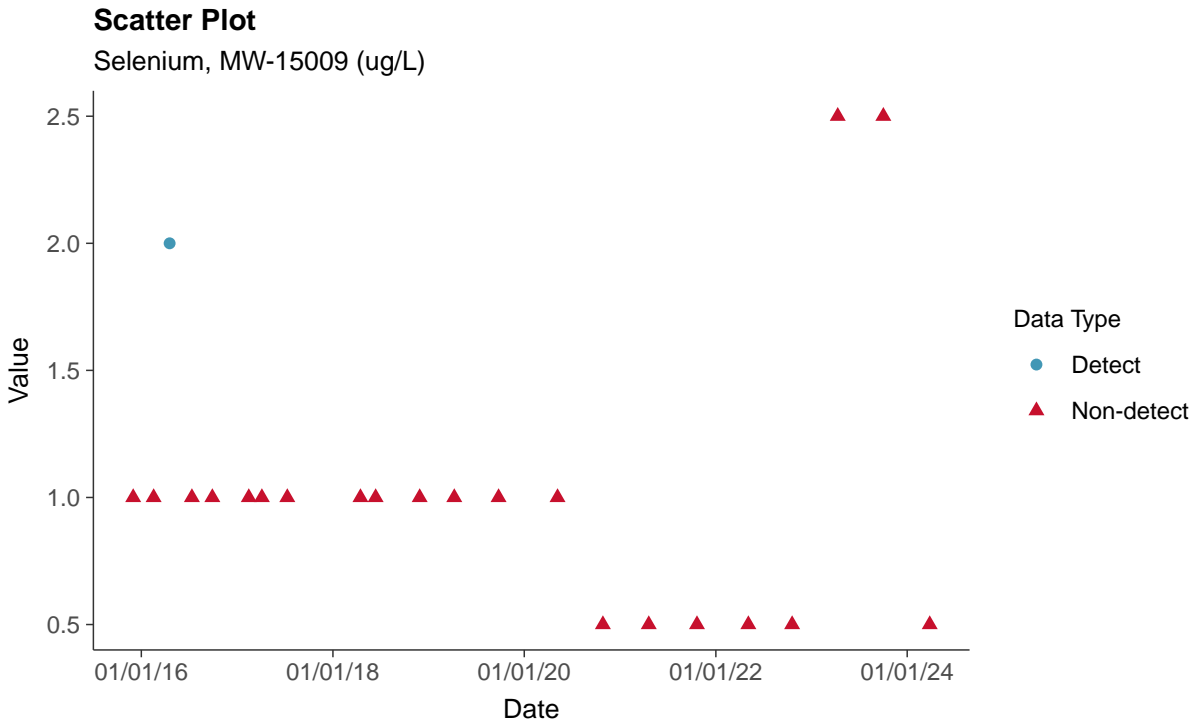
Radium-226+228, MW-15009 (pCi/L)





Appendix IV: Selenium, MW-15009

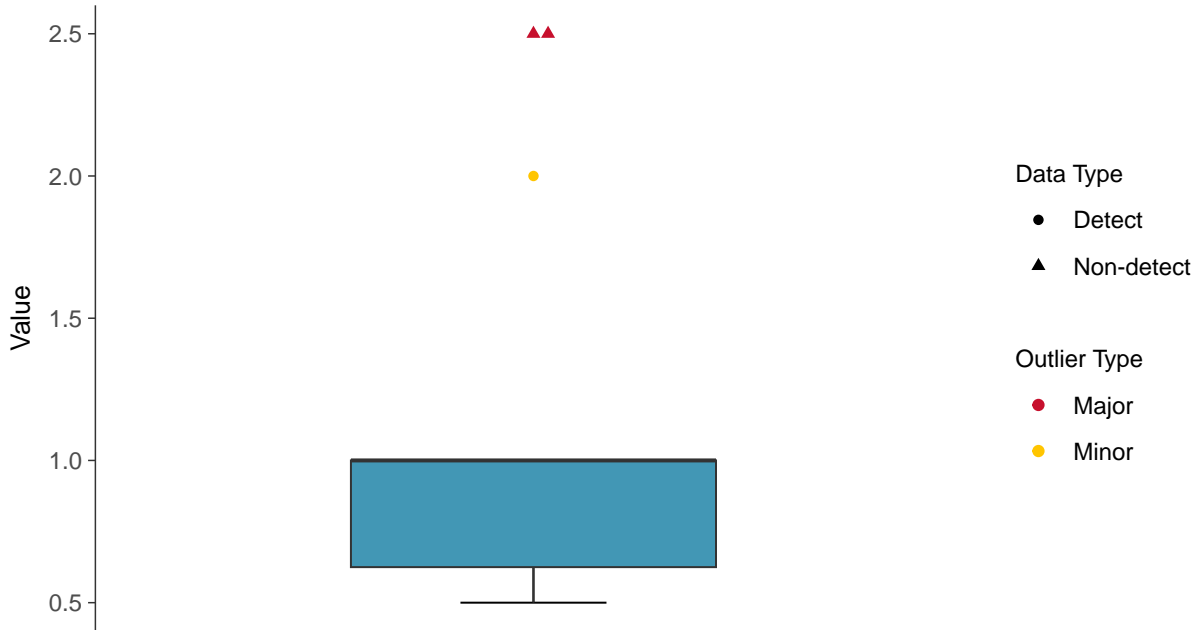
ID: 01_2_127





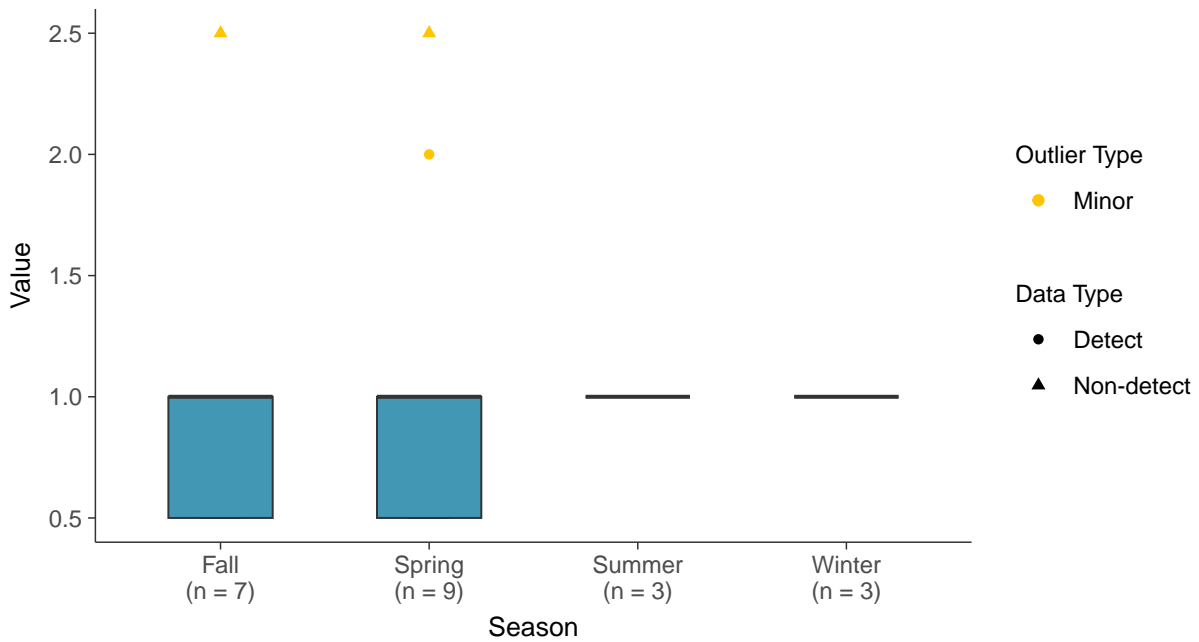
Boxplot

Selenium, MW-15009 (ug/L)



Boxplot by Season

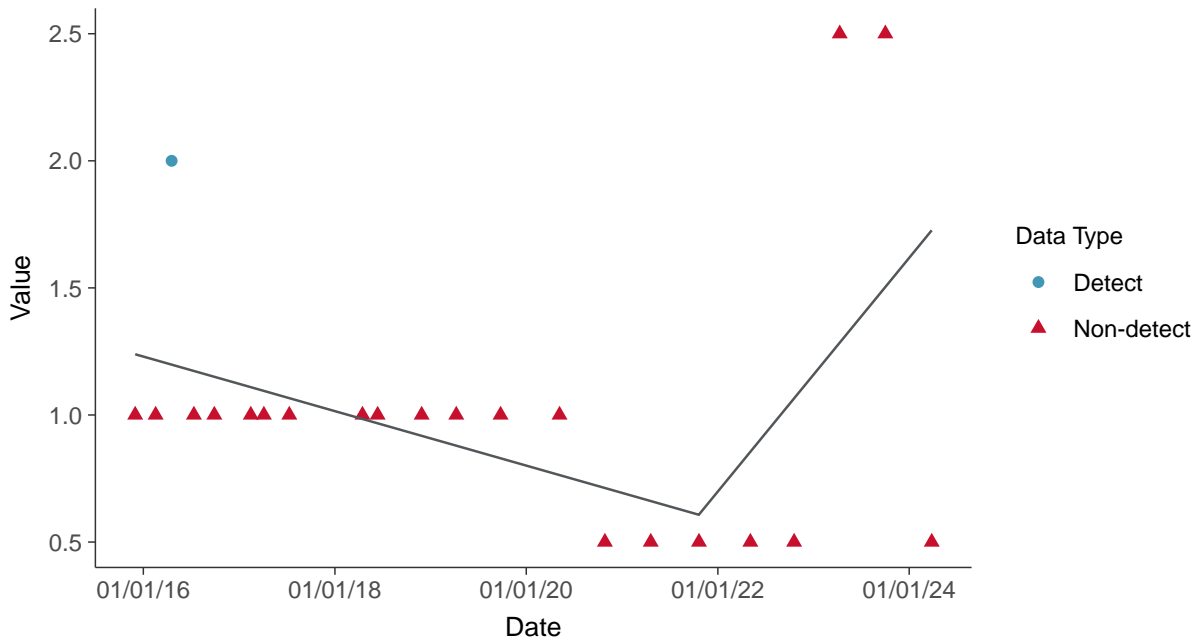
Selenium, MW-15009 (ug/L)





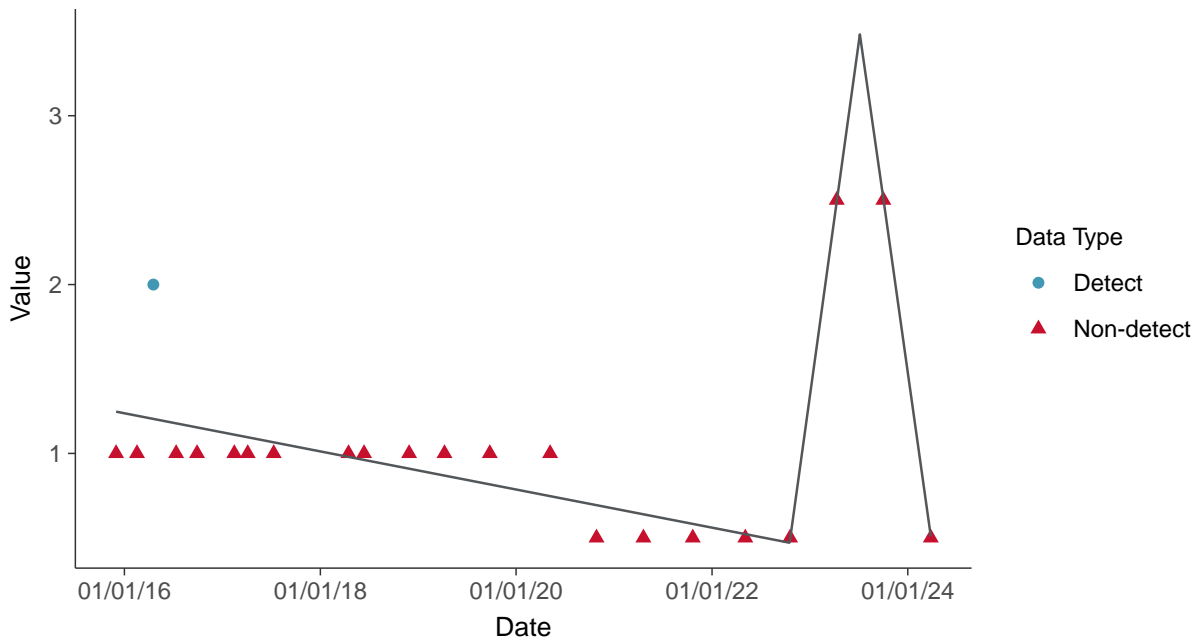
Trend Regression: Piecewise Linear-Linear

Selenium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

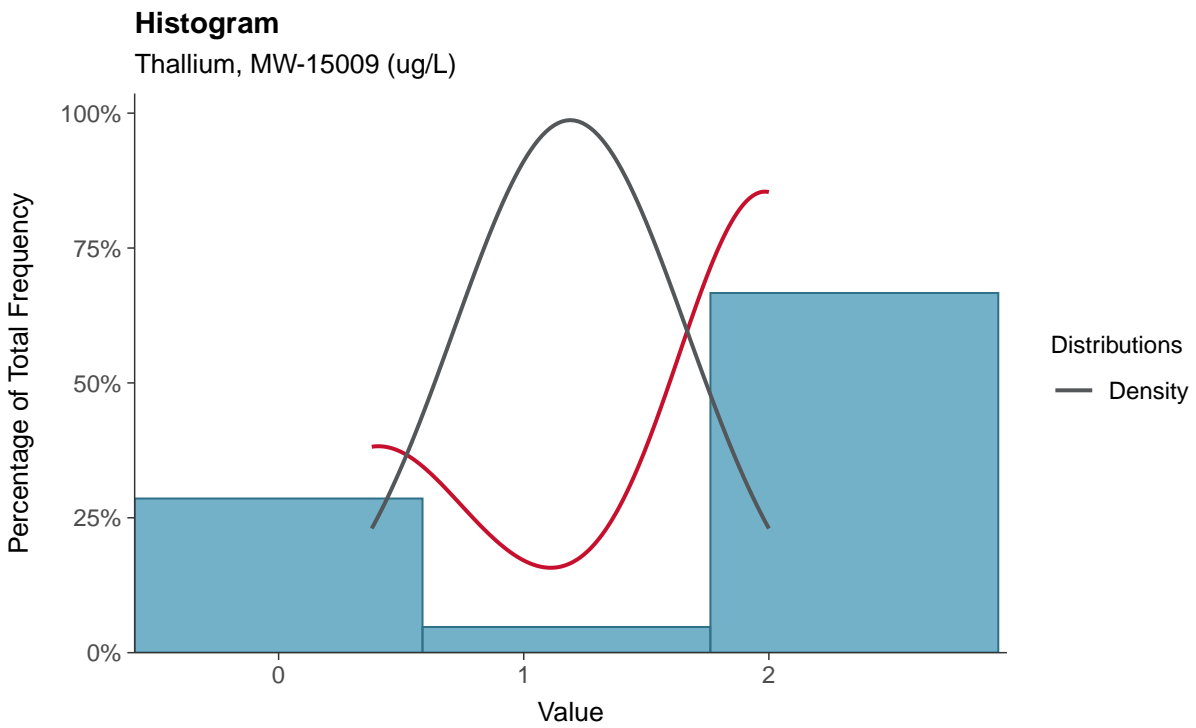
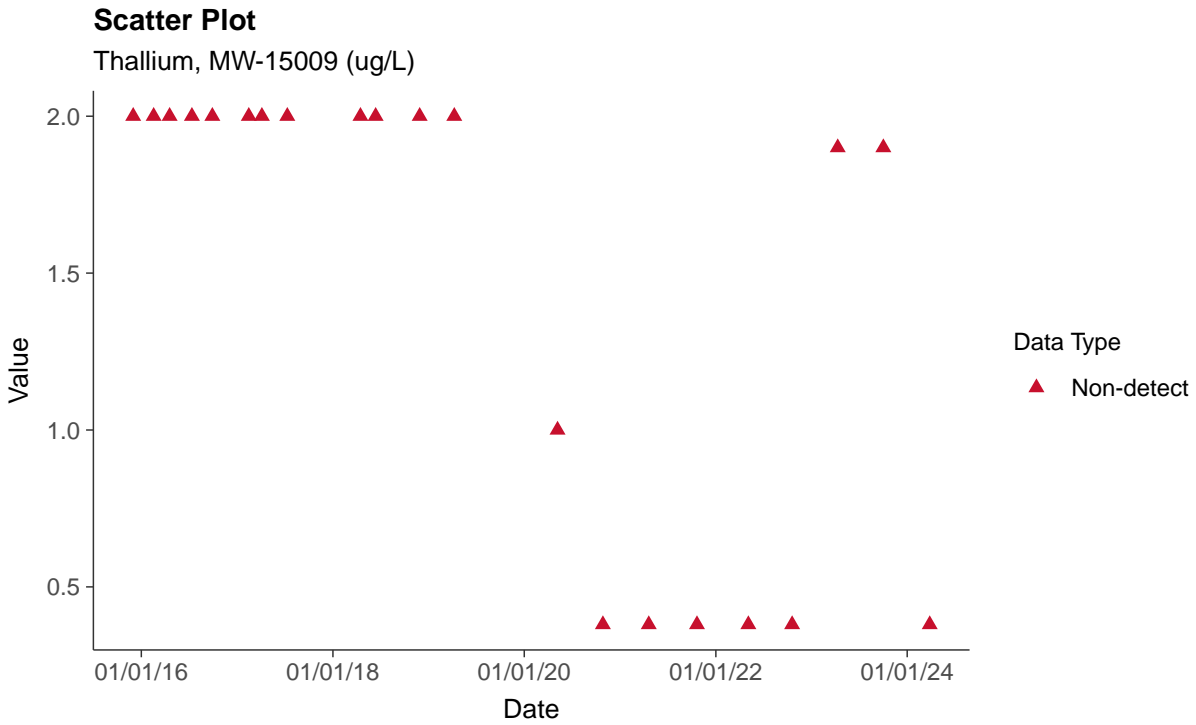
Selenium, MW-15009 (ug/L)





Appendix IV: Thallium, MW-15009

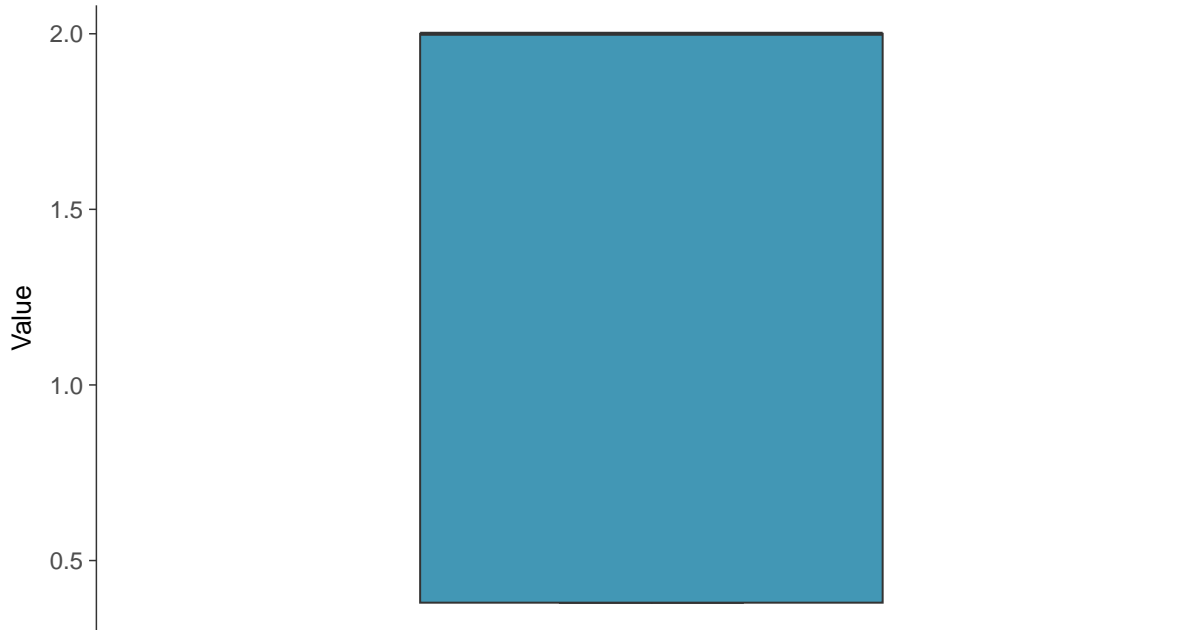
ID: 01_2_131





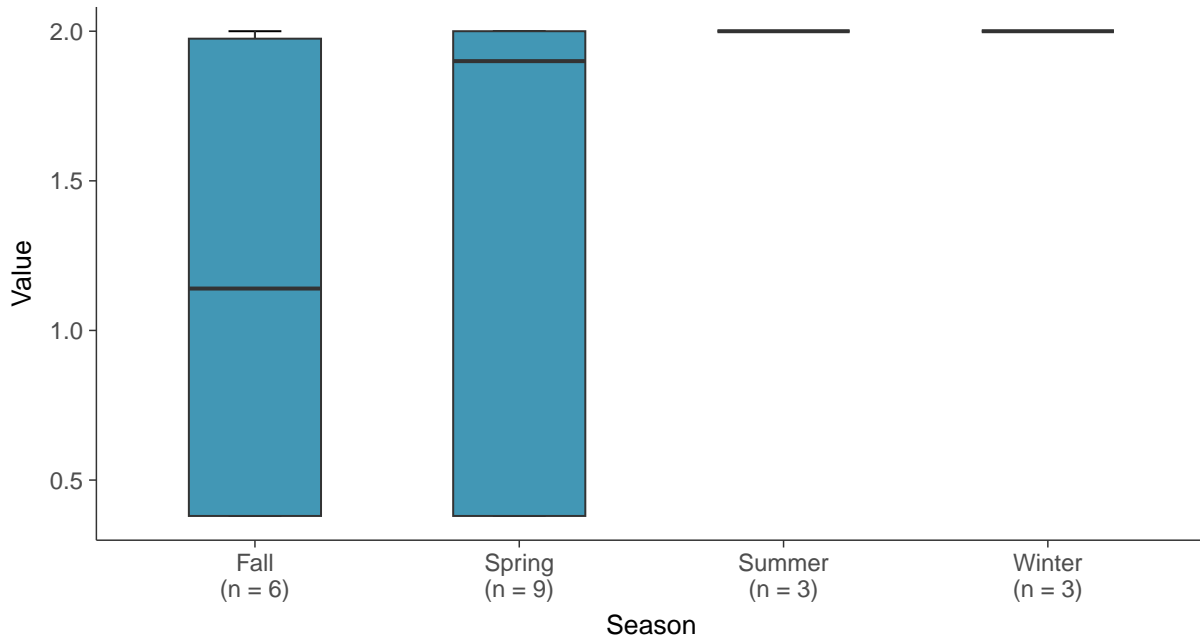
Boxplot

Thallium, MW-15009 (ug/L)



Boxplot by Season

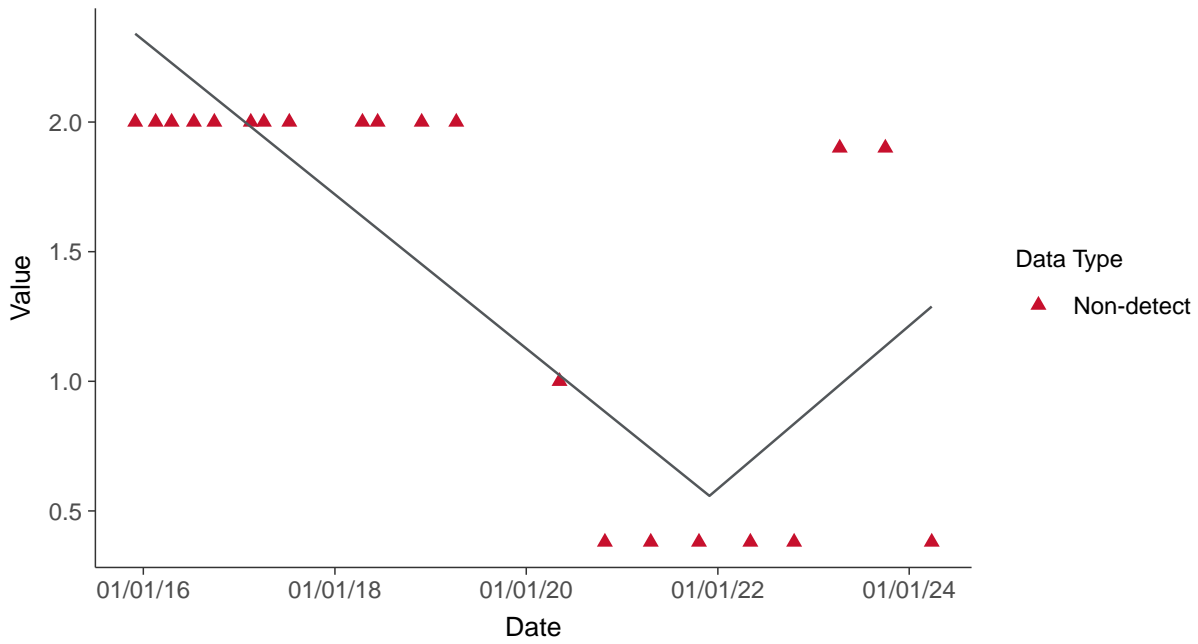
Thallium, MW-15009 (ug/L)





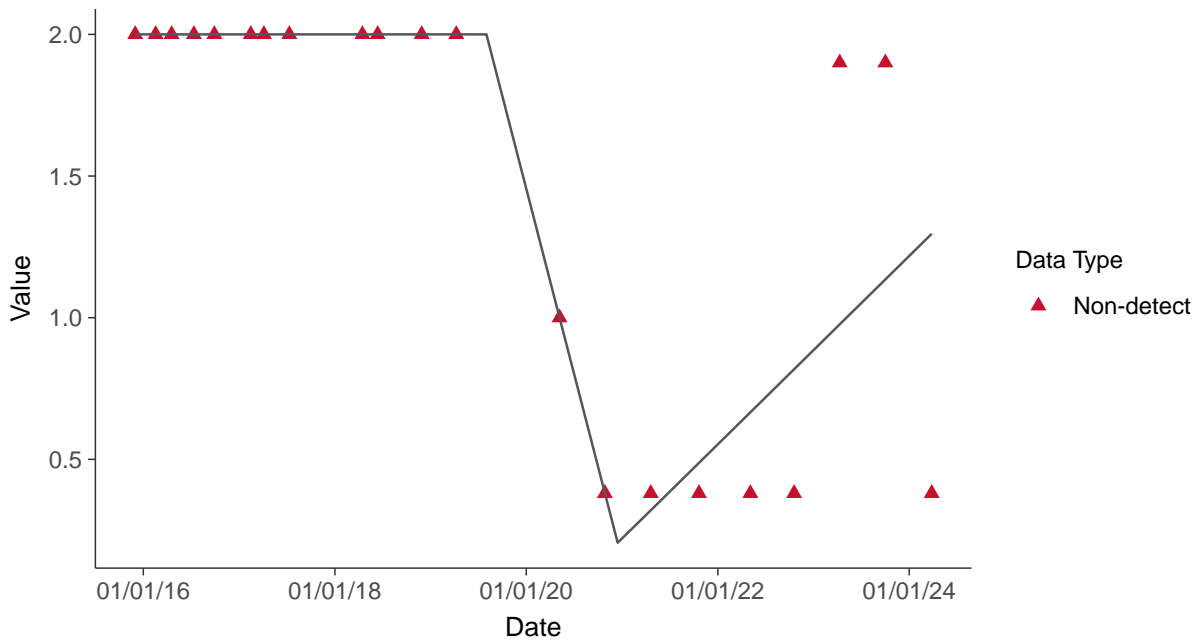
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

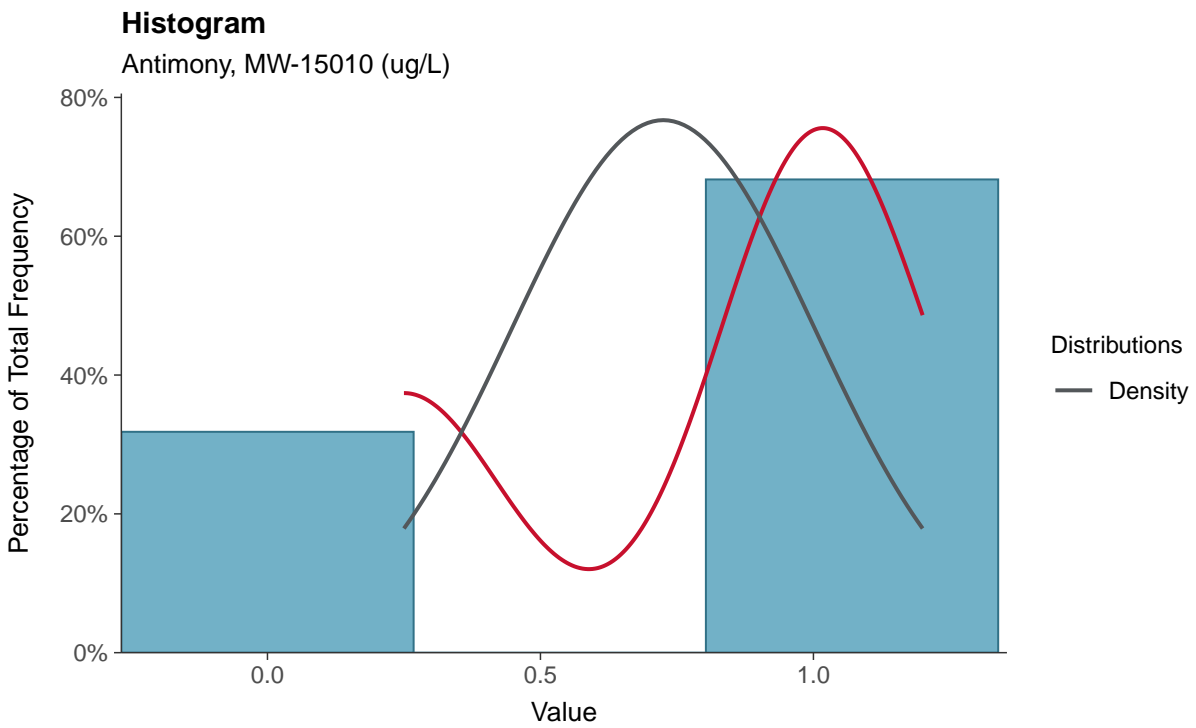
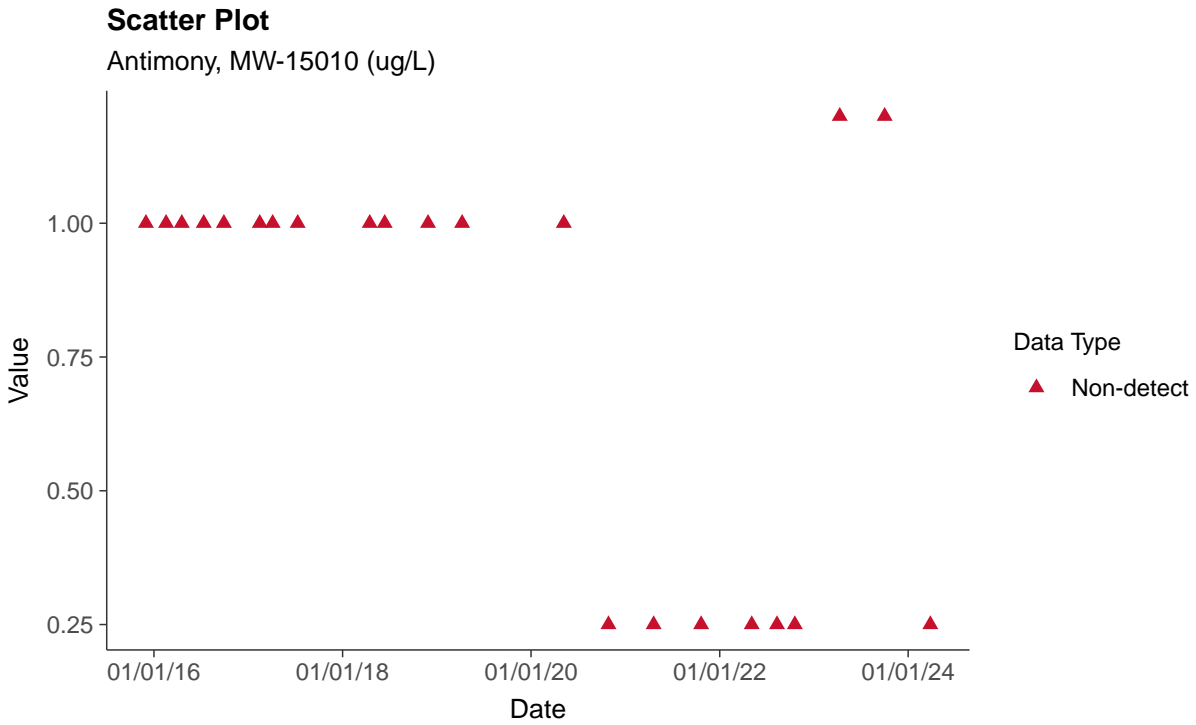
Thallium, MW-15009 (ug/L)





Appendix IV: Antimony, MW-15010

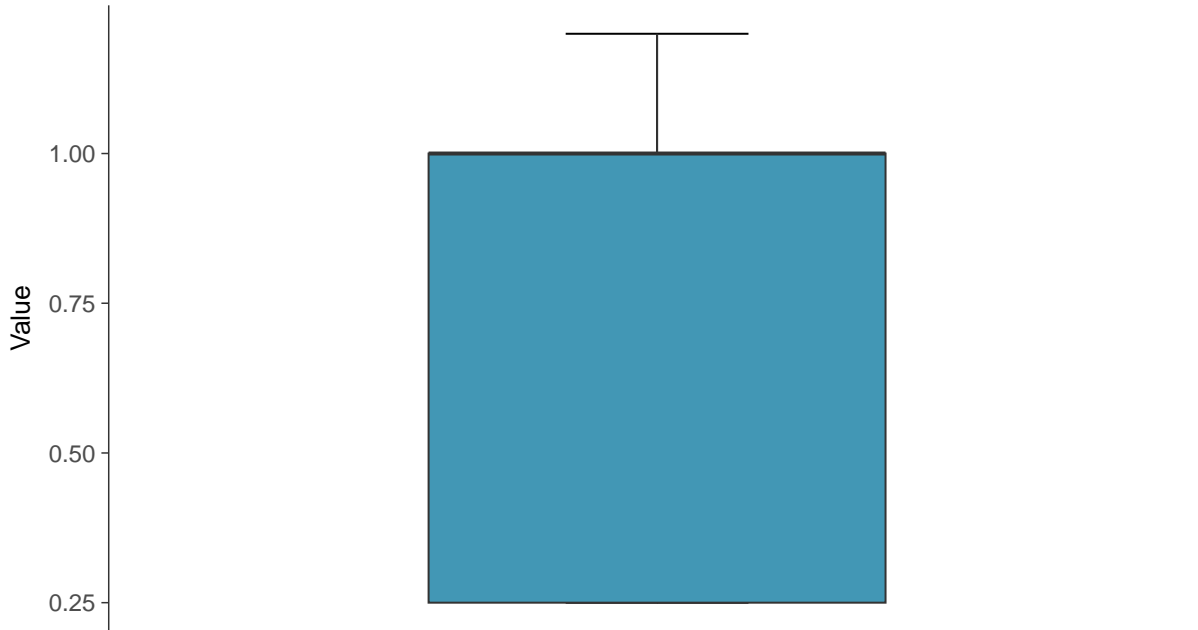
ID: 02_2_101





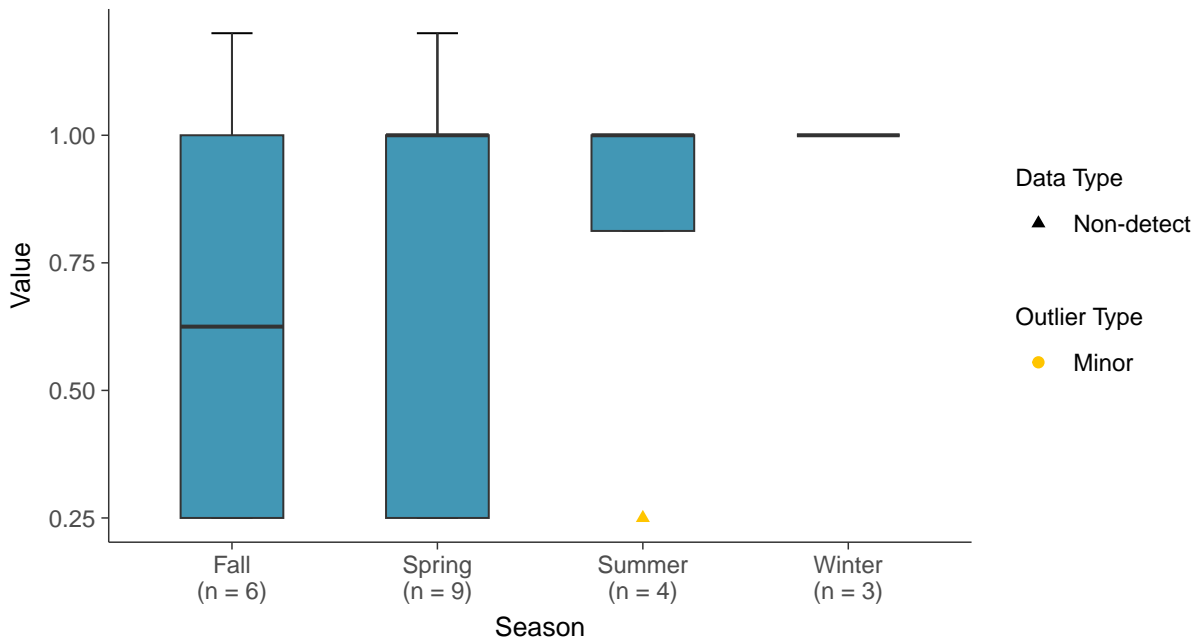
Boxplot

Antimony, MW-15010 (ug/L)



Boxplot by Season

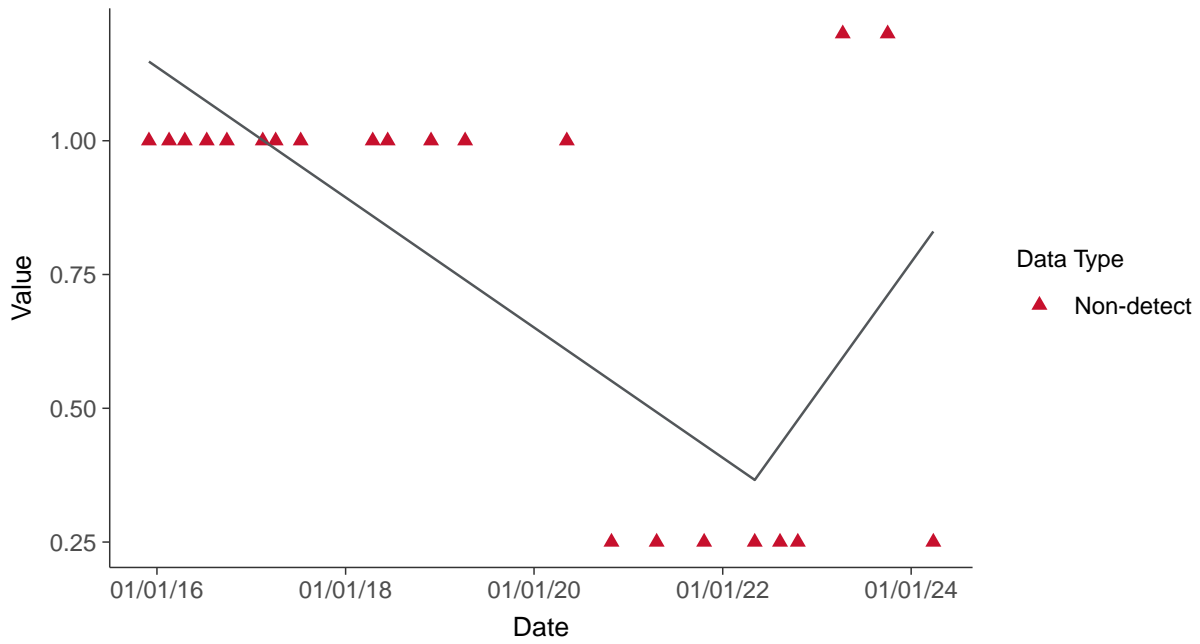
Antimony, MW-15010 (ug/L)





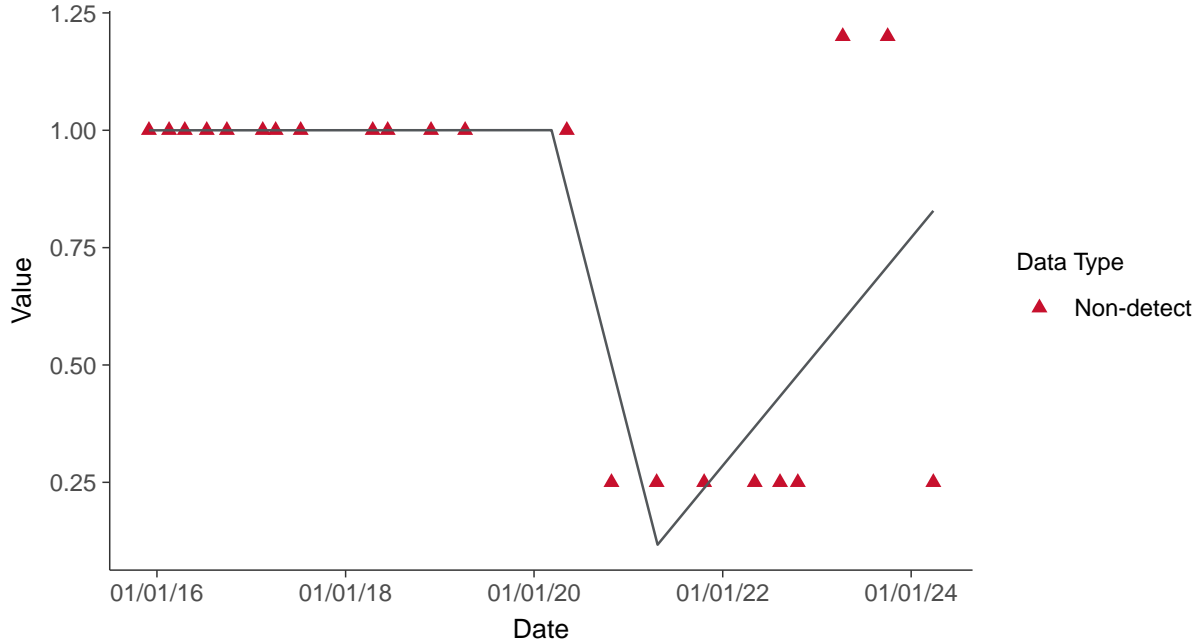
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15010 (ug/L)

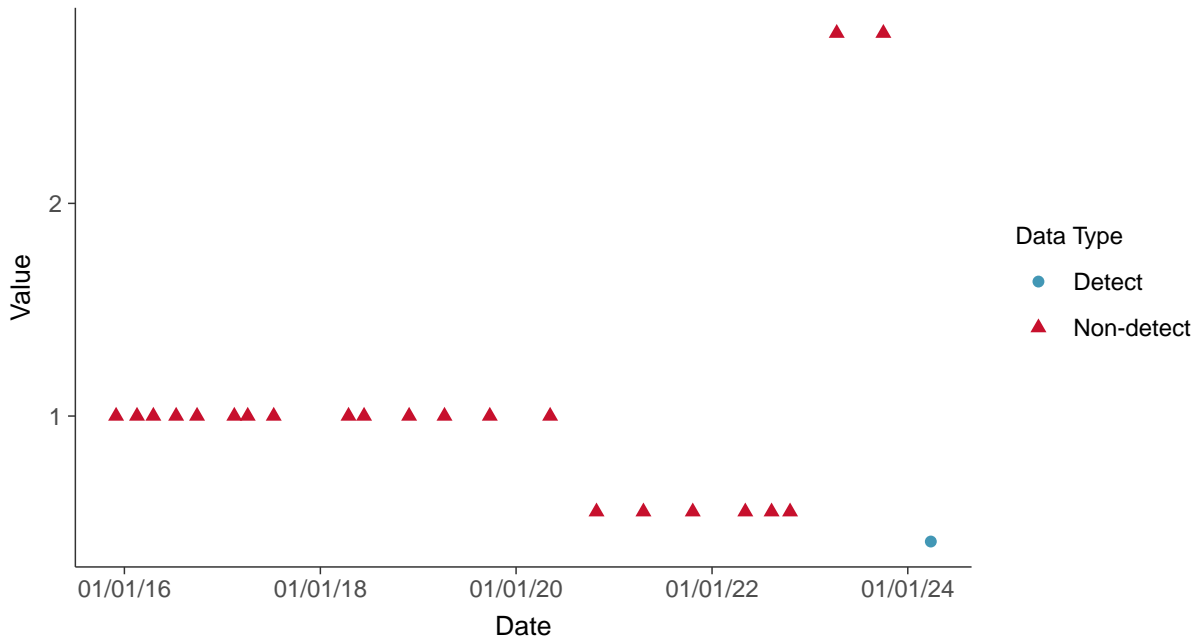


Appendix IV: Arsenic, MW-15010

ID: 02_2_102

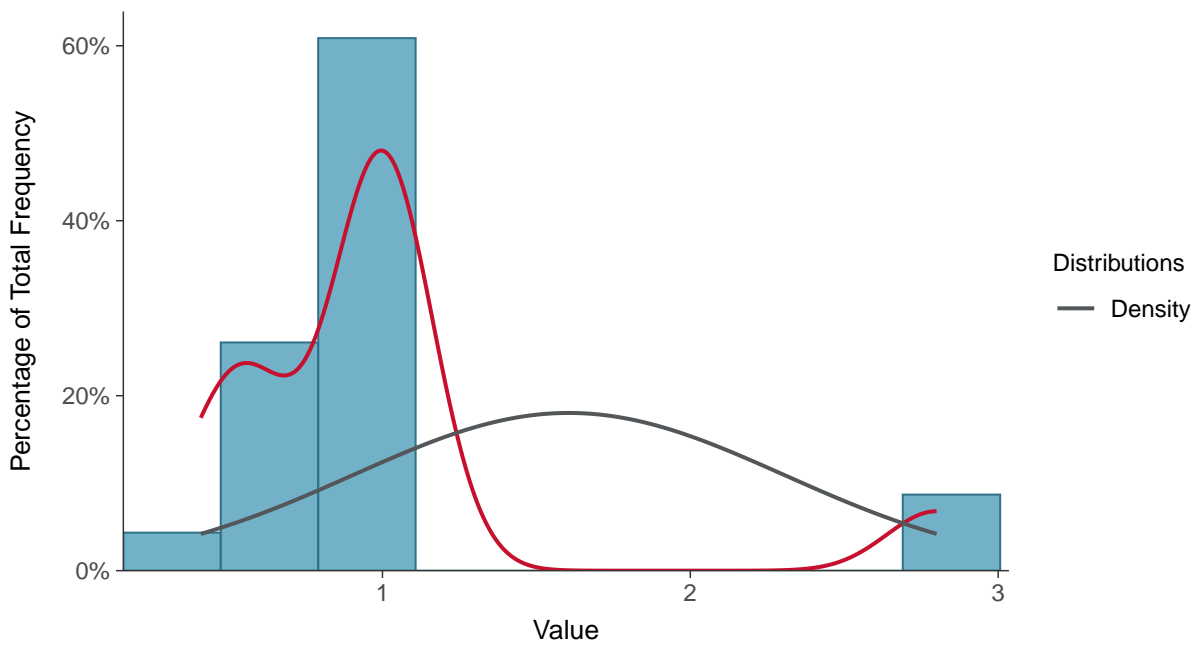
Scatter Plot

Arsenic, MW-15010 (ug/L)



Histogram

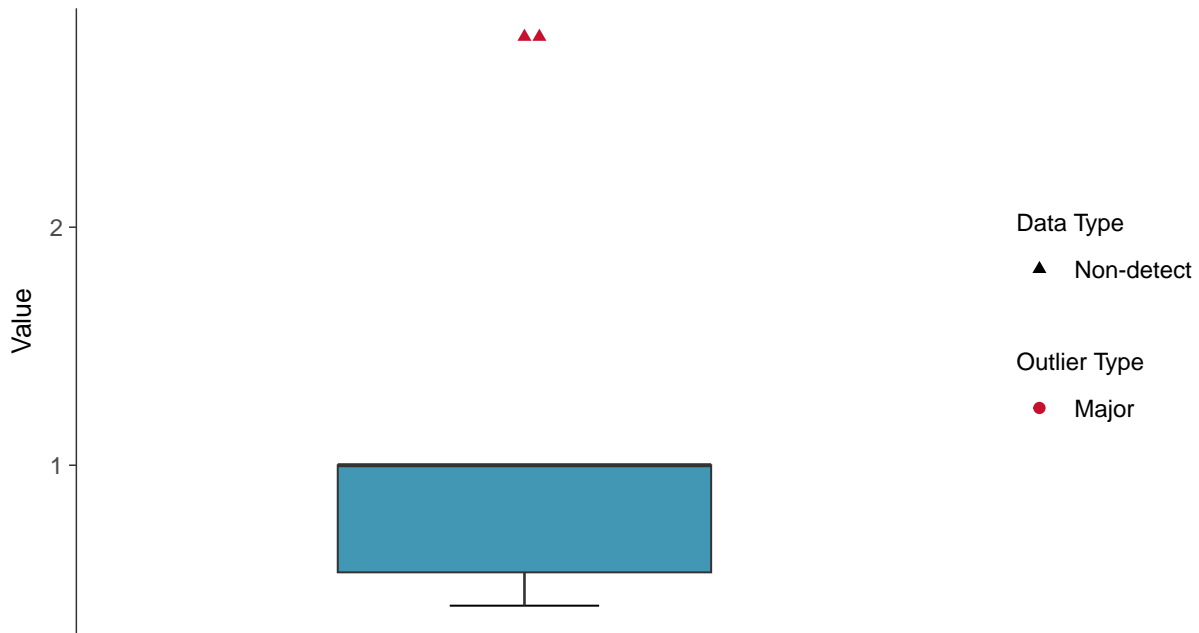
Arsenic, MW-15010 (ug/L)





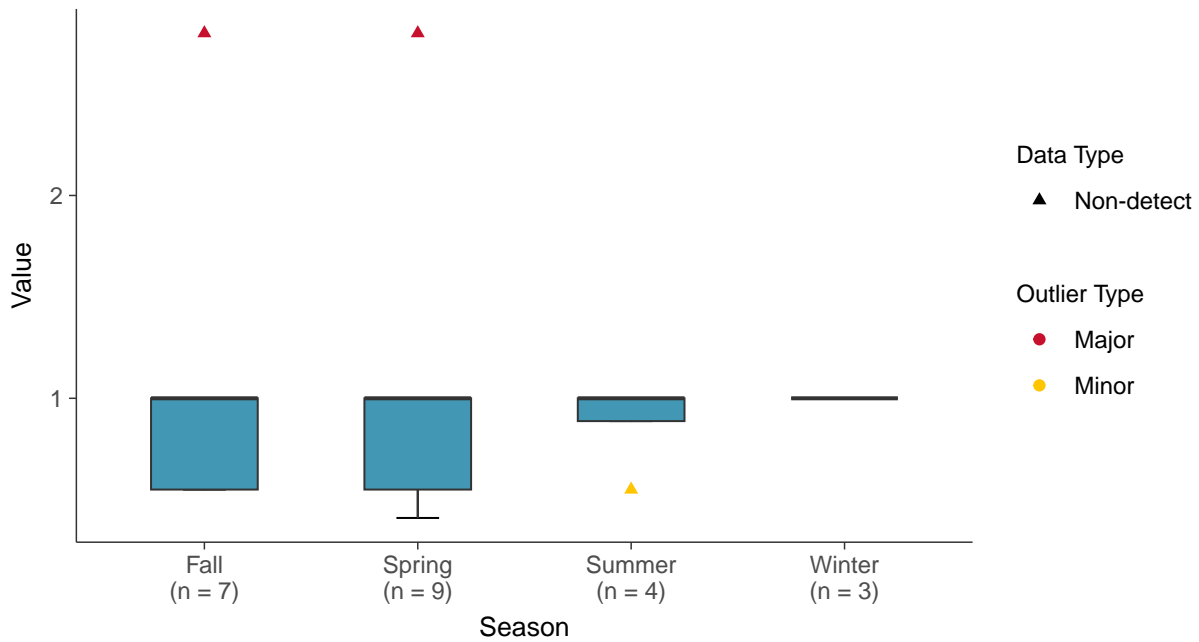
Boxplot

Arsenic, MW-15010 (ug/L)



Boxplot by Season

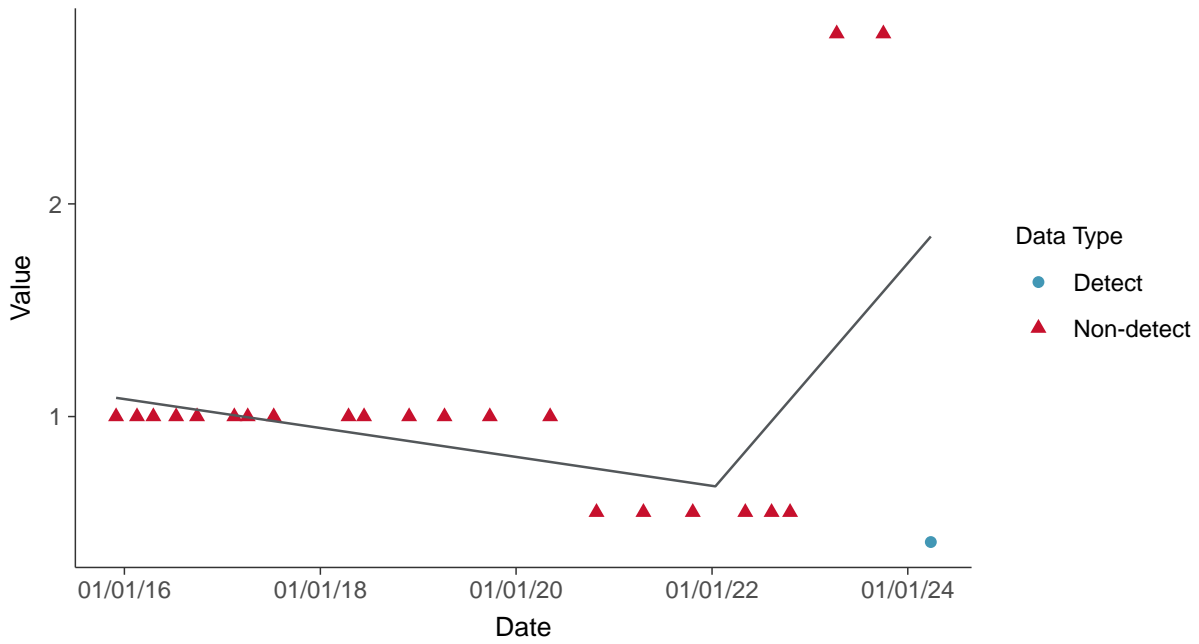
Arsenic, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15010 (ug/L)



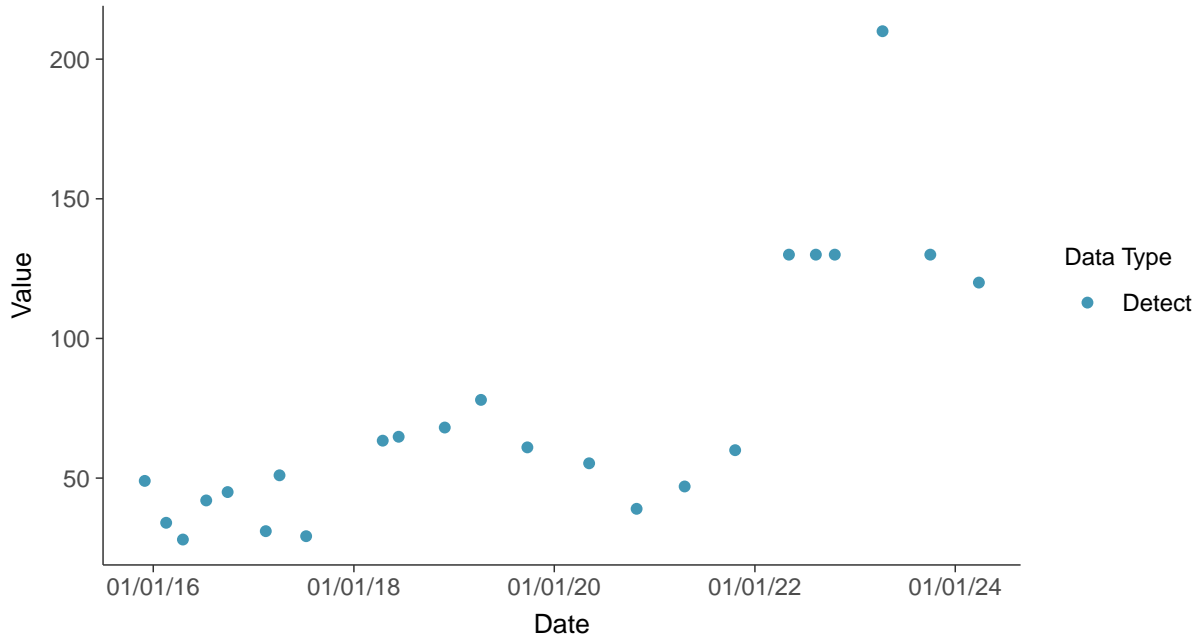


Appendix IV: Barium, MW-15010

ID: 02_2_103

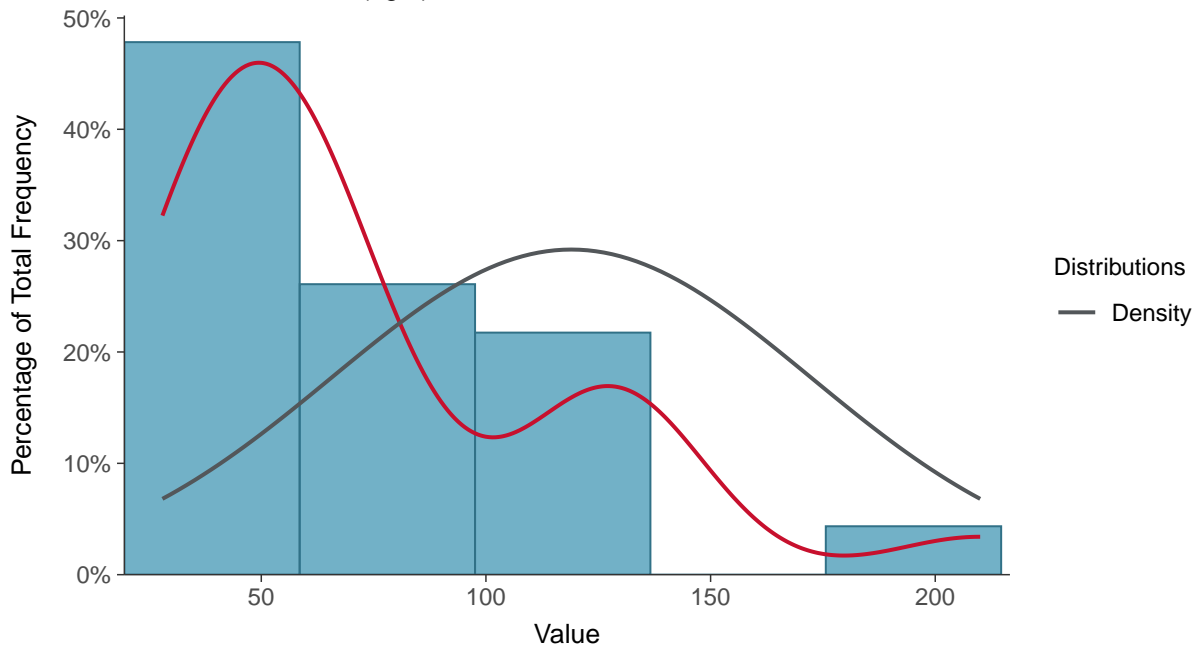
Scatter Plot

Barium, MW-15010 (ug/L)



Histogram

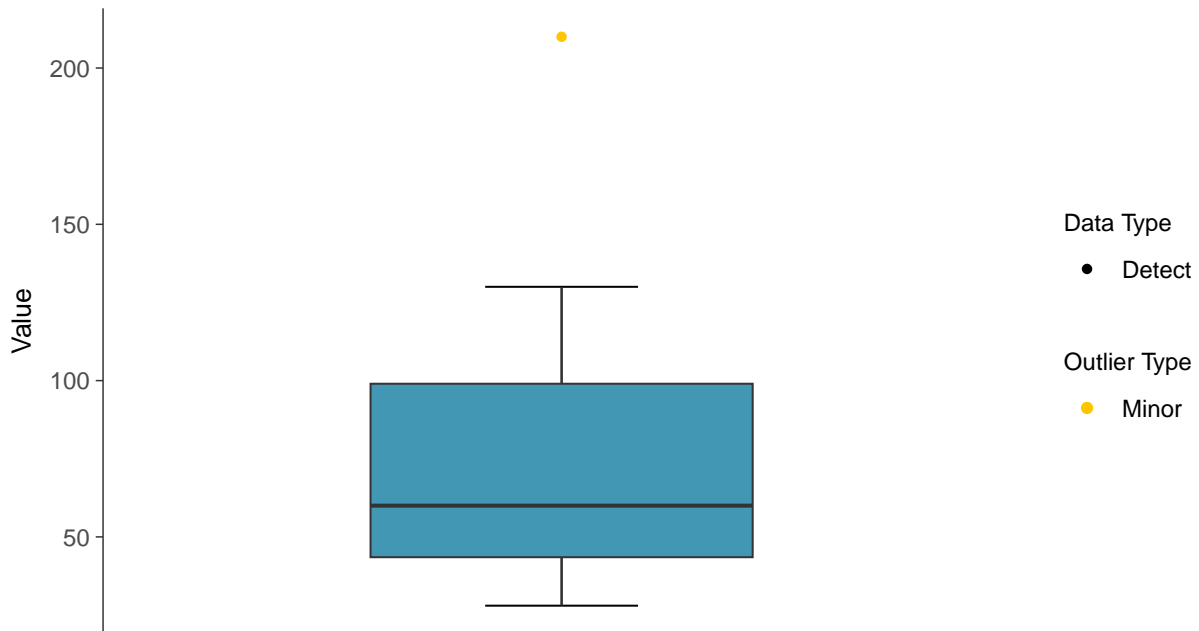
Barium, MW-15010 (ug/L)





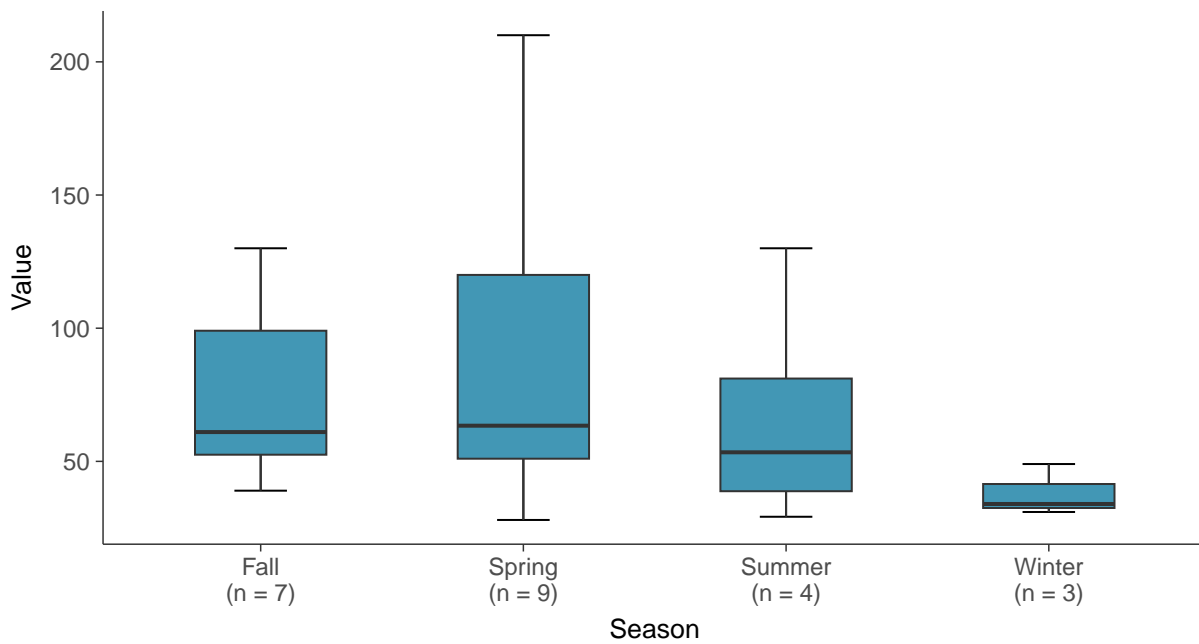
Boxplot

Barium, MW-15010 (ug/L)



Boxplot by Season

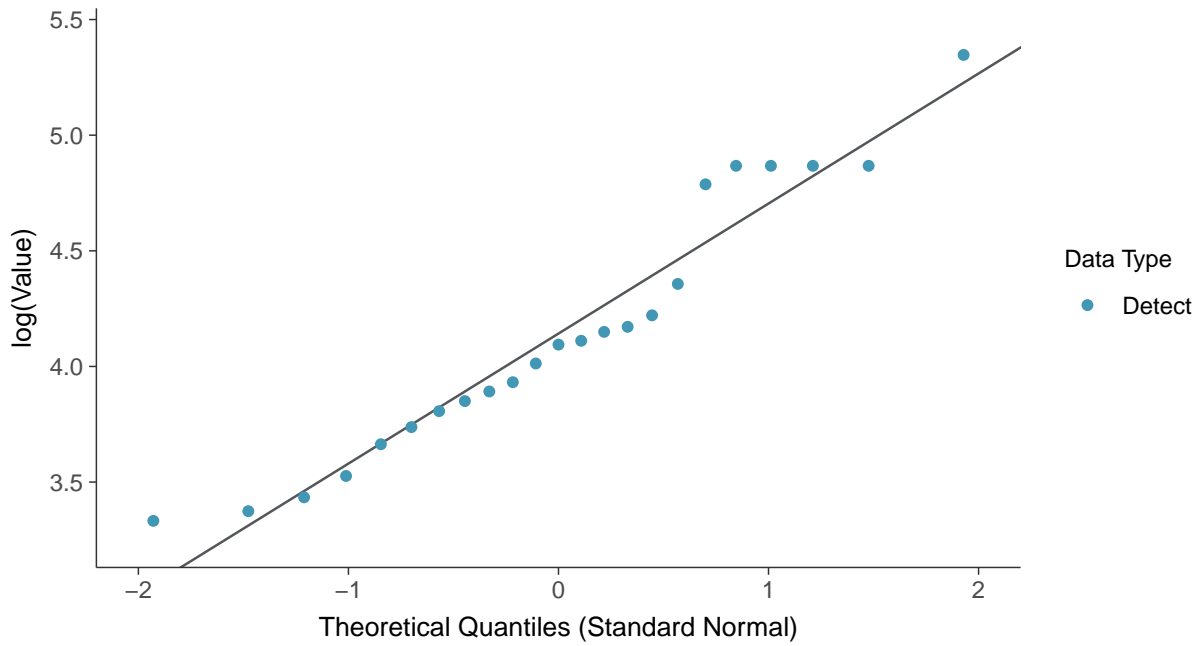
Barium, MW-15010 (ug/L)





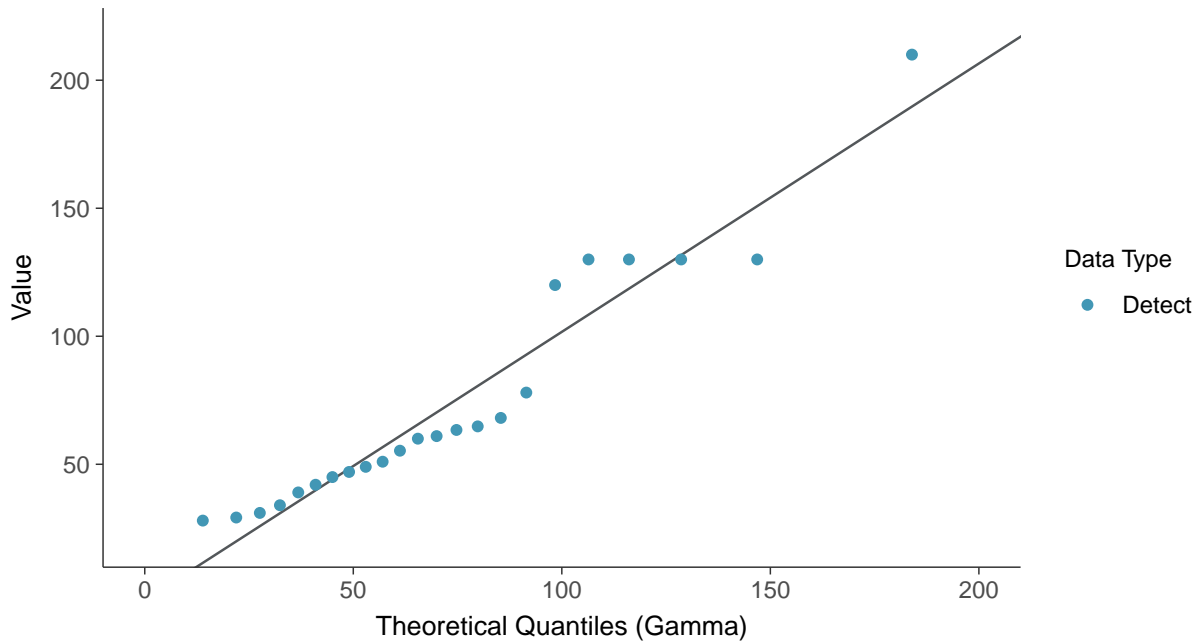
Lognormal Q-Q plot

Barium, MW-15010 (ug/L)



Gamma Q-Q plot

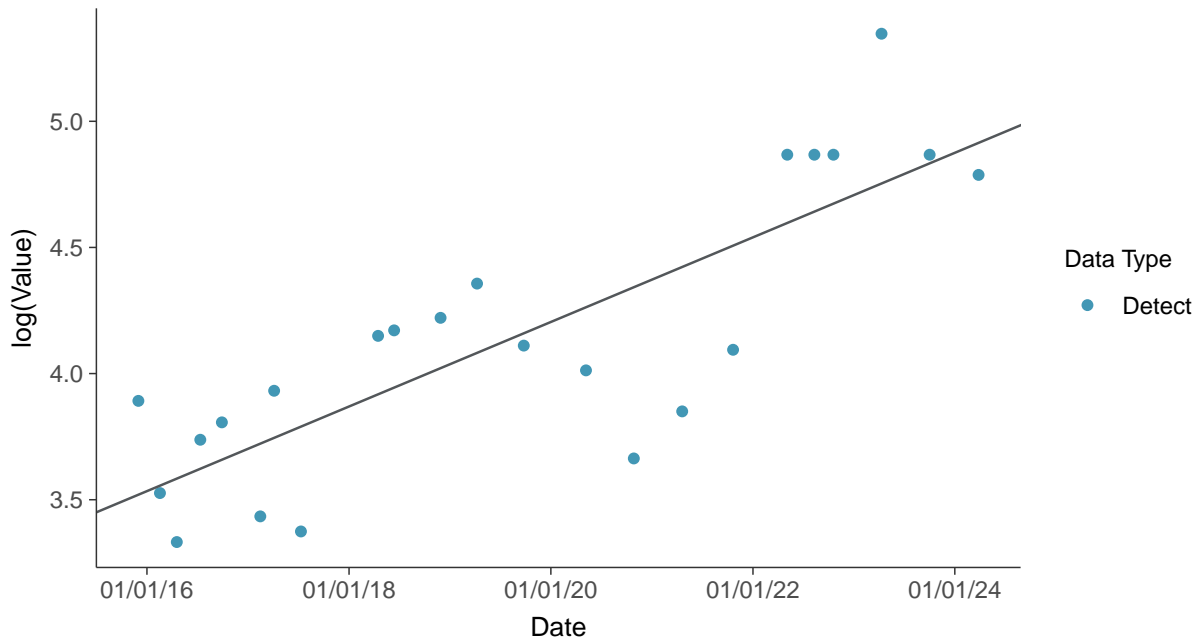
Barium, MW-15010 (ug/L)





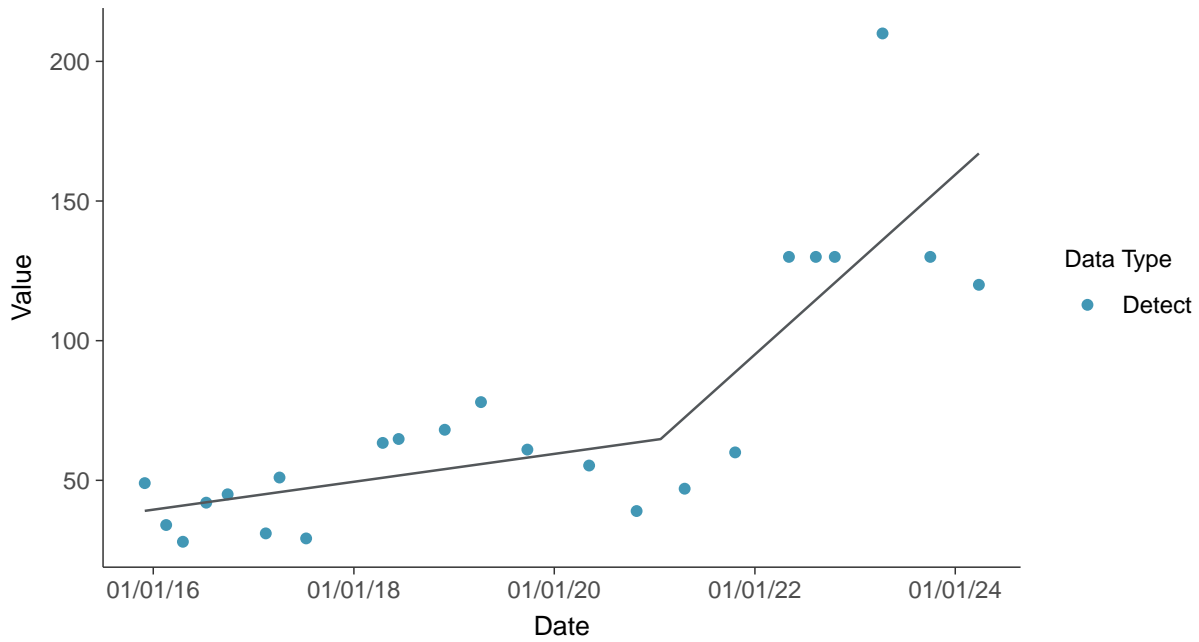
Trend Regression: Lognormal MLE

Barium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear

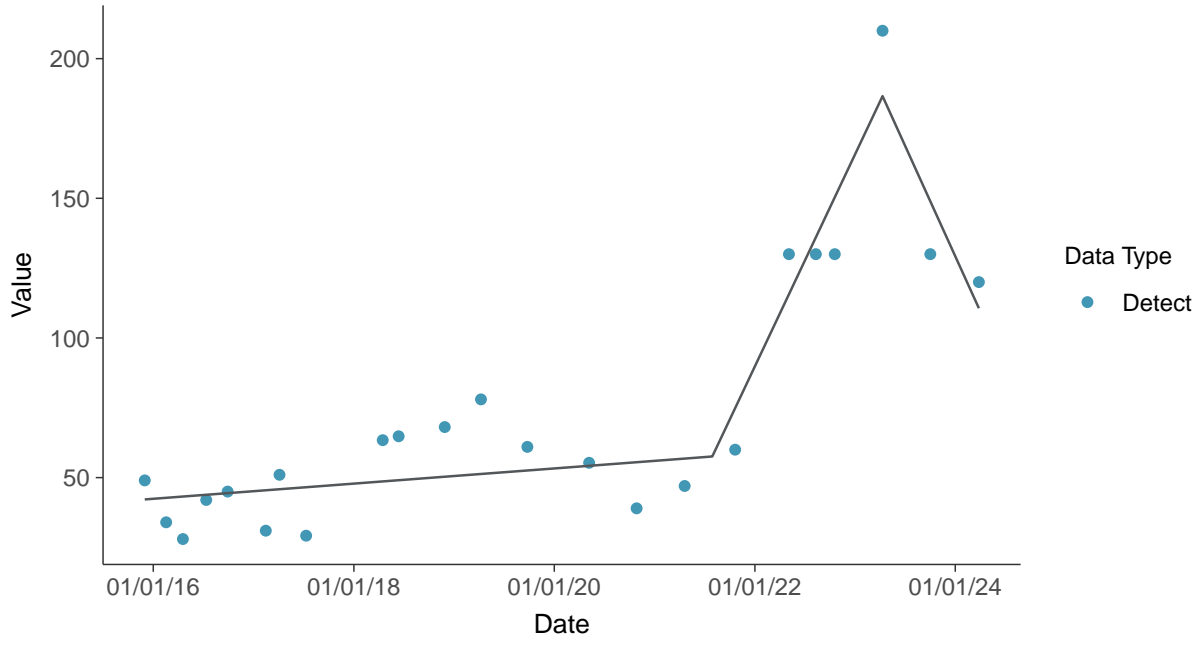
Barium, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

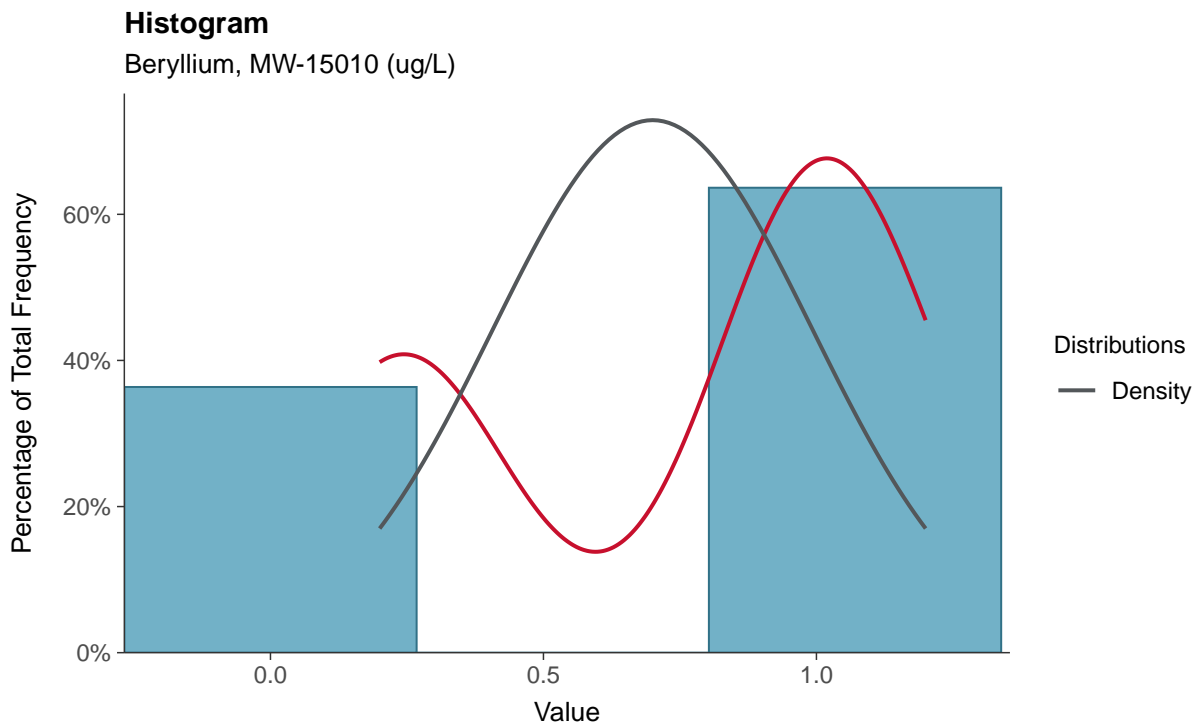
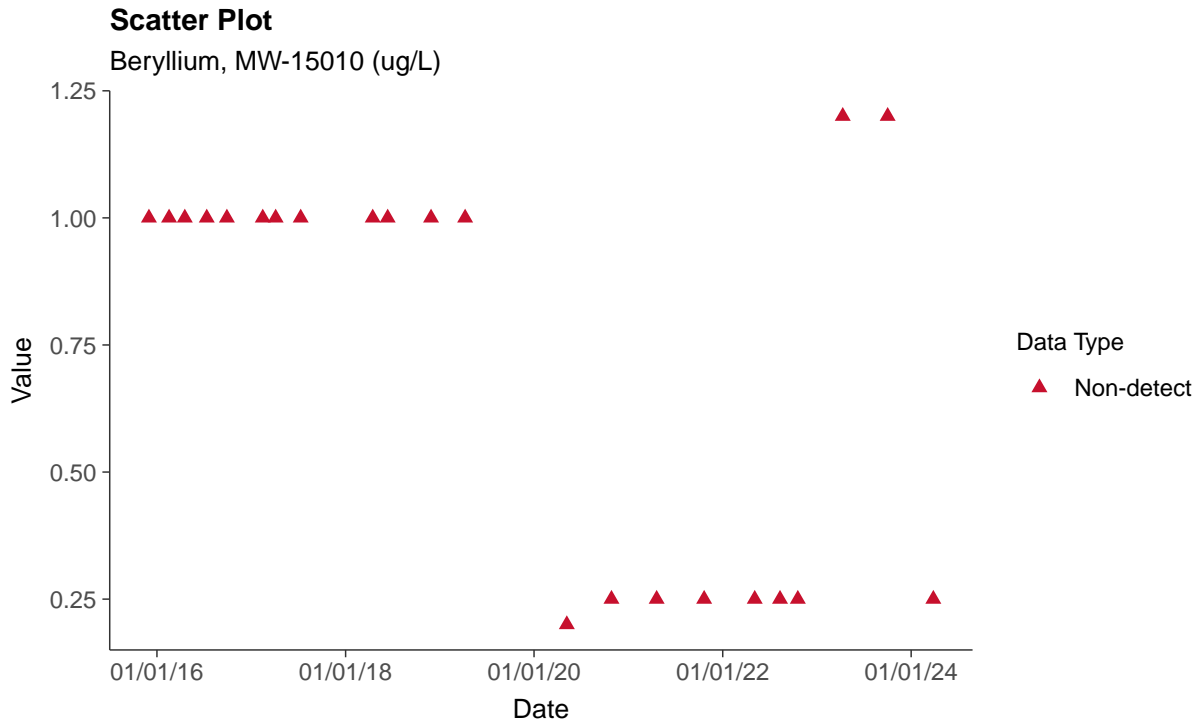
Barium, MW-15010 (ug/L)





Appendix IV: Beryllium, MW-15010

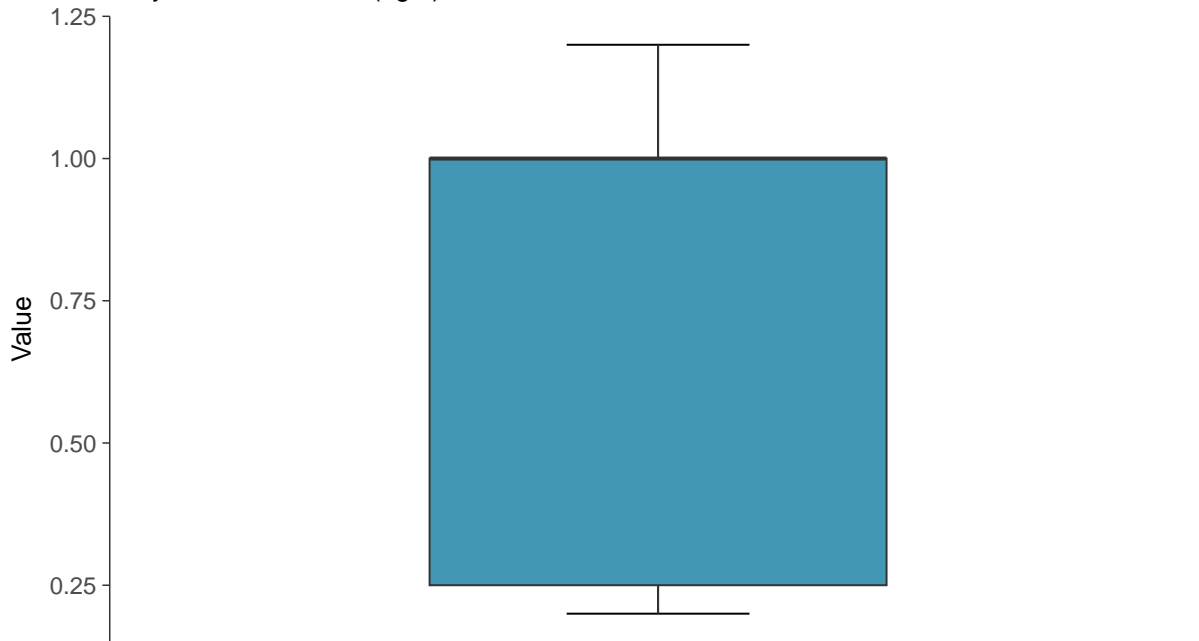
ID: 02_2_104





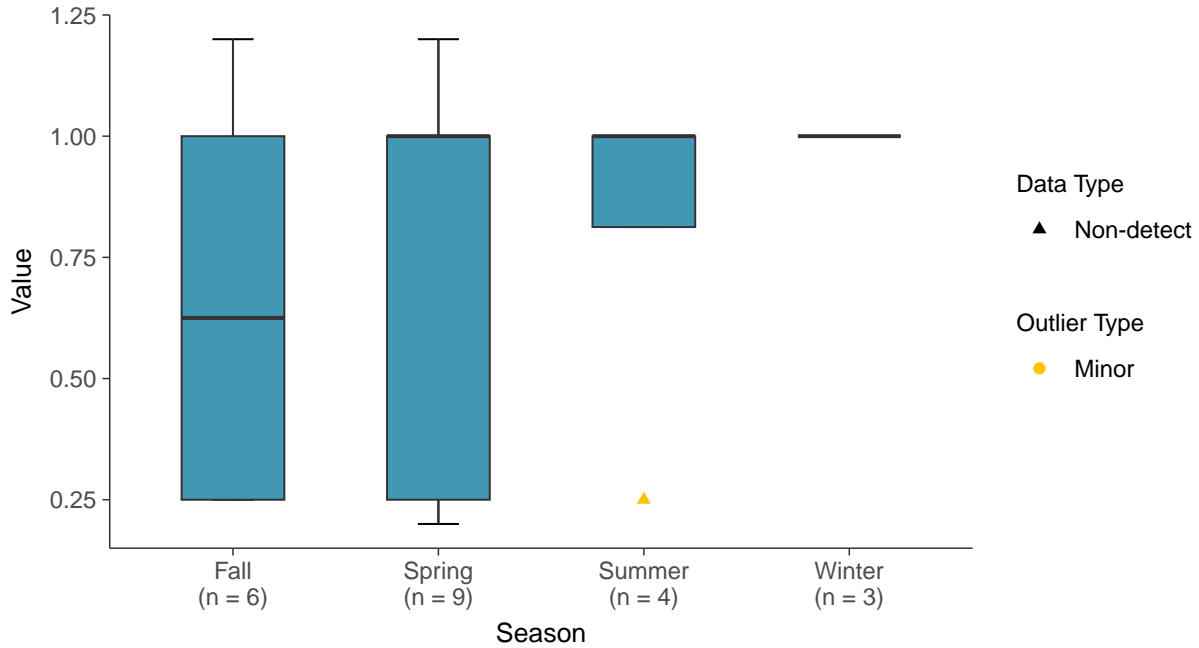
Boxplot

Beryllium, MW-15010 (ug/L)



Boxplot by Season

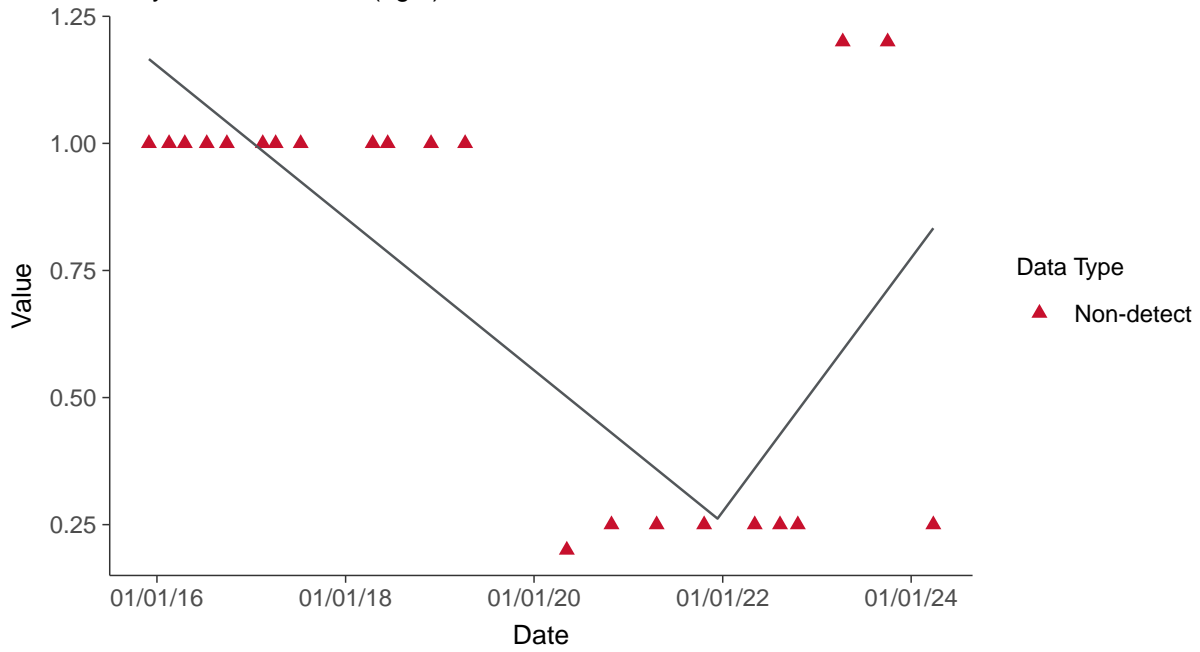
Beryllium, MW-15010 (ug/L)





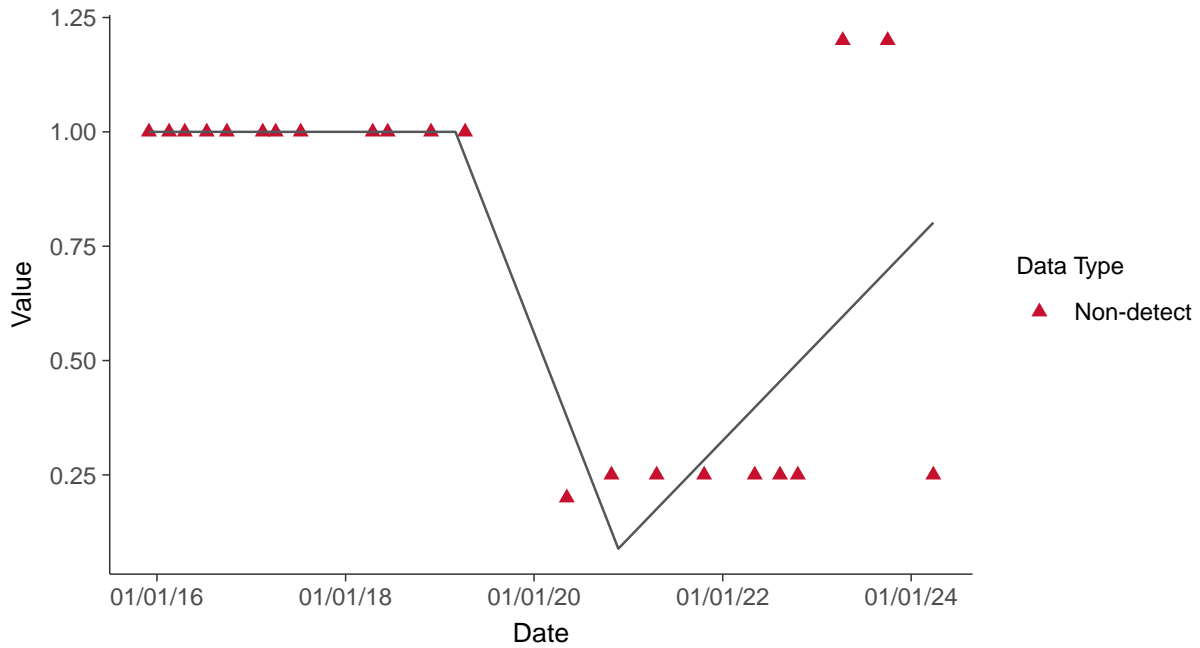
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

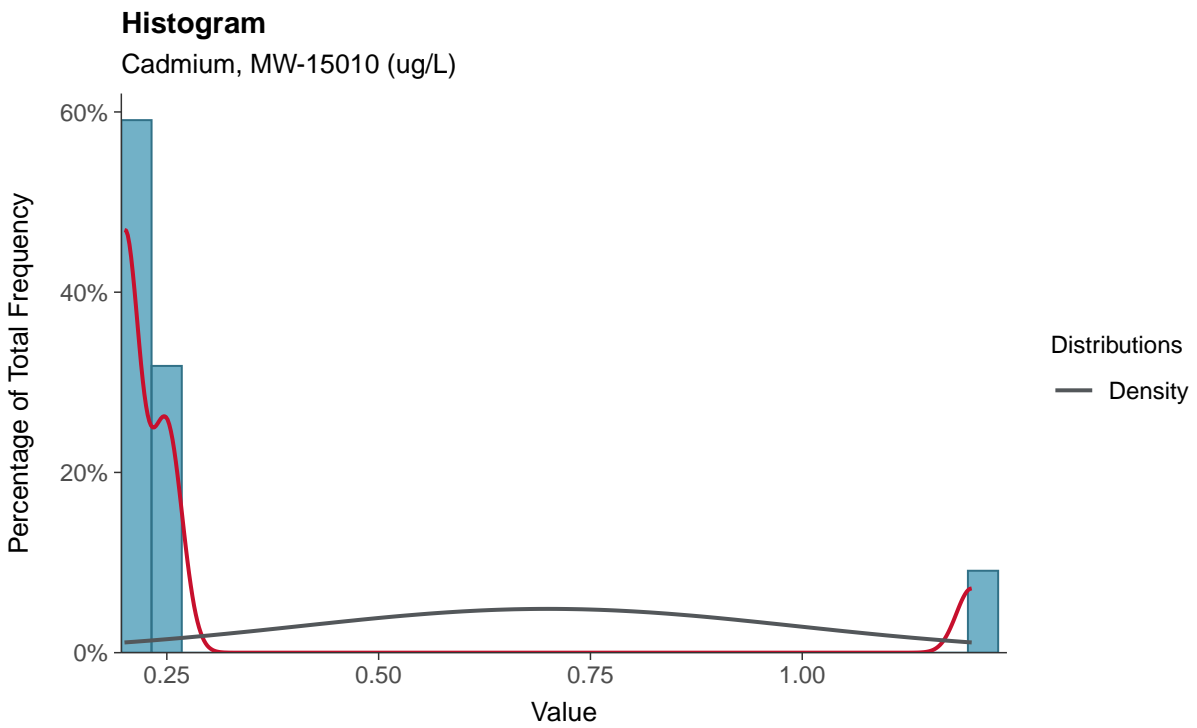
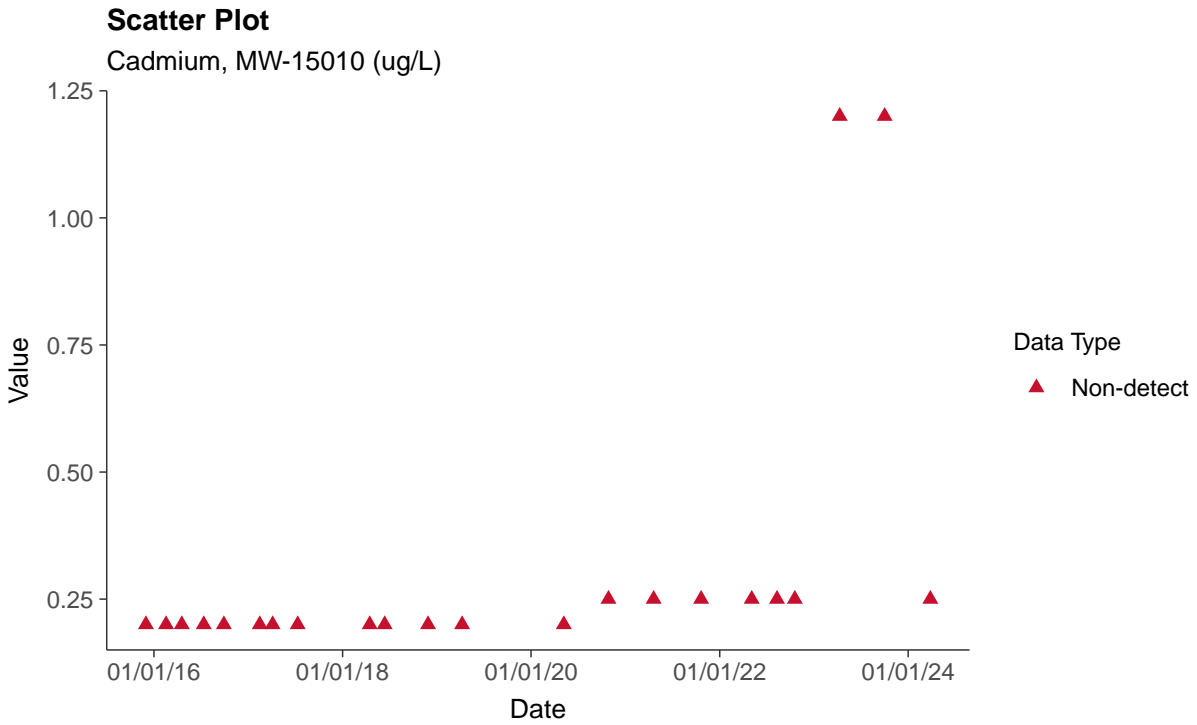
Beryllium, MW-15010 (ug/L)

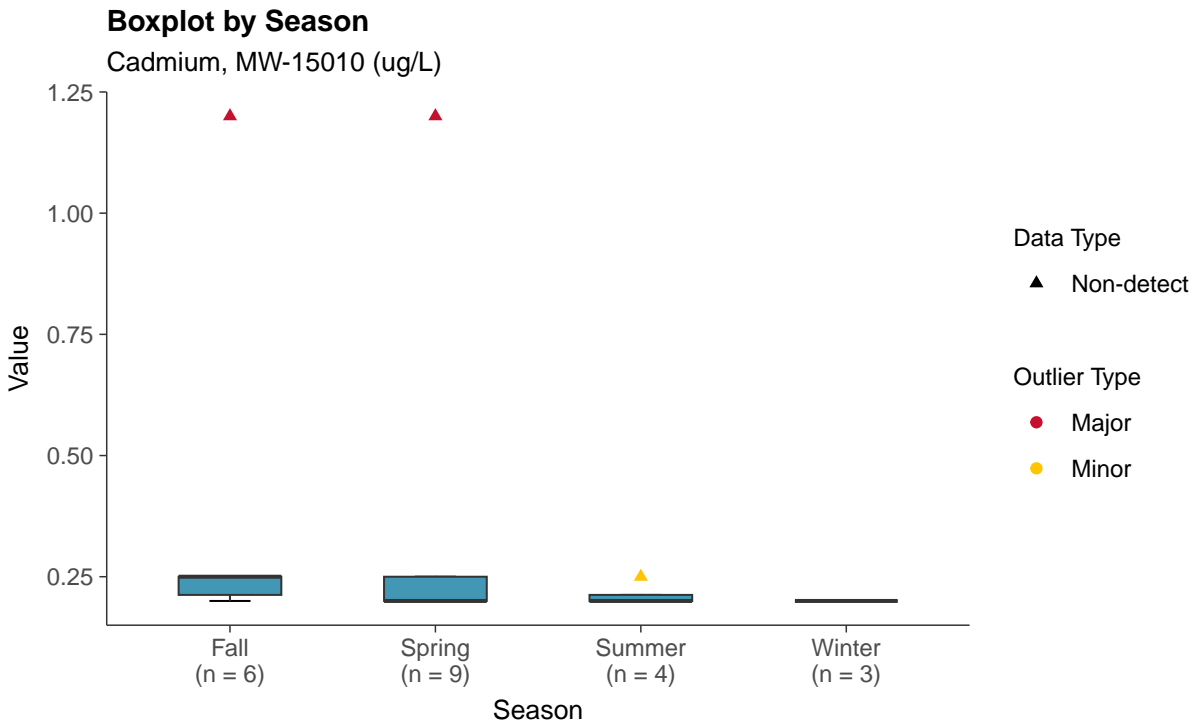
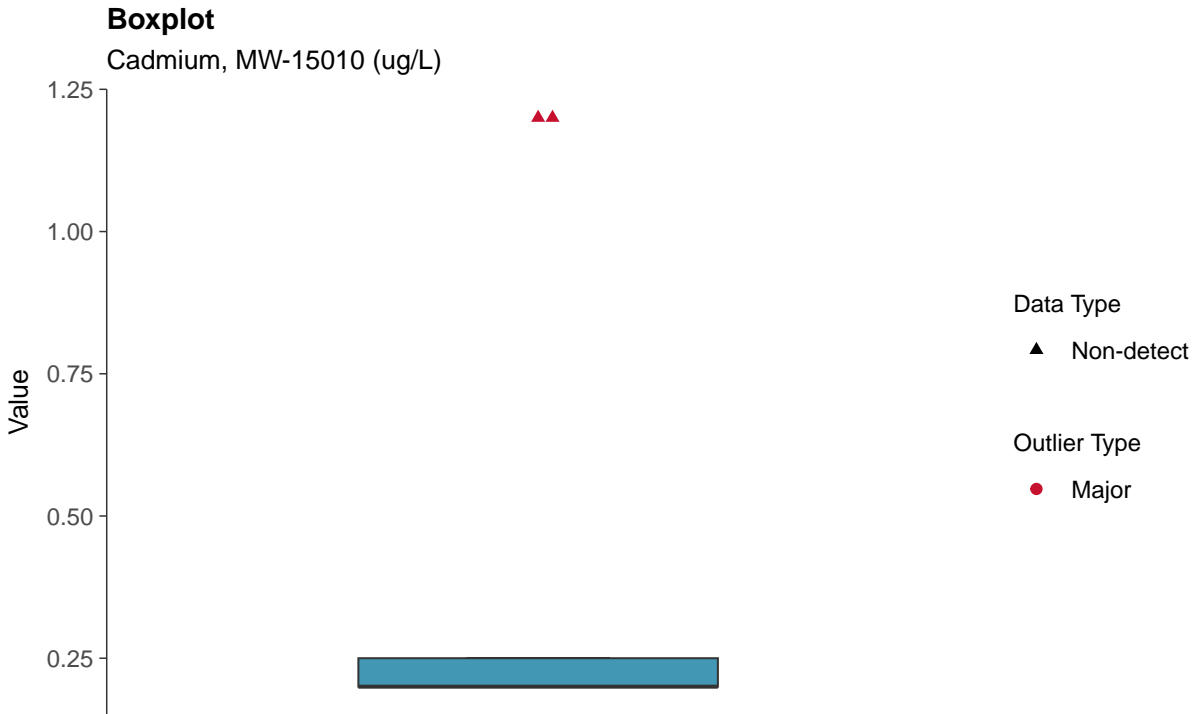




Appendix IV: Cadmium, MW-15010

ID: 02_2_106

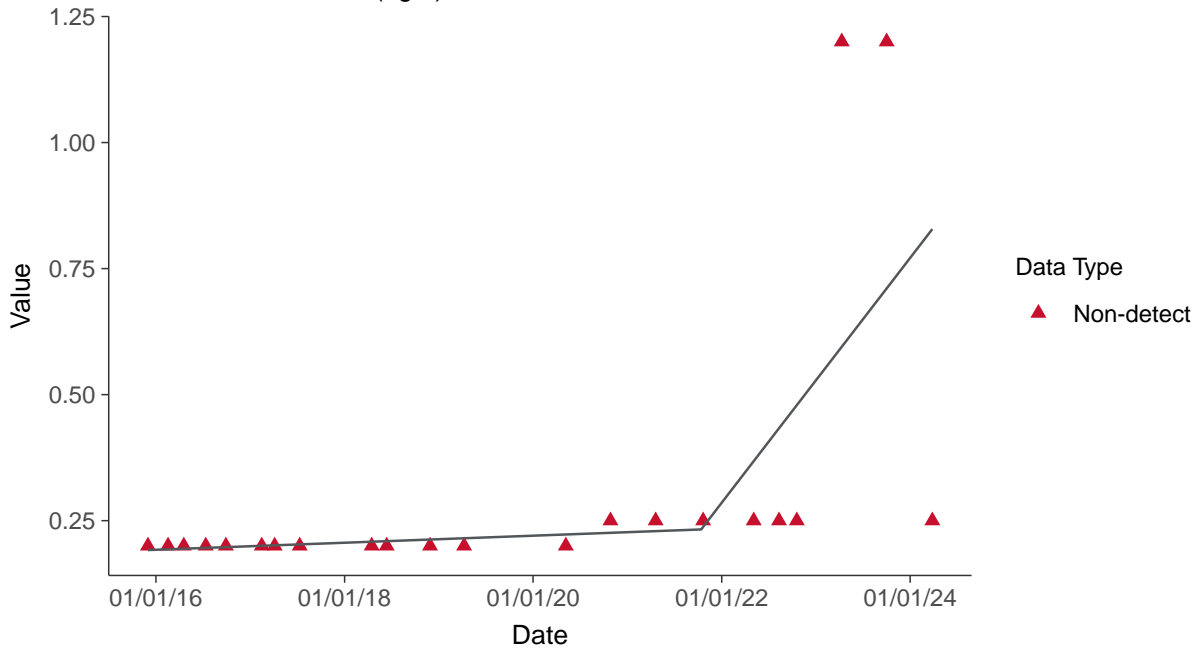






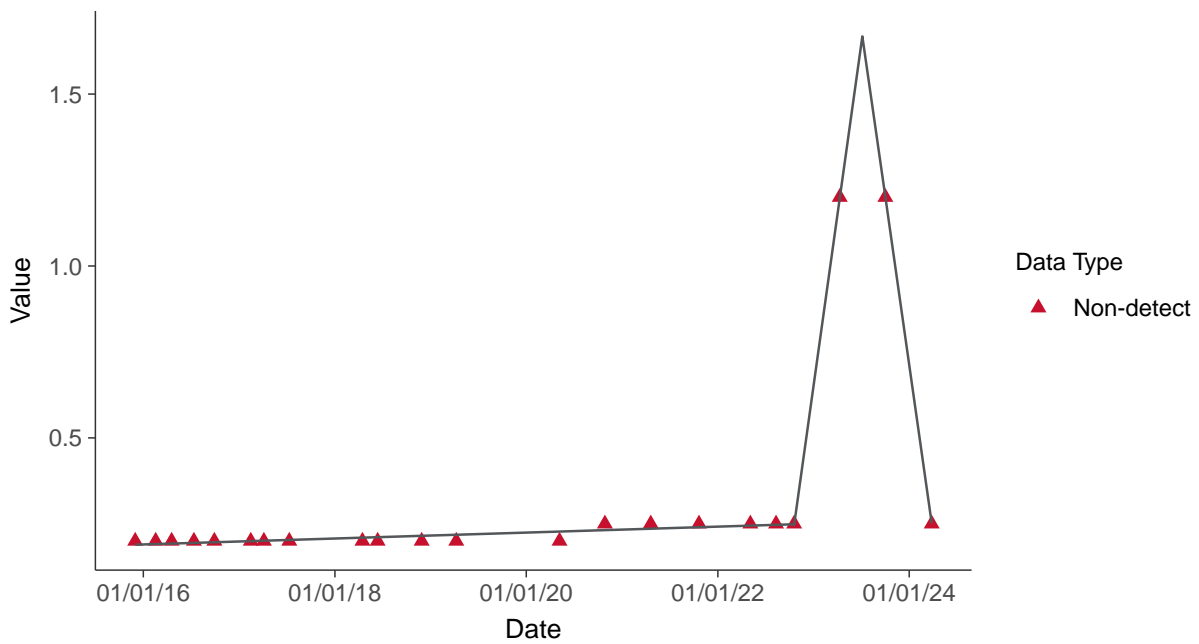
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

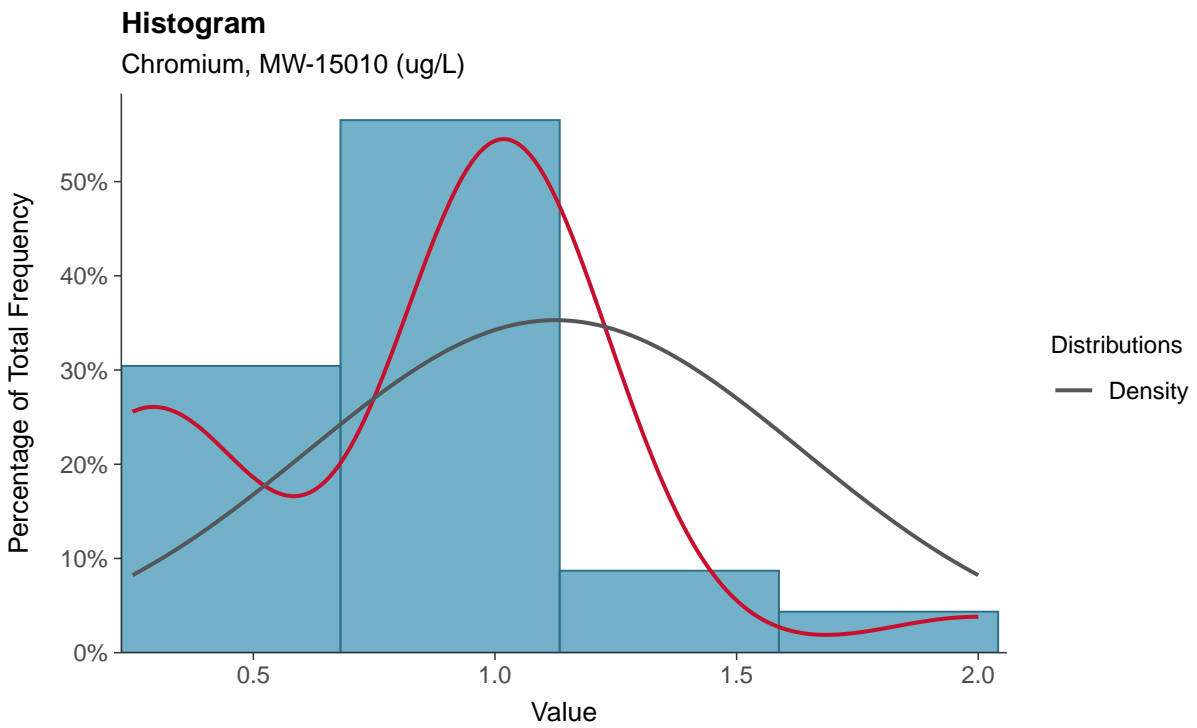
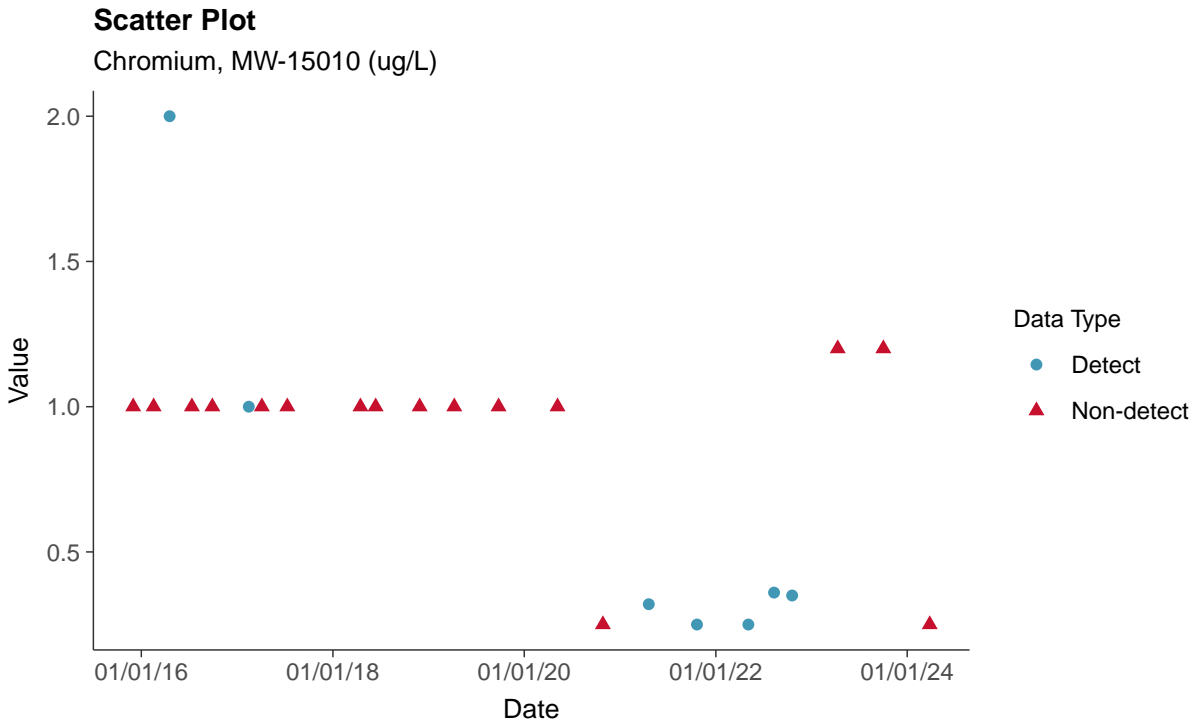
Cadmium, MW-15010 (ug/L)





Appendix IV: Chromium, MW-15010

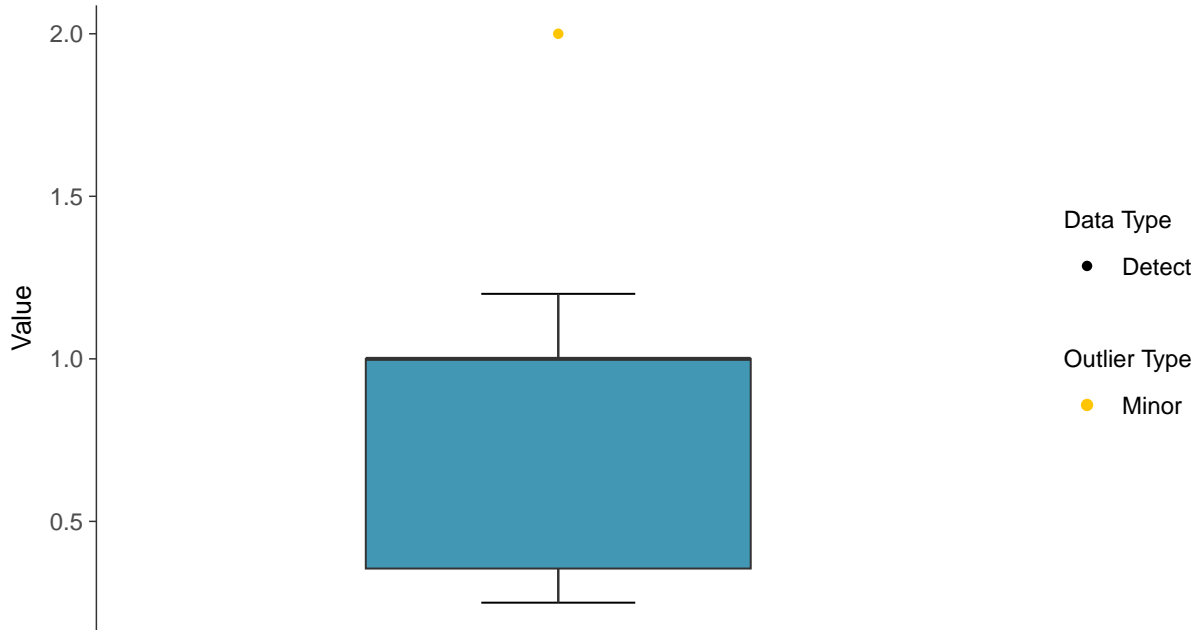
ID: 02_2_109





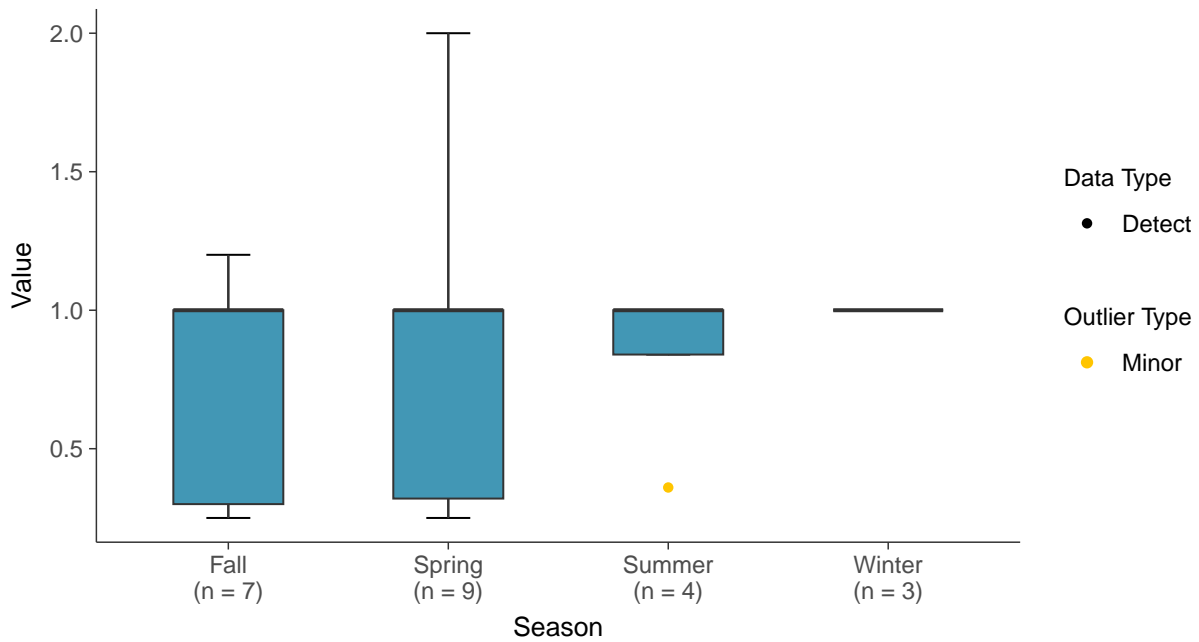
Boxplot

Chromium, MW-15010 (ug/L)



Boxplot by Season

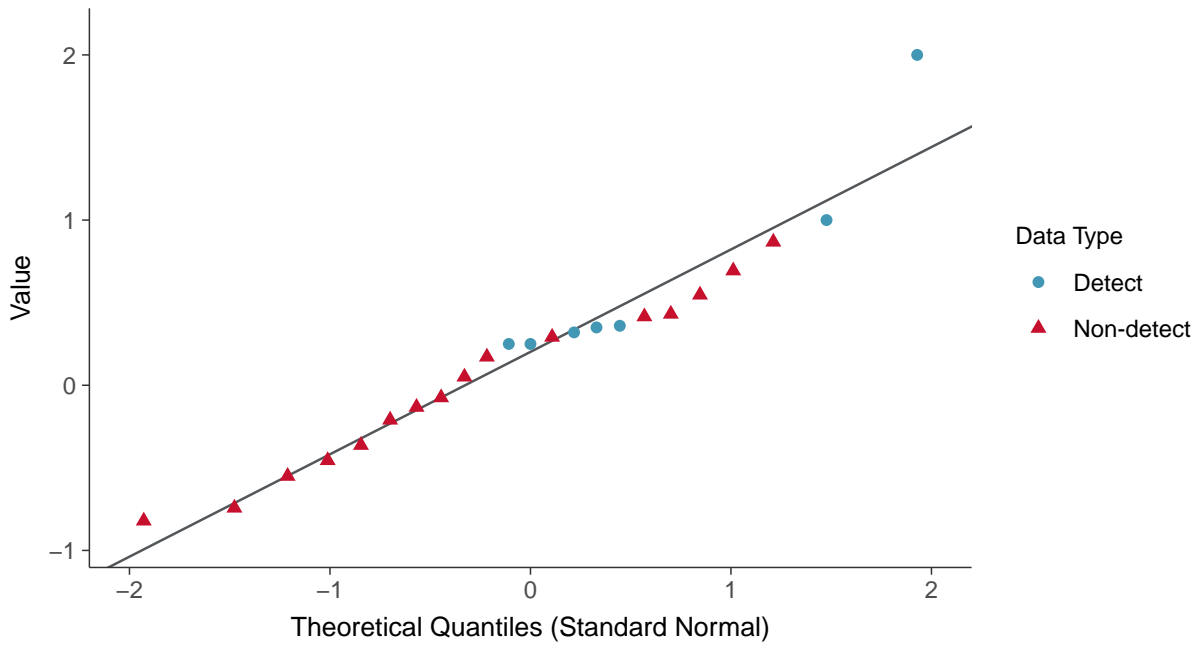
Chromium, MW-15010 (ug/L)





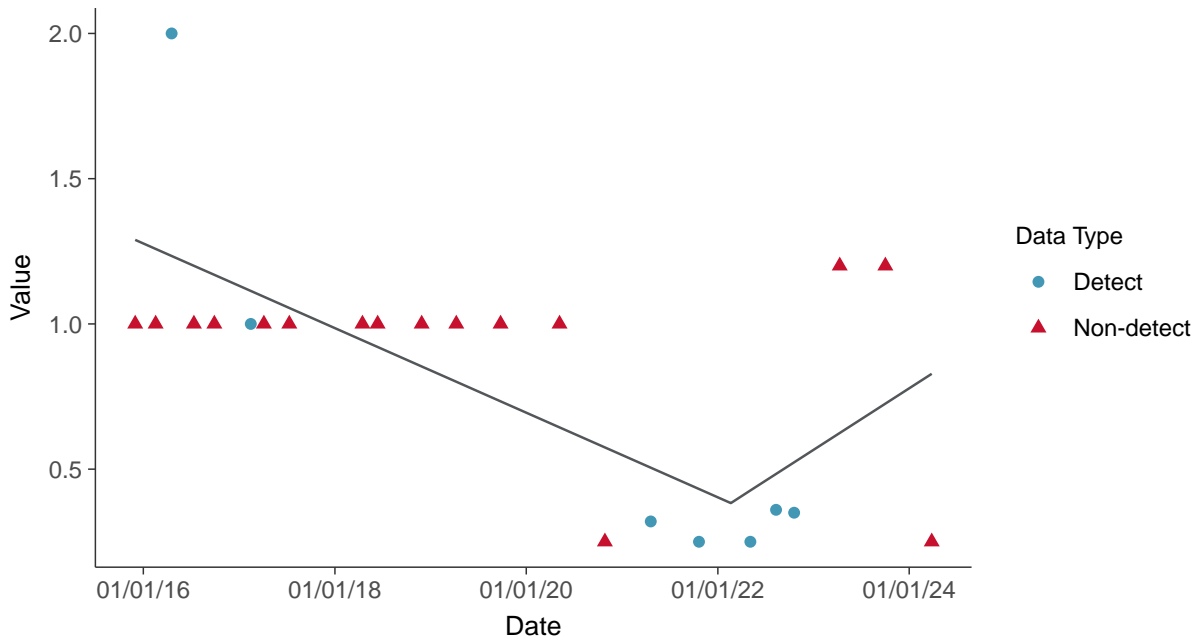
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear

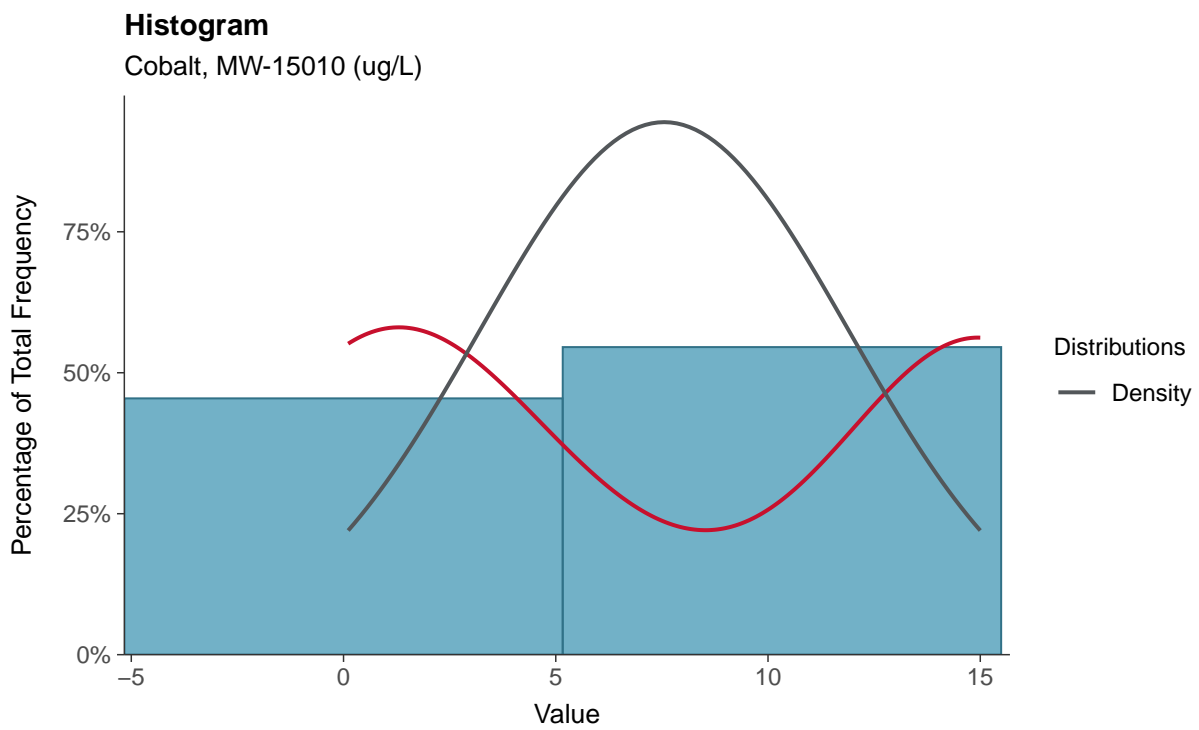
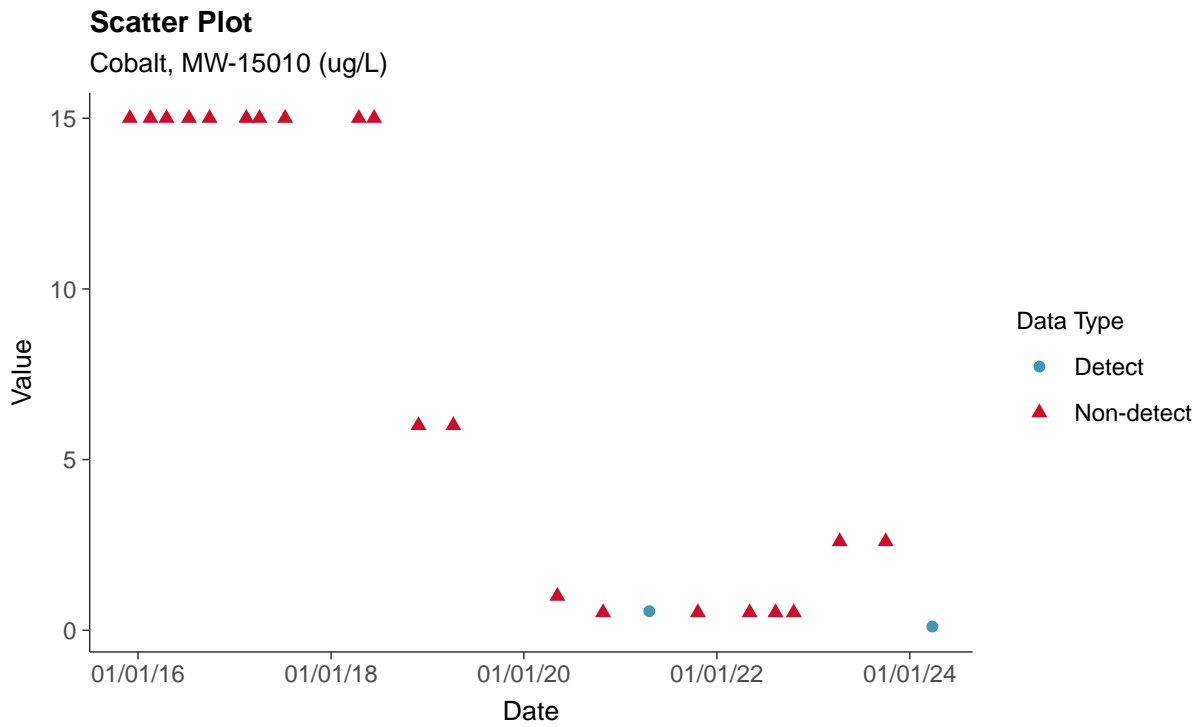
Chromium, MW-15010 (ug/L)





Appendix IV: Cobalt, MW-15010

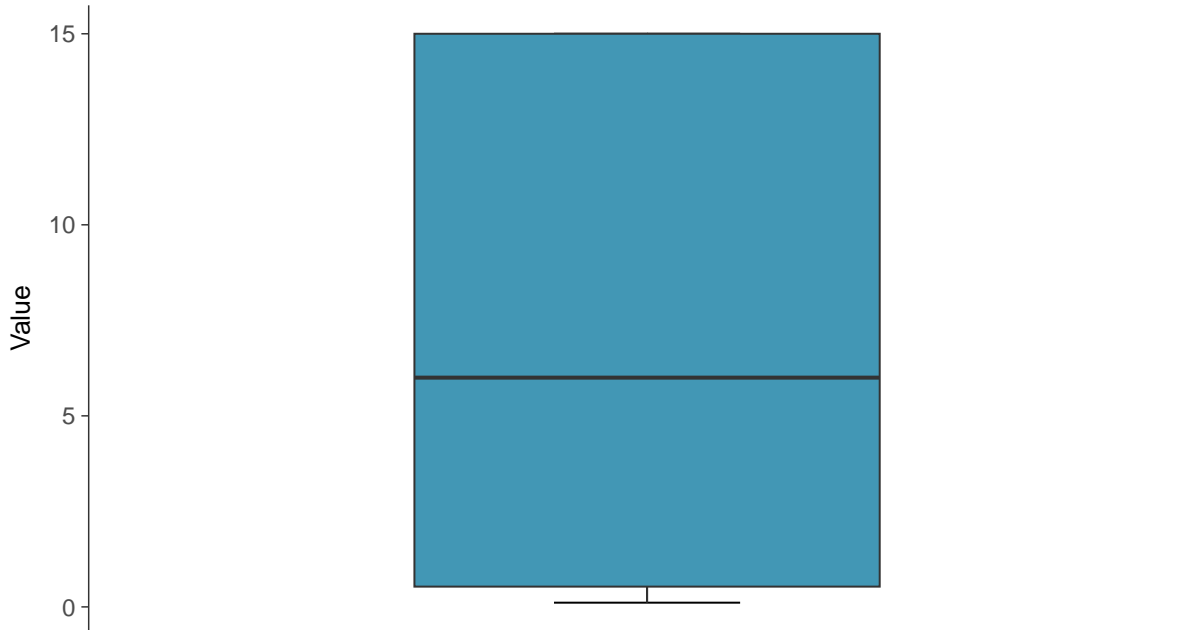
ID: 02_2_110





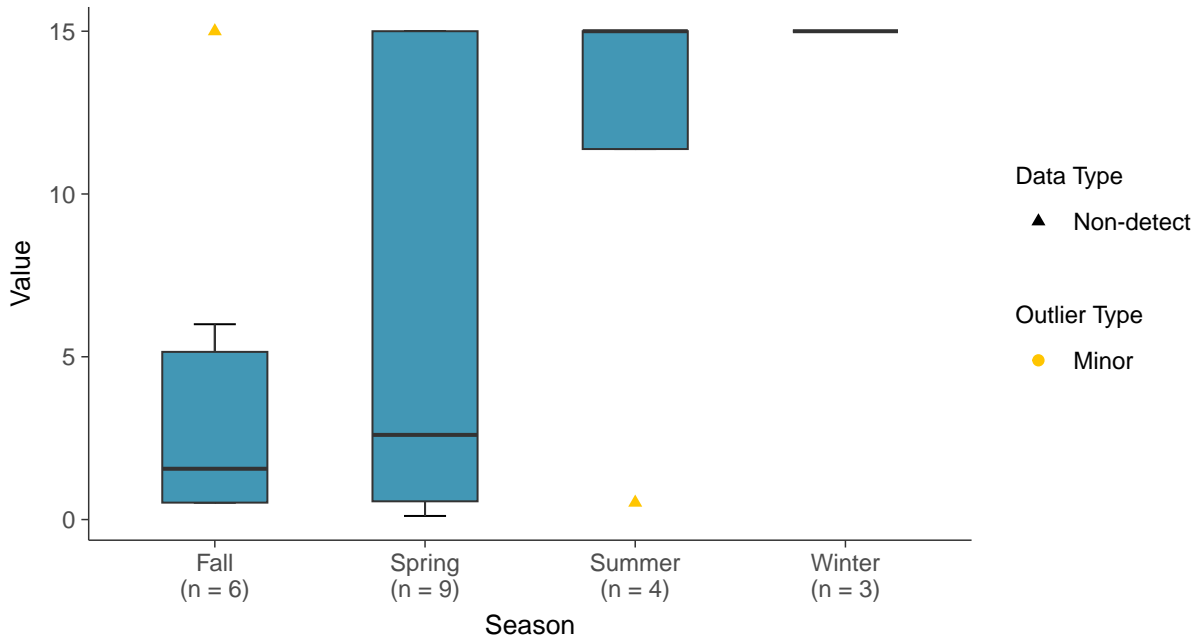
Boxplot

Cobalt, MW-15010 (ug/L)



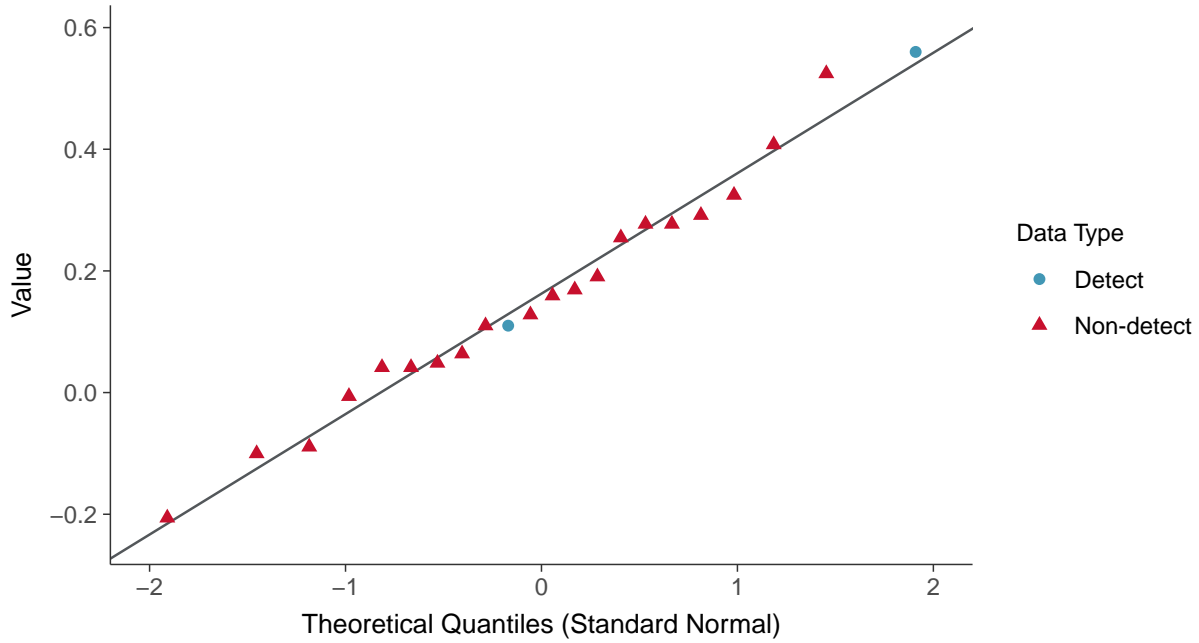
Boxplot by Season

Cobalt, MW-15010 (ug/L)

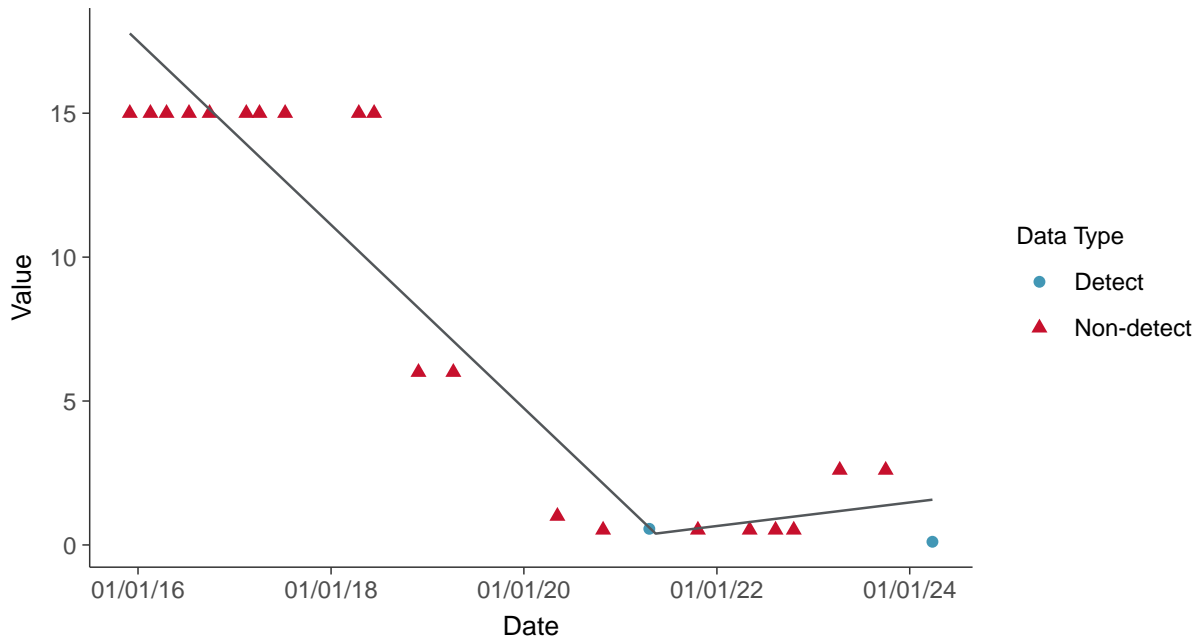




Normal Q-Q plot using ROS Imputed Estimates Cobalt, MW-15010 (ug/L)



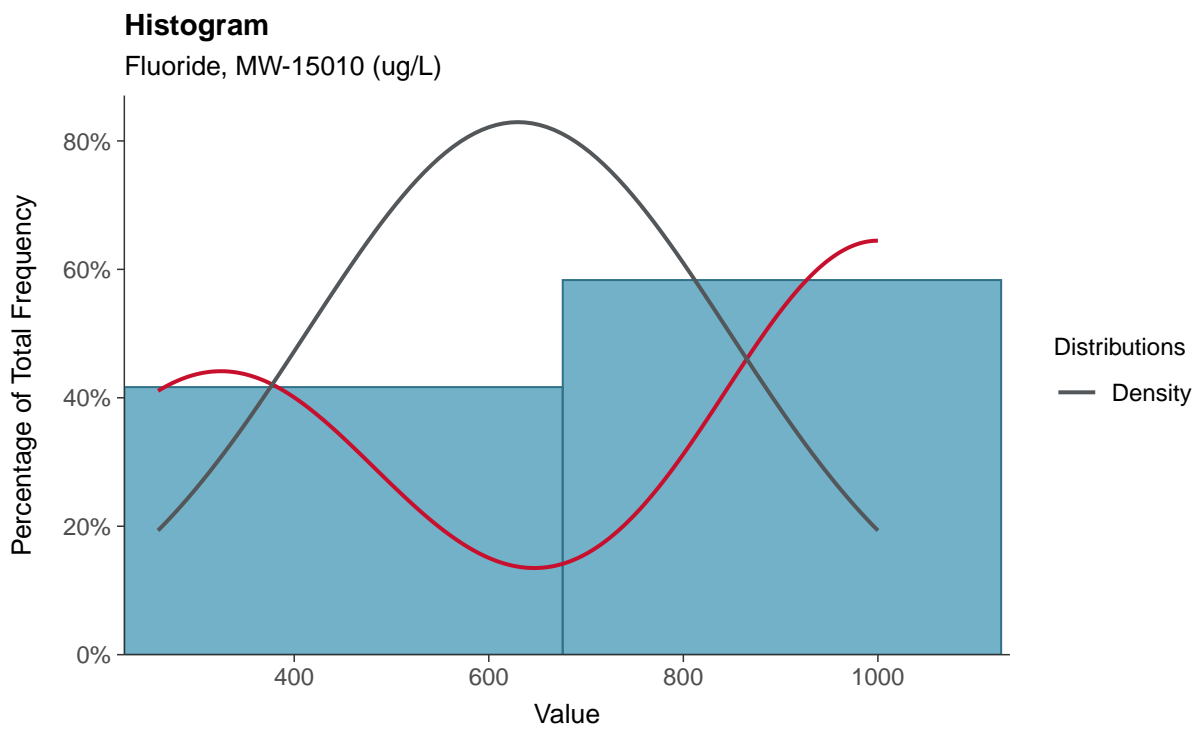
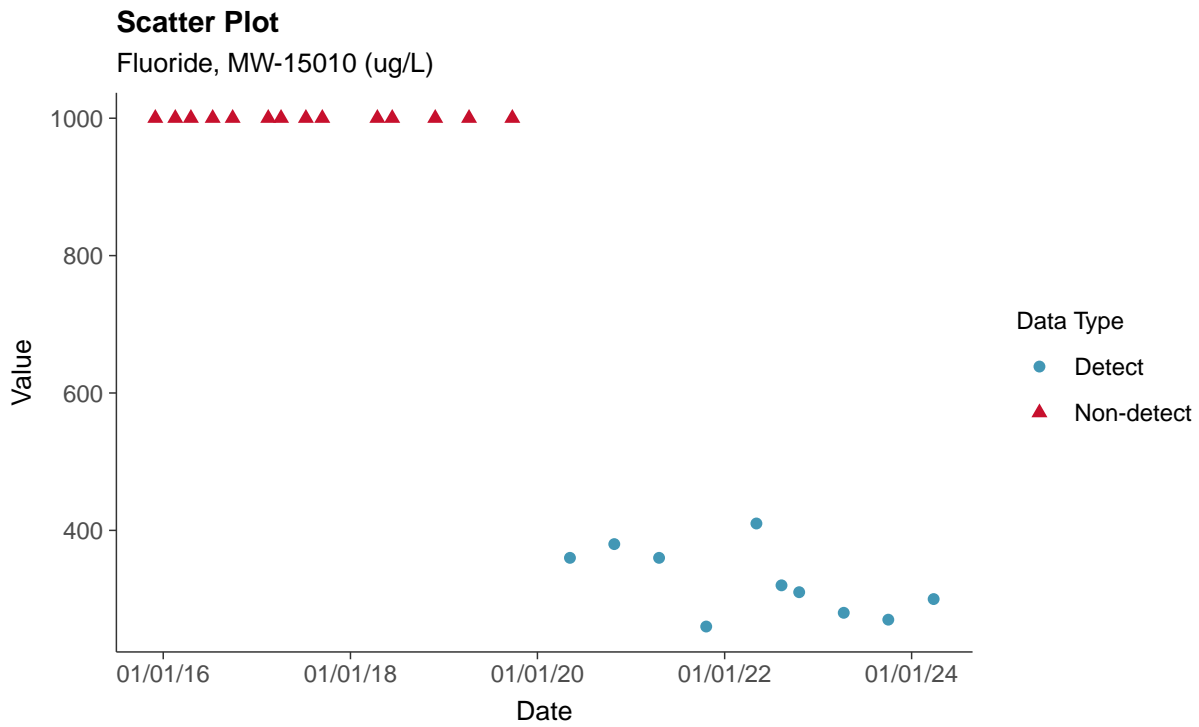
Trend Regression: Piecewise Linear-Linear Cobalt, MW-15010 (ug/L)





Appendix IV: Fluoride, MW-15010

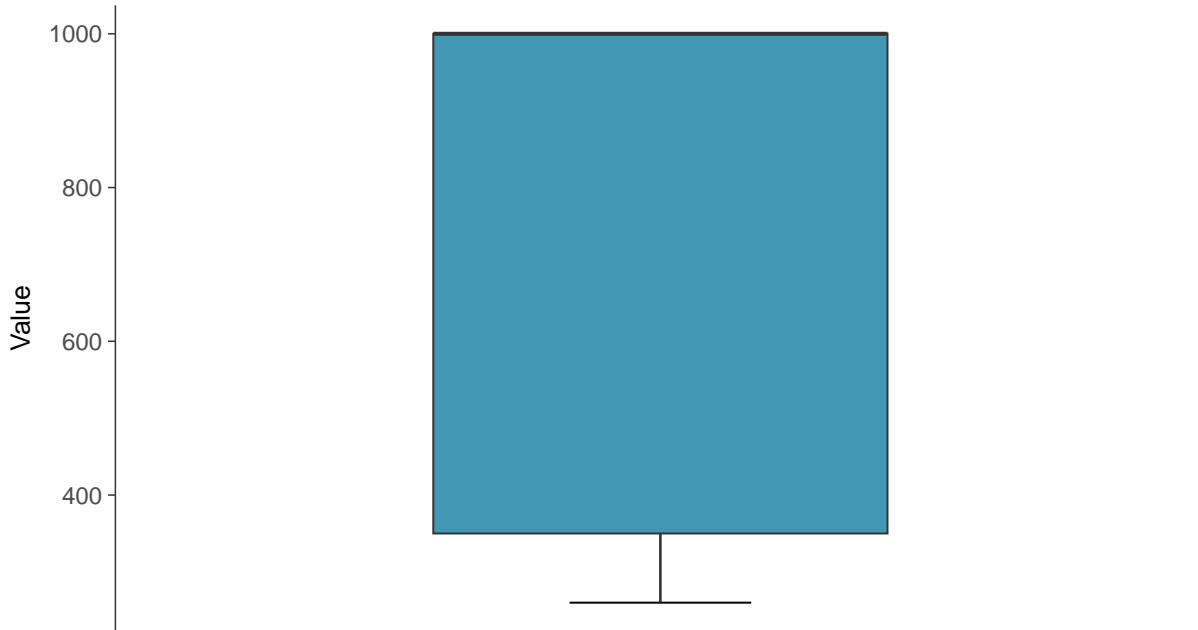
ID: 02_2_114





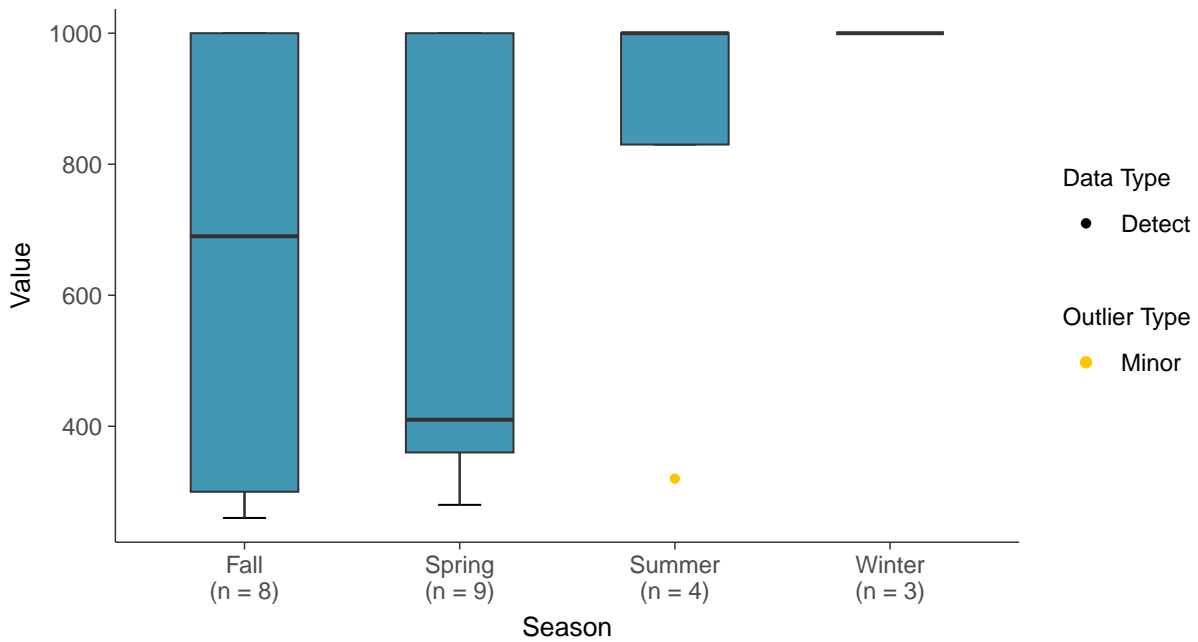
Boxplot

Fluoride, MW-15010 (ug/L)



Boxplot by Season

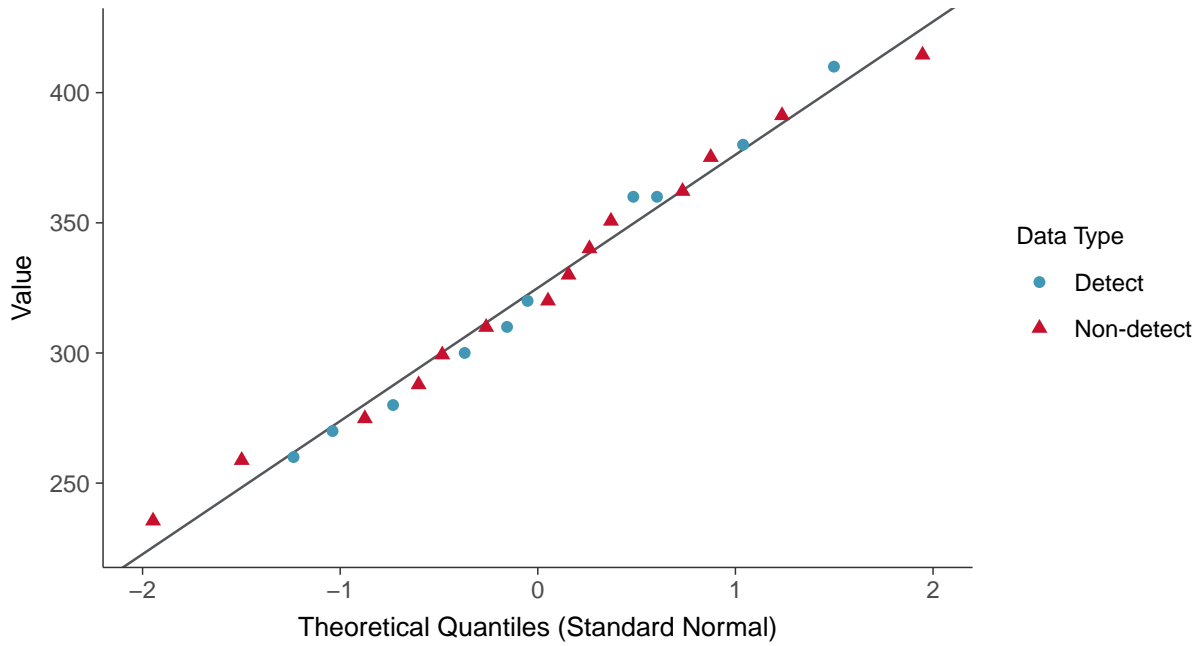
Fluoride, MW-15010 (ug/L)





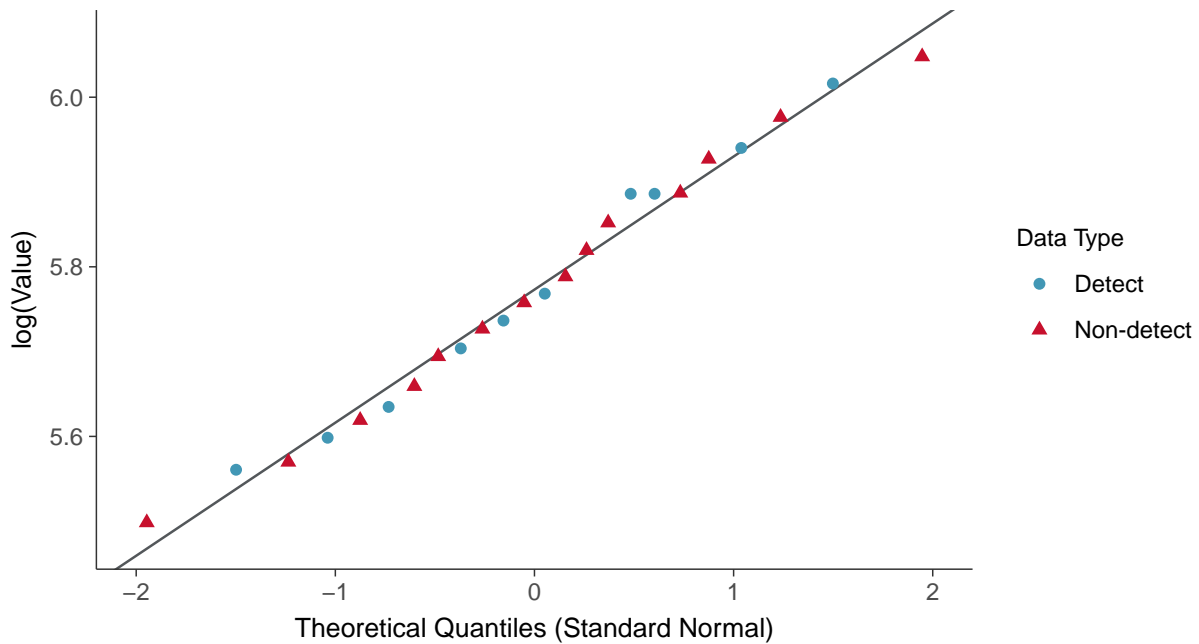
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15010 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

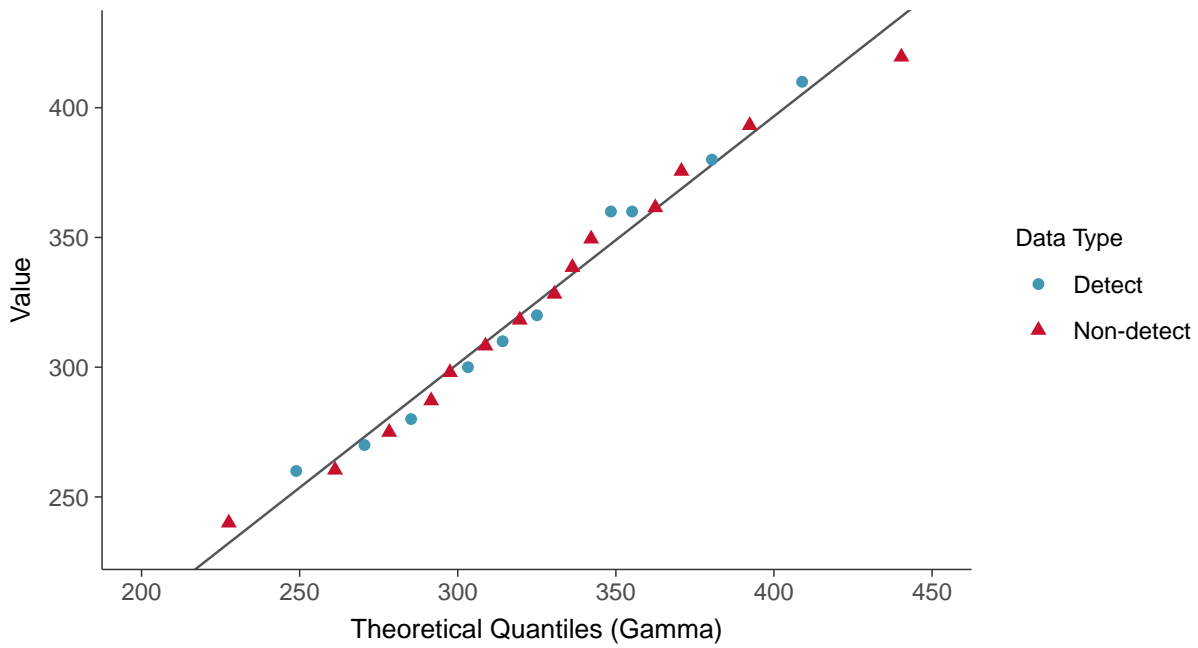
Fluoride, MW-15010 (ug/L)





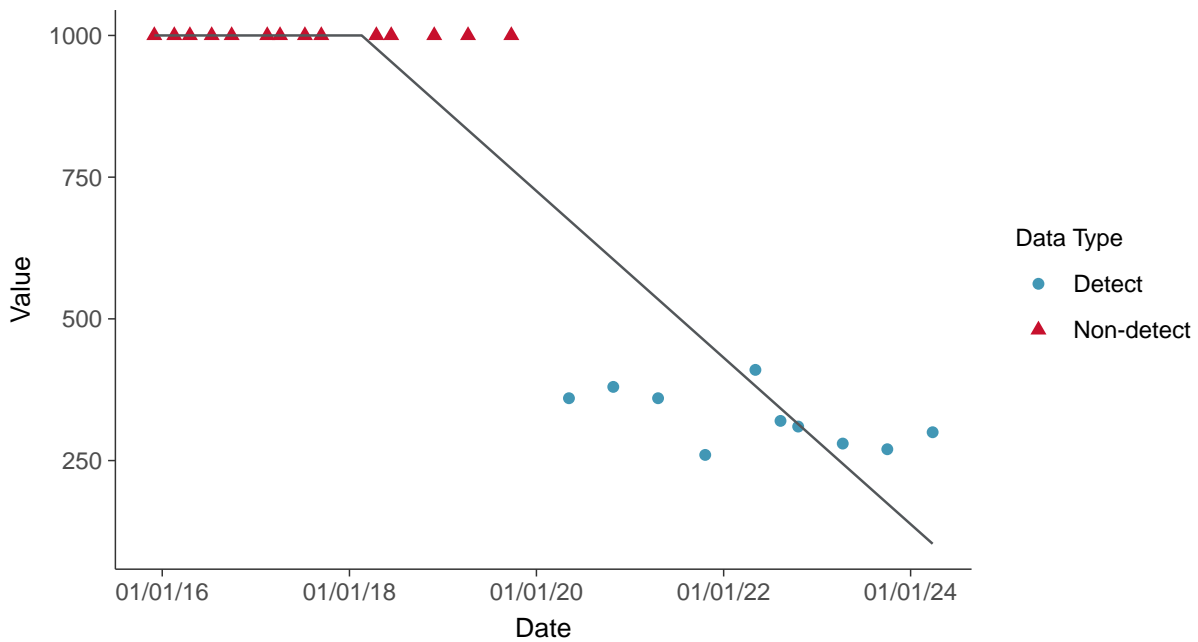
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear

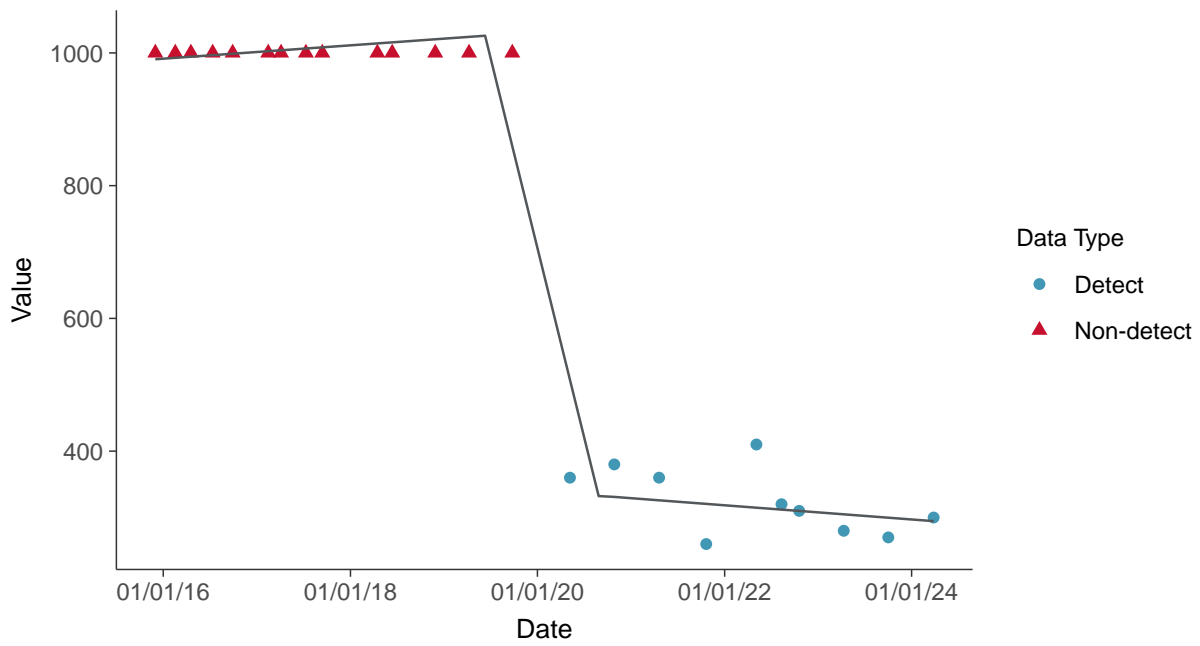
Fluoride, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-15010 (ug/L)



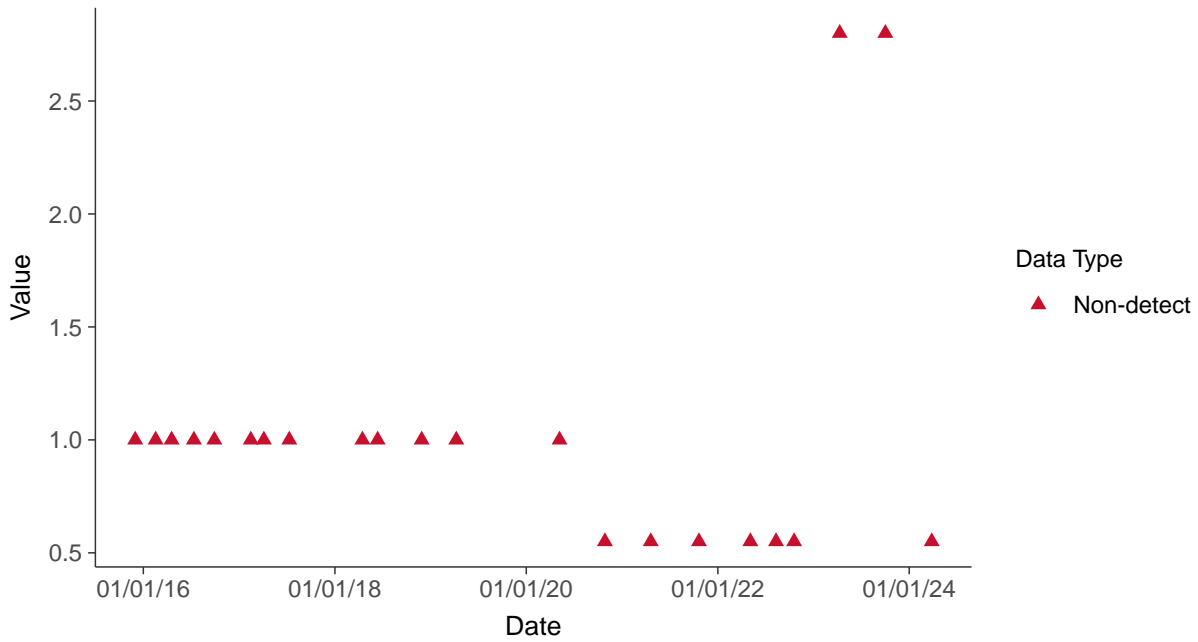


Appendix IV: Lead, MW-15010

ID: 02_2_116

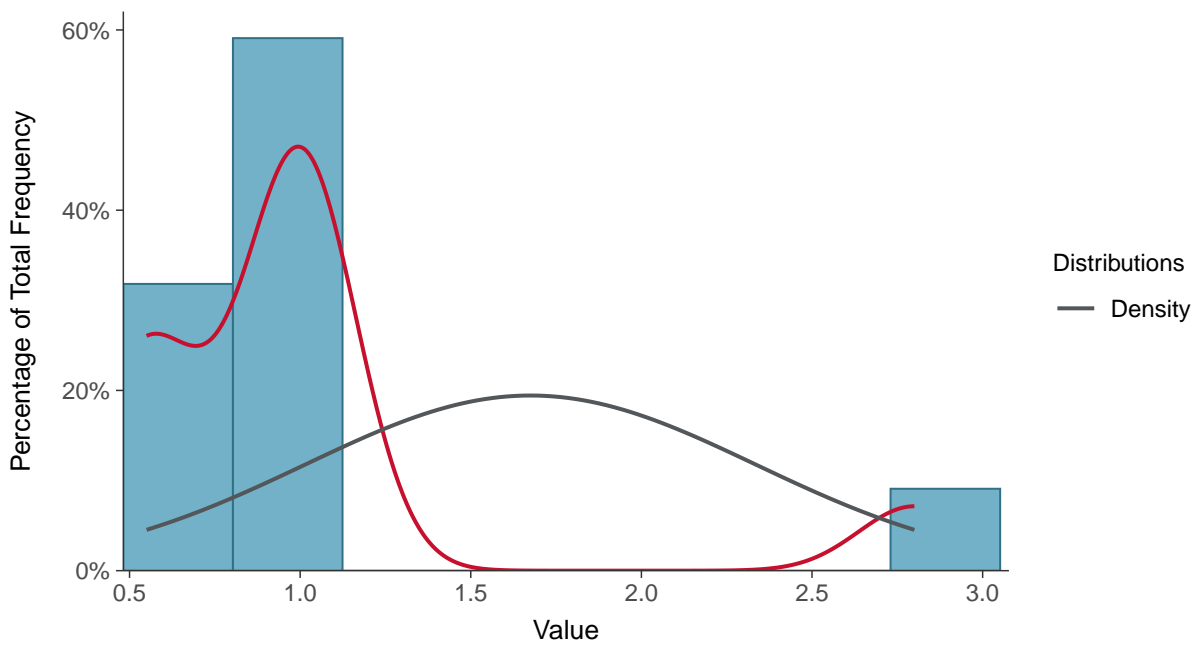
Scatter Plot

Lead, MW-15010 (ug/L)



Histogram

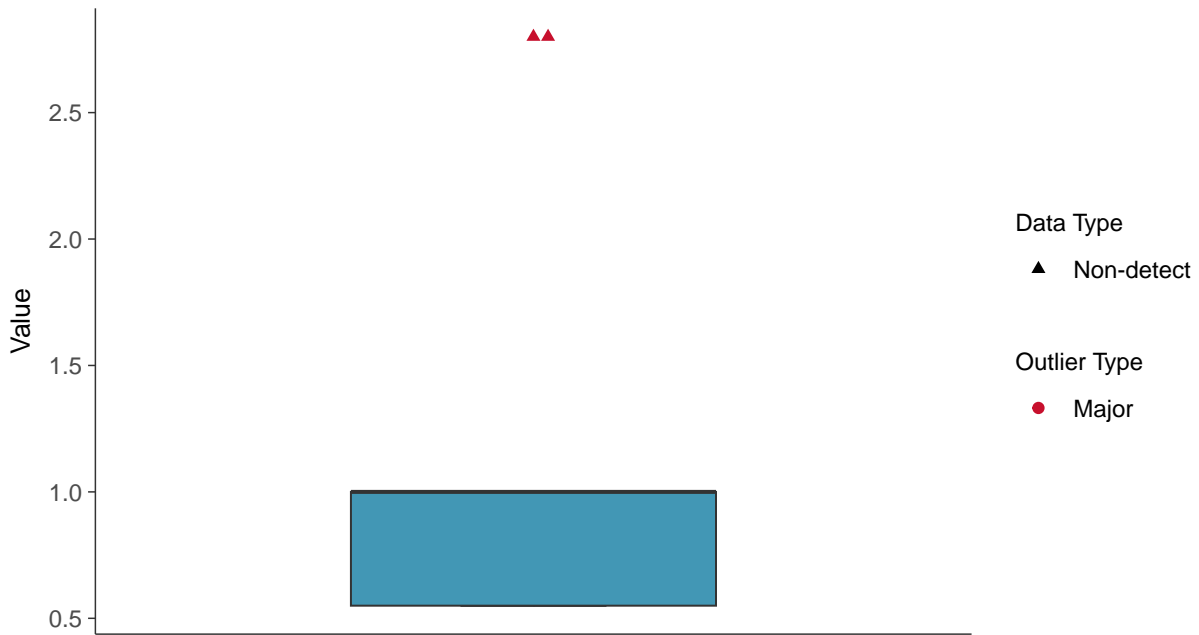
Lead, MW-15010 (ug/L)





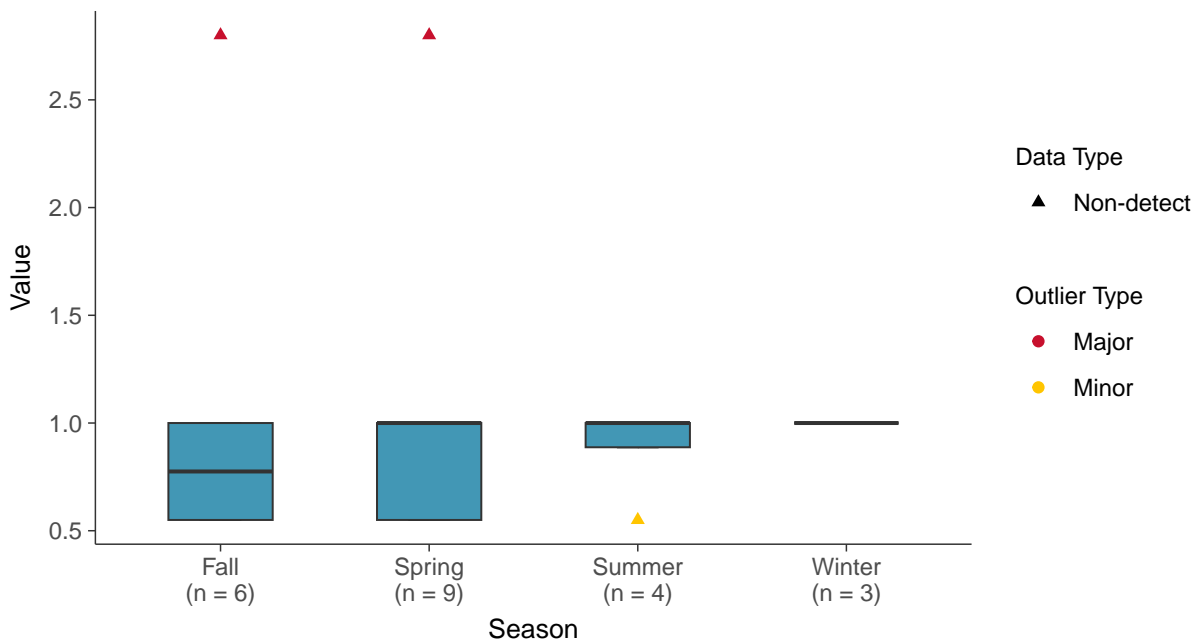
Boxplot

Lead, MW-15010 (ug/L)



Boxplot by Season

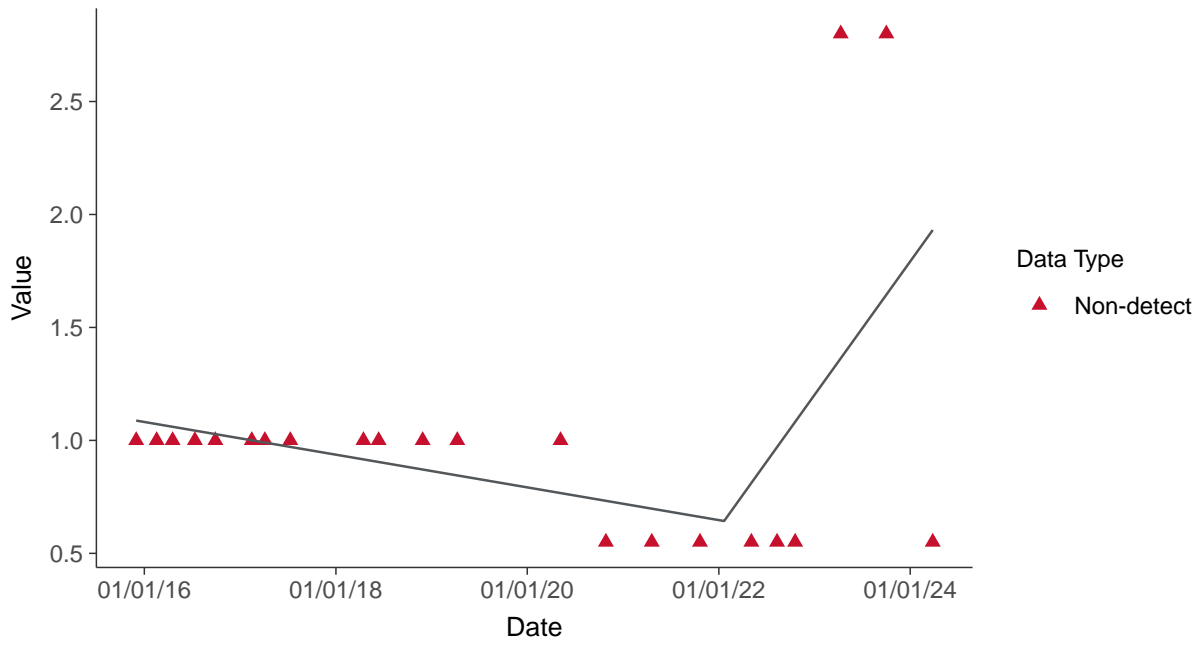
Lead, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear

Lead, MW-15010 (ug/L)



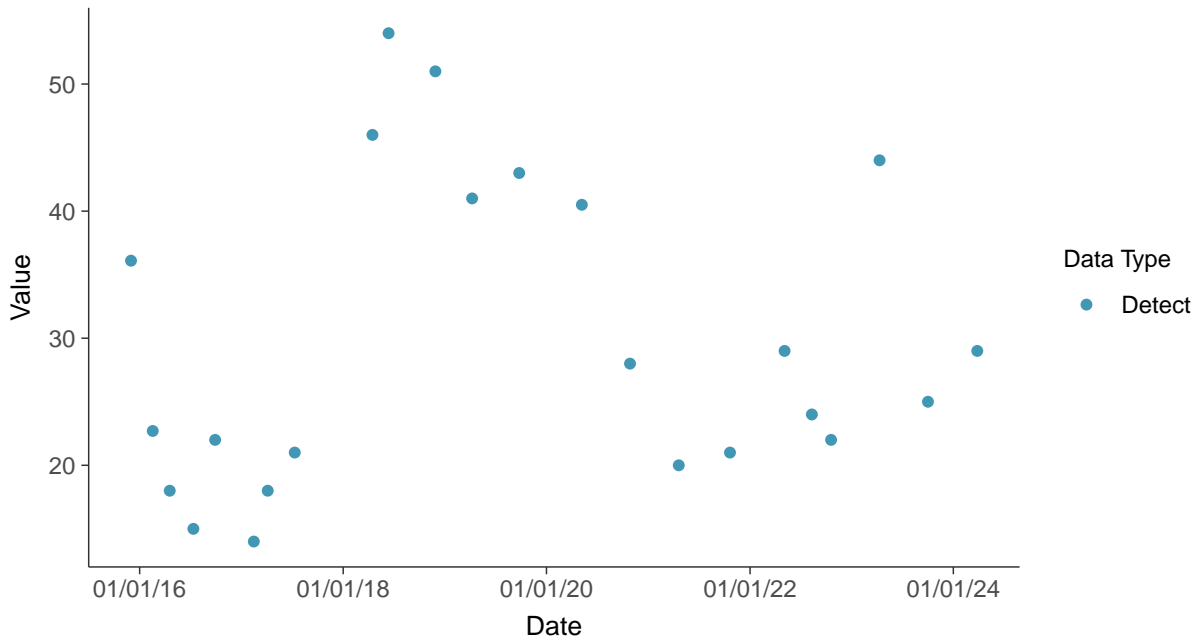


Appendix IV: Lithium, MW-15010

ID: 02_2_117

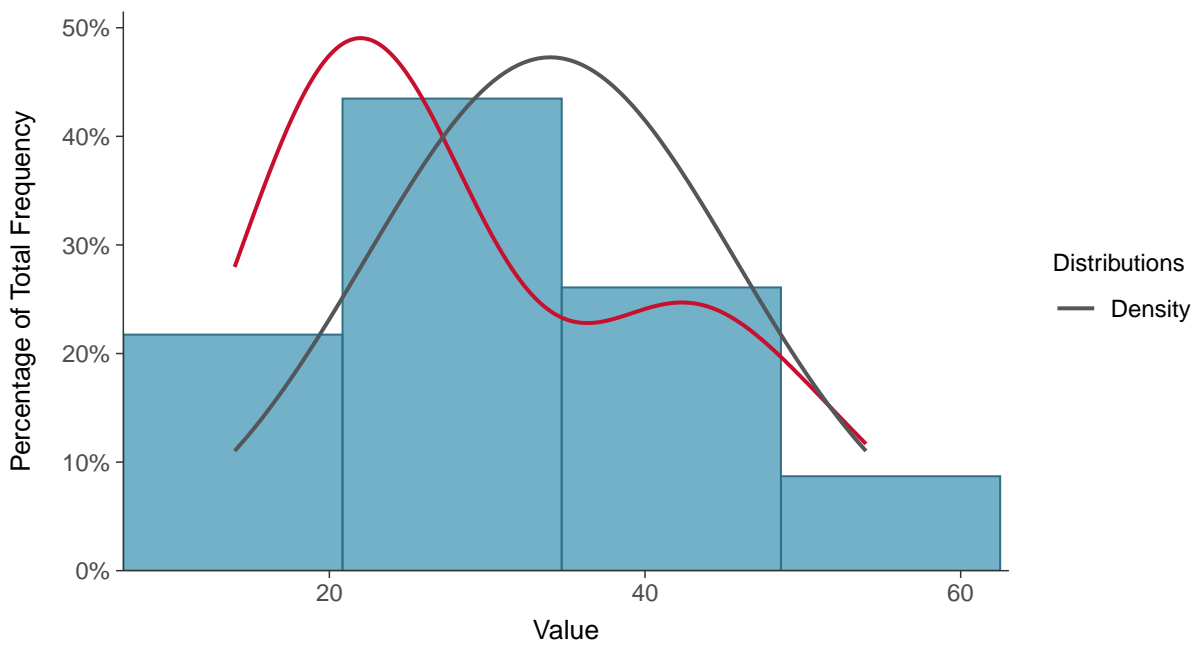
Scatter Plot

Lithium, MW-15010 (ug/L)



Histogram

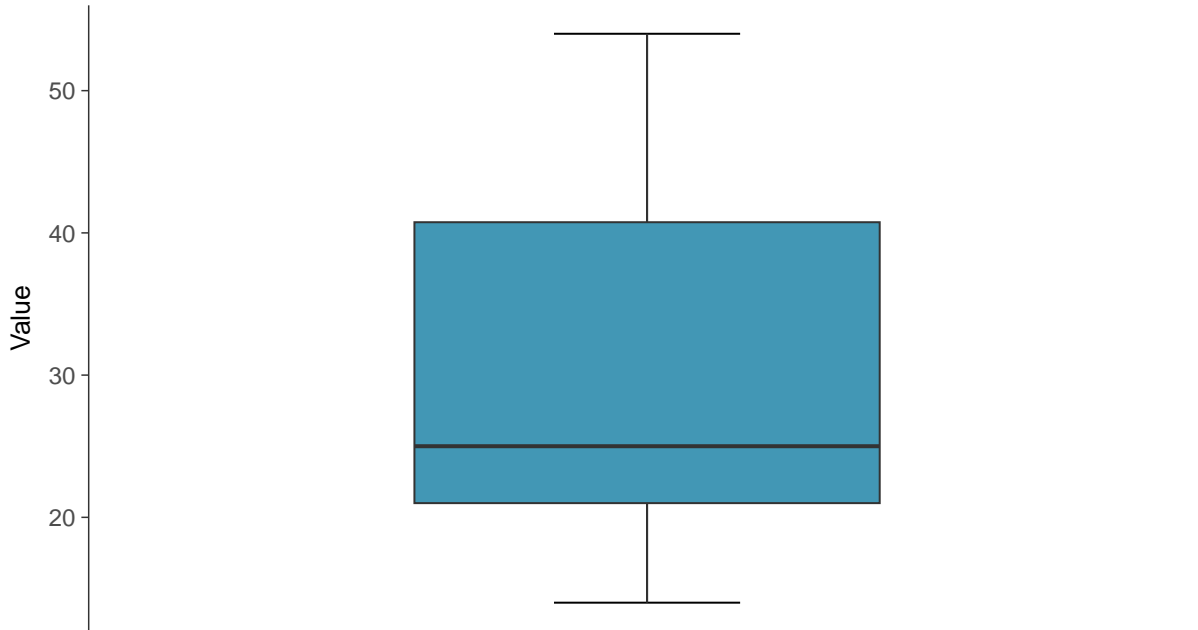
Lithium, MW-15010 (ug/L)





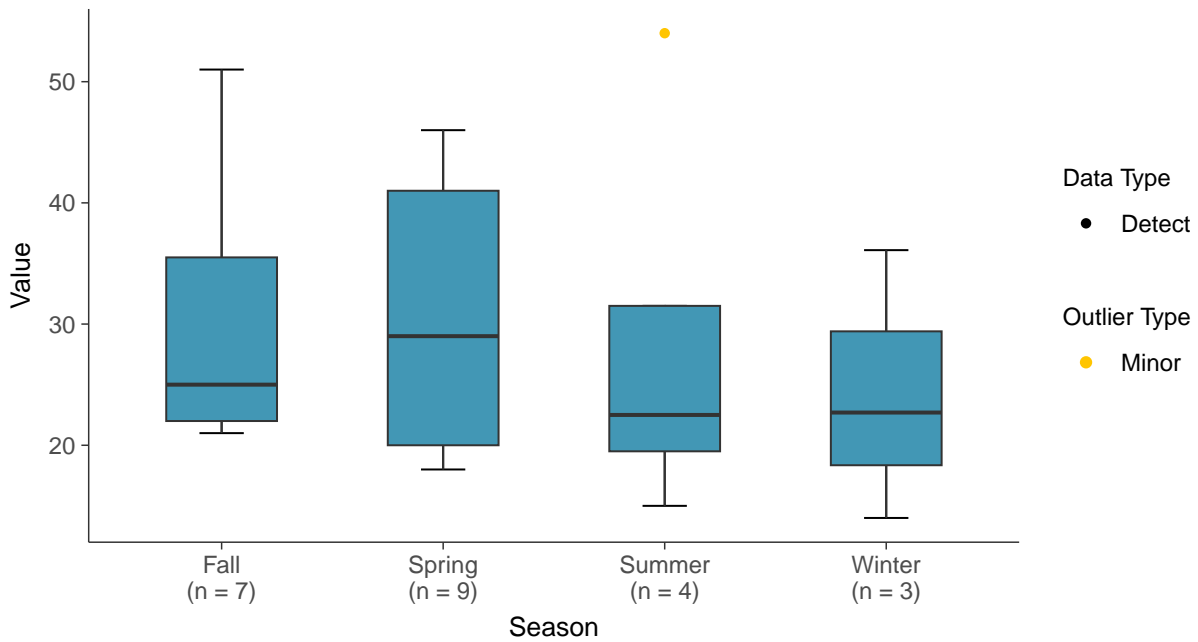
Boxplot

Lithium, MW-15010 (ug/L)



Boxplot by Season

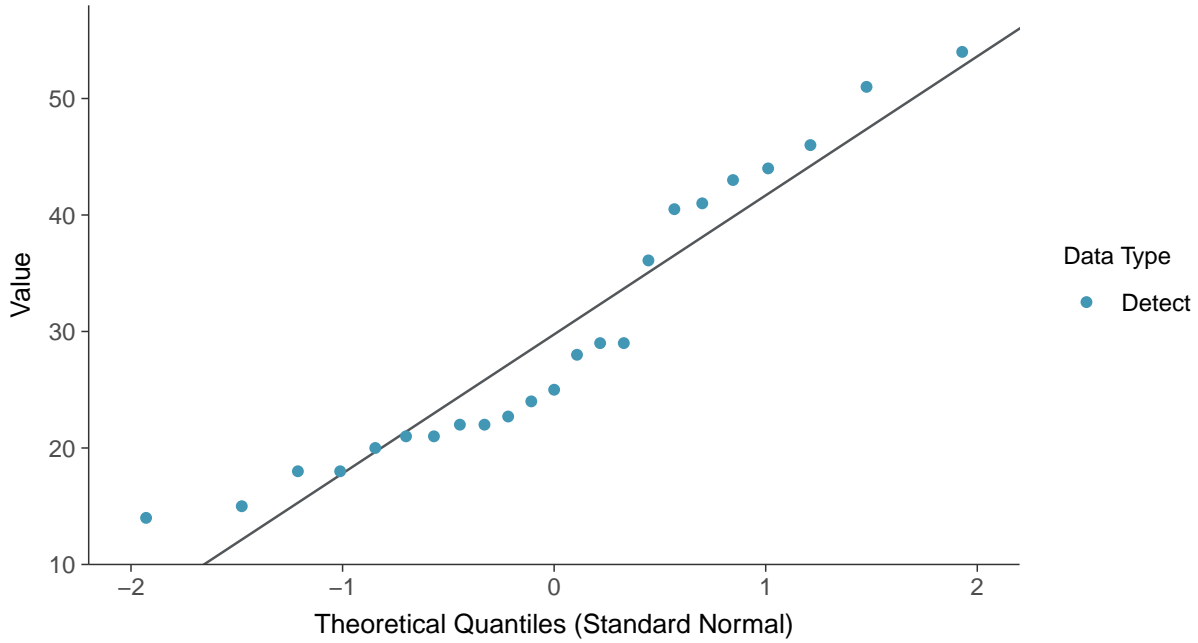
Lithium, MW-15010 (ug/L)





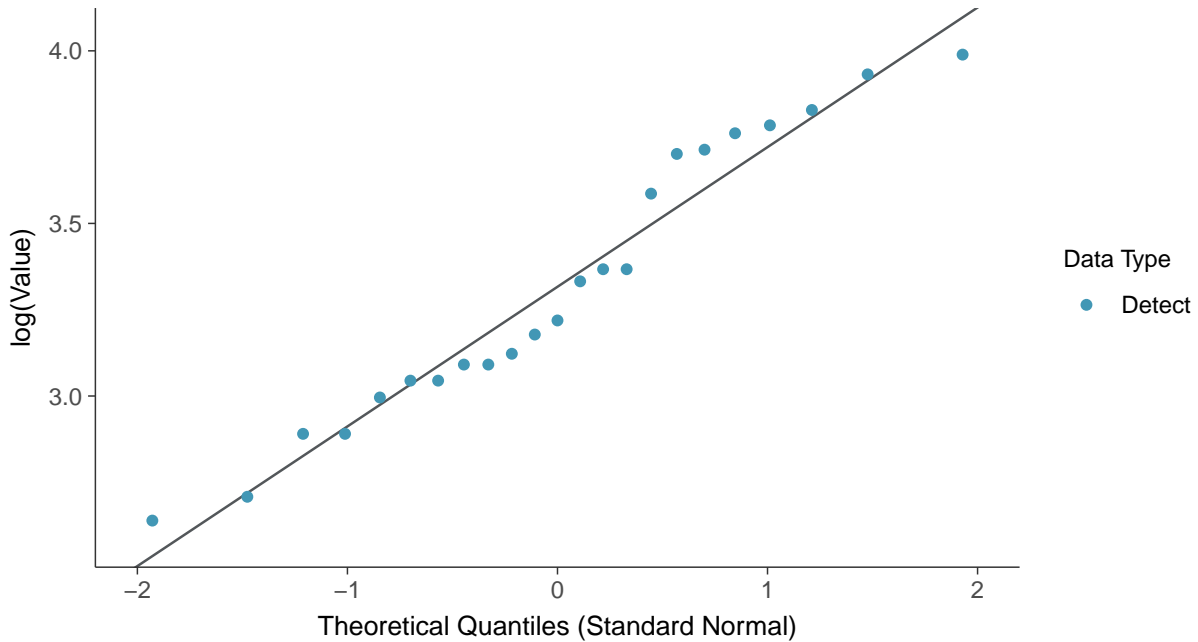
Normal Q-Q plot

Lithium, MW-15010 (ug/L)



Lognormal Q-Q plot

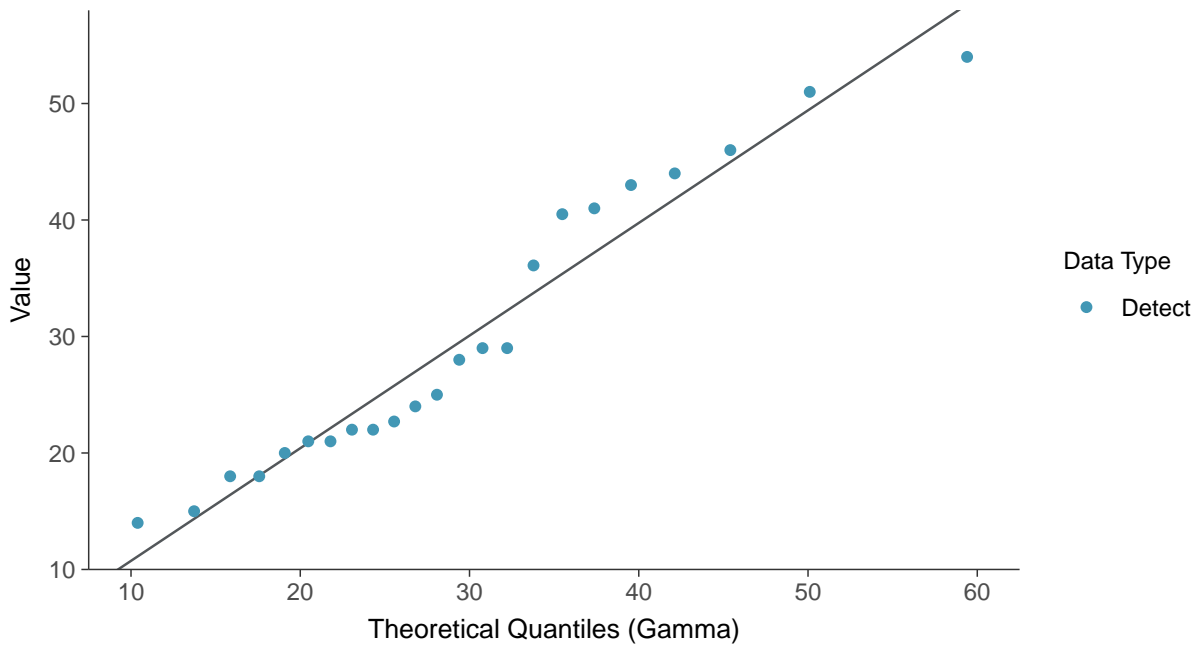
Lithium, MW-15010 (ug/L)





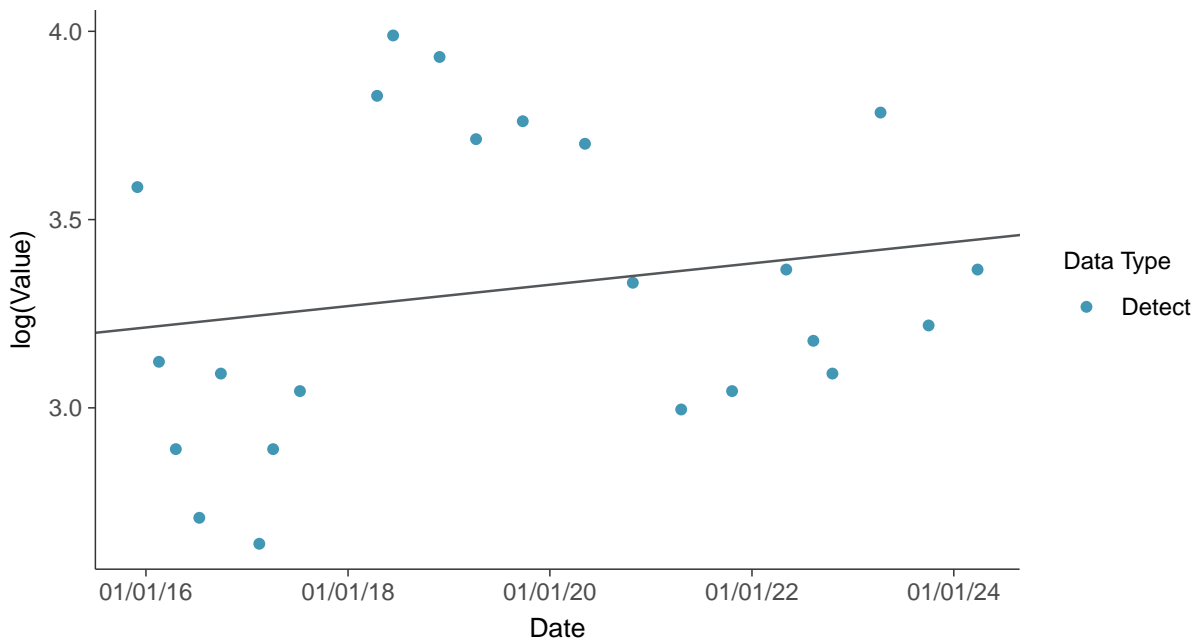
Gamma Q-Q plot

Lithium, MW-15010 (ug/L)



Trend Regression: Lognormal MLE

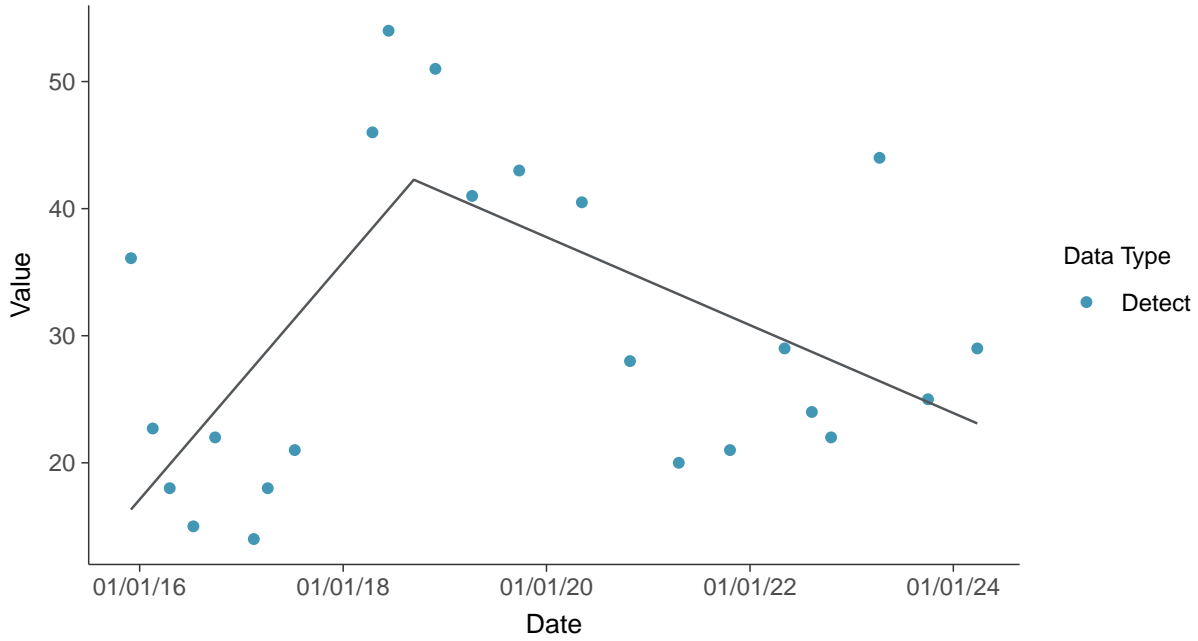
Lithium, MW-15010 (ug/L)





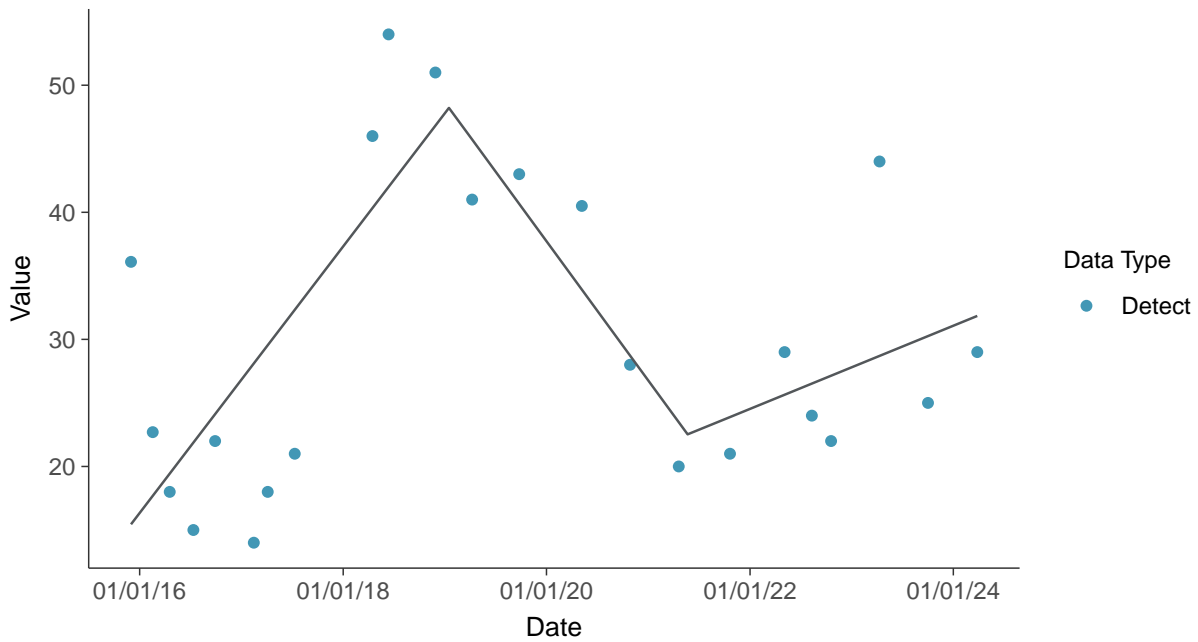
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

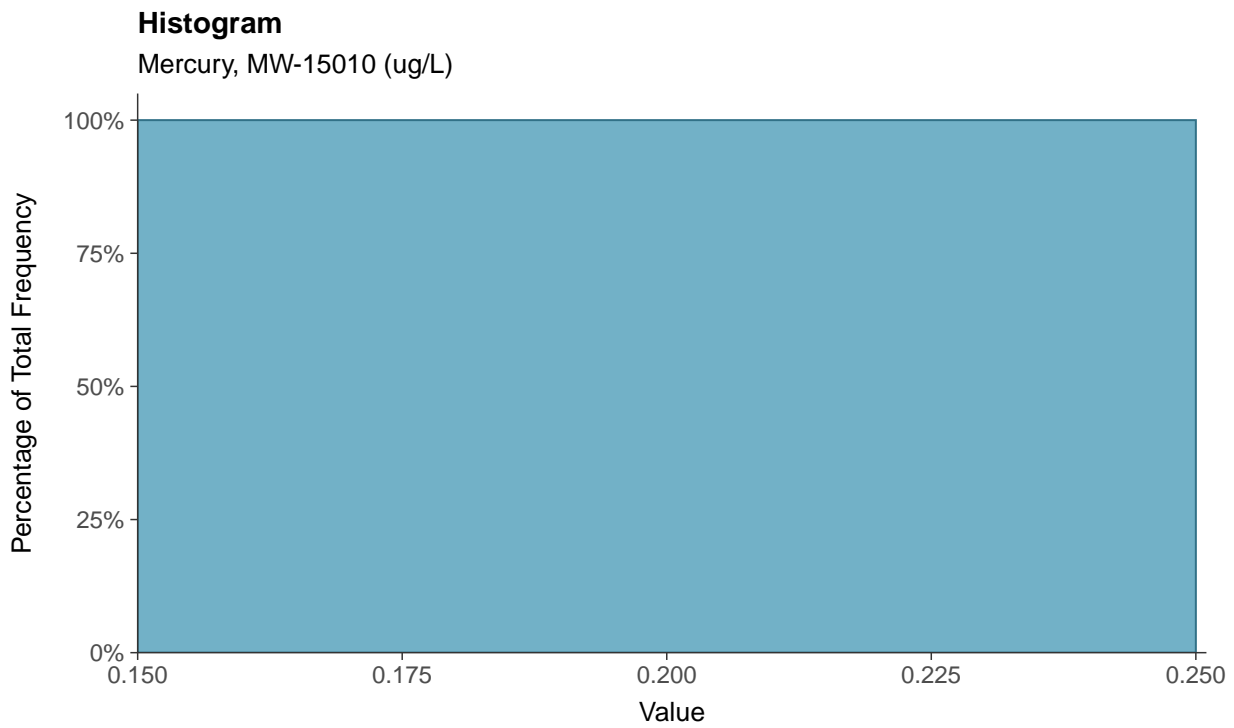
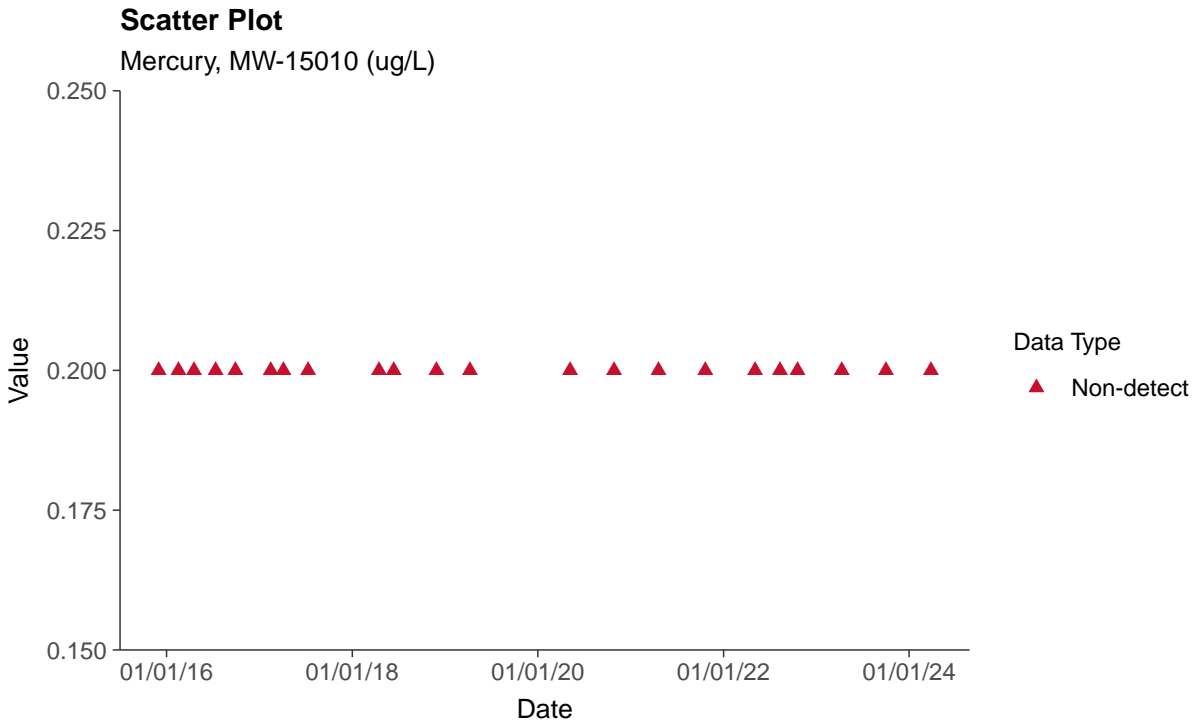
Lithium, MW-15010 (ug/L)





Appendix IV: Mercury, MW-15010

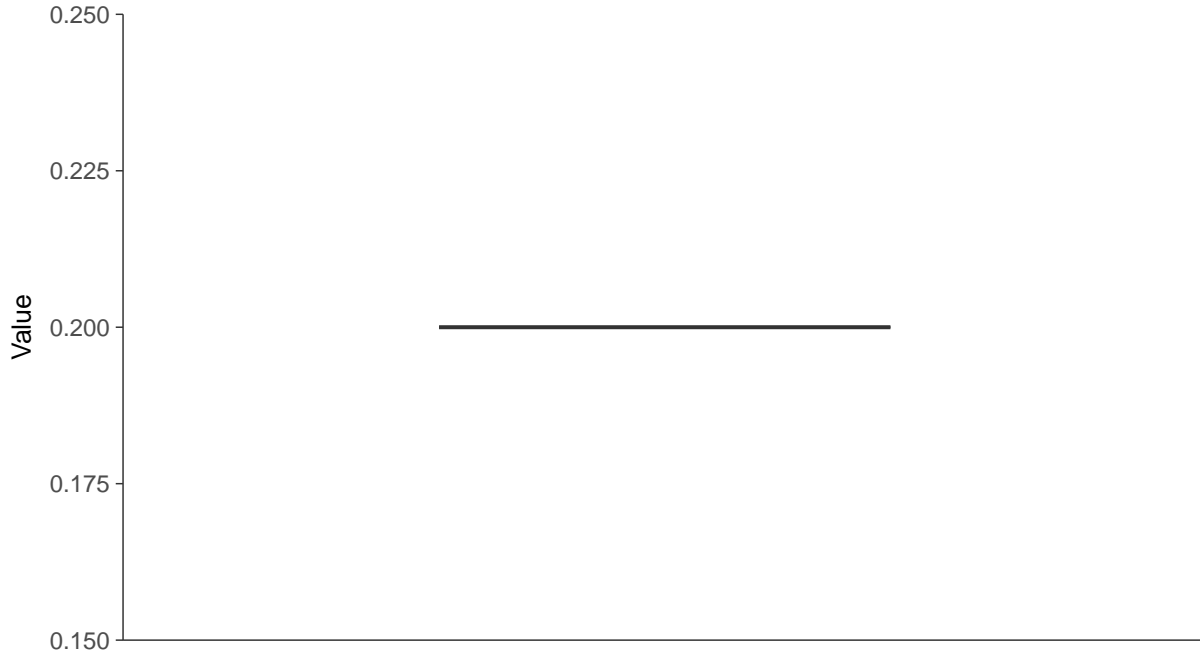
ID: 02_2_118





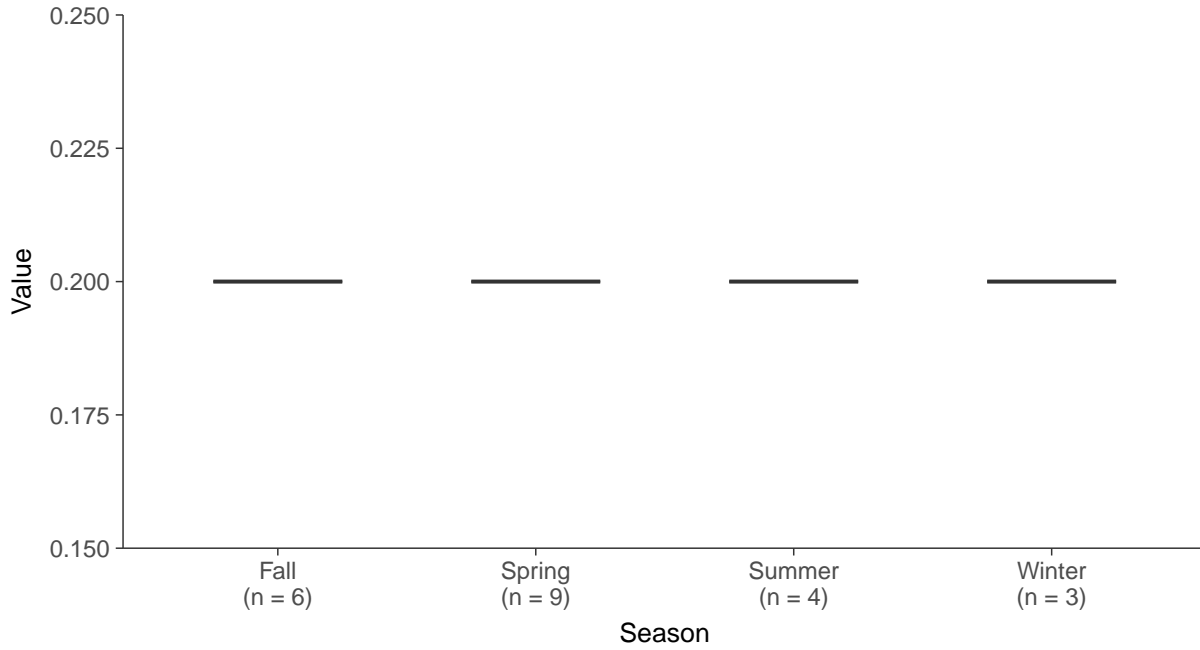
Boxplot

Mercury, MW-15010 (ug/L)



Boxplot by Season

Mercury, MW-15010 (ug/L)



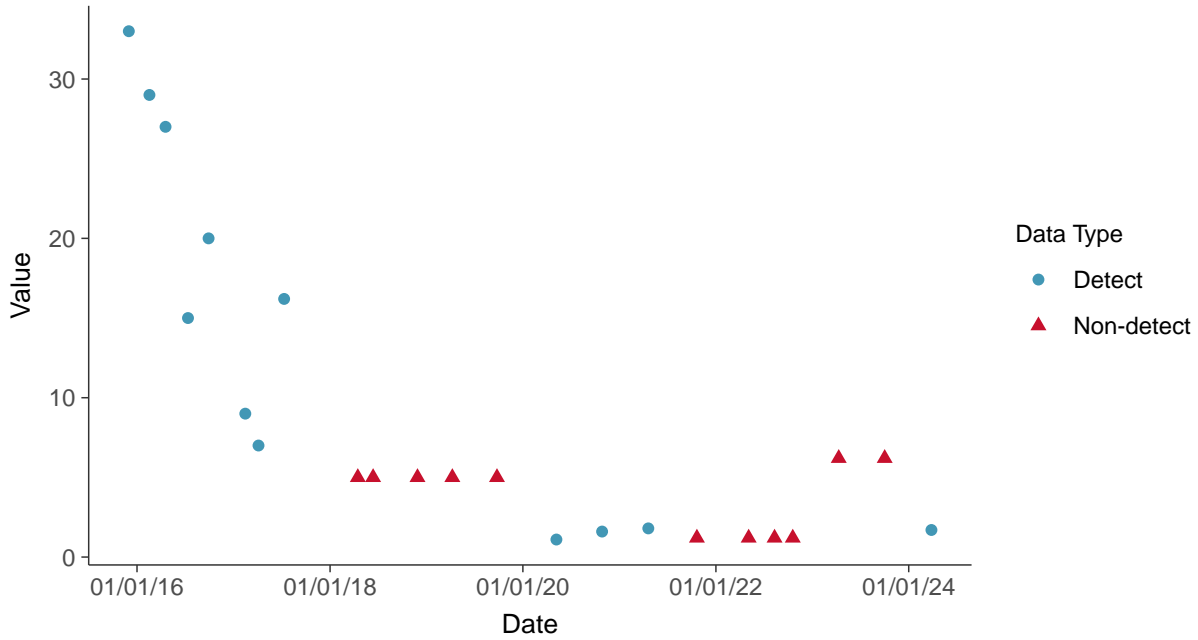


Appendix IV: Molybdenum, MW-15010

ID: 02_2_119

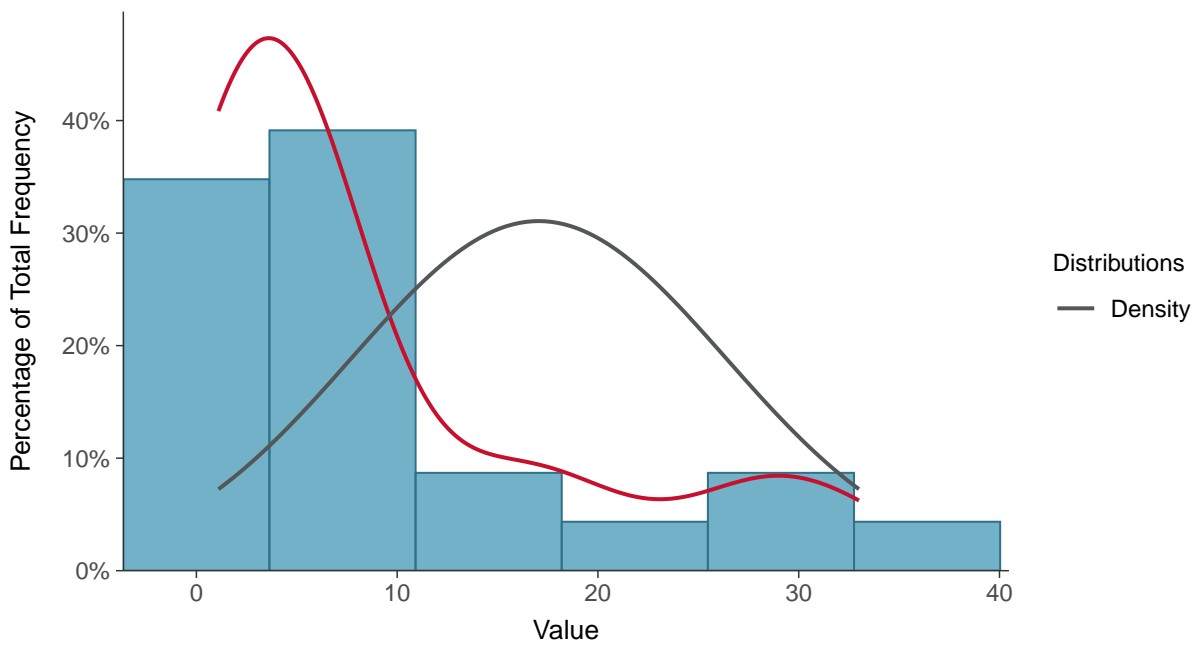
Scatter Plot

Molybdenum, MW-15010 (ug/L)



Histogram

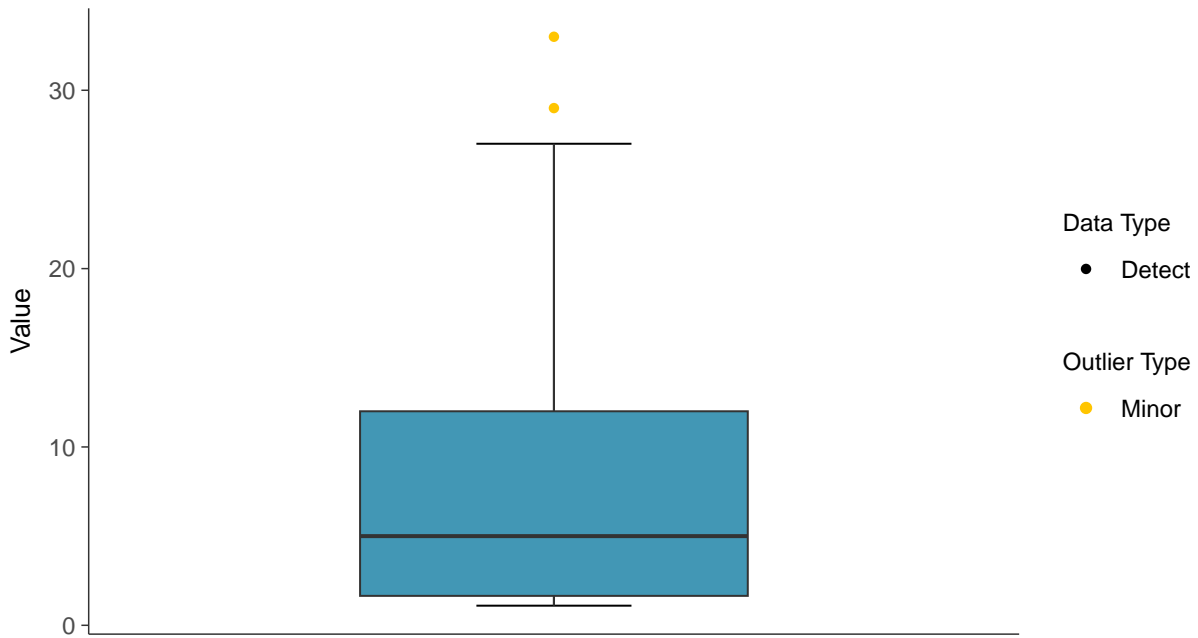
Molybdenum, MW-15010 (ug/L)





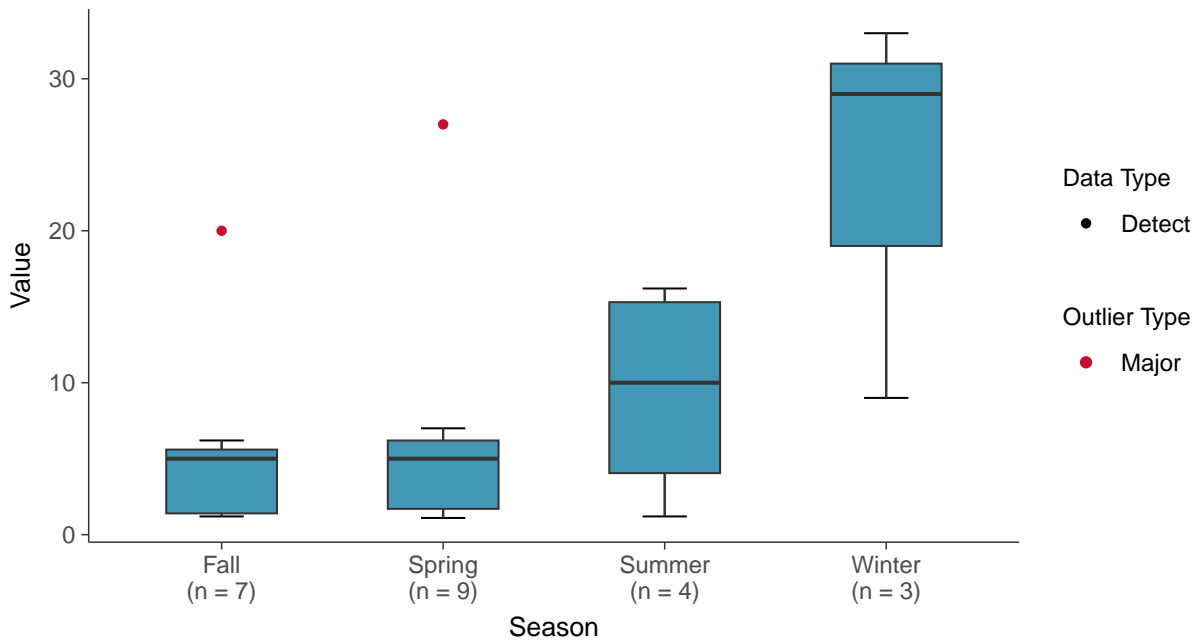
Boxplot

Molybdenum, MW-15010 (ug/L)



Boxplot by Season

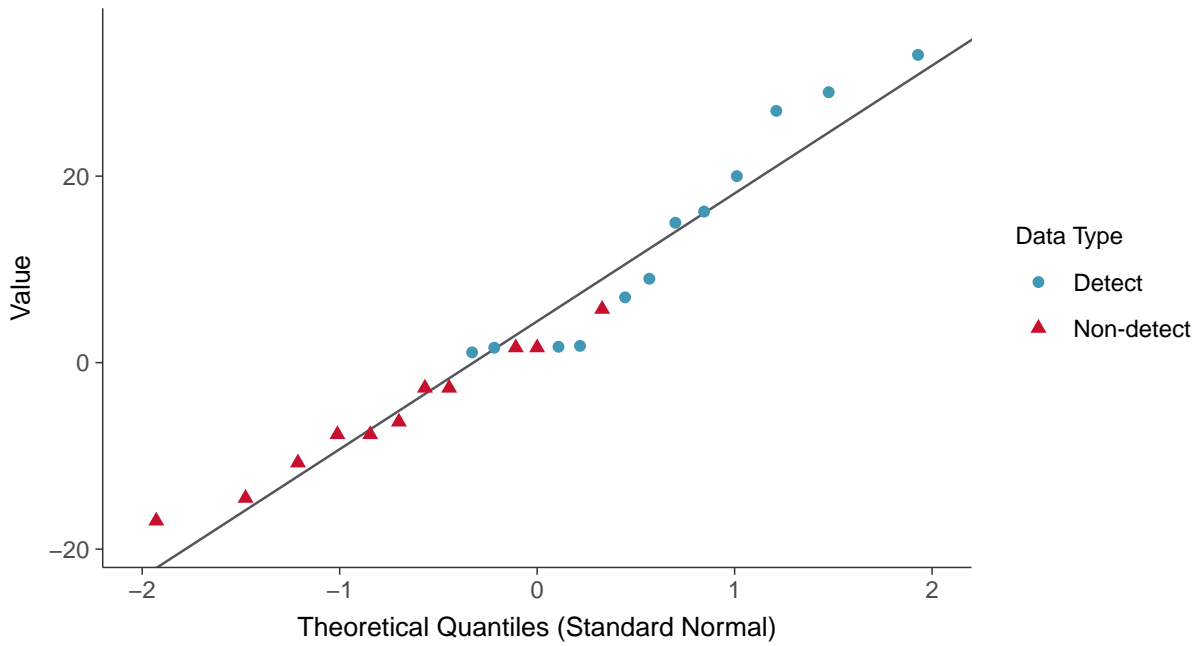
Molybdenum, MW-15010 (ug/L)





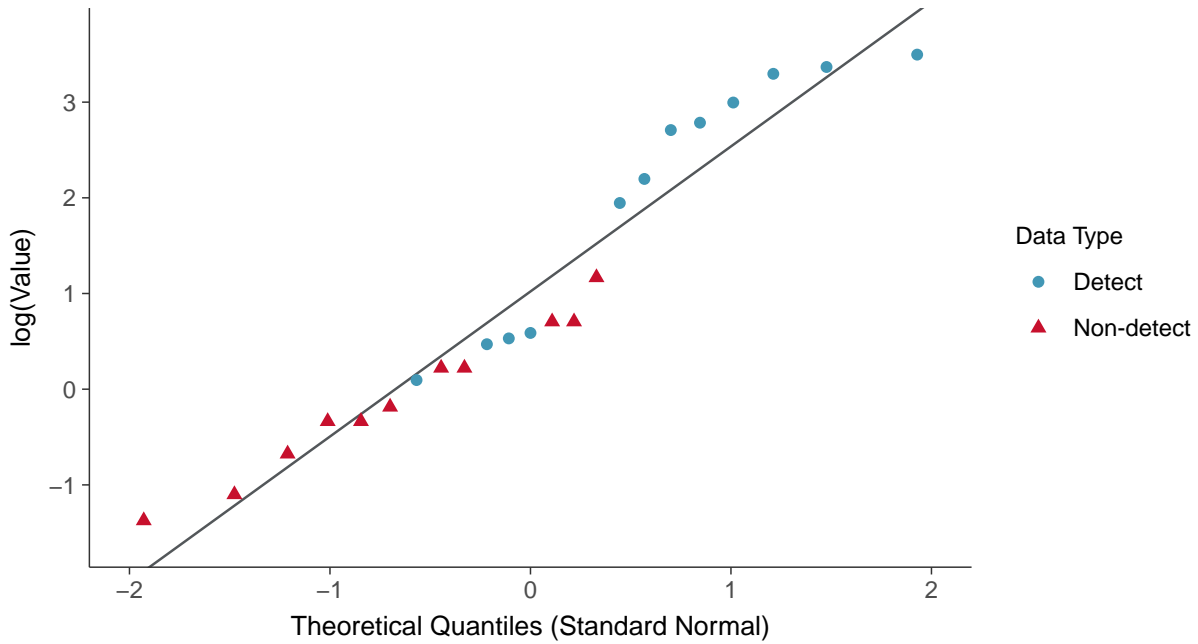
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15010 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

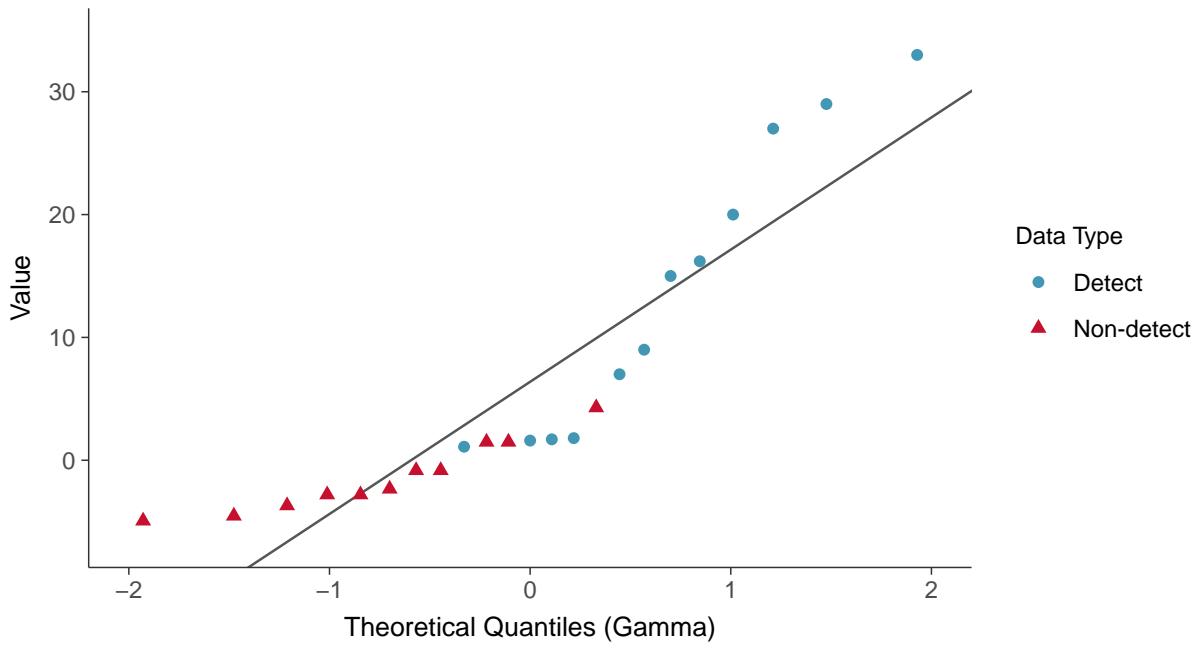
Molybdenum, MW-15010 (ug/L)





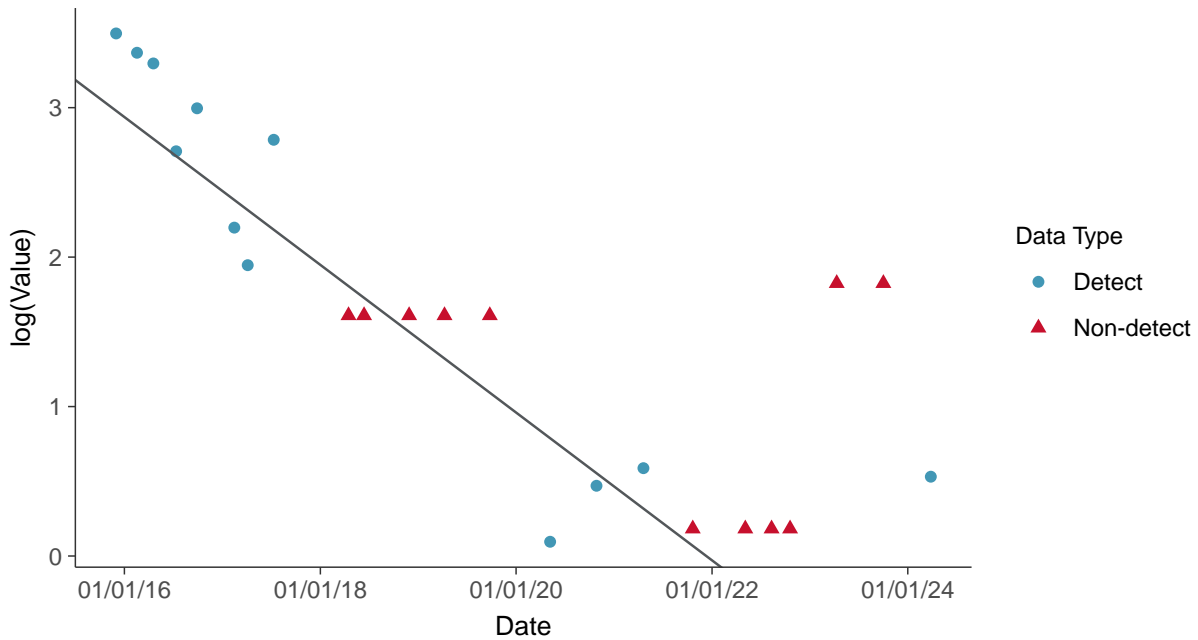
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15010 (ug/L)



Trend Regression: Lognormal MLE

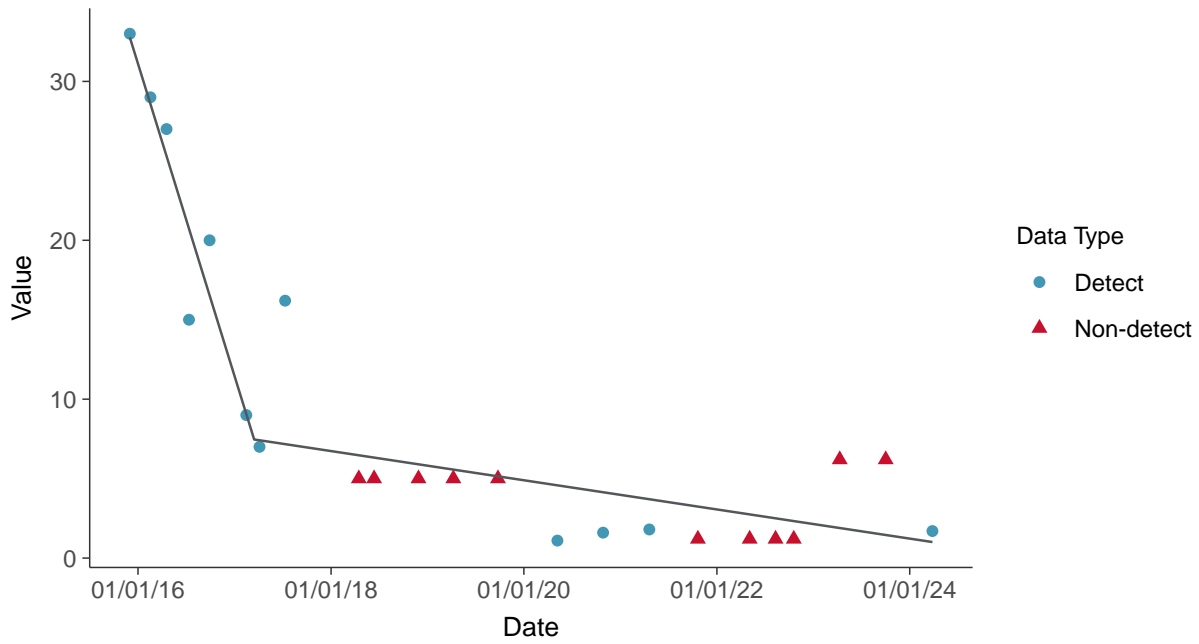
Molybdenum, MW-15010 (ug/L)





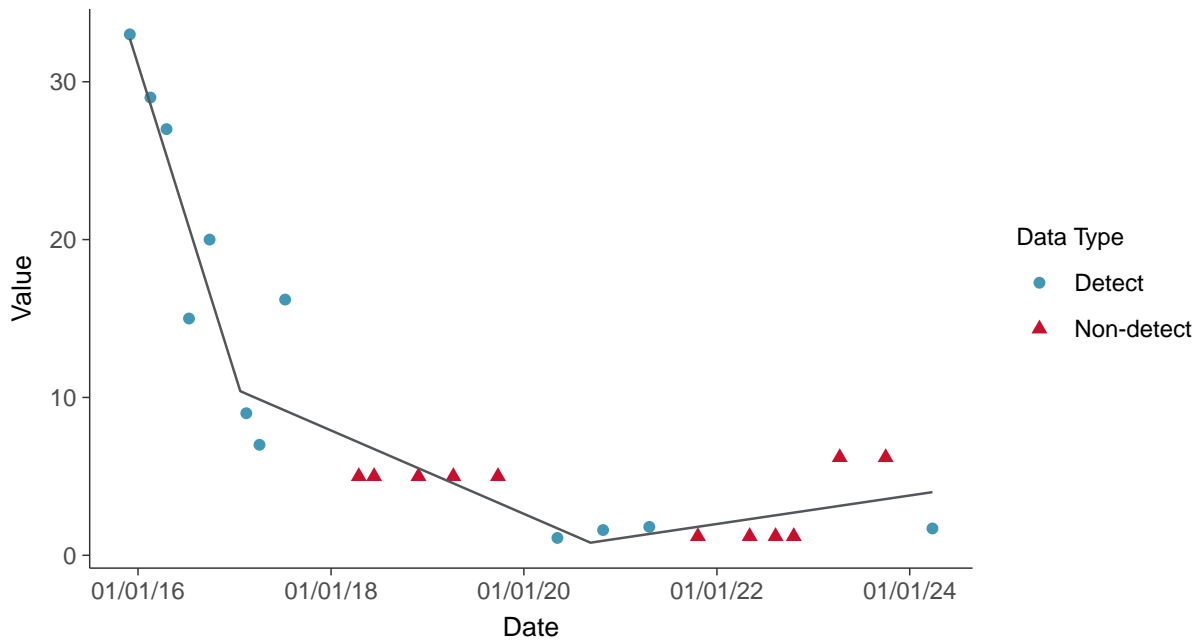
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15010 (ug/L)



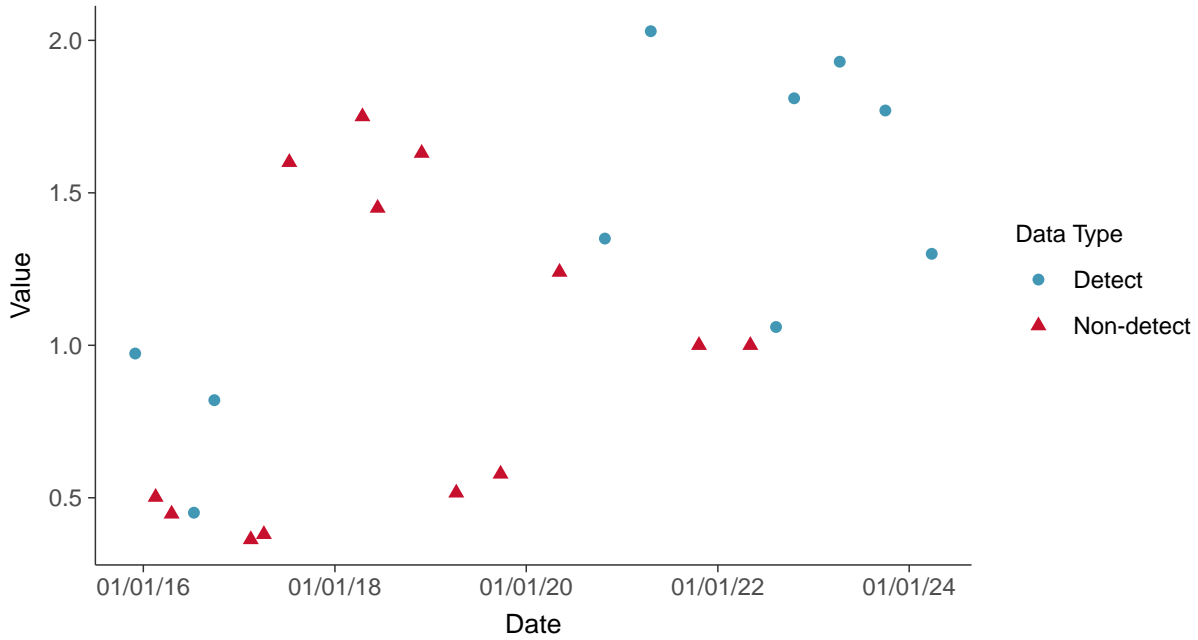


Appendix IV: Radium-226+228, MW-15010

ID: 02_2_125

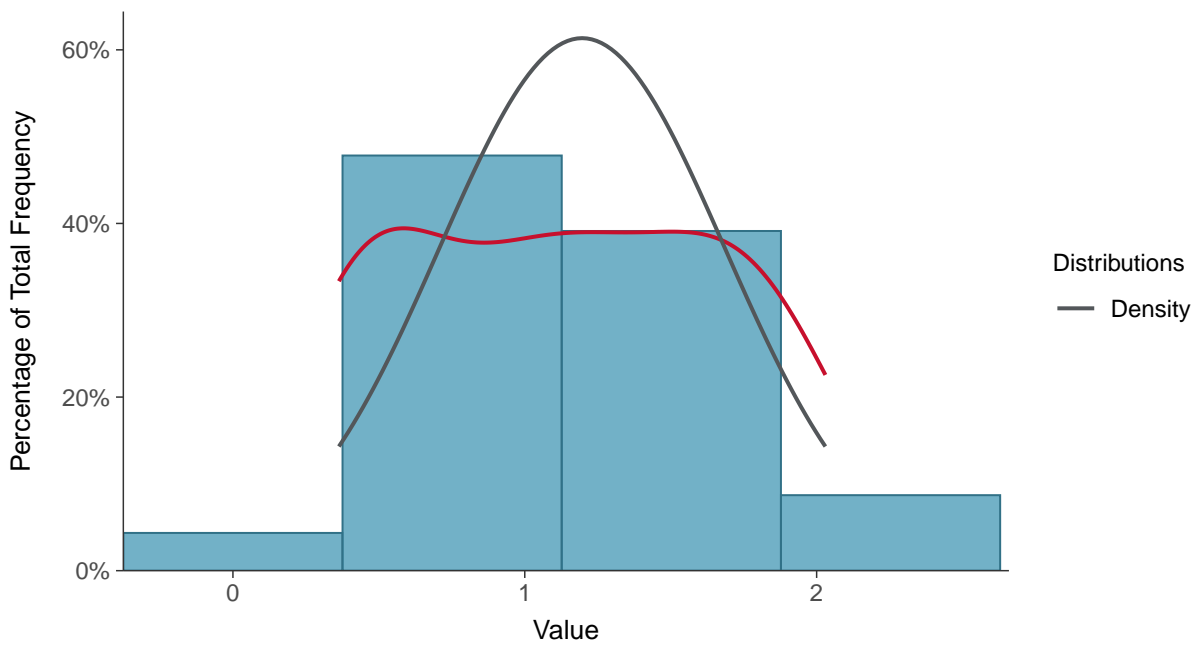
Scatter Plot

Radium-226+228, MW-15010 (pCi/L)



Histogram

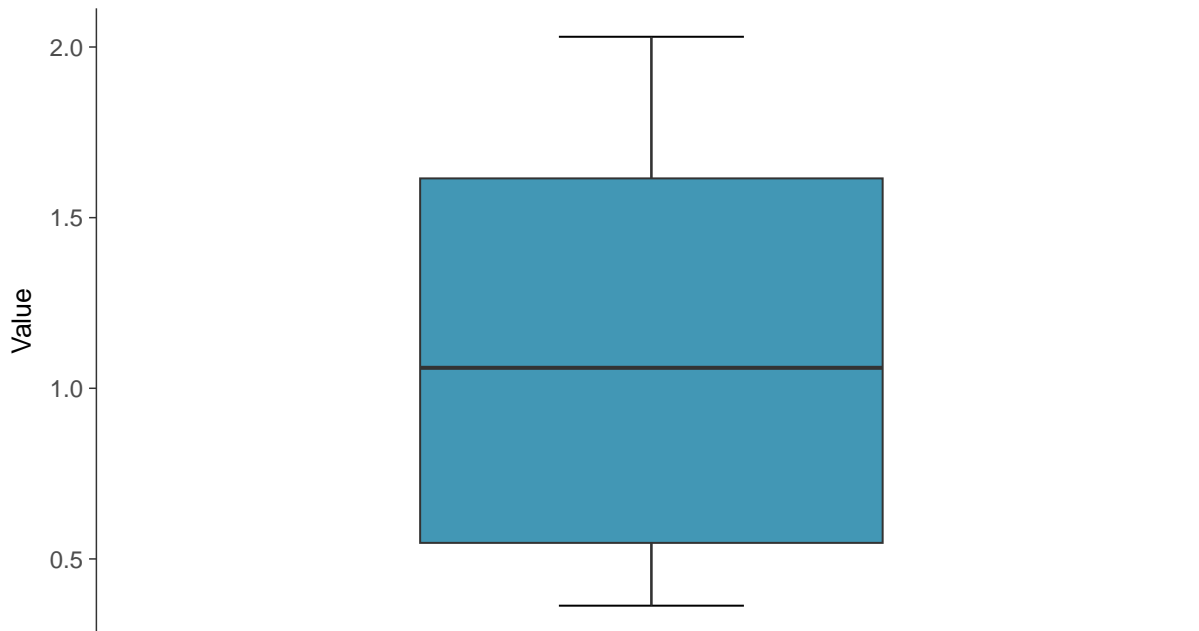
Radium-226+228, MW-15010 (pCi/L)





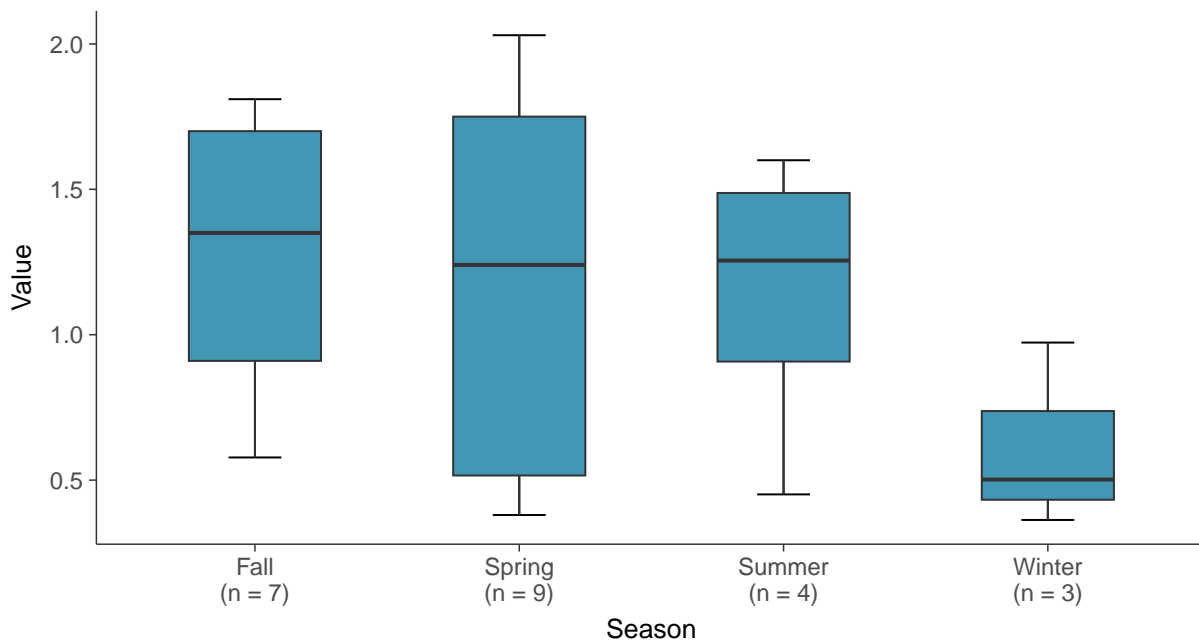
Boxplot

Radium-226+228, MW-15010 (pCi/L)



Boxplot by Season

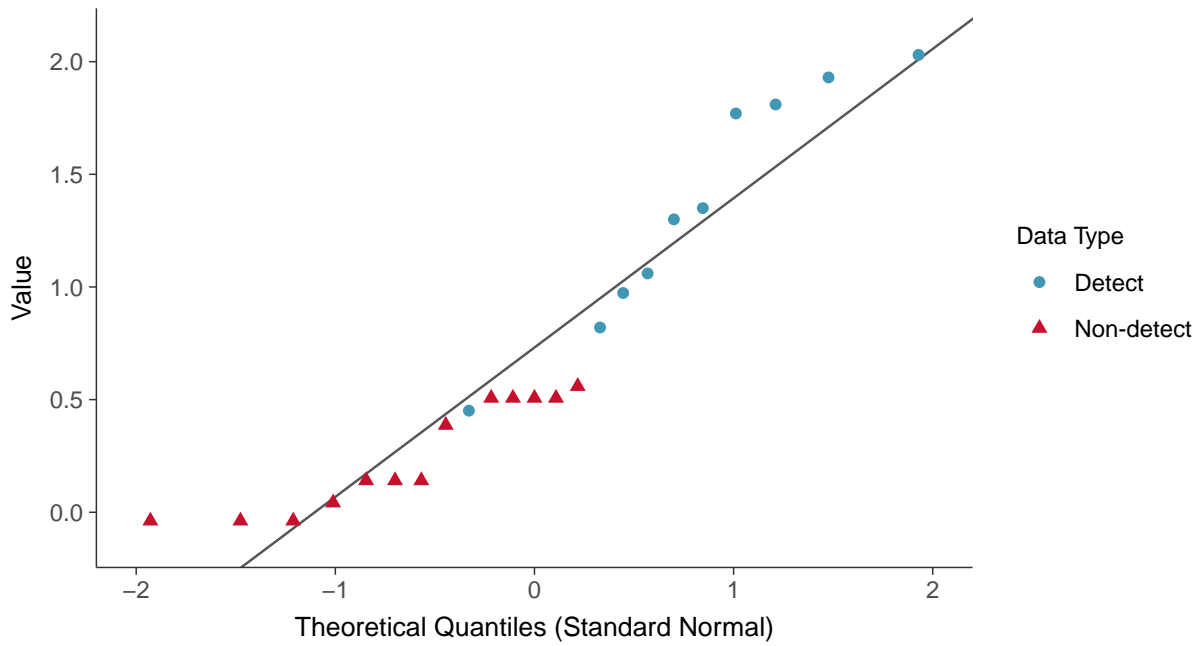
Radium-226+228, MW-15010 (pCi/L)





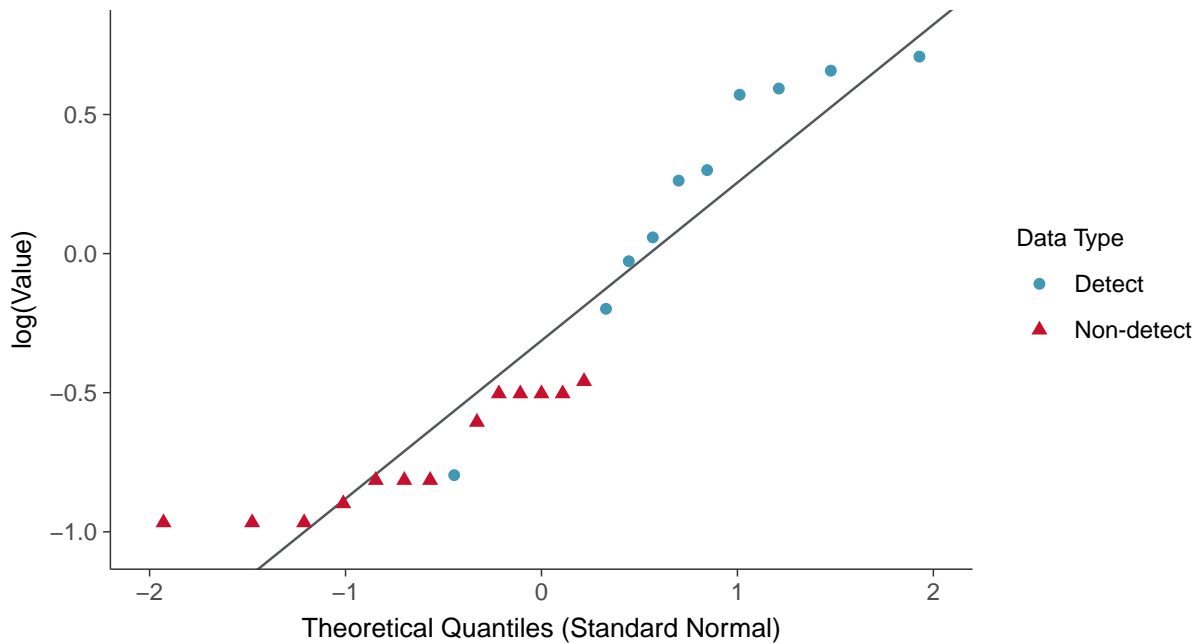
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15010 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

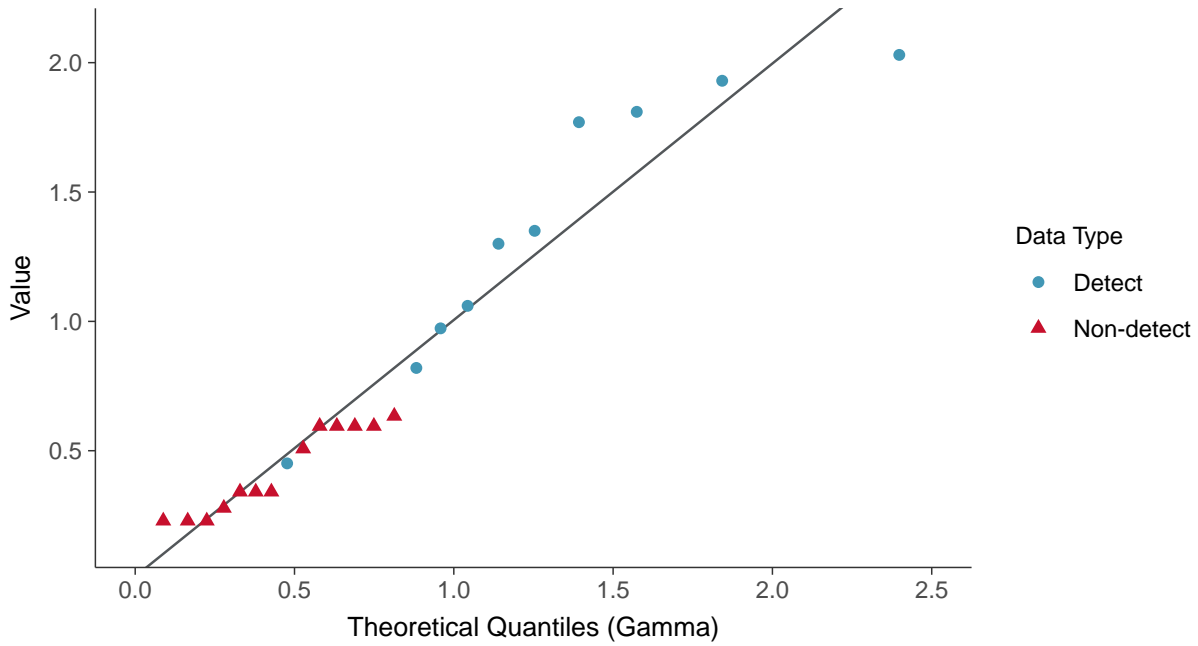
Radium-226+228, MW-15010 (pCi/L)





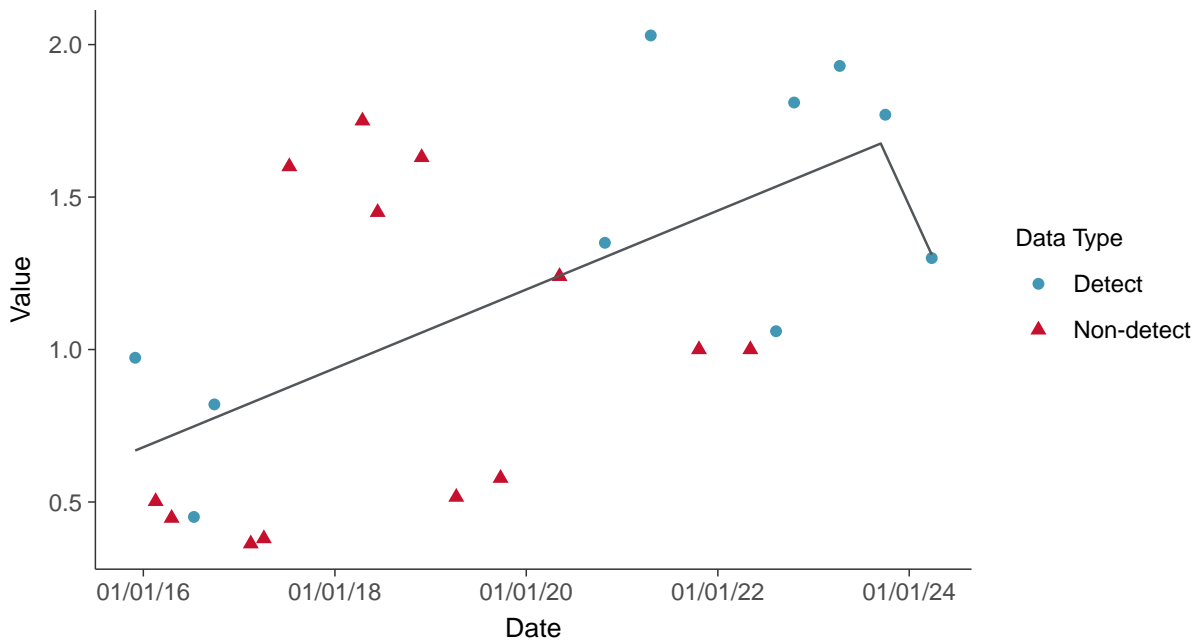
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15010 (pCi/L)



Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15010 (pCi/L)



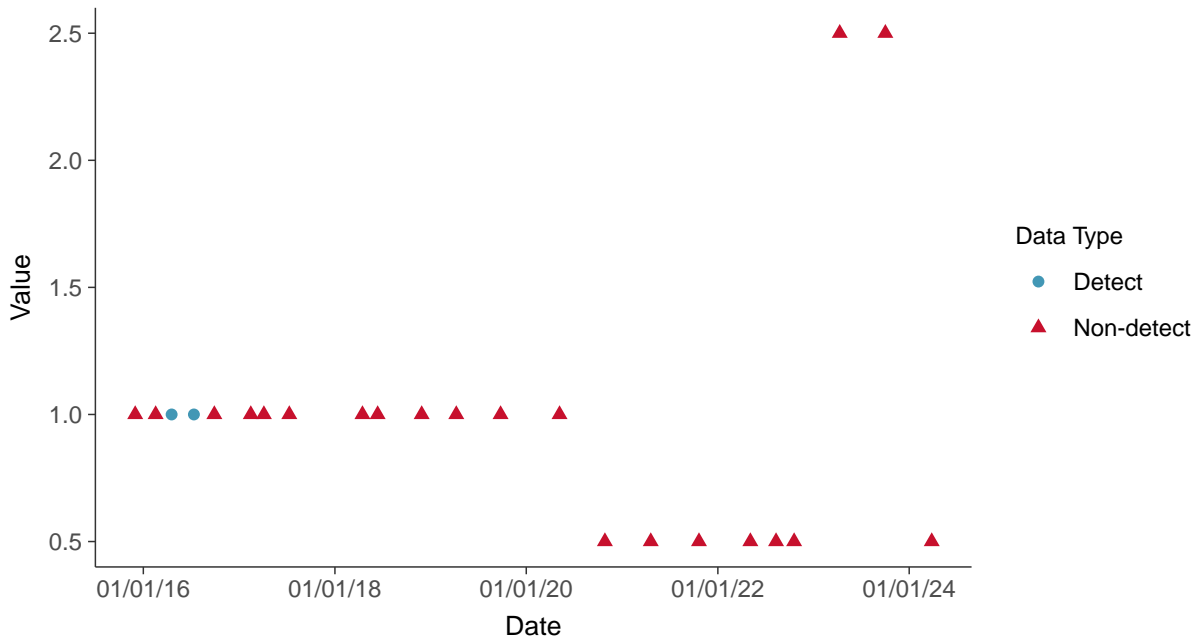


Appendix IV: Selenium, MW-15010

ID: 02_2_127

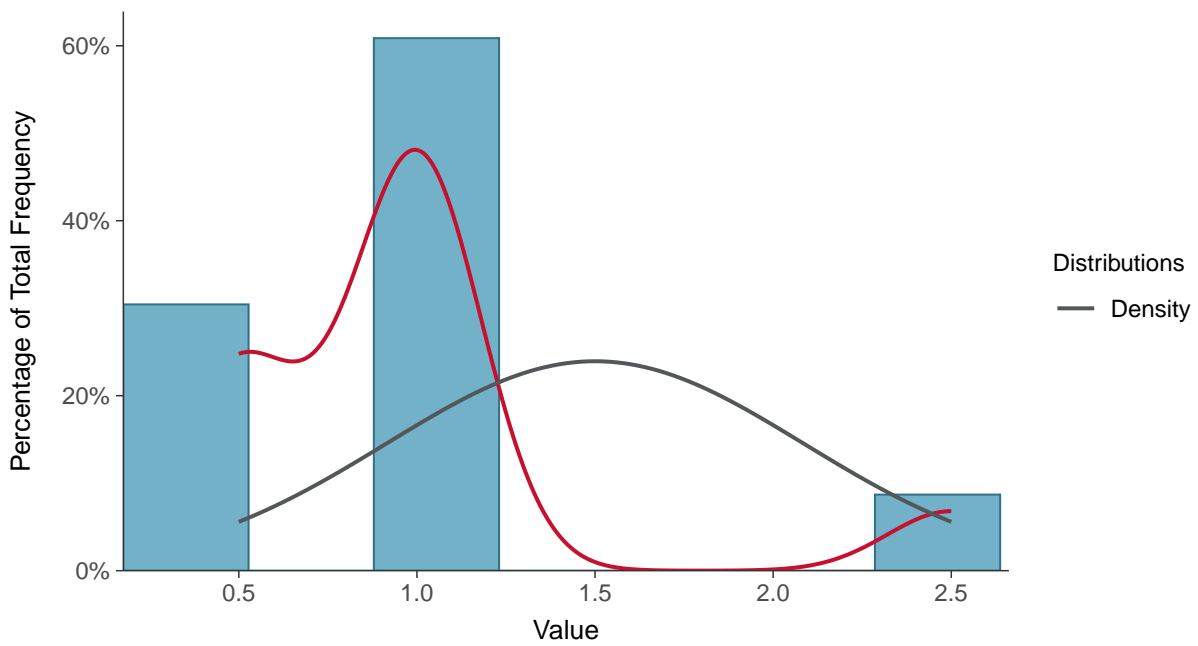
Scatter Plot

Selenium, MW-15010 (ug/L)



Histogram

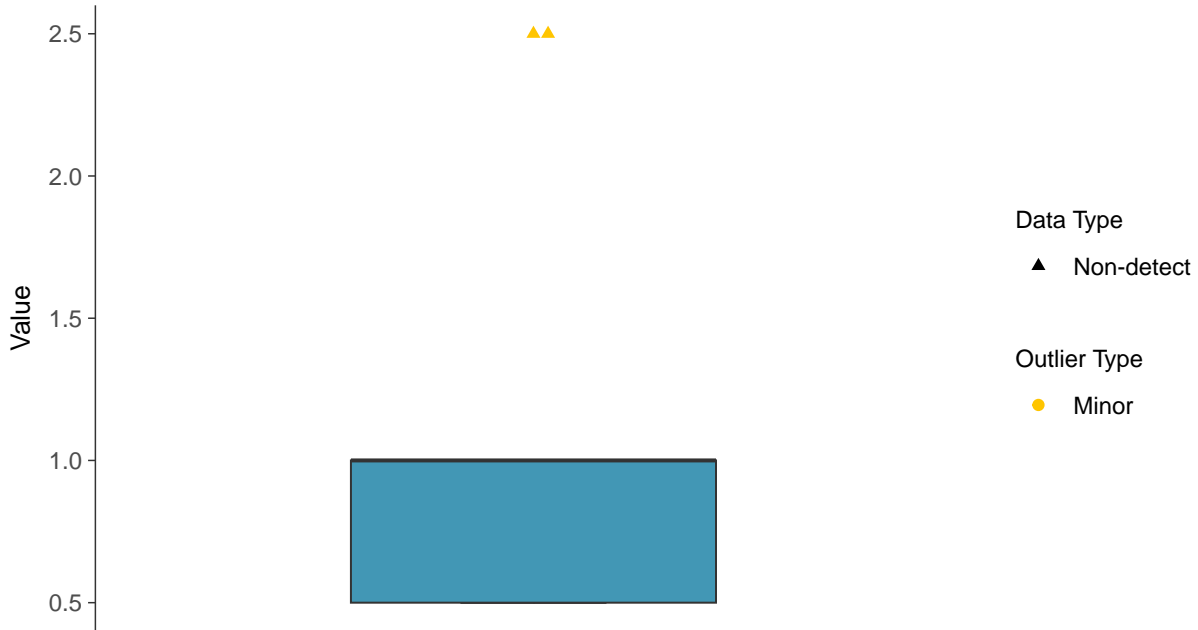
Selenium, MW-15010 (ug/L)





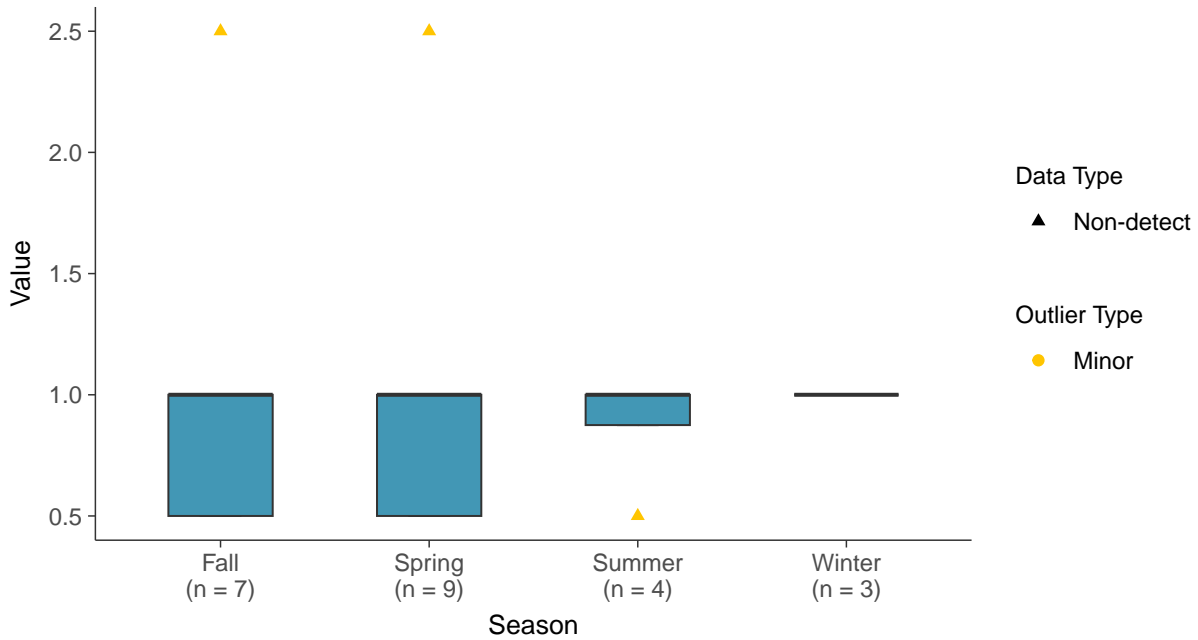
Boxplot

Selenium, MW-15010 (ug/L)



Boxplot by Season

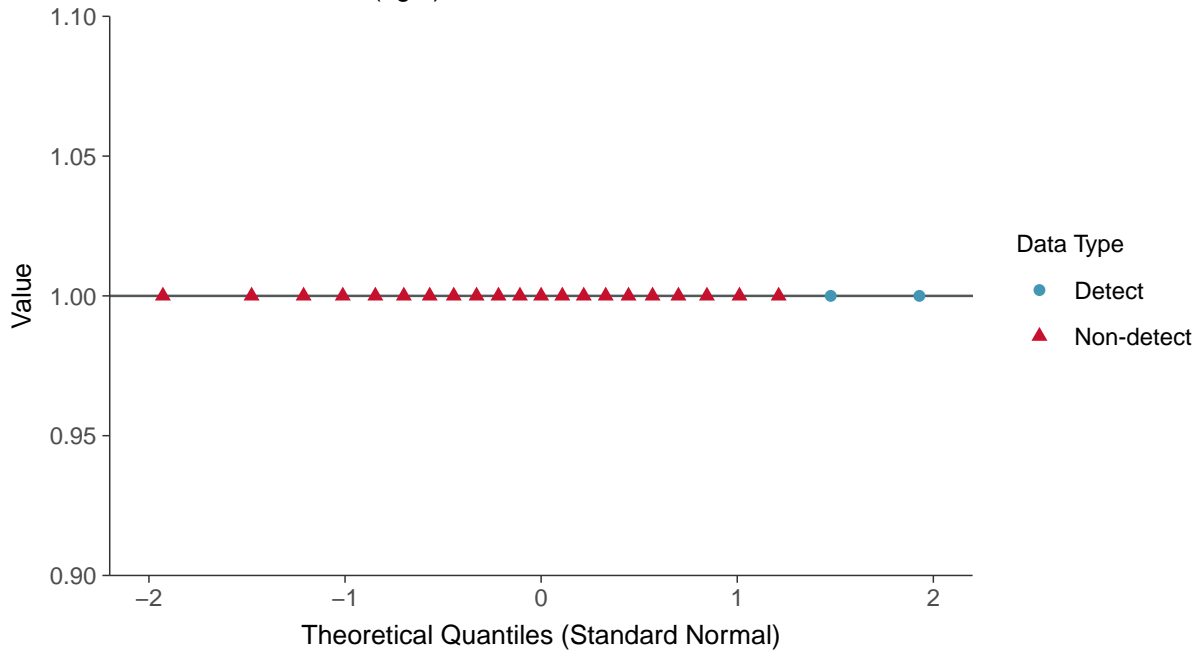
Selenium, MW-15010 (ug/L)





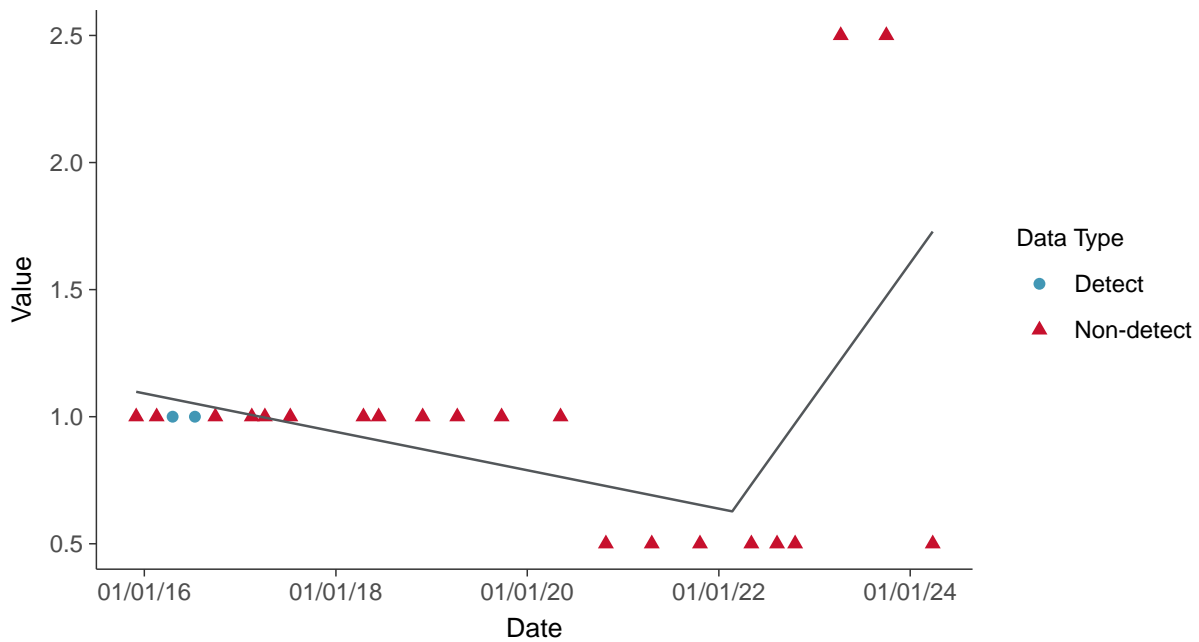
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear

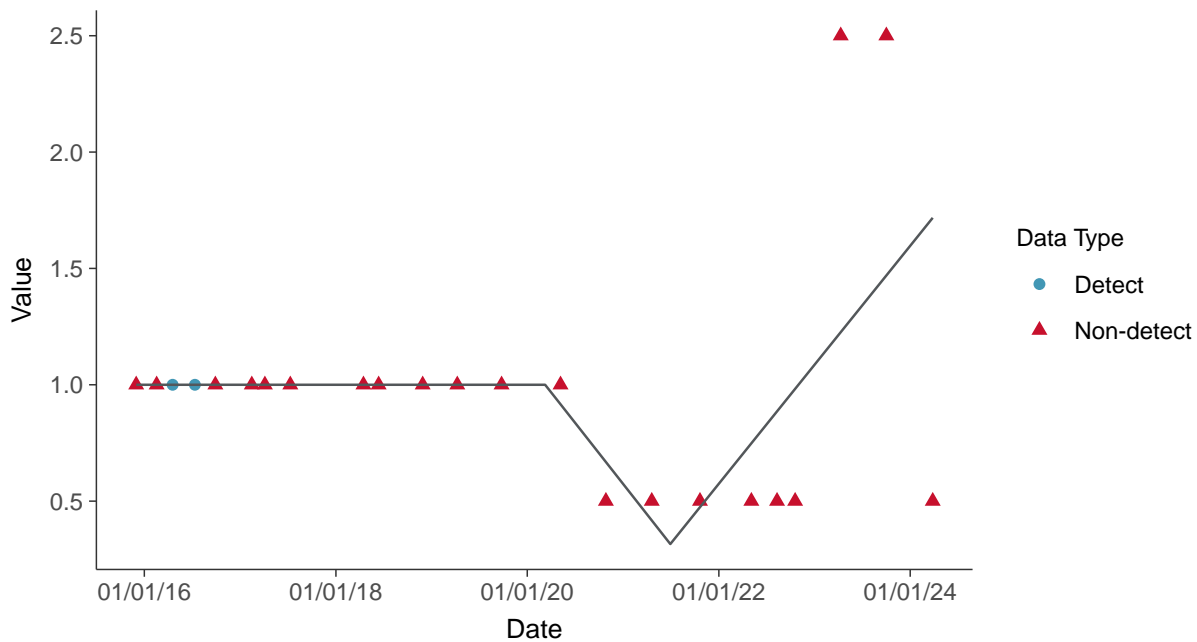
Selenium, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

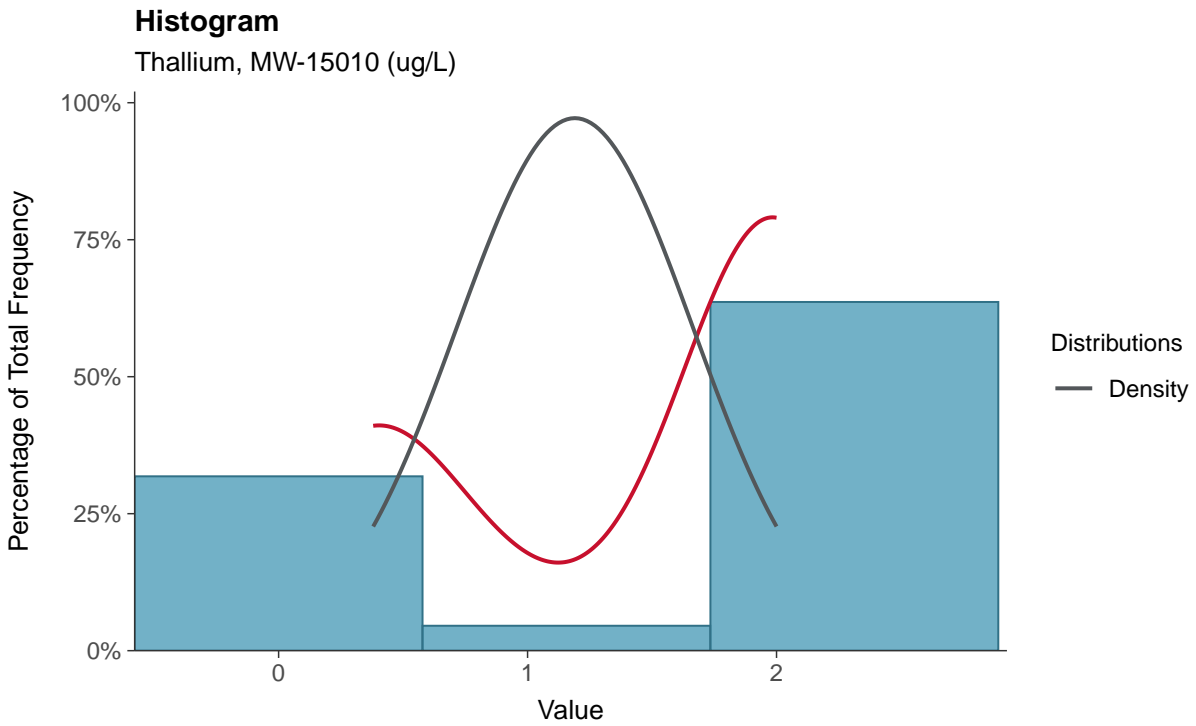
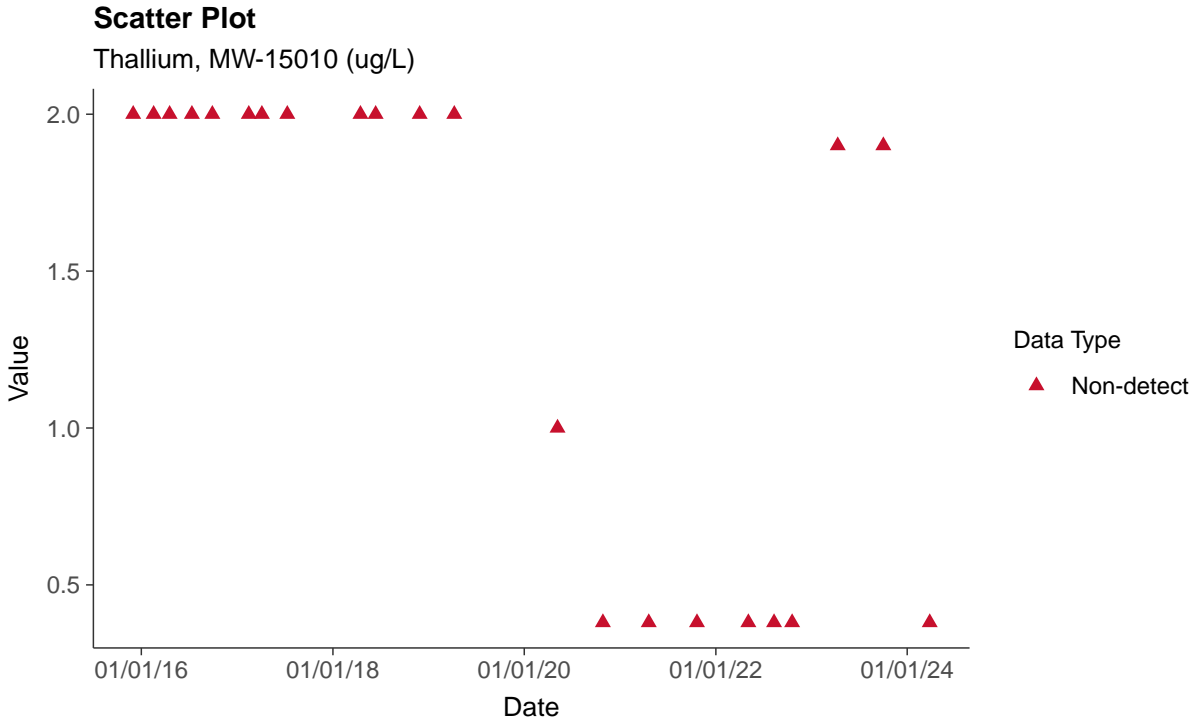
Selenium, MW-15010 (ug/L)





Appendix IV: Thallium, MW-15010

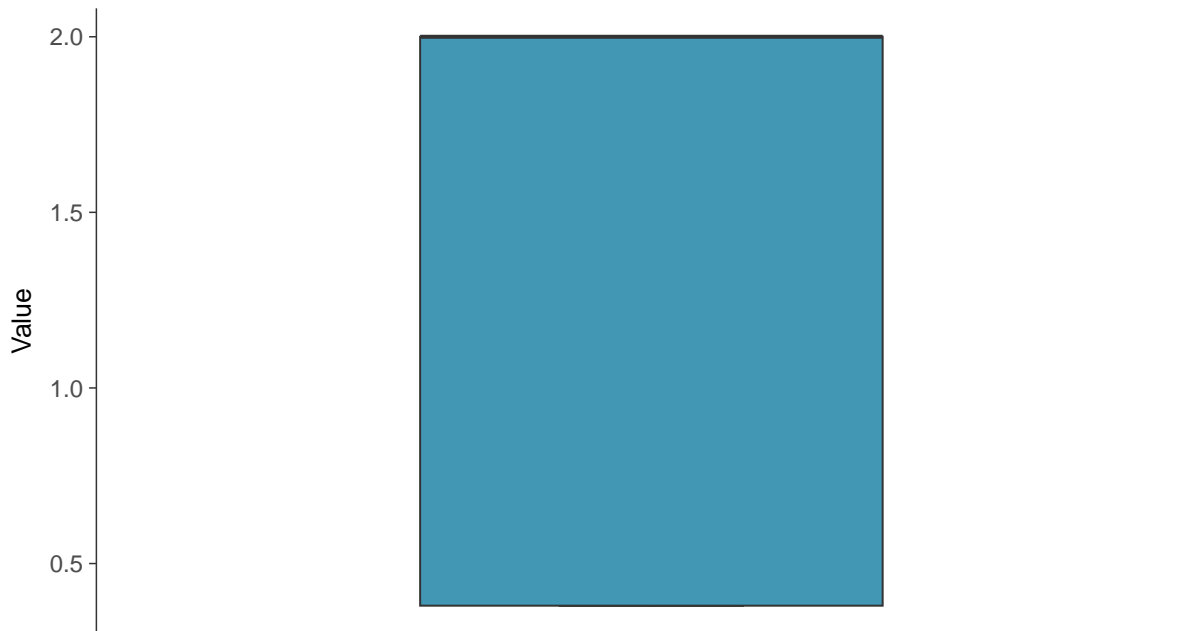
ID: 02_2_131





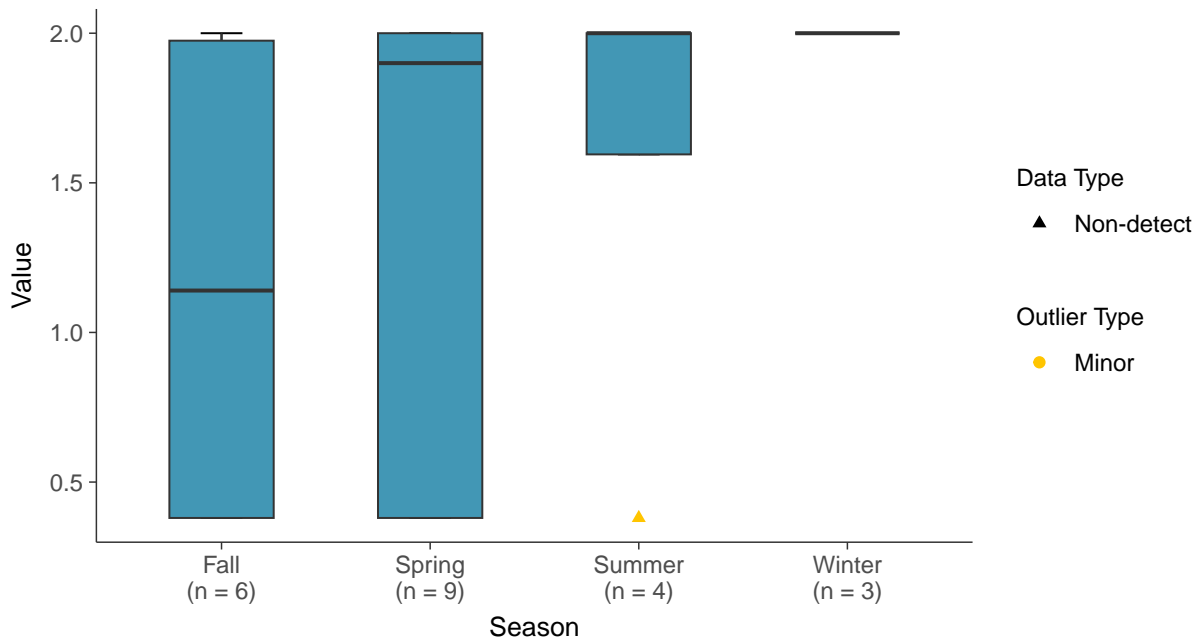
Boxplot

Thallium, MW-15010 (ug/L)



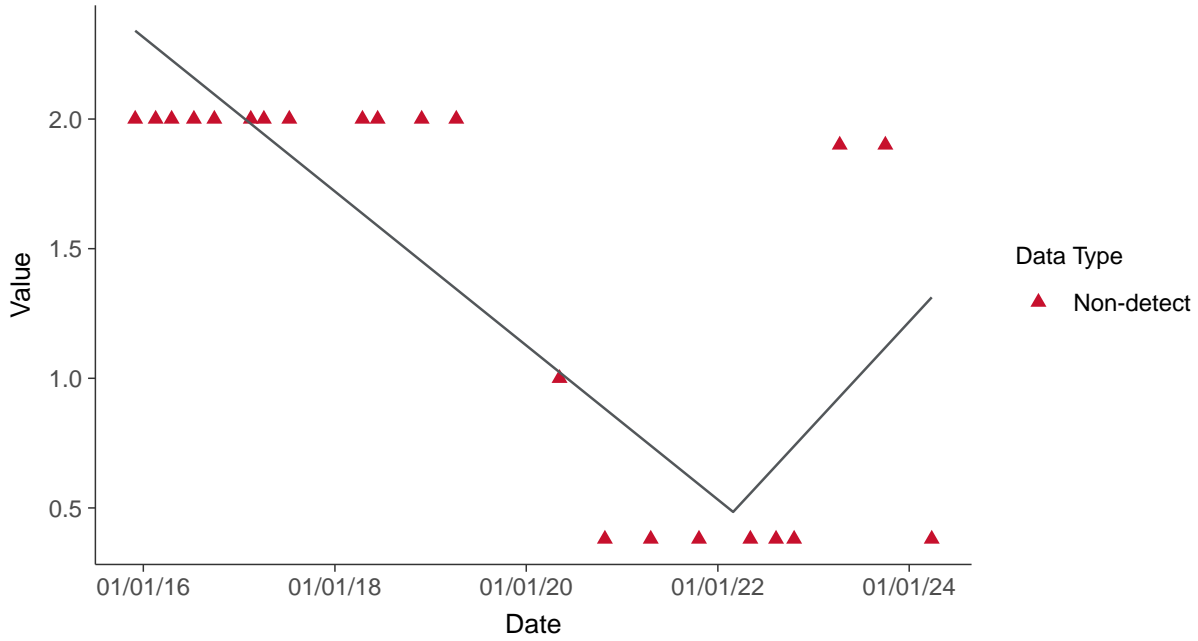
Boxplot by Season

Thallium, MW-15010 (ug/L)

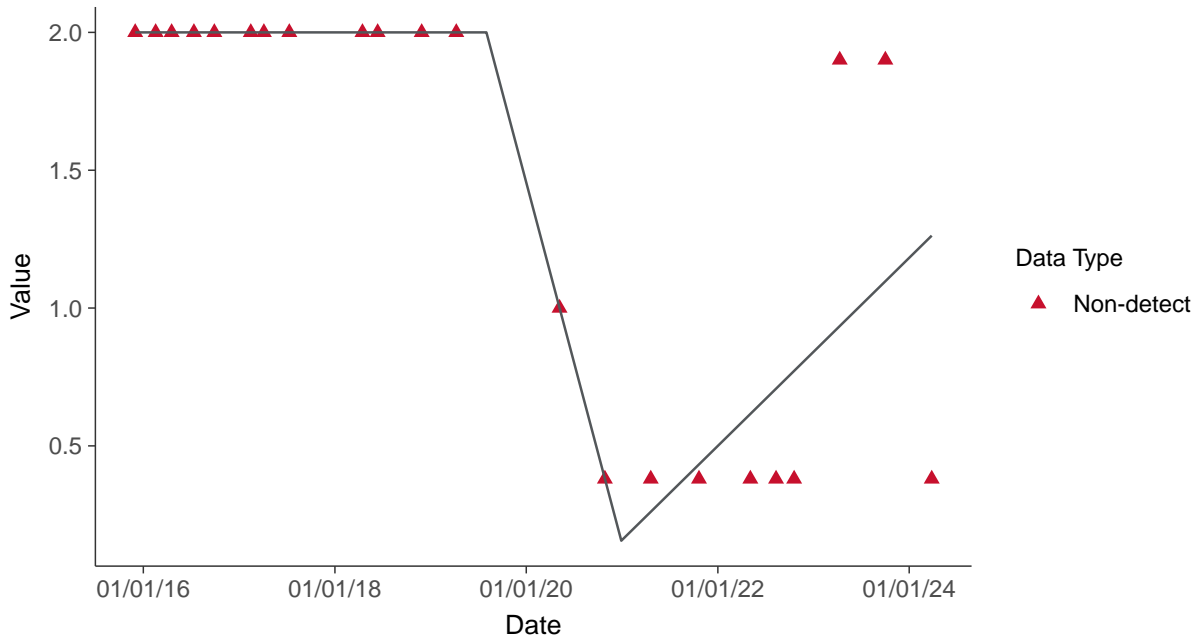




Trend Regression: Piecewise Linear-Linear
Thallium, MW-15010 (ug/L)



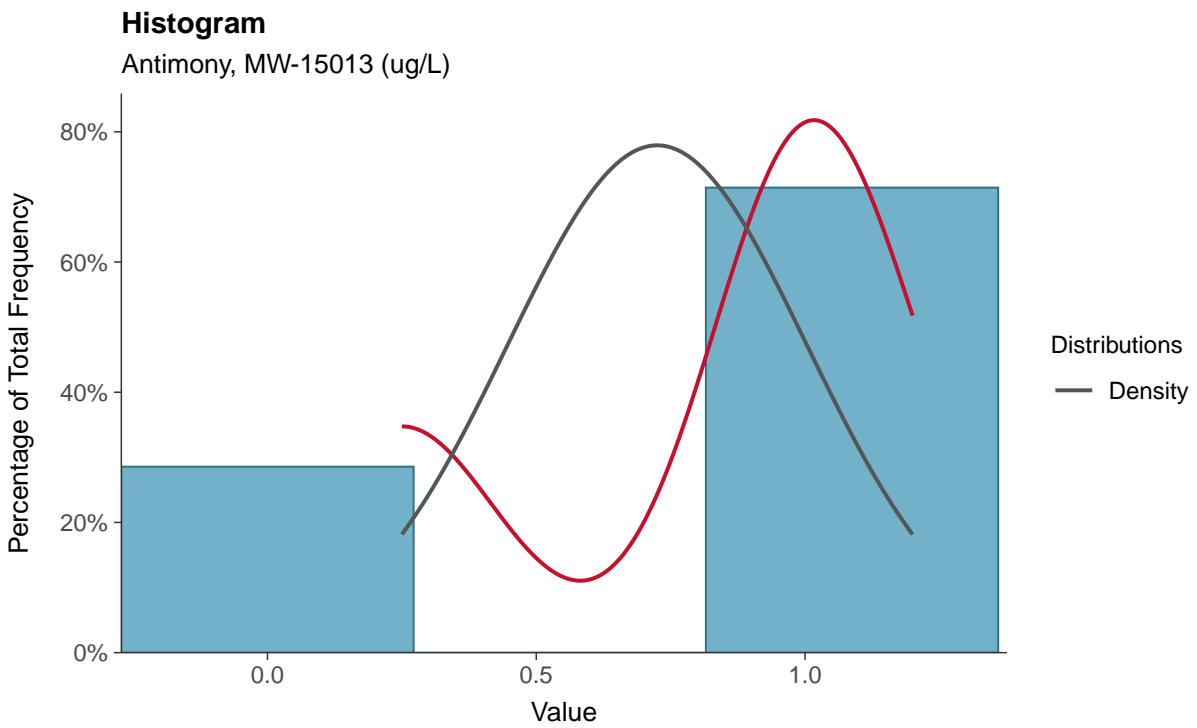
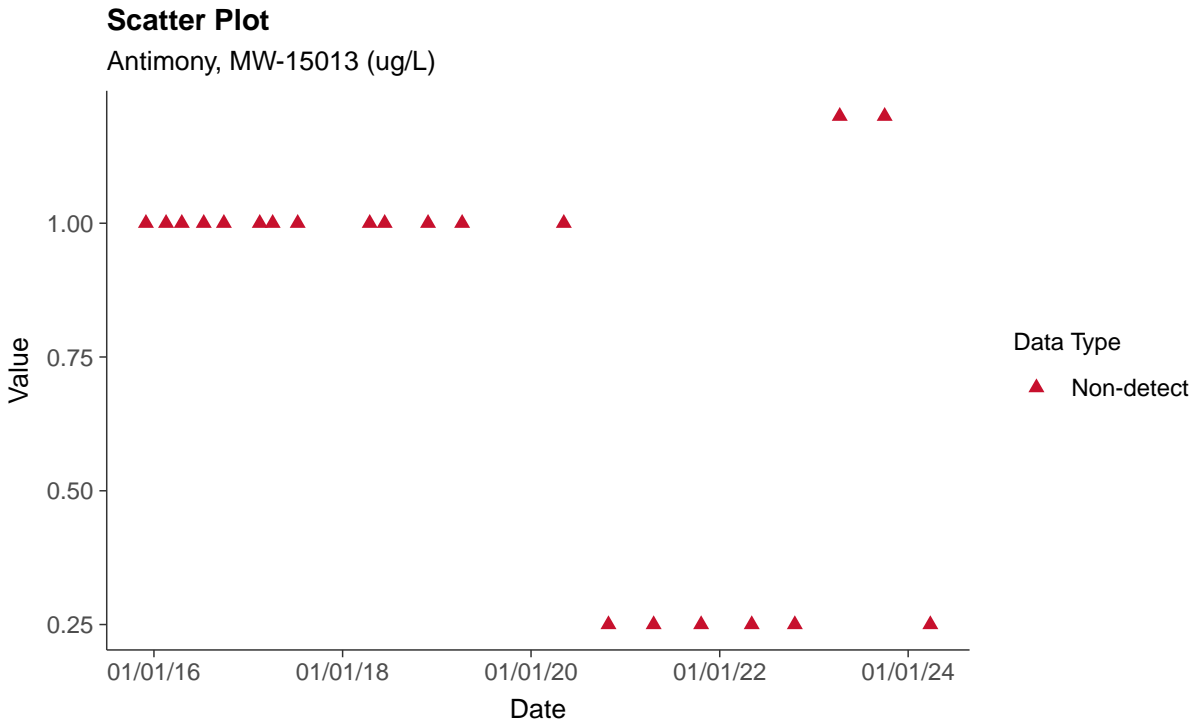
Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-15010 (ug/L)





Appendix IV: Antimony, MW-15013

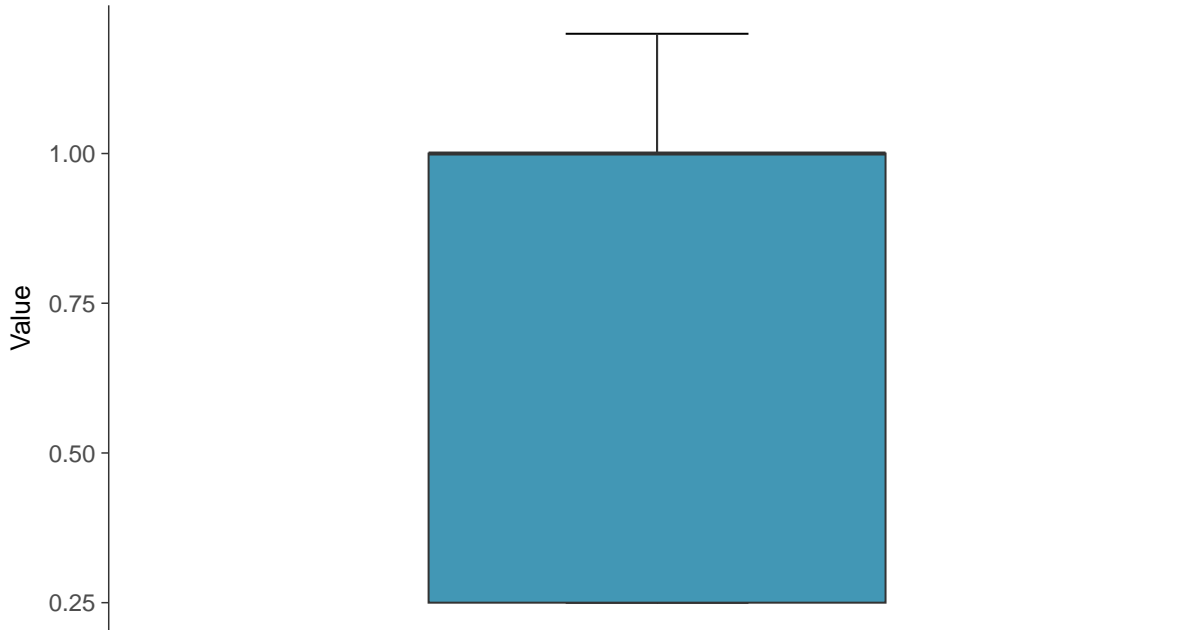
ID: 03_2_101





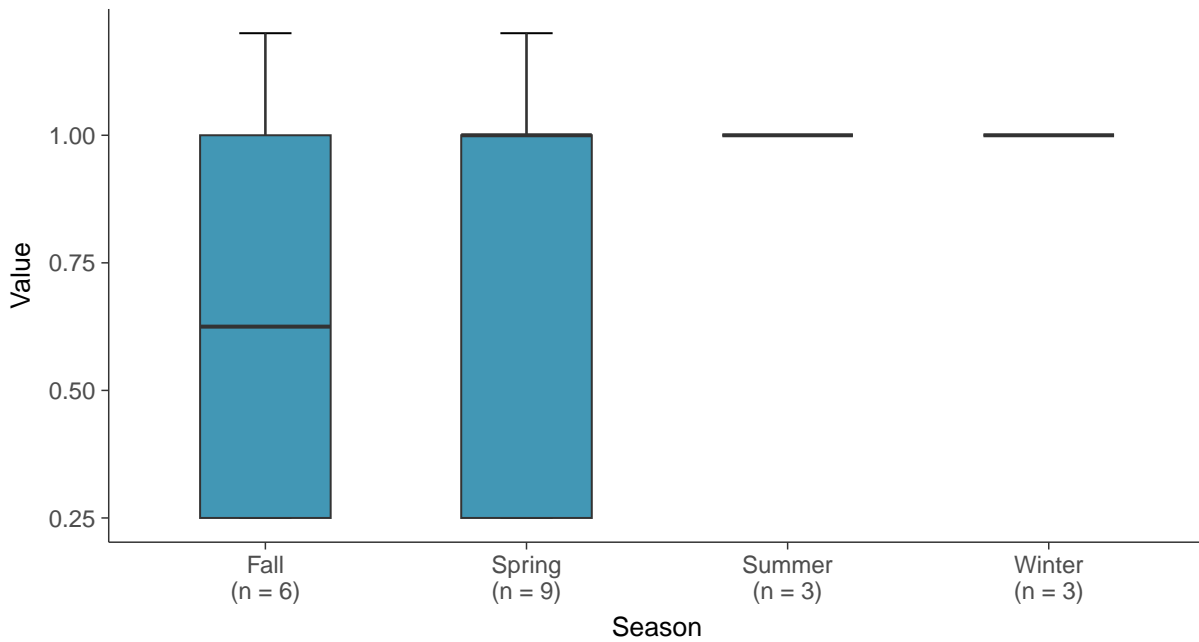
Boxplot

Antimony, MW-15013 (ug/L)



Boxplot by Season

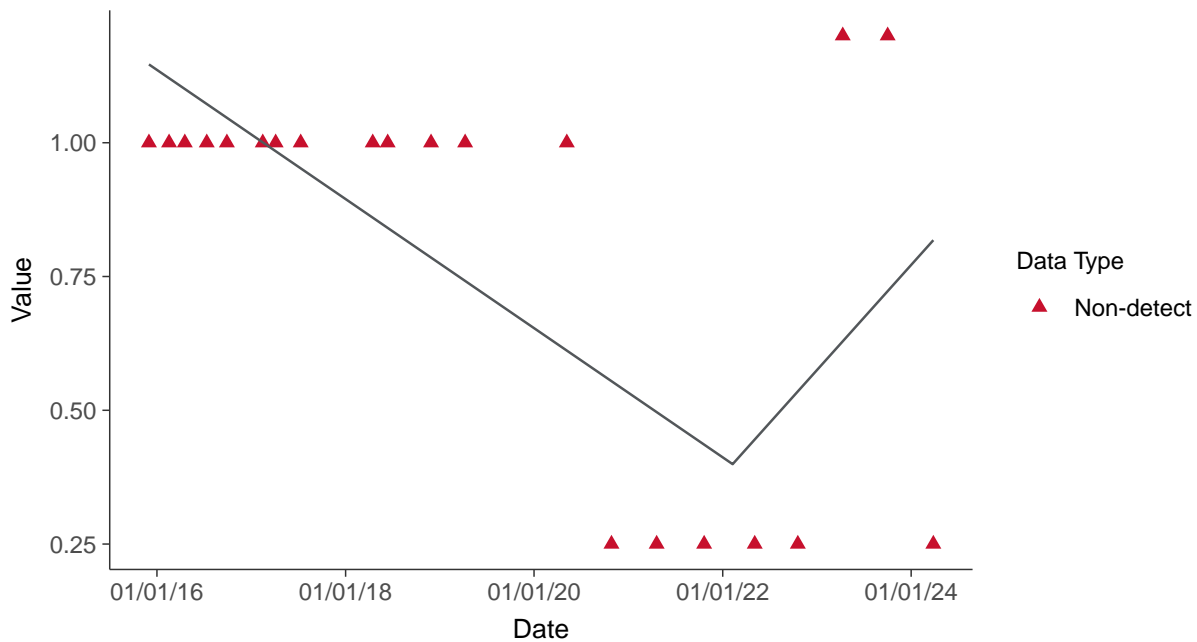
Antimony, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear

Antimony, MW-15013 (ug/L)



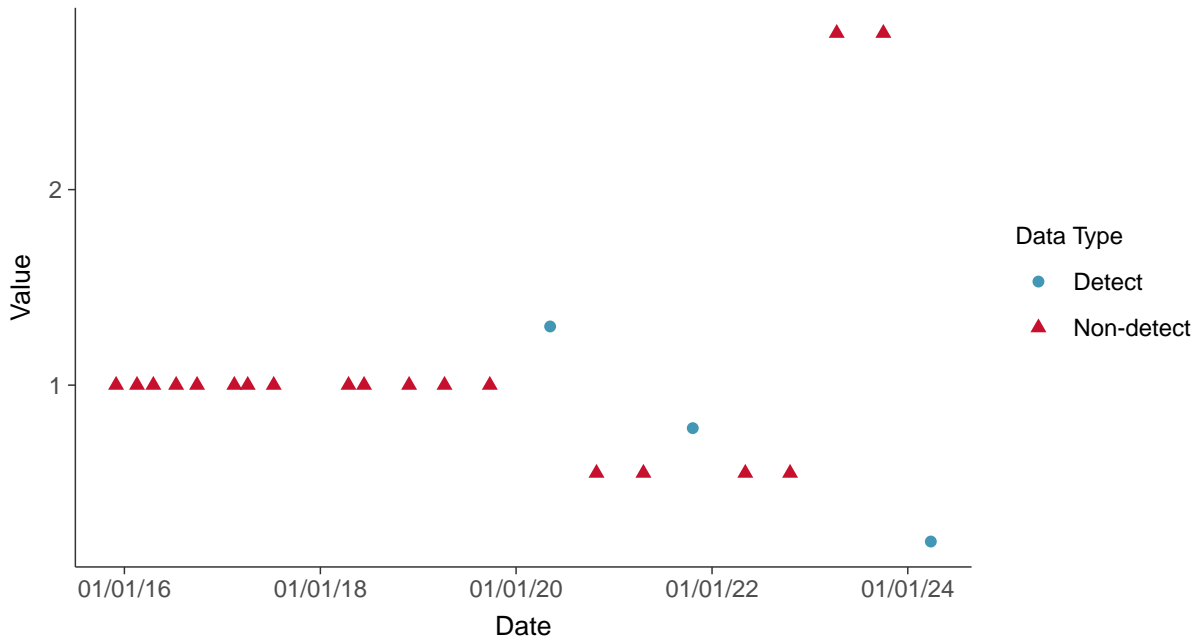


Appendix IV: Arsenic, MW-15013

ID: 03_2_102

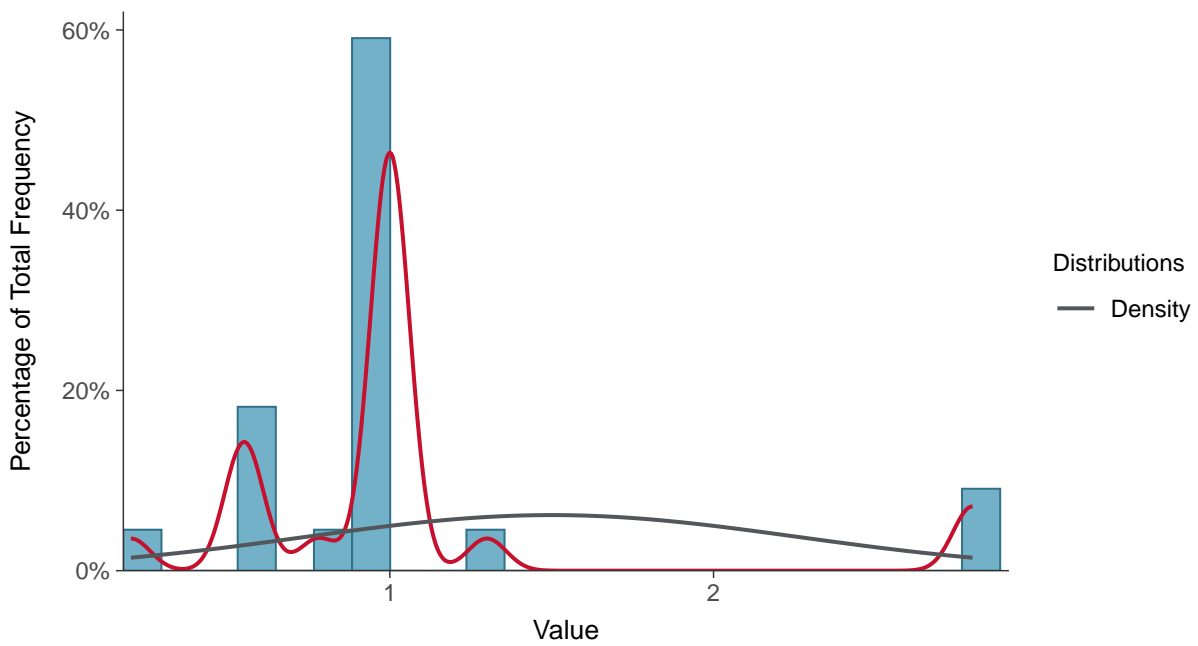
Scatter Plot

Arsenic, MW-15013 (ug/L)



Histogram

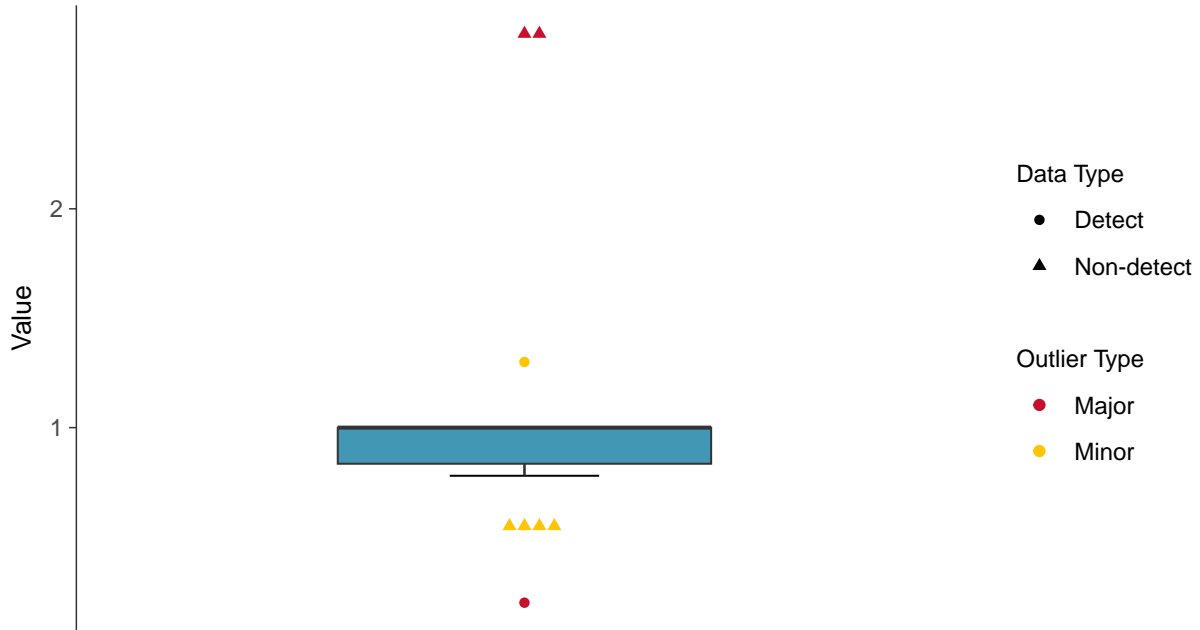
Arsenic, MW-15013 (ug/L)





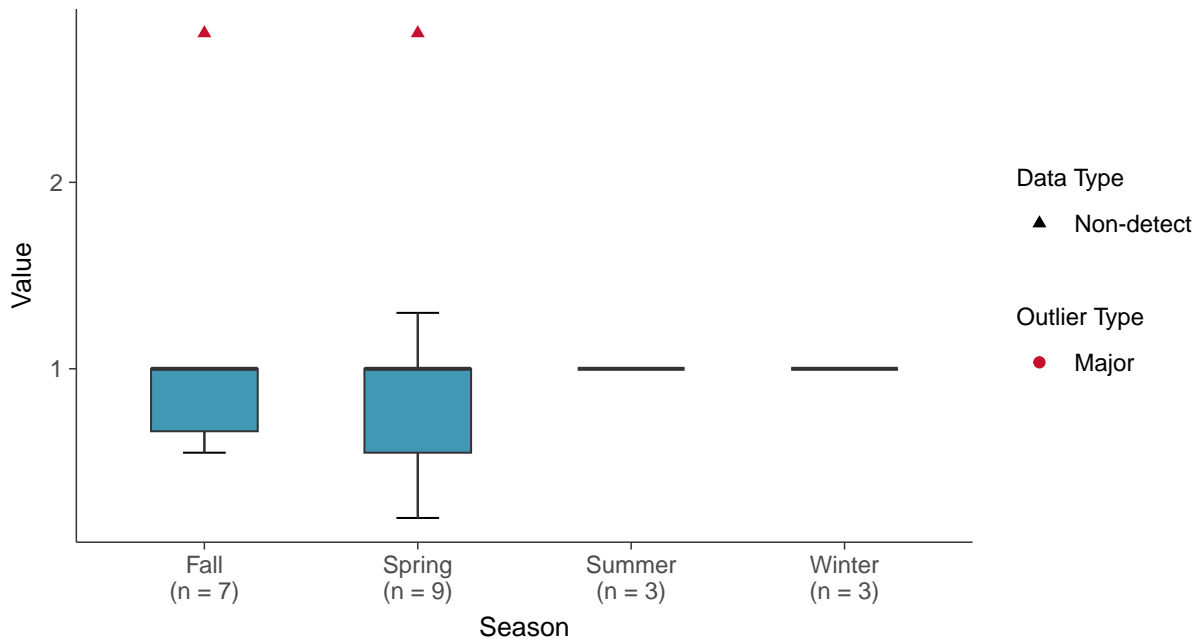
Boxplot

Arsenic, MW-15013 (ug/L)



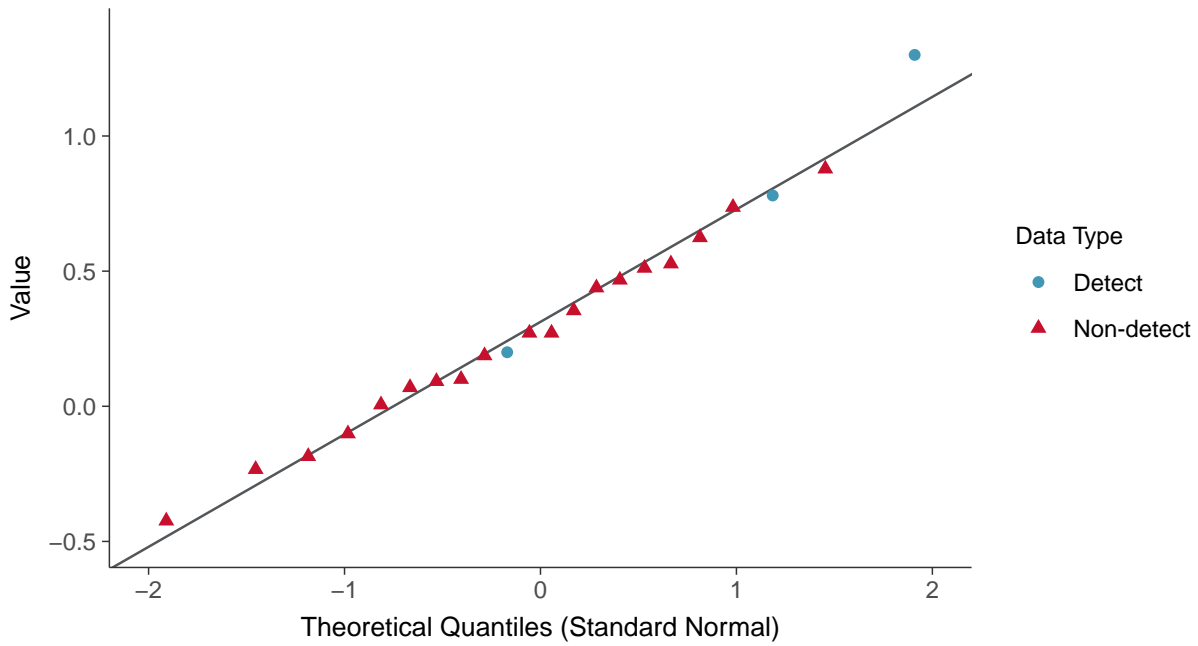
Boxplot by Season

Arsenic, MW-15013 (ug/L)

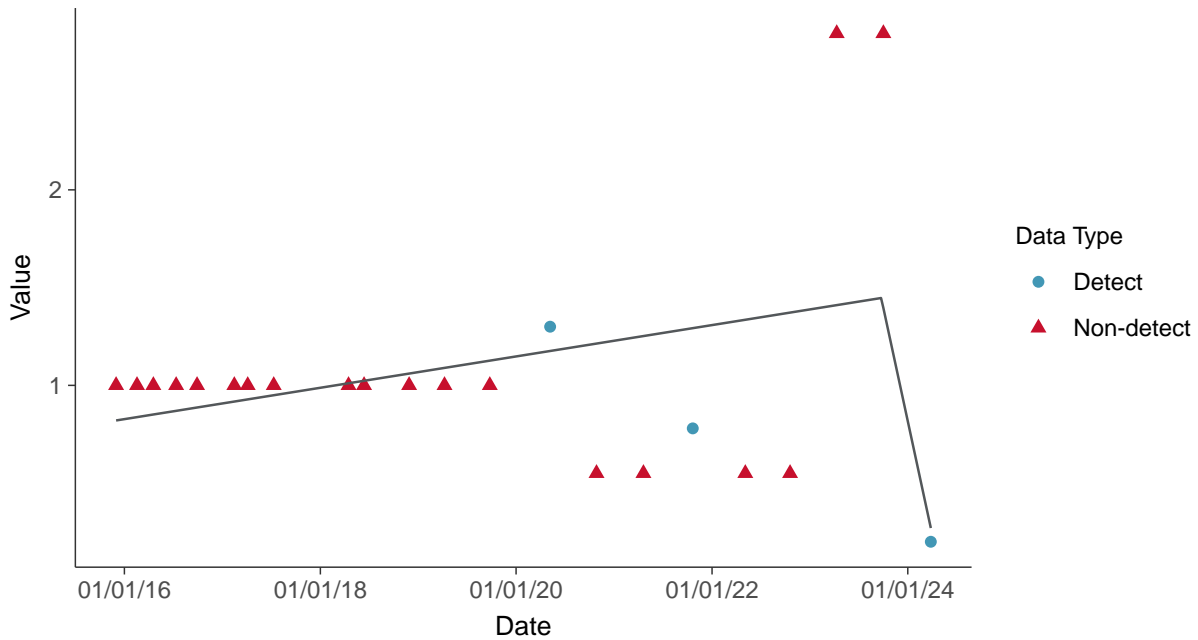




Normal Q-Q plot using ROS Imputed Estimates
Arsenic, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-15013 (ug/L)



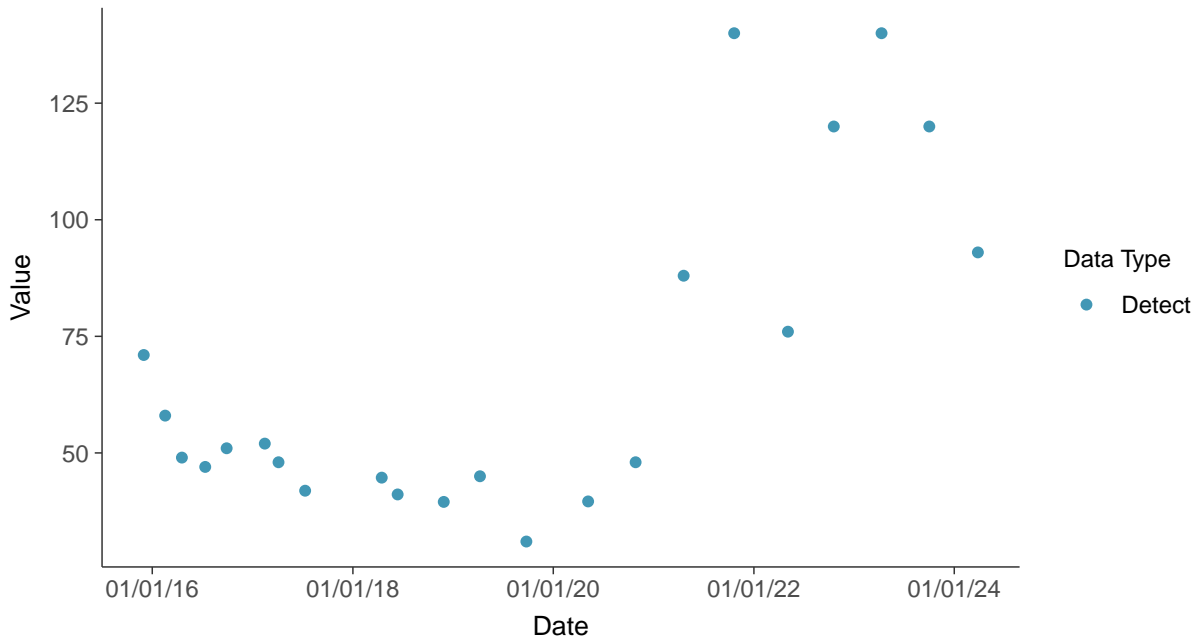


Appendix IV: Barium, MW-15013

ID: 03_2_103

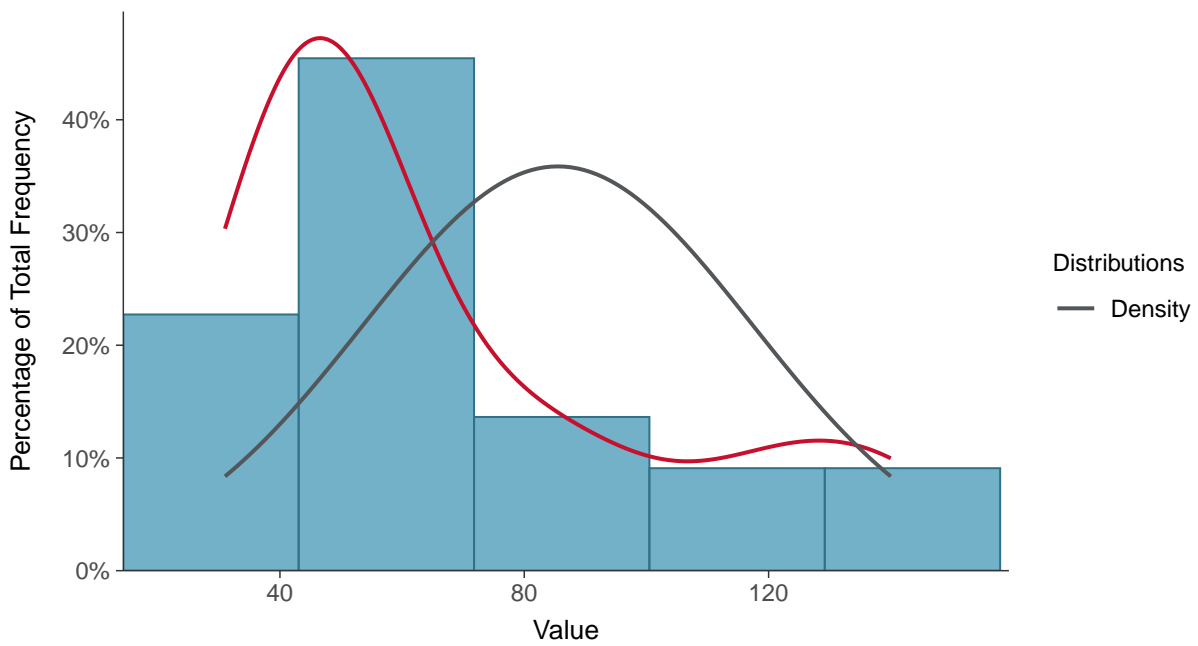
Scatter Plot

Barium, MW-15013 (ug/L)



Histogram

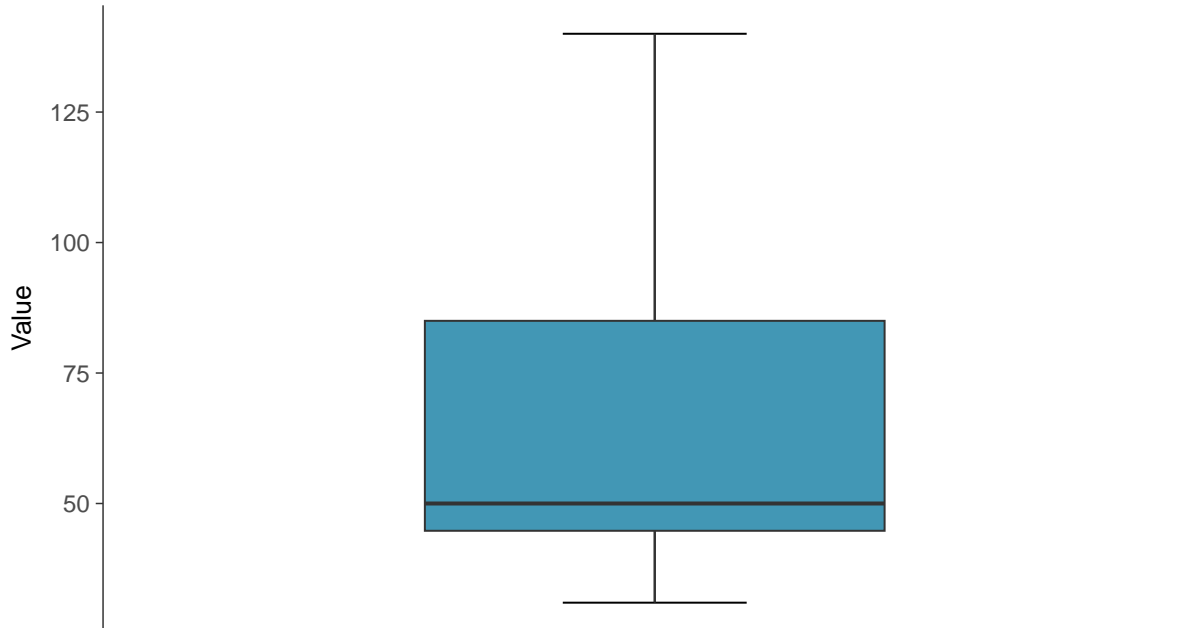
Barium, MW-15013 (ug/L)





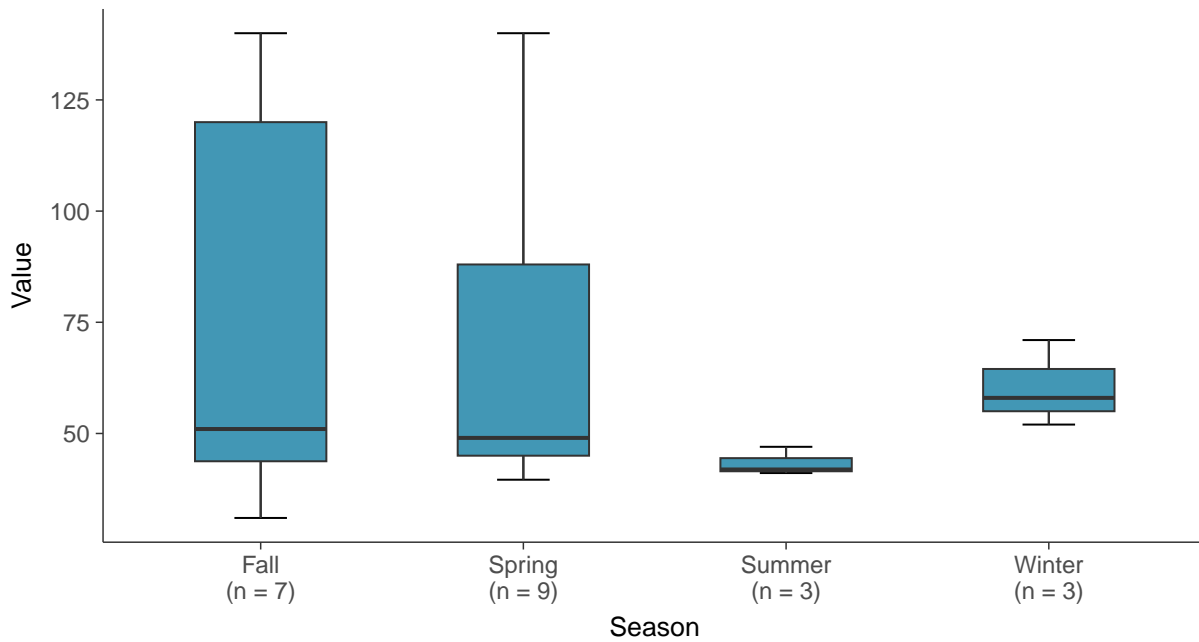
Boxplot

Barium, MW-15013 (ug/L)



Boxplot by Season

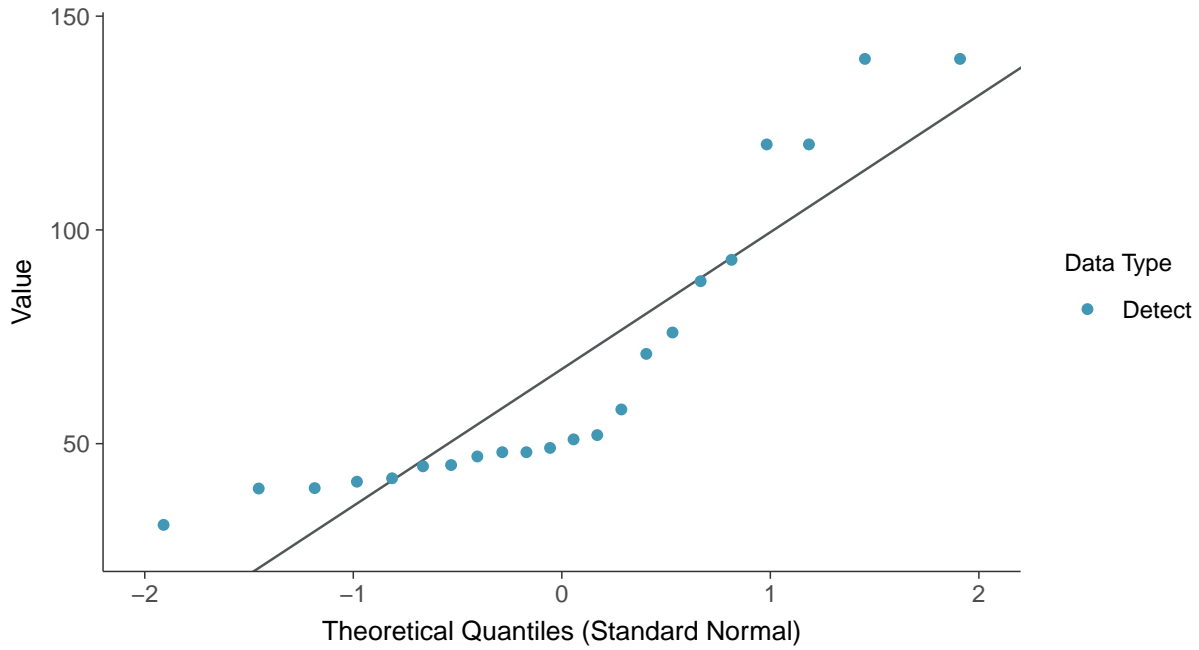
Barium, MW-15013 (ug/L)





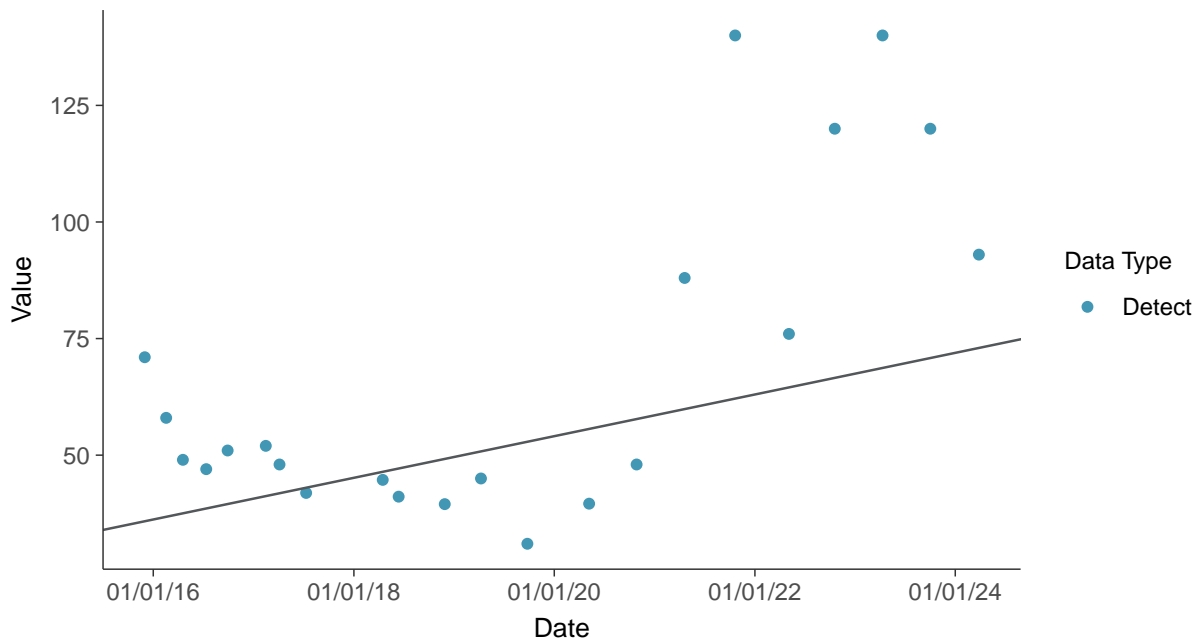
Normal Q-Q plot

Barium, MW-15013 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

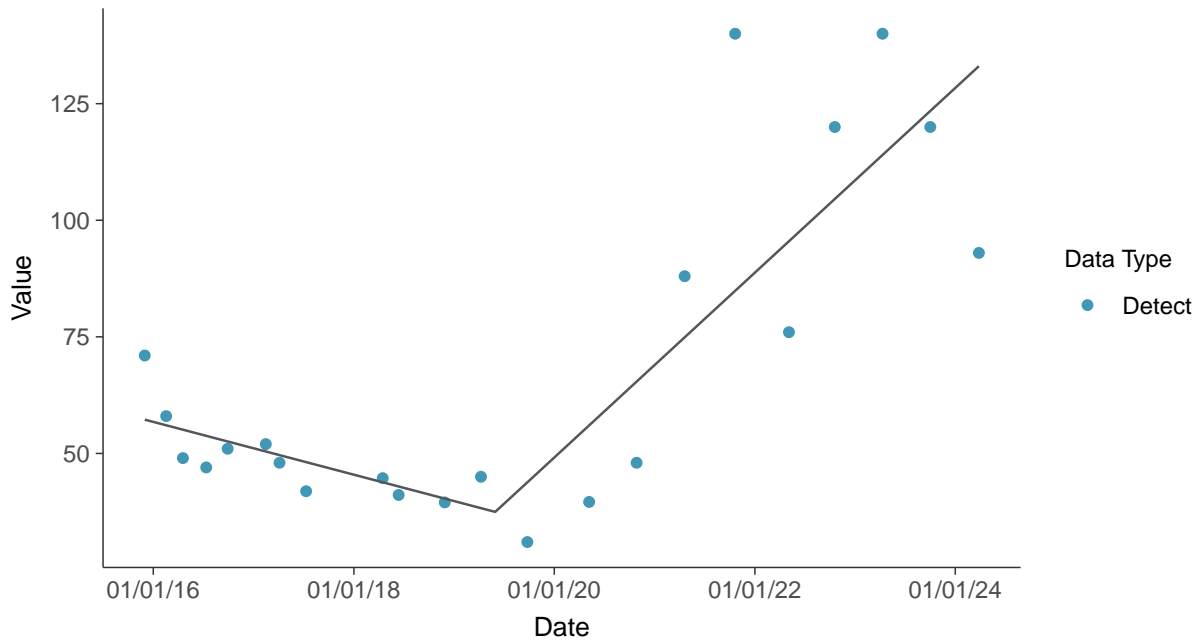
Barium, MW-15013 (ug/L)





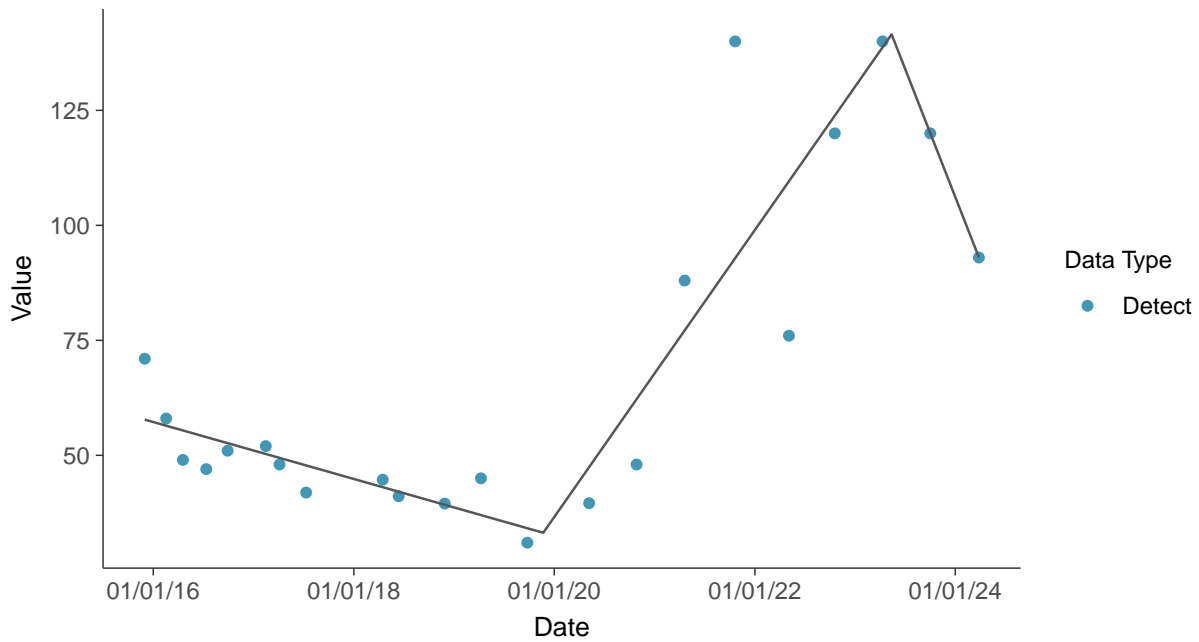
Trend Regression: Piecewise Linear-Linear

Barium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

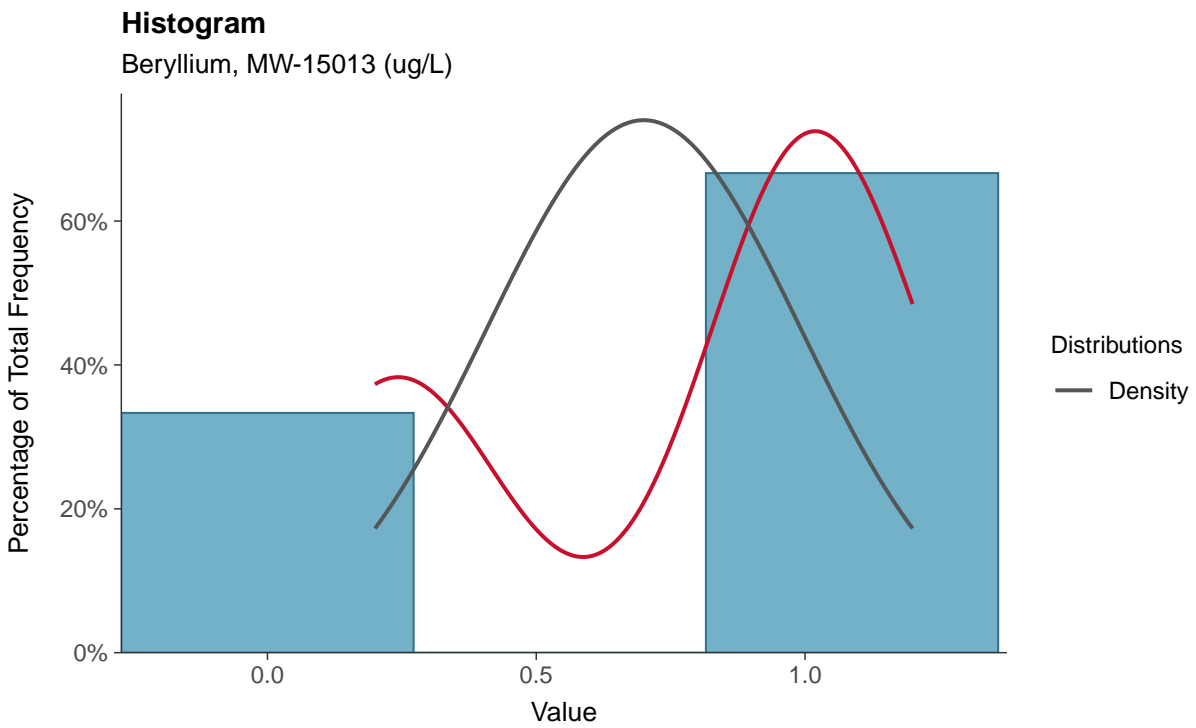
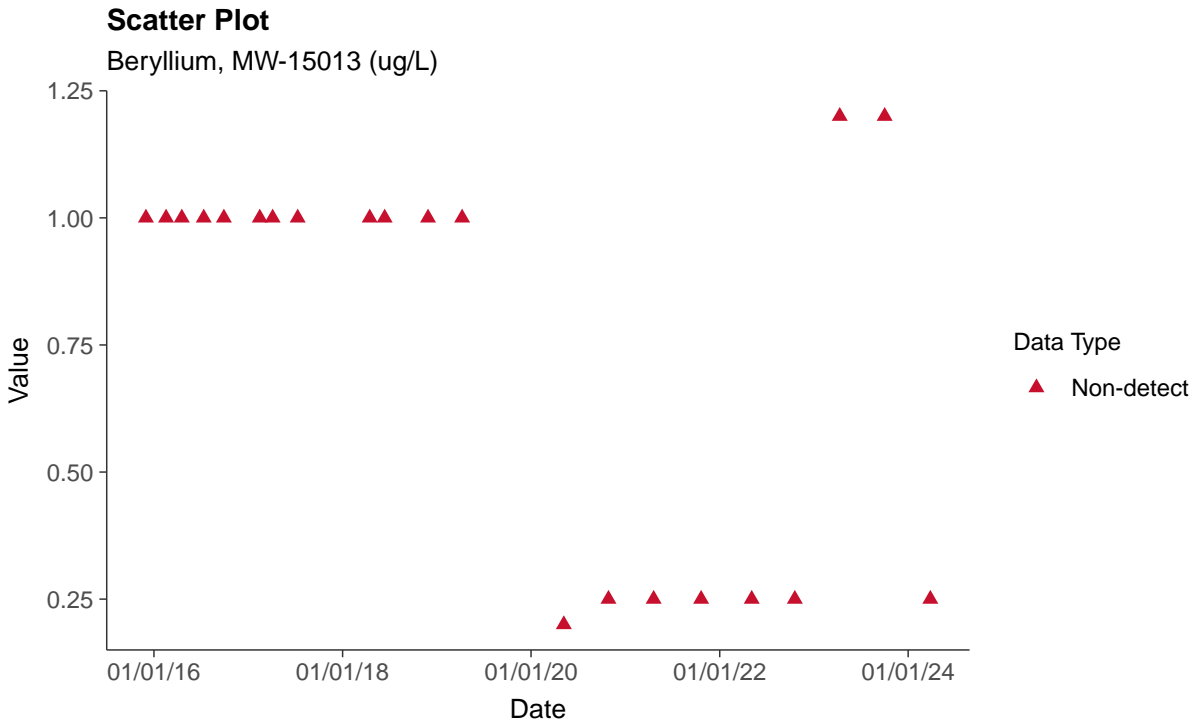
Barium, MW-15013 (ug/L)





Appendix IV: Beryllium, MW-15013

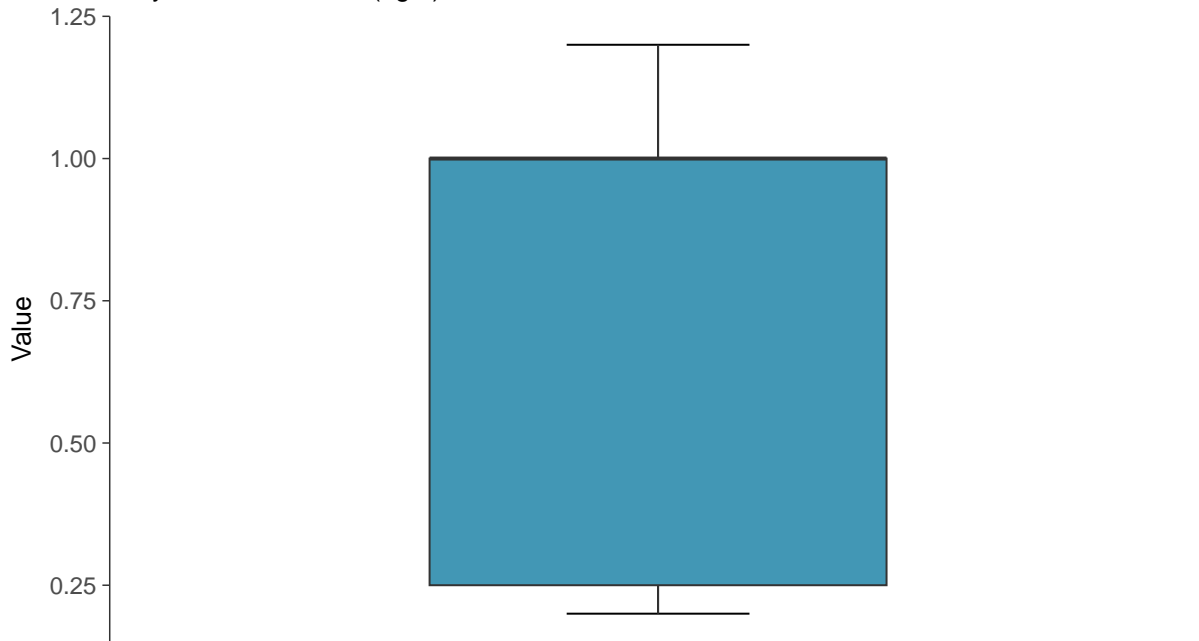
ID: 03_2_104





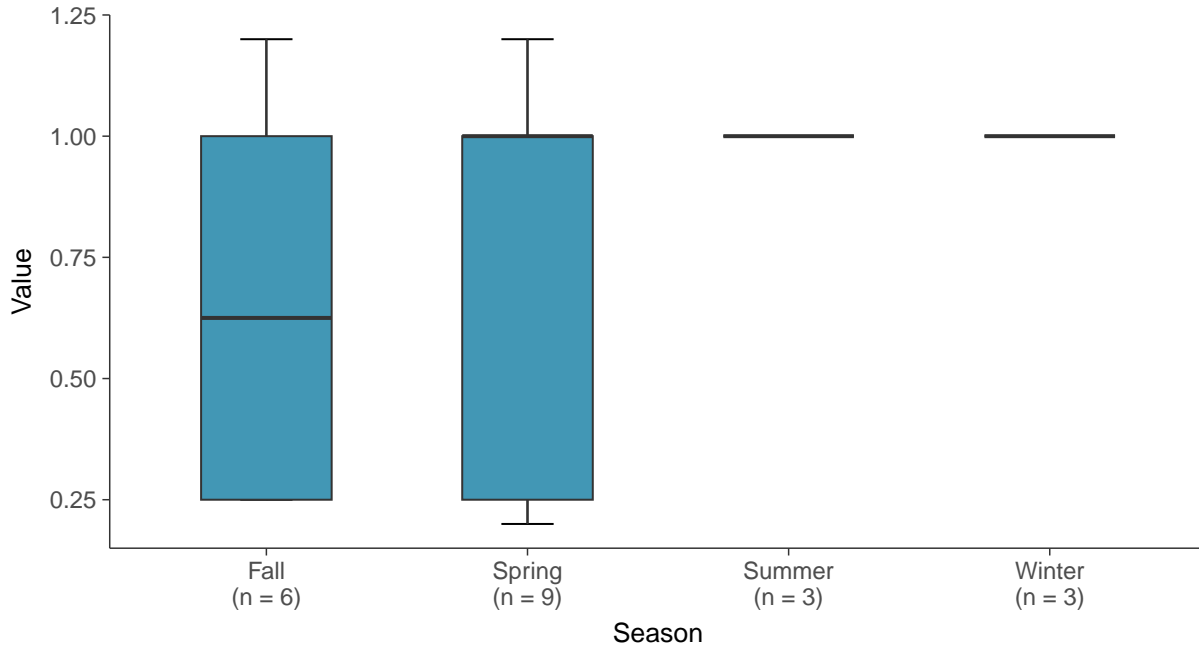
Boxplot

Beryllium, MW-15013 (ug/L)



Boxplot by Season

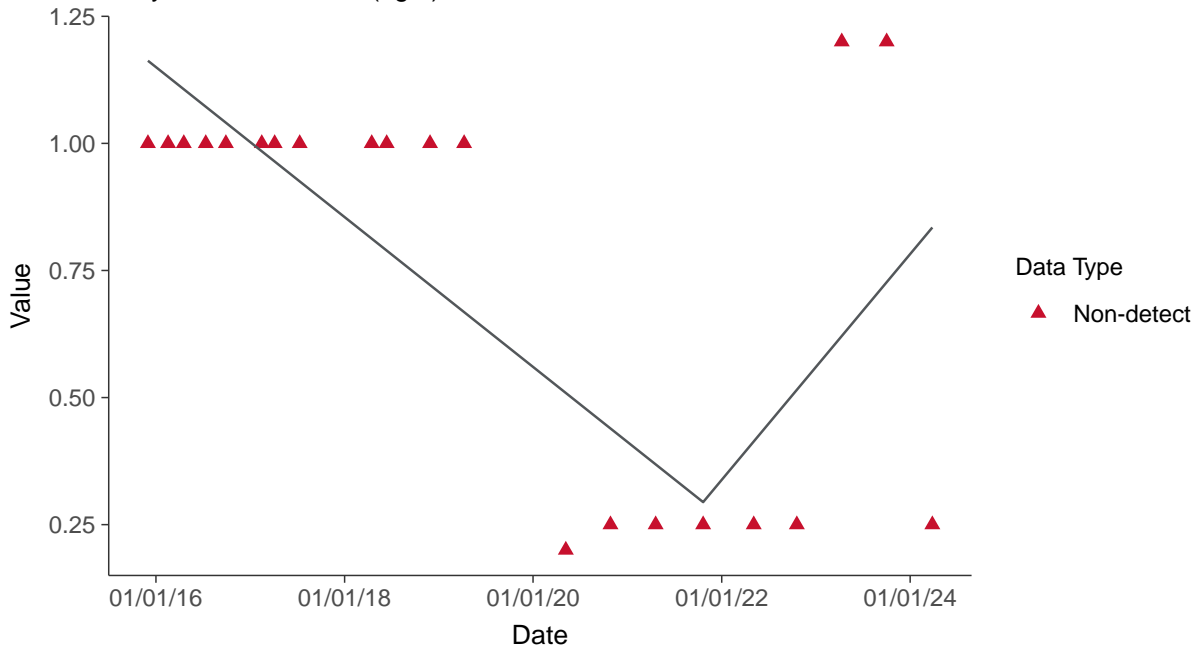
Beryllium, MW-15013 (ug/L)





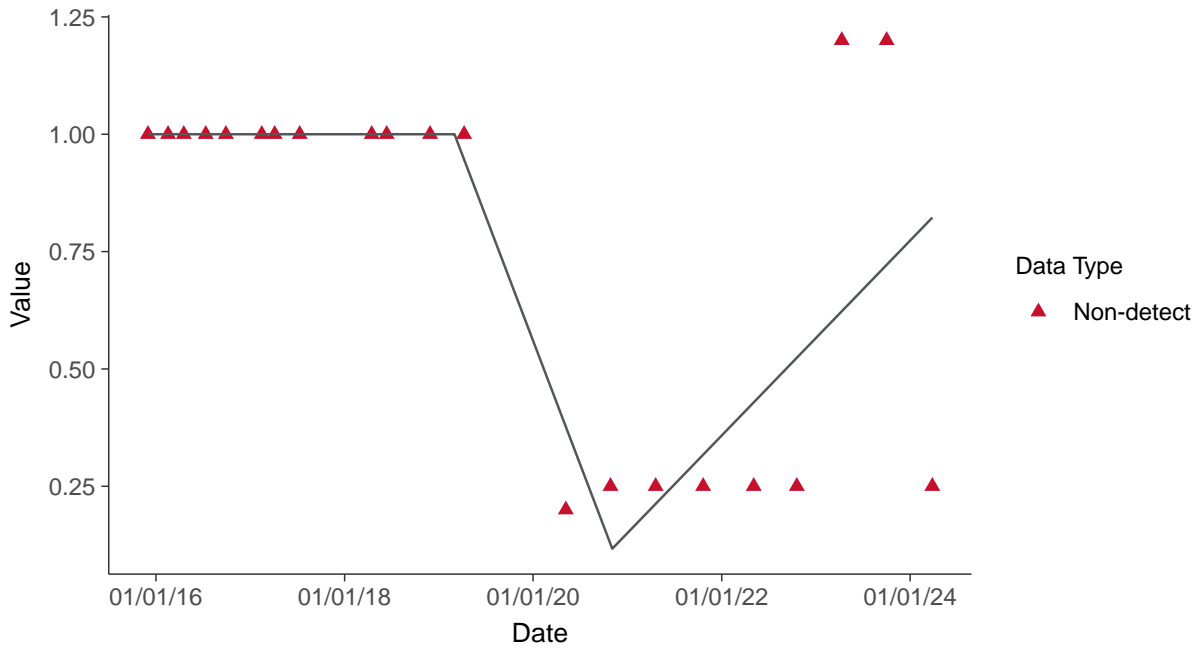
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

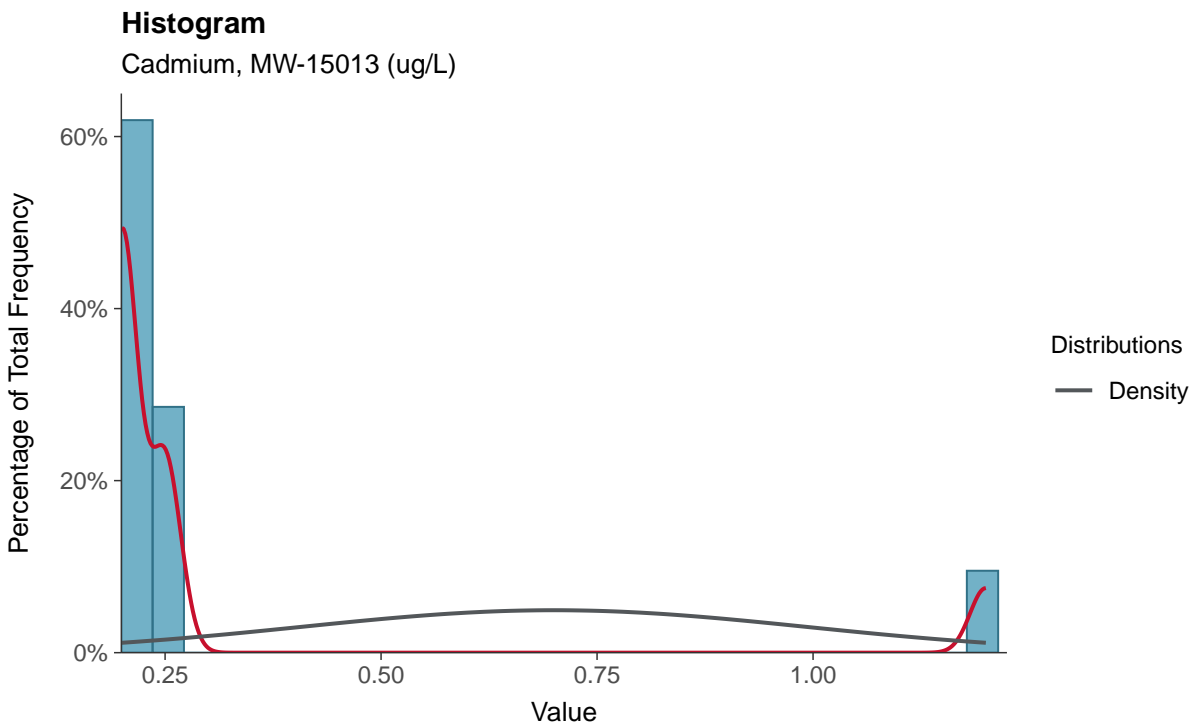
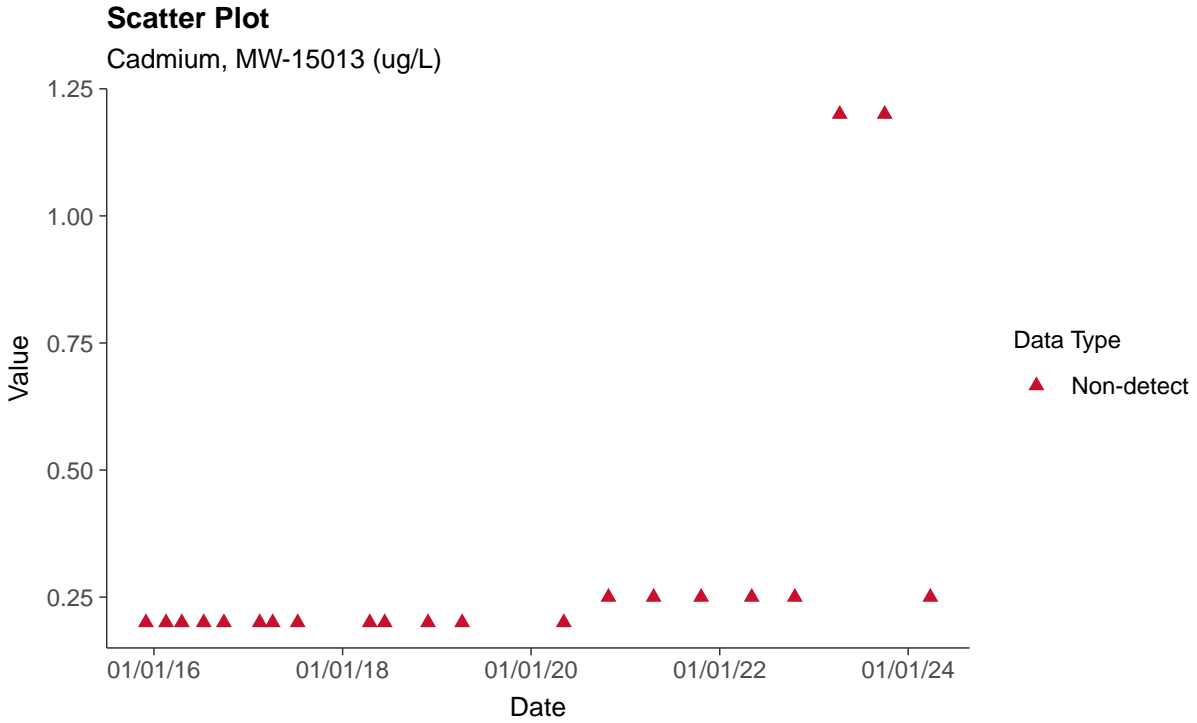
Beryllium, MW-15013 (ug/L)

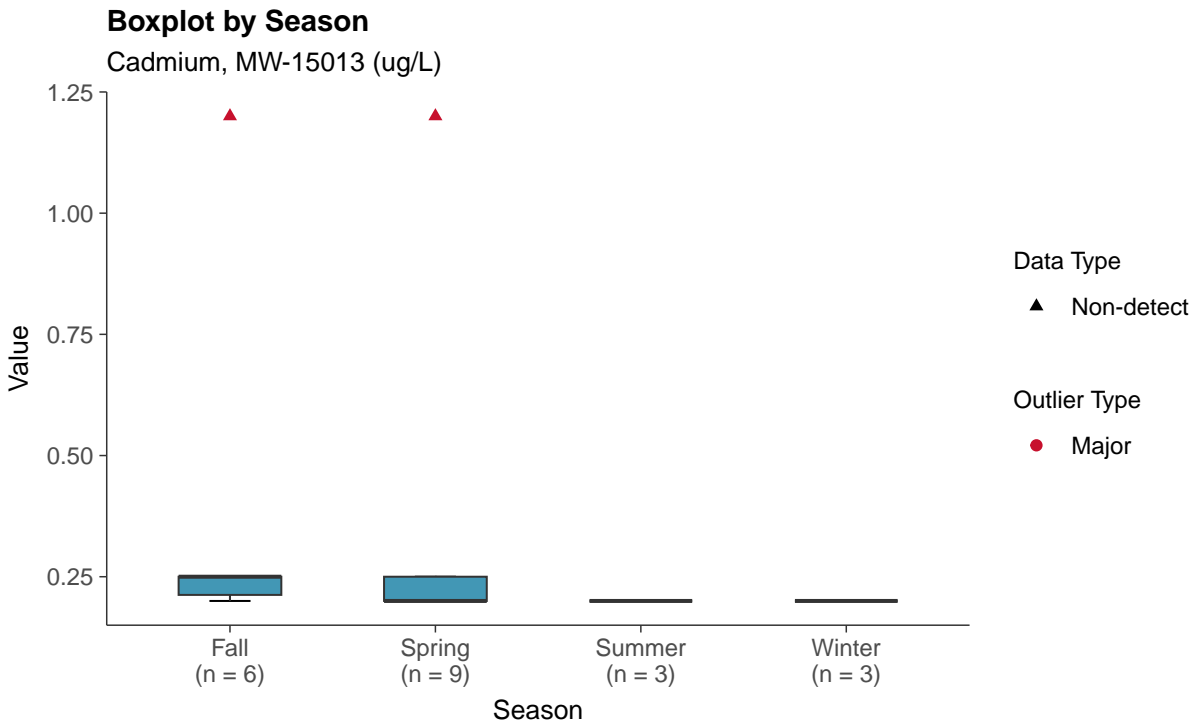
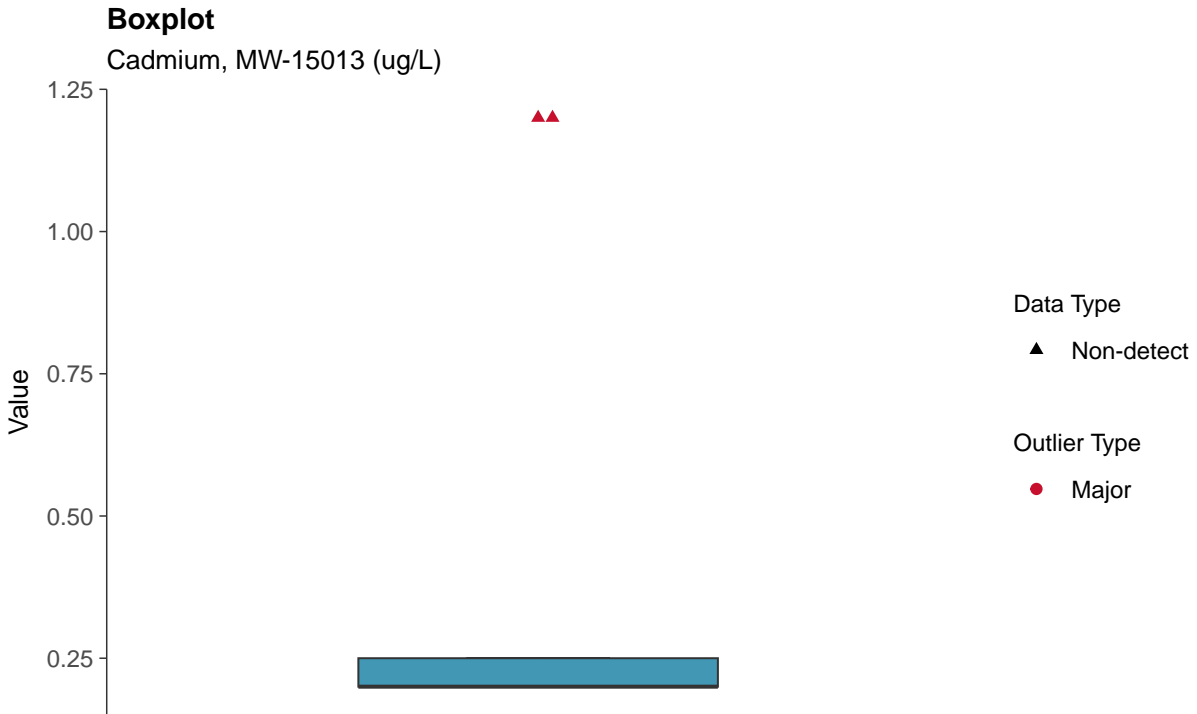




Appendix IV: Cadmium, MW-15013

ID: 03_2_106

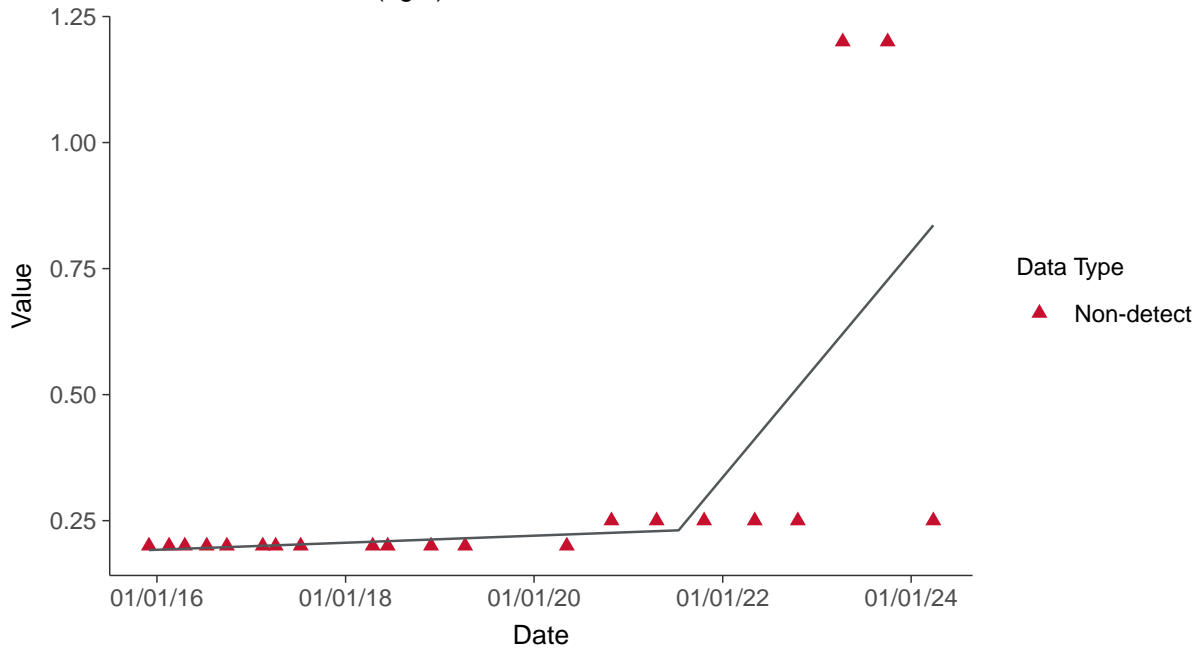






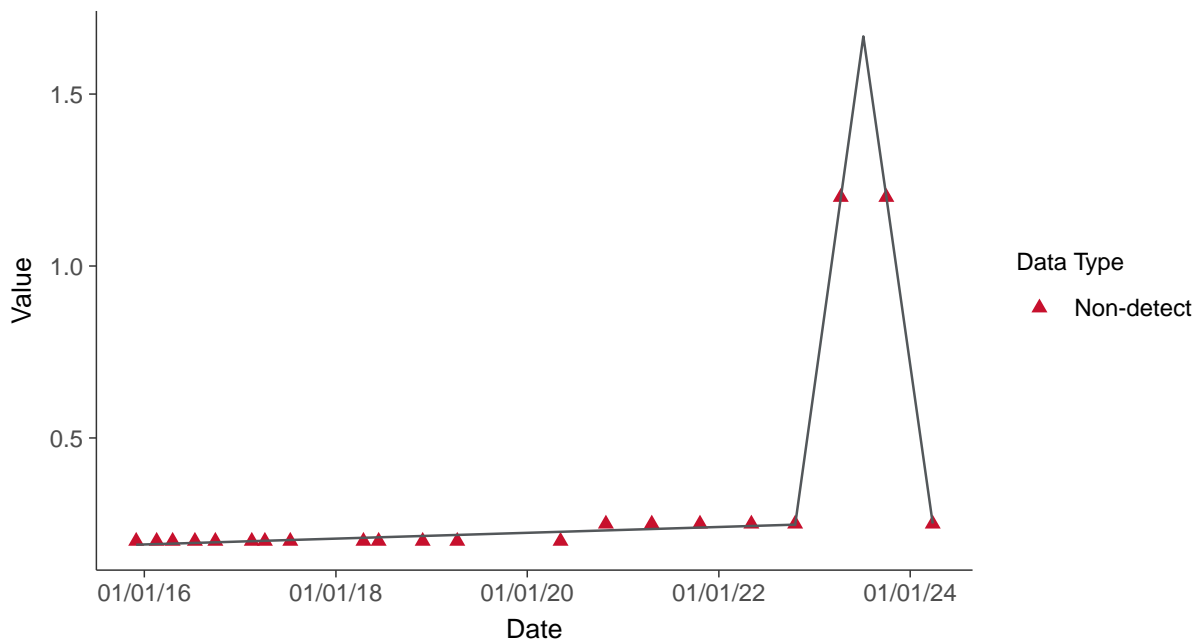
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

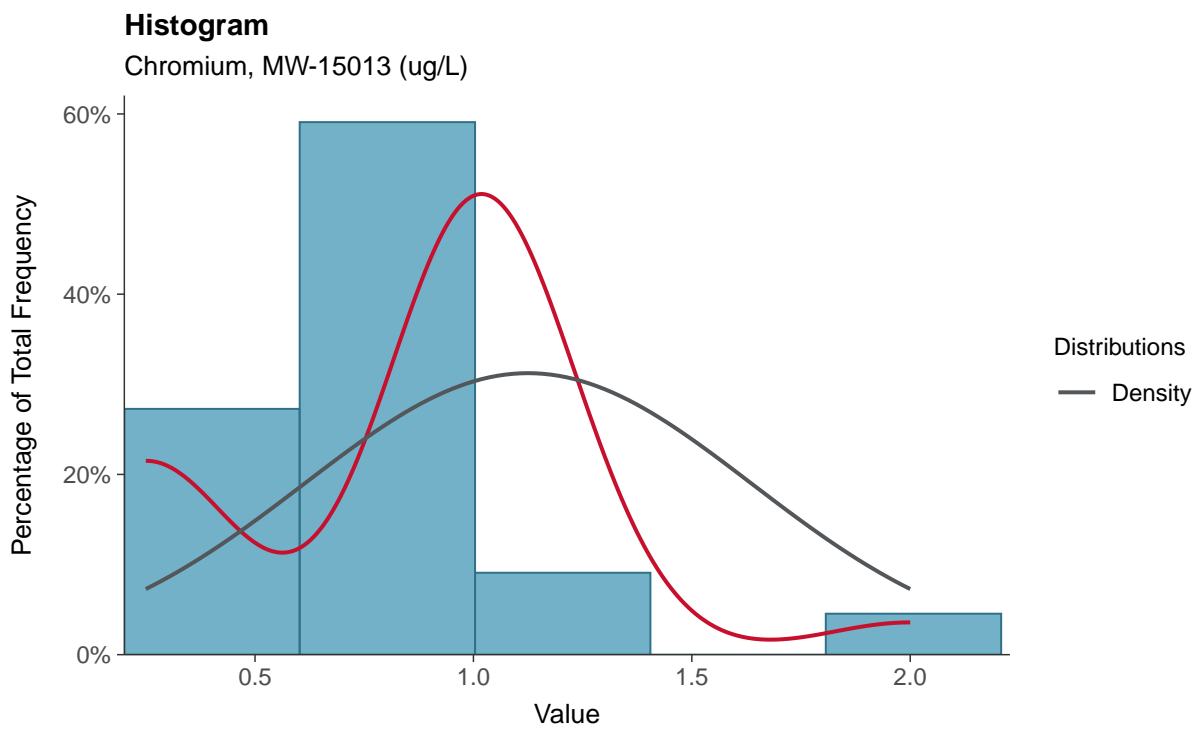
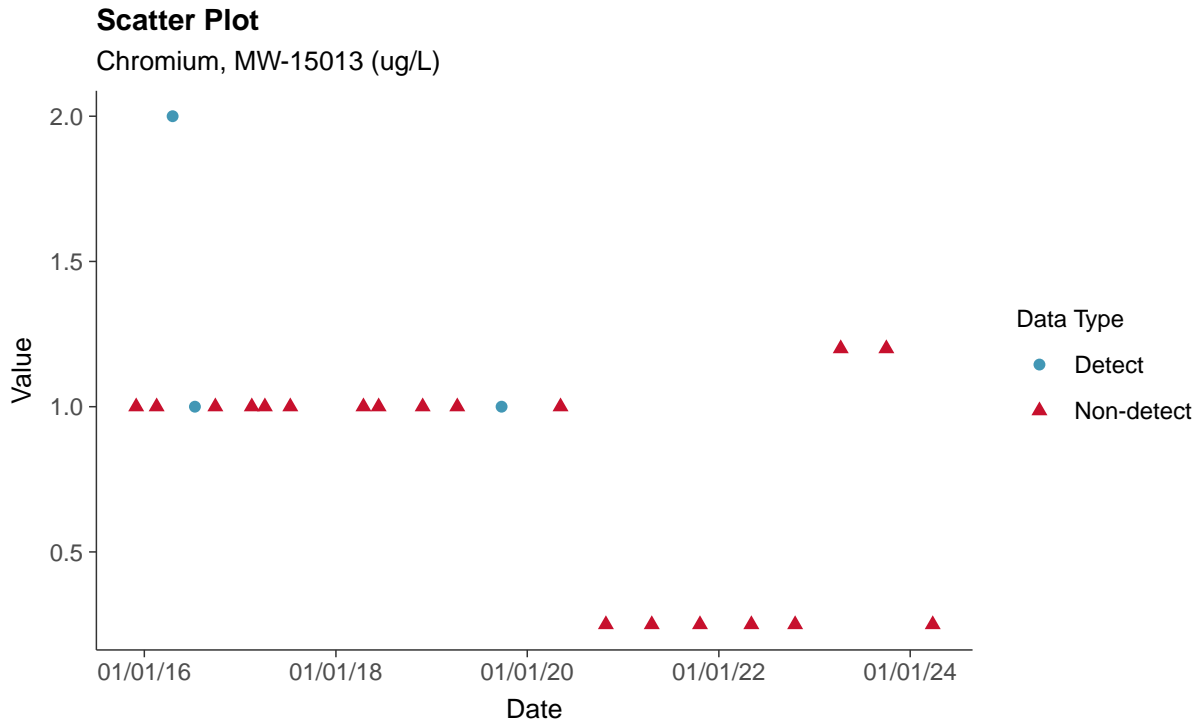
Cadmium, MW-15013 (ug/L)





Appendix IV: Chromium, MW-15013

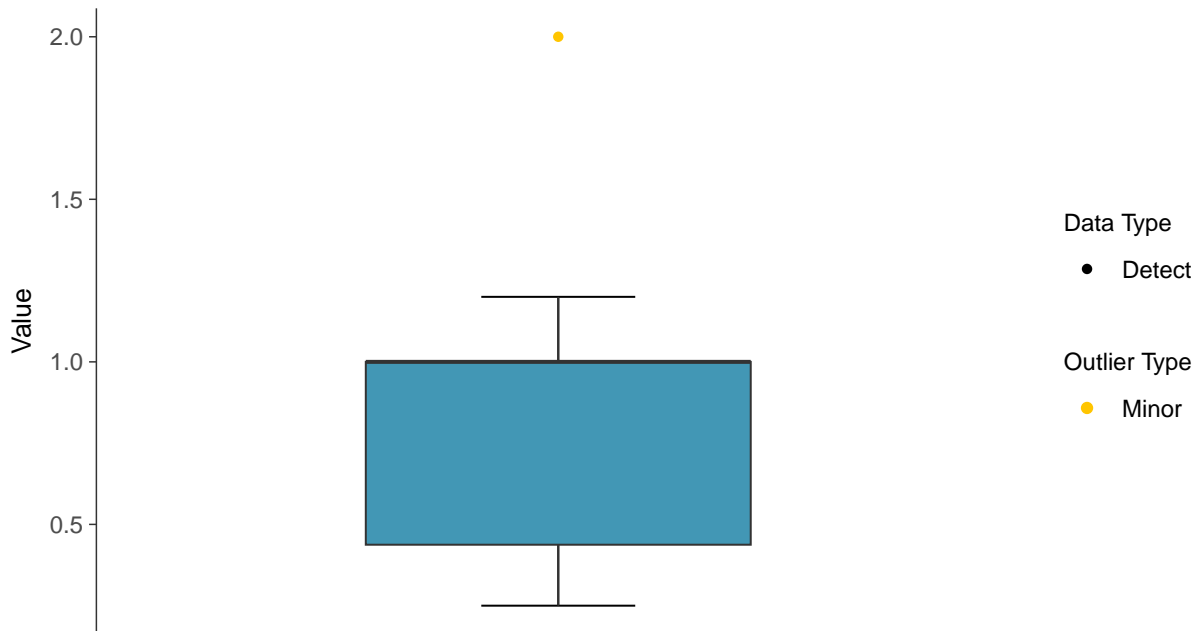
ID: 03_2_109





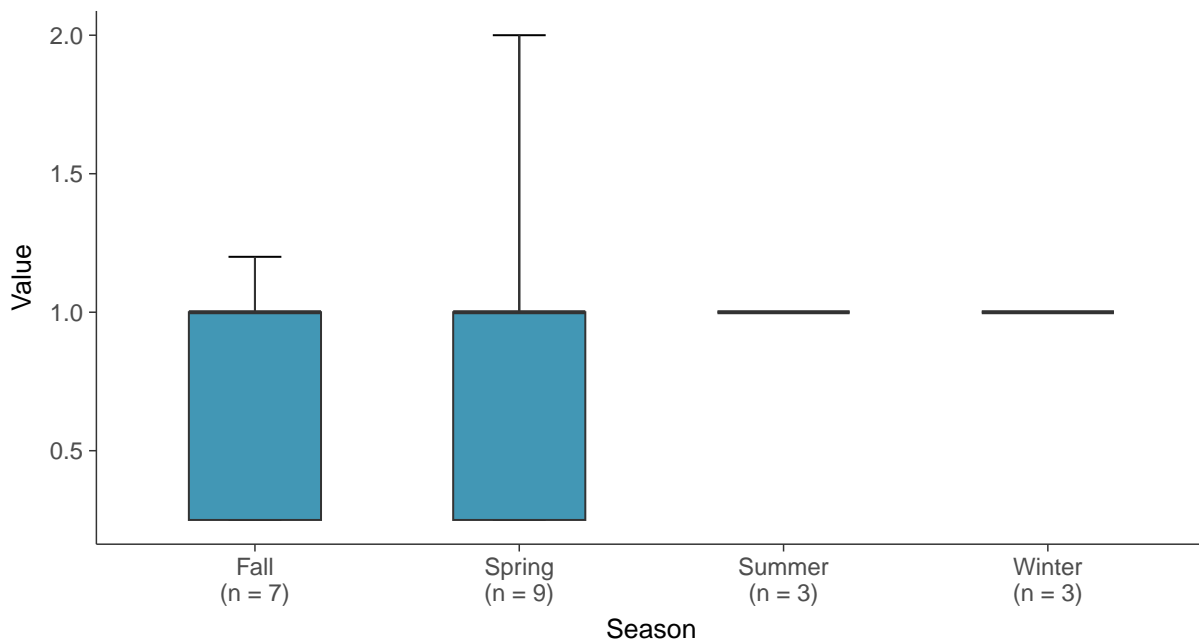
Boxplot

Chromium, MW-15013 (ug/L)



Boxplot by Season

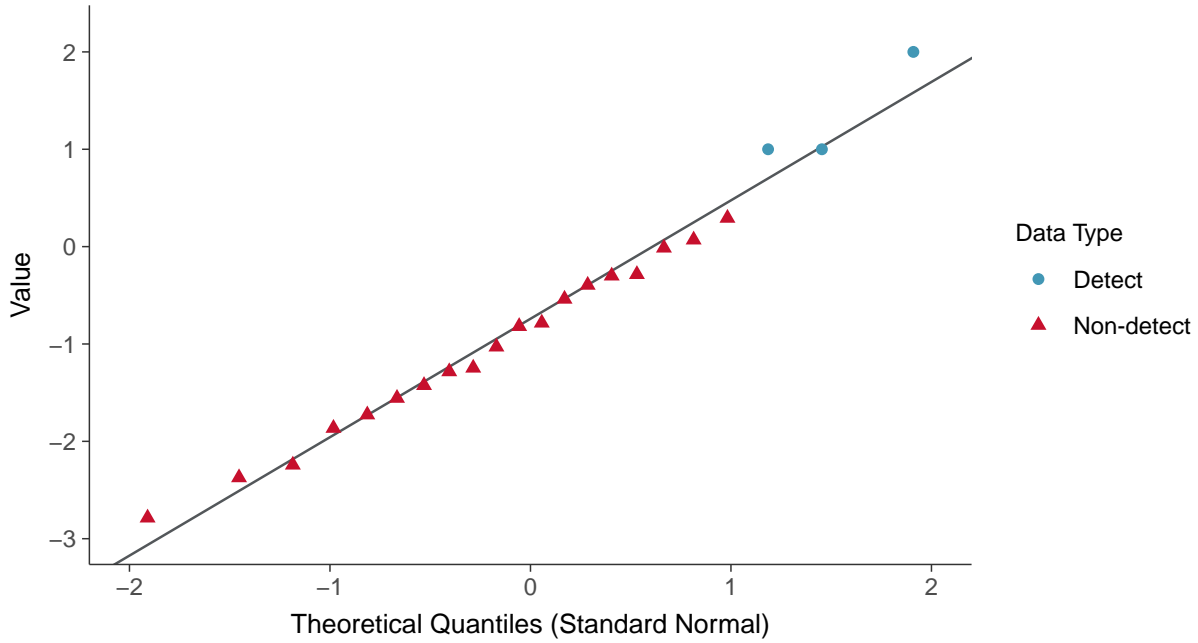
Chromium, MW-15013 (ug/L)





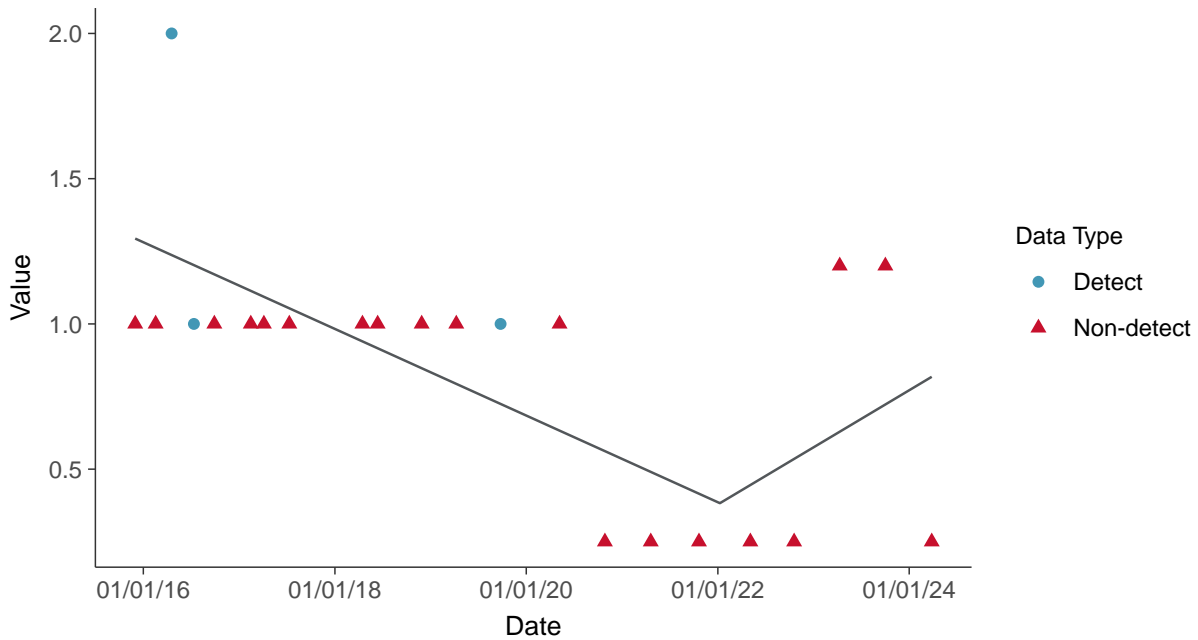
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear

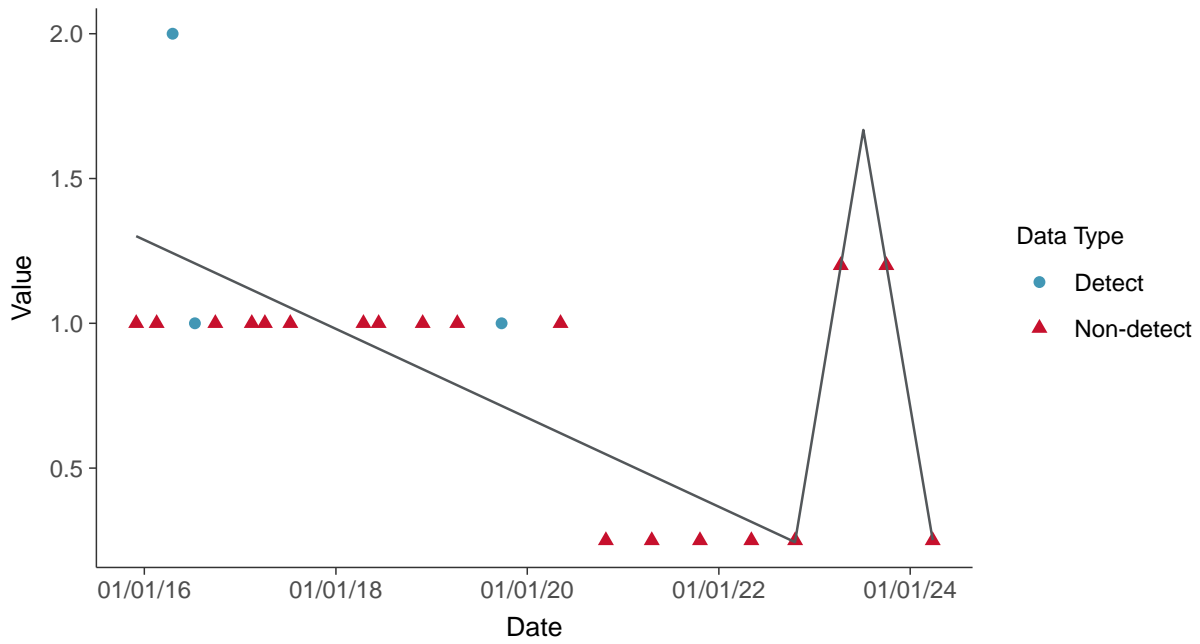
Chromium, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

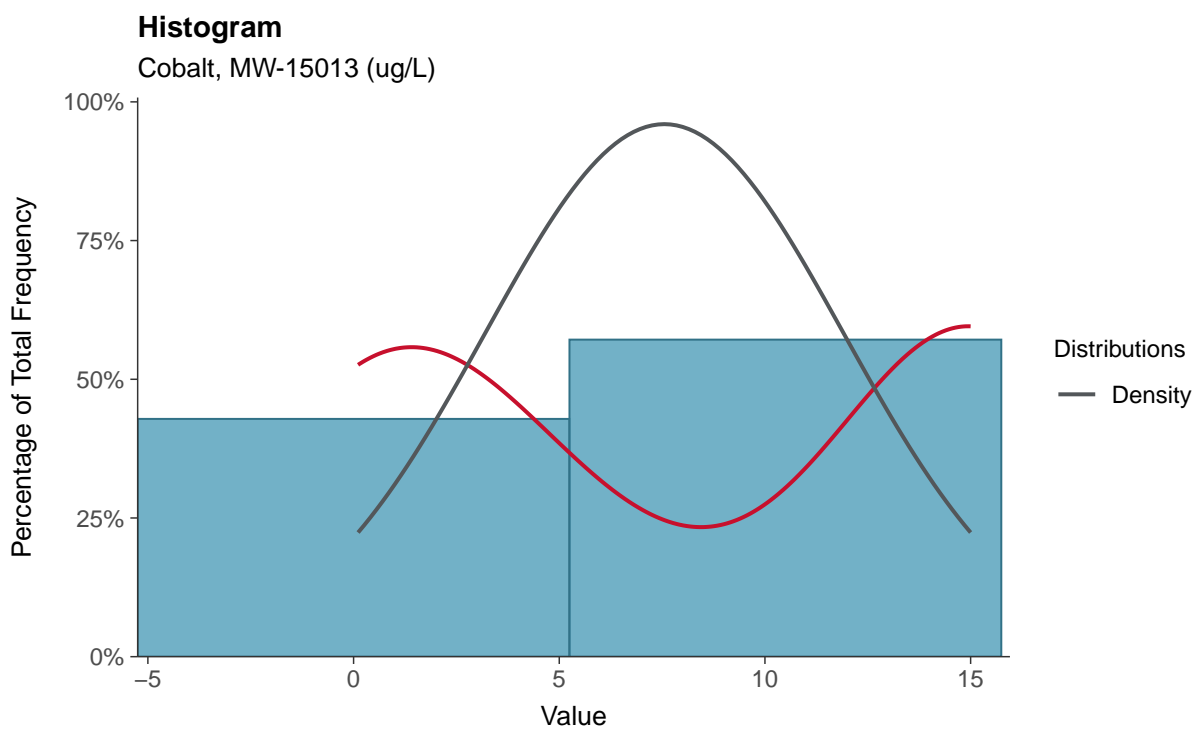
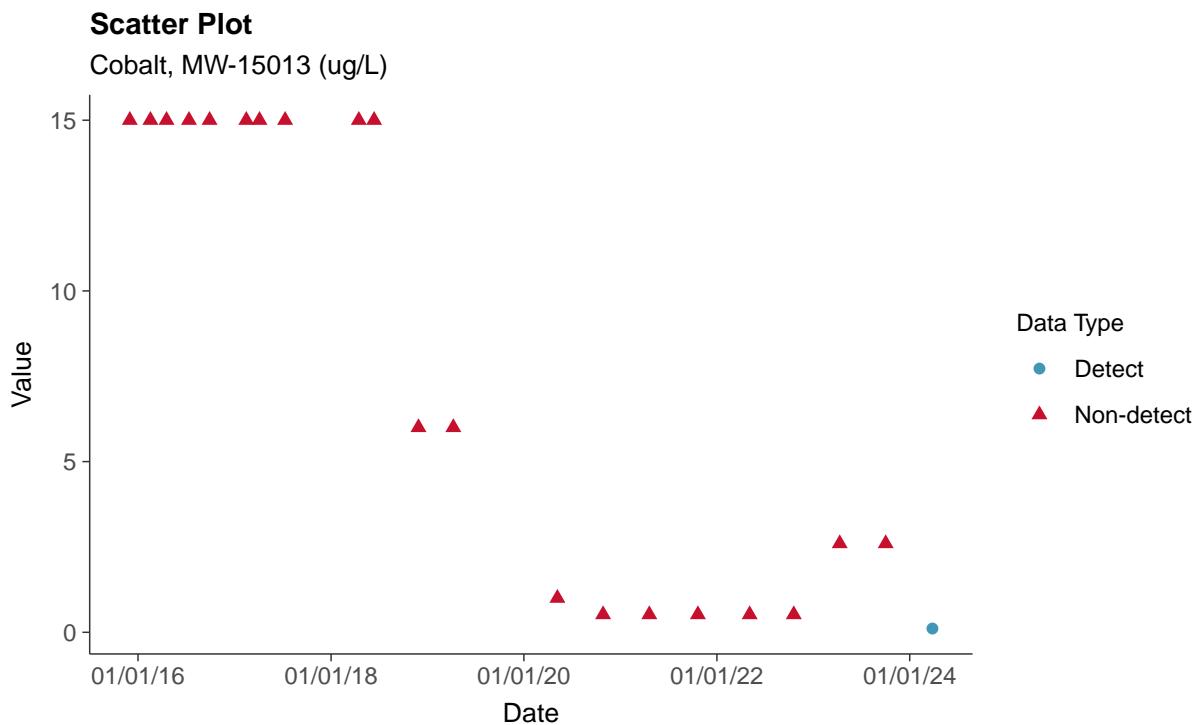
Chromium, MW-15013 (ug/L)





Appendix IV: Cobalt, MW-15013

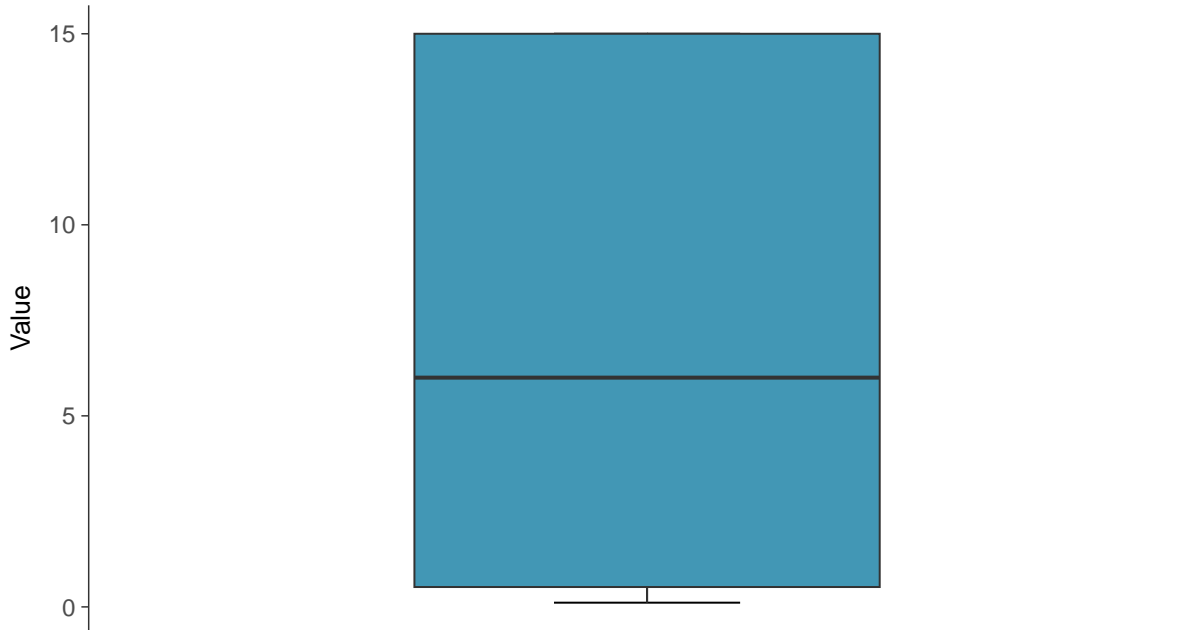
ID: 03_2_110





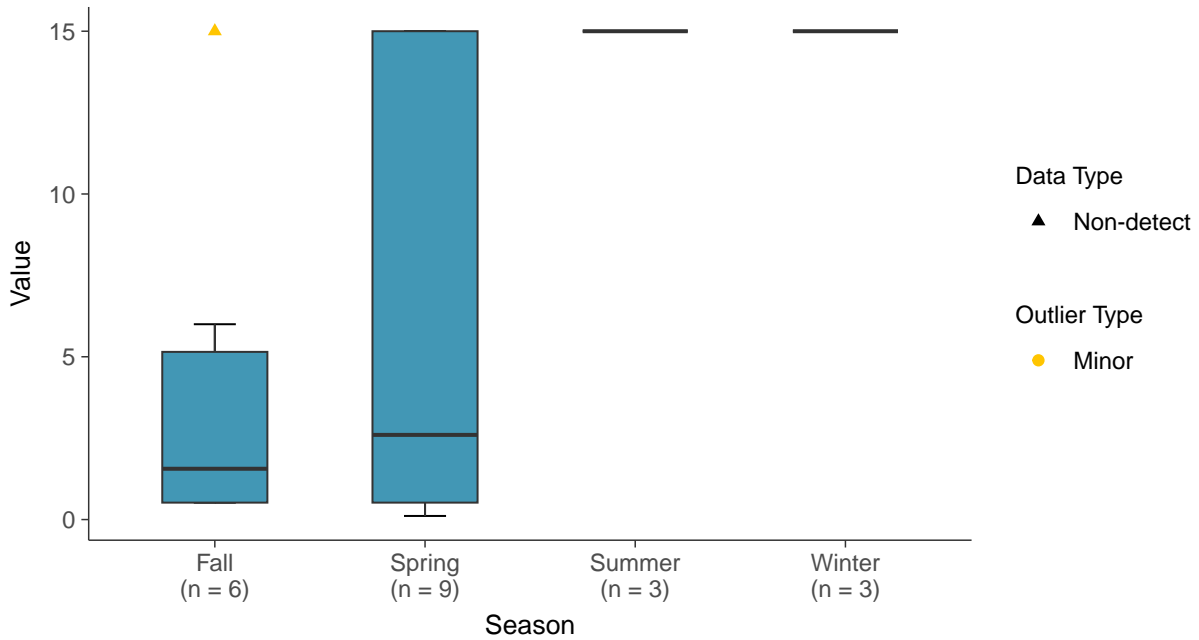
Boxplot

Cobalt, MW-15013 (ug/L)



Boxplot by Season

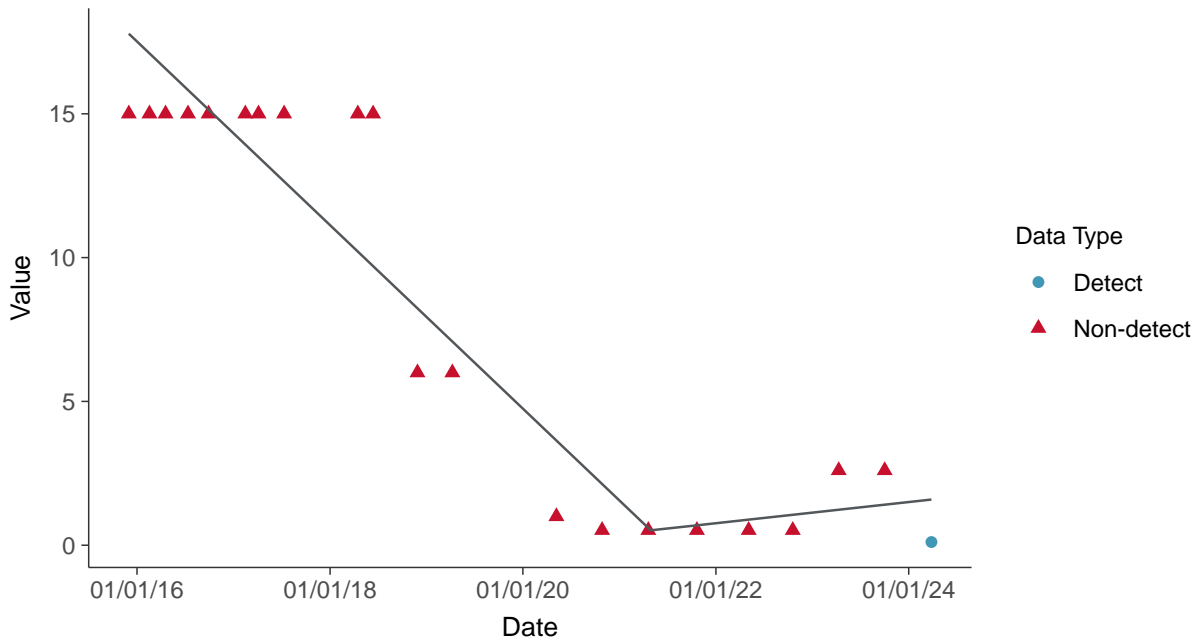
Cobalt, MW-15013 (ug/L)





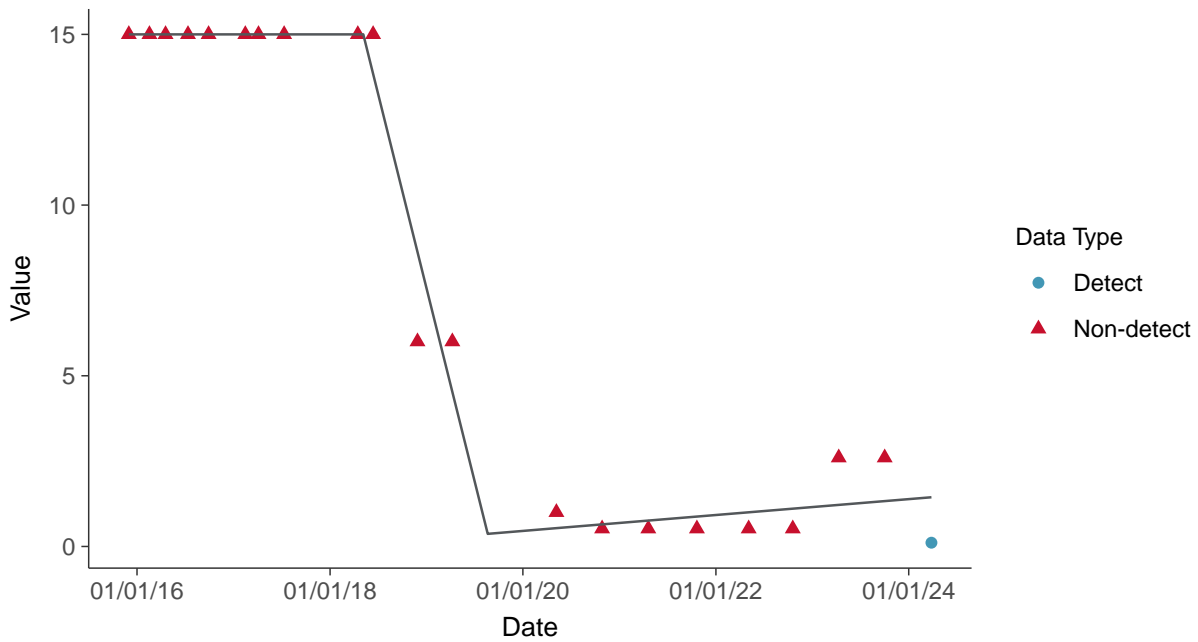
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

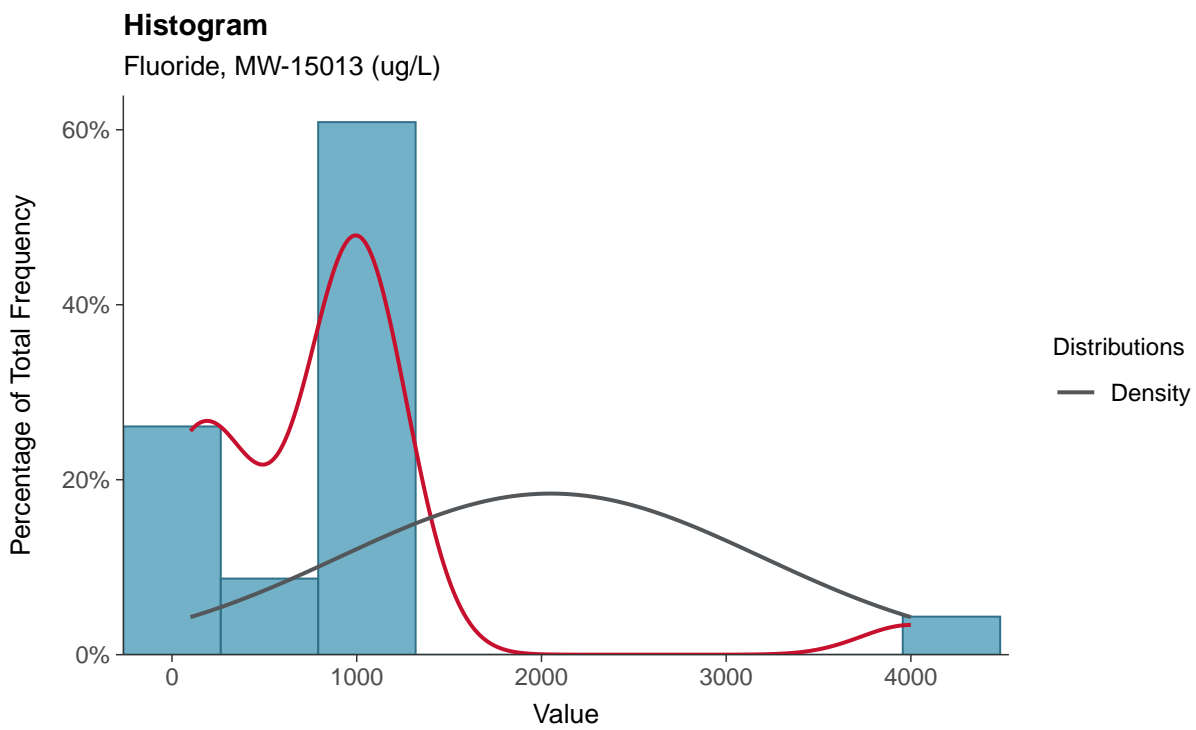
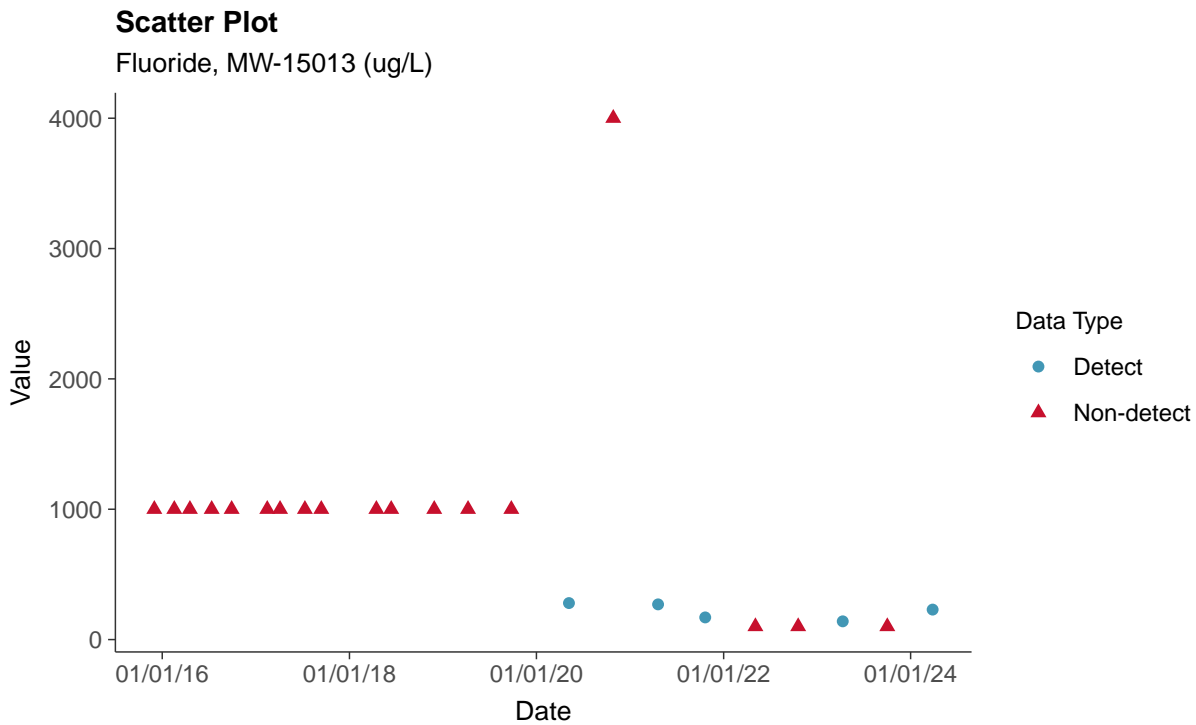
Cobalt, MW-15013 (ug/L)





Appendix IV: Fluoride, MW-15013

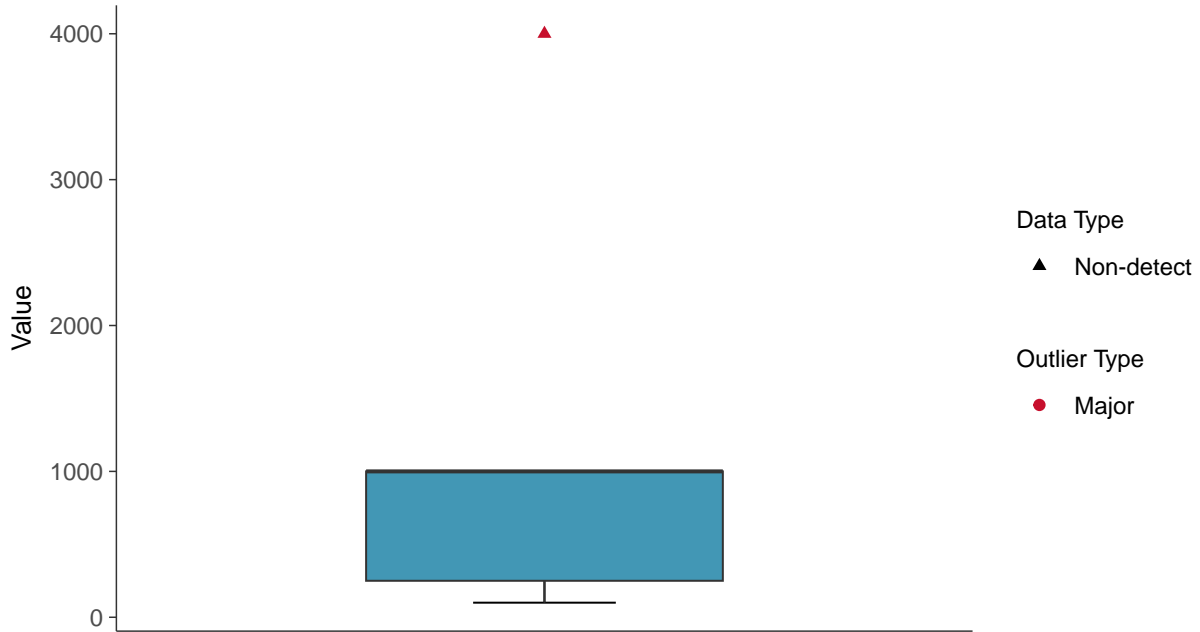
ID: 03_2_114





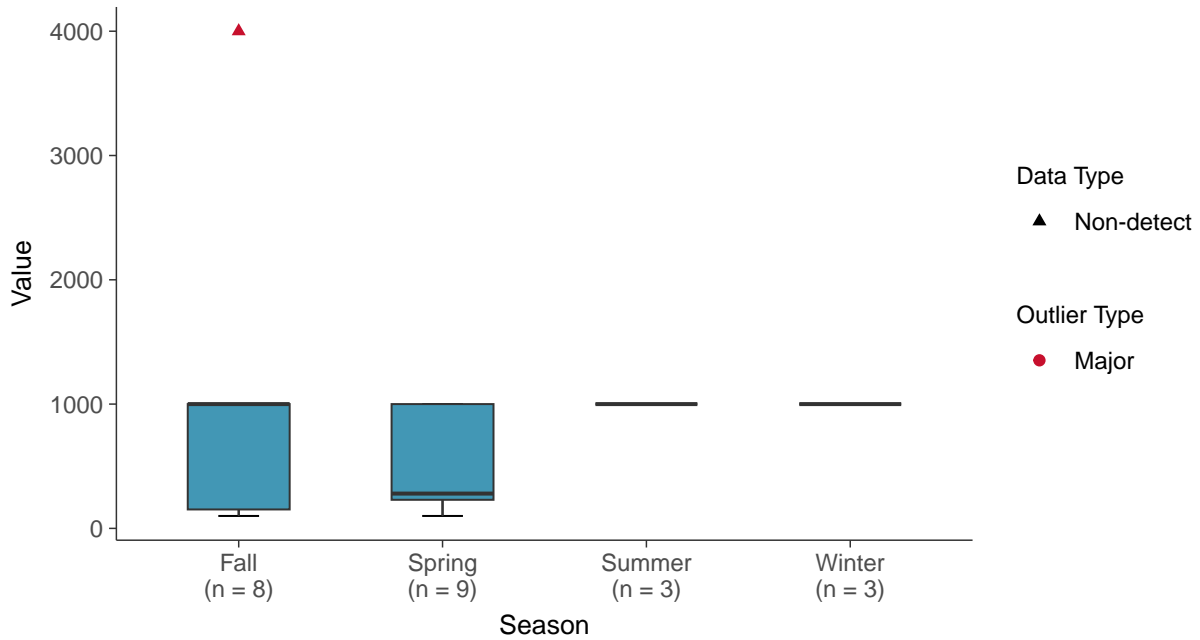
Boxplot

Fluoride, MW-15013 (ug/L)



Boxplot by Season

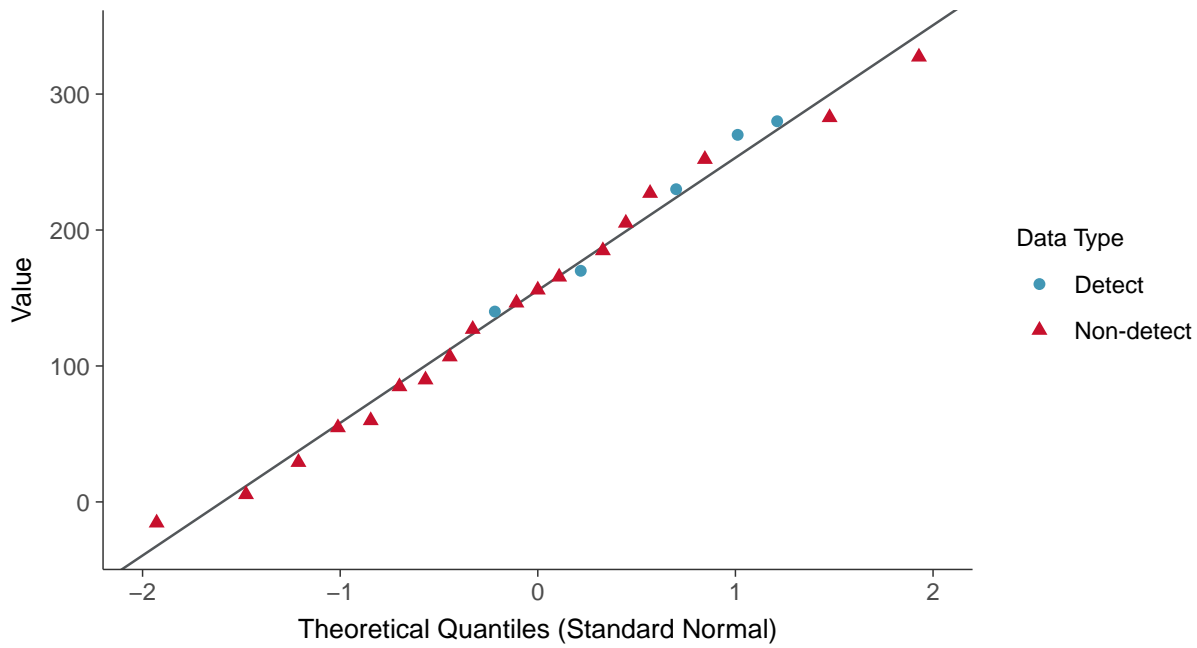
Fluoride, MW-15013 (ug/L)





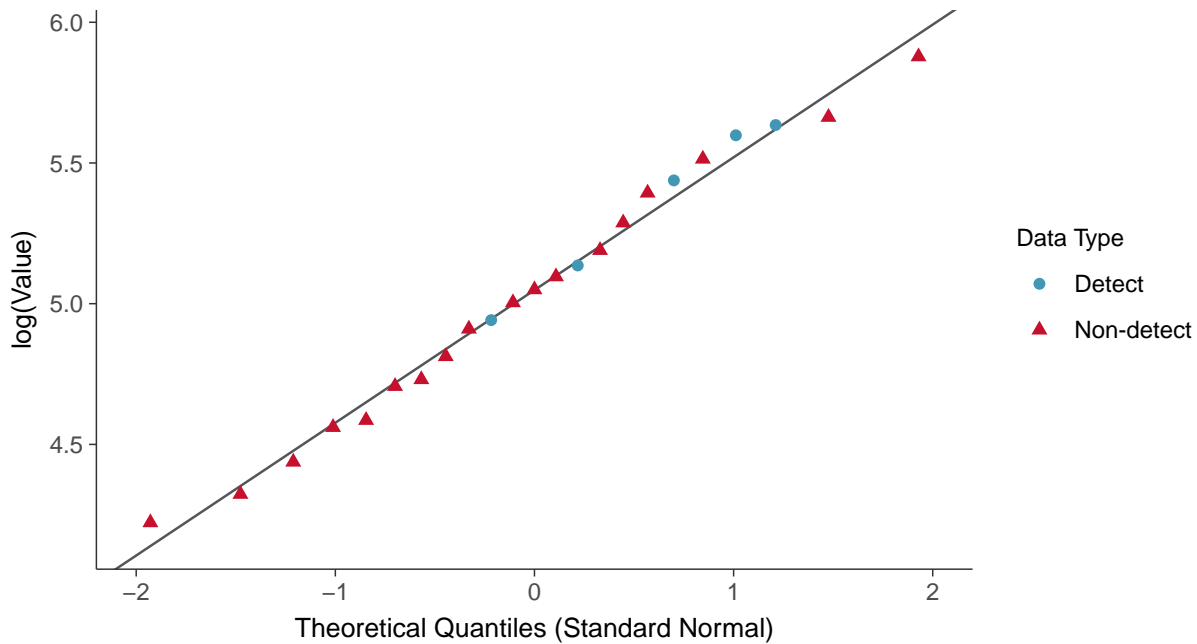
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15013 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

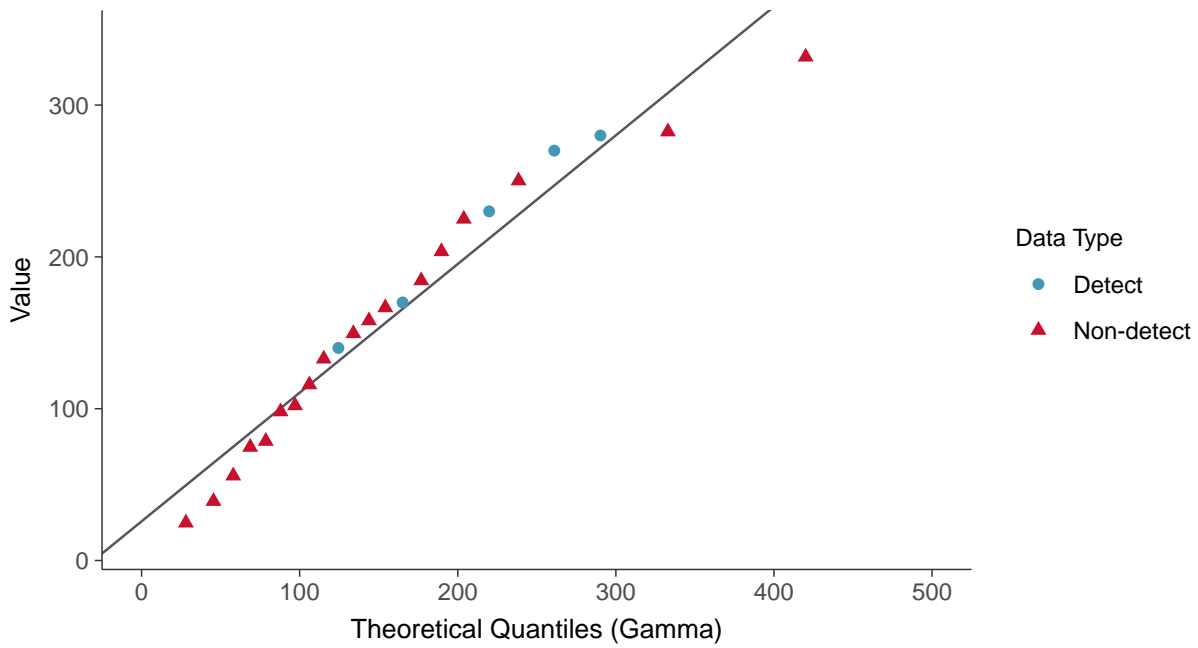
Fluoride, MW-15013 (ug/L)





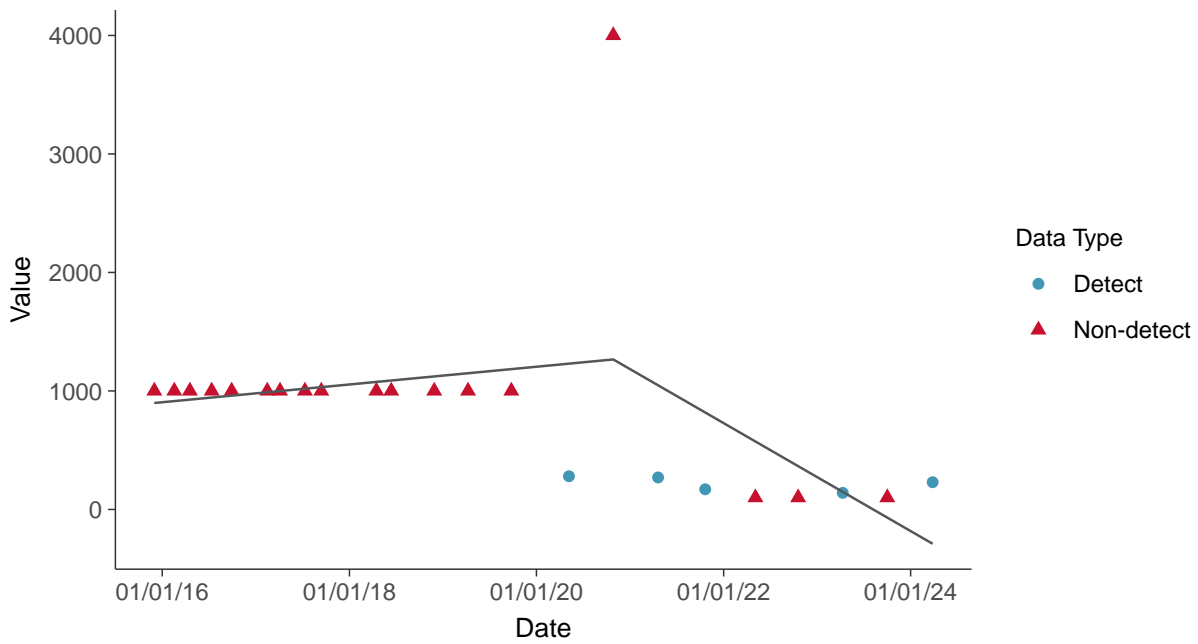
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear

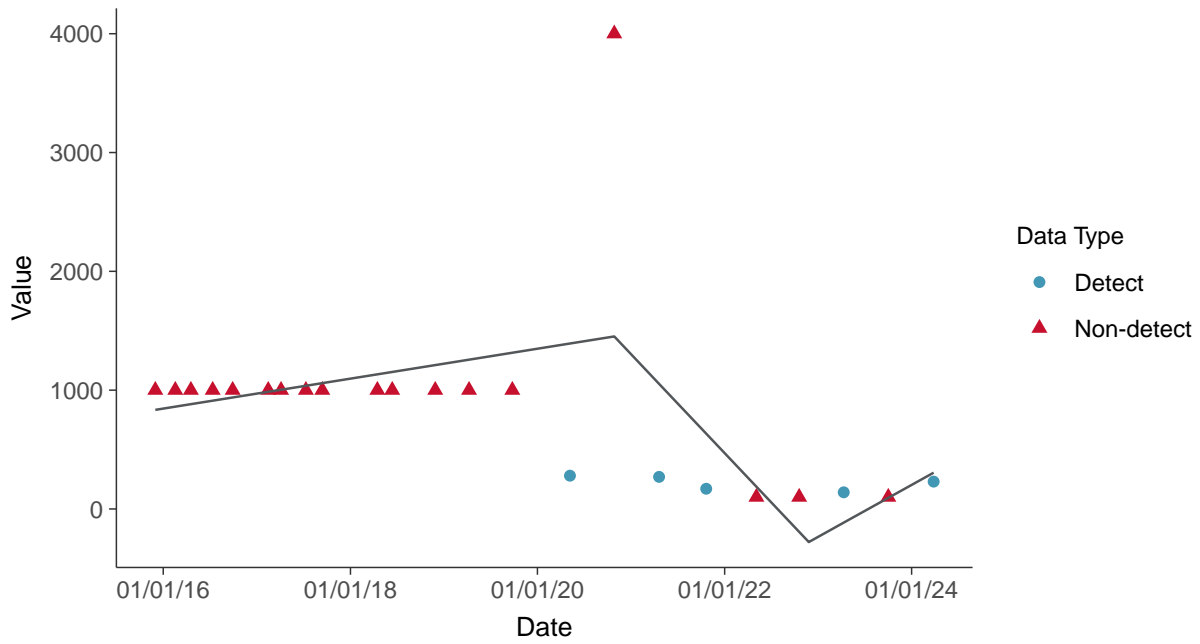
Fluoride, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-15013 (ug/L)



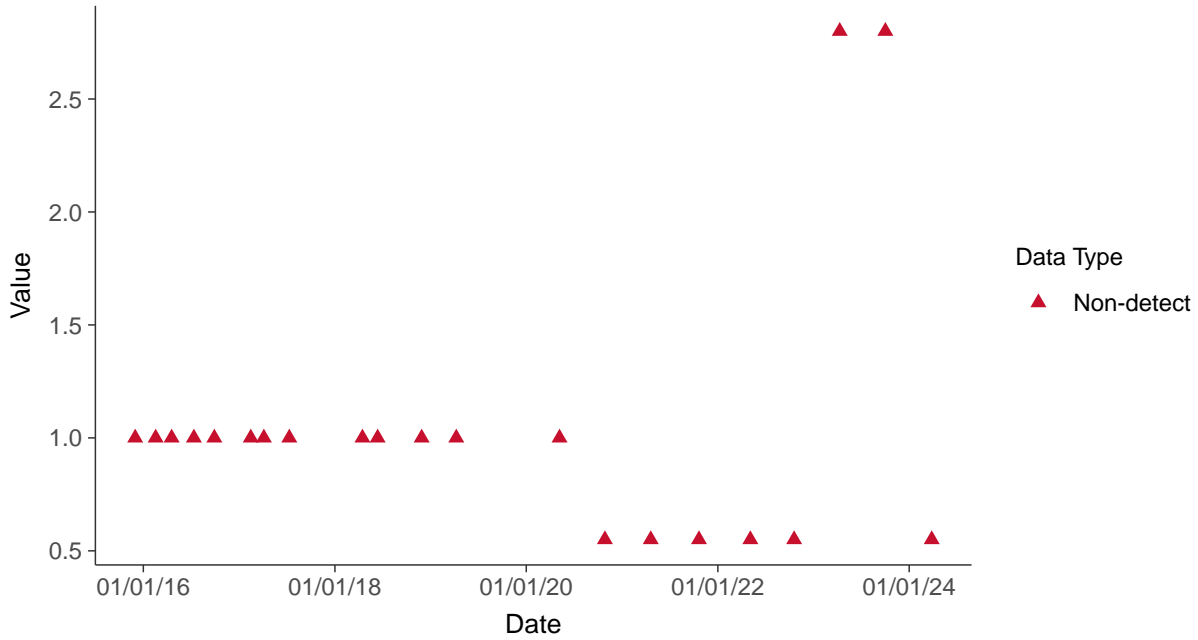


Appendix IV: Lead, MW-15013

ID: 03_2_116

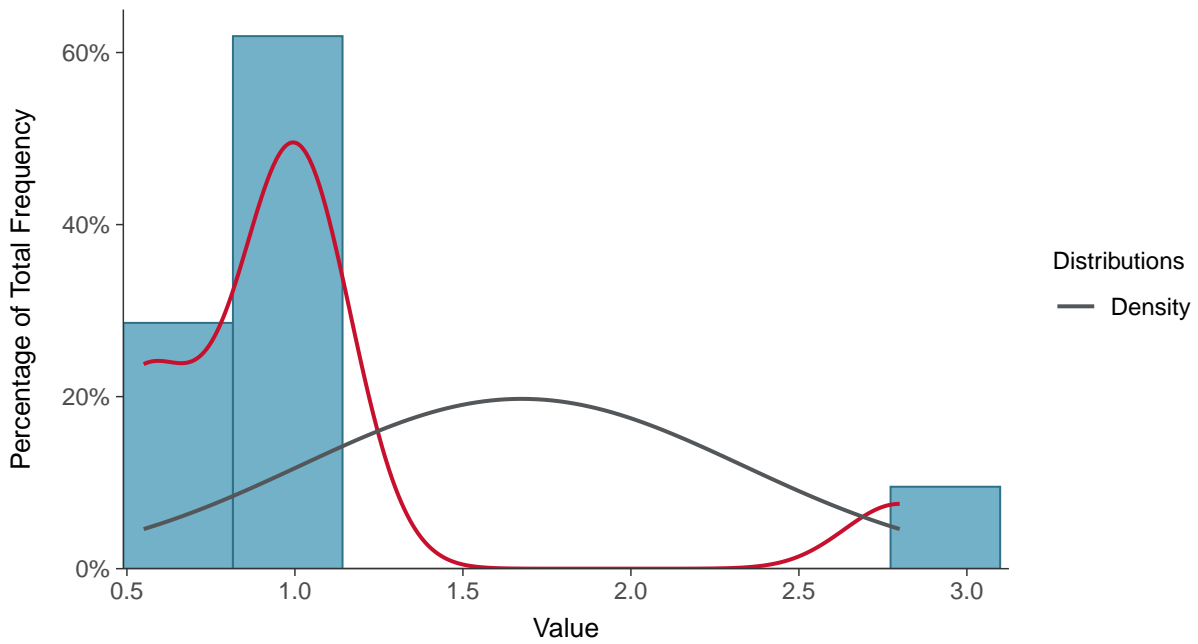
Scatter Plot

Lead, MW-15013 (ug/L)



Histogram

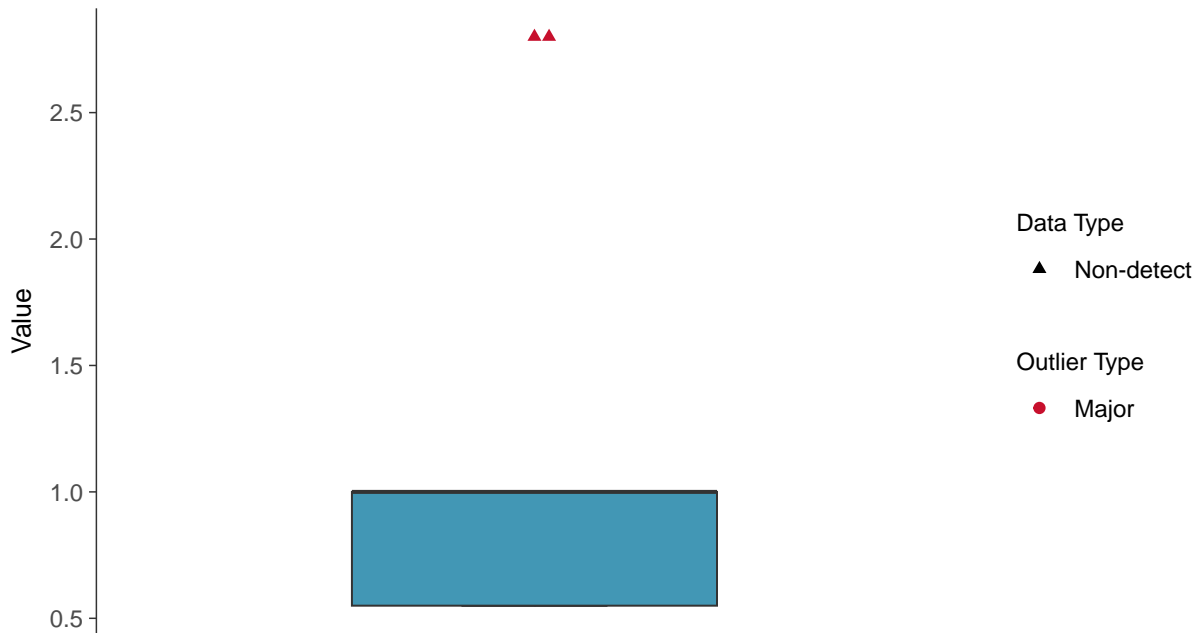
Lead, MW-15013 (ug/L)





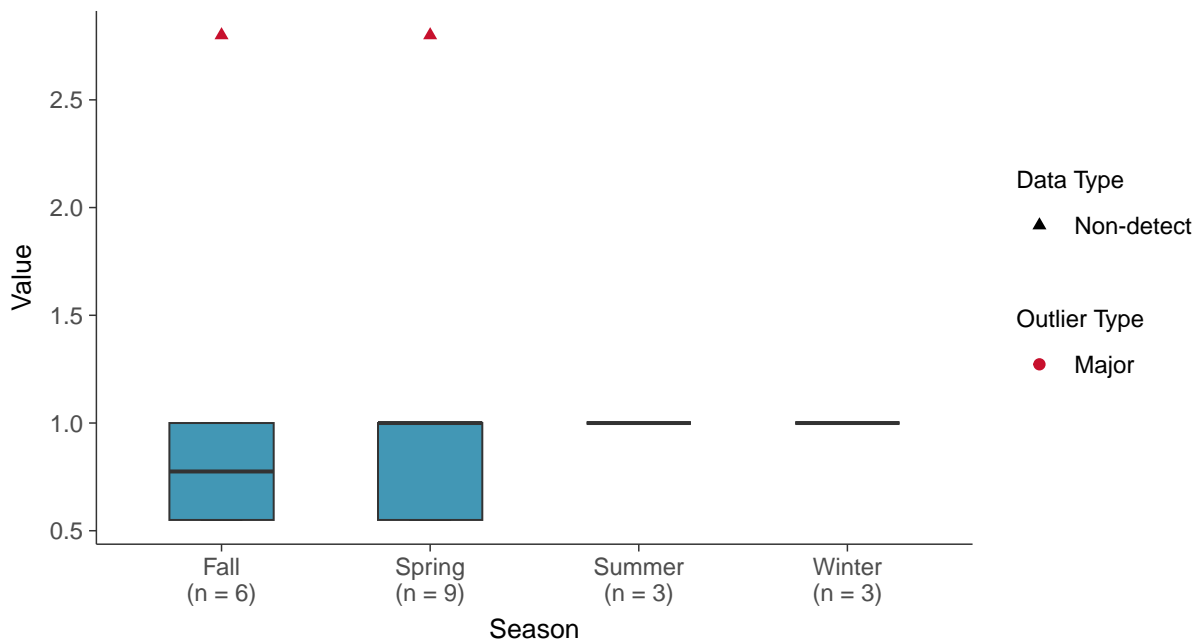
Boxplot

Lead, MW-15013 (ug/L)



Boxplot by Season

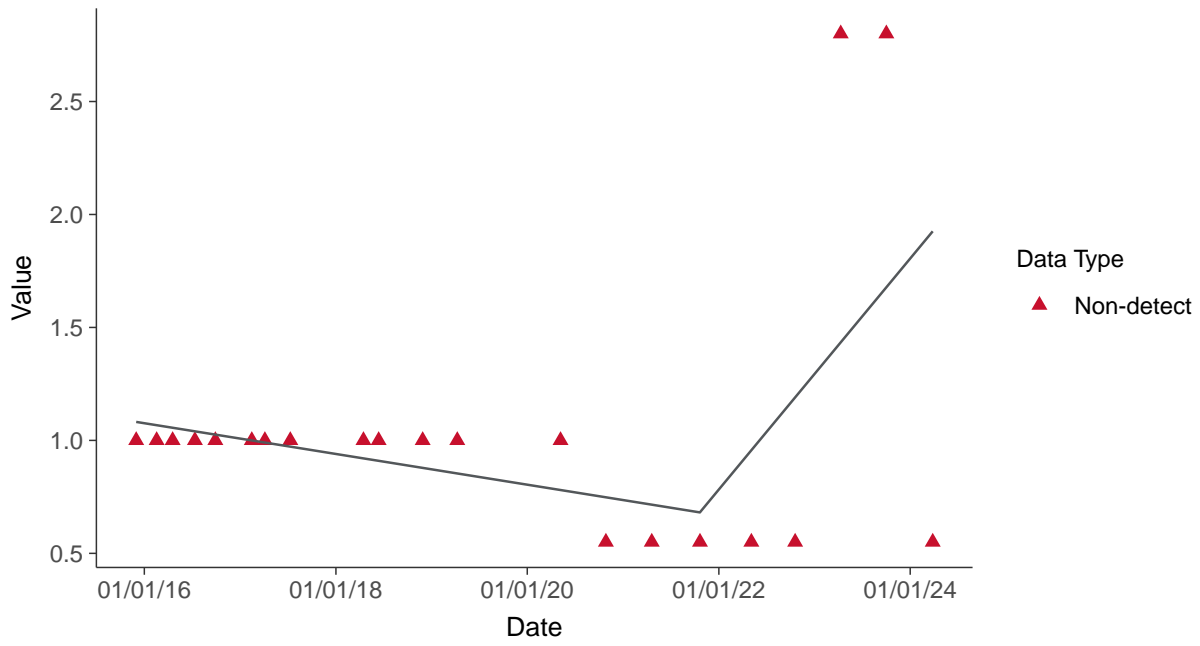
Lead, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear

Lead, MW-15013 (ug/L)



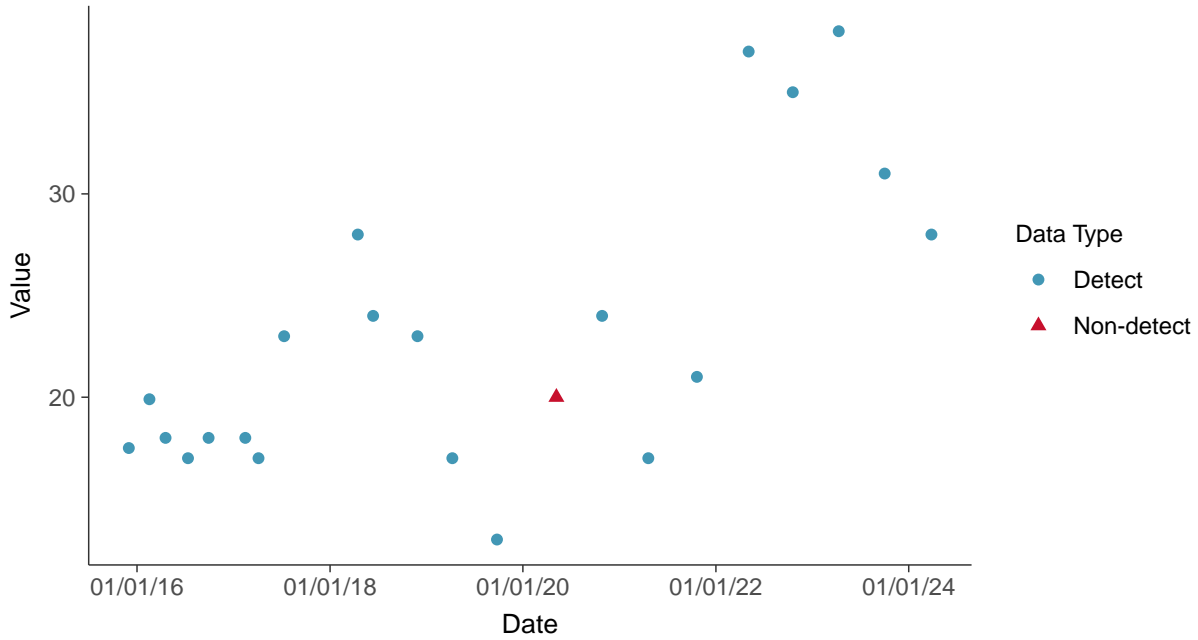


Appendix IV: Lithium, MW-15013

ID: 03_2_117

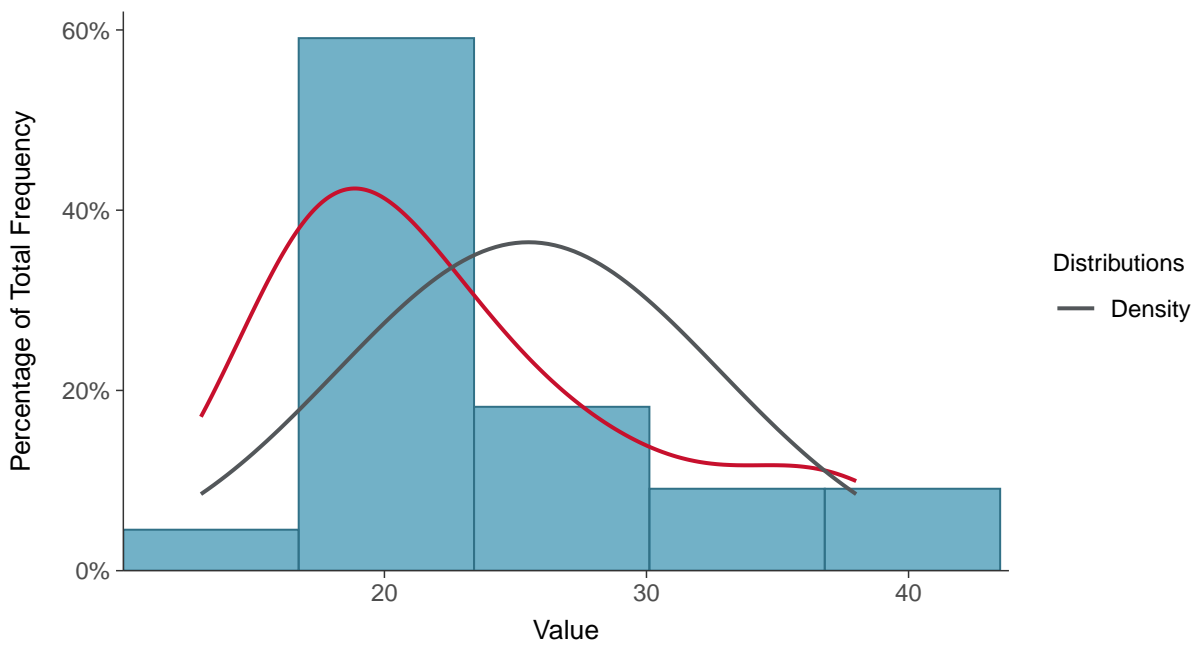
Scatter Plot

Lithium, MW-15013 (ug/L)



Histogram

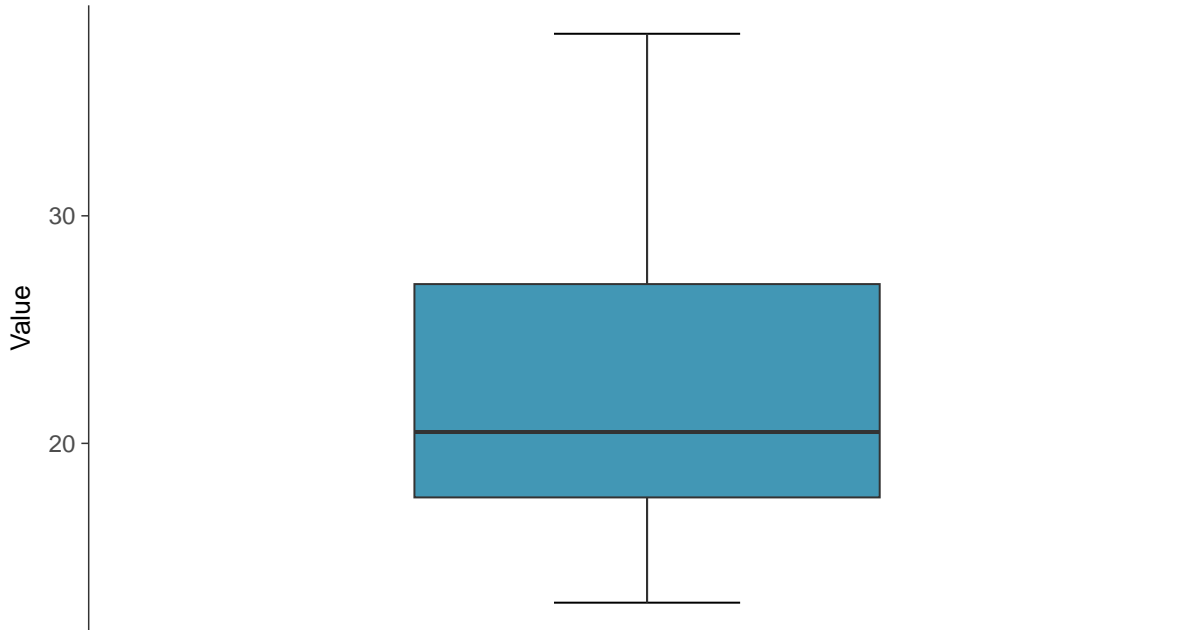
Lithium, MW-15013 (ug/L)





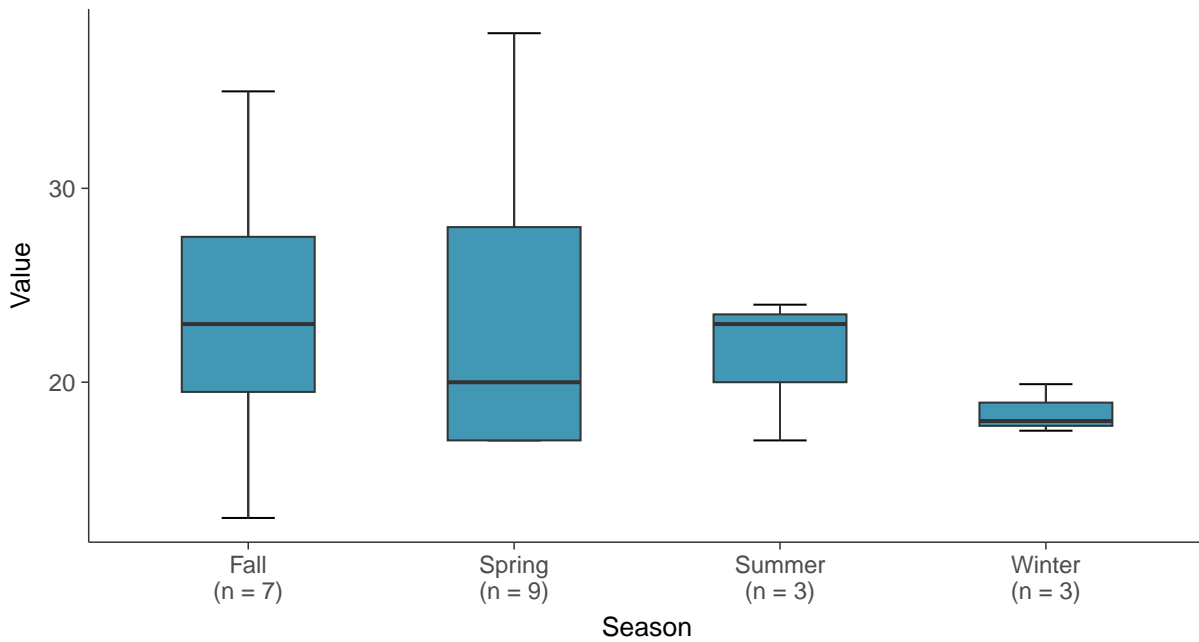
Boxplot

Lithium, MW-15013 (ug/L)



Boxplot by Season

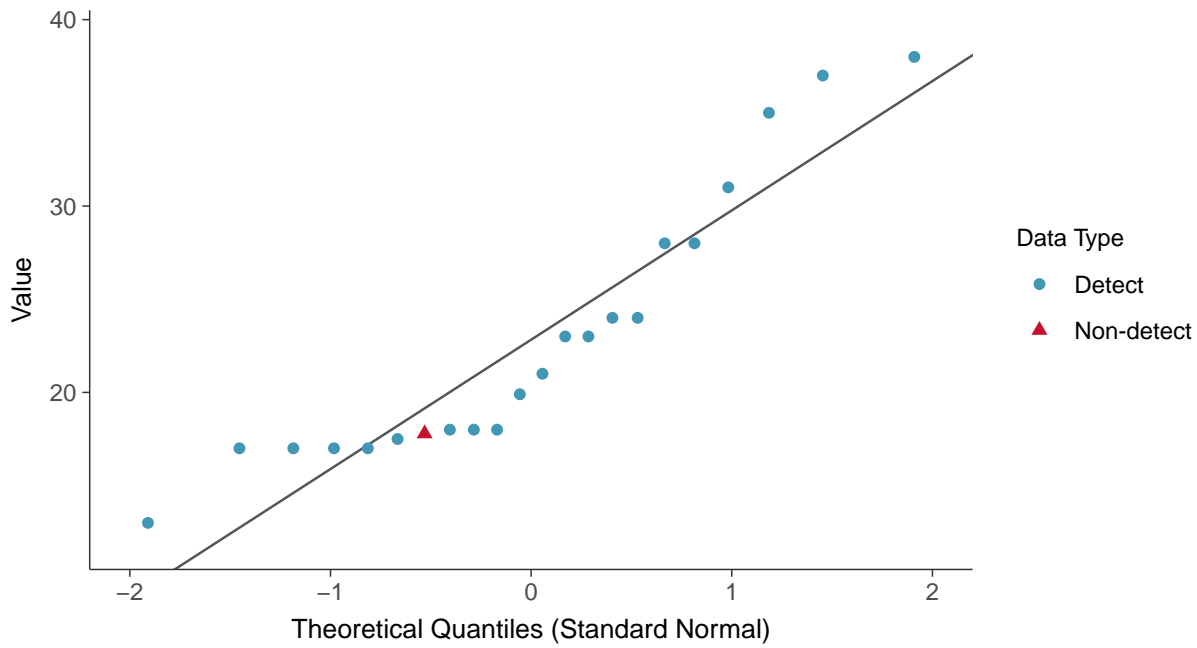
Lithium, MW-15013 (ug/L)





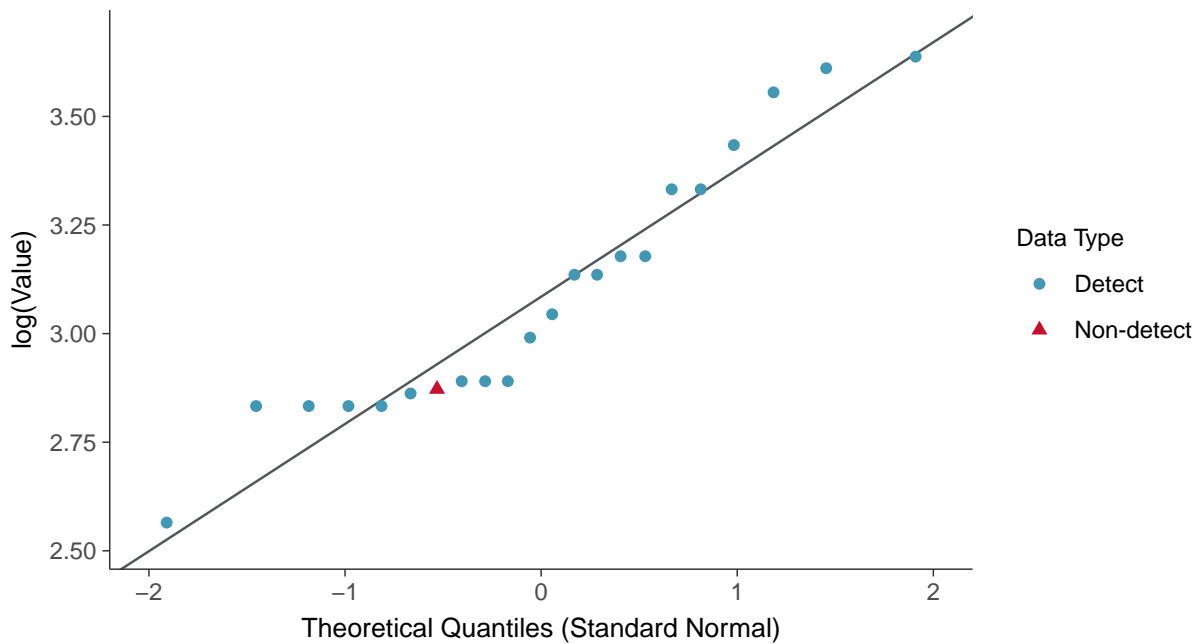
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15013 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

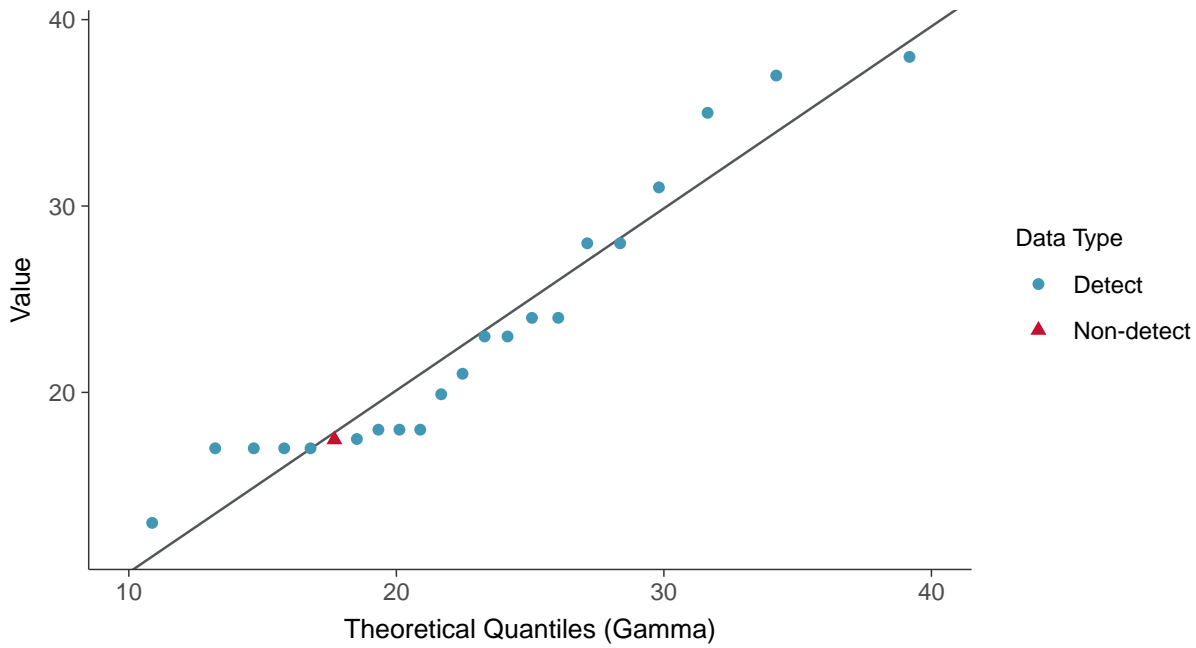
Lithium, MW-15013 (ug/L)





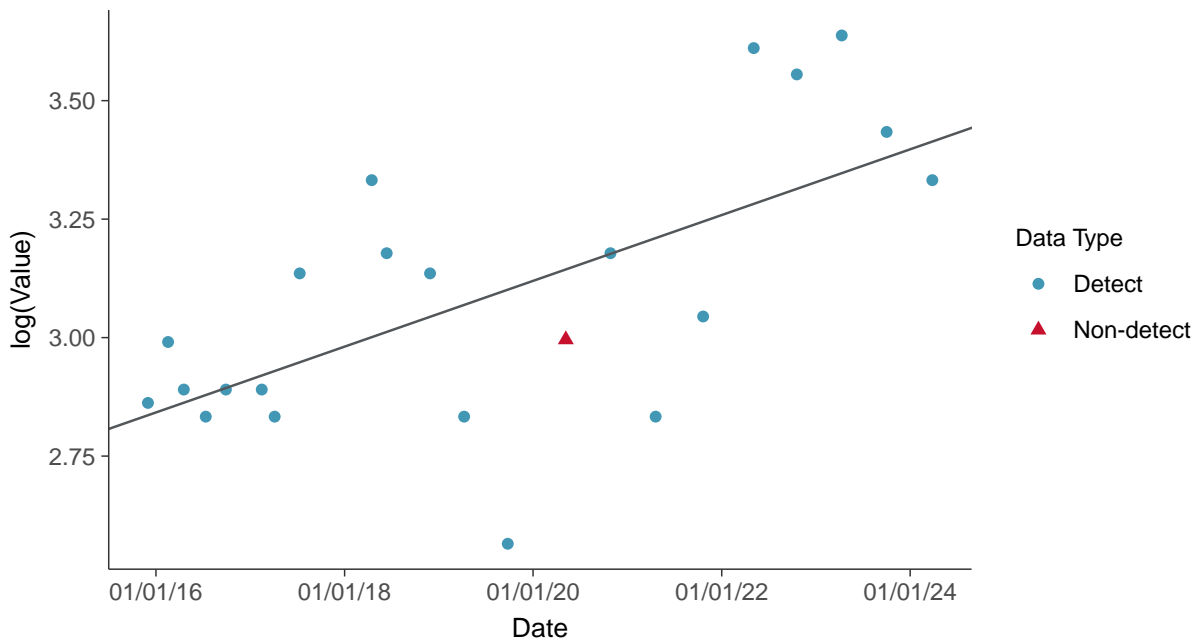
Gamma Q-Q plot using ROS Imputed Estimates

Lithium, MW-15013 (ug/L)



Trend Regression: Lognormal MLE

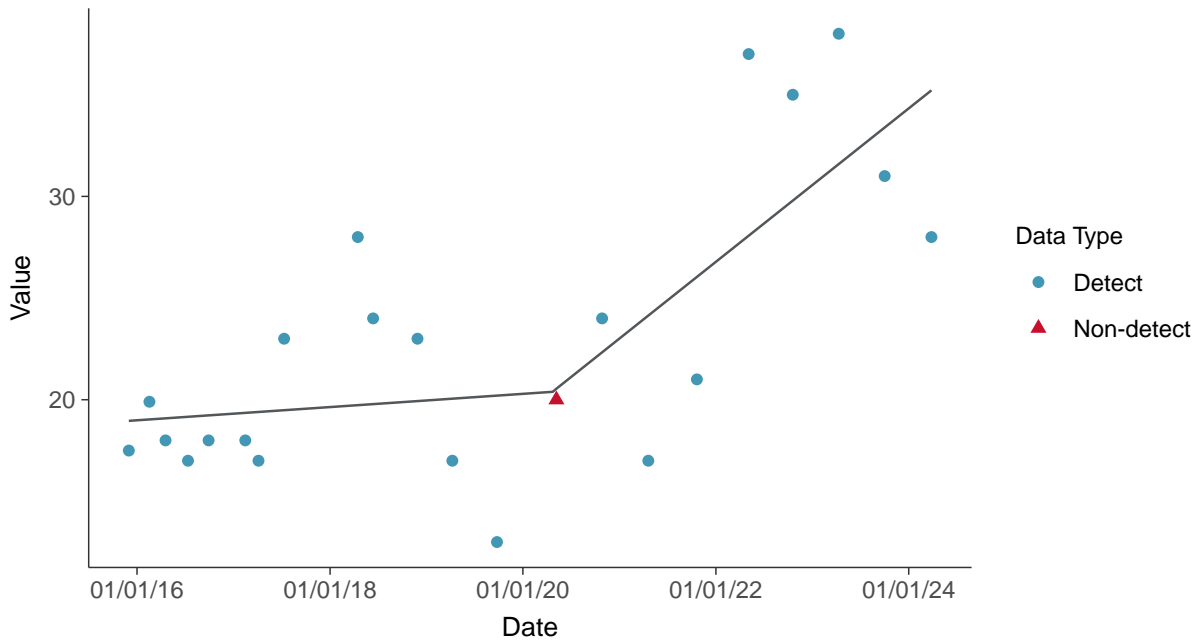
Lithium, MW-15013 (ug/L)





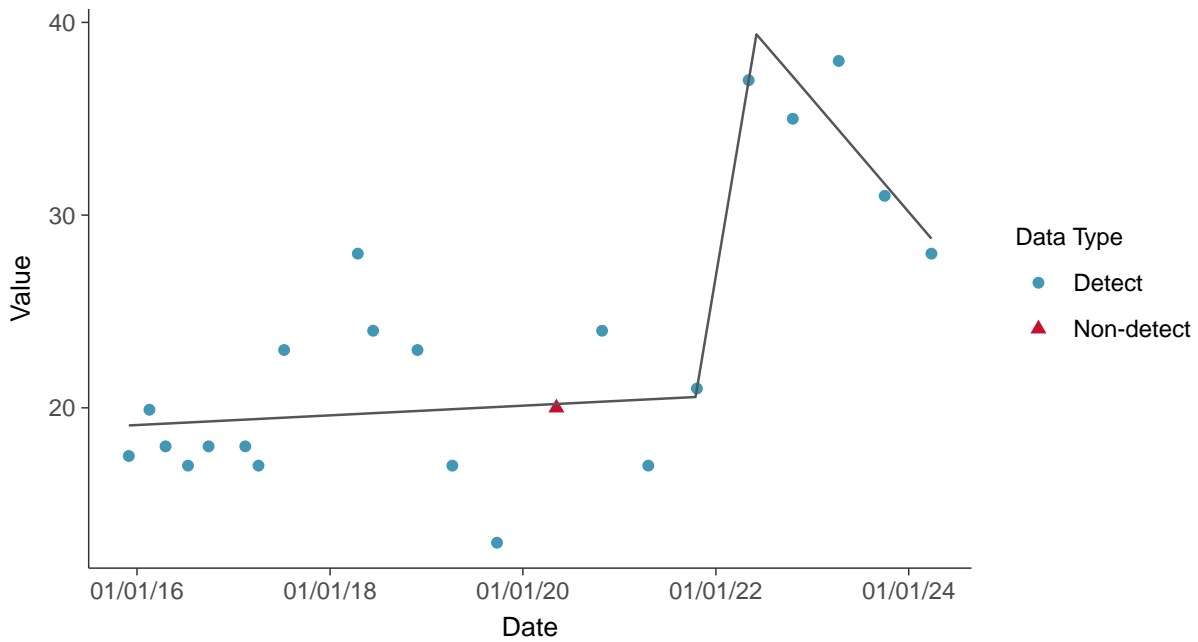
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-15013 (ug/L)



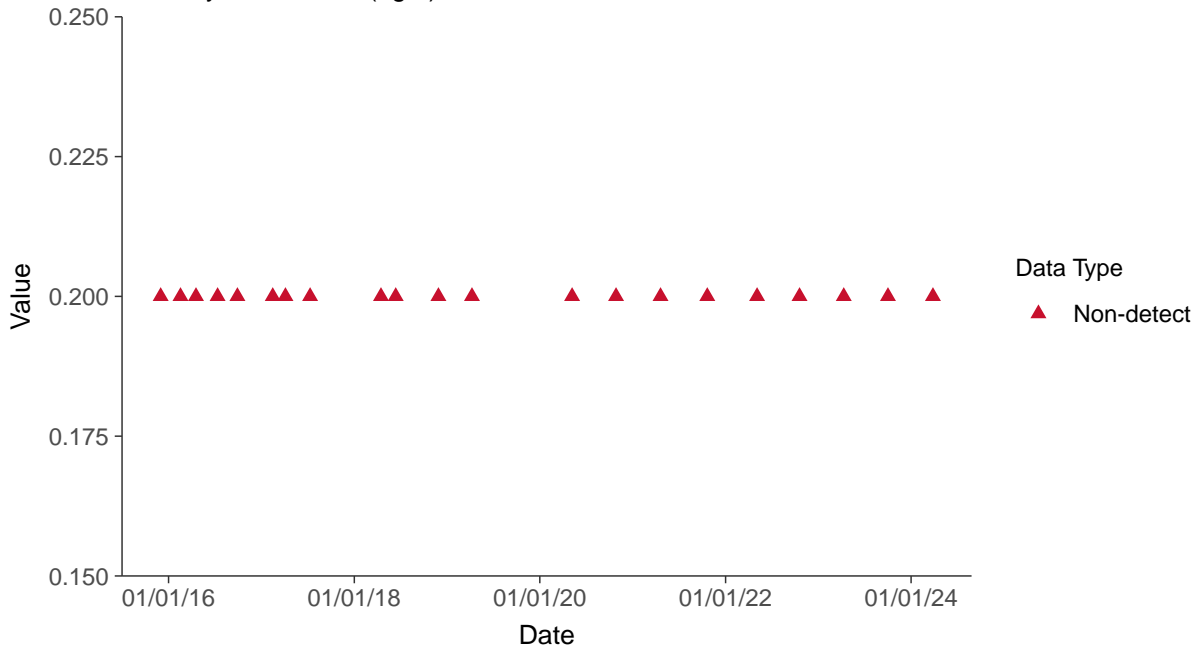


Appendix IV: Mercury, MW-15013

ID: 03_2_118

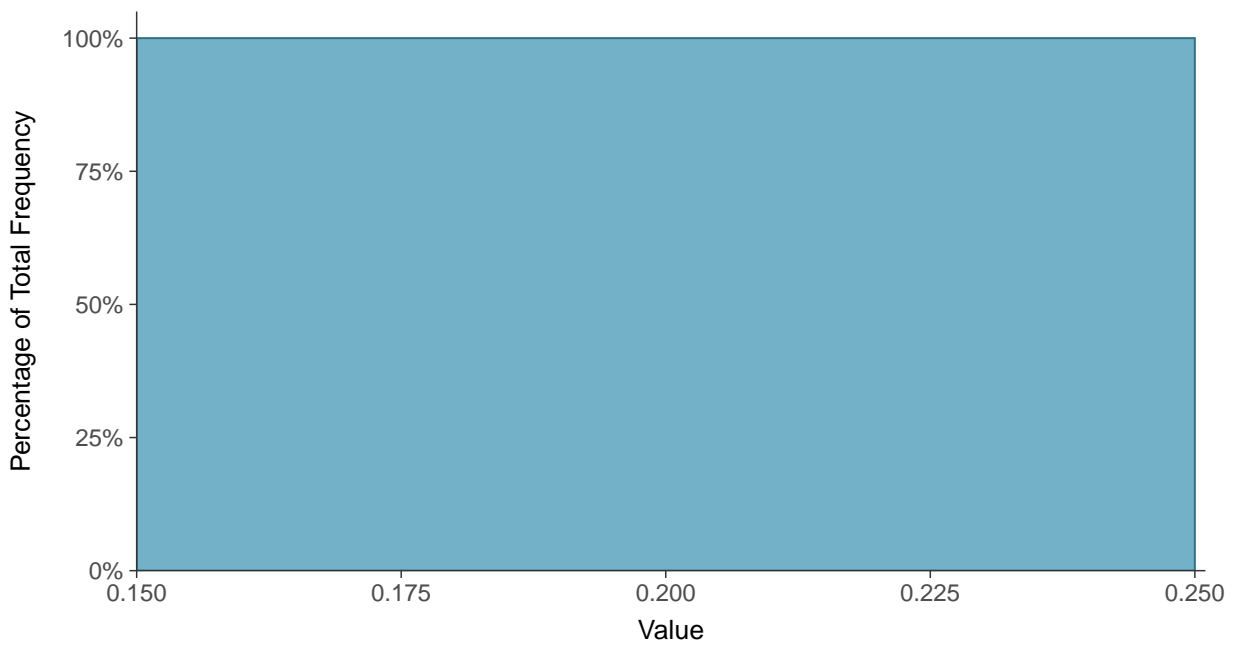
Scatter Plot

Mercury, MW-15013 (ug/L)



Histogram

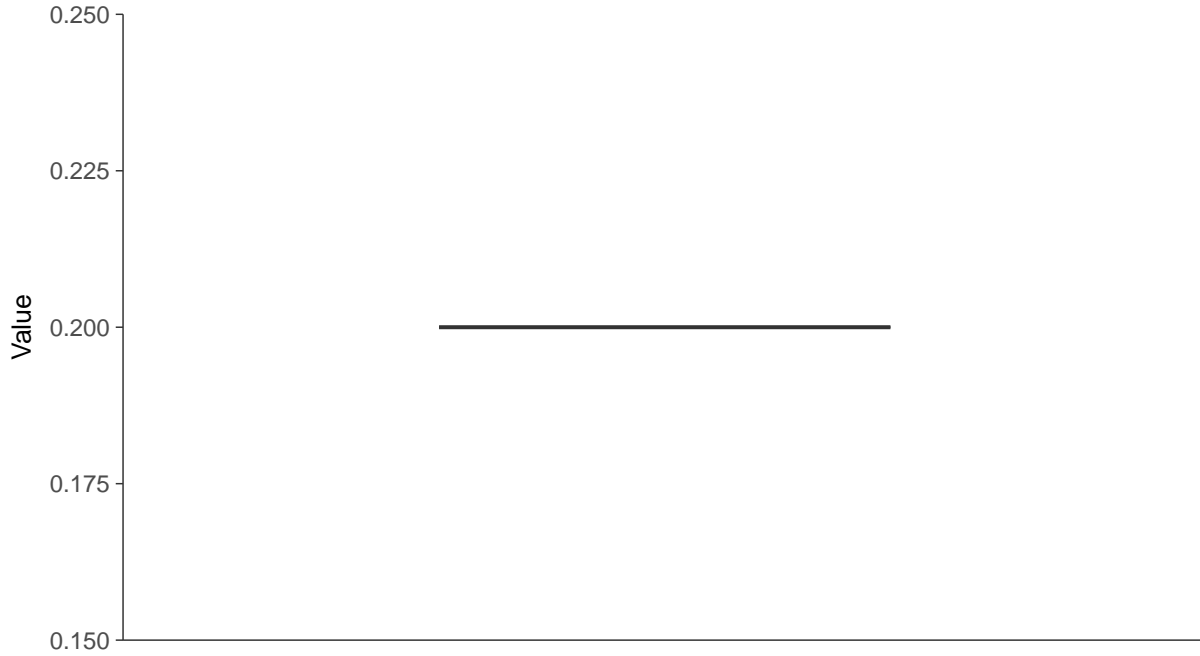
Mercury, MW-15013 (ug/L)





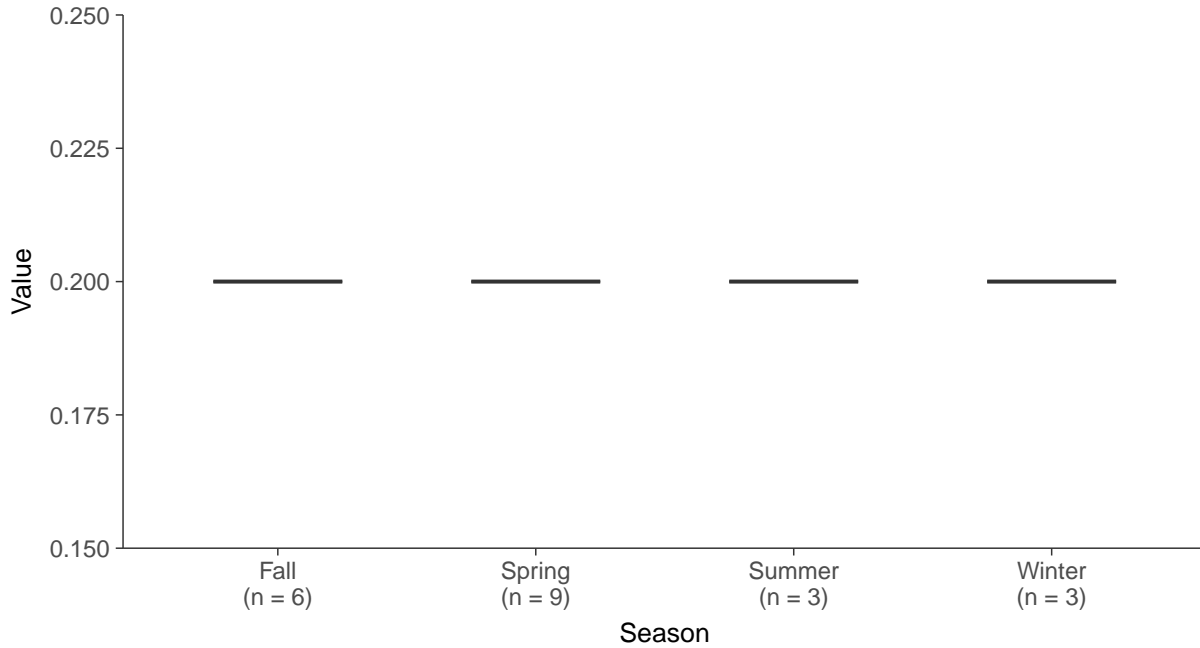
Boxplot

Mercury, MW-15013 (ug/L)



Boxplot by Season

Mercury, MW-15013 (ug/L)



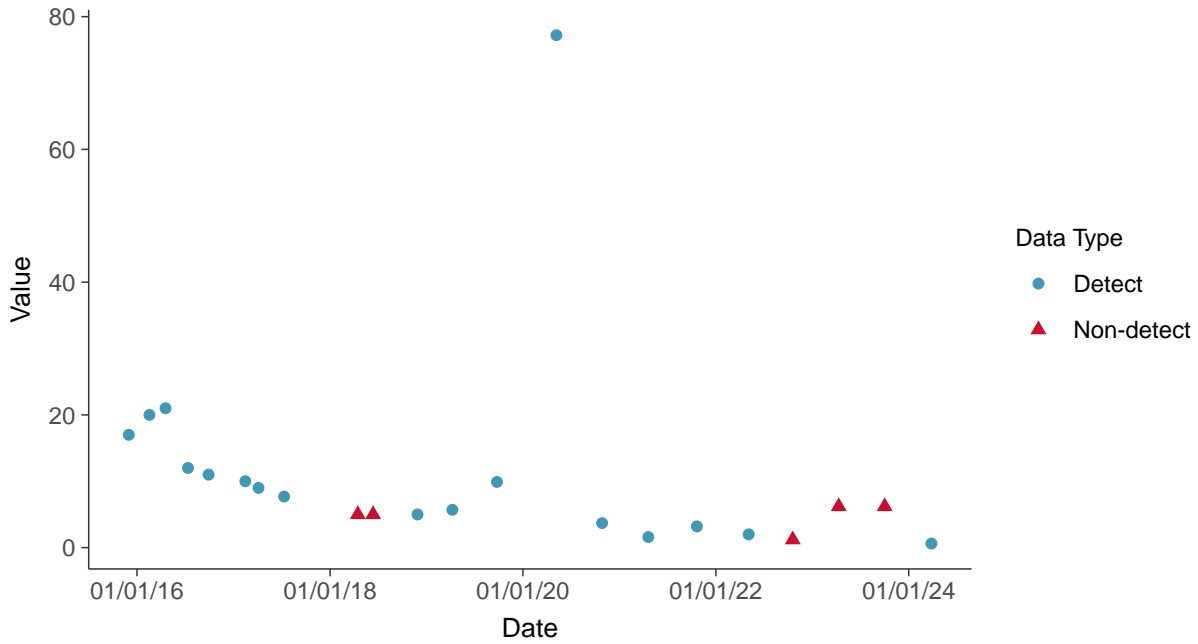


Appendix IV: Molybdenum, MW-15013

ID: 03_2_119

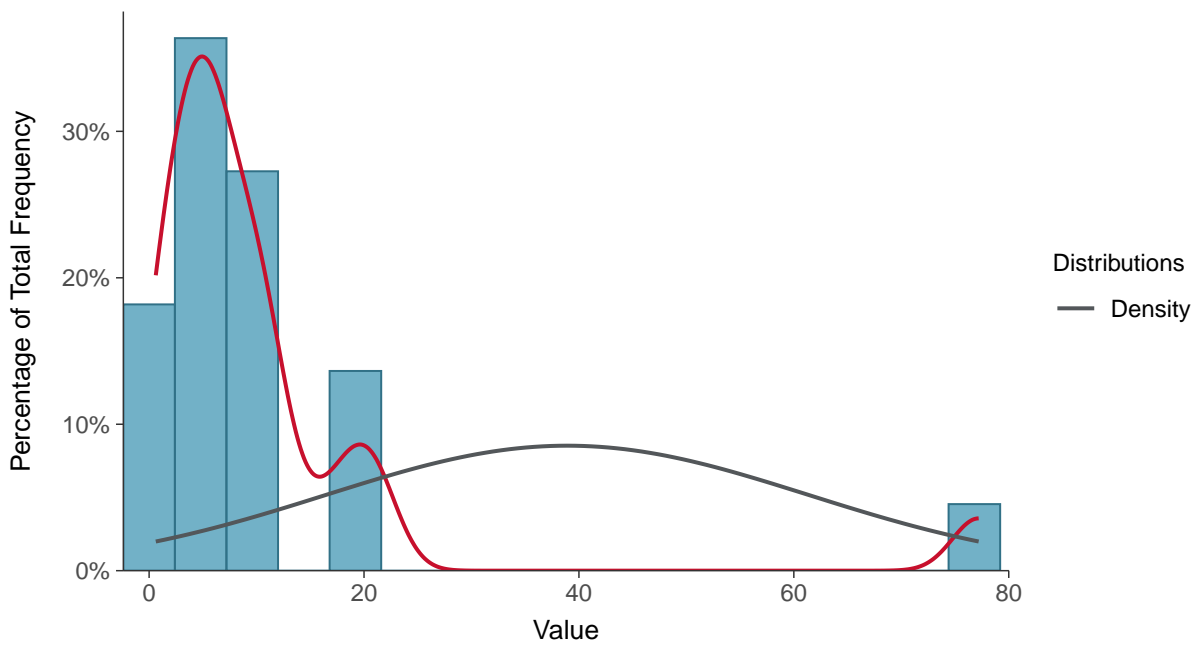
Scatter Plot

Molybdenum, MW-15013 (ug/L)



Histogram

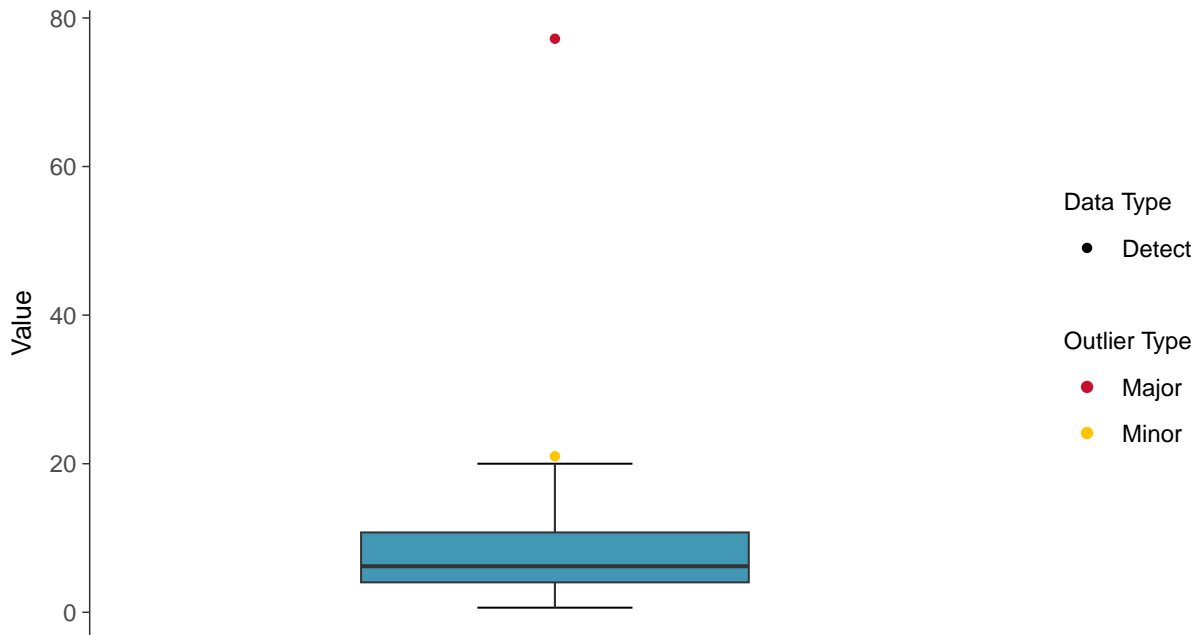
Molybdenum, MW-15013 (ug/L)





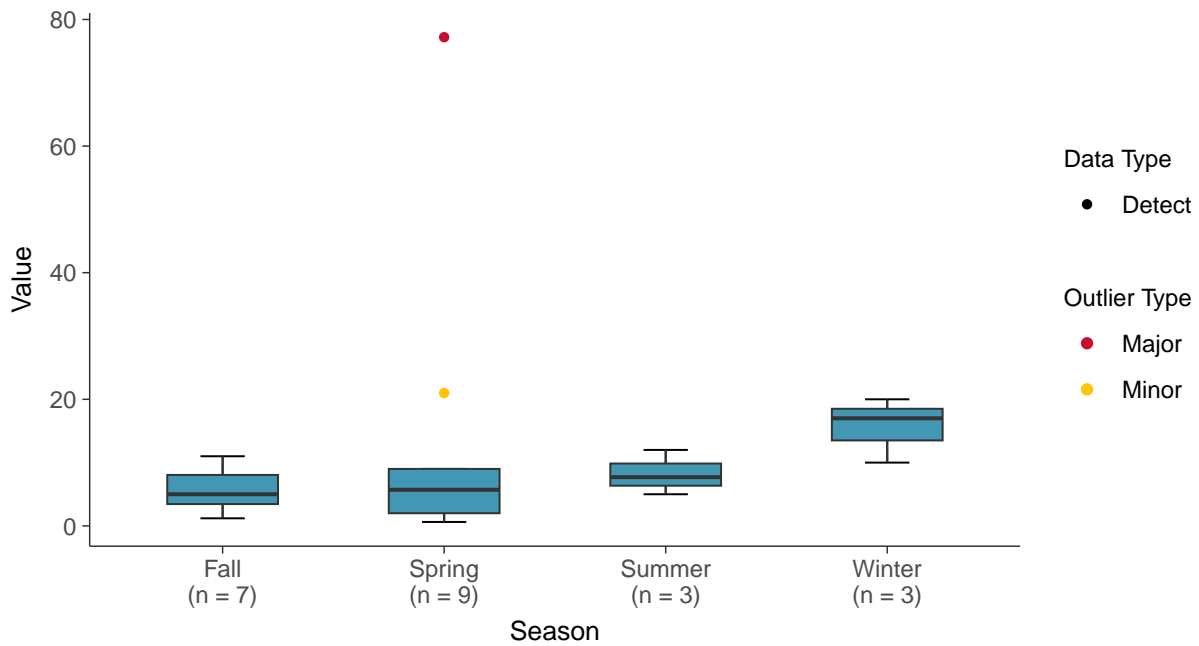
Boxplot

Molybdenum, MW-15013 (ug/L)



Boxplot by Season

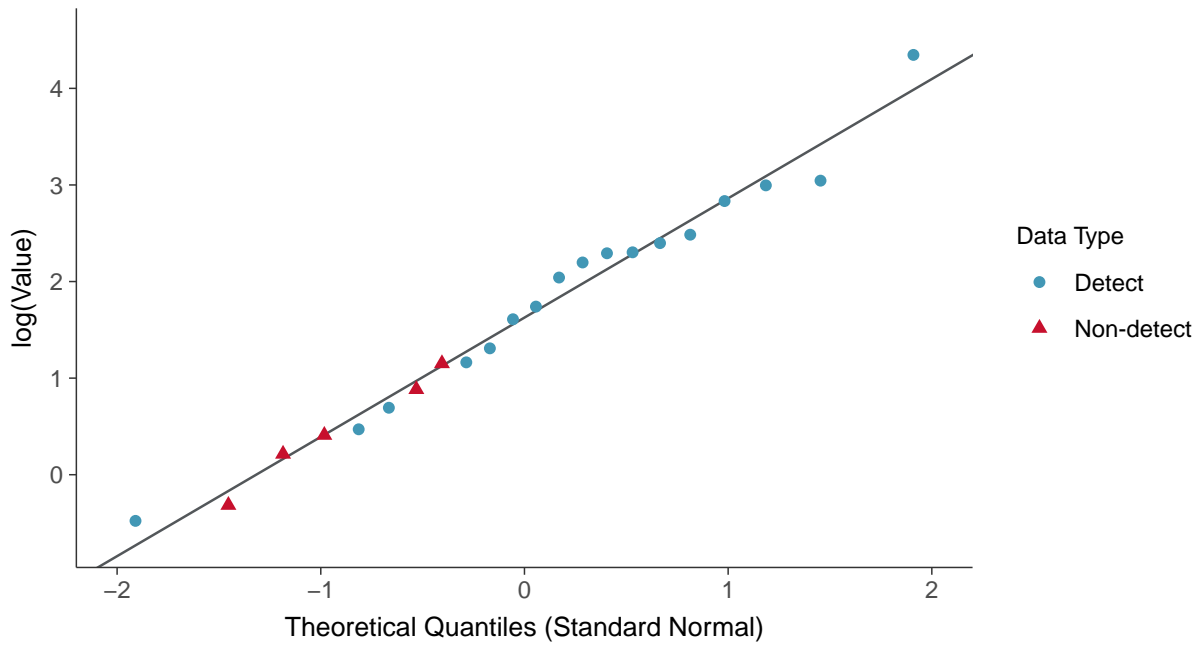
Molybdenum, MW-15013 (ug/L)





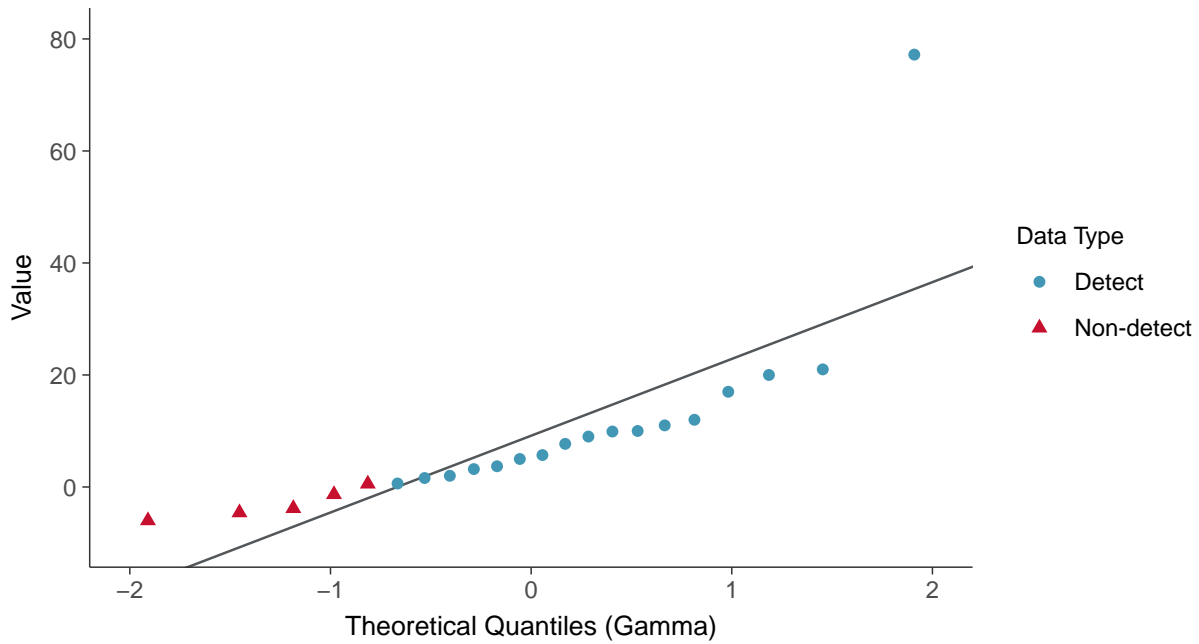
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15013 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

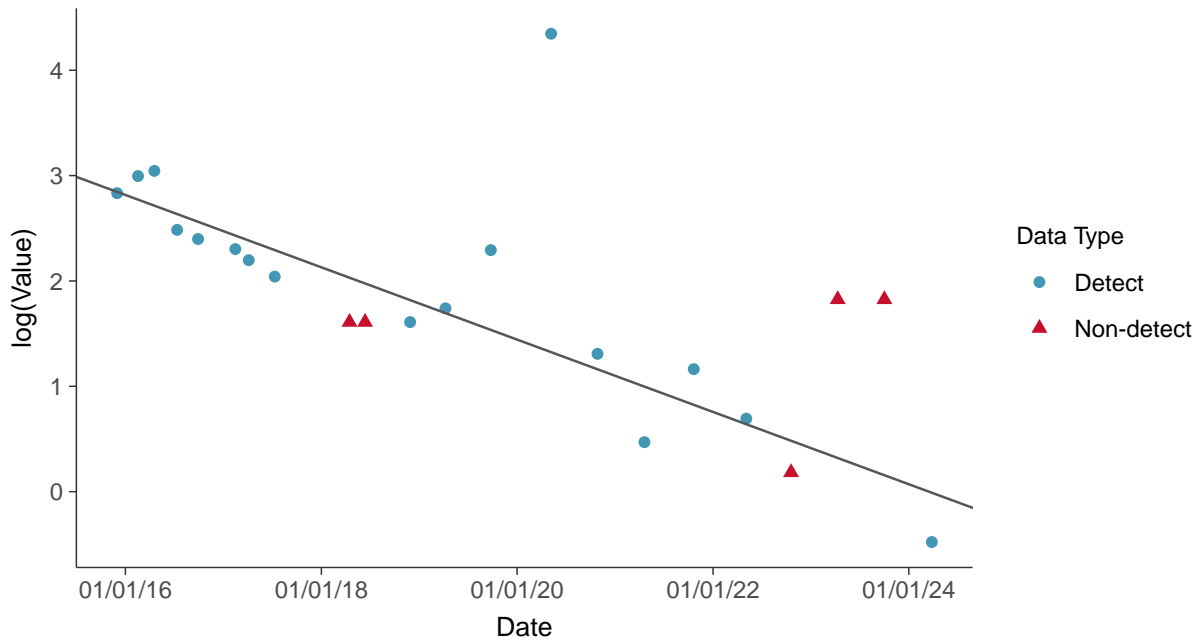
Molybdenum, MW-15013 (ug/L)





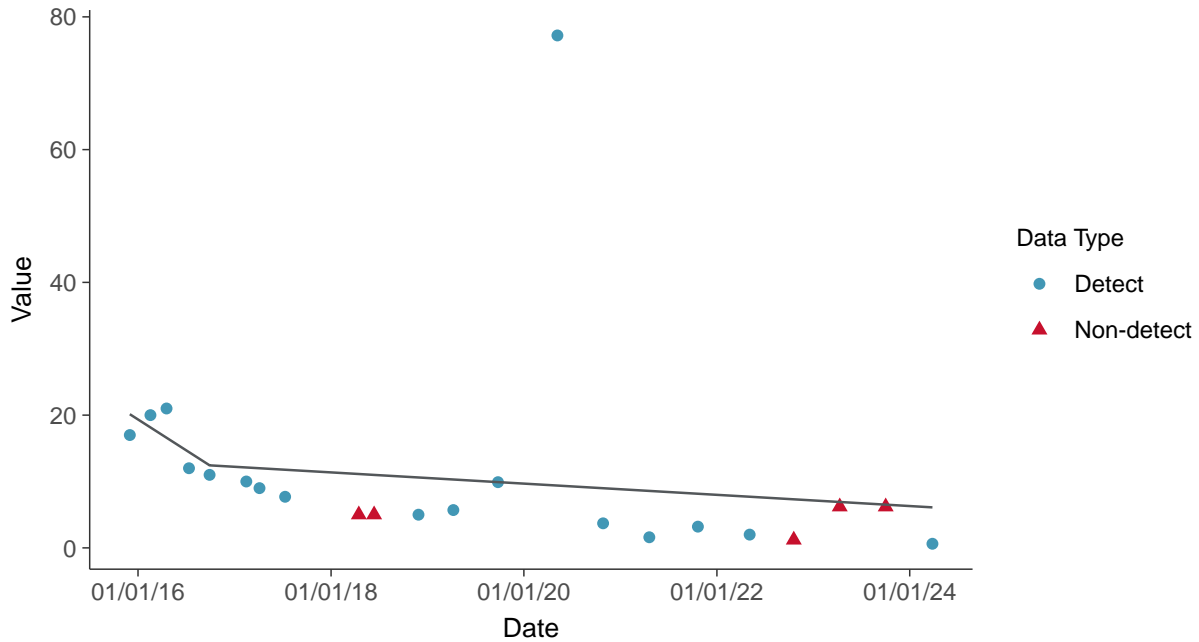
Trend Regression: Lognormal MLE

Molybdenum, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear

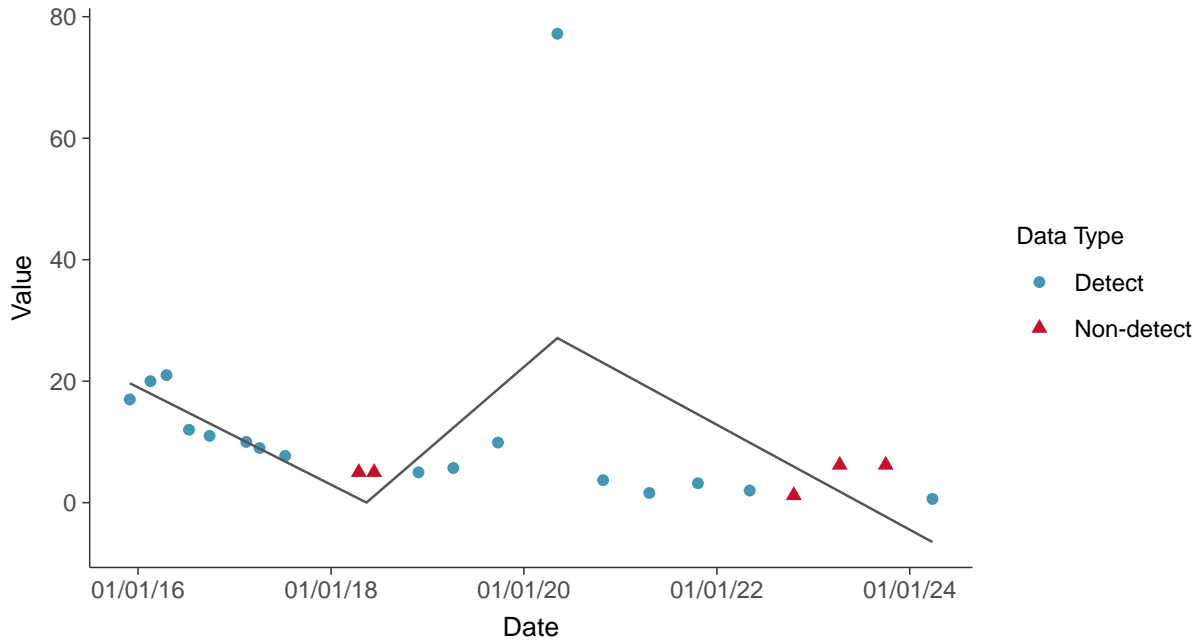
Molybdenum, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15013 (ug/L)



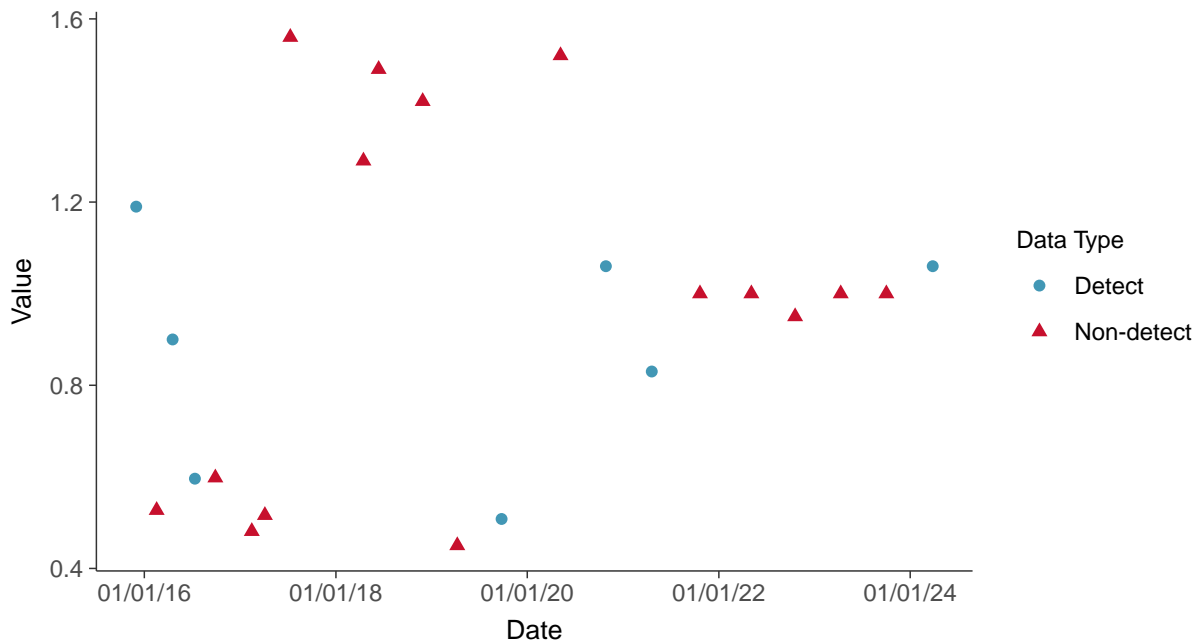


Appendix IV: Radium-226+228, MW-15013

ID: 03_2_125

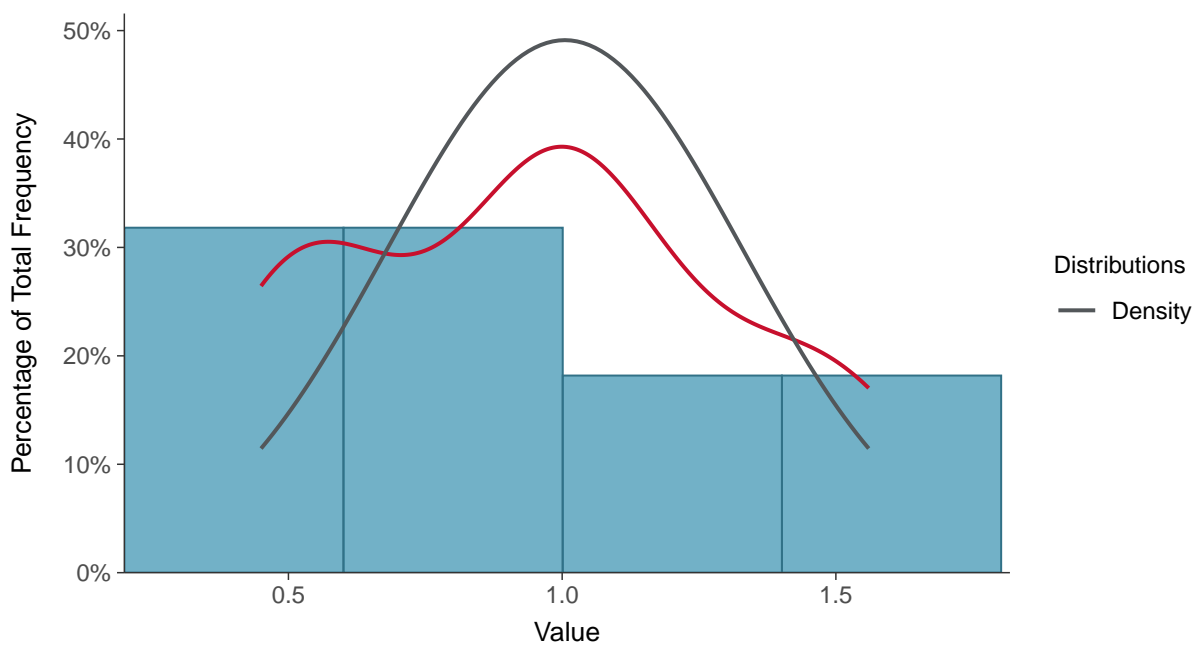
Scatter Plot

Radium-226+228, MW-15013 (pCi/L)



Histogram

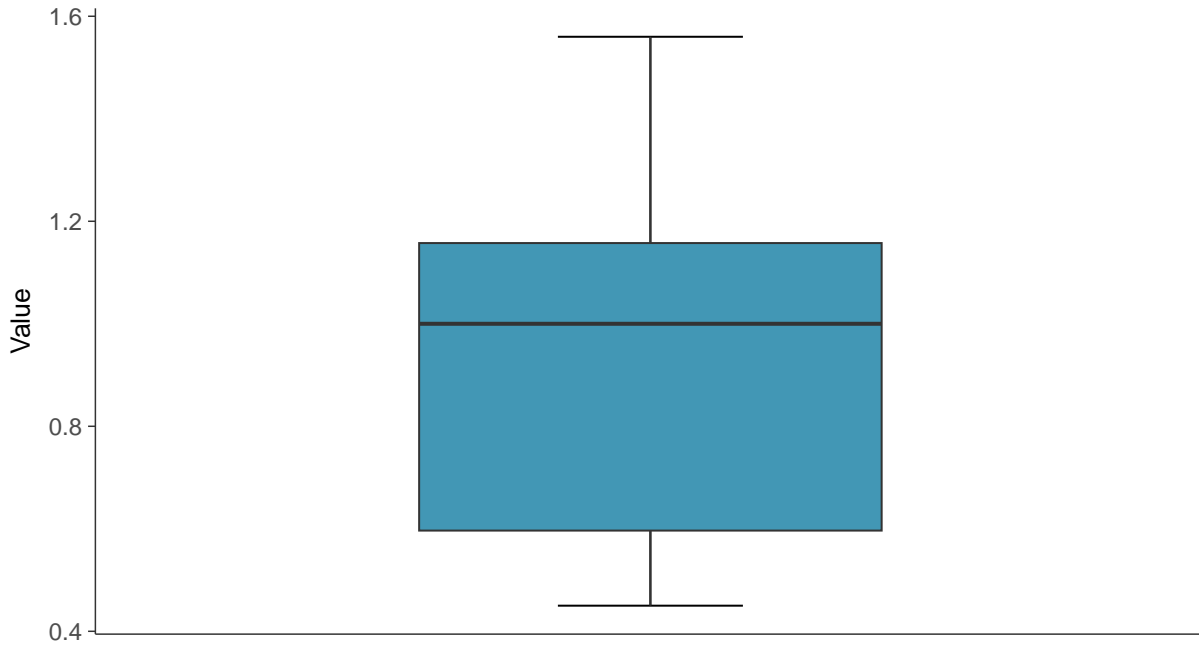
Radium-226+228, MW-15013 (pCi/L)





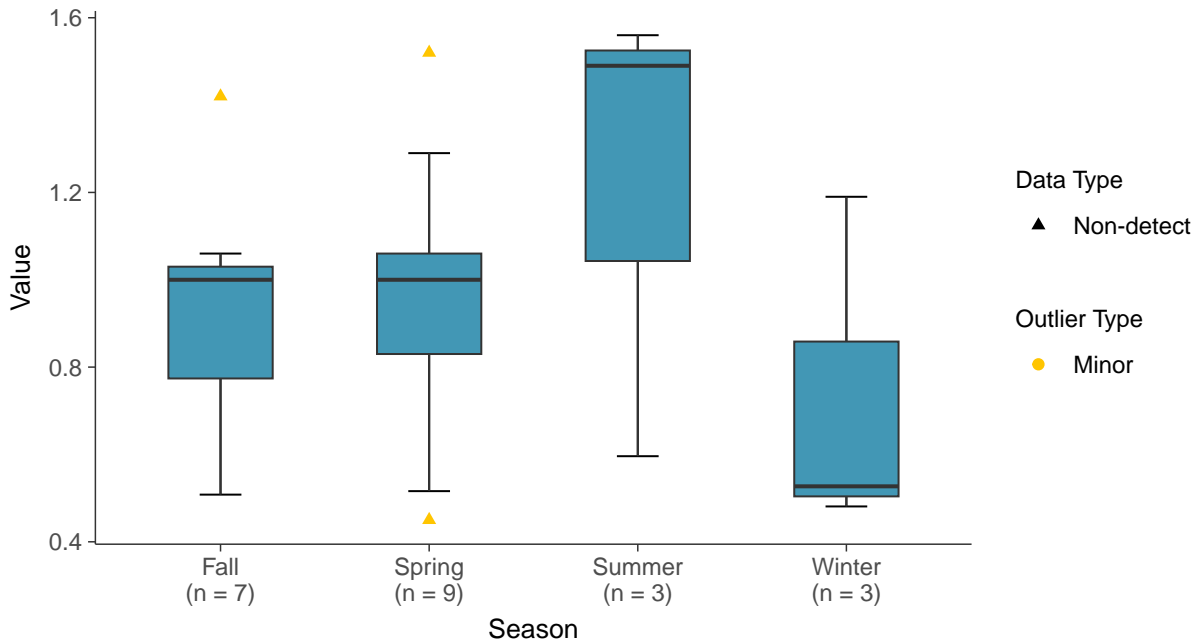
Boxplot

Radium-226+228, MW-15013 (pCi/L)



Boxplot by Season

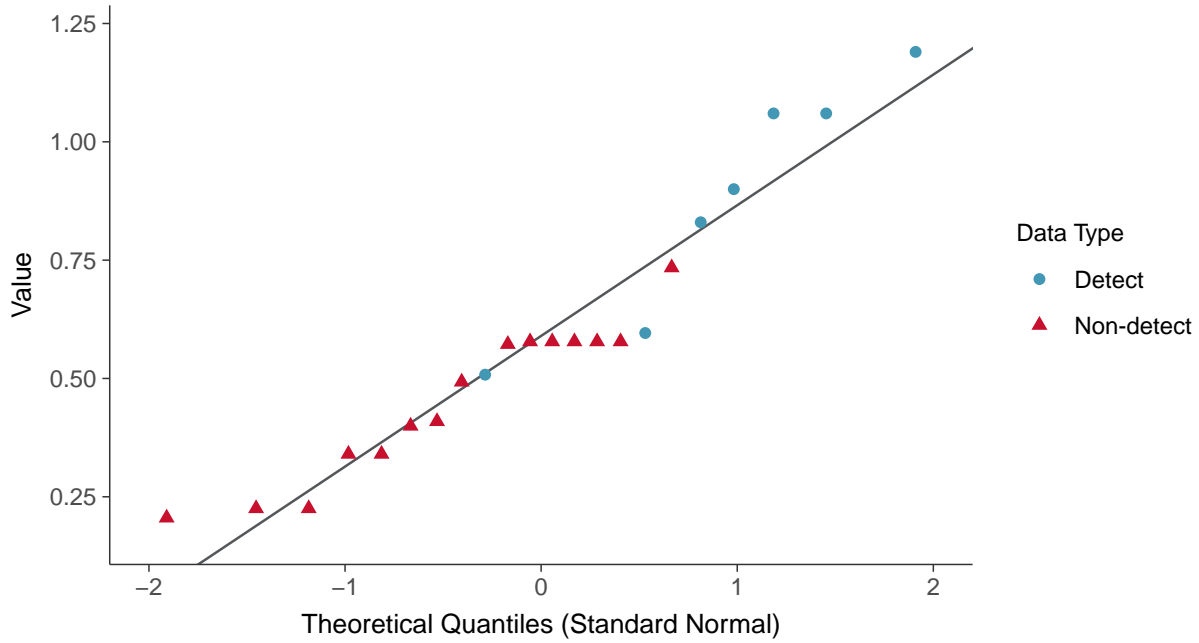
Radium-226+228, MW-15013 (pCi/L)





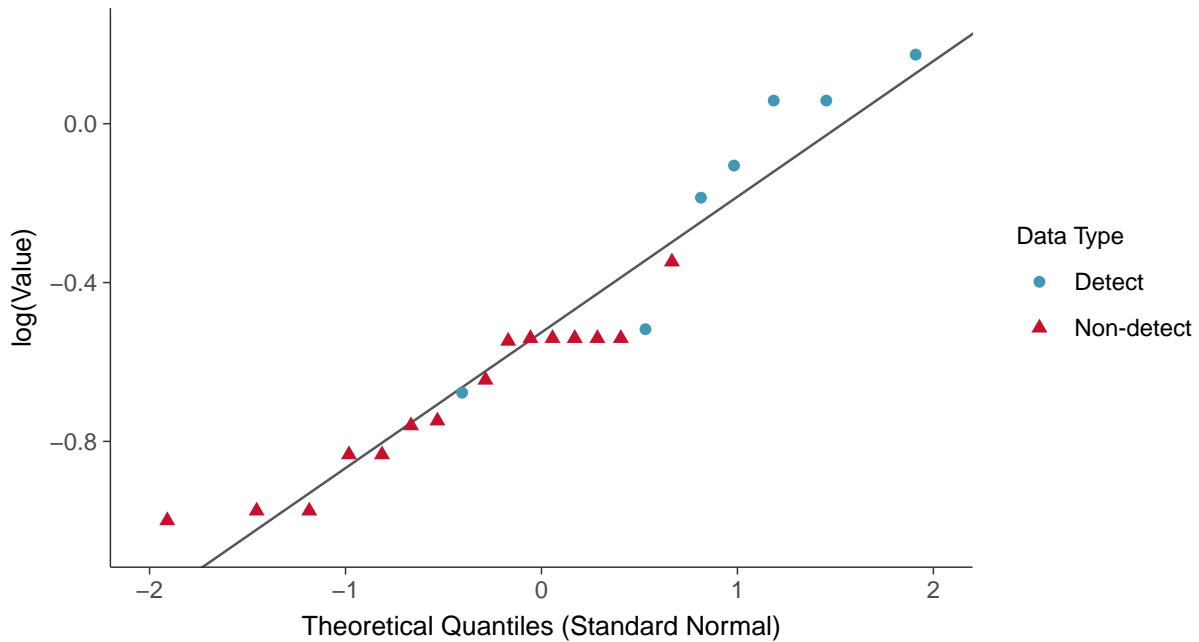
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15013 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

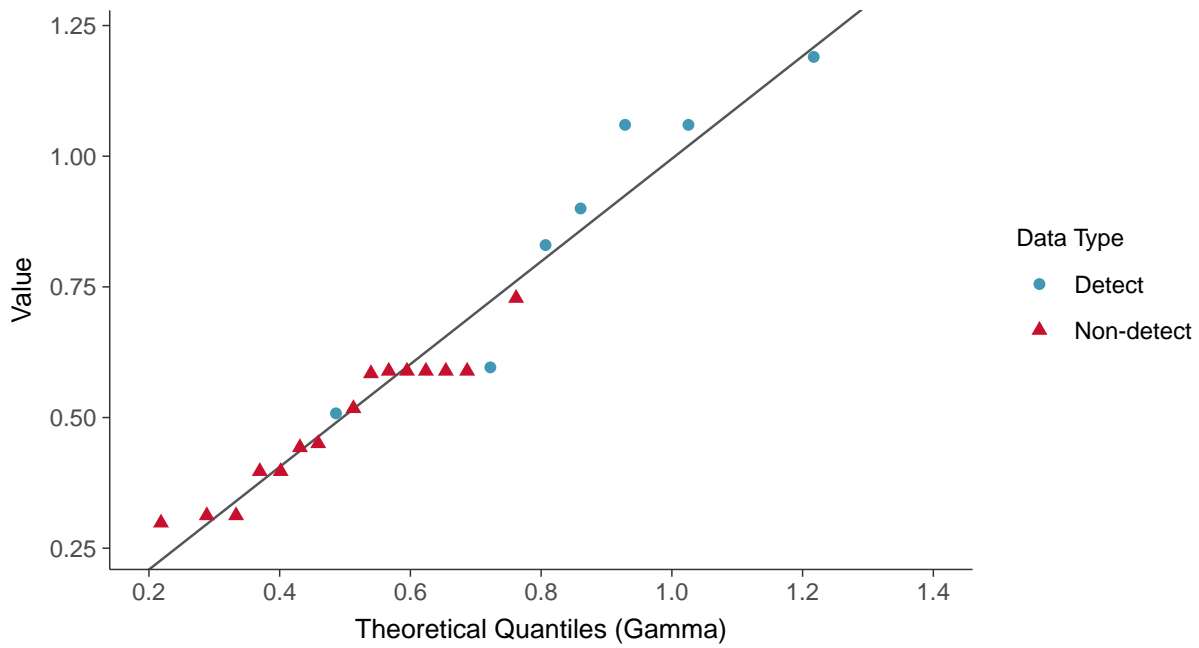
Radium-226+228, MW-15013 (pCi/L)





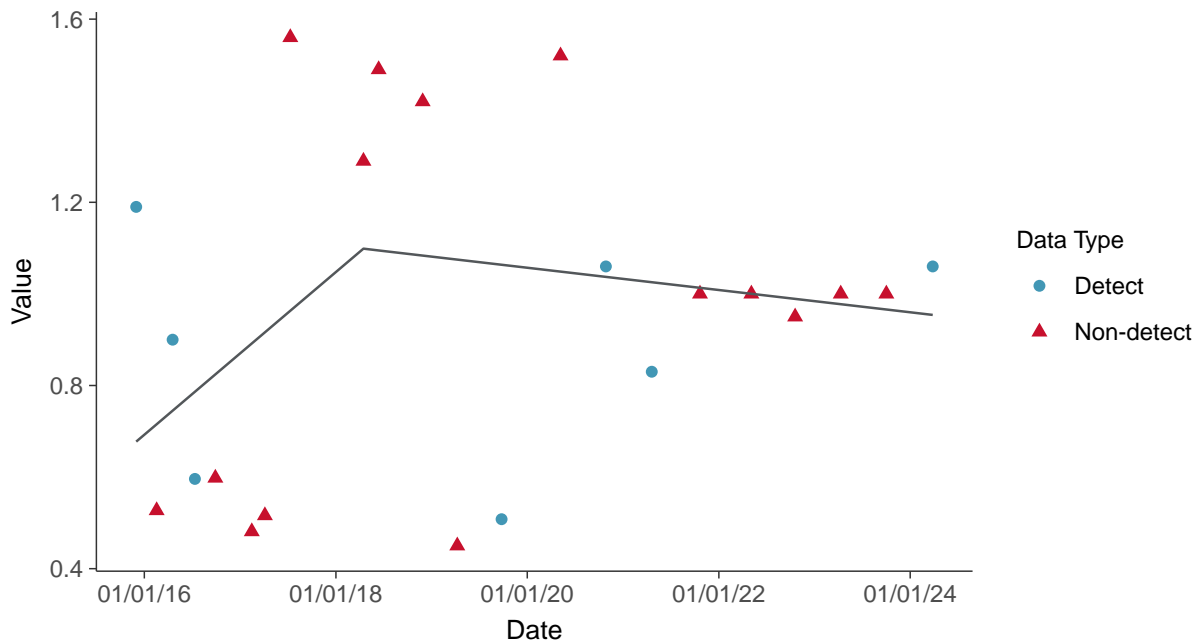
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15013 (pCi/L)



Trend Regression: Piecewise Linear-Linear

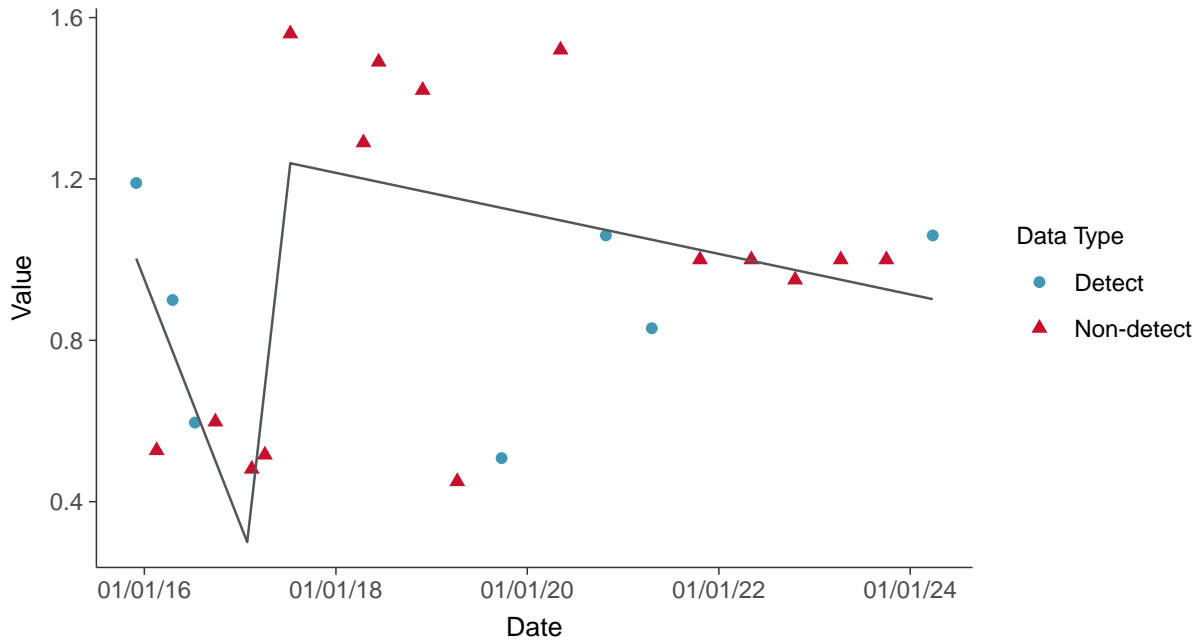
Radium-226+228, MW-15013 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

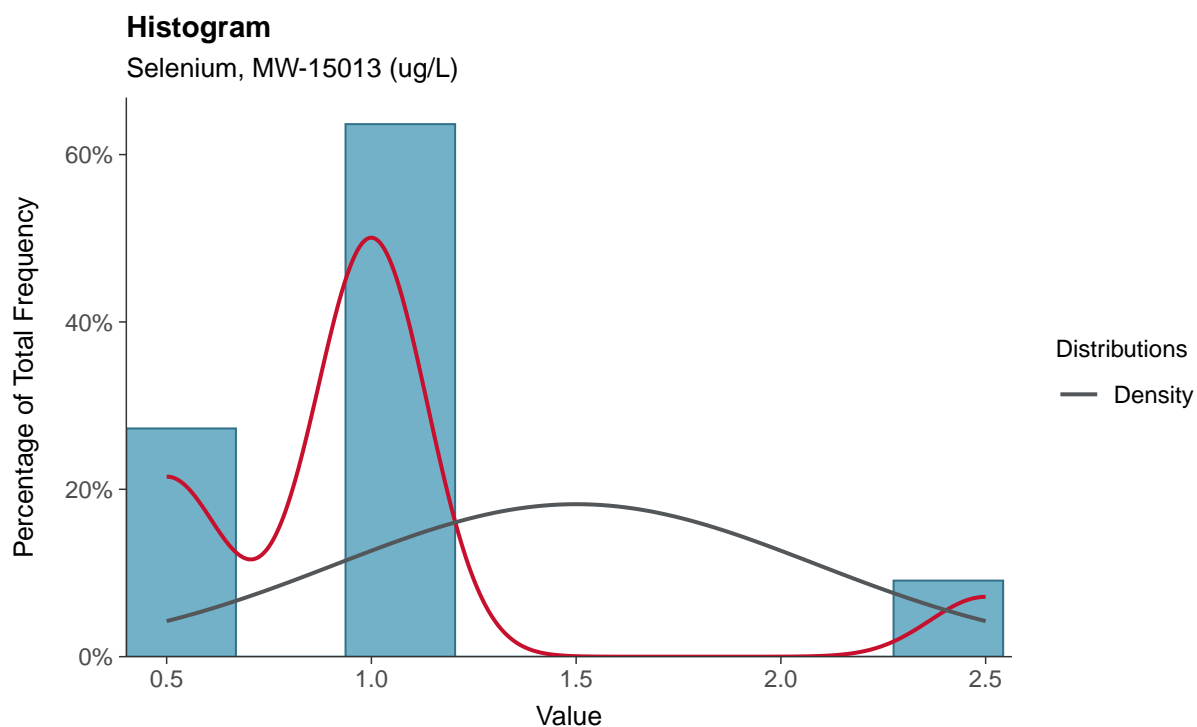
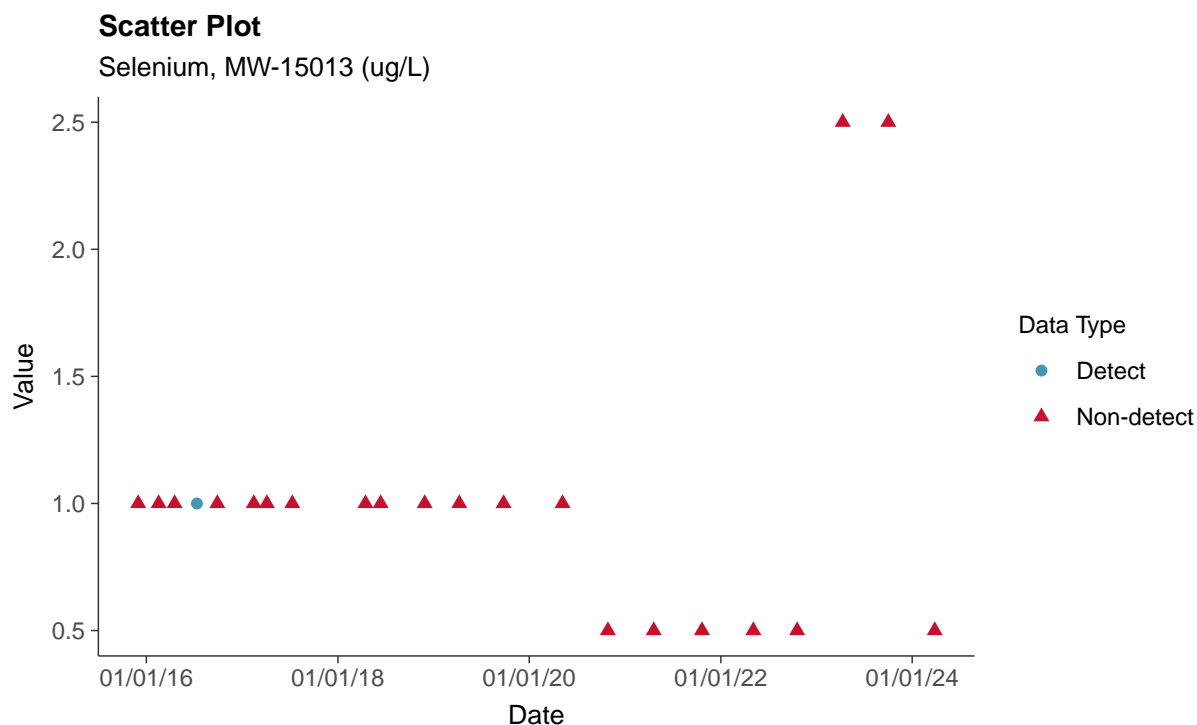
Radium-226+228, MW-15013 (pCi/L)





Appendix IV: Selenium, MW-15013

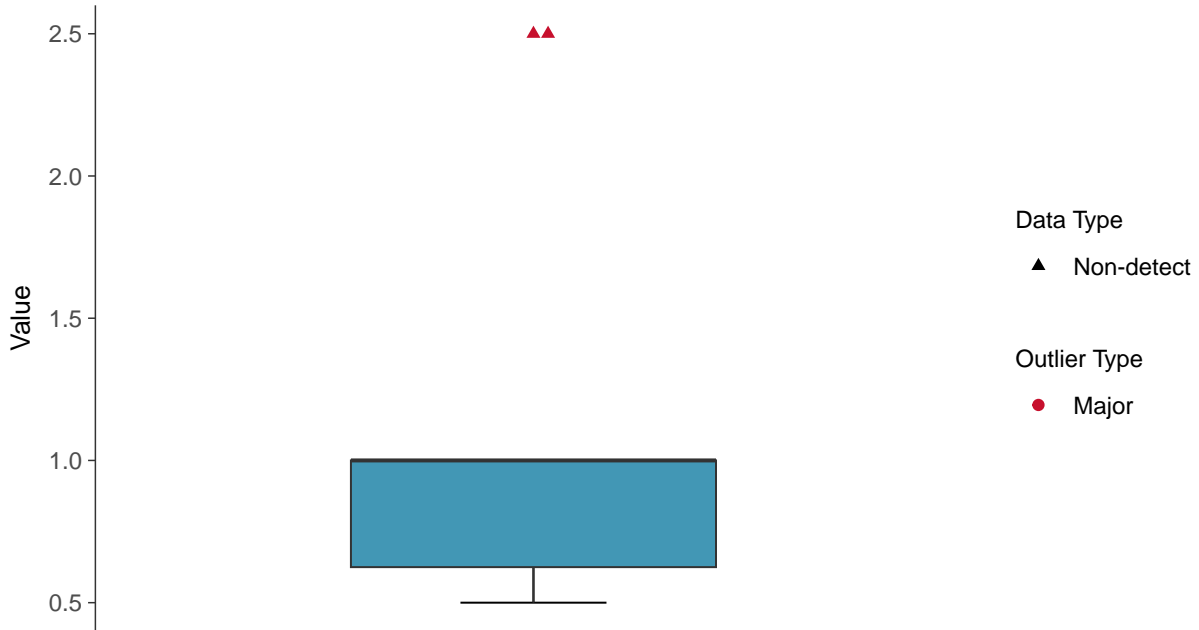
ID: 03_2_127





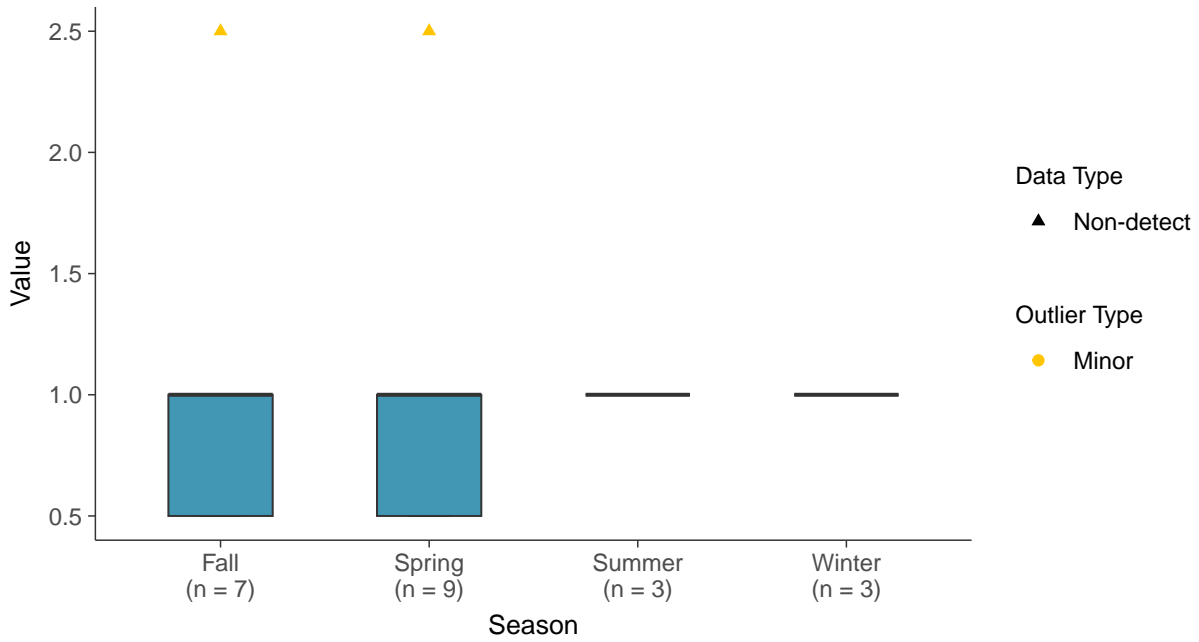
Boxplot

Selenium, MW-15013 (ug/L)



Boxplot by Season

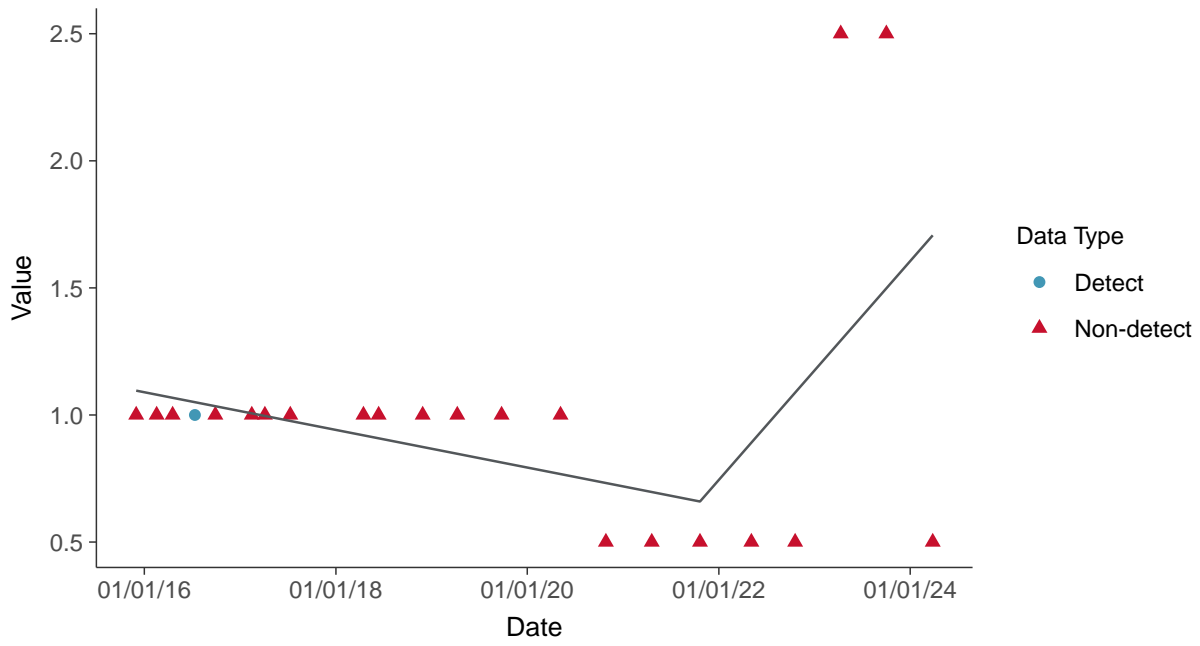
Selenium, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear

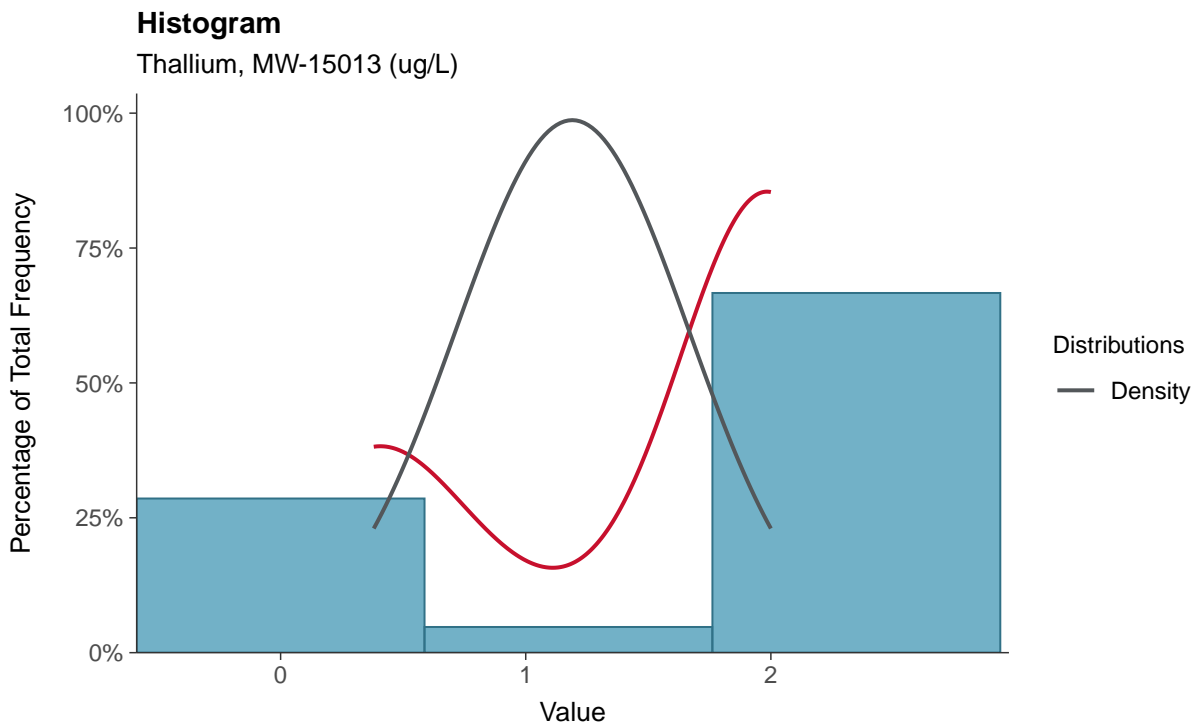
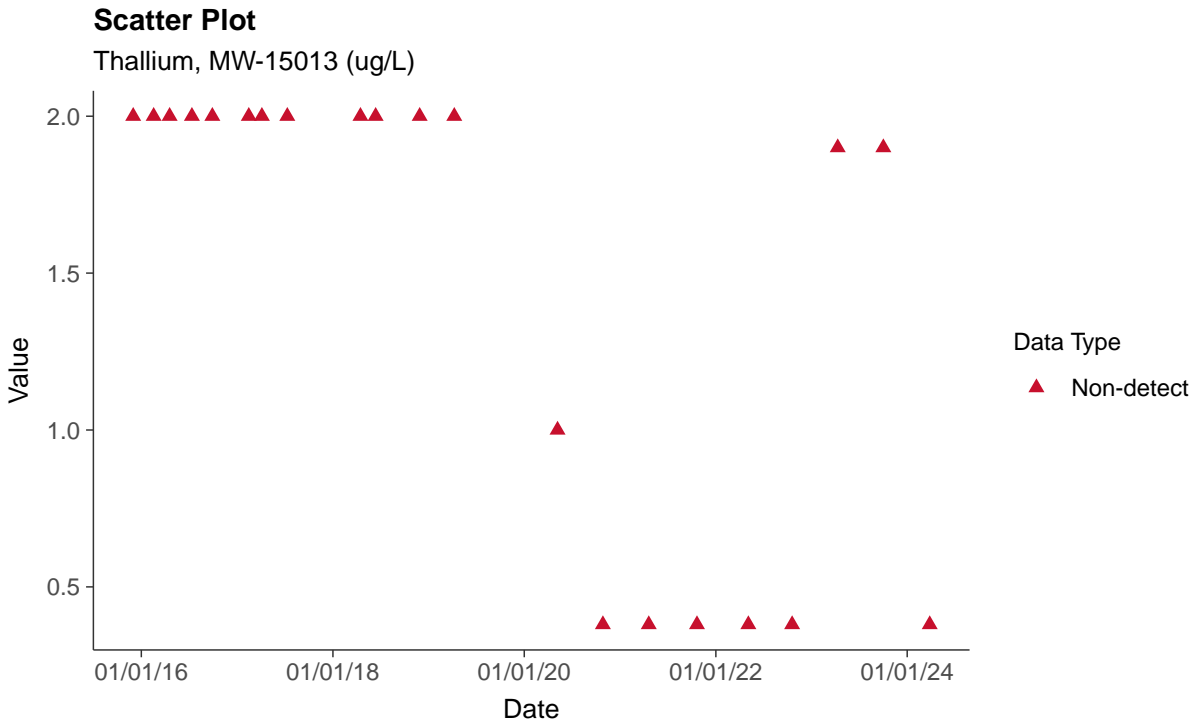
Selenium, MW-15013 (ug/L)





Appendix IV: Thallium, MW-15013

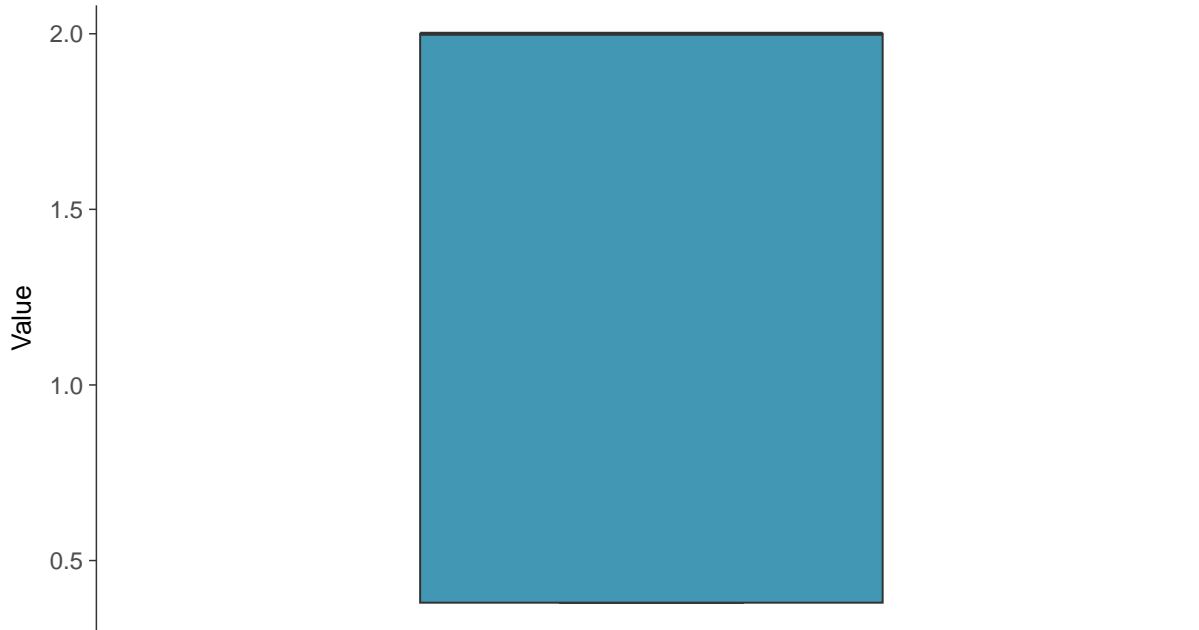
ID: 03_2_131





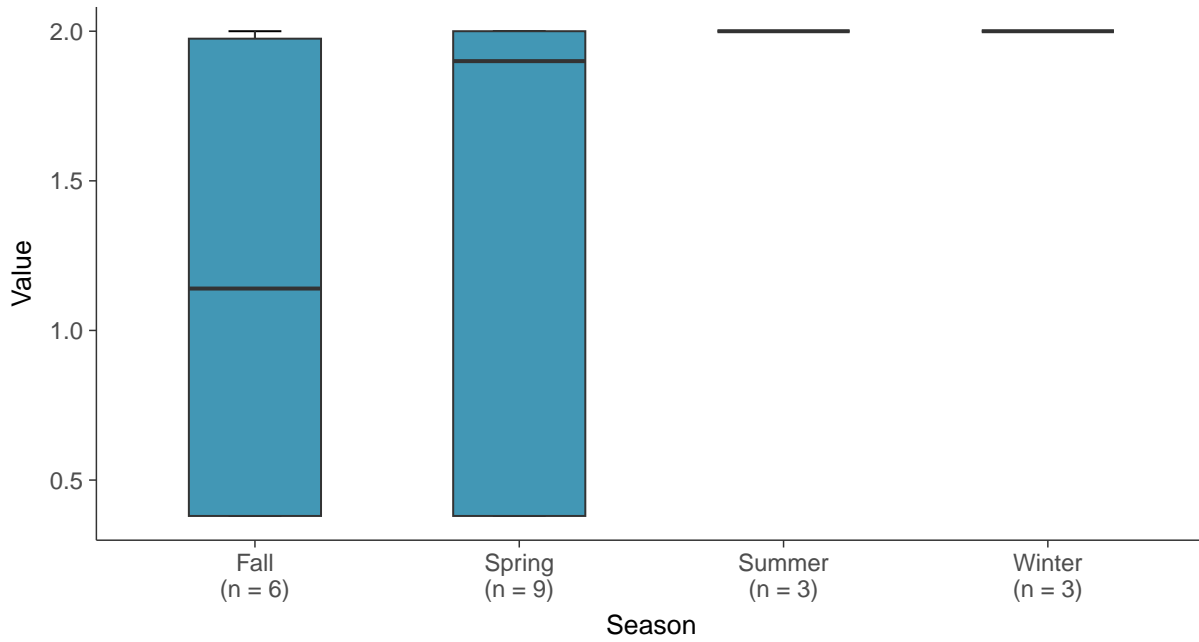
Boxplot

Thallium, MW-15013 (ug/L)



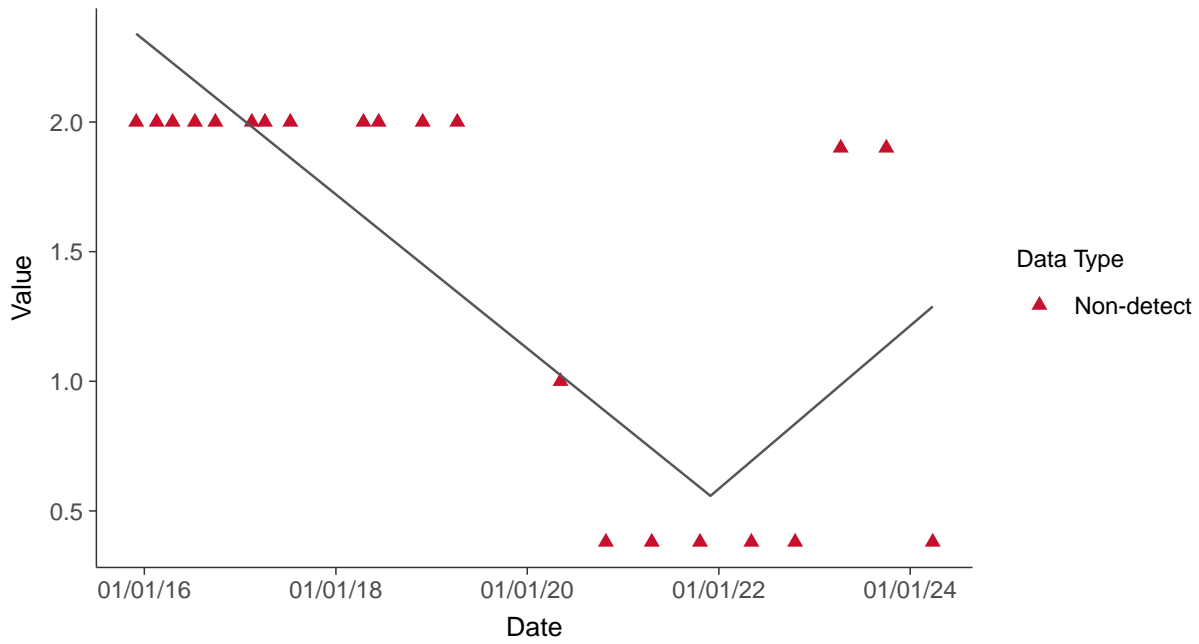
Boxplot by Season

Thallium, MW-15013 (ug/L)

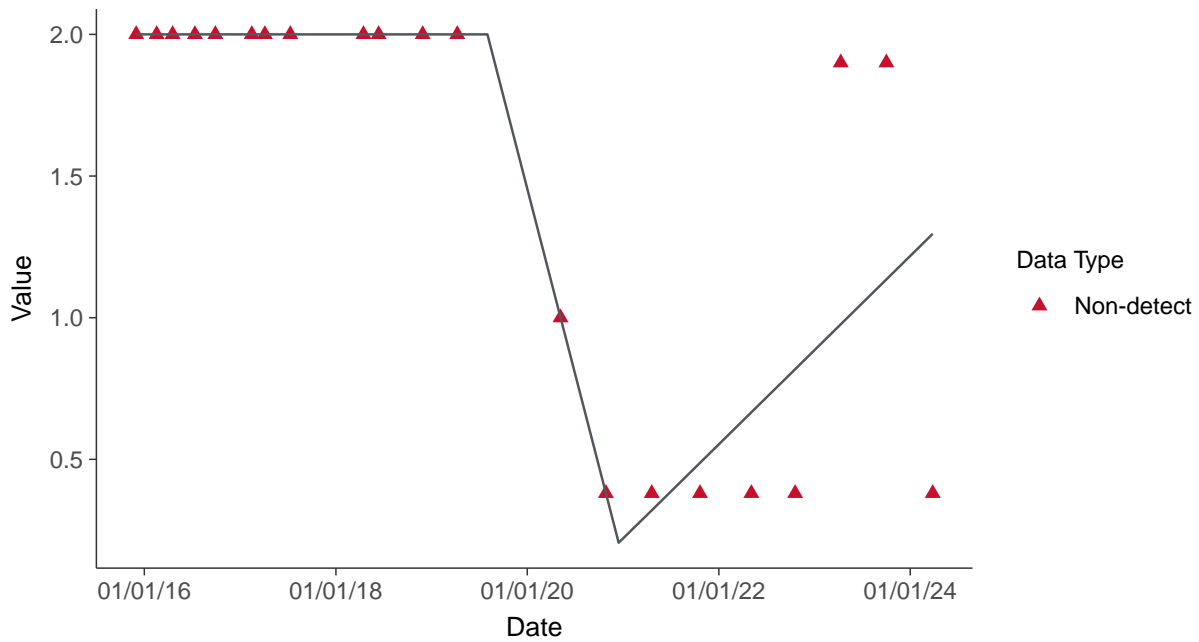




Trend Regression: Piecewise Linear-Linear
Thallium, MW-15013 (ug/L)



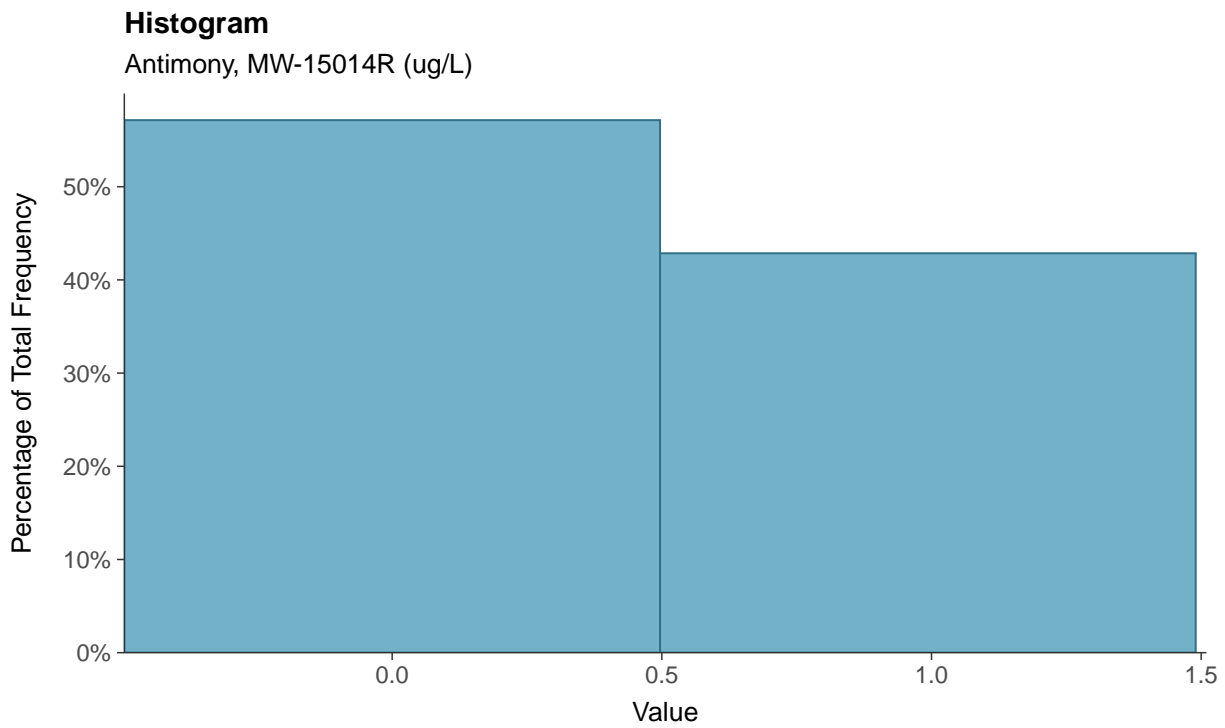
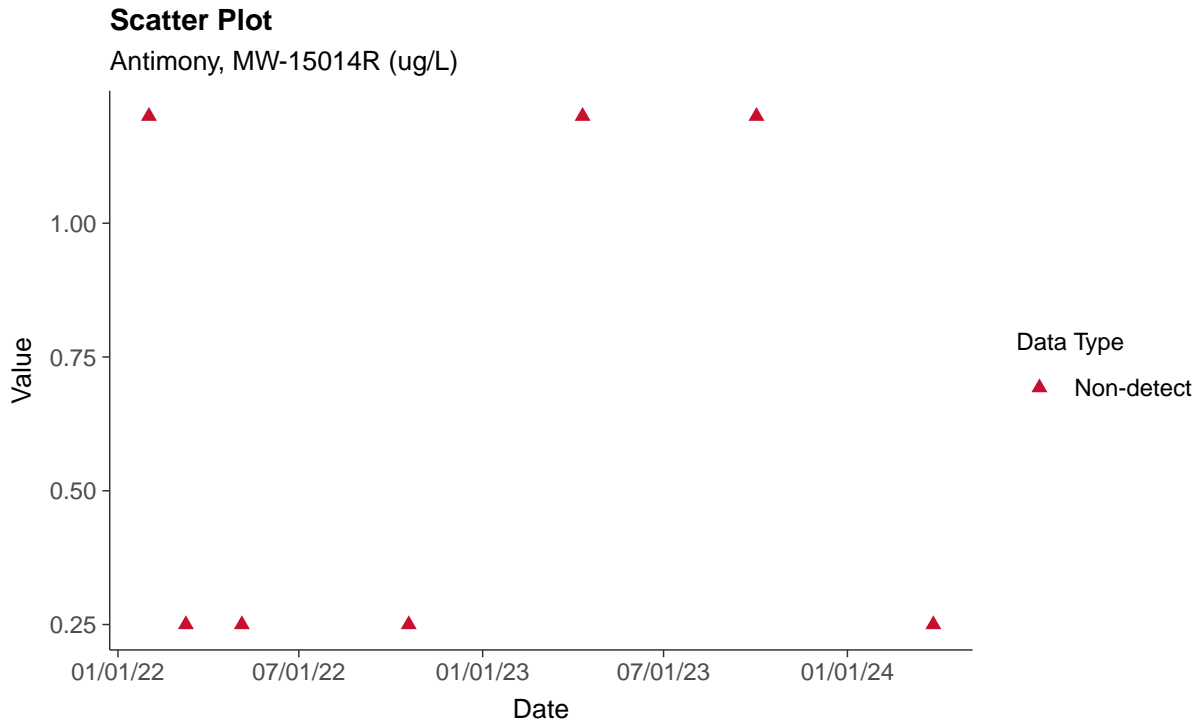
Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-15013 (ug/L)





Appendix IV: Antimony, MW-15014R

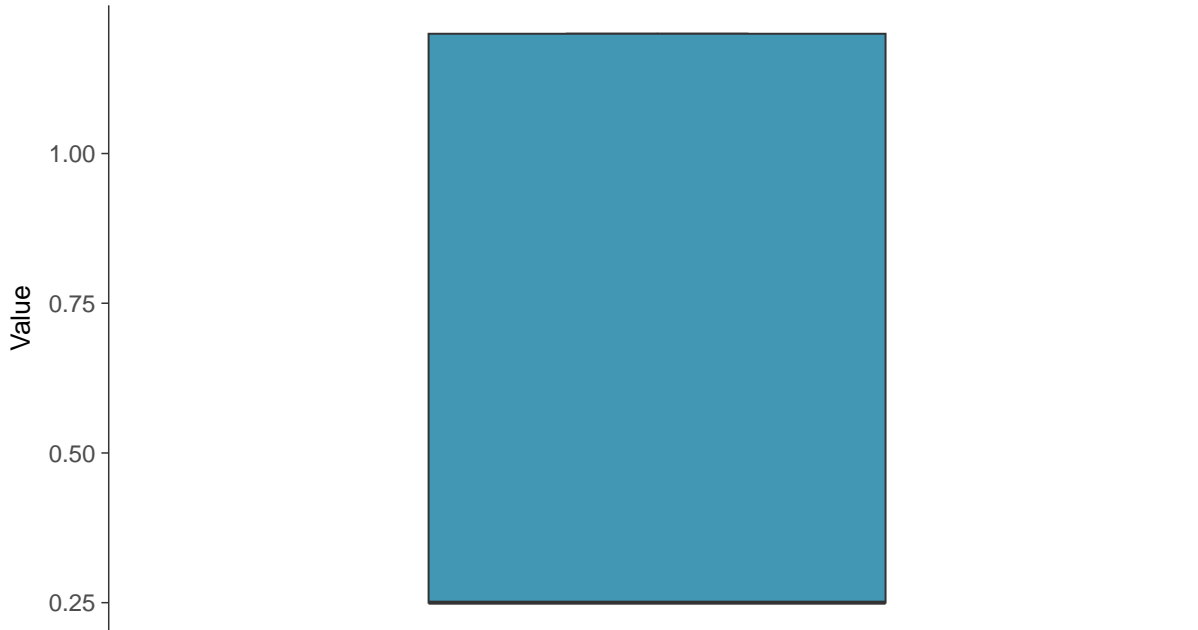
ID: 04_2_101





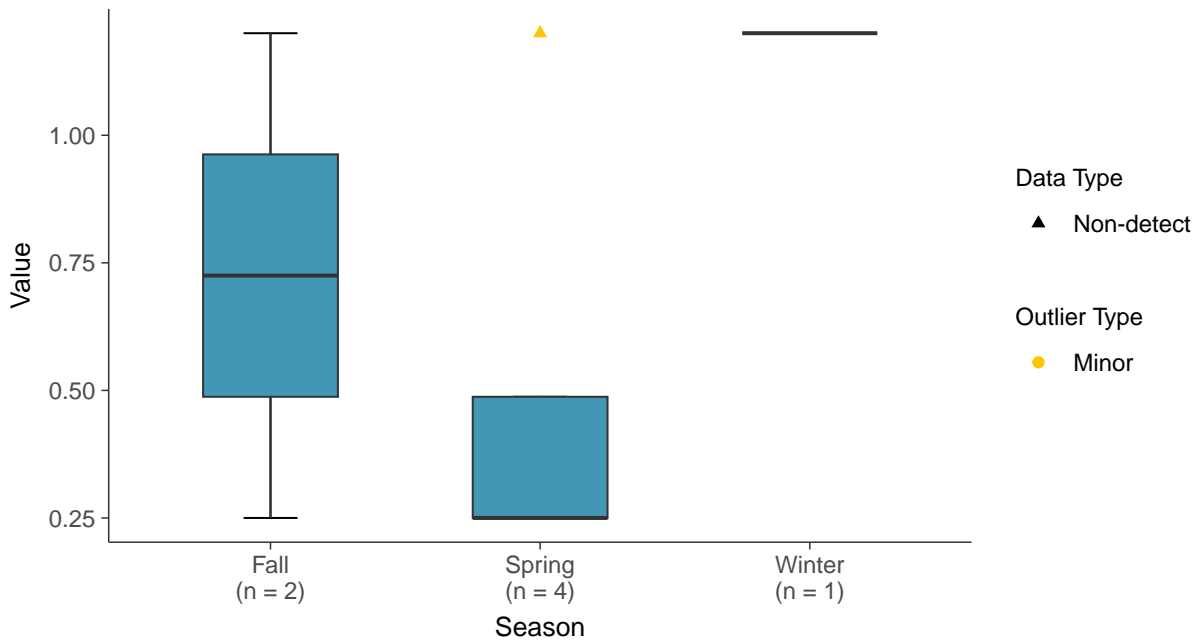
Boxplot

Antimony, MW-15014R (ug/L)



Boxplot by Season

Antimony, MW-15014R (ug/L)



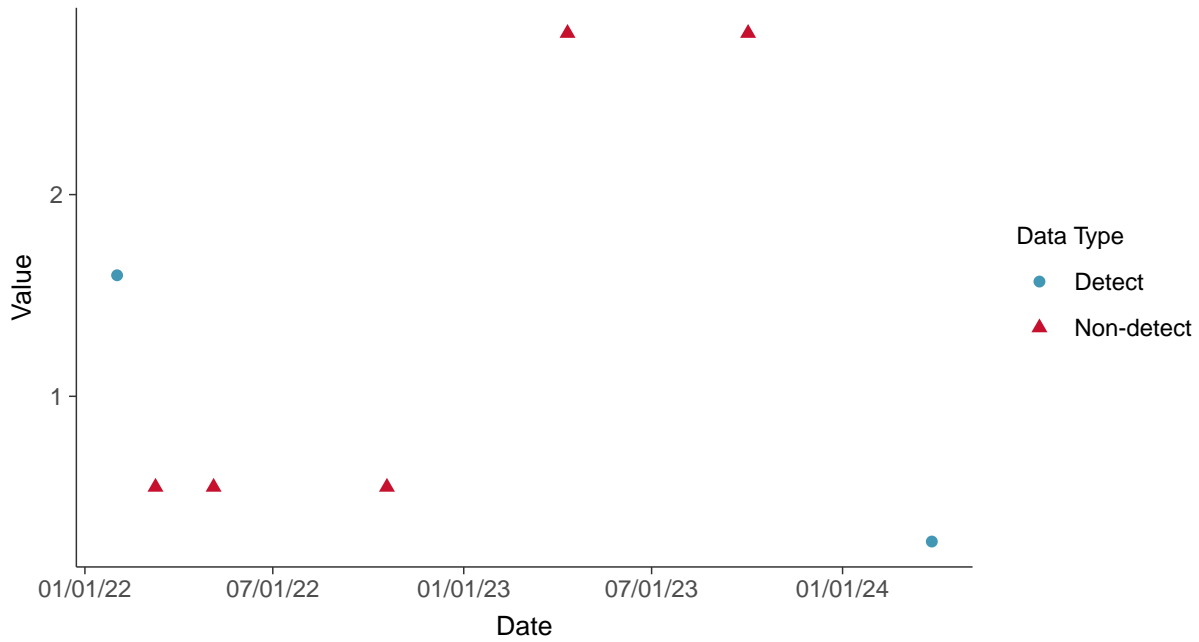


Appendix IV: Arsenic, MW-15014R

ID: 04_2_102

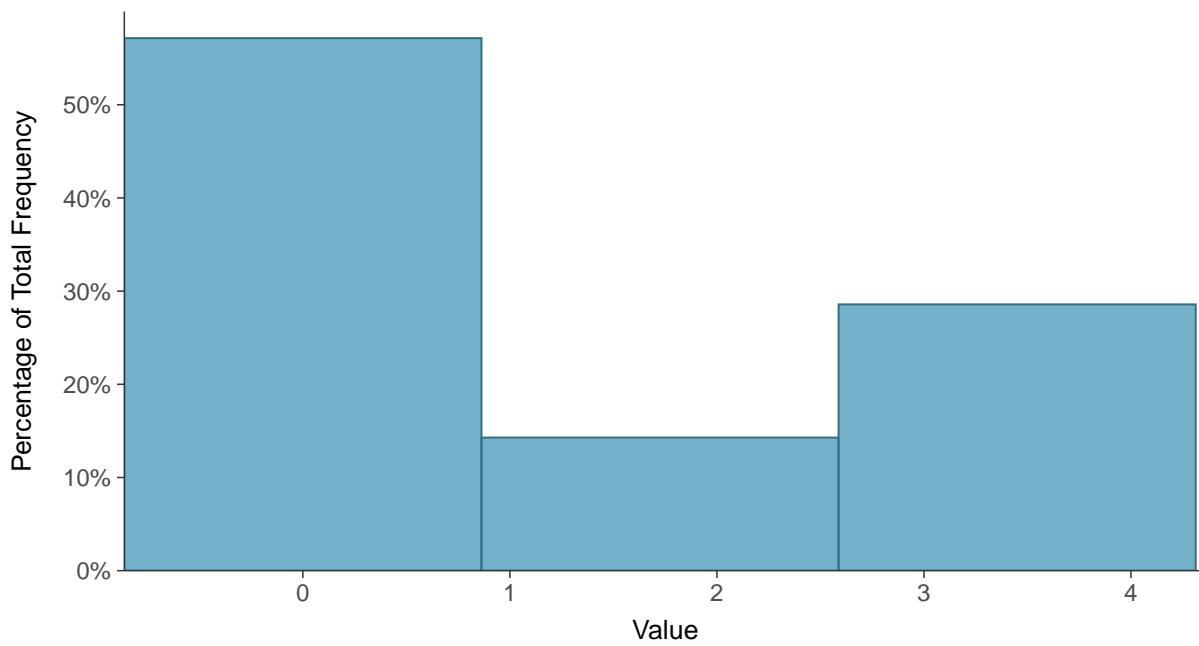
Scatter Plot

Arsenic, MW-15014R (ug/L)



Histogram

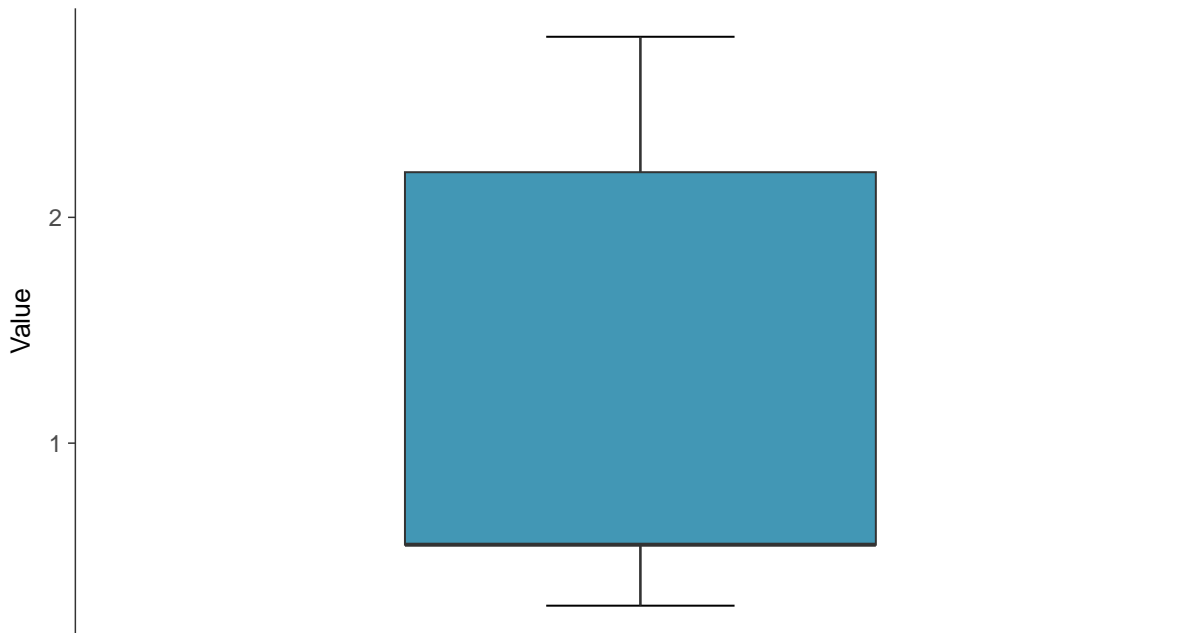
Arsenic, MW-15014R (ug/L)





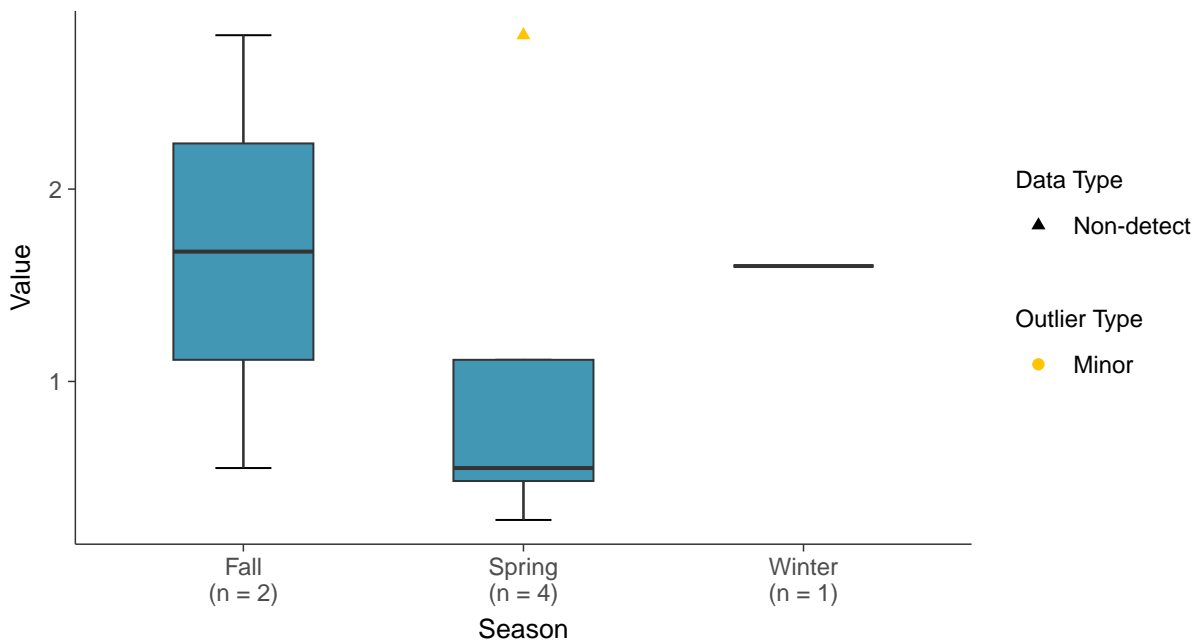
Boxplot

Arsenic, MW-15014R (ug/L)



Boxplot by Season

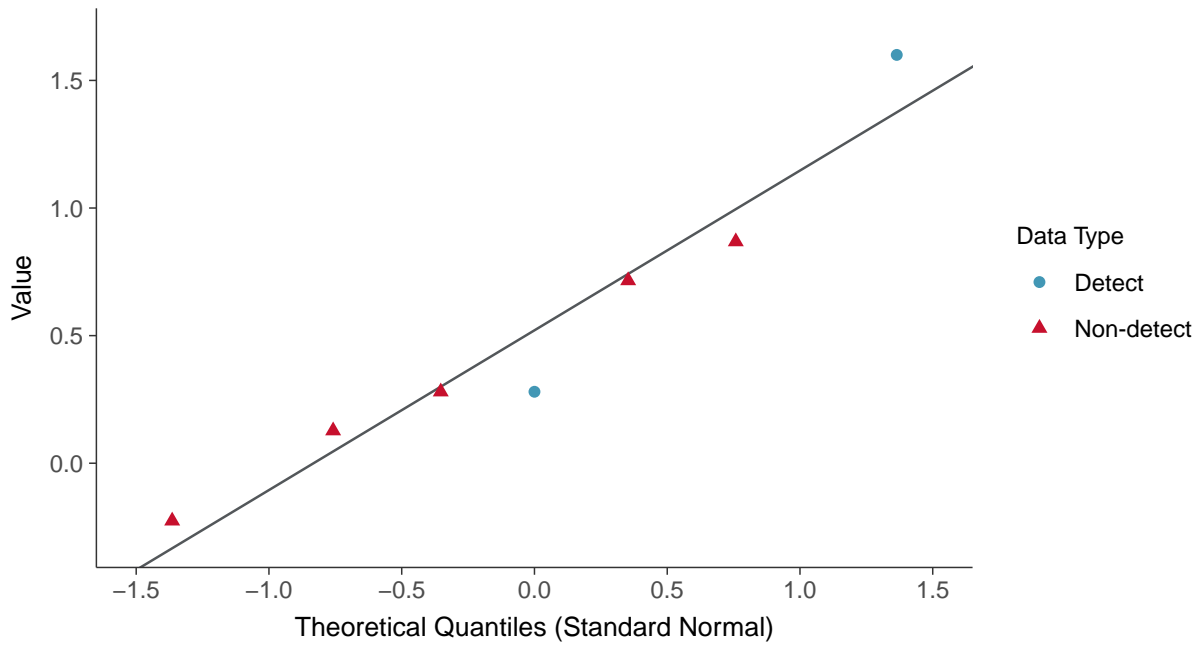
Arsenic, MW-15014R (ug/L)





Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15014R (ug/L)



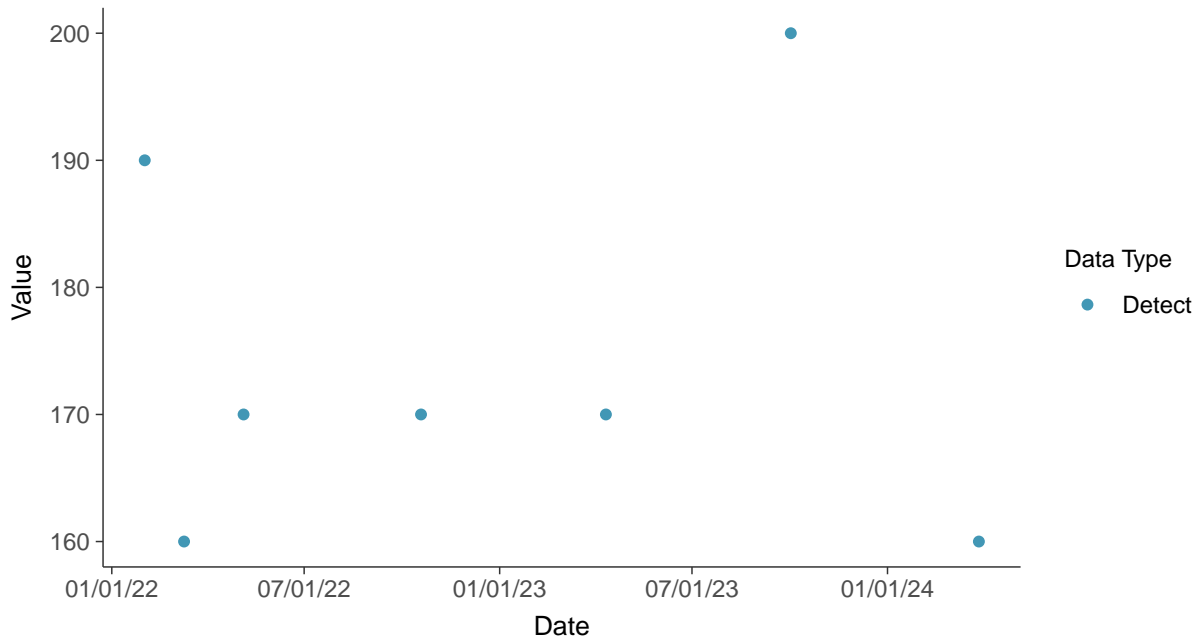


Appendix IV: Barium, MW-15014R

ID: 04_2_103

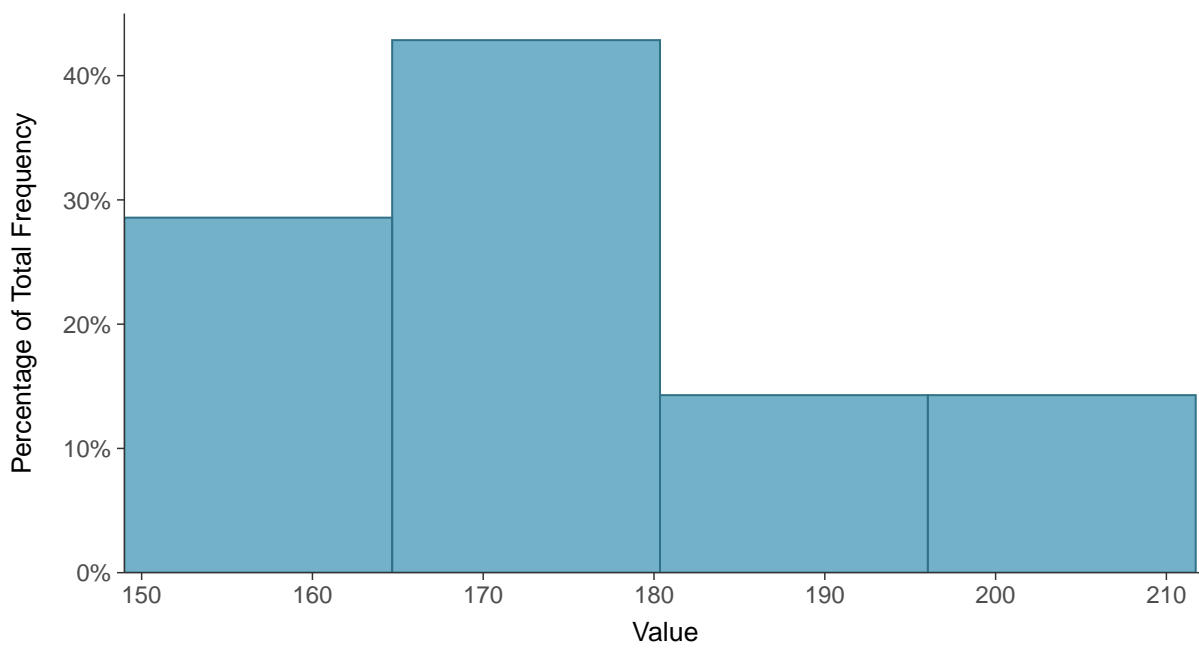
Scatter Plot

Barium, MW-15014R (ug/L)



Histogram

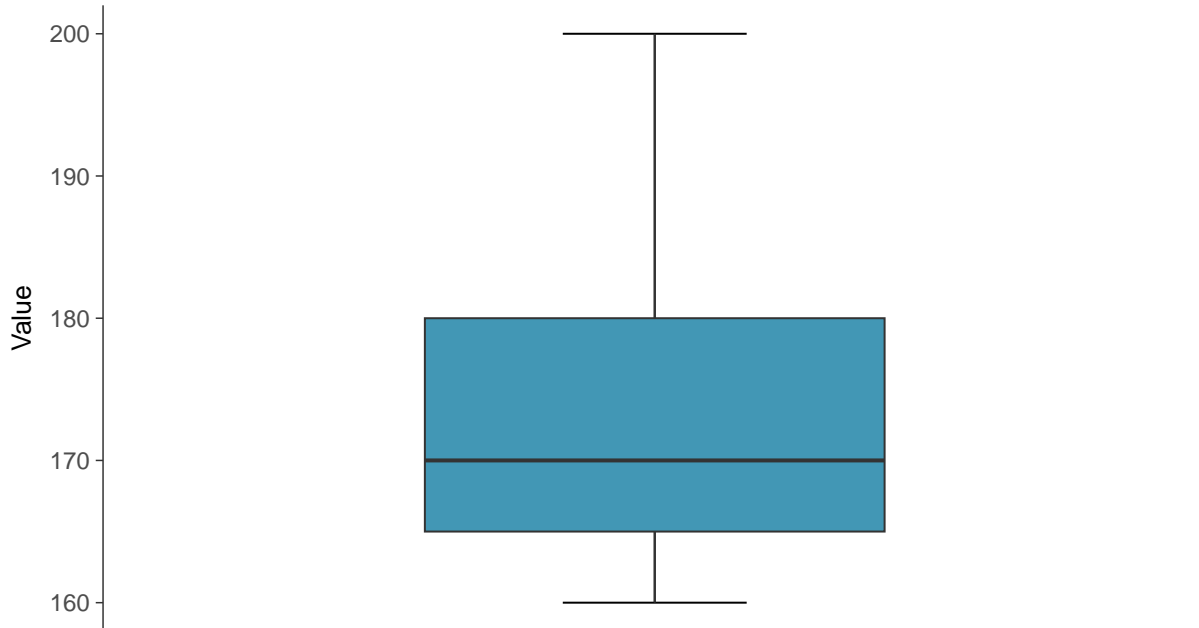
Barium, MW-15014R (ug/L)





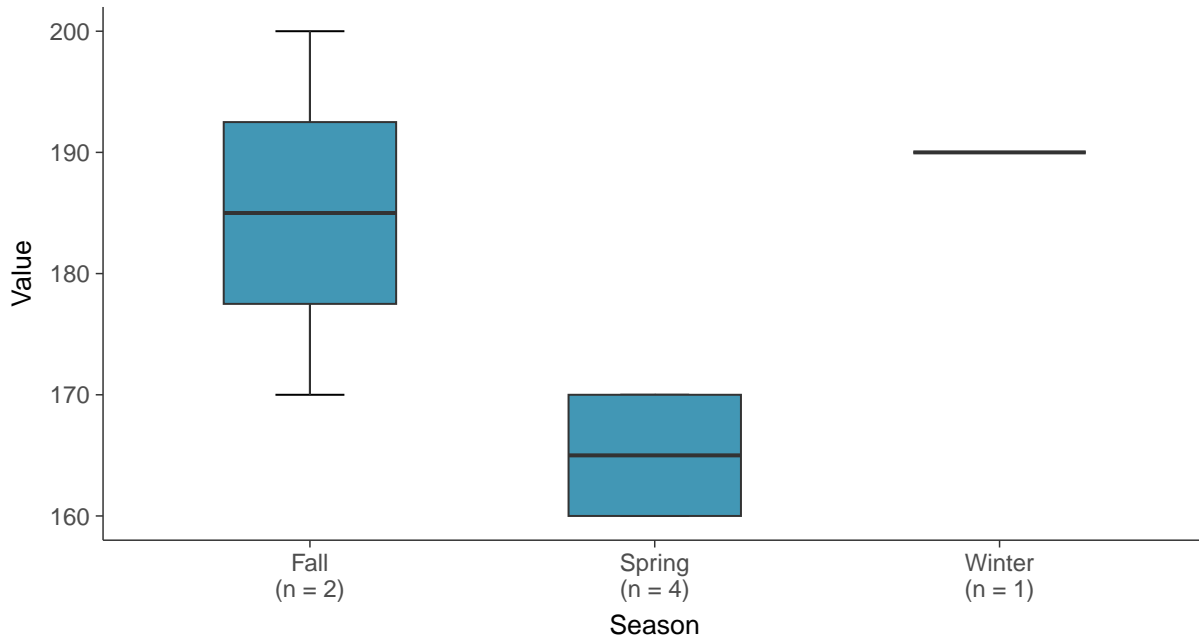
Boxplot

Barium, MW-15014R (ug/L)



Boxplot by Season

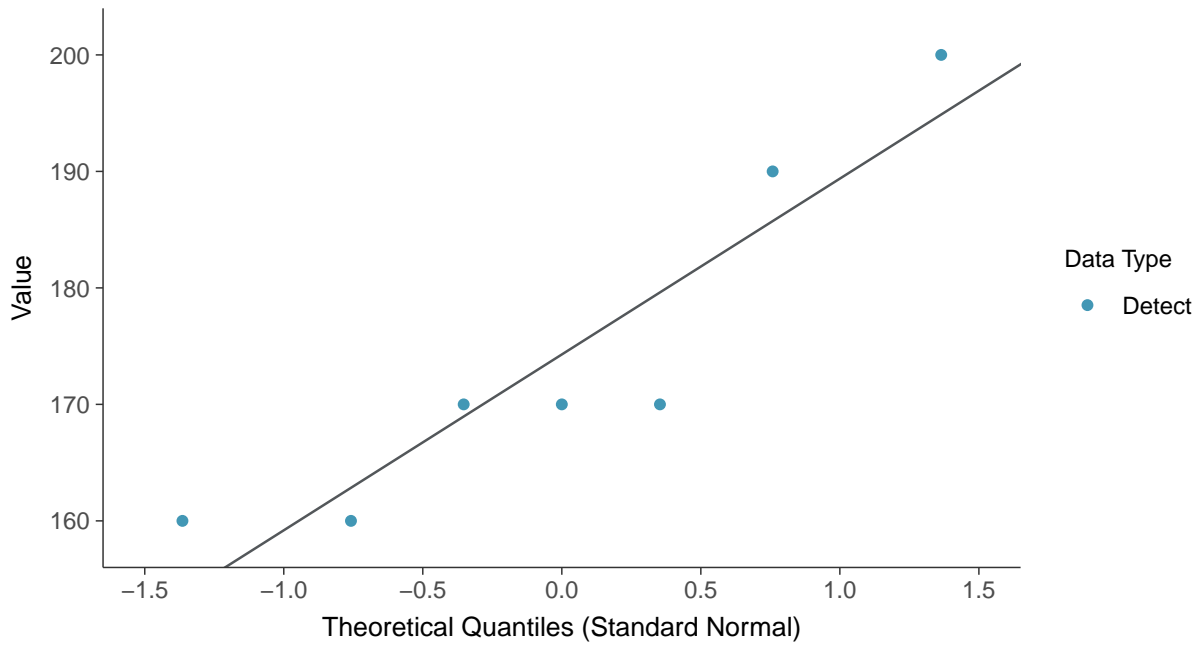
Barium, MW-15014R (ug/L)





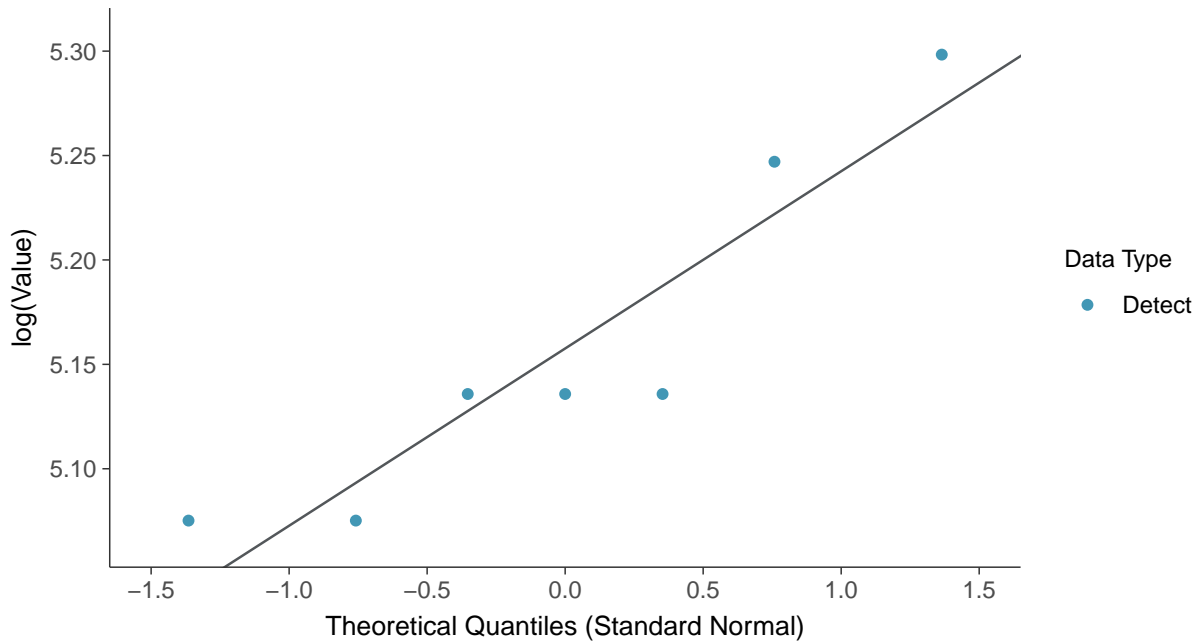
Normal Q-Q plot

Barium, MW-15014R (ug/L)



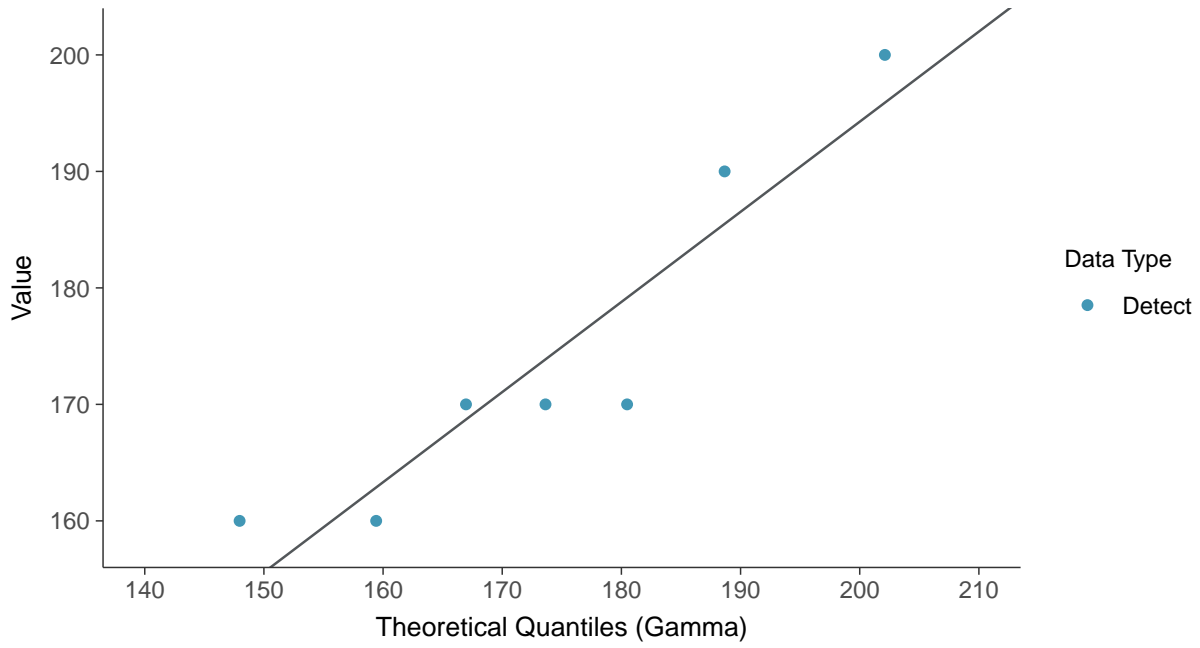
Lognormal Q-Q plot

Barium, MW-15014R (ug/L)





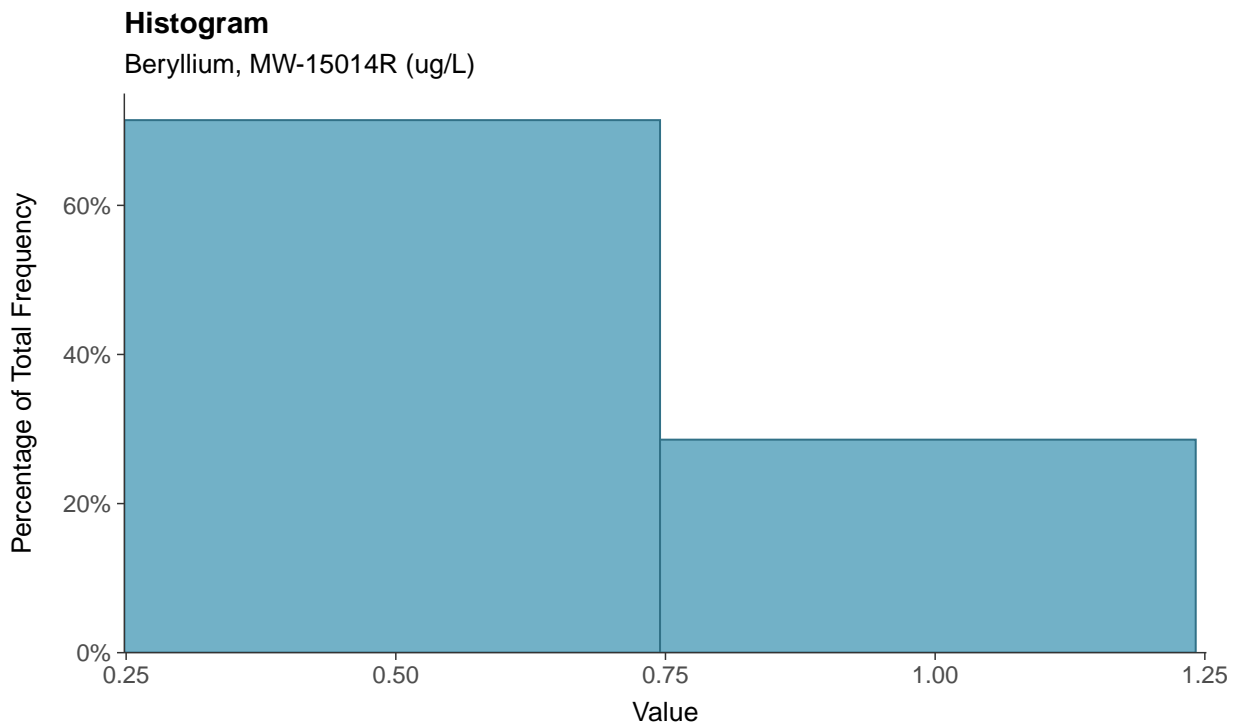
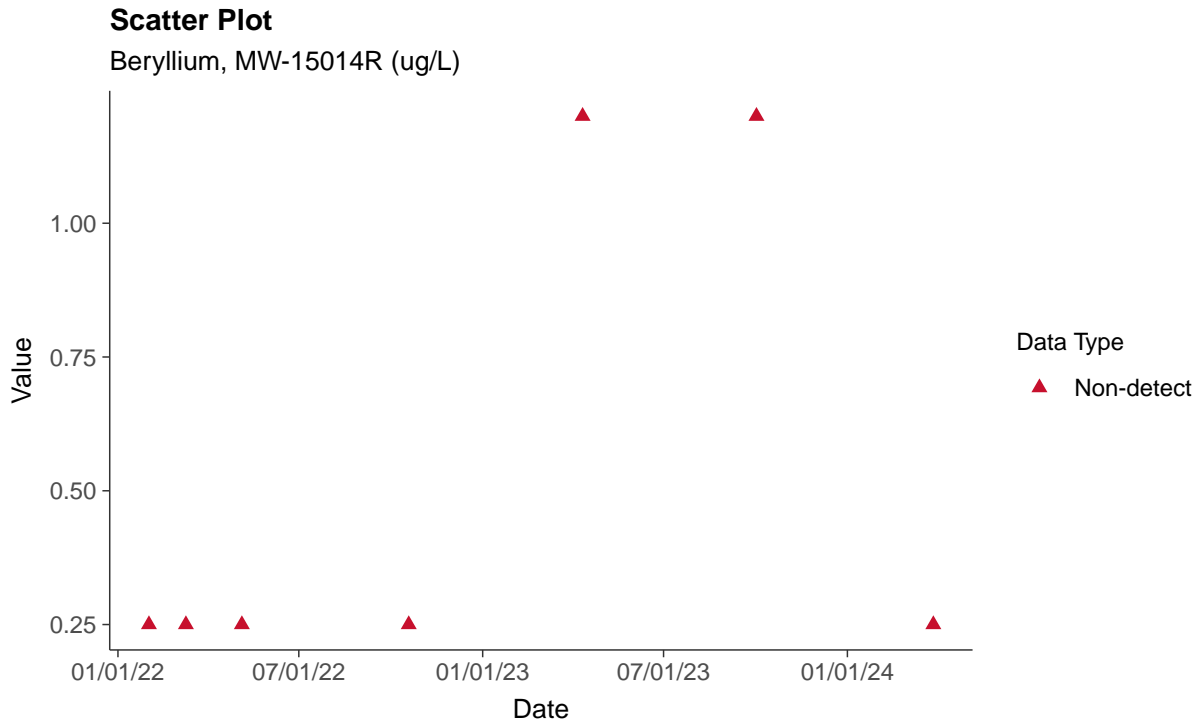
Gamma Q-Q plot
Barium, MW-15014R (ug/L)





Appendix IV: Beryllium, MW-15014R

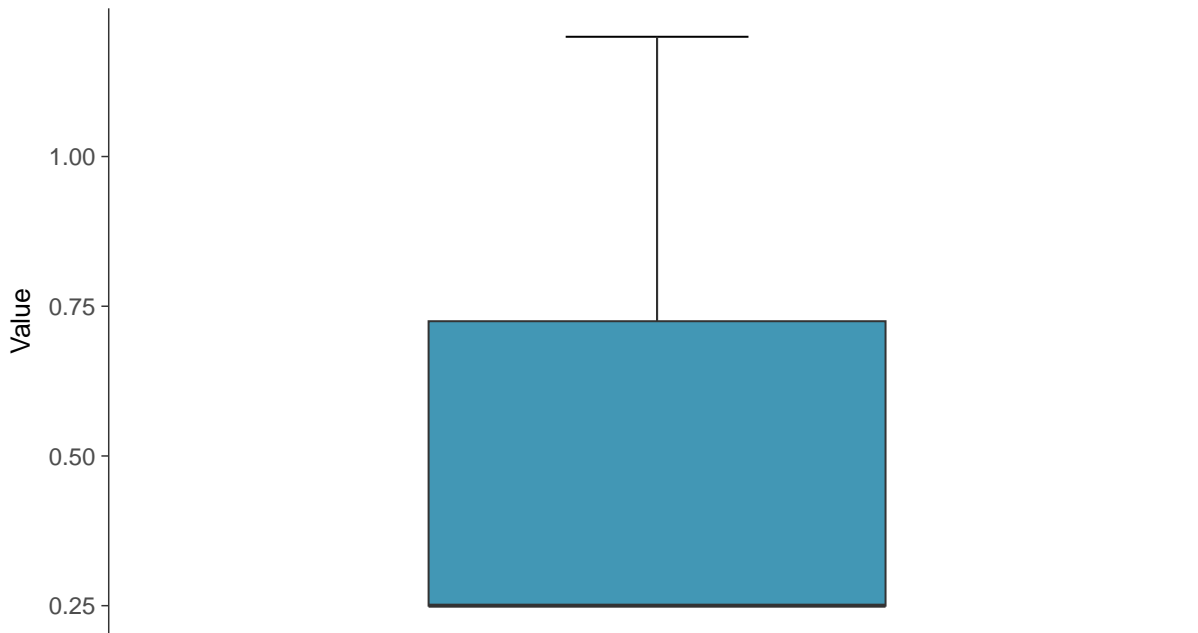
ID: 04_2_104





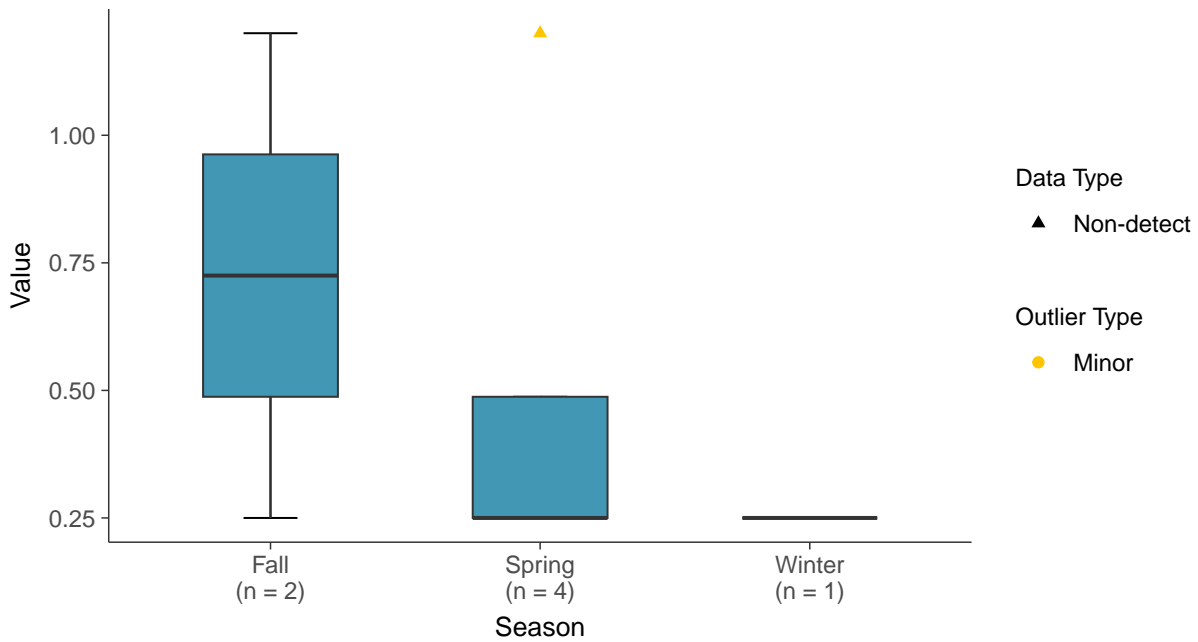
Boxplot

Beryllium, MW-15014R (ug/L)



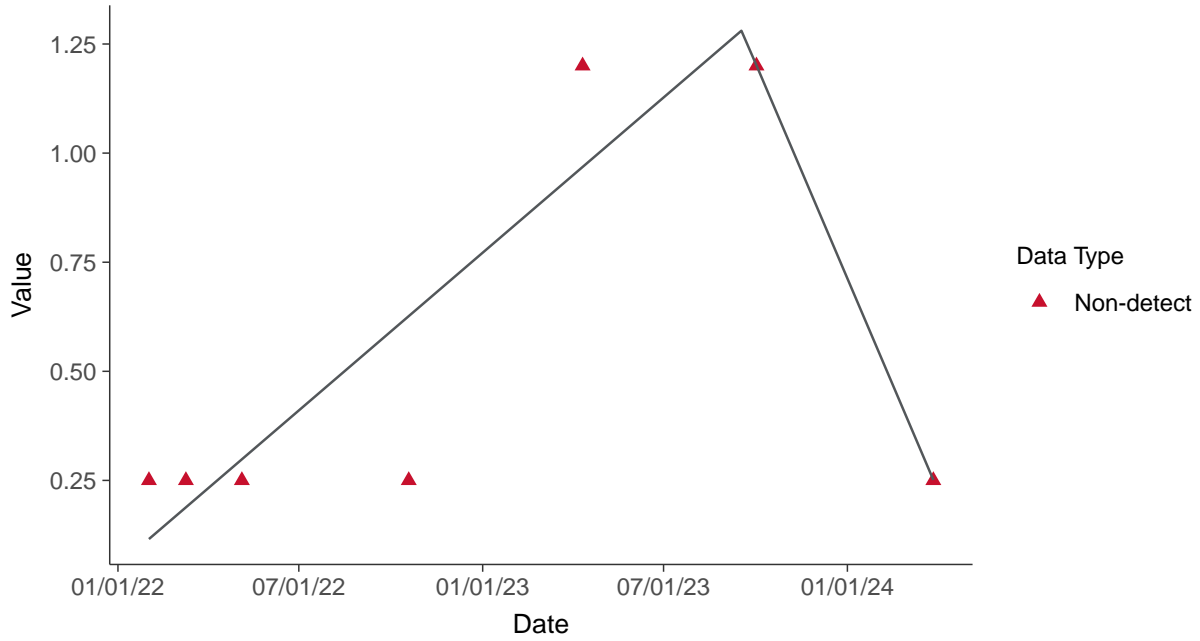
Boxplot by Season

Beryllium, MW-15014R (ug/L)





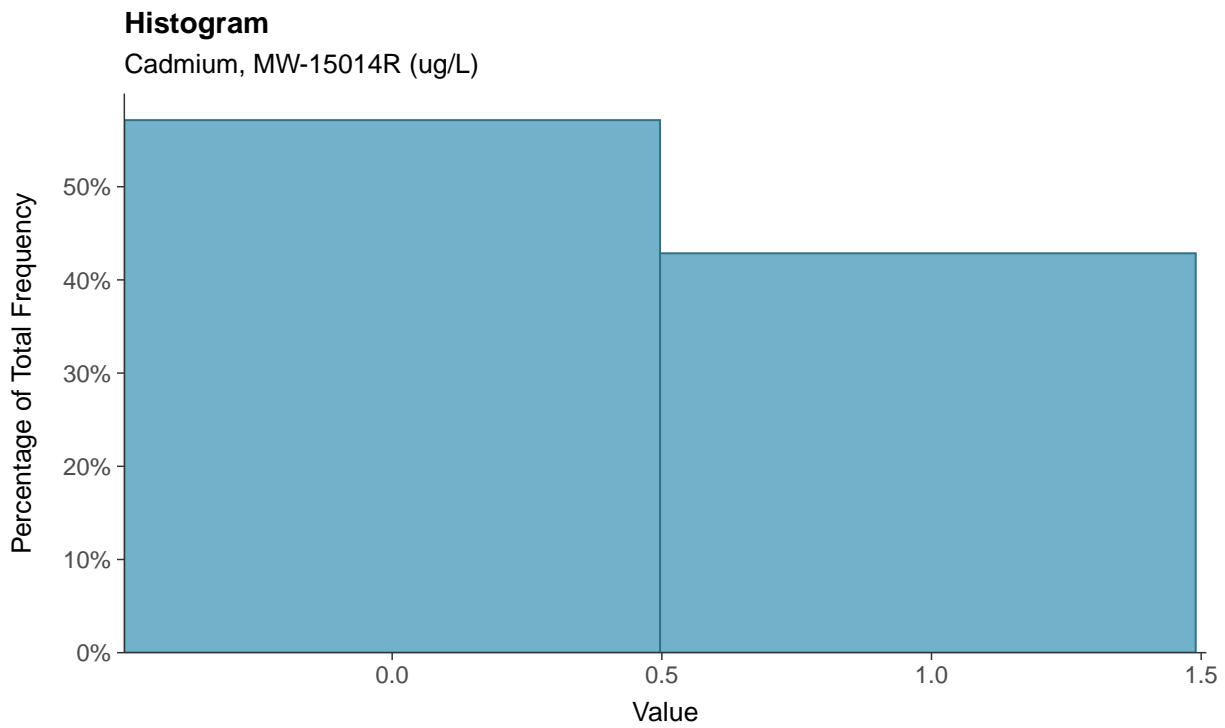
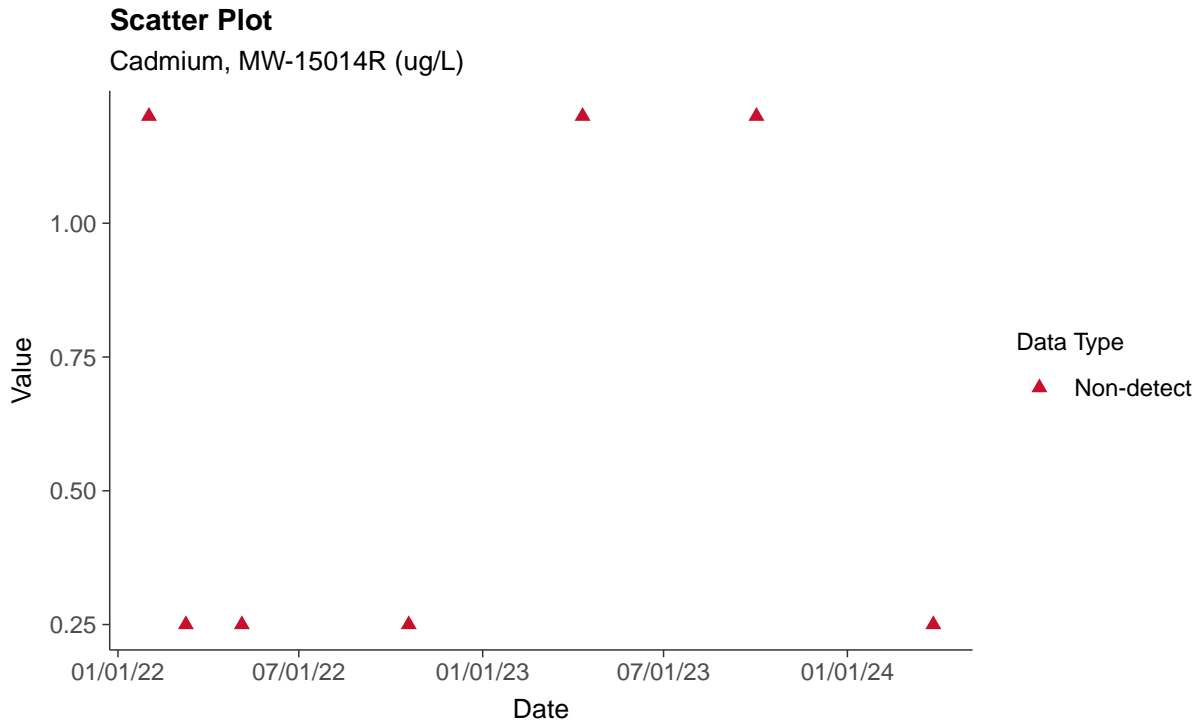
Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15014R (ug/L)





Appendix IV: Cadmium, MW-15014R

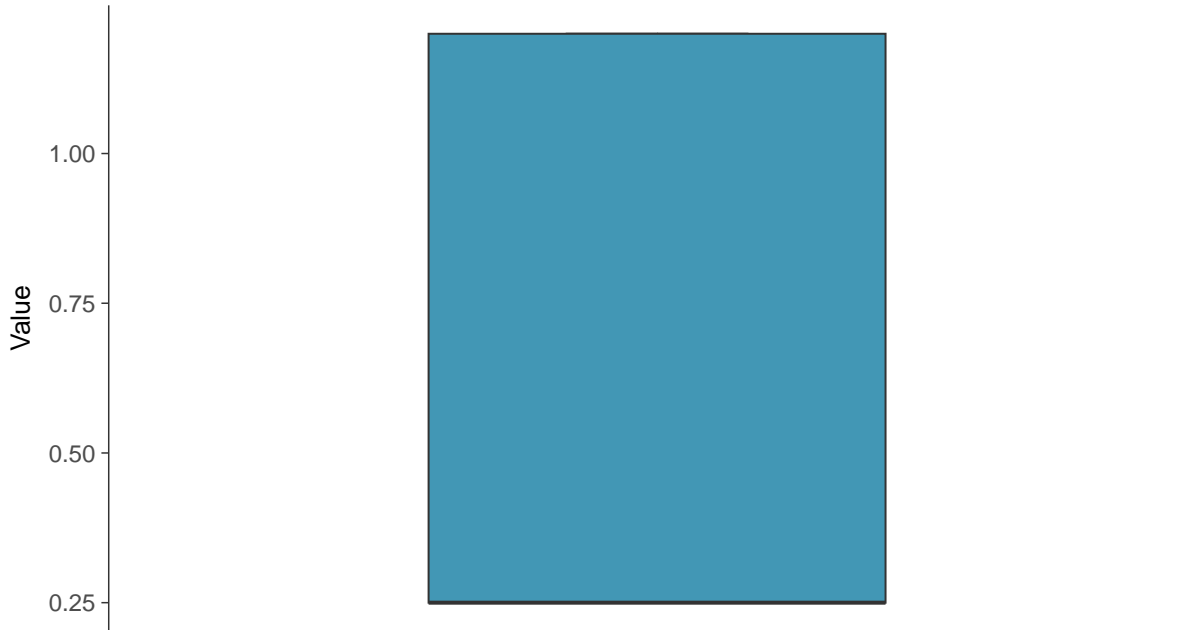
ID: 04_2_106





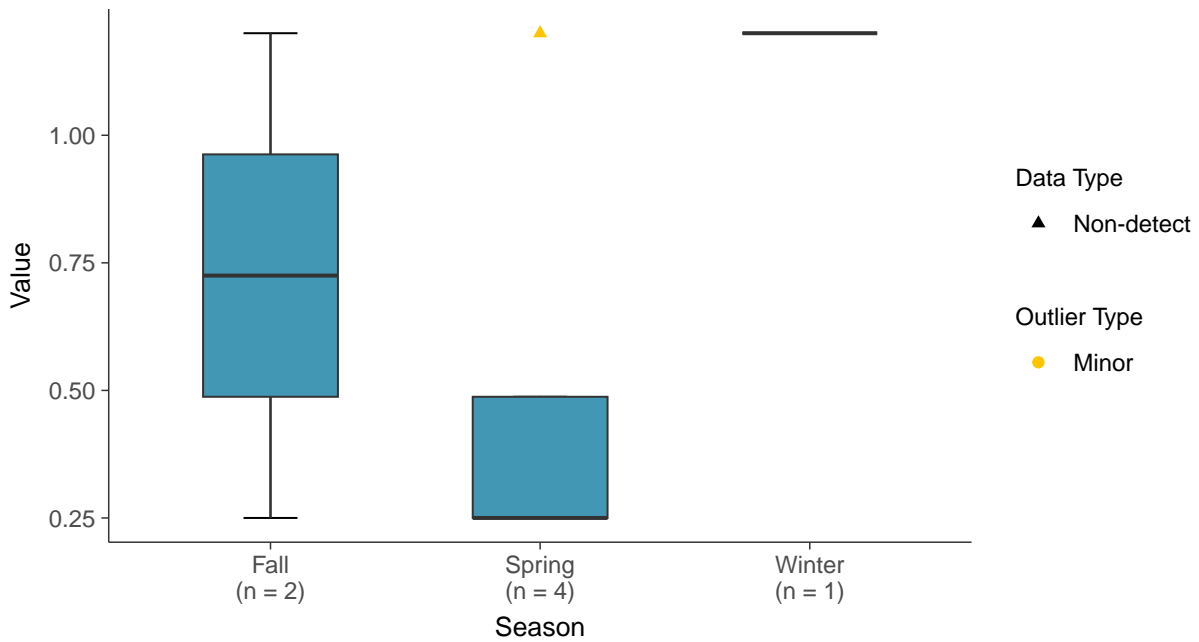
Boxplot

Cadmium, MW-15014R (ug/L)



Boxplot by Season

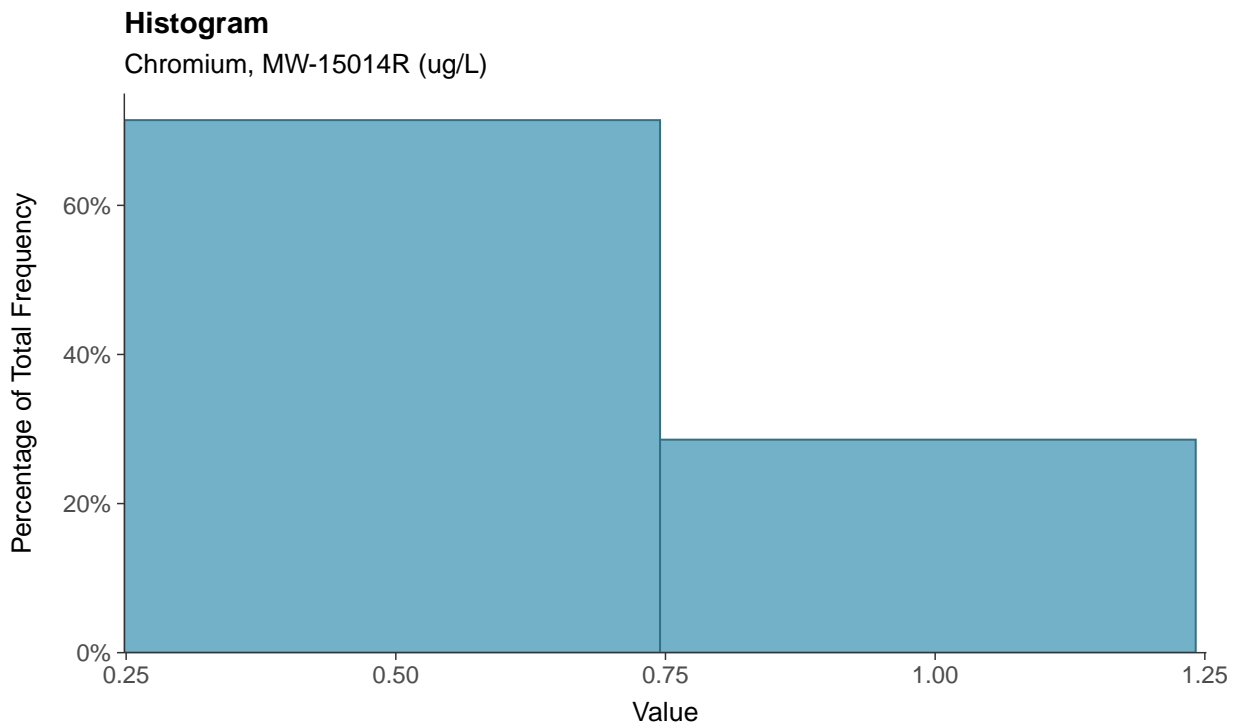
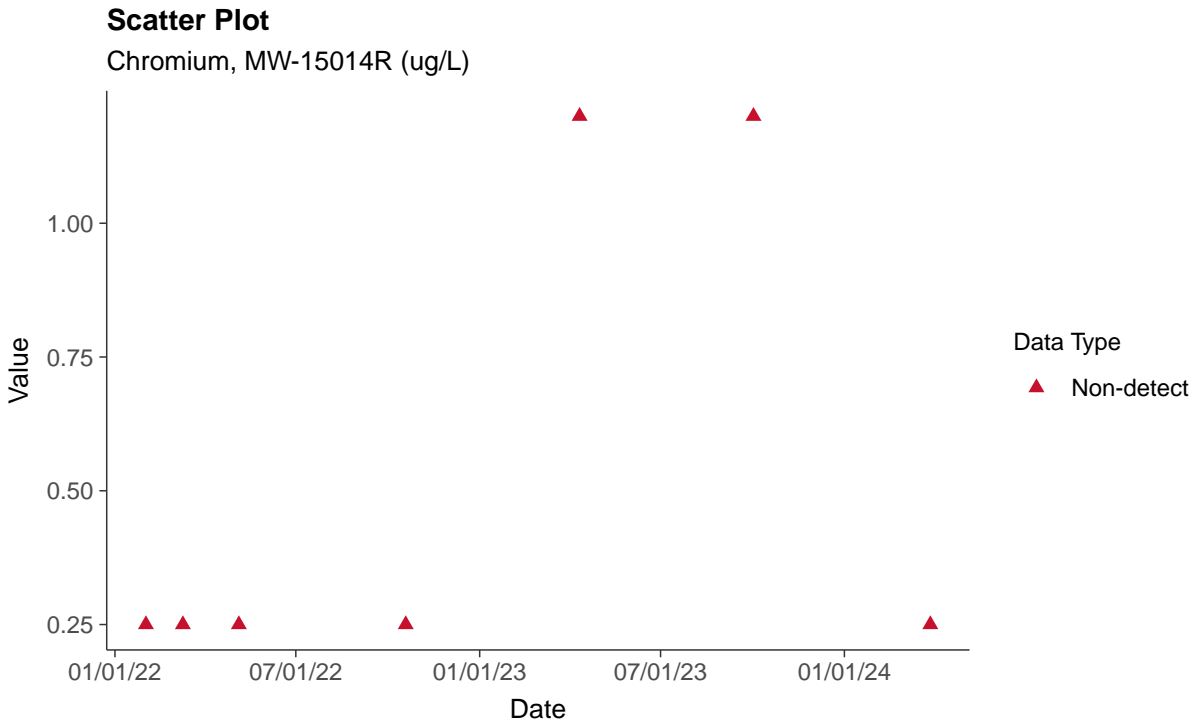
Cadmium, MW-15014R (ug/L)





Appendix IV: Chromium, MW-15014R

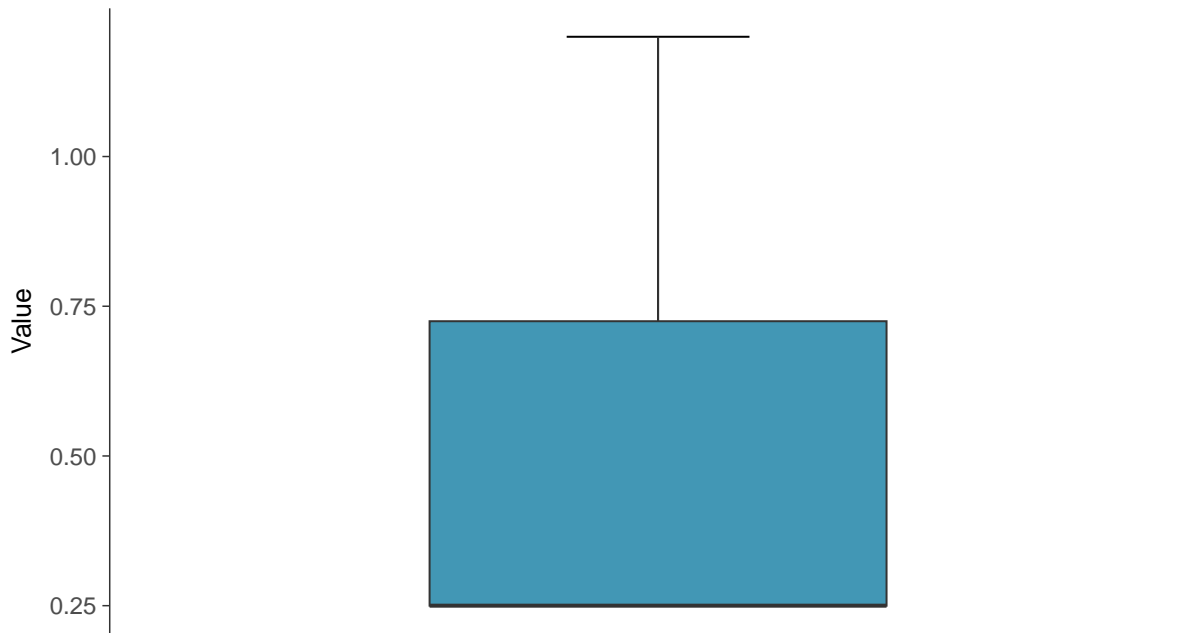
ID: 04_2_109





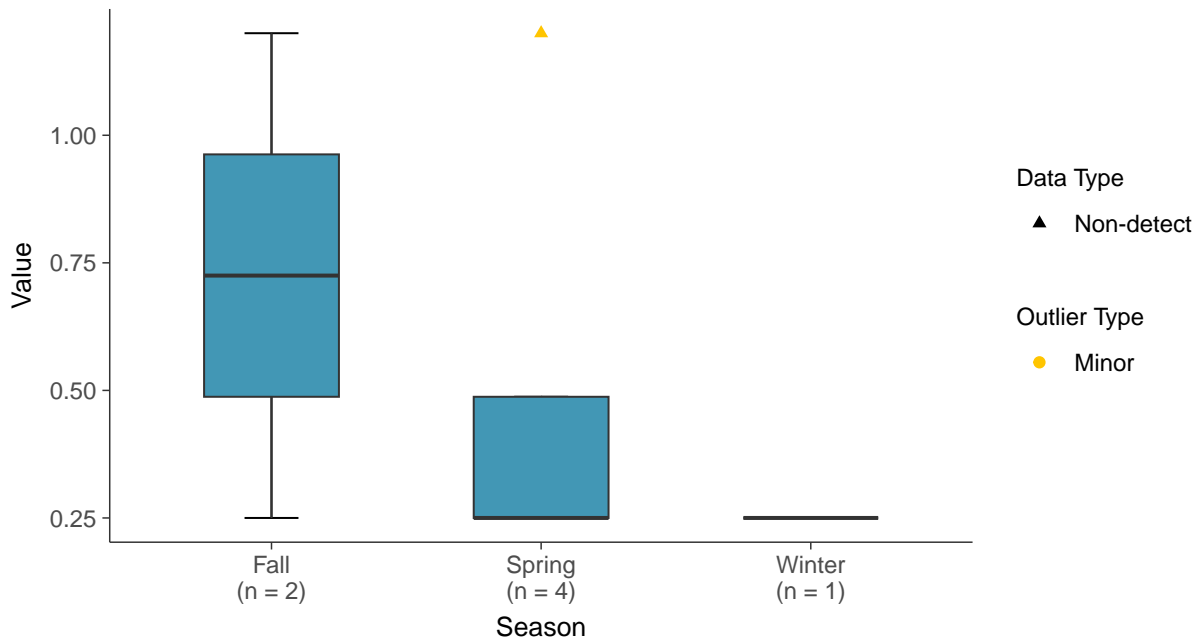
Boxplot

Chromium, MW-15014R (ug/L)



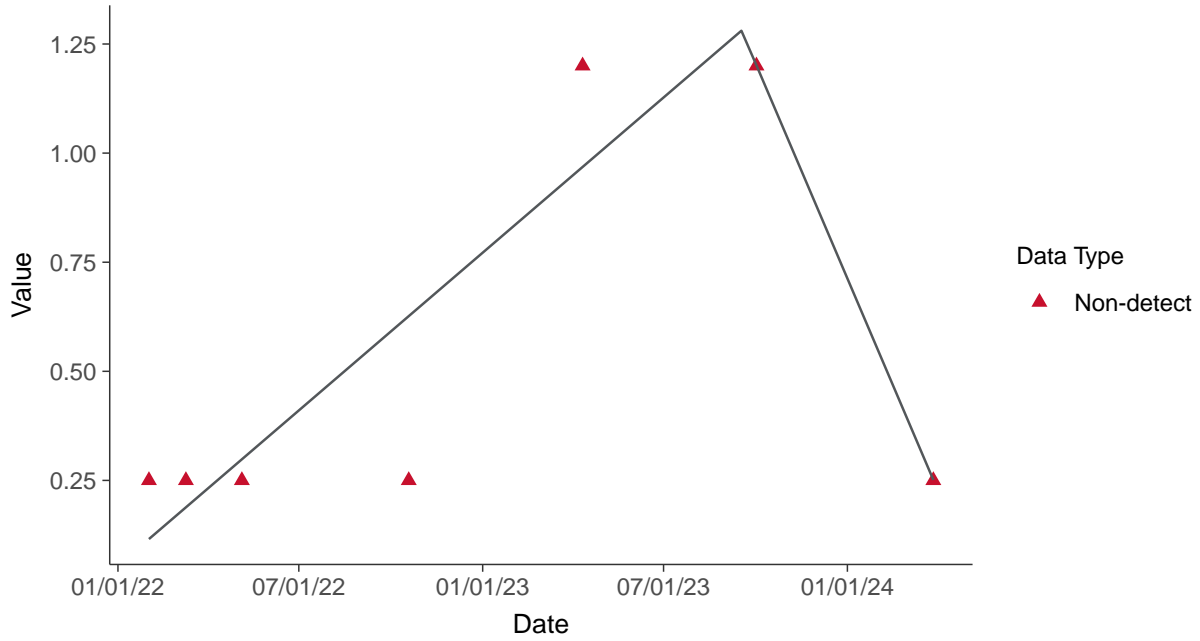
Boxplot by Season

Chromium, MW-15014R (ug/L)





Trend Regression: Piecewise Linear-Linear
Chromium, MW-15014R (ug/L)



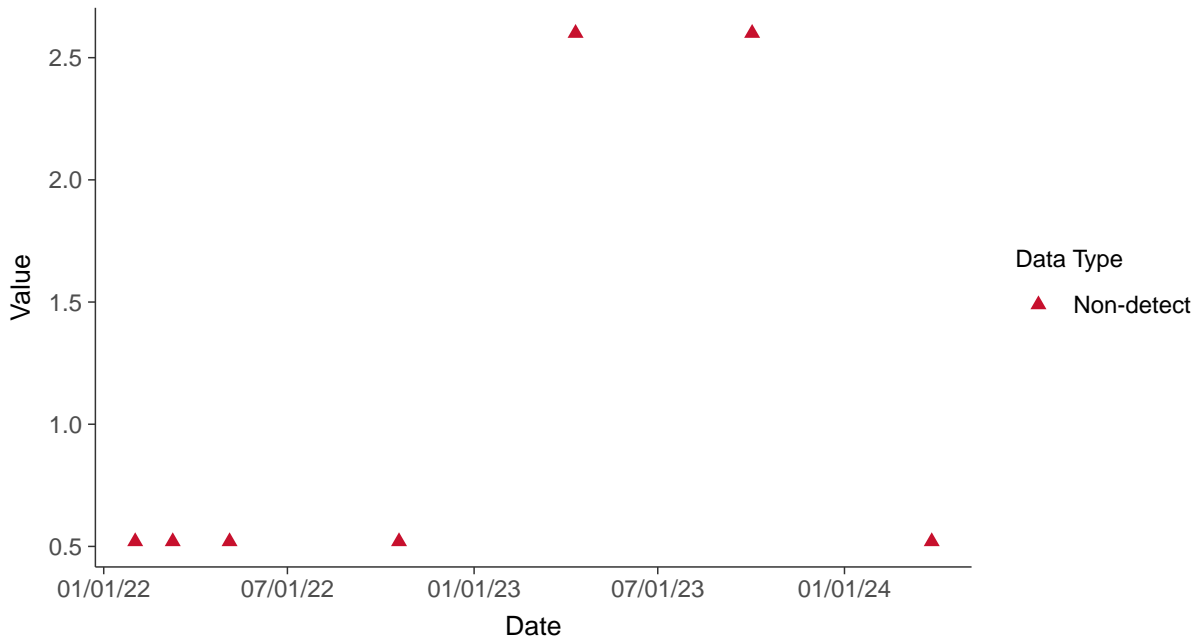


Appendix IV: Cobalt, MW-15014R

ID: 04_2_110

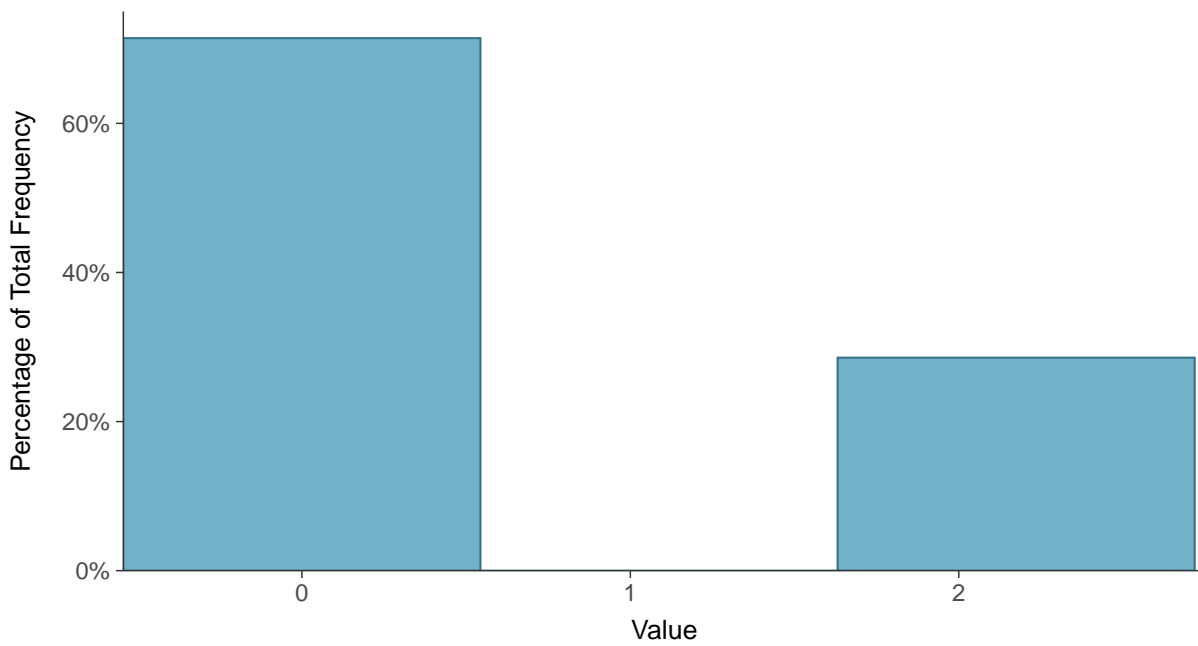
Scatter Plot

Cobalt, MW-15014R (ug/L)



Histogram

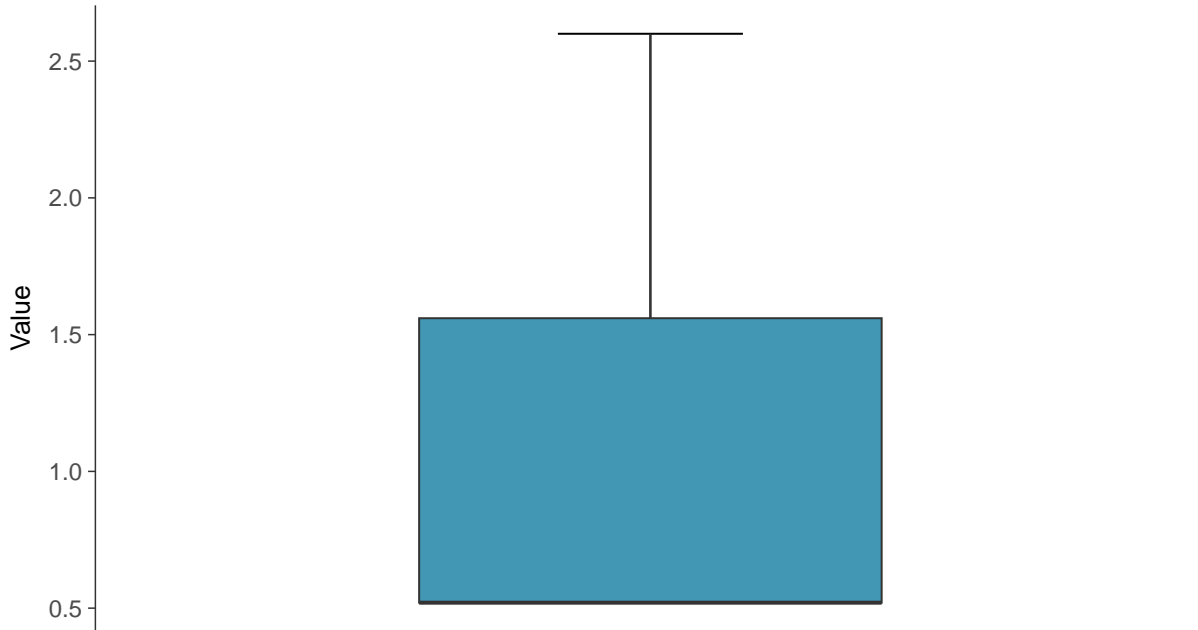
Cobalt, MW-15014R (ug/L)





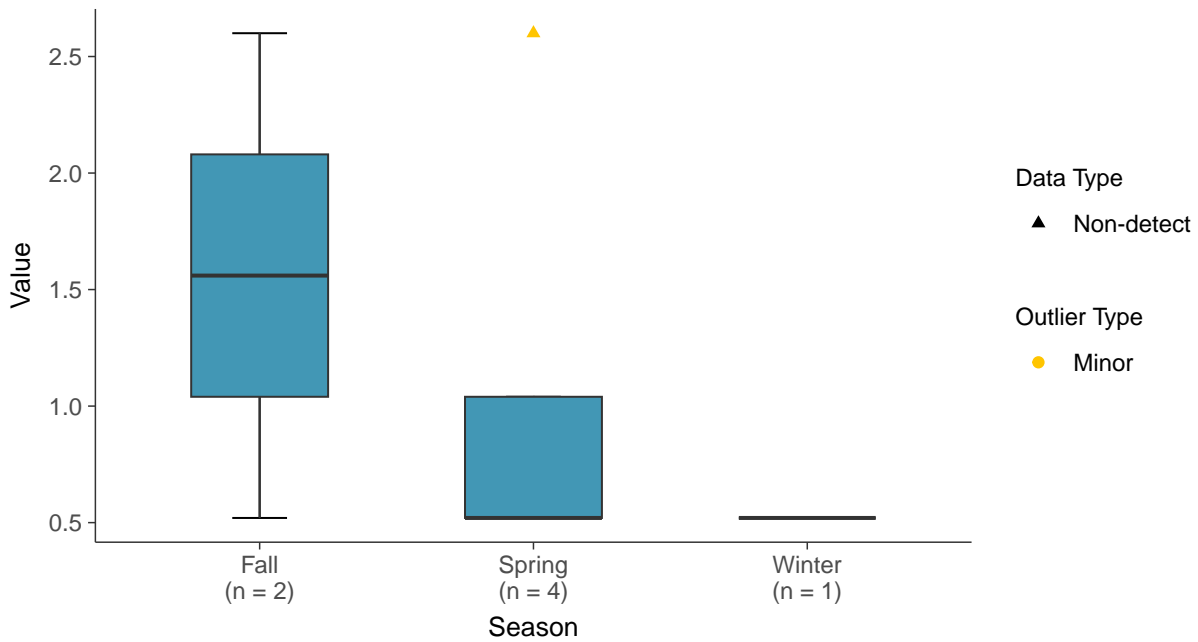
Boxplot

Cobalt, MW-15014R (ug/L)



Boxplot by Season

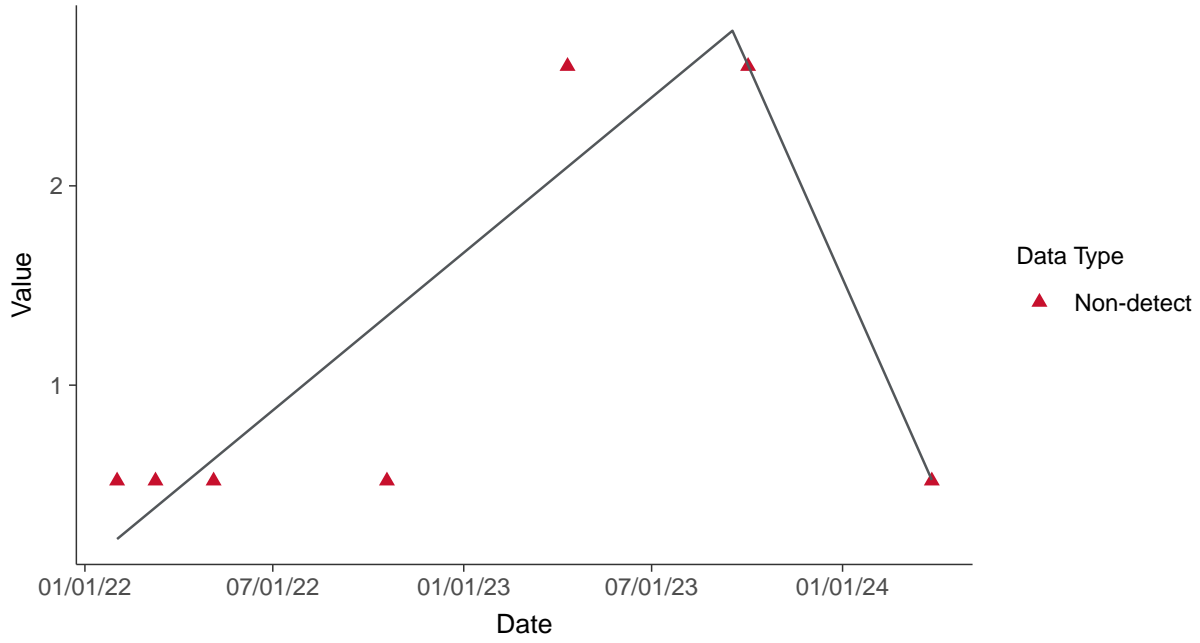
Cobalt, MW-15014R (ug/L)





Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15014R (ug/L)



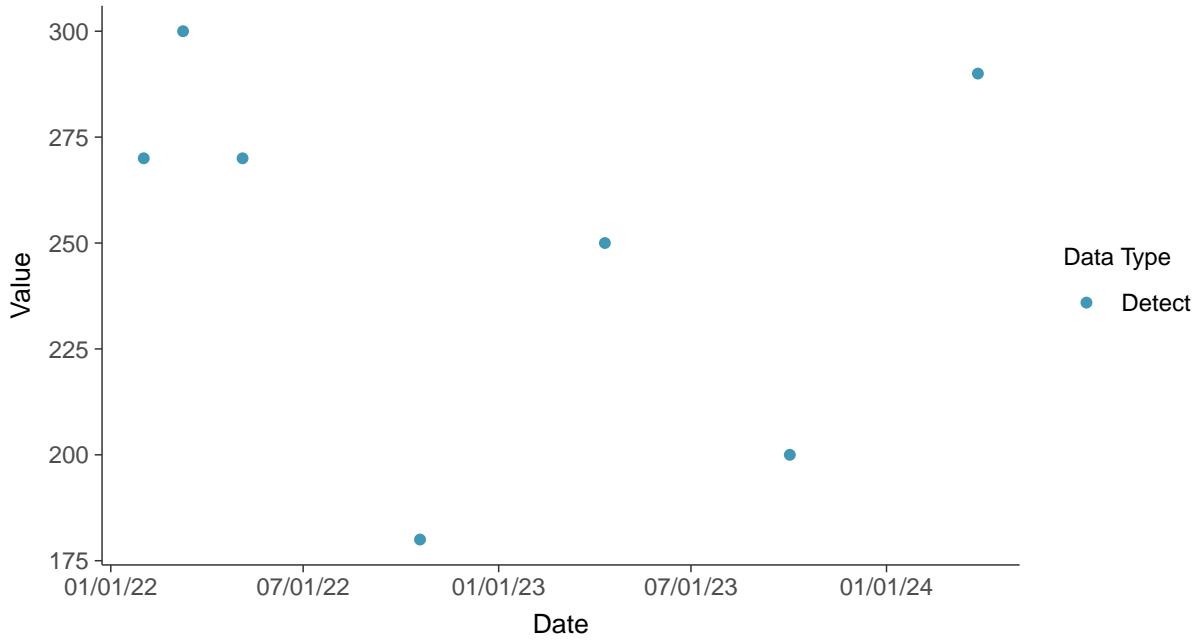


Appendix IV: Fluoride, MW-15014R

ID: 04_2_114

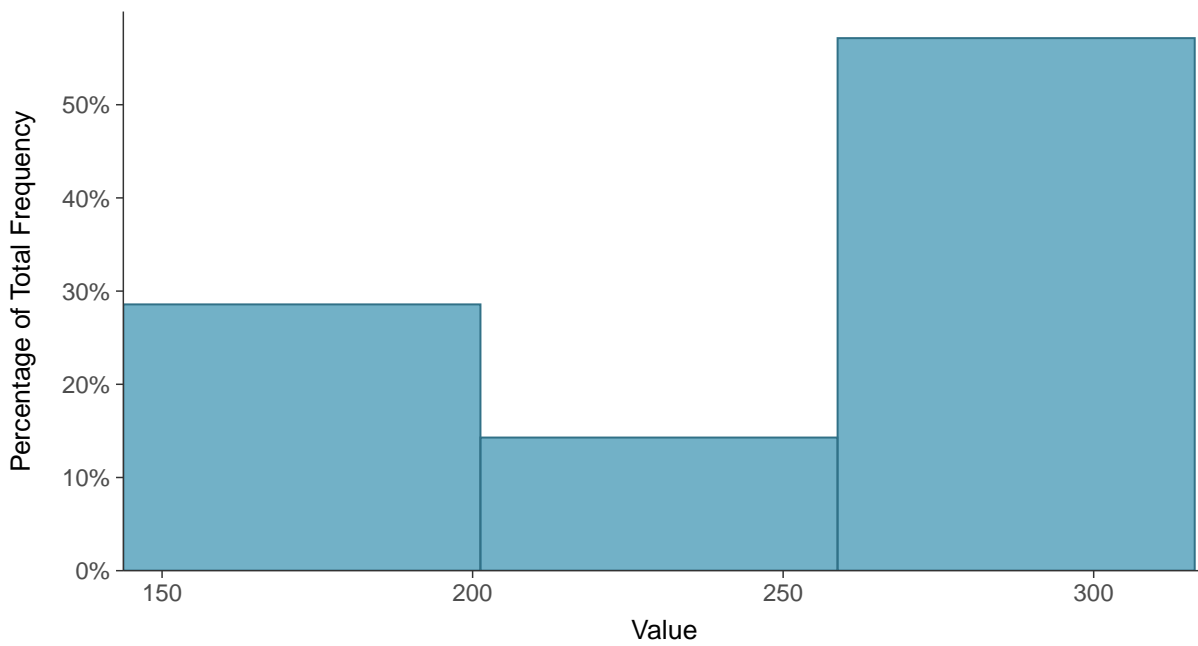
Scatter Plot

Fluoride, MW-15014R (ug/L)



Histogram

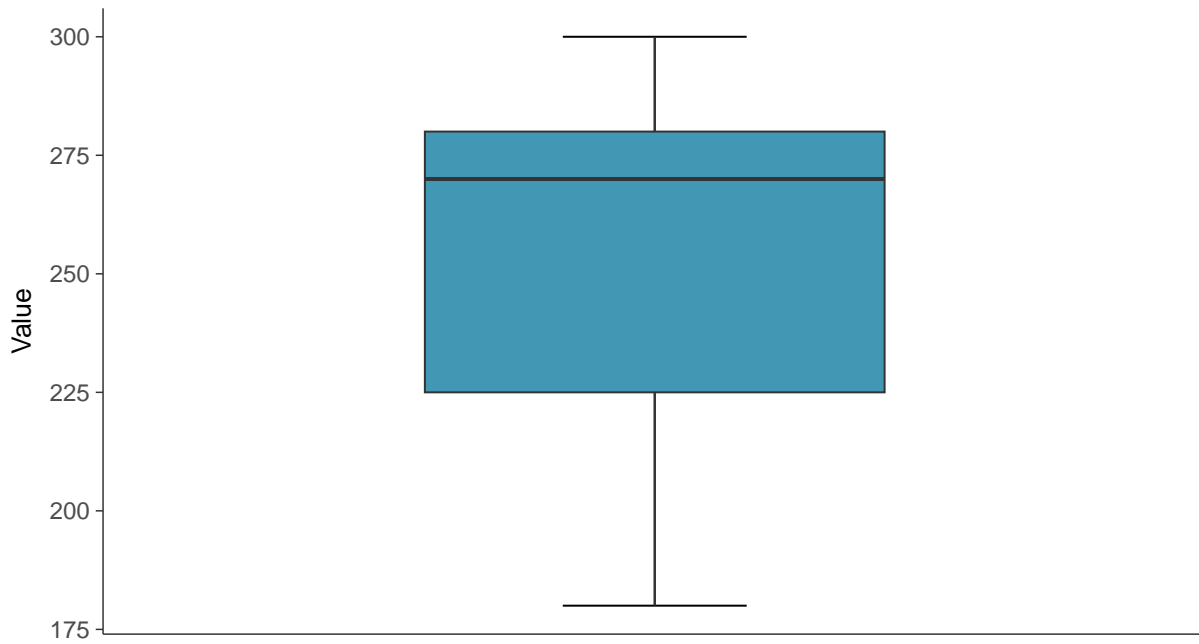
Fluoride, MW-15014R (ug/L)





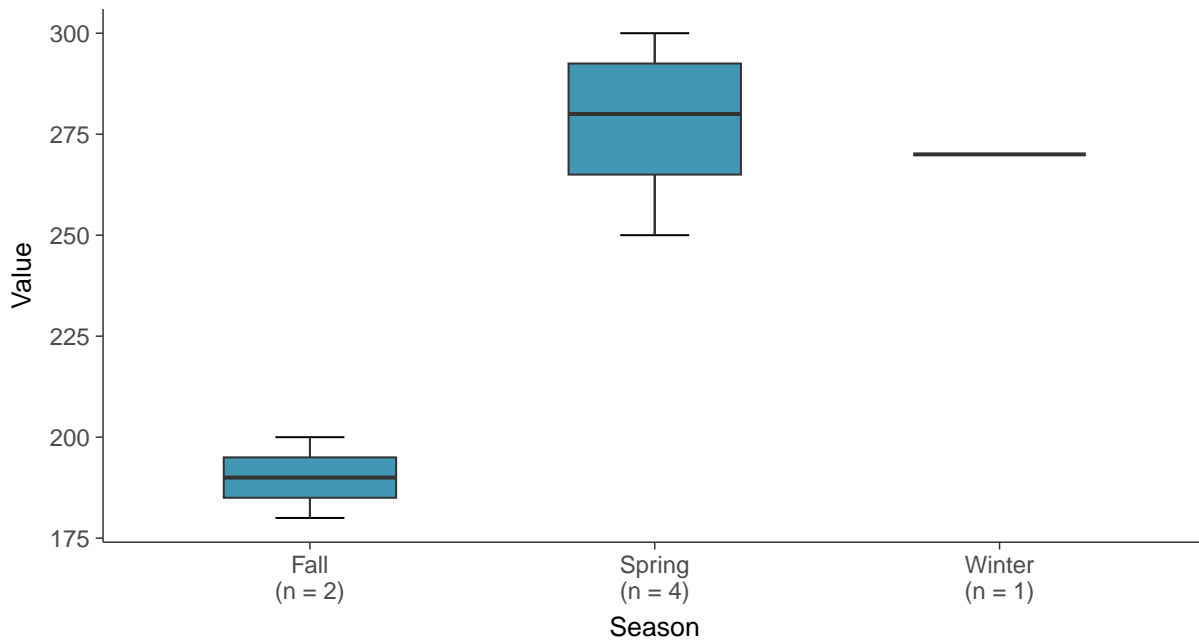
Boxplot

Fluoride, MW-15014R (ug/L)



Boxplot by Season

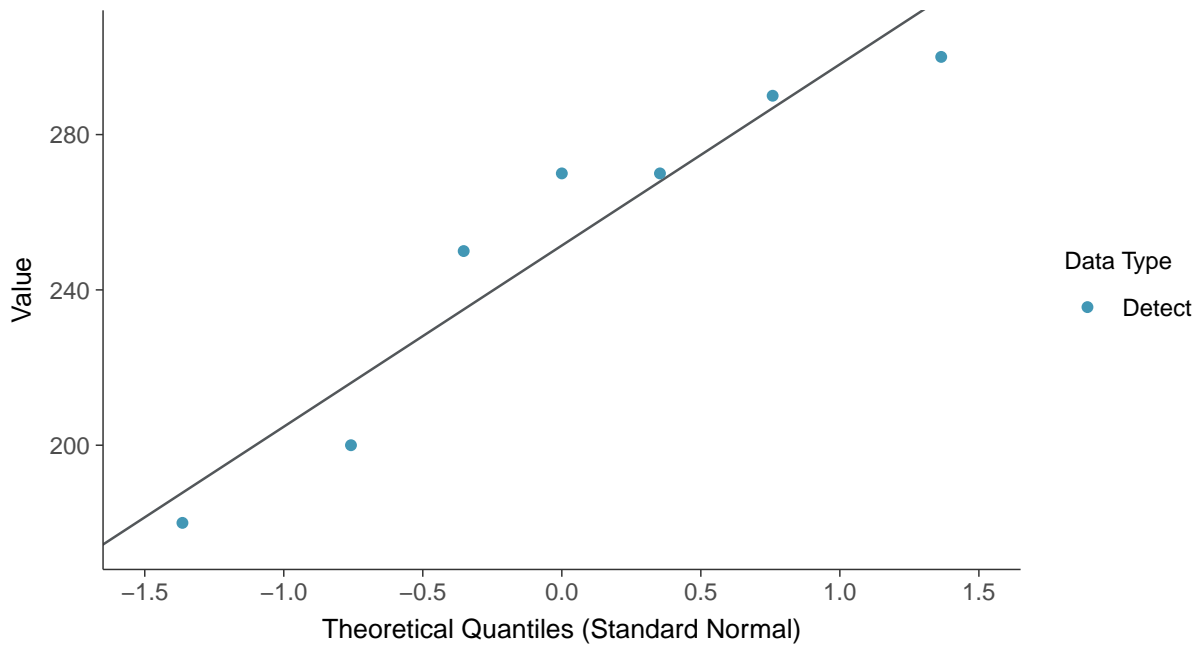
Fluoride, MW-15014R (ug/L)





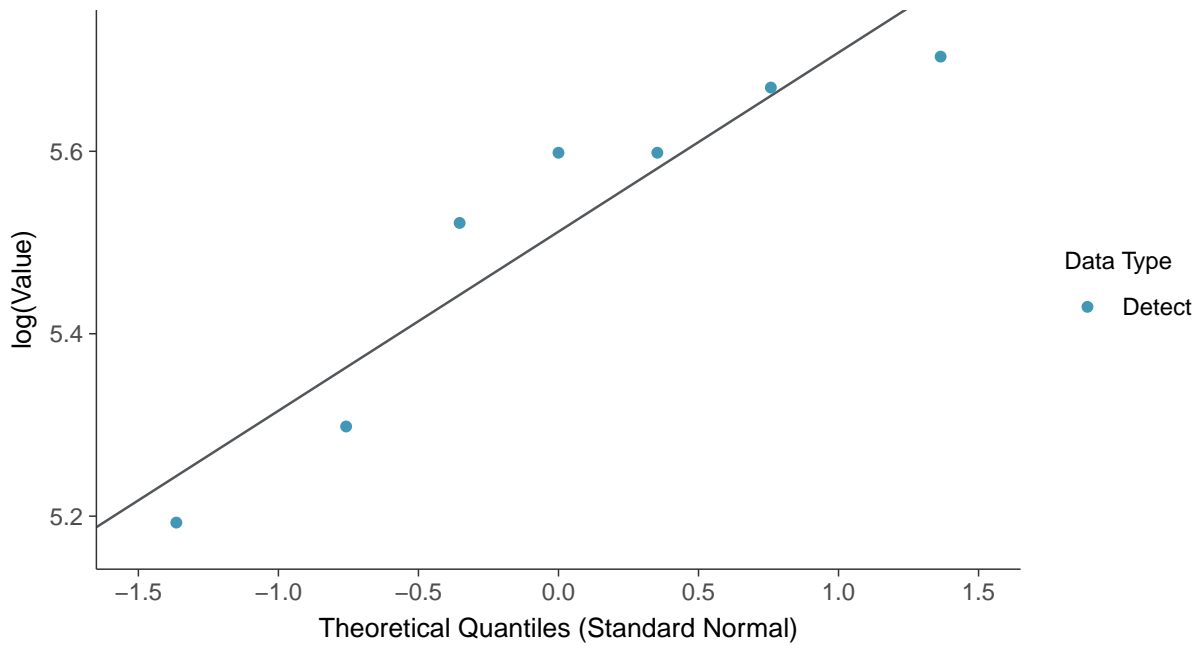
Normal Q-Q plot

Fluoride, MW-15014R (ug/L)



Lognormal Q-Q plot

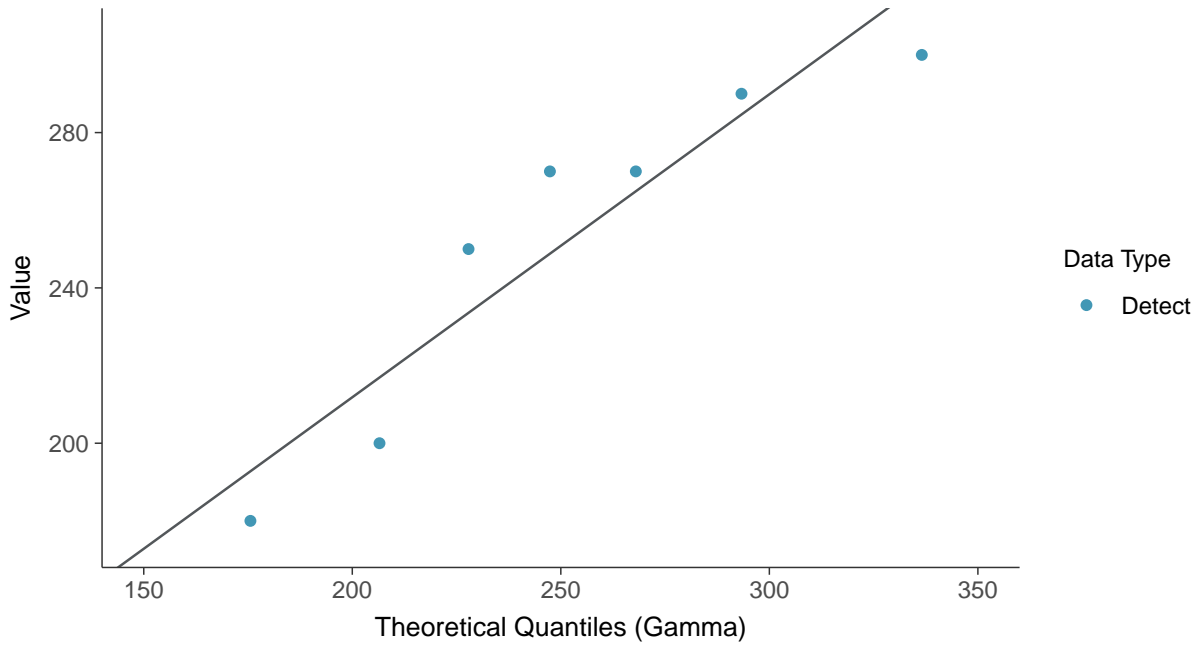
Fluoride, MW-15014R (ug/L)





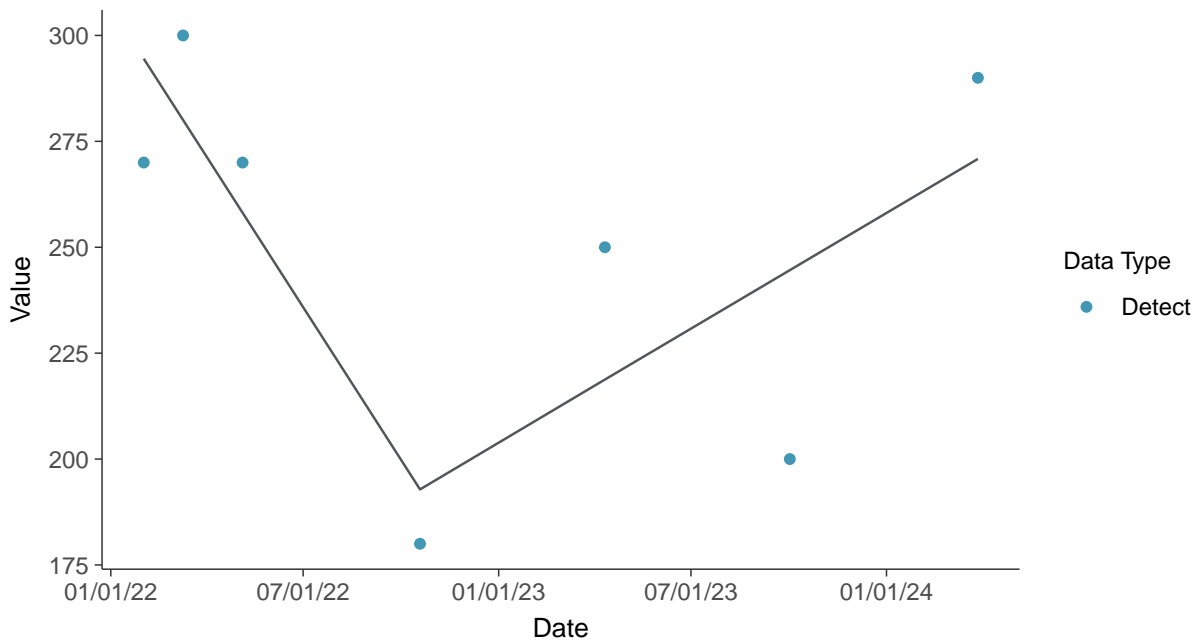
Gamma Q-Q plot

Fluoride, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear

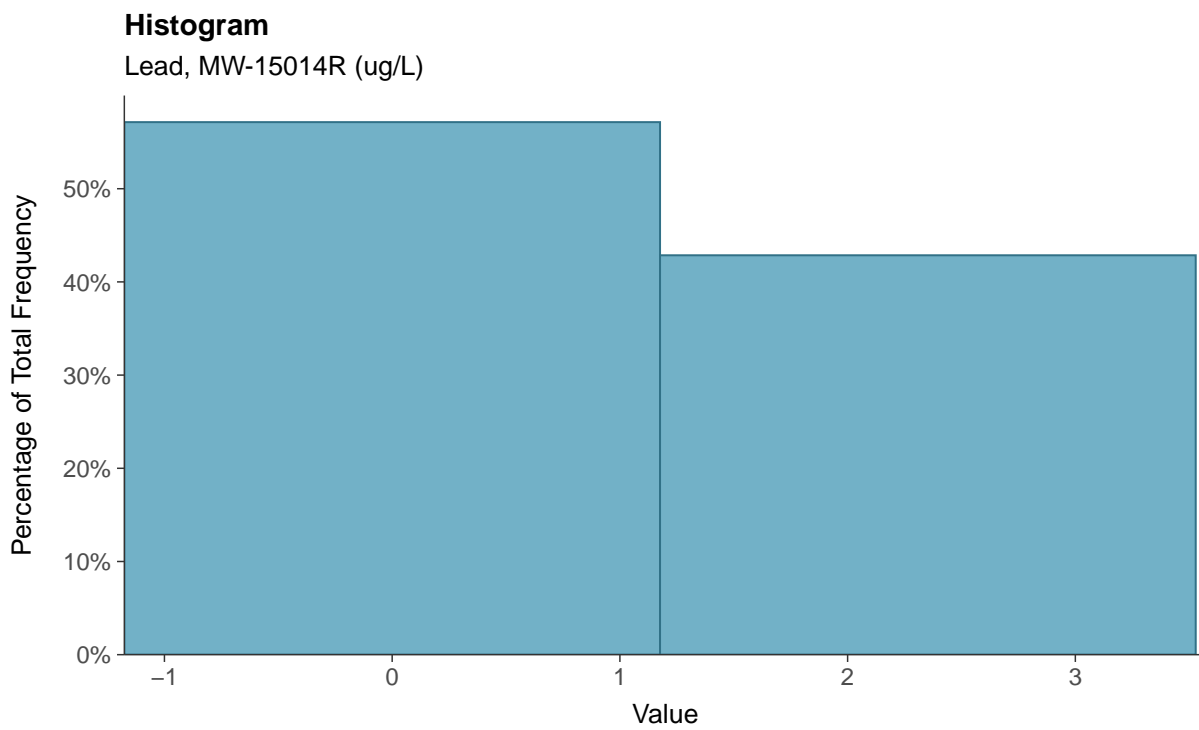
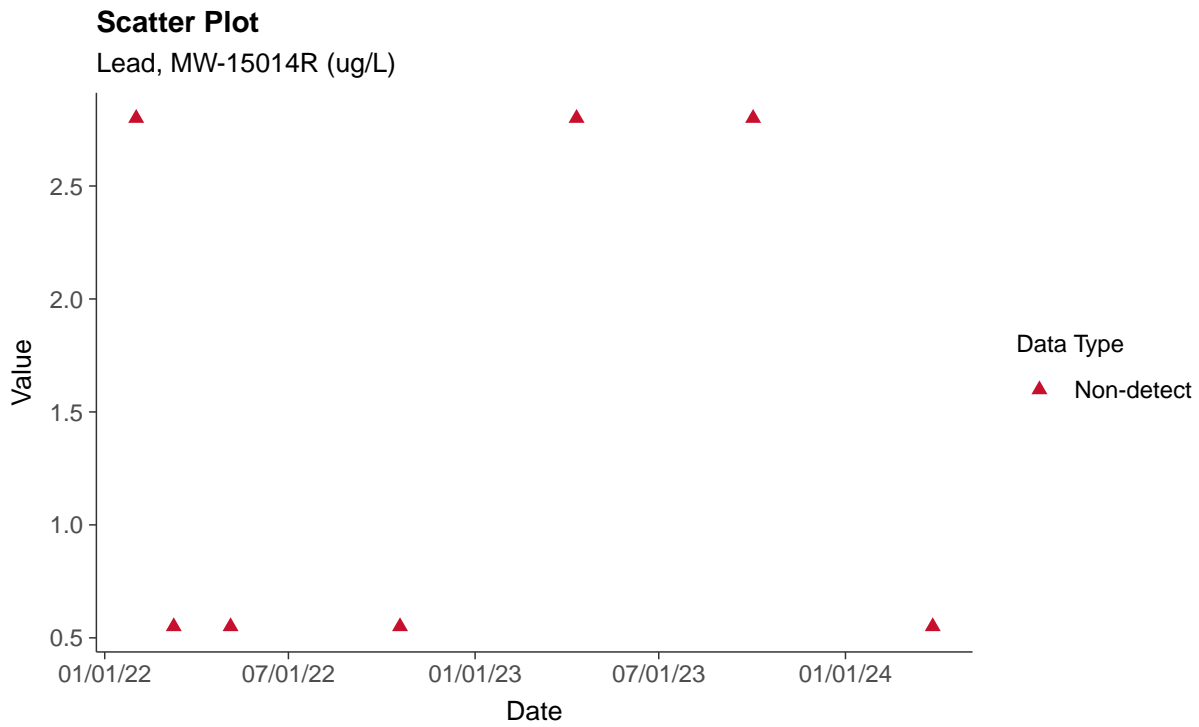
Fluoride, MW-15014R (ug/L)





Appendix IV: Lead, MW-15014R

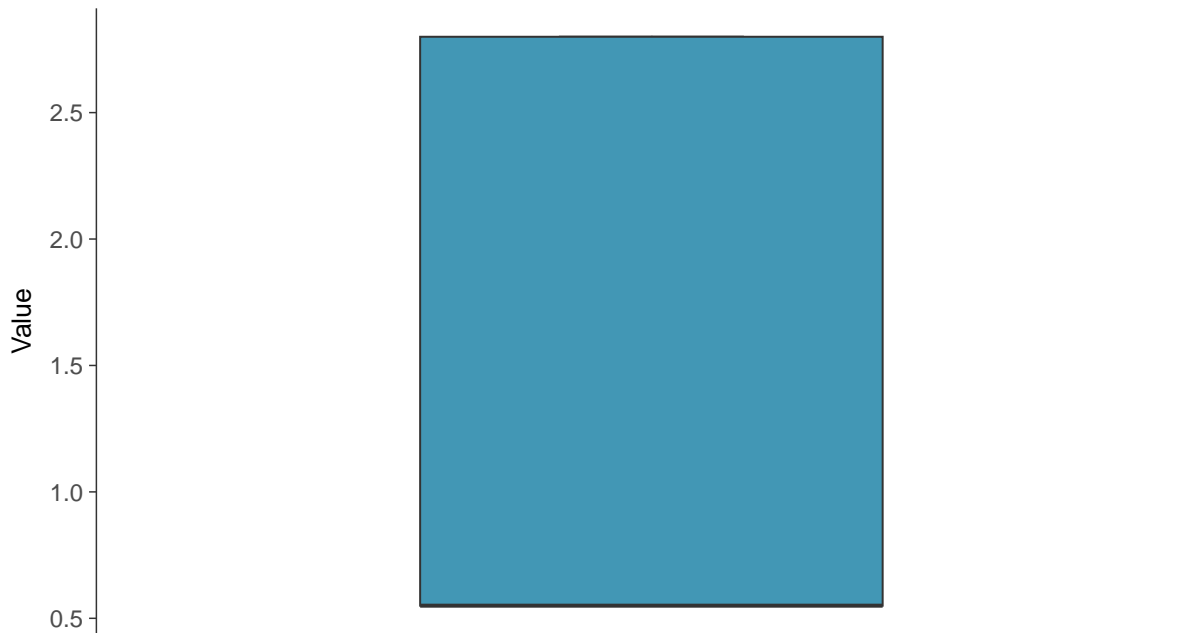
ID: 04_2_116





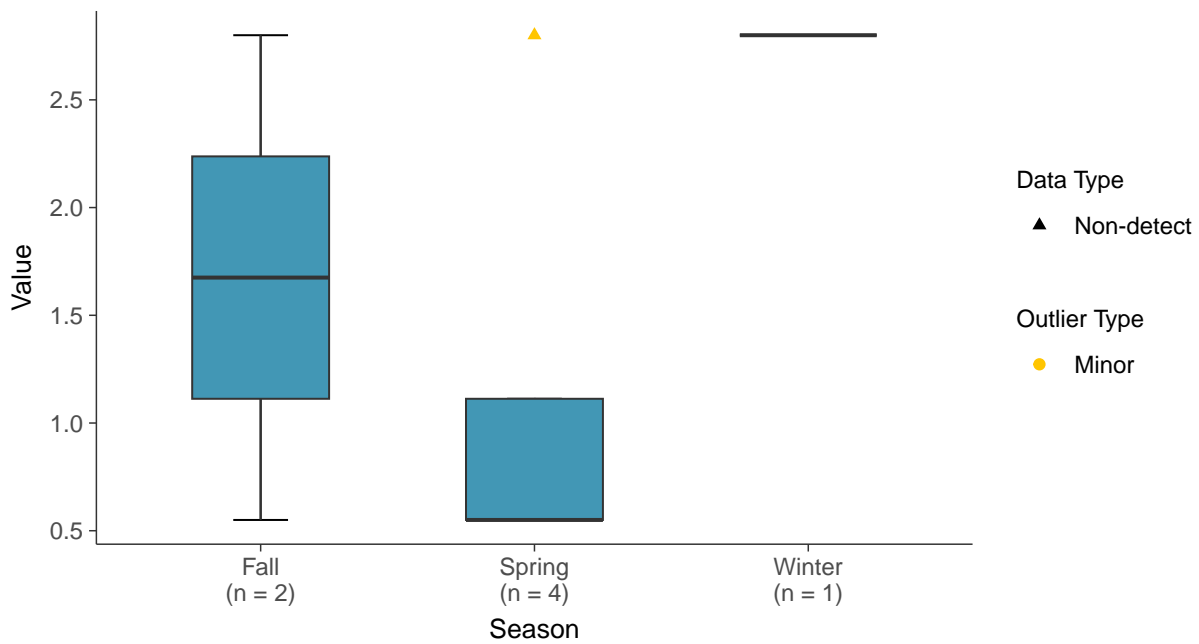
Boxplot

Lead, MW-15014R (ug/L)



Boxplot by Season

Lead, MW-15014R (ug/L)



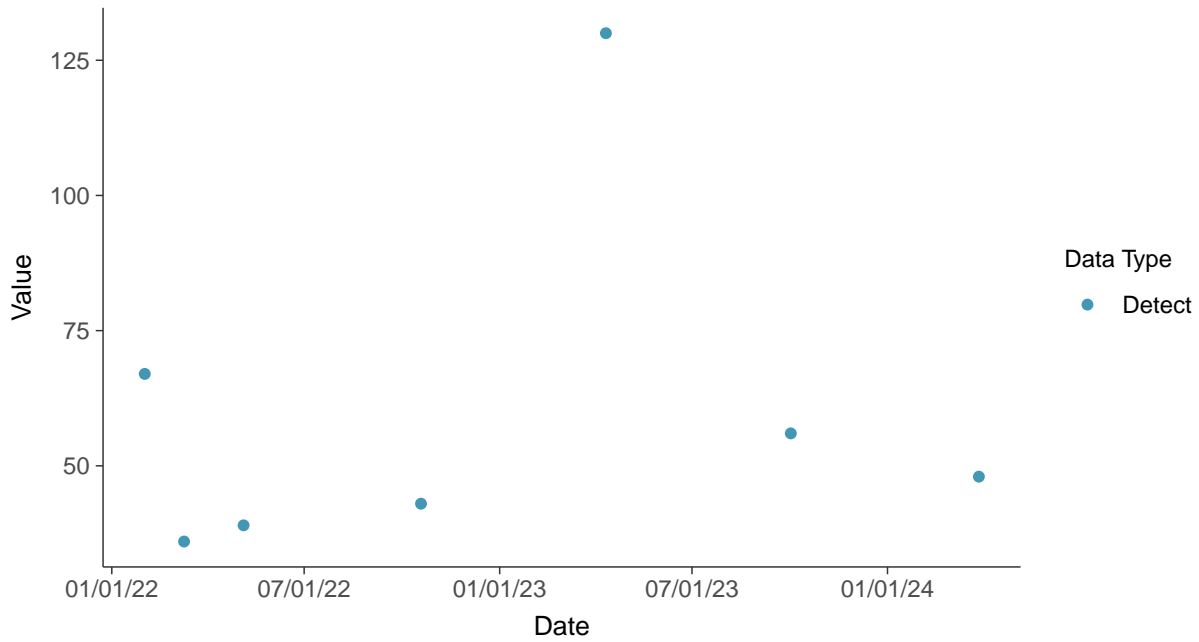


Appendix IV: Lithium, MW-15014R

ID: 04_2_117

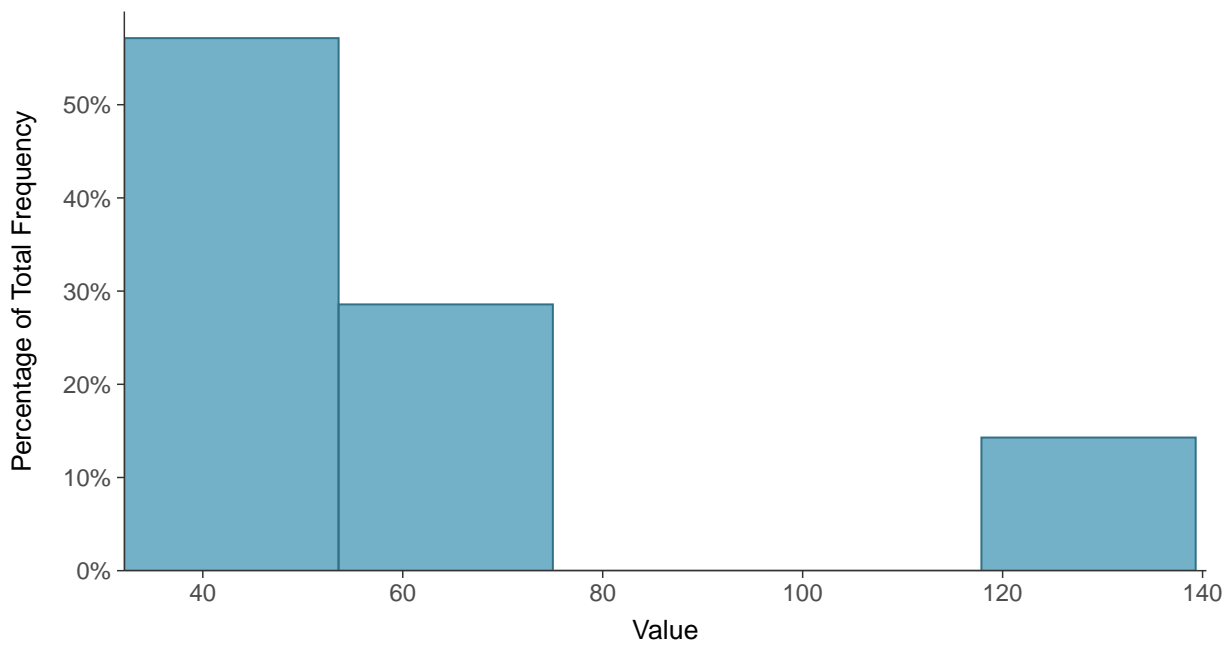
Scatter Plot

Lithium, MW-15014R (ug/L)



Histogram

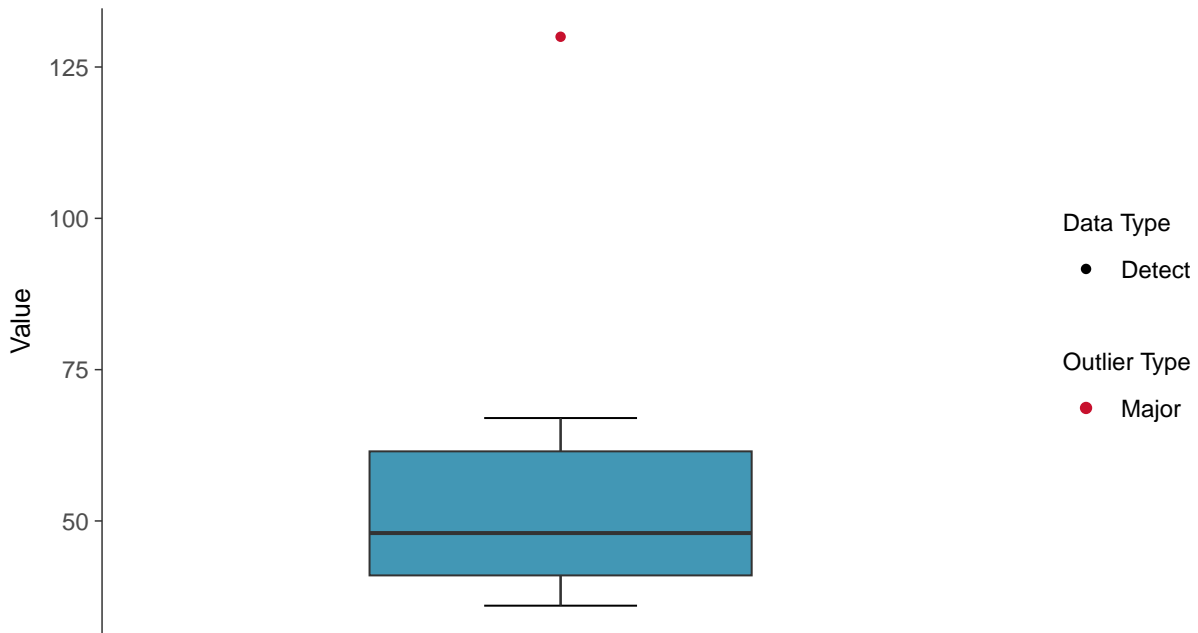
Lithium, MW-15014R (ug/L)





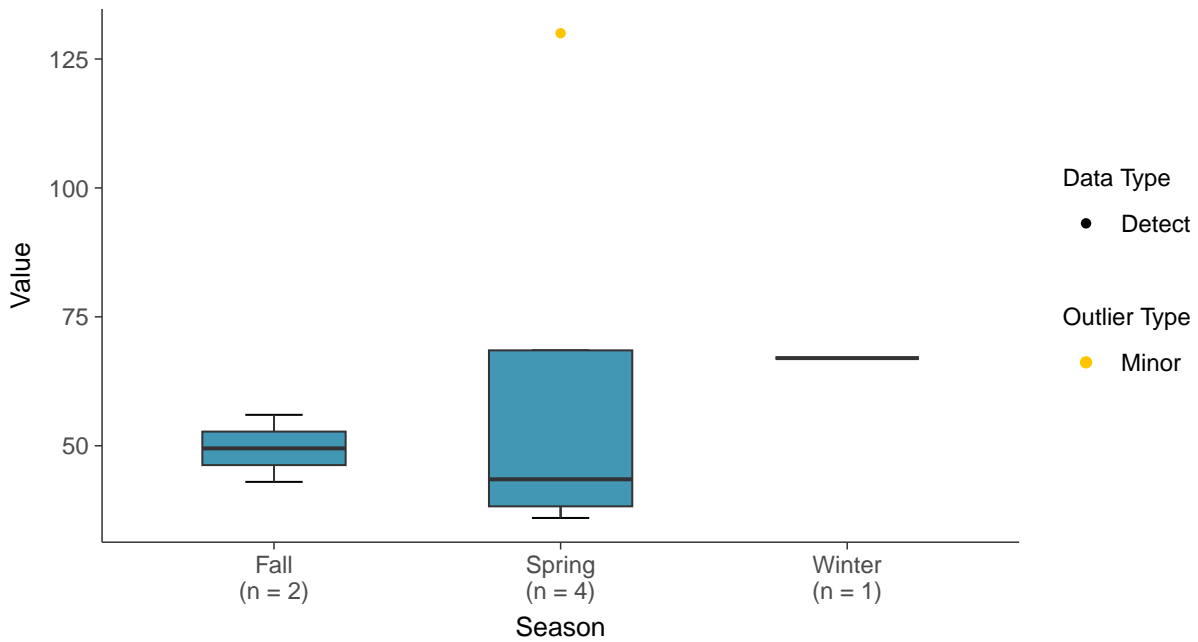
Boxplot

Lithium, MW-15014R (ug/L)



Boxplot by Season

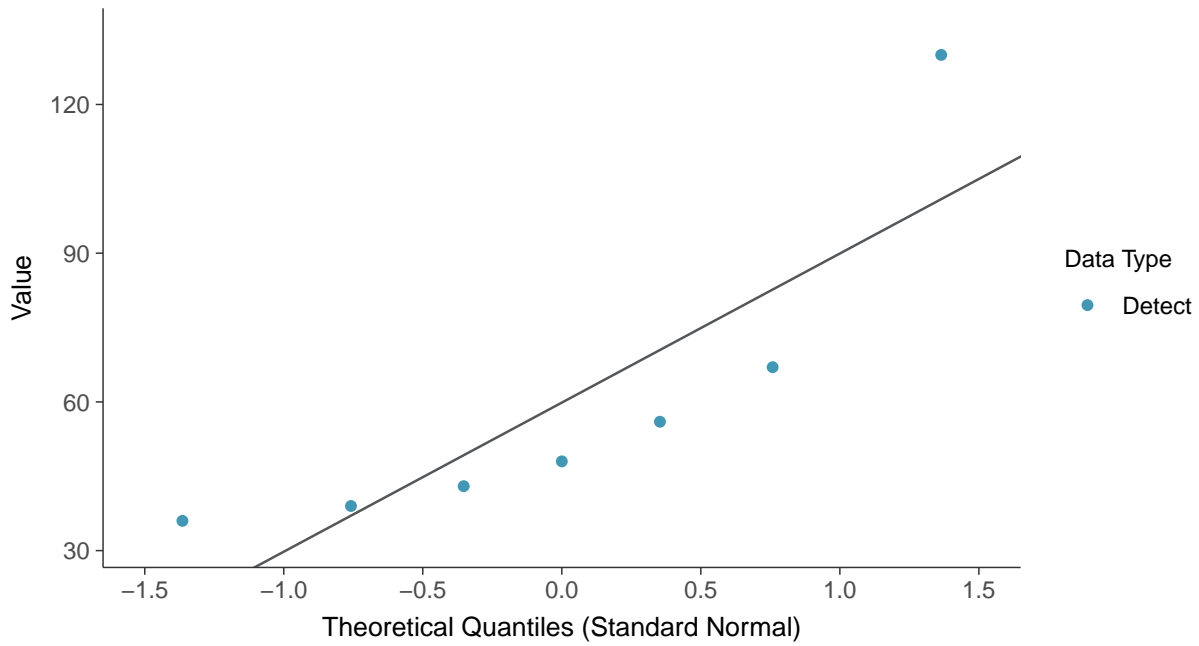
Lithium, MW-15014R (ug/L)





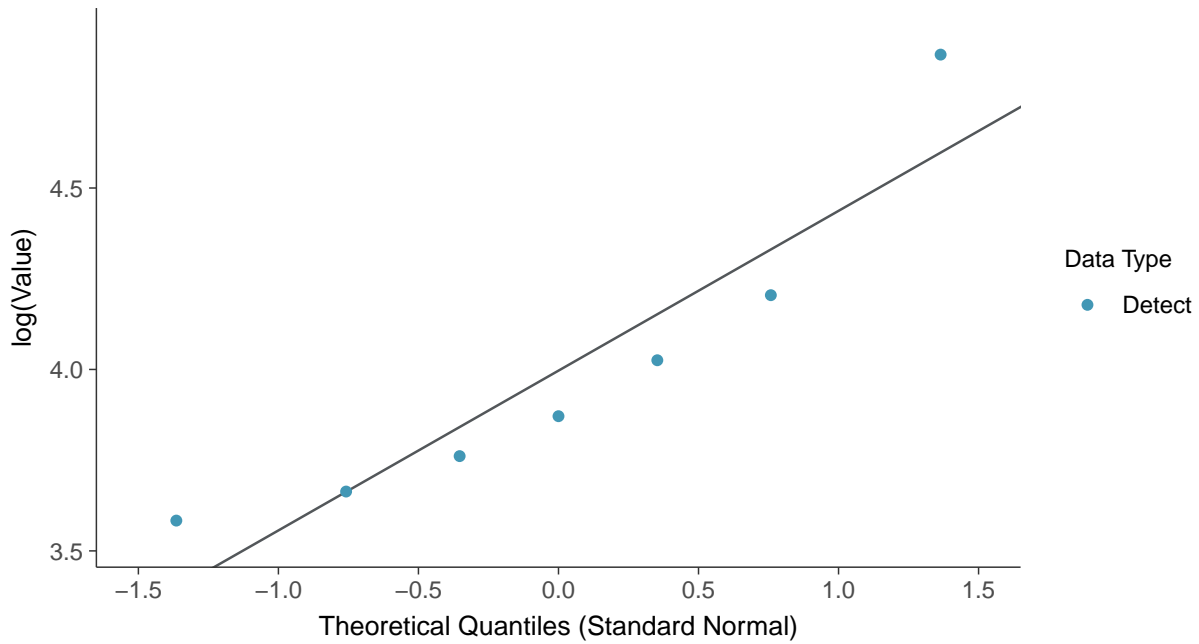
Normal Q-Q plot

Lithium, MW-15014R (ug/L)



Lognormal Q-Q plot

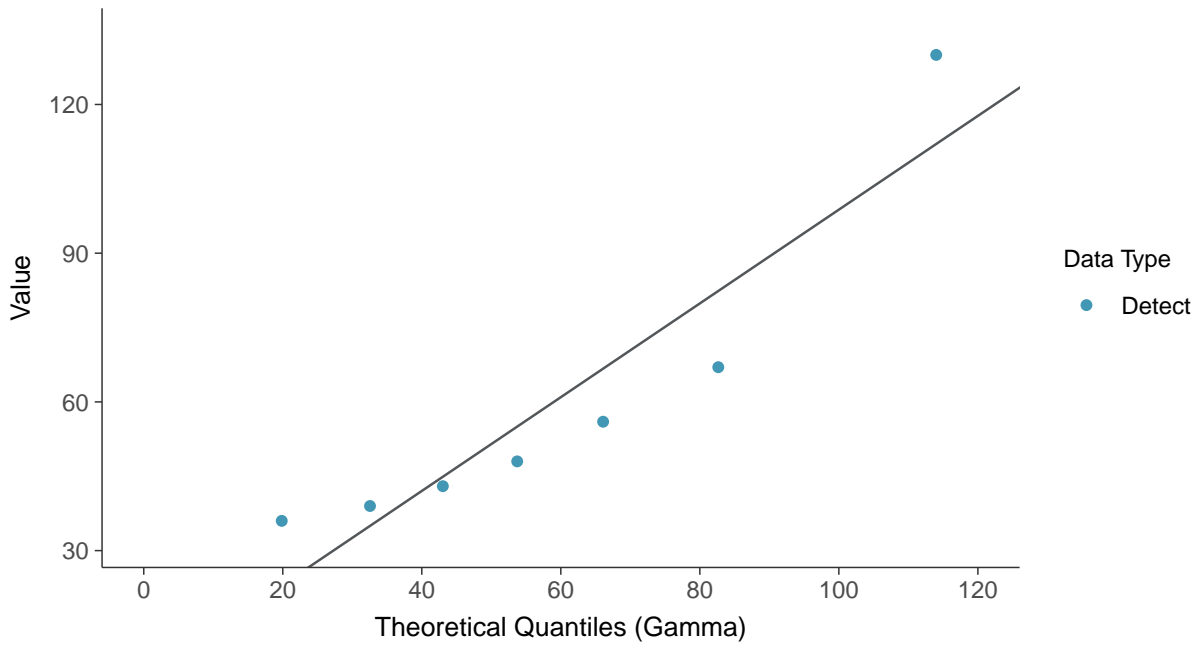
Lithium, MW-15014R (ug/L)





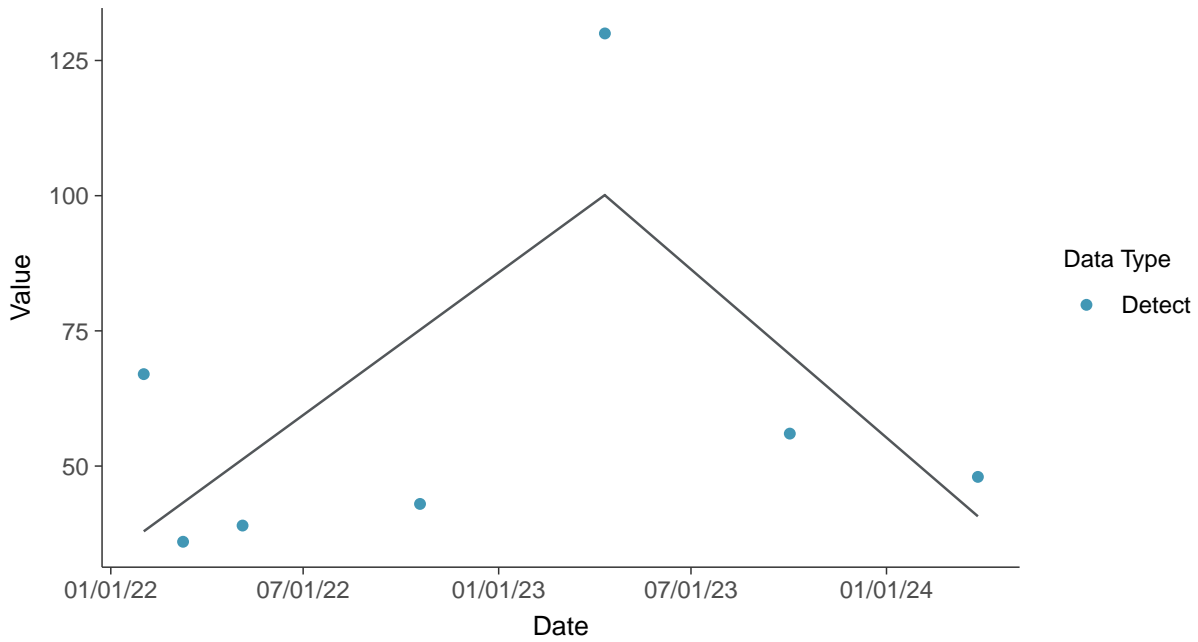
Gamma Q-Q plot

Lithium, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear

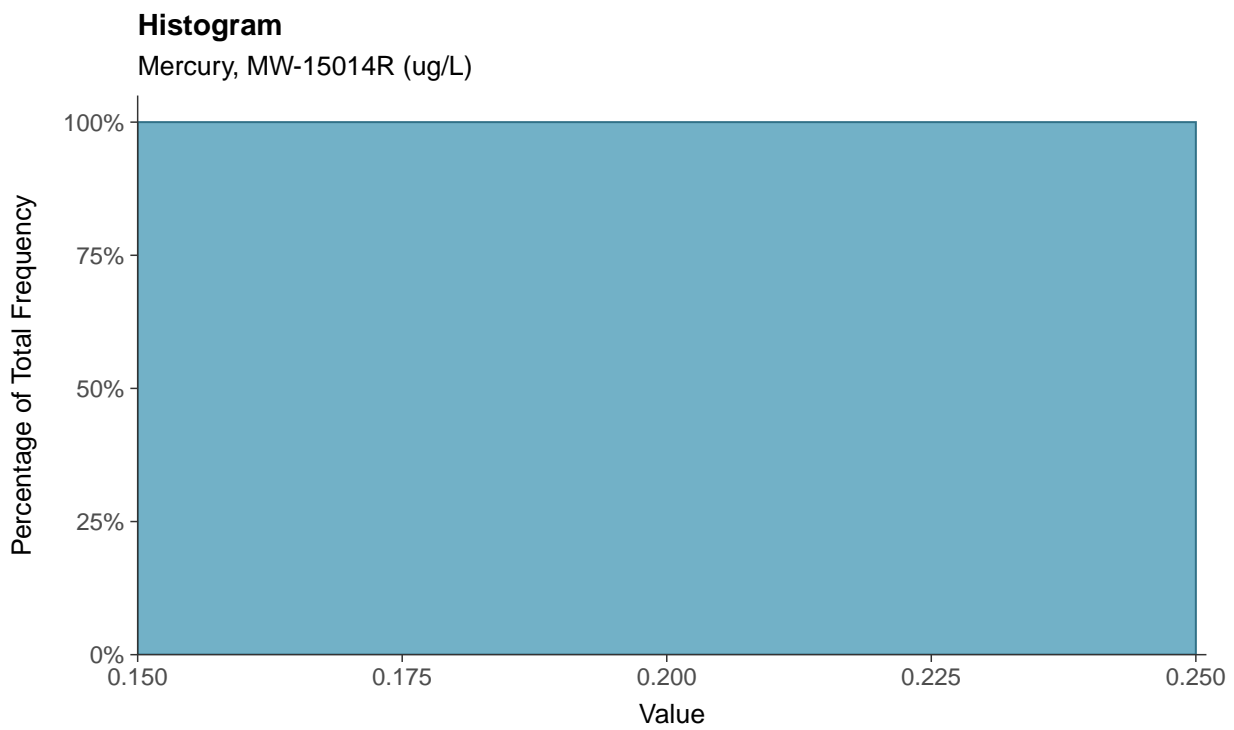
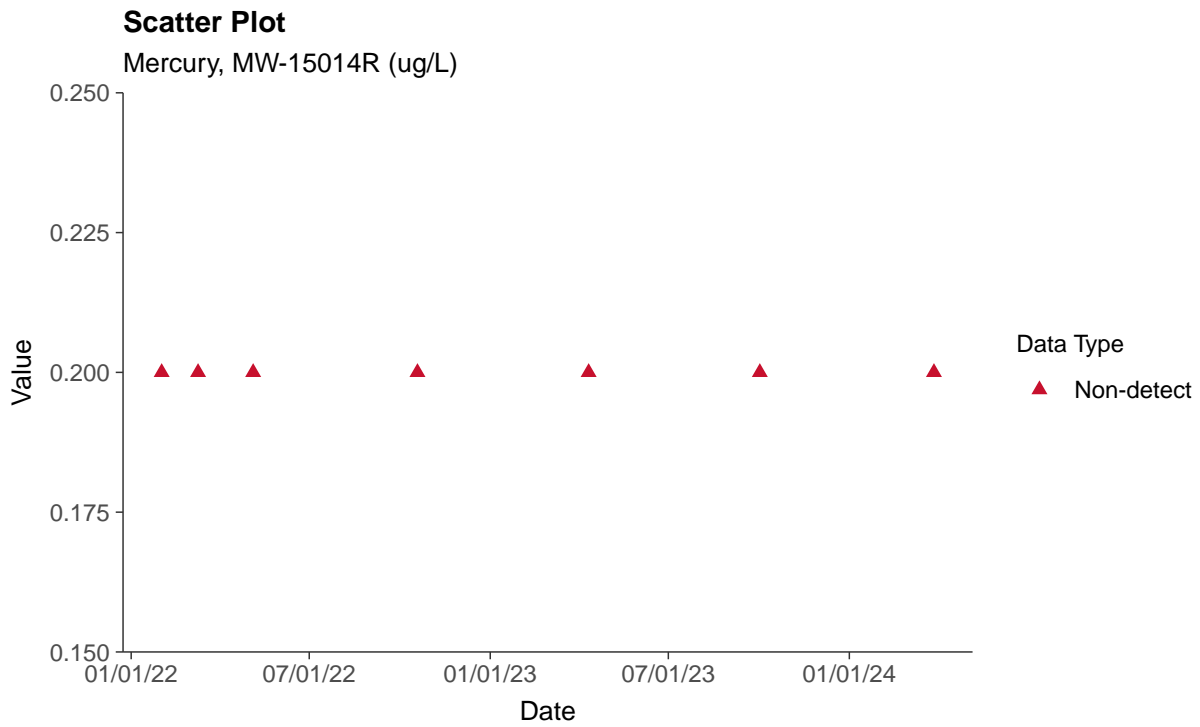
Lithium, MW-15014R (ug/L)





Appendix IV: Mercury, MW-15014R

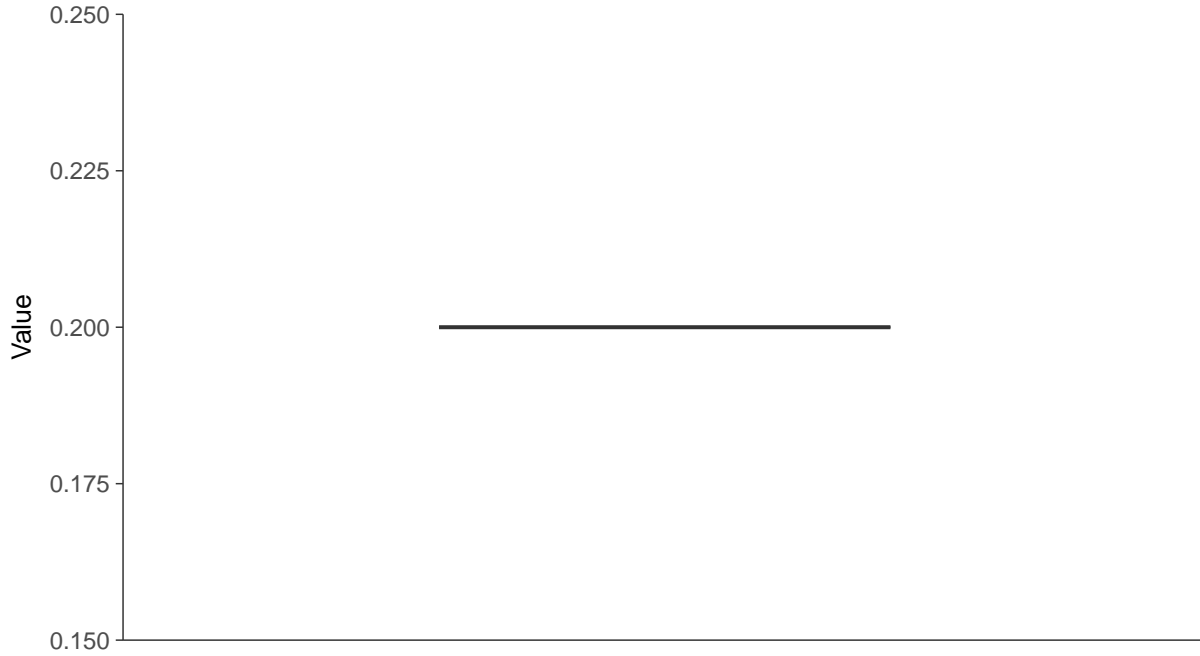
ID: 04_2_118





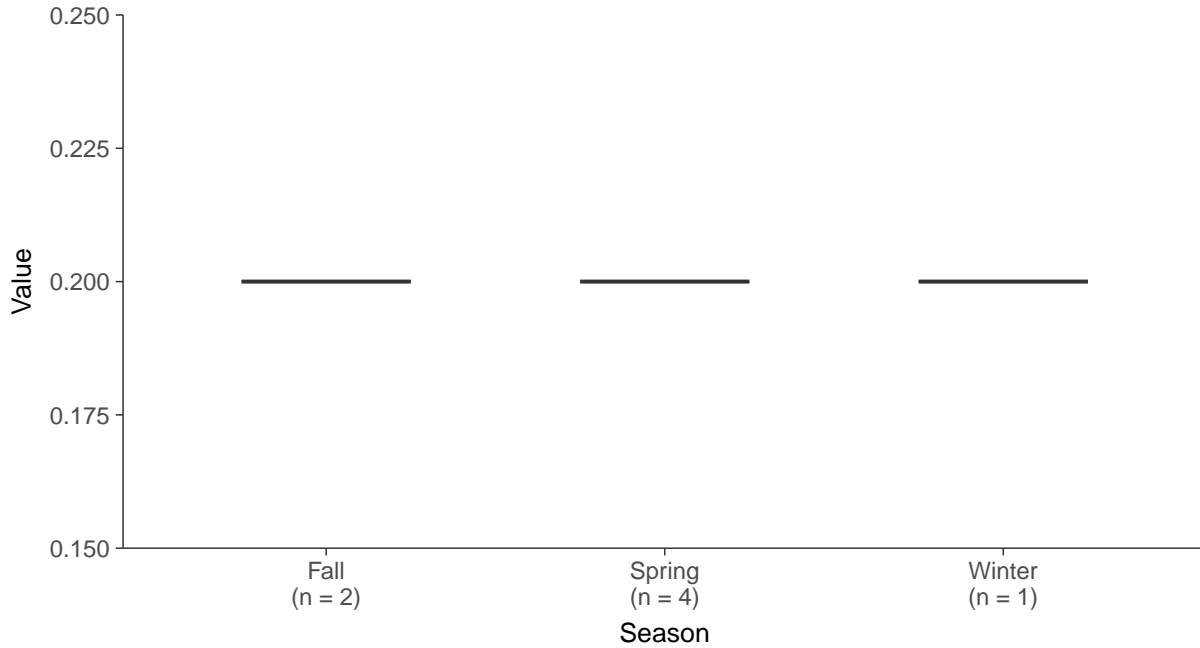
Boxplot

Mercury, MW-15014R (ug/L)



Boxplot by Season

Mercury, MW-15014R (ug/L)



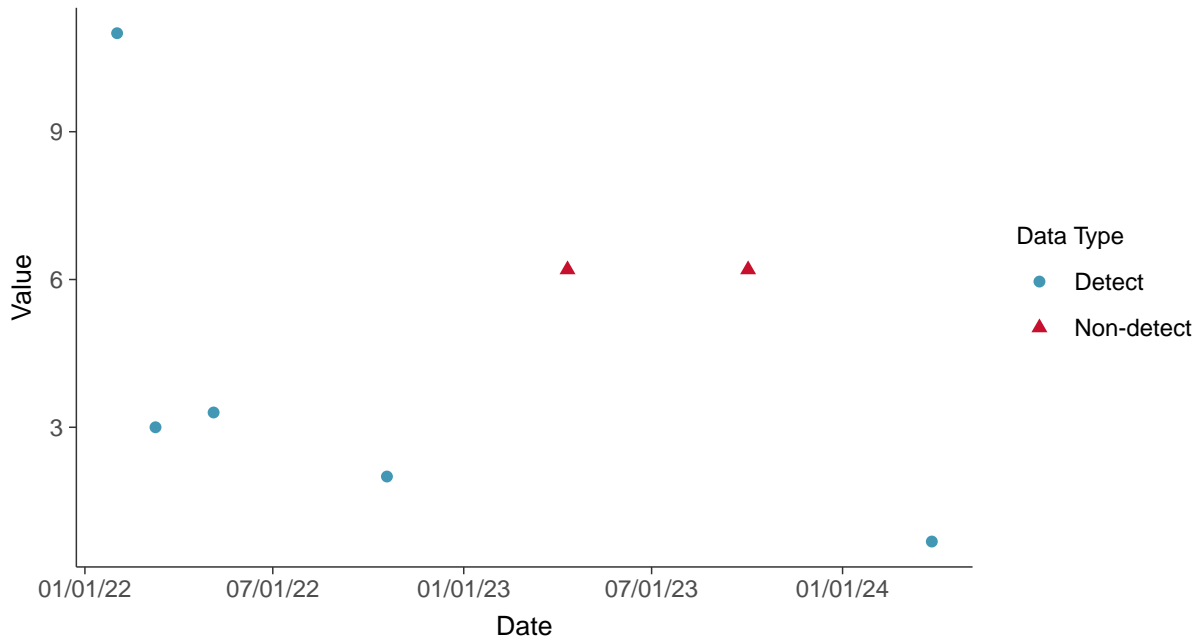


Appendix IV: Molybdenum, MW-15014R

ID: 04_2_119

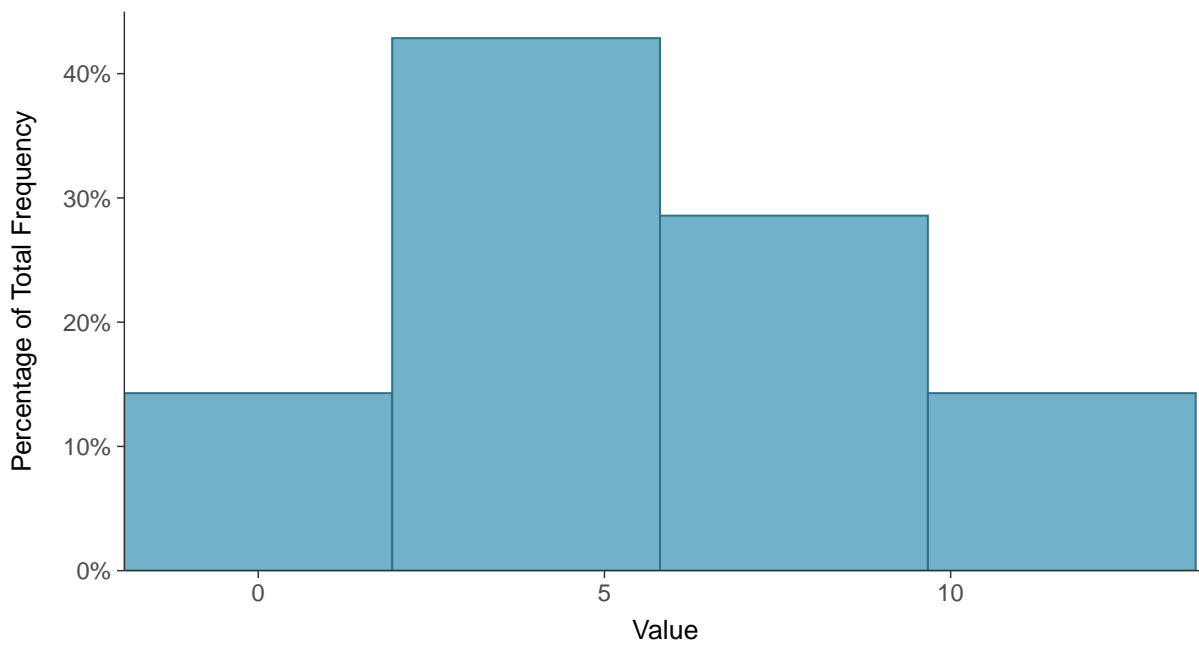
Scatter Plot

Molybdenum, MW-15014R (ug/L)



Histogram

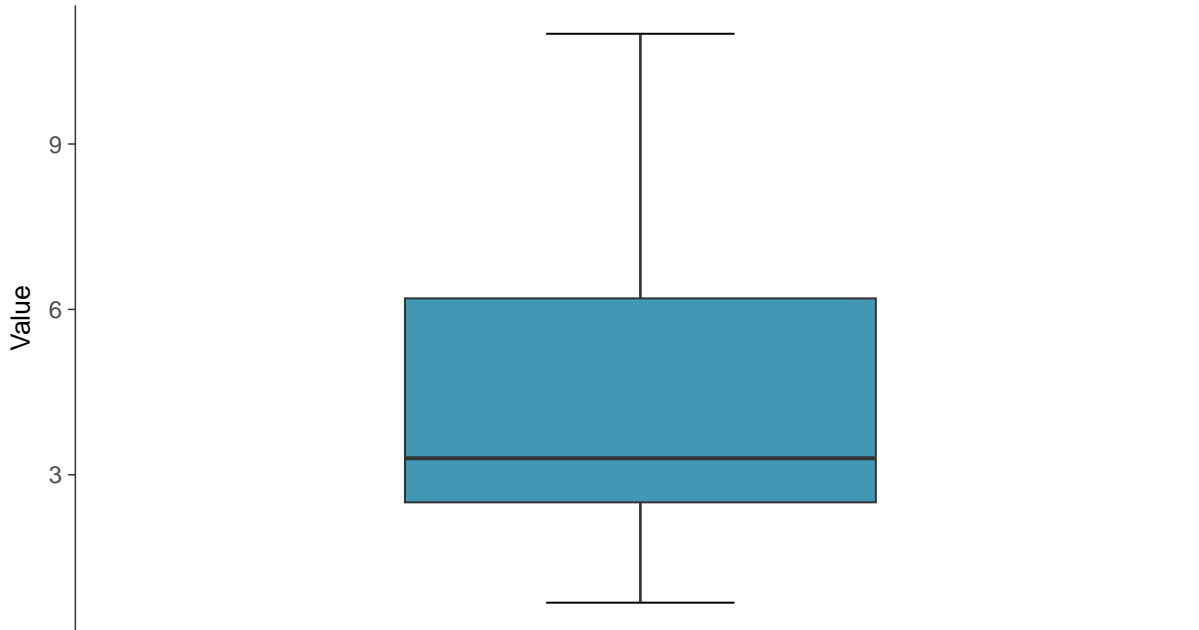
Molybdenum, MW-15014R (ug/L)





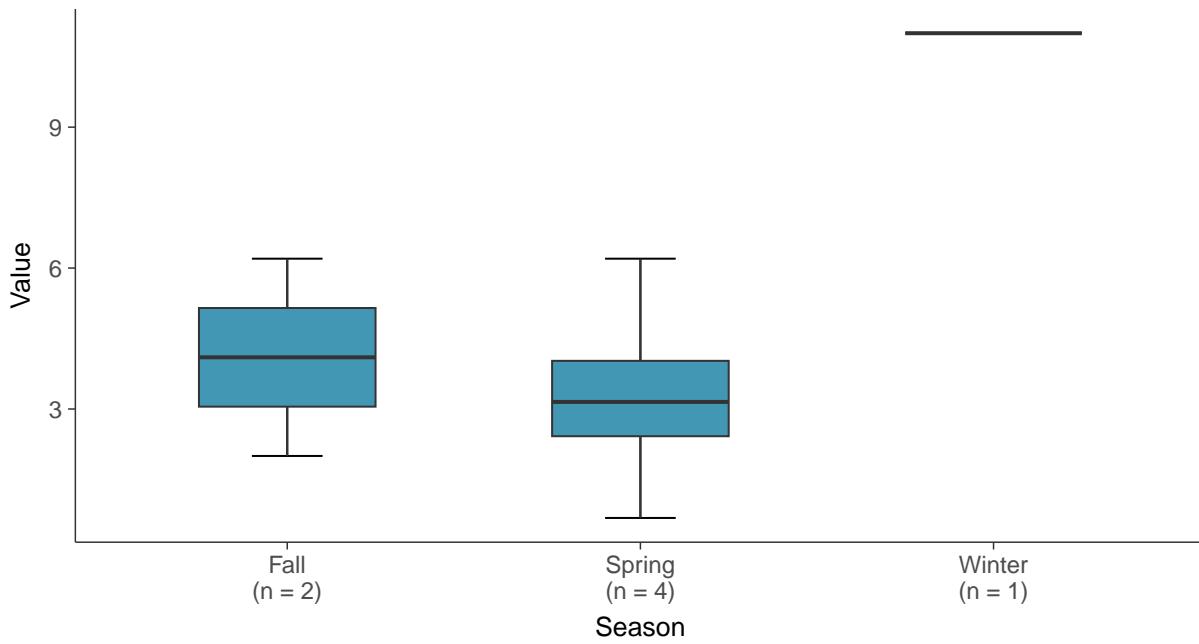
Boxplot

Molybdenum, MW-15014R (ug/L)



Boxplot by Season

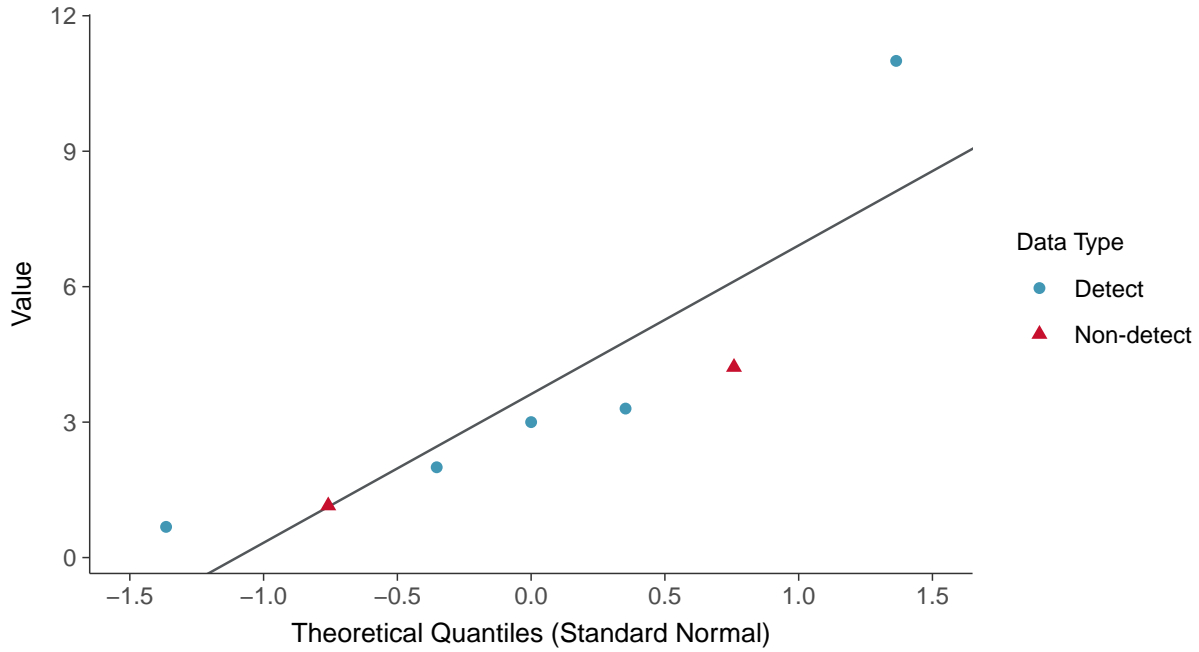
Molybdenum, MW-15014R (ug/L)





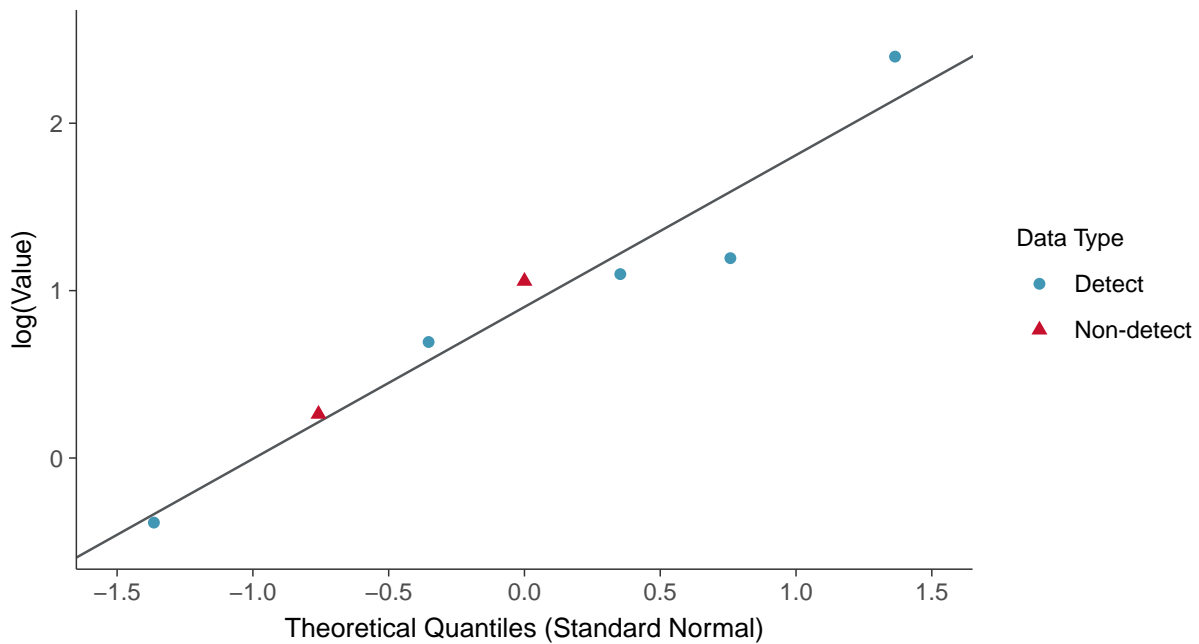
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15014R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

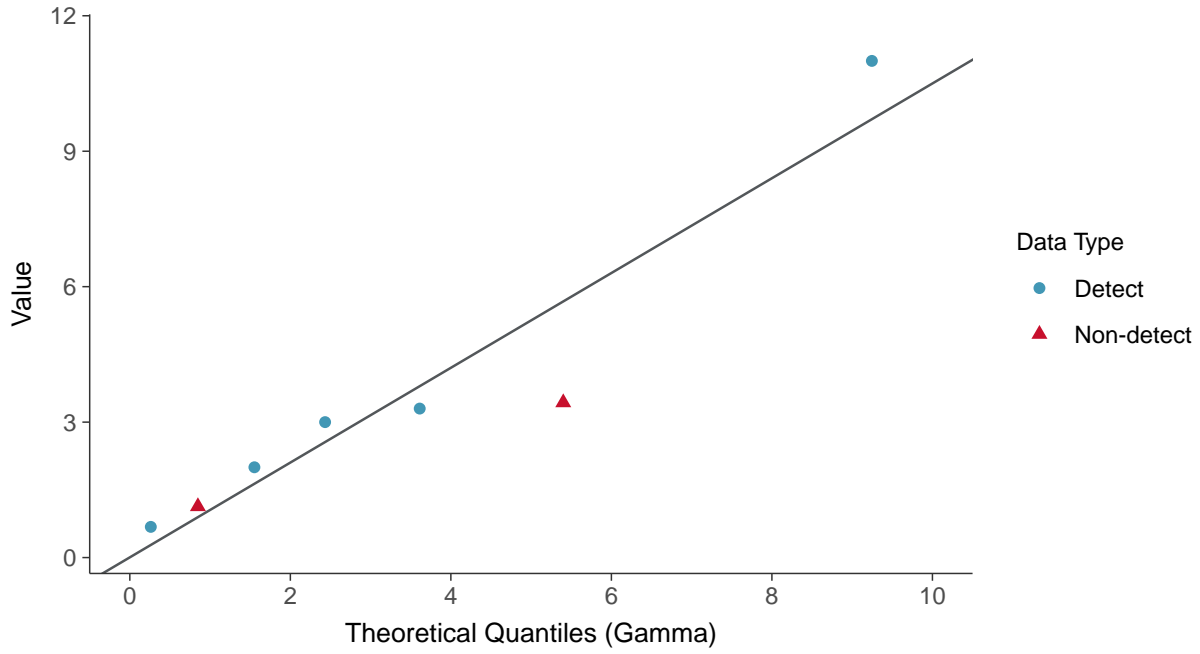
Molybdenum, MW-15014R (ug/L)





Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15014R (ug/L)



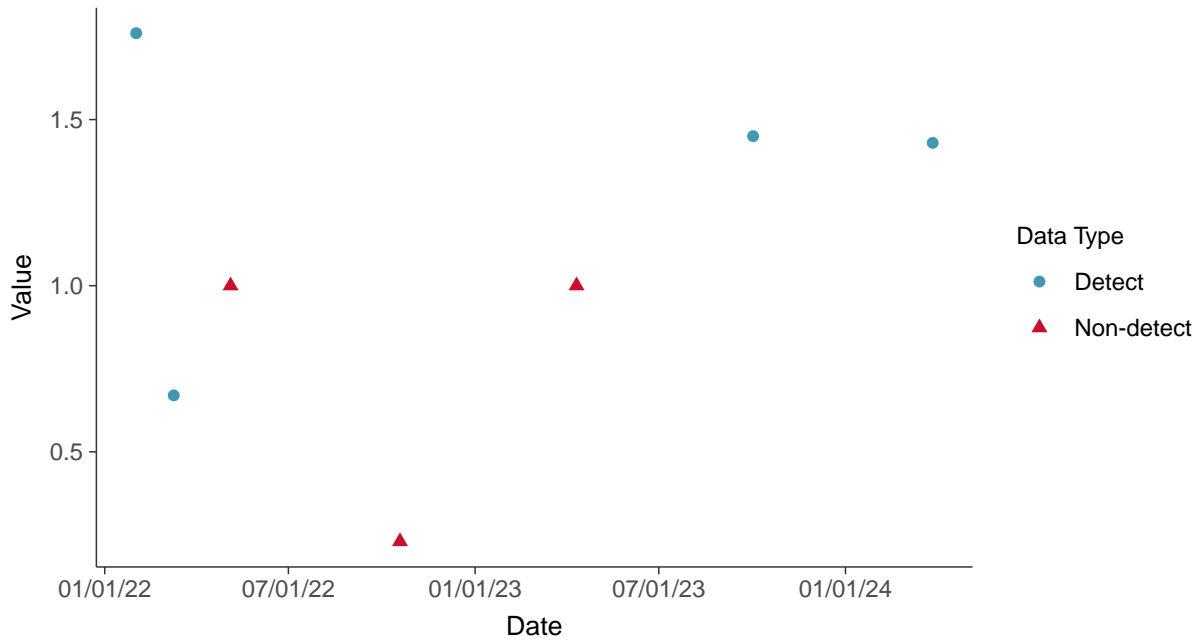


Appendix IV: Radium-226+228, MW-15014R

ID: 04_2_125

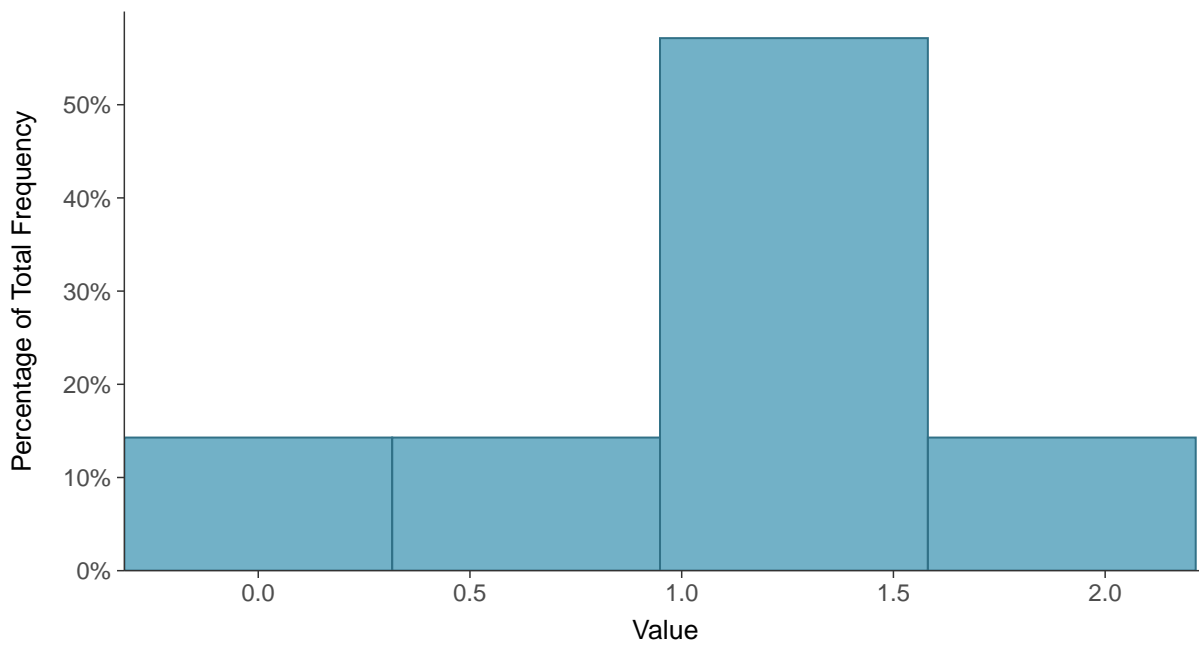
Scatter Plot

Radium-226+228, MW-15014R (pCi/L)



Histogram

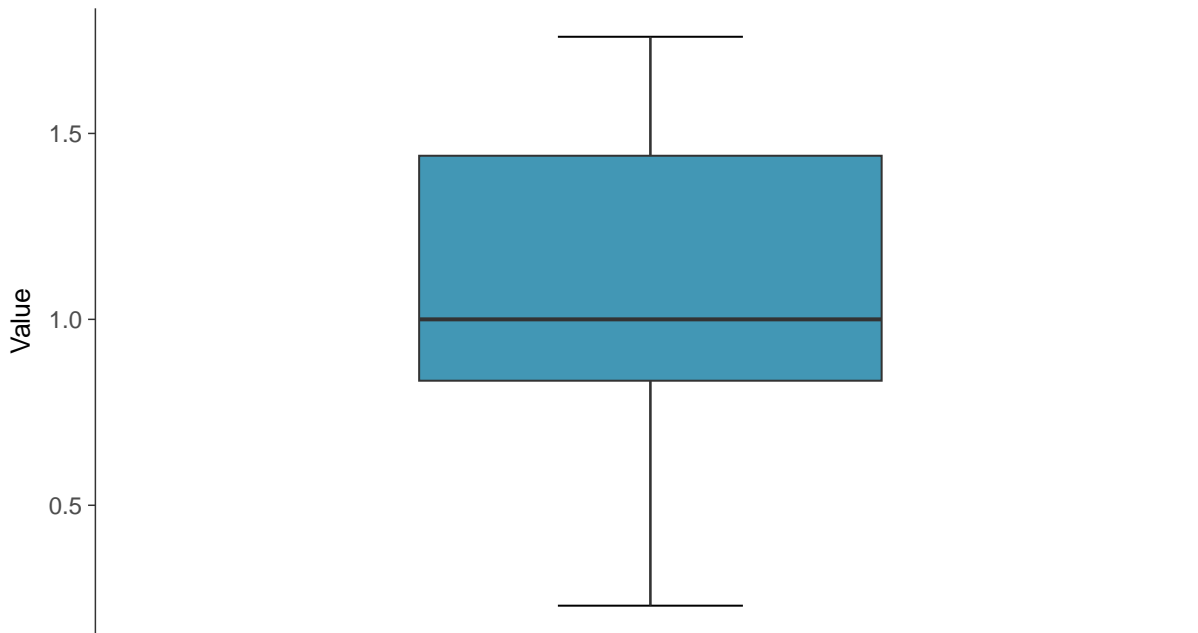
Radium-226+228, MW-15014R (pCi/L)





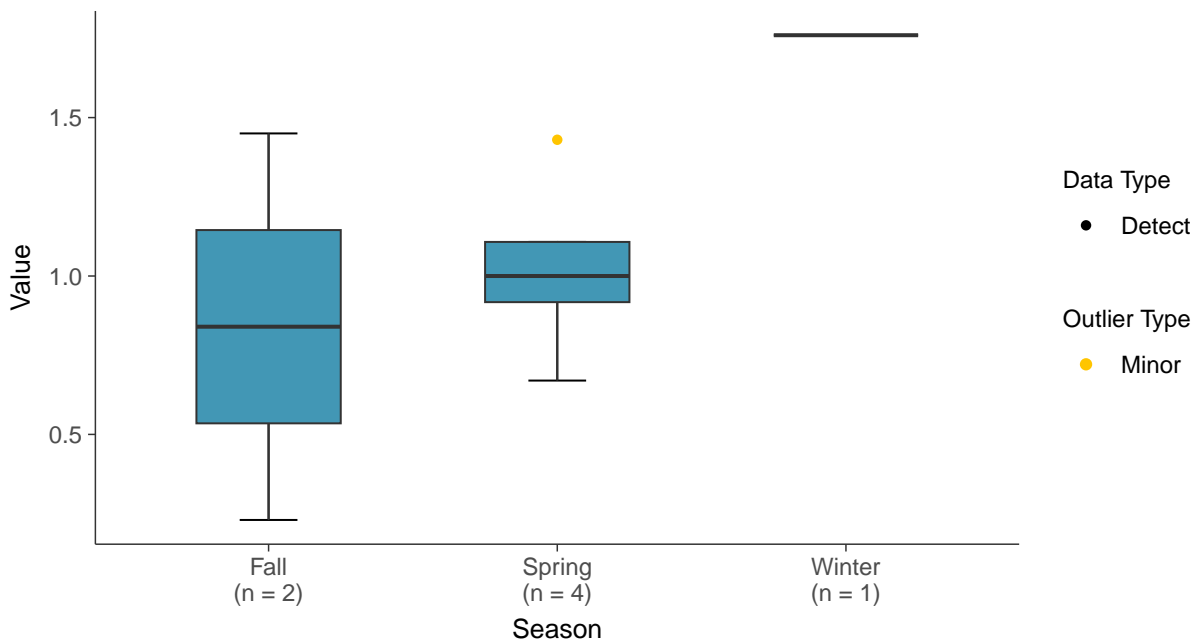
Boxplot

Radium-226+228, MW-15014R (pCi/L)



Boxplot by Season

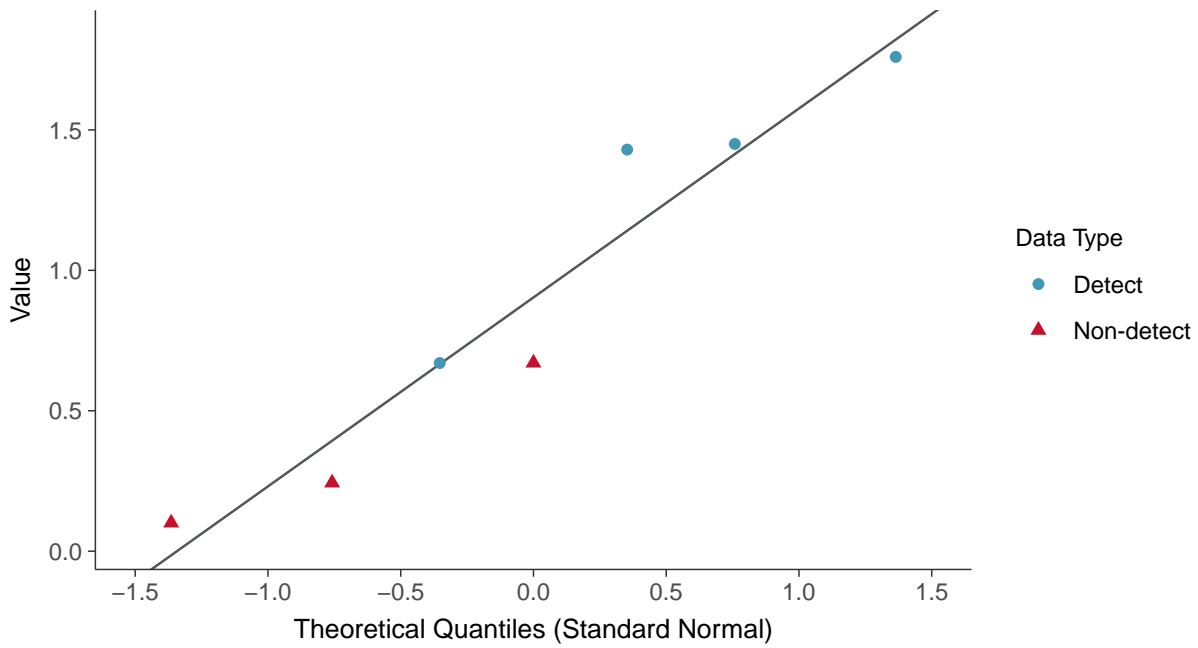
Radium-226+228, MW-15014R (pCi/L)





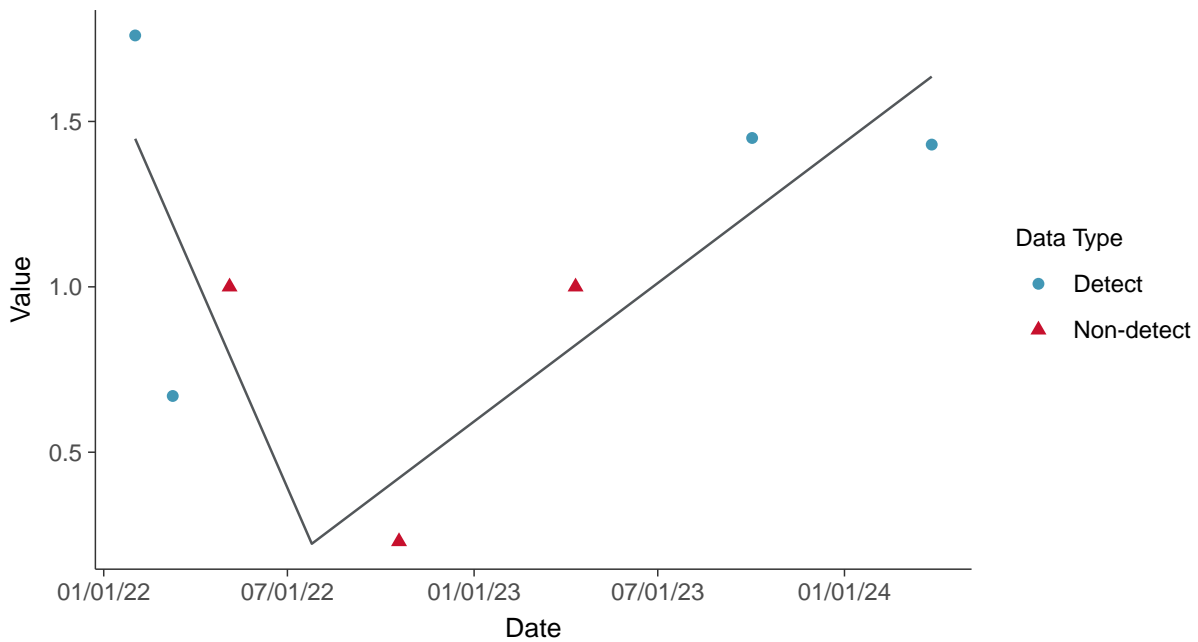
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15014R (pCi/L)



Trend Regression: Piecewise Linear-Linear

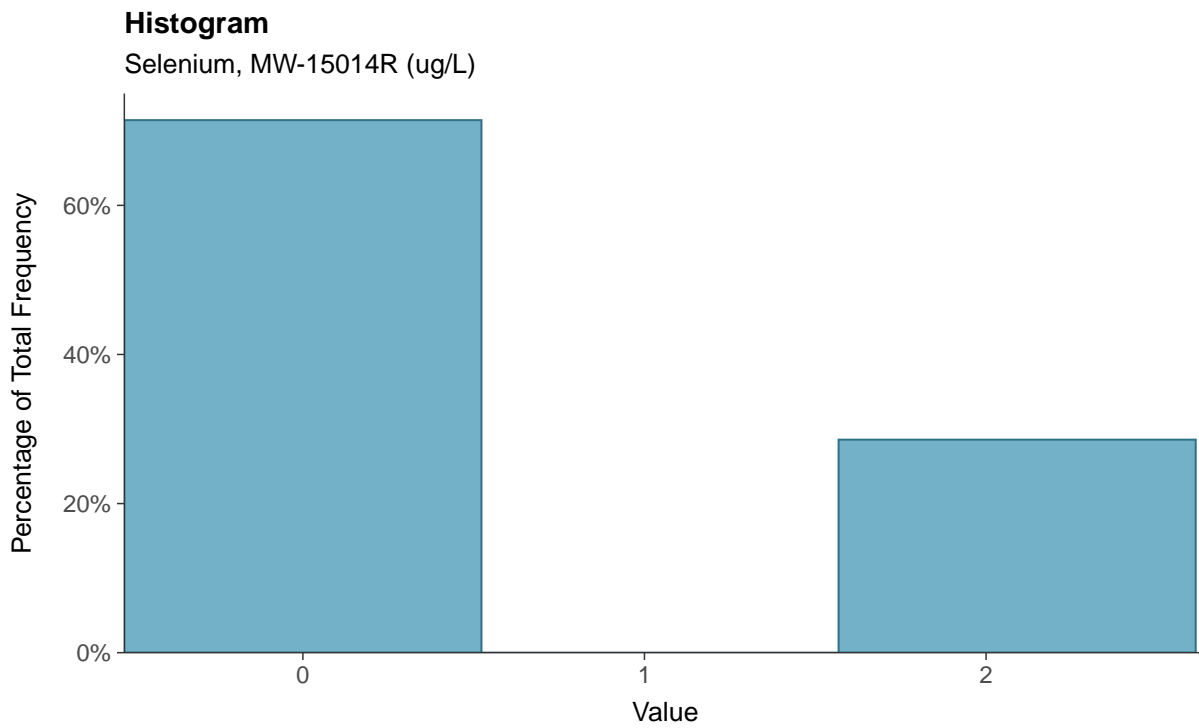
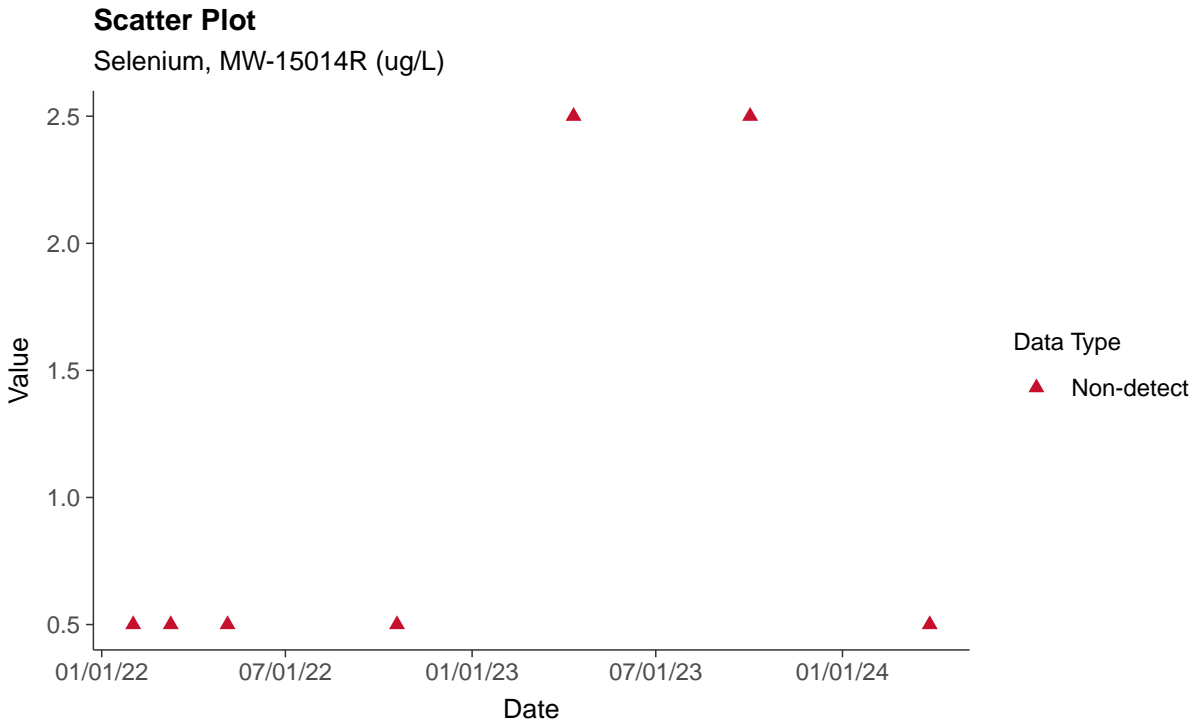
Radium-226+228, MW-15014R (pCi/L)





Appendix IV: Selenium, MW-15014R

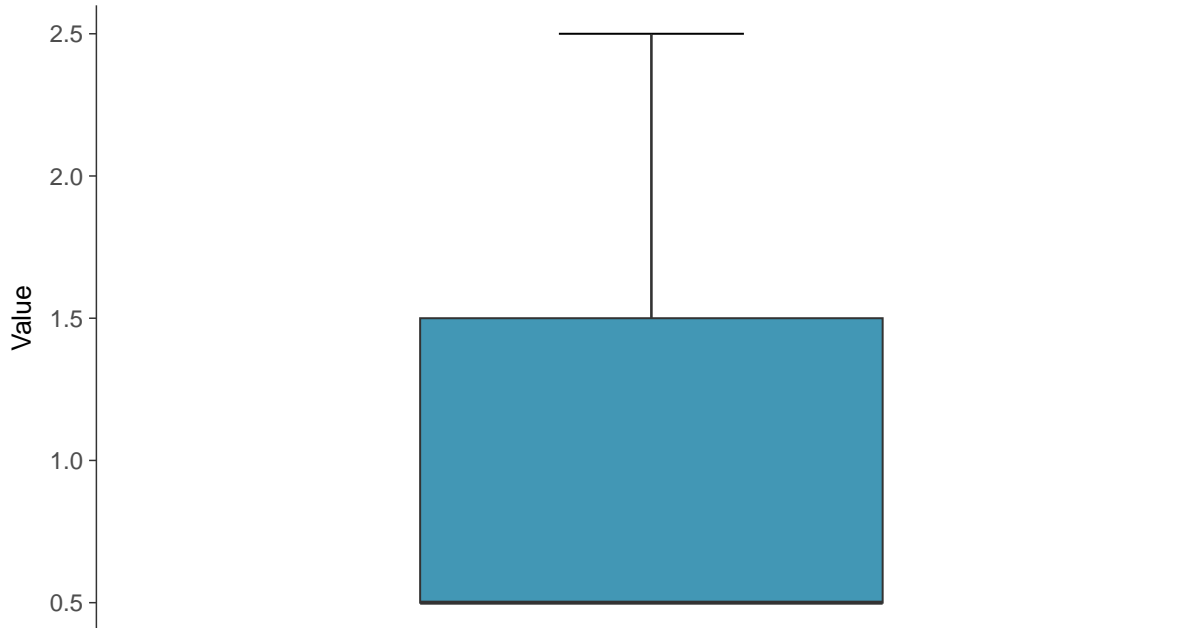
ID: 04_2_127





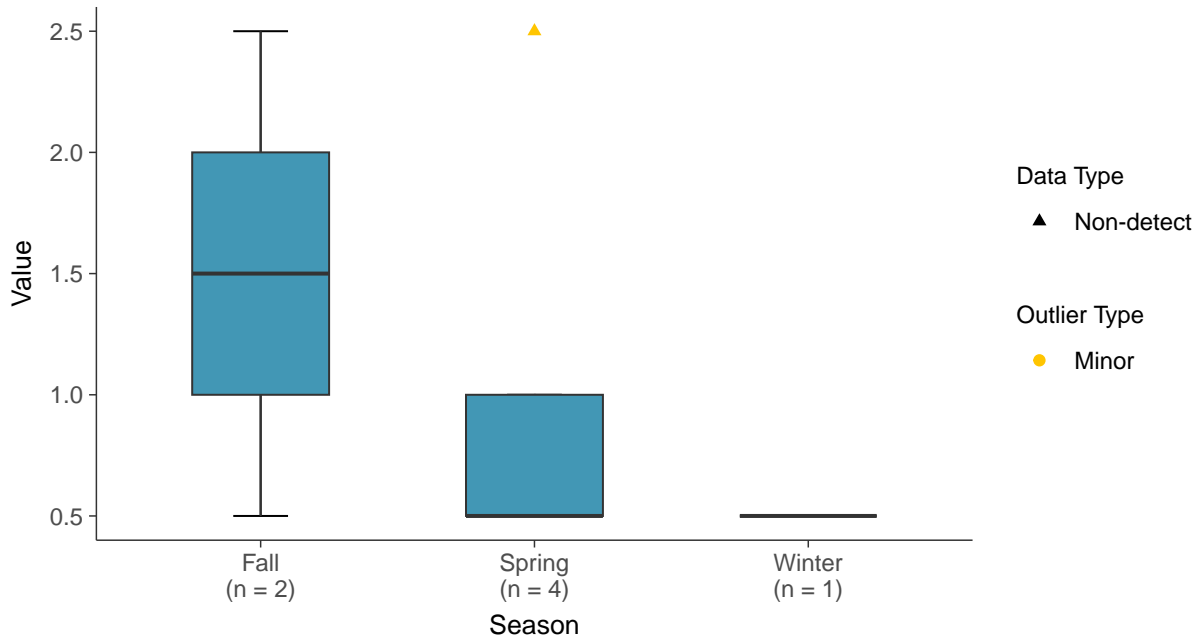
Boxplot

Selenium, MW-15014R (ug/L)



Boxplot by Season

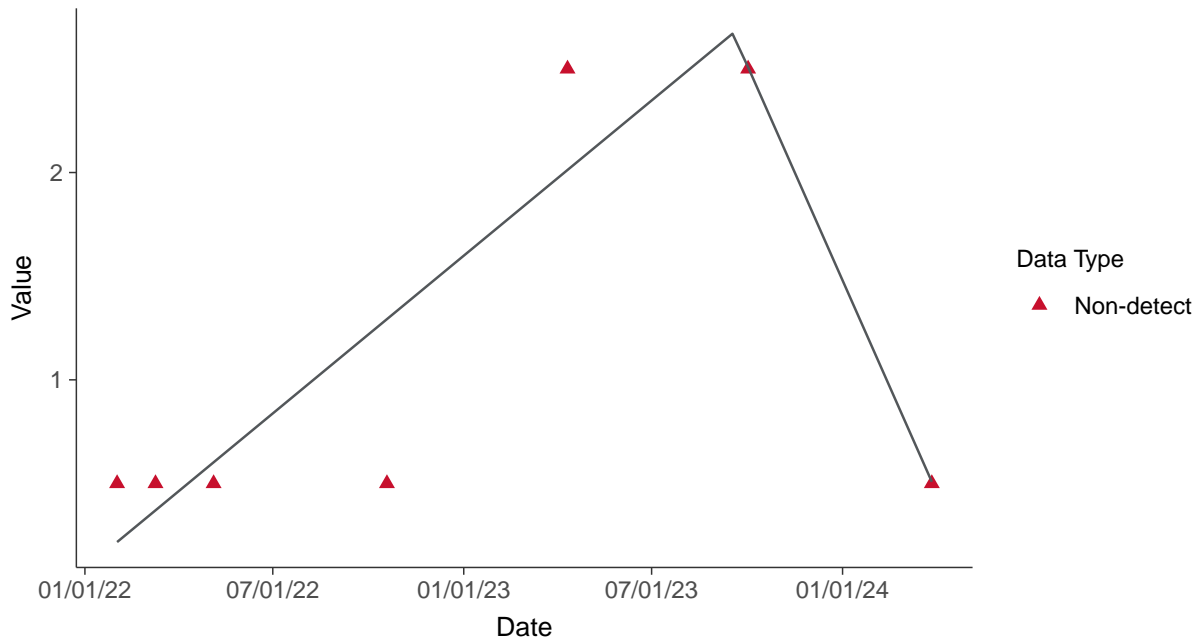
Selenium, MW-15014R (ug/L)





Trend Regression: Piecewise Linear-Linear

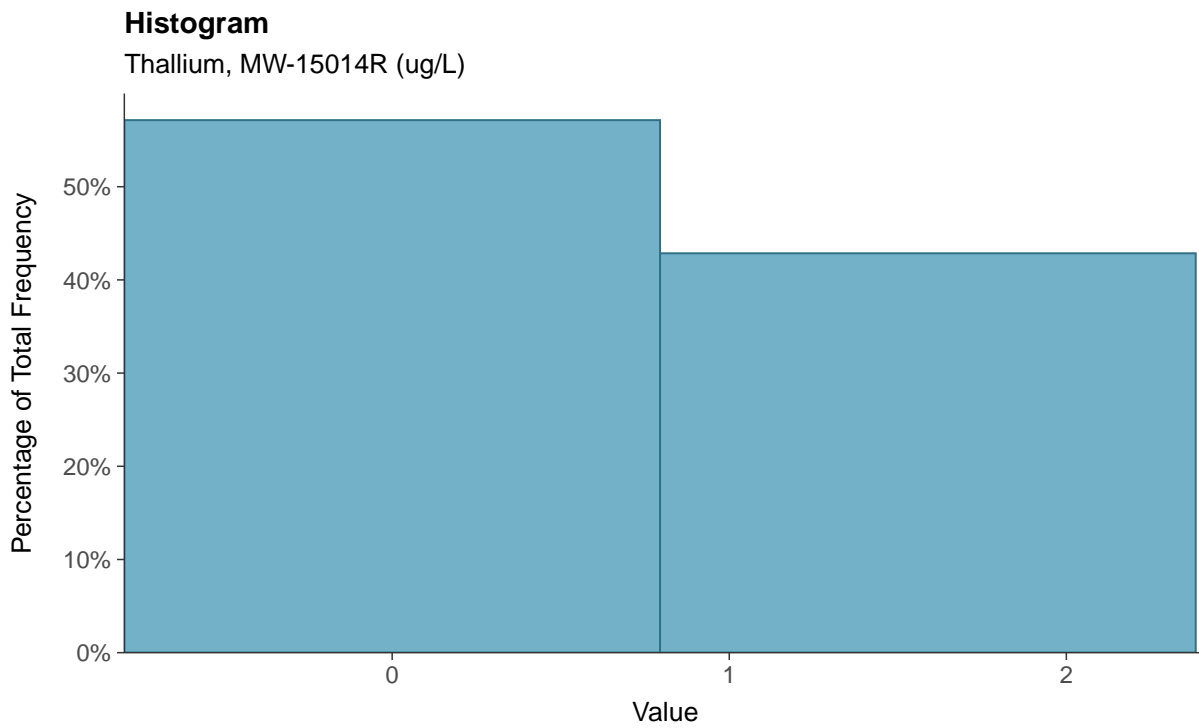
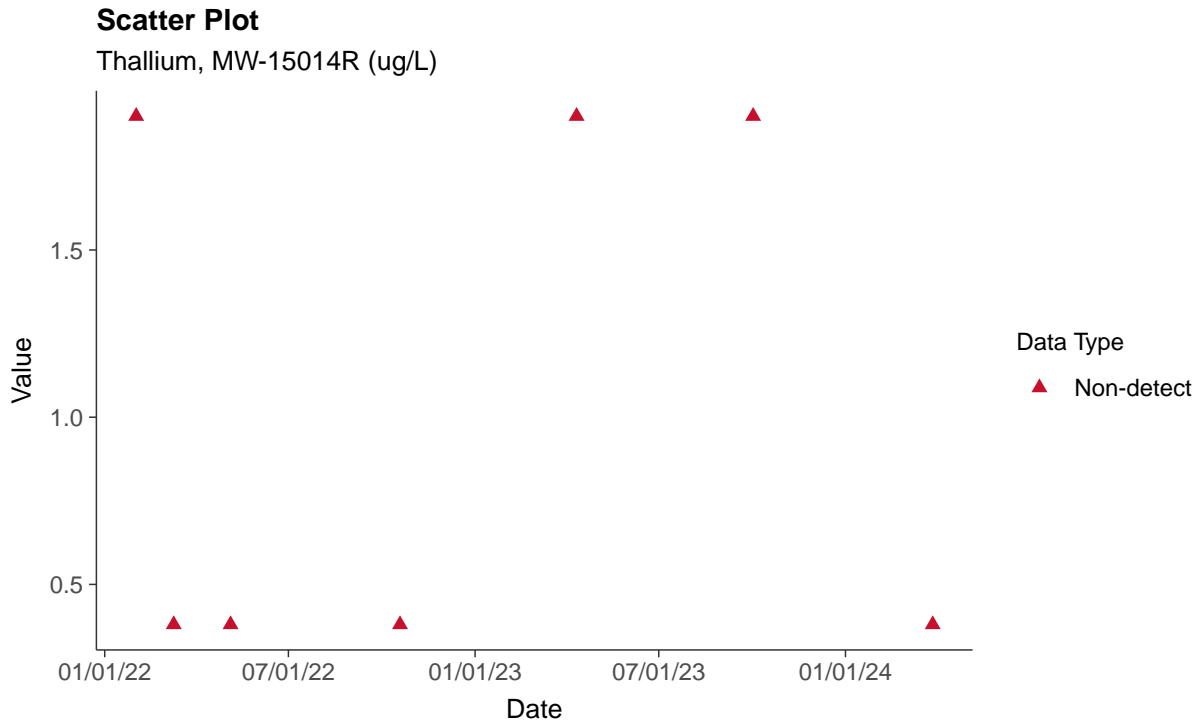
Selenium, MW-15014R (ug/L)





Appendix IV: Thallium, MW-15014R

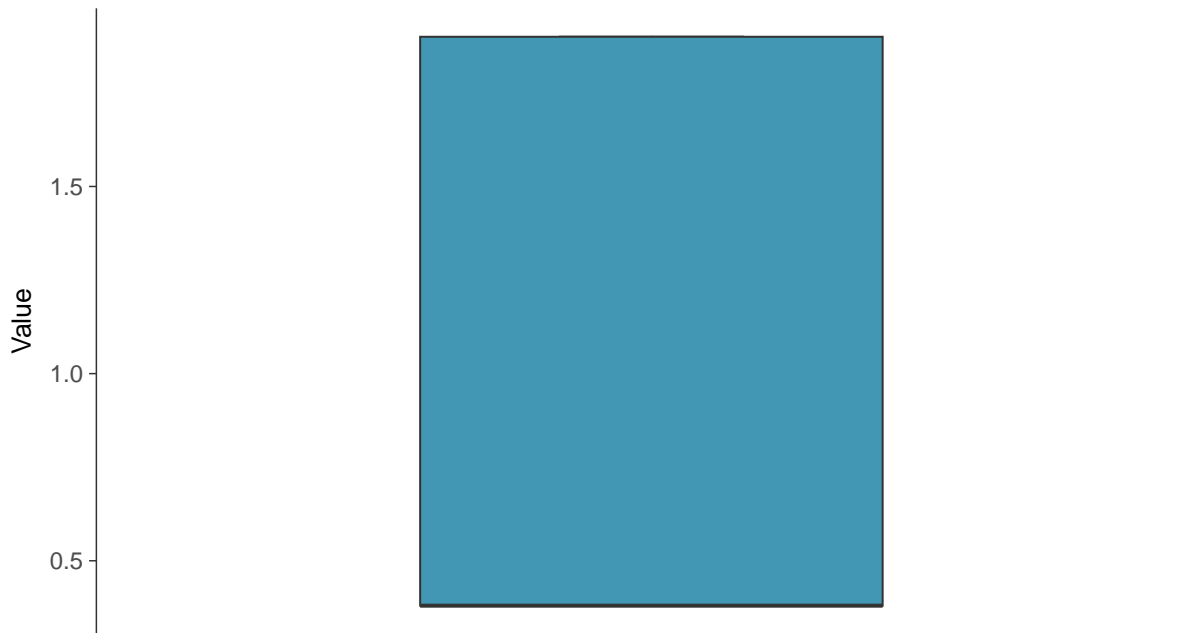
ID: 04_2_131





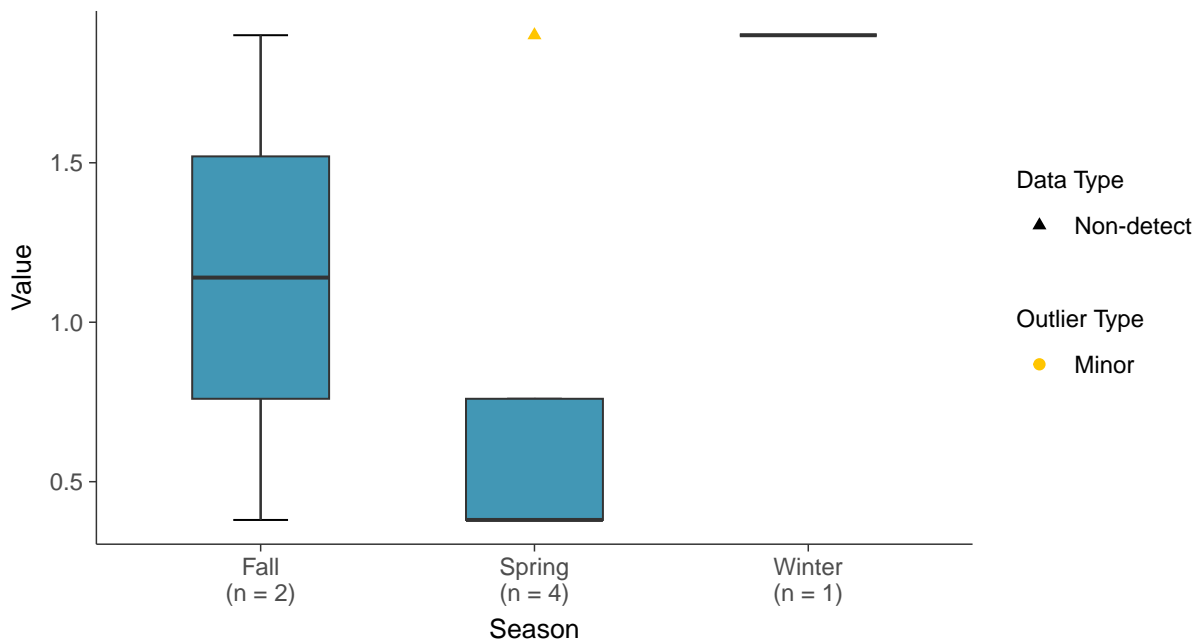
Boxplot

Thallium, MW-15014R (ug/L)



Boxplot by Season

Thallium, MW-15014R (ug/L)



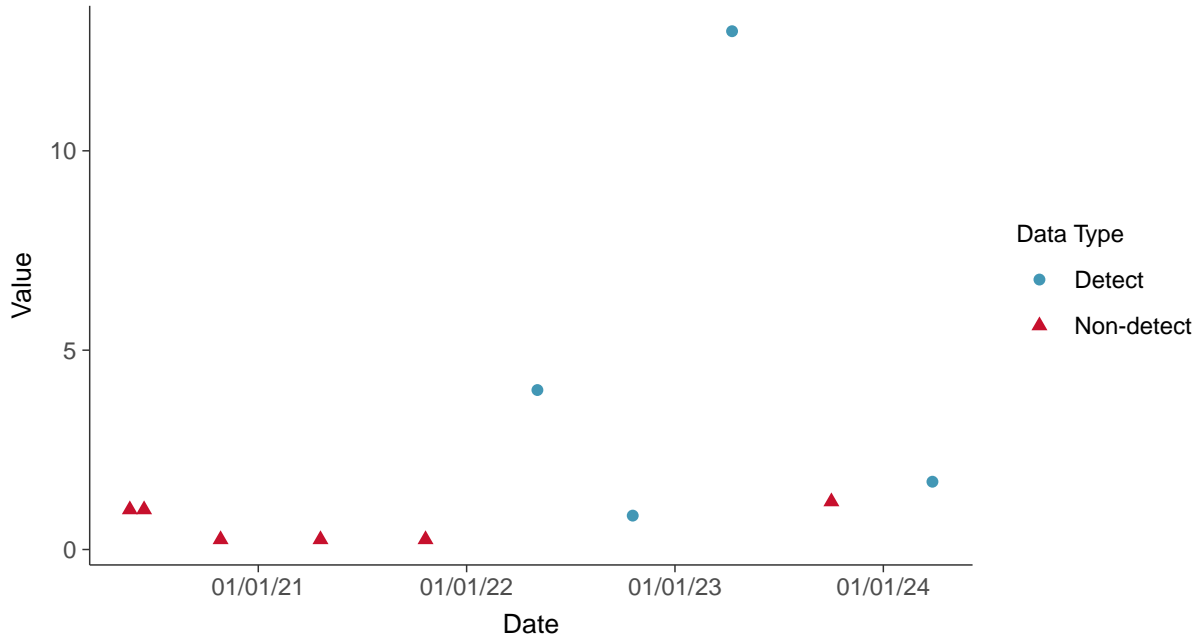


Appendix IV: Antimony, MW-15015R

ID: 05_2_101

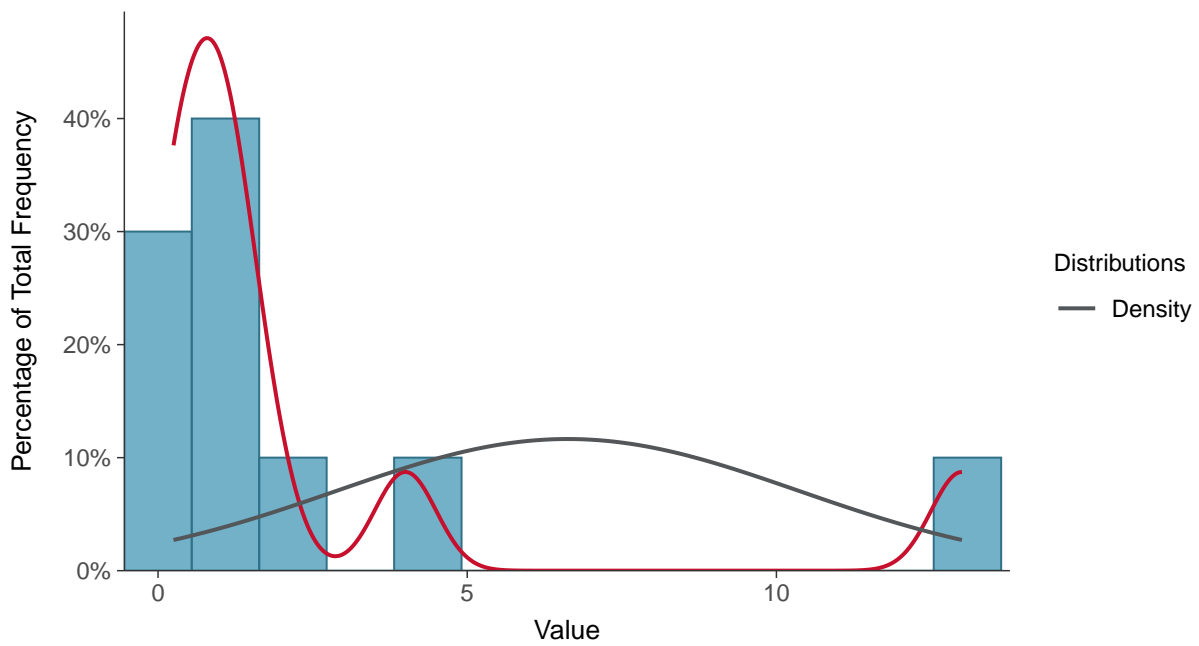
Scatter Plot

Antimony, MW-15015R (ug/L)



Histogram

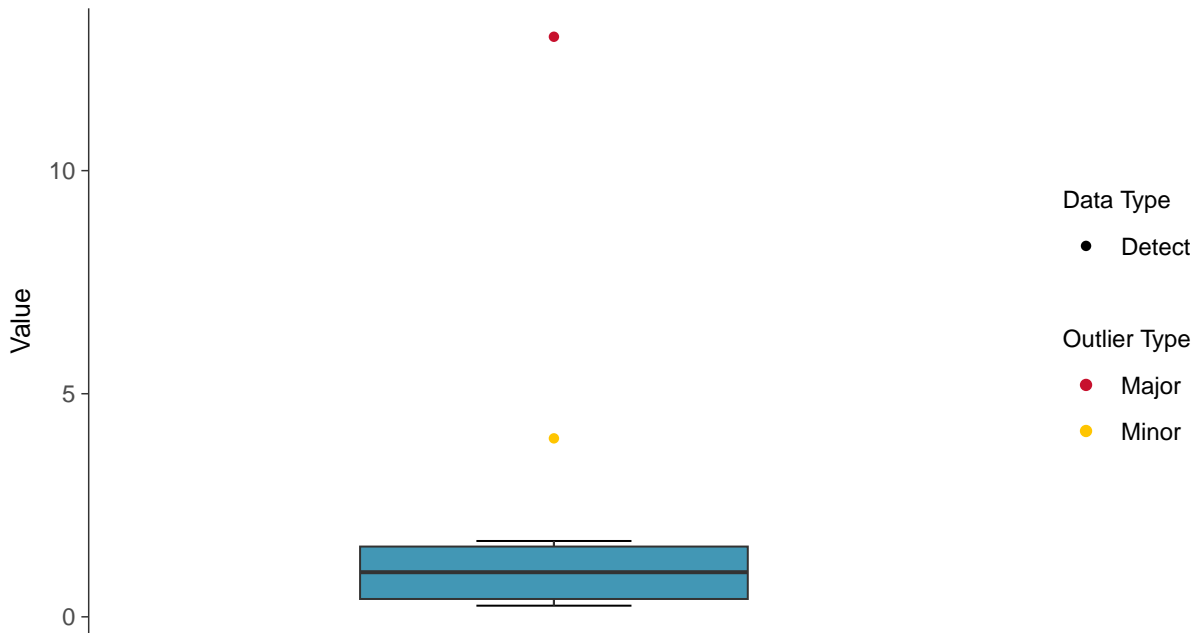
Antimony, MW-15015R (ug/L)





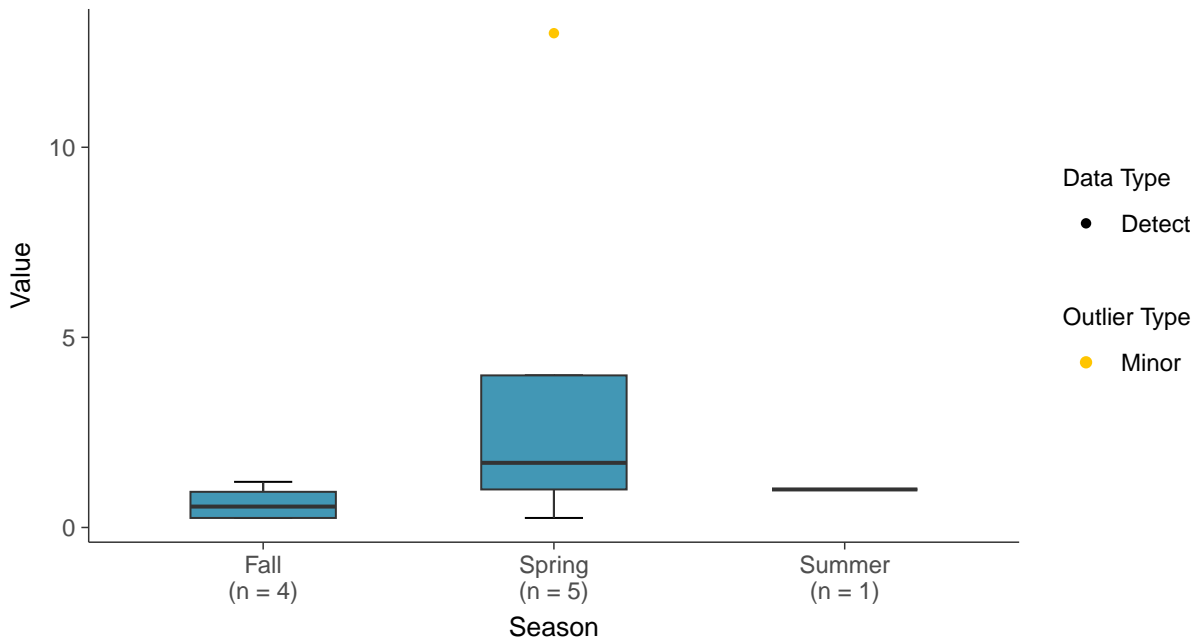
Boxplot

Antimony, MW-15015R (ug/L)



Boxplot by Season

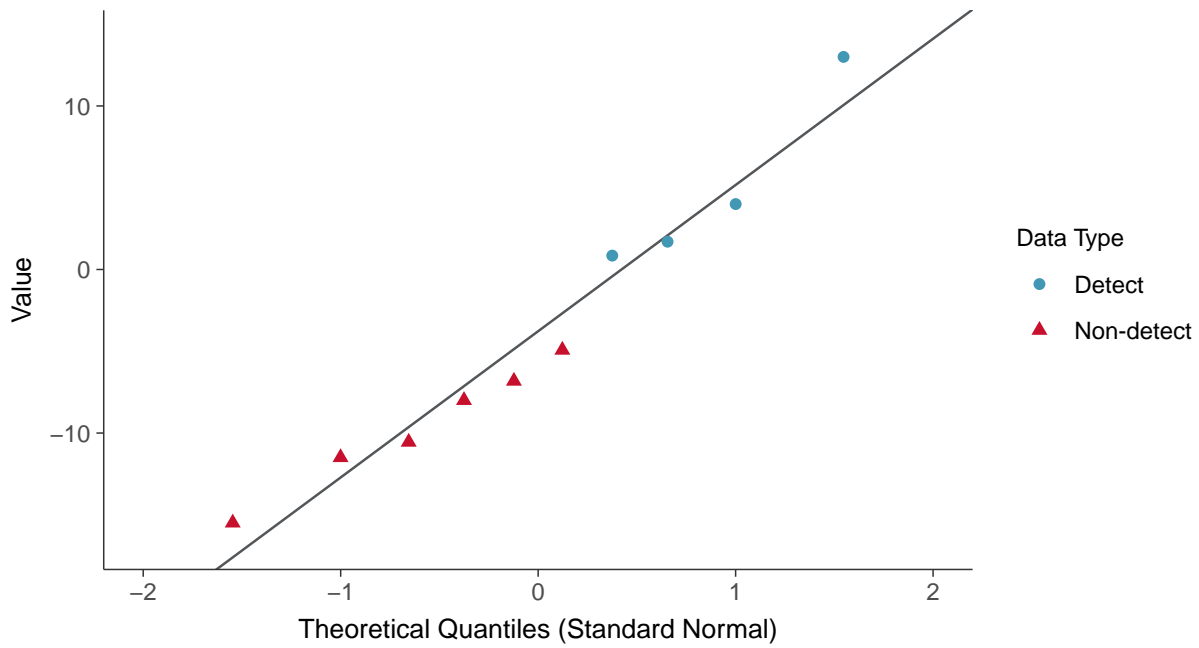
Antimony, MW-15015R (ug/L)





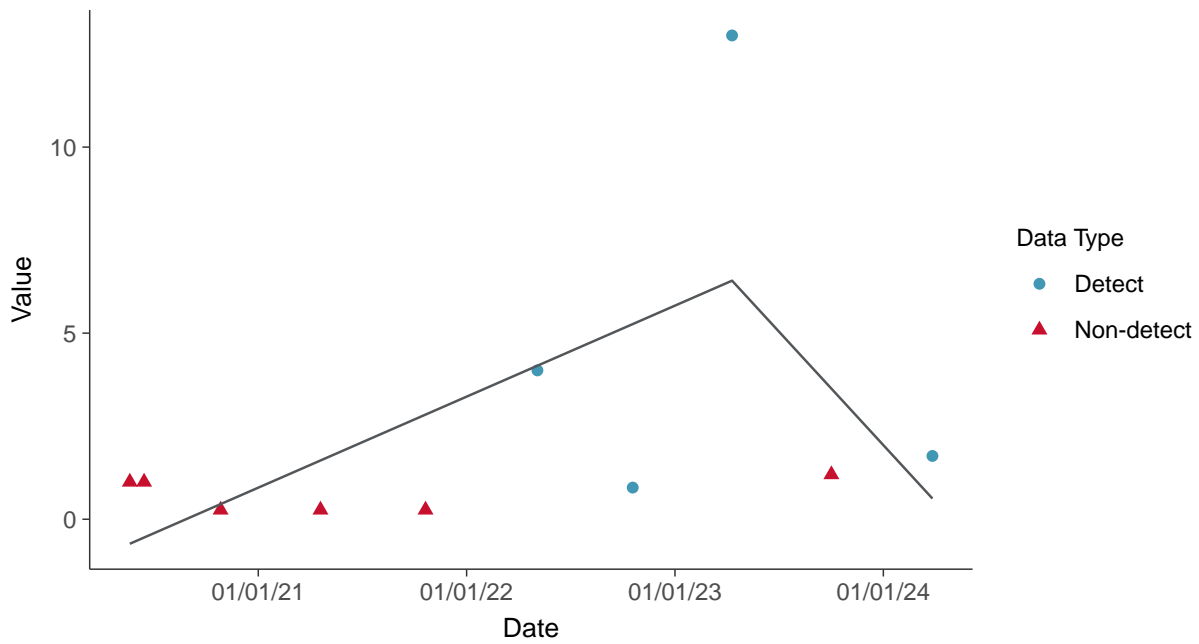
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

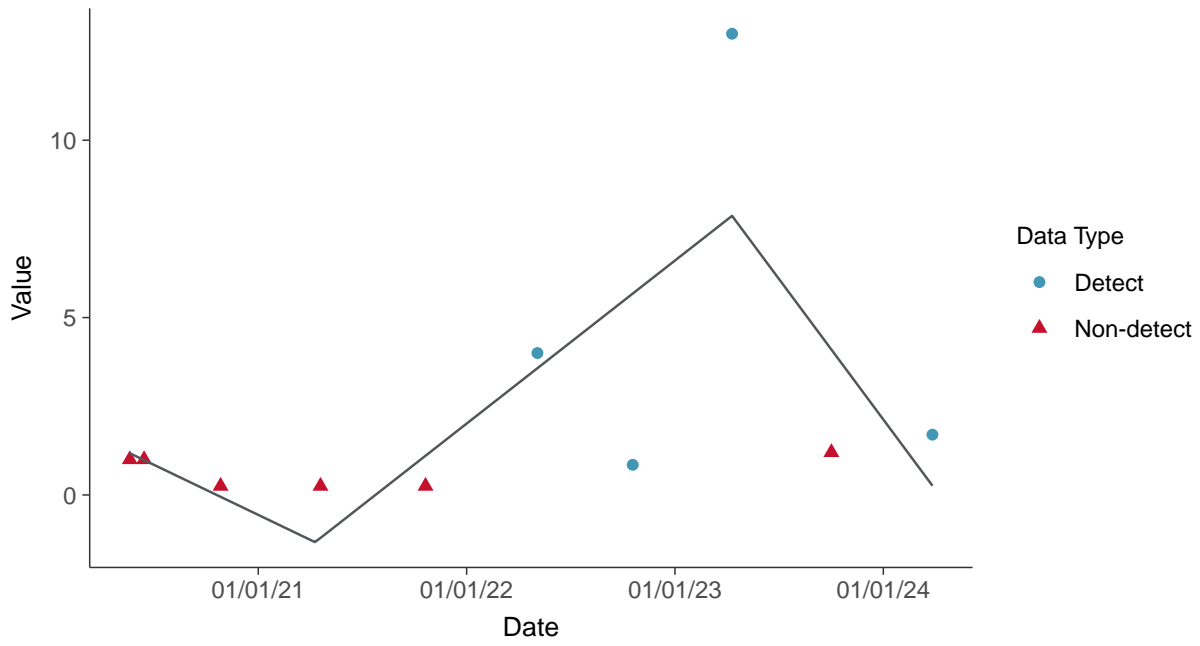
Antimony, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15015R (ug/L)



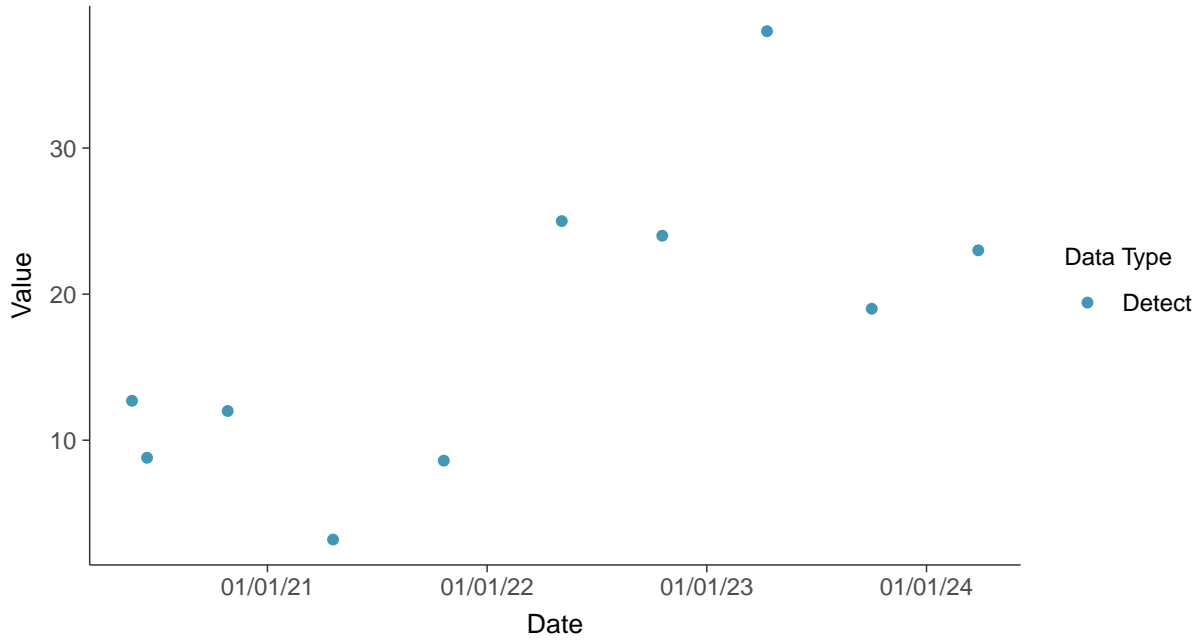


Appendix IV: Arsenic, MW-15015R

ID: 05_2_102

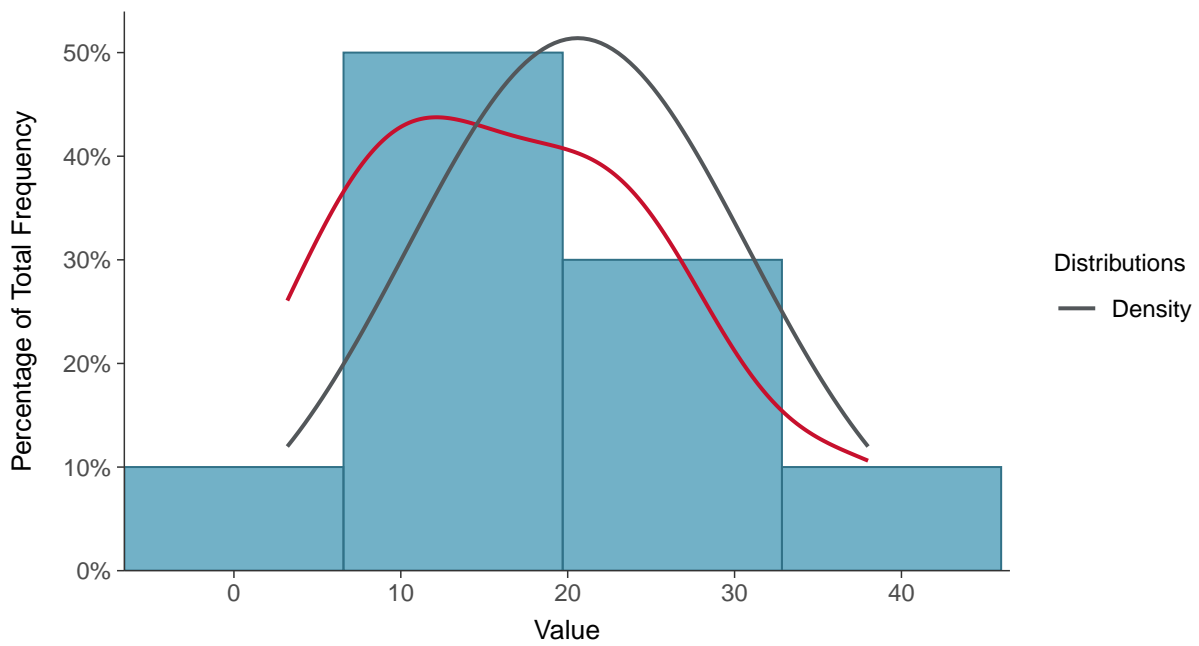
Scatter Plot

Arsenic, MW-15015R (ug/L)



Histogram

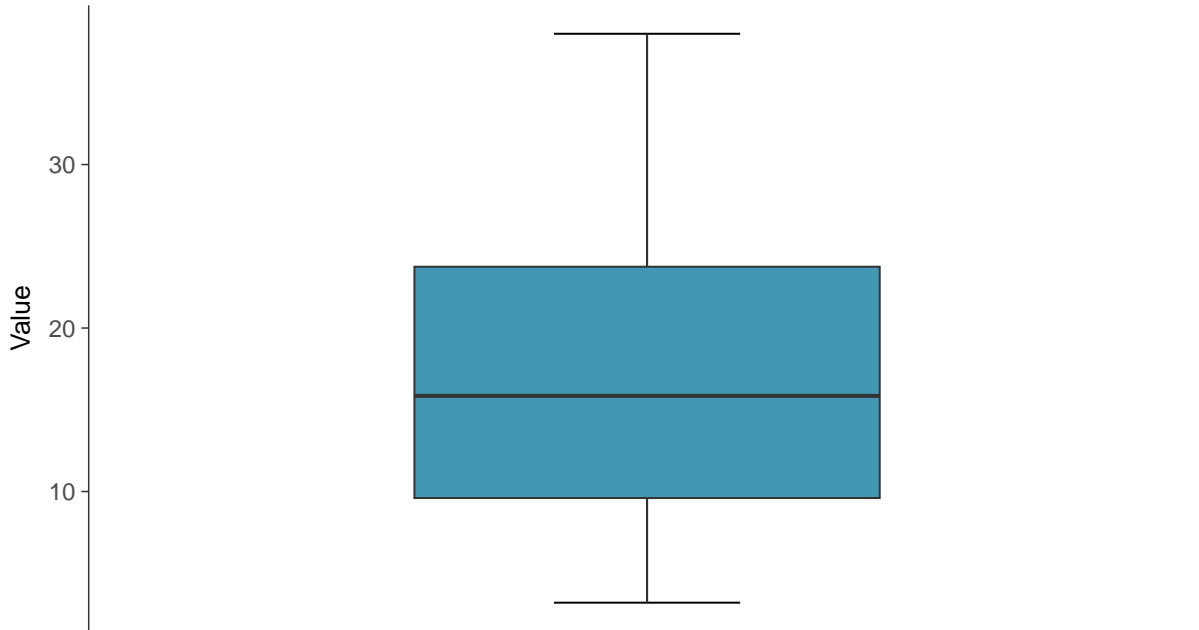
Arsenic, MW-15015R (ug/L)





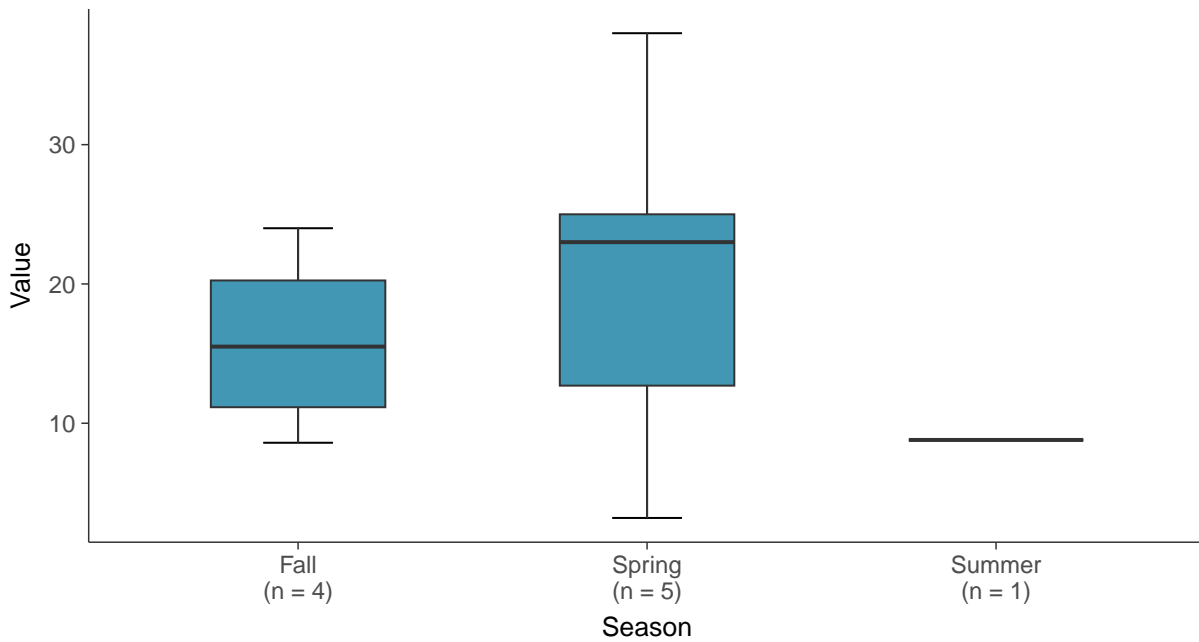
Boxplot

Arsenic, MW-15015R (ug/L)



Boxplot by Season

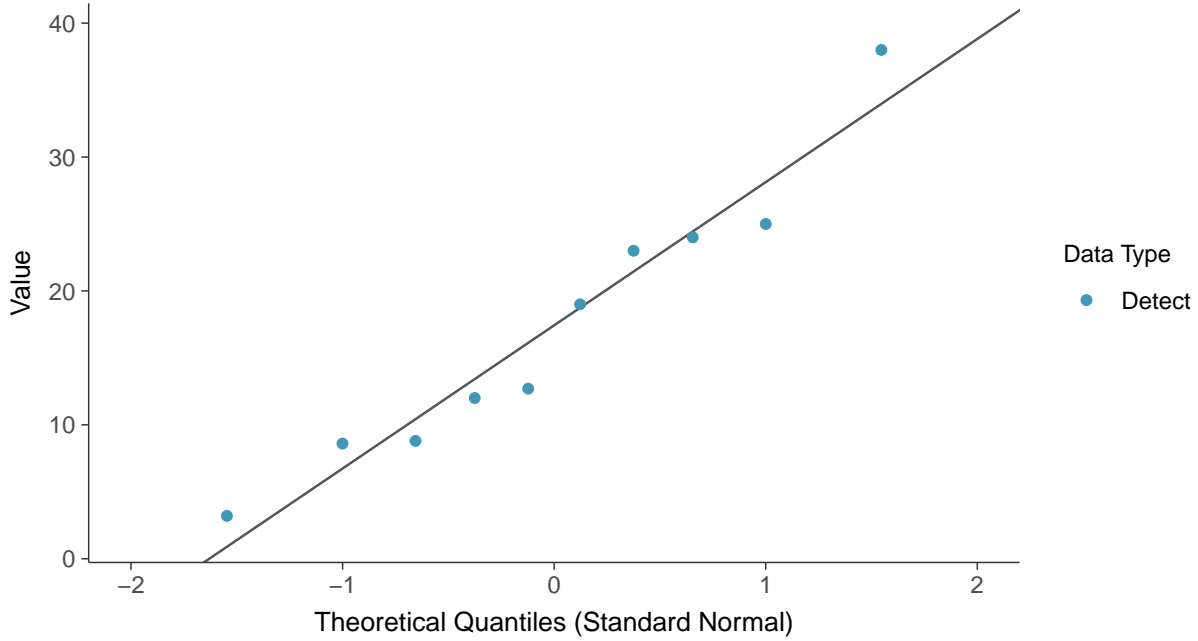
Arsenic, MW-15015R (ug/L)





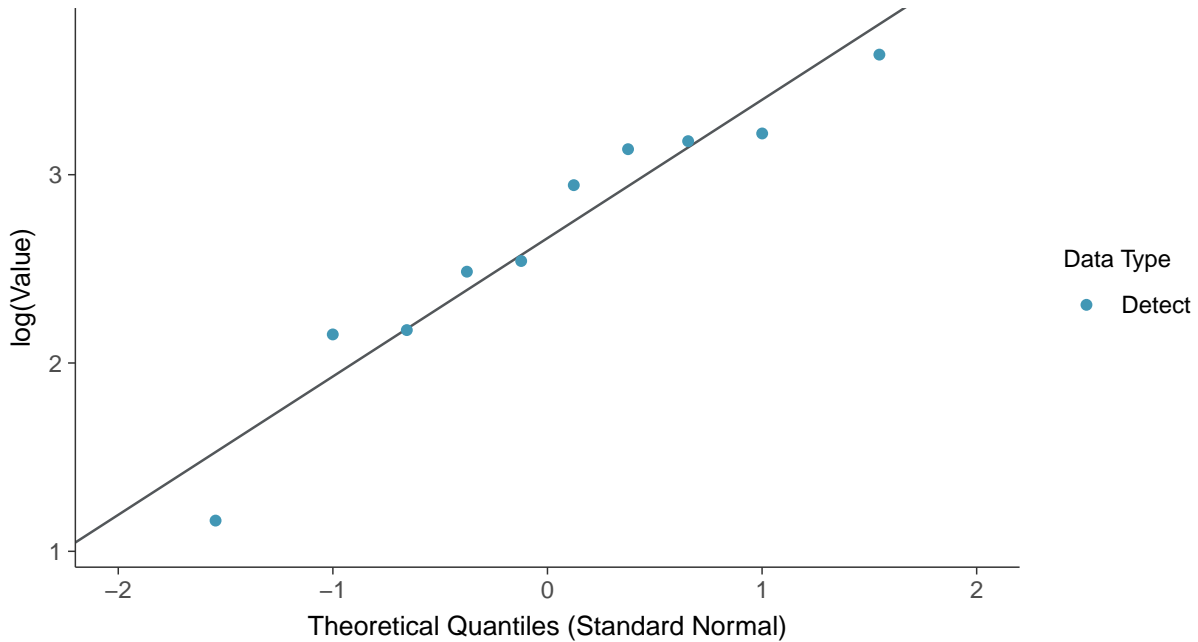
Normal Q-Q plot

Arsenic, MW-15015R (ug/L)



Lognormal Q-Q plot

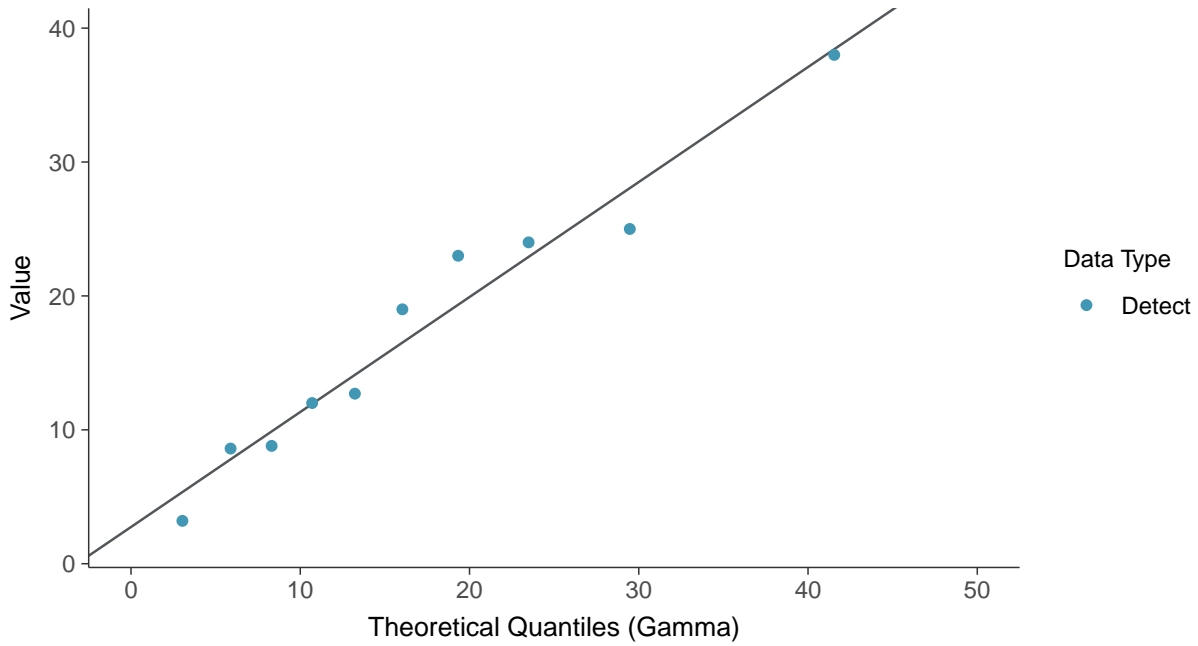
Arsenic, MW-15015R (ug/L)





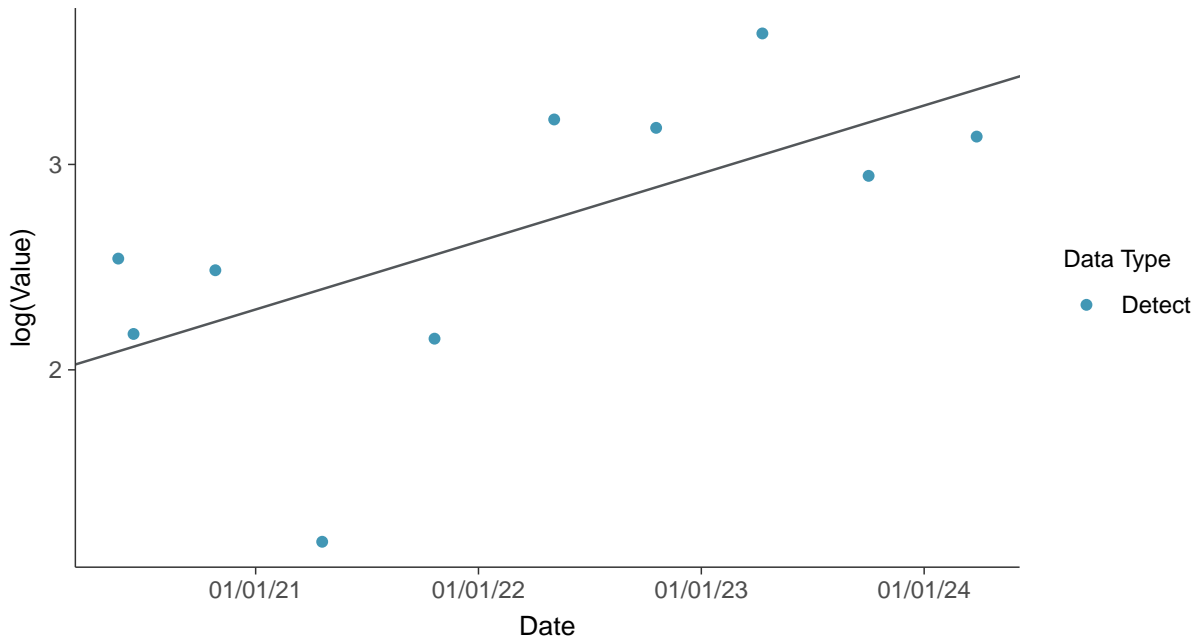
Gamma Q-Q plot

Arsenic, MW-15015R (ug/L)



Trend Regression: Lognormal MLE

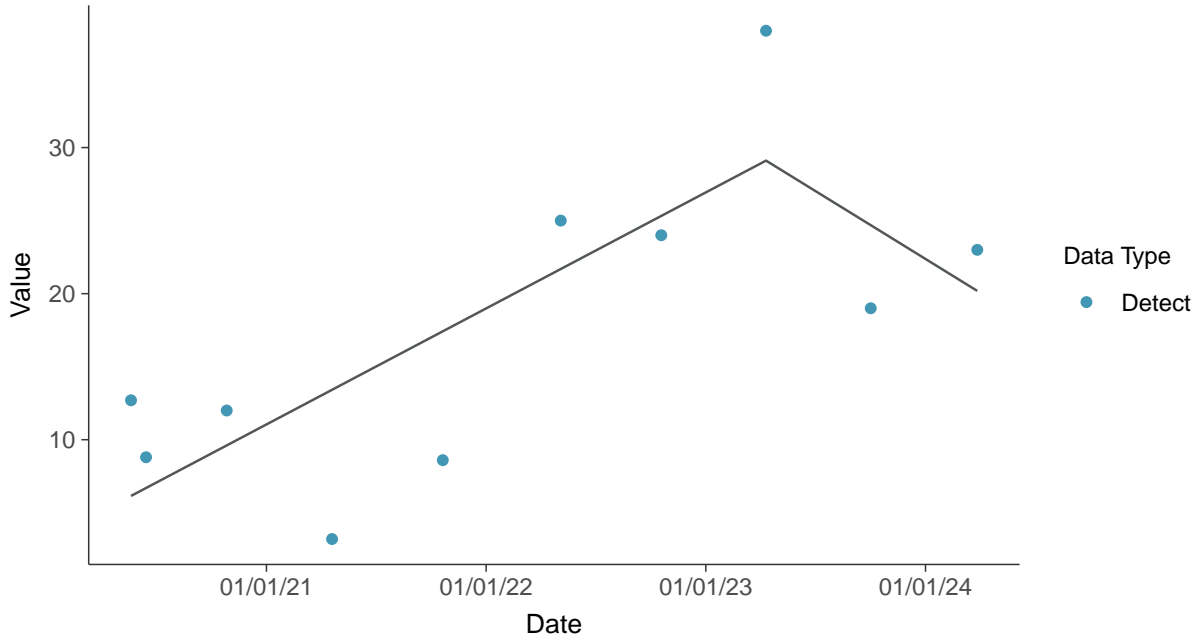
Arsenic, MW-15015R (ug/L)





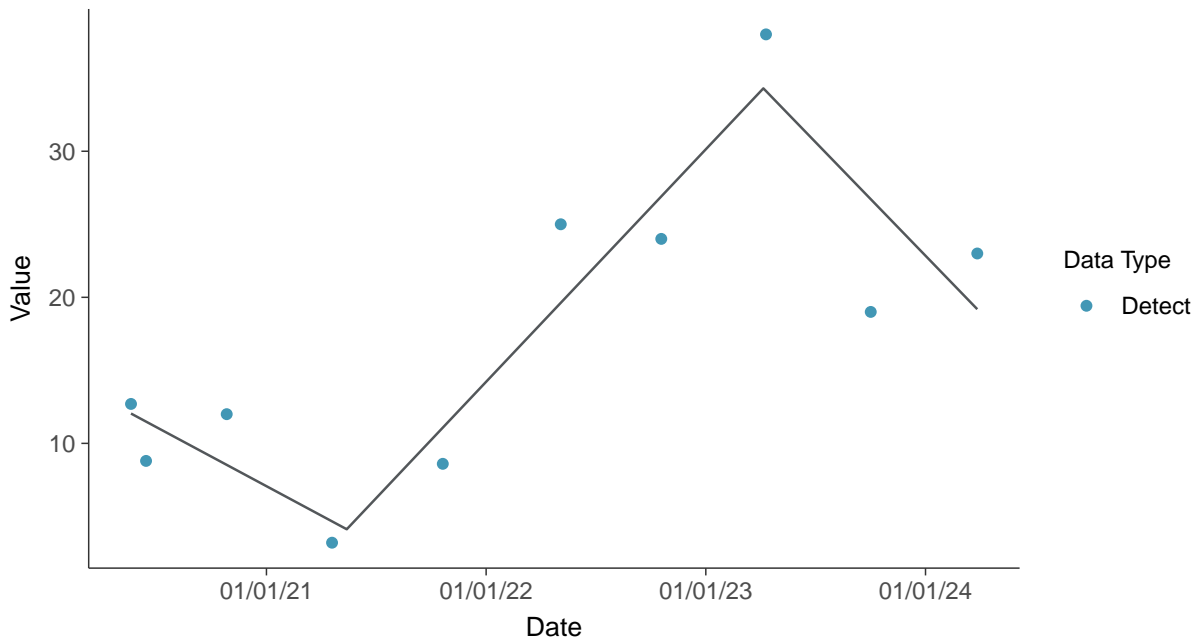
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

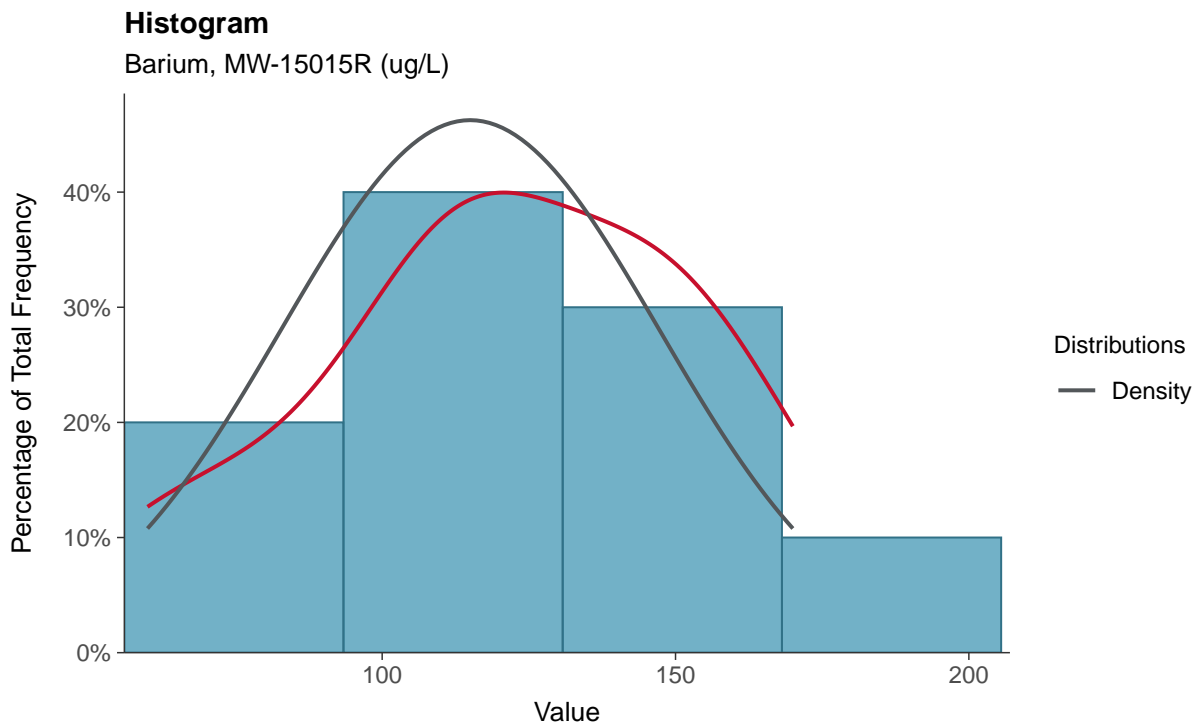
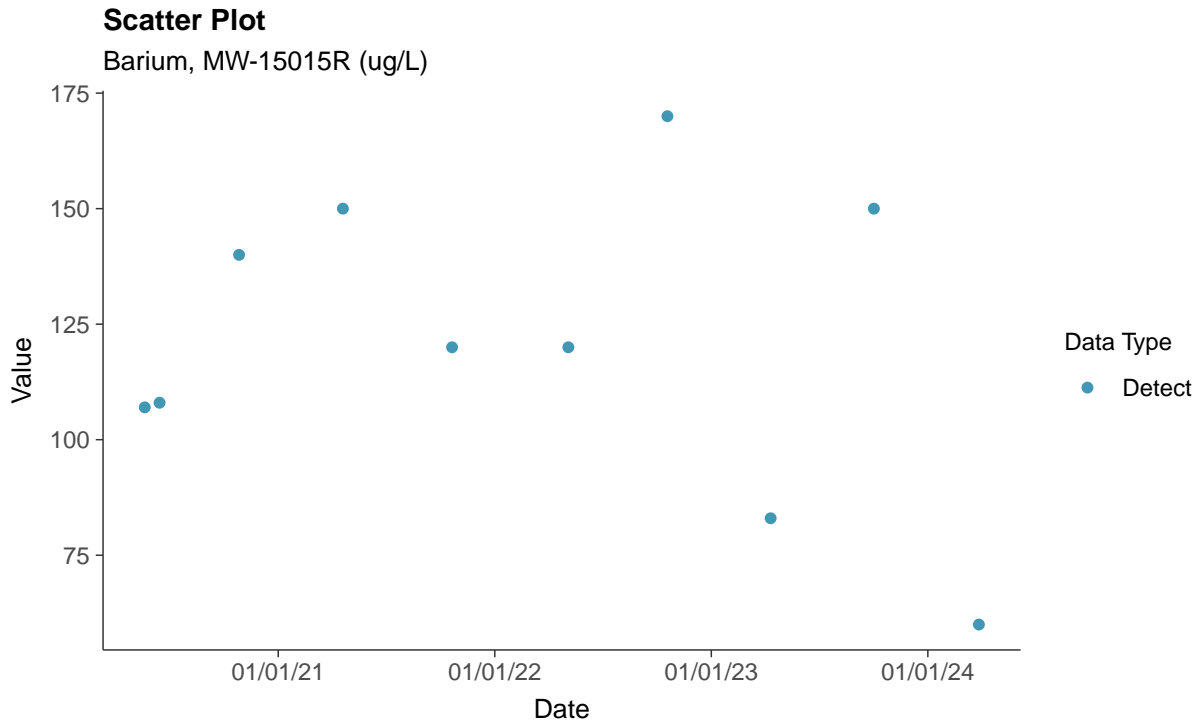
Arsenic, MW-15015R (ug/L)





Appendix IV: Barium, MW-15015R

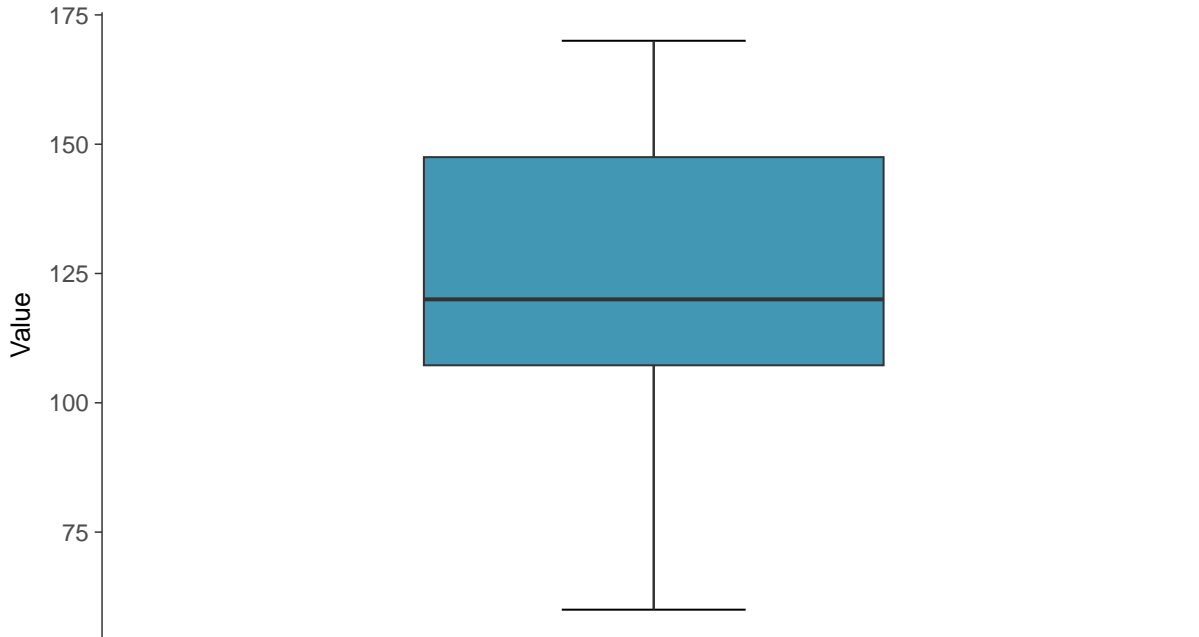
ID: 05_2_103





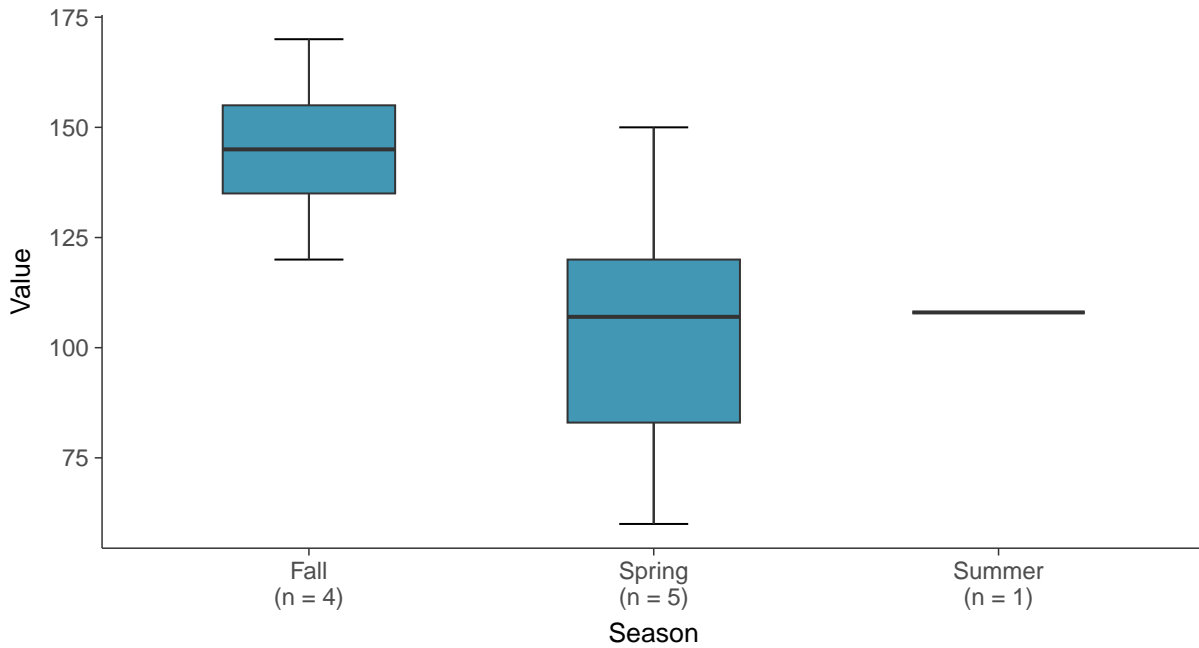
Boxplot

Barium, MW-15015R (ug/L)



Boxplot by Season

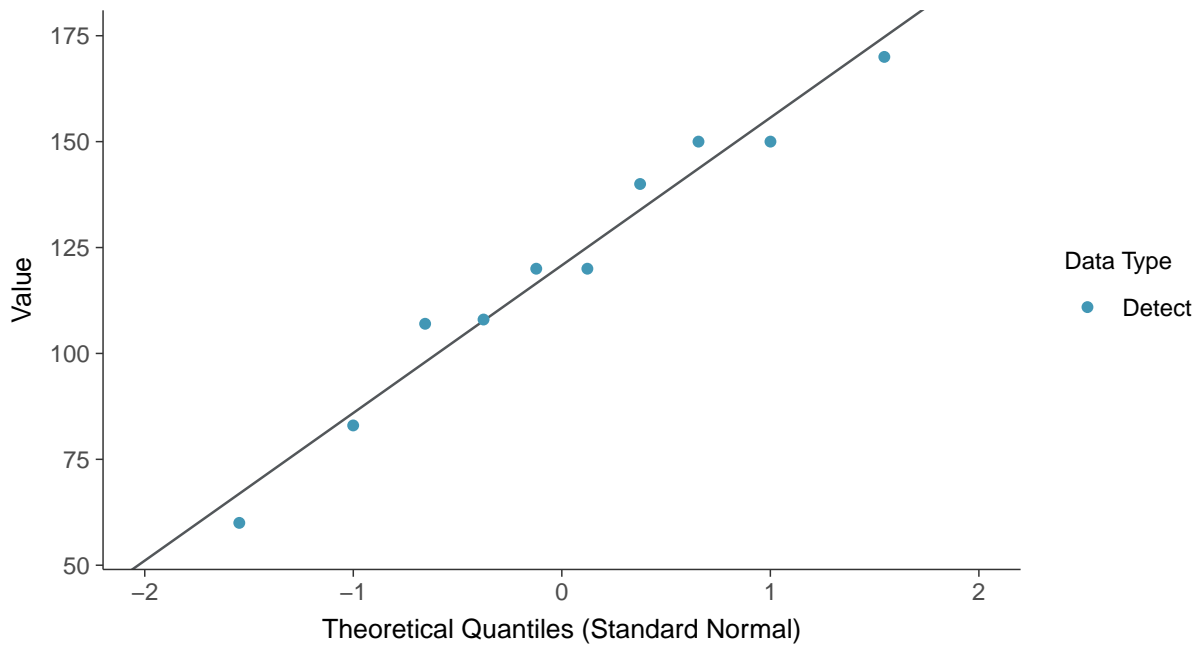
Barium, MW-15015R (ug/L)





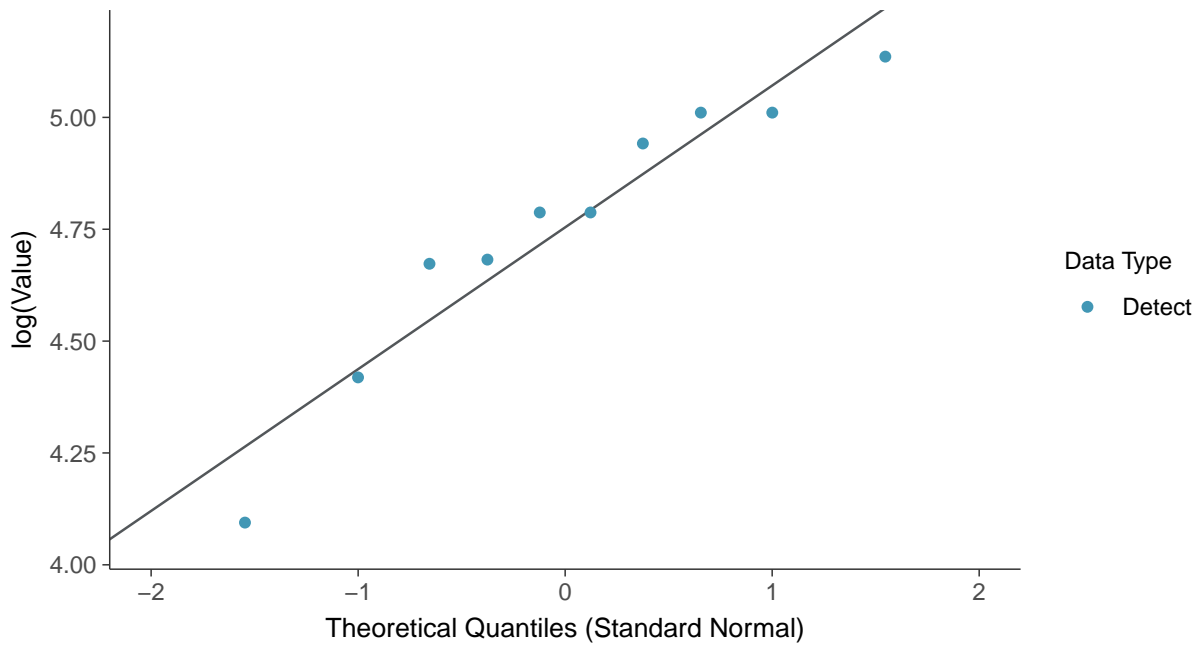
Normal Q-Q plot

Barium, MW-15015R (ug/L)



Lognormal Q-Q plot

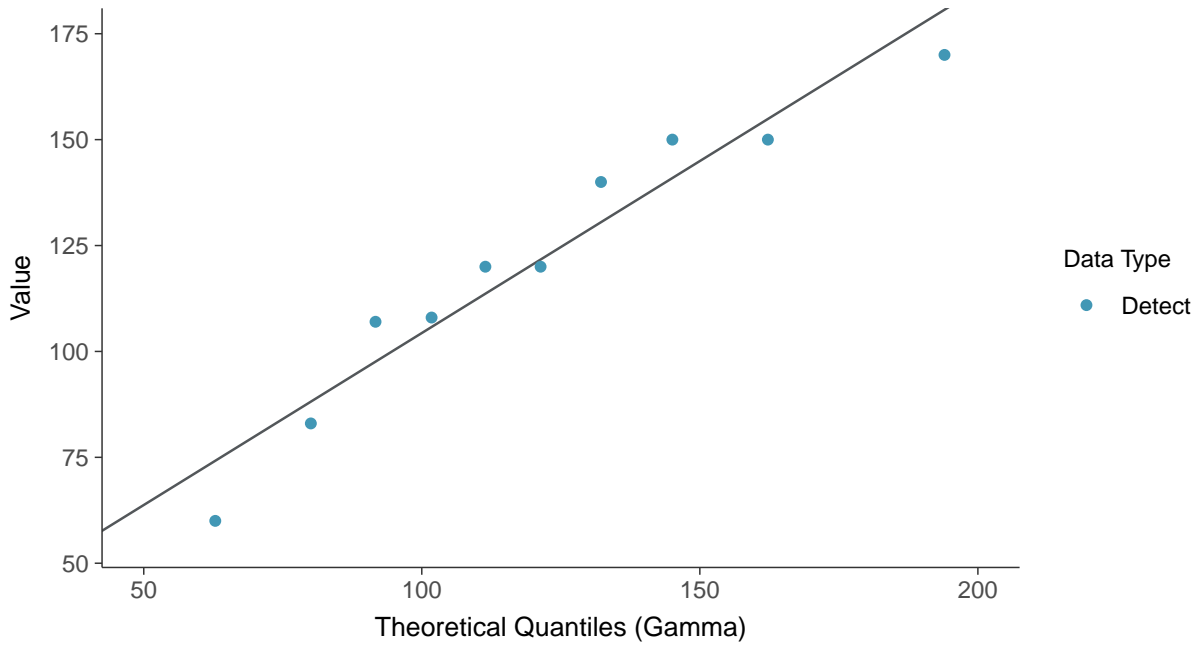
Barium, MW-15015R (ug/L)





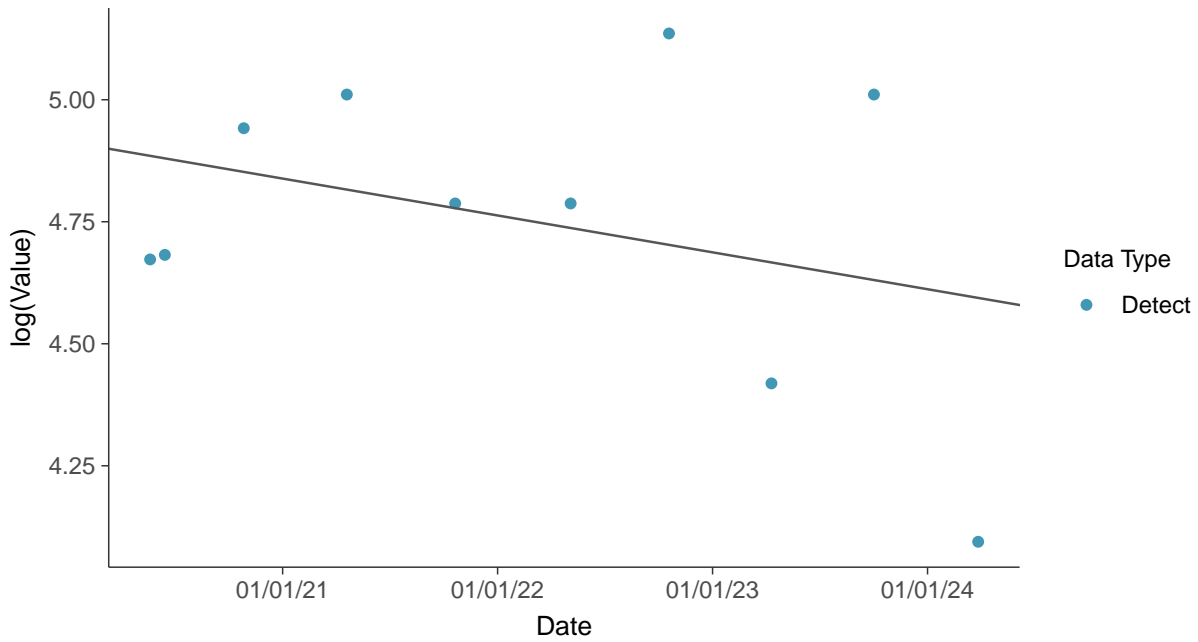
Gamma Q-Q plot

Barium, MW-15015R (ug/L)



Trend Regression: Lognormal MLE

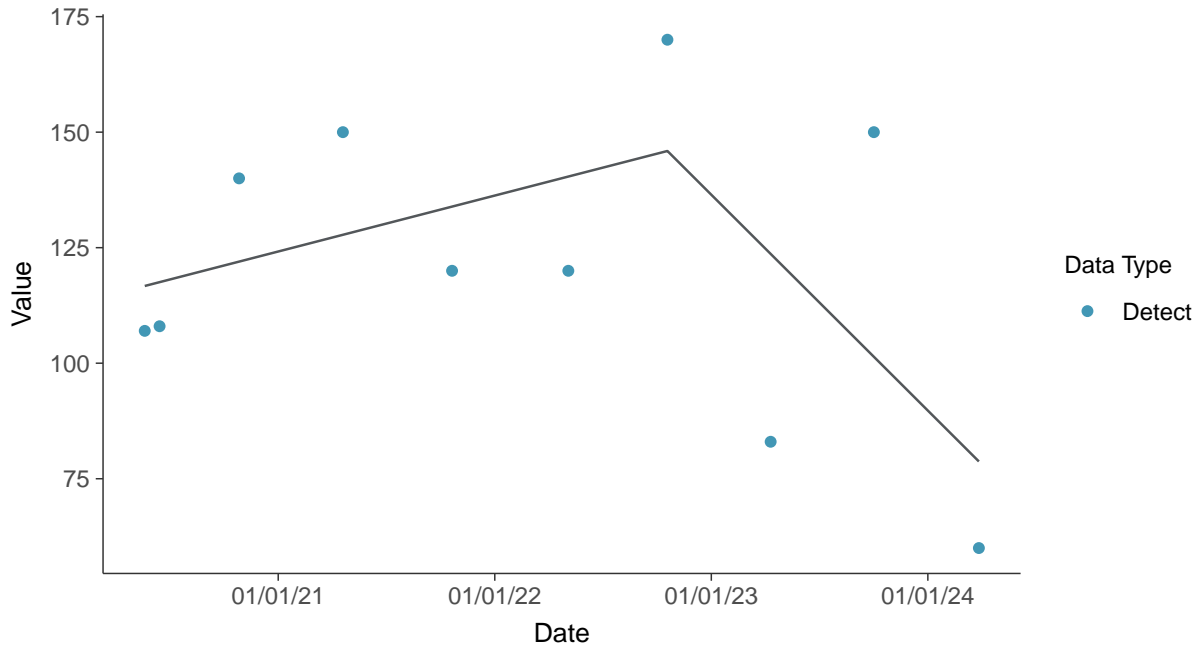
Barium, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear

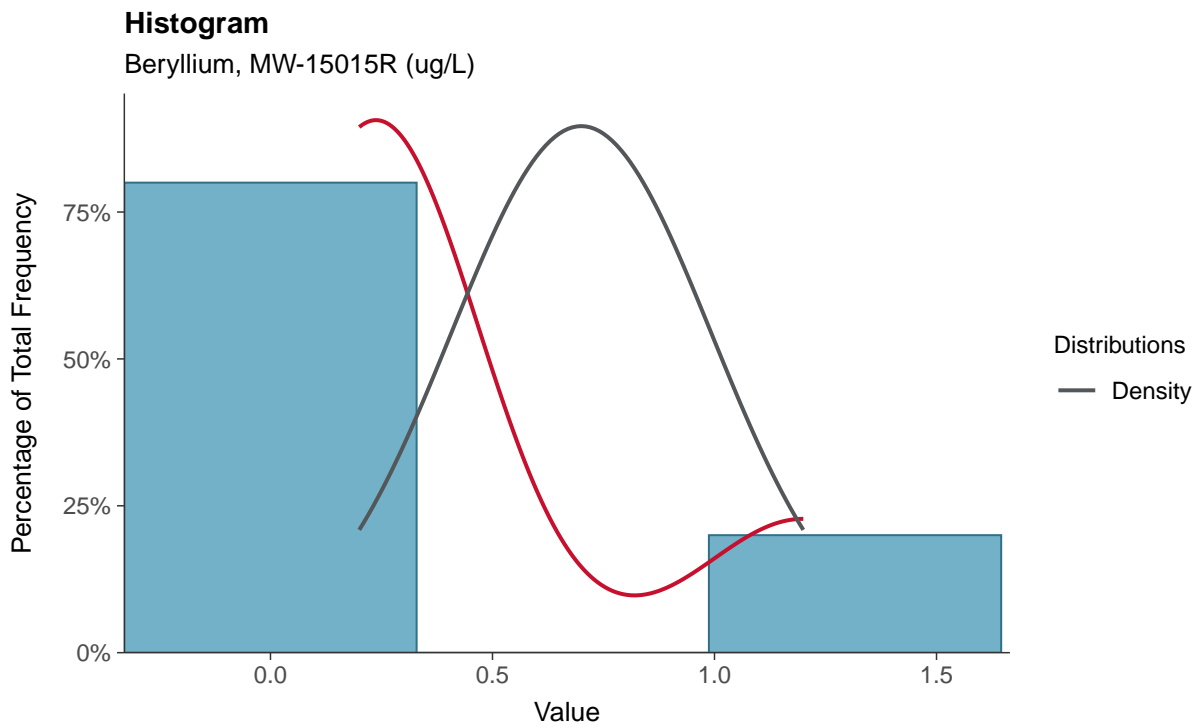
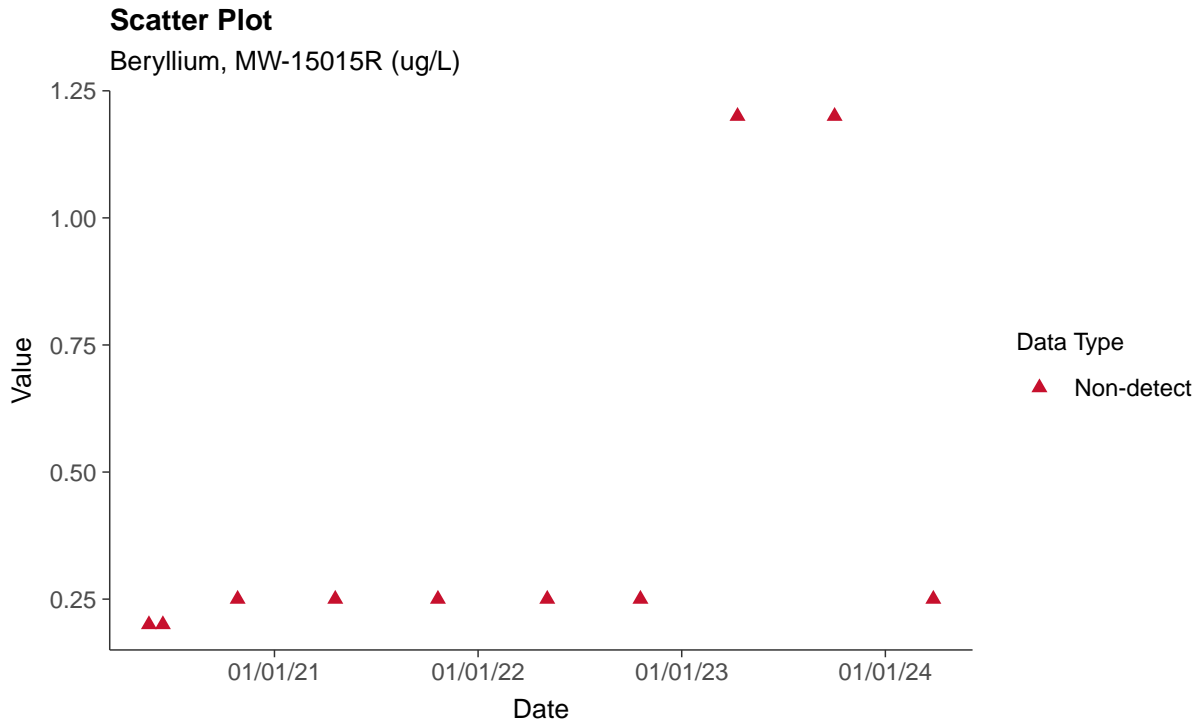
Barium, MW-15015R (ug/L)





Appendix IV: Beryllium, MW-15015R

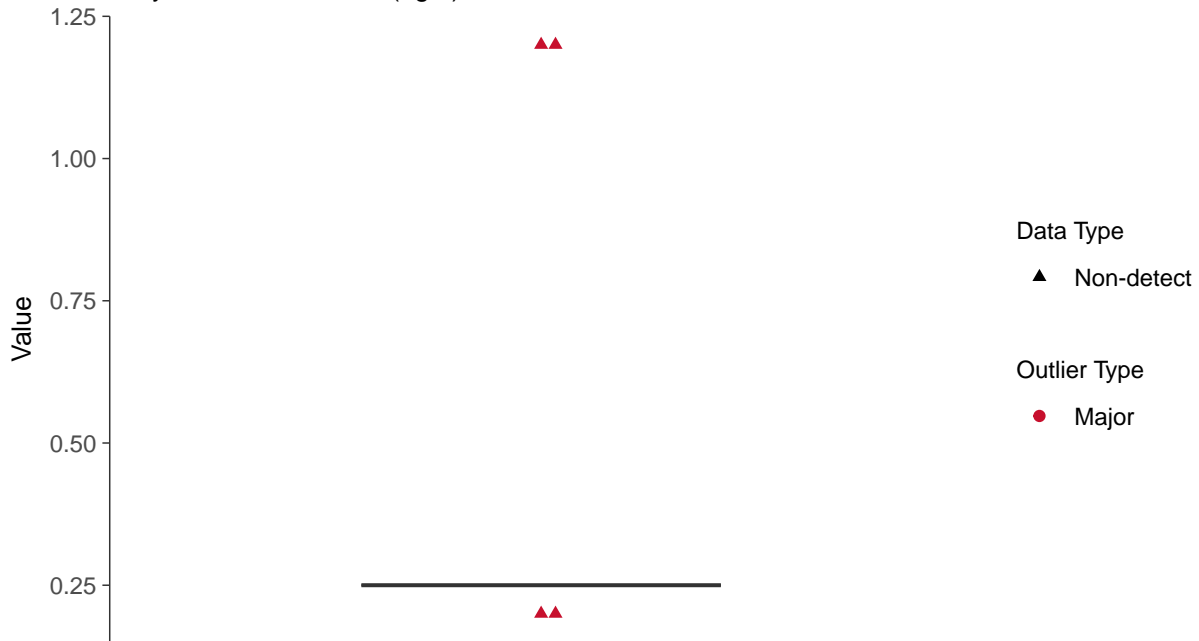
ID: 05_2_104





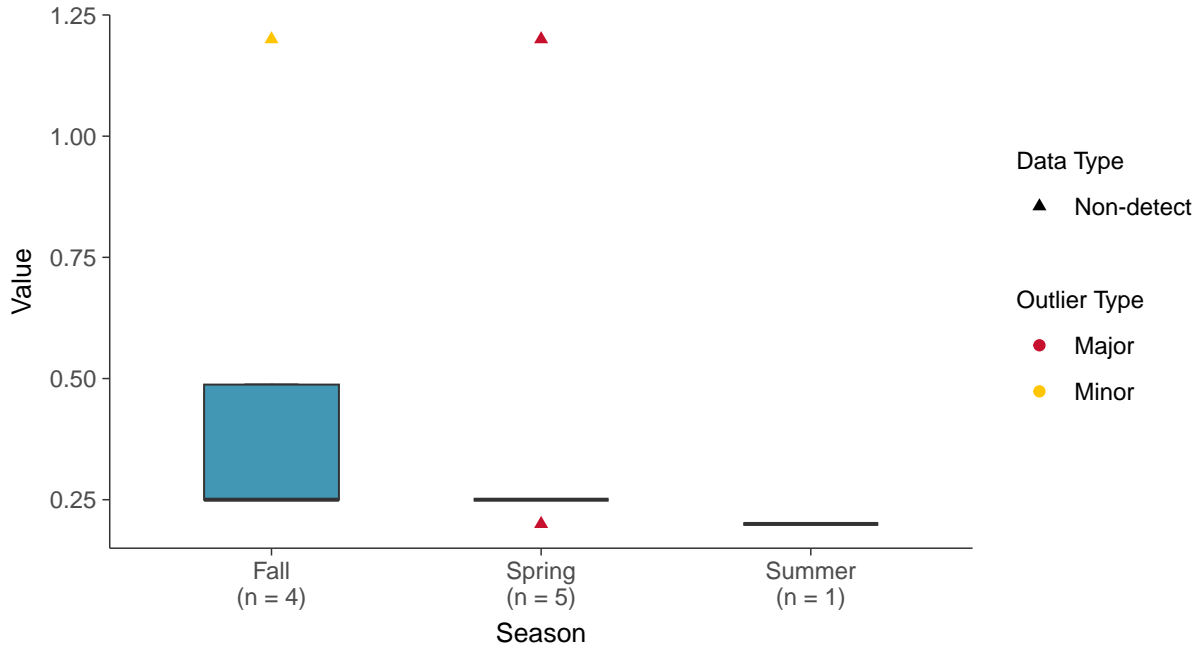
Boxplot

Beryllium, MW-15015R (ug/L)



Boxplot by Season

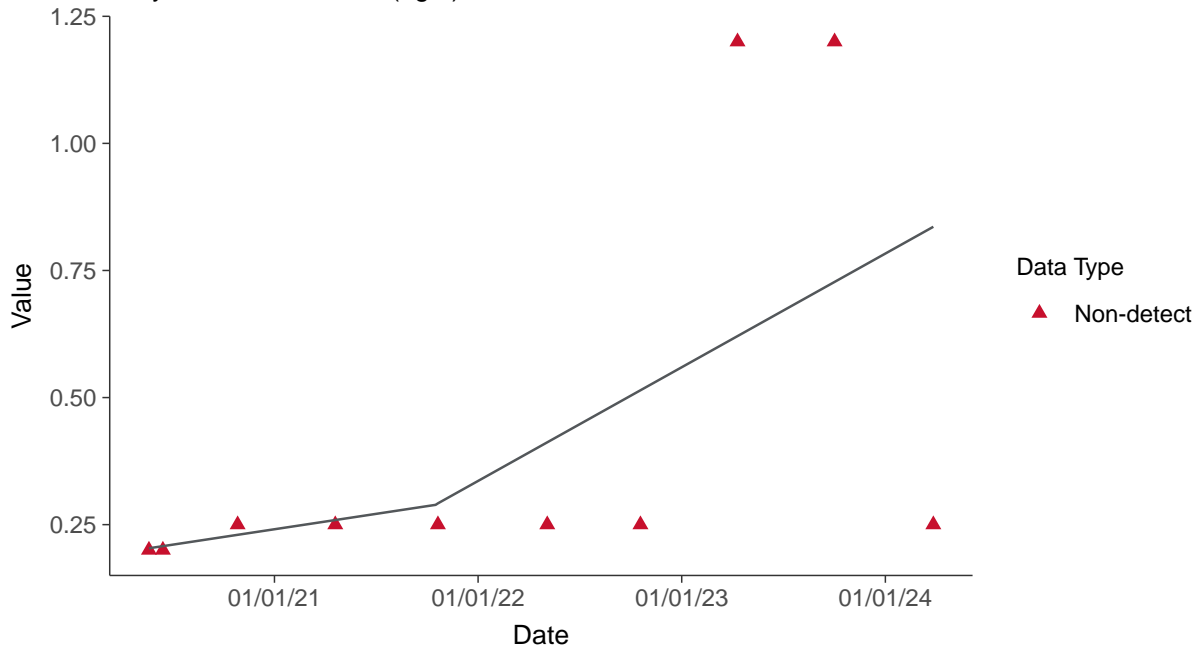
Beryllium, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear

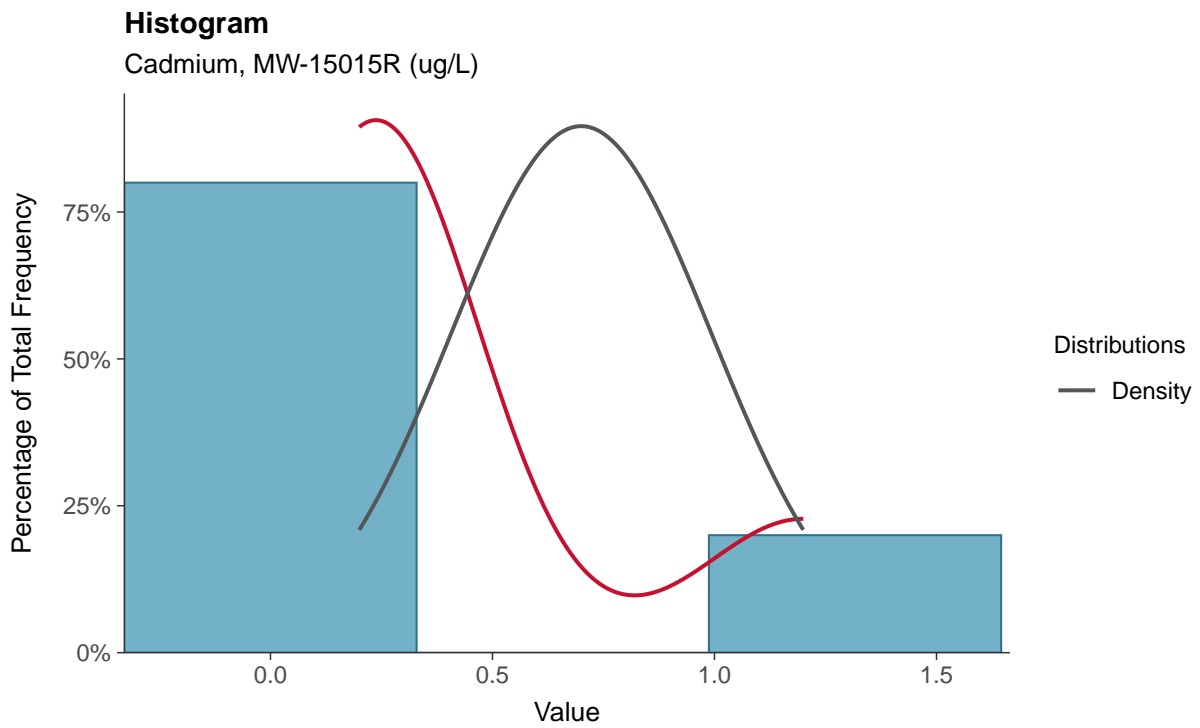
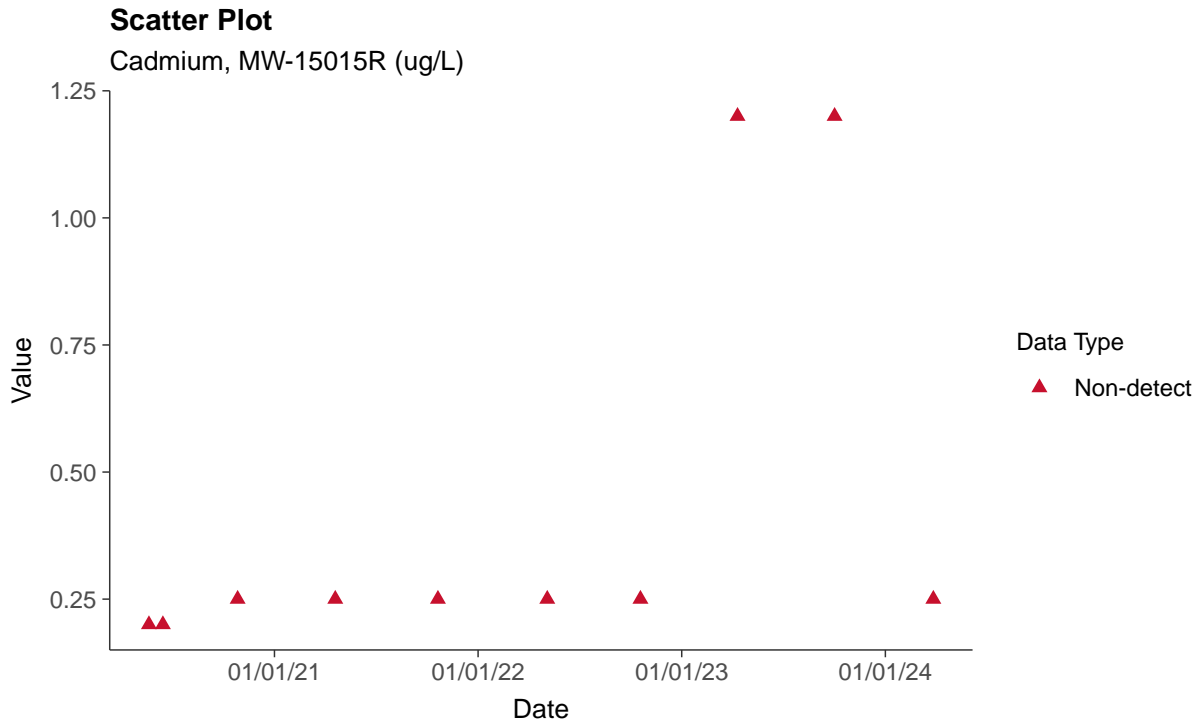
Beryllium, MW-15015R (ug/L)





Appendix IV: Cadmium, MW-15015R

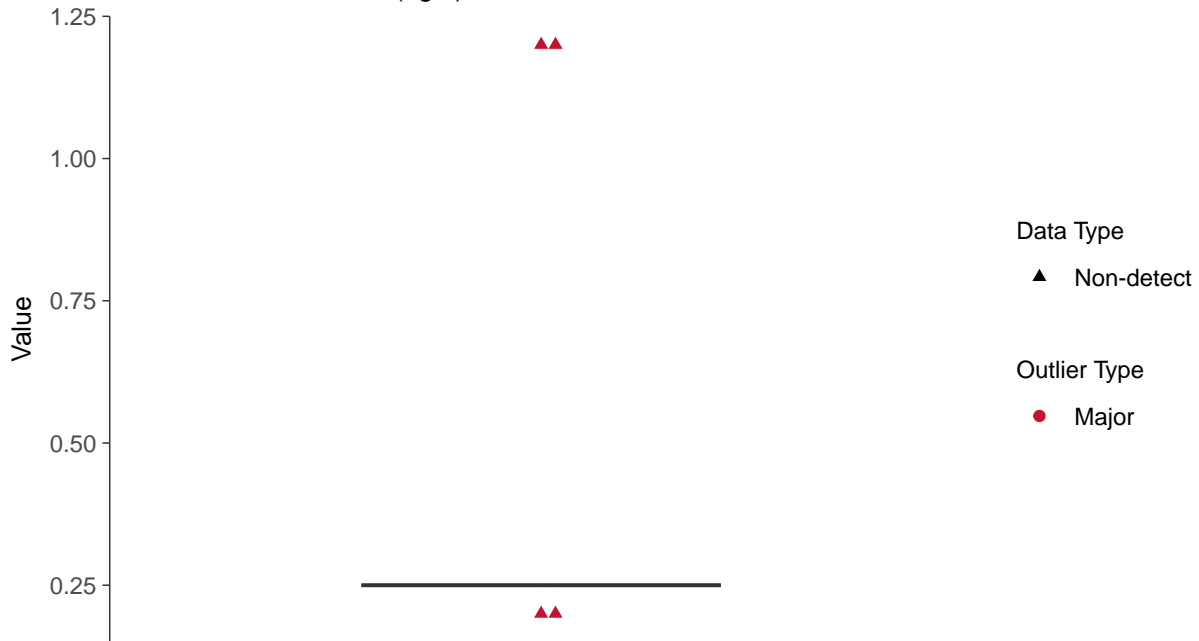
ID: 05_2_106





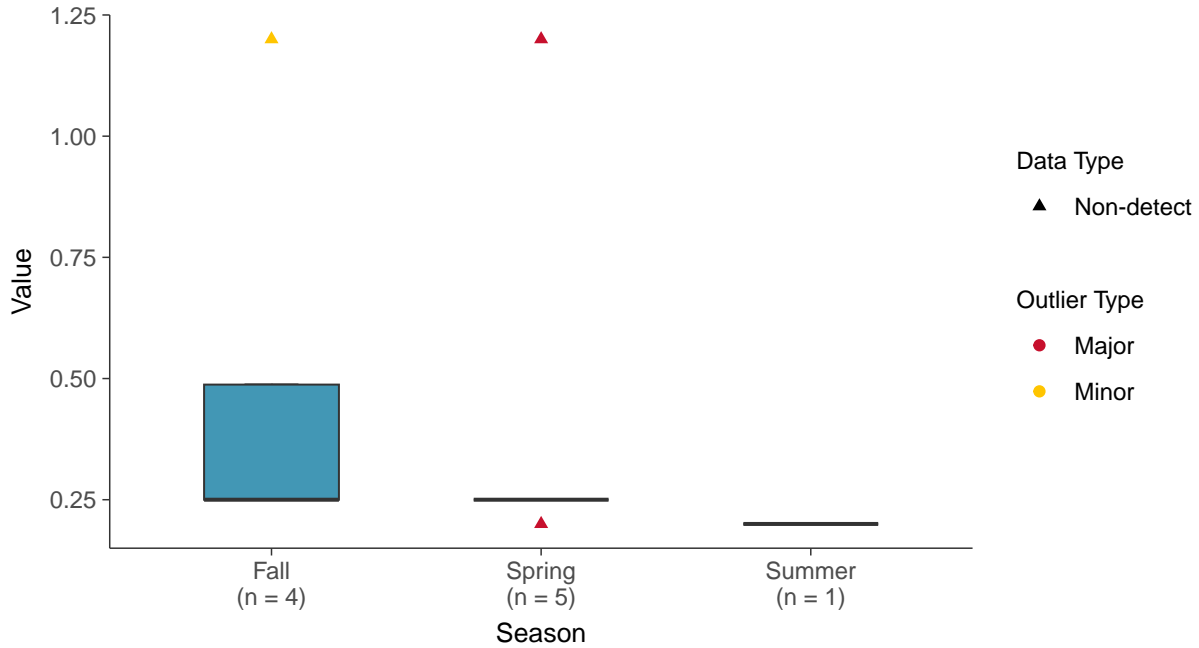
Boxplot

Cadmium, MW-15015R (ug/L)



Boxplot by Season

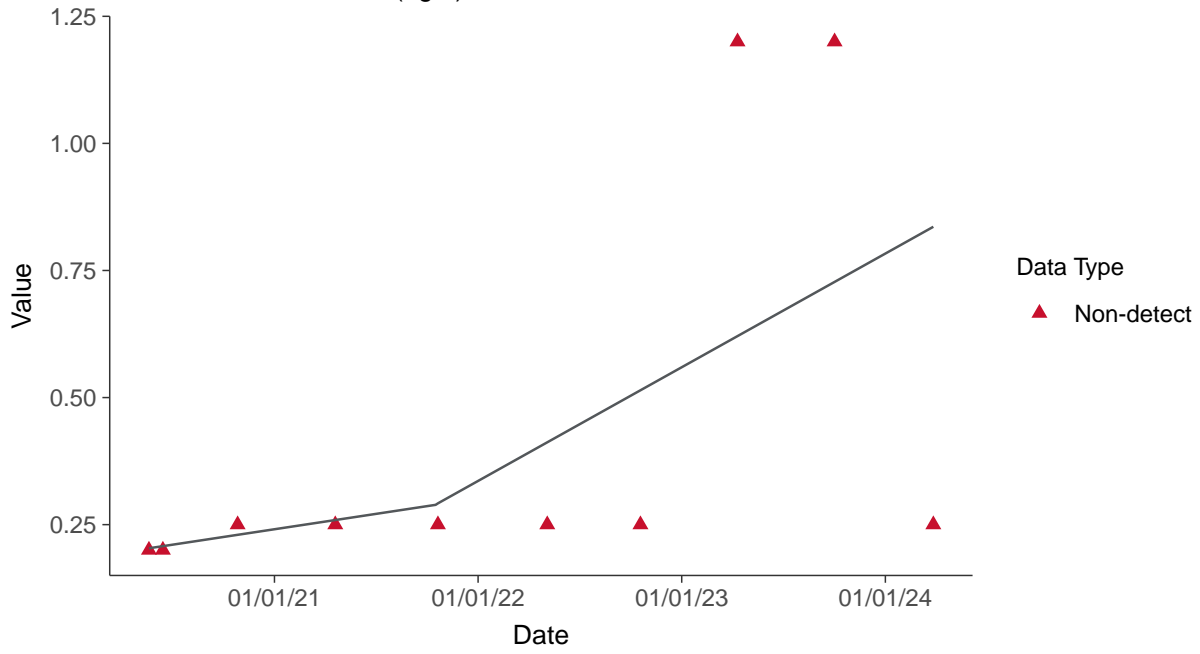
Cadmium, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear

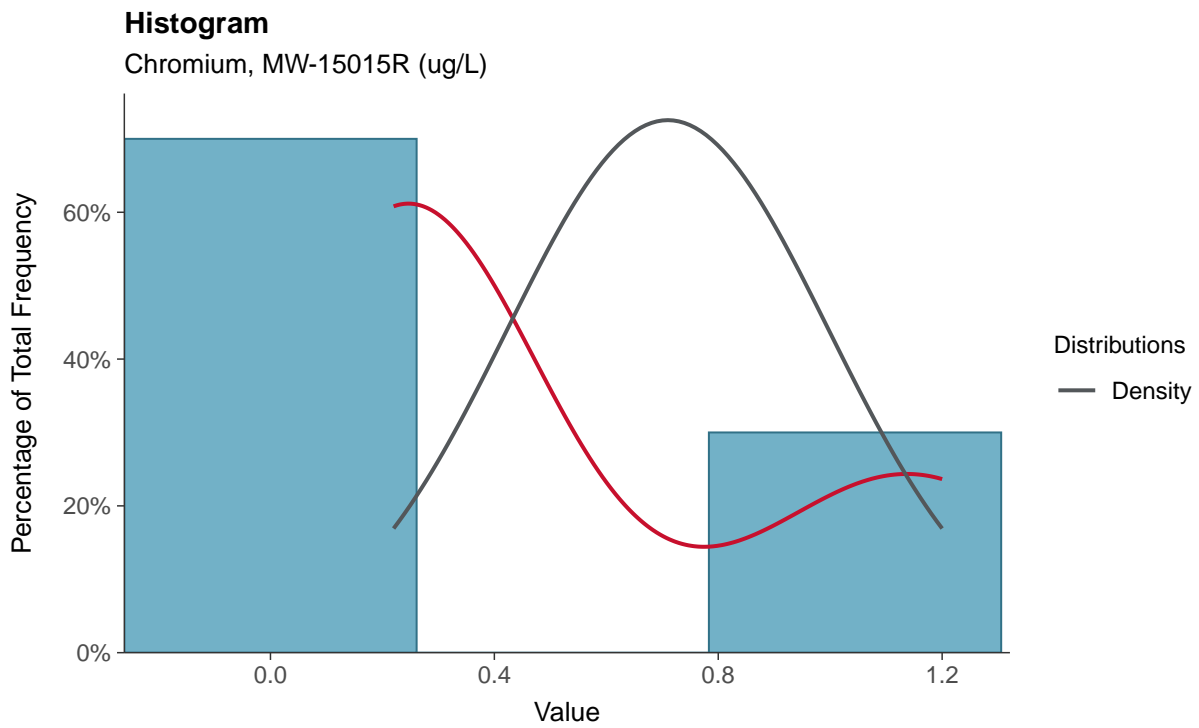
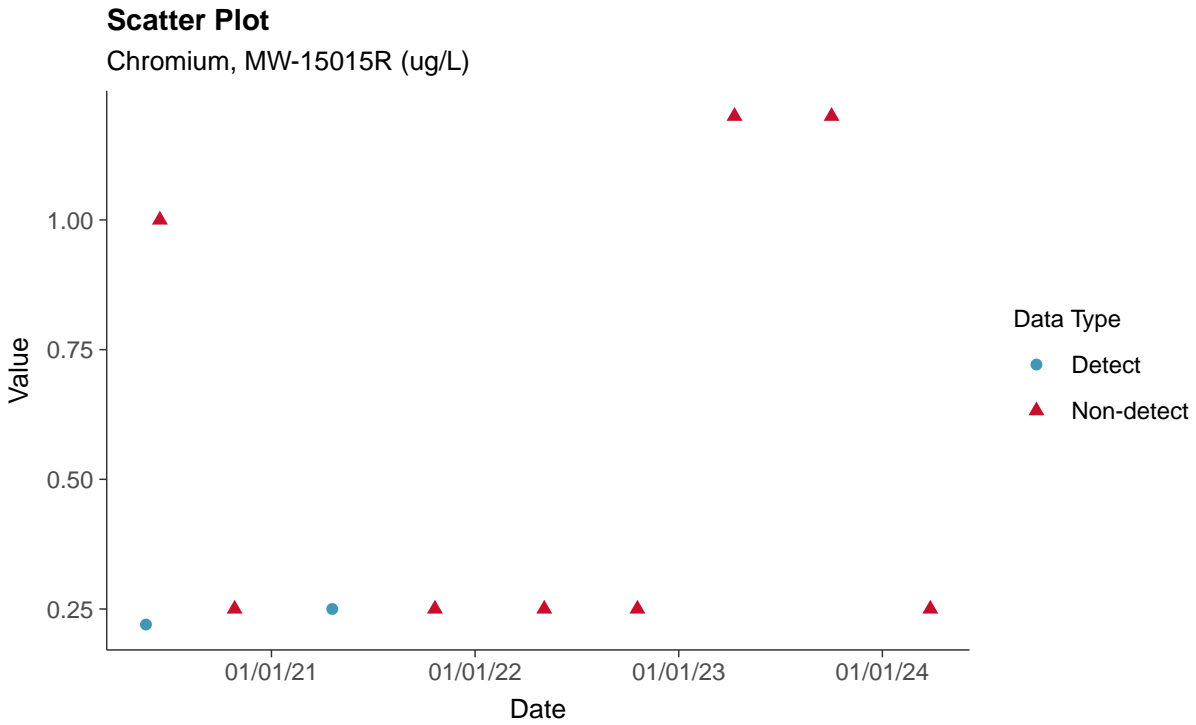
Cadmium, MW-15015R (ug/L)





Appendix IV: Chromium, MW-15015R

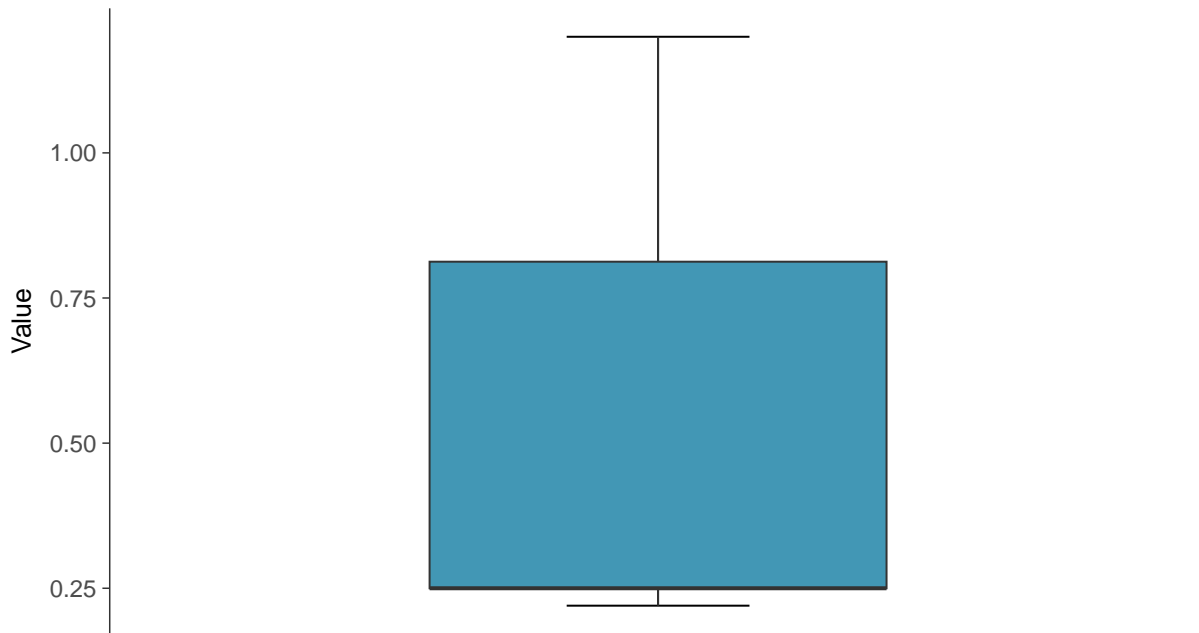
ID: 05_2_109





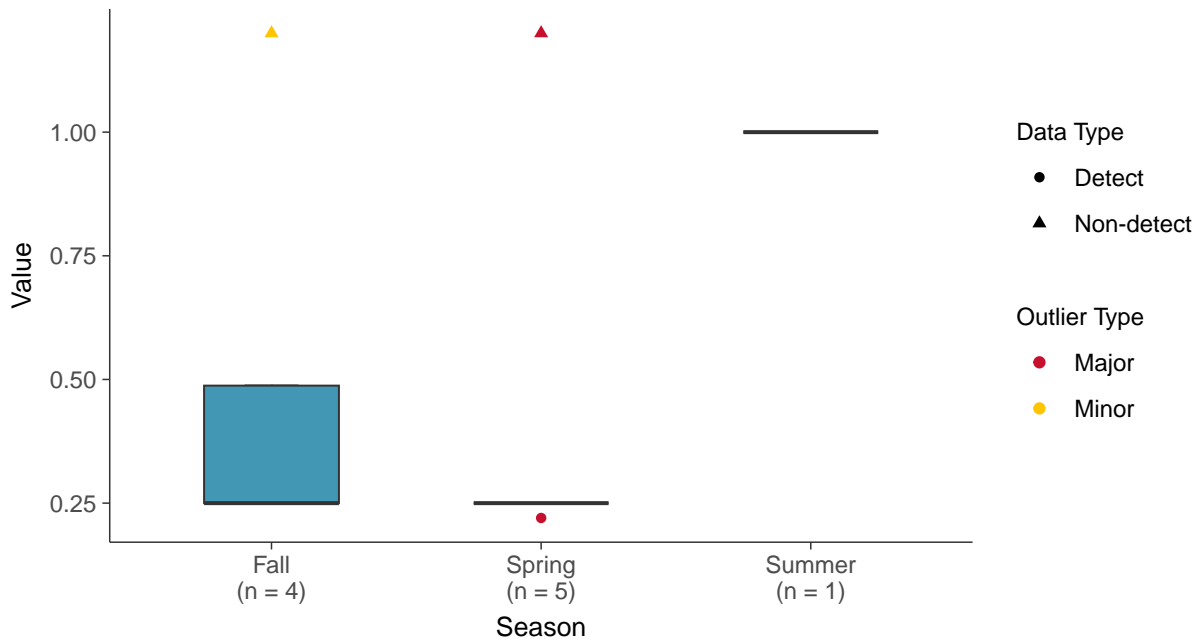
Boxplot

Chromium, MW-15015R (ug/L)



Boxplot by Season

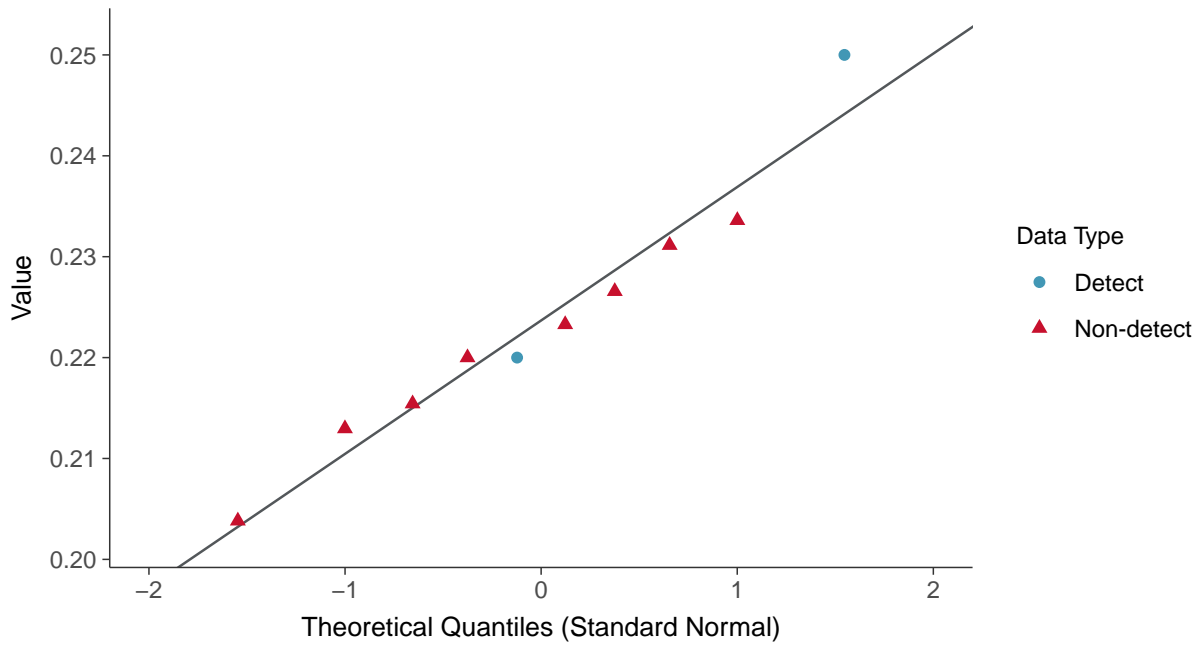
Chromium, MW-15015R (ug/L)





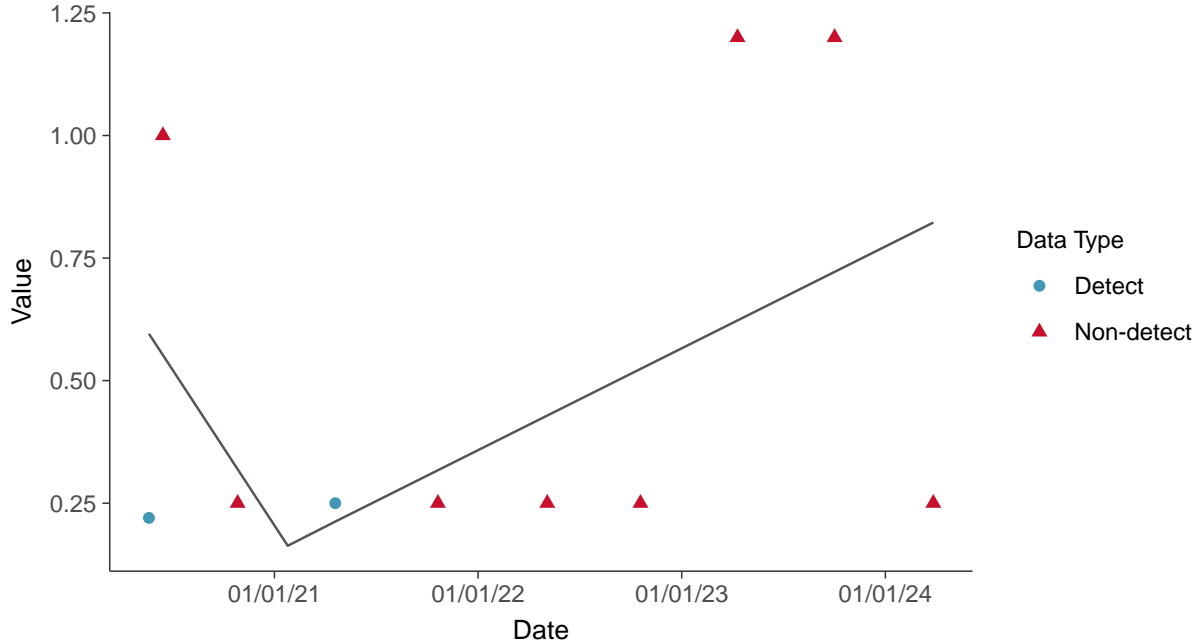
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

Chromium, MW-15015R (ug/L)



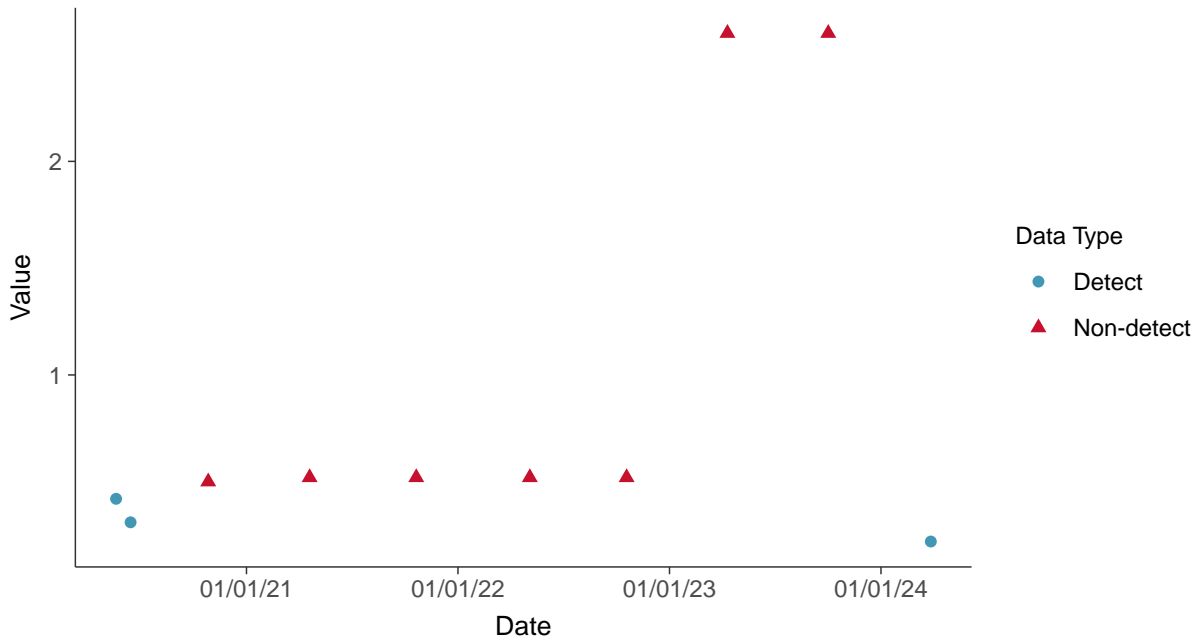


Appendix IV: Cobalt, MW-15015R

ID: 05_2_110

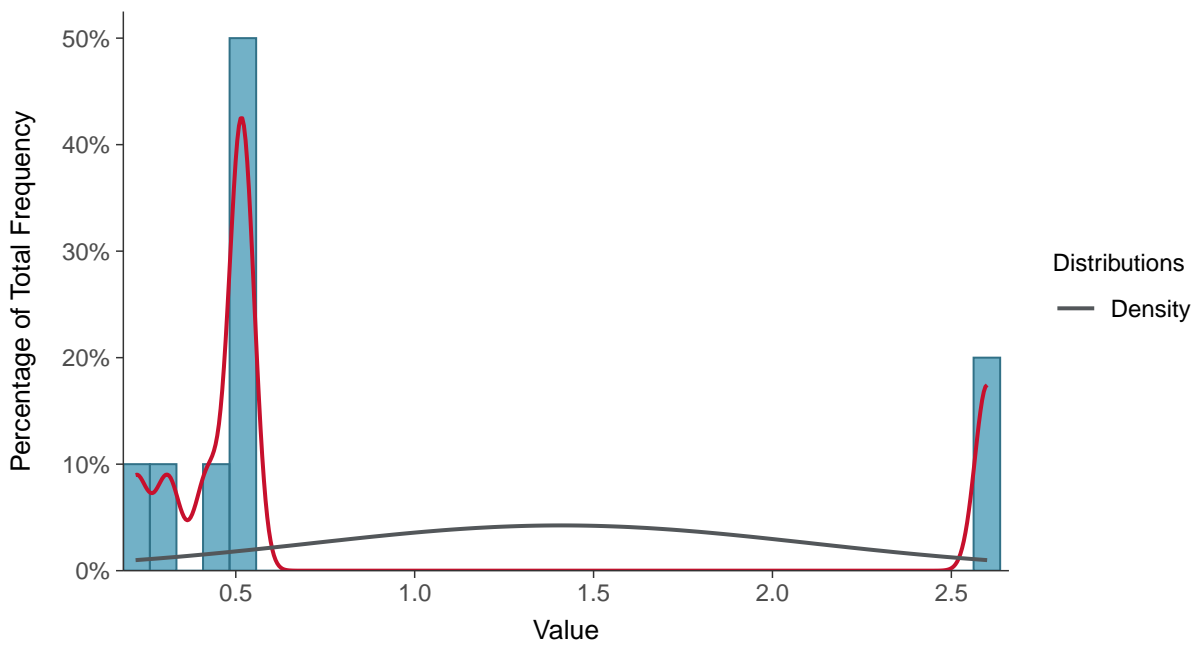
Scatter Plot

Cobalt, MW-15015R (ug/L)



Histogram

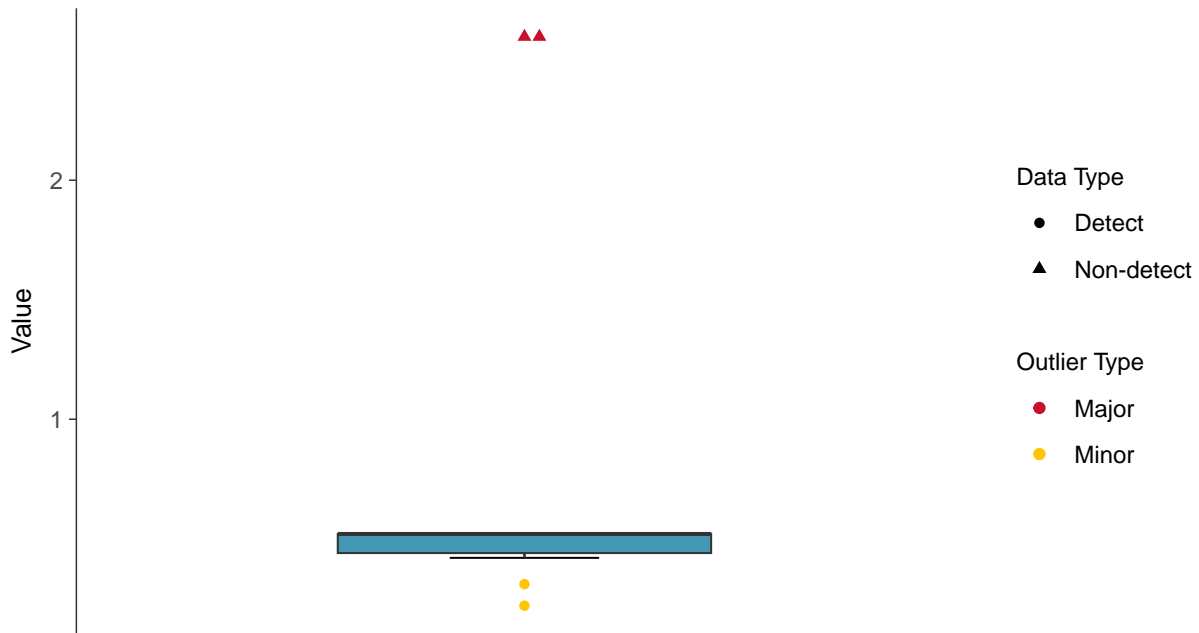
Cobalt, MW-15015R (ug/L)





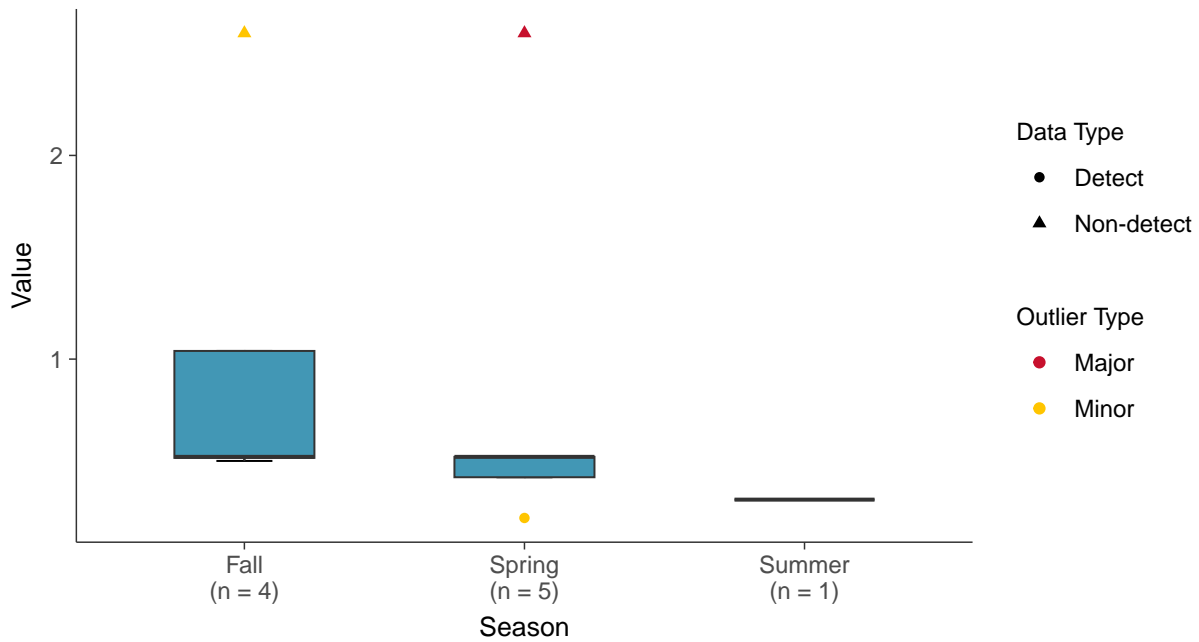
Boxplot

Cobalt, MW-15015R (ug/L)



Boxplot by Season

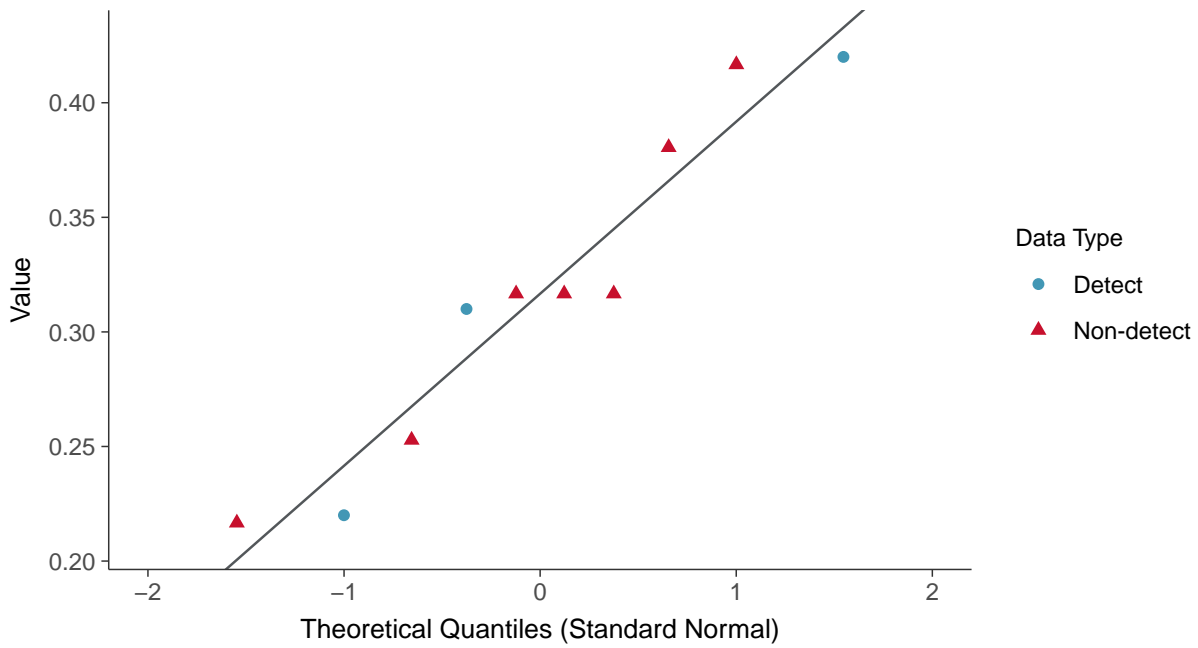
Cobalt, MW-15015R (ug/L)





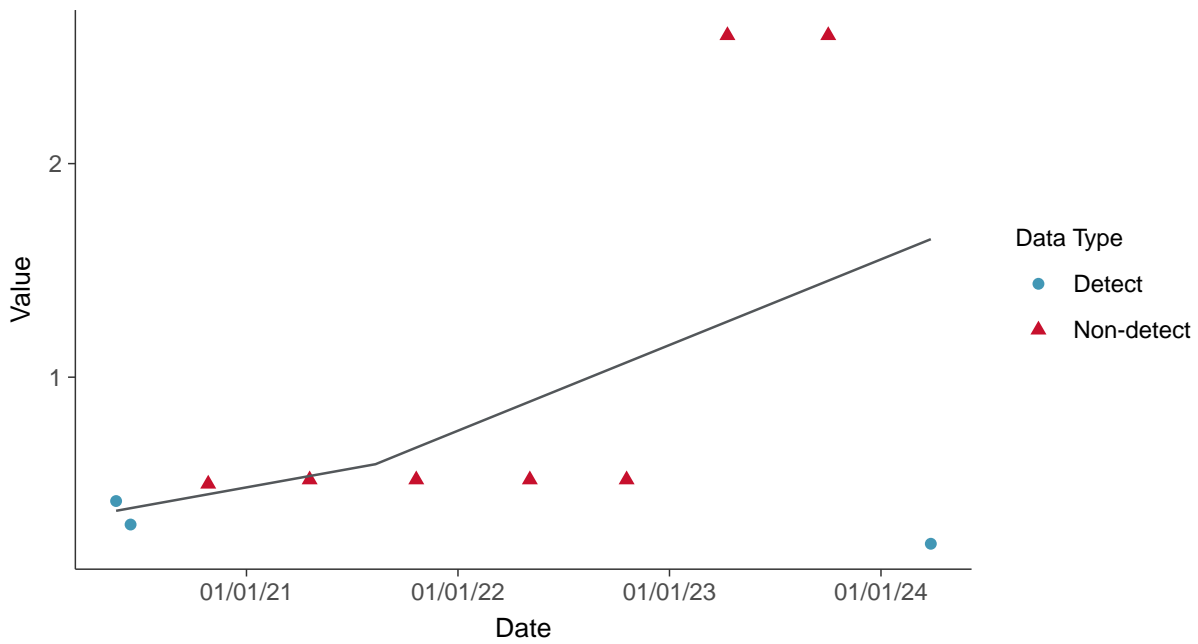
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15015R (ug/L)



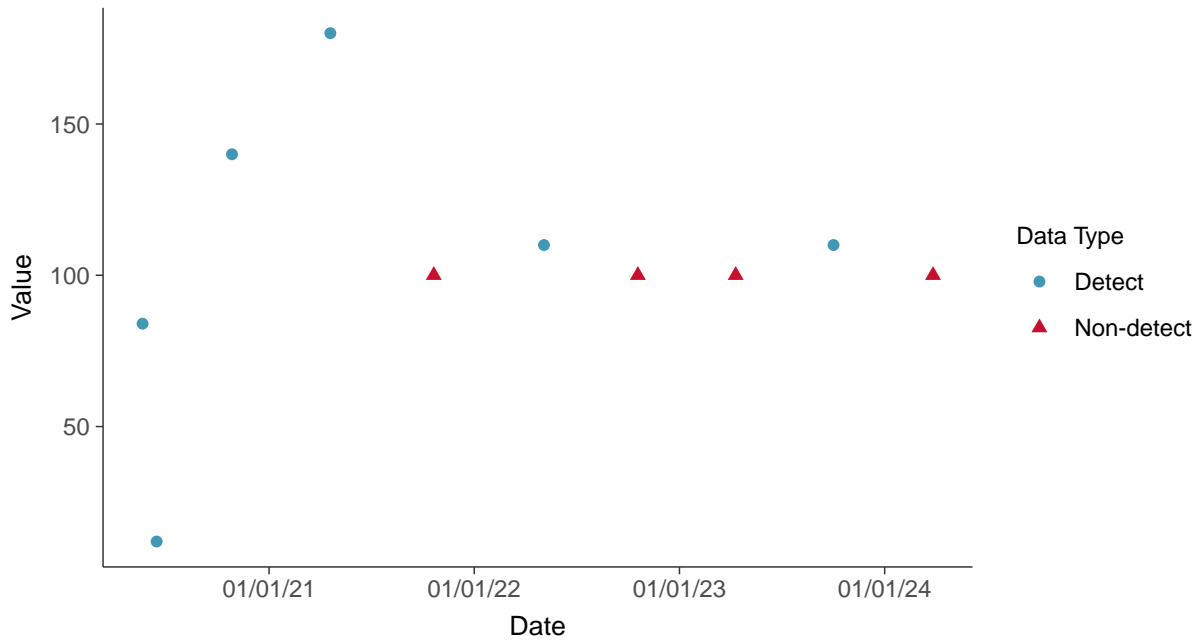


Appendix IV: Fluoride, MW-15015R

ID: 05_2_114

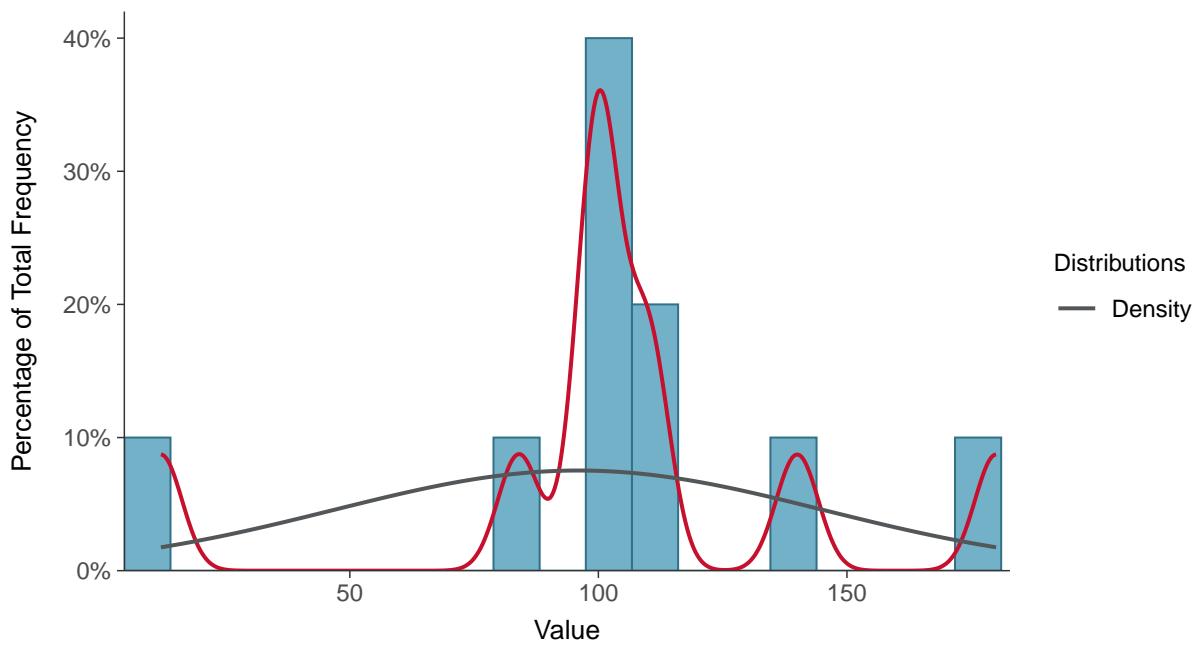
Scatter Plot

Fluoride, MW-15015R (ug/L)



Histogram

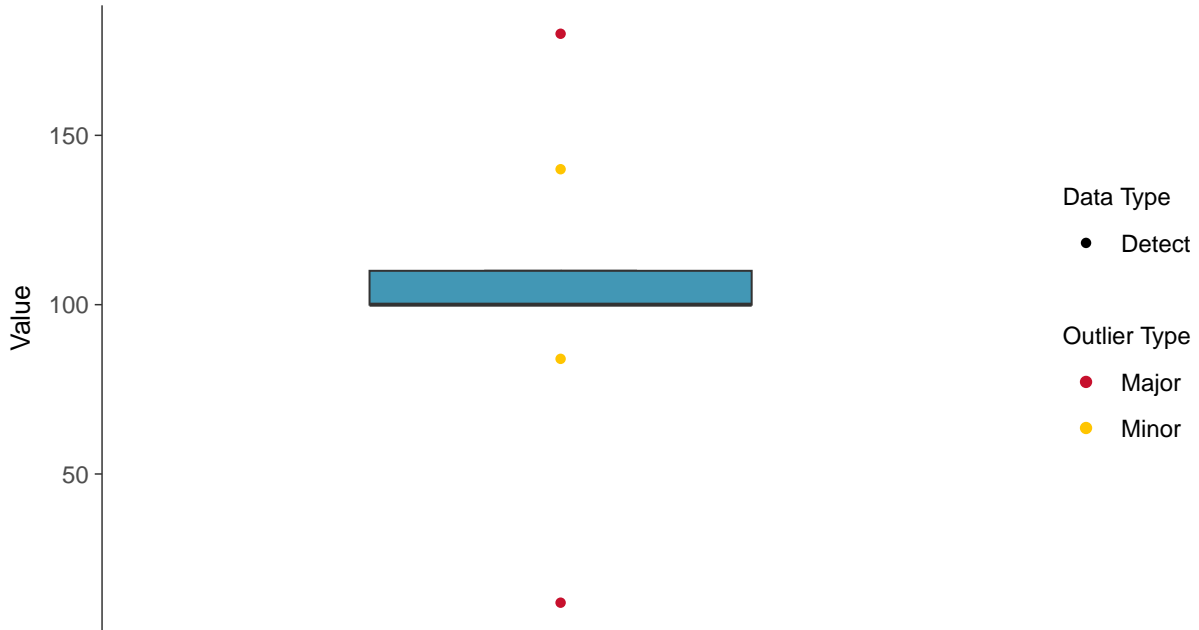
Fluoride, MW-15015R (ug/L)





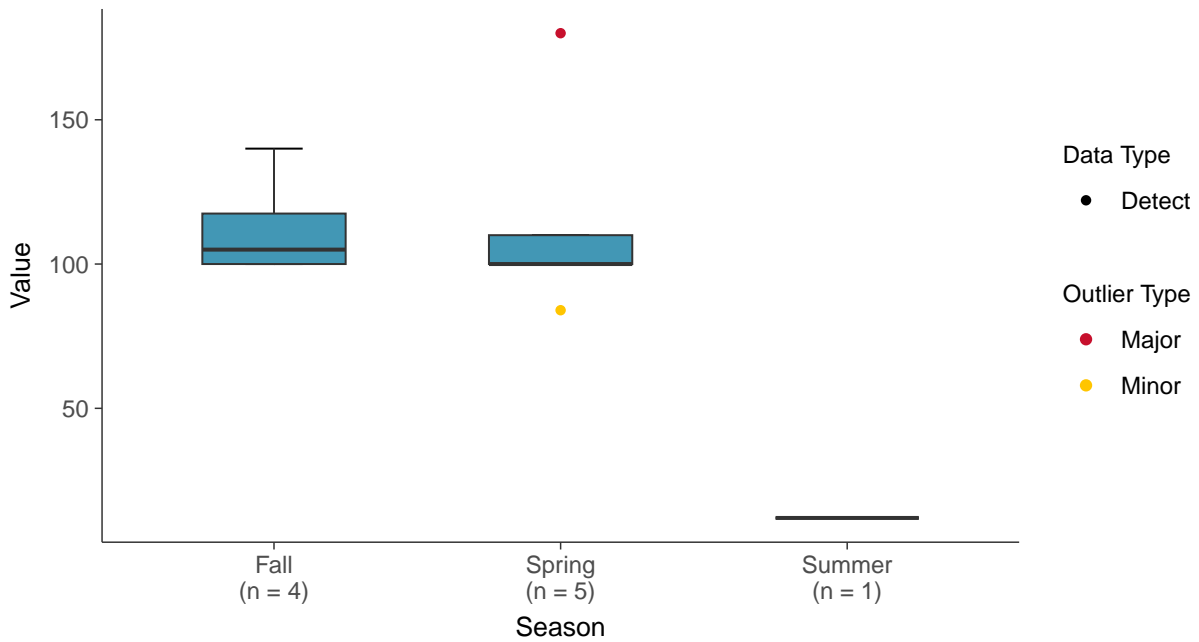
Boxplot

Fluoride, MW-15015R (ug/L)



Boxplot by Season

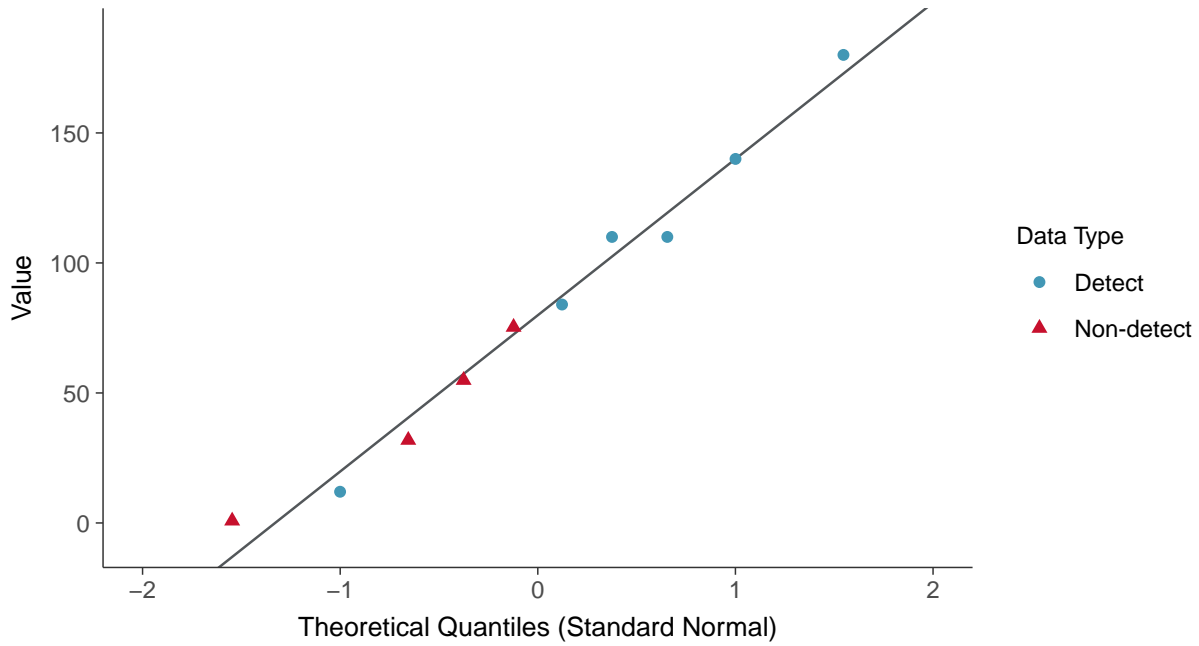
Fluoride, MW-15015R (ug/L)





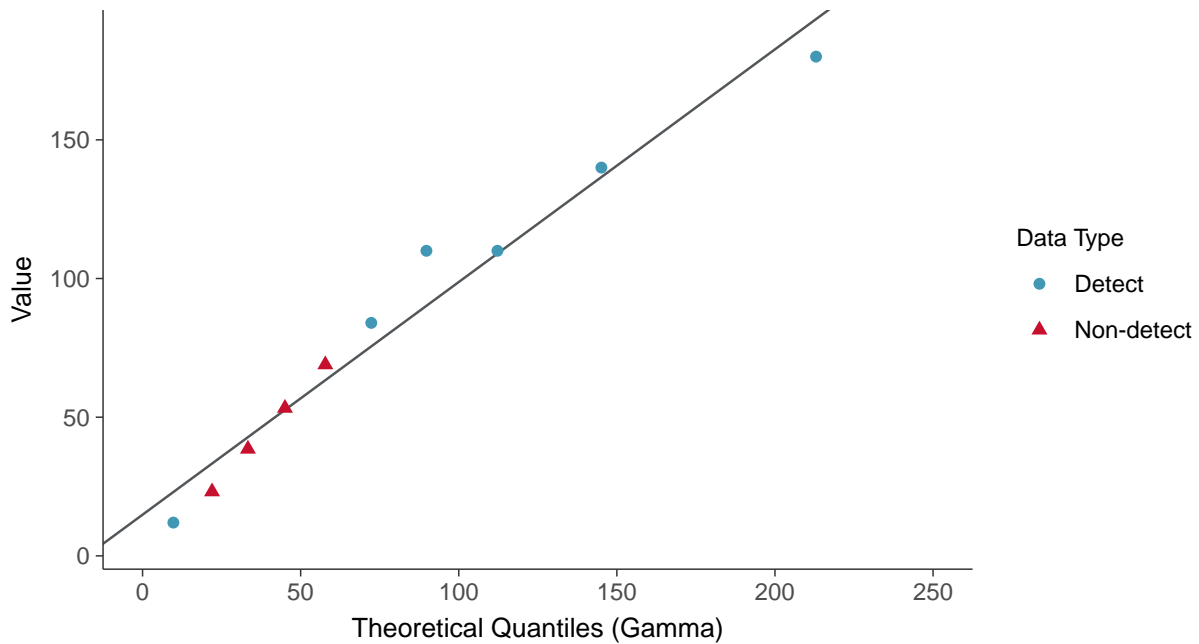
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15015R (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

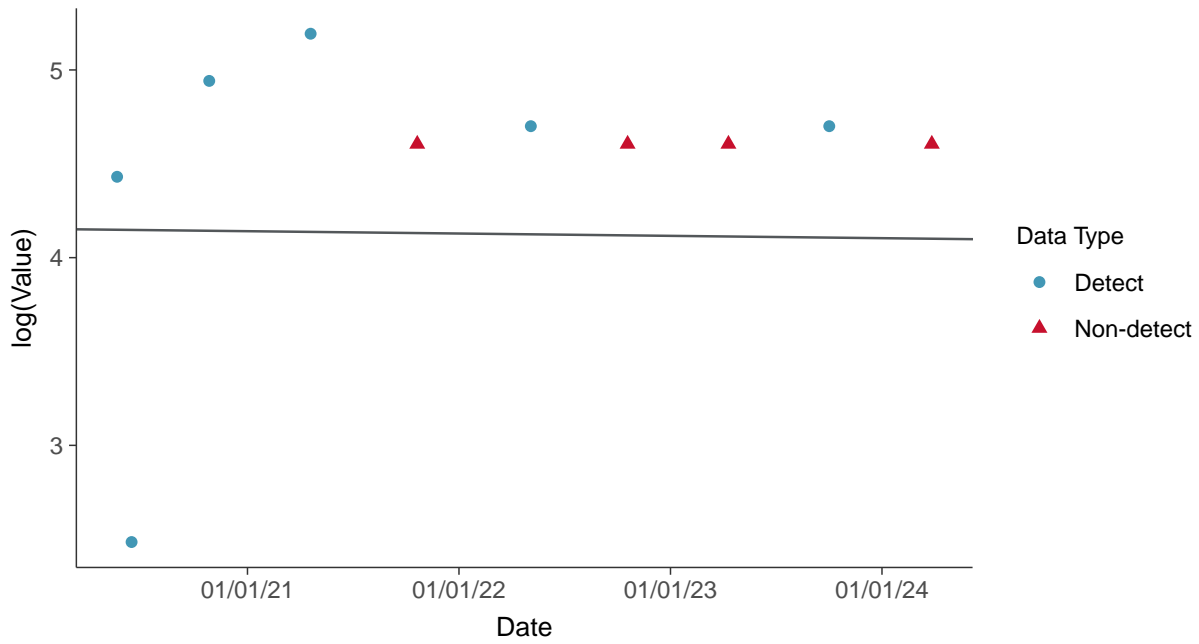
Fluoride, MW-15015R (ug/L)





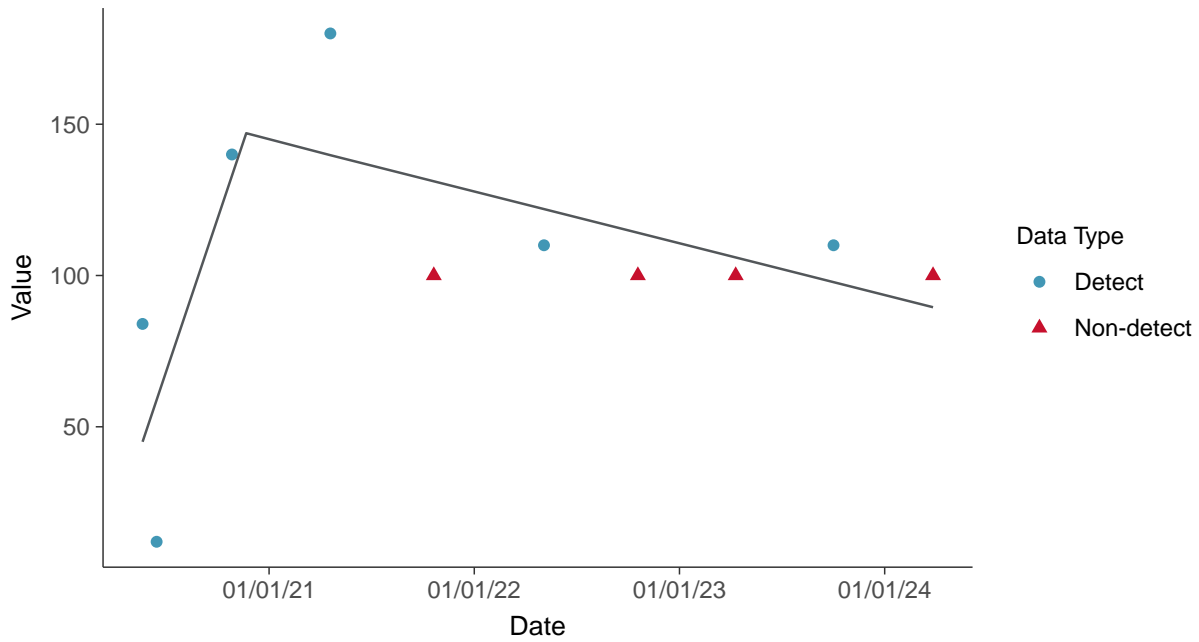
Trend Regression: Lognormal MLE

Fluoride, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

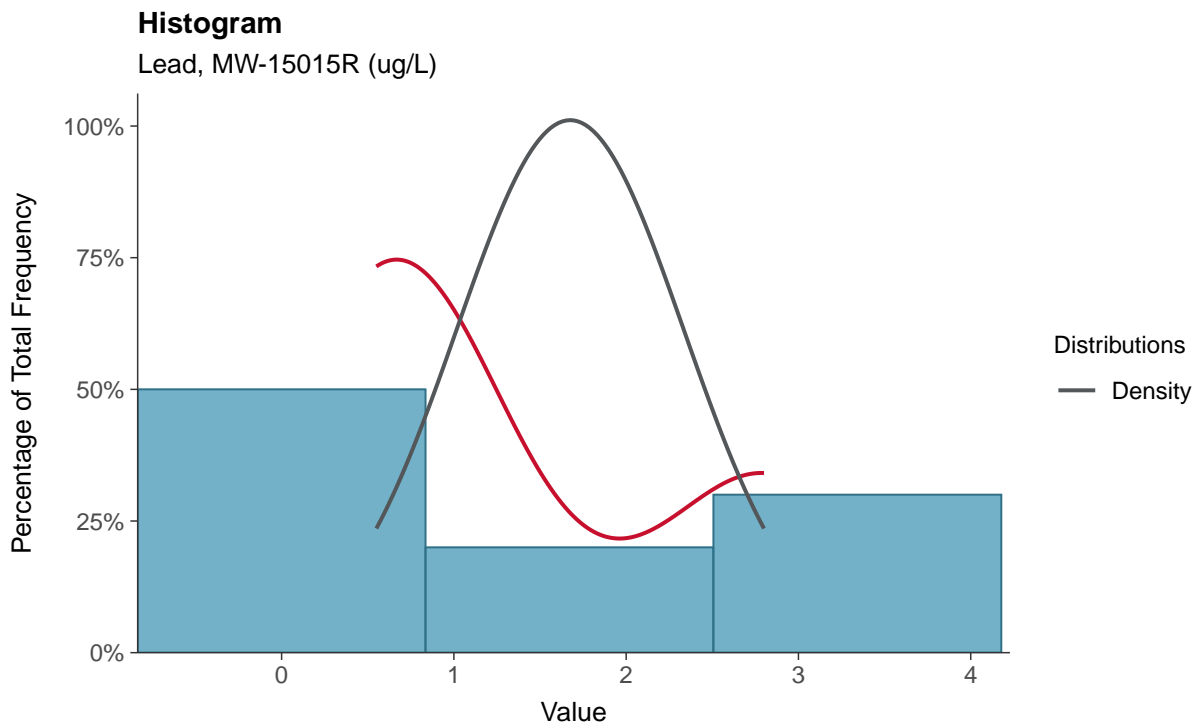
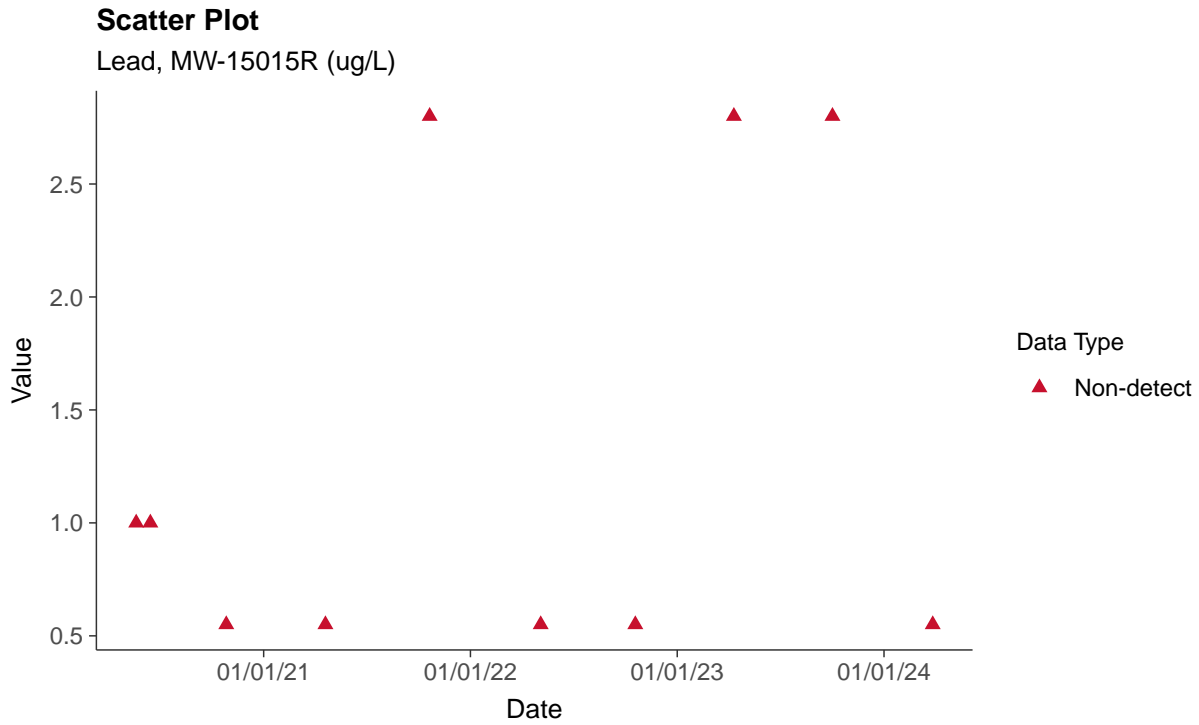
Fluoride, MW-15015R (ug/L)





Appendix IV: Lead, MW-15015R

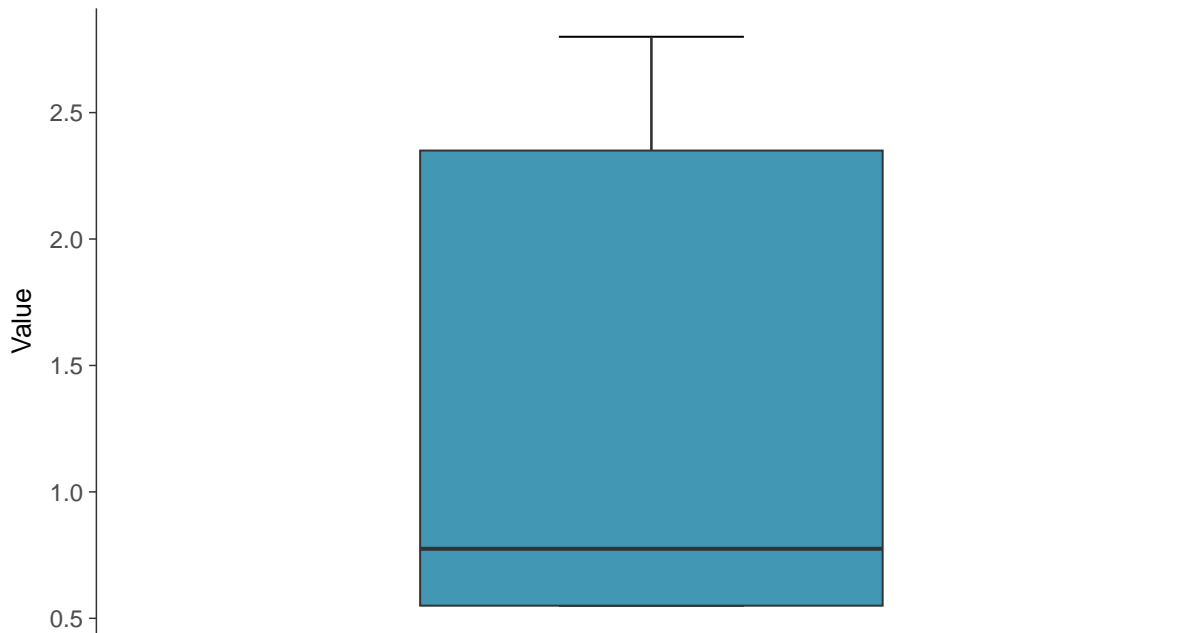
ID: 05_2_116





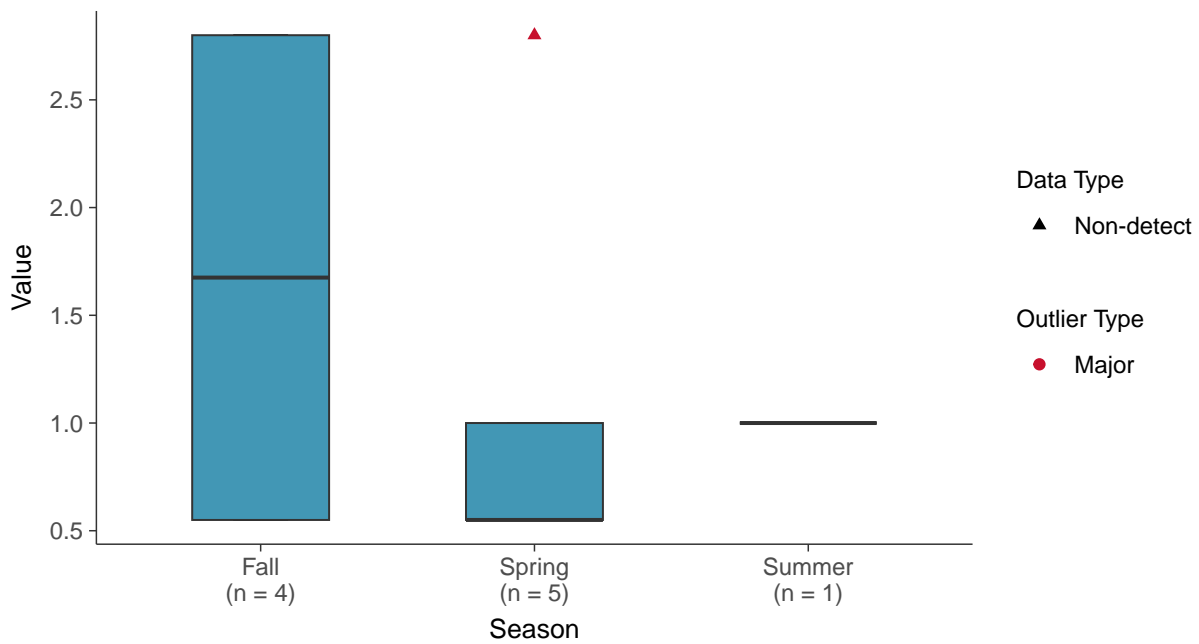
Boxplot

Lead, MW-15015R (ug/L)



Boxplot by Season

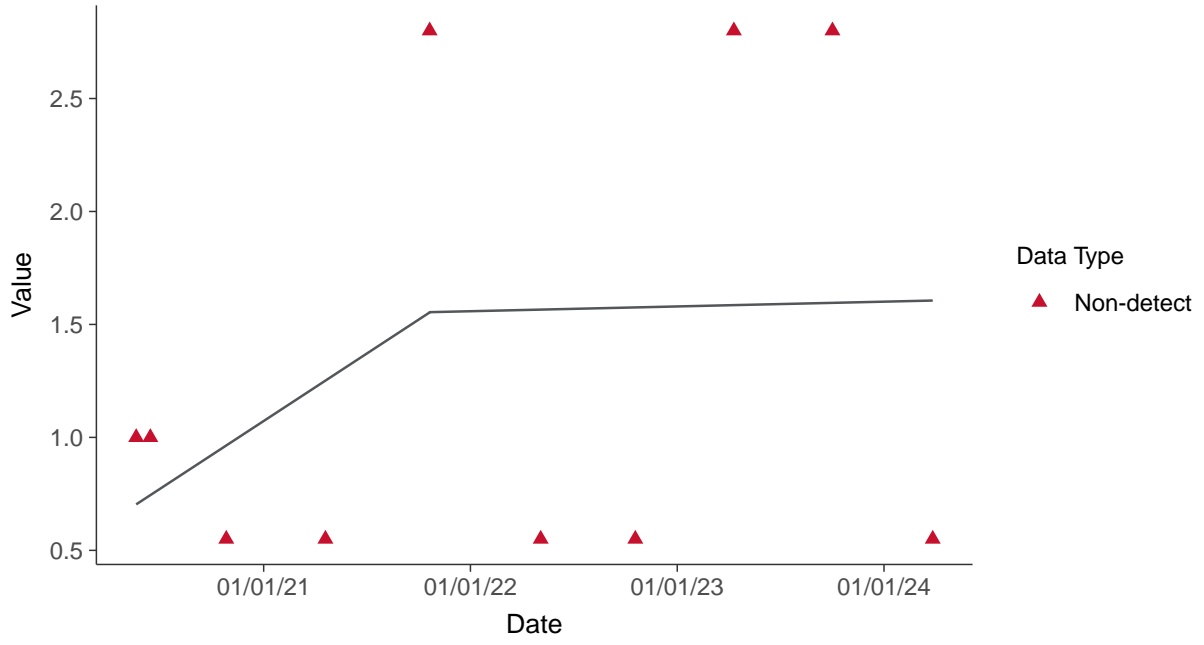
Lead, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear

Lead, MW-15015R (ug/L)



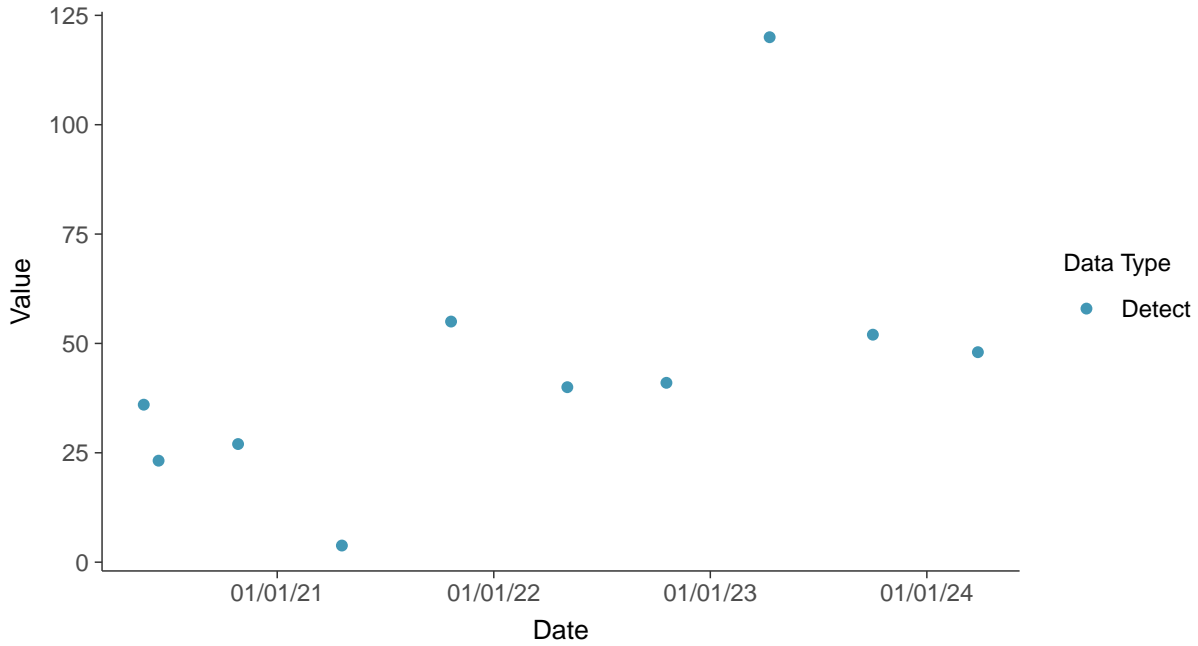


Appendix IV: Lithium, MW-15015R

ID: 05_2_117

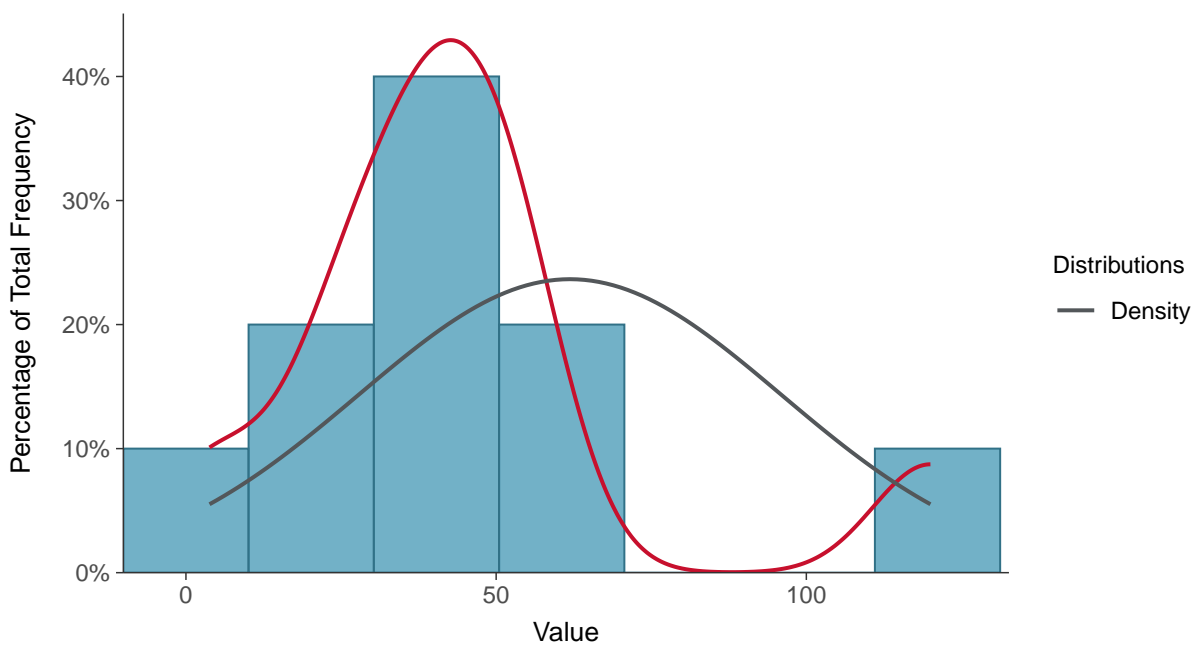
Scatter Plot

Lithium, MW-15015R (ug/L)



Histogram

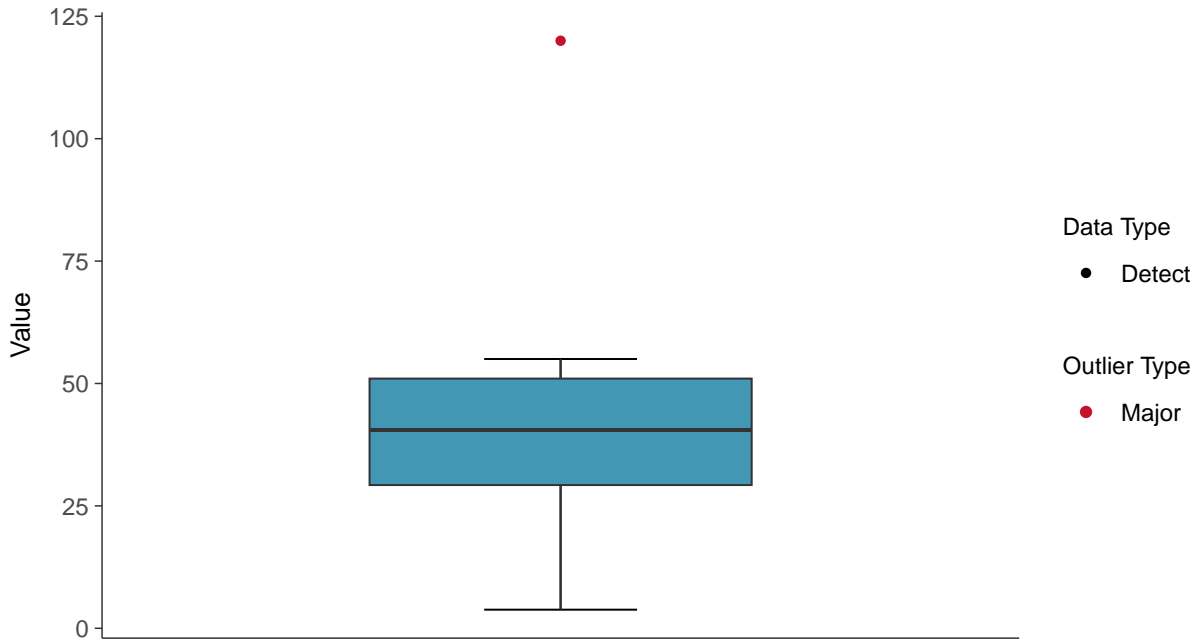
Lithium, MW-15015R (ug/L)





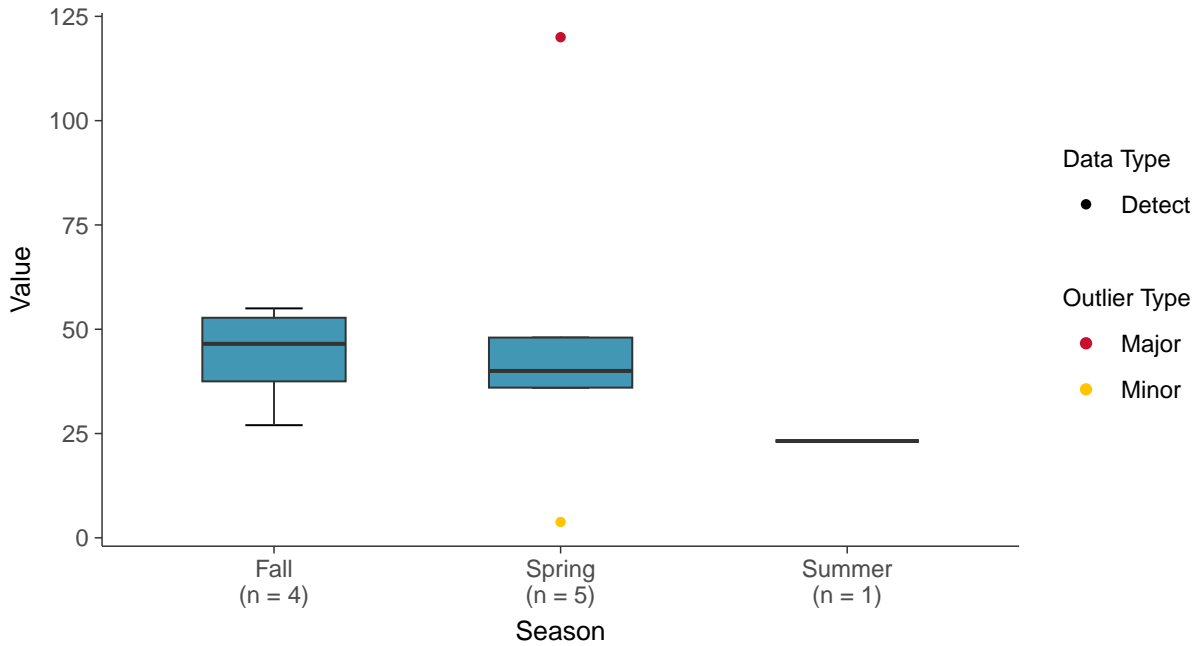
Boxplot

Lithium, MW-15015R (ug/L)



Boxplot by Season

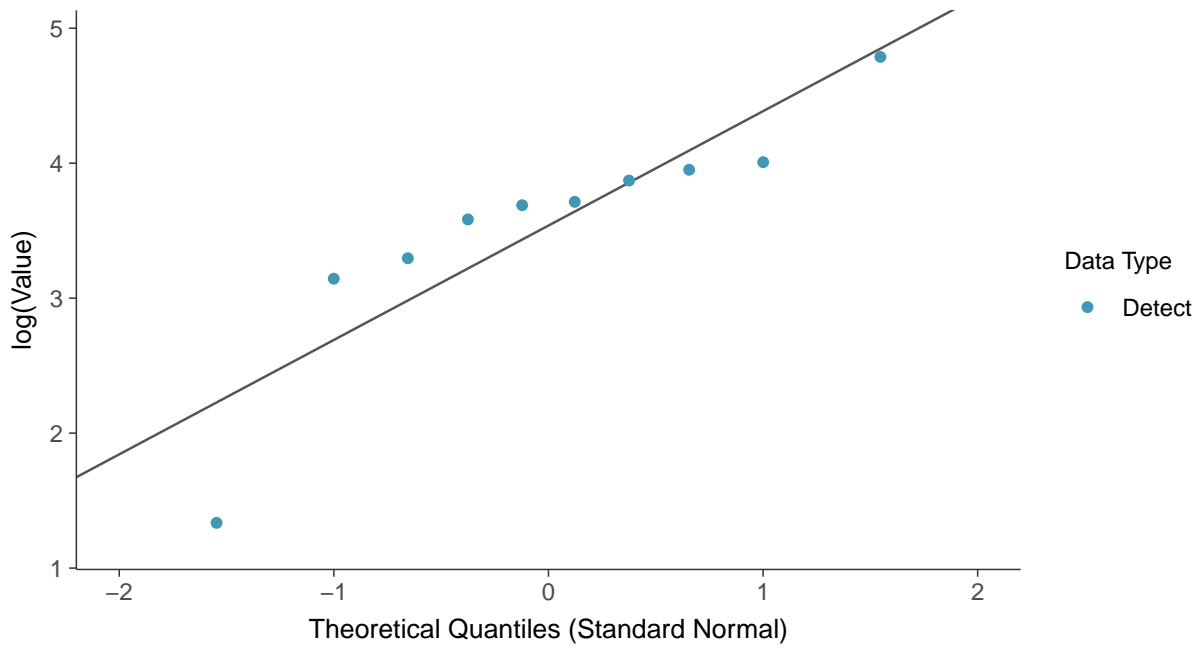
Lithium, MW-15015R (ug/L)





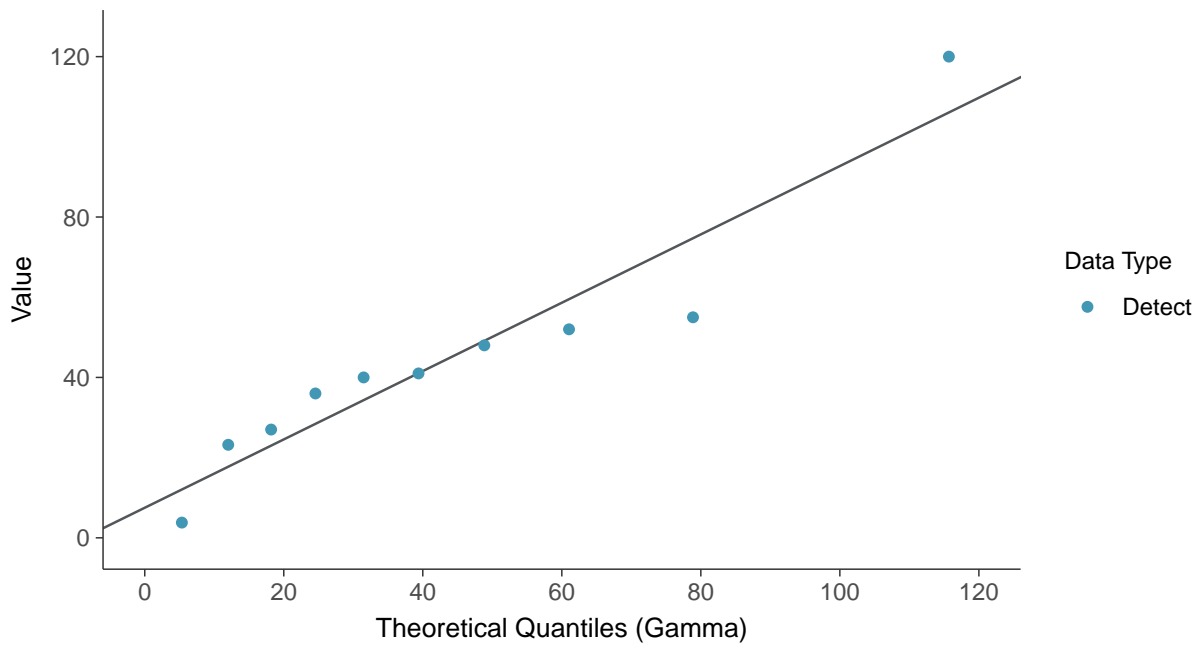
Lognormal Q-Q plot

Lithium, MW-15015R (ug/L)



Gamma Q-Q plot

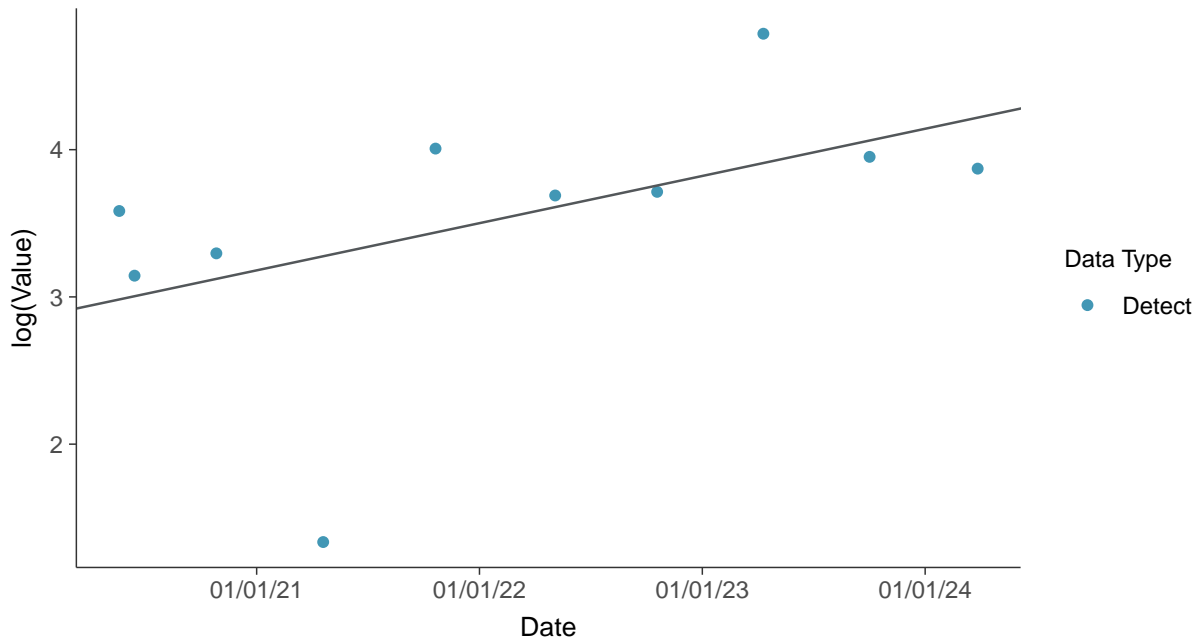
Lithium, MW-15015R (ug/L)





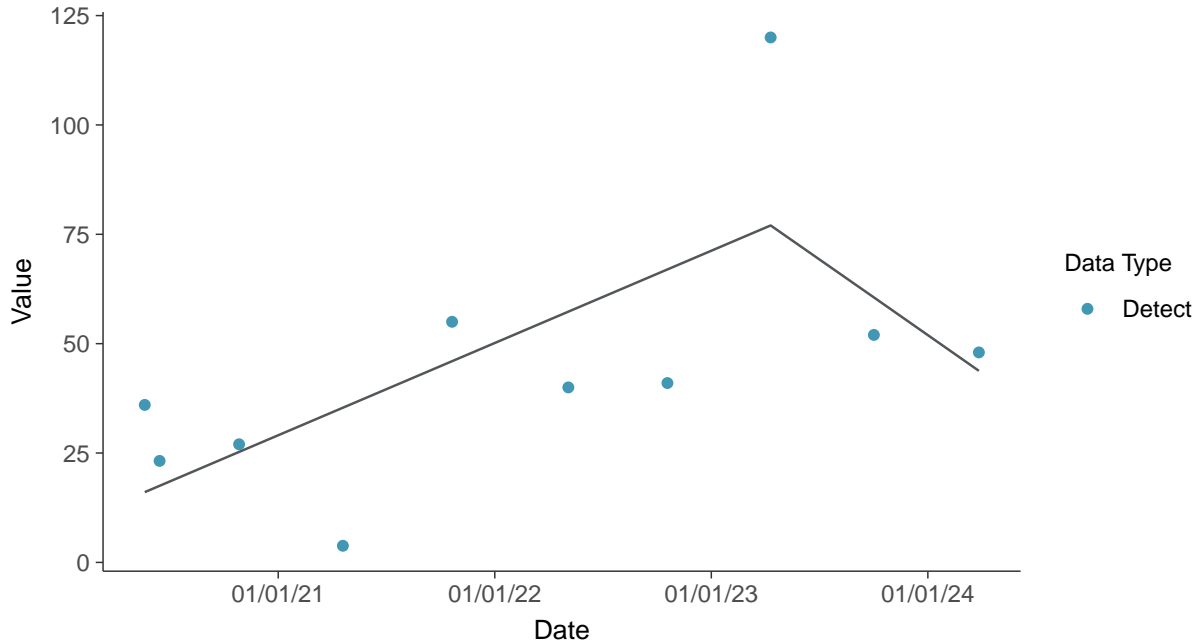
Trend Regression: Lognormal MLE

Lithium, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

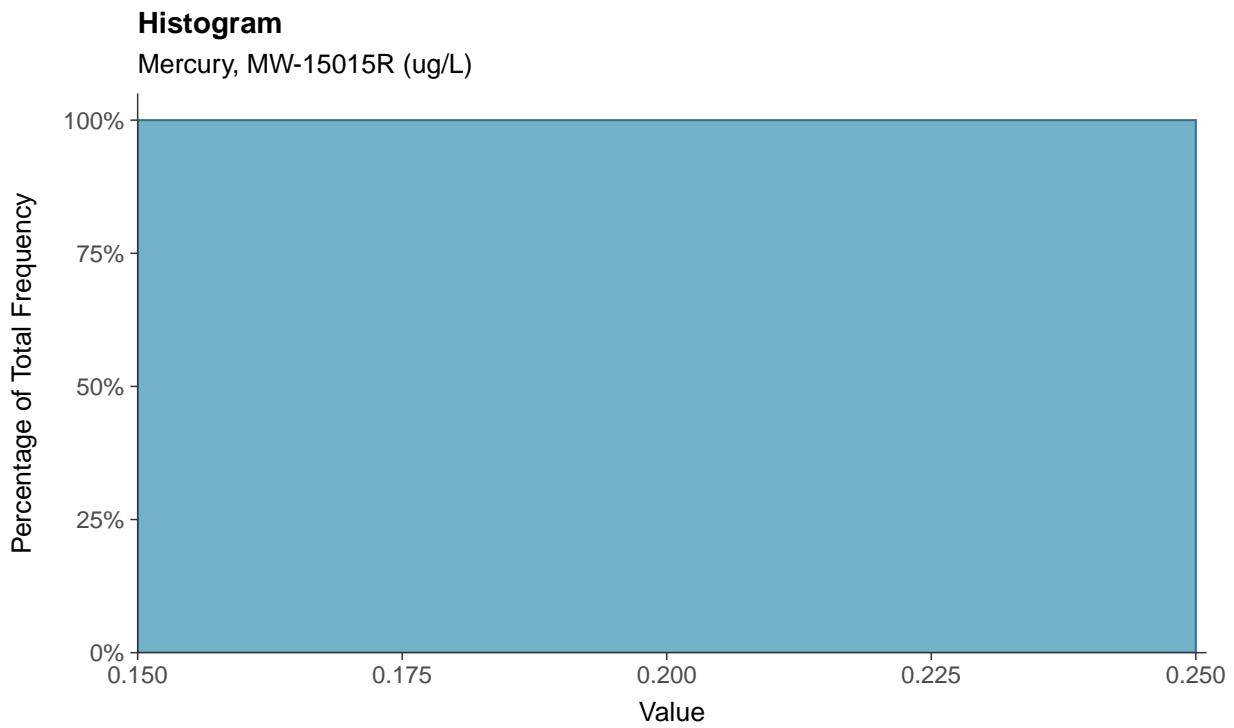
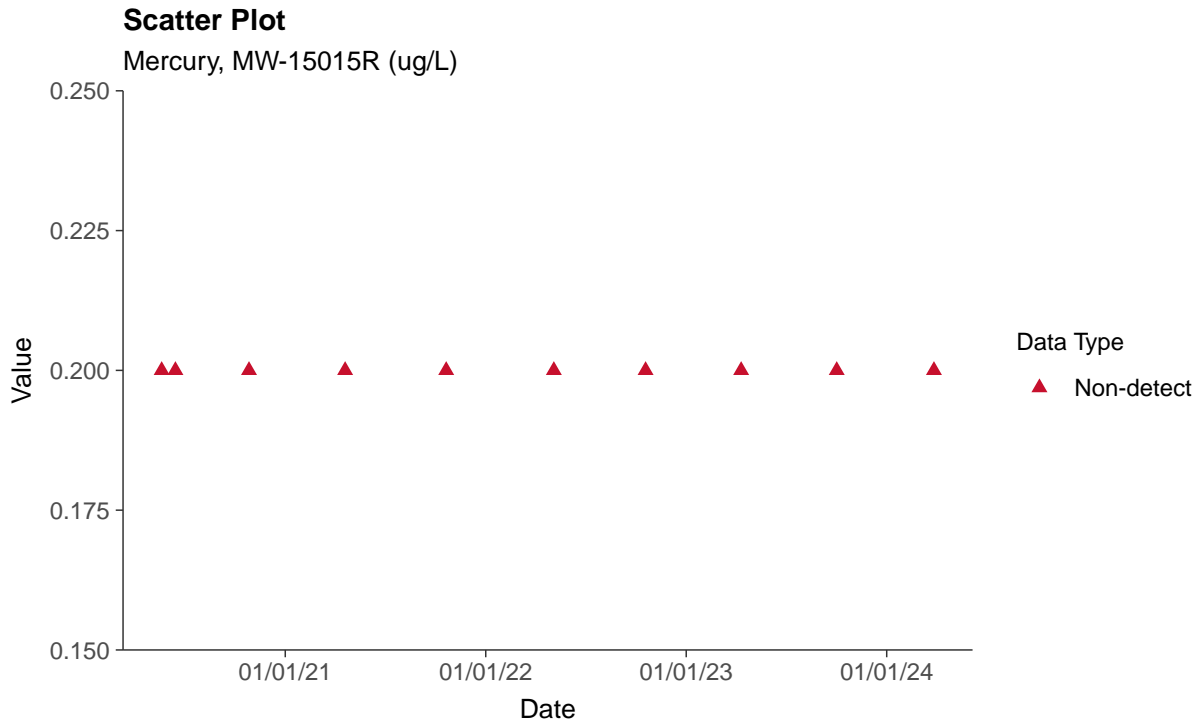
Lithium, MW-15015R (ug/L)





Appendix IV: Mercury, MW-15015R

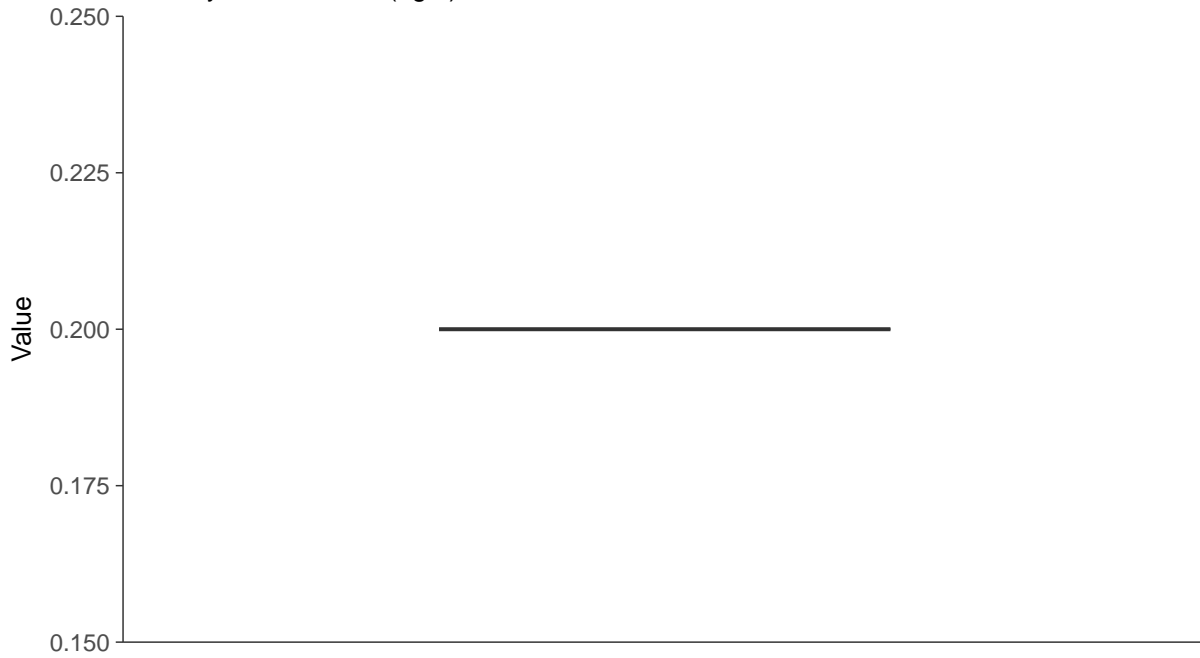
ID: 05_2_118





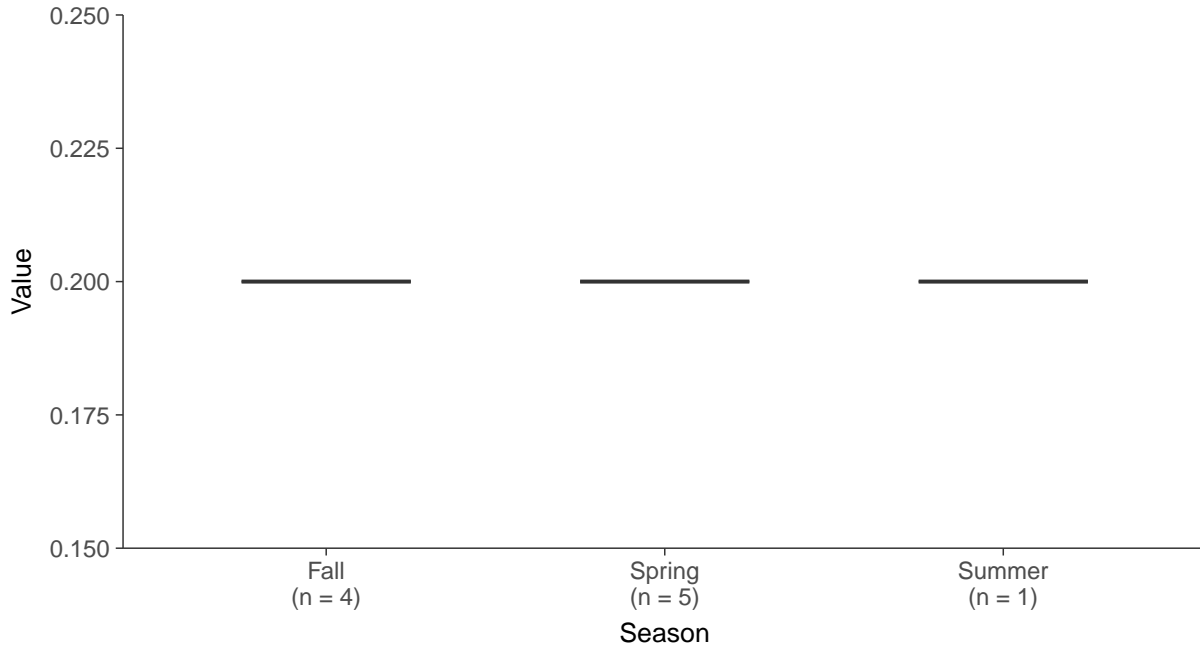
Boxplot

Mercury, MW-15015R (ug/L)



Boxplot by Season

Mercury, MW-15015R (ug/L)



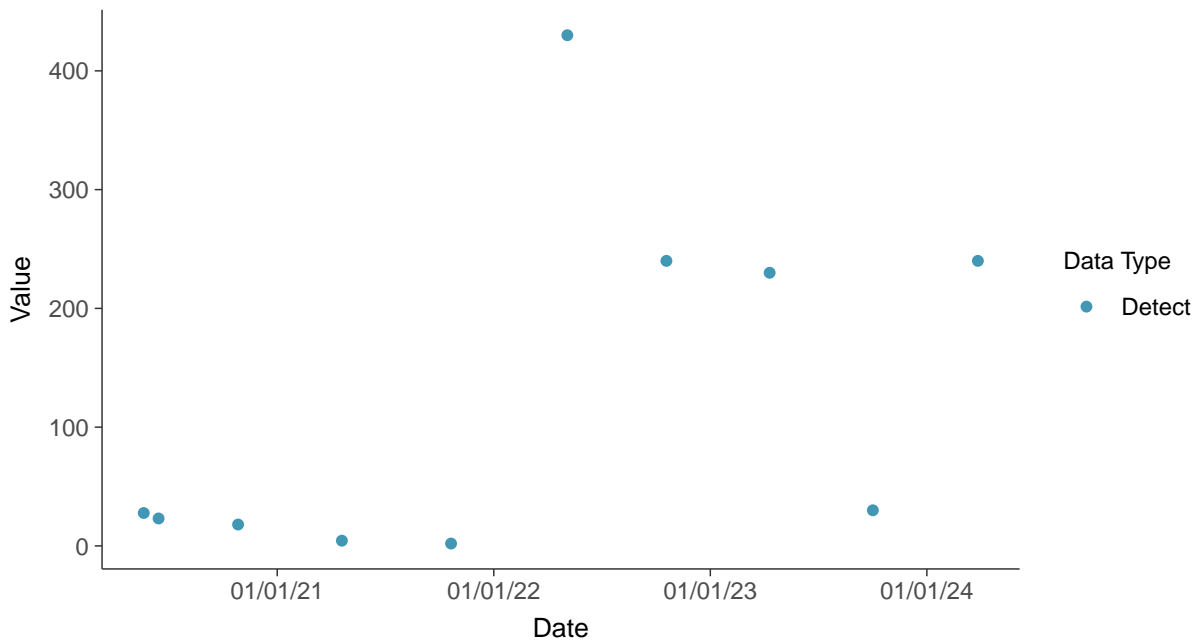


Appendix IV: Molybdenum, MW-15015R

ID: 05_2_119

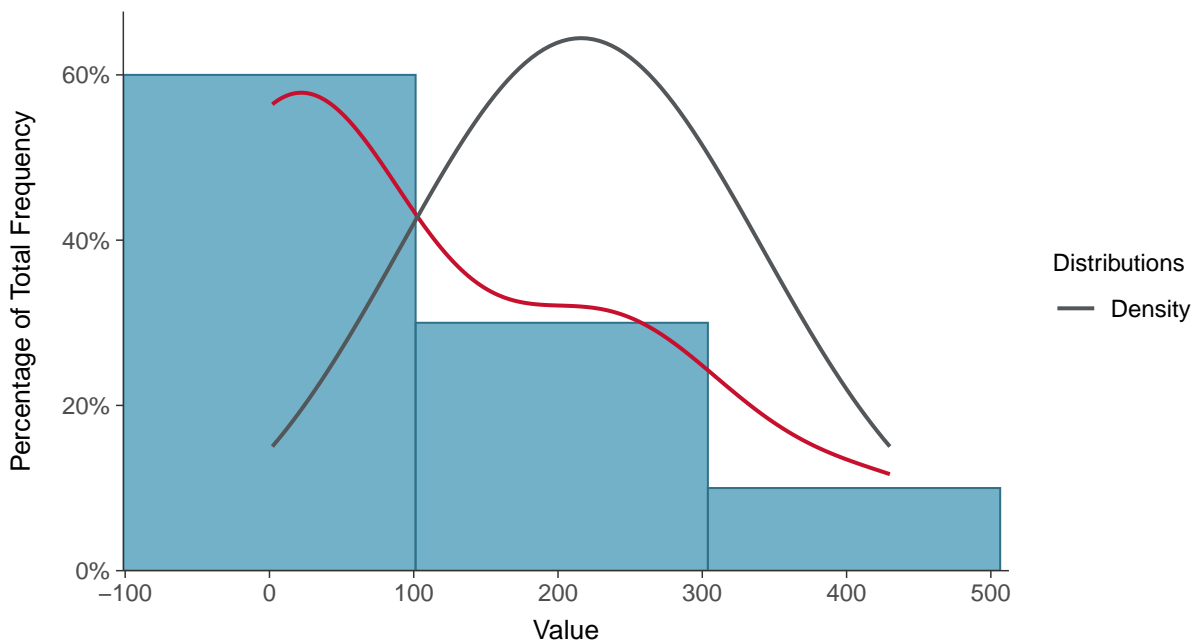
Scatter Plot

Molybdenum, MW-15015R (ug/L)



Histogram

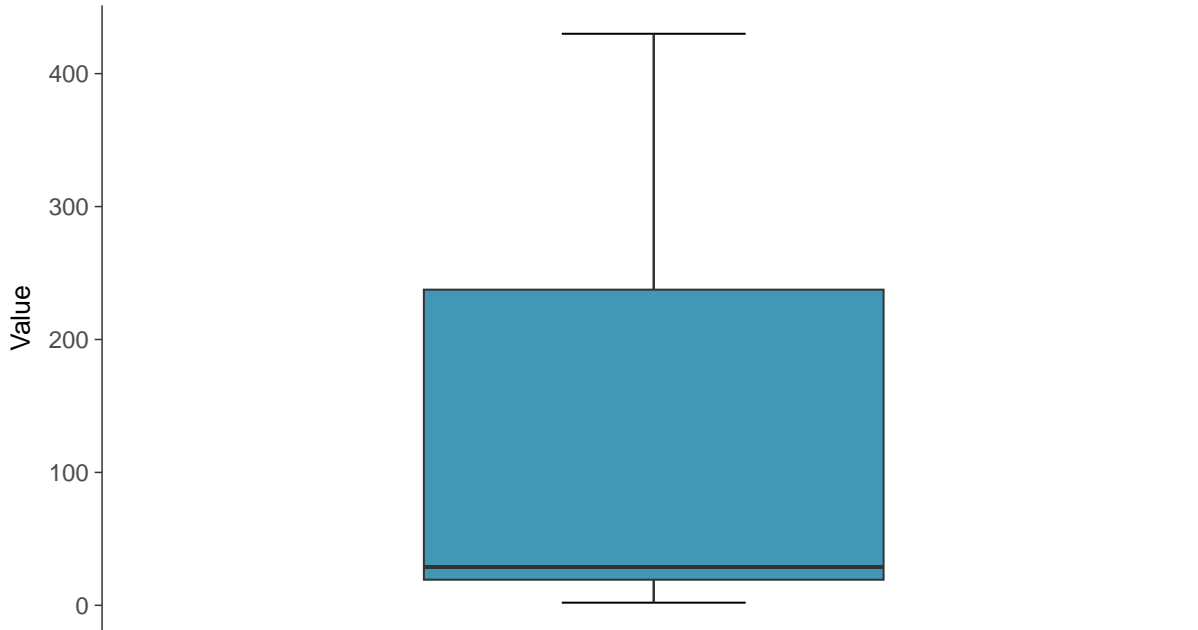
Molybdenum, MW-15015R (ug/L)





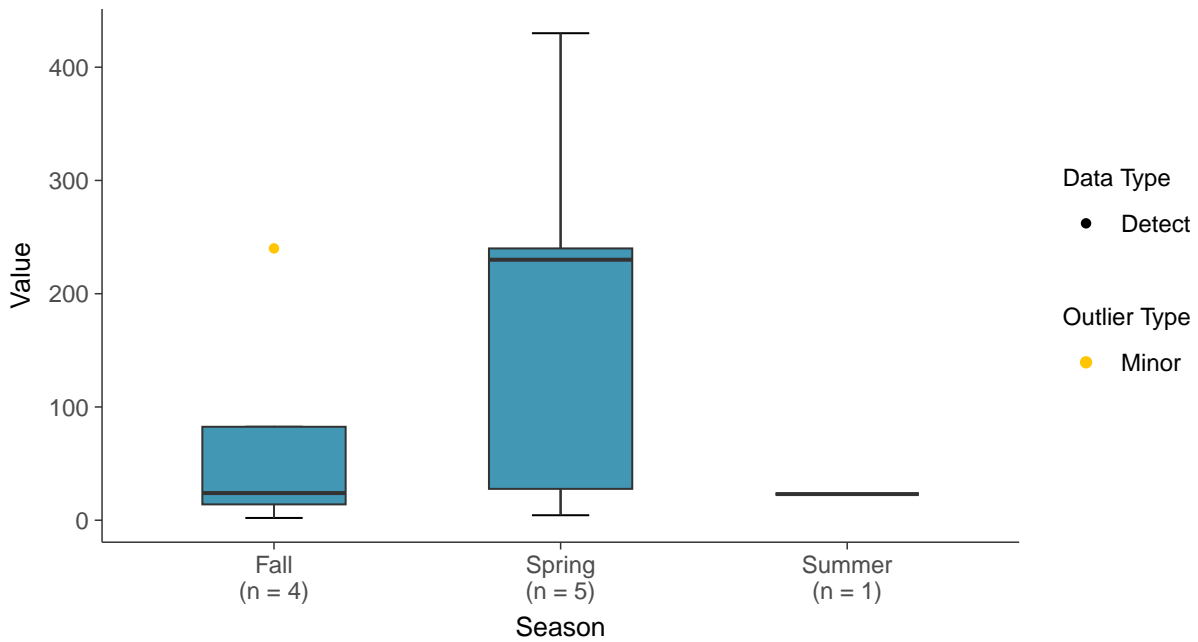
Boxplot

Molybdenum, MW-15015R (ug/L)



Boxplot by Season

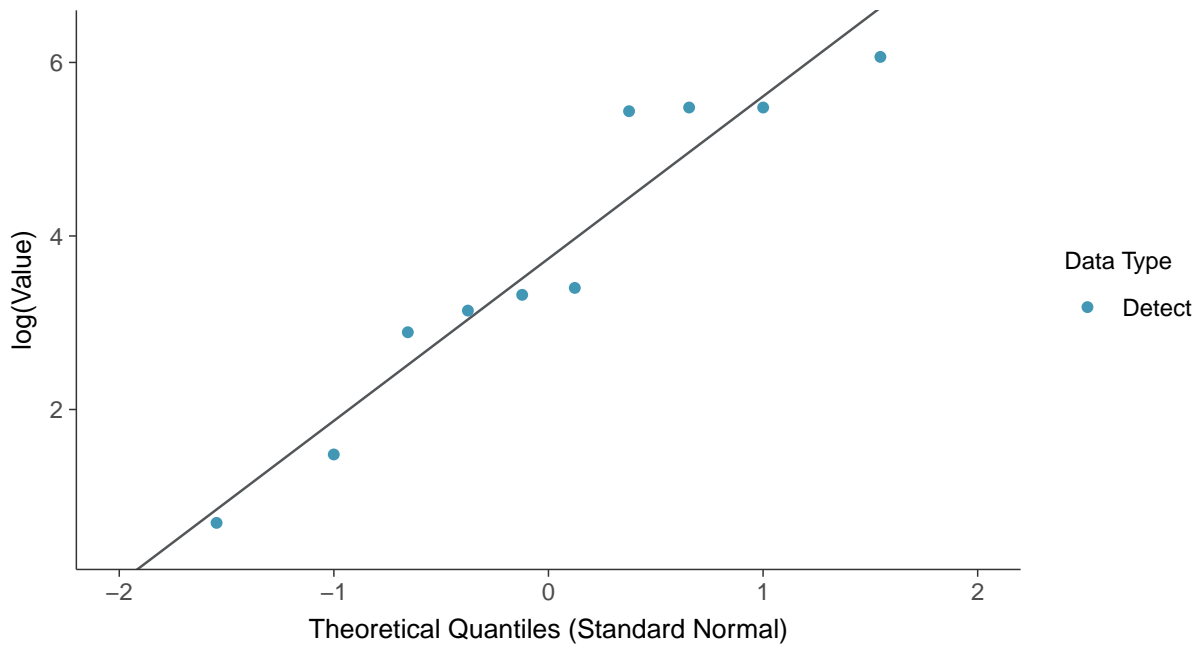
Molybdenum, MW-15015R (ug/L)





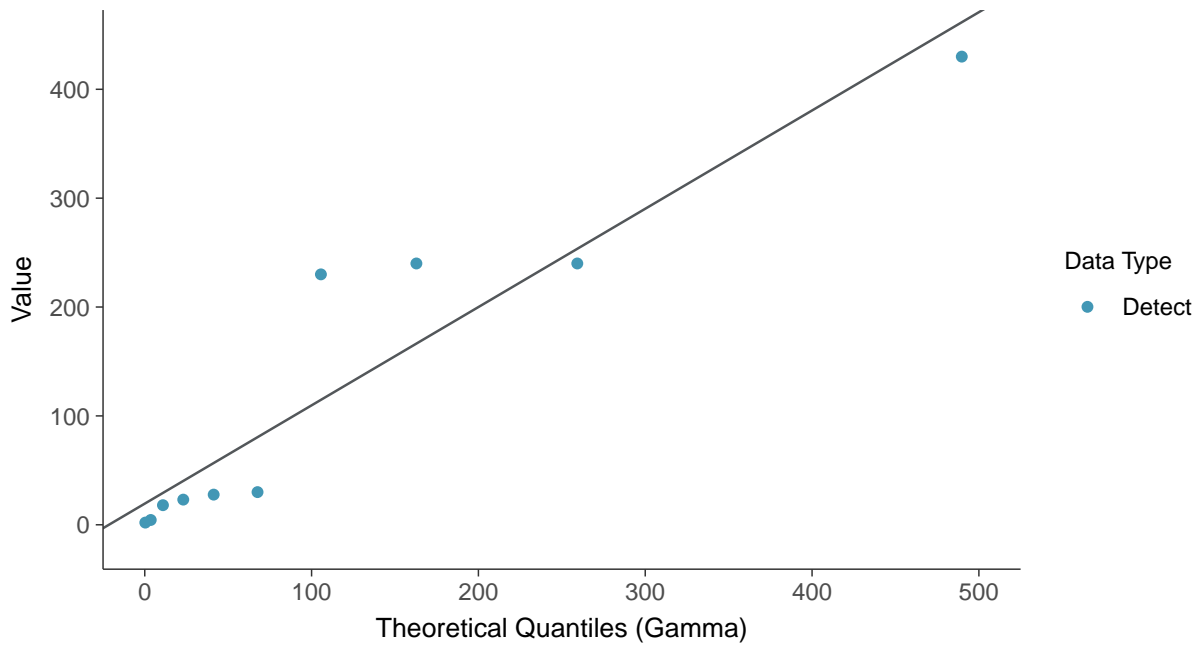
Lognormal Q-Q plot

Molybdenum, MW-15015R (ug/L)



Gamma Q-Q plot

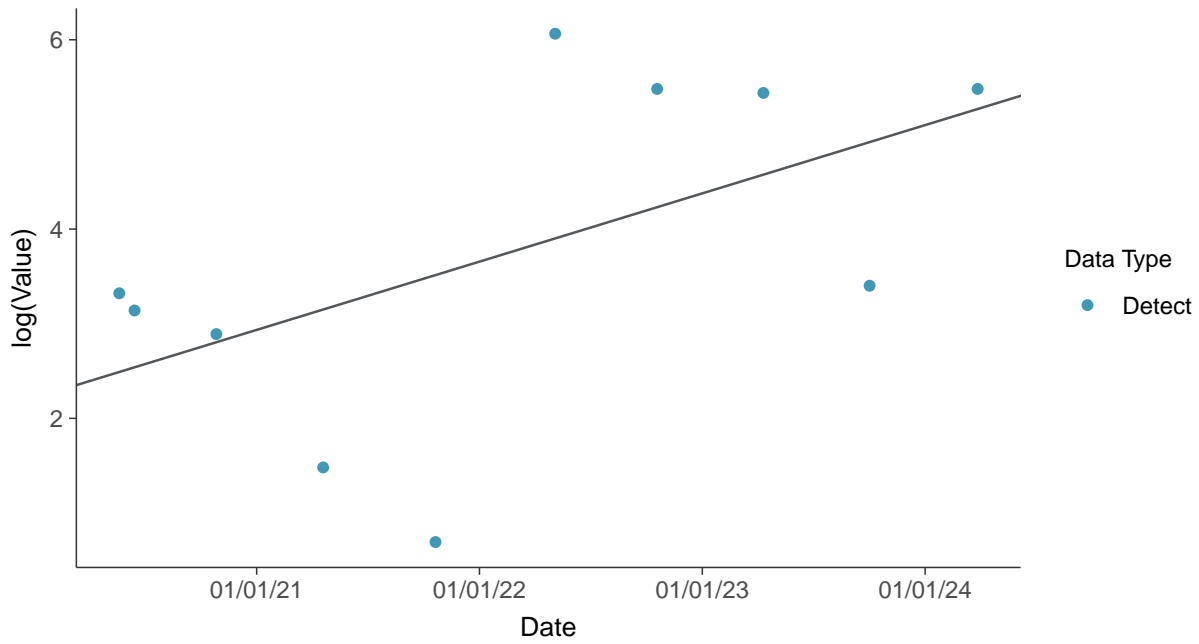
Molybdenum, MW-15015R (ug/L)





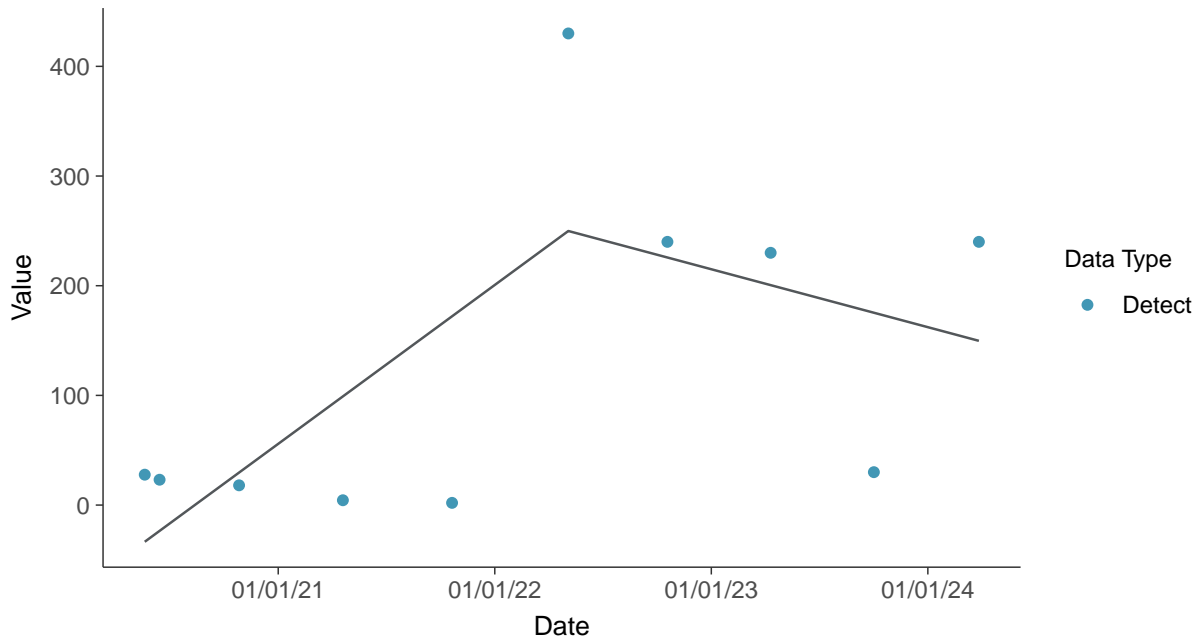
Trend Regression: Lognormal MLE

Molybdenum, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15015R (ug/L)



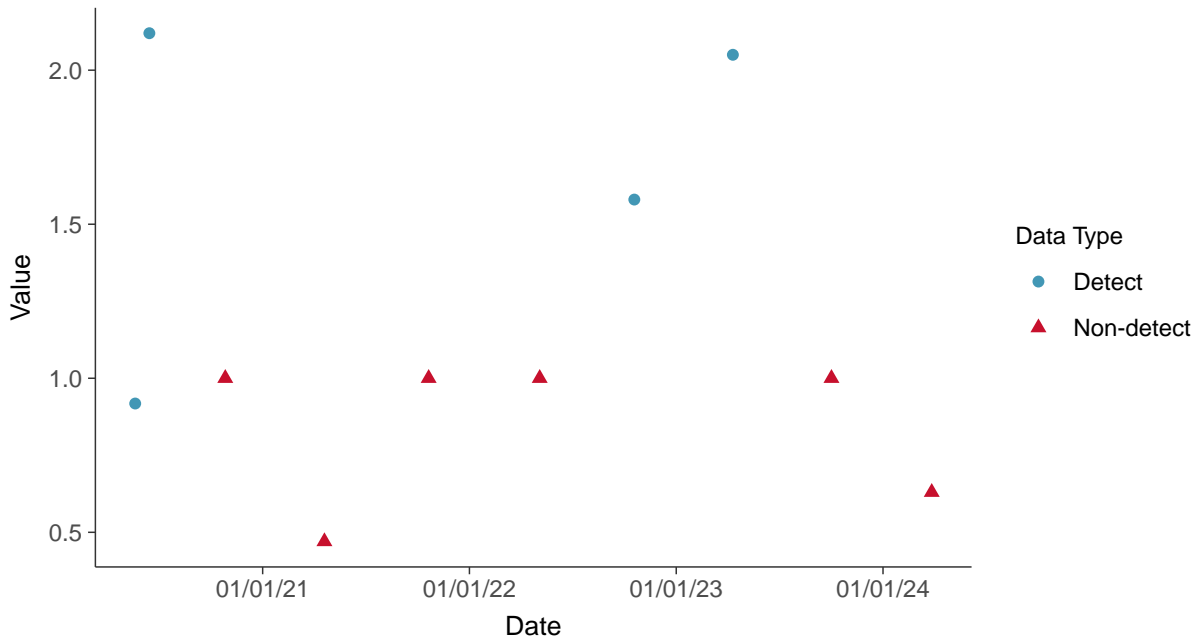


Appendix IV: Radium-226+228, MW-15015R

ID: 05_2_125

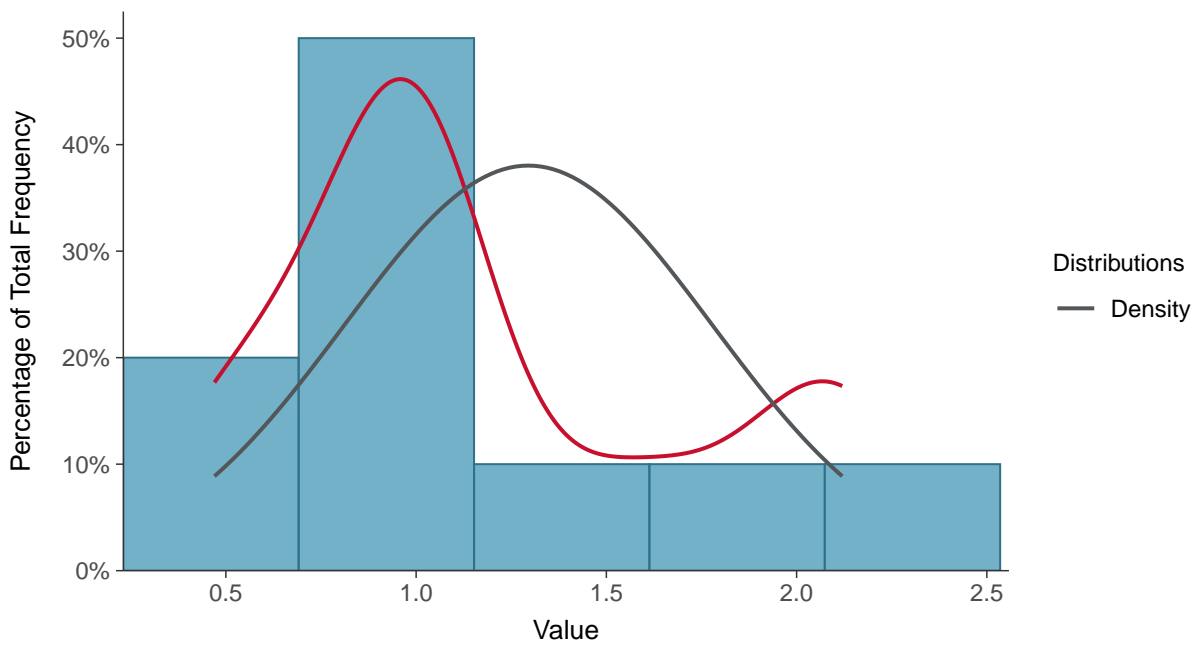
Scatter Plot

Radium-226+228, MW-15015R (pCi/L)



Histogram

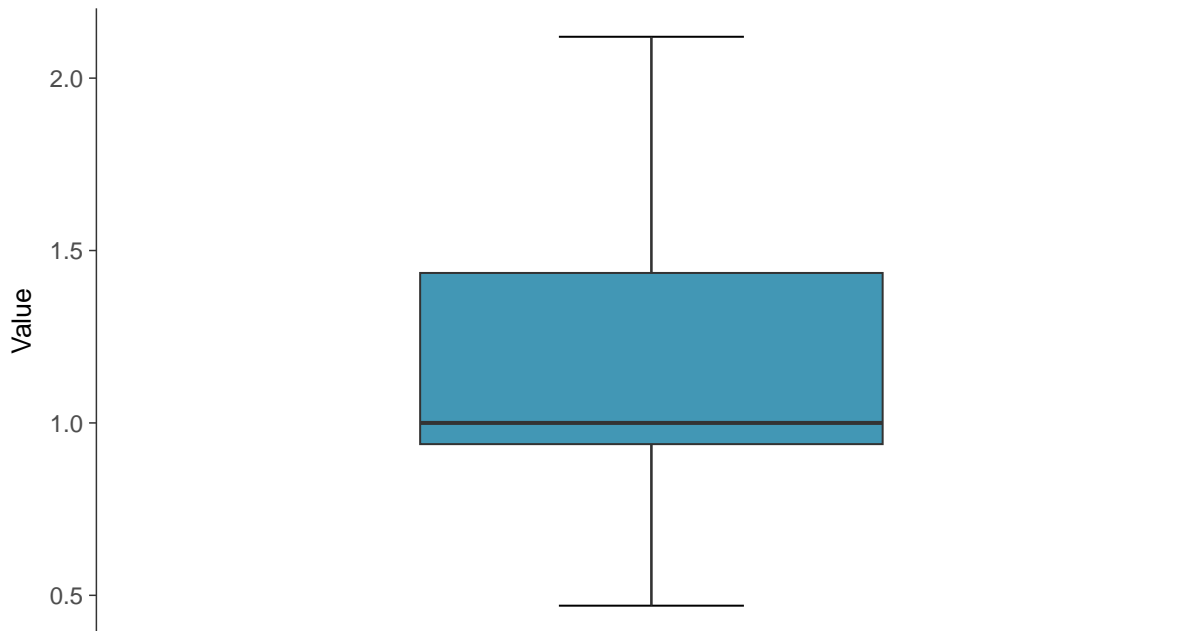
Radium-226+228, MW-15015R (pCi/L)





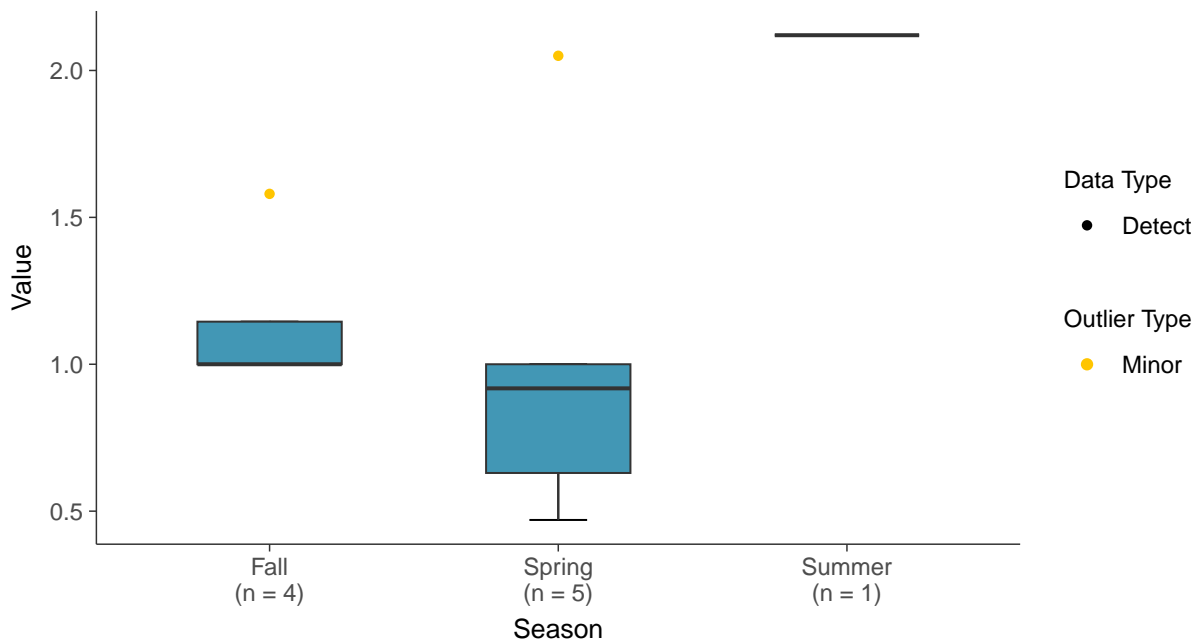
Boxplot

Radium-226+228, MW-15015R (pCi/L)



Boxplot by Season

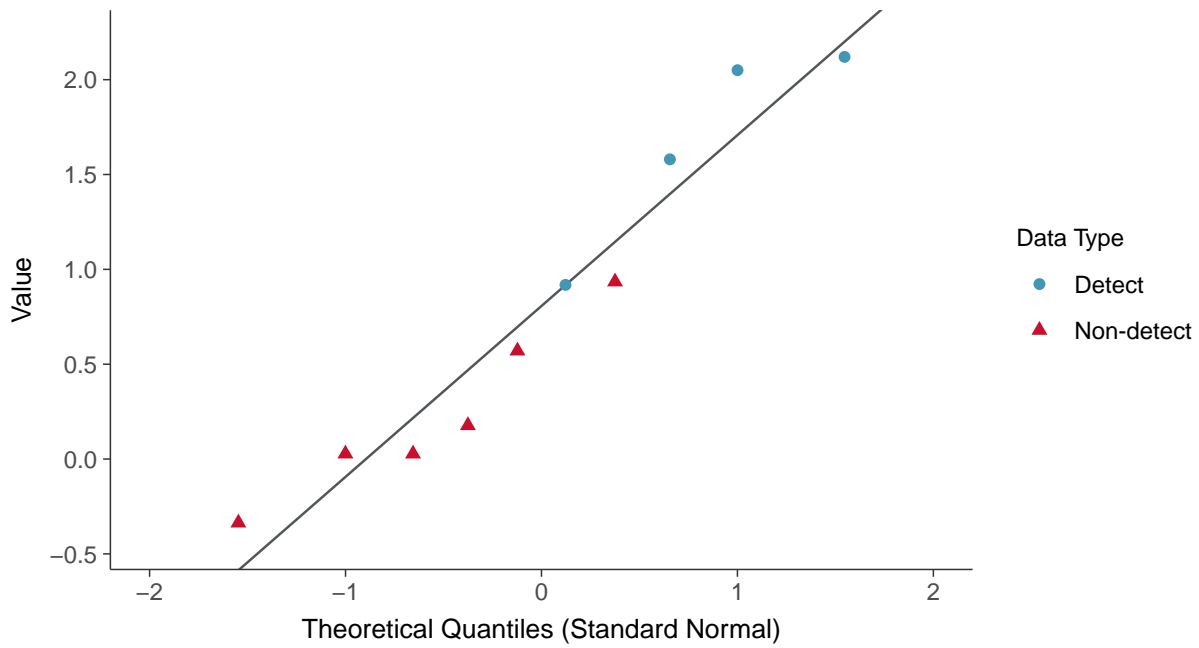
Radium-226+228, MW-15015R (pCi/L)





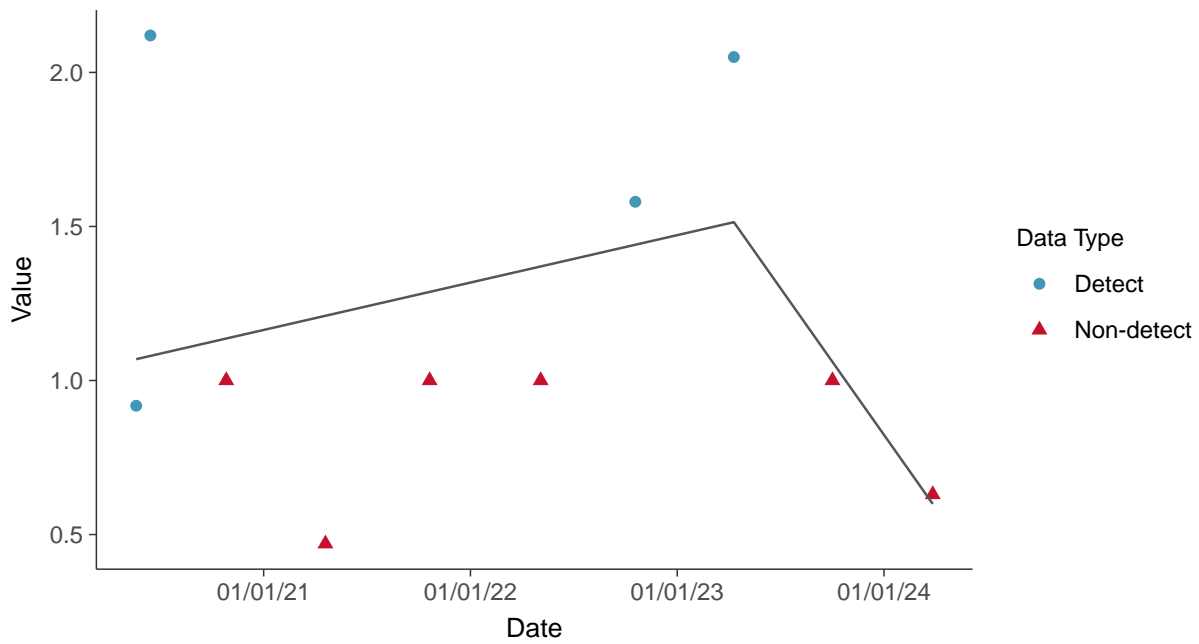
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15015R (pCi/L)



Trend Regression: Piecewise Linear-Linear

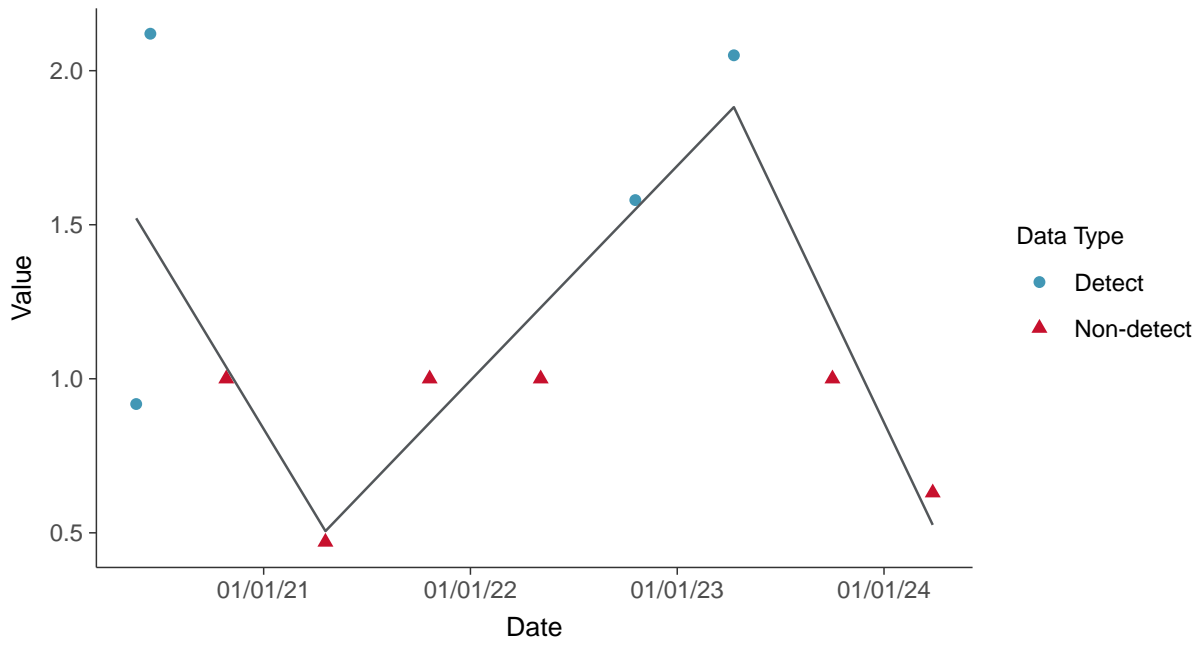
Radium-226+228, MW-15015R (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-15015R (pCi/L)



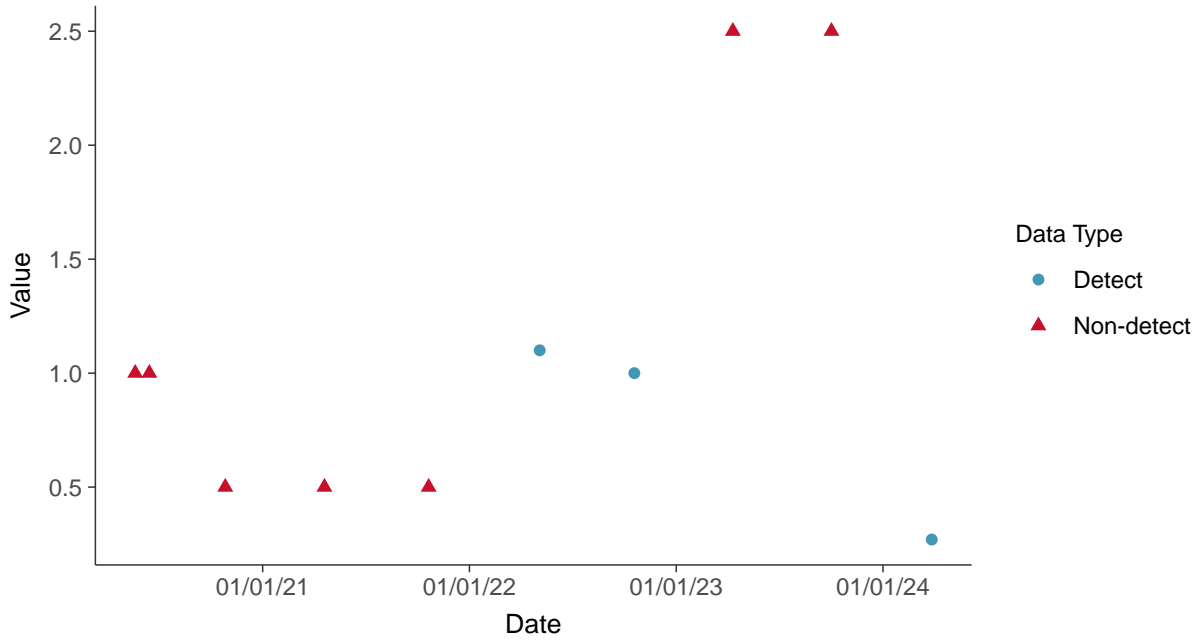


Appendix IV: Selenium, MW-15015R

ID: 05_2_127

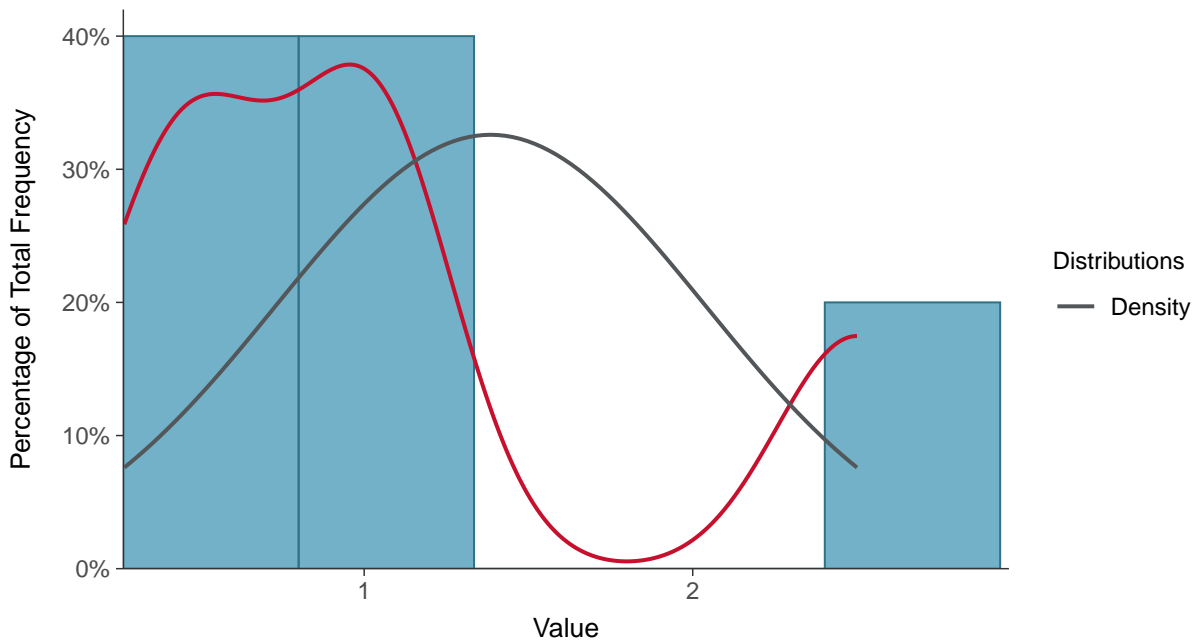
Scatter Plot

Selenium, MW-15015R (ug/L)



Histogram

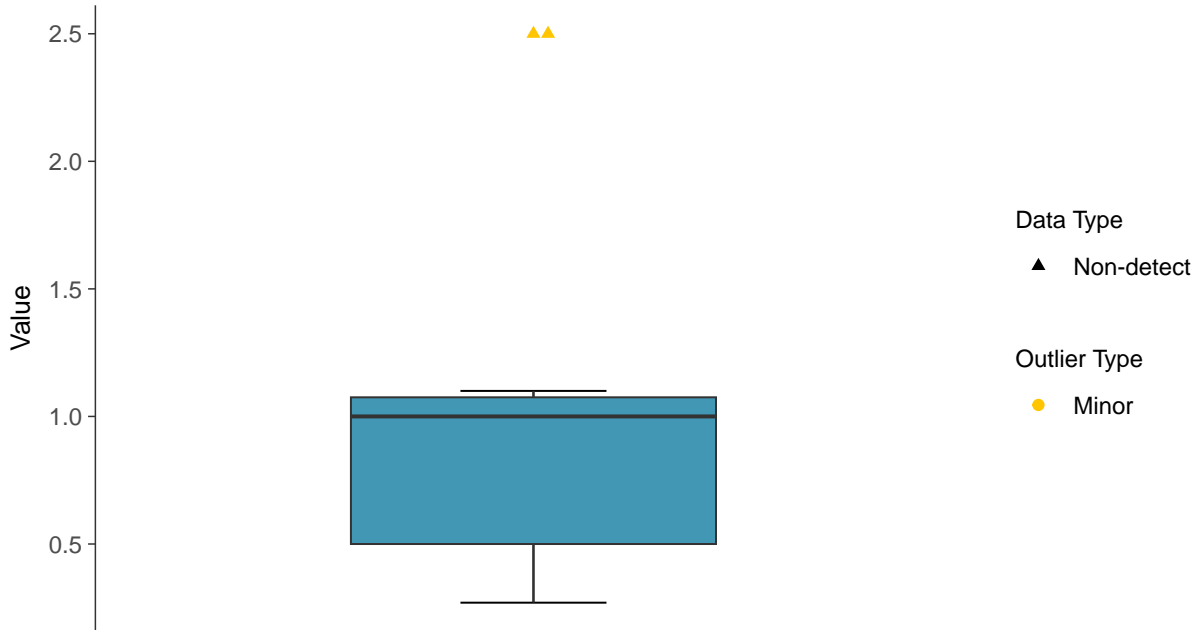
Selenium, MW-15015R (ug/L)





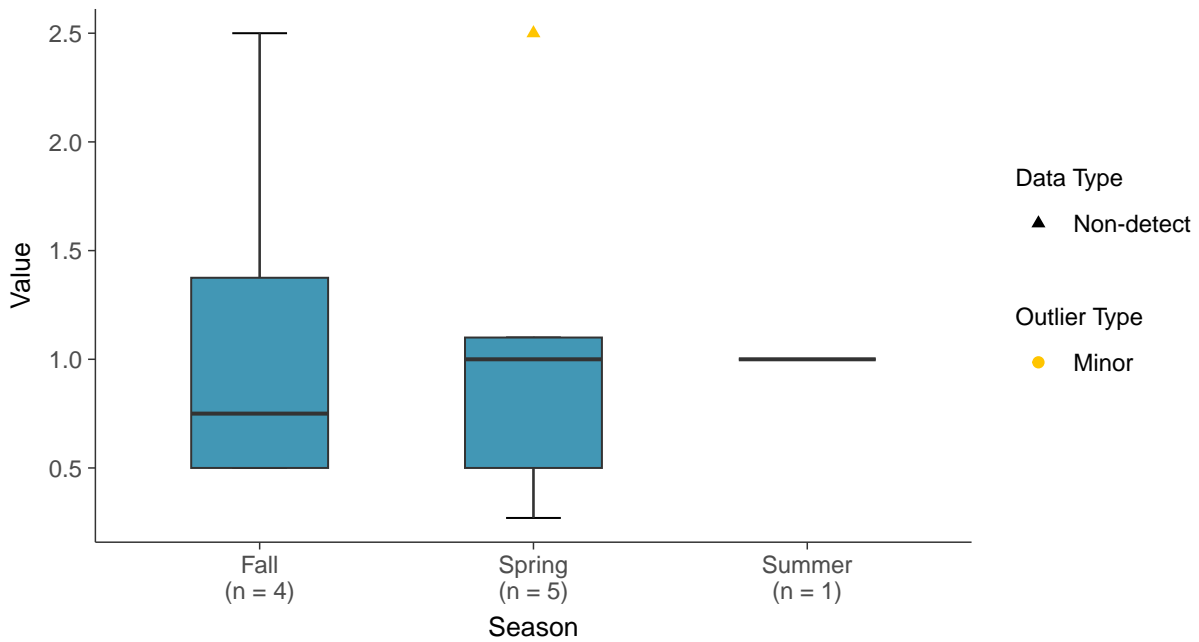
Boxplot

Selenium, MW-15015R (ug/L)



Boxplot by Season

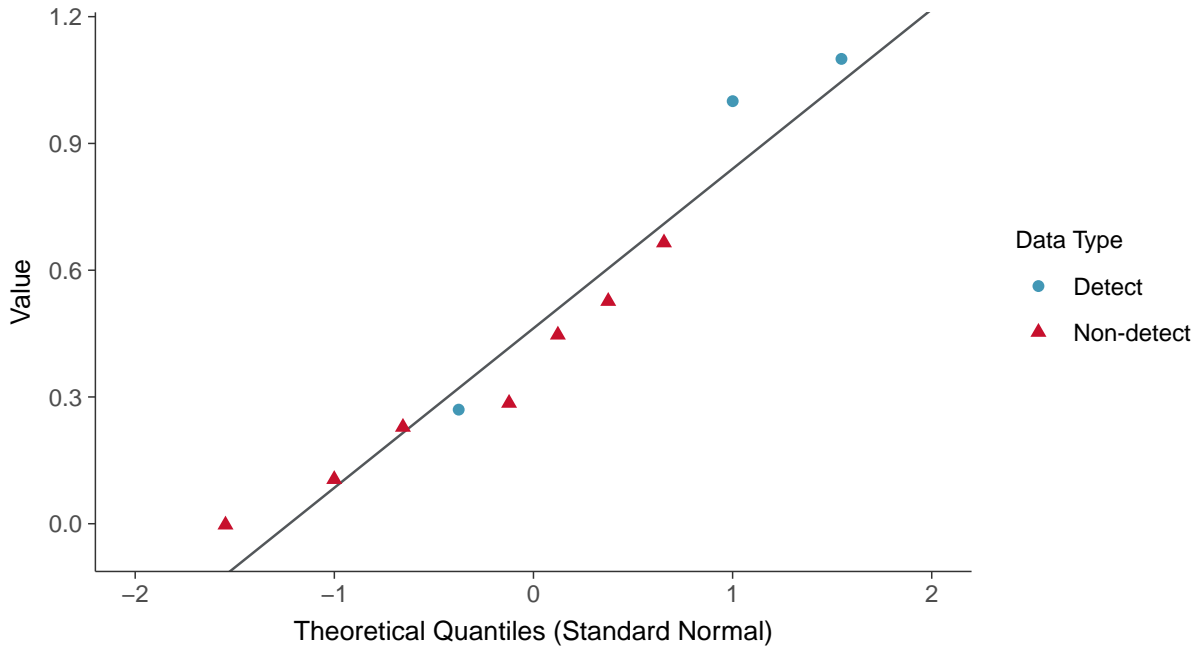
Selenium, MW-15015R (ug/L)





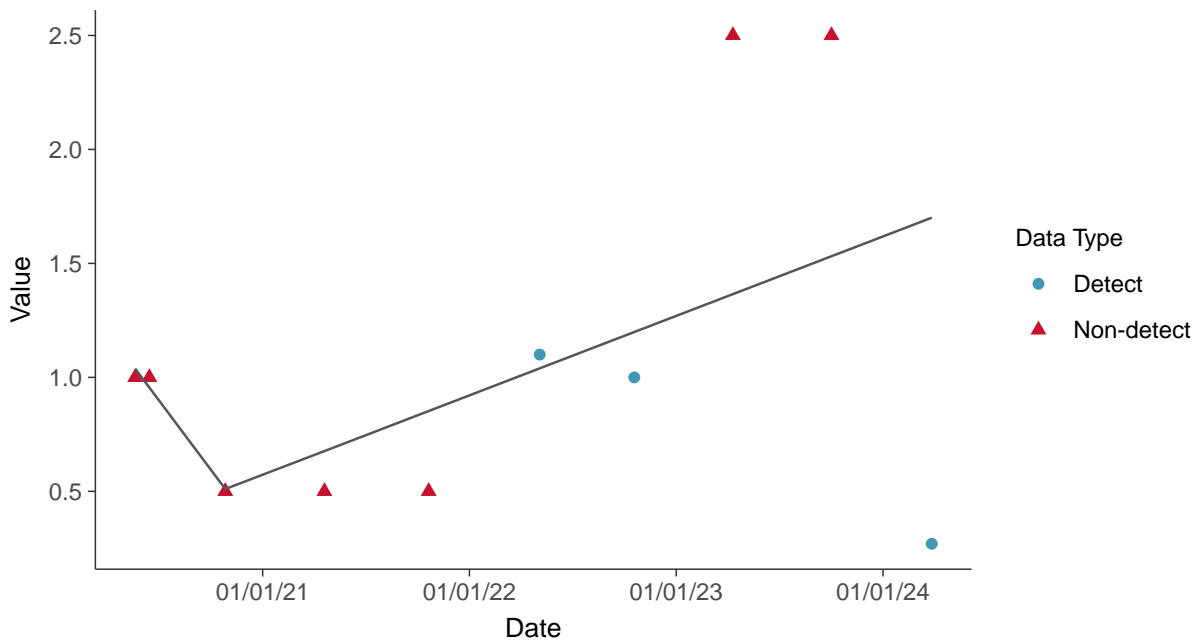
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

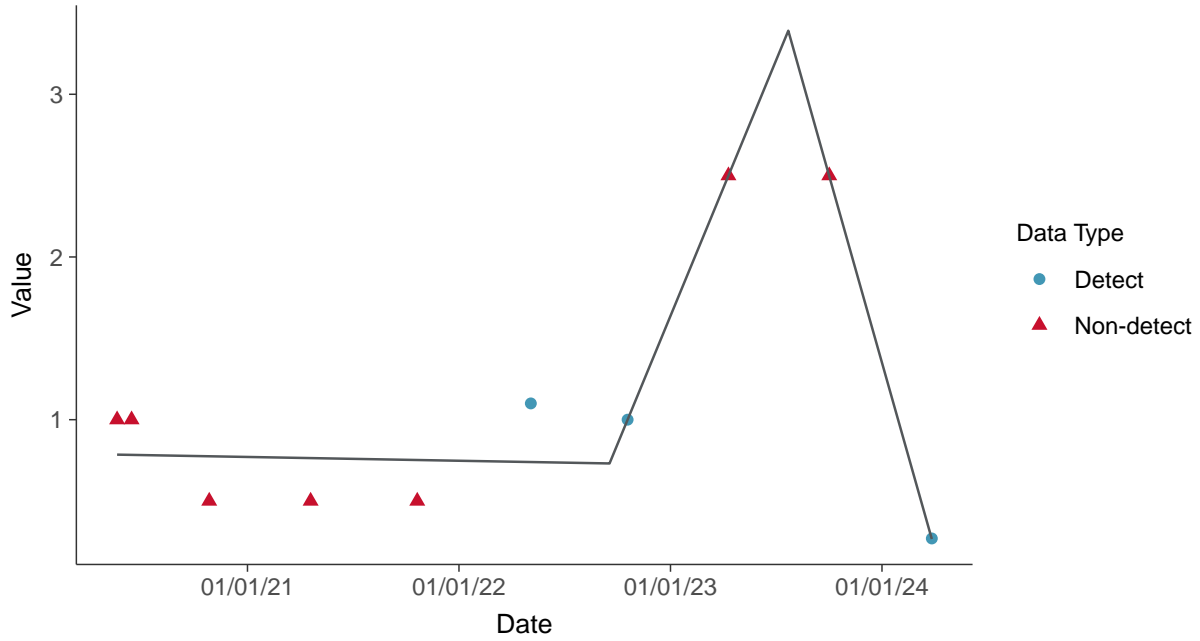
Selenium, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

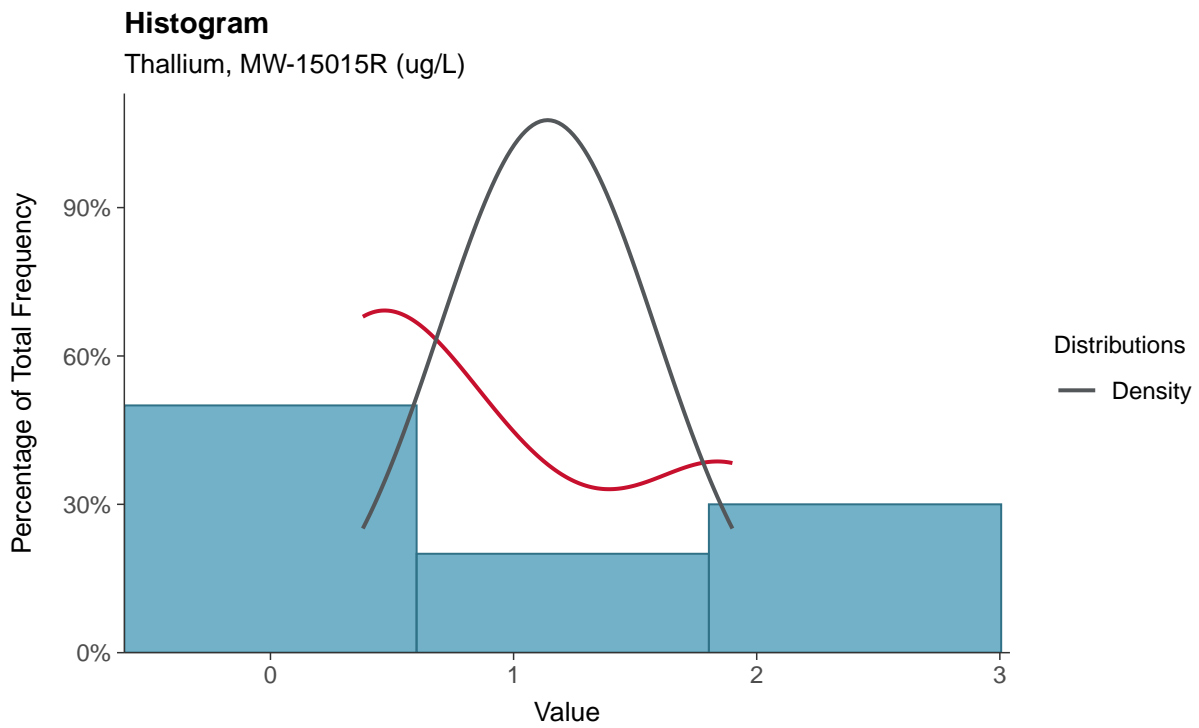
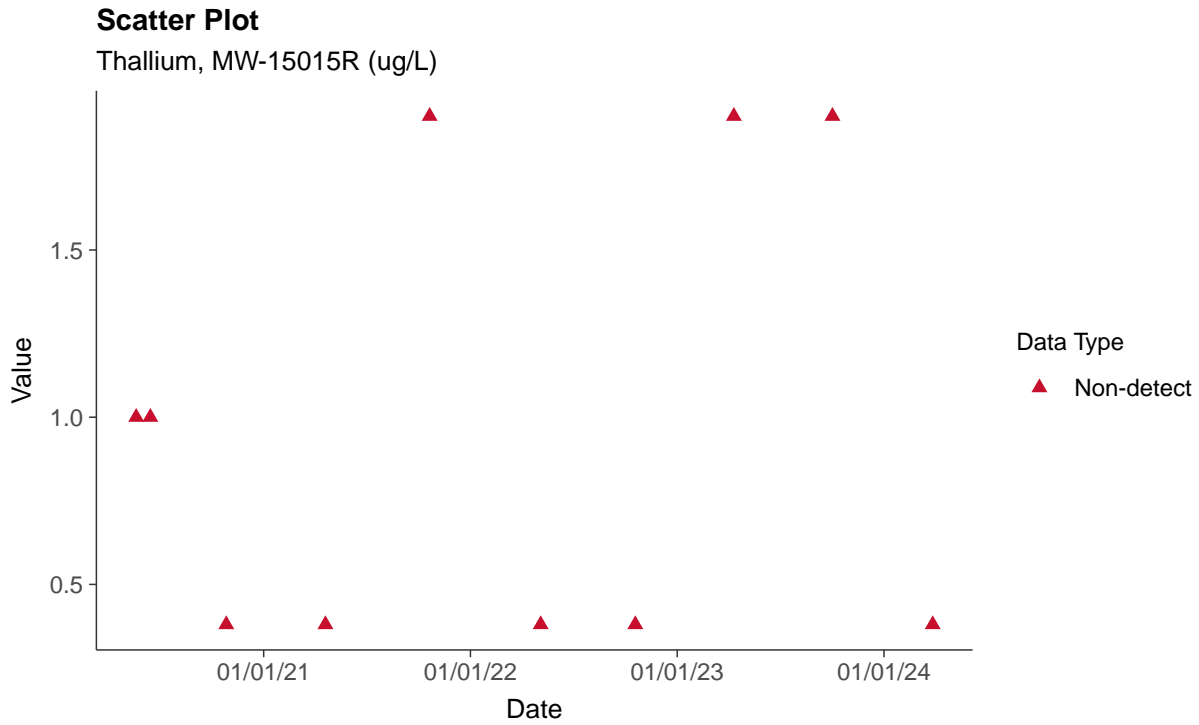
Selenium, MW-15015R (ug/L)





Appendix IV: Thallium, MW-15015R

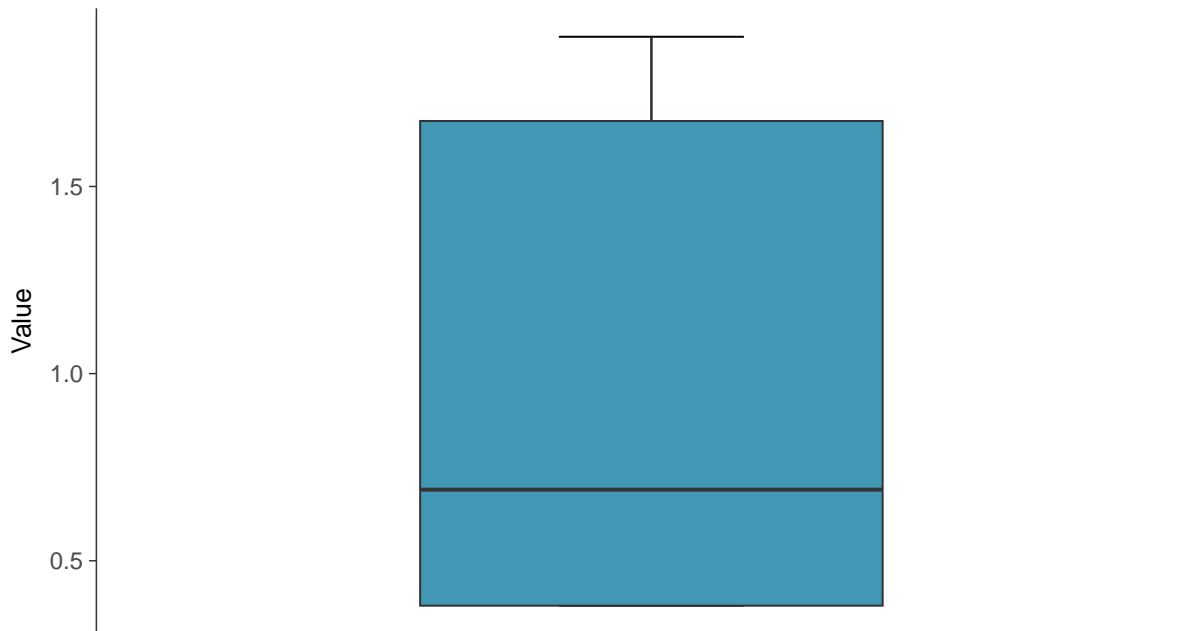
ID: 05_2_131





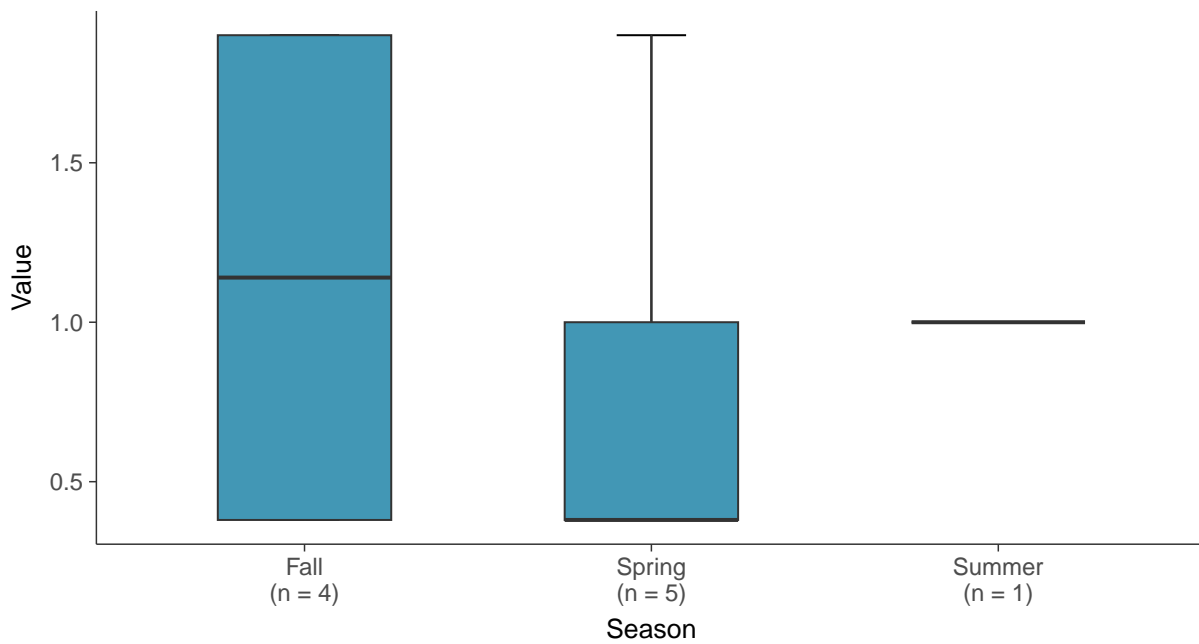
Boxplot

Thallium, MW-15015R (ug/L)



Boxplot by Season

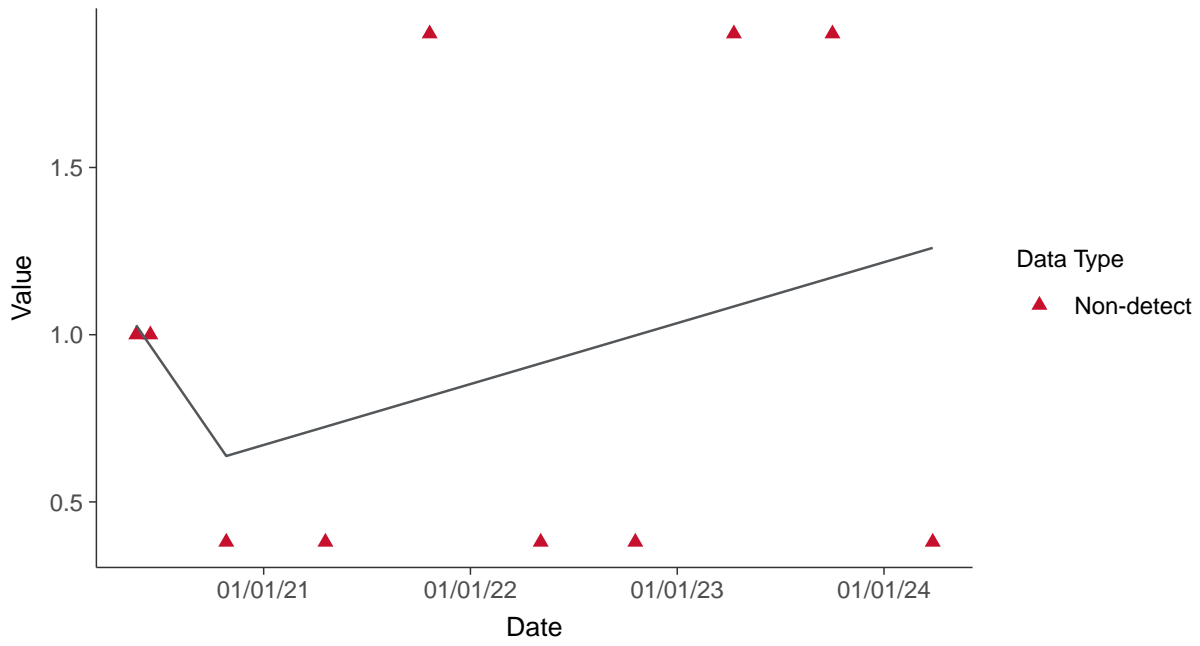
Thallium, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear

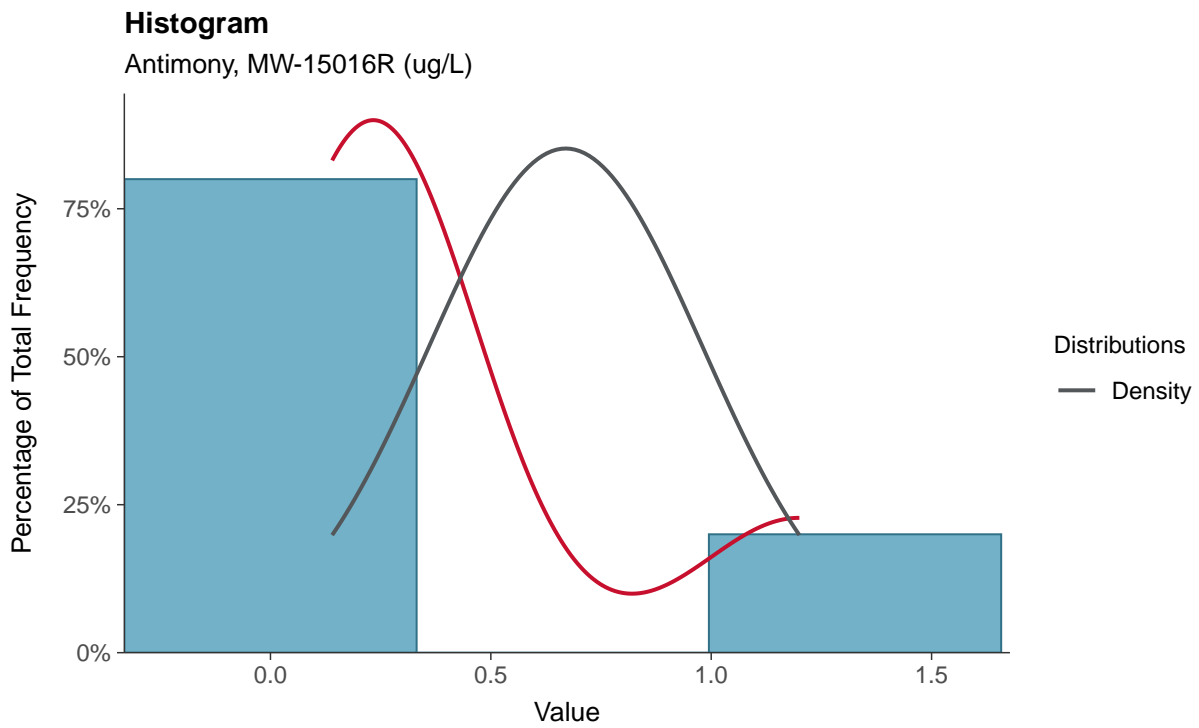
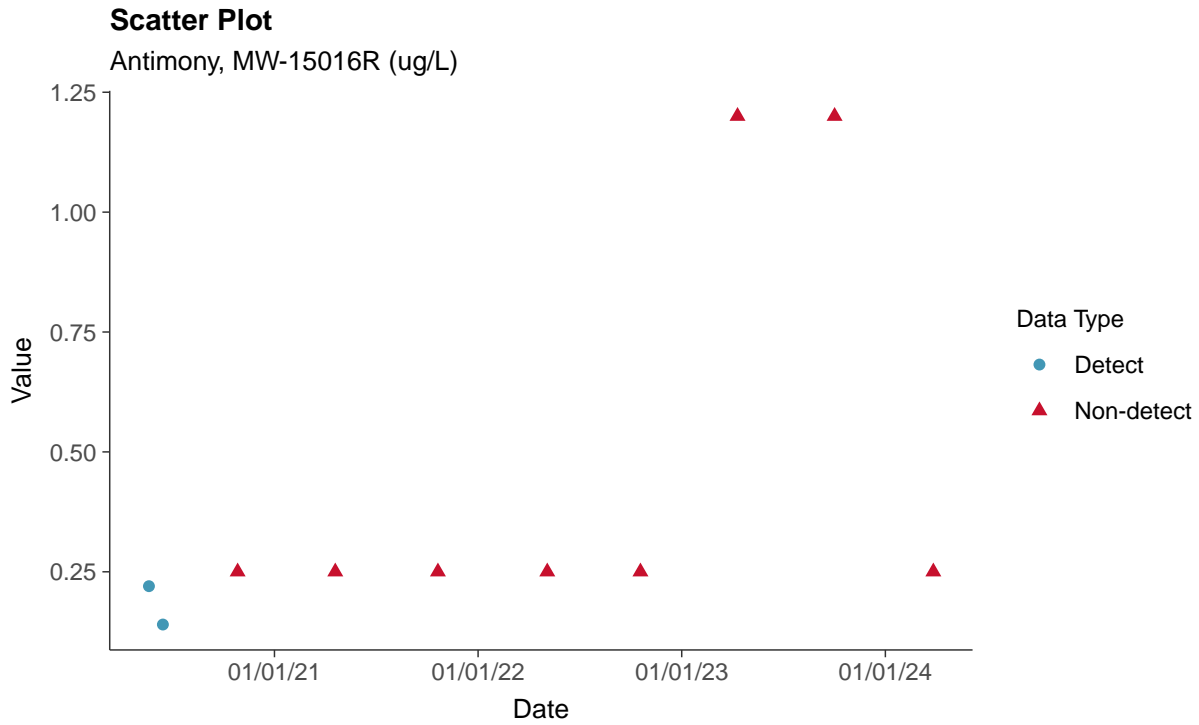
Thallium, MW-15015R (ug/L)





Appendix IV: Antimony, MW-15016R

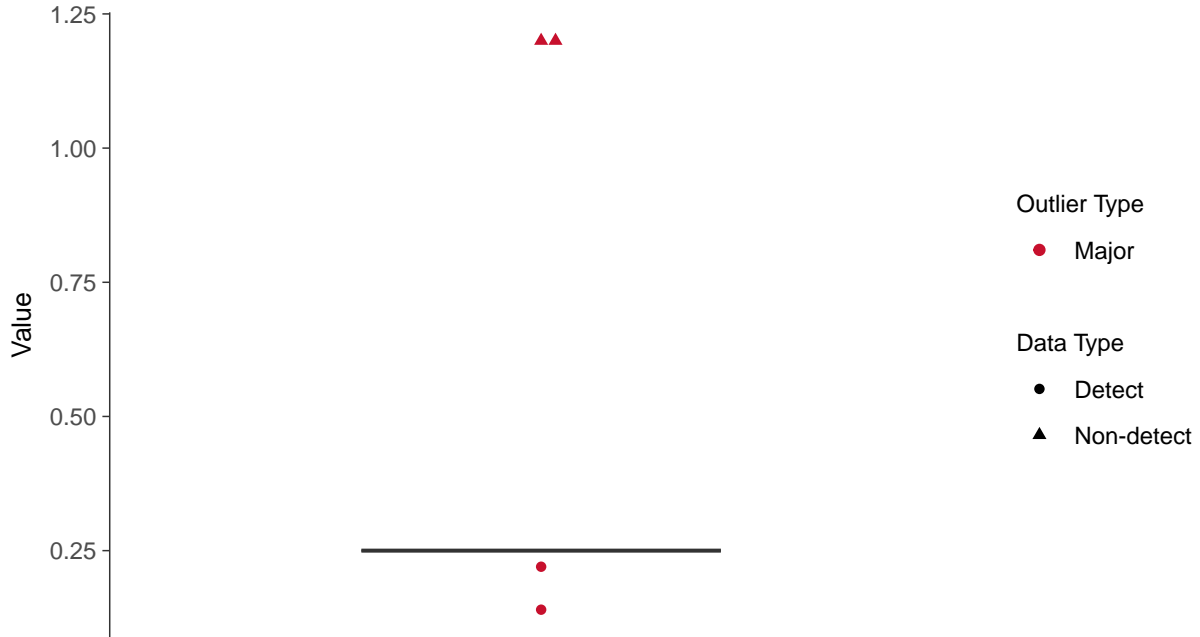
ID: 06_2_101





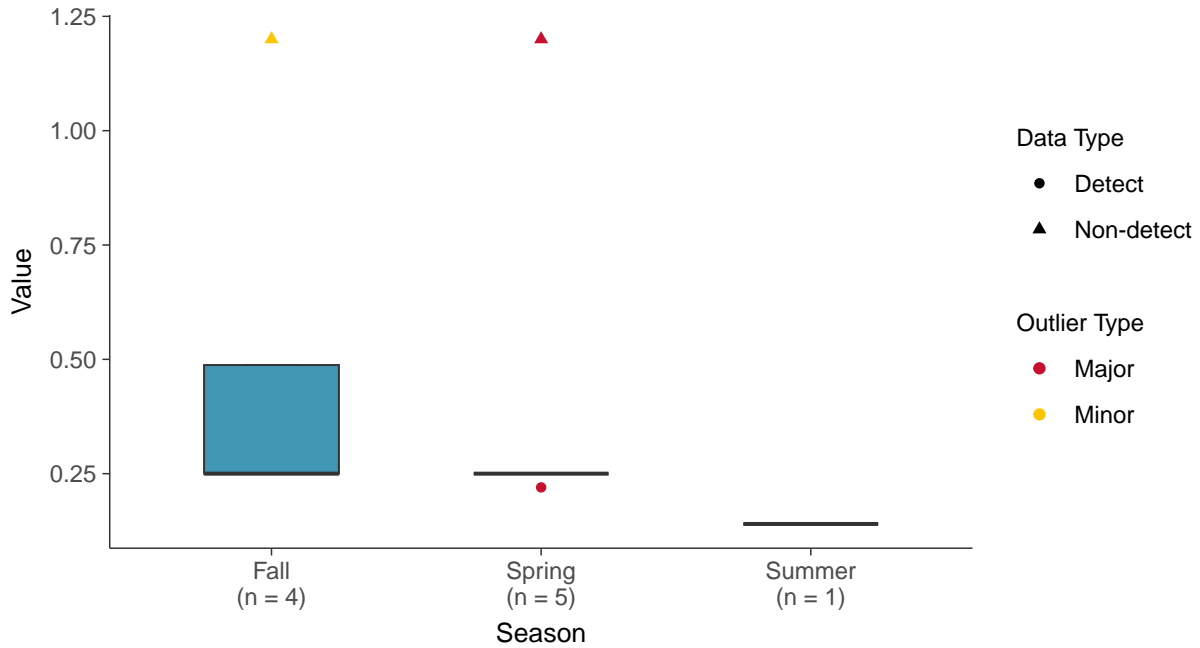
Boxplot

Antimony, MW-15016R (ug/L)



Boxplot by Season

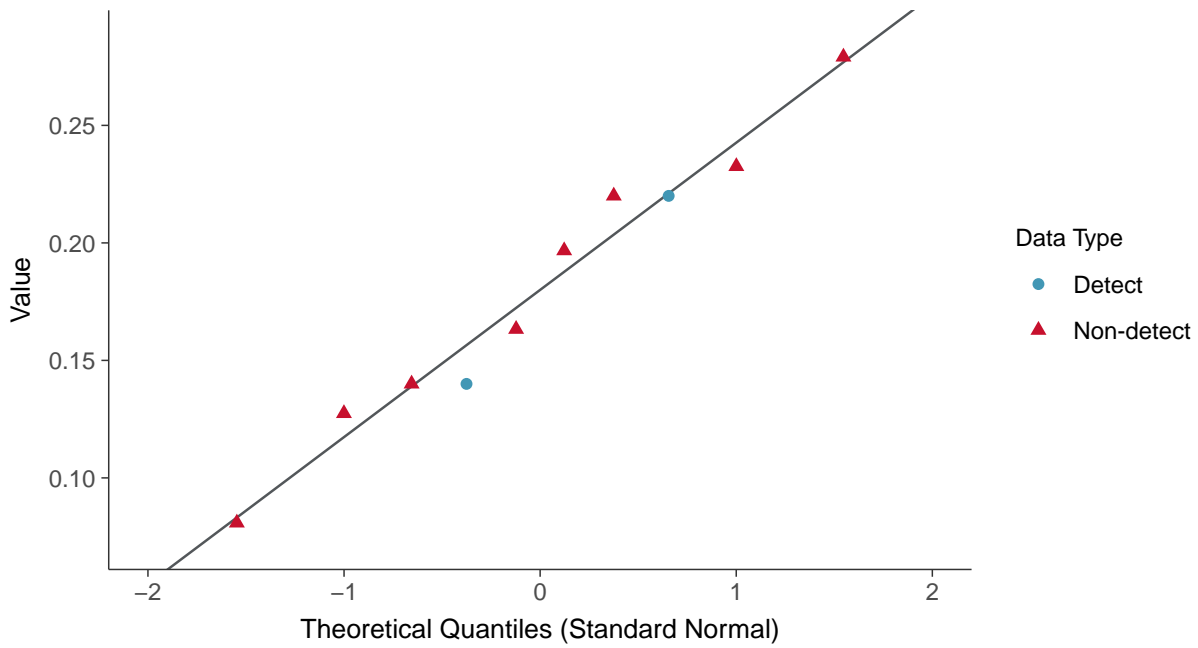
Antimony, MW-15016R (ug/L)





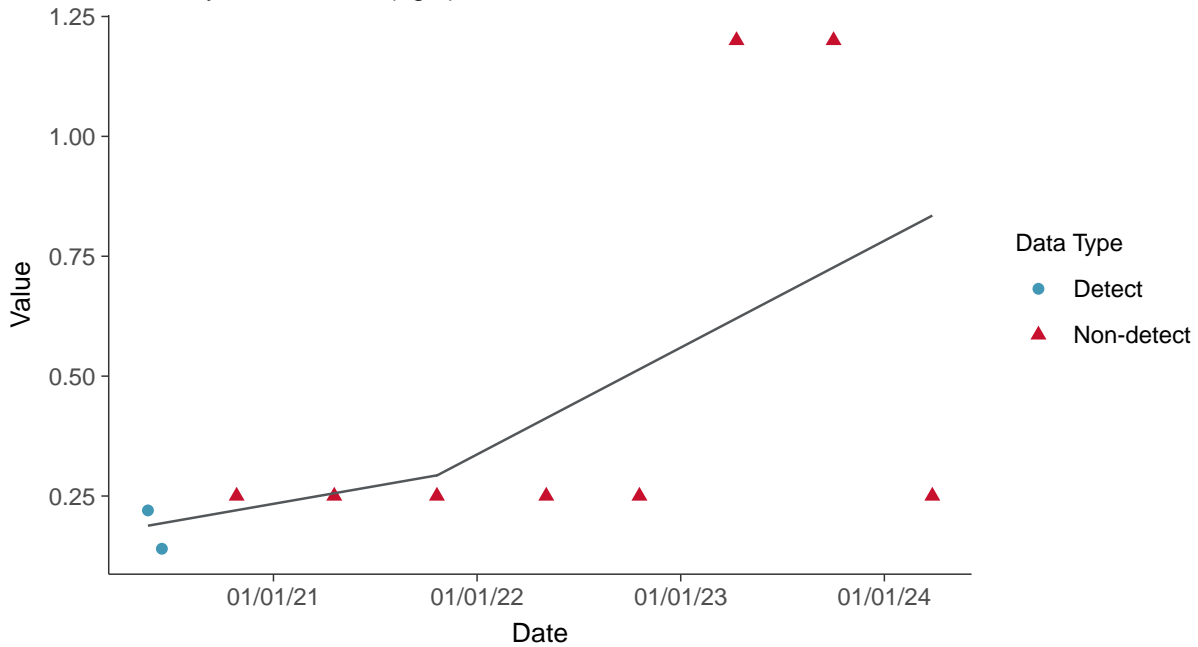
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

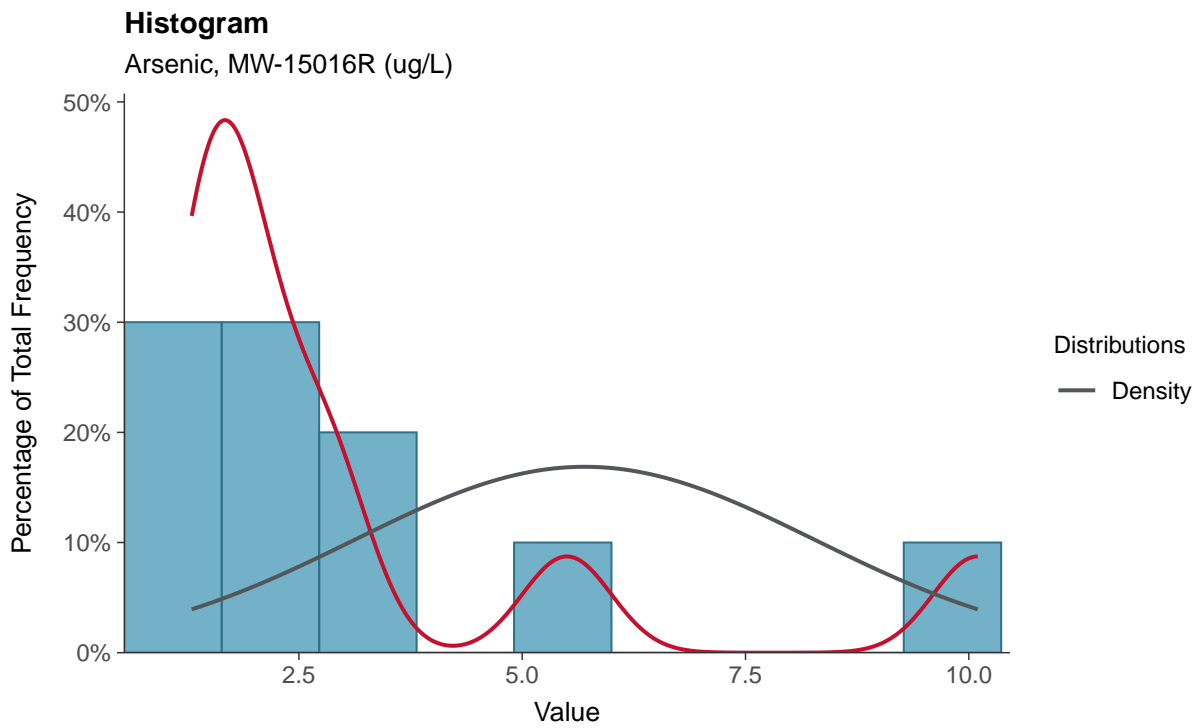
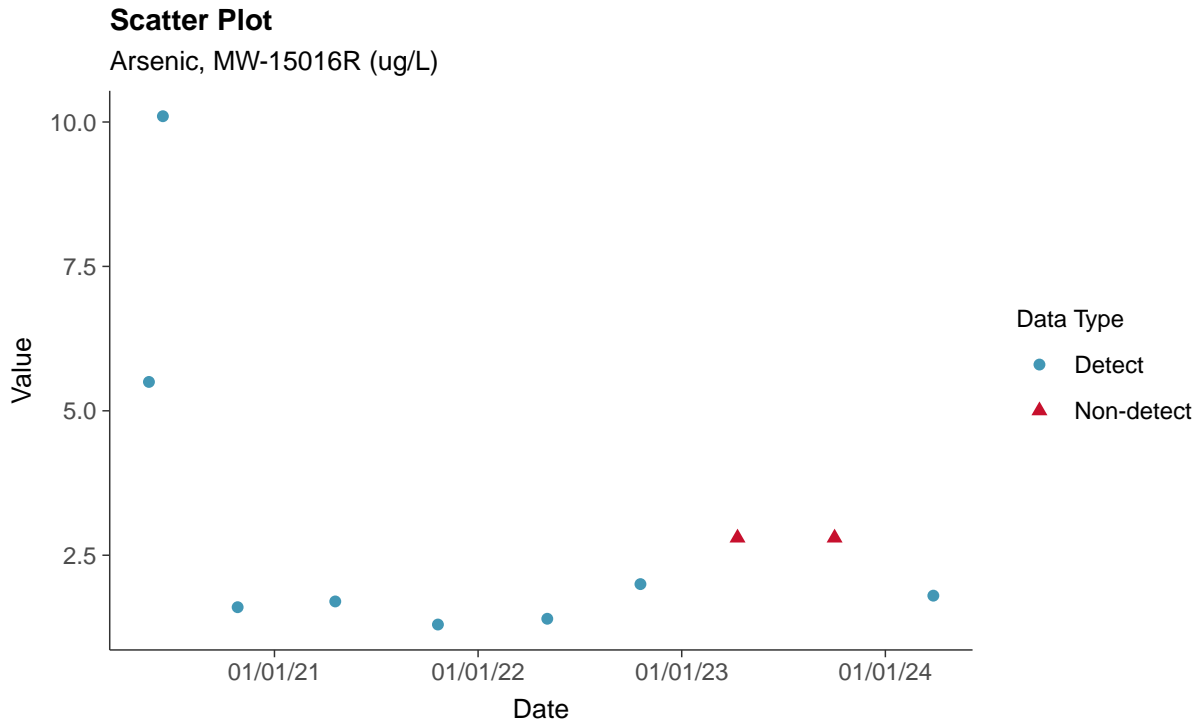
Antimony, MW-15016R (ug/L)





Appendix IV: Arsenic, MW-15016R

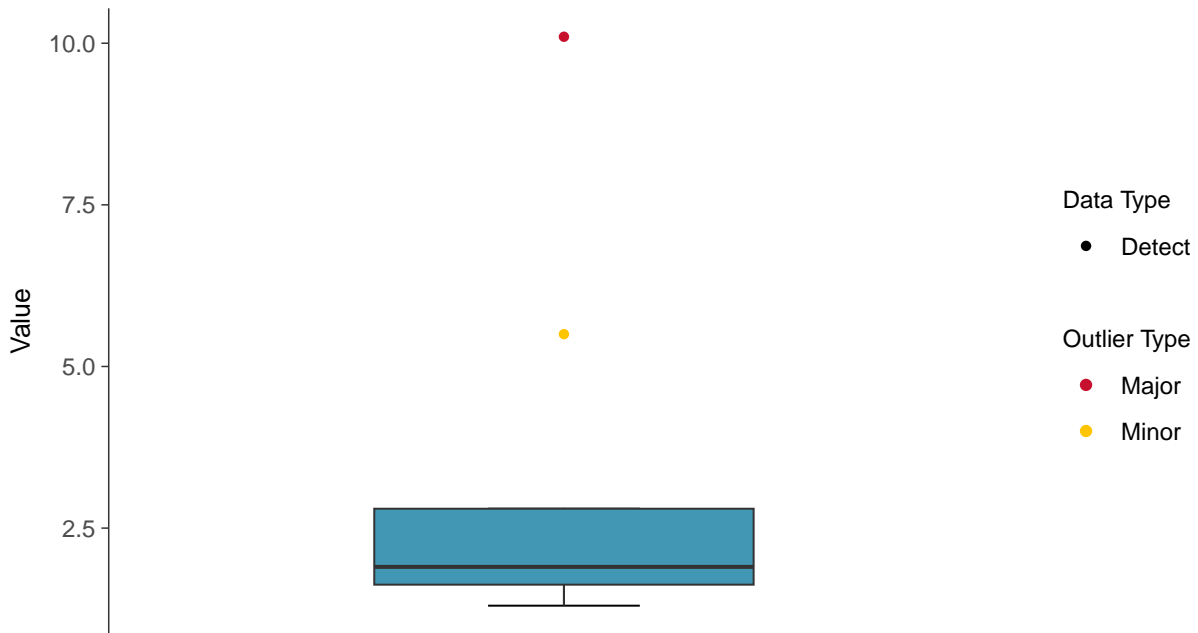
ID: 06_2_102





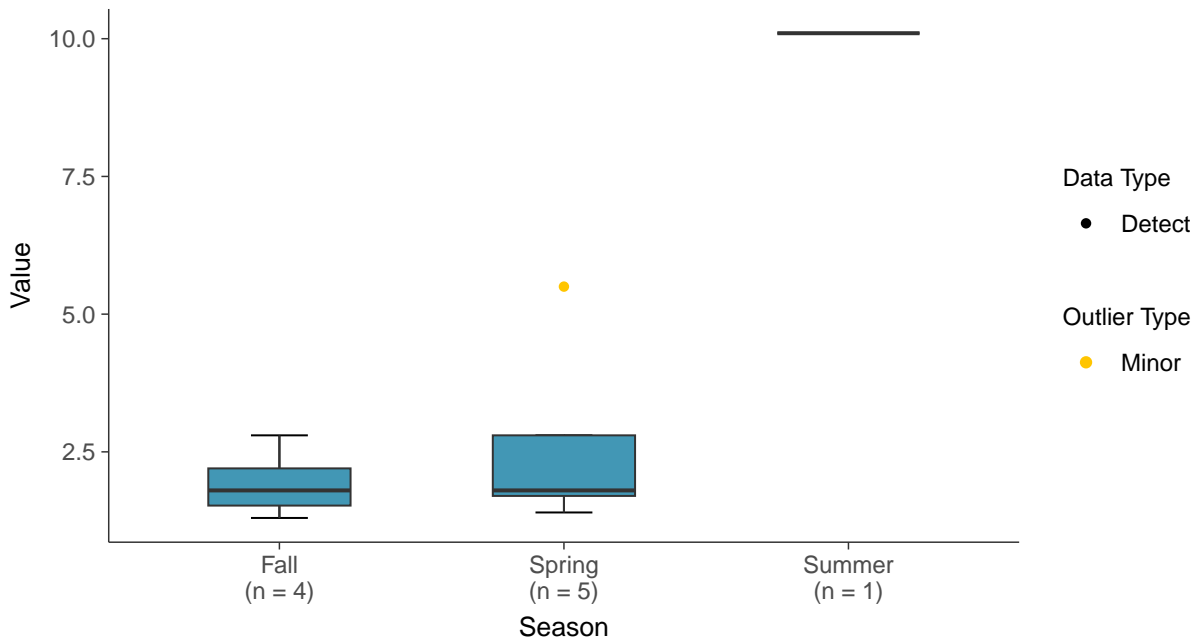
Boxplot

Arsenic, MW-15016R (ug/L)



Boxplot by Season

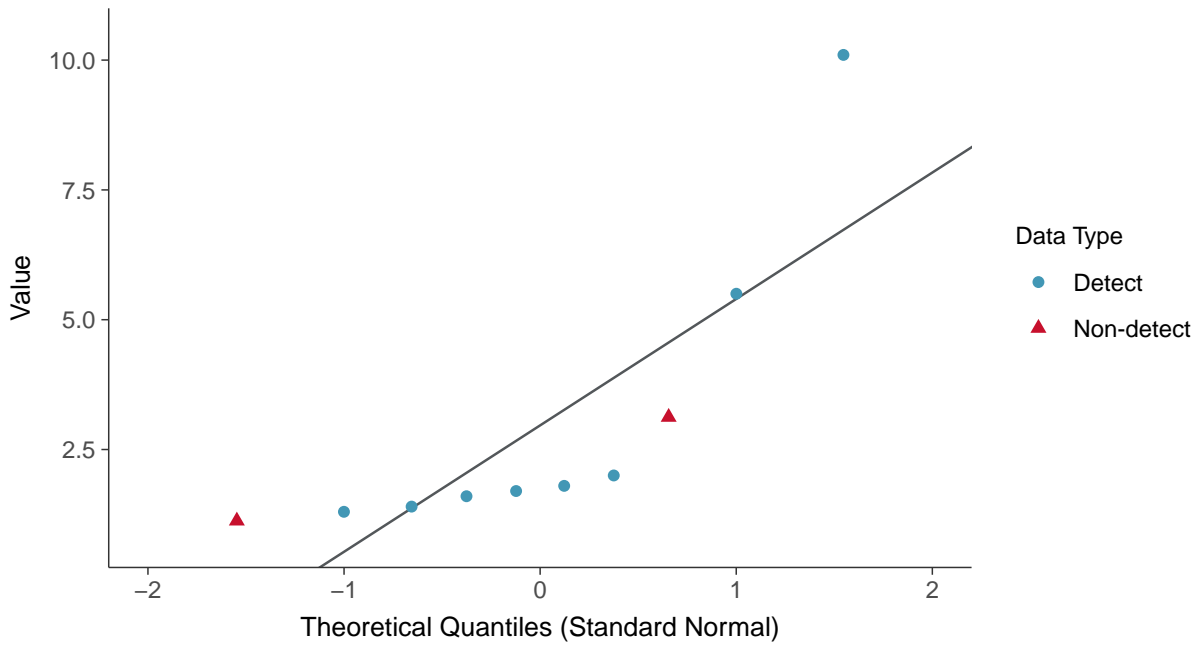
Arsenic, MW-15016R (ug/L)





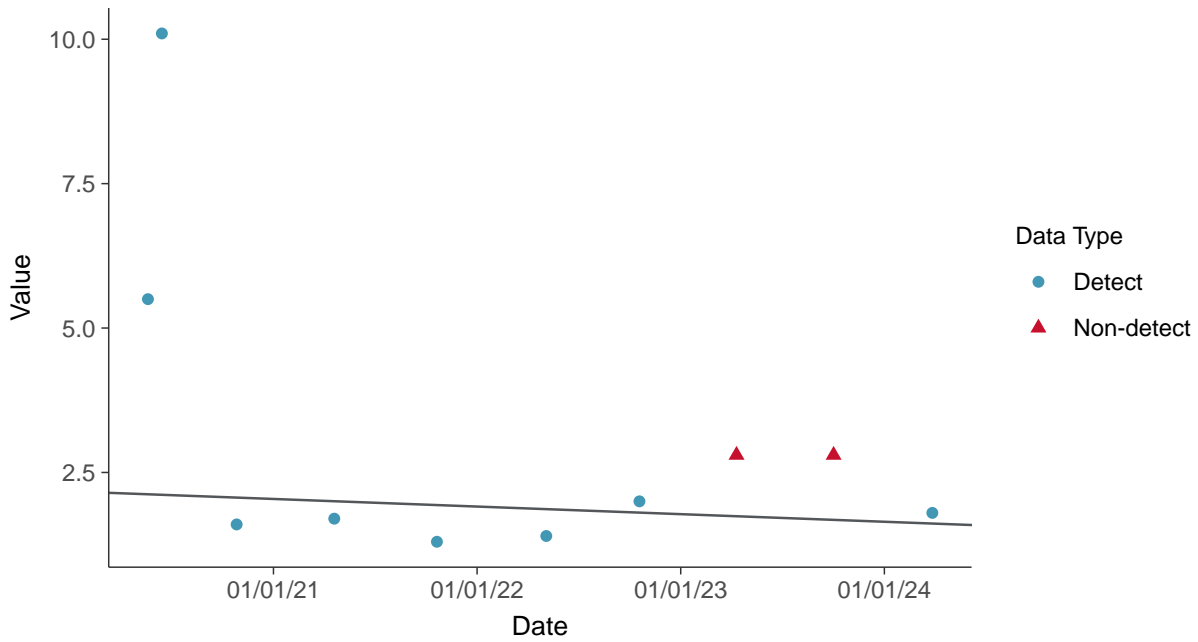
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15016R (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

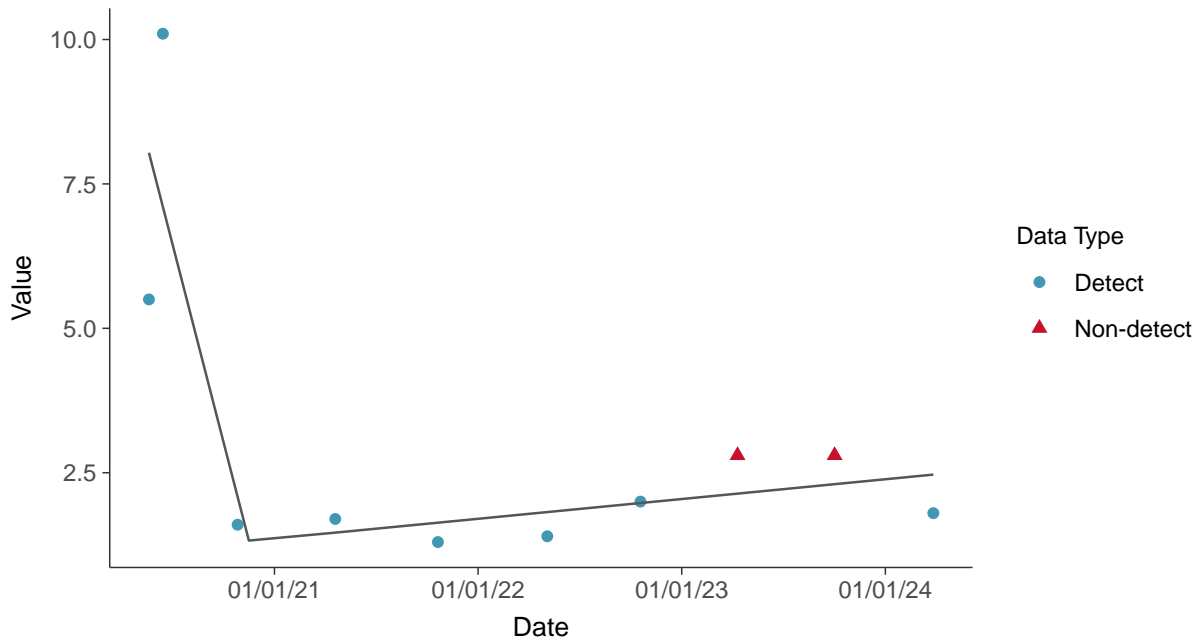
Arsenic, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15016R (ug/L)



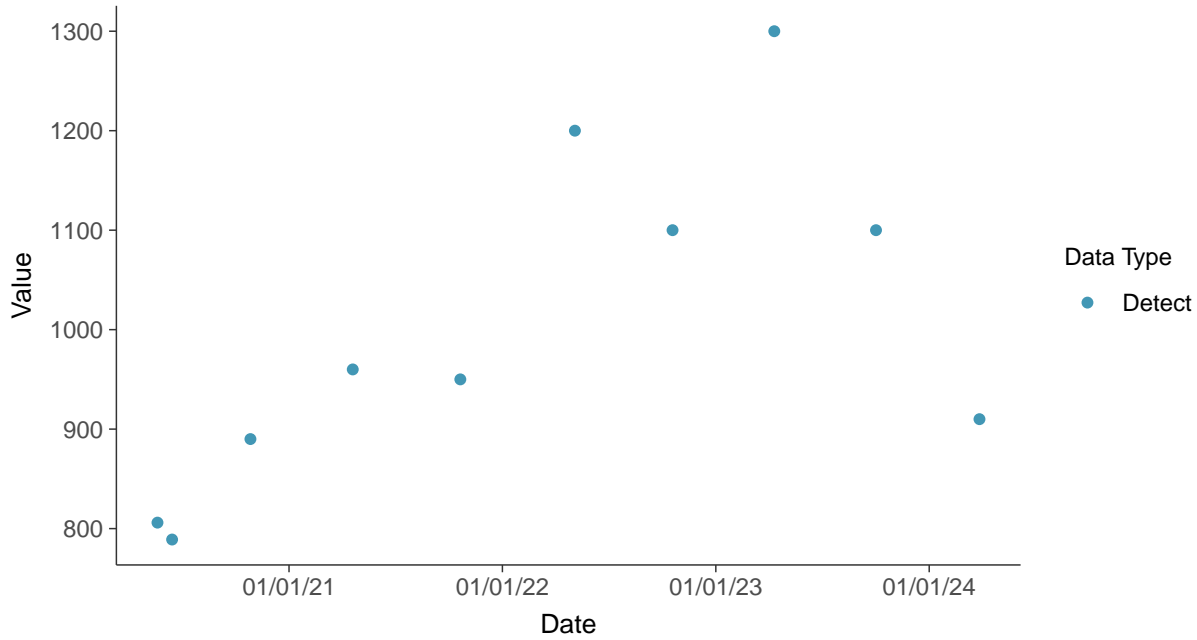


Appendix IV: Barium, MW-15016R

ID: 06_2_103

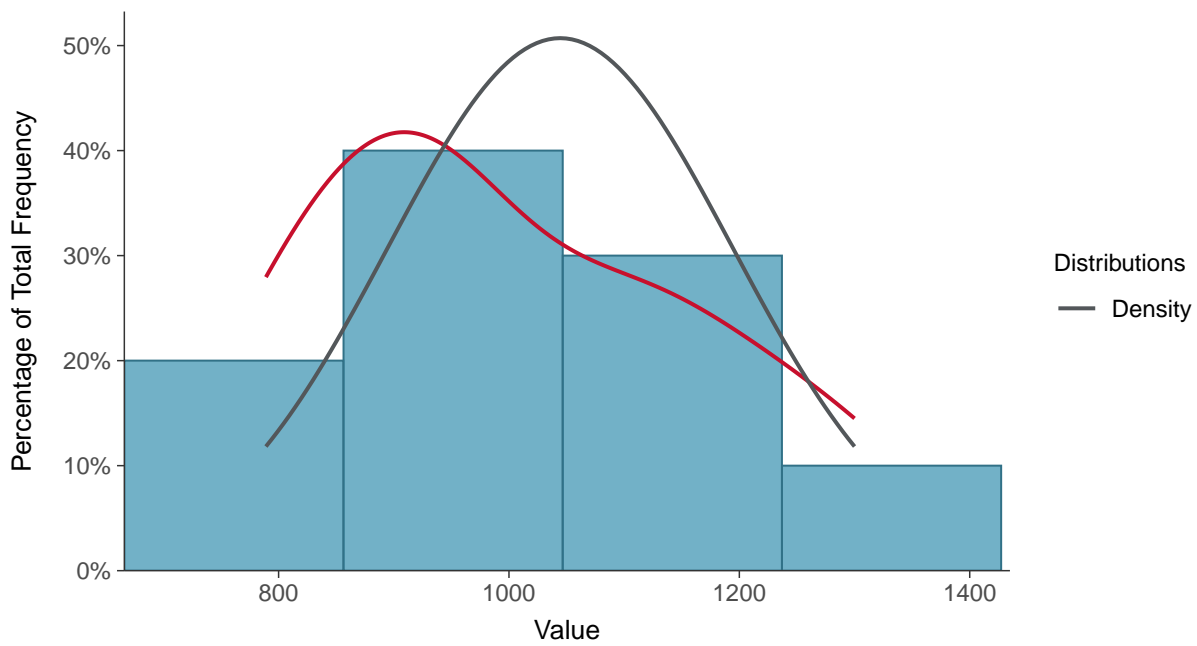
Scatter Plot

Barium, MW-15016R (ug/L)



Histogram

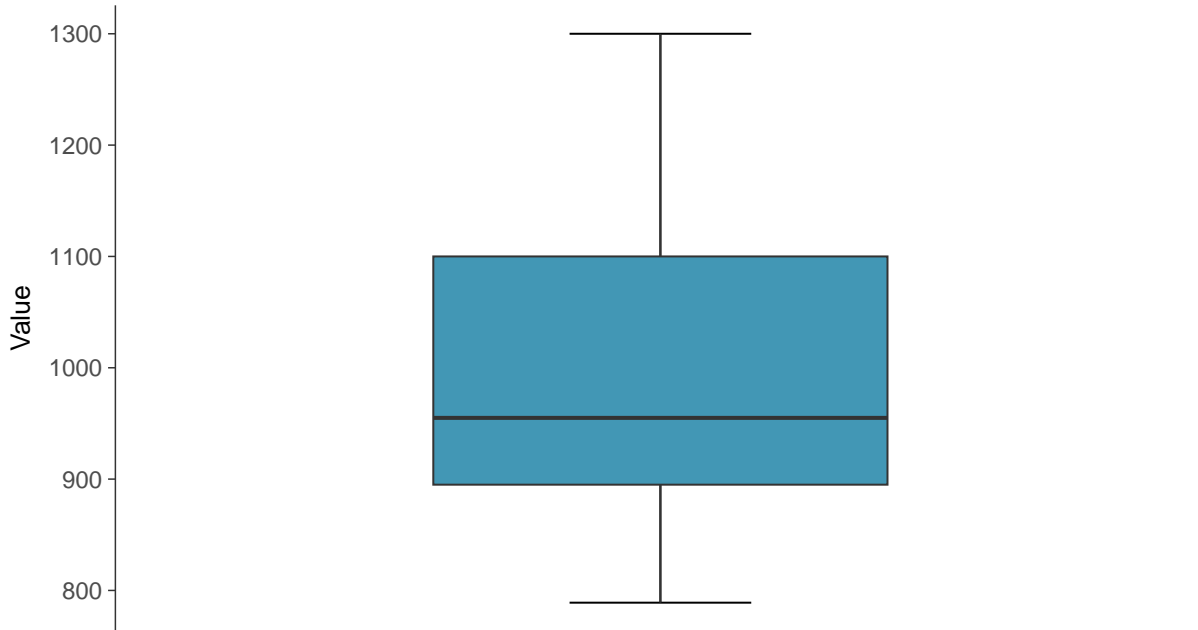
Barium, MW-15016R (ug/L)





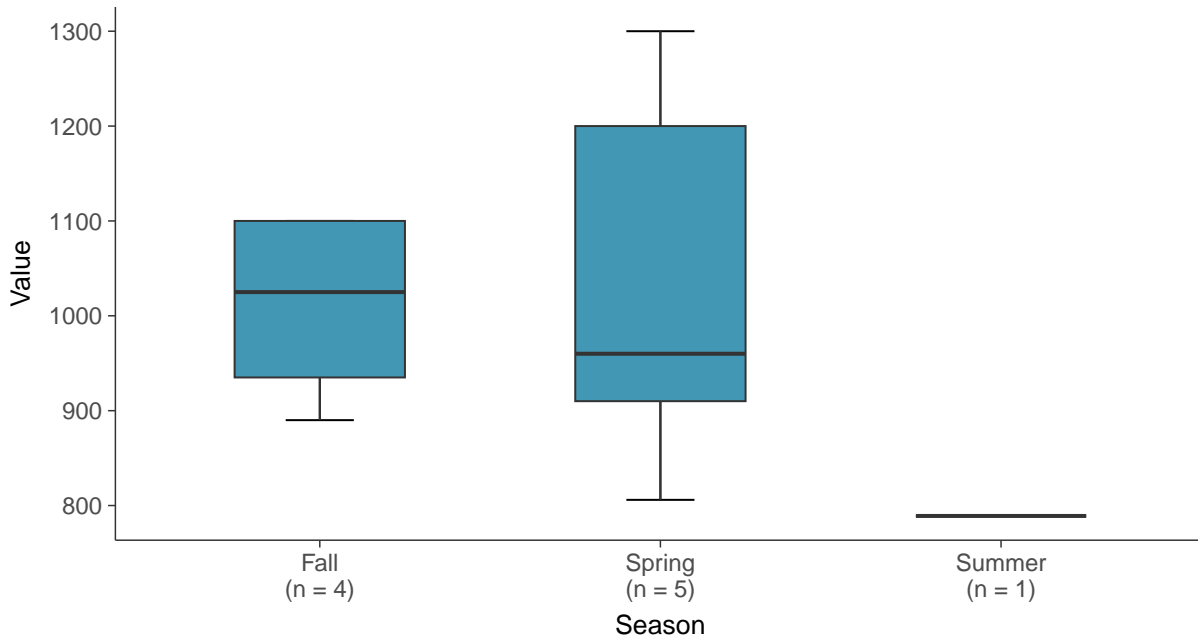
Boxplot

Barium, MW-15016R (ug/L)



Boxplot by Season

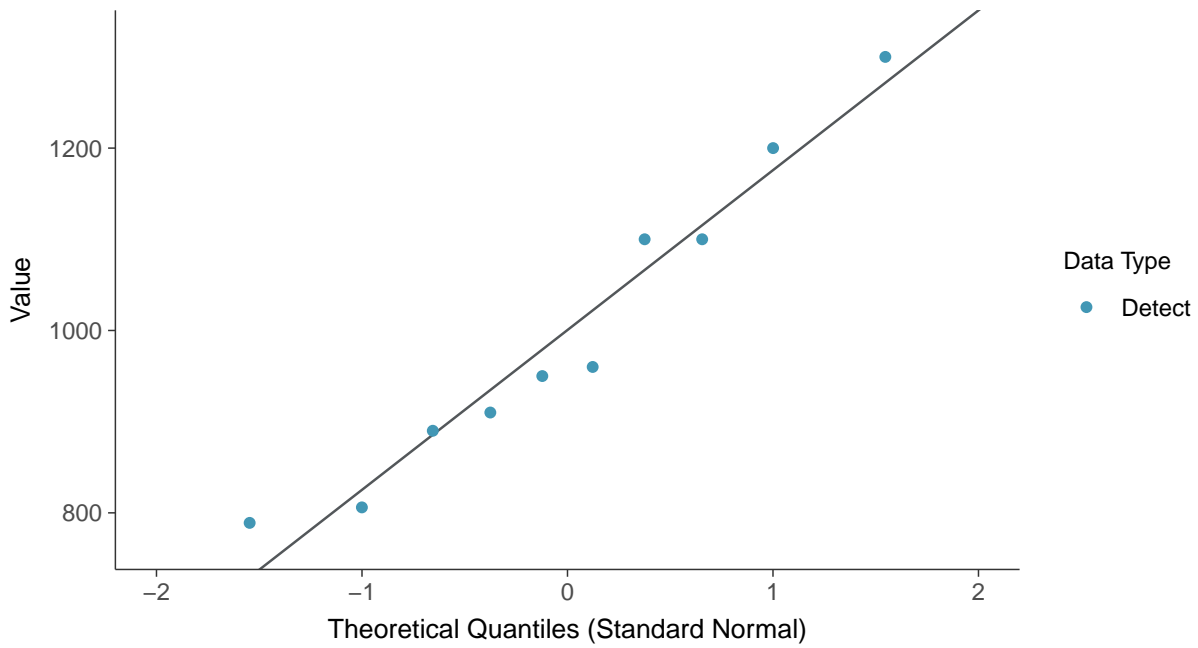
Barium, MW-15016R (ug/L)





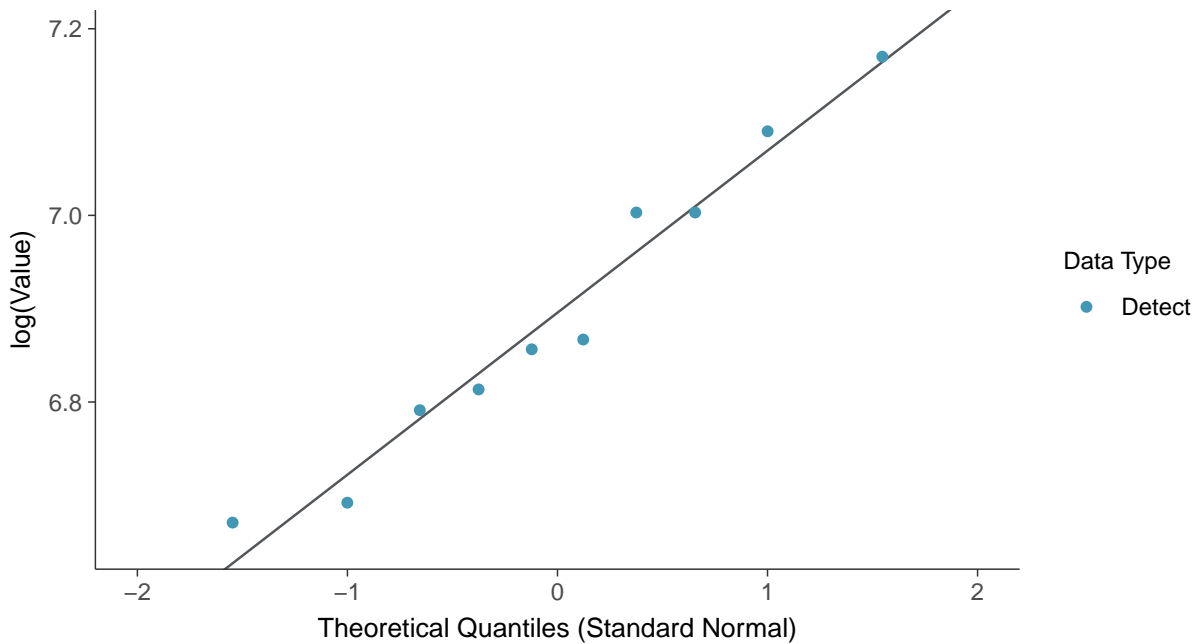
Normal Q-Q plot

Barium, MW-15016R (ug/L)



Lognormal Q-Q plot

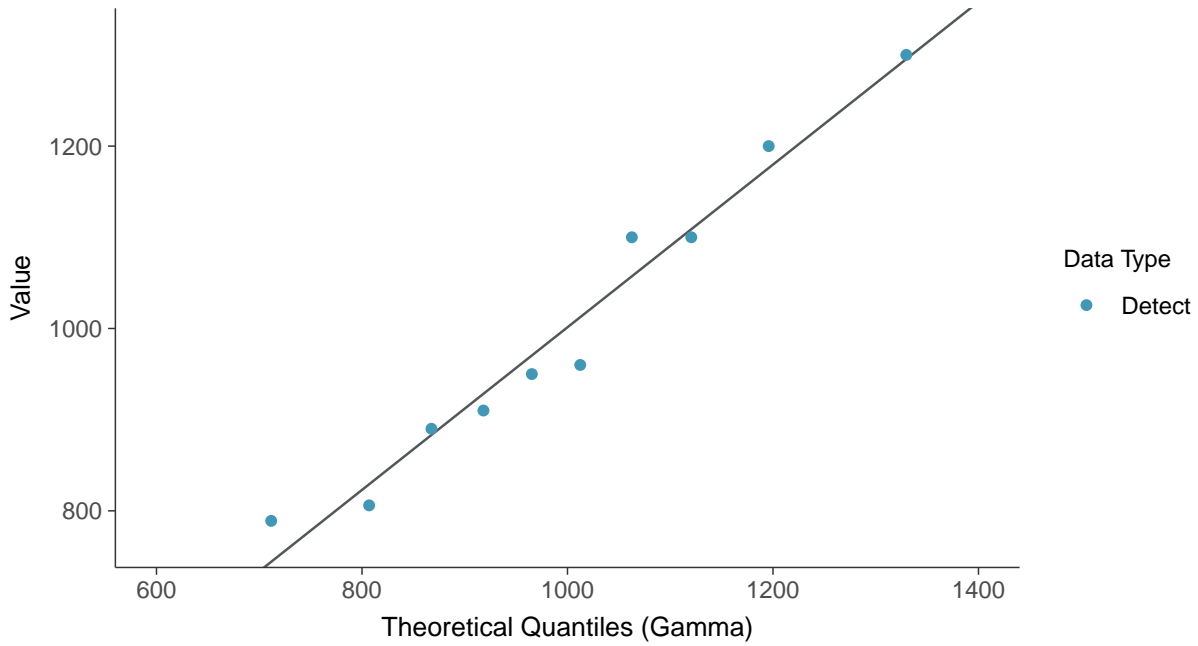
Barium, MW-15016R (ug/L)





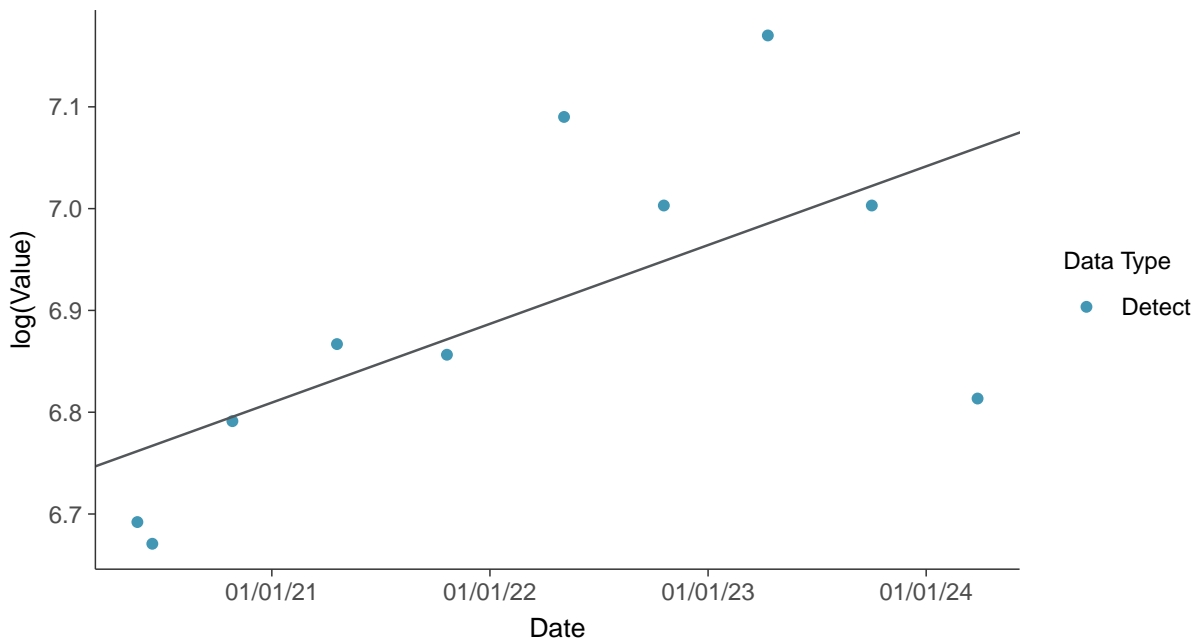
Gamma Q-Q plot

Barium, MW-15016R (ug/L)



Trend Regression: Lognormal MLE

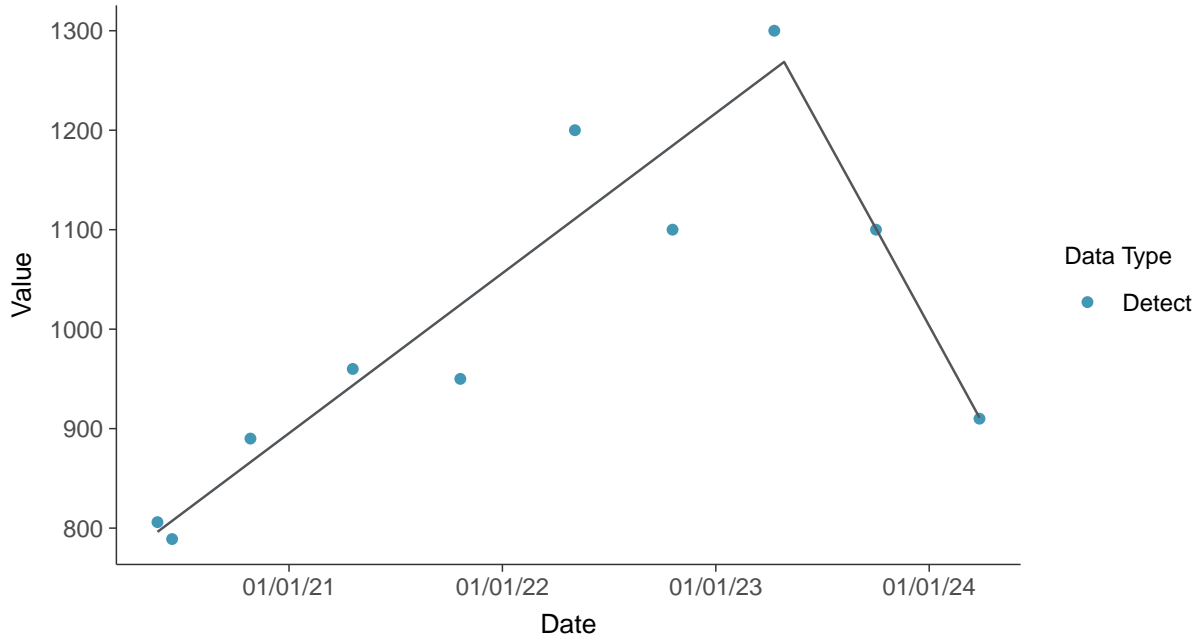
Barium, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear

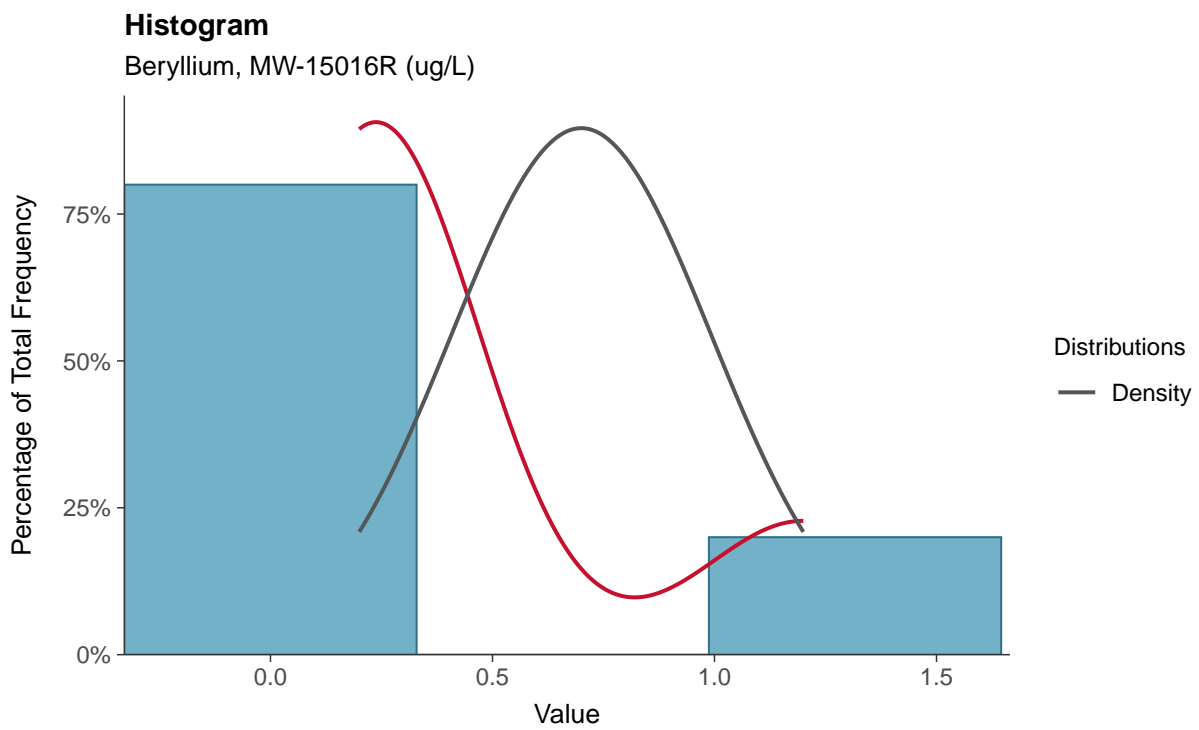
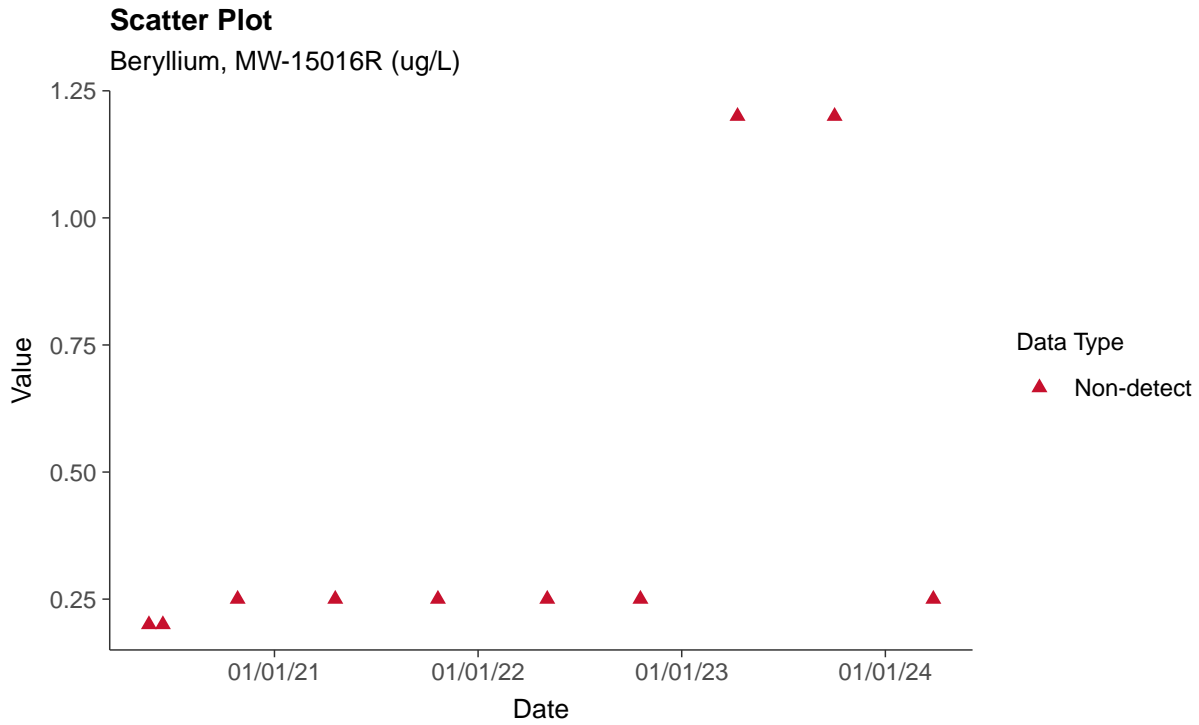
Barium, MW-15016R (ug/L)





Appendix IV: Beryllium, MW-15016R

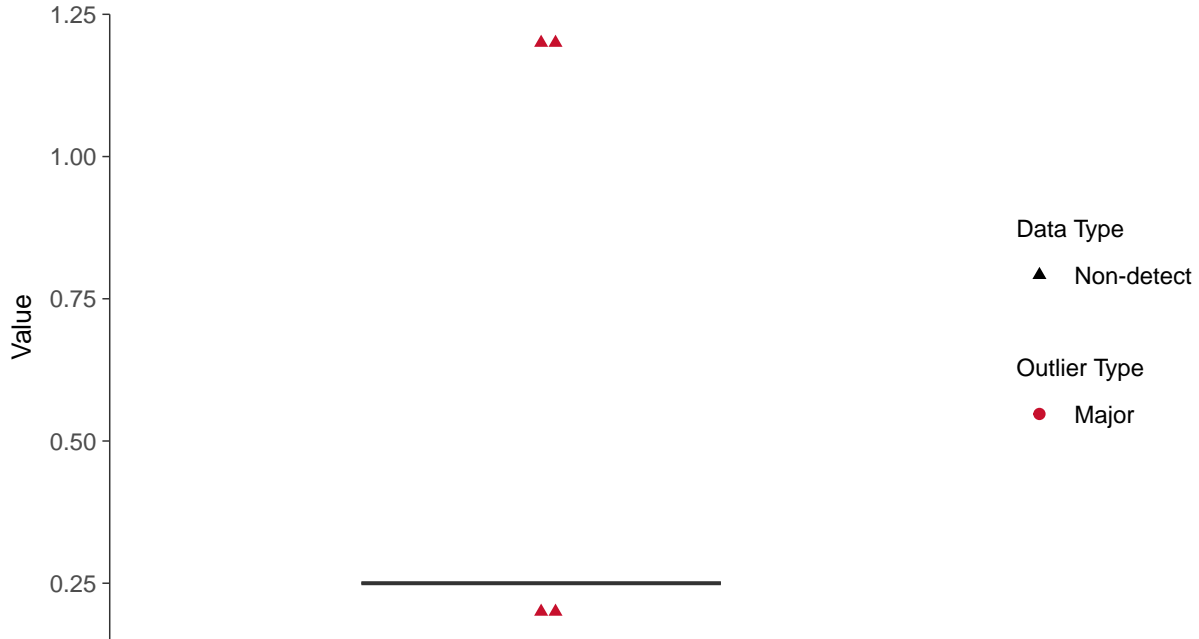
ID: 06_2_104





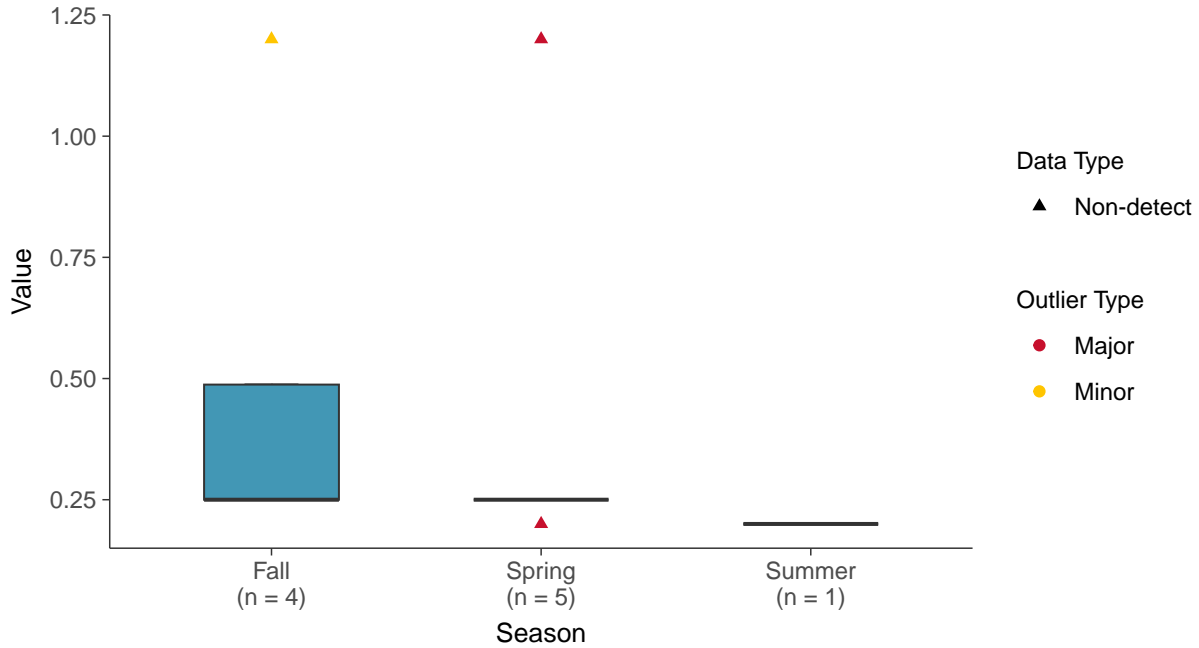
Boxplot

Beryllium, MW-15016R (ug/L)



Boxplot by Season

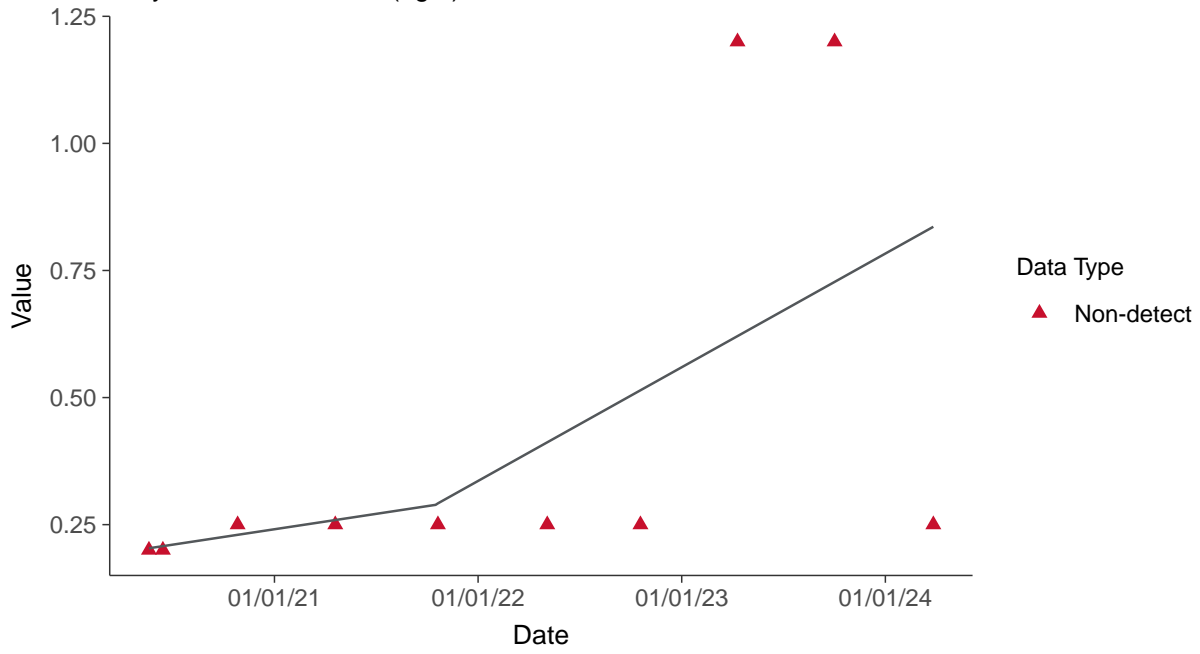
Beryllium, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear

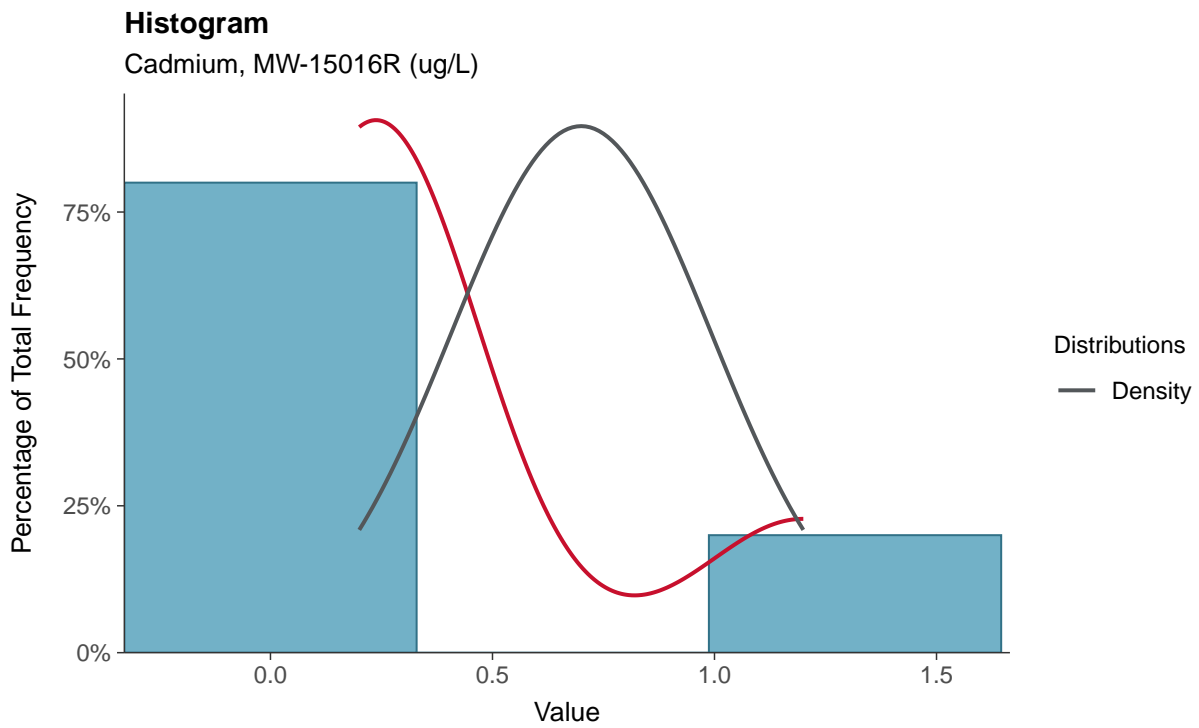
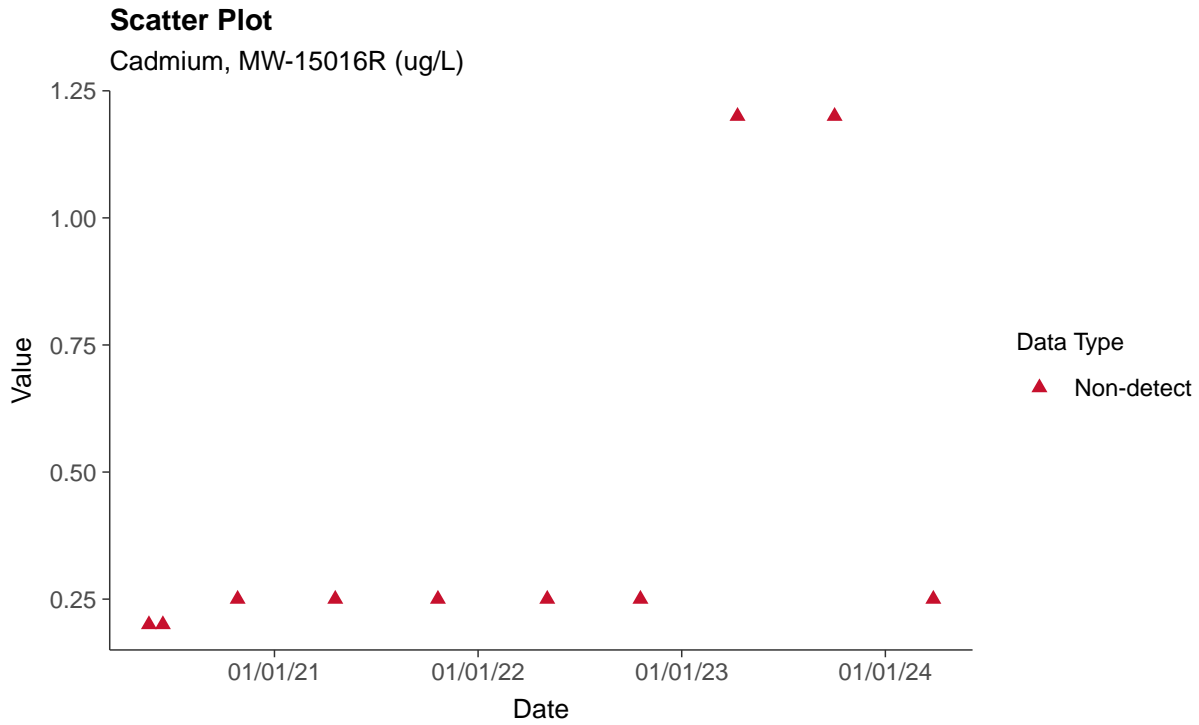
Beryllium, MW-15016R (ug/L)

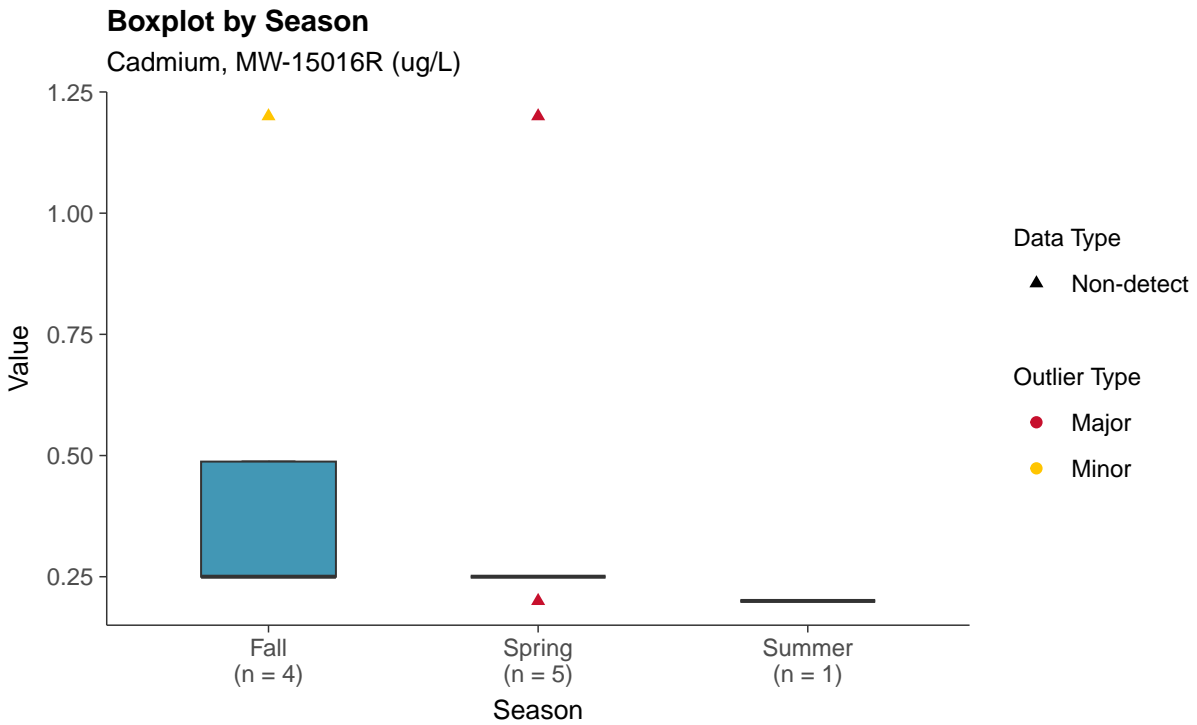
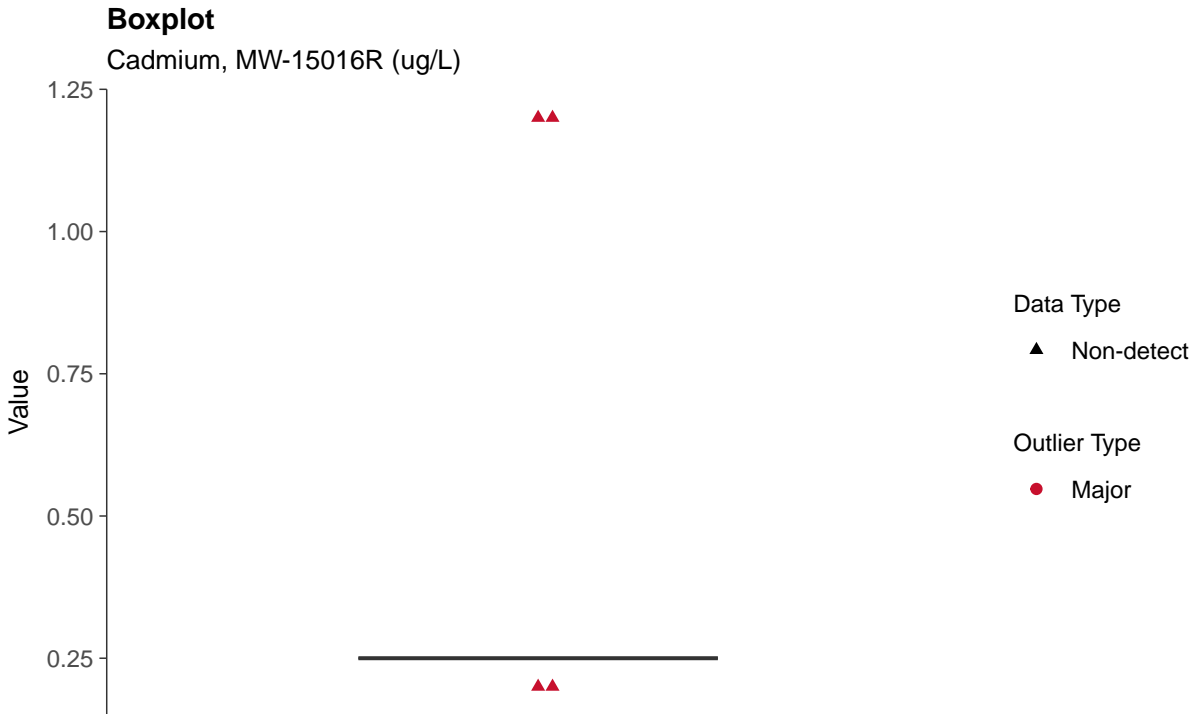




Appendix IV: Cadmium, MW-15016R

ID: 06_2_106

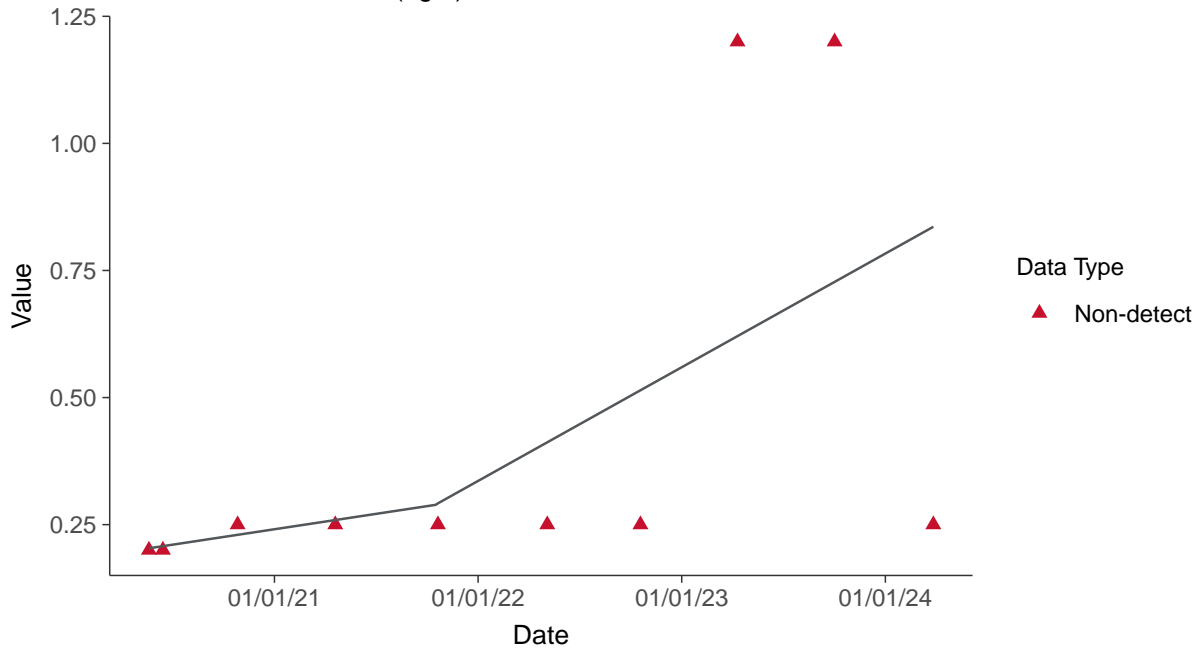






Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15016R (ug/L)



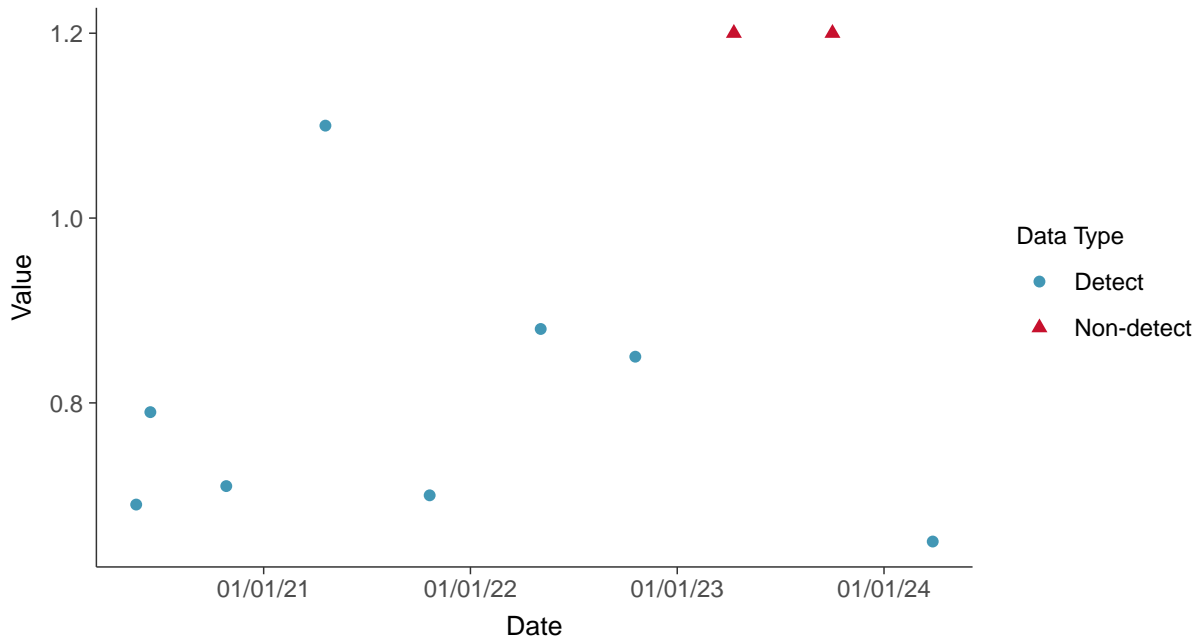


Appendix IV: Chromium, MW-15016R

ID: 06_2_109

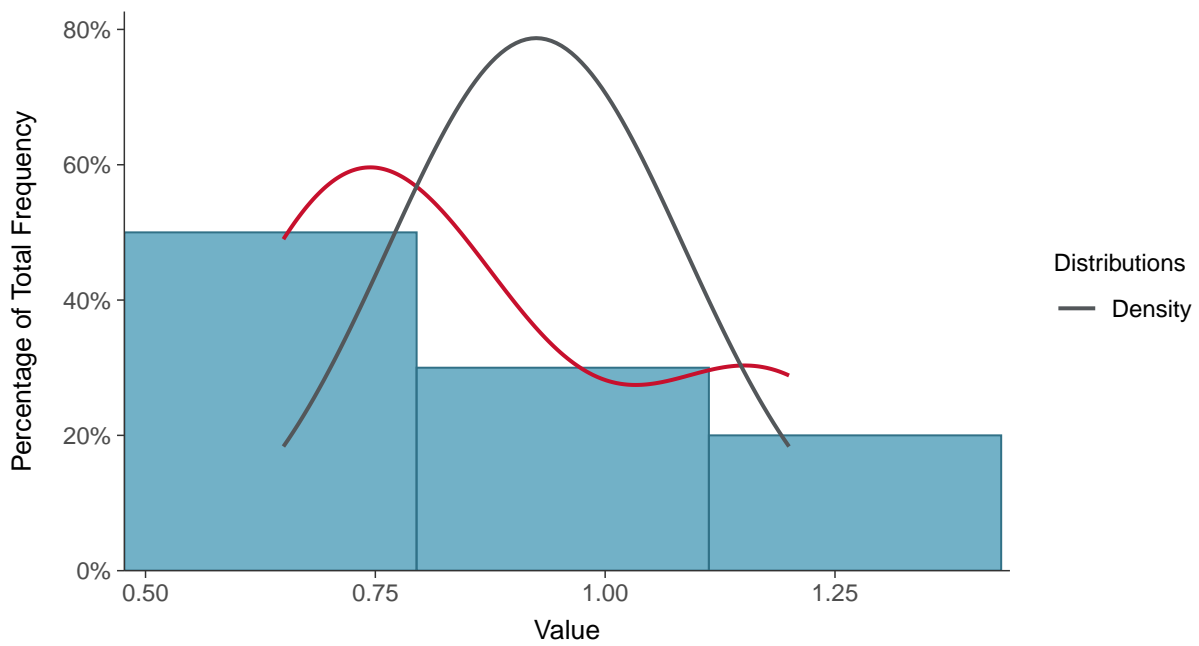
Scatter Plot

Chromium, MW-15016R (ug/L)



Histogram

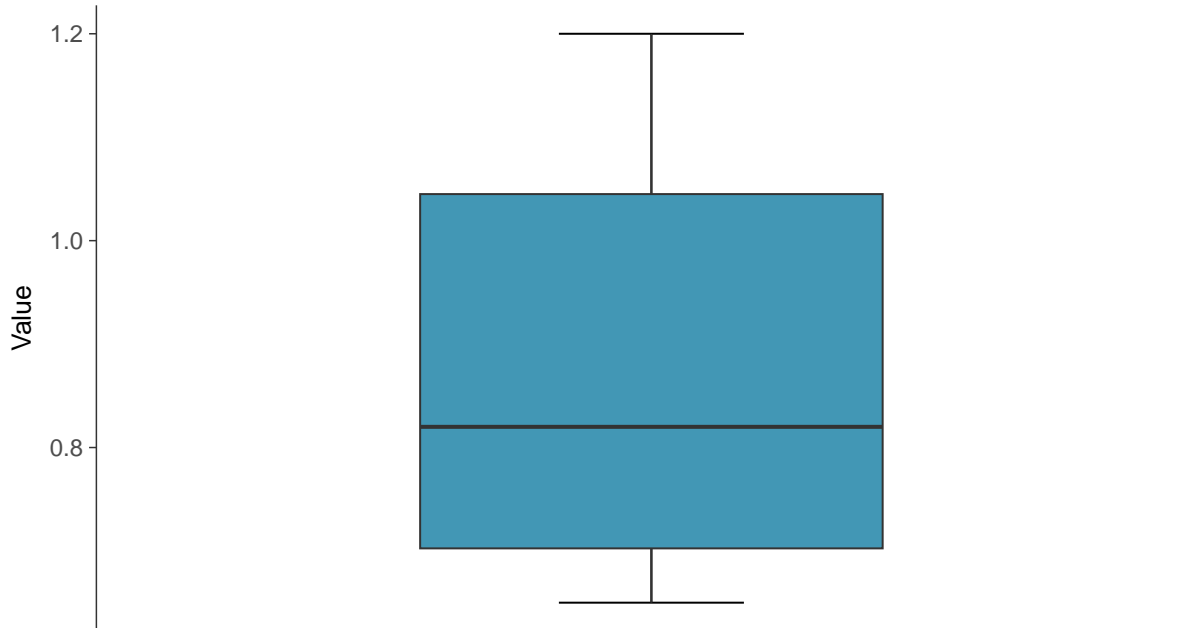
Chromium, MW-15016R (ug/L)





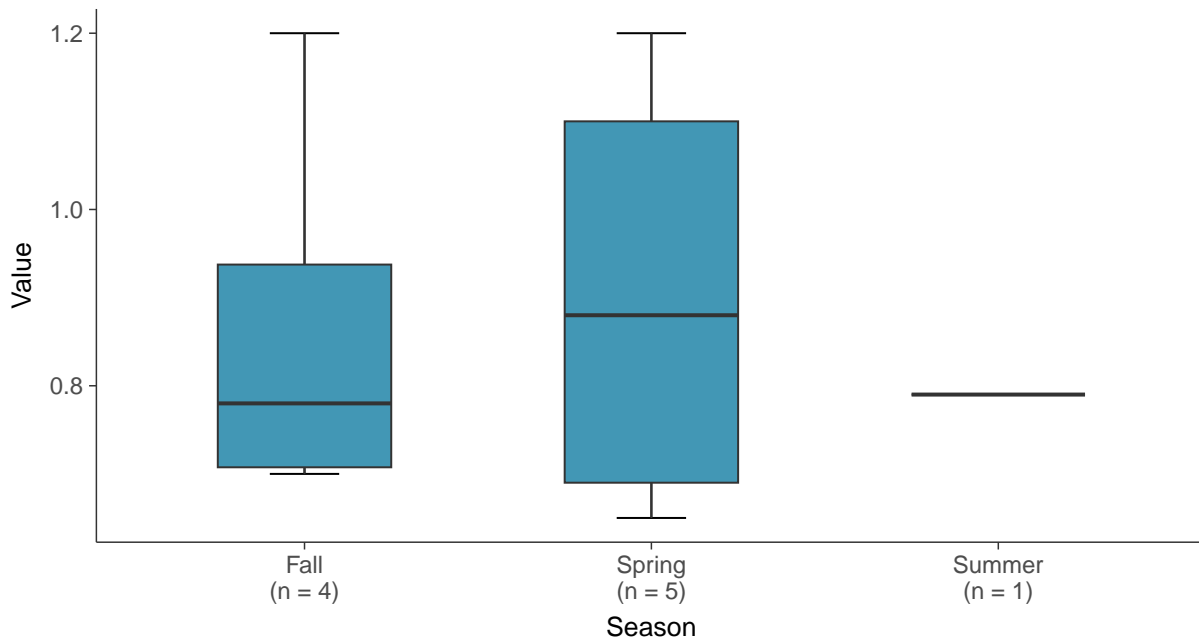
Boxplot

Chromium, MW-15016R (ug/L)



Boxplot by Season

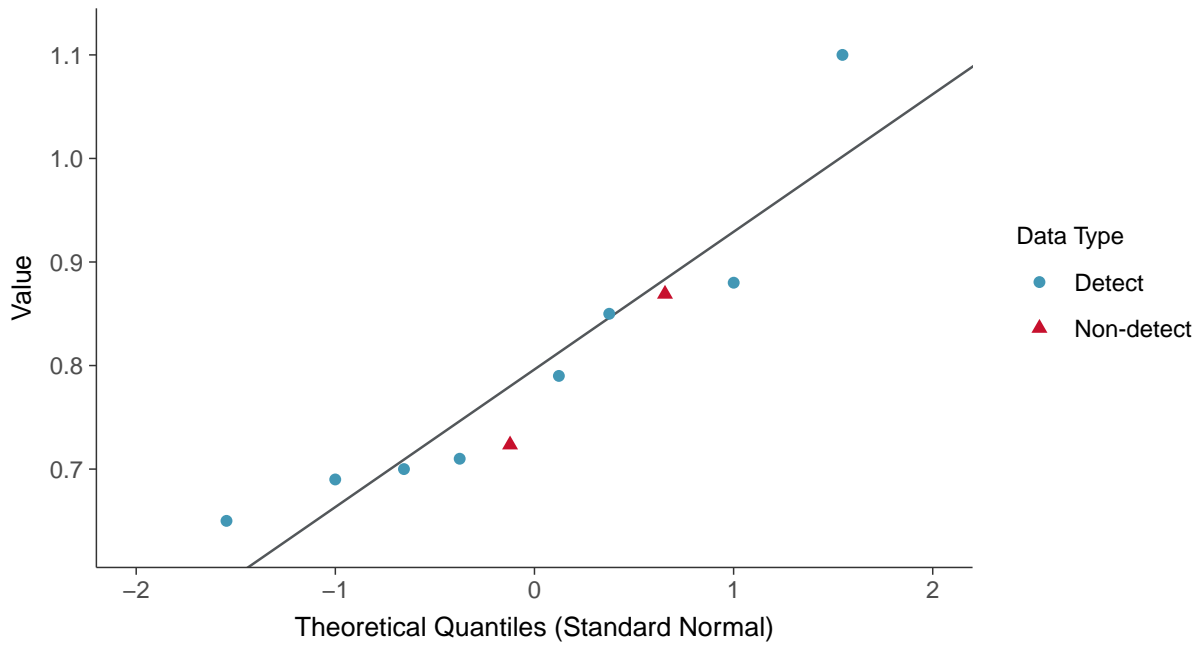
Chromium, MW-15016R (ug/L)





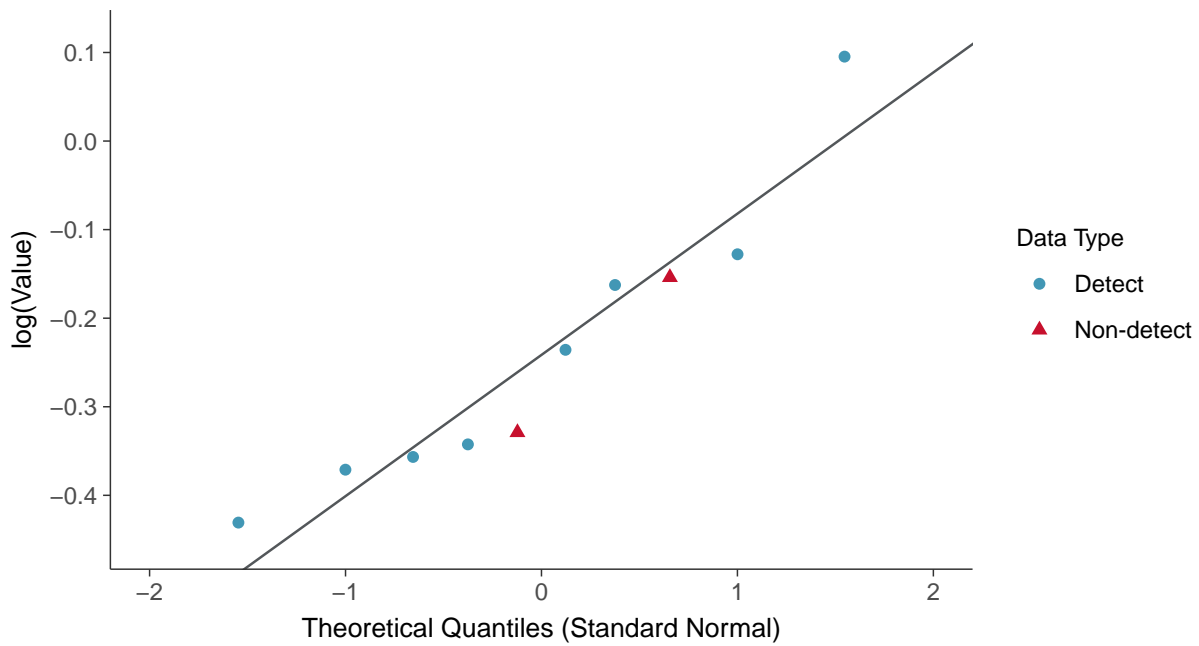
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15016R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

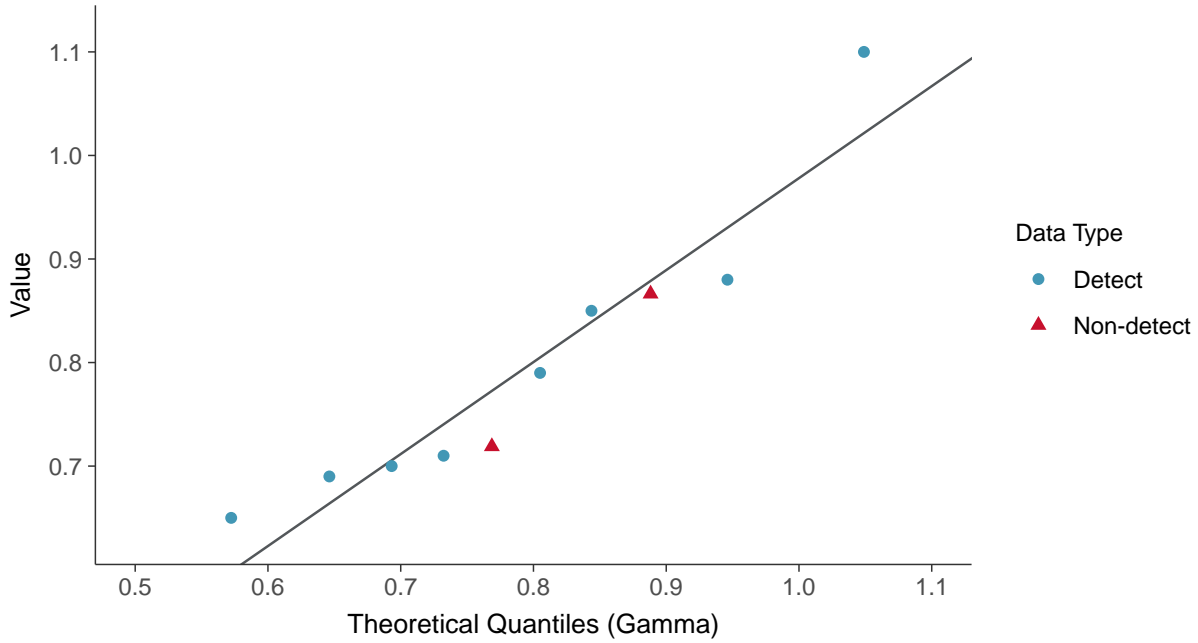
Chromium, MW-15016R (ug/L)





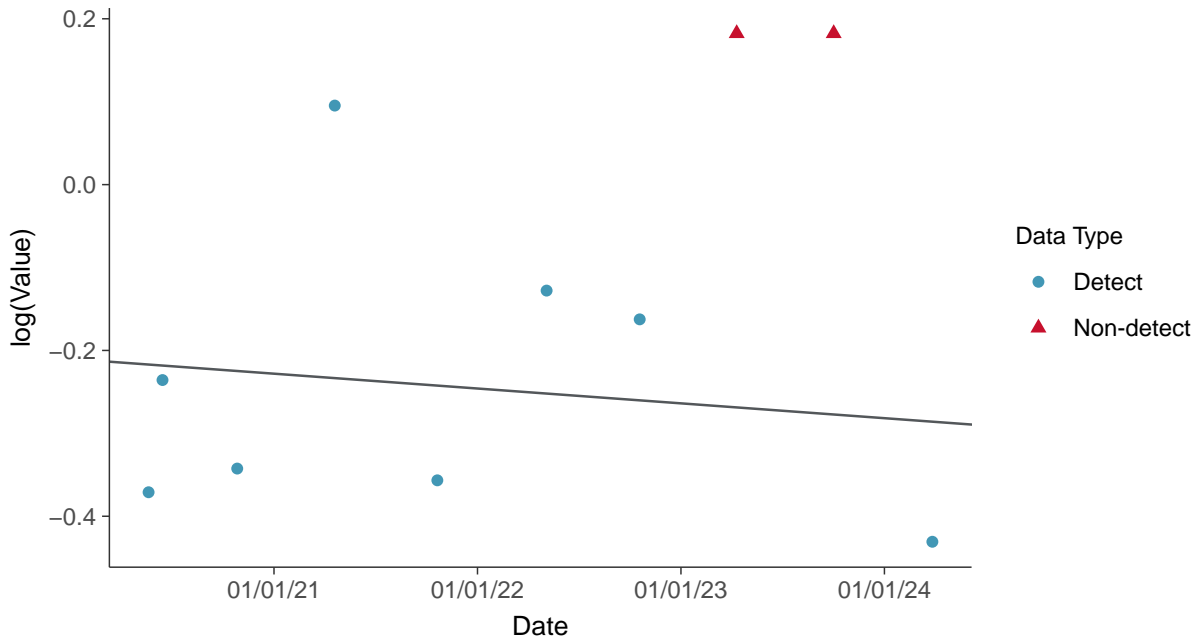
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15016R (ug/L)



Trend Regression: Lognormal MLE

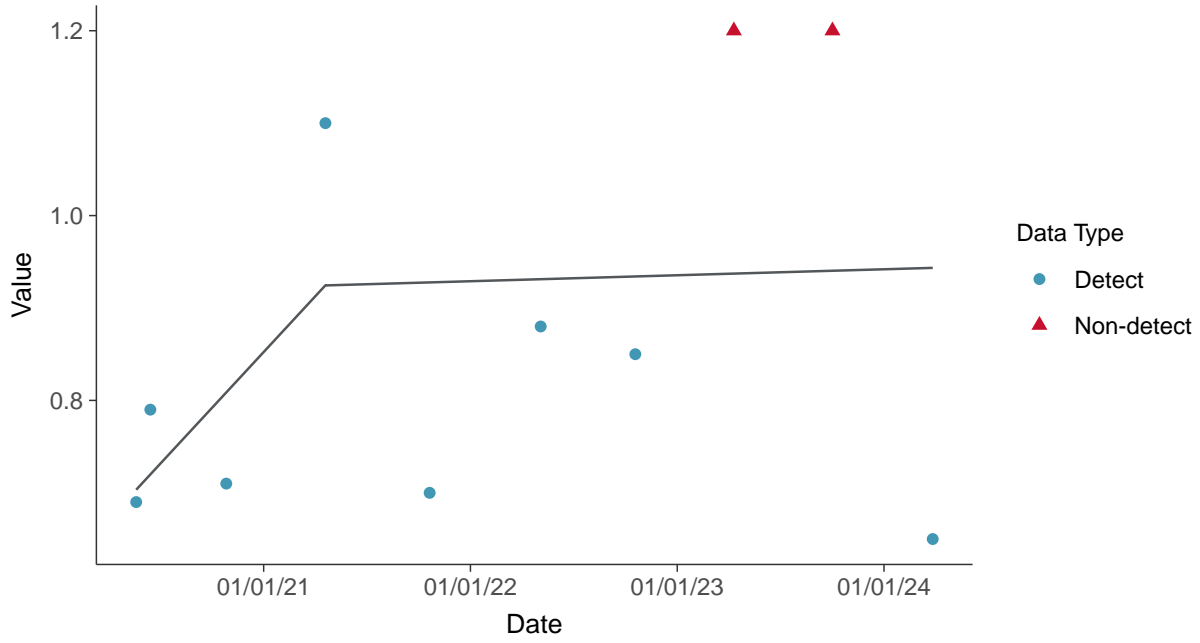
Chromium, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear

Chromium, MW-15016R (ug/L)



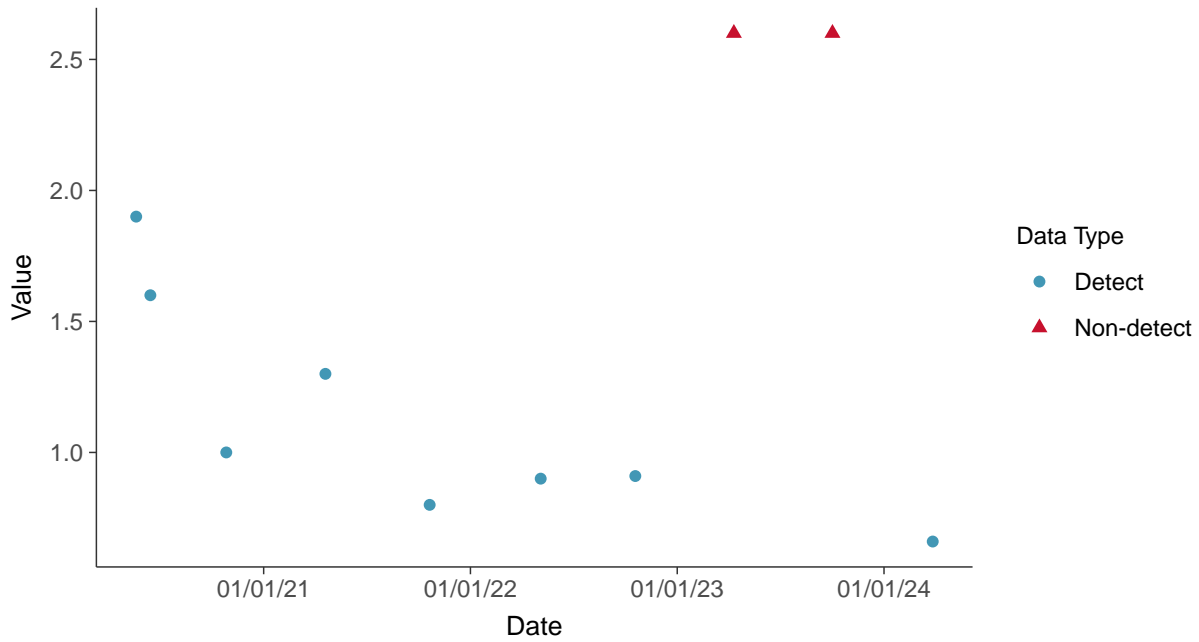


Appendix IV: Cobalt, MW-15016R

ID: 06_2_110

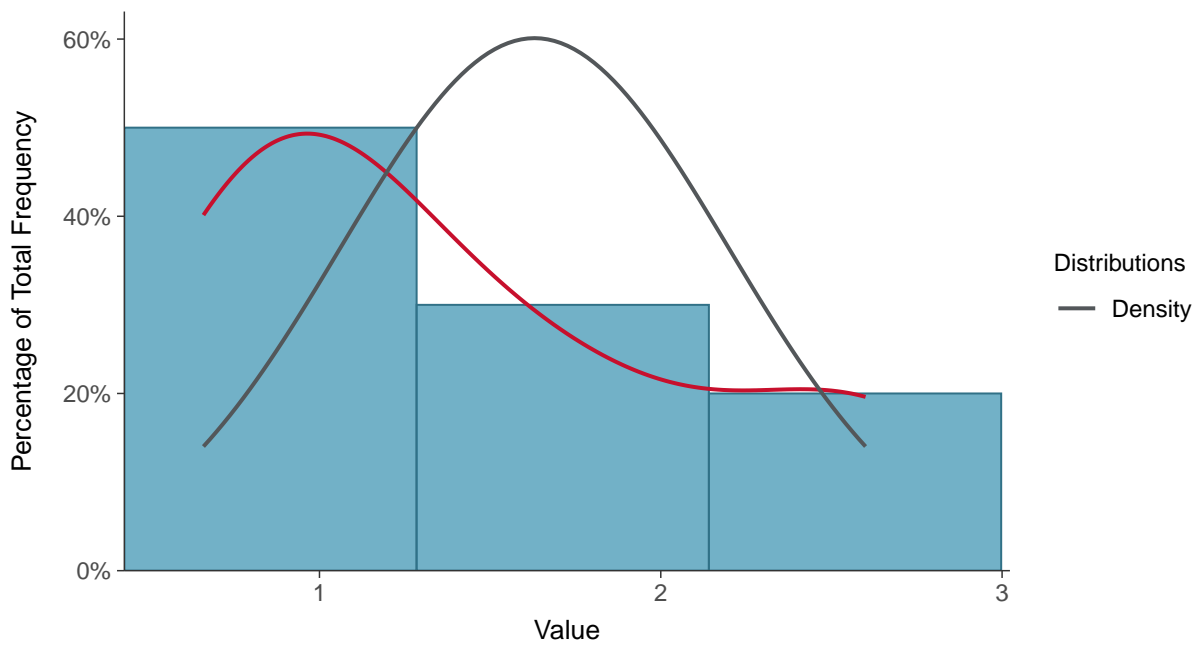
Scatter Plot

Cobalt, MW-15016R (ug/L)



Histogram

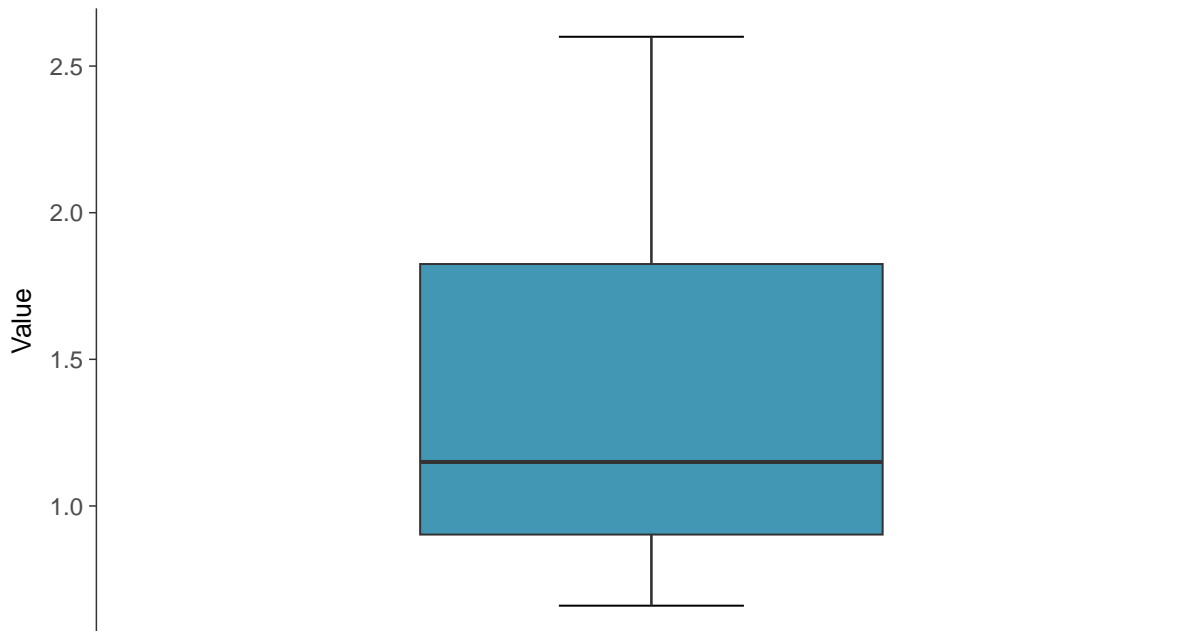
Cobalt, MW-15016R (ug/L)





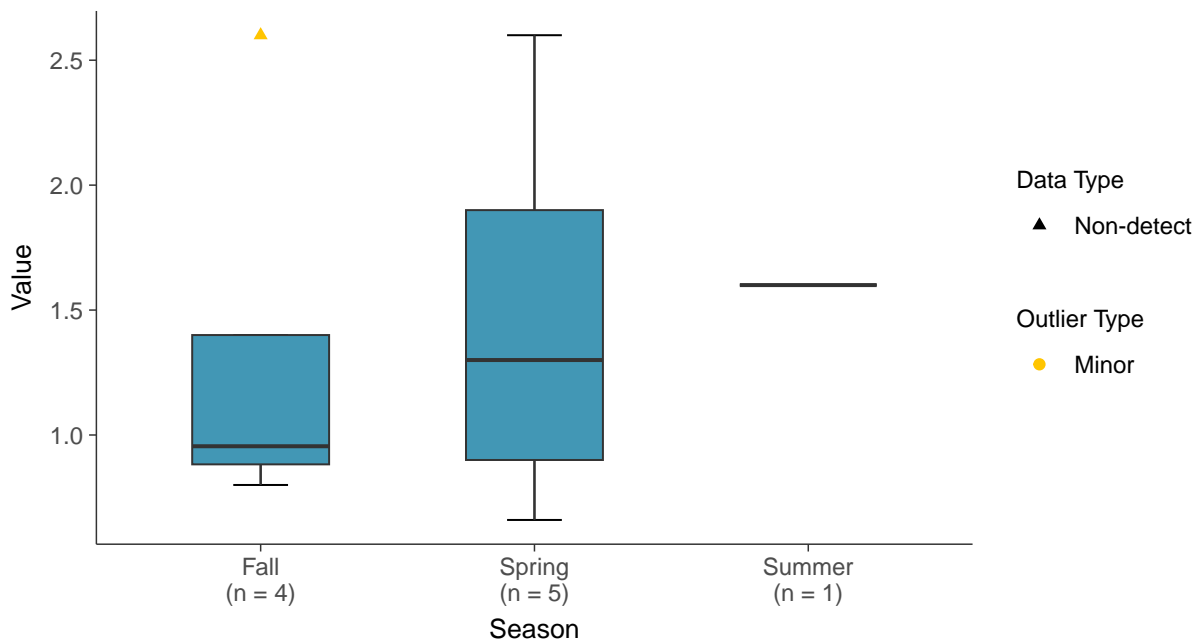
Boxplot

Cobalt, MW-15016R (ug/L)



Boxplot by Season

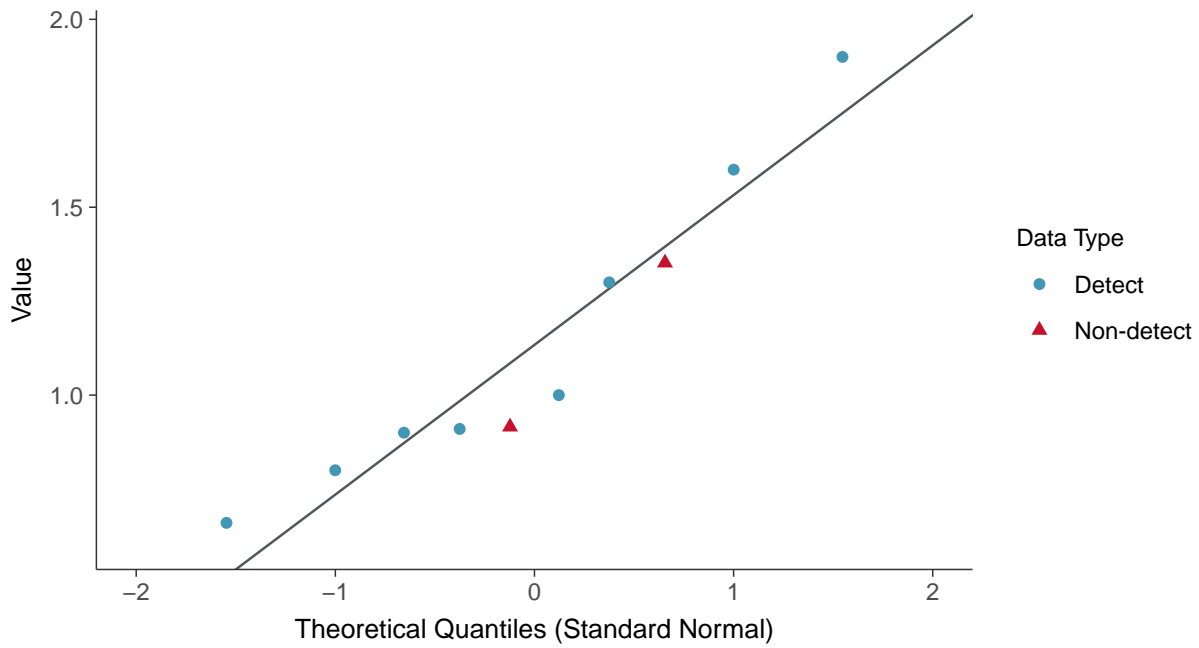
Cobalt, MW-15016R (ug/L)





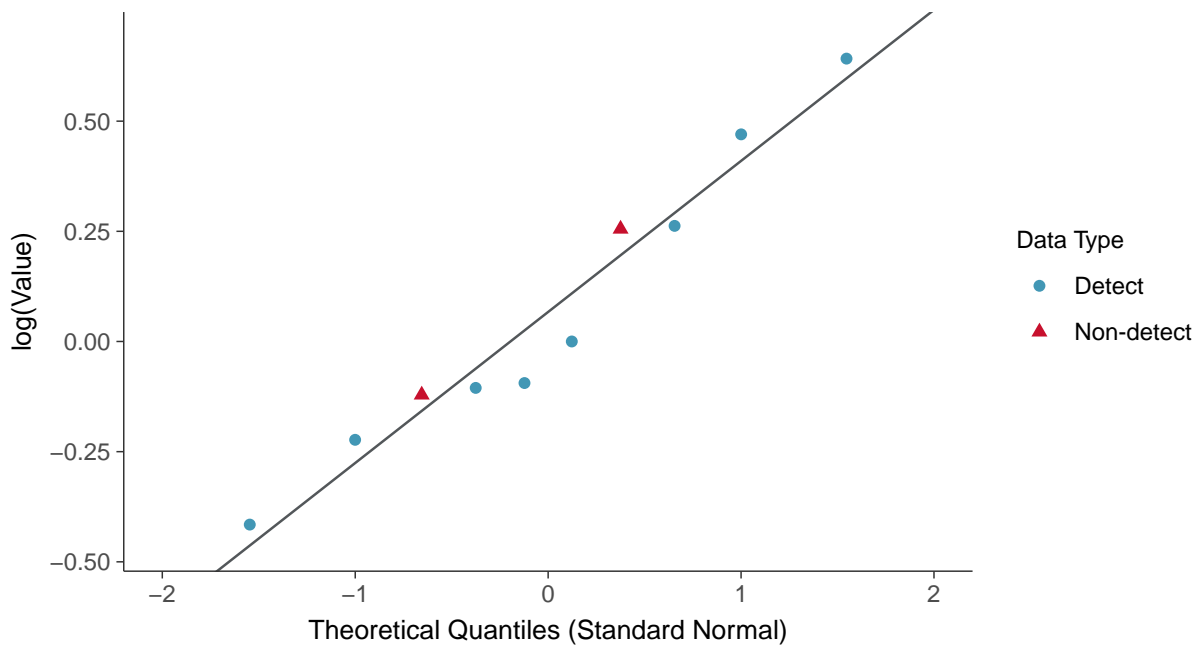
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15016R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

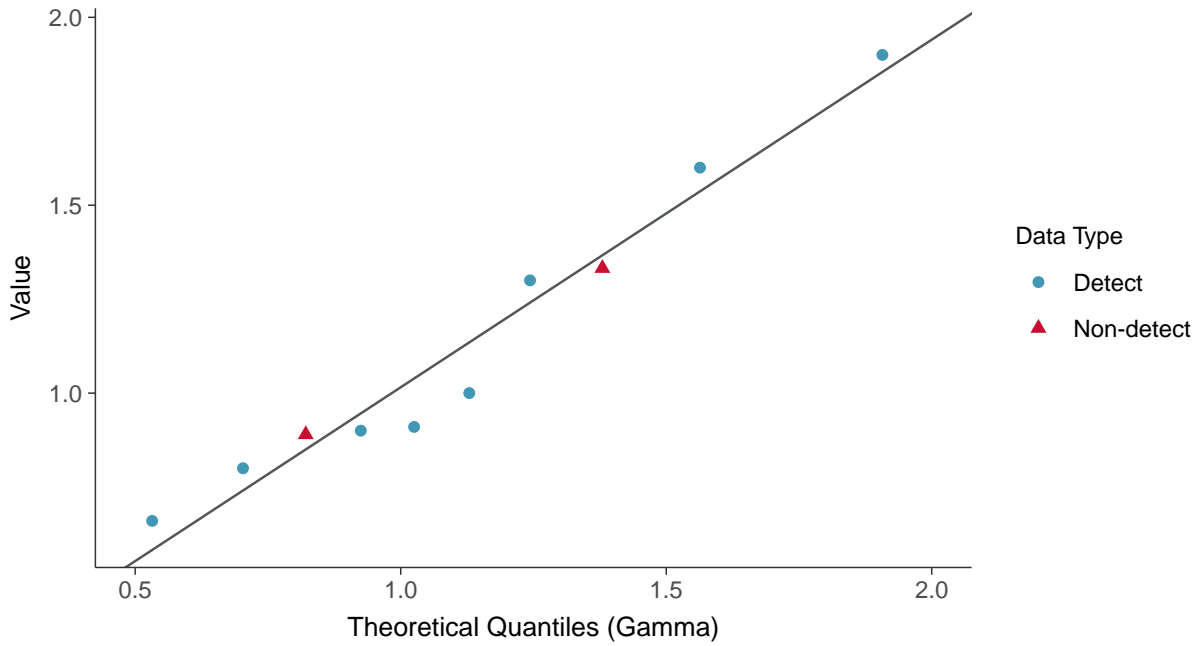
Cobalt, MW-15016R (ug/L)





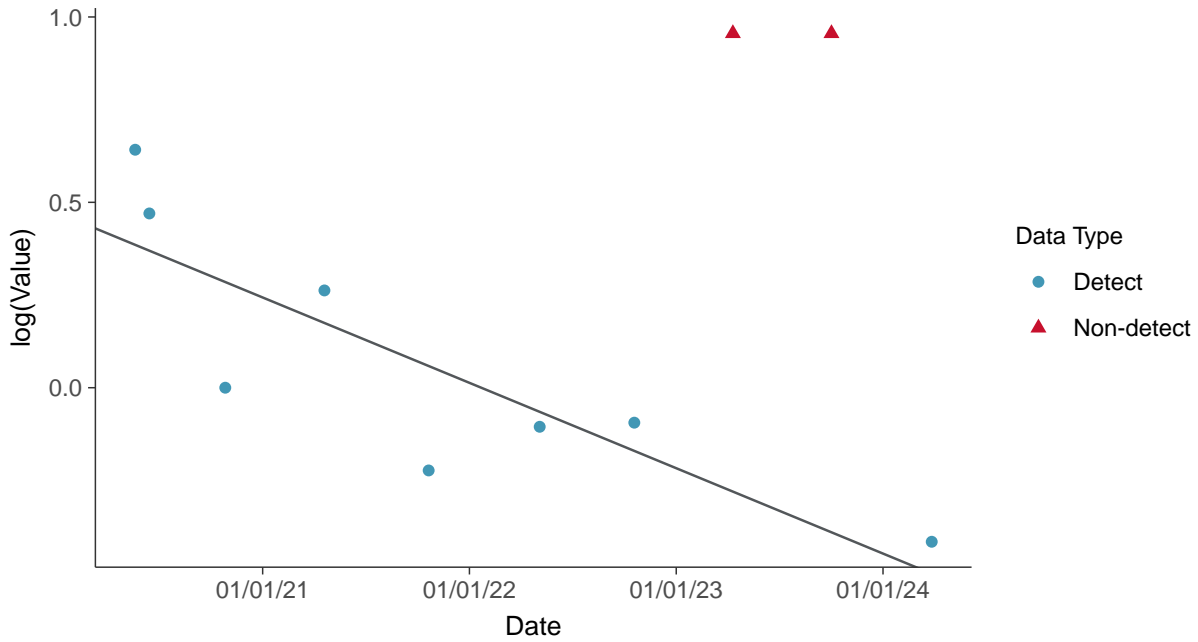
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15016R (ug/L)



Trend Regression: Lognormal MLE

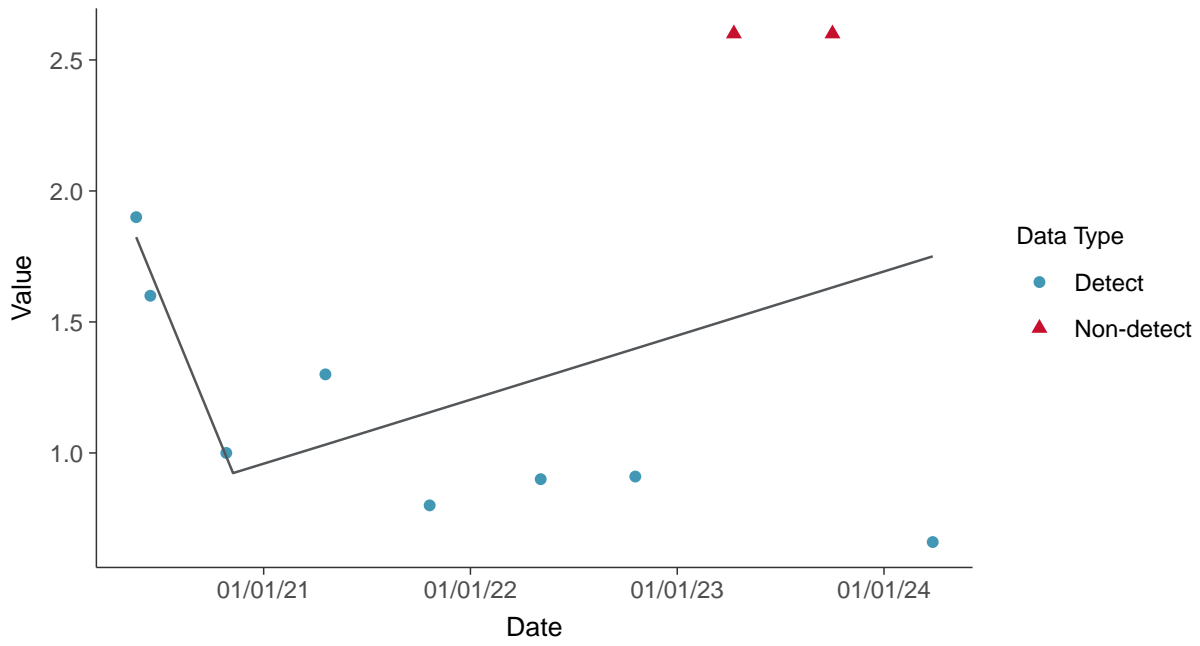
Cobalt, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15016R (ug/L)



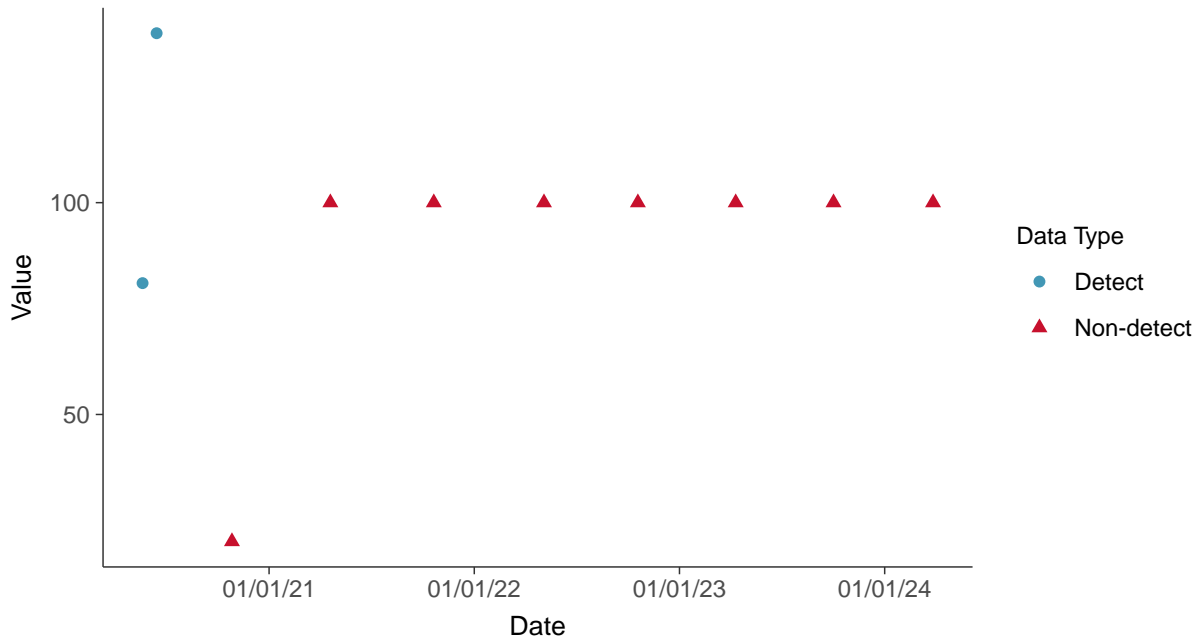


Appendix IV: Fluoride, MW-15016R

ID: 06_2_114

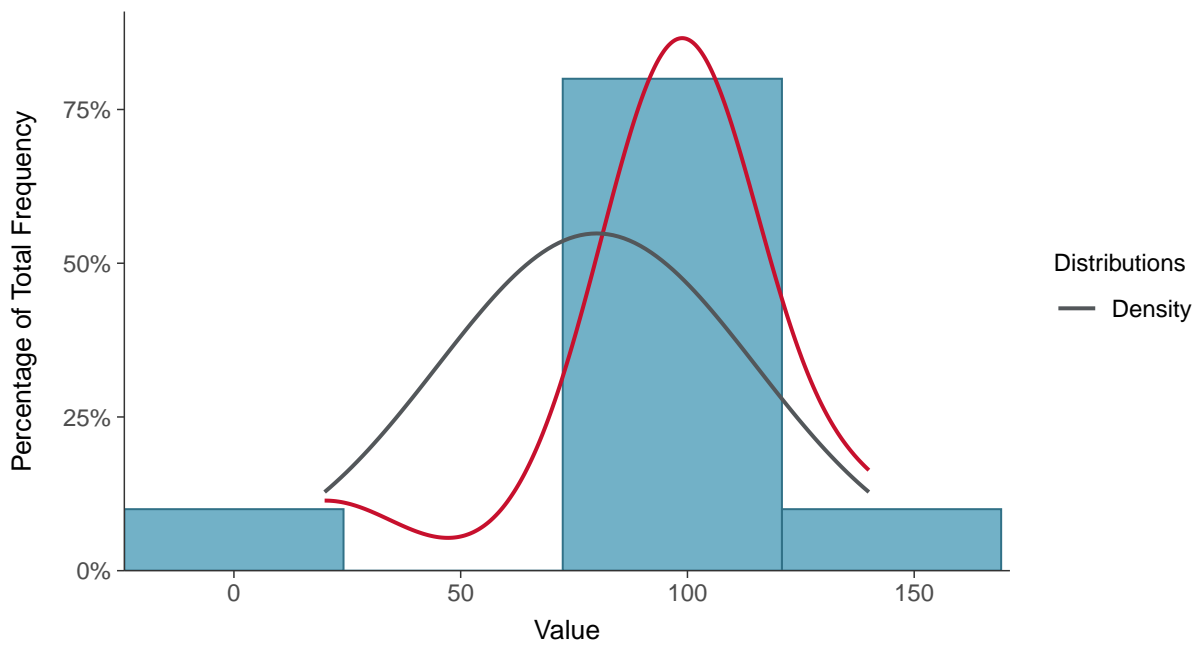
Scatter Plot

Fluoride, MW-15016R (ug/L)



Histogram

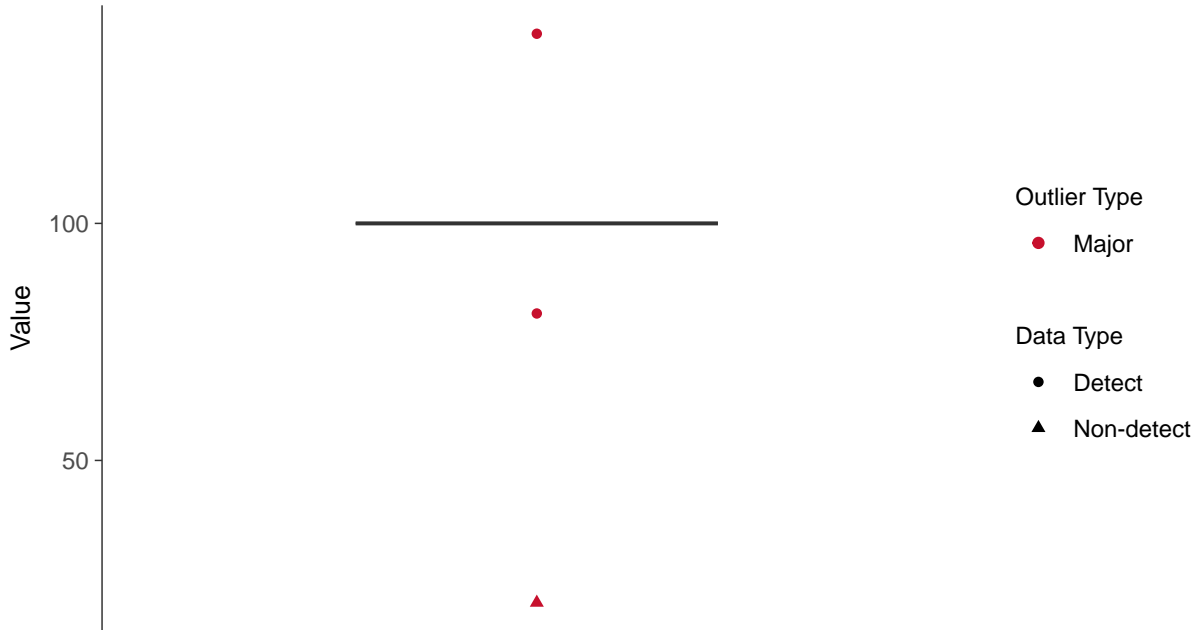
Fluoride, MW-15016R (ug/L)





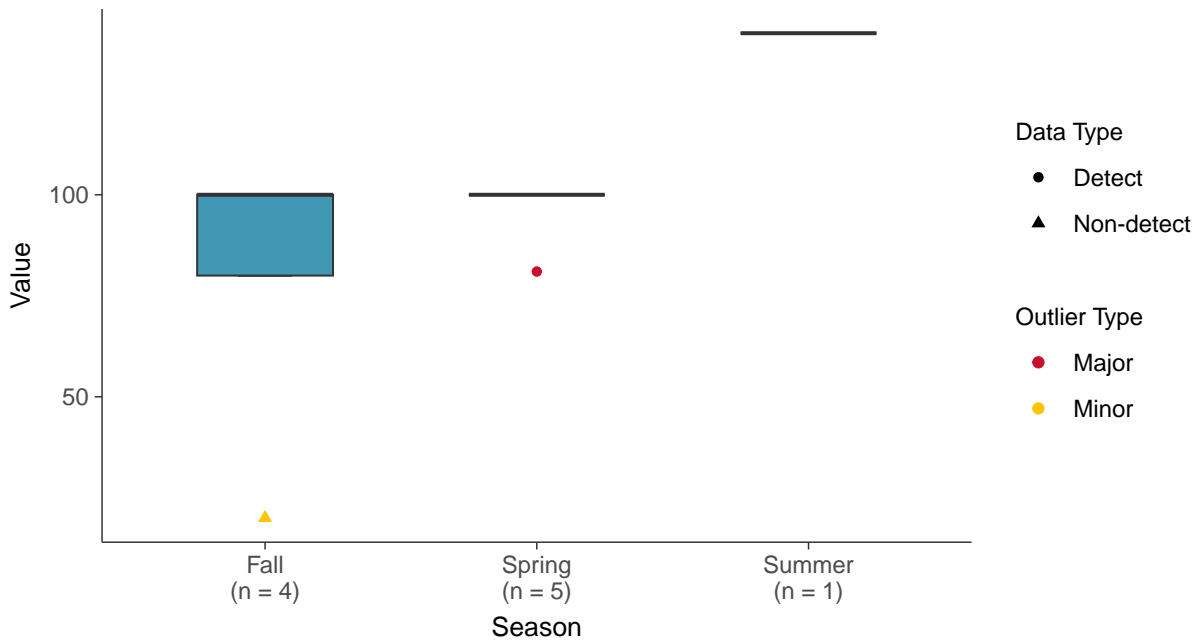
Boxplot

Fluoride, MW-15016R (ug/L)



Boxplot by Season

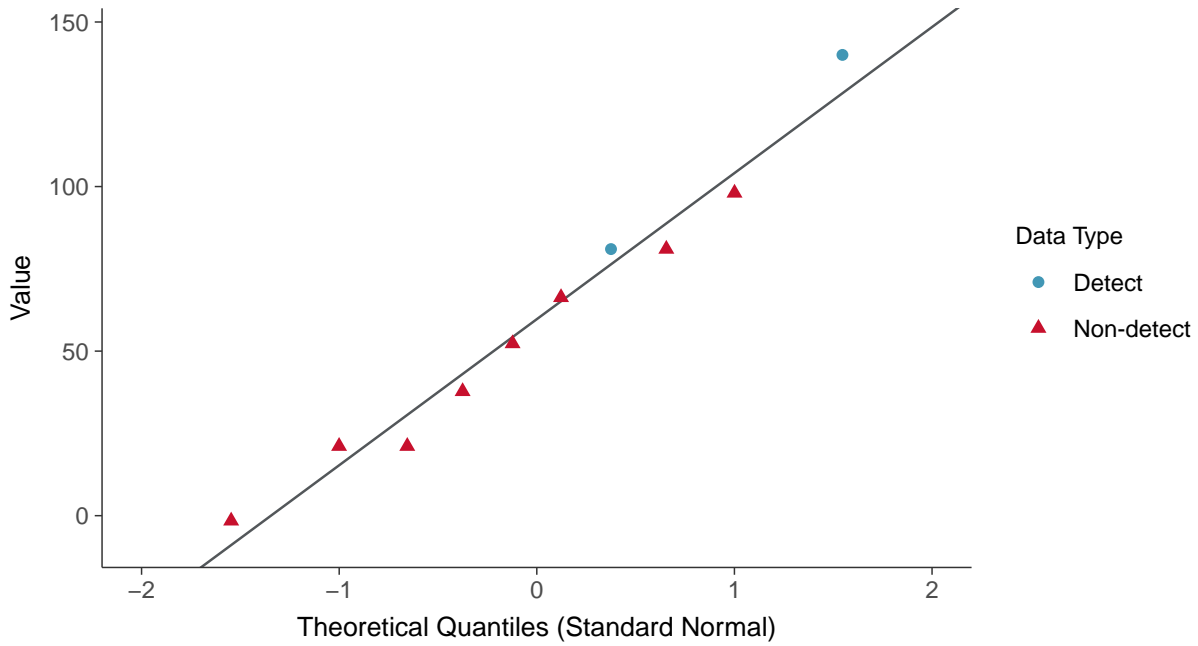
Fluoride, MW-15016R (ug/L)





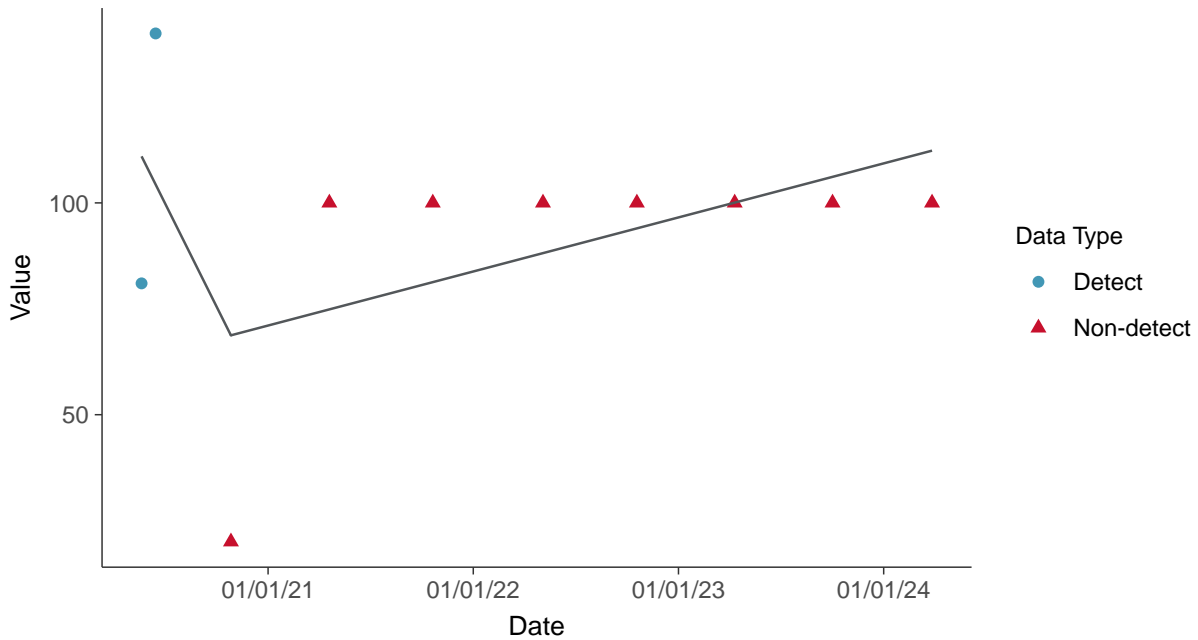
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

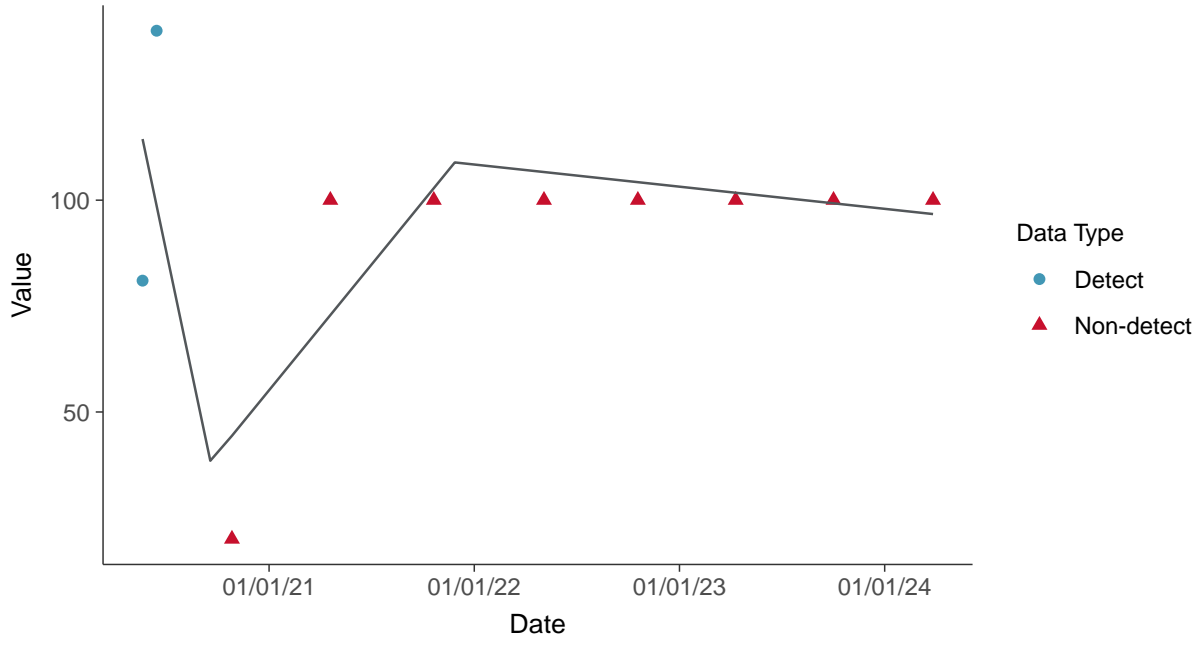
Fluoride, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-15016R (ug/L)



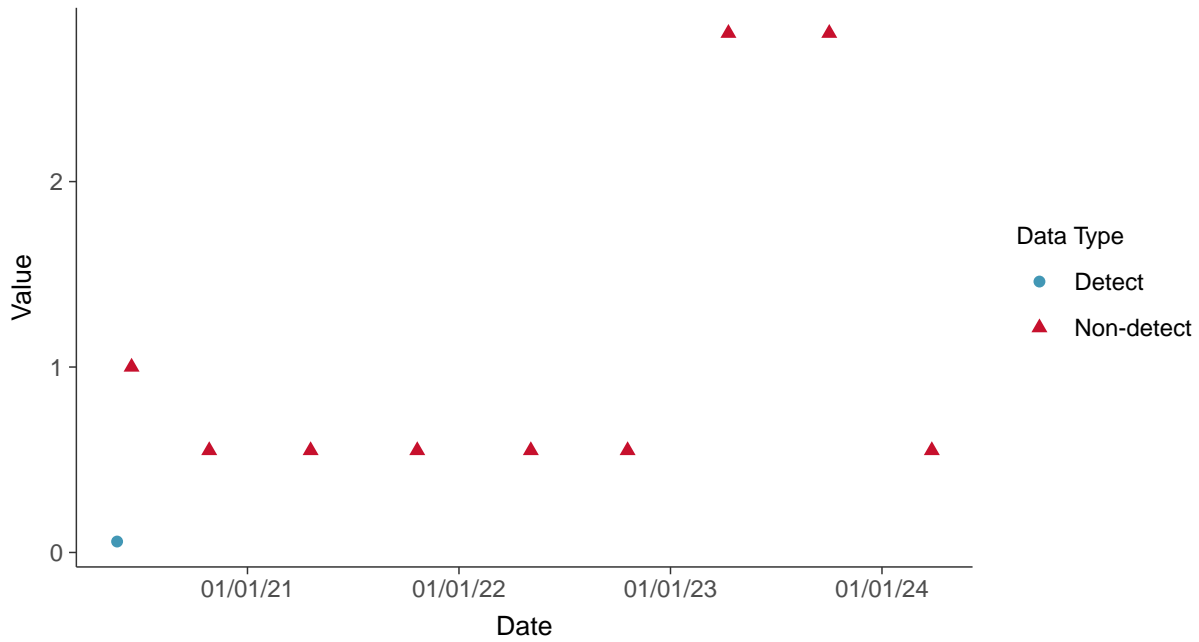


Appendix IV: Lead, MW-15016R

ID: 06_2_116

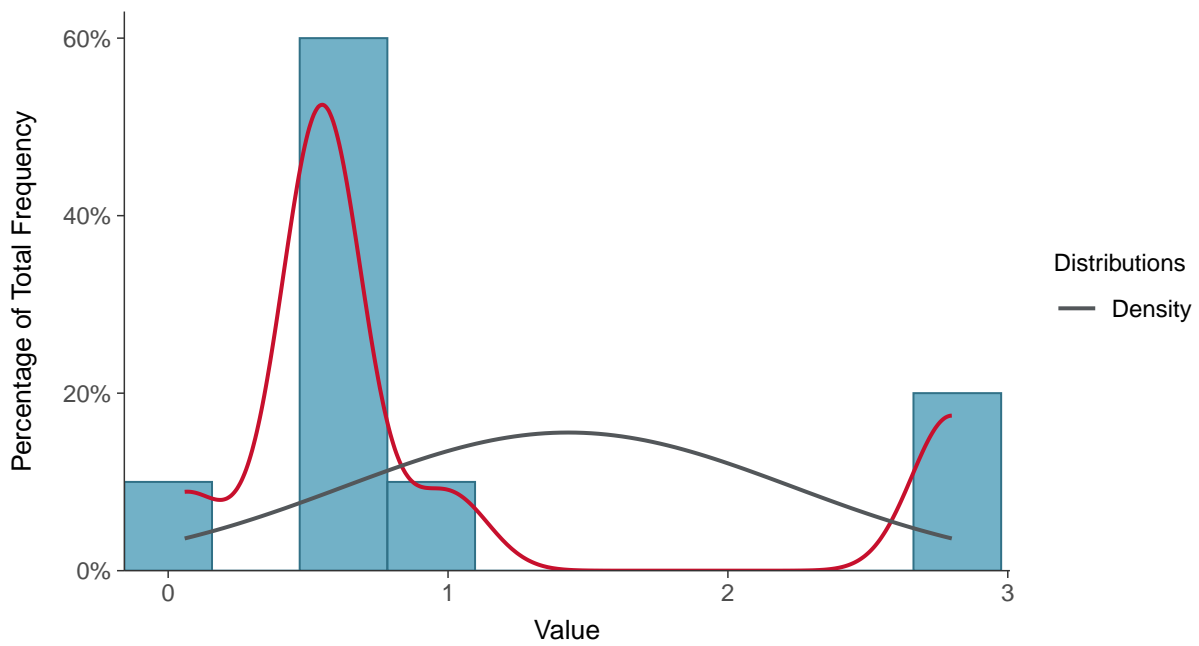
Scatter Plot

Lead, MW-15016R (ug/L)



Histogram

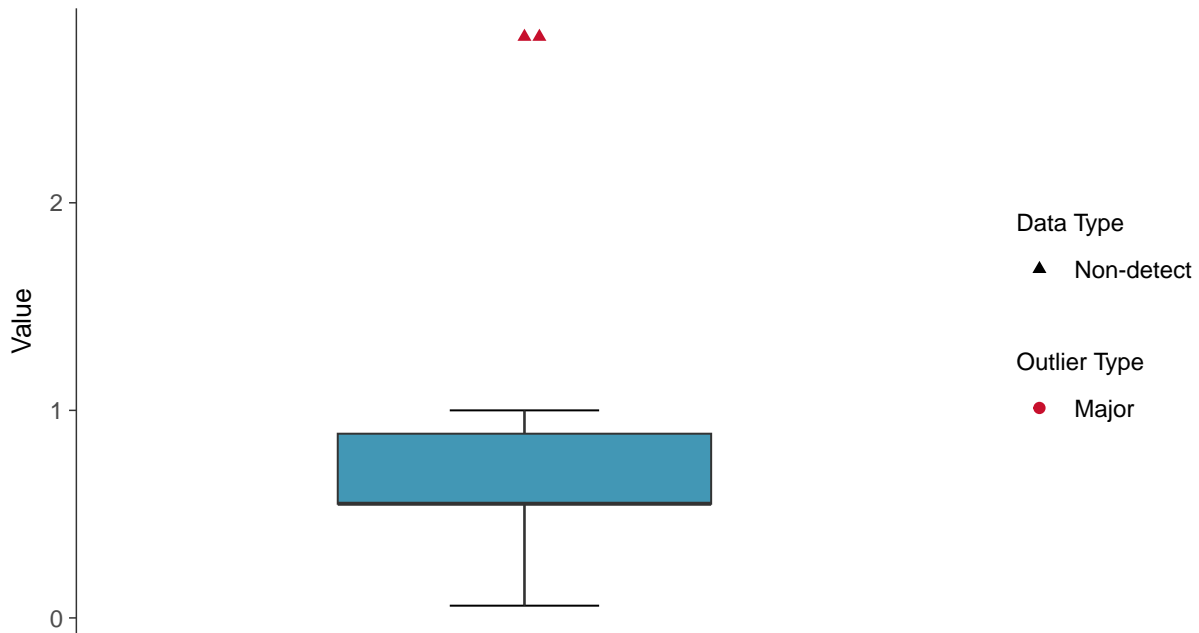
Lead, MW-15016R (ug/L)





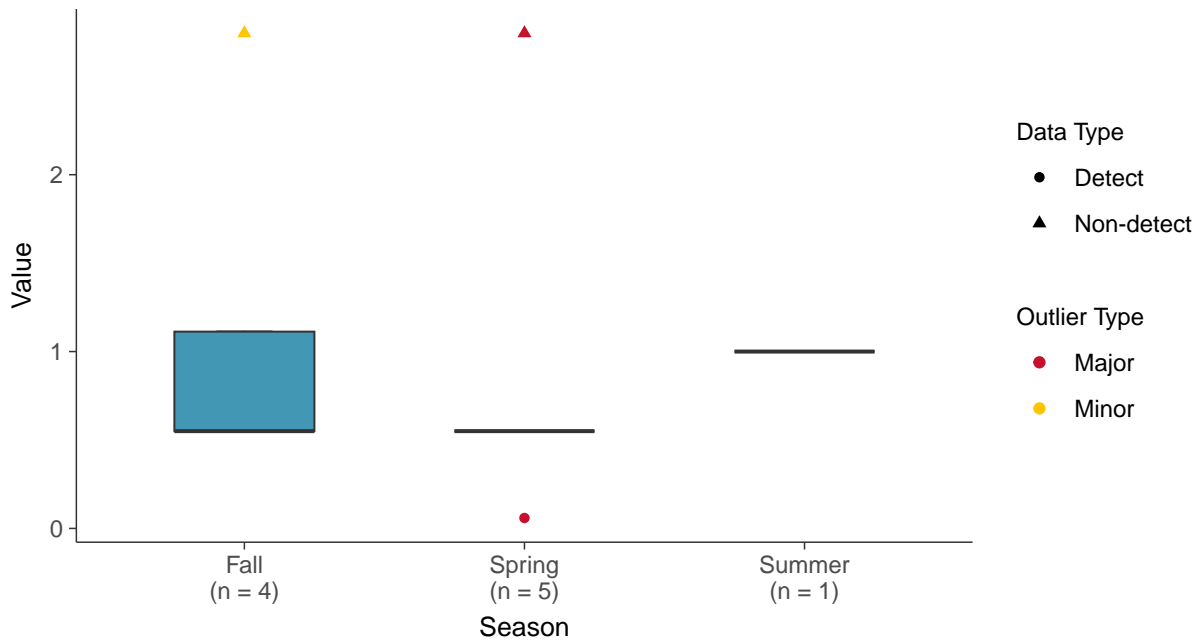
Boxplot

Lead, MW-15016R (ug/L)



Boxplot by Season

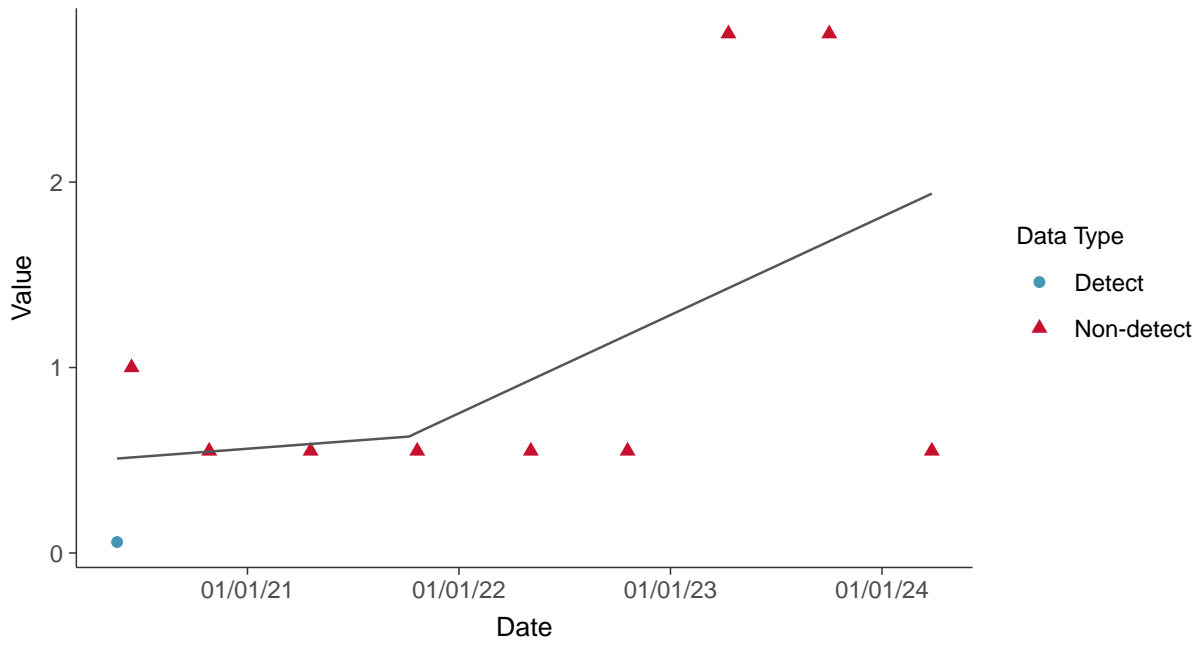
Lead, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear

Lead, MW-15016R (ug/L)



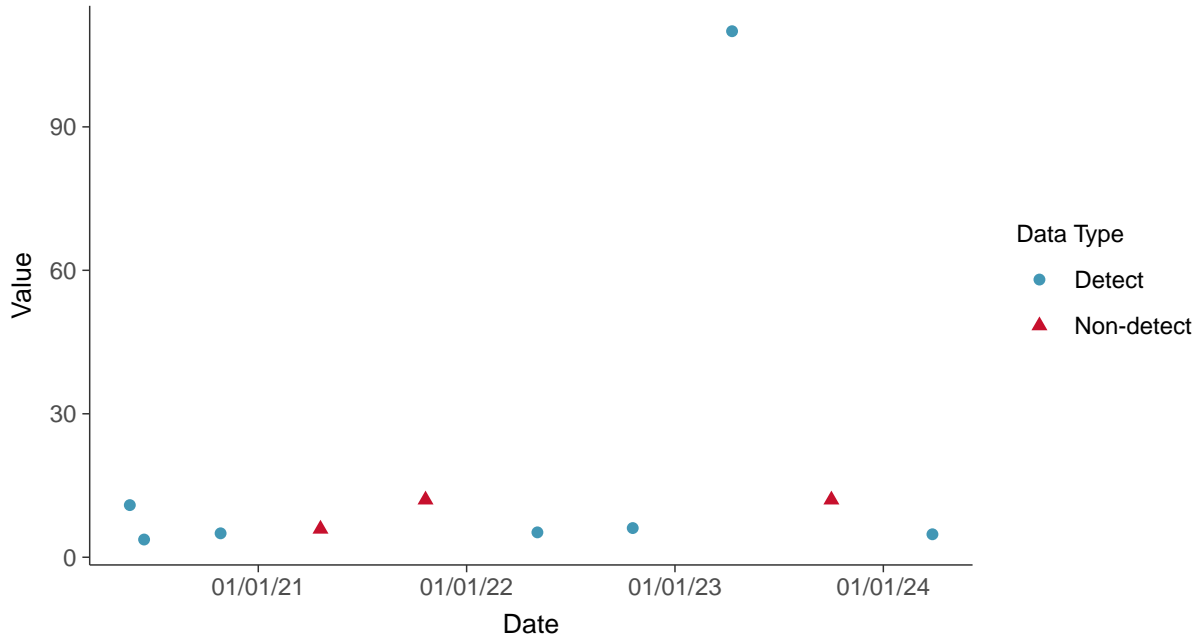


Appendix IV: Lithium, MW-15016R

ID: 06_2_117

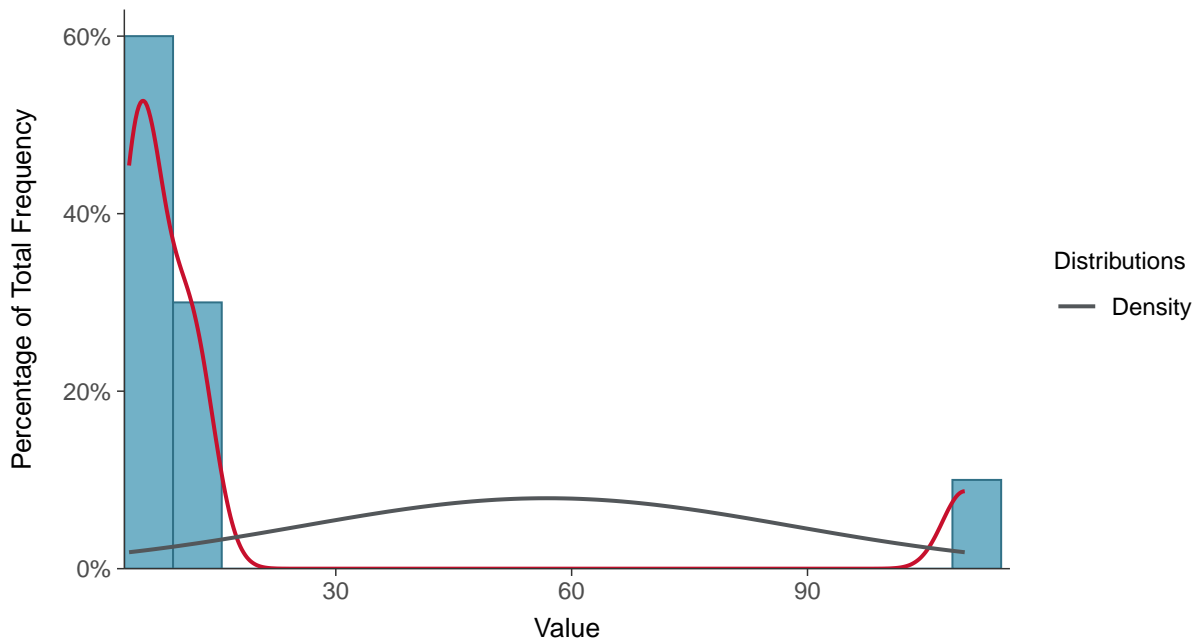
Scatter Plot

Lithium, MW-15016R (ug/L)



Histogram

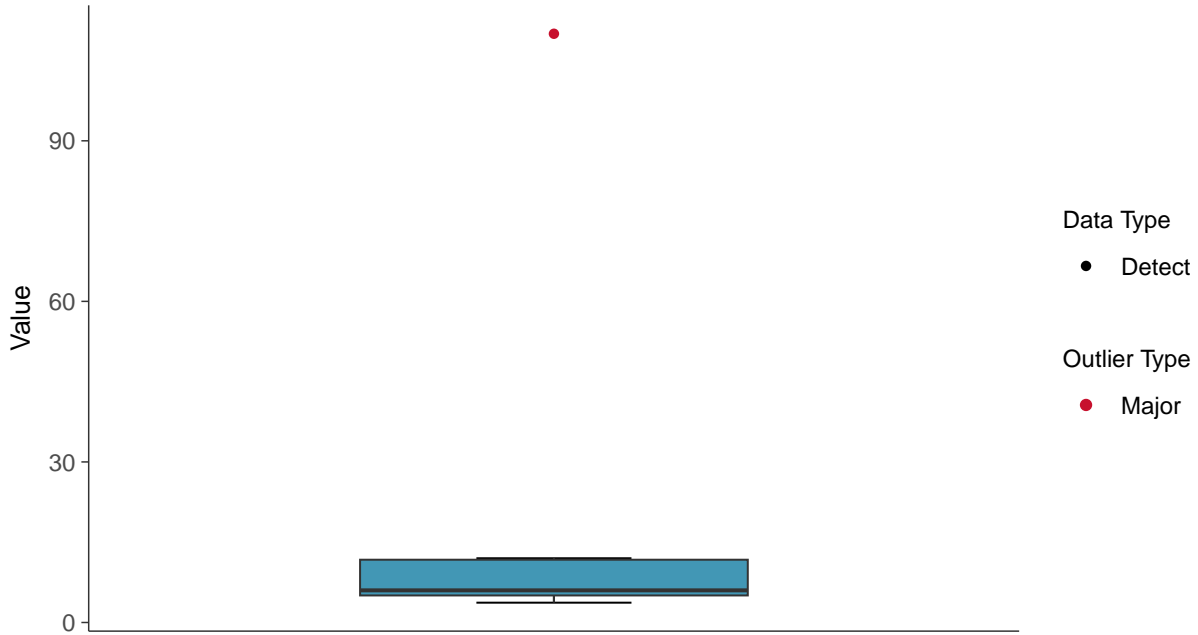
Lithium, MW-15016R (ug/L)





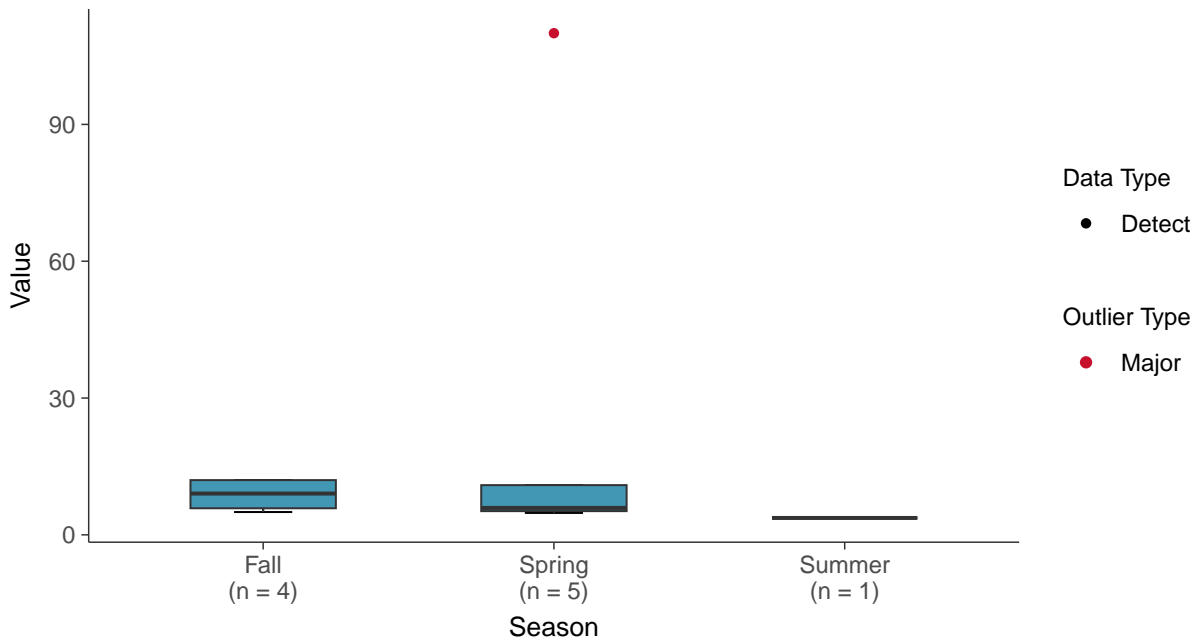
Boxplot

Lithium, MW-15016R (ug/L)



Boxplot by Season

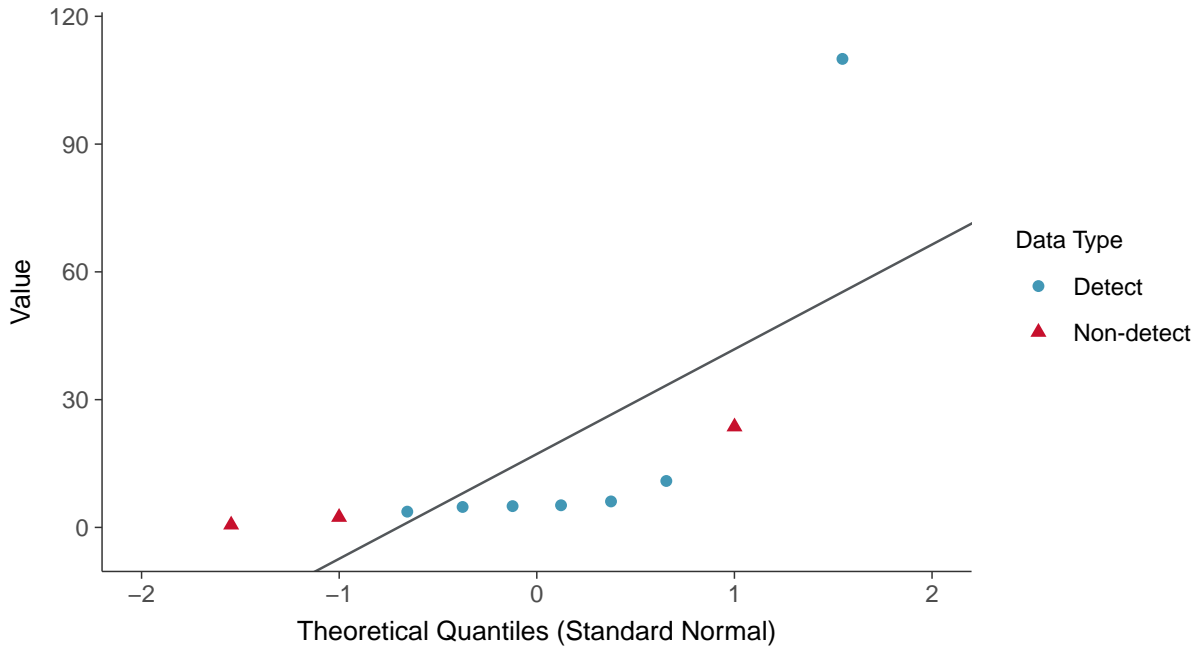
Lithium, MW-15016R (ug/L)





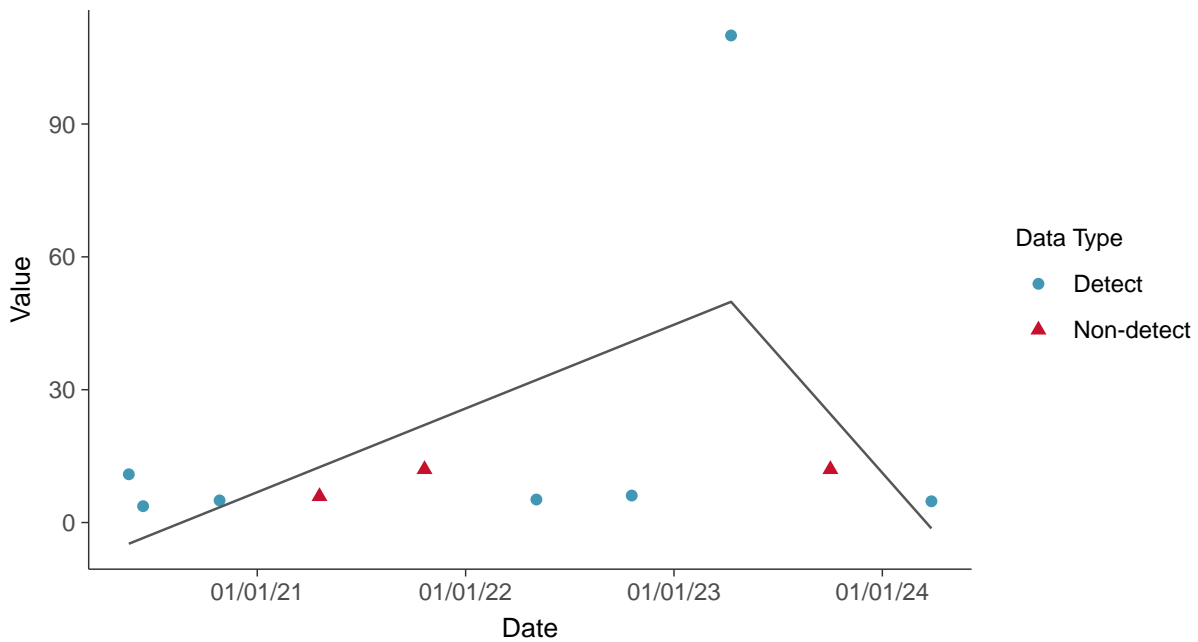
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

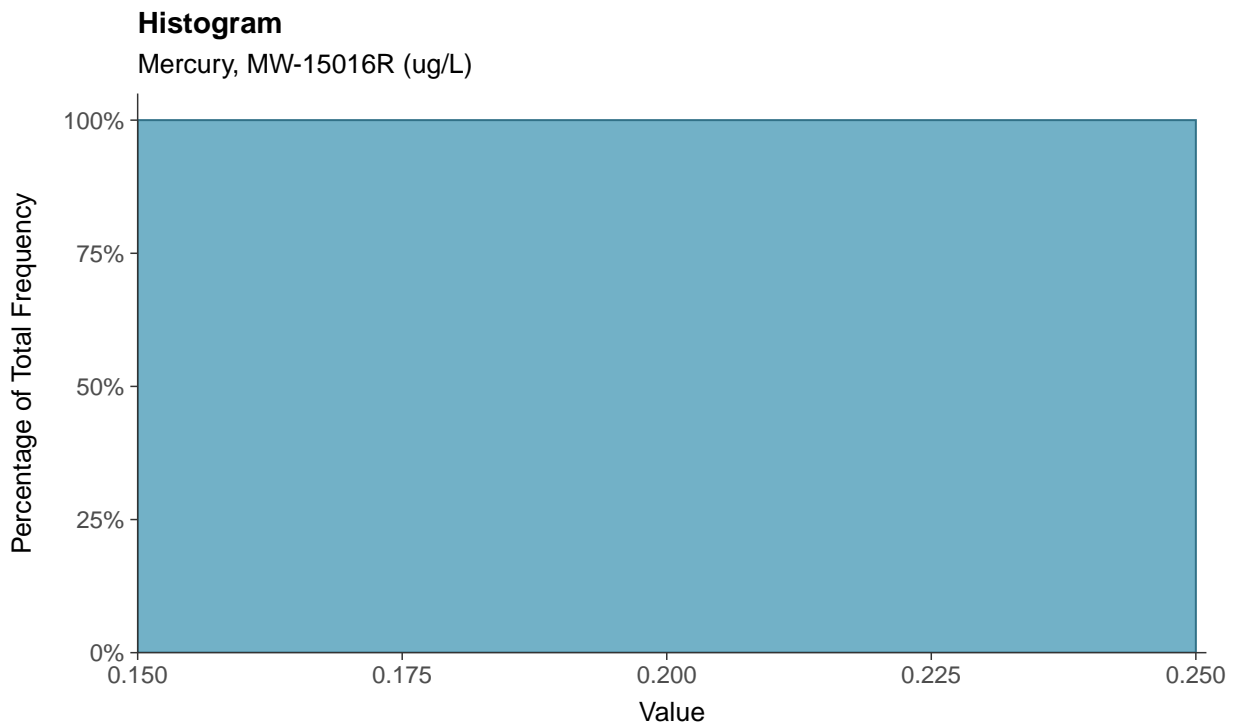
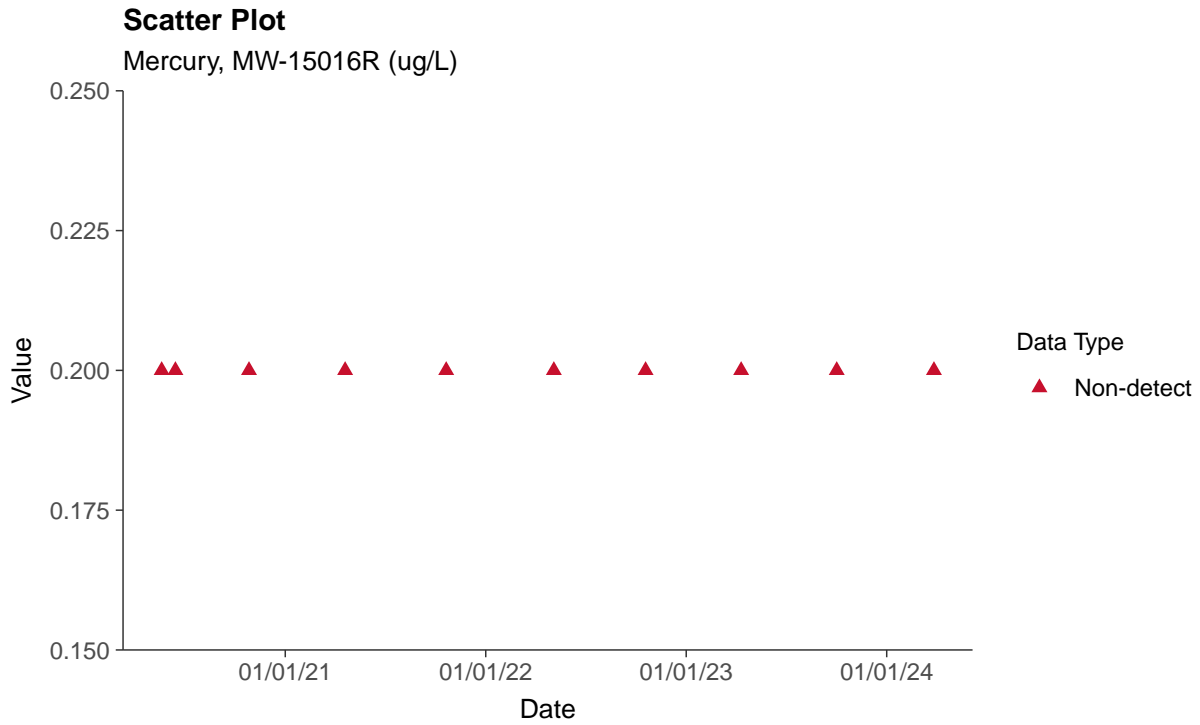
Lithium, MW-15016R (ug/L)





Appendix IV: Mercury, MW-15016R

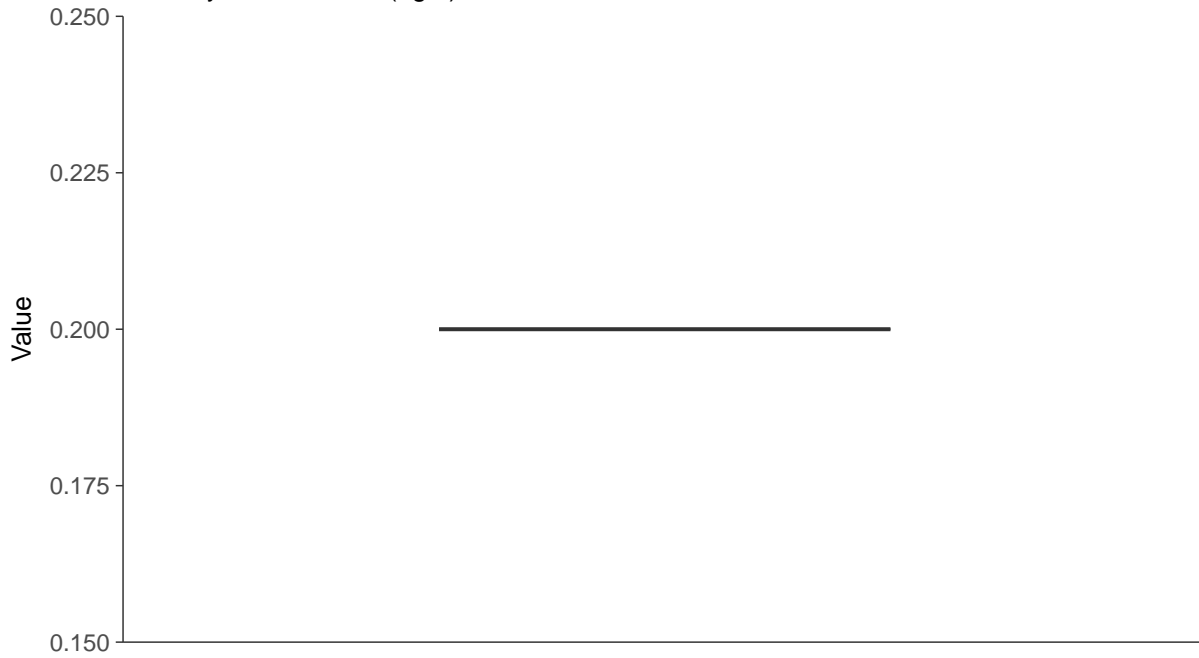
ID: 06_2_118





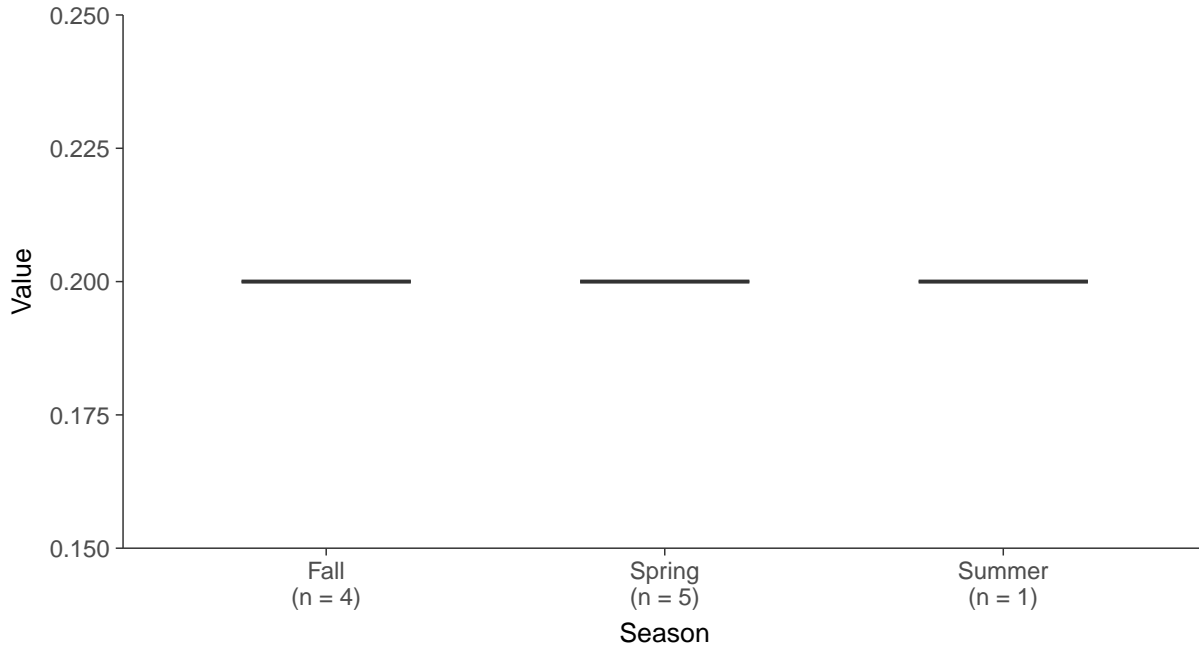
Boxplot

Mercury, MW-15016R (ug/L)



Boxplot by Season

Mercury, MW-15016R (ug/L)



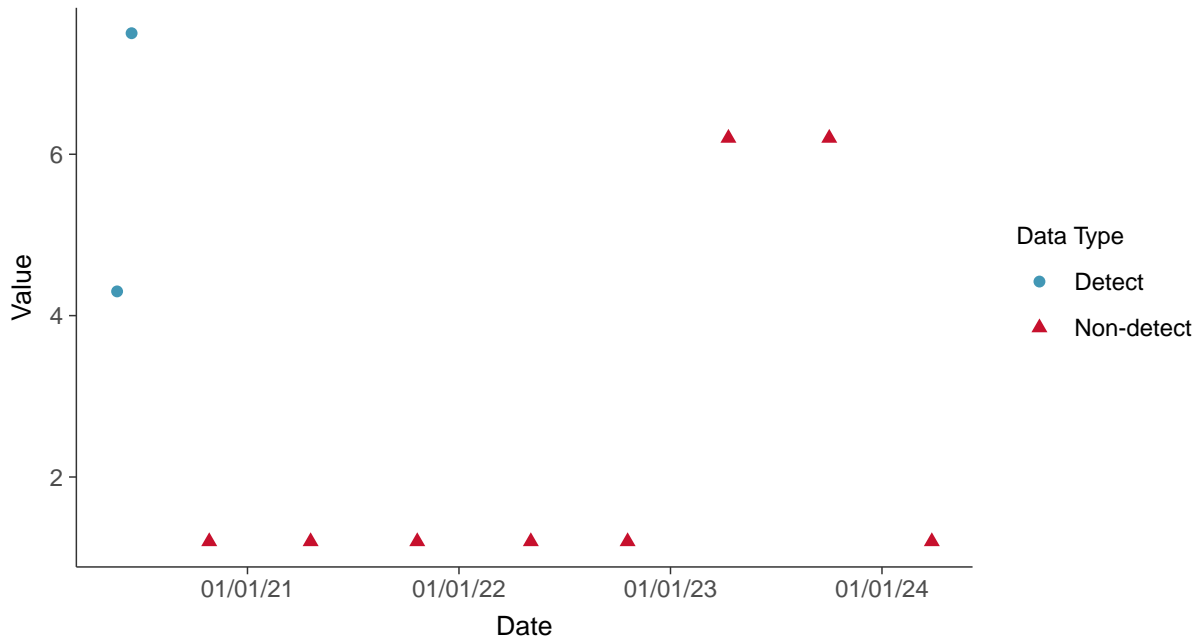


Appendix IV: Molybdenum, MW-15016R

ID: 06_2_119

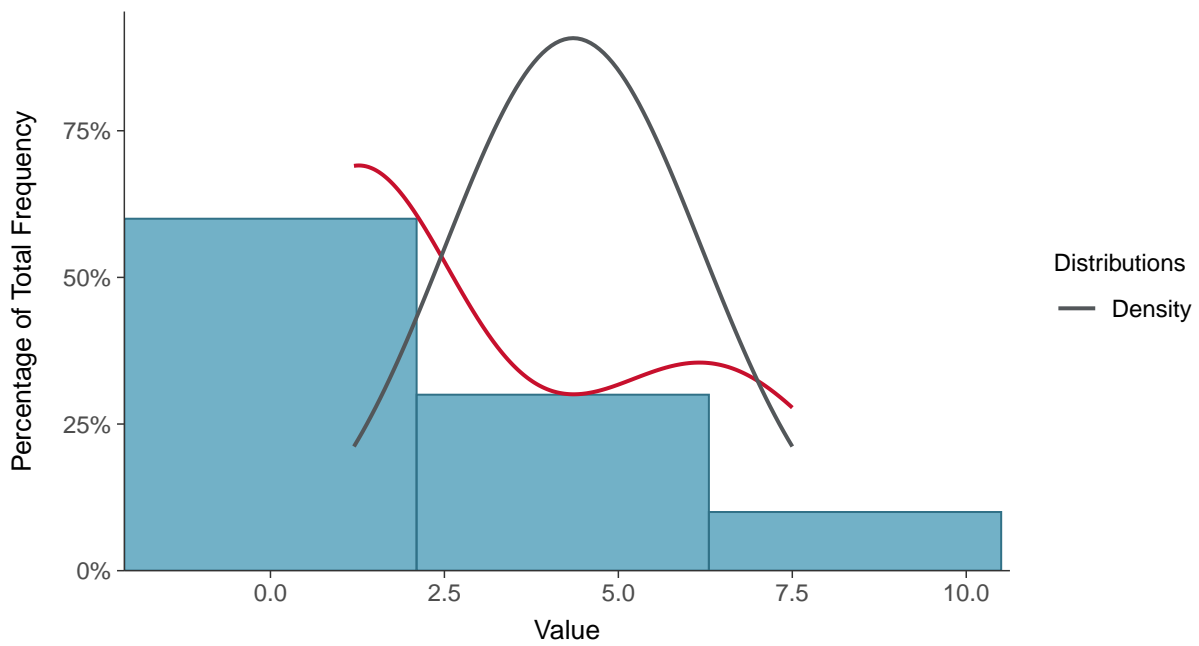
Scatter Plot

Molybdenum, MW-15016R (ug/L)



Histogram

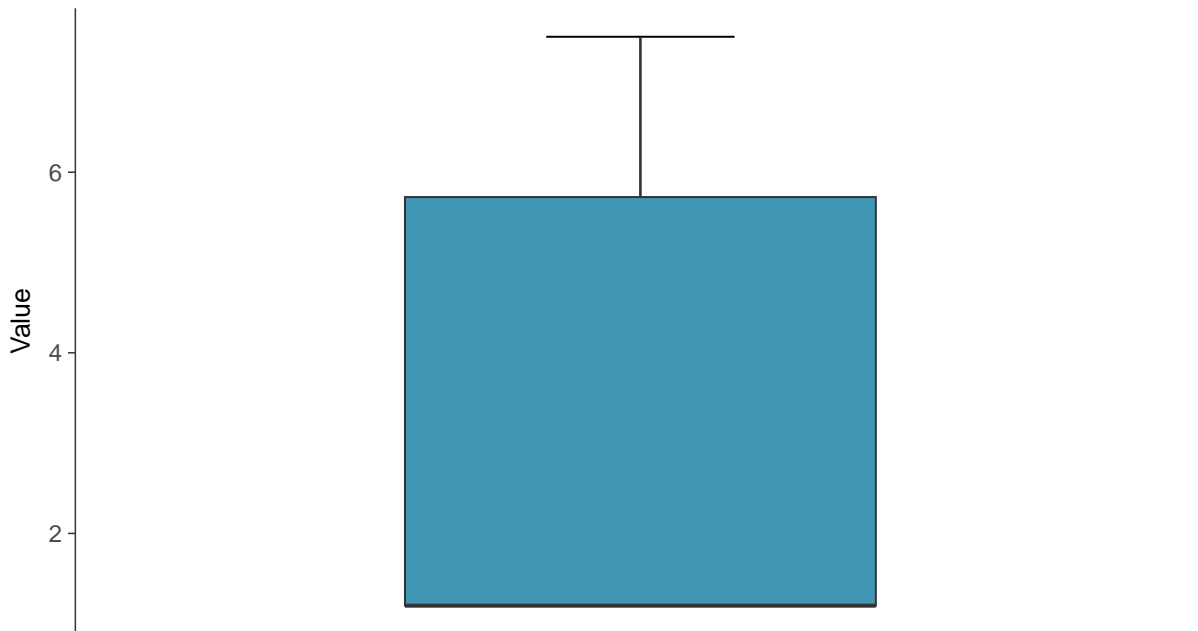
Molybdenum, MW-15016R (ug/L)





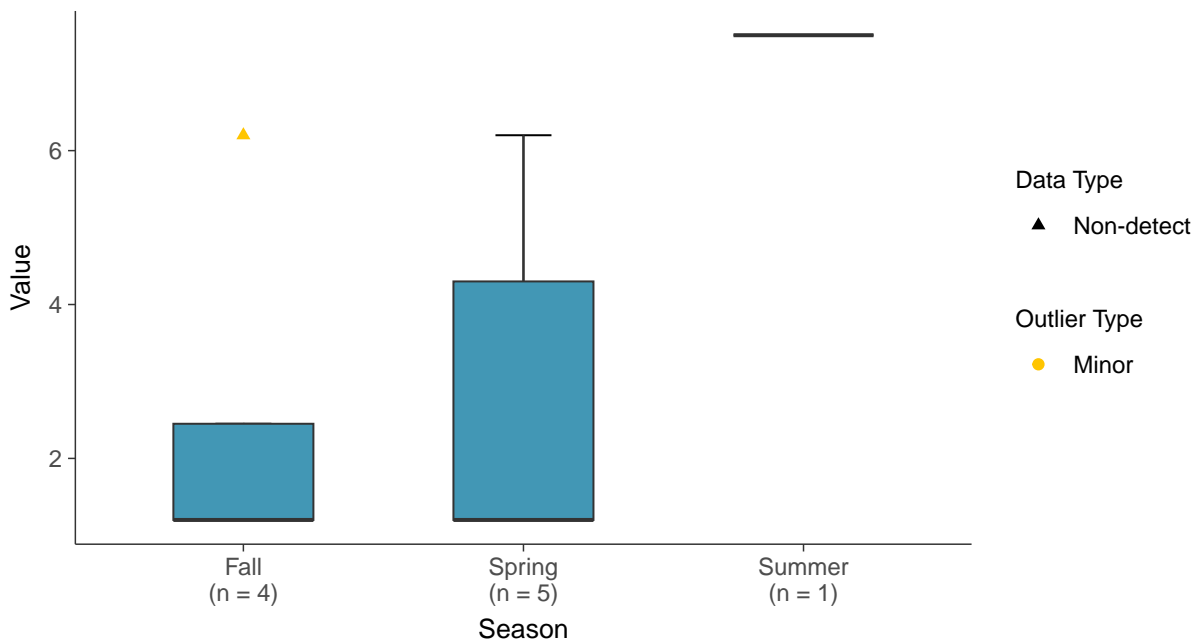
Boxplot

Molybdenum, MW-15016R (ug/L)



Boxplot by Season

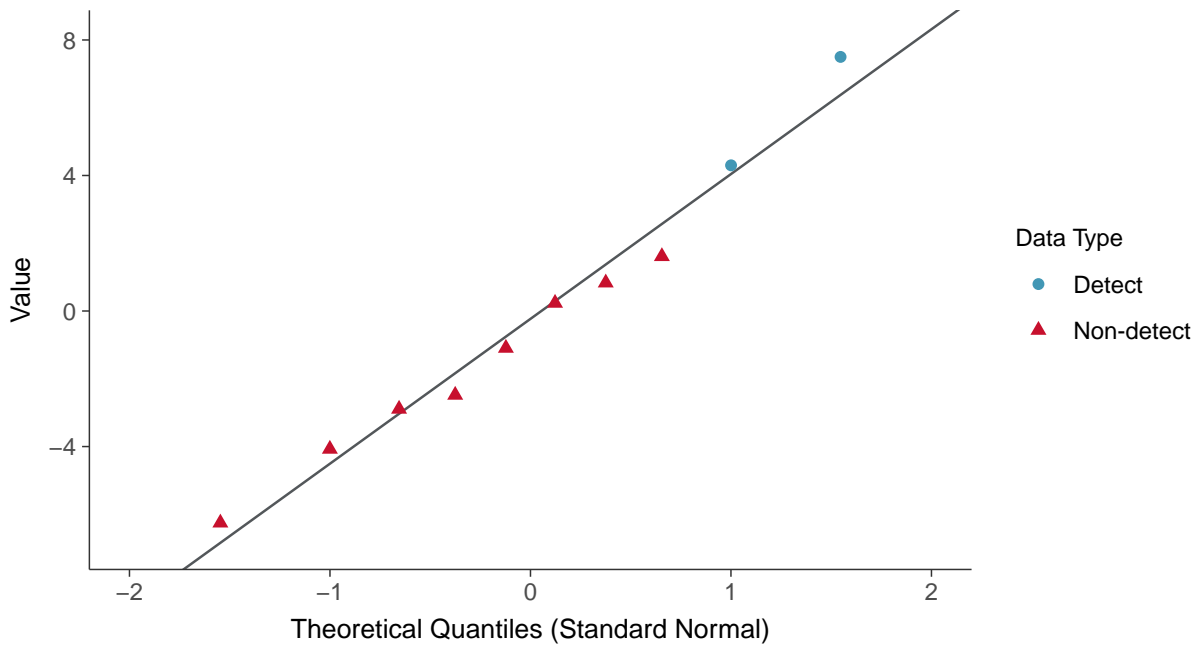
Molybdenum, MW-15016R (ug/L)





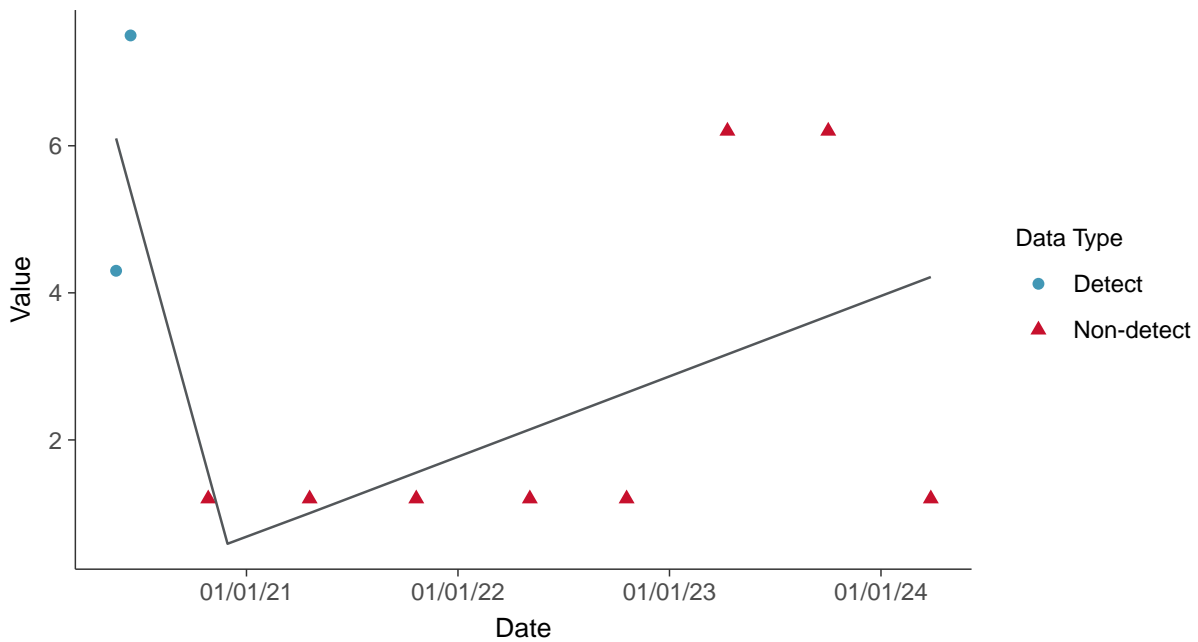
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15016R (ug/L)



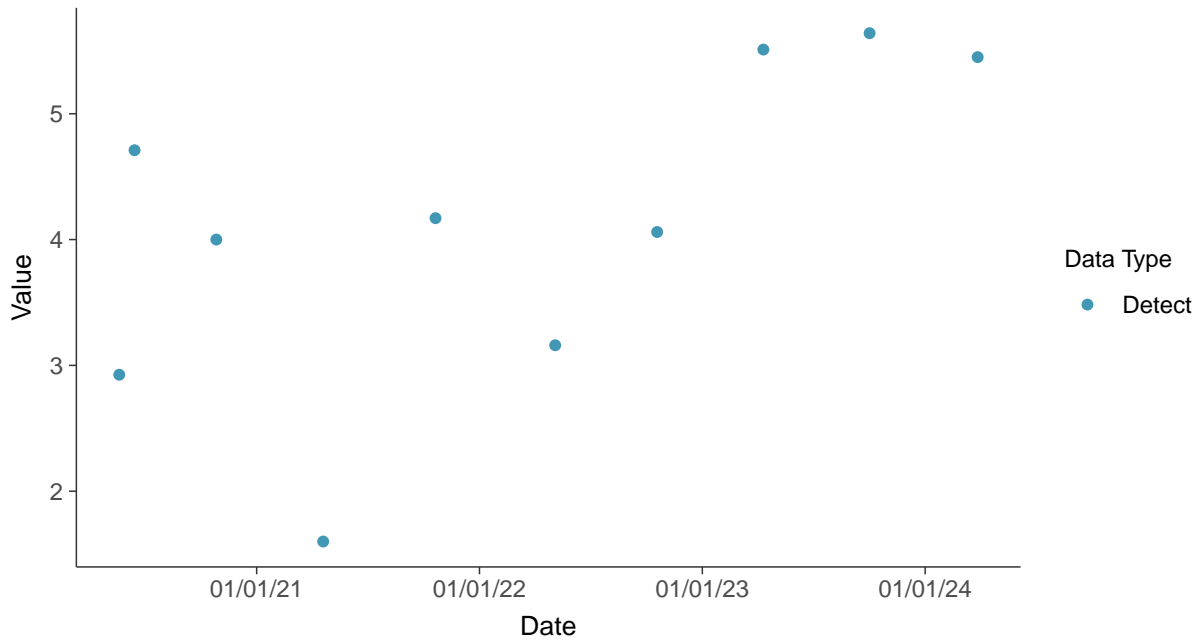


Appendix IV: Radium-226+228, MW-15016R

ID: 06_2_125

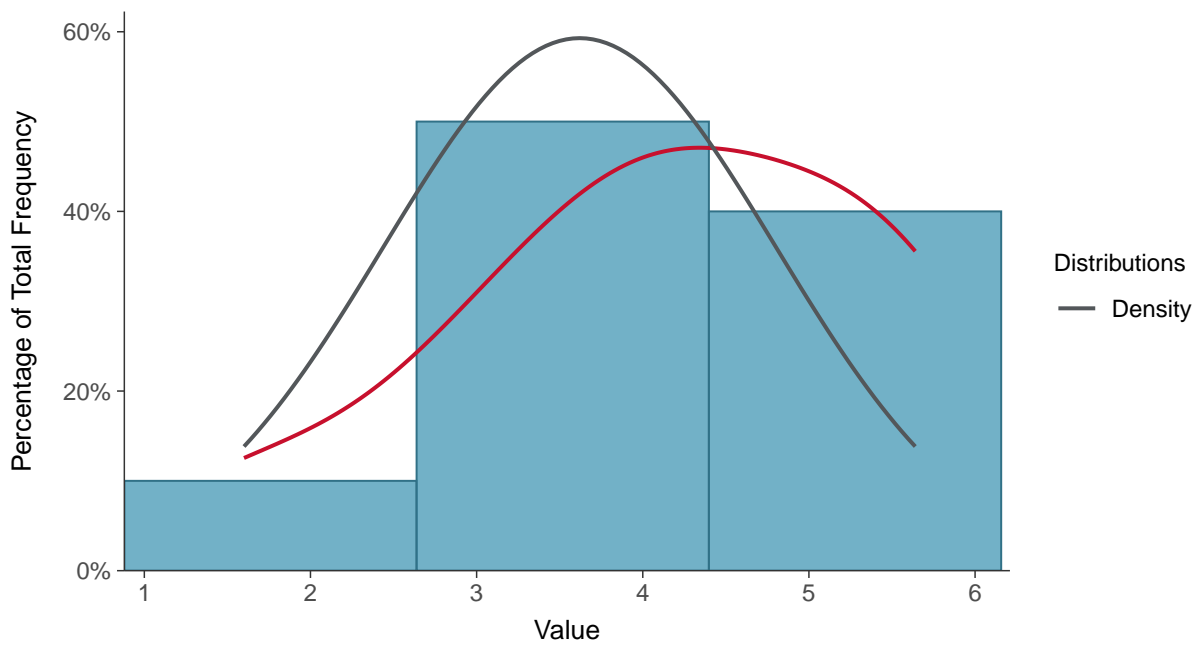
Scatter Plot

Radium-226+228, MW-15016R (pCi/L)



Histogram

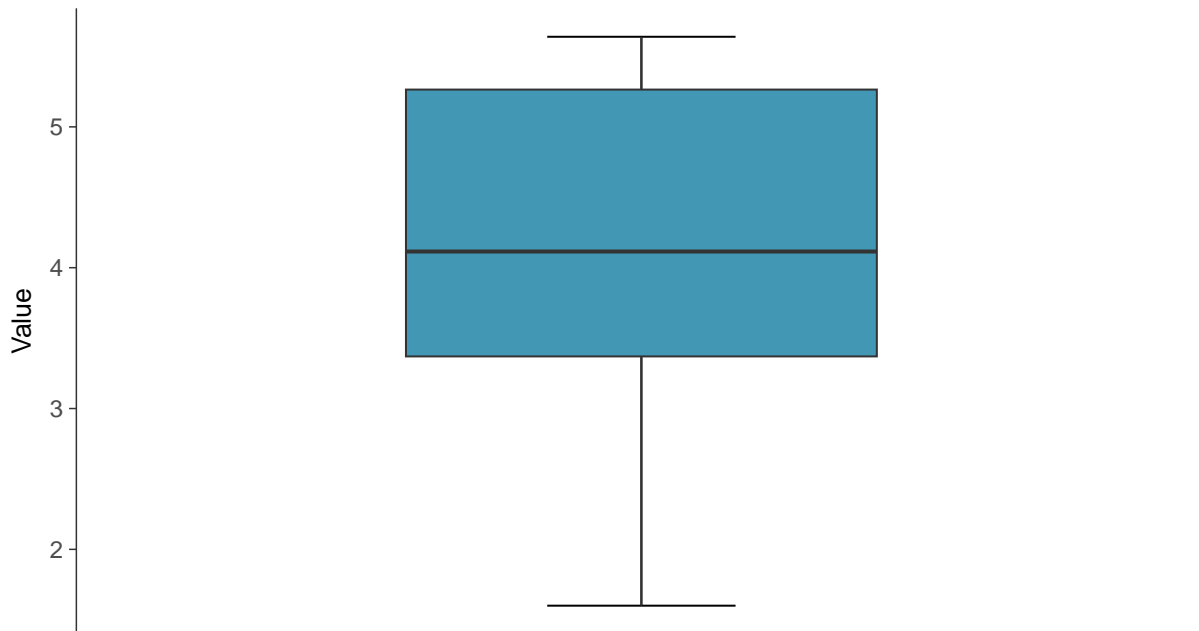
Radium-226+228, MW-15016R (pCi/L)





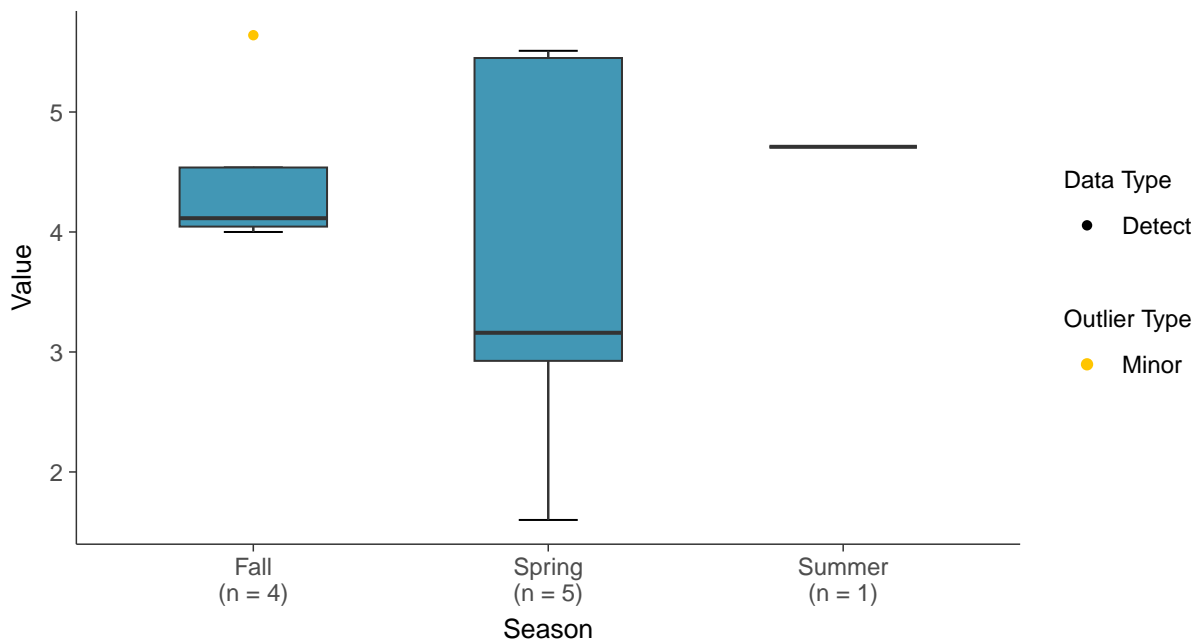
Boxplot

Radium-226+228, MW-15016R (pCi/L)



Boxplot by Season

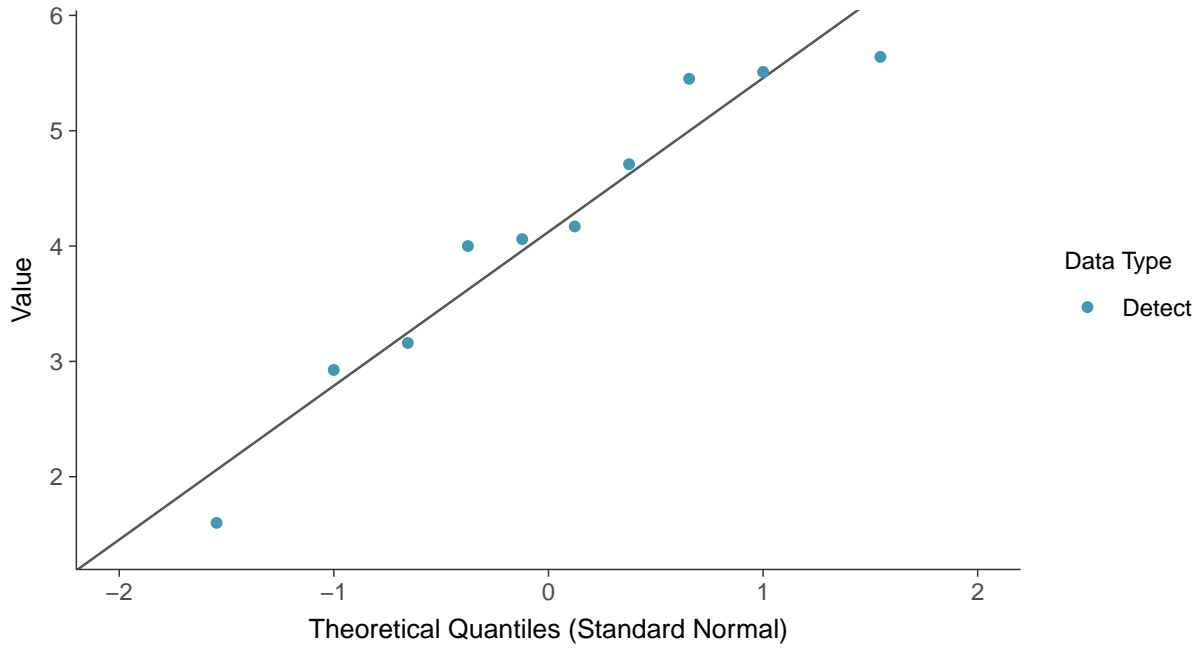
Radium-226+228, MW-15016R (pCi/L)





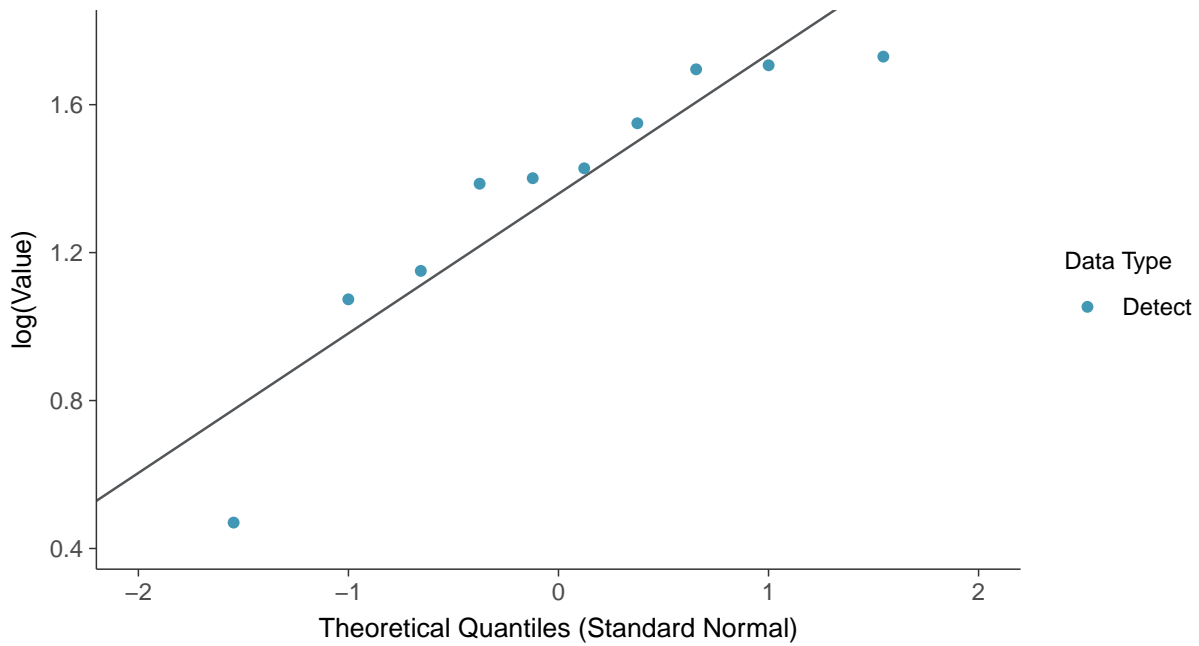
Normal Q-Q plot

Radium-226+228, MW-15016R (pCi/L)



Lognormal Q-Q plot

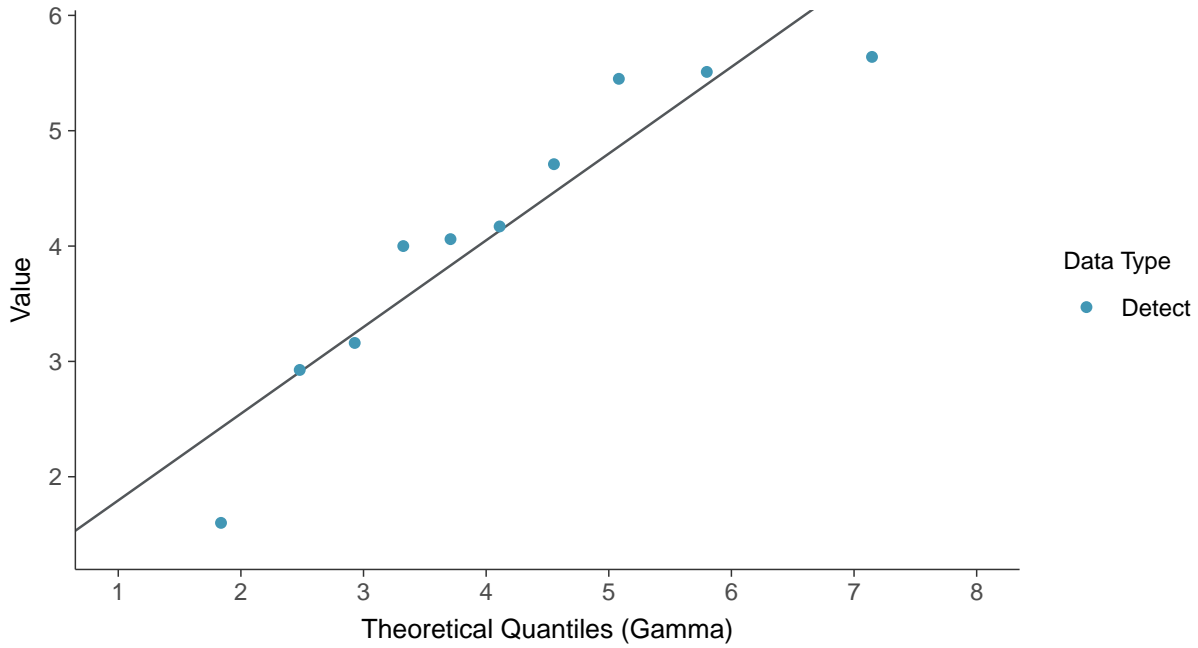
Radium-226+228, MW-15016R (pCi/L)





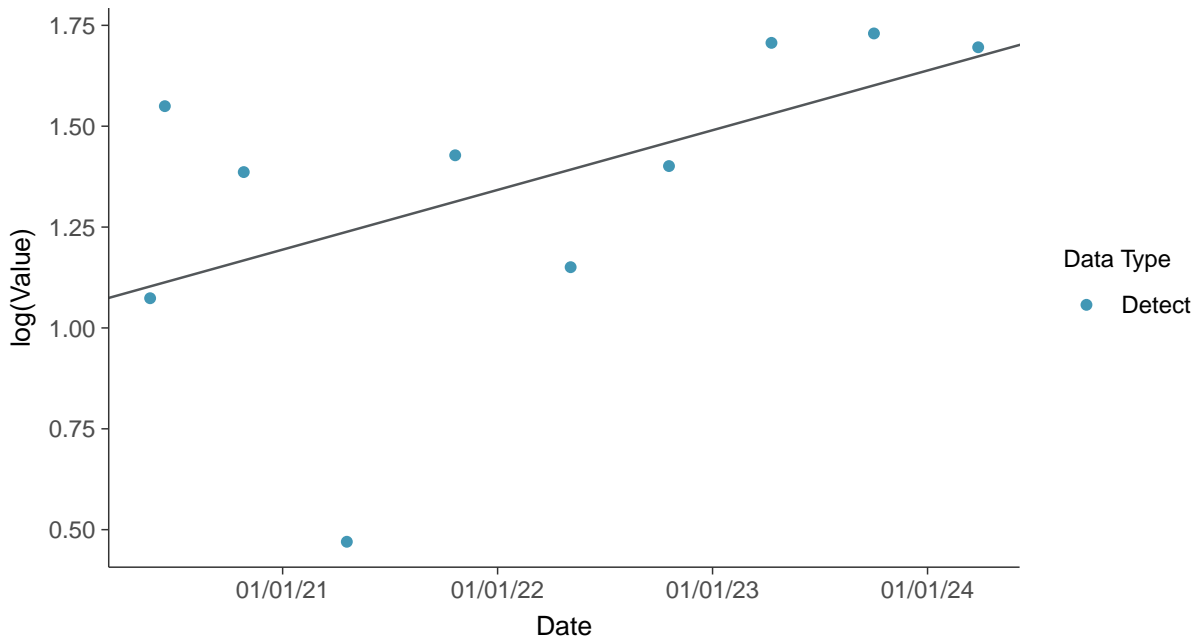
Gamma Q-Q plot

Radium-226+228, MW-15016R (pCi/L)



Trend Regression: Lognormal MLE

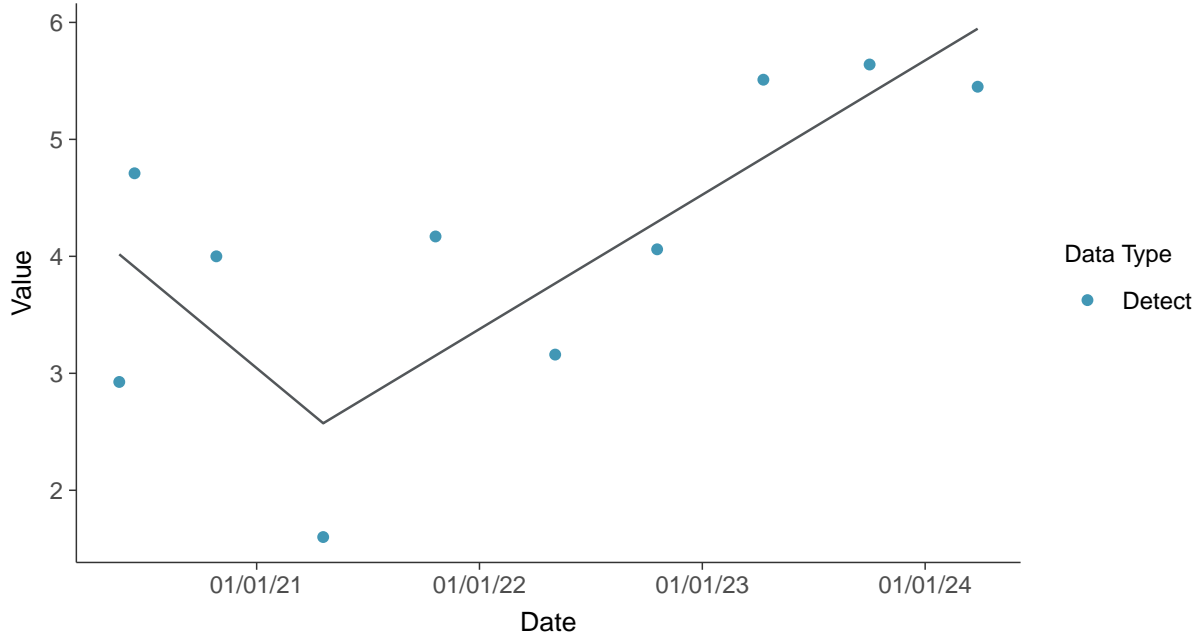
Radium-226+228, MW-15016R (pCi/L)





Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15016R (pCi/L)



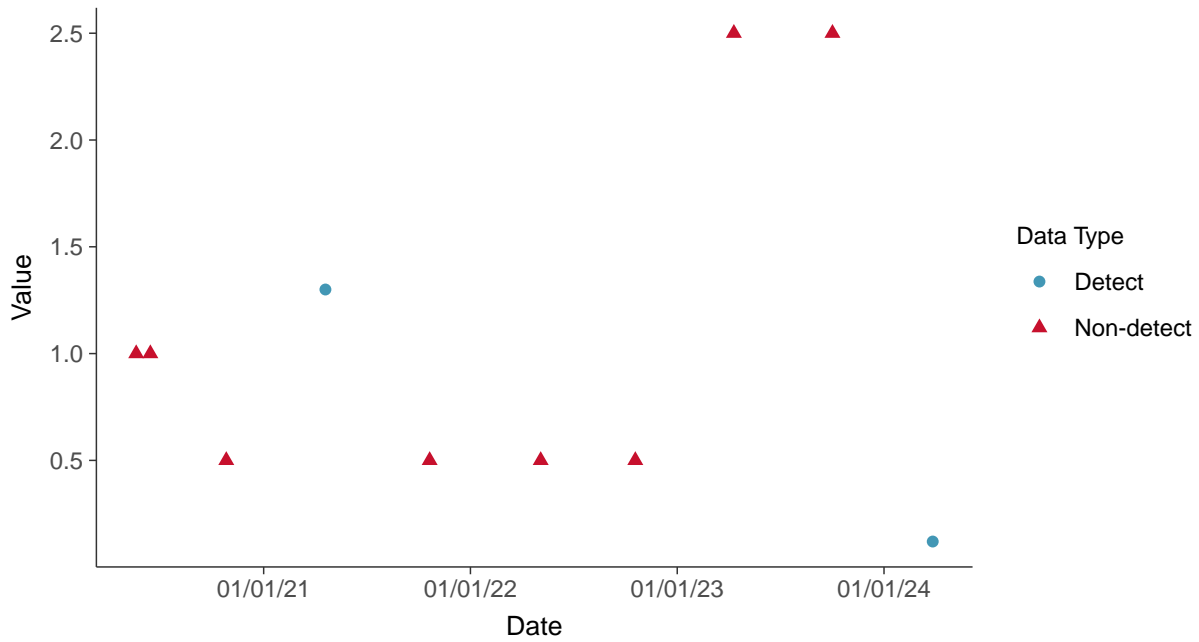


Appendix IV: Selenium, MW-15016R

ID: 06_2_127

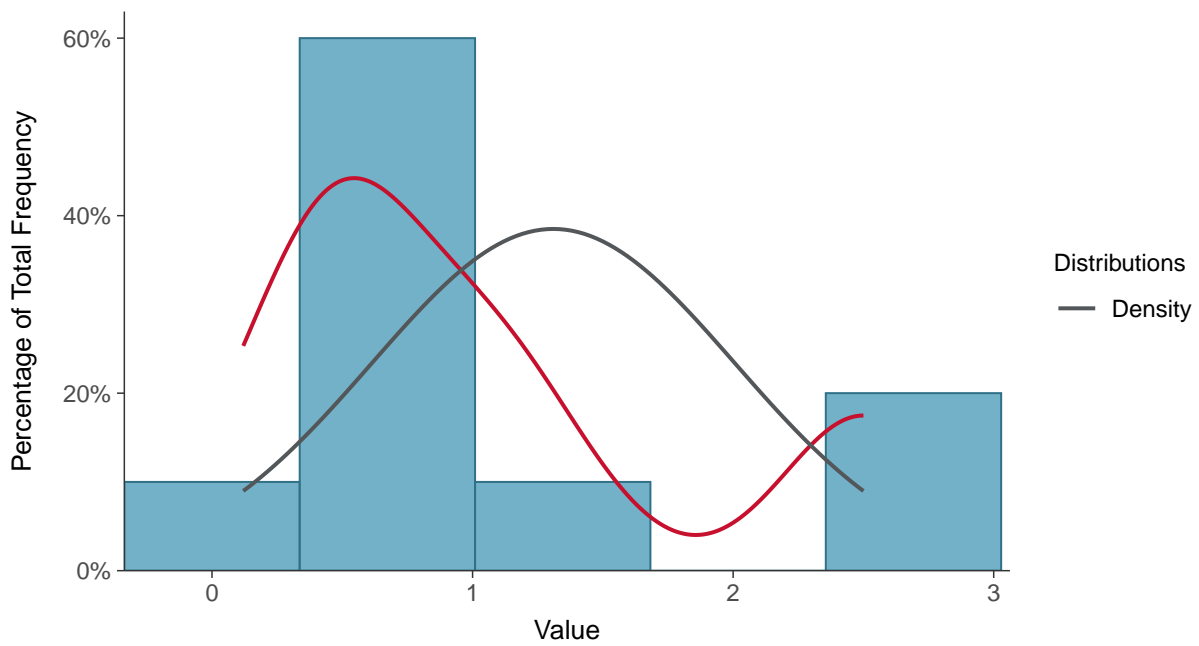
Scatter Plot

Selenium, MW-15016R (ug/L)



Histogram

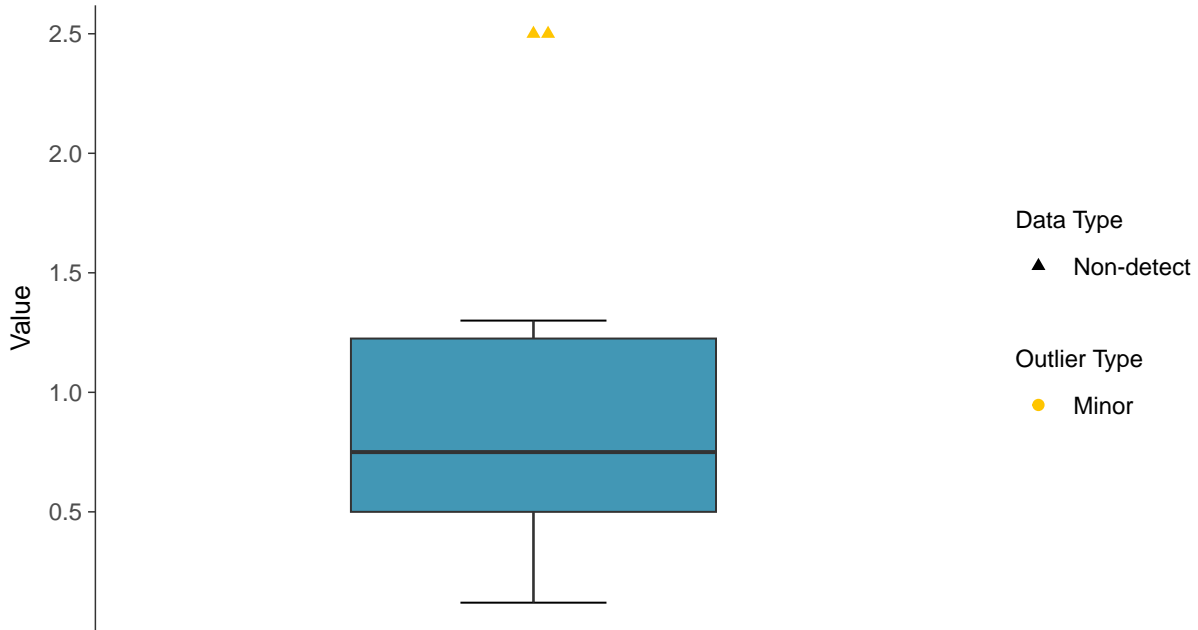
Selenium, MW-15016R (ug/L)





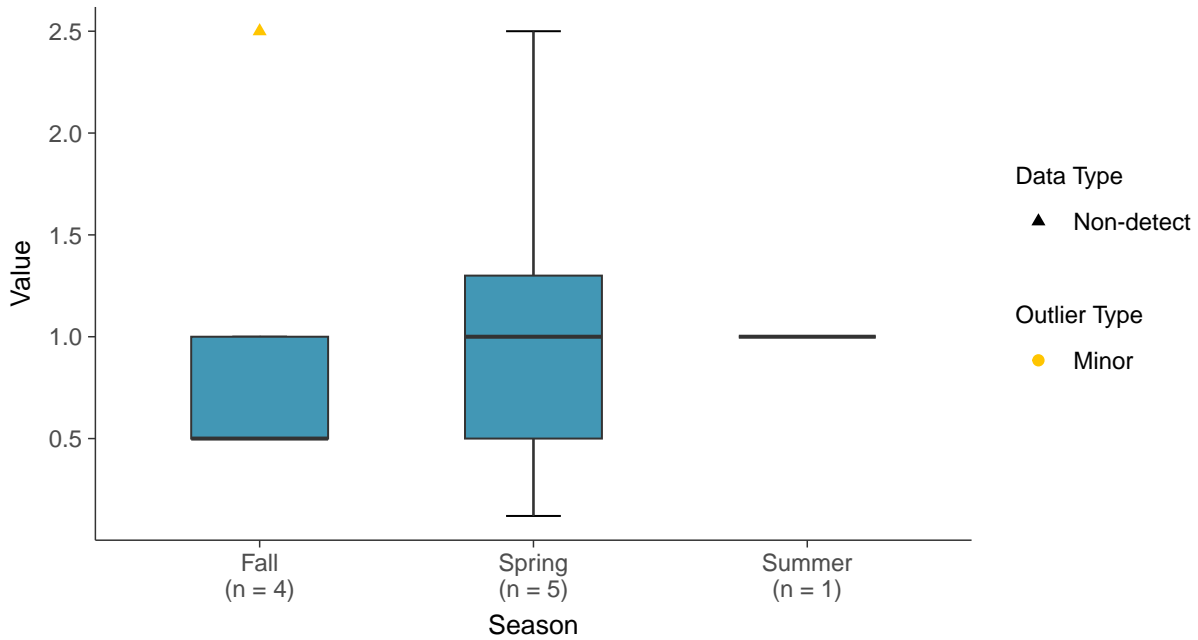
Boxplot

Selenium, MW-15016R (ug/L)



Boxplot by Season

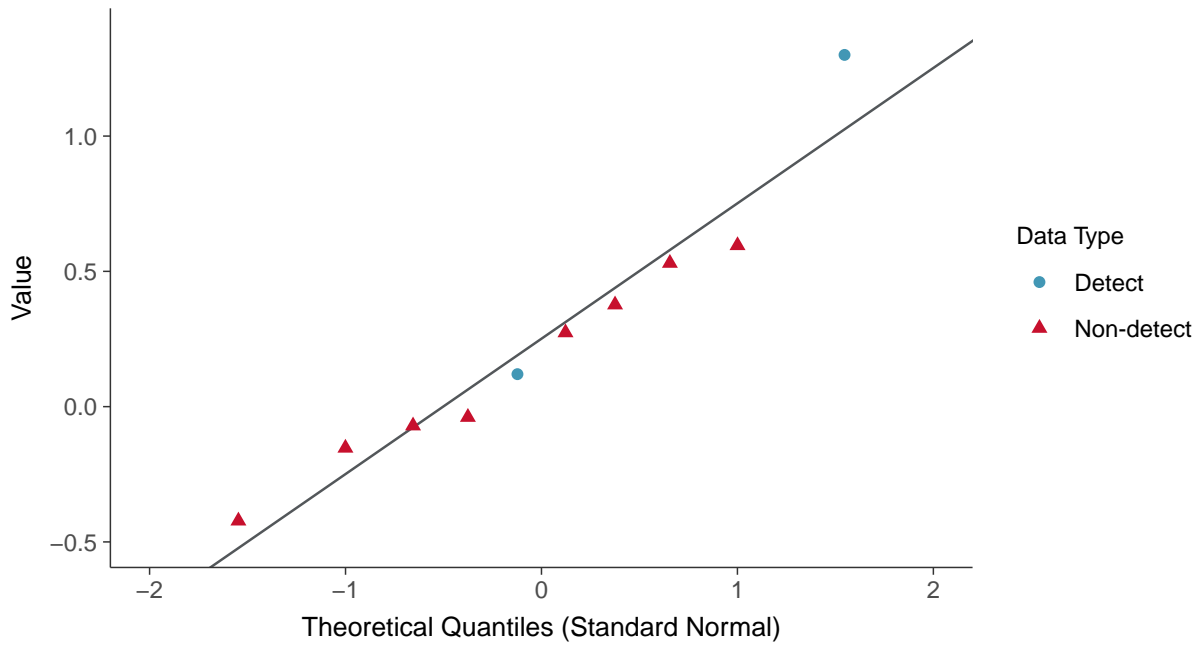
Selenium, MW-15016R (ug/L)





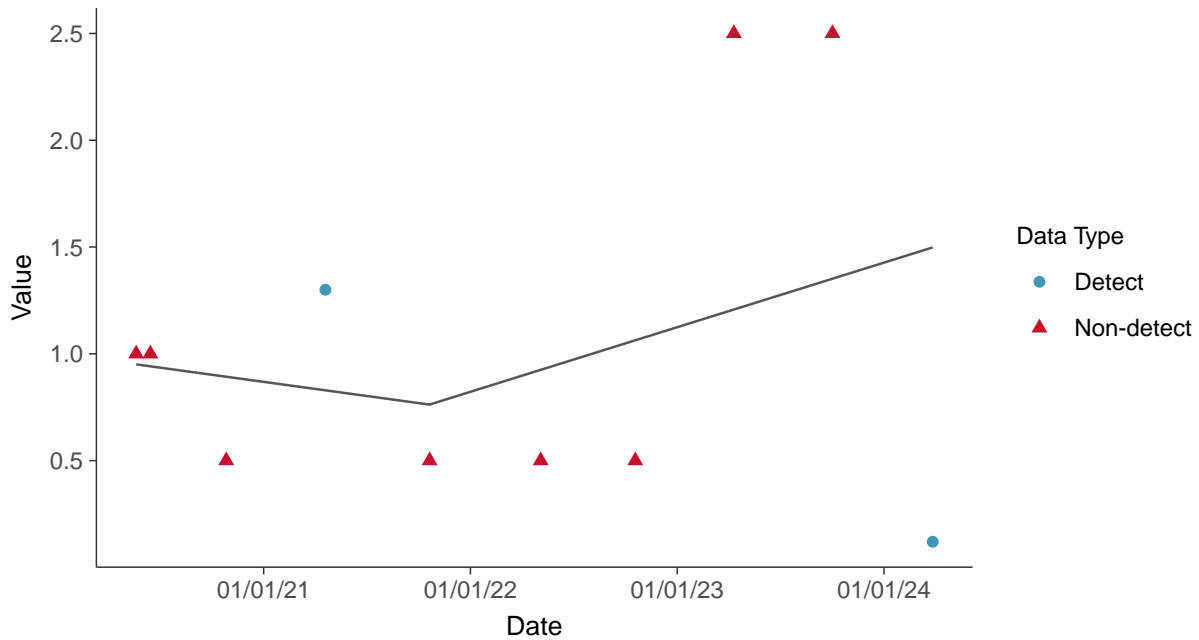
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

Selenium, MW-15016R (ug/L)



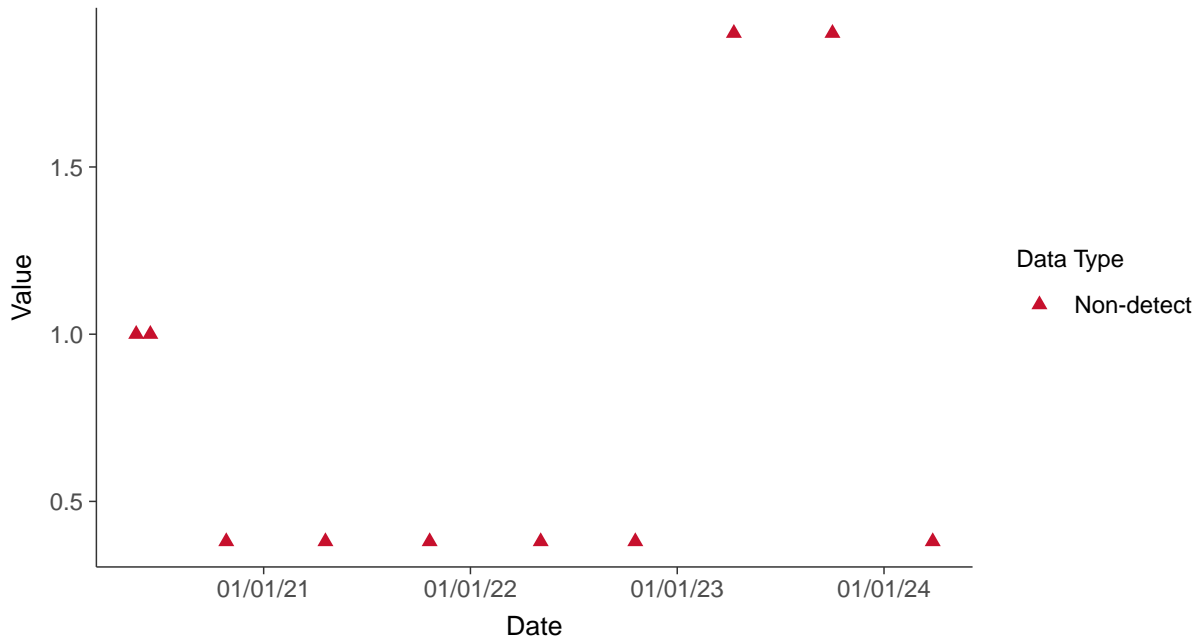


Appendix IV: Thallium, MW-15016R

ID: 06_2_131

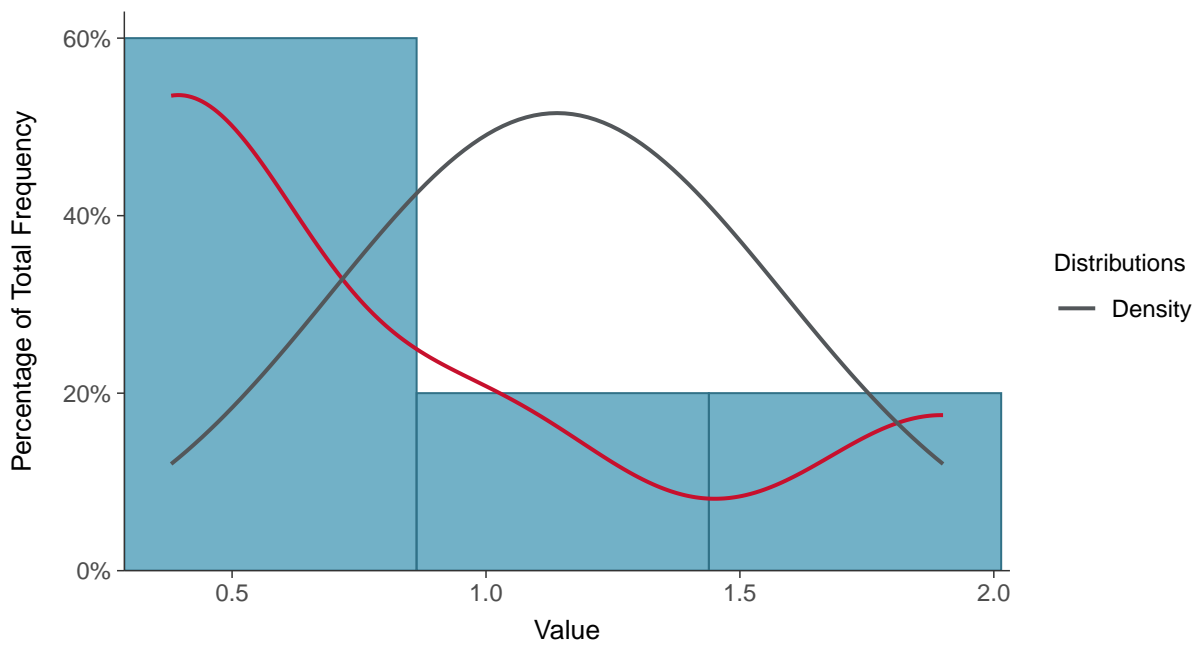
Scatter Plot

Thallium, MW-15016R (ug/L)



Histogram

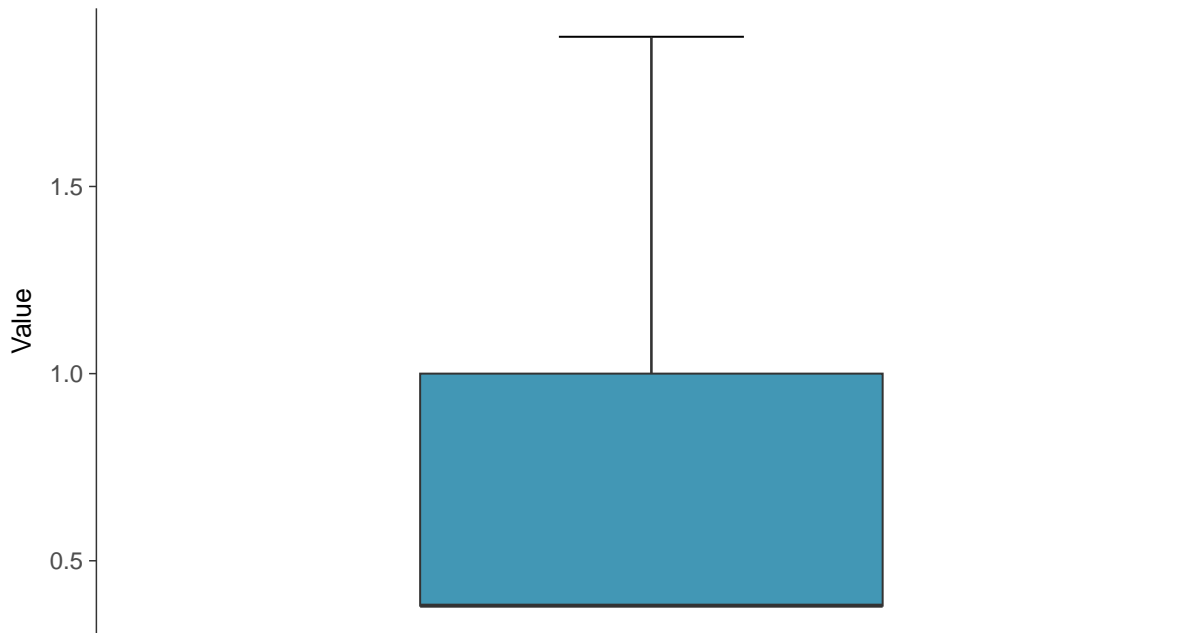
Thallium, MW-15016R (ug/L)





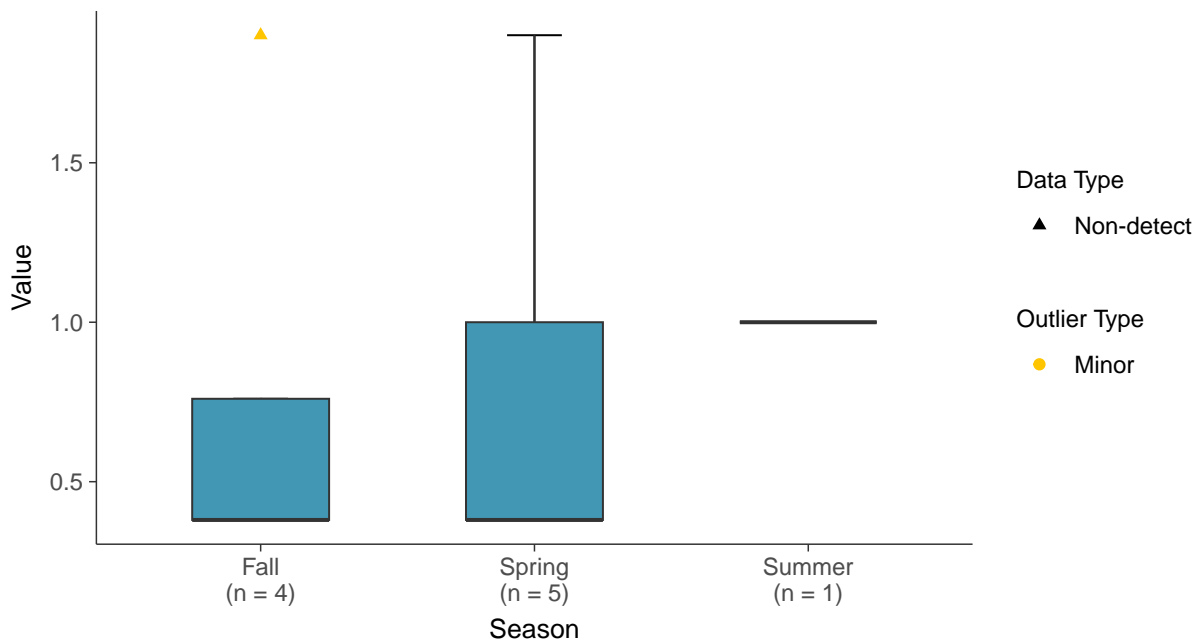
Boxplot

Thallium, MW-15016R (ug/L)



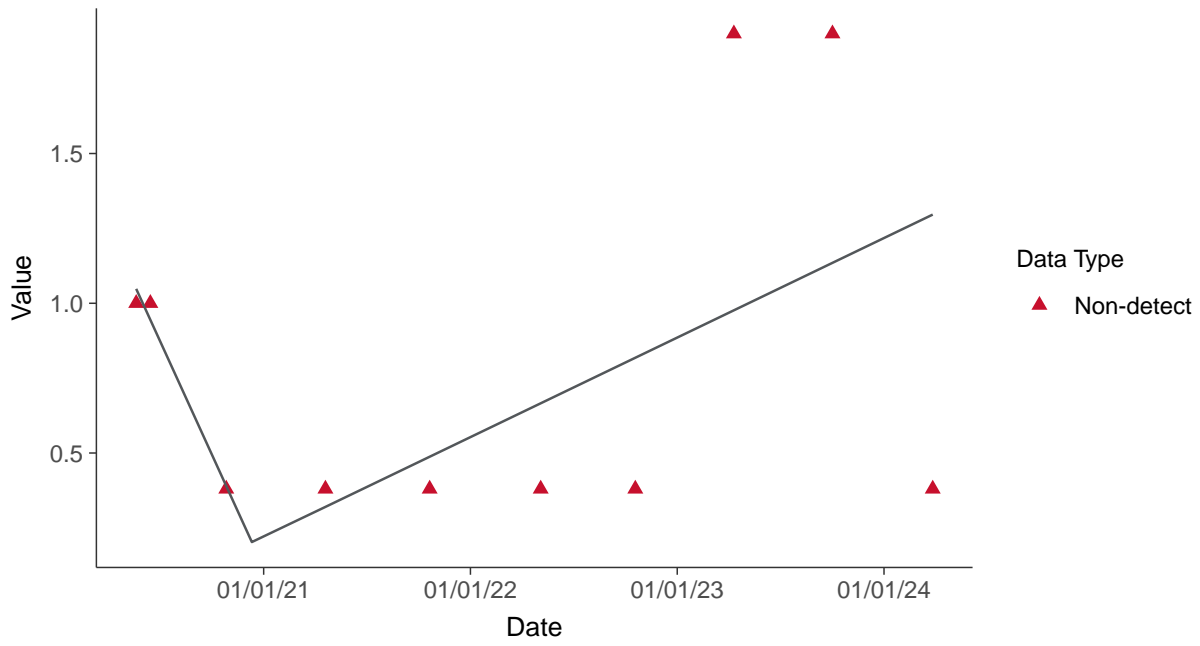
Boxplot by Season

Thallium, MW-15016R (ug/L)





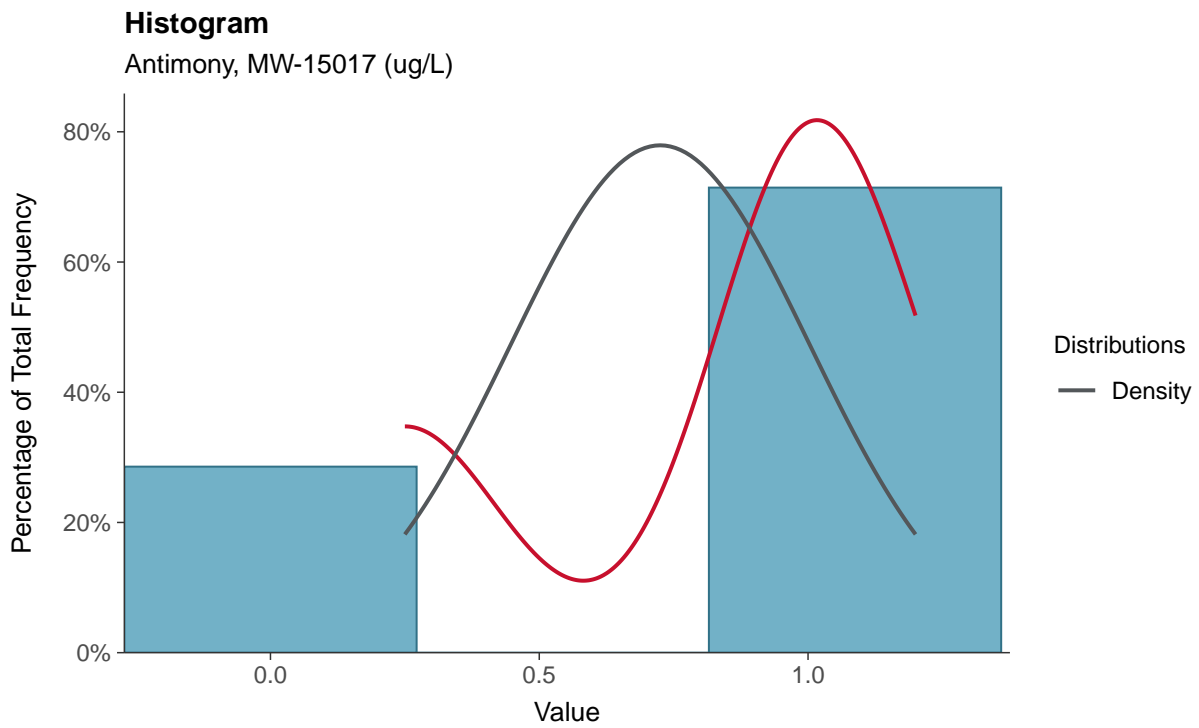
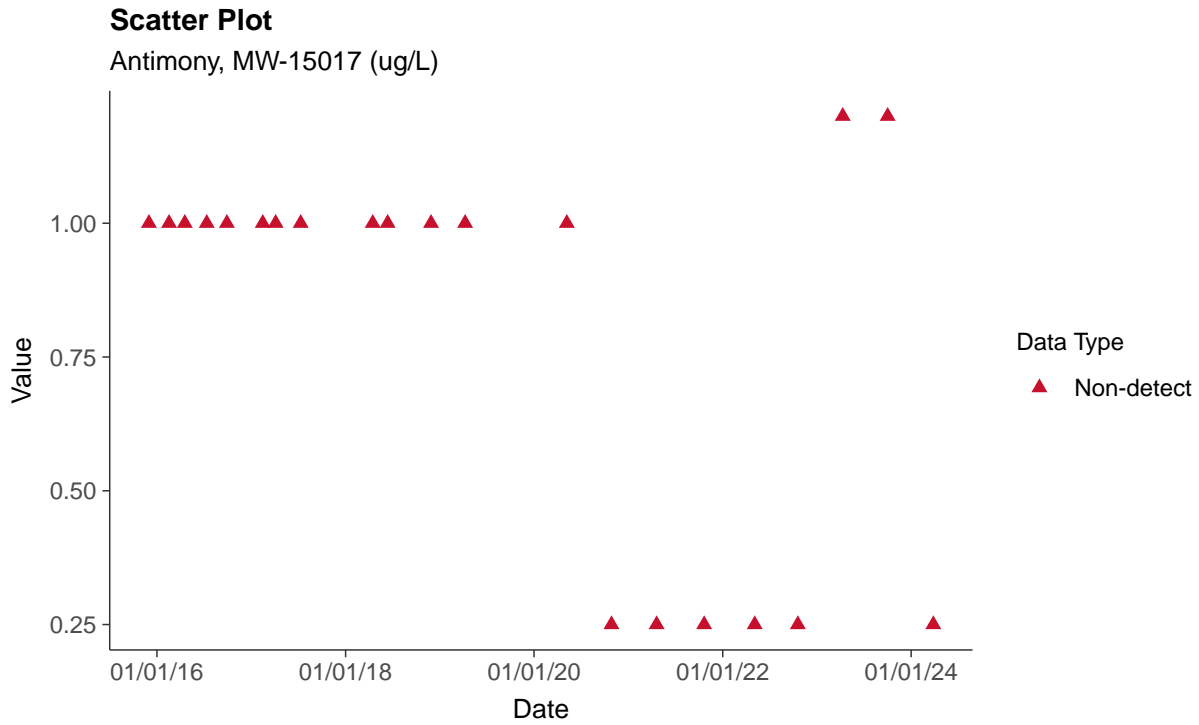
Trend Regression: Piecewise Linear-Linear
Thallium, MW-15016R (ug/L)





Appendix IV: Antimony, MW-15017

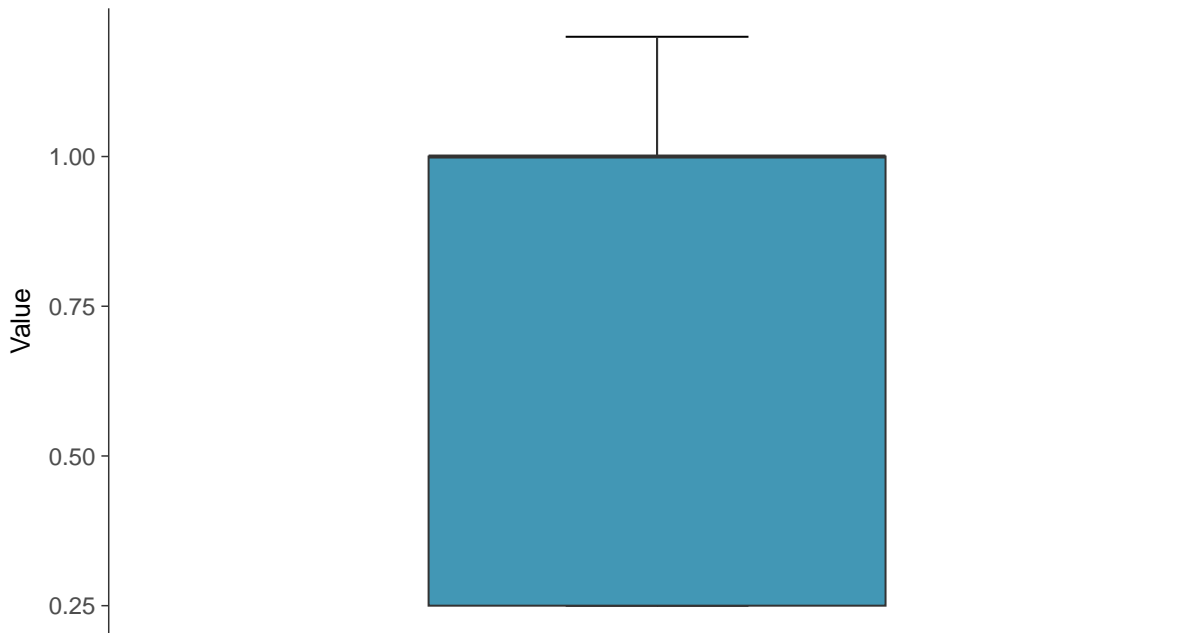
ID: 07_2_101





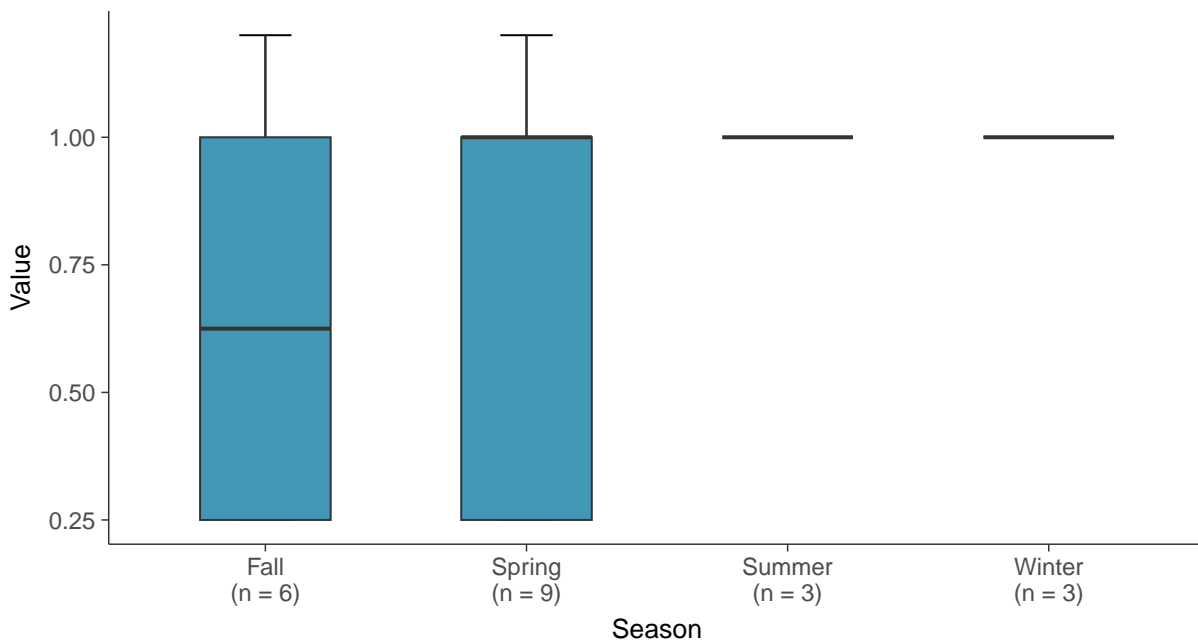
Boxplot

Antimony, MW-15017 (ug/L)



Boxplot by Season

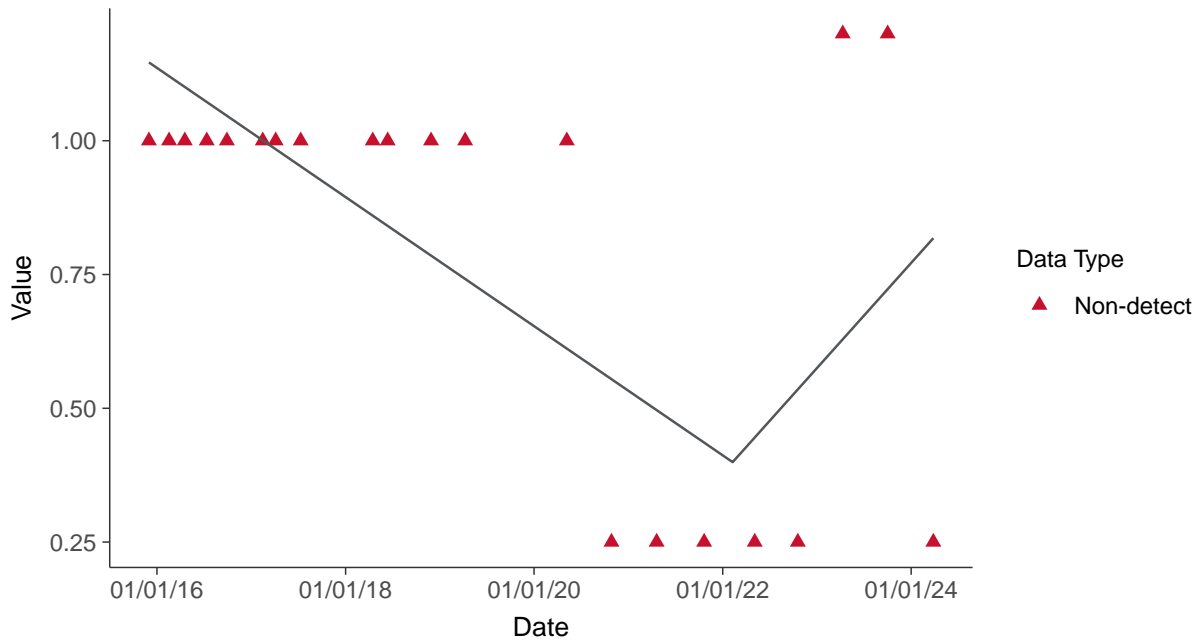
Antimony, MW-15017 (ug/L)





Trend Regression: Piecewise Linear-Linear

Antimony, MW-15017 (ug/L)



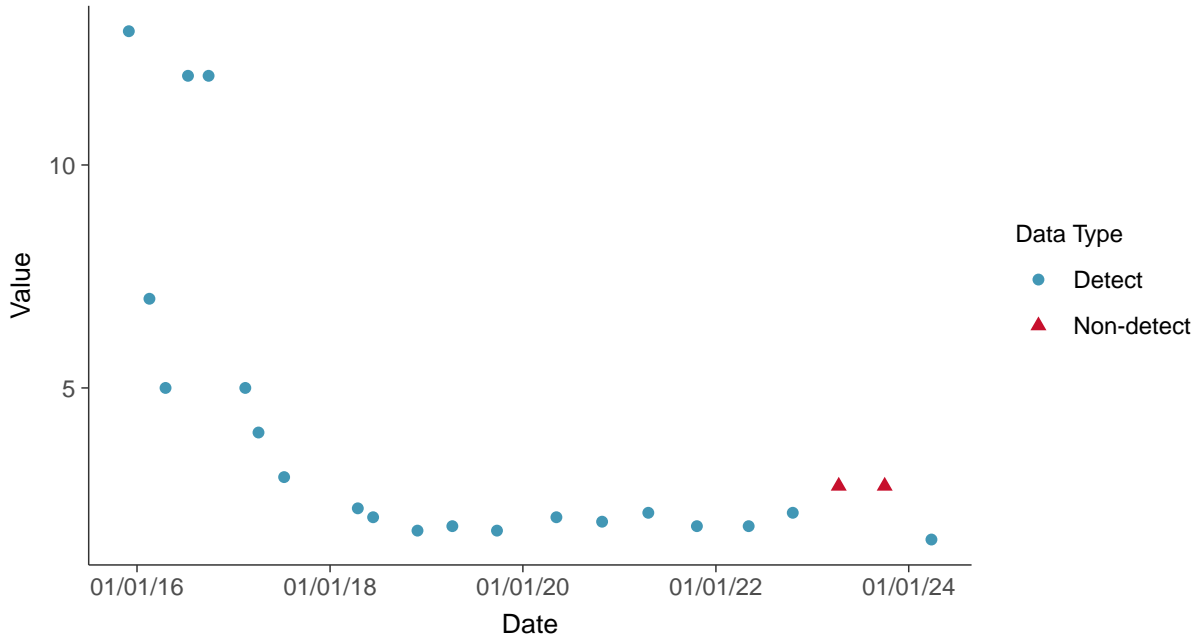


Appendix IV: Arsenic, MW-15017

ID: 07_2_102

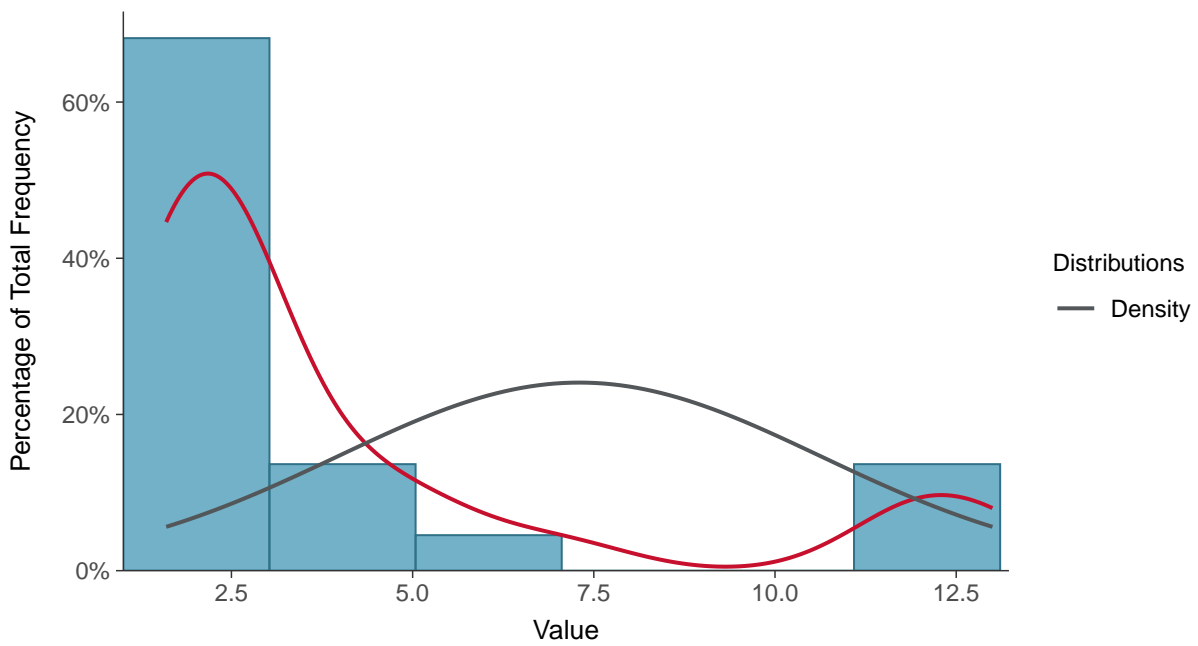
Scatter Plot

Arsenic, MW-15017 (ug/L)



Histogram

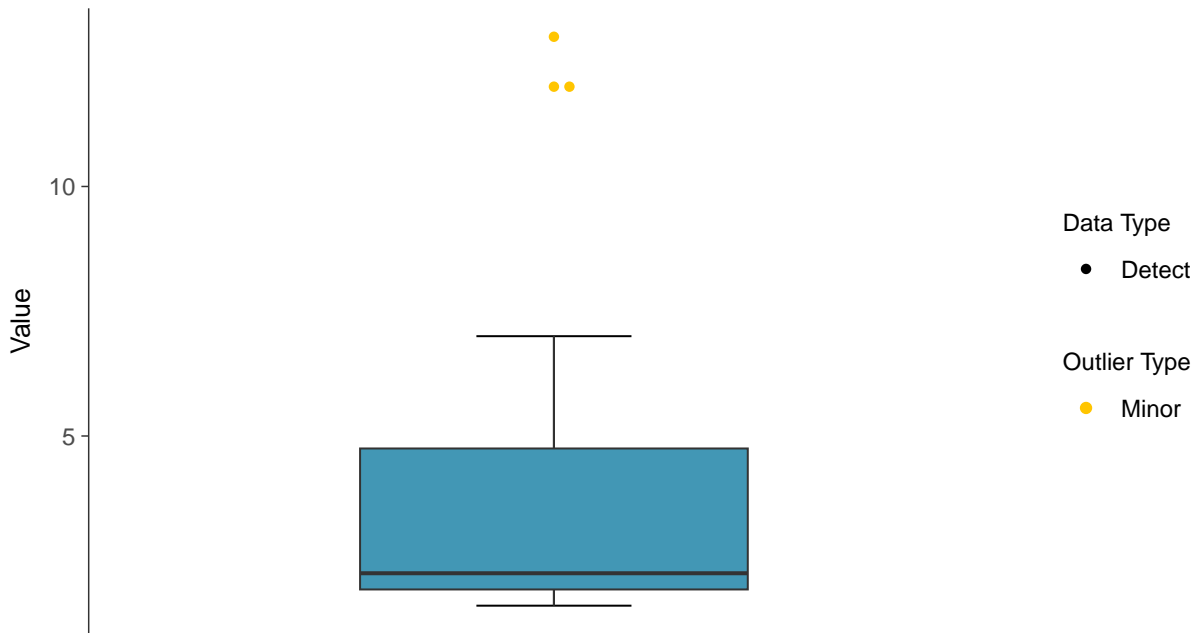
Arsenic, MW-15017 (ug/L)





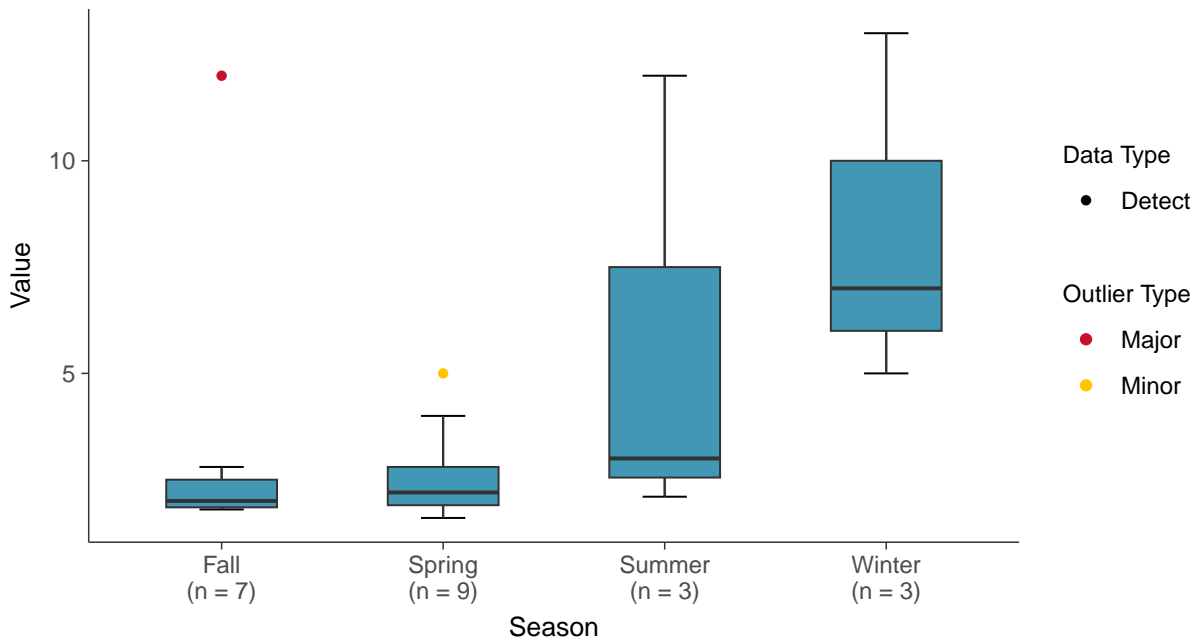
Boxplot

Arsenic, MW-15017 (ug/L)



Boxplot by Season

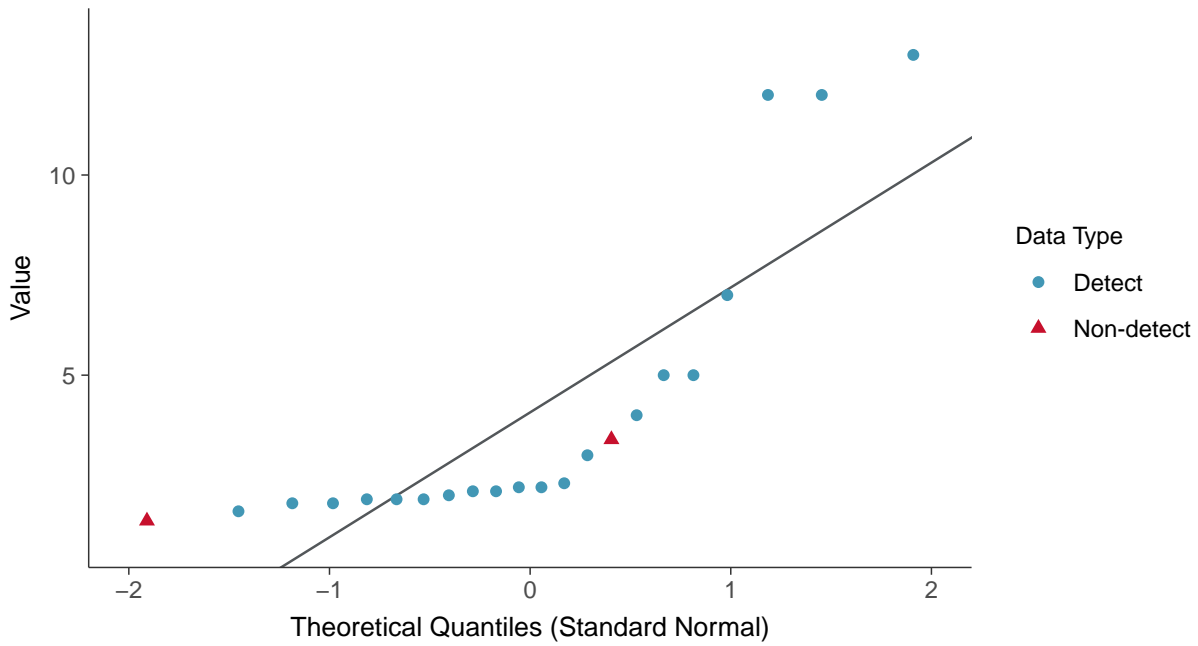
Arsenic, MW-15017 (ug/L)





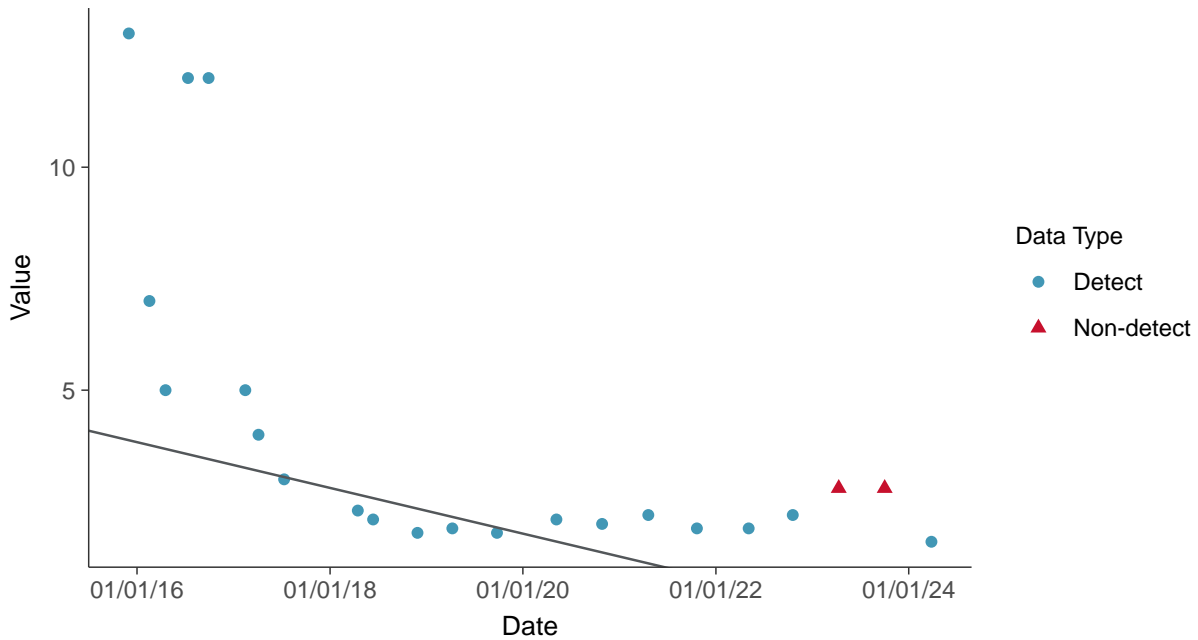
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15017 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

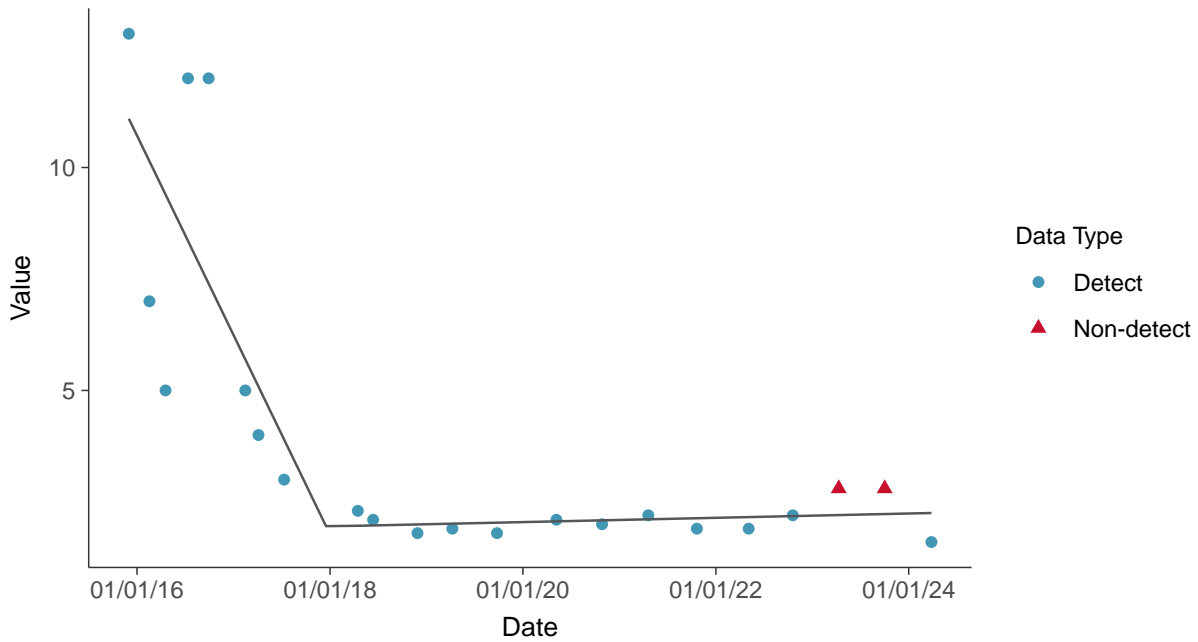
Arsenic, MW-15017 (ug/L)





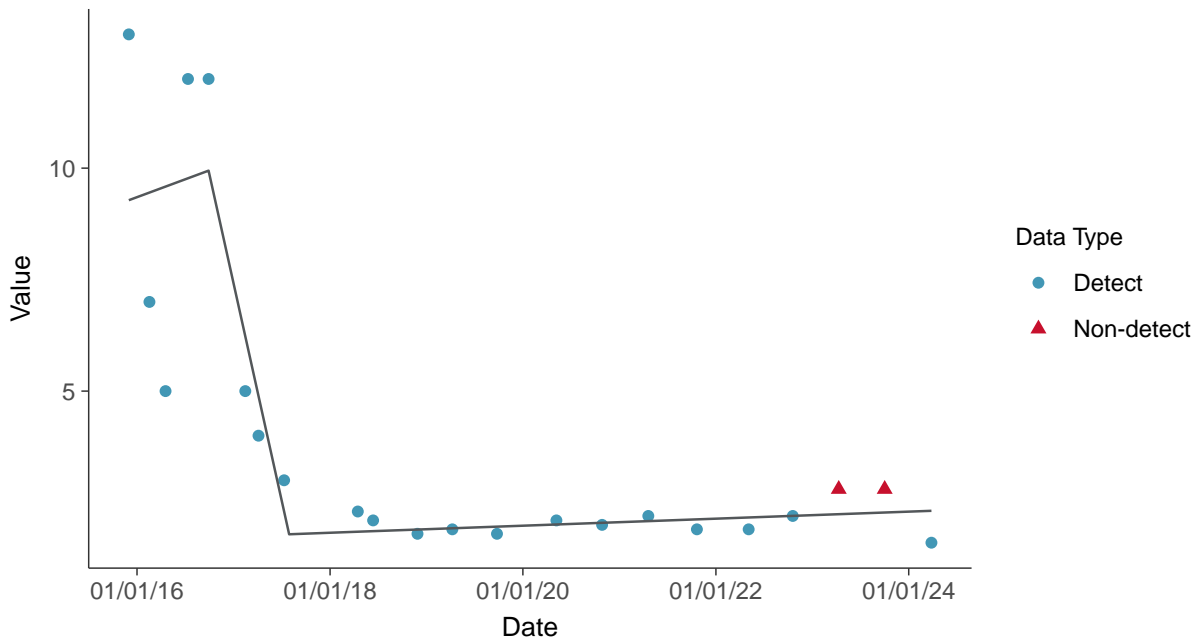
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15017 (ug/L)



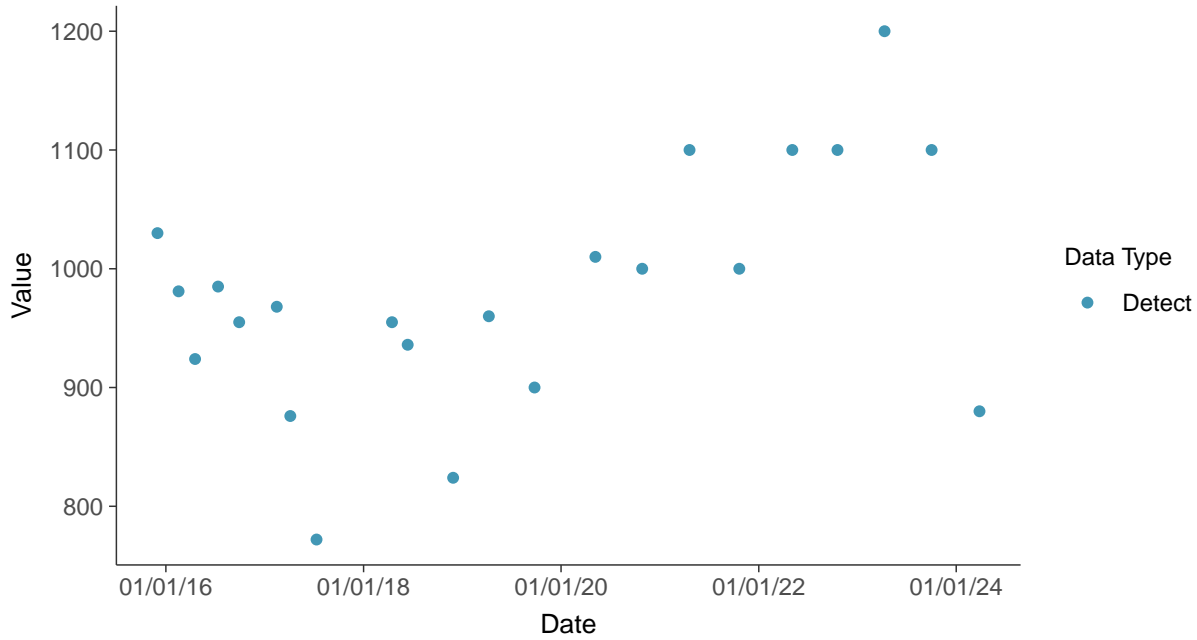


Appendix IV: Barium, MW-15017

ID: 07_2_103

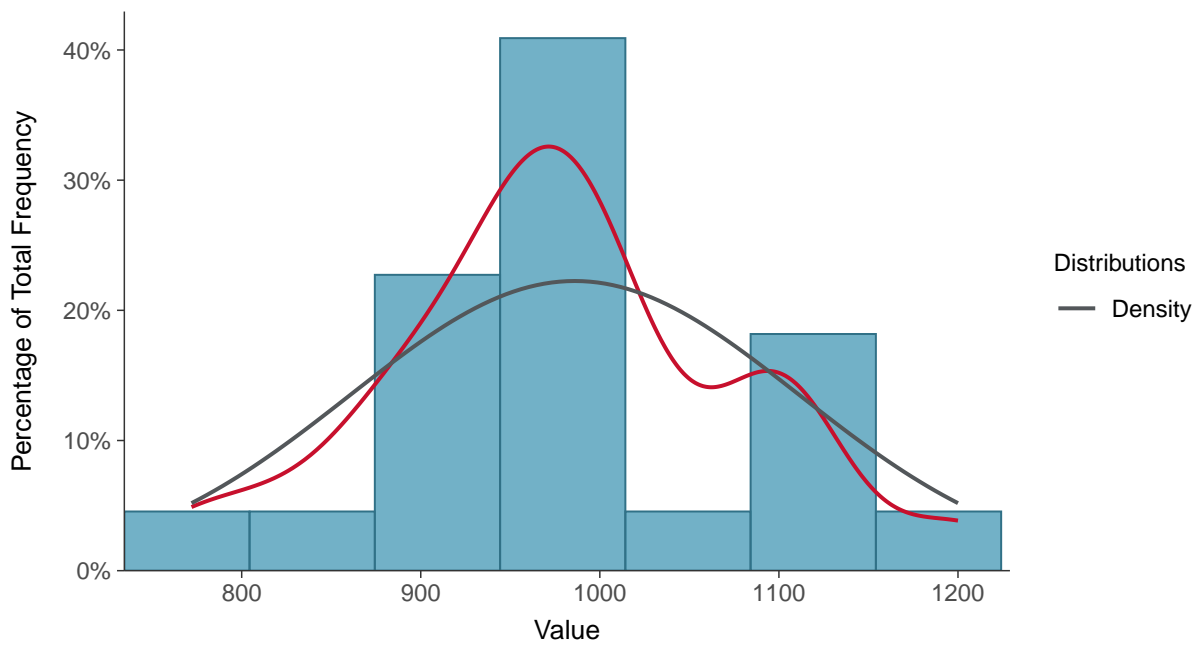
Scatter Plot

Barium, MW-15017 (ug/L)



Histogram

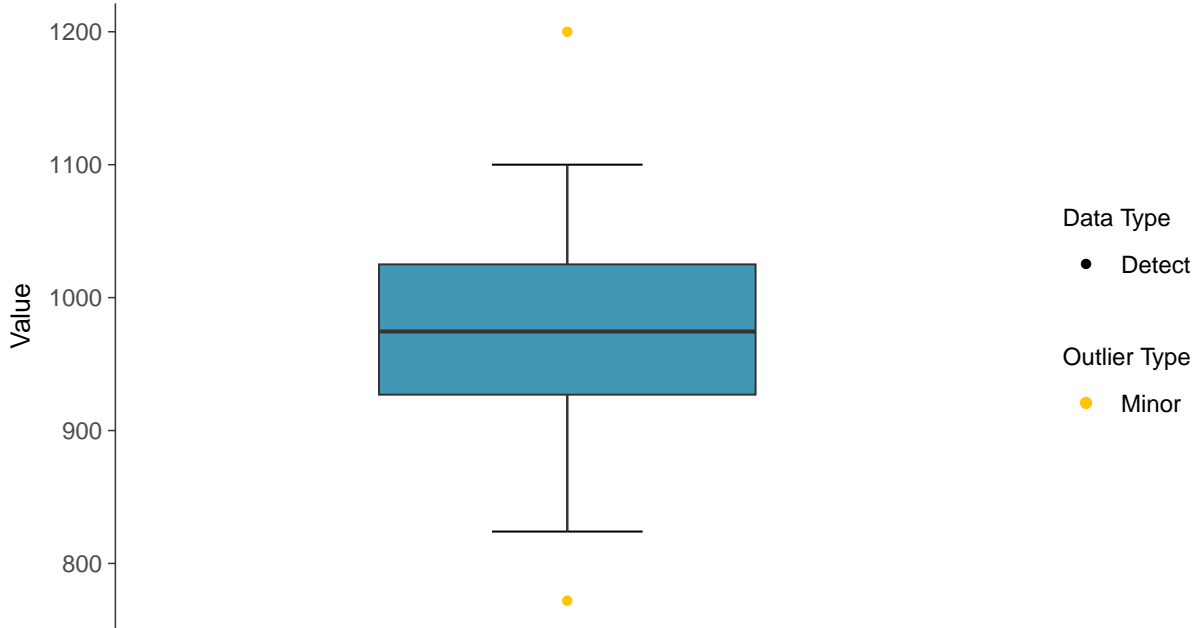
Barium, MW-15017 (ug/L)





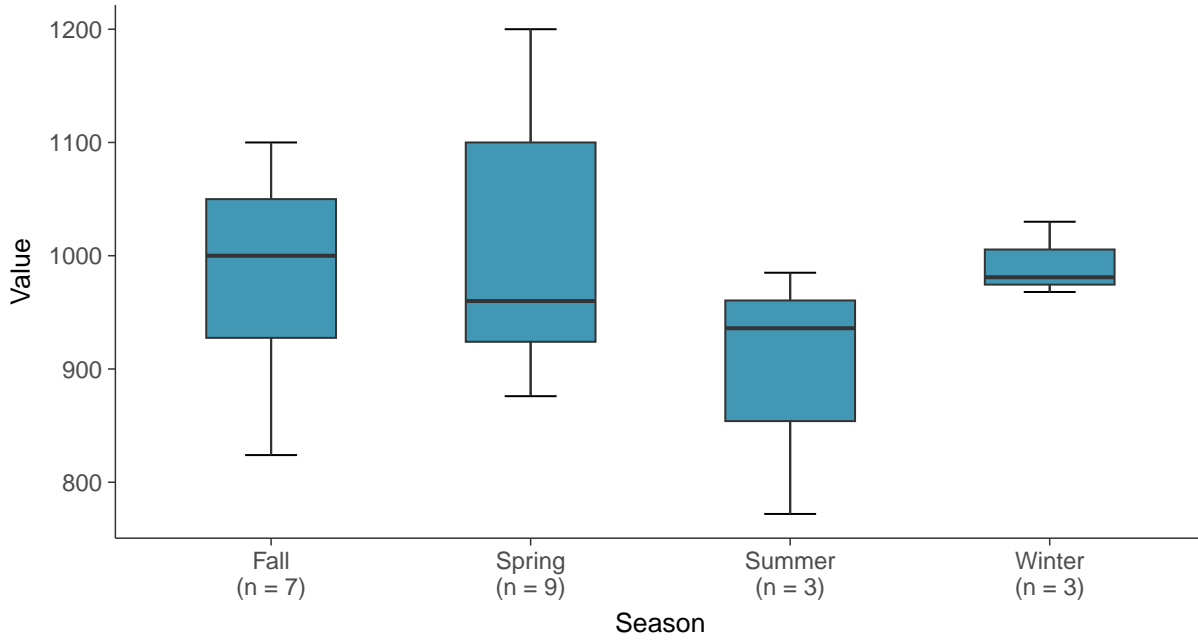
Boxplot

Barium, MW-15017 (ug/L)



Boxplot by Season

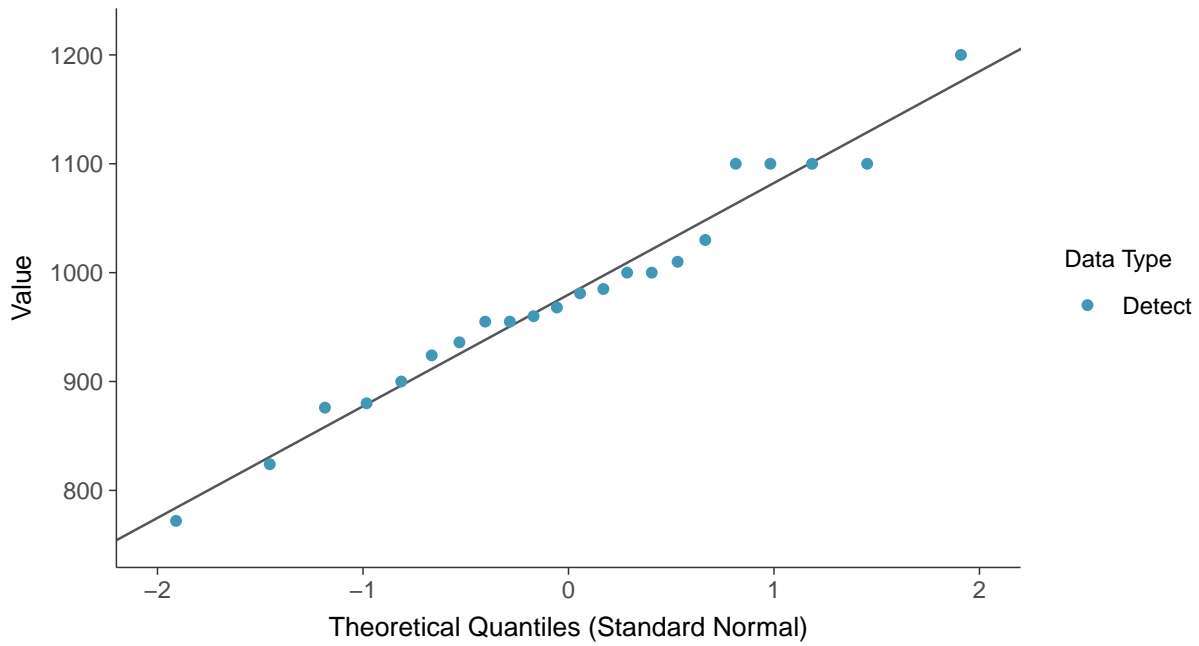
Barium, MW-15017 (ug/L)





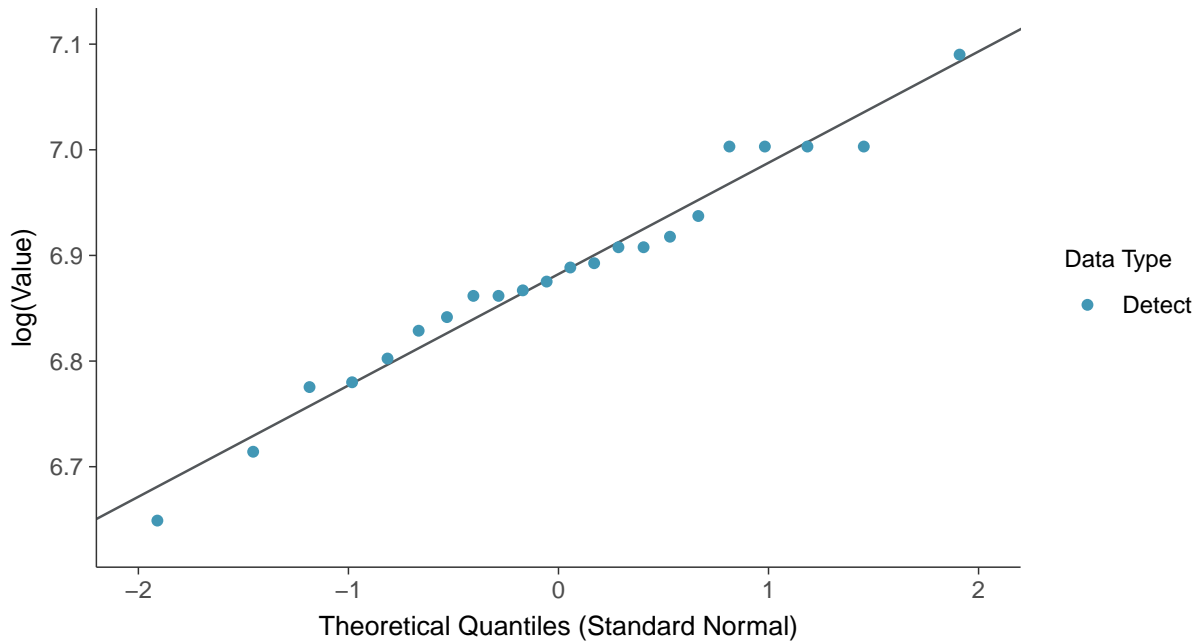
Normal Q-Q plot

Barium, MW-15017 (ug/L)



Lognormal Q-Q plot

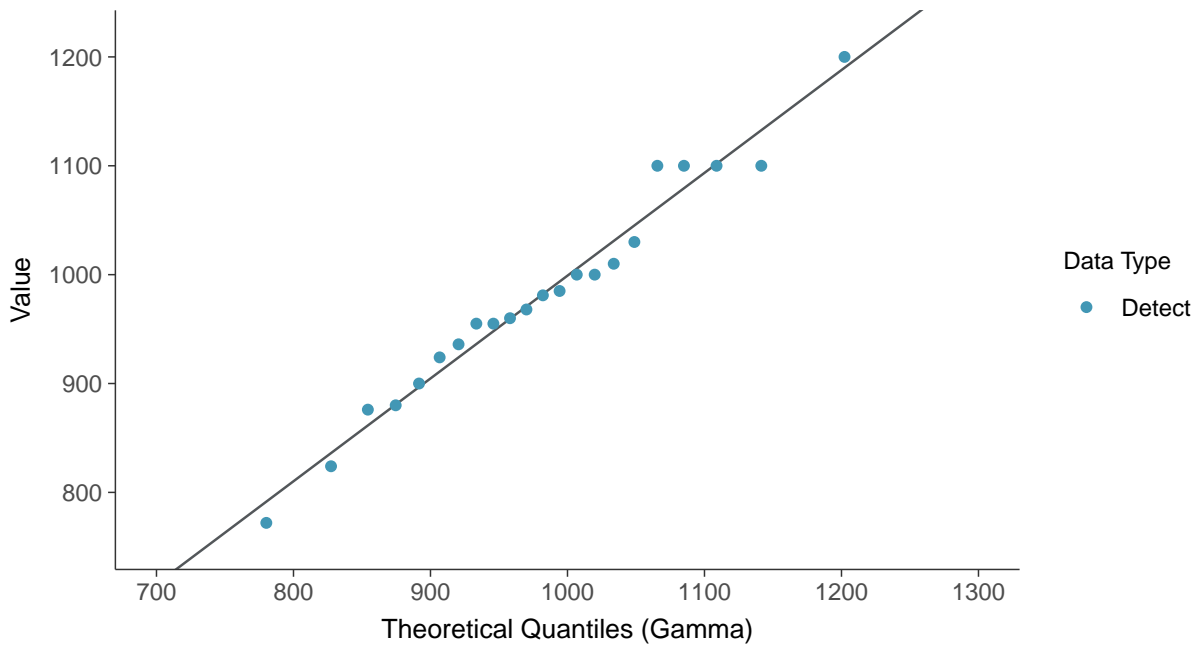
Barium, MW-15017 (ug/L)





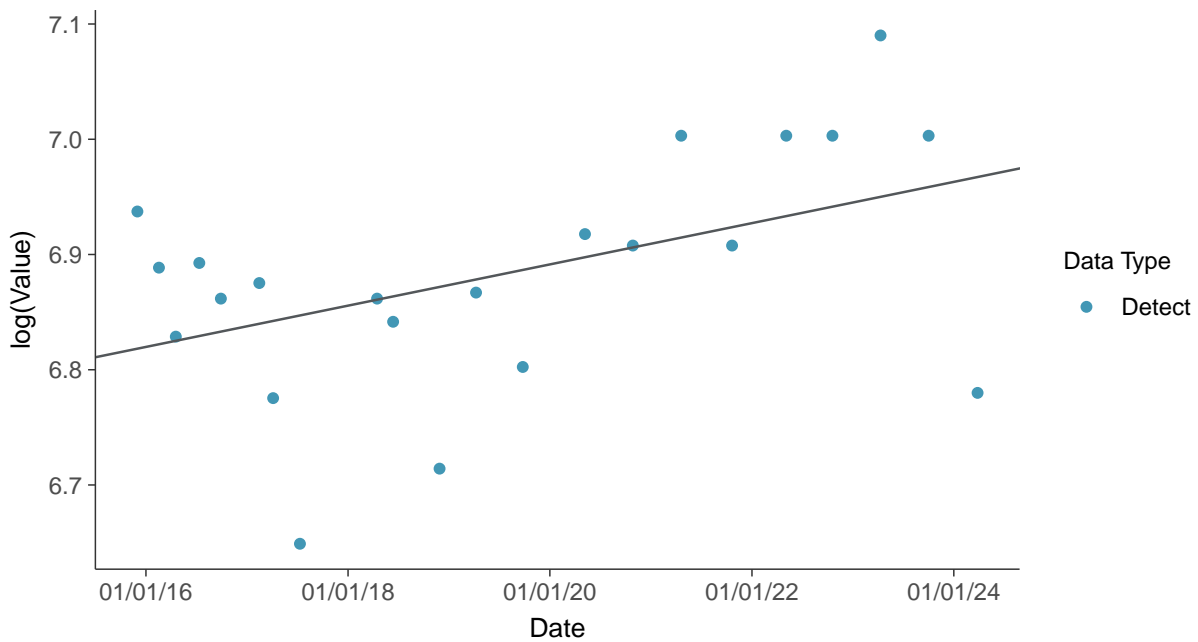
Gamma Q-Q plot

Barium, MW-15017 (ug/L)



Trend Regression: Lognormal MLE

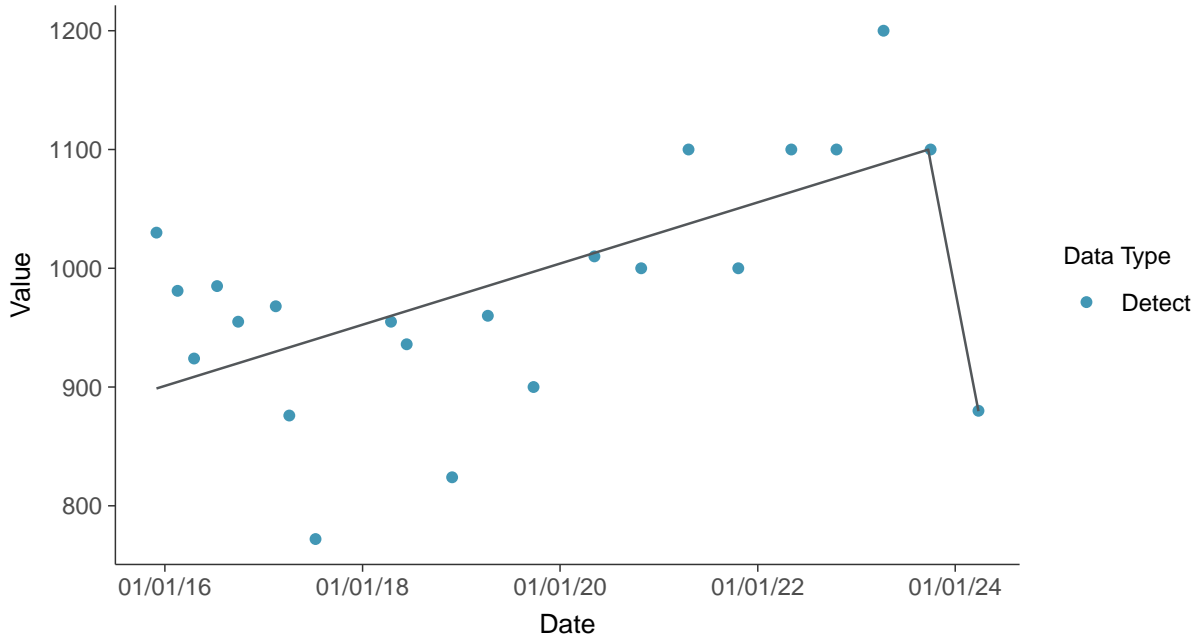
Barium, MW-15017 (ug/L)





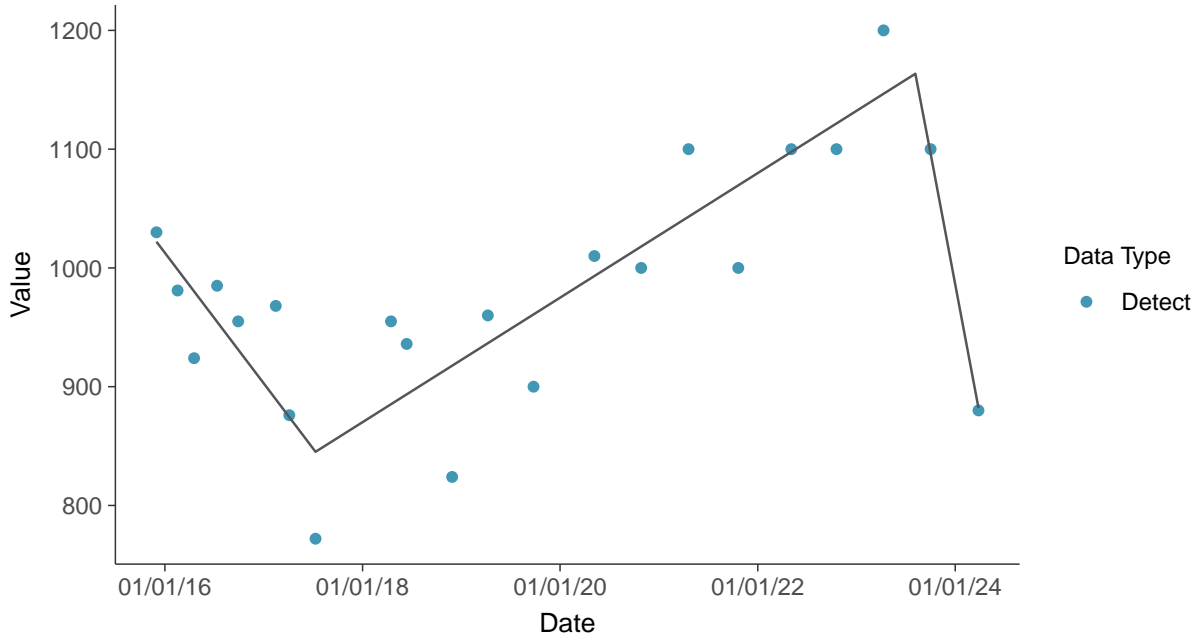
Trend Regression: Piecewise Linear-Linear

Barium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

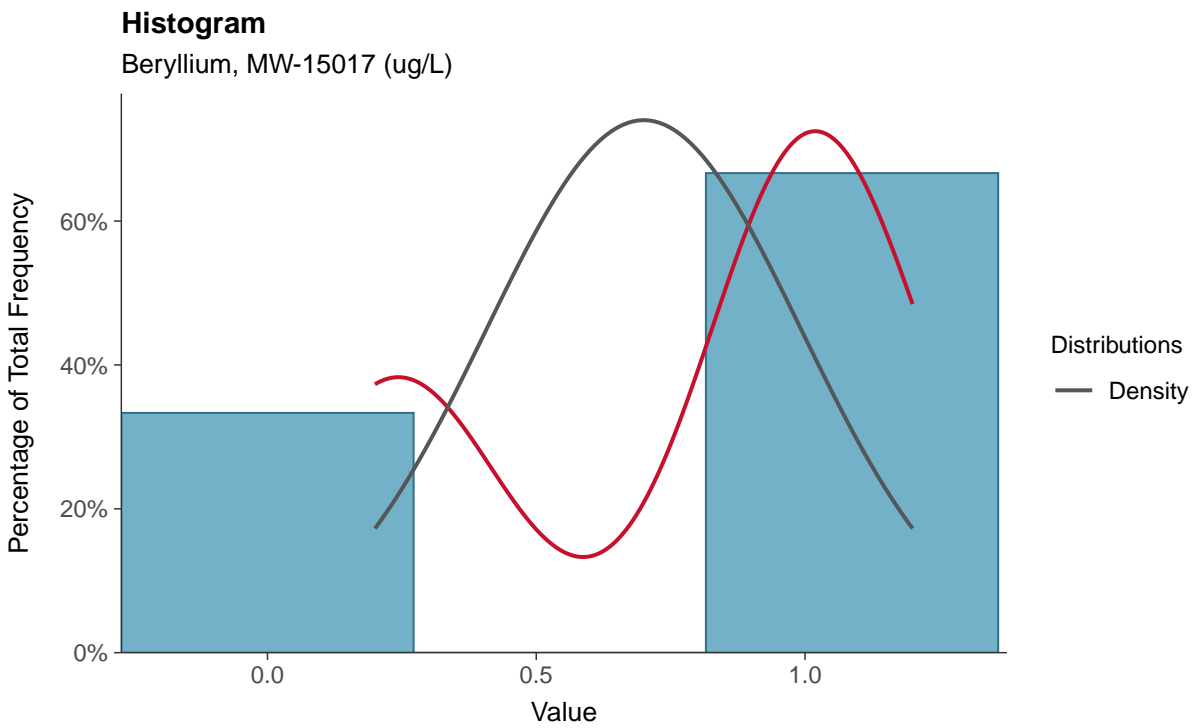
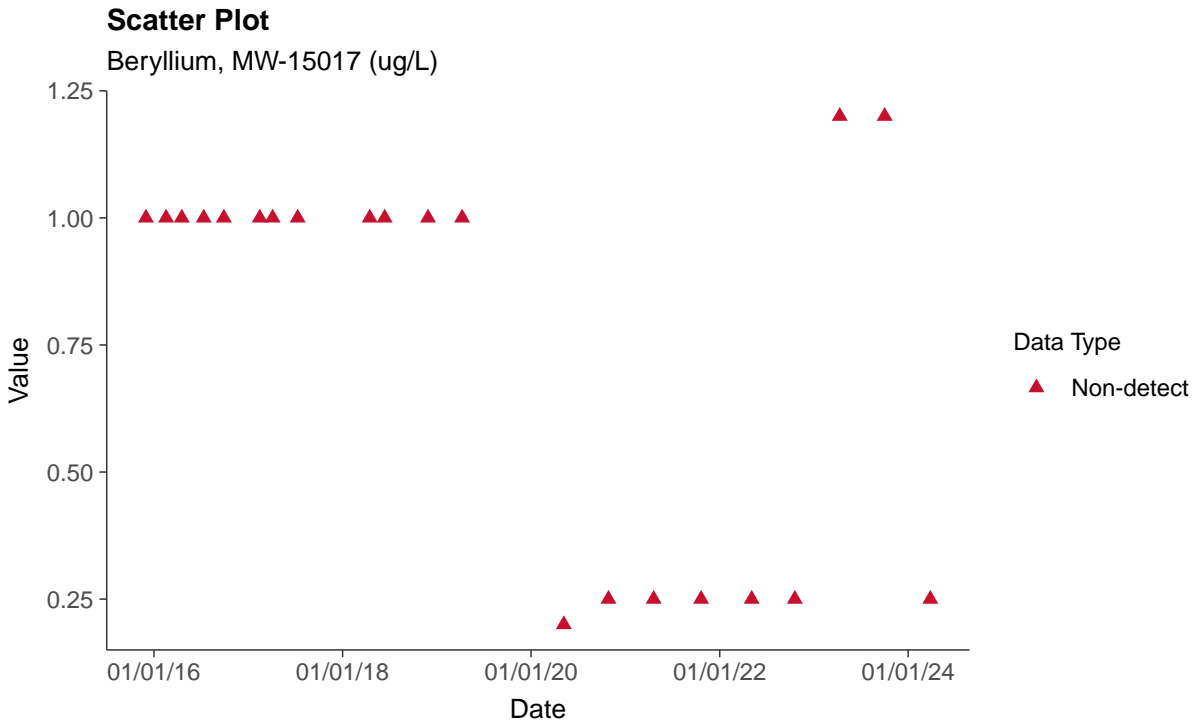
Barium, MW-15017 (ug/L)





Appendix IV: Beryllium, MW-15017

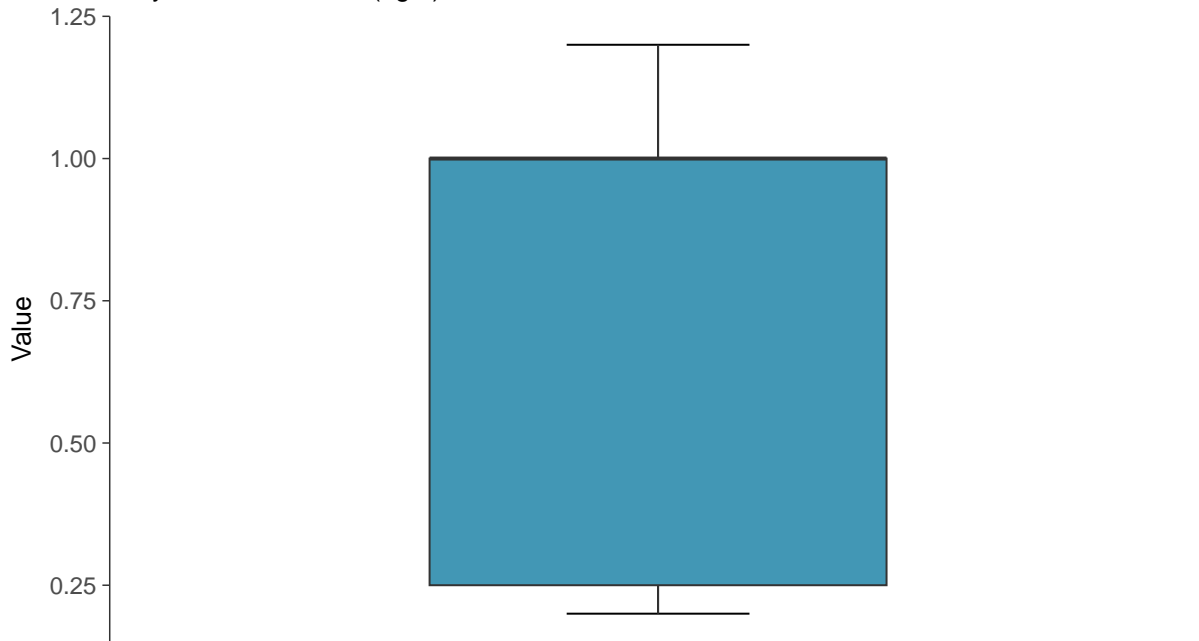
ID: 07_2_104





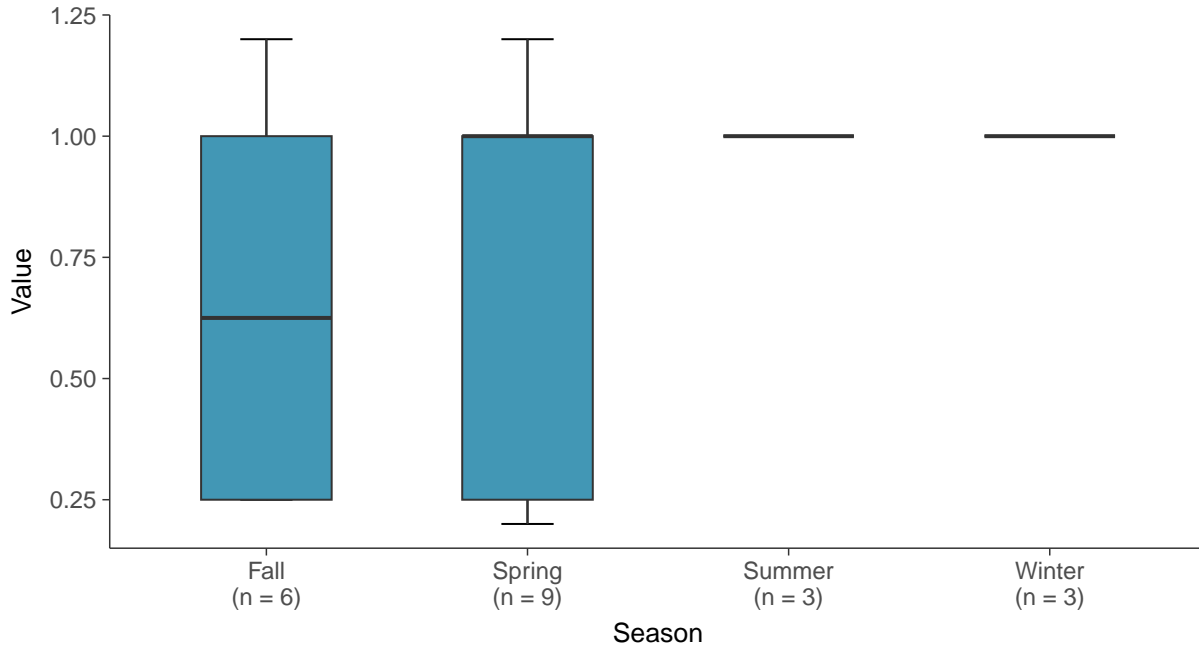
Boxplot

Beryllium, MW-15017 (ug/L)



Boxplot by Season

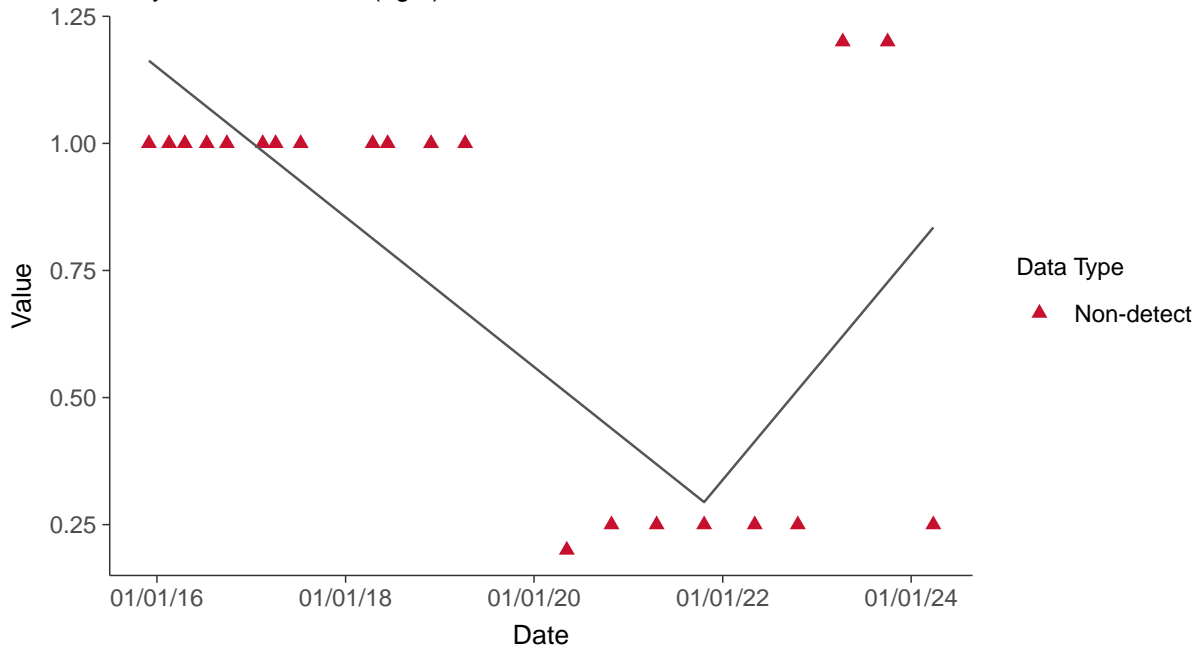
Beryllium, MW-15017 (ug/L)





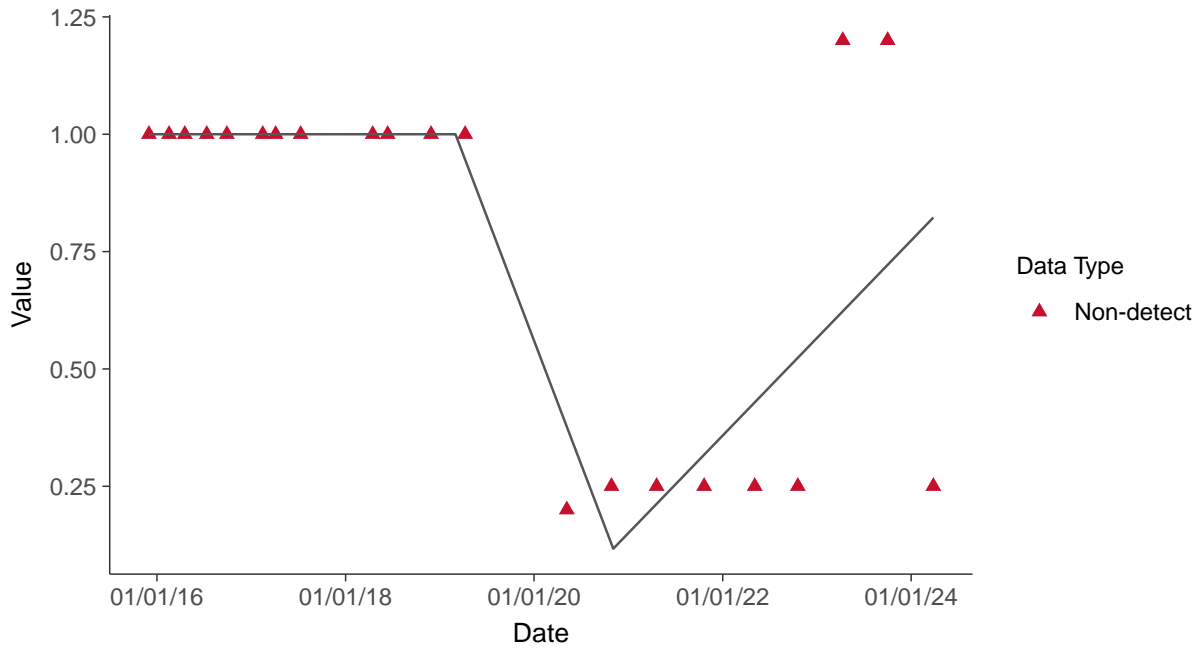
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

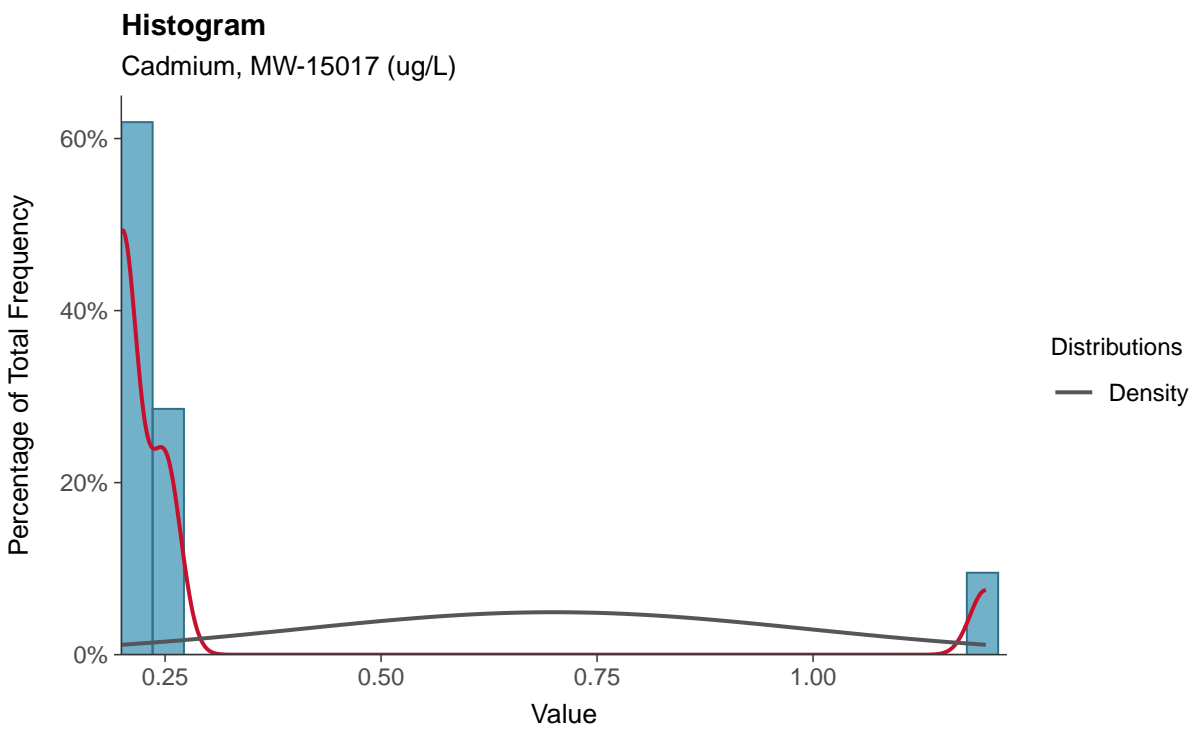
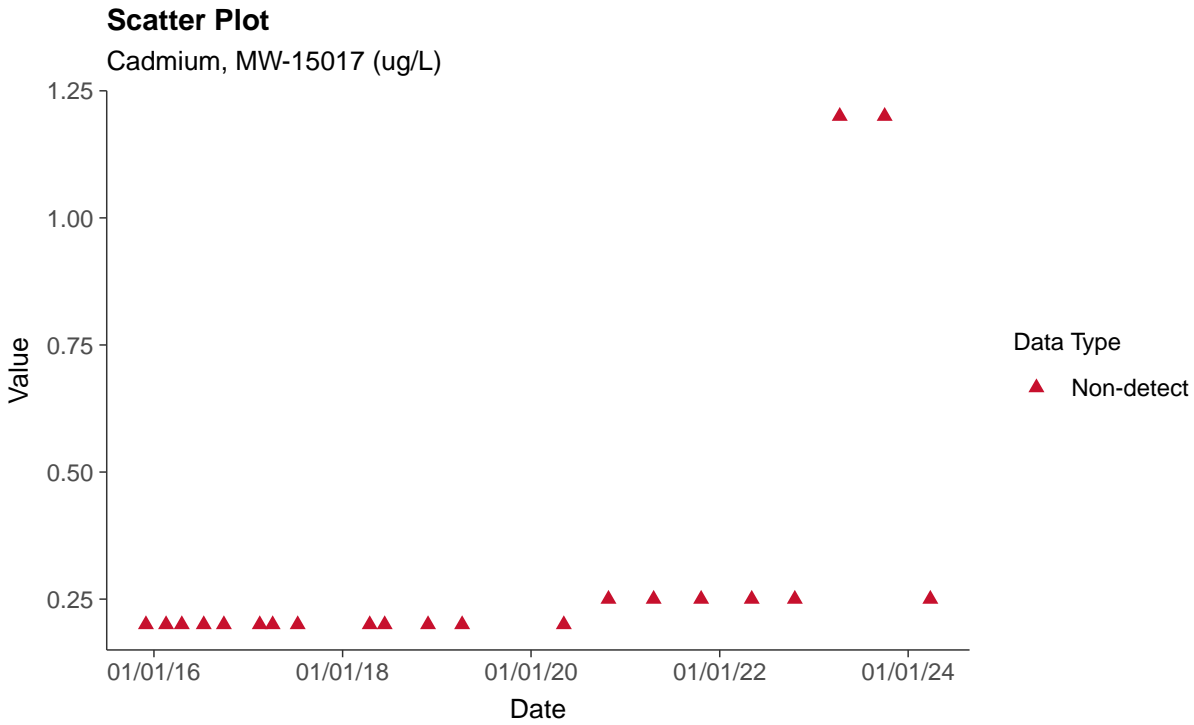
Beryllium, MW-15017 (ug/L)

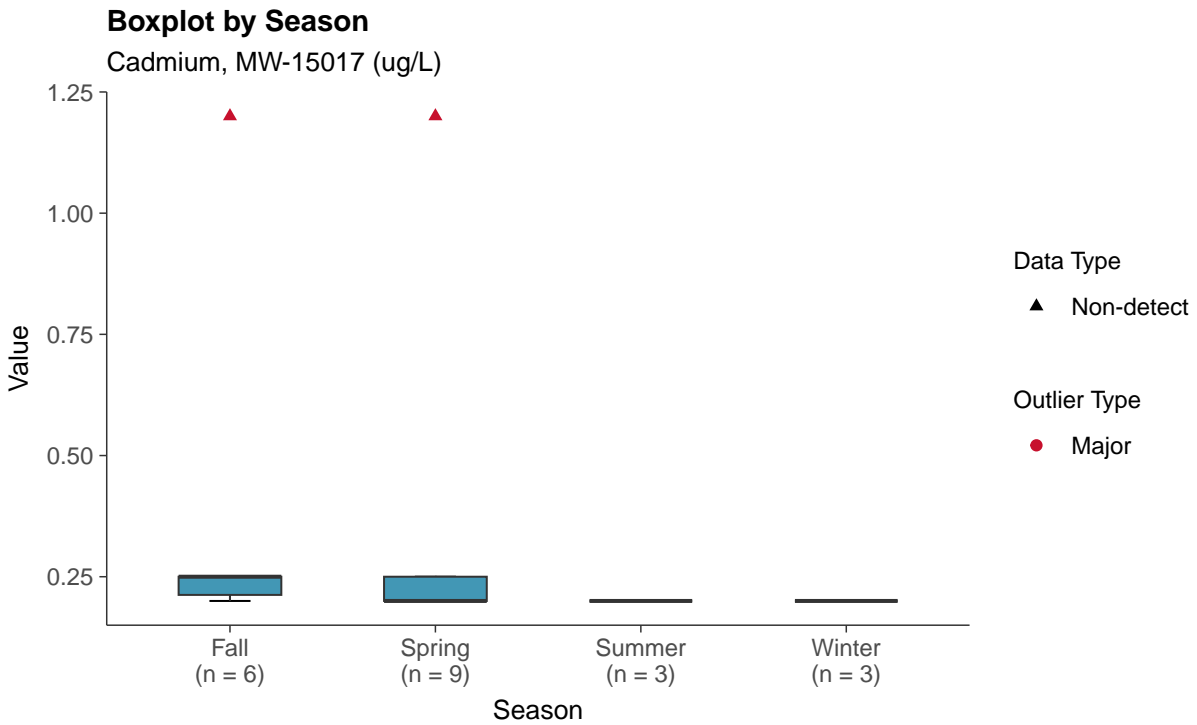
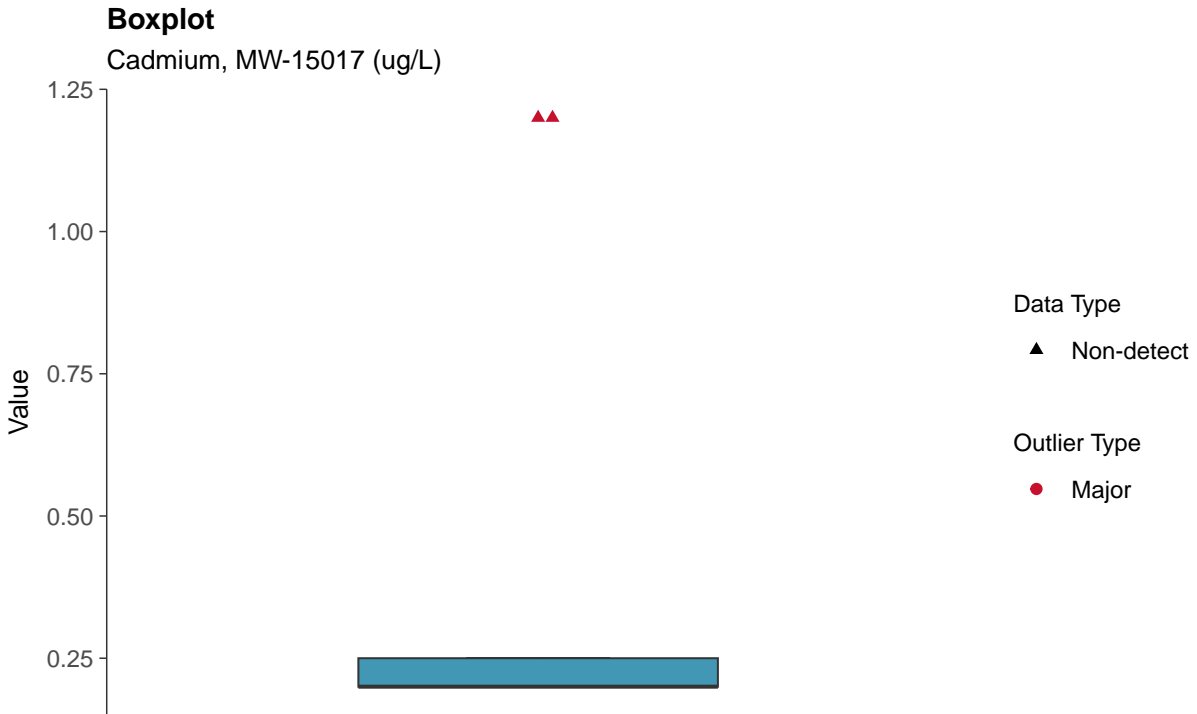




Appendix IV: Cadmium, MW-15017

ID: 07_2_106

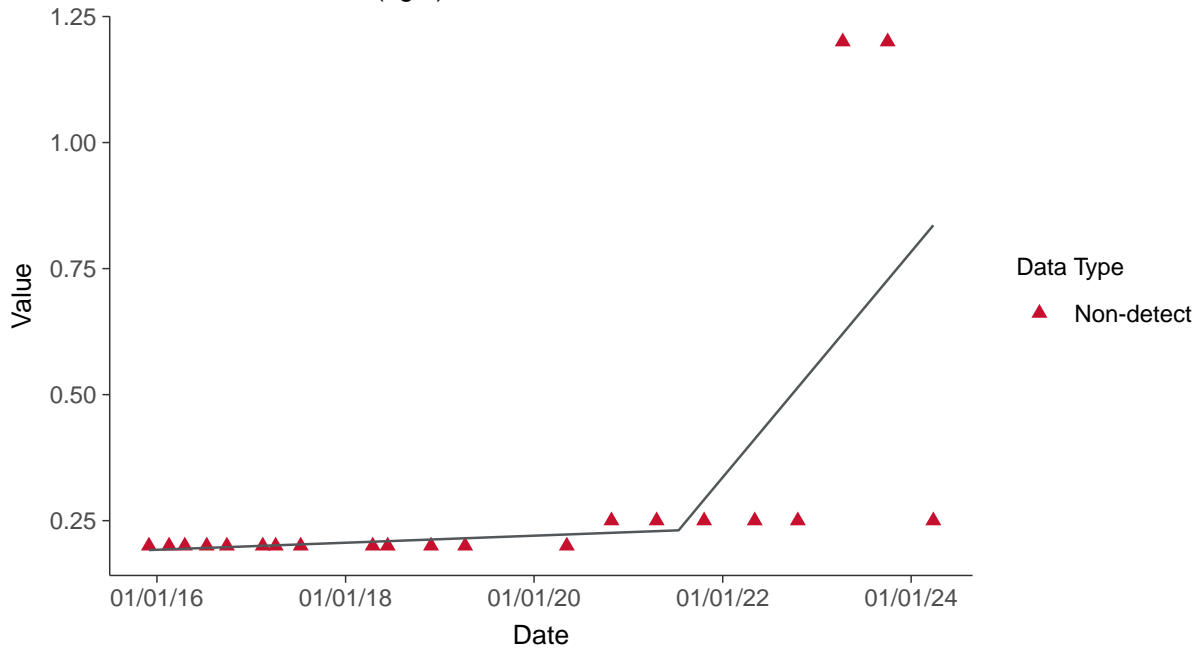






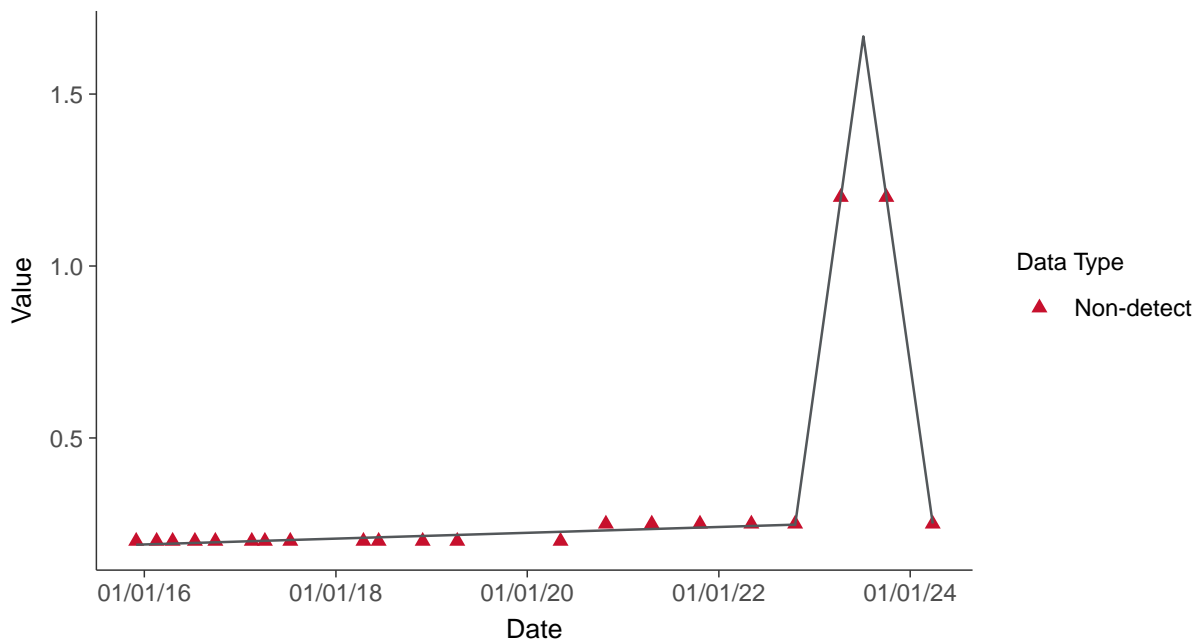
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15017 (ug/L)



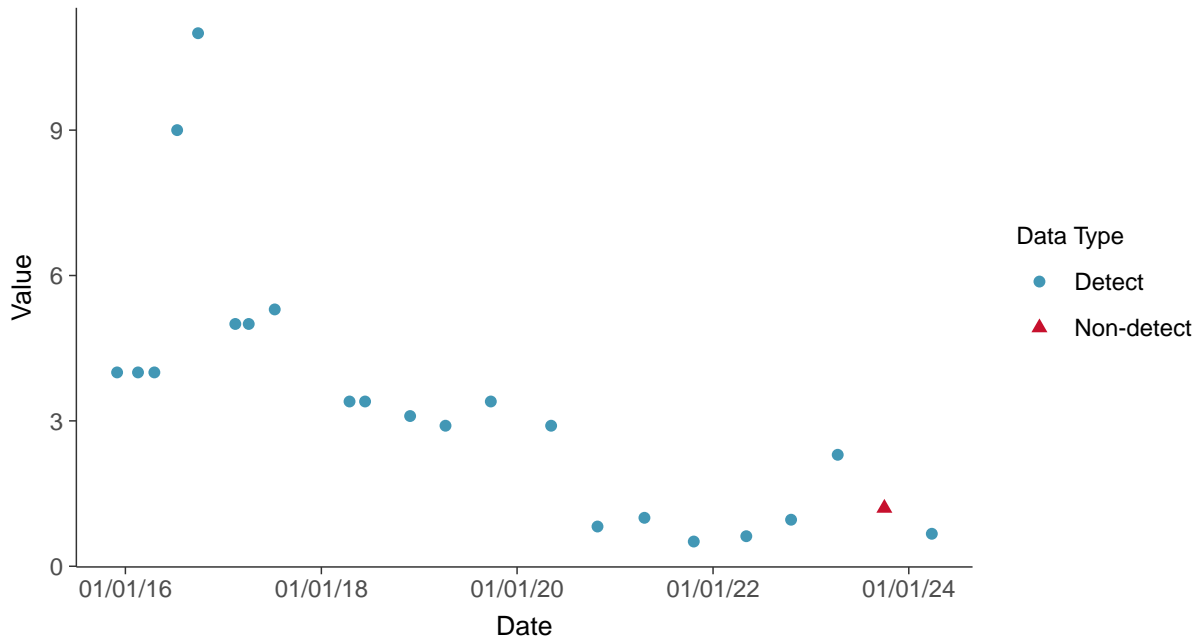


Appendix IV: Chromium, MW-15017

ID: 07_2_109

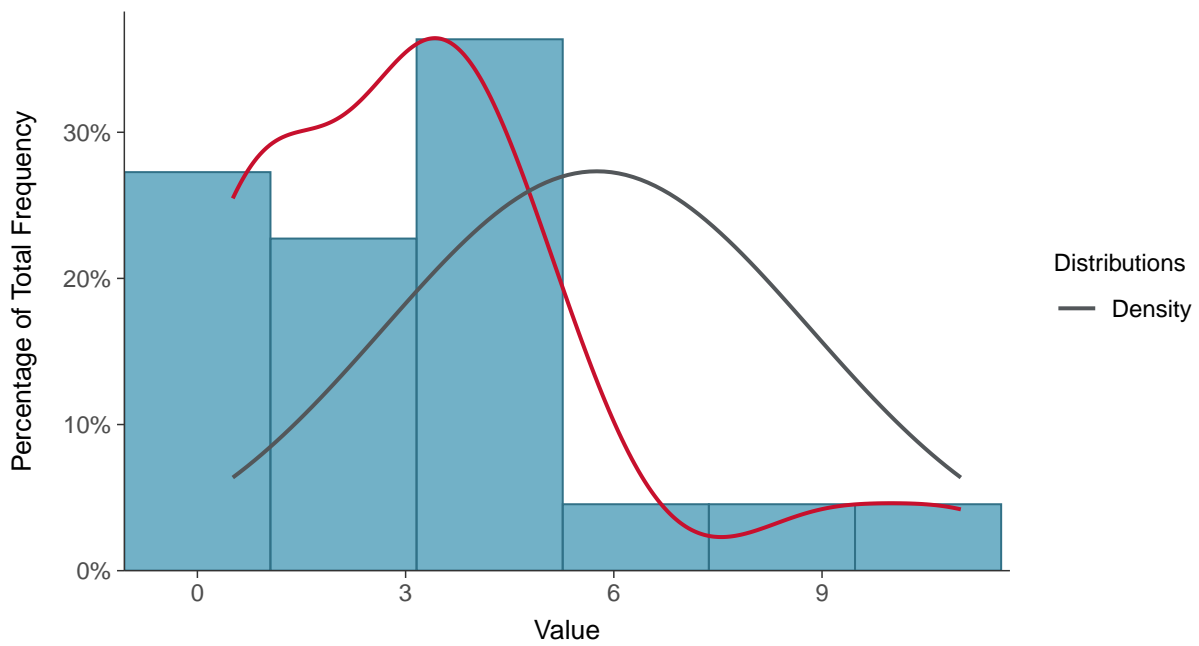
Scatter Plot

Chromium, MW-15017 (ug/L)



Histogram

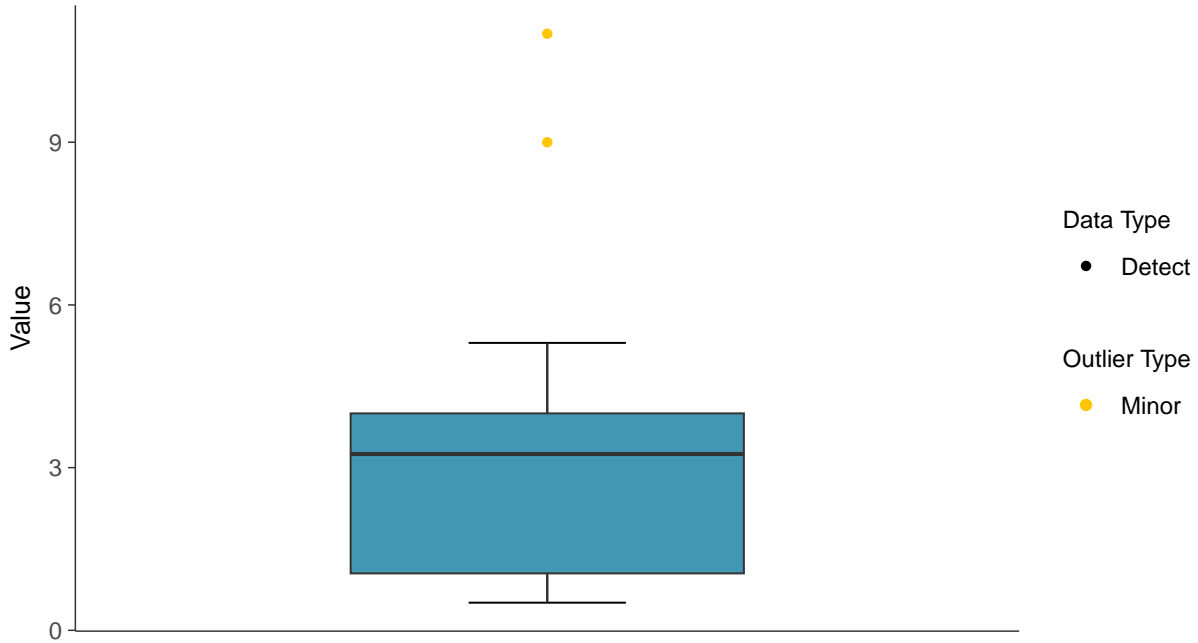
Chromium, MW-15017 (ug/L)





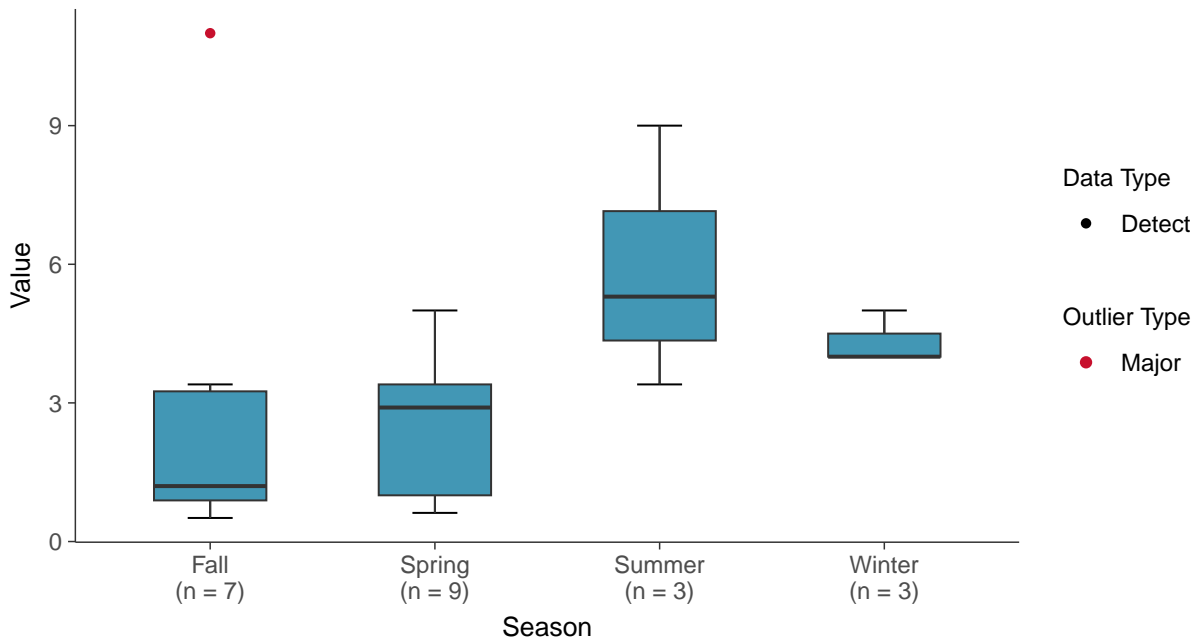
Boxplot

Chromium, MW-15017 (ug/L)



Boxplot by Season

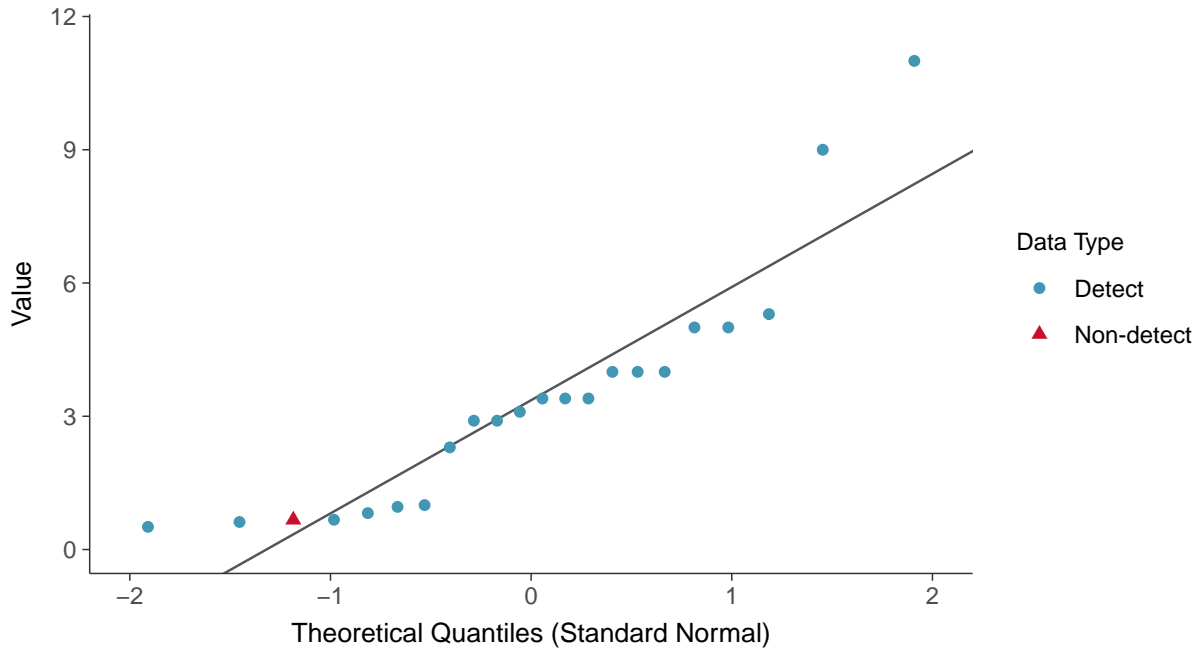
Chromium, MW-15017 (ug/L)





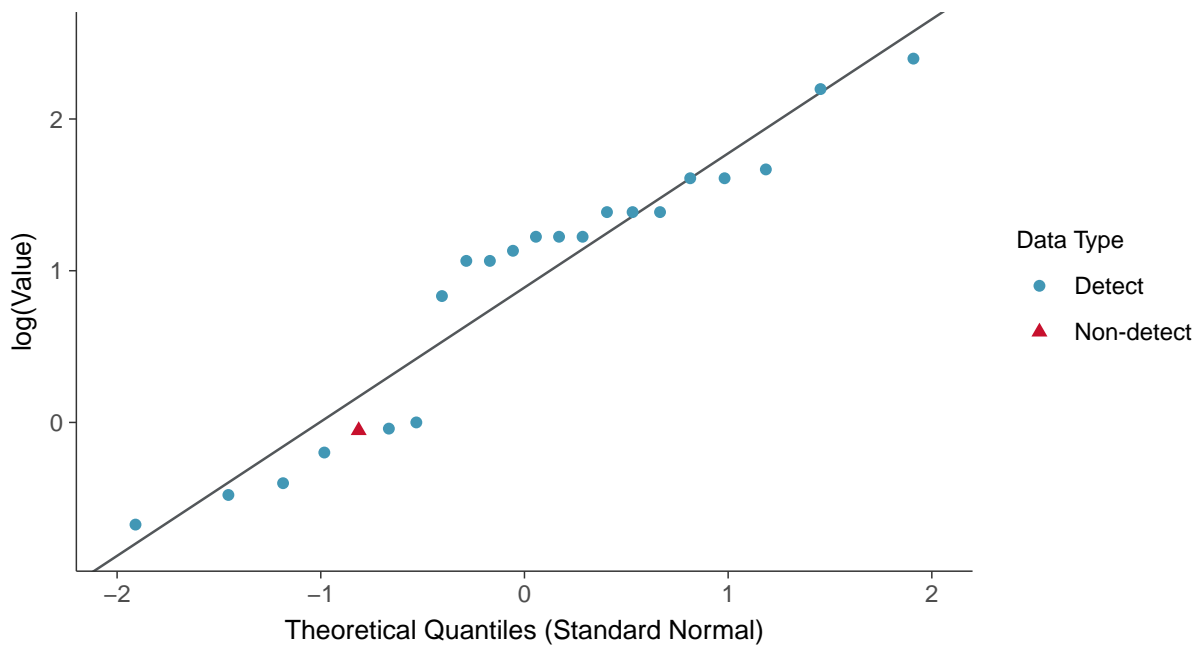
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15017 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

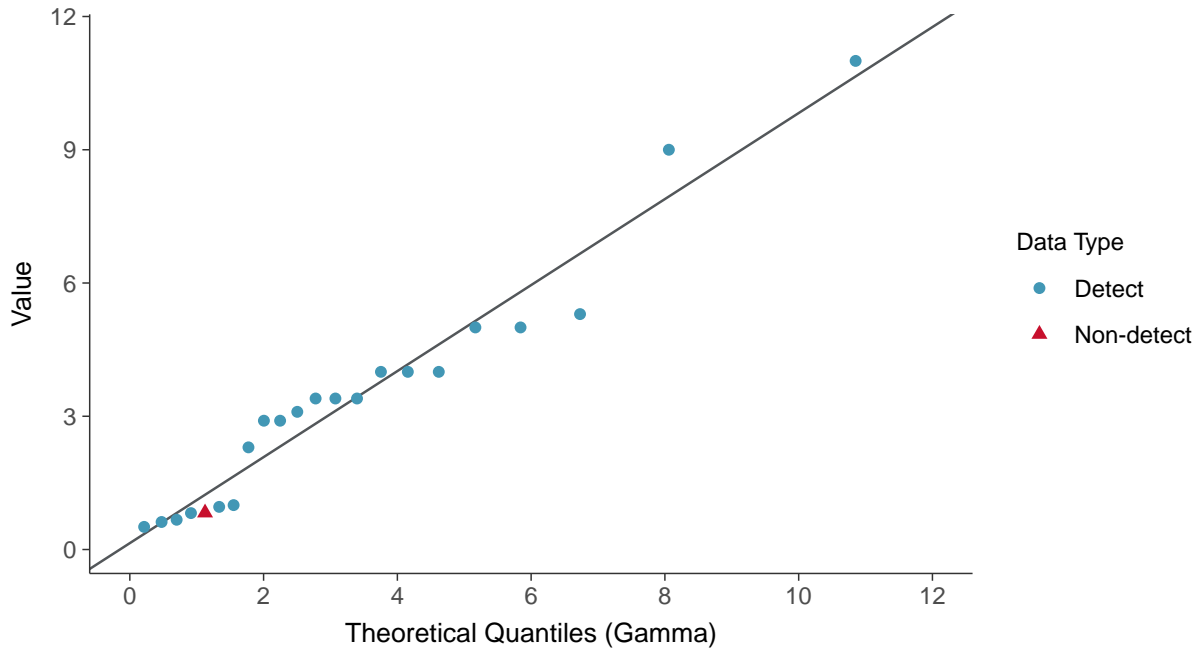
Chromium, MW-15017 (ug/L)





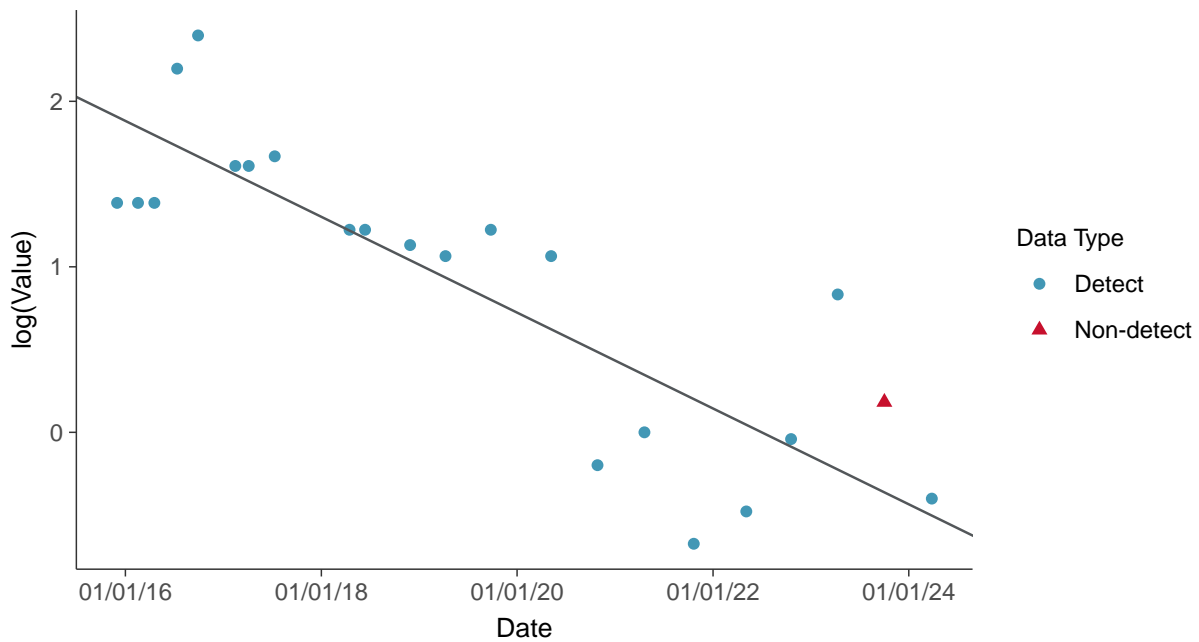
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15017 (ug/L)



Trend Regression: Lognormal MLE

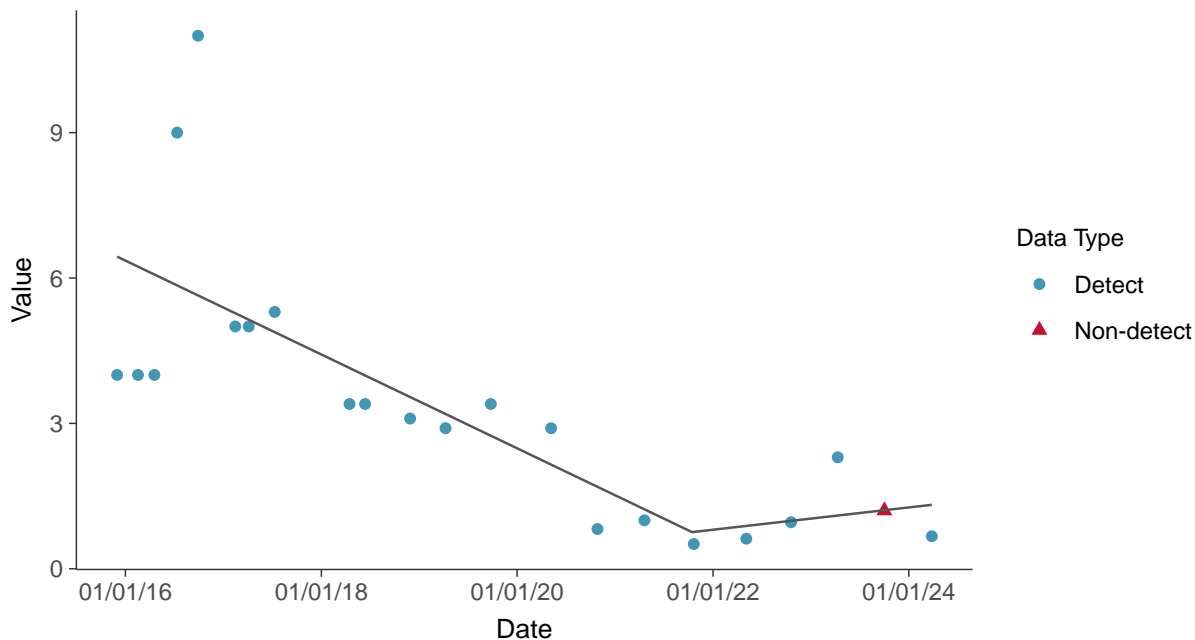
Chromium, MW-15017 (ug/L)





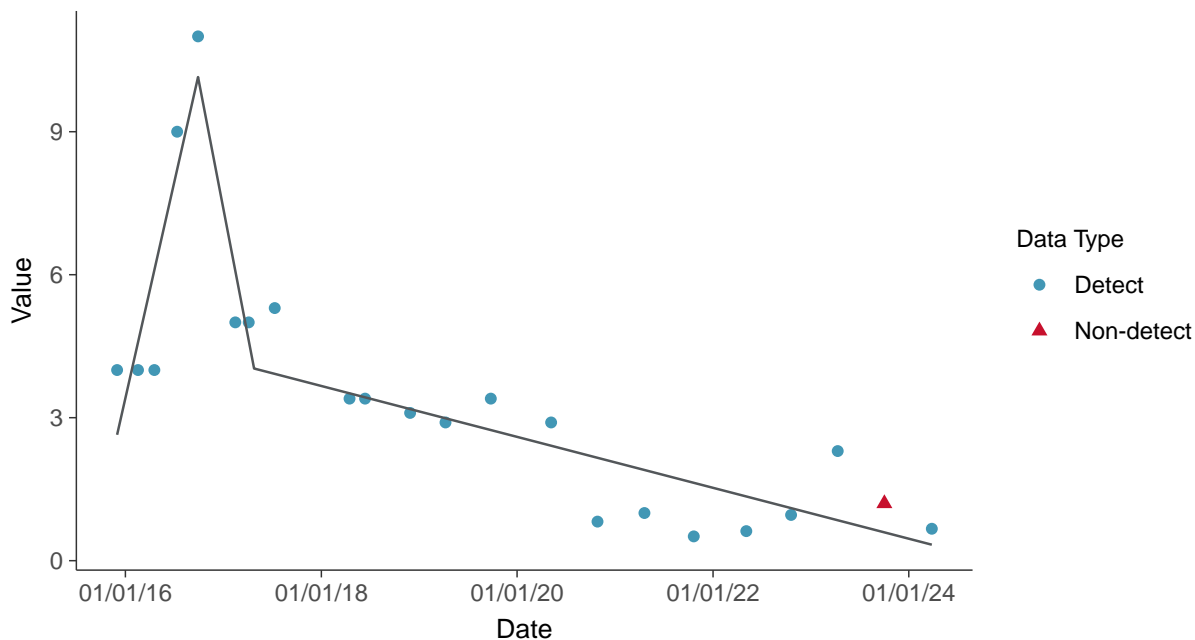
Trend Regression: Piecewise Linear-Linear

Chromium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

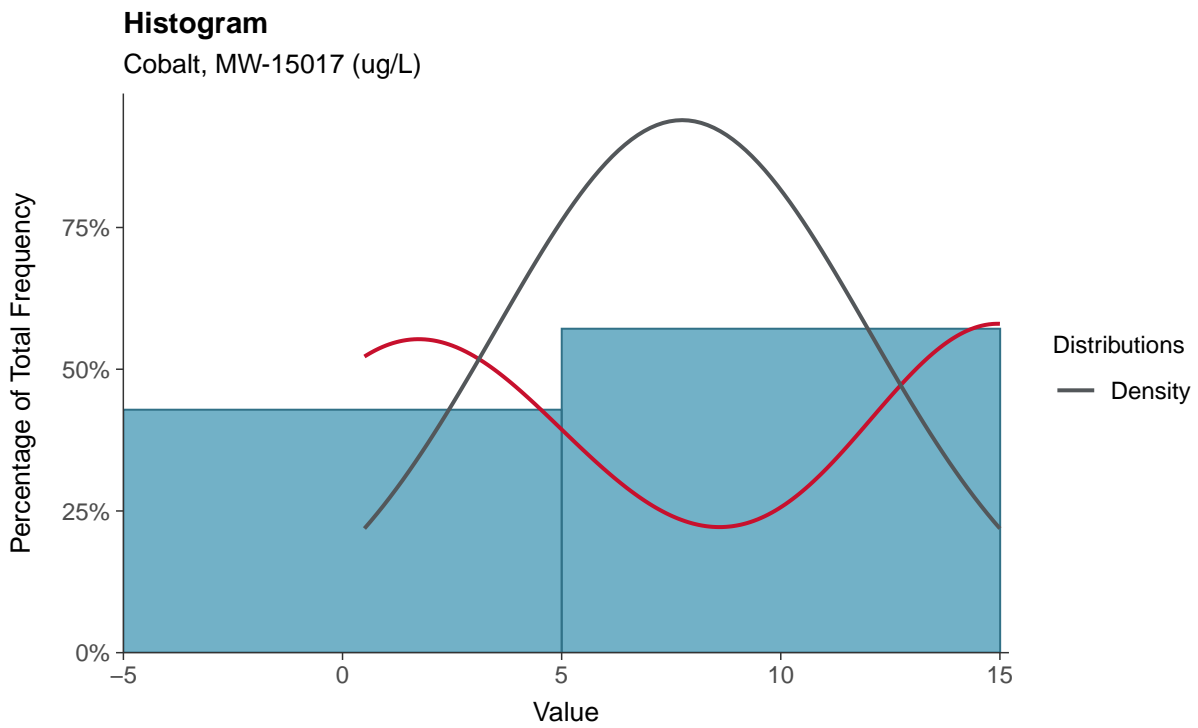
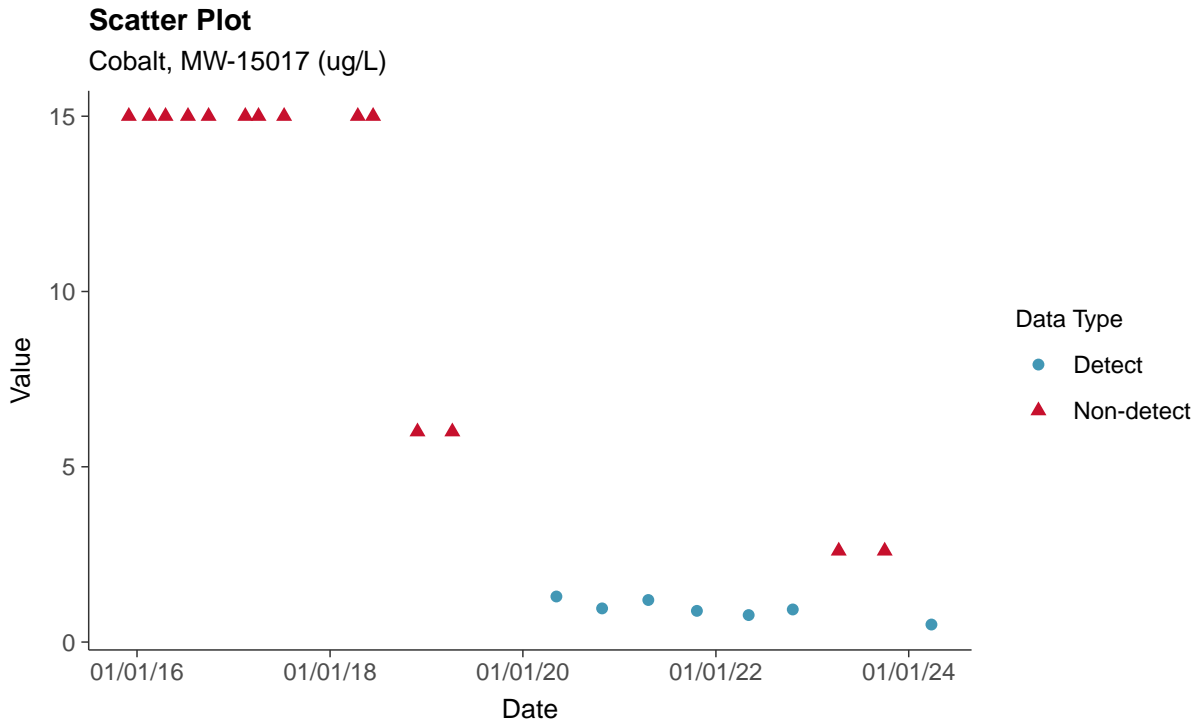
Chromium, MW-15017 (ug/L)





Appendix IV: Cobalt, MW-15017

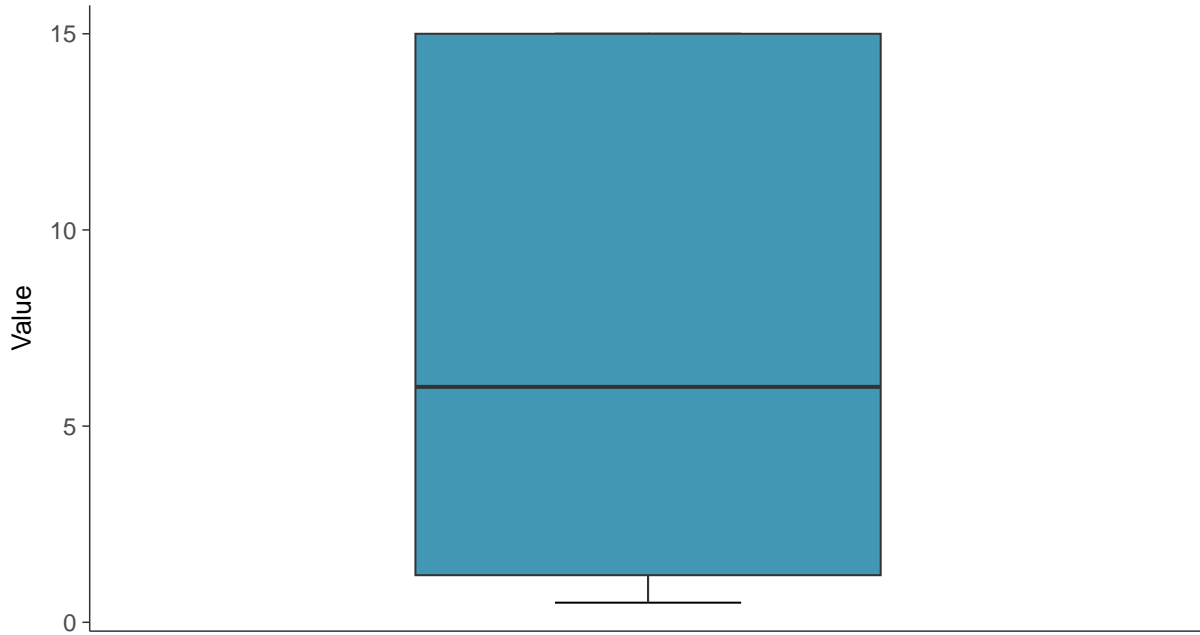
ID: 07_2_110





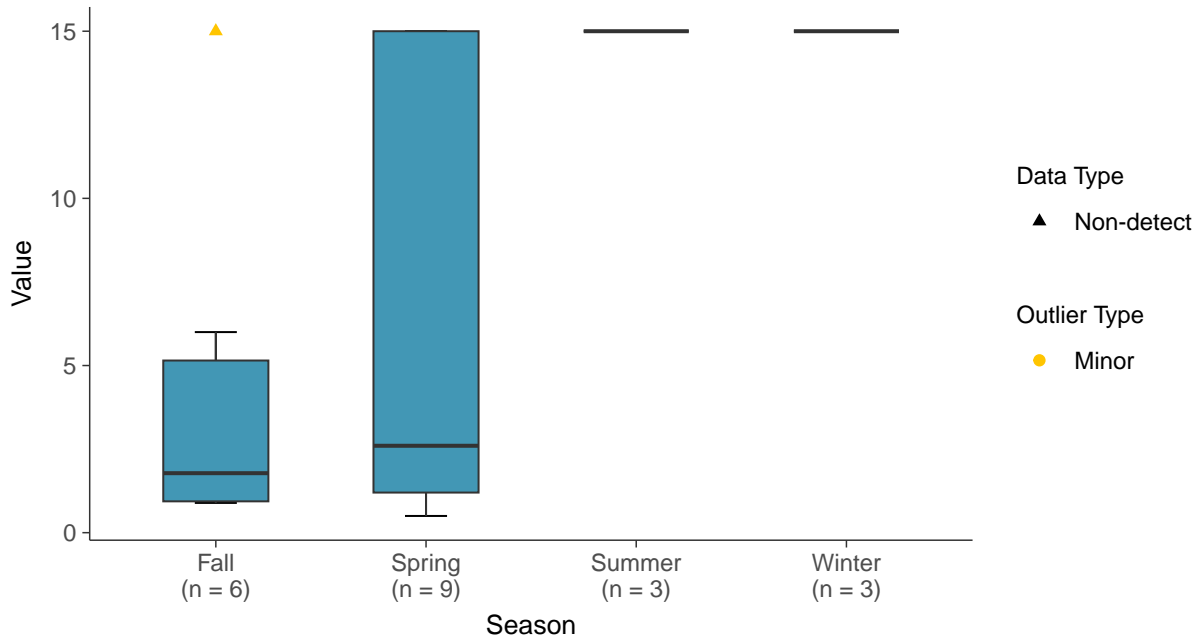
Boxplot

Cobalt, MW-15017 (ug/L)



Boxplot by Season

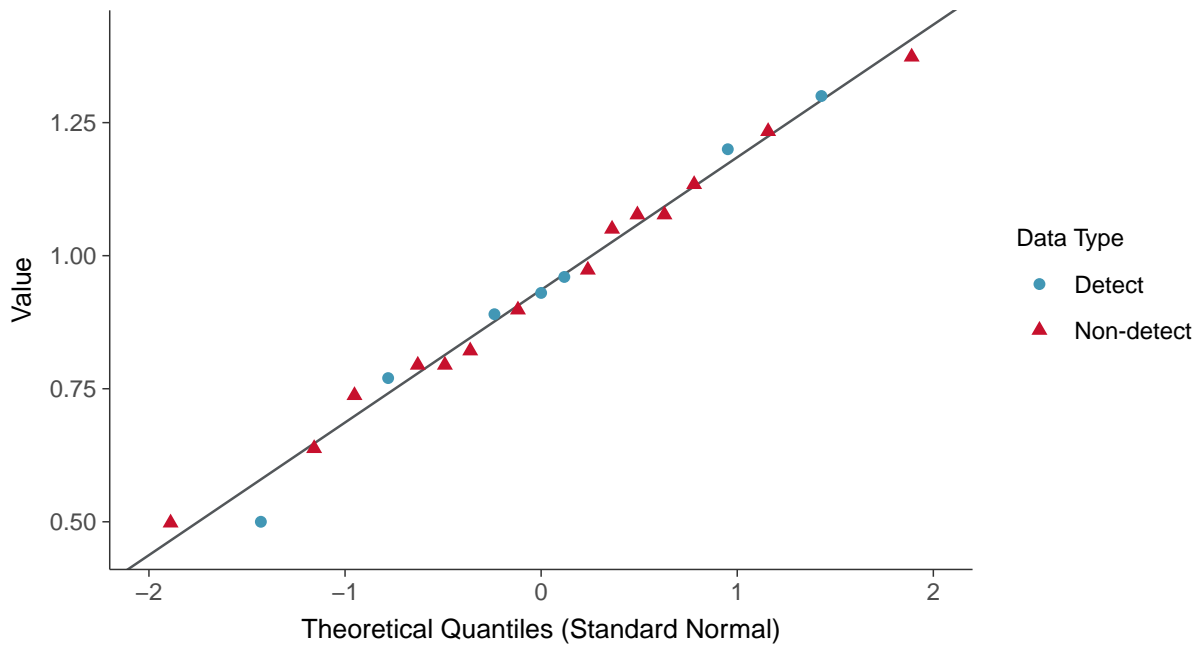
Cobalt, MW-15017 (ug/L)





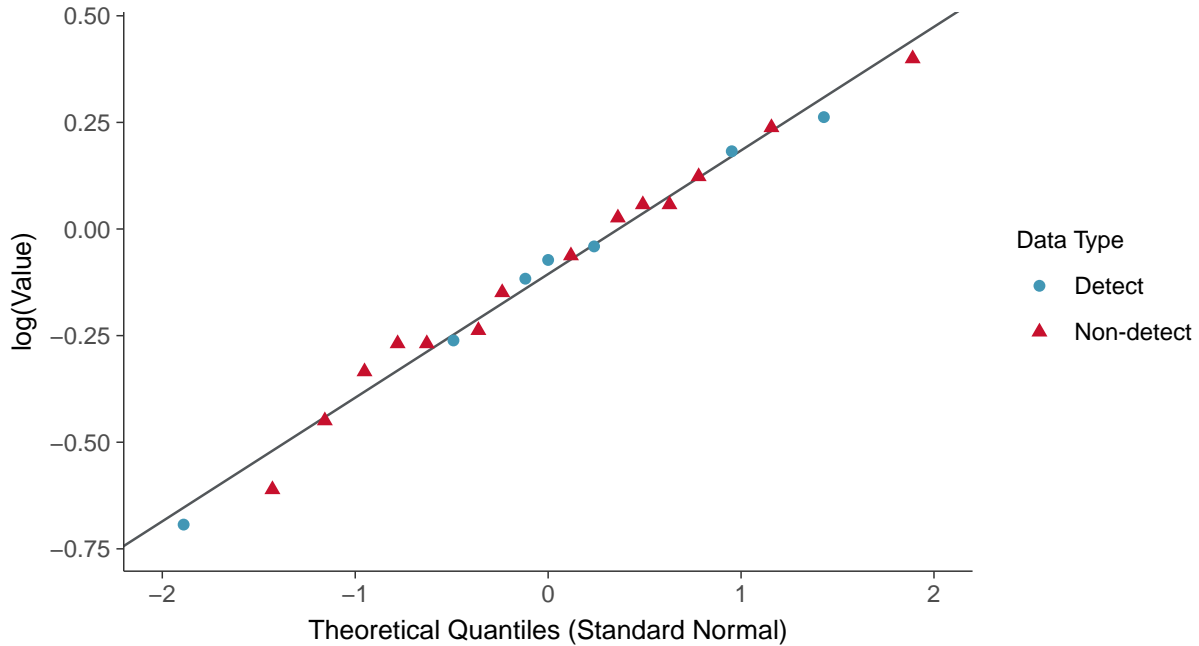
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15017 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

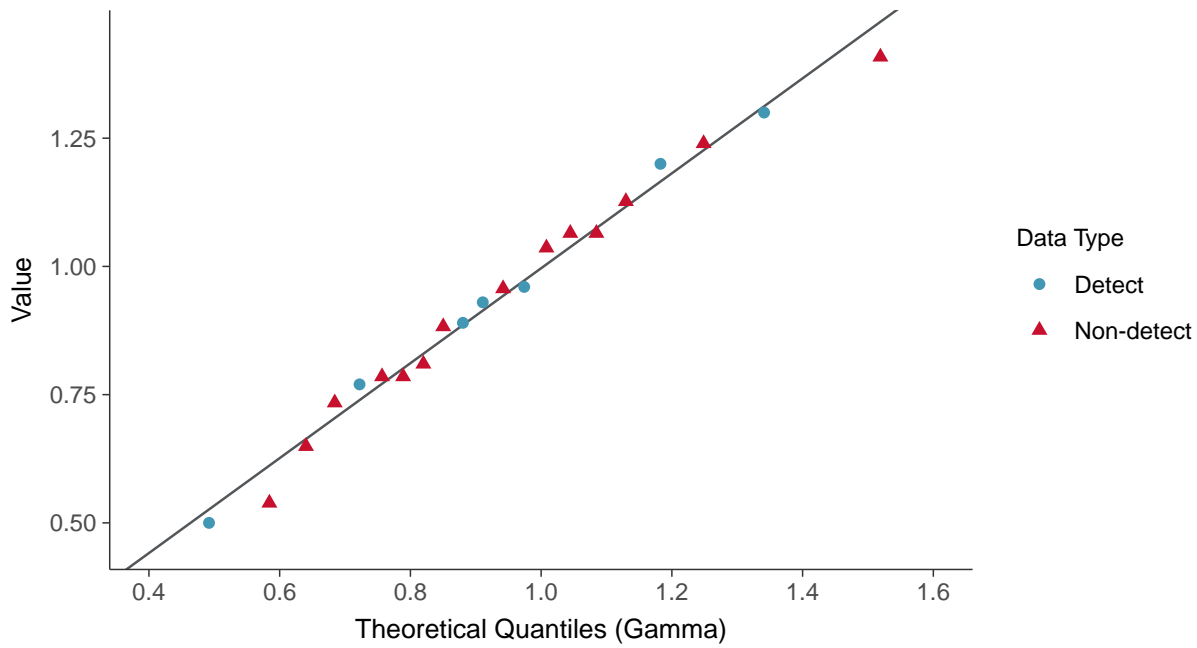
Cobalt, MW-15017 (ug/L)





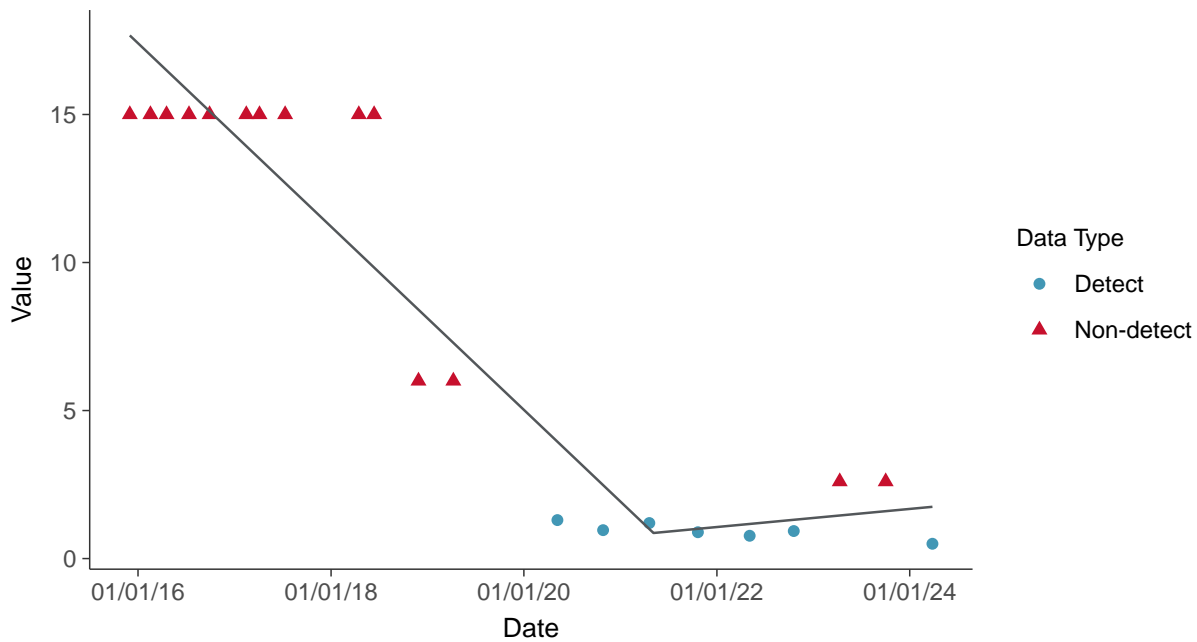
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear

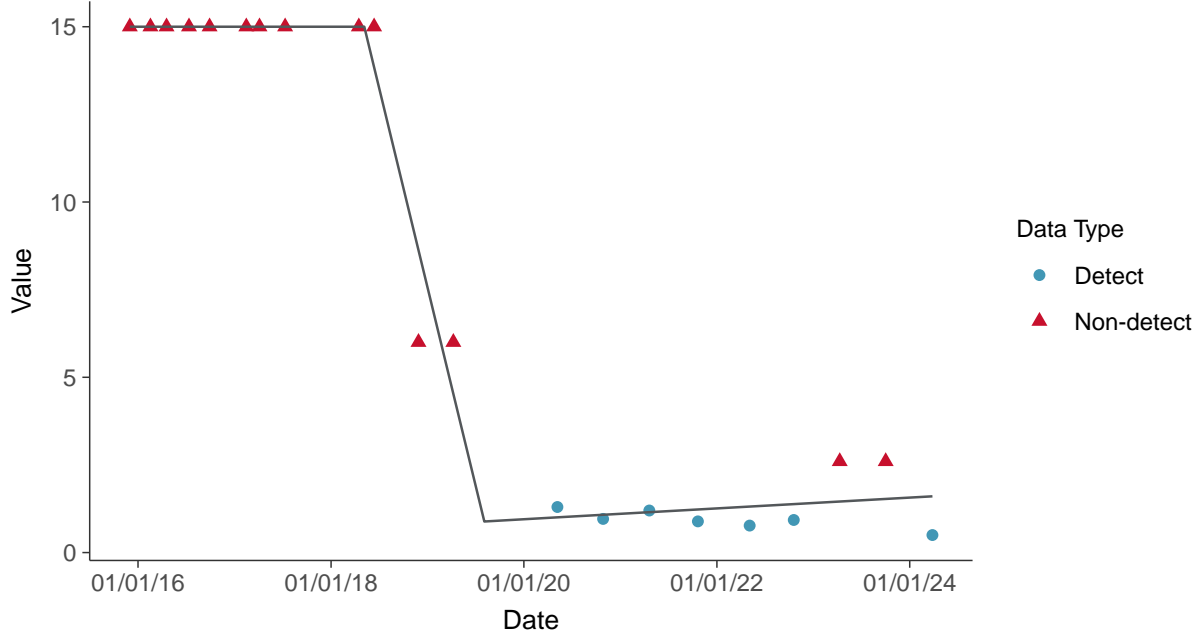
Cobalt, MW-15017 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

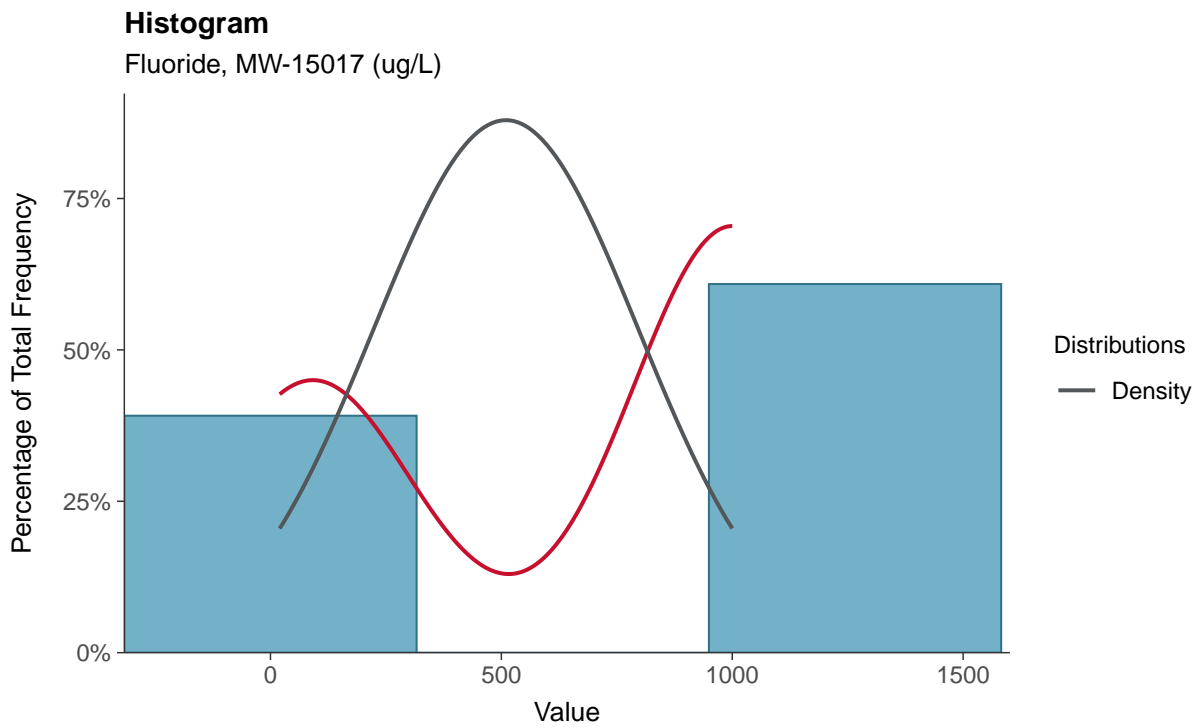
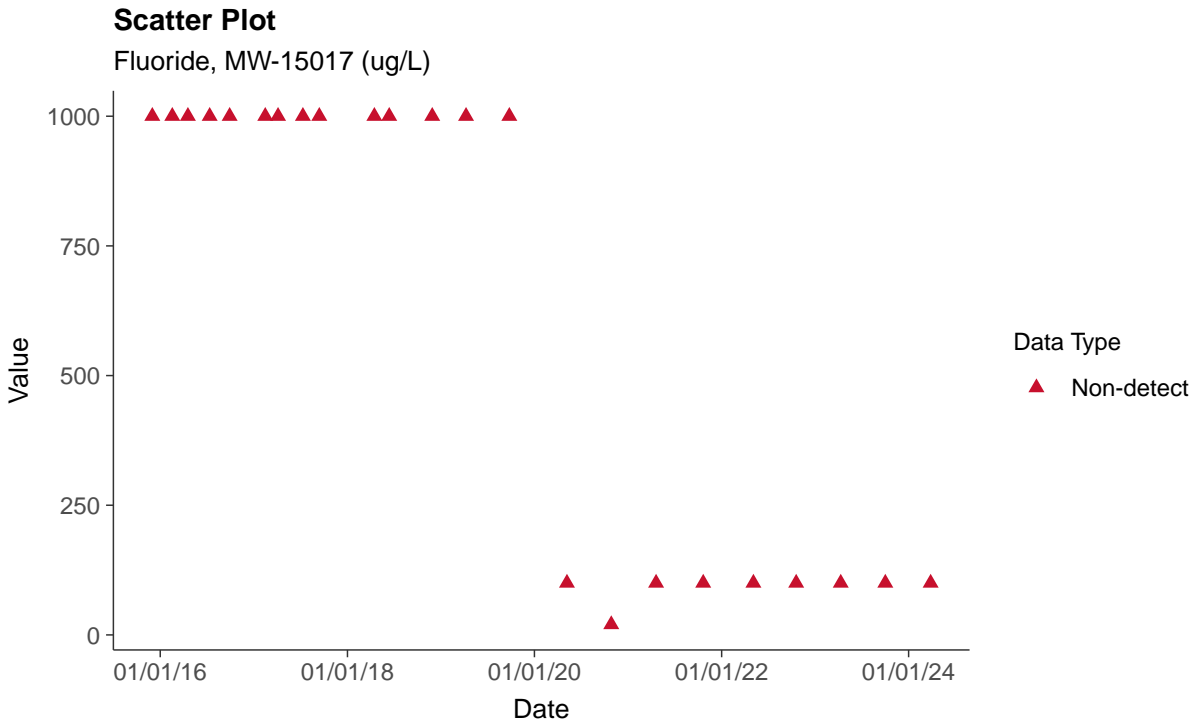
Cobalt, MW-15017 (ug/L)





Appendix IV: Fluoride, MW-15017

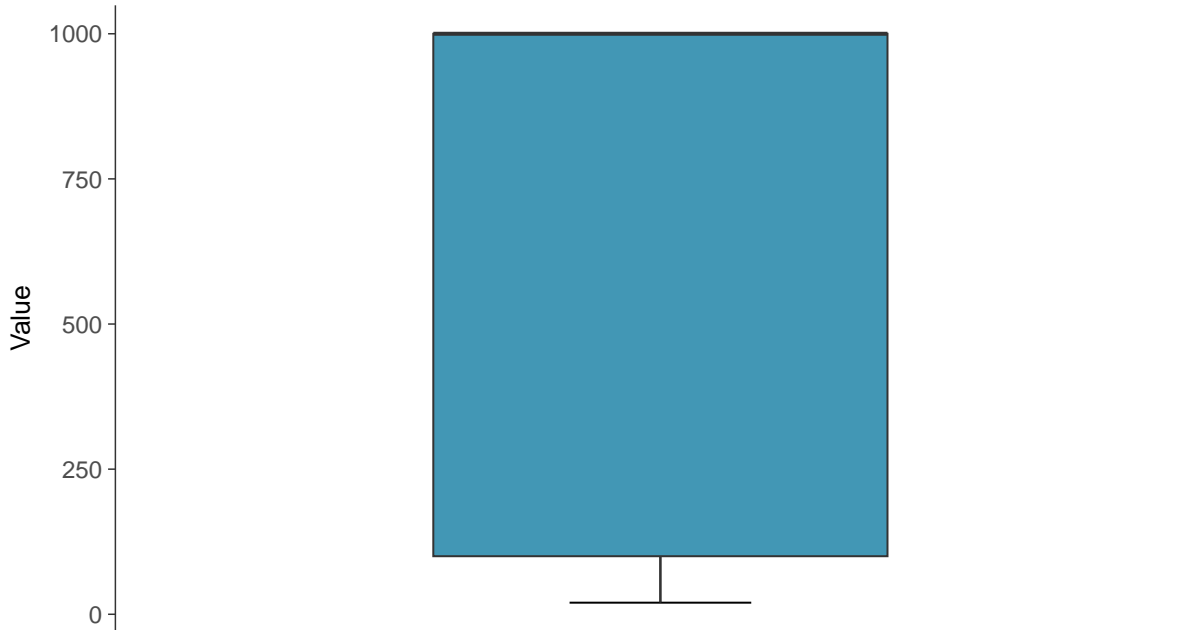
ID: 07_2_114





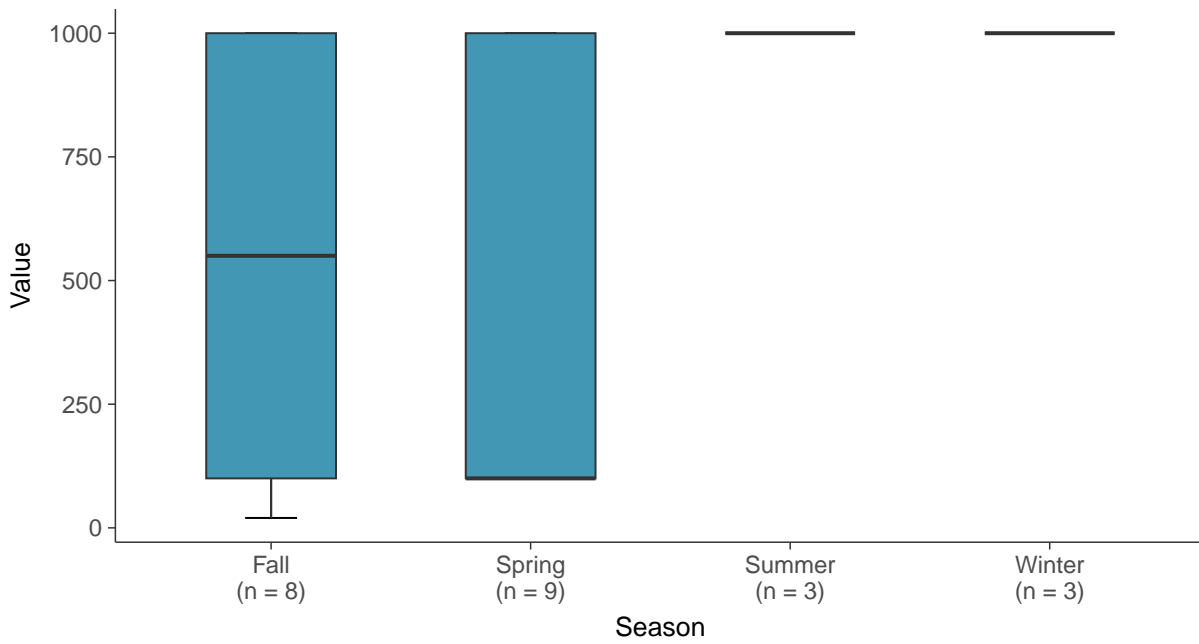
Boxplot

Fluoride, MW-15017 (ug/L)



Boxplot by Season

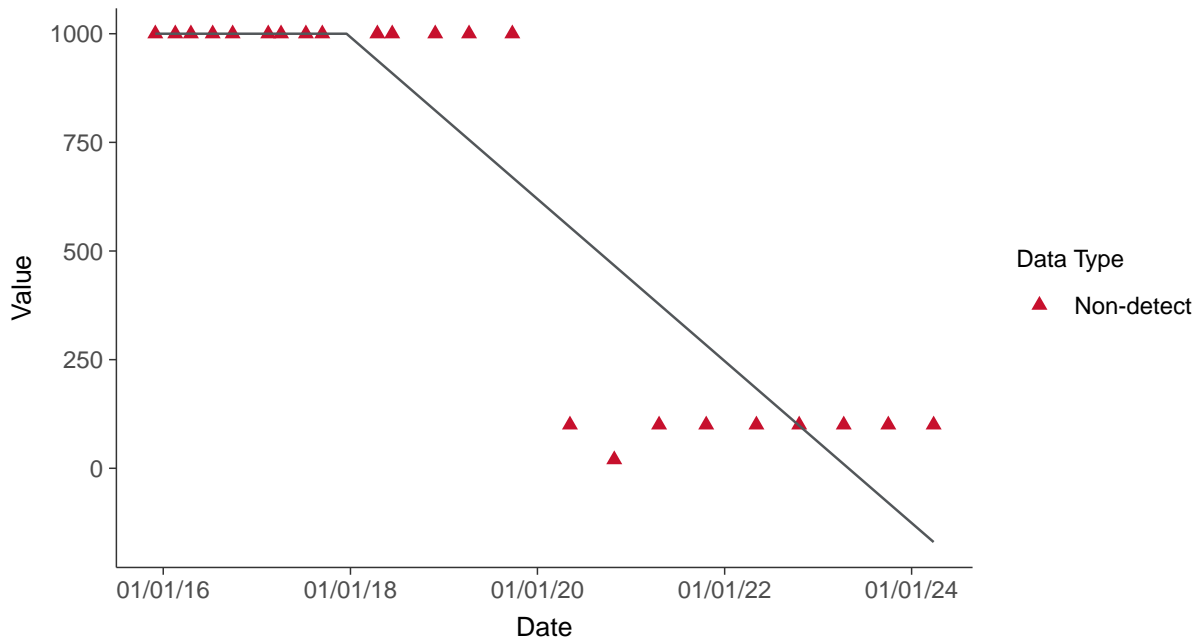
Fluoride, MW-15017 (ug/L)





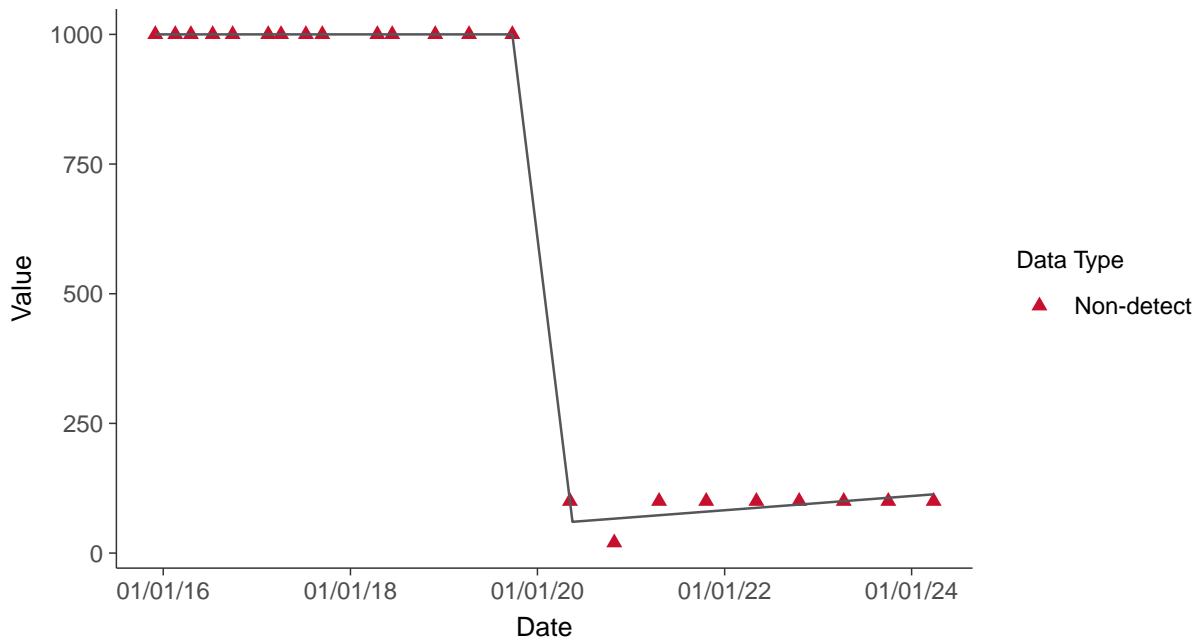
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

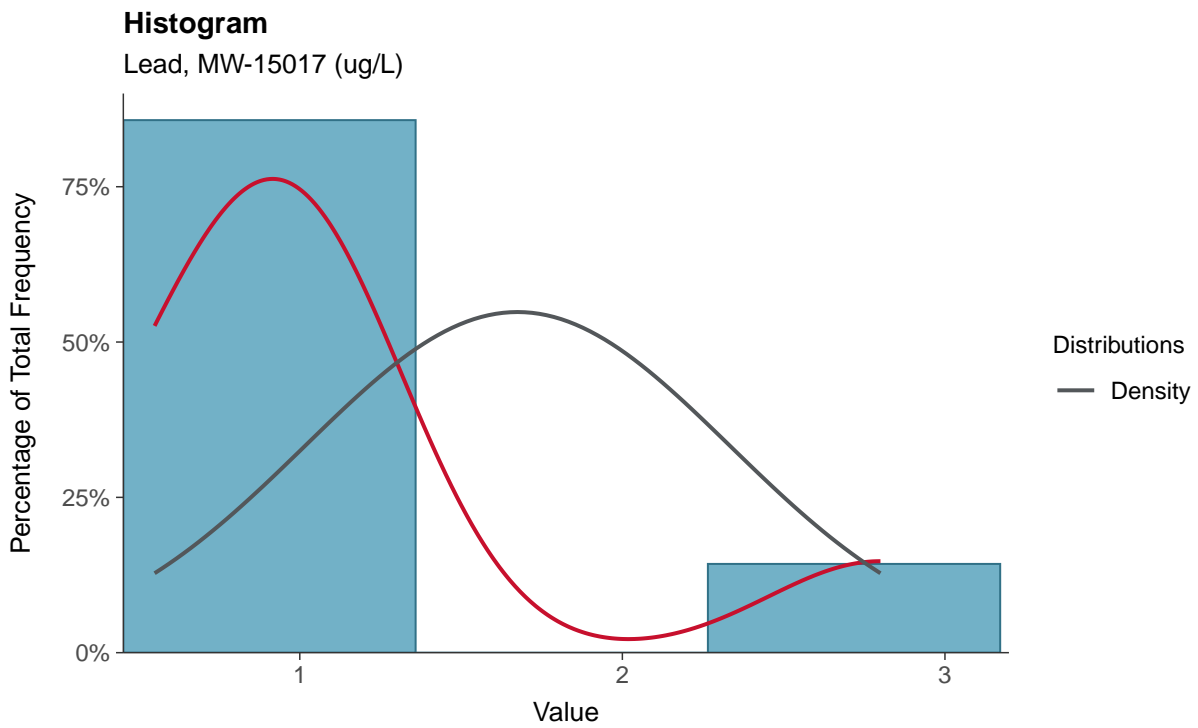
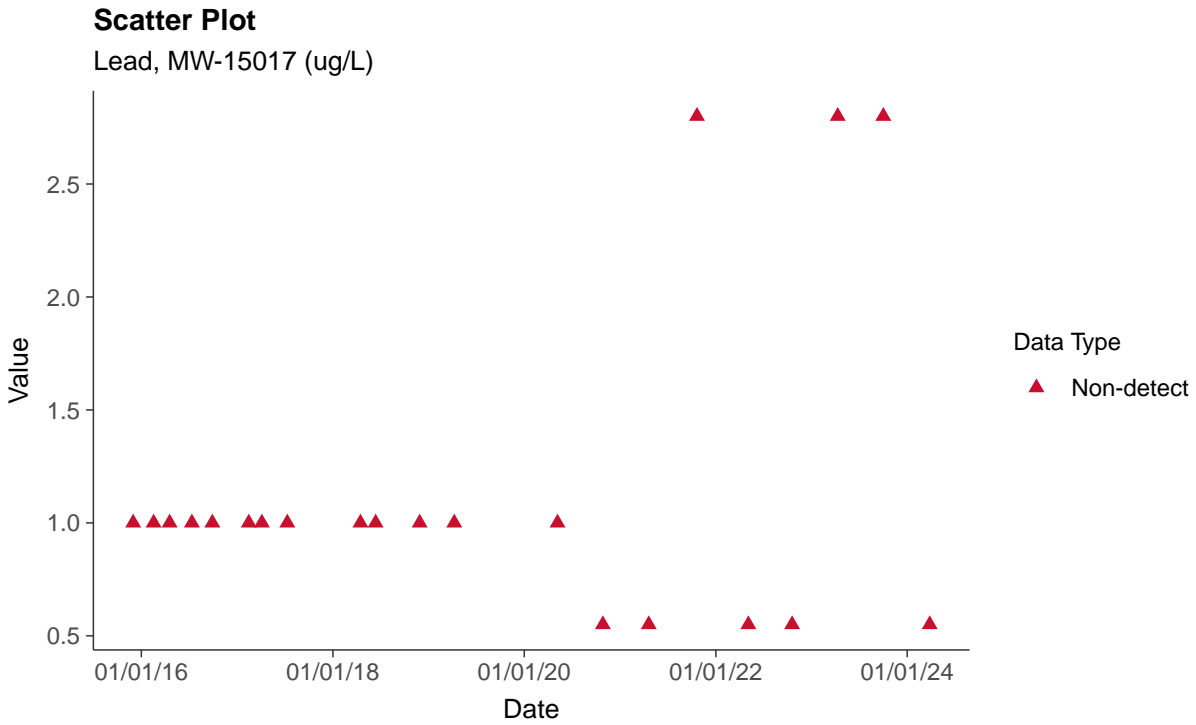
Fluoride, MW-15017 (ug/L)





Appendix IV: Lead, MW-15017

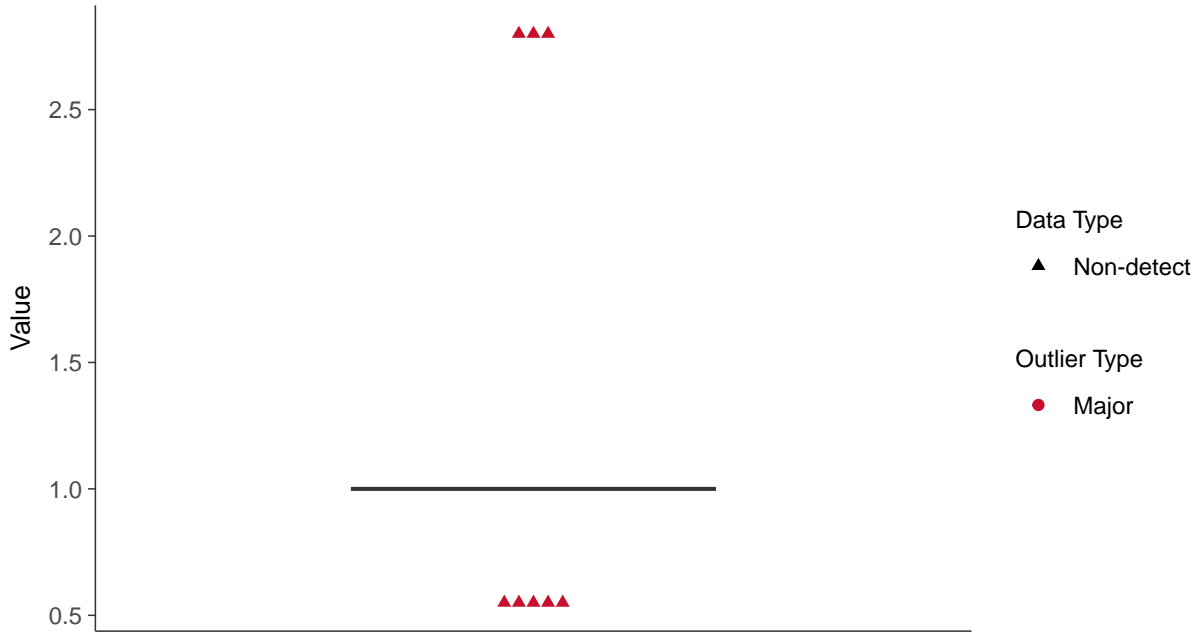
ID: 07_2_116





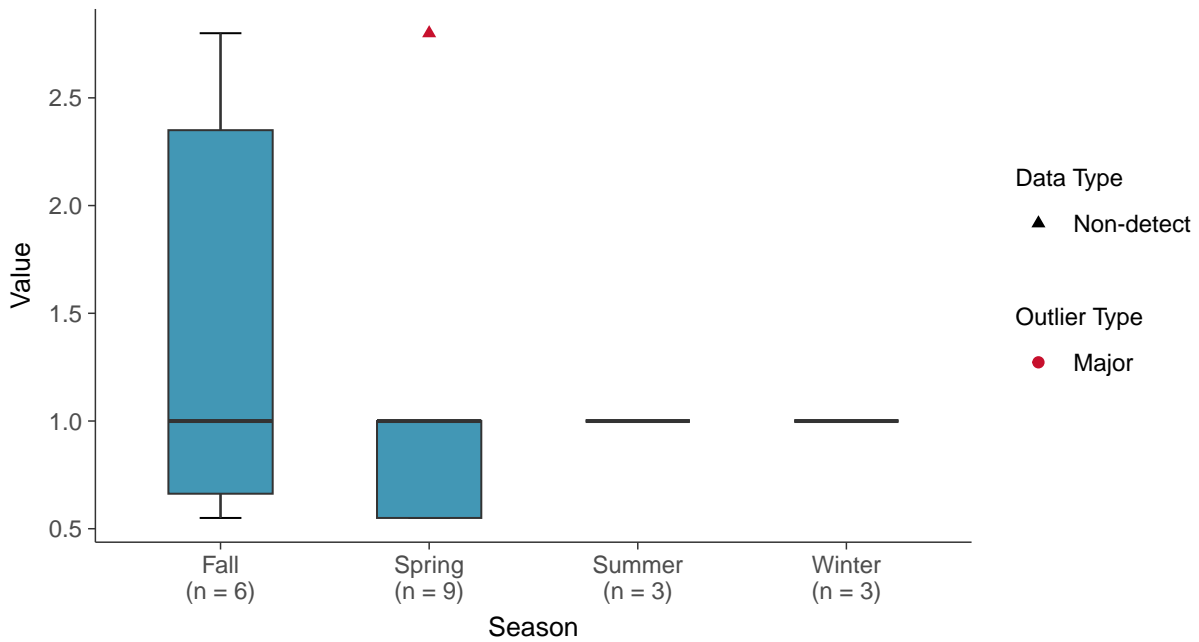
Boxplot

Lead, MW-15017 (ug/L)



Boxplot by Season

Lead, MW-15017 (ug/L)



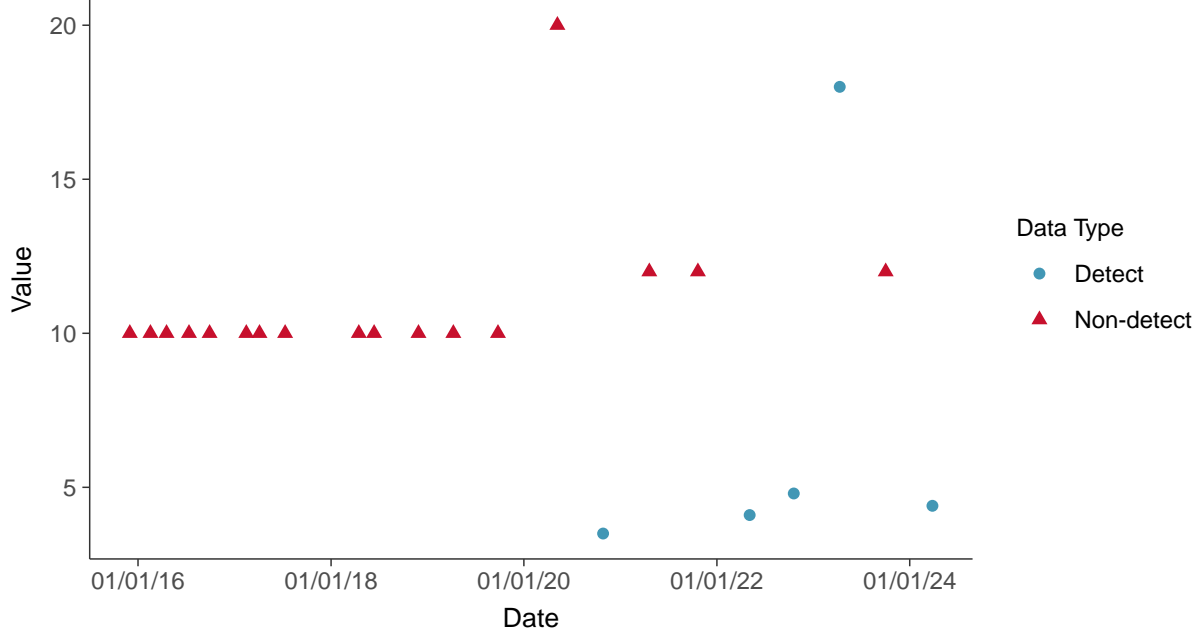


Appendix IV: Lithium, MW-15017

ID: 07_2_117

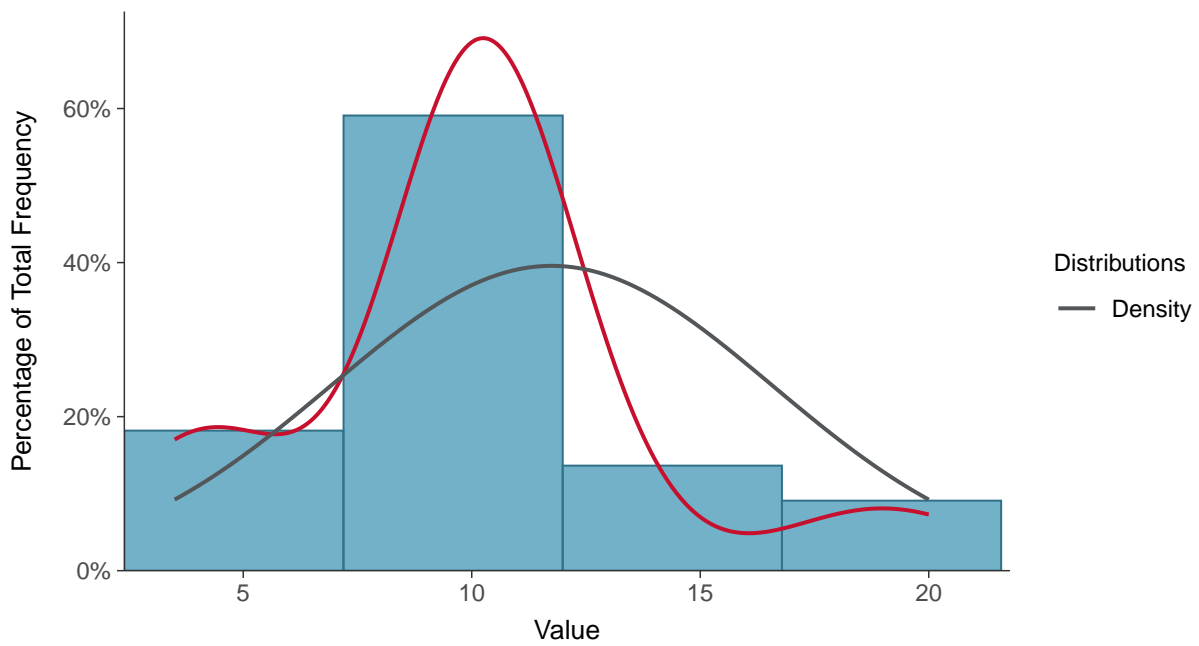
Scatter Plot

Lithium, MW-15017 (ug/L)



Histogram

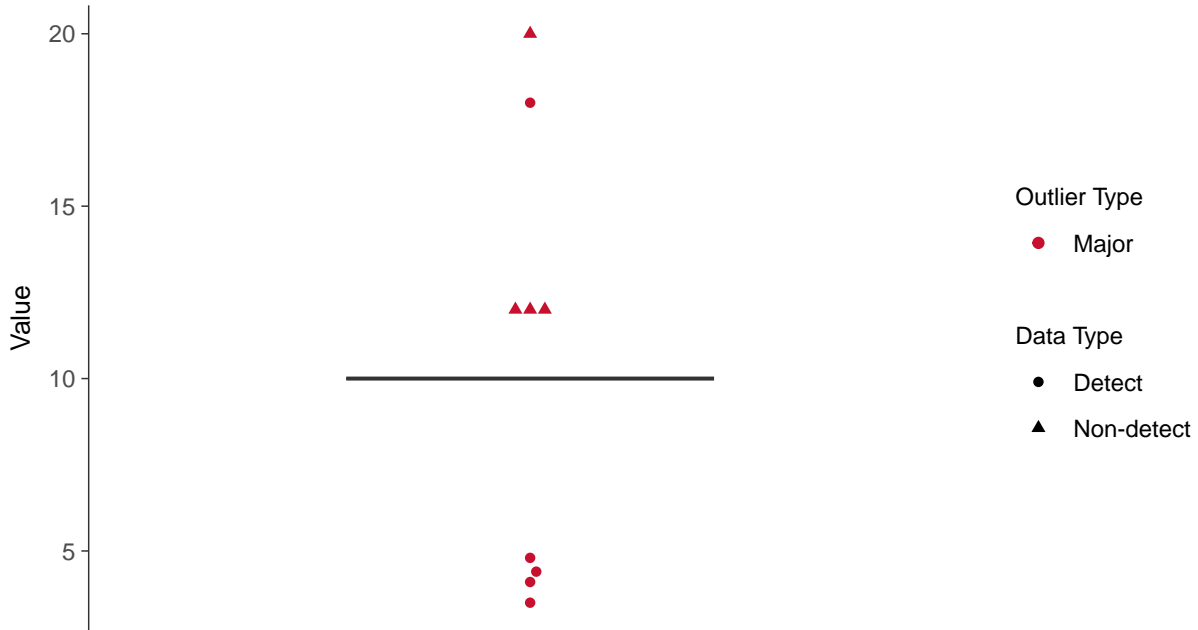
Lithium, MW-15017 (ug/L)





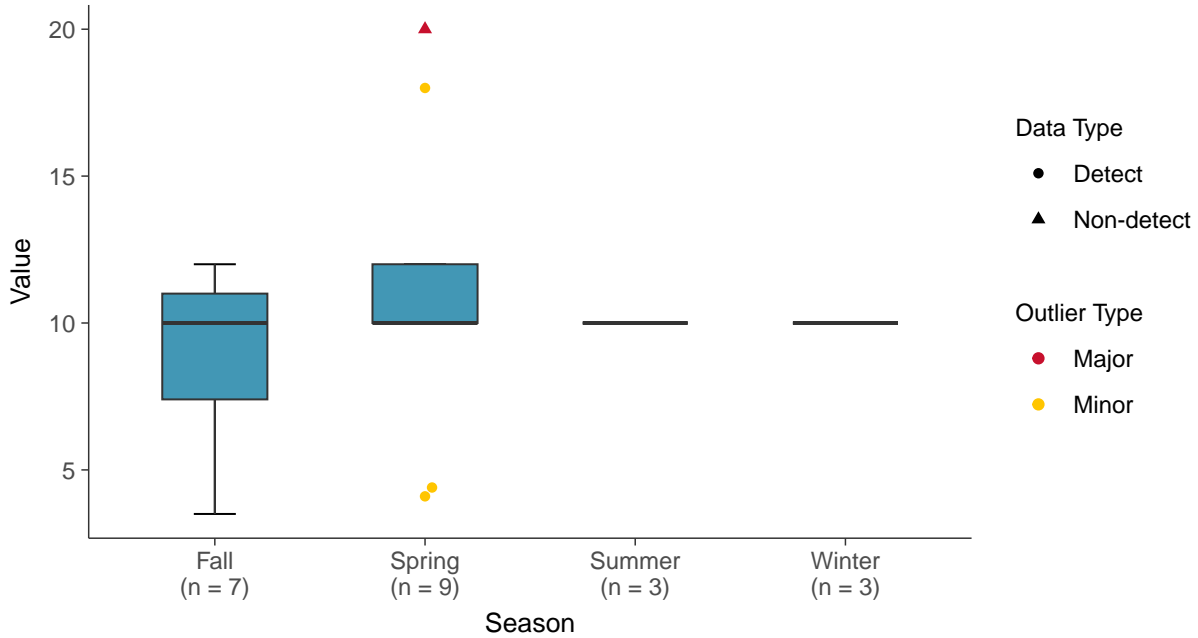
Boxplot

Lithium, MW-15017 (ug/L)



Boxplot by Season

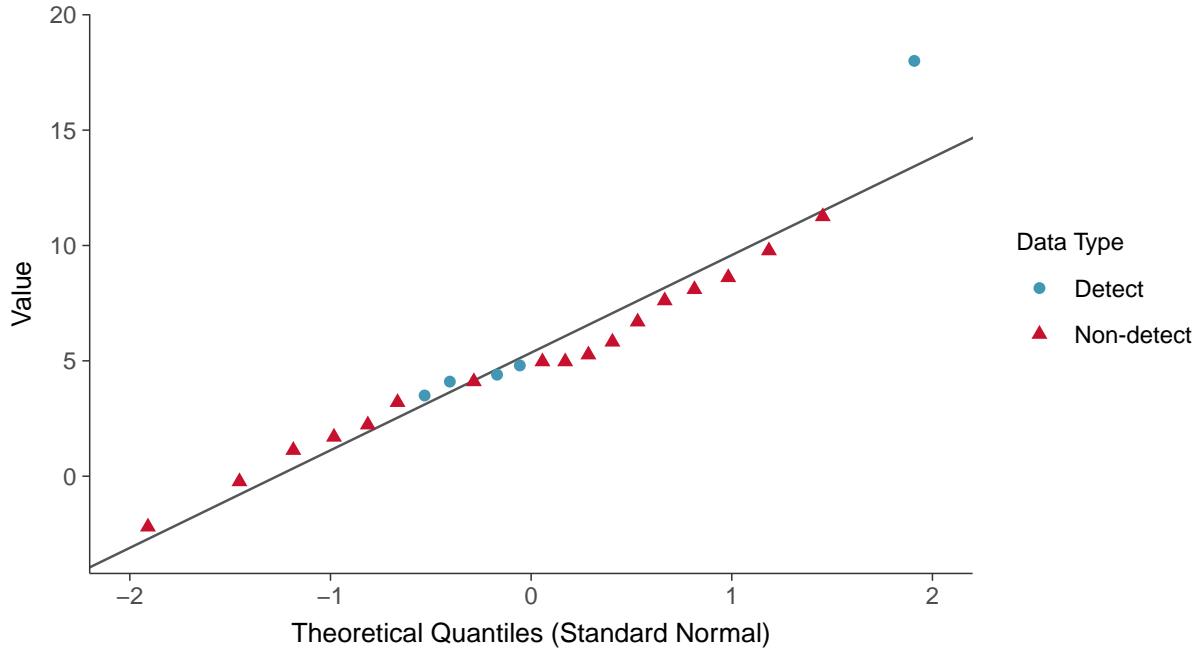
Lithium, MW-15017 (ug/L)





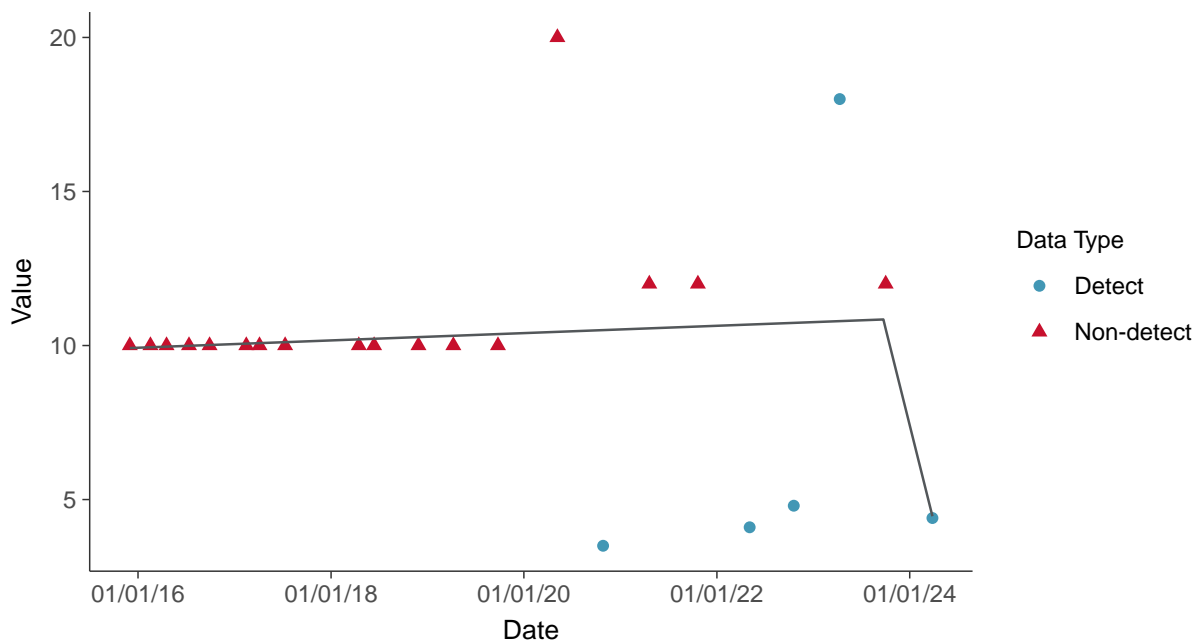
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear

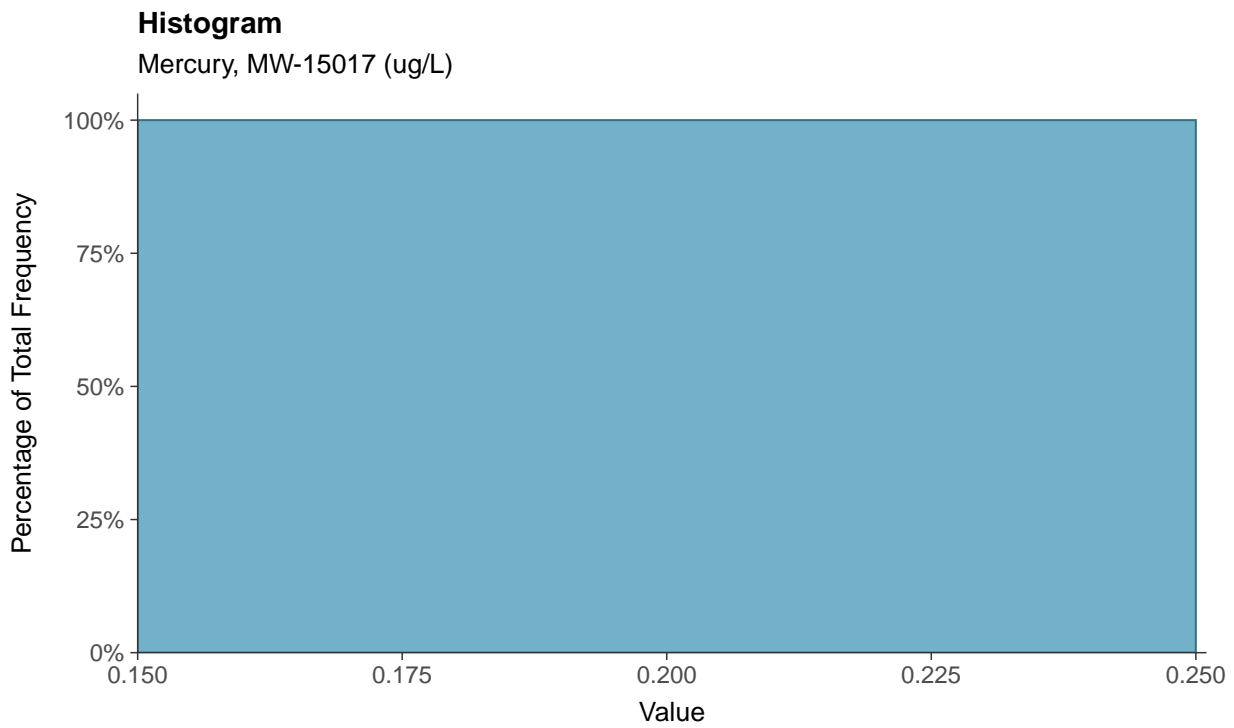
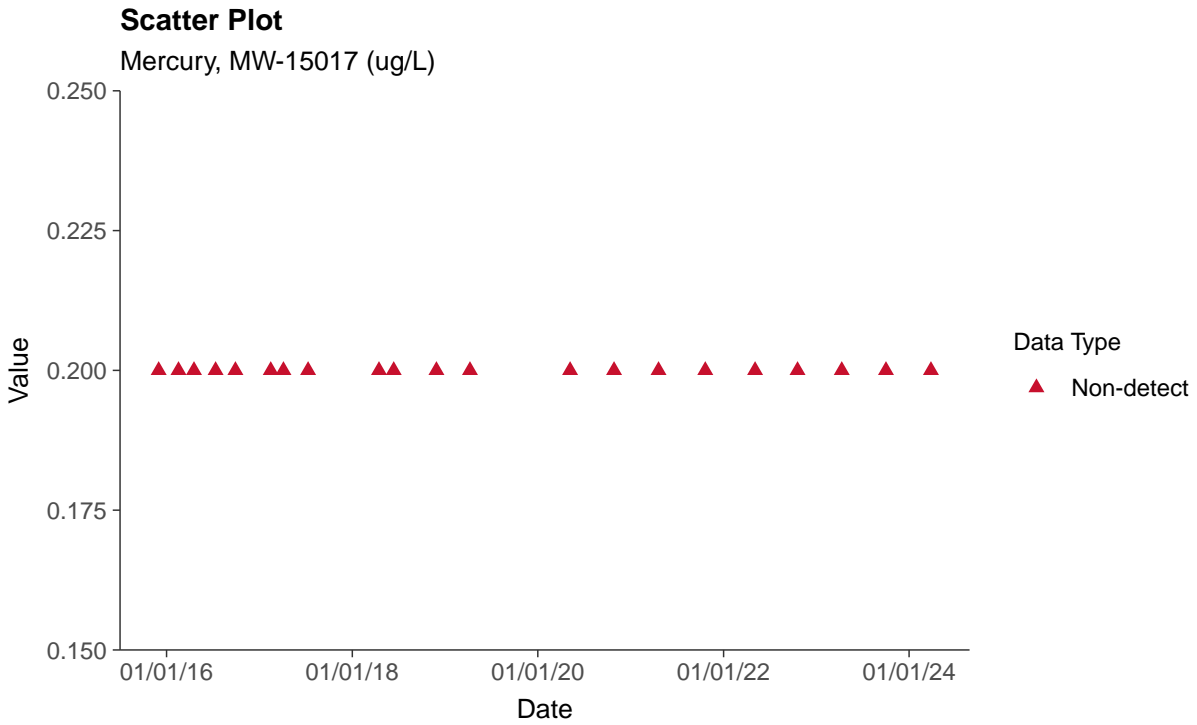
Lithium, MW-15017 (ug/L)





Appendix IV: Mercury, MW-15017

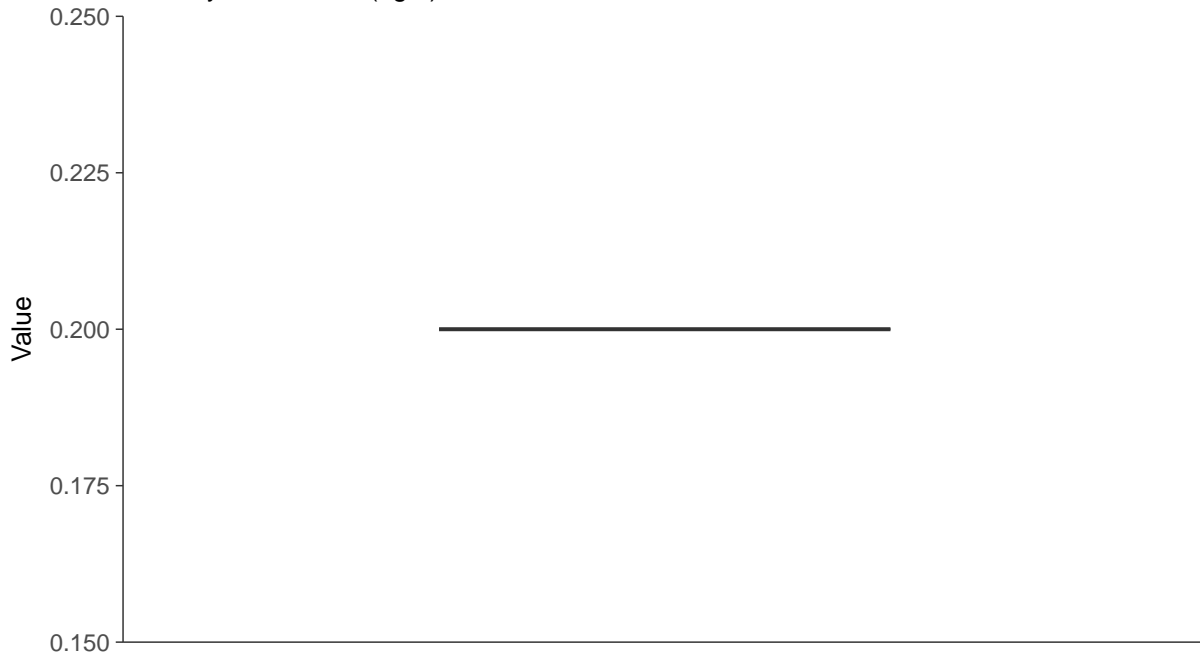
ID: 07_2_118





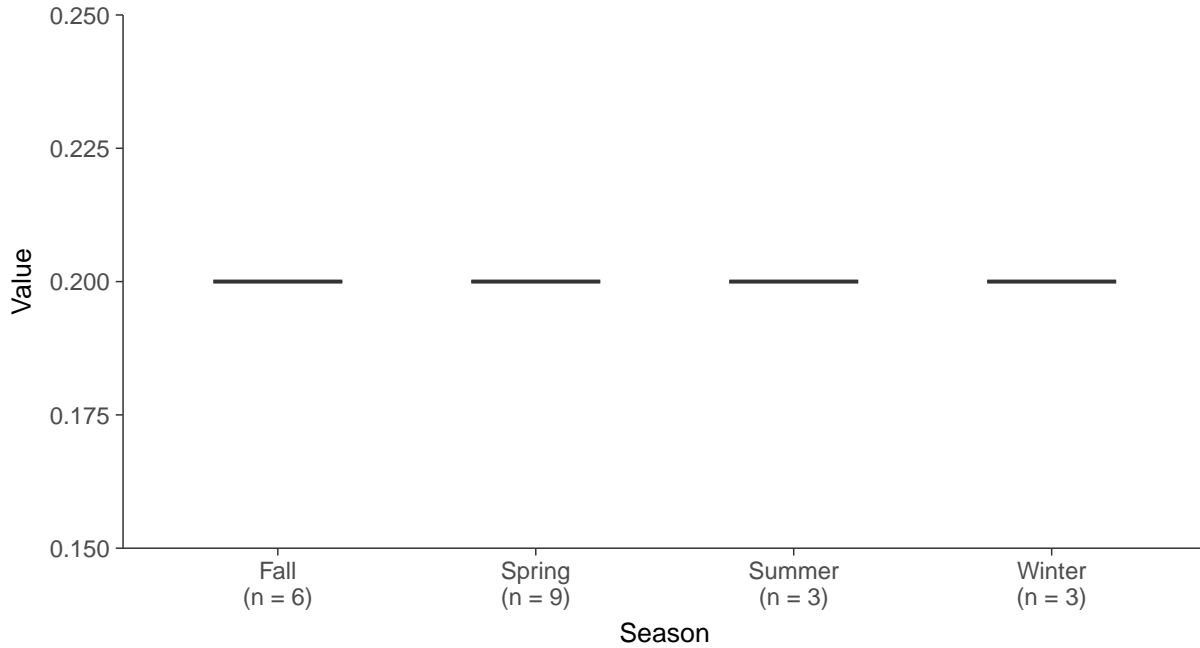
Boxplot

Mercury, MW-15017 (ug/L)



Boxplot by Season

Mercury, MW-15017 (ug/L)



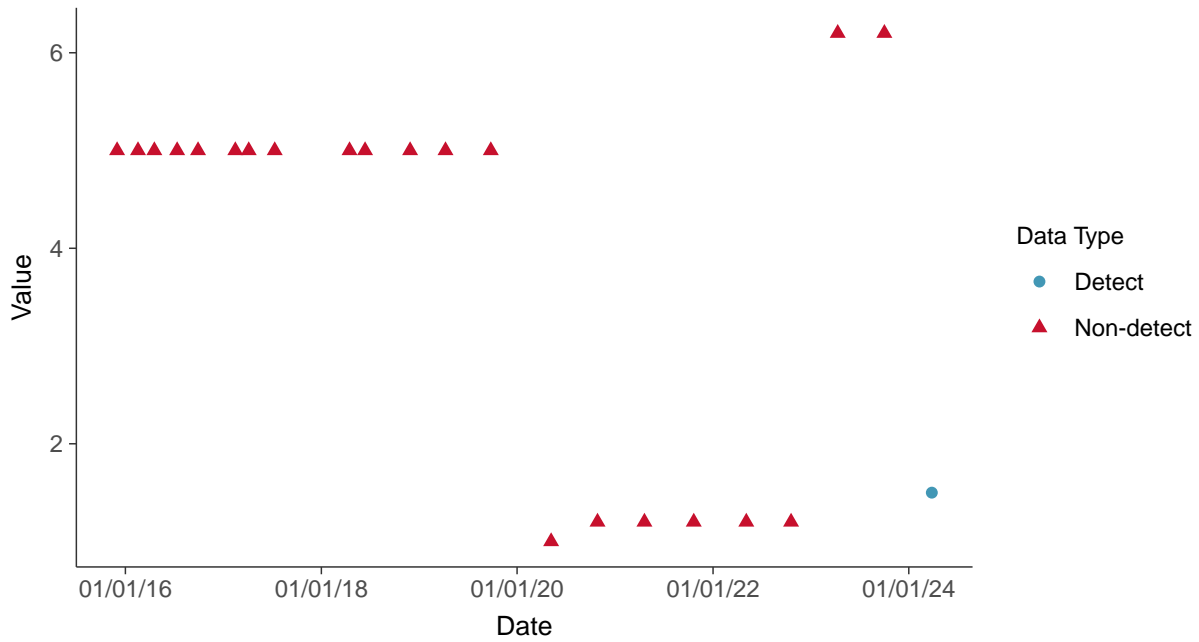


Appendix IV: Molybdenum, MW-15017

ID: 07_2_119

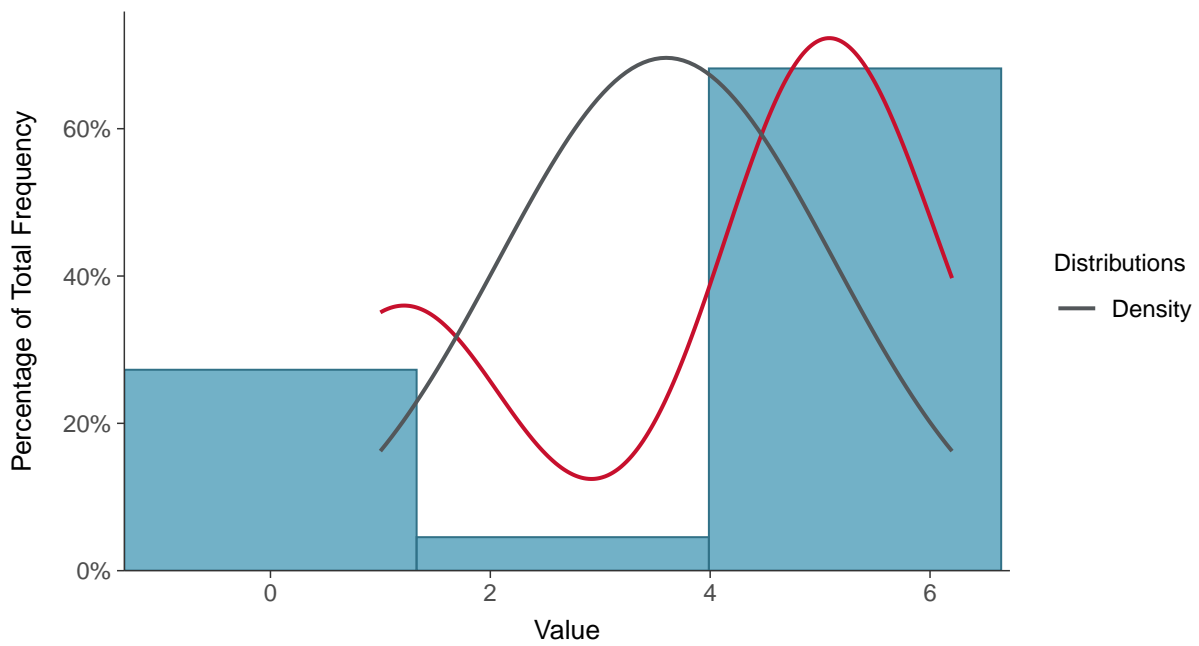
Scatter Plot

Molybdenum, MW-15017 (ug/L)



Histogram

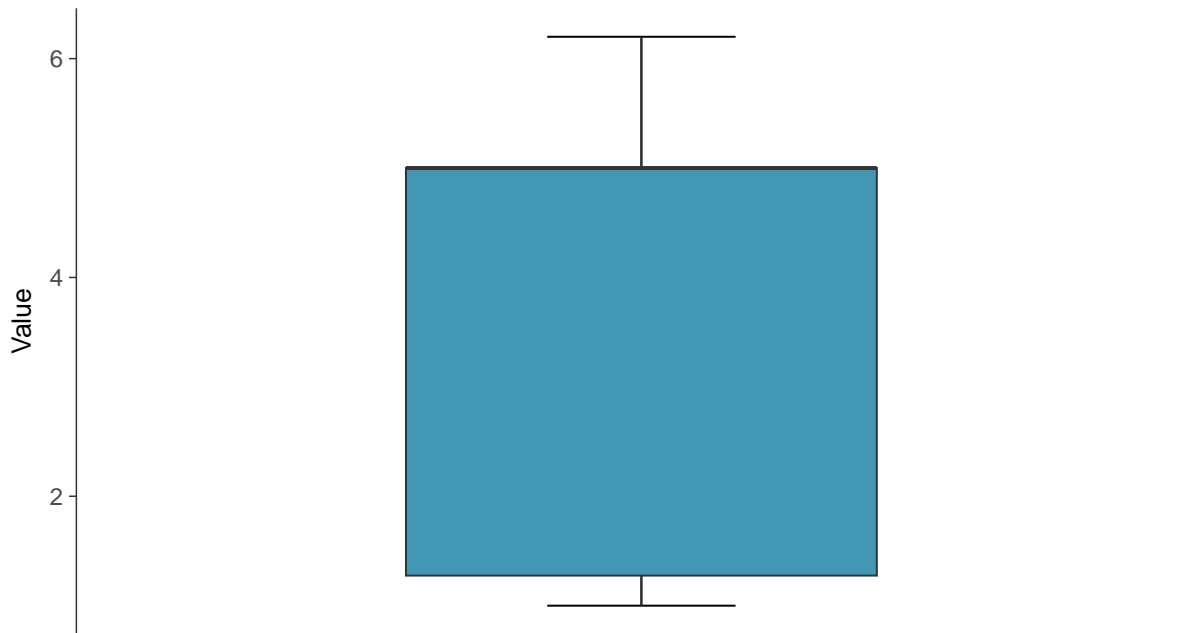
Molybdenum, MW-15017 (ug/L)





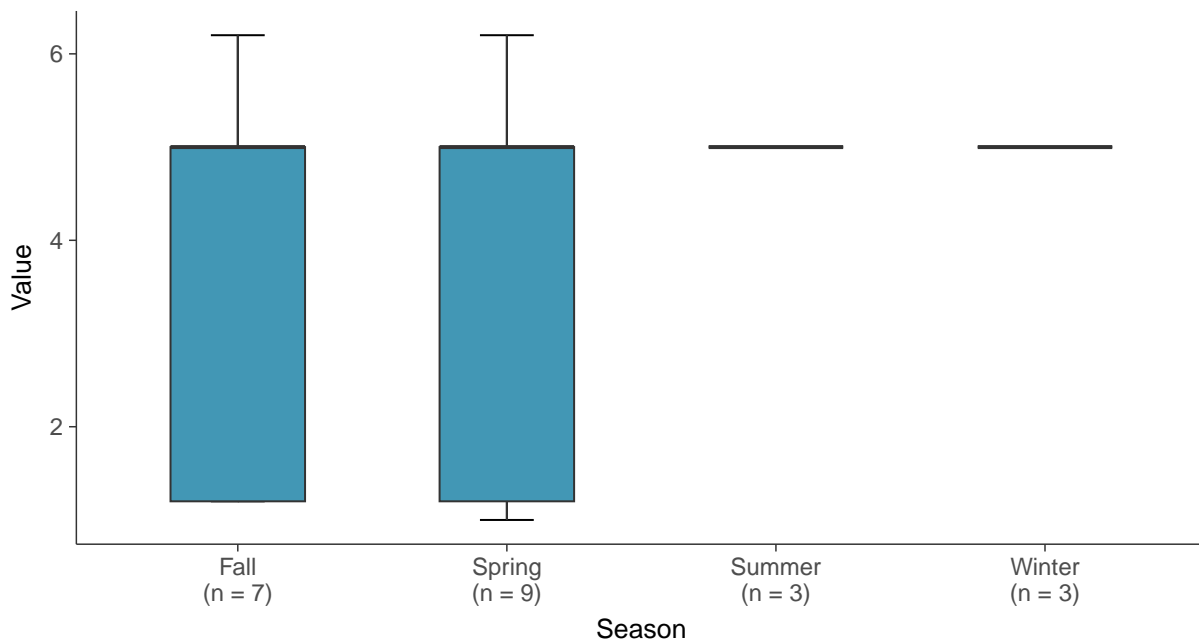
Boxplot

Molybdenum, MW-15017 (ug/L)



Boxplot by Season

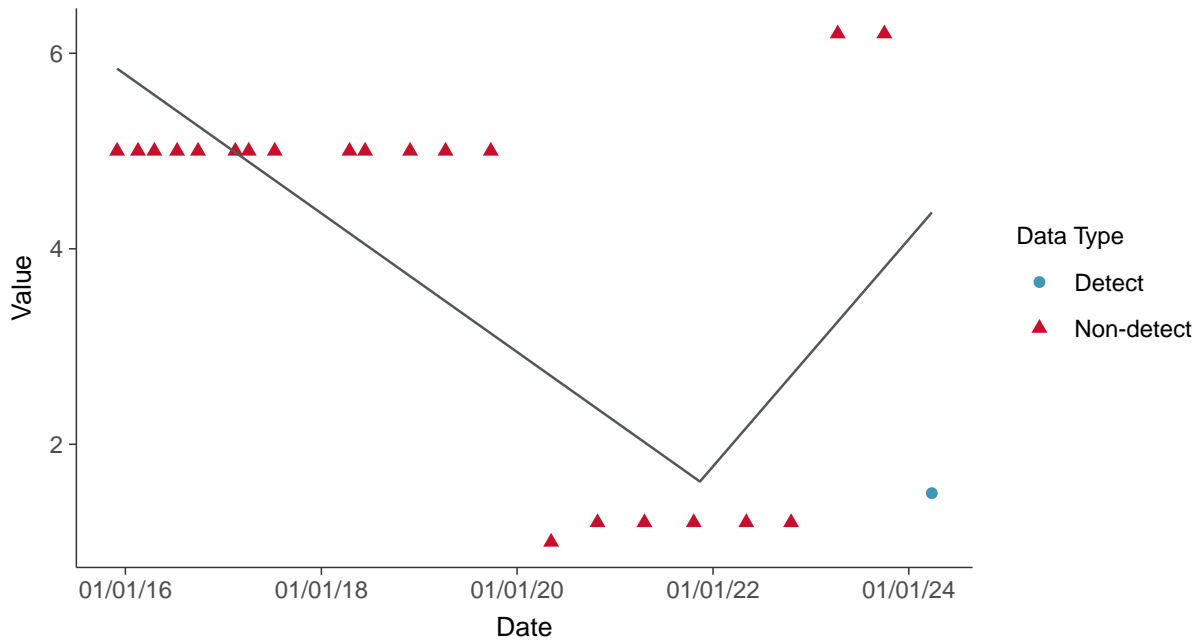
Molybdenum, MW-15017 (ug/L)





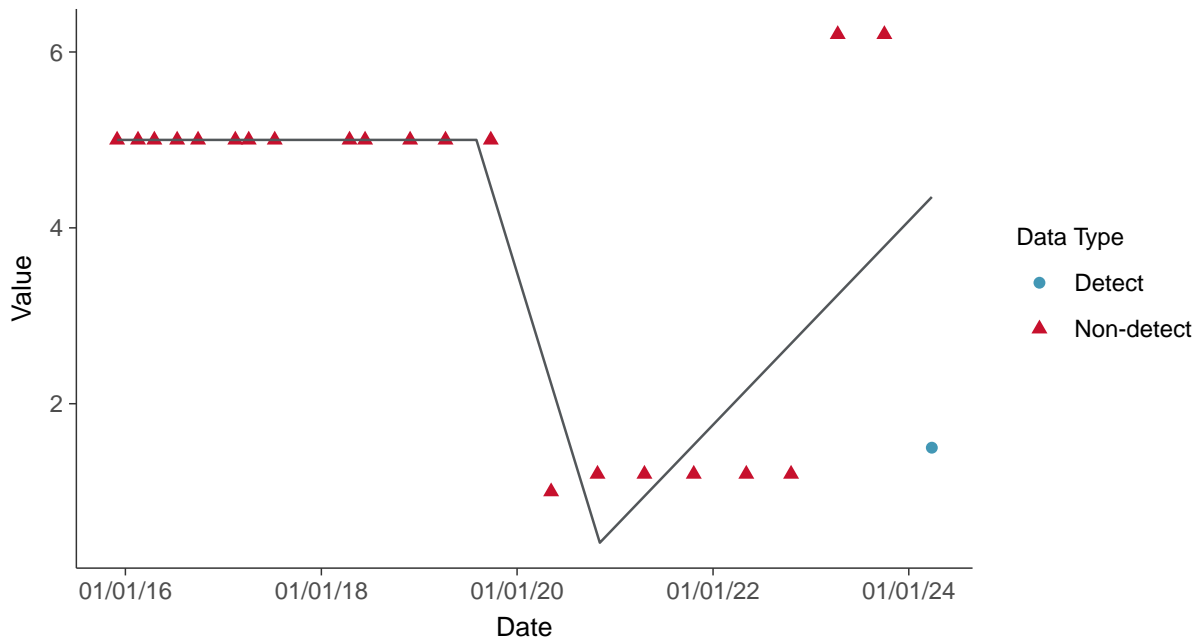
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

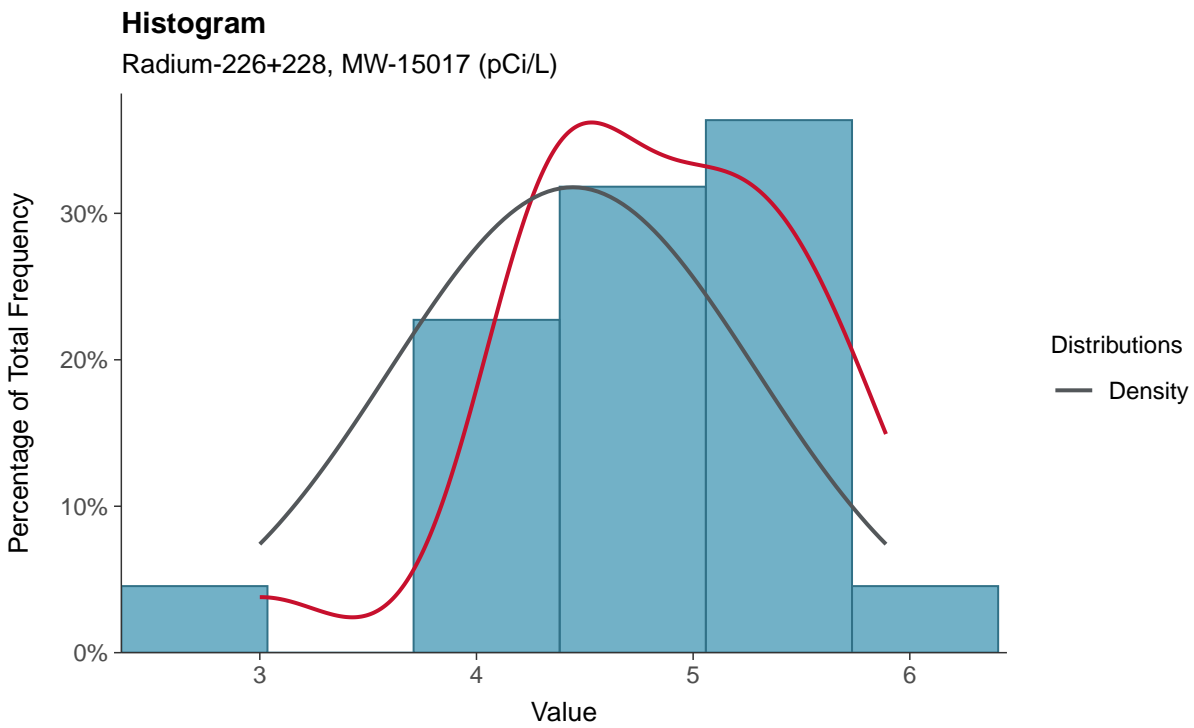
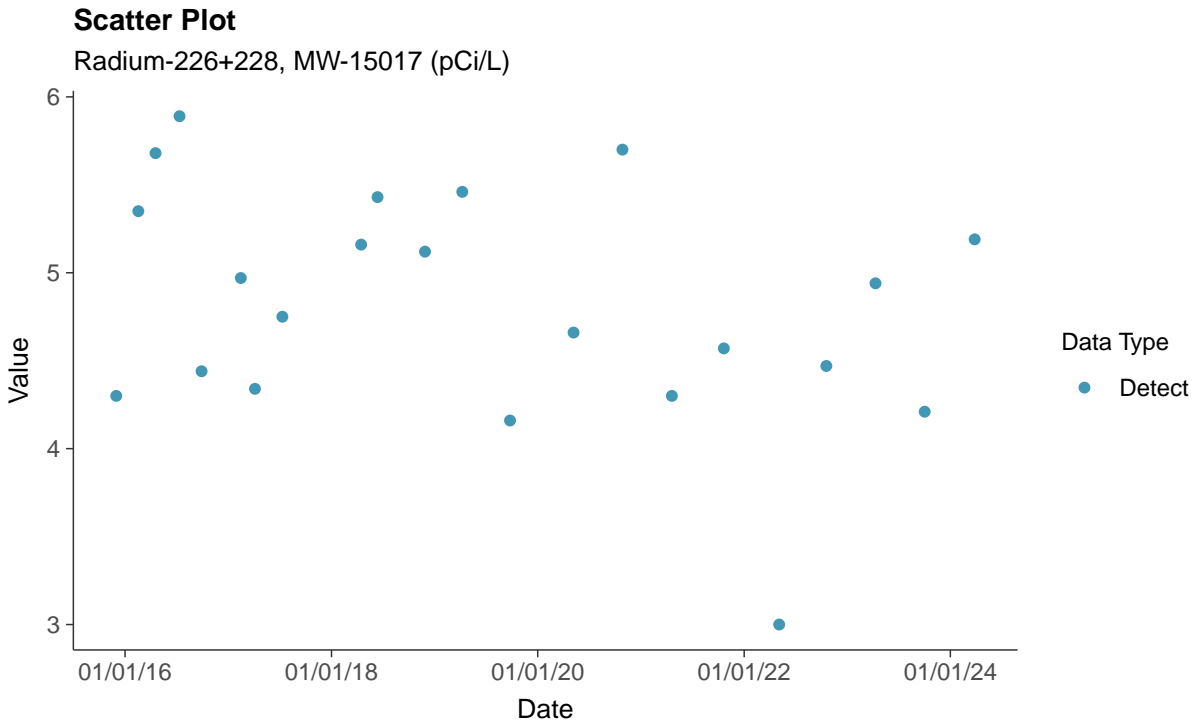
Molybdenum, MW-15017 (ug/L)





Appendix IV: Radium-226+228, MW-15017

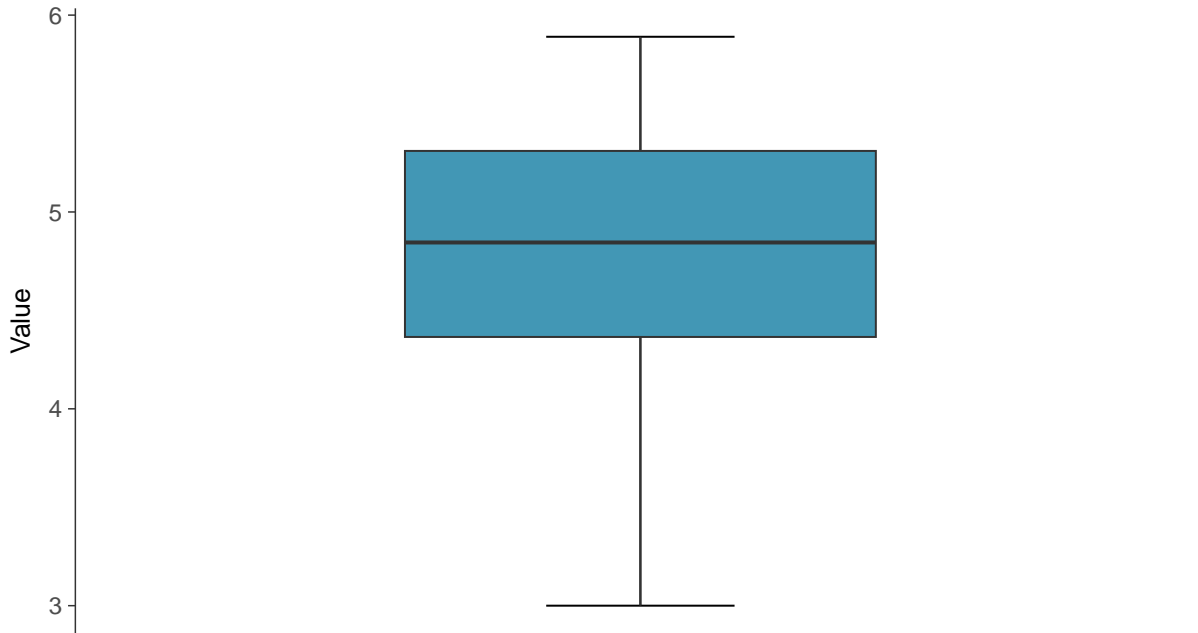
ID: 07_2_125





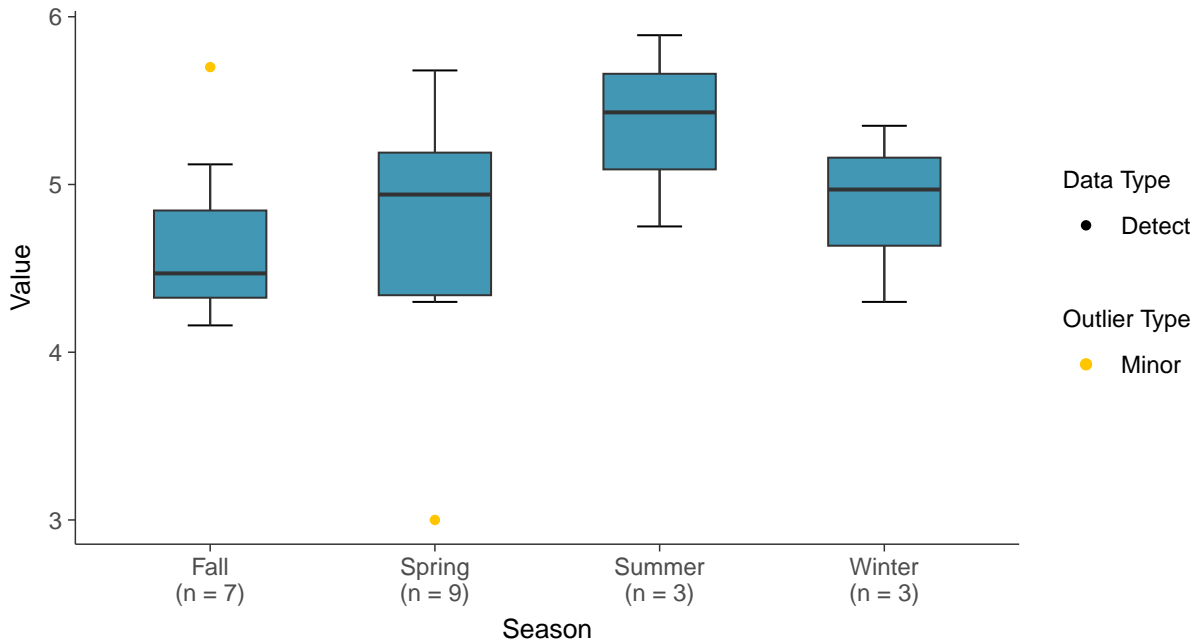
Boxplot

Radium-226+228, MW-15017 (pCi/L)



Boxplot by Season

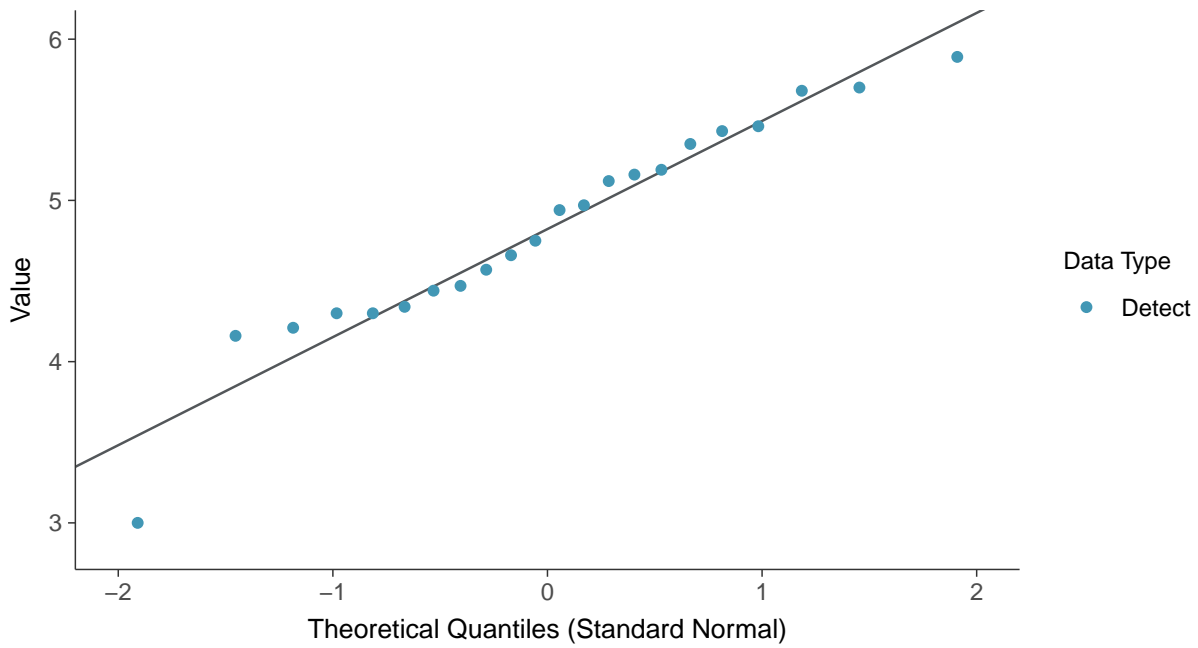
Radium-226+228, MW-15017 (pCi/L)





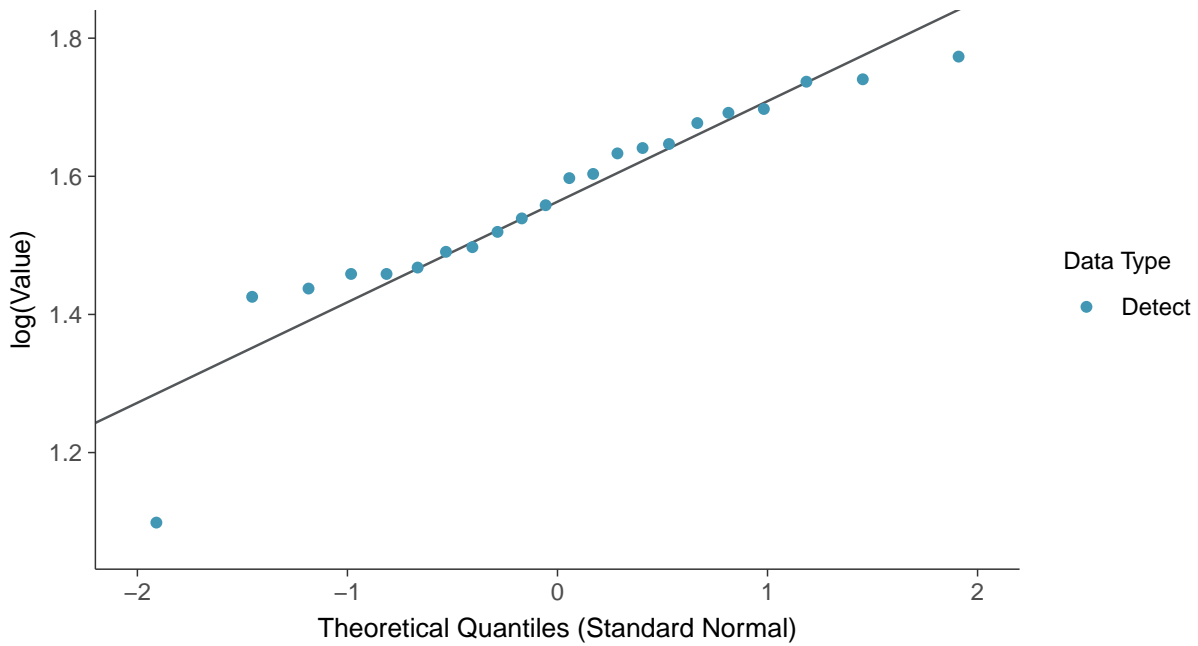
Normal Q-Q plot

Radium-226+228, MW-15017 (pCi/L)



Lognormal Q-Q plot

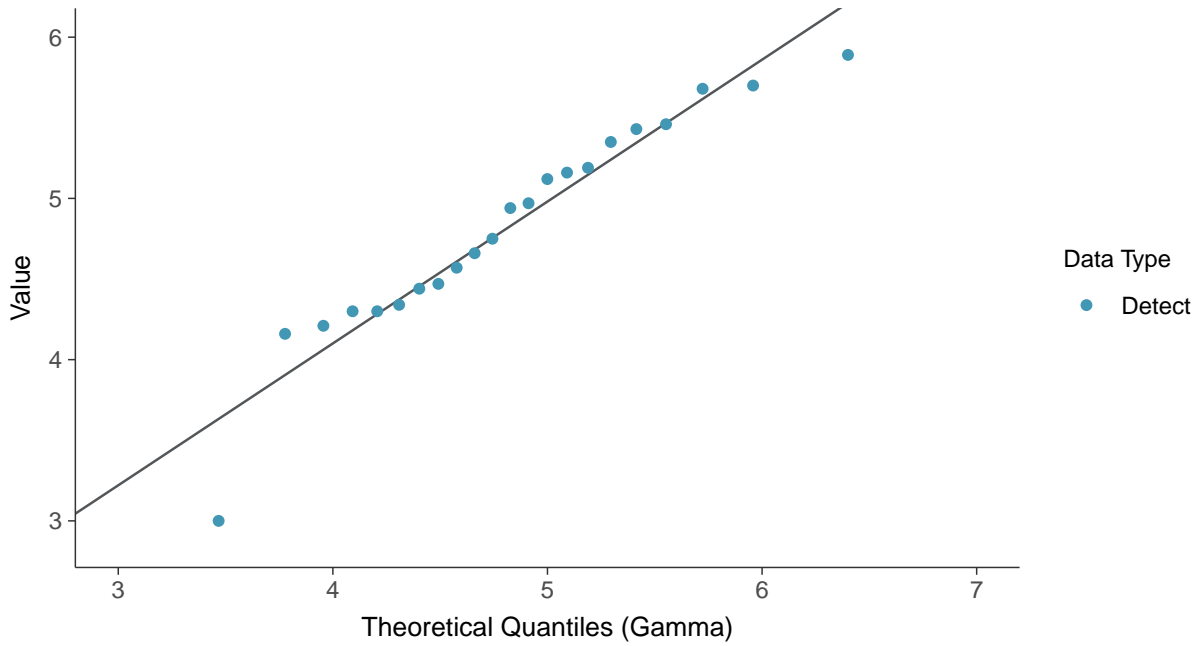
Radium-226+228, MW-15017 (pCi/L)





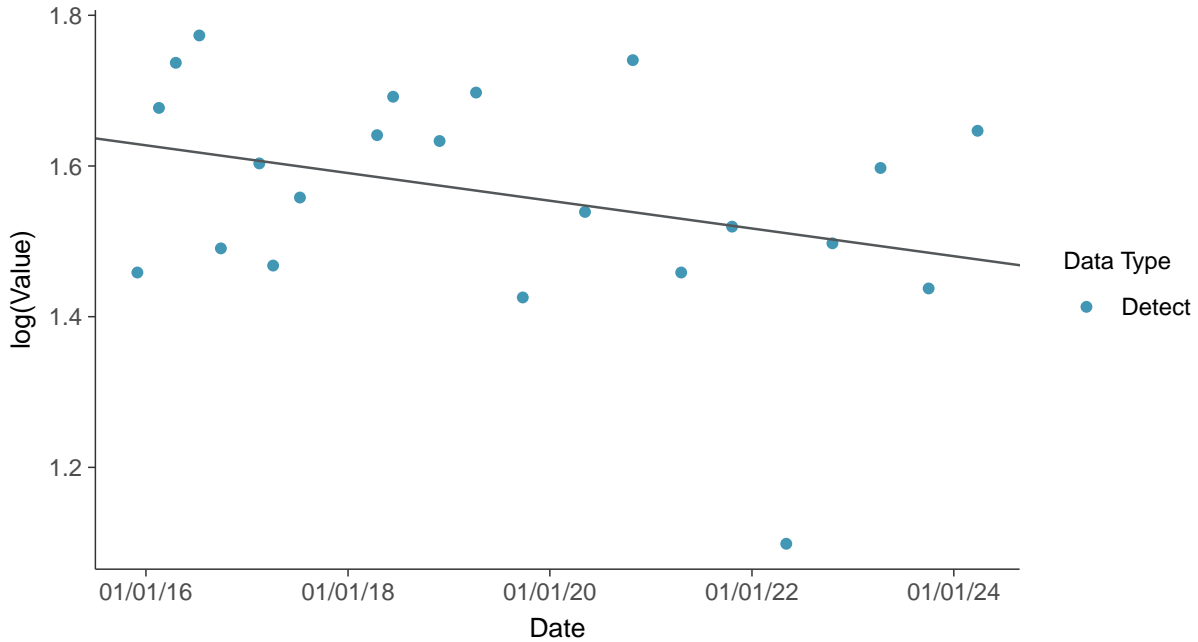
Gamma Q-Q plot

Radium-226+228, MW-15017 (pCi/L)



Trend Regression: Lognormal MLE

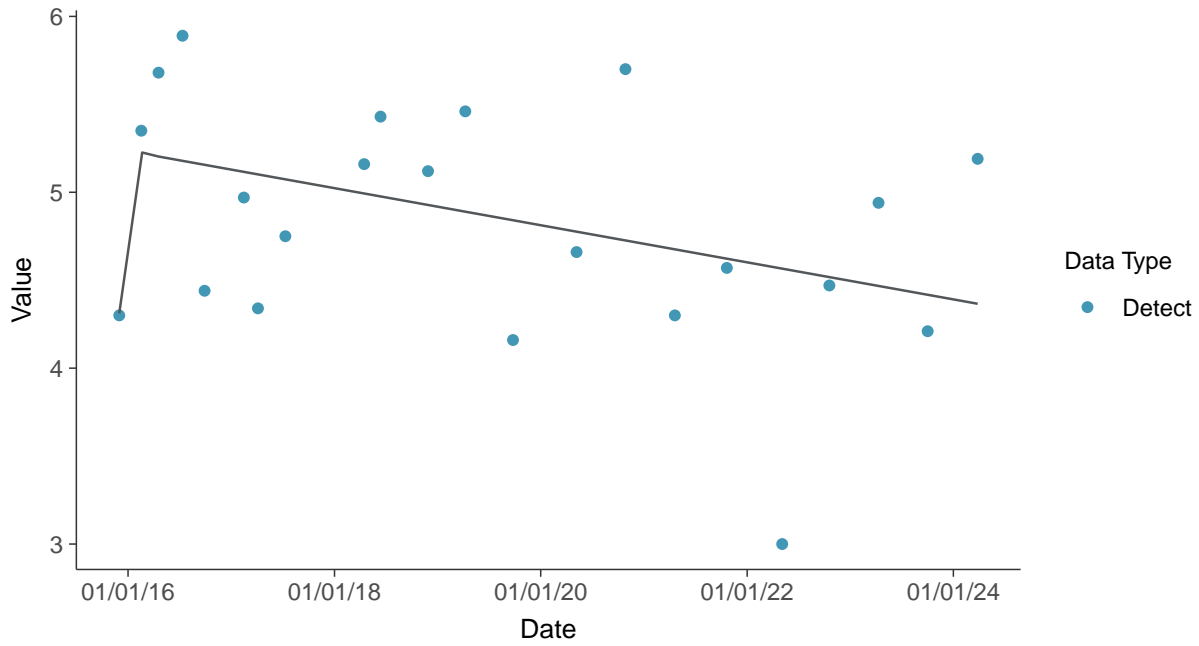
Radium-226+228, MW-15017 (pCi/L)





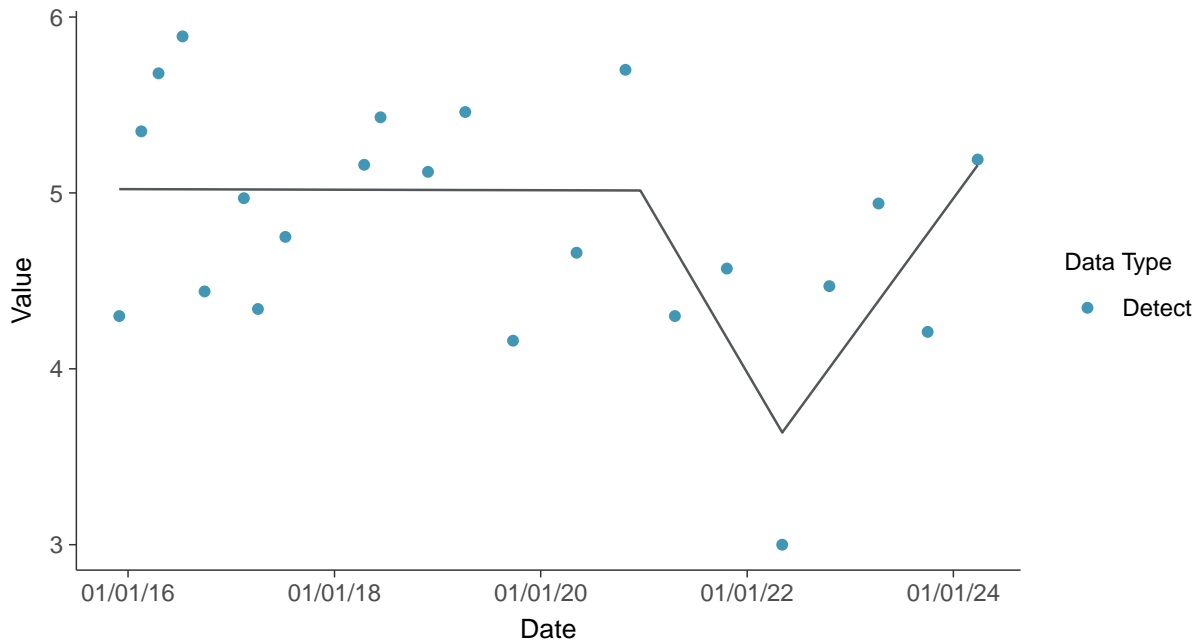
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15017 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

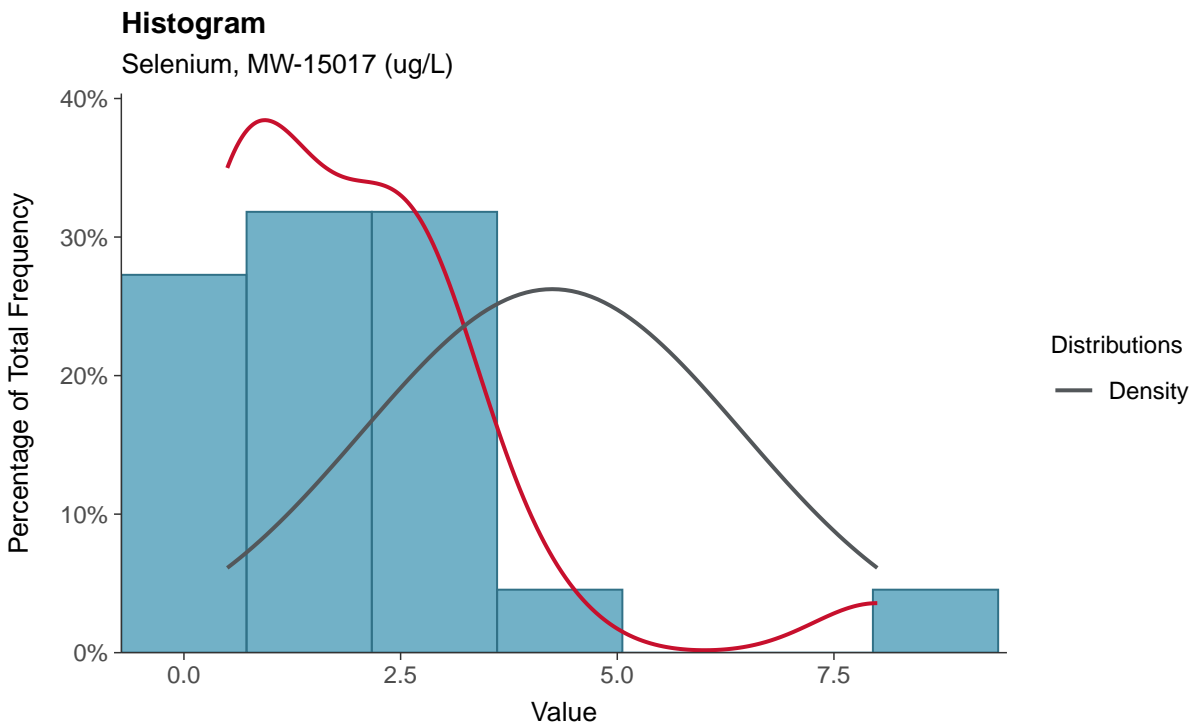
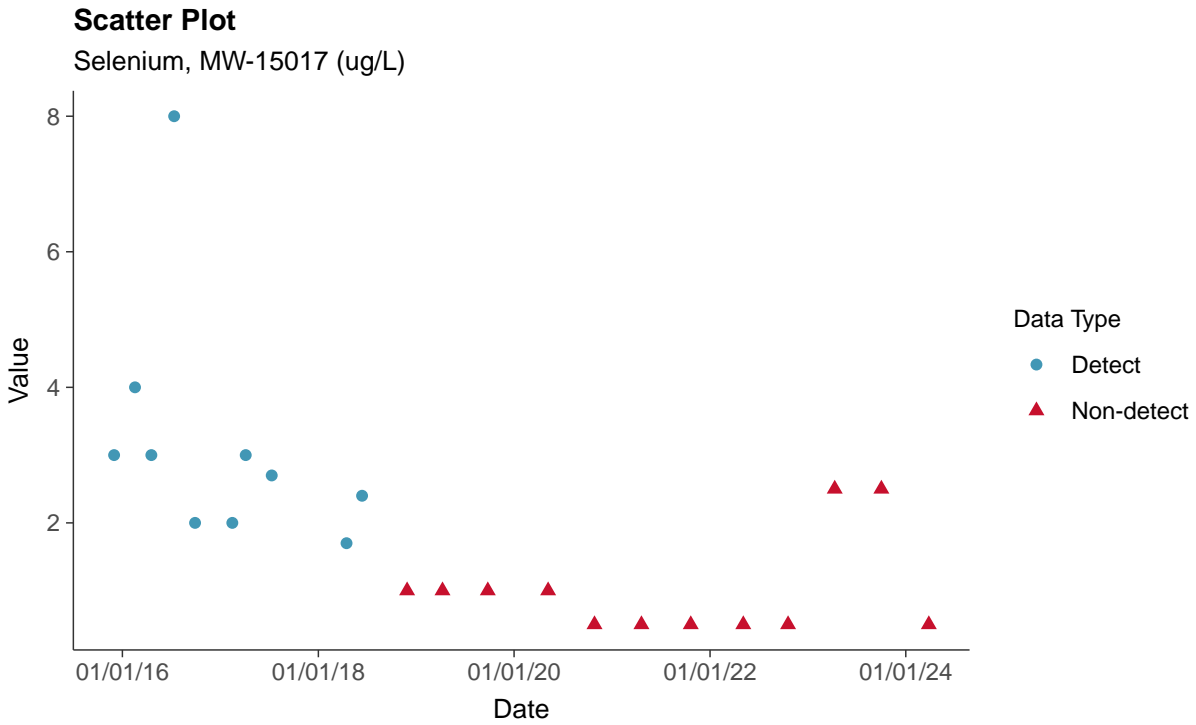
Radium-226+228, MW-15017 (pCi/L)





Appendix IV: Selenium, MW-15017

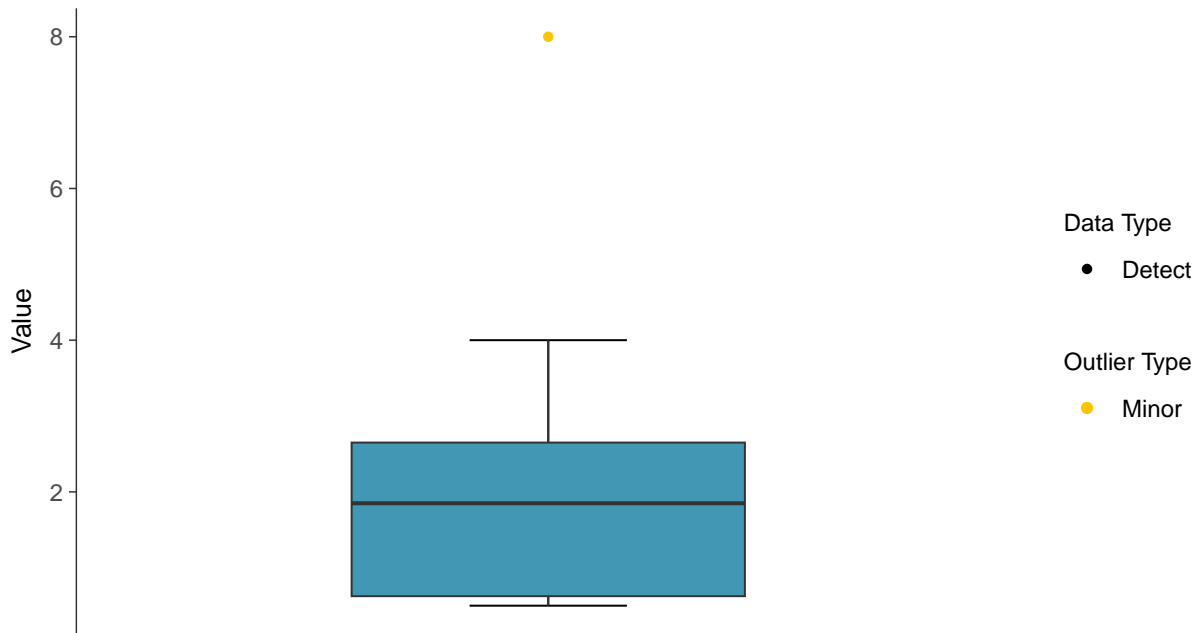
ID: 07_2_127





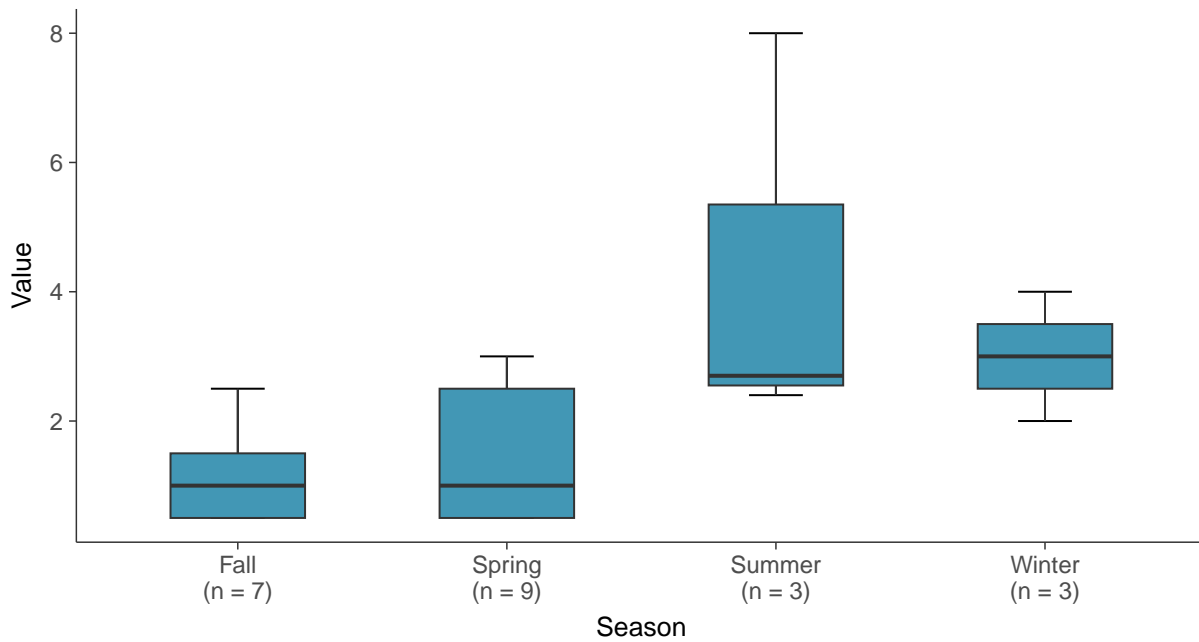
Boxplot

Selenium, MW-15017 (ug/L)



Boxplot by Season

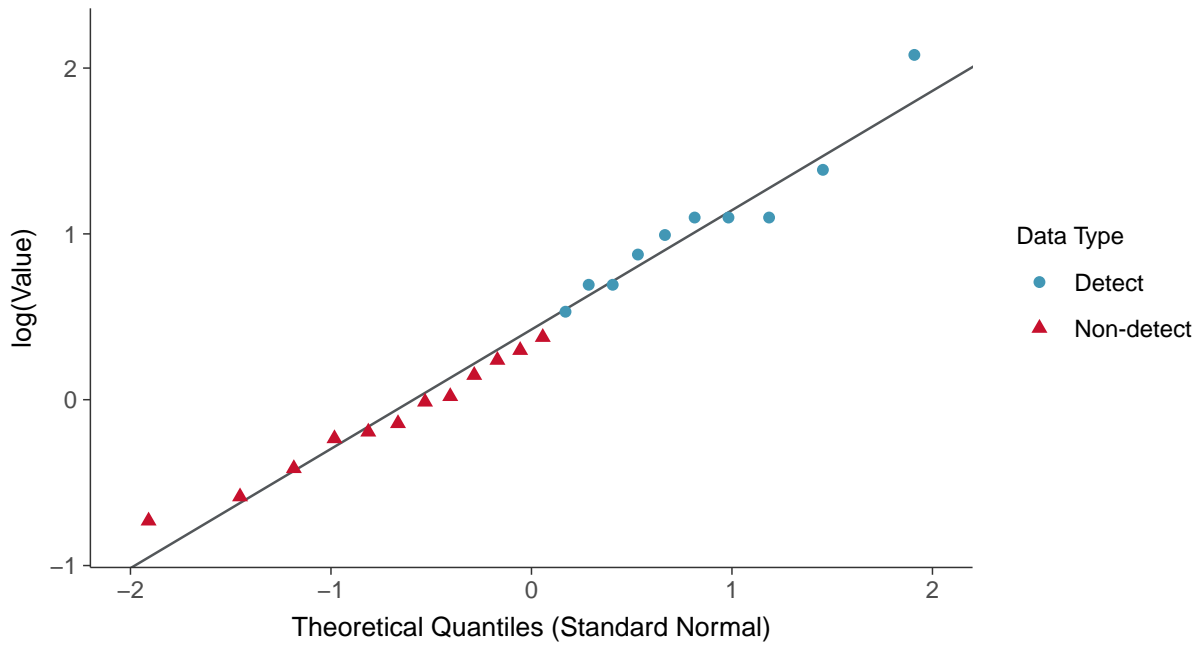
Selenium, MW-15017 (ug/L)





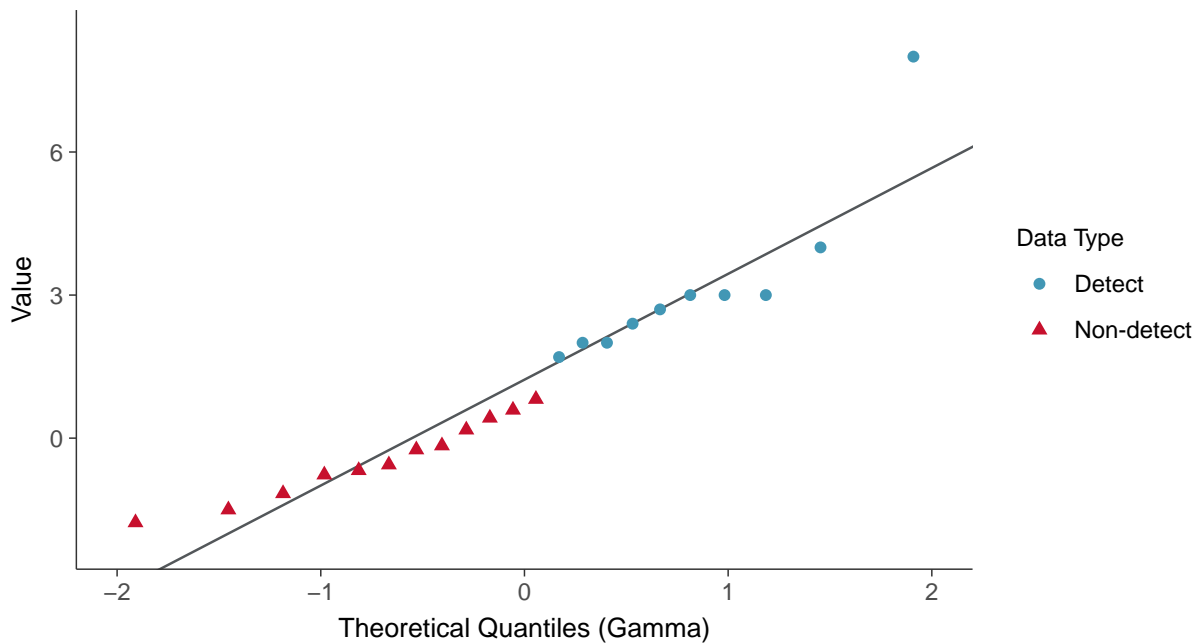
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15017 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

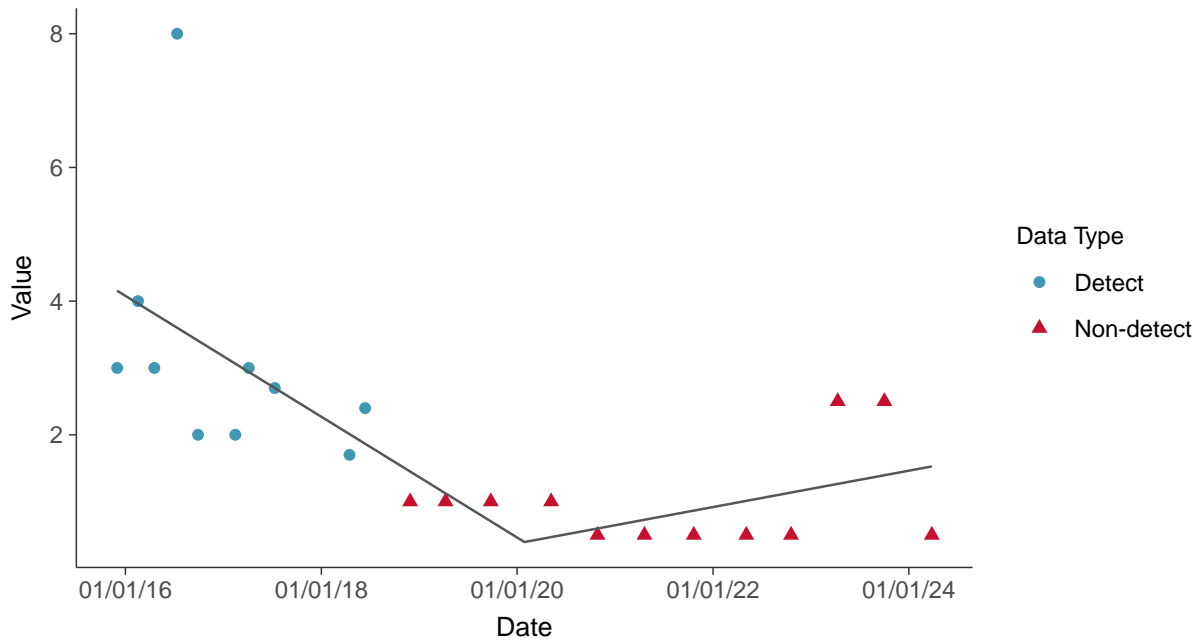
Selenium, MW-15017 (ug/L)





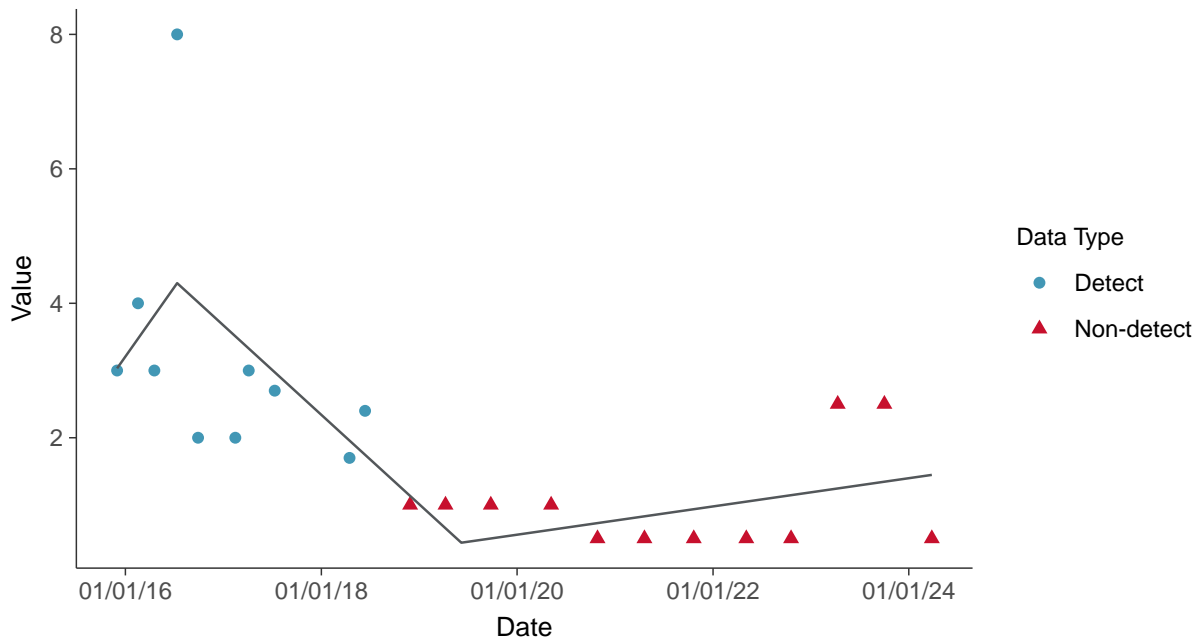
Trend Regression: Piecewise Linear-Linear

Selenium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

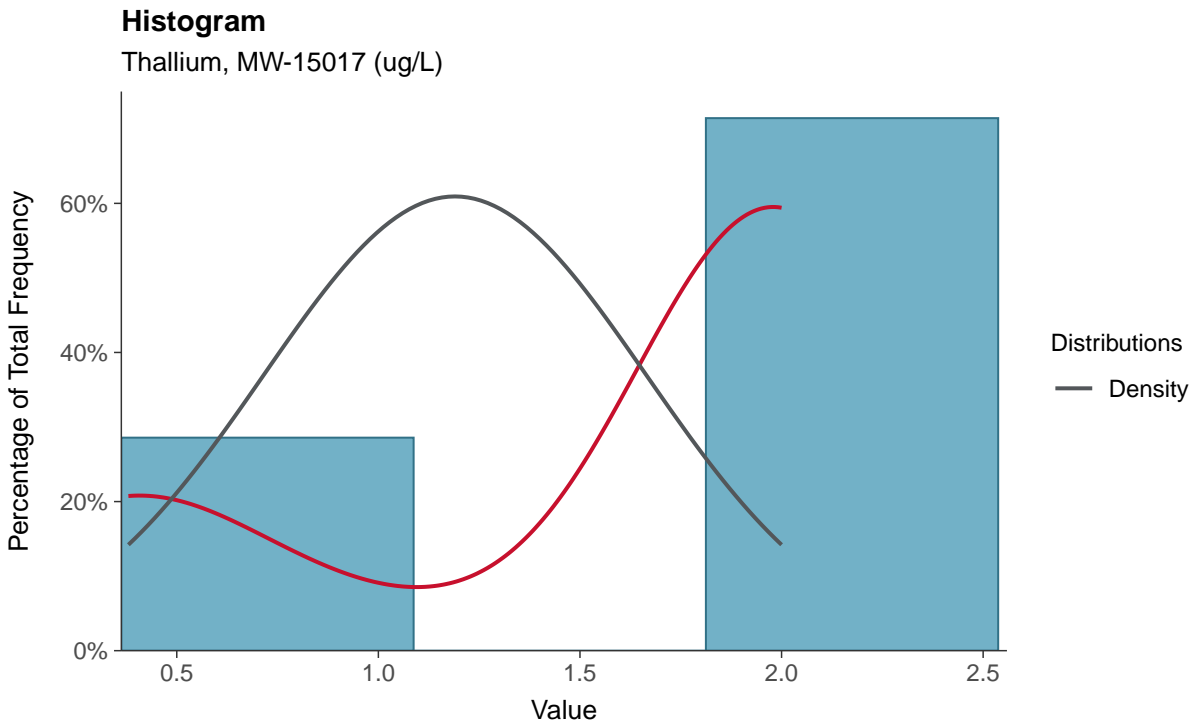
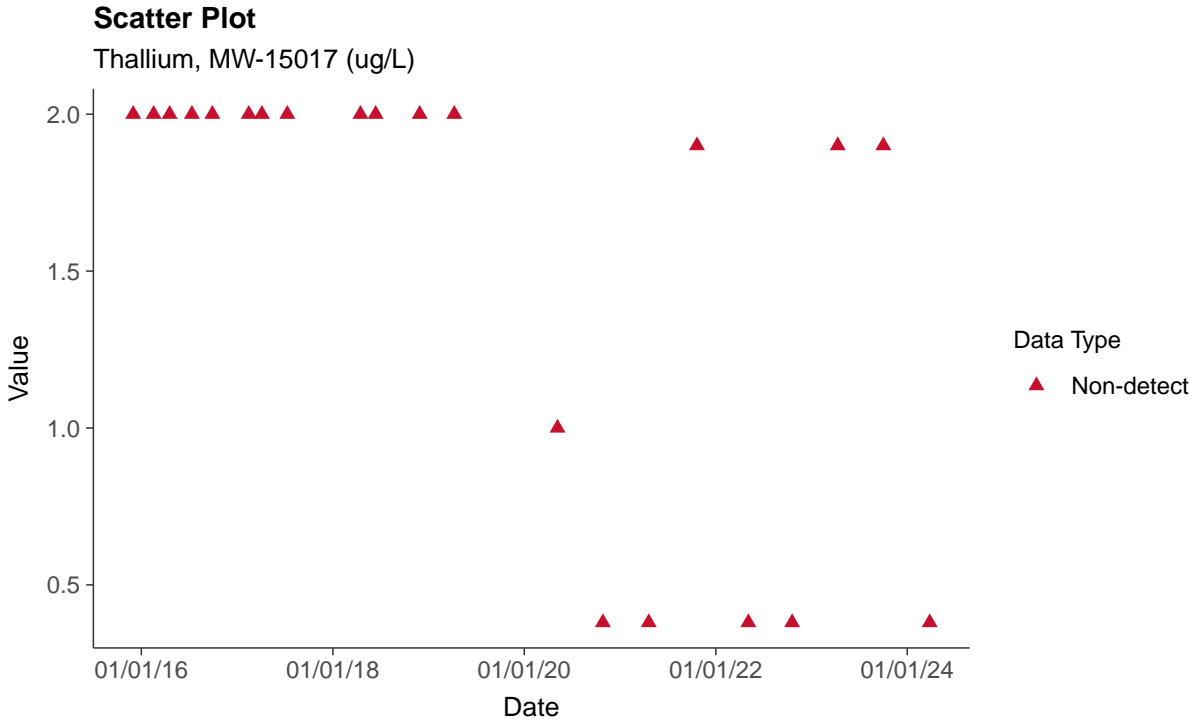
Selenium, MW-15017 (ug/L)





Appendix IV: Thallium, MW-15017

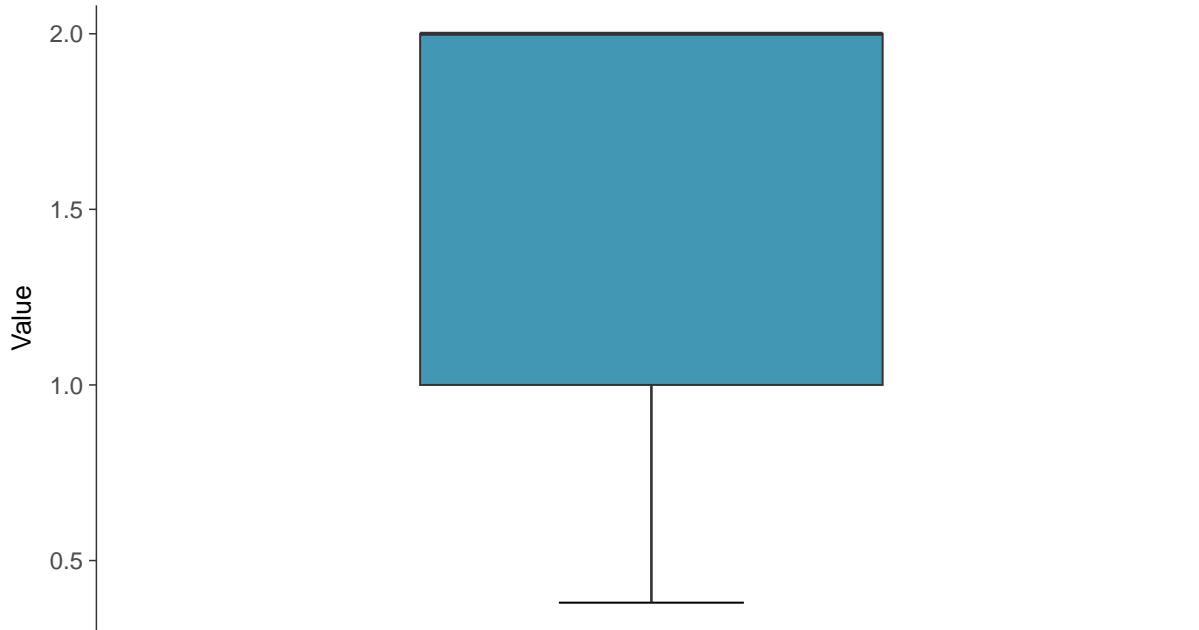
ID: 07_2_131





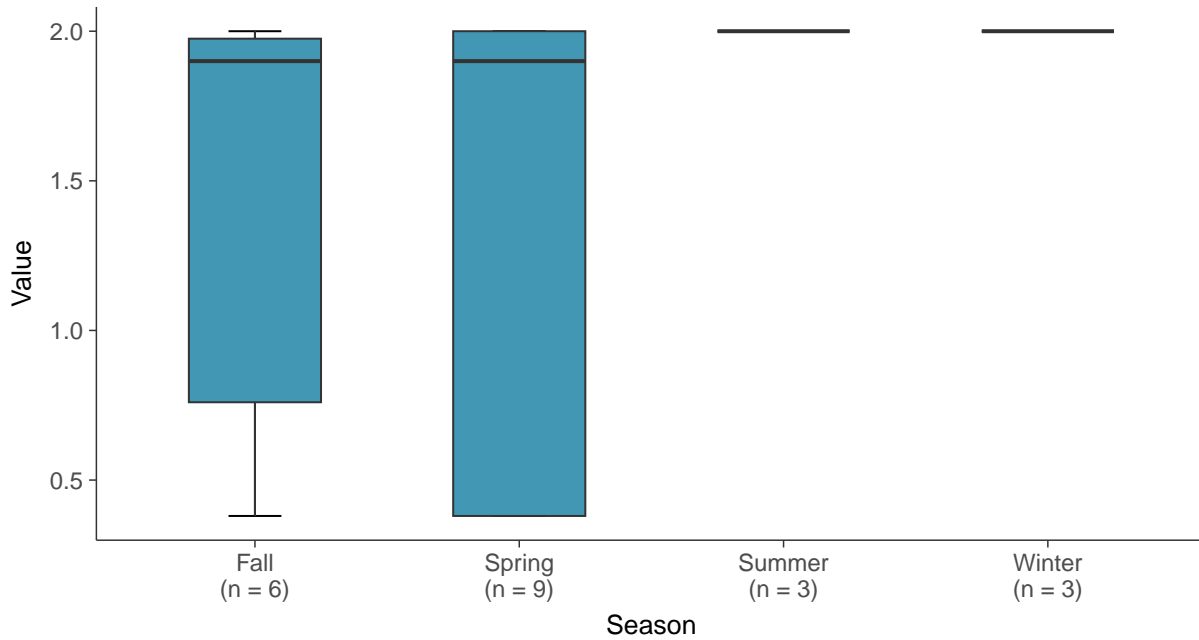
Boxplot

Thallium, MW-15017 (ug/L)



Boxplot by Season

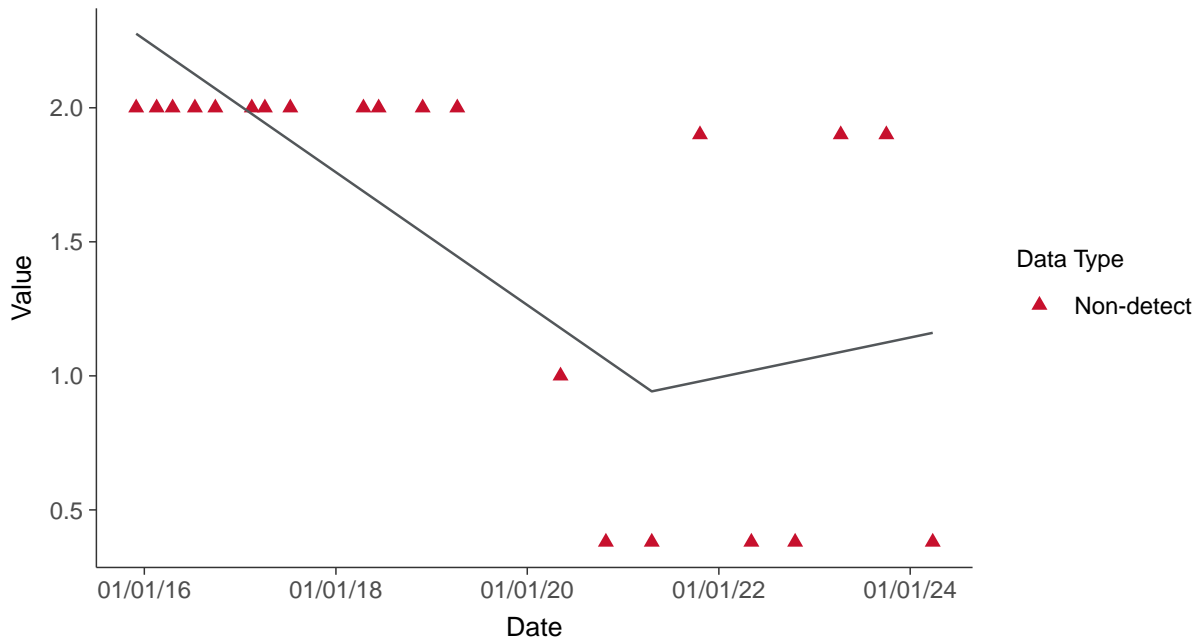
Thallium, MW-15017 (ug/L)





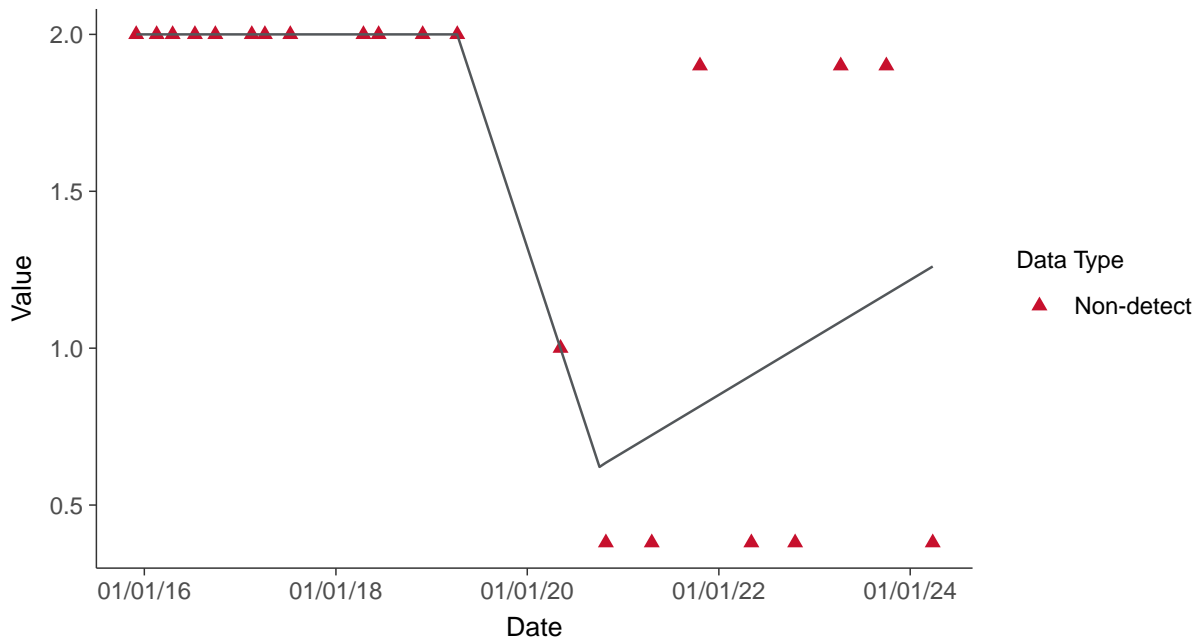
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

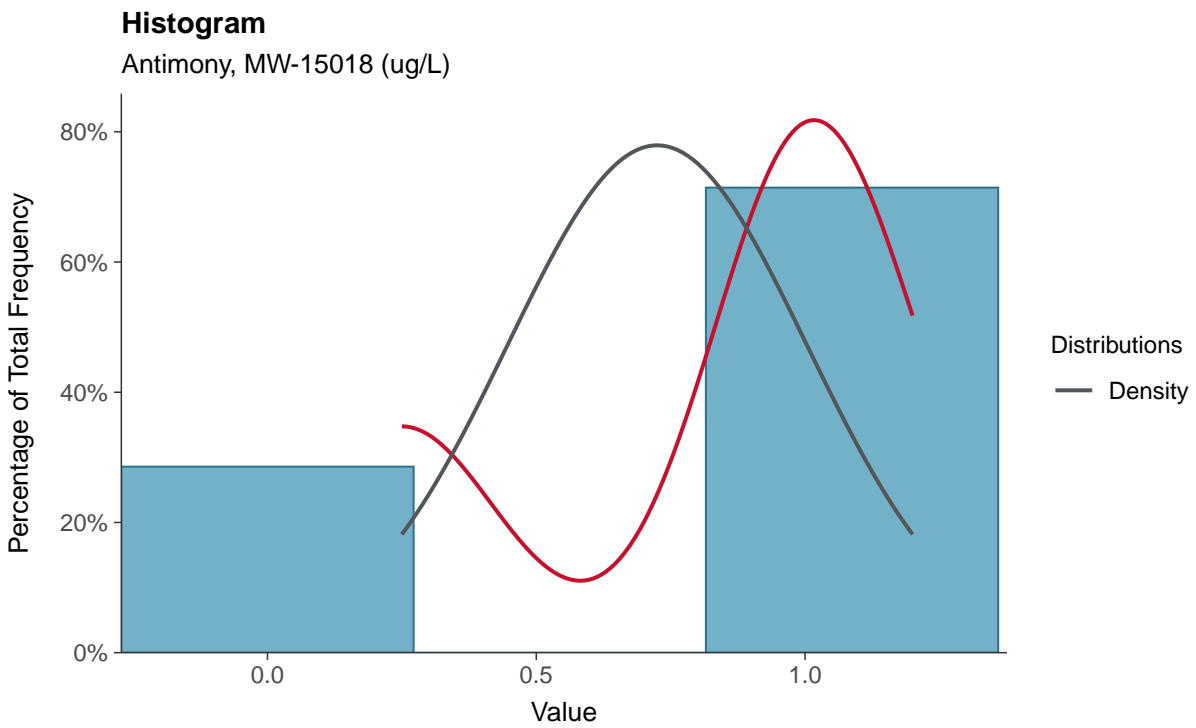
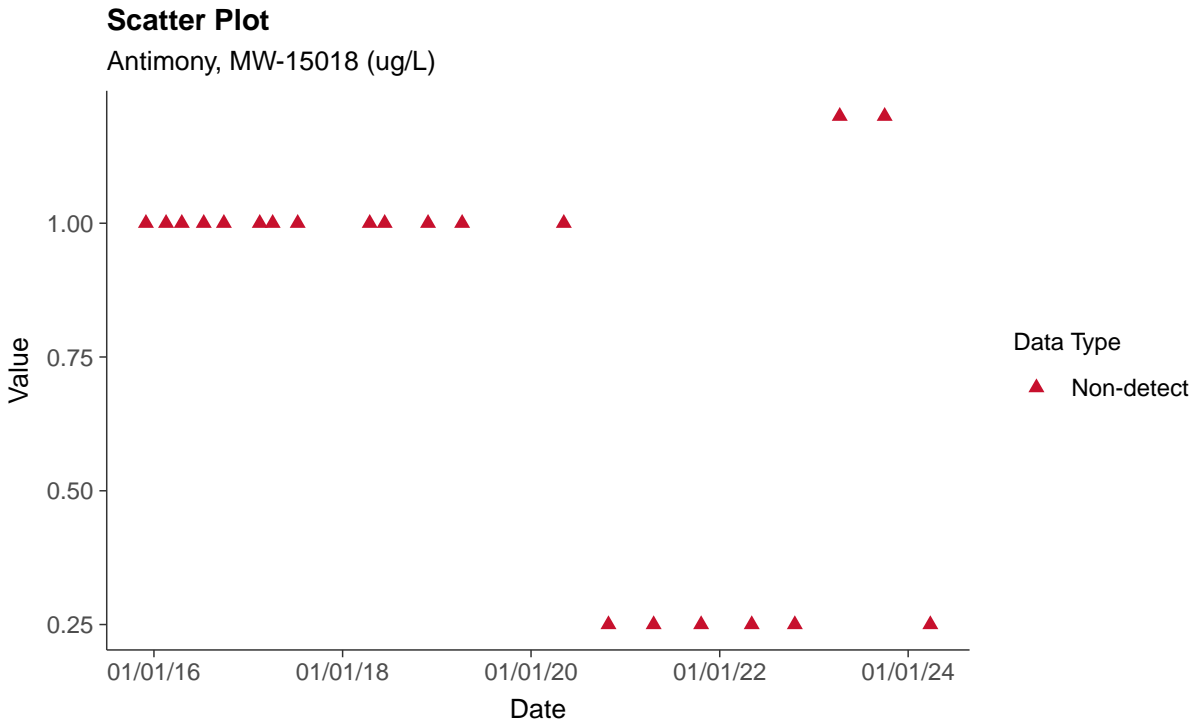
Thallium, MW-15017 (ug/L)





Appendix IV: Antimony, MW-15018

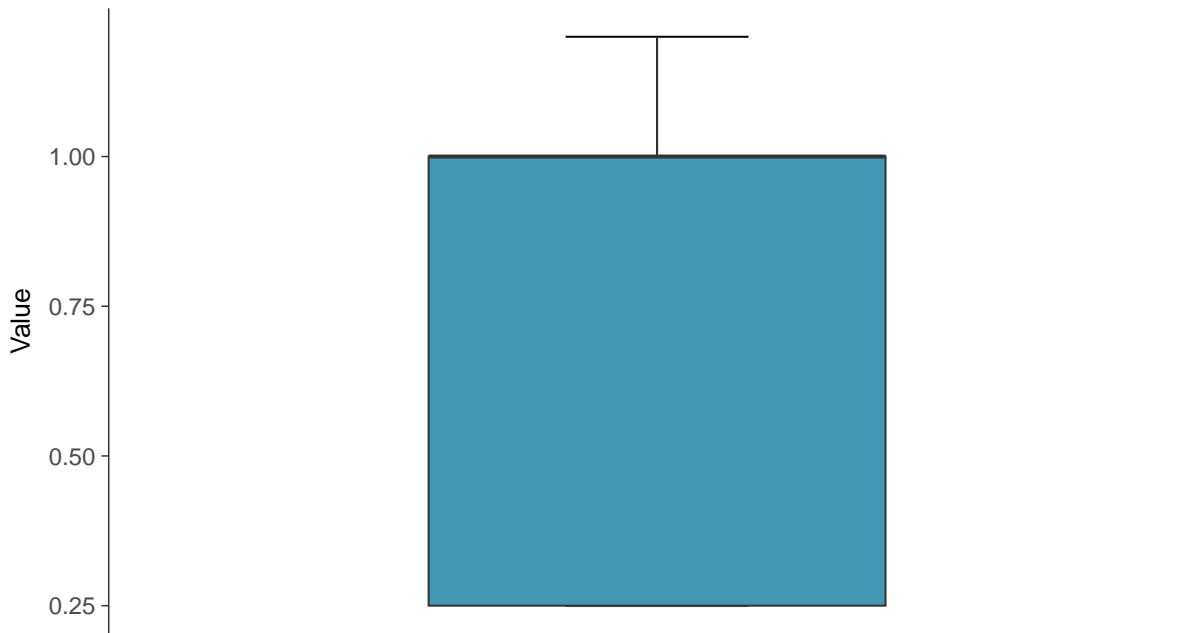
ID: 08_2_101





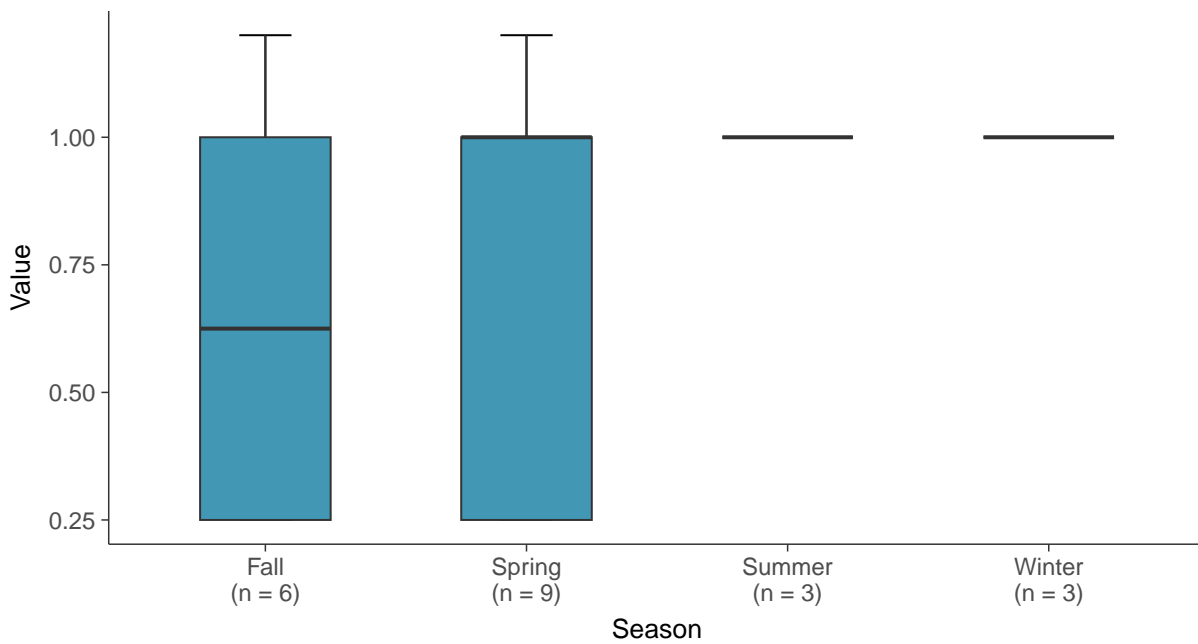
Boxplot

Antimony, MW-15018 (ug/L)



Boxplot by Season

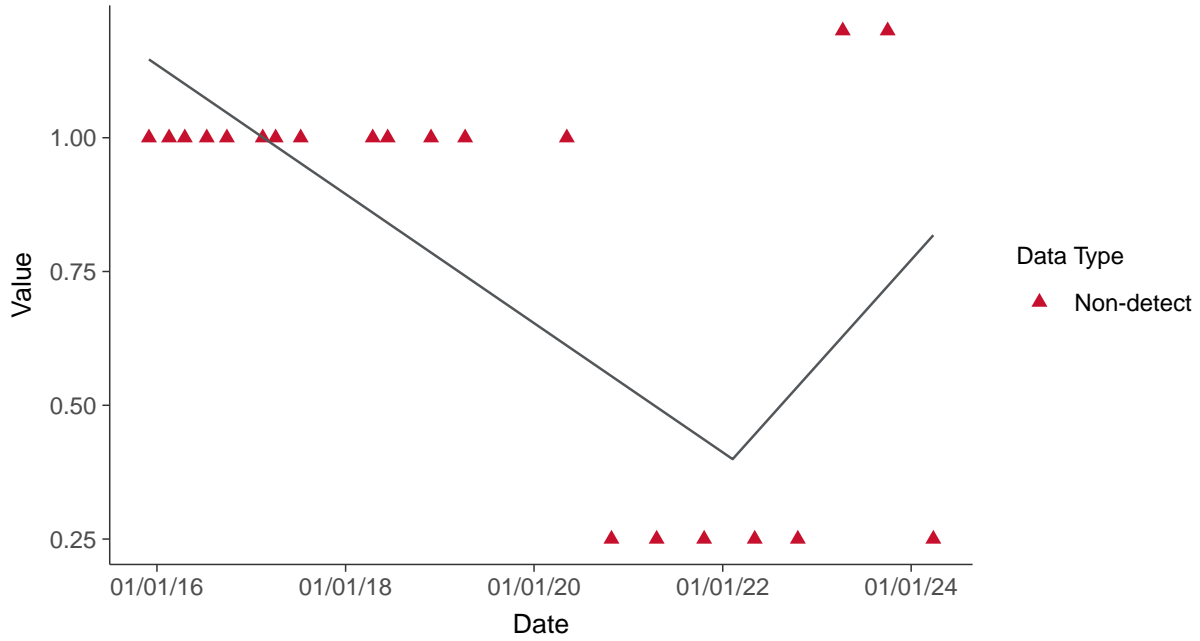
Antimony, MW-15018 (ug/L)





Trend Regression: Piecewise Linear-Linear

Antimony, MW-15018 (ug/L)



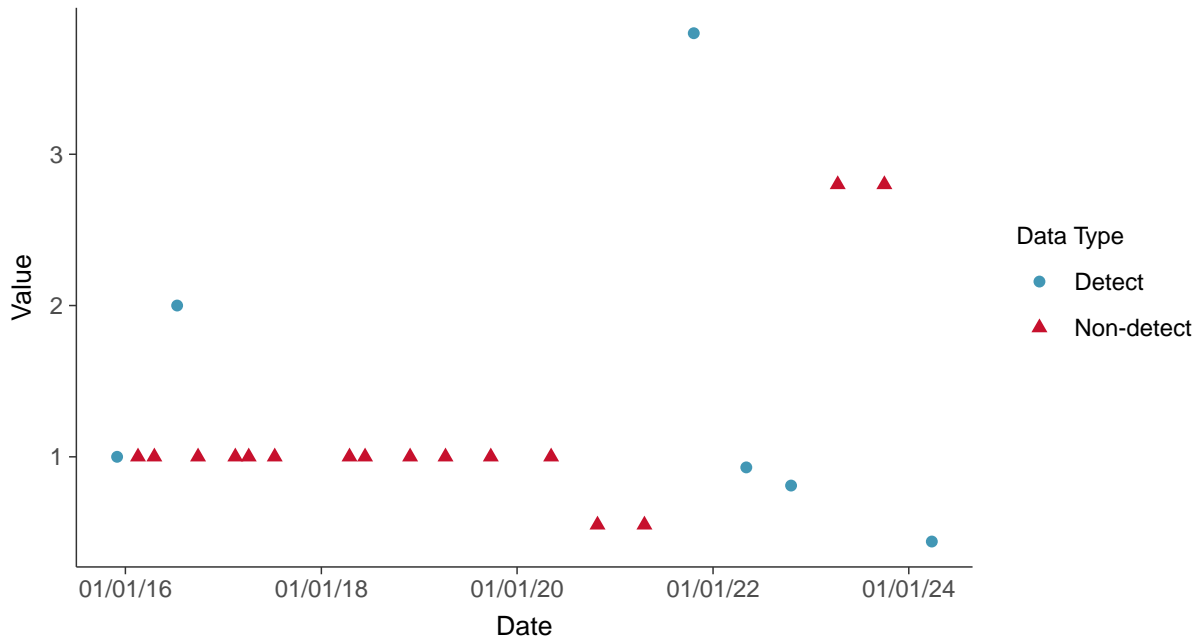


Appendix IV: Arsenic, MW-15018

ID: 08_2_102

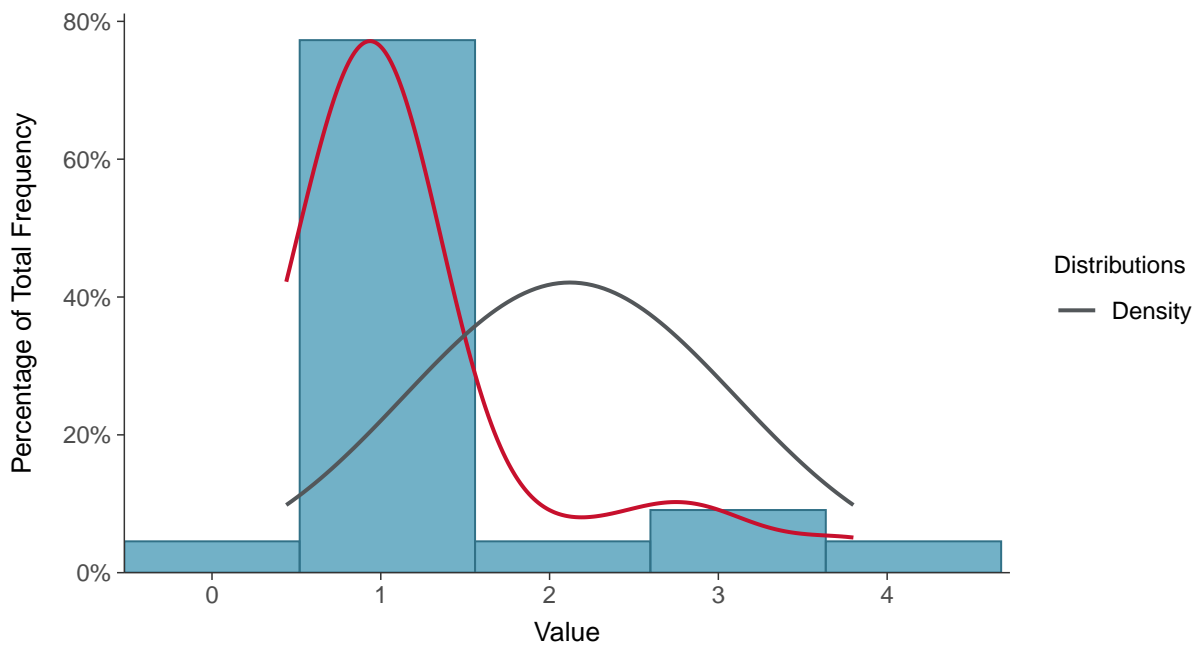
Scatter Plot

Arsenic, MW-15018 (ug/L)



Histogram

Arsenic, MW-15018 (ug/L)





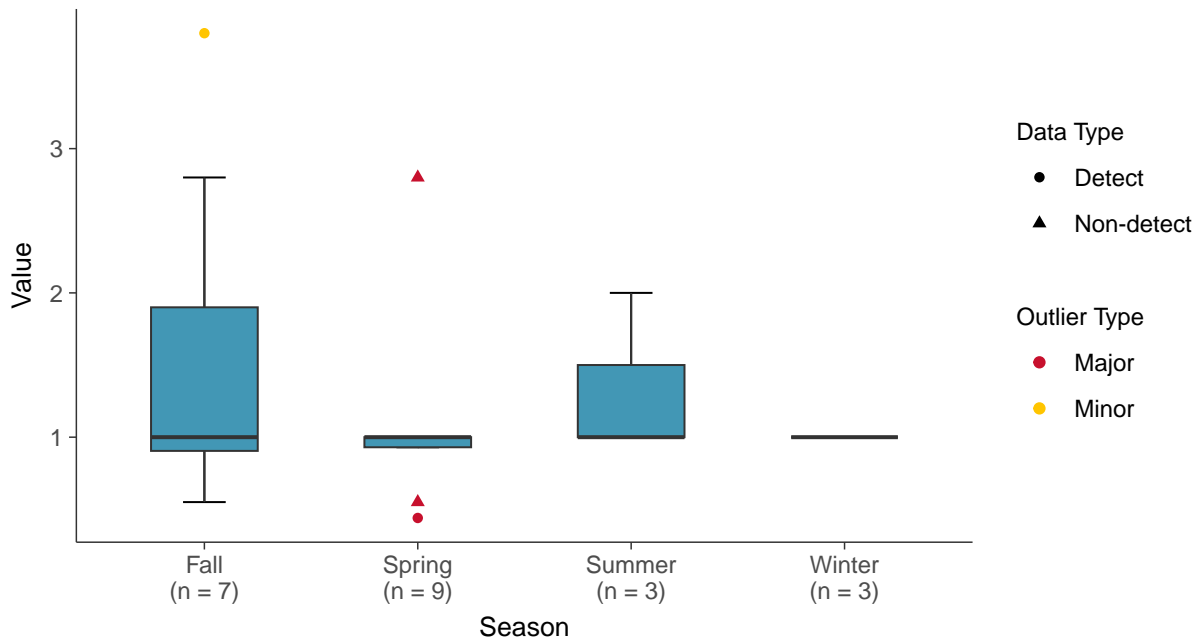
Boxplot

Arsenic, MW-15018 (ug/L)



Boxplot by Season

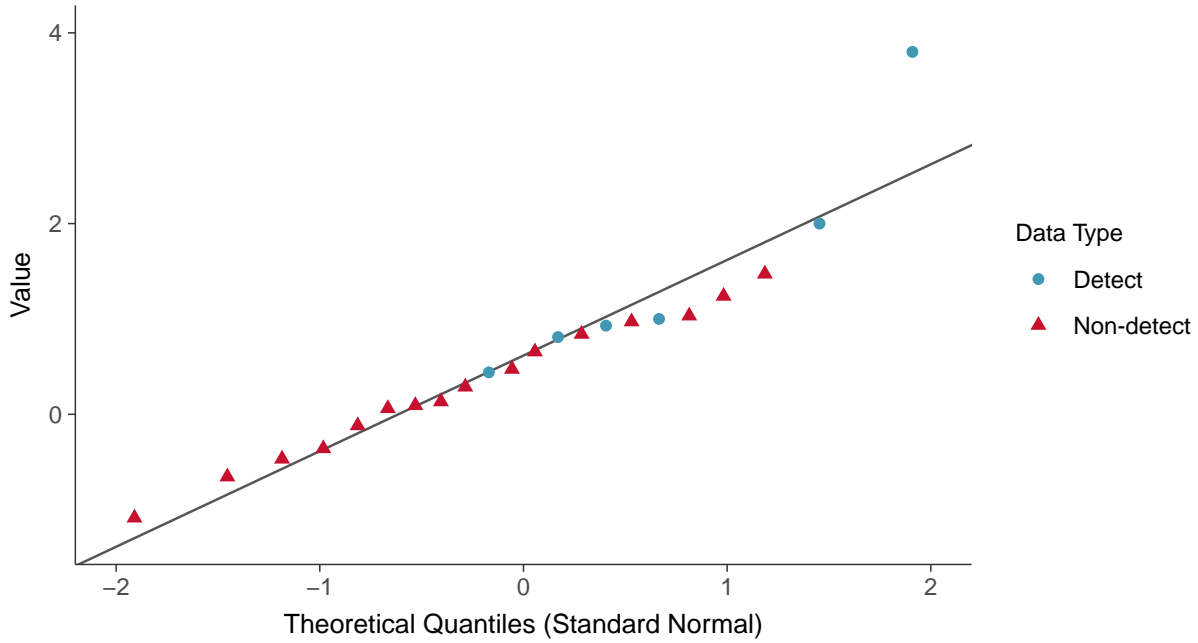
Arsenic, MW-15018 (ug/L)





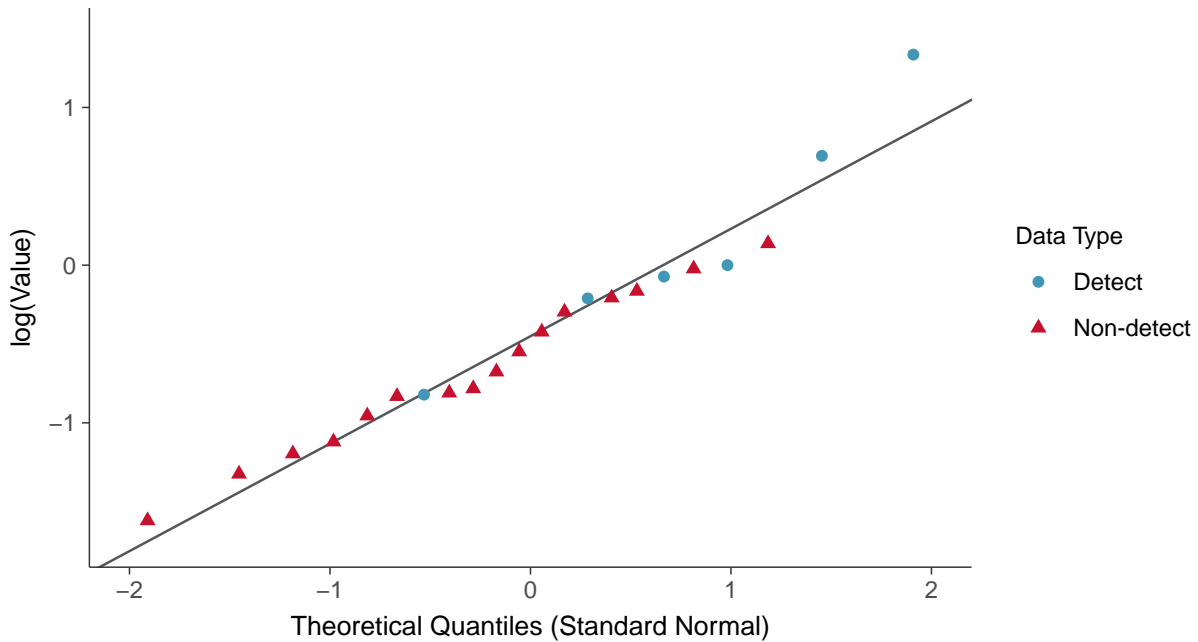
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15018 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

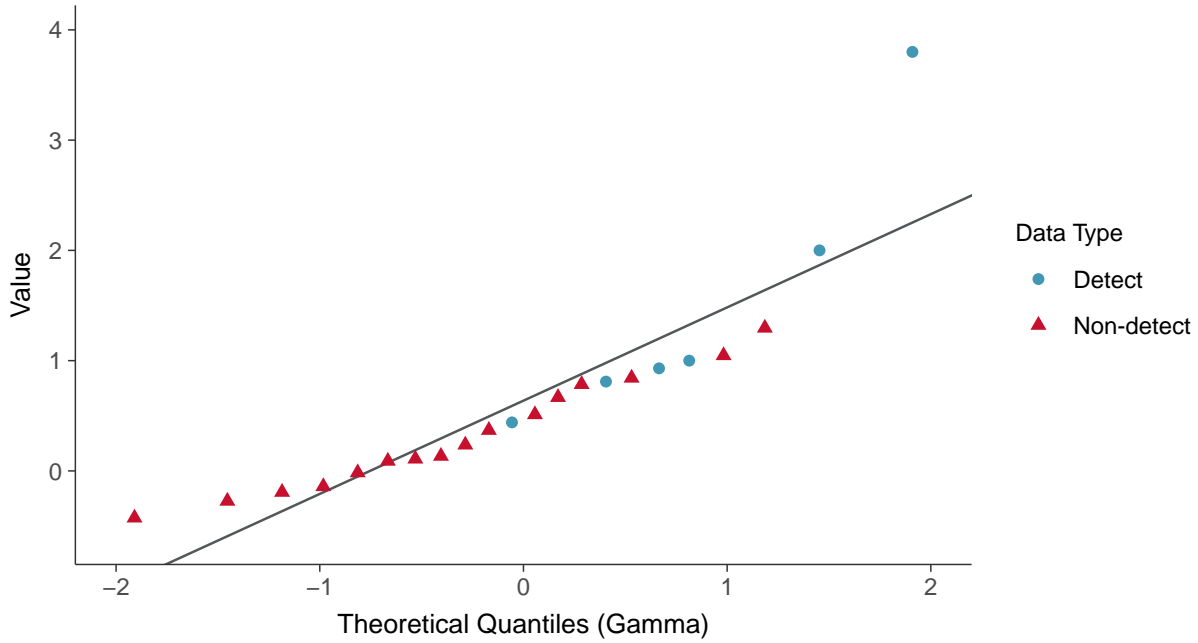
Arsenic, MW-15018 (ug/L)





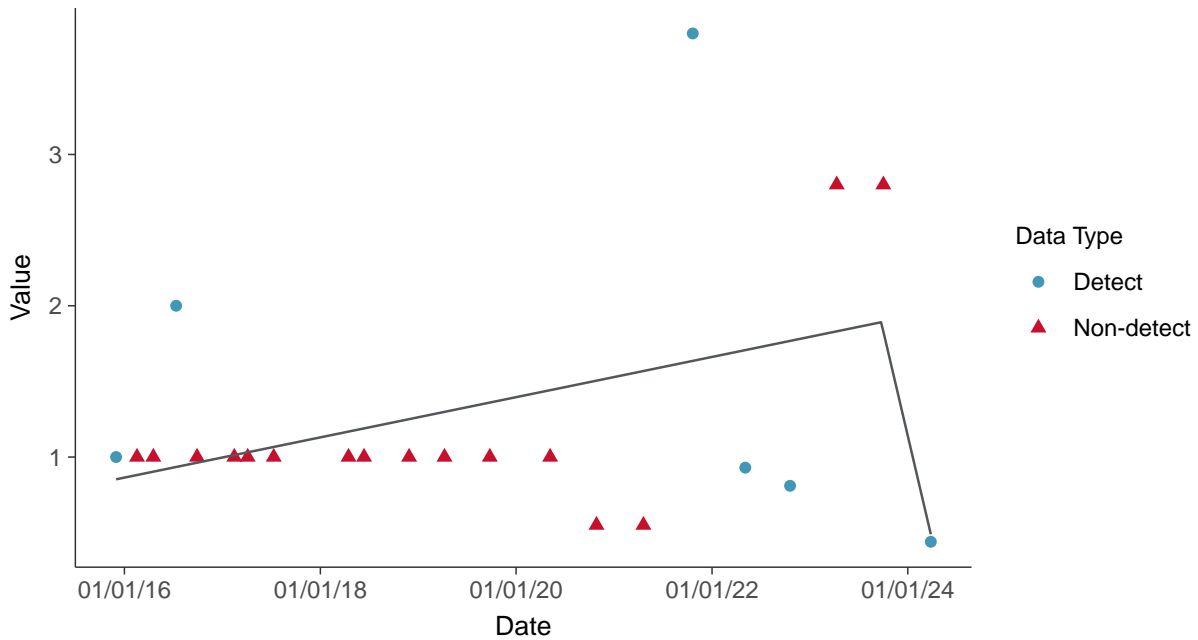
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear

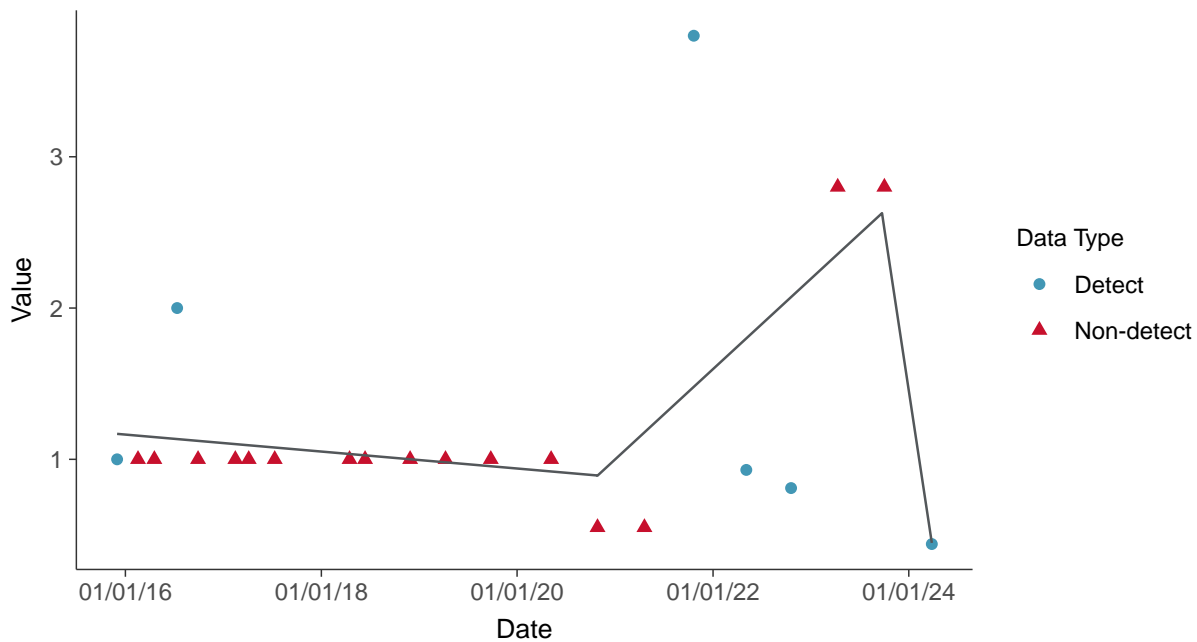
Arsenic, MW-15018 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15018 (ug/L)



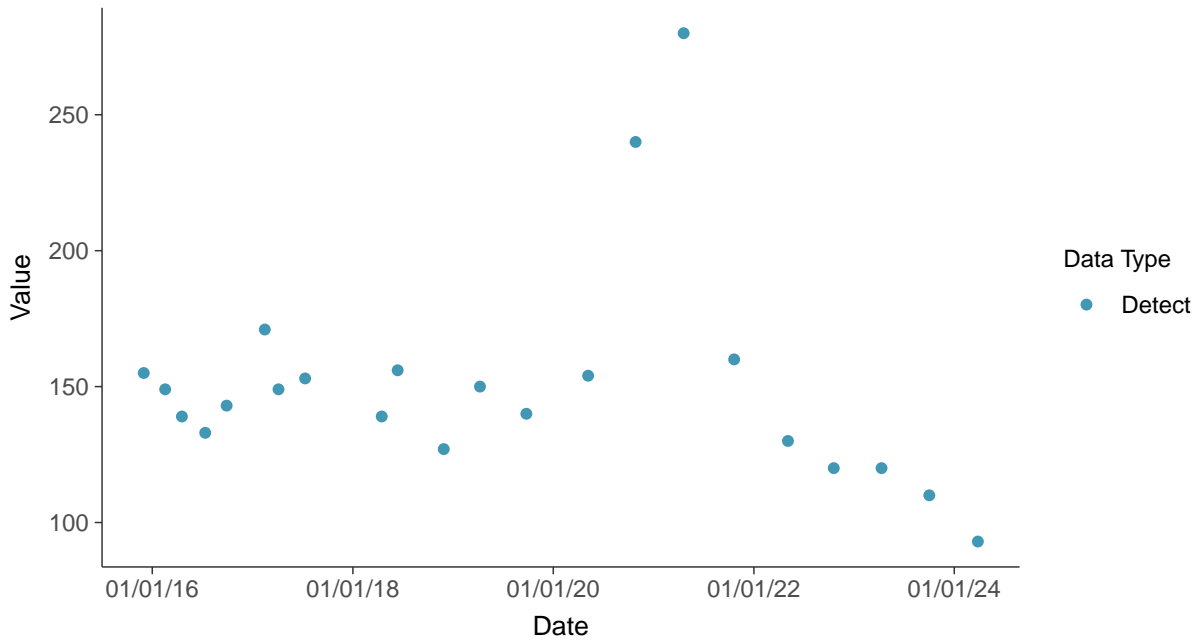


Appendix IV: Barium, MW-15018

ID: 08_2_103

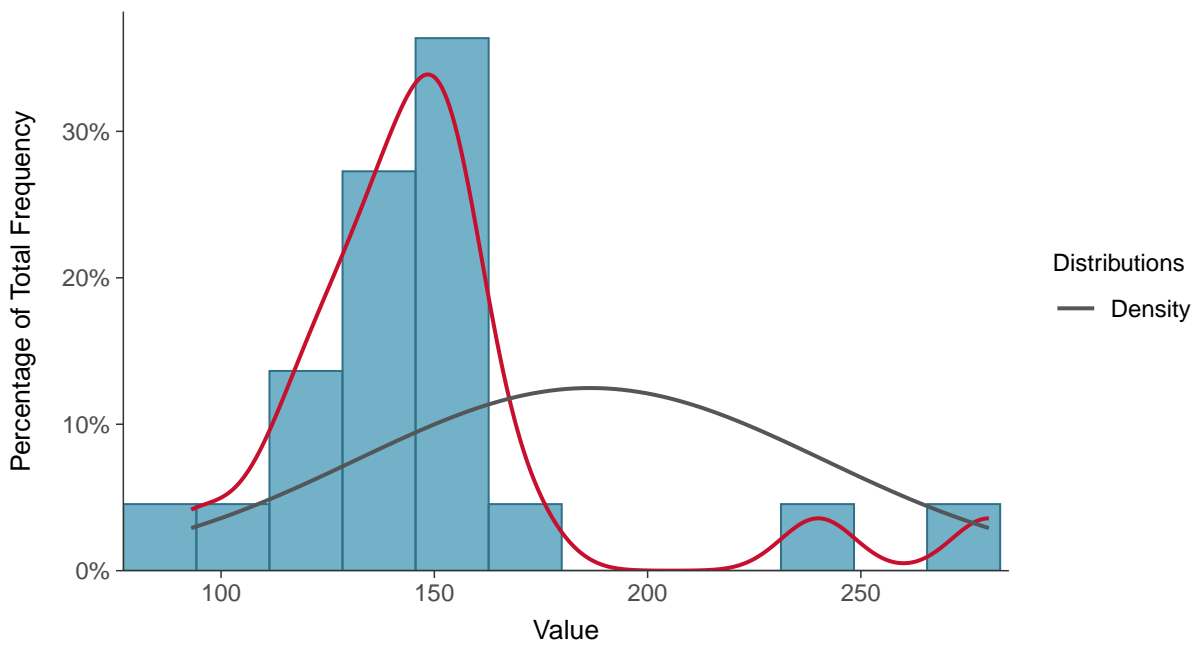
Scatter Plot

Barium, MW-15018 (ug/L)



Histogram

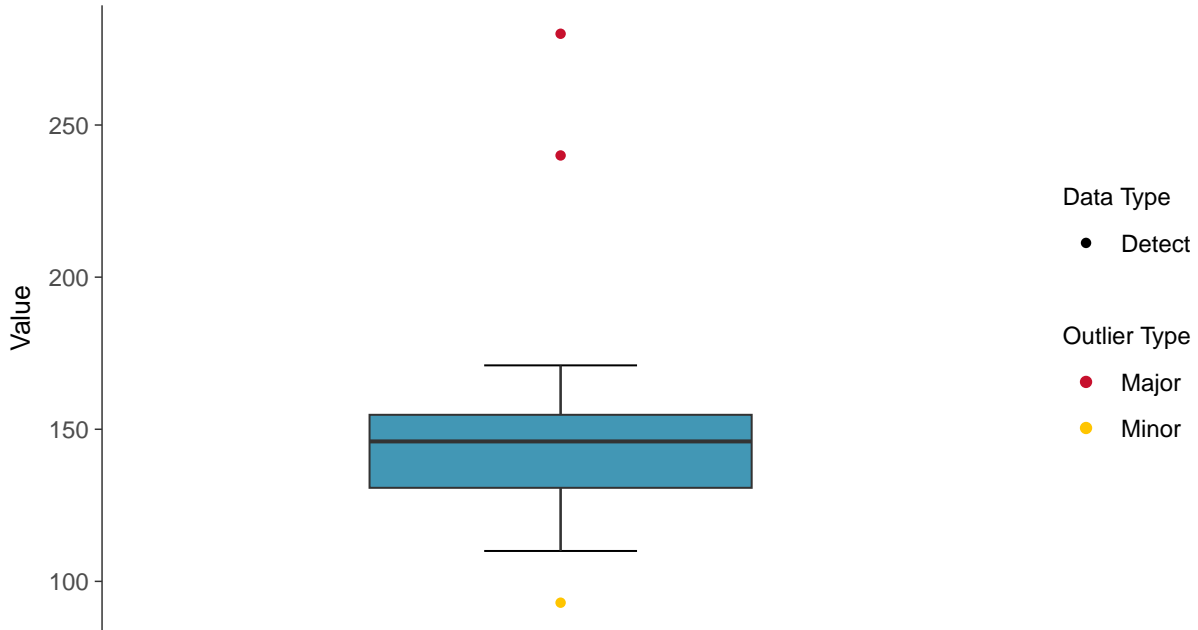
Barium, MW-15018 (ug/L)





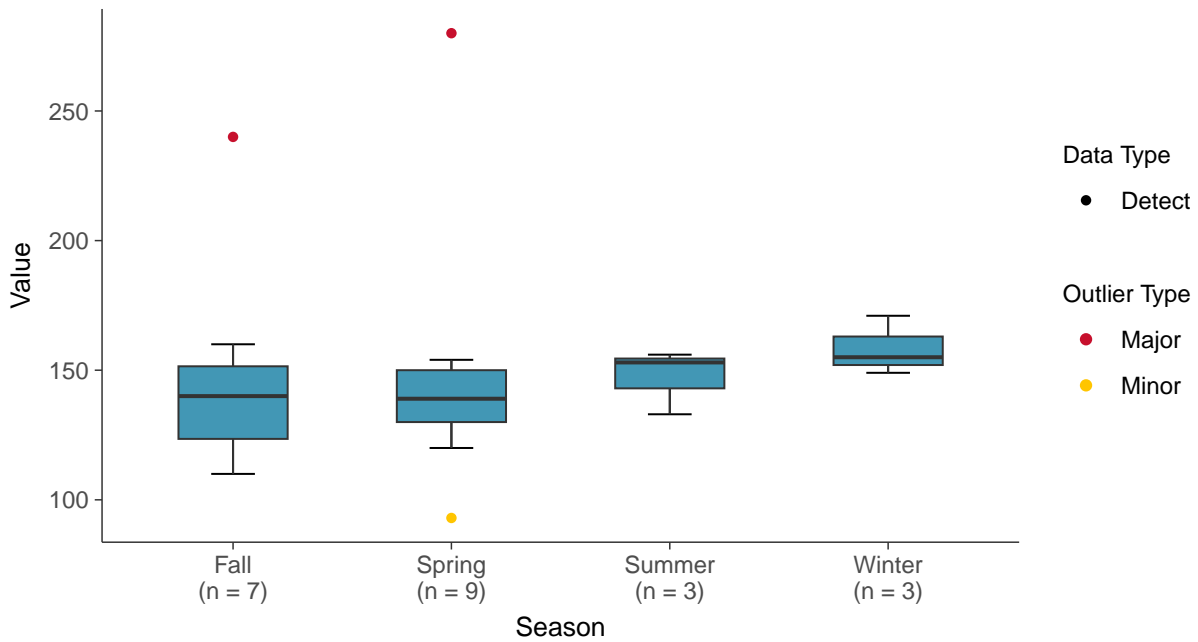
Boxplot

Barium, MW-15018 (ug/L)



Boxplot by Season

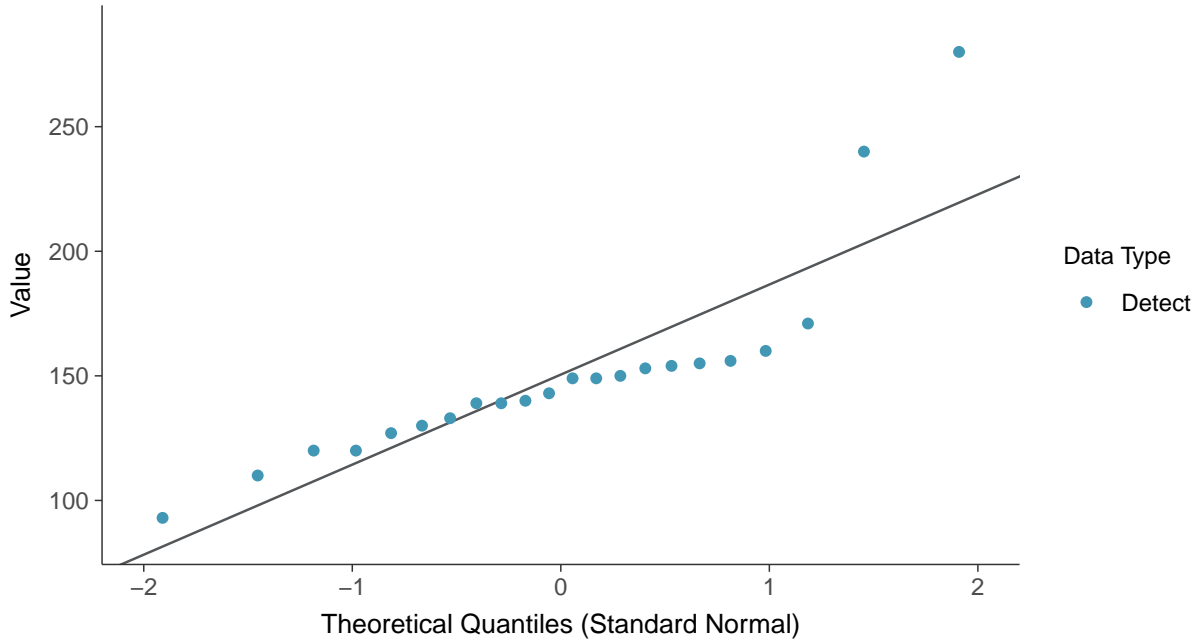
Barium, MW-15018 (ug/L)





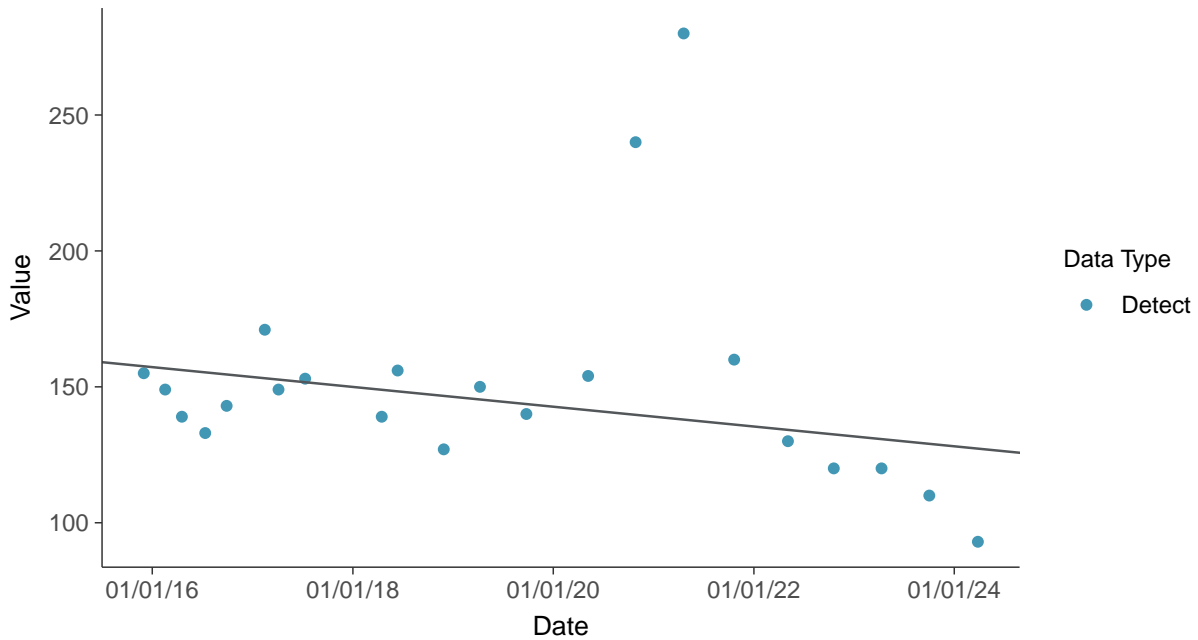
Normal Q-Q plot

Barium, MW-15018 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

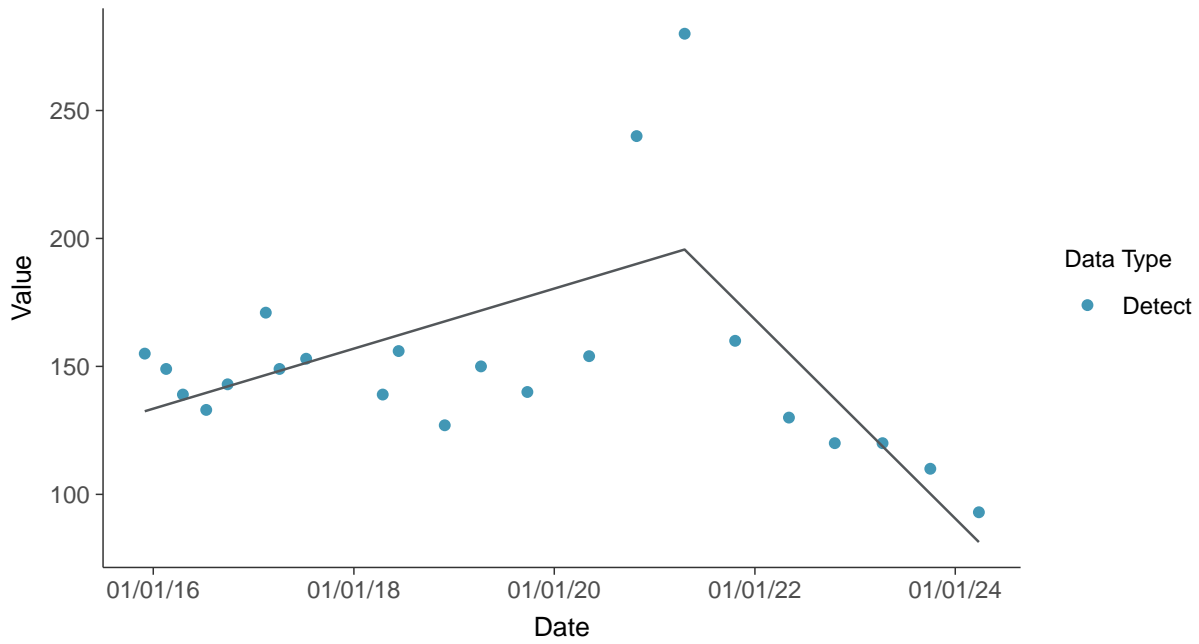
Barium, MW-15018 (ug/L)





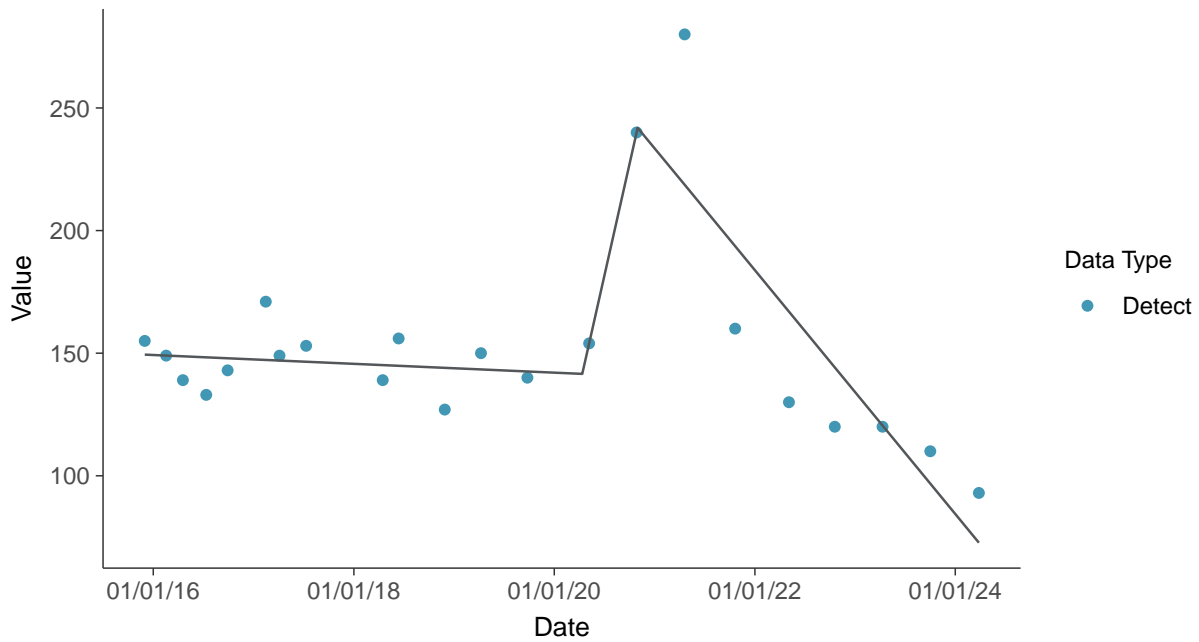
Trend Regression: Piecewise Linear-Linear

Barium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

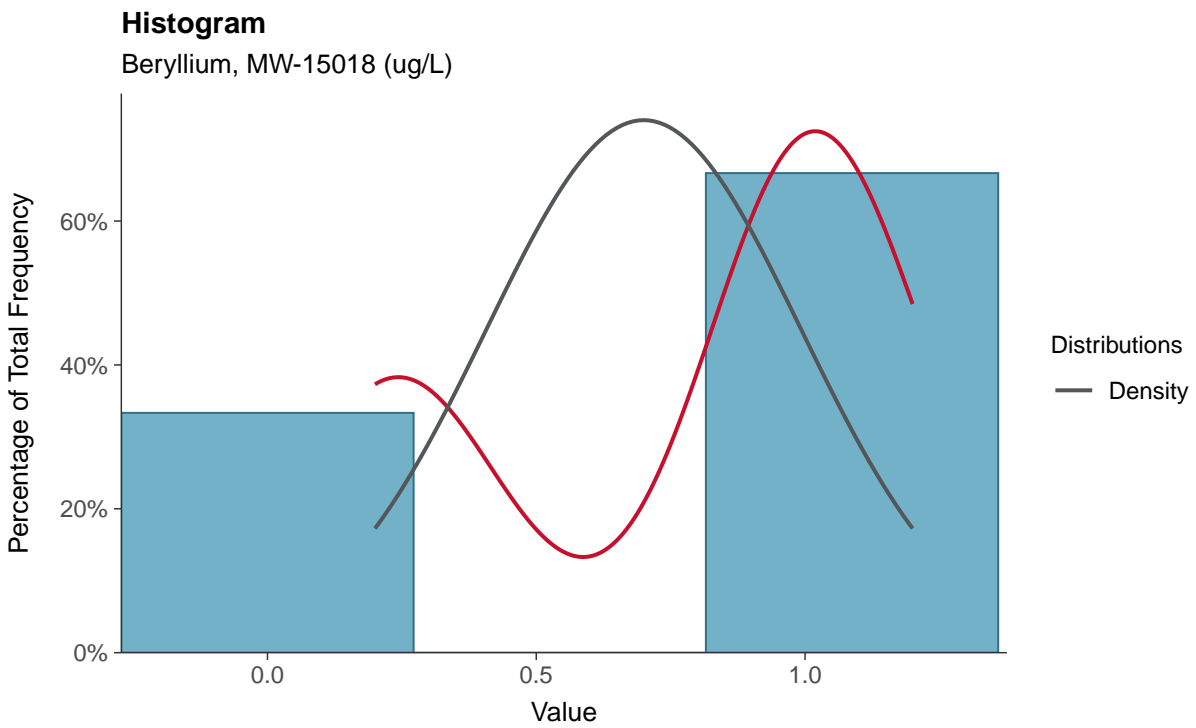
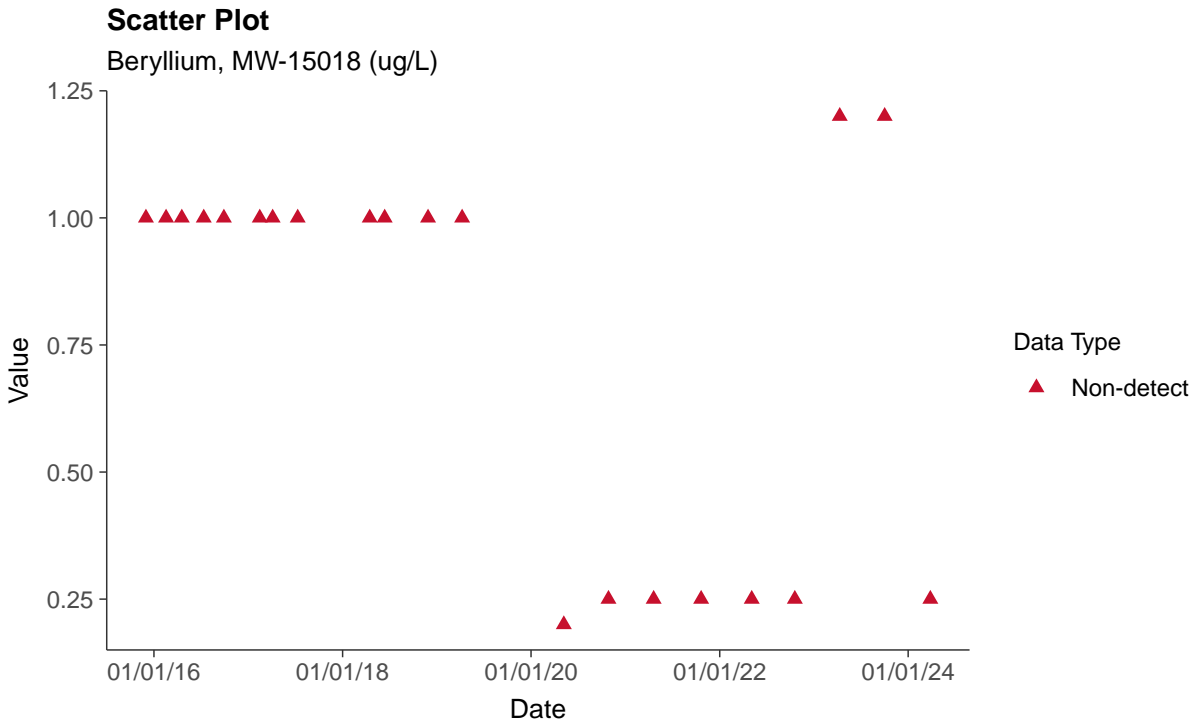
Barium, MW-15018 (ug/L)





Appendix IV: Beryllium, MW-15018

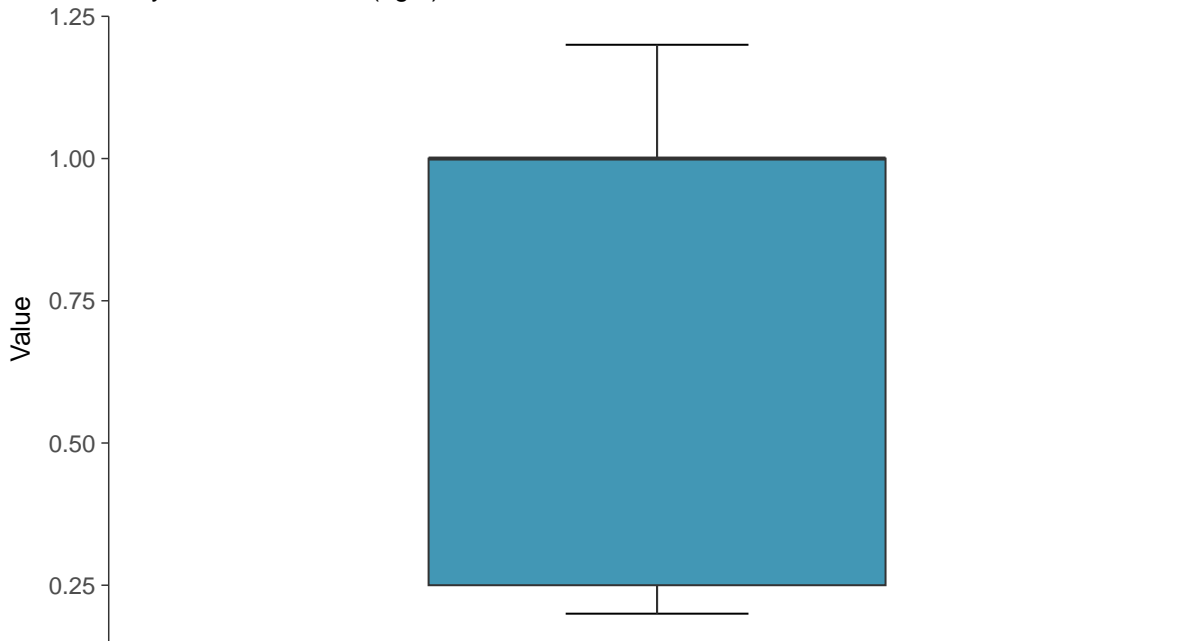
ID: 08_2_104





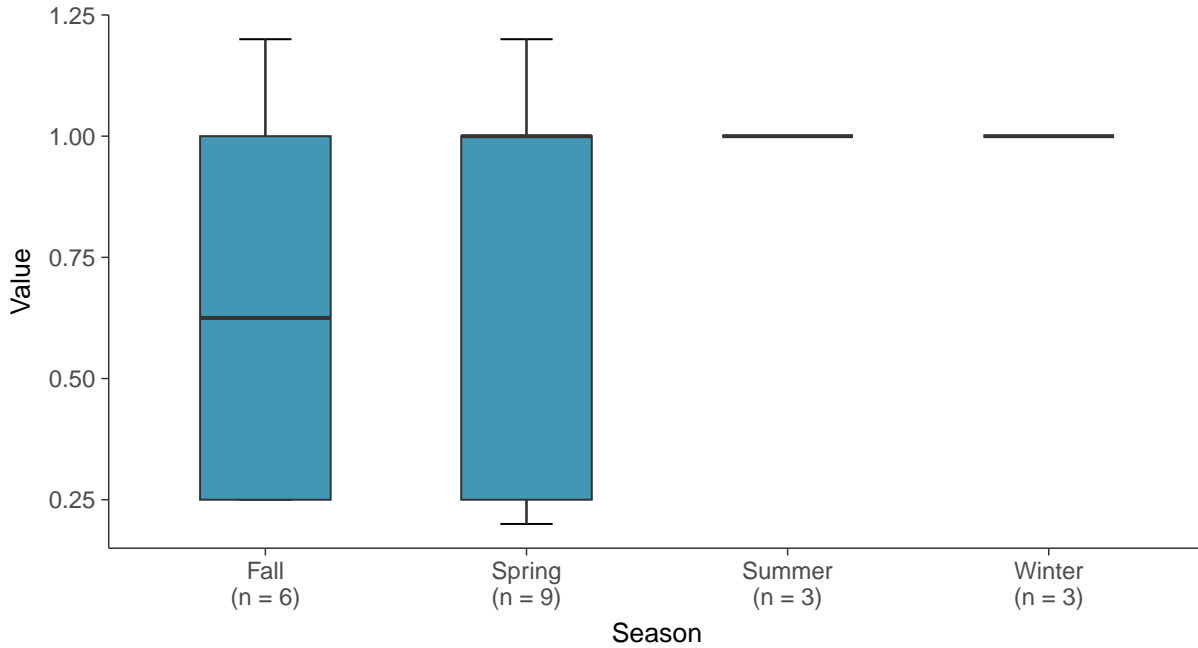
Boxplot

Beryllium, MW-15018 (ug/L)



Boxplot by Season

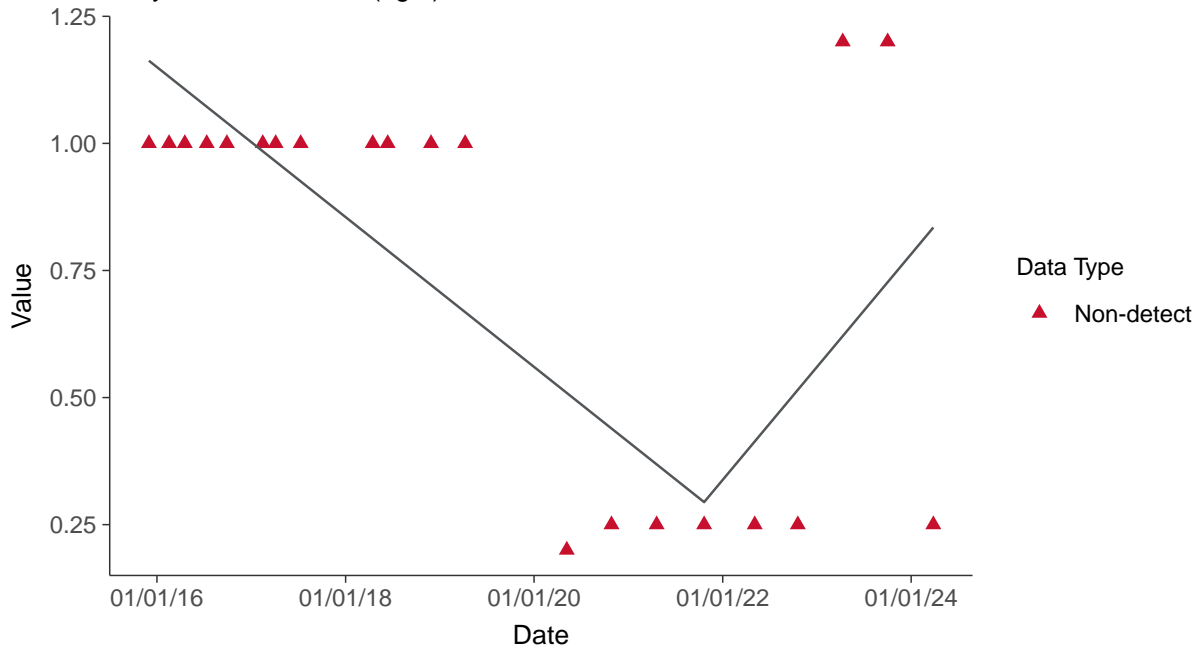
Beryllium, MW-15018 (ug/L)





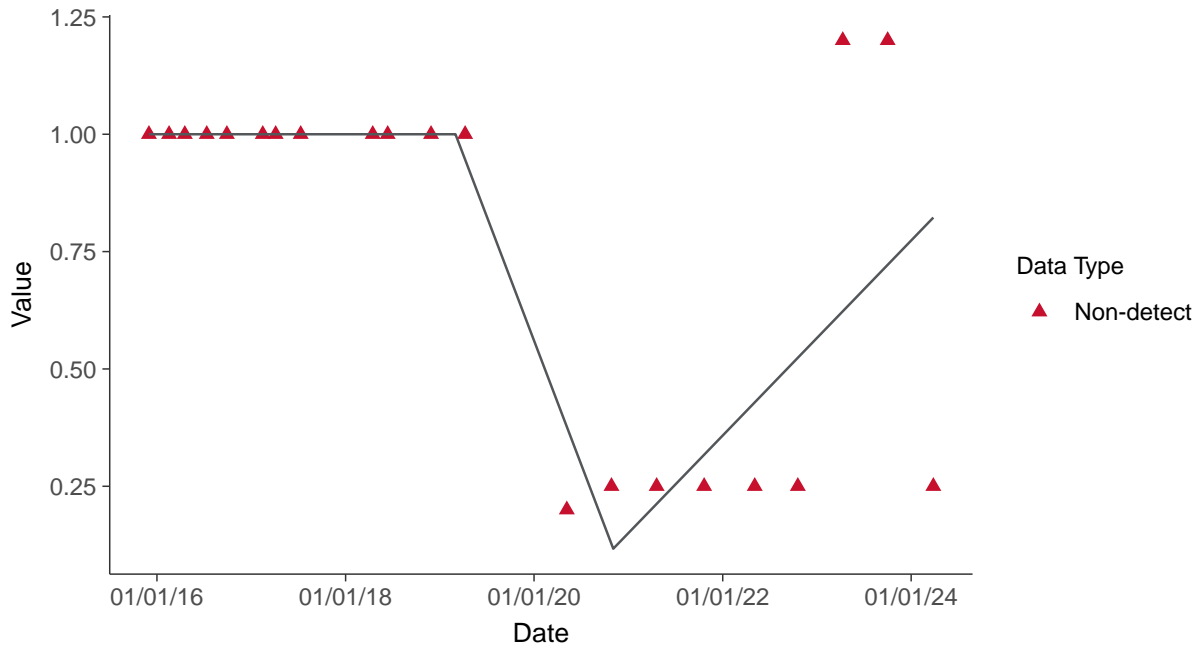
Trend Regression: Piecewise Linear-Linear

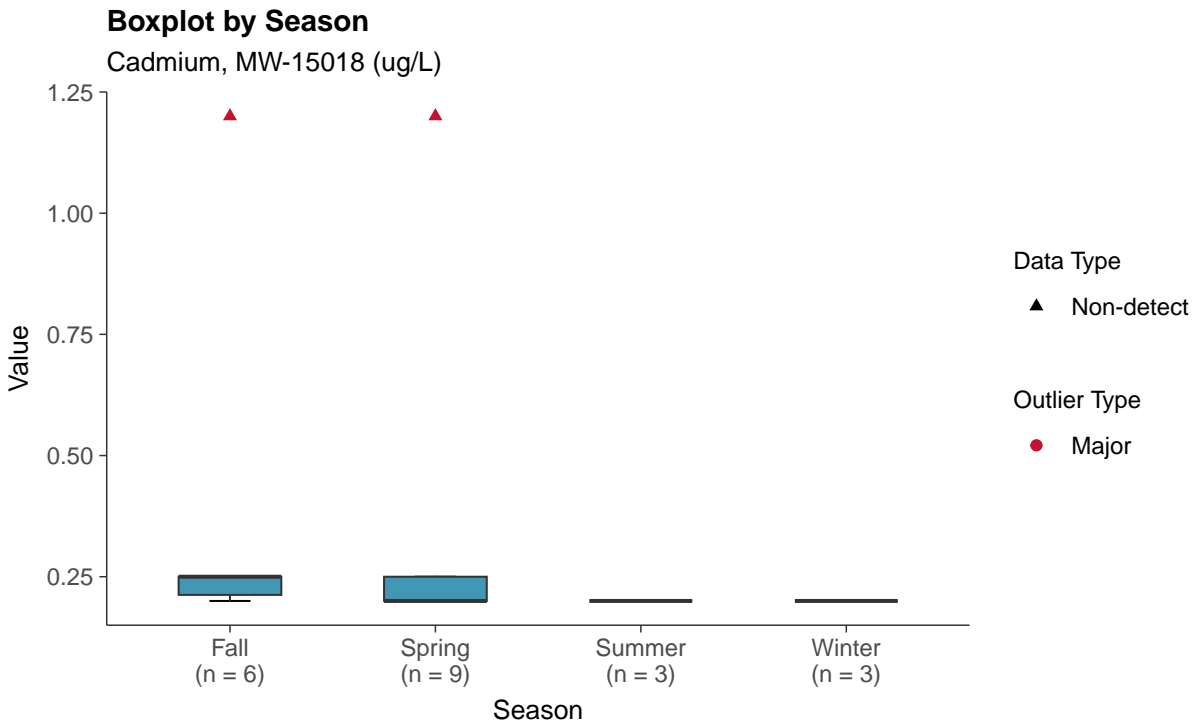
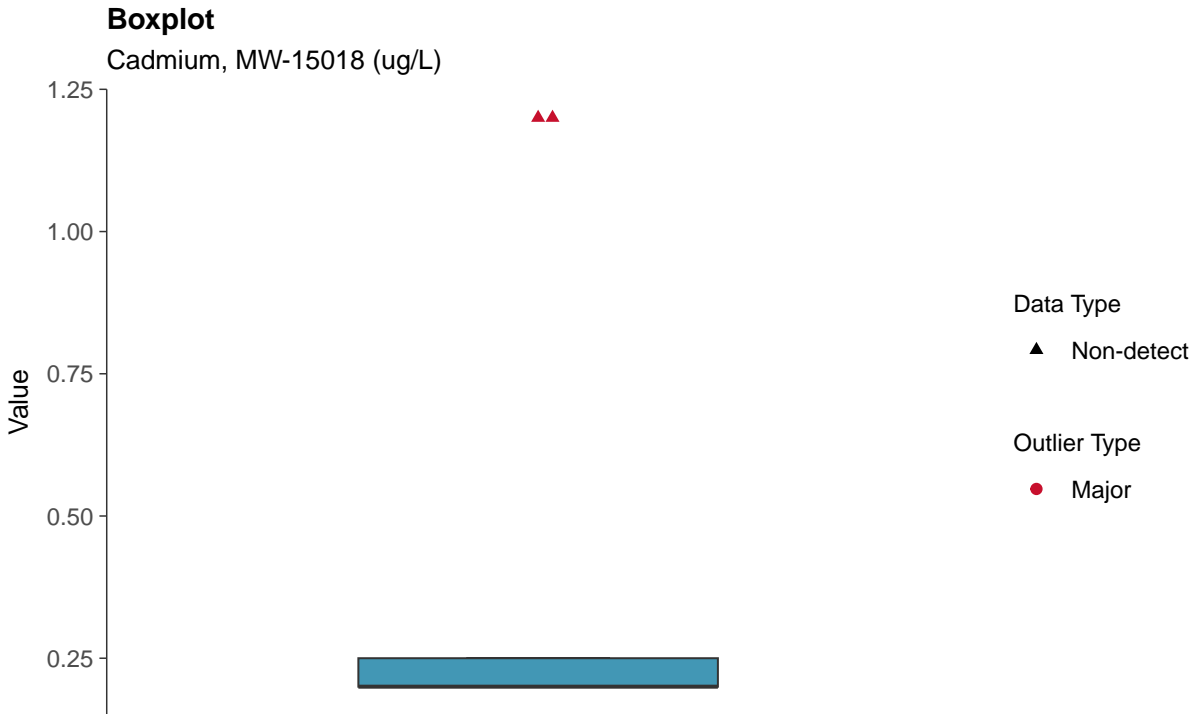
Beryllium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-15018 (ug/L)

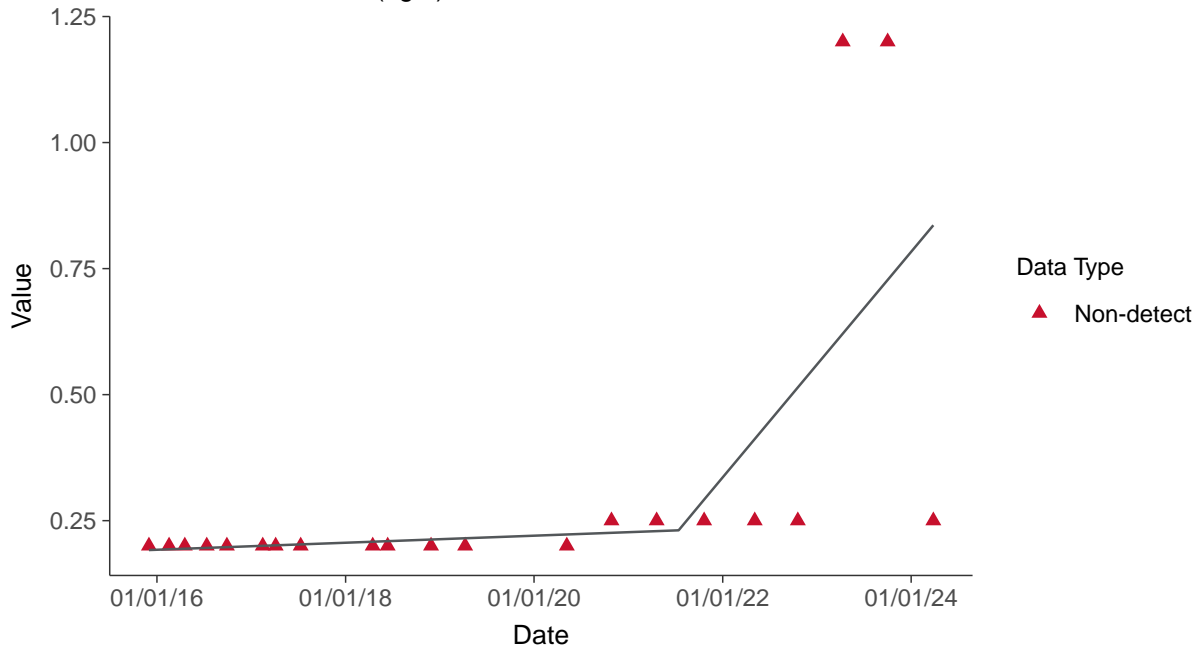






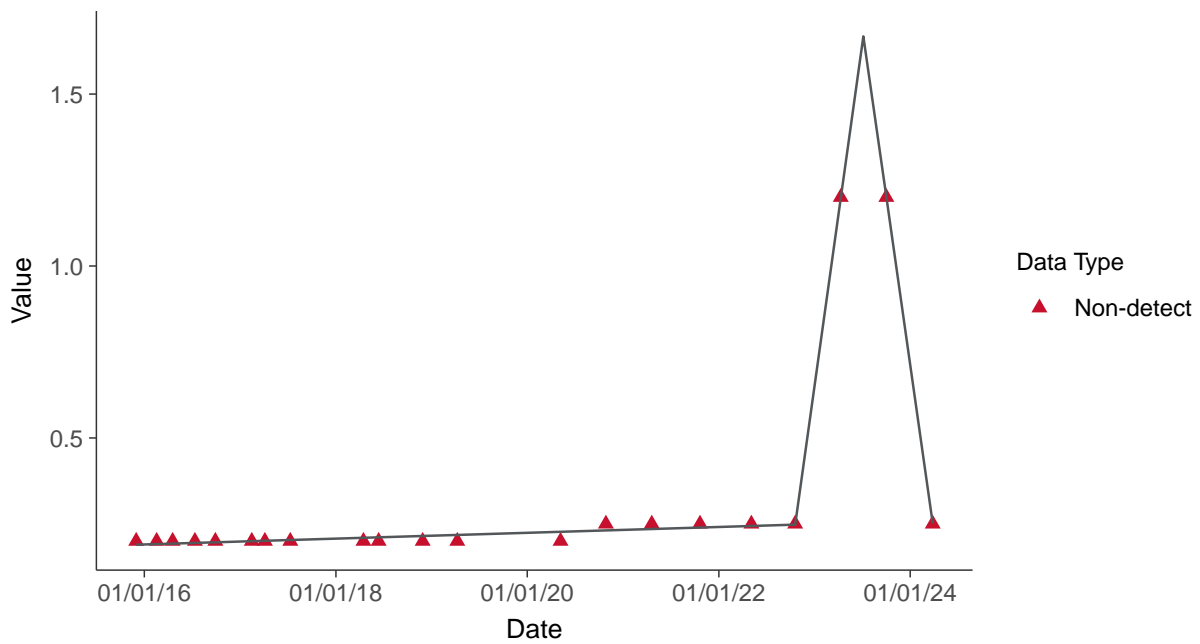
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15018 (ug/L)



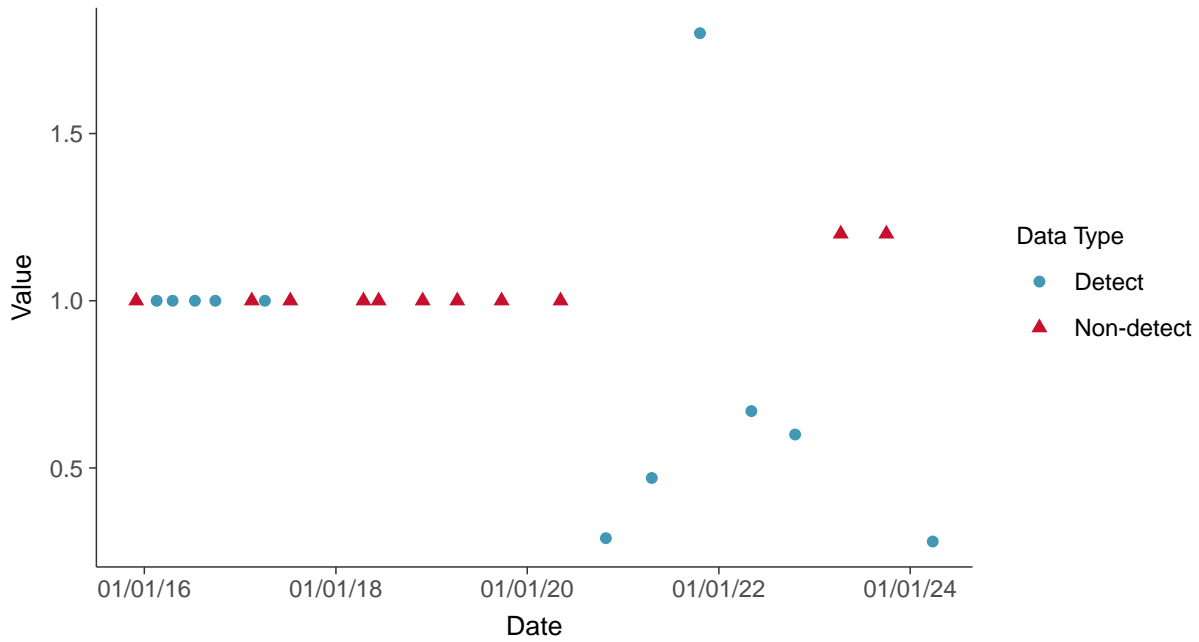


Appendix IV: Chromium, MW-15018

ID: 08_2_109

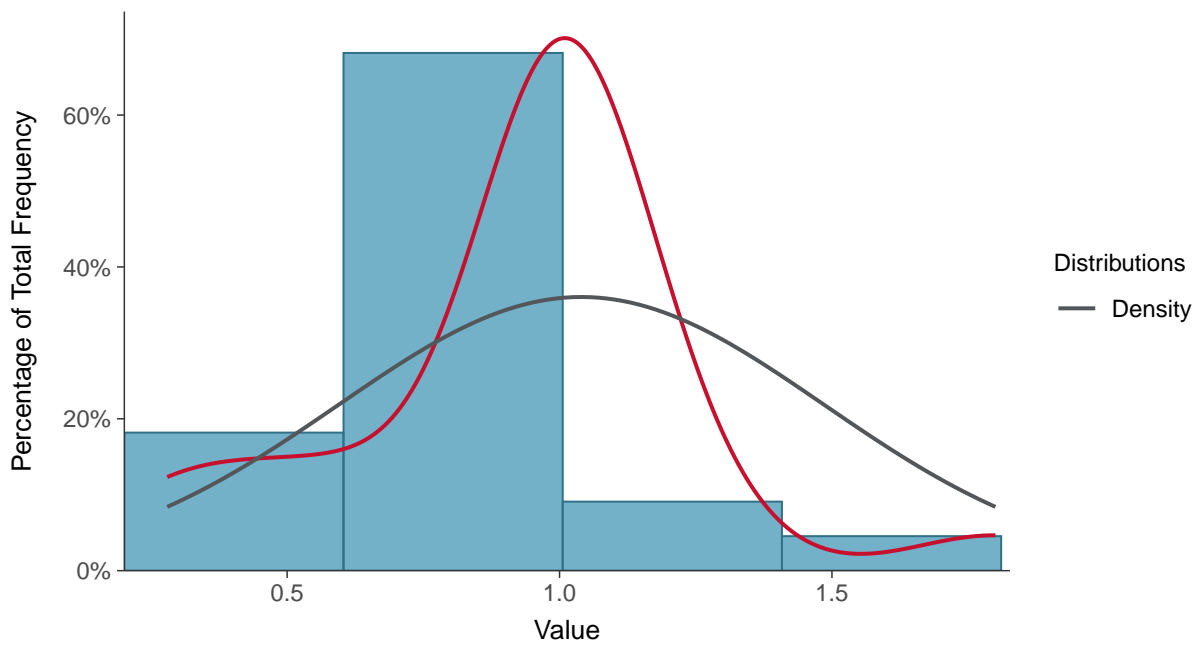
Scatter Plot

Chromium, MW-15018 (ug/L)



Histogram

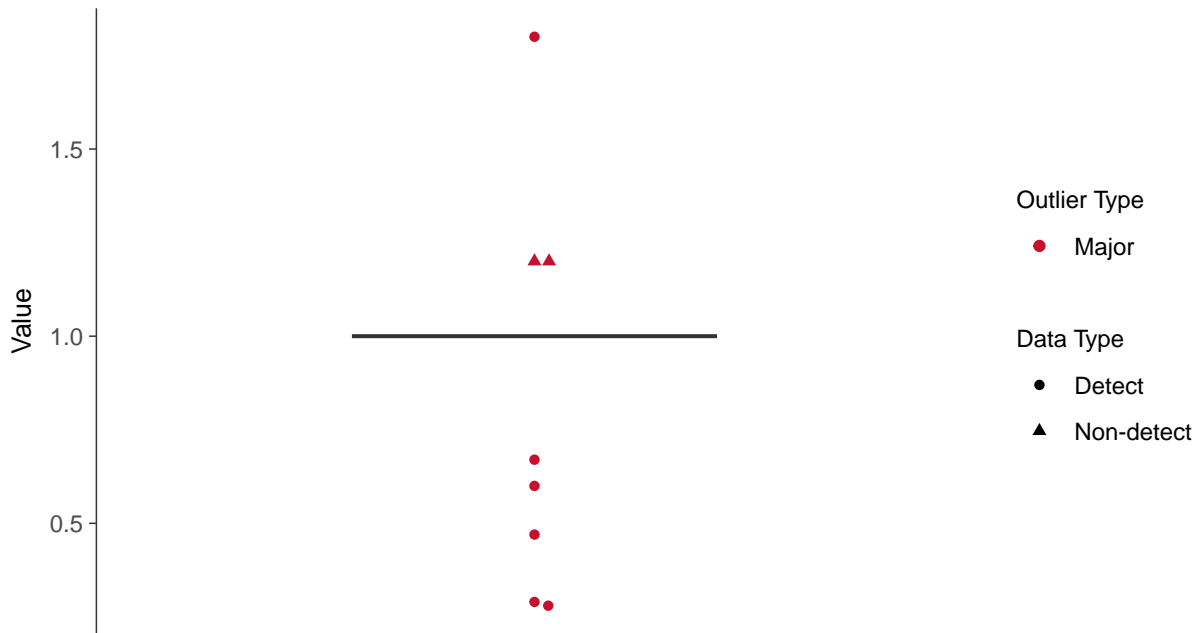
Chromium, MW-15018 (ug/L)





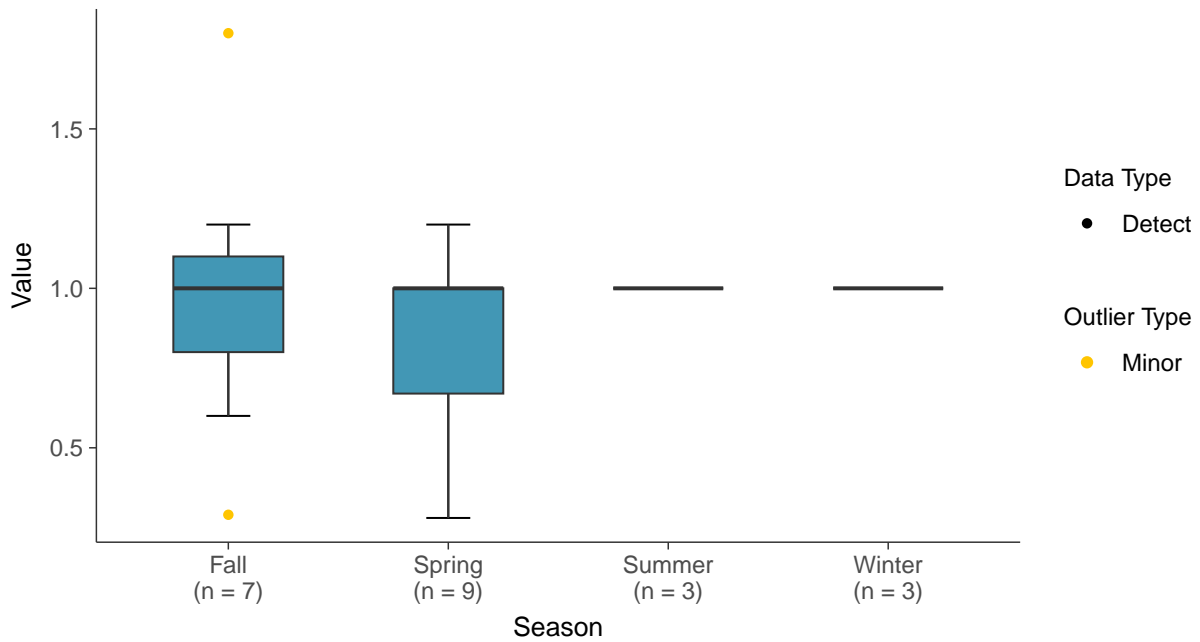
Boxplot

Chromium, MW-15018 (ug/L)



Boxplot by Season

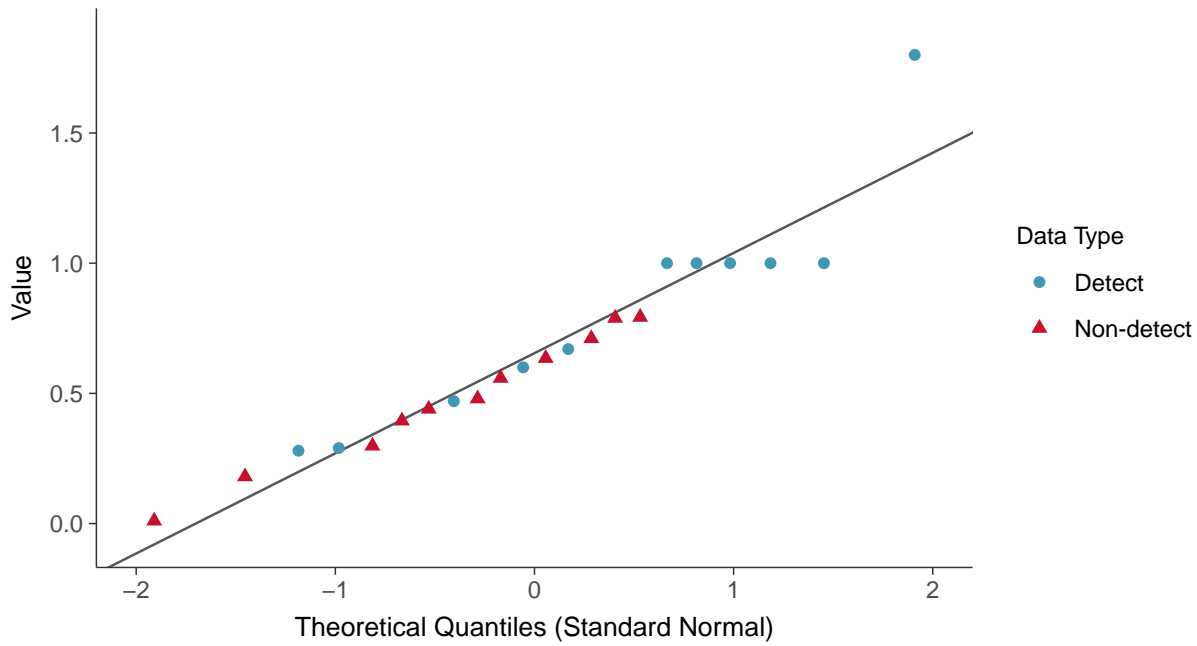
Chromium, MW-15018 (ug/L)





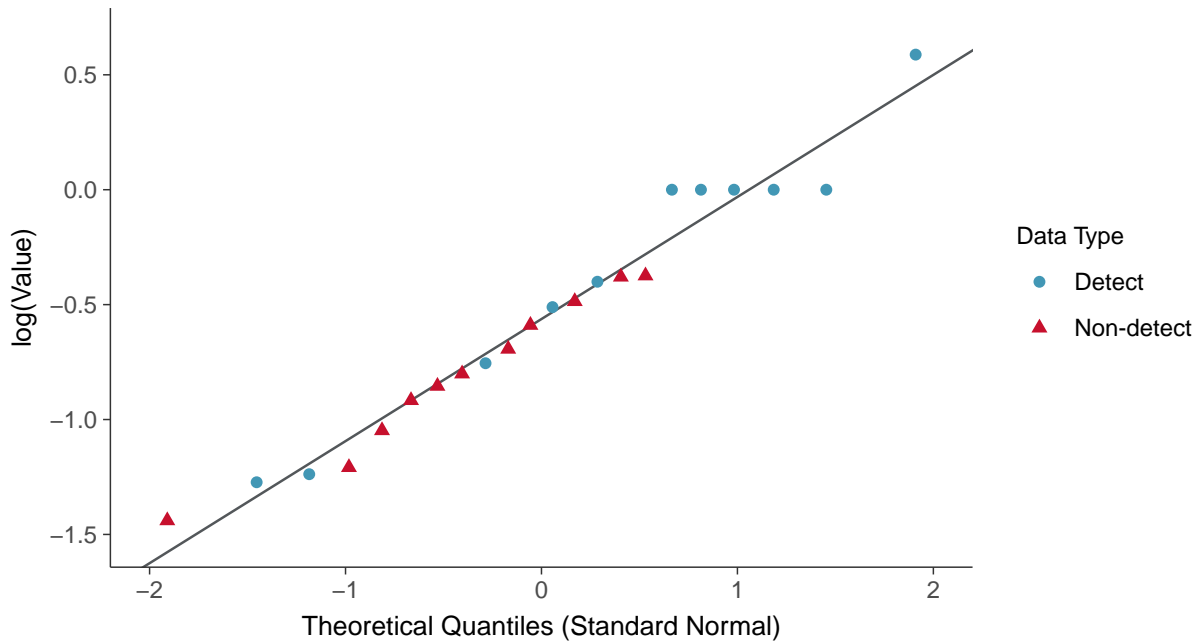
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15018 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

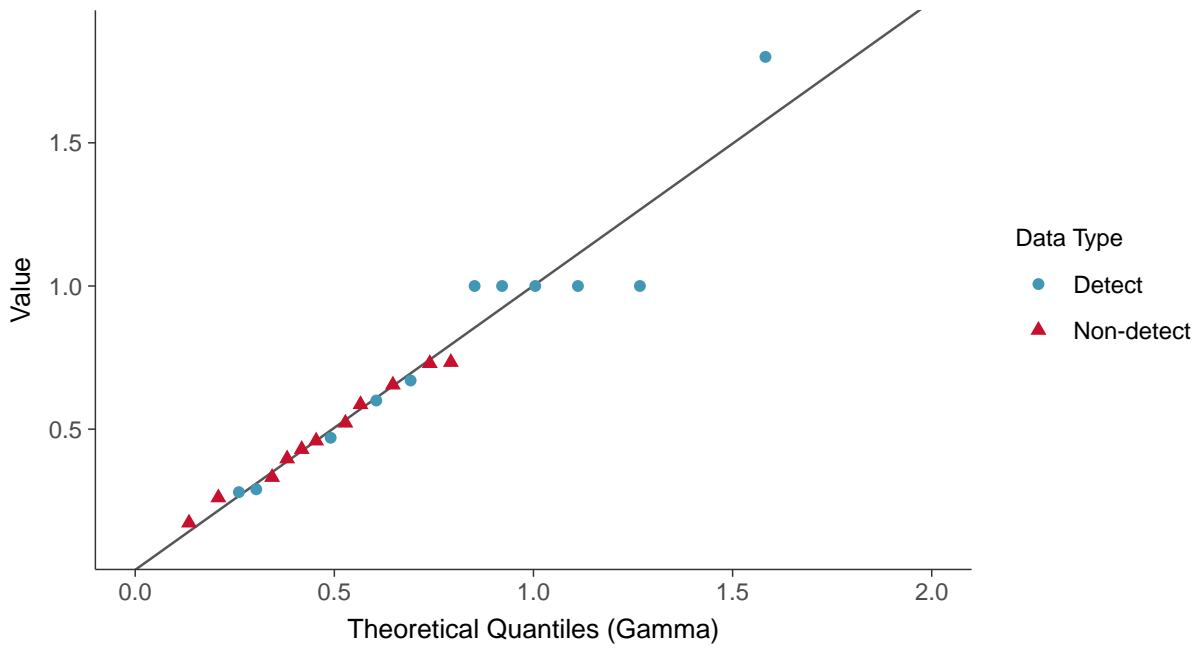
Chromium, MW-15018 (ug/L)





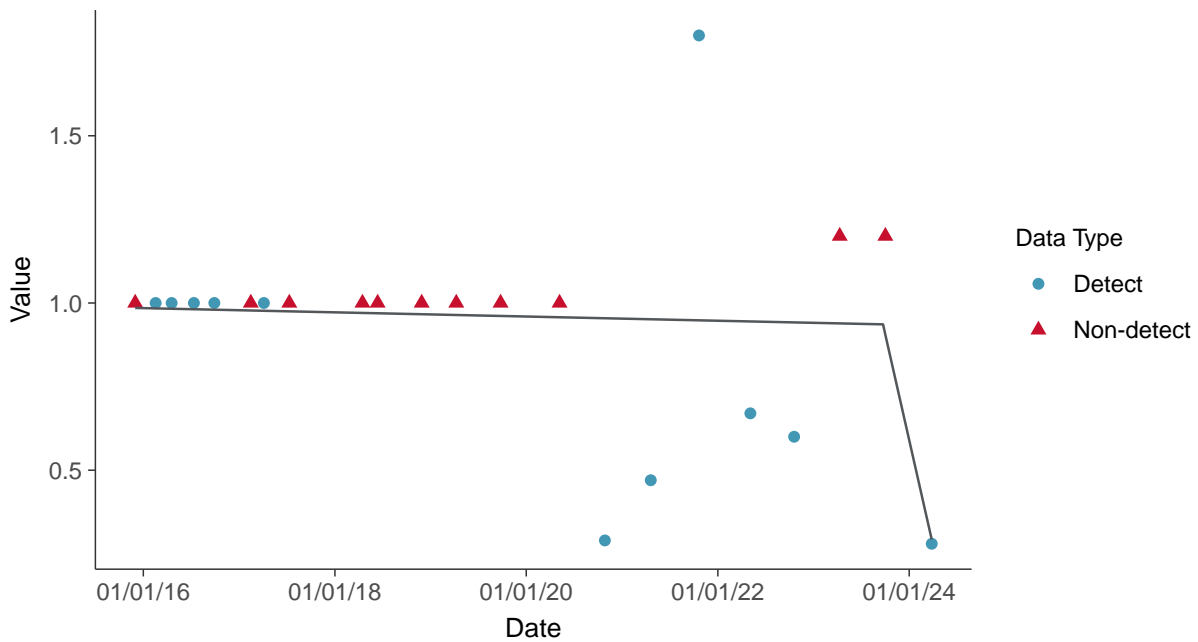
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear

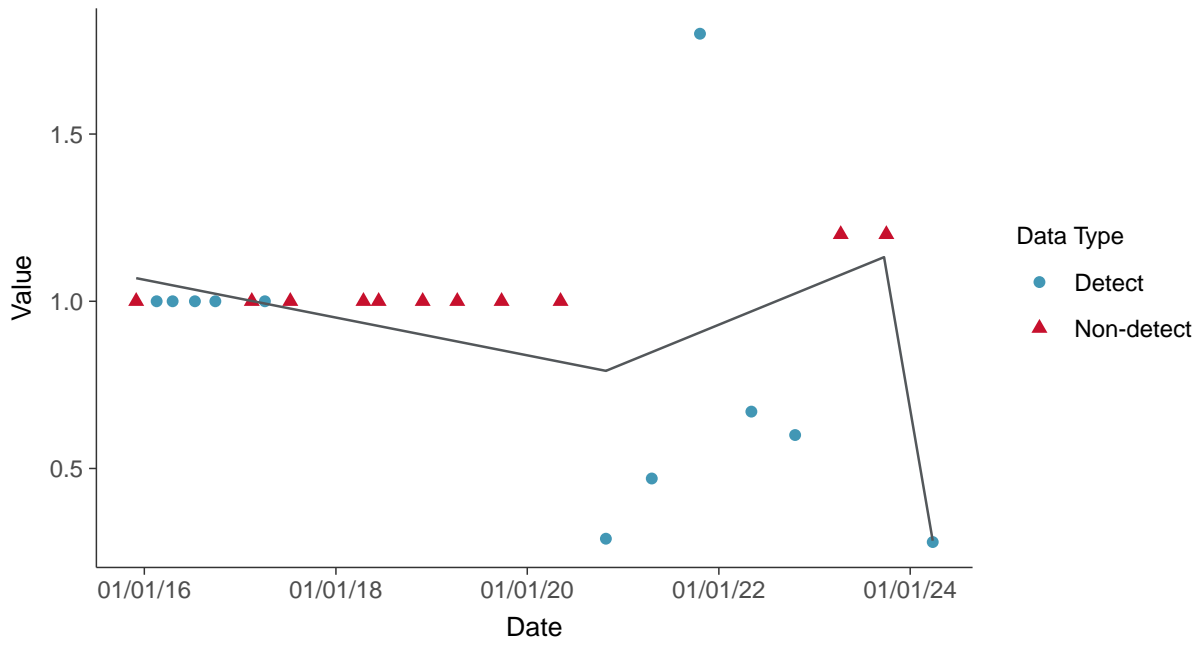
Chromium, MW-15018 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

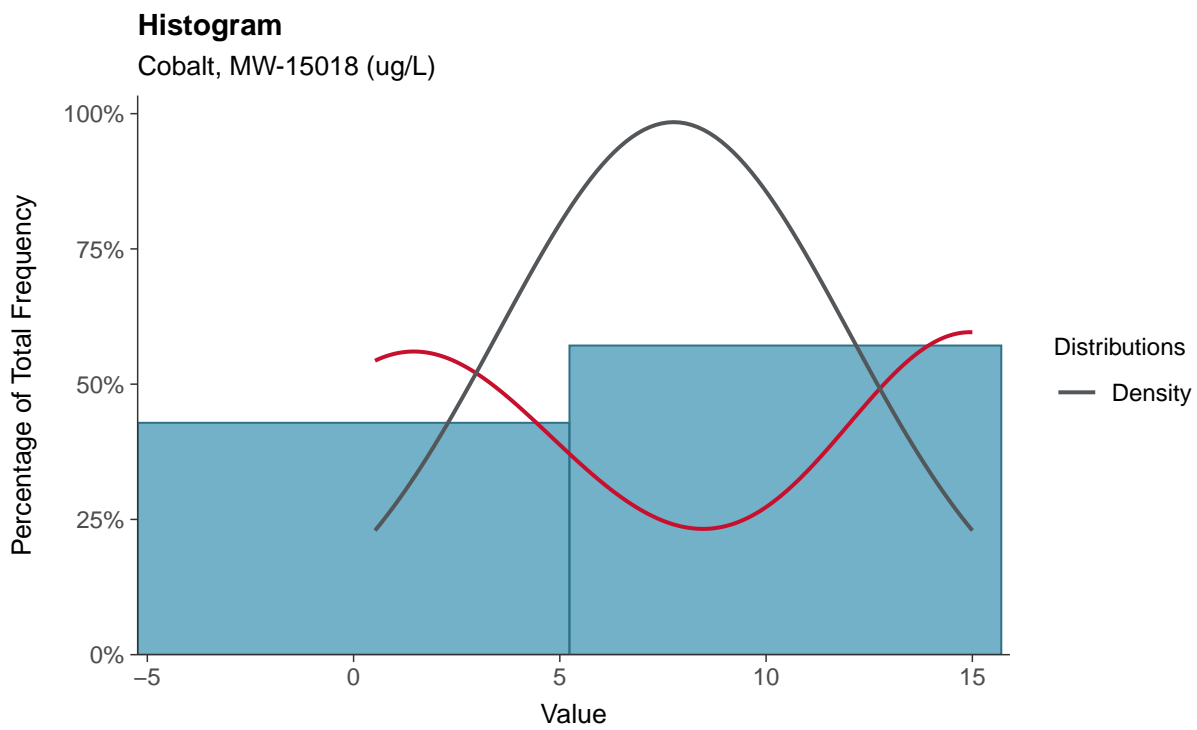
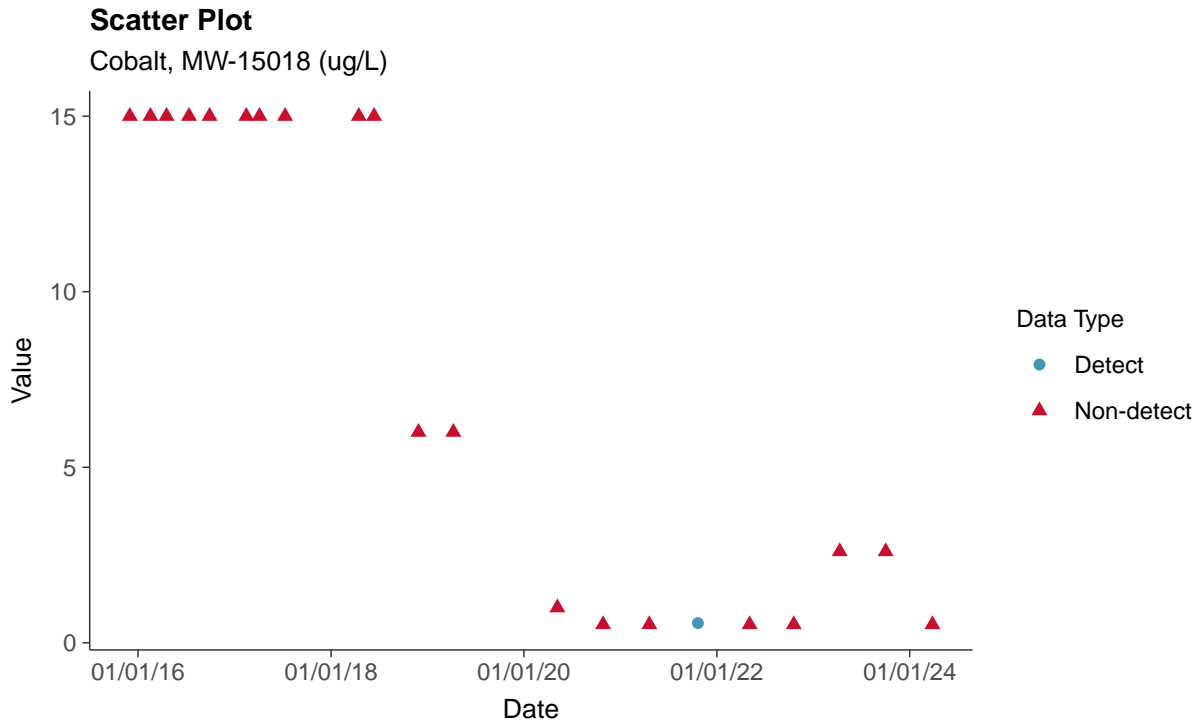
Chromium, MW-15018 (ug/L)





Appendix IV: Cobalt, MW-15018

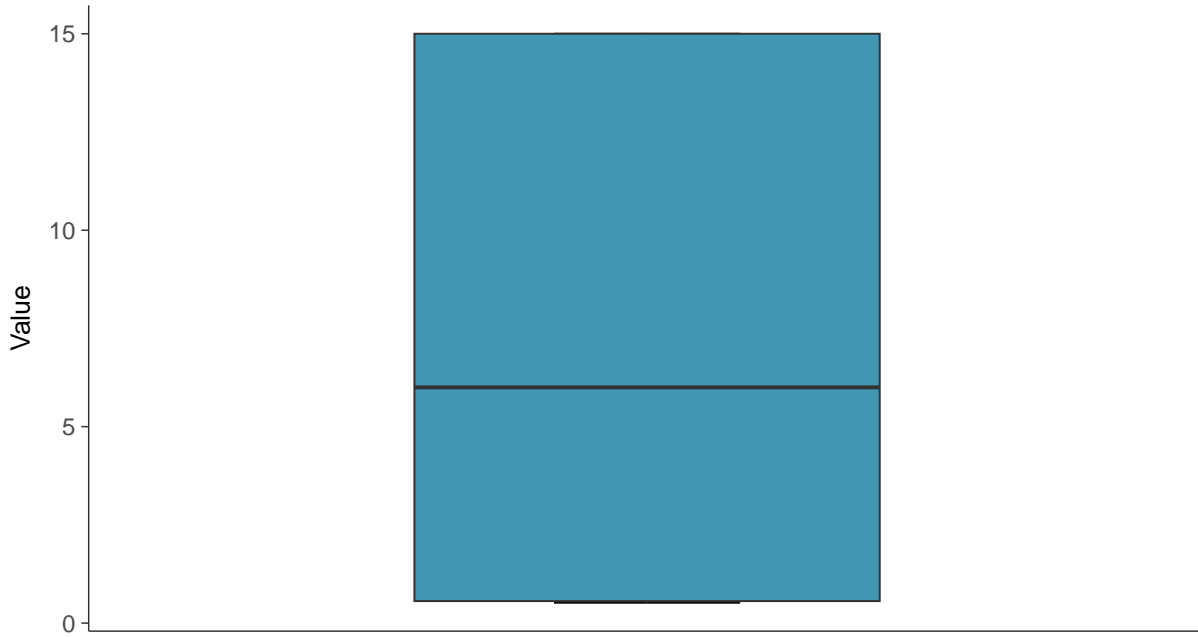
ID: 08_2_110





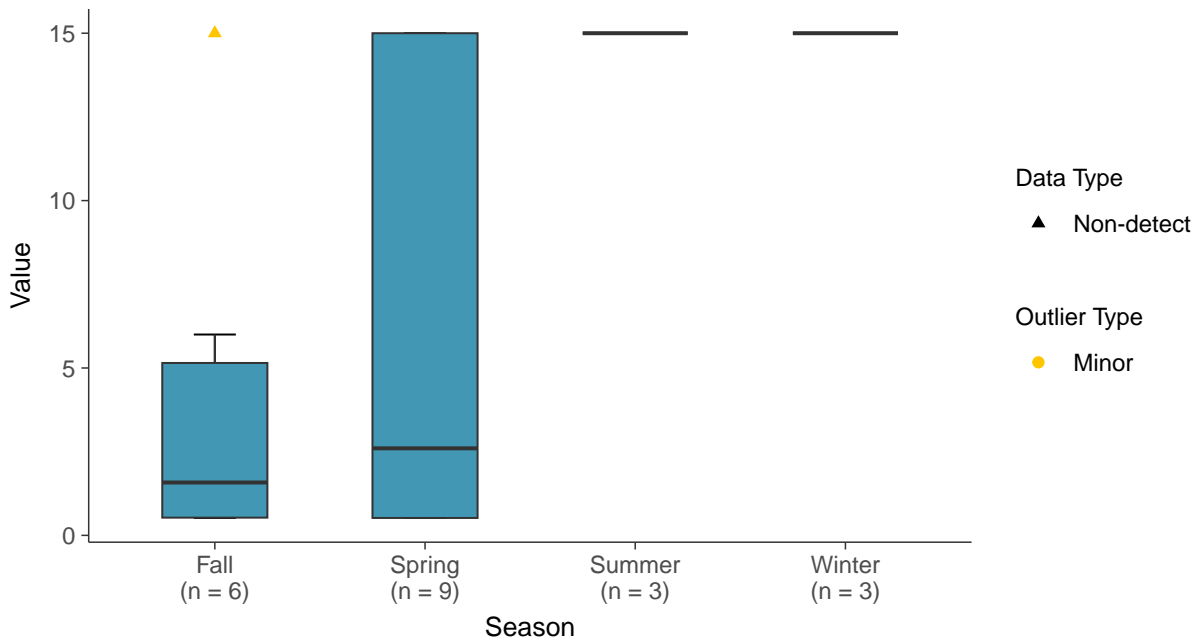
Boxplot

Cobalt, MW-15018 (ug/L)



Boxplot by Season

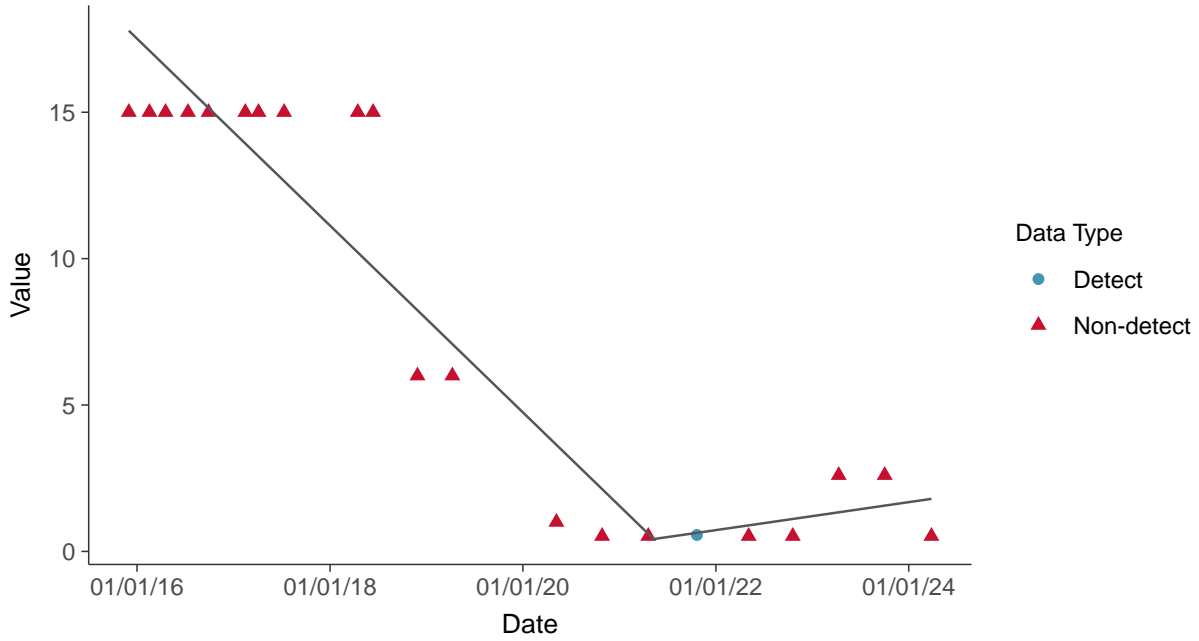
Cobalt, MW-15018 (ug/L)





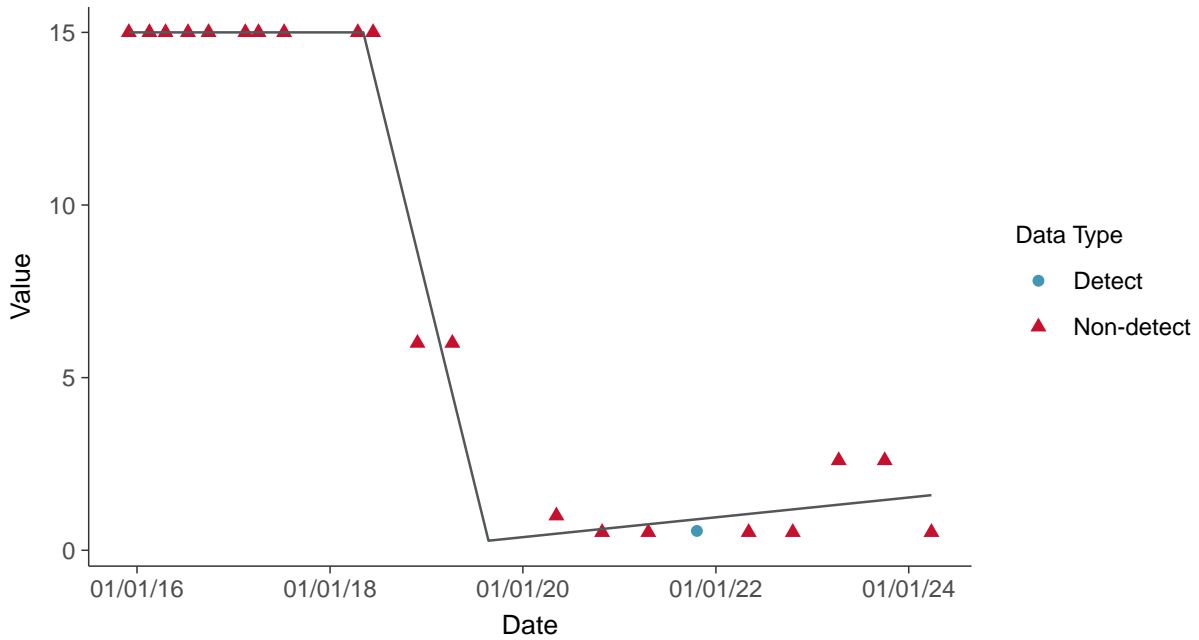
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

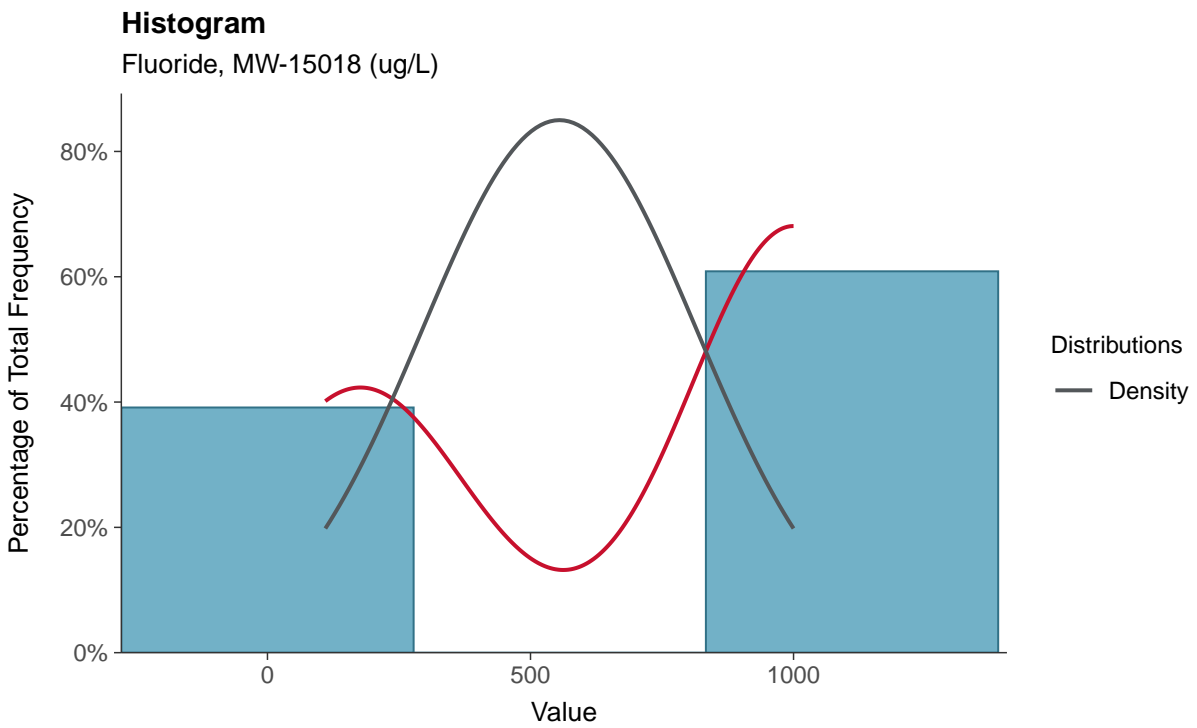
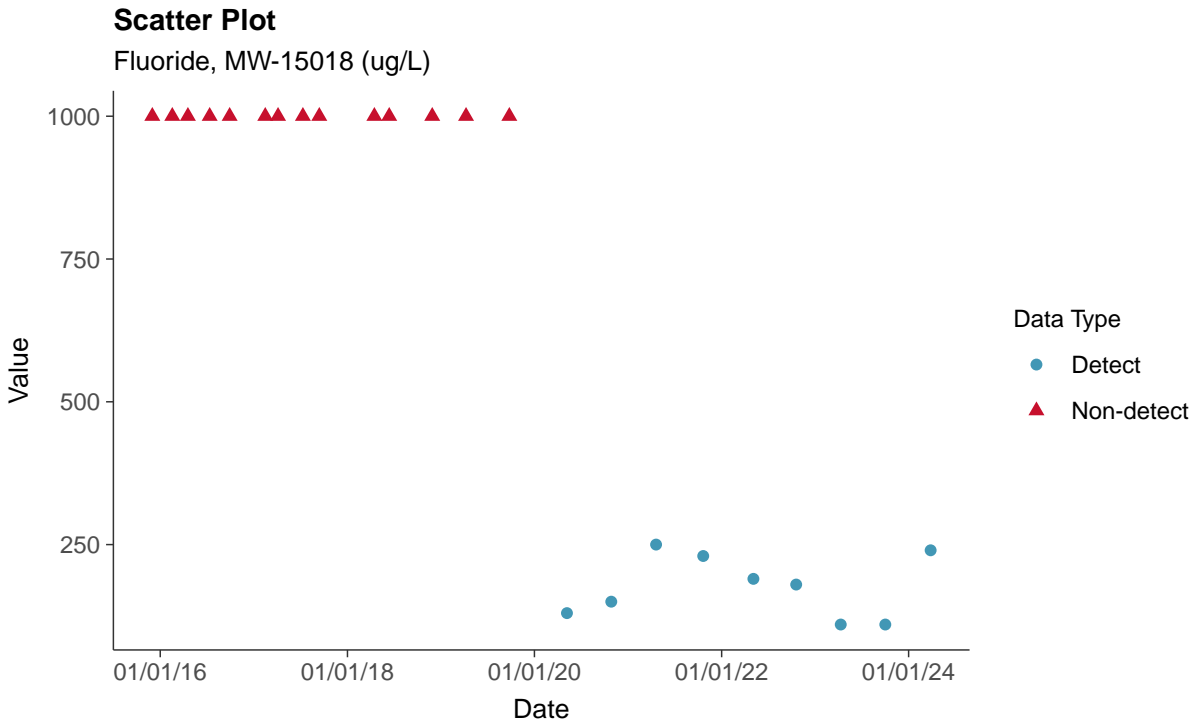
Cobalt, MW-15018 (ug/L)





Appendix IV: Fluoride, MW-15018

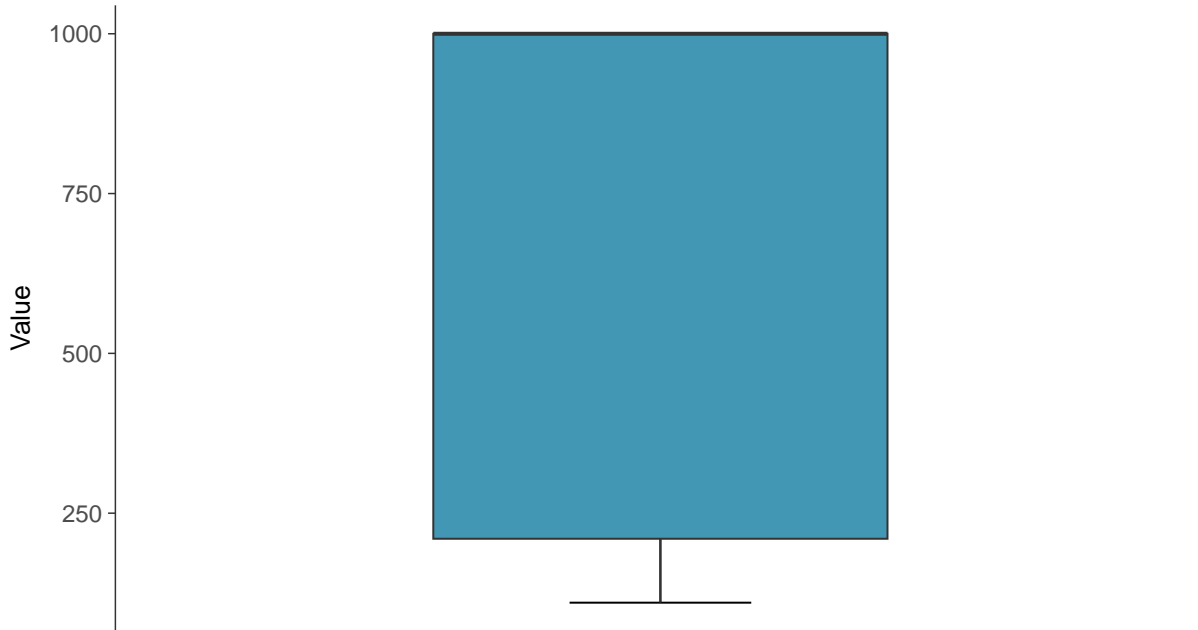
ID: 08_2_114





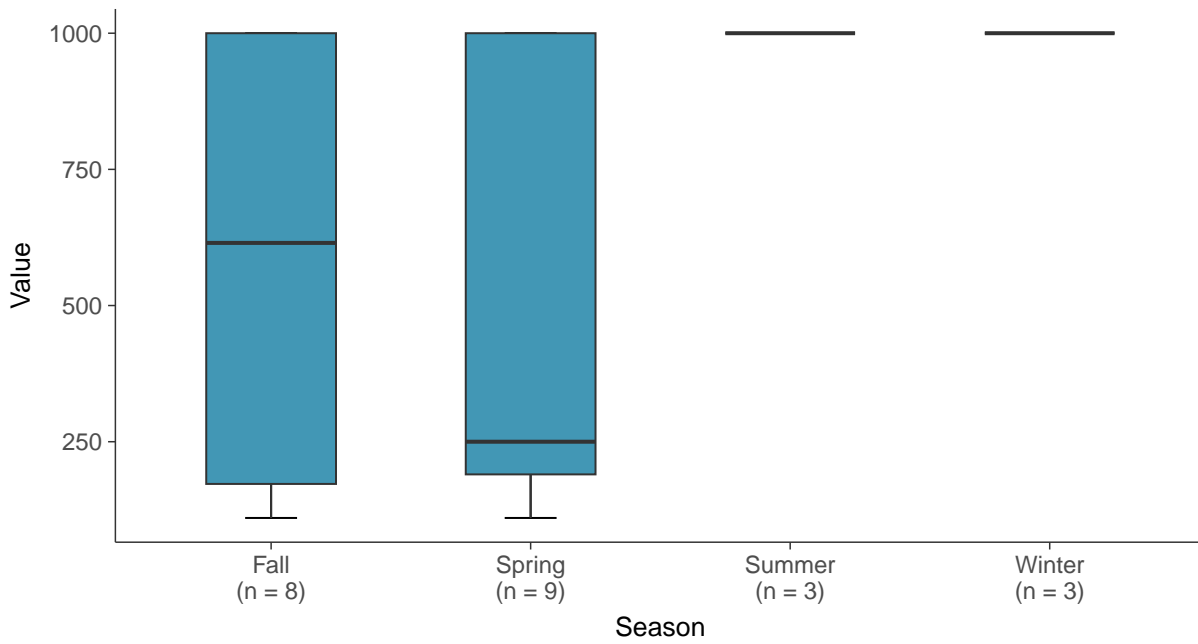
Boxplot

Fluoride, MW-15018 (ug/L)



Boxplot by Season

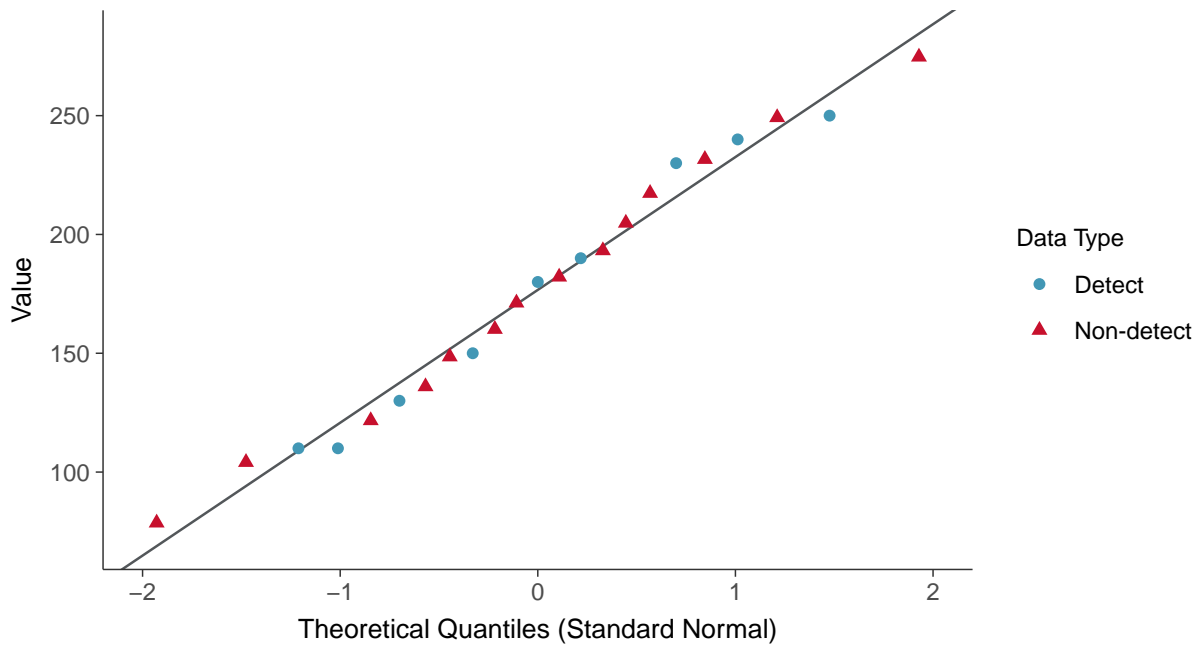
Fluoride, MW-15018 (ug/L)





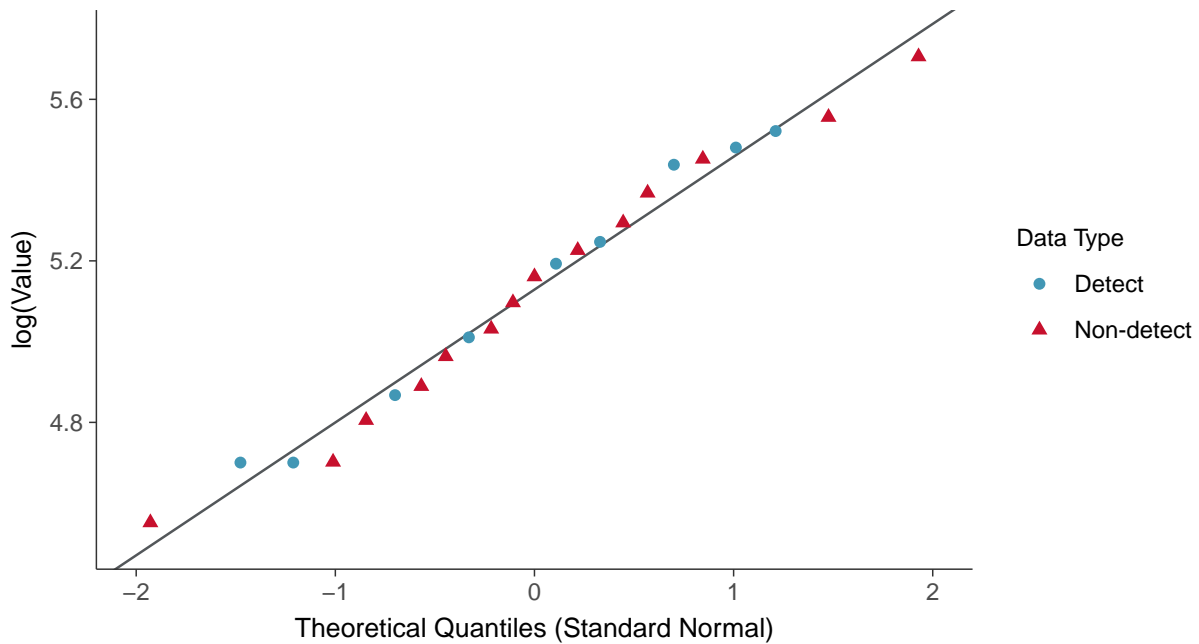
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15018 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

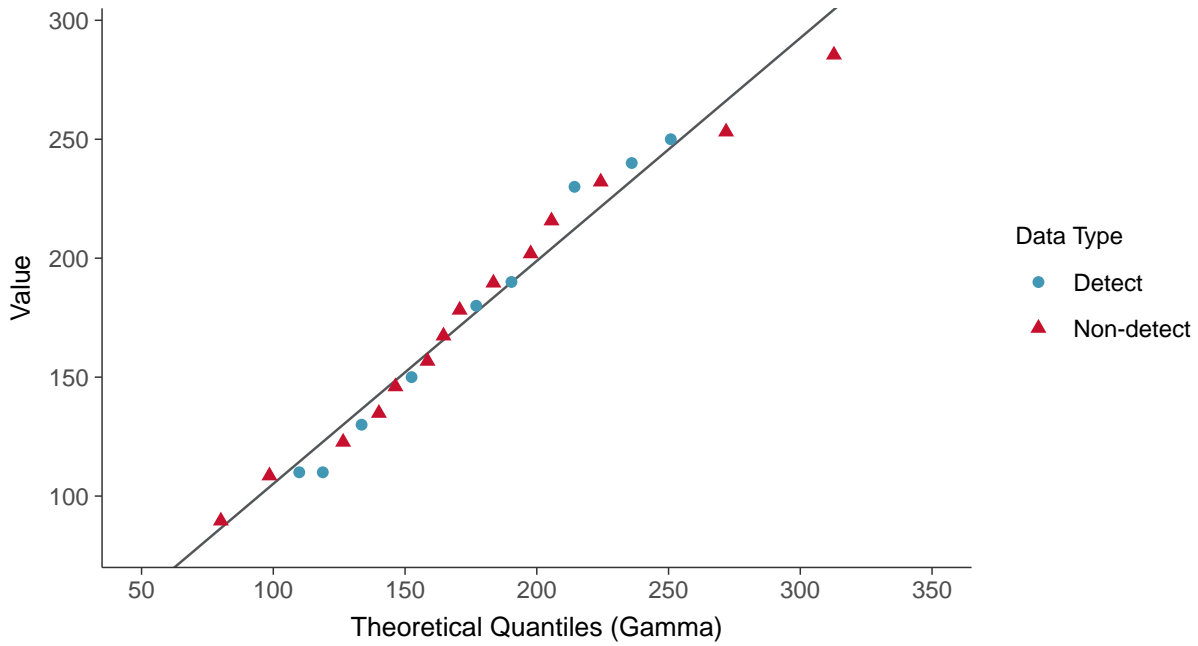
Fluoride, MW-15018 (ug/L)





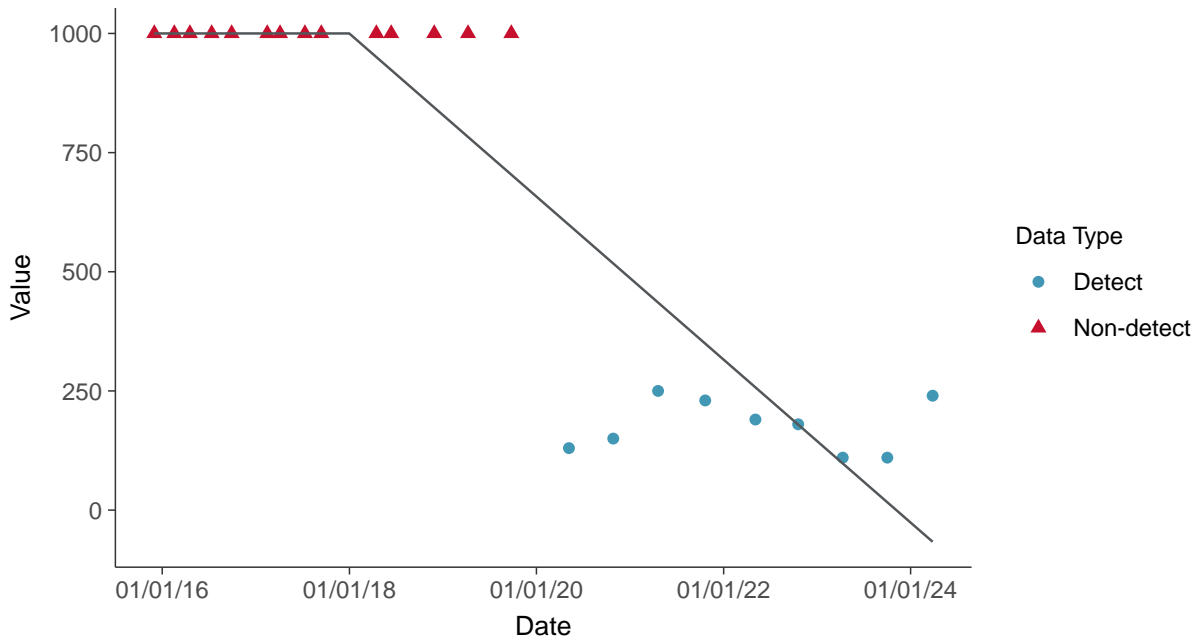
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear

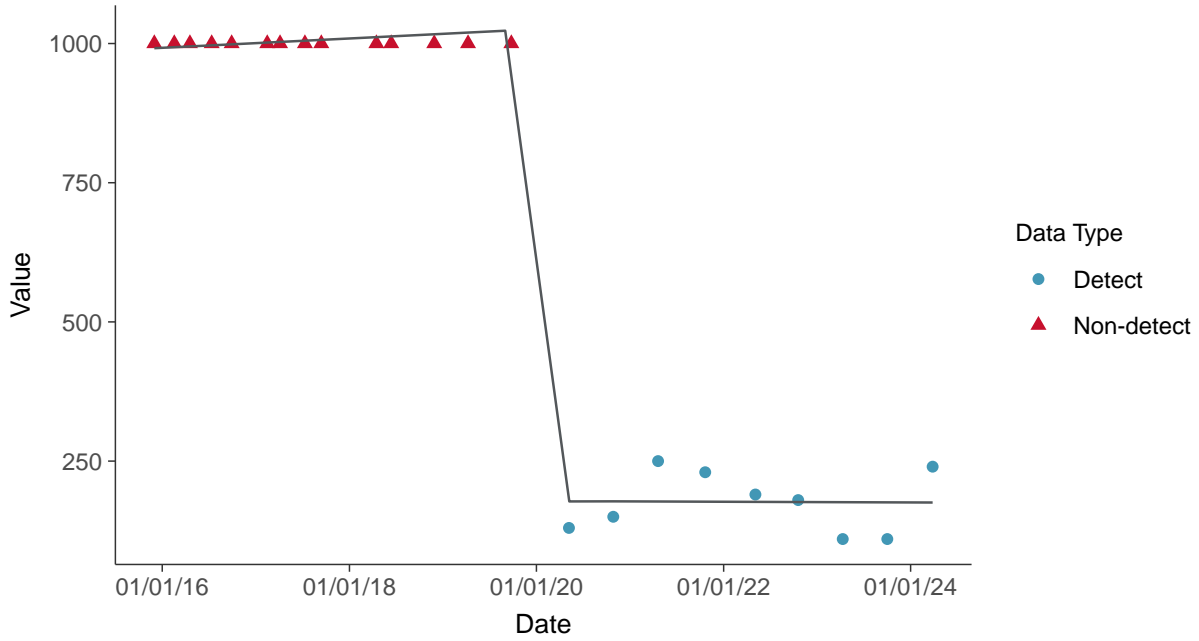
Fluoride, MW-15018 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-15018 (ug/L)



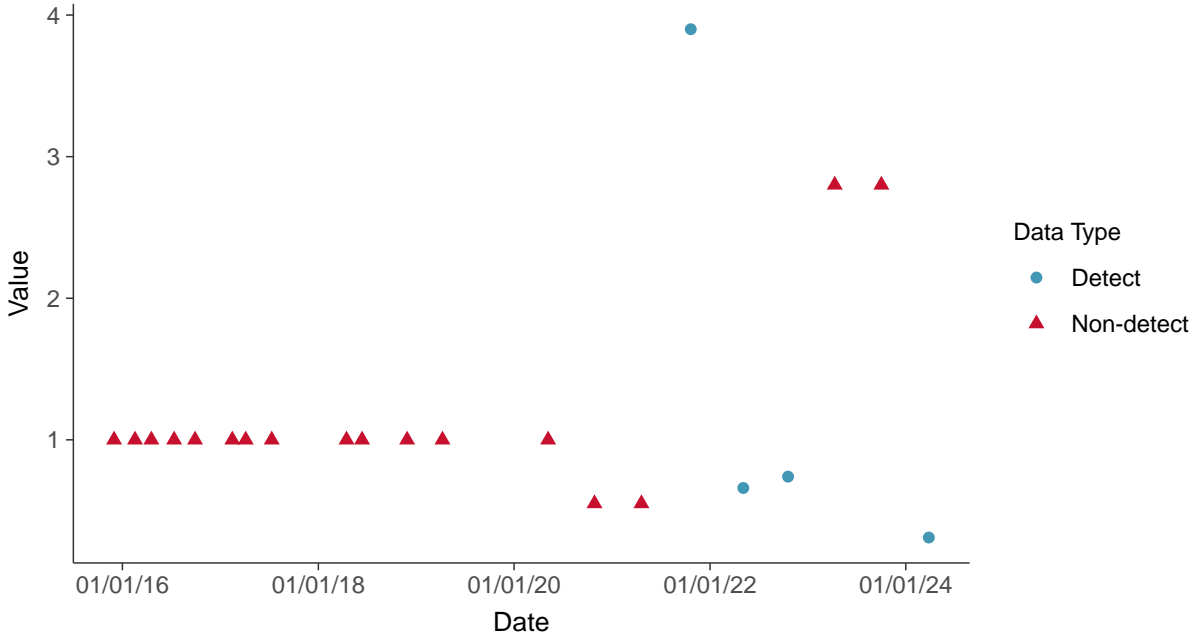


Appendix IV: Lead, MW-15018

ID: 08_2_116

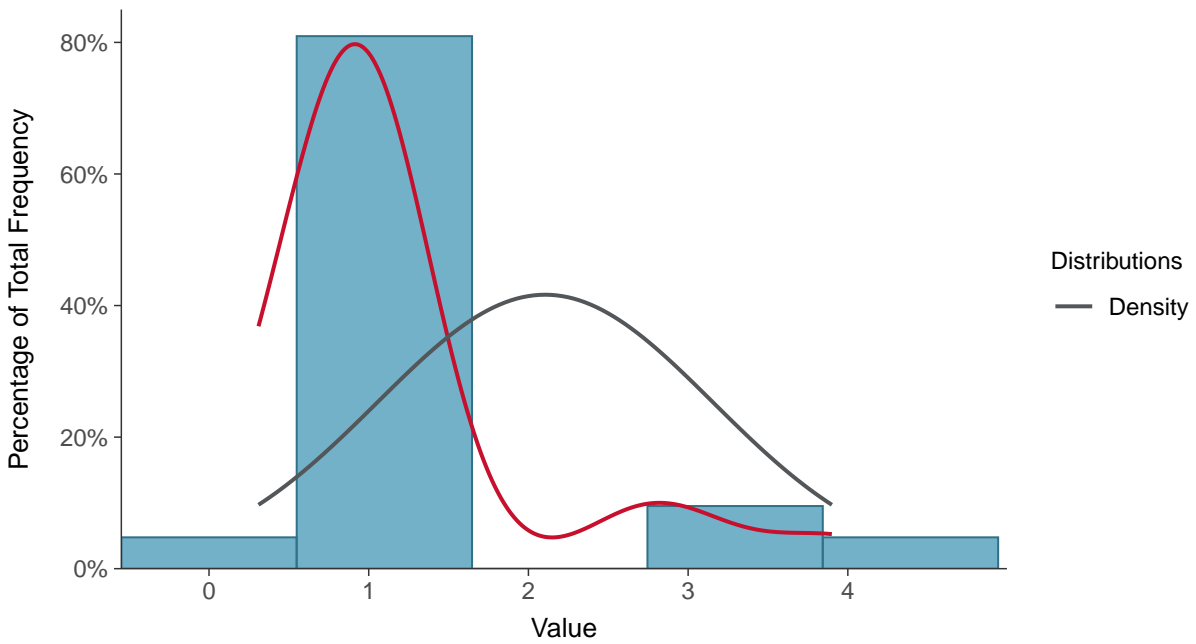
Scatter Plot

Lead, MW-15018 (ug/L)



Histogram

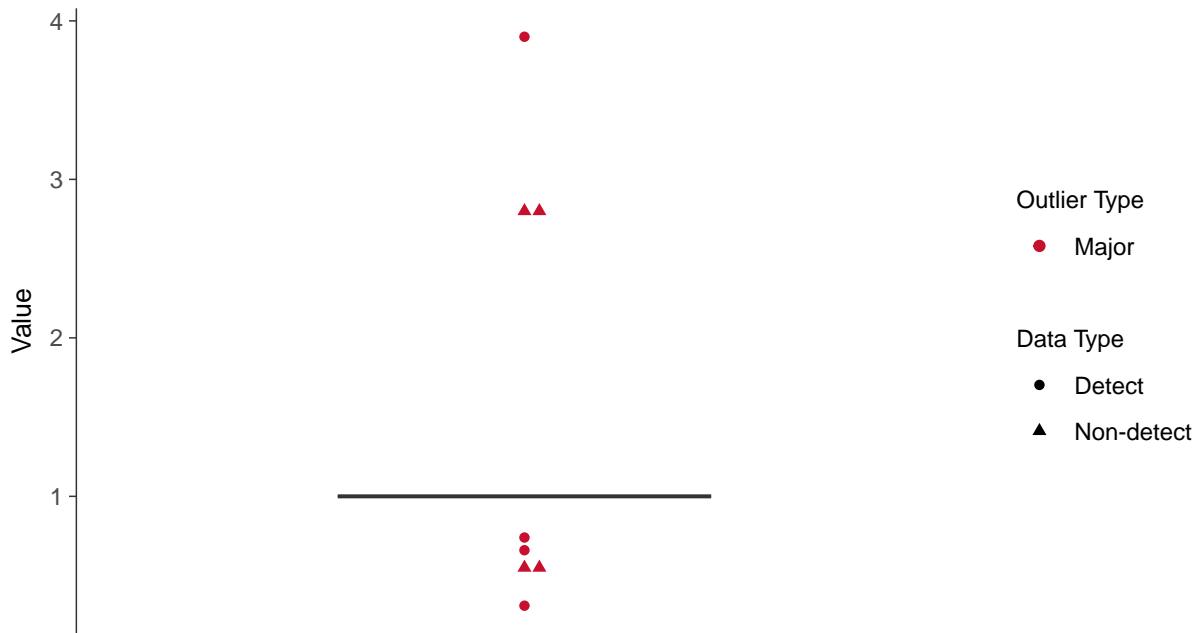
Lead, MW-15018 (ug/L)





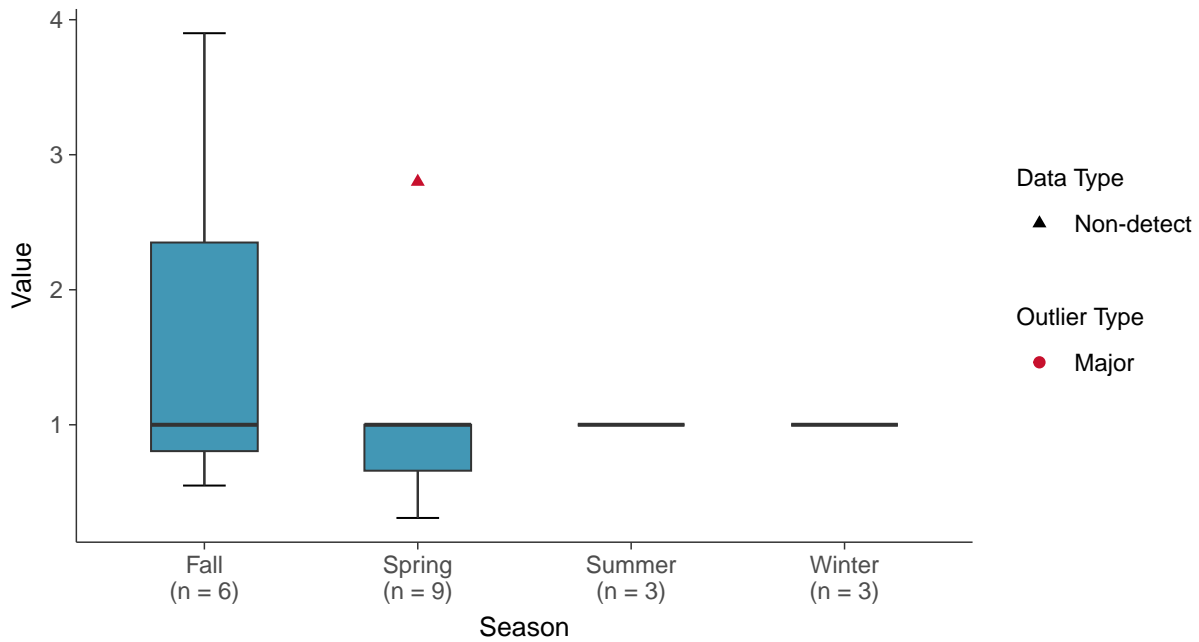
Boxplot

Lead, MW-15018 (ug/L)



Boxplot by Season

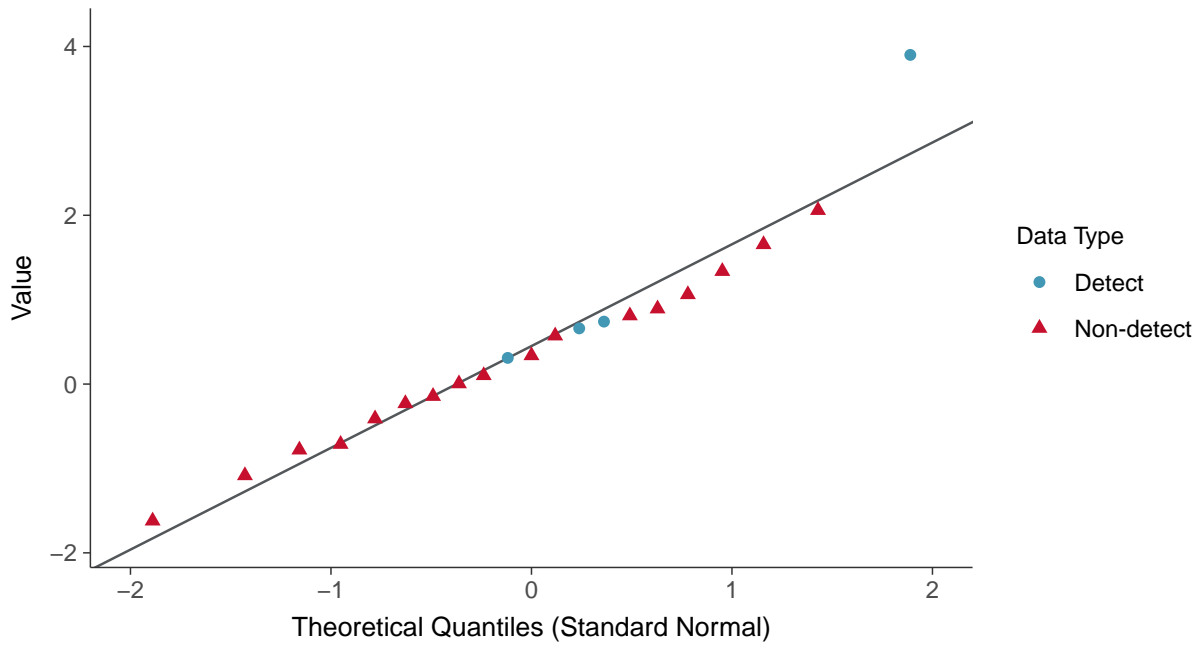
Lead, MW-15018 (ug/L)





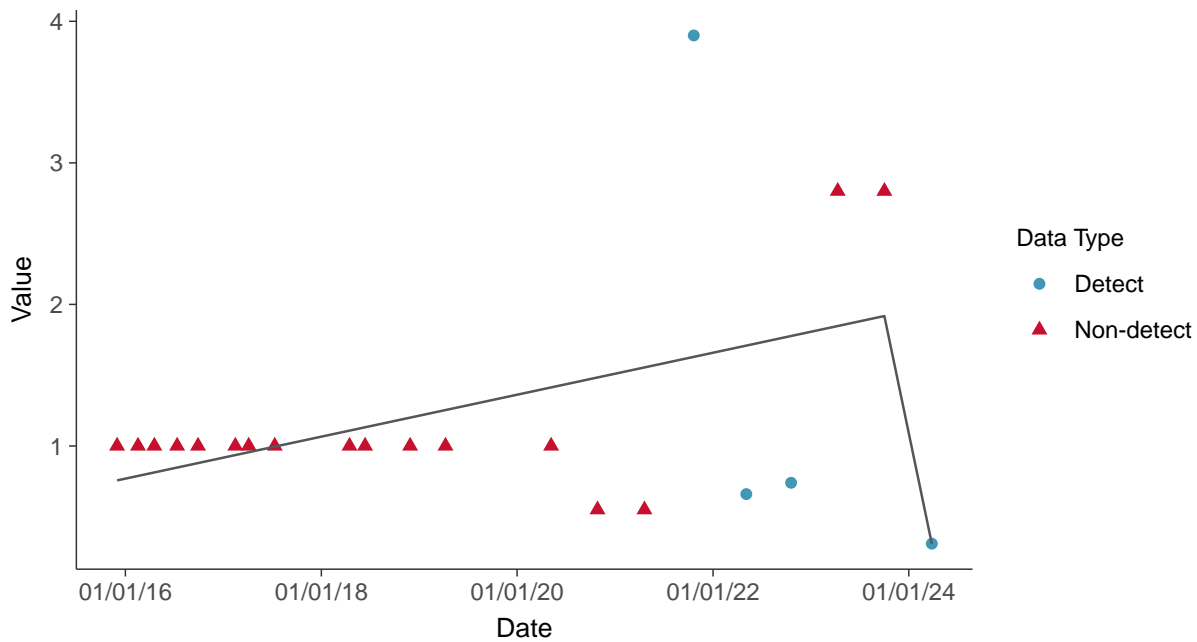
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear

Lead, MW-15018 (ug/L)



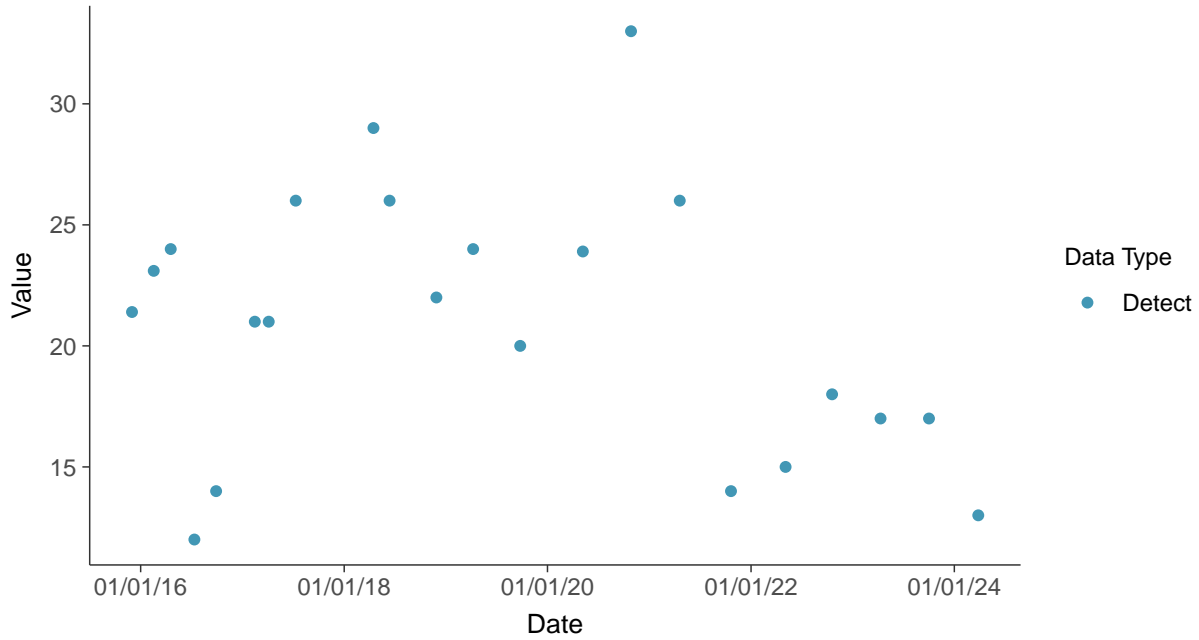


Appendix IV: Lithium, MW-15018

ID: 08_2_117

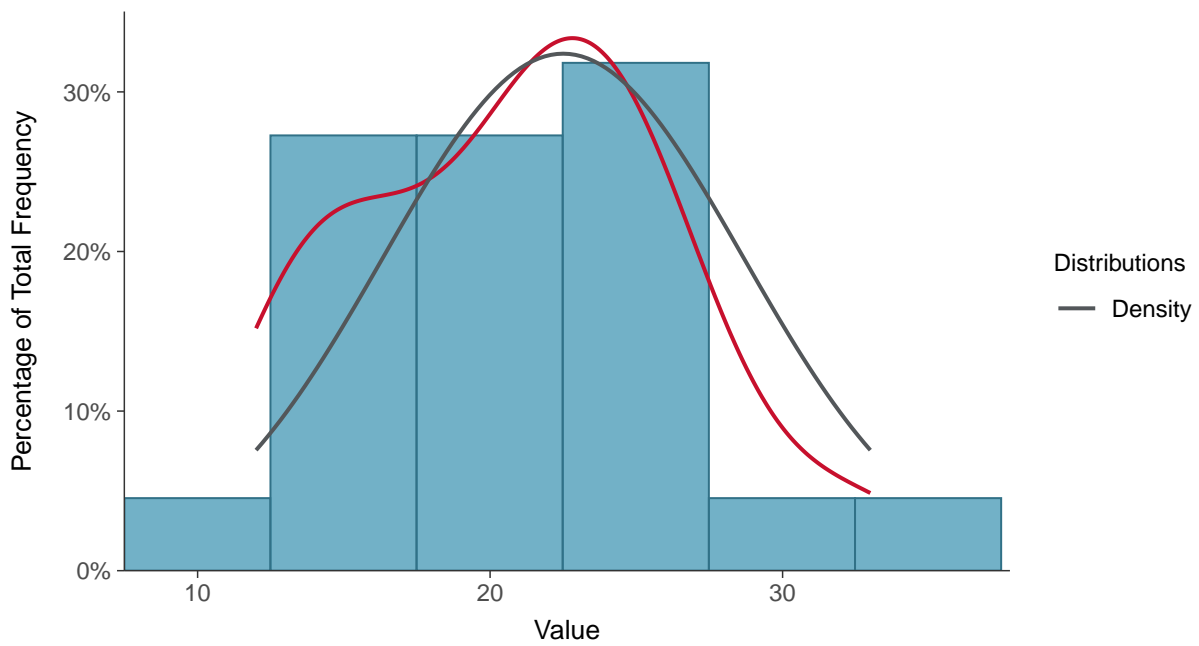
Scatter Plot

Lithium, MW-15018 (ug/L)



Histogram

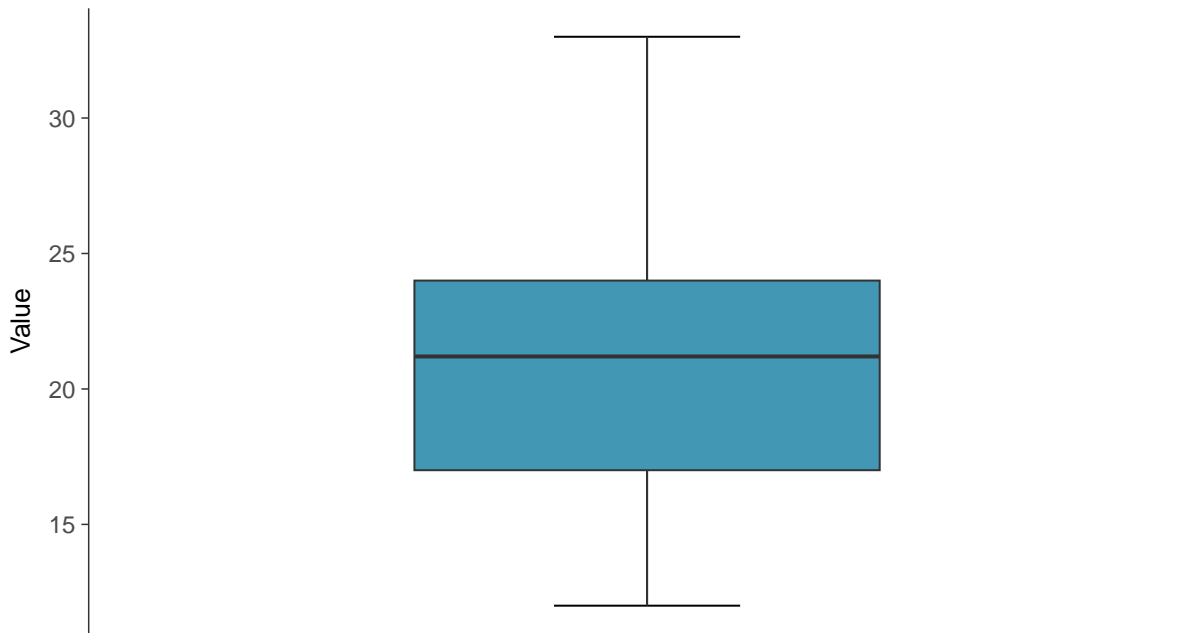
Lithium, MW-15018 (ug/L)





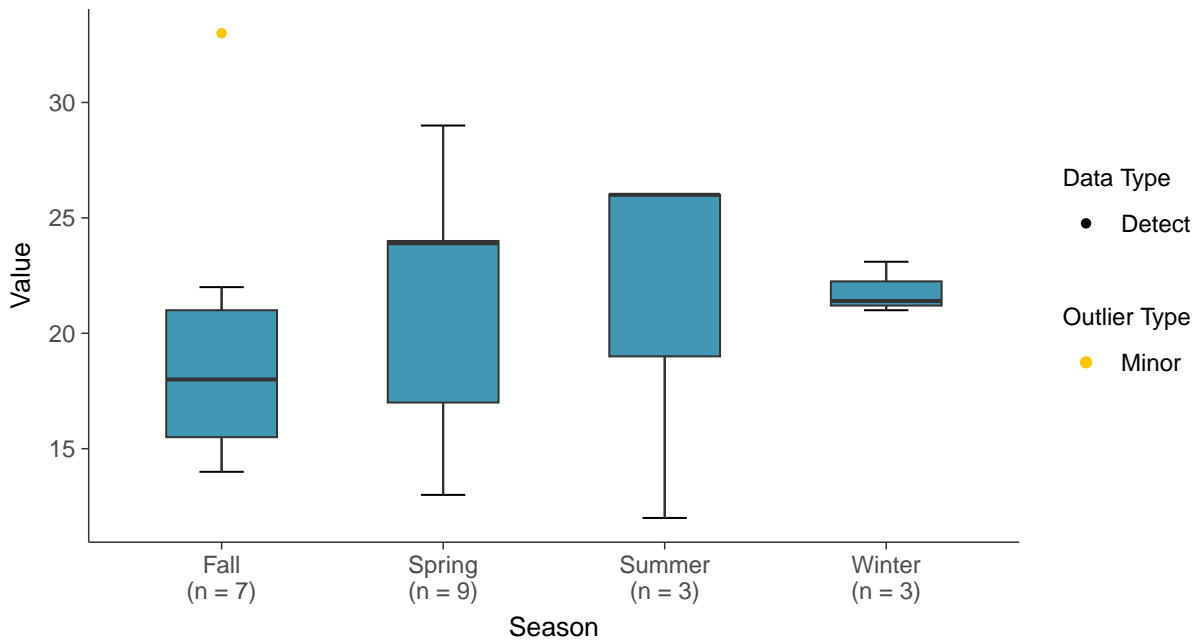
Boxplot

Lithium, MW-15018 (ug/L)



Boxplot by Season

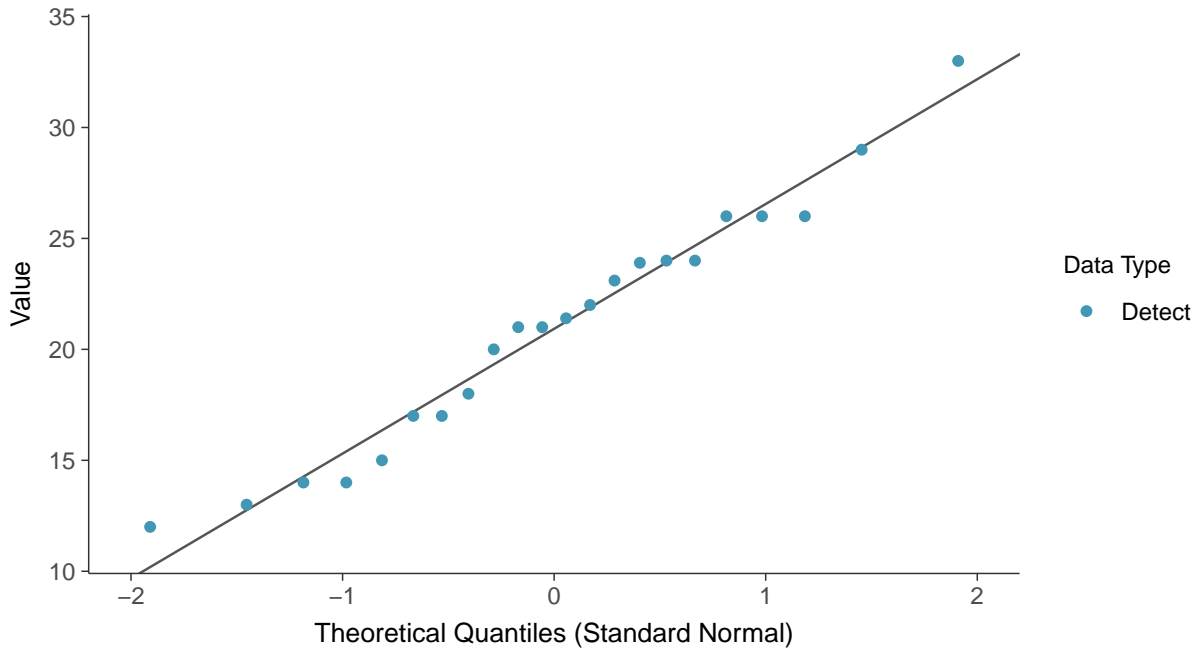
Lithium, MW-15018 (ug/L)





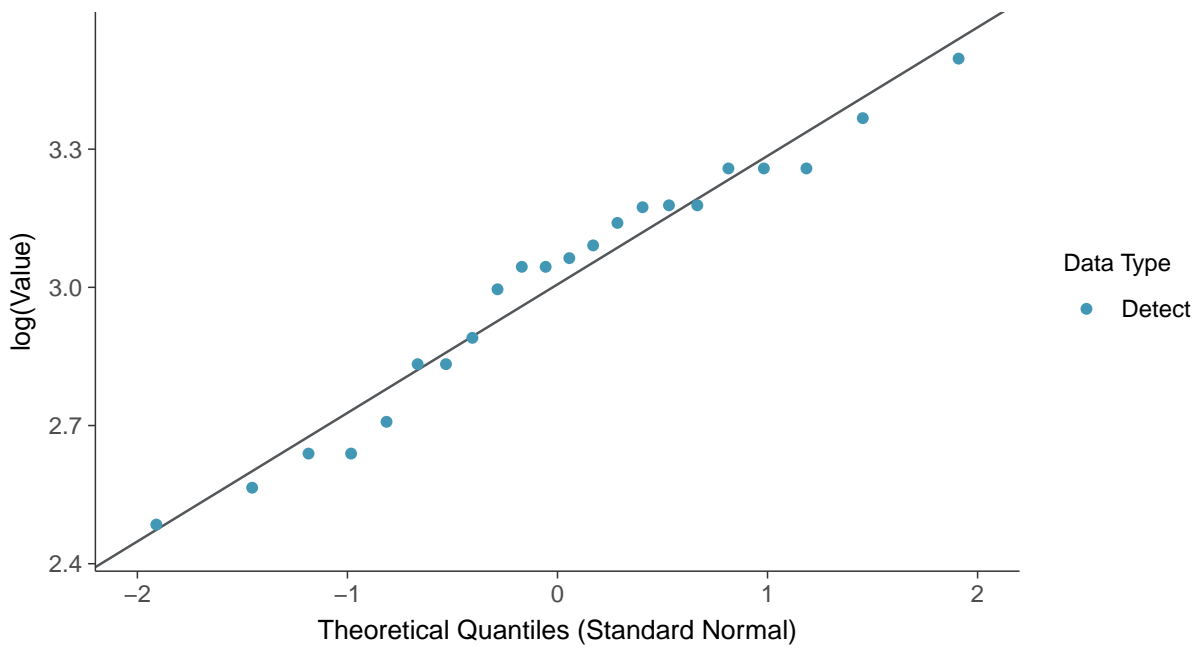
Normal Q-Q plot

Lithium, MW-15018 (ug/L)



Lognormal Q-Q plot

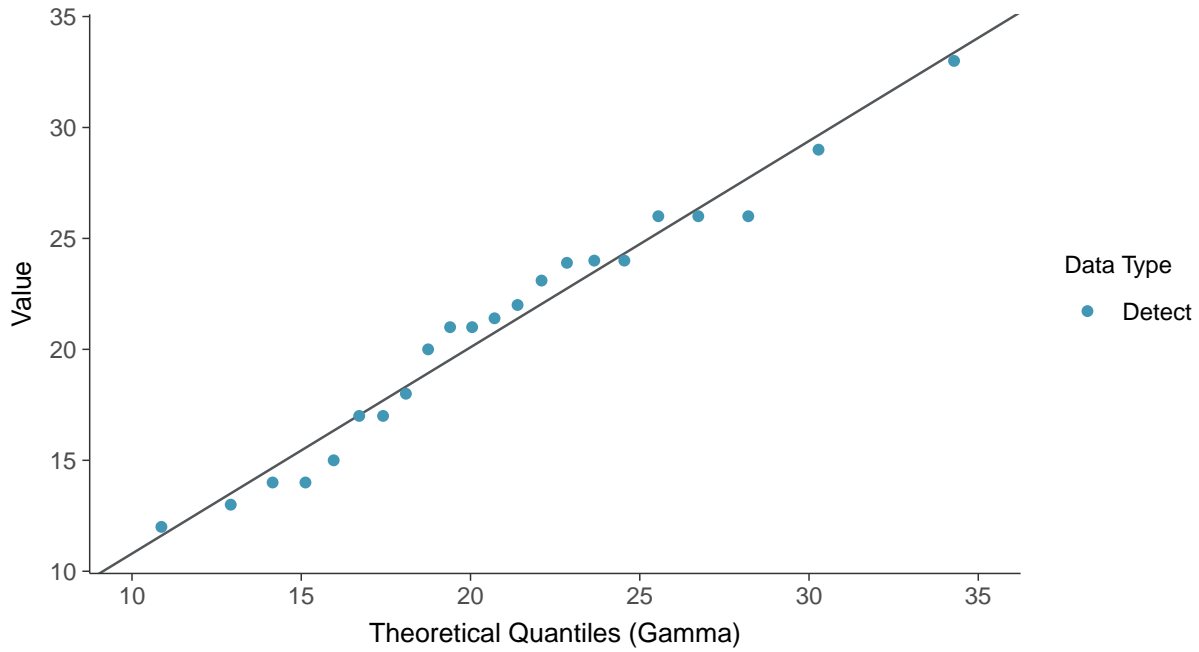
Lithium, MW-15018 (ug/L)





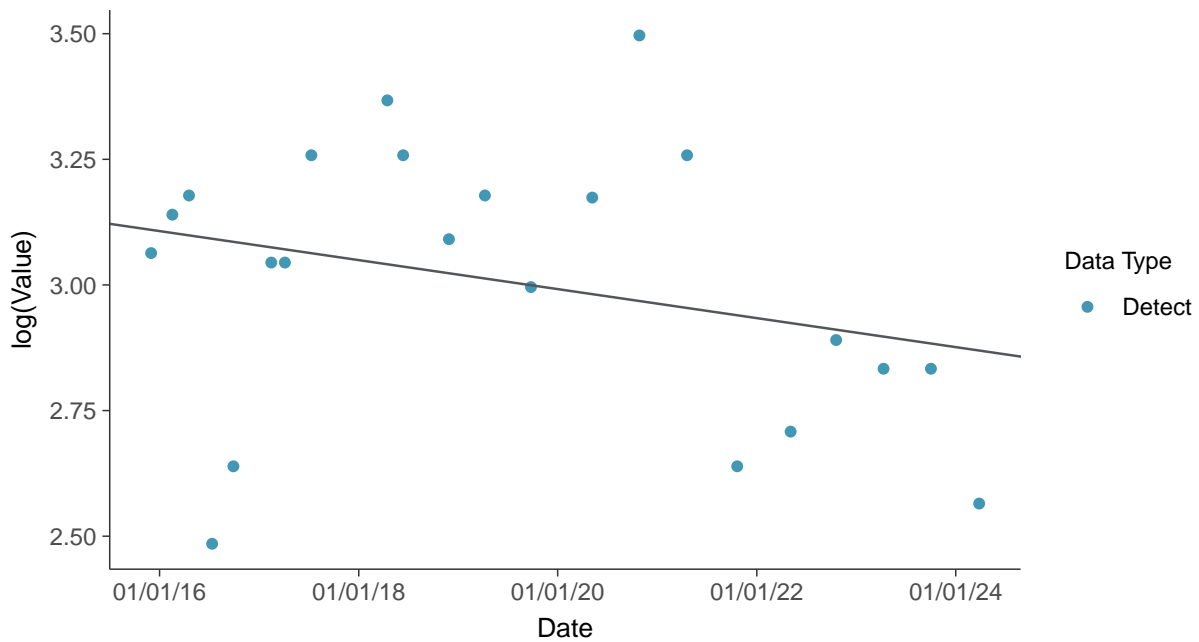
Gamma Q-Q plot

Lithium, MW-15018 (ug/L)



Trend Regression: Lognormal MLE

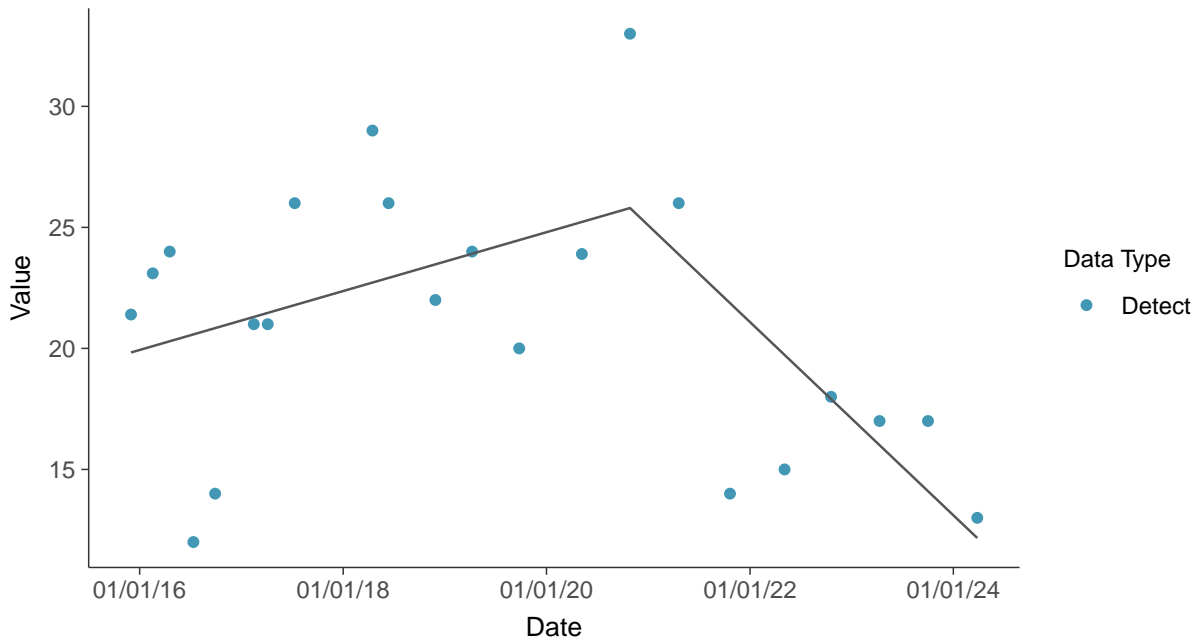
Lithium, MW-15018 (ug/L)





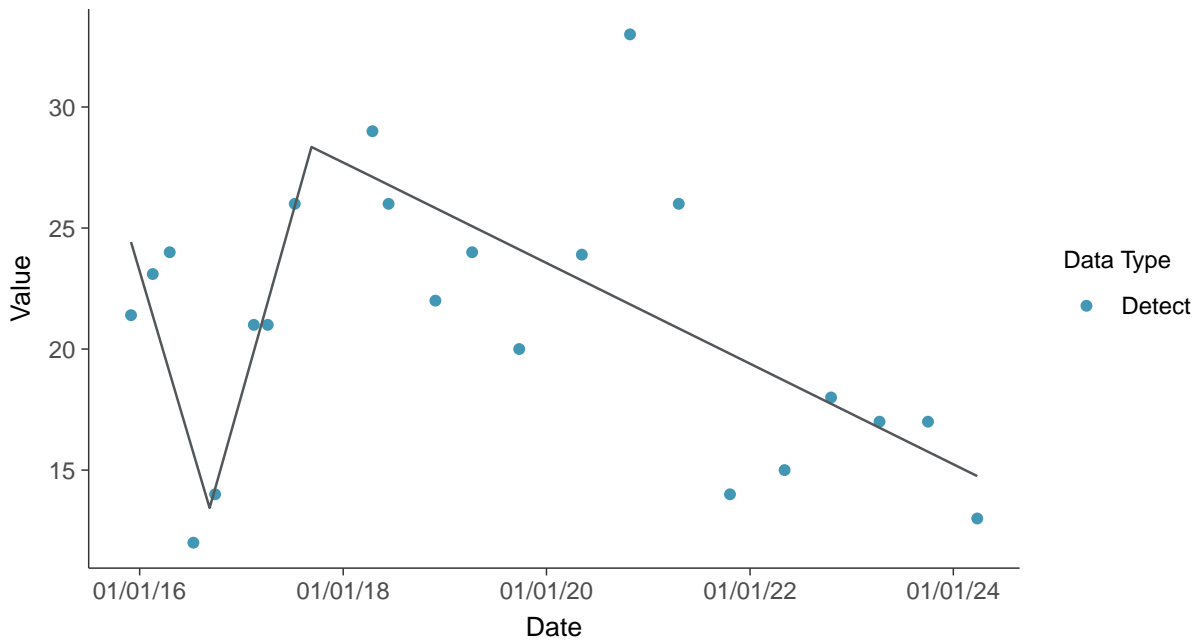
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

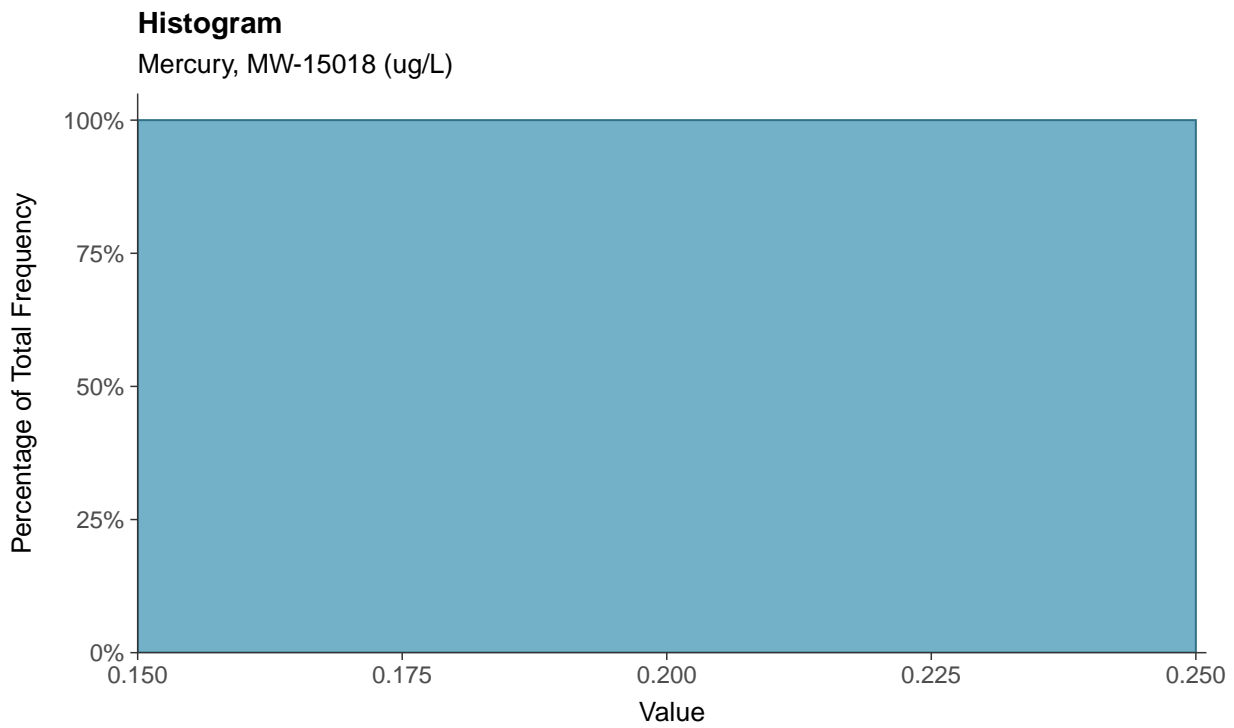
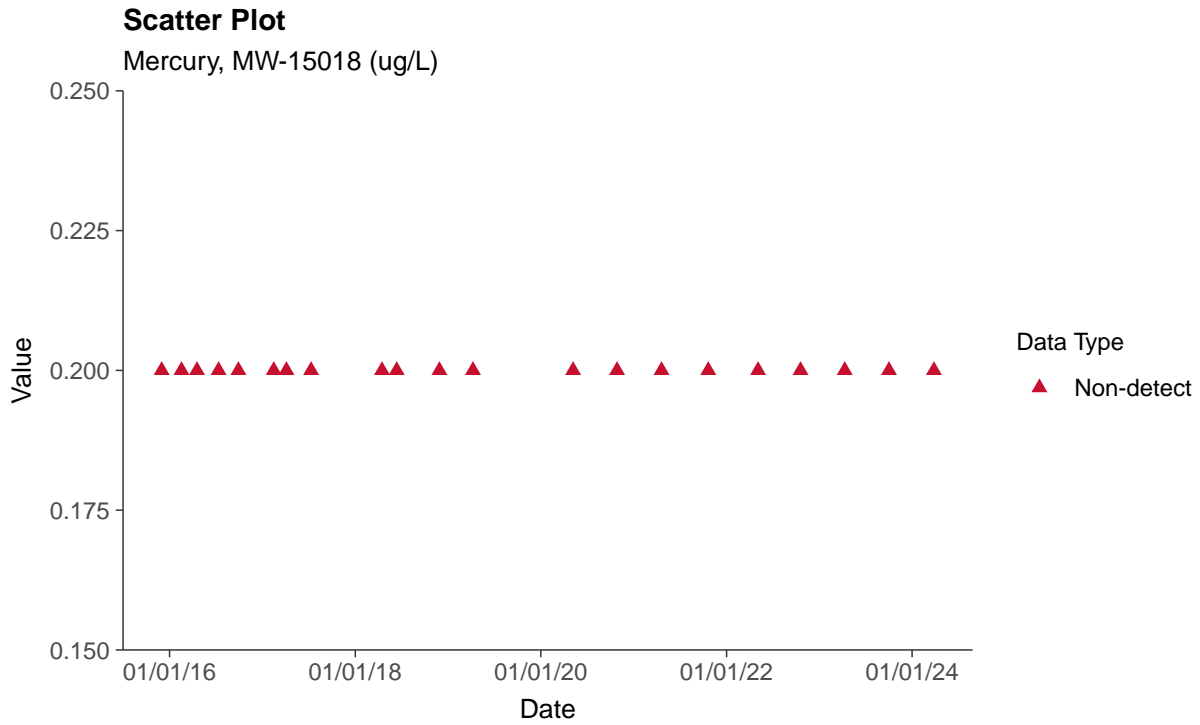
Lithium, MW-15018 (ug/L)





Appendix IV: Mercury, MW-15018

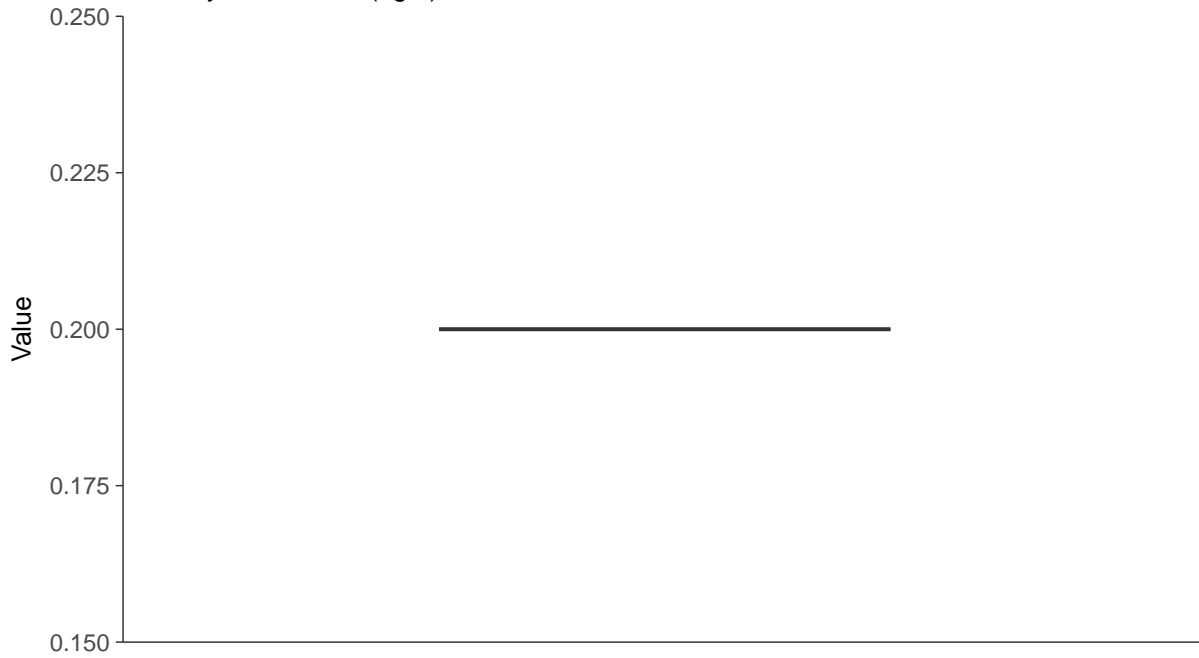
ID: 08_2_118





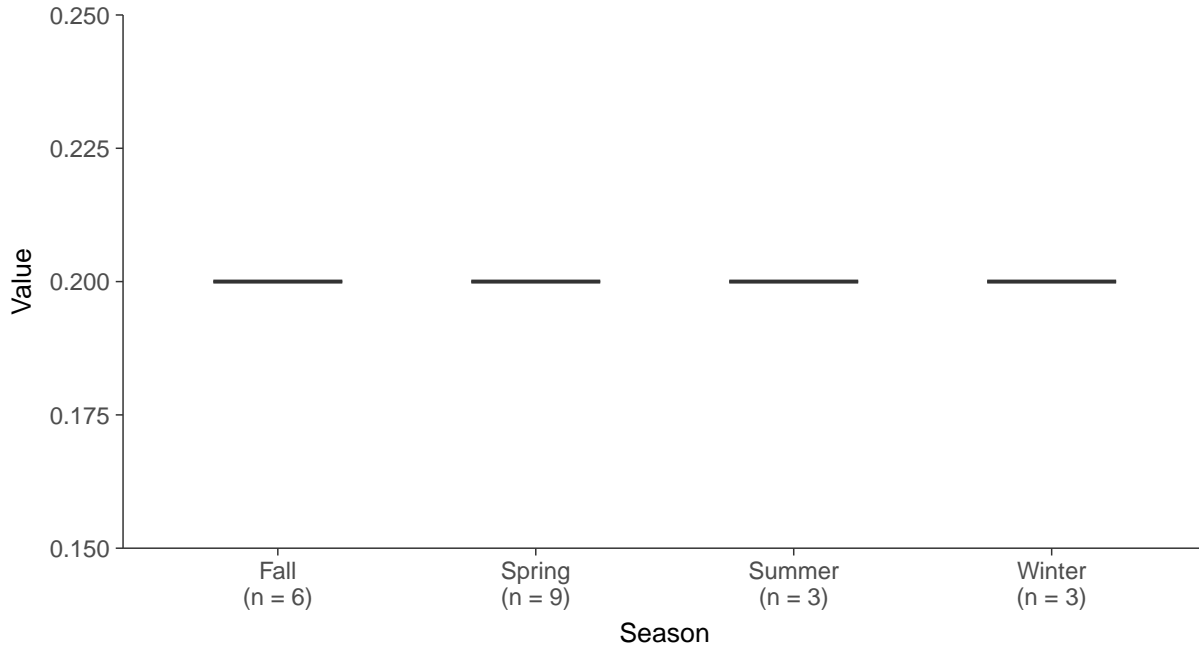
Boxplot

Mercury, MW-15018 (ug/L)



Boxplot by Season

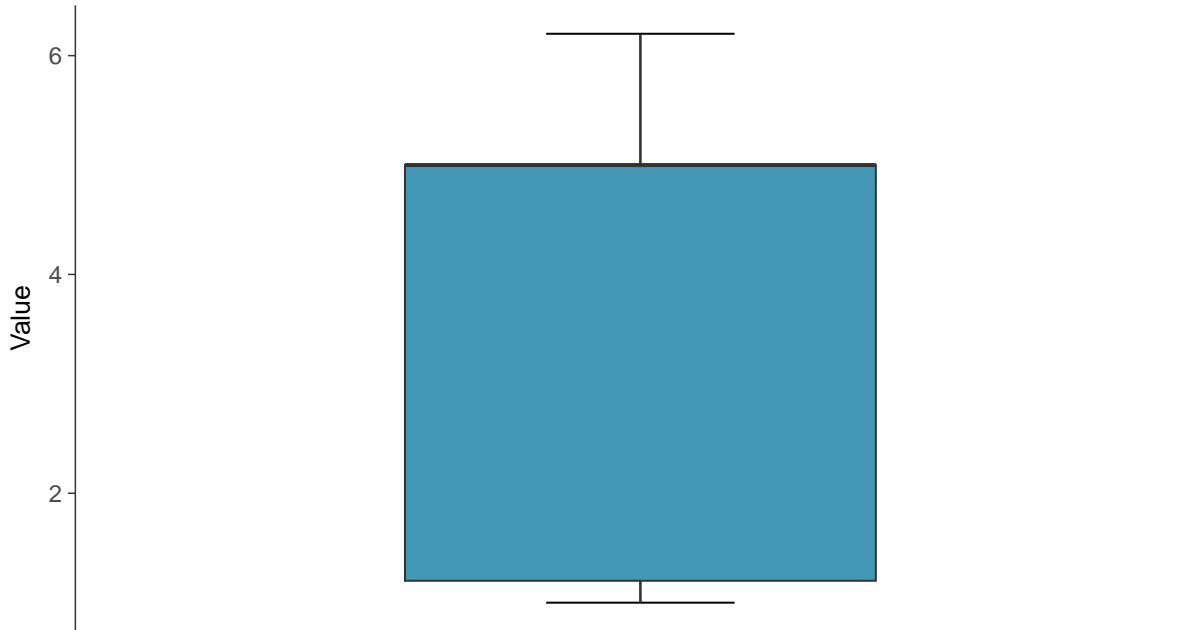
Mercury, MW-15018 (ug/L)





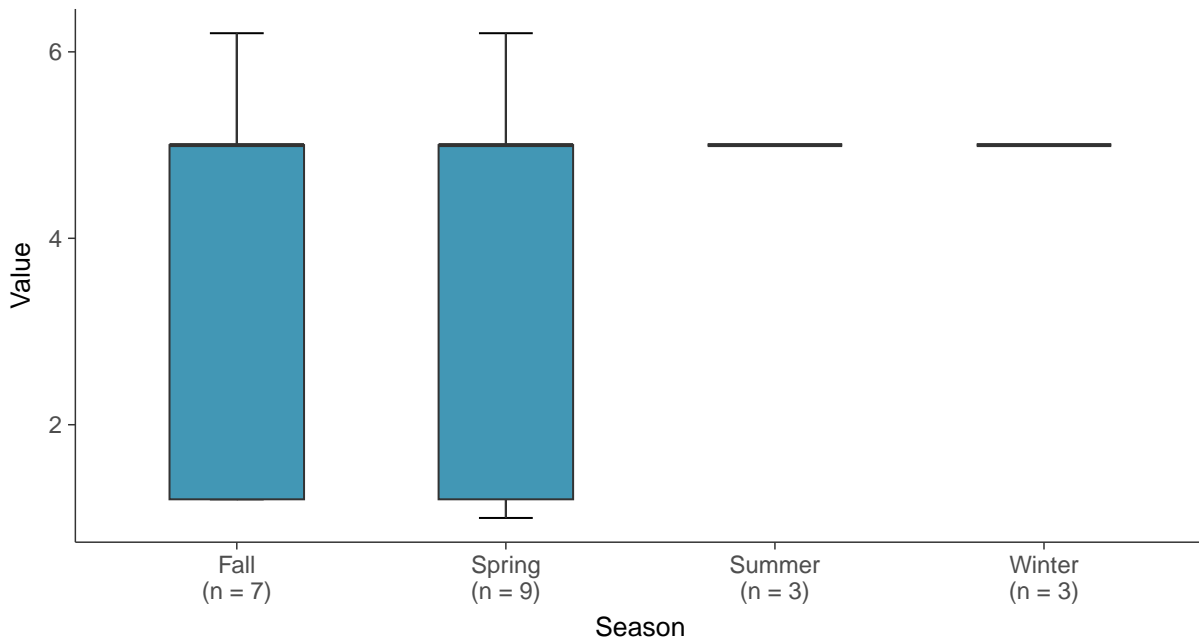
Boxplot

Molybdenum, MW-15018 (ug/L)



Boxplot by Season

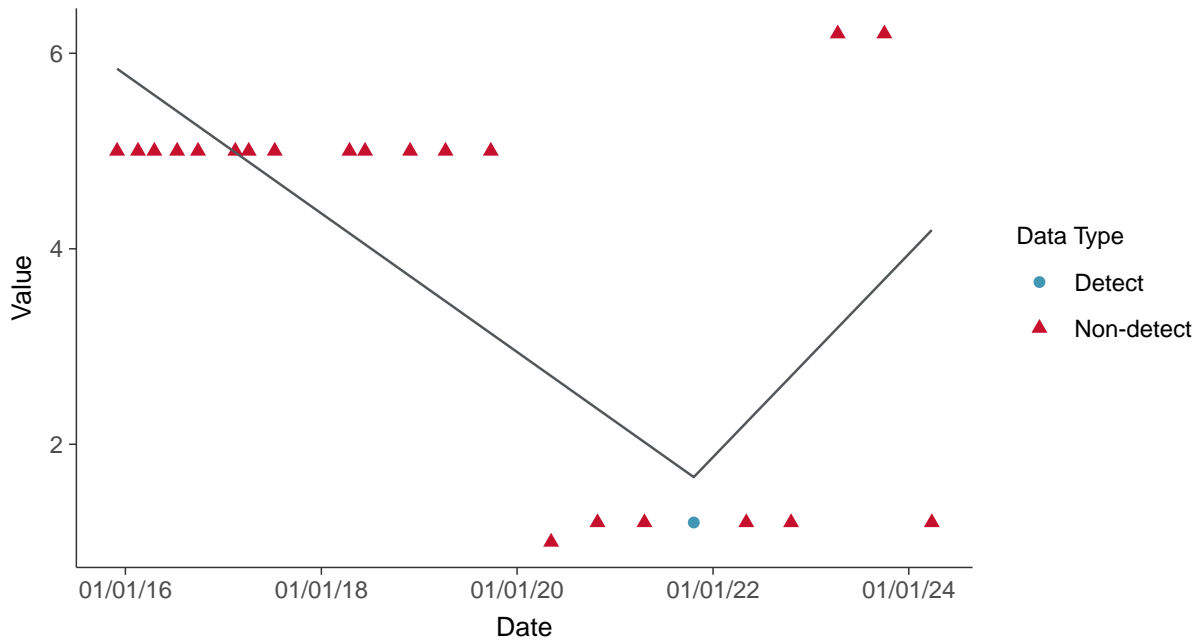
Molybdenum, MW-15018 (ug/L)





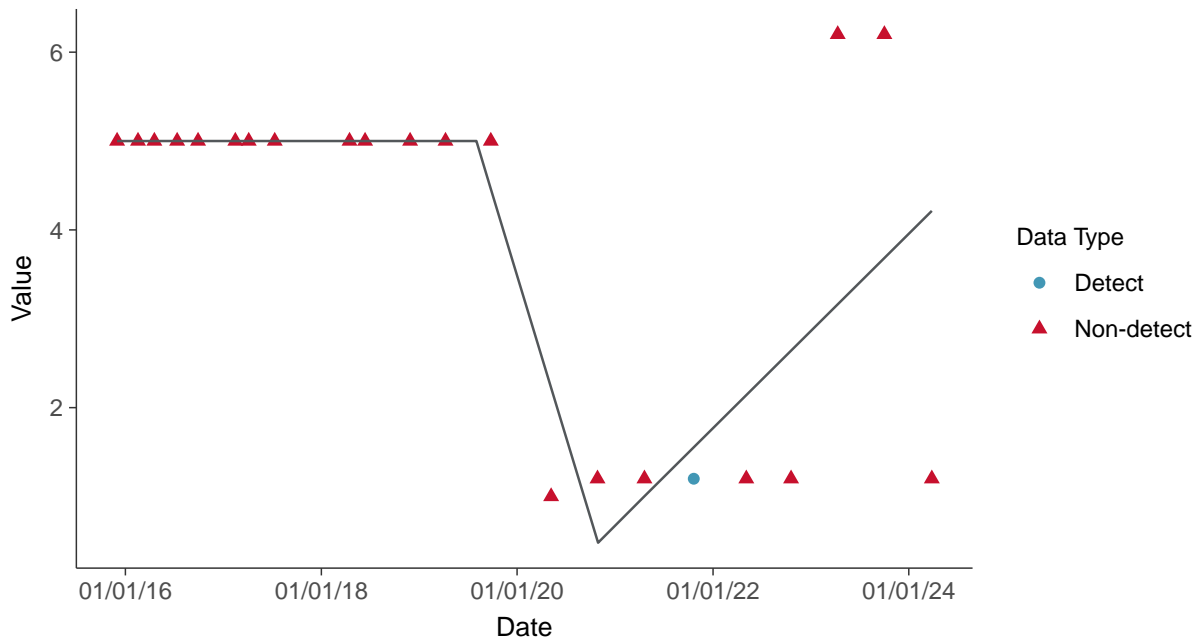
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15018 (ug/L)



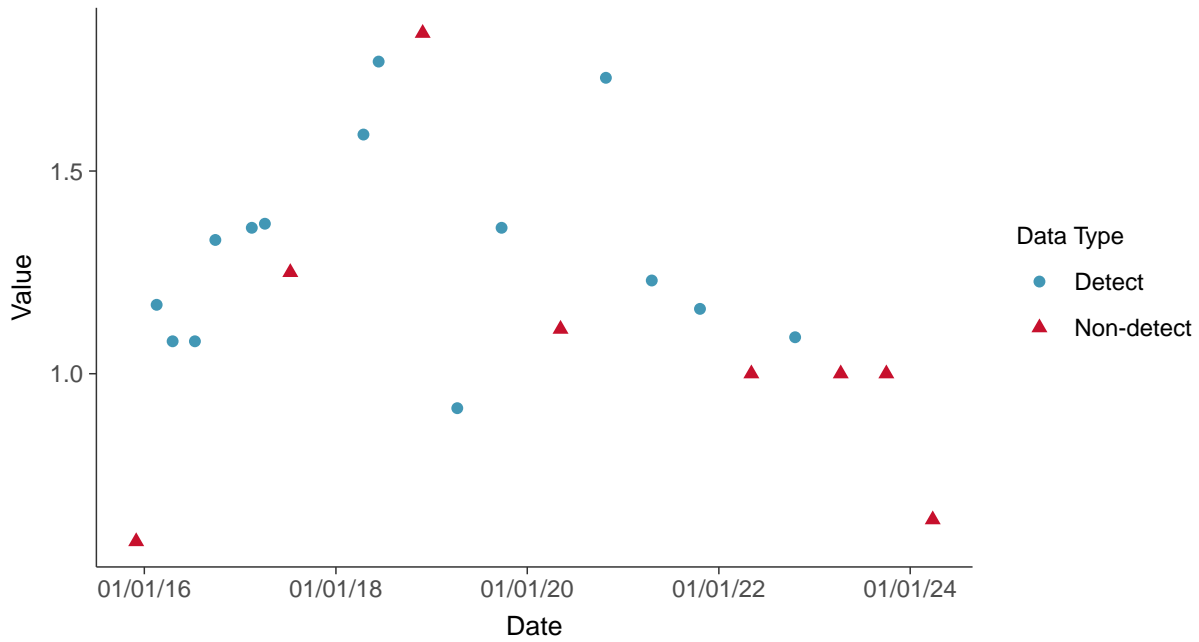


Appendix IV: Radium-226+228, MW-15018

ID: 08_2_125

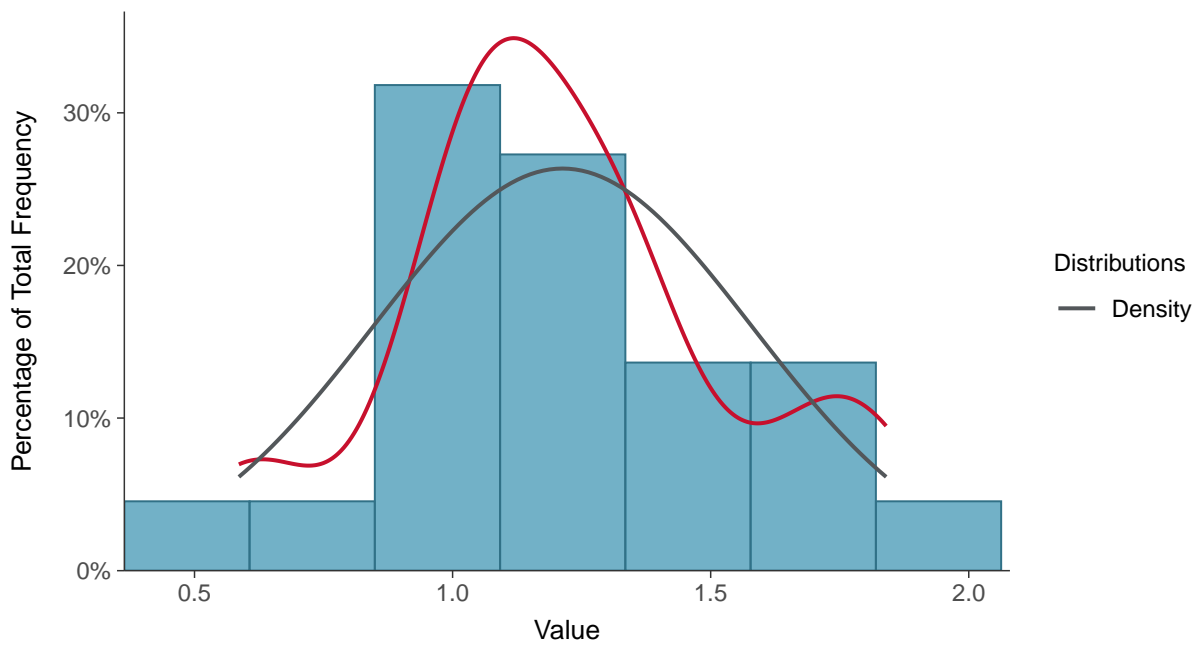
Scatter Plot

Radium-226+228, MW-15018 (pCi/L)



Histogram

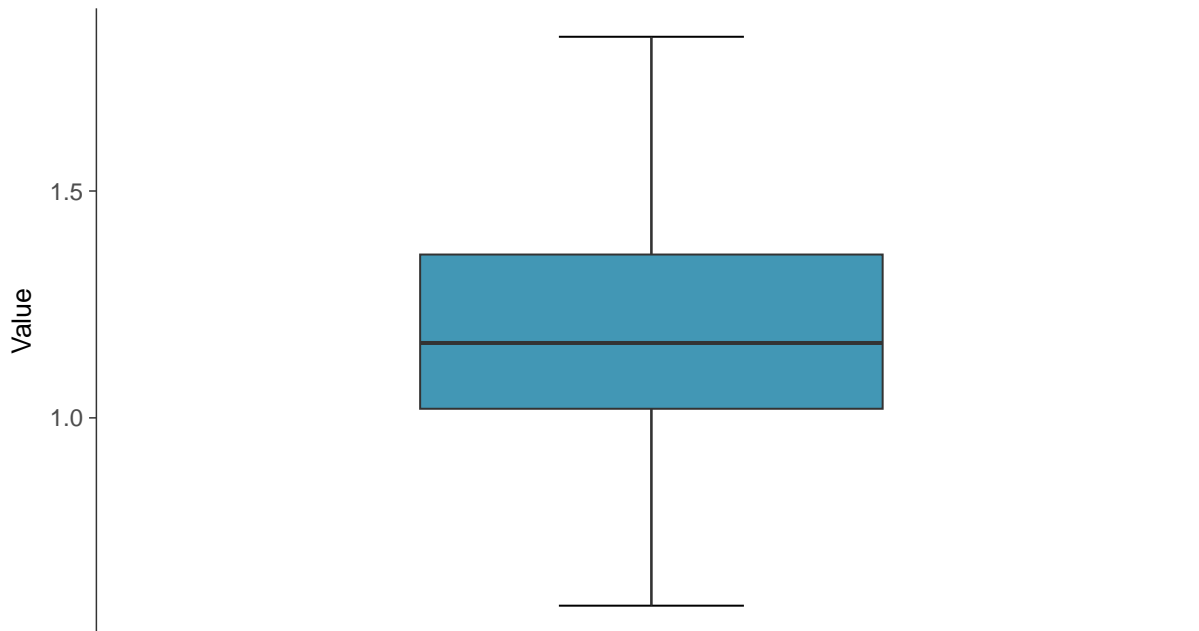
Radium-226+228, MW-15018 (pCi/L)





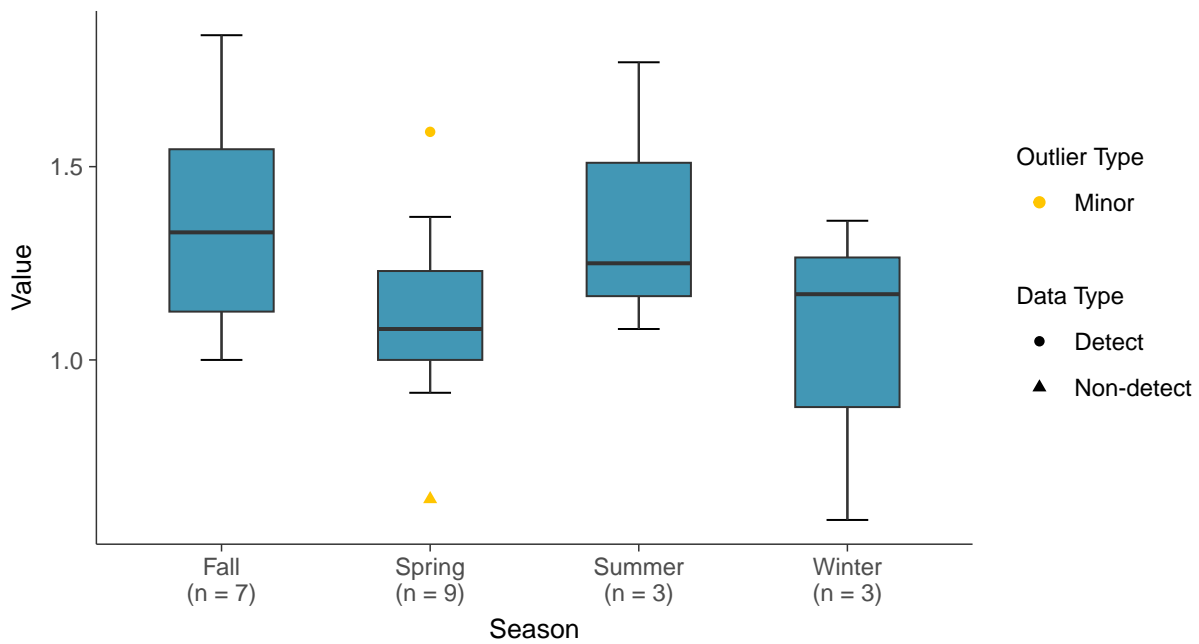
Boxplot

Radium-226+228, MW-15018 (pCi/L)



Boxplot by Season

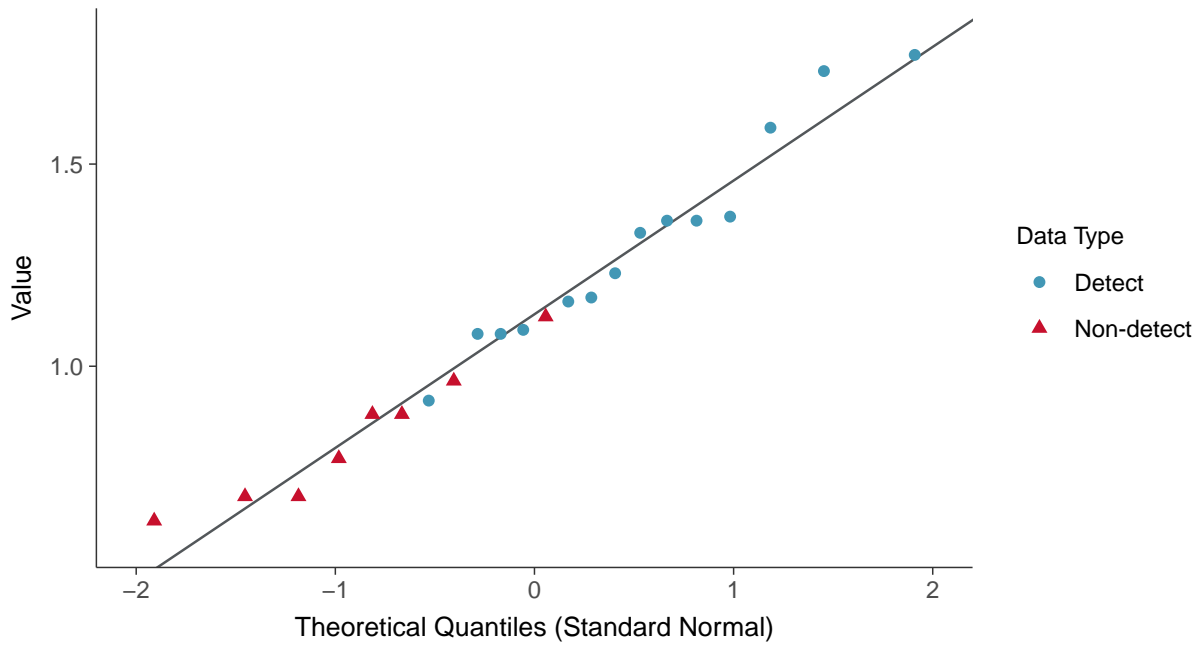
Radium-226+228, MW-15018 (pCi/L)





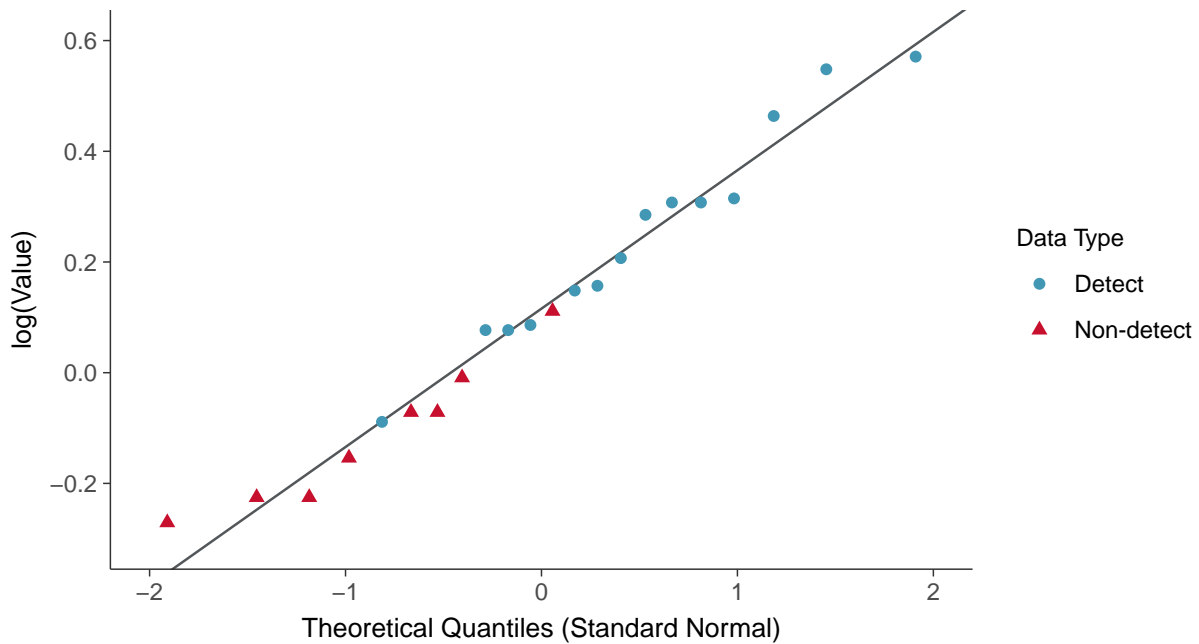
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15018 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

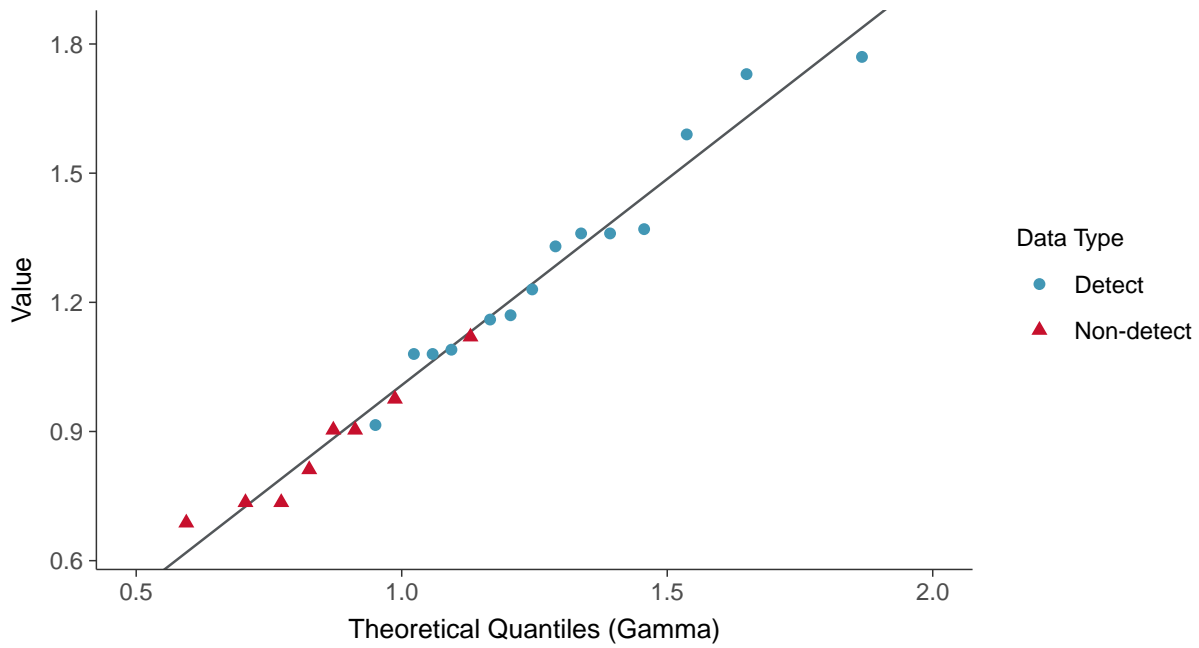
Radium-226+228, MW-15018 (pCi/L)





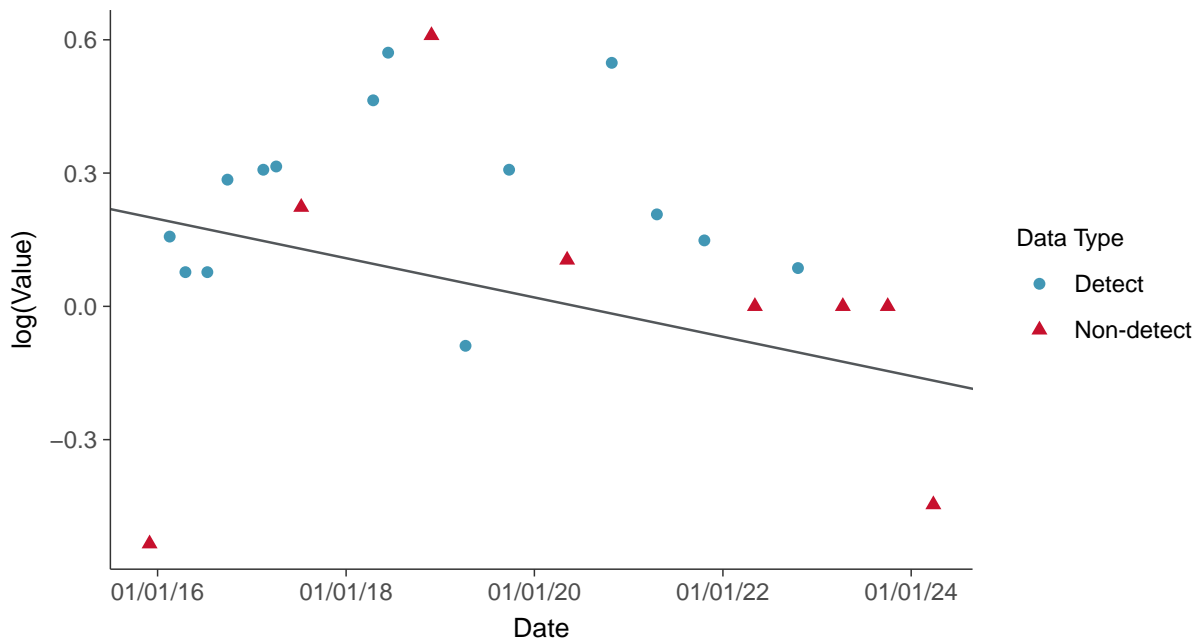
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15018 (pCi/L)



Trend Regression: Lognormal MLE

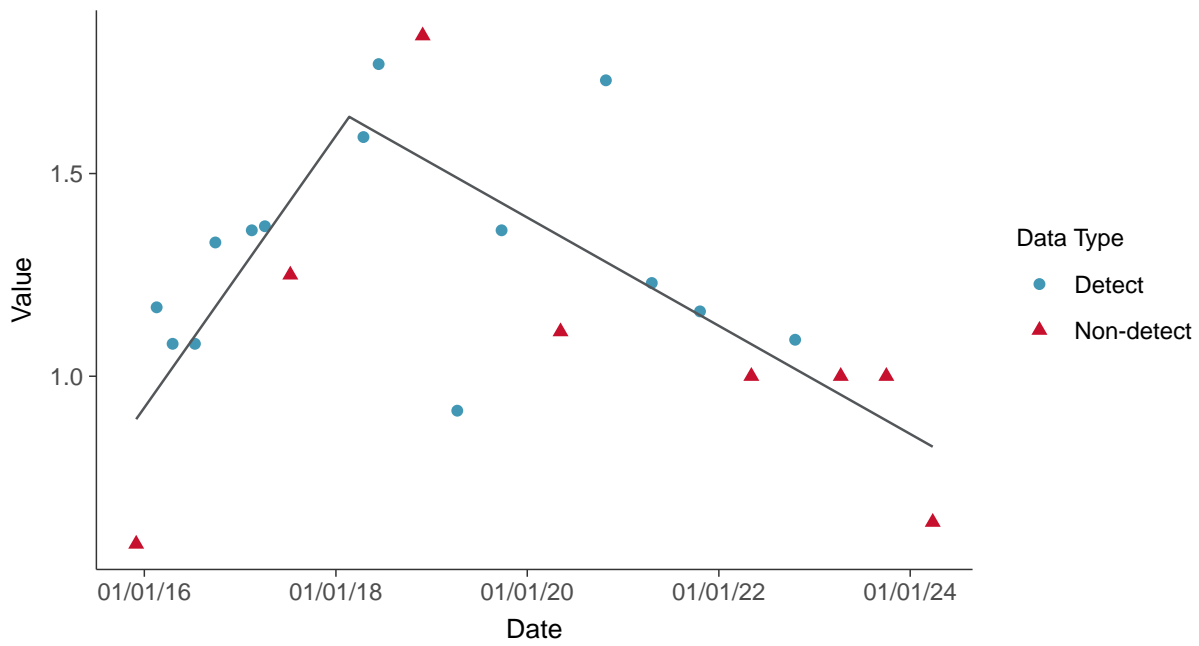
Radium-226+228, MW-15018 (pCi/L)





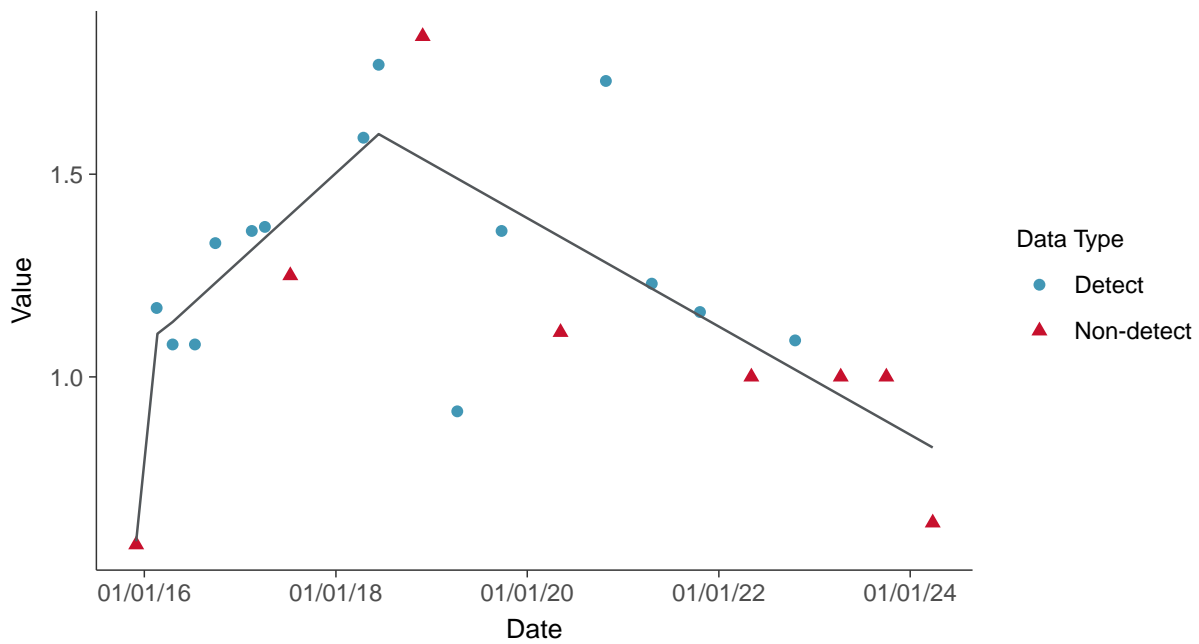
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15018 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

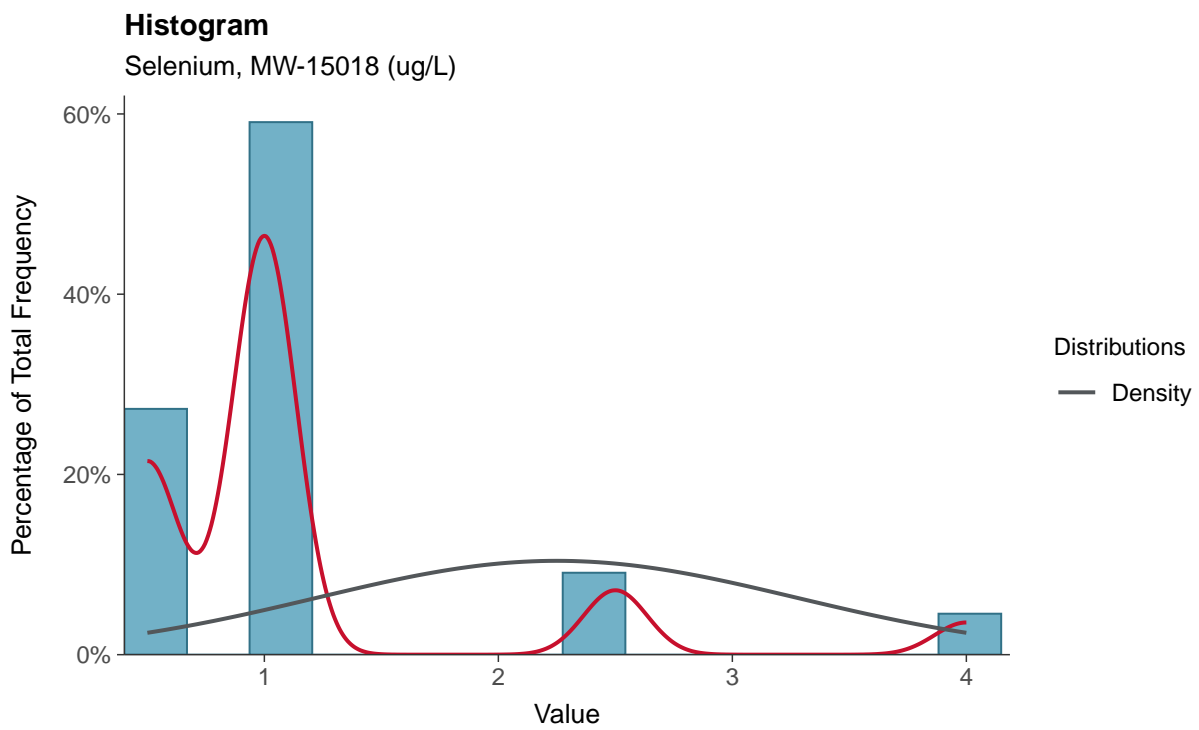
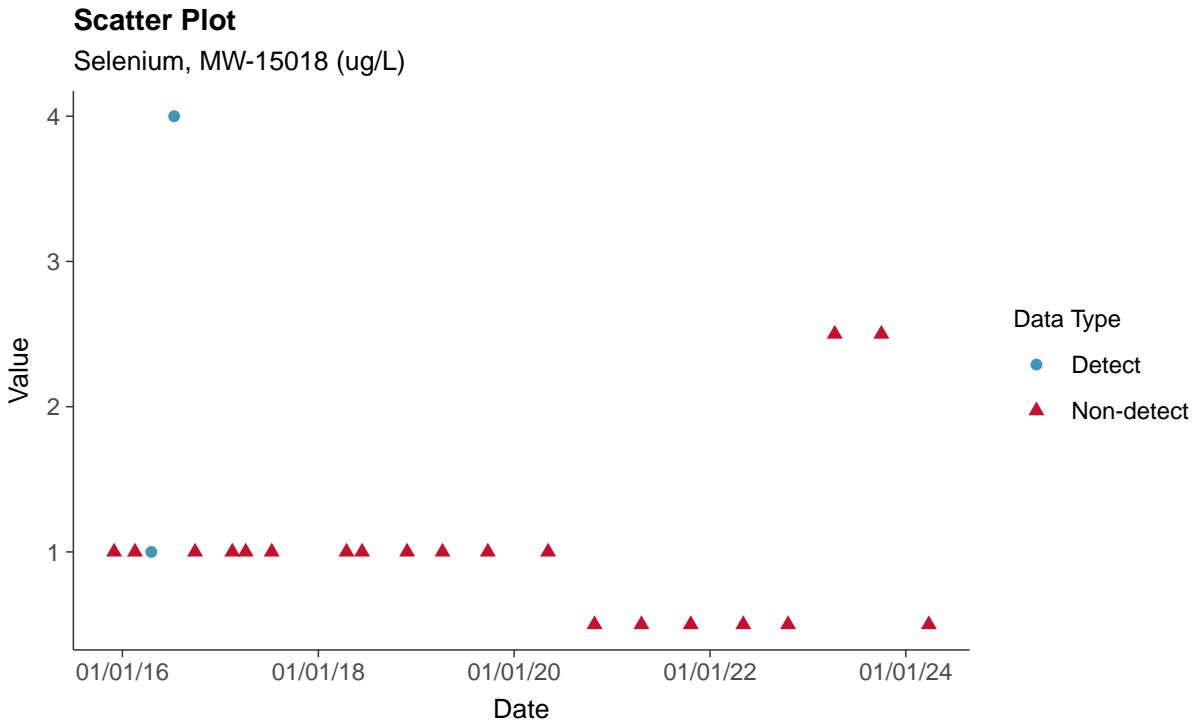
Radium-226+228, MW-15018 (pCi/L)





Appendix IV: Selenium, MW-15018

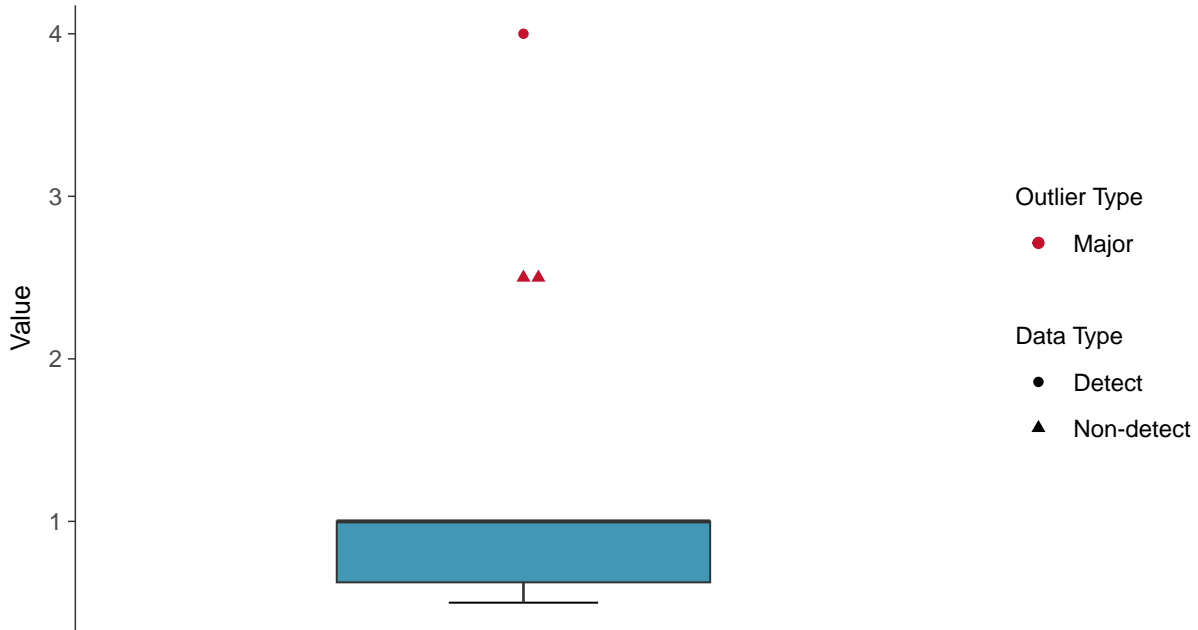
ID: 08_2_127





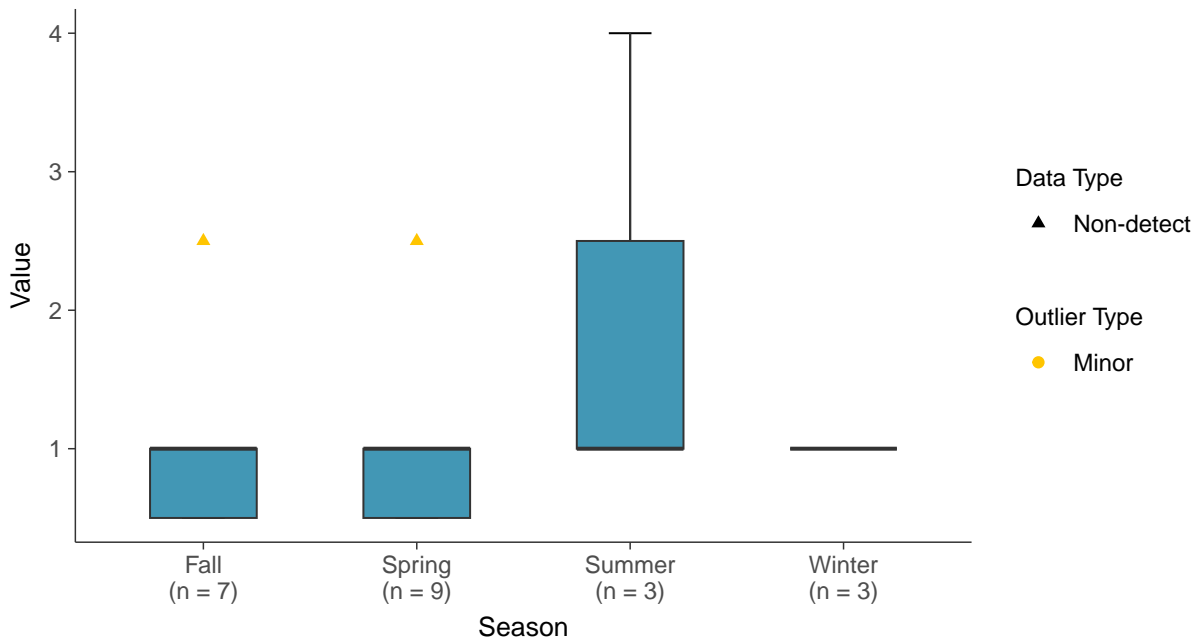
Boxplot

Selenium, MW-15018 (ug/L)



Boxplot by Season

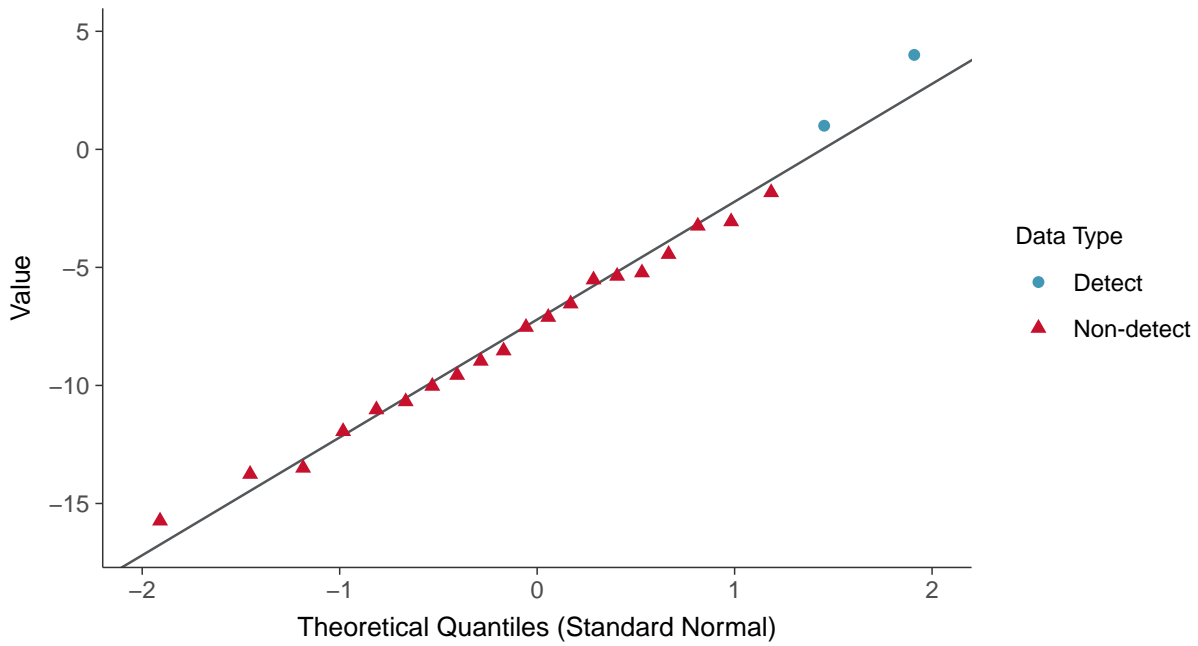
Selenium, MW-15018 (ug/L)





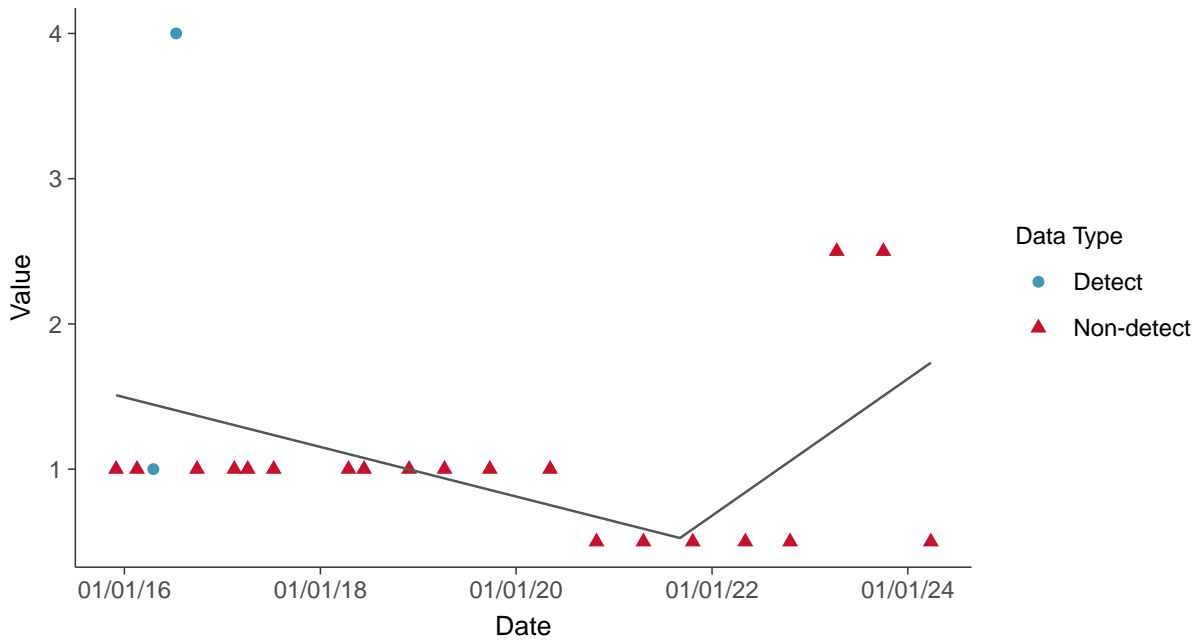
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear

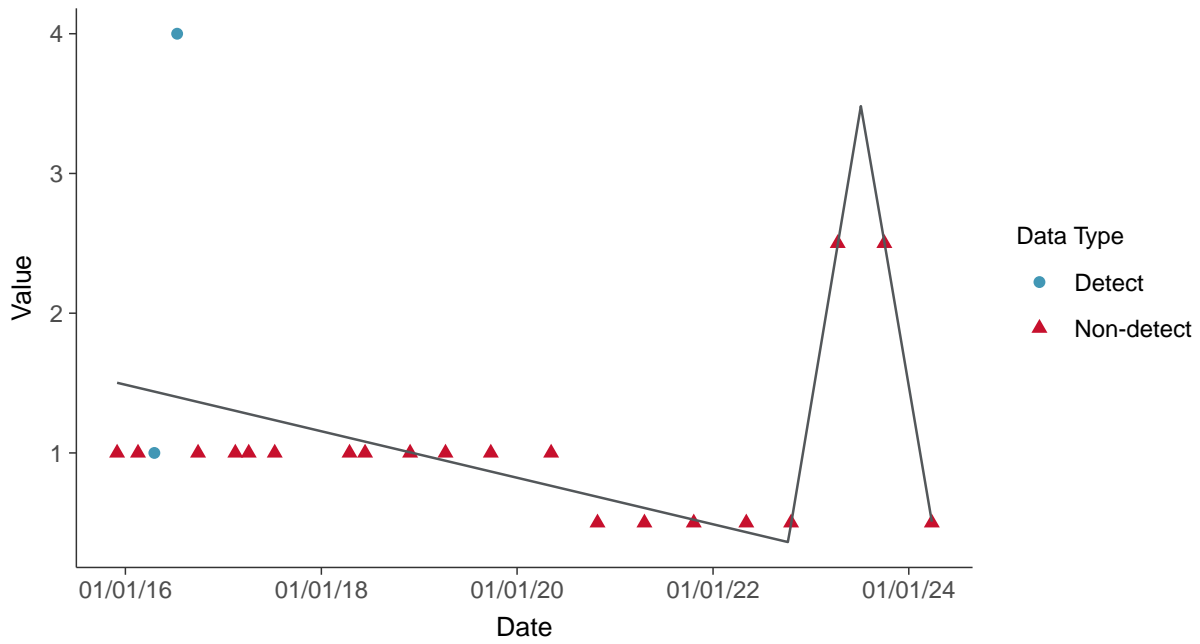
Selenium, MW-15018 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

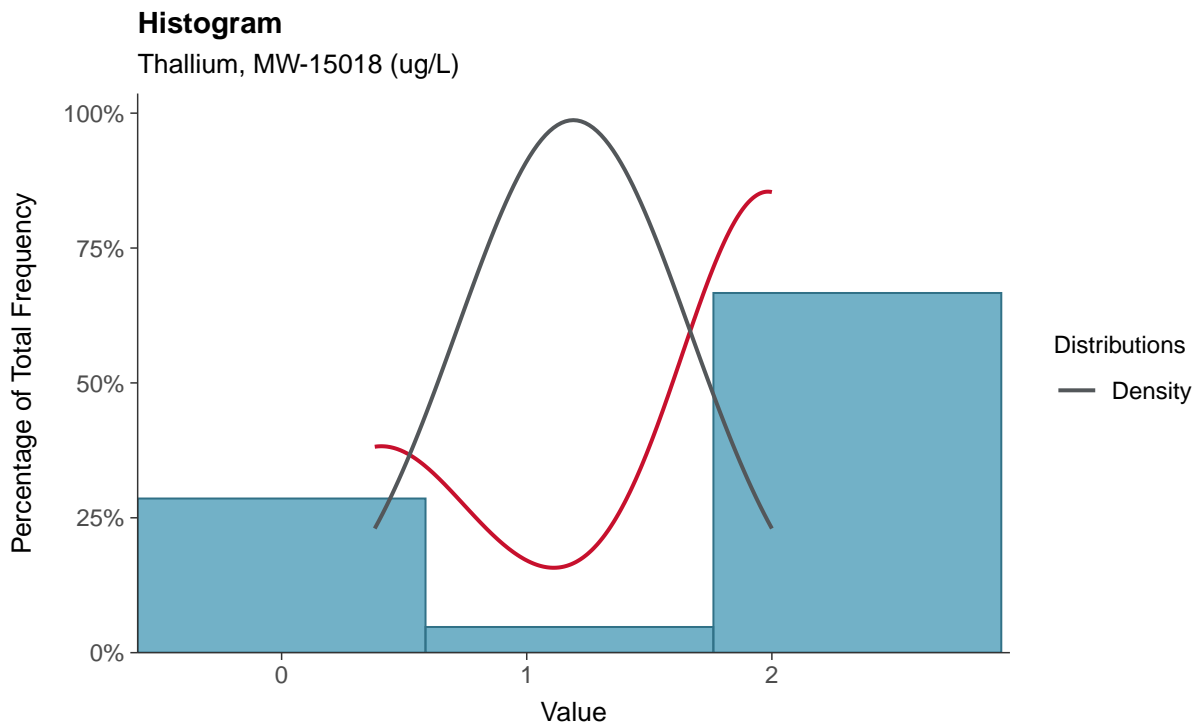
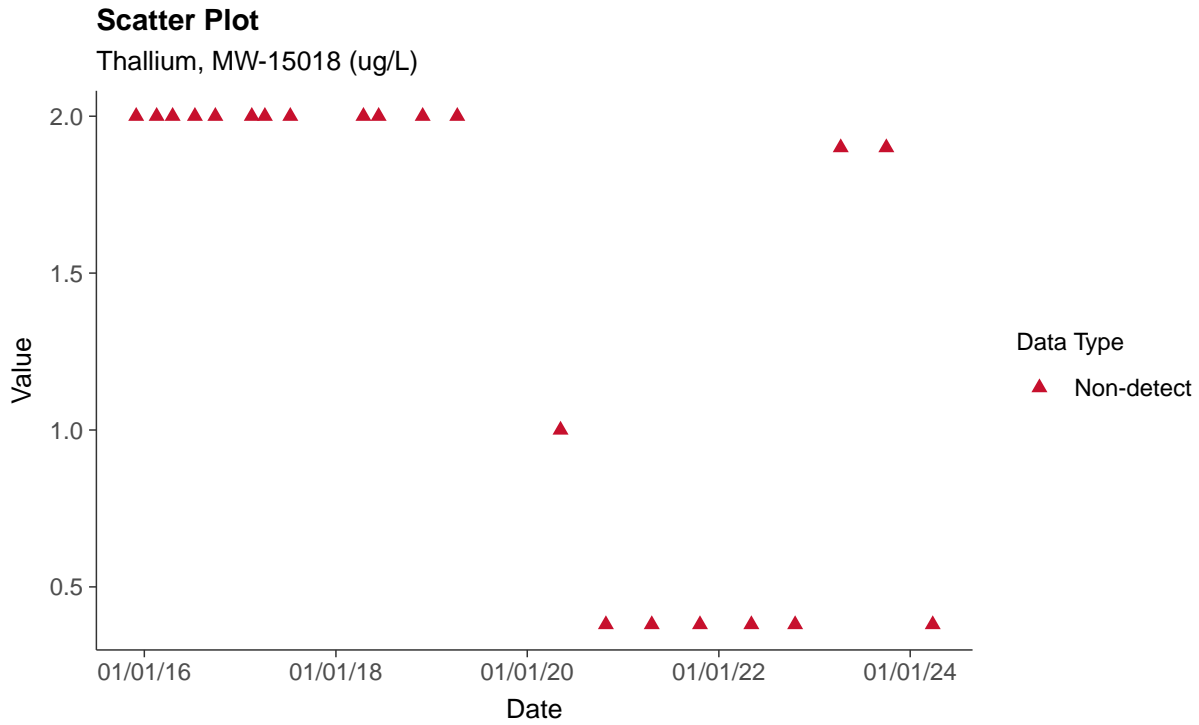
Selenium, MW-15018 (ug/L)





Appendix IV: Thallium, MW-15018

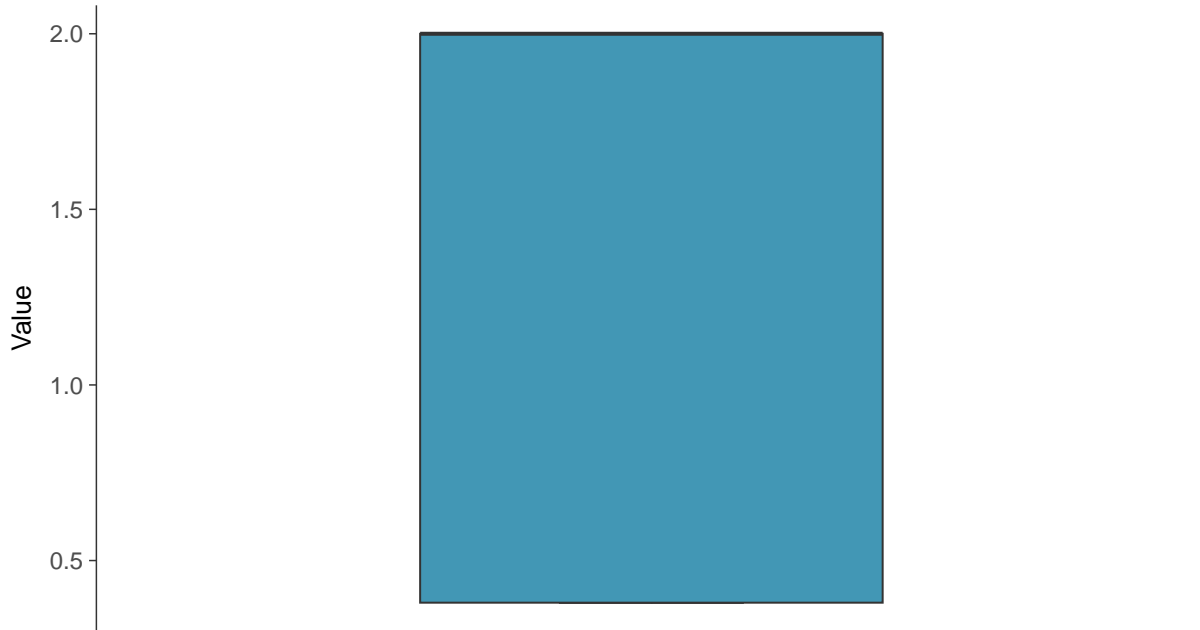
ID: 08_2_131





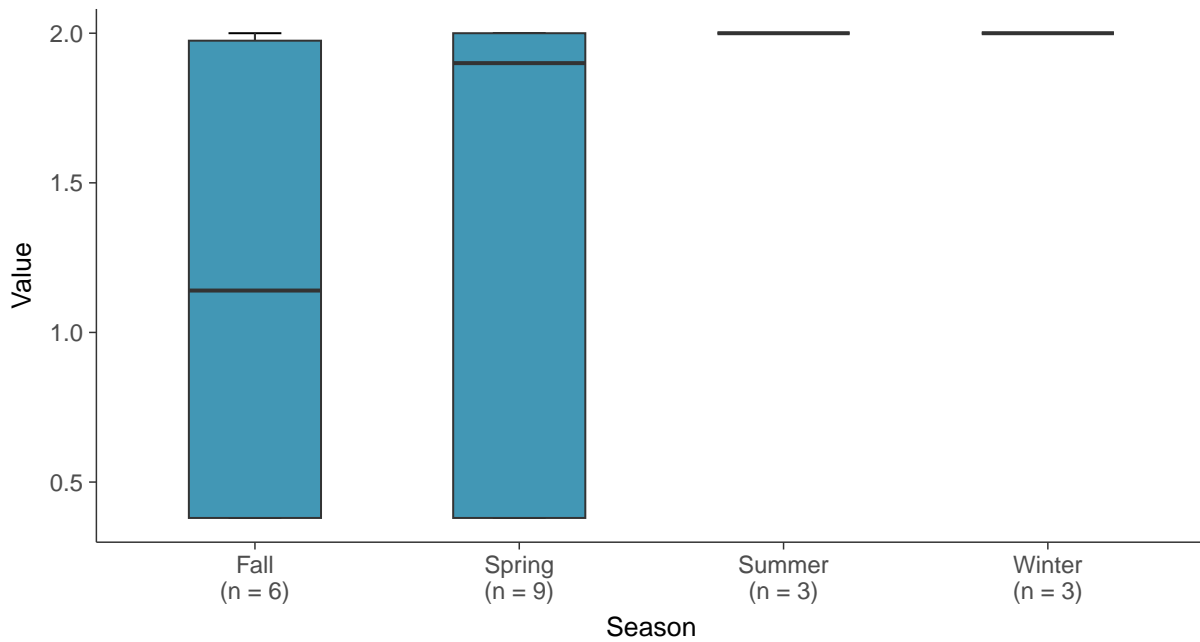
Boxplot

Thallium, MW-15018 (ug/L)



Boxplot by Season

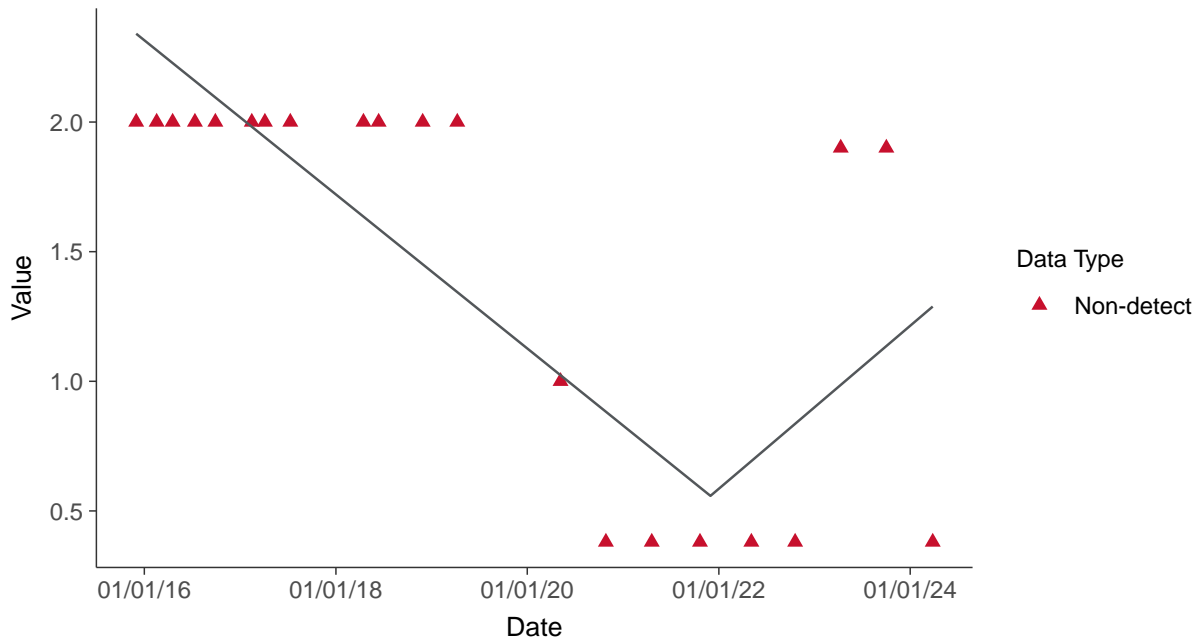
Thallium, MW-15018 (ug/L)





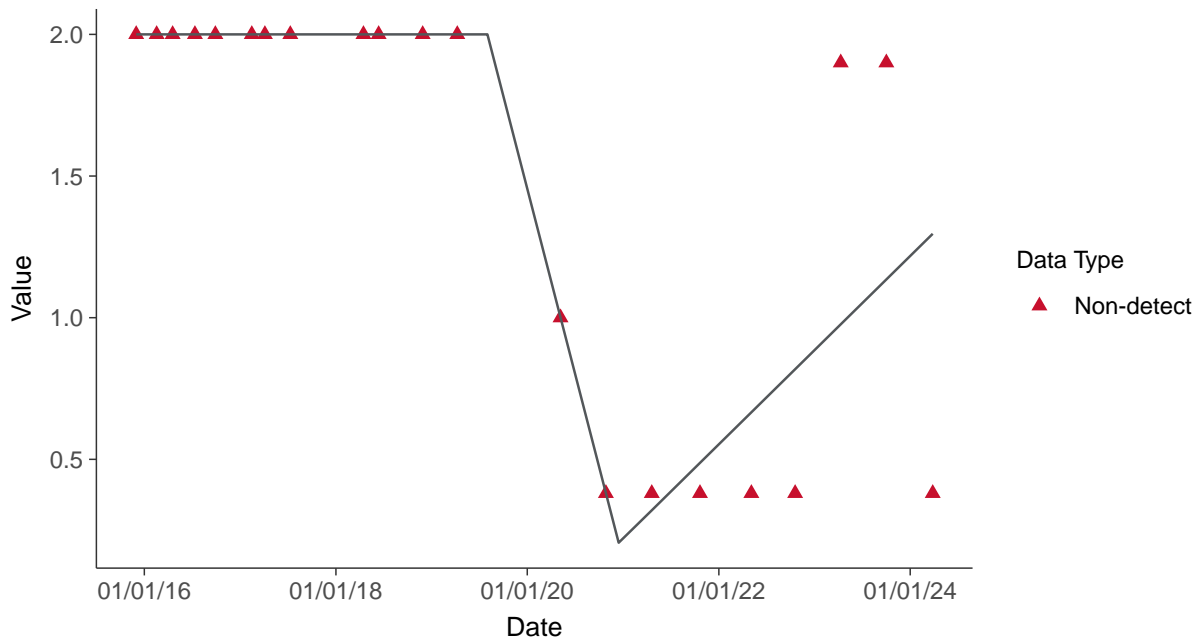
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

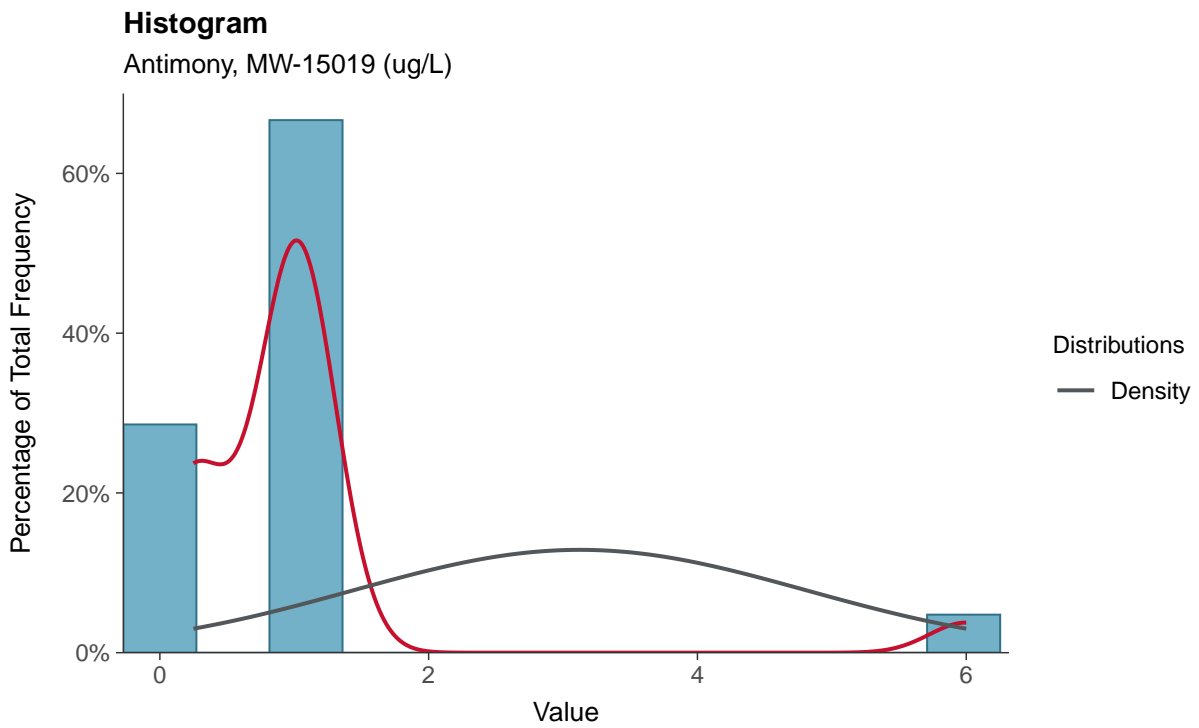
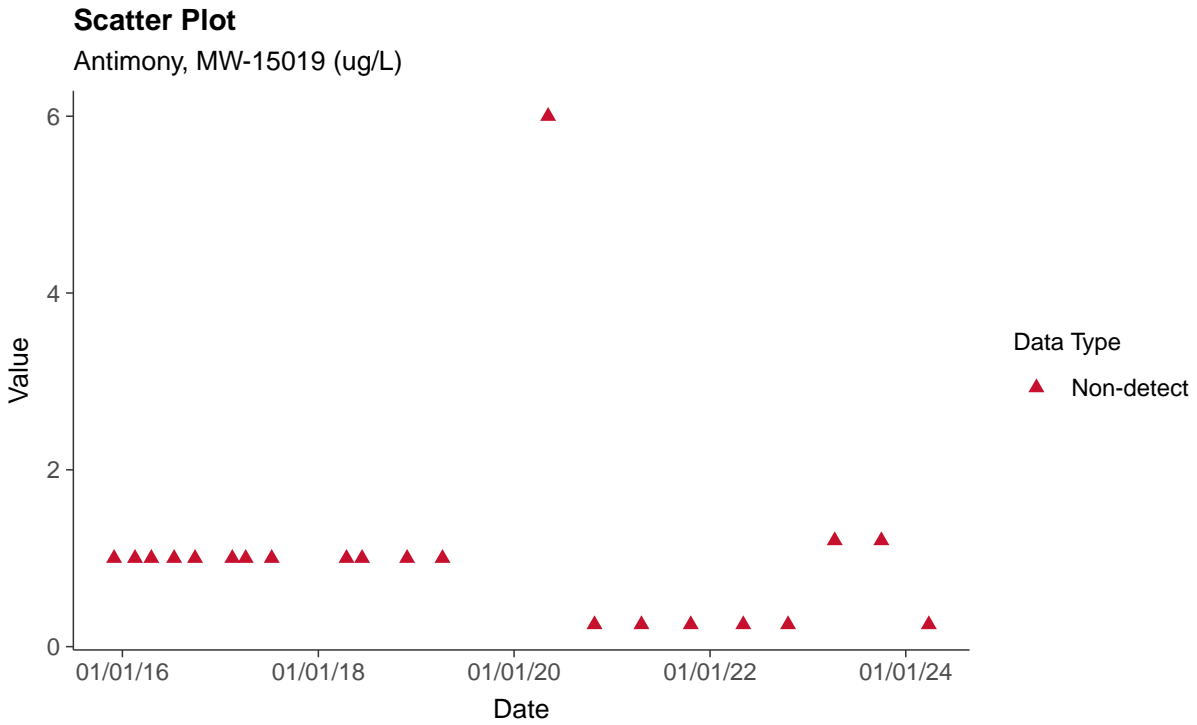
Thallium, MW-15018 (ug/L)





Appendix IV: Antimony, MW-15019

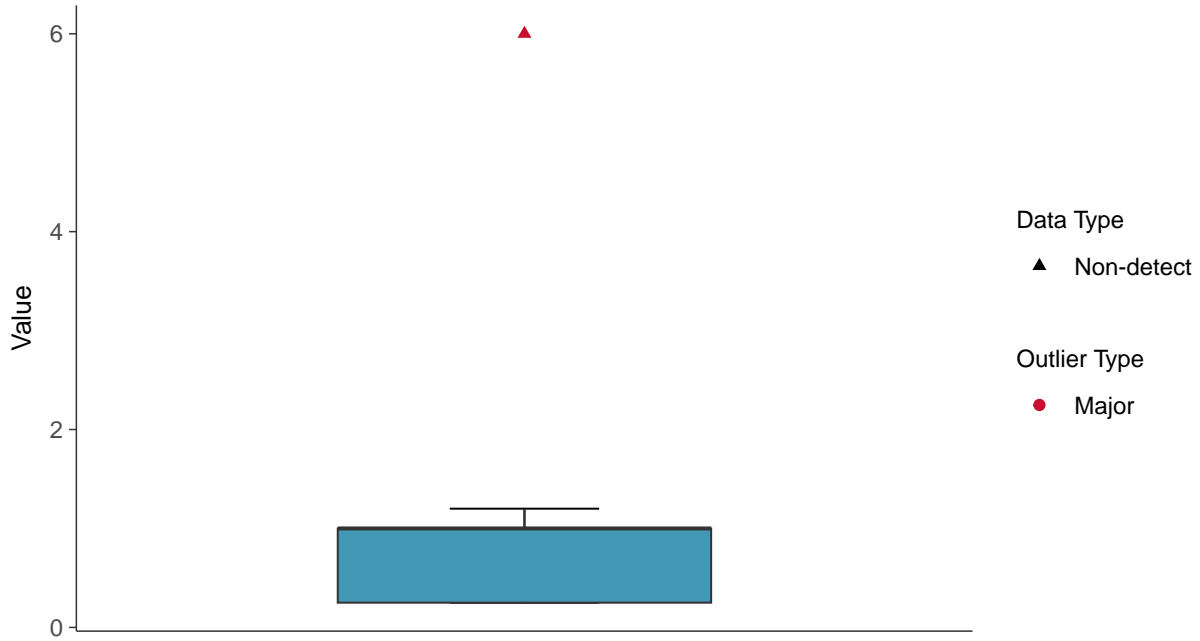
ID: 09_2_101





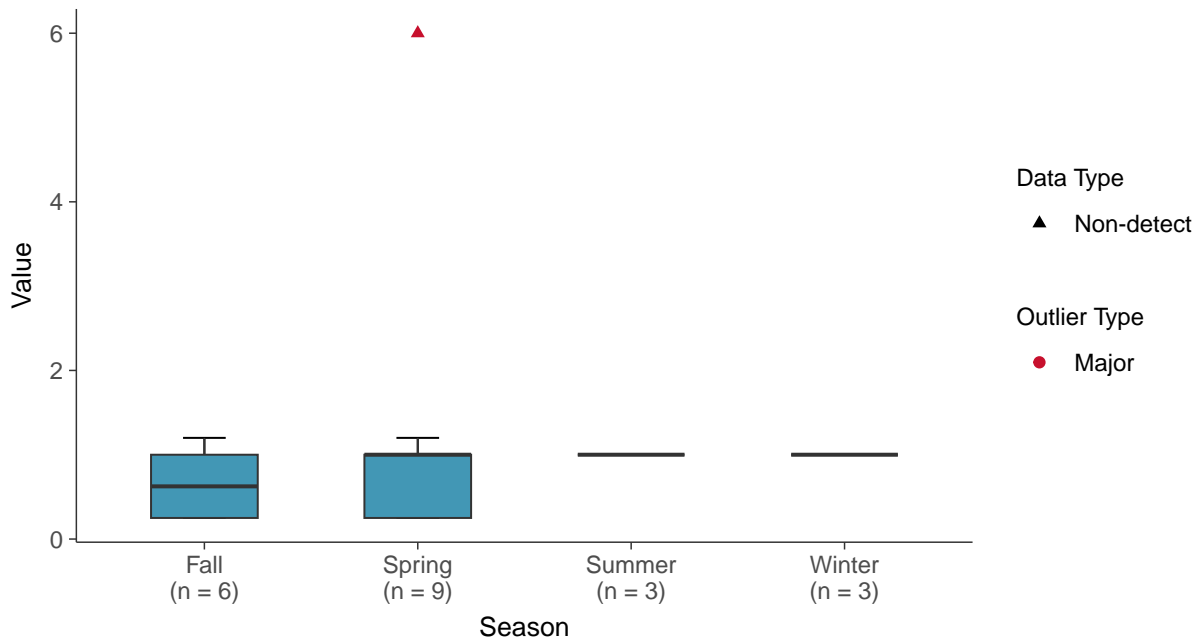
Boxplot

Antimony, MW-15019 (ug/L)



Boxplot by Season

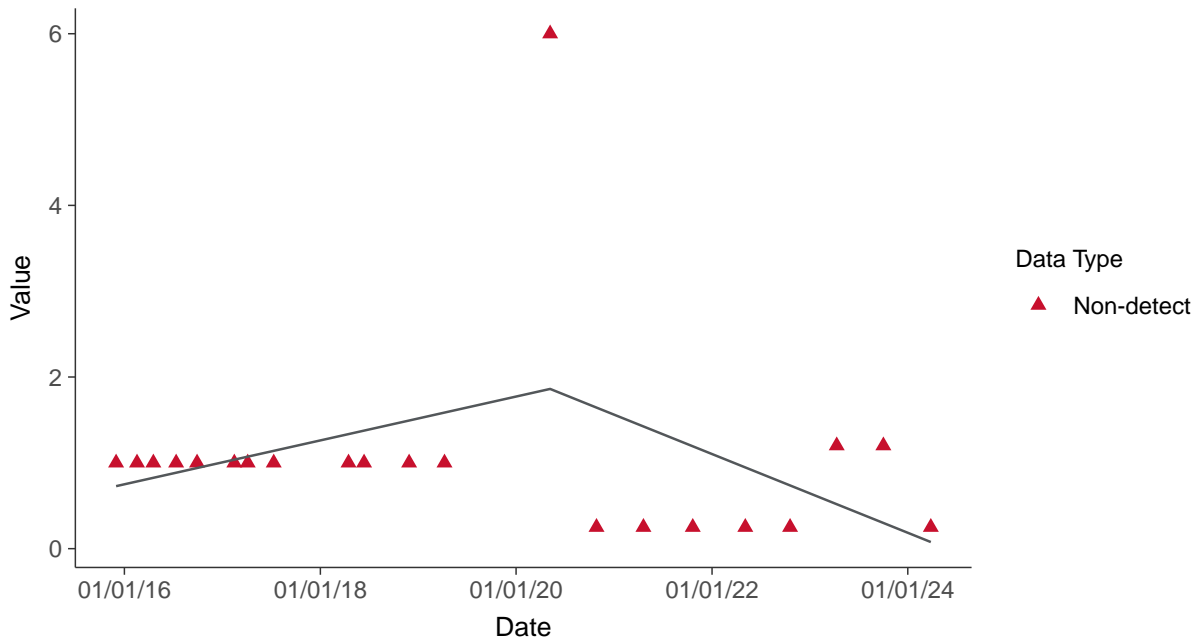
Antimony, MW-15019 (ug/L)





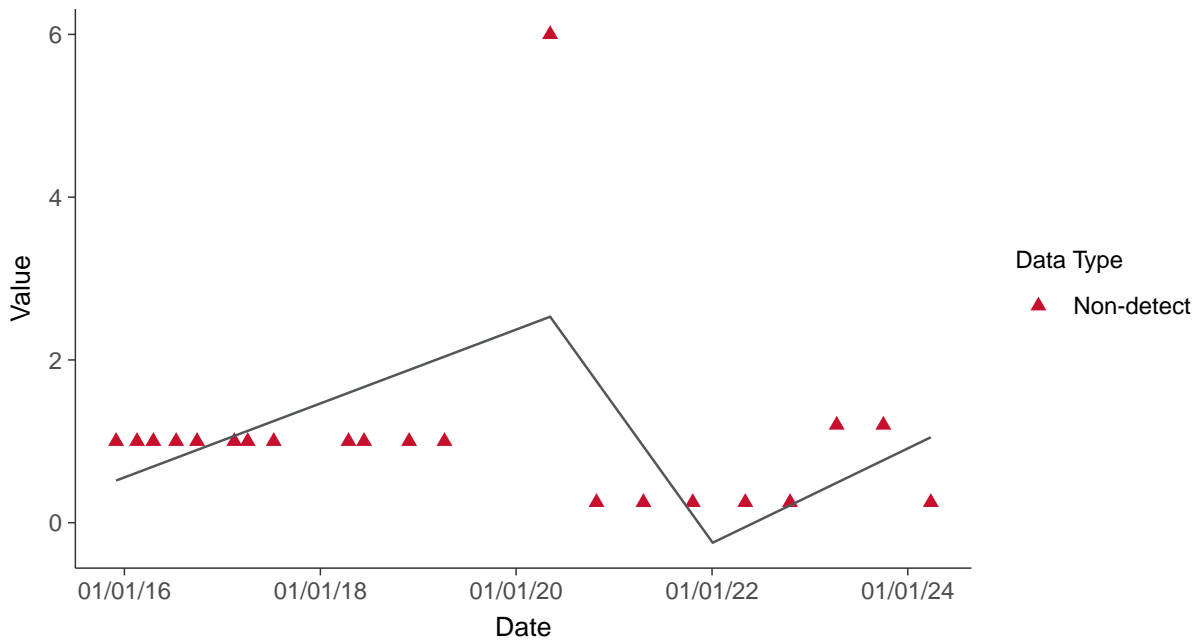
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

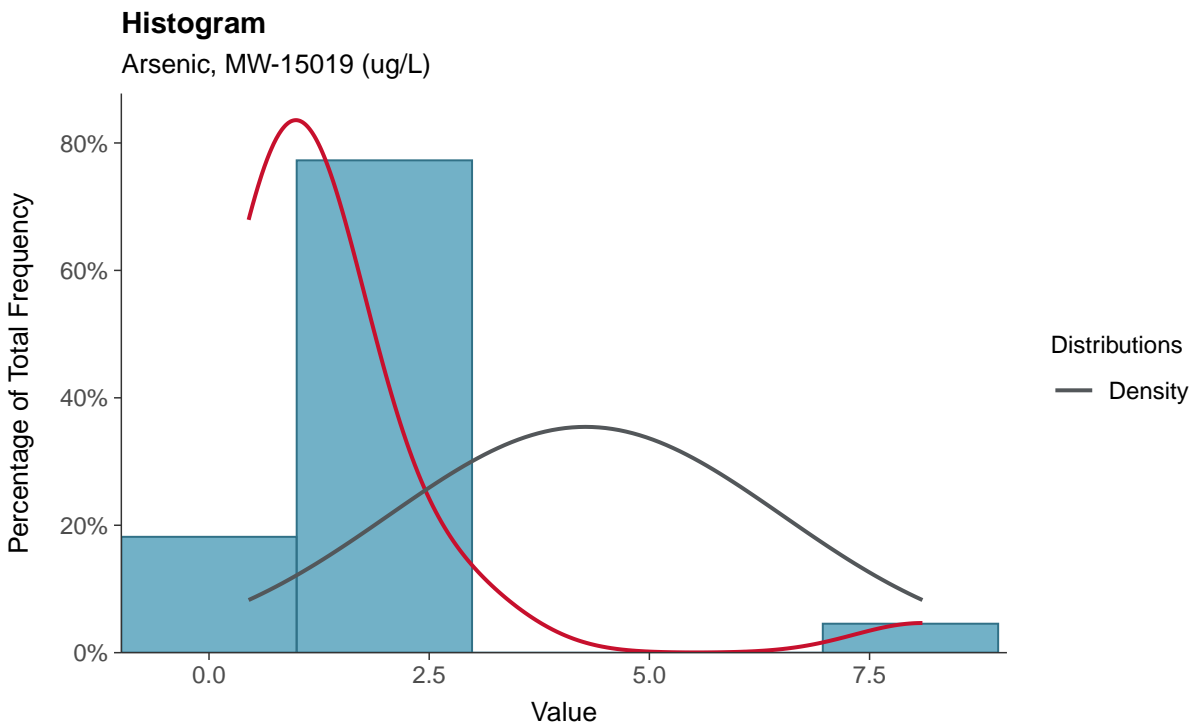
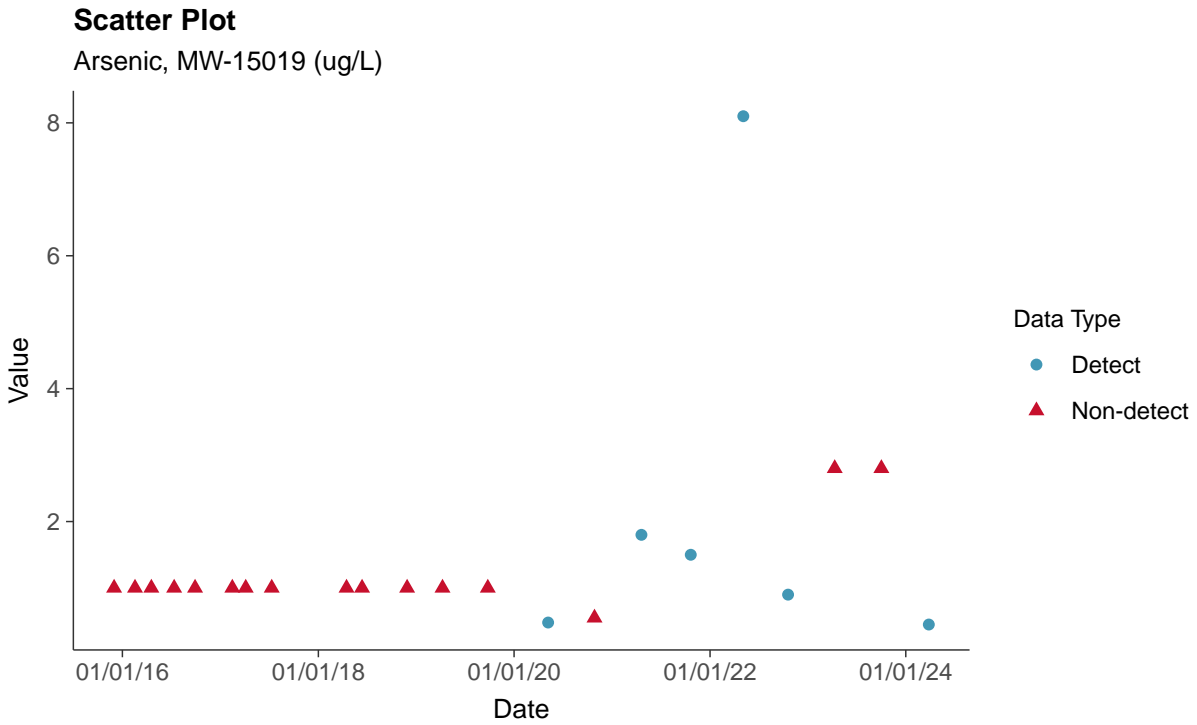
Antimony, MW-15019 (ug/L)





Appendix IV: Arsenic, MW-15019

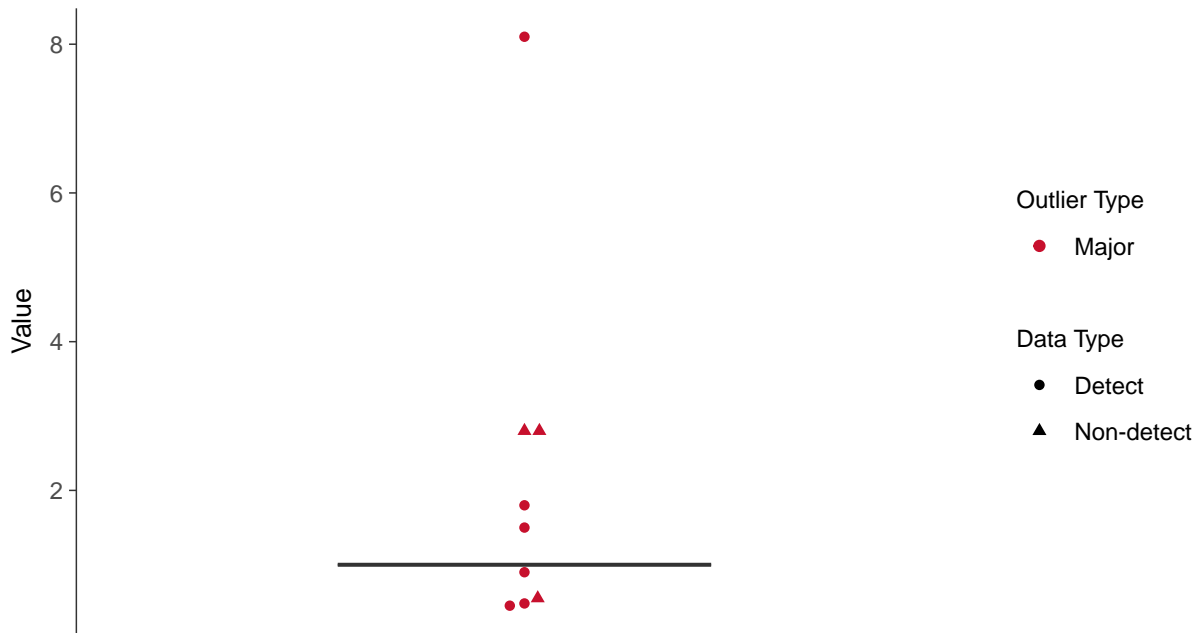
ID: 09_2_102





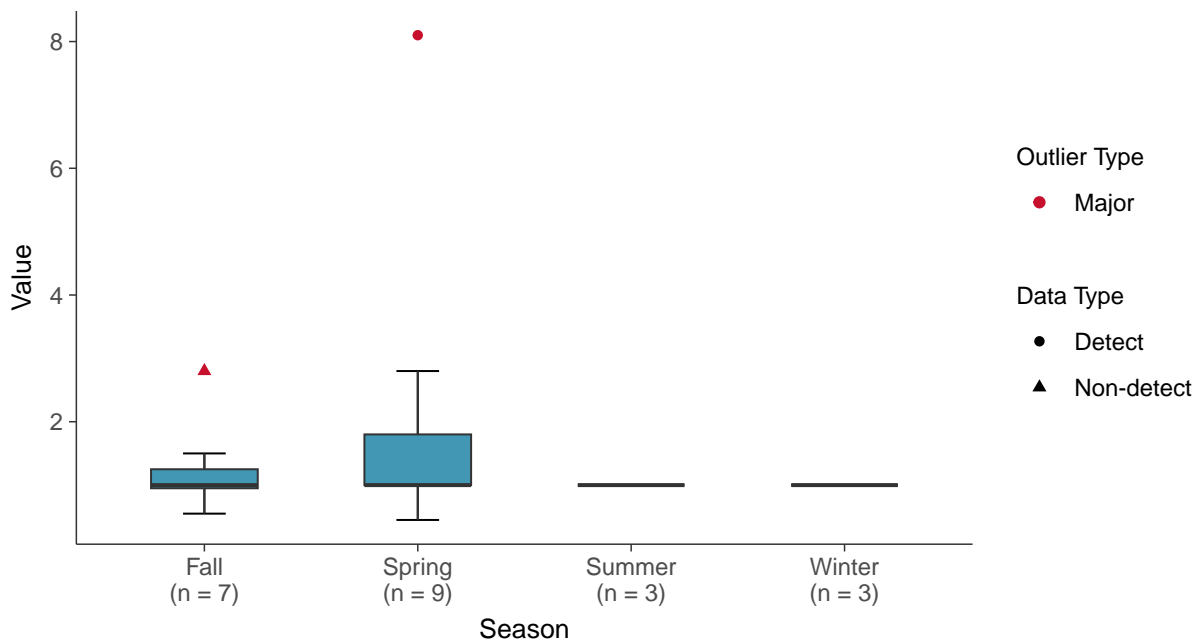
Boxplot

Arsenic, MW-15019 (ug/L)



Boxplot by Season

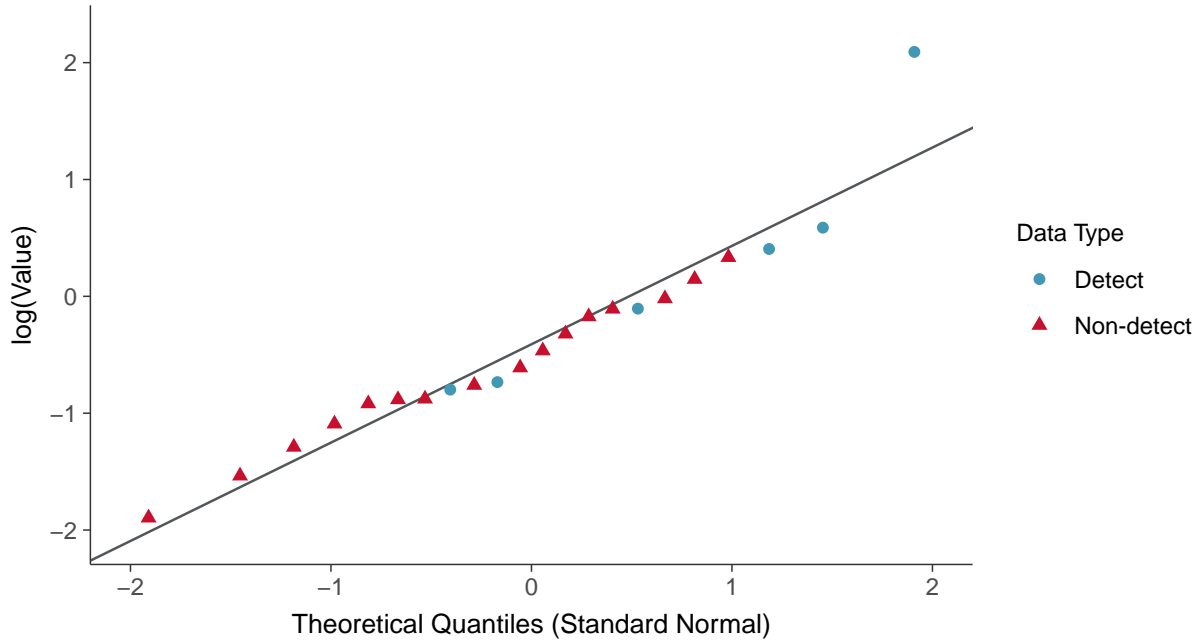
Arsenic, MW-15019 (ug/L)





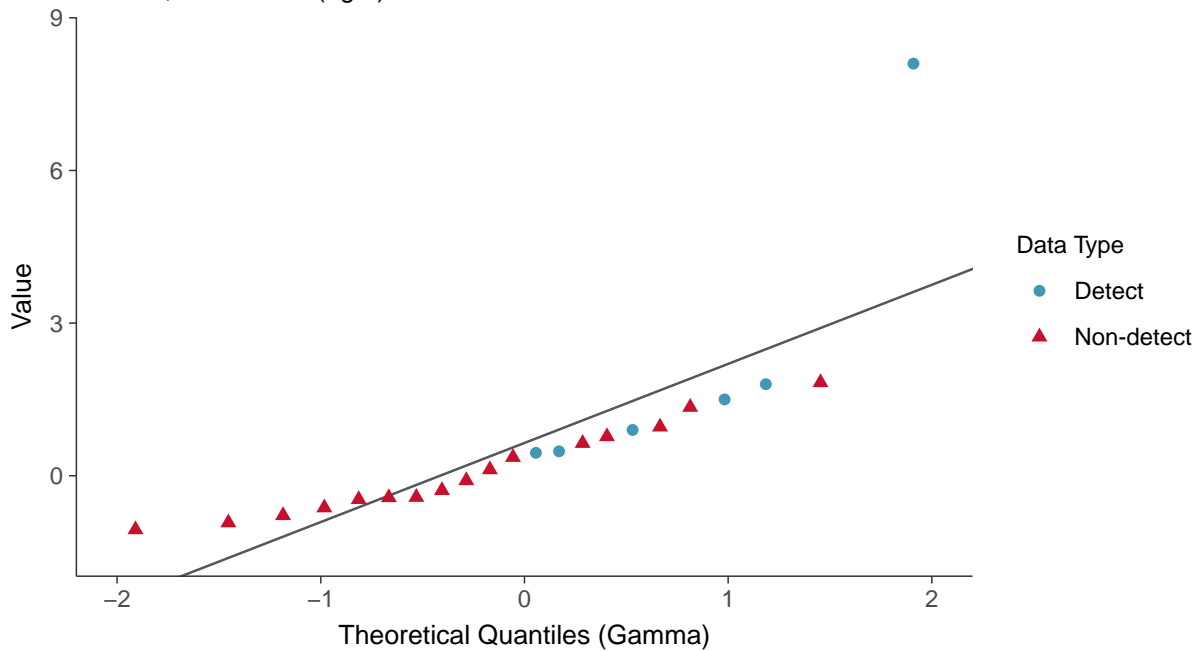
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15019 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

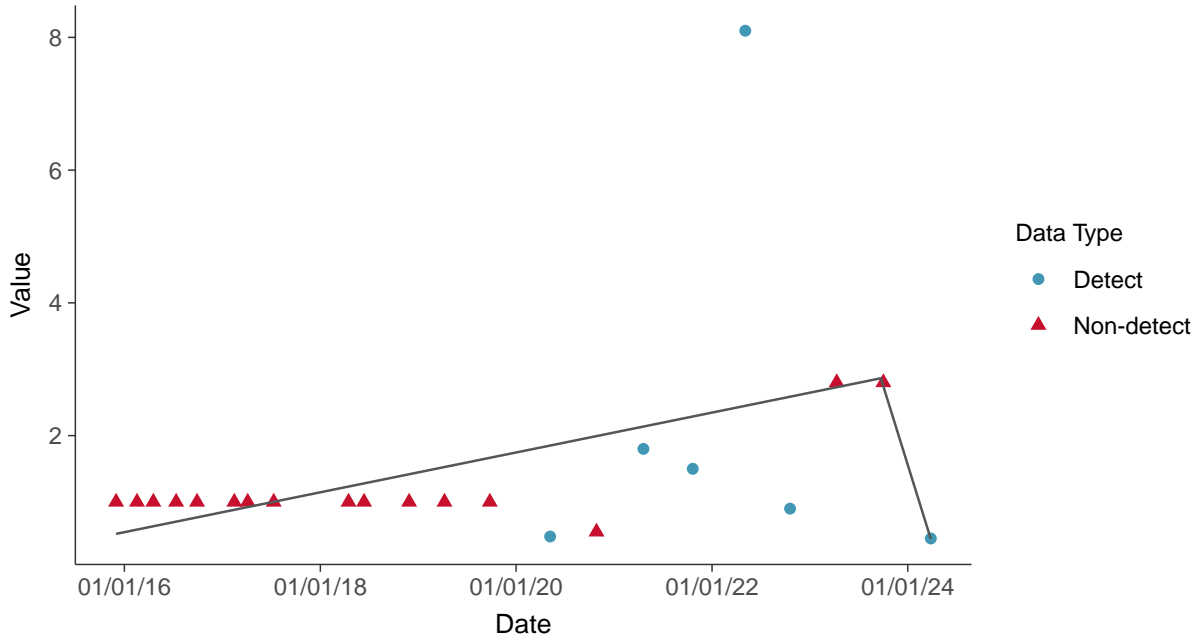
Arsenic, MW-15019 (ug/L)





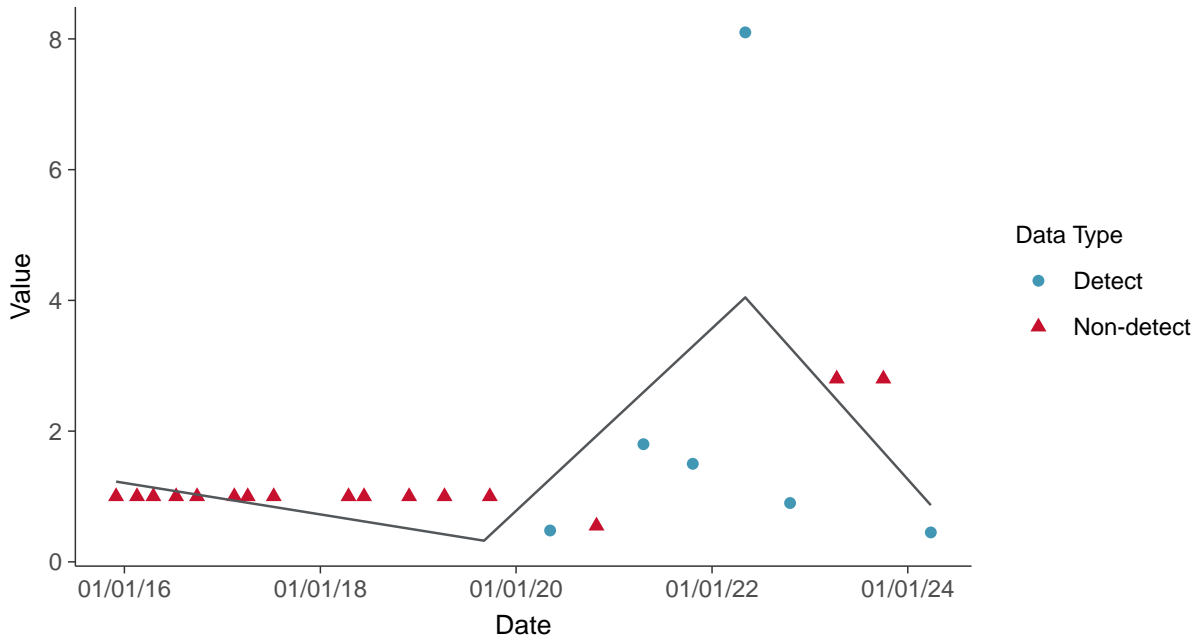
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

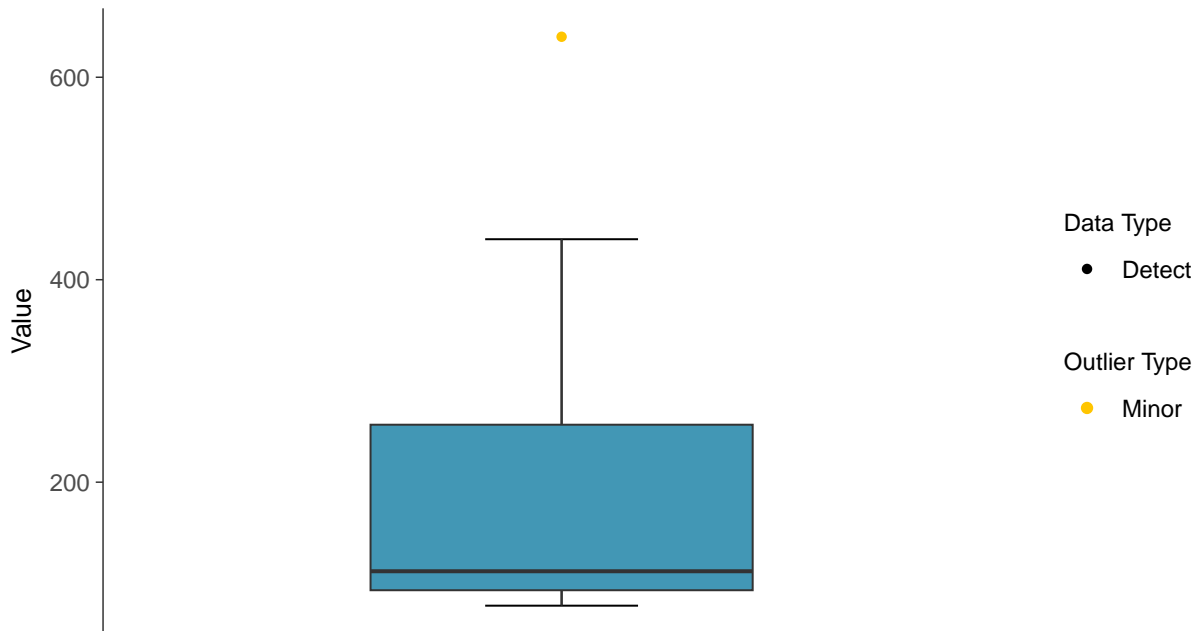
Arsenic, MW-15019 (ug/L)





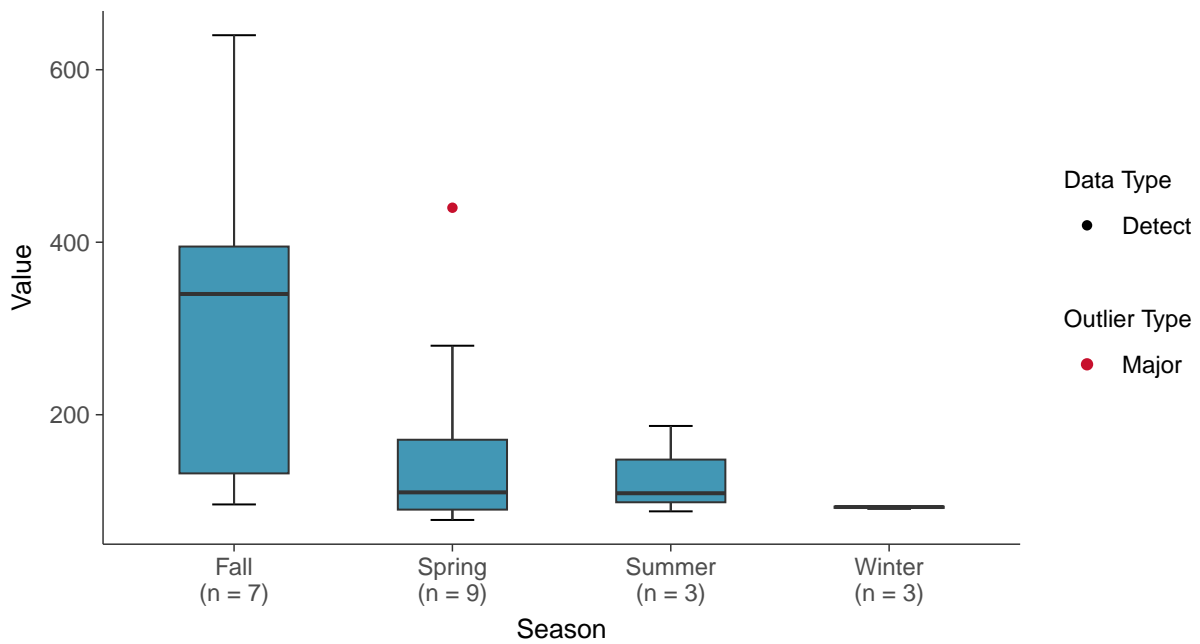
Boxplot

Barium, MW-15019 (ug/L)



Boxplot by Season

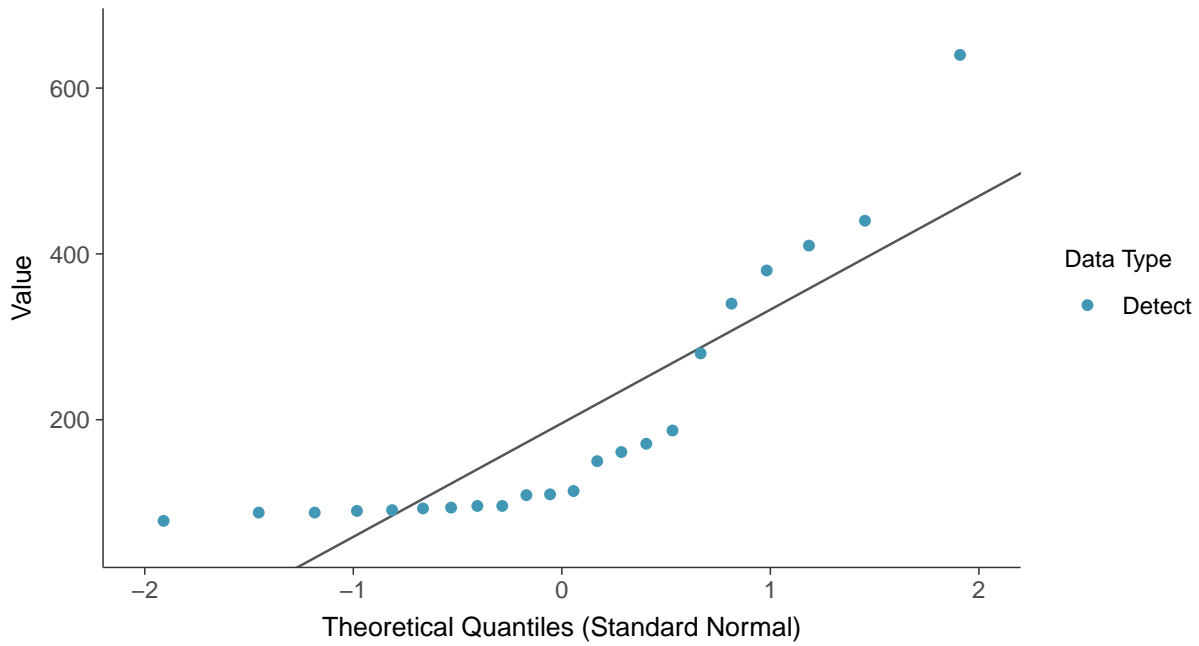
Barium, MW-15019 (ug/L)





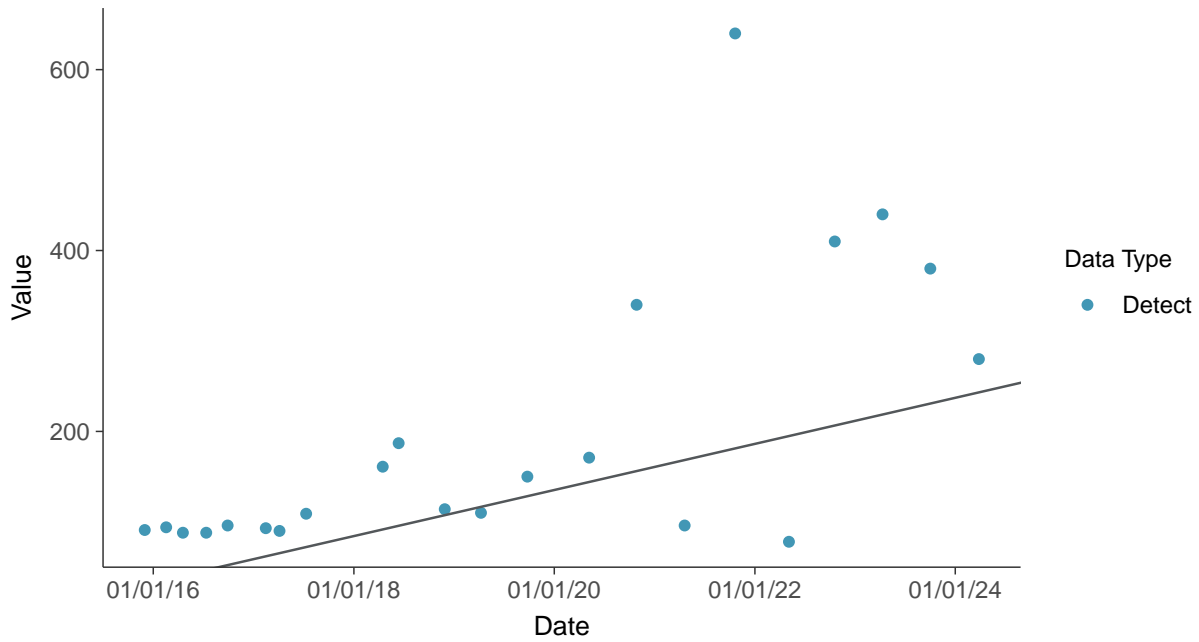
Normal Q-Q plot

Barium, MW-15019 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

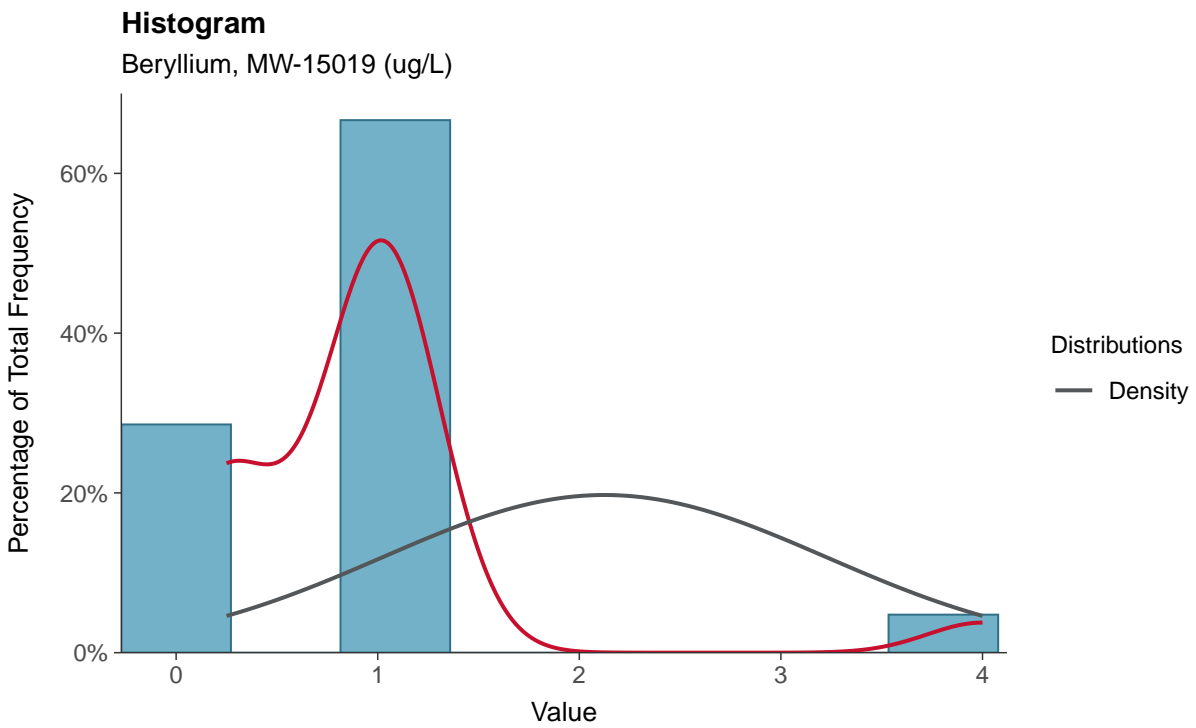
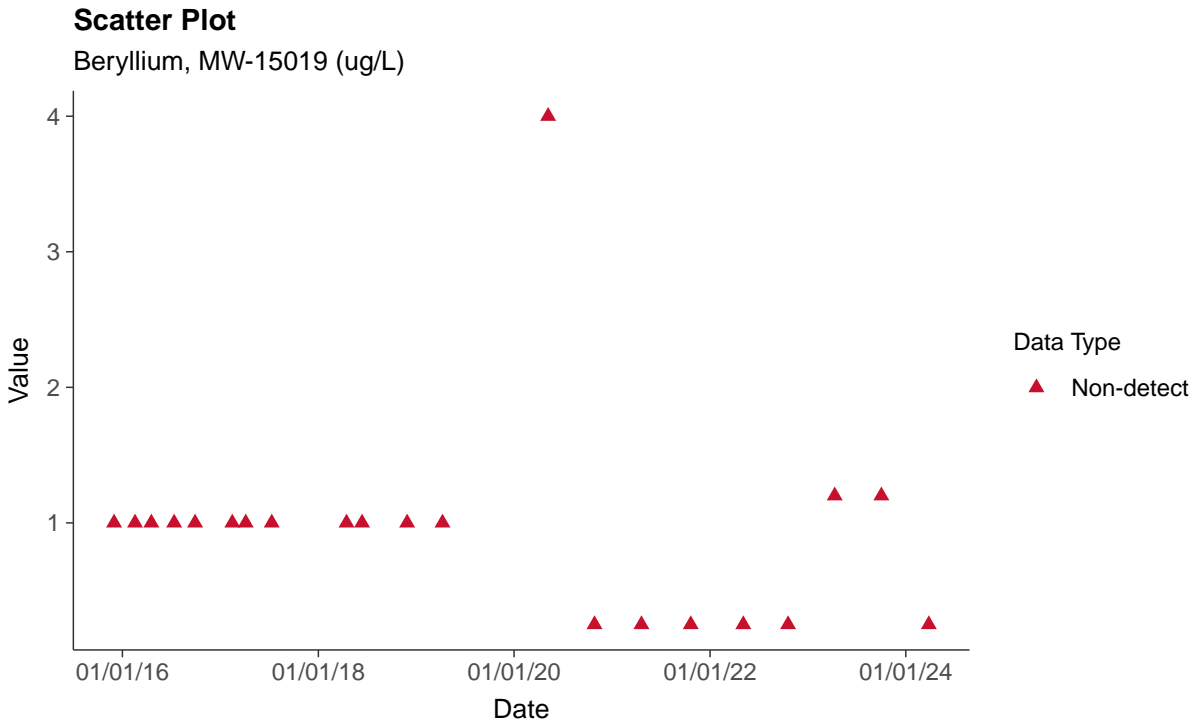
Barium, MW-15019 (ug/L)





Appendix IV: Beryllium, MW-15019

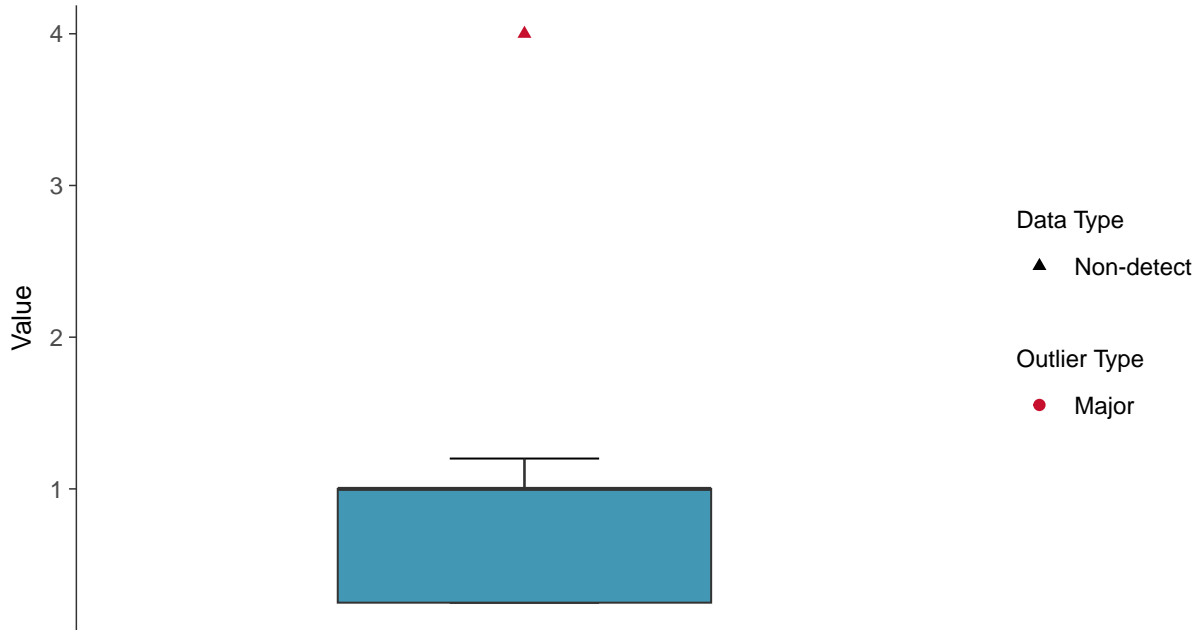
ID: 09_2_104





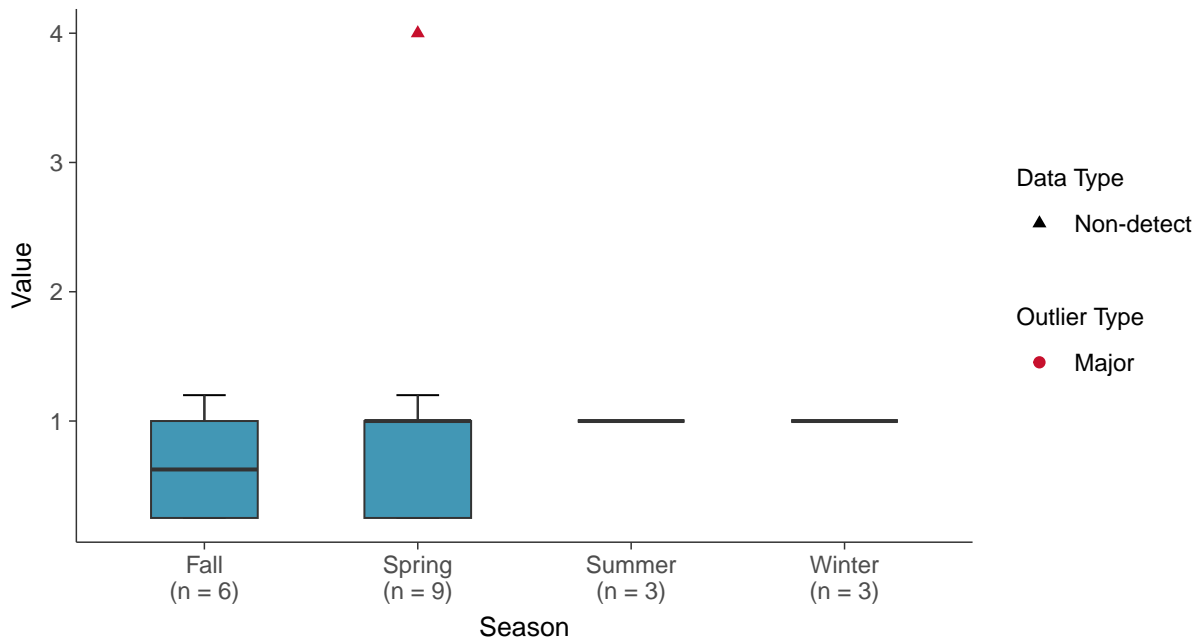
Boxplot

Beryllium, MW-15019 (ug/L)



Boxplot by Season

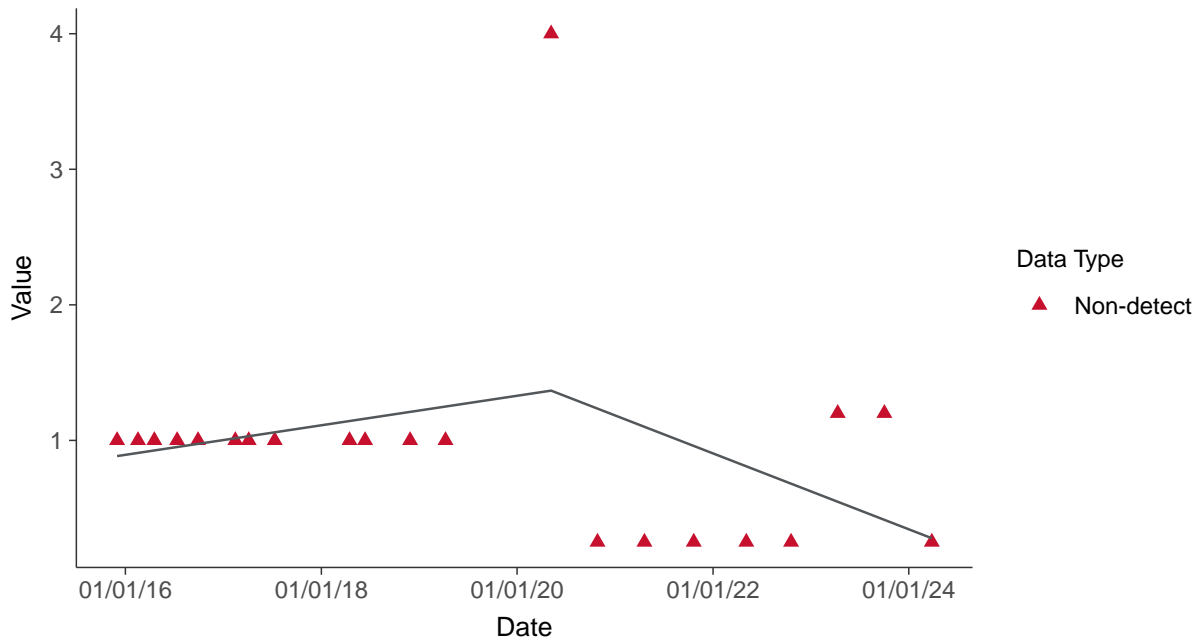
Beryllium, MW-15019 (ug/L)





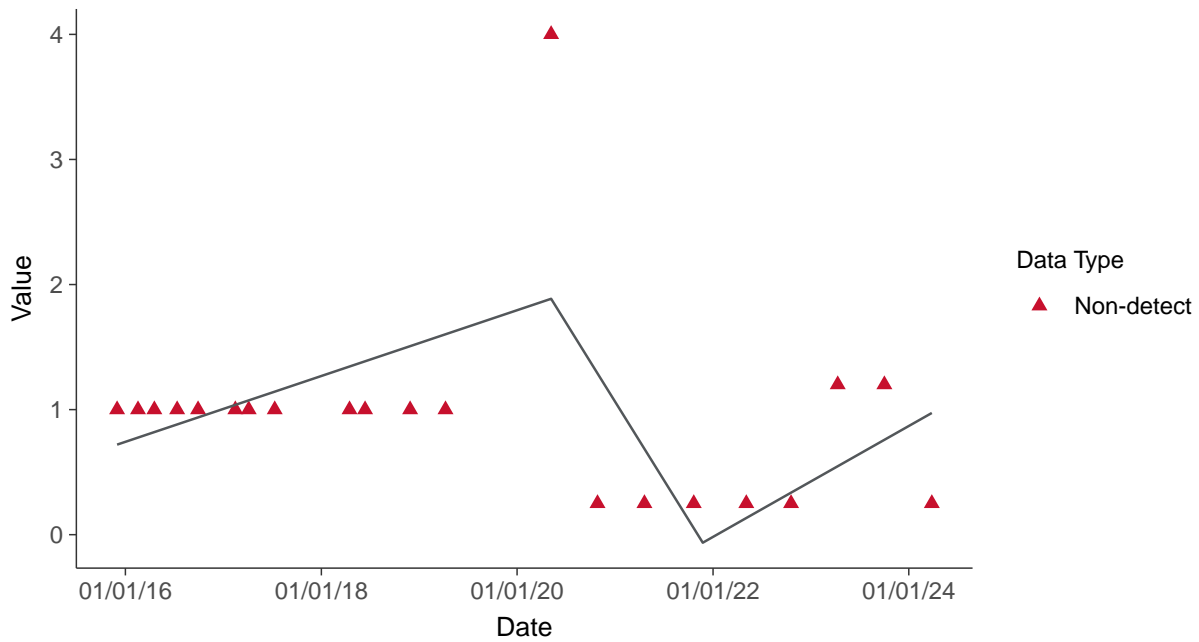
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

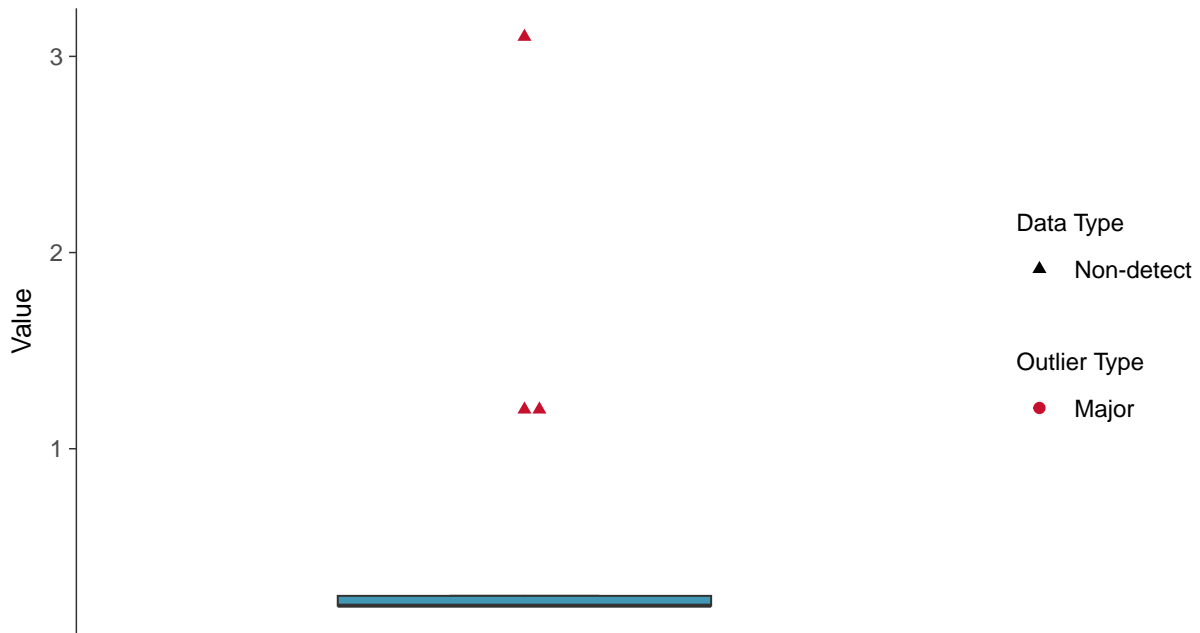
Beryllium, MW-15019 (ug/L)





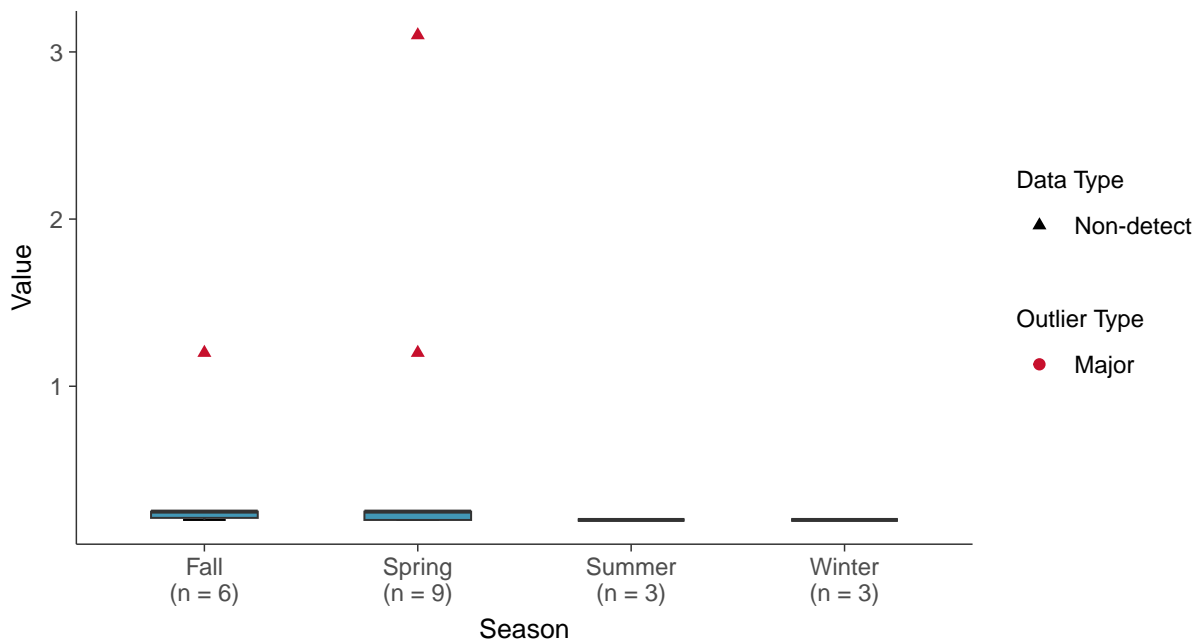
Boxplot

Cadmium, MW-15019 (ug/L)



Boxplot by Season

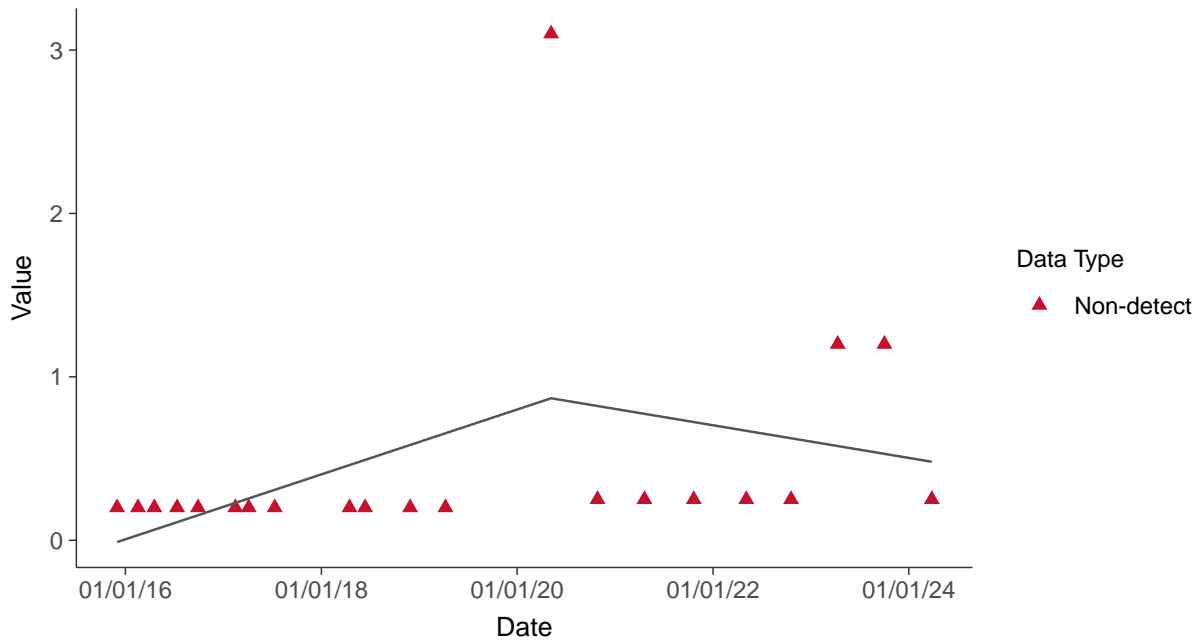
Cadmium, MW-15019 (ug/L)





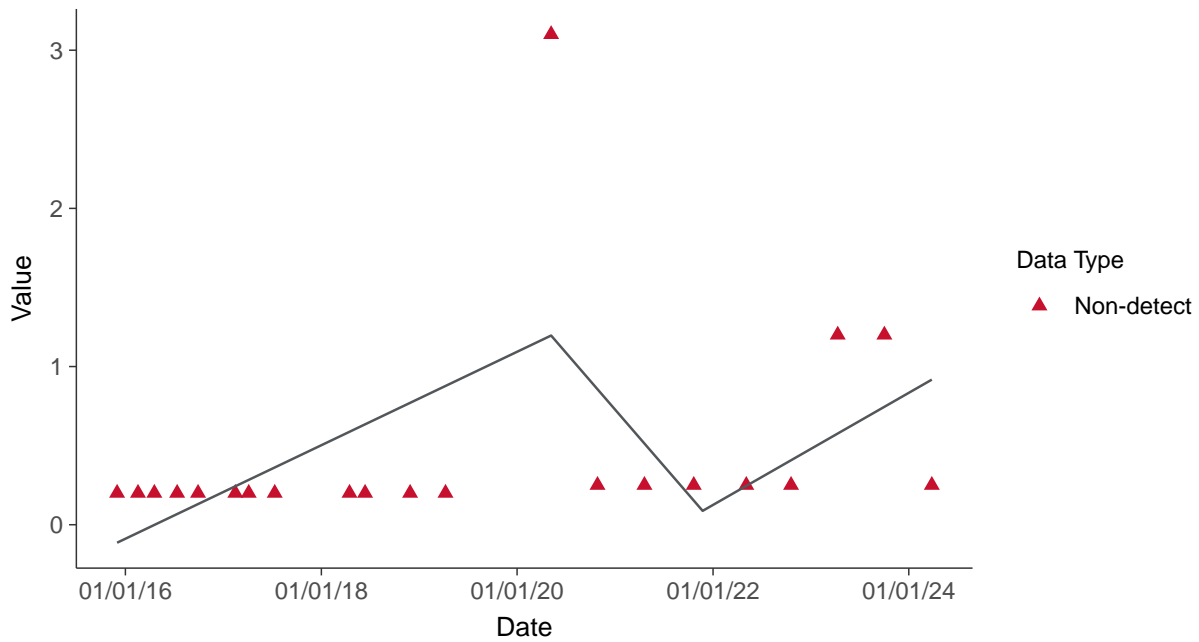
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

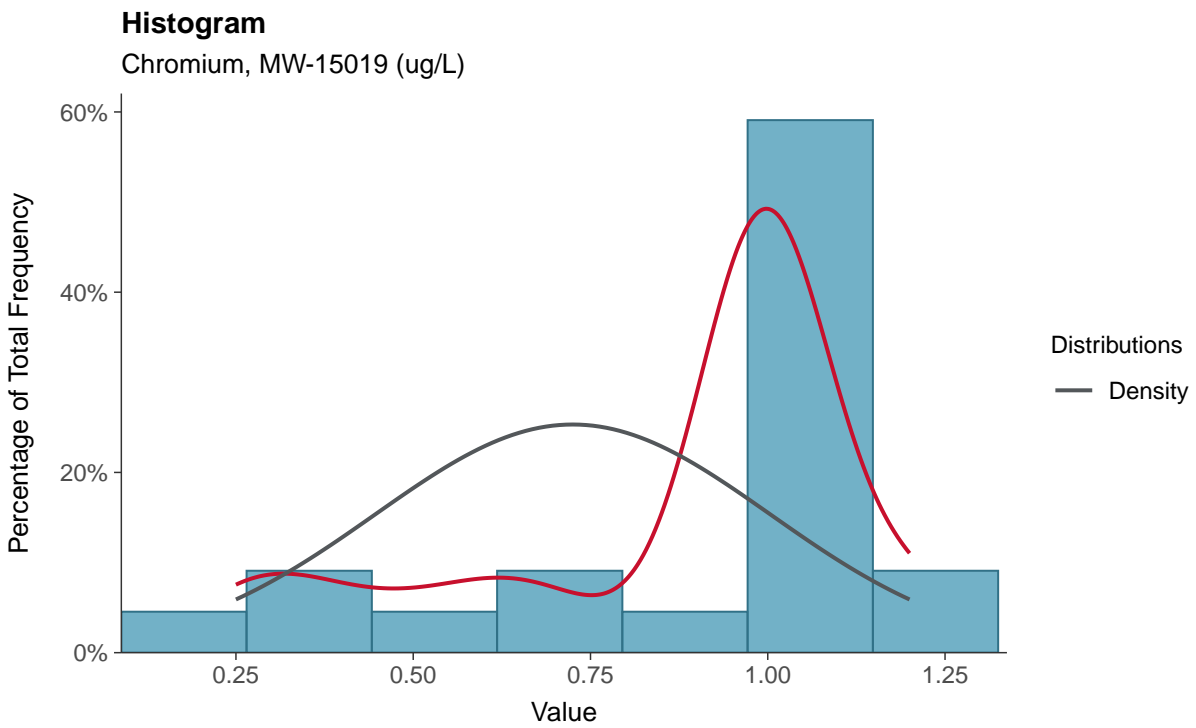
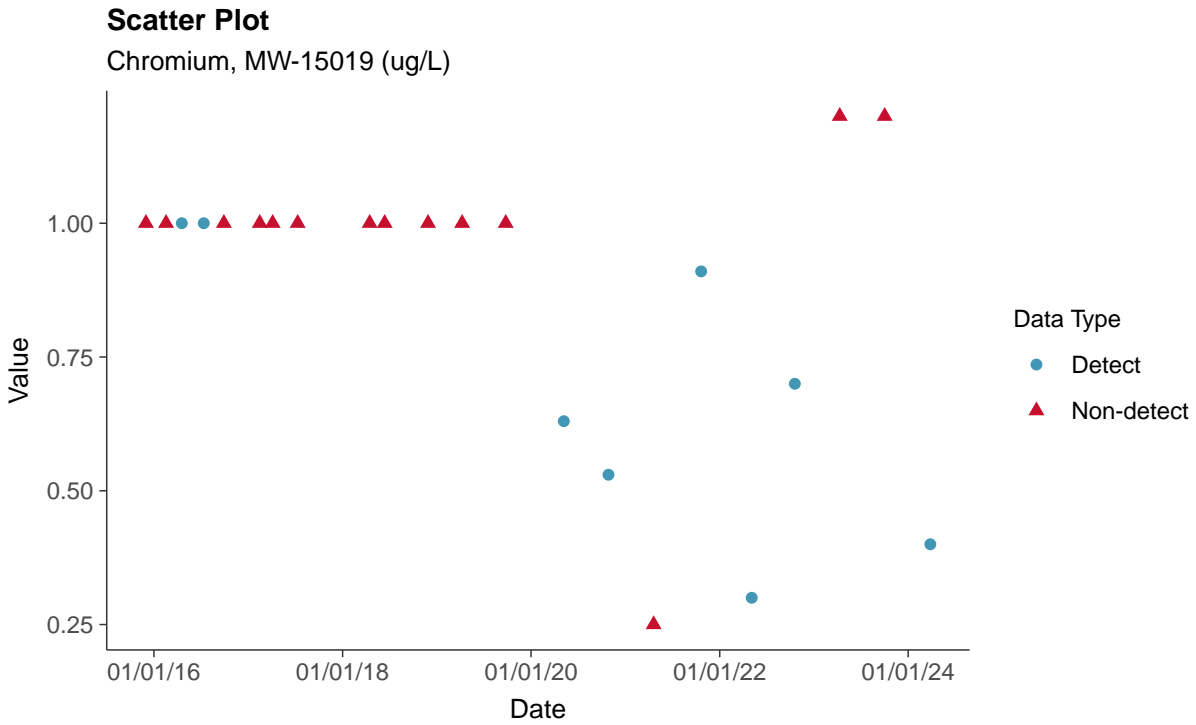
Cadmium, MW-15019 (ug/L)





Appendix IV: Chromium, MW-15019

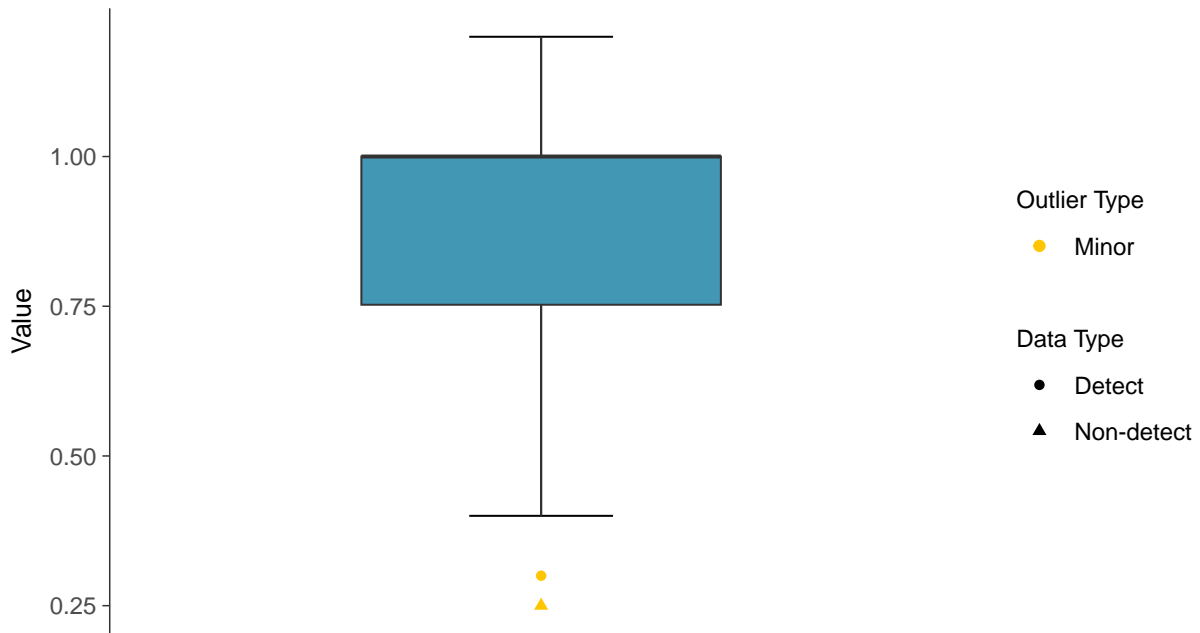
ID: 09_2_109





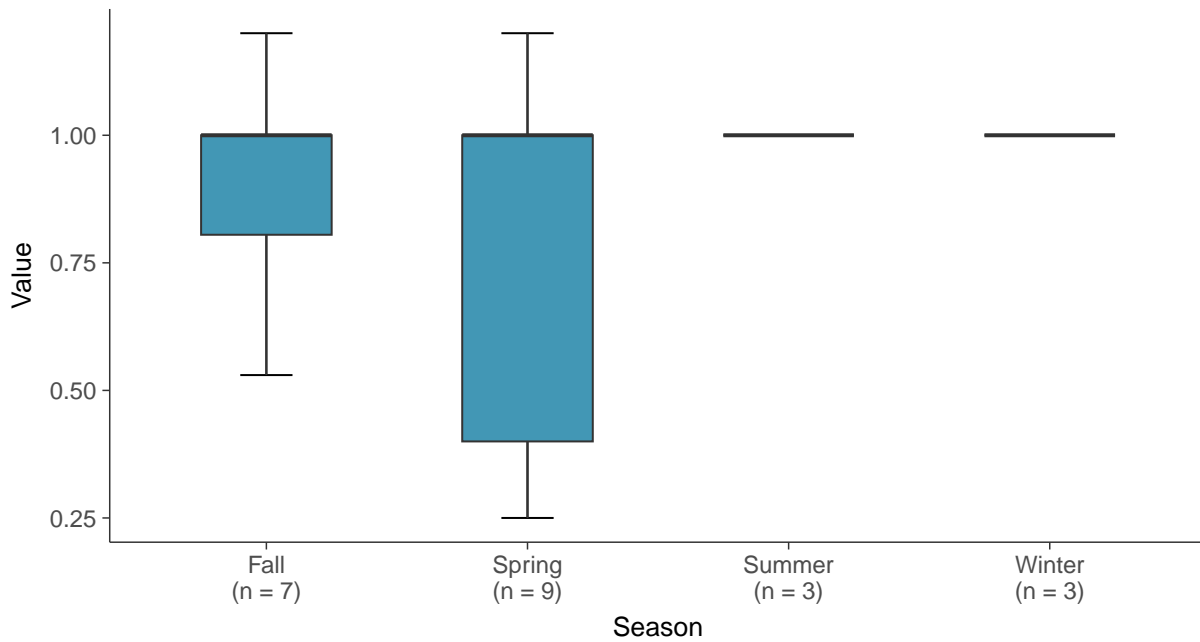
Boxplot

Chromium, MW-15019 (ug/L)



Boxplot by Season

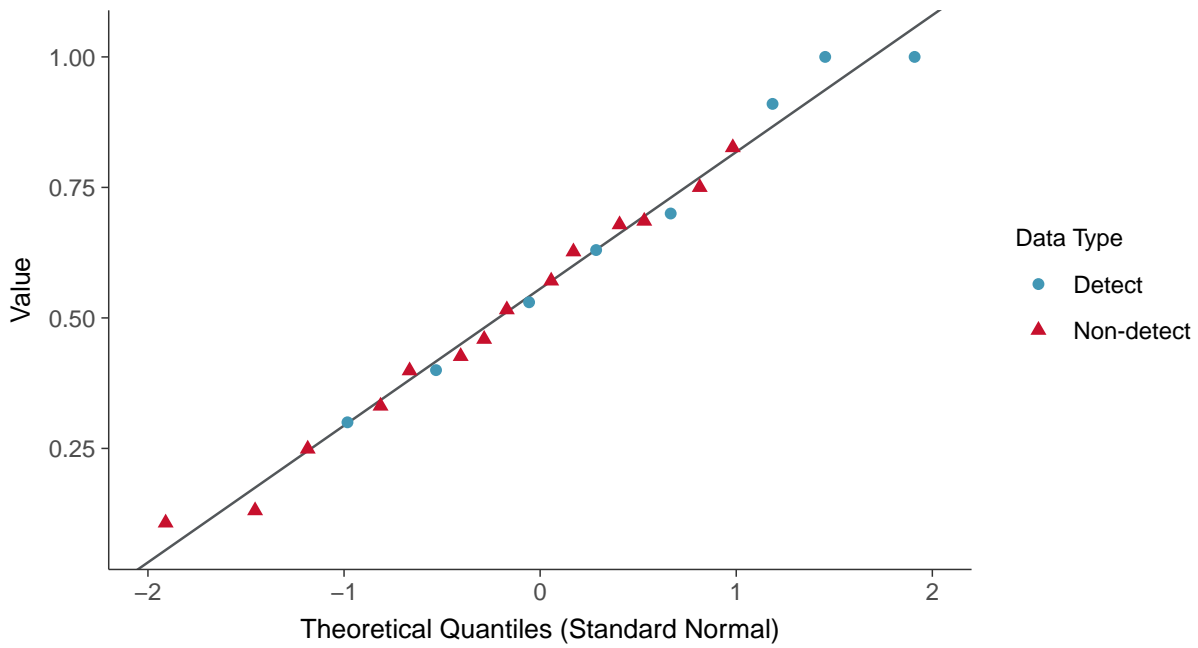
Chromium, MW-15019 (ug/L)





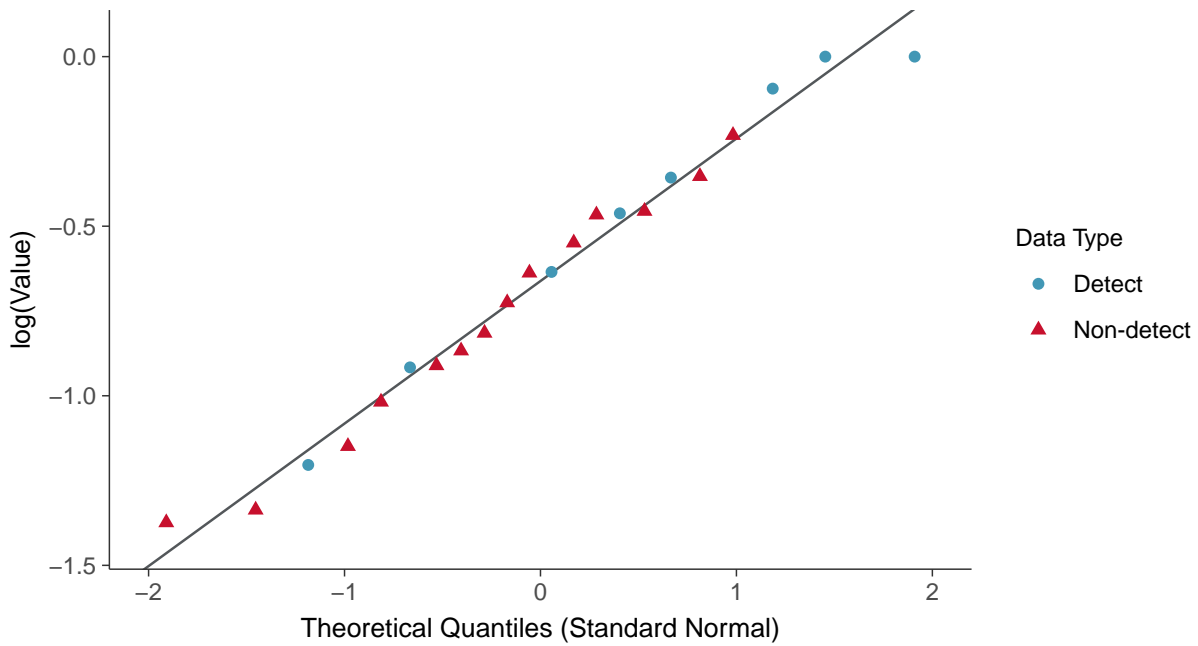
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15019 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

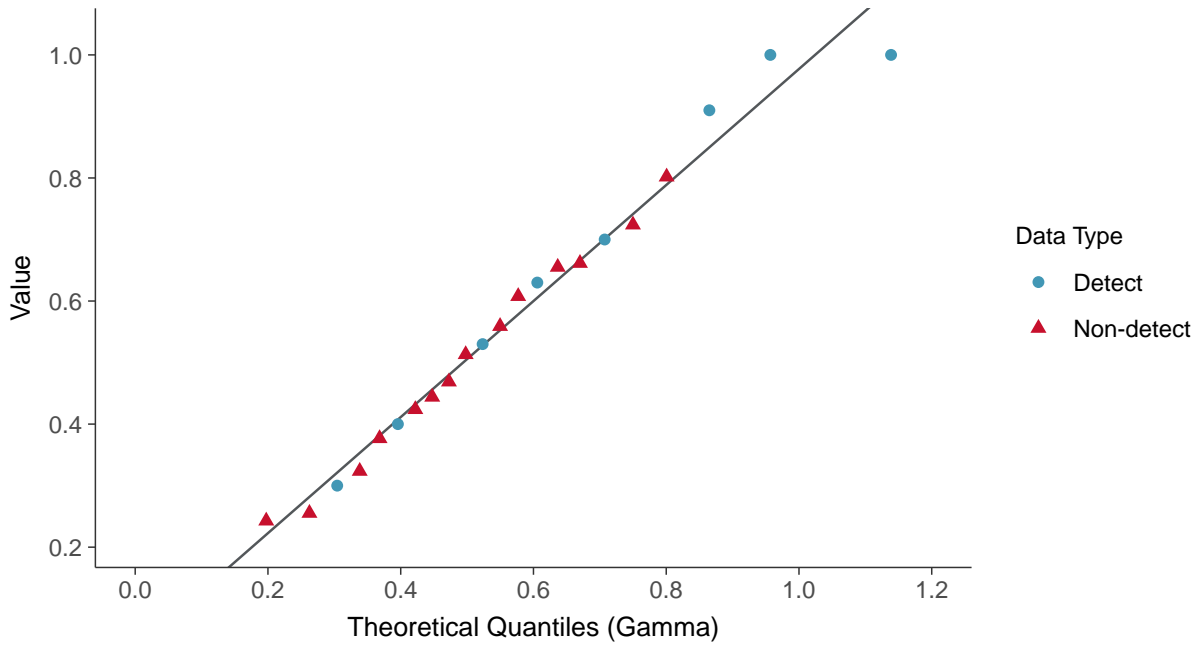
Chromium, MW-15019 (ug/L)





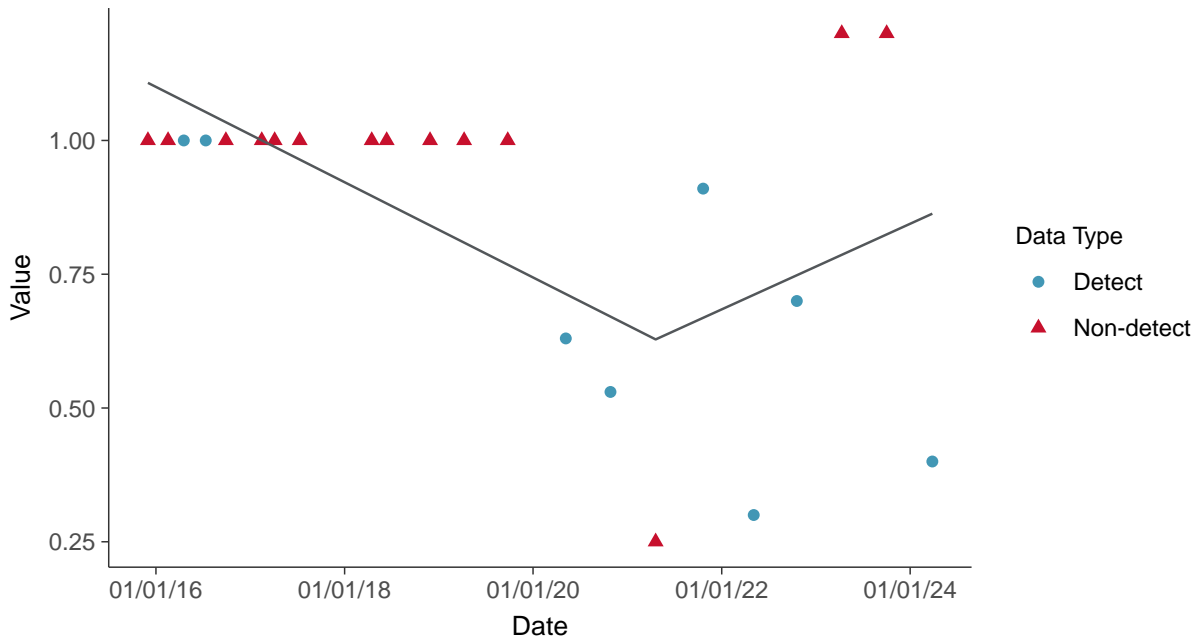
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

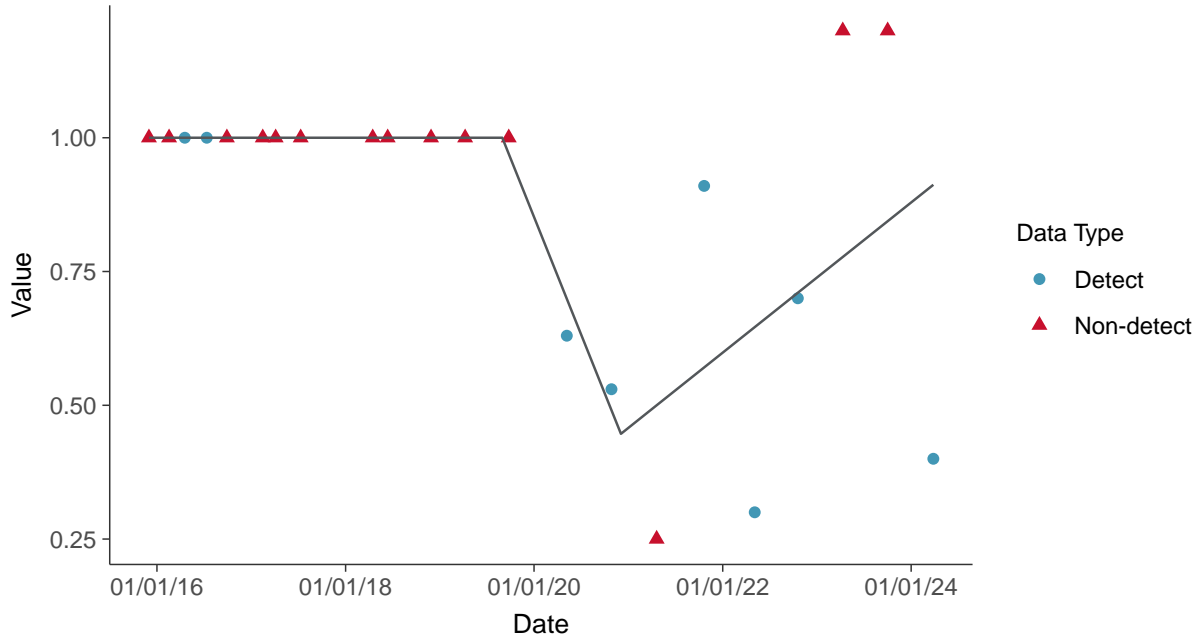
Chromium, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

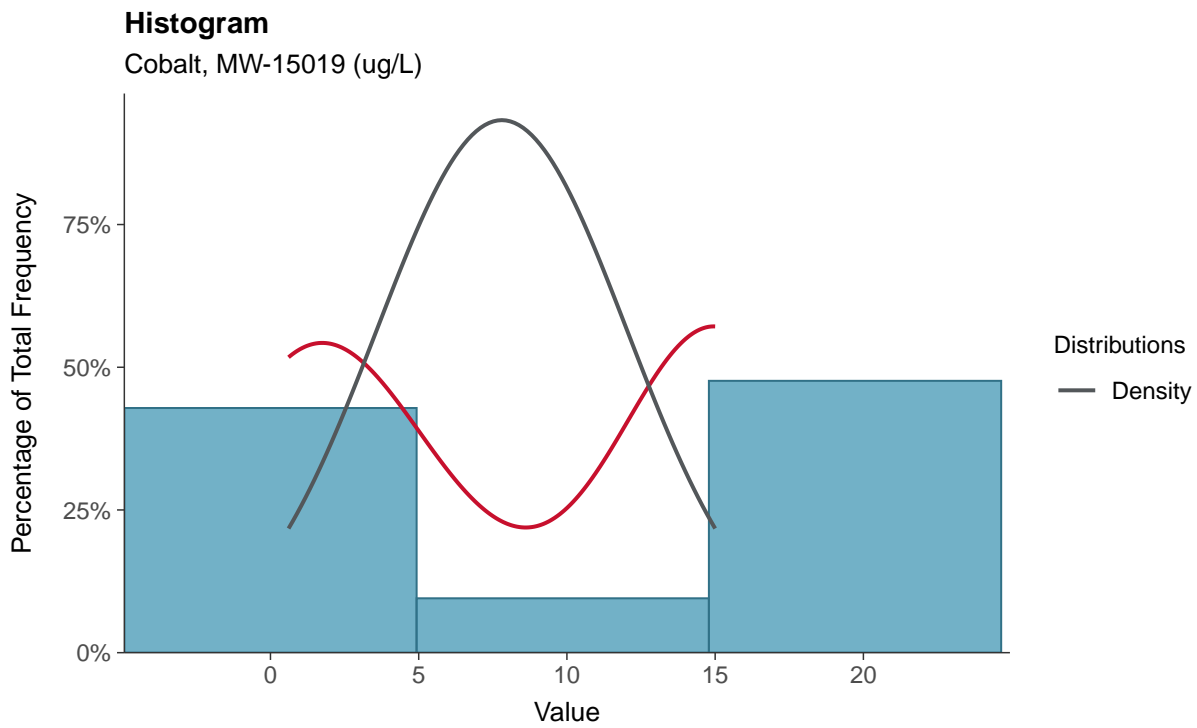
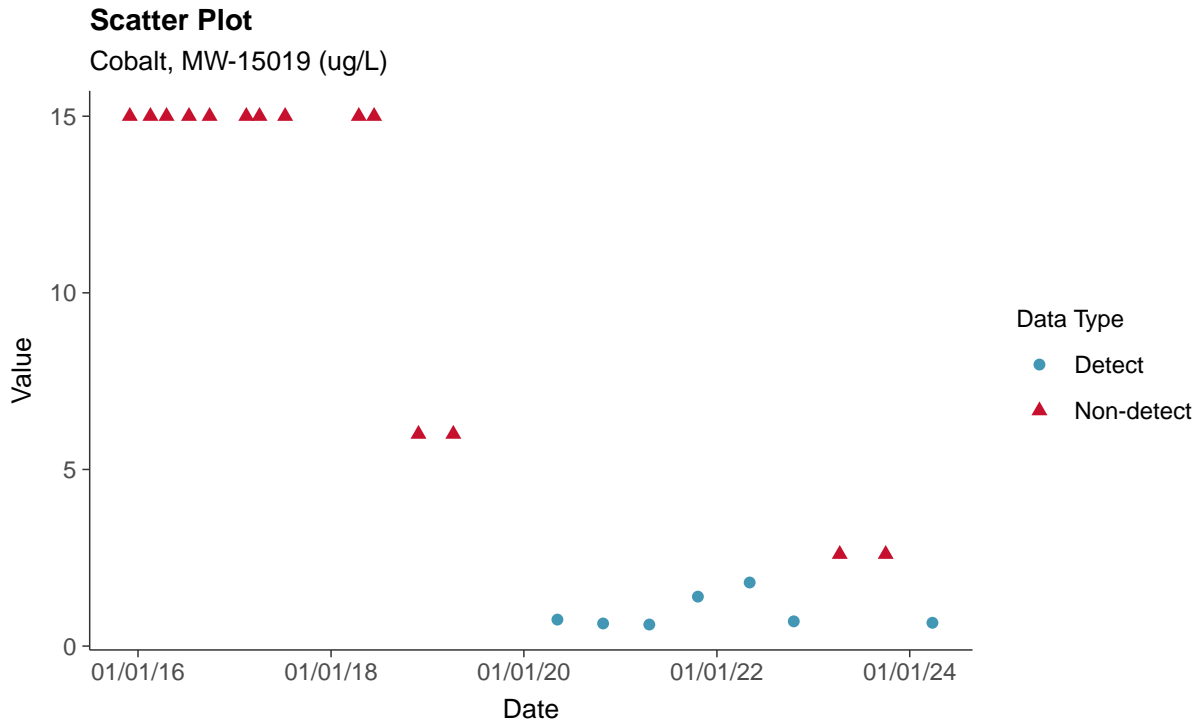
Chromium, MW-15019 (ug/L)





Appendix IV: Cobalt, MW-15019

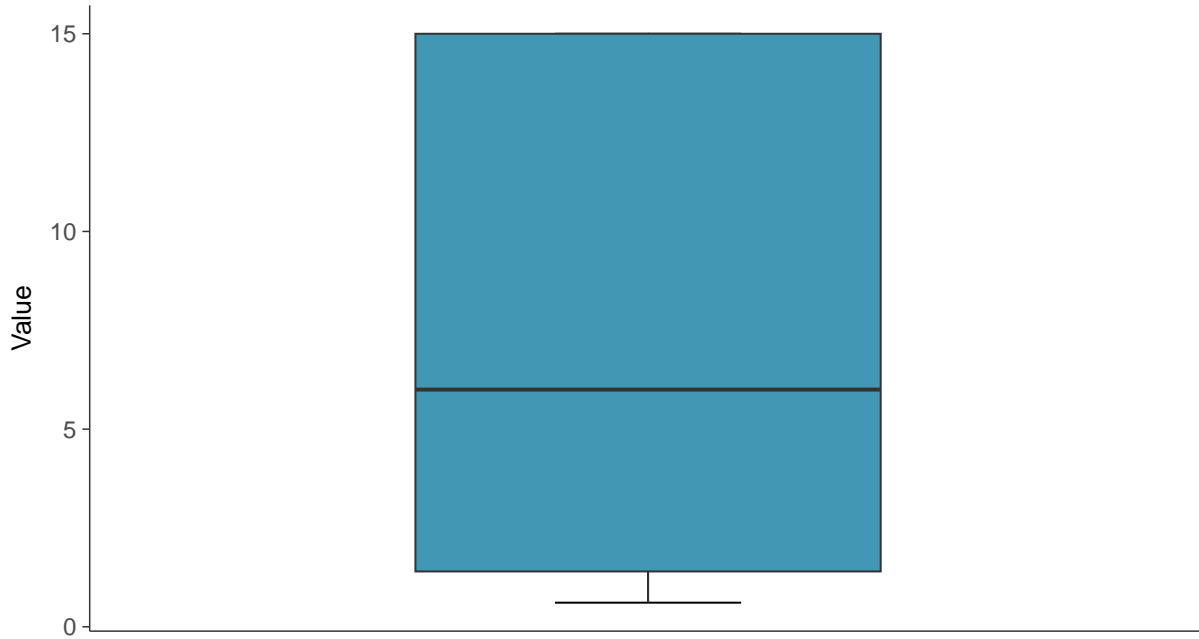
ID: 09_2_110





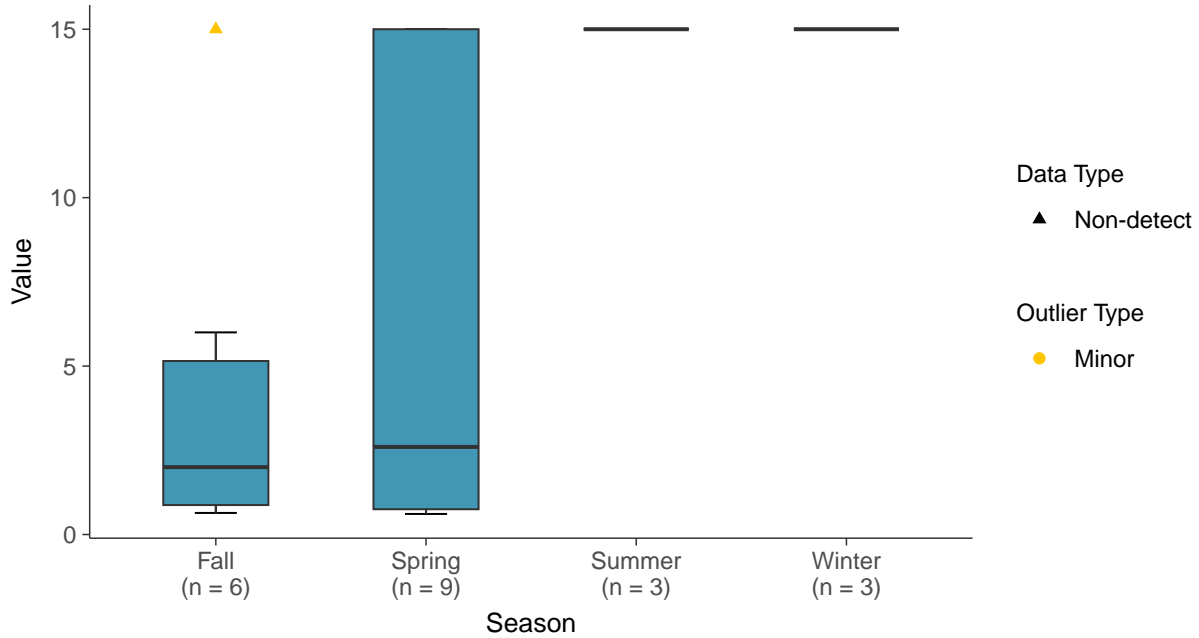
Boxplot

Cobalt, MW-15019 (ug/L)



Boxplot by Season

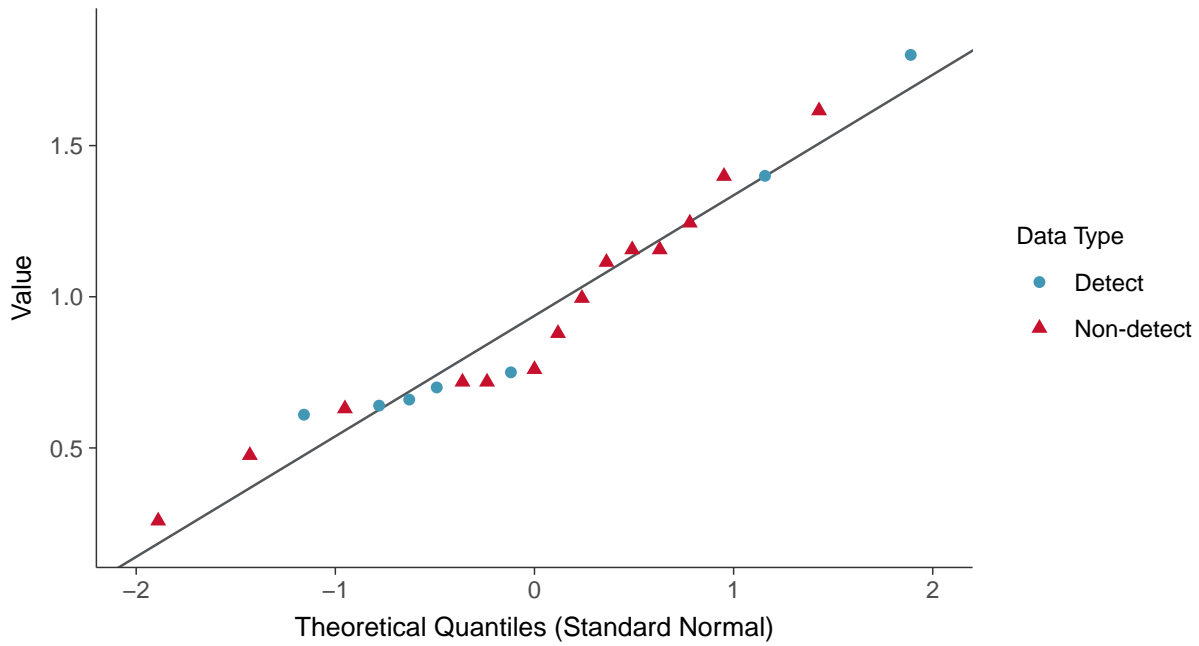
Cobalt, MW-15019 (ug/L)





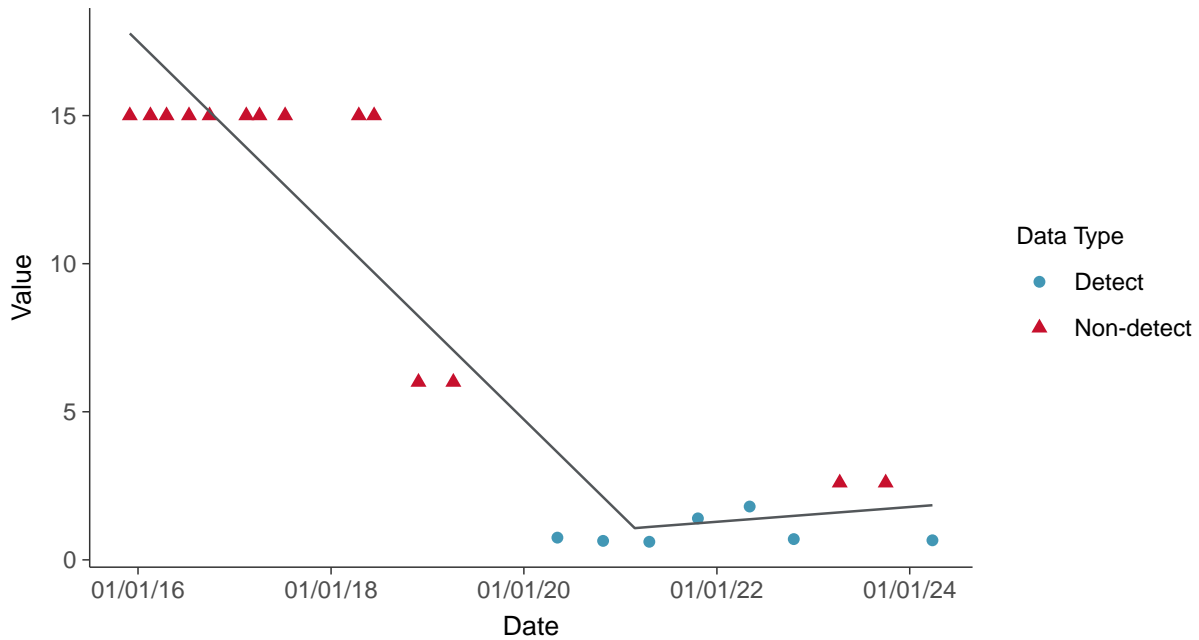
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

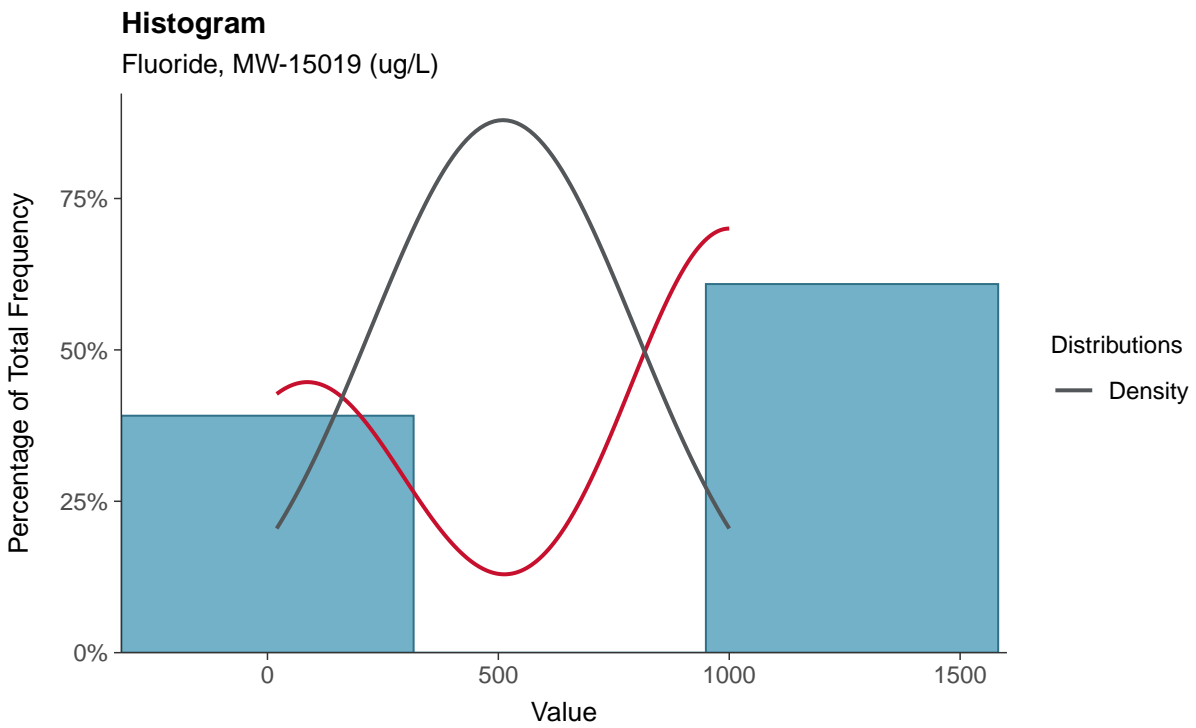
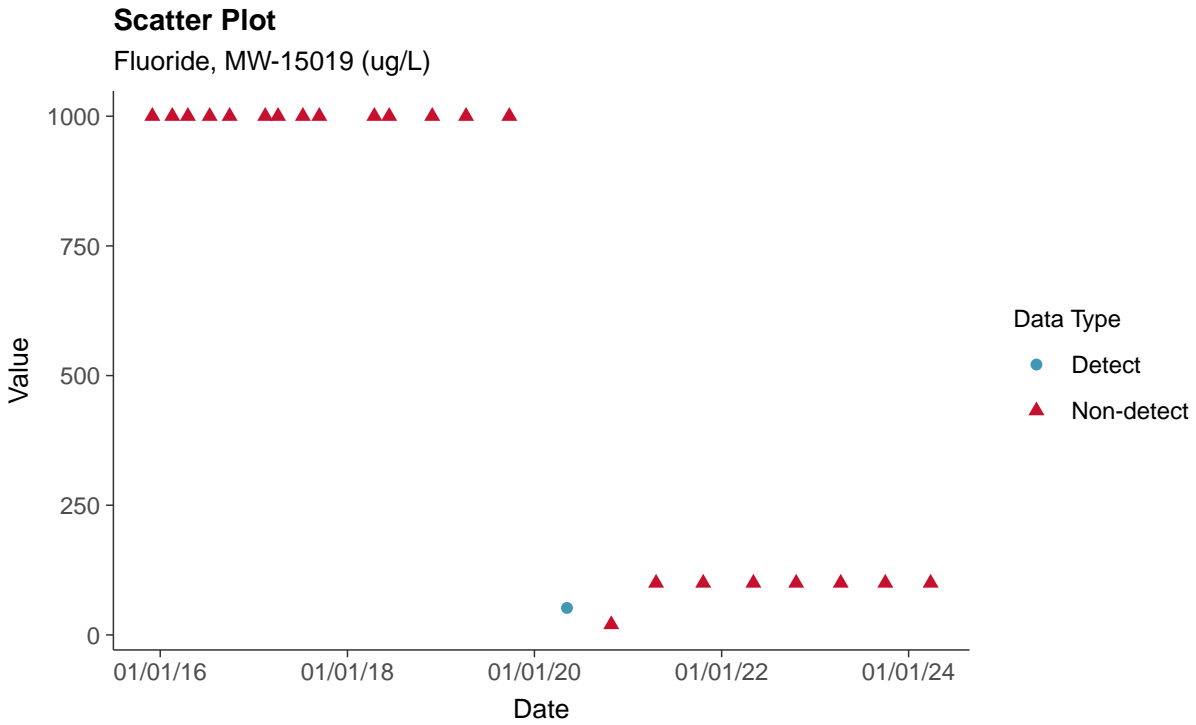
Cobalt, MW-15019 (ug/L)





Appendix IV: Fluoride, MW-15019

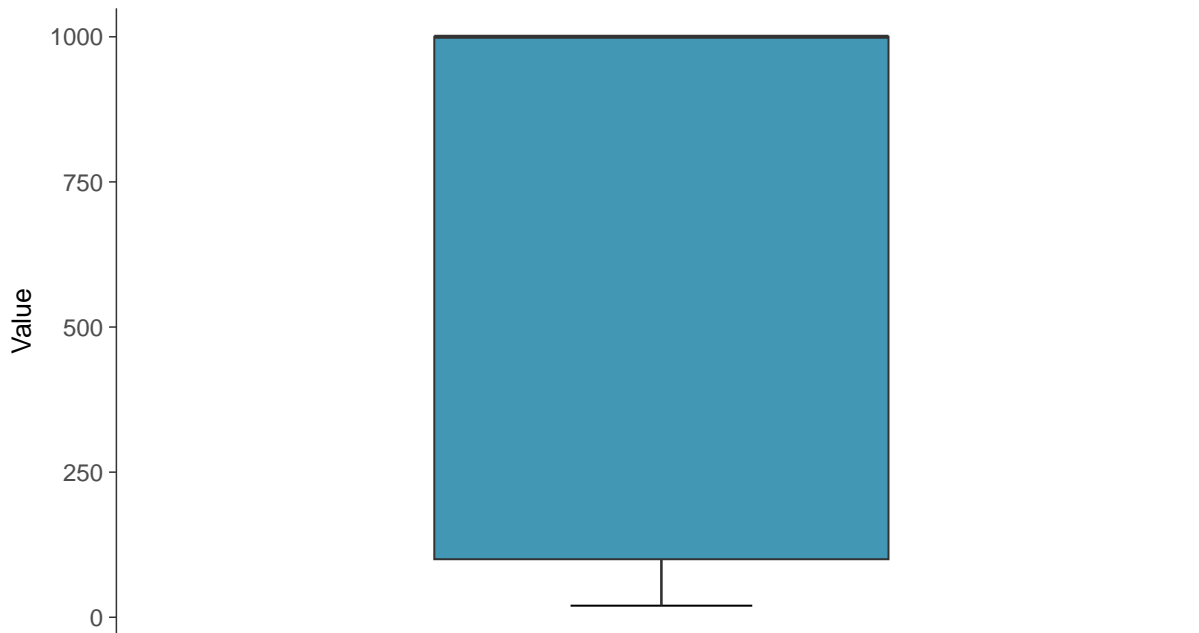
ID: 09_2_114





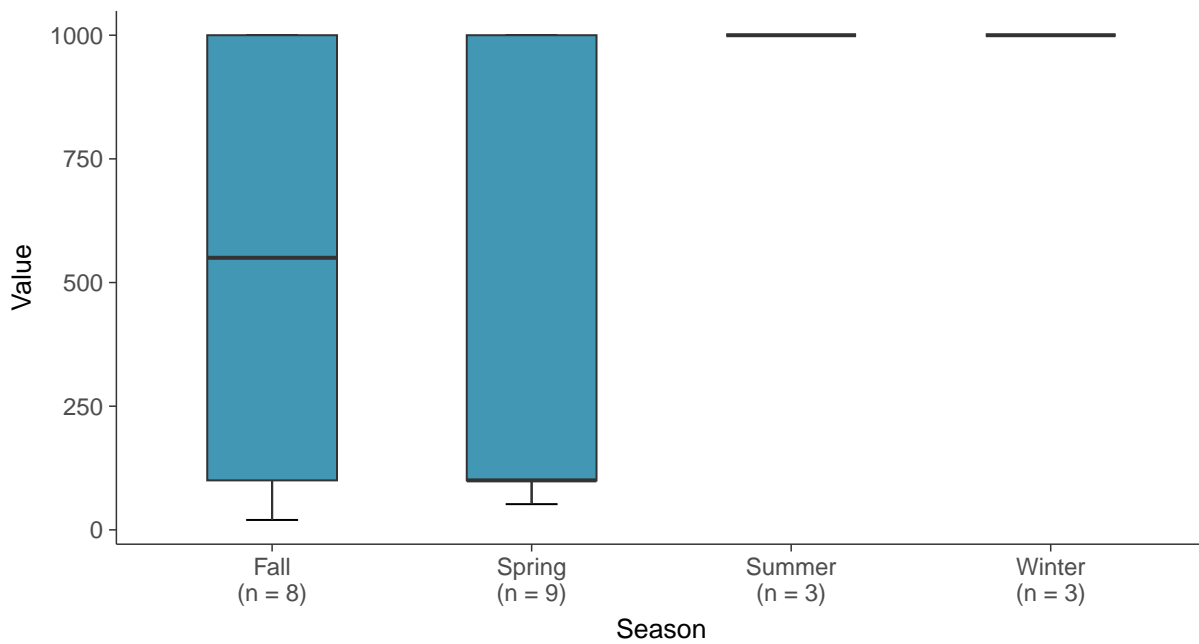
Boxplot

Fluoride, MW-15019 (ug/L)



Boxplot by Season

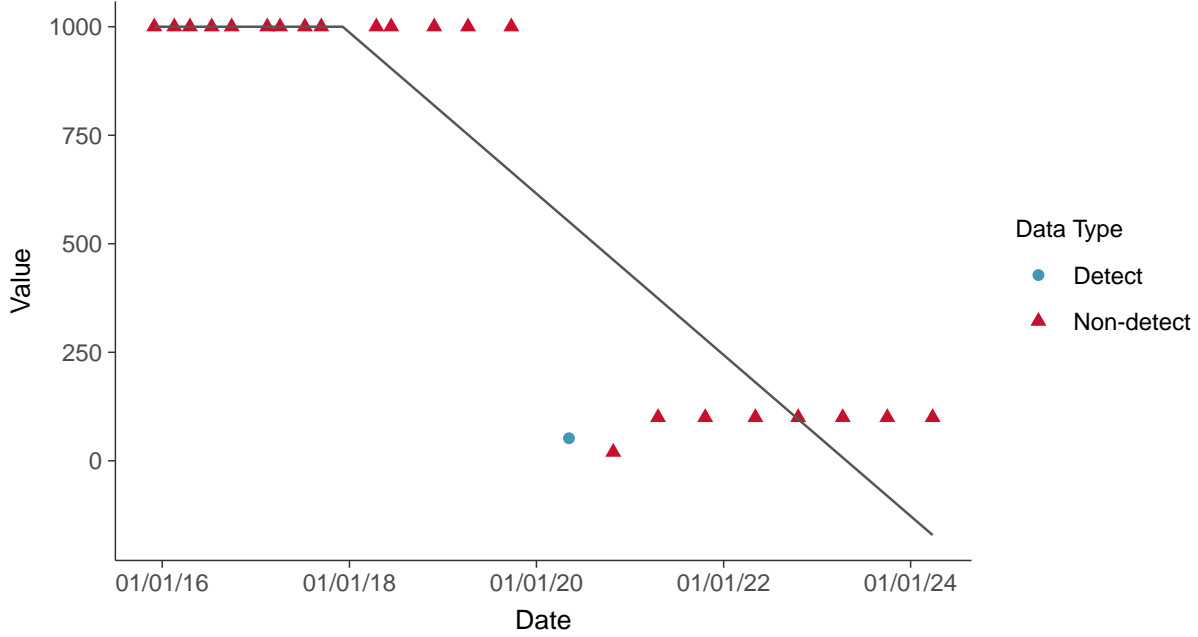
Fluoride, MW-15019 (ug/L)





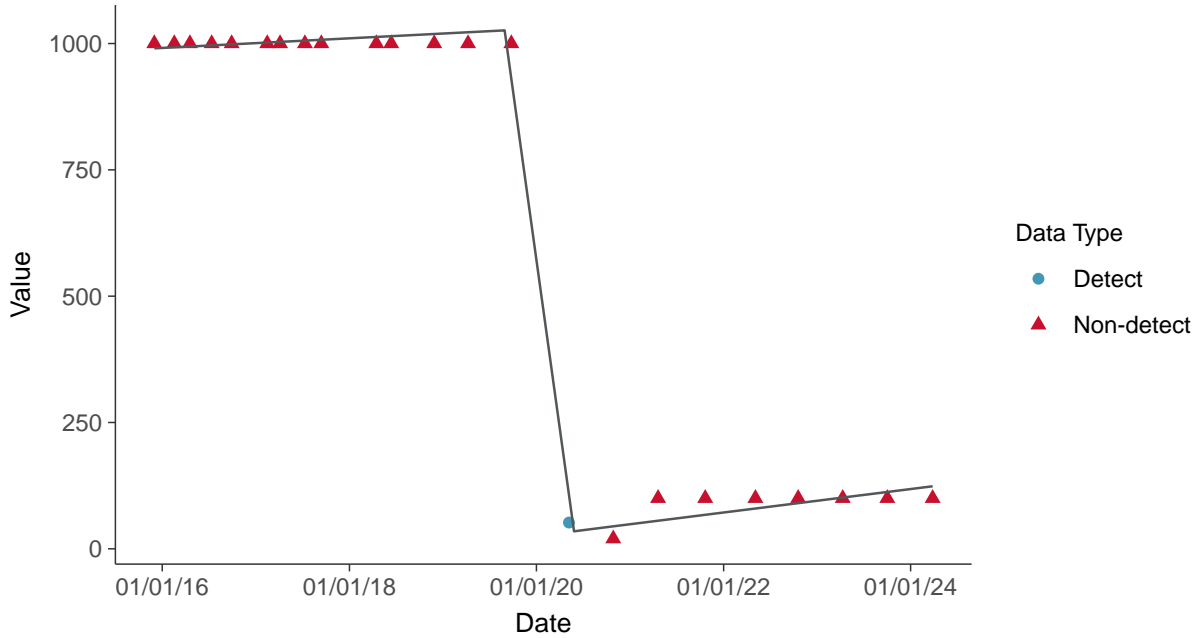
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

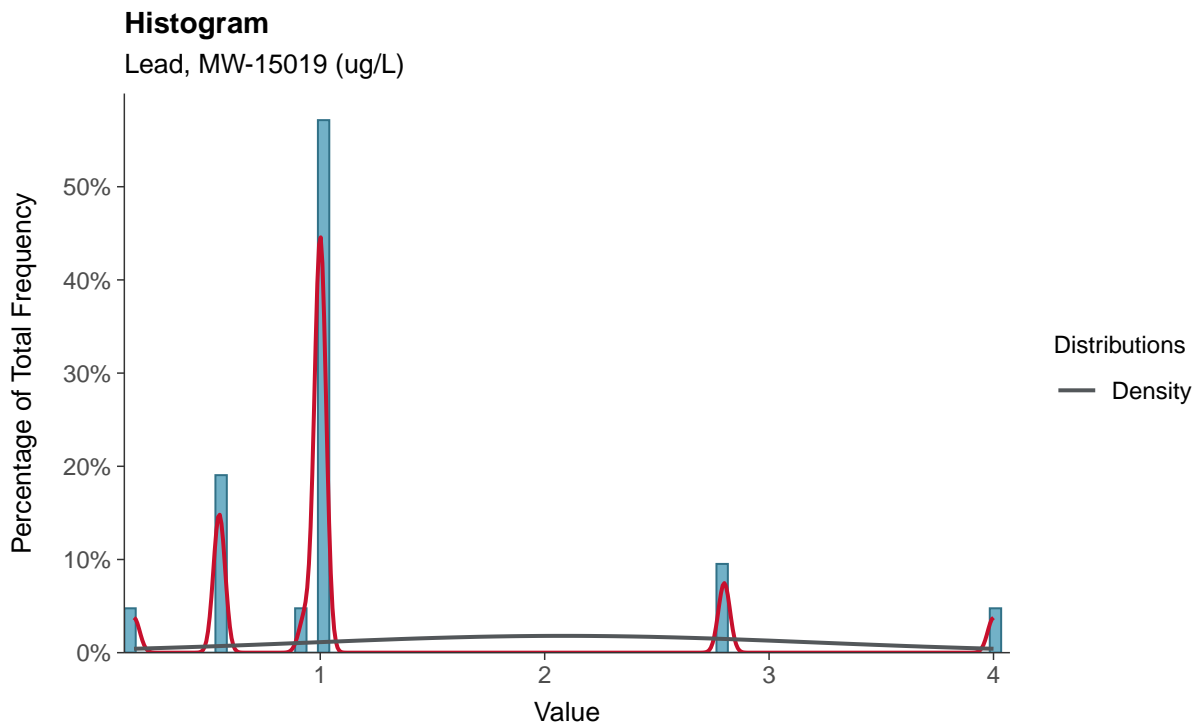
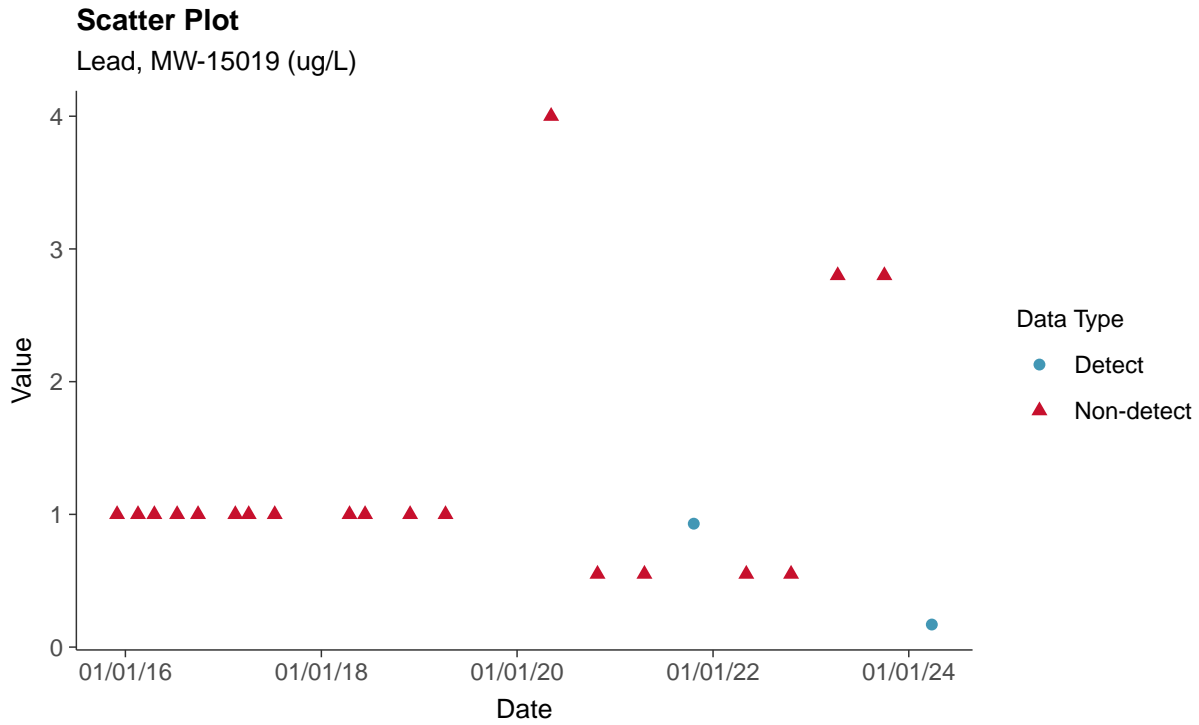
Fluoride, MW-15019 (ug/L)





Appendix IV: Lead, MW-15019

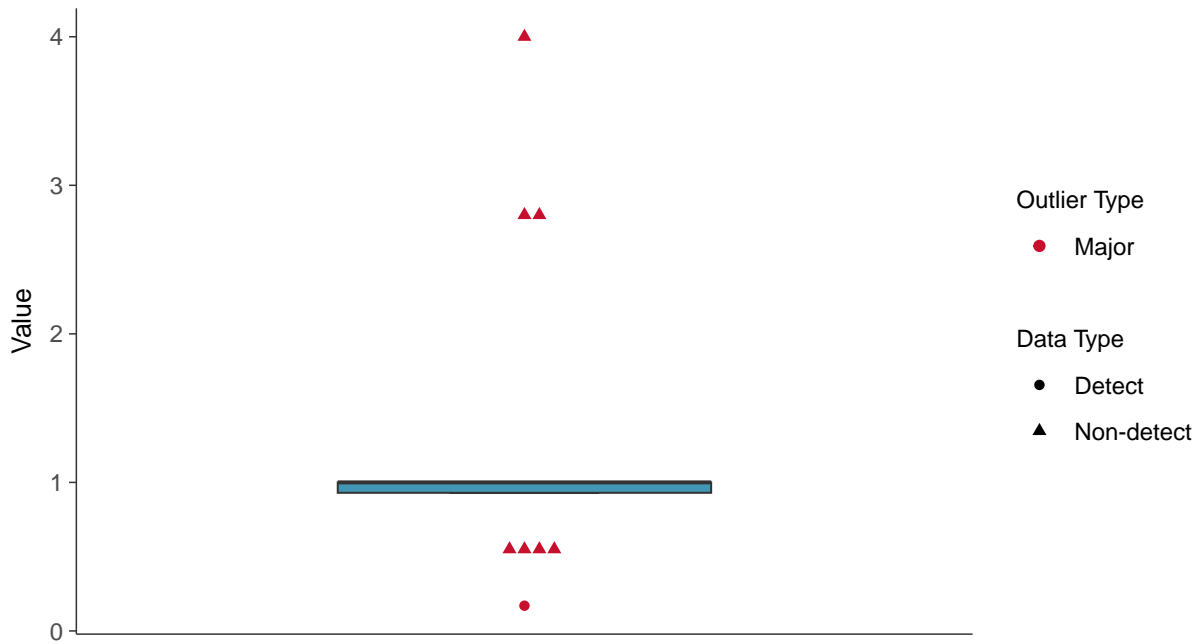
ID: 09_2_116





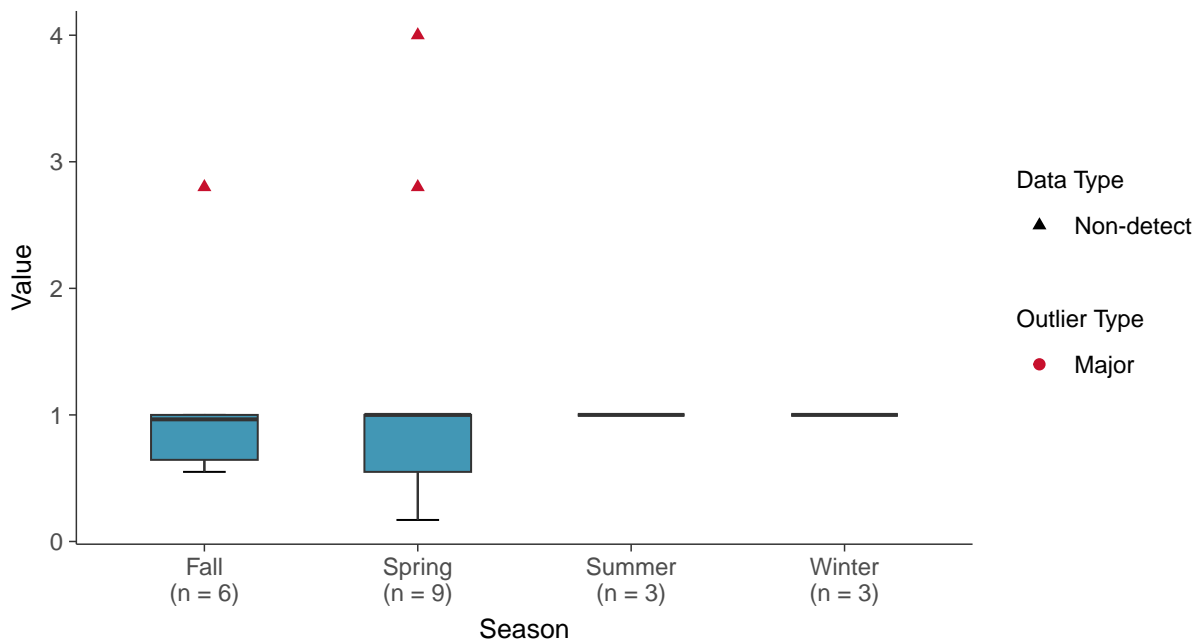
Boxplot

Lead, MW-15019 (ug/L)



Boxplot by Season

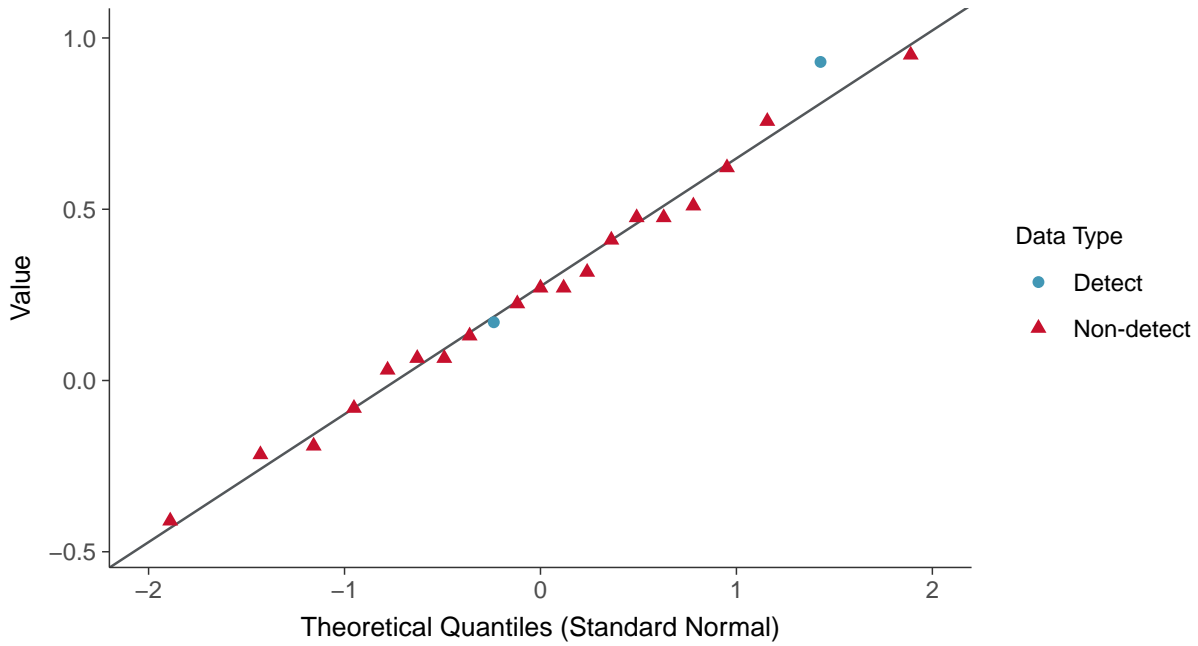
Lead, MW-15019 (ug/L)





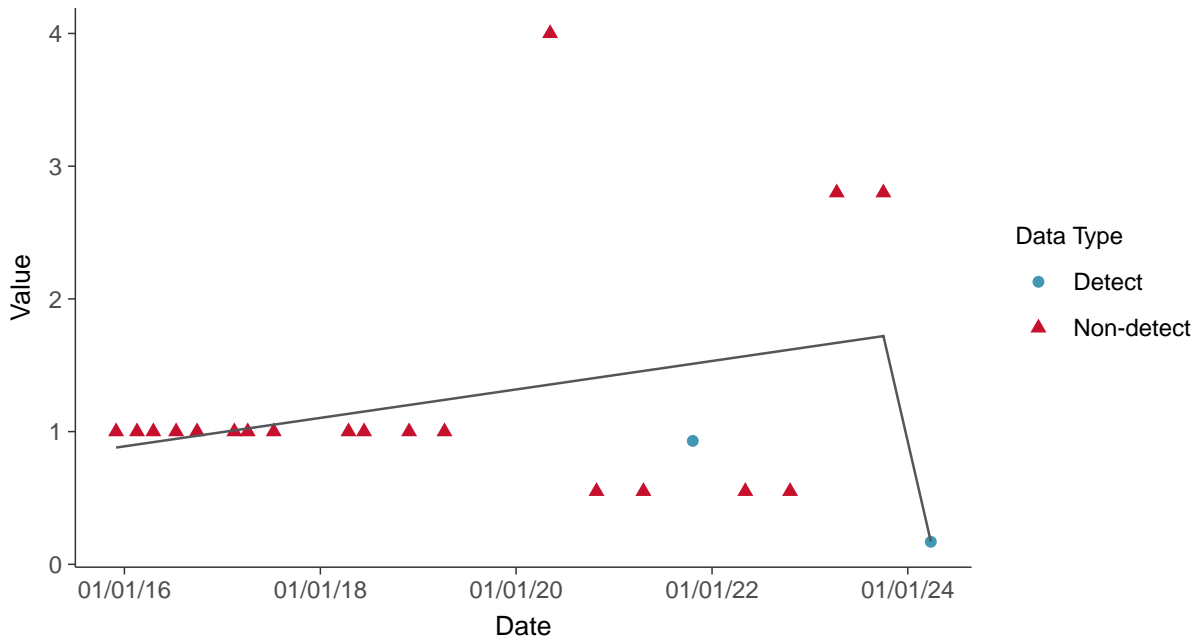
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

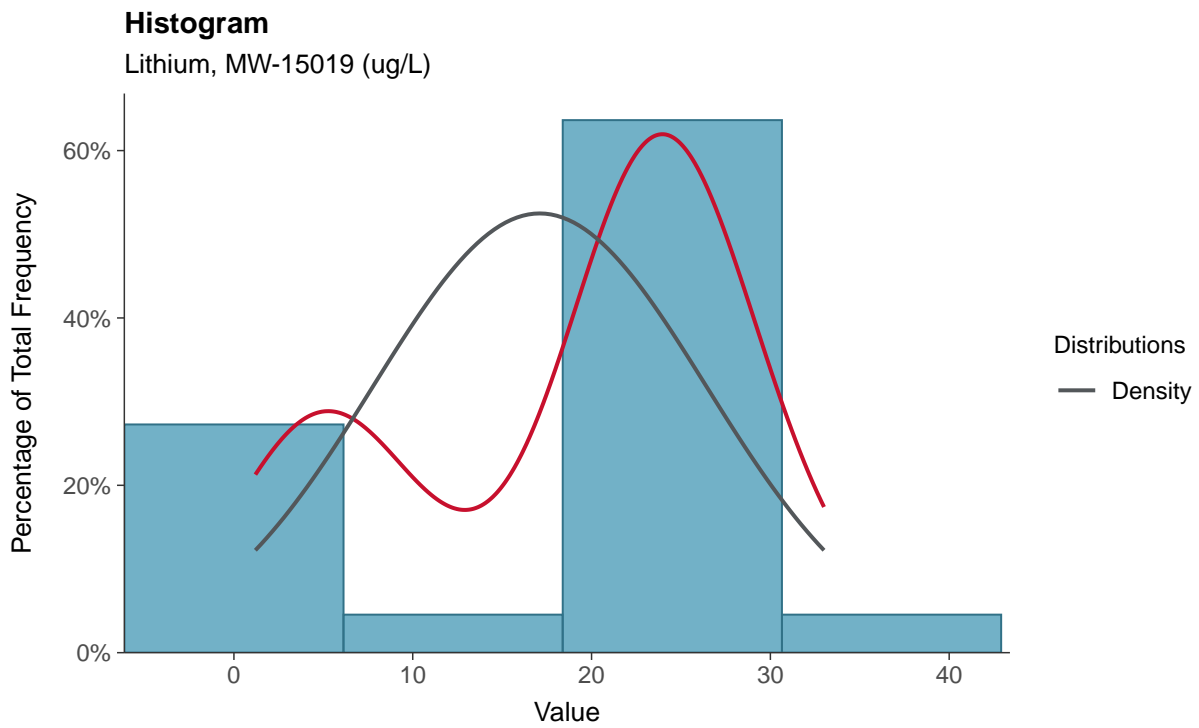
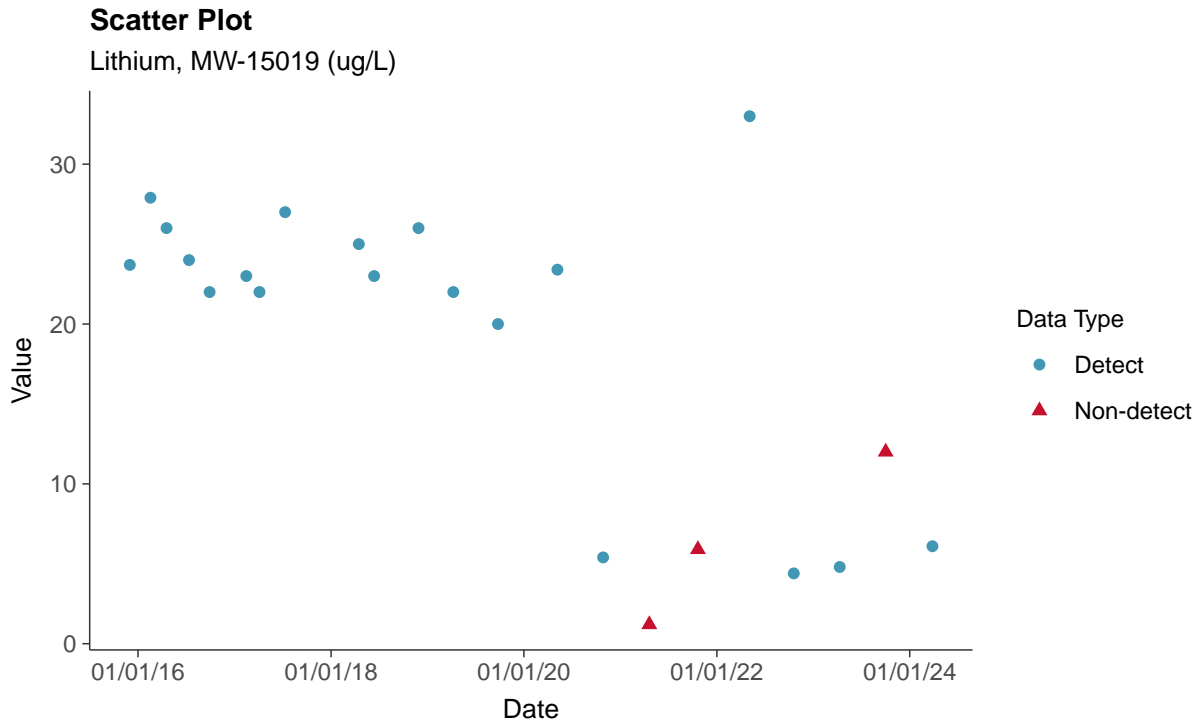
Lead, MW-15019 (ug/L)





Appendix IV: Lithium, MW-15019

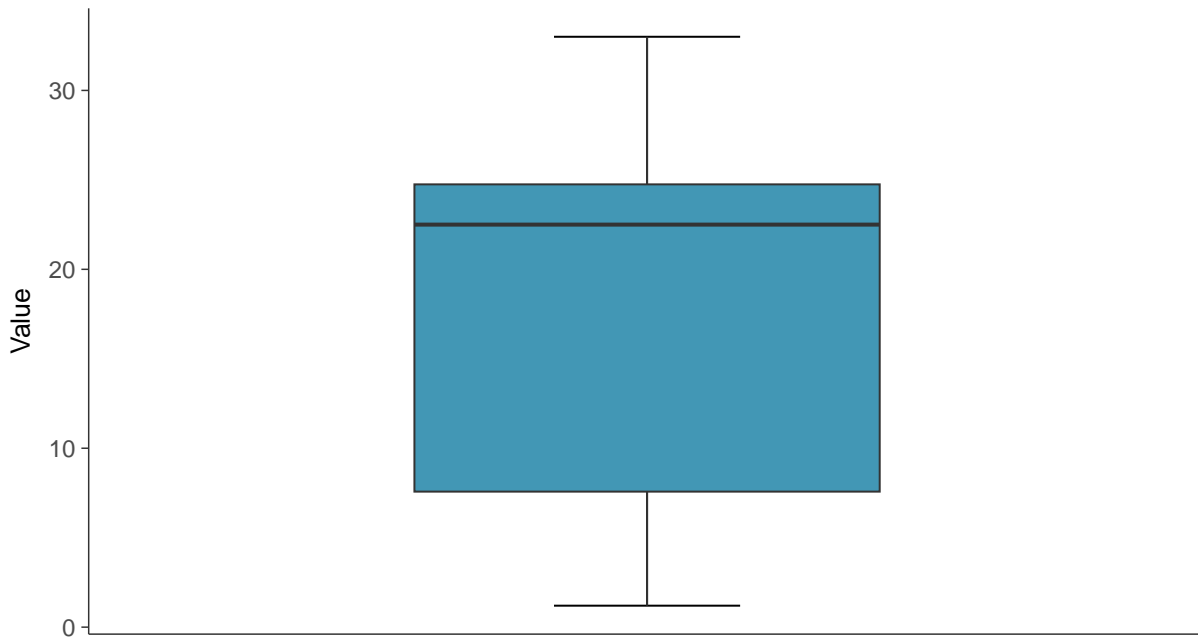
ID: 09_2_117





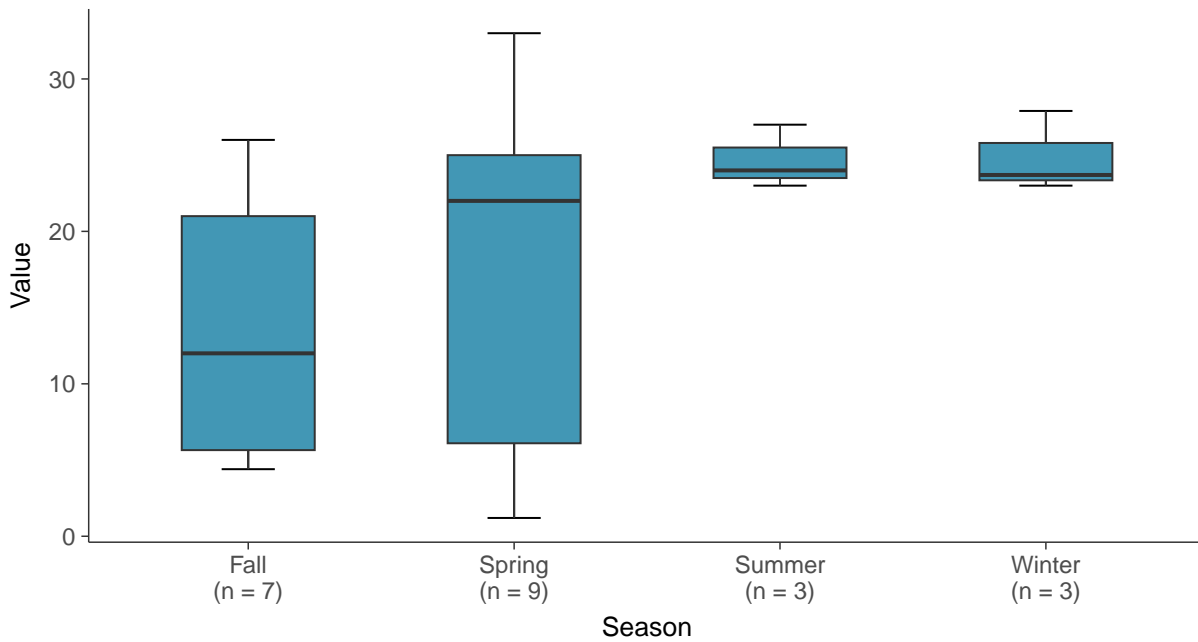
Boxplot

Lithium, MW-15019 (ug/L)



Boxplot by Season

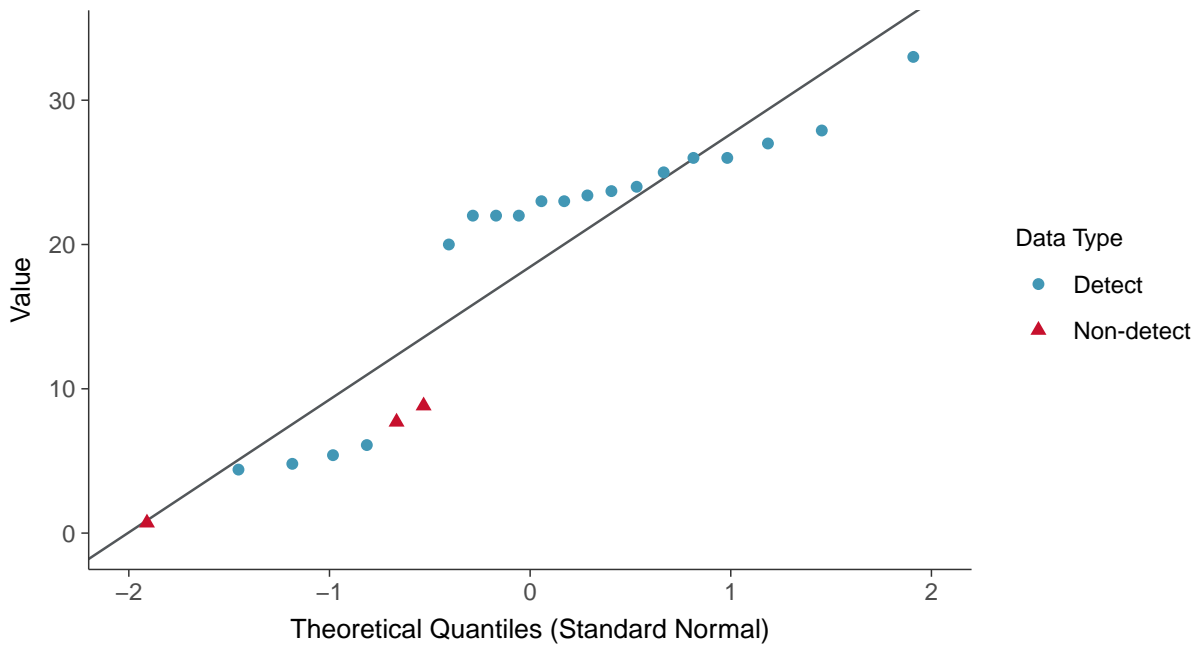
Lithium, MW-15019 (ug/L)





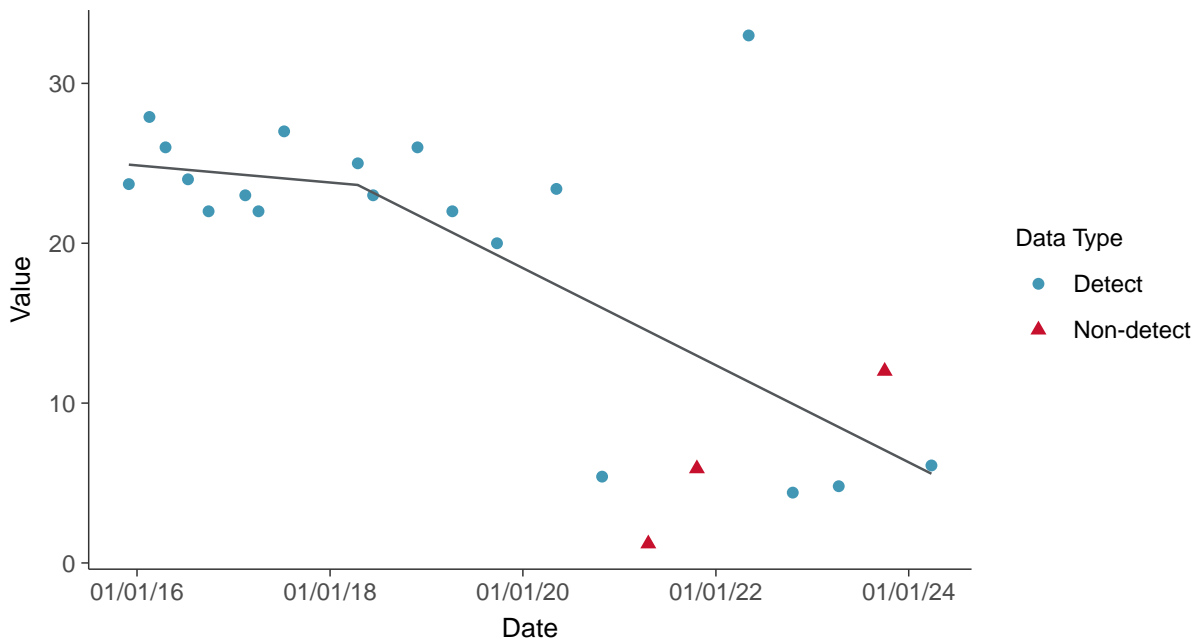
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

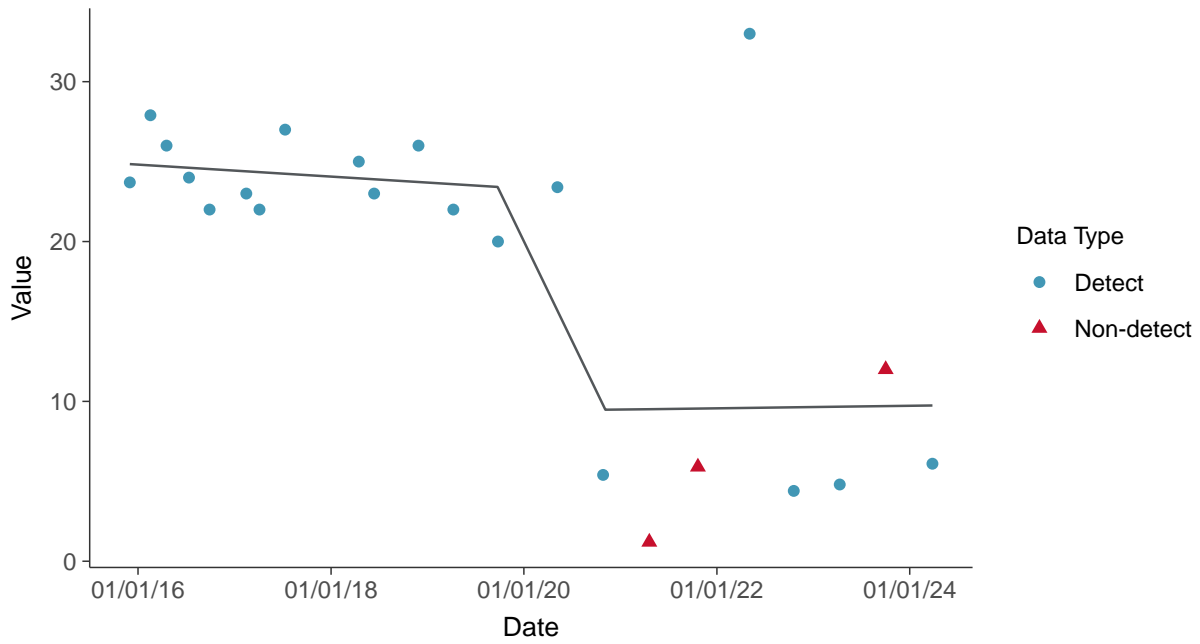
Lithium, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

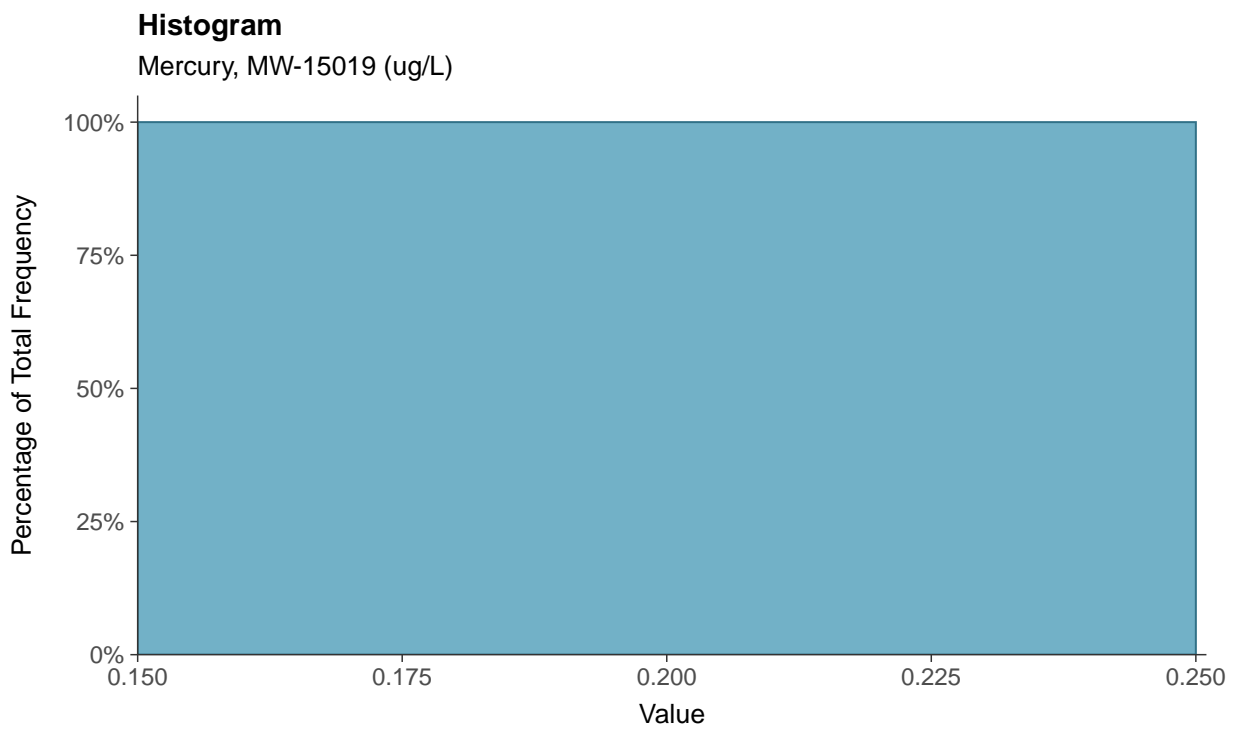
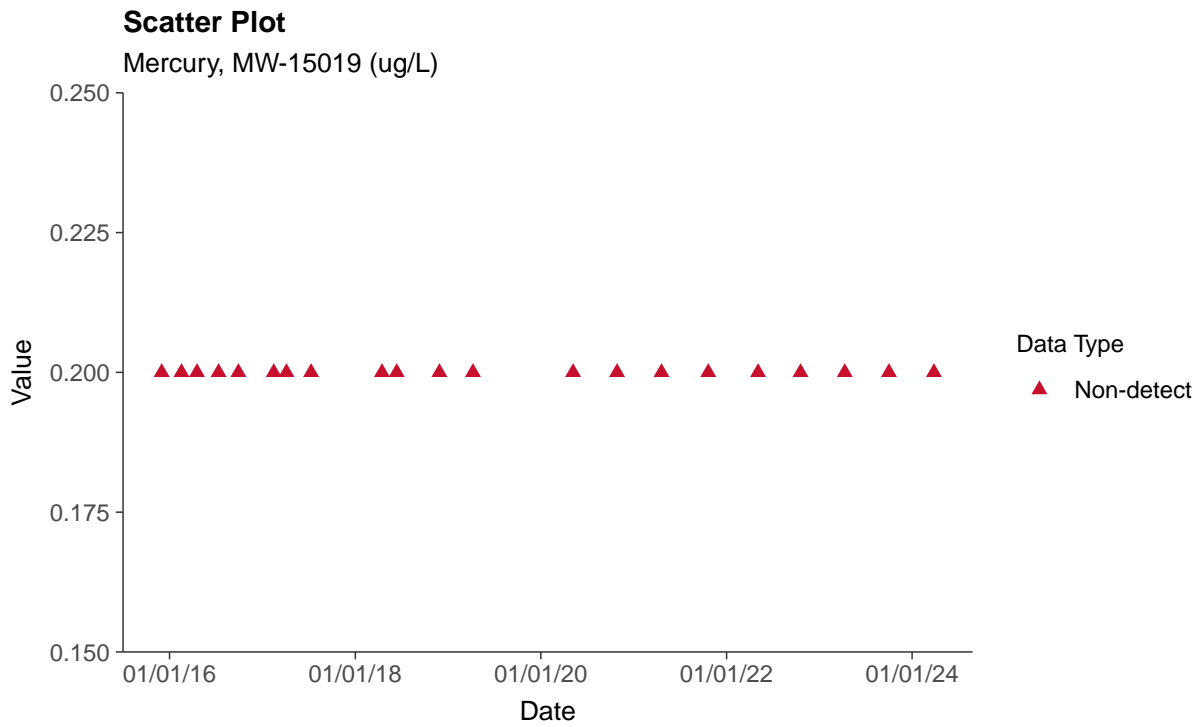
Lithium, MW-15019 (ug/L)





Appendix IV: Mercury, MW-15019

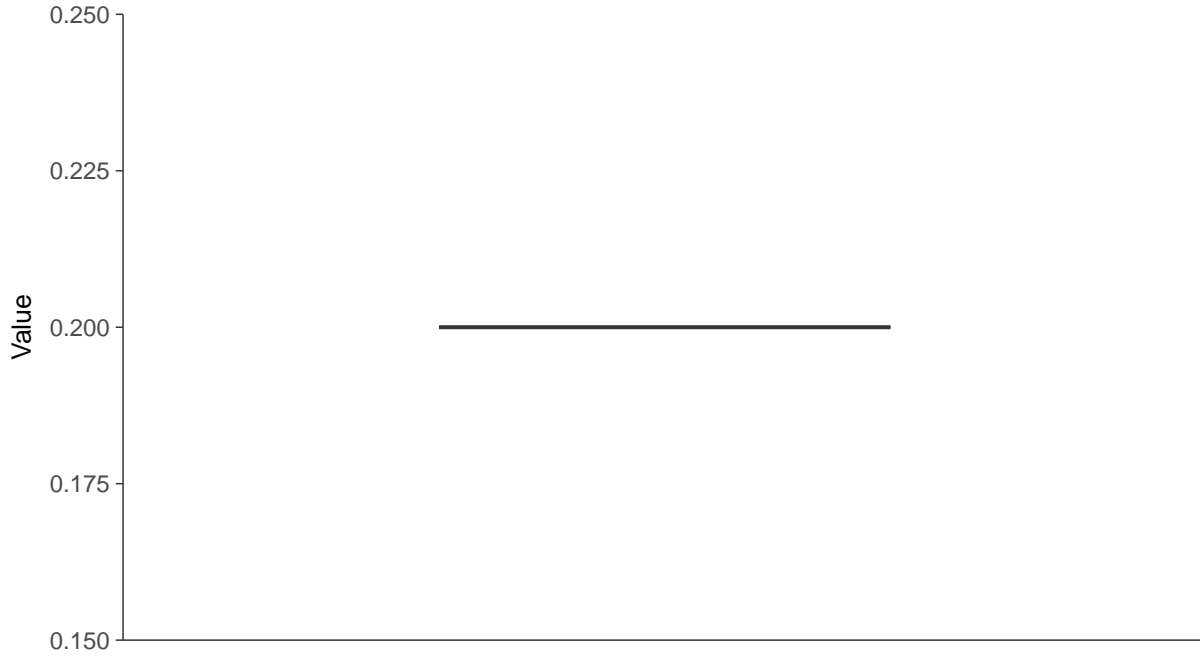
ID: 09_2_118





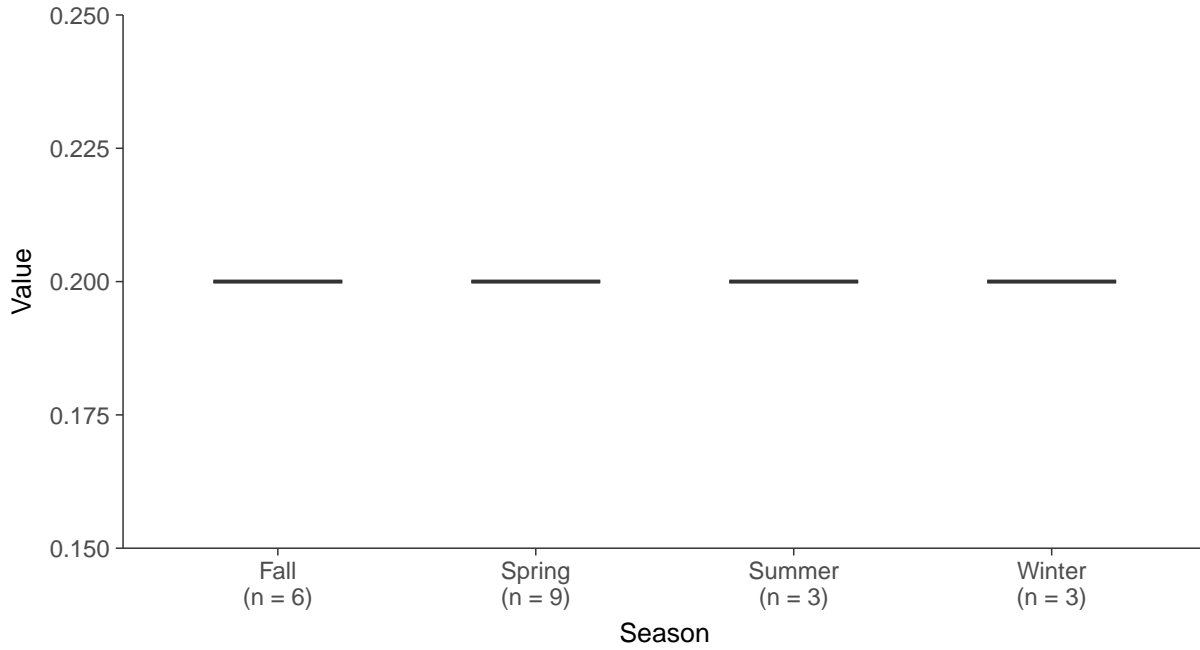
Boxplot

Mercury, MW-15019 (ug/L)



Boxplot by Season

Mercury, MW-15019 (ug/L)



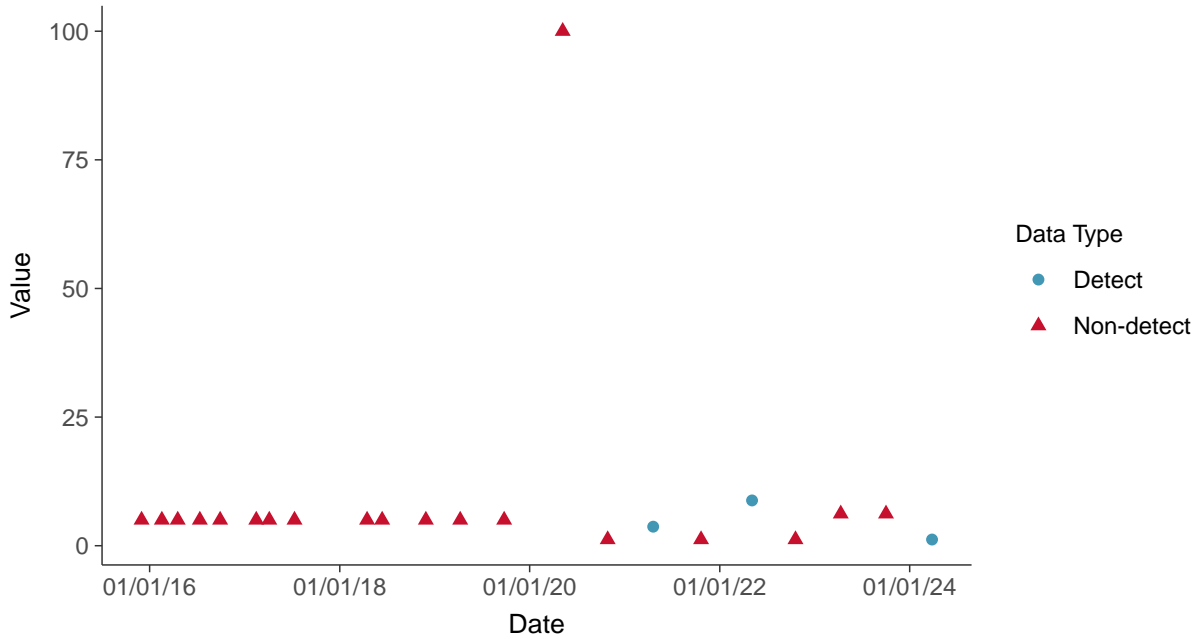


Appendix IV: Molybdenum, MW-15019

ID: 09_2_119

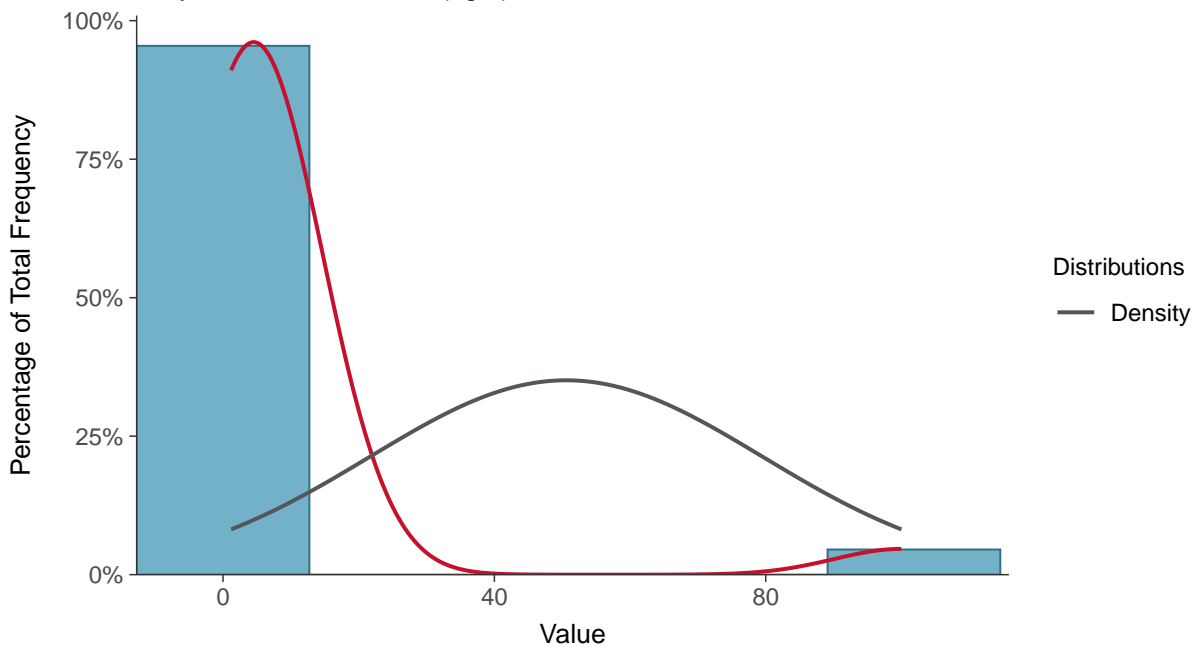
Scatter Plot

Molybdenum, MW-15019 (ug/L)



Histogram

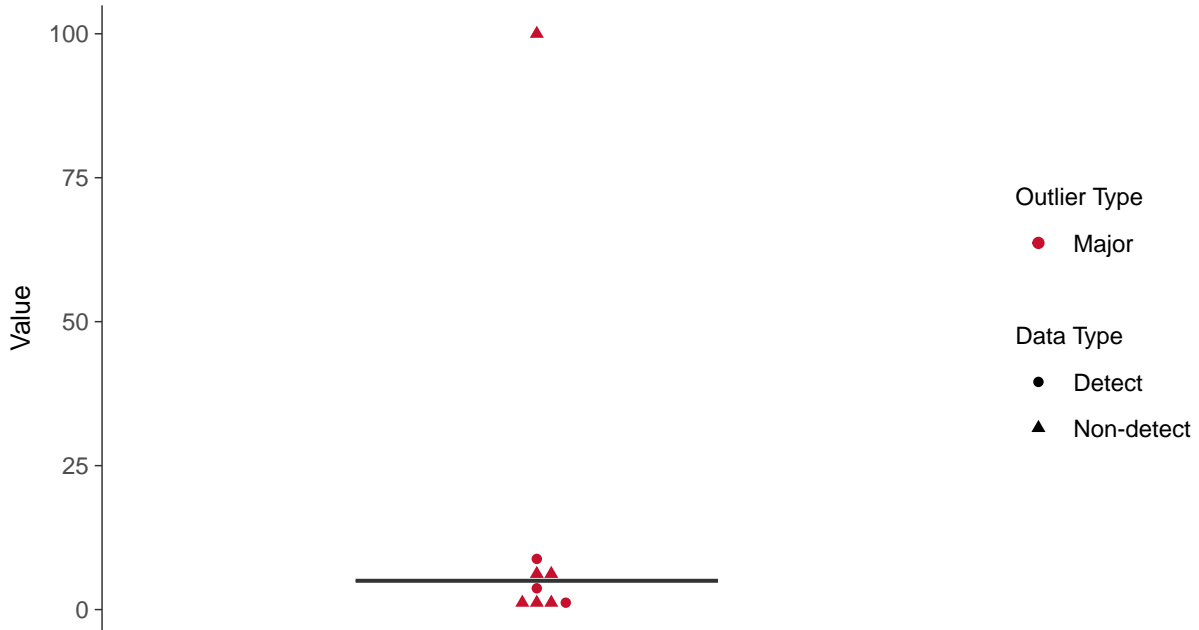
Molybdenum, MW-15019 (ug/L)





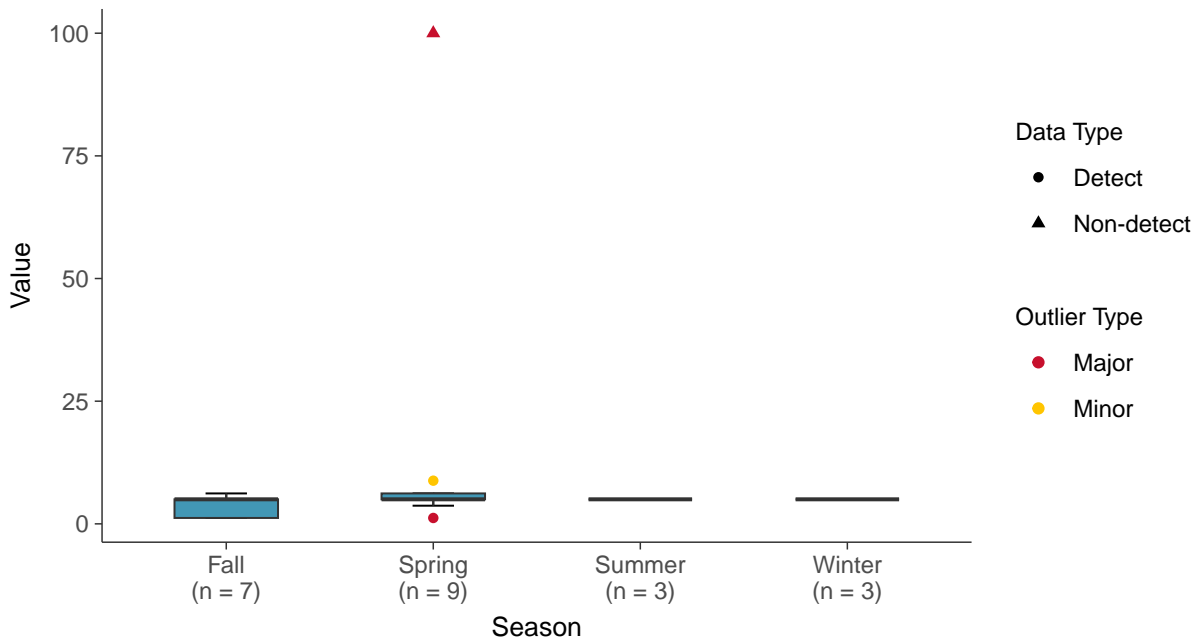
Boxplot

Molybdenum, MW-15019 (ug/L)



Boxplot by Season

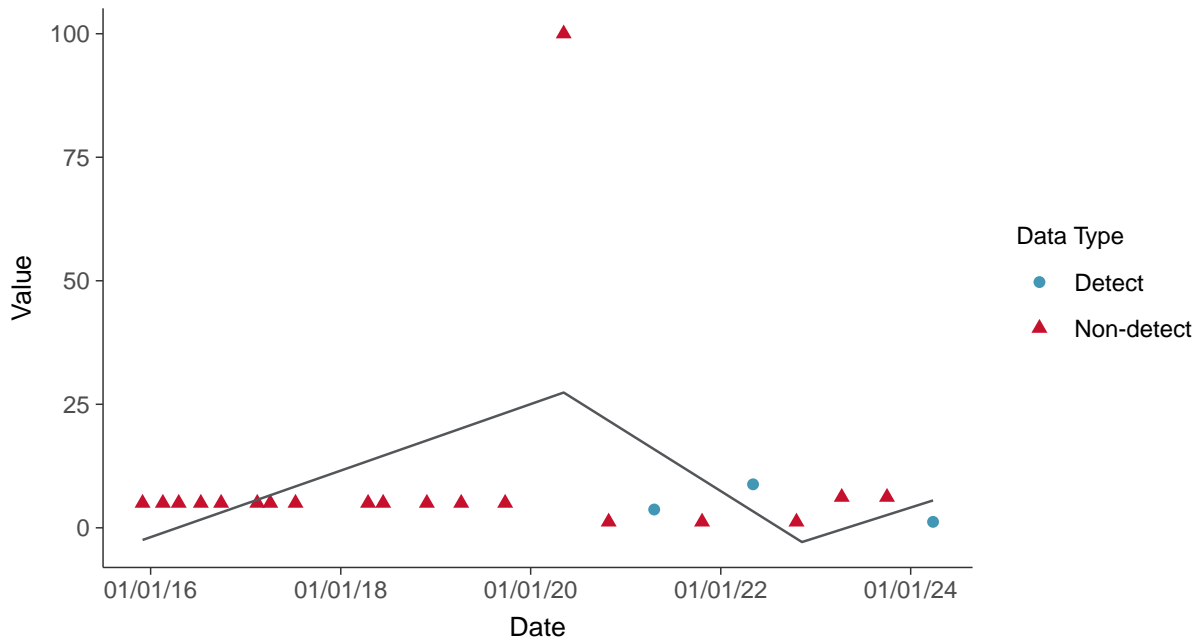
Molybdenum, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15019 (ug/L)



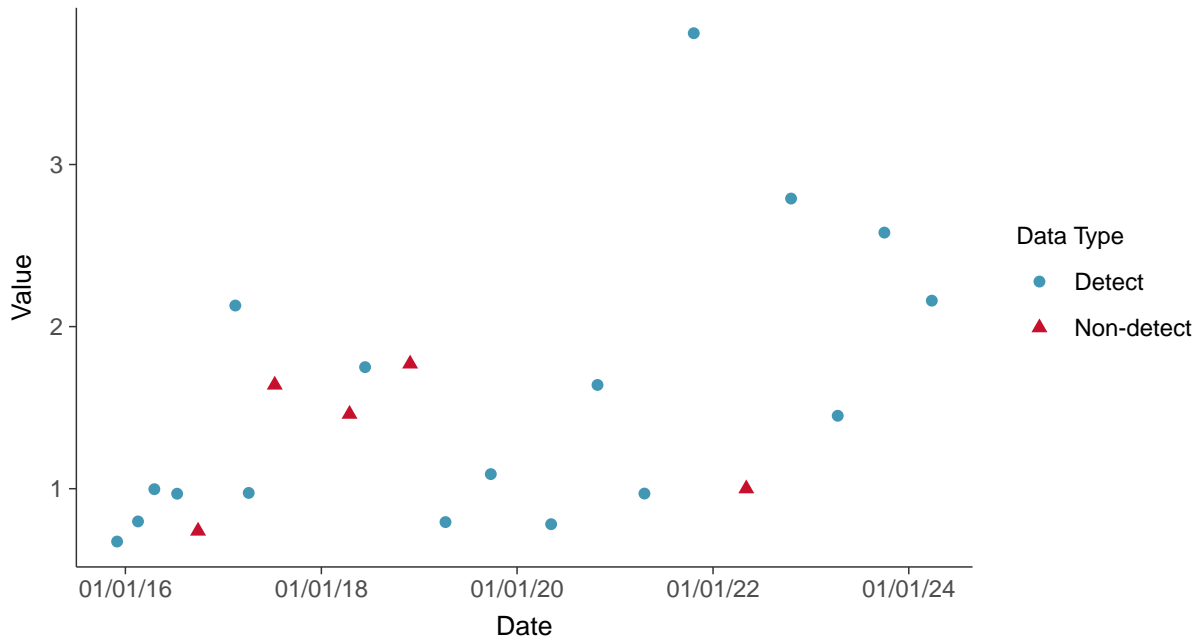


Appendix IV: Radium-226+228, MW-15019

ID: 09_2_125

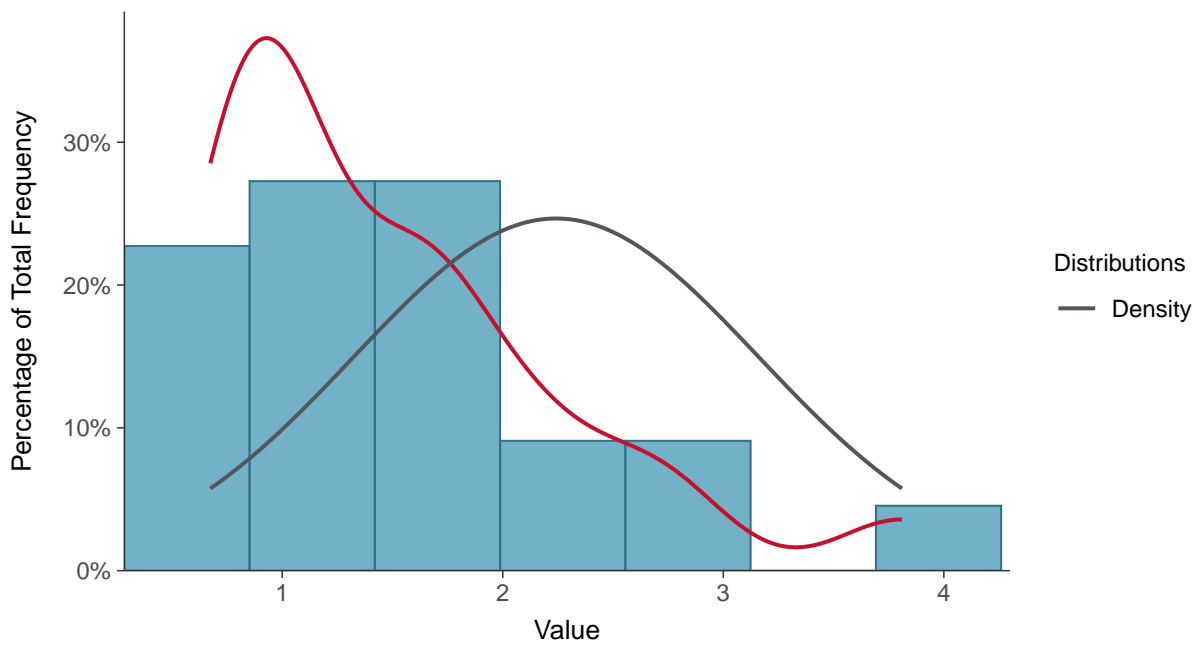
Scatter Plot

Radium-226+228, MW-15019 (pCi/L)



Histogram

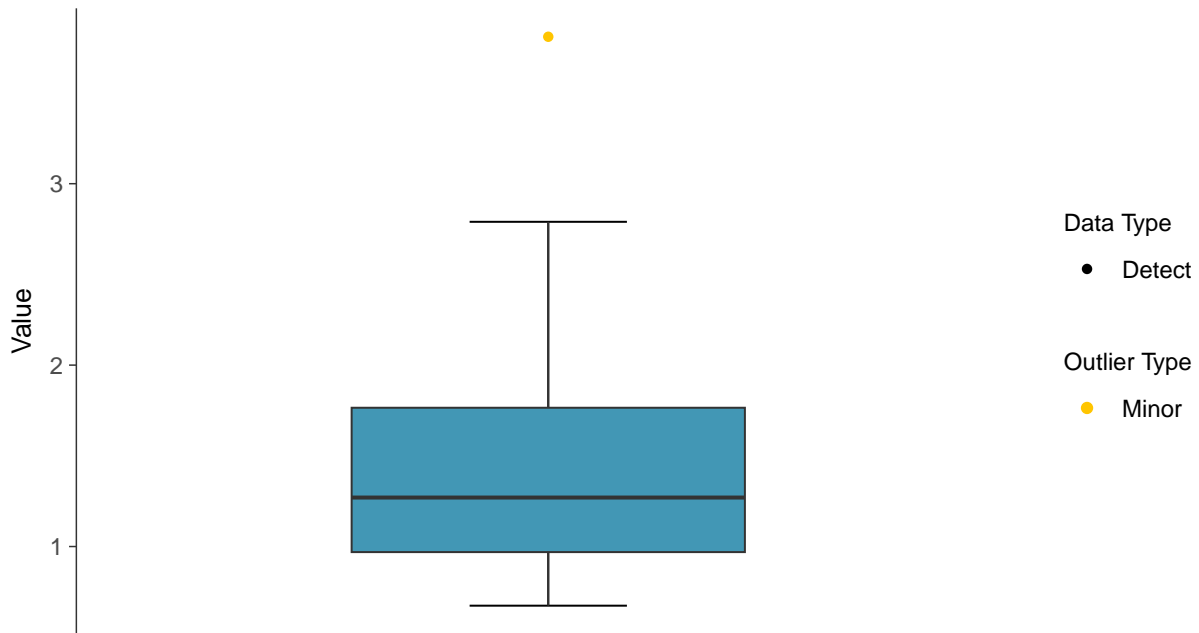
Radium-226+228, MW-15019 (pCi/L)





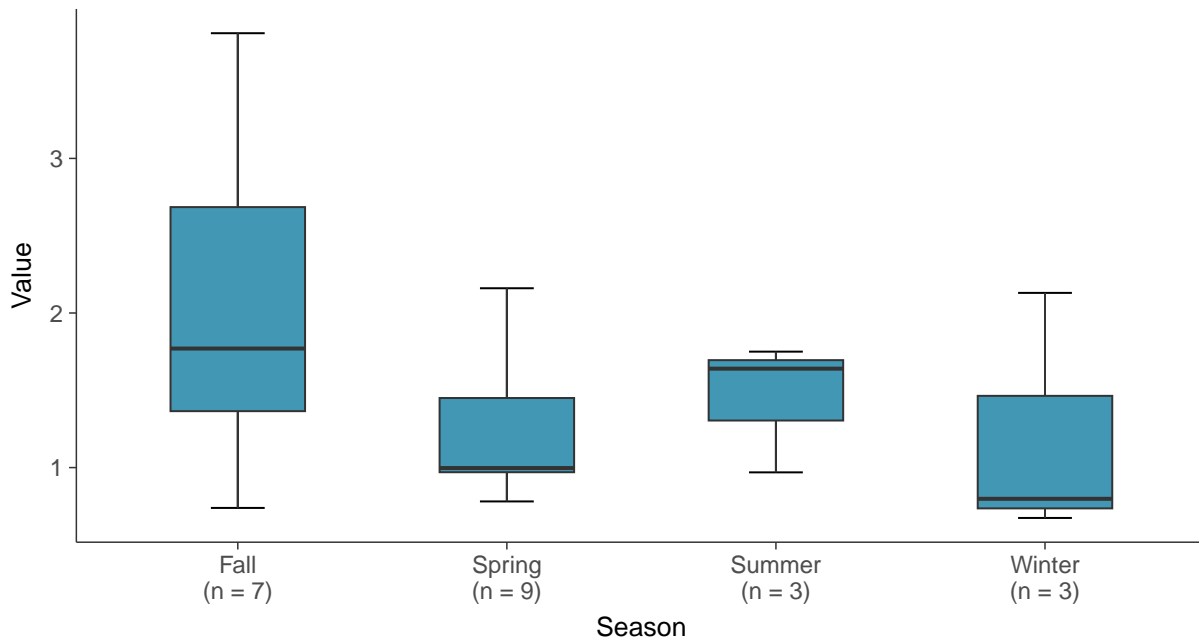
Boxplot

Radium-226+228, MW-15019 (pCi/L)



Boxplot by Season

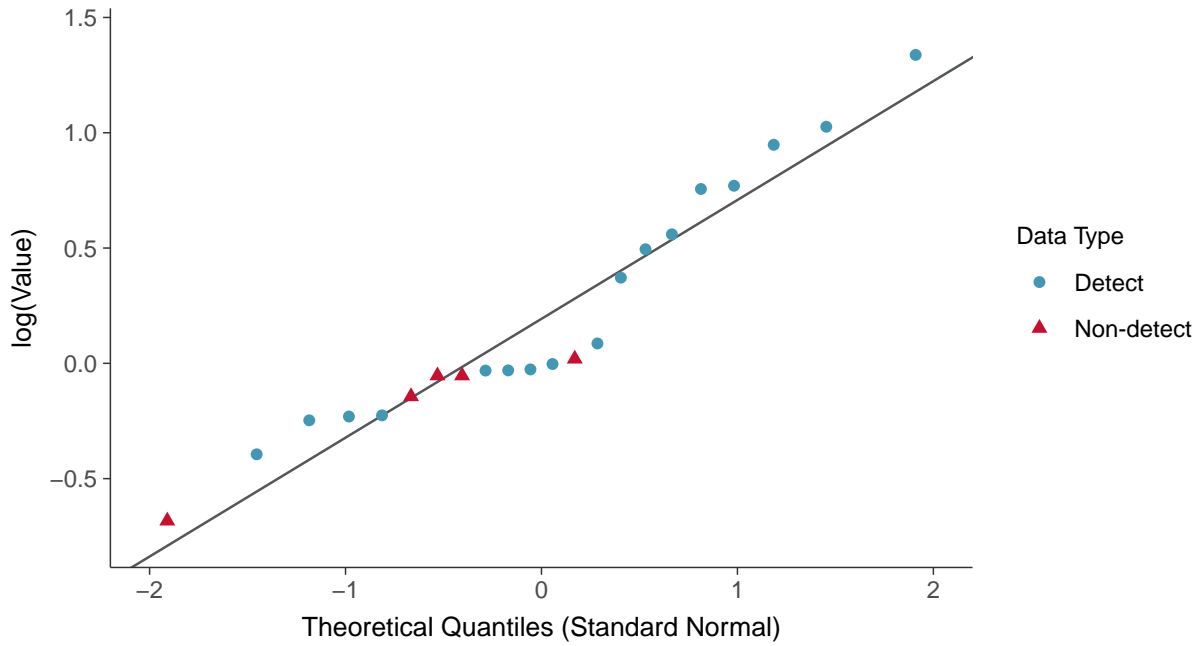
Radium-226+228, MW-15019 (pCi/L)





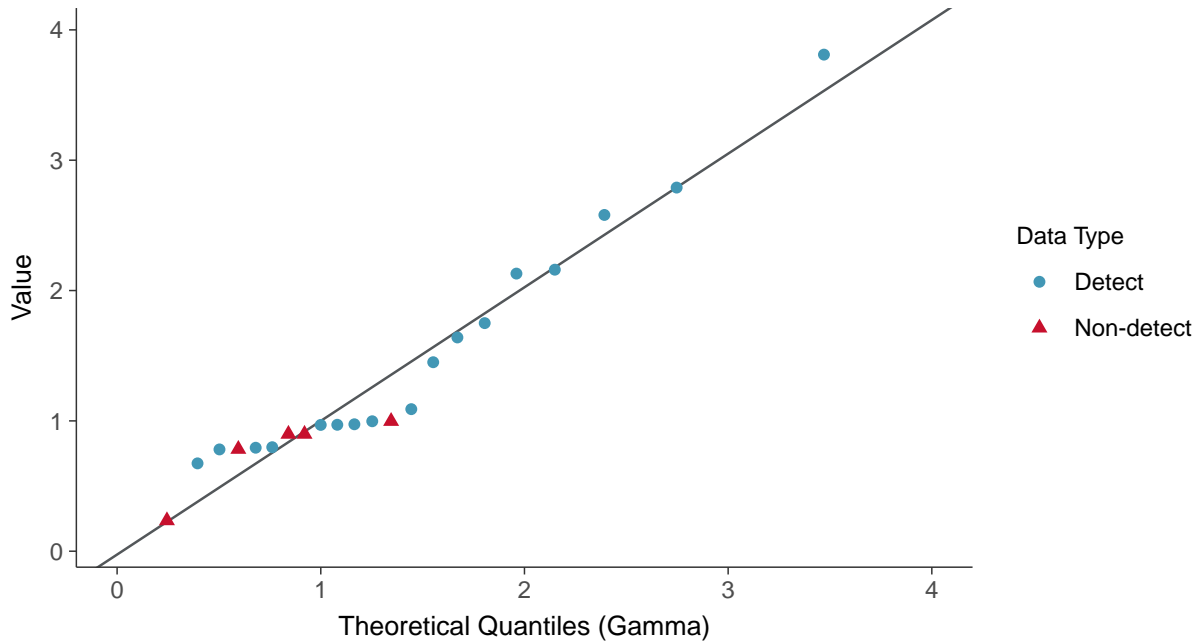
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15019 (pCi/L)



Gamma Q-Q plot using ROS Imputed Estimates

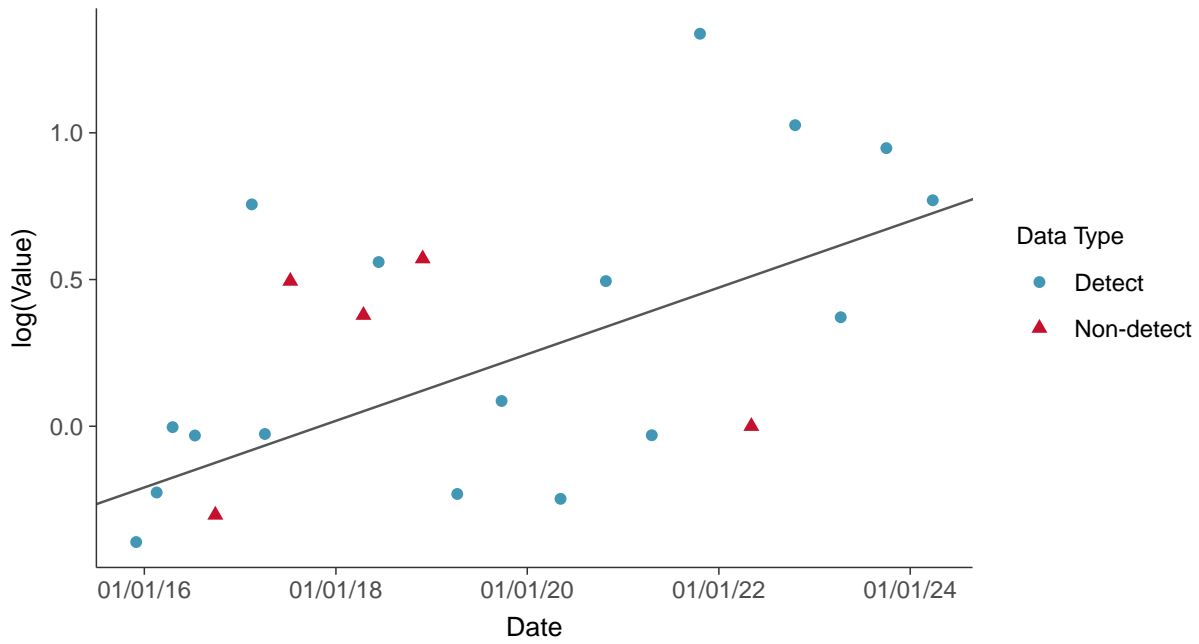
Radium-226+228, MW-15019 (pCi/L)





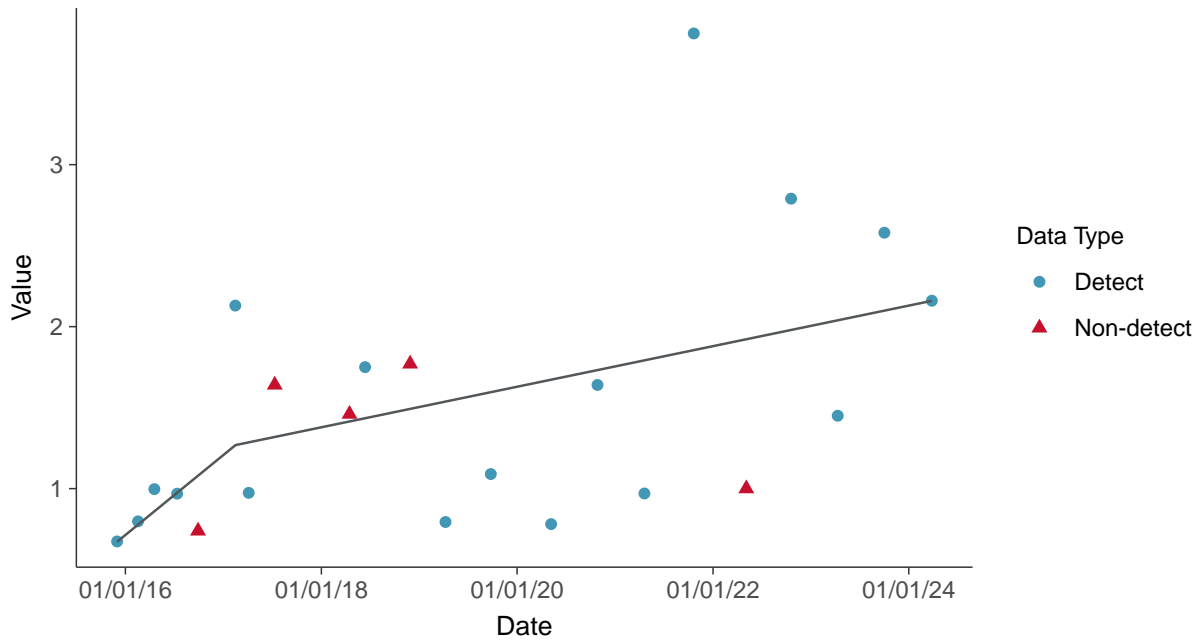
Trend Regression: Lognormal MLE

Radium-226+228, MW-15019 (pCi/L)



Trend Regression: Piecewise Linear-Linear

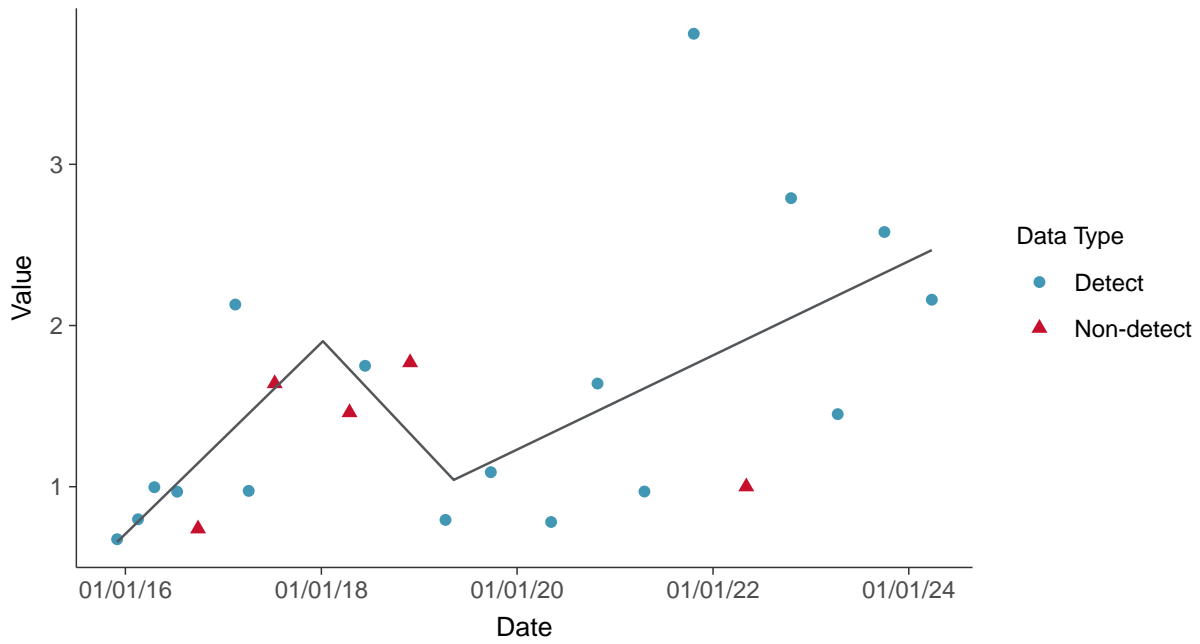
Radium-226+228, MW-15019 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

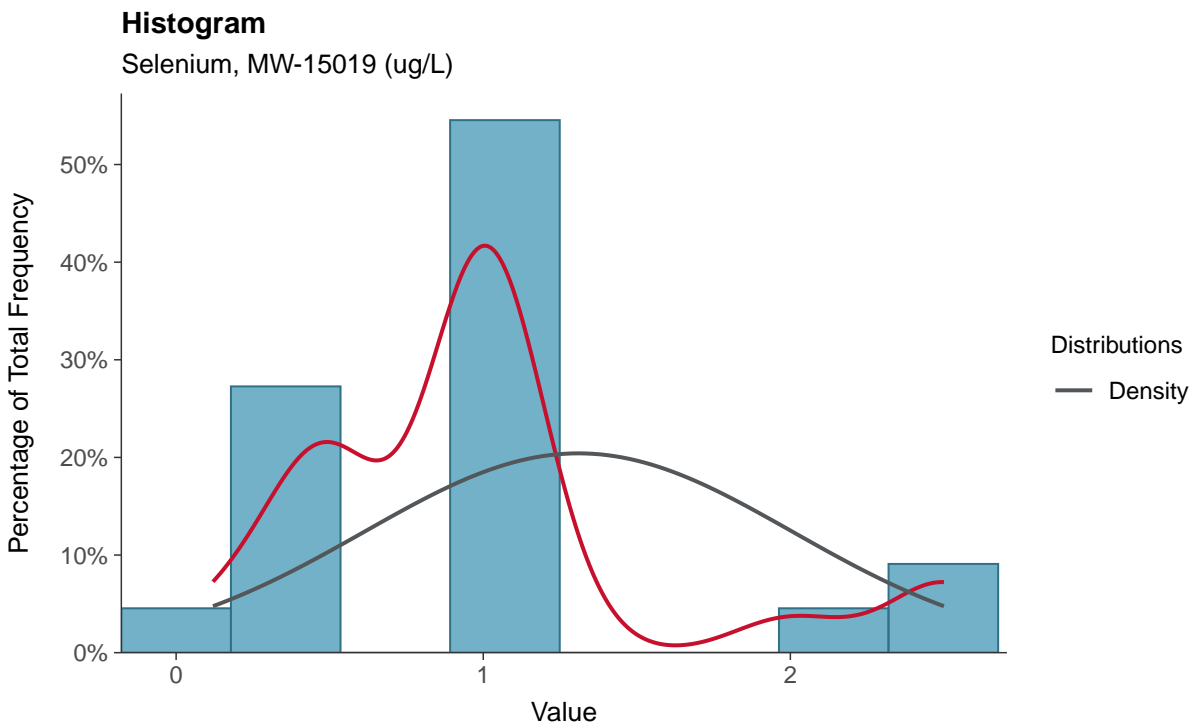
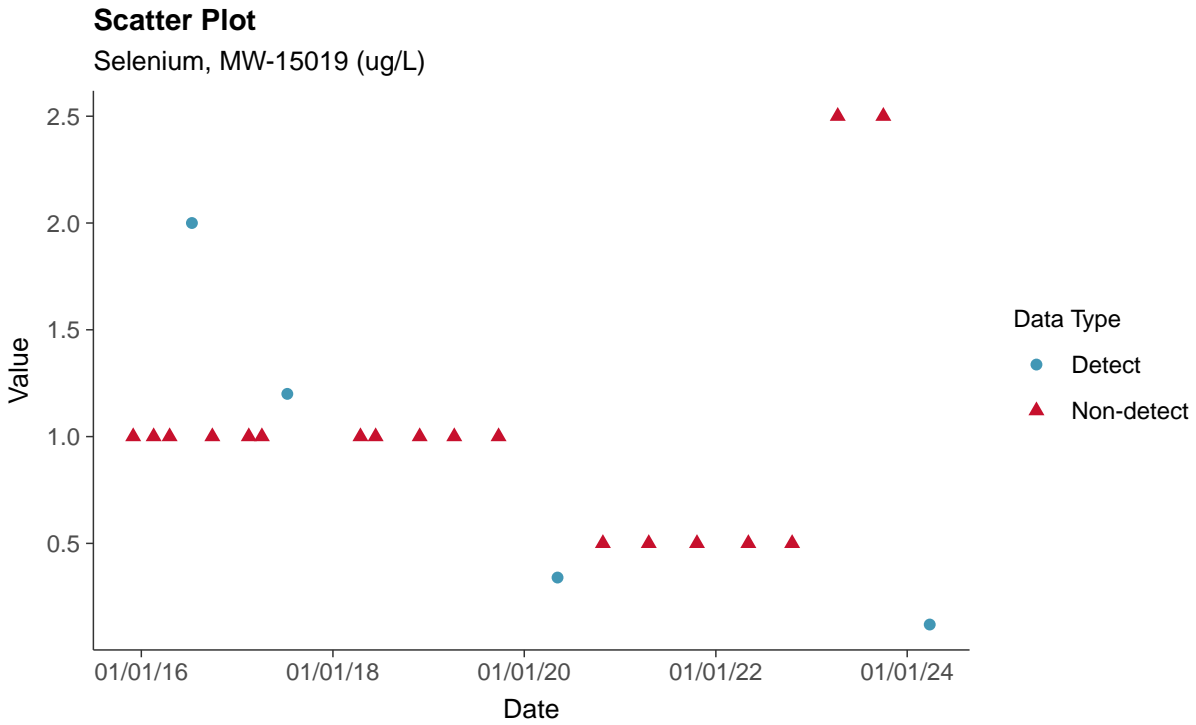
Radium-226+228, MW-15019 (pCi/L)





Appendix IV: Selenium, MW-15019

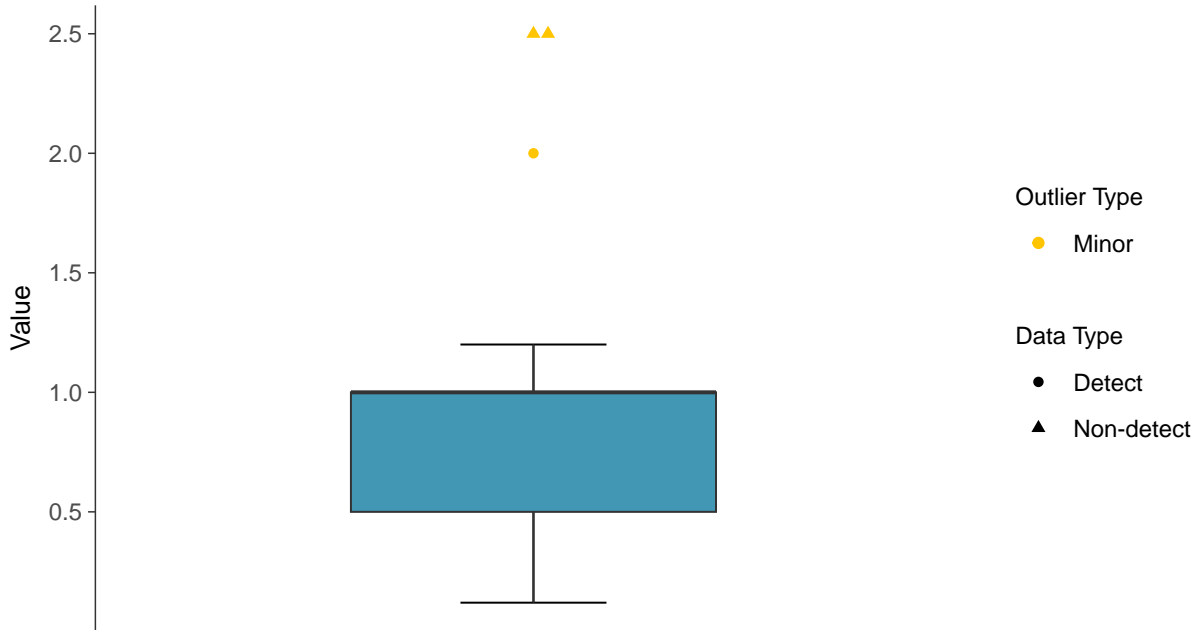
ID: 09_2_127





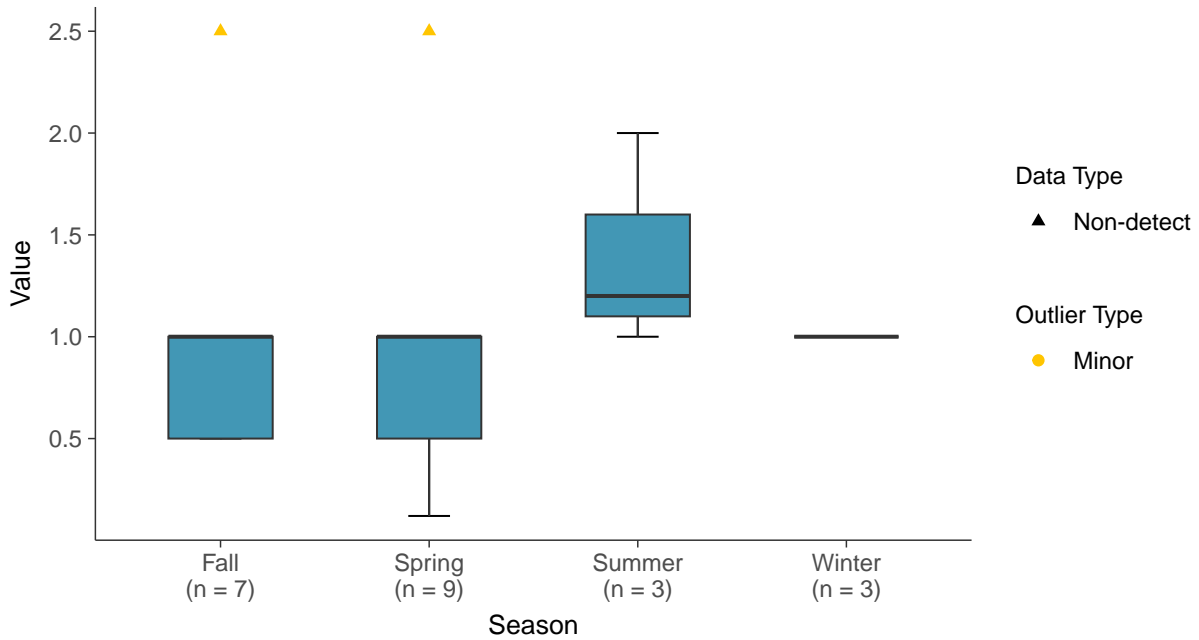
Boxplot

Selenium, MW-15019 (ug/L)



Boxplot by Season

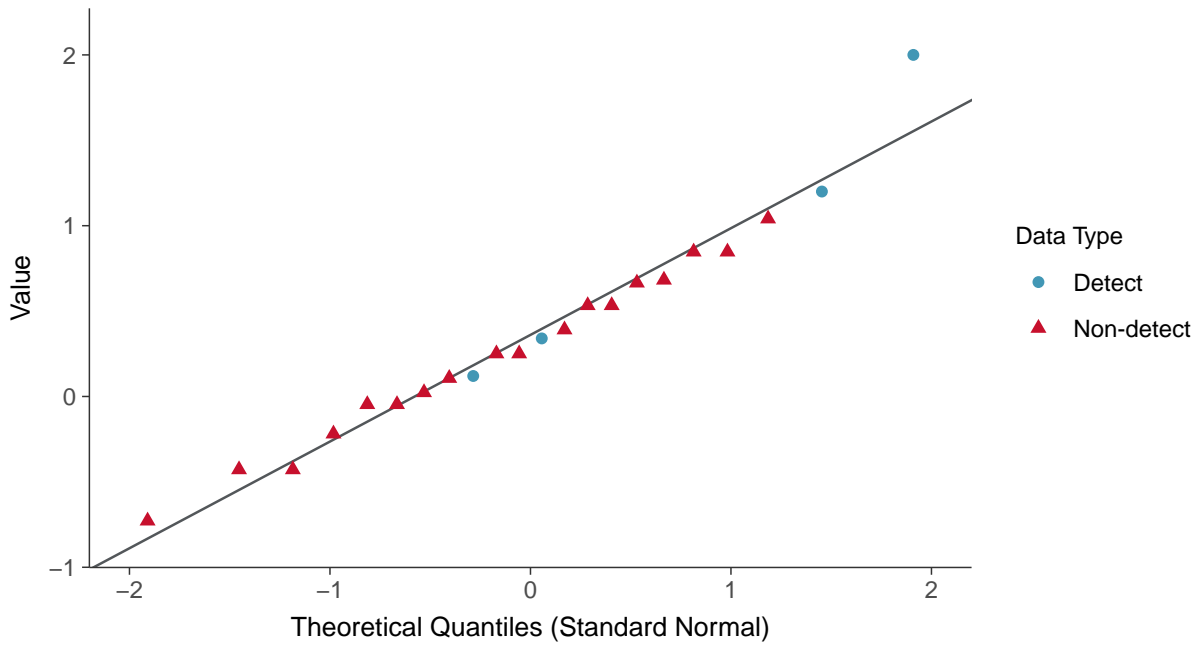
Selenium, MW-15019 (ug/L)





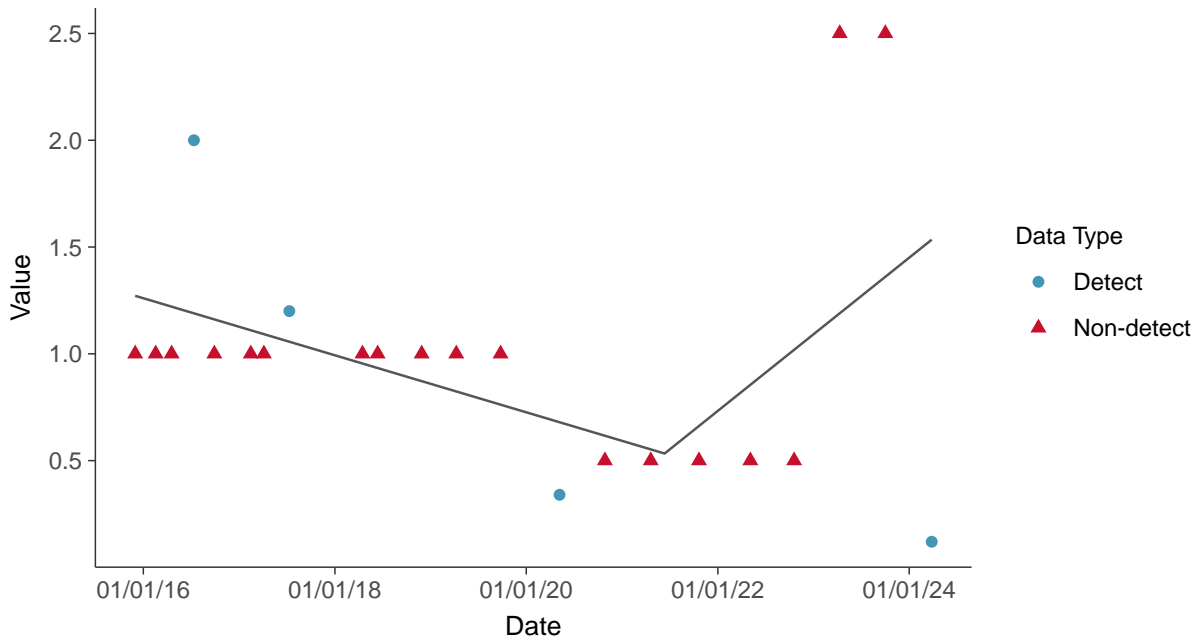
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

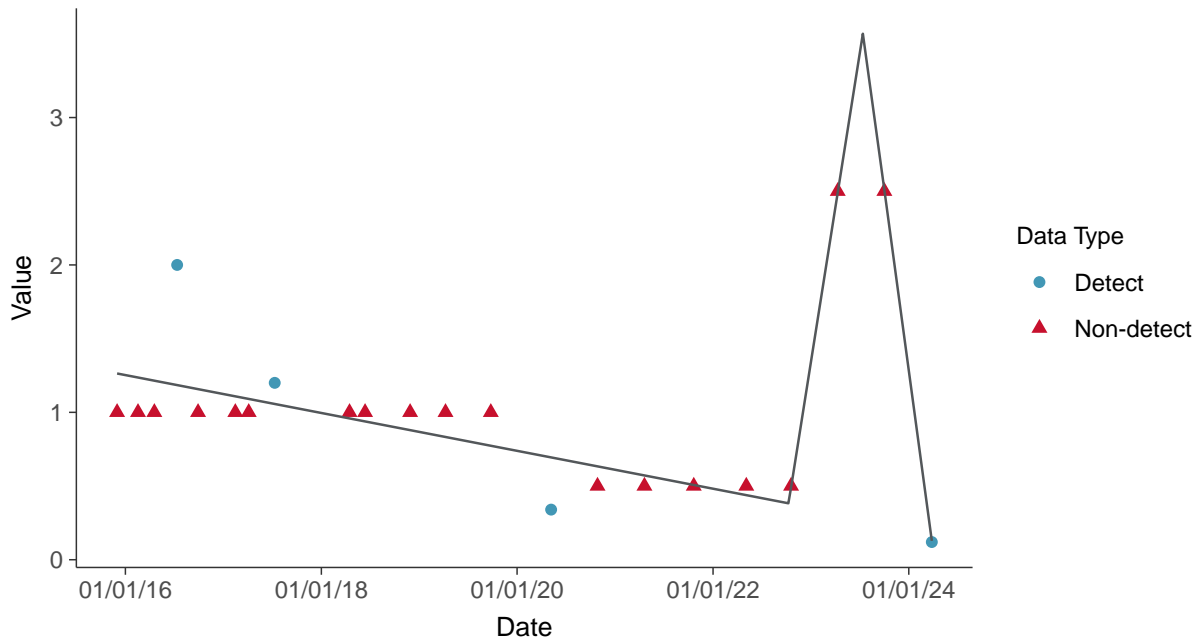
Selenium, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

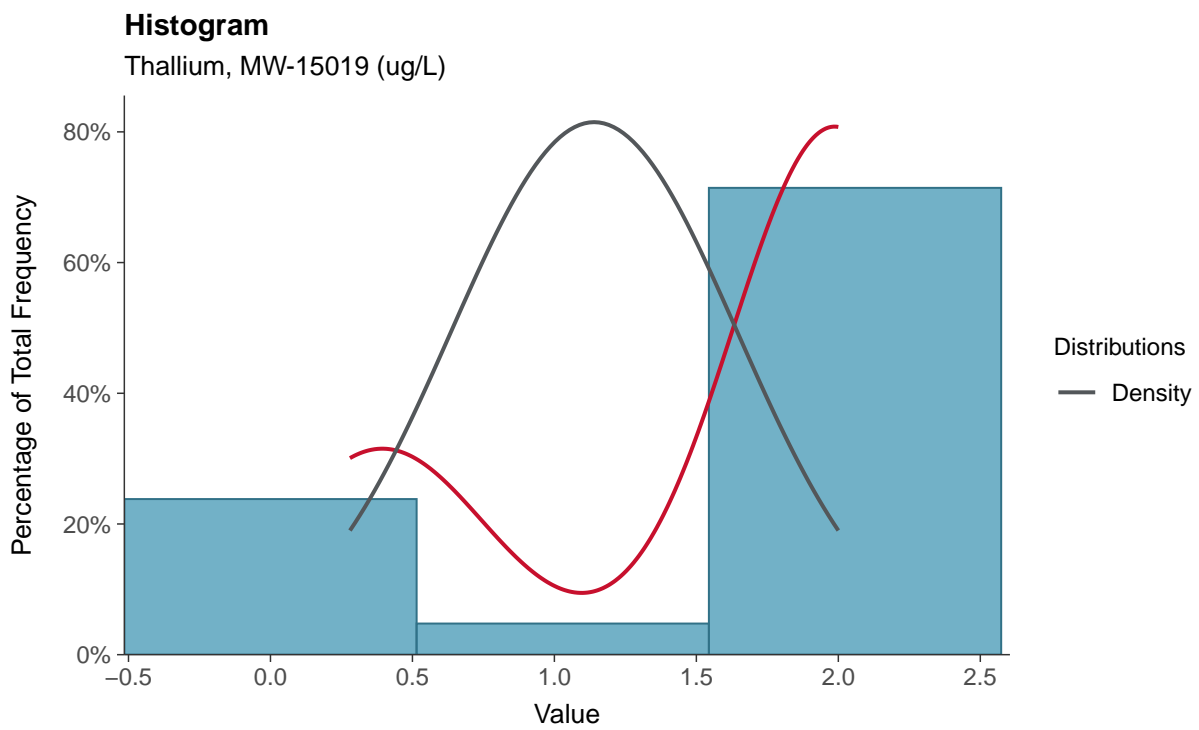
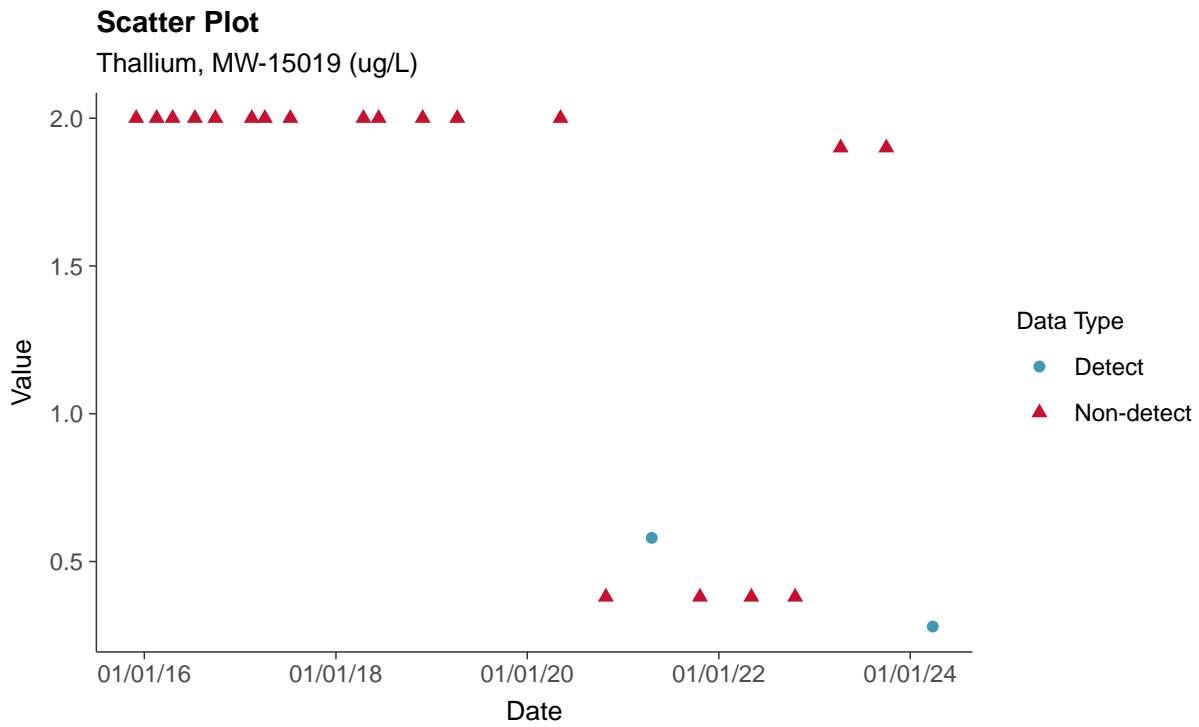
Selenium, MW-15019 (ug/L)





Appendix IV: Thallium, MW-15019

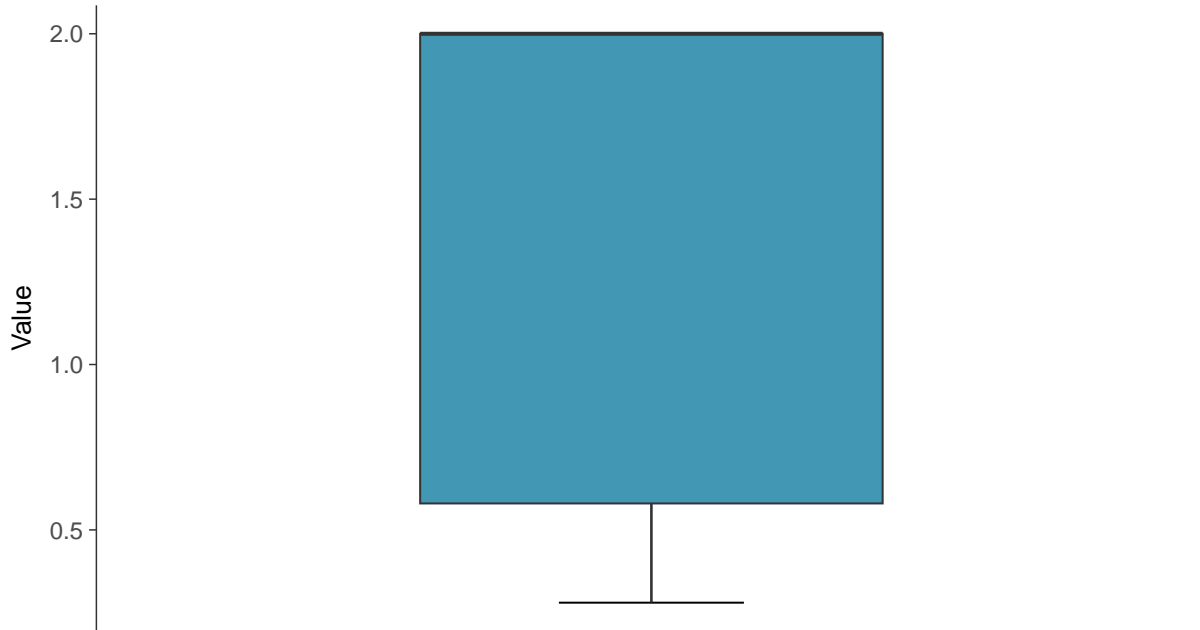
ID: 09_2_131





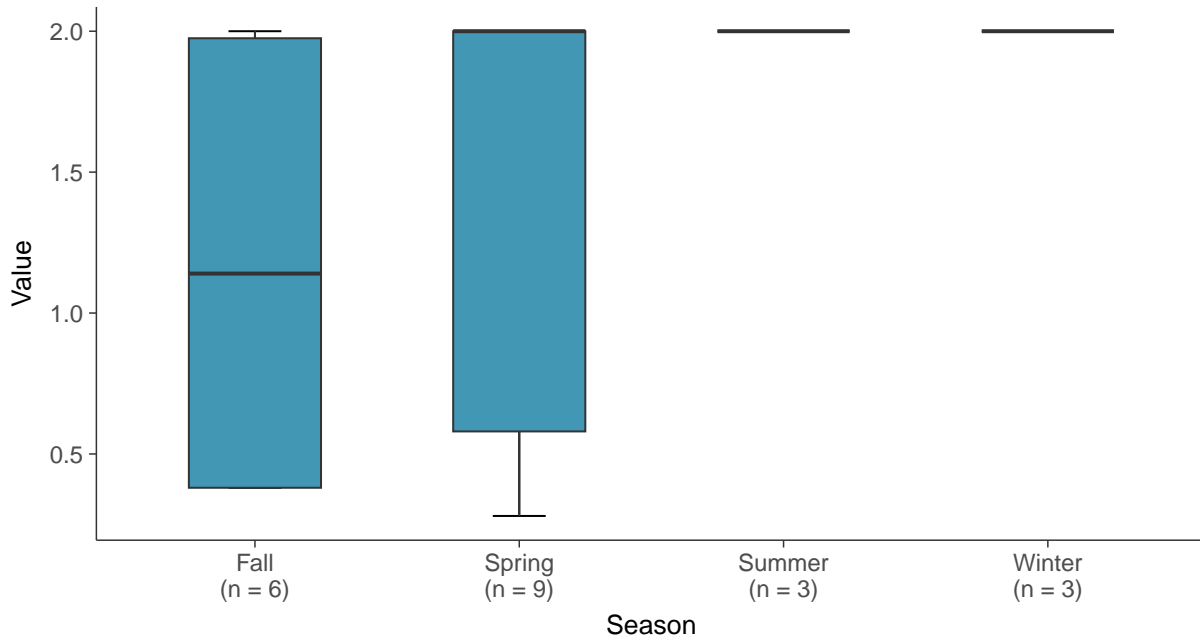
Boxplot

Thallium, MW-15019 (ug/L)



Boxplot by Season

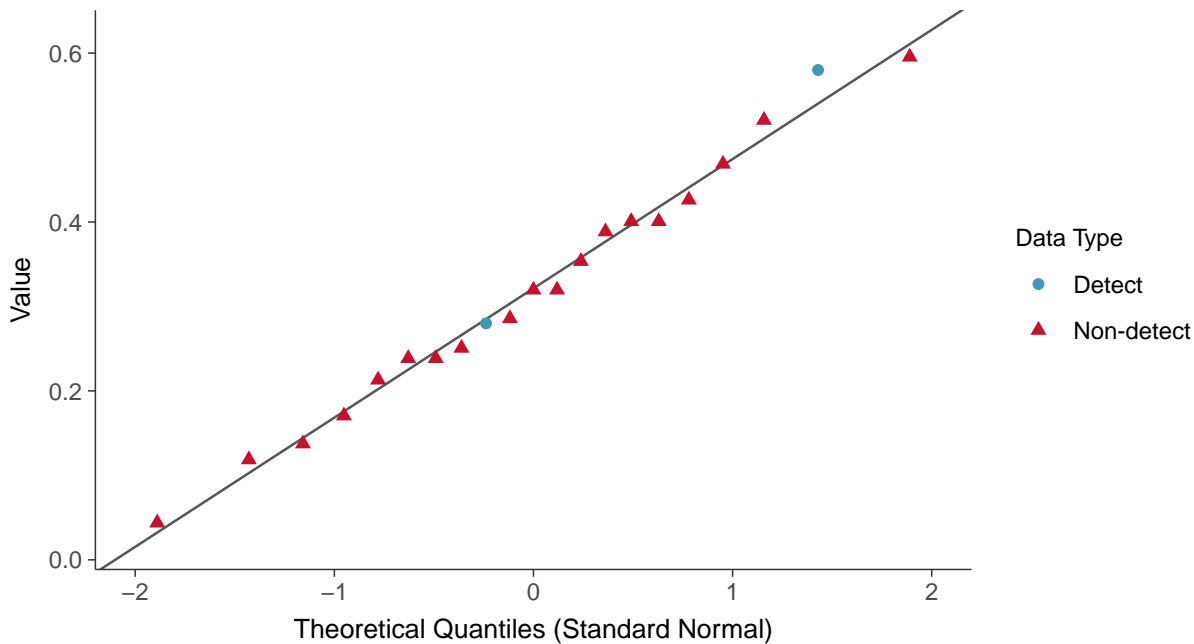
Thallium, MW-15019 (ug/L)





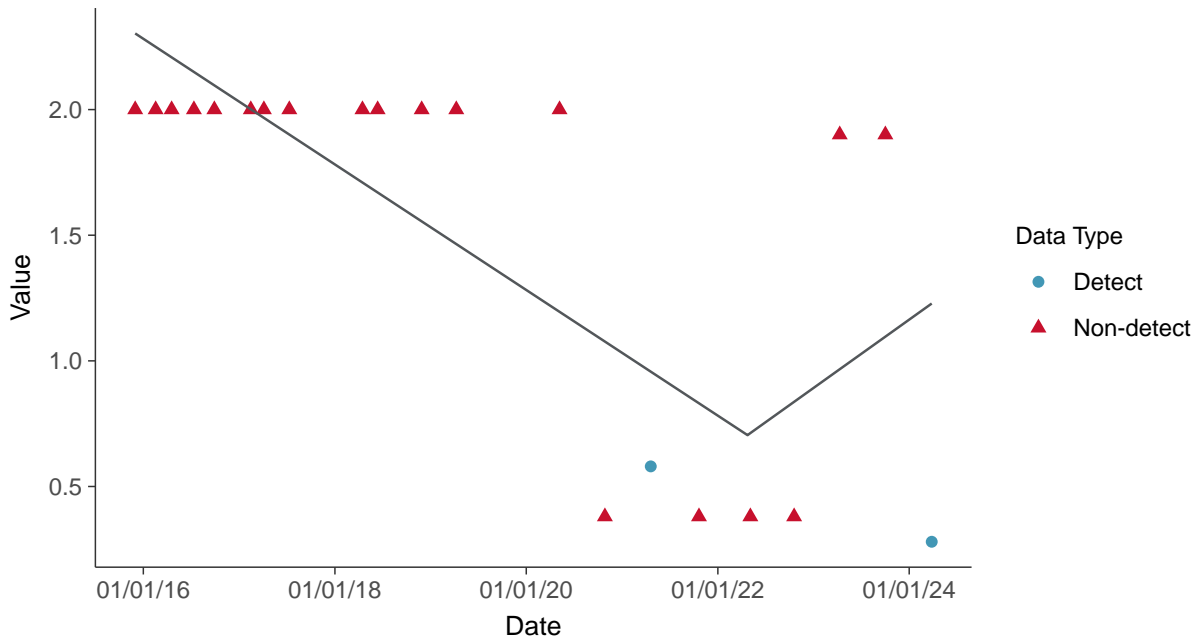
Normal Q-Q plot using ROS Imputed Estimates

Thallium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

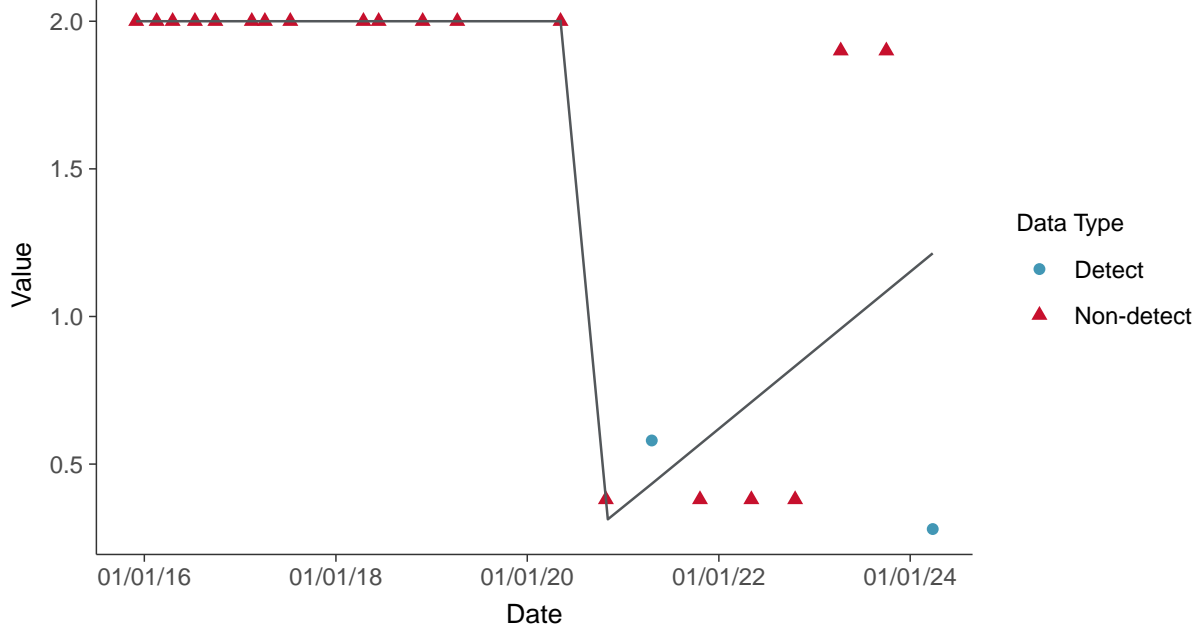
Thallium, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

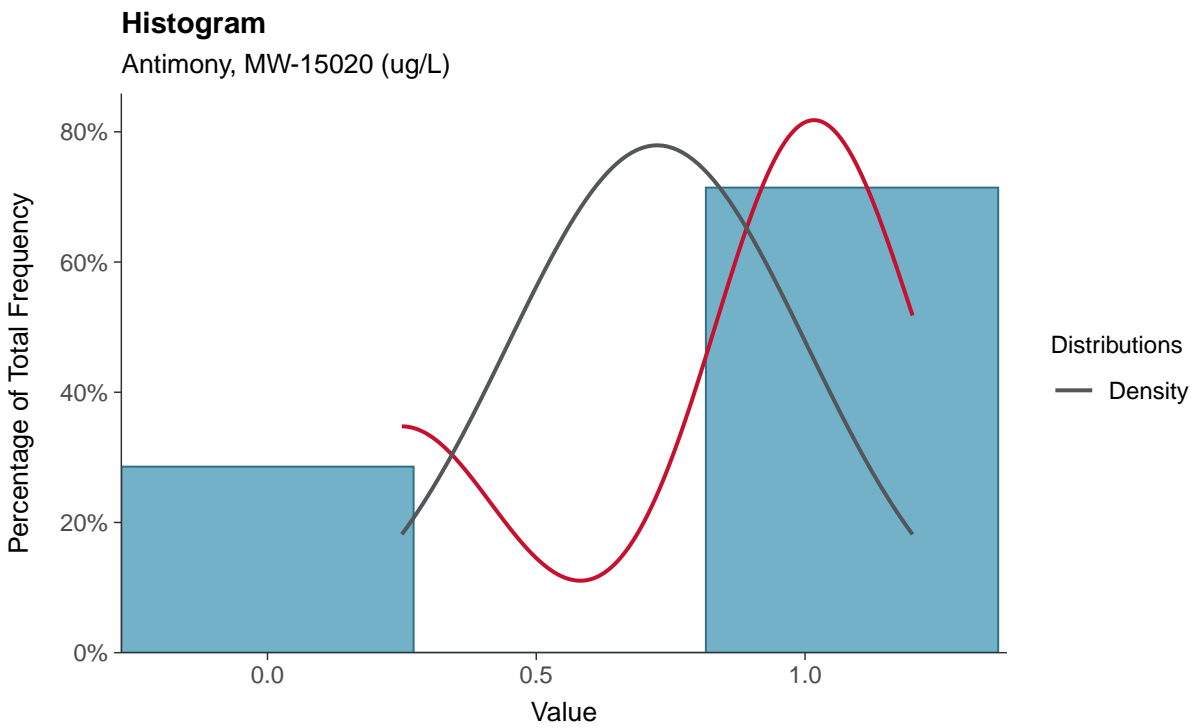
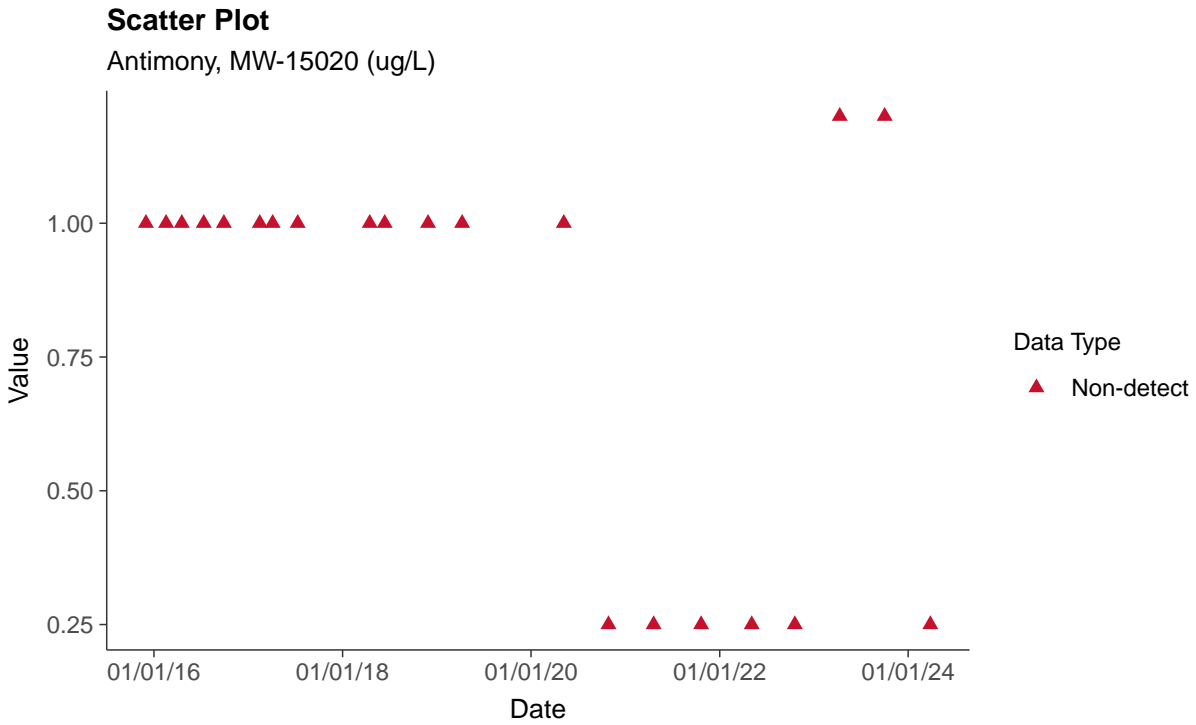
Thallium, MW-15019 (ug/L)





Appendix IV: Antimony, MW-15020

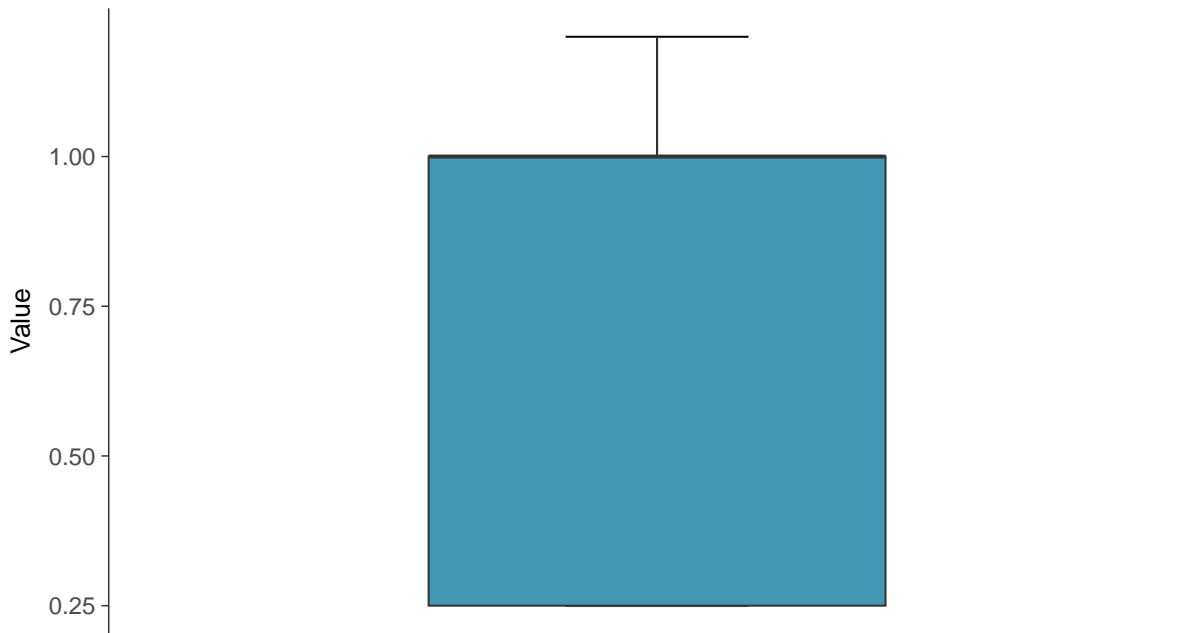
ID: 10_2_101





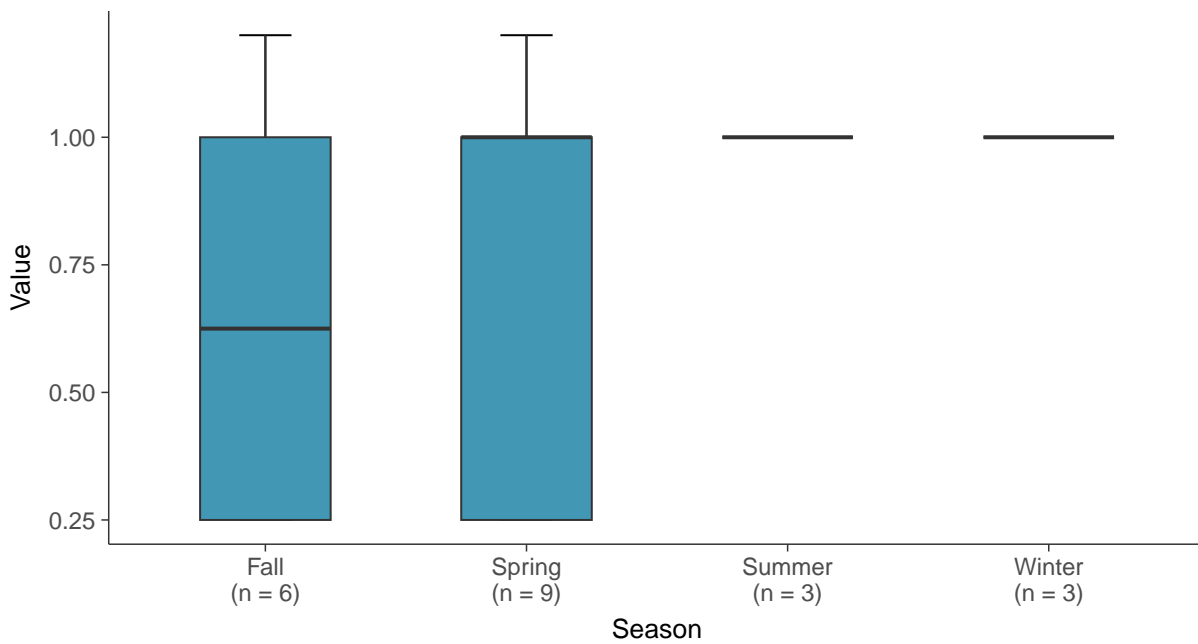
Boxplot

Antimony, MW-15020 (ug/L)



Boxplot by Season

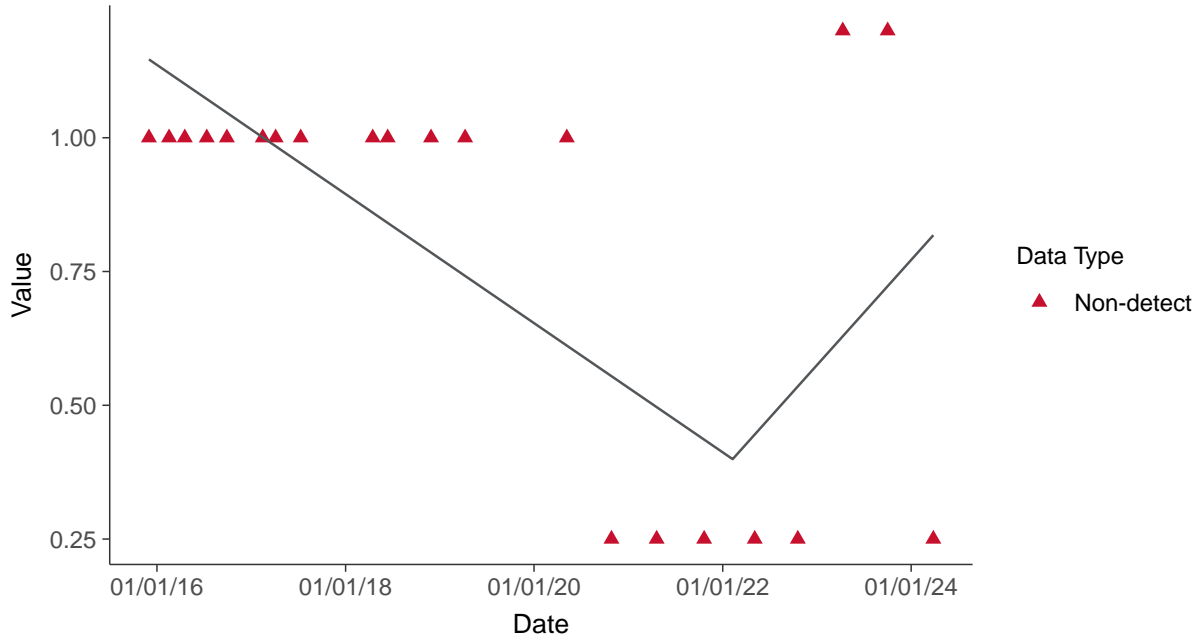
Antimony, MW-15020 (ug/L)





Trend Regression: Piecewise Linear-Linear

Antimony, MW-15020 (ug/L)



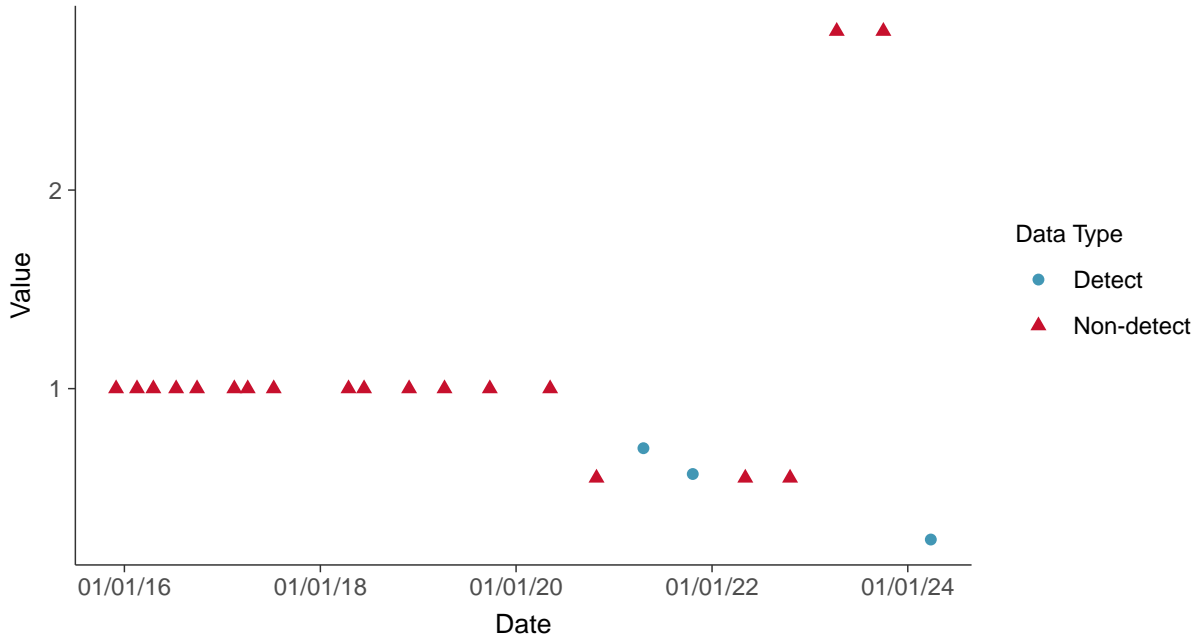


Appendix IV: Arsenic, MW-15020

ID: 10_2_102

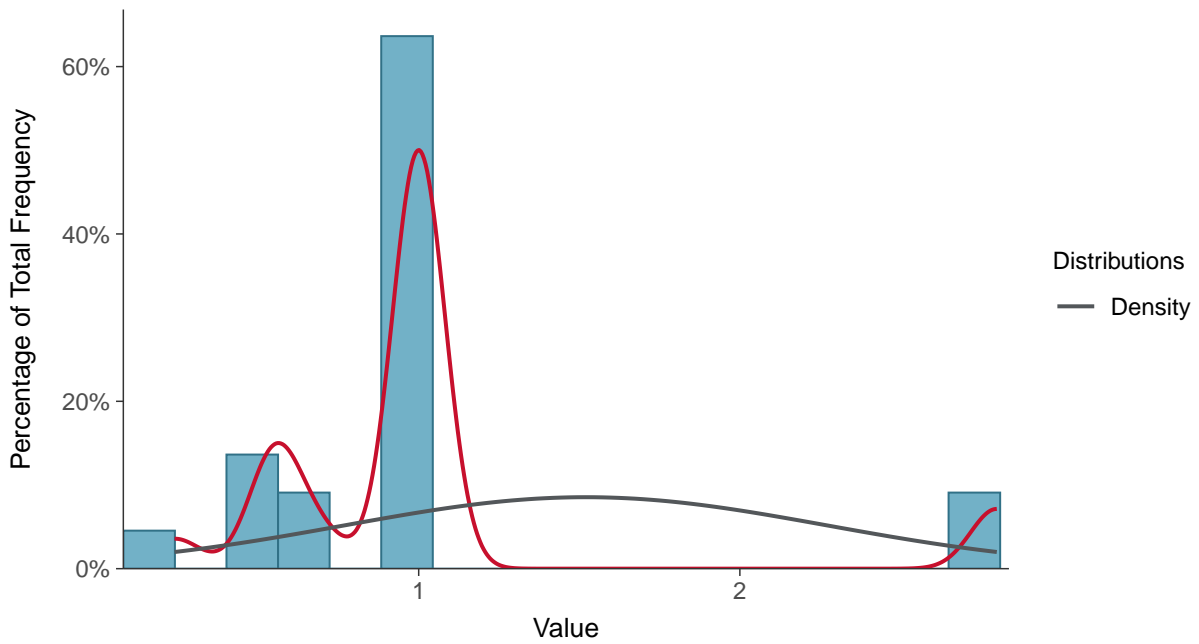
Scatter Plot

Arsenic, MW-15020 (ug/L)



Histogram

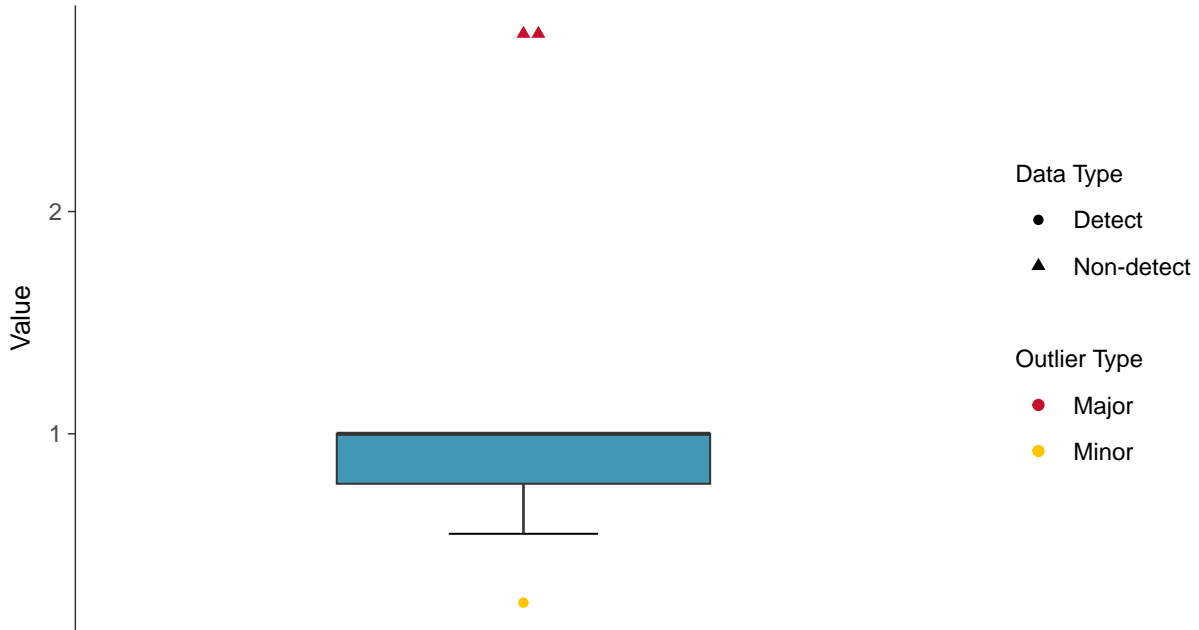
Arsenic, MW-15020 (ug/L)





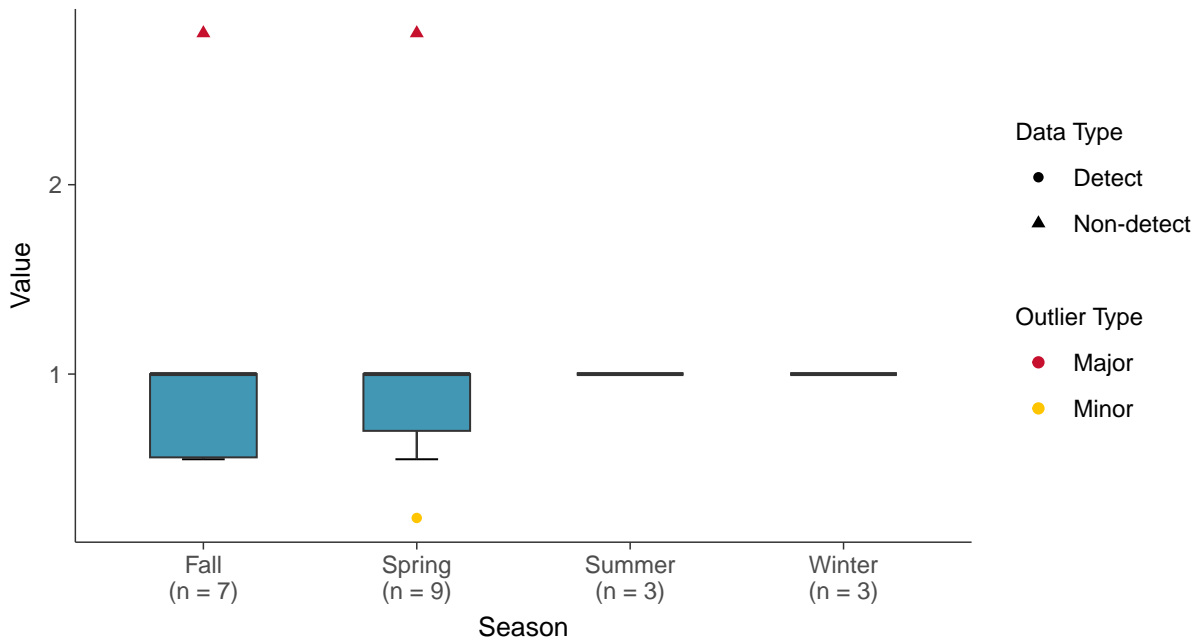
Boxplot

Arsenic, MW-15020 (ug/L)



Boxplot by Season

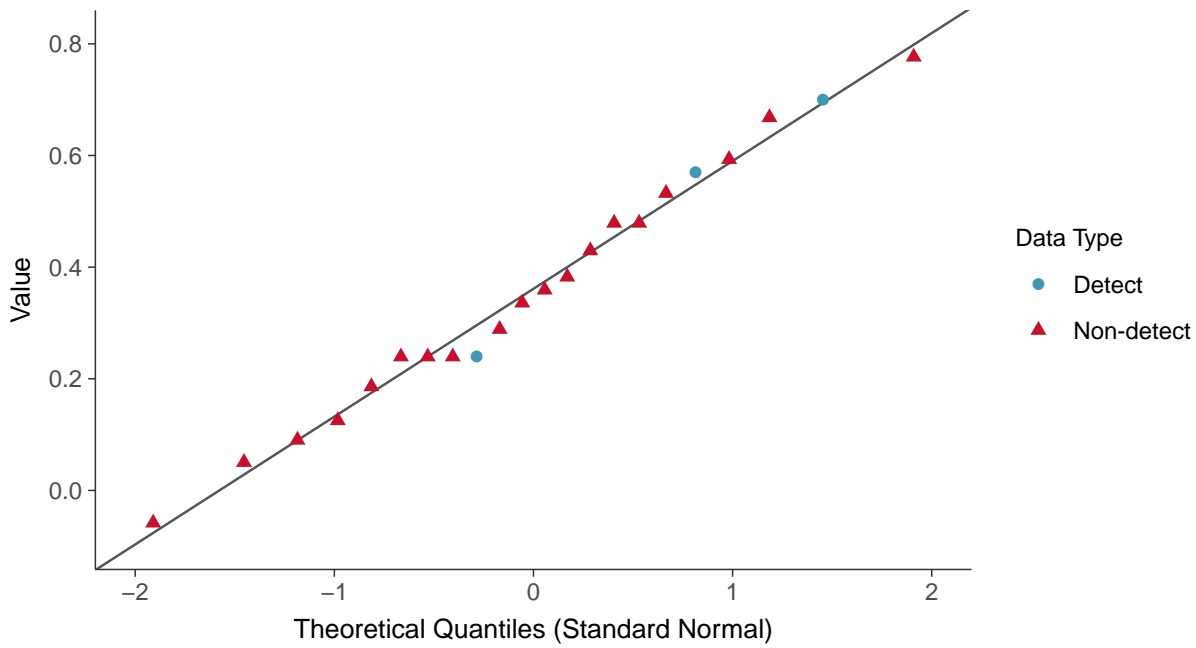
Arsenic, MW-15020 (ug/L)





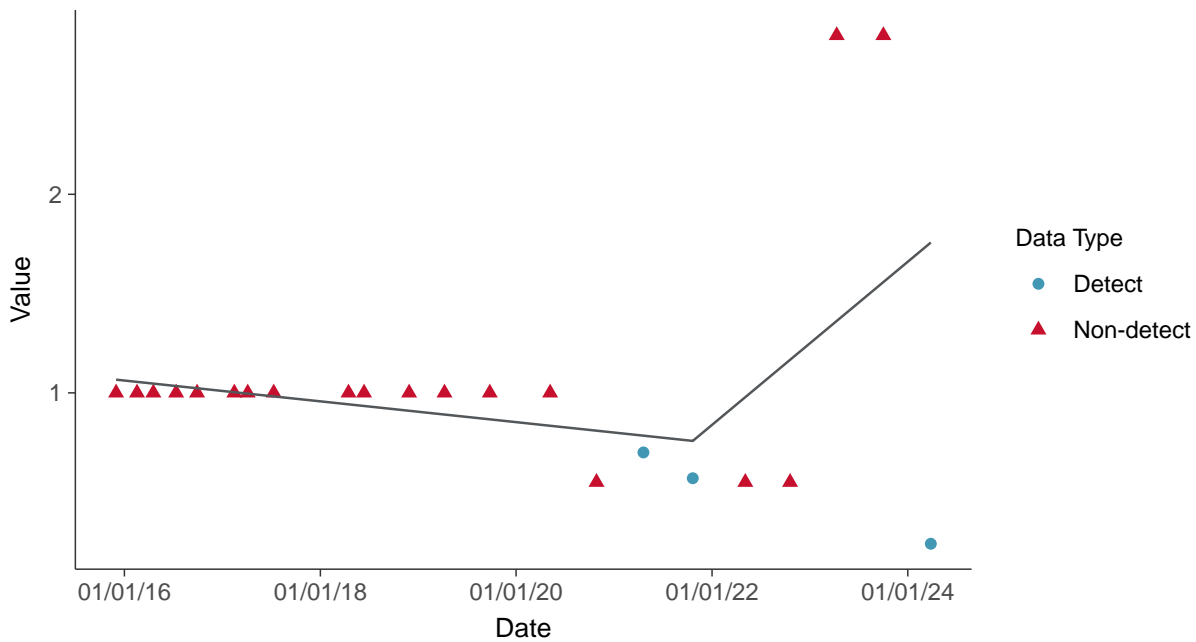
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15020 (ug/L)



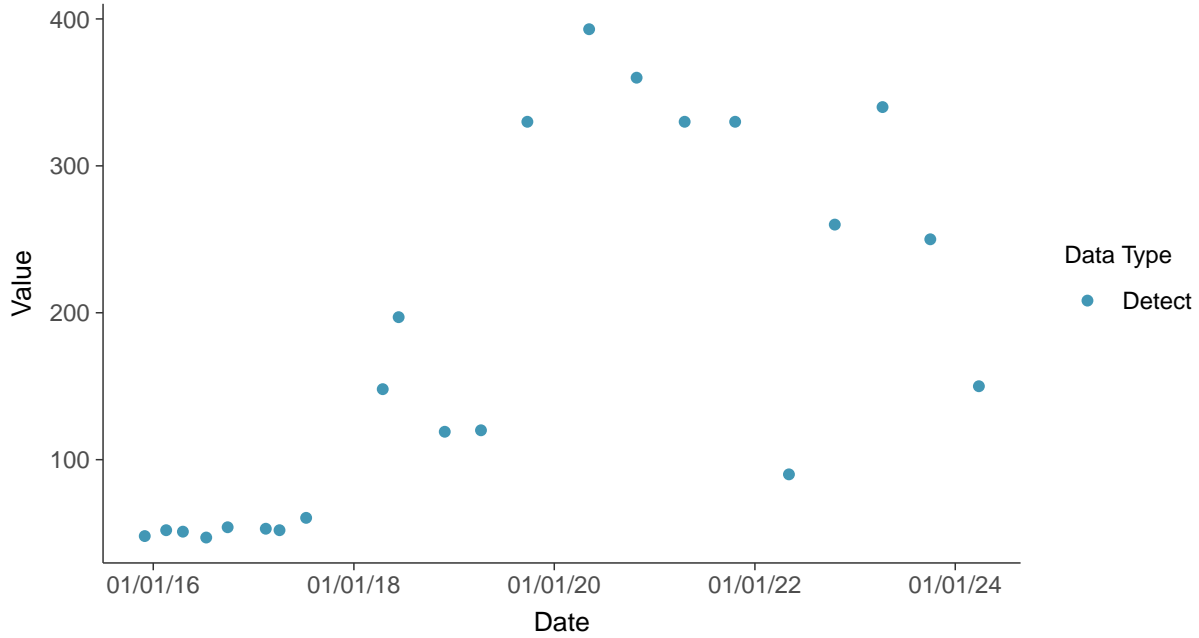


Appendix IV: Barium, MW-15020

ID: 10_2_103

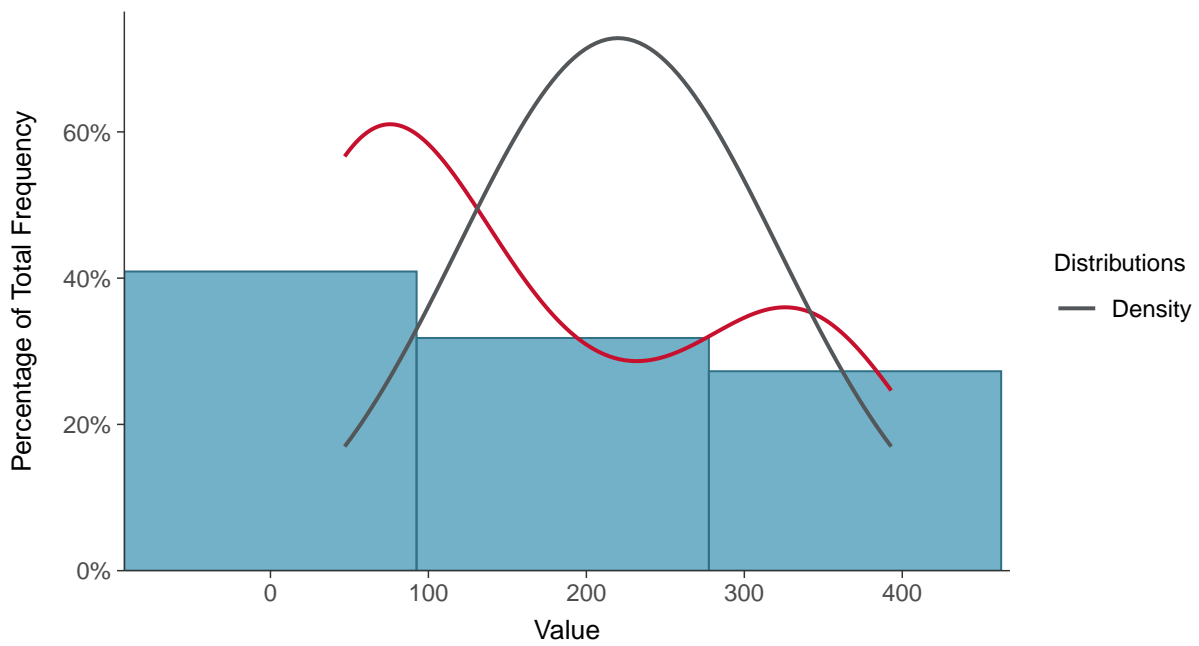
Scatter Plot

Barium, MW-15020 (ug/L)



Histogram

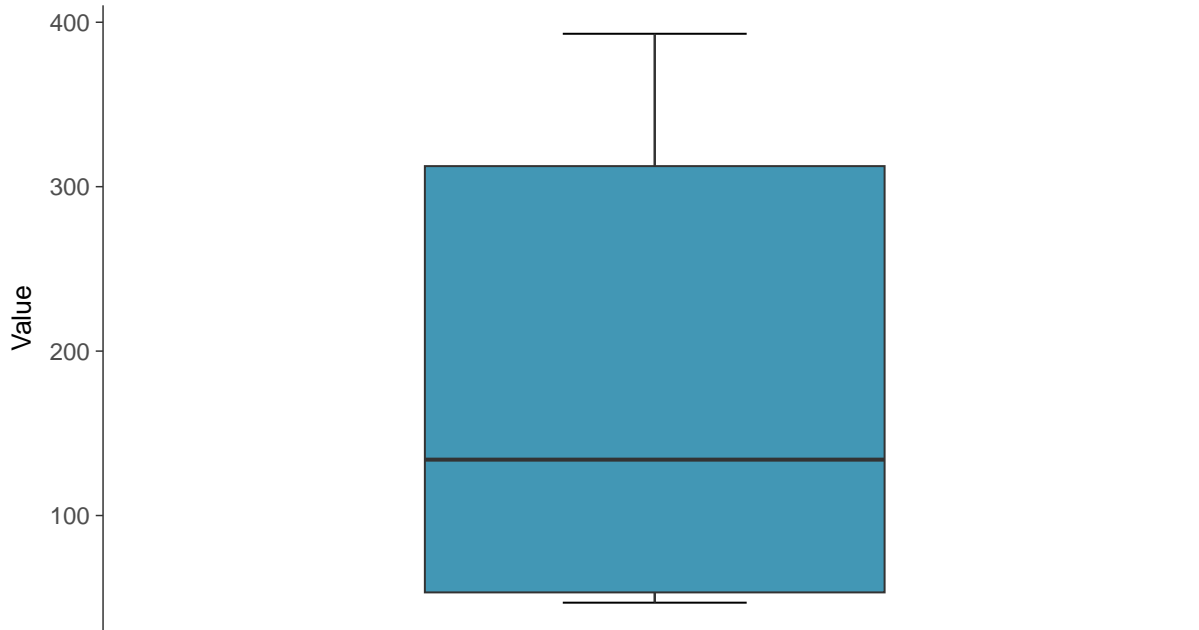
Barium, MW-15020 (ug/L)





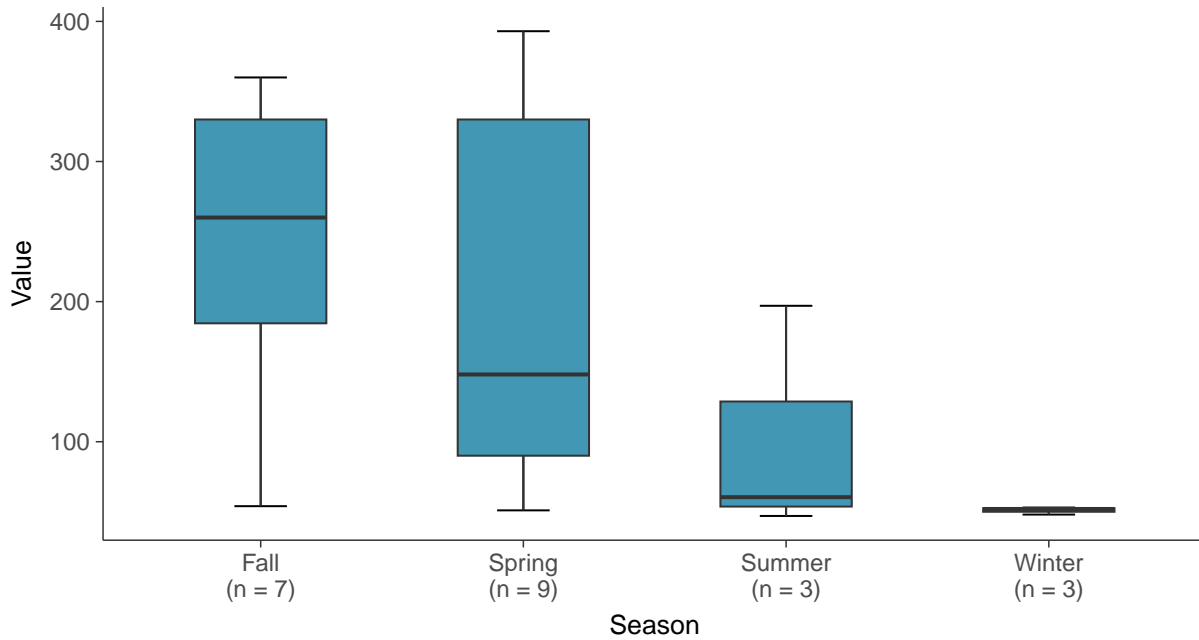
Boxplot

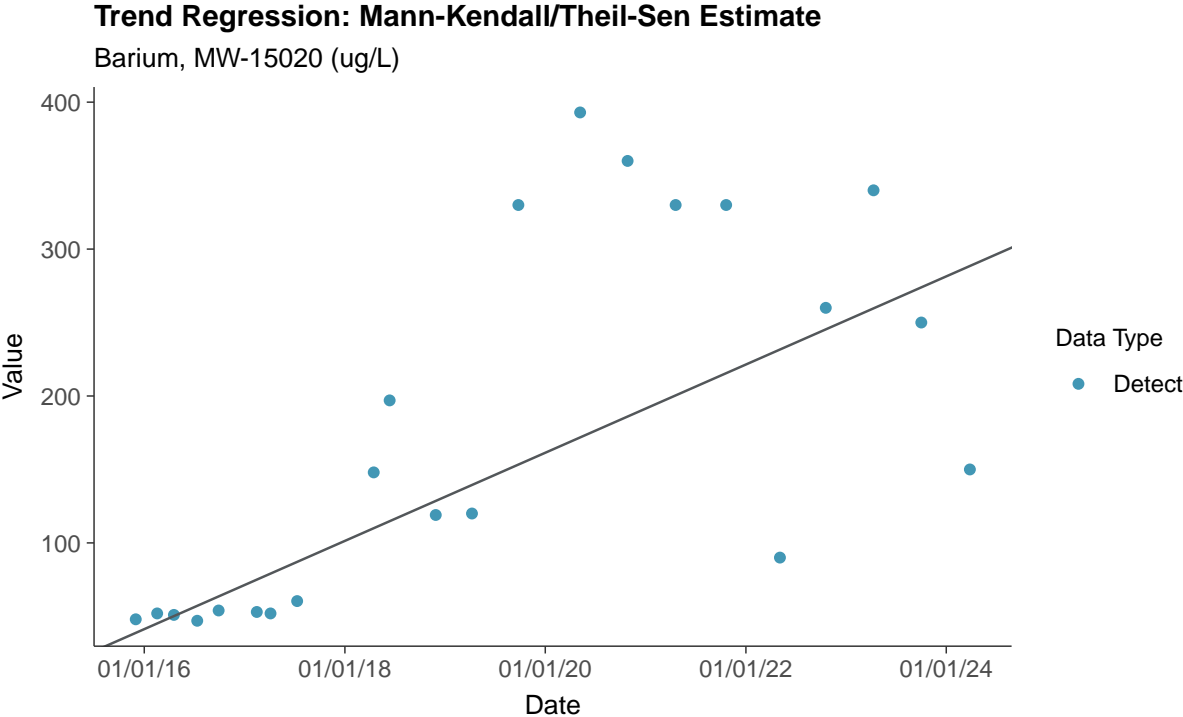
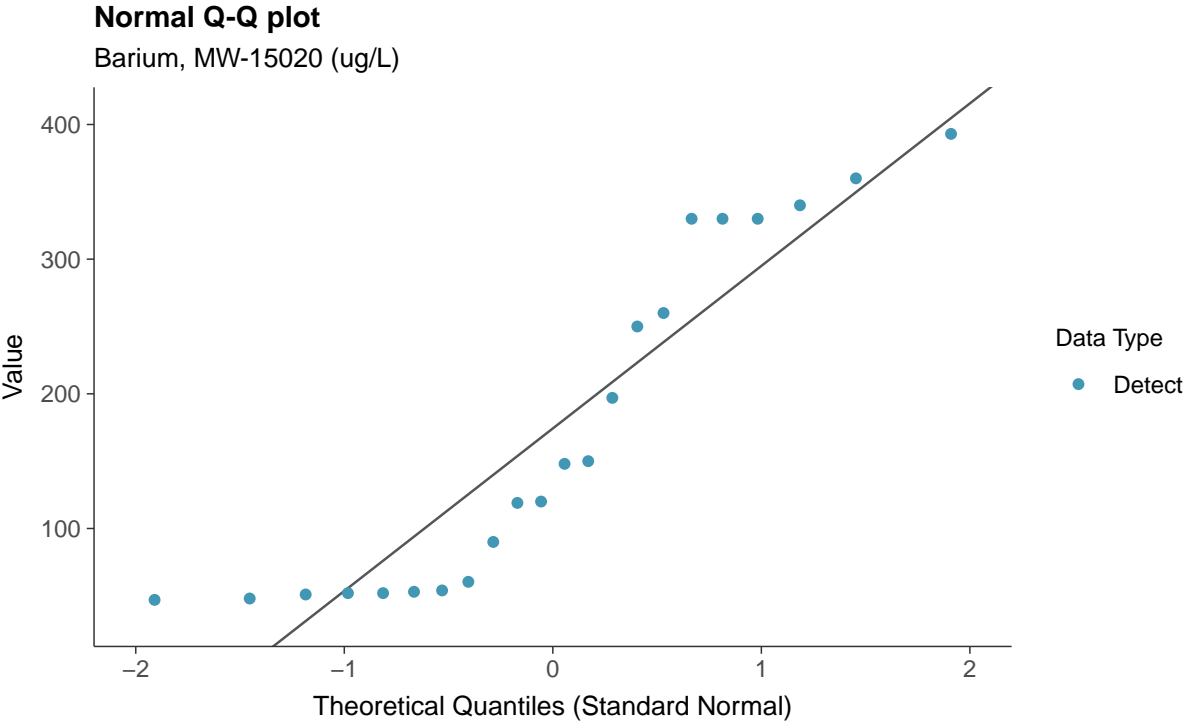
Barium, MW-15020 (ug/L)



Boxplot by Season

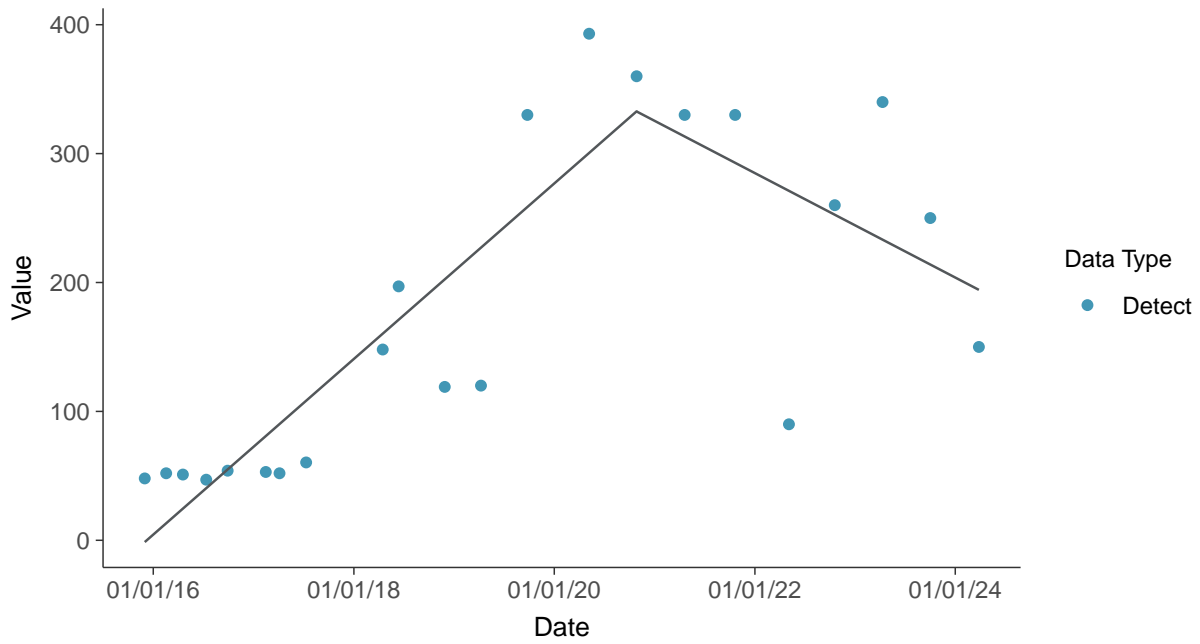
Barium, MW-15020 (ug/L)



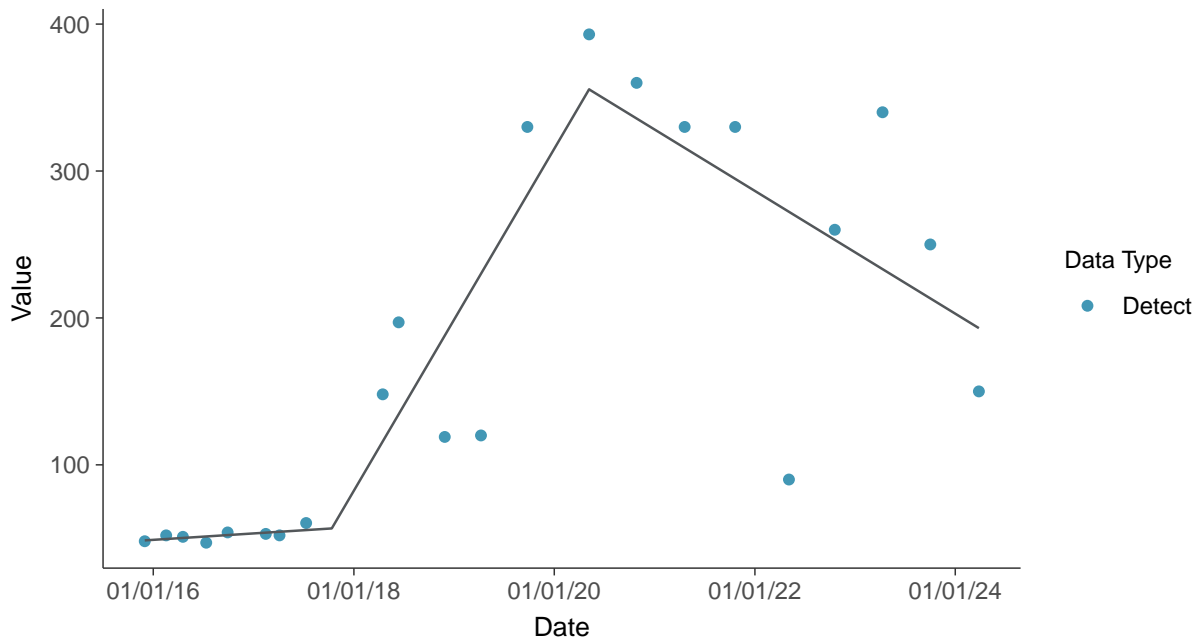




Trend Regression: Piecewise Linear-Linear
Barium, MW-15020 (ug/L)



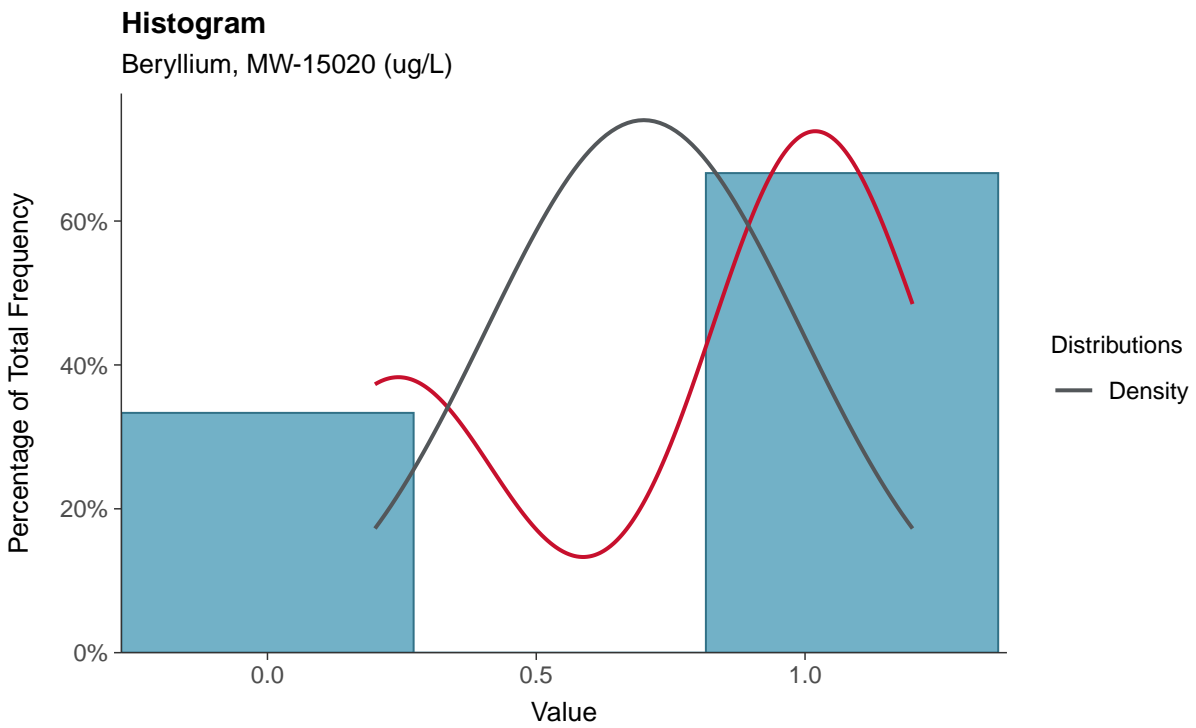
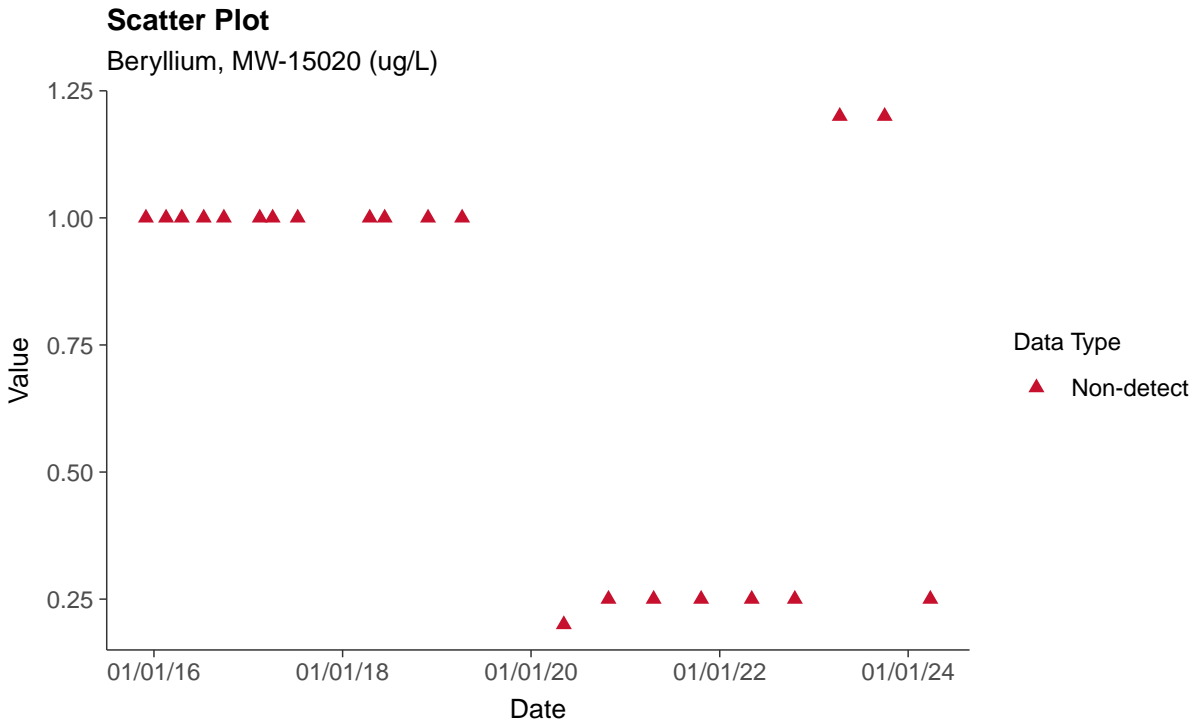
Trend Regression: Piecewise Linear-Linear-Linear
Barium, MW-15020 (ug/L)





Appendix IV: Beryllium, MW-15020

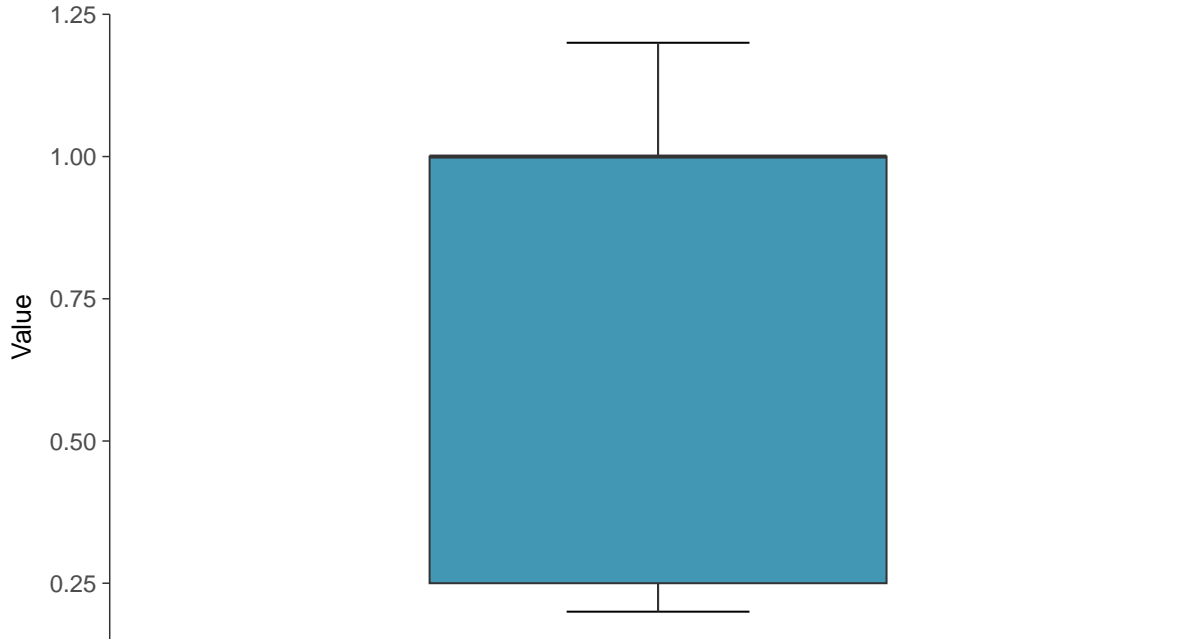
ID: 10_2_104





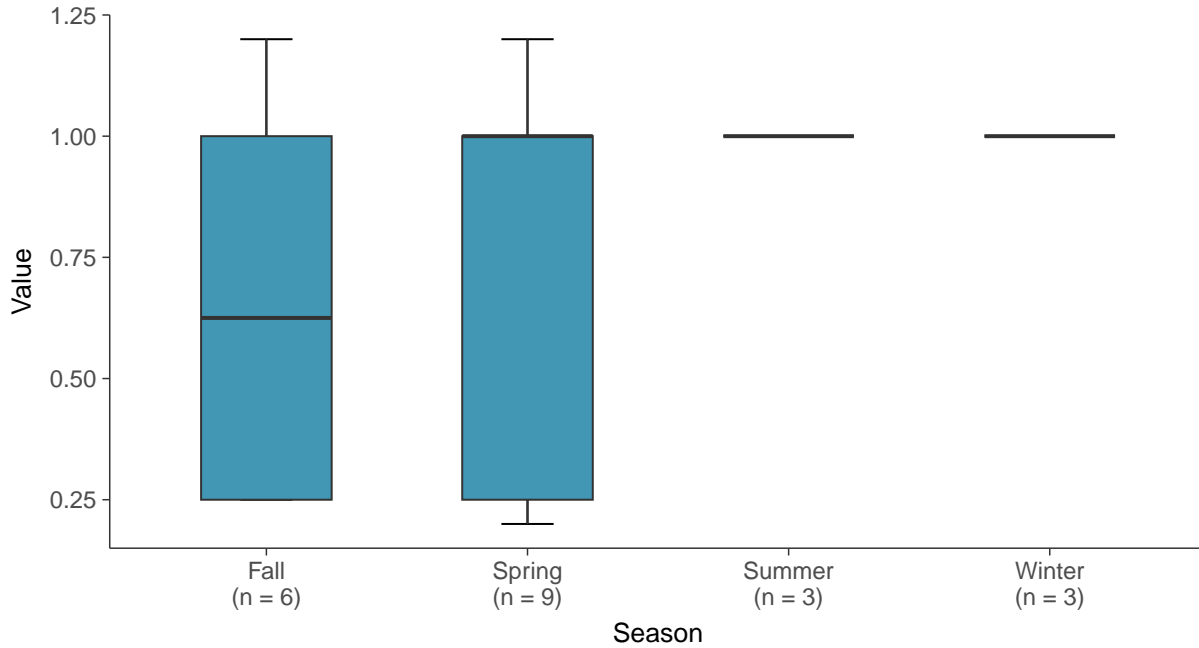
Boxplot

Beryllium, MW-15020 (ug/L)



Boxplot by Season

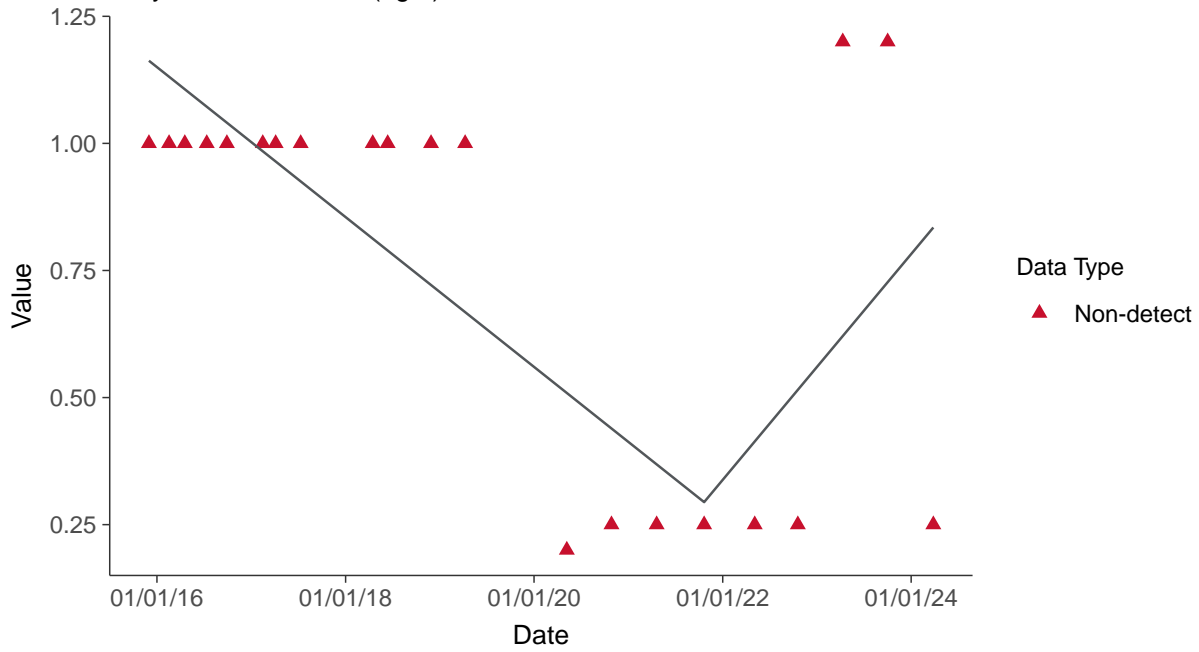
Beryllium, MW-15020 (ug/L)





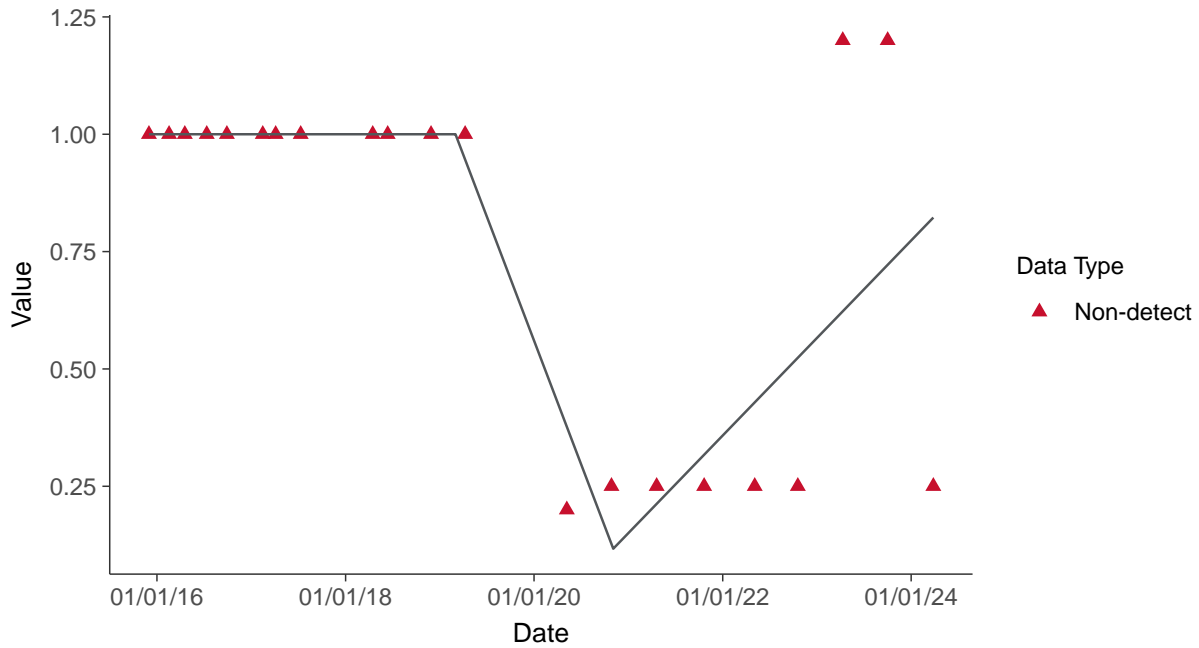
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

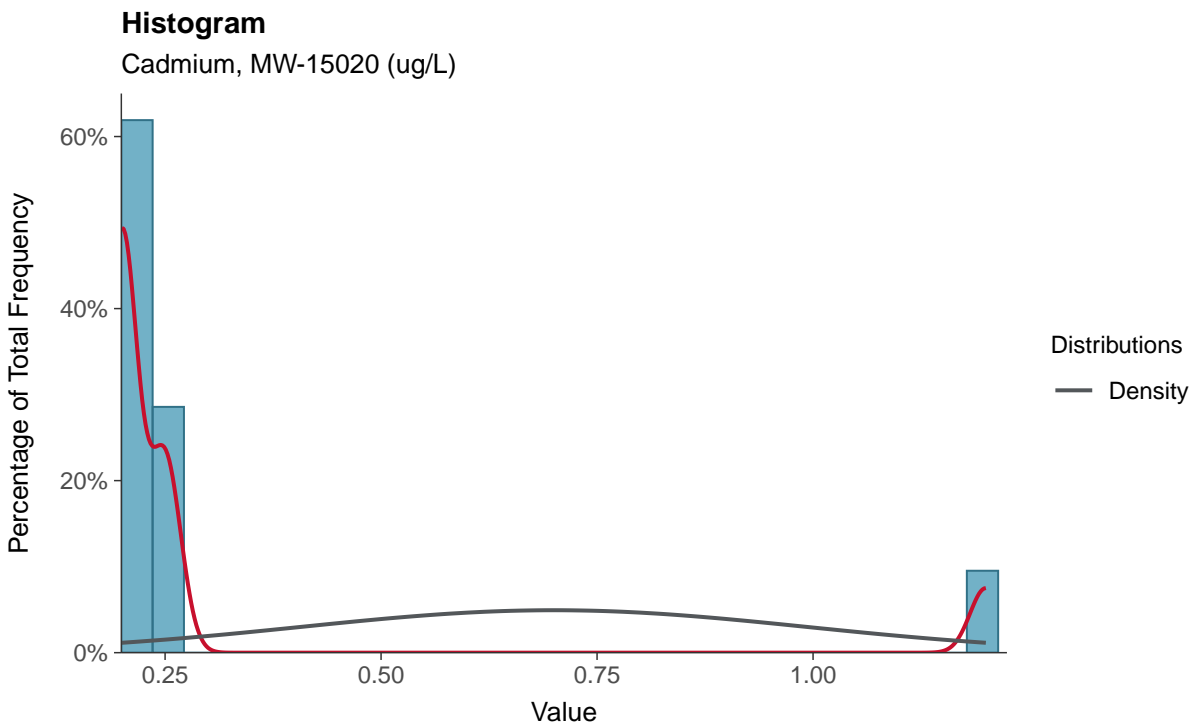
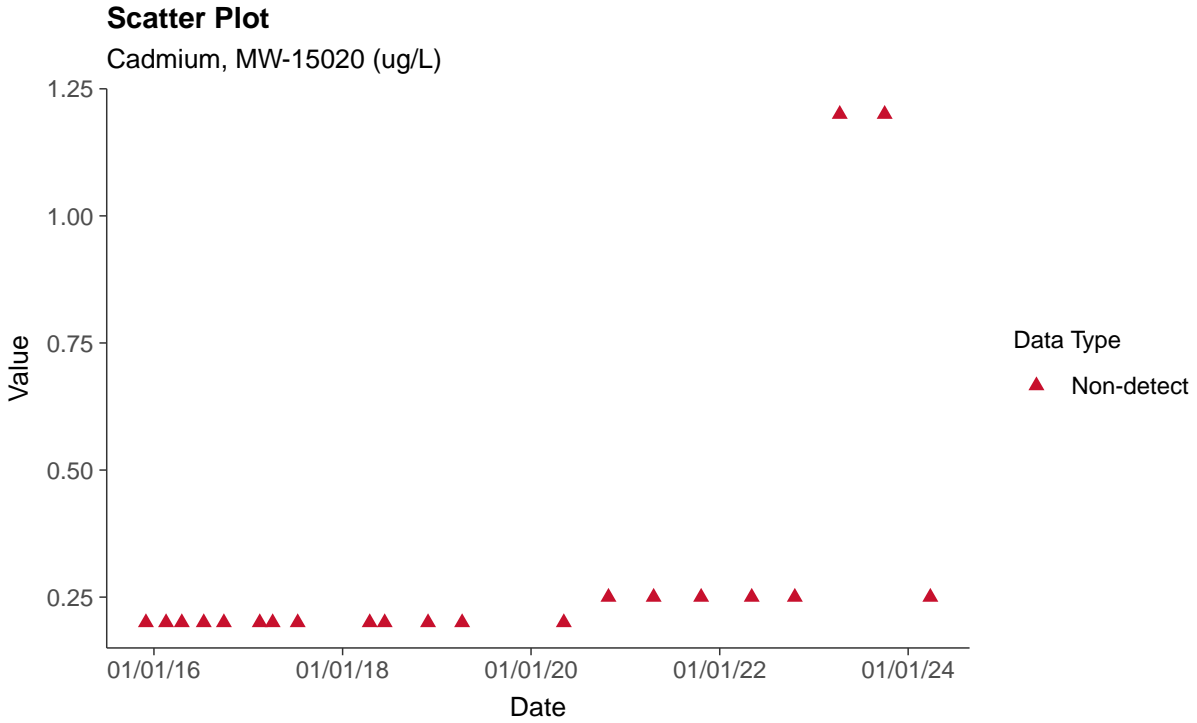
Beryllium, MW-15020 (ug/L)

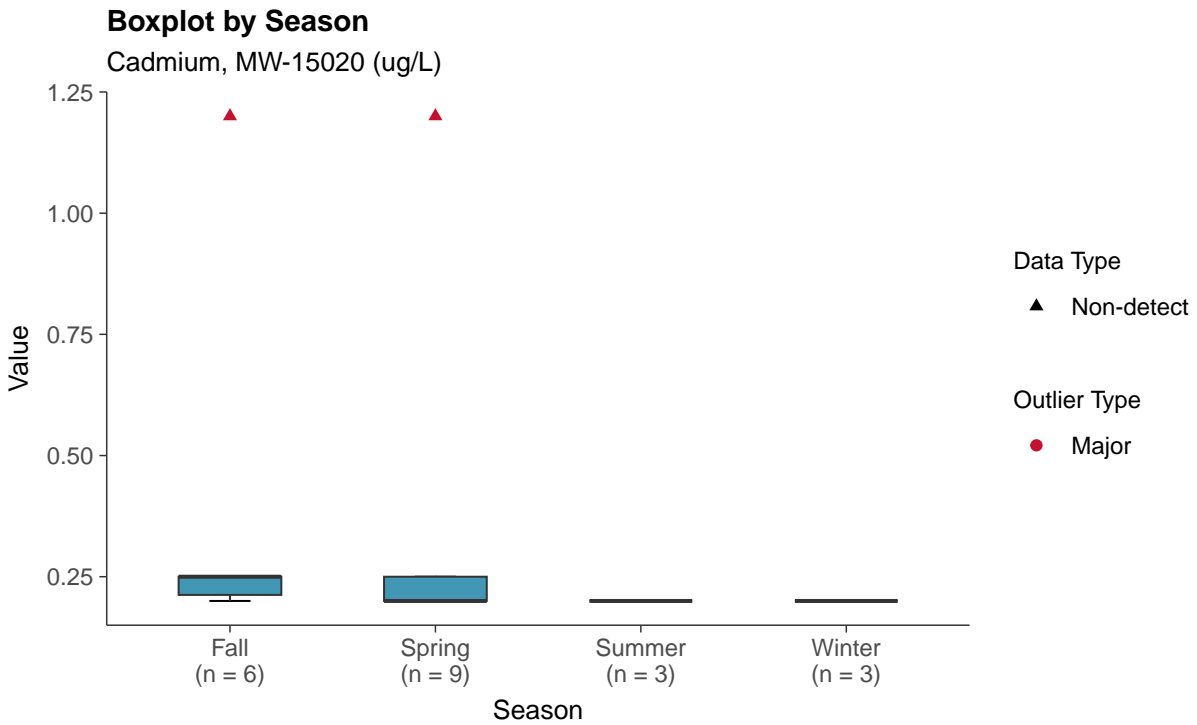
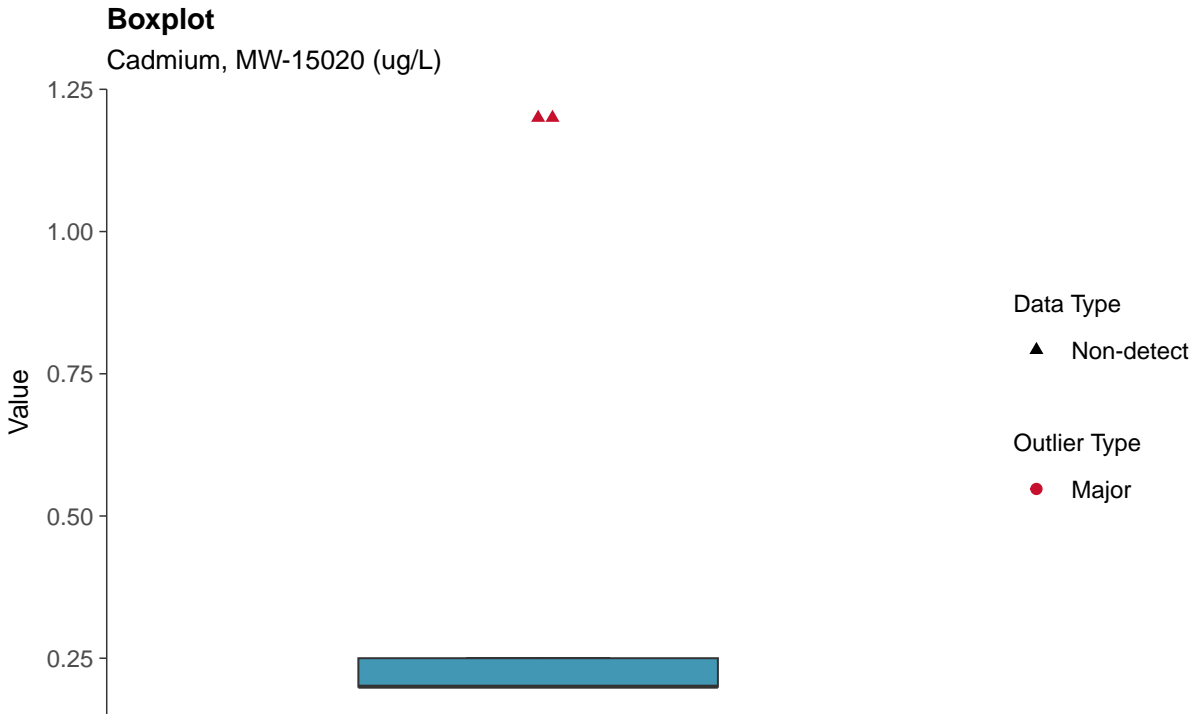




Appendix IV: Cadmium, MW-15020

ID: 10_2_106

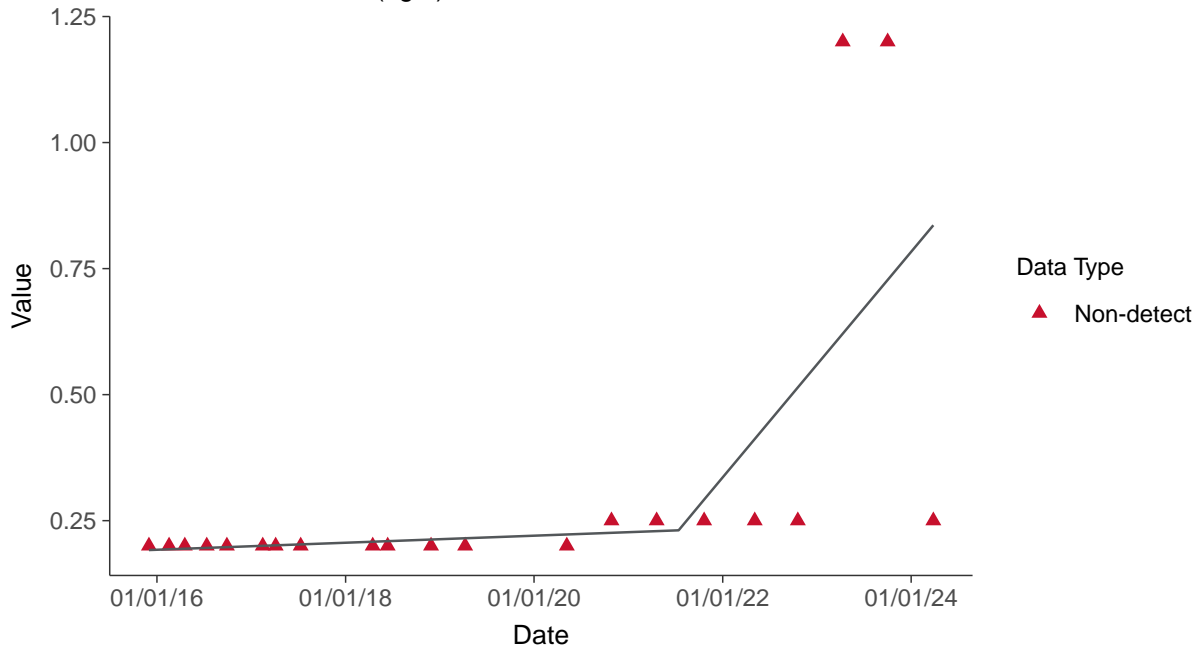






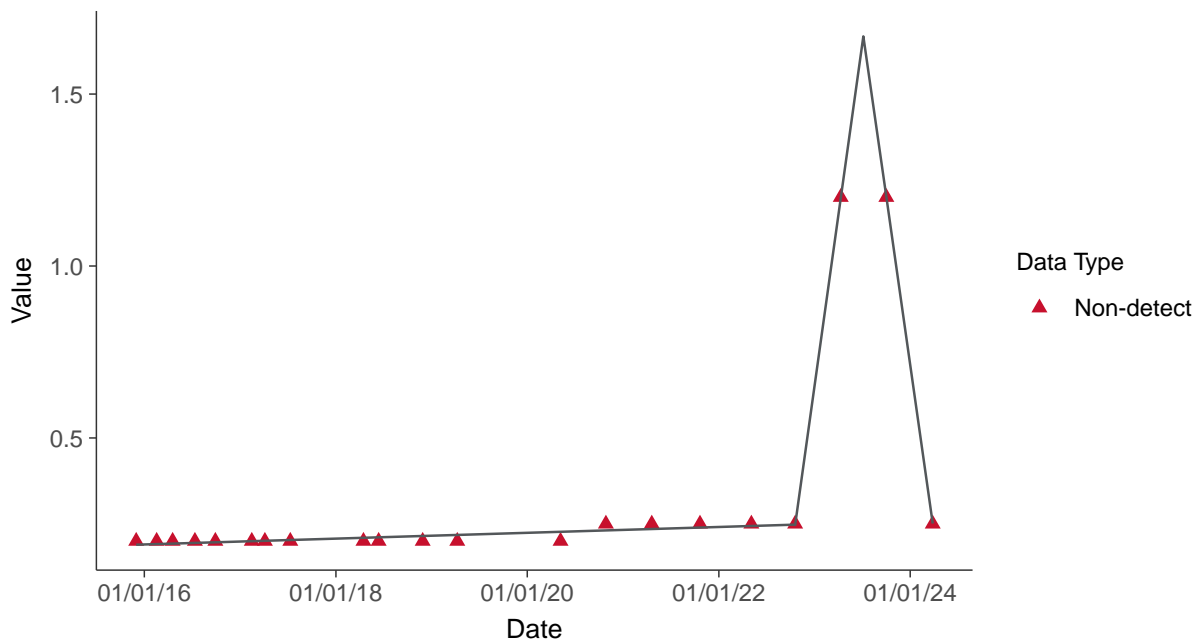
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

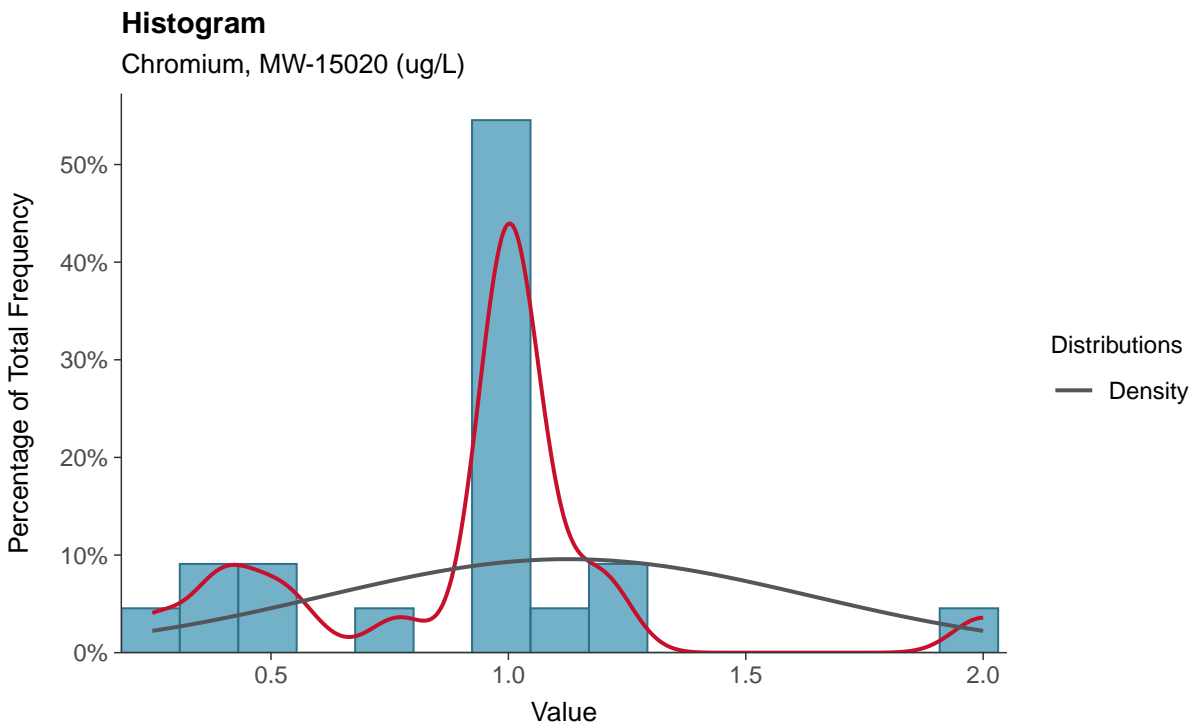
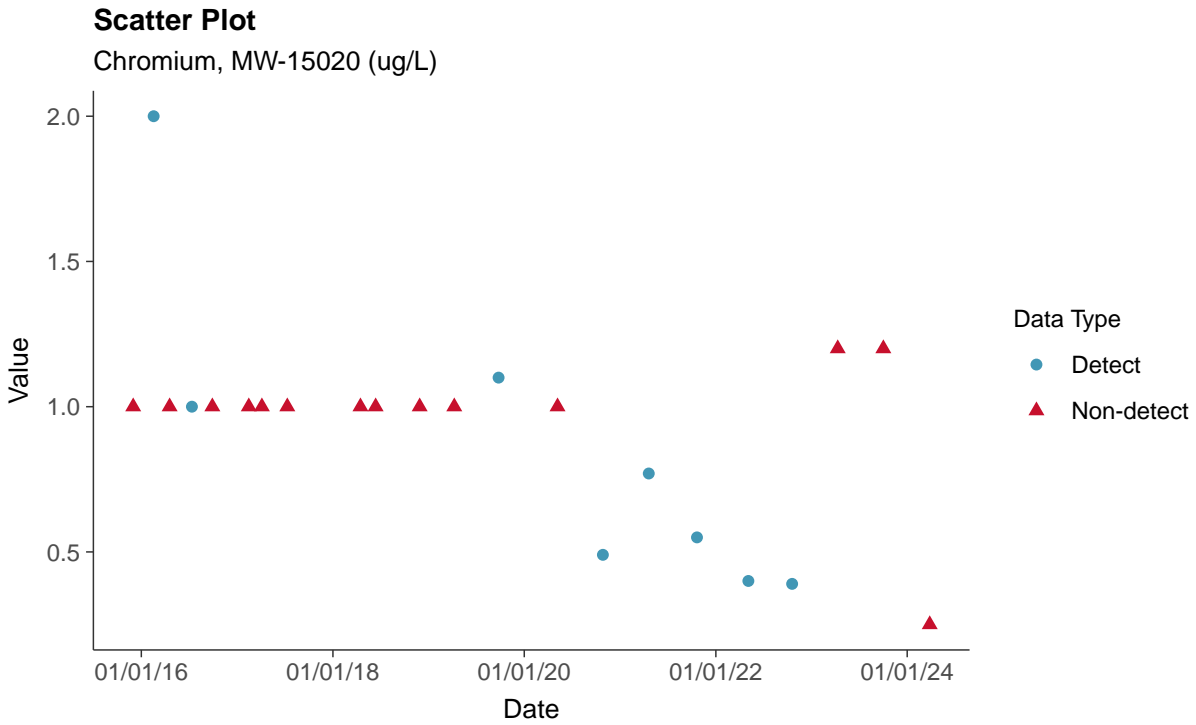
Cadmium, MW-15020 (ug/L)





Appendix IV: Chromium, MW-15020

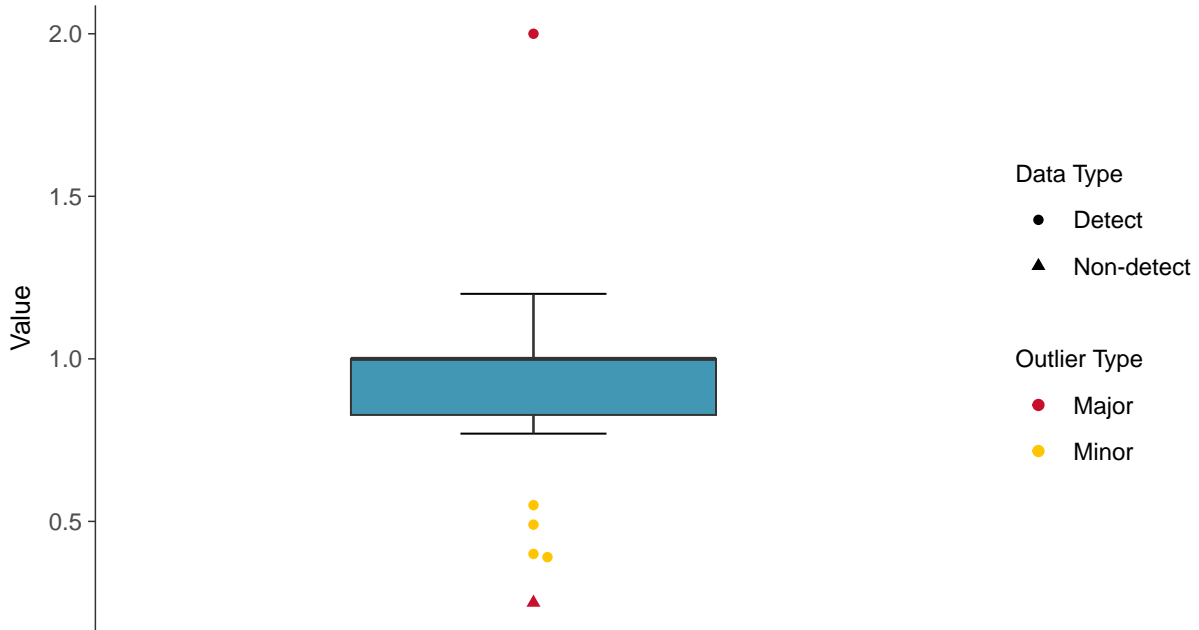
ID: 10_2_109





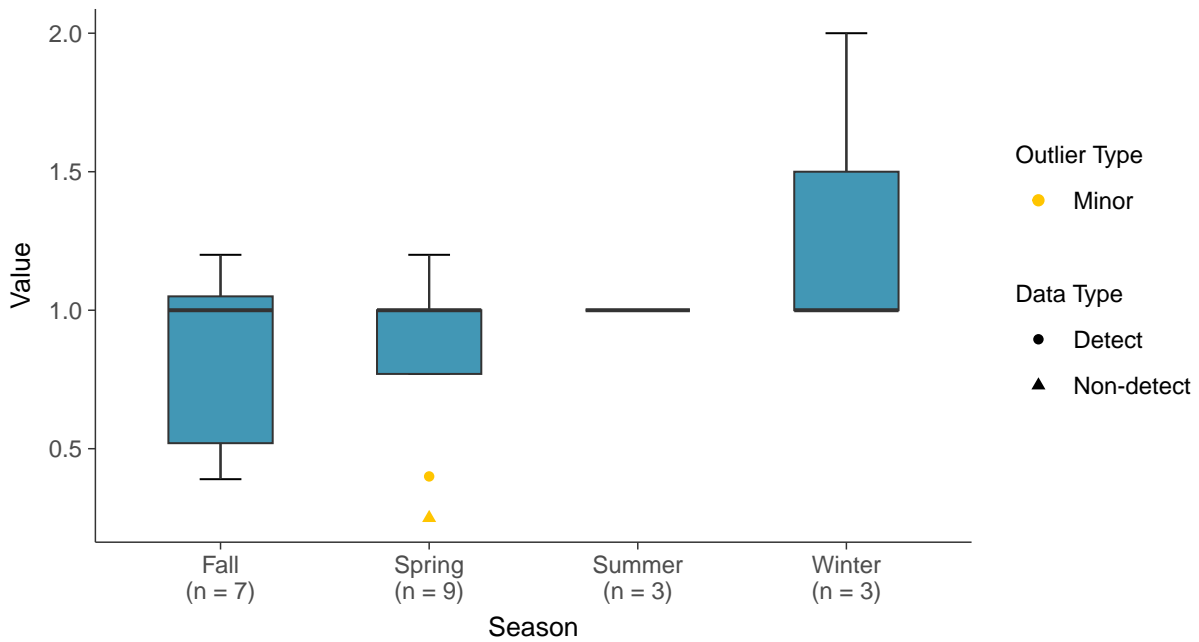
Boxplot

Chromium, MW-15020 (ug/L)



Boxplot by Season

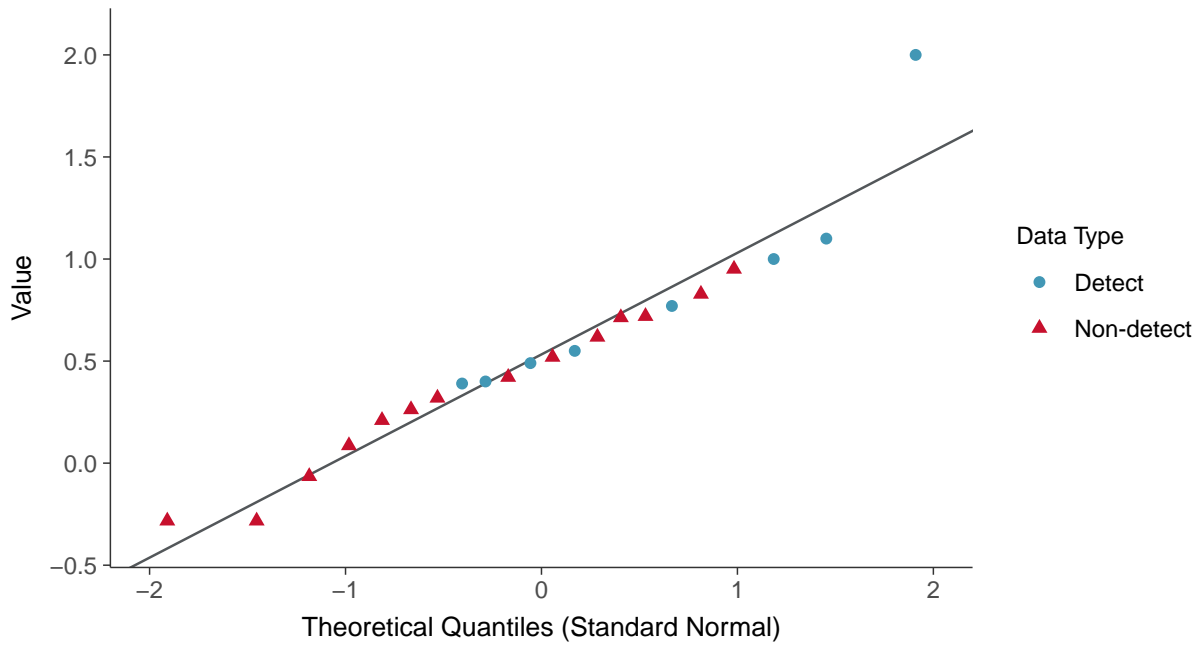
Chromium, MW-15020 (ug/L)





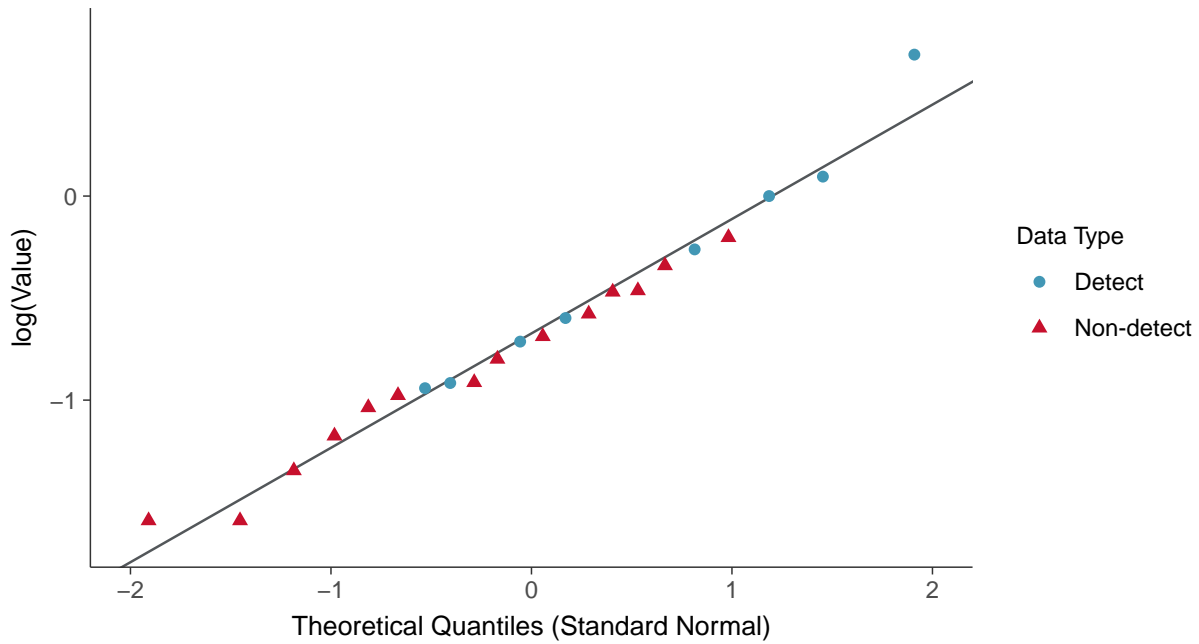
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15020 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

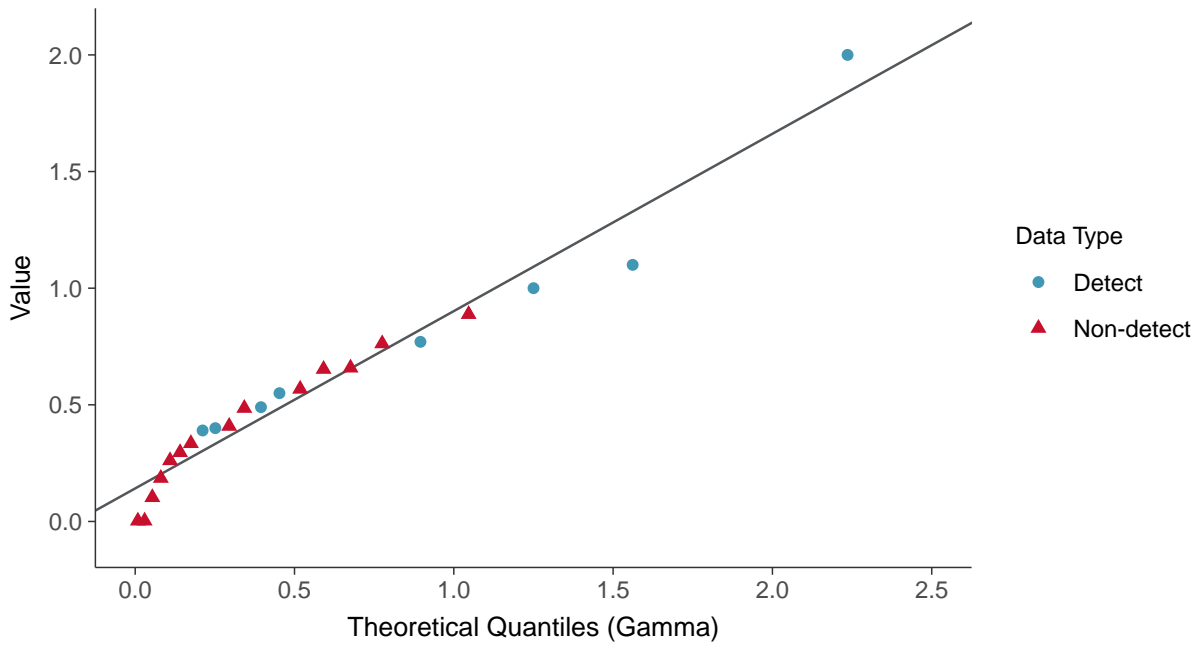
Chromium, MW-15020 (ug/L)





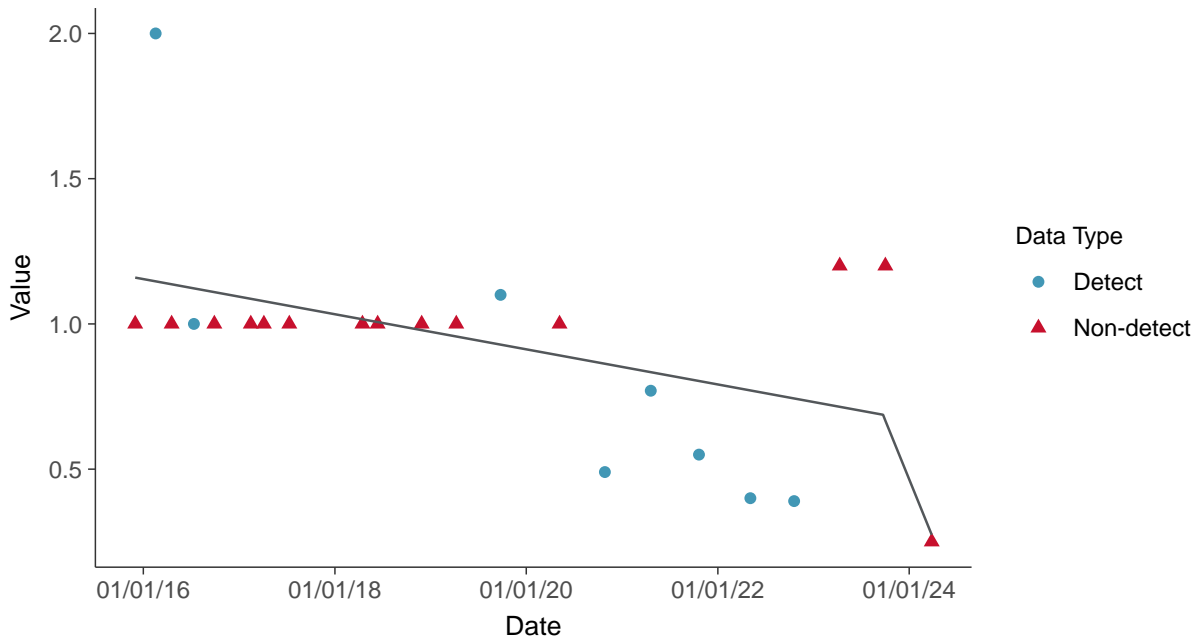
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear

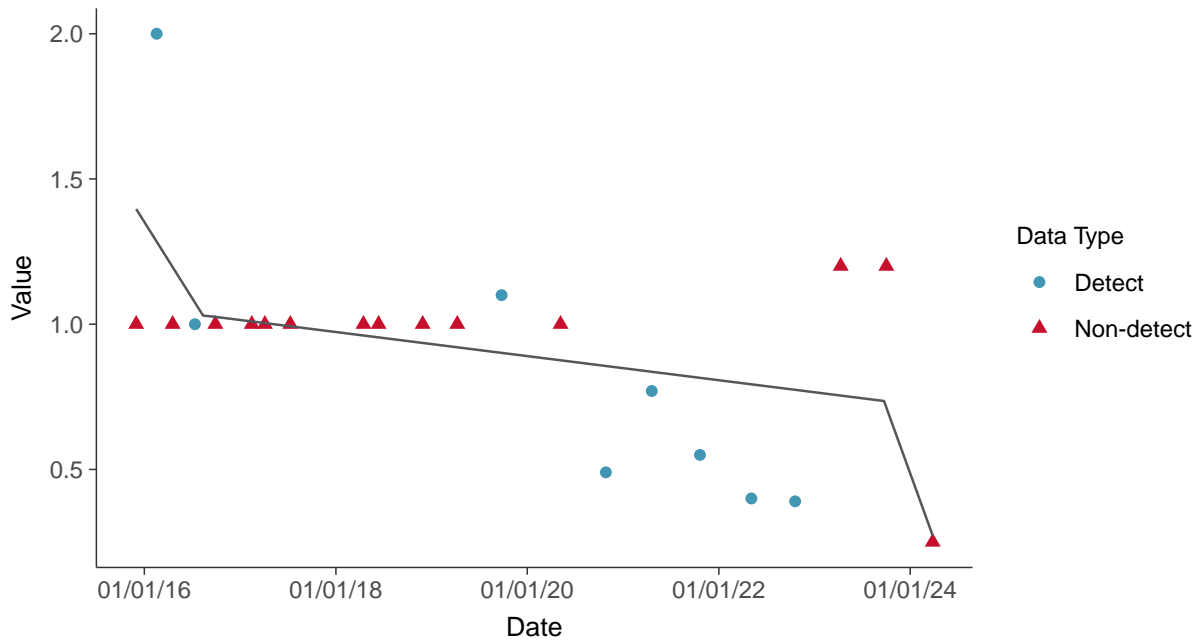
Chromium, MW-15020 (ug/L)





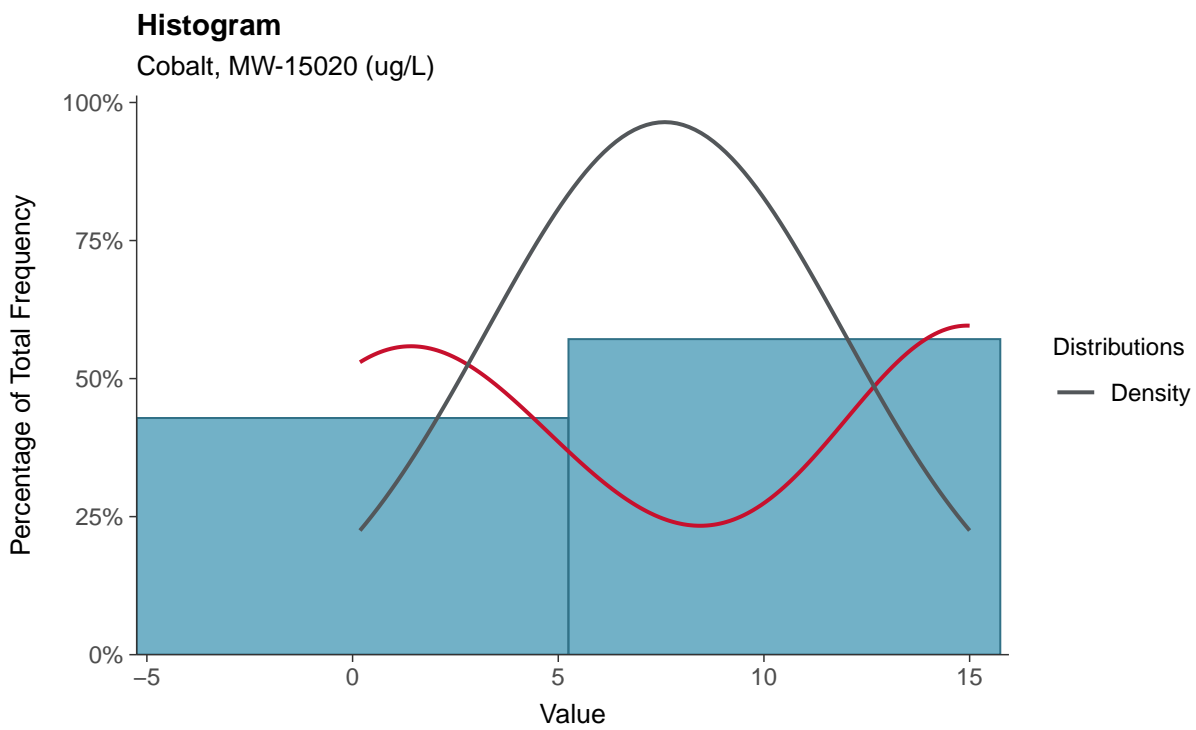
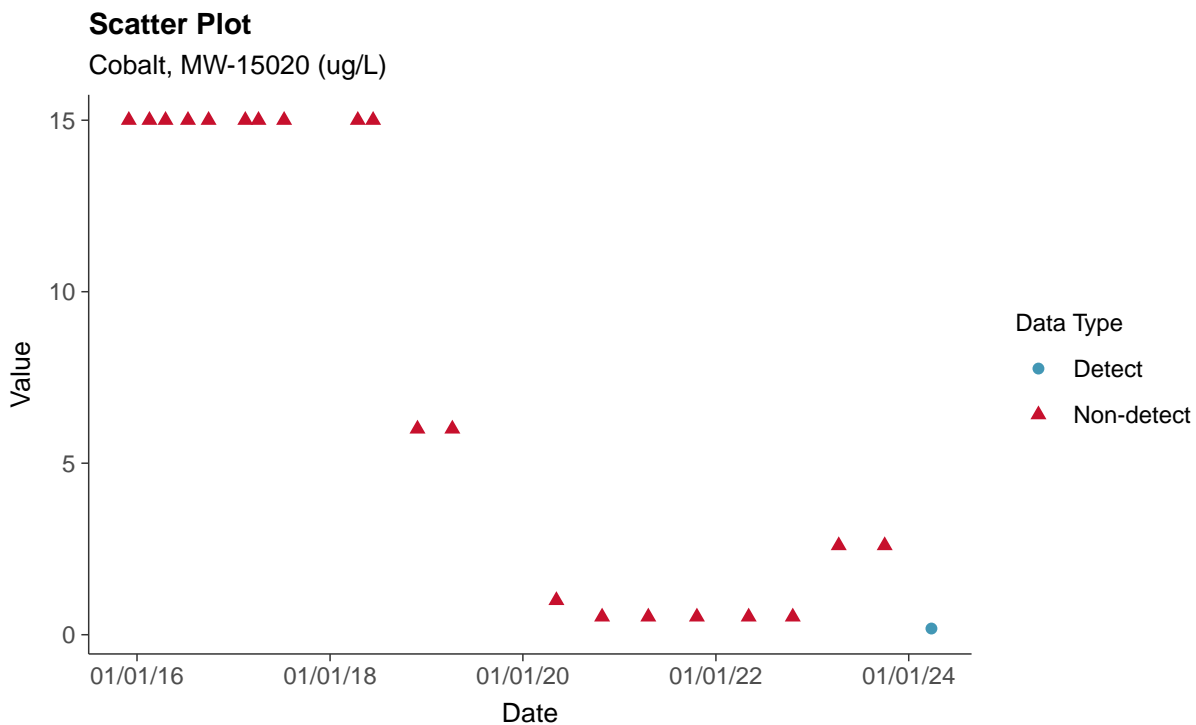
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, MW-15020 (ug/L)



Appendix IV: Cobalt, MW-15020

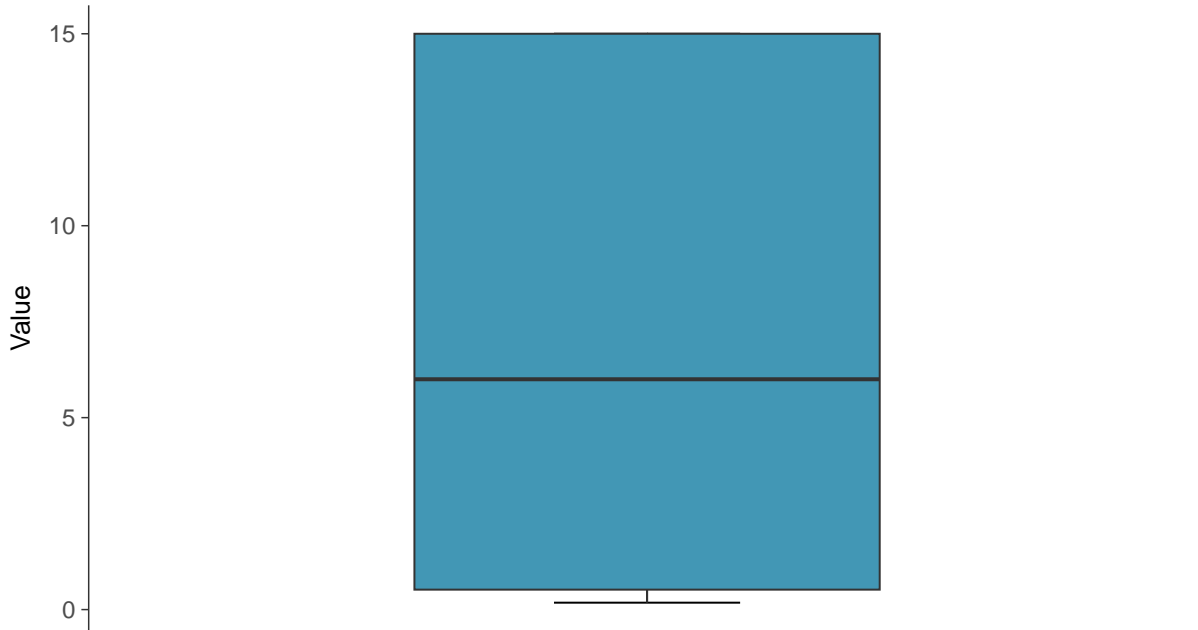
ID: 10_2_110





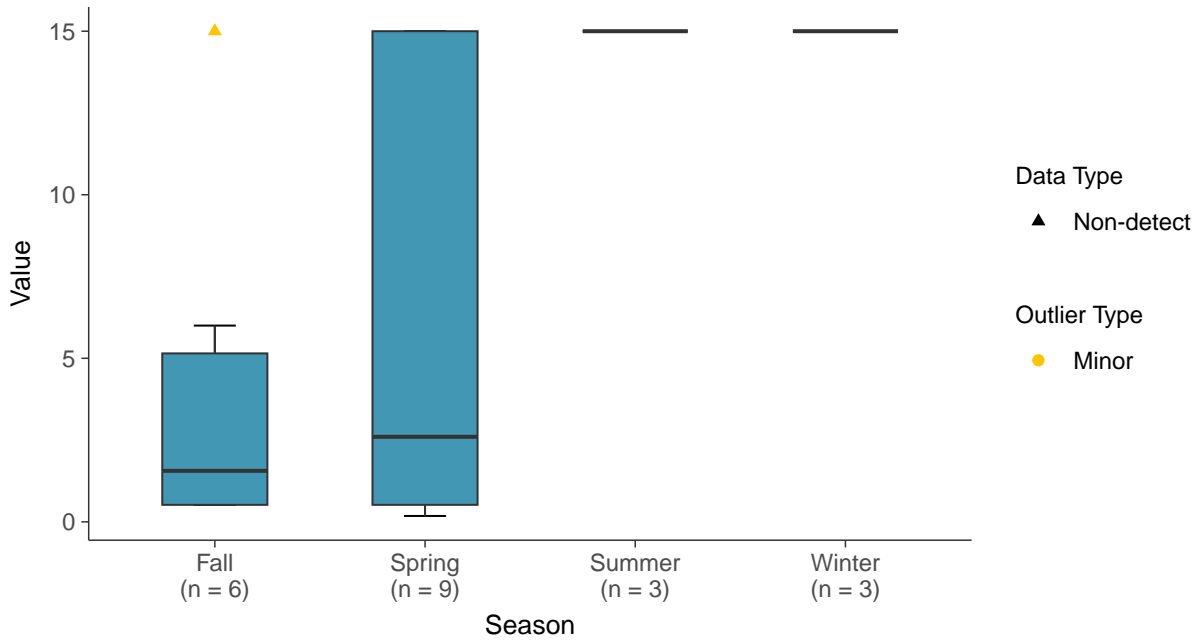
Boxplot

Cobalt, MW-15020 (ug/L)



Boxplot by Season

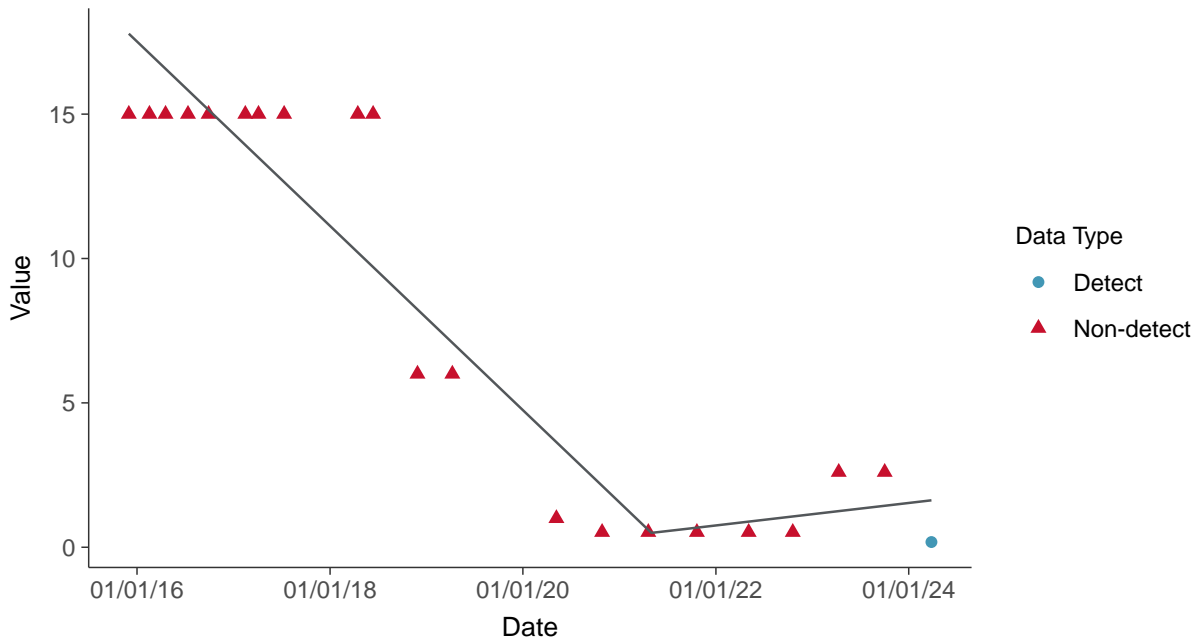
Cobalt, MW-15020 (ug/L)





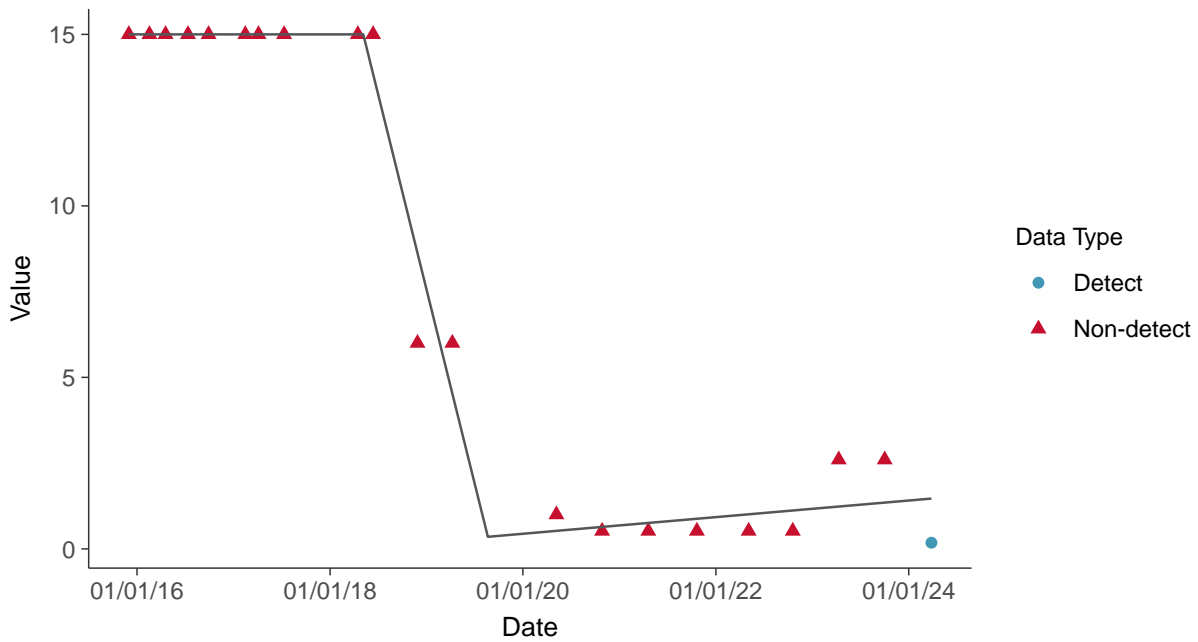
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

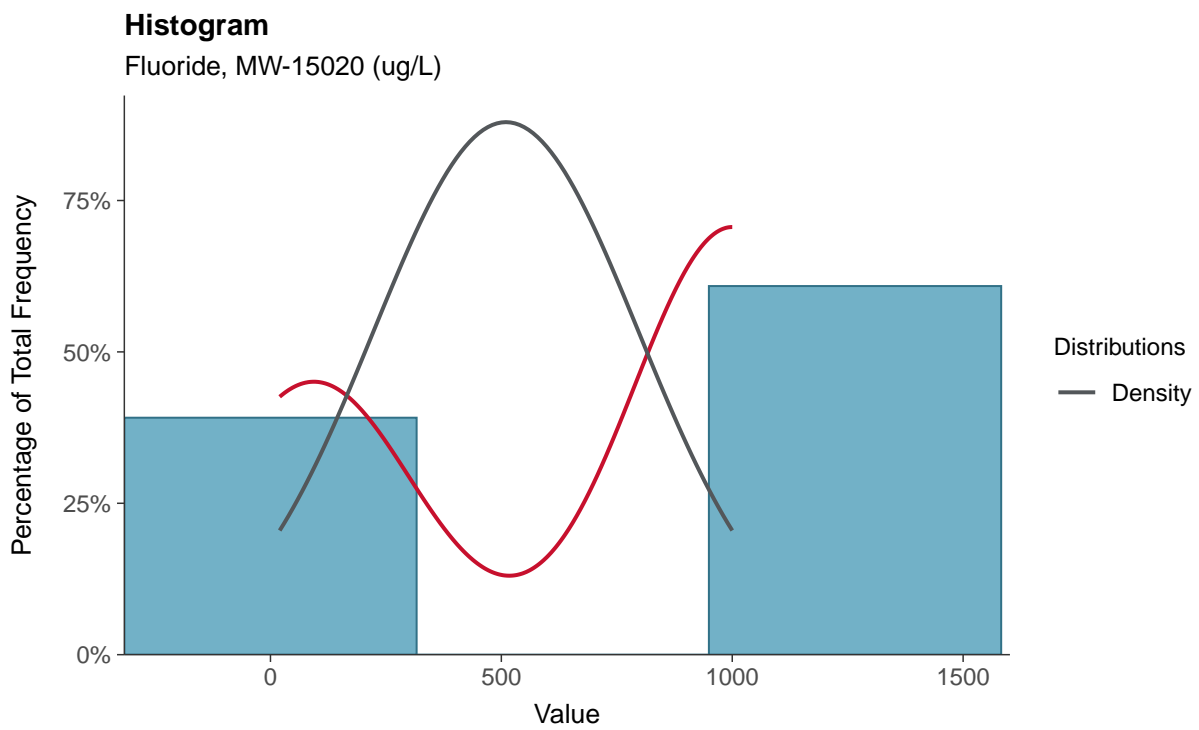
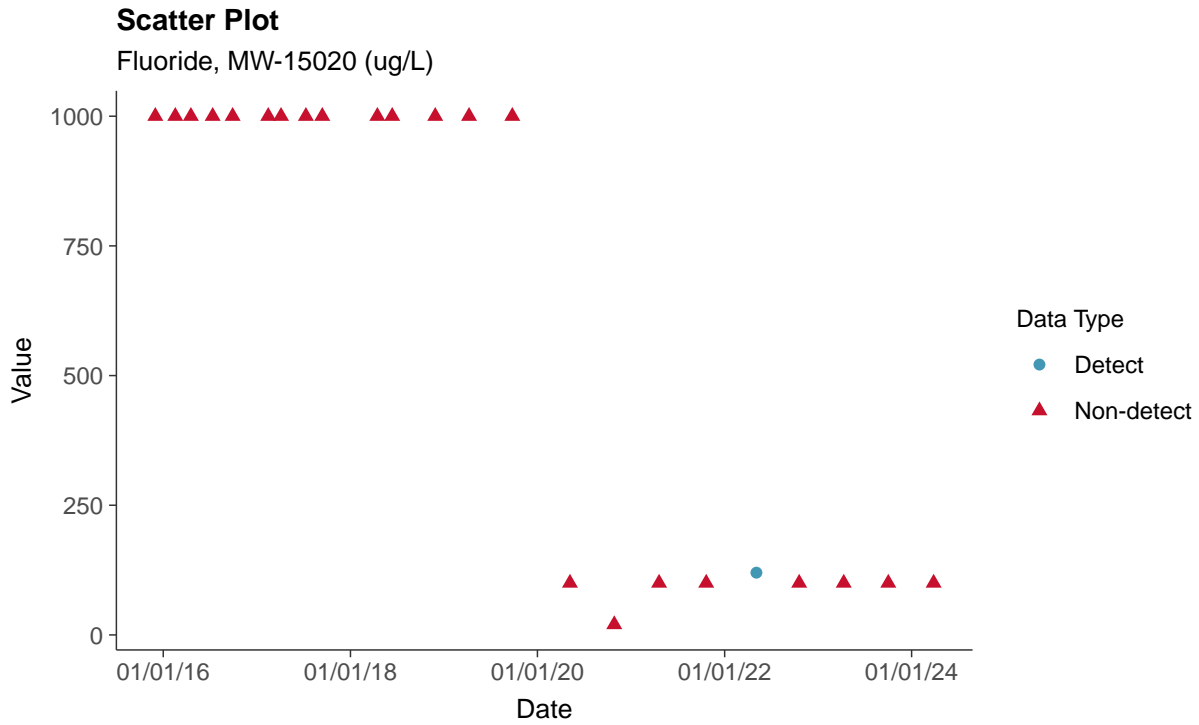
Cobalt, MW-15020 (ug/L)





Appendix IV: Fluoride, MW-15020

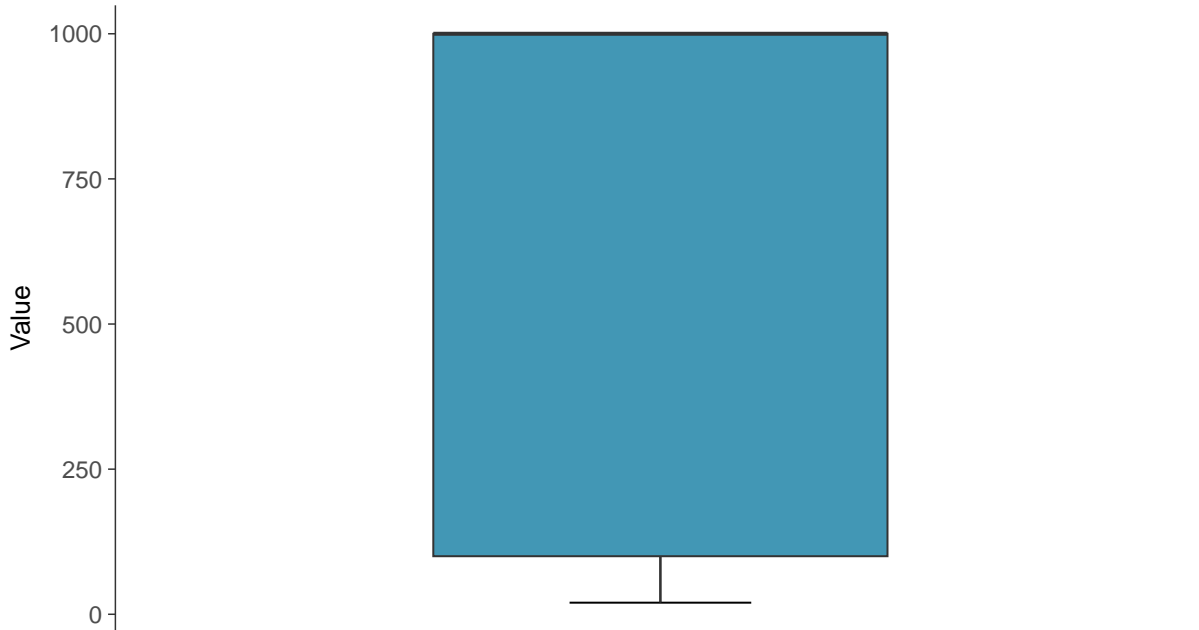
ID: 10_2_114





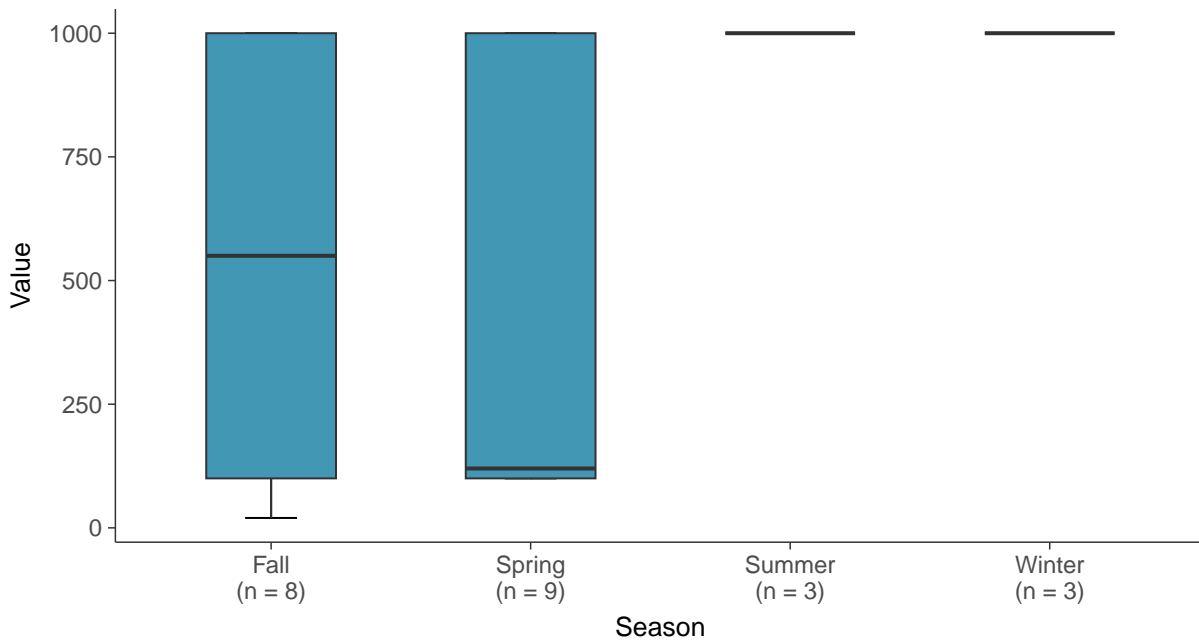
Boxplot

Fluoride, MW-15020 (ug/L)



Boxplot by Season

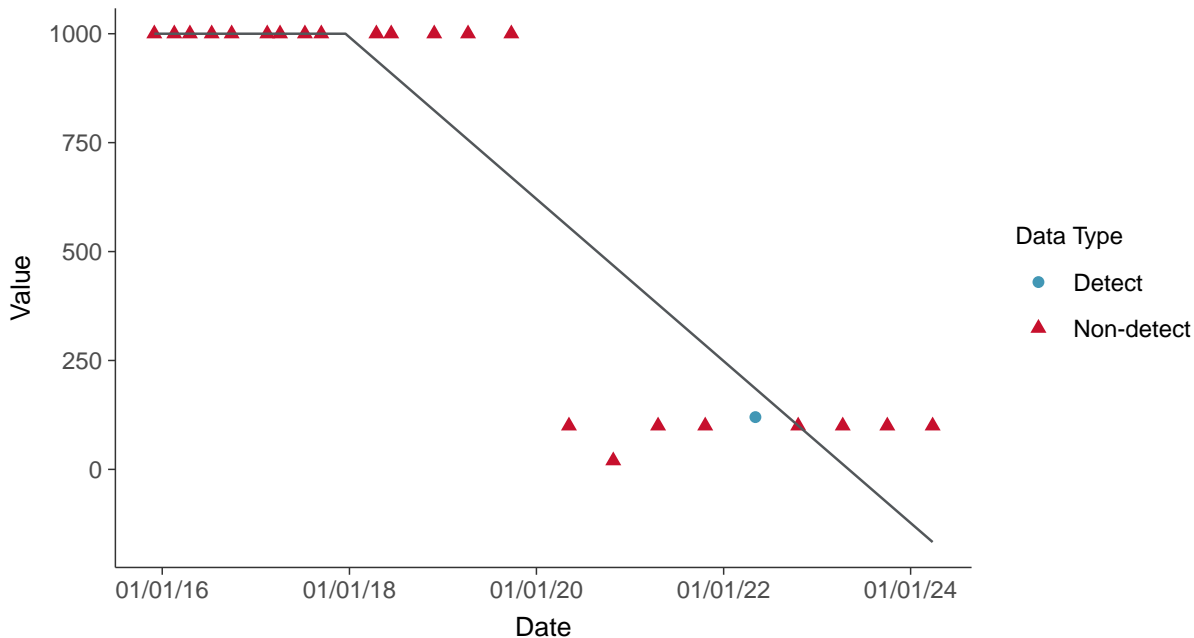
Fluoride, MW-15020 (ug/L)





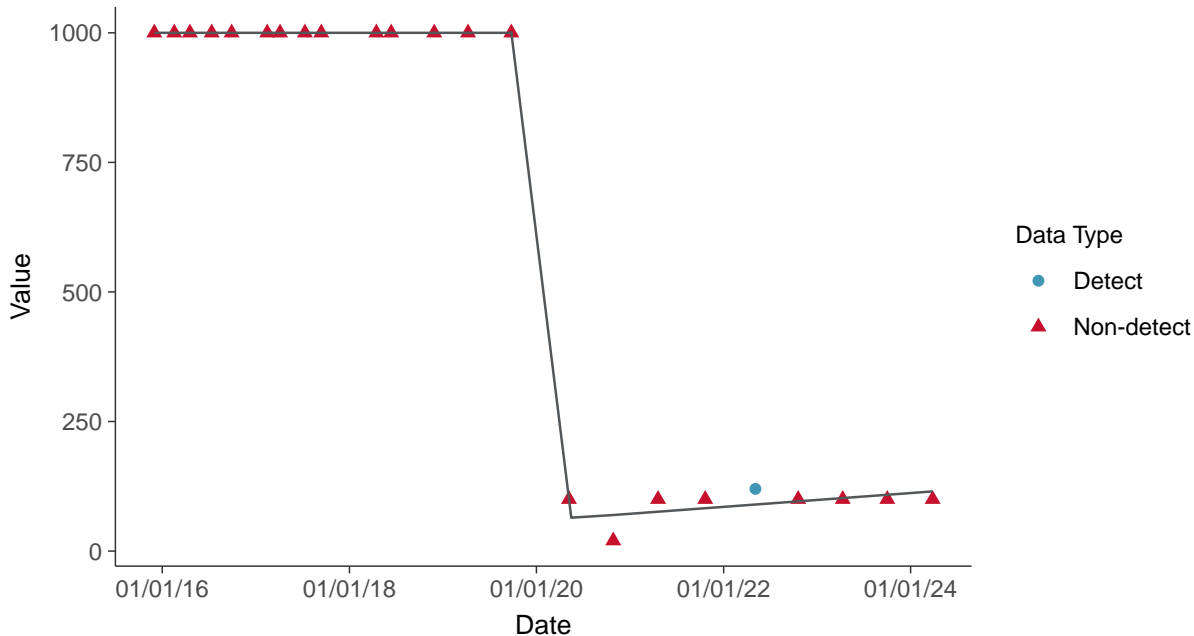
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-15020 (ug/L)



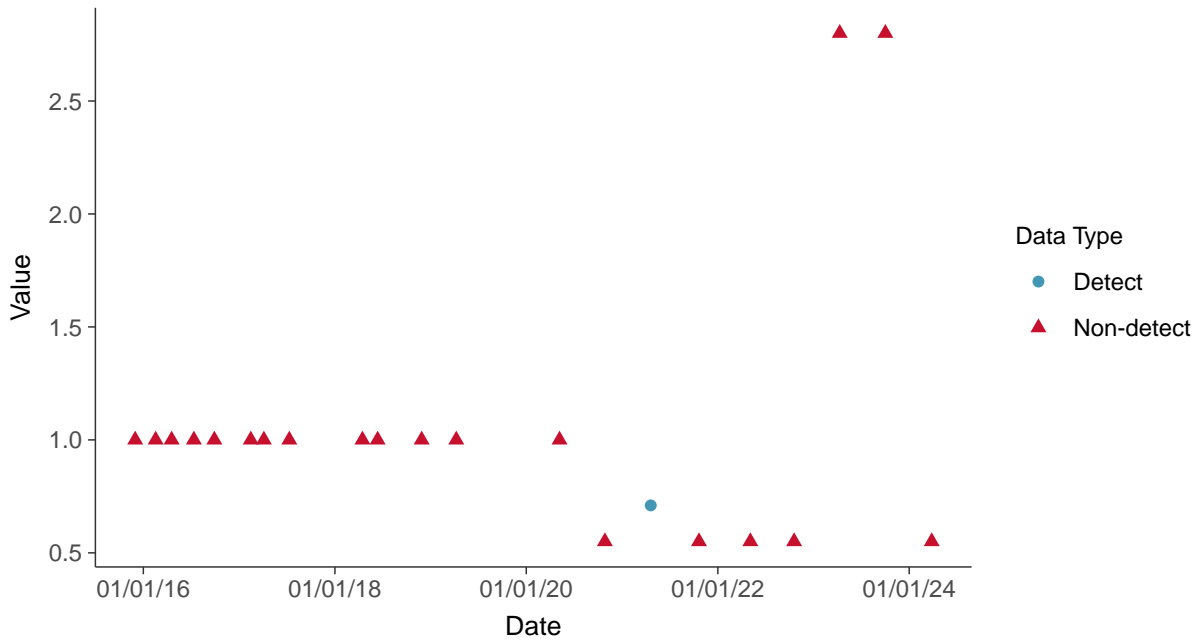


Appendix IV: Lead, MW-15020

ID: 10_2_116

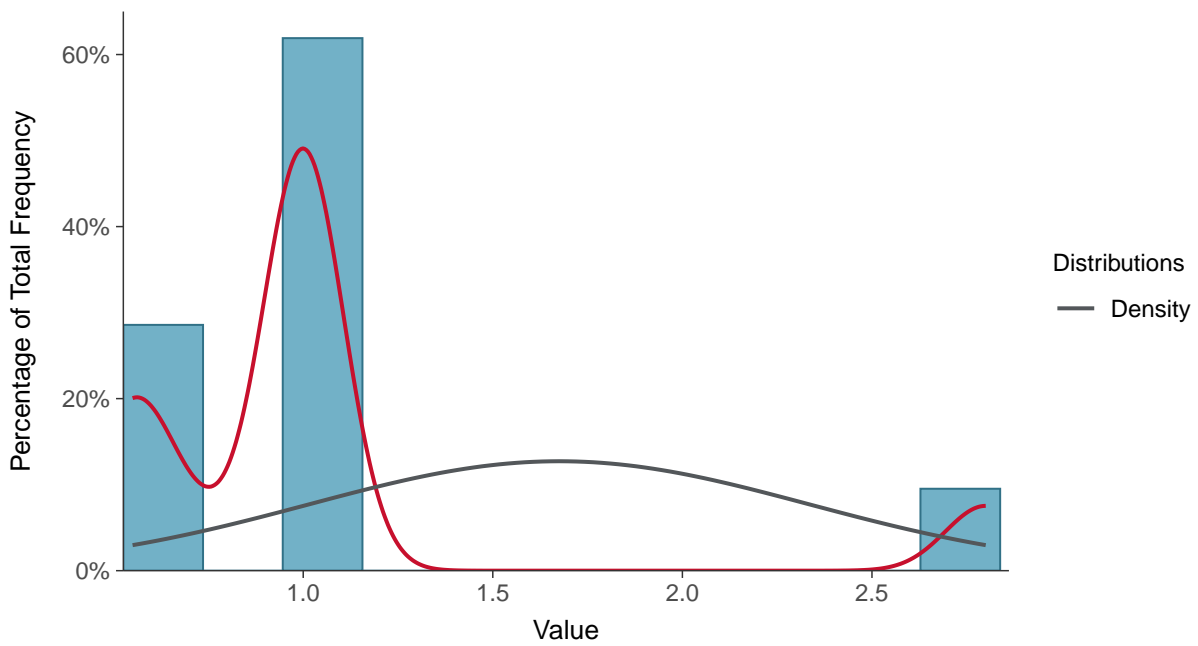
Scatter Plot

Lead, MW-15020 (ug/L)



Histogram

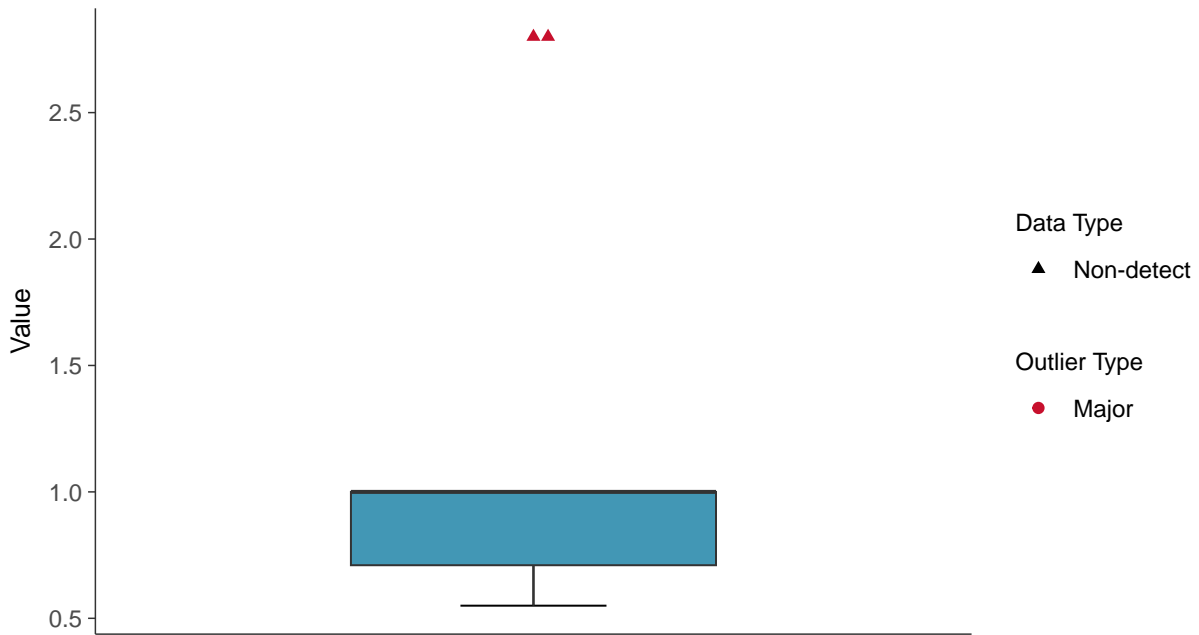
Lead, MW-15020 (ug/L)





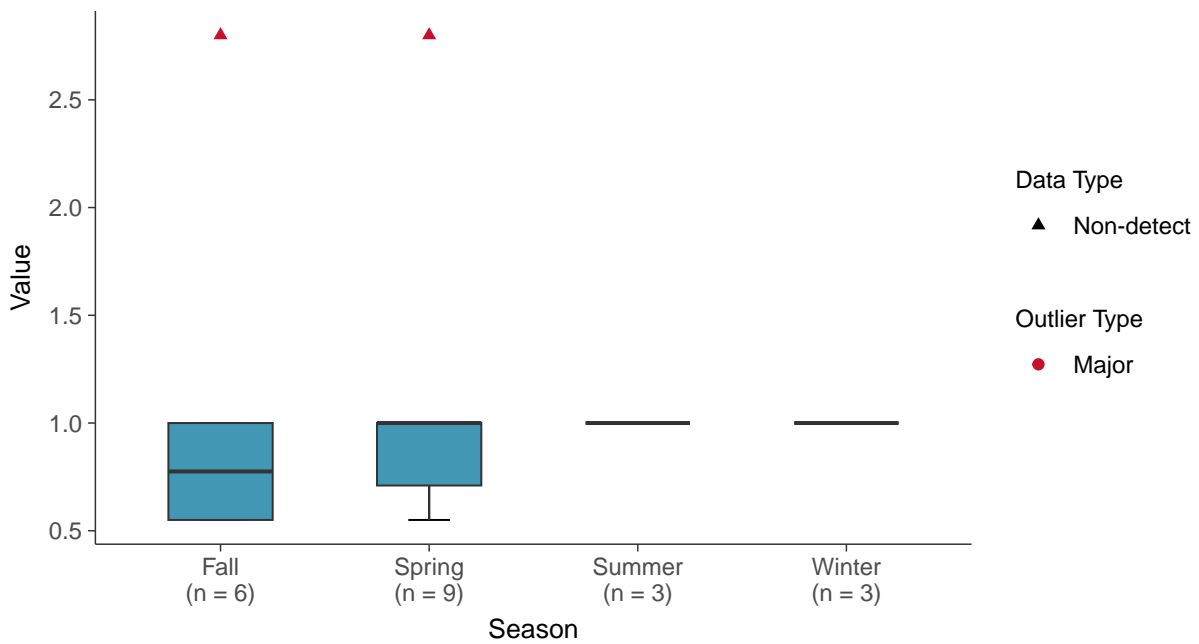
Boxplot

Lead, MW-15020 (ug/L)



Boxplot by Season

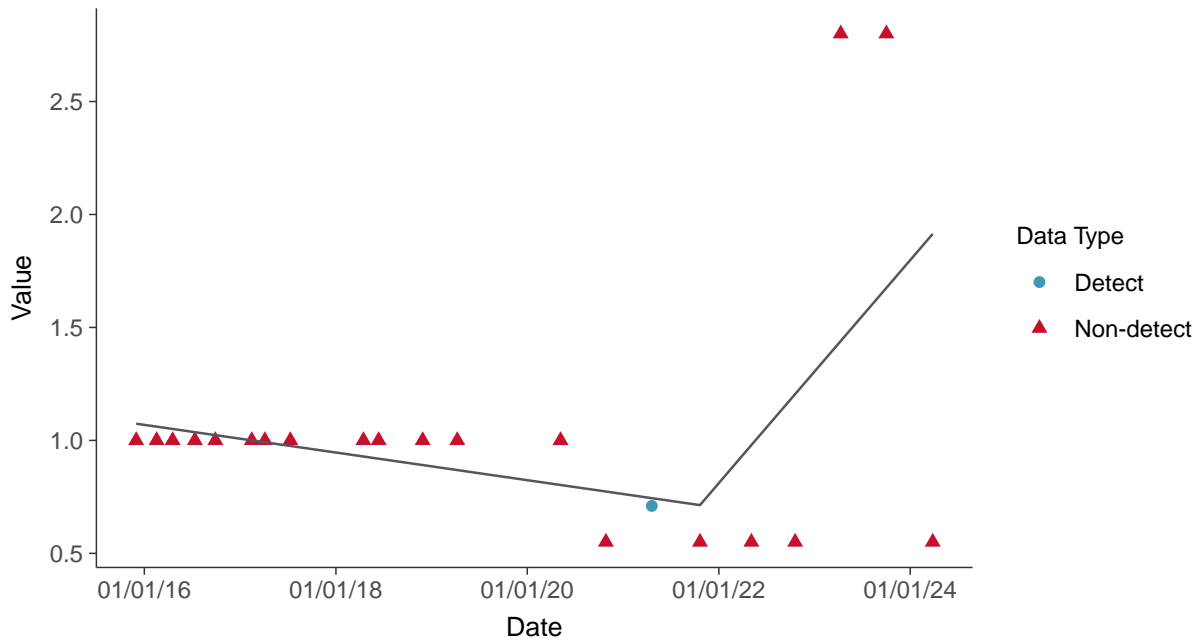
Lead, MW-15020 (ug/L)





Trend Regression: Piecewise Linear-Linear

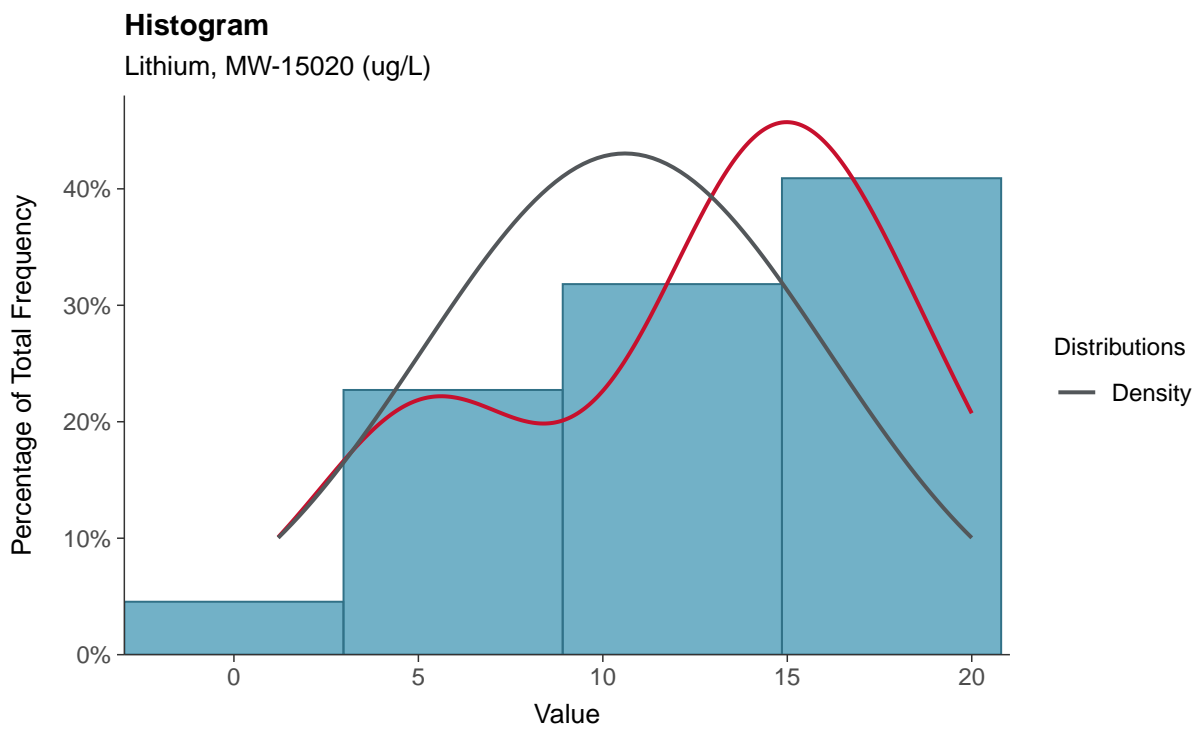
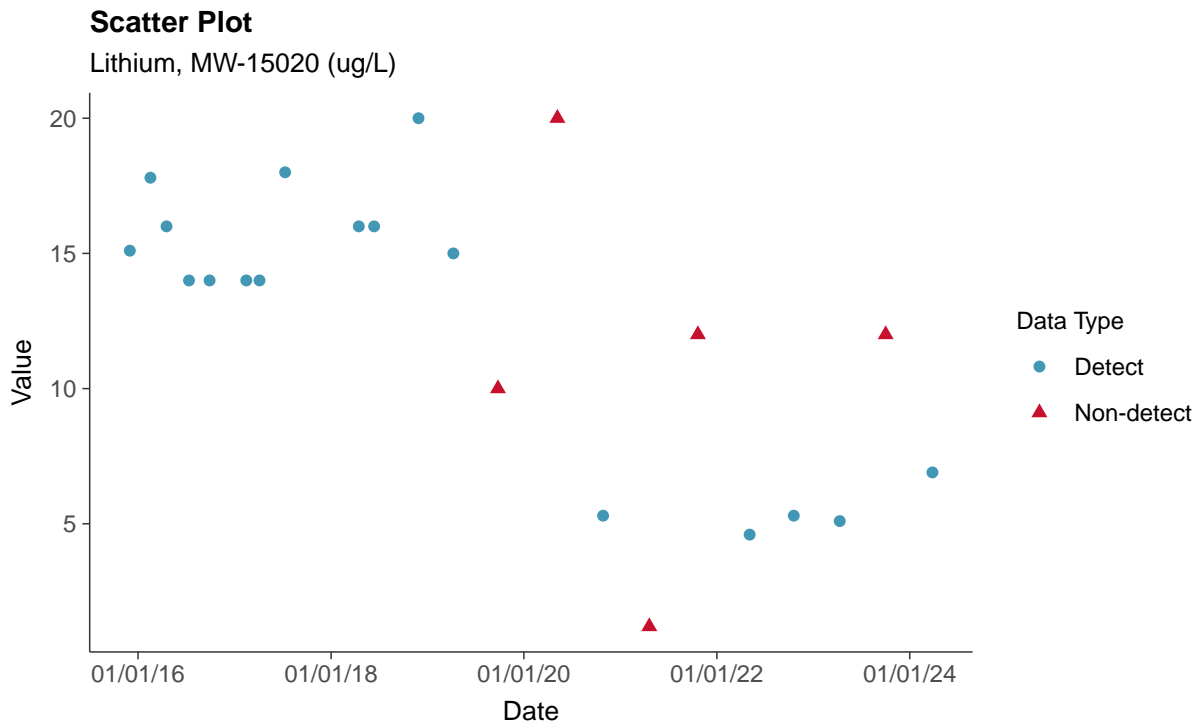
Lead, MW-15020 (ug/L)





Appendix IV: Lithium, MW-15020

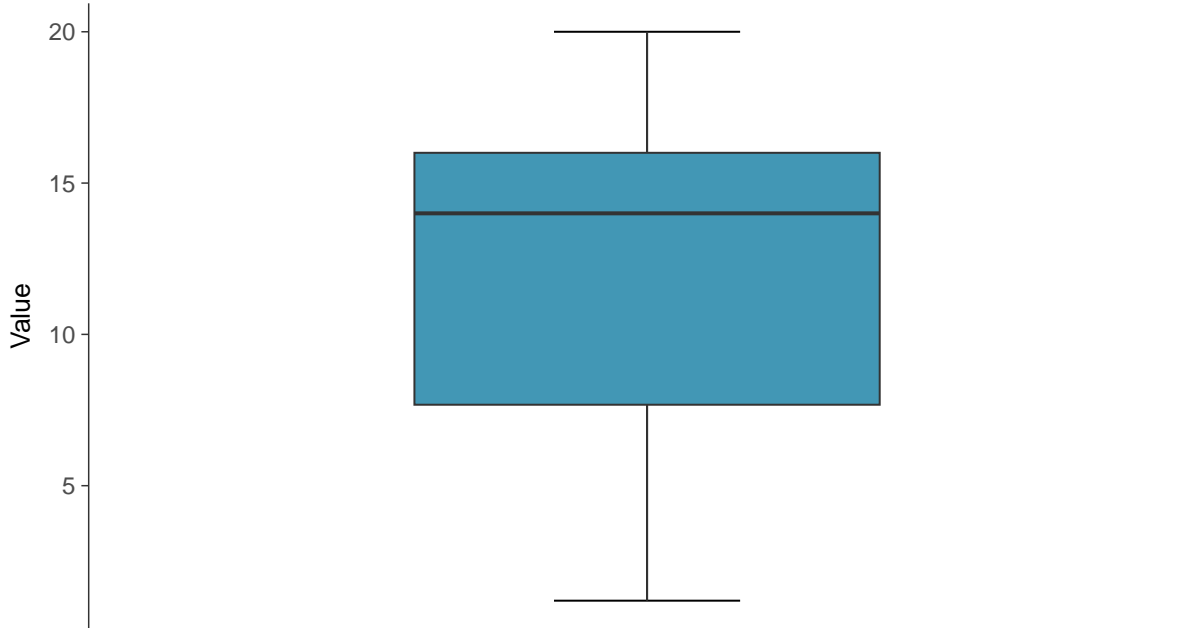
ID: 10_2_117





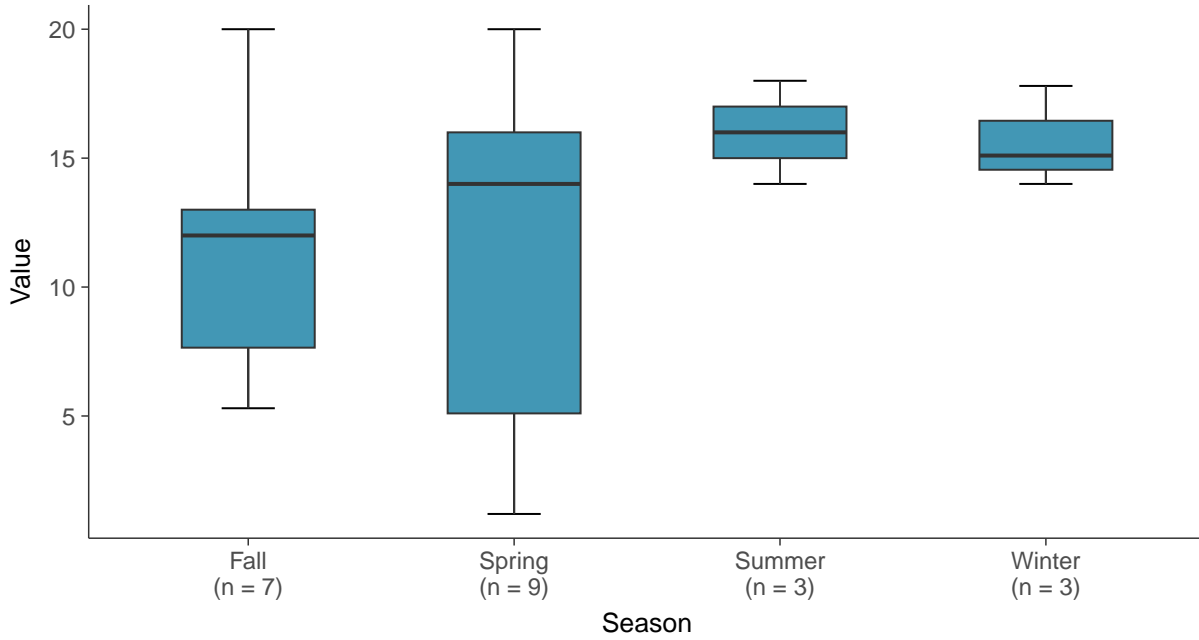
Boxplot

Lithium, MW-15020 (ug/L)



Boxplot by Season

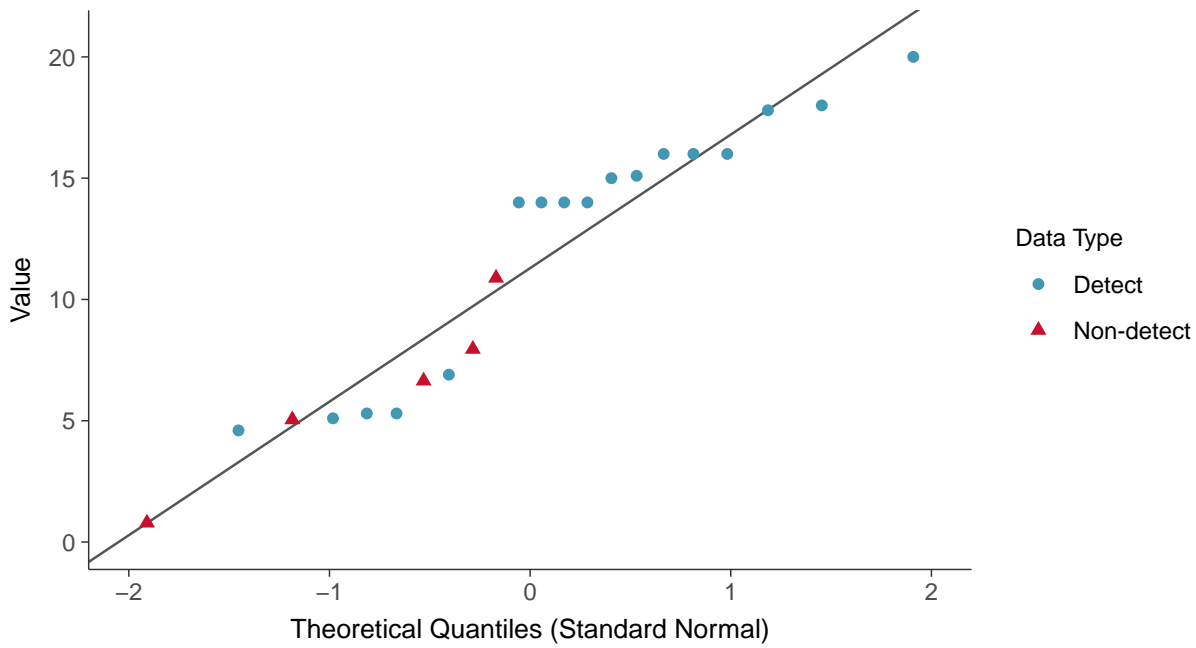
Lithium, MW-15020 (ug/L)





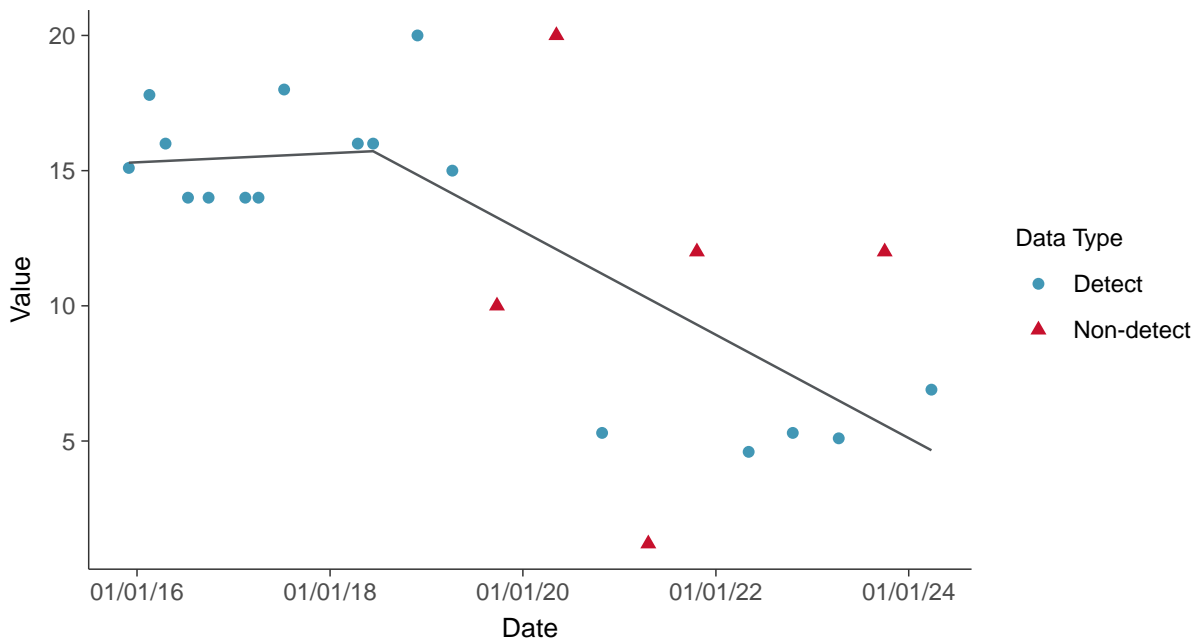
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear

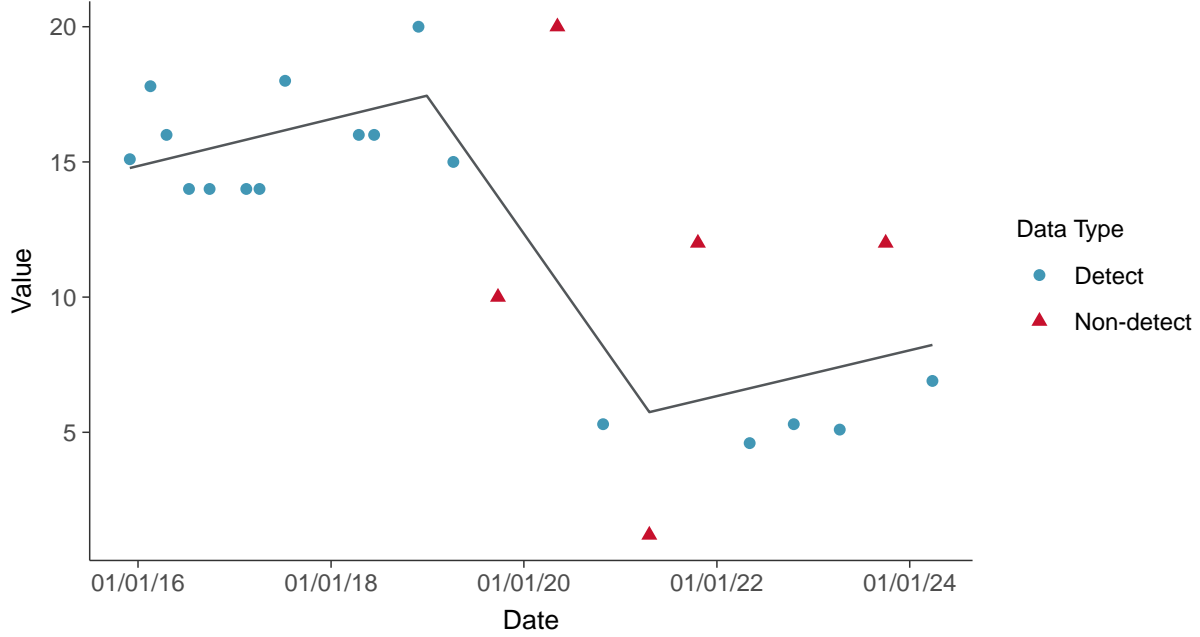
Lithium, MW-15020 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-15020 (ug/L)



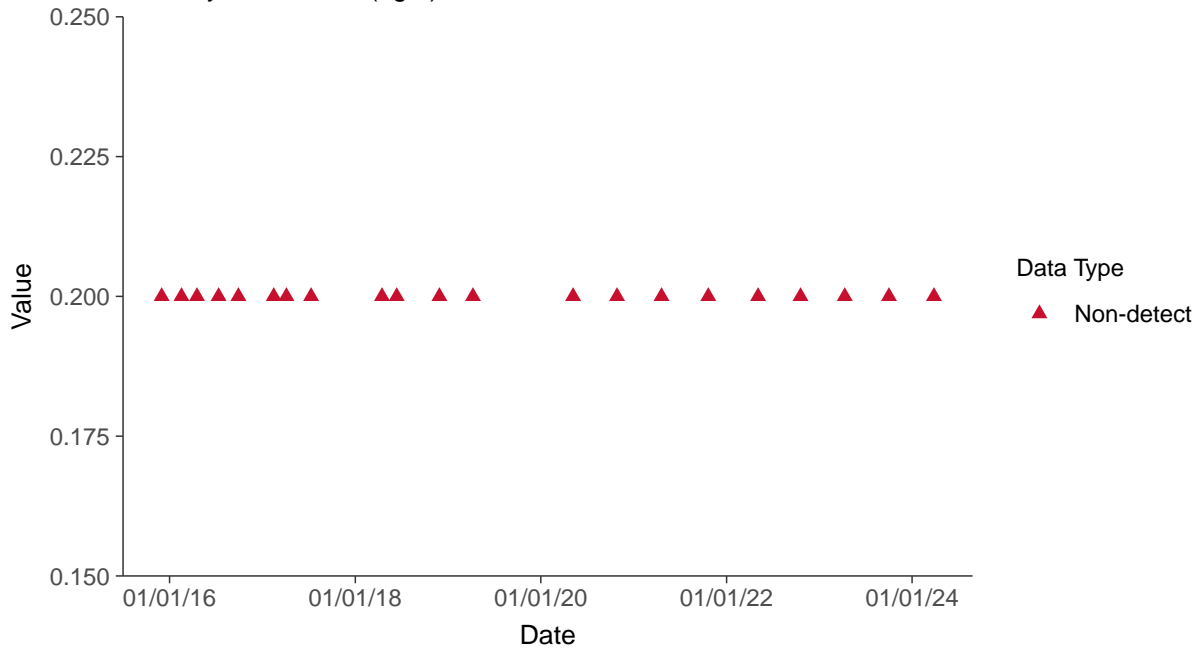


Appendix IV: Mercury, MW-15020

ID: 10_2_118

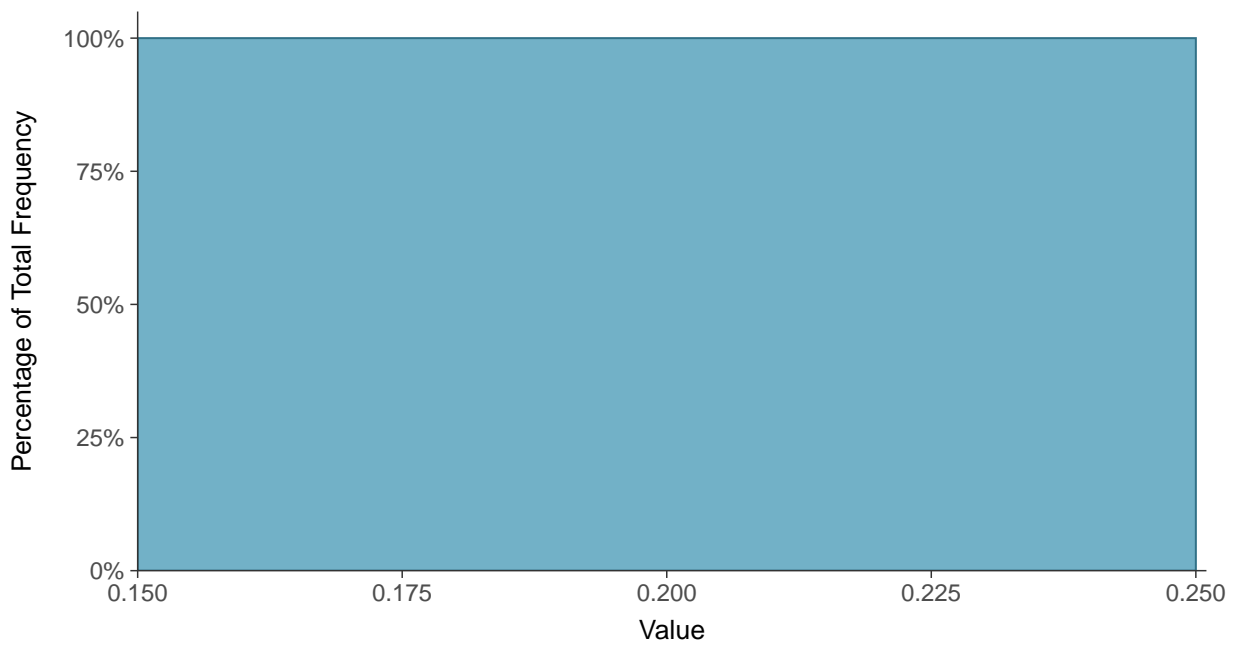
Scatter Plot

Mercury, MW-15020 (ug/L)



Histogram

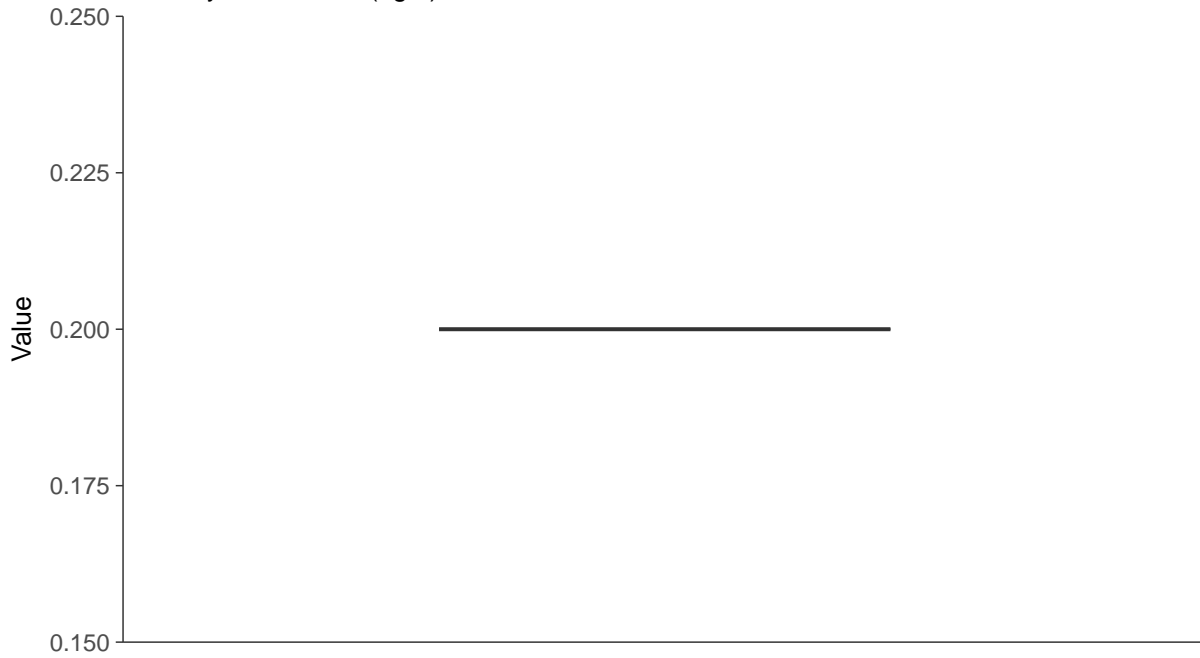
Mercury, MW-15020 (ug/L)





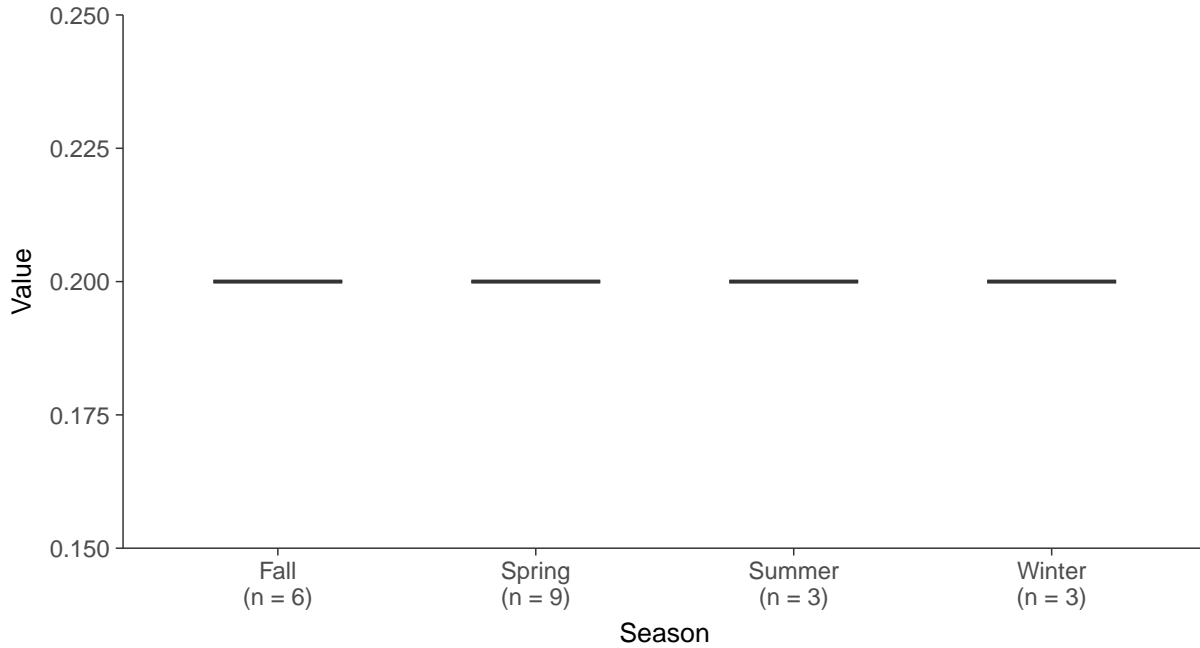
Boxplot

Mercury, MW-15020 (ug/L)



Boxplot by Season

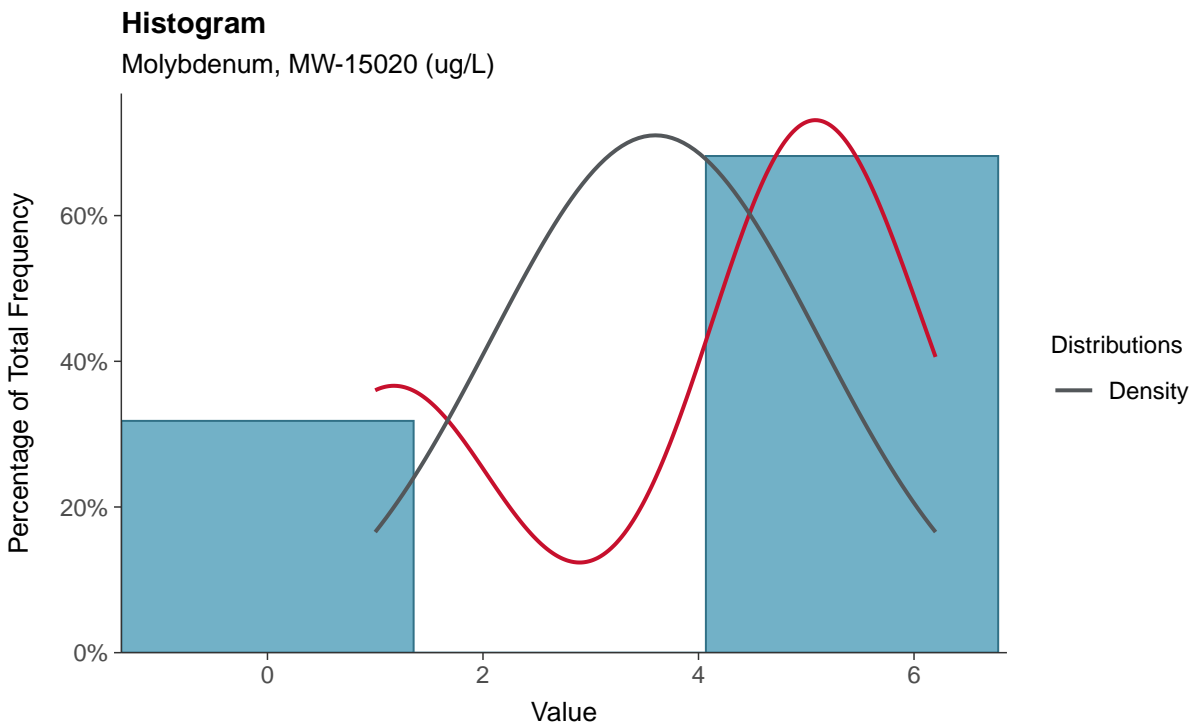
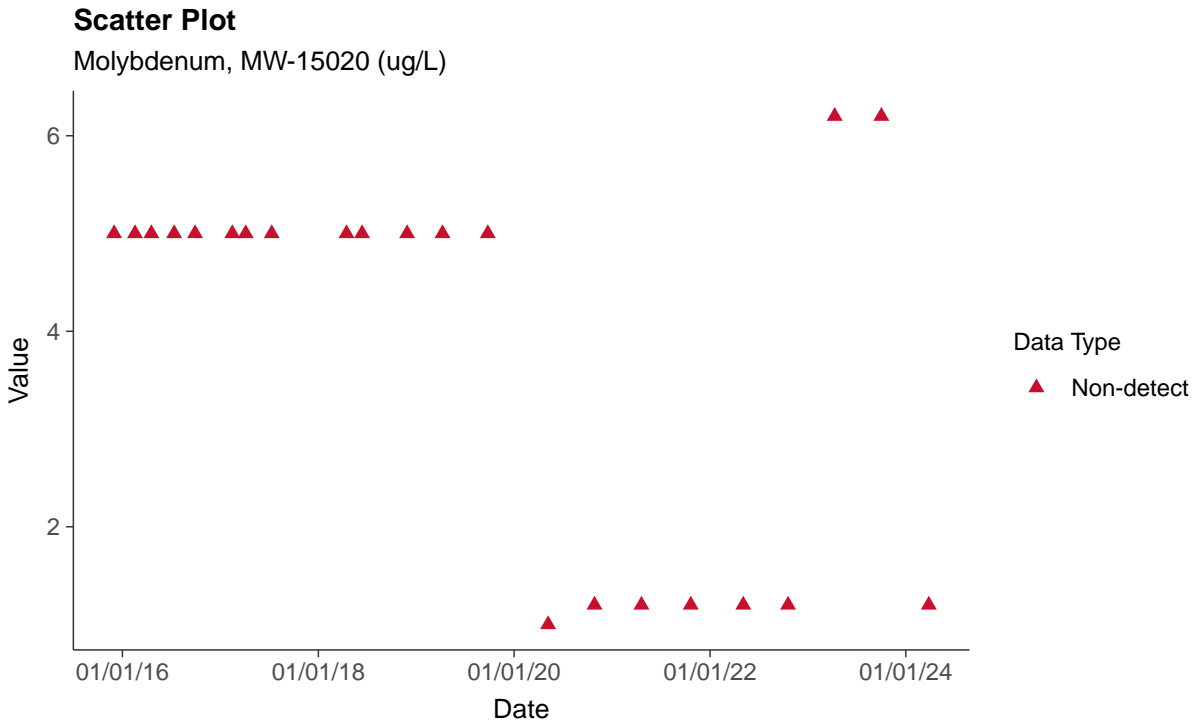
Mercury, MW-15020 (ug/L)





Appendix IV: Molybdenum, MW-15020

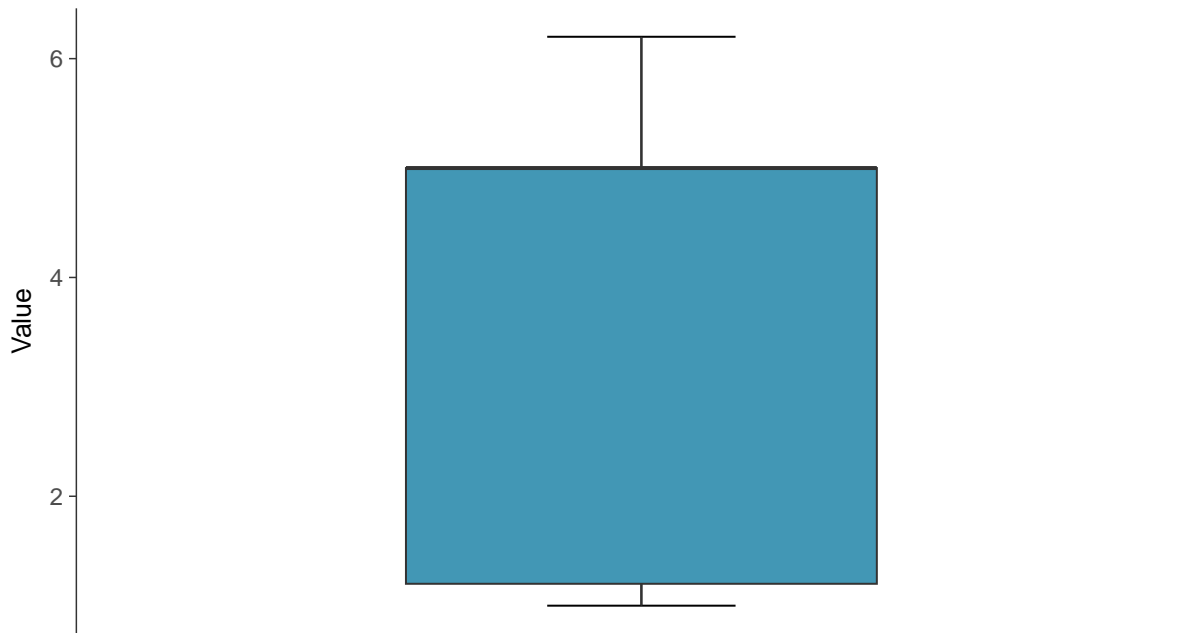
ID: 10_2_119





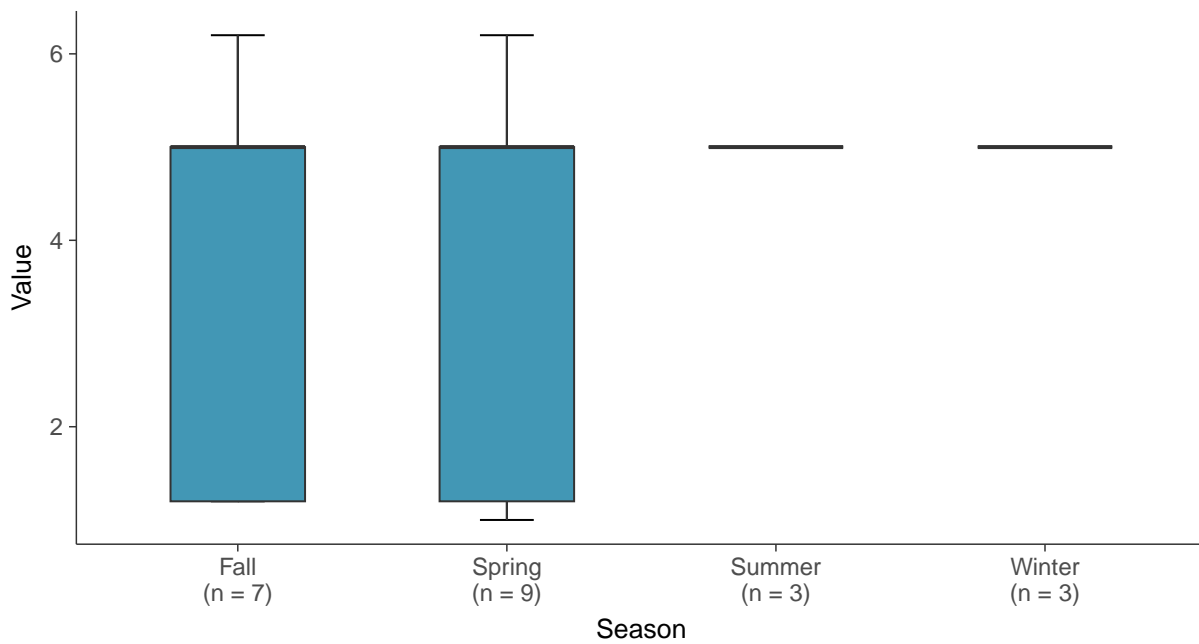
Boxplot

Molybdenum, MW-15020 (ug/L)



Boxplot by Season

Molybdenum, MW-15020 (ug/L)



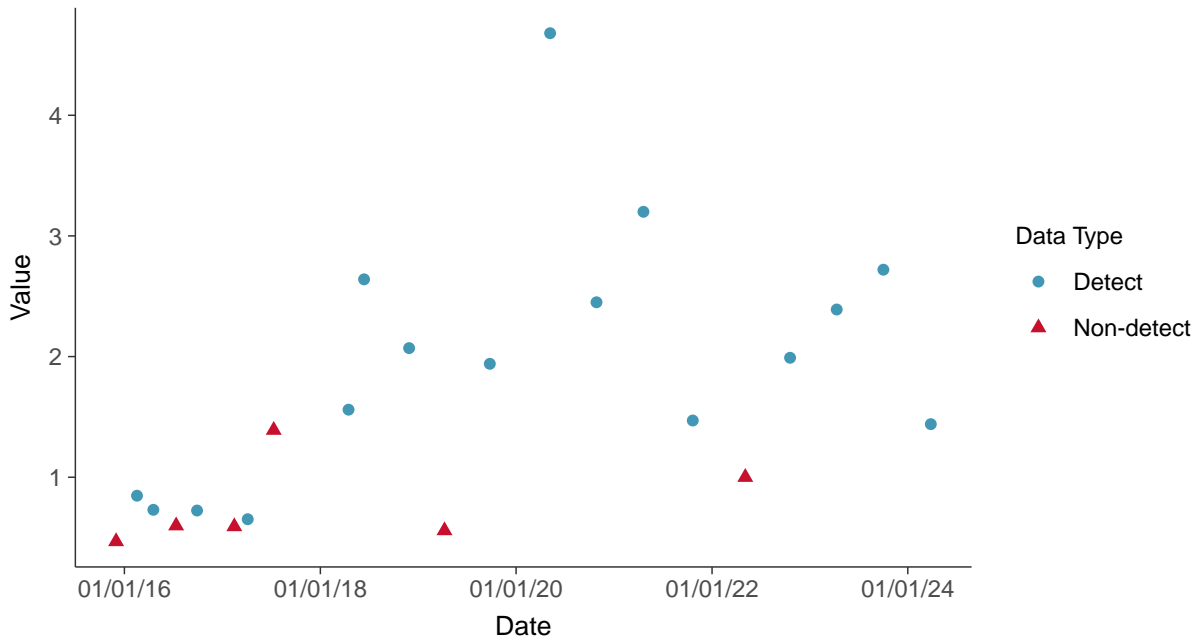


Appendix IV: Radium-226+228, MW-15020

ID: 10_2_125

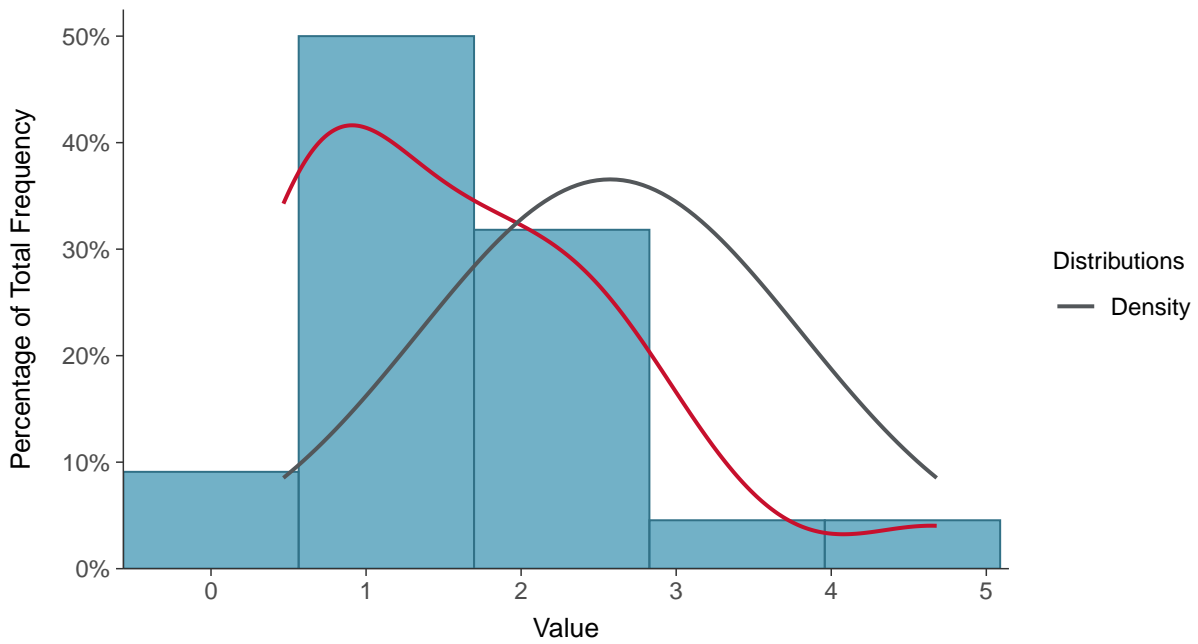
Scatter Plot

Radium-226+228, MW-15020 (pCi/L)



Histogram

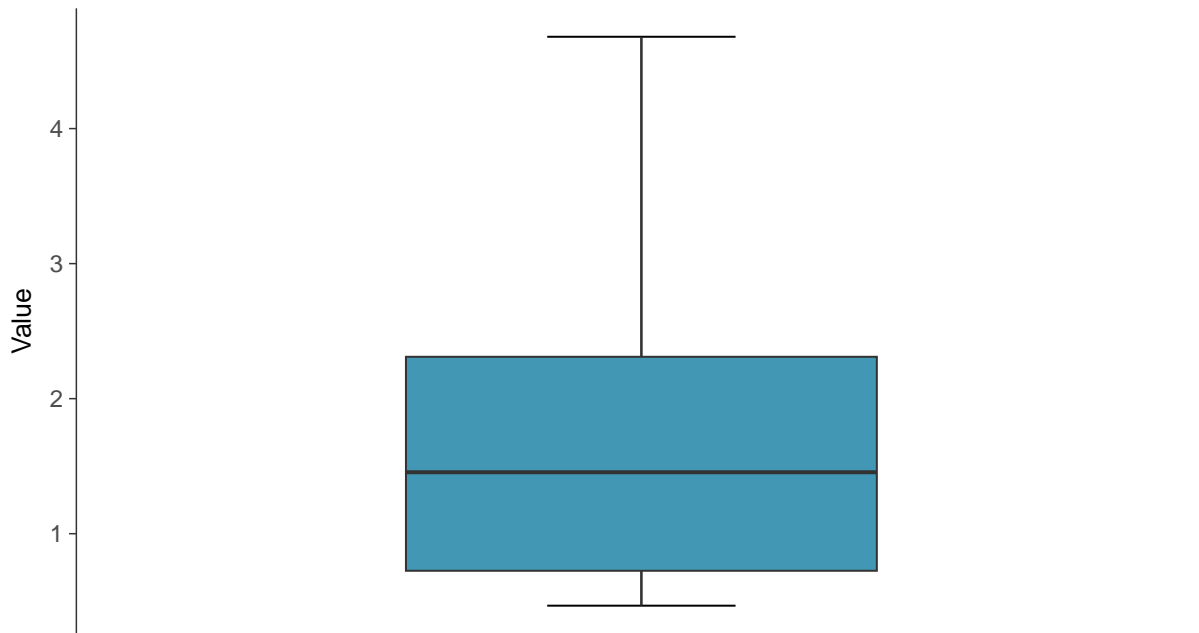
Radium-226+228, MW-15020 (pCi/L)





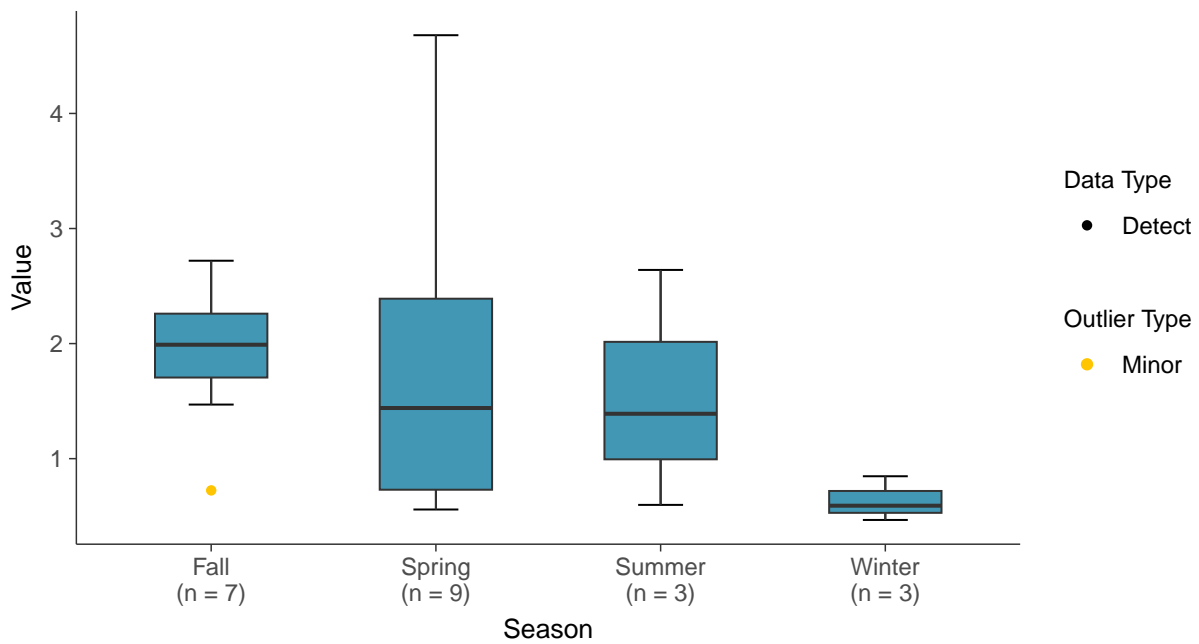
Boxplot

Radium-226+228, MW-15020 (pCi/L)



Boxplot by Season

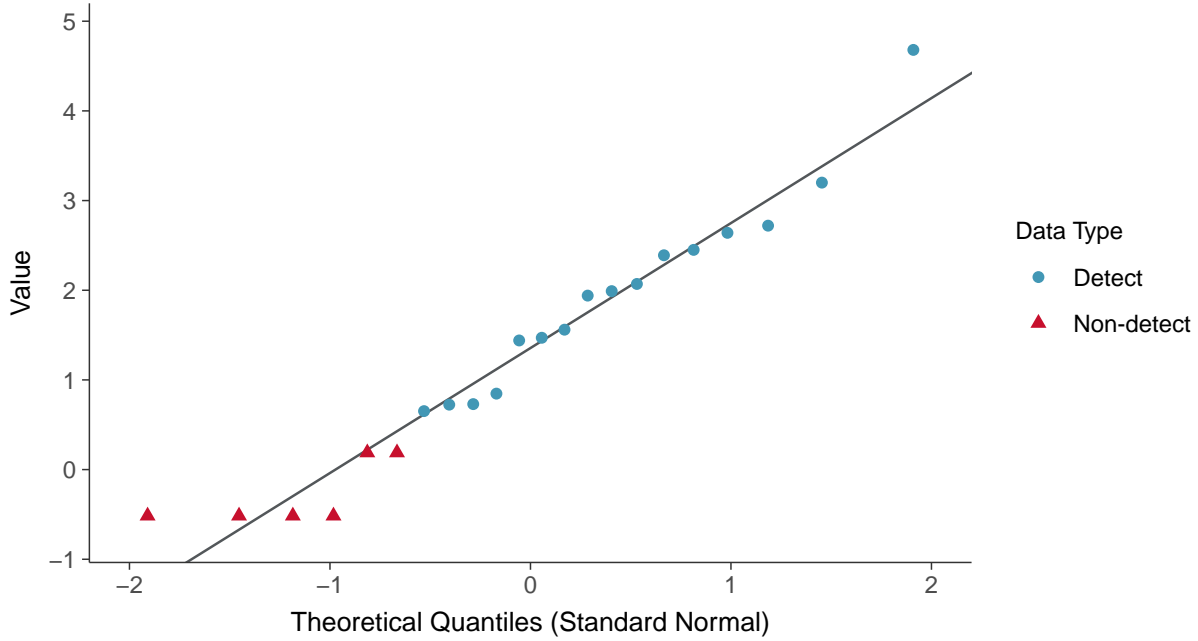
Radium-226+228, MW-15020 (pCi/L)





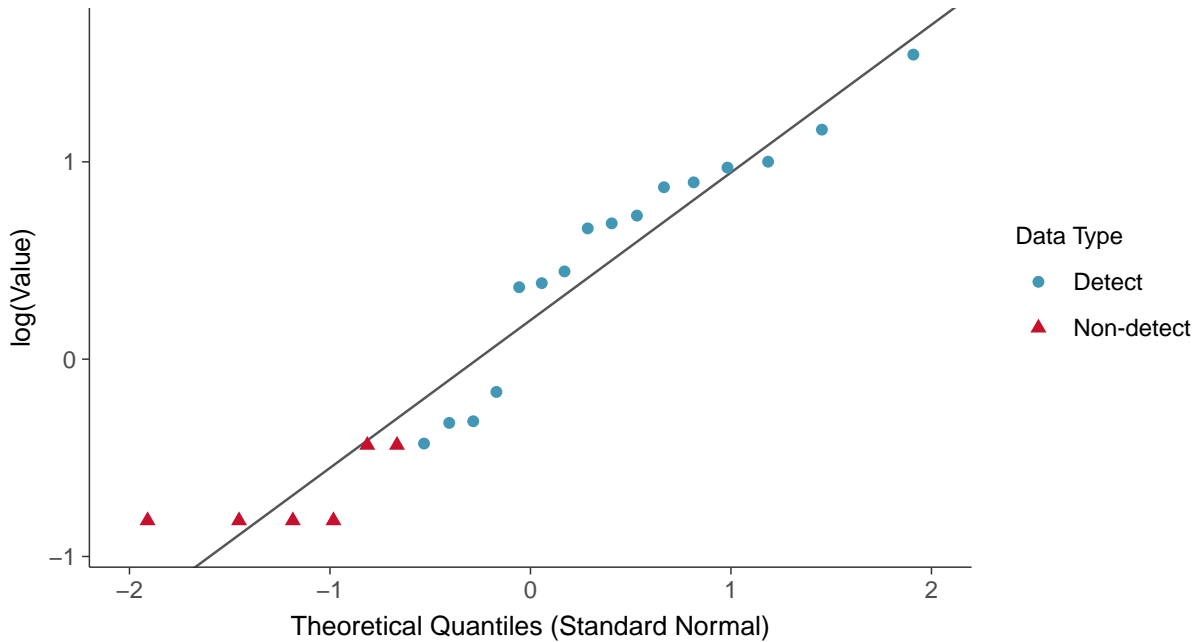
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15020 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

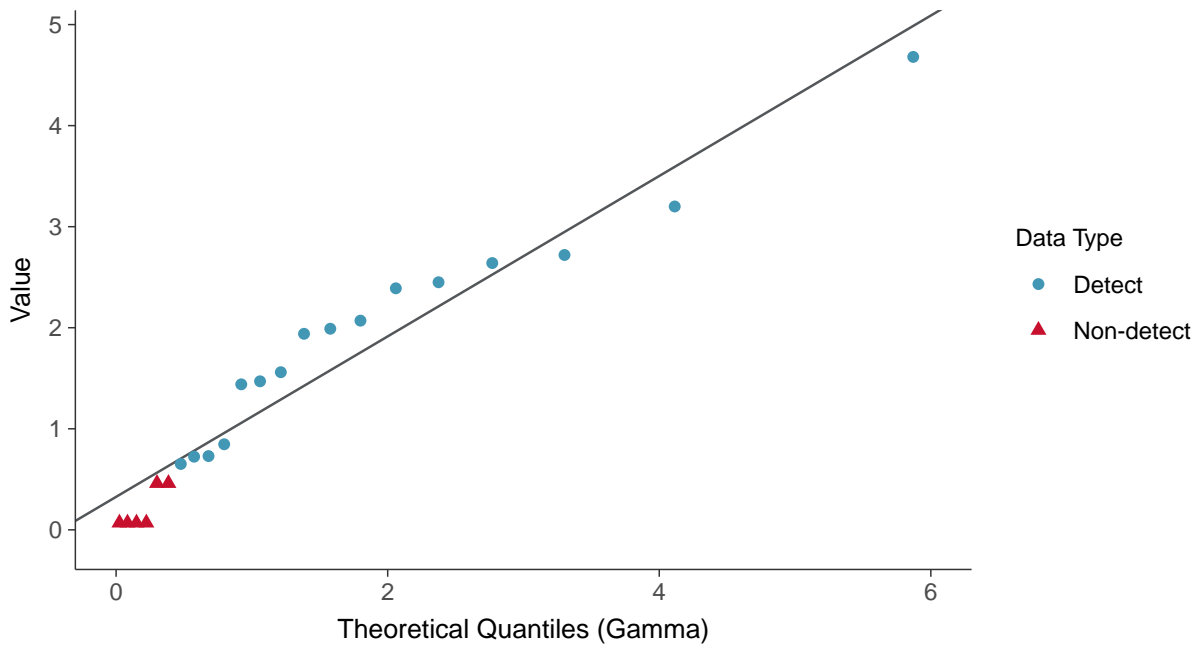
Radium-226+228, MW-15020 (pCi/L)





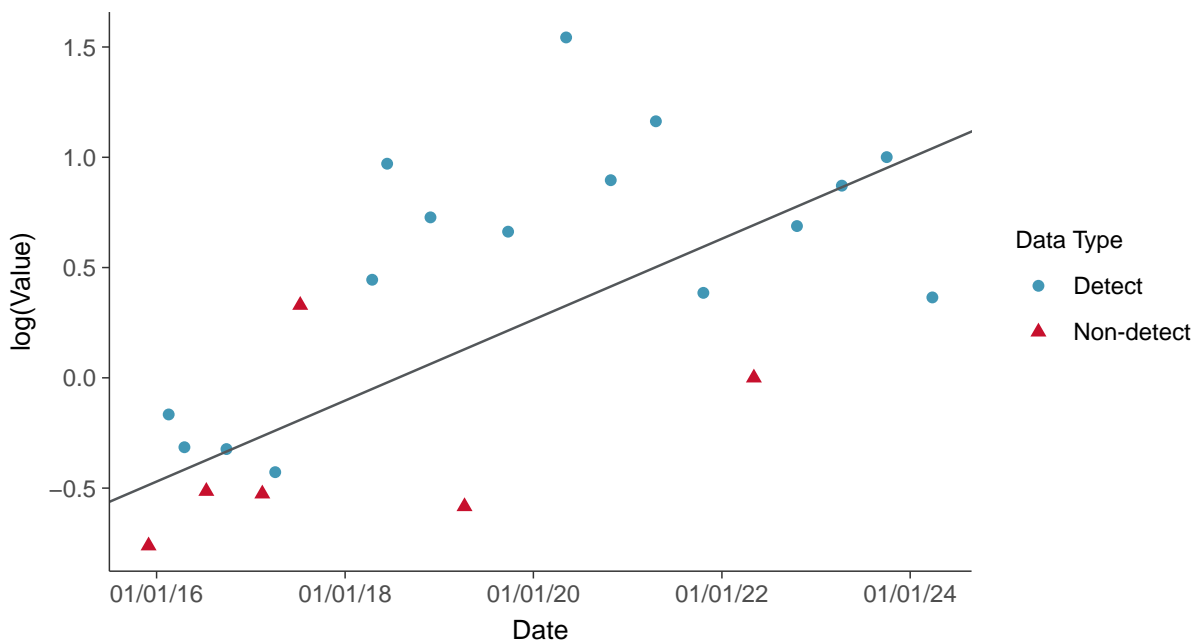
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15020 (pCi/L)



Trend Regression: Lognormal MLE

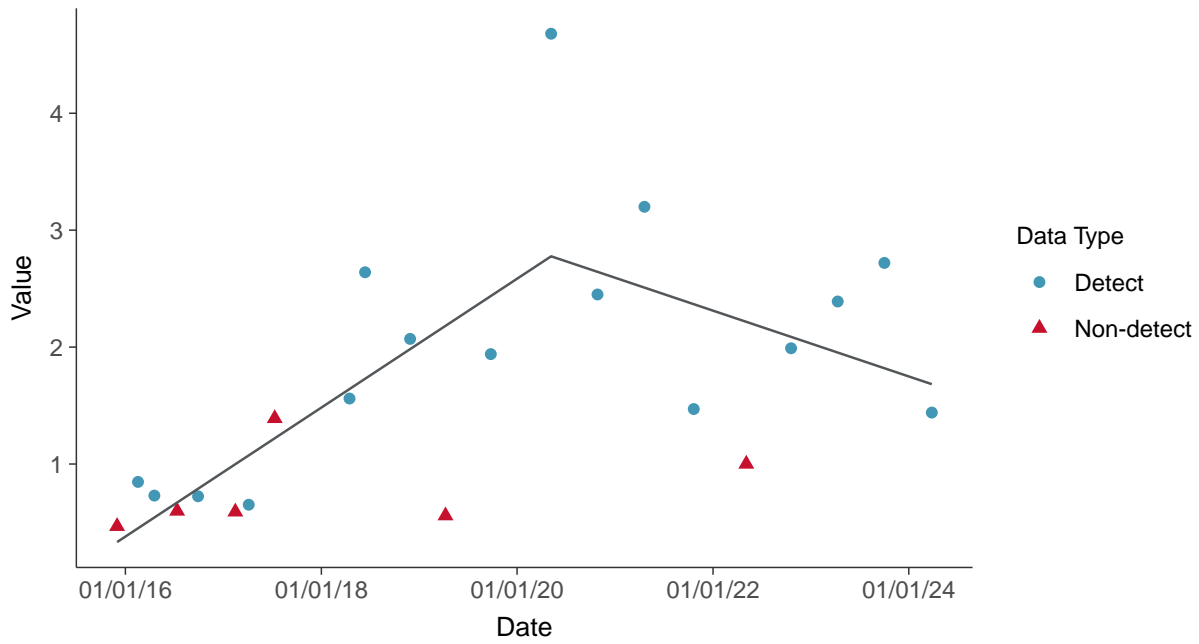
Radium-226+228, MW-15020 (pCi/L)





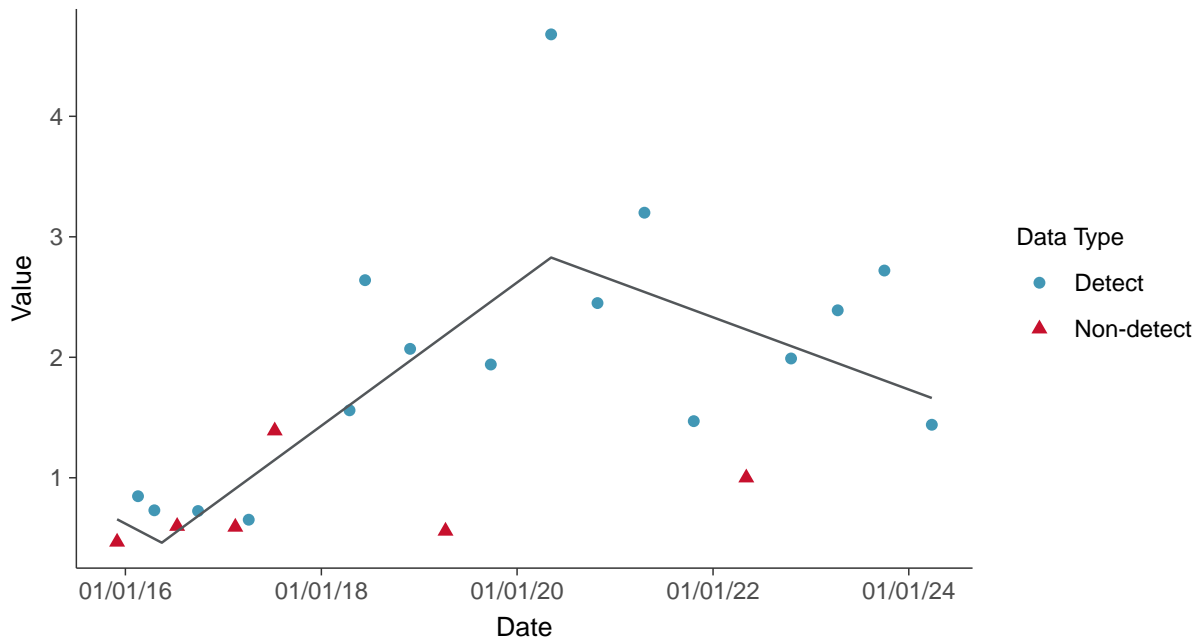
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15020 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-15020 (pCi/L)



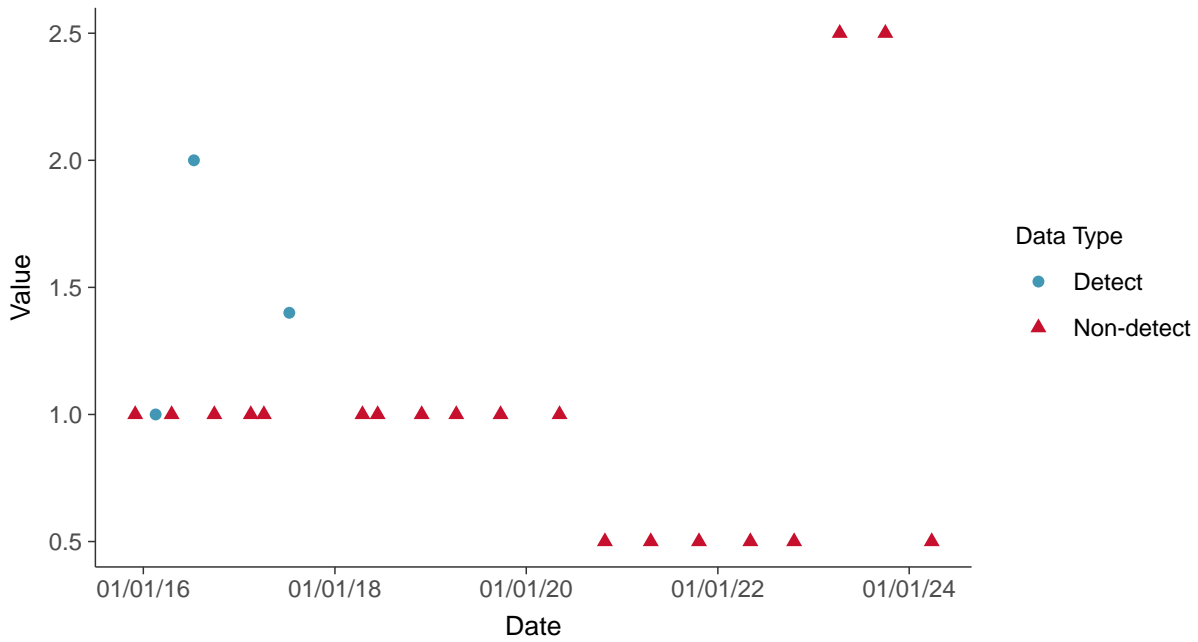


Appendix IV: Selenium, MW-15020

ID: 10_2_127

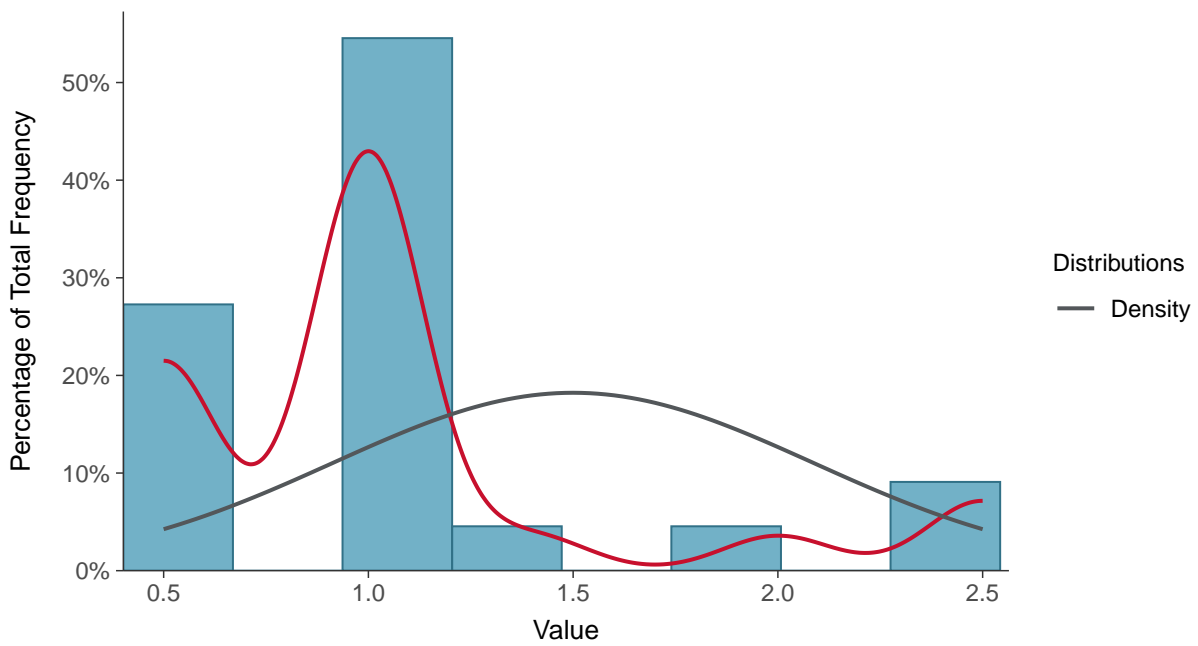
Scatter Plot

Selenium, MW-15020 (ug/L)



Histogram

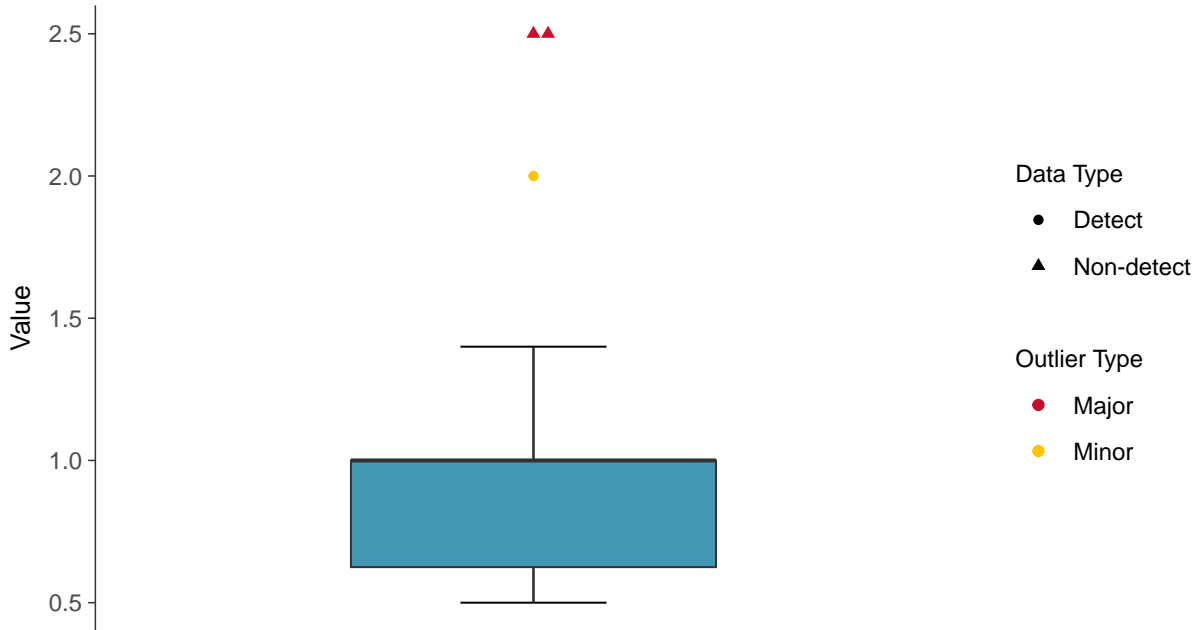
Selenium, MW-15020 (ug/L)





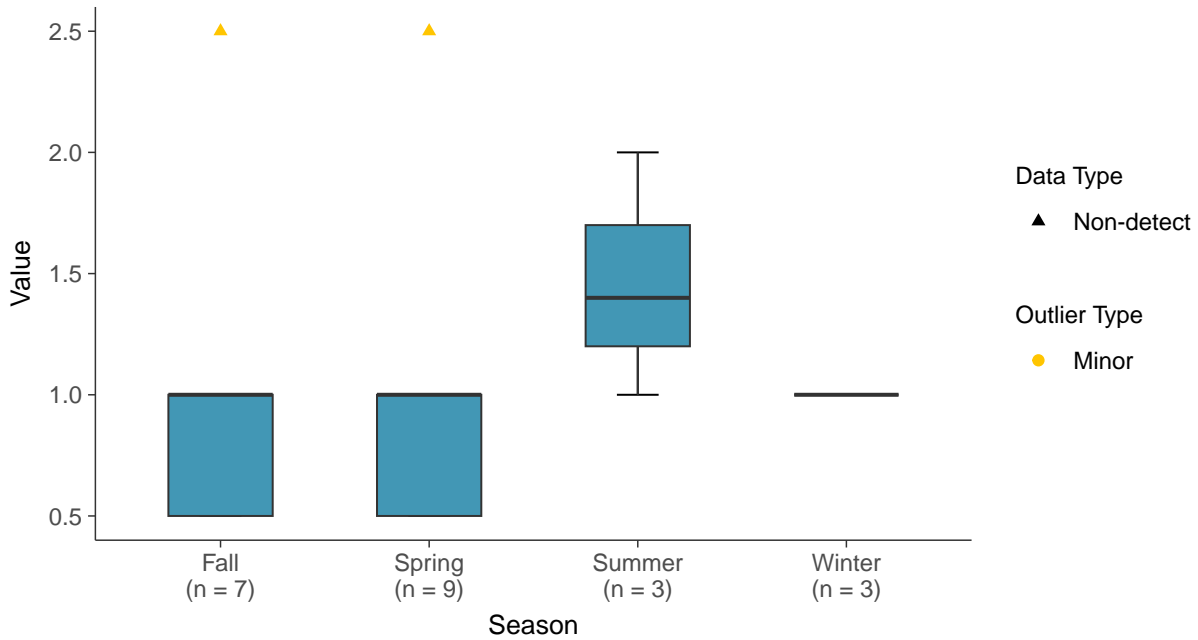
Boxplot

Selenium, MW-15020 (ug/L)



Boxplot by Season

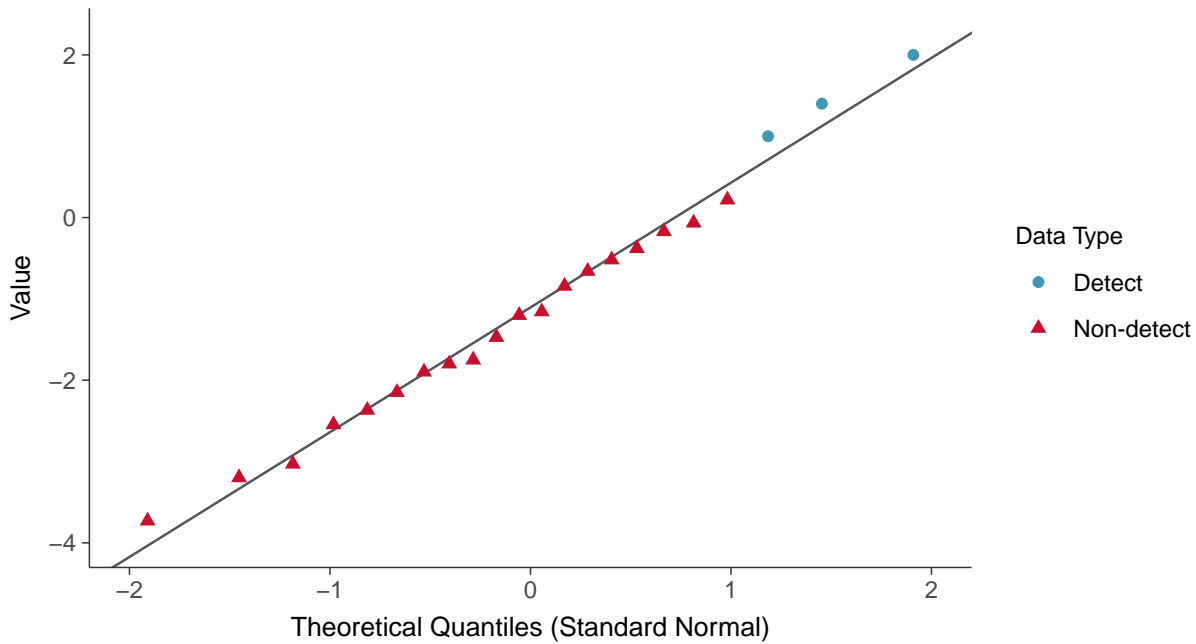
Selenium, MW-15020 (ug/L)





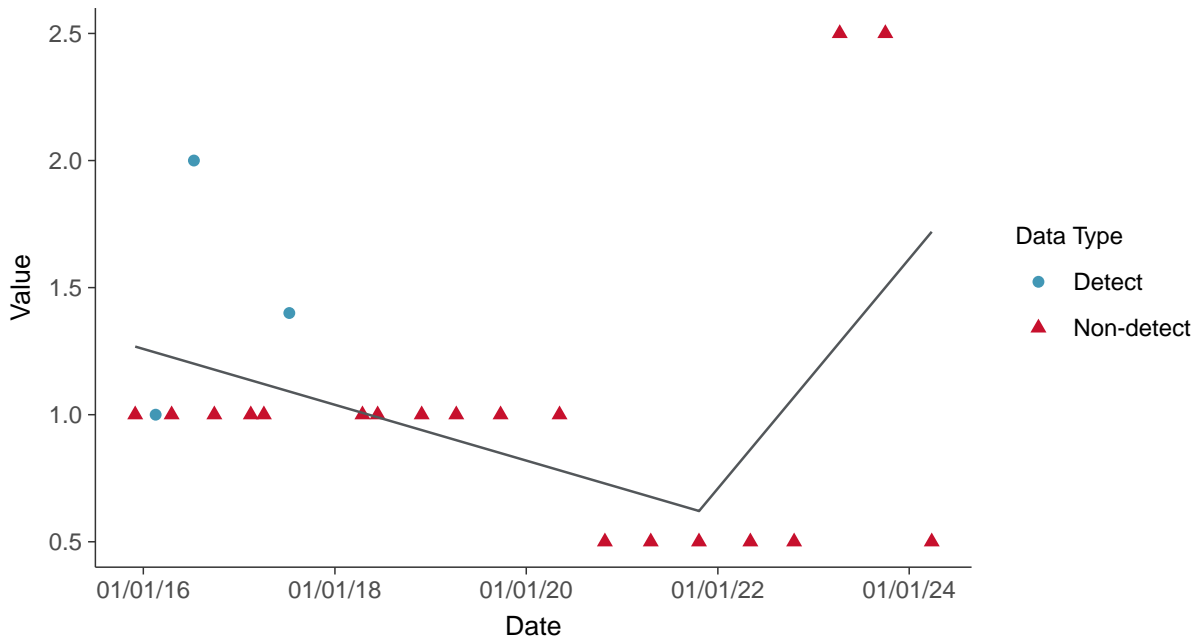
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear

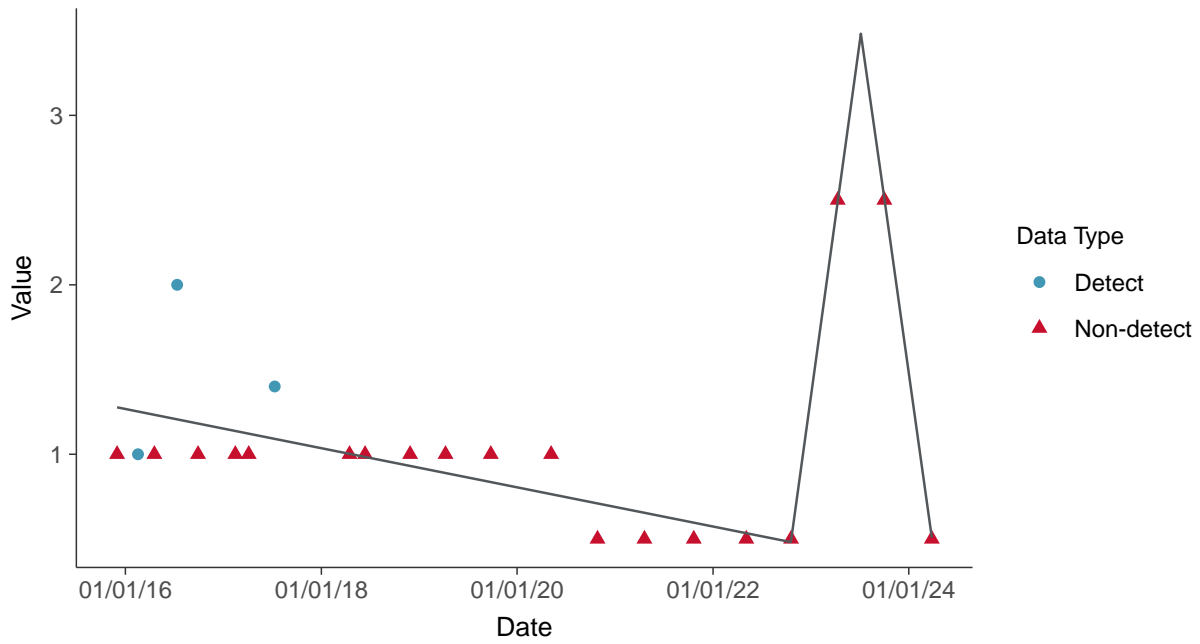
Selenium, MW-15020 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

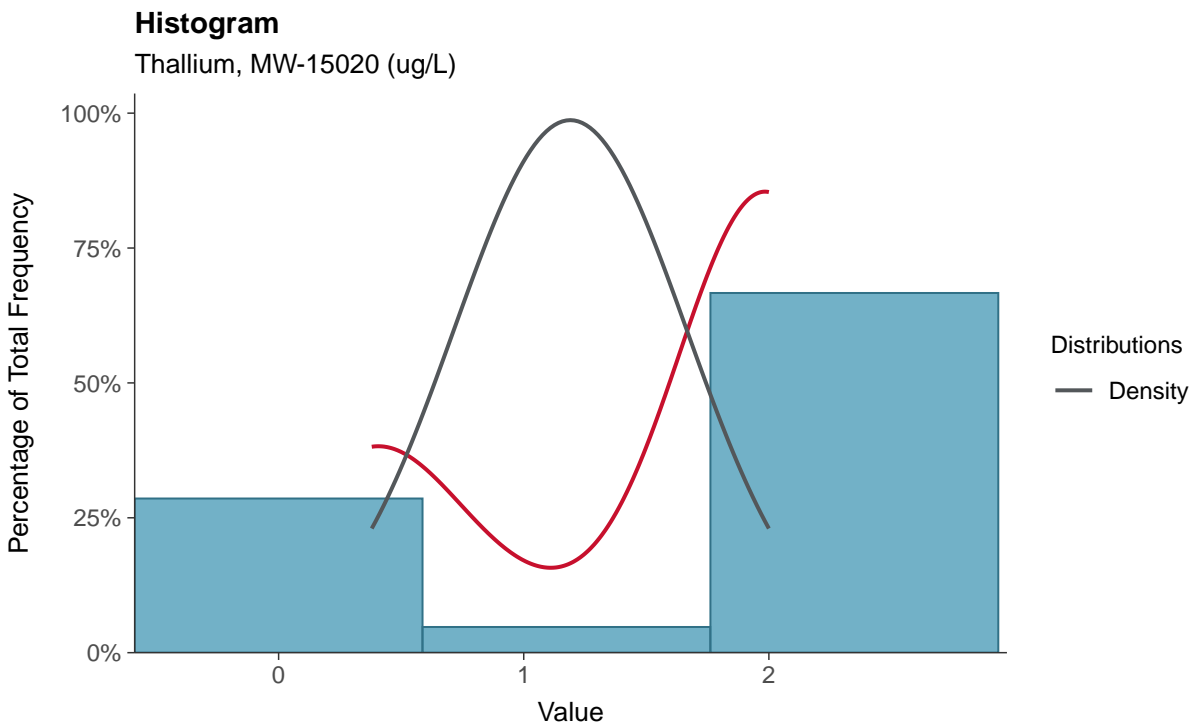
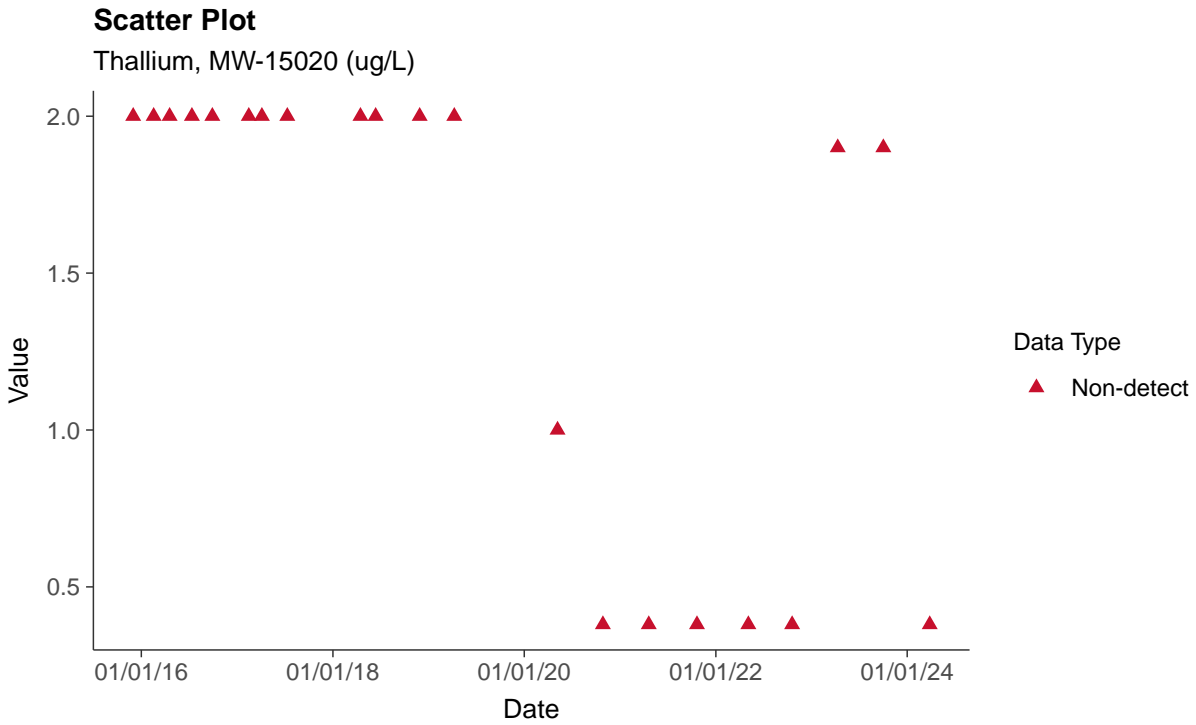
Selenium, MW-15020 (ug/L)





Appendix IV: Thallium, MW-15020

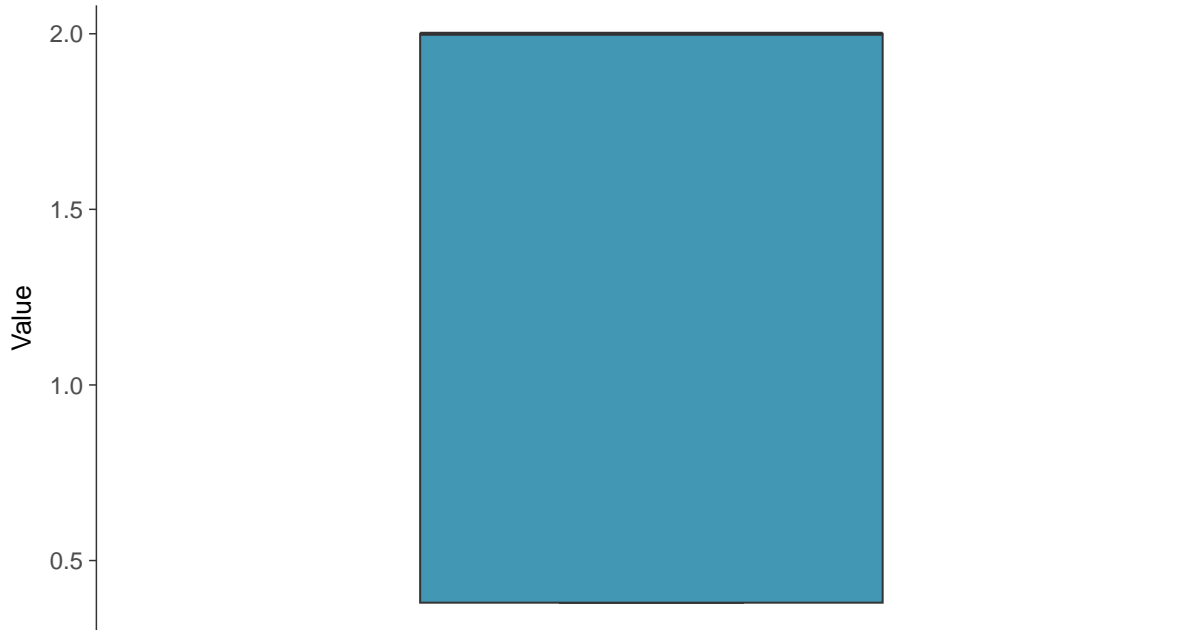
ID: 10_2_131





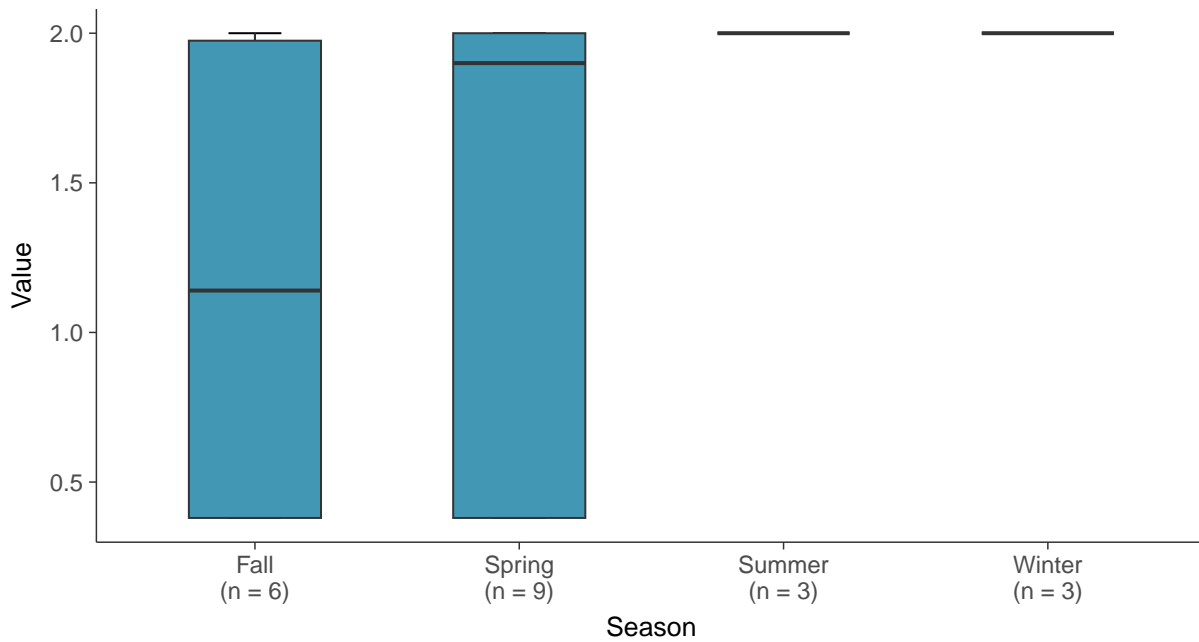
Boxplot

Thallium, MW-15020 (ug/L)



Boxplot by Season

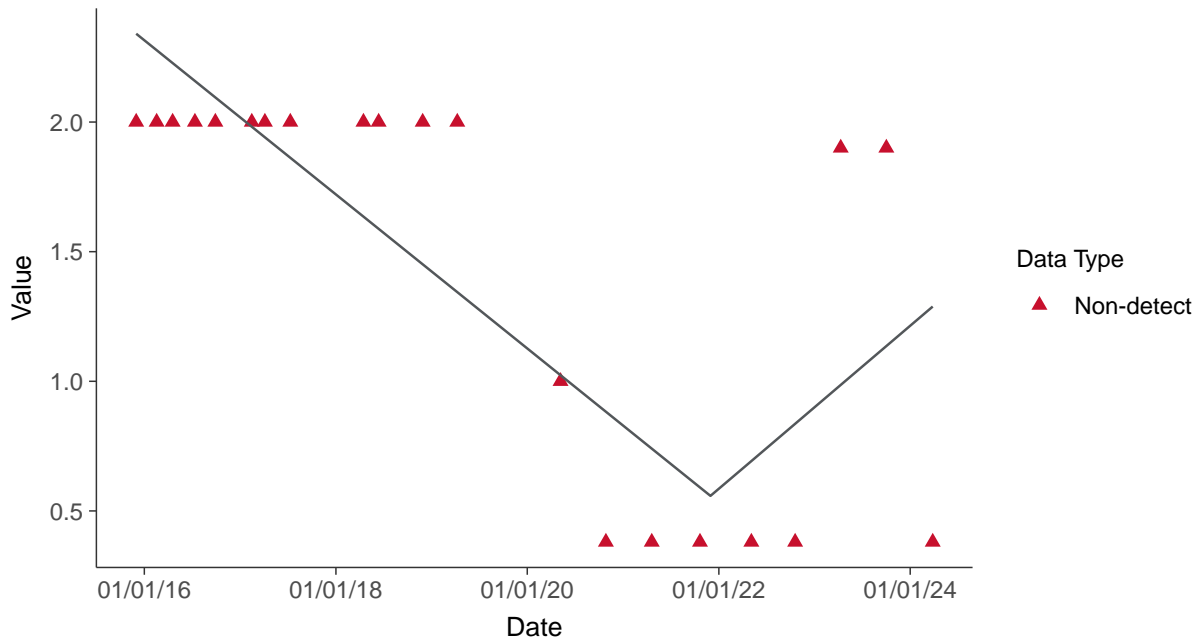
Thallium, MW-15020 (ug/L)





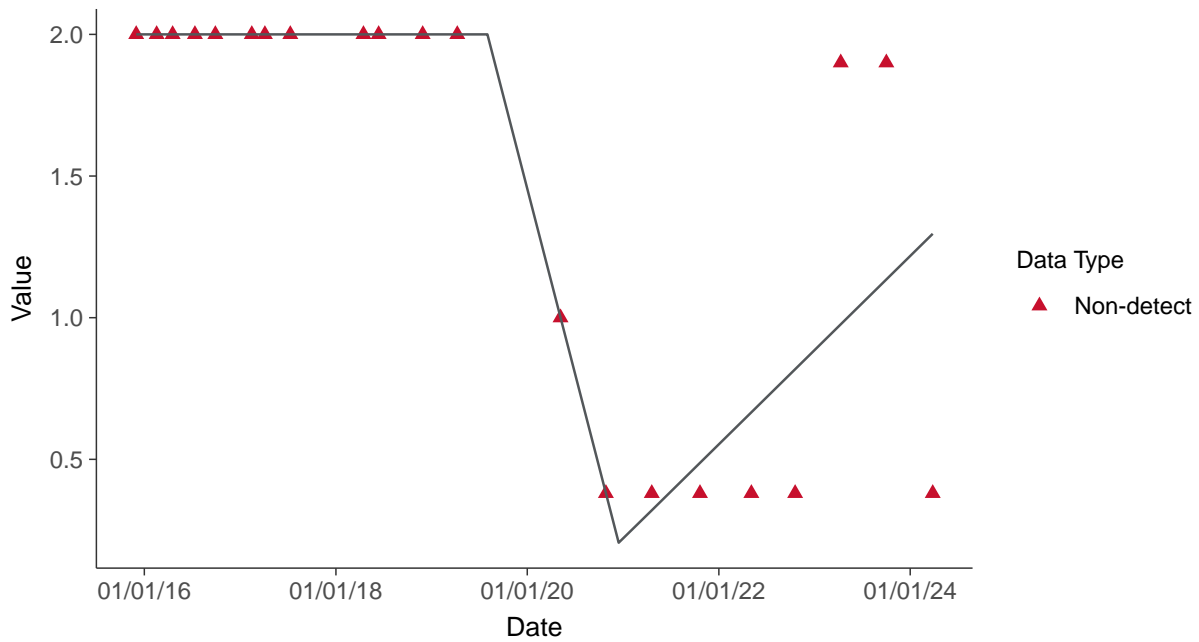
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

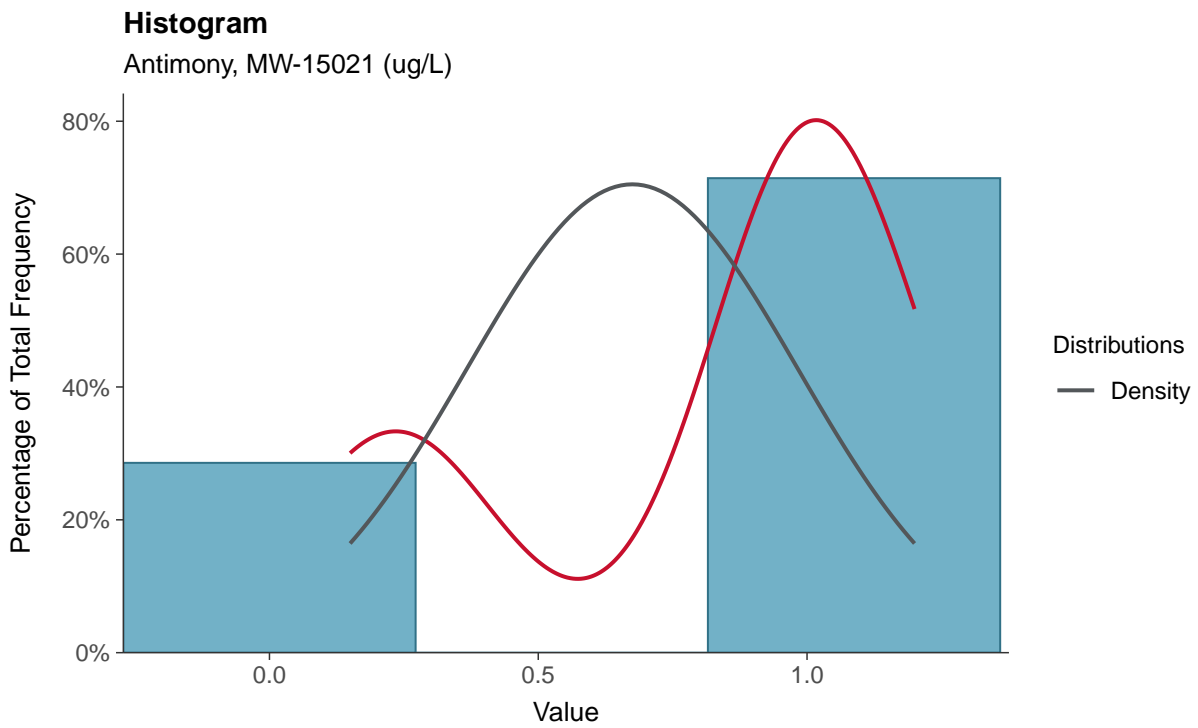
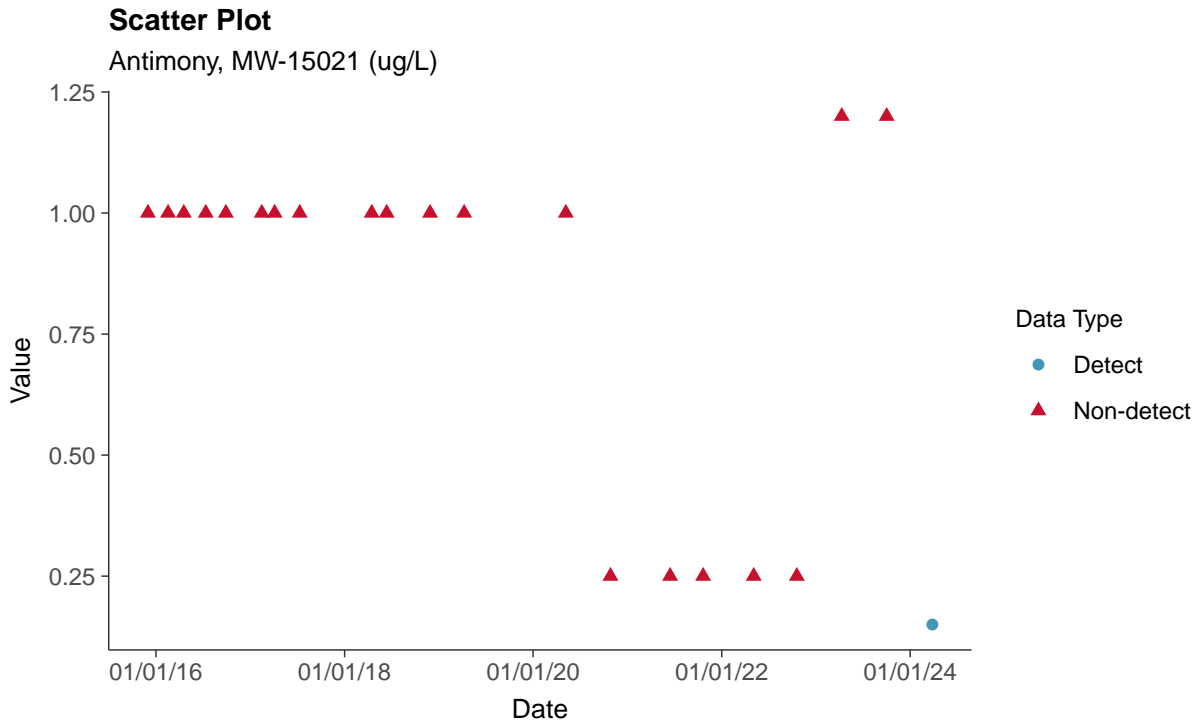
Thallium, MW-15020 (ug/L)





Appendix IV: Antimony, MW-15021

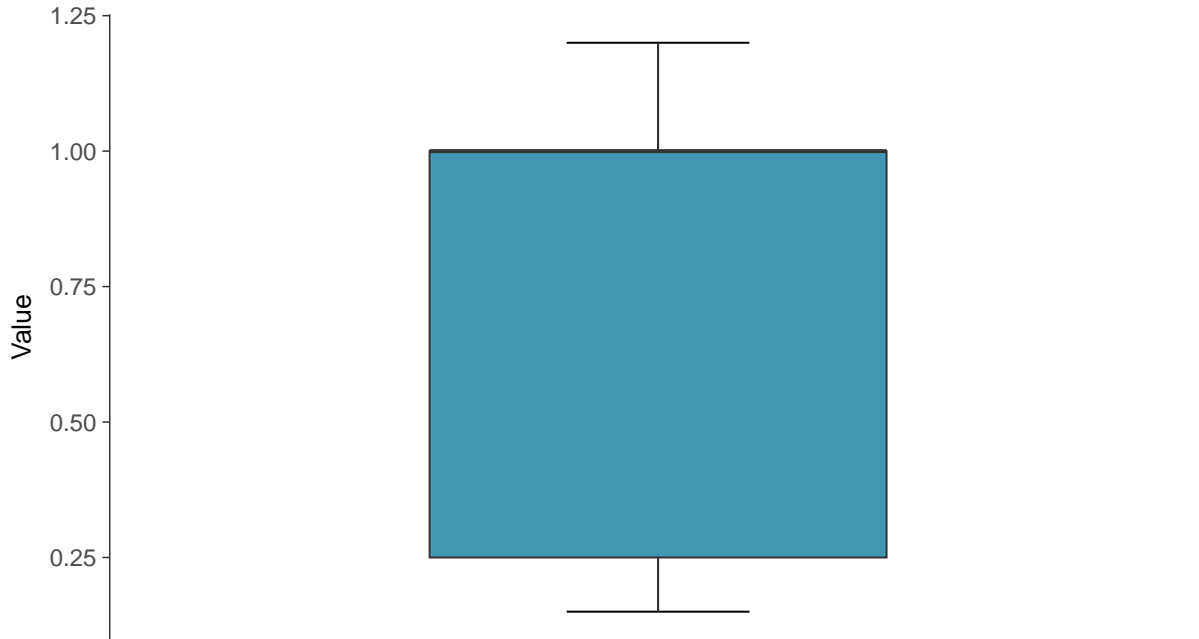
ID: 11_2_101





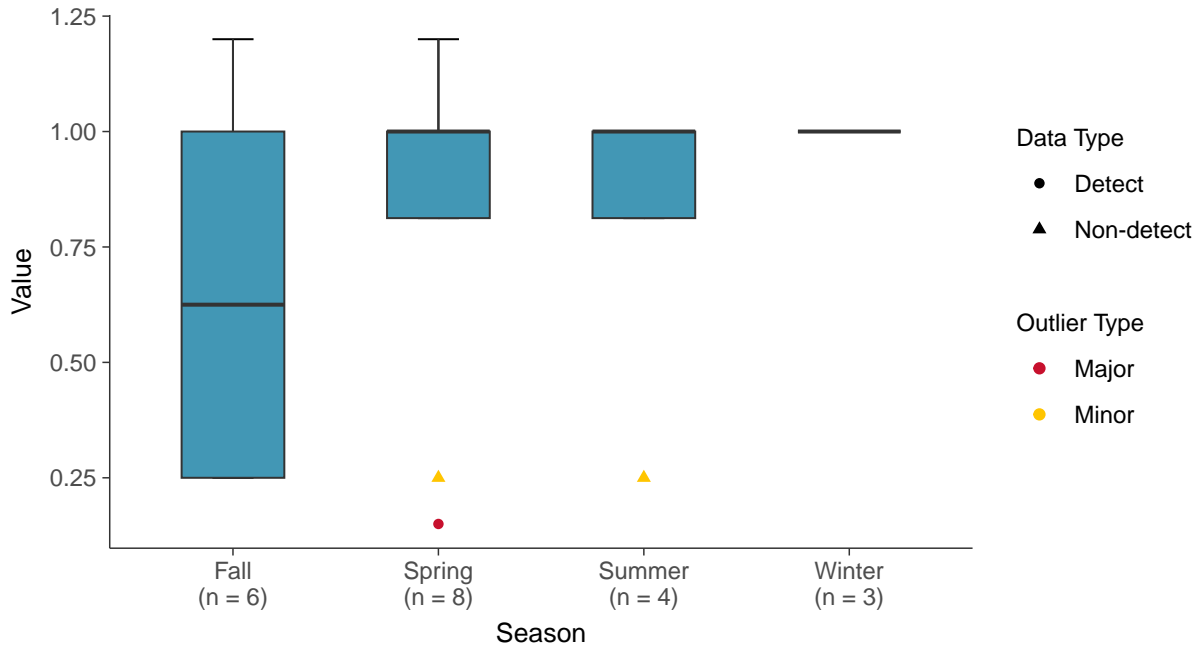
Boxplot

Antimony, MW-15021 (ug/L)



Boxplot by Season

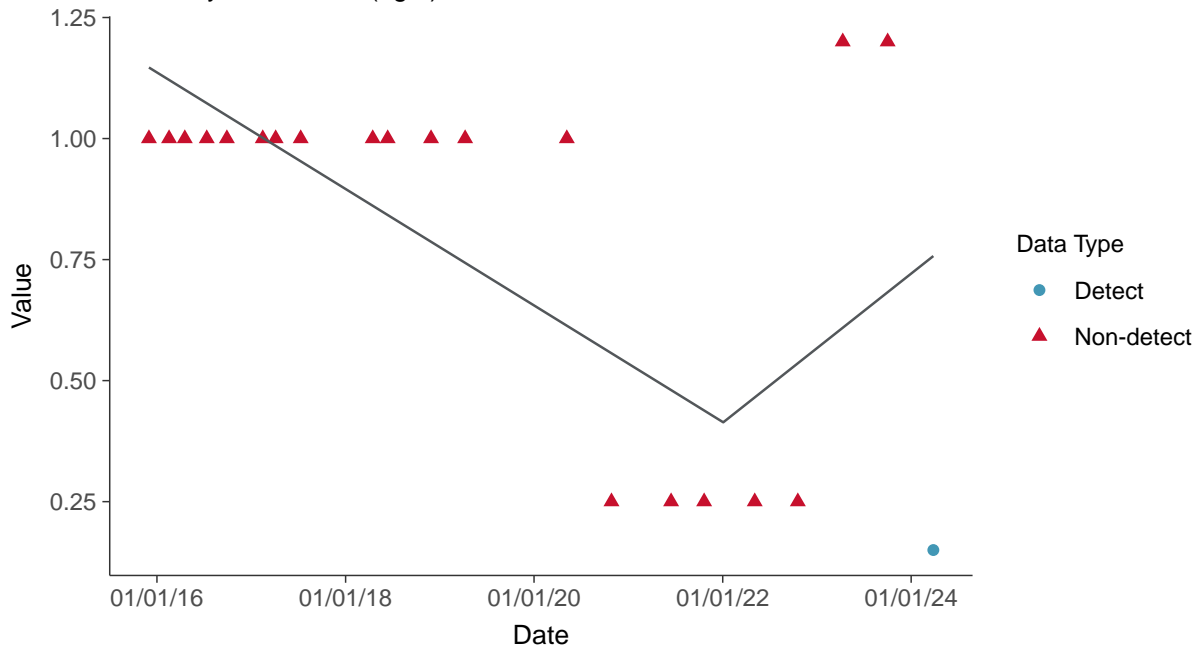
Antimony, MW-15021 (ug/L)





Trend Regression: Piecewise Linear-Linear

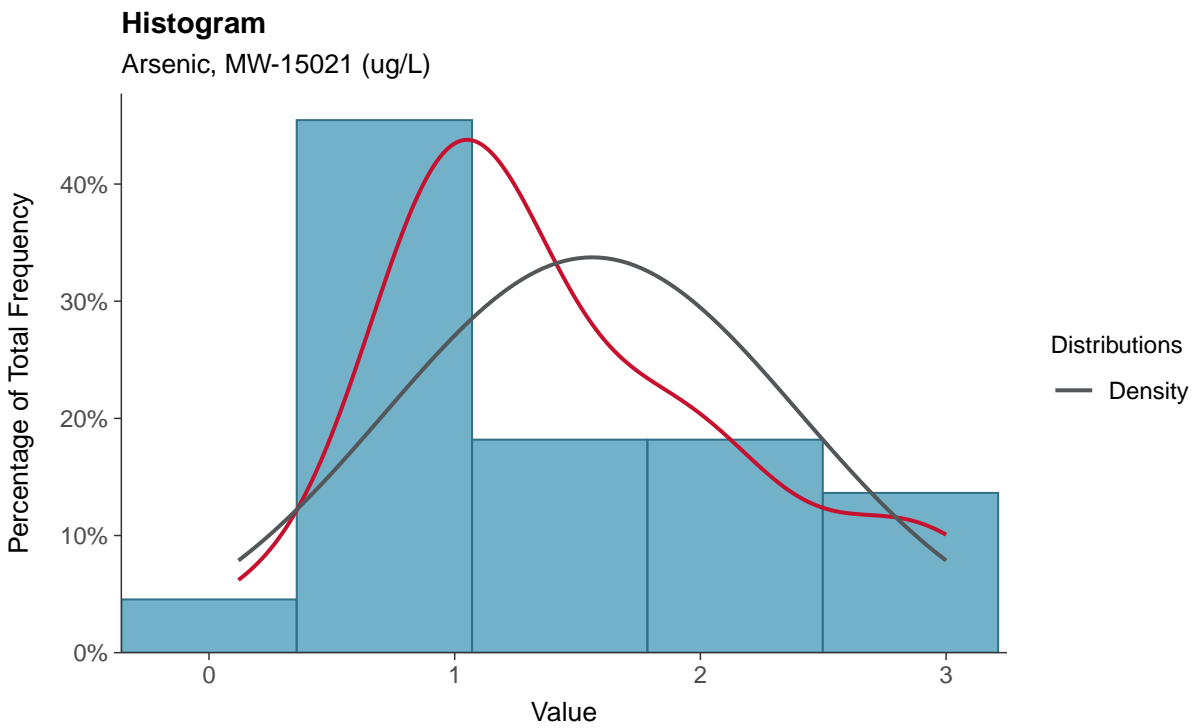
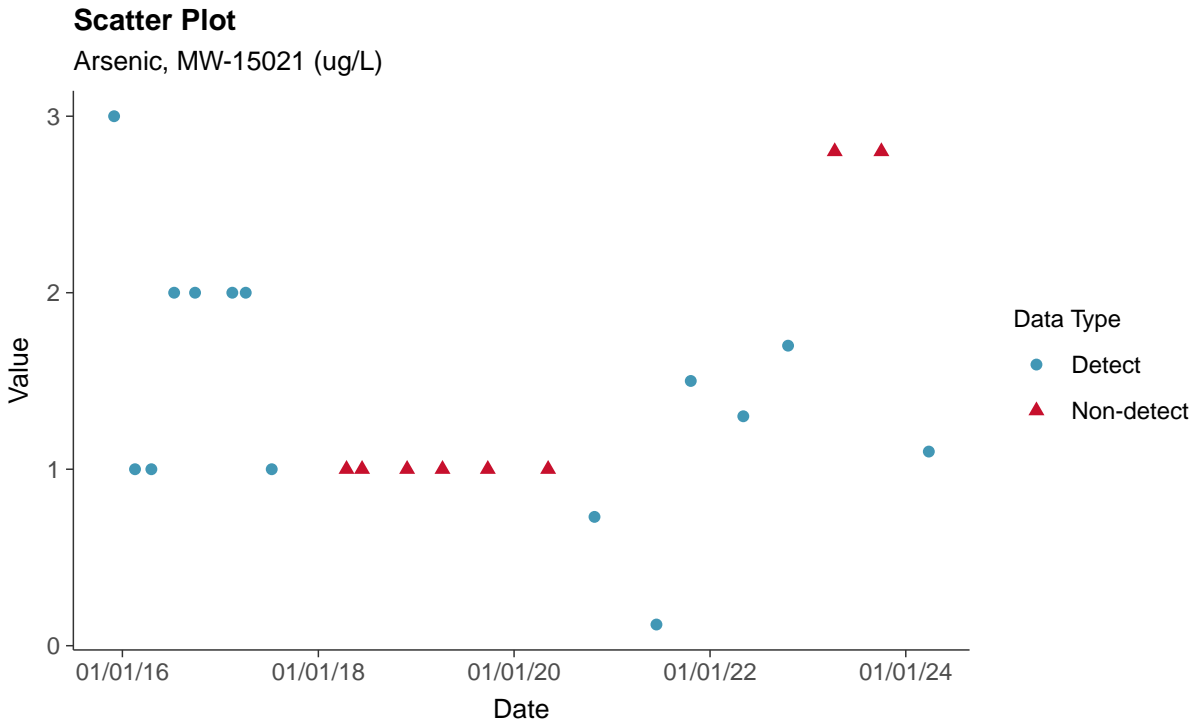
Antimony, MW-15021 (ug/L)





Appendix IV: Arsenic, MW-15021

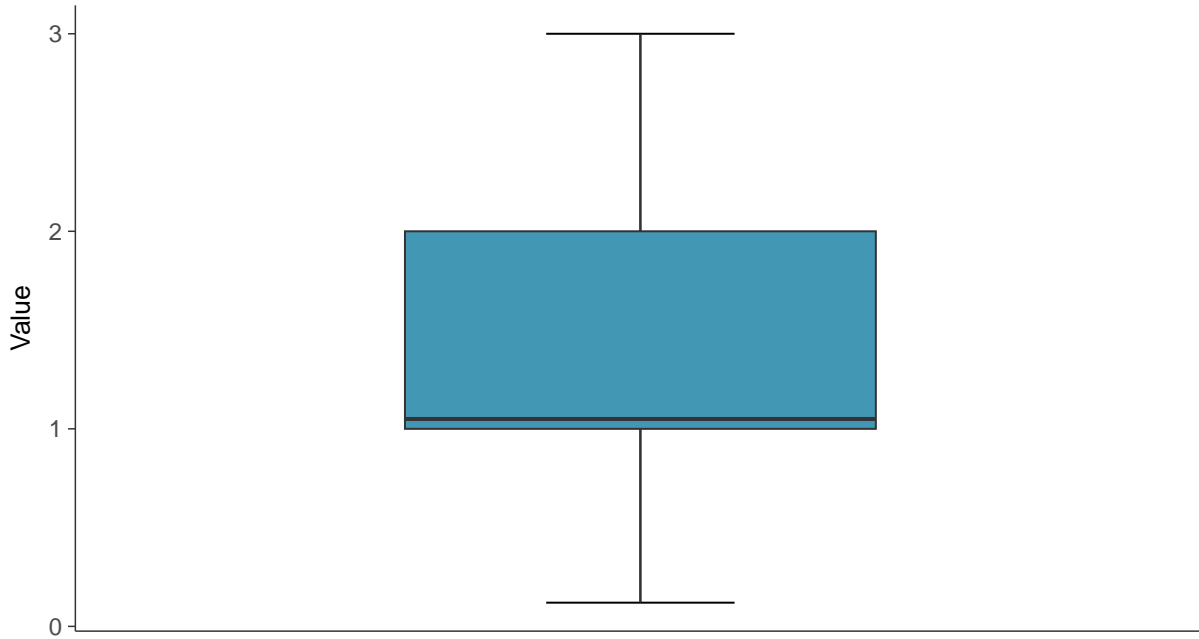
ID: 11_2_102





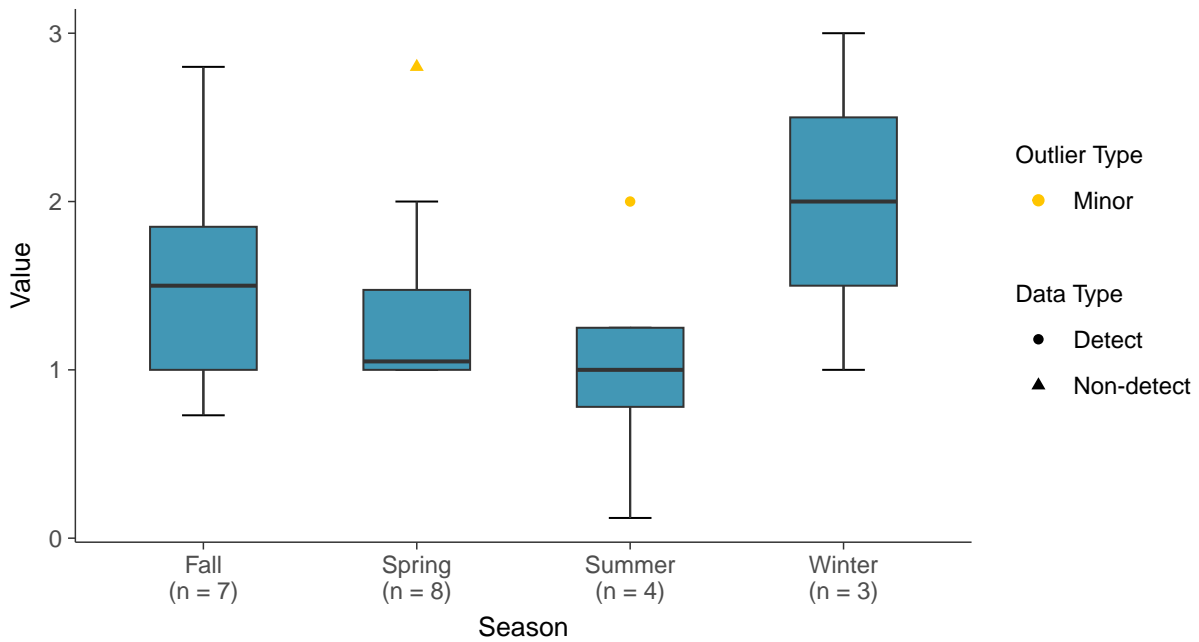
Boxplot

Arsenic, MW-15021 (ug/L)



Boxplot by Season

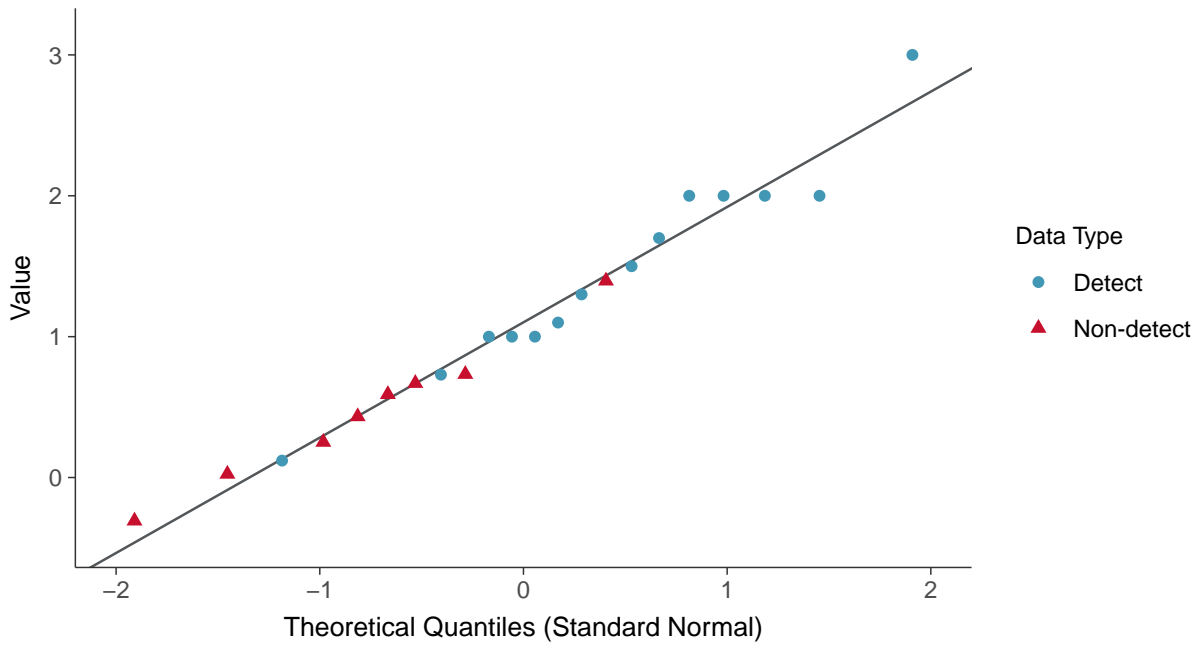
Arsenic, MW-15021 (ug/L)





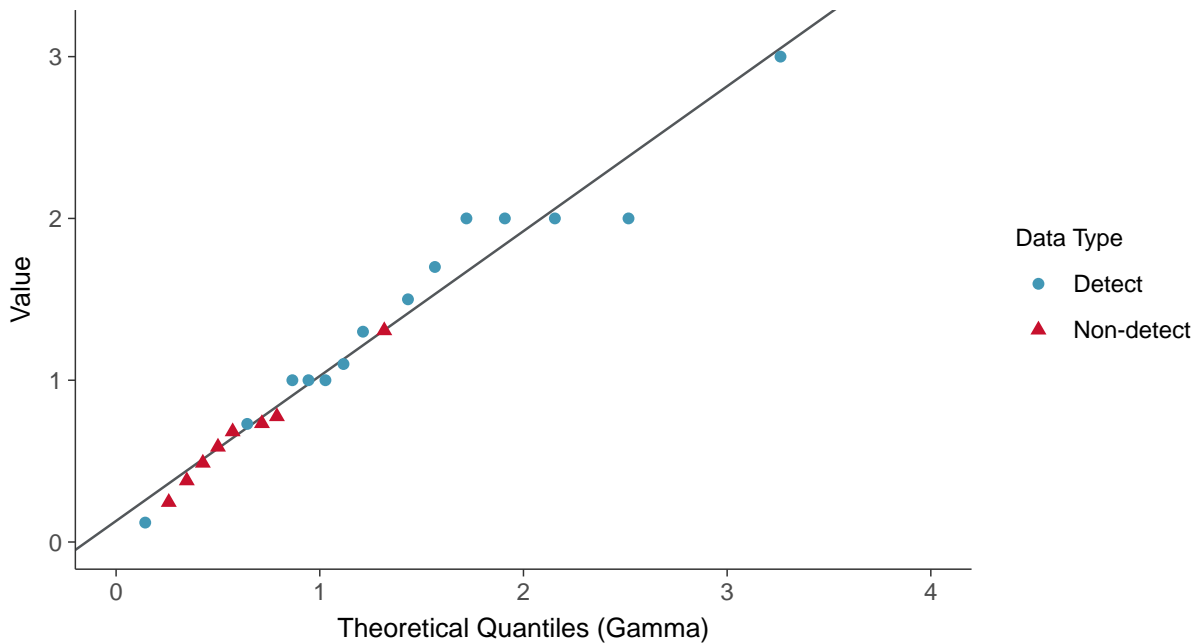
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15021 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

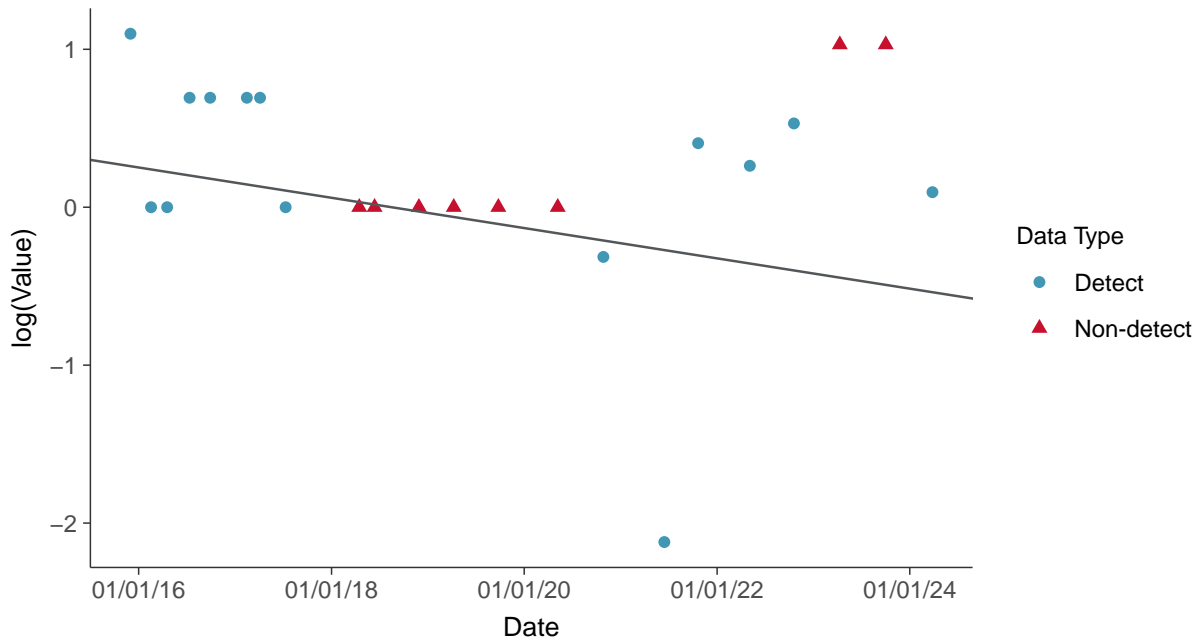
Arsenic, MW-15021 (ug/L)





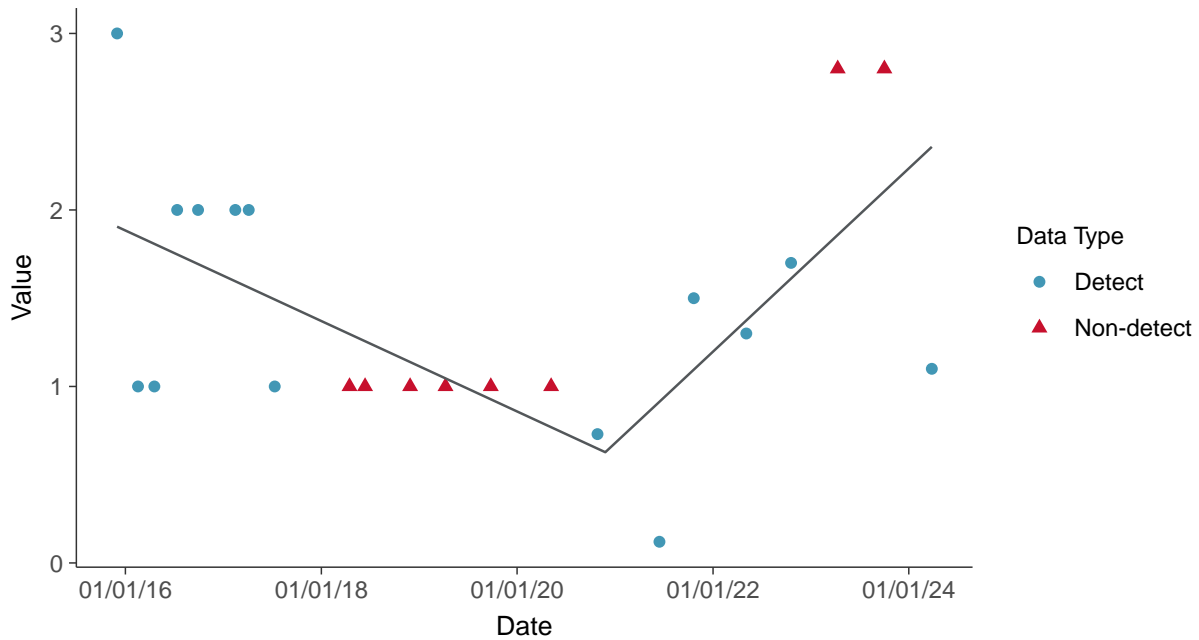
Trend Regression: Lognormal MLE

Arsenic, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

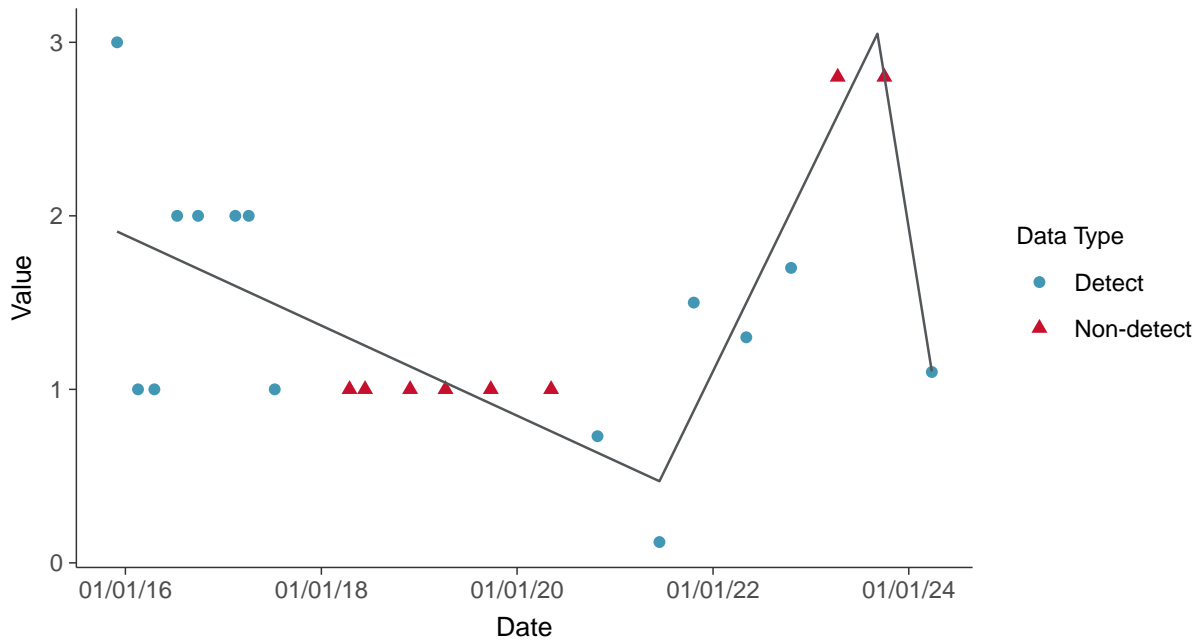
Arsenic, MW-15021 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15021 (ug/L)



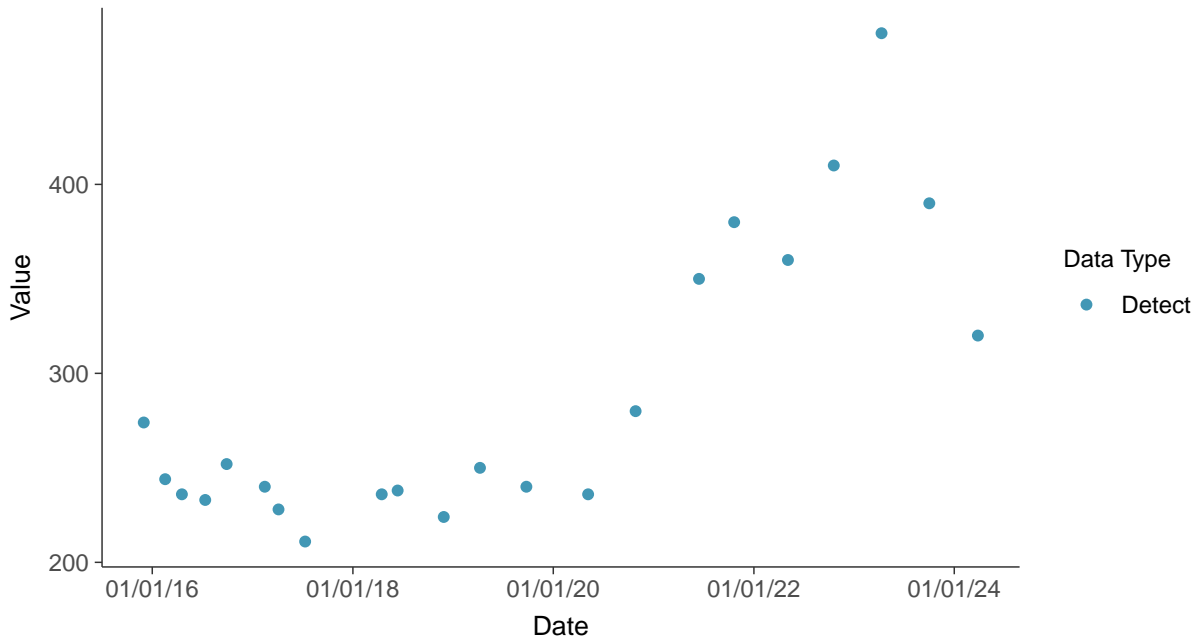


Appendix IV: Barium, MW-15021

ID: 11_2_103

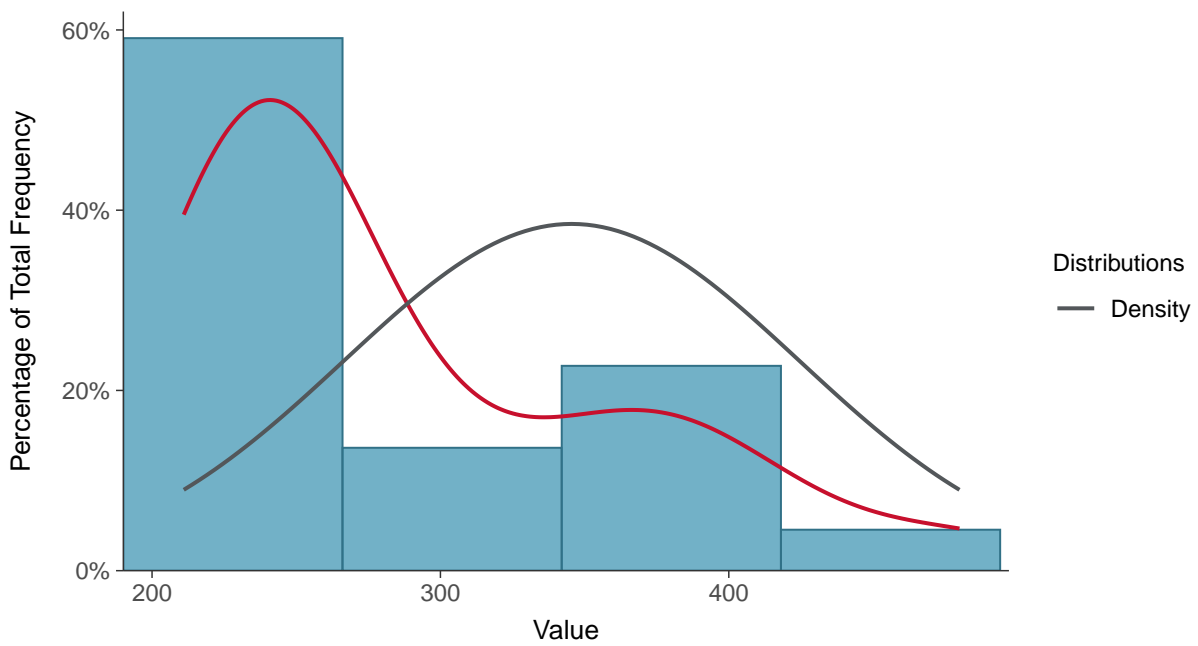
Scatter Plot

Barium, MW-15021 (ug/L)



Histogram

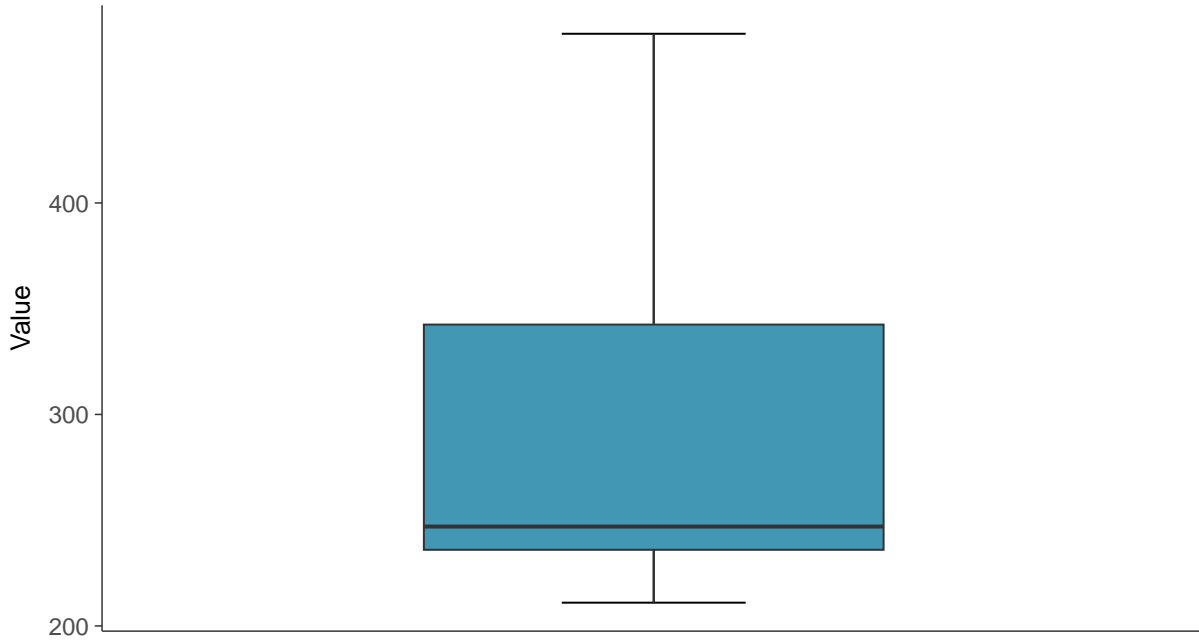
Barium, MW-15021 (ug/L)





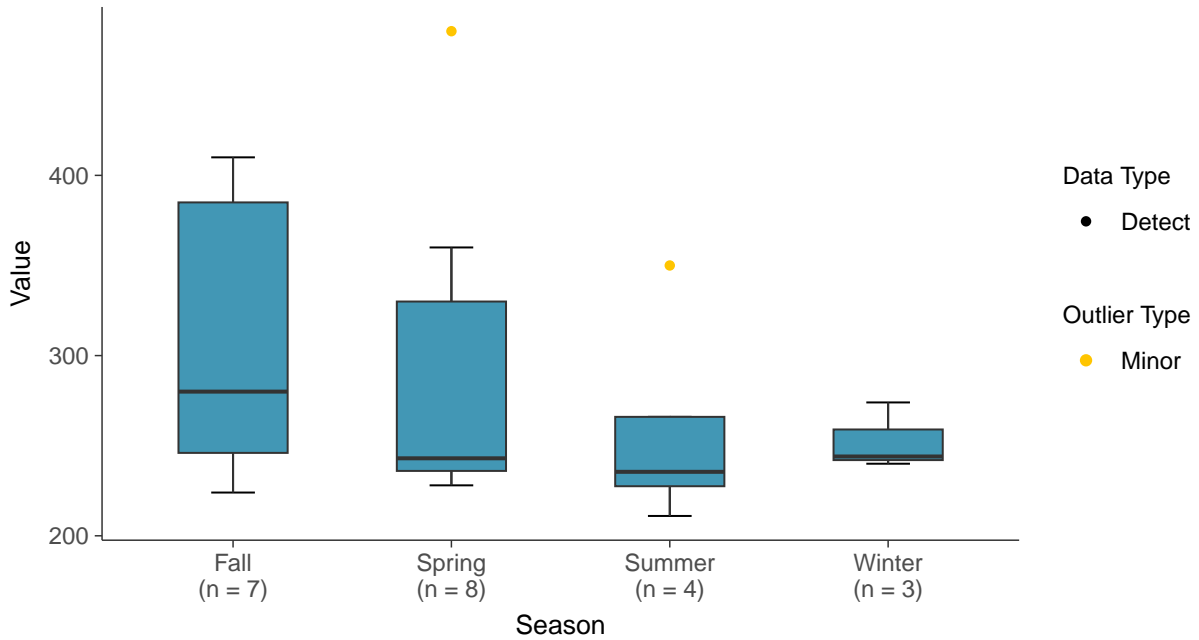
Boxplot

Barium, MW-15021 (ug/L)



Boxplot by Season

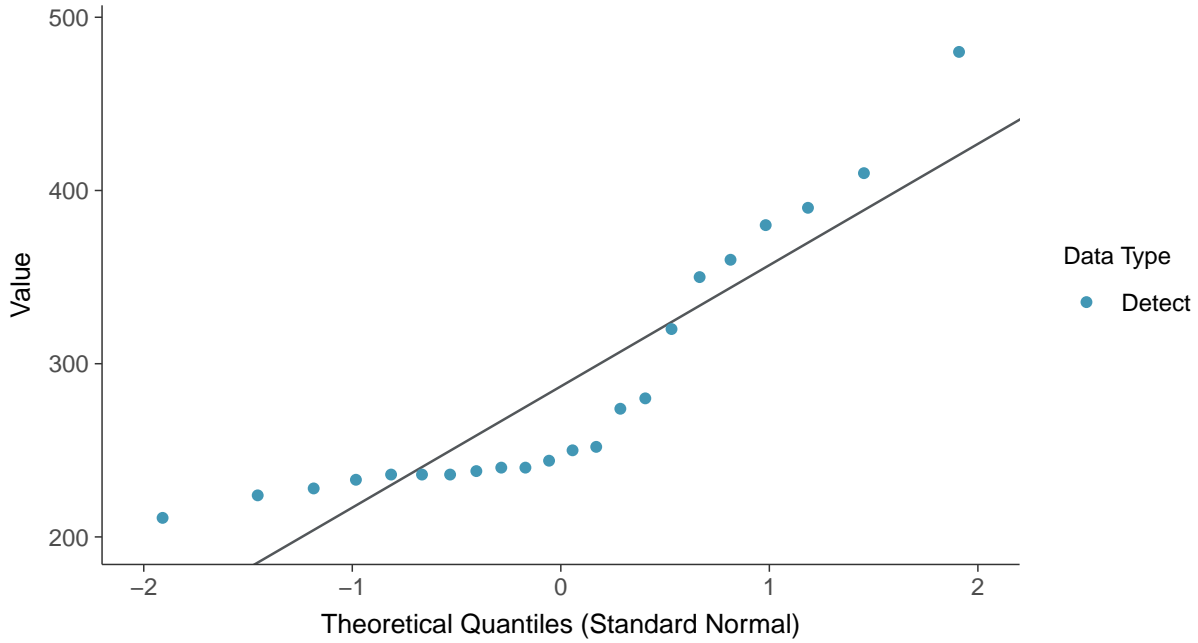
Barium, MW-15021 (ug/L)





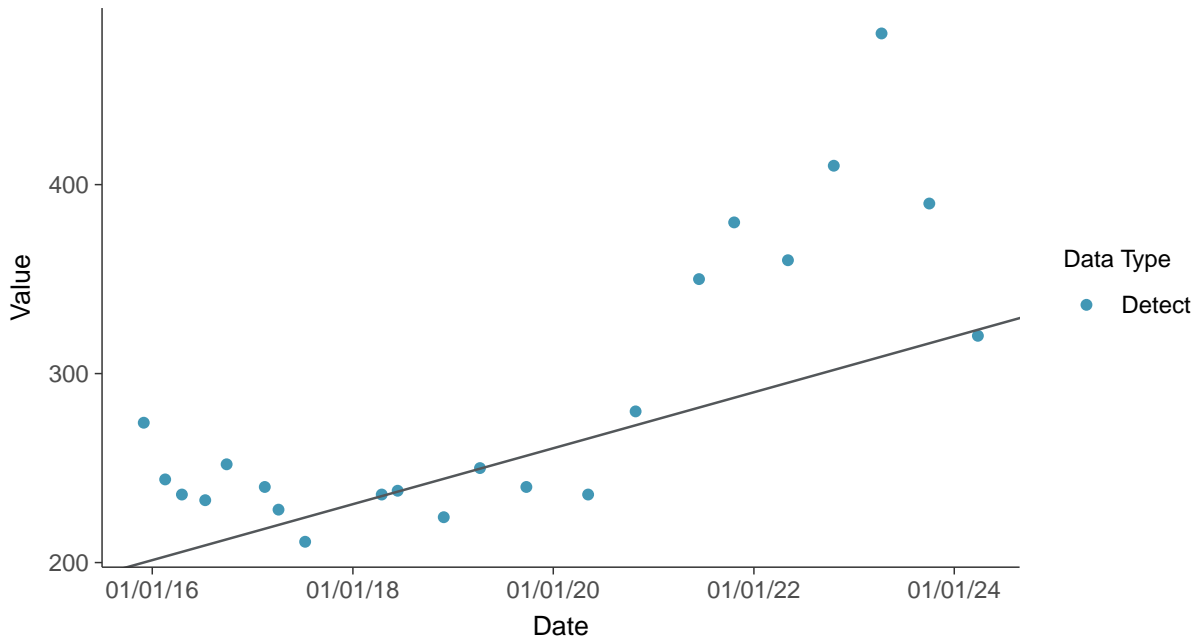
Normal Q-Q plot

Barium, MW-15021 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

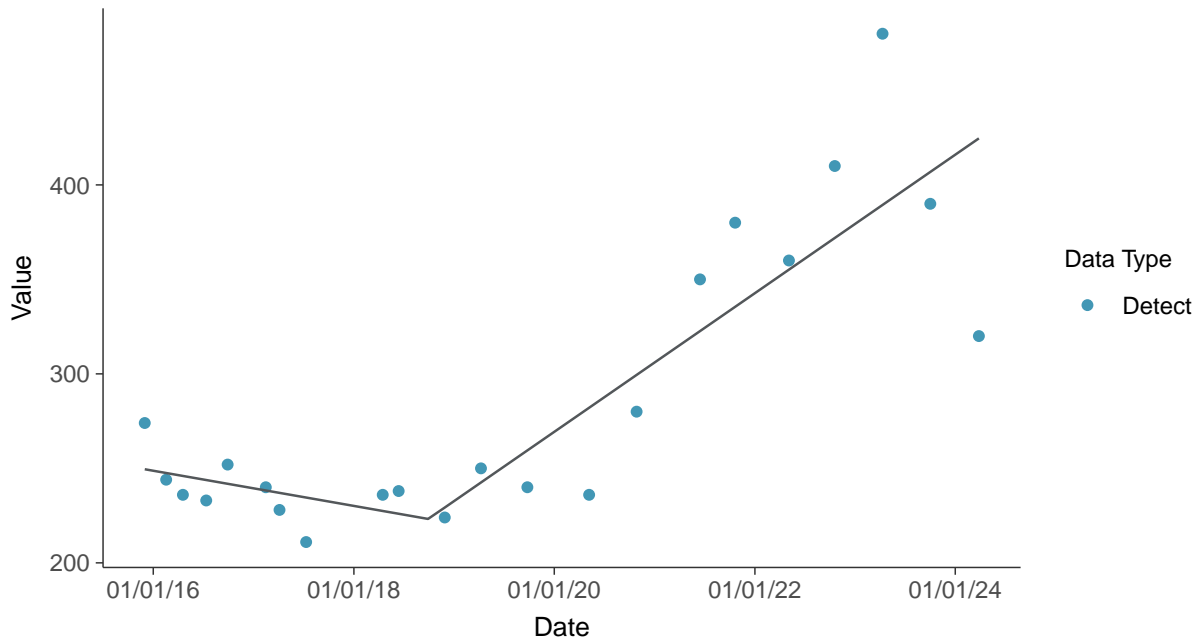
Barium, MW-15021 (ug/L)





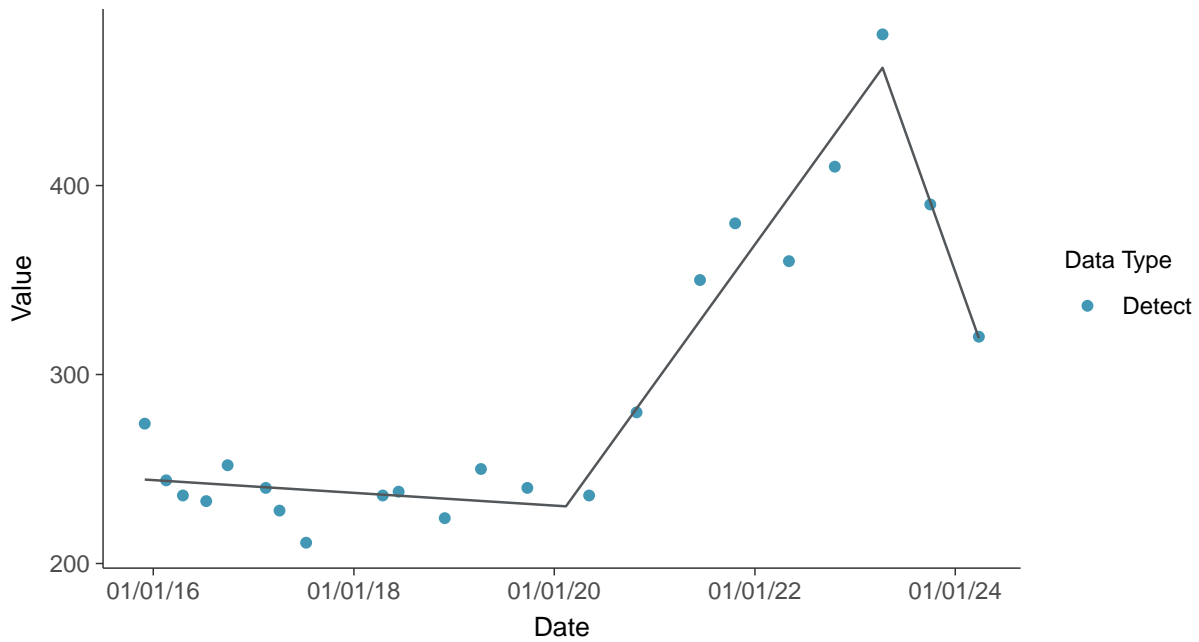
Trend Regression: Piecewise Linear-Linear

Barium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

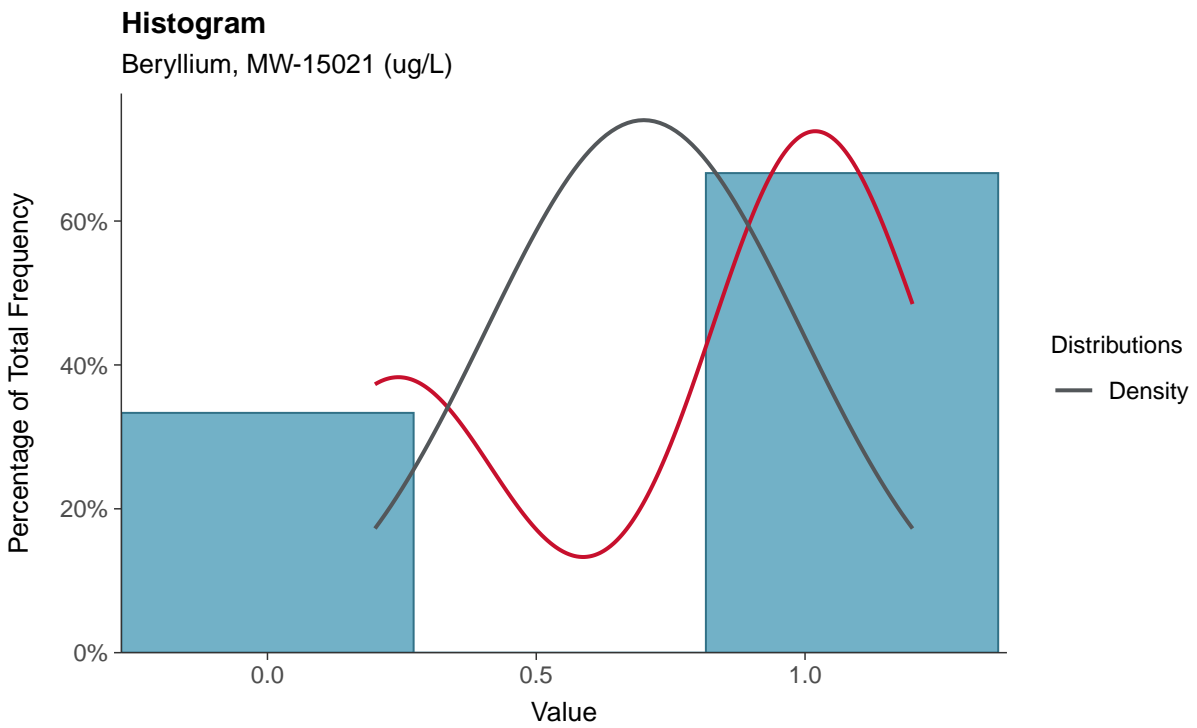
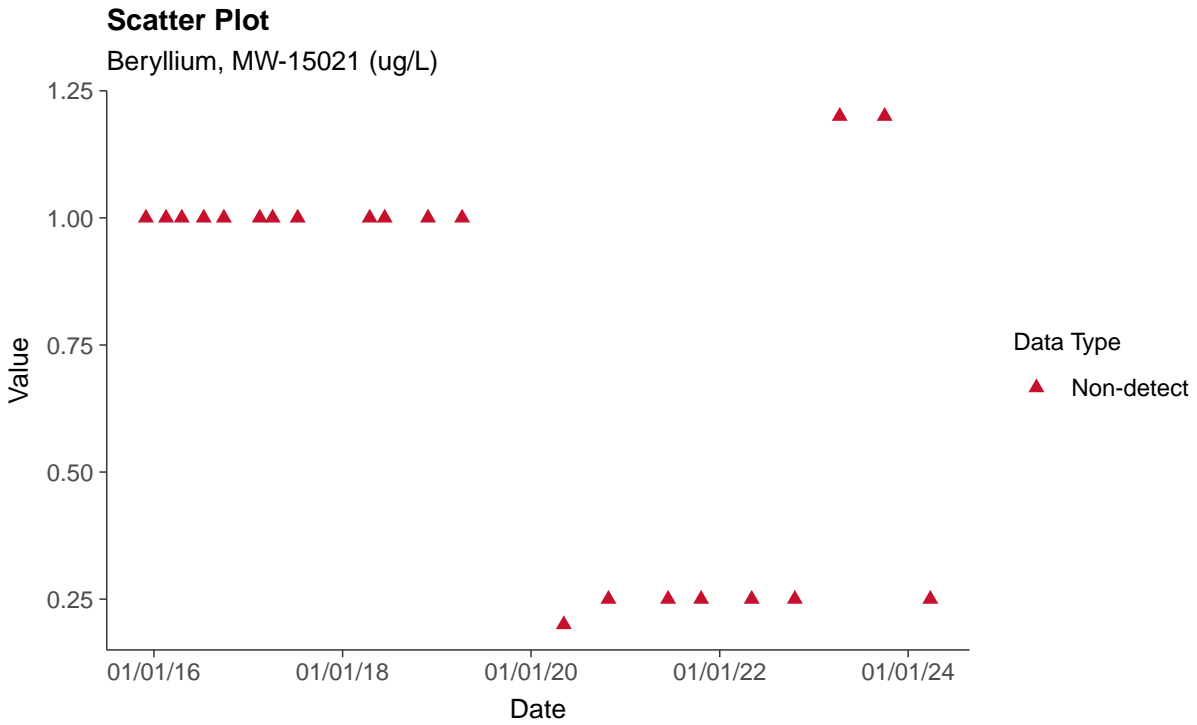
Barium, MW-15021 (ug/L)





Appendix IV: Beryllium, MW-15021

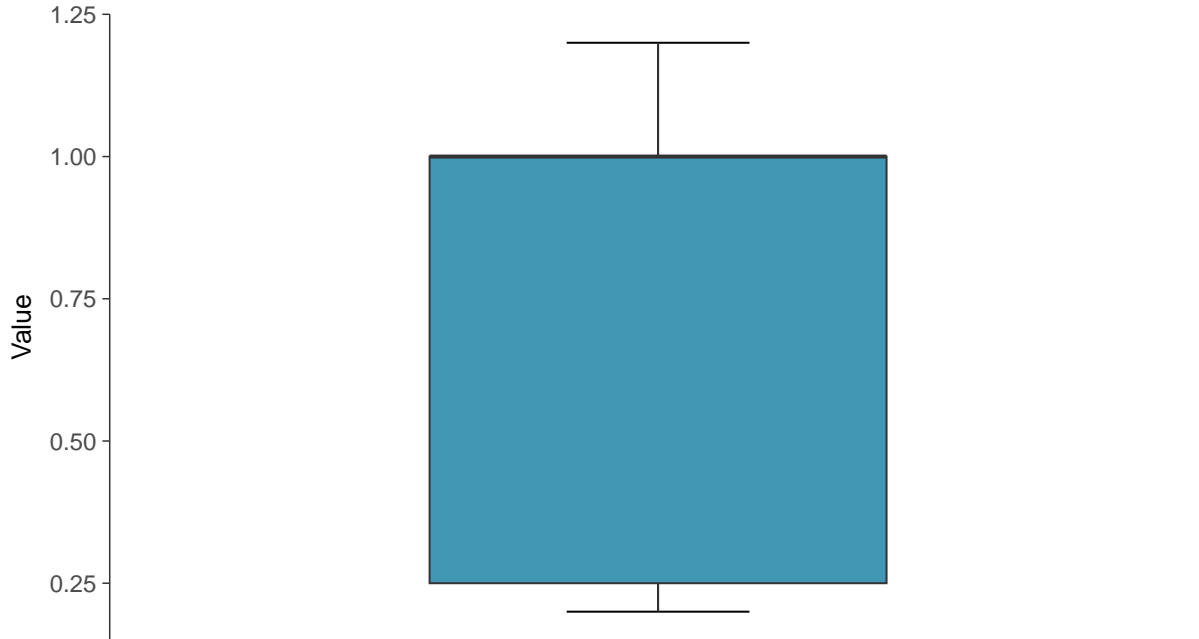
ID: 11_2_104





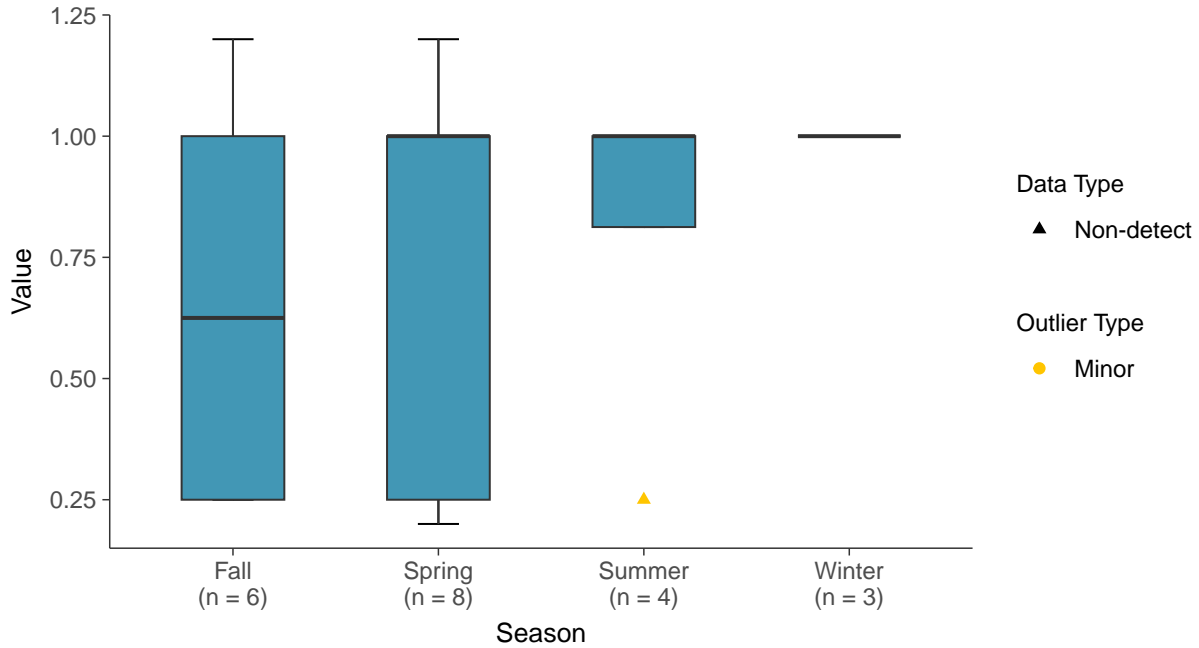
Boxplot

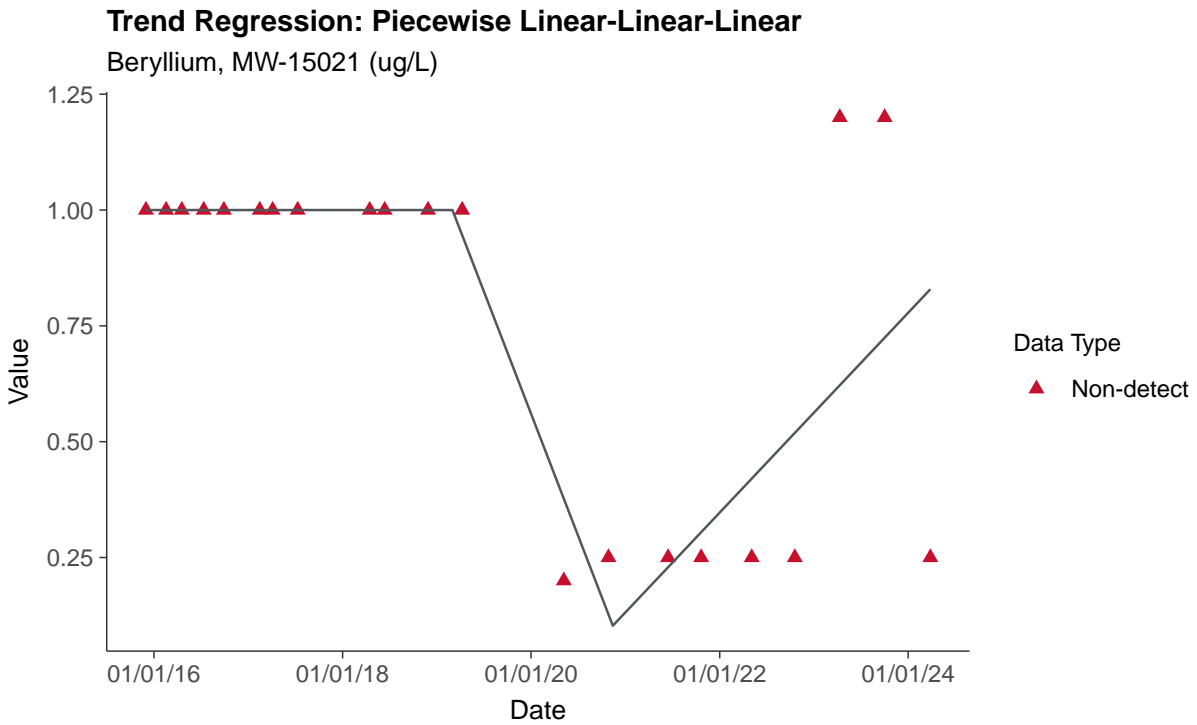
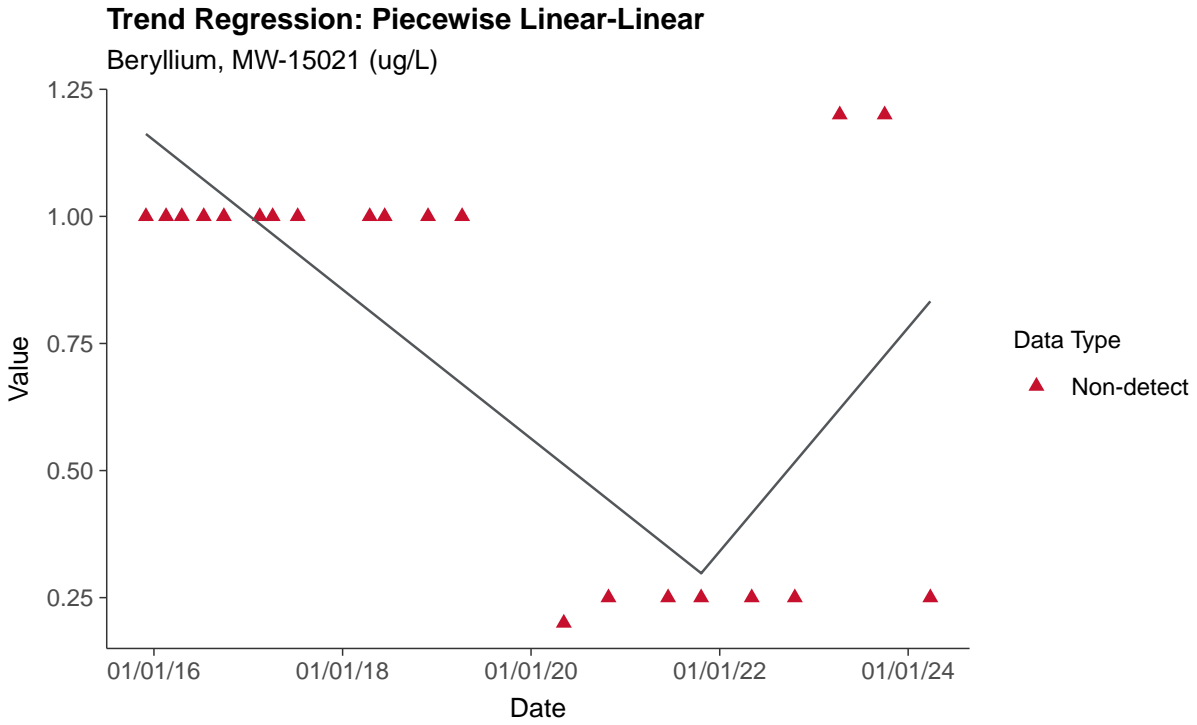
Beryllium, MW-15021 (ug/L)



Boxplot by Season

Beryllium, MW-15021 (ug/L)

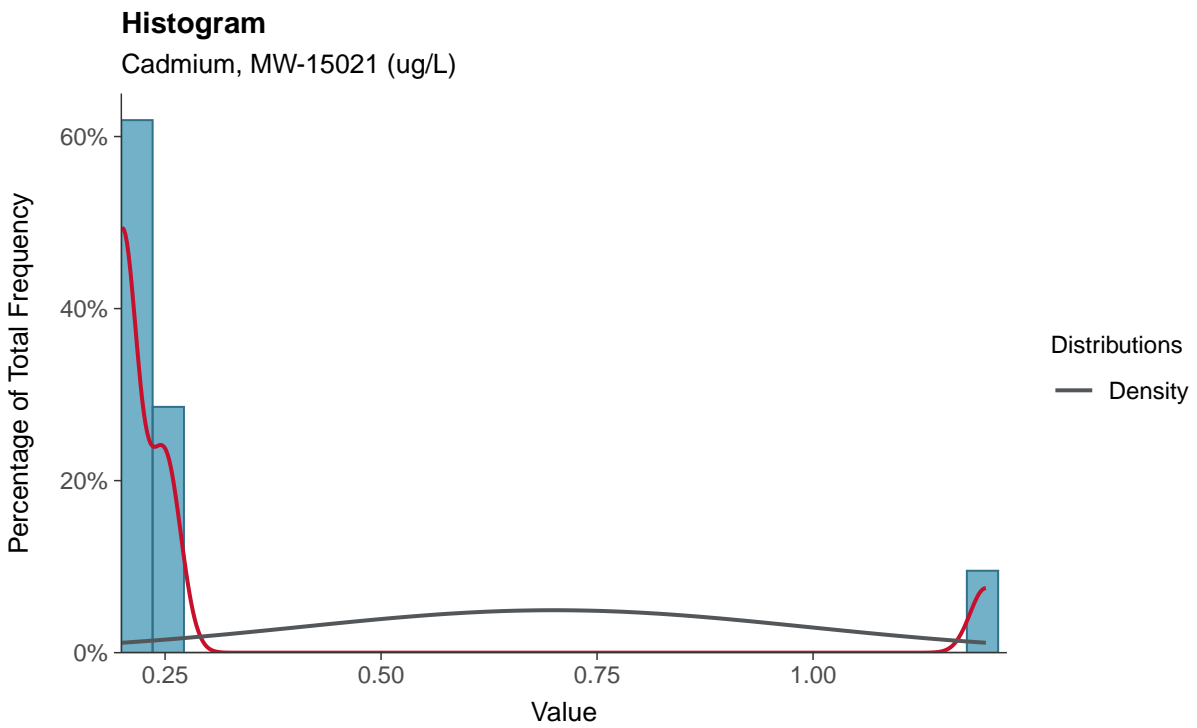
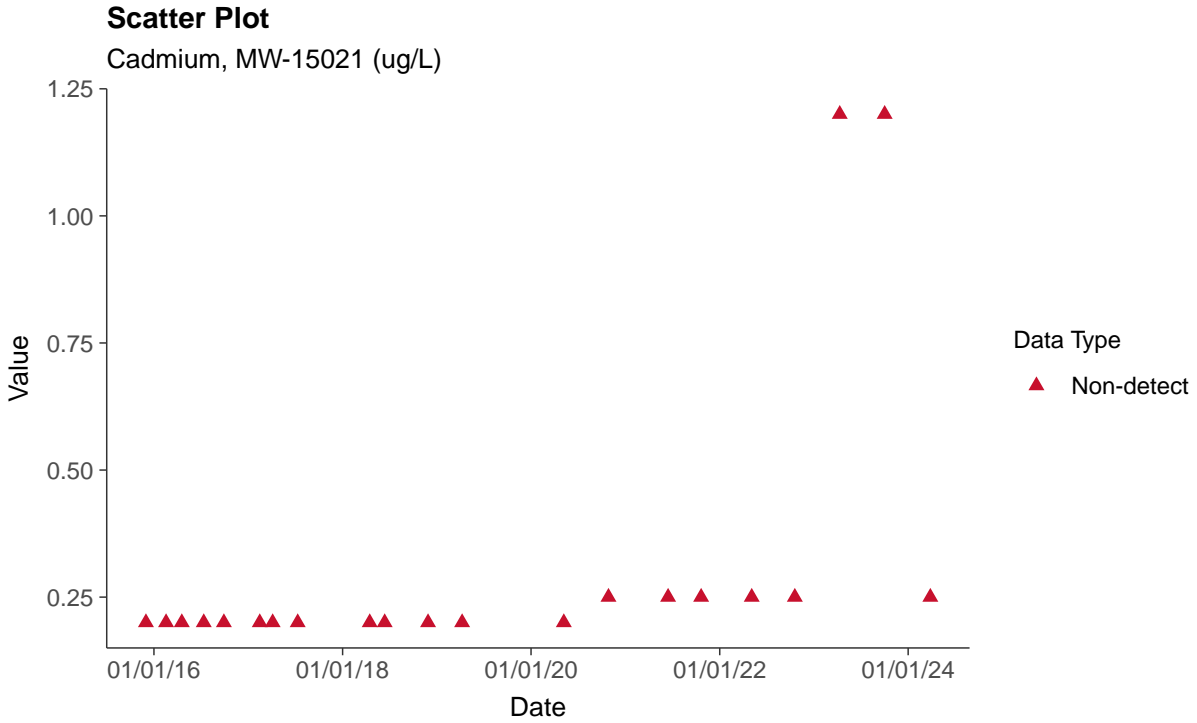


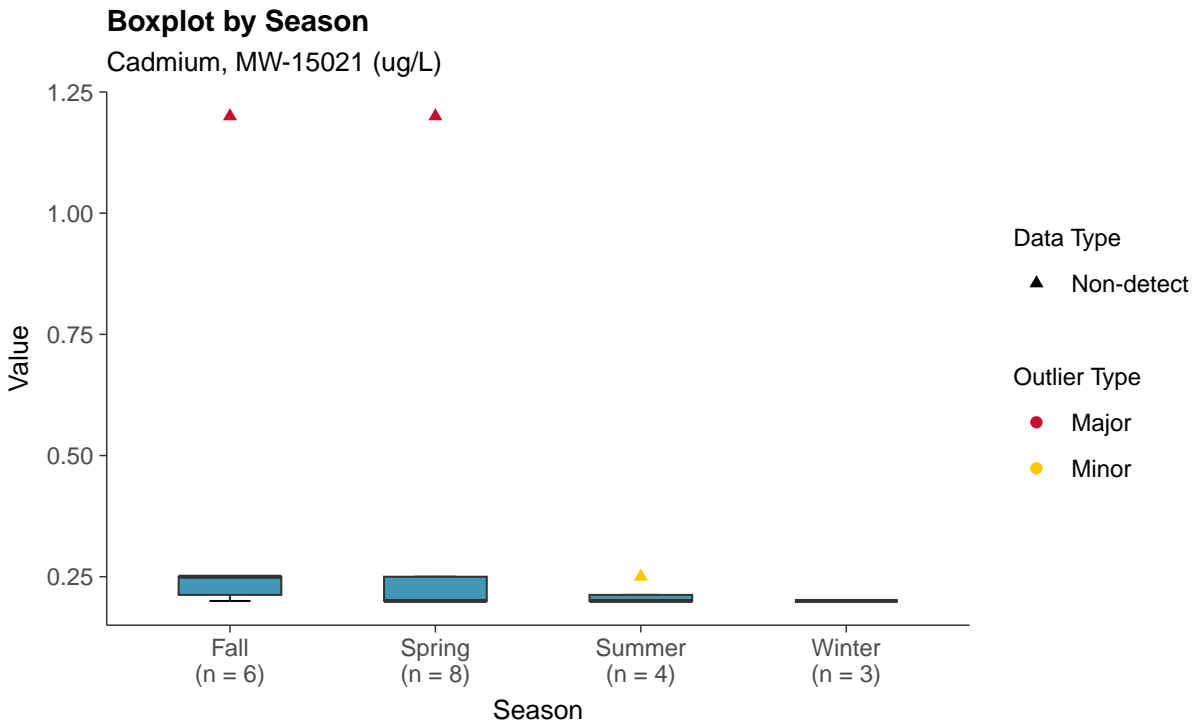
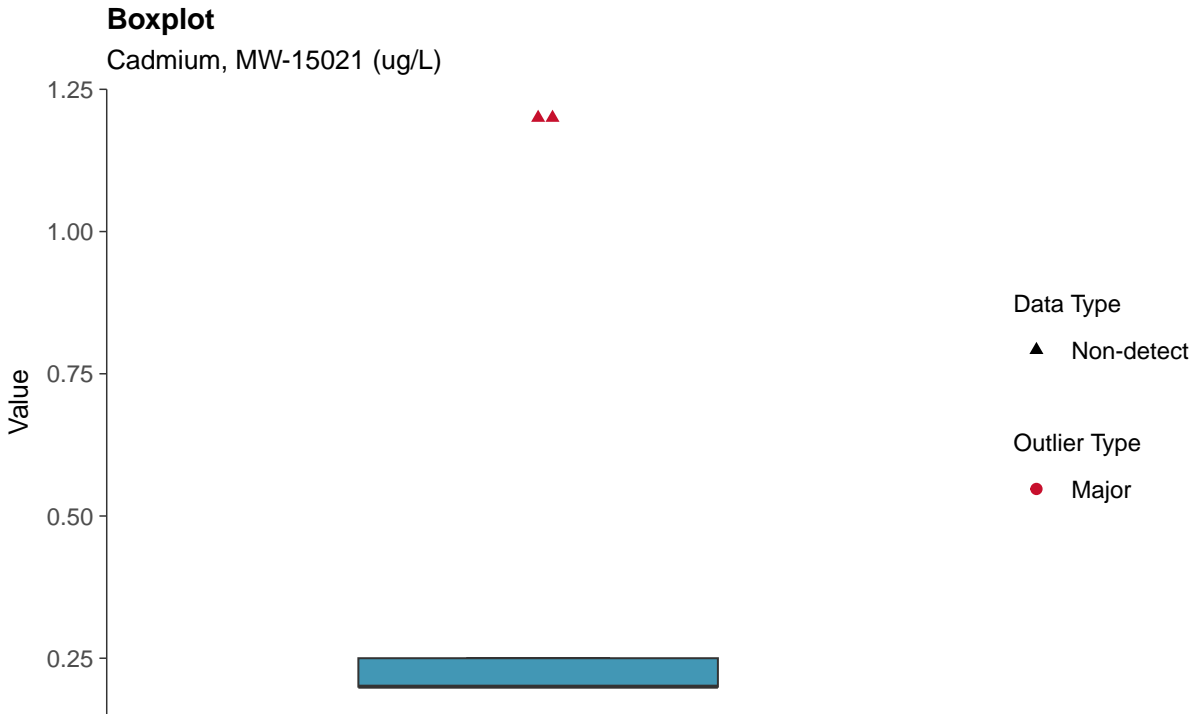




Appendix IV: Cadmium, MW-15021

ID: 11_2_106

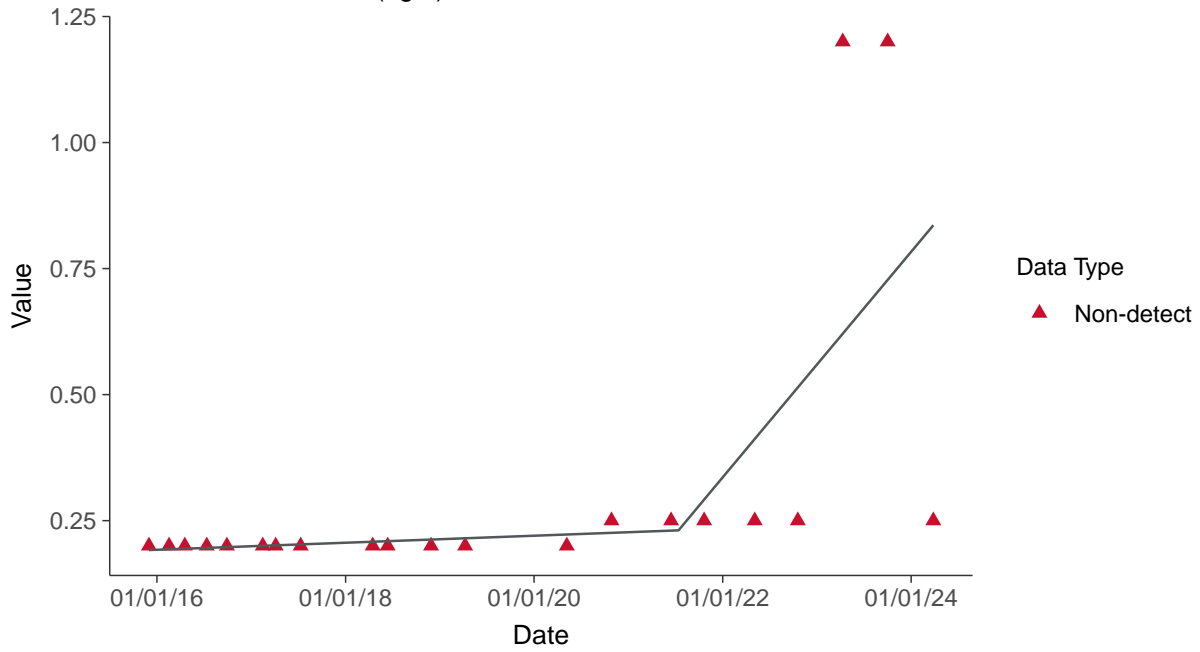






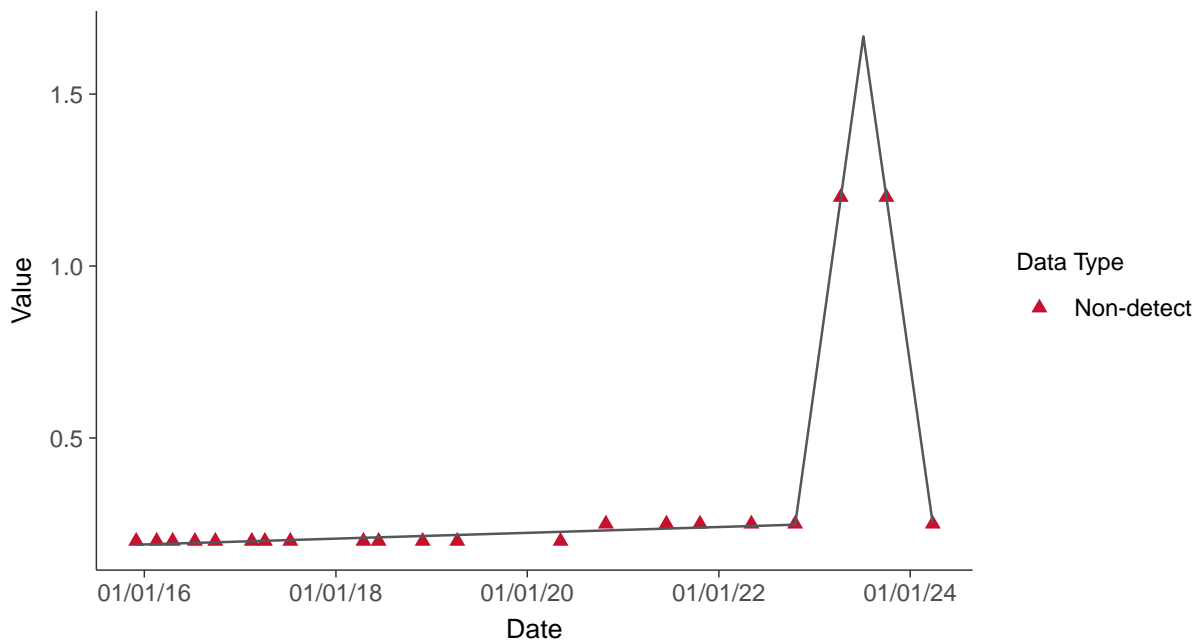
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15021 (ug/L)

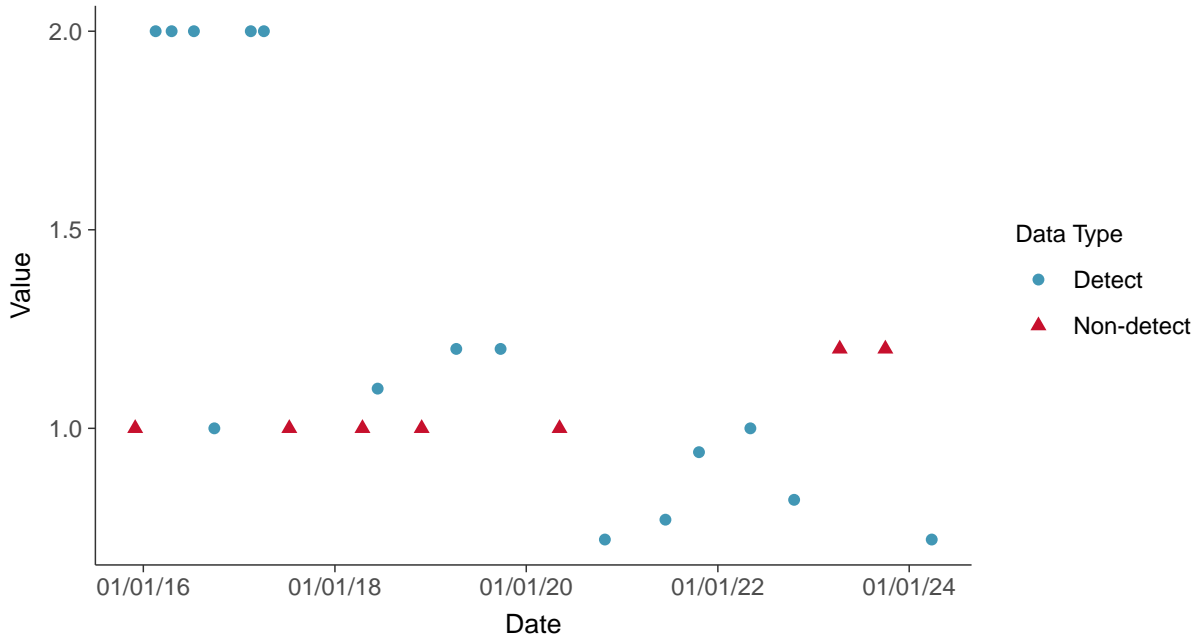


Appendix IV: Chromium, MW-15021

ID: 11_2_109

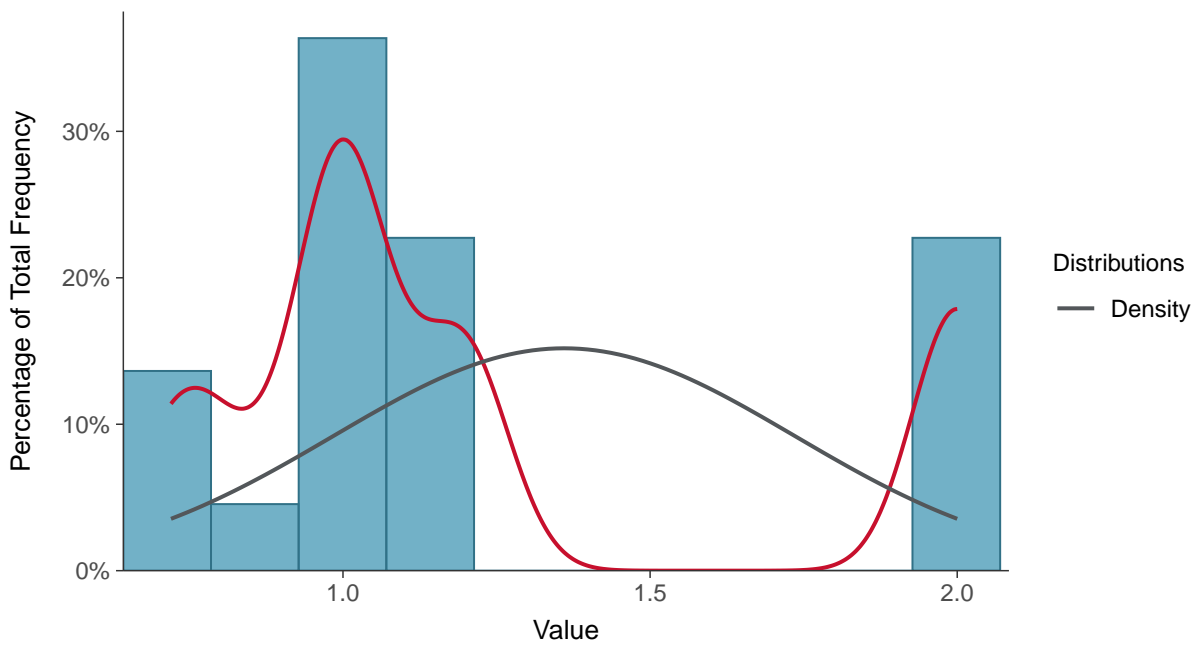
Scatter Plot

Chromium, MW-15021 (ug/L)



Histogram

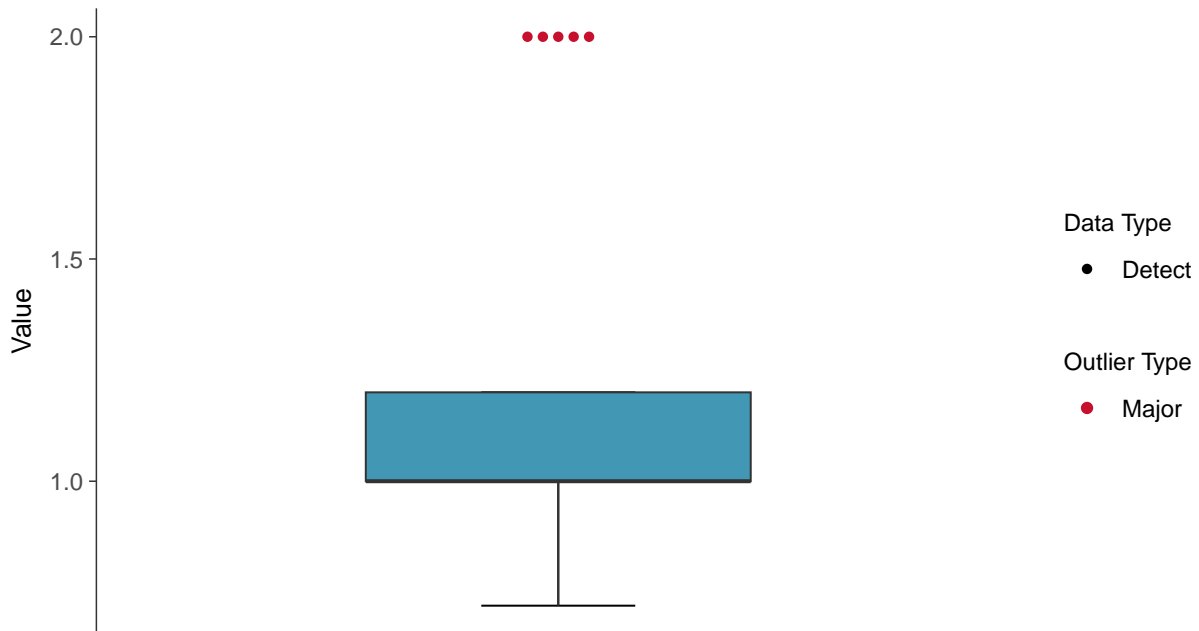
Chromium, MW-15021 (ug/L)





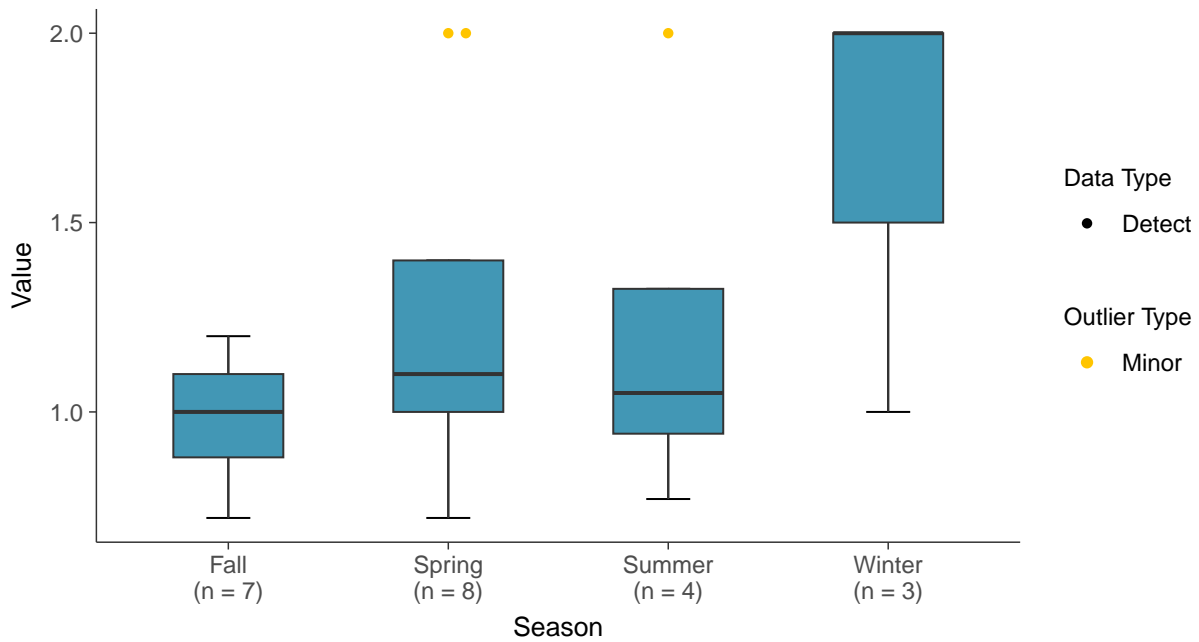
Boxplot

Chromium, MW-15021 (ug/L)



Boxplot by Season

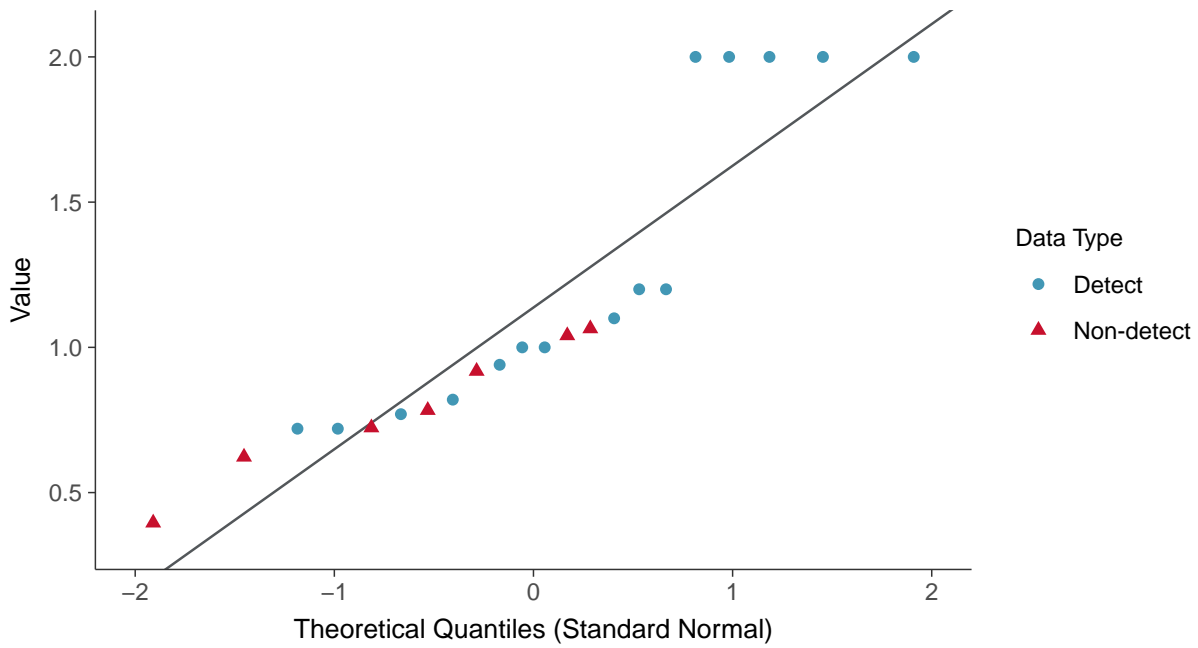
Chromium, MW-15021 (ug/L)





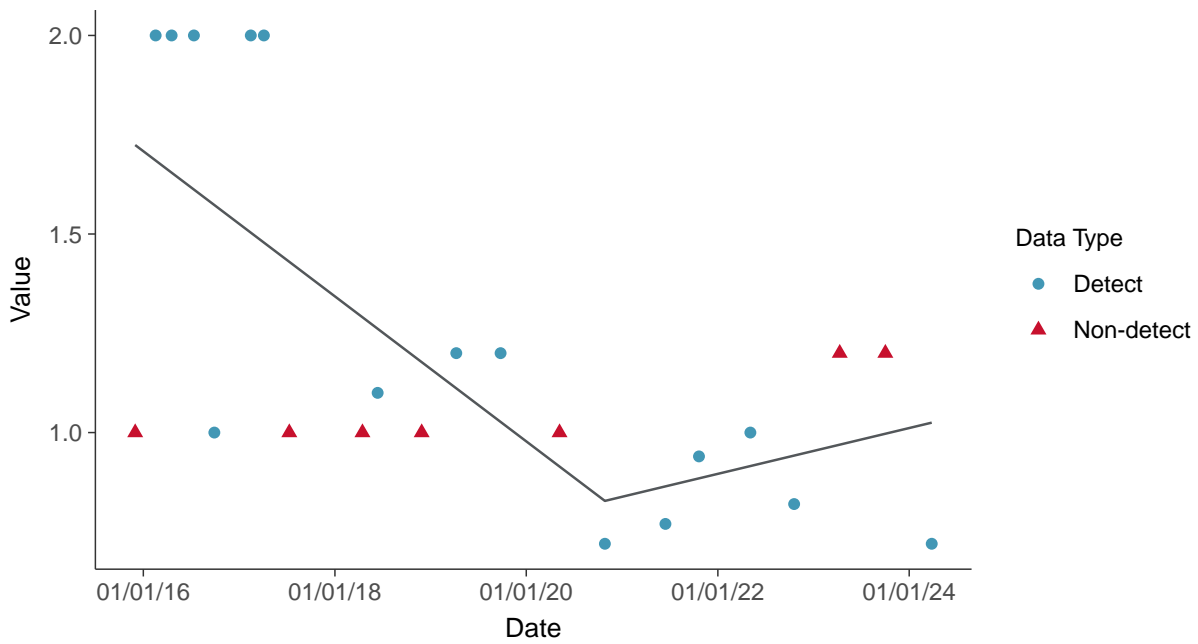
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15021 (ug/L)



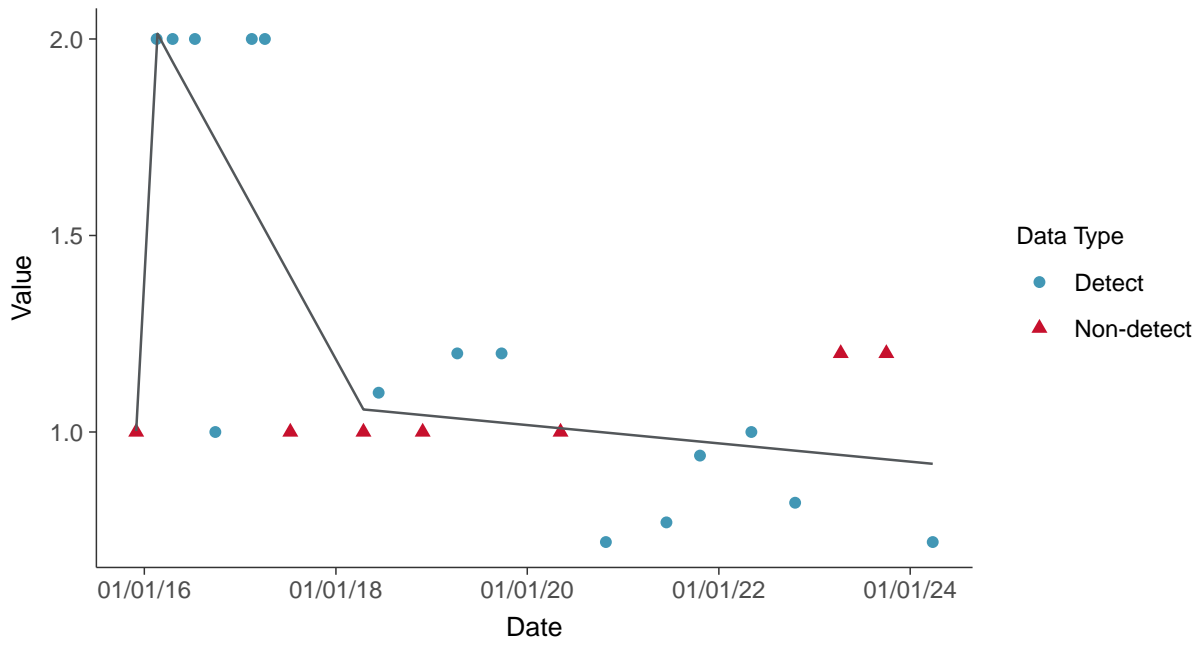
Trend Regression: Piecewise Linear-Linear

Chromium, MW-15021 (ug/L)





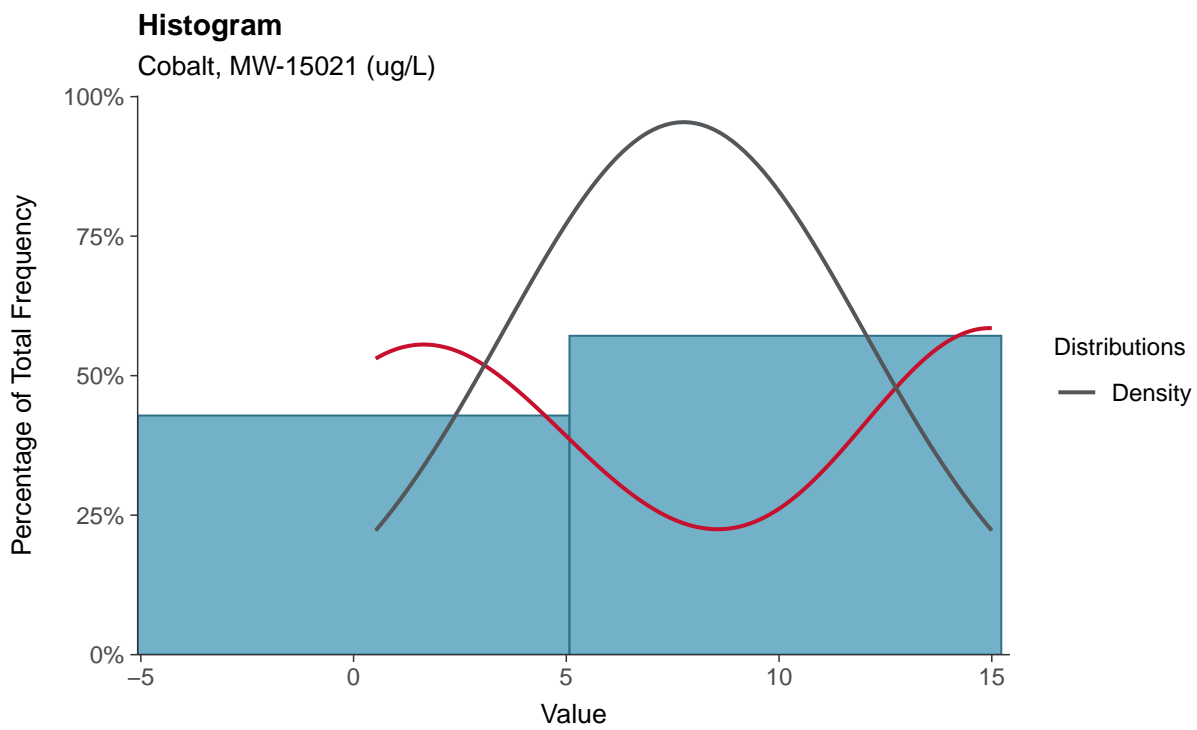
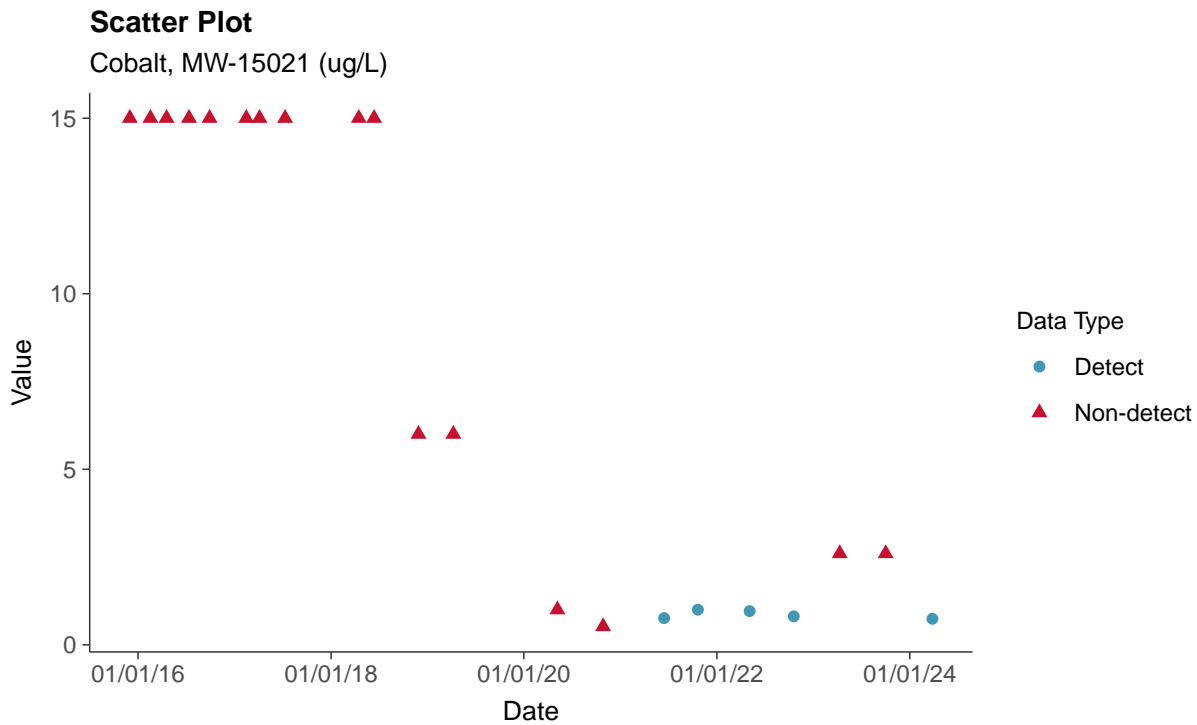
Trend Regression: Piecewise Linear-Linear-Linear Chromium, MW-15021 (ug/L)





Appendix IV: Cobalt, MW-15021

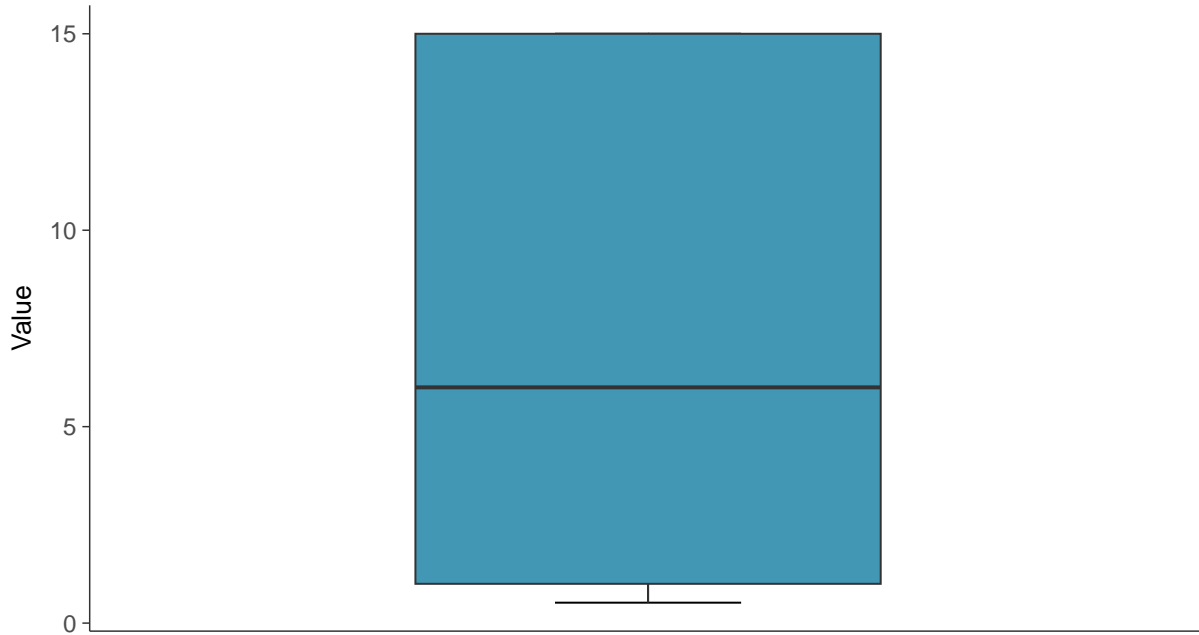
ID: 11_2_110





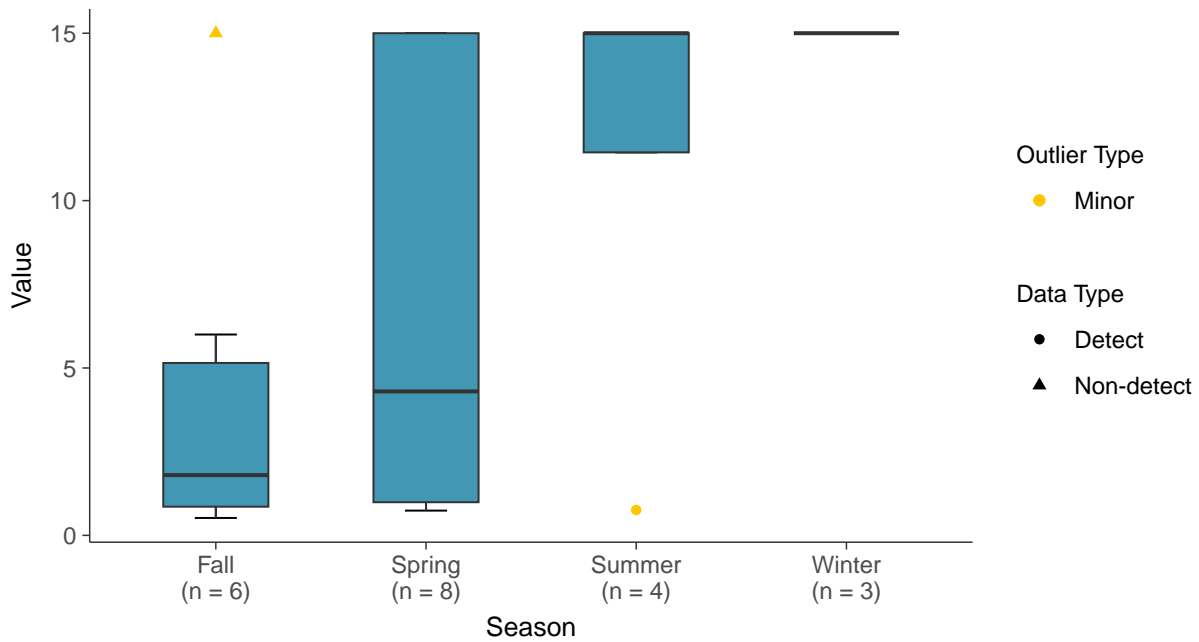
Boxplot

Cobalt, MW-15021 (ug/L)



Boxplot by Season

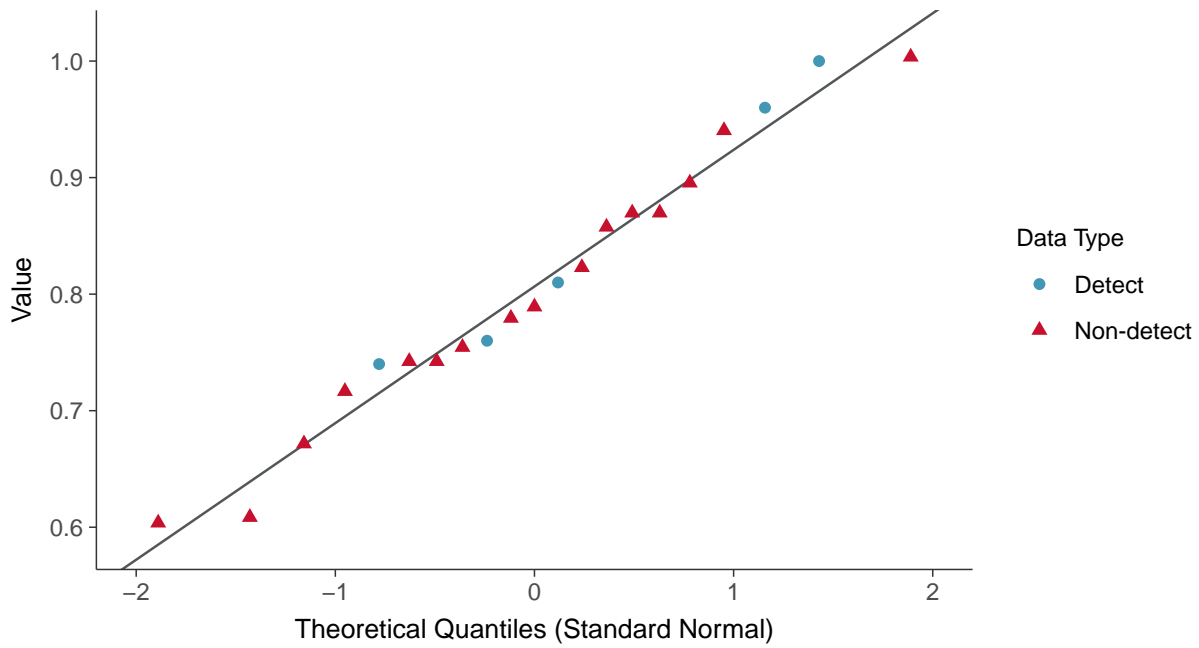
Cobalt, MW-15021 (ug/L)





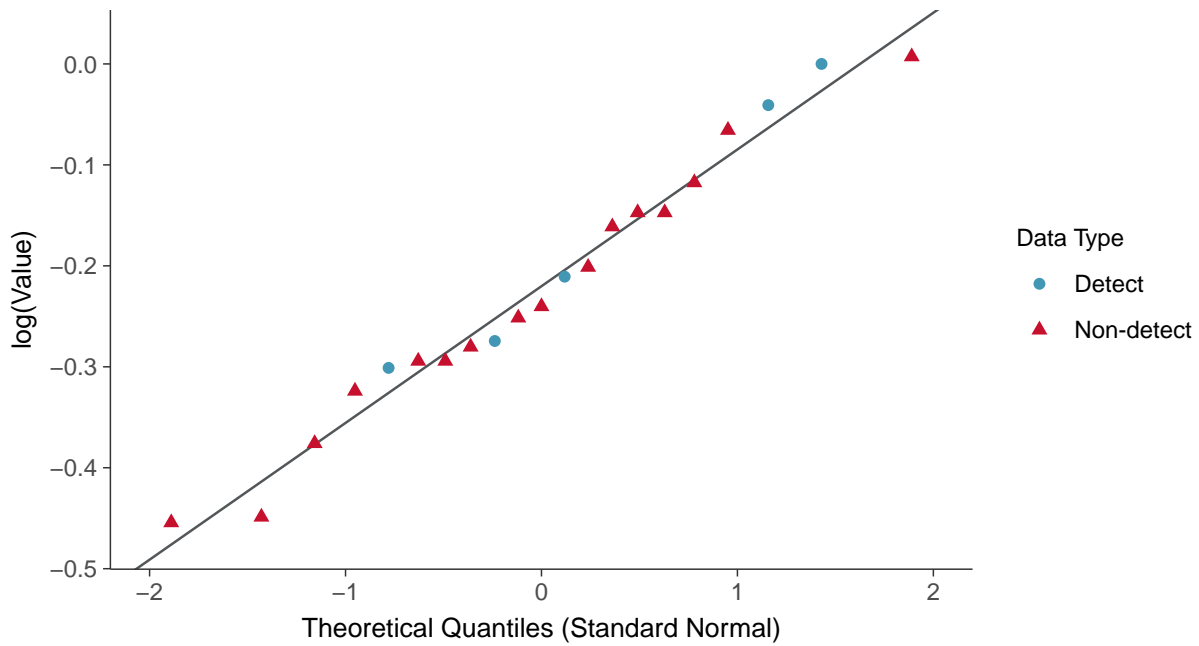
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15021 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

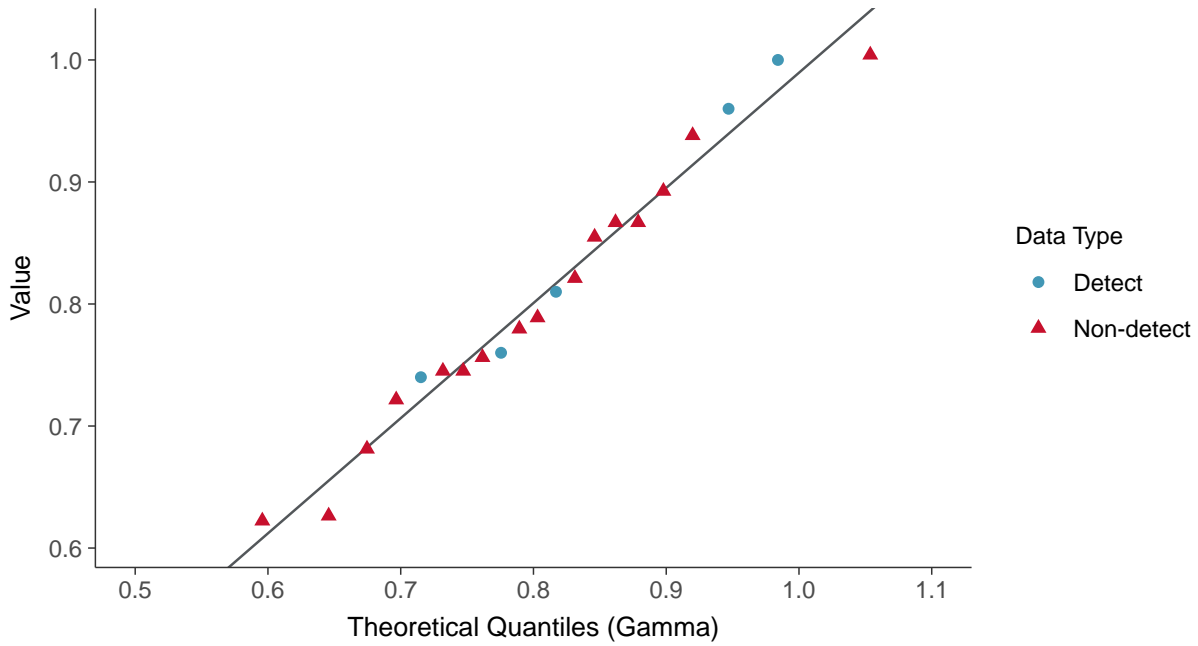
Cobalt, MW-15021 (ug/L)





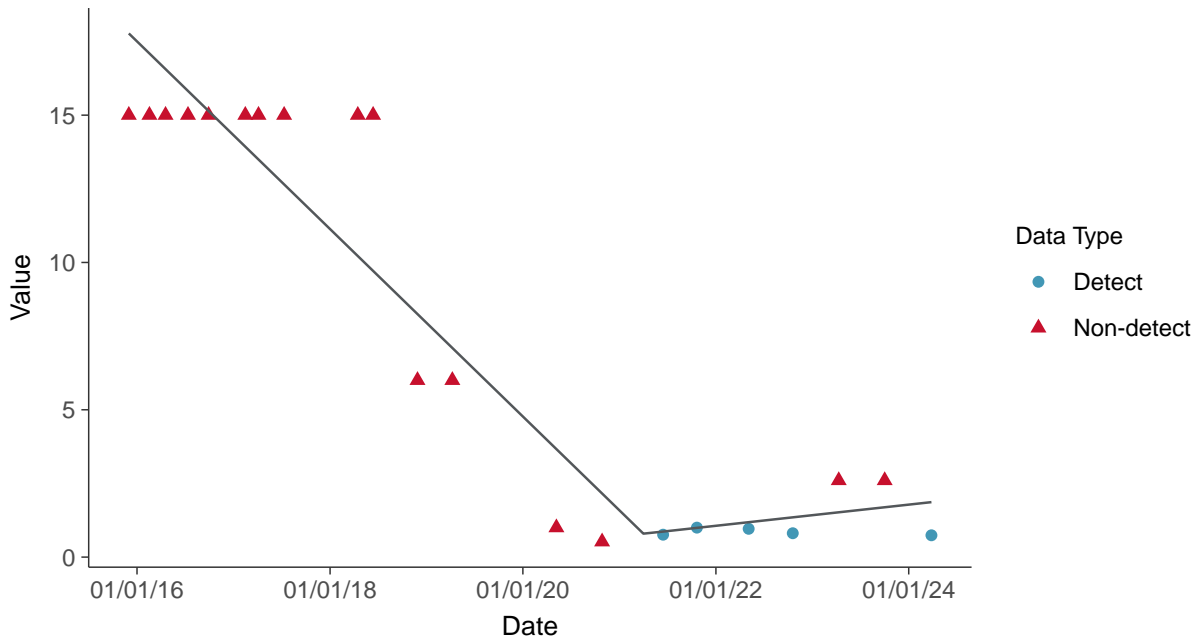
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

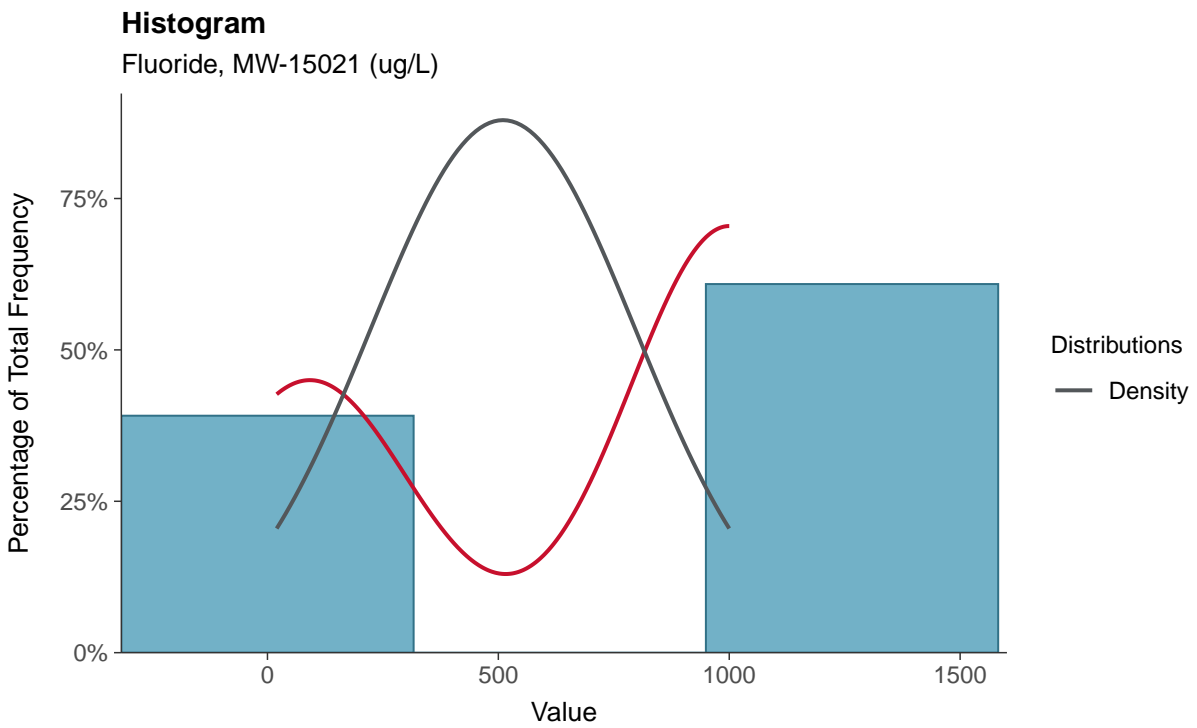
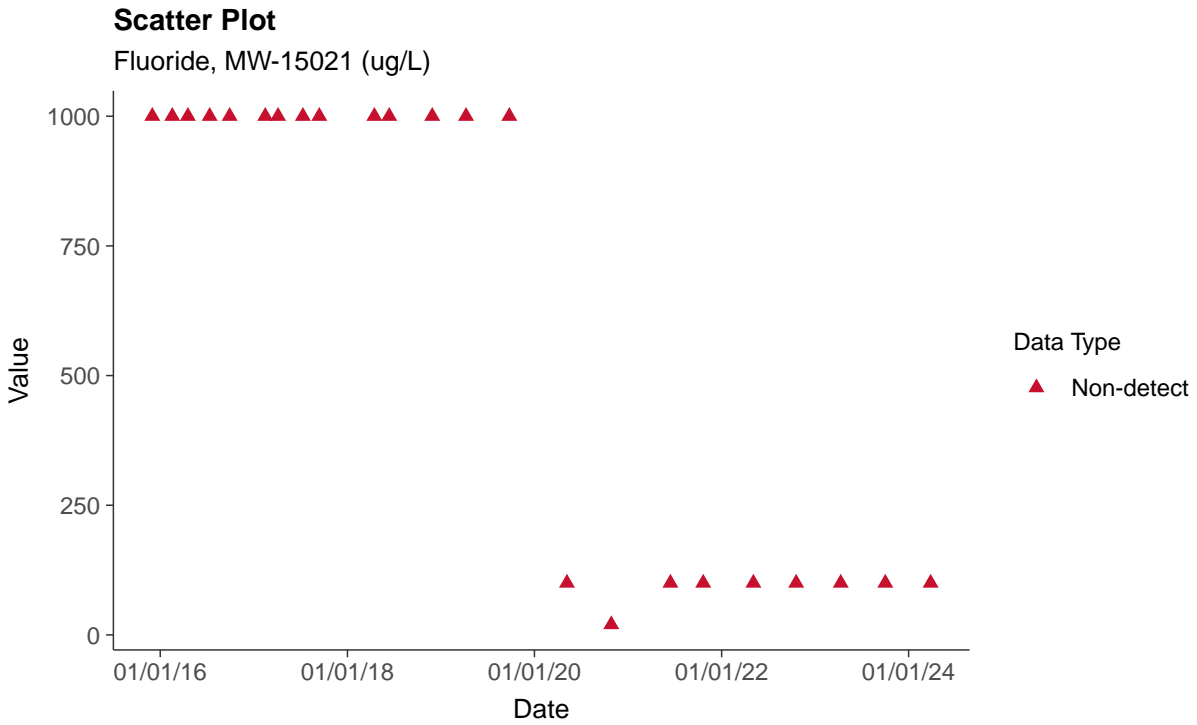
Cobalt, MW-15021 (ug/L)





Appendix IV: Fluoride, MW-15021

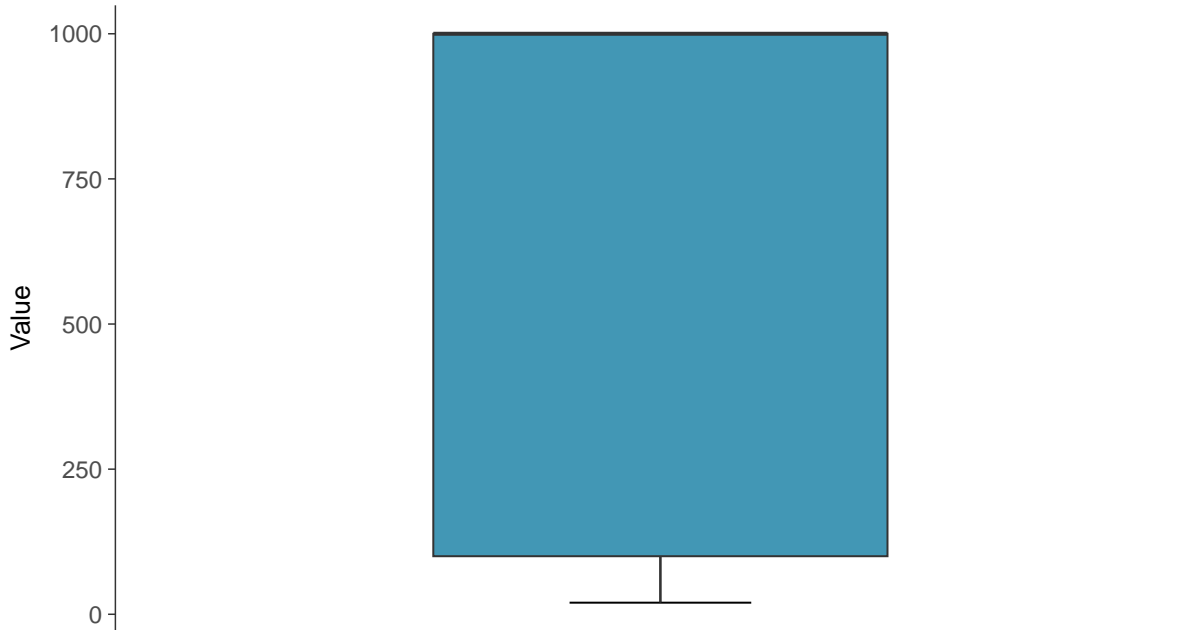
ID: 11_2_114





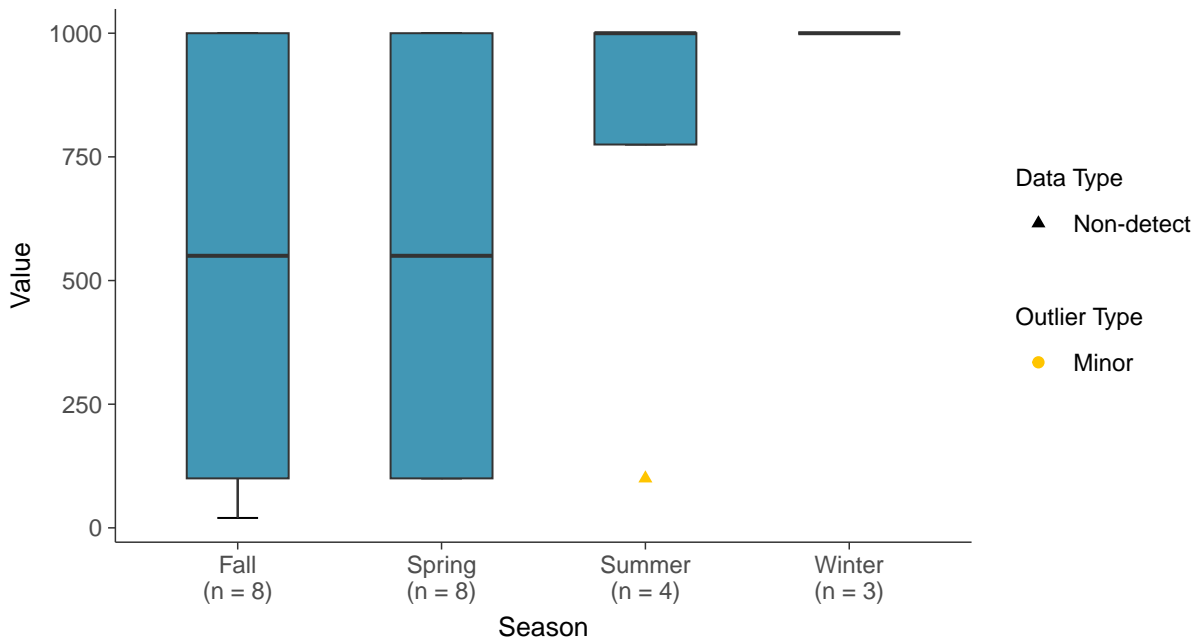
Boxplot

Fluoride, MW-15021 (ug/L)



Boxplot by Season

Fluoride, MW-15021 (ug/L)



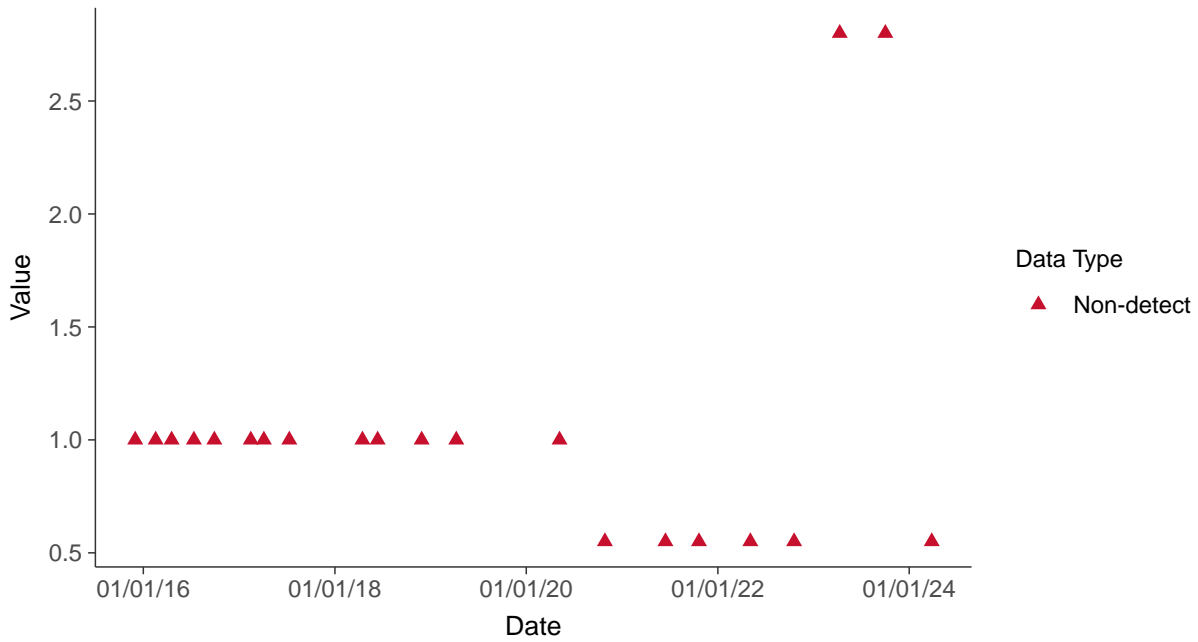


Appendix IV: Lead, MW-15021

ID: 11_2_116

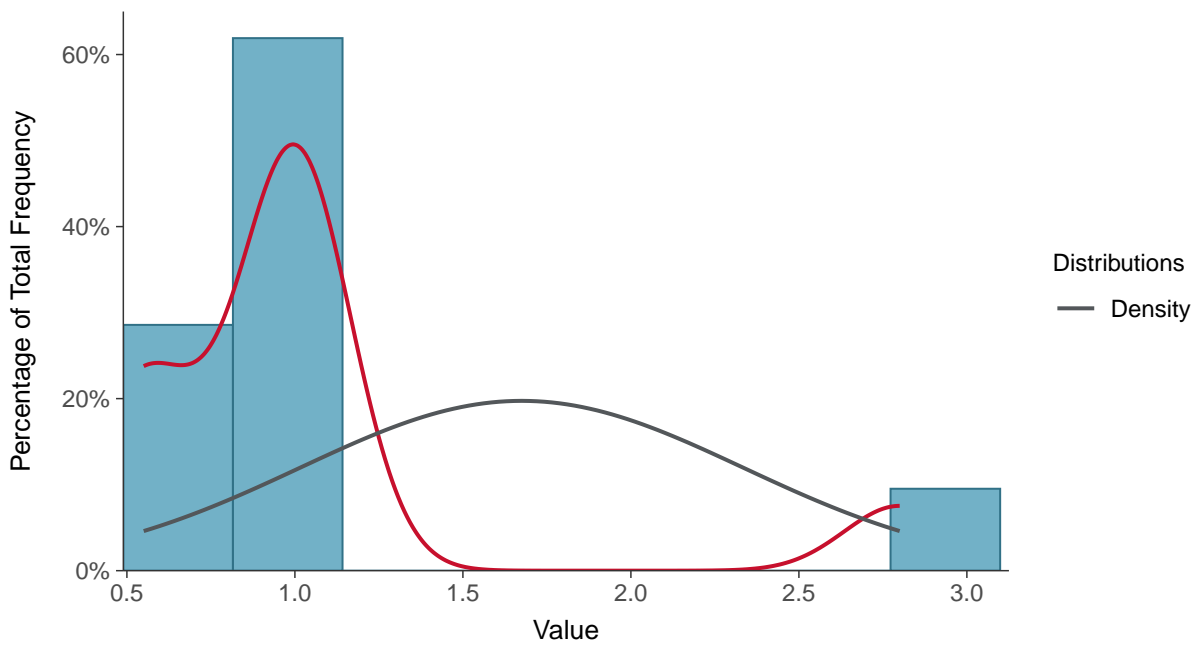
Scatter Plot

Lead, MW-15021 (ug/L)



Histogram

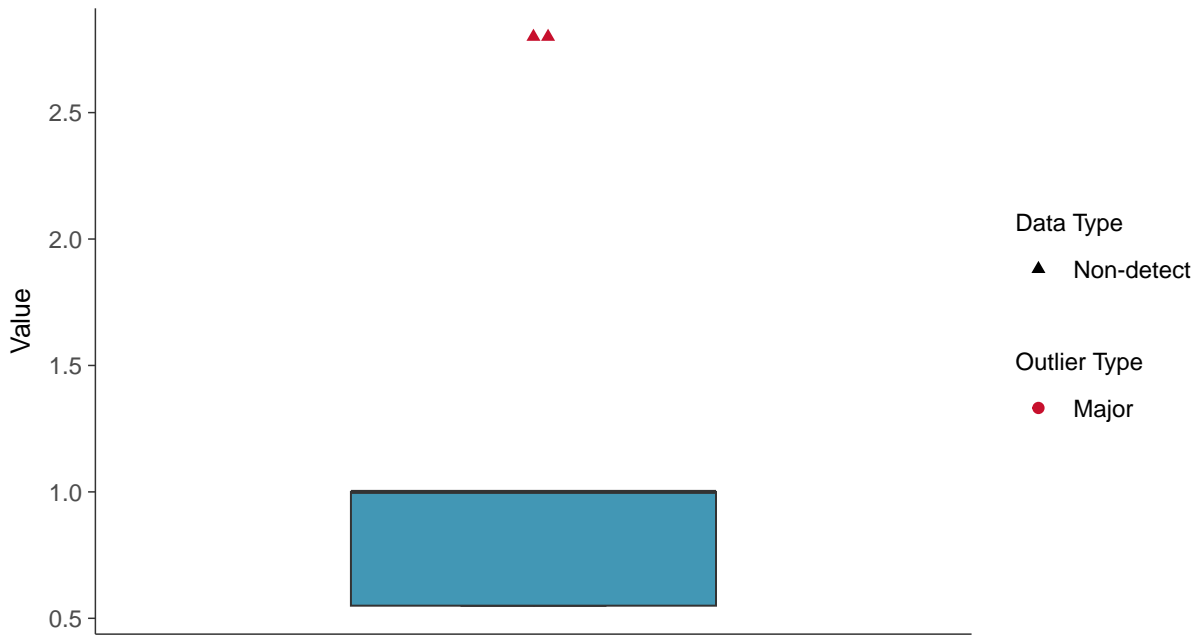
Lead, MW-15021 (ug/L)





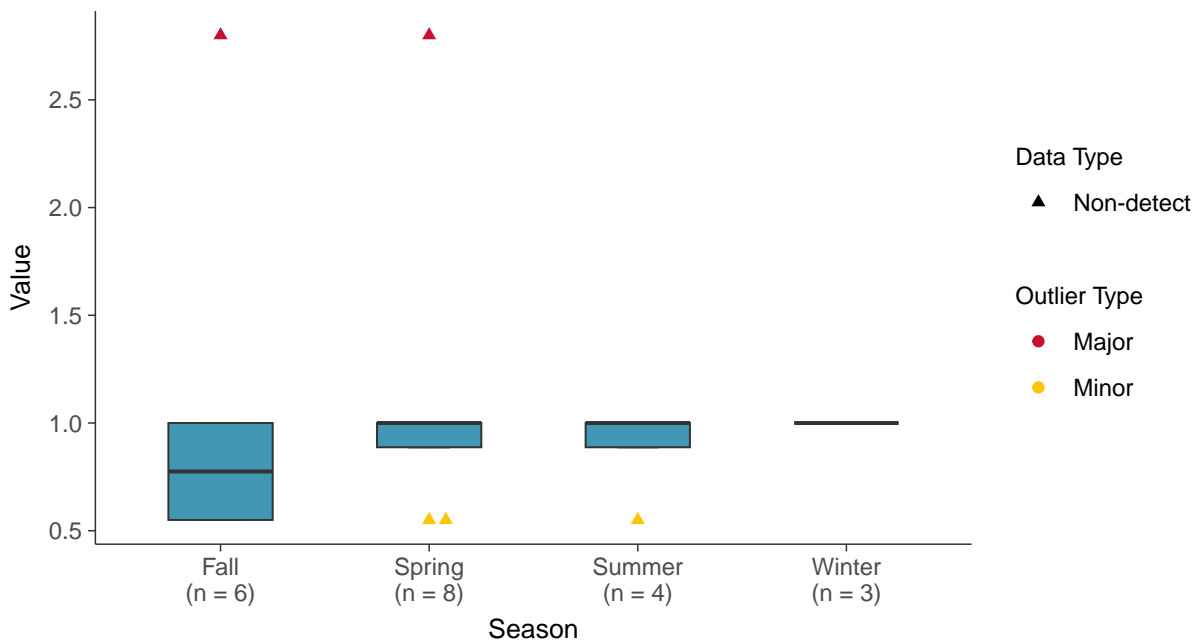
Boxplot

Lead, MW-15021 (ug/L)



Boxplot by Season

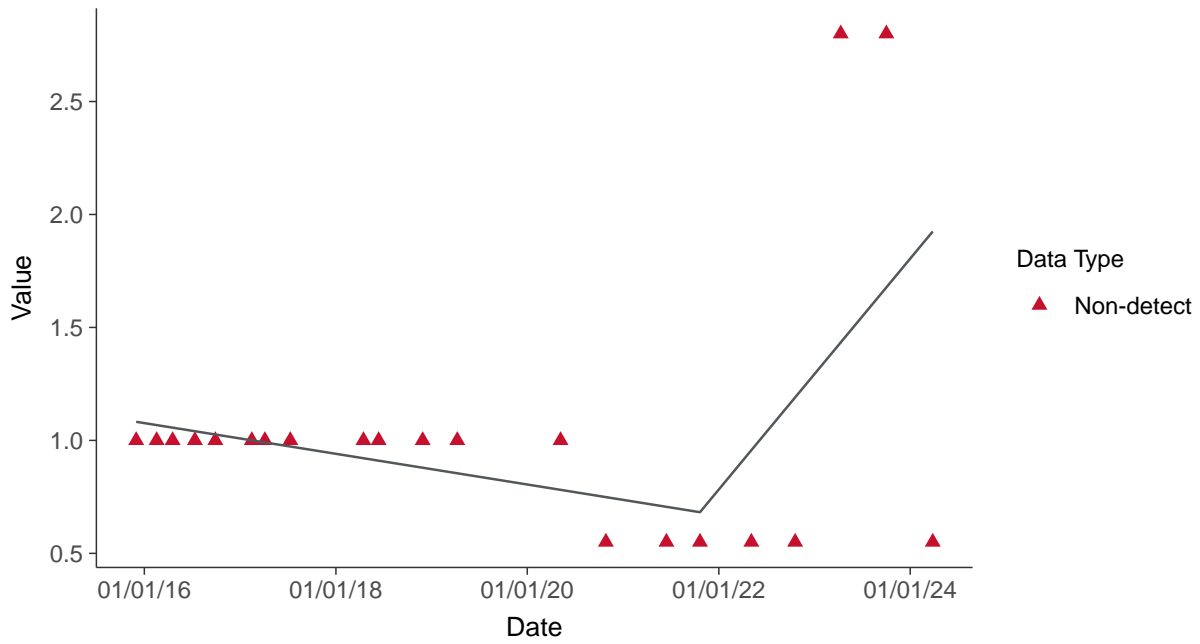
Lead, MW-15021 (ug/L)





Trend Regression: Piecewise Linear-Linear

Lead, MW-15021 (ug/L)



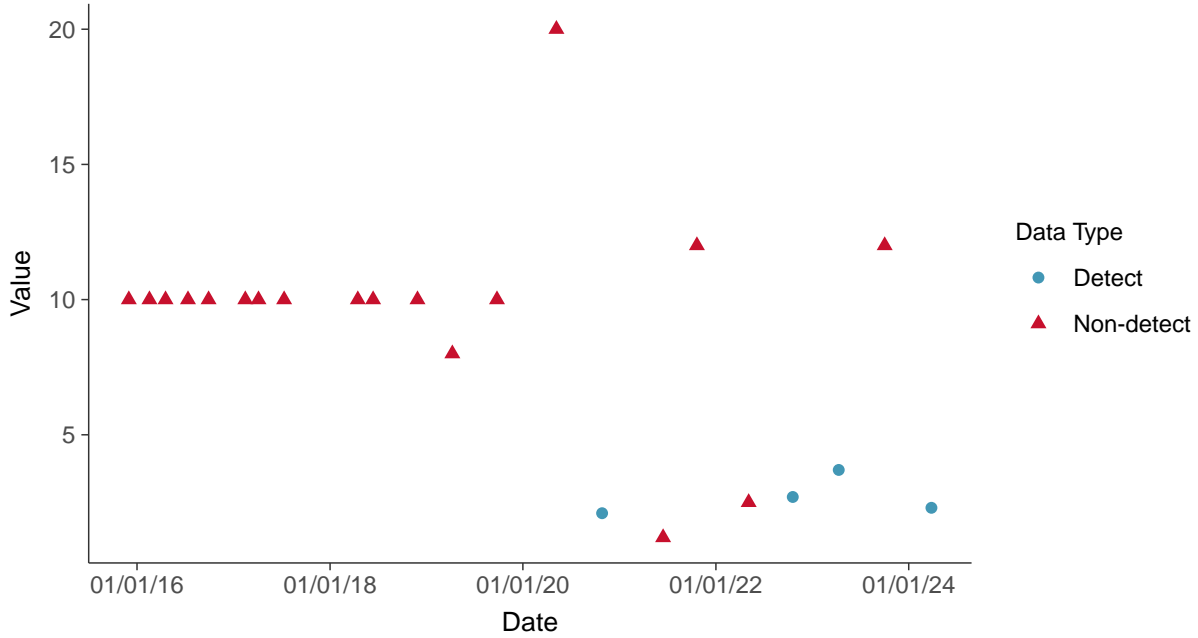


Appendix IV: Lithium, MW-15021

ID: 11_2_117

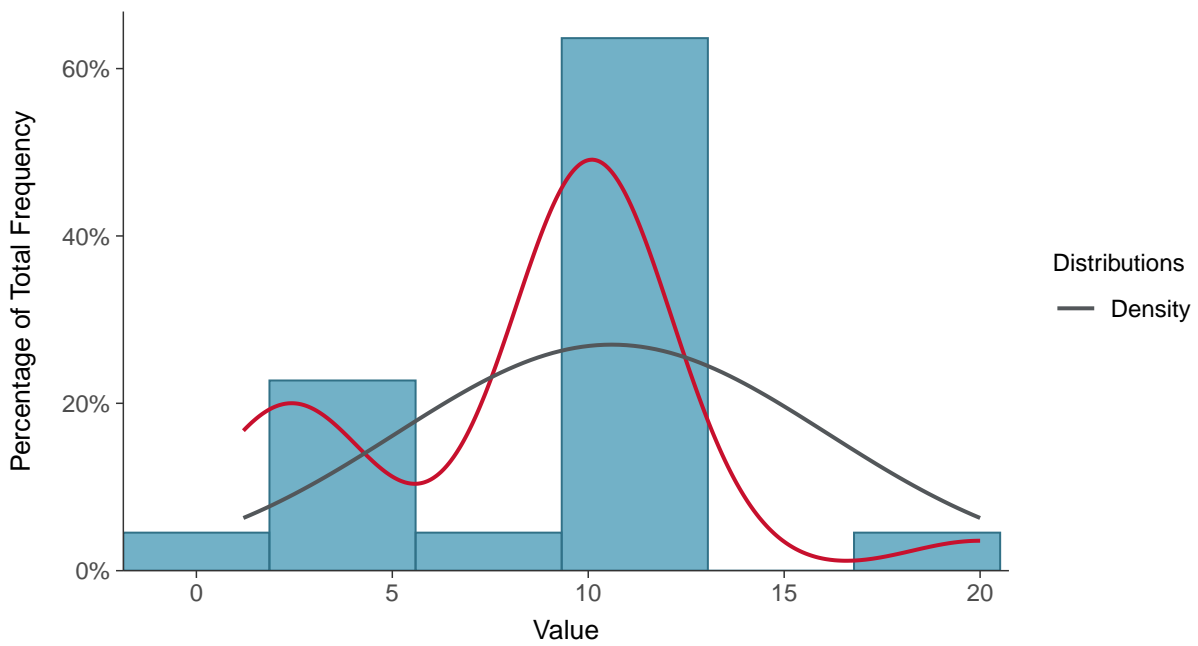
Scatter Plot

Lithium, MW-15021 (ug/L)



Histogram

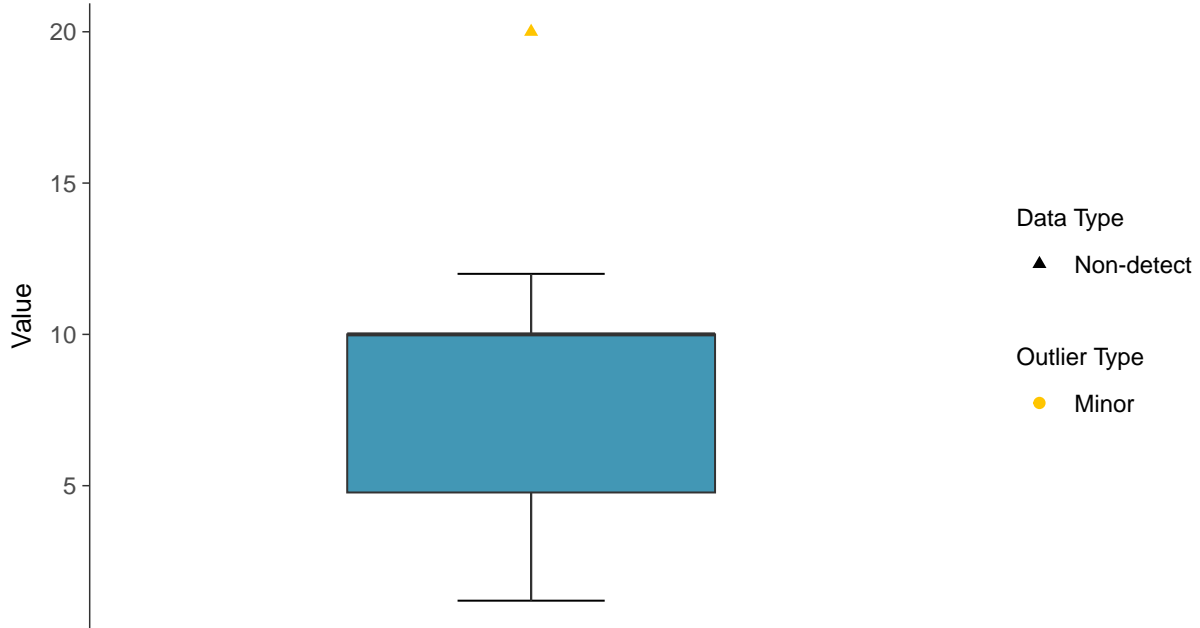
Lithium, MW-15021 (ug/L)





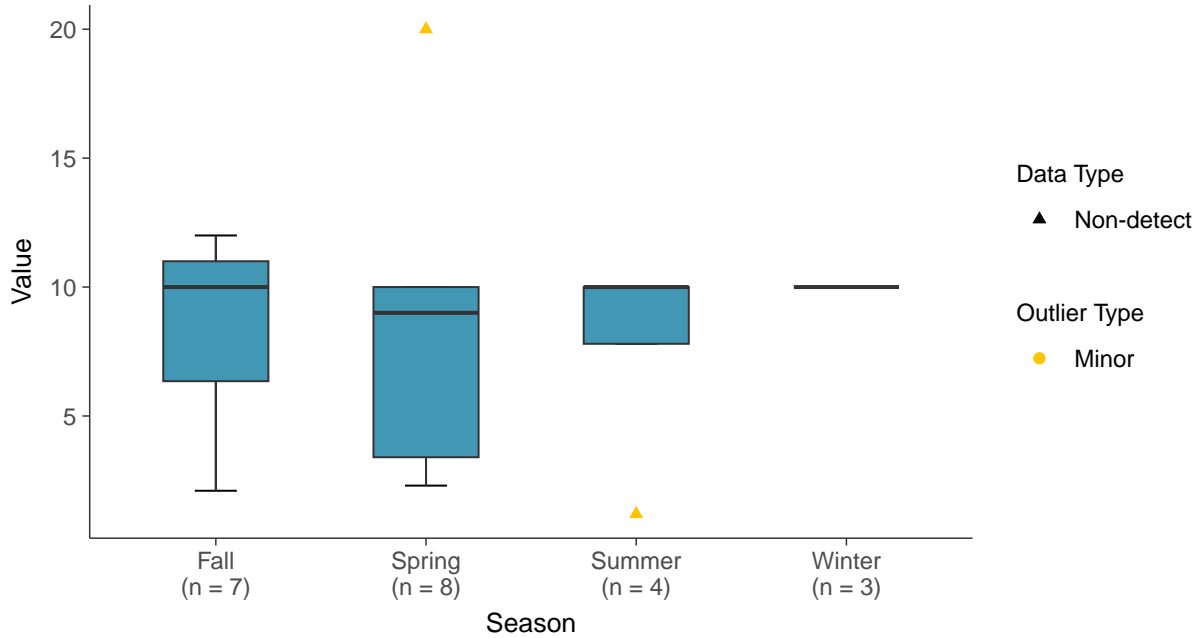
Boxplot

Lithium, MW-15021 (ug/L)



Boxplot by Season

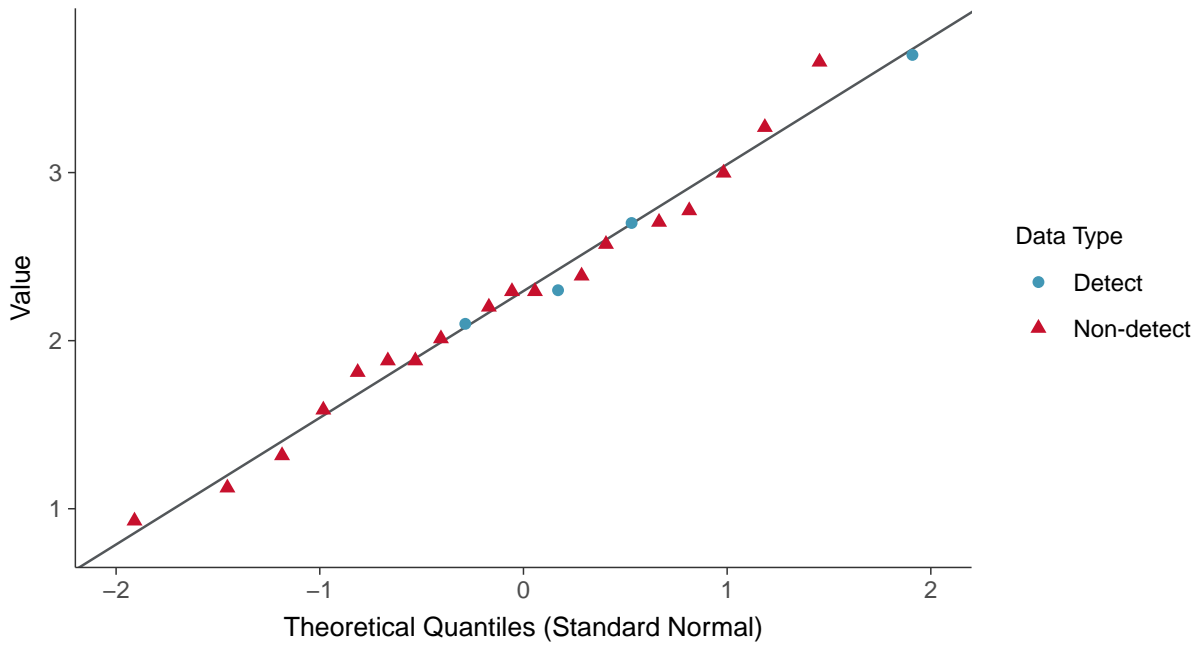
Lithium, MW-15021 (ug/L)





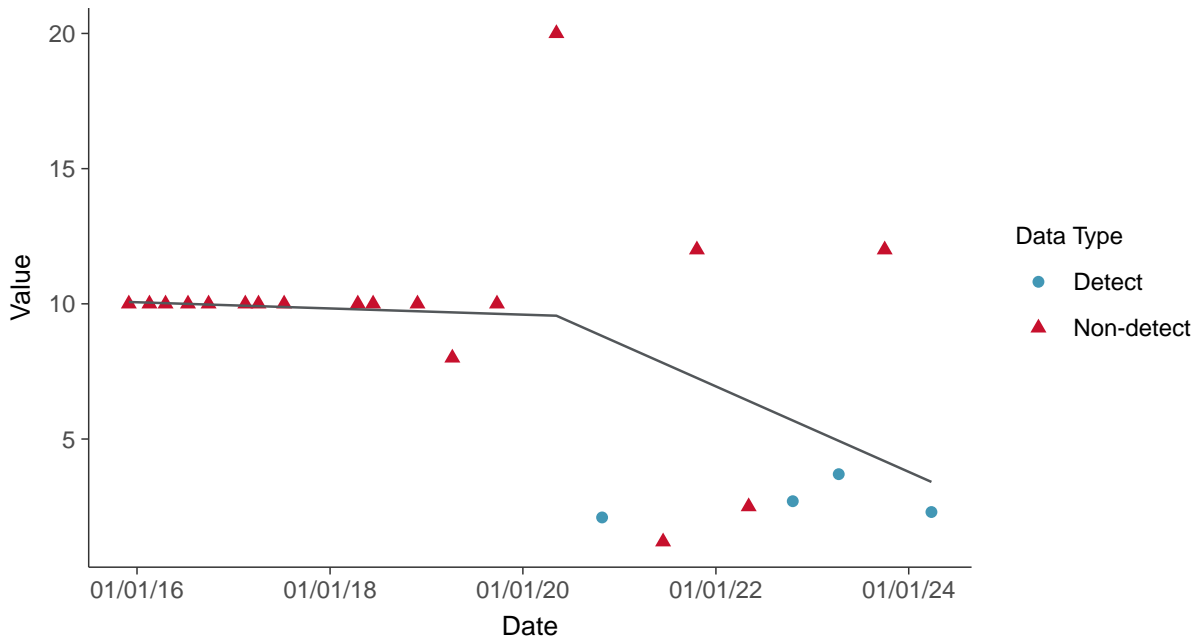
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

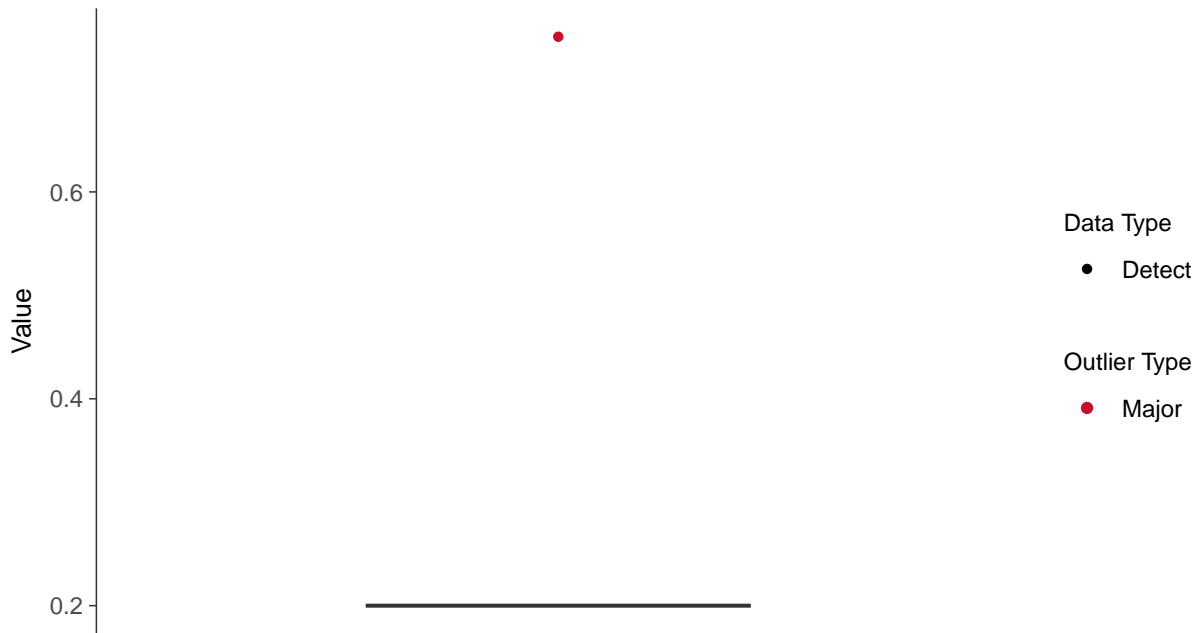
Lithium, MW-15021 (ug/L)





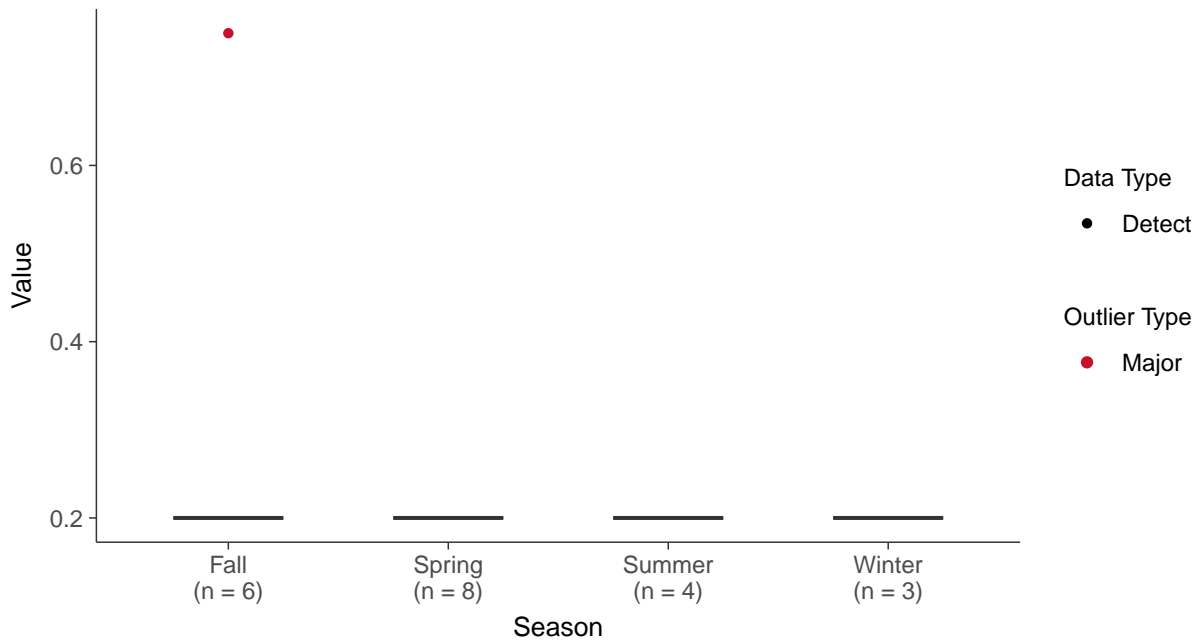
Boxplot

Mercury, MW-15021 (ug/L)



Boxplot by Season

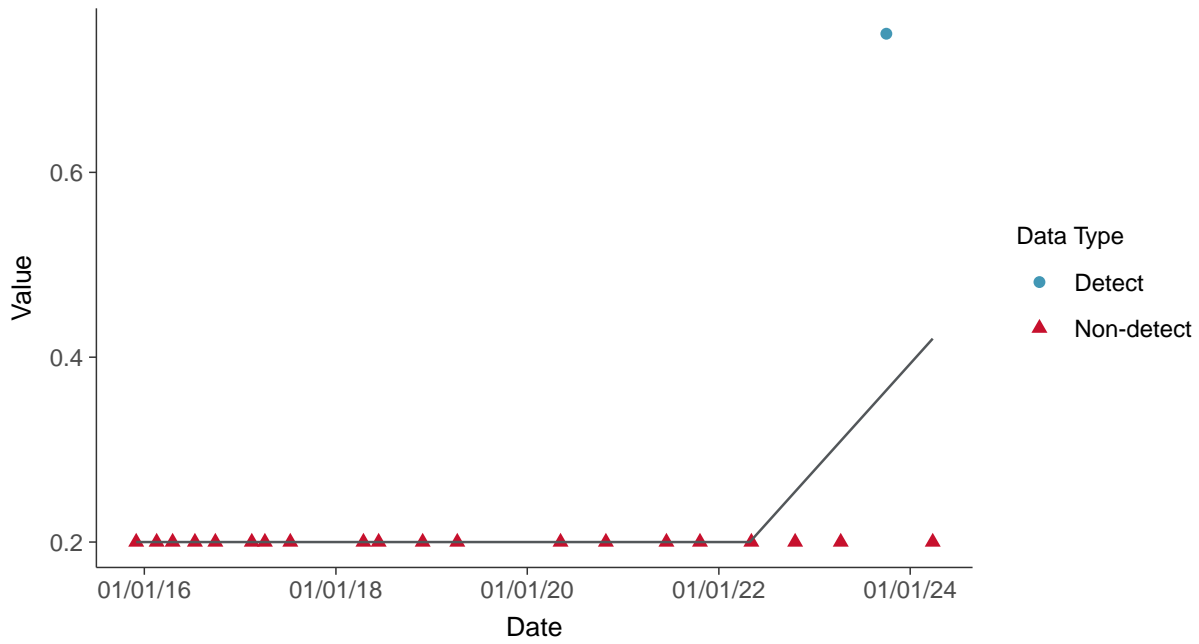
Mercury, MW-15021 (ug/L)





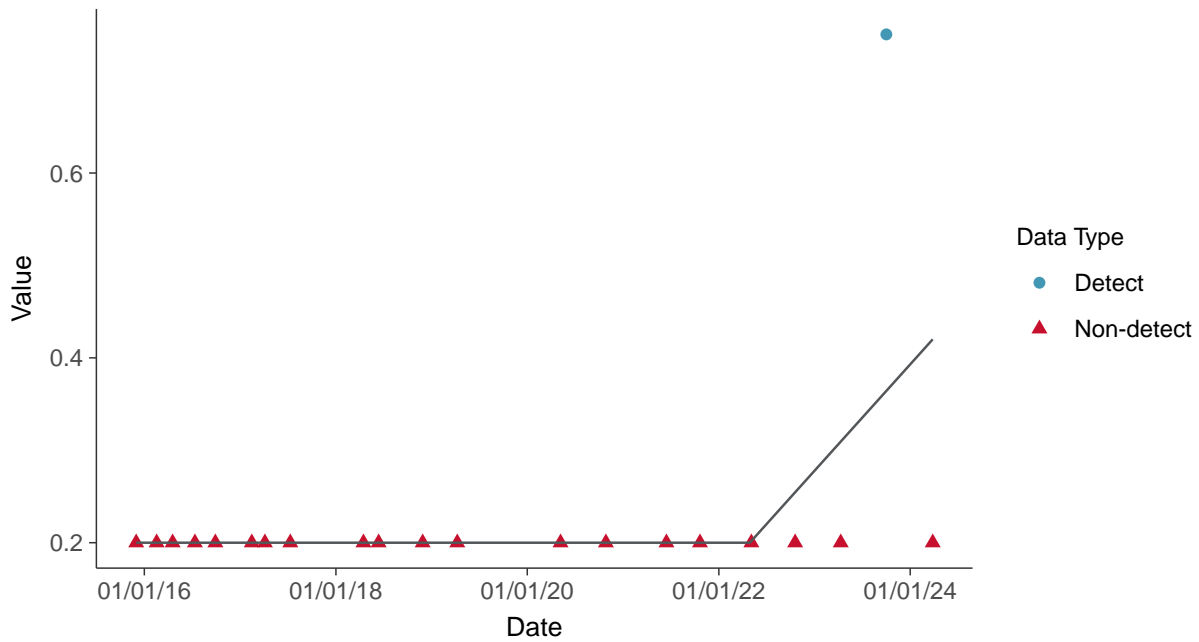
Trend Regression: Piecewise Linear-Linear

Mercury, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

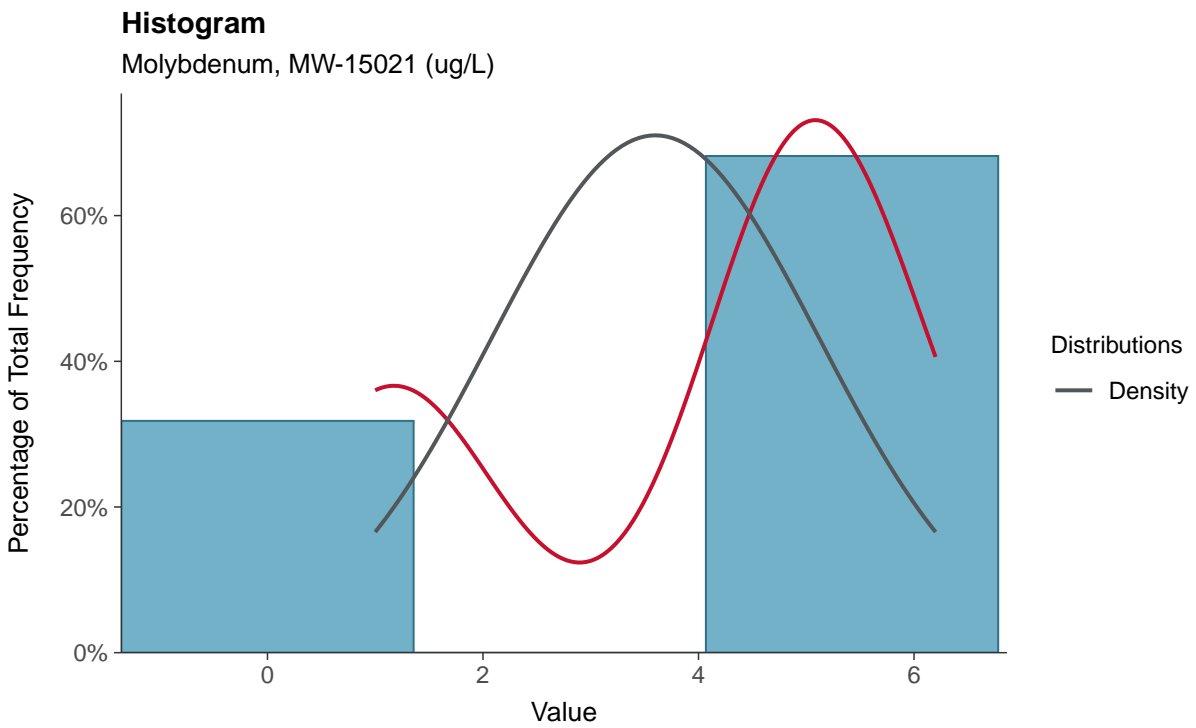
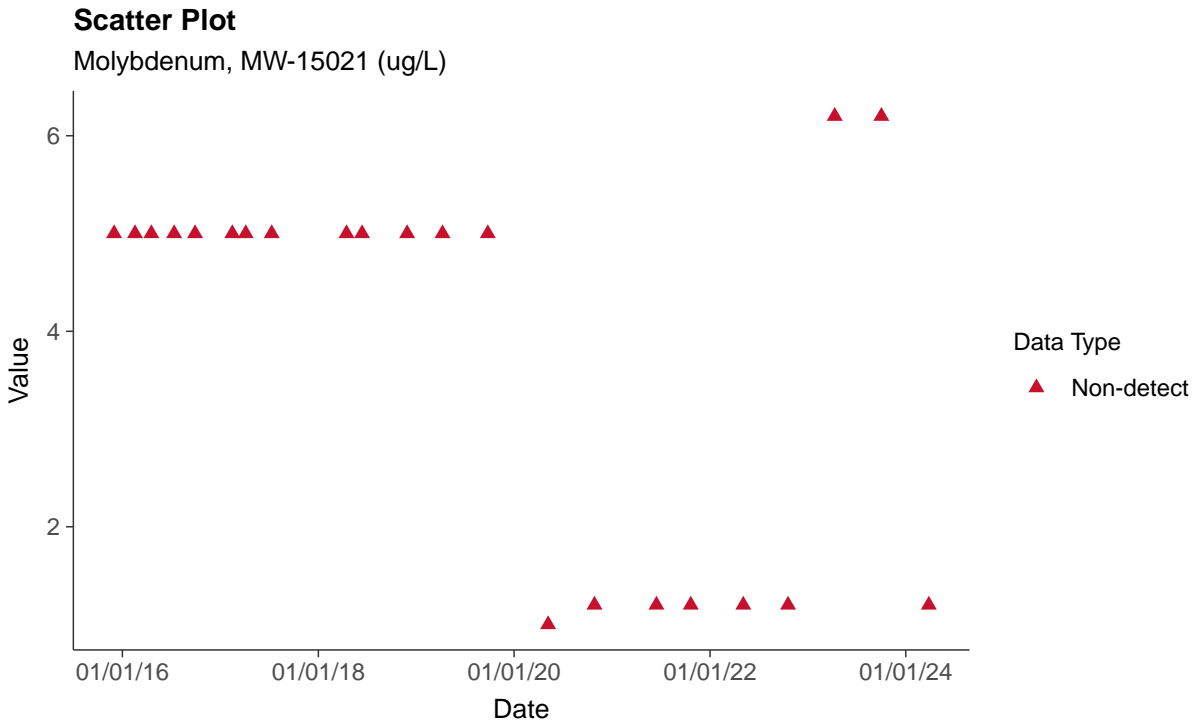
Mercury, MW-15021 (ug/L)





Appendix IV: Molybdenum, MW-15021

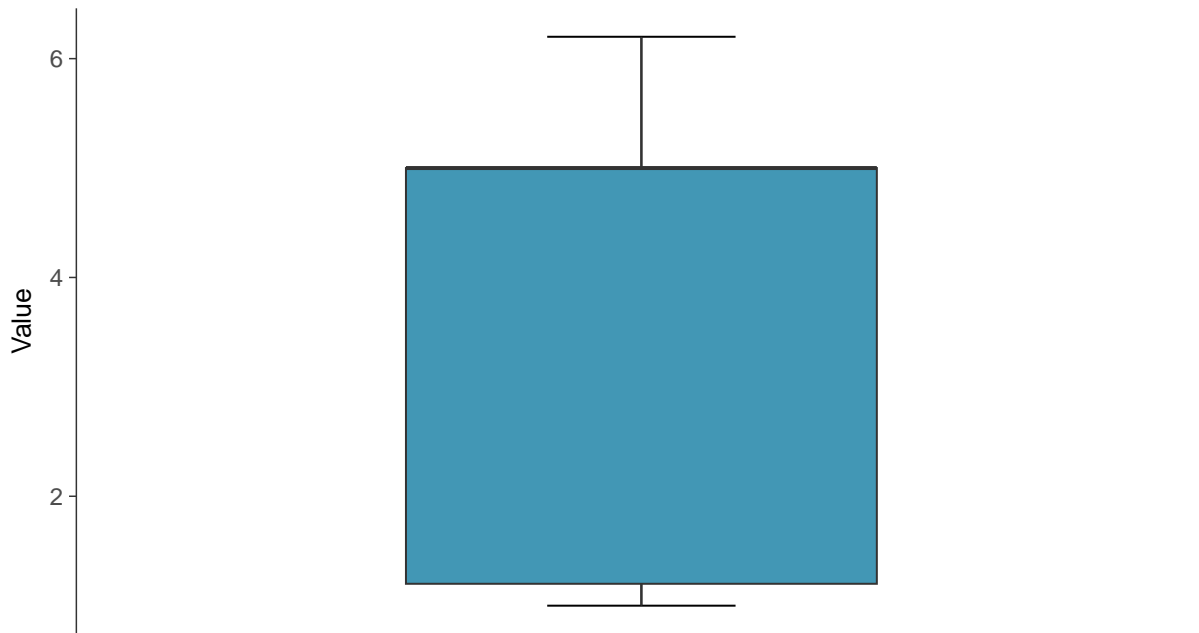
ID: 11_2_119





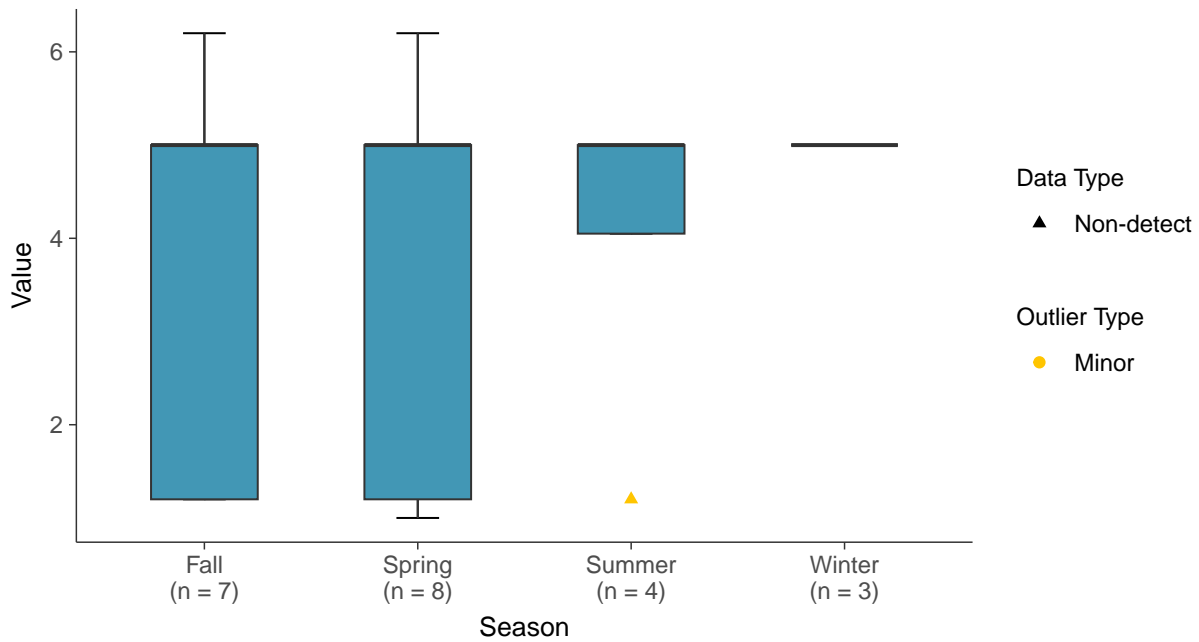
Boxplot

Molybdenum, MW-15021 (ug/L)



Boxplot by Season

Molybdenum, MW-15021 (ug/L)



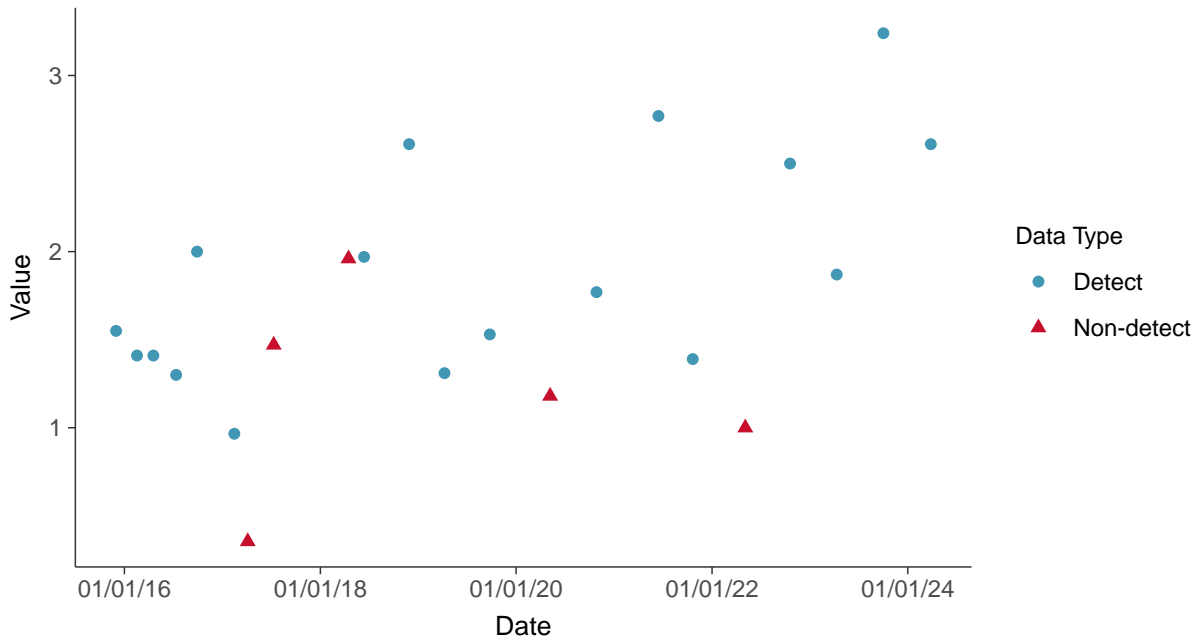


Appendix IV: Radium-226+228, MW-15021

ID: 11_2_125

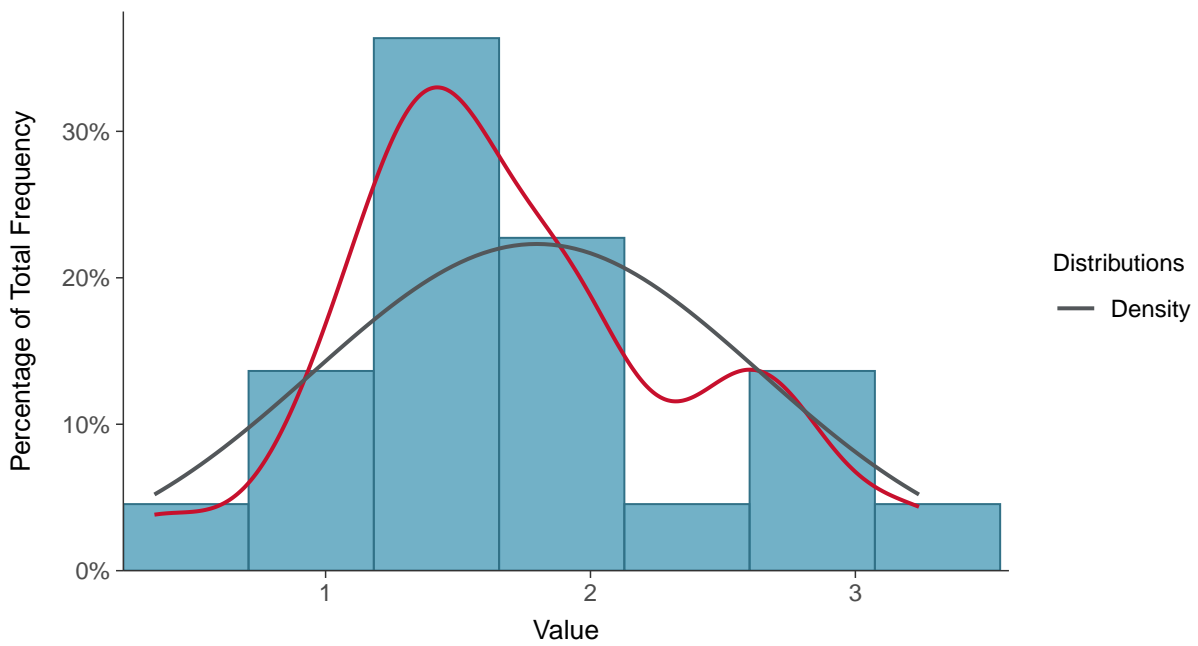
Scatter Plot

Radium-226+228, MW-15021 (pCi/L)



Histogram

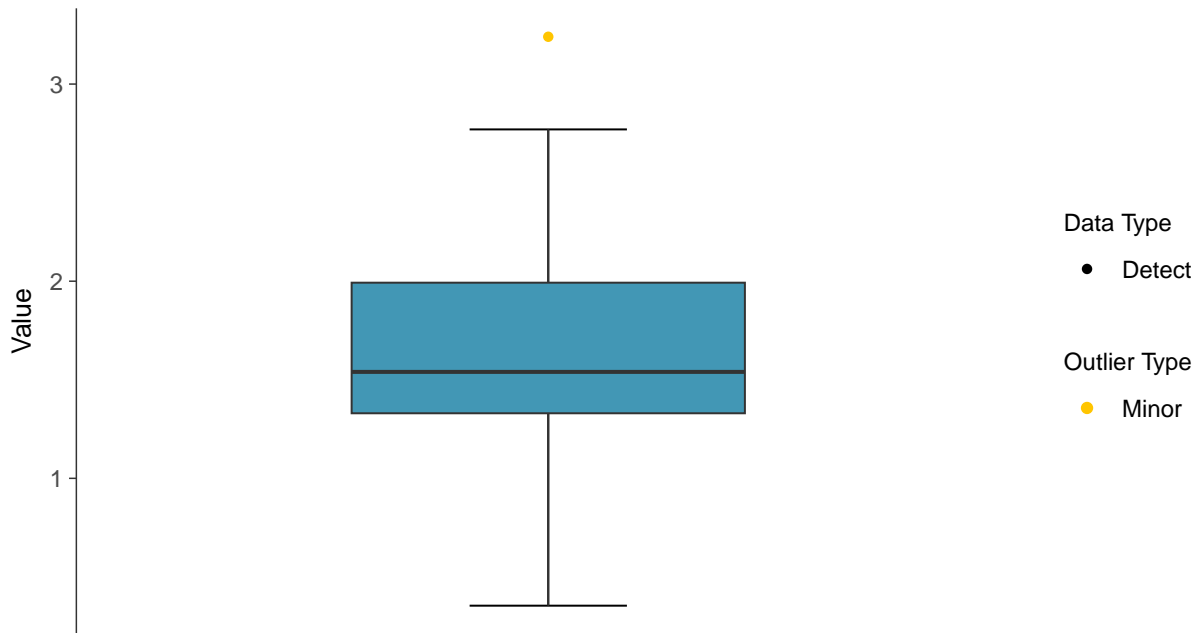
Radium-226+228, MW-15021 (pCi/L)





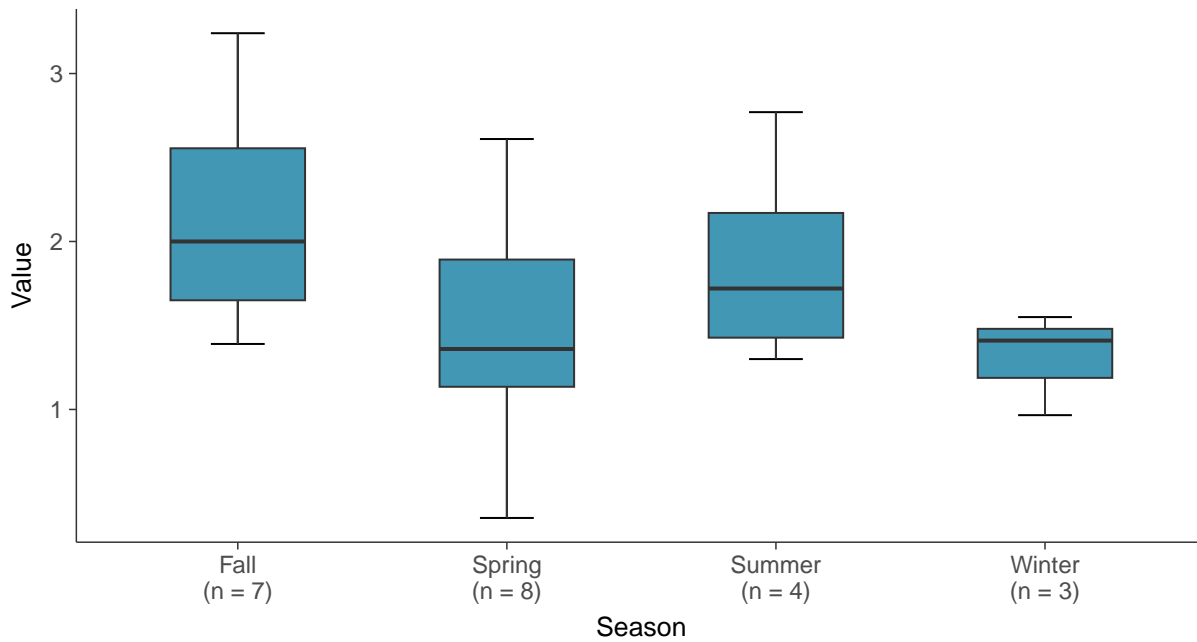
Boxplot

Radium-226+228, MW-15021 (pCi/L)



Boxplot by Season

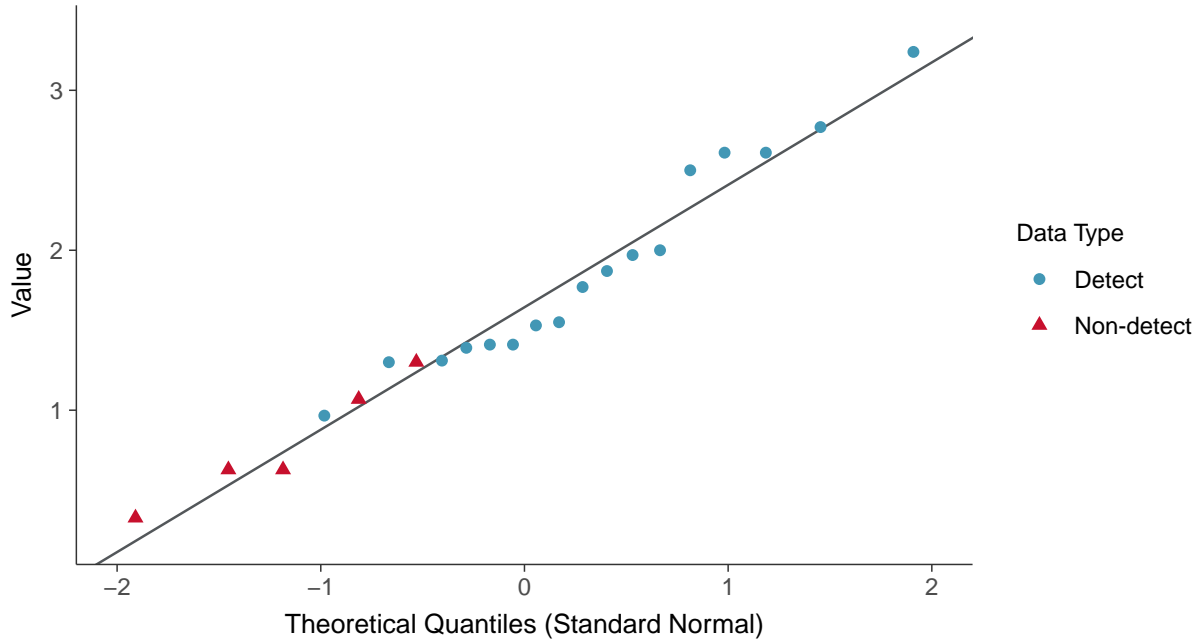
Radium-226+228, MW-15021 (pCi/L)





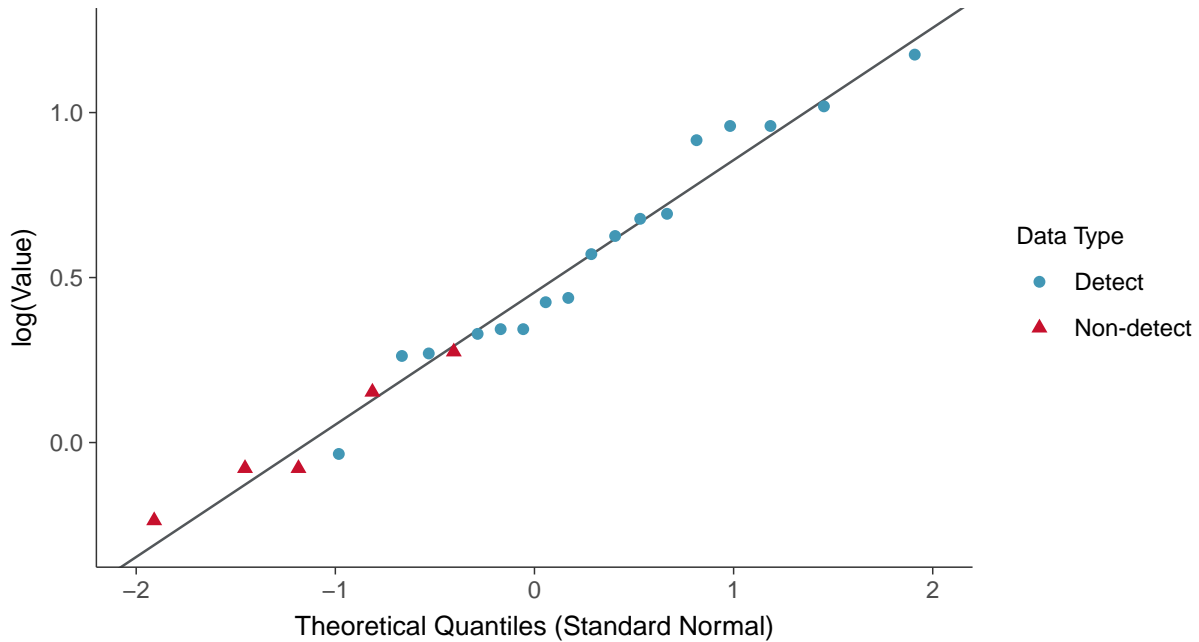
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15021 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

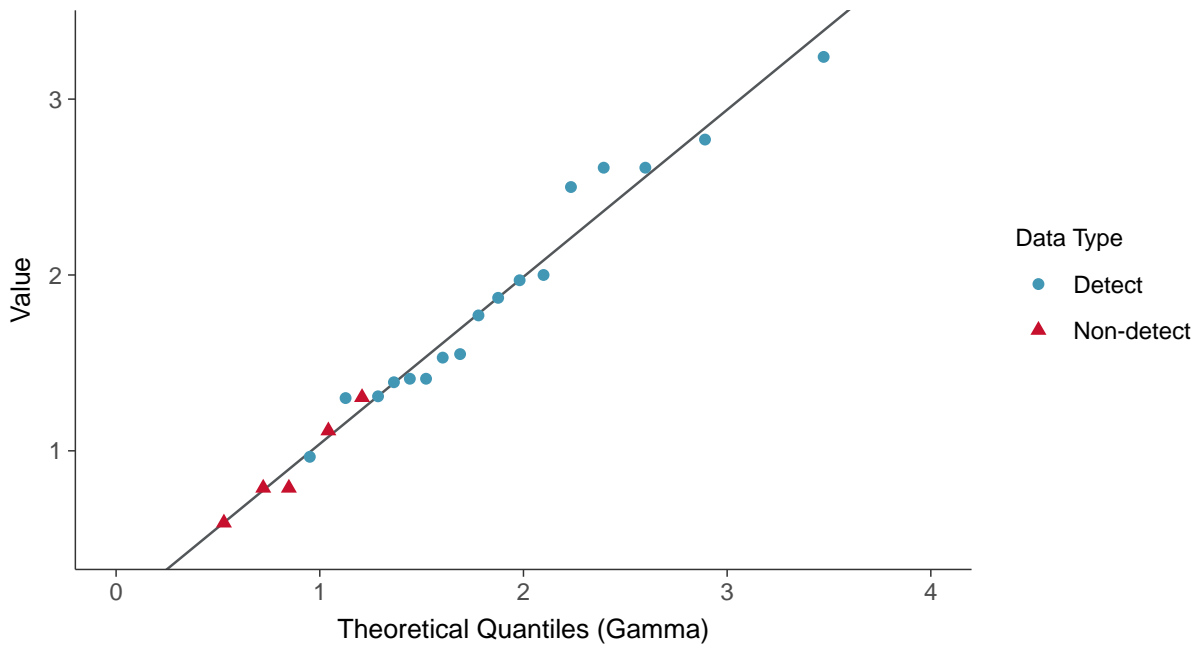
Radium-226+228, MW-15021 (pCi/L)





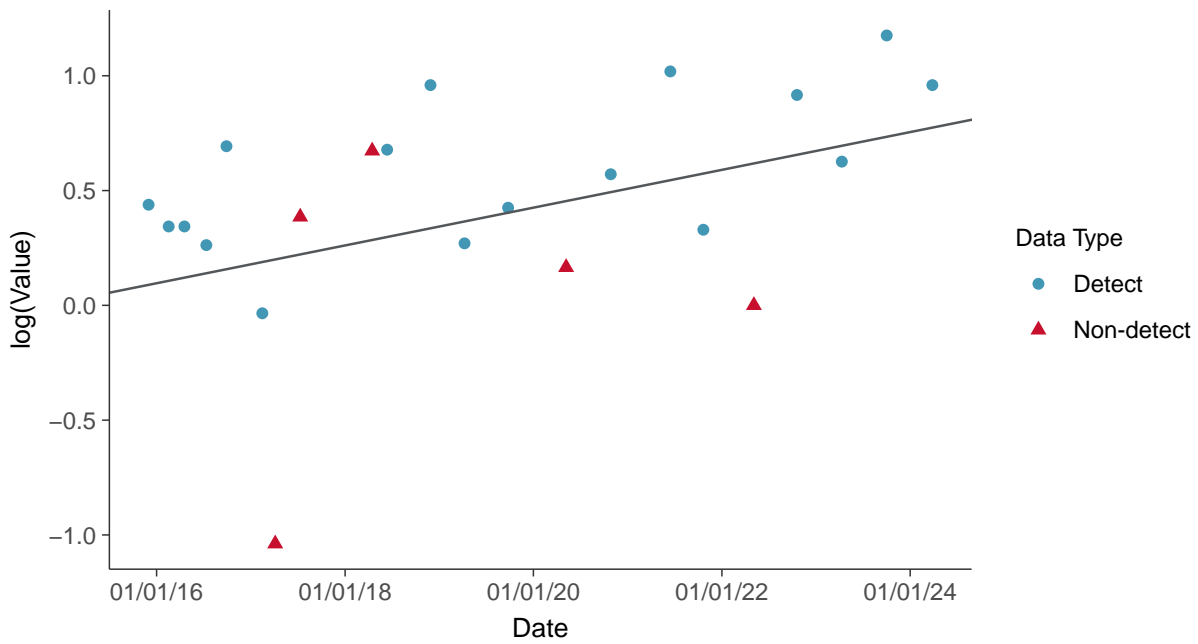
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15021 (pCi/L)



Trend Regression: Lognormal MLE

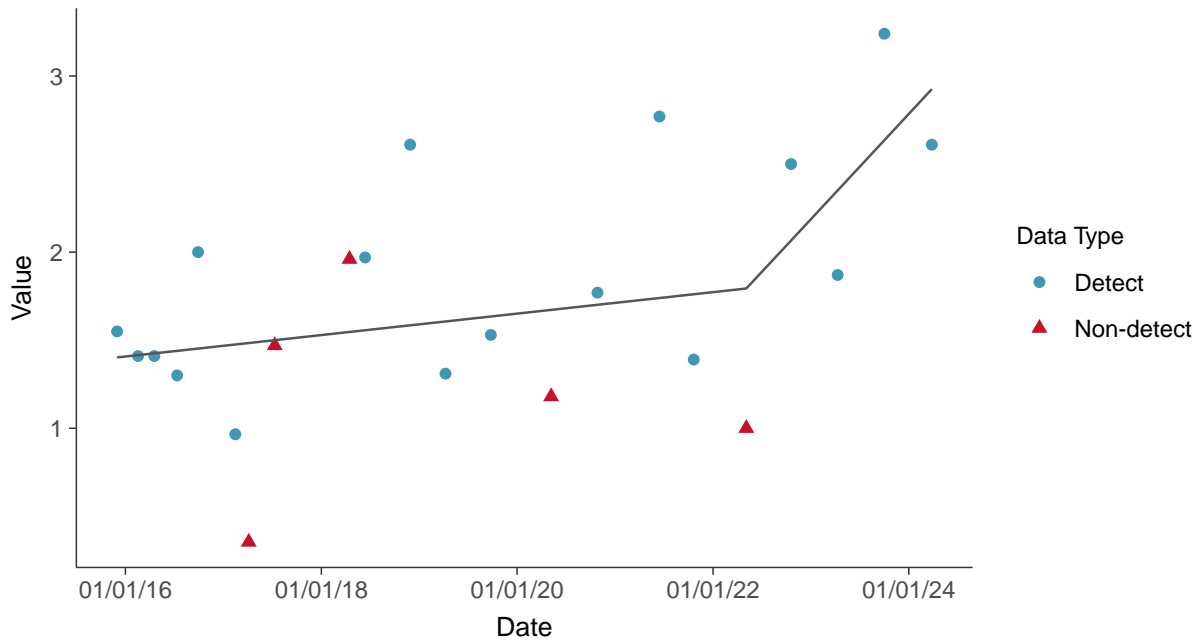
Radium-226+228, MW-15021 (pCi/L)





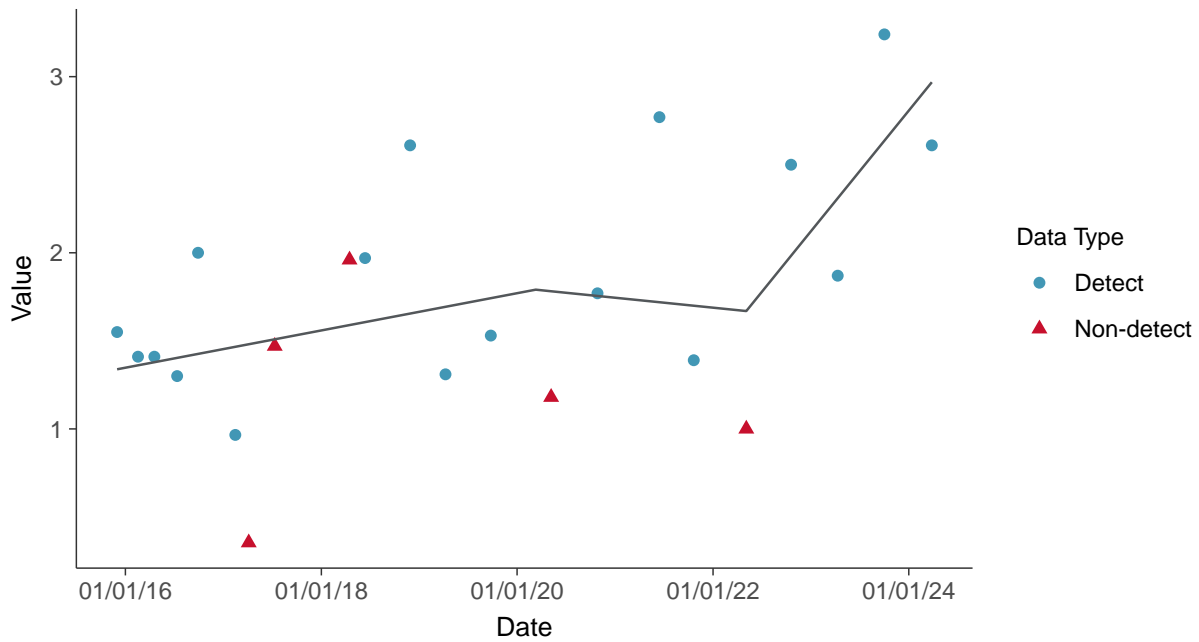
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15021 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

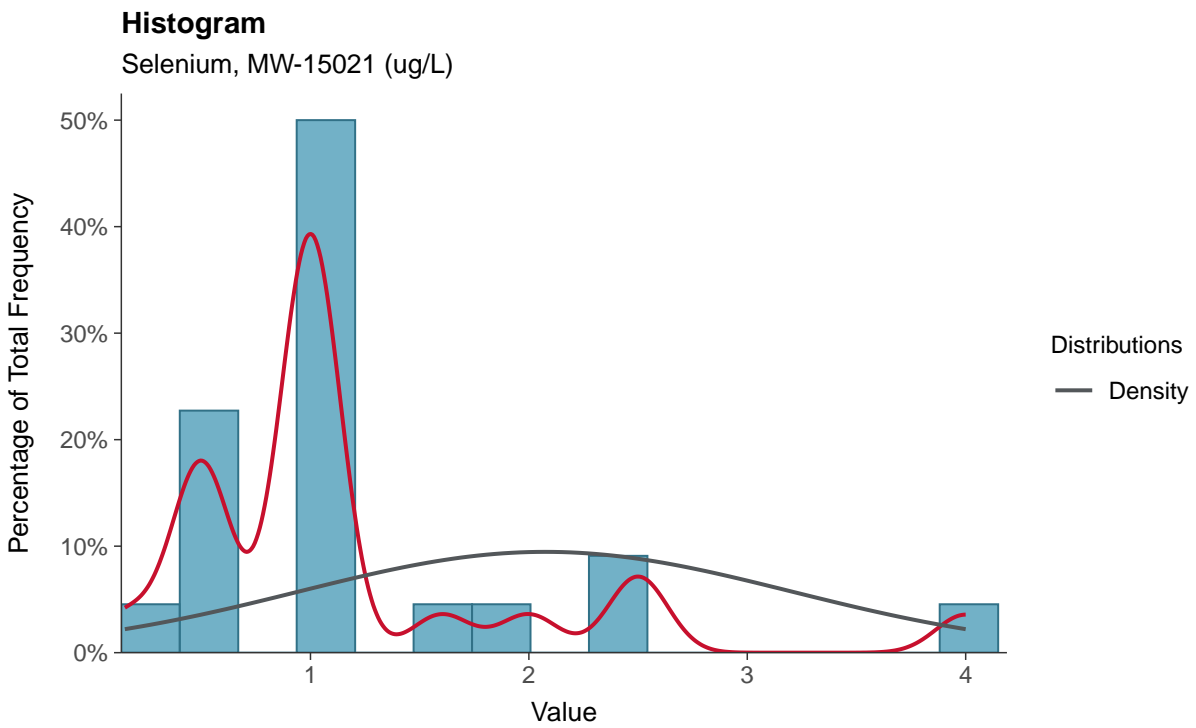
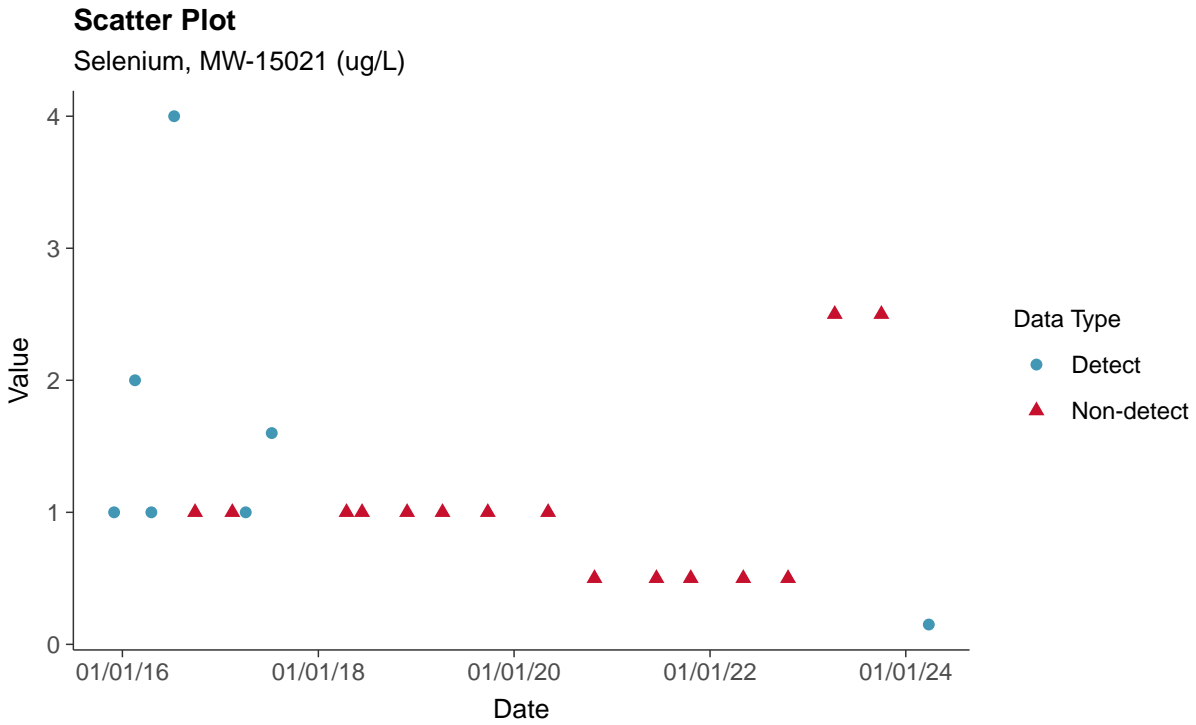
Radium-226+228, MW-15021 (pCi/L)





Appendix IV: Selenium, MW-15021

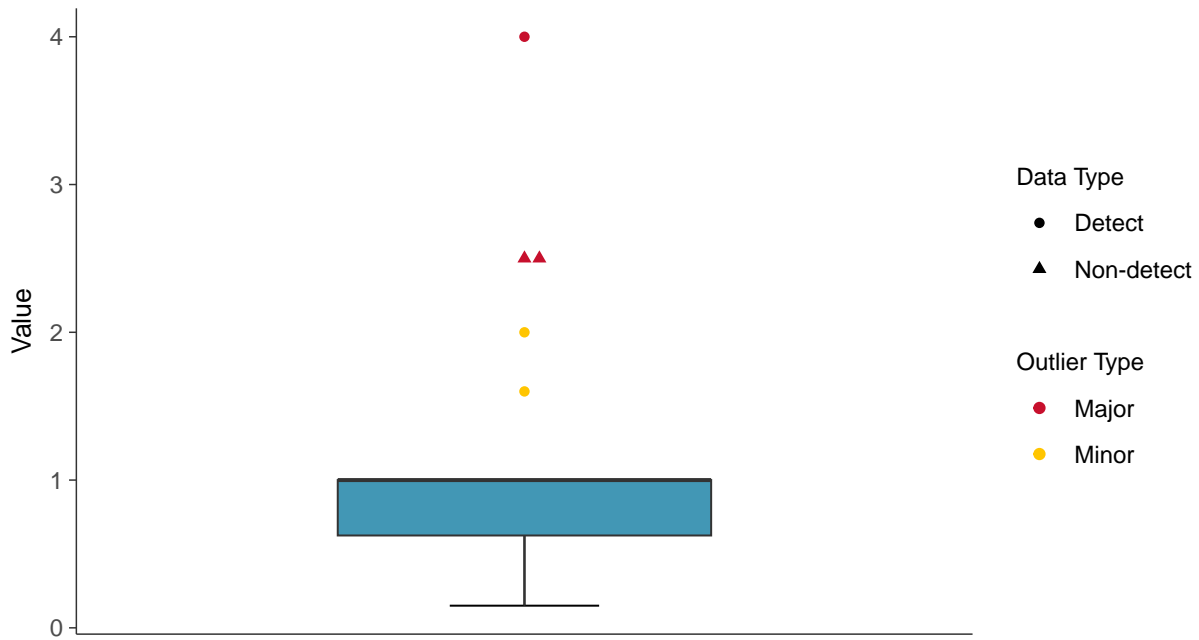
ID: 11_2_127





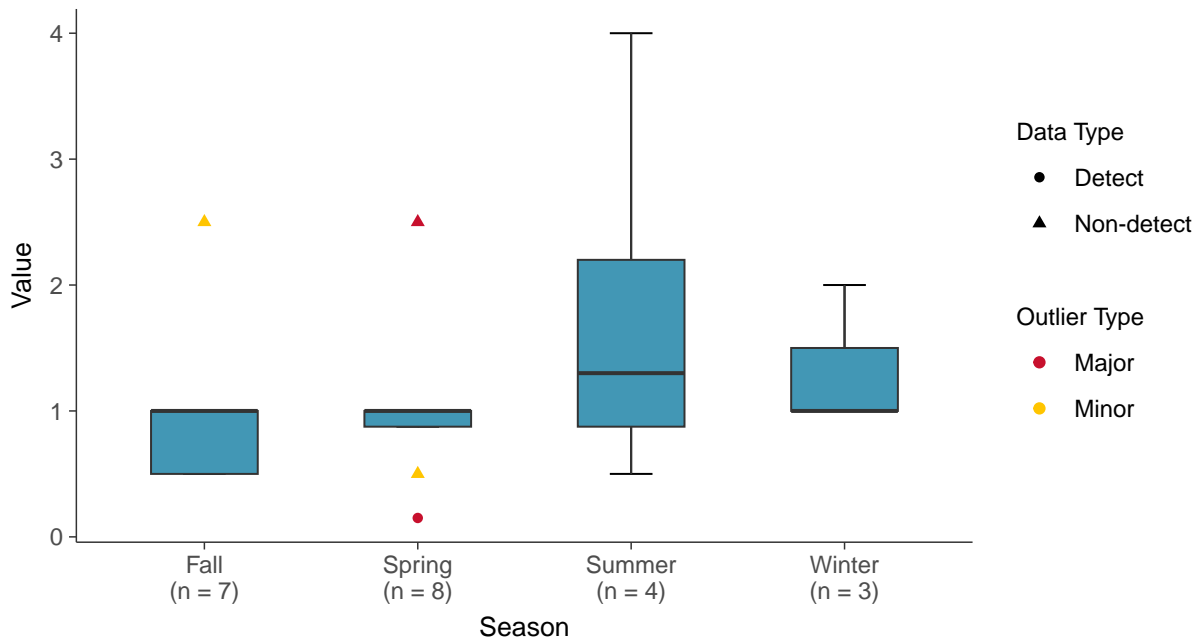
Boxplot

Selenium, MW-15021 (ug/L)



Boxplot by Season

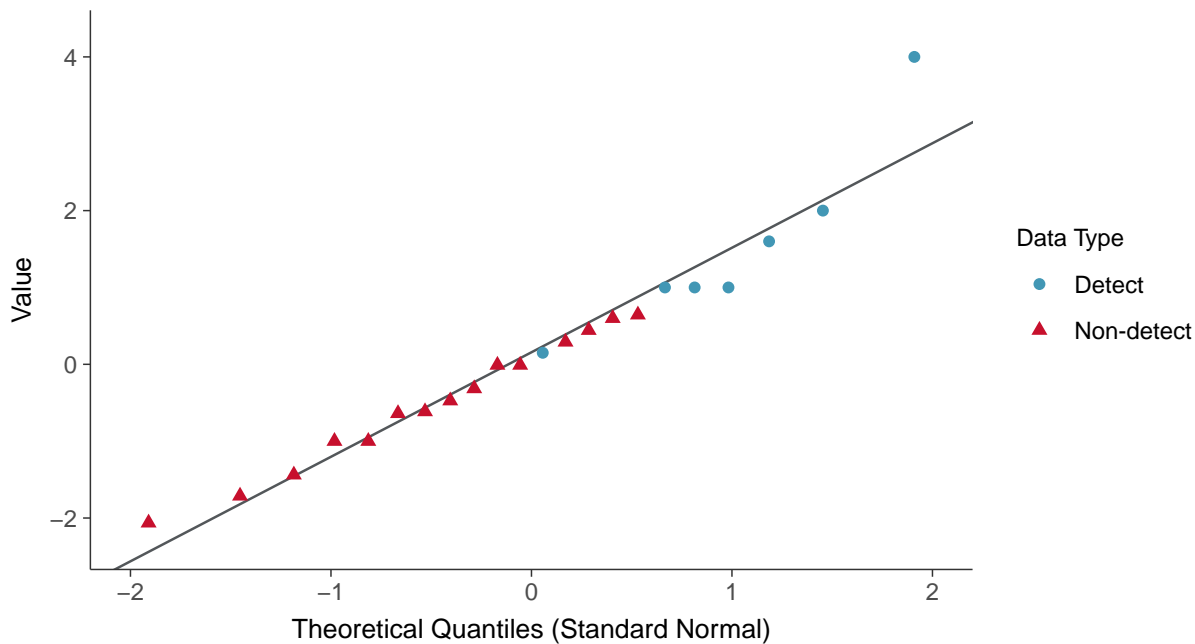
Selenium, MW-15021 (ug/L)





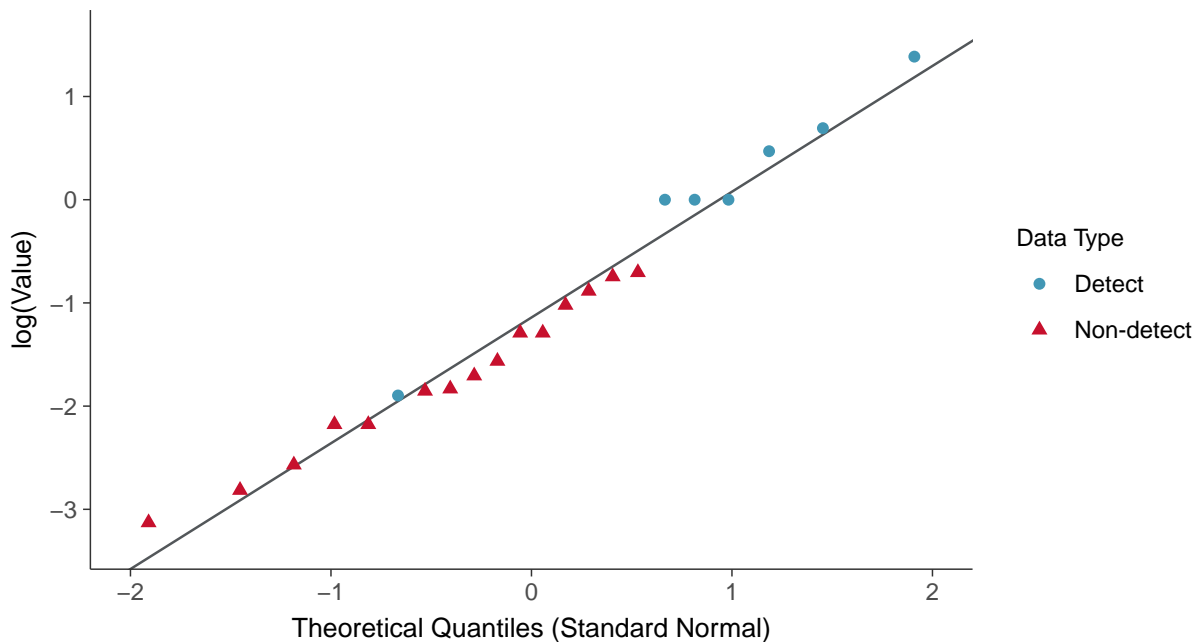
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15021 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

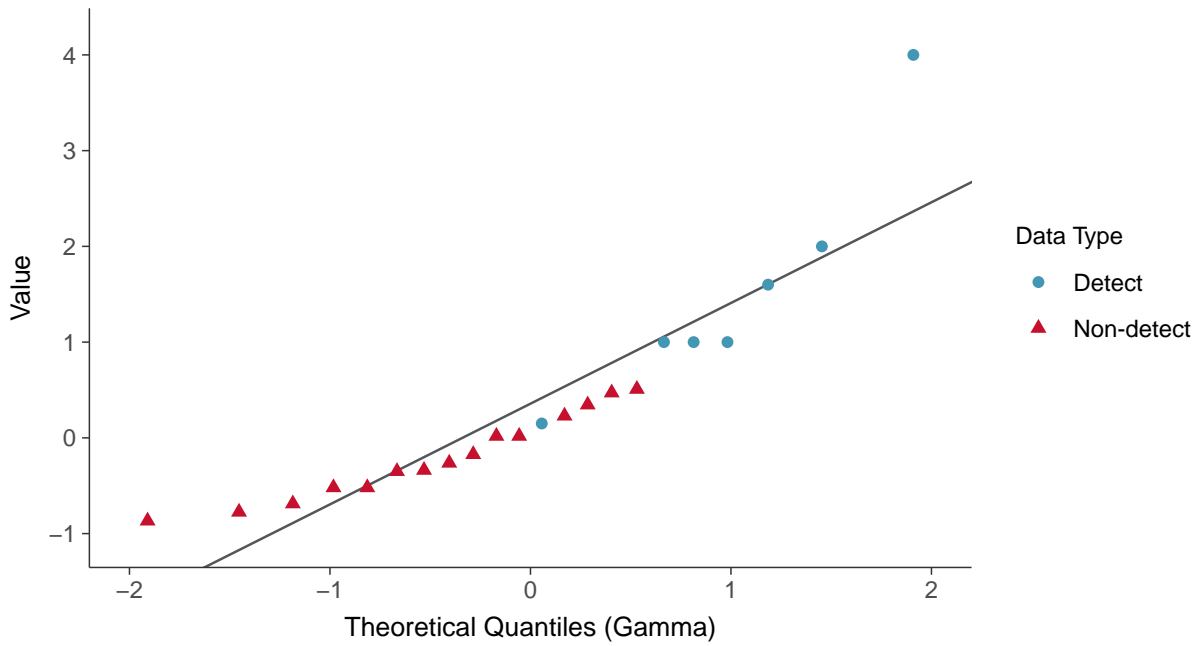
Selenium, MW-15021 (ug/L)





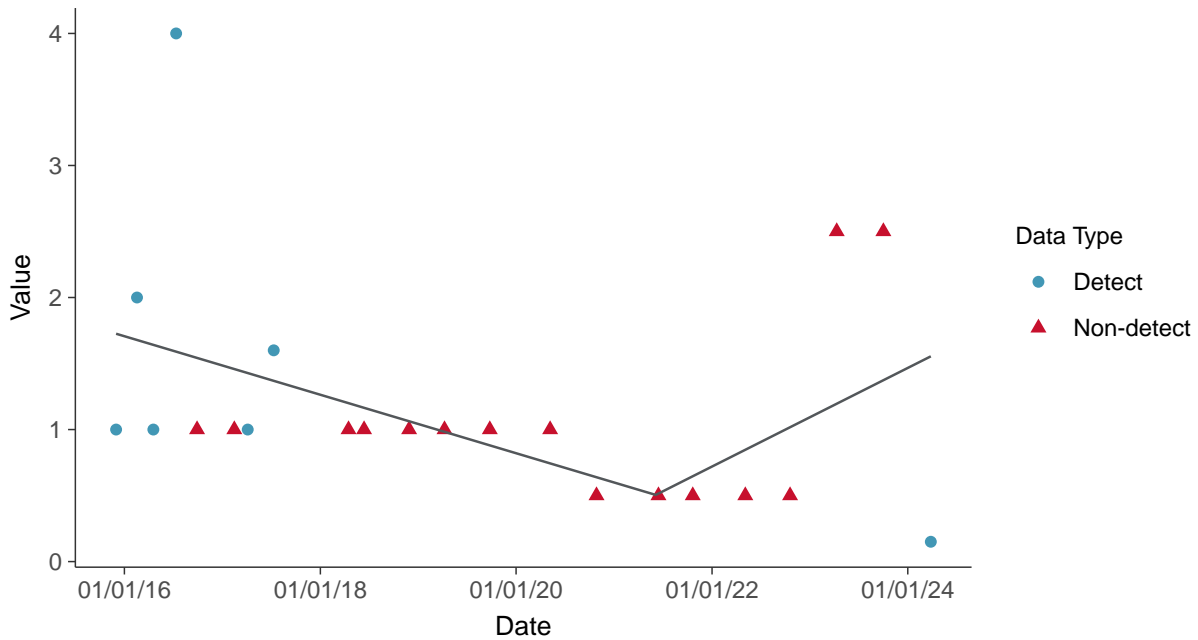
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

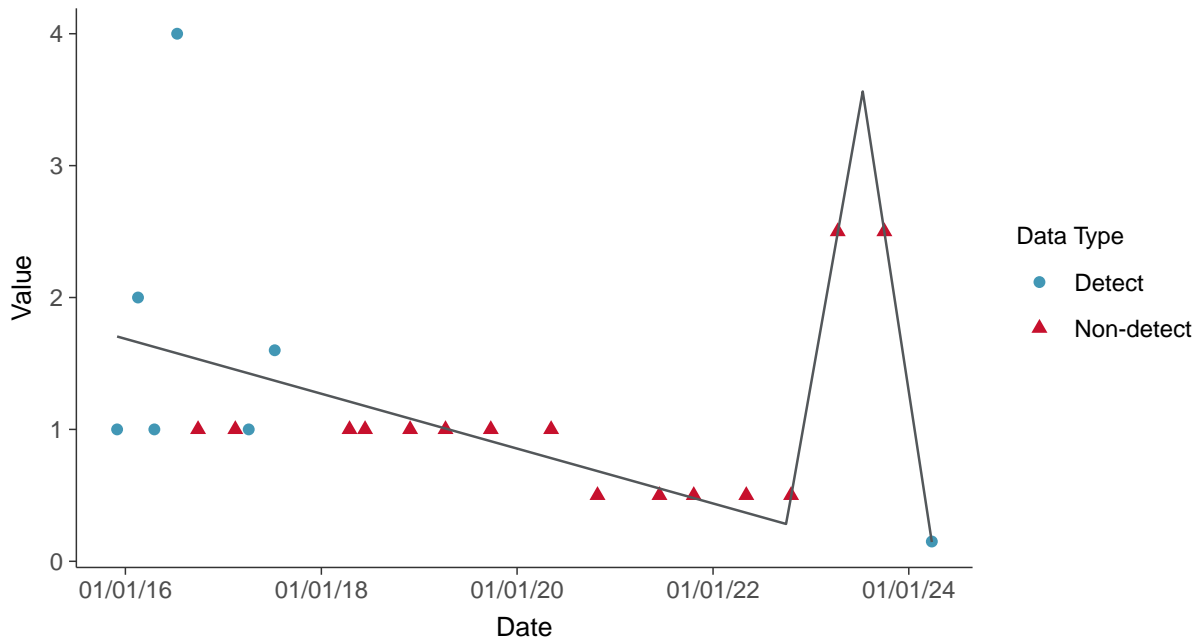
Selenium, MW-15021 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

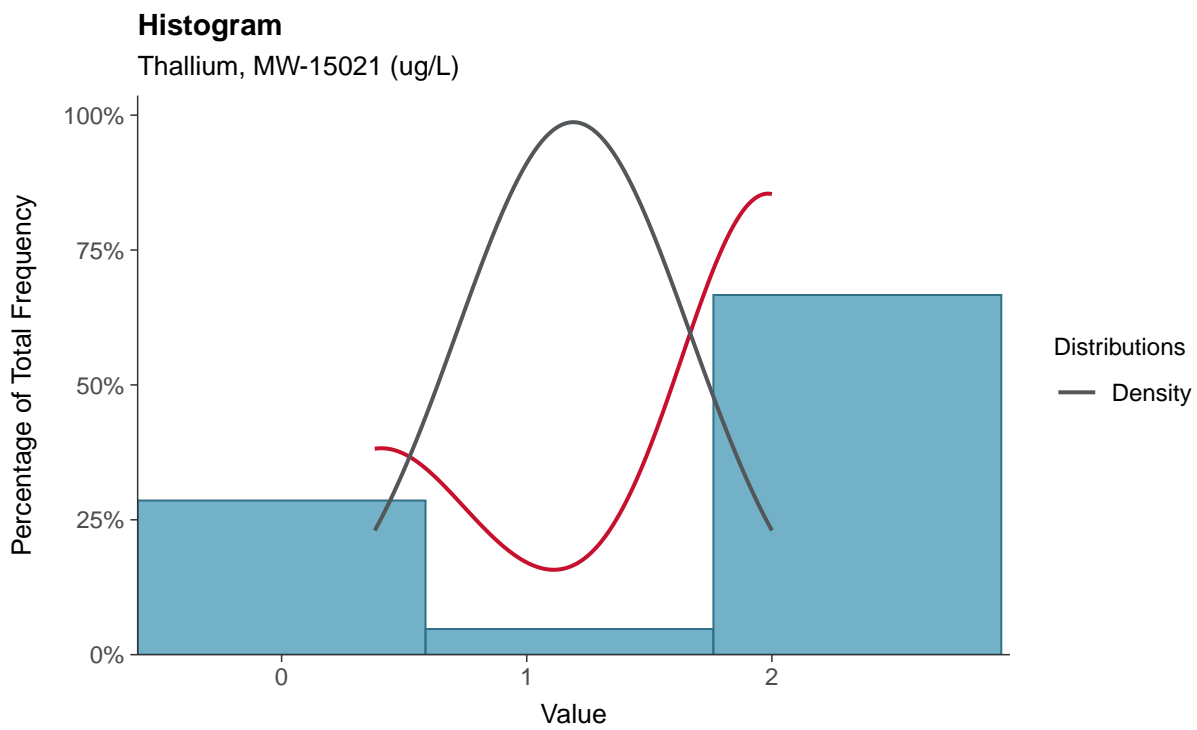
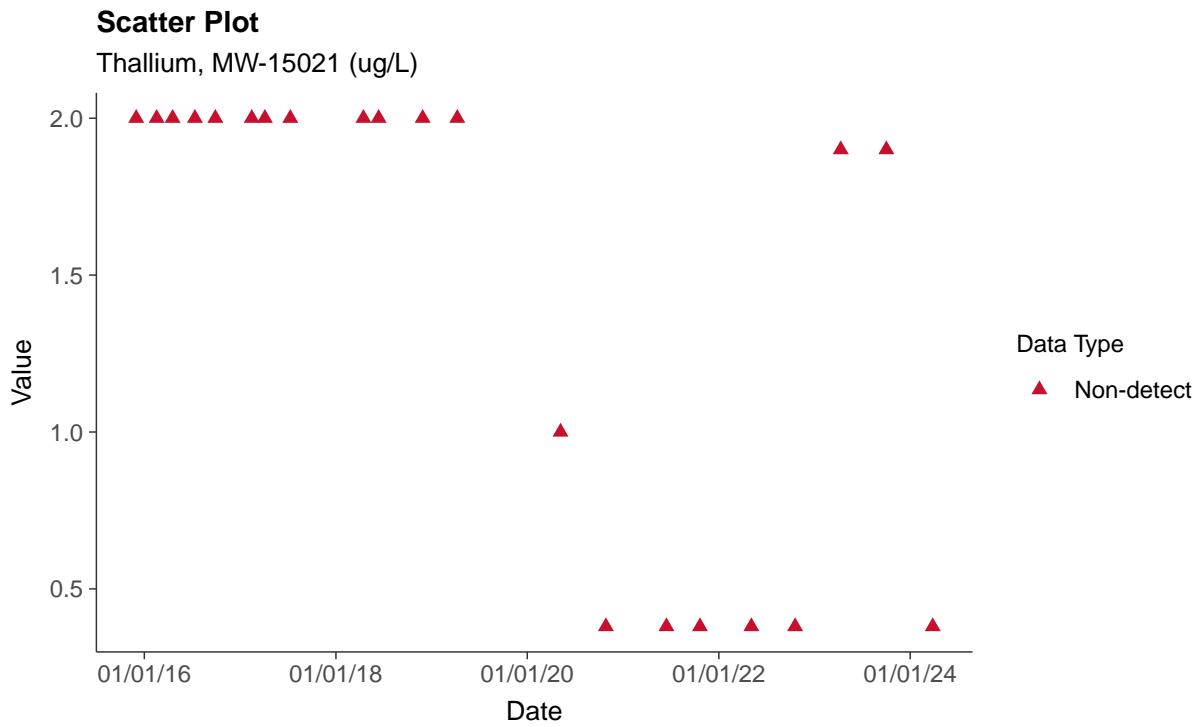
Selenium, MW-15021 (ug/L)





Appendix IV: Thallium, MW-15021

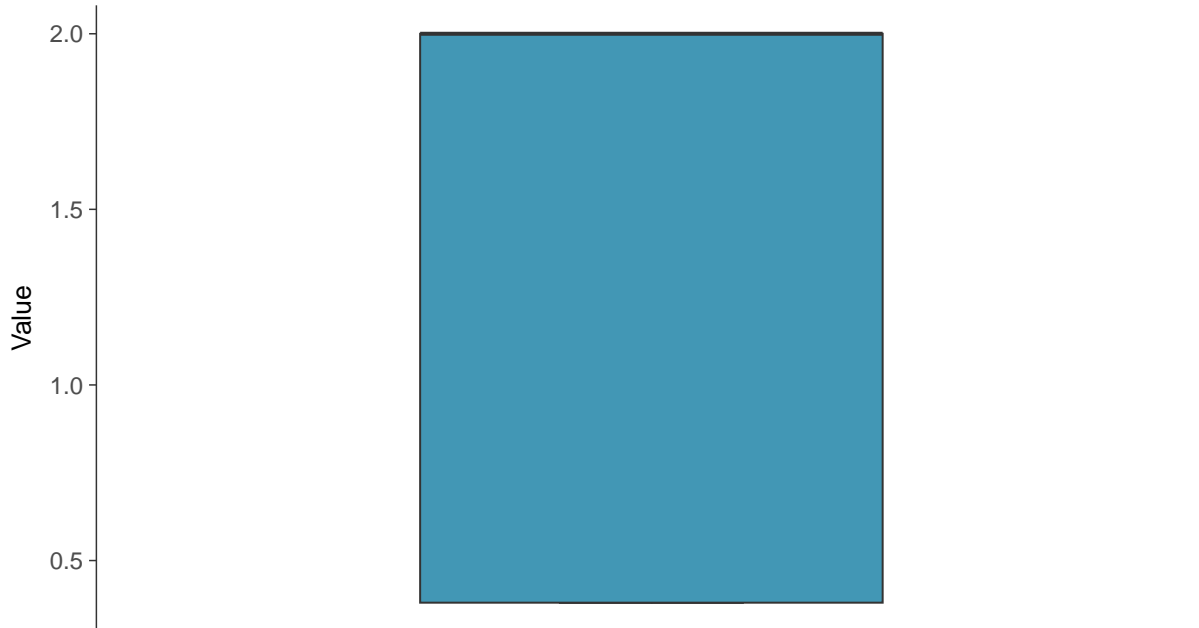
ID: 11_2_131





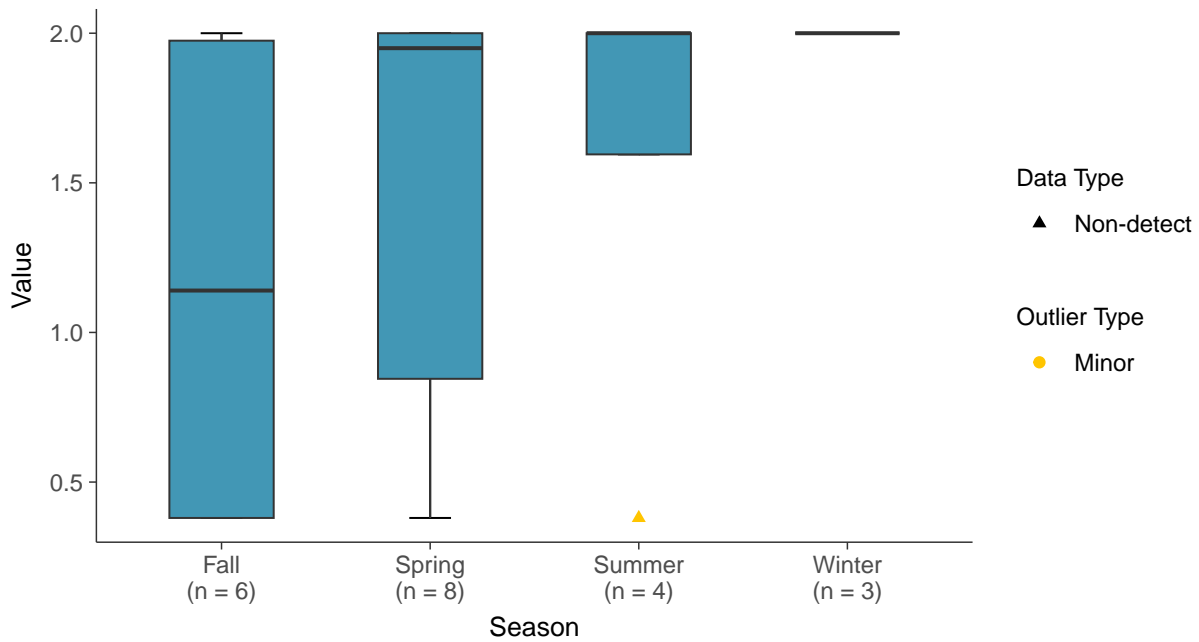
Boxplot

Thallium, MW-15021 (ug/L)



Boxplot by Season

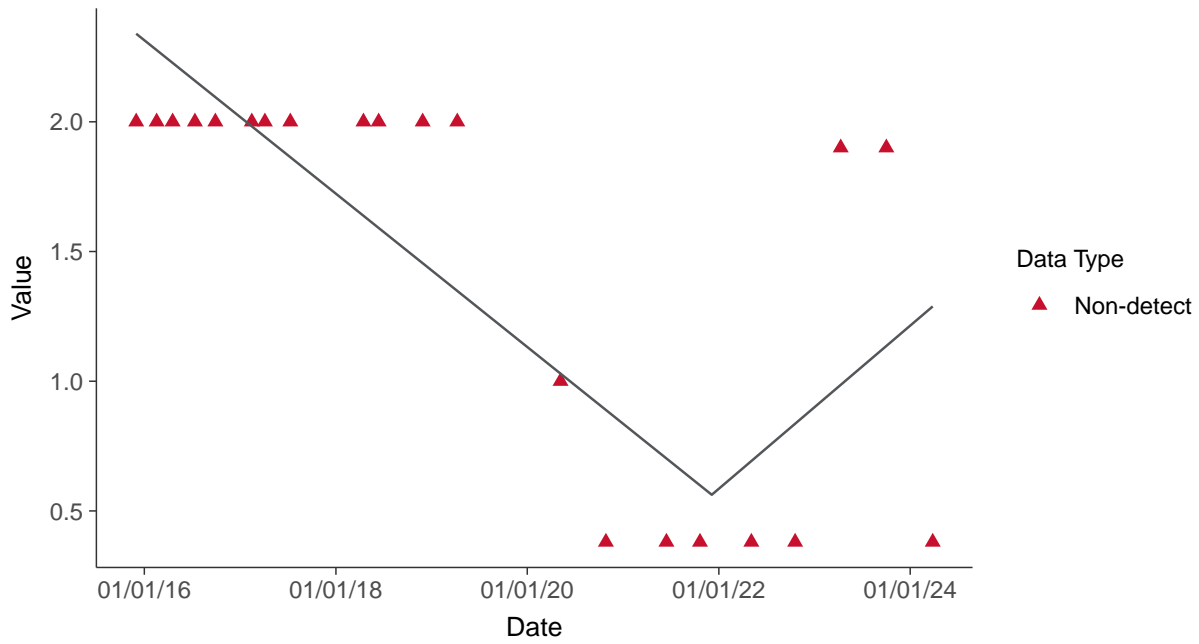
Thallium, MW-15021 (ug/L)





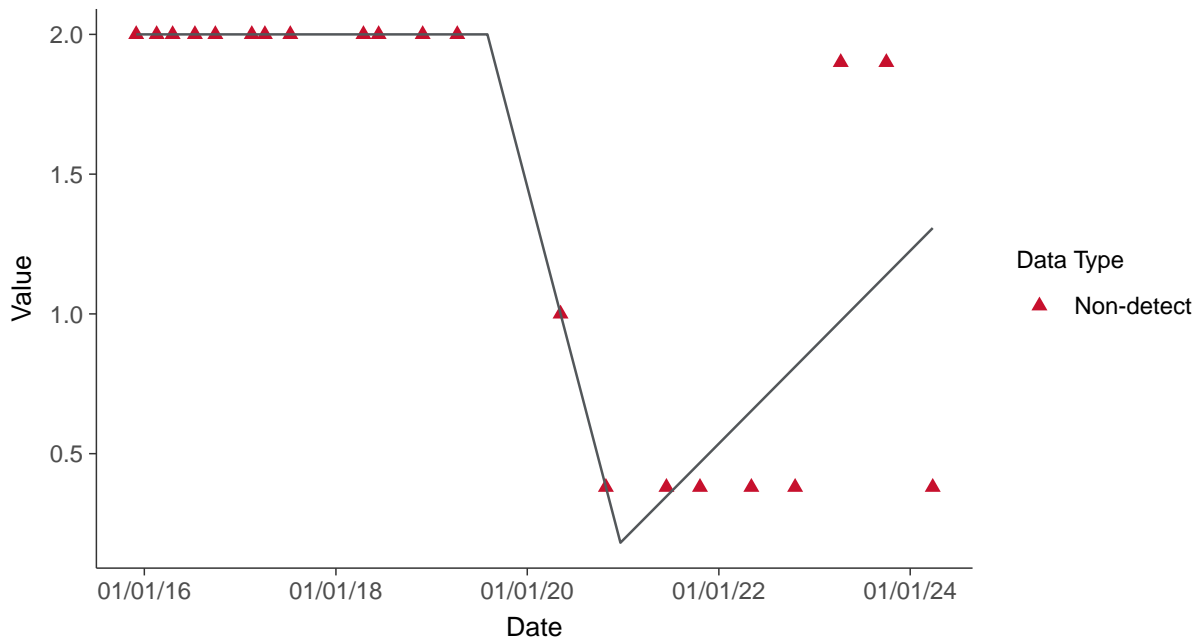
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-15021 (ug/L)



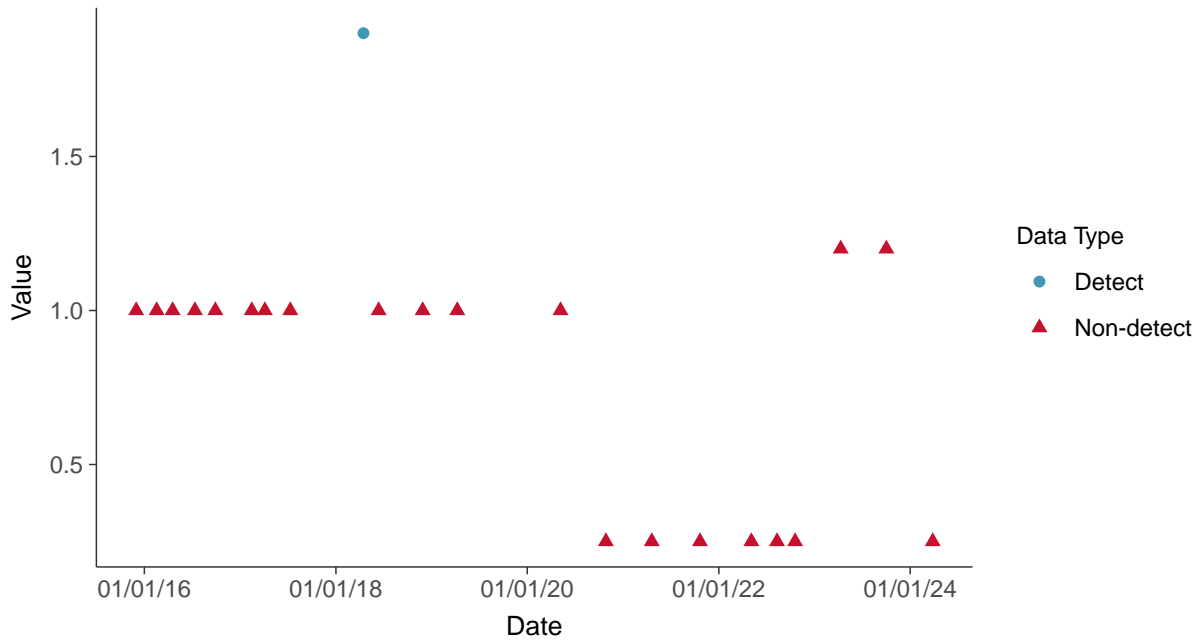


Appendix IV: Antimony, MW-15022

ID: 12_2_101

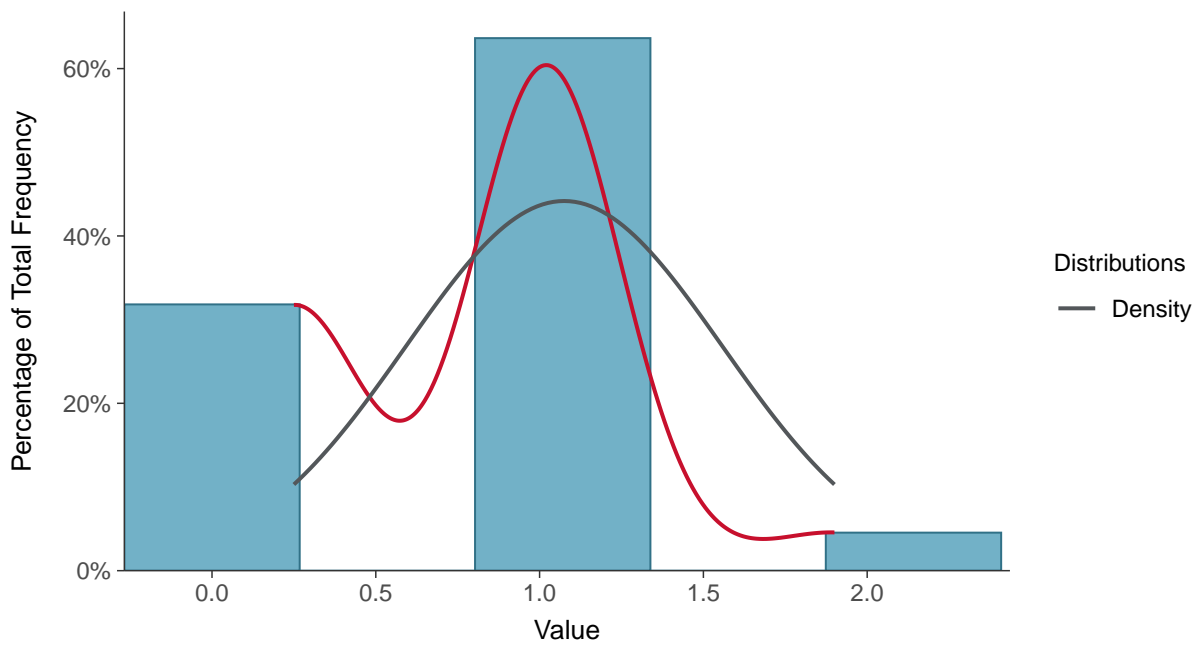
Scatter Plot

Antimony, MW-15022 (ug/L)



Histogram

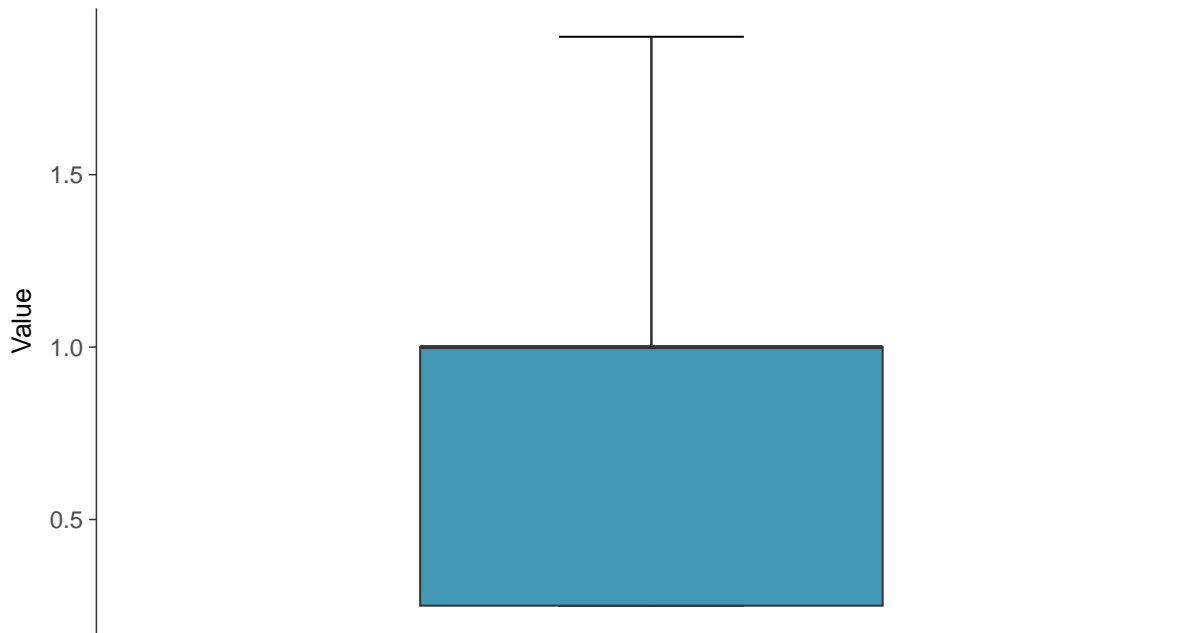
Antimony, MW-15022 (ug/L)





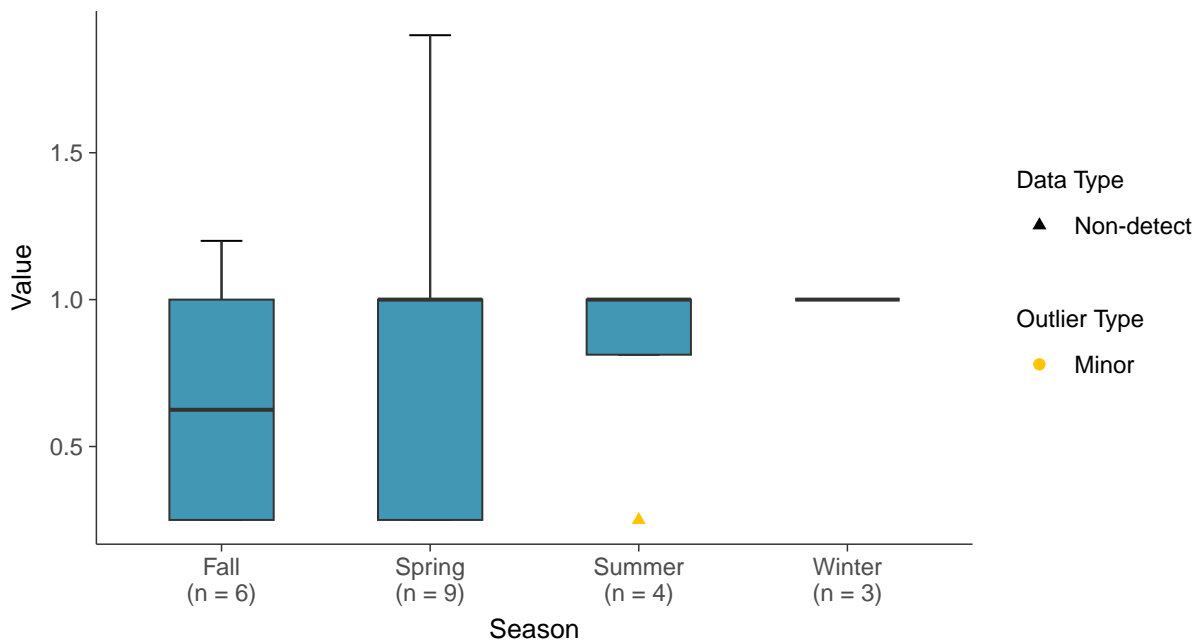
Boxplot

Antimony, MW-15022 (ug/L)



Boxplot by Season

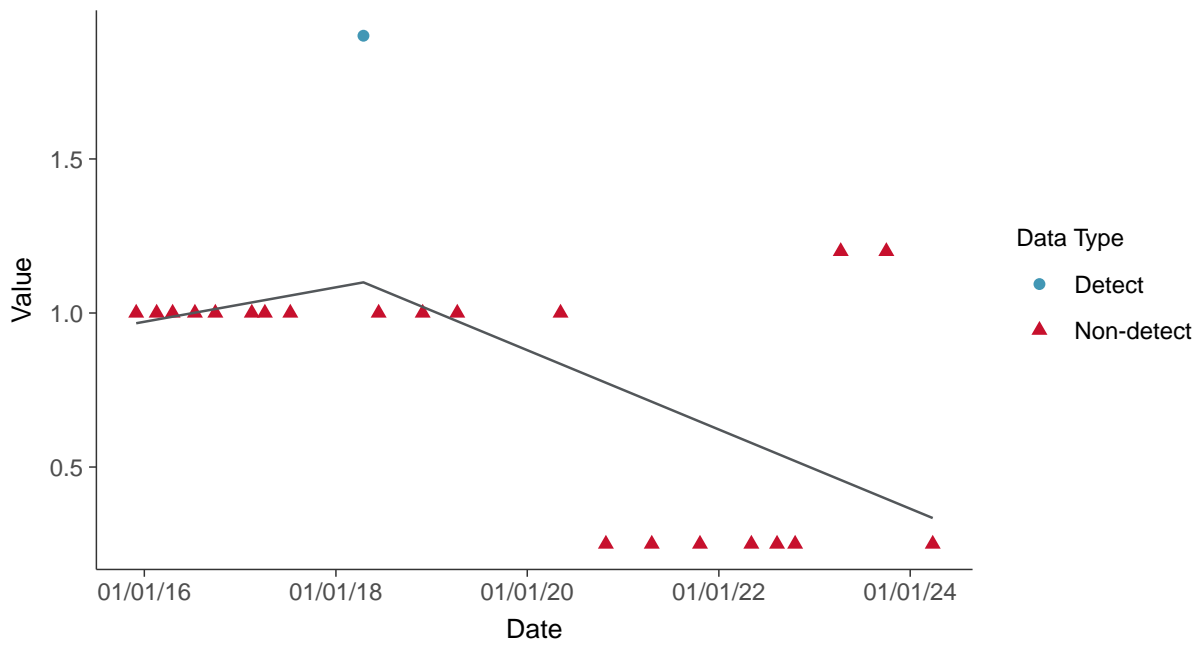
Antimony, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear

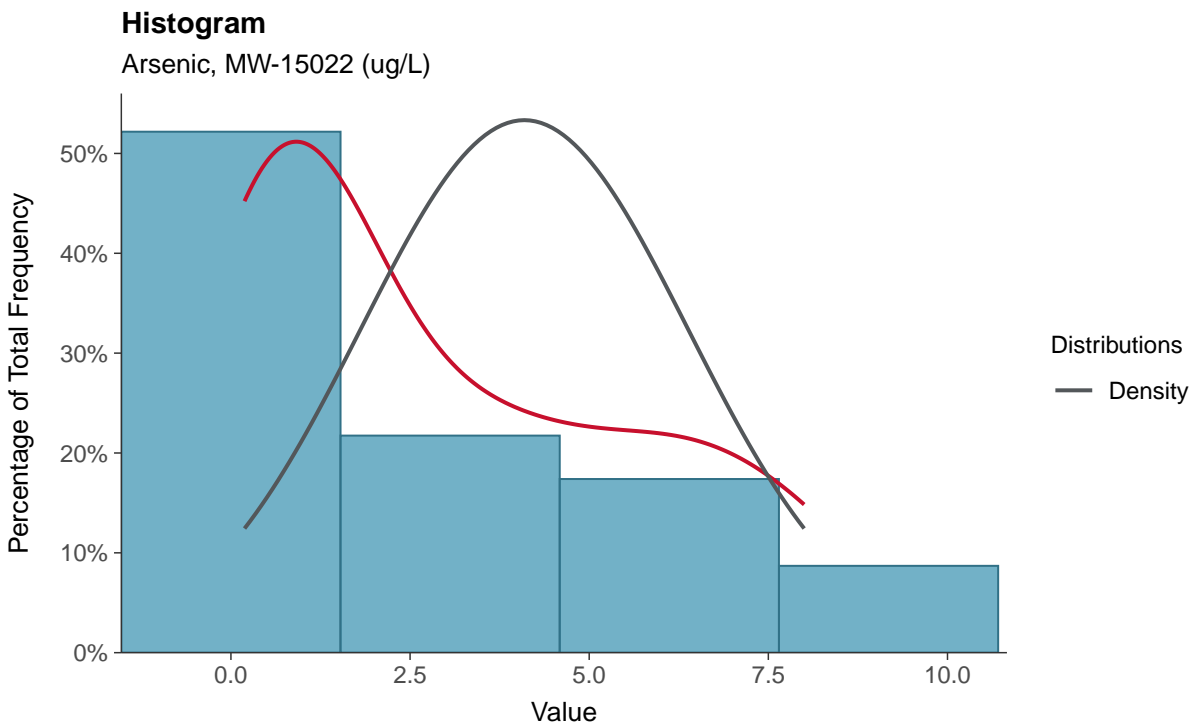
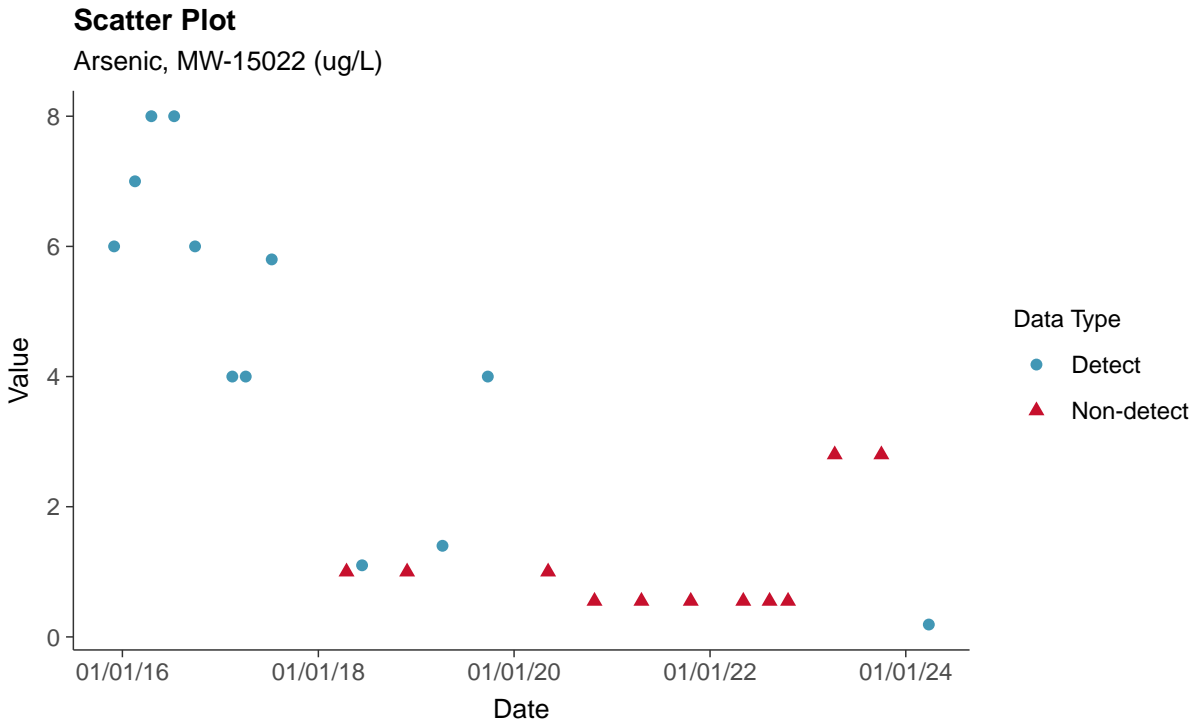
Antimony, MW-15022 (ug/L)





Appendix IV: Arsenic, MW-15022

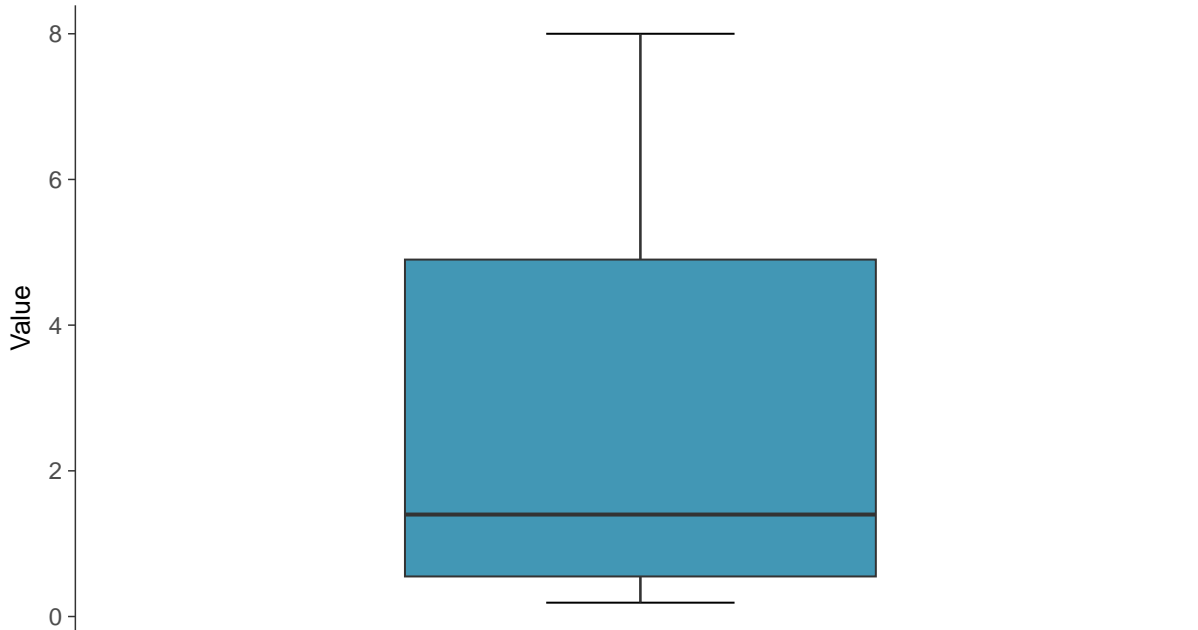
ID: 12_2_102





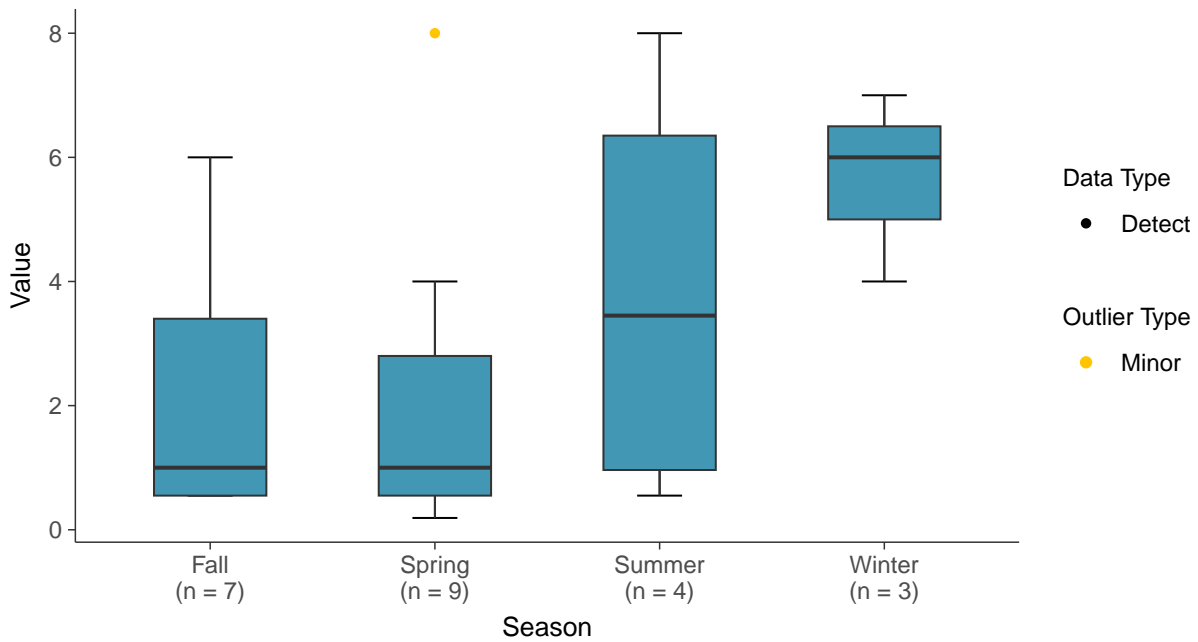
Boxplot

Arsenic, MW-15022 (ug/L)



Boxplot by Season

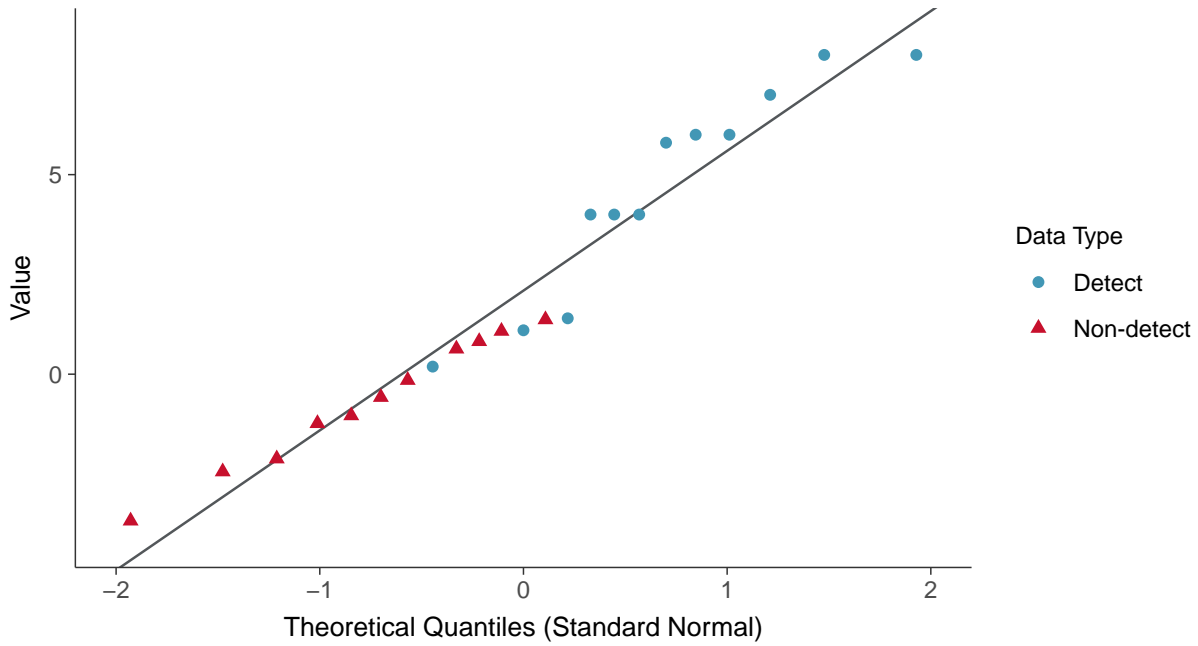
Arsenic, MW-15022 (ug/L)





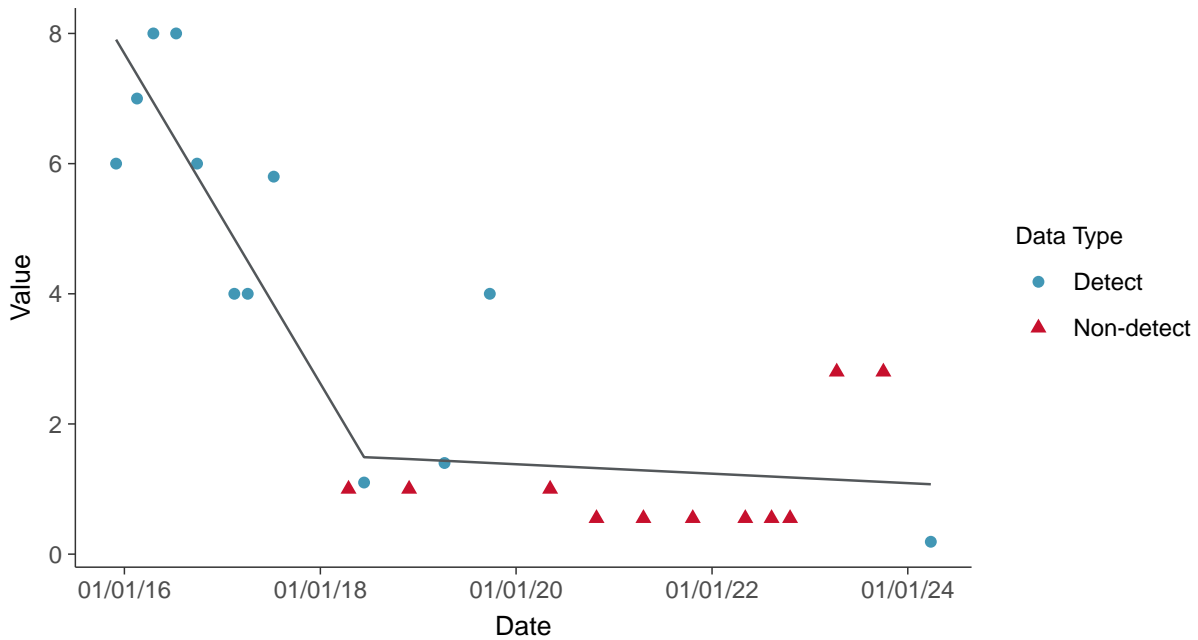
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear

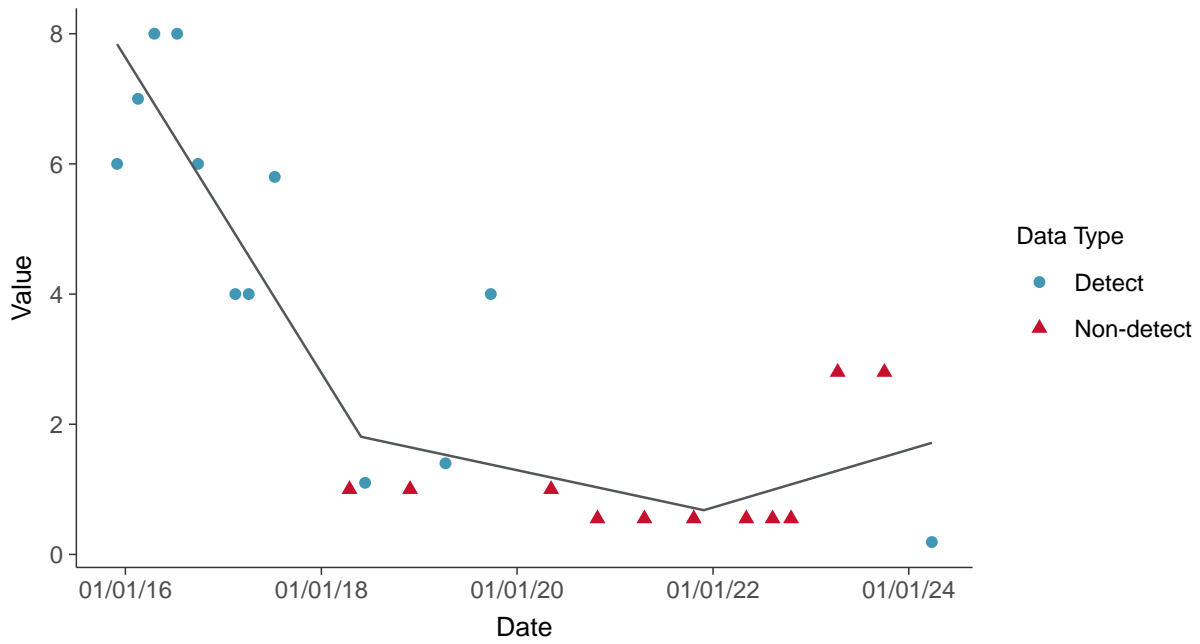
Arsenic, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15022 (ug/L)



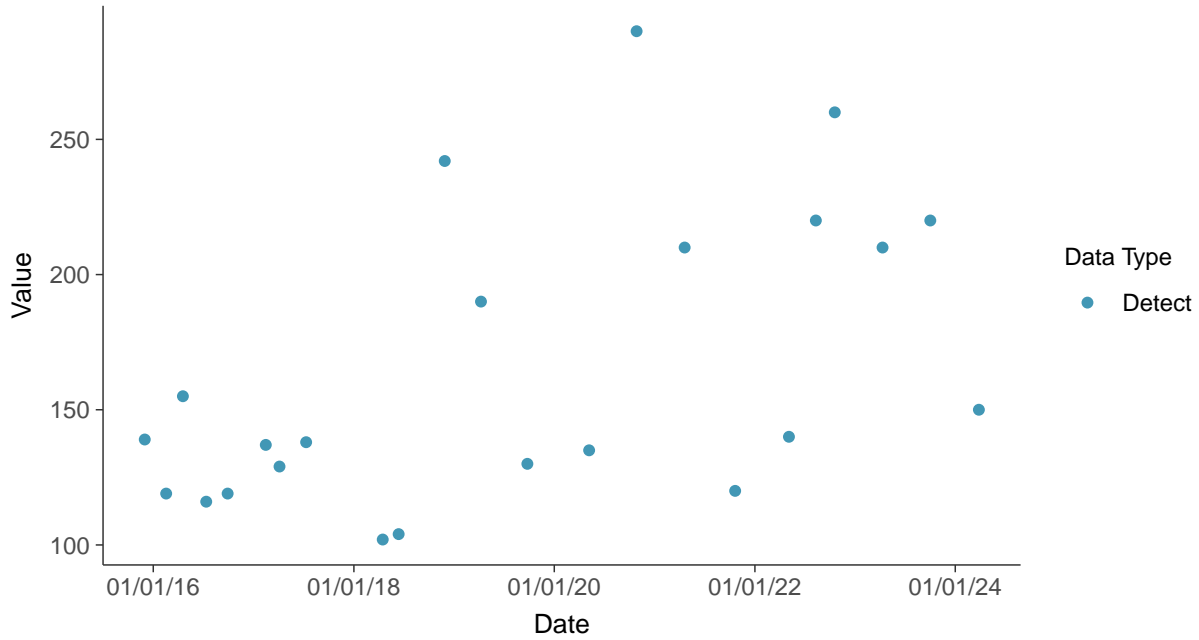


Appendix IV: Barium, MW-15022

ID: 12_2_103

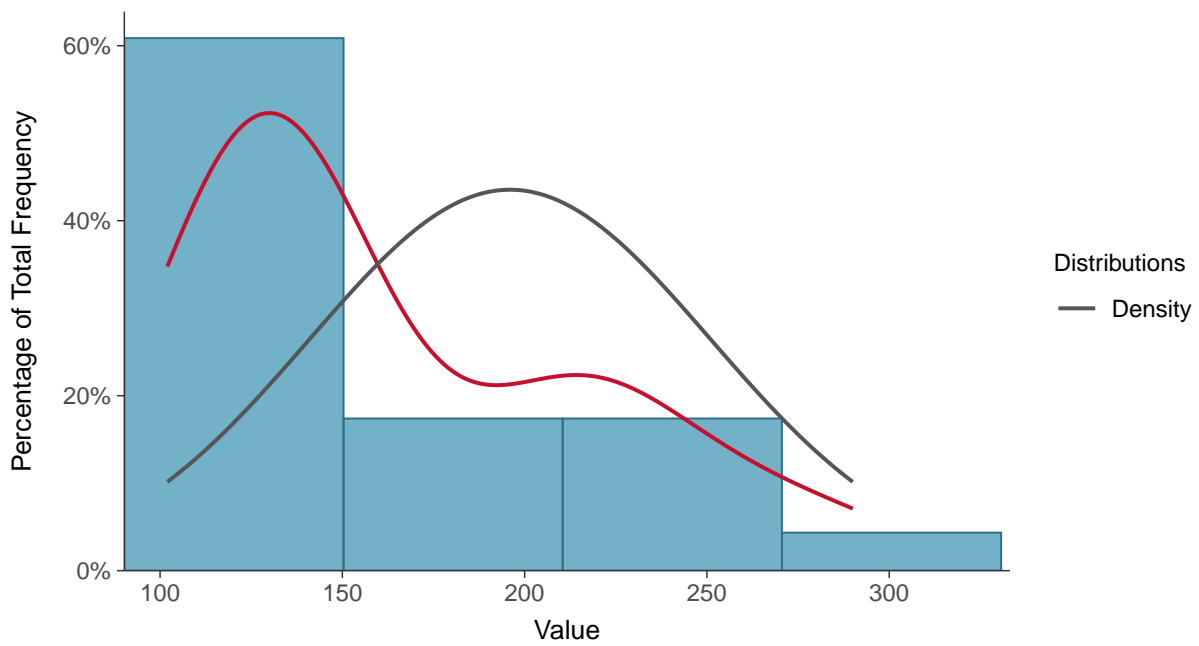
Scatter Plot

Barium, MW-15022 (ug/L)



Histogram

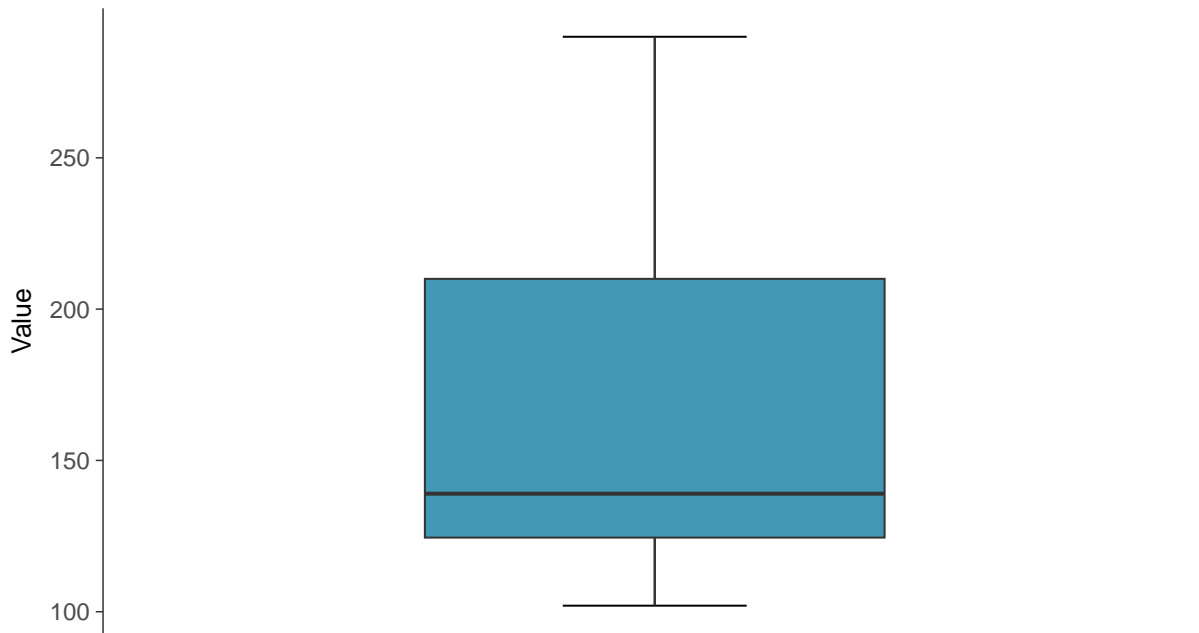
Barium, MW-15022 (ug/L)





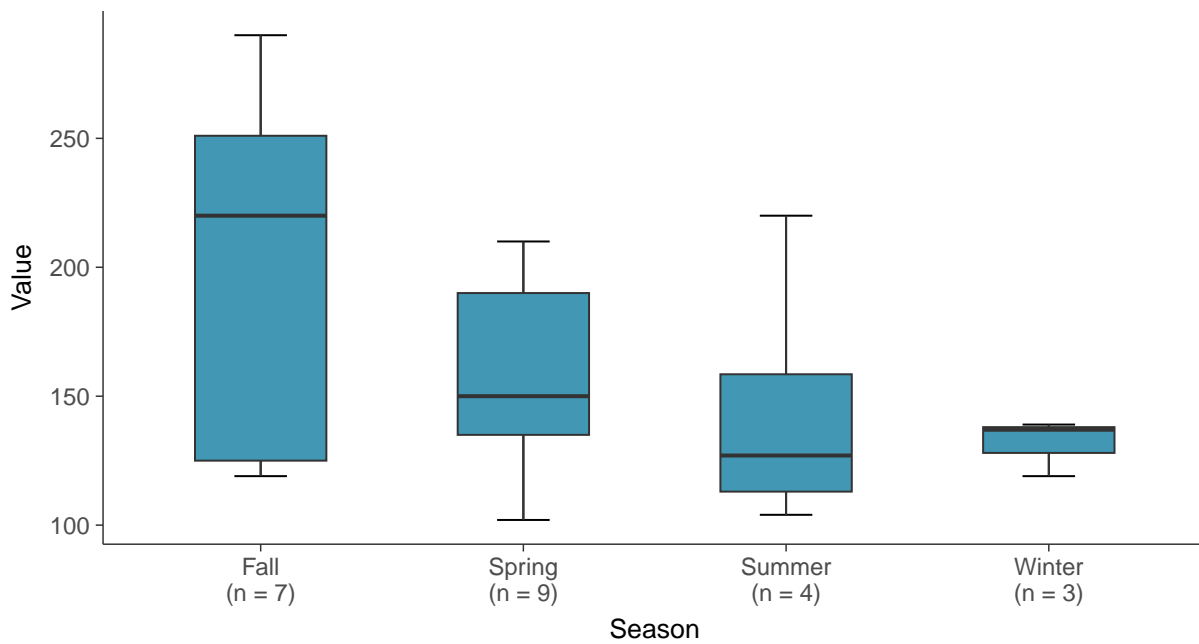
Boxplot

Barium, MW-15022 (ug/L)



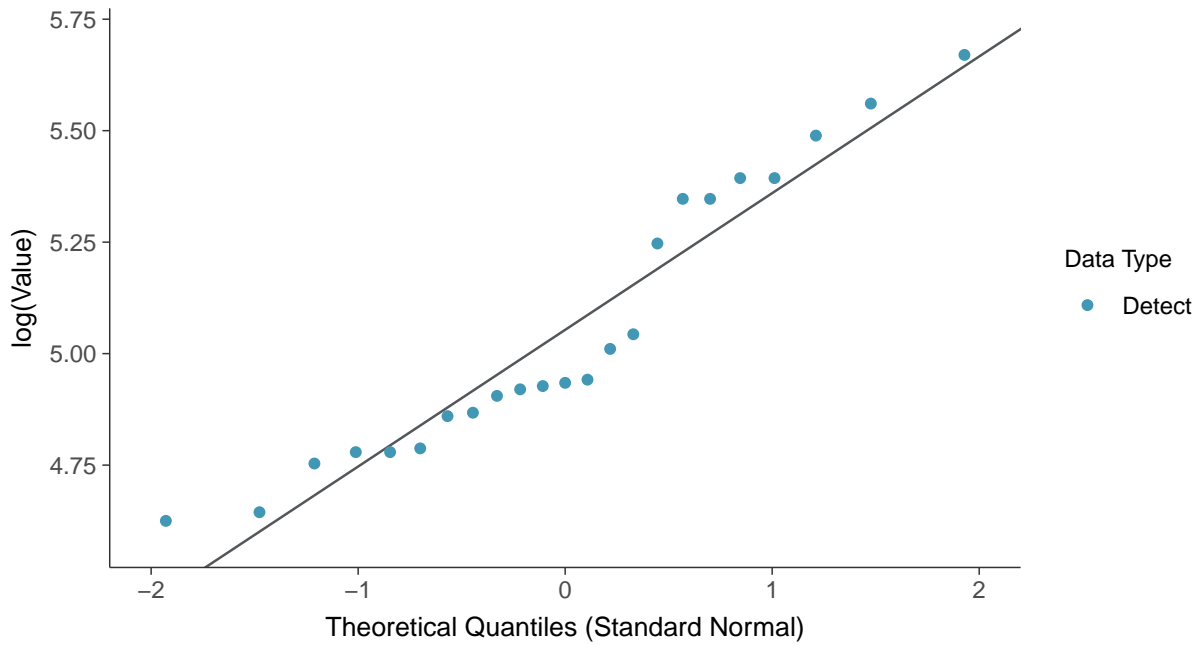
Boxplot by Season

Barium, MW-15022 (ug/L)

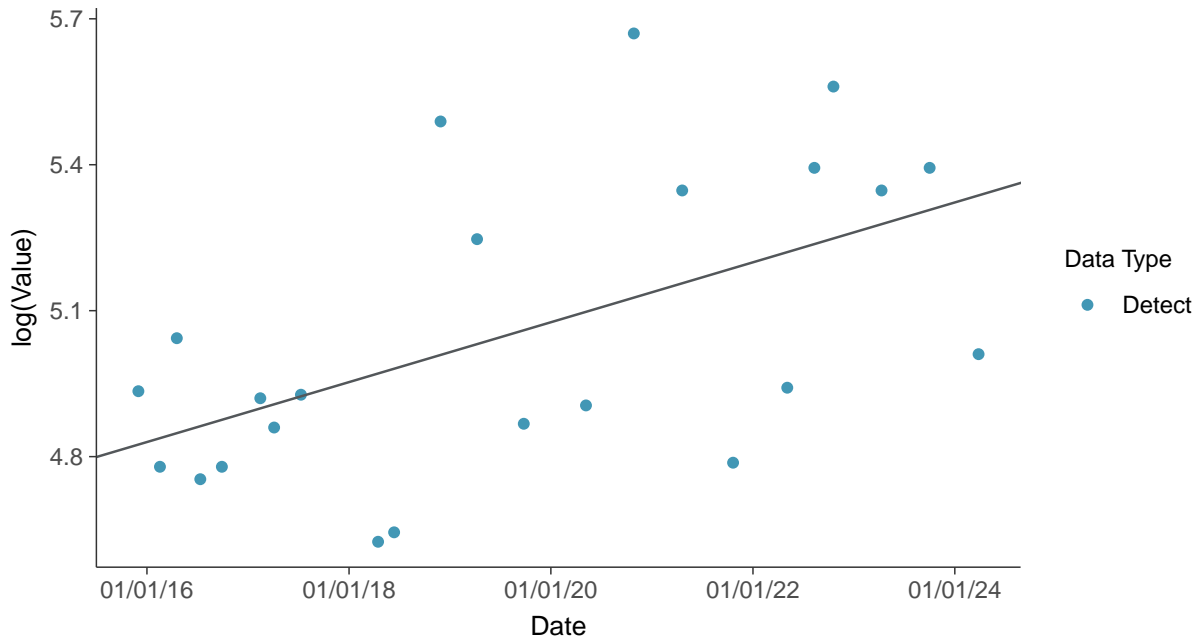




Lognormal Q-Q plot
Barium, MW-15022 (ug/L)



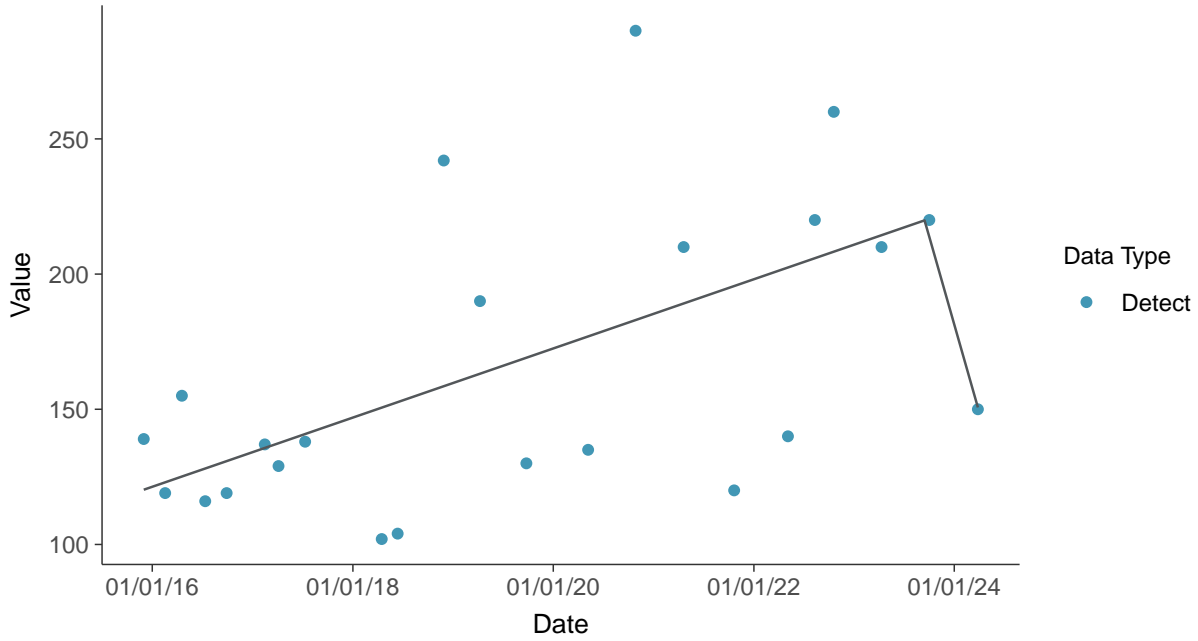
Trend Regression: Lognormal MLE
Barium, MW-15022 (ug/L)





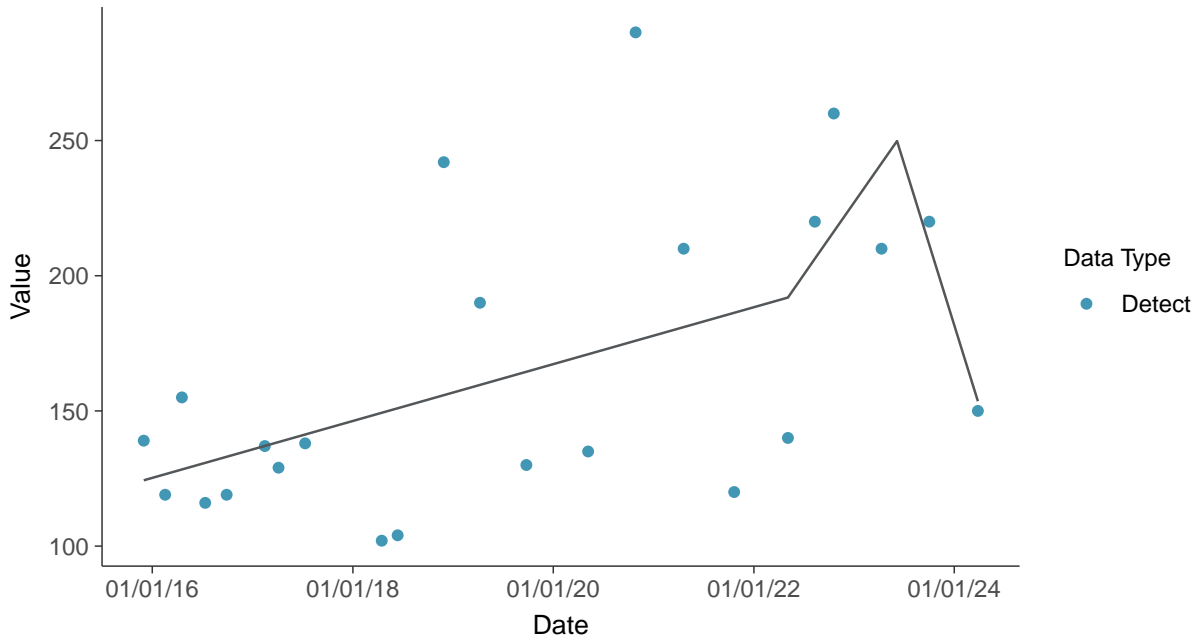
Trend Regression: Piecewise Linear-Linear

Barium, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

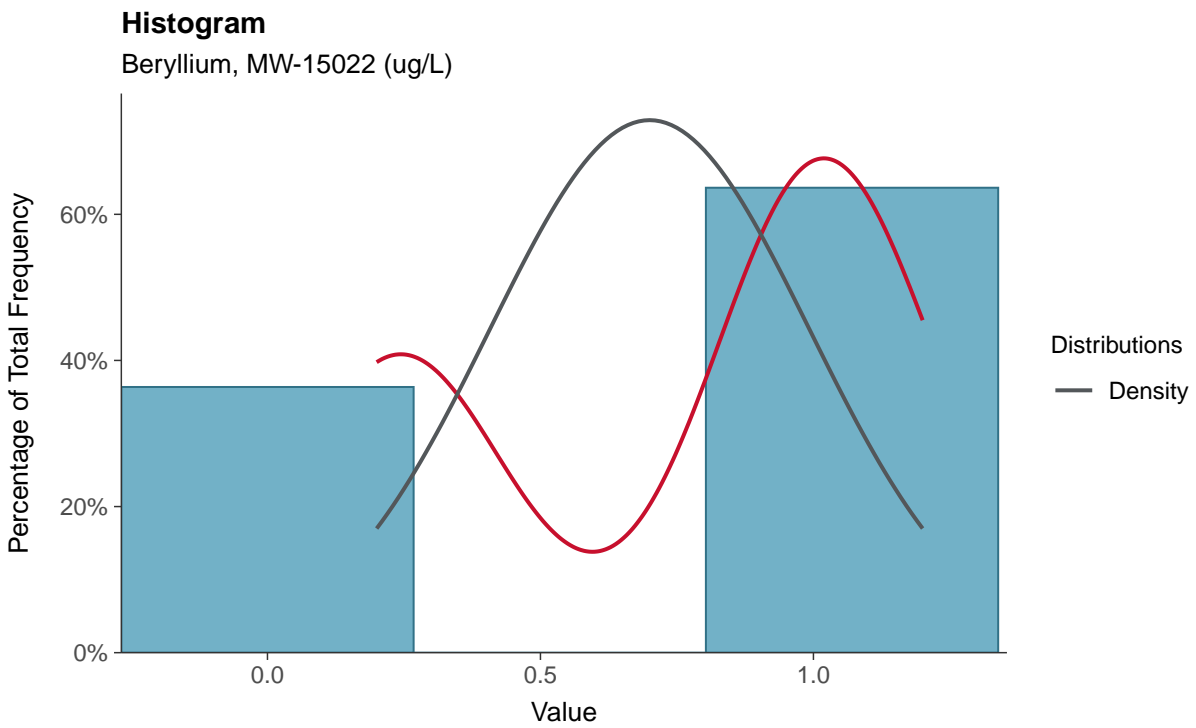
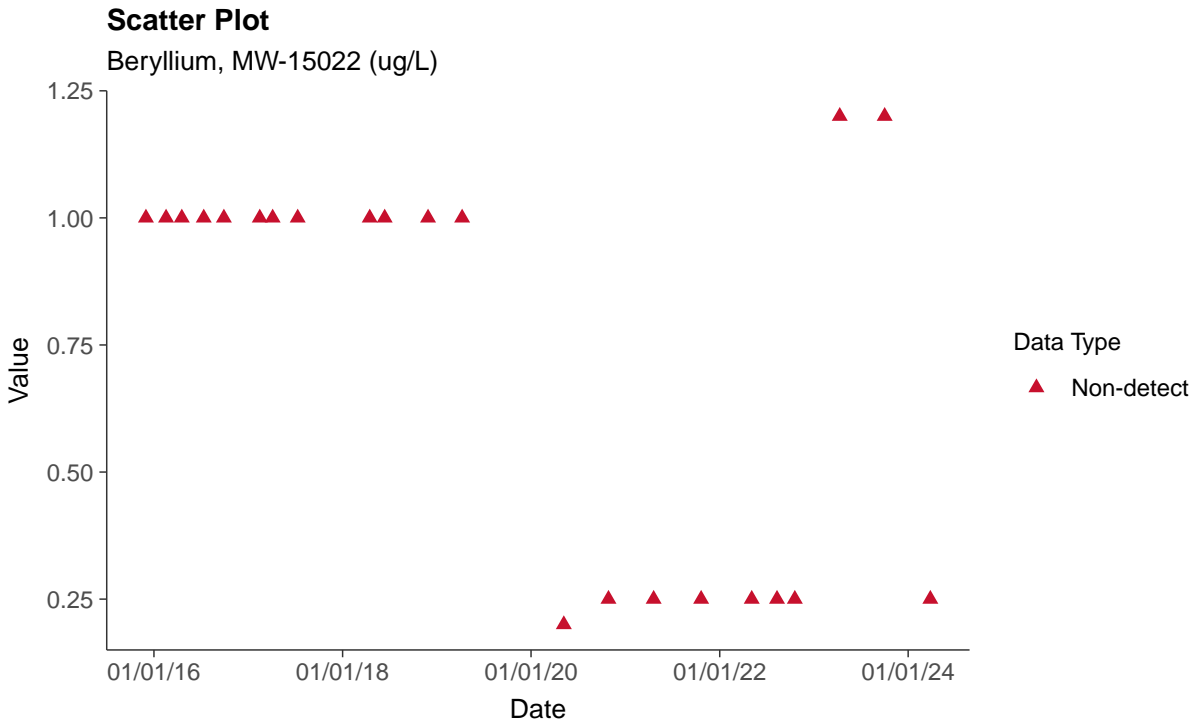
Barium, MW-15022 (ug/L)





Appendix IV: Beryllium, MW-15022

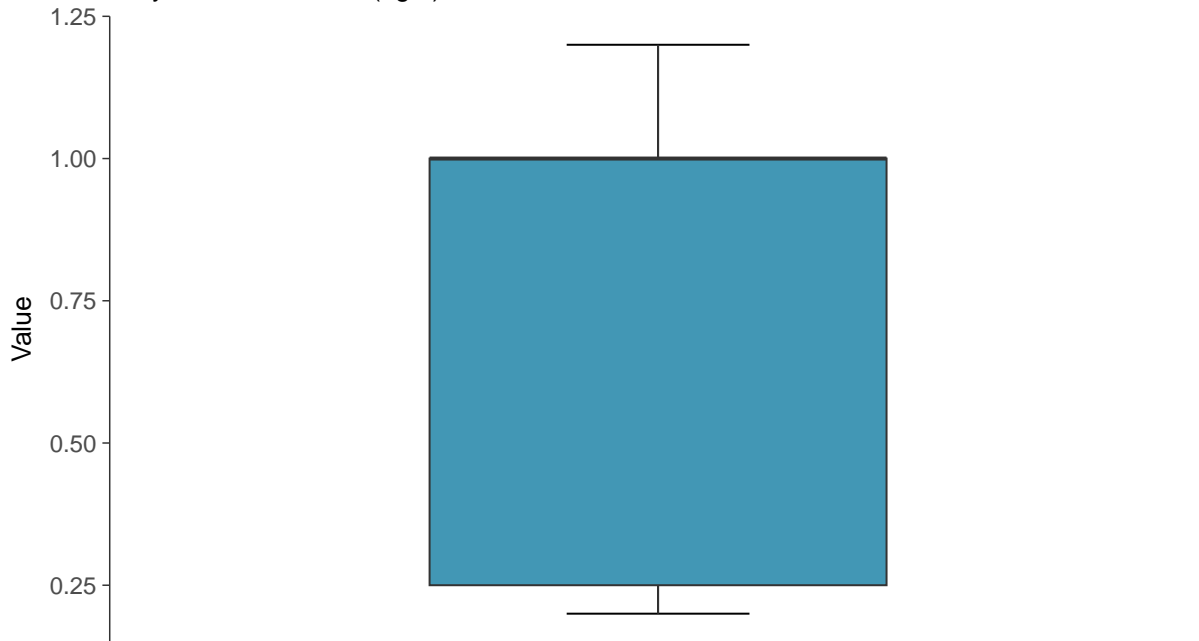
ID: 12_2_104





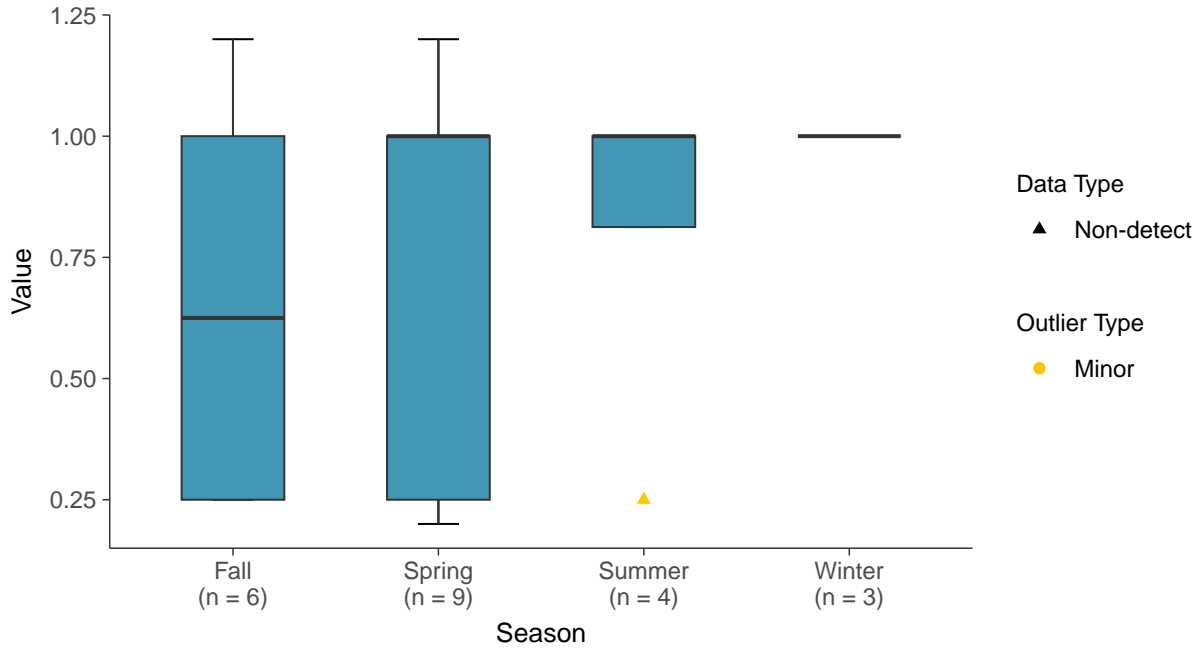
Boxplot

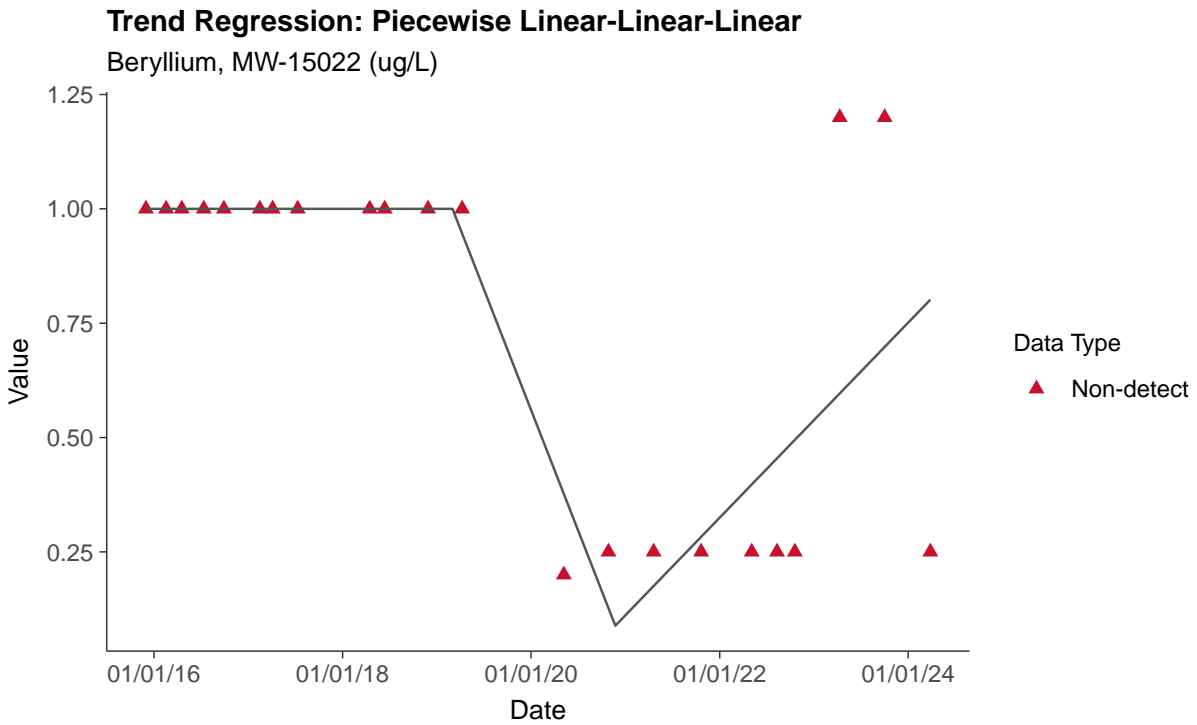
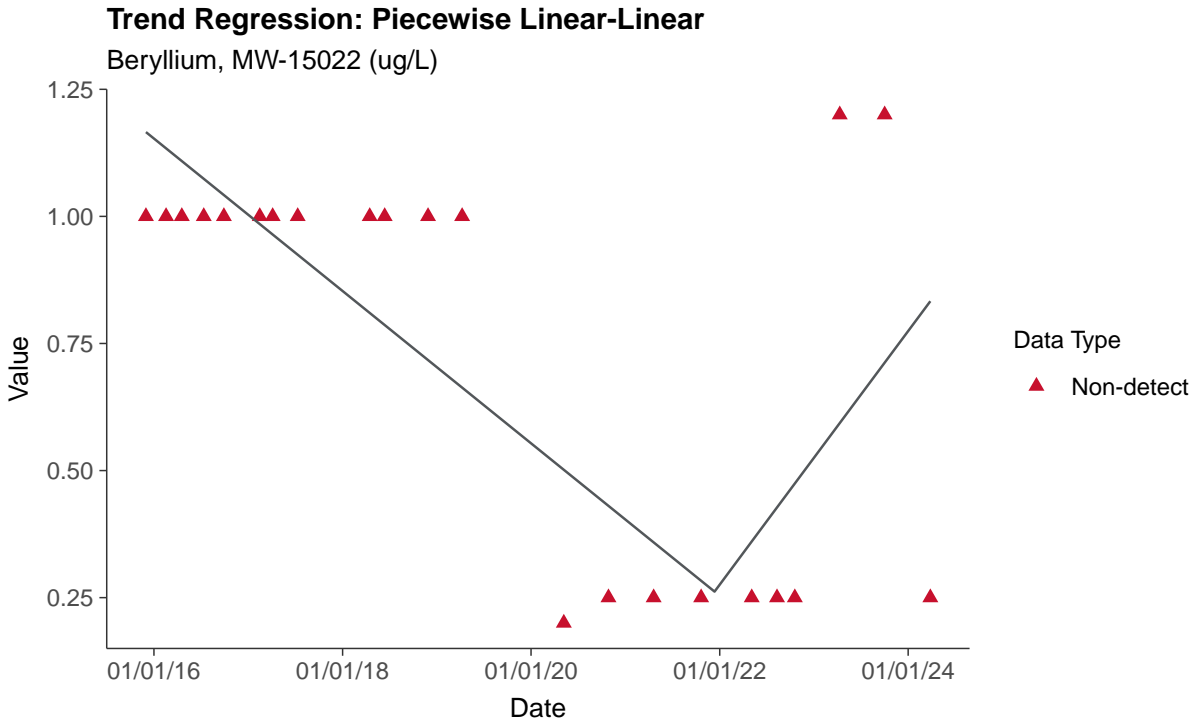
Beryllium, MW-15022 (ug/L)

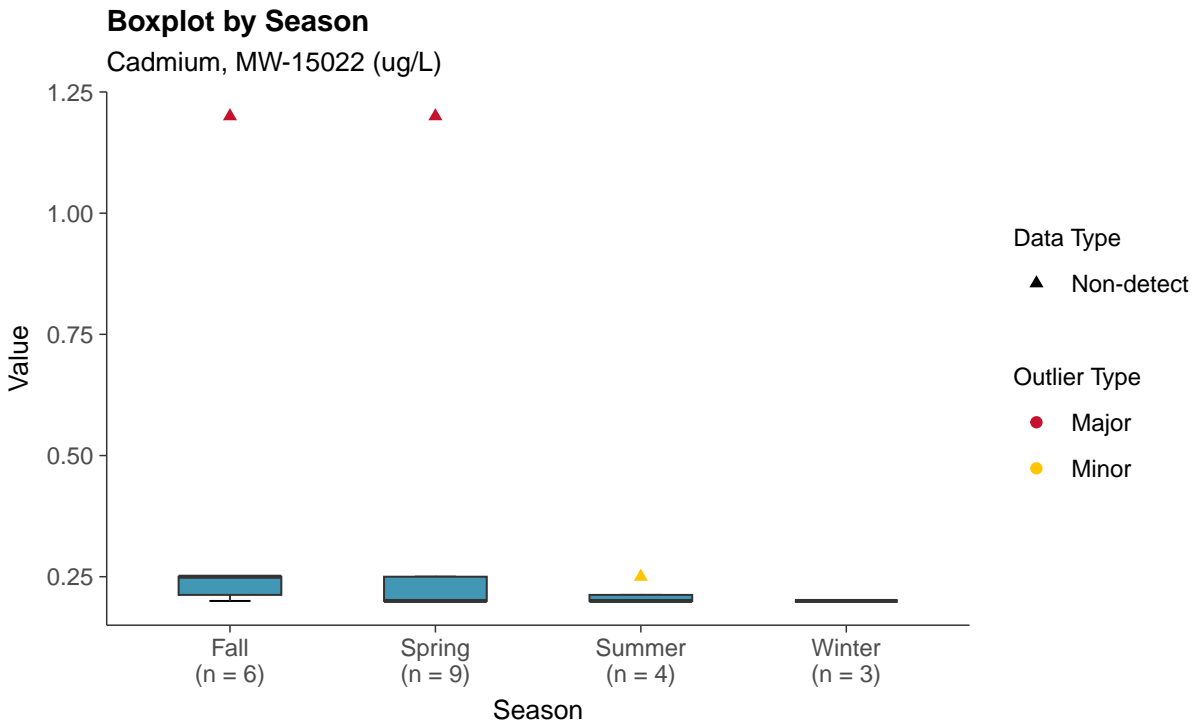
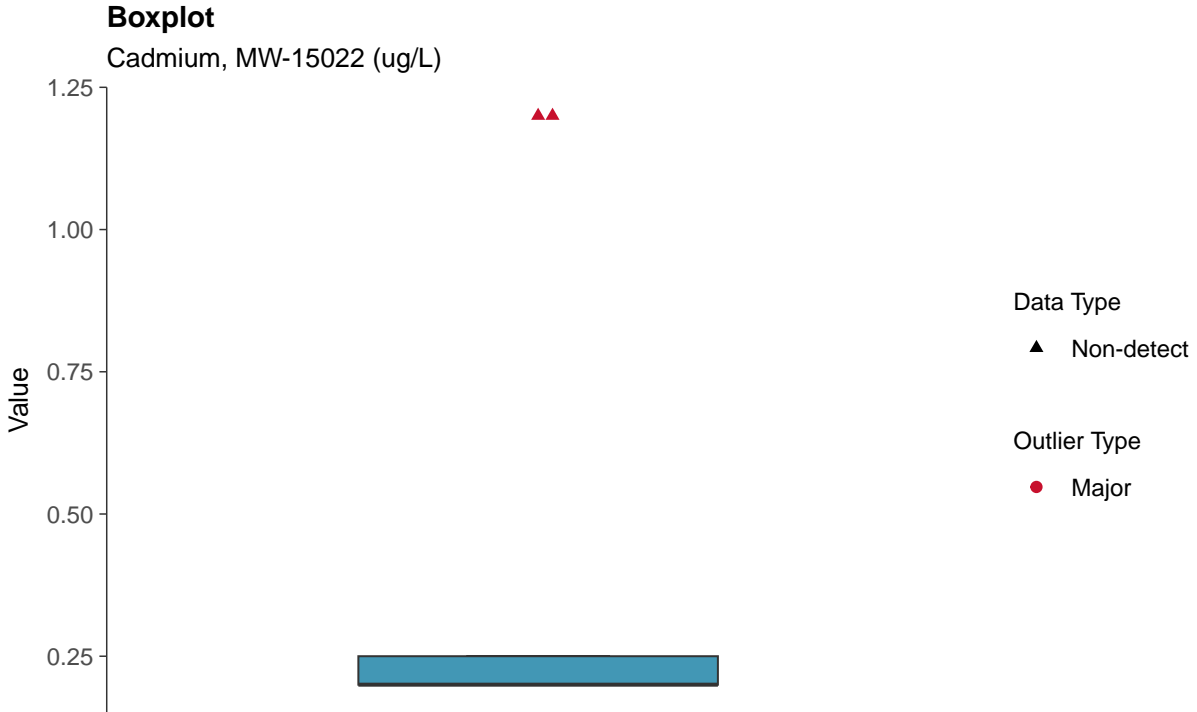


Boxplot by Season

Beryllium, MW-15022 (ug/L)



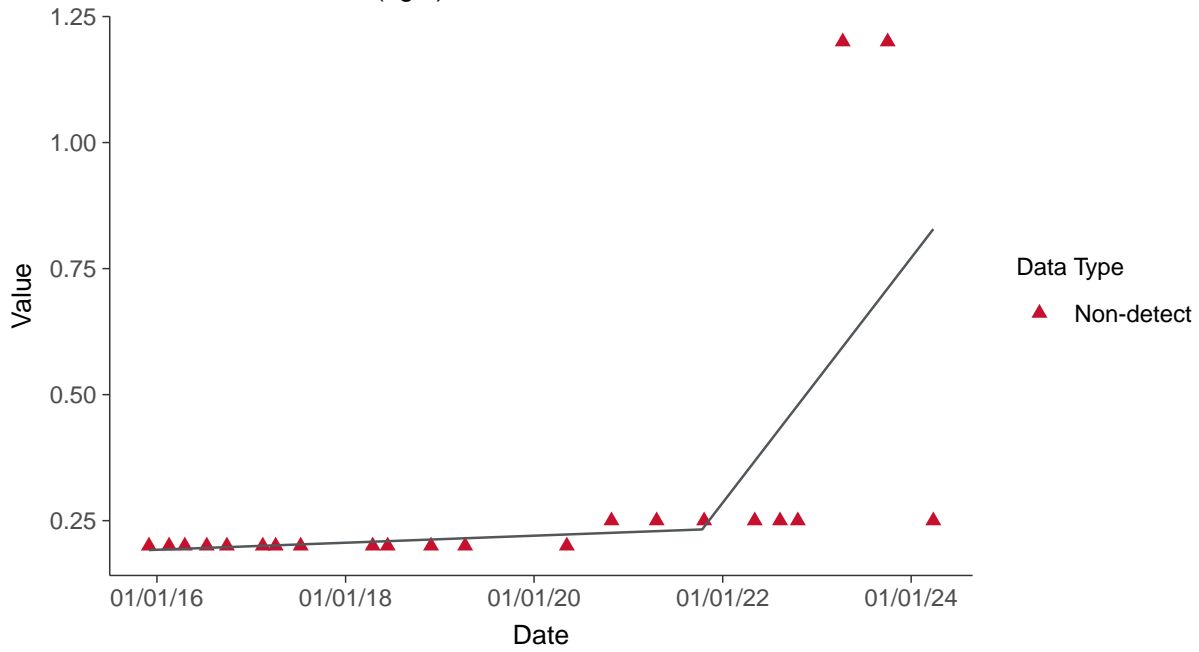






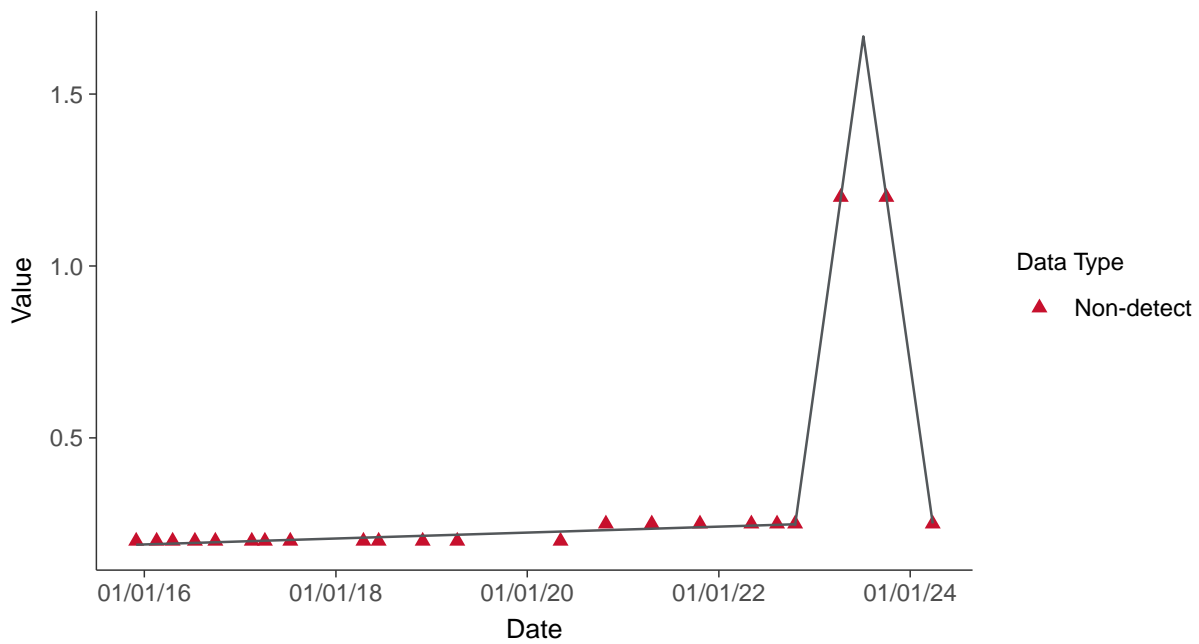
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

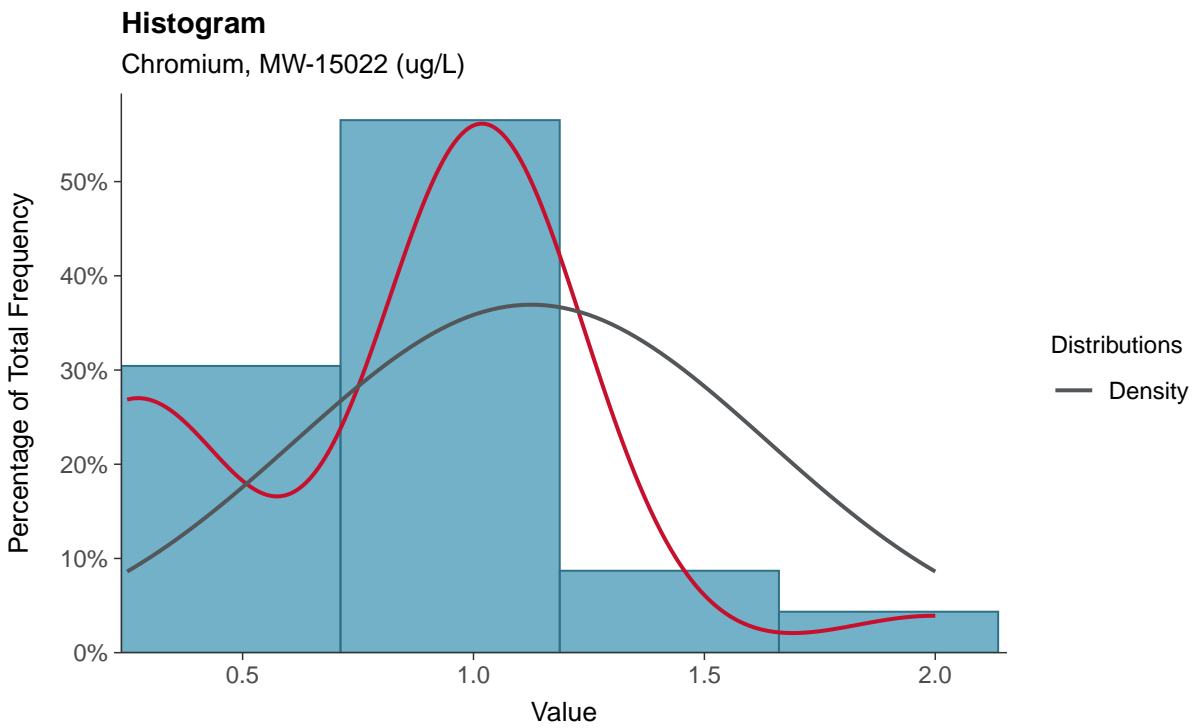
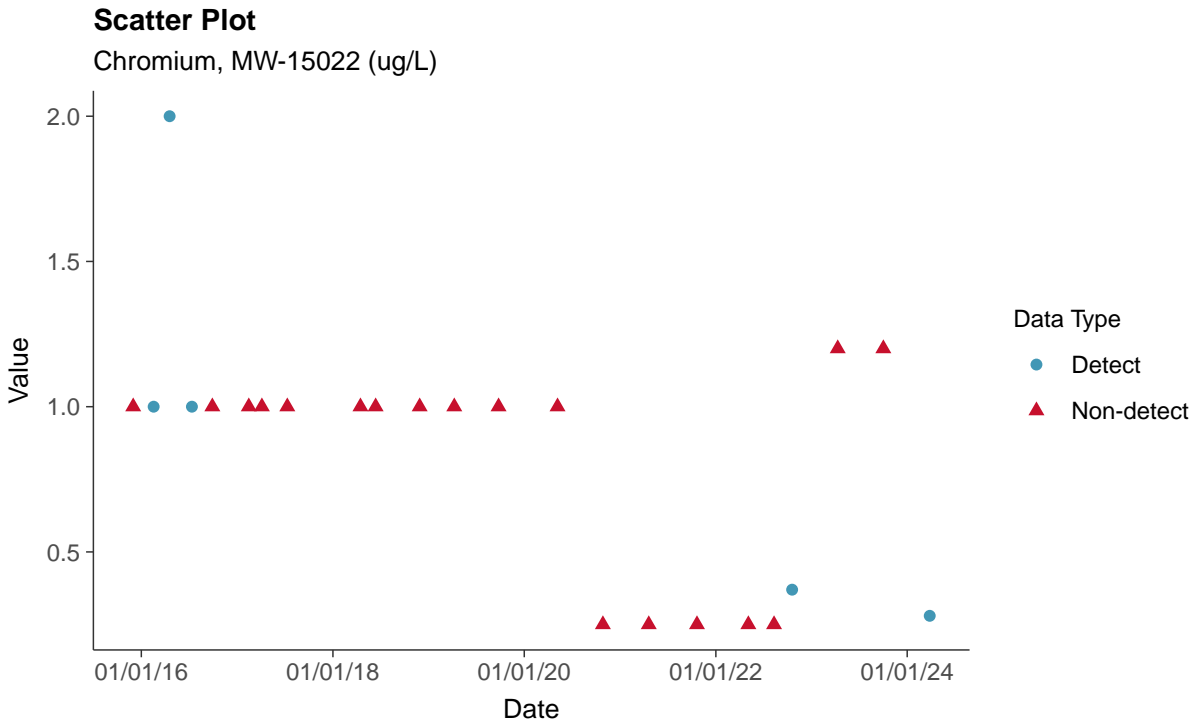
Cadmium, MW-15022 (ug/L)





Appendix IV: Chromium, MW-15022

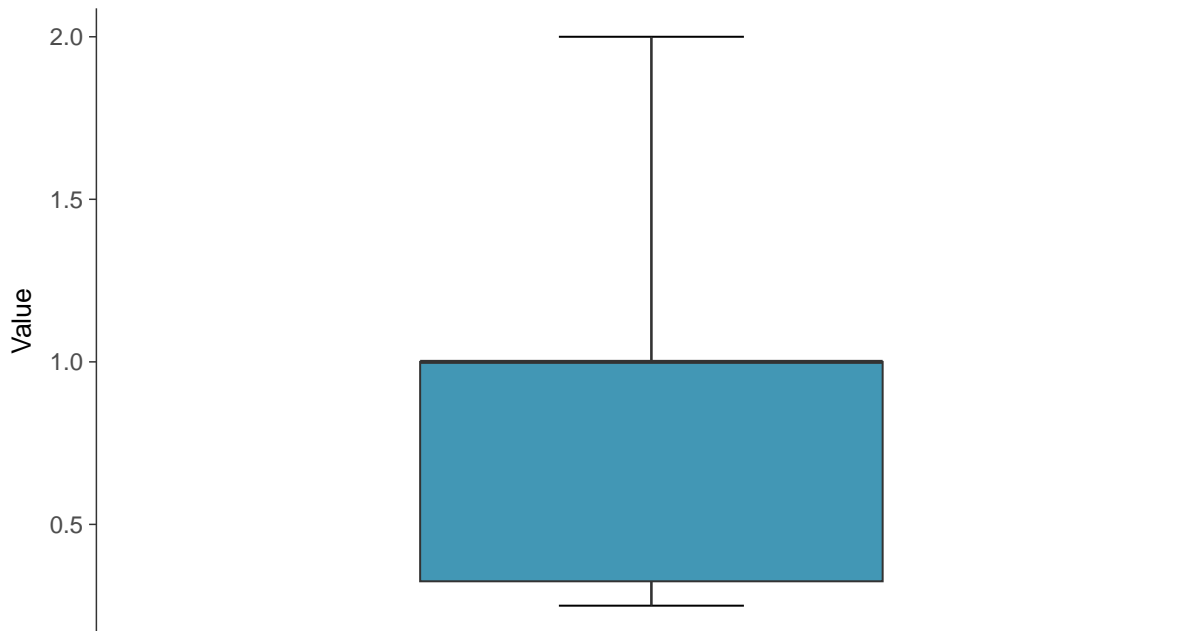
ID: 12_2_109





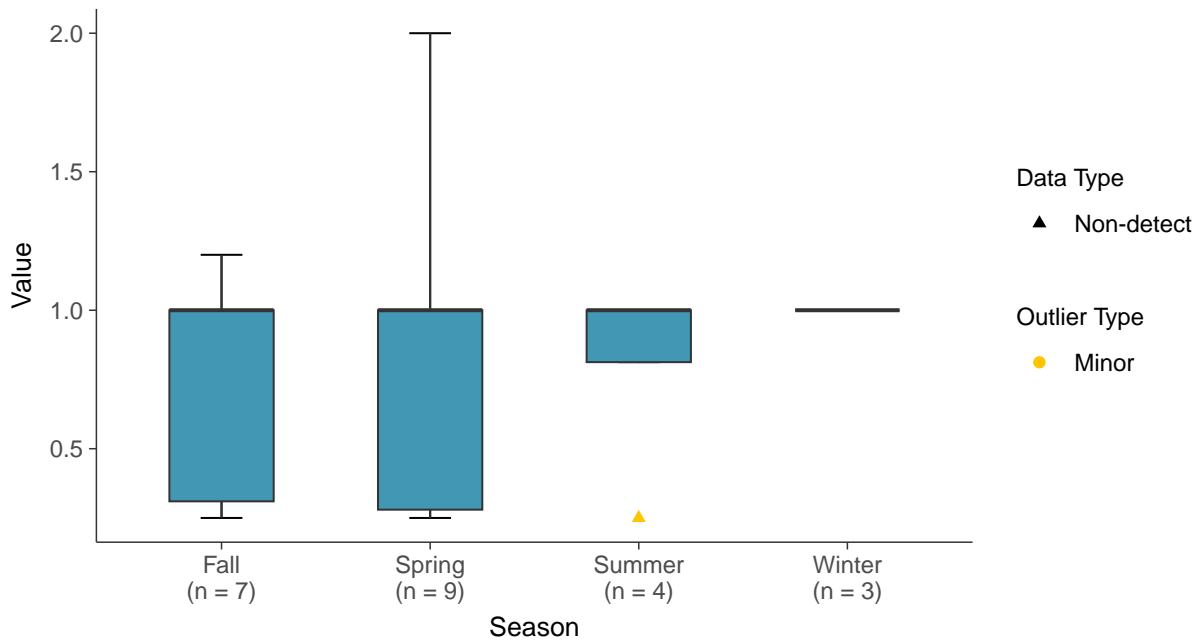
Boxplot

Chromium, MW-15022 (ug/L)



Boxplot by Season

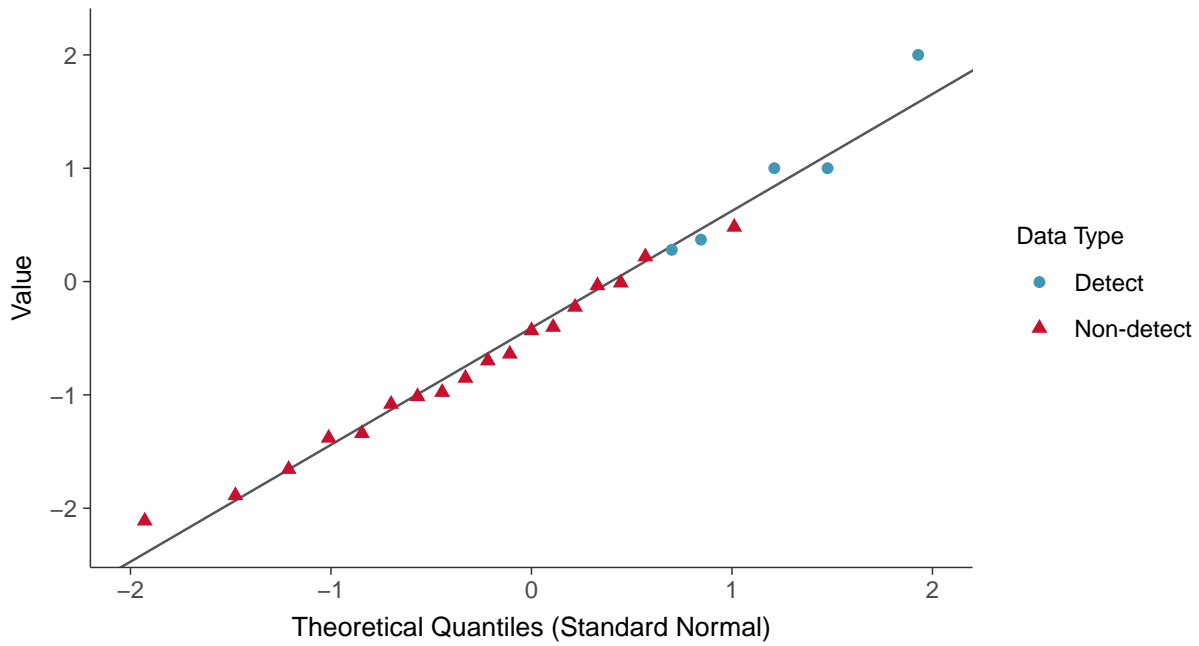
Chromium, MW-15022 (ug/L)





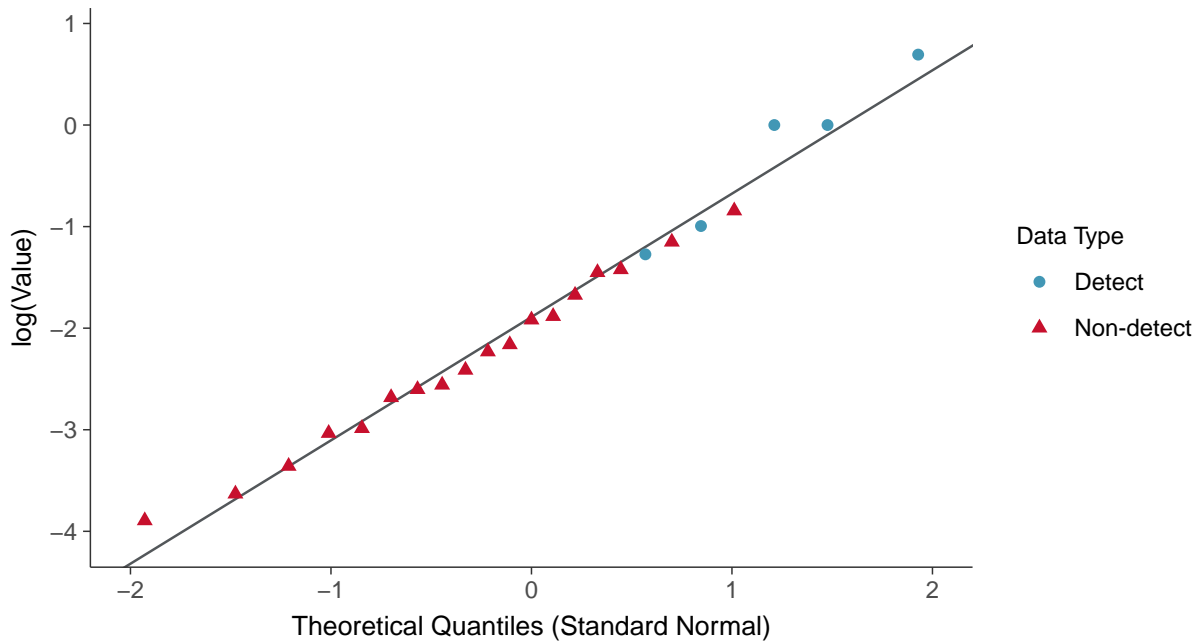
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15022 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

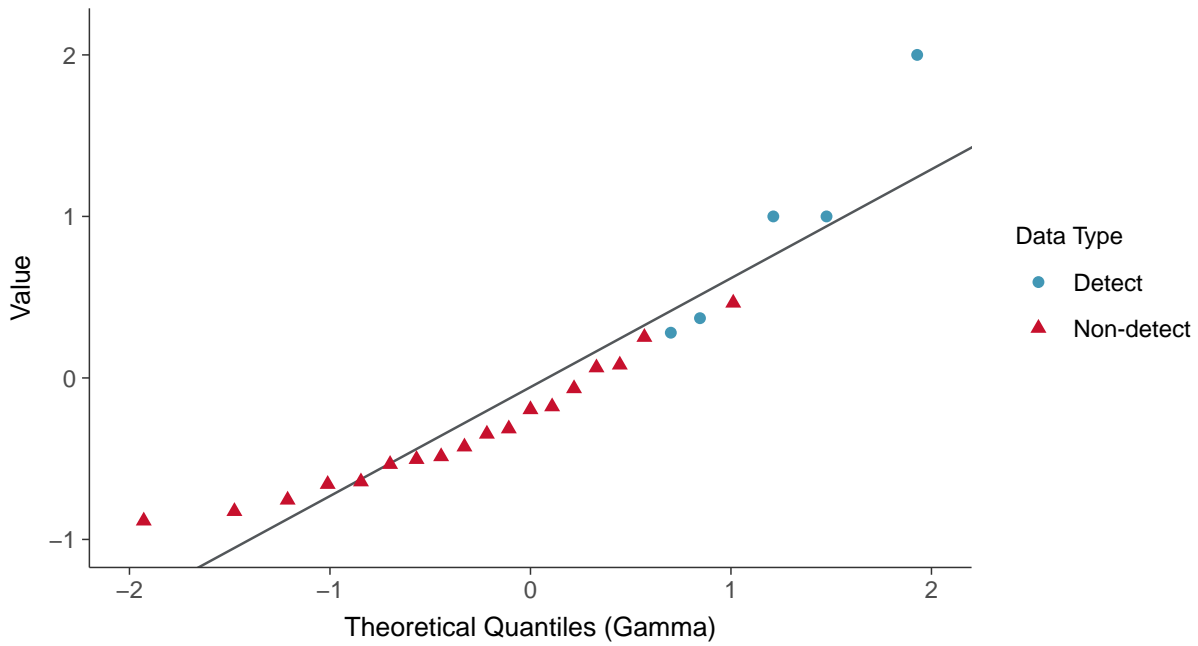
Chromium, MW-15022 (ug/L)





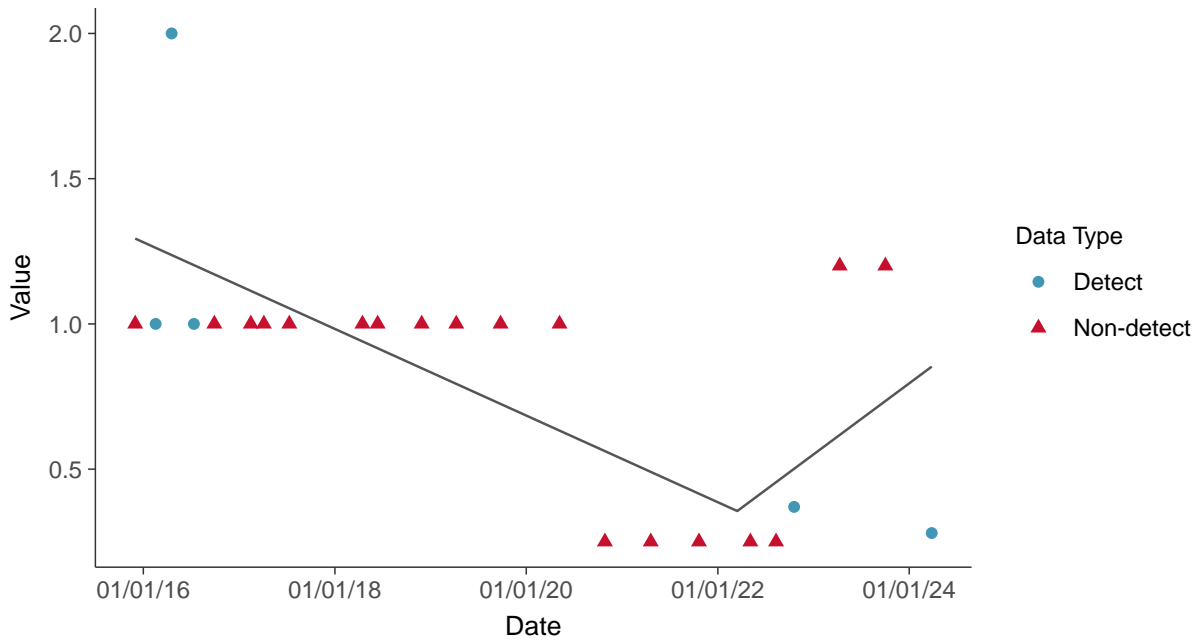
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear

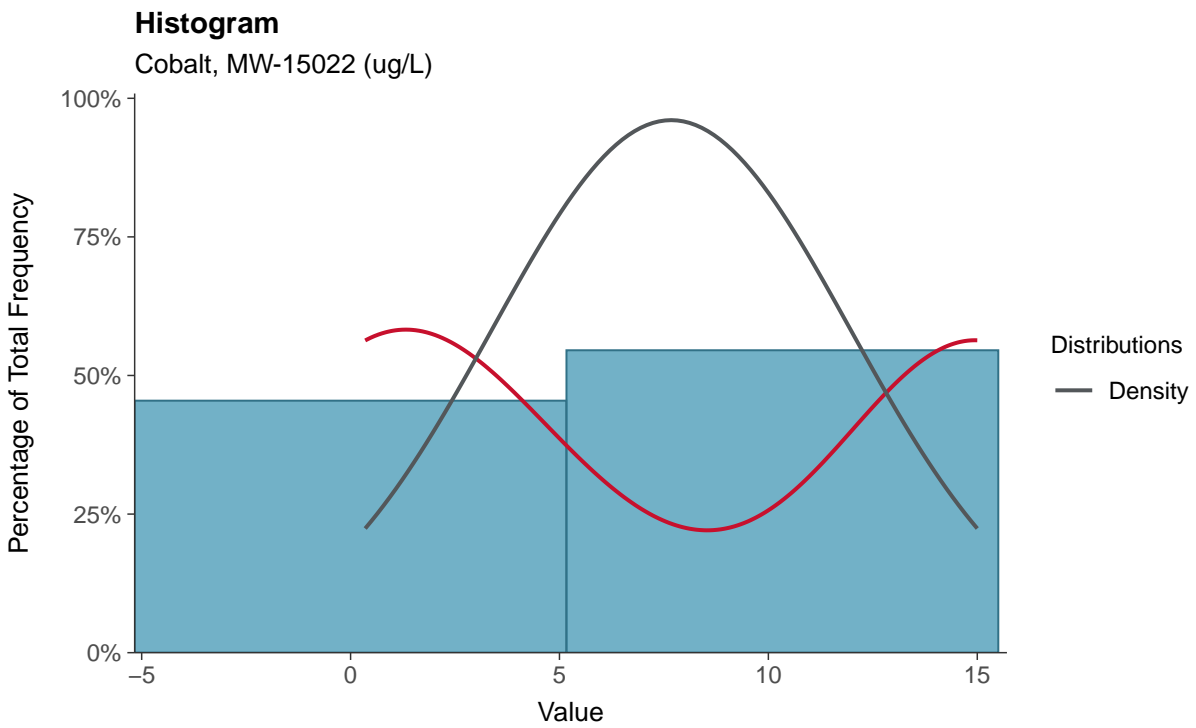
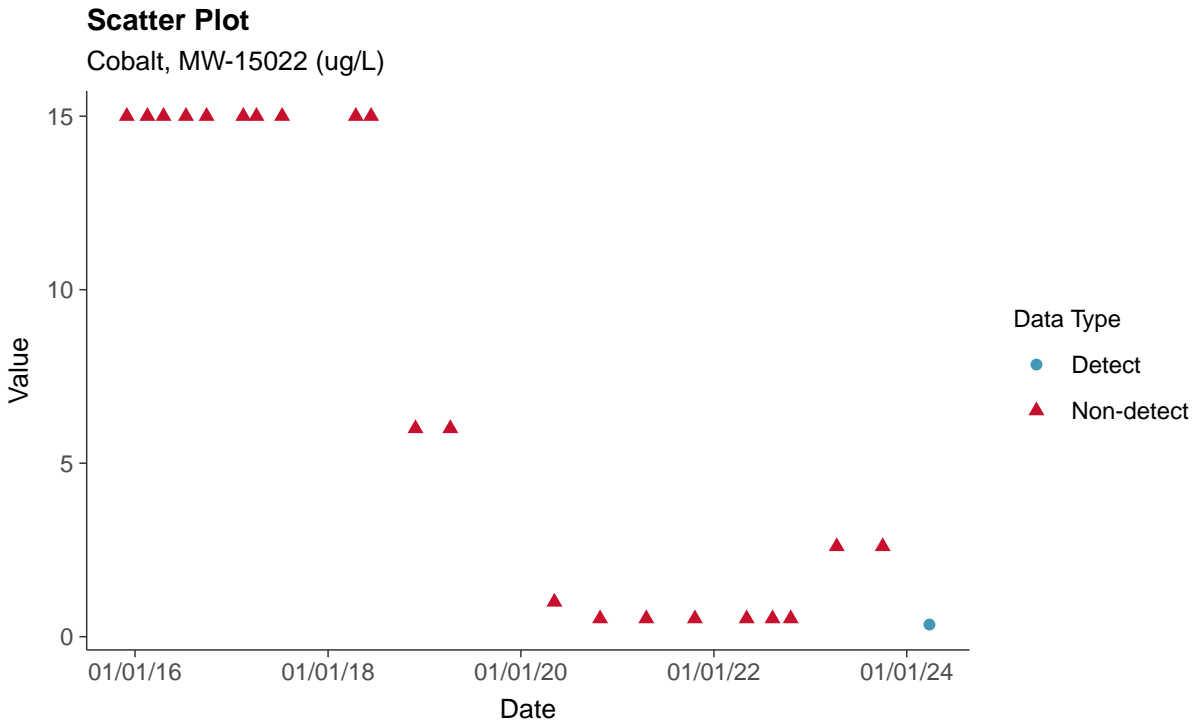
Chromium, MW-15022 (ug/L)





Appendix IV: Cobalt, MW-15022

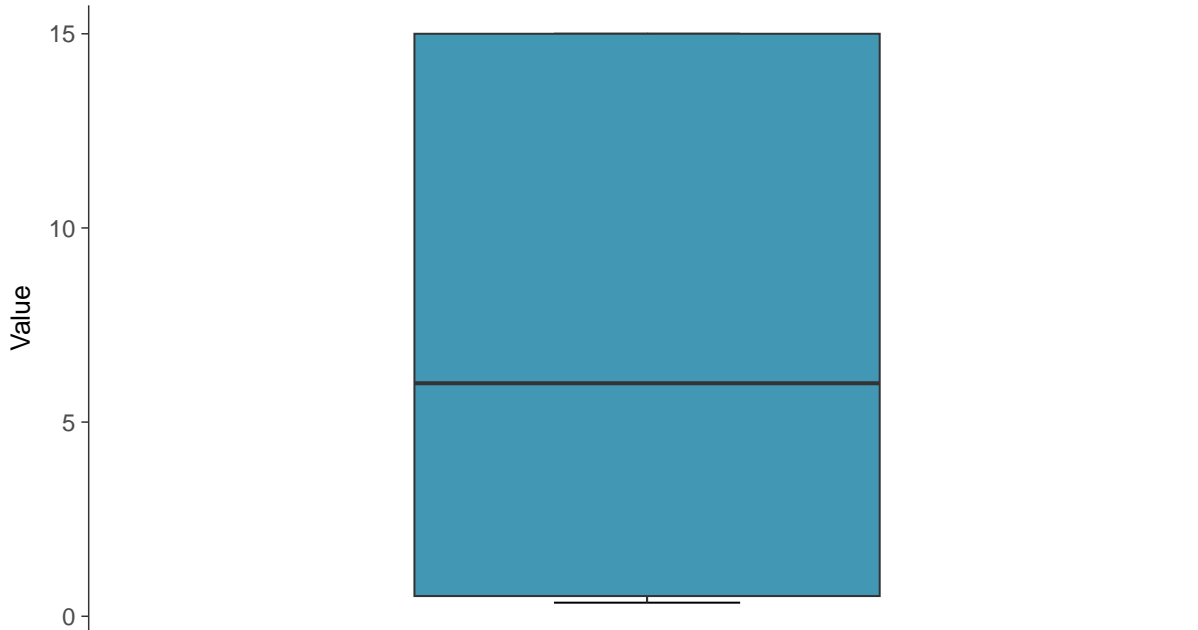
ID: 12_2_110





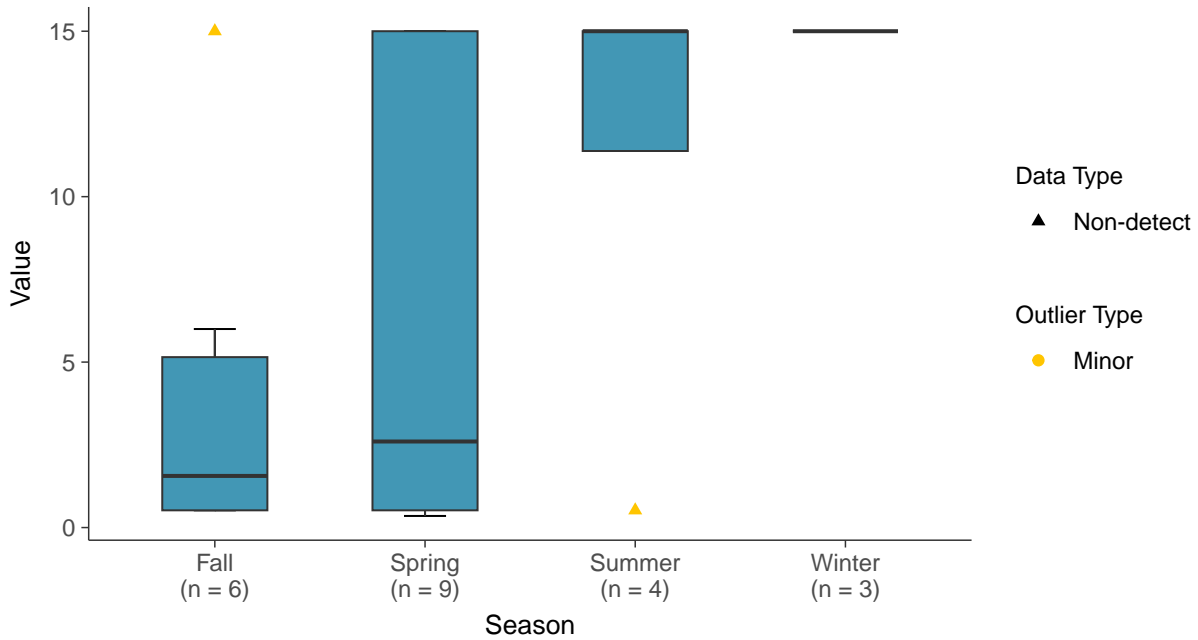
Boxplot

Cobalt, MW-15022 (ug/L)



Boxplot by Season

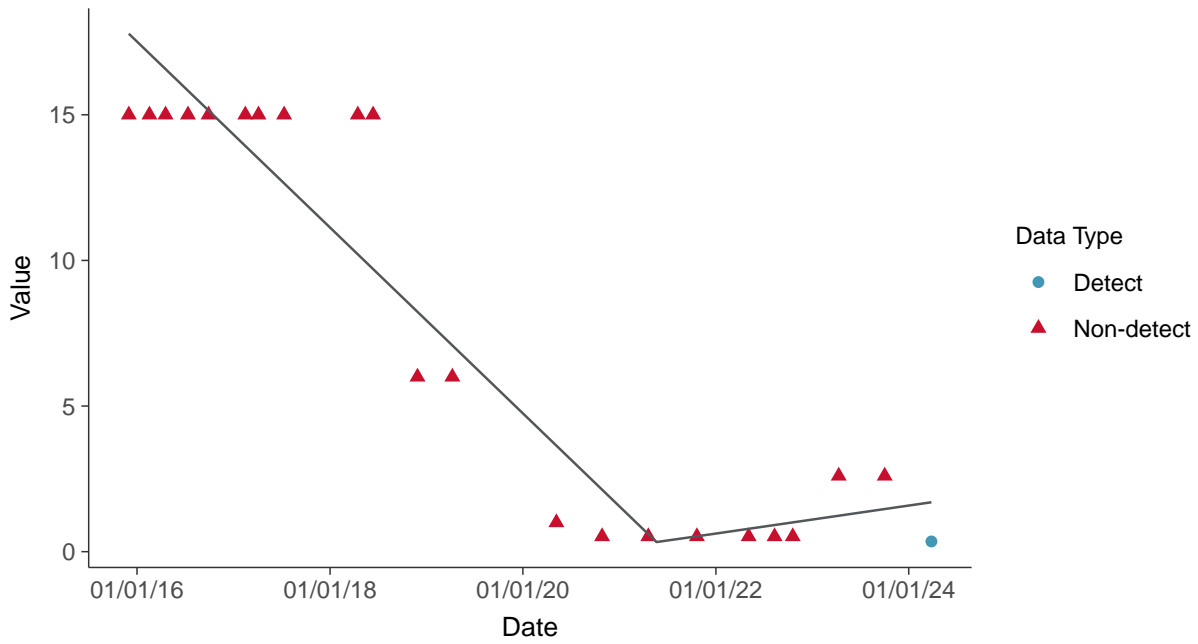
Cobalt, MW-15022 (ug/L)





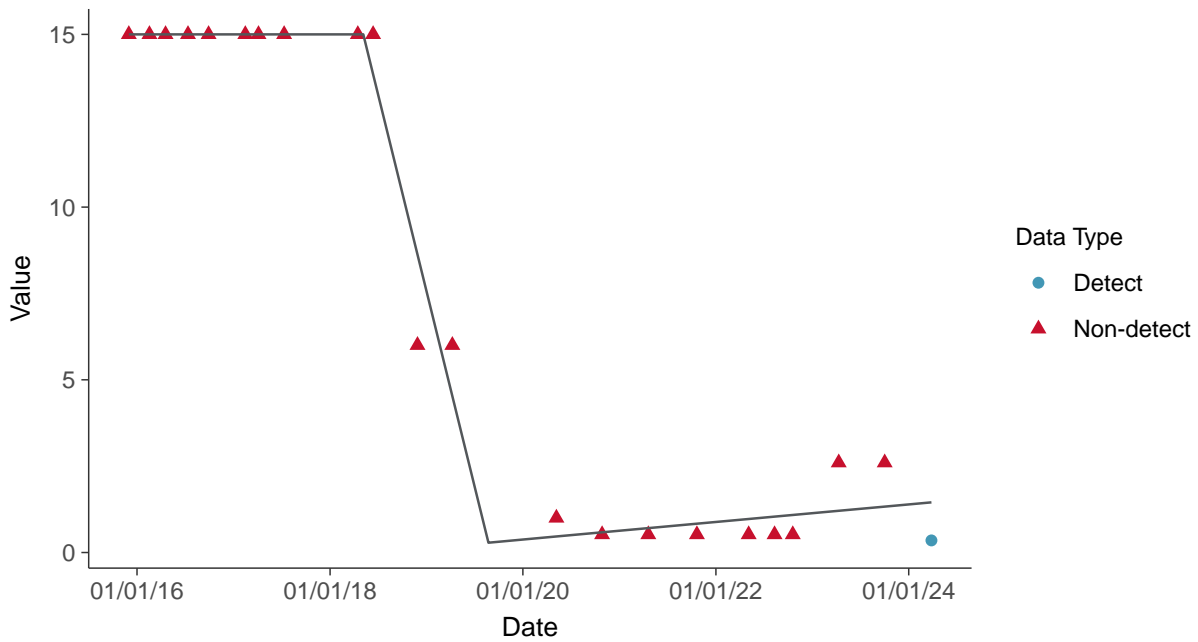
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-15022 (ug/L)



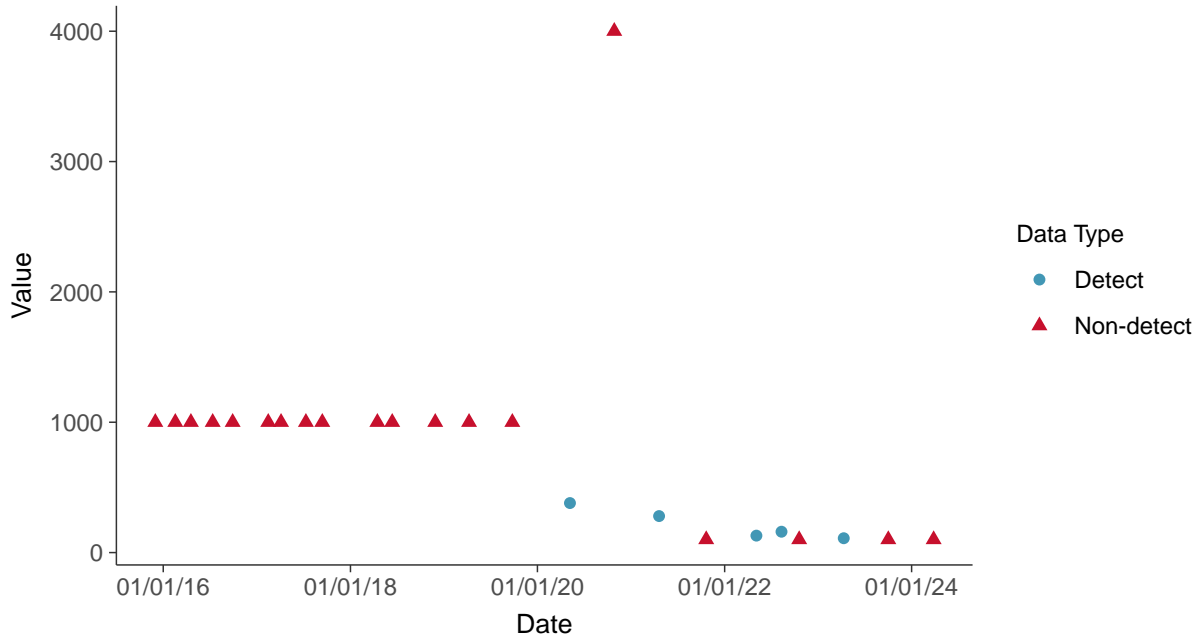


Appendix IV: Fluoride, MW-15022

ID: 12_2_114

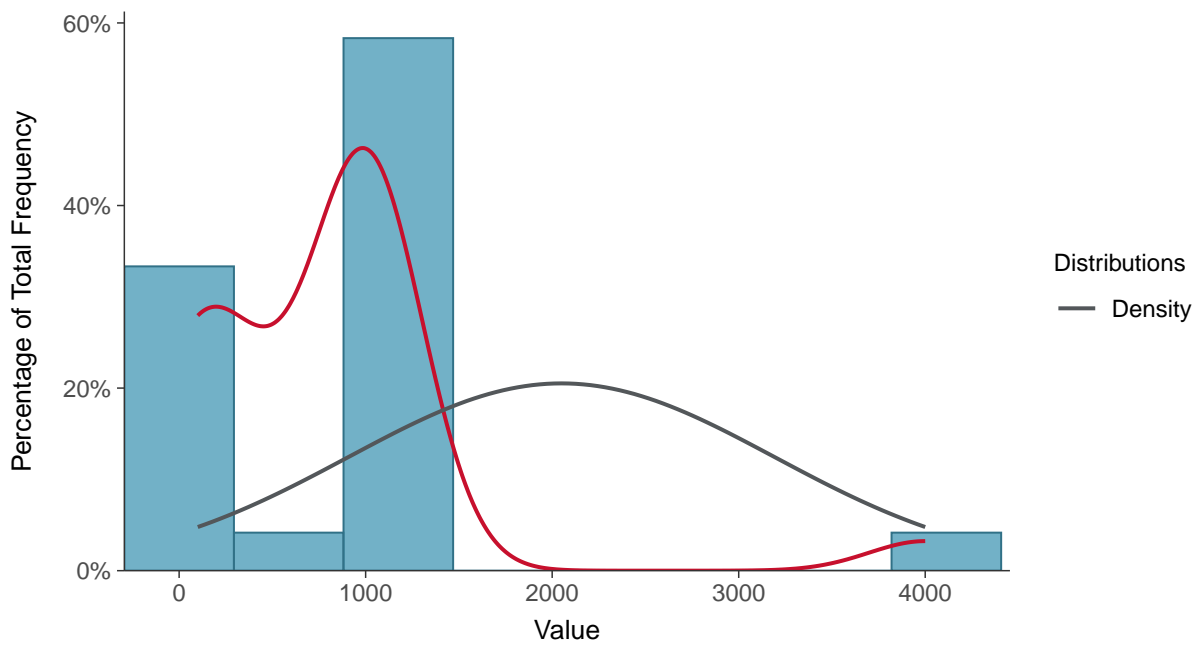
Scatter Plot

Fluoride, MW-15022 (ug/L)



Histogram

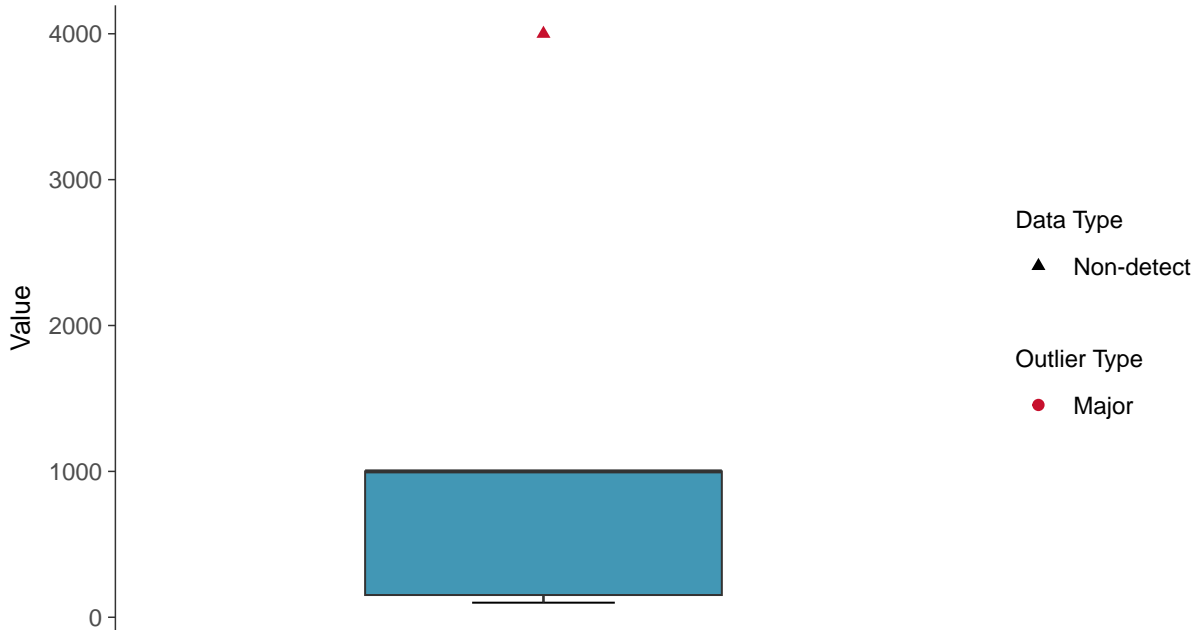
Fluoride, MW-15022 (ug/L)





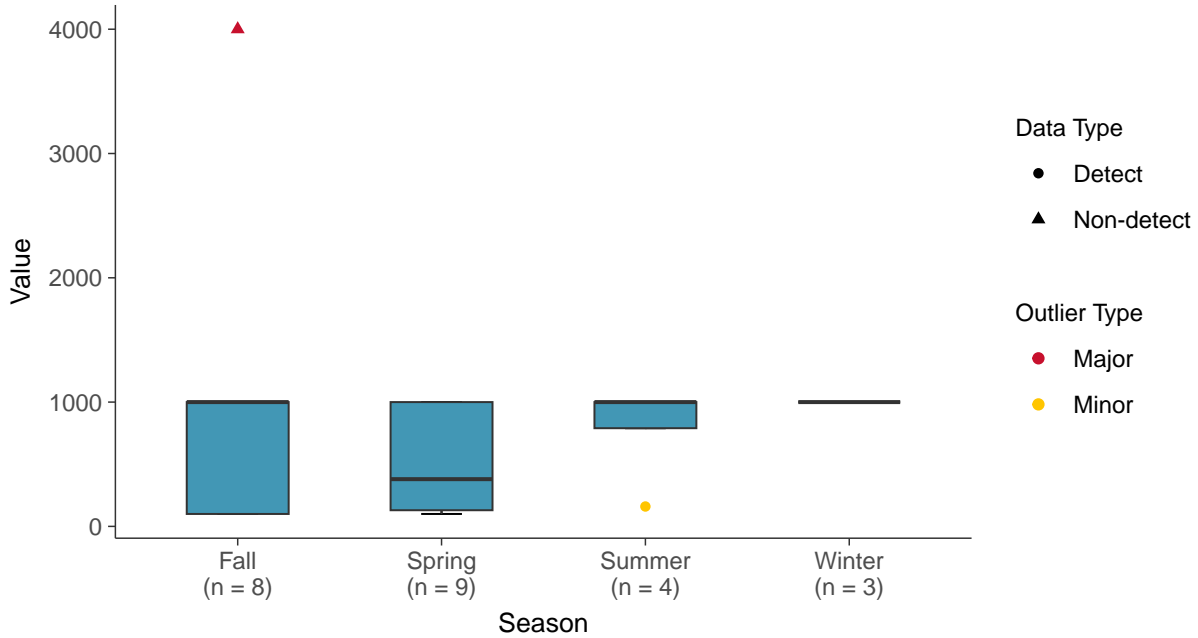
Boxplot

Fluoride, MW-15022 (ug/L)



Boxplot by Season

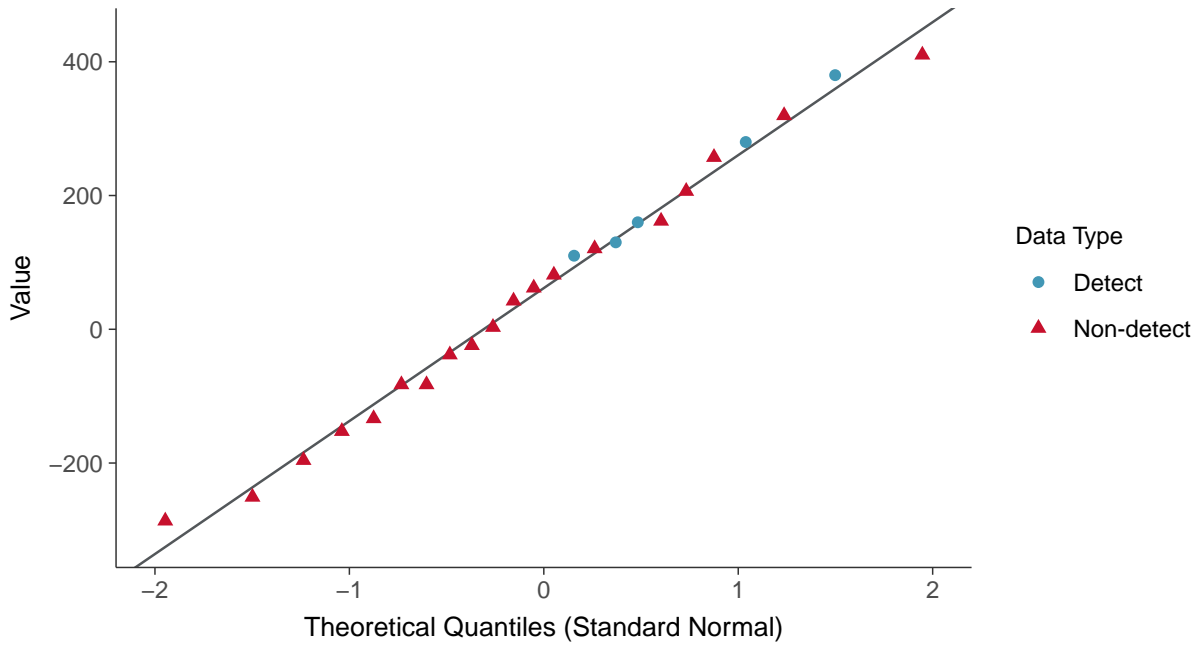
Fluoride, MW-15022 (ug/L)





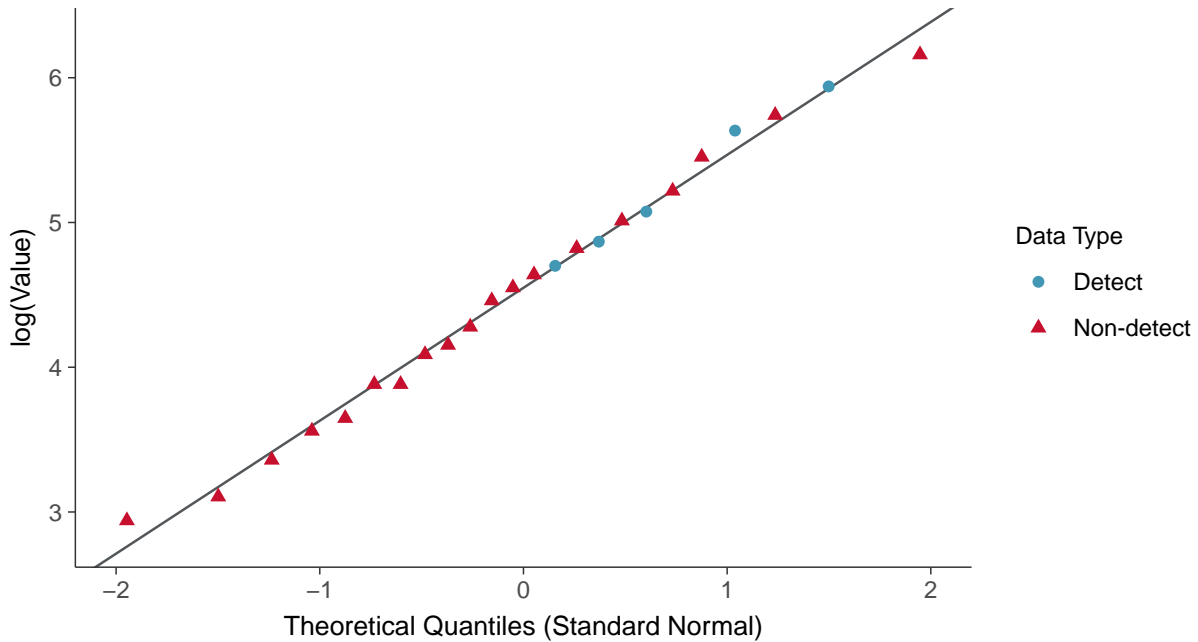
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15022 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

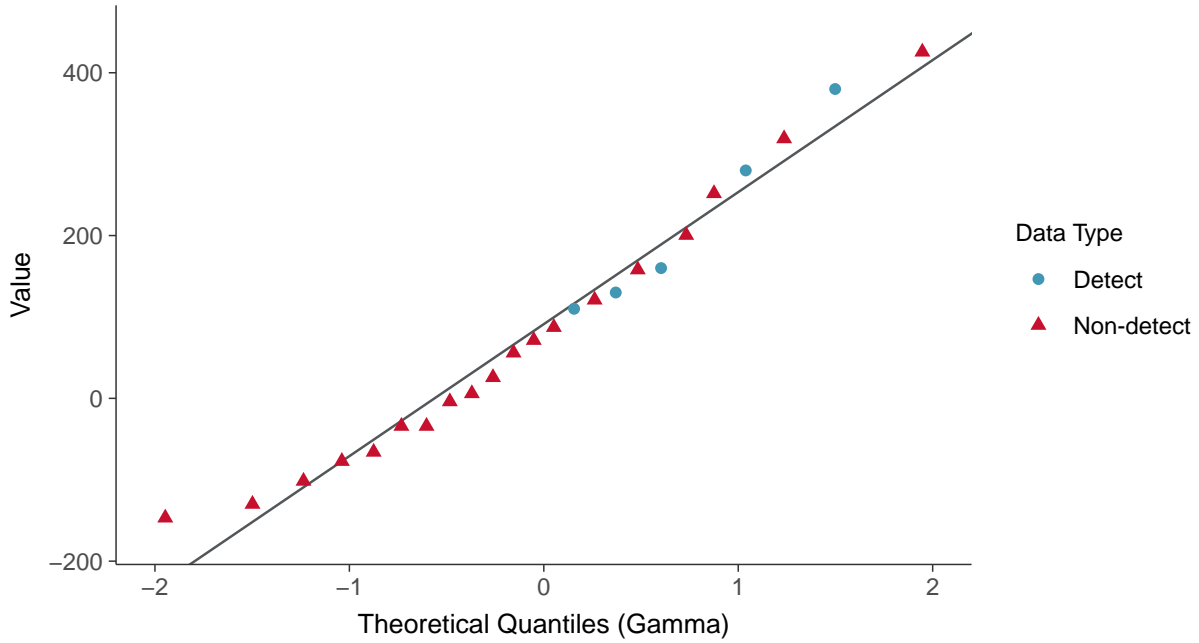
Fluoride, MW-15022 (ug/L)





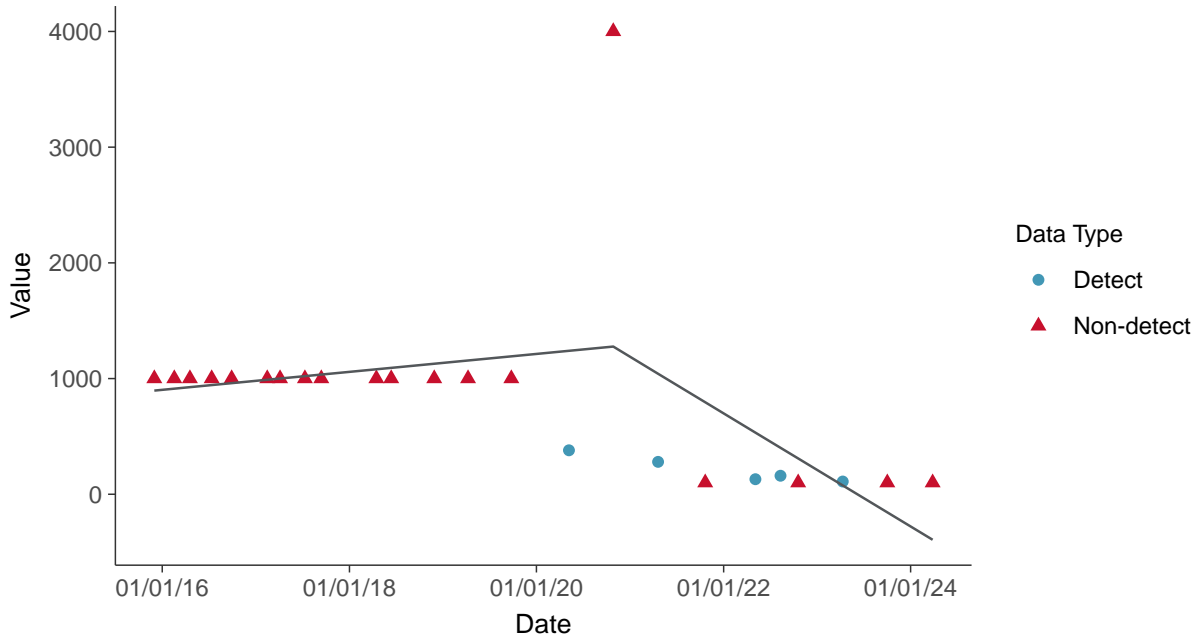
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear

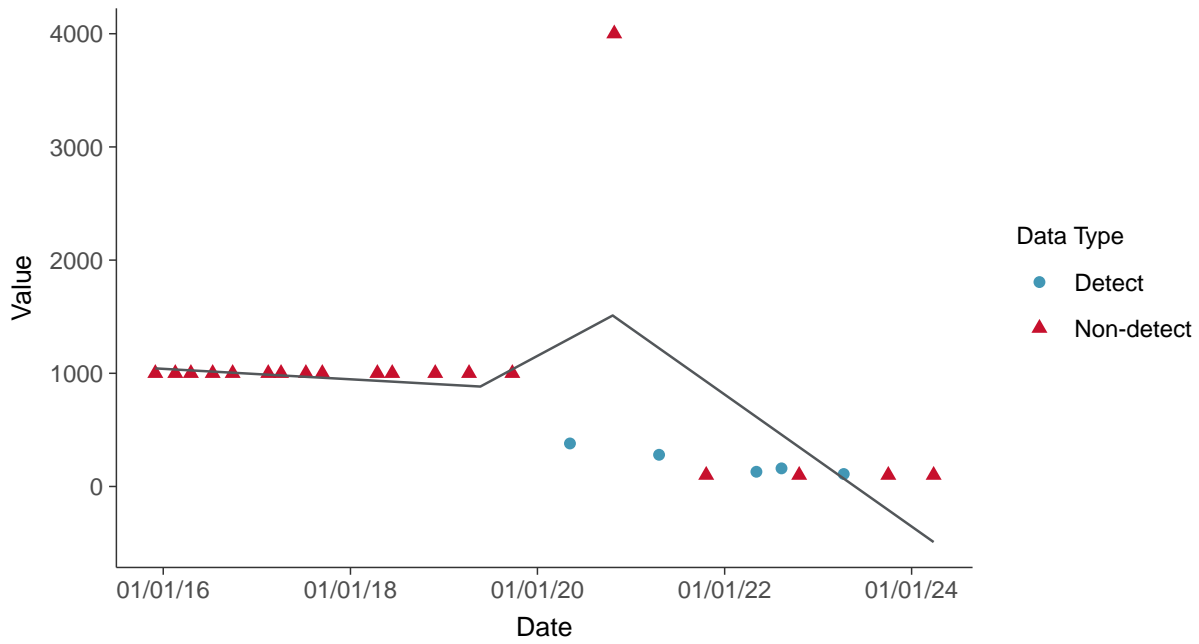
Fluoride, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-15022 (ug/L)



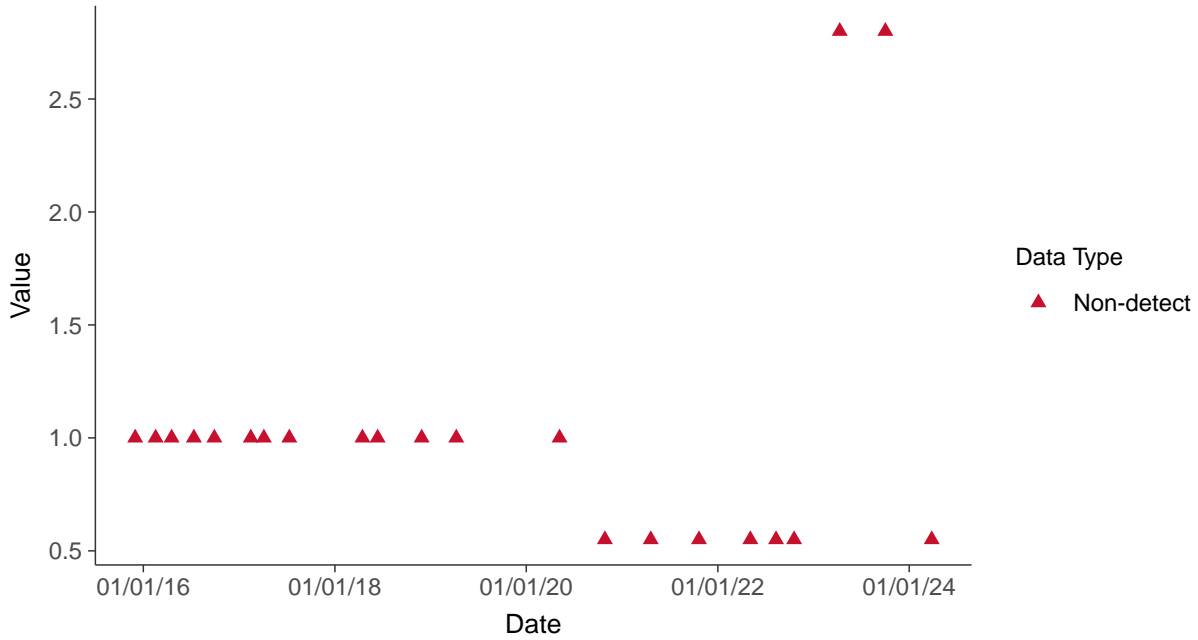


Appendix IV: Lead, MW-15022

ID: 12_2_116

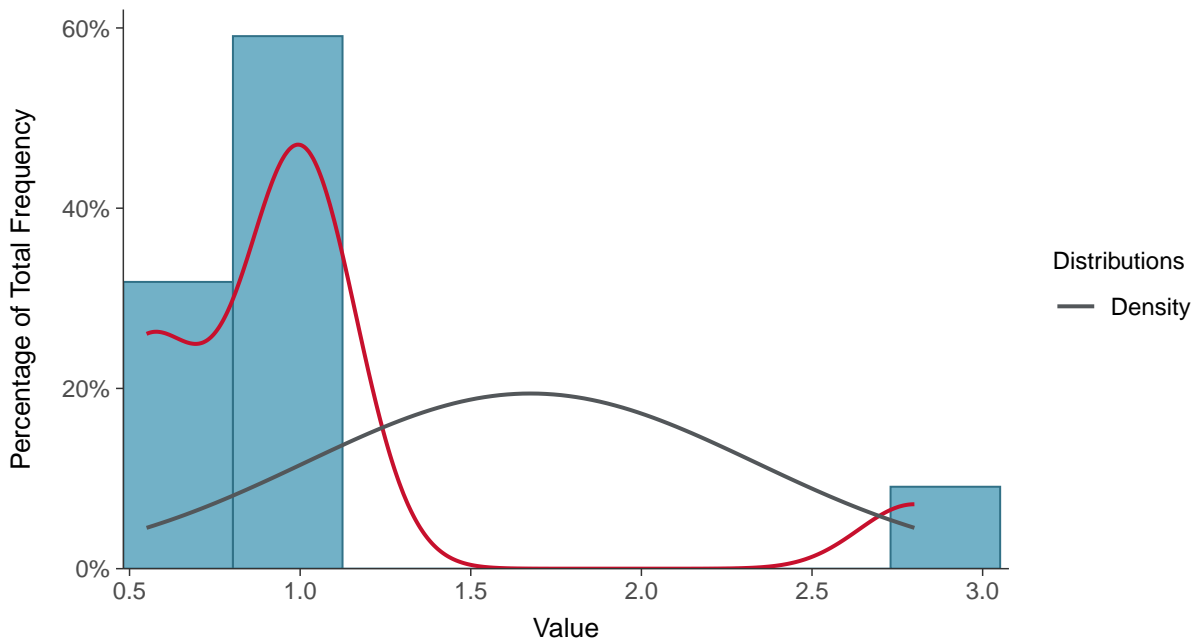
Scatter Plot

Lead, MW-15022 (ug/L)



Histogram

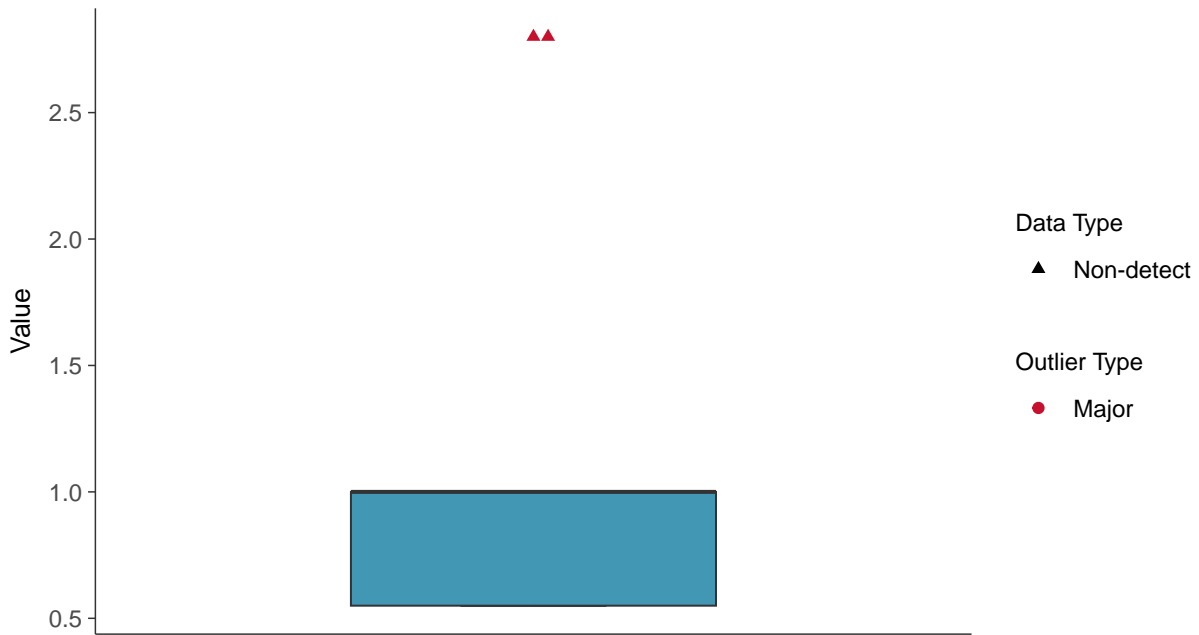
Lead, MW-15022 (ug/L)





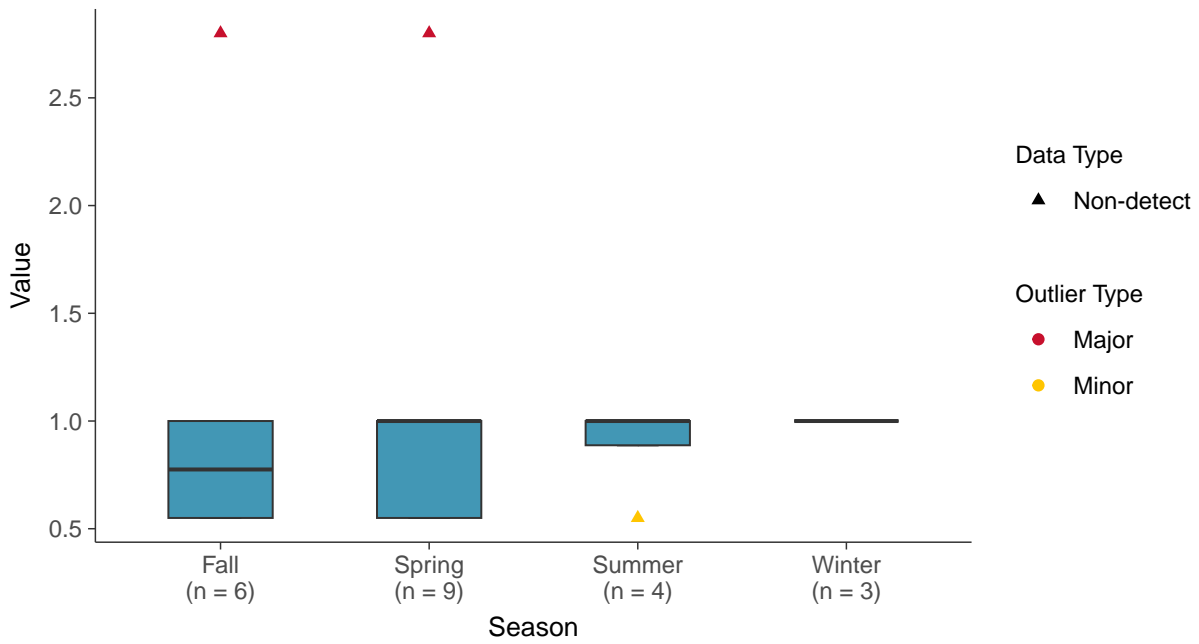
Boxplot

Lead, MW-15022 (ug/L)



Boxplot by Season

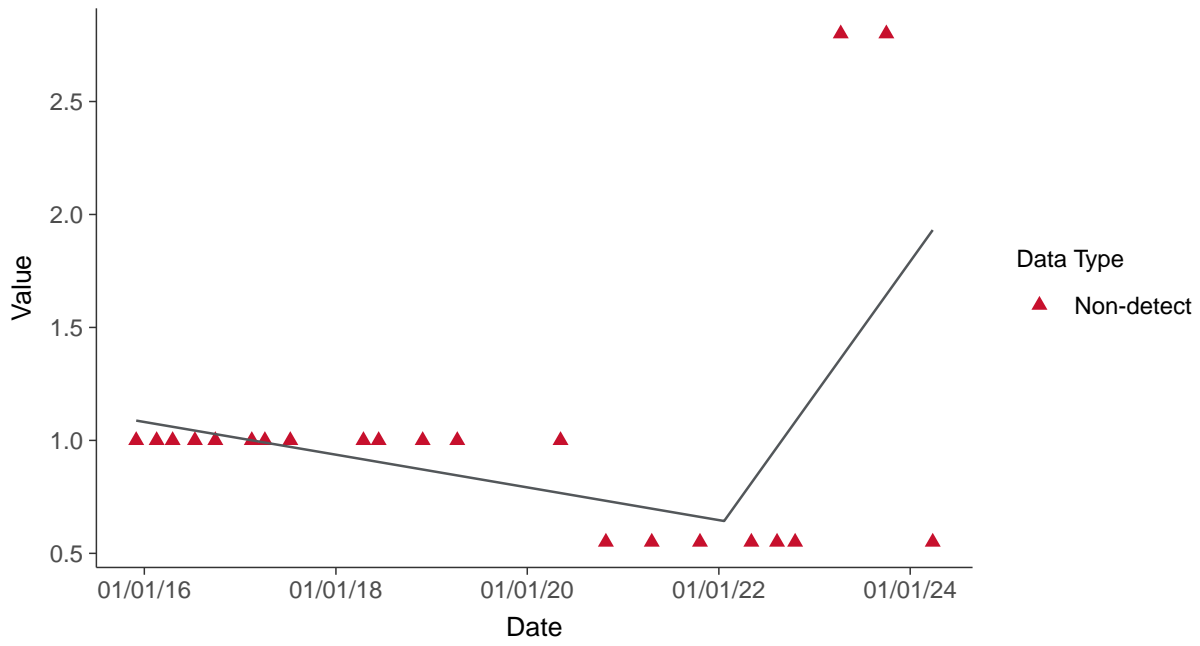
Lead, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear

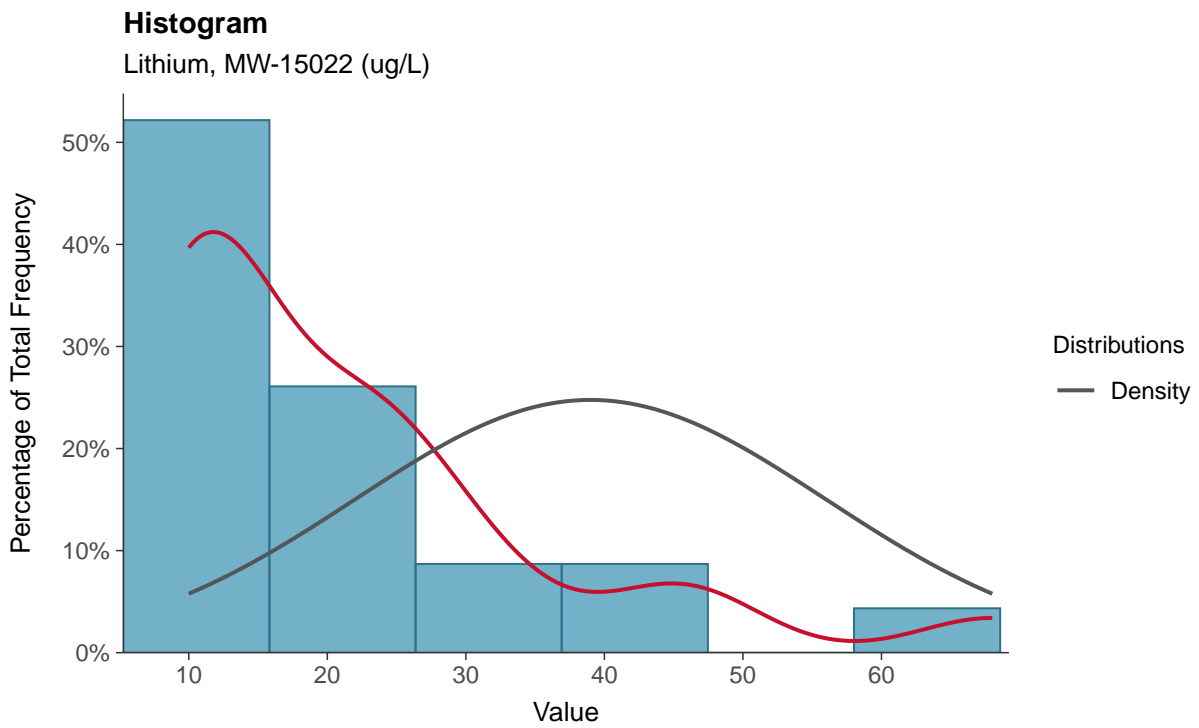
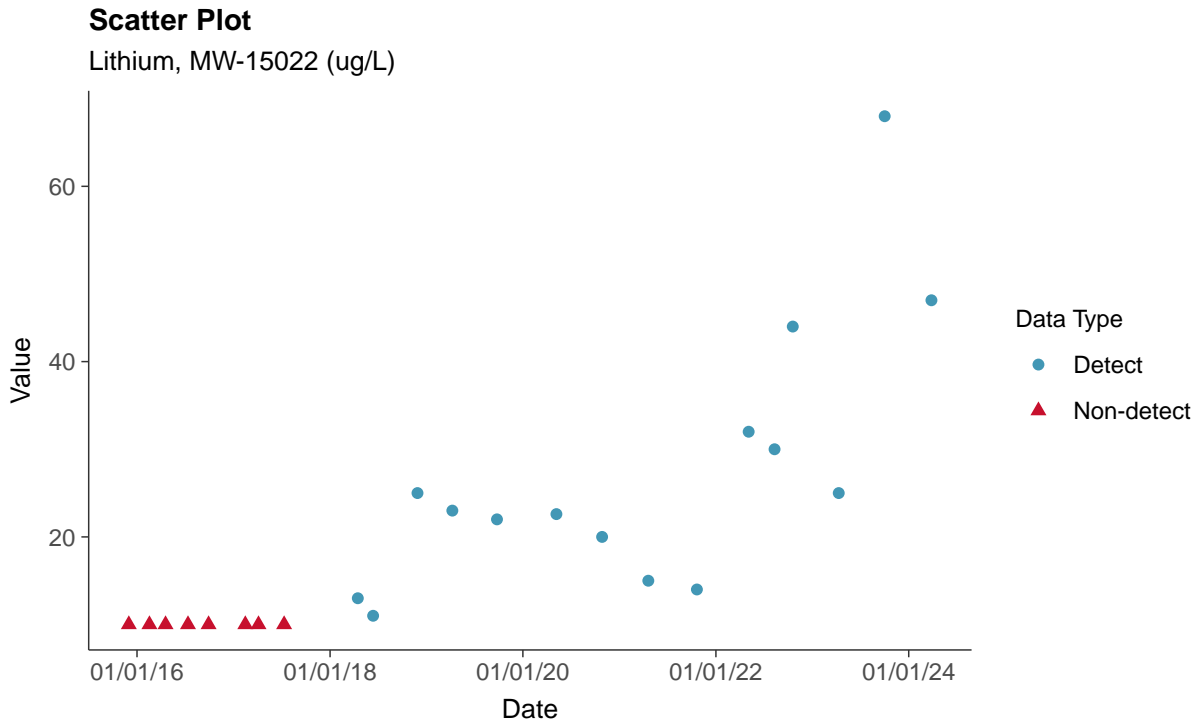
Lead, MW-15022 (ug/L)





Appendix IV: Lithium, MW-15022

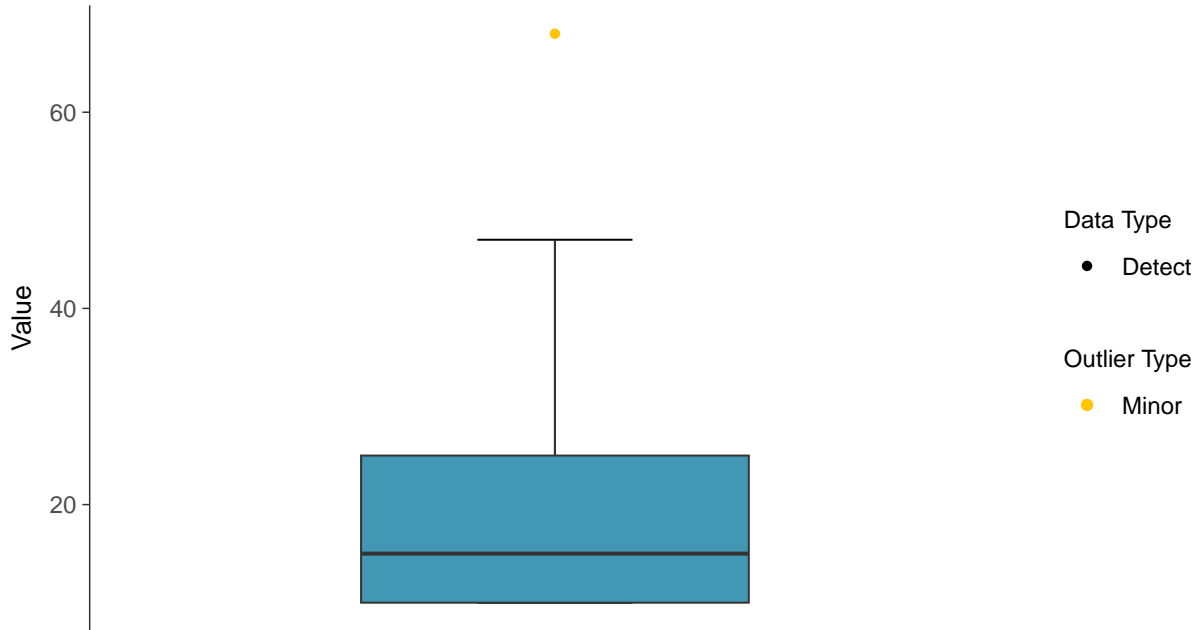
ID: 12_2_117





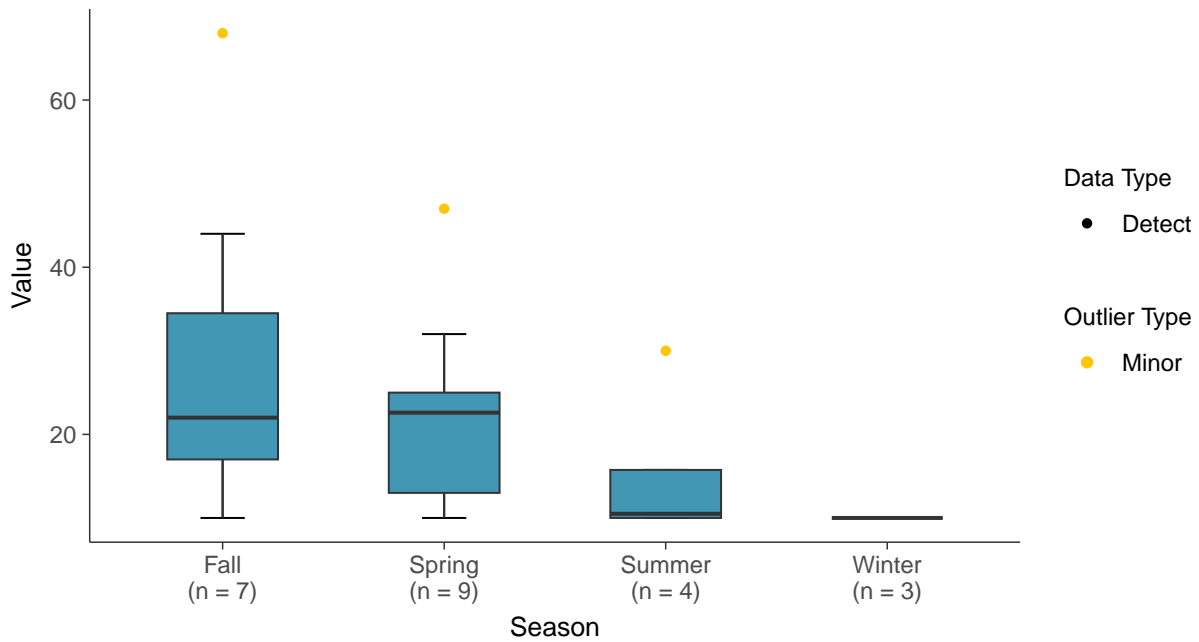
Boxplot

Lithium, MW-15022 (ug/L)



Boxplot by Season

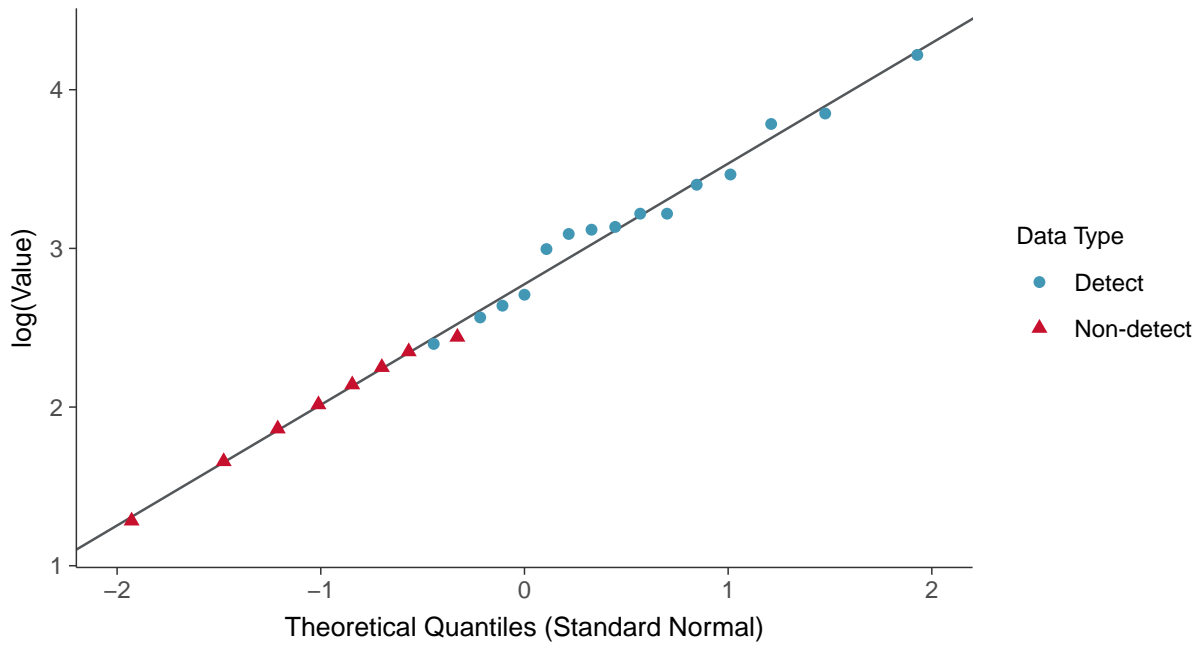
Lithium, MW-15022 (ug/L)





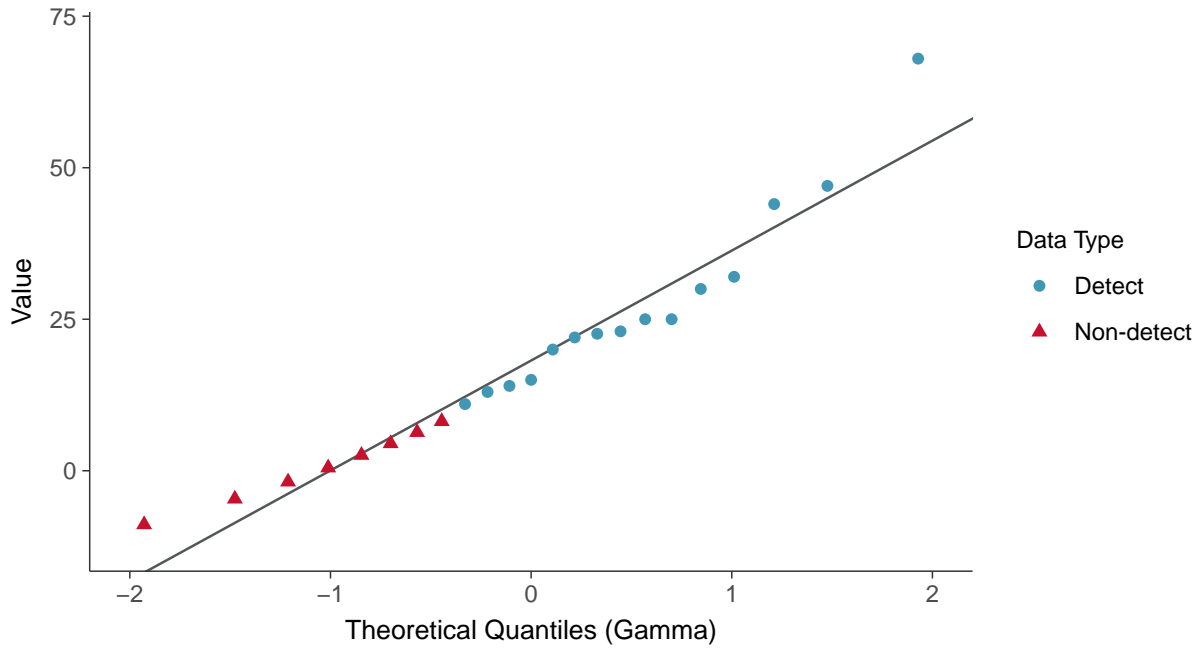
Lognormal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15022 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

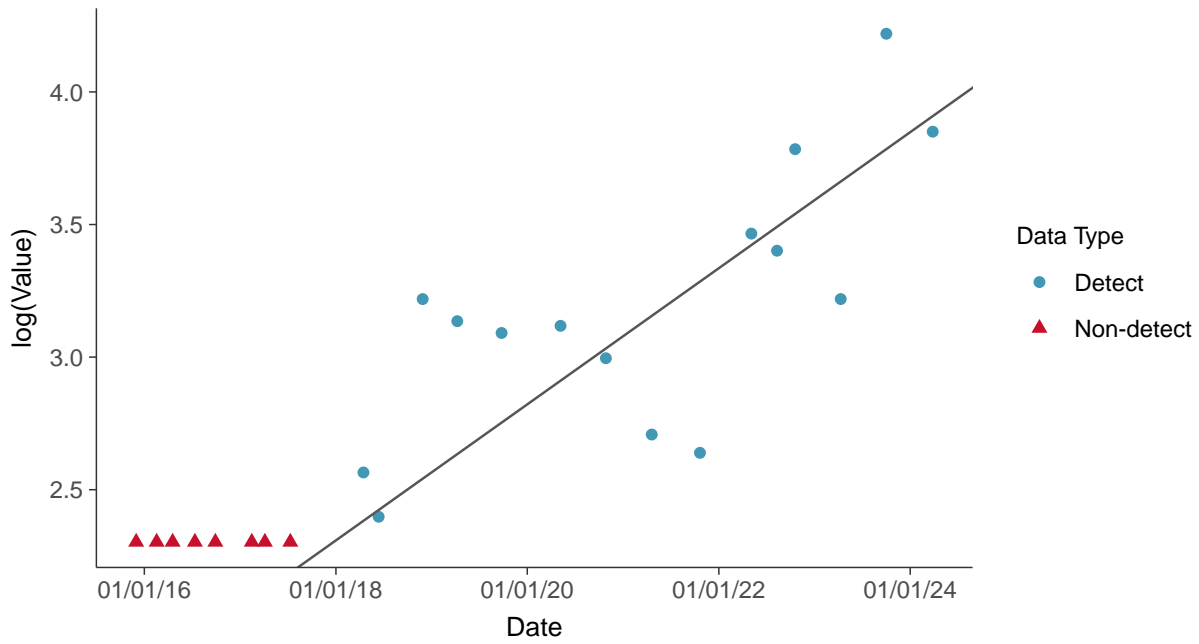
Lithium, MW-15022 (ug/L)





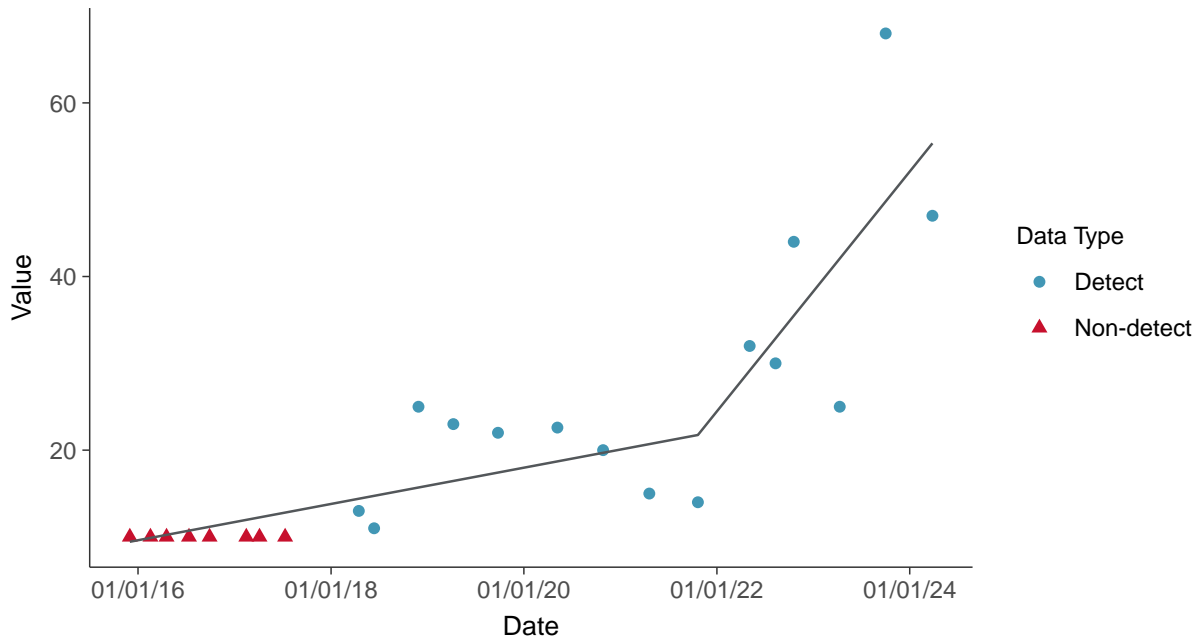
Trend Regression: Lognormal MLE

Lithium, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear

Lithium, MW-15022 (ug/L)



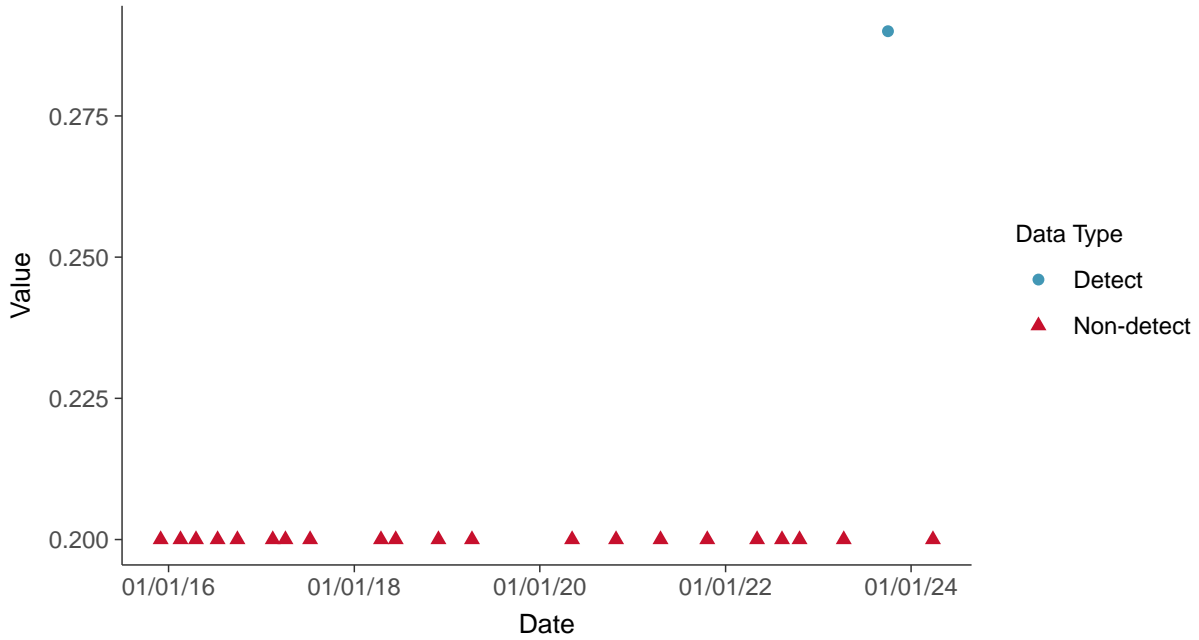


Appendix IV: Mercury, MW-15022

ID: 12_2_118

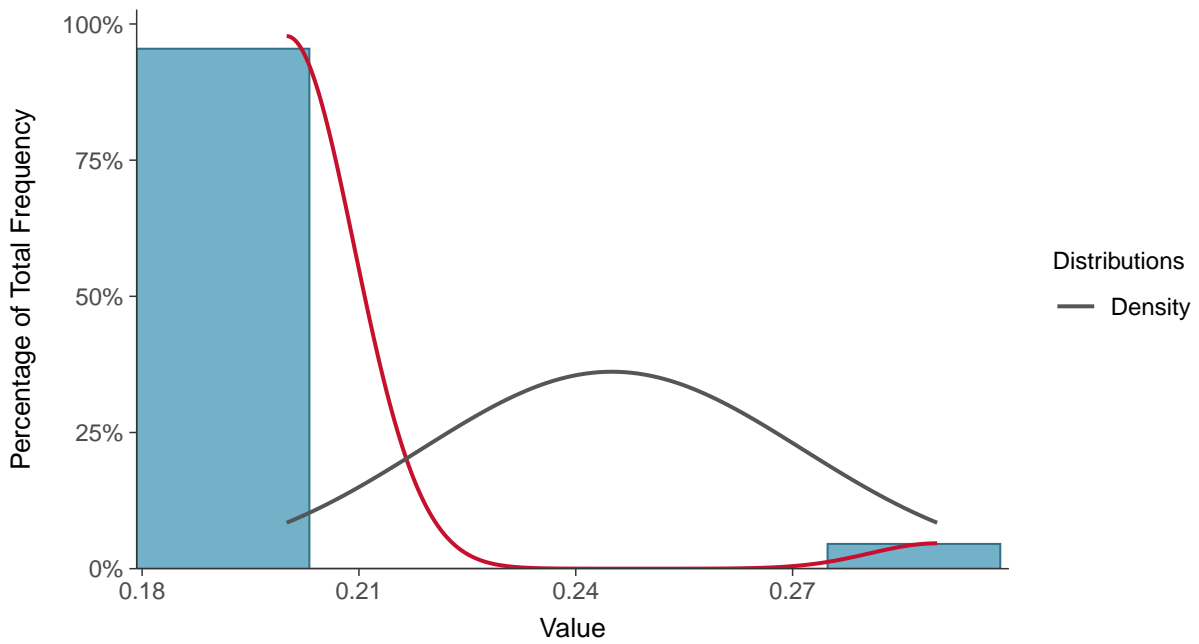
Scatter Plot

Mercury, MW-15022 (ug/L)



Histogram

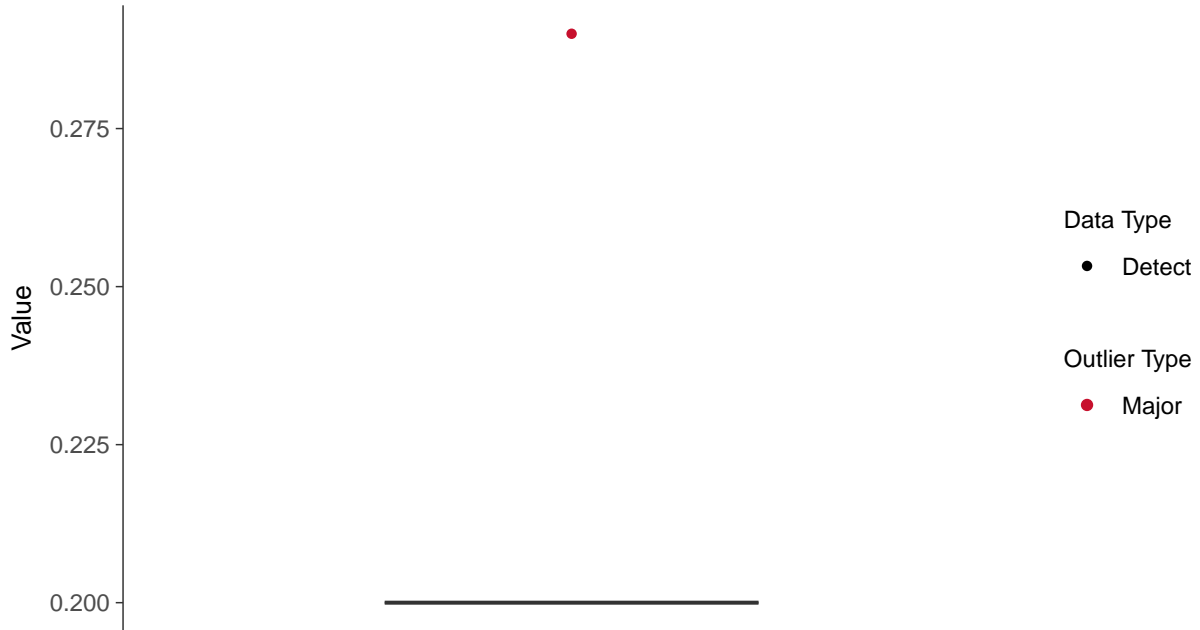
Mercury, MW-15022 (ug/L)





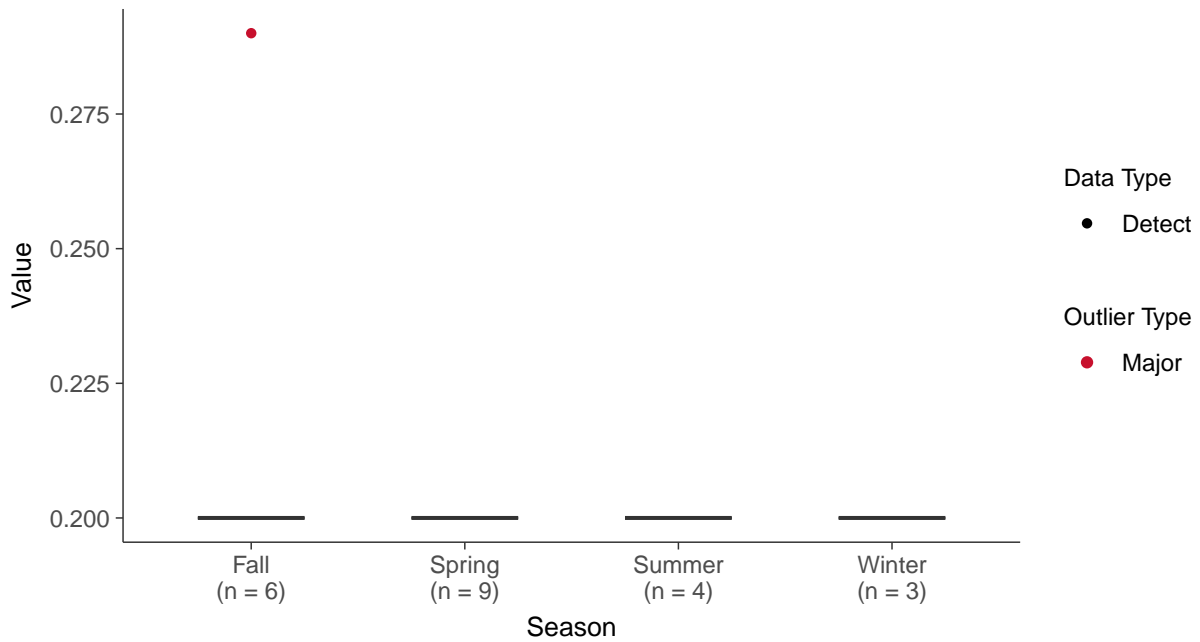
Boxplot

Mercury, MW-15022 (ug/L)



Boxplot by Season

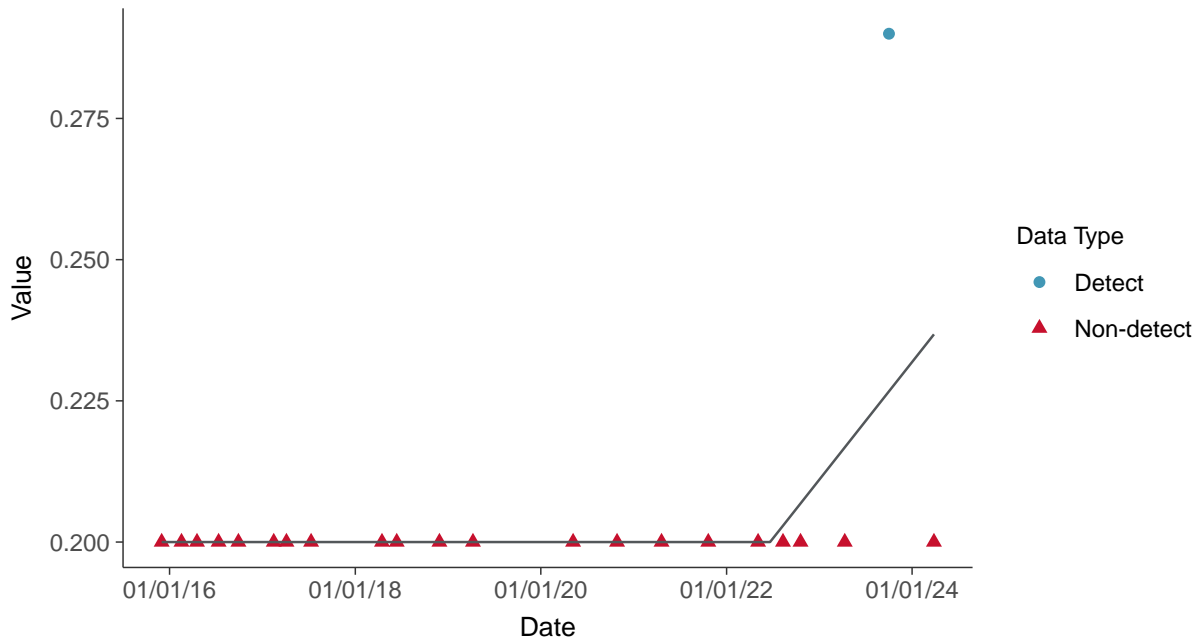
Mercury, MW-15022 (ug/L)





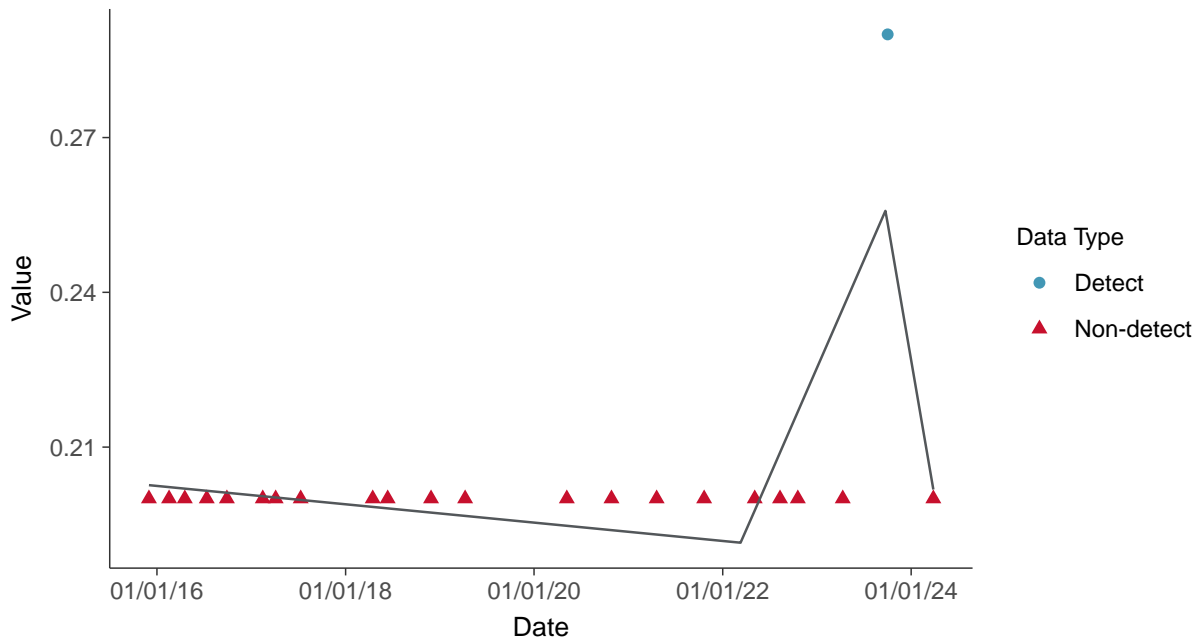
Trend Regression: Piecewise Linear-Linear

Mercury, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-15022 (ug/L)



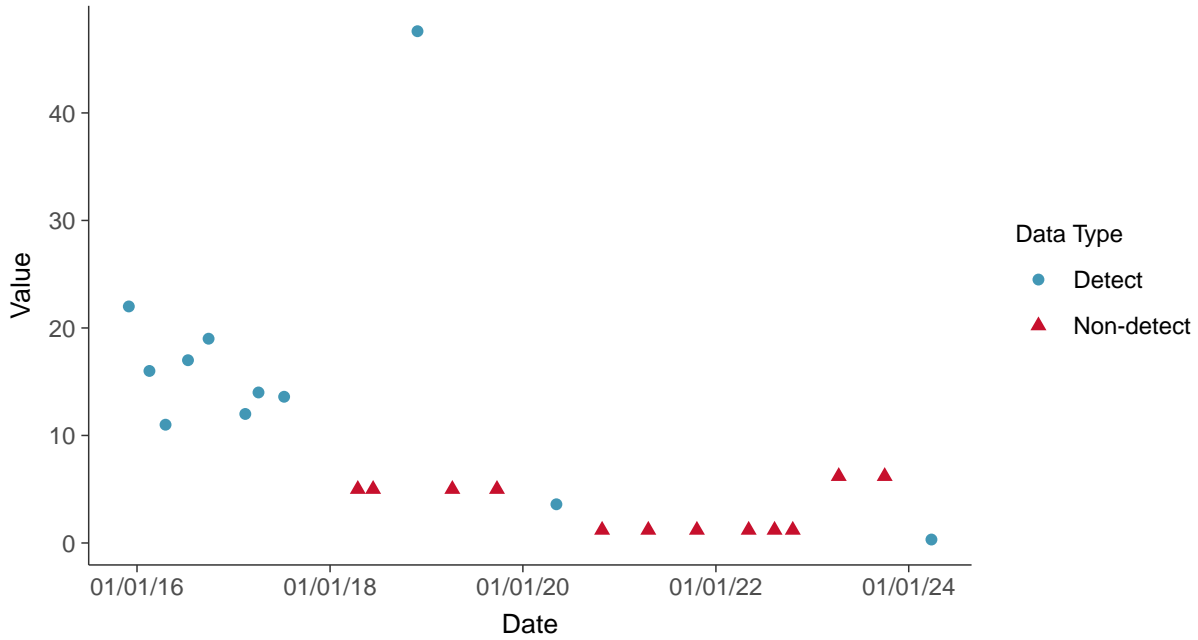


Appendix IV: Molybdenum, MW-15022

ID: 12_2_119

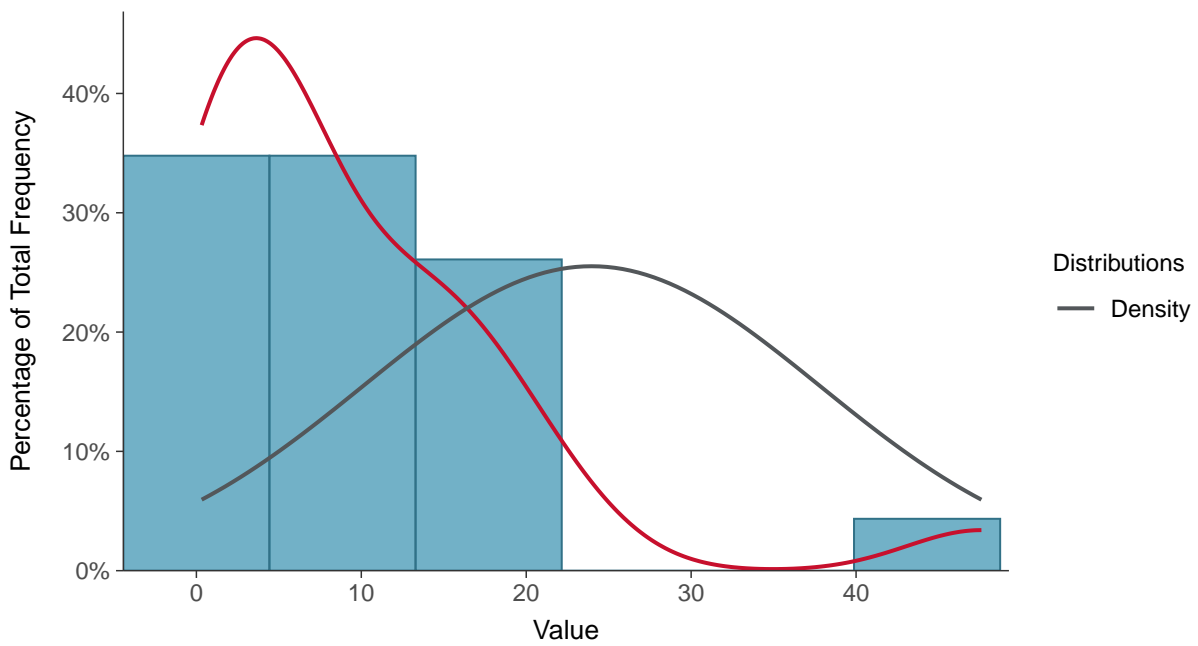
Scatter Plot

Molybdenum, MW-15022 (ug/L)



Histogram

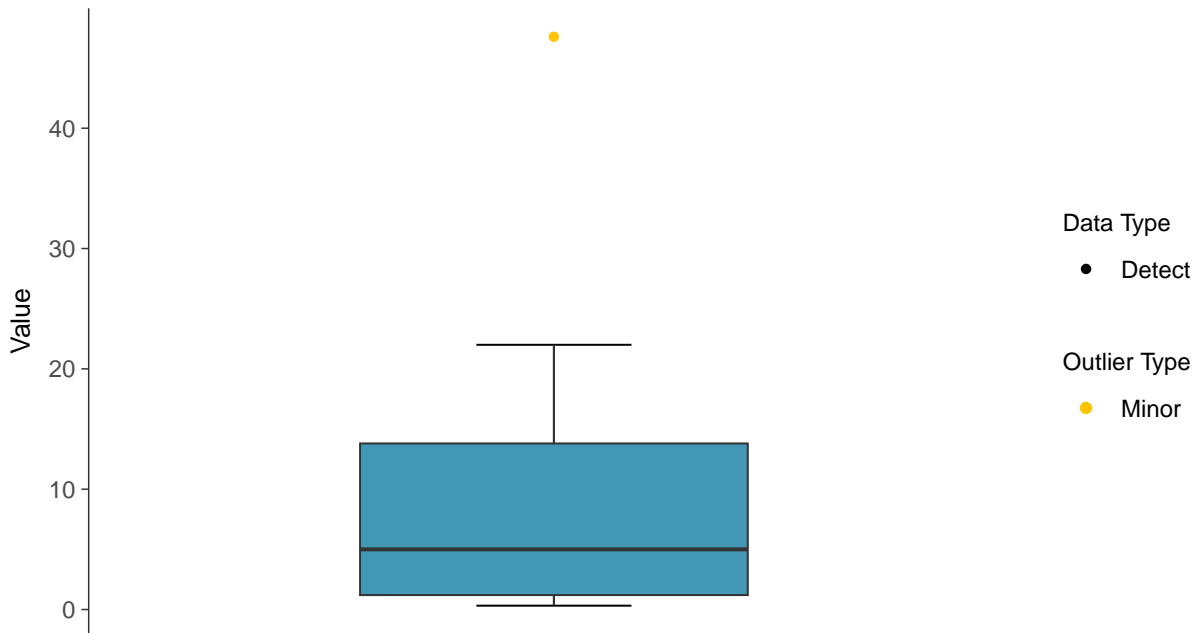
Molybdenum, MW-15022 (ug/L)





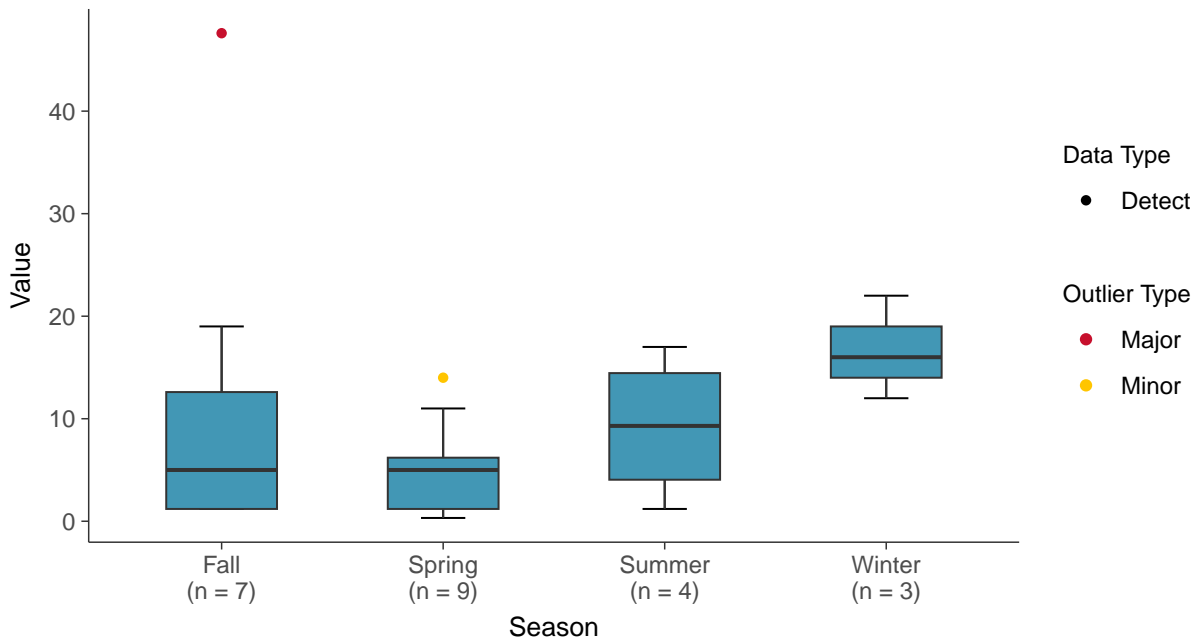
Boxplot

Molybdenum, MW-15022 (ug/L)



Boxplot by Season

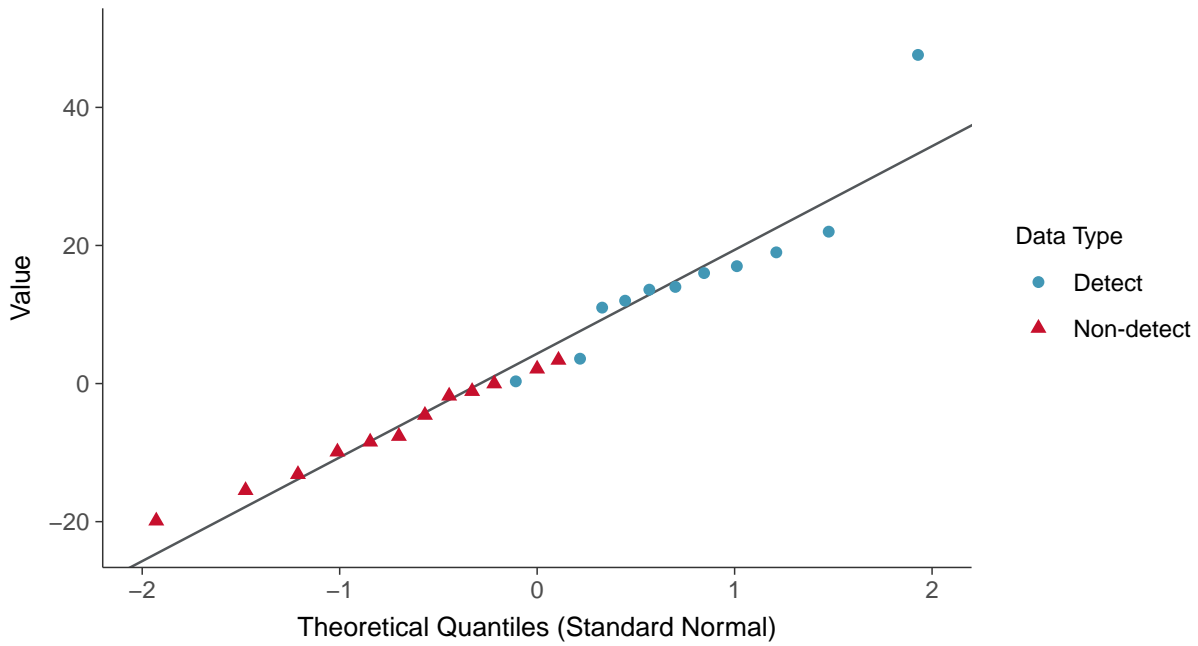
Molybdenum, MW-15022 (ug/L)





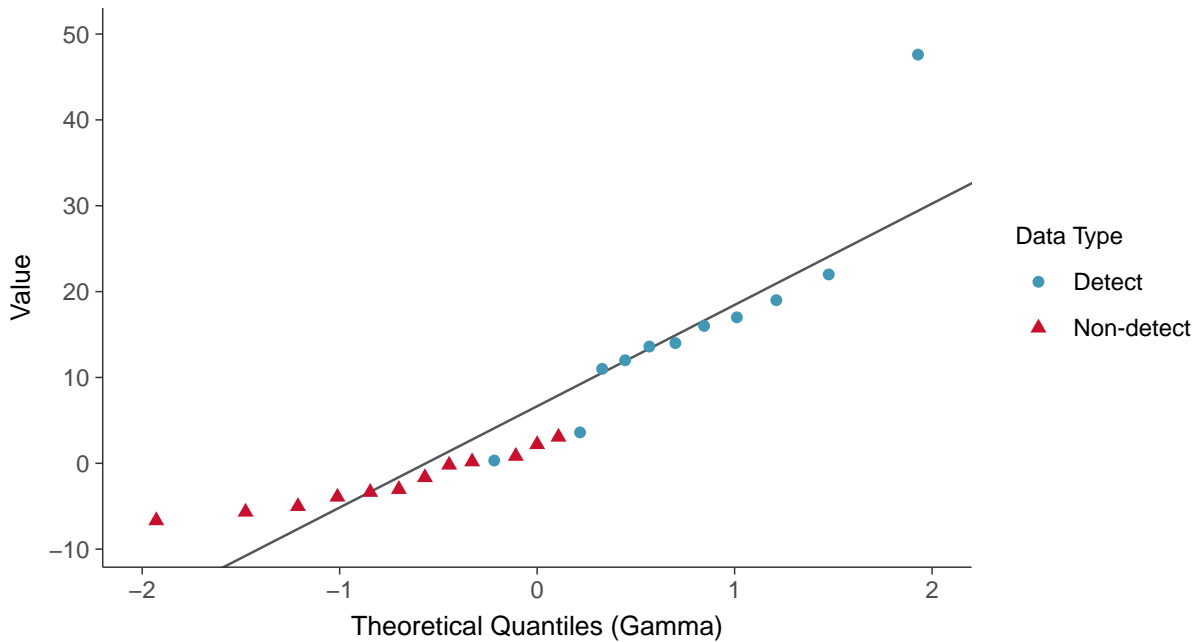
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15022 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

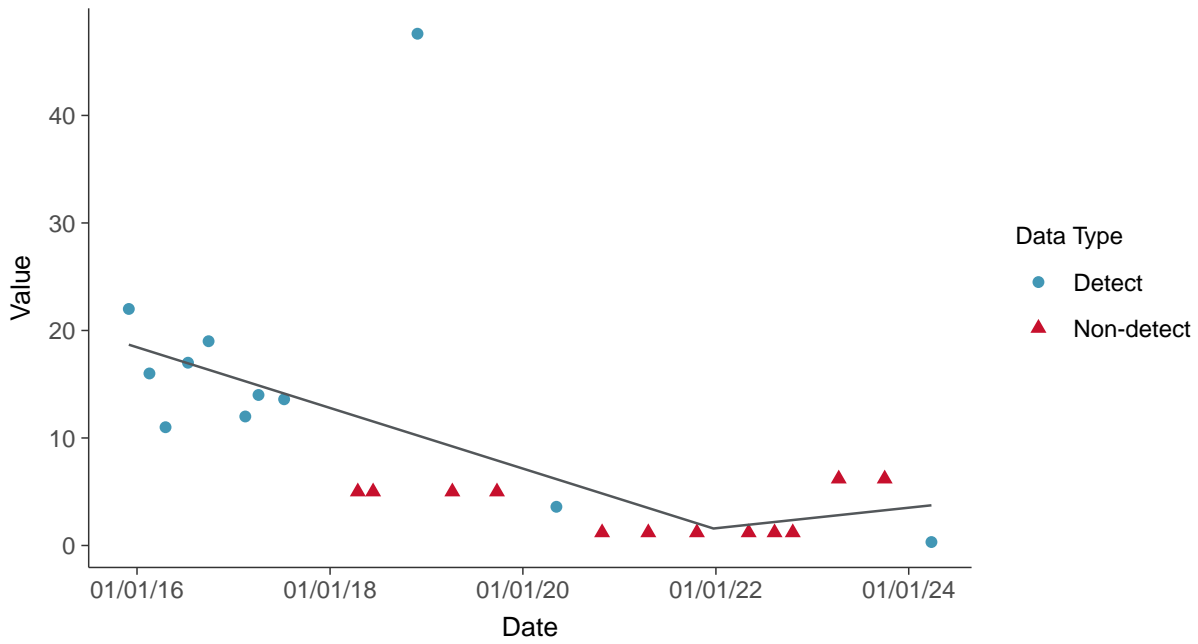
Molybdenum, MW-15022 (ug/L)





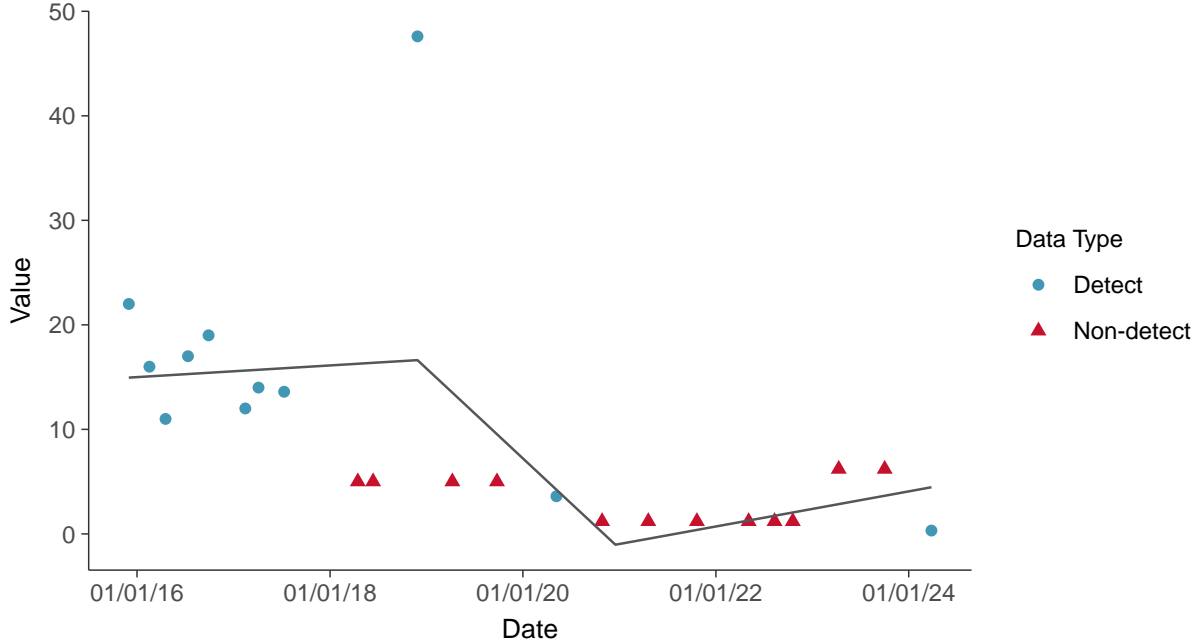
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15022 (ug/L)



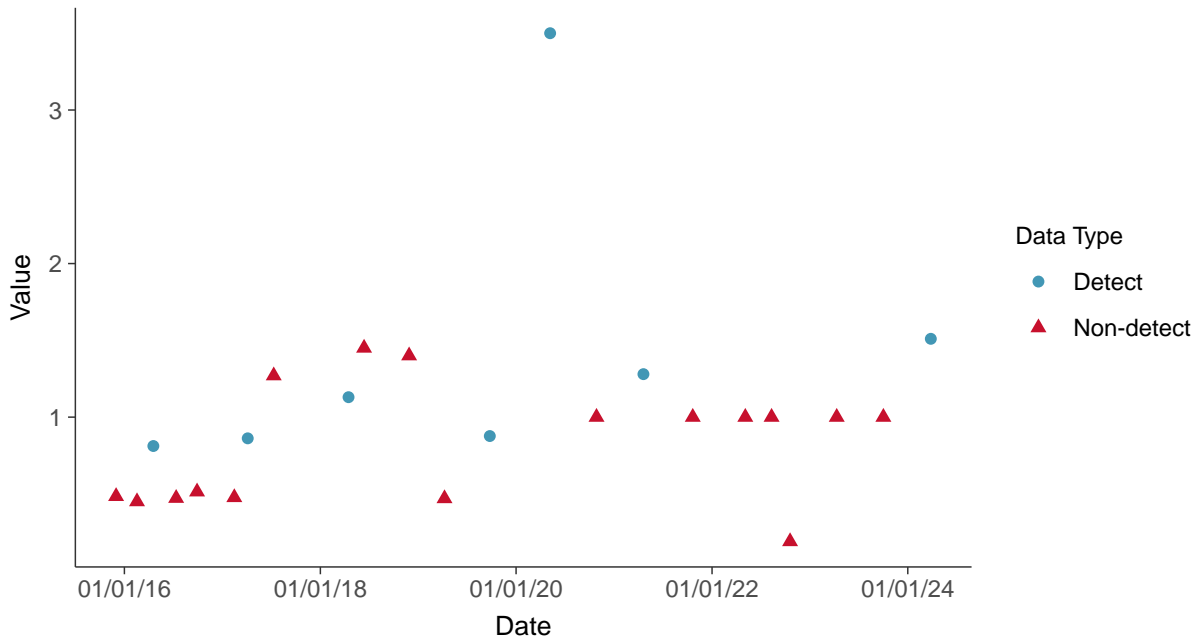


Appendix IV: Radium-226+228, MW-15022

ID: 12_2_125

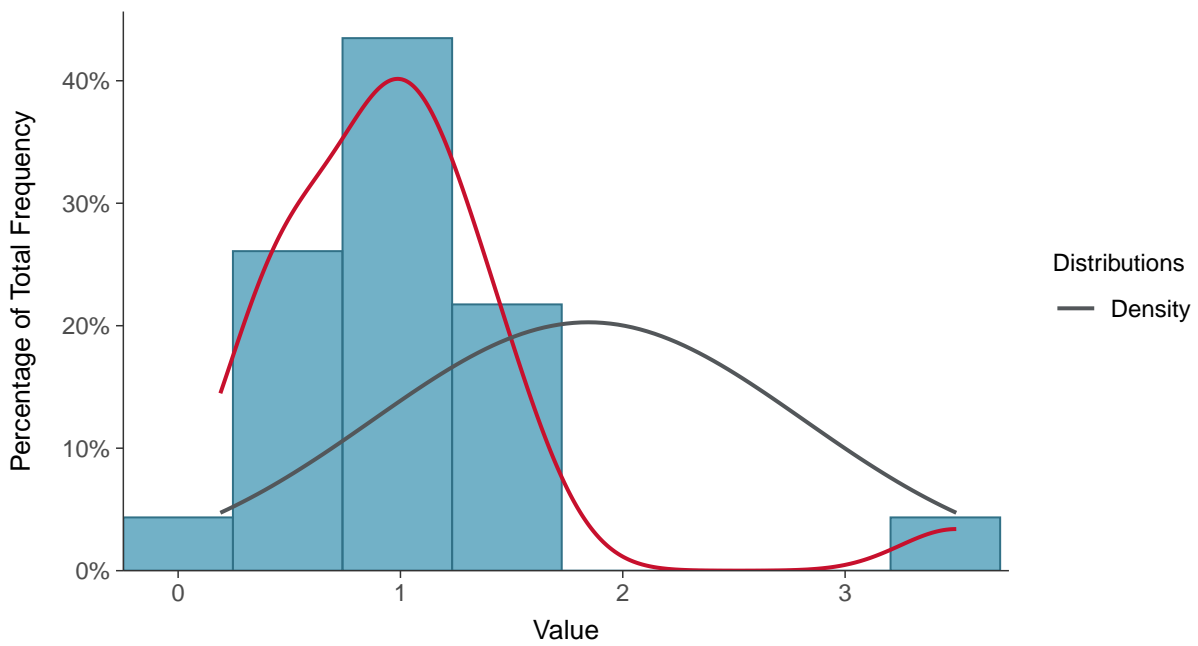
Scatter Plot

Radium-226+228, MW-15022 (pCi/L)



Histogram

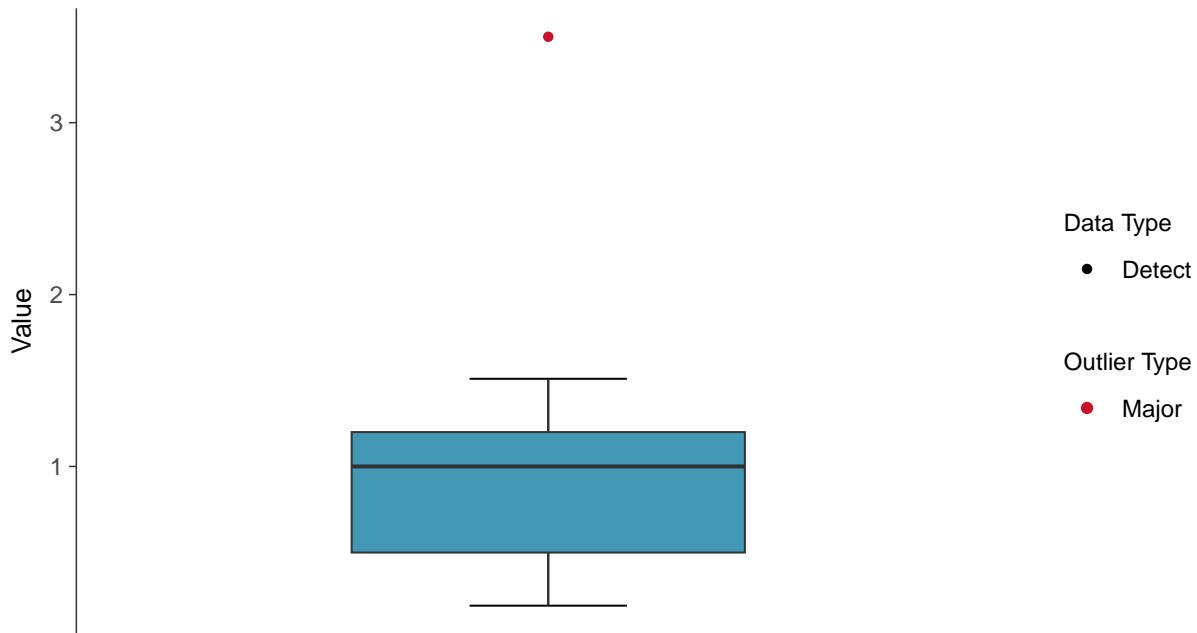
Radium-226+228, MW-15022 (pCi/L)





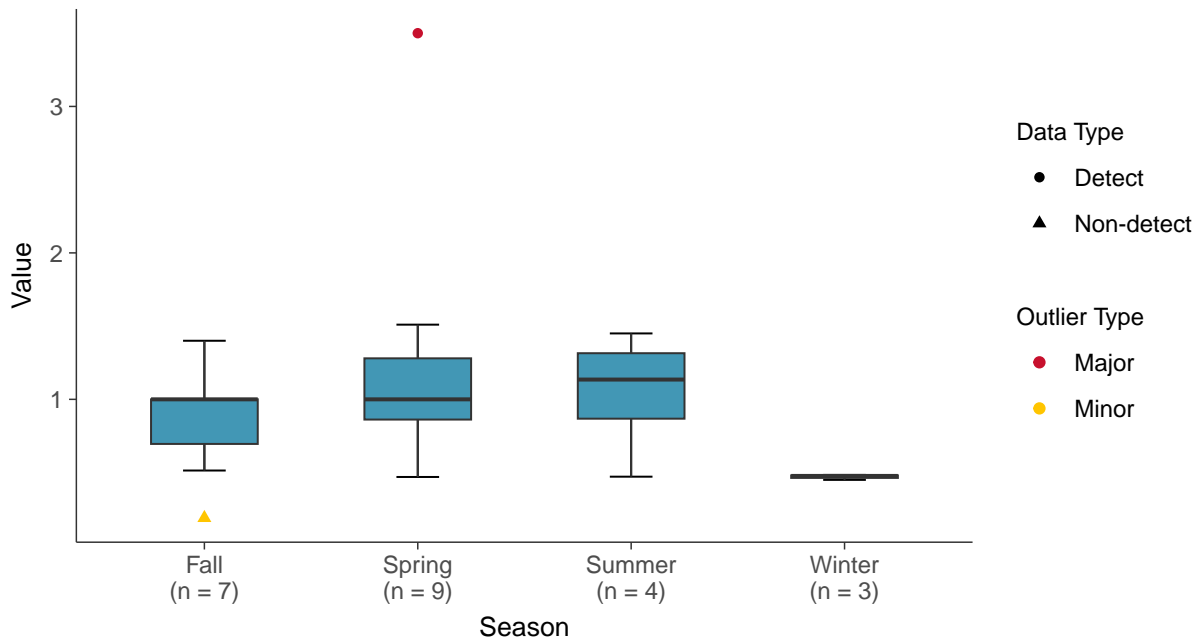
Boxplot

Radium-226+228, MW-15022 (pCi/L)



Boxplot by Season

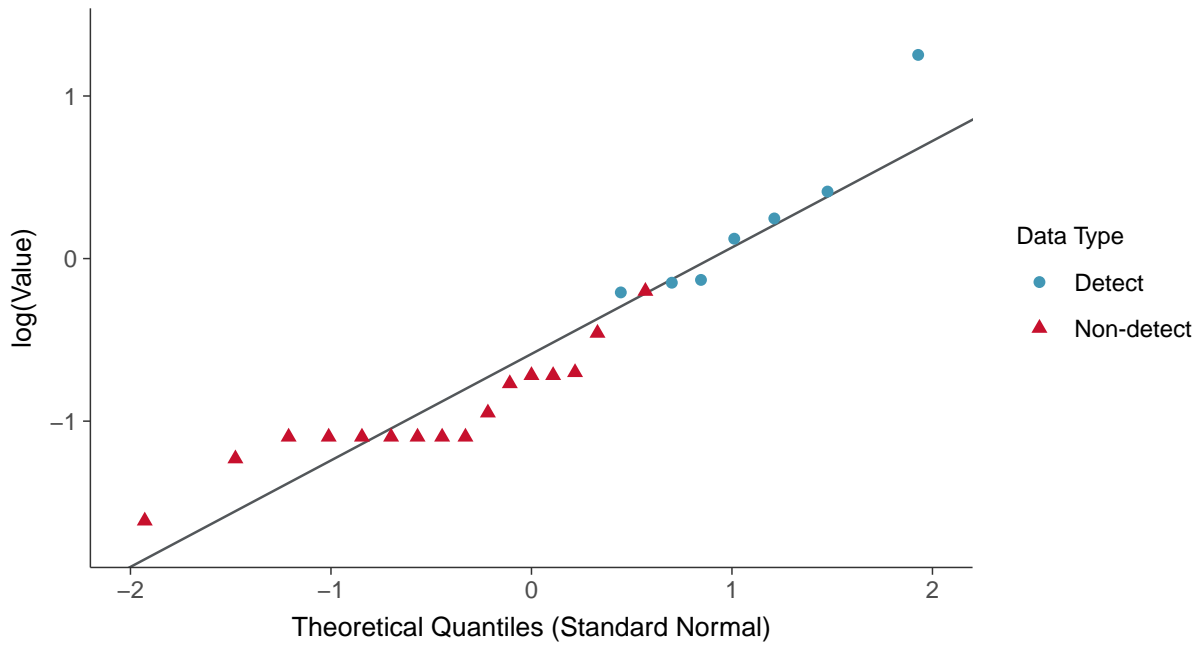
Radium-226+228, MW-15022 (pCi/L)





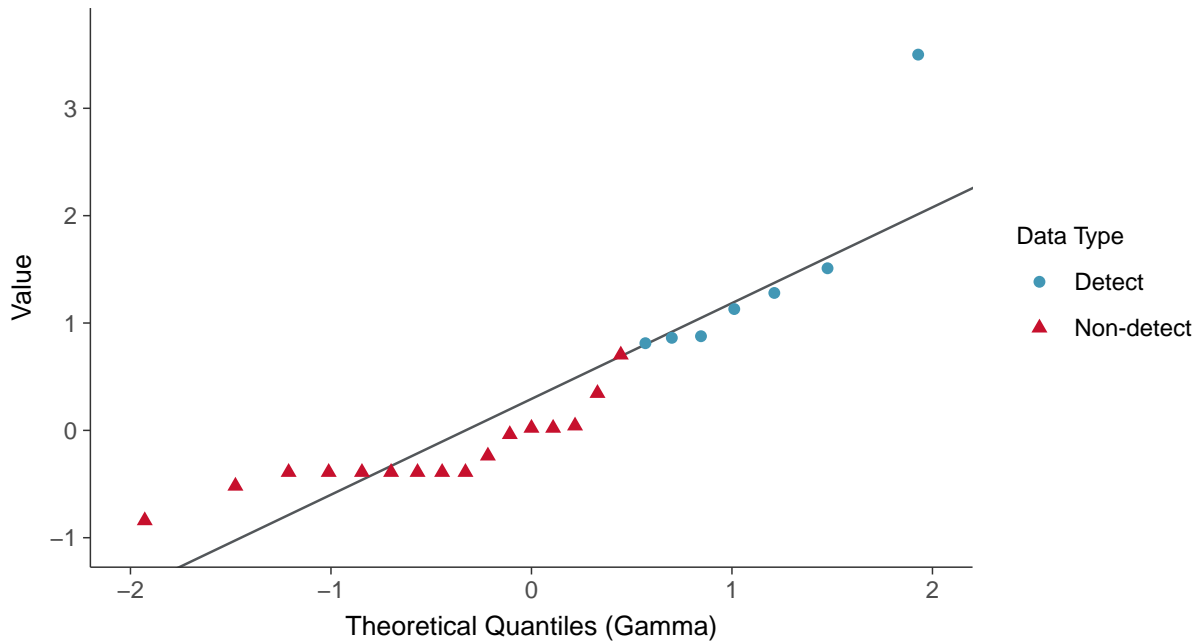
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15022 (pCi/L)



Gamma Q-Q plot using ROS Imputed Estimates

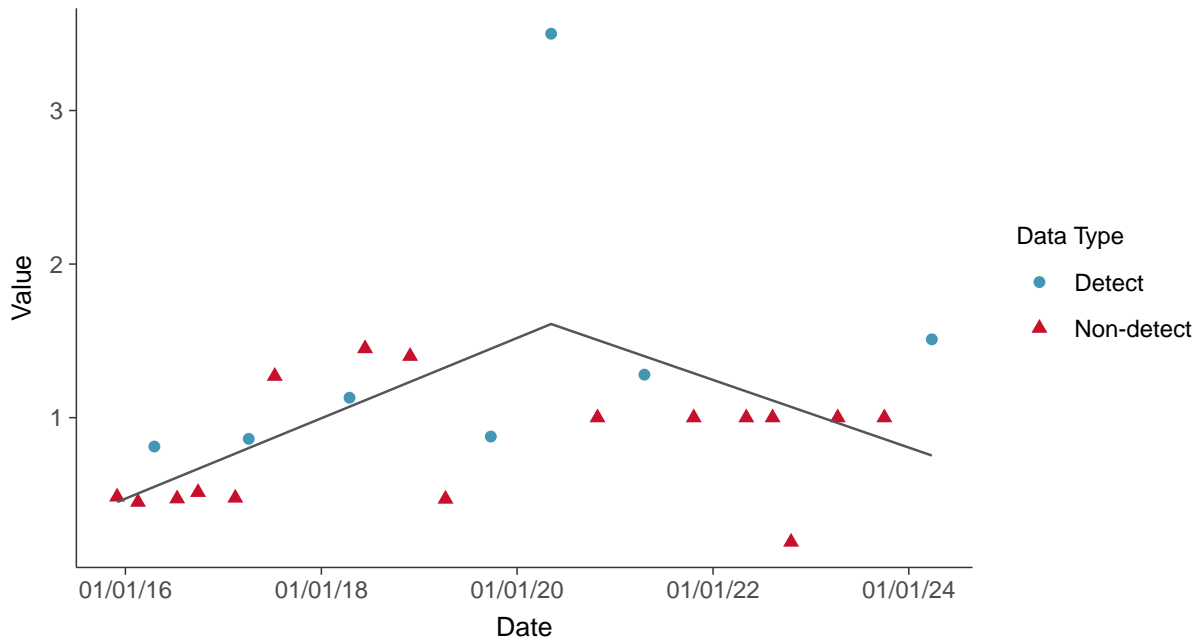
Radium-226+228, MW-15022 (pCi/L)





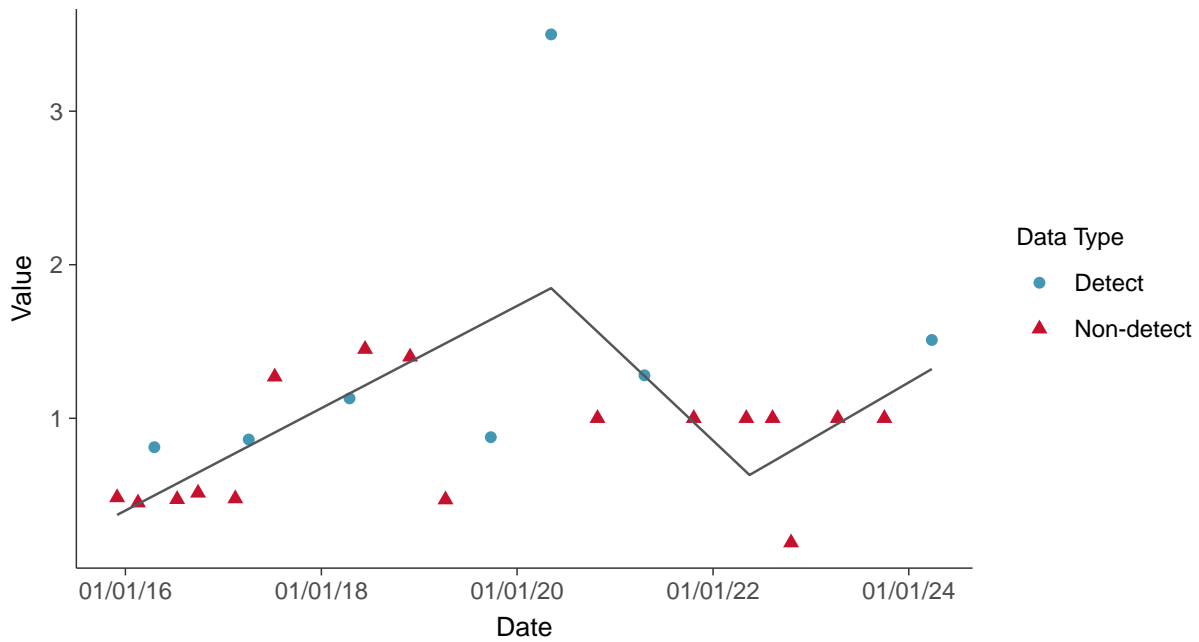
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15022 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

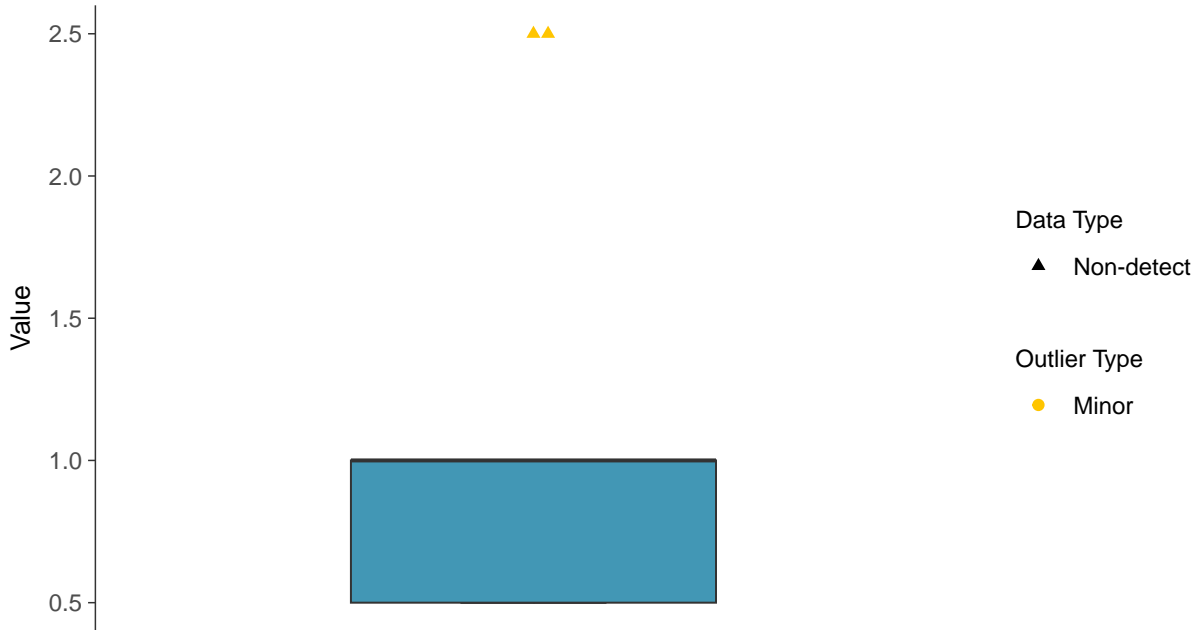
Radium-226+228, MW-15022 (pCi/L)





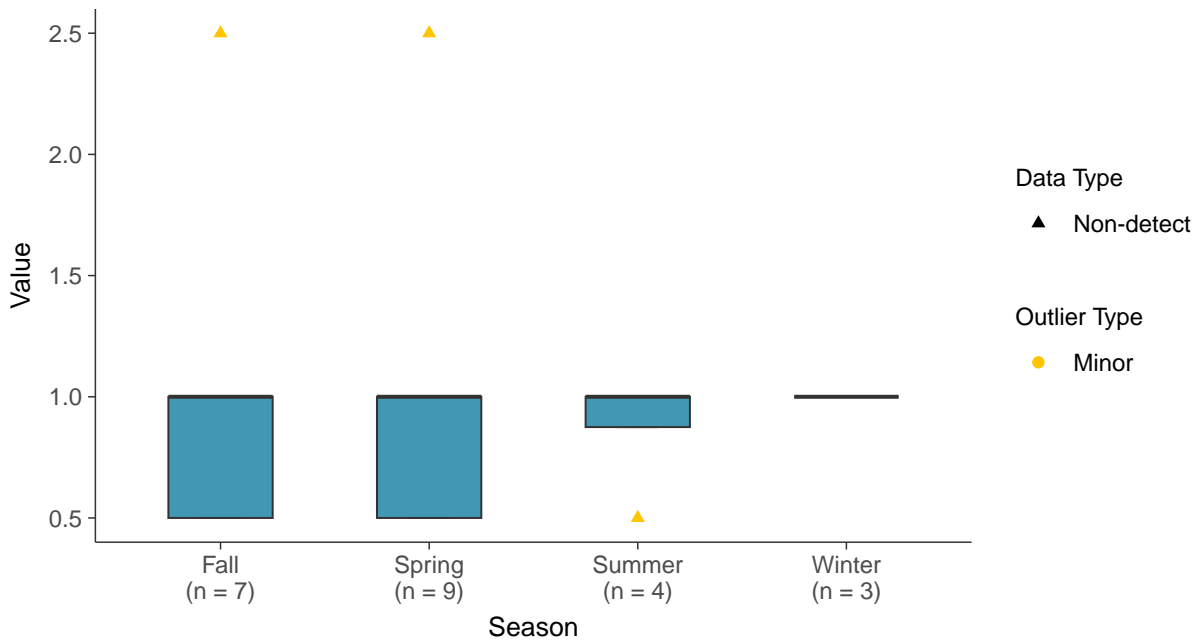
Boxplot

Selenium, MW-15022 (ug/L)



Boxplot by Season

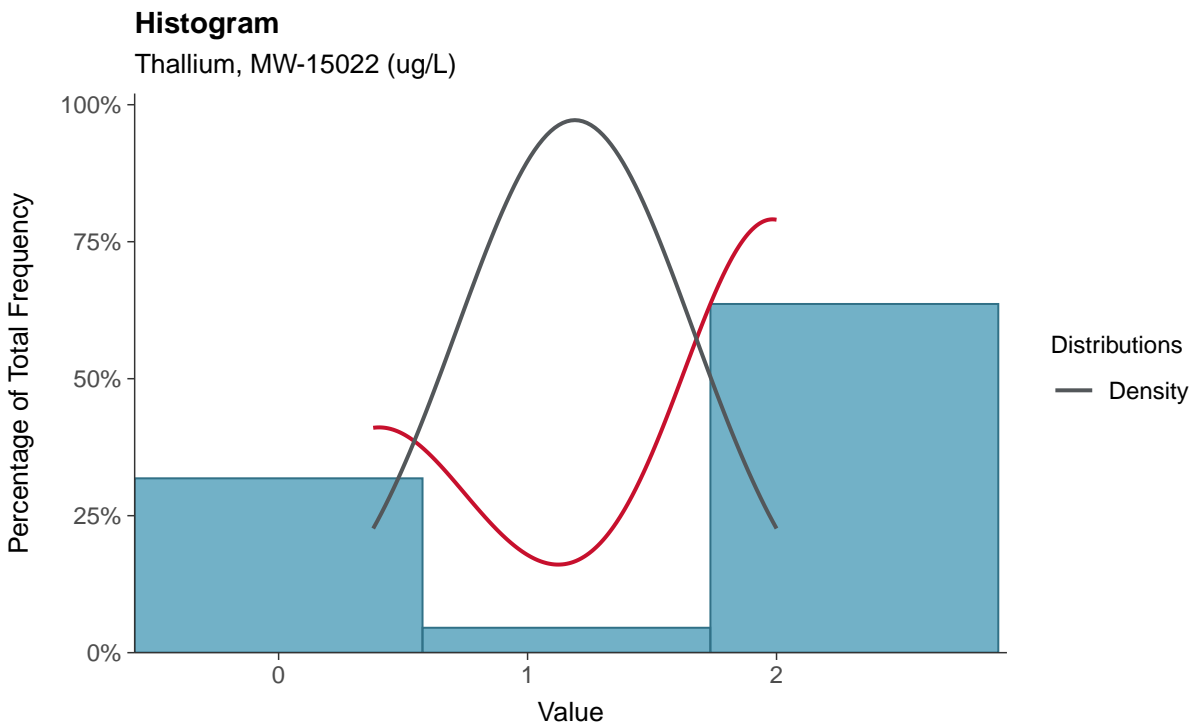
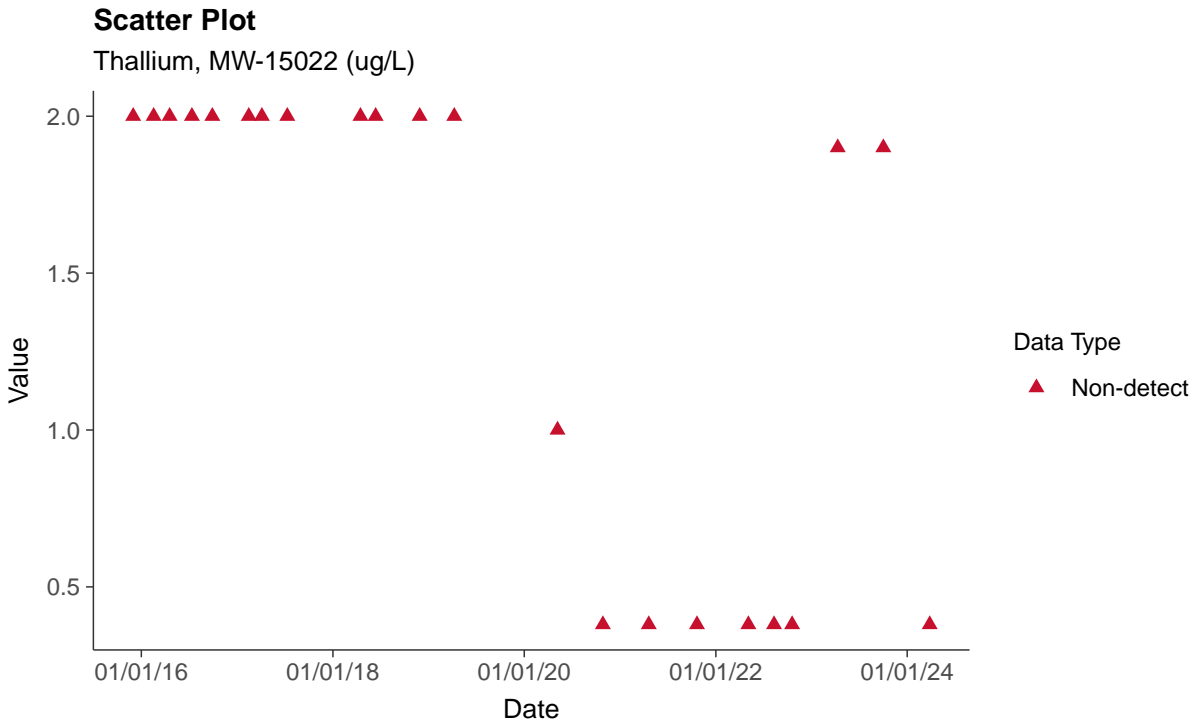
Selenium, MW-15022 (ug/L)





Appendix IV: Thallium, MW-15022

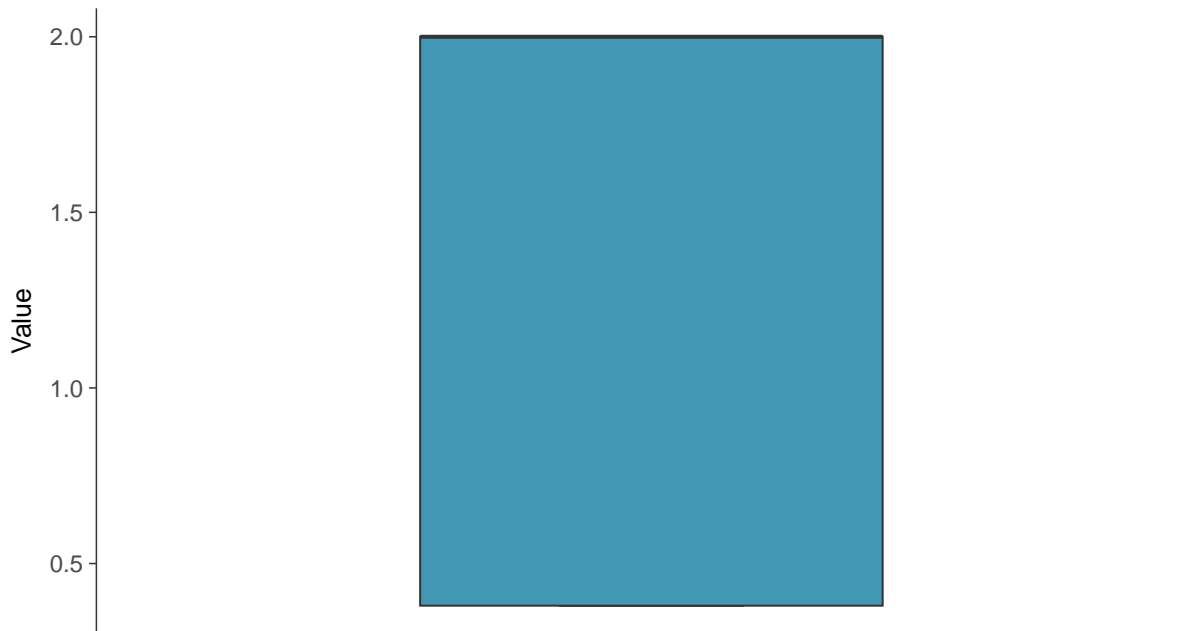
ID: 12_2_131





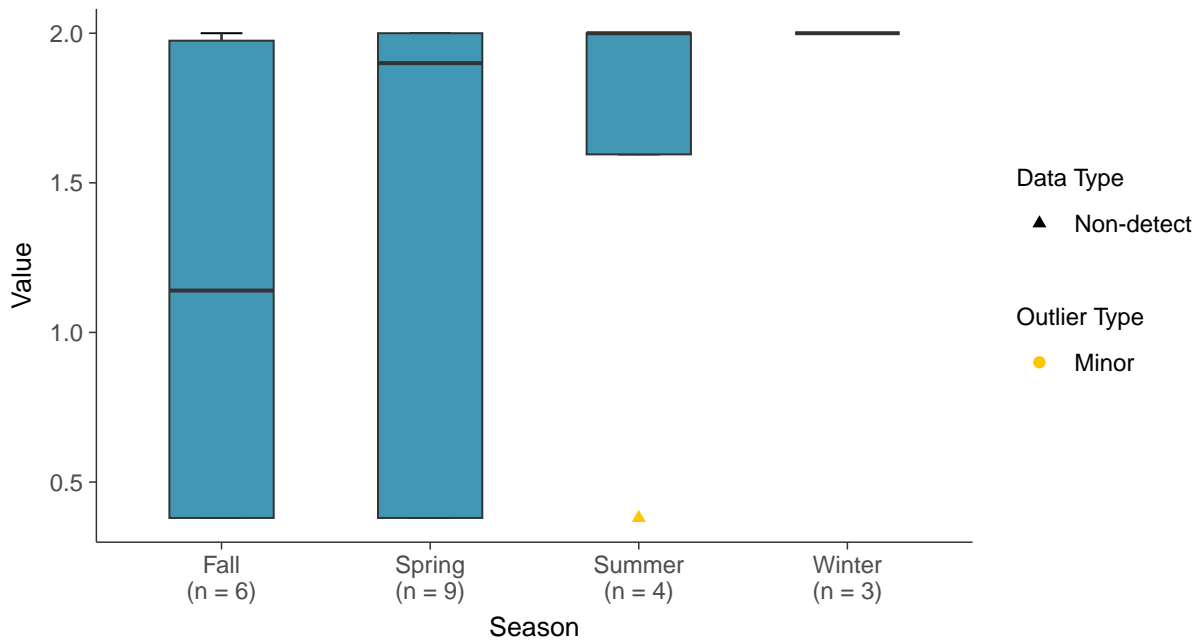
Boxplot

Thallium, MW-15022 (ug/L)



Boxplot by Season

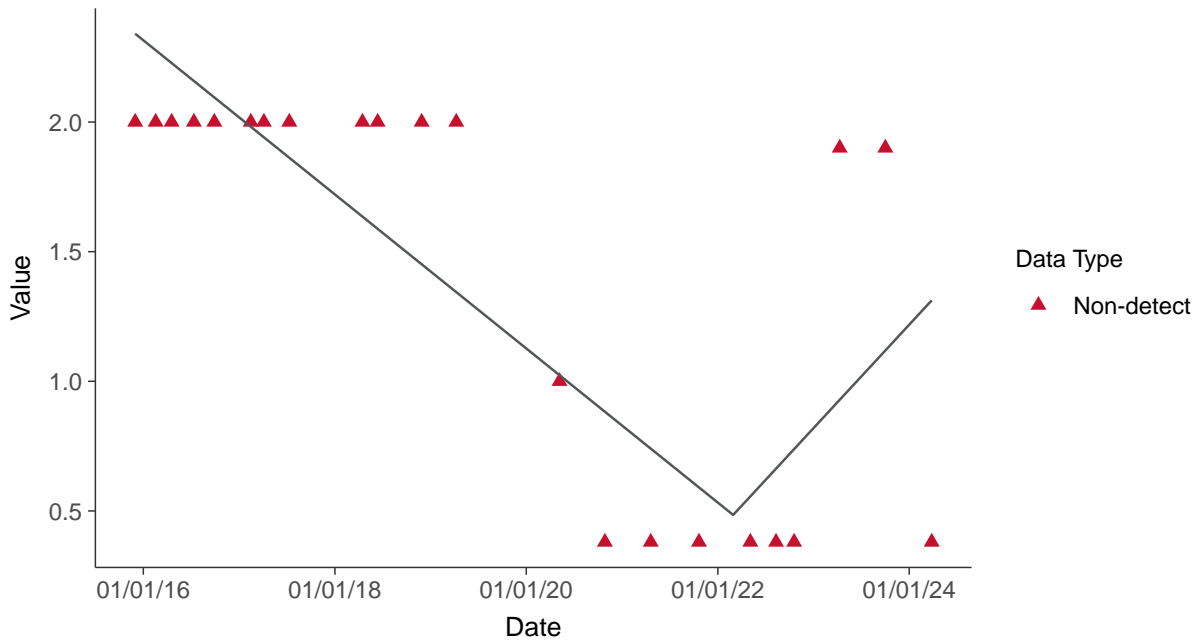
Thallium, MW-15022 (ug/L)





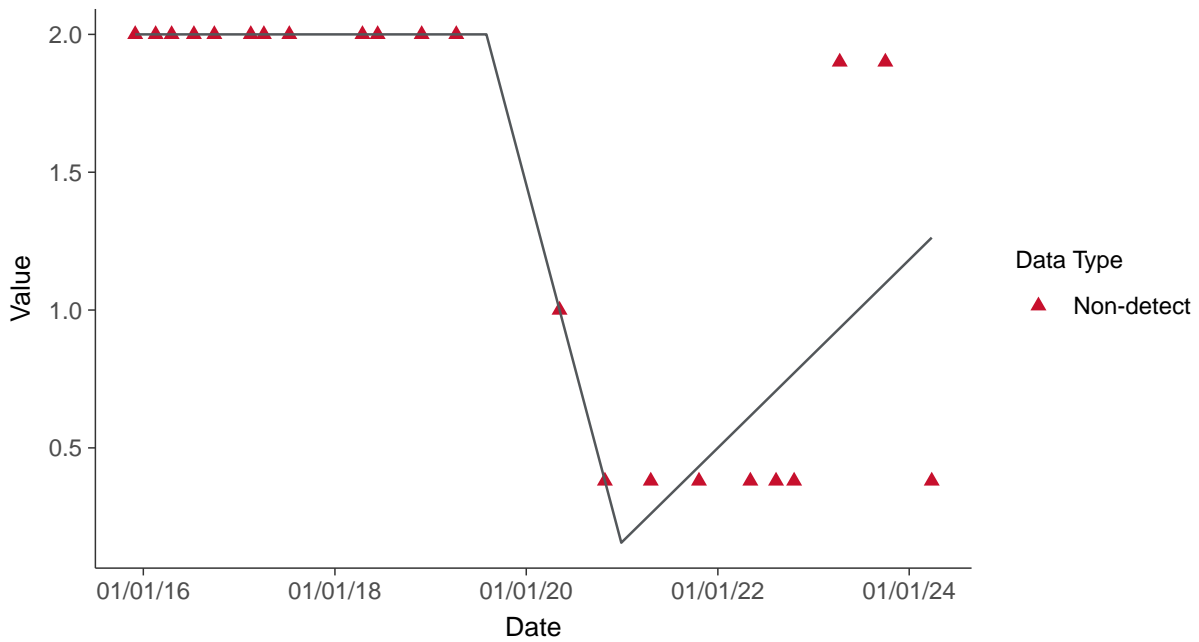
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

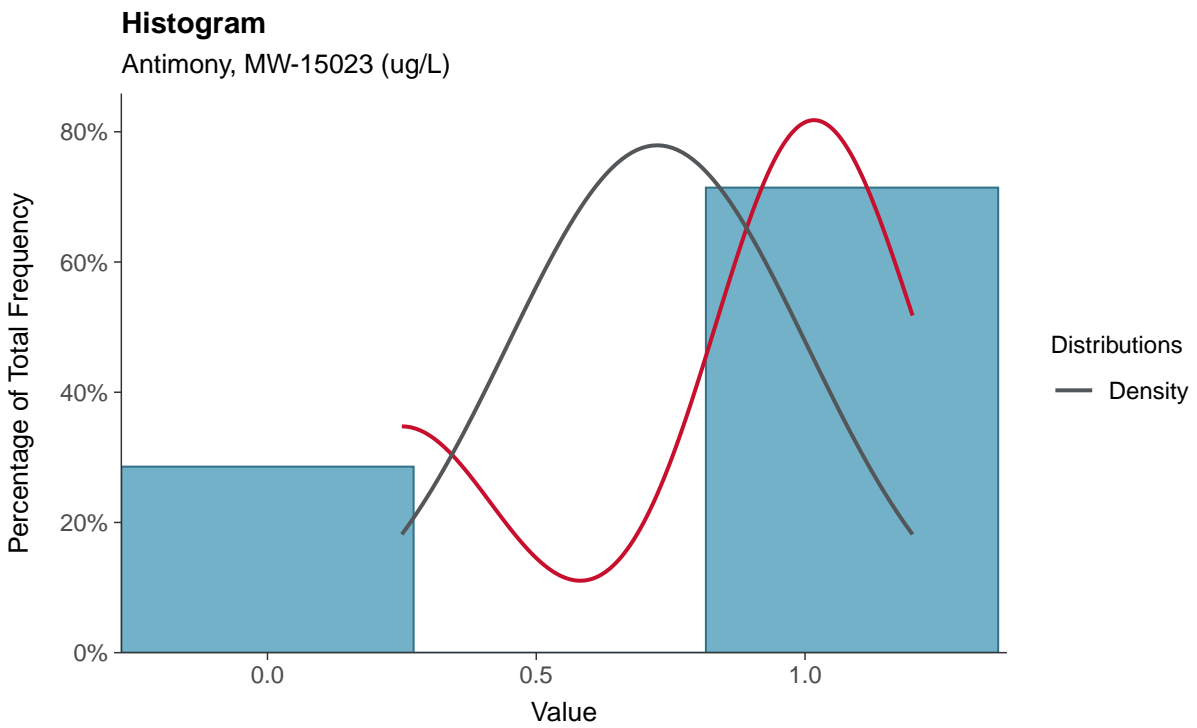
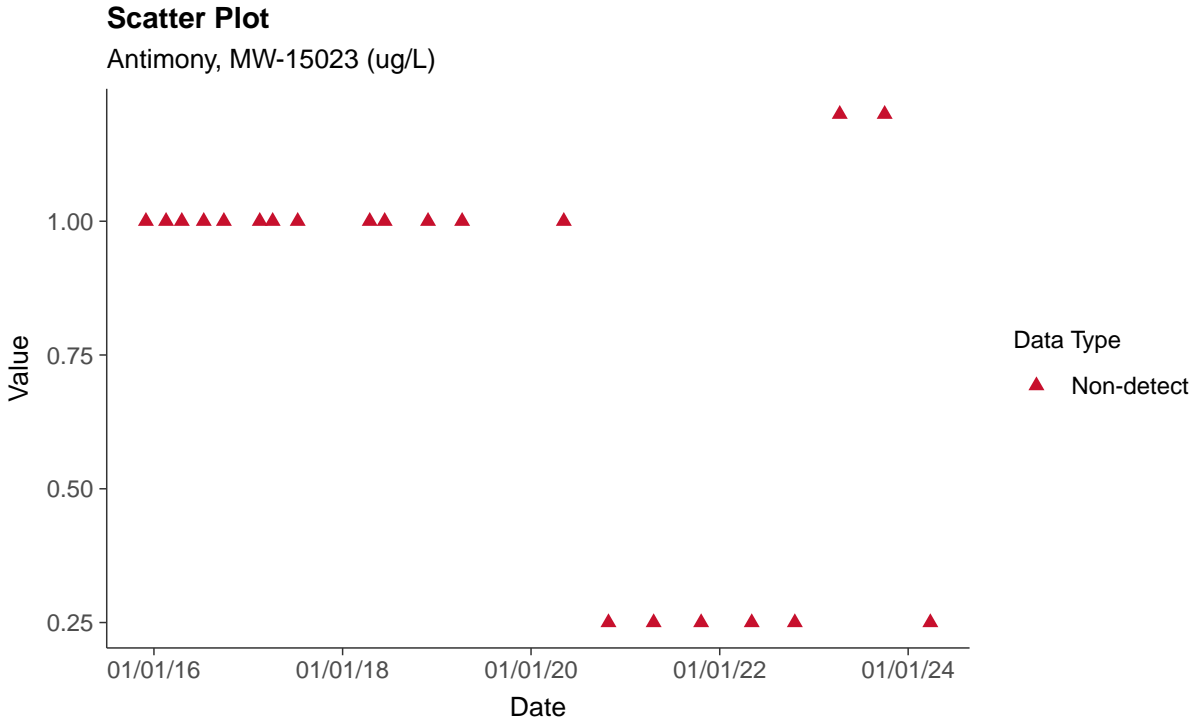
Thallium, MW-15022 (ug/L)





Appendix IV: Antimony, MW-15023

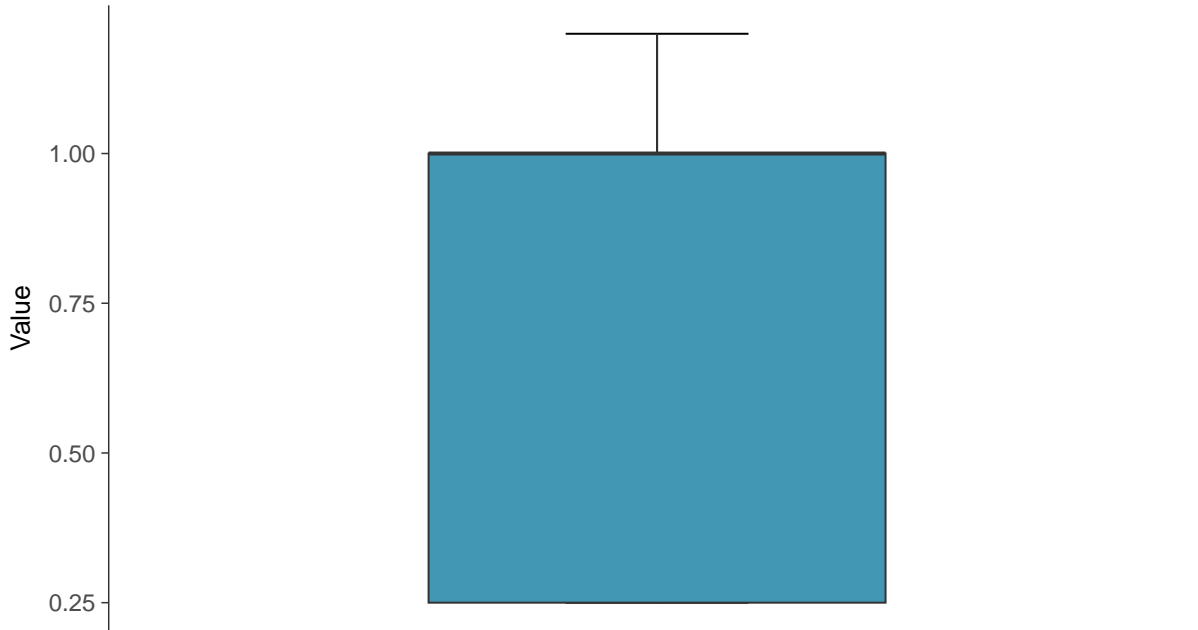
ID: 13_2_101





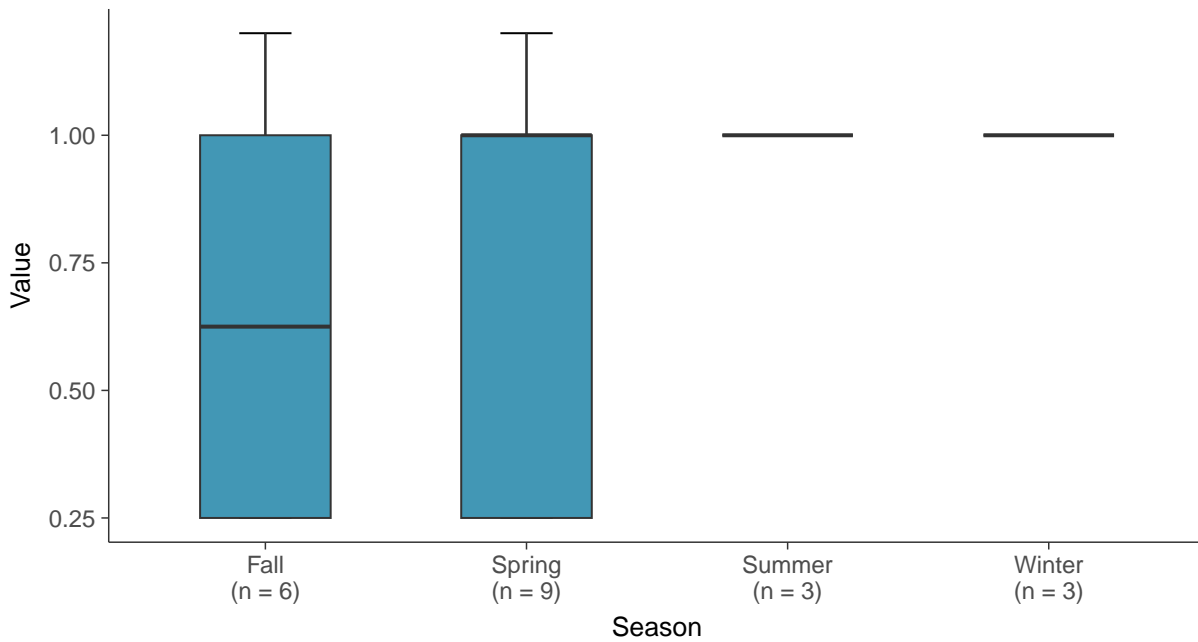
Boxplot

Antimony, MW-15023 (ug/L)



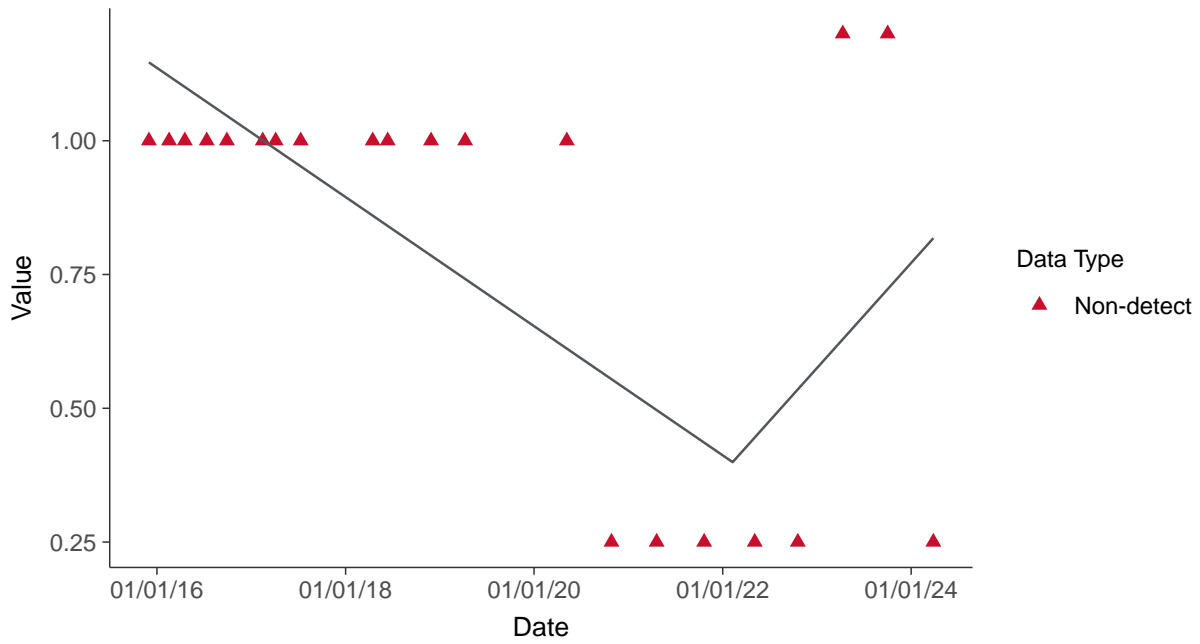
Boxplot by Season

Antimony, MW-15023 (ug/L)





Trend Regression: Piecewise Linear-Linear
Antimony, MW-15023 (ug/L)



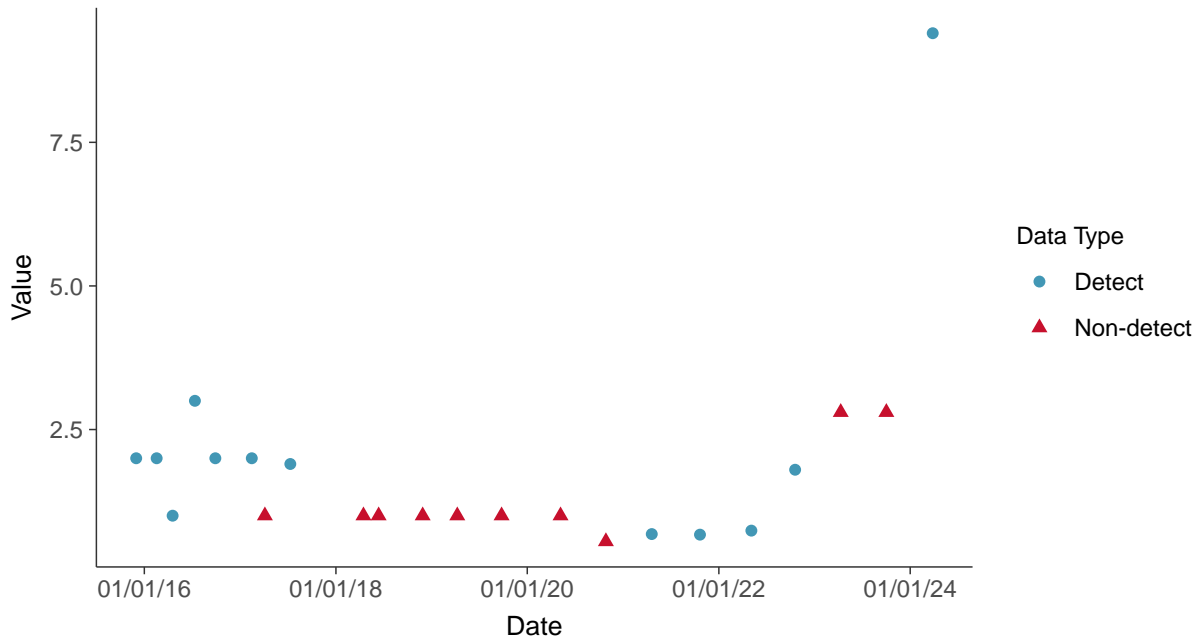


Appendix IV: Arsenic, MW-15023

ID: 13_2_102

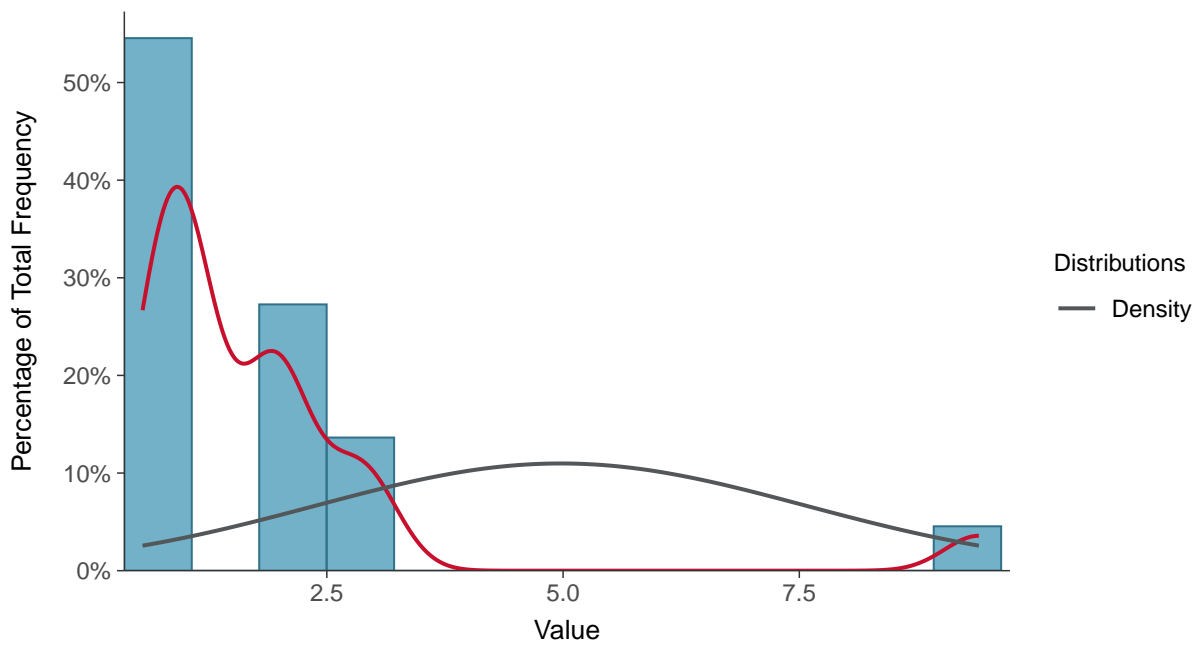
Scatter Plot

Arsenic, MW-15023 (ug/L)



Histogram

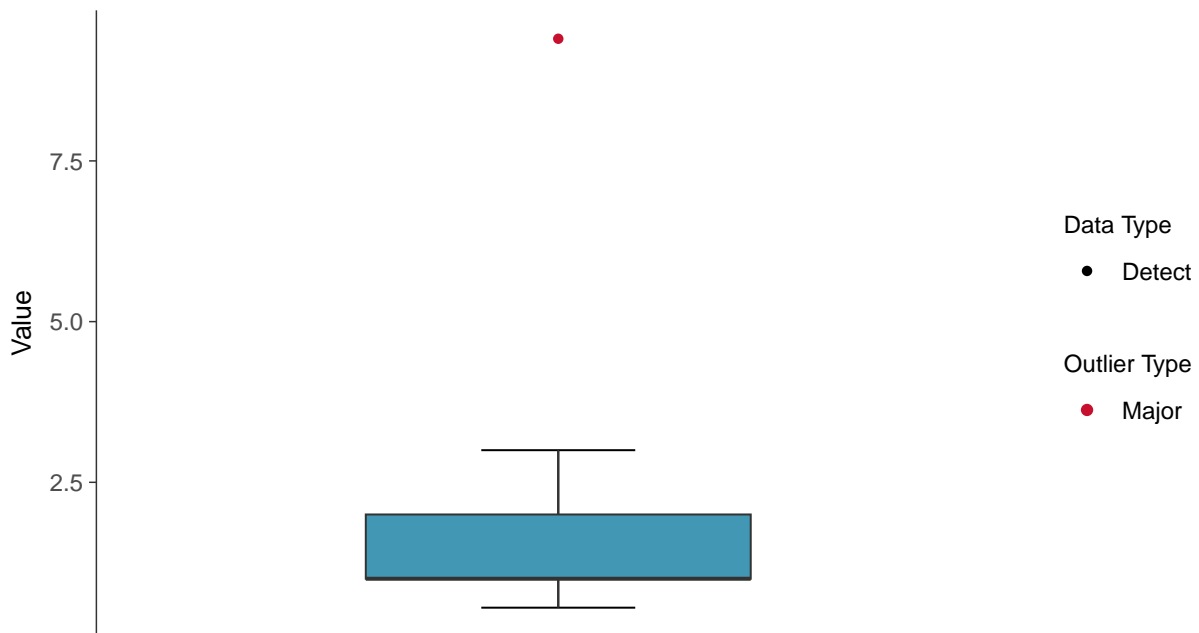
Arsenic, MW-15023 (ug/L)





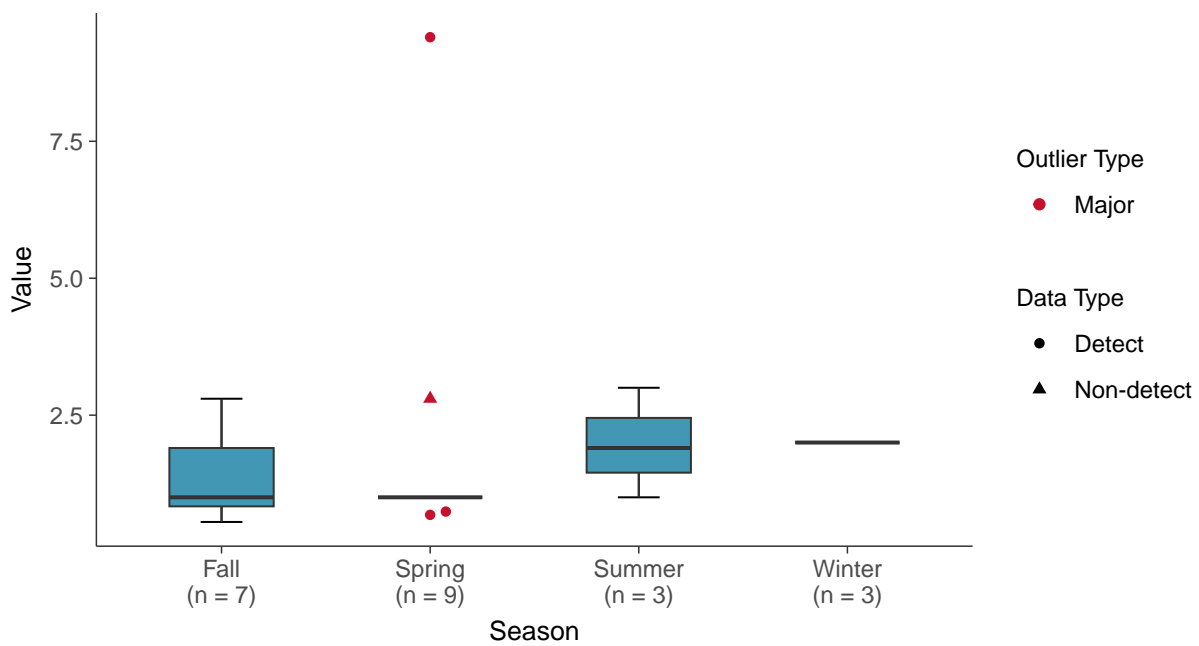
Boxplot

Arsenic, MW-15023 (ug/L)



Boxplot by Season

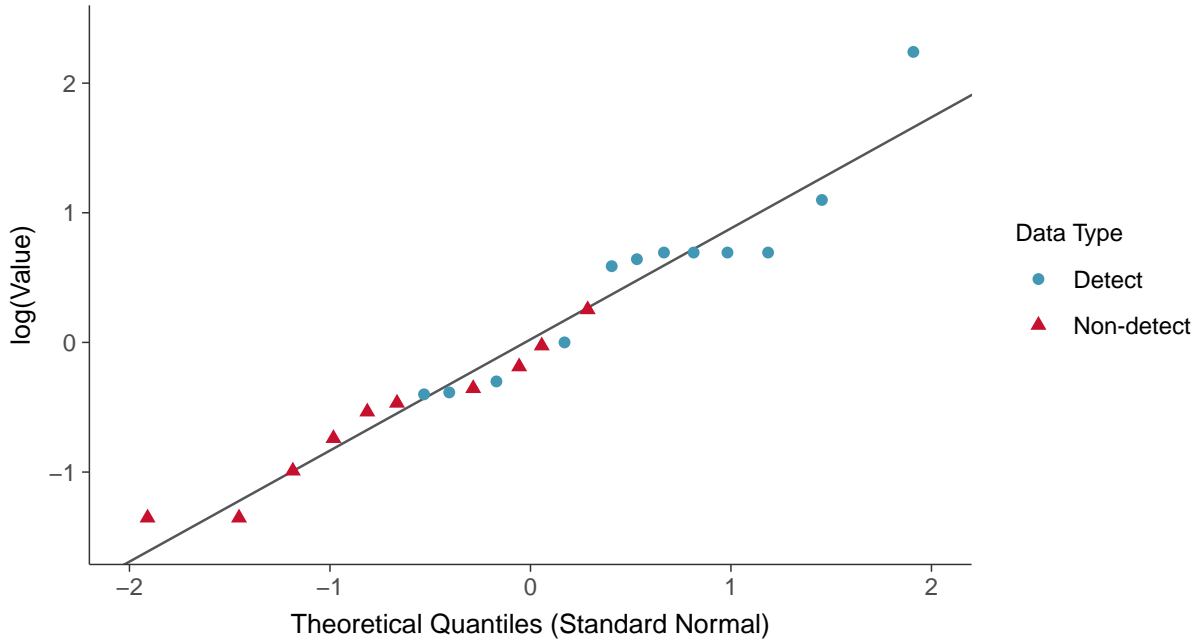
Arsenic, MW-15023 (ug/L)





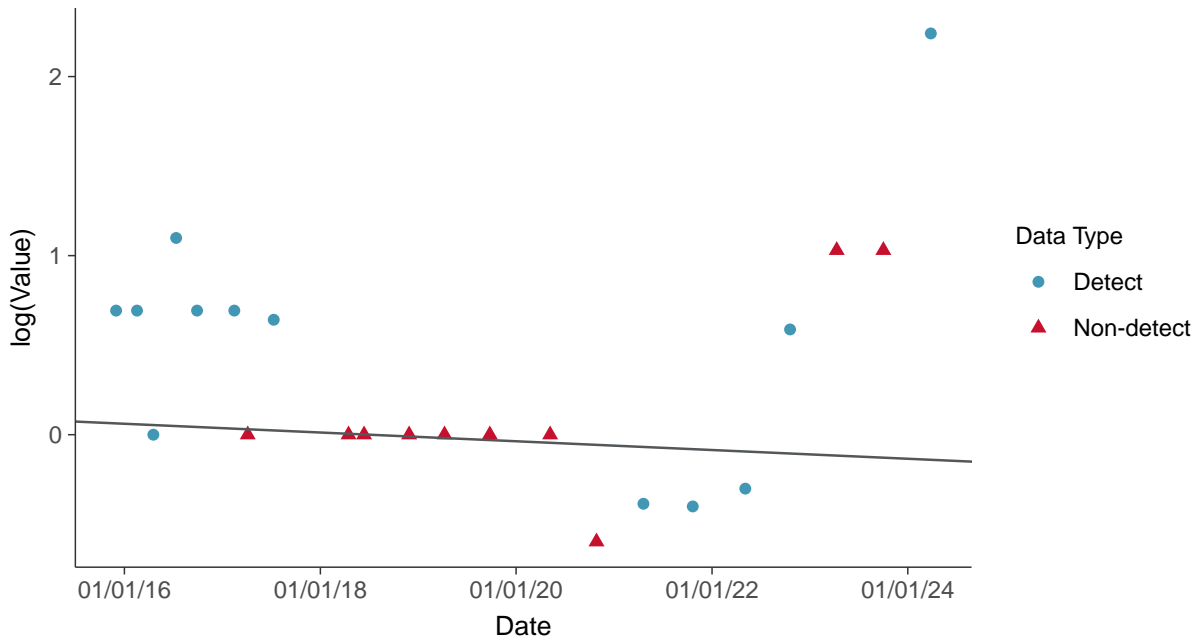
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15023 (ug/L)



Trend Regression: Lognormal MLE

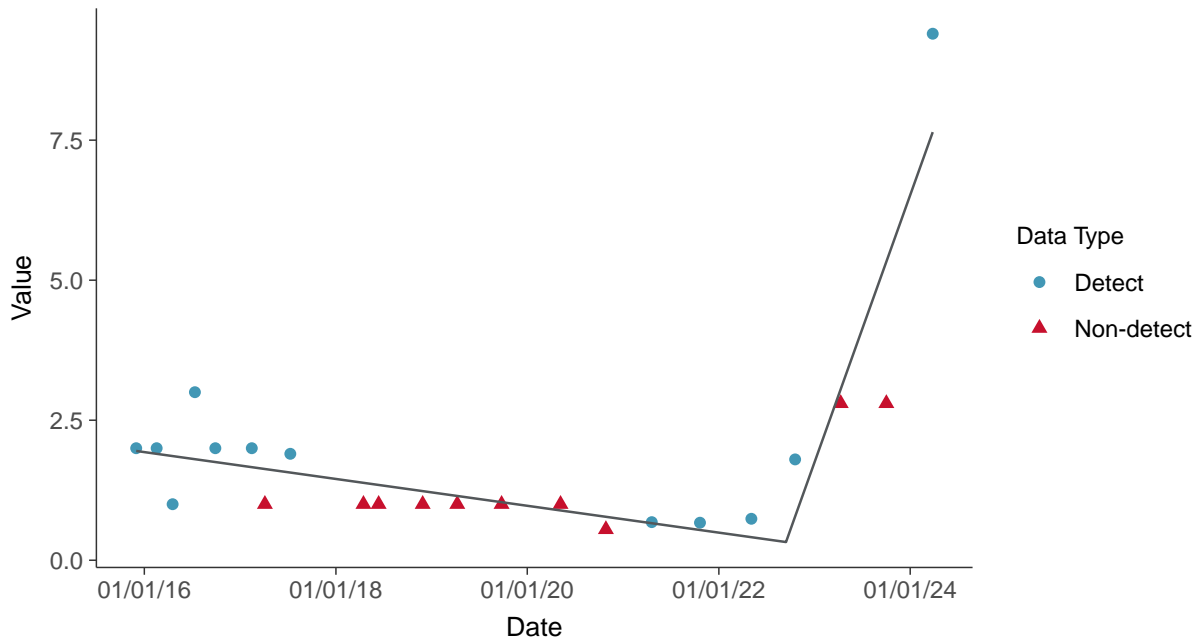
Arsenic, MW-15023 (ug/L)





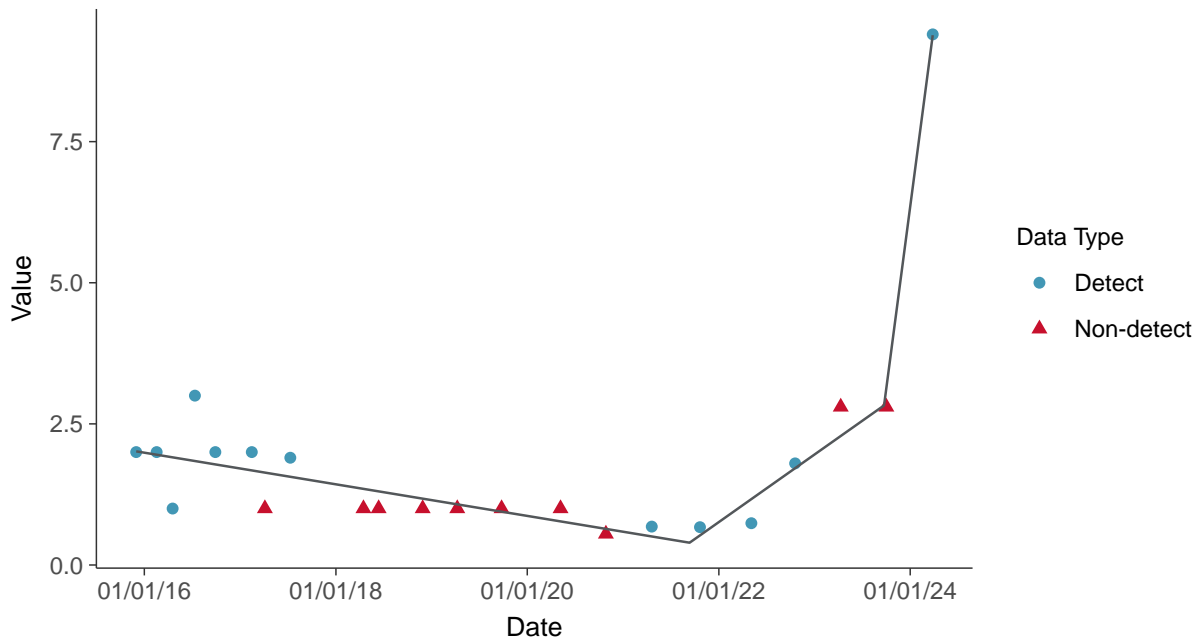
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15023 (ug/L)



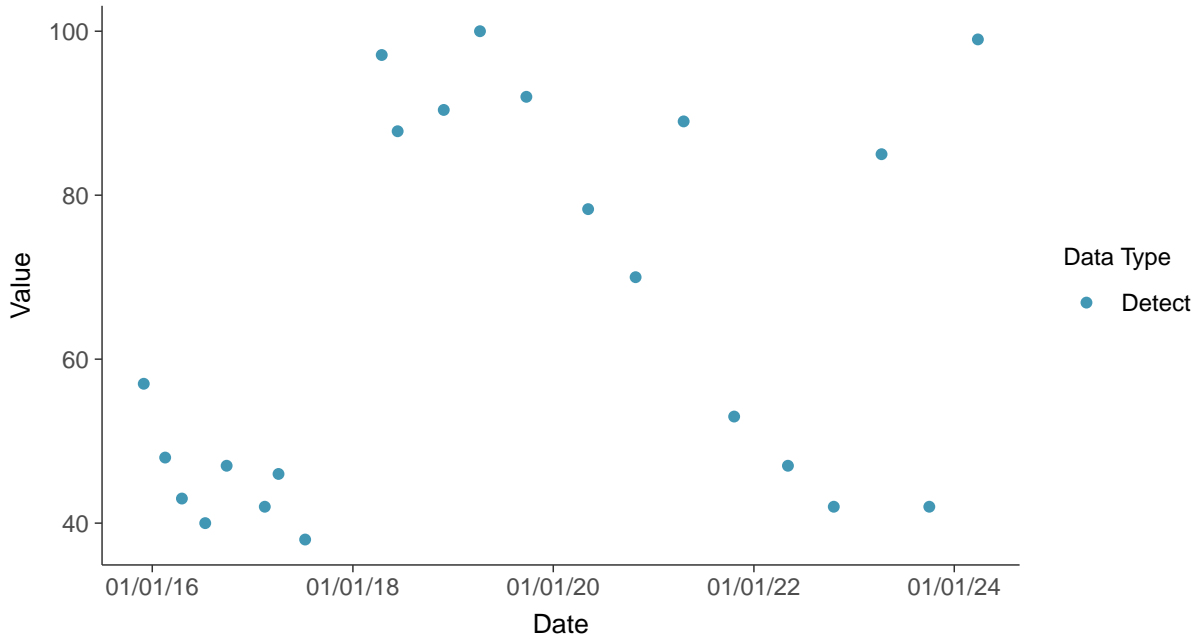


Appendix IV: Barium, MW-15023

ID: 13_2_103

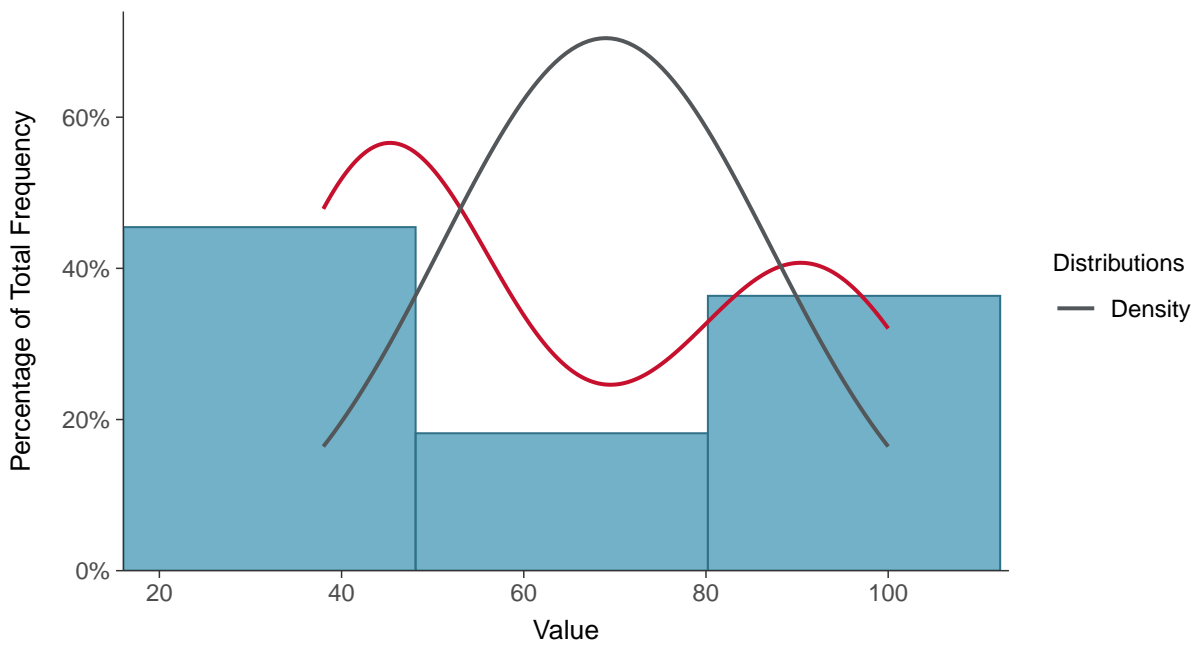
Scatter Plot

Barium, MW-15023 (ug/L)



Histogram

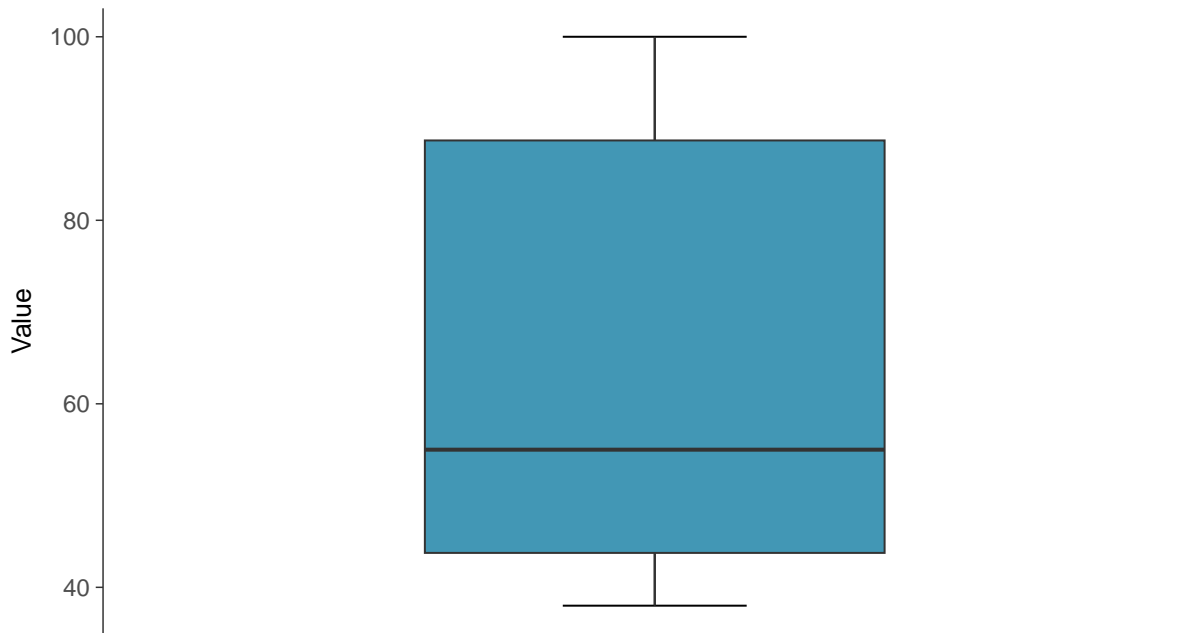
Barium, MW-15023 (ug/L)





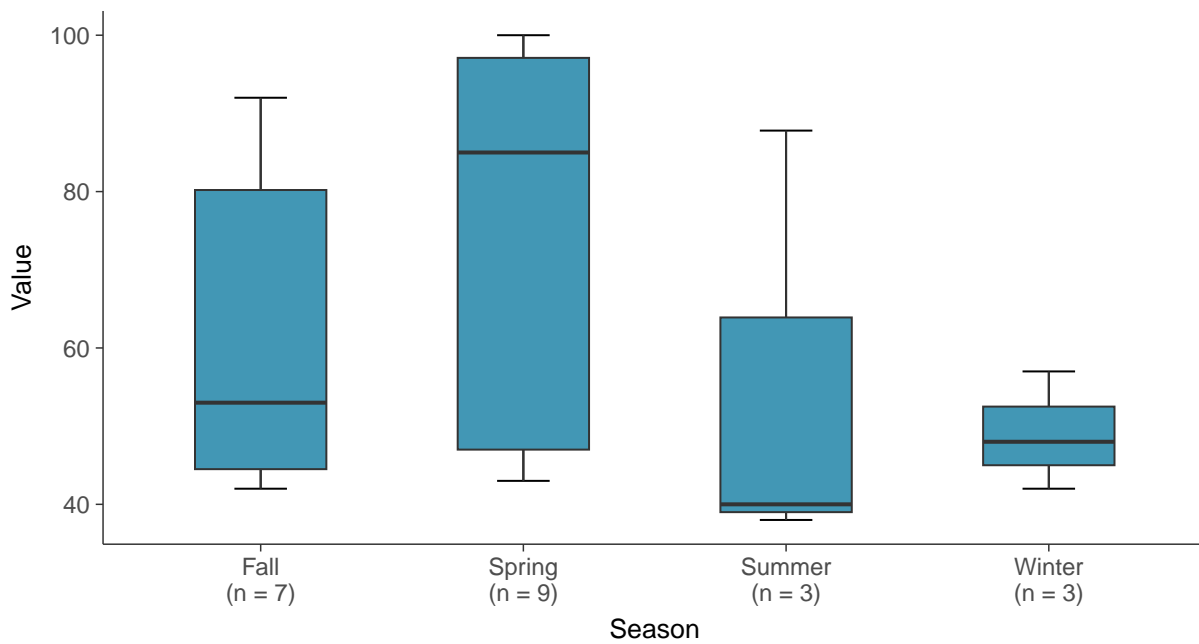
Boxplot

Barium, MW-15023 (ug/L)



Boxplot by Season

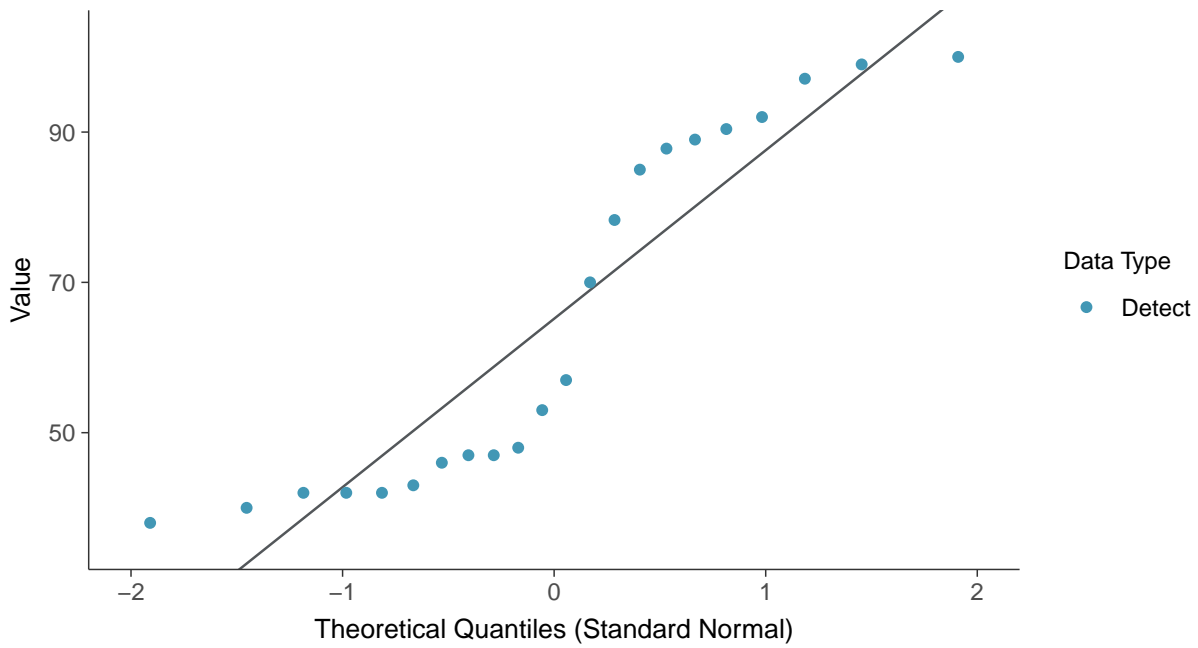
Barium, MW-15023 (ug/L)





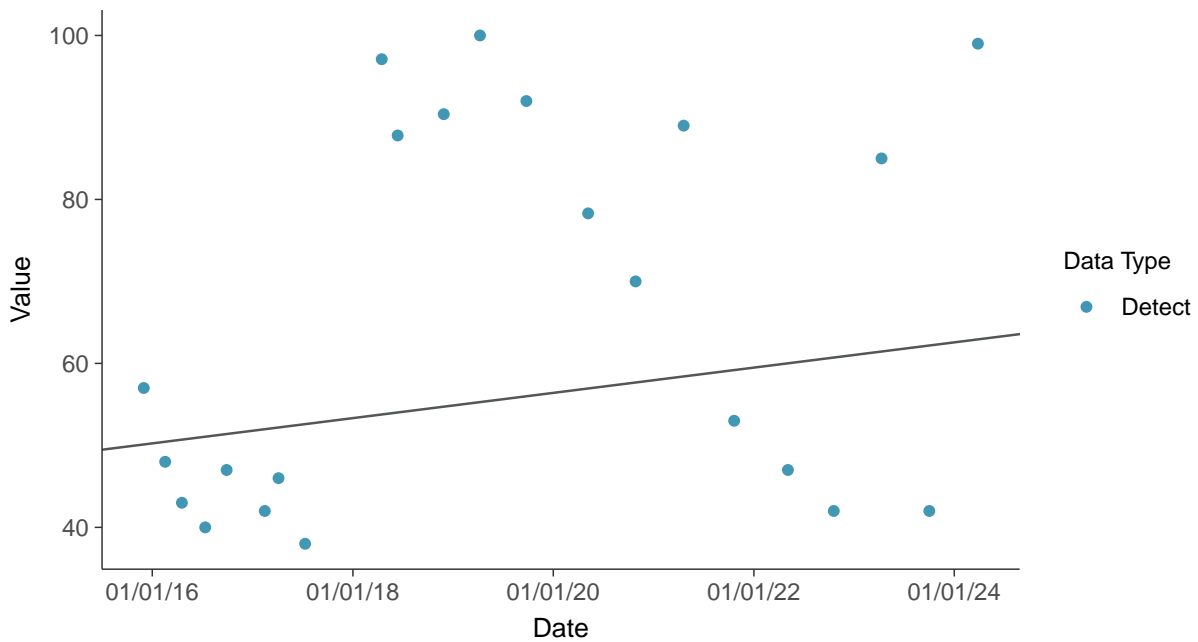
Normal Q-Q plot

Barium, MW-15023 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

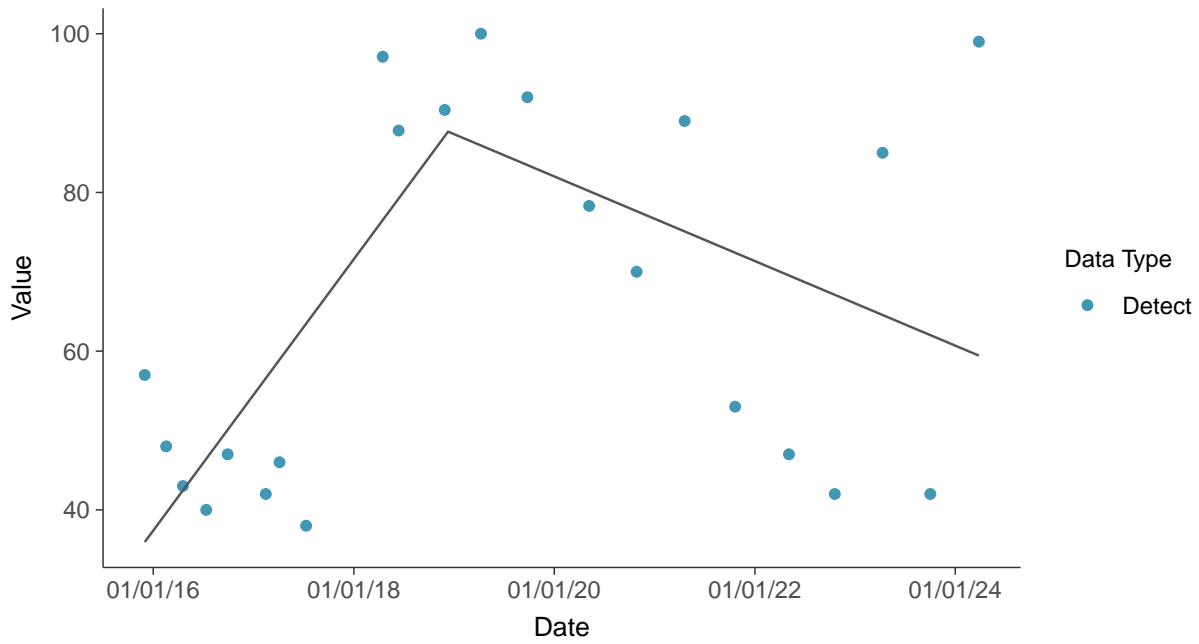
Barium, MW-15023 (ug/L)





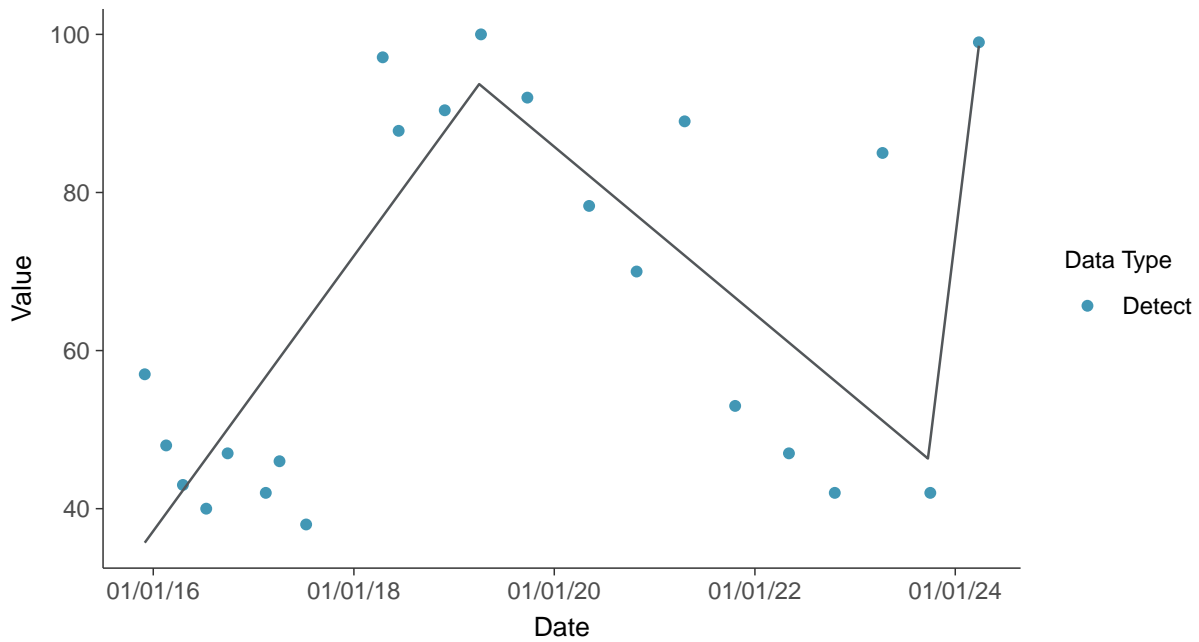
Trend Regression: Piecewise Linear-Linear

Barium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

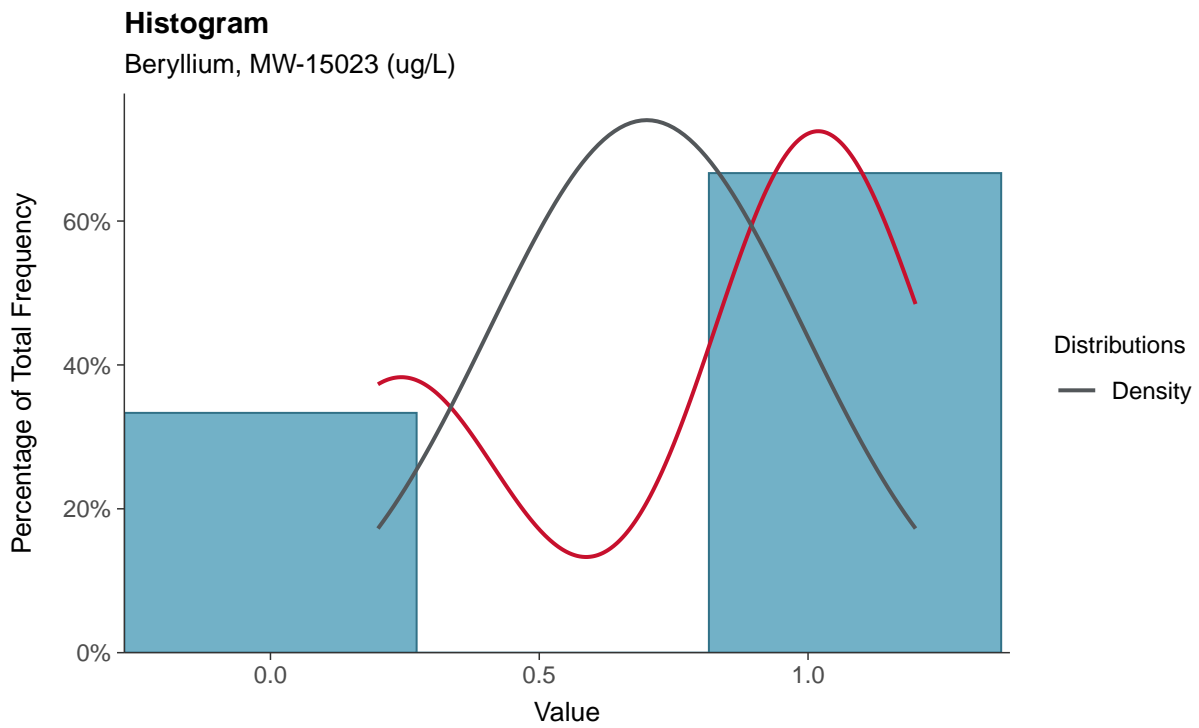
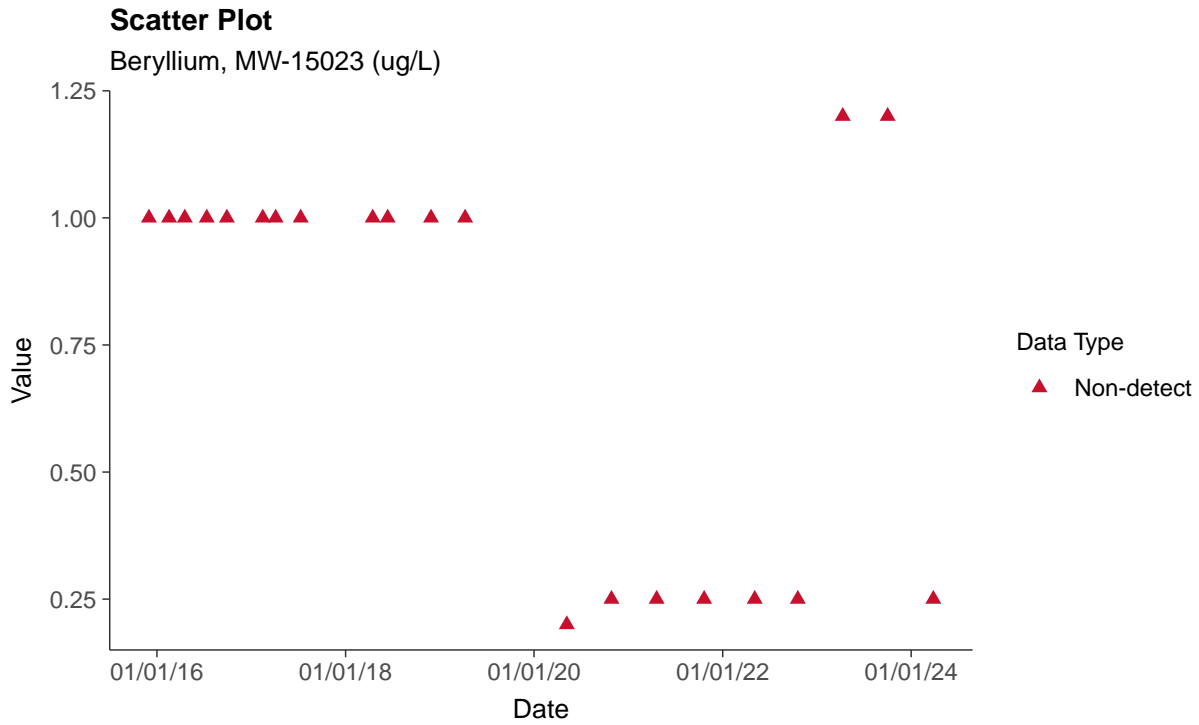
Barium, MW-15023 (ug/L)





Appendix IV: Beryllium, MW-15023

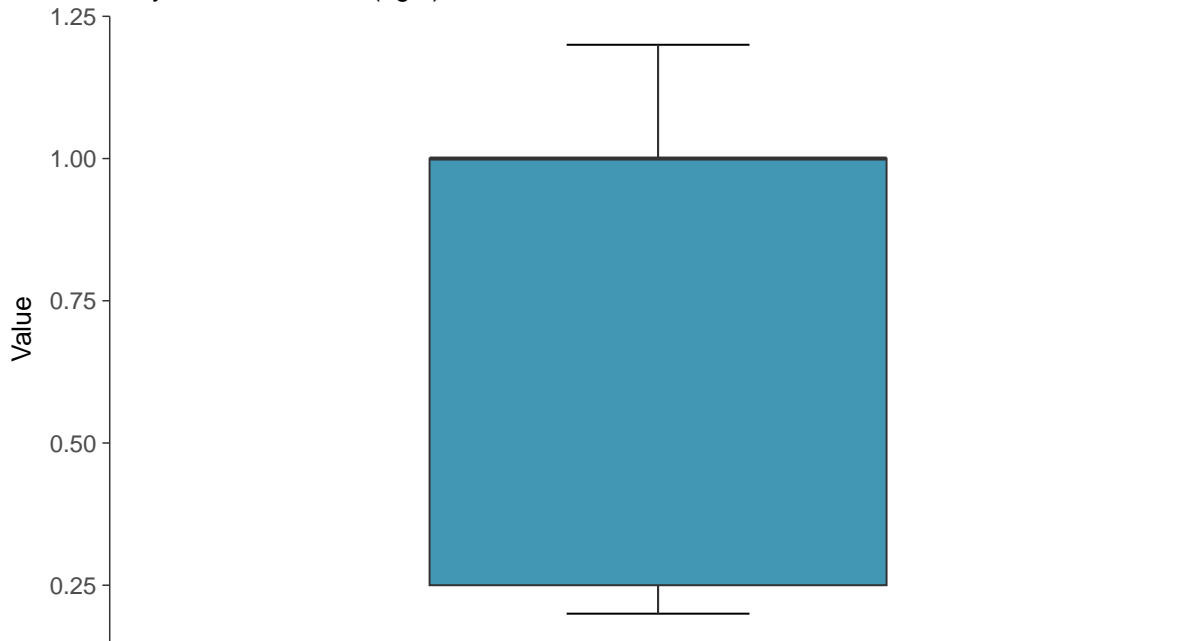
ID: 13_2_104





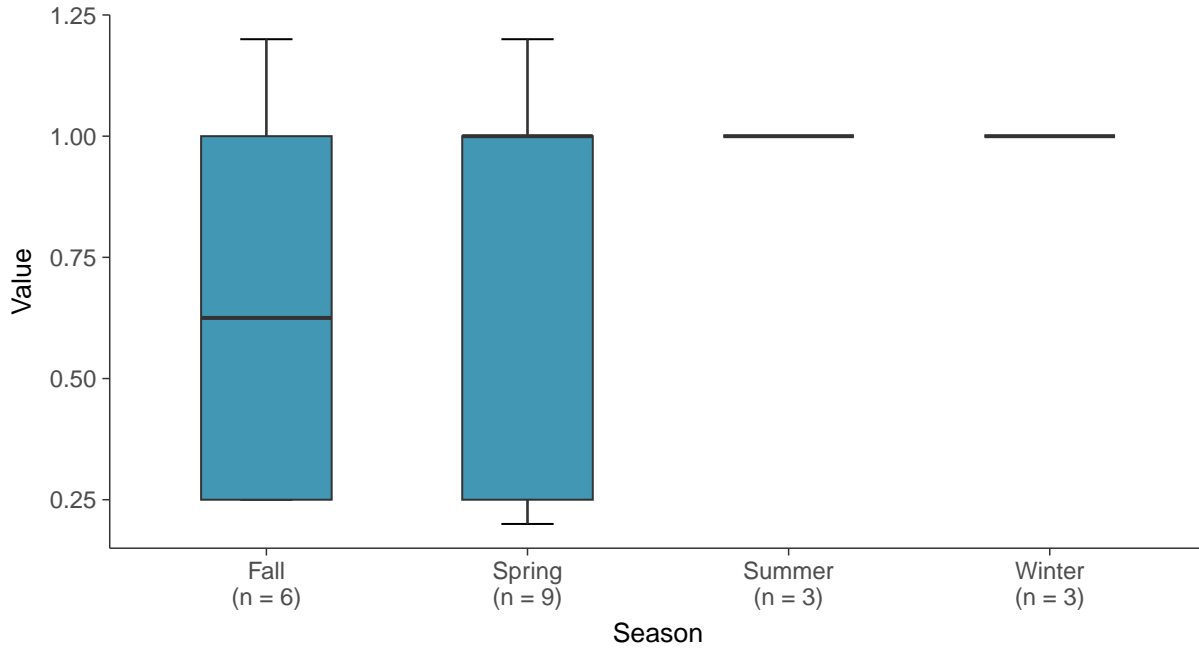
Boxplot

Beryllium, MW-15023 (ug/L)



Boxplot by Season

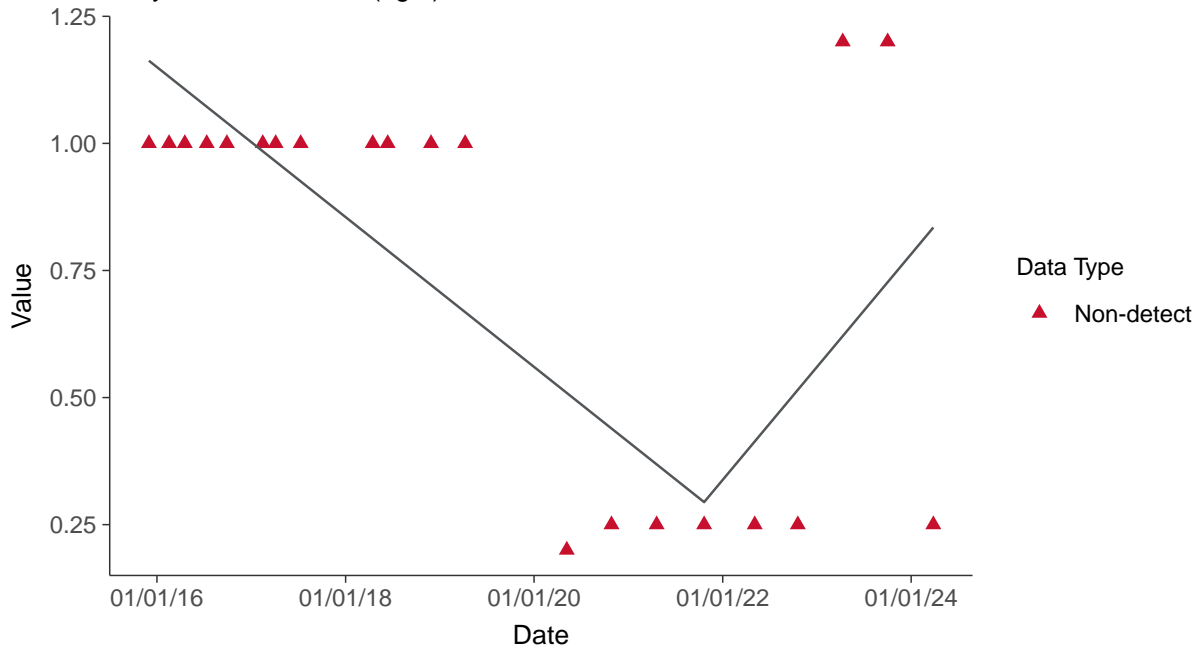
Beryllium, MW-15023 (ug/L)





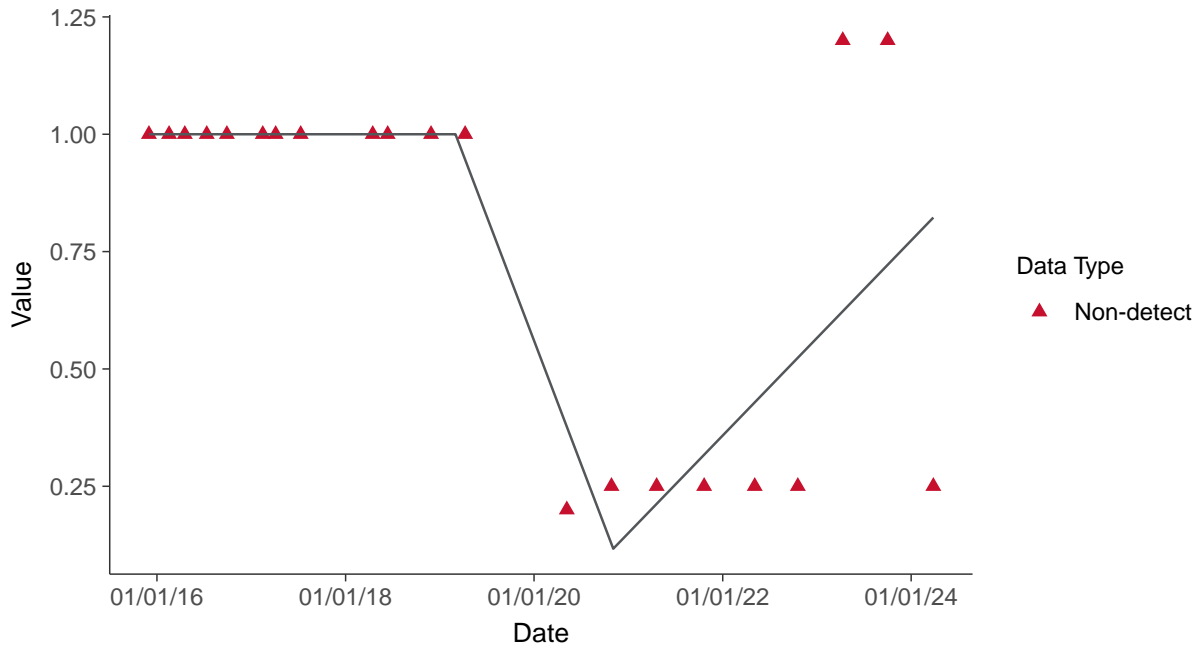
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

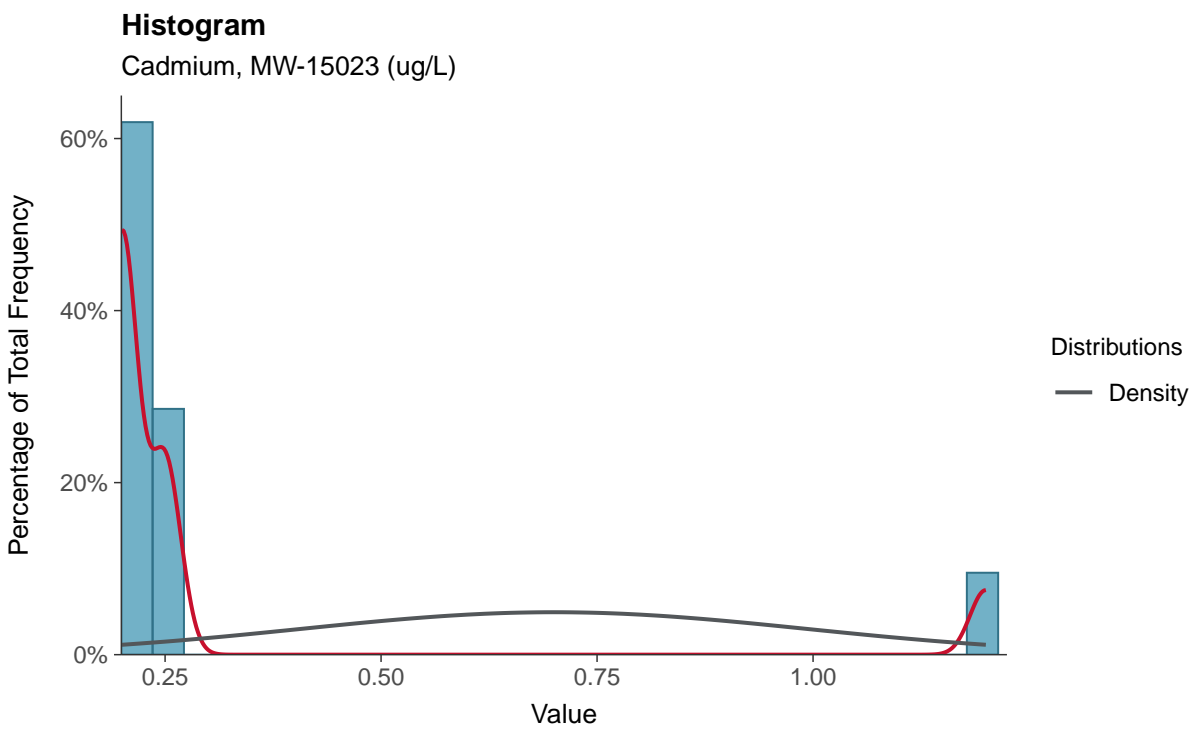
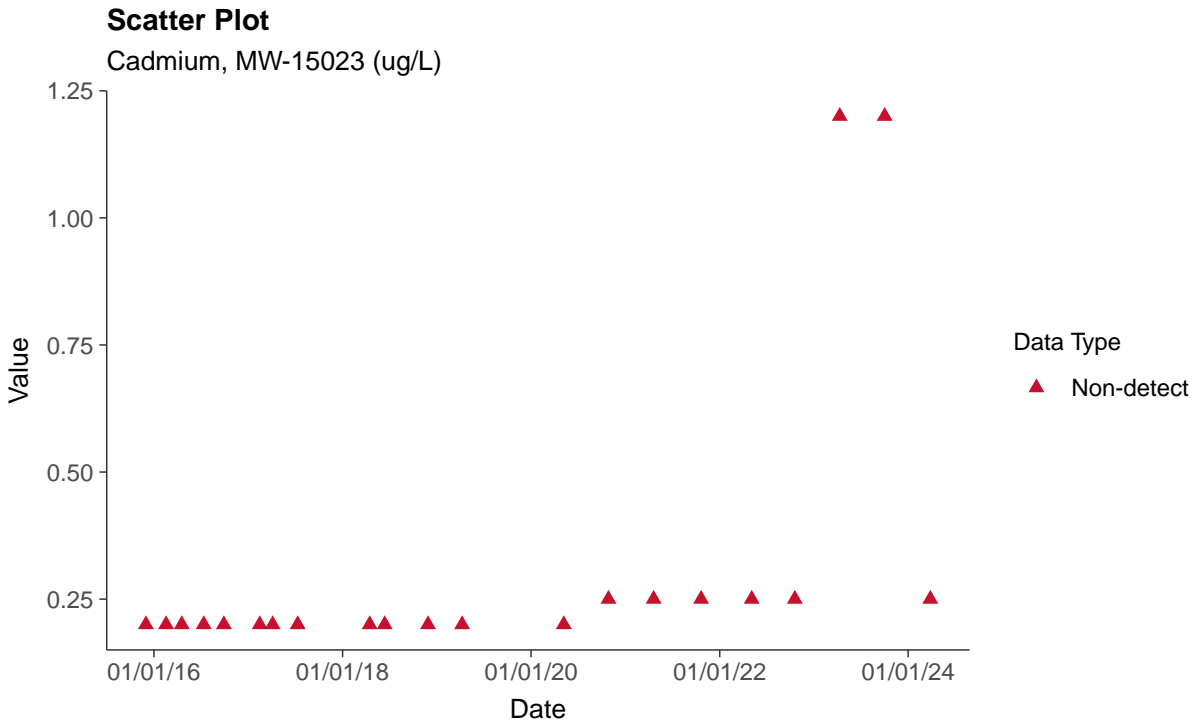
Beryllium, MW-15023 (ug/L)

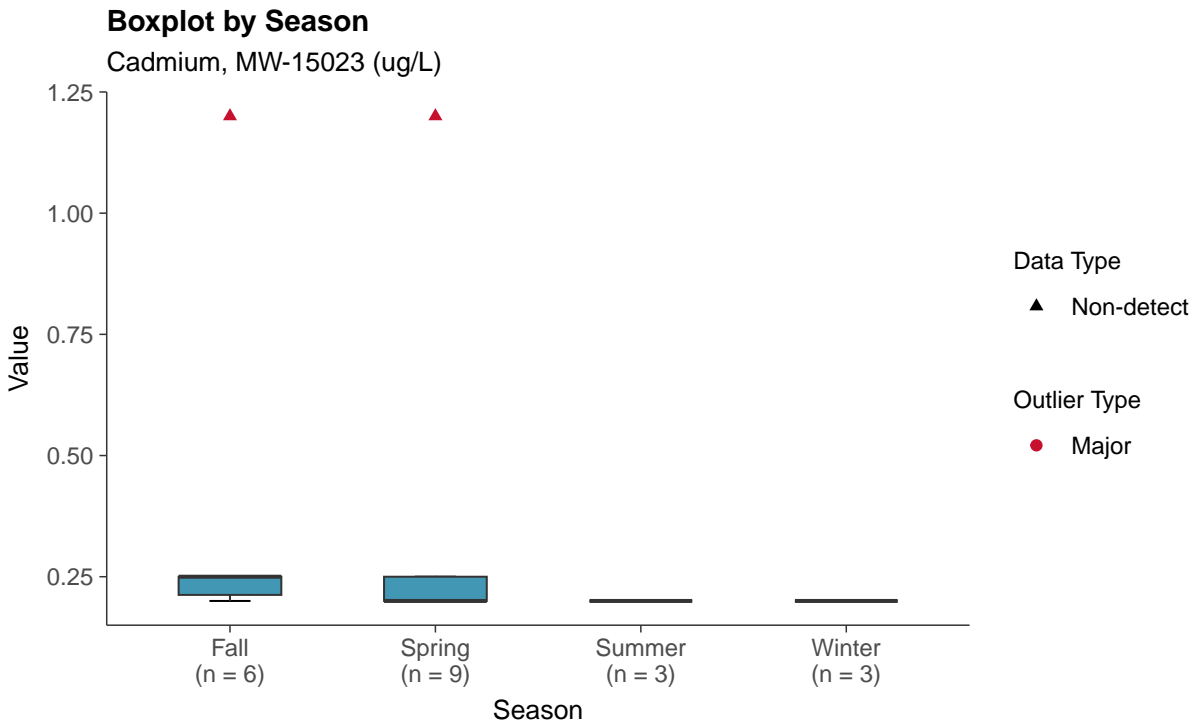
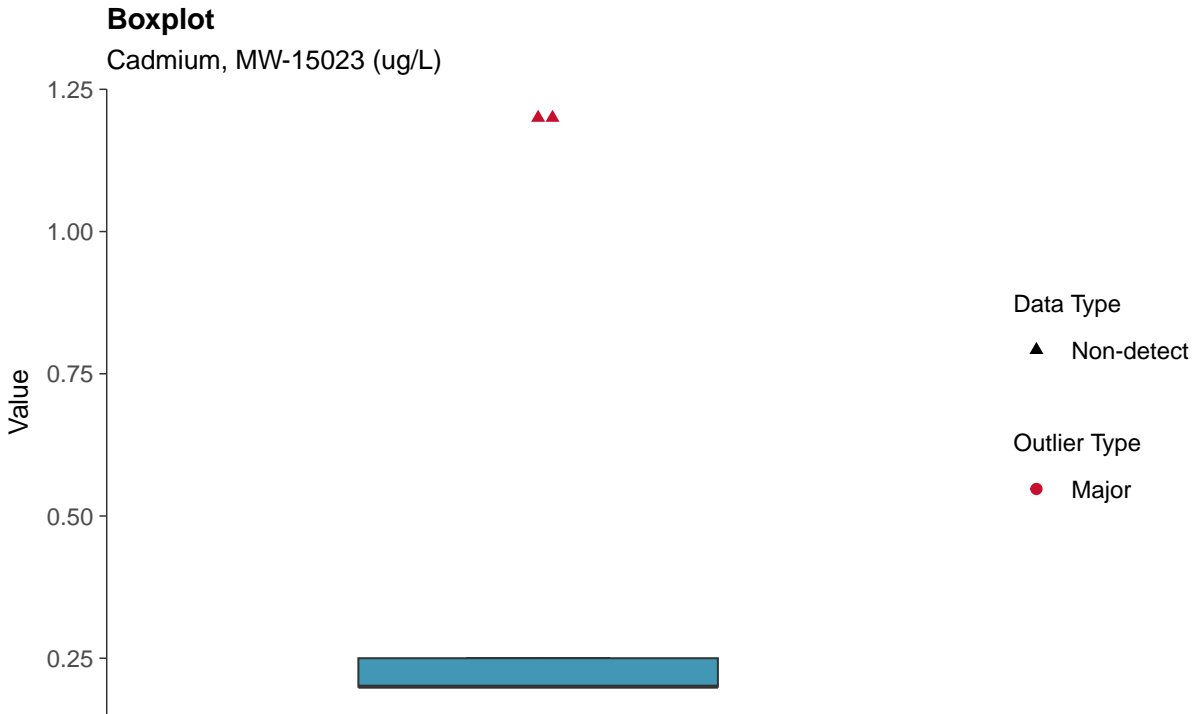




Appendix IV: Cadmium, MW-15023

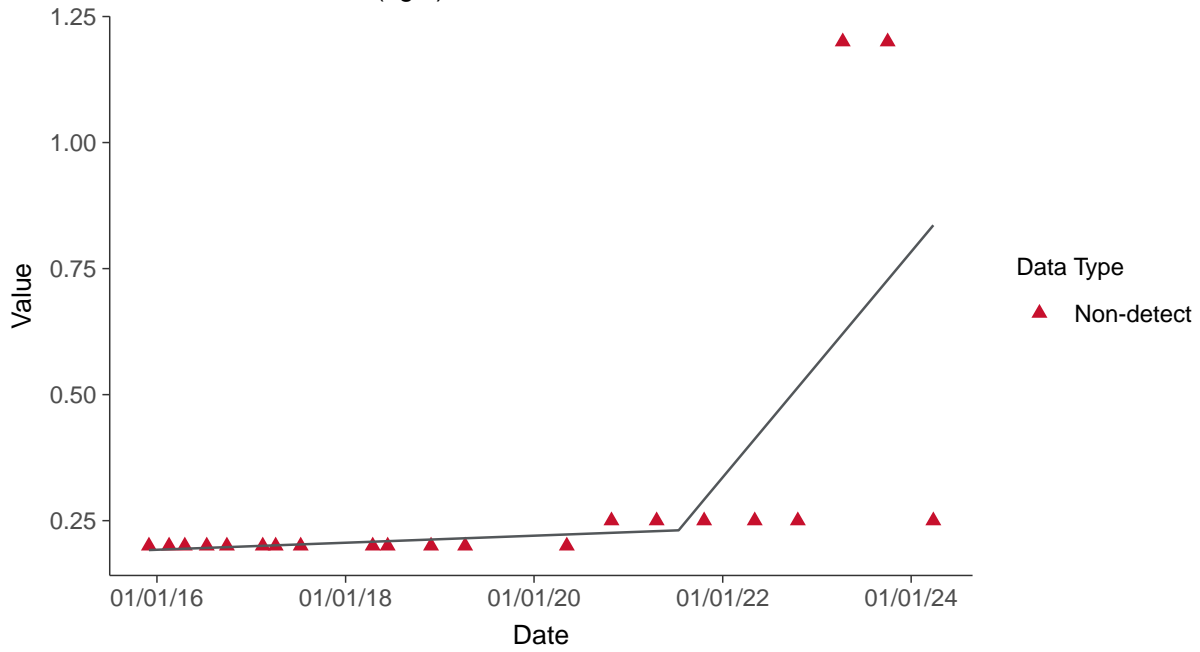
ID: 13_2_106



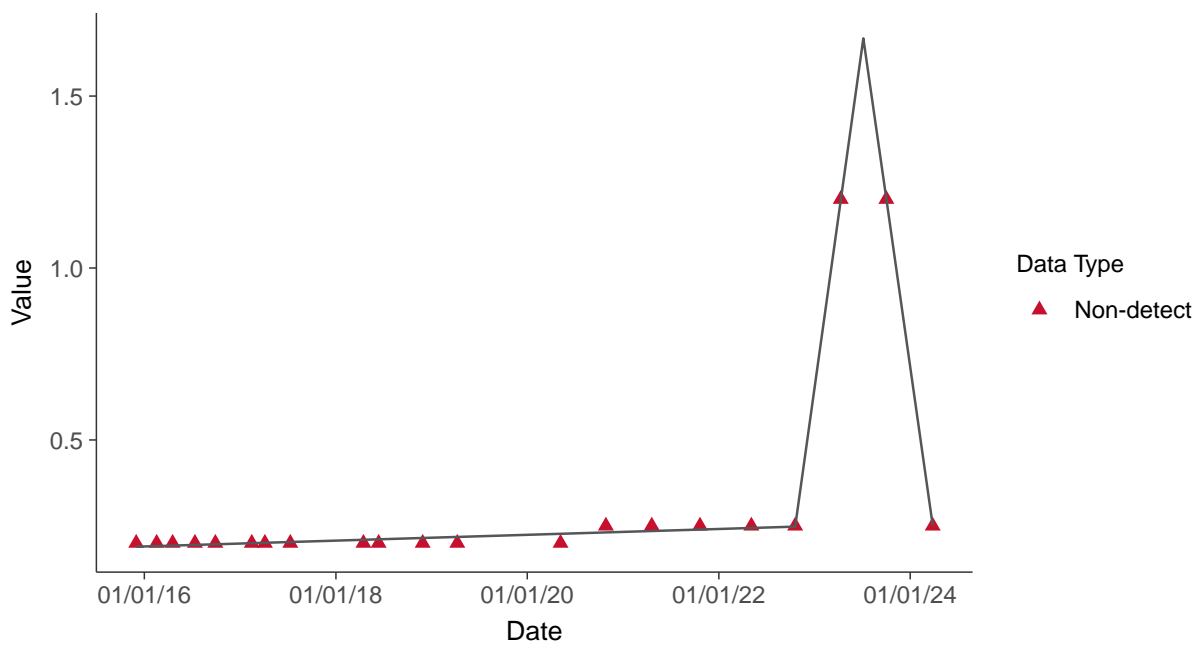




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-15023 (ug/L)



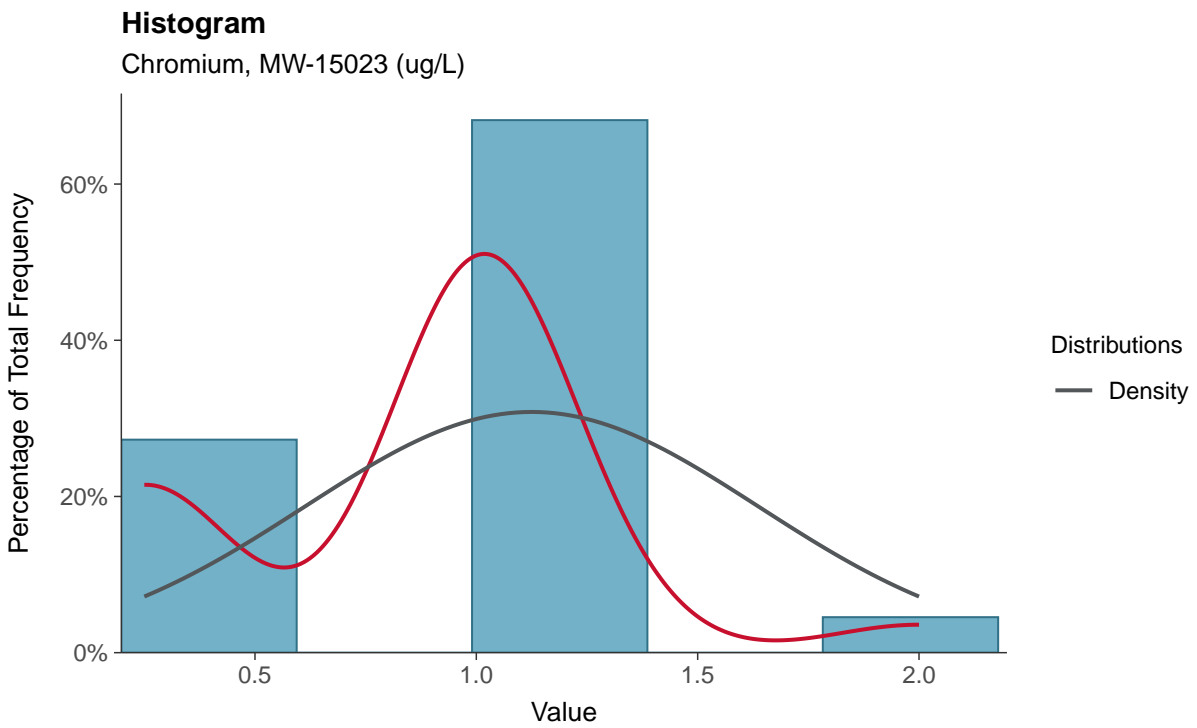
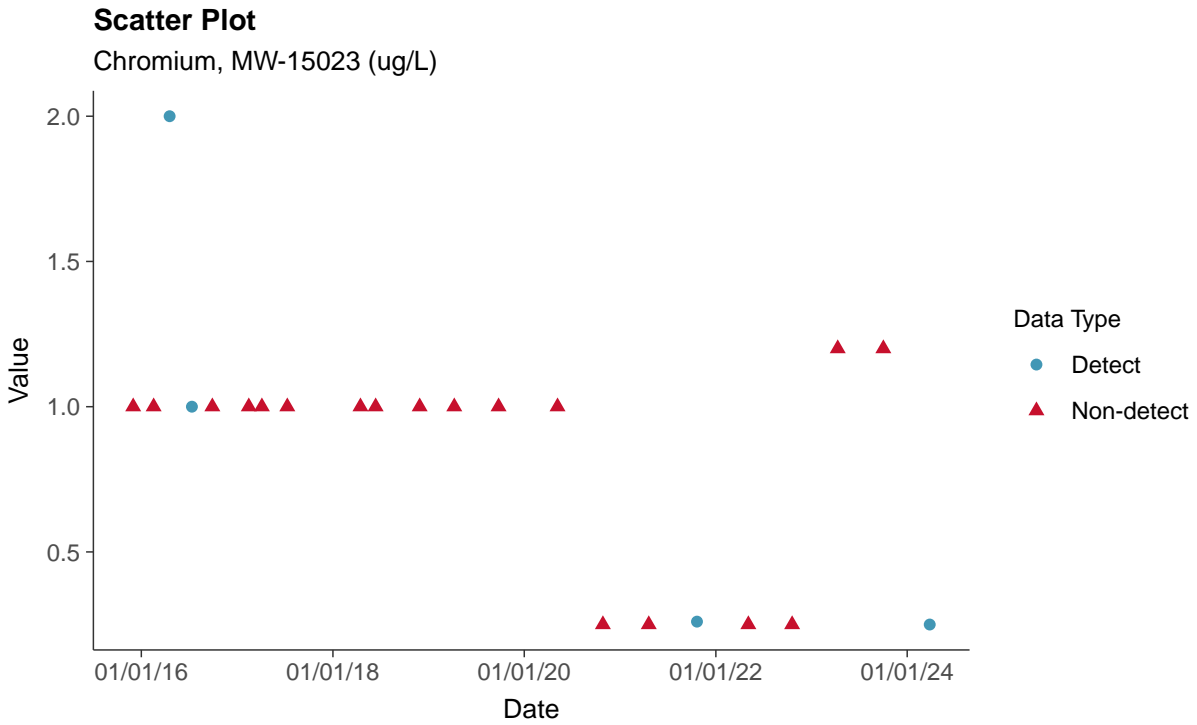
Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-15023 (ug/L)





Appendix IV: Chromium, MW-15023

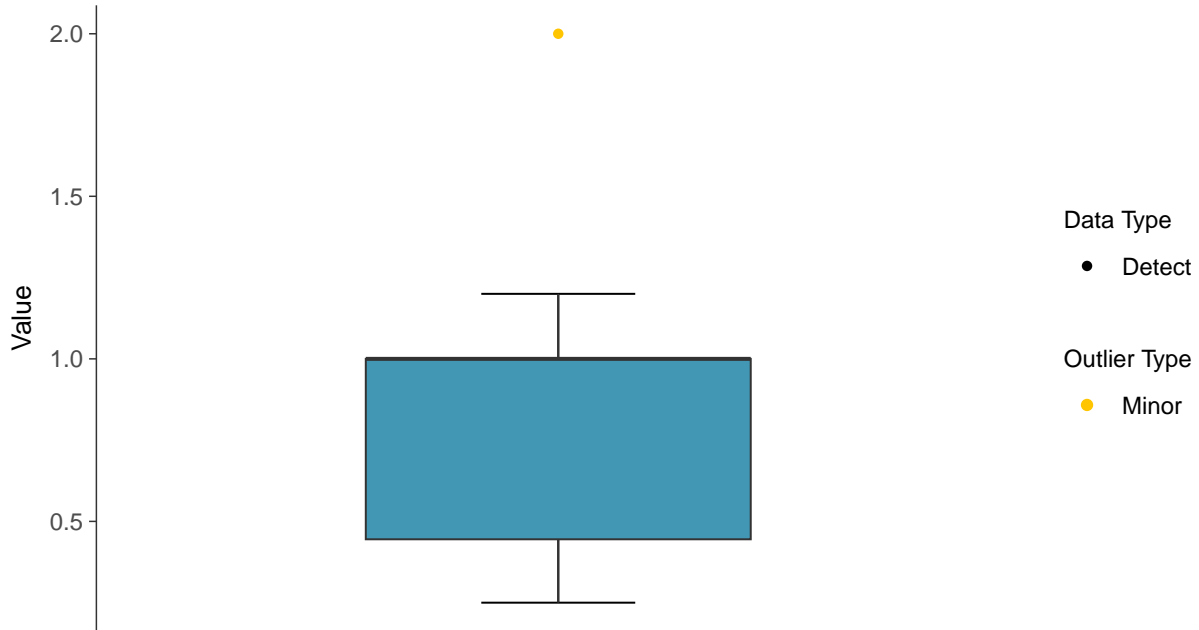
ID: 13_2_109





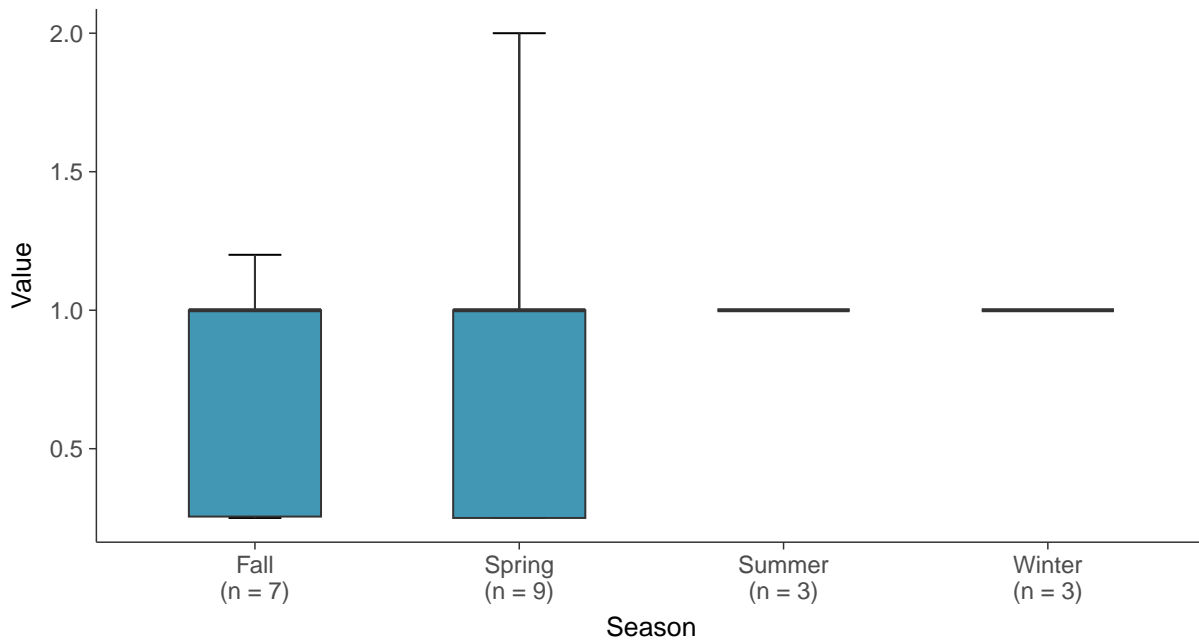
Boxplot

Chromium, MW-15023 (ug/L)



Boxplot by Season

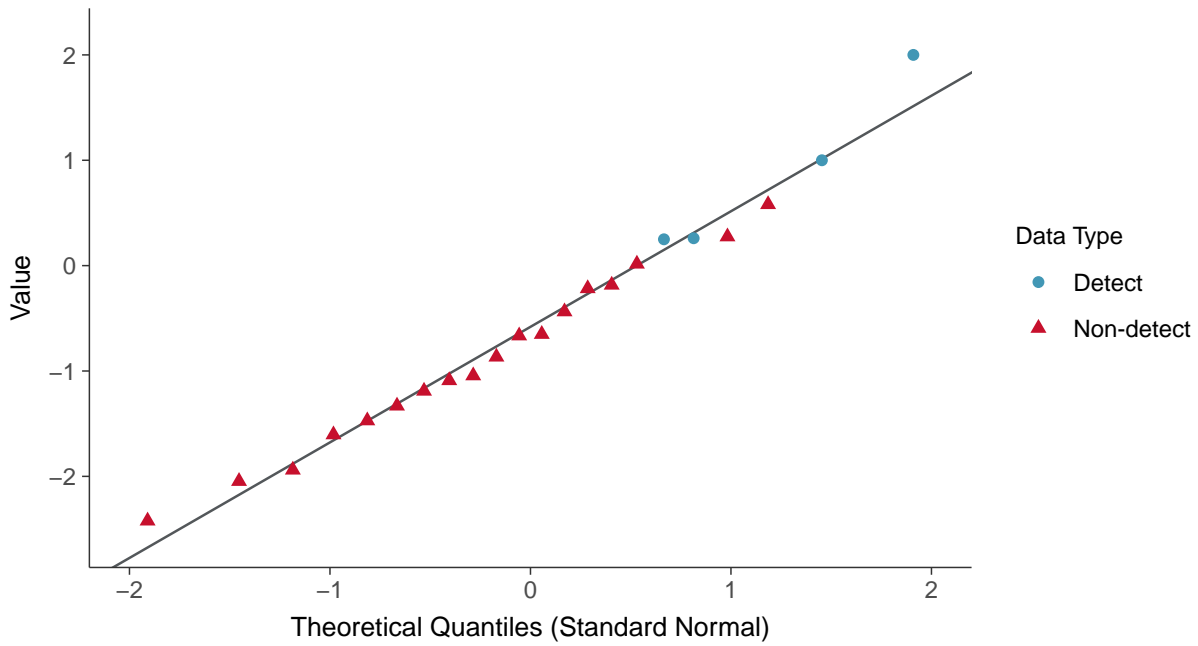
Chromium, MW-15023 (ug/L)





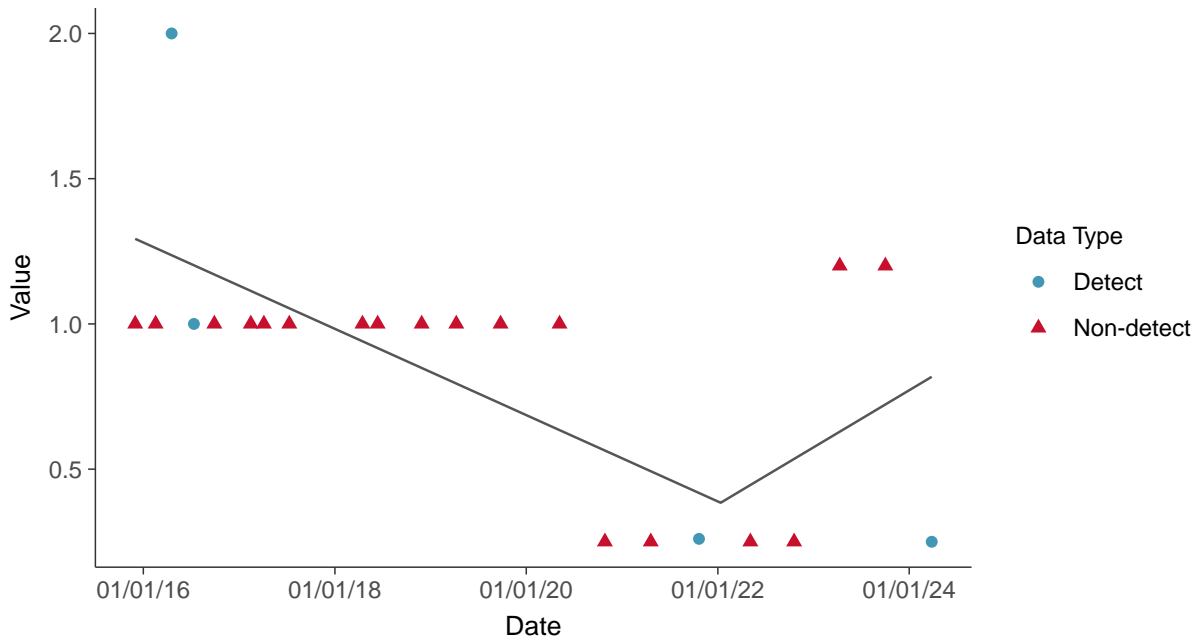
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear

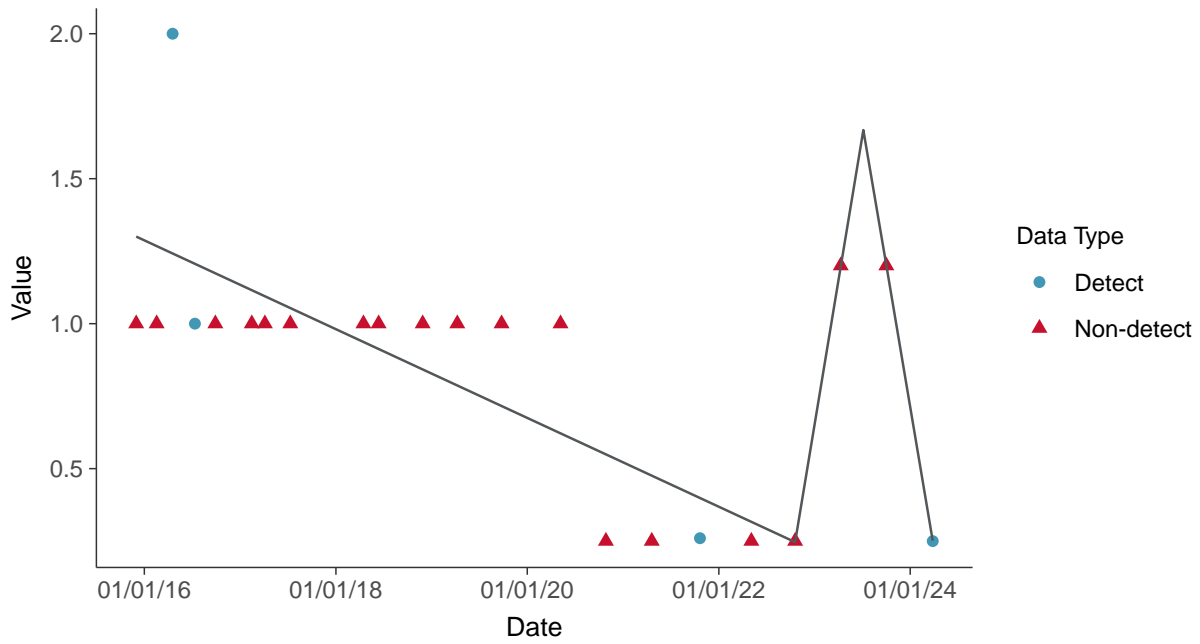
Chromium, MW-15023 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Chromium, MW-15023 (ug/L)



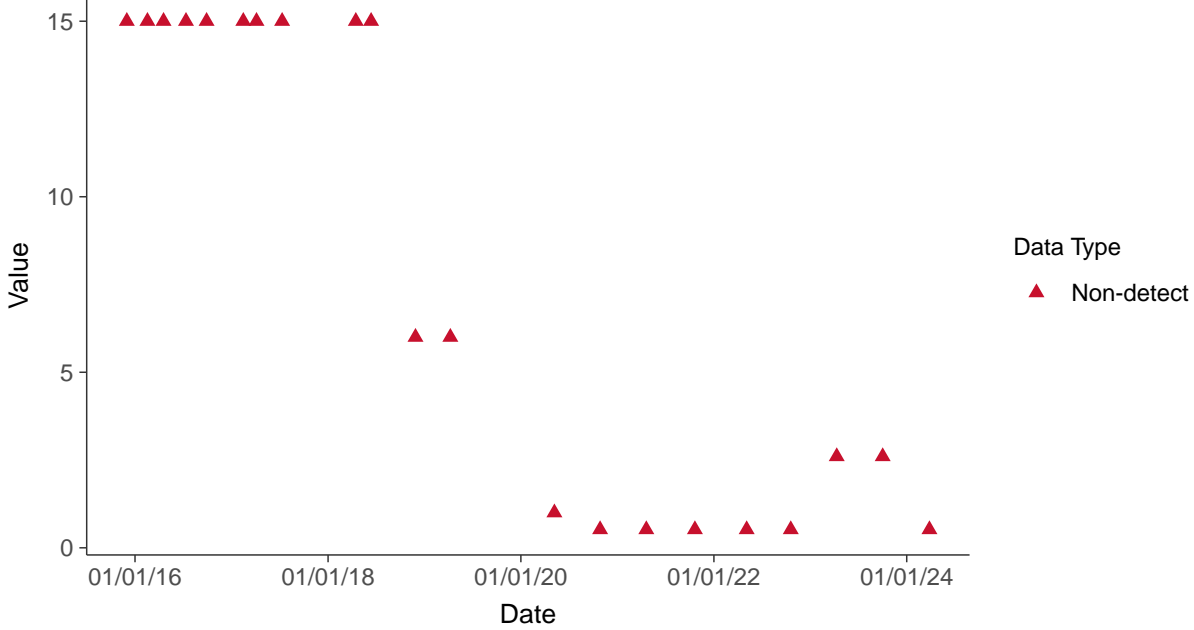


Appendix IV: Cobalt, MW-15023

ID: 13_2_110

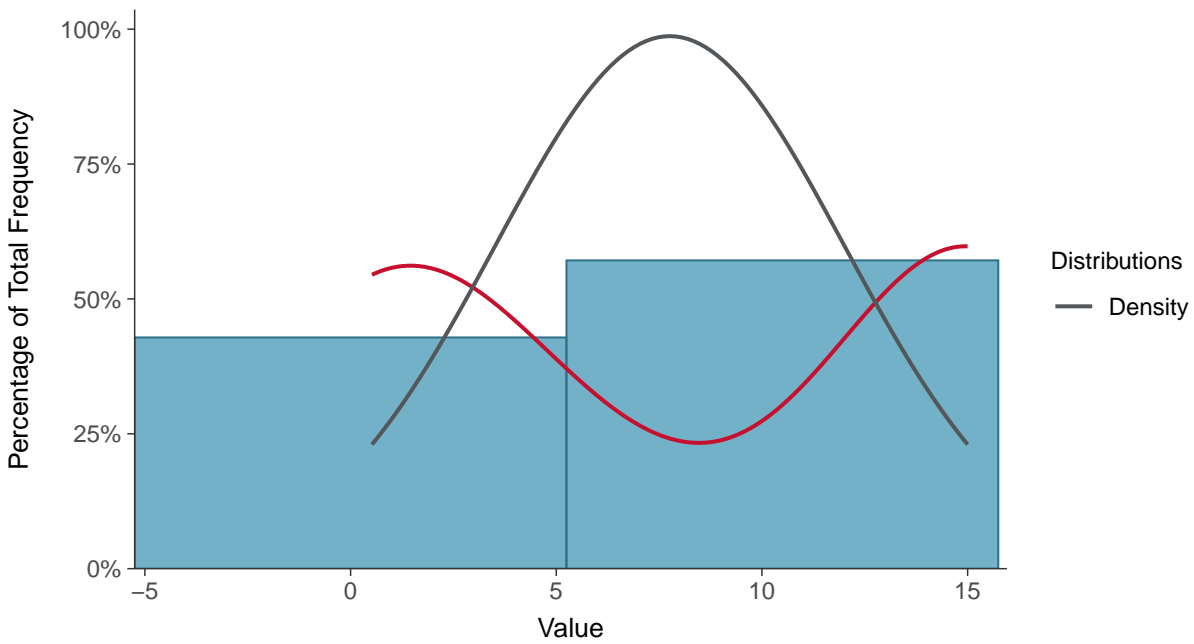
Scatter Plot

Cobalt, MW-15023 (ug/L)



Histogram

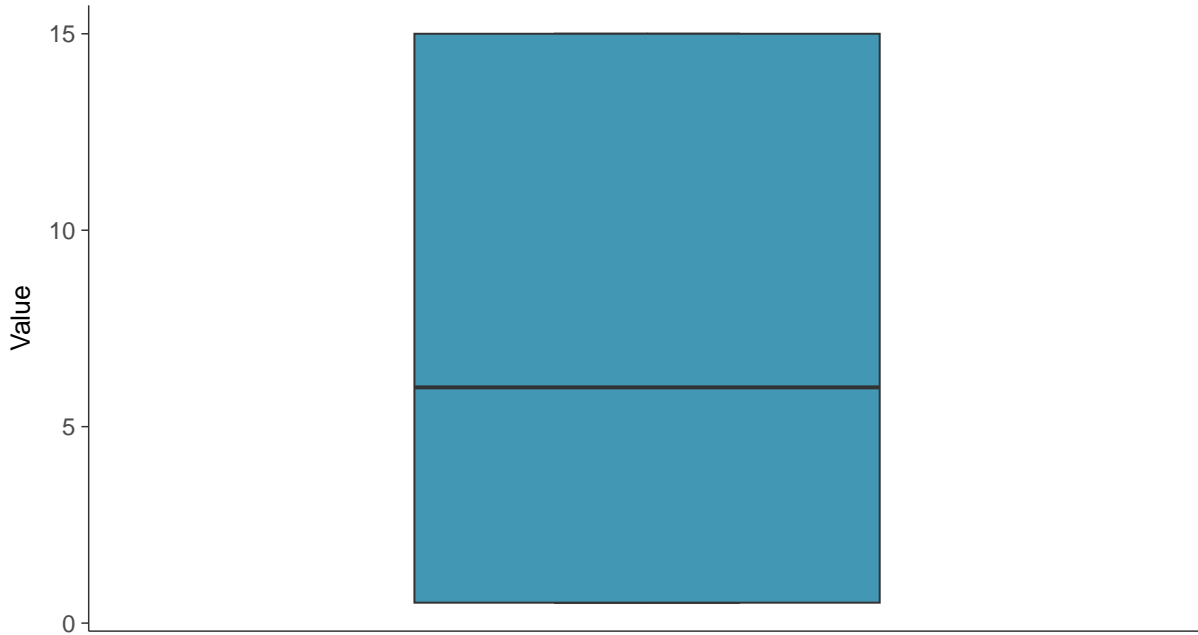
Cobalt, MW-15023 (ug/L)





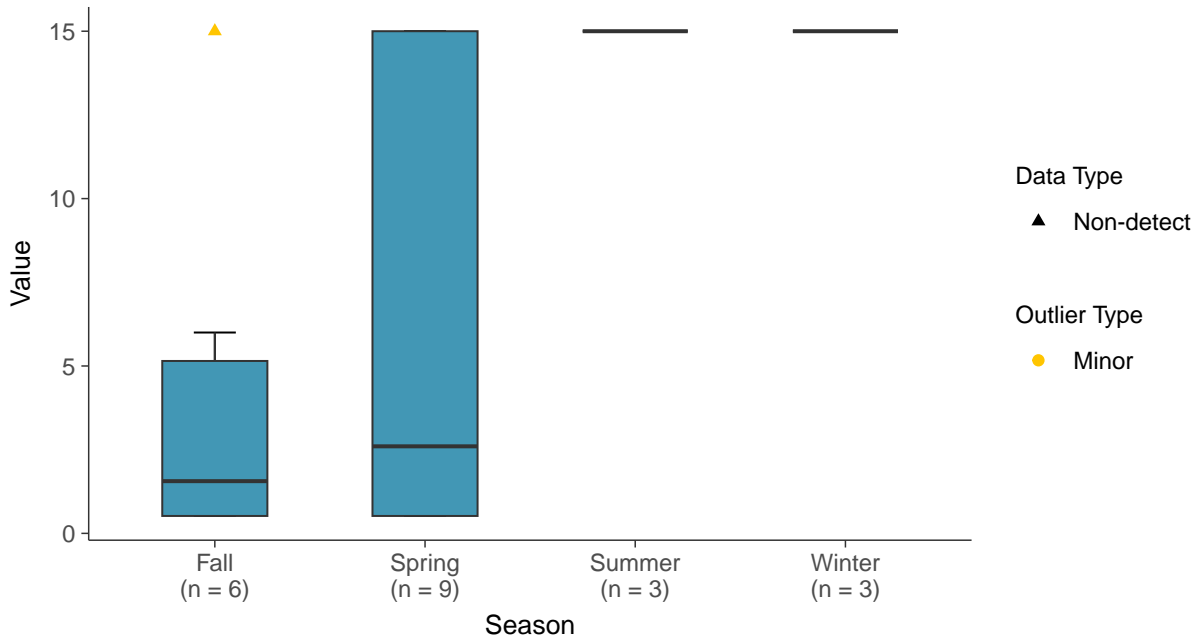
Boxplot

Cobalt, MW-15023 (ug/L)



Boxplot by Season

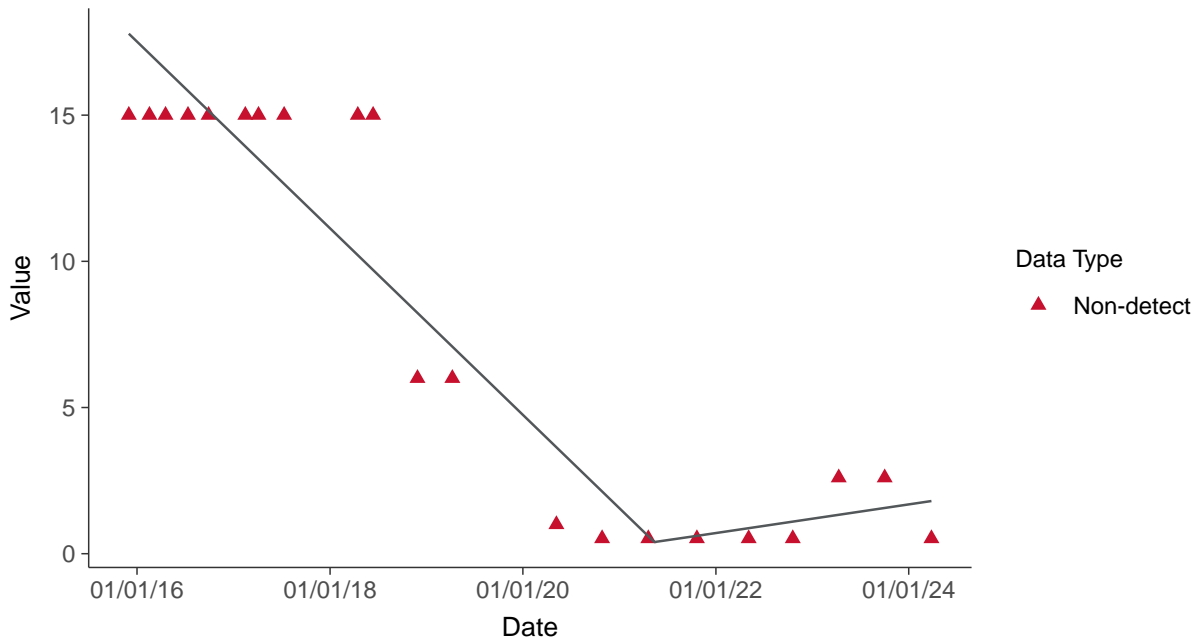
Cobalt, MW-15023 (ug/L)





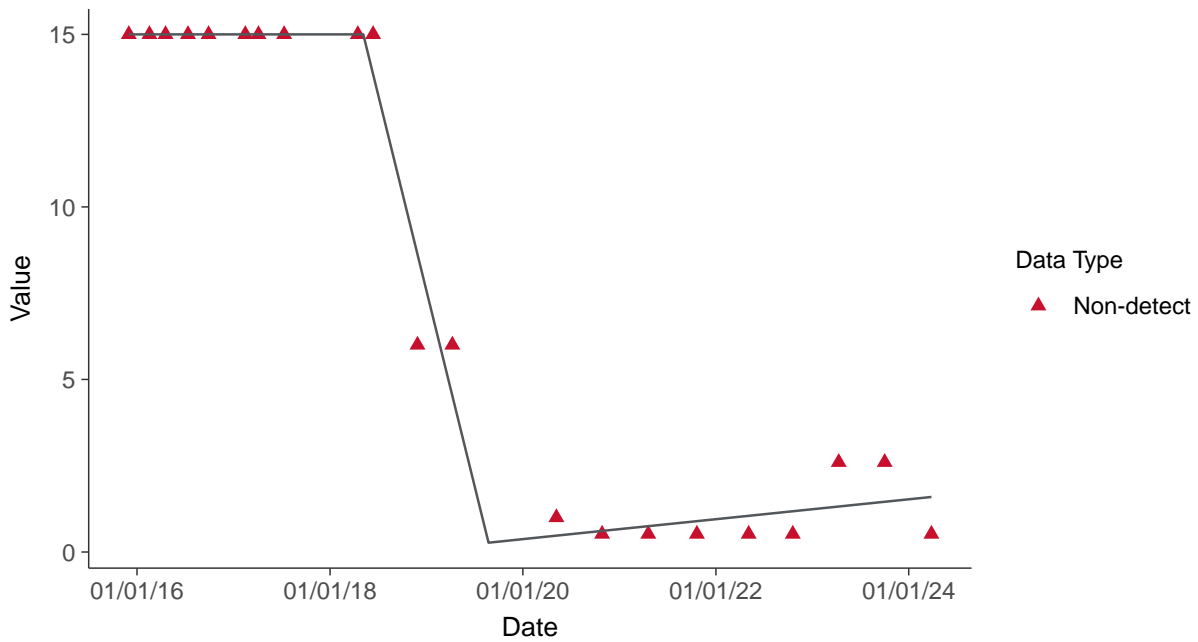
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

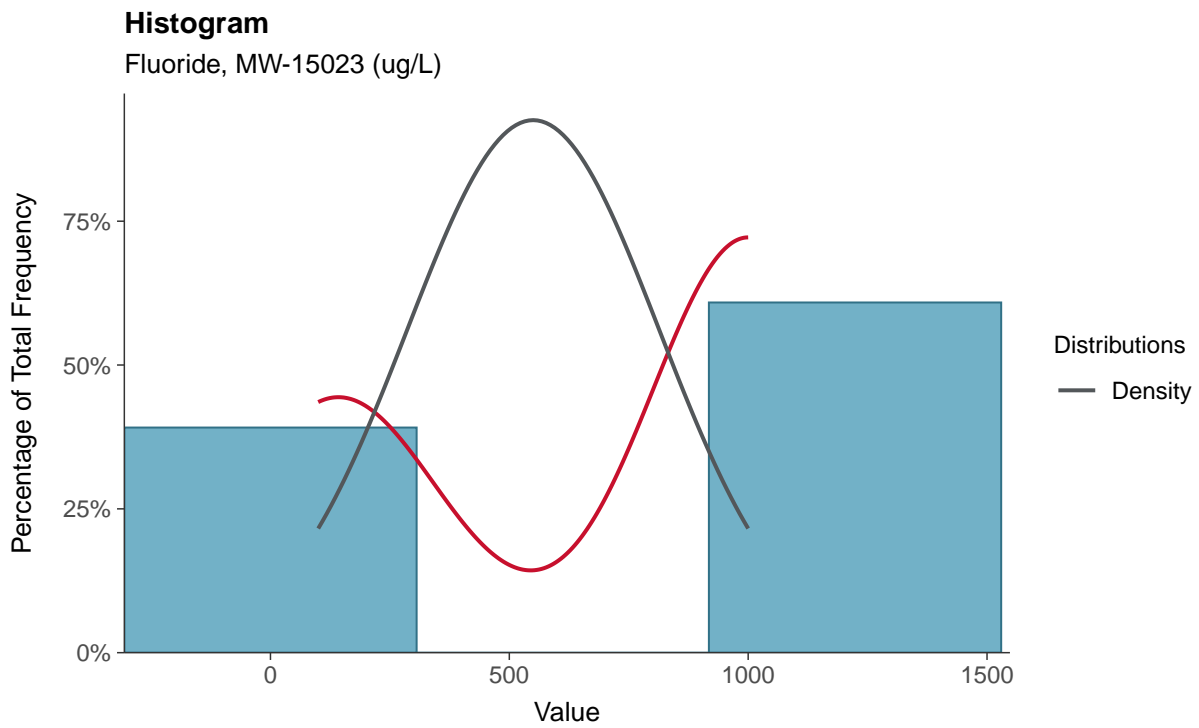
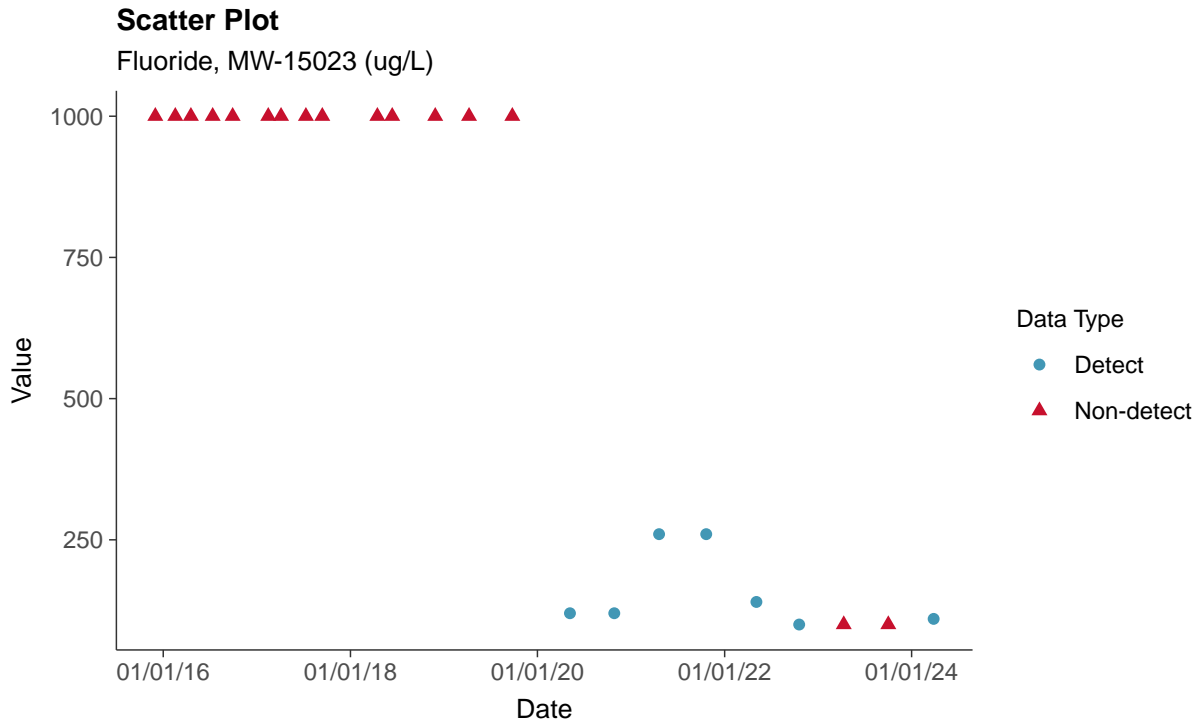
Cobalt, MW-15023 (ug/L)





Appendix IV: Fluoride, MW-15023

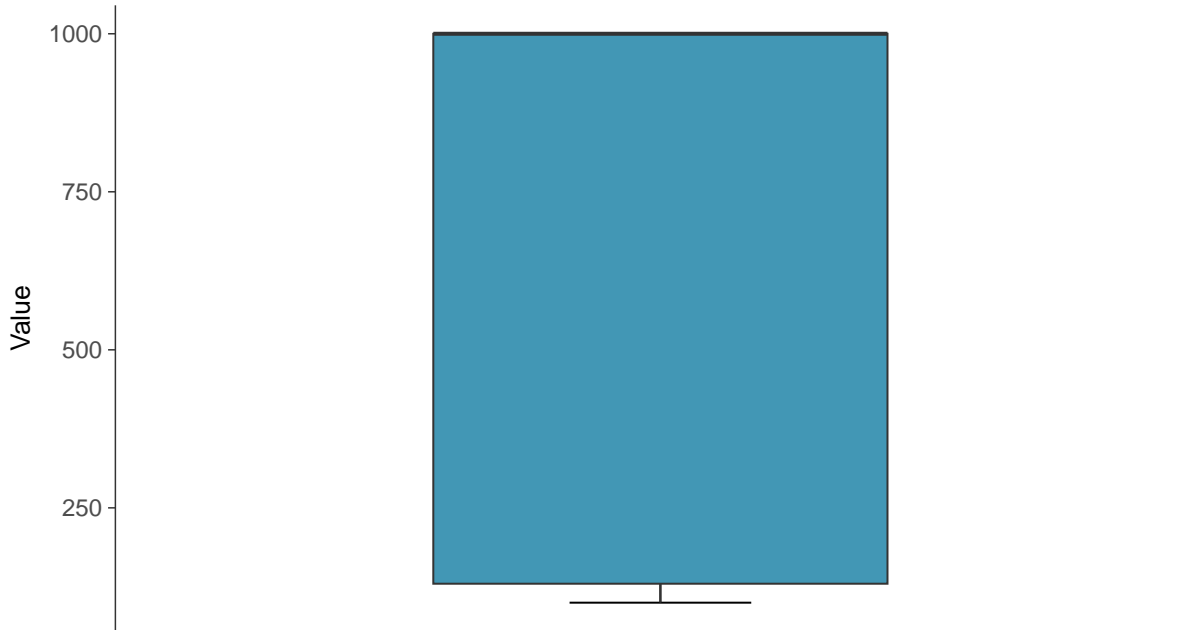
ID: 13_2_114





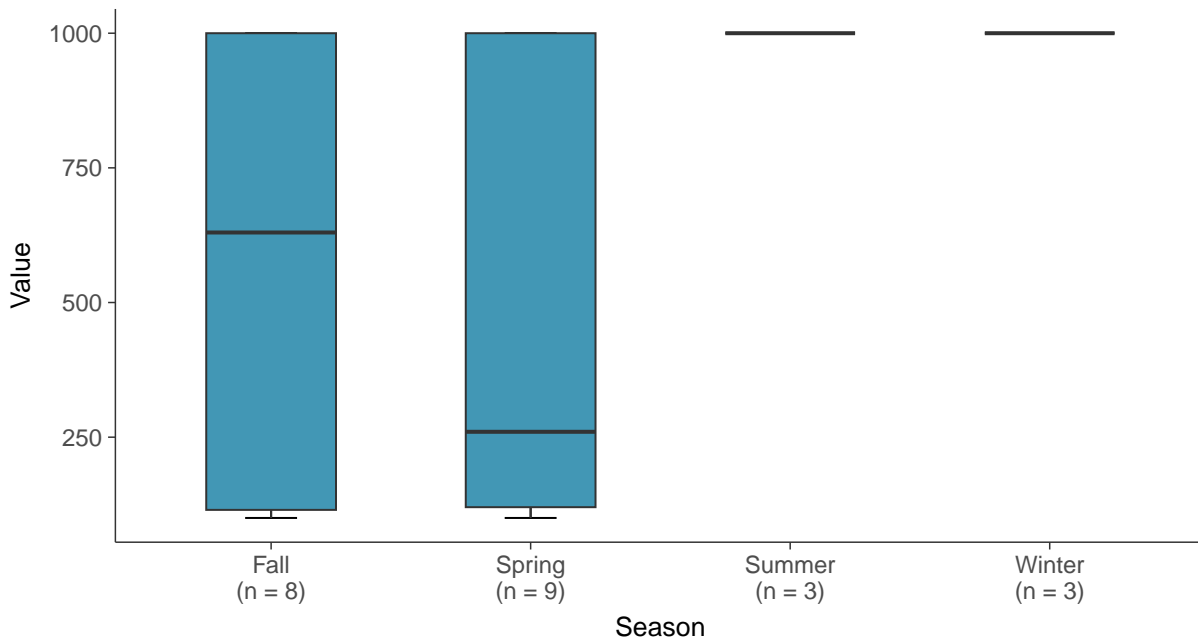
Boxplot

Fluoride, MW-15023 (ug/L)



Boxplot by Season

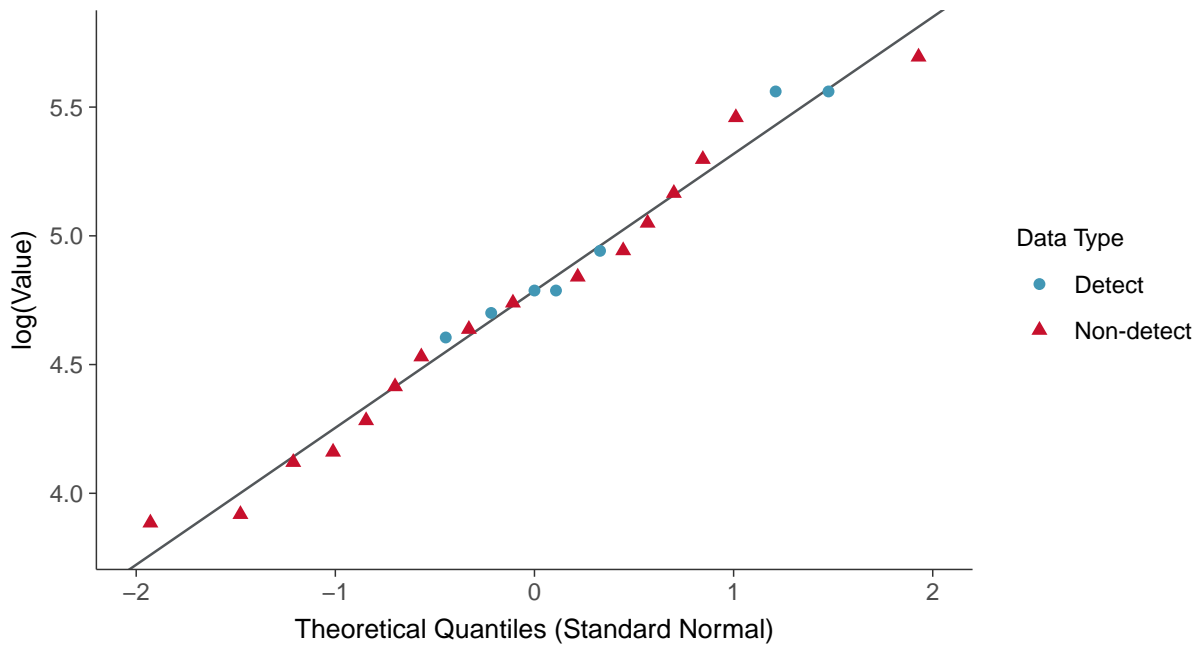
Fluoride, MW-15023 (ug/L)





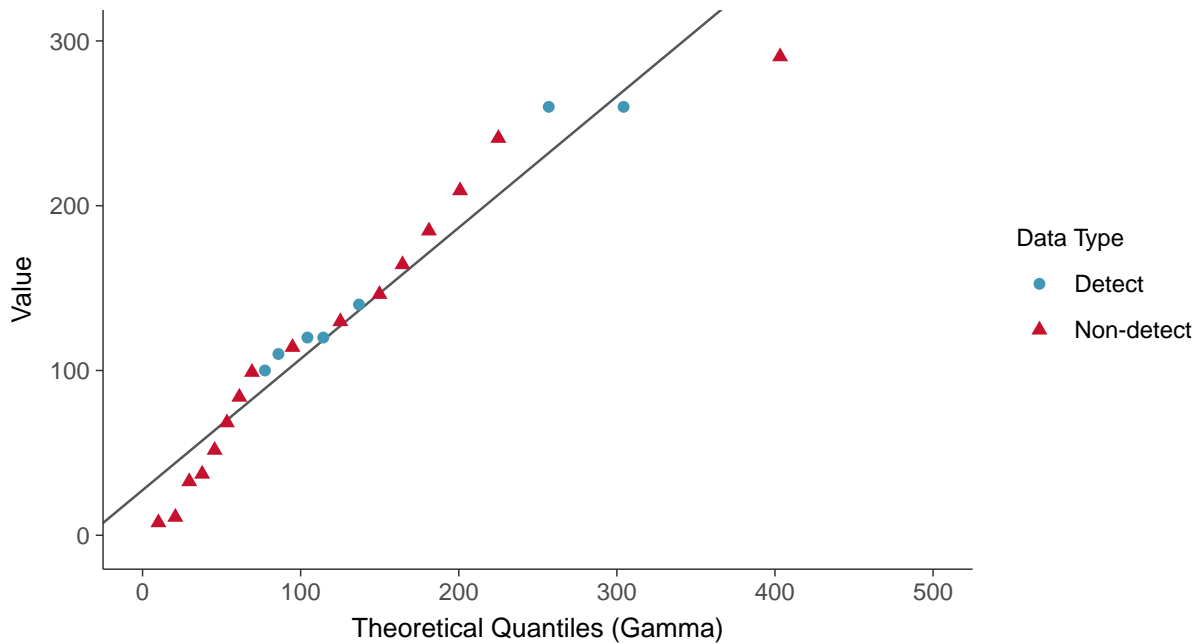
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15023 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

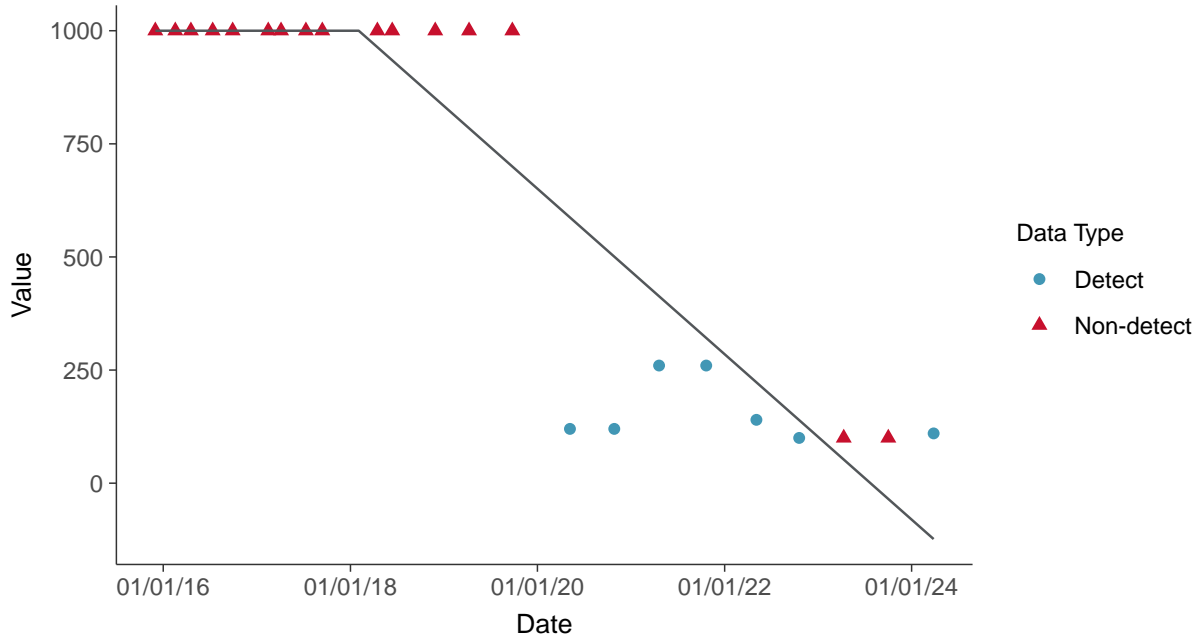
Fluoride, MW-15023 (ug/L)





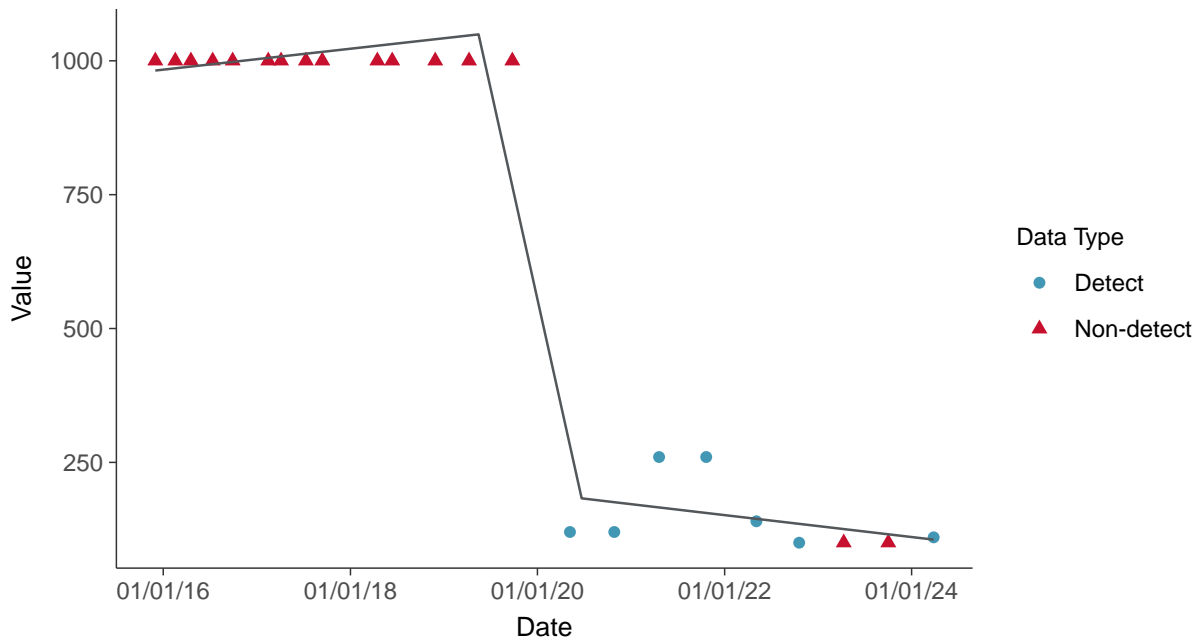
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

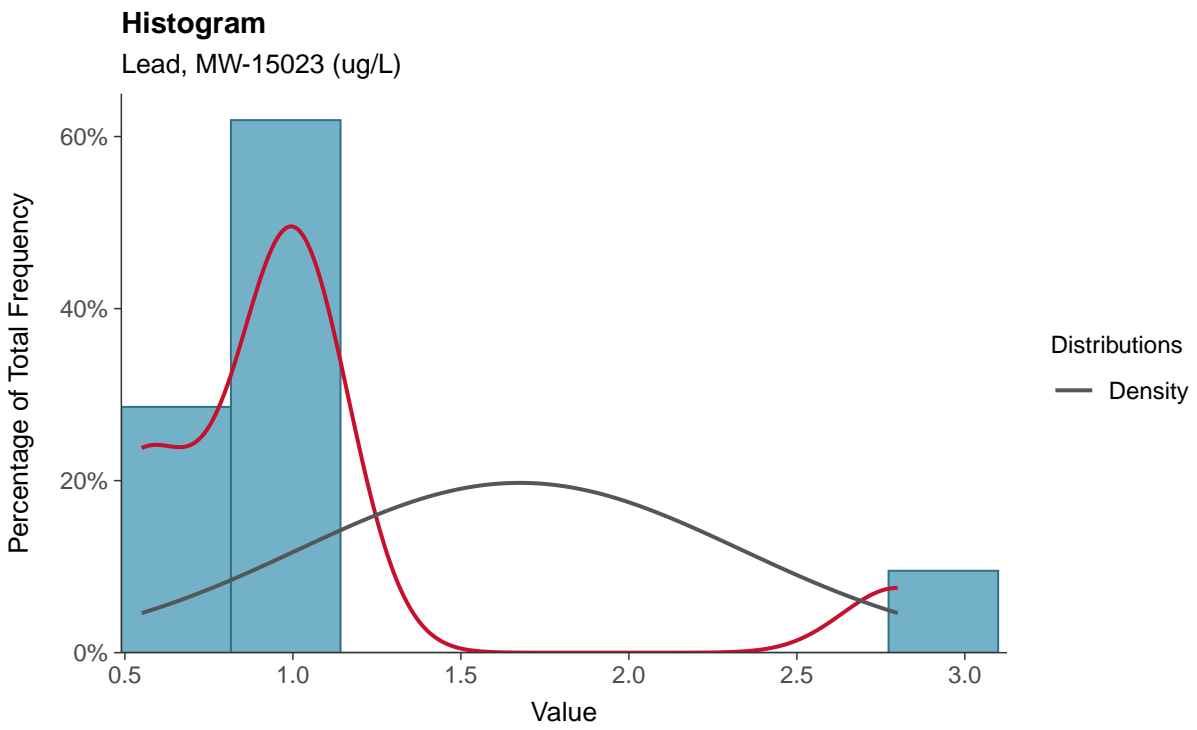
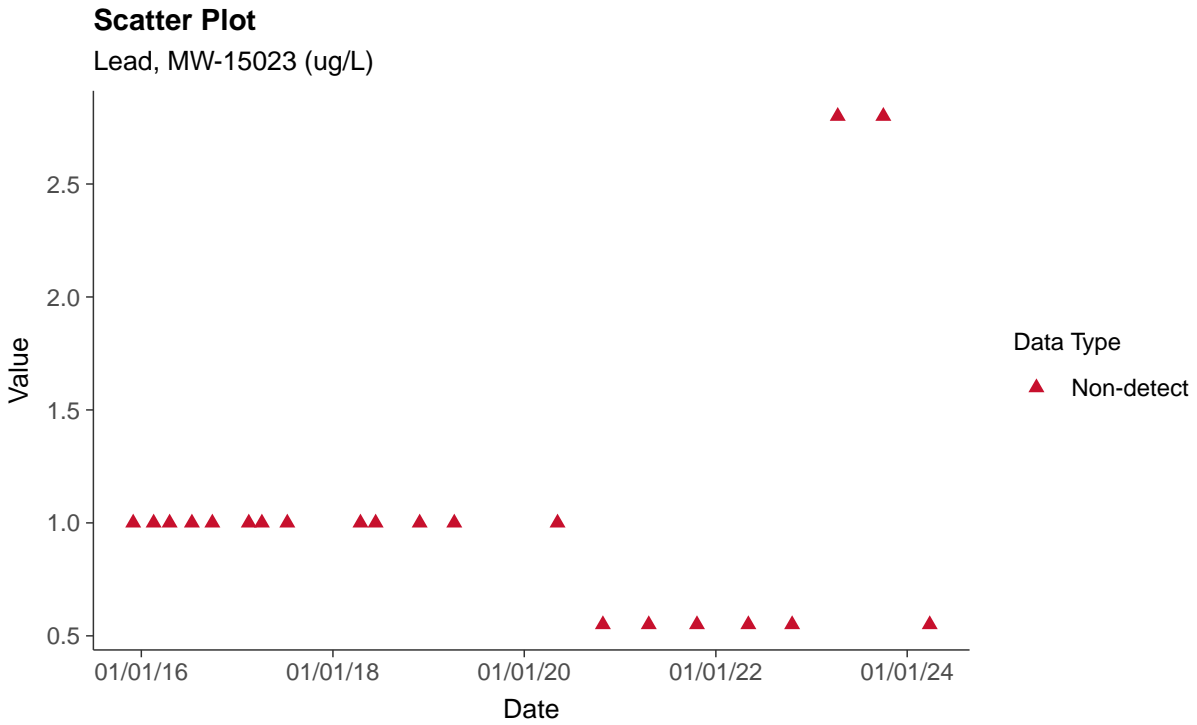
Fluoride, MW-15023 (ug/L)





Appendix IV: Lead, MW-15023

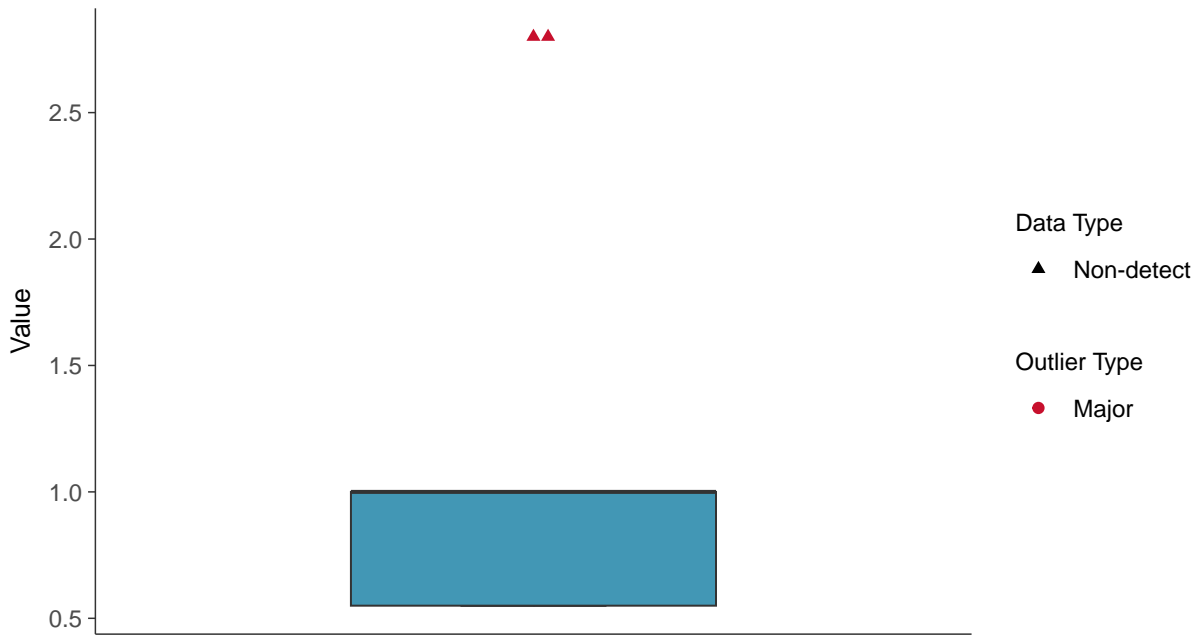
ID: 13_2_116





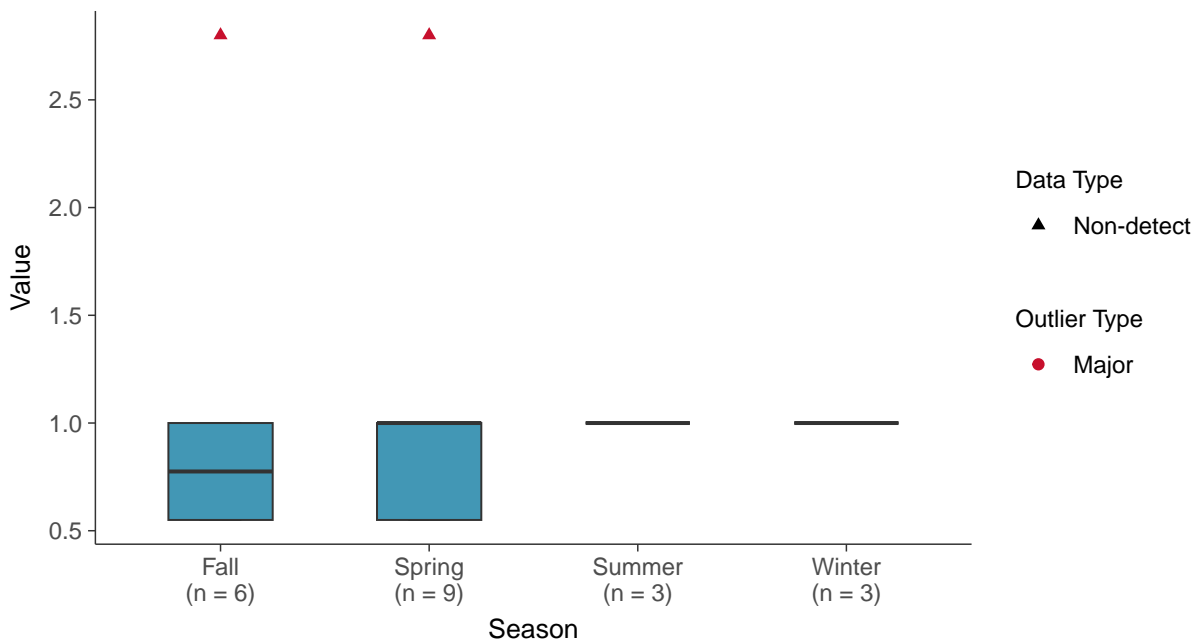
Boxplot

Lead, MW-15023 (ug/L)



Boxplot by Season

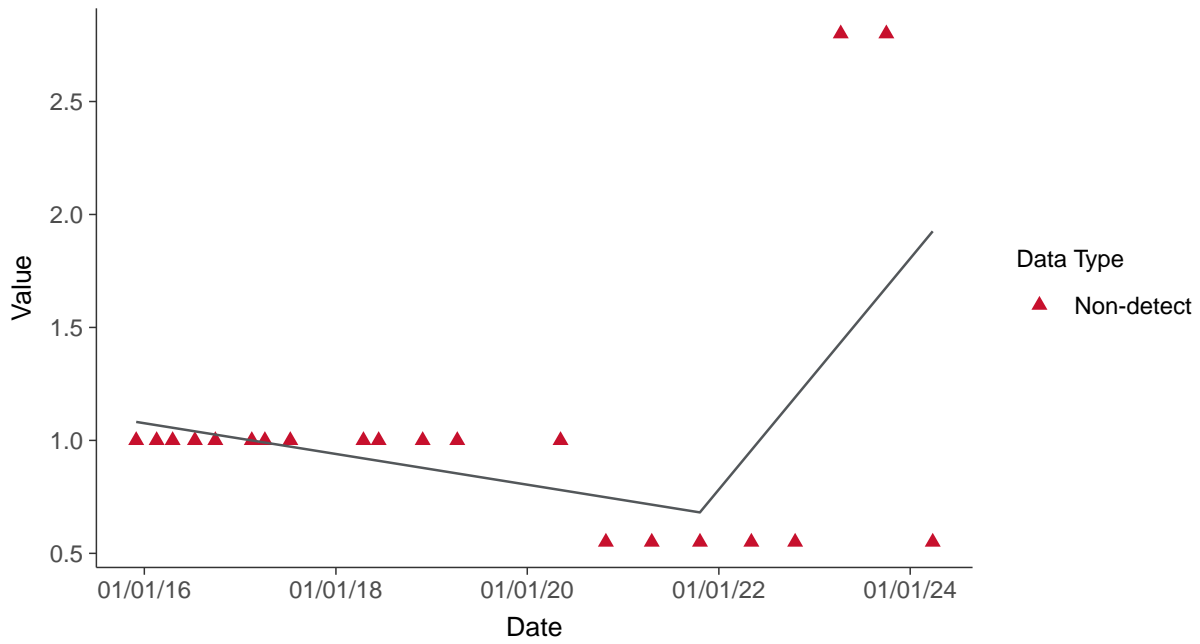
Lead, MW-15023 (ug/L)





Trend Regression: Piecewise Linear-Linear

Lead, MW-15023 (ug/L)



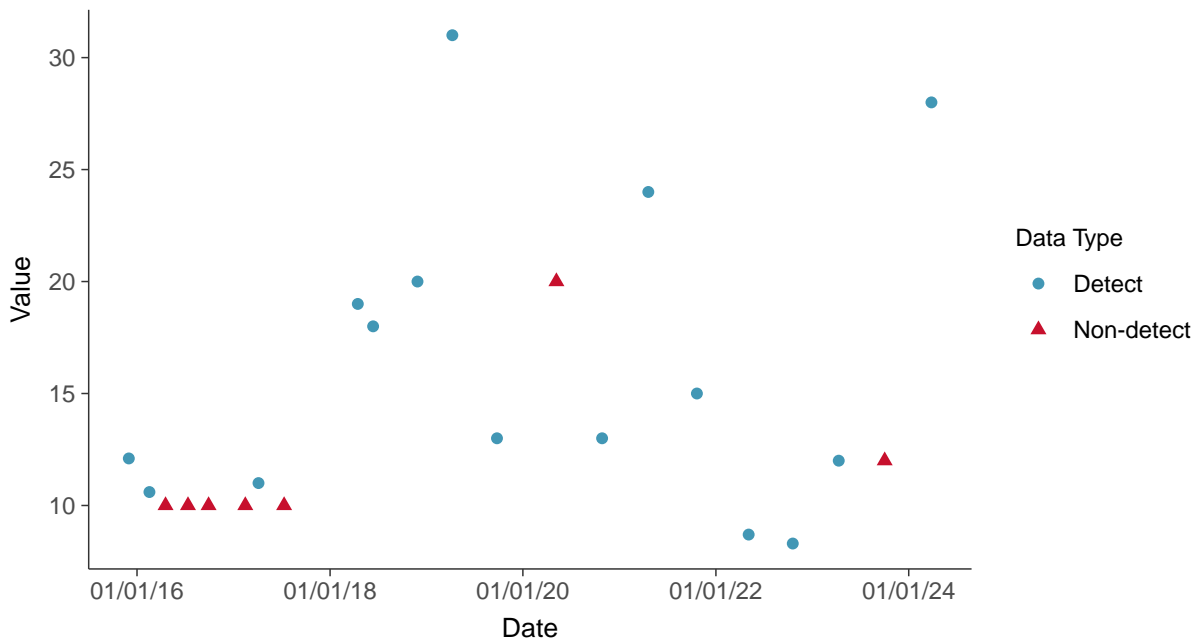


Appendix IV: Lithium, MW-15023

ID: 13_2_117

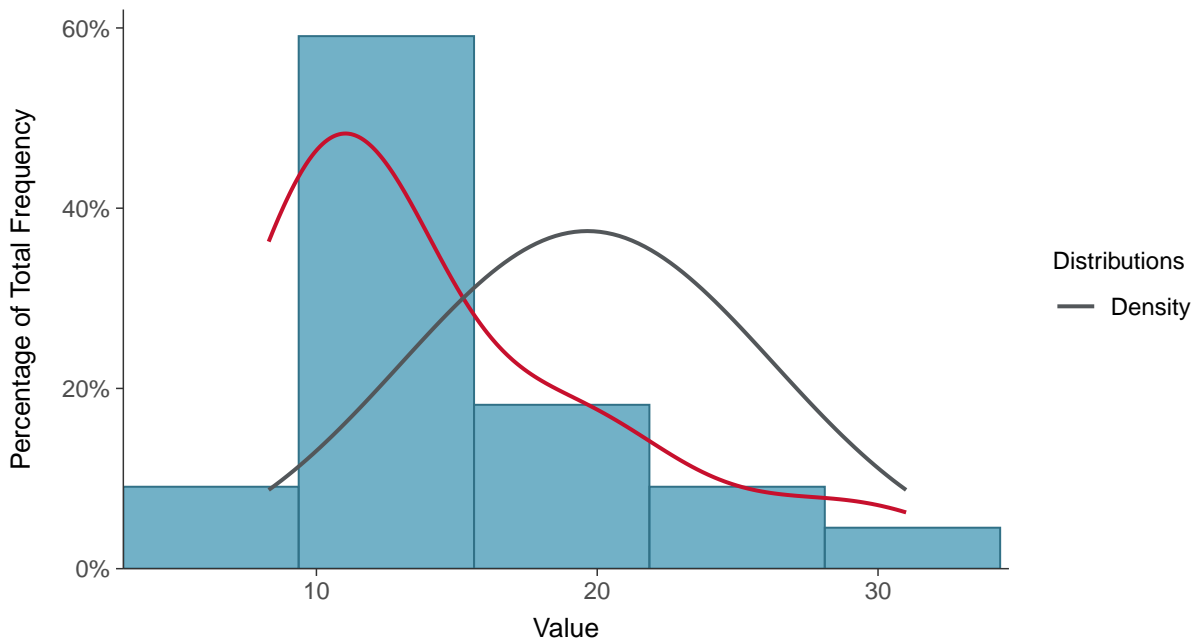
Scatter Plot

Lithium, MW-15023 (ug/L)



Histogram

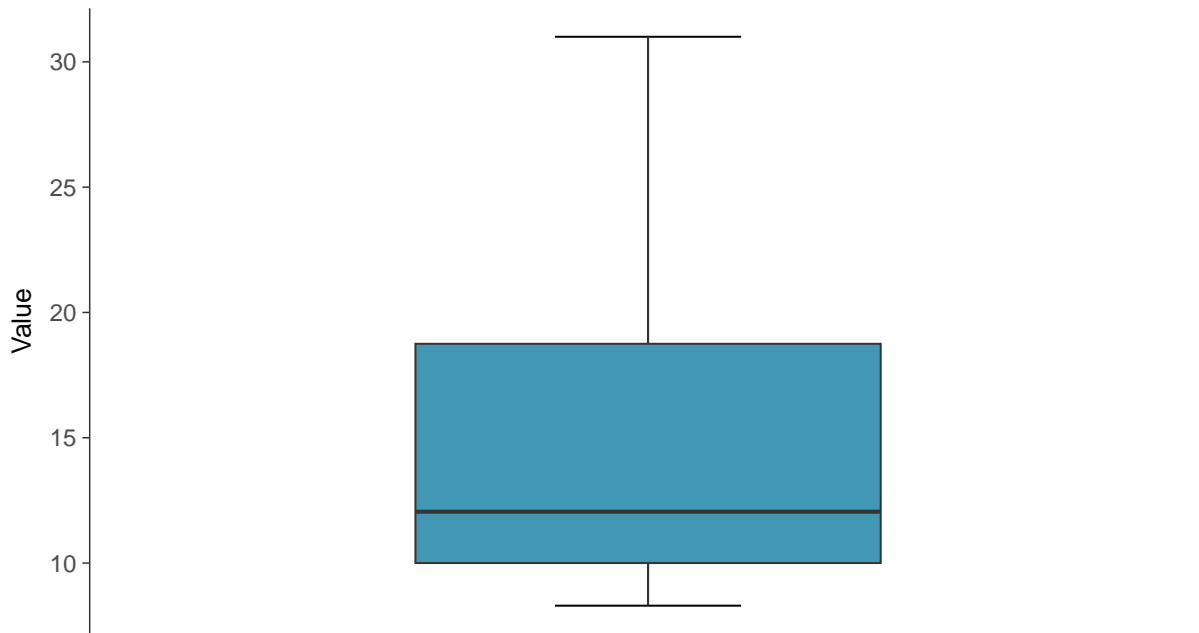
Lithium, MW-15023 (ug/L)





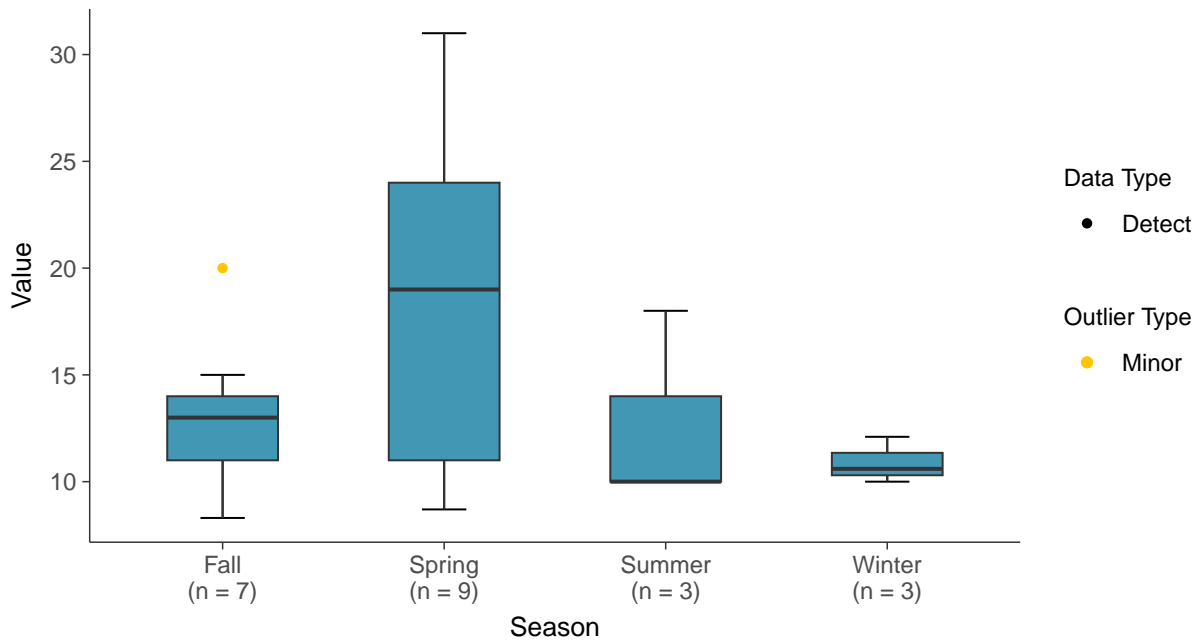
Boxplot

Lithium, MW-15023 (ug/L)



Boxplot by Season

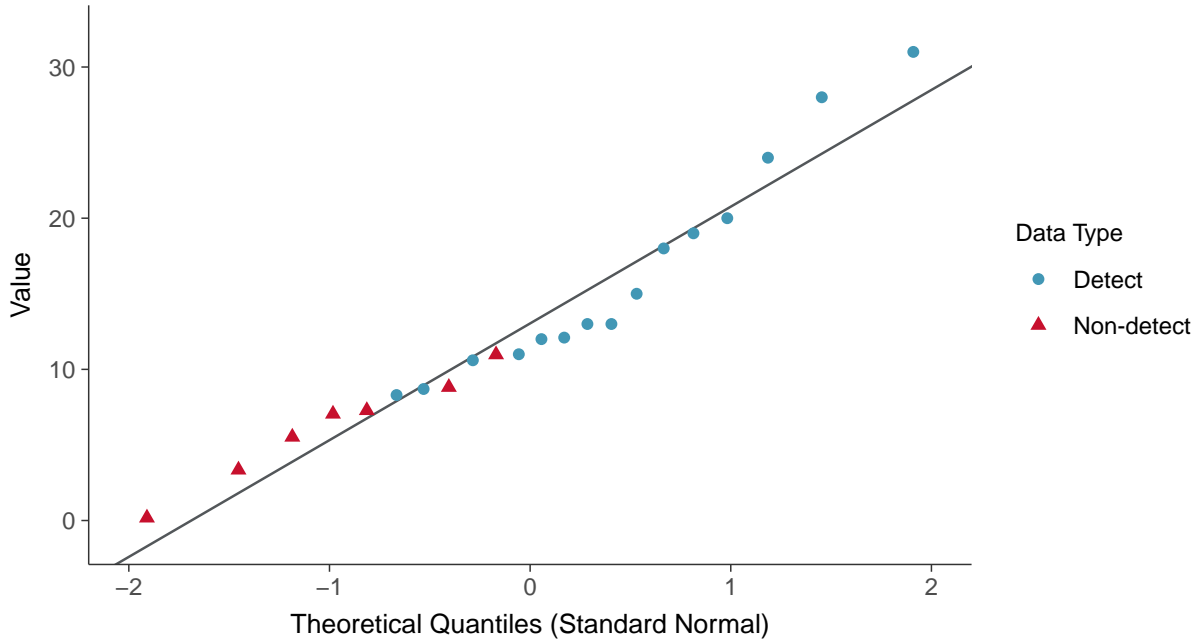
Lithium, MW-15023 (ug/L)





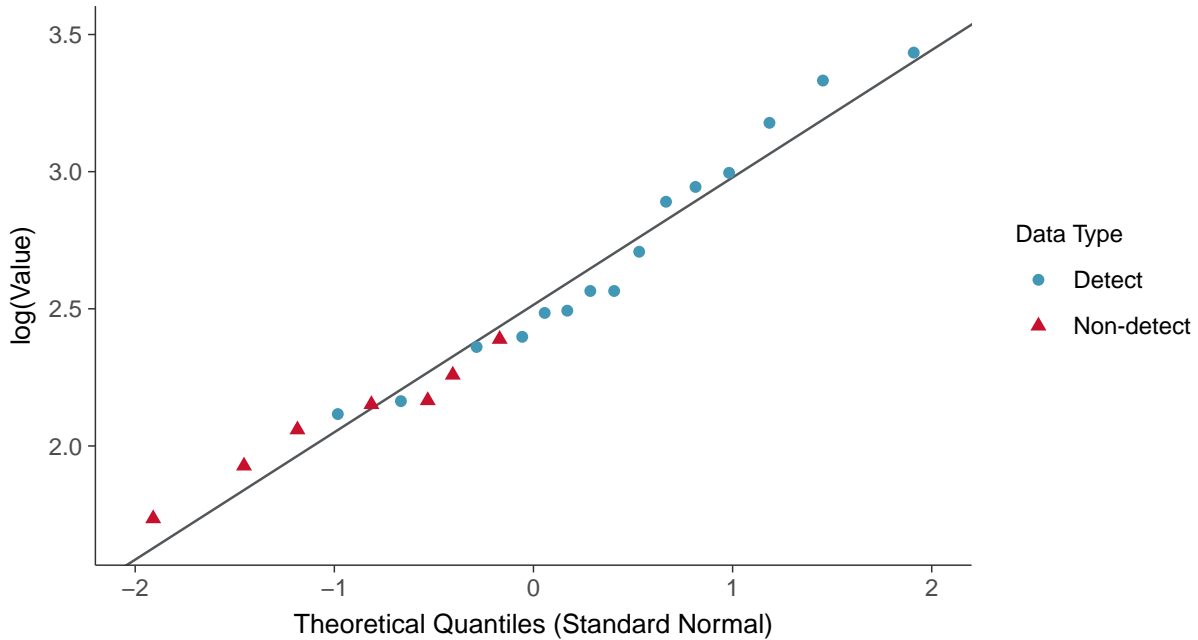
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15023 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

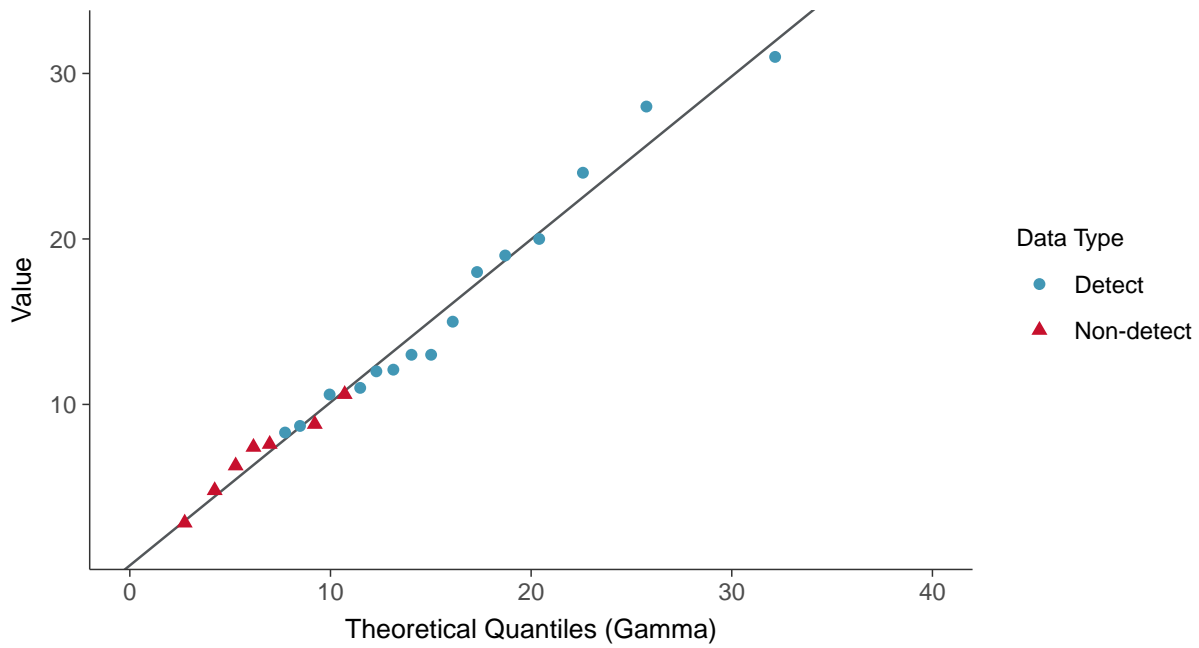
Lithium, MW-15023 (ug/L)





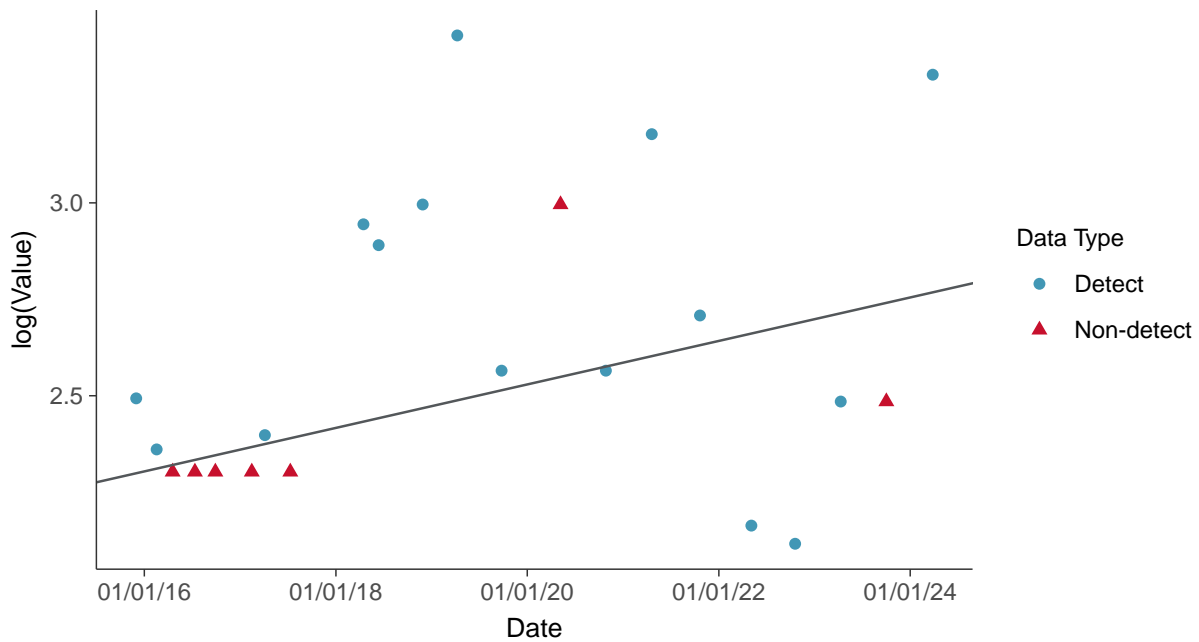
Gamma Q-Q plot using ROS Imputed Estimates

Lithium, MW-15023 (ug/L)



Trend Regression: Lognormal MLE

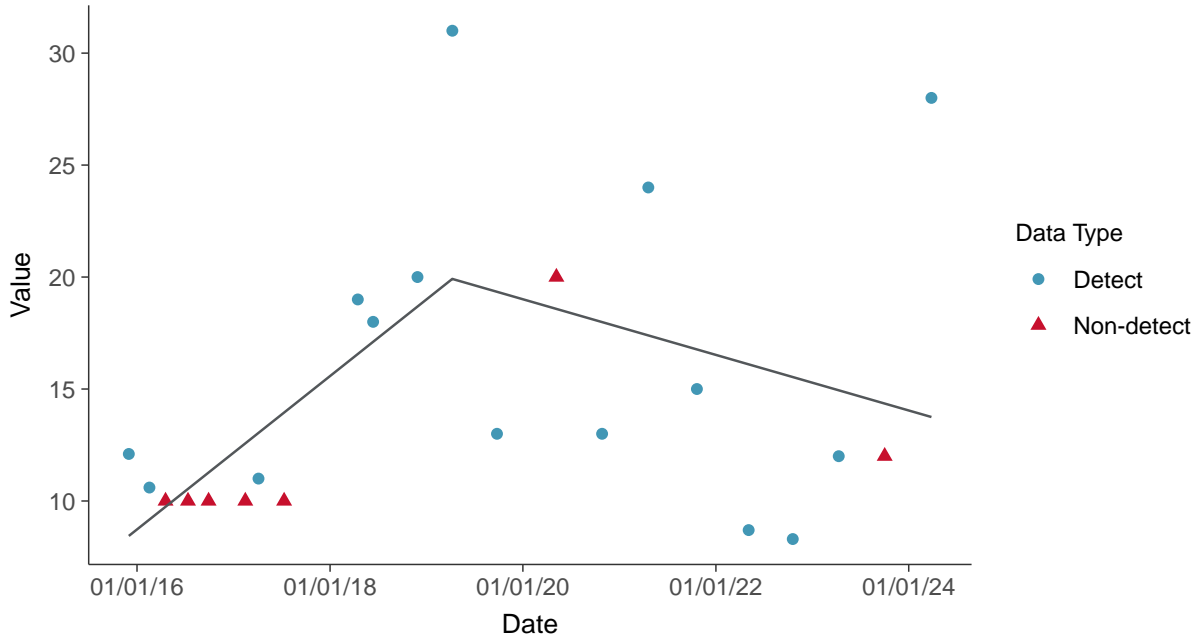
Lithium, MW-15023 (ug/L)





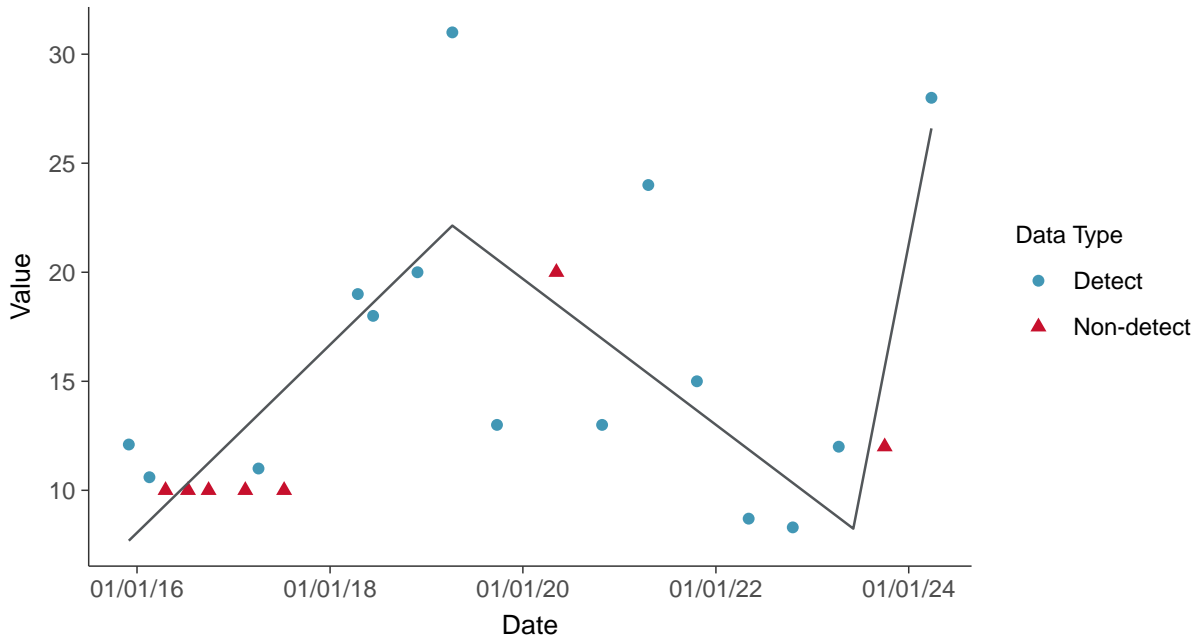
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

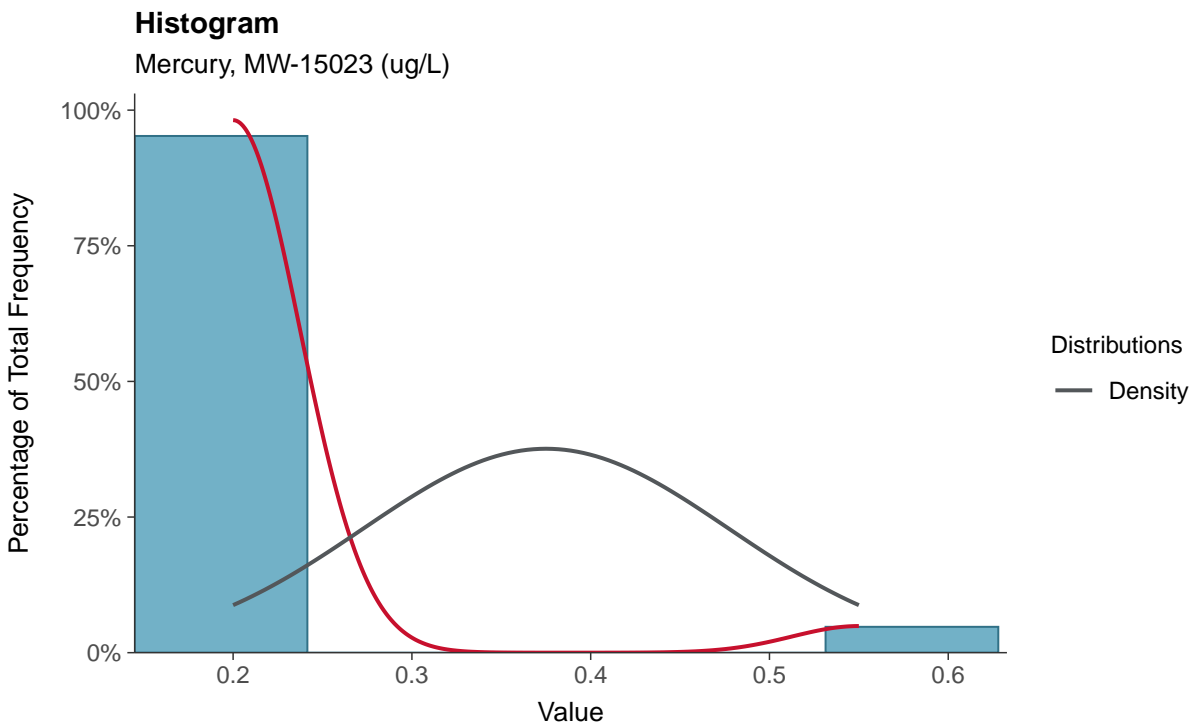
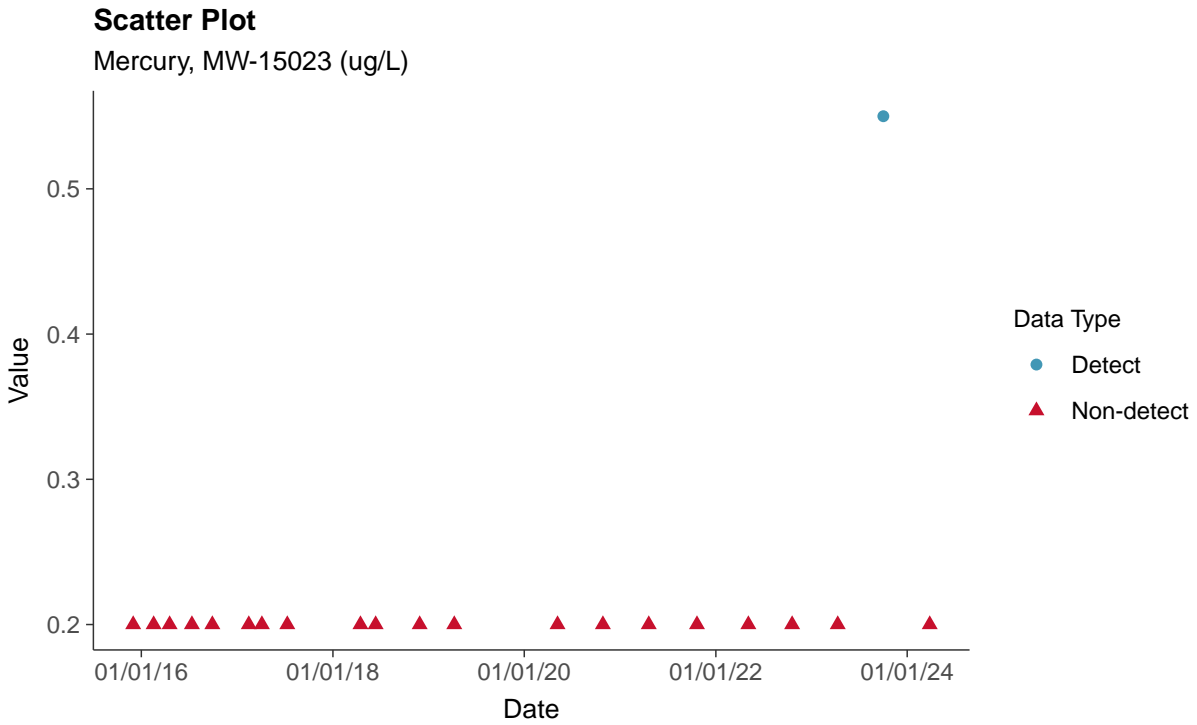
Lithium, MW-15023 (ug/L)





Appendix IV: Mercury, MW-15023

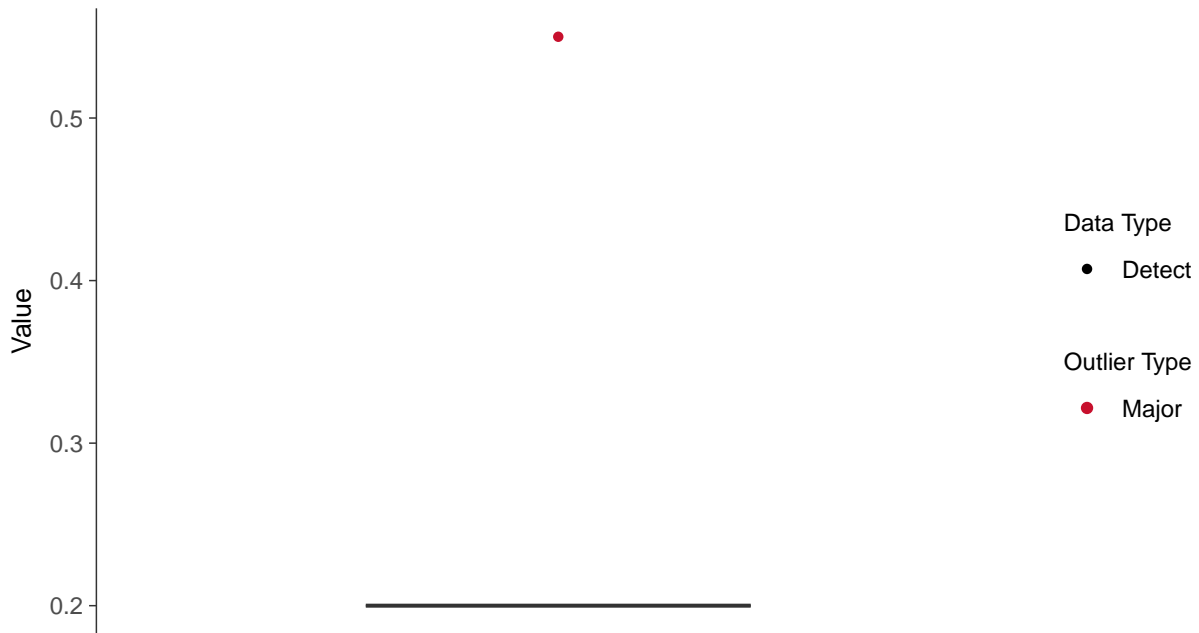
ID: 13_2_118





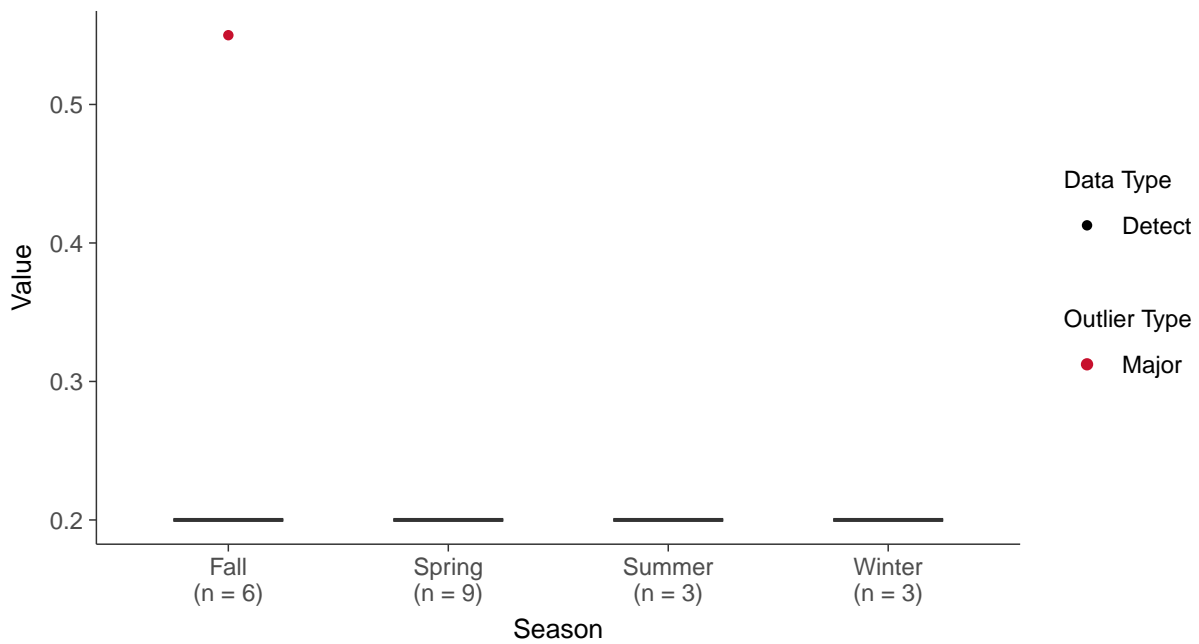
Boxplot

Mercury, MW-15023 (ug/L)



Boxplot by Season

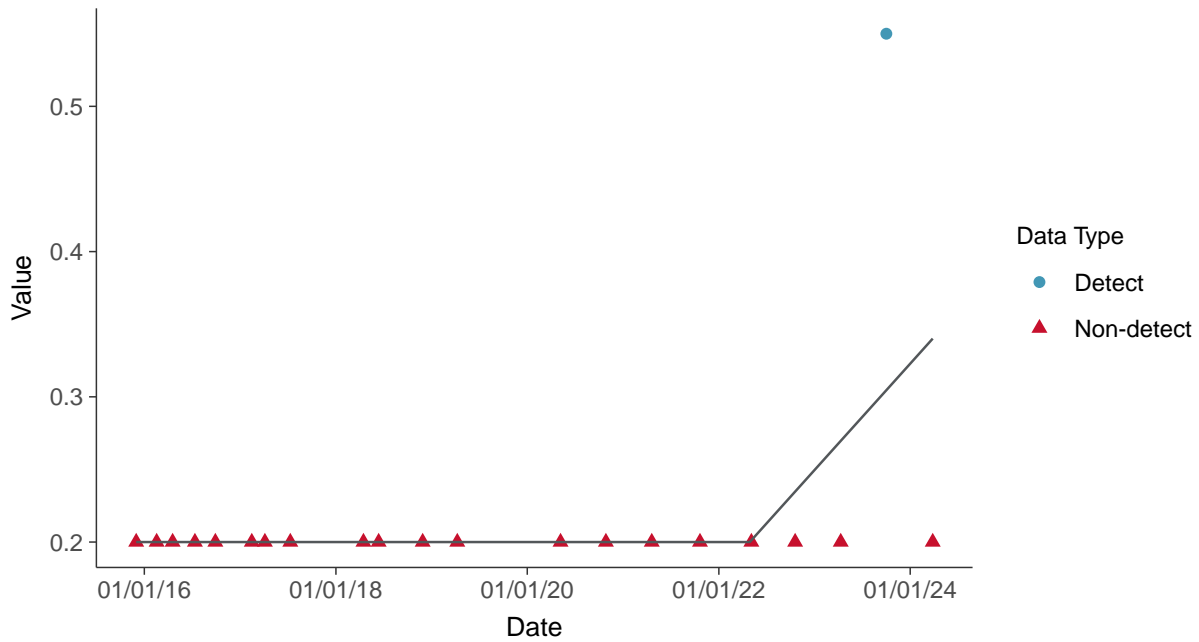
Mercury, MW-15023 (ug/L)





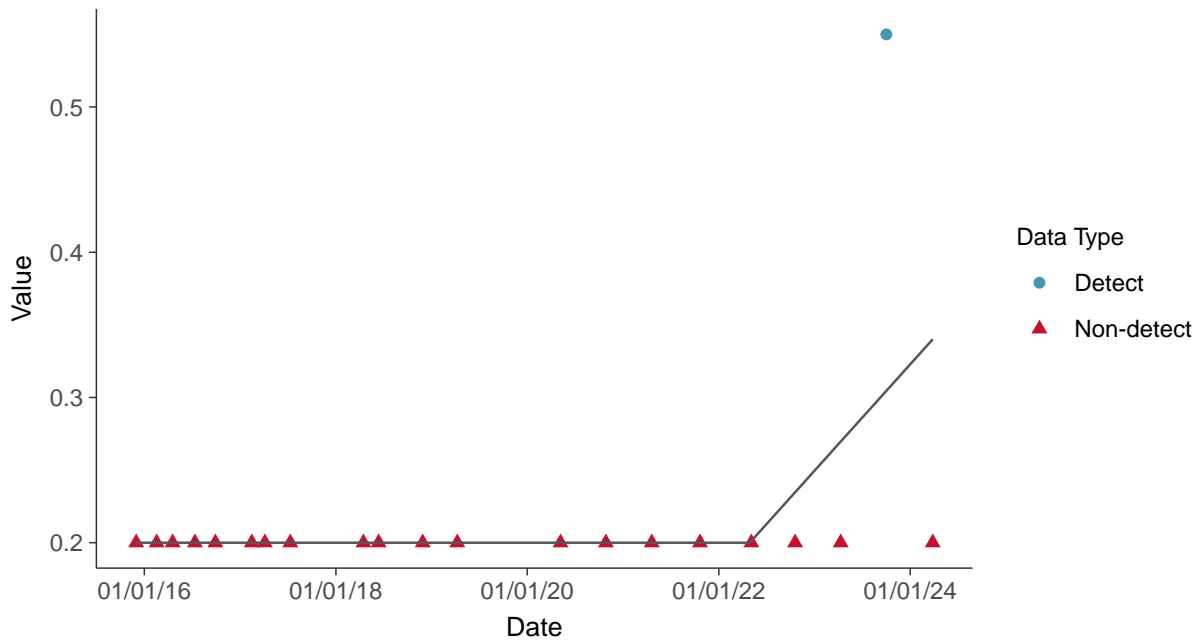
Trend Regression: Piecewise Linear-Linear

Mercury, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-15023 (ug/L)



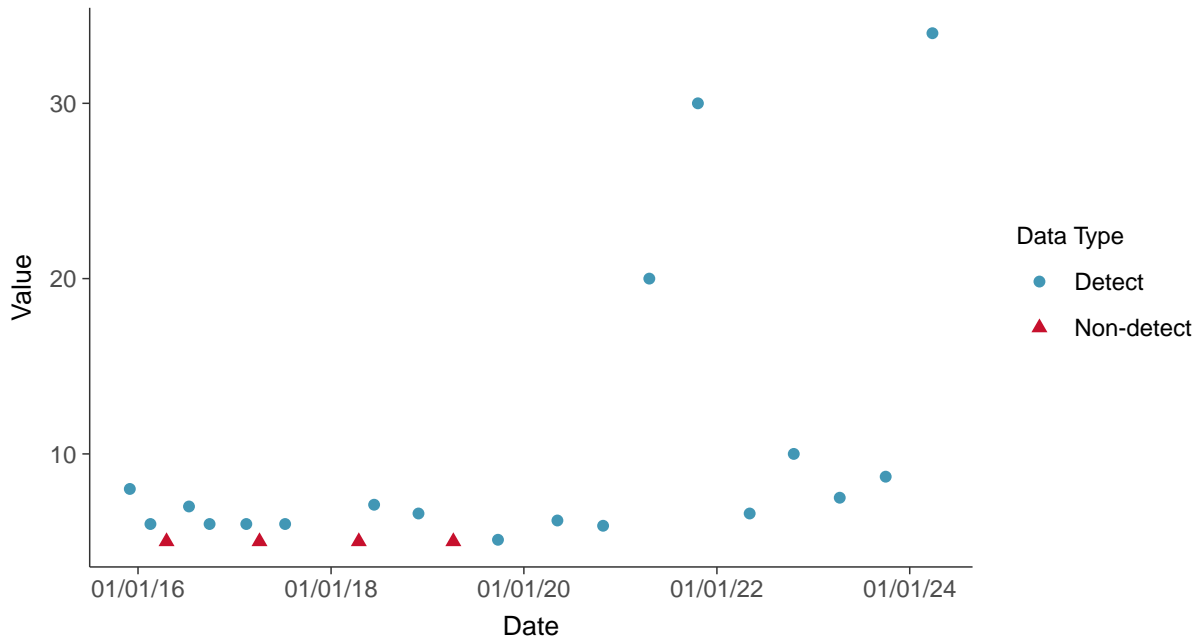


Appendix IV: Molybdenum, MW-15023

ID: 13_2_119

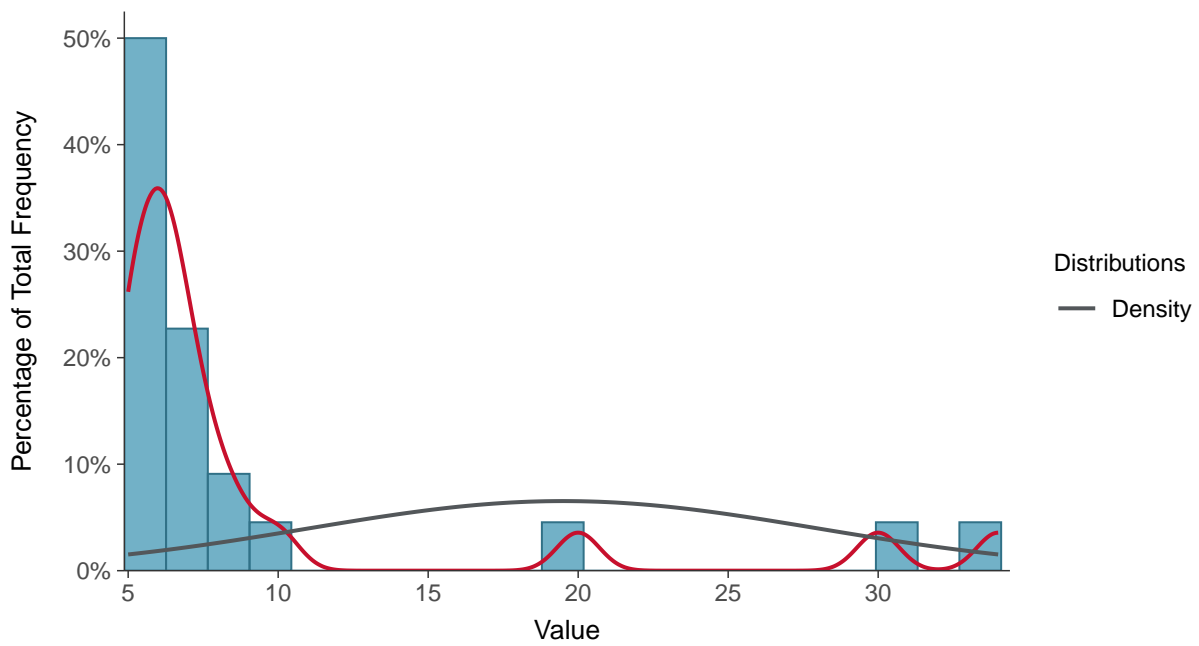
Scatter Plot

Molybdenum, MW-15023 (ug/L)



Histogram

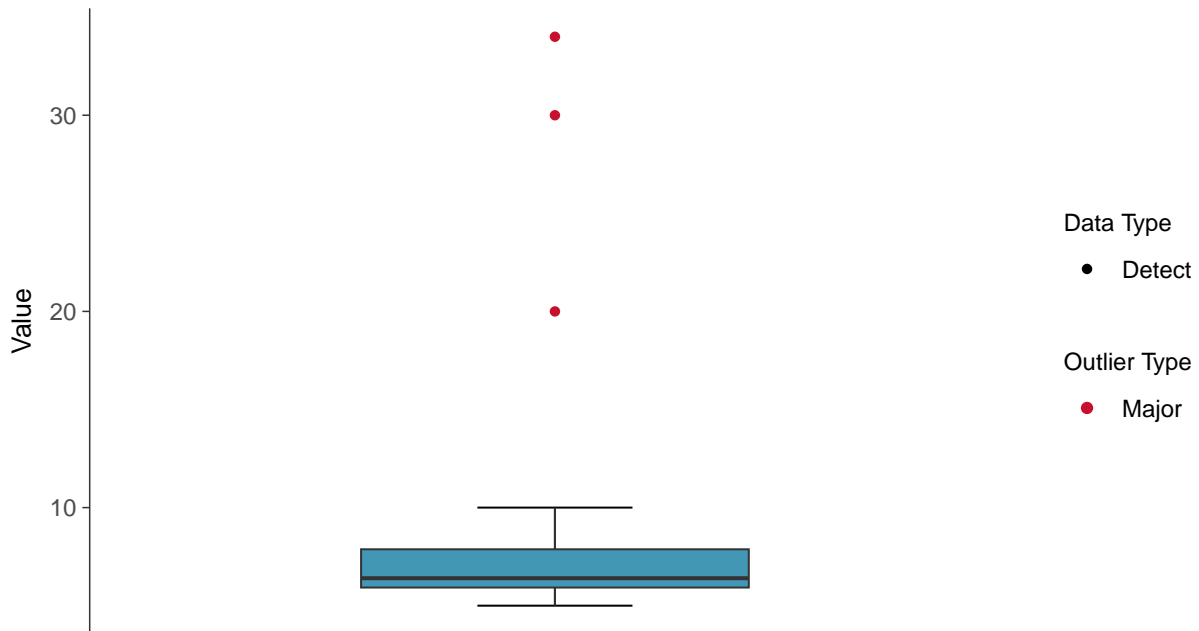
Molybdenum, MW-15023 (ug/L)





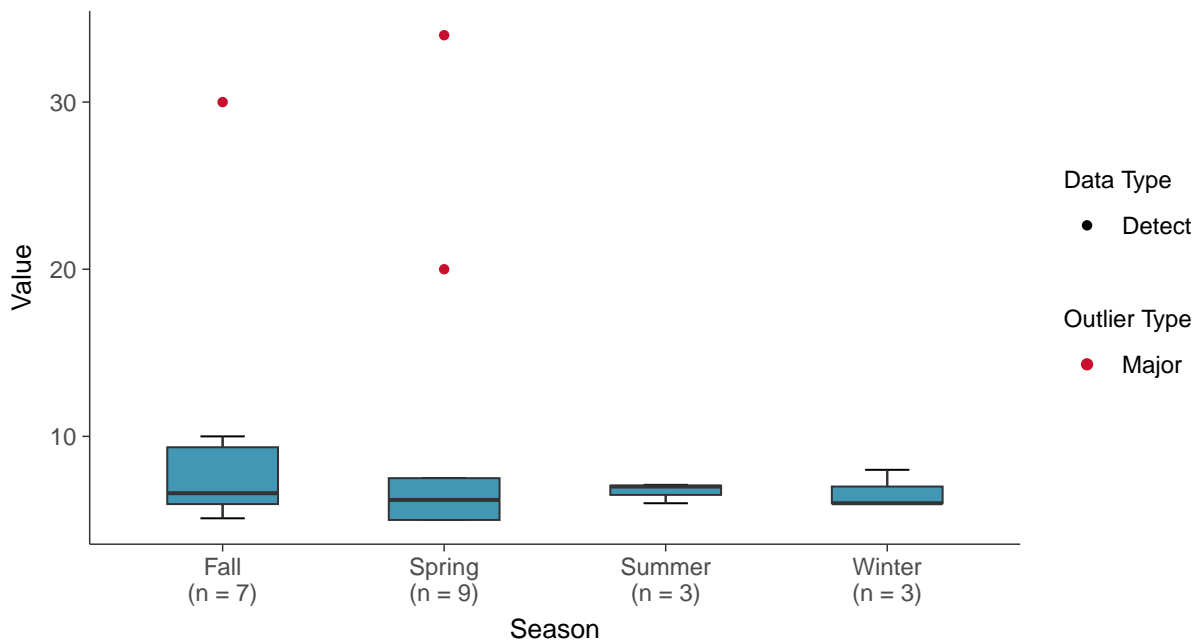
Boxplot

Molybdenum, MW-15023 (ug/L)



Boxplot by Season

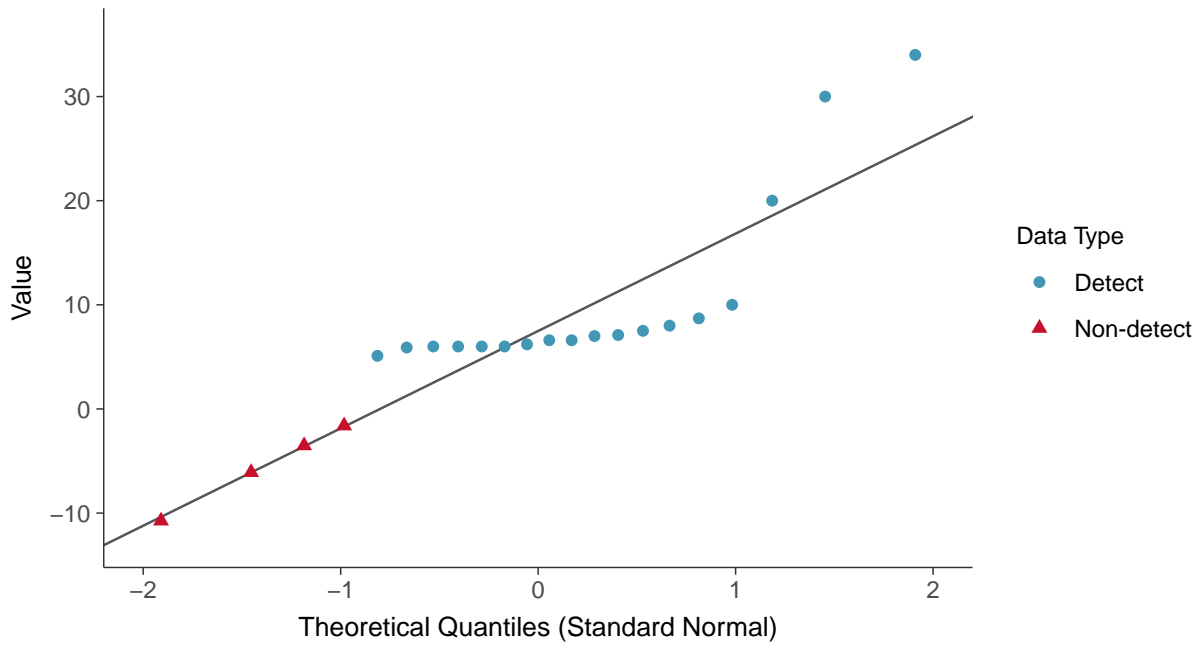
Molybdenum, MW-15023 (ug/L)





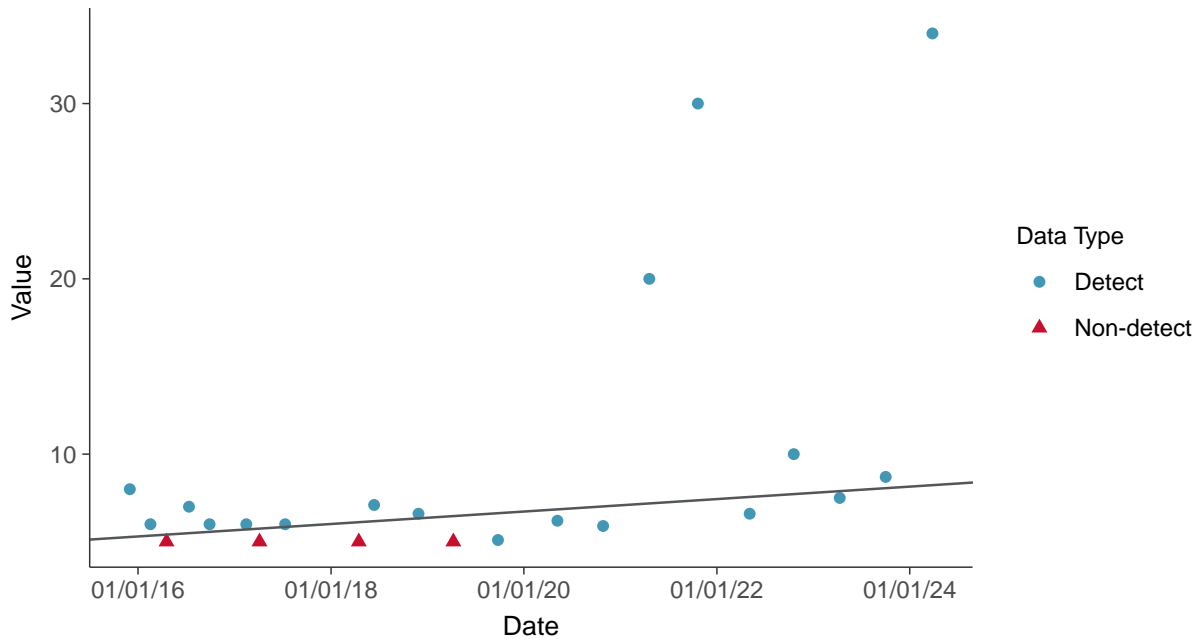
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15023 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

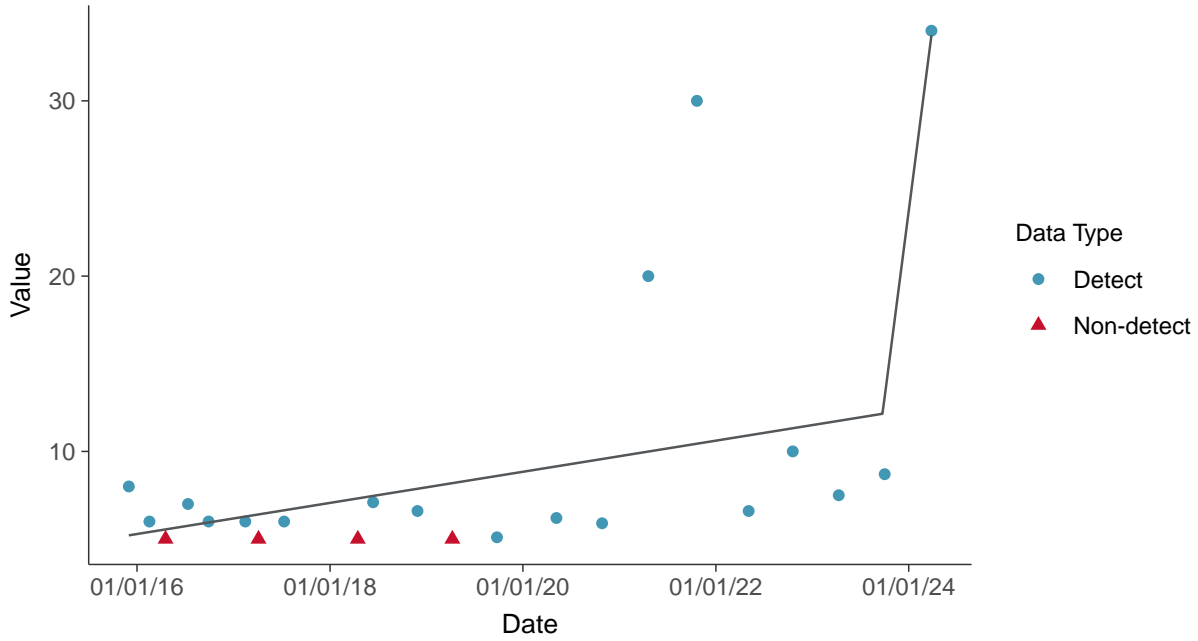
Molybdenum, MW-15023 (ug/L)





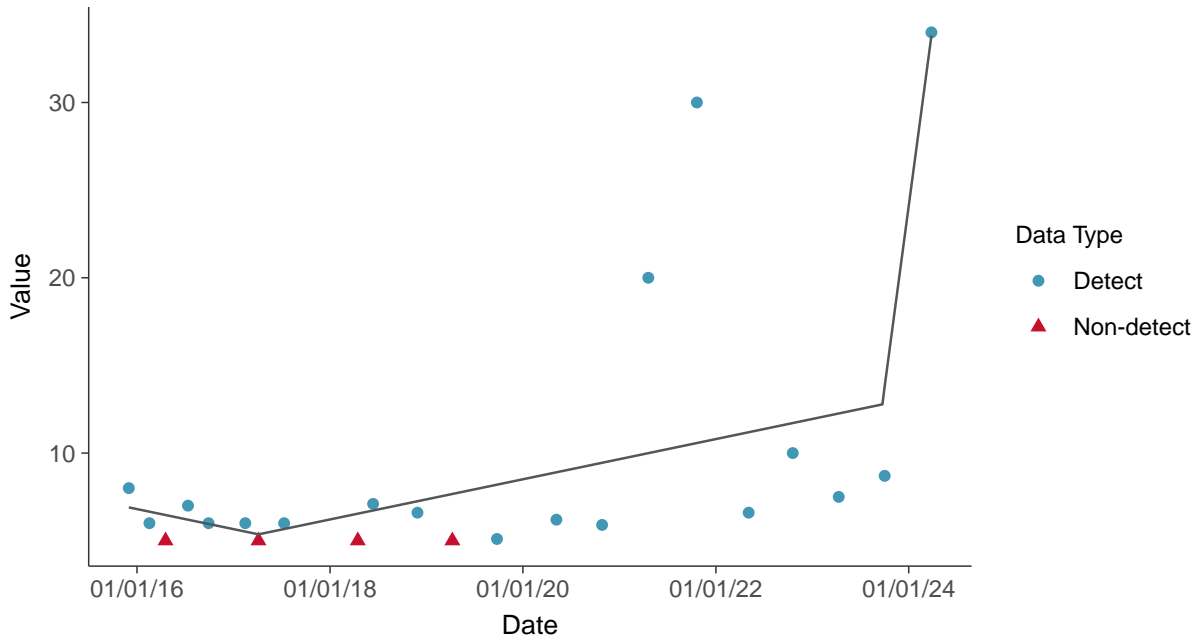
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15023 (ug/L)



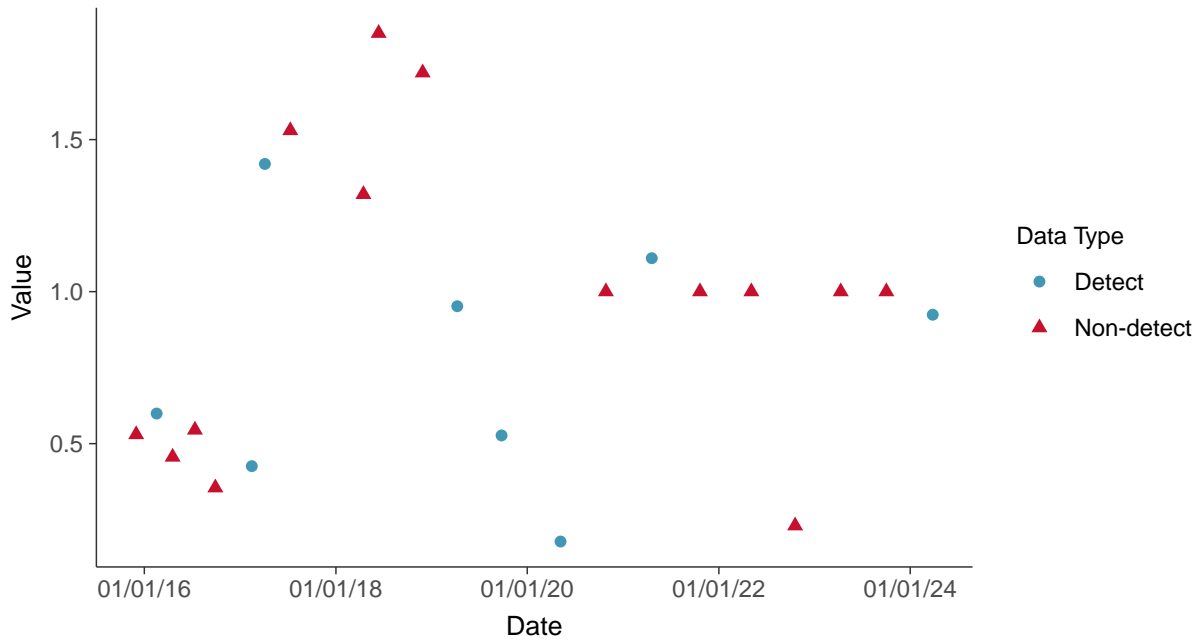


Appendix IV: Radium-226+228, MW-15023

ID: 13_2_125

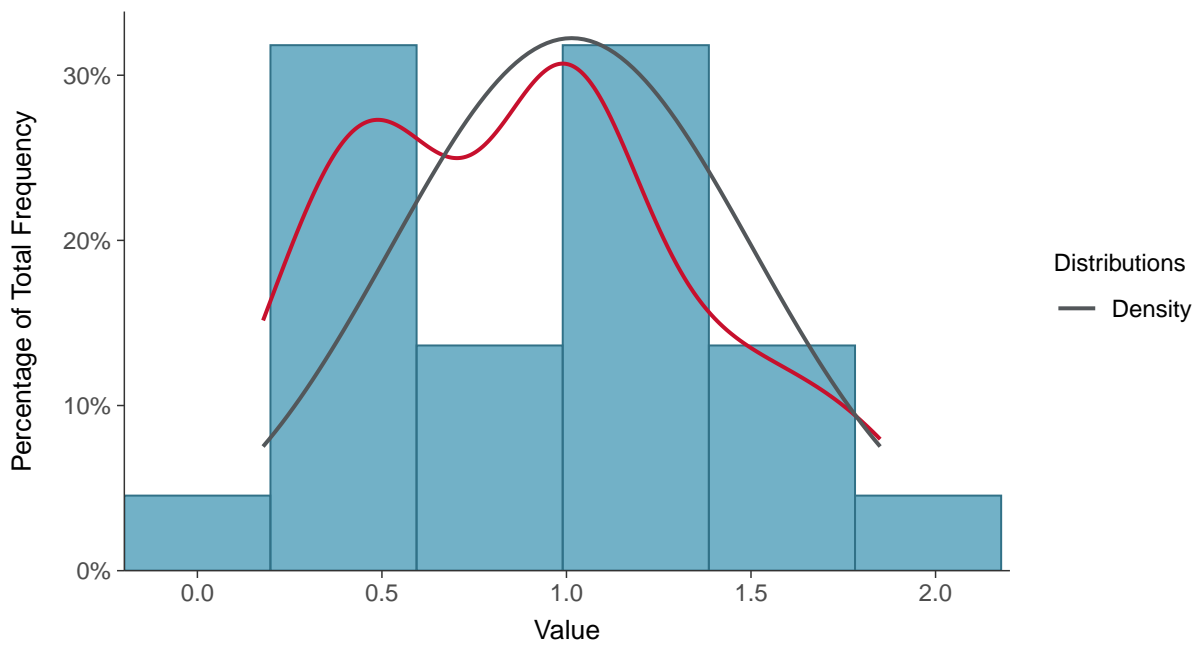
Scatter Plot

Radium-226+228, MW-15023 (pCi/L)



Histogram

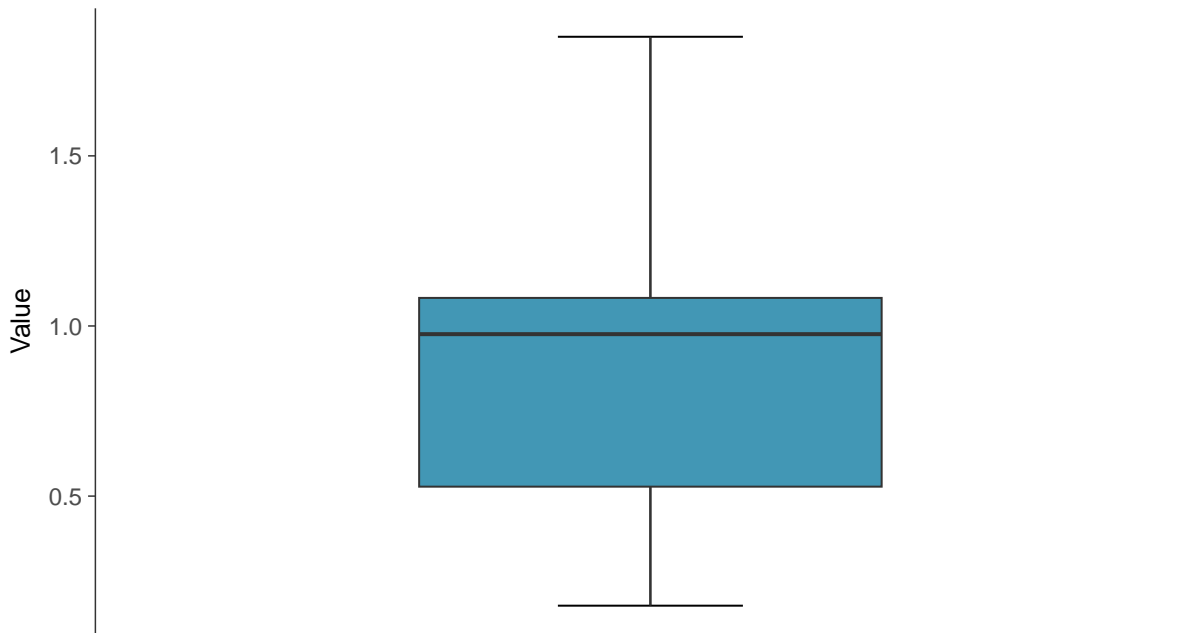
Radium-226+228, MW-15023 (pCi/L)





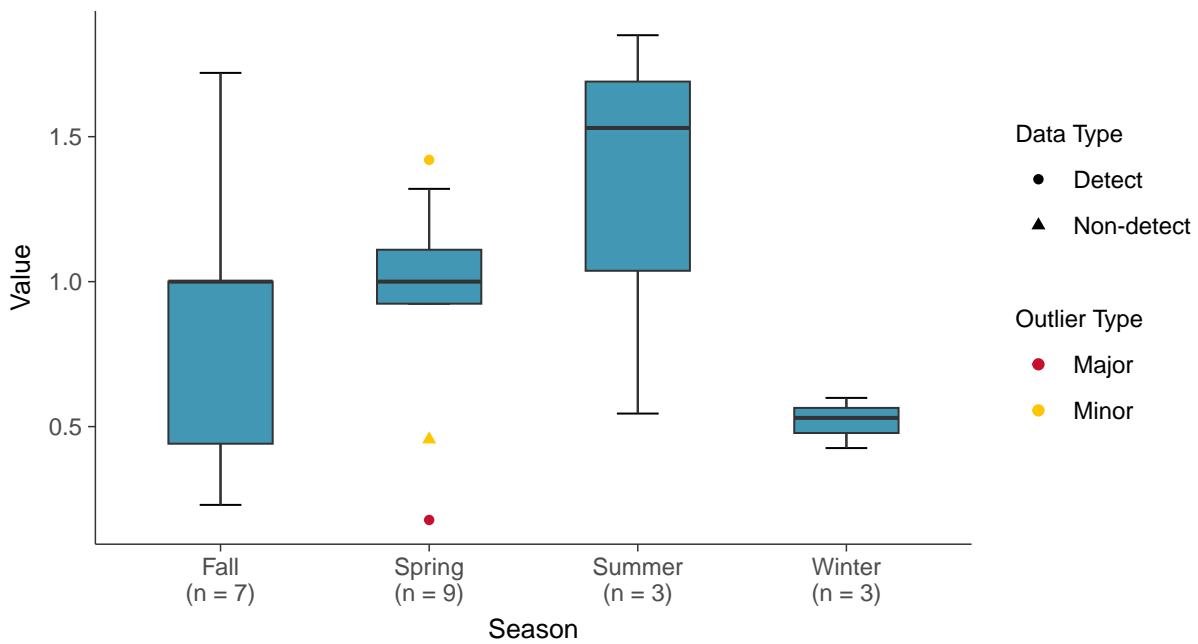
Boxplot

Radium-226+228, MW-15023 (pCi/L)



Boxplot by Season

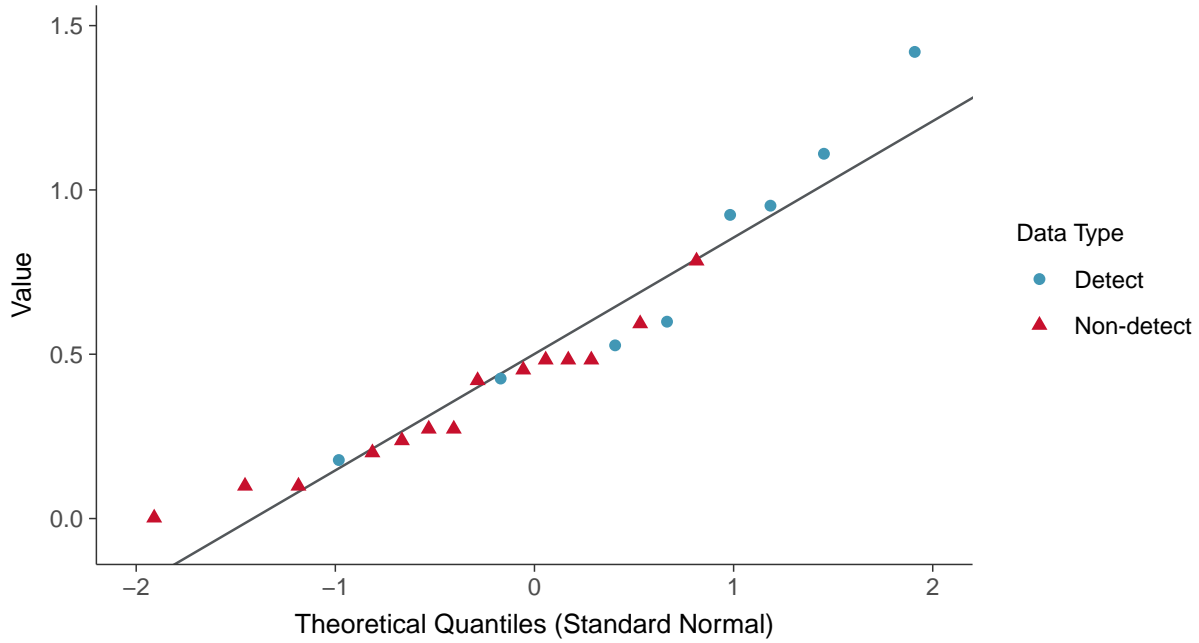
Radium-226+228, MW-15023 (pCi/L)





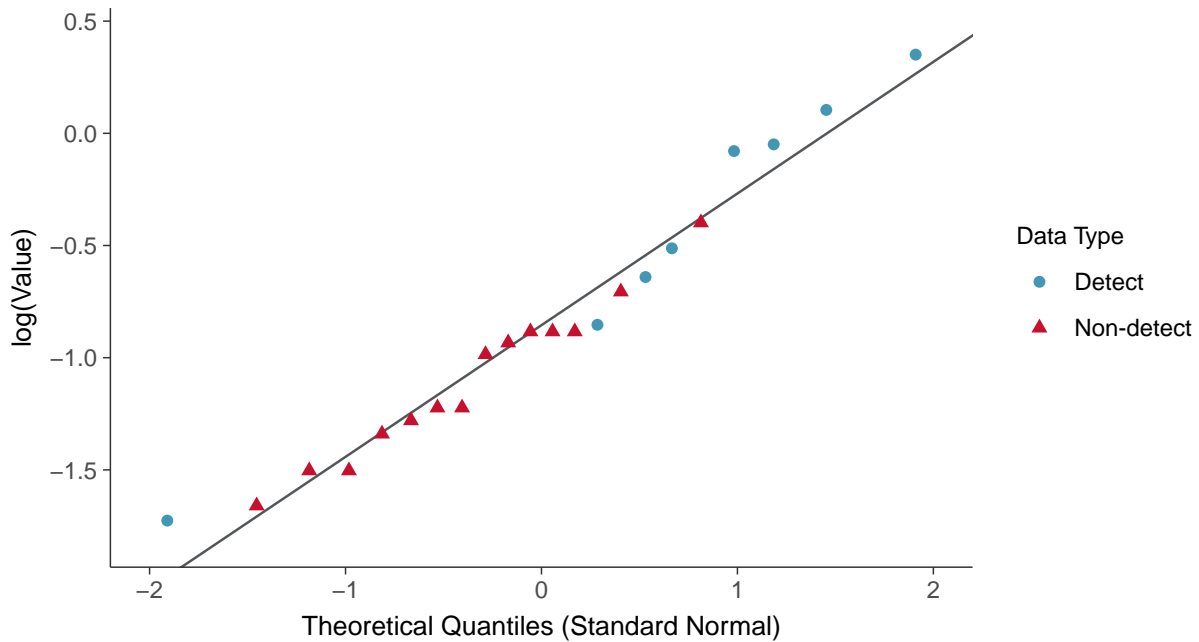
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15023 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

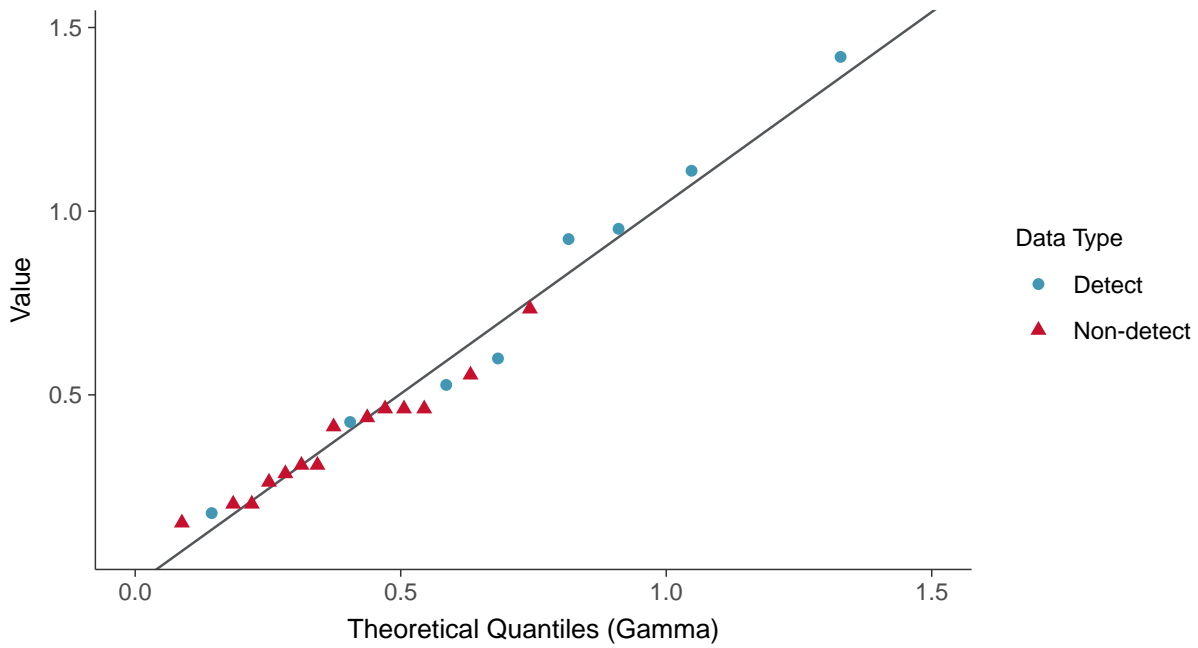
Radium-226+228, MW-15023 (pCi/L)





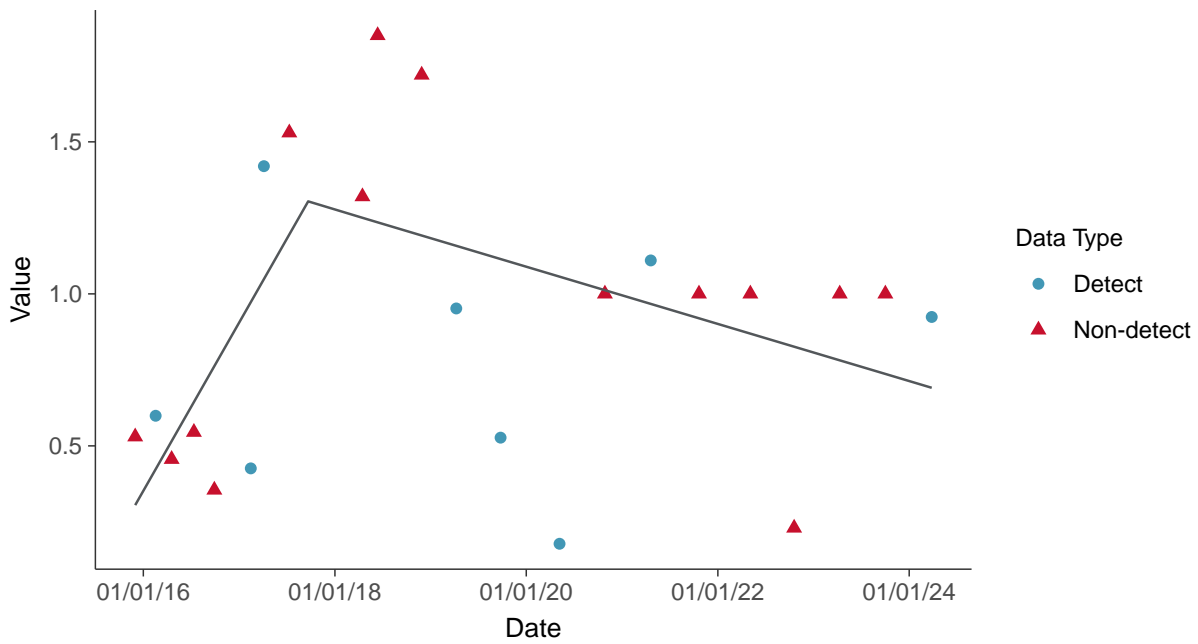
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15023 (pCi/L)



Trend Regression: Piecewise Linear-Linear

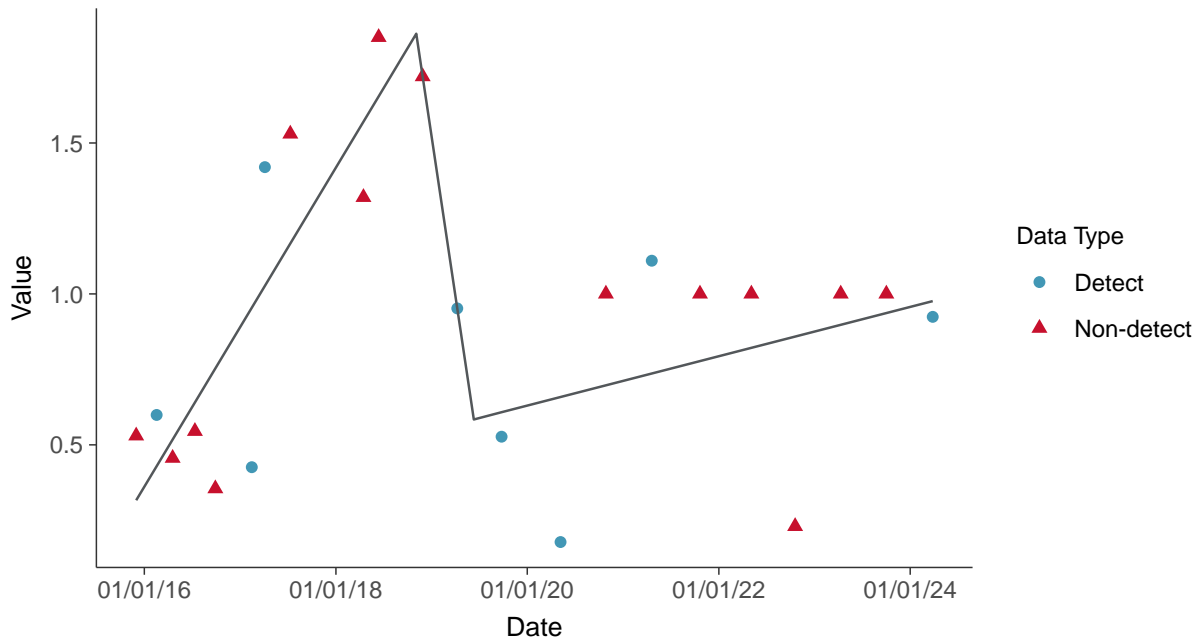
Radium-226+228, MW-15023 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-15023 (pCi/L)



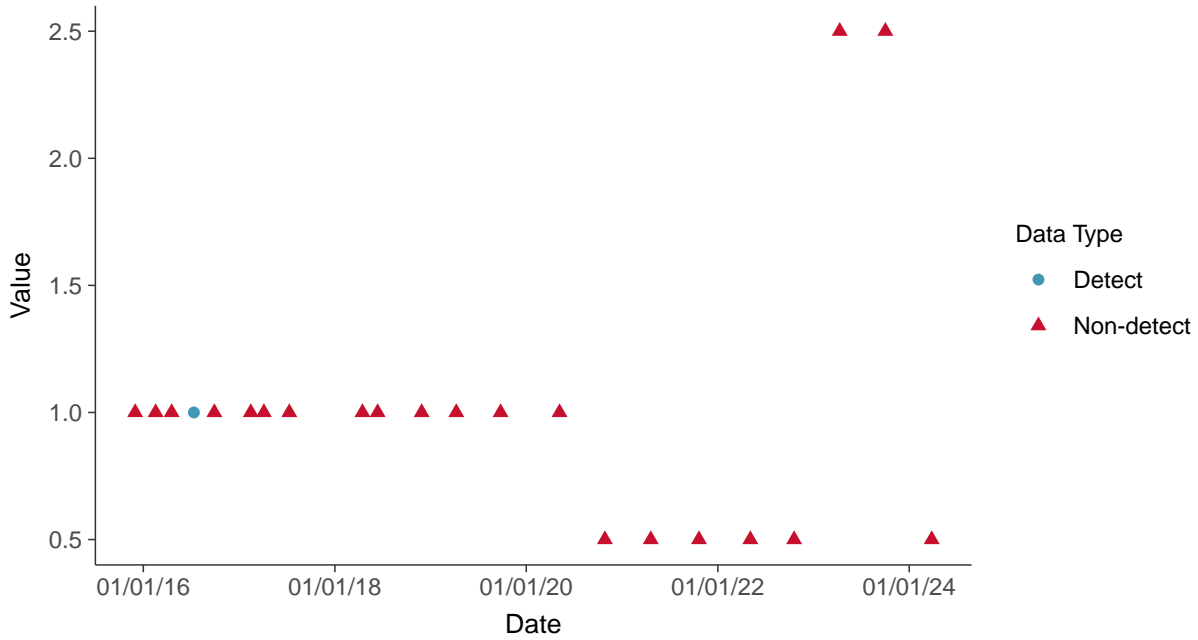


Appendix IV: Selenium, MW-15023

ID: 13_2_127

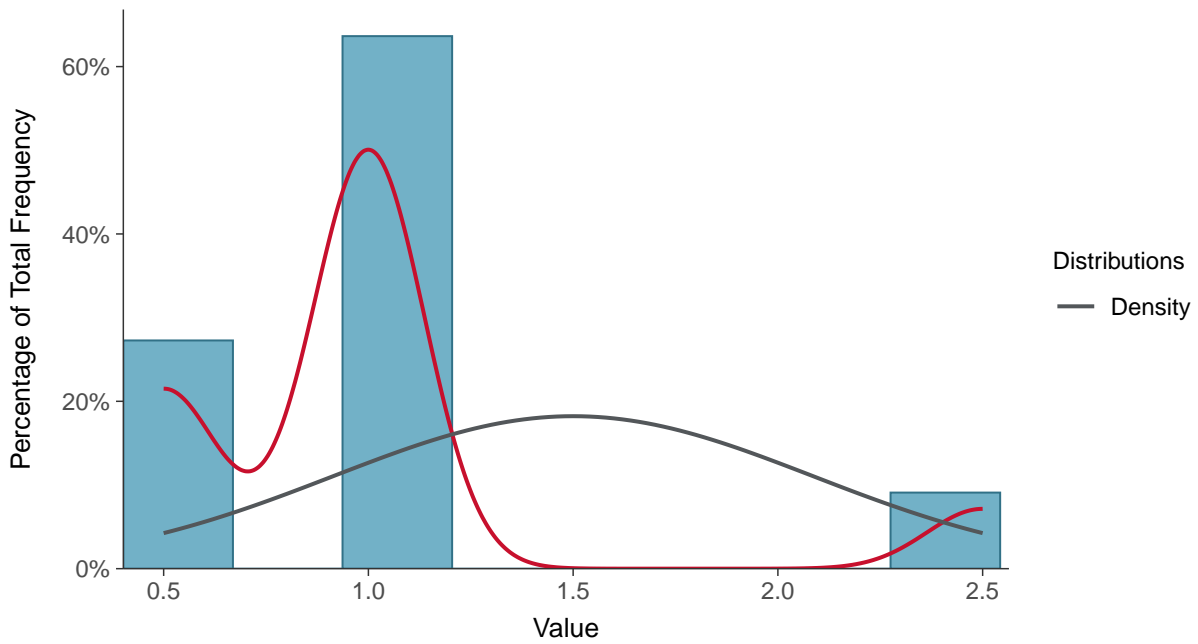
Scatter Plot

Selenium, MW-15023 (ug/L)



Histogram

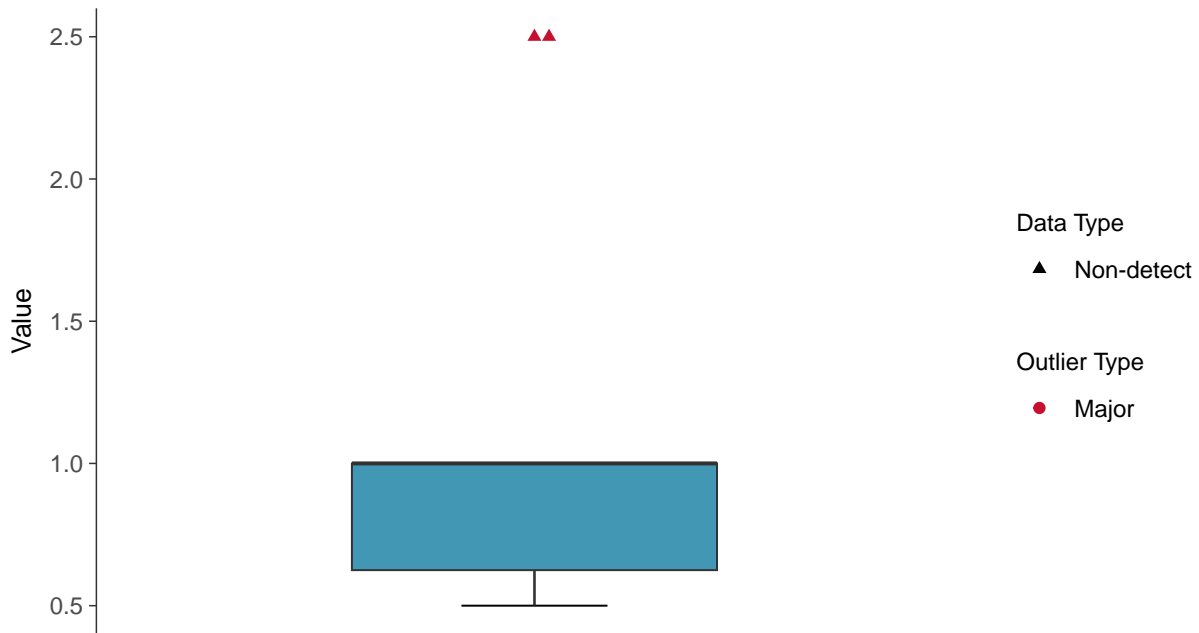
Selenium, MW-15023 (ug/L)





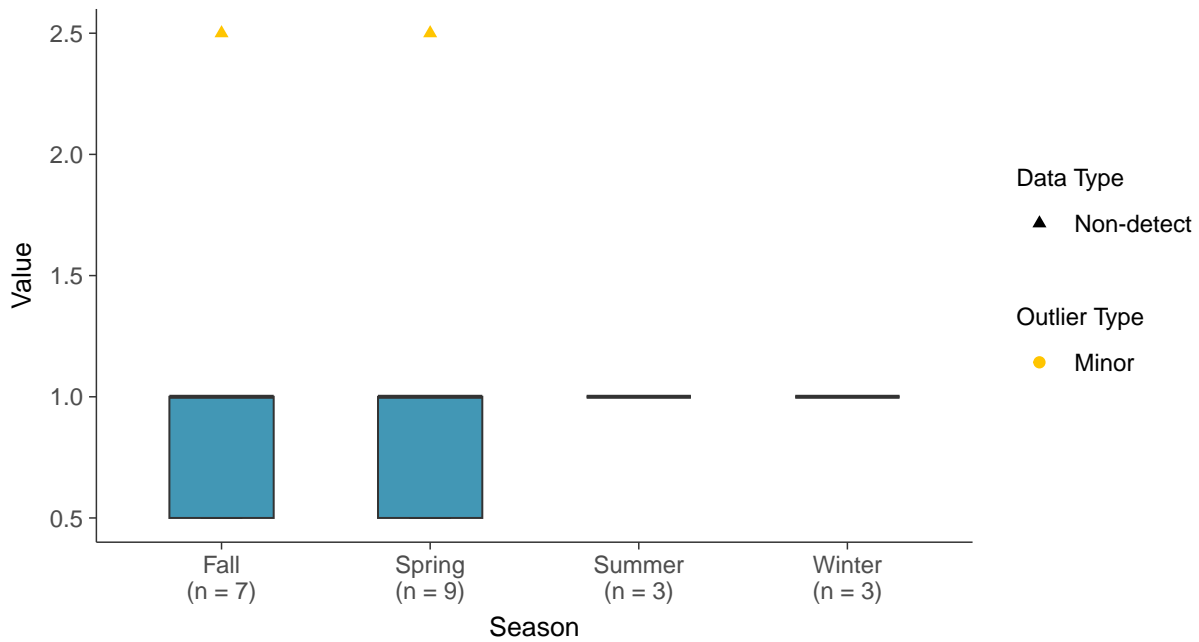
Boxplot

Selenium, MW-15023 (ug/L)



Boxplot by Season

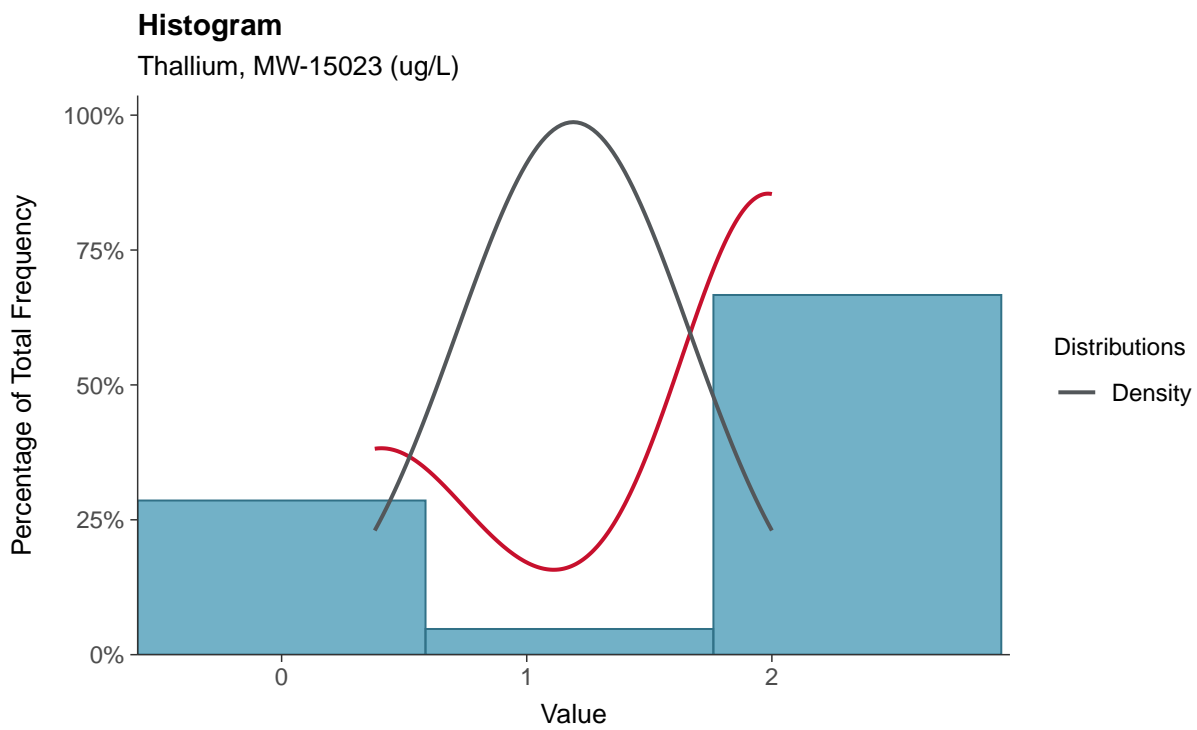
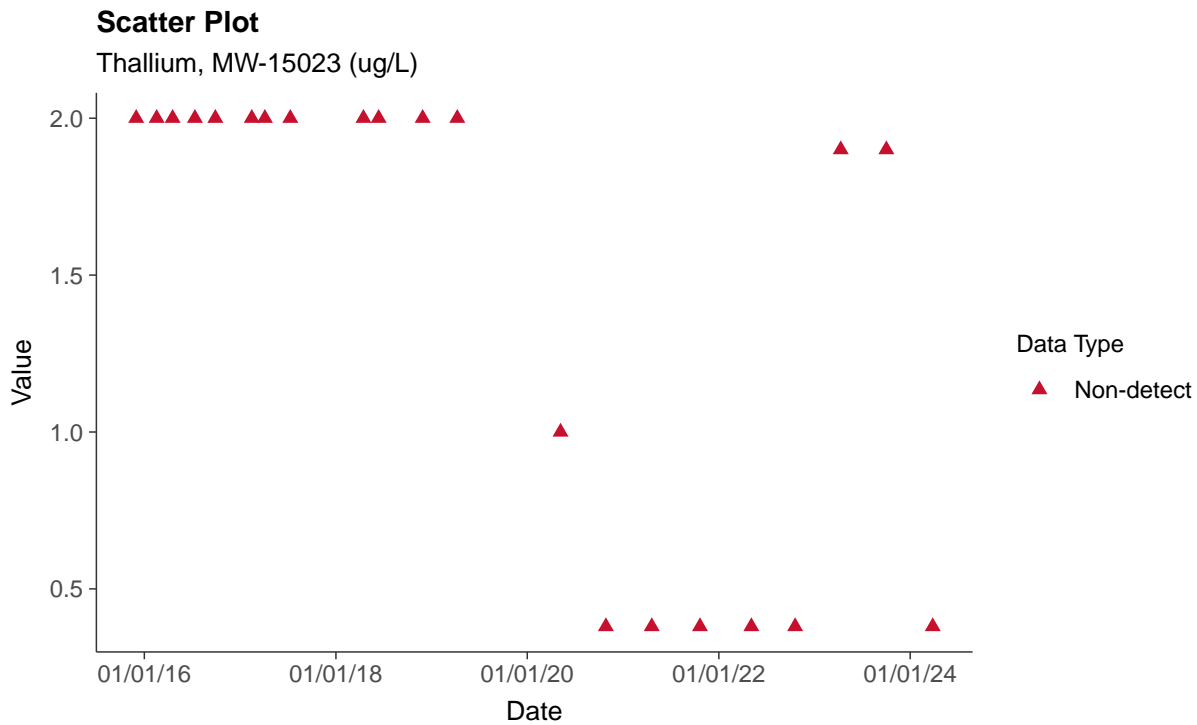
Selenium, MW-15023 (ug/L)





Appendix IV: Thallium, MW-15023

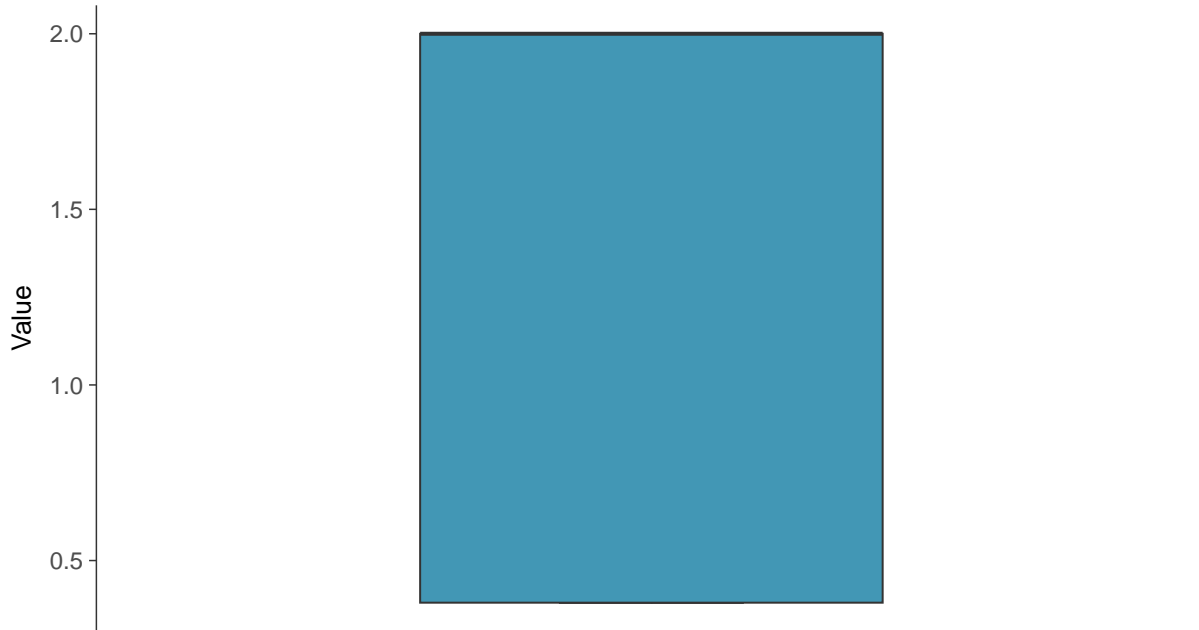
ID: 13_2_131





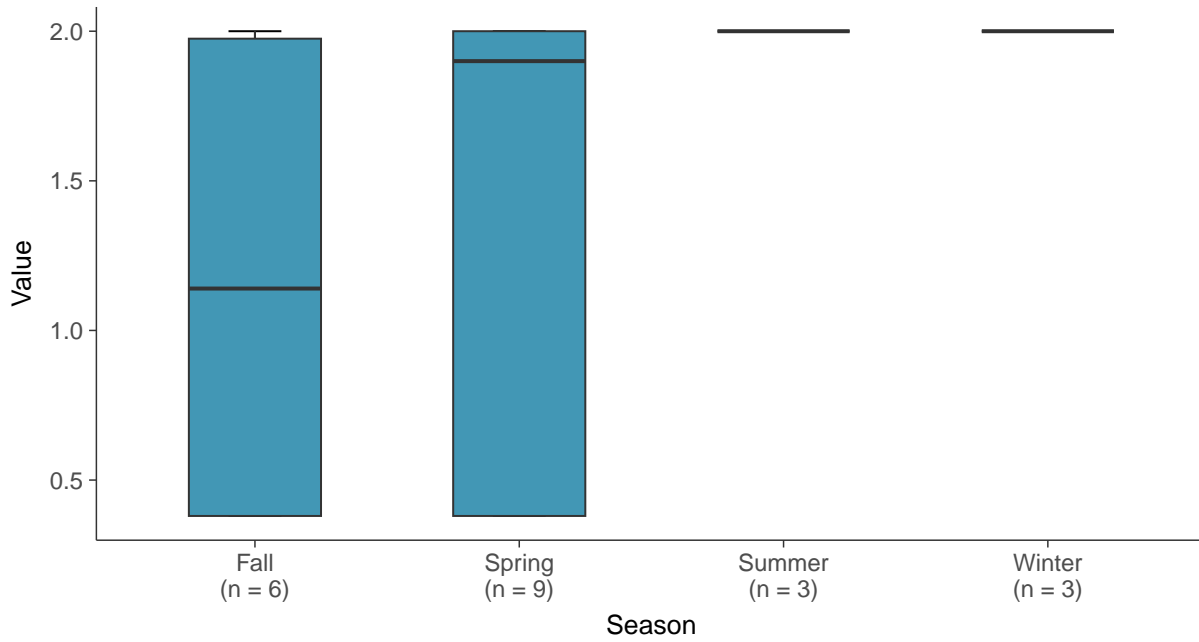
Boxplot

Thallium, MW-15023 (ug/L)



Boxplot by Season

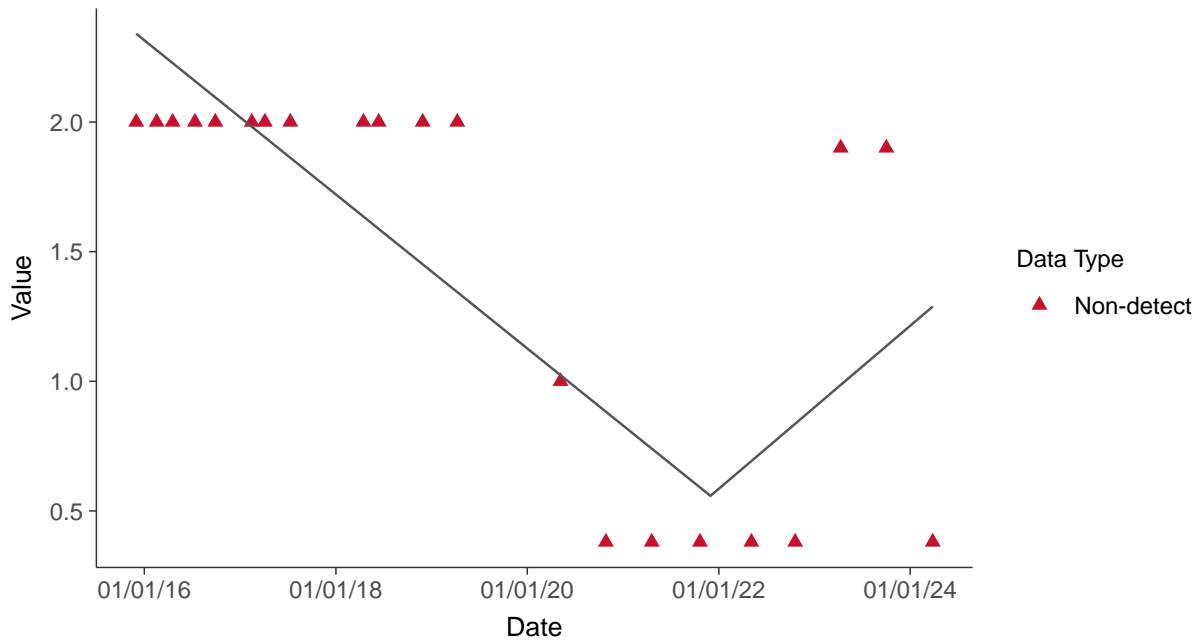
Thallium, MW-15023 (ug/L)





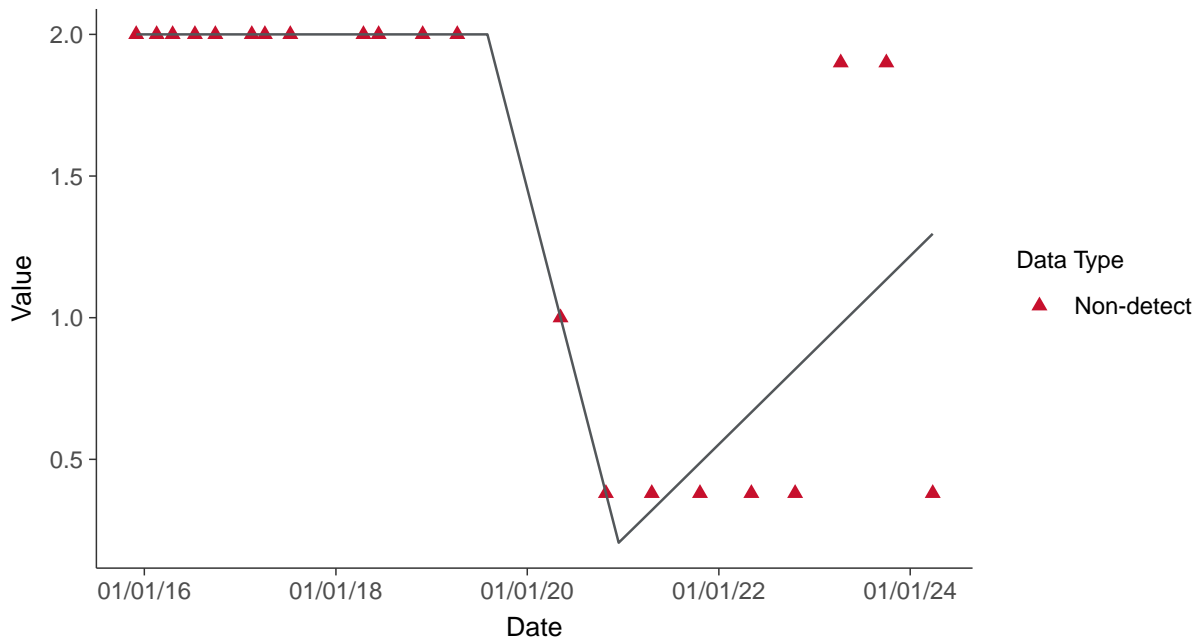
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

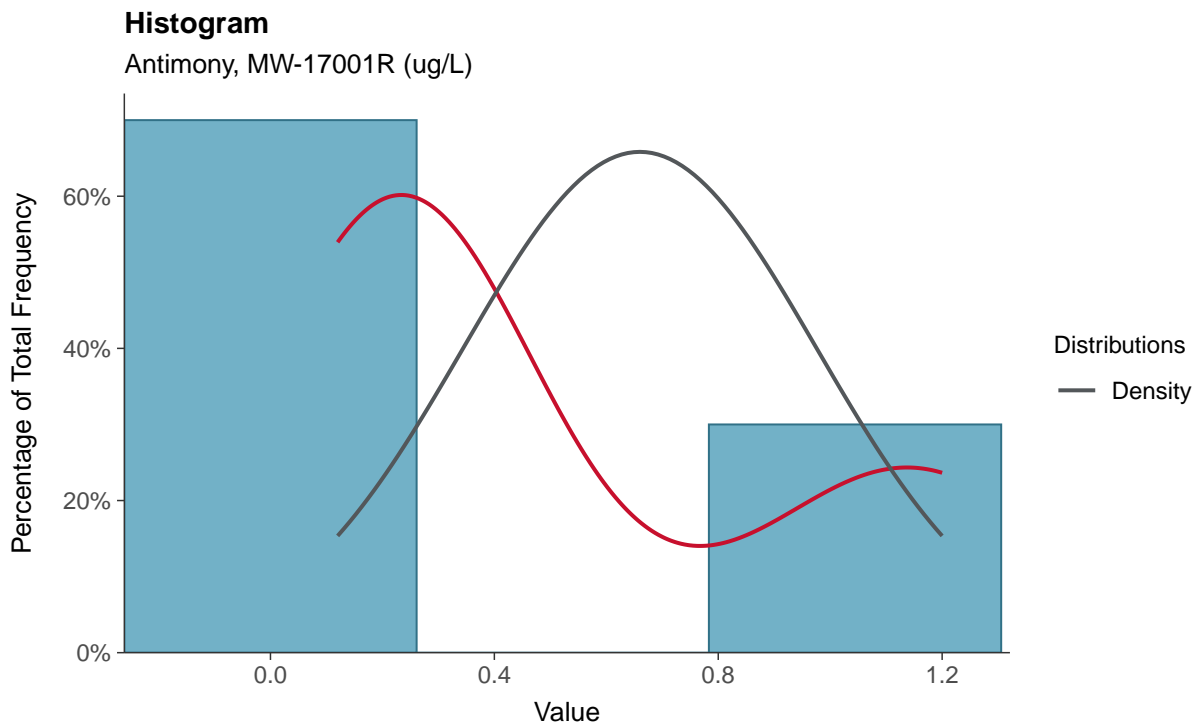
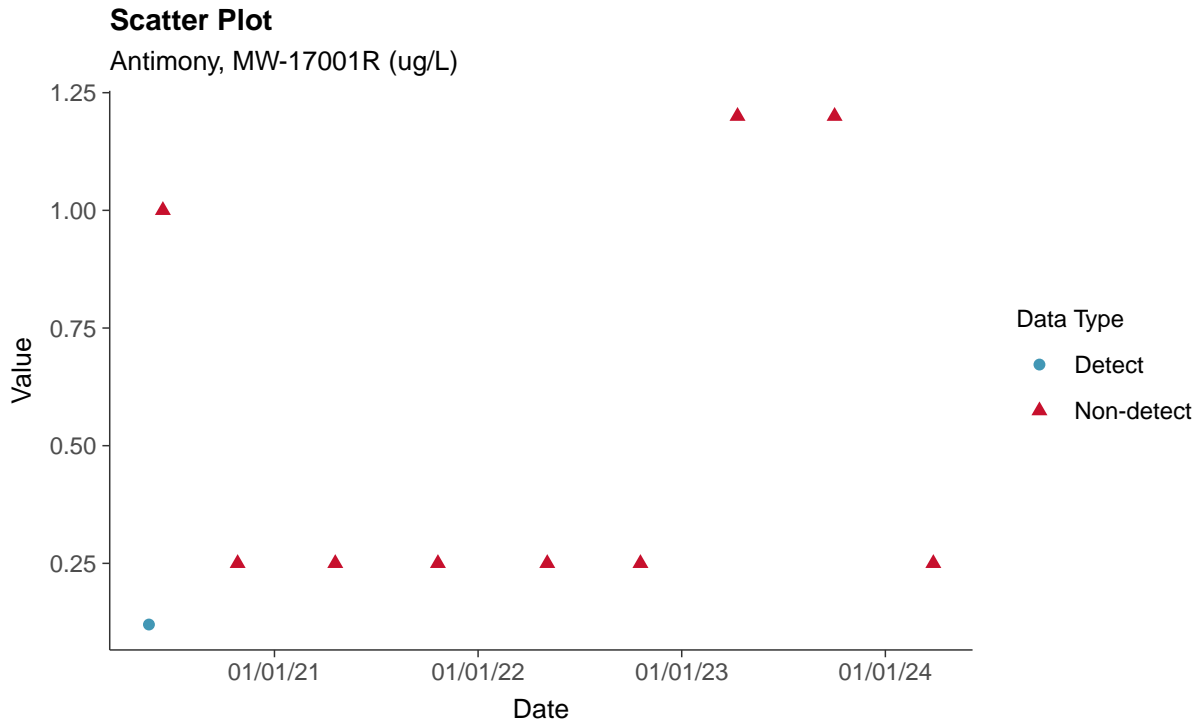
Thallium, MW-15023 (ug/L)





Appendix IV: Antimony, MW-17001R

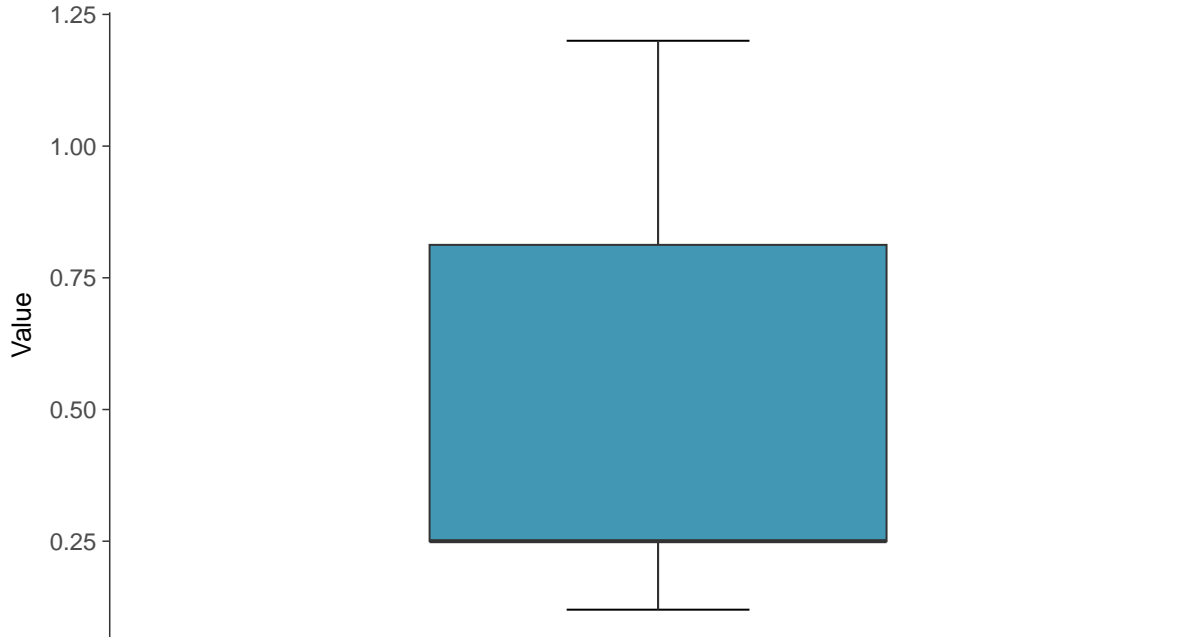
ID: 14_2_101





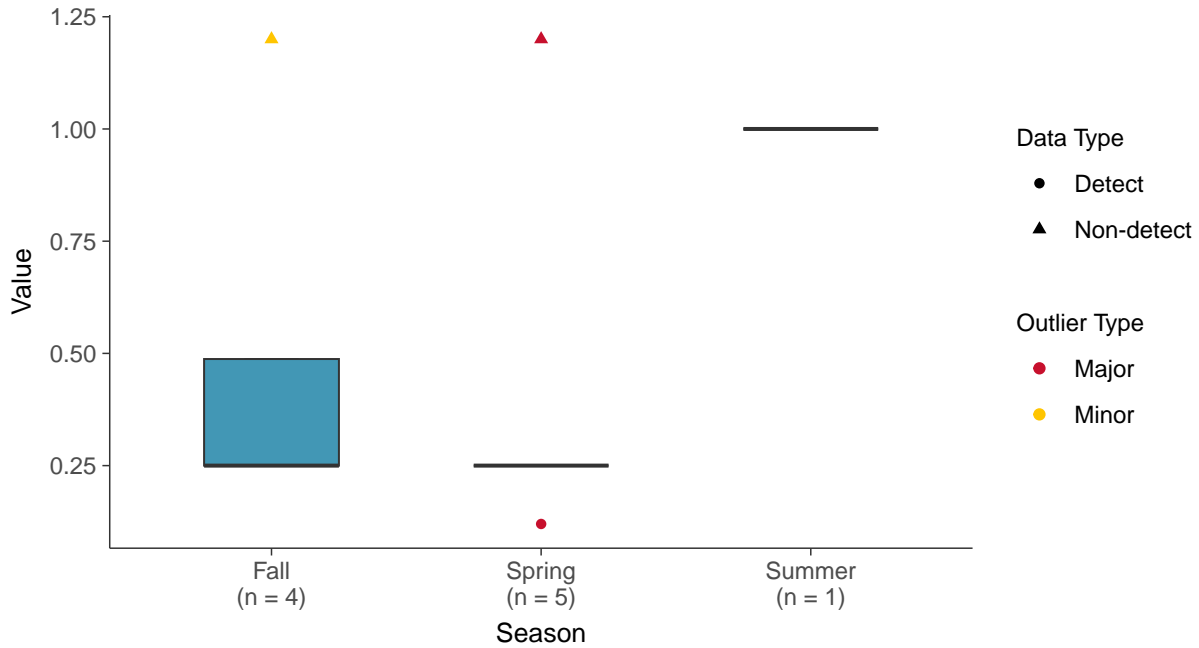
Boxplot

Antimony, MW-17001R (ug/L)



Boxplot by Season

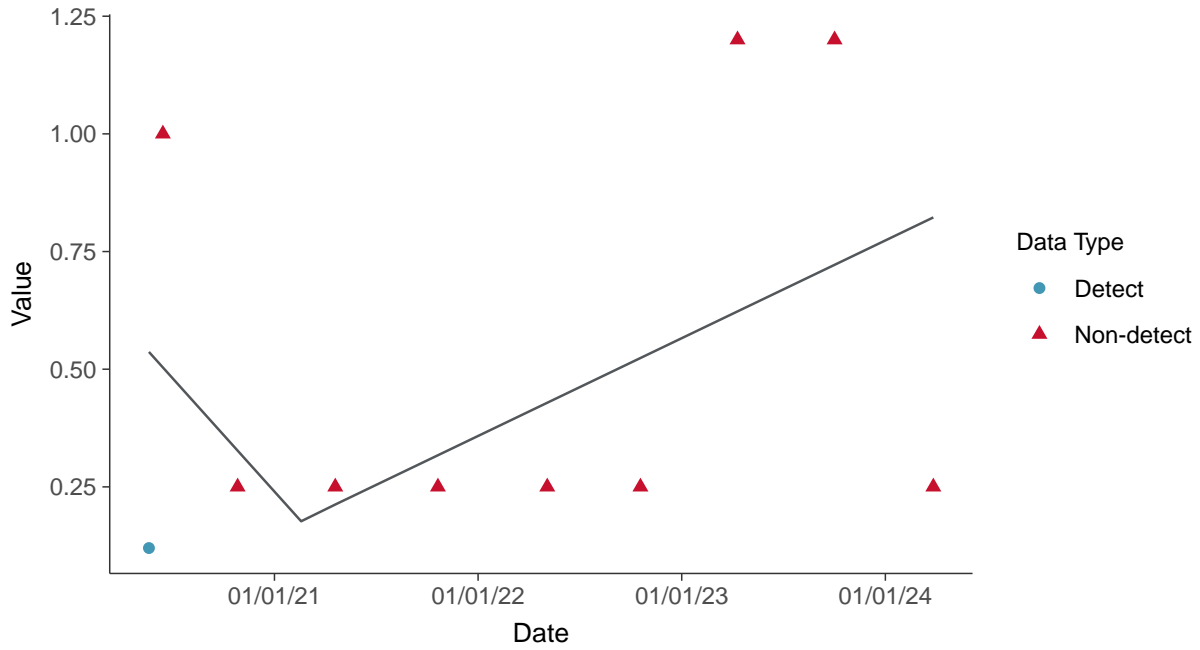
Antimony, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear

Antimony, MW-17001R (ug/L)



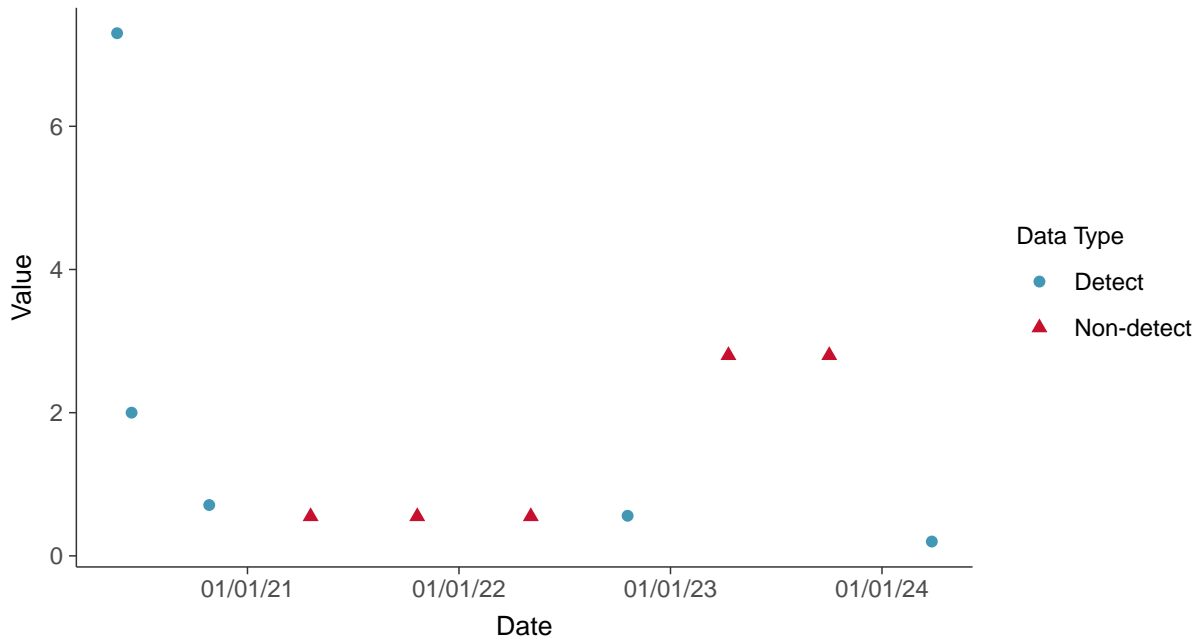


Appendix IV: Arsenic, MW-17001R

ID: 14_2_102

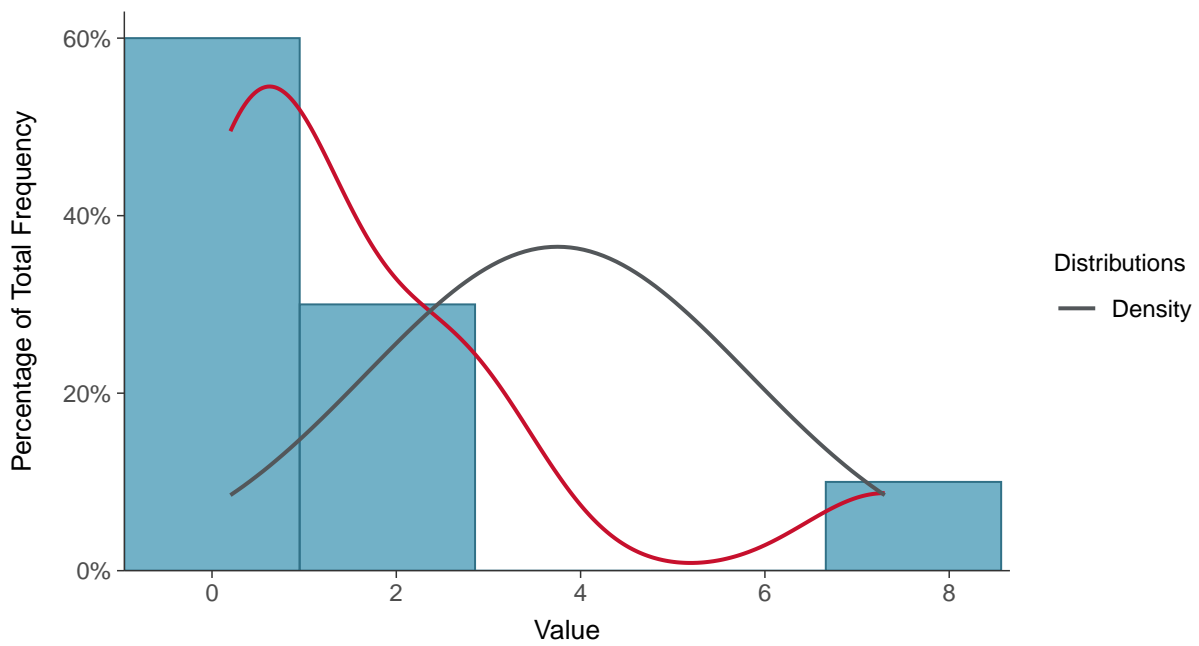
Scatter Plot

Arsenic, MW-17001R (ug/L)



Histogram

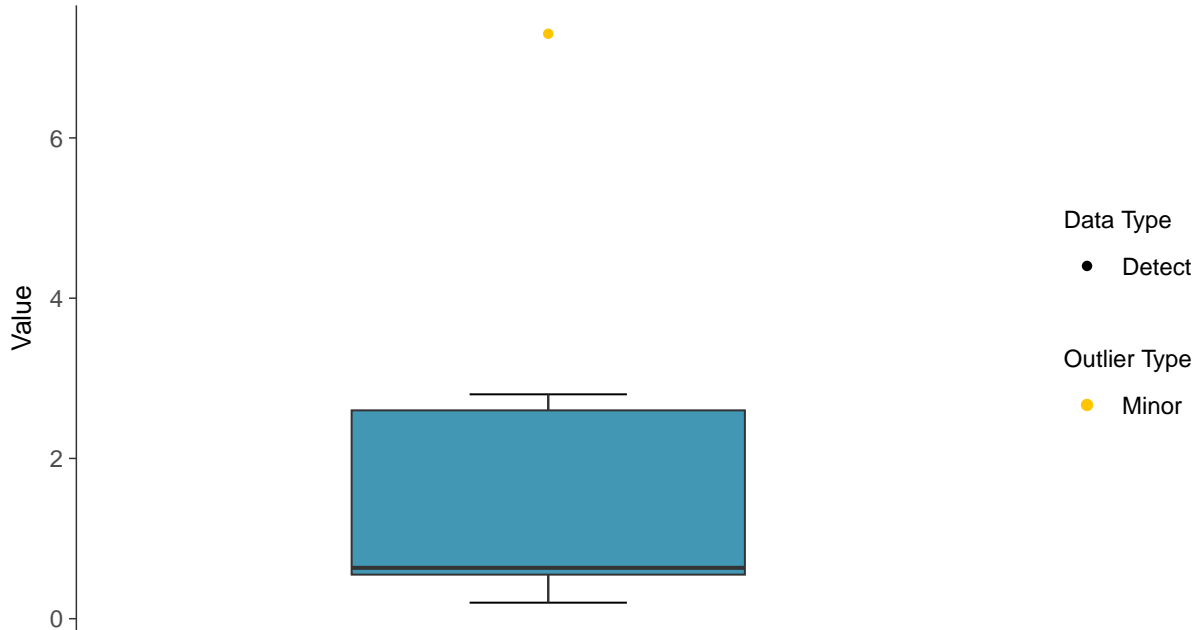
Arsenic, MW-17001R (ug/L)





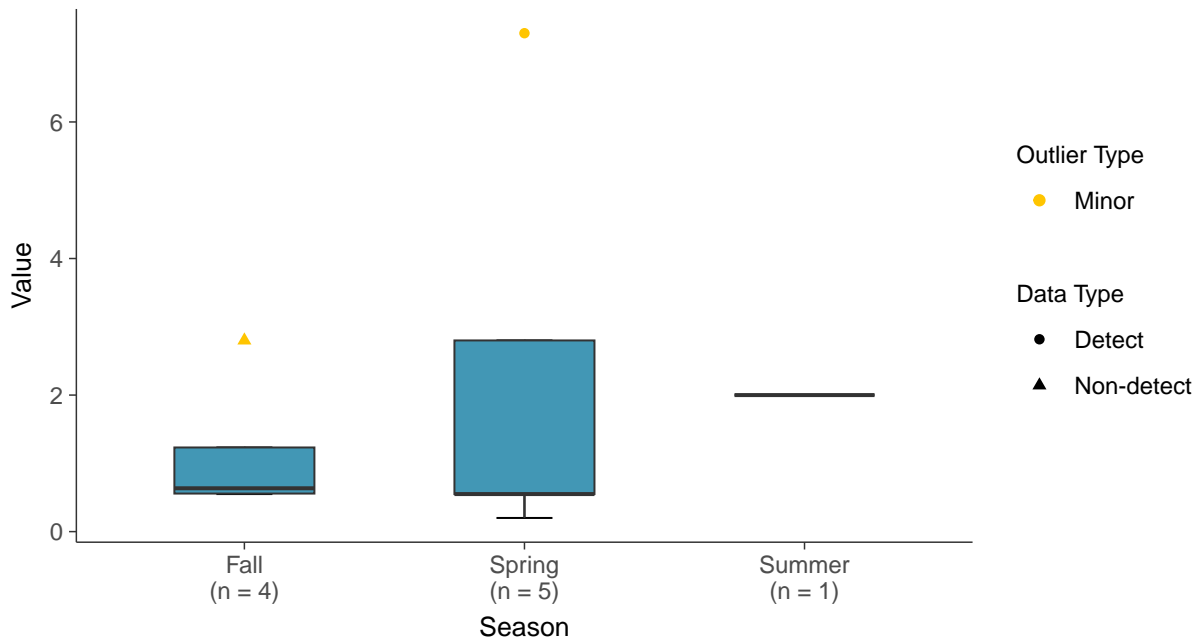
Boxplot

Arsenic, MW-17001R (ug/L)



Boxplot by Season

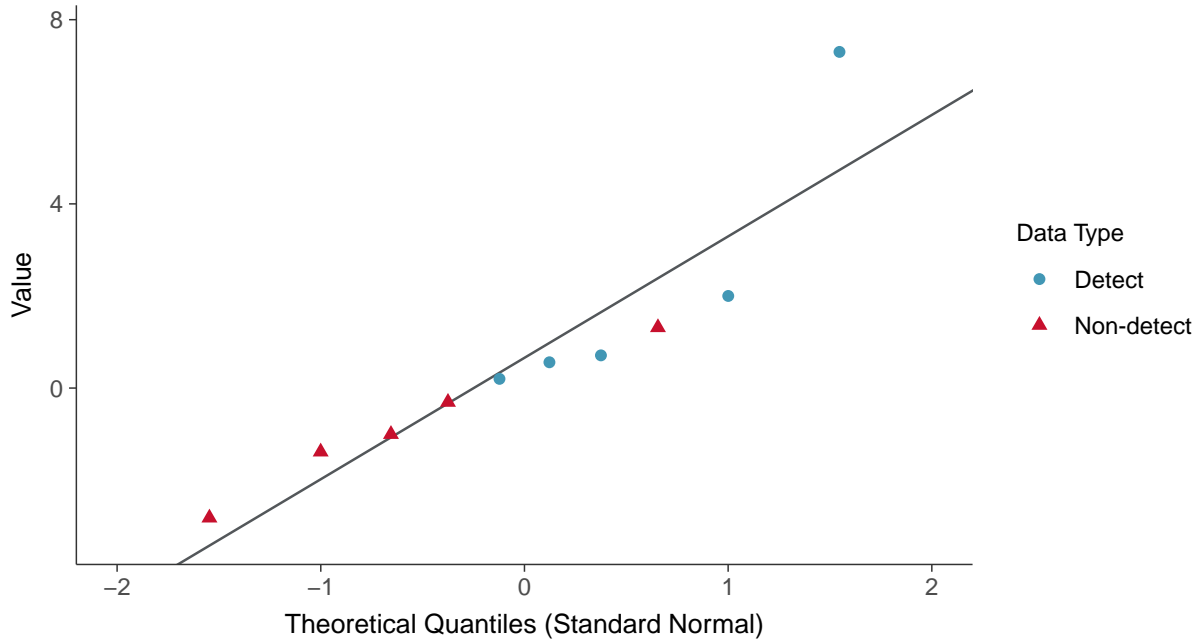
Arsenic, MW-17001R (ug/L)





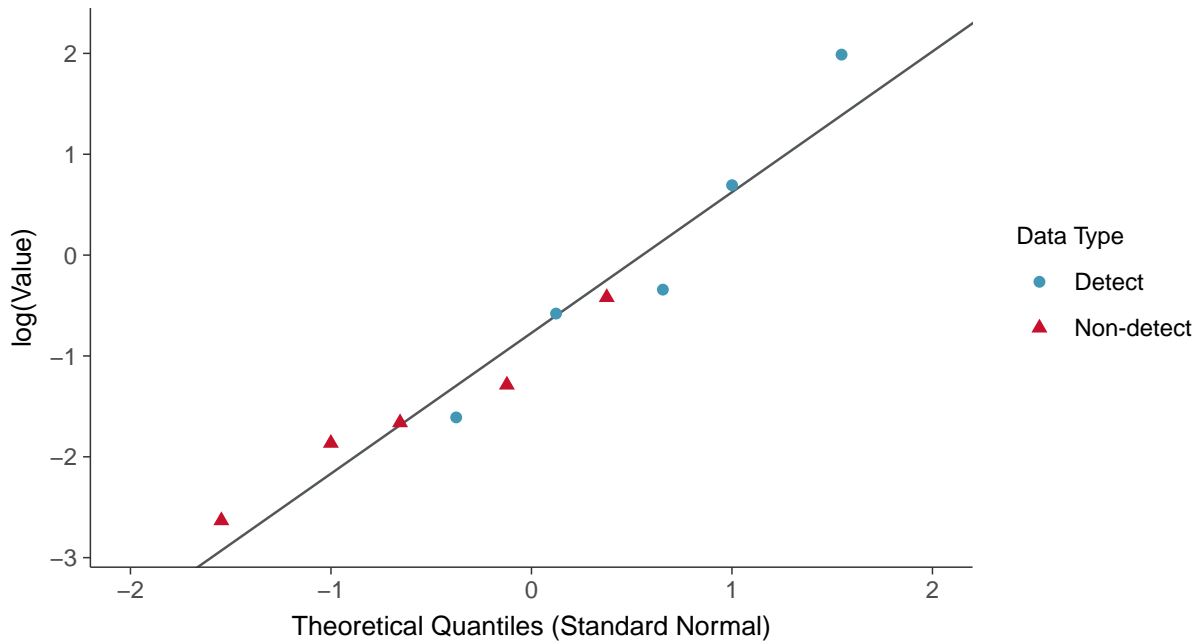
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17001R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

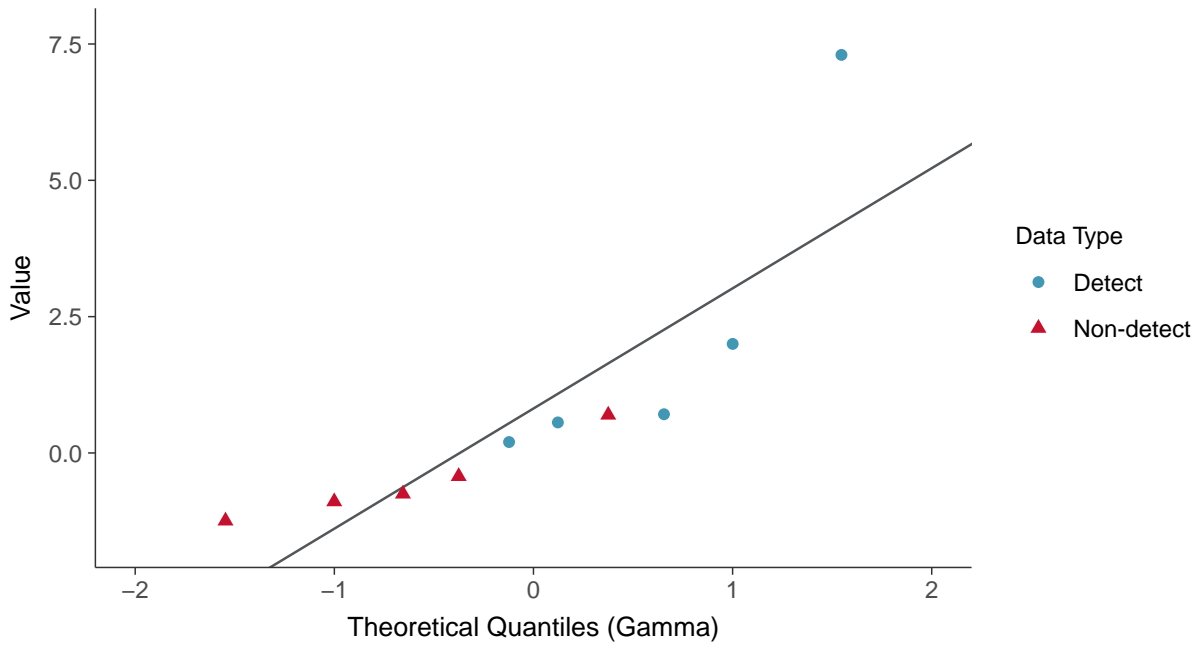
Arsenic, MW-17001R (ug/L)





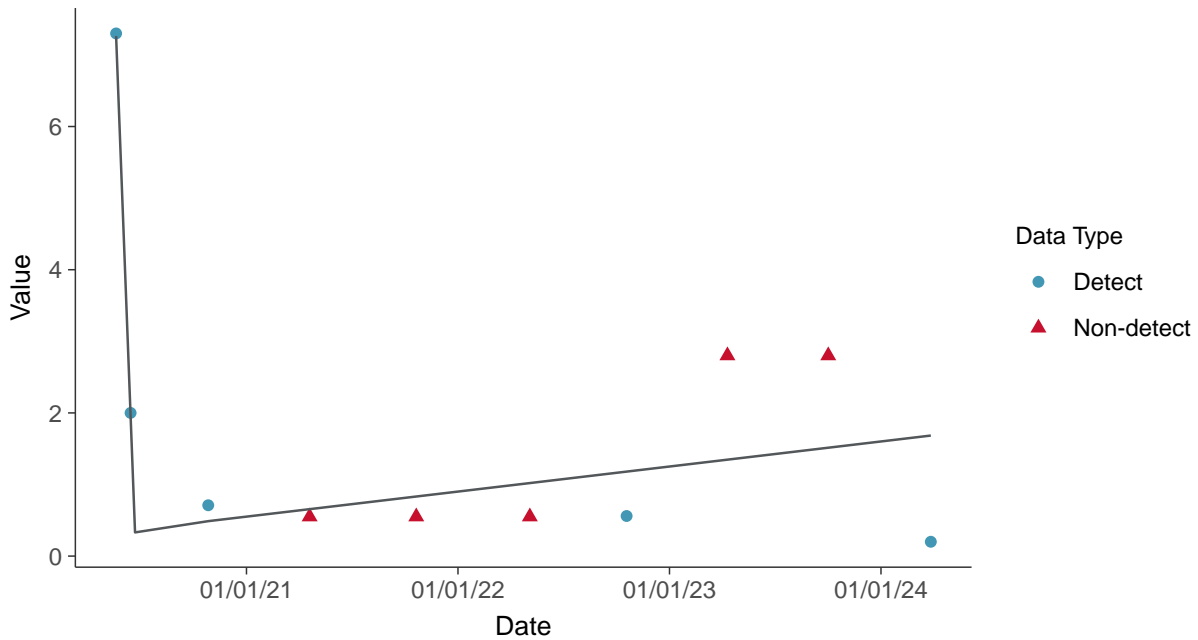
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear

Arsenic, MW-17001R (ug/L)



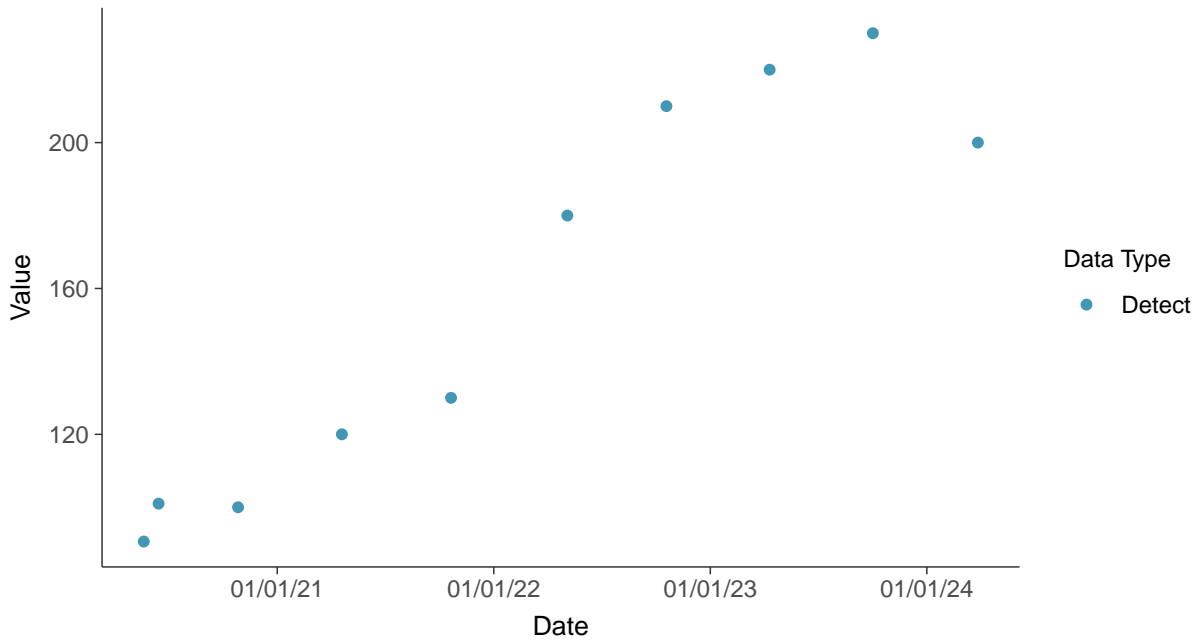


Appendix IV: Barium, MW-17001R

ID: 14_2_103

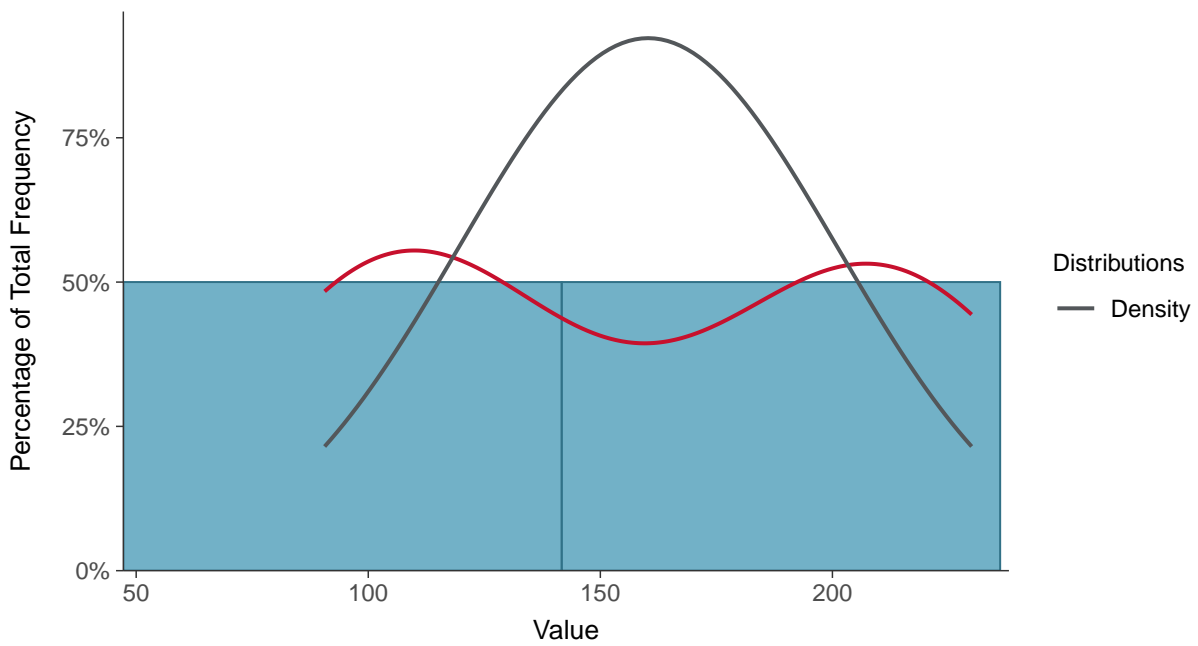
Scatter Plot

Barium, MW-17001R (ug/L)



Histogram

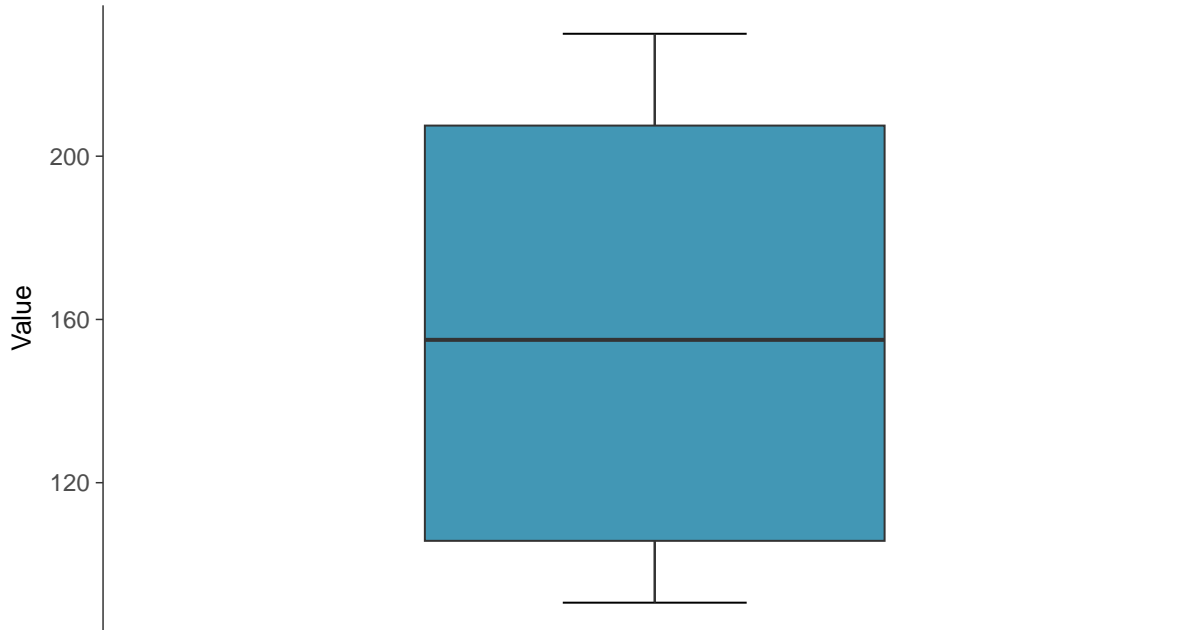
Barium, MW-17001R (ug/L)





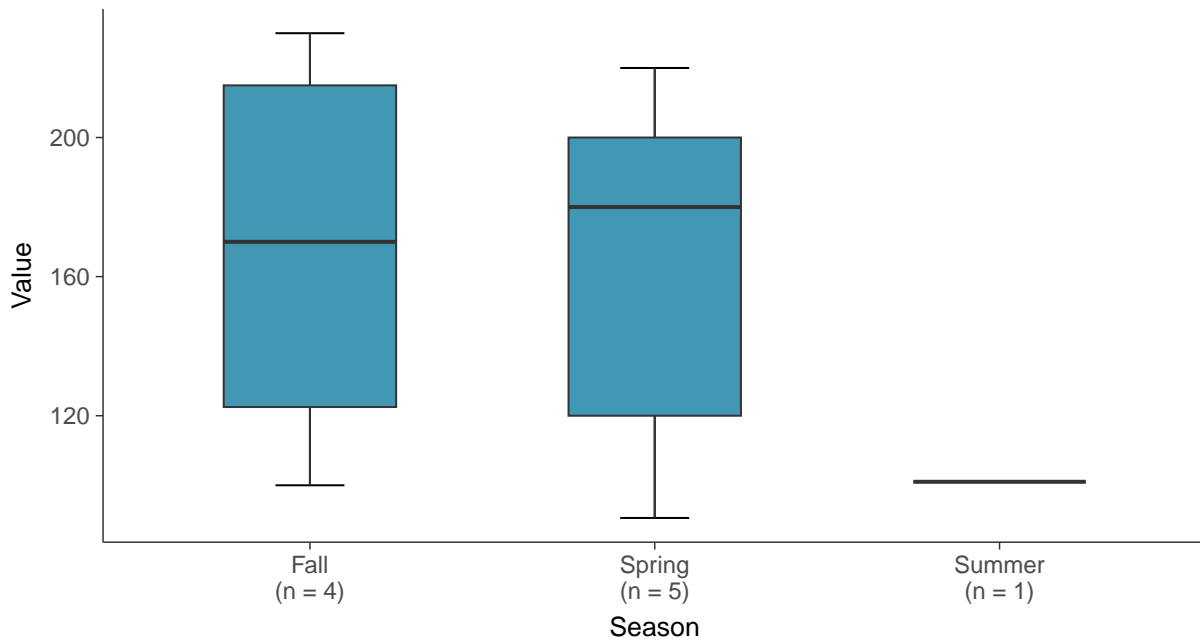
Boxplot

Barium, MW-17001R (ug/L)



Boxplot by Season

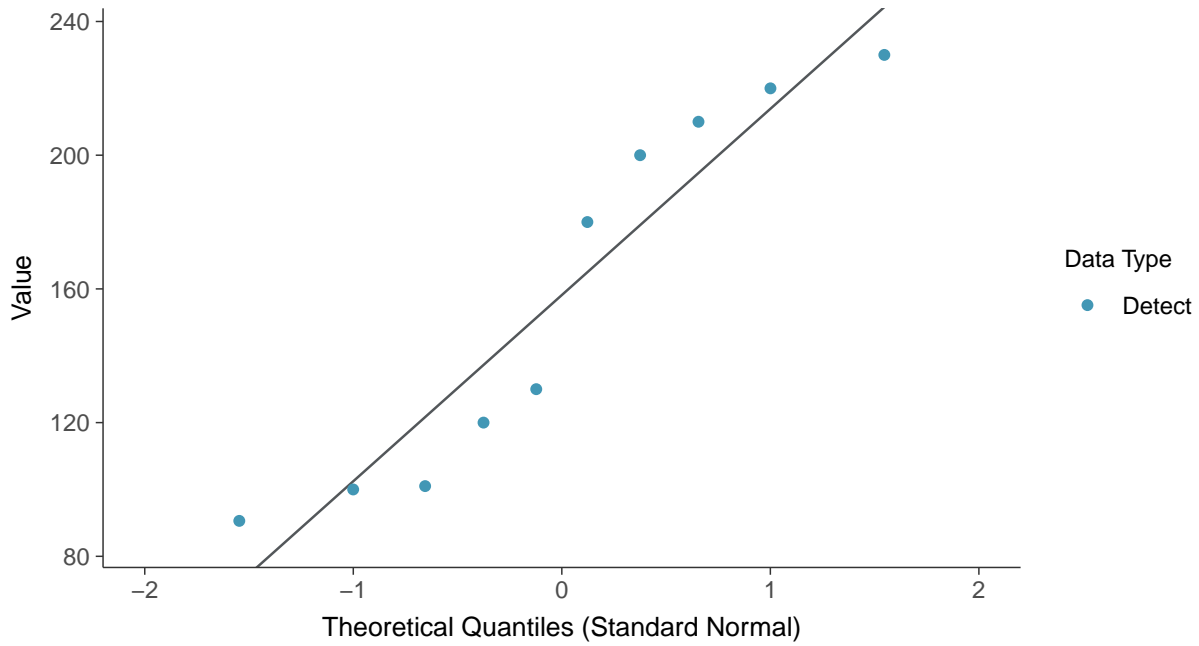
Barium, MW-17001R (ug/L)





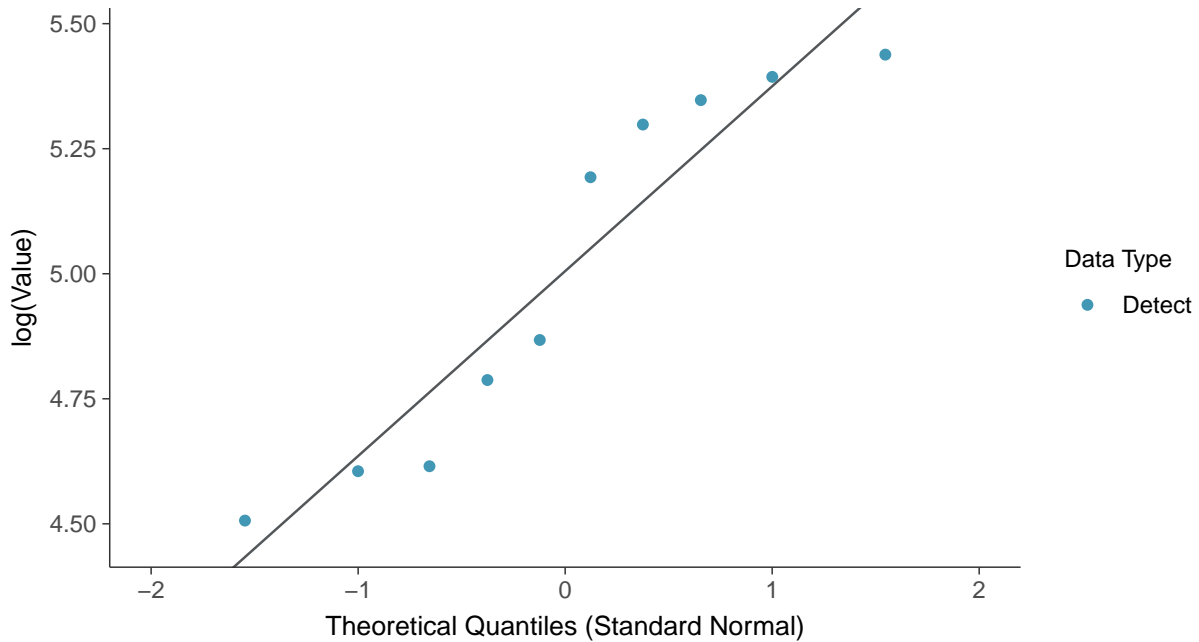
Normal Q-Q plot

Barium, MW-17001R (ug/L)



Lognormal Q-Q plot

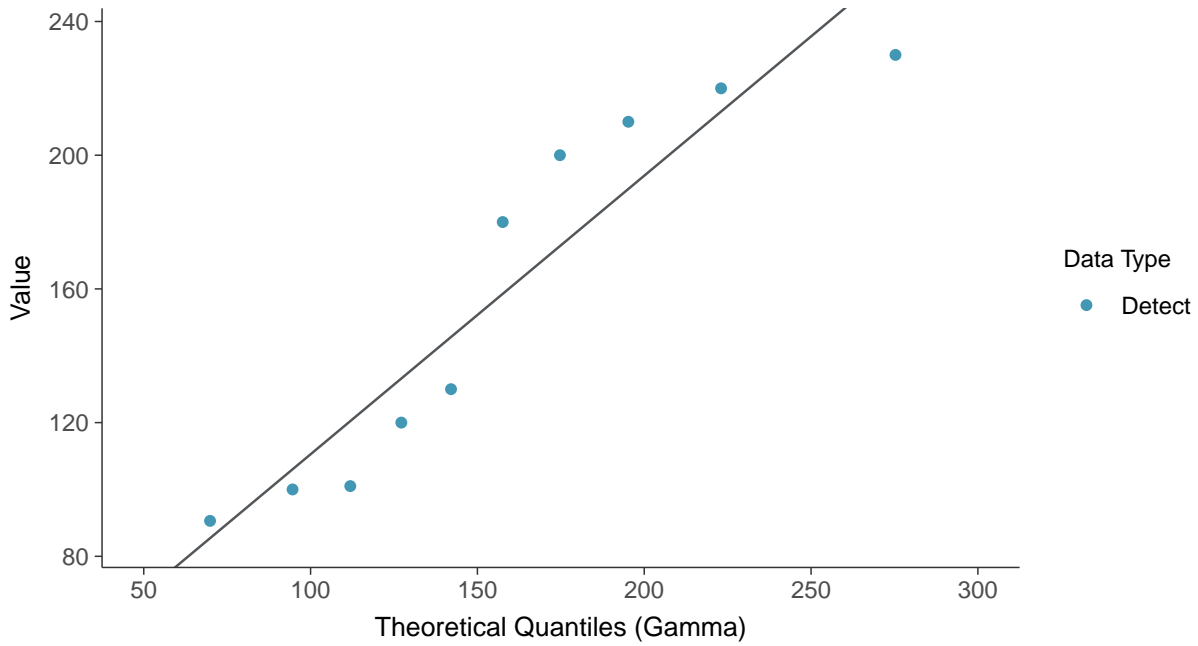
Barium, MW-17001R (ug/L)





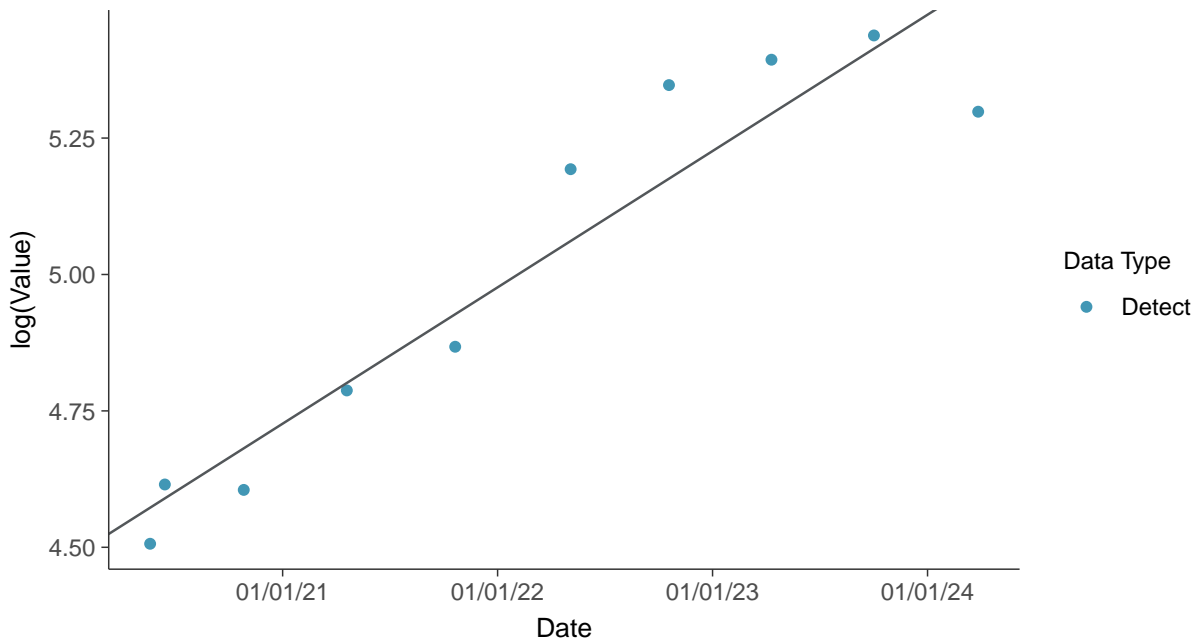
Gamma Q-Q plot

Barium, MW-17001R (ug/L)



Trend Regression: Lognormal MLE

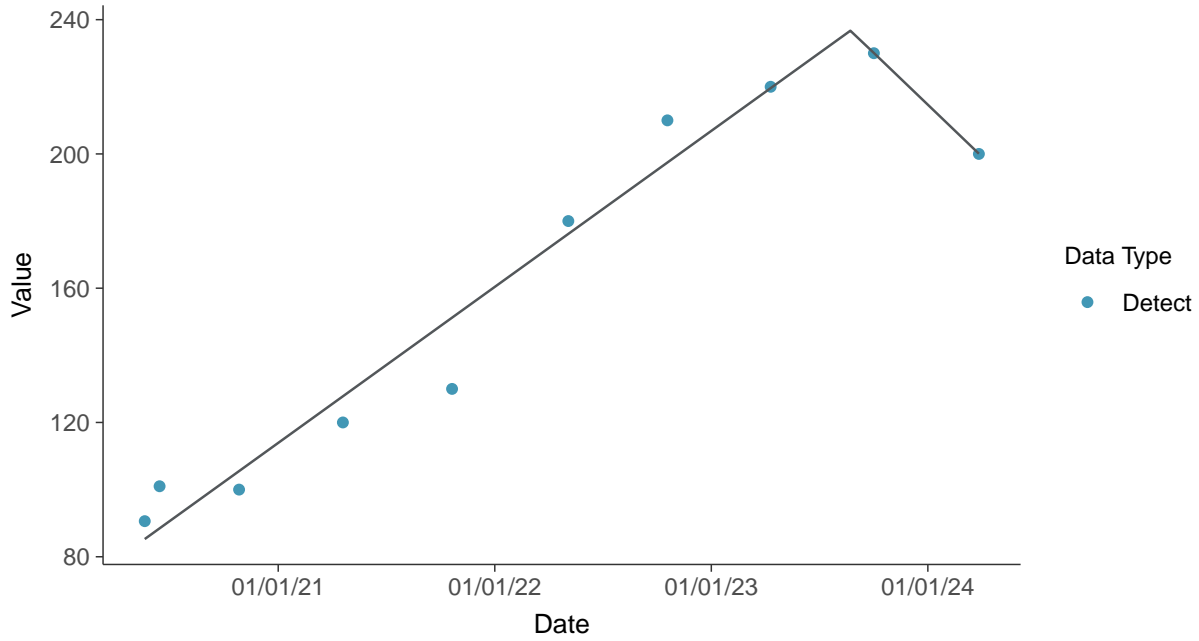
Barium, MW-17001R (ug/L)





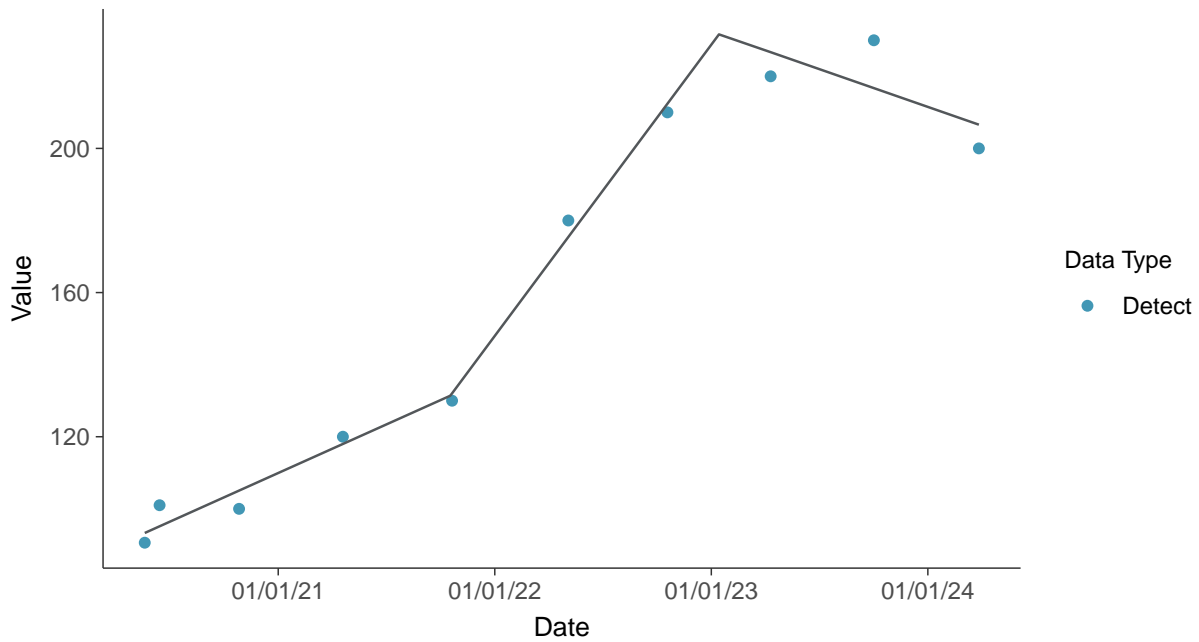
Trend Regression: Piecewise Linear-Linear

Barium, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

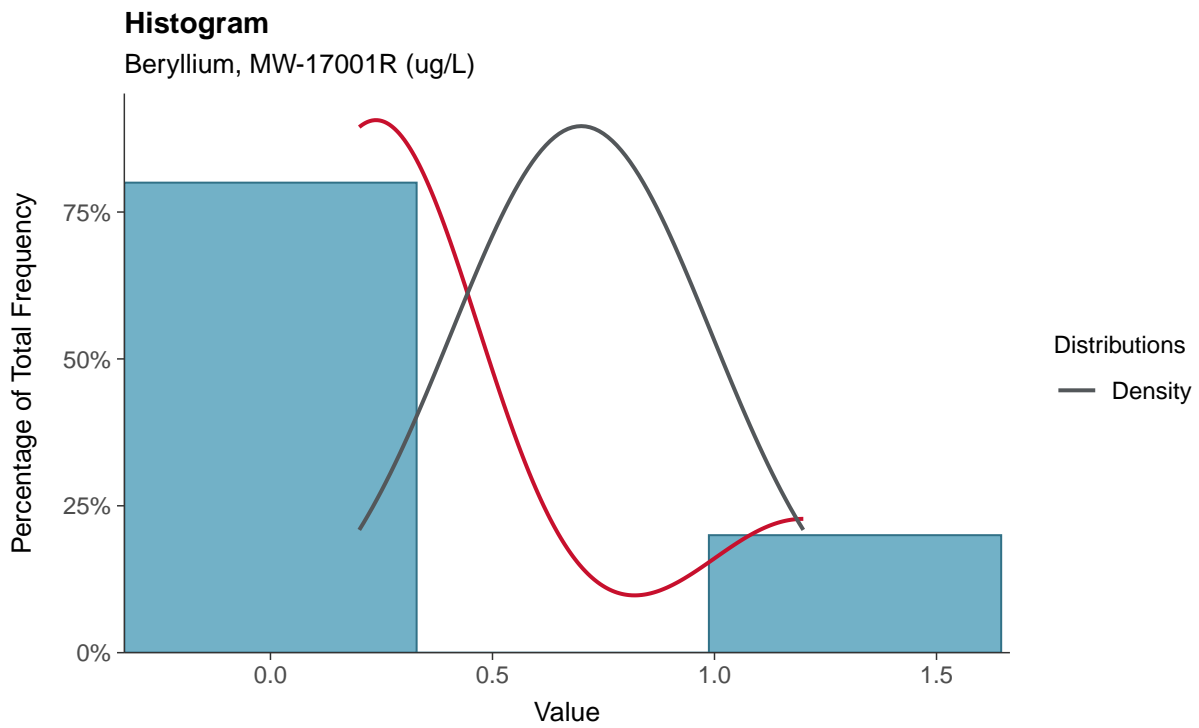
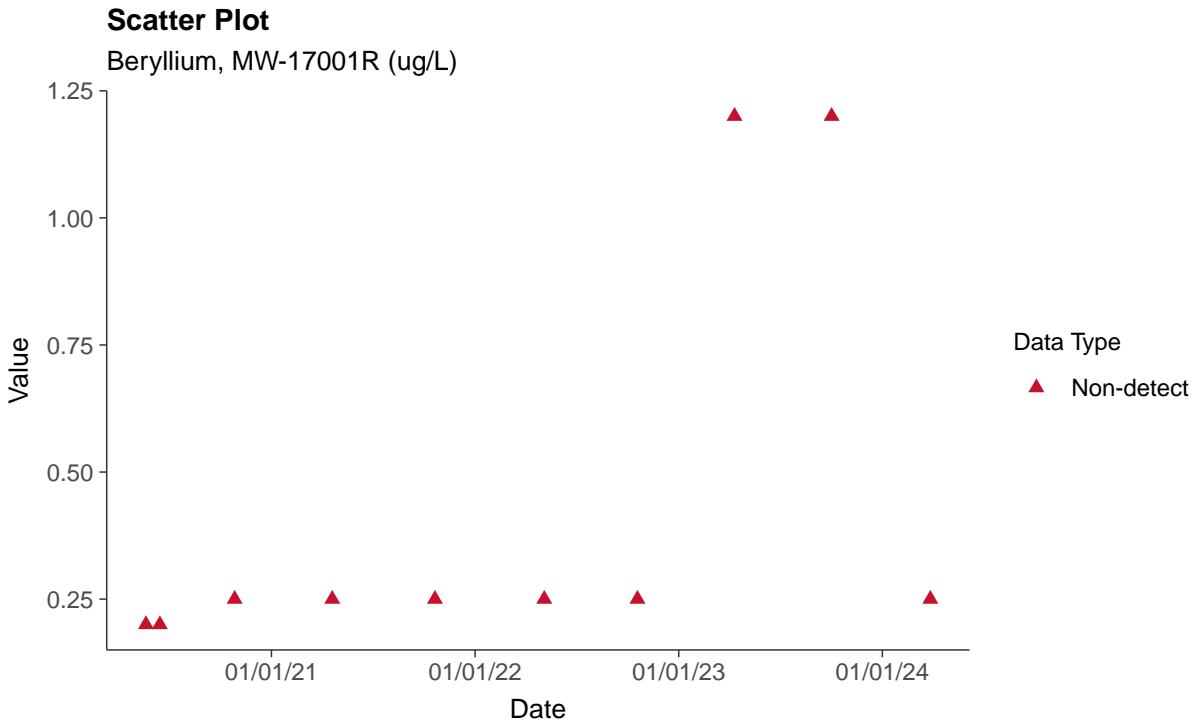
Barium, MW-17001R (ug/L)





Appendix IV: Beryllium, MW-17001R

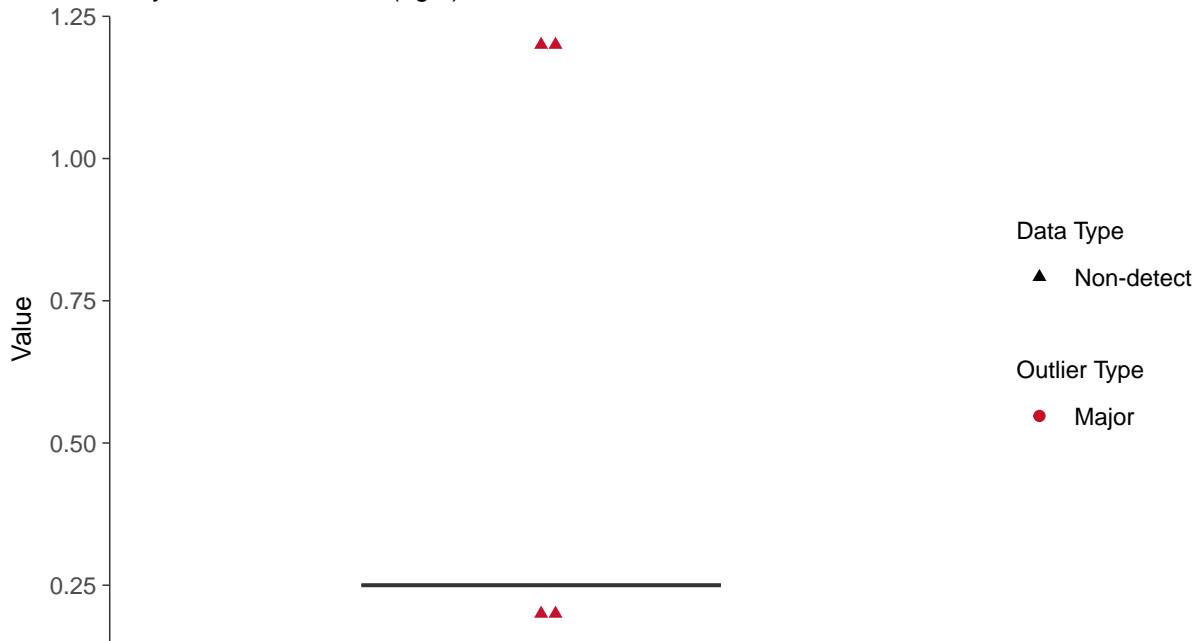
ID: 14_2_104





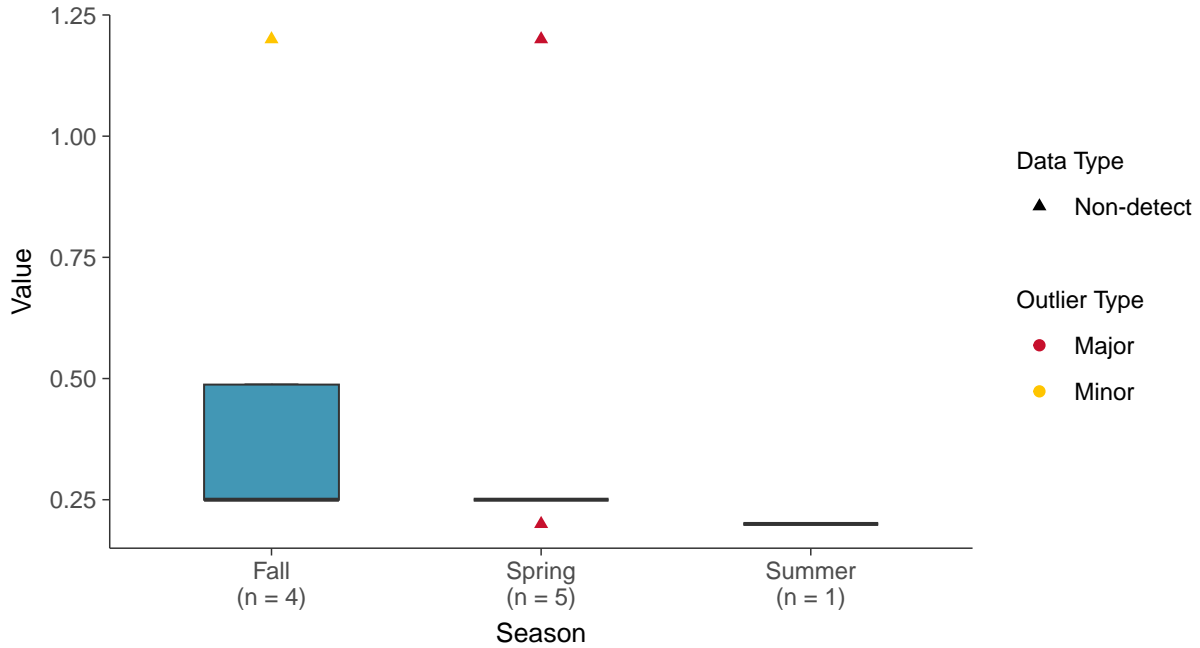
Boxplot

Beryllium, MW-17001R (ug/L)



Boxplot by Season

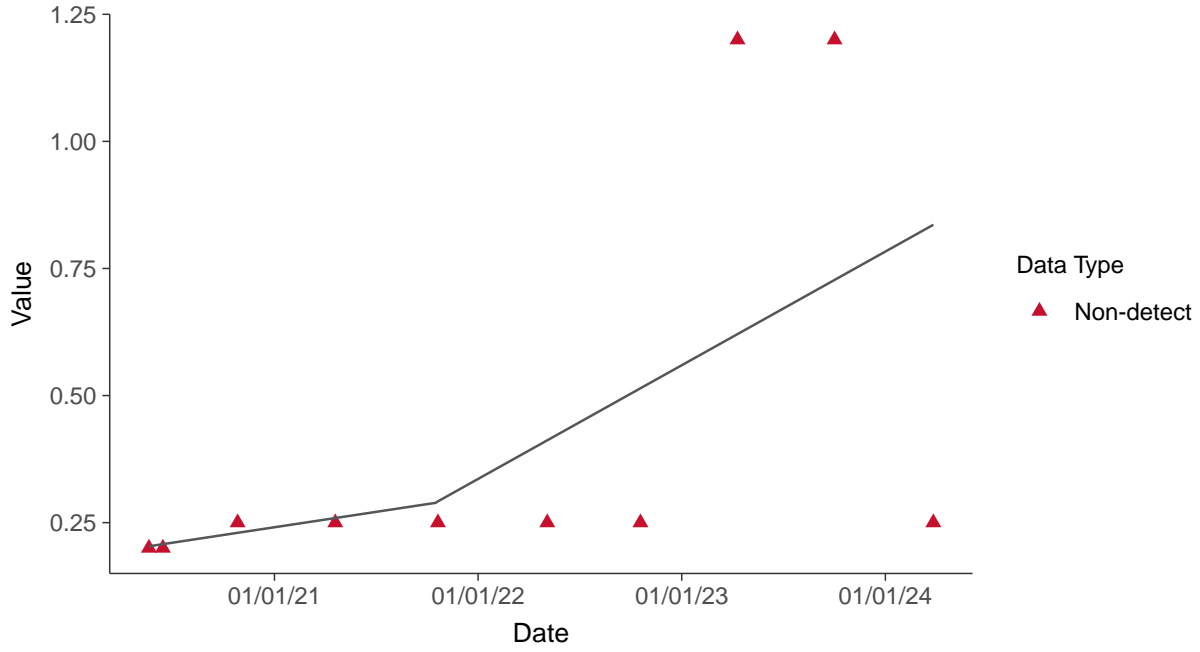
Beryllium, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear

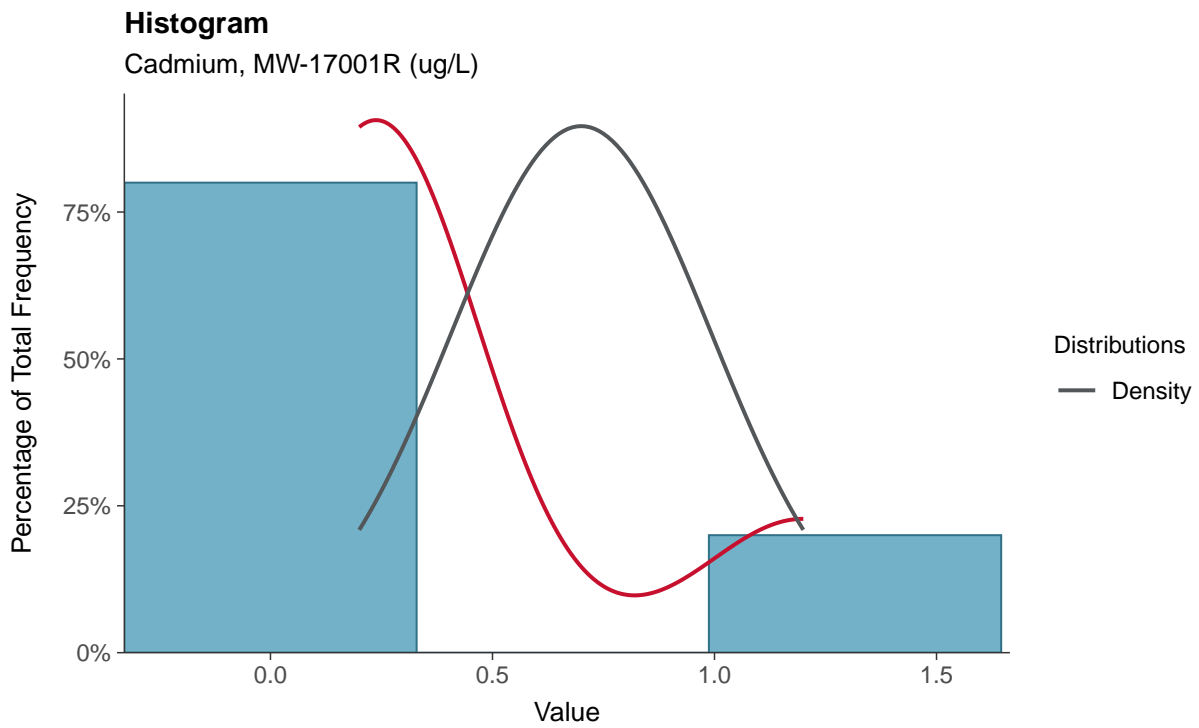
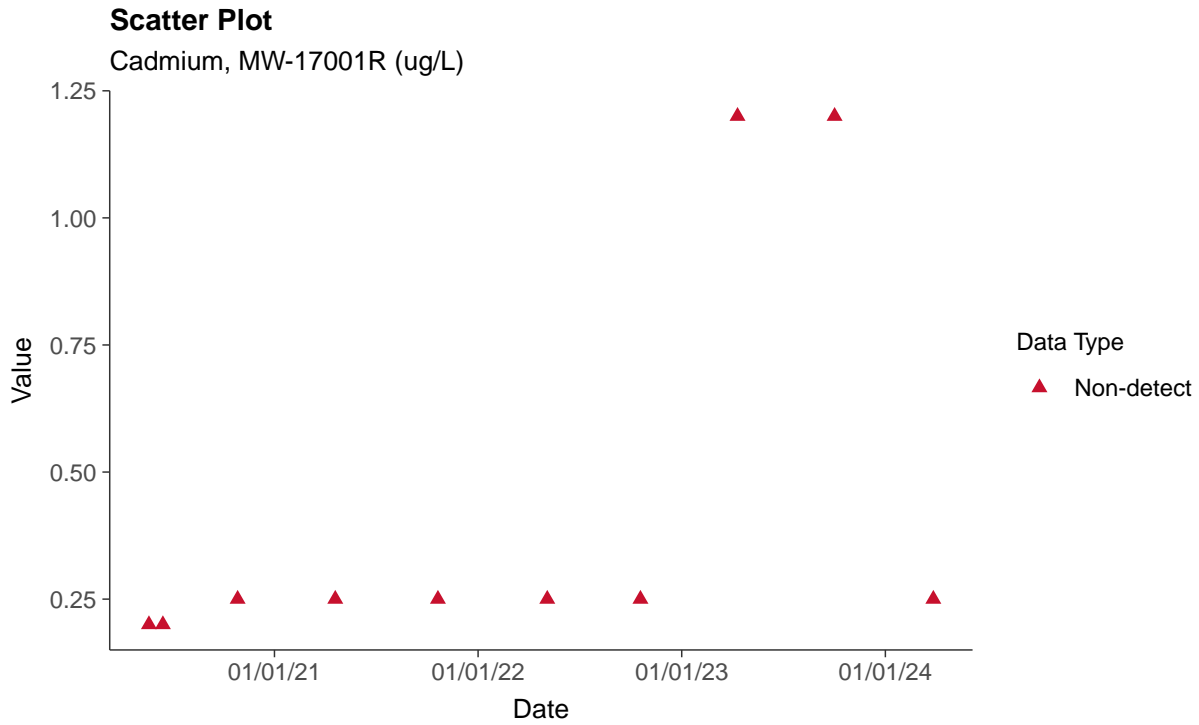
Beryllium, MW-17001R (ug/L)





Appendix IV: Cadmium, MW-17001R

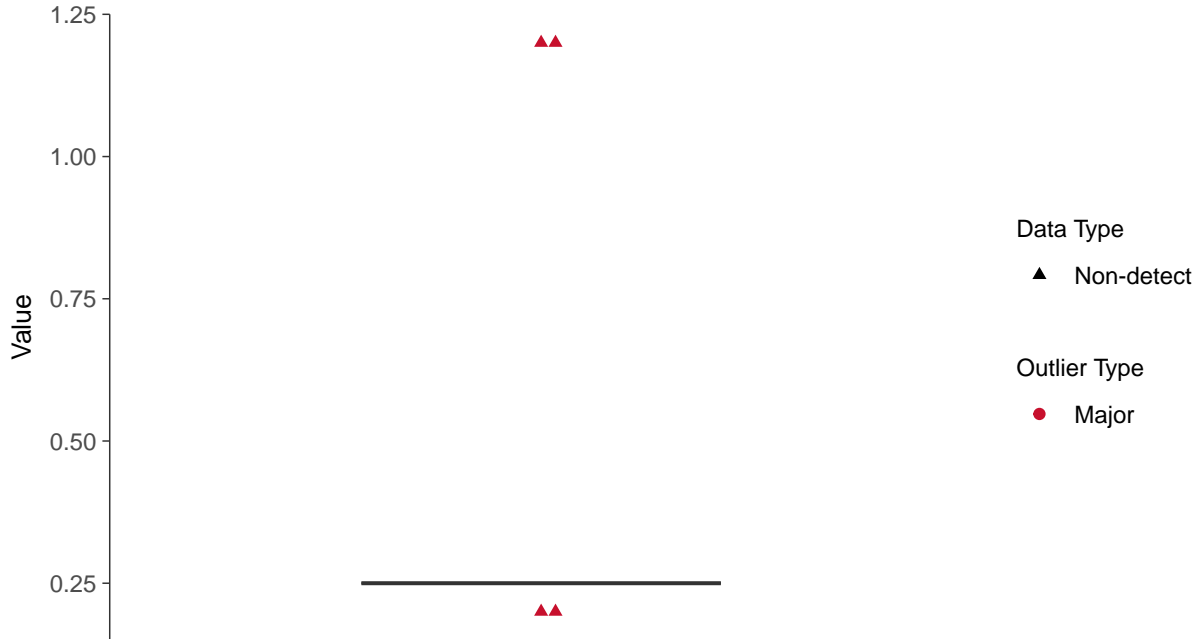
ID: 14_2_106





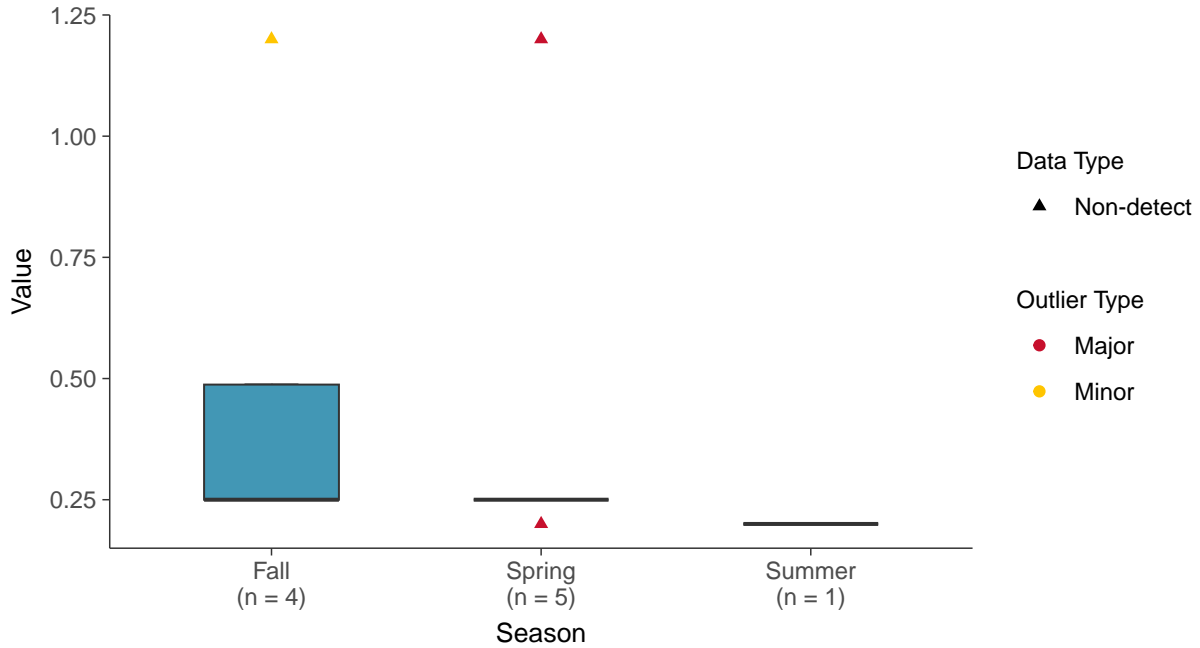
Boxplot

Cadmium, MW-17001R (ug/L)



Boxplot by Season

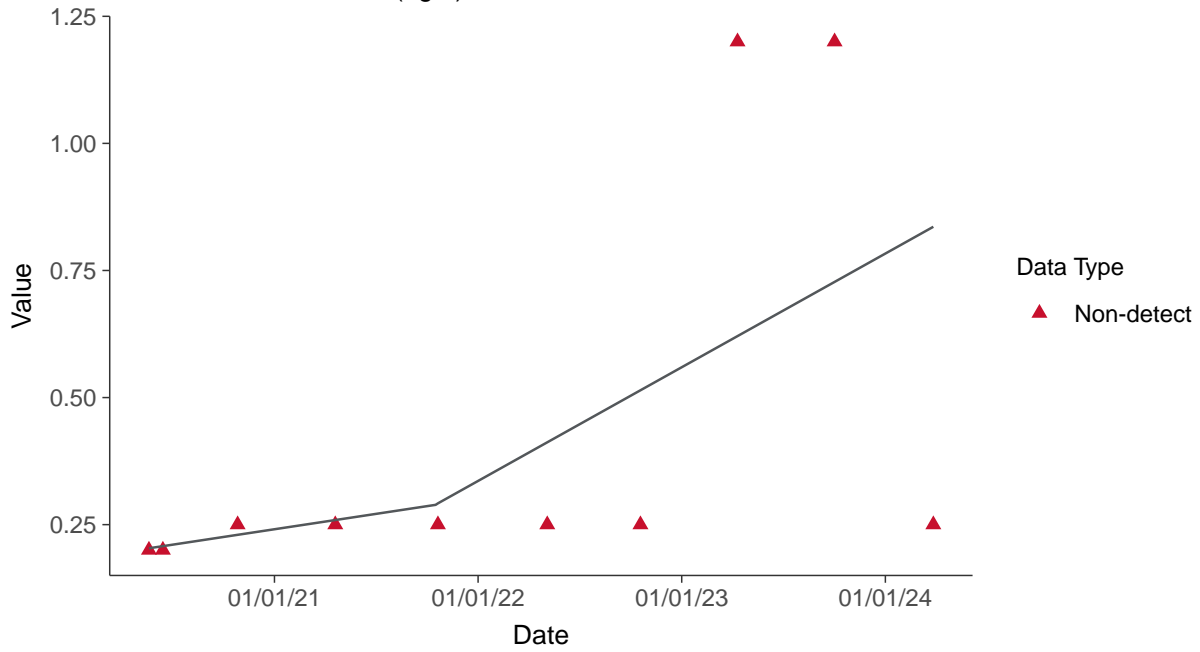
Cadmium, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear

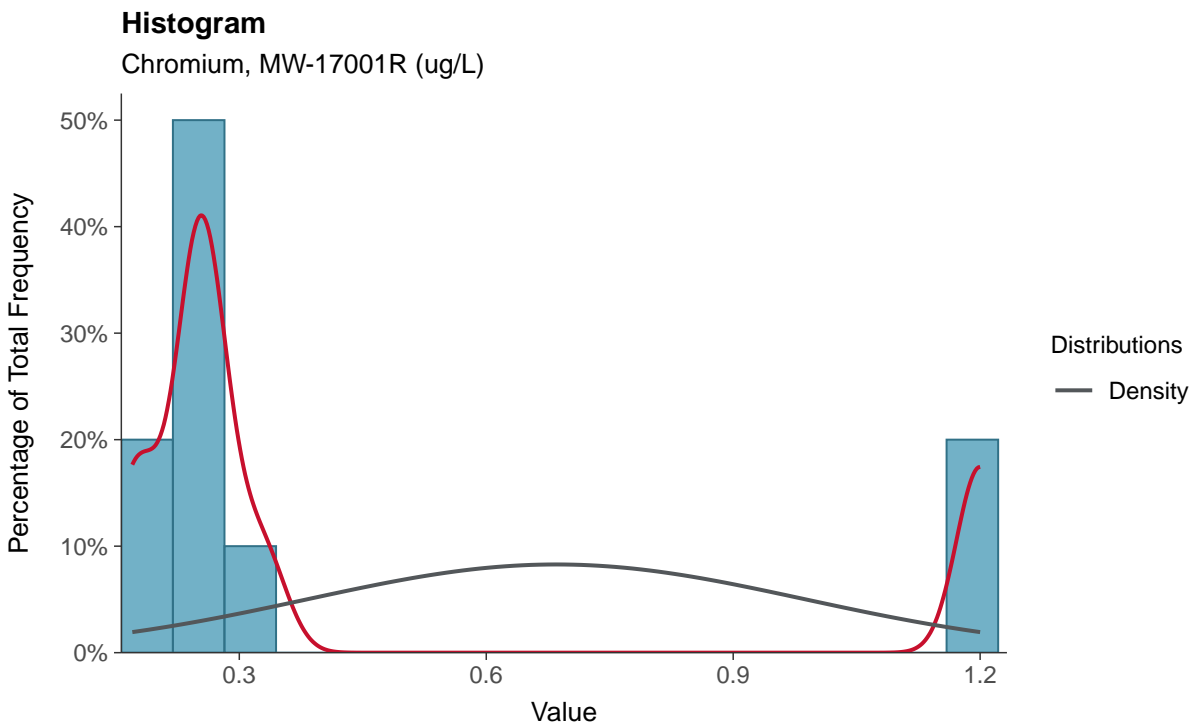
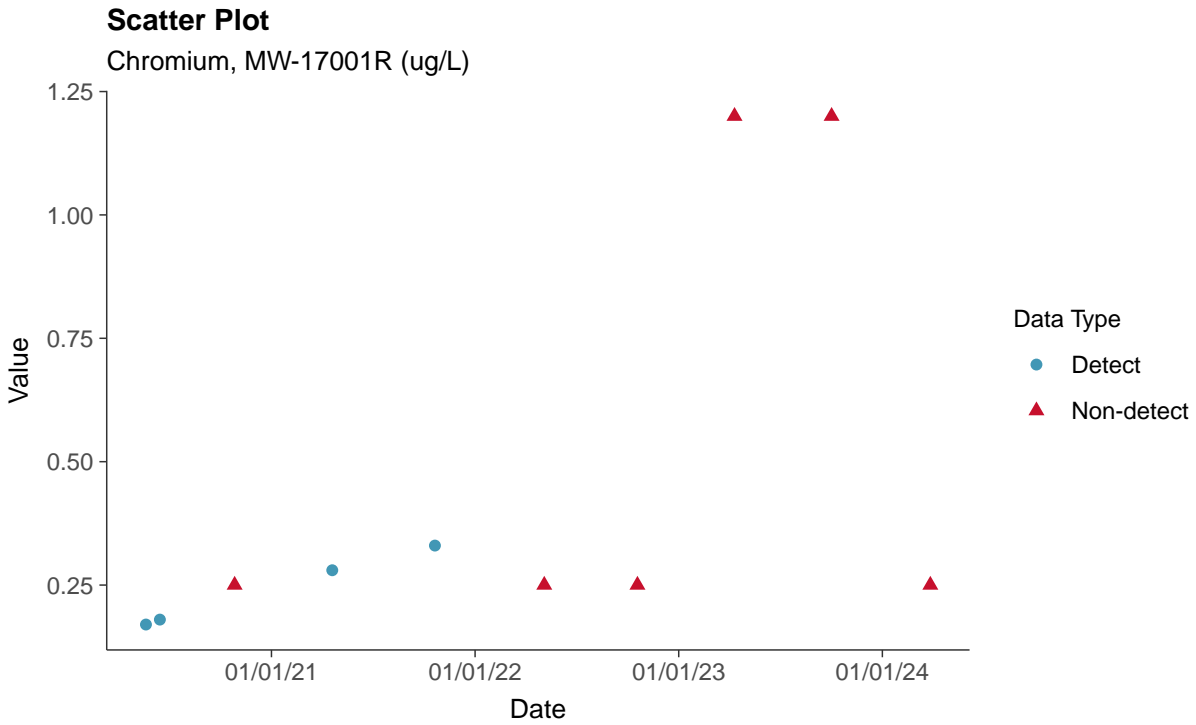
Cadmium, MW-17001R (ug/L)





Appendix IV: Chromium, MW-17001R

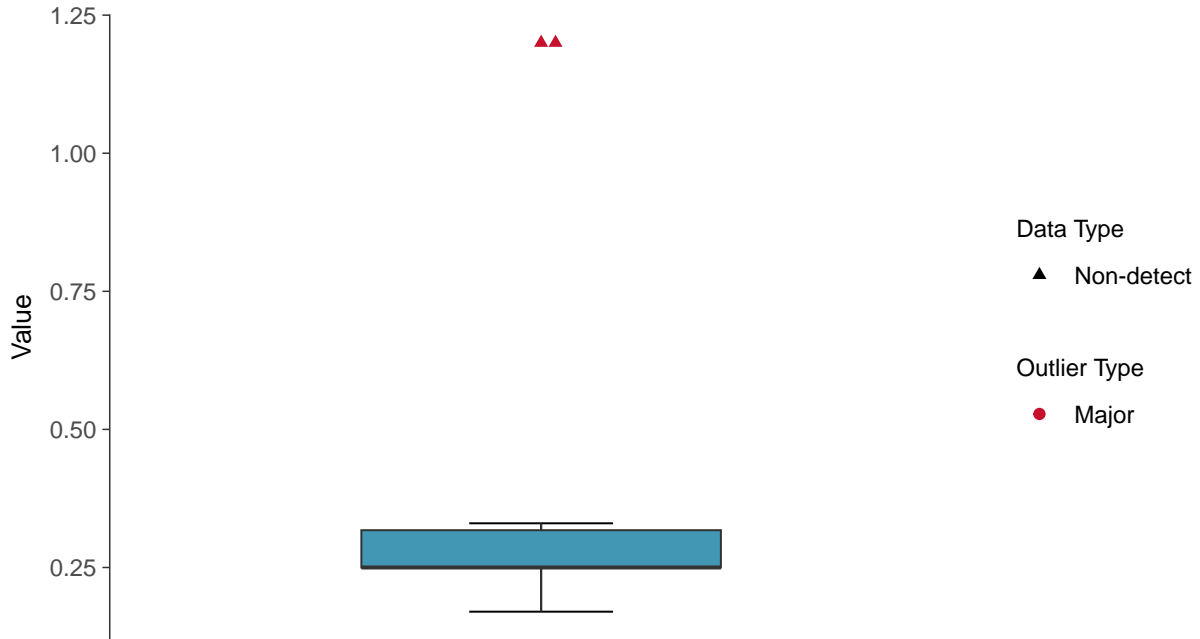
ID: 14_2_109





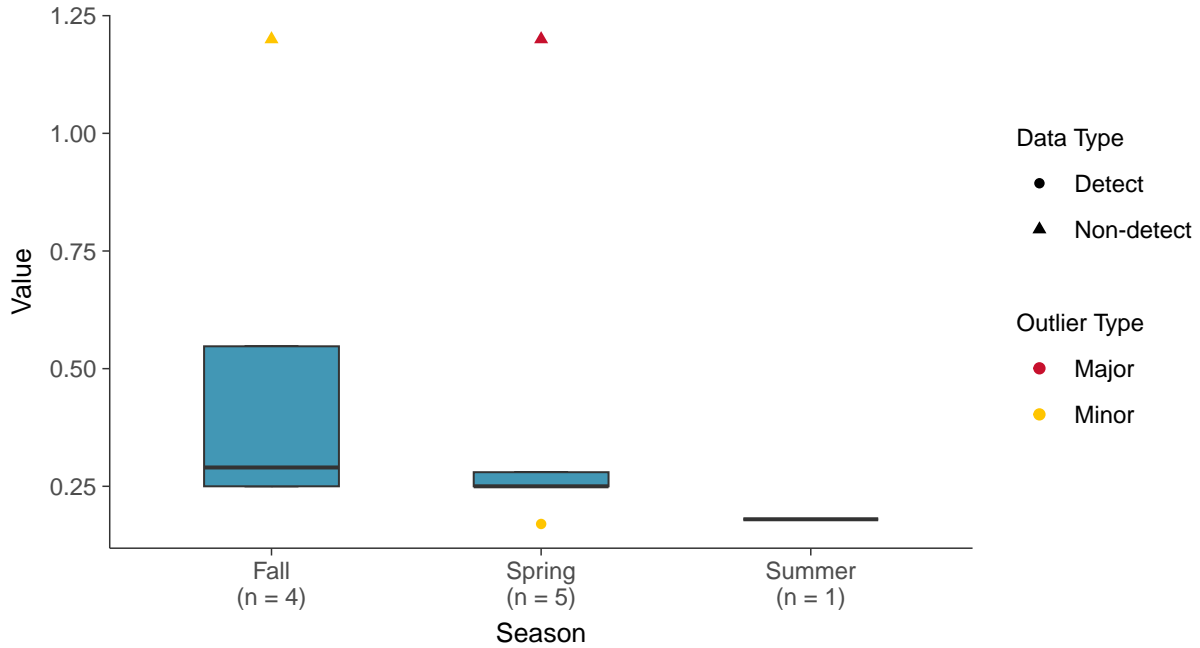
Boxplot

Chromium, MW-17001R (ug/L)



Boxplot by Season

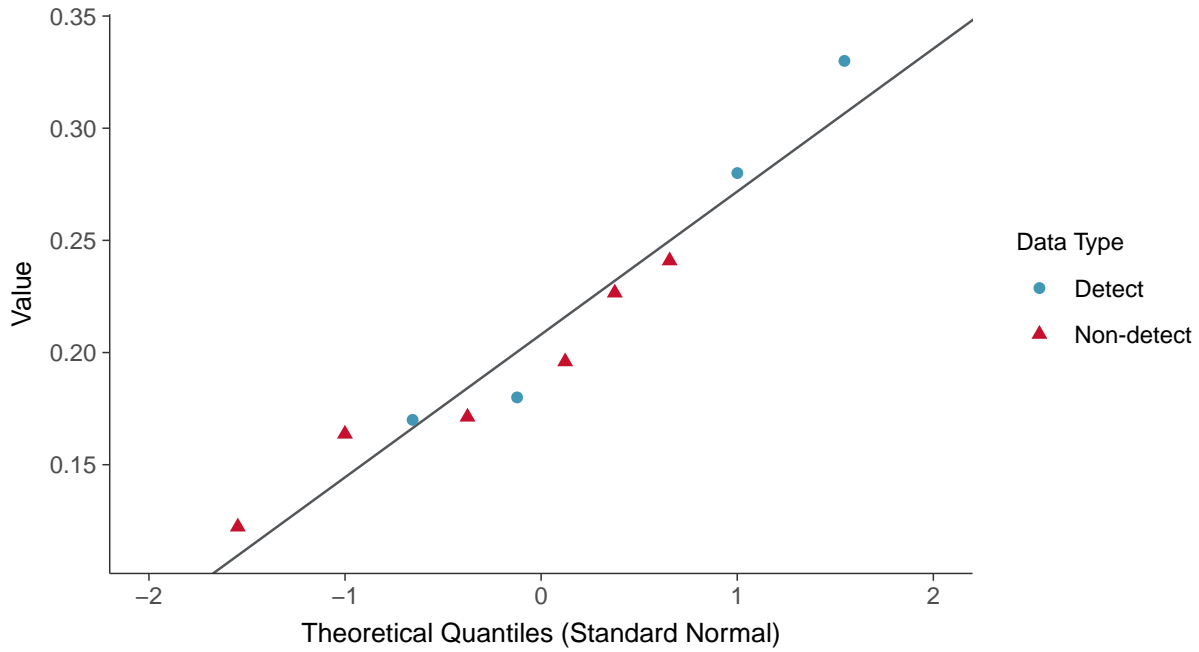
Chromium, MW-17001R (ug/L)





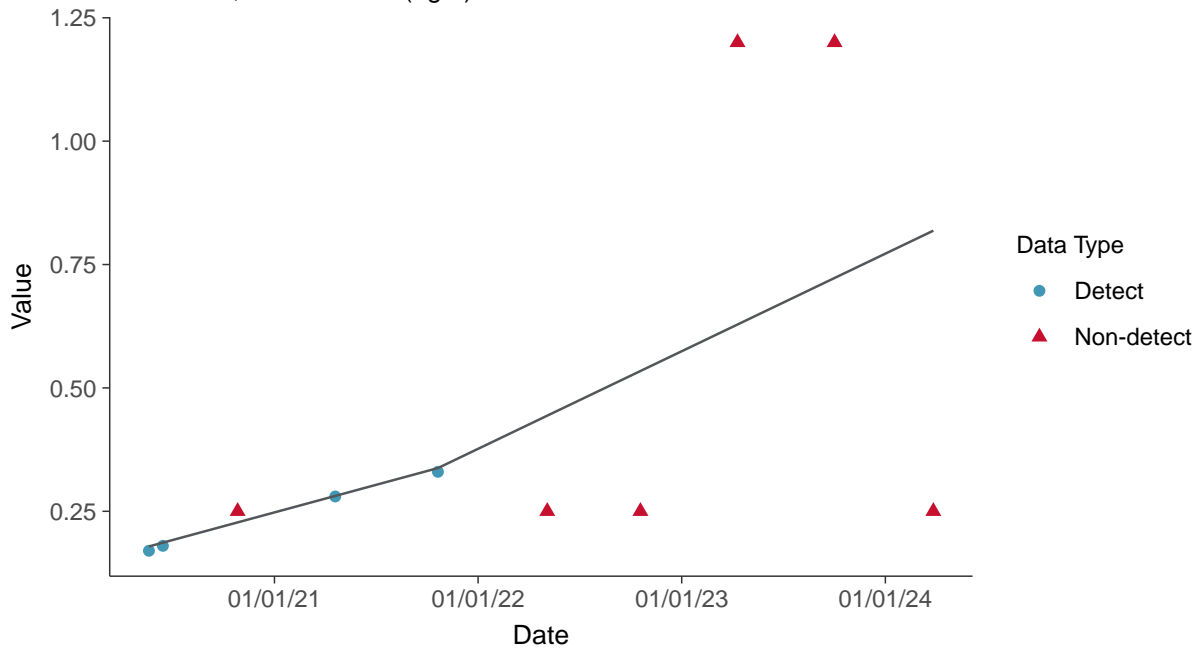
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear

Chromium, MW-17001R (ug/L)



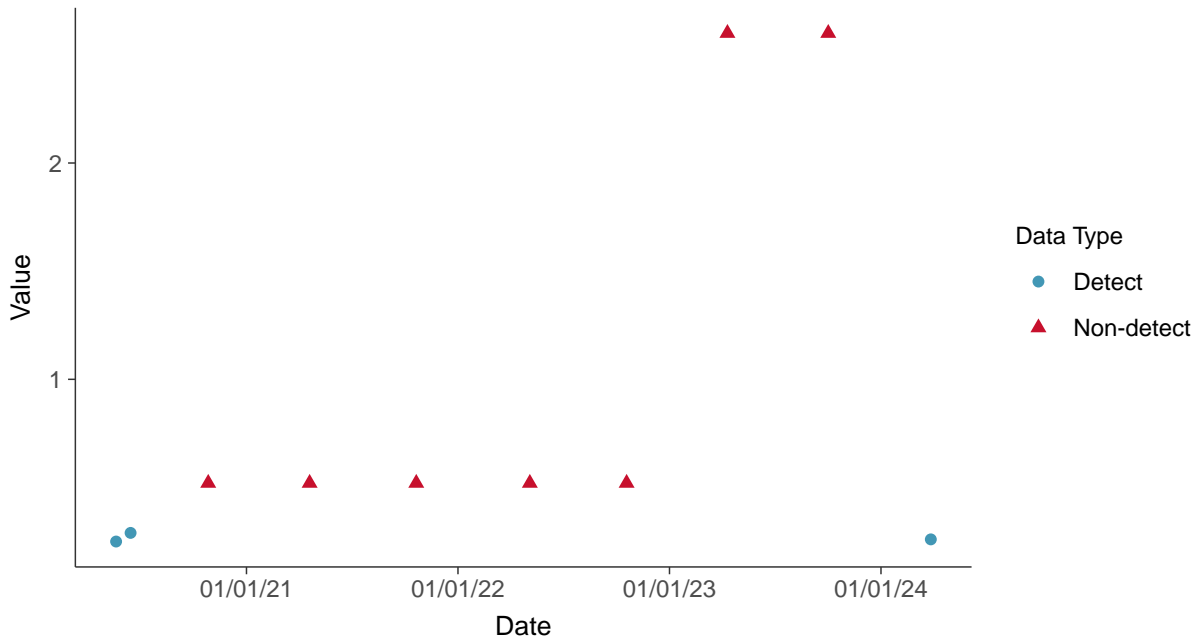


Appendix IV: Cobalt, MW-17001R

ID: 14_2_110

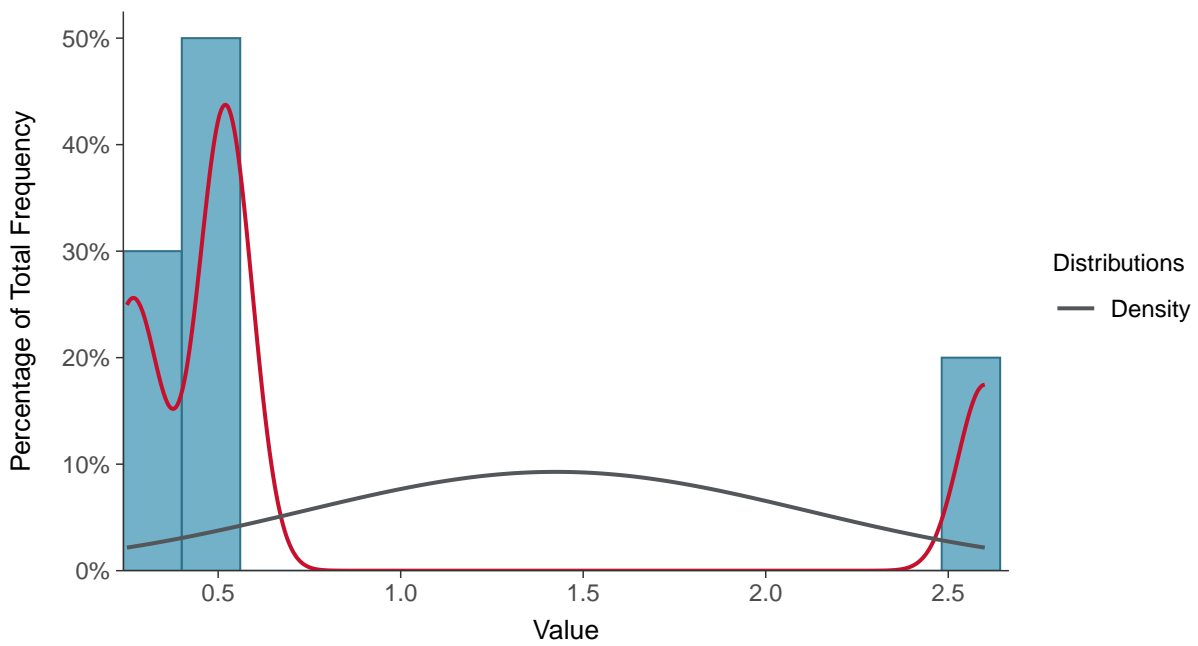
Scatter Plot

Cobalt, MW-17001R (ug/L)



Histogram

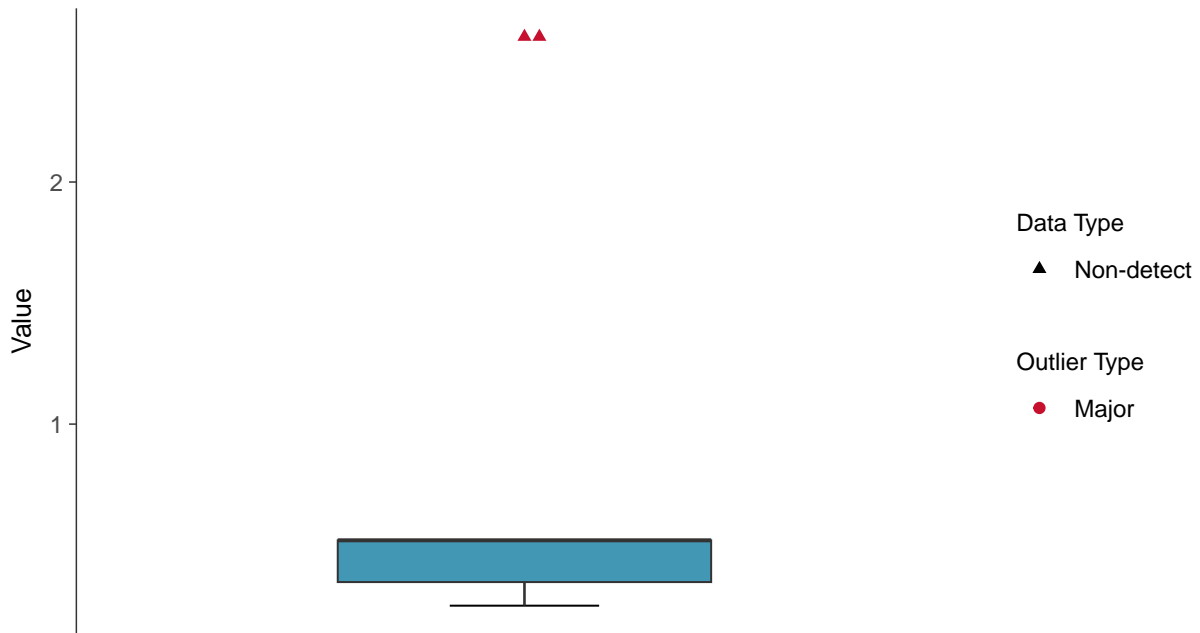
Cobalt, MW-17001R (ug/L)





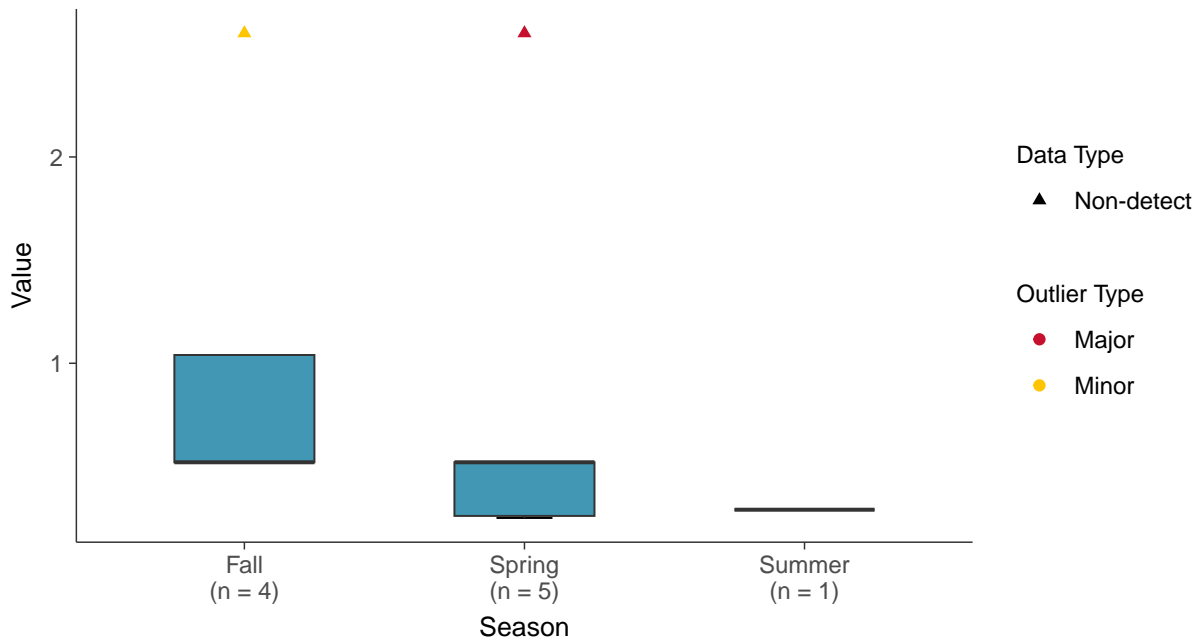
Boxplot

Cobalt, MW-17001R (ug/L)



Boxplot by Season

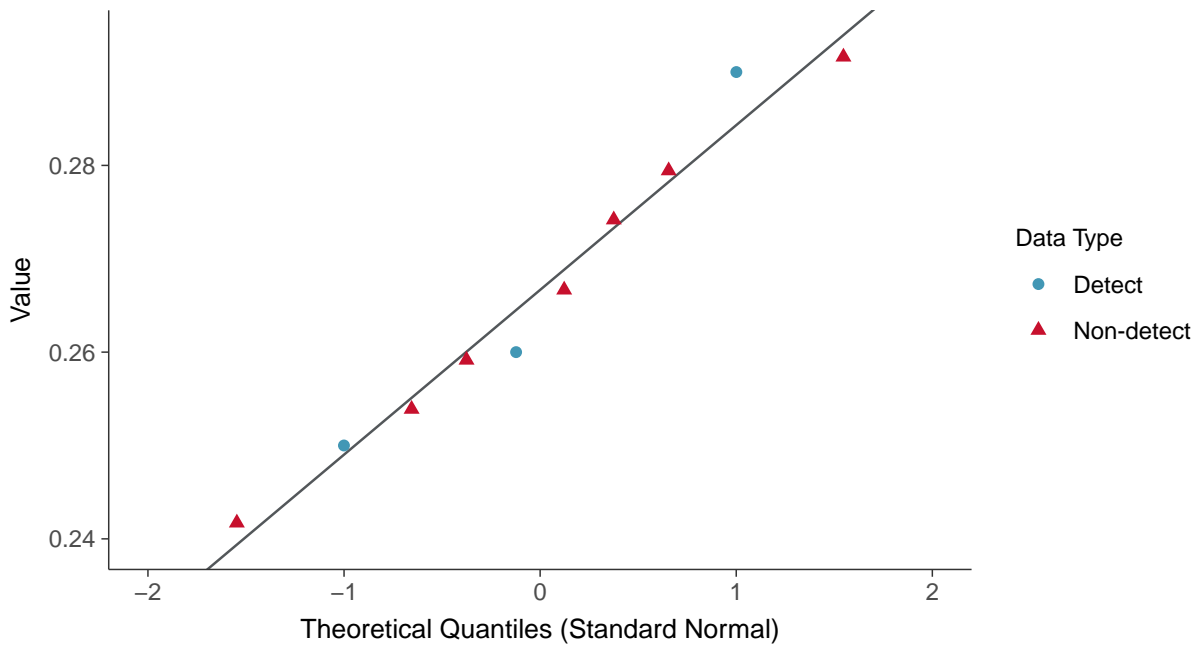
Cobalt, MW-17001R (ug/L)





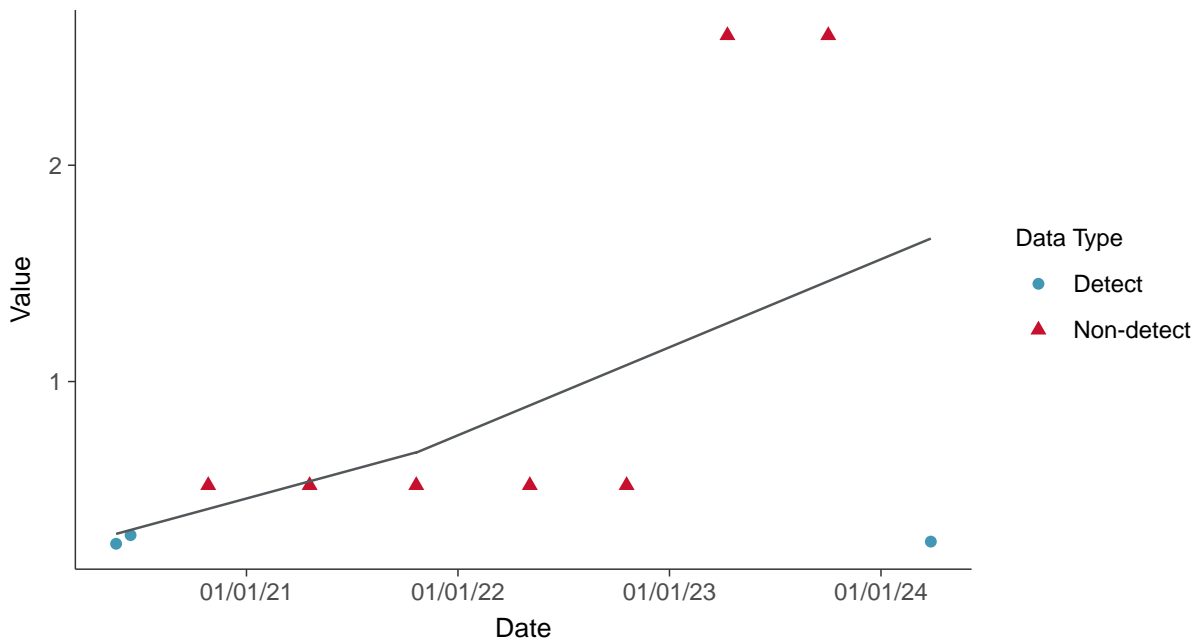
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-17001R (ug/L)



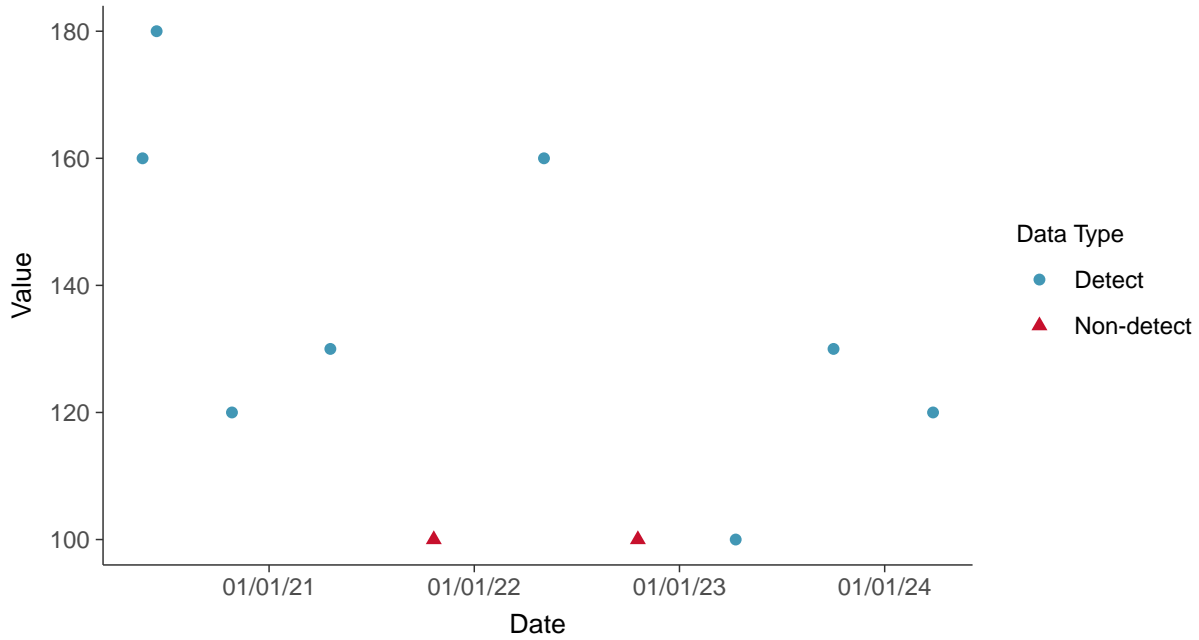


Appendix IV: Fluoride, MW-17001R

ID: 14_2_114

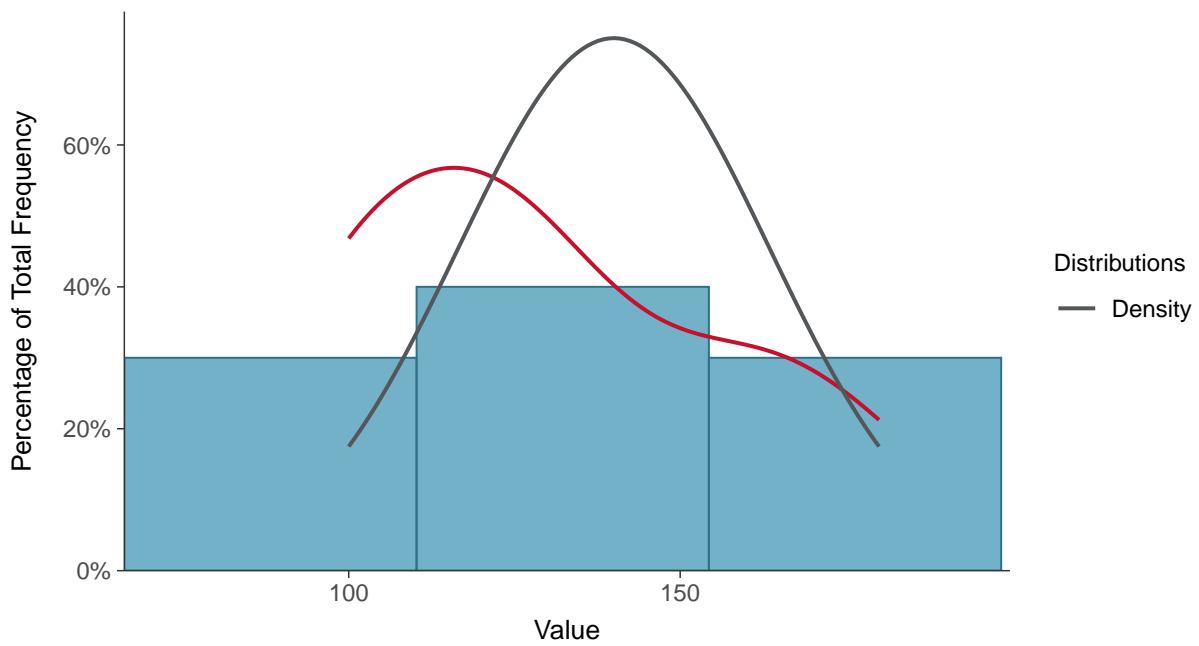
Scatter Plot

Fluoride, MW-17001R (ug/L)



Histogram

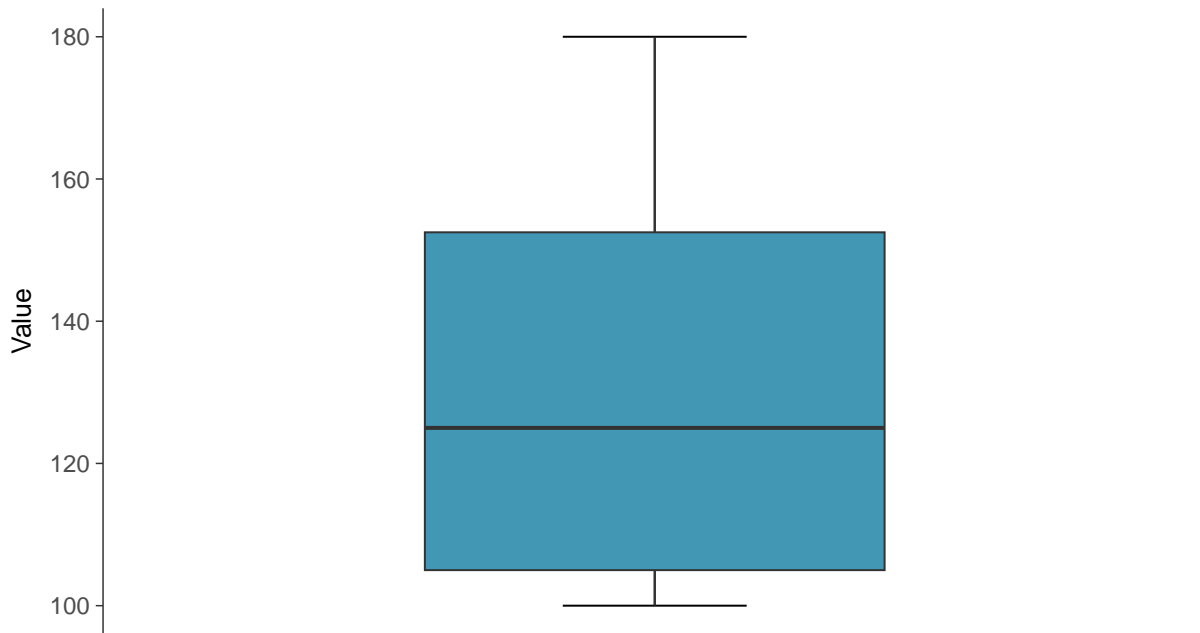
Fluoride, MW-17001R (ug/L)





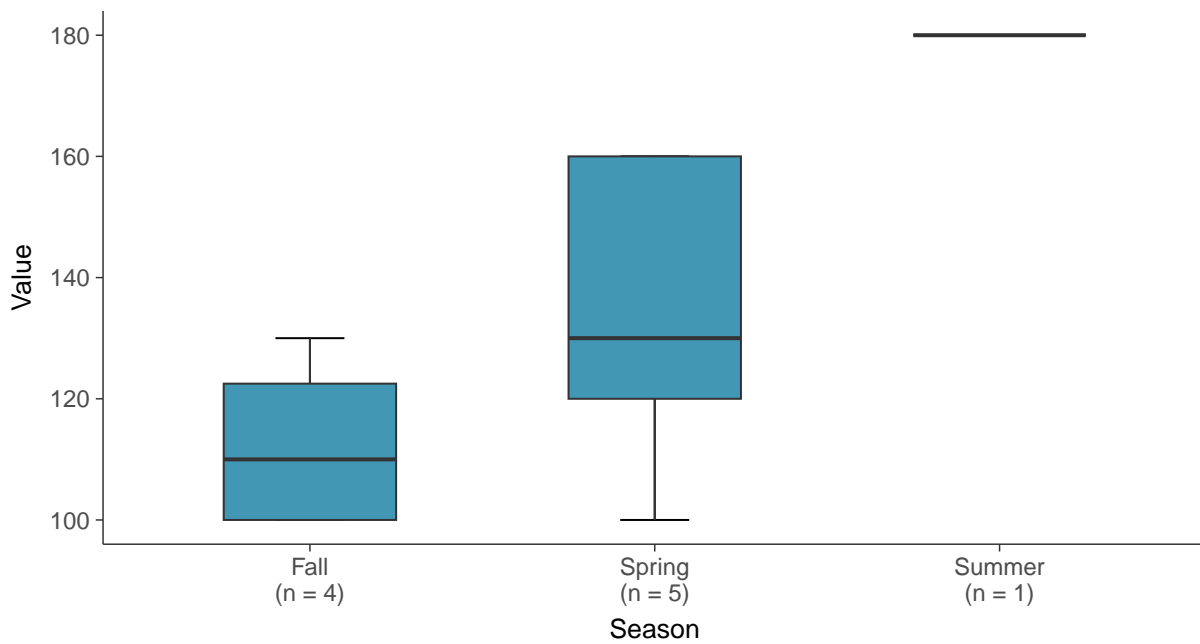
Boxplot

Fluoride, MW-17001R (ug/L)



Boxplot by Season

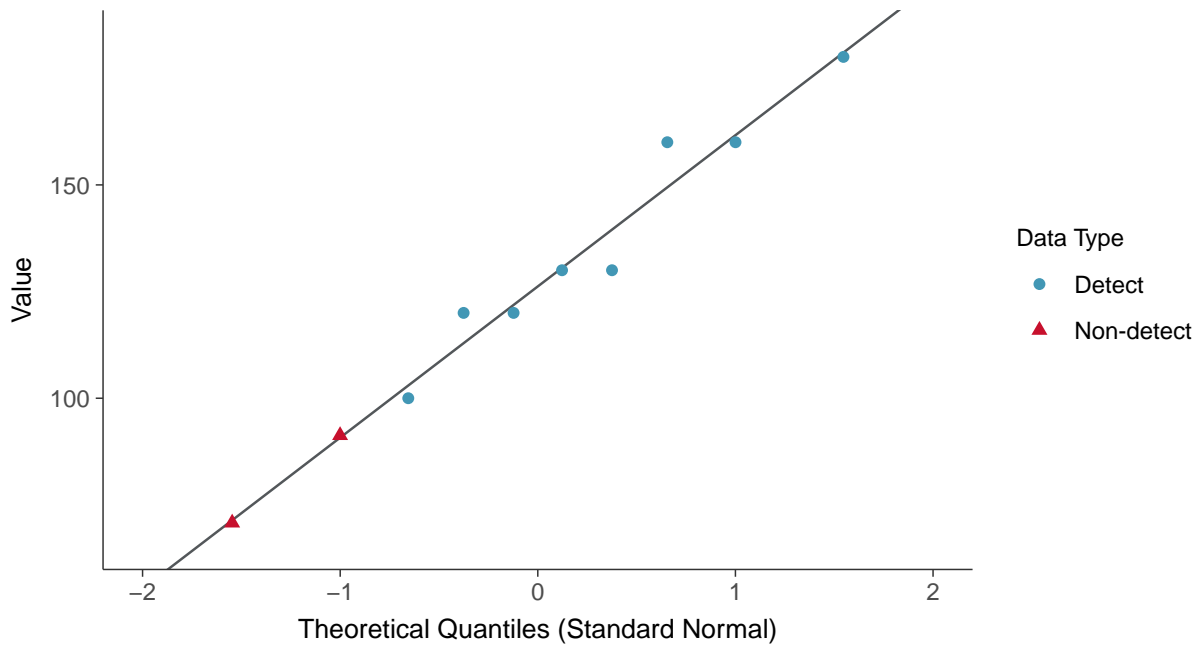
Fluoride, MW-17001R (ug/L)





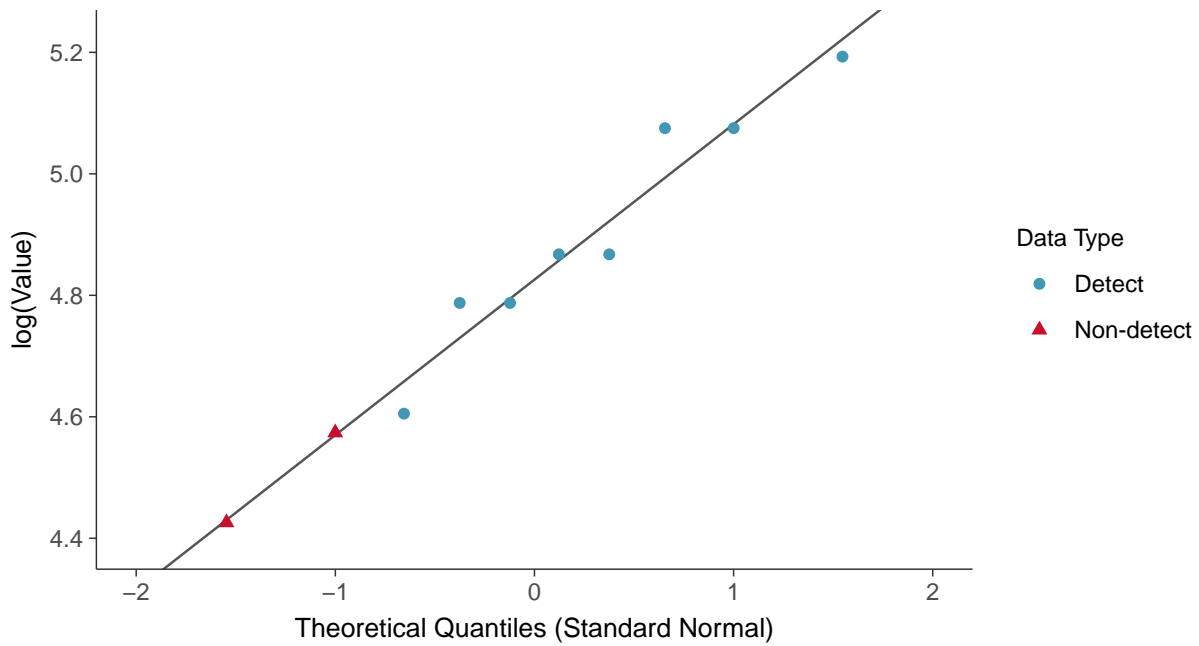
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17001R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

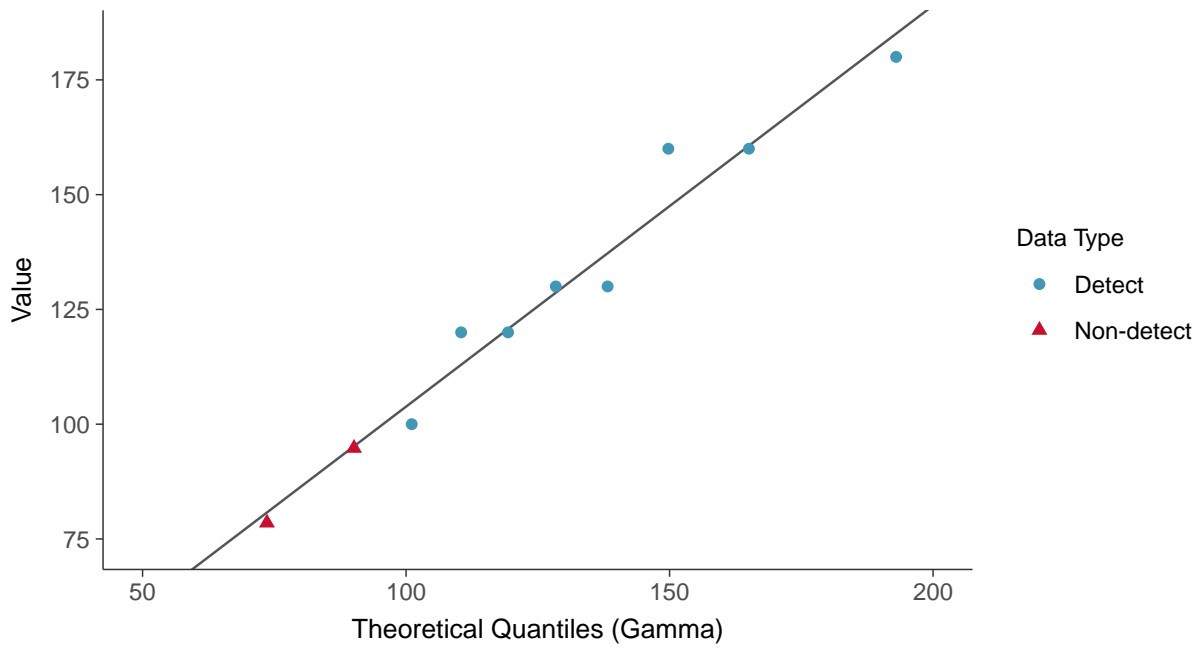
Fluoride, MW-17001R (ug/L)





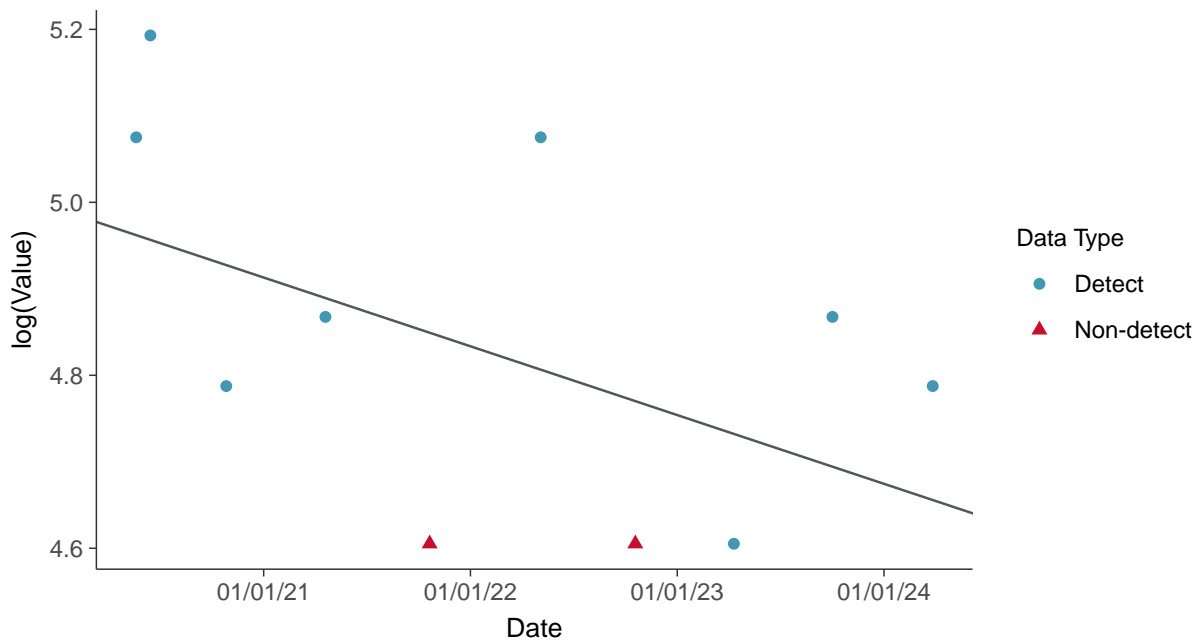
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17001R (ug/L)



Trend Regression: Lognormal MLE

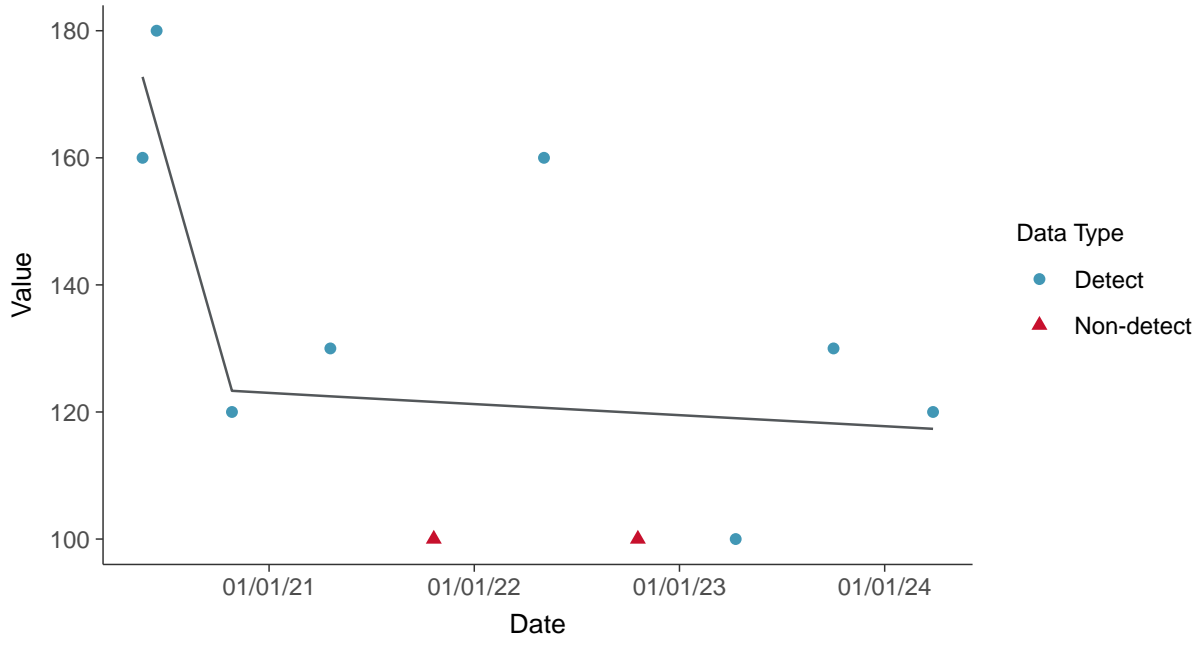
Fluoride, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear

Fluoride, MW-17001R (ug/L)



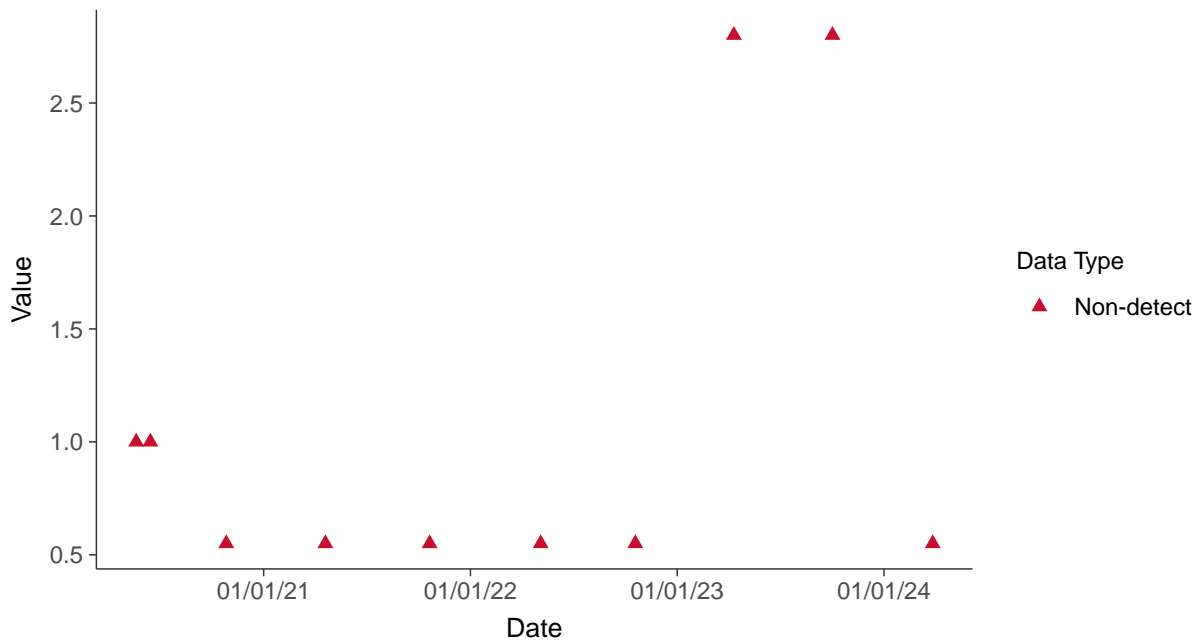


Appendix IV: Lead, MW-17001R

ID: 14_2_116

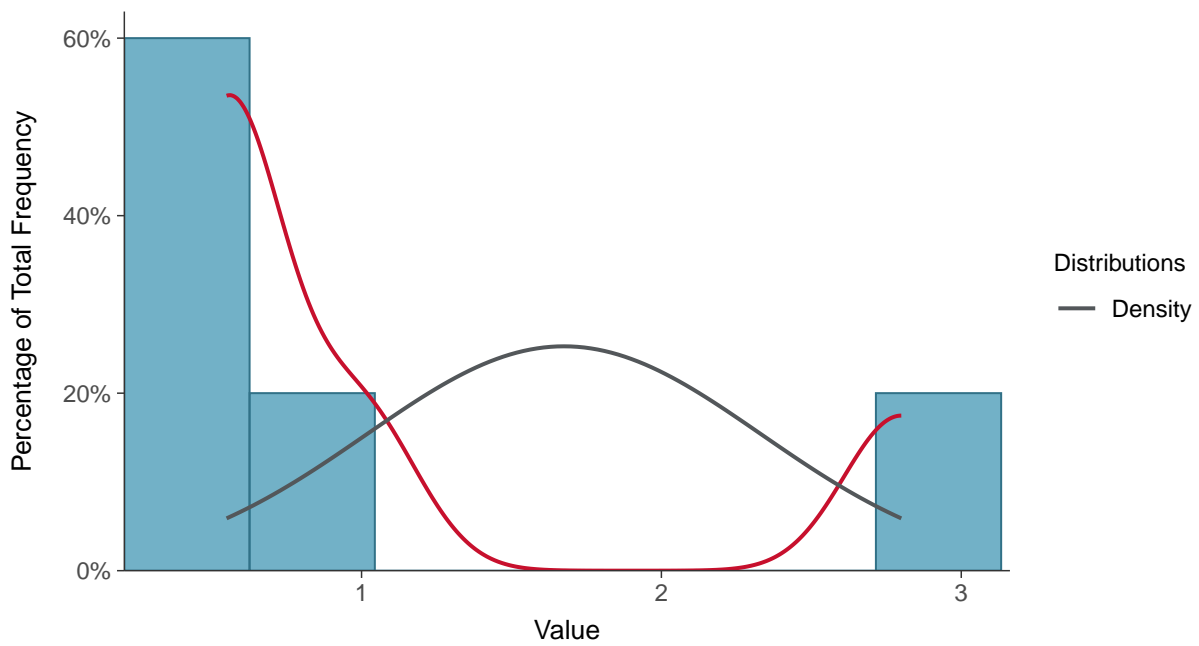
Scatter Plot

Lead, MW-17001R (ug/L)



Histogram

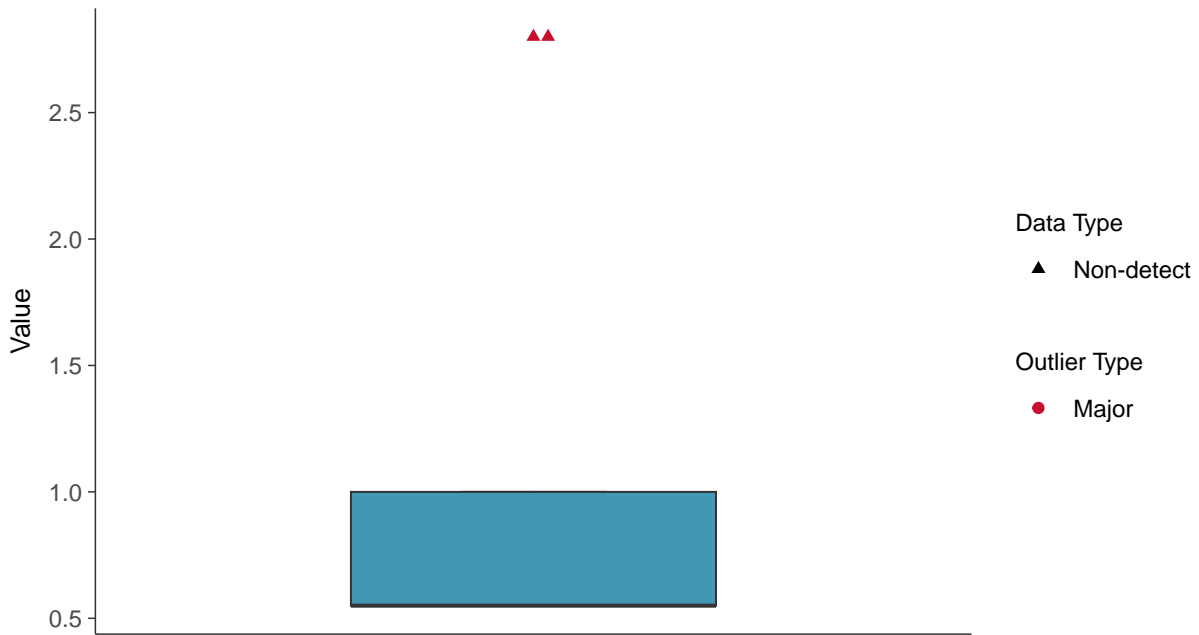
Lead, MW-17001R (ug/L)





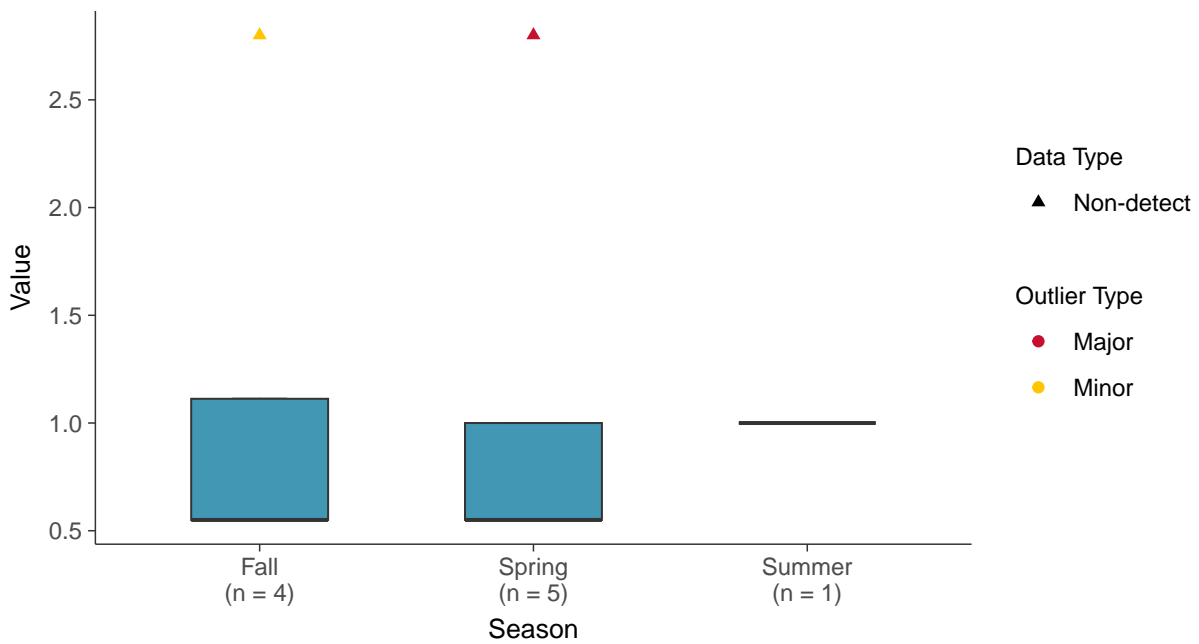
Boxplot

Lead, MW-17001R (ug/L)



Boxplot by Season

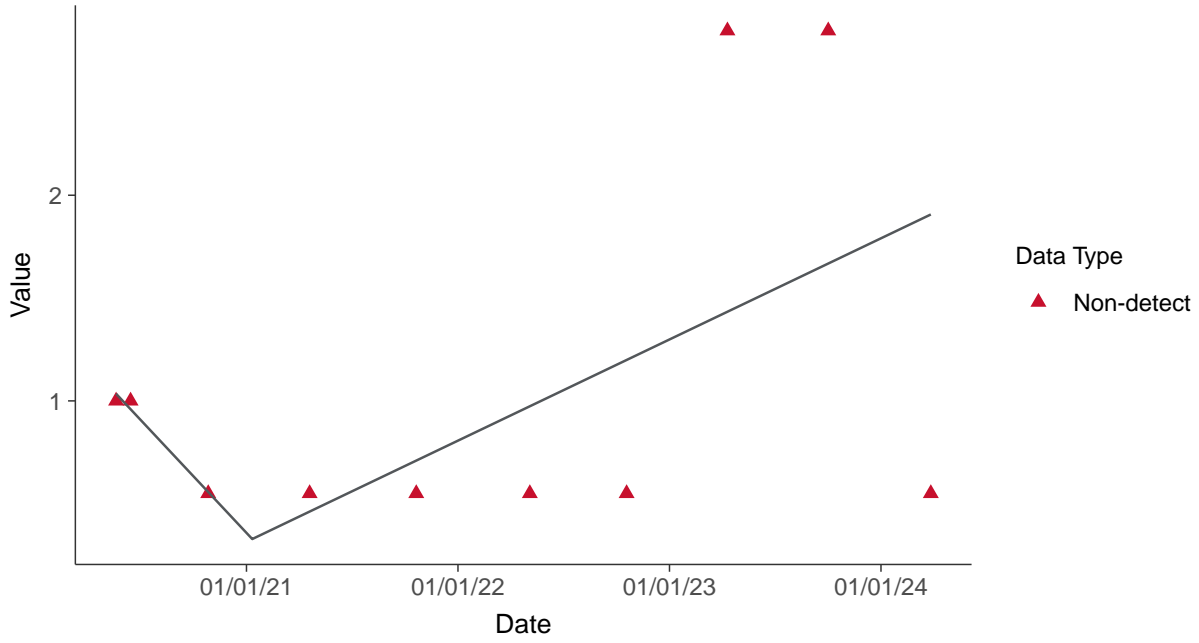
Lead, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear

Lead, MW-17001R (ug/L)



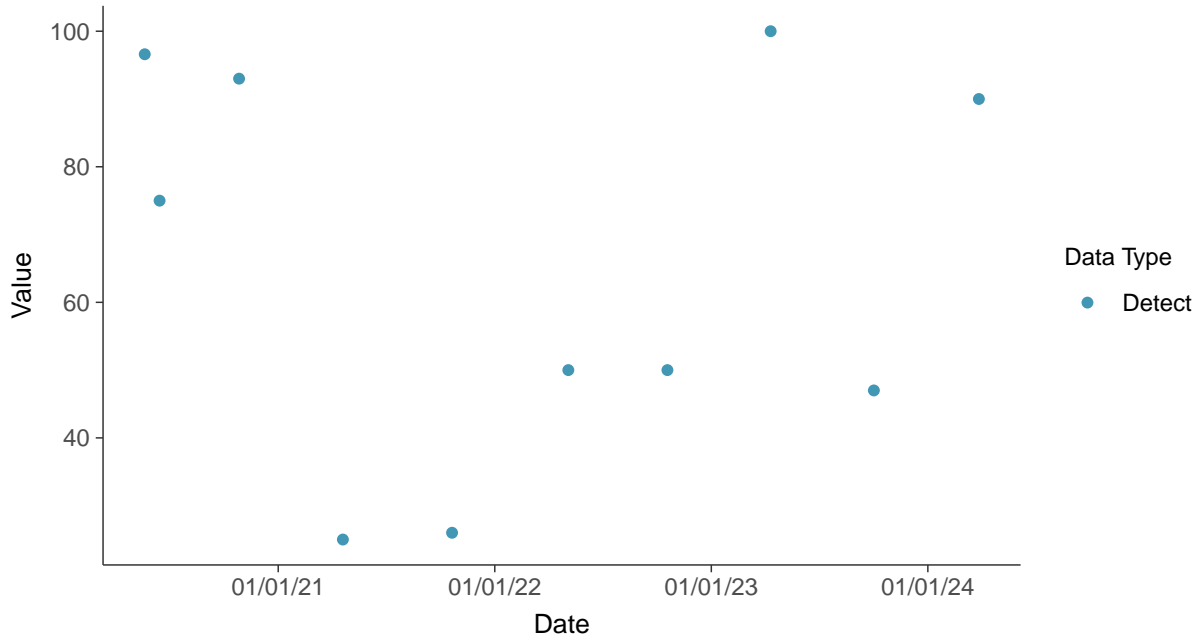


Appendix IV: Lithium, MW-17001R

ID: 14_2_117

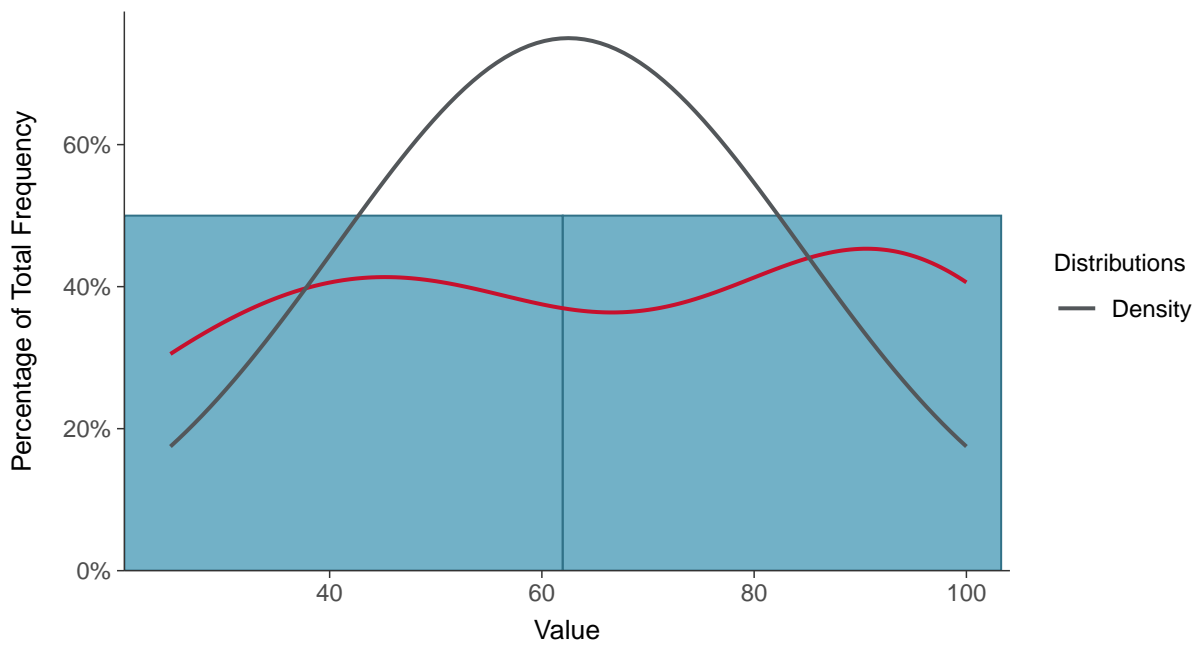
Scatter Plot

Lithium, MW-17001R (ug/L)



Histogram

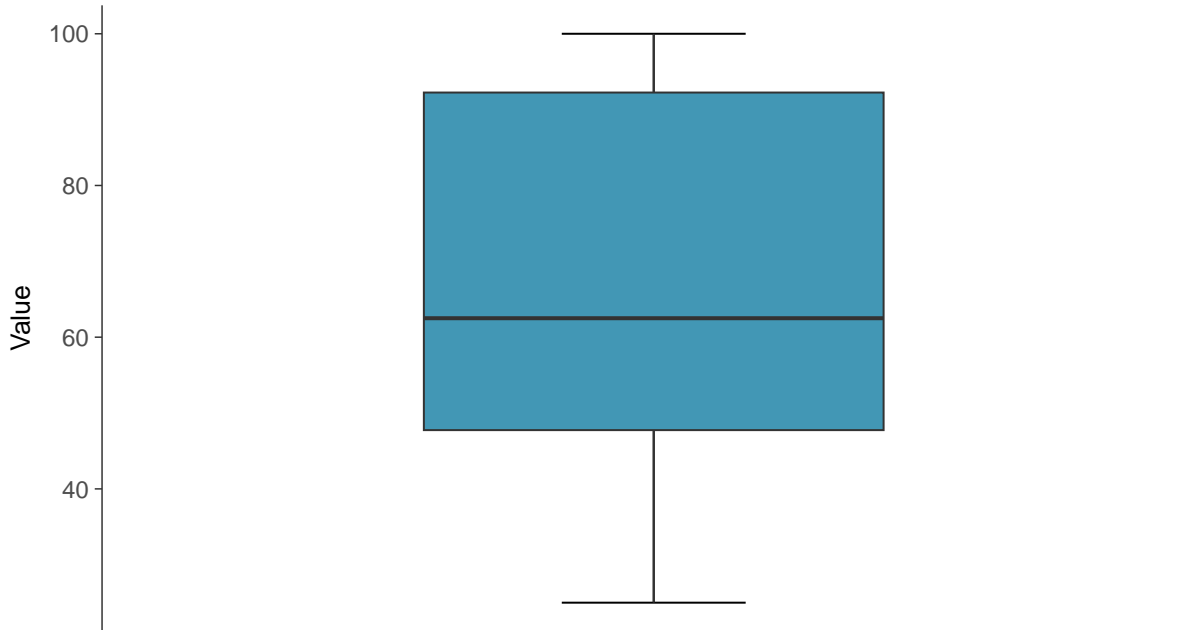
Lithium, MW-17001R (ug/L)





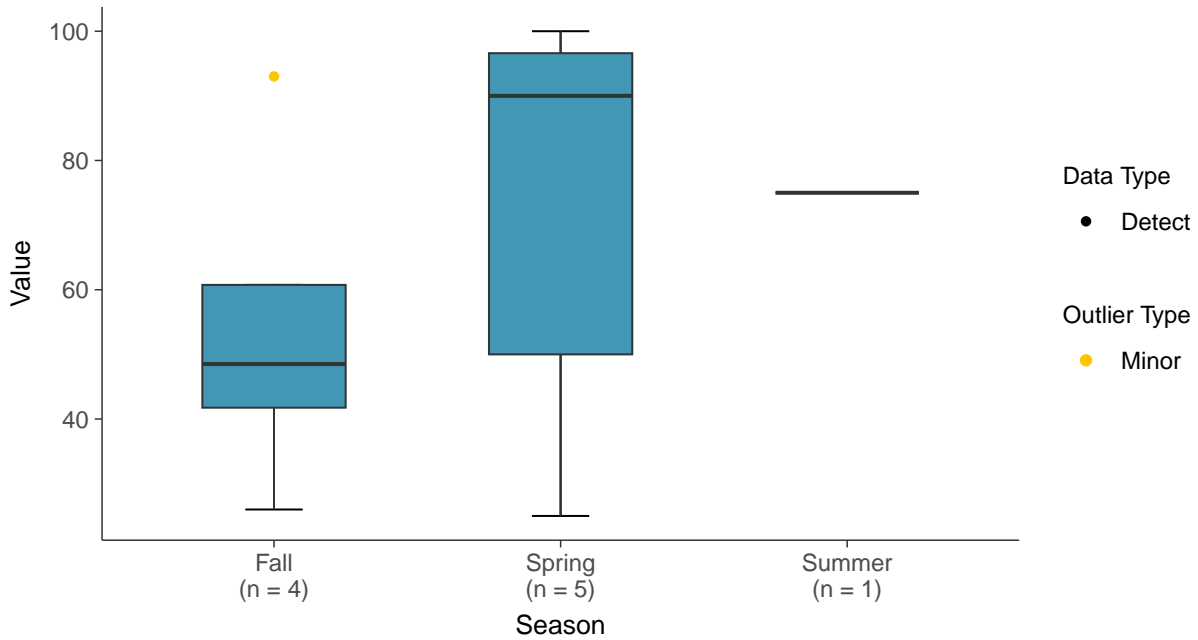
Boxplot

Lithium, MW-17001R (ug/L)



Boxplot by Season

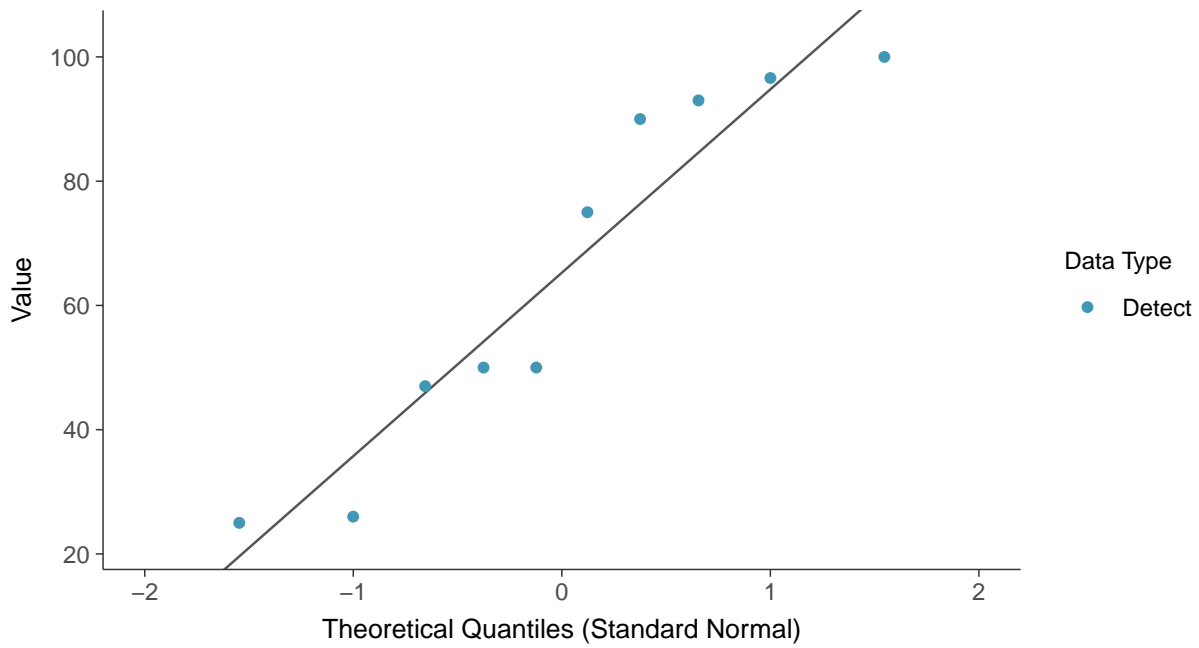
Lithium, MW-17001R (ug/L)





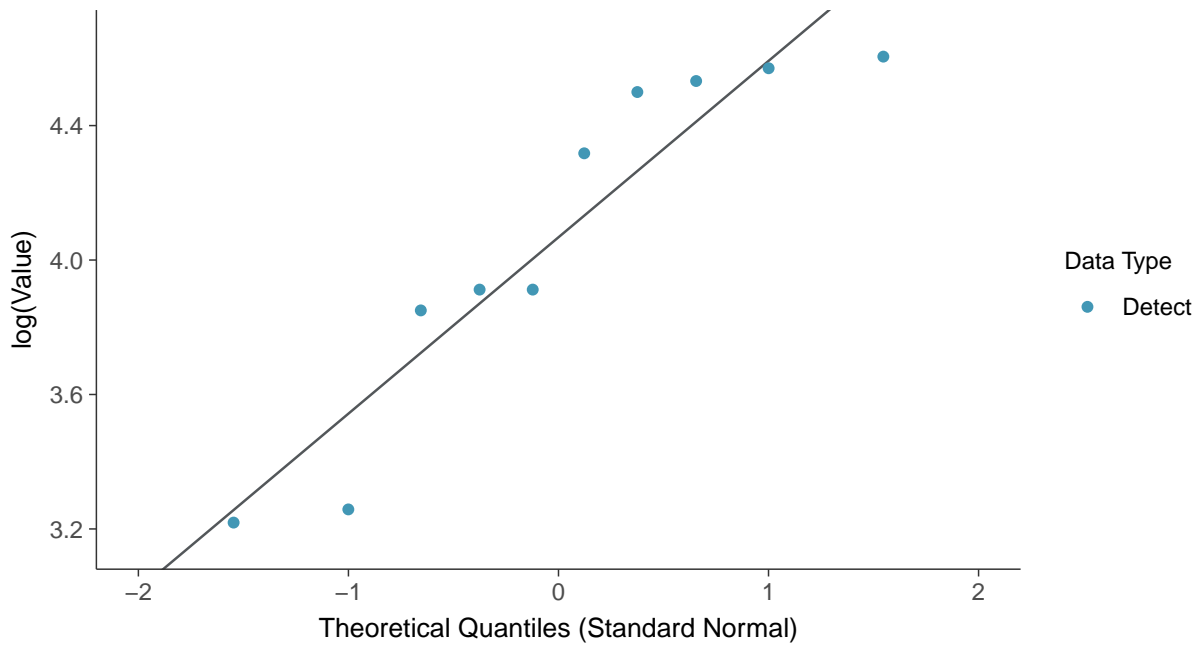
Normal Q-Q plot

Lithium, MW-17001R (ug/L)



Lognormal Q-Q plot

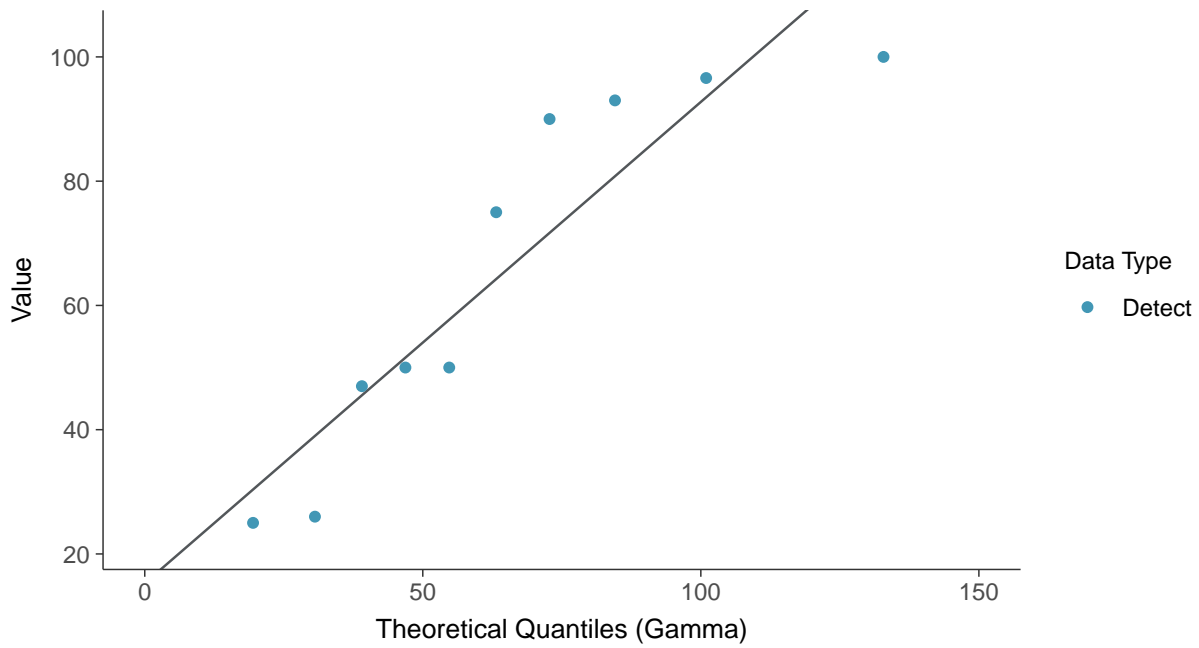
Lithium, MW-17001R (ug/L)





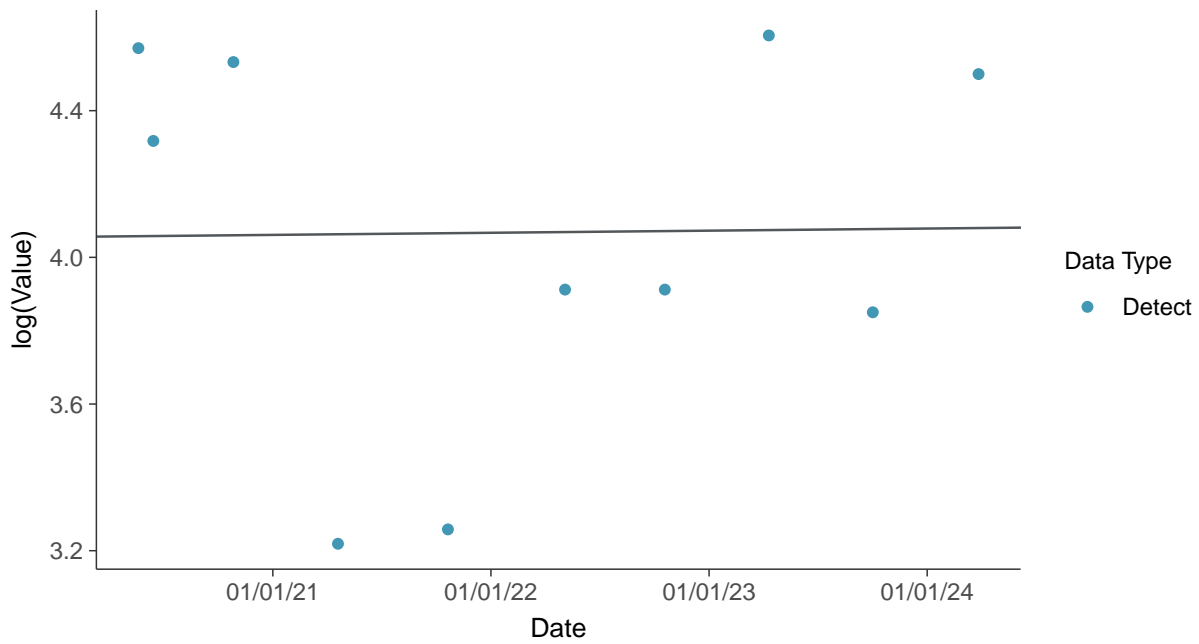
Gamma Q-Q plot

Lithium, MW-17001R (ug/L)



Trend Regression: Lognormal MLE

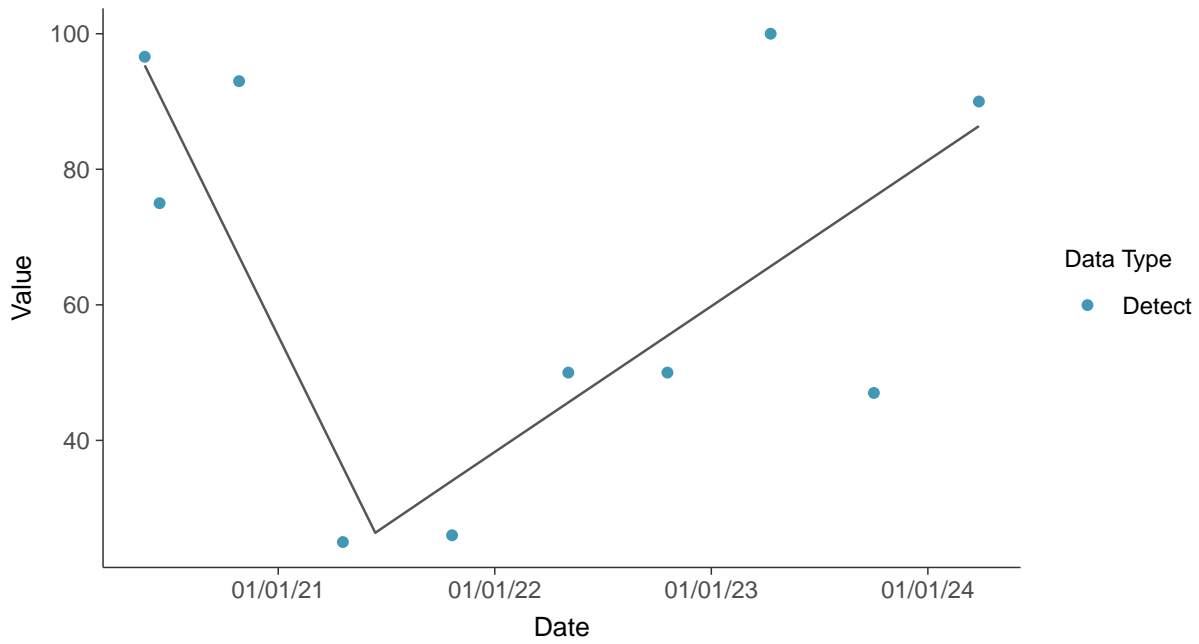
Lithium, MW-17001R (ug/L)





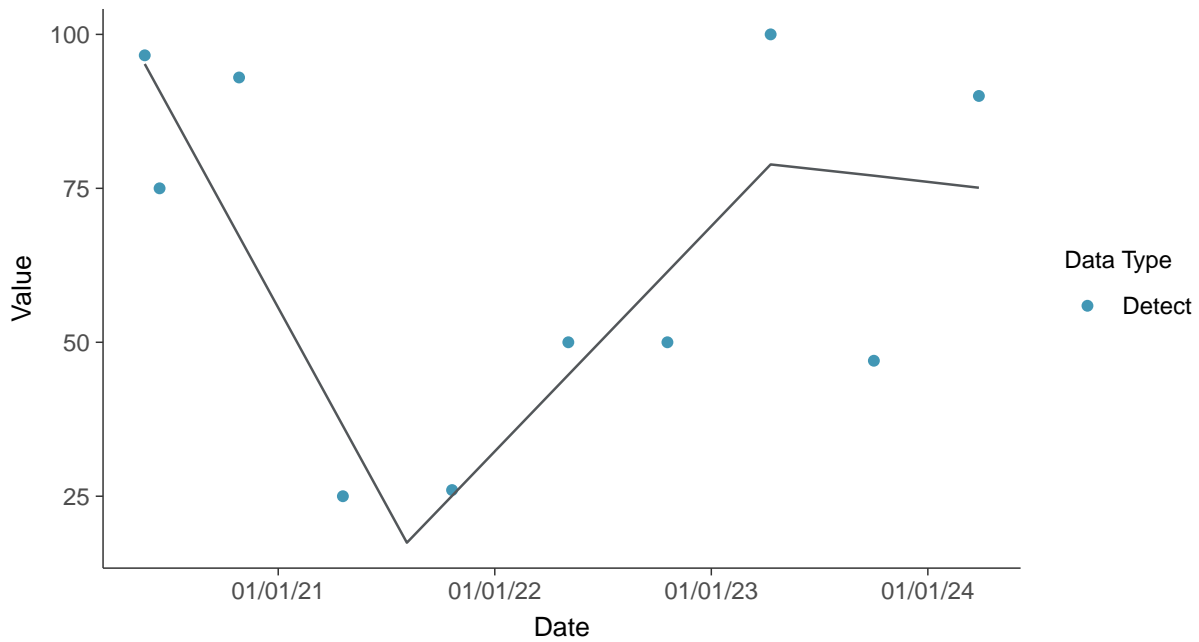
Trend Regression: Piecewise Linear-Linear

Lithium, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-17001R (ug/L)



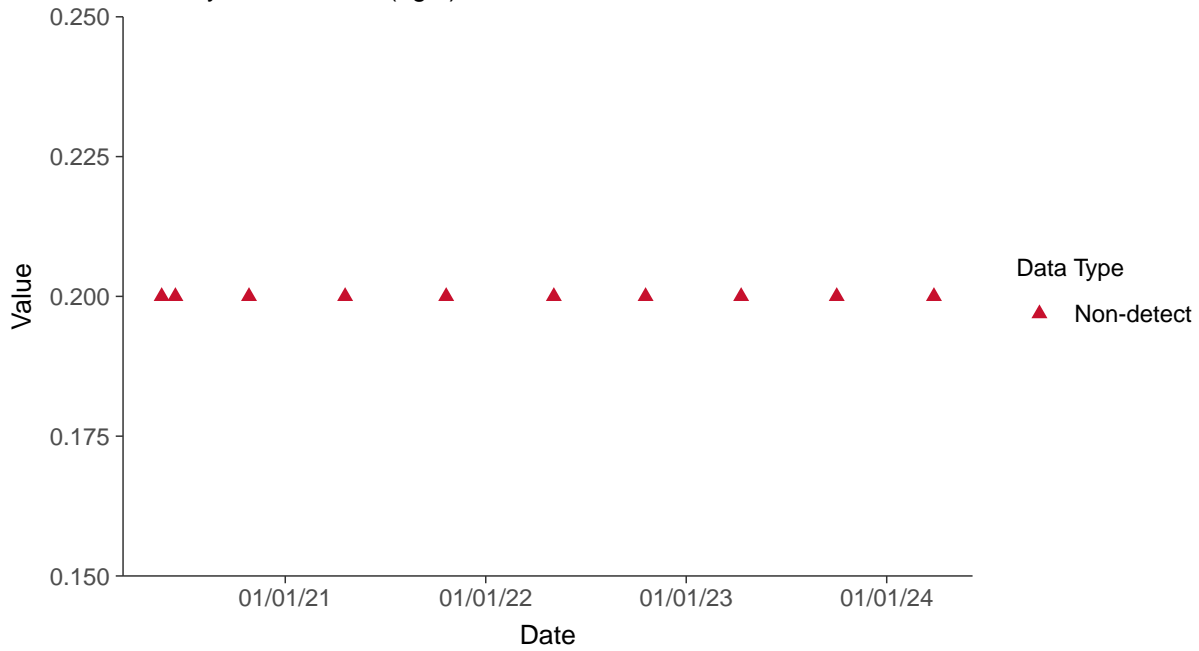


Appendix IV: Mercury, MW-17001R

ID: 14_2_118

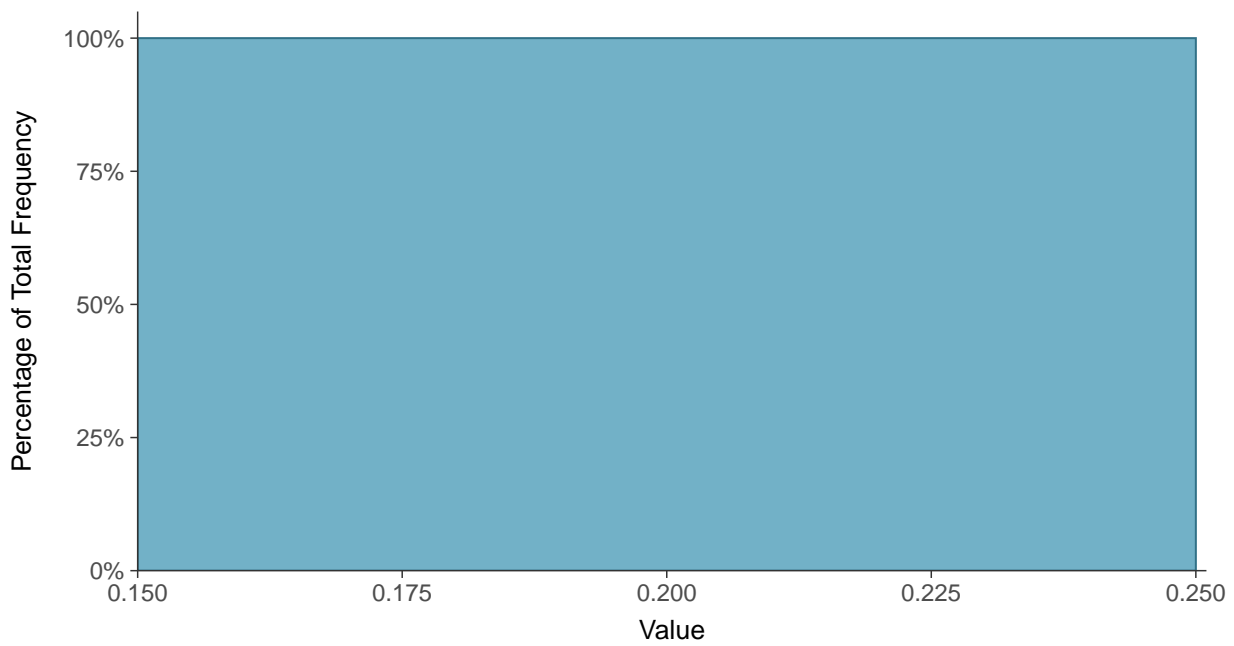
Scatter Plot

Mercury, MW-17001R (ug/L)



Histogram

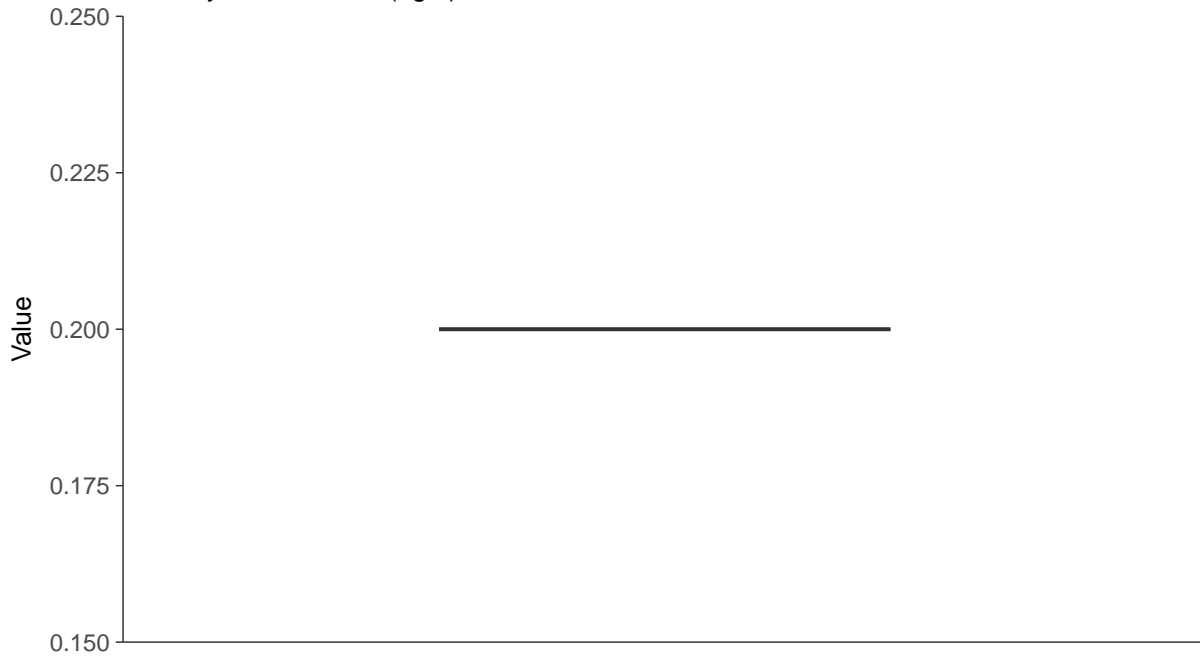
Mercury, MW-17001R (ug/L)





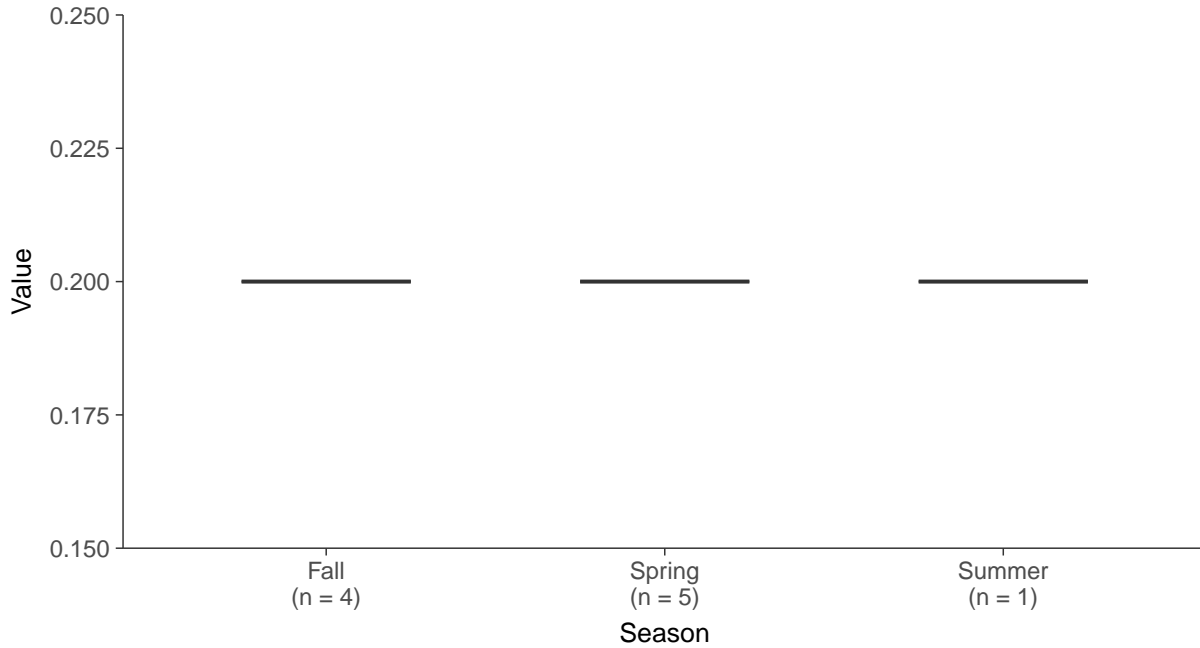
Boxplot

Mercury, MW-17001R (ug/L)



Boxplot by Season

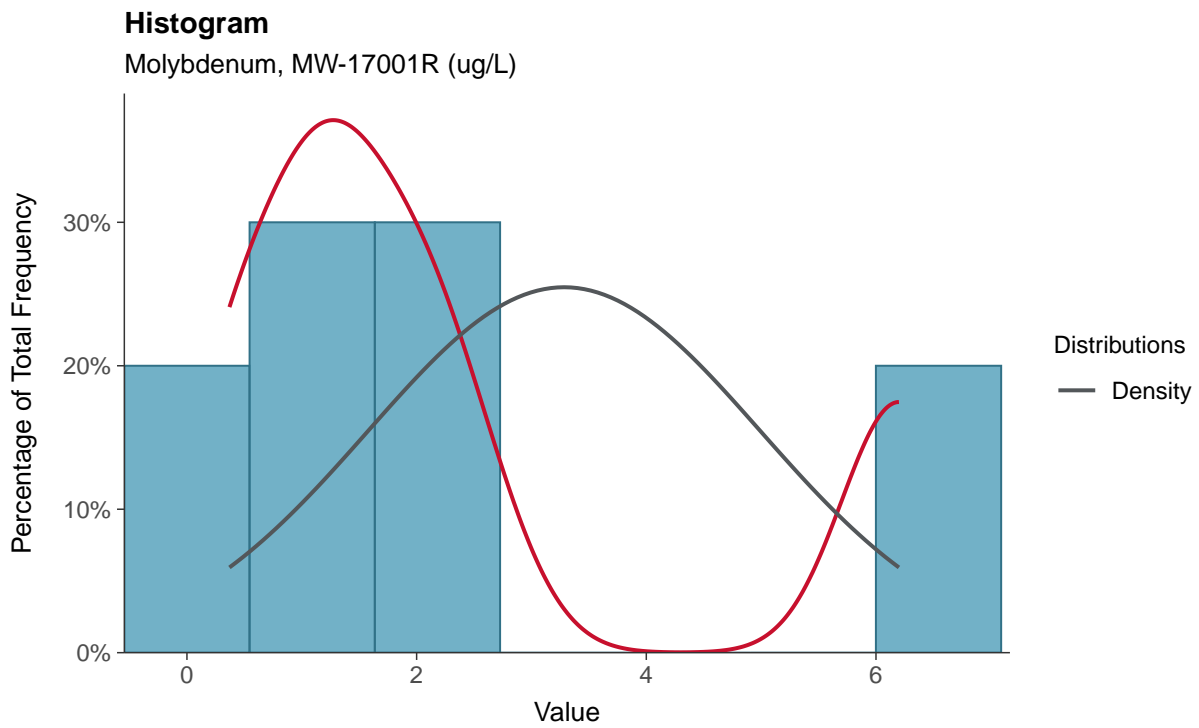
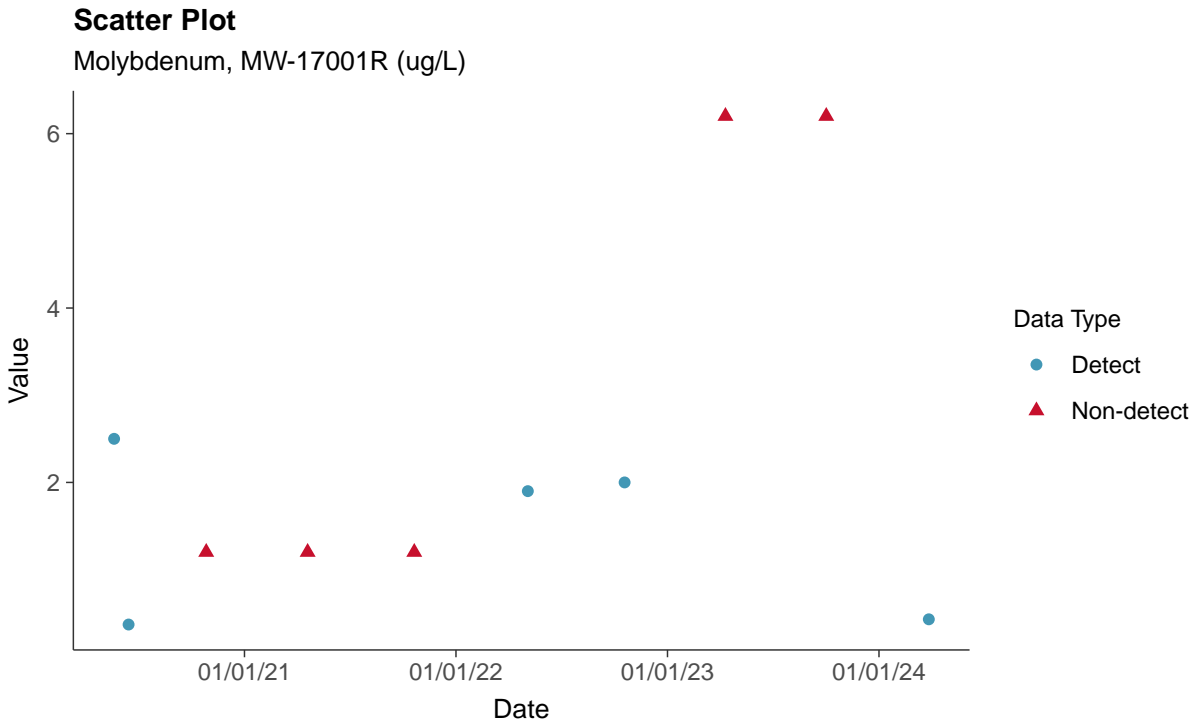
Mercury, MW-17001R (ug/L)





Appendix IV: Molybdenum, MW-17001R

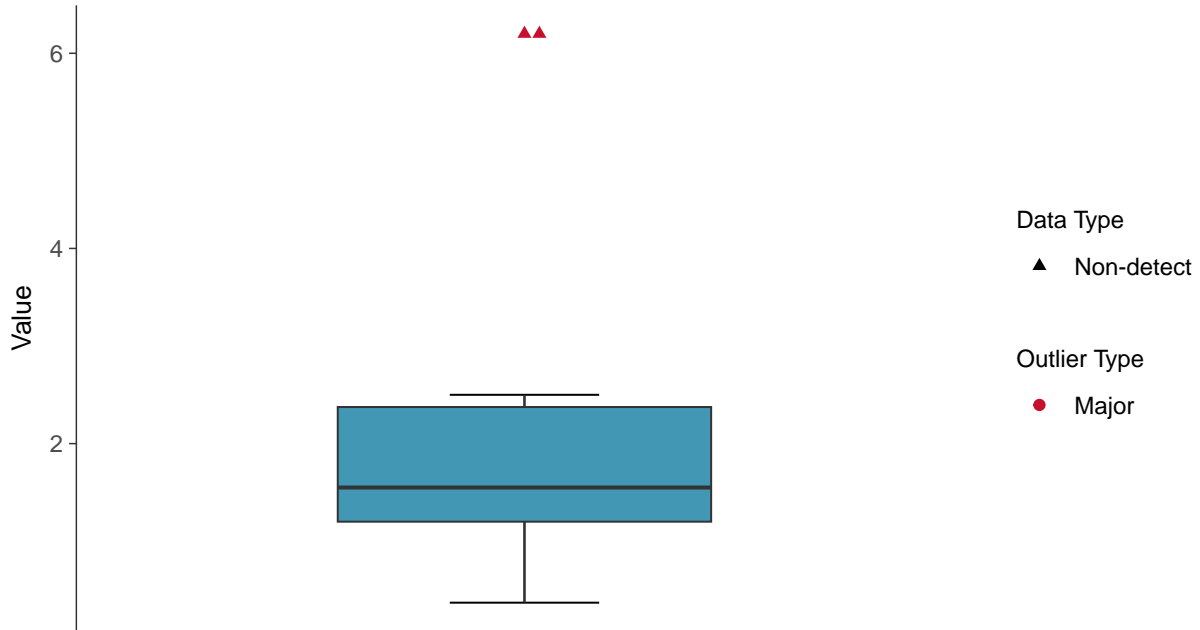
ID: 14_2_119





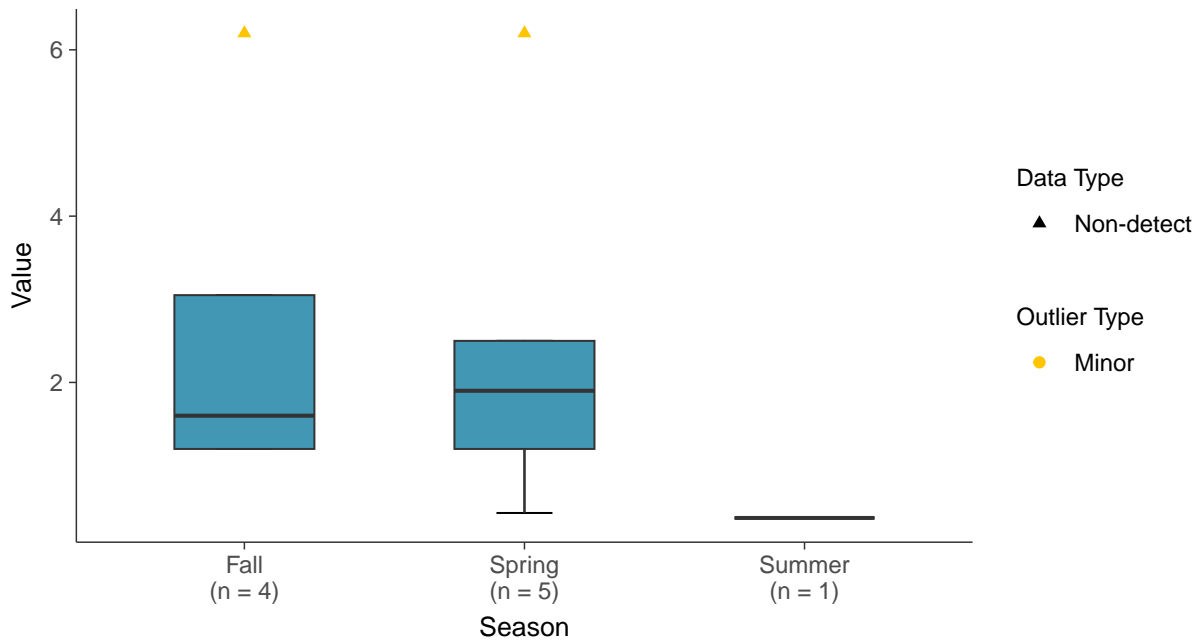
Boxplot

Molybdenum, MW-17001R (ug/L)



Boxplot by Season

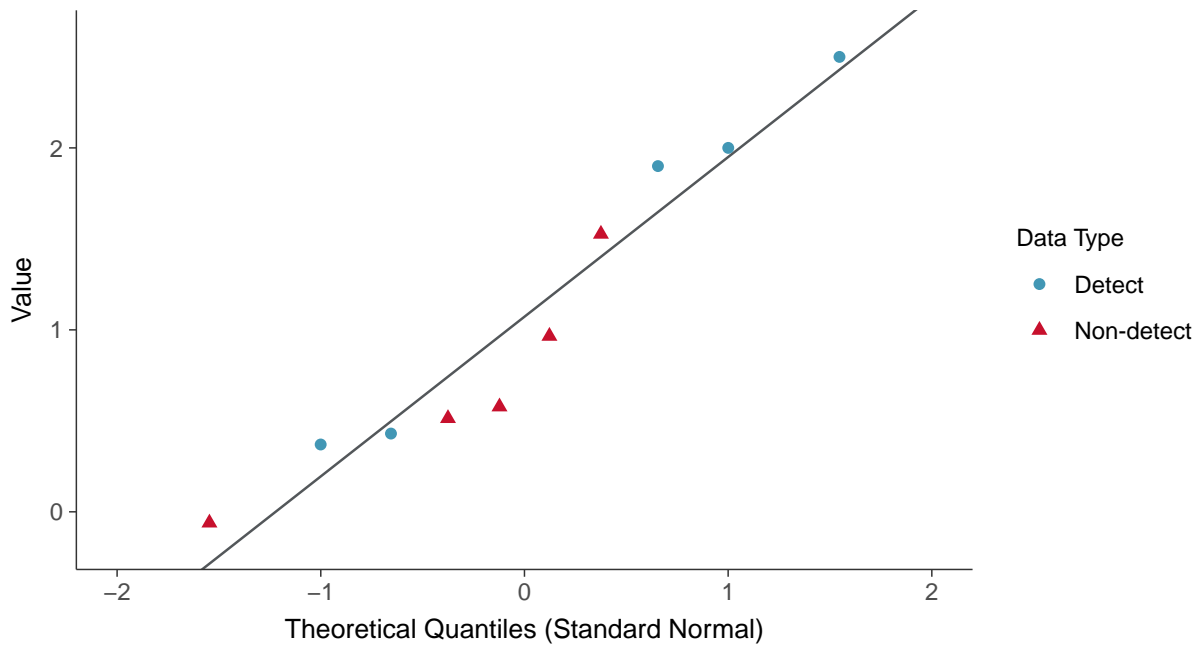
Molybdenum, MW-17001R (ug/L)





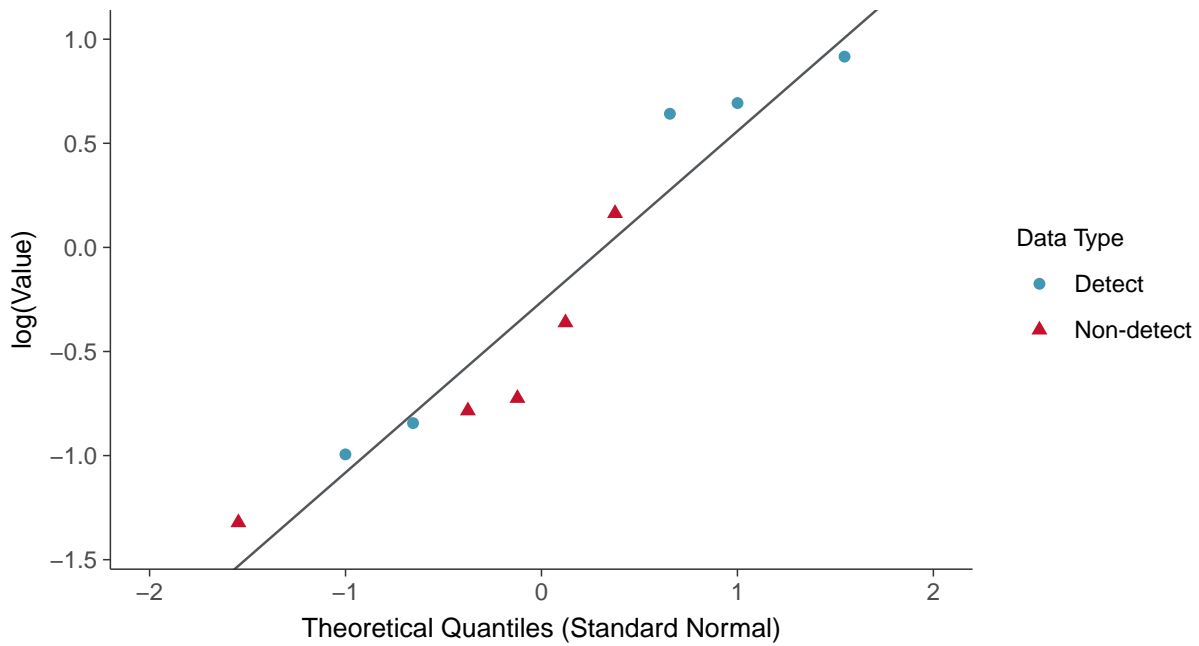
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17001R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

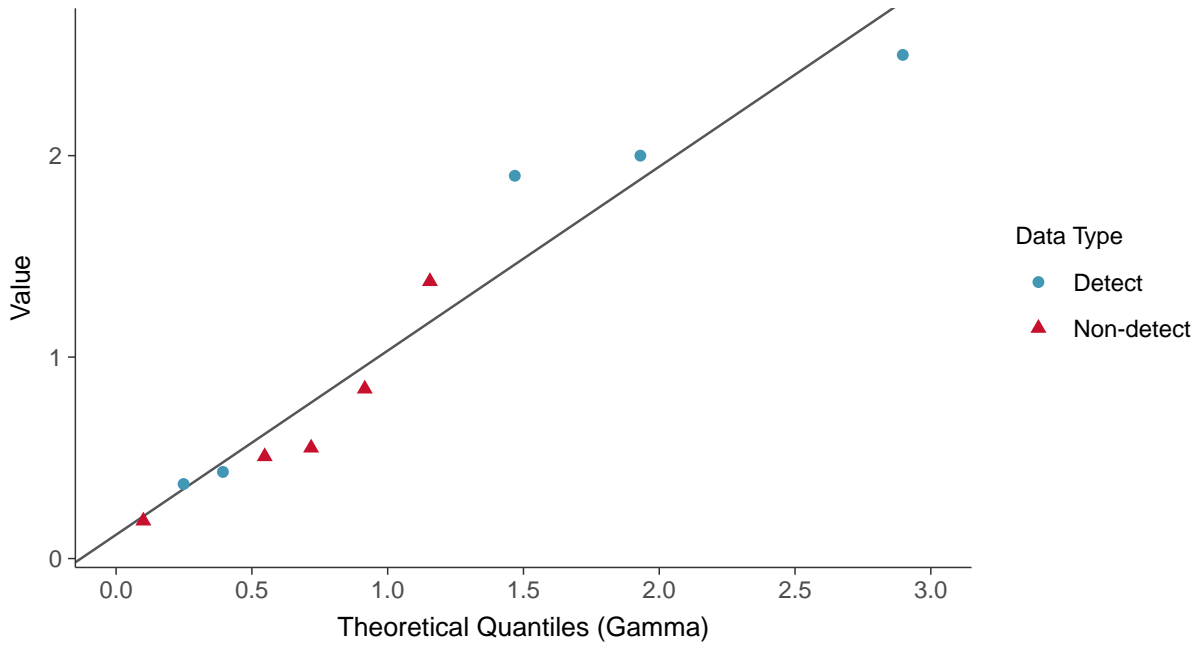
Molybdenum, MW-17001R (ug/L)





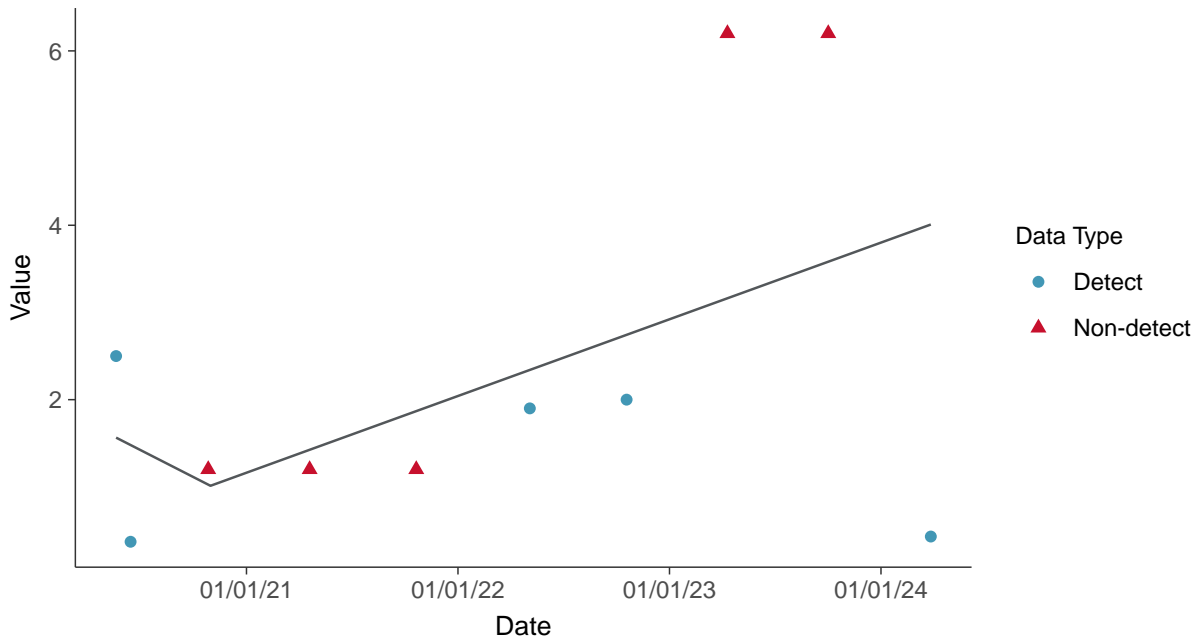
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear

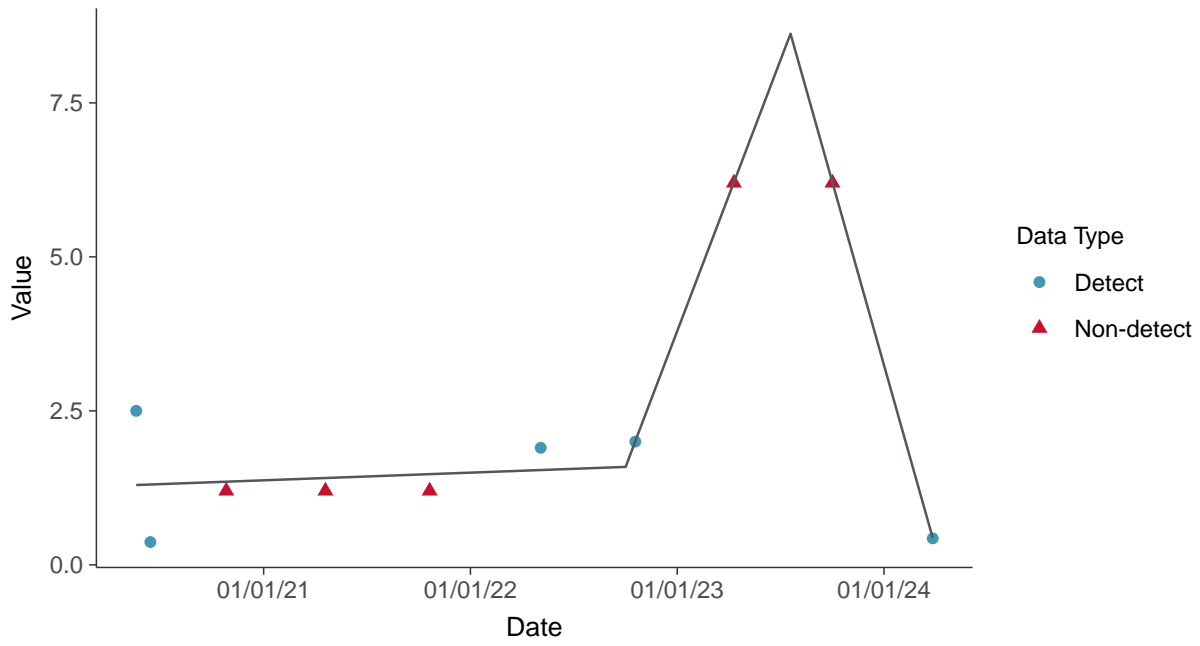
Molybdenum, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-17001R (ug/L)



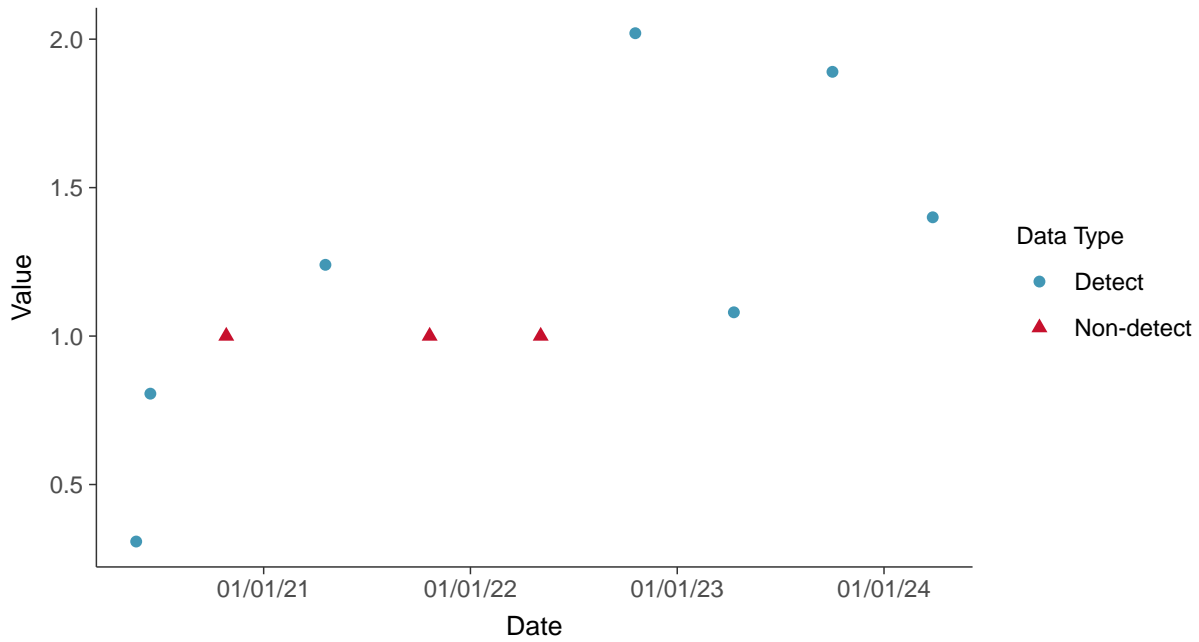


Appendix IV: Radium-226+228, MW-17001R

ID: 14_2_125

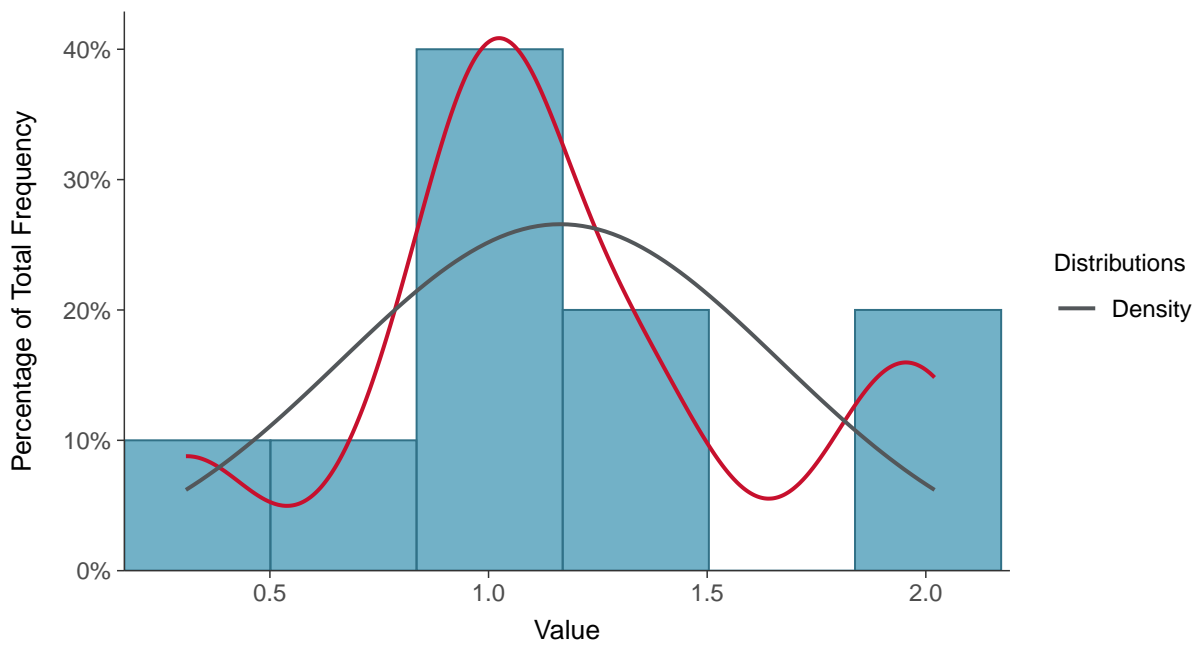
Scatter Plot

Radium-226+228, MW-17001R (pCi/L)



Histogram

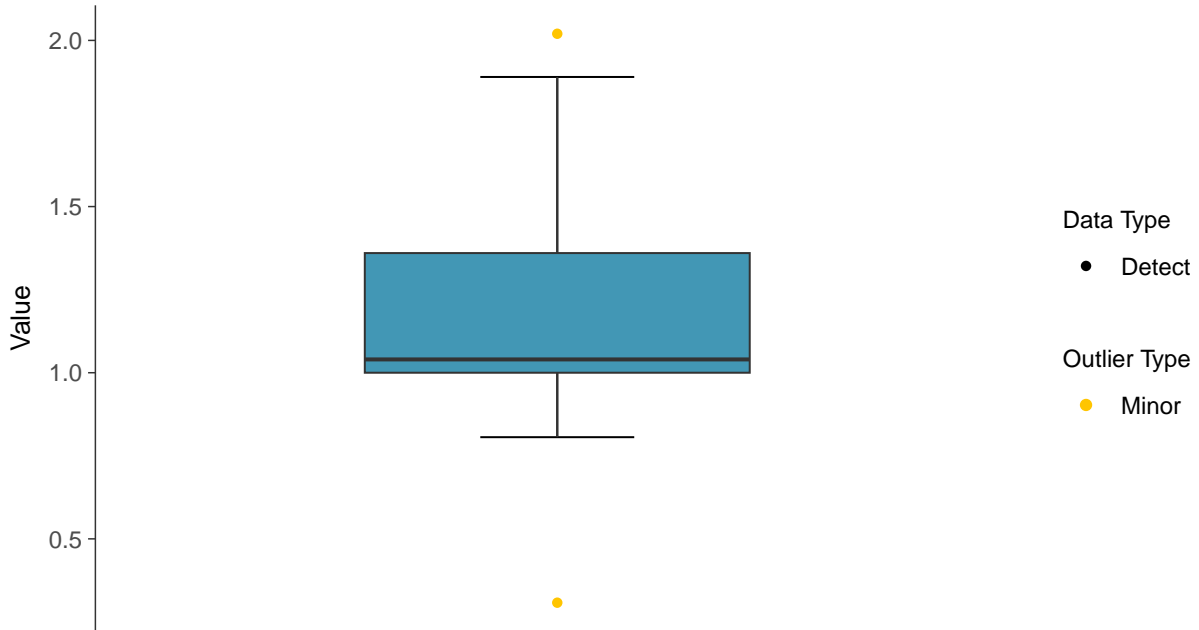
Radium-226+228, MW-17001R (pCi/L)





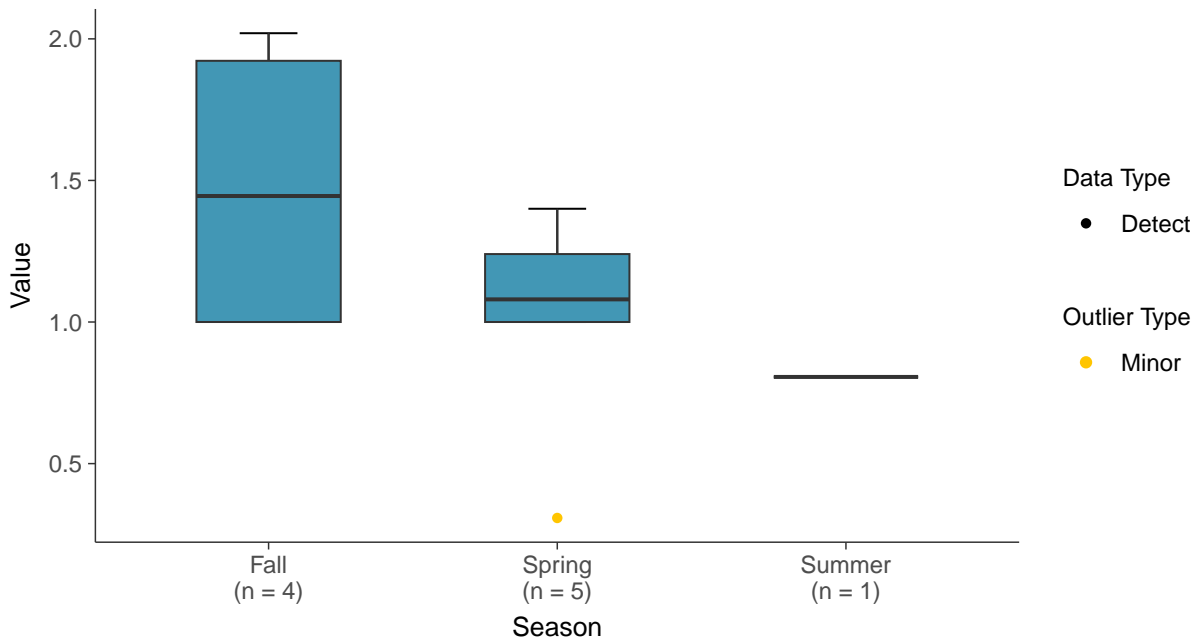
Boxplot

Radium-226+228, MW-17001R (pCi/L)



Boxplot by Season

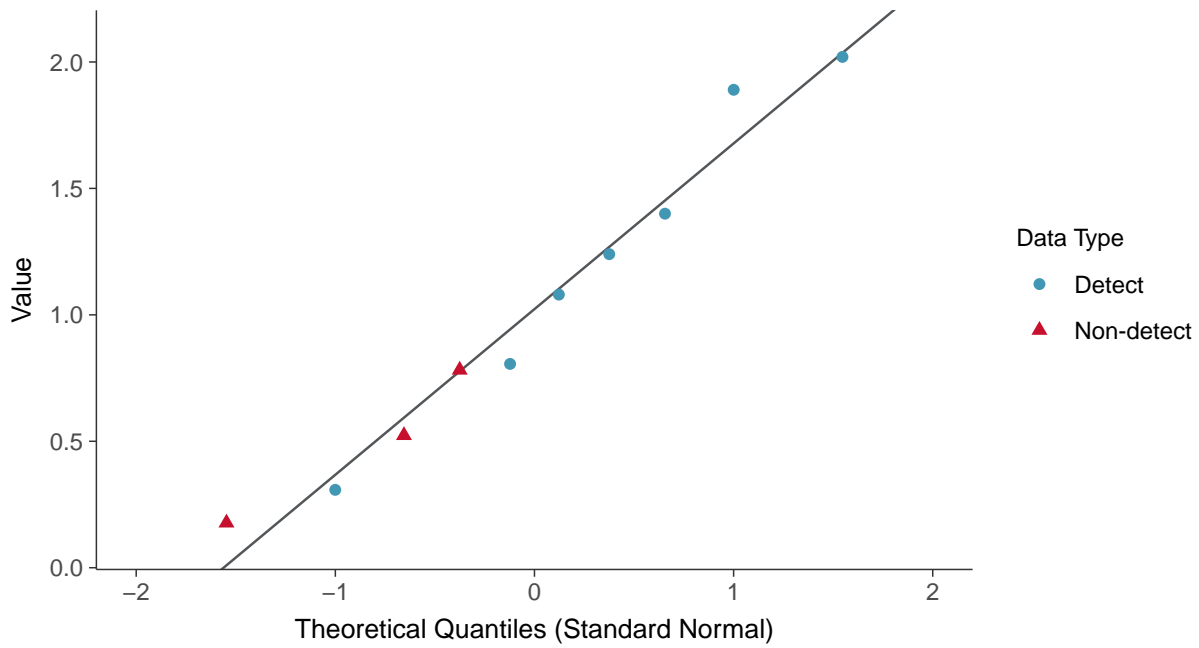
Radium-226+228, MW-17001R (pCi/L)





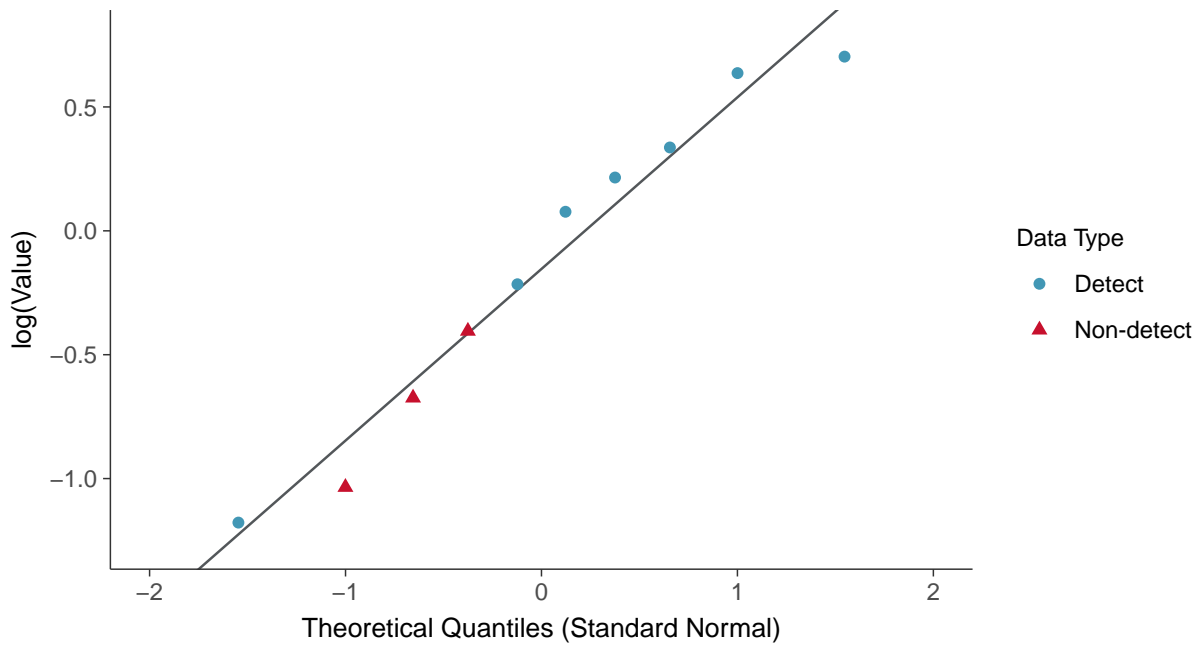
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17001R (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

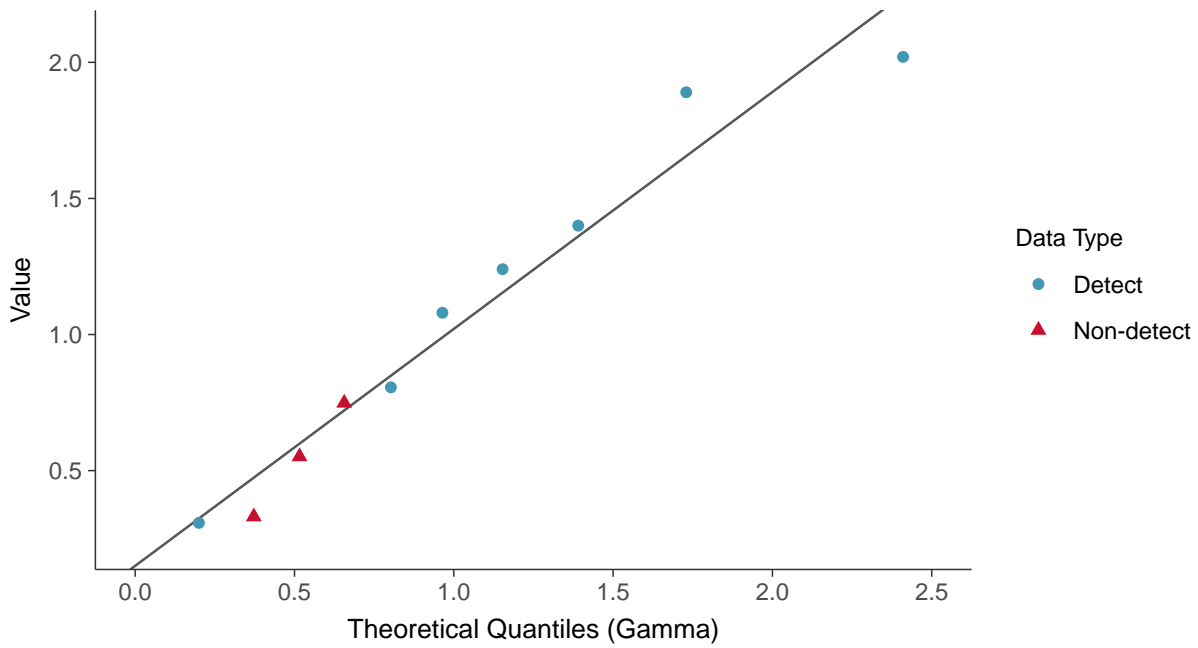
Radium-226+228, MW-17001R (pCi/L)





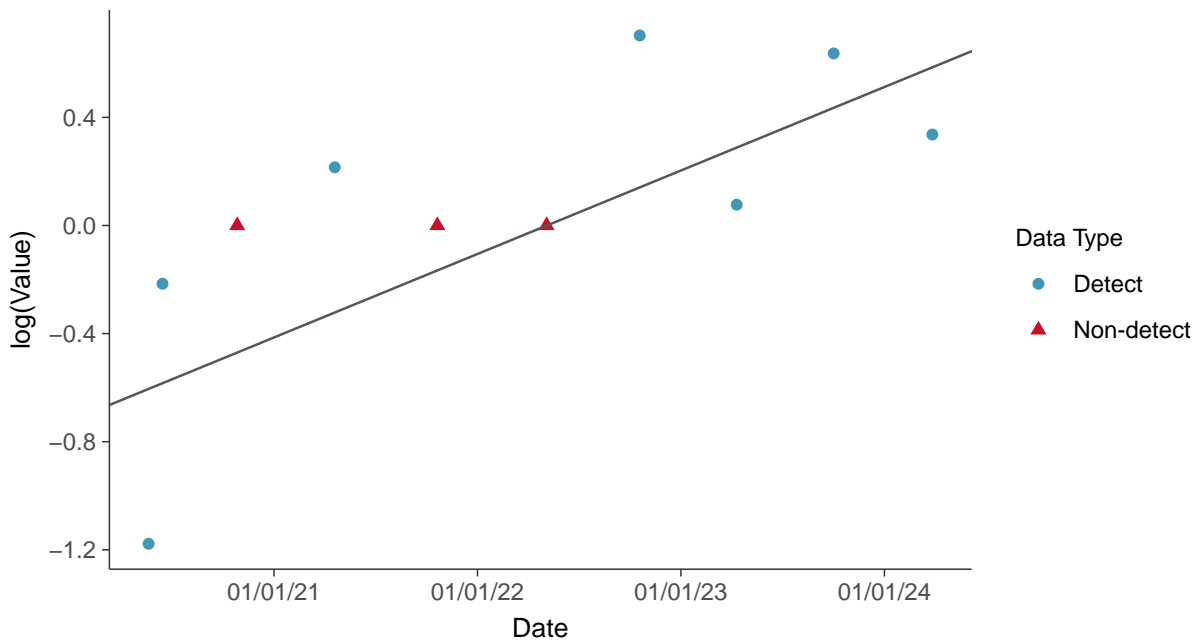
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17001R (pCi/L)



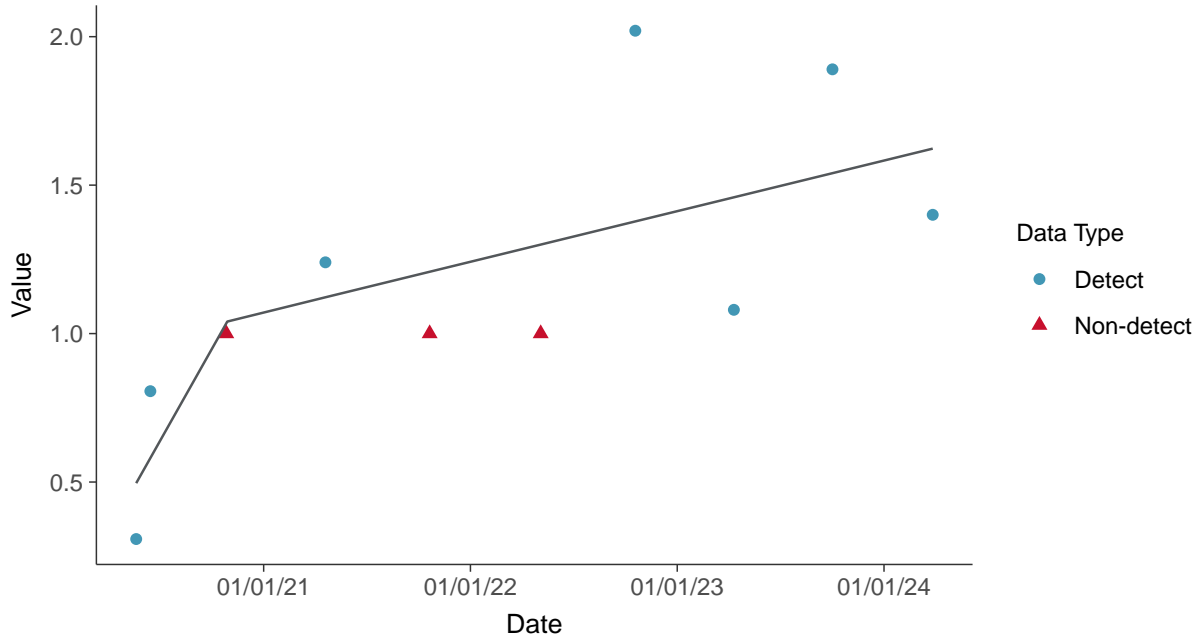
Trend Regression: Lognormal MLE

Radium-226+228, MW-17001R (pCi/L)





Trend Regression: Piecewise Linear-Linear
Radium-226+228, MW-17001R (pCi/L)



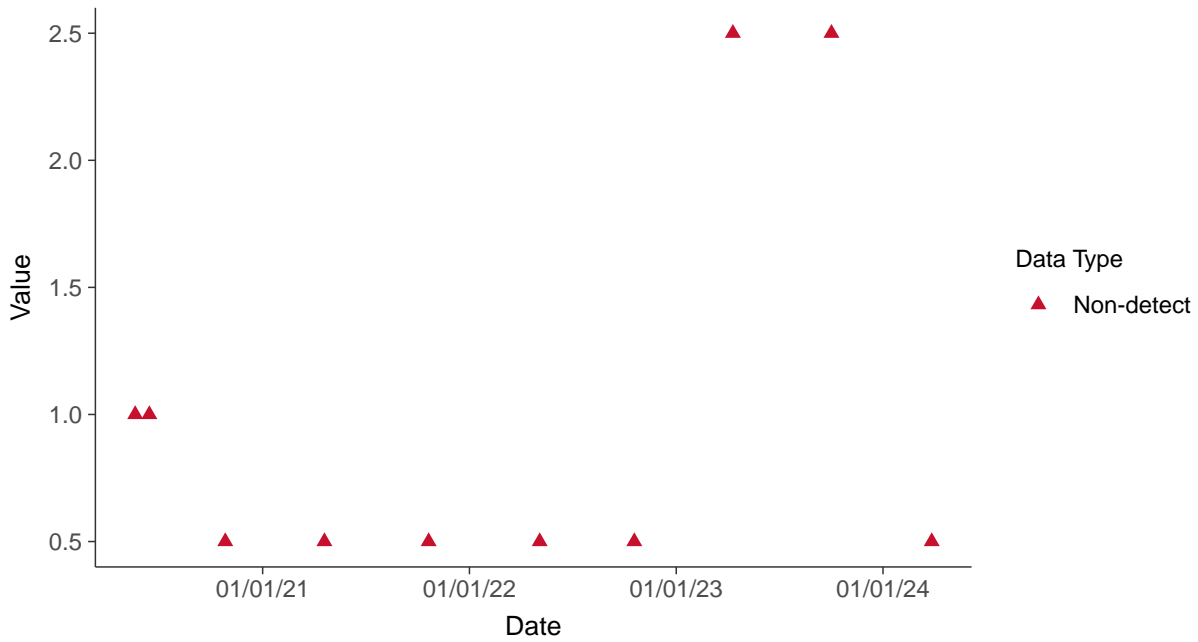


Appendix IV: Selenium, MW-17001R

ID: 14_2_127

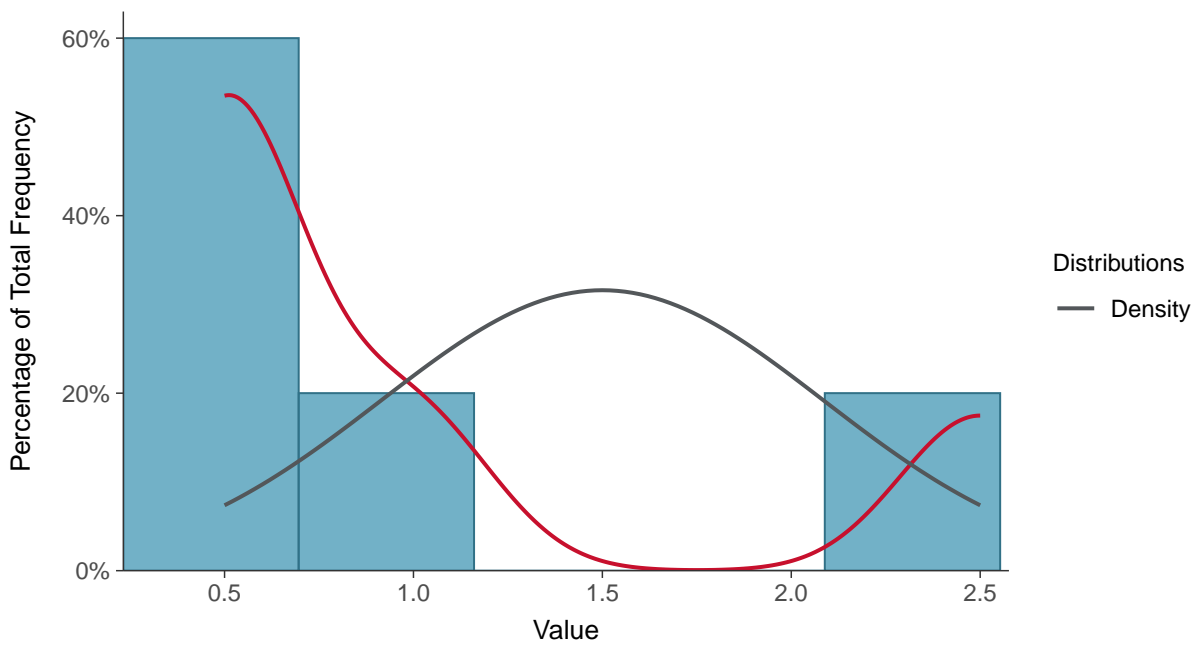
Scatter Plot

Selenium, MW-17001R (ug/L)



Histogram

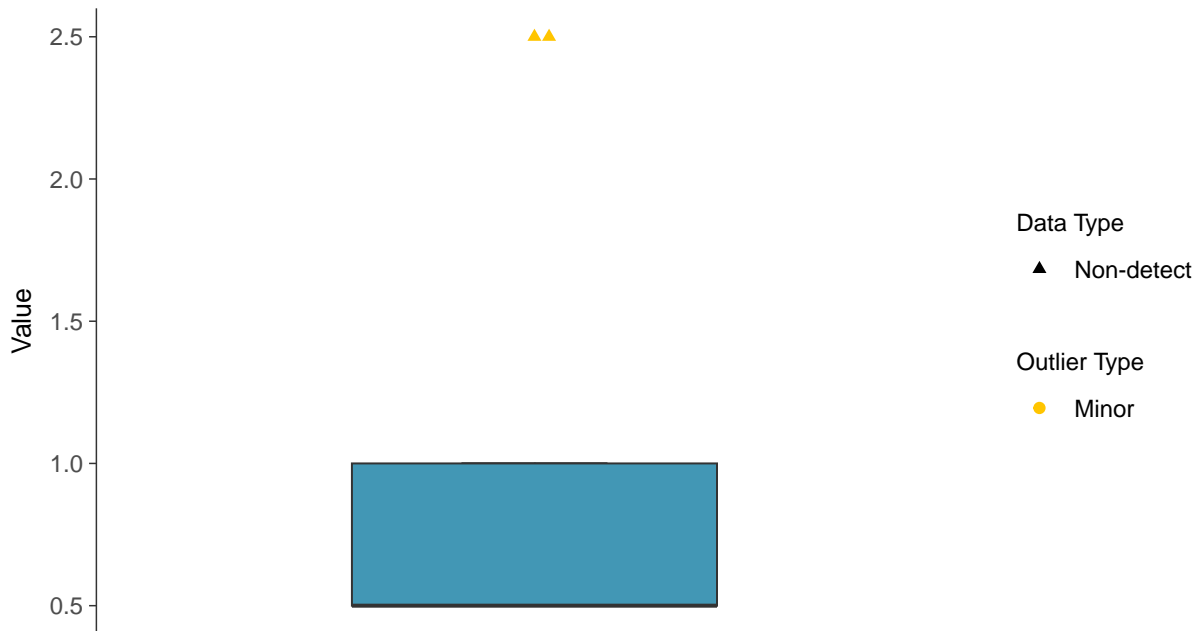
Selenium, MW-17001R (ug/L)





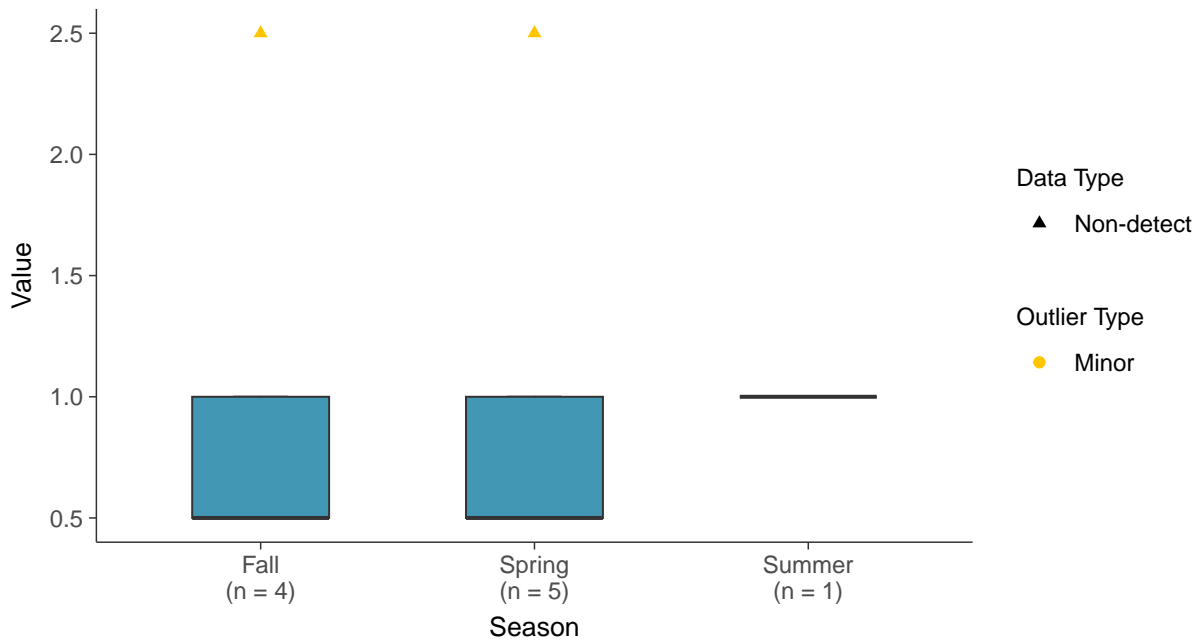
Boxplot

Selenium, MW-17001R (ug/L)



Boxplot by Season

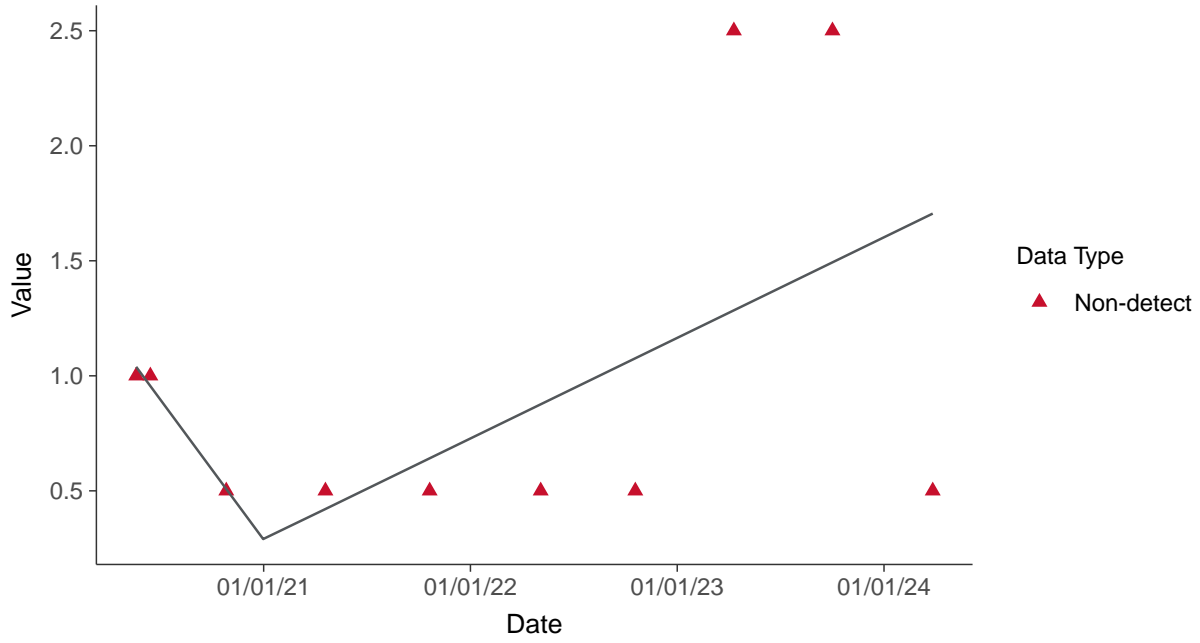
Selenium, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear

Selenium, MW-17001R (ug/L)



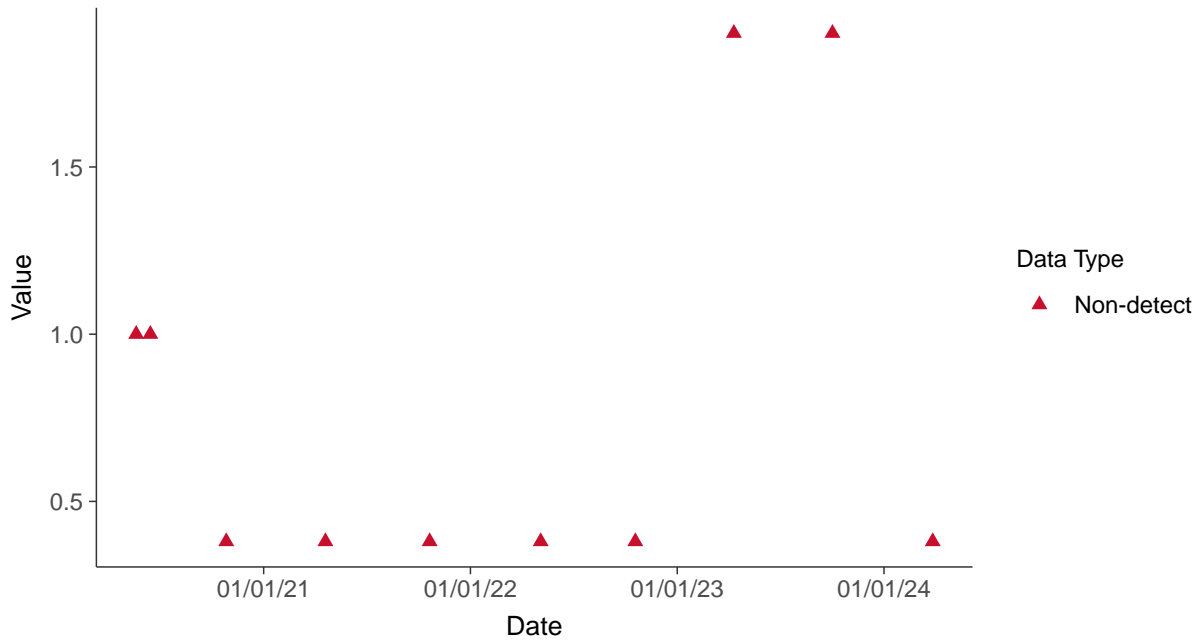


Appendix IV: Thallium, MW-17001R

ID: 14_2_131

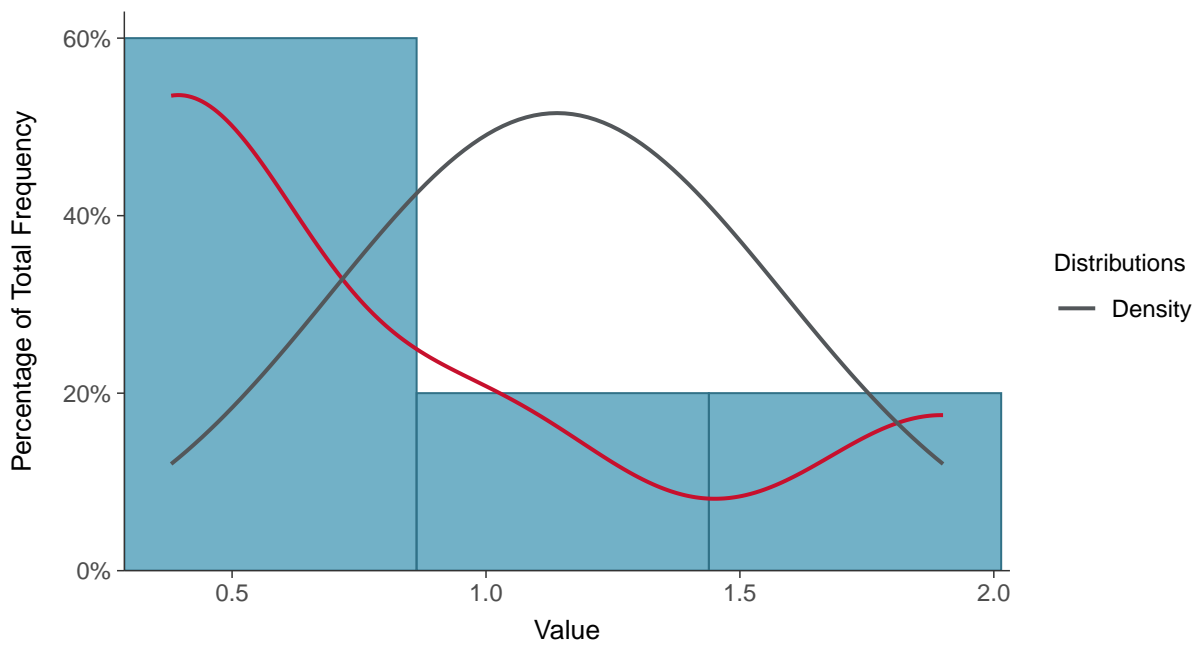
Scatter Plot

Thallium, MW-17001R (ug/L)



Histogram

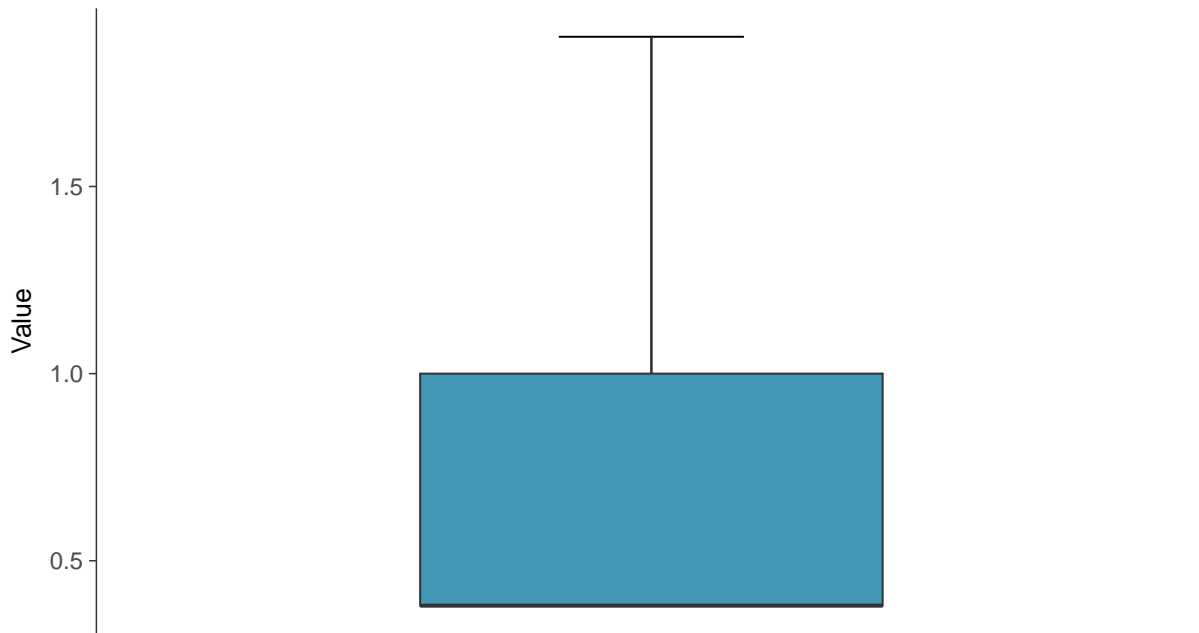
Thallium, MW-17001R (ug/L)





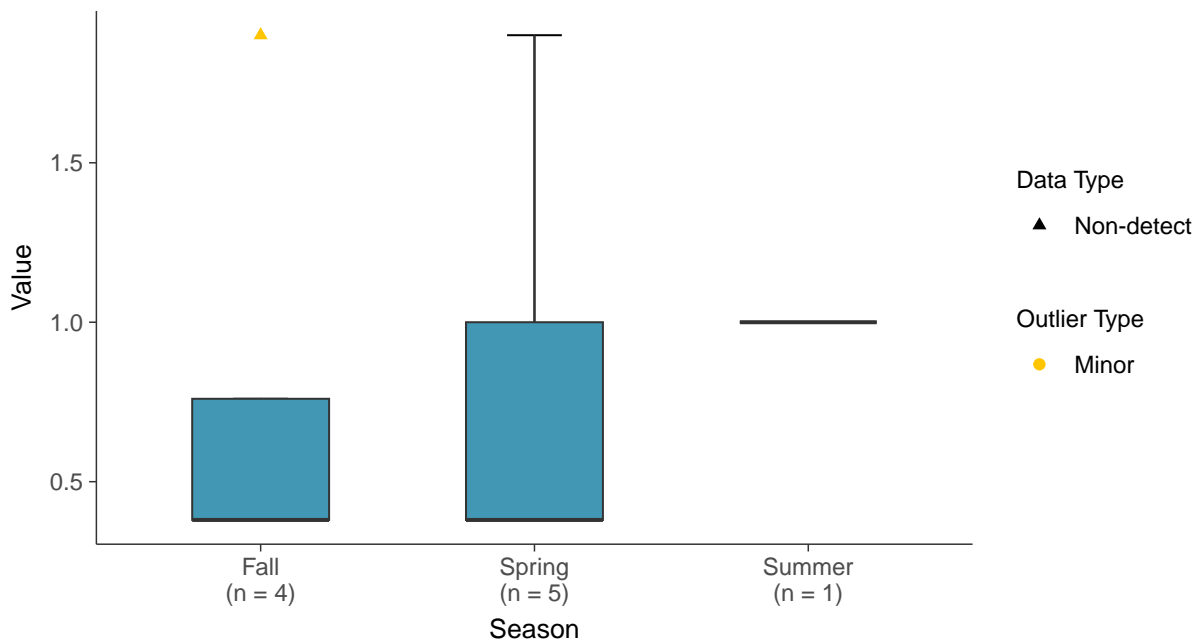
Boxplot

Thallium, MW-17001R (ug/L)



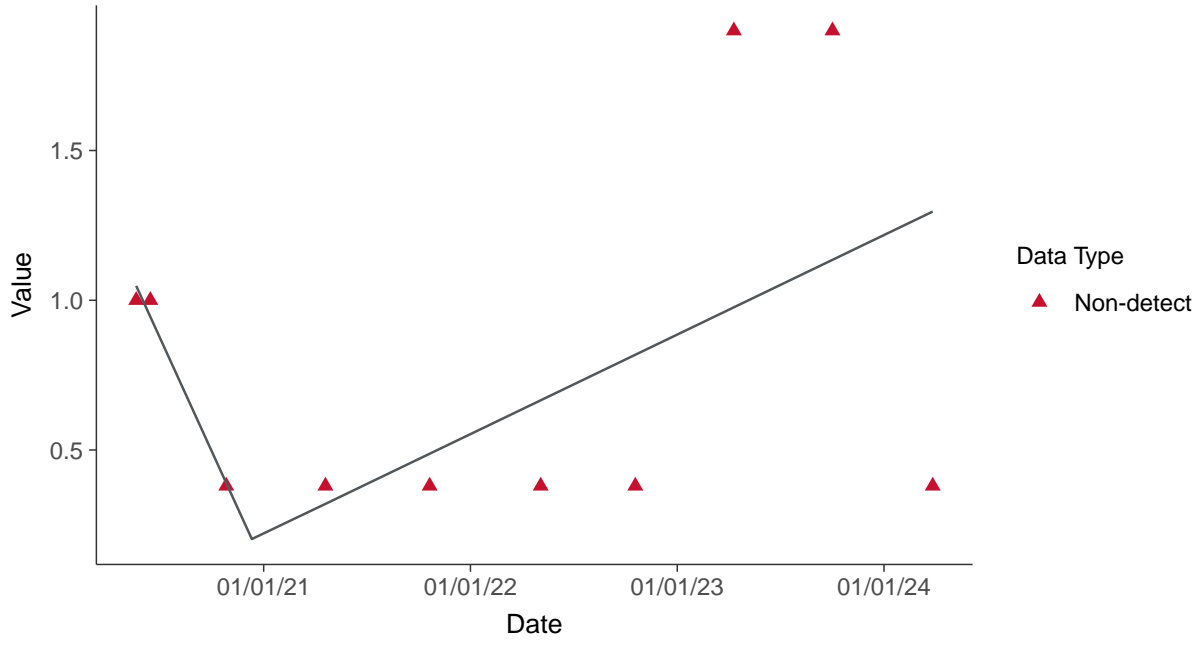
Boxplot by Season

Thallium, MW-17001R (ug/L)





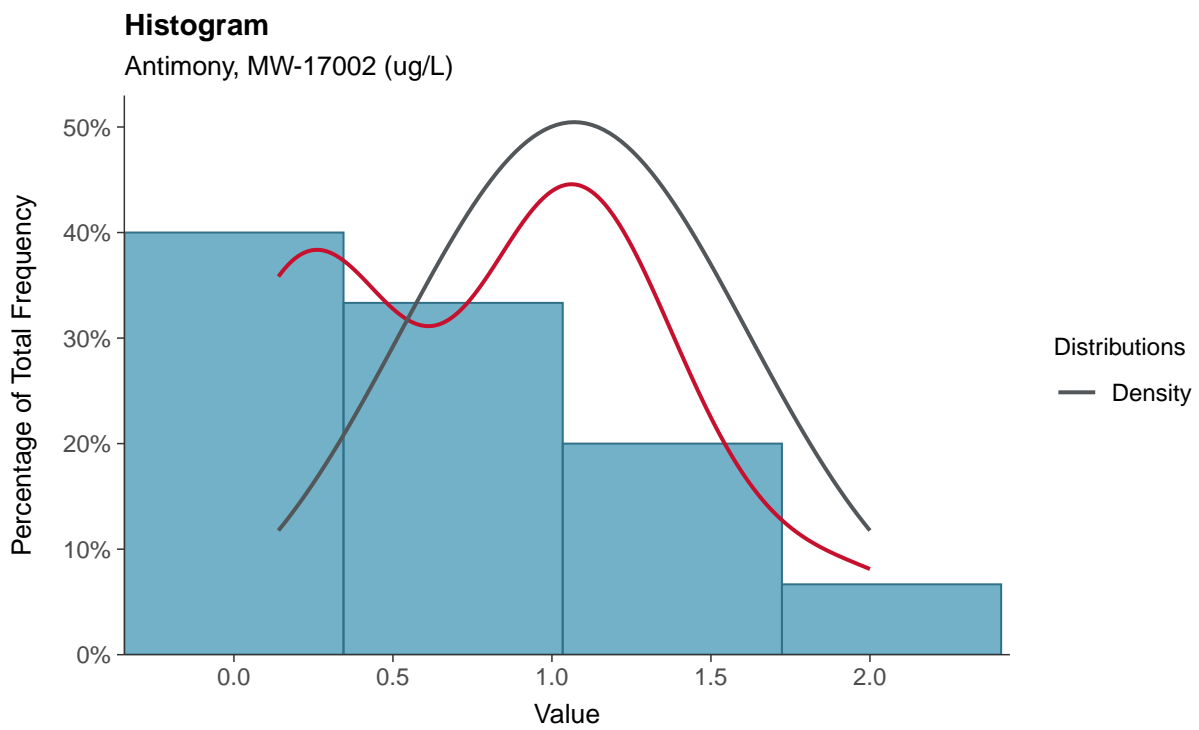
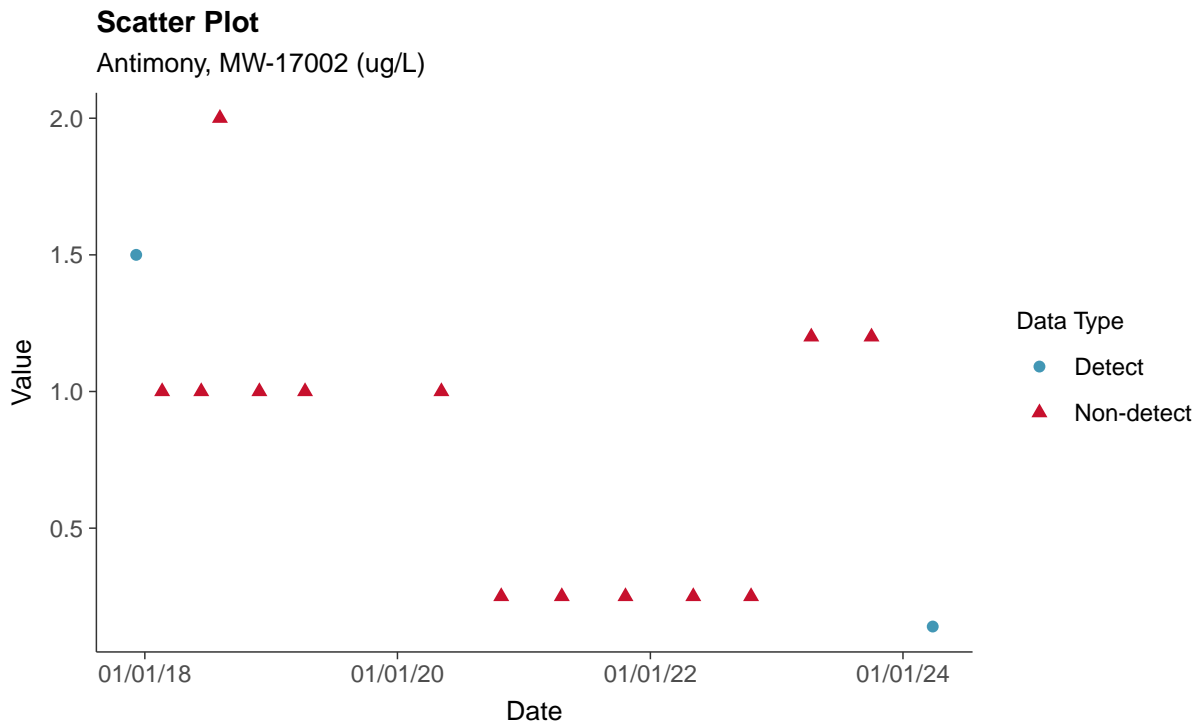
Trend Regression: Piecewise Linear-Linear
Thallium, MW-17001R (ug/L)





Appendix IV: Antimony, MW-17002

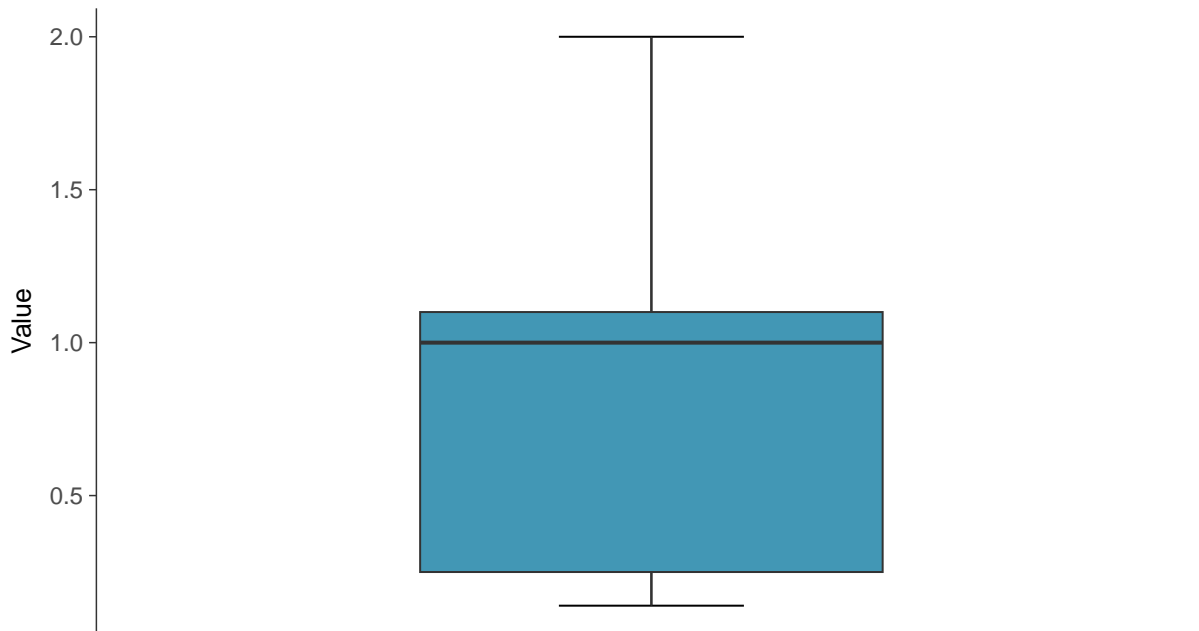
ID: 15_2_101





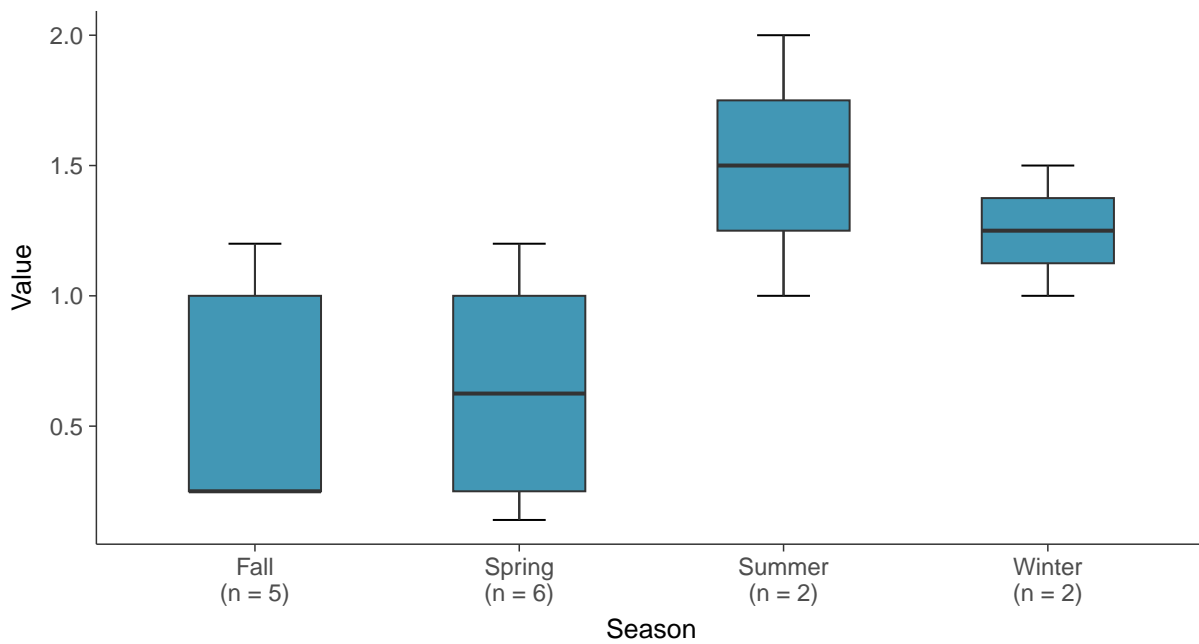
Boxplot

Antimony, MW-17002 (ug/L)



Boxplot by Season

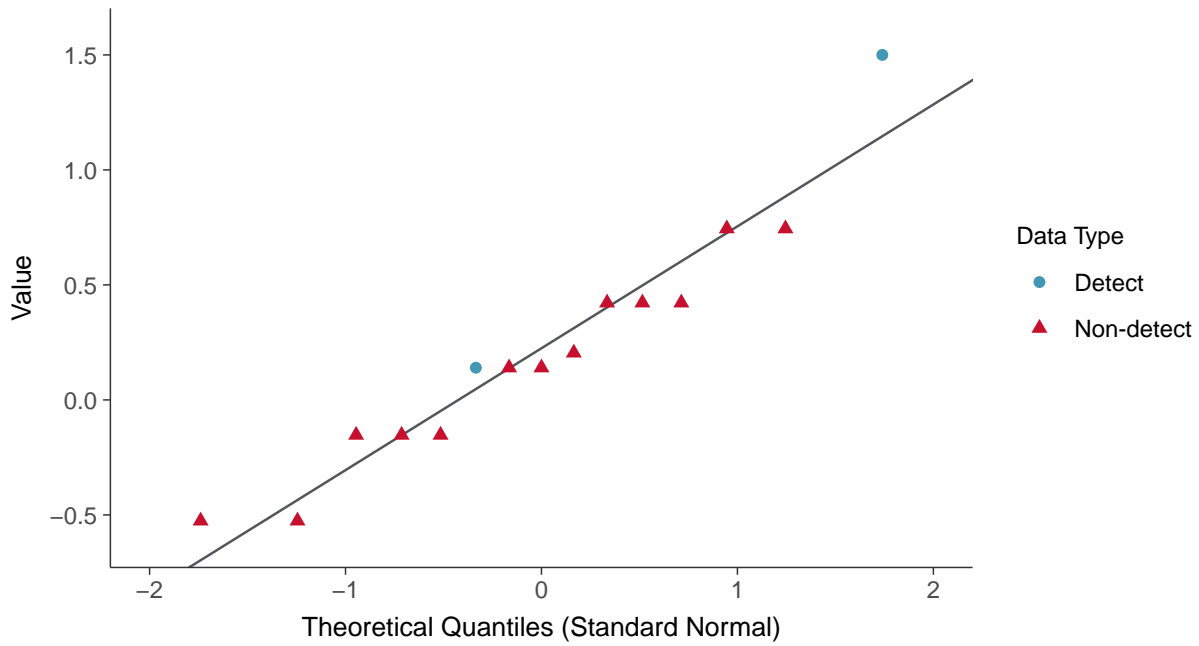
Antimony, MW-17002 (ug/L)





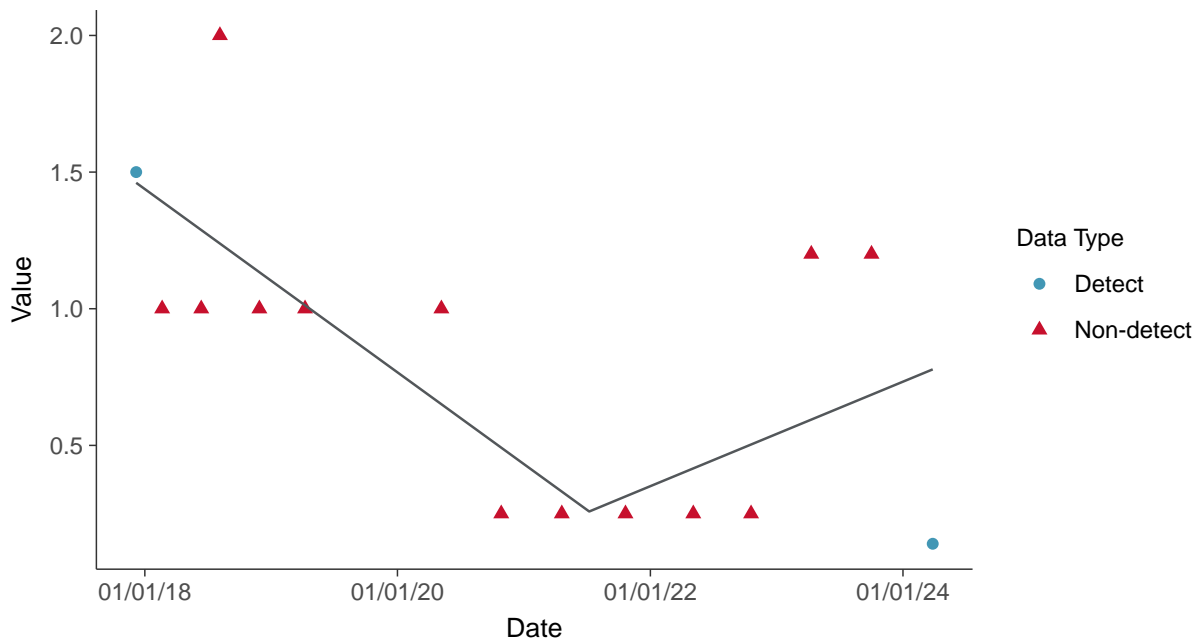
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

Antimony, MW-17002 (ug/L)



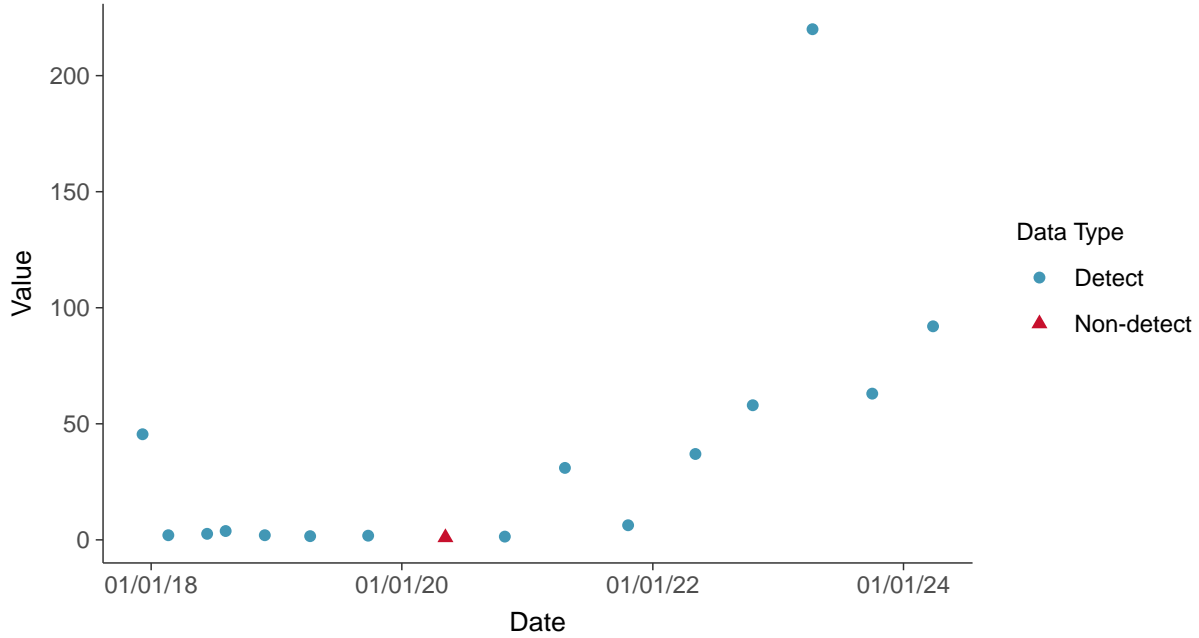


Appendix IV: Arsenic, MW-17002

ID: 15_2_102

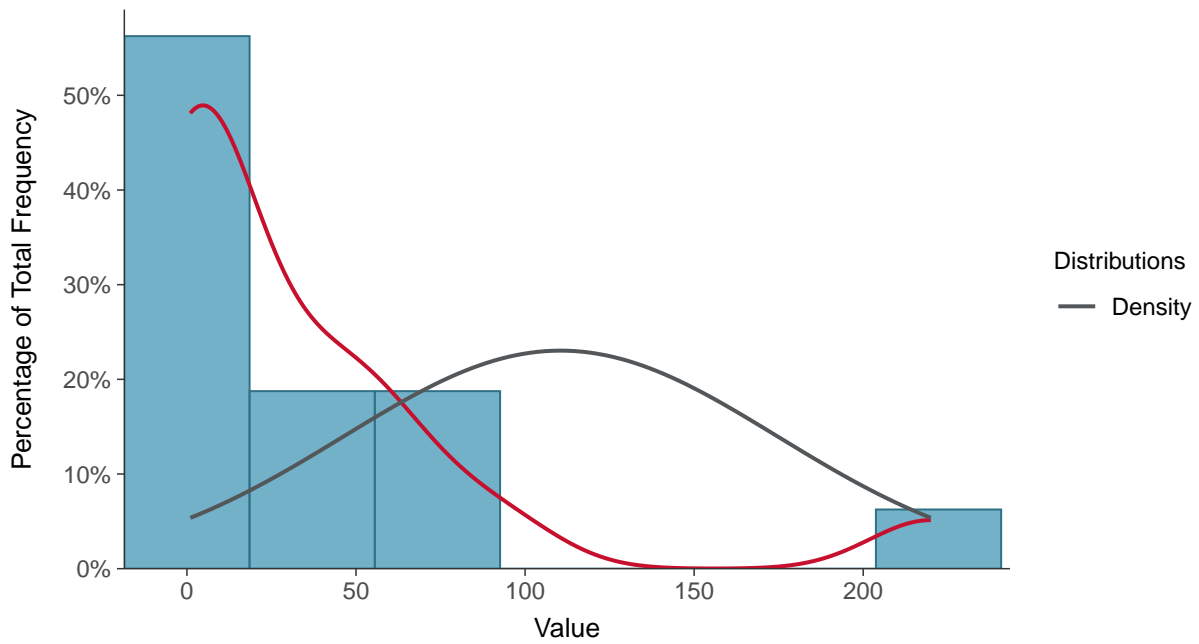
Scatter Plot

Arsenic, MW-17002 (ug/L)



Histogram

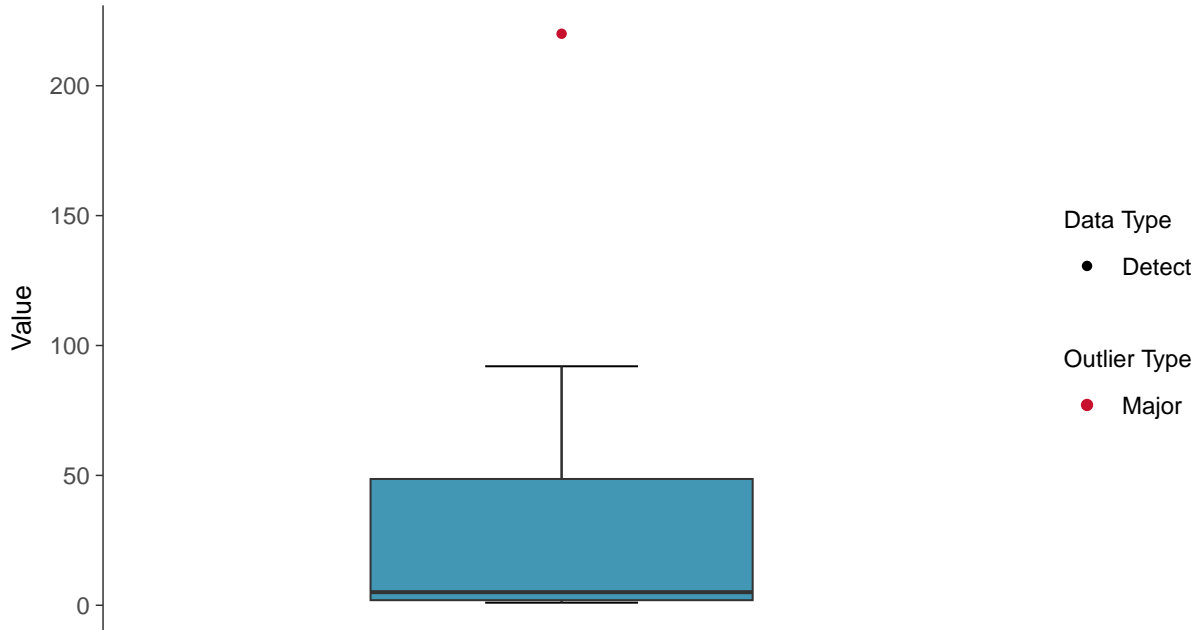
Arsenic, MW-17002 (ug/L)





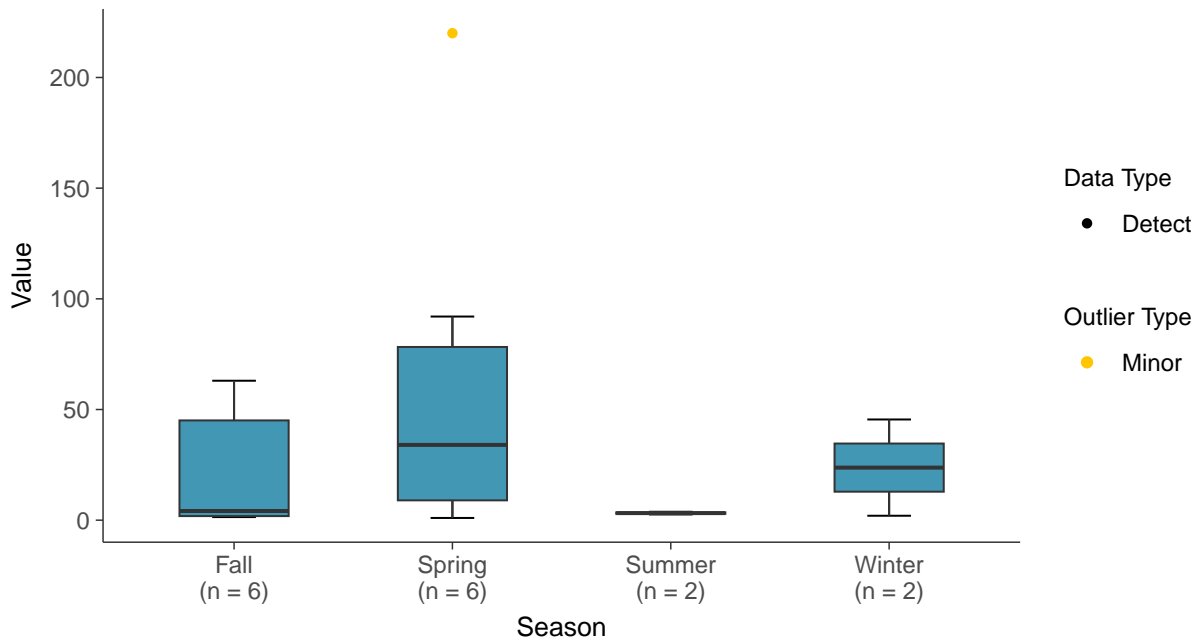
Boxplot

Arsenic, MW-17002 (ug/L)



Boxplot by Season

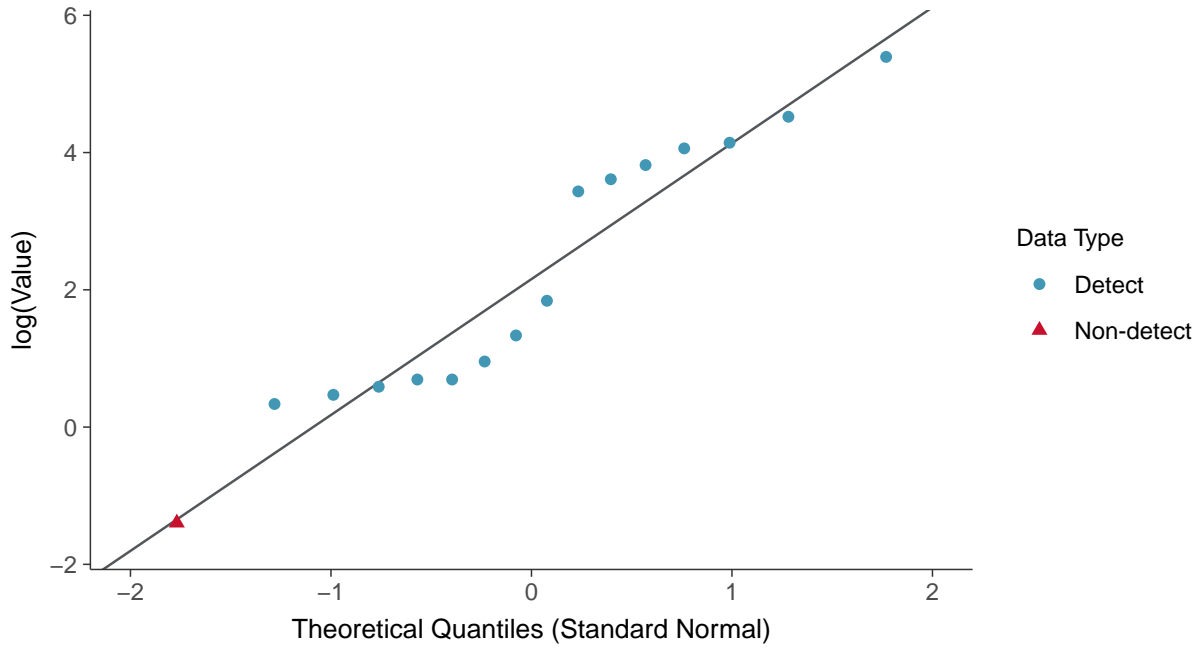
Arsenic, MW-17002 (ug/L)





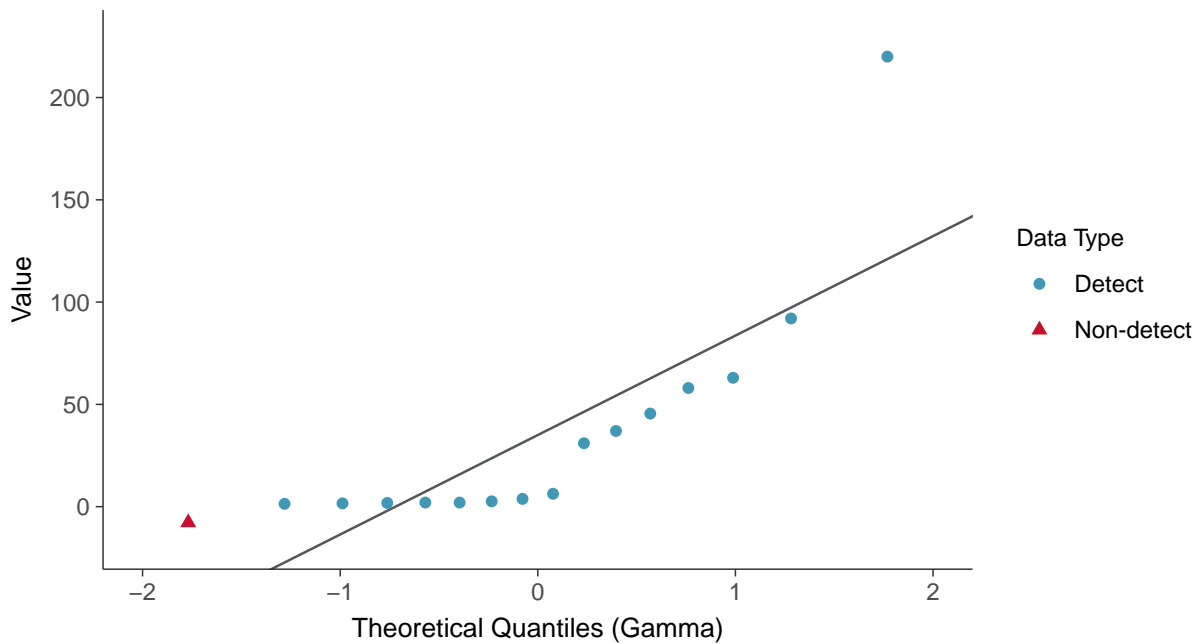
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17002 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

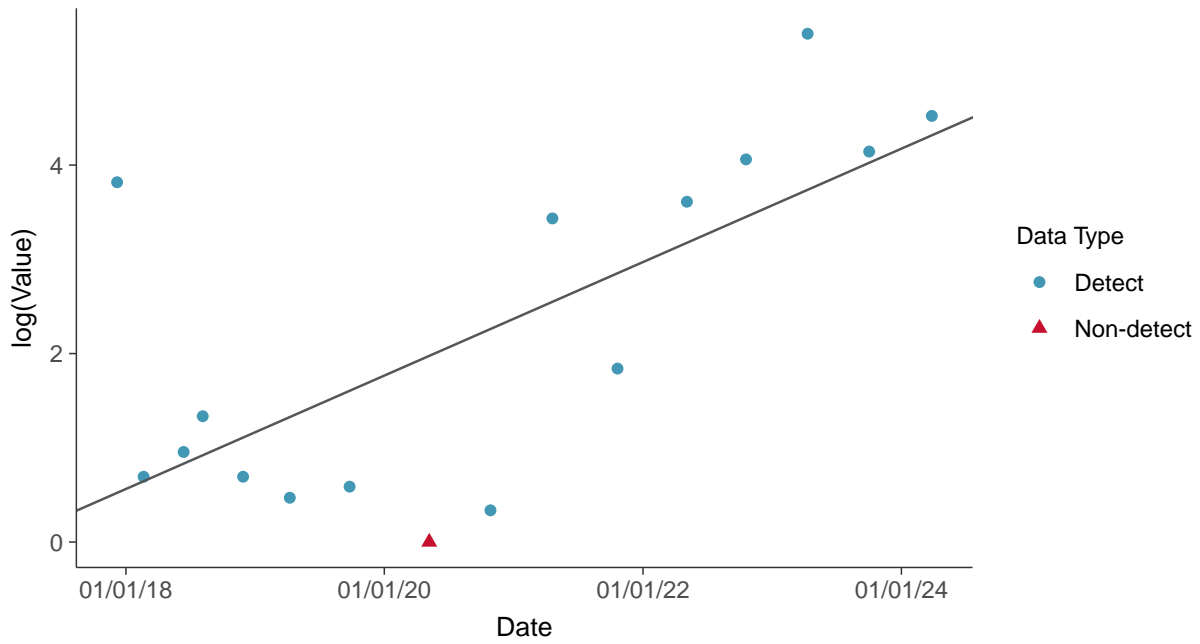
Arsenic, MW-17002 (ug/L)





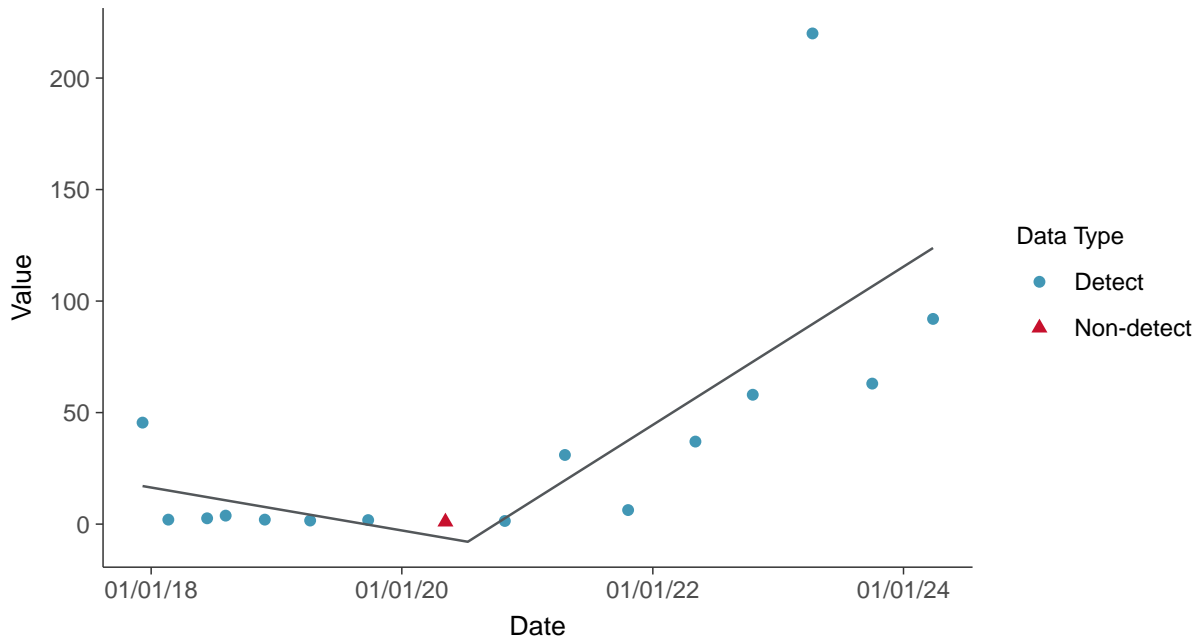
Trend Regression: Lognormal MLE

Arsenic, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

Arsenic, MW-17002 (ug/L)



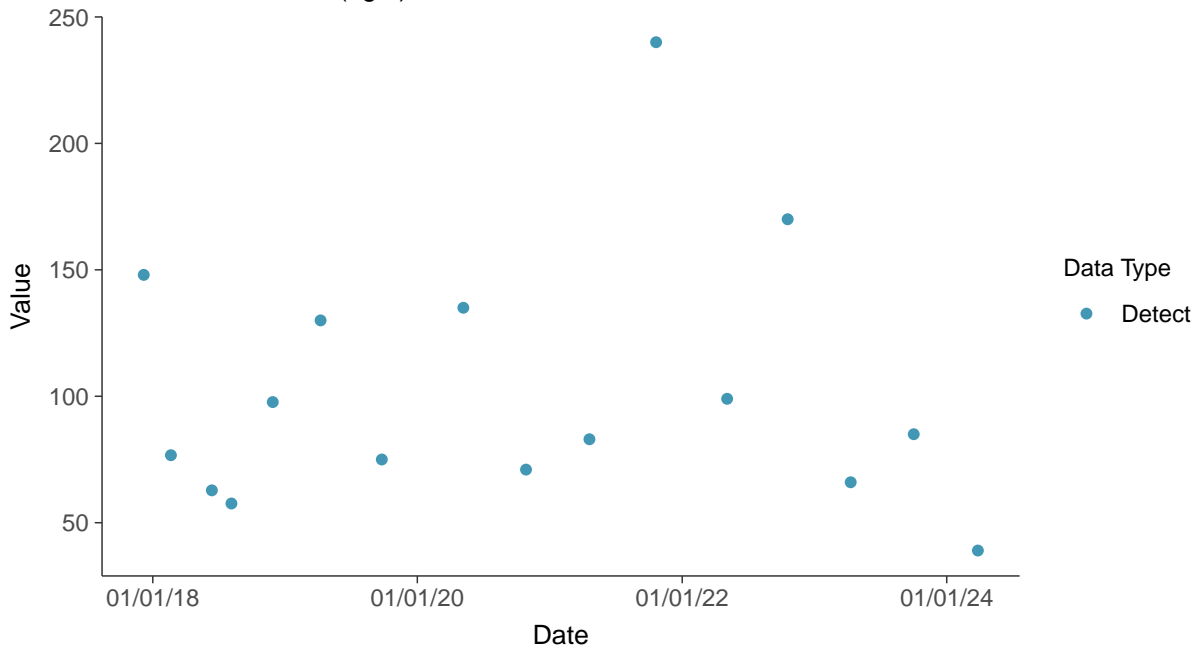


Appendix IV: Barium, MW-17002

ID: 15_2_103

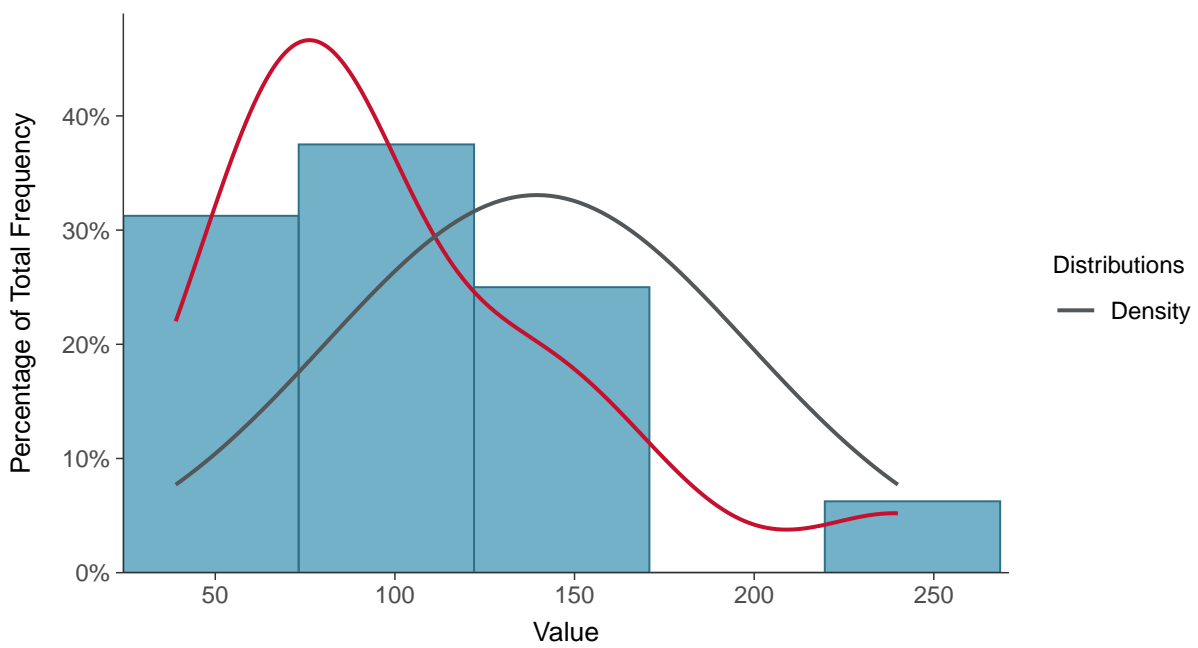
Scatter Plot

Barium, MW-17002 (ug/L)



Histogram

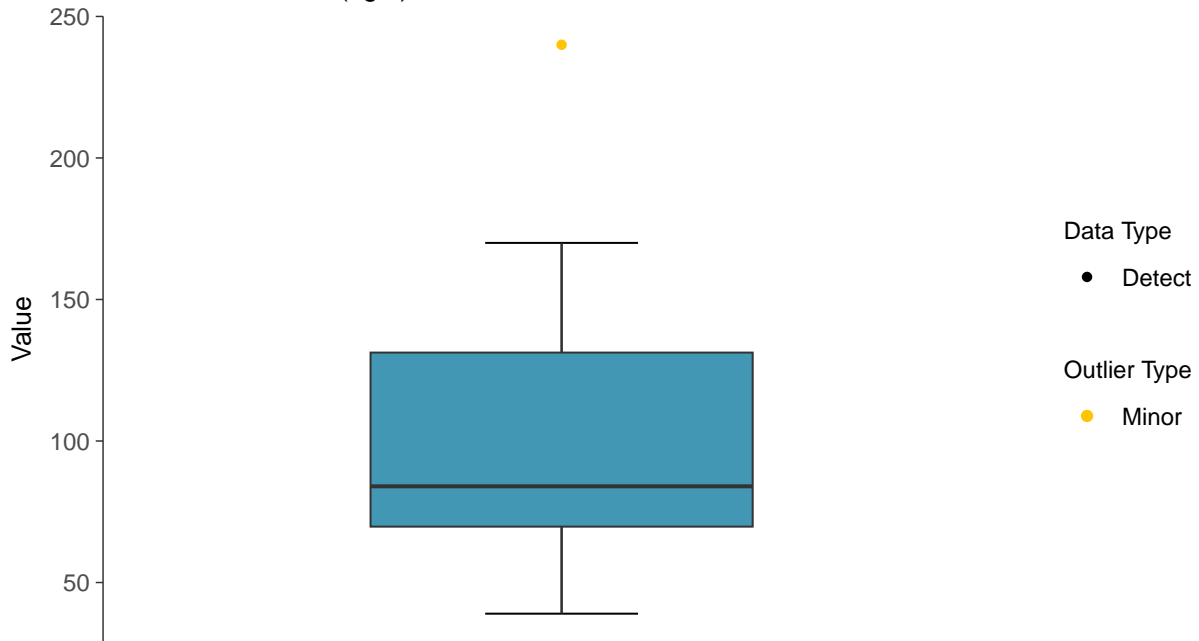
Barium, MW-17002 (ug/L)





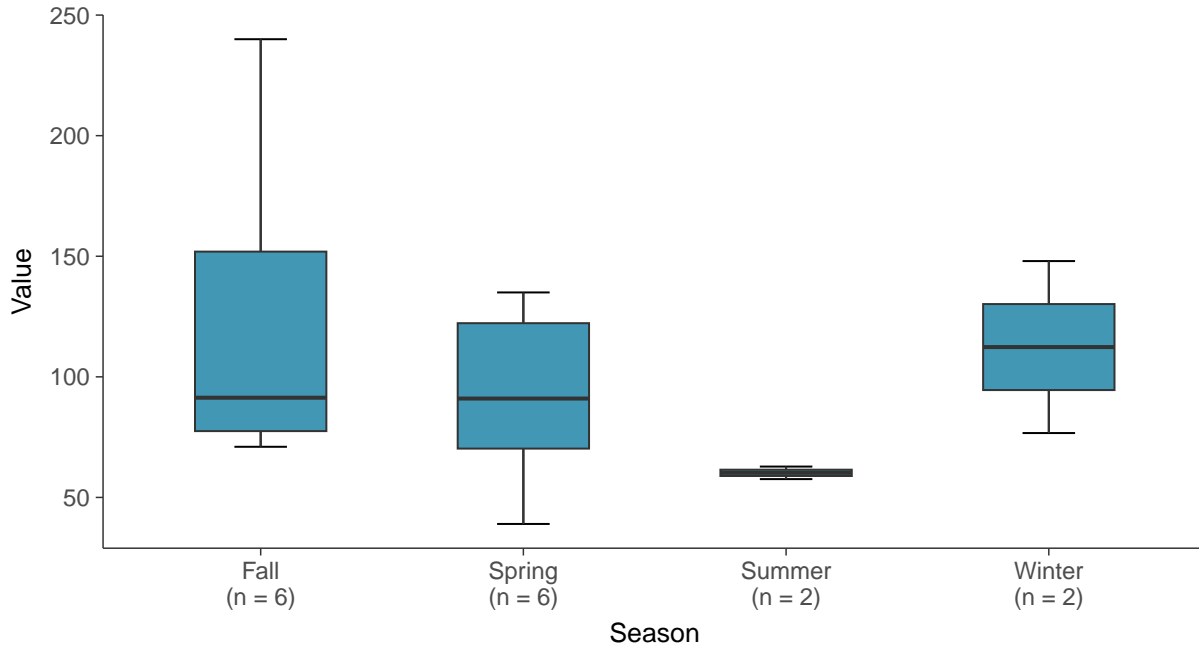
Boxplot

Barium, MW-17002 (ug/L)



Boxplot by Season

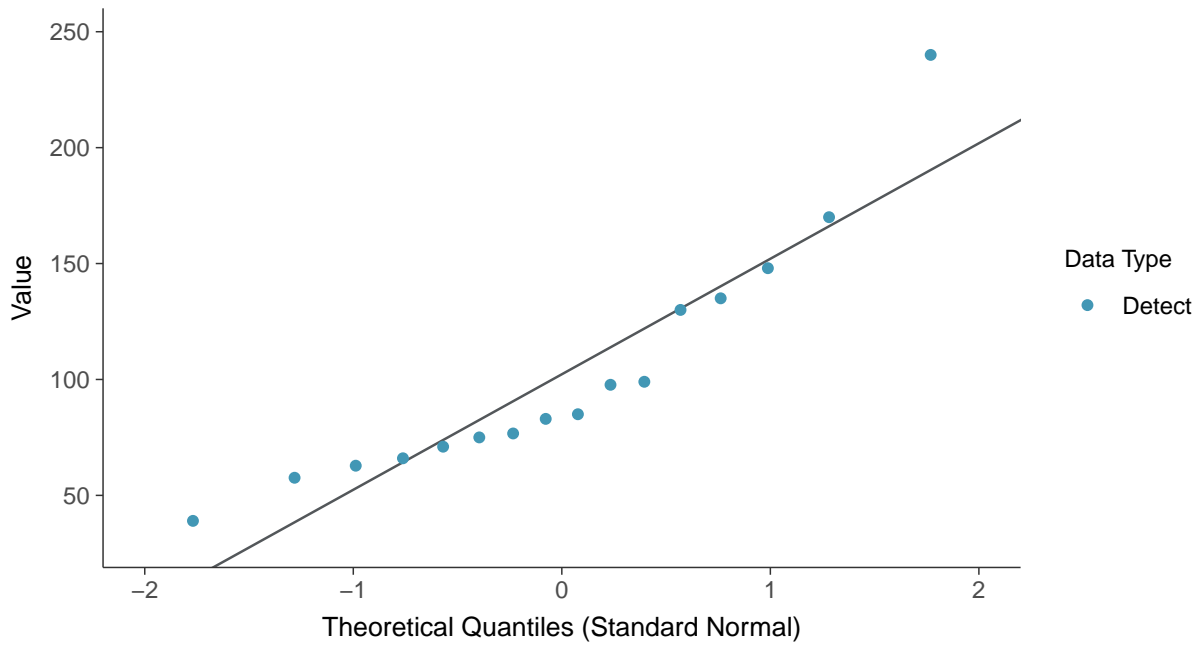
Barium, MW-17002 (ug/L)





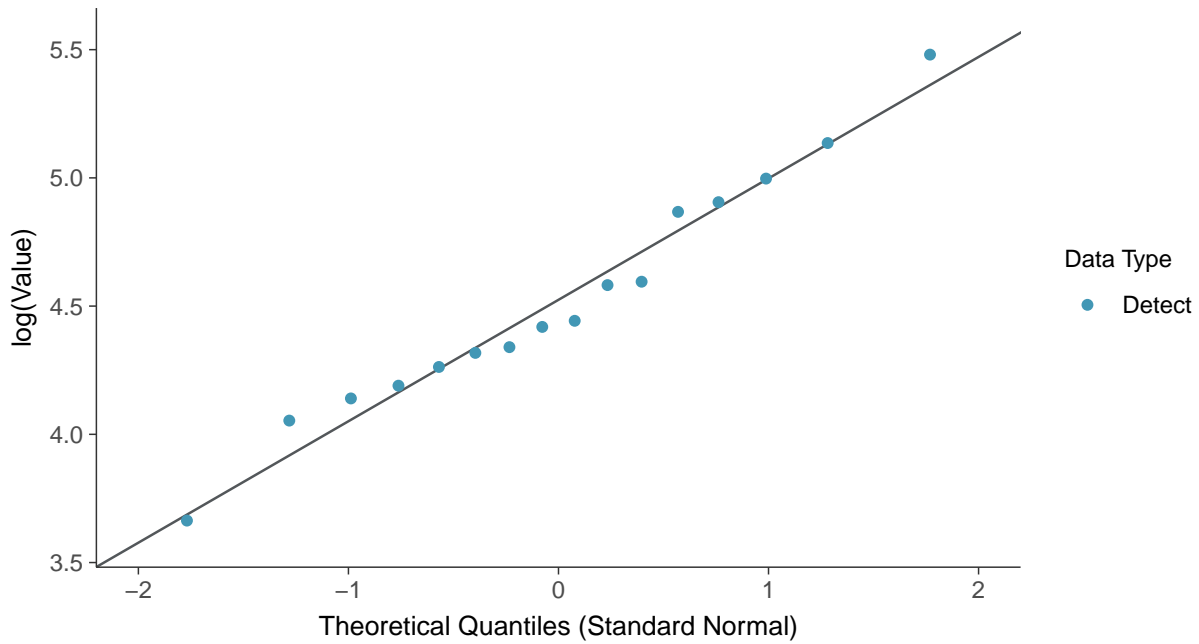
Normal Q-Q plot

Barium, MW-17002 (ug/L)



Lognormal Q-Q plot

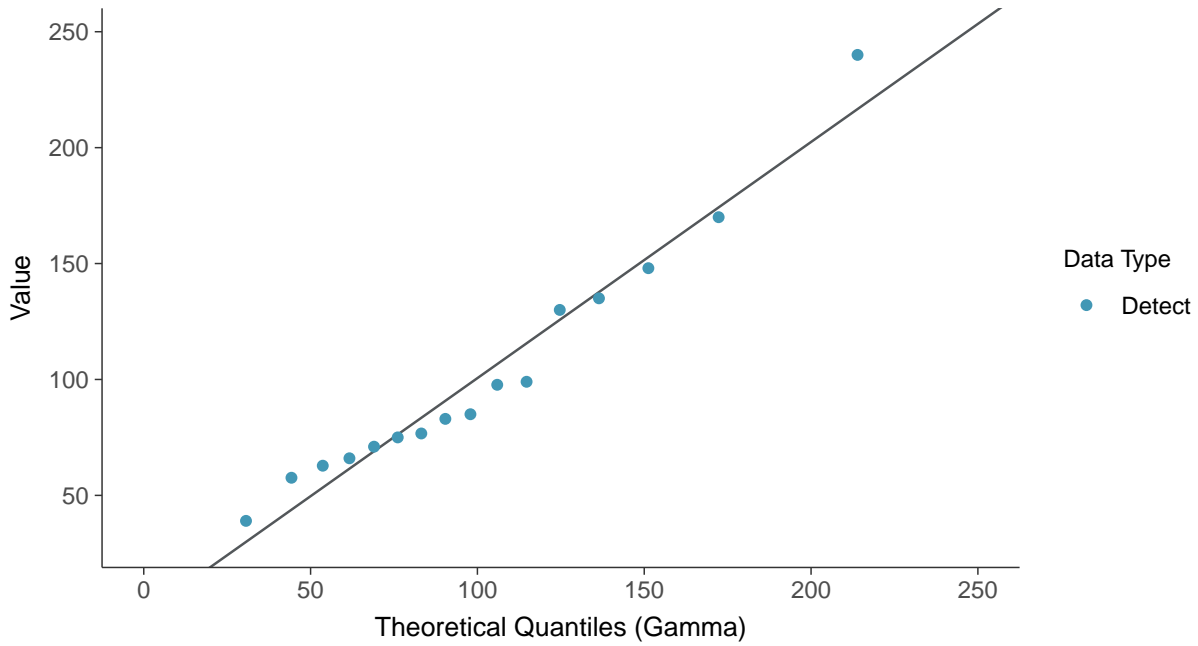
Barium, MW-17002 (ug/L)





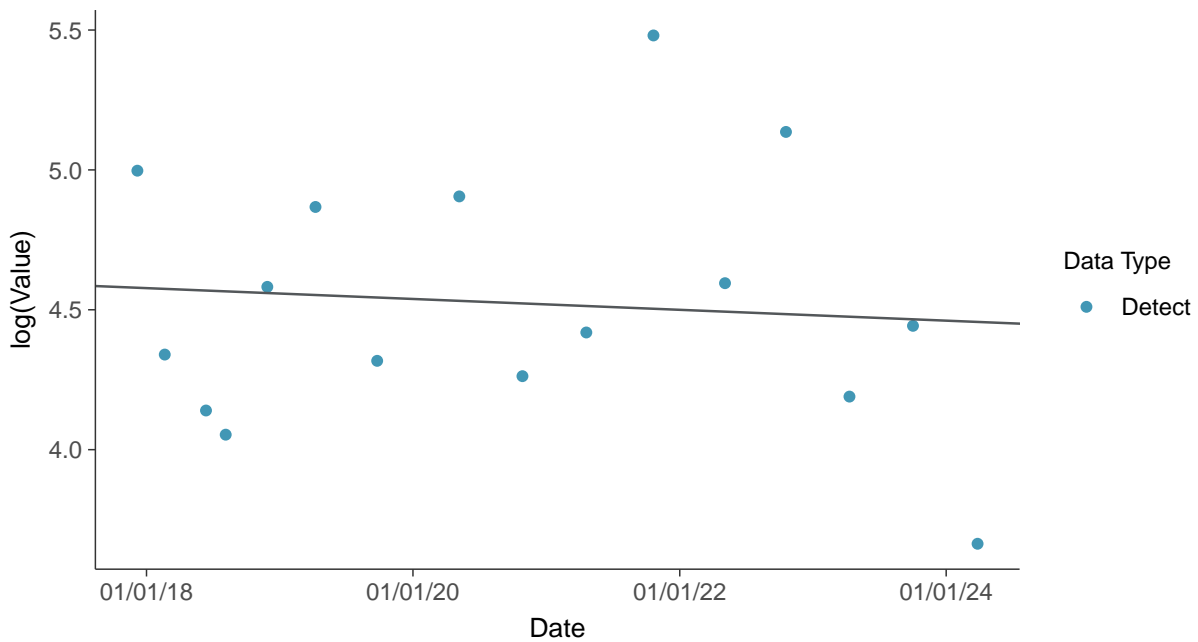
Gamma Q-Q plot

Barium, MW-17002 (ug/L)



Trend Regression: Lognormal MLE

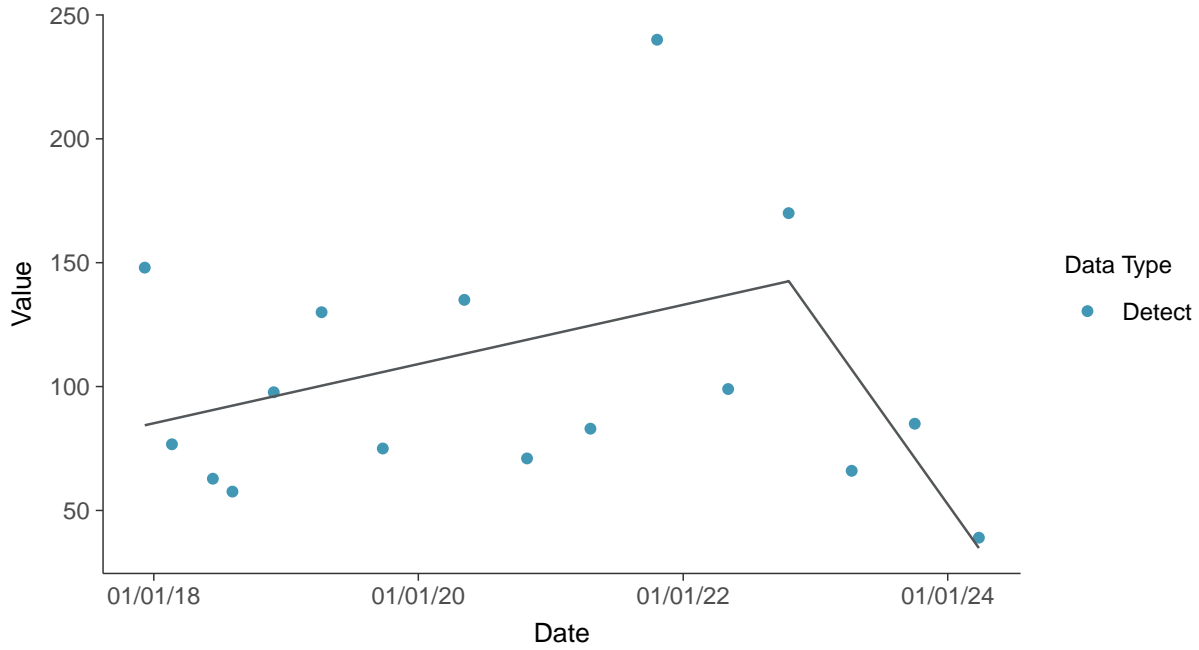
Barium, MW-17002 (ug/L)





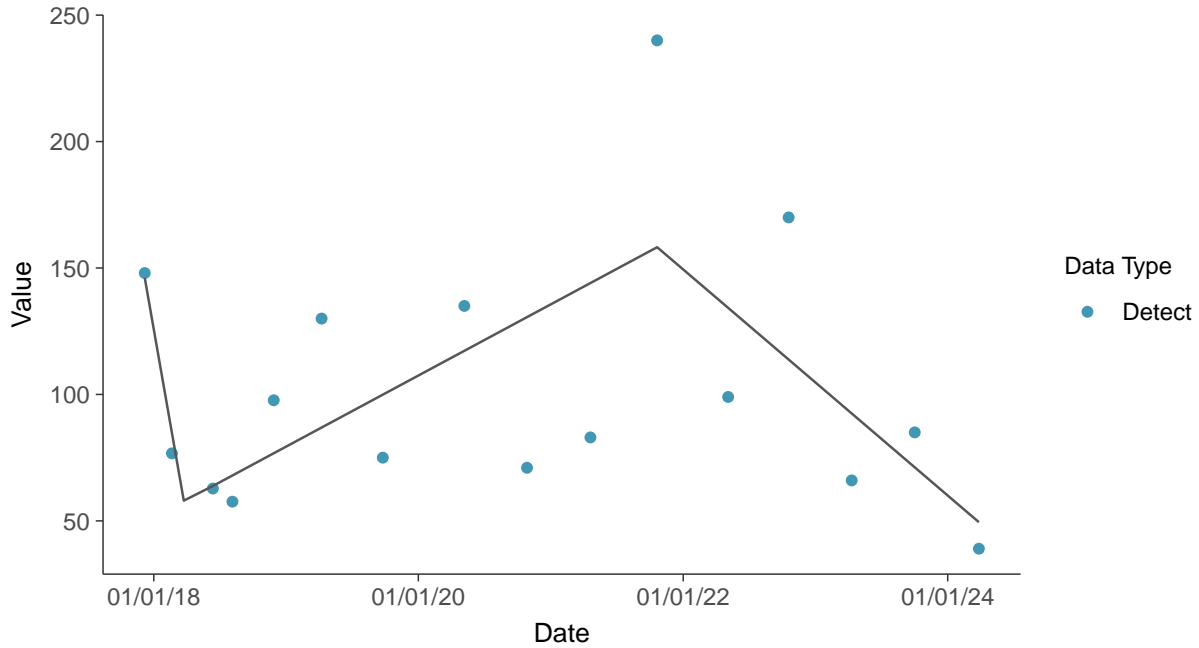
Trend Regression: Piecewise Linear-Linear

Barium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

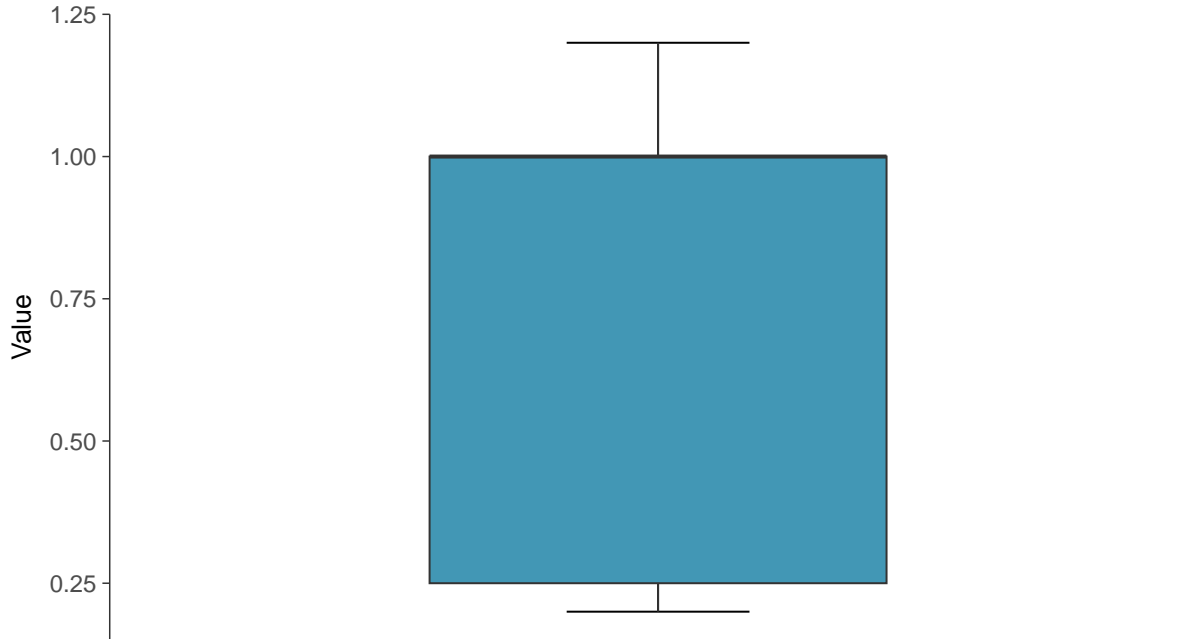
Barium, MW-17002 (ug/L)





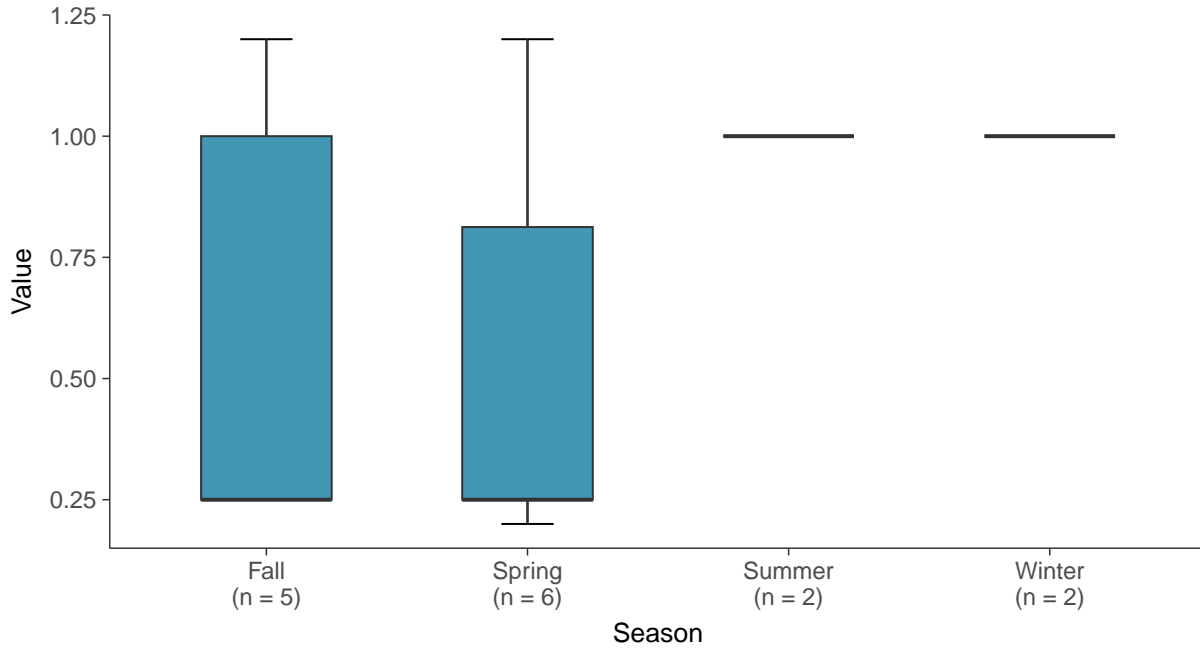
Boxplot

Beryllium, MW-17002 (ug/L)



Boxplot by Season

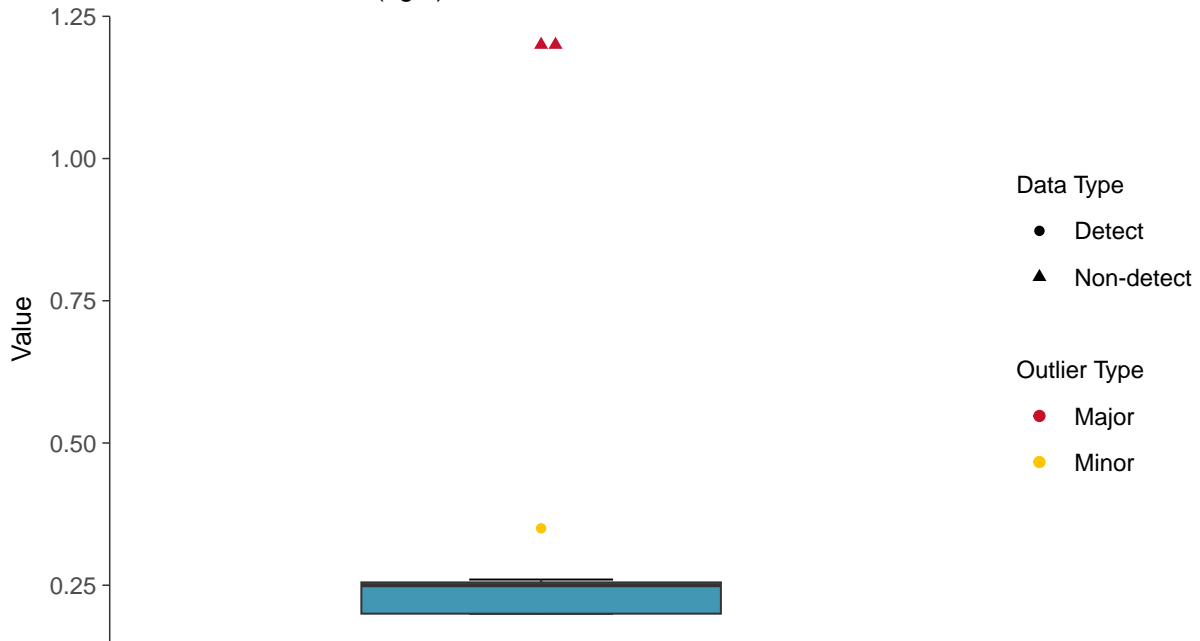
Beryllium, MW-17002 (ug/L)





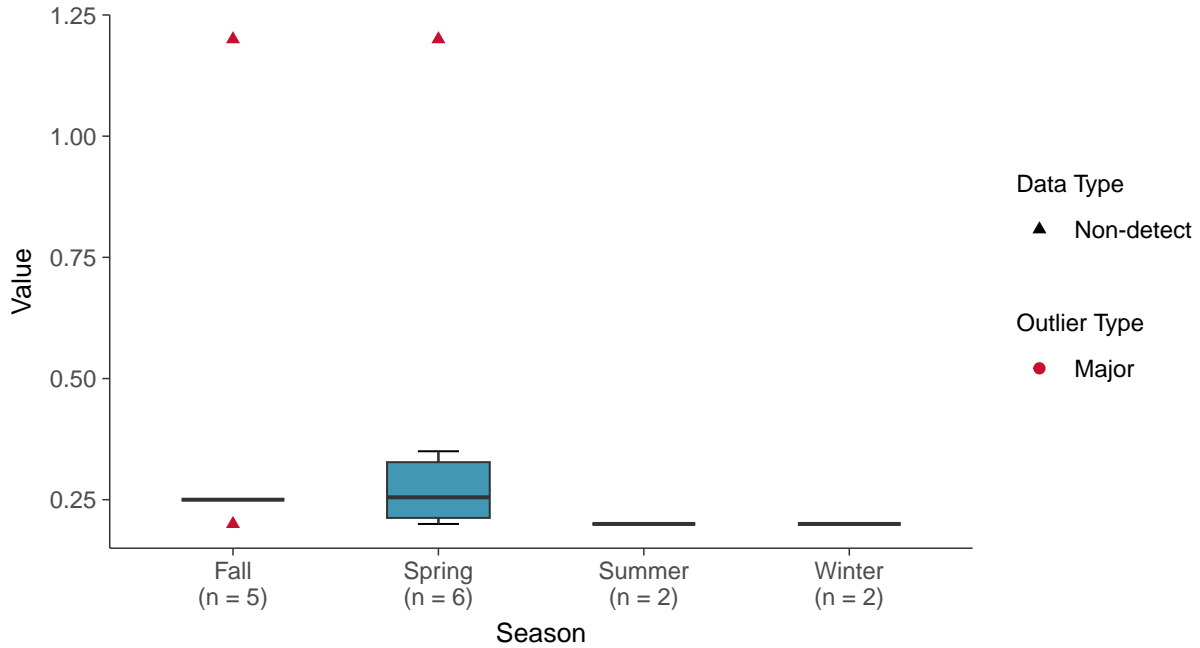
Boxplot

Cadmium, MW-17002 (ug/L)



Boxplot by Season

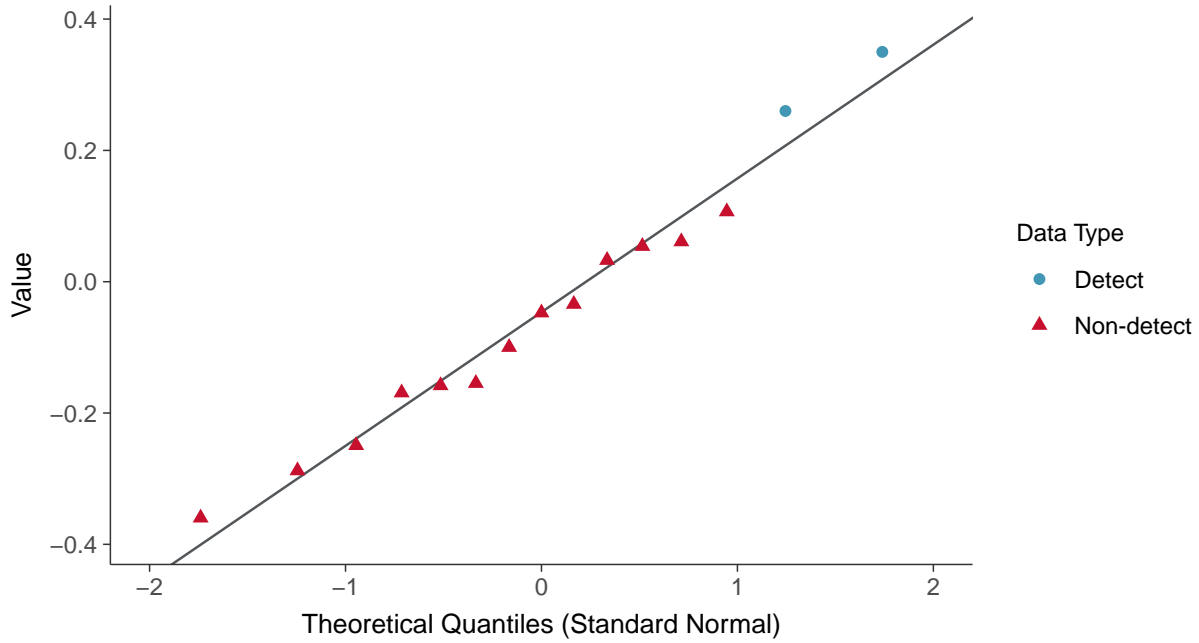
Cadmium, MW-17002 (ug/L)





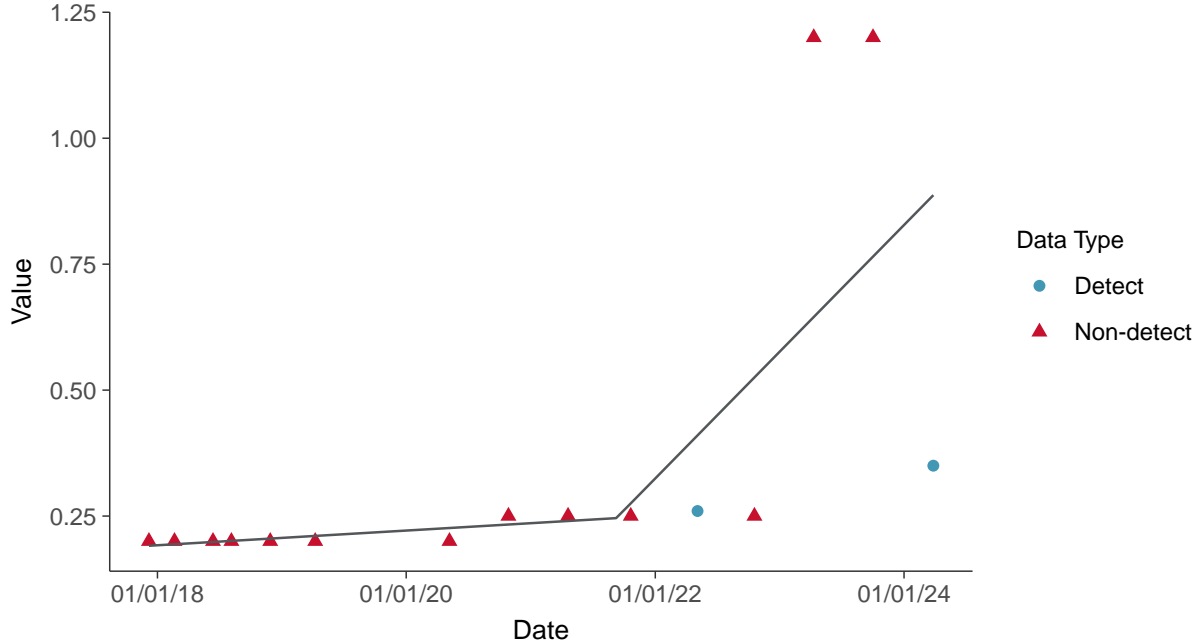
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

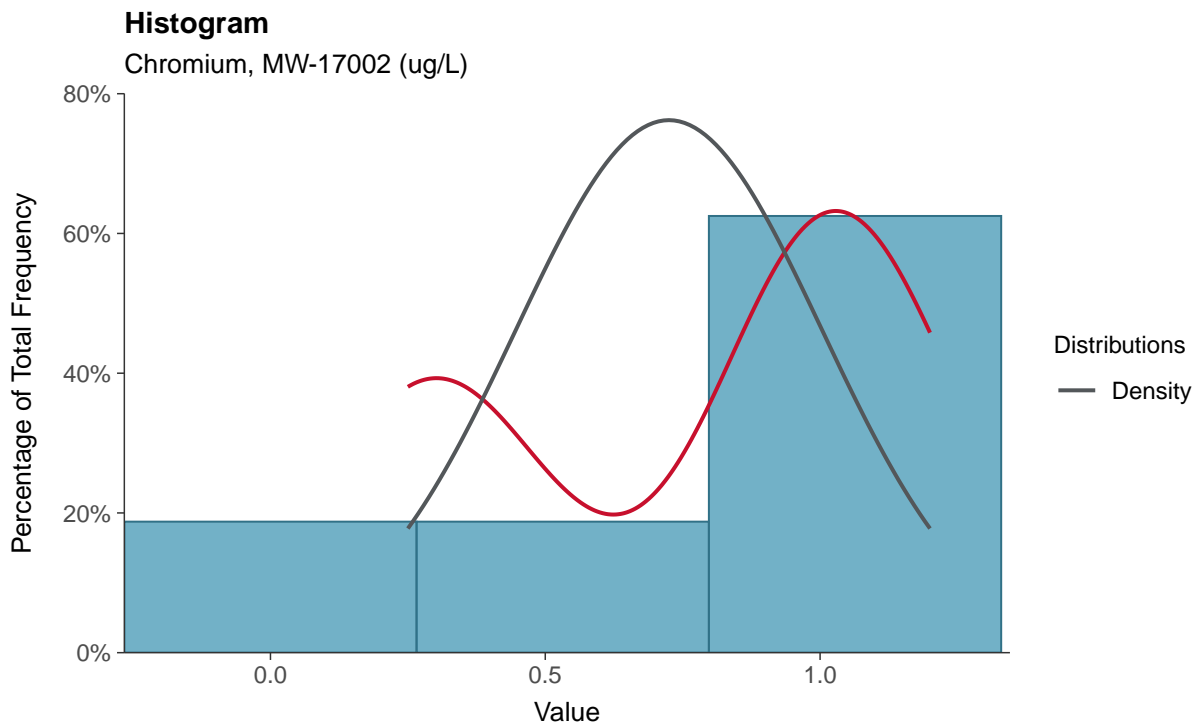
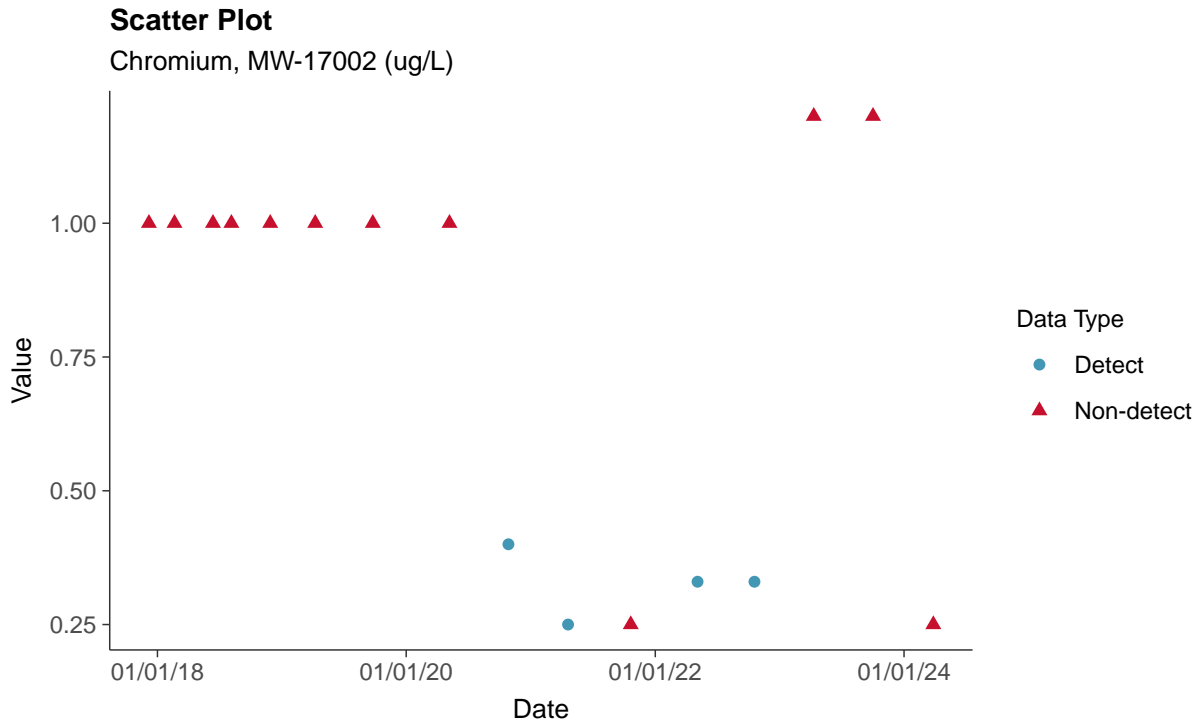
Cadmium, MW-17002 (ug/L)





Appendix IV: Chromium, MW-17002

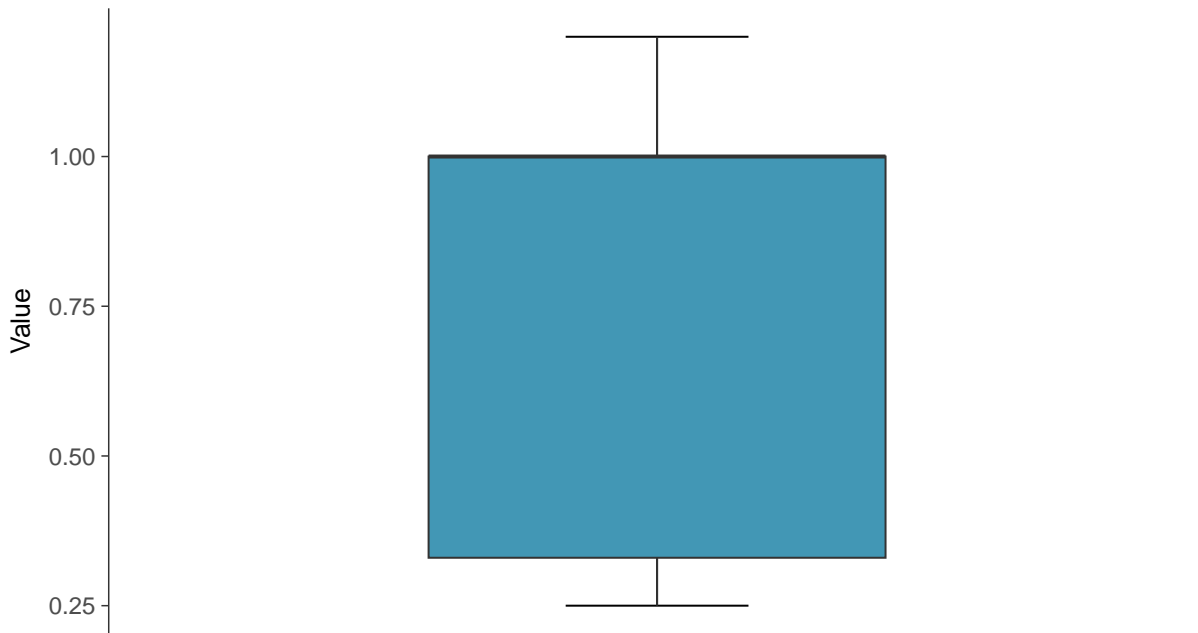
ID: 15_2_109





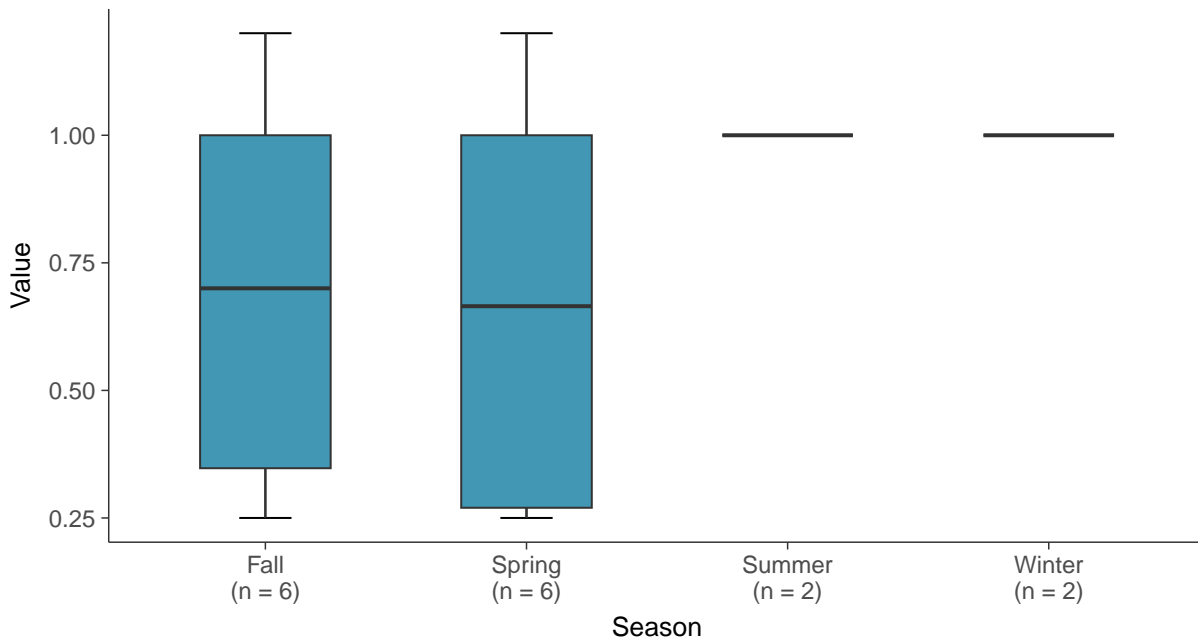
Boxplot

Chromium, MW-17002 (ug/L)



Boxplot by Season

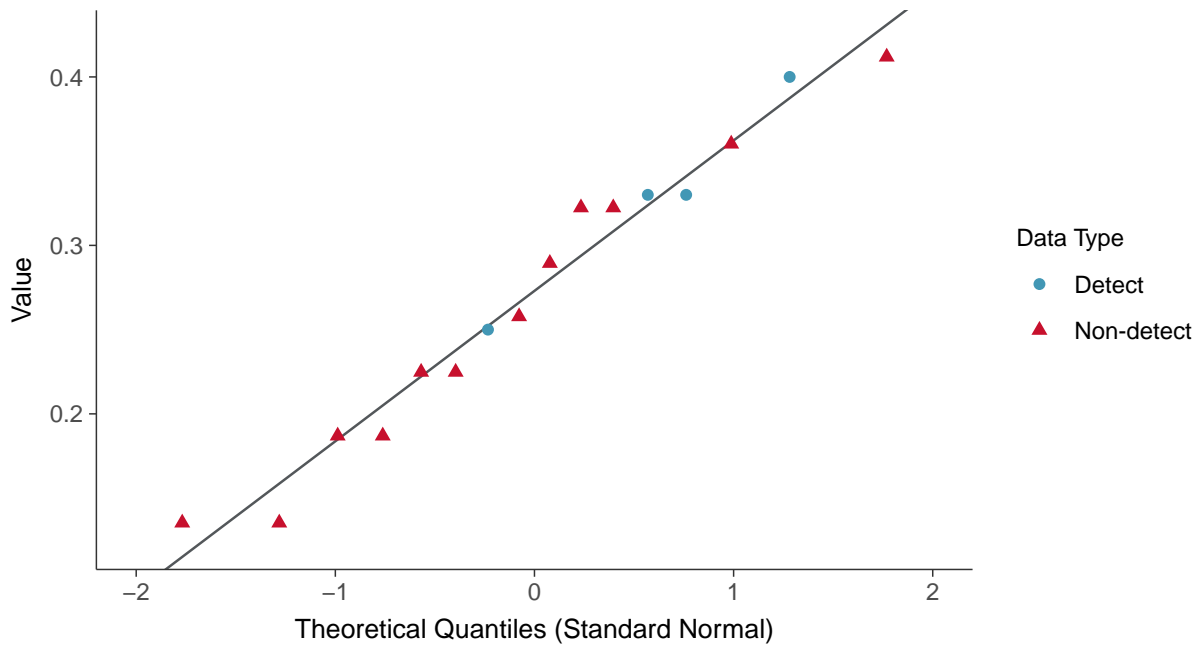
Chromium, MW-17002 (ug/L)





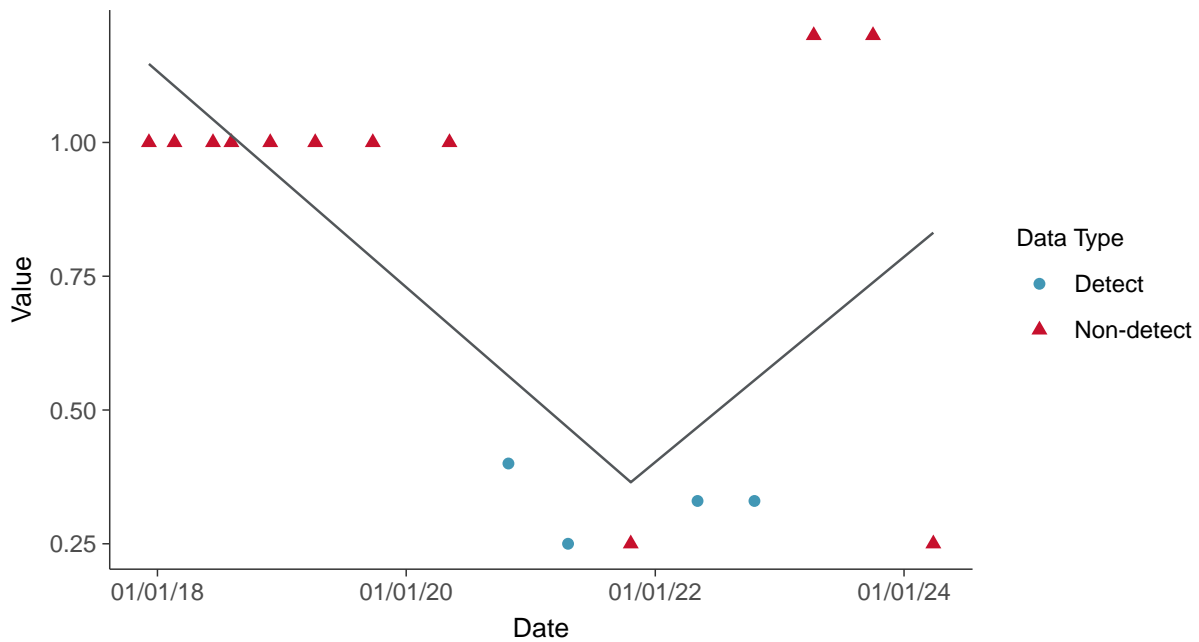
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

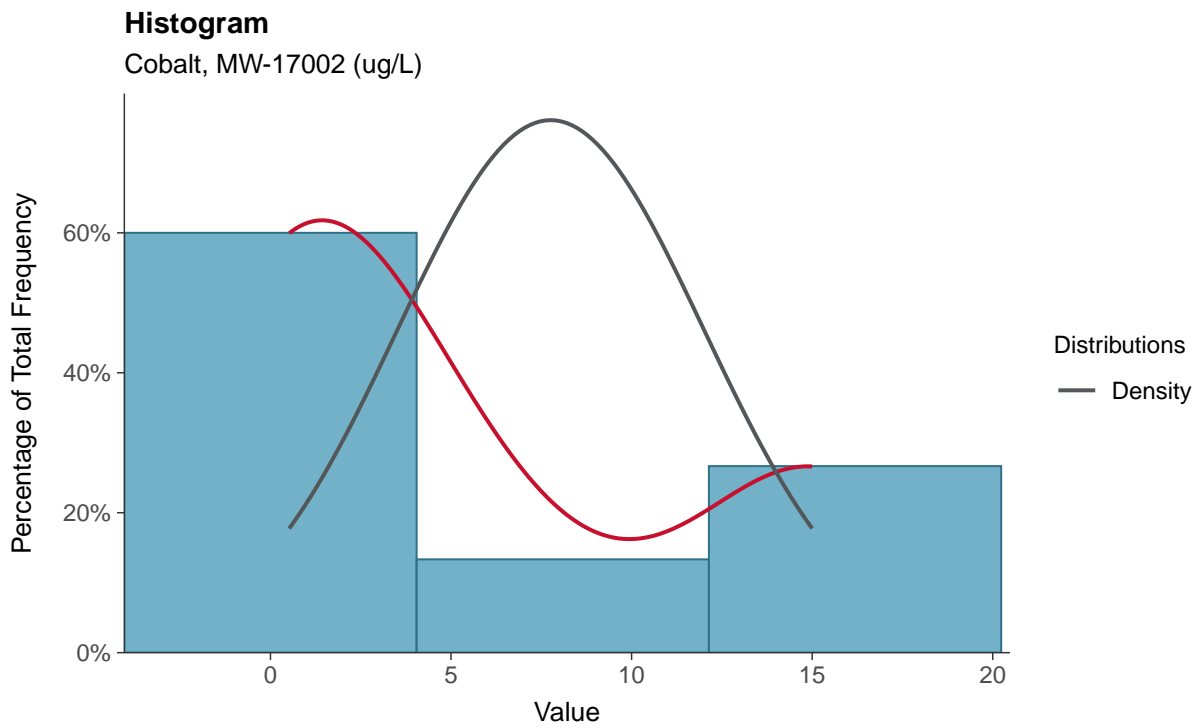
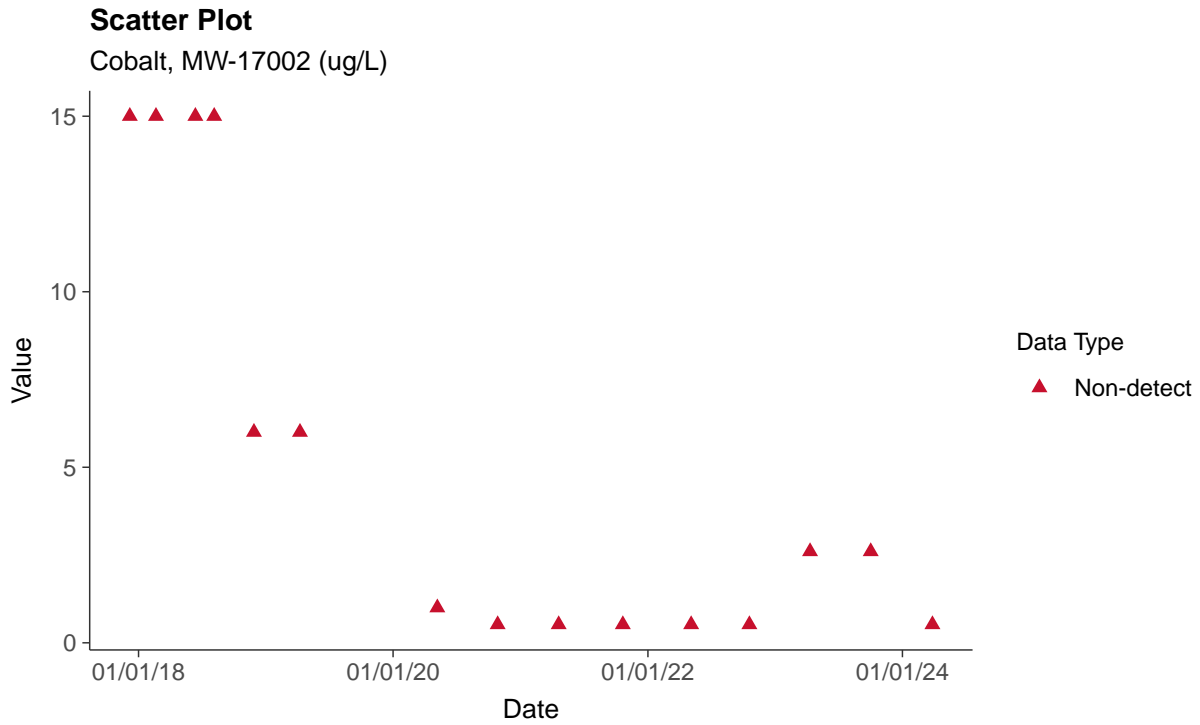
Chromium, MW-17002 (ug/L)





Appendix IV: Cobalt, MW-17002

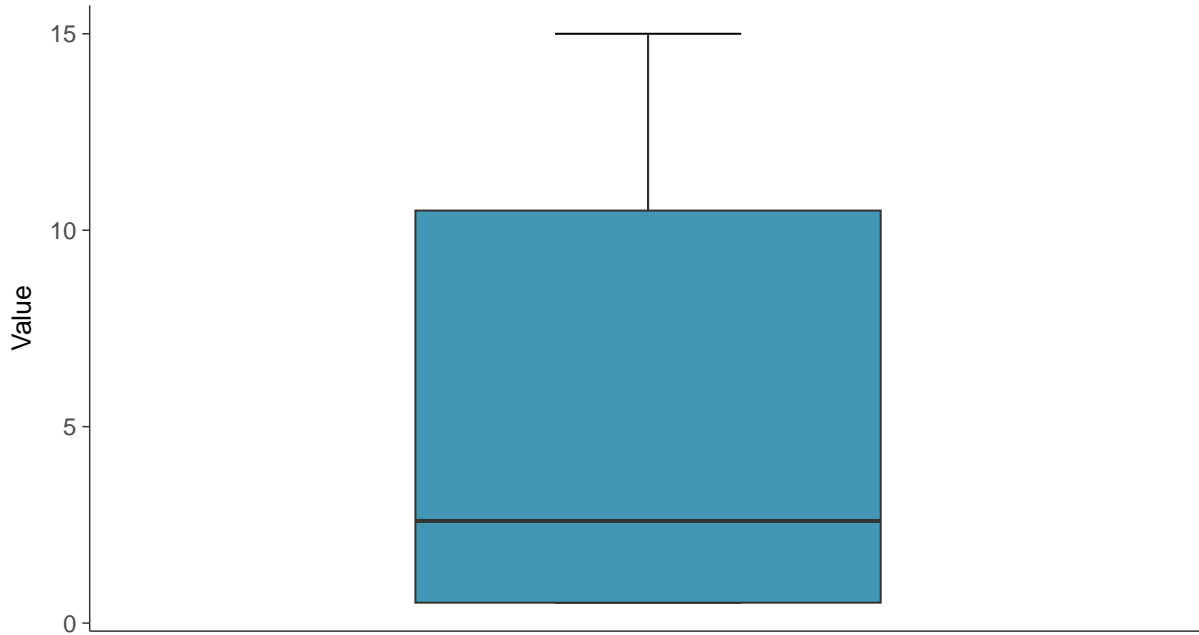
ID: 15_2_110





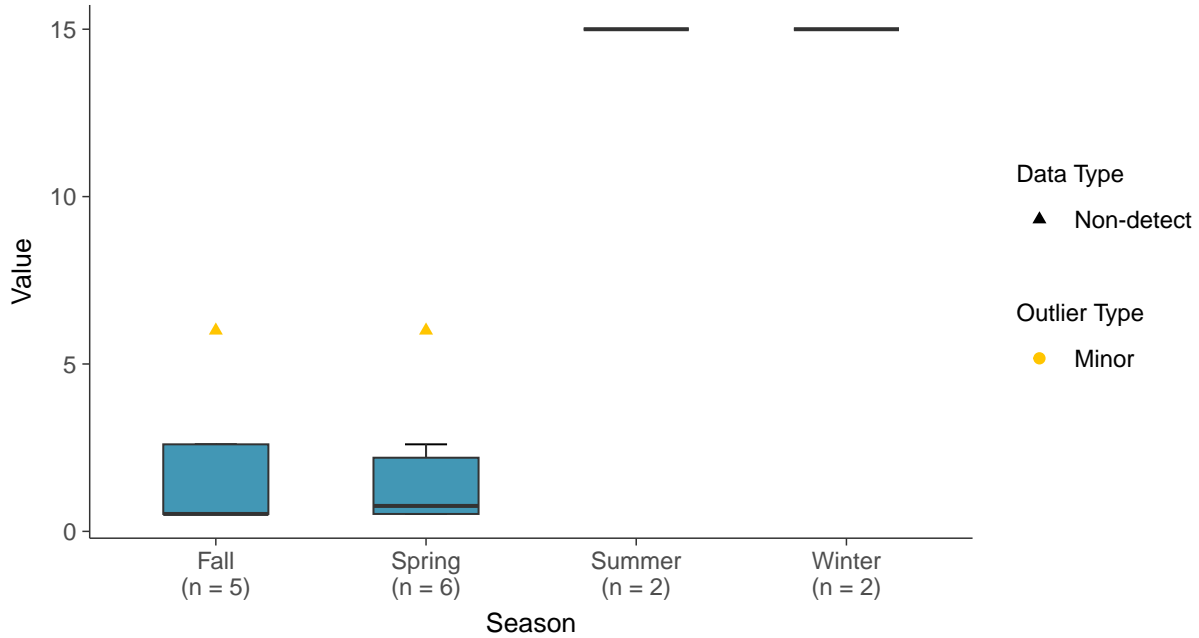
Boxplot

Cobalt, MW-17002 (ug/L)



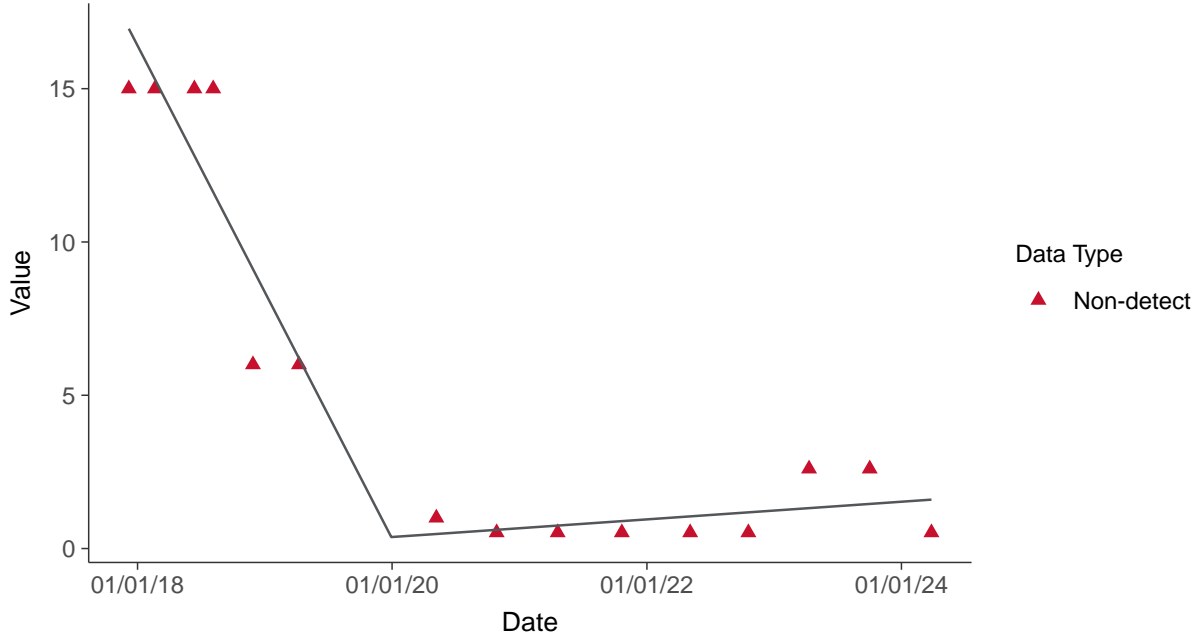
Boxplot by Season

Cobalt, MW-17002 (ug/L)

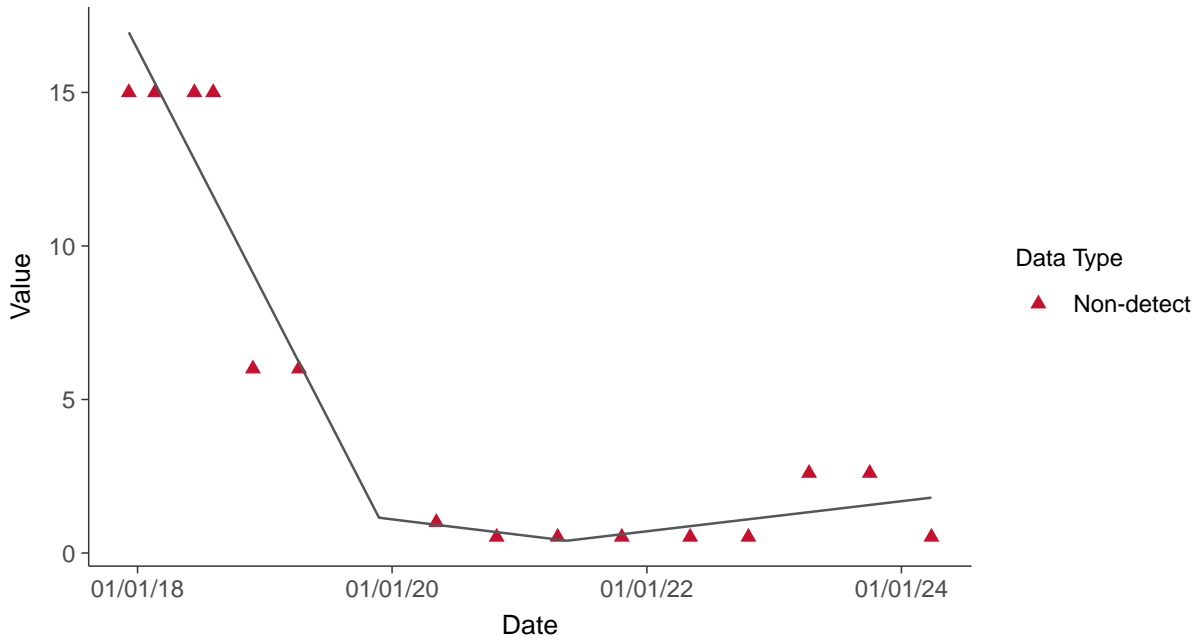




Trend Regression: Piecewise Linear-Linear
Cobalt, MW-17002 (ug/L)



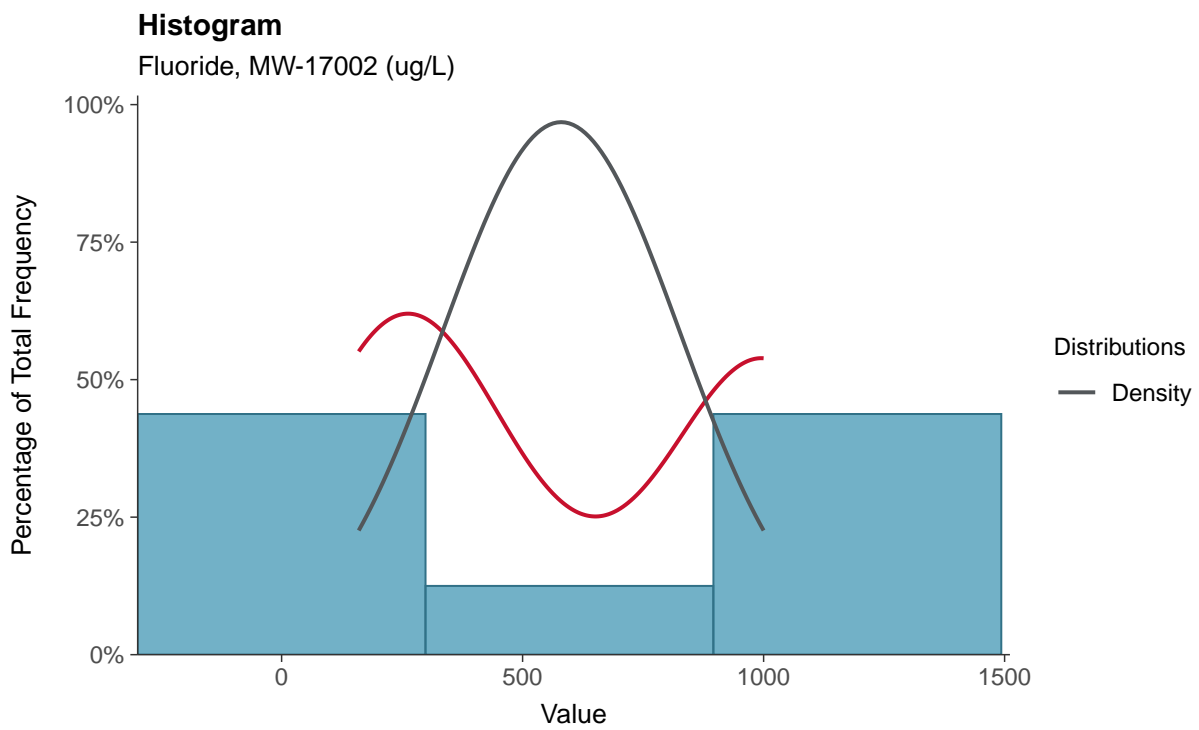
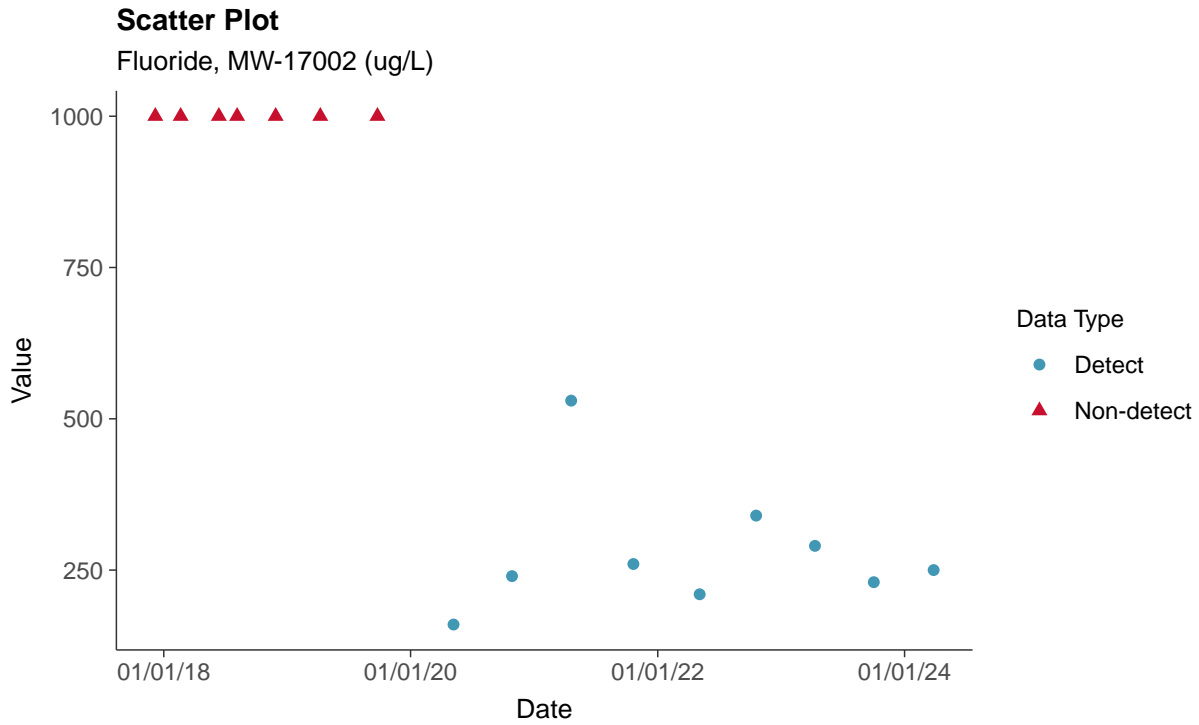
Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-17002 (ug/L)





Appendix IV: Fluoride, MW-17002

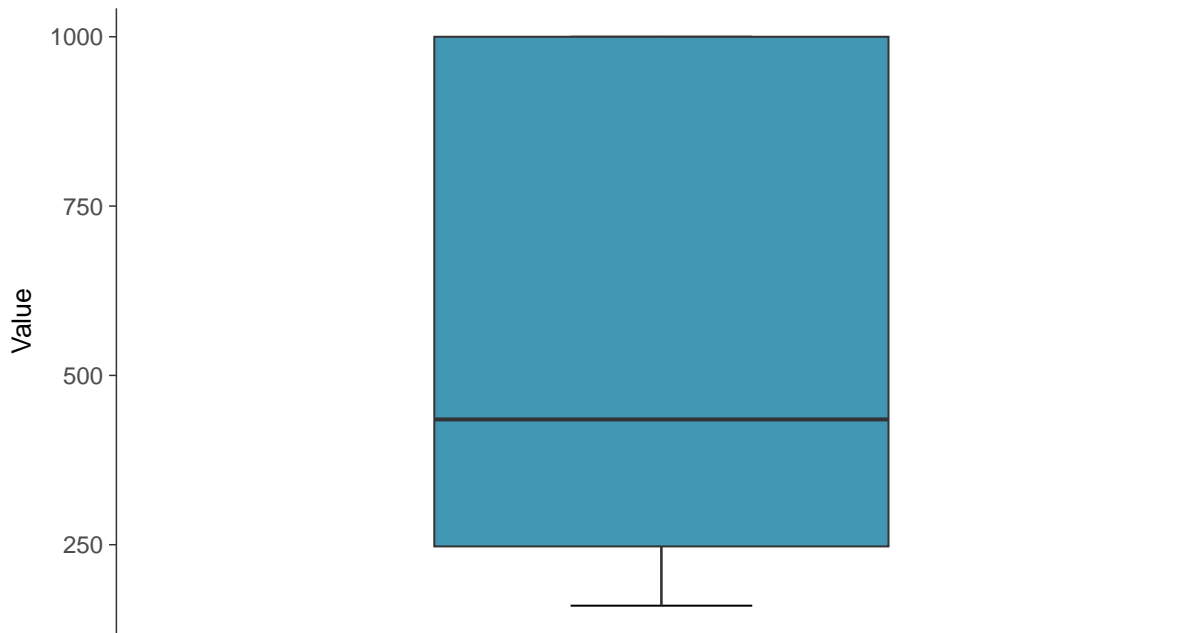
ID: 15_2_114





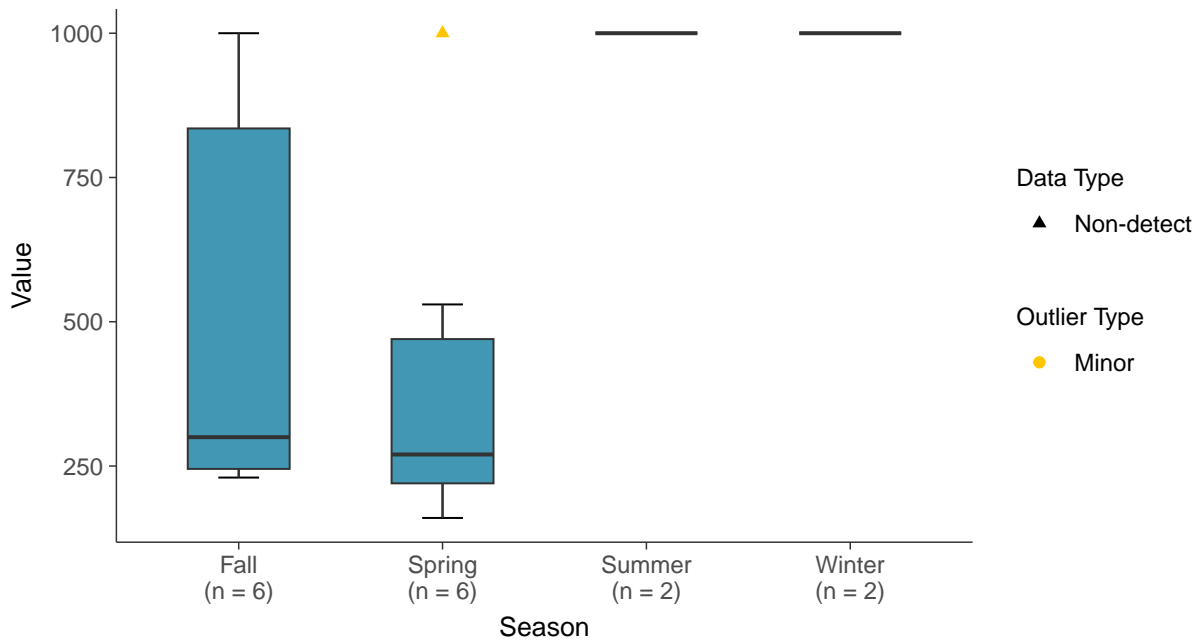
Boxplot

Fluoride, MW-17002 (ug/L)



Boxplot by Season

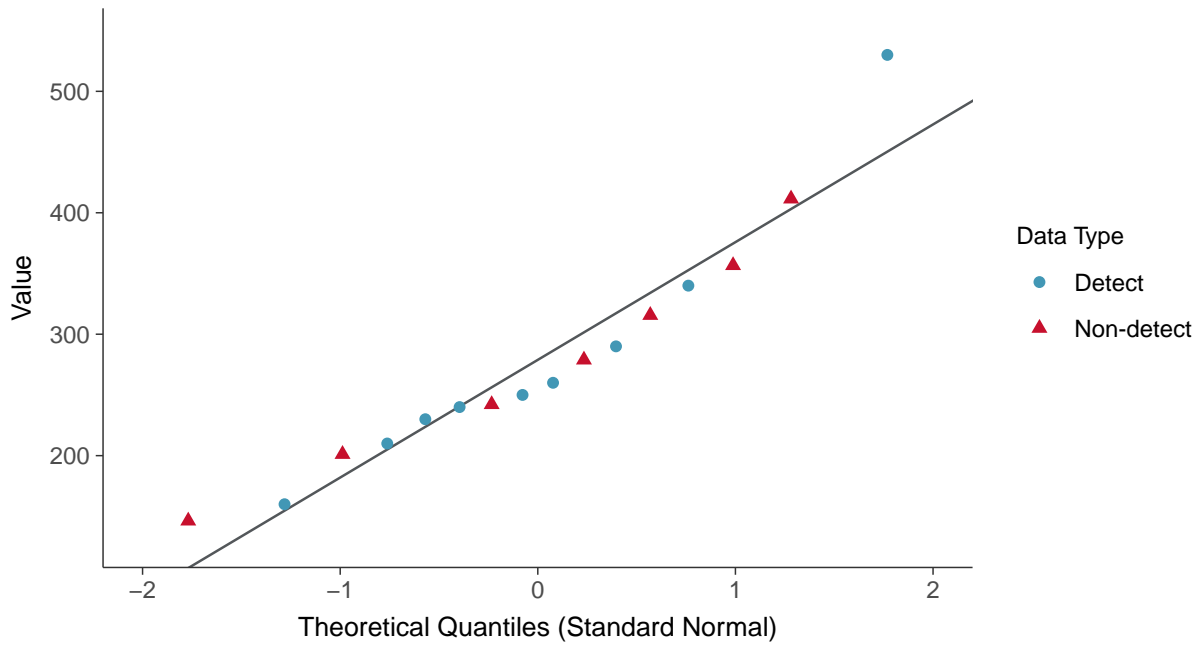
Fluoride, MW-17002 (ug/L)





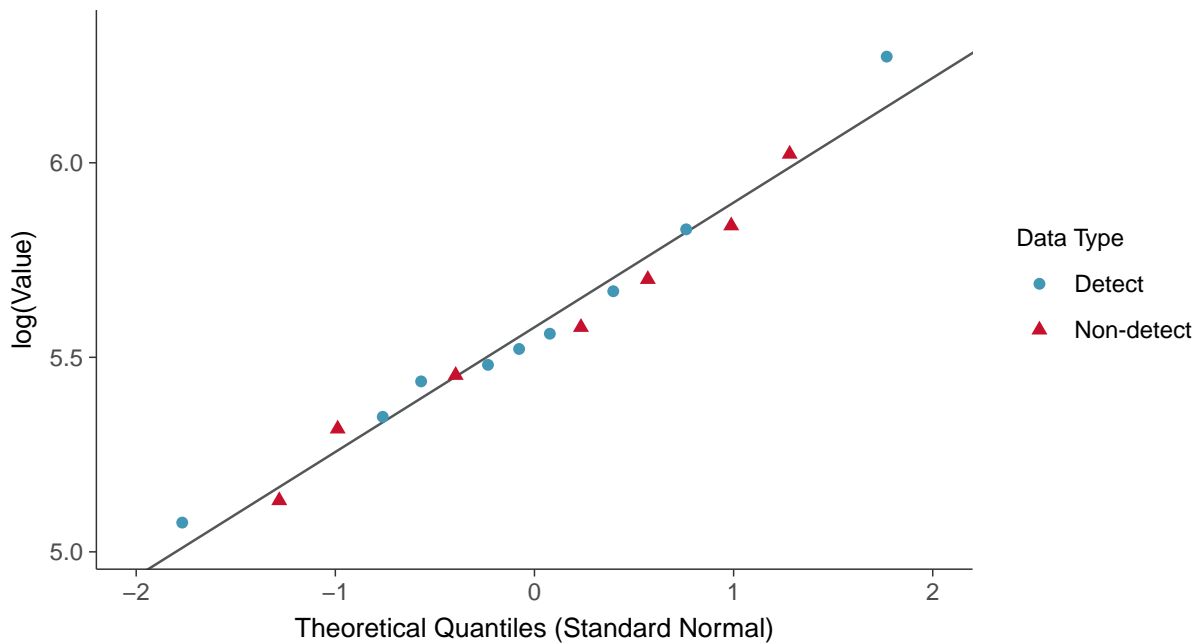
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17002 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

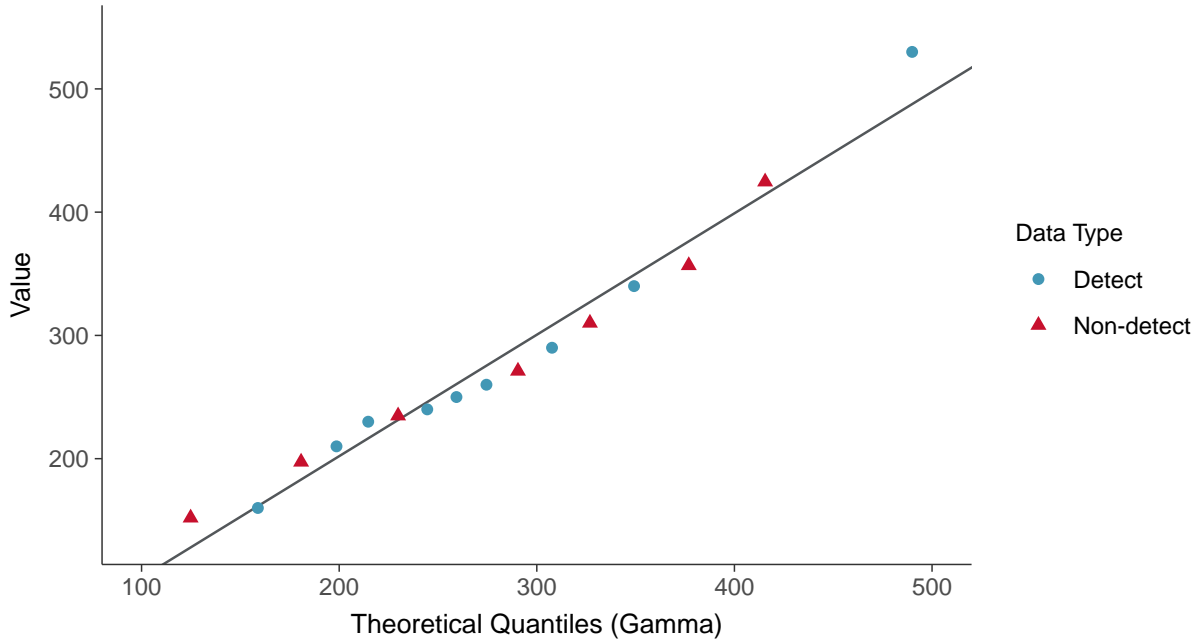
Fluoride, MW-17002 (ug/L)





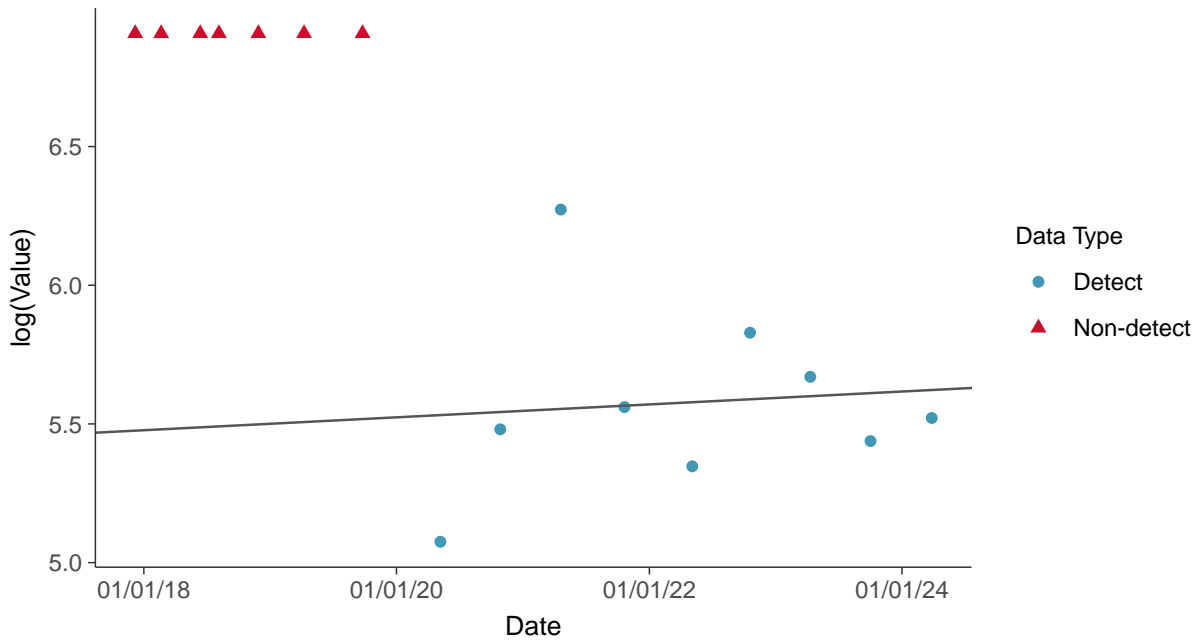
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17002 (ug/L)



Trend Regression: Lognormal MLE

Fluoride, MW-17002 (ug/L)



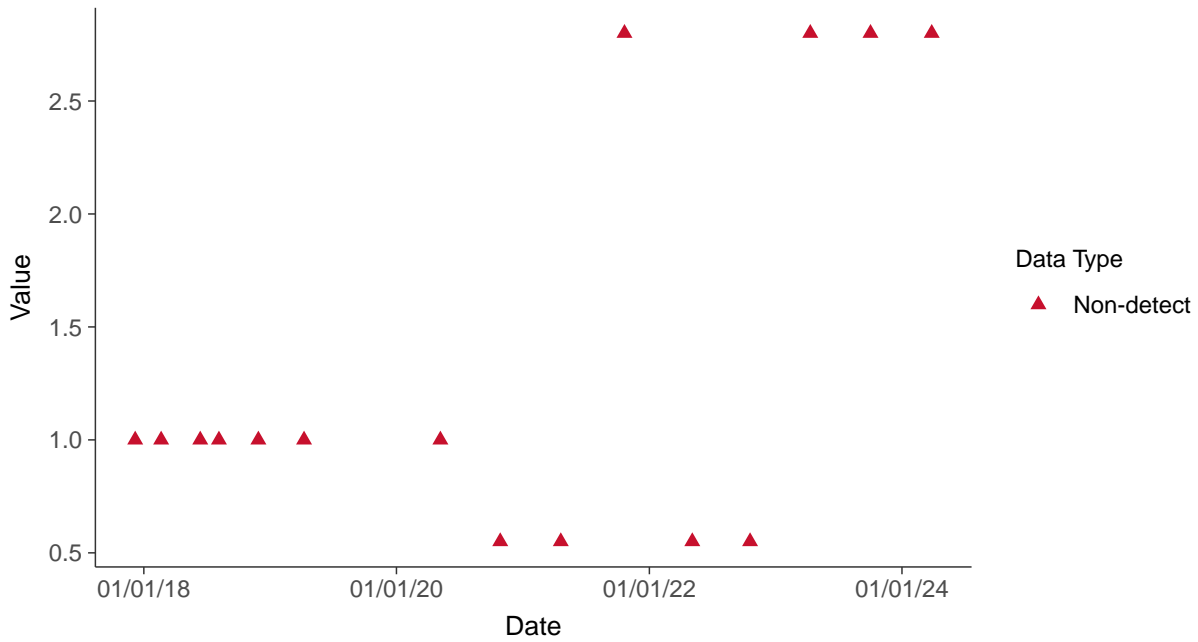


Appendix IV: Lead, MW-17002

ID: 15_2_116

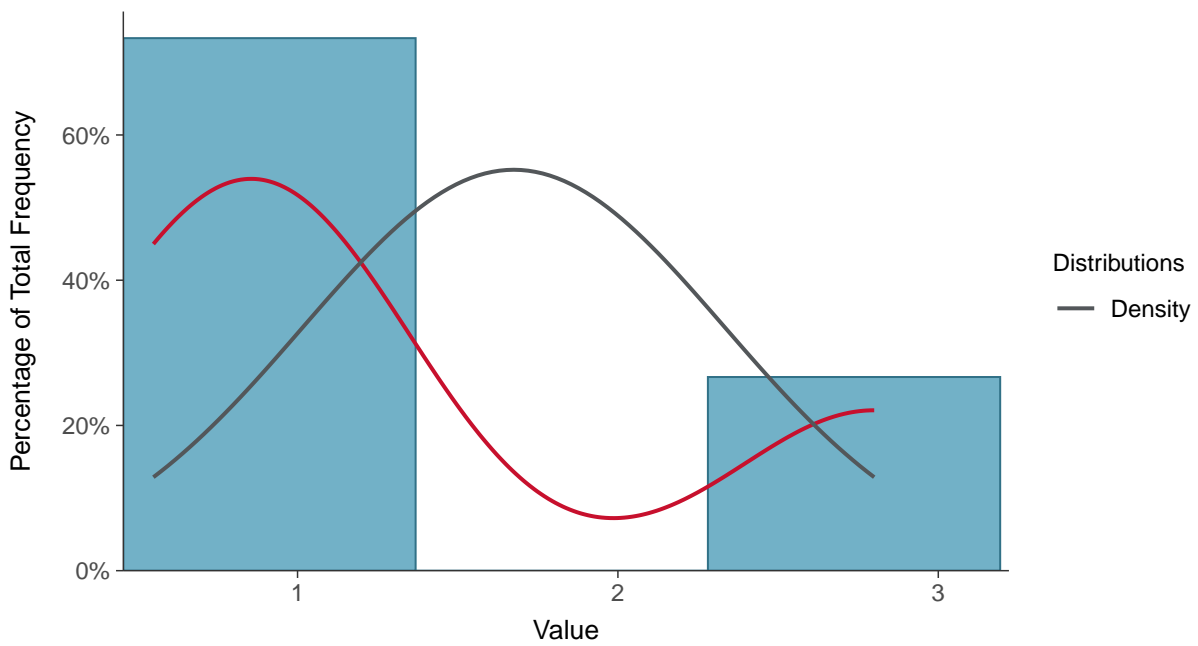
Scatter Plot

Lead, MW-17002 (ug/L)



Histogram

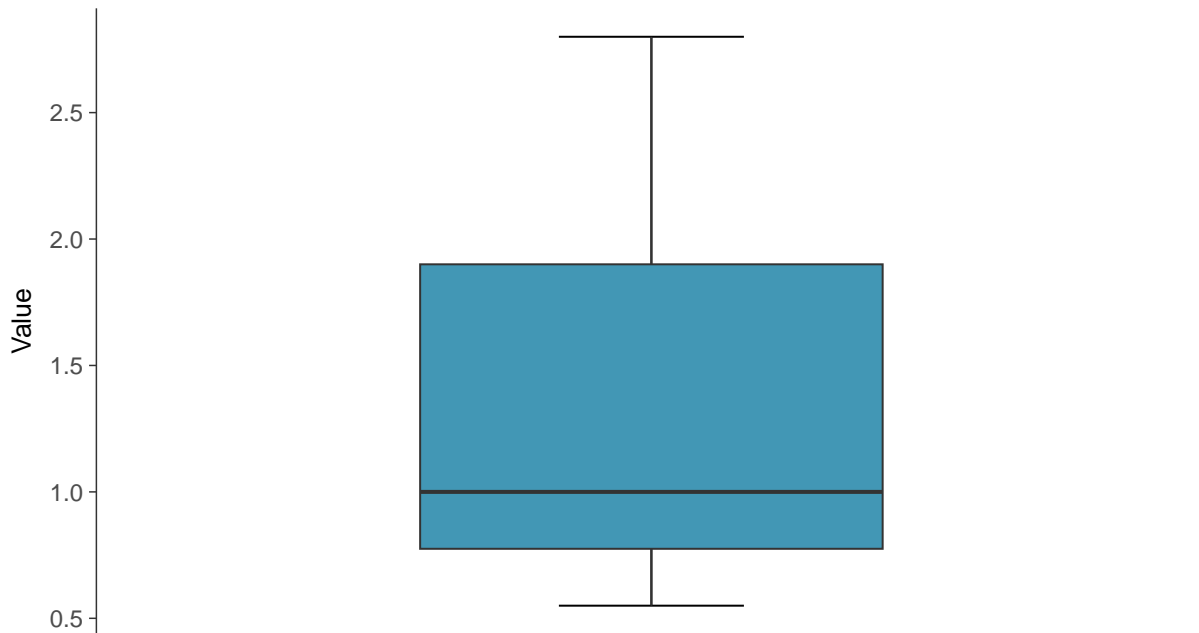
Lead, MW-17002 (ug/L)





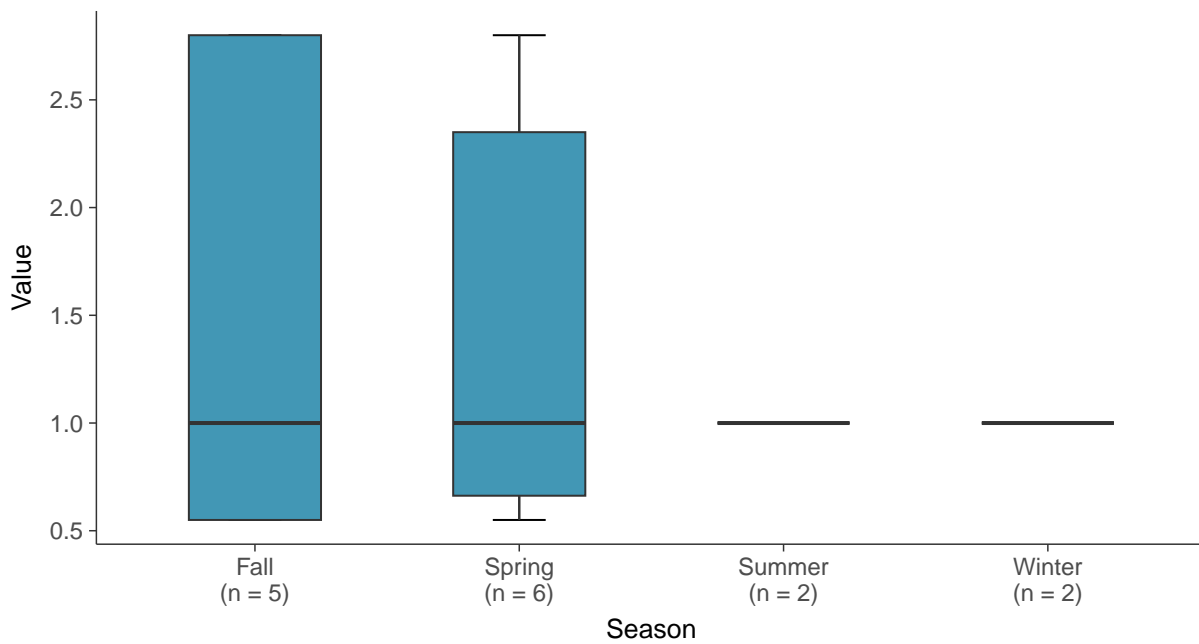
Boxplot

Lead, MW-17002 (ug/L)



Boxplot by Season

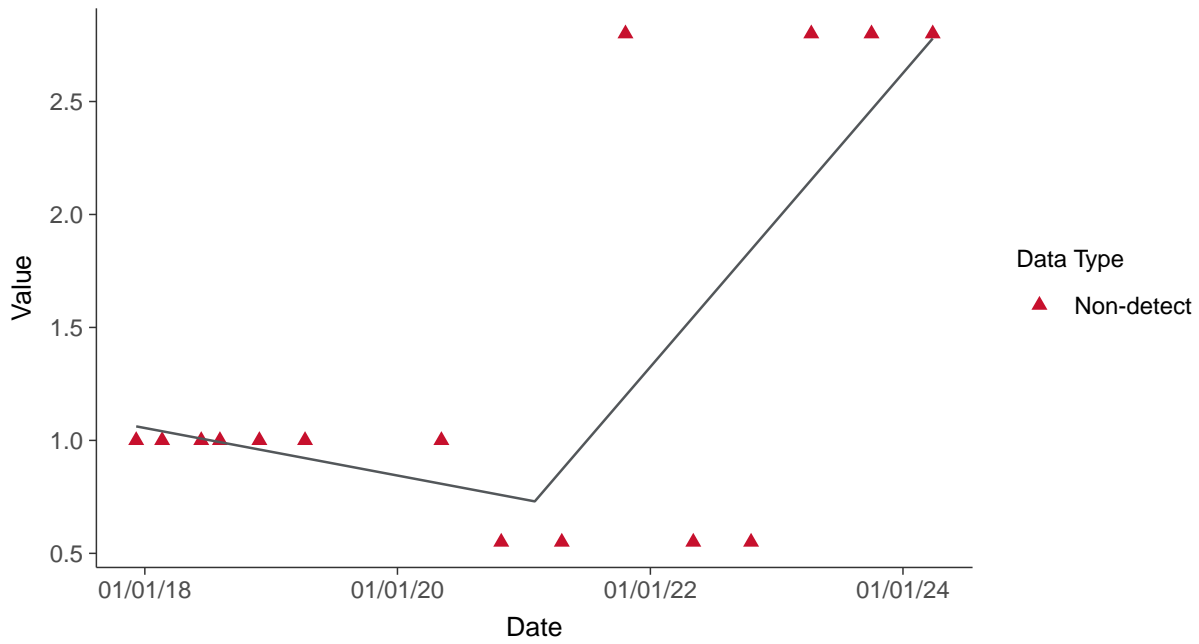
Lead, MW-17002 (ug/L)





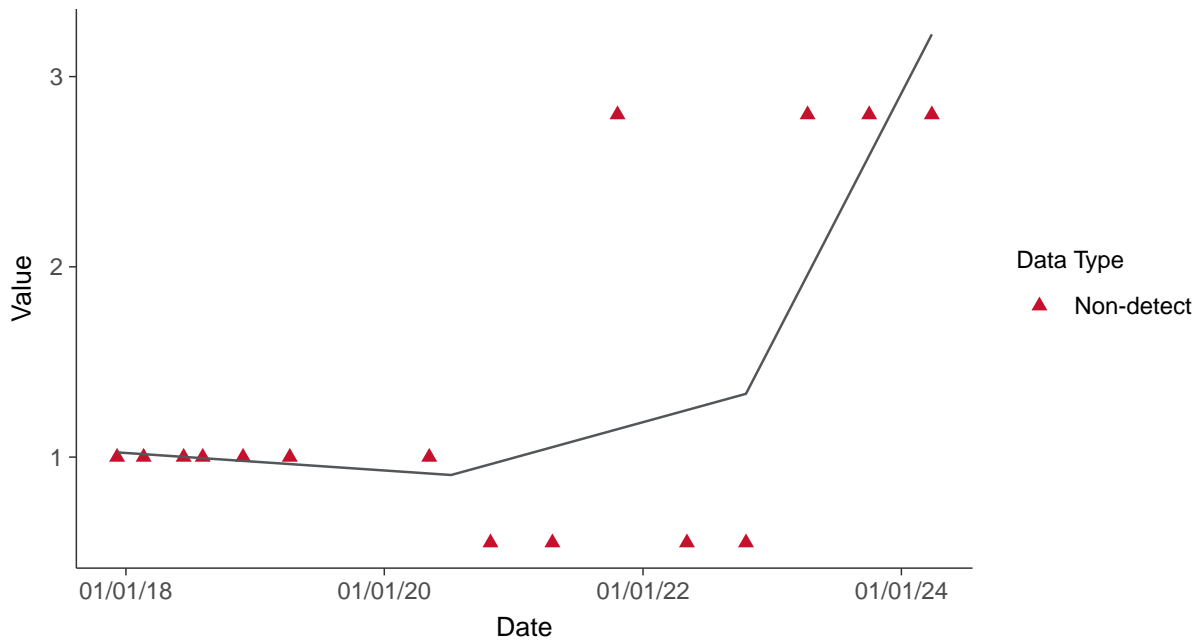
Trend Regression: Piecewise Linear-Linear

Lead, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-17002 (ug/L)



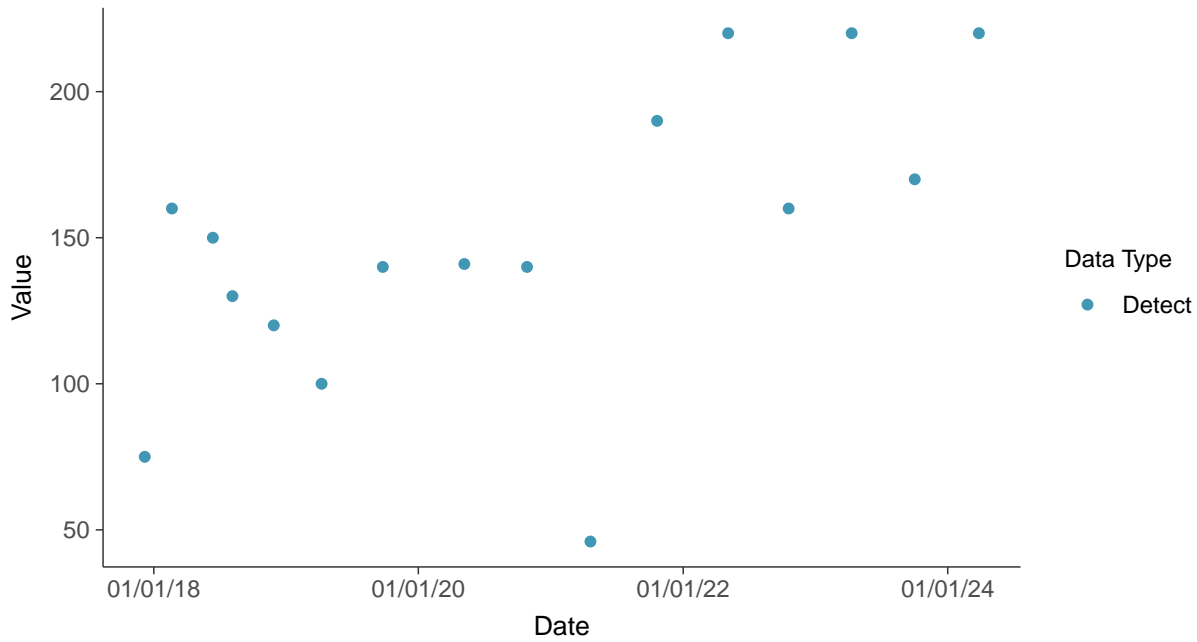


Appendix IV: Lithium, MW-17002

ID: 15_2_117

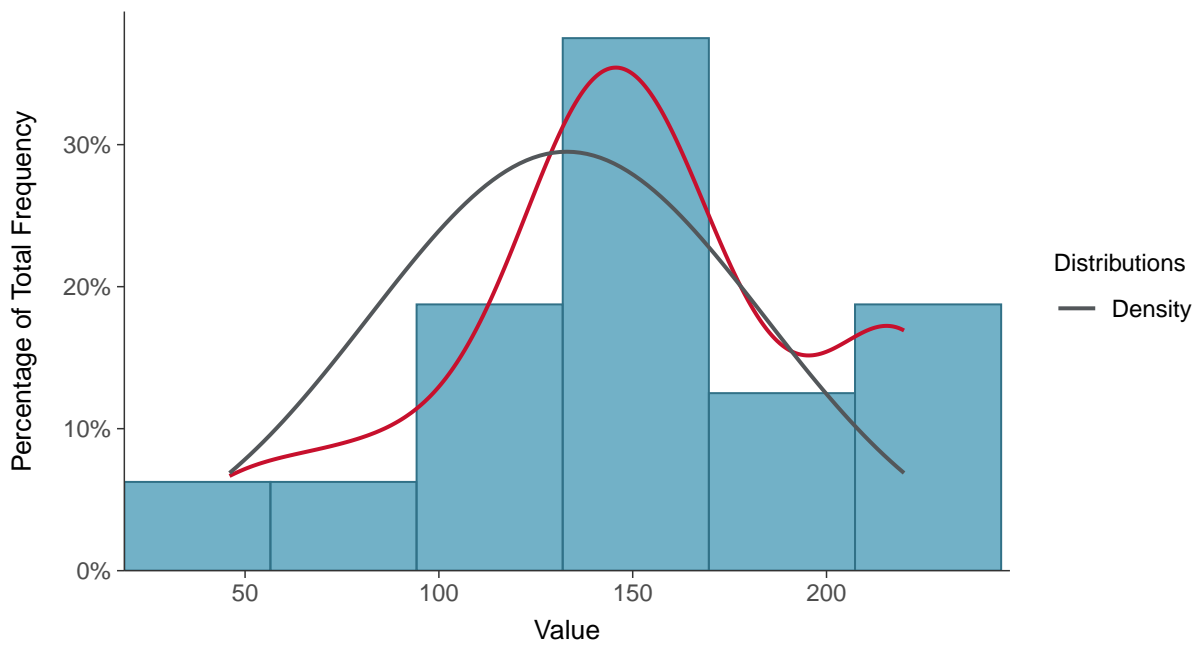
Scatter Plot

Lithium, MW-17002 (ug/L)



Histogram

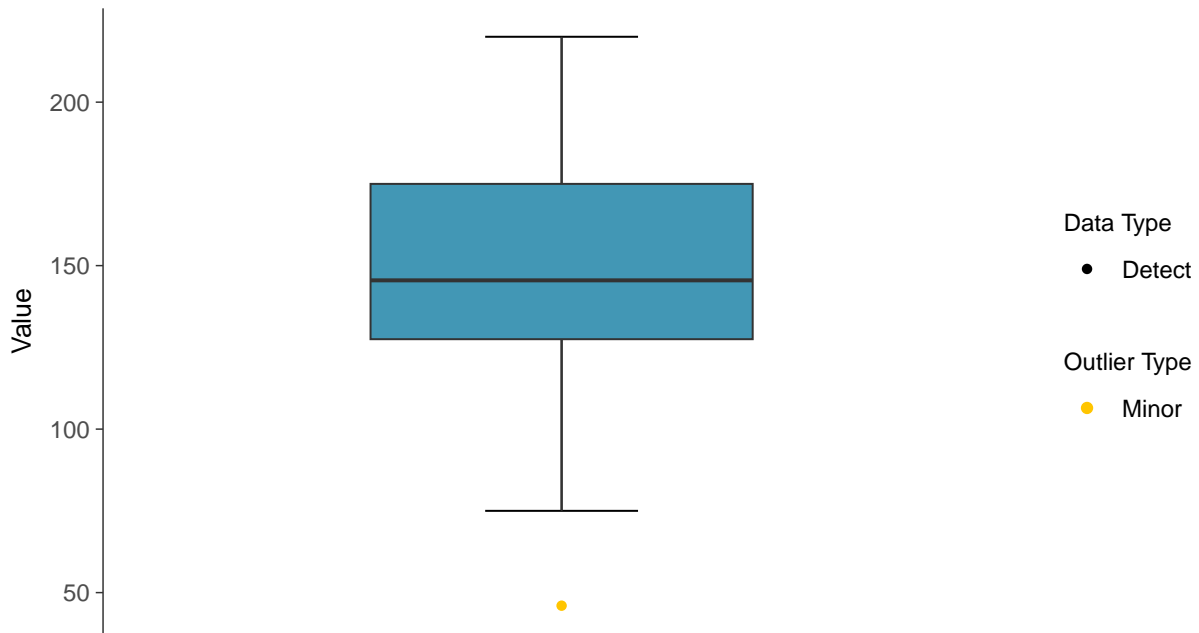
Lithium, MW-17002 (ug/L)





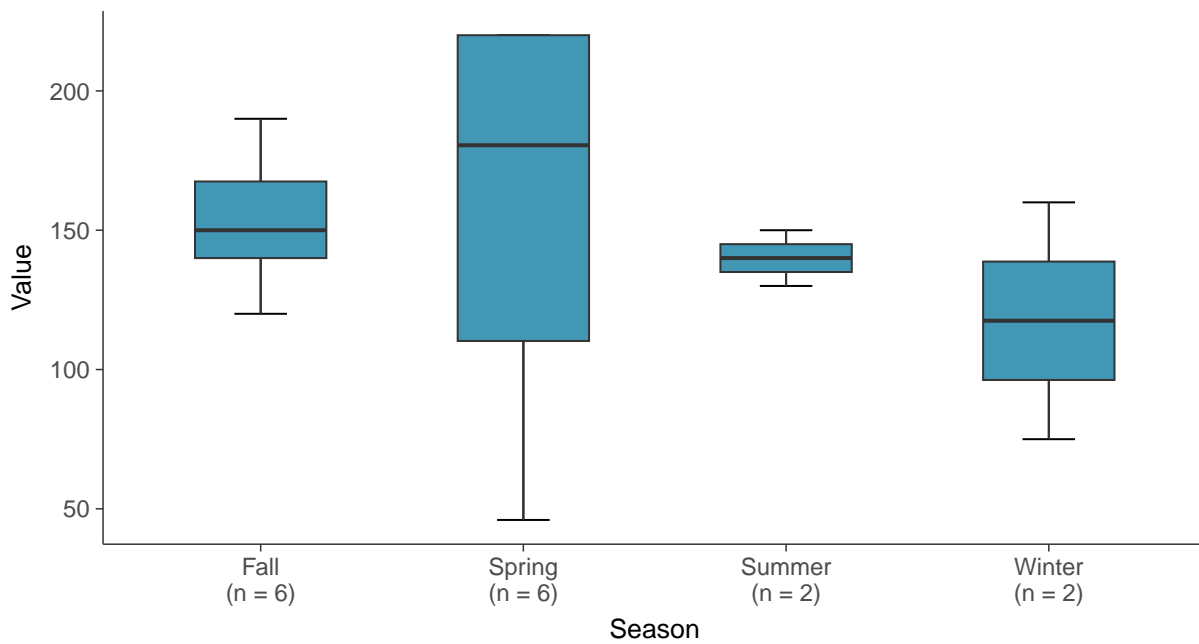
Boxplot

Lithium, MW-17002 (ug/L)



Boxplot by Season

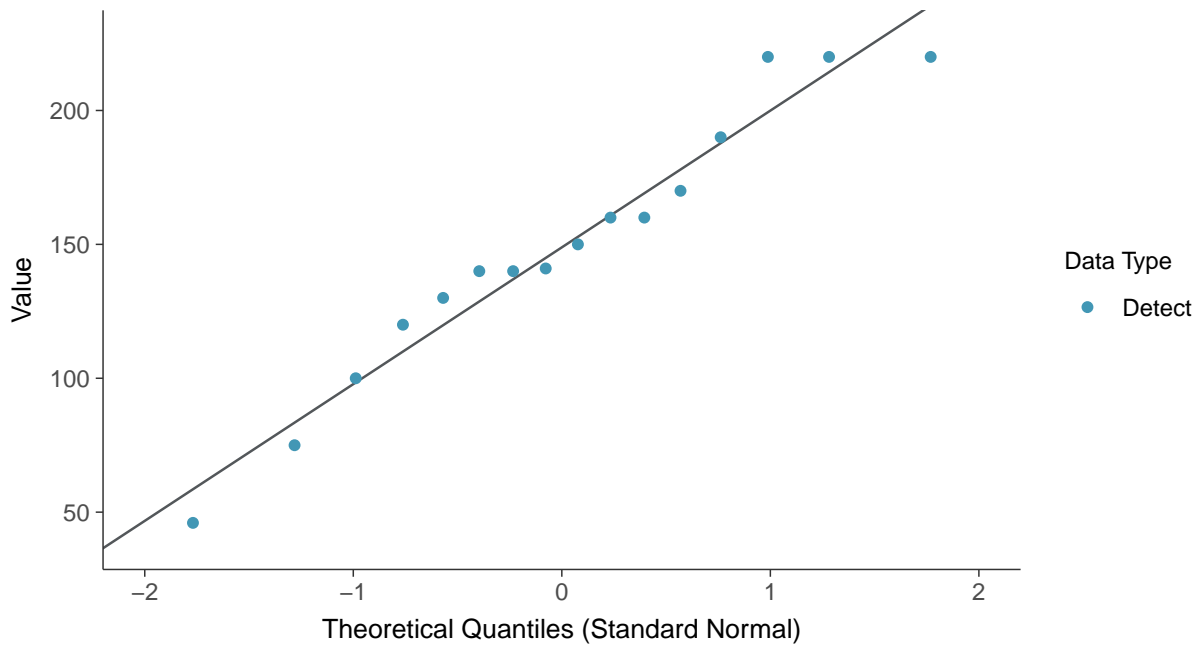
Lithium, MW-17002 (ug/L)





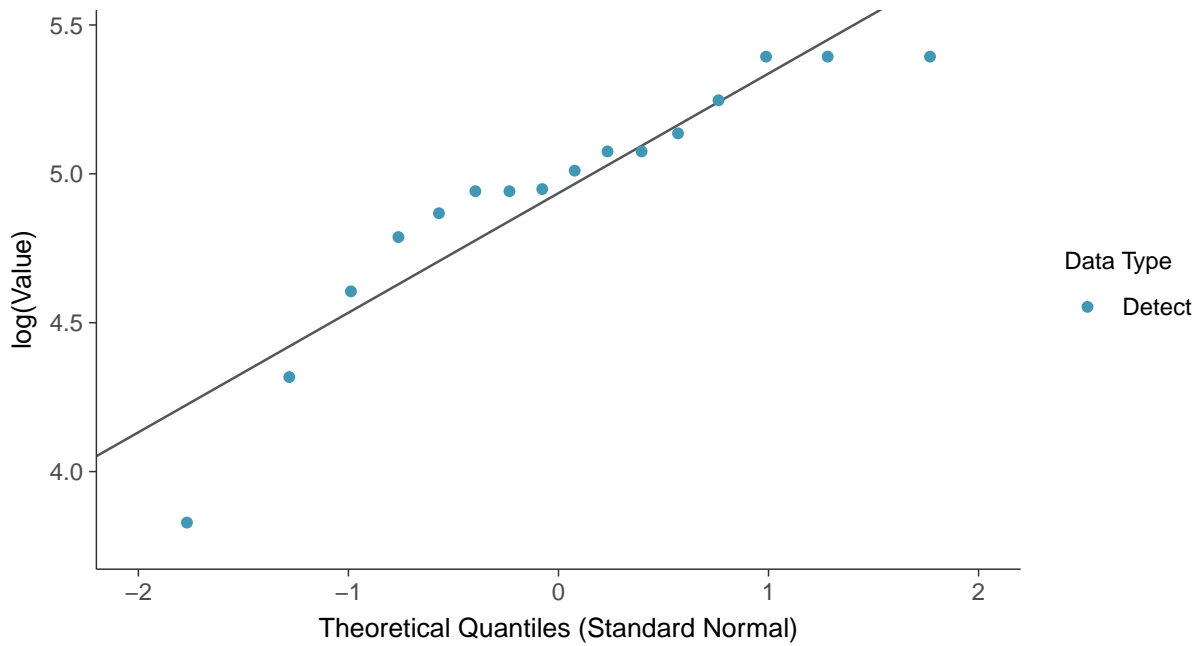
Normal Q-Q plot

Lithium, MW-17002 (ug/L)



Lognormal Q-Q plot

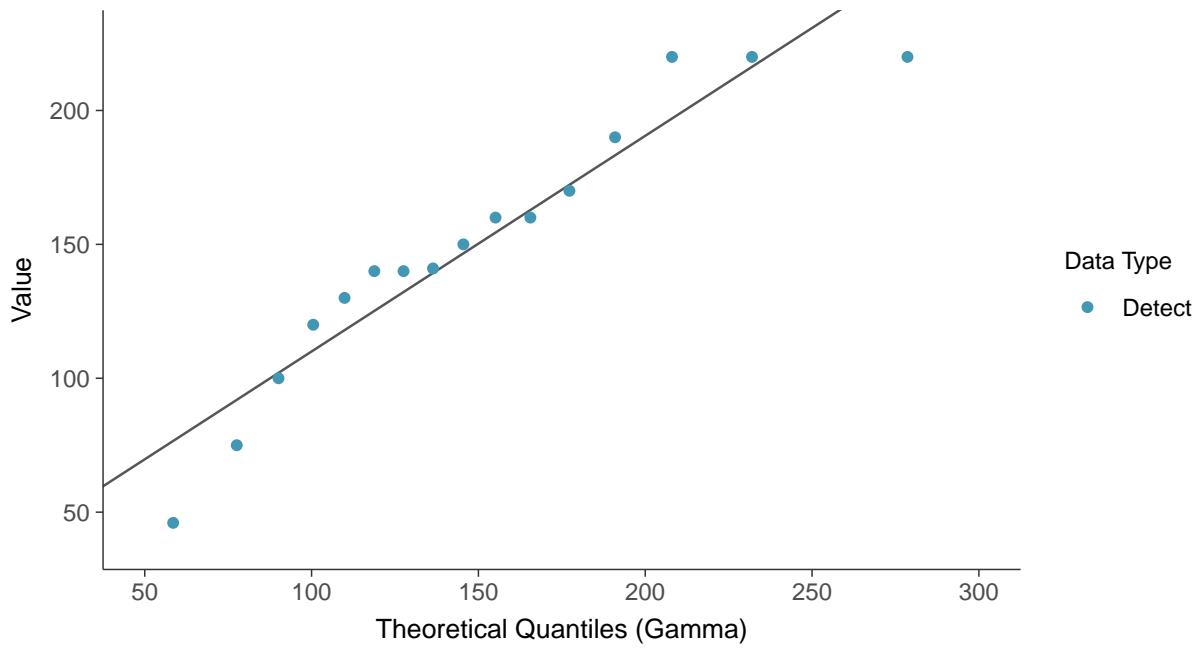
Lithium, MW-17002 (ug/L)





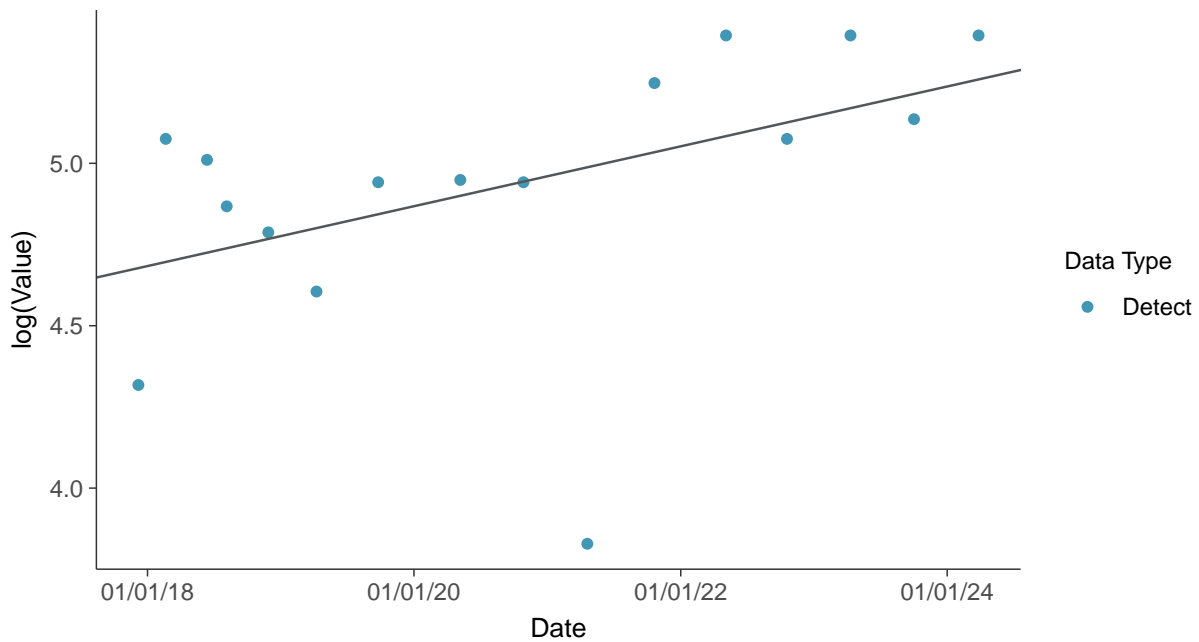
Gamma Q-Q plot

Lithium, MW-17002 (ug/L)



Trend Regression: Lognormal MLE

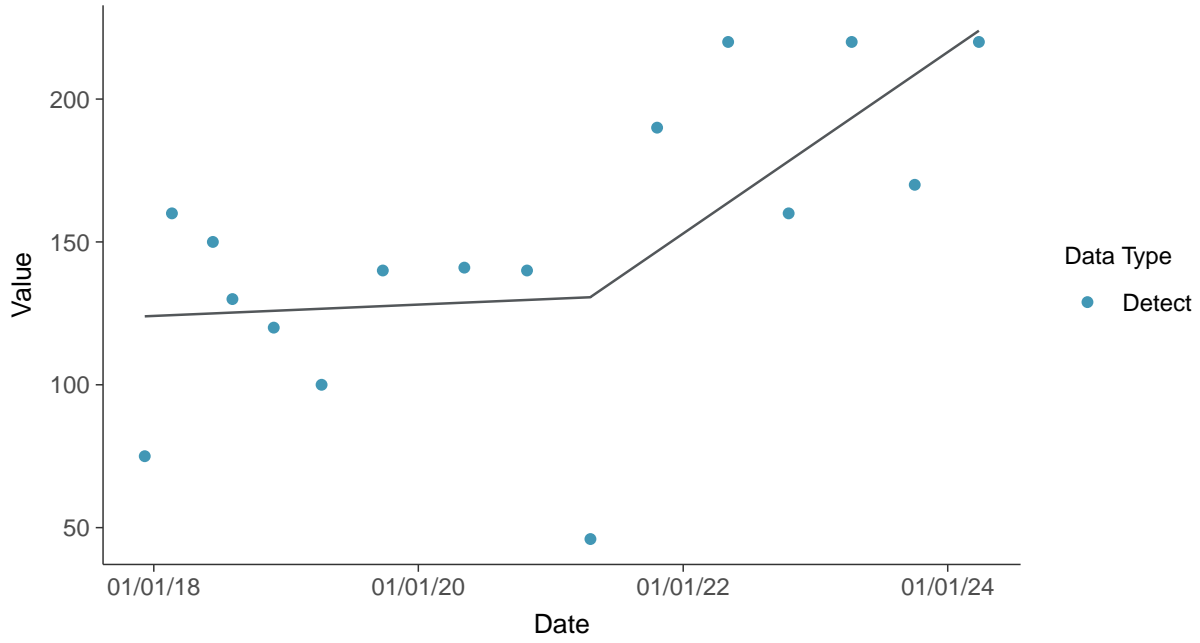
Lithium, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear

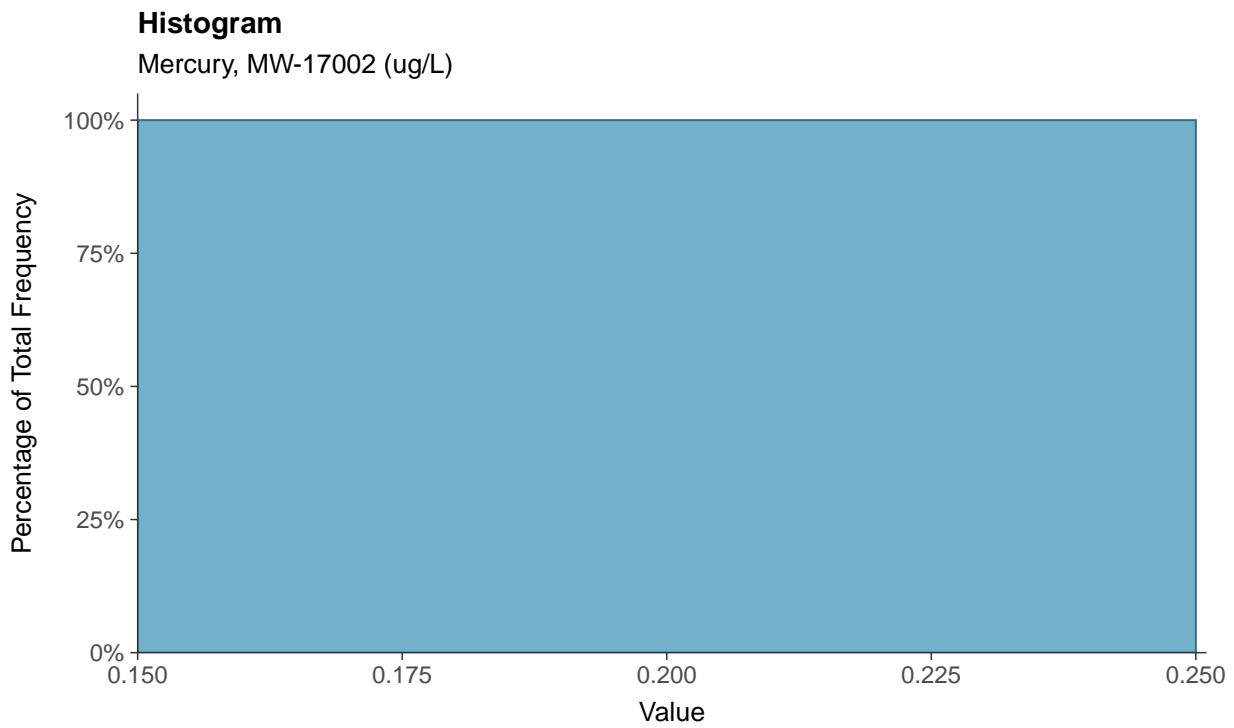
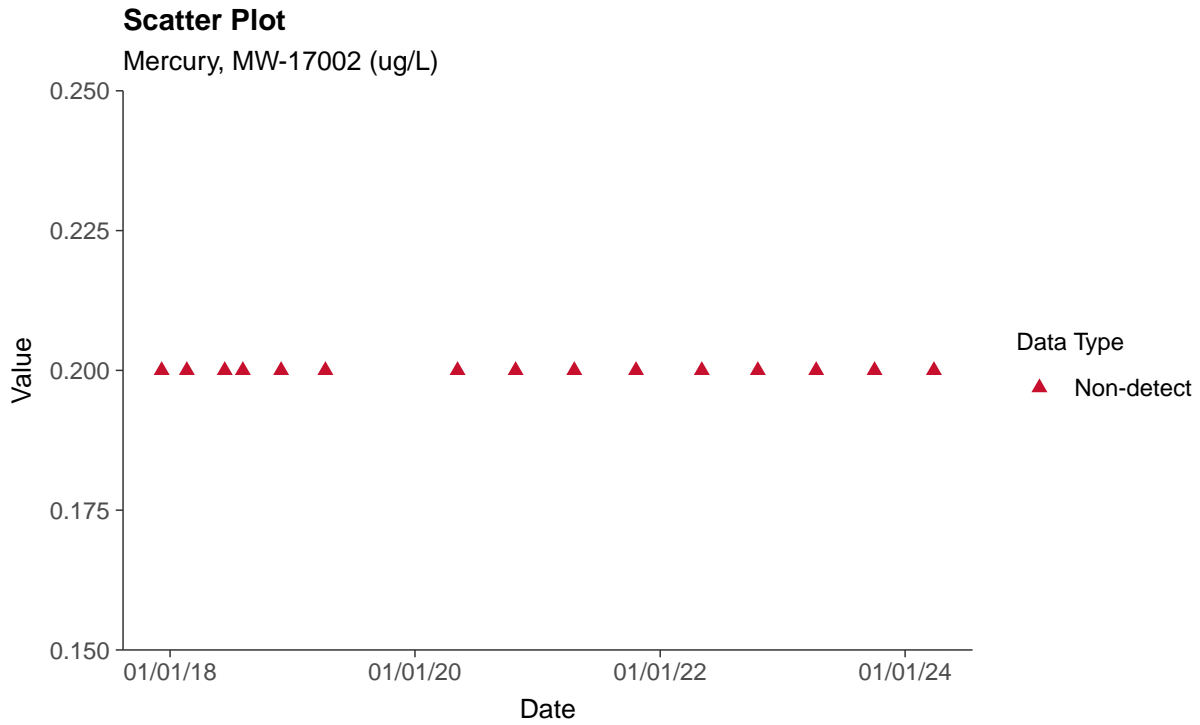
Lithium, MW-17002 (ug/L)





Appendix IV: Mercury, MW-17002

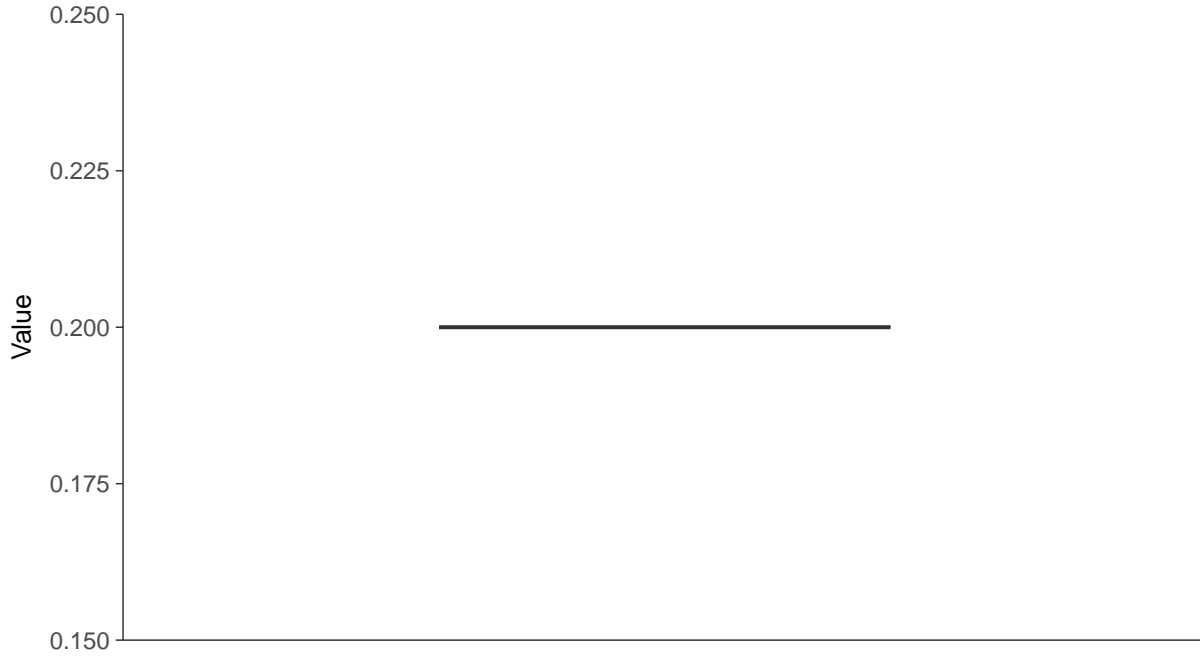
ID: 15_2_118





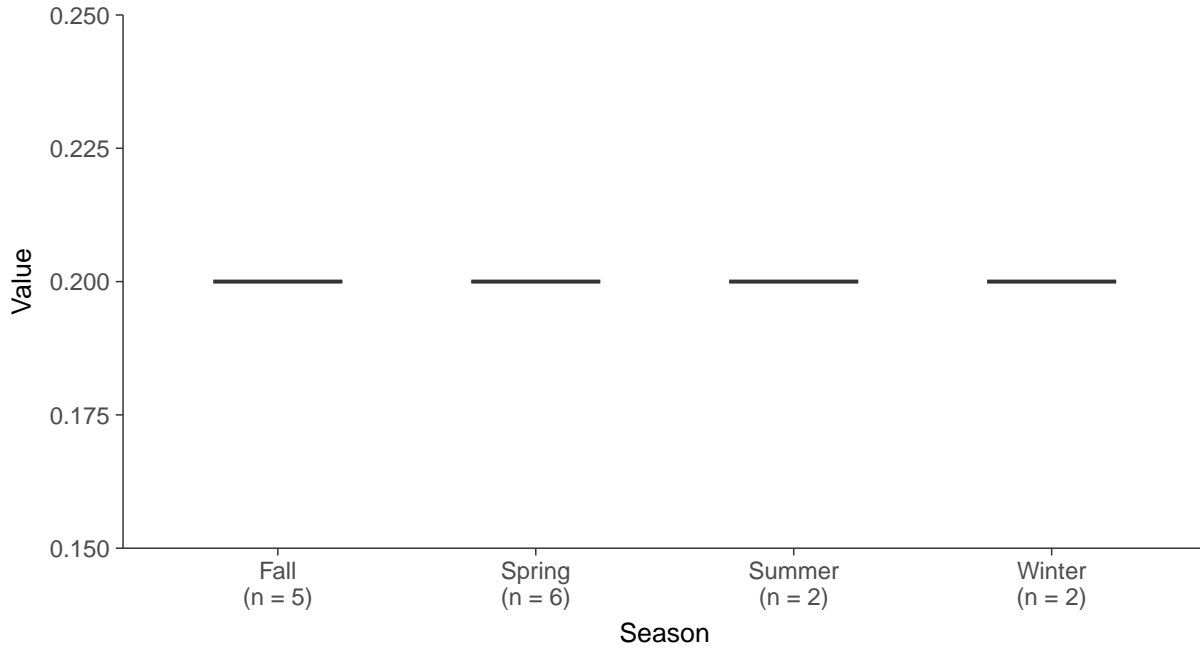
Boxplot

Mercury, MW-17002 (ug/L)



Boxplot by Season

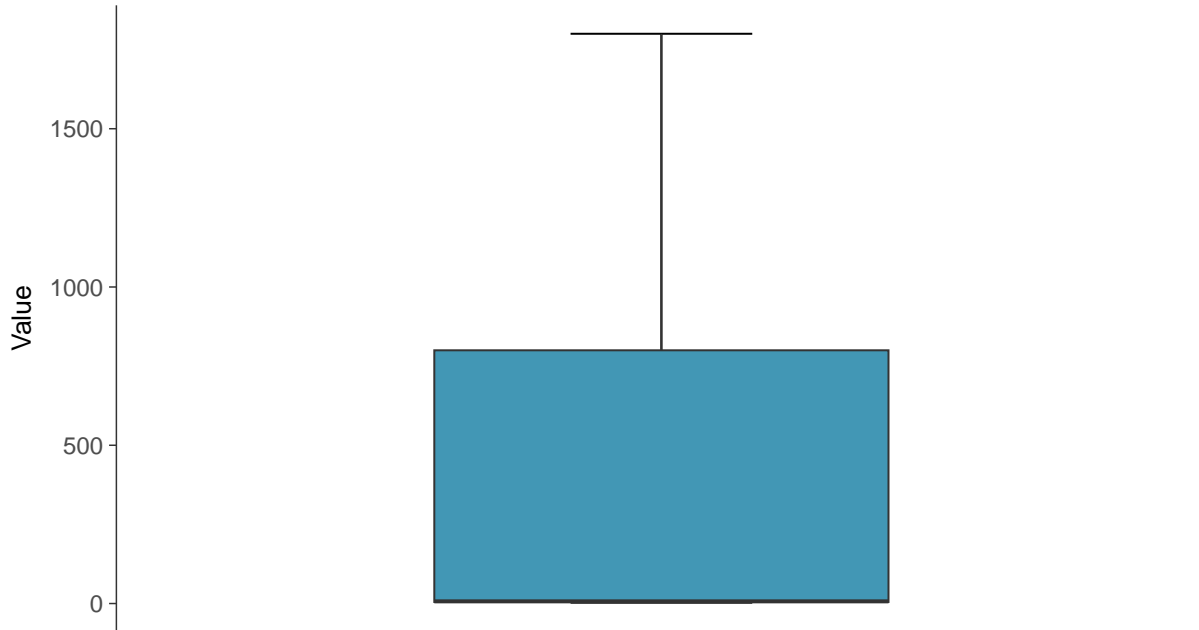
Mercury, MW-17002 (ug/L)





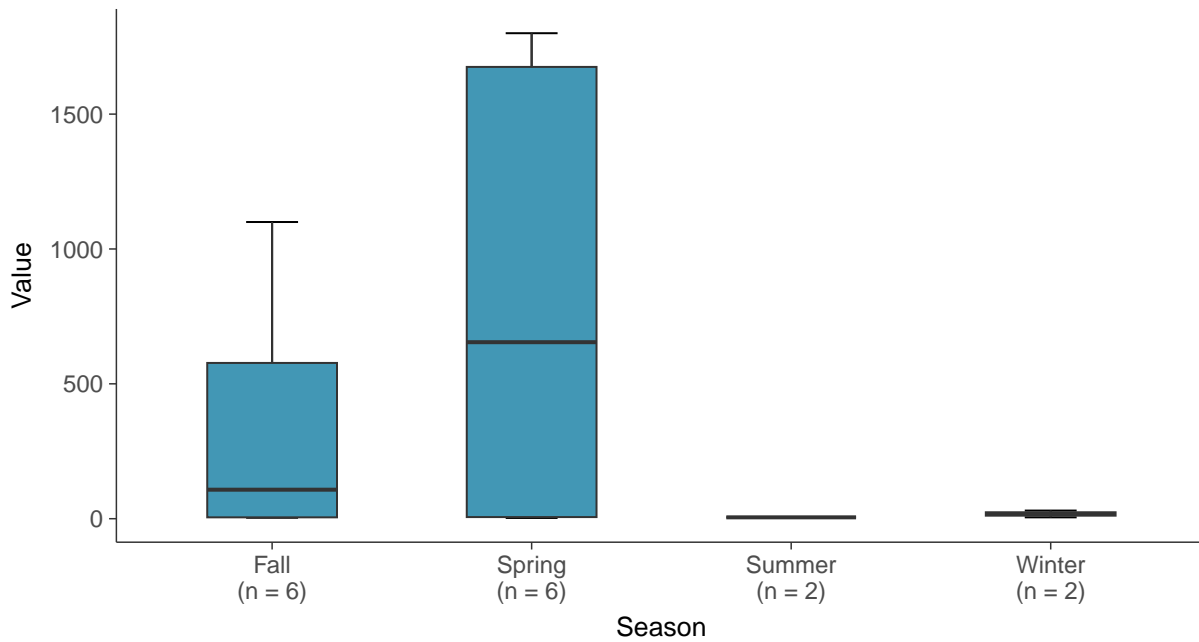
Boxplot

Molybdenum, MW-17002 (ug/L)



Boxplot by Season

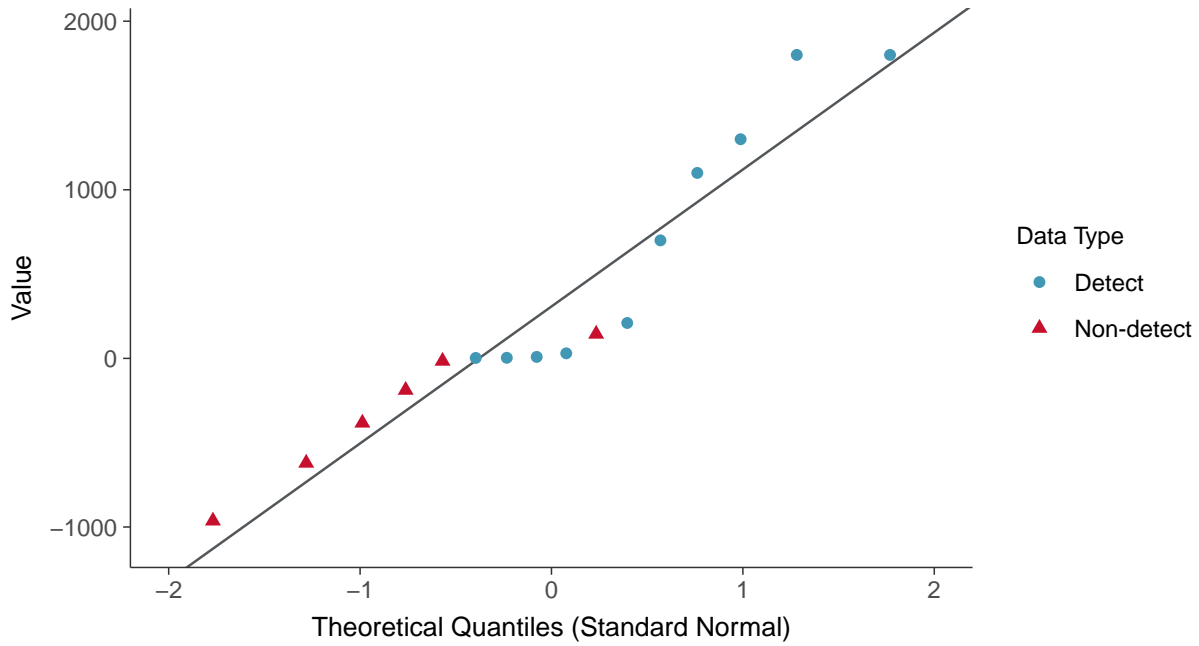
Molybdenum, MW-17002 (ug/L)





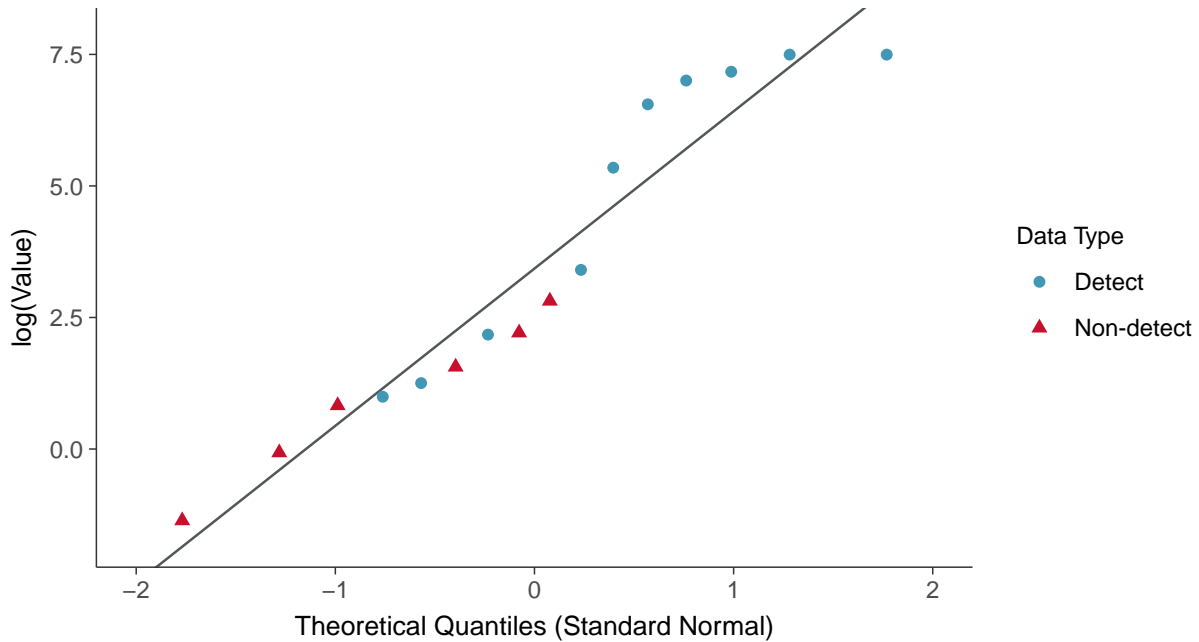
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17002 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

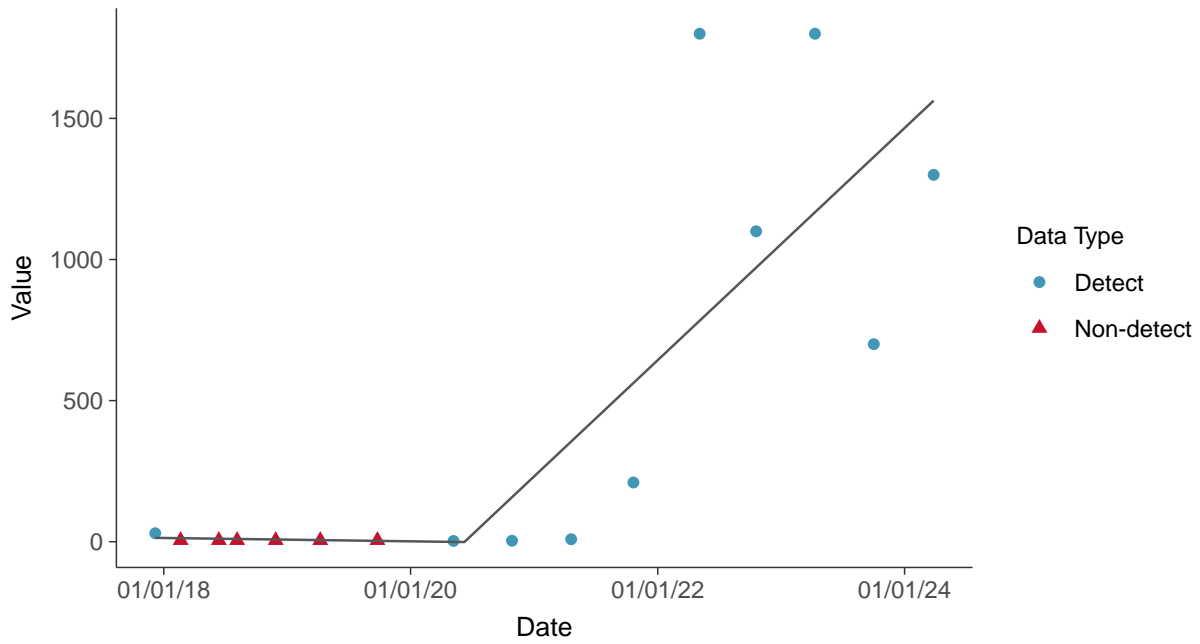
Molybdenum, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-17002 (ug/L)



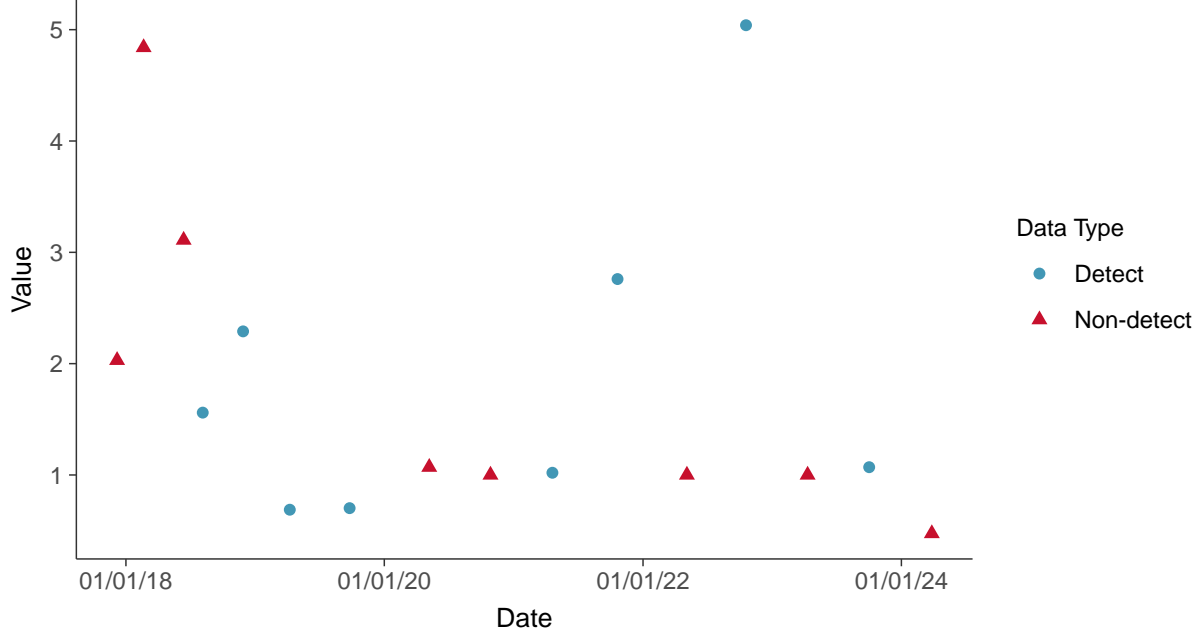


Appendix IV: Radium-226+228, MW-17002

ID: 15_2_125

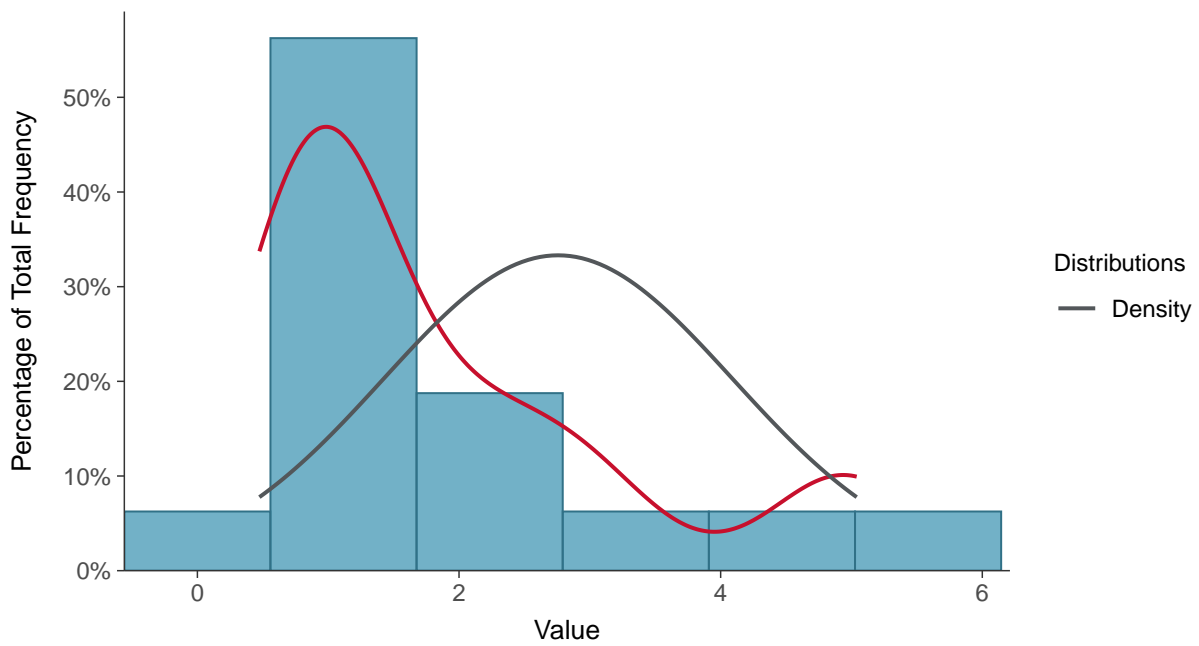
Scatter Plot

Radium-226+228, MW-17002 (pCi/L)



Histogram

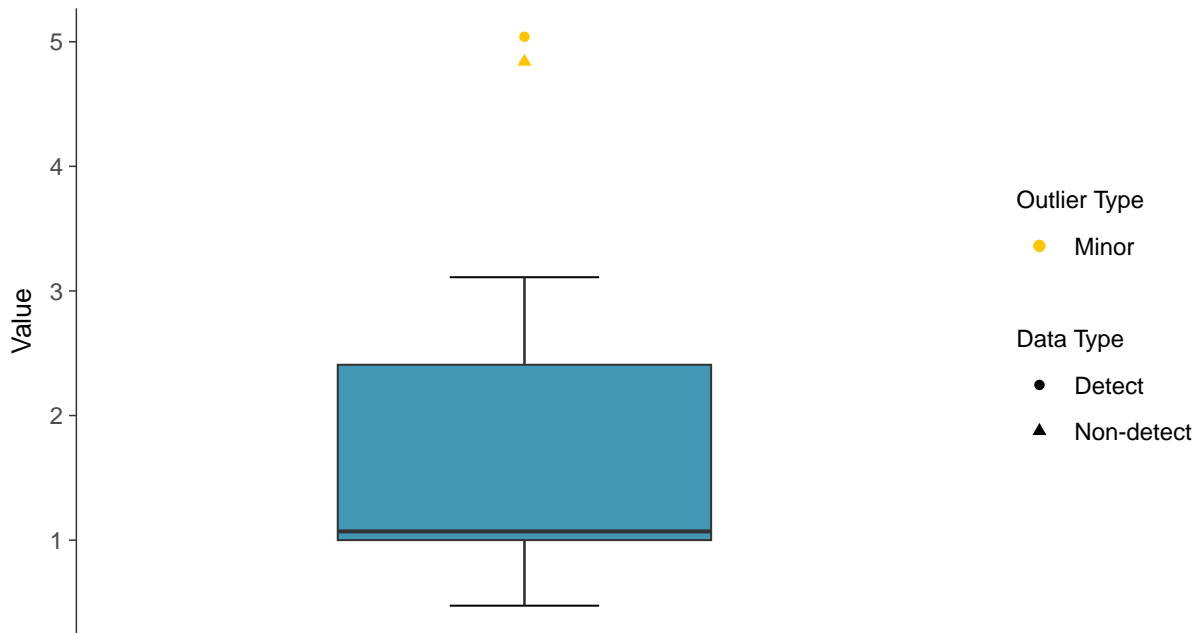
Radium-226+228, MW-17002 (pCi/L)





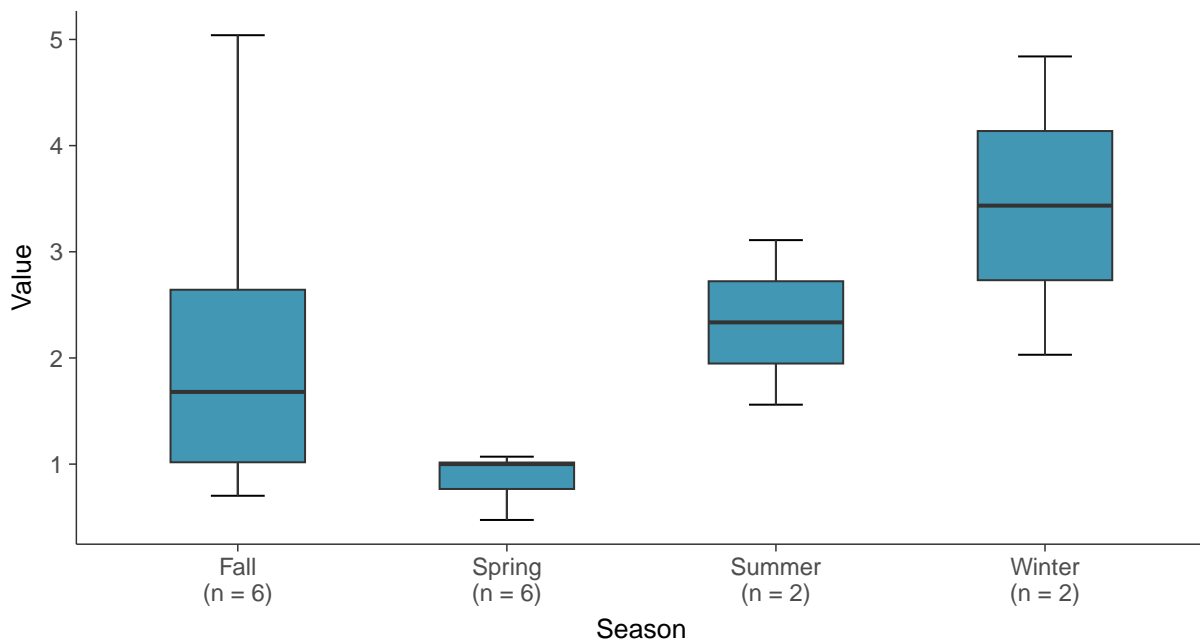
Boxplot

Radium-226+228, MW-17002 (pCi/L)



Boxplot by Season

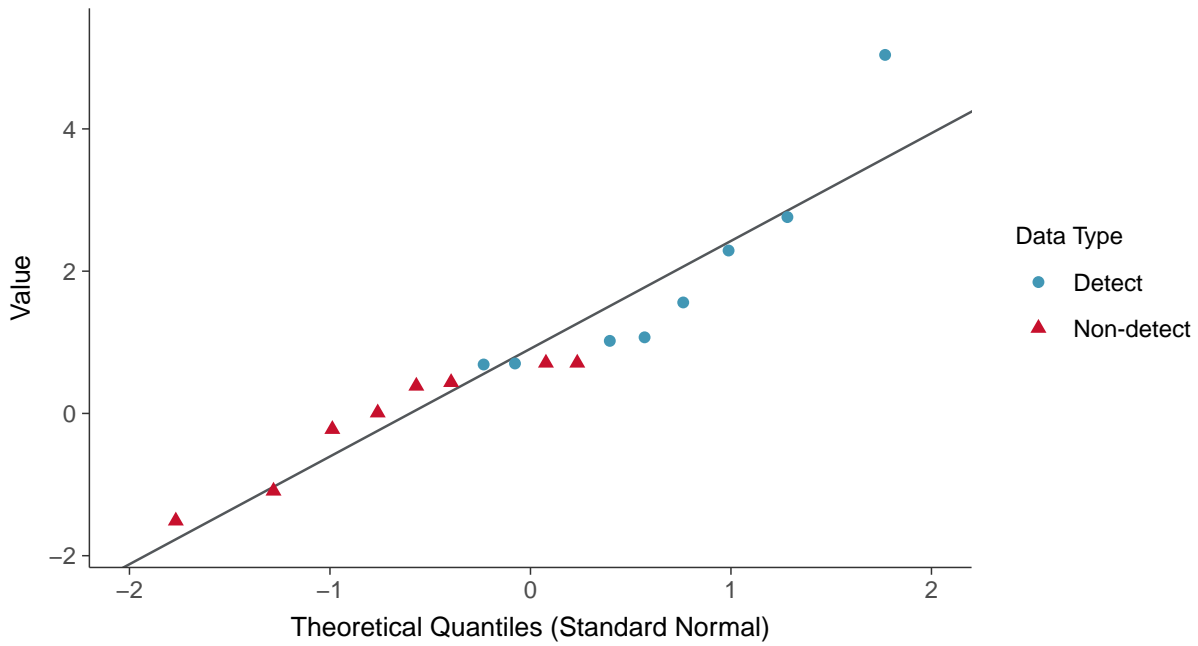
Radium-226+228, MW-17002 (pCi/L)





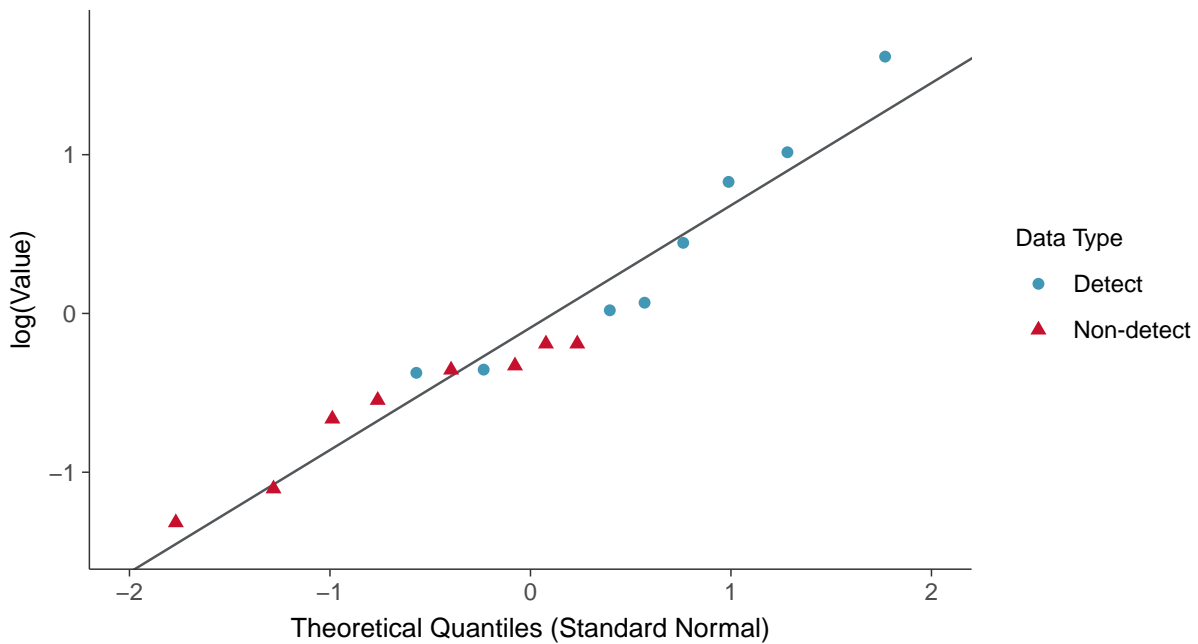
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17002 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

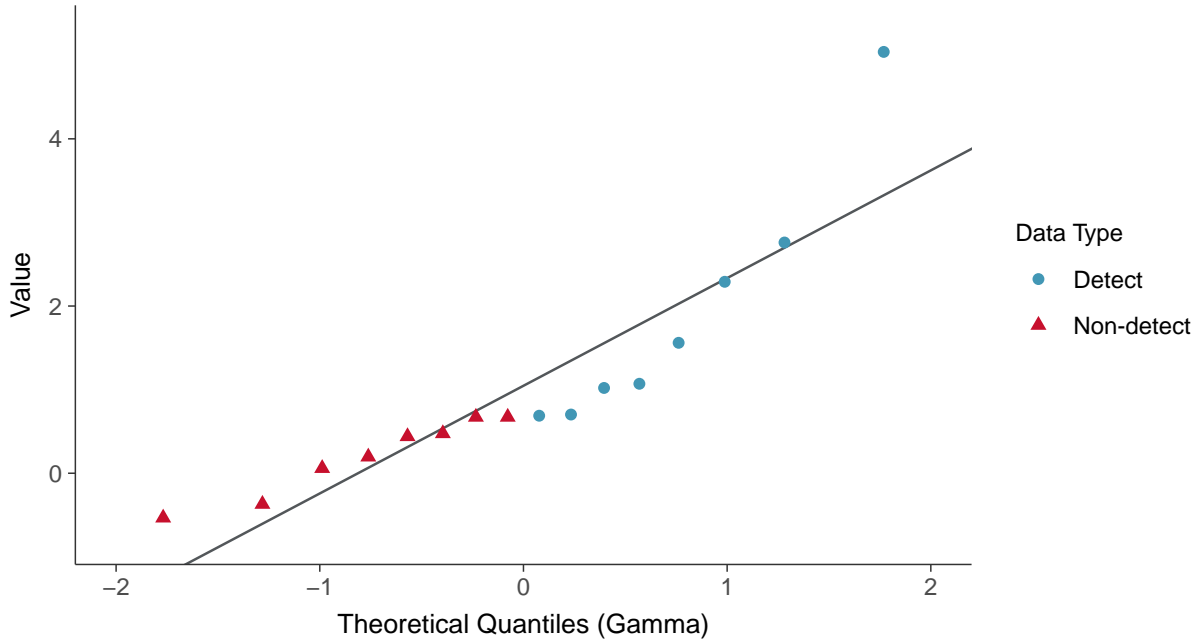
Radium-226+228, MW-17002 (pCi/L)





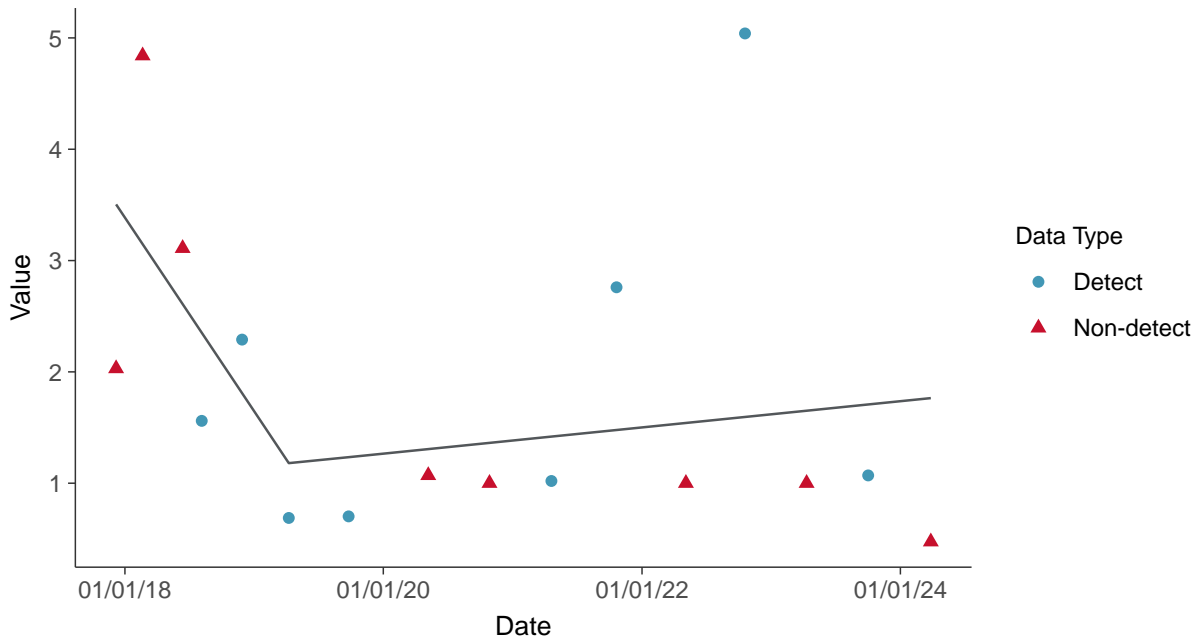
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17002 (pCi/L)



Trend Regression: Piecewise Linear-Linear

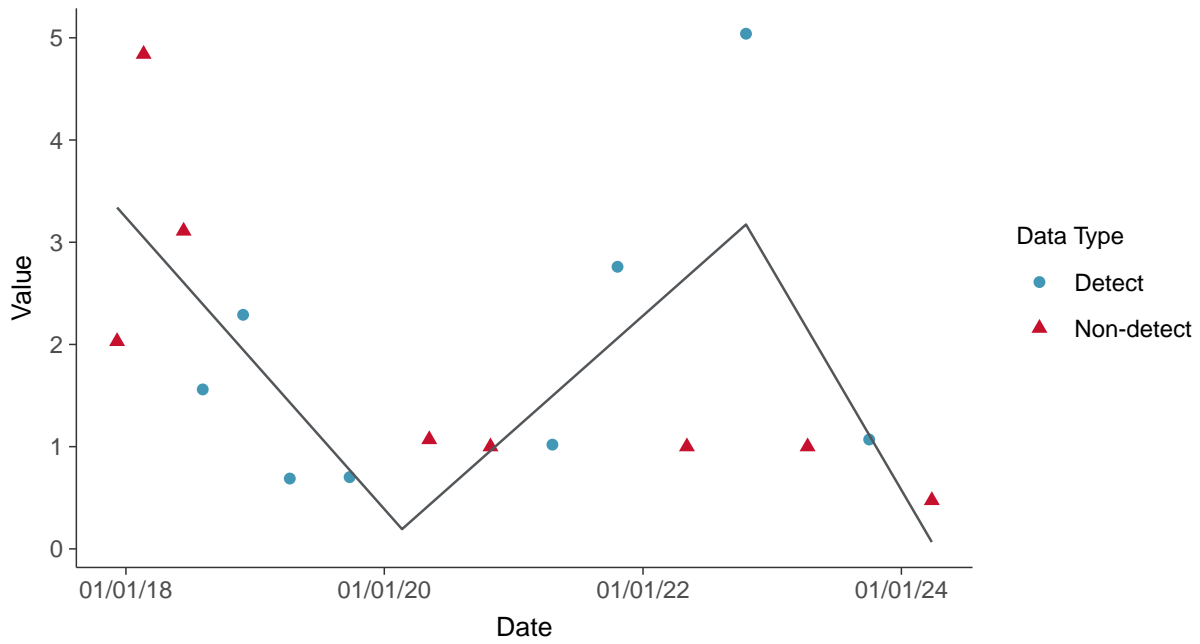
Radium-226+228, MW-17002 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

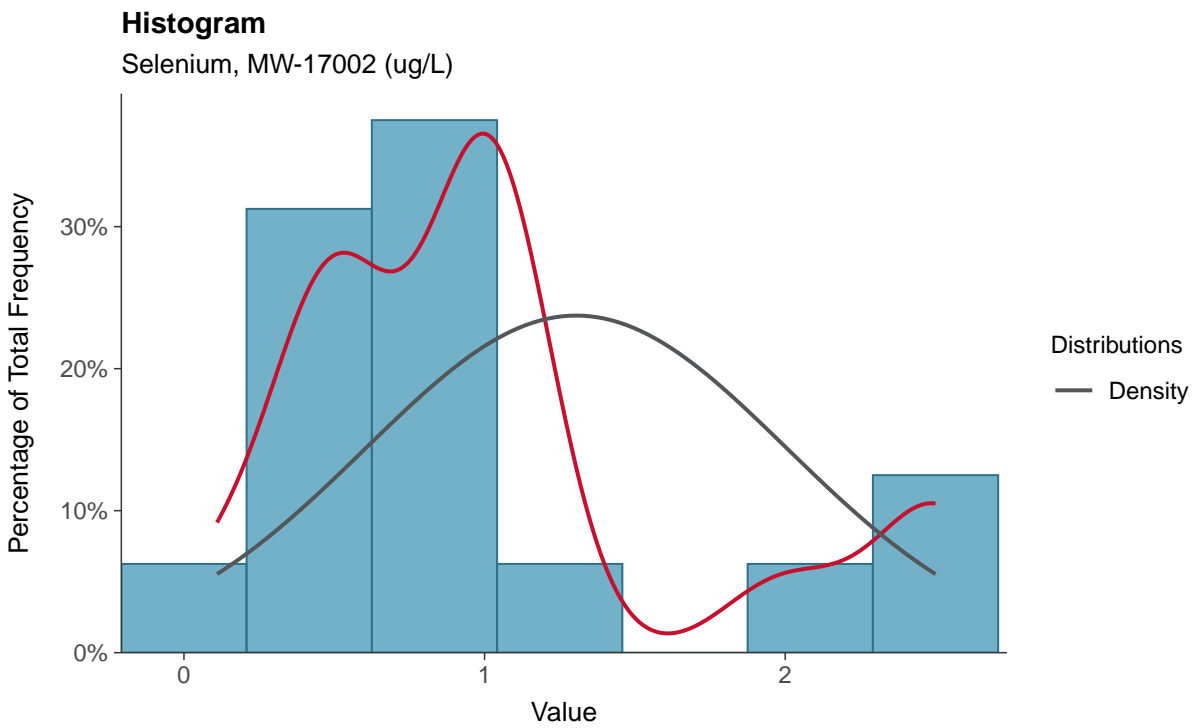
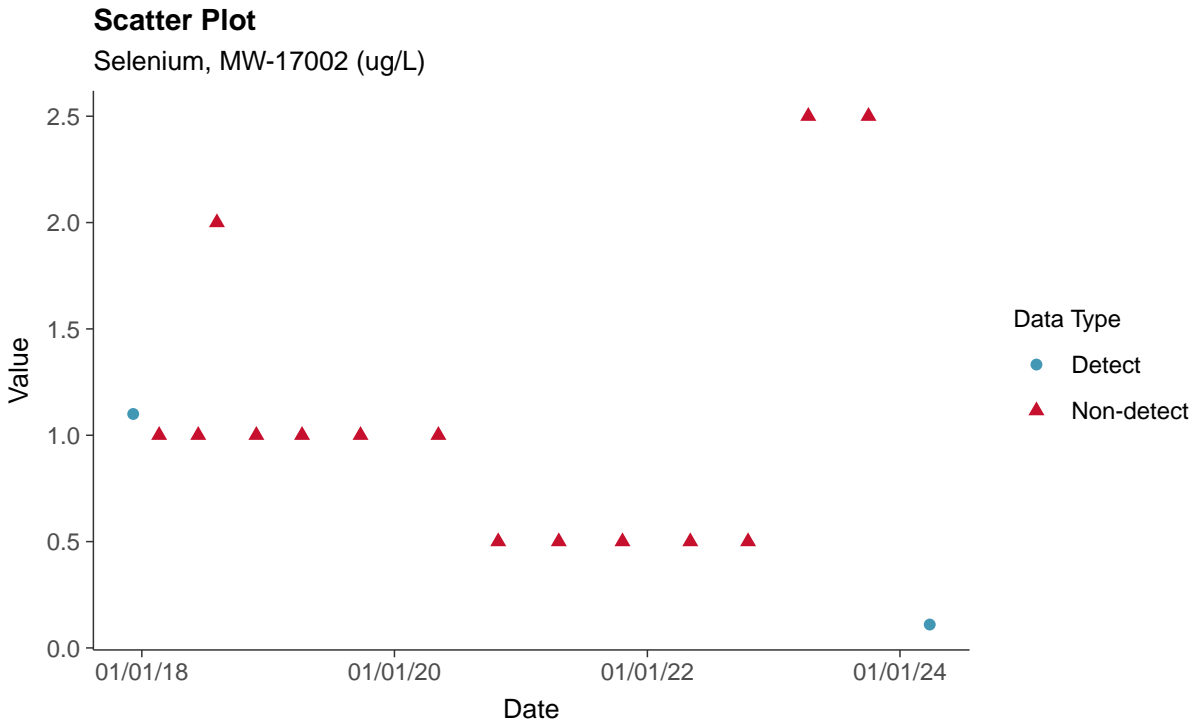
Radium-226+228, MW-17002 (pCi/L)





Appendix IV: Selenium, MW-17002

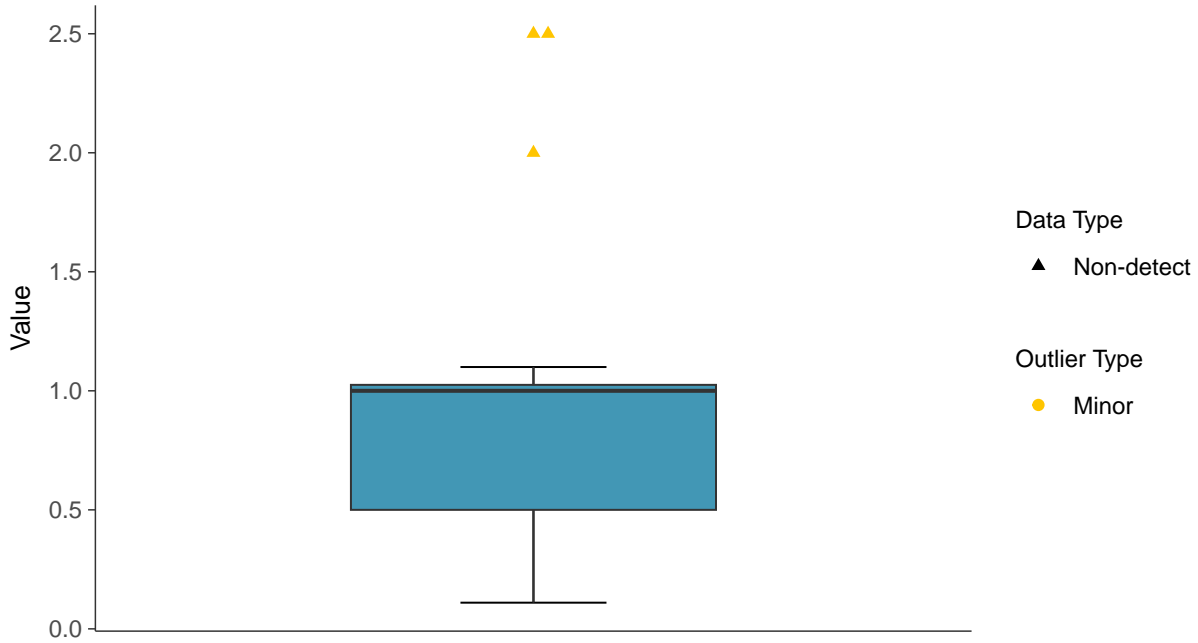
ID: 15_2_127





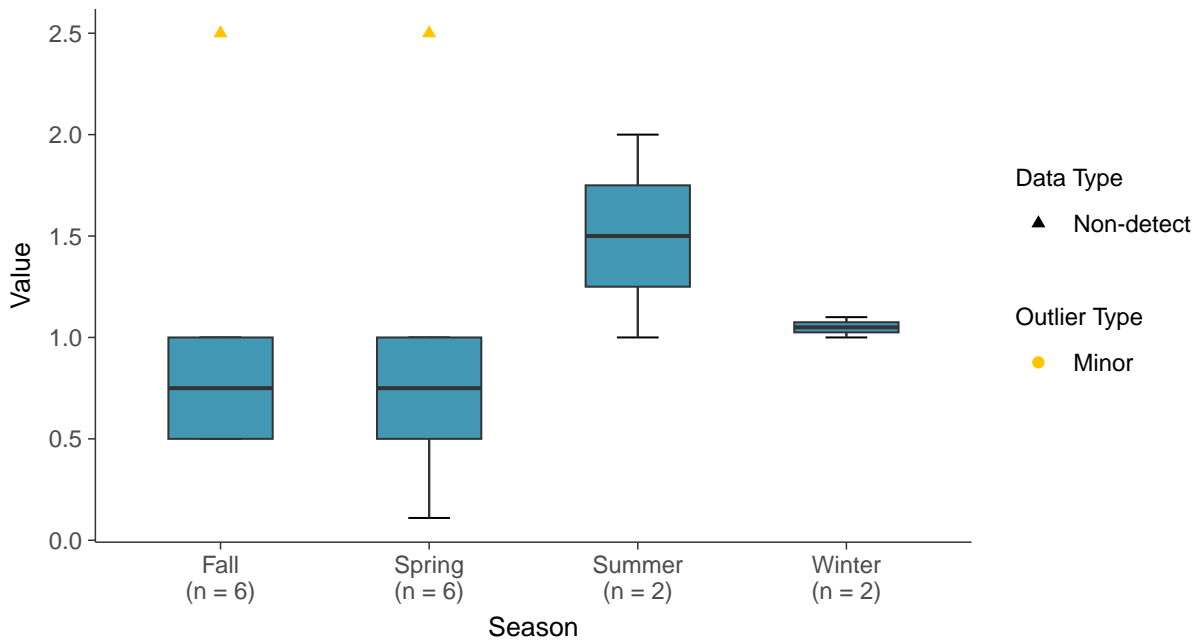
Boxplot

Selenium, MW-17002 (ug/L)



Boxplot by Season

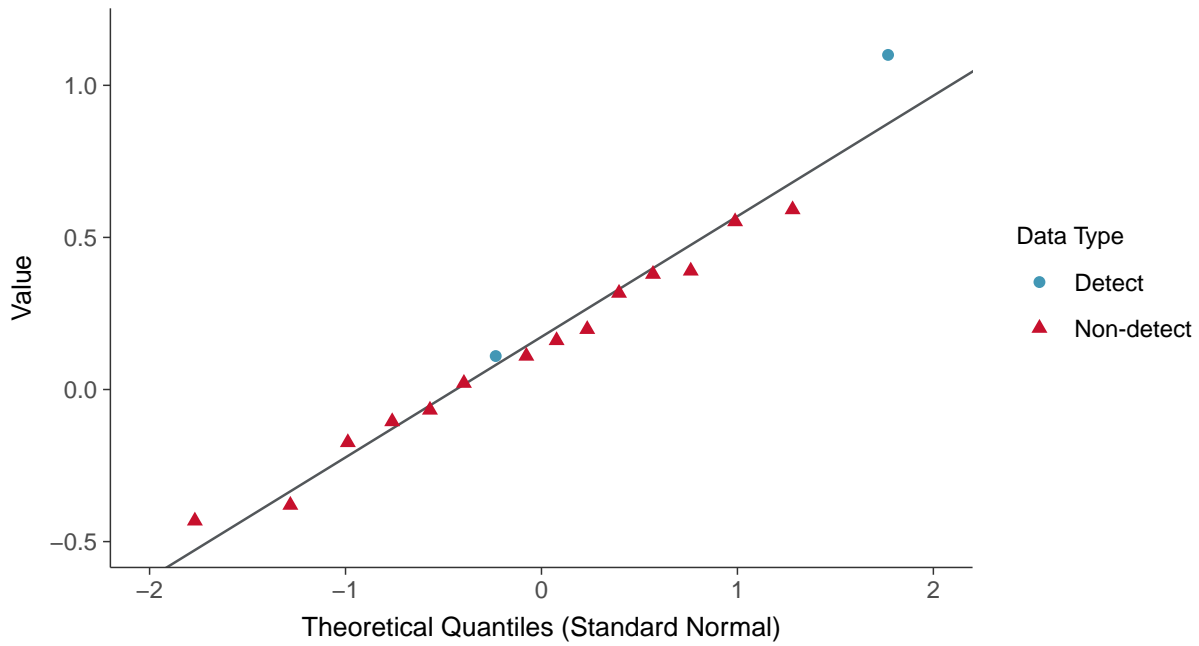
Selenium, MW-17002 (ug/L)





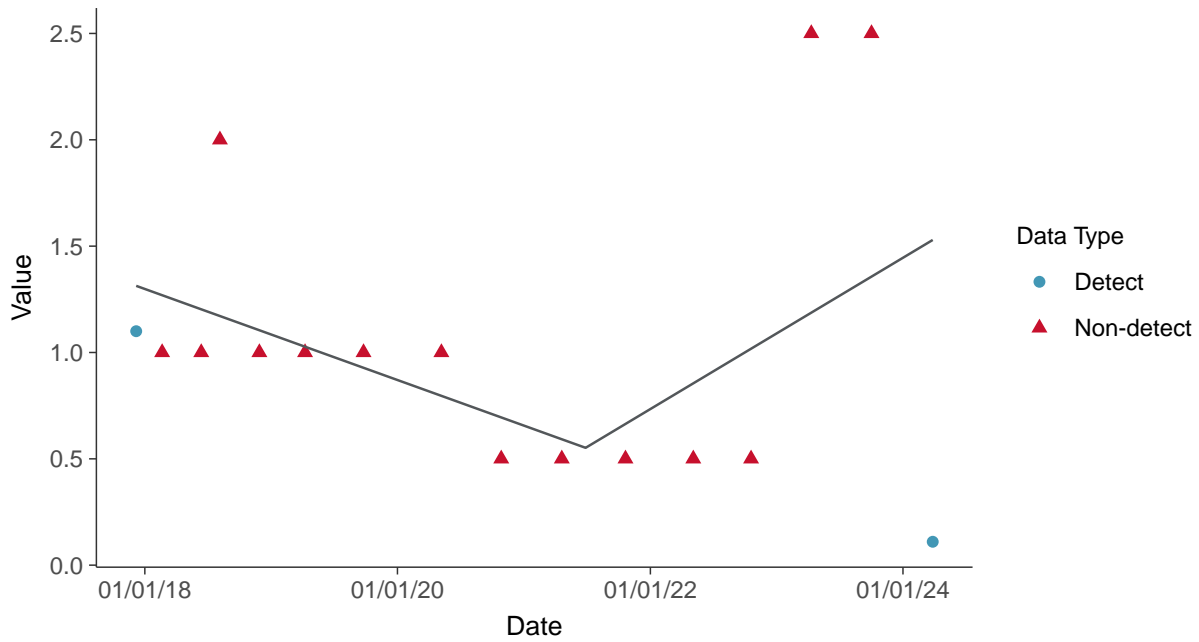
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

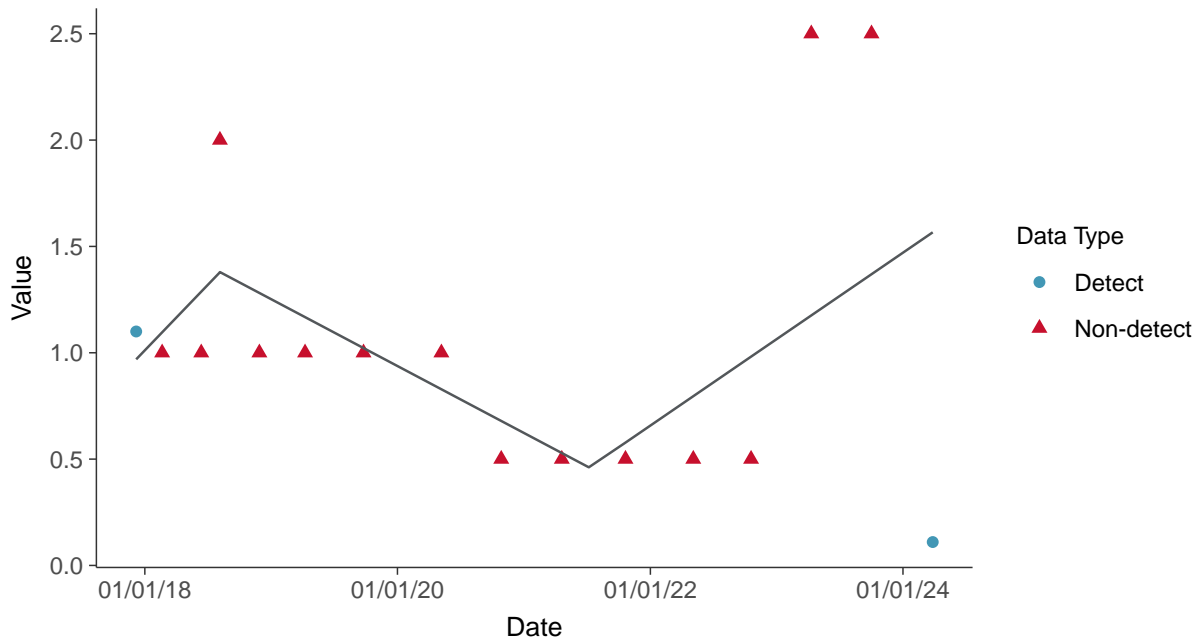
Selenium, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

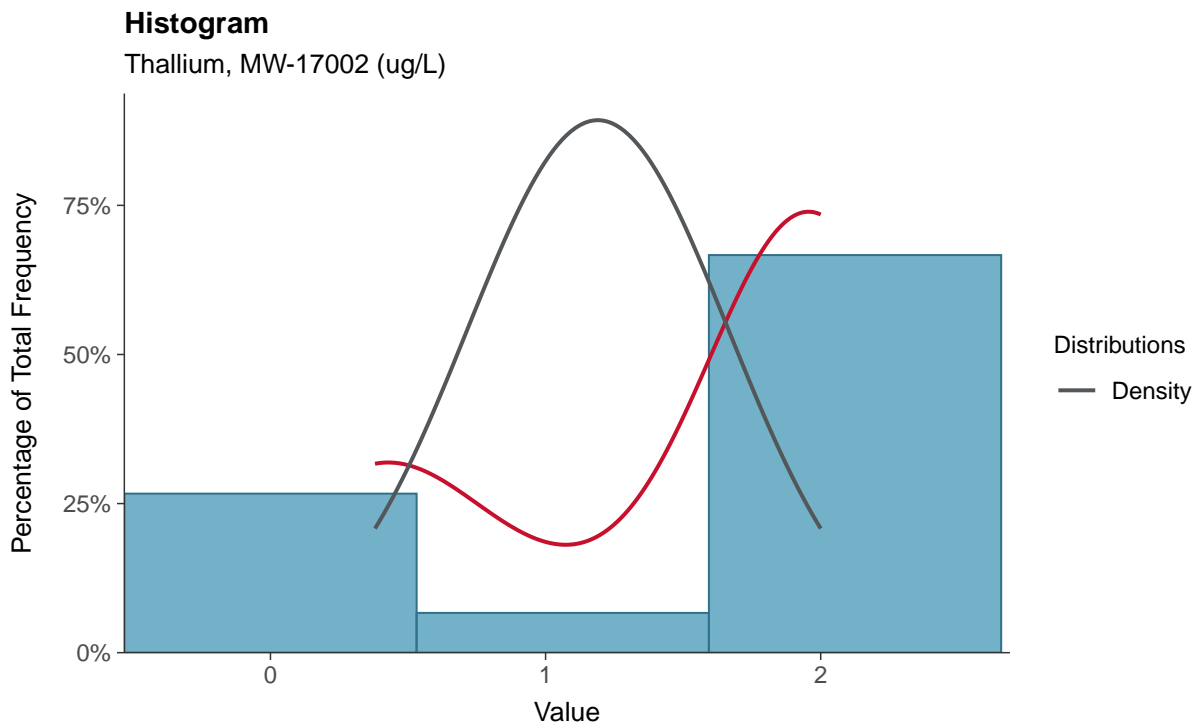
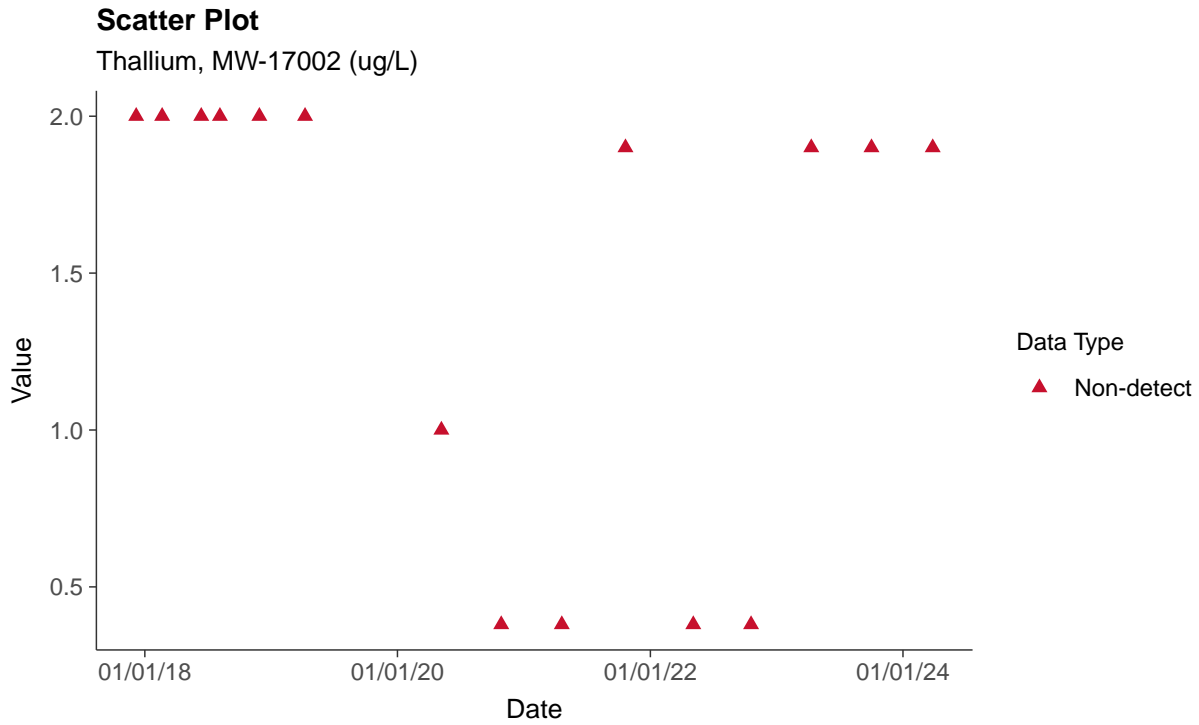
Selenium, MW-17002 (ug/L)





Appendix IV: Thallium, MW-17002

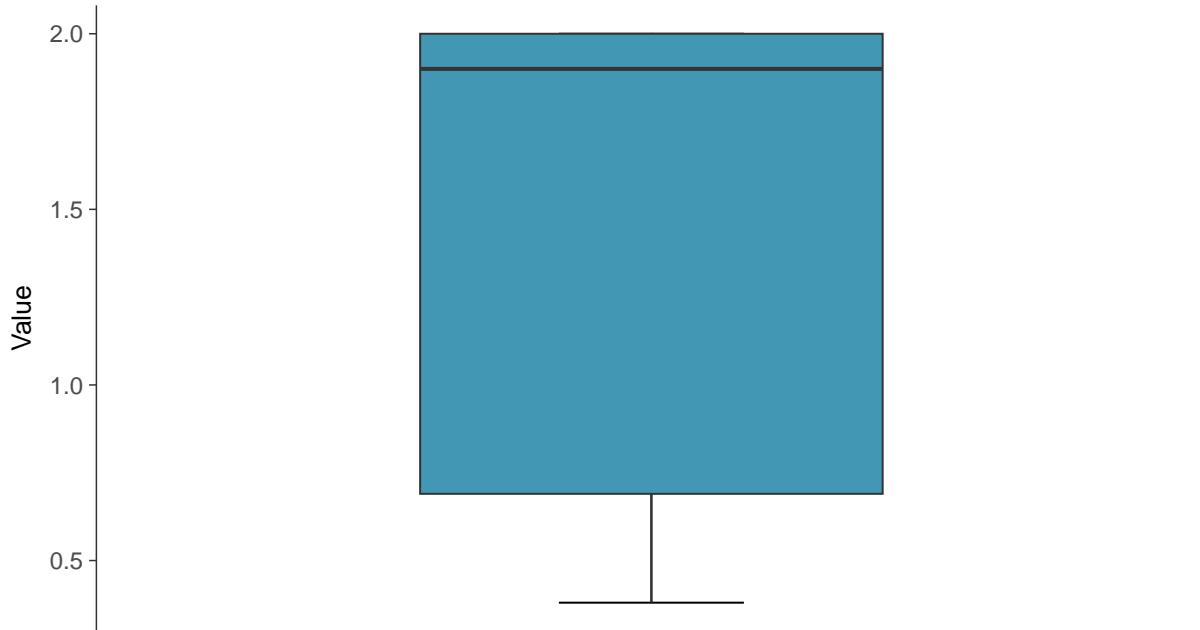
ID: 15_2_131





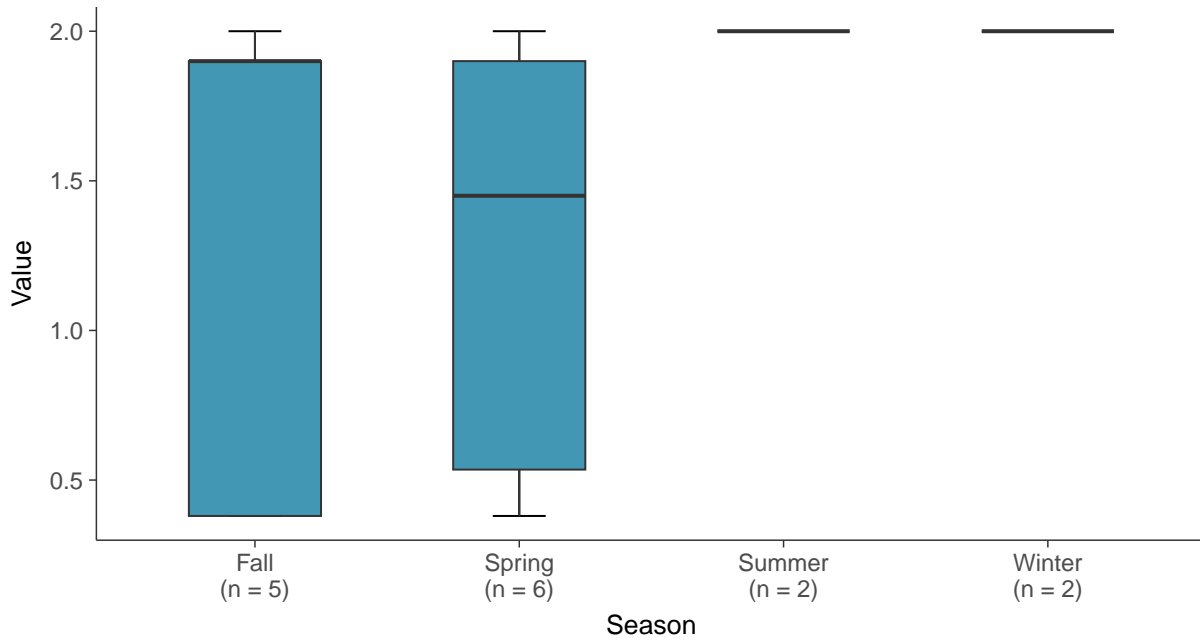
Boxplot

Thallium, MW-17002 (ug/L)



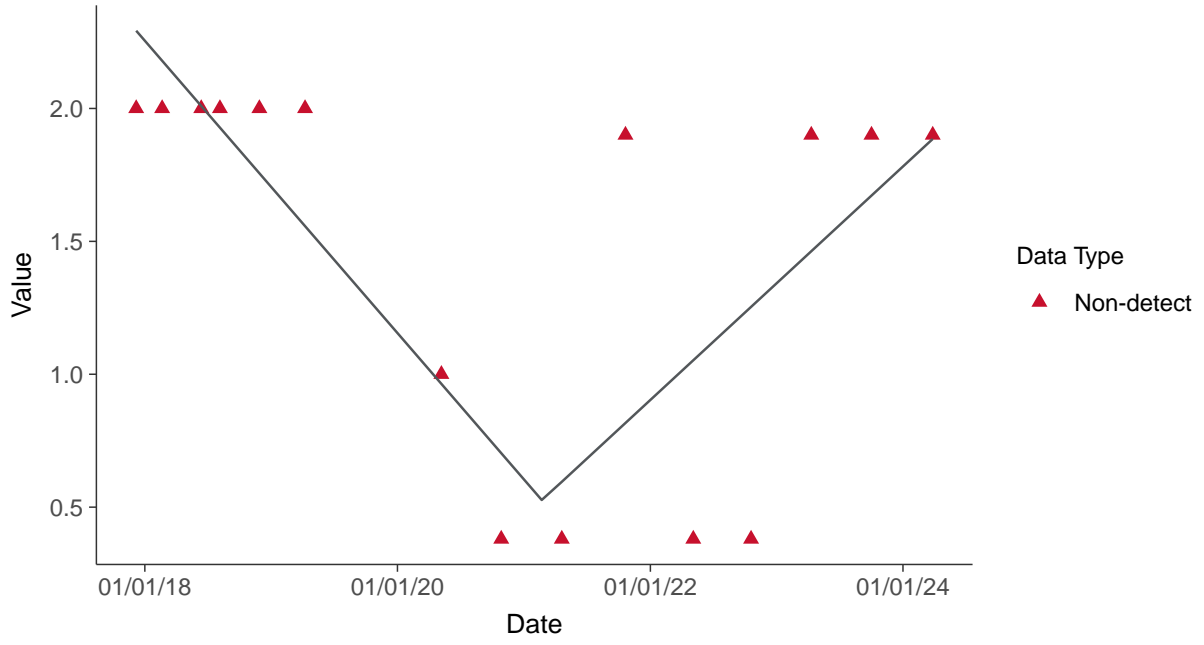
Boxplot by Season

Thallium, MW-17002 (ug/L)





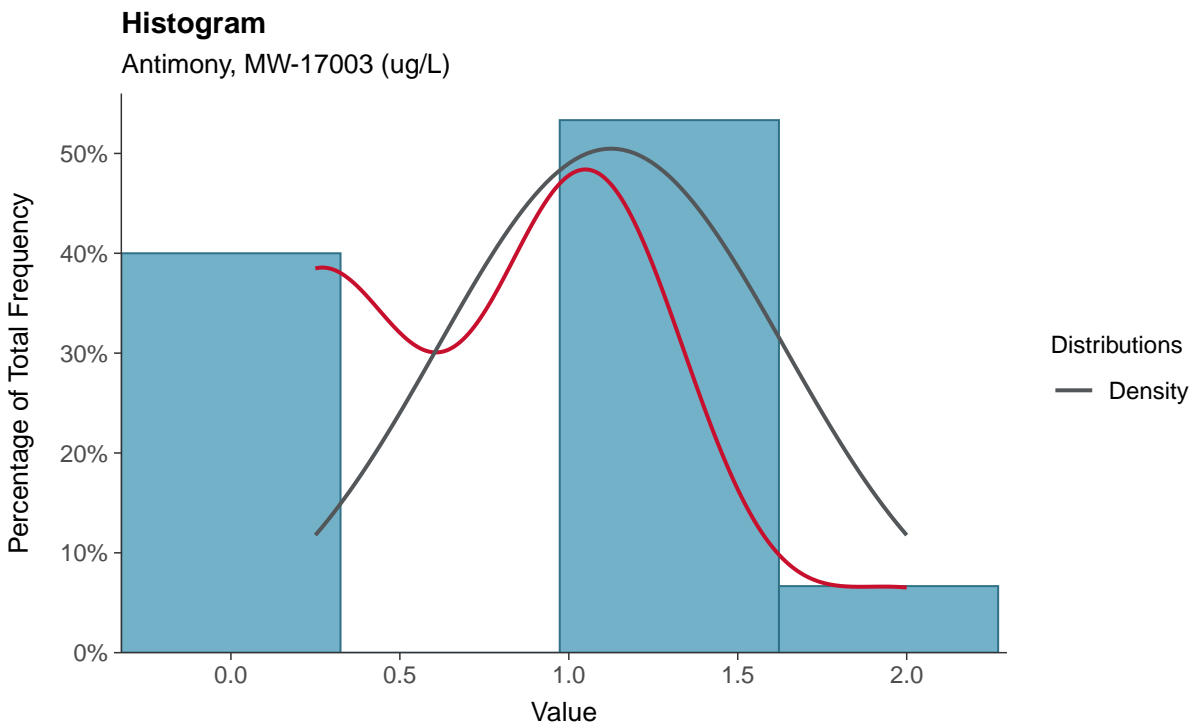
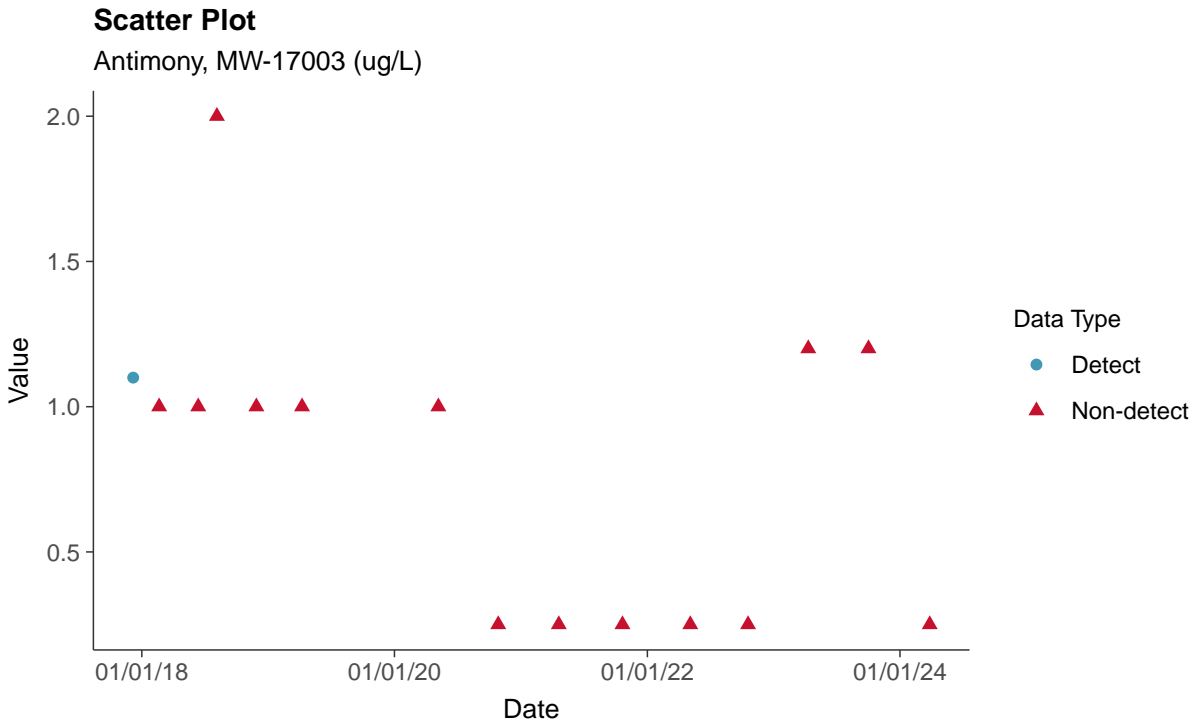
Trend Regression: Piecewise Linear-Linear Thallium, MW-17002 (ug/L)





Appendix IV: Antimony, MW-17003

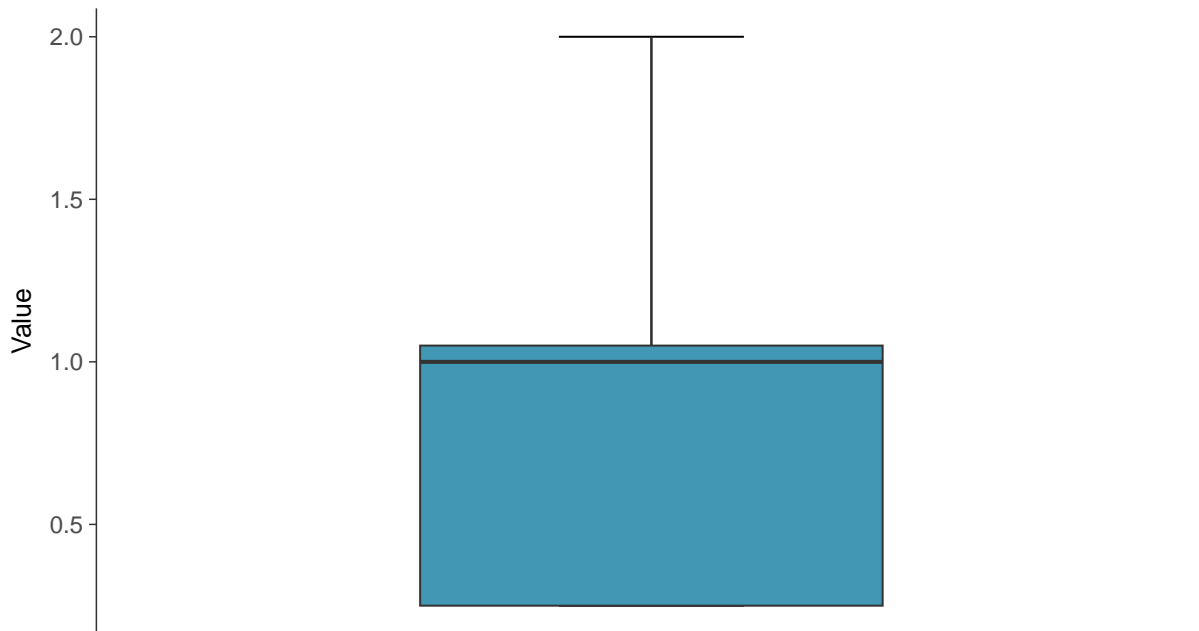
ID: 16_2_101





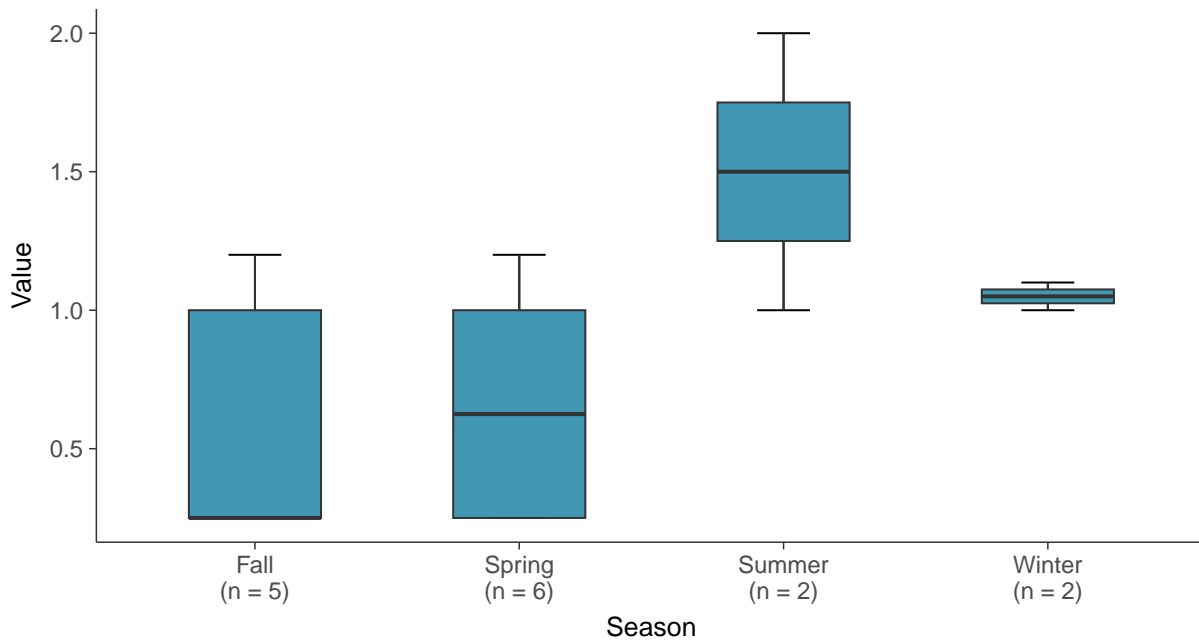
Boxplot

Antimony, MW-17003 (ug/L)



Boxplot by Season

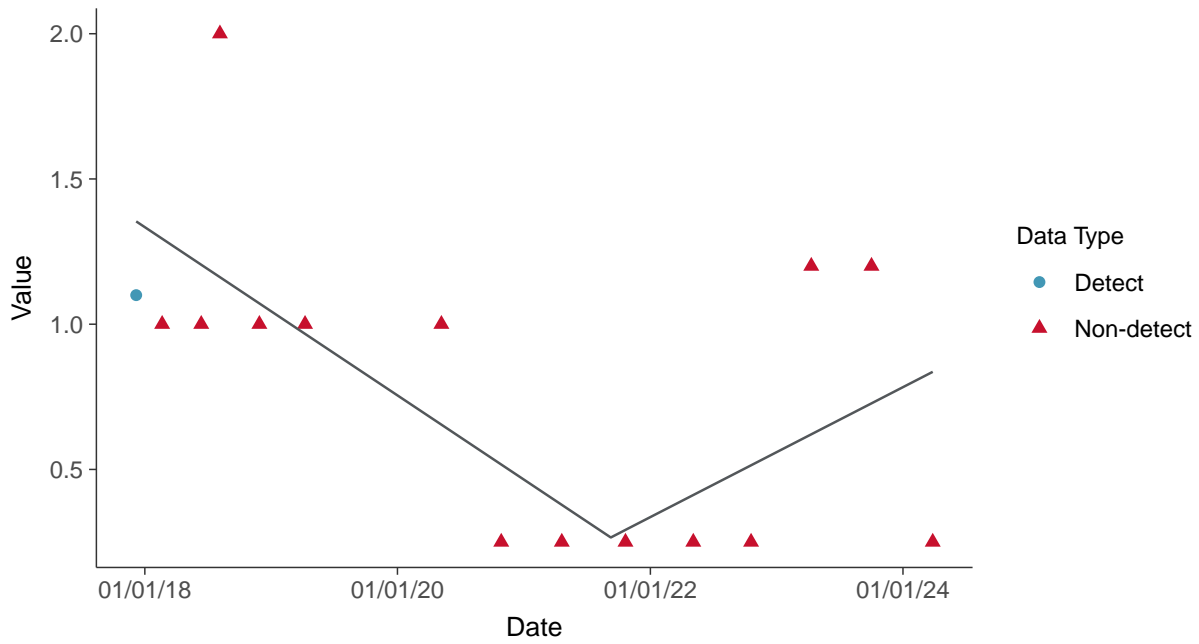
Antimony, MW-17003 (ug/L)





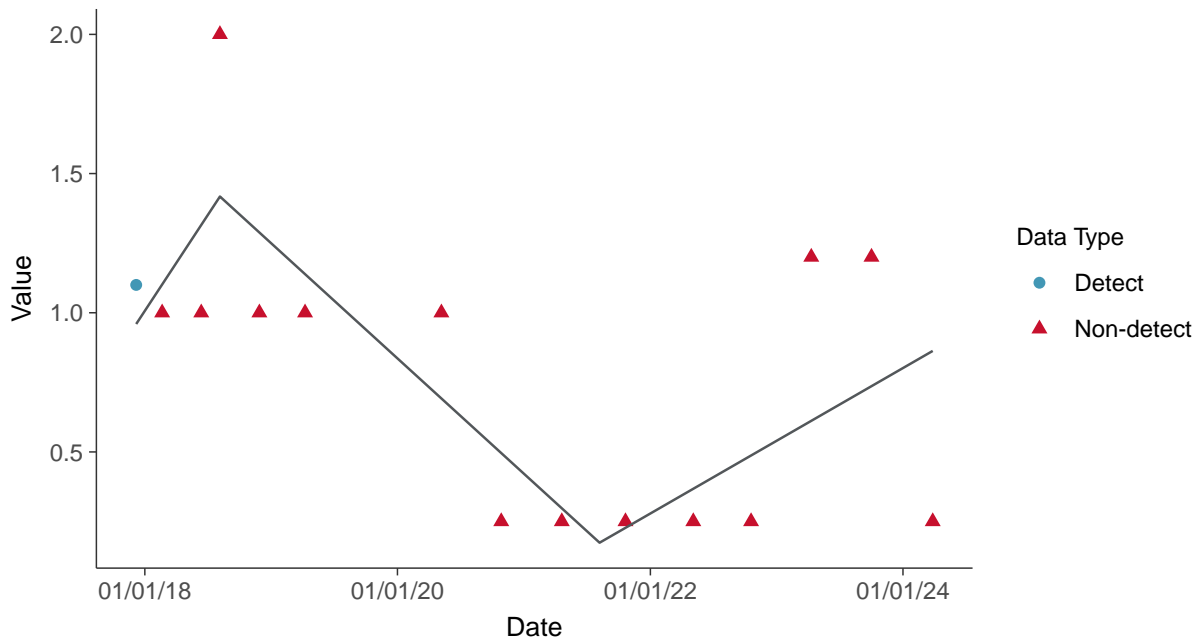
Trend Regression: Piecewise Linear-Linear

Antimony, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-17003 (ug/L)



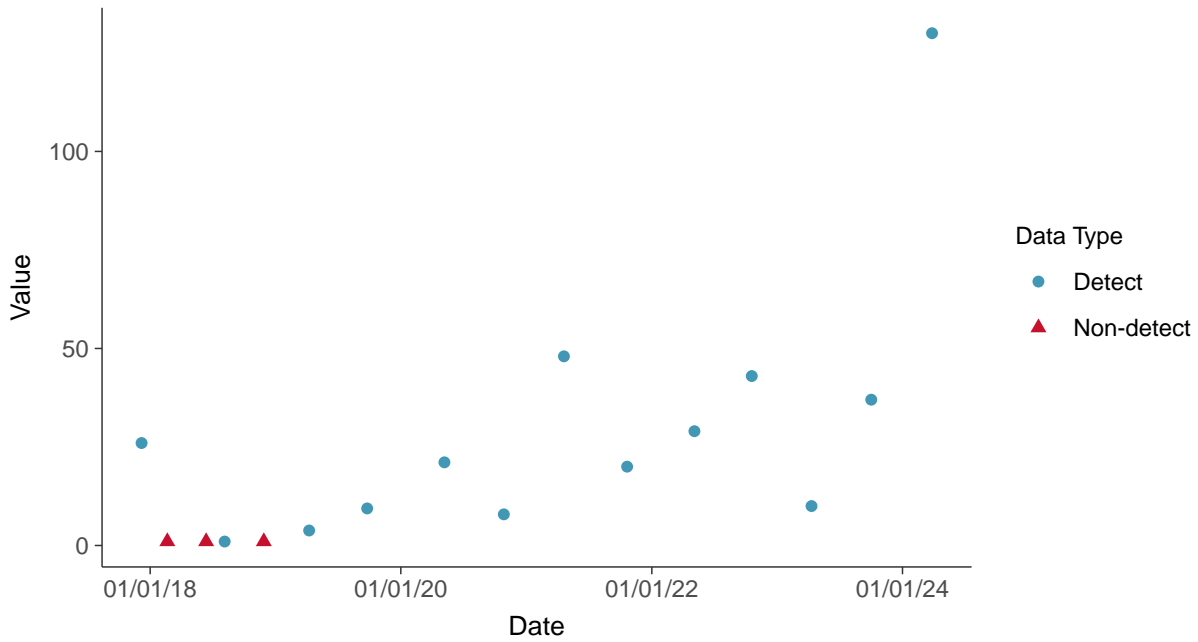


Appendix IV: Arsenic, MW-17003

ID: 16_2_102

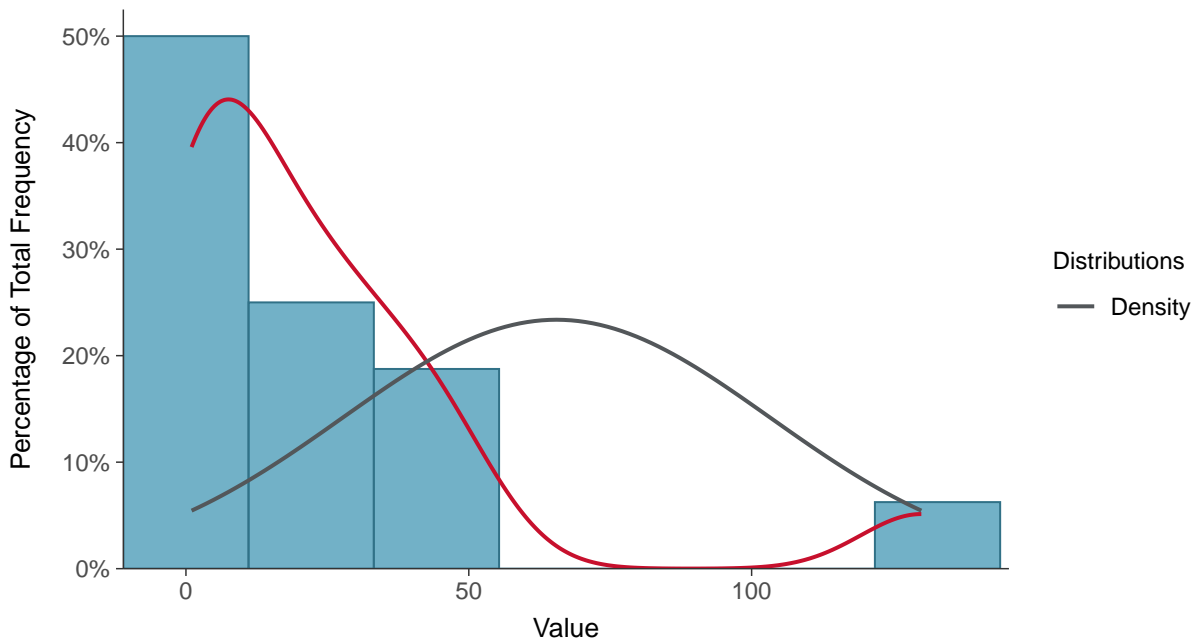
Scatter Plot

Arsenic, MW-17003 (ug/L)



Histogram

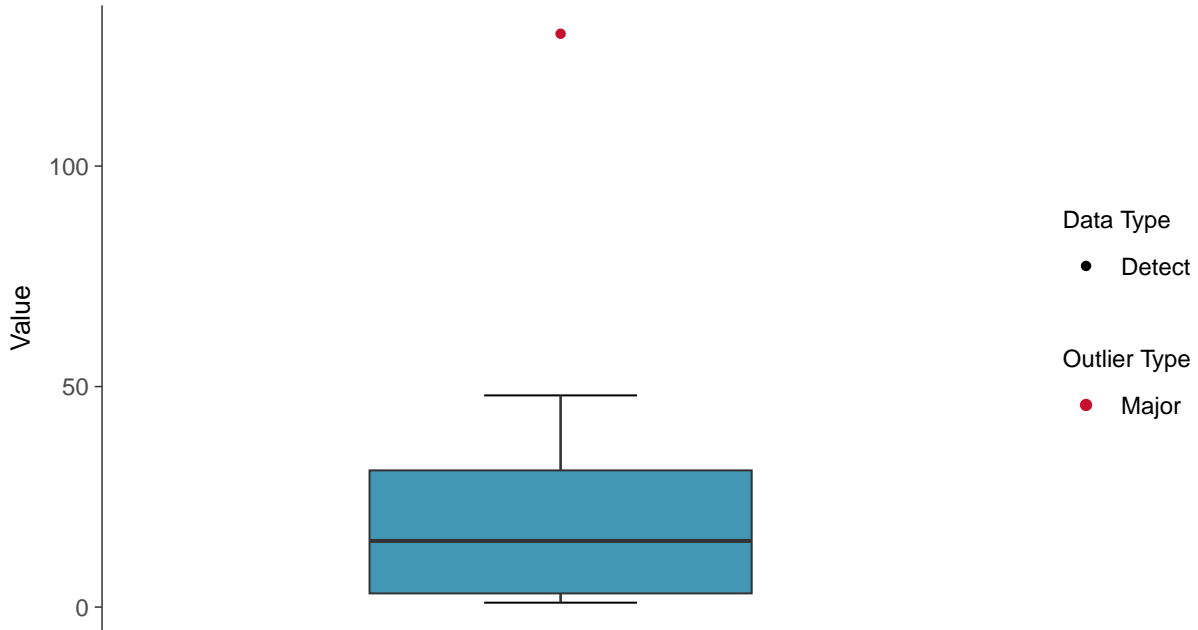
Arsenic, MW-17003 (ug/L)





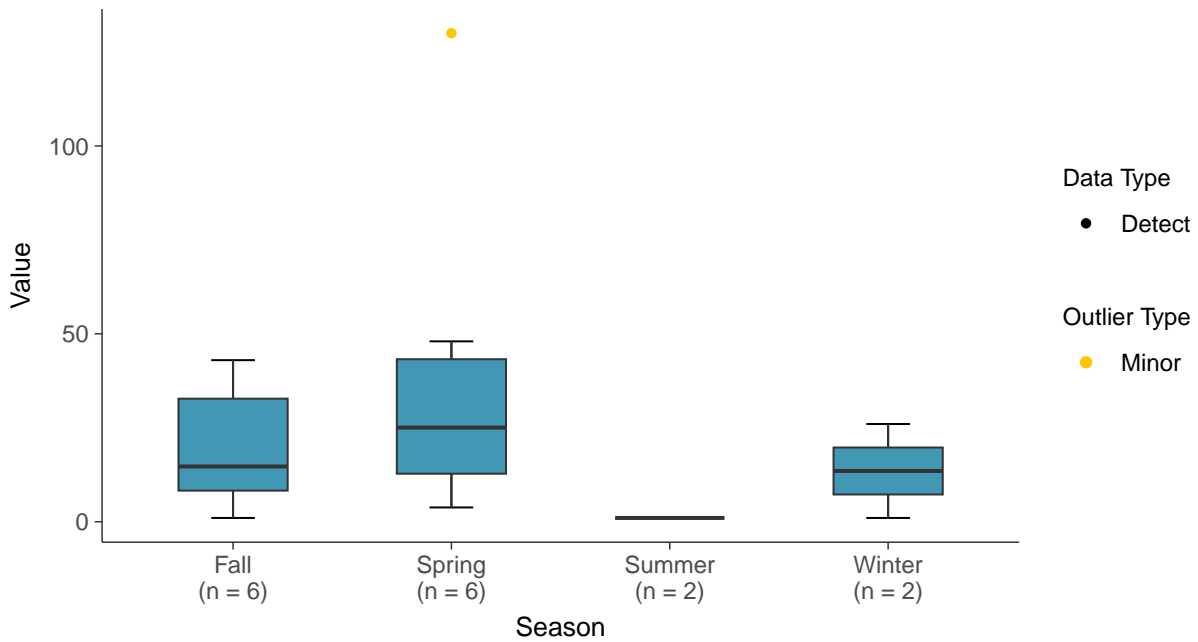
Boxplot

Arsenic, MW-17003 (ug/L)



Boxplot by Season

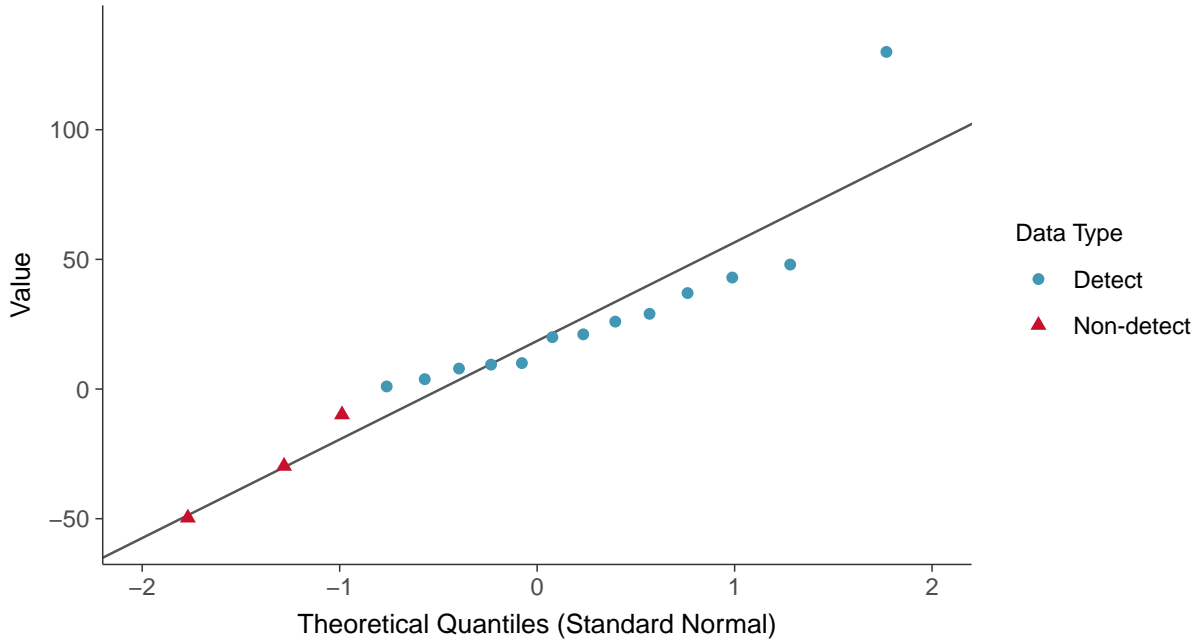
Arsenic, MW-17003 (ug/L)





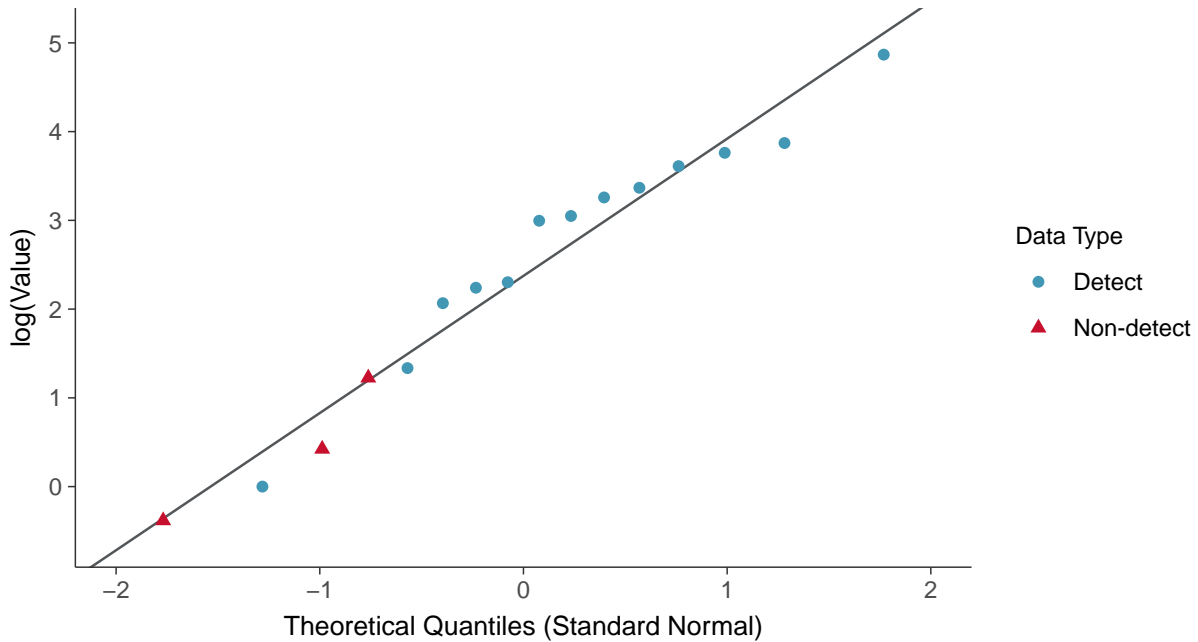
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17003 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

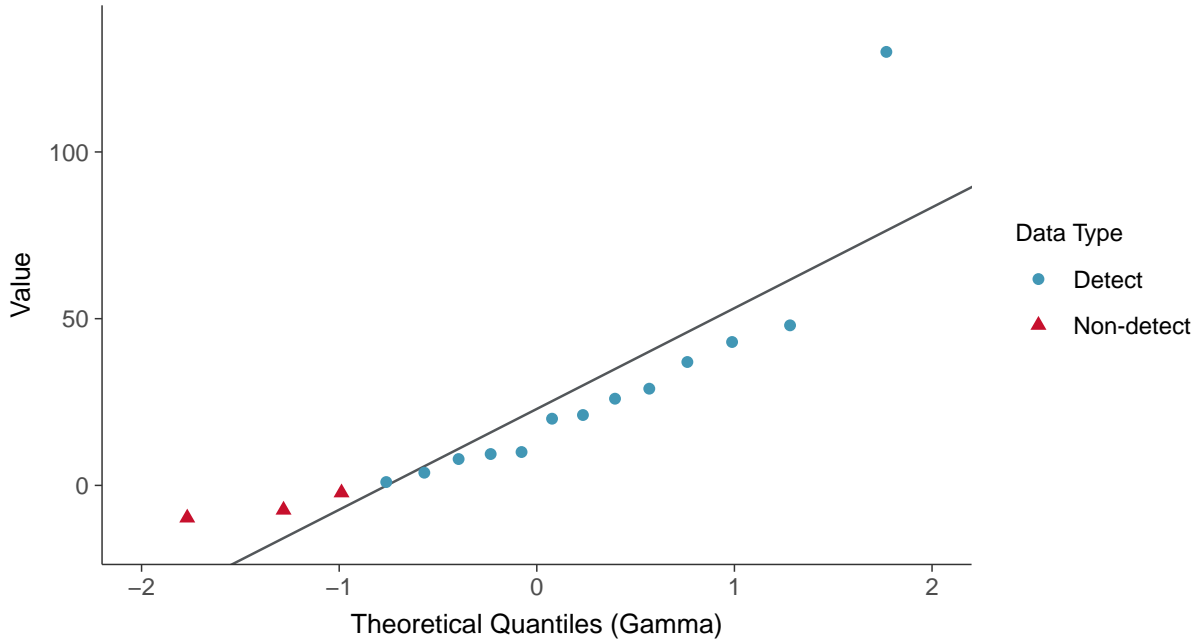
Arsenic, MW-17003 (ug/L)





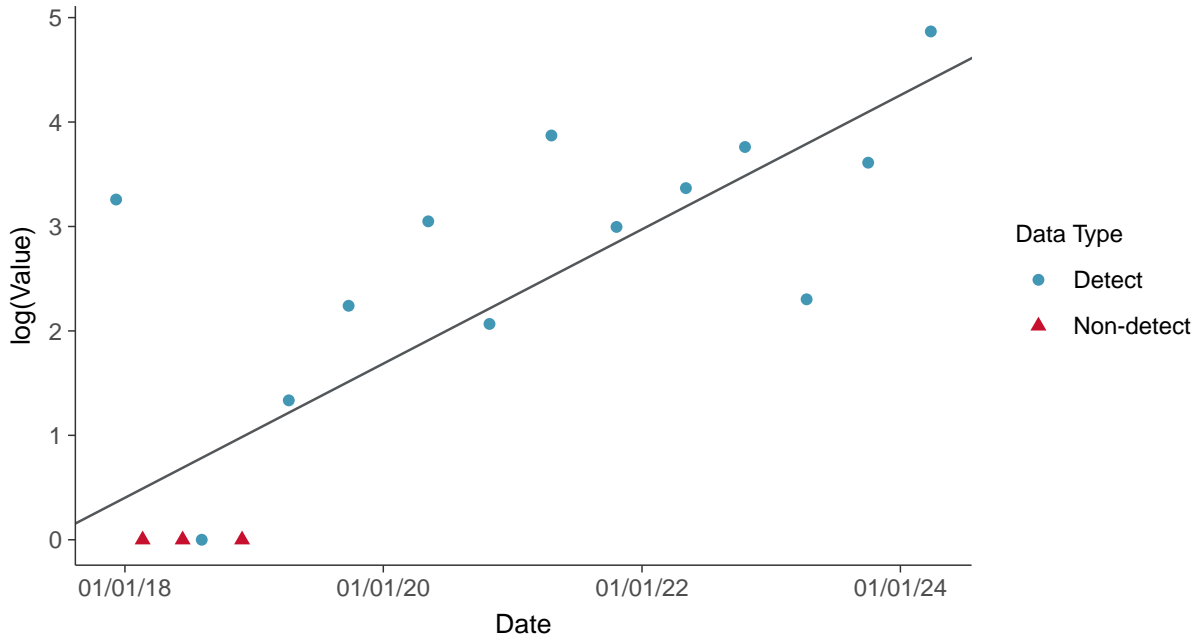
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17003 (ug/L)



Trend Regression: Lognormal MLE

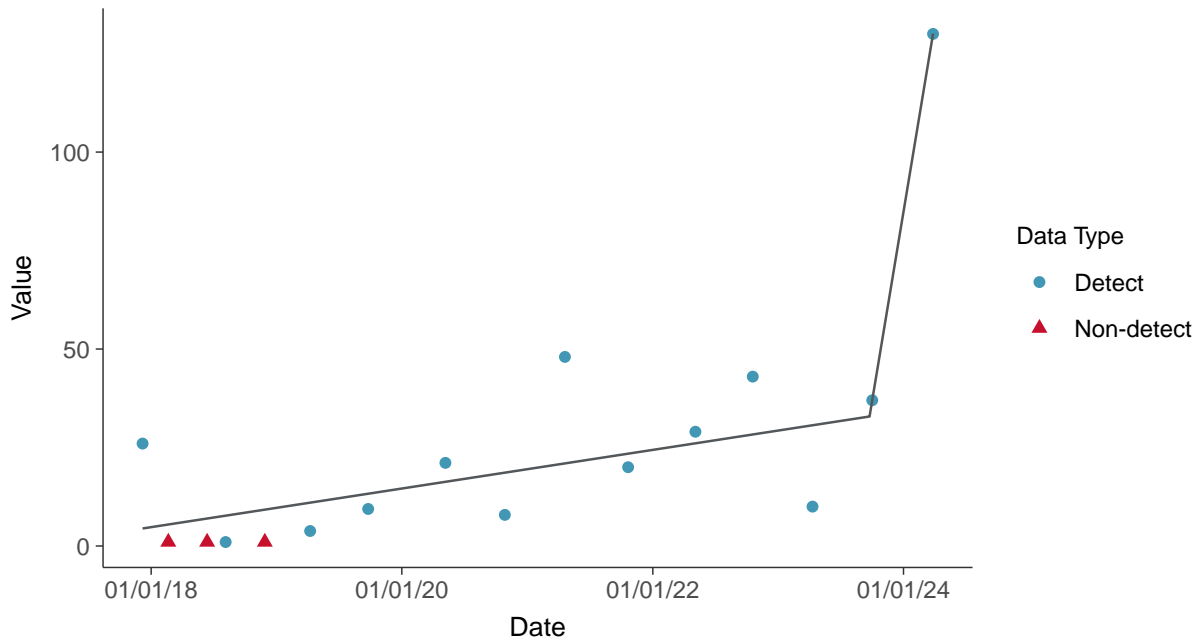
Arsenic, MW-17003 (ug/L)





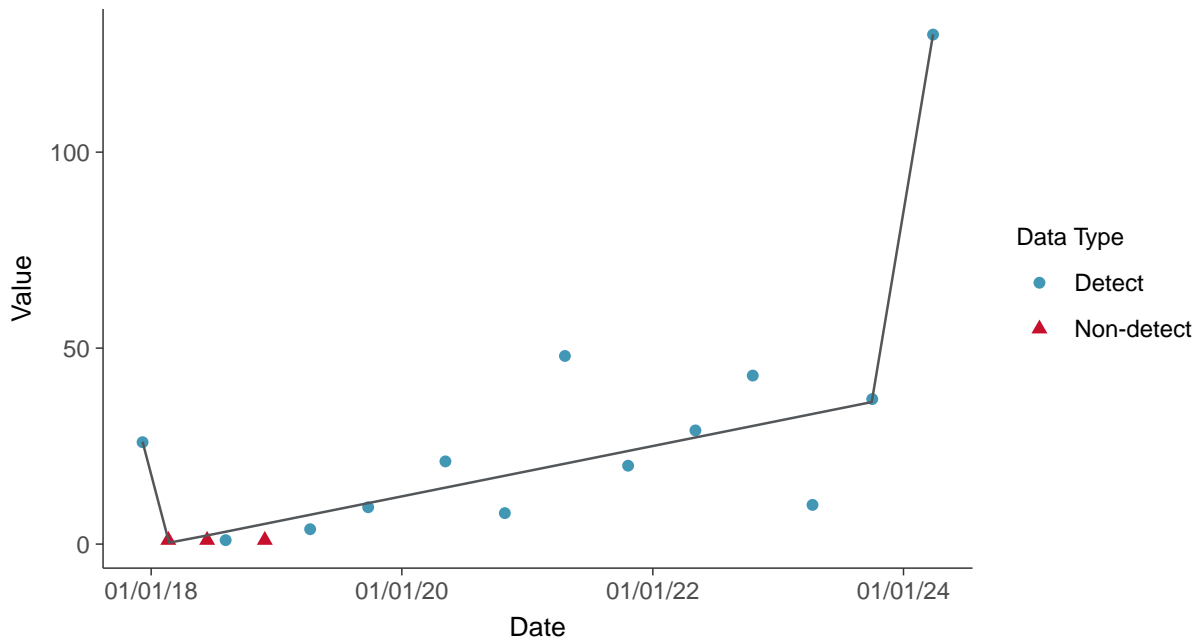
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-17003 (ug/L)



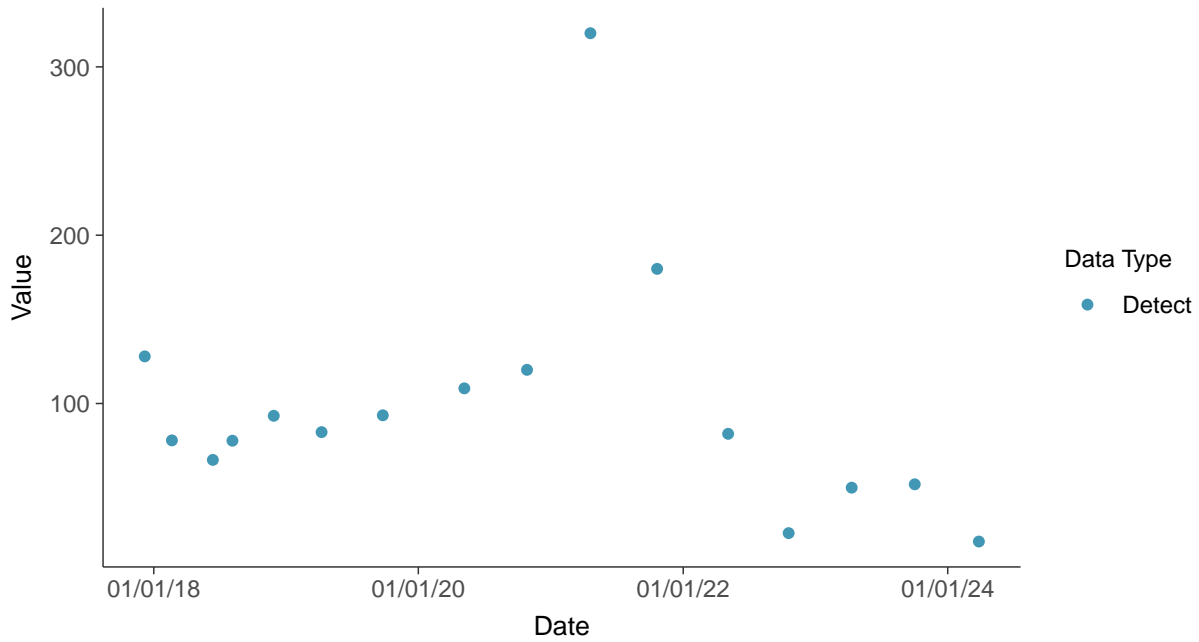


Appendix IV: Barium, MW-17003

ID: 16_2_103

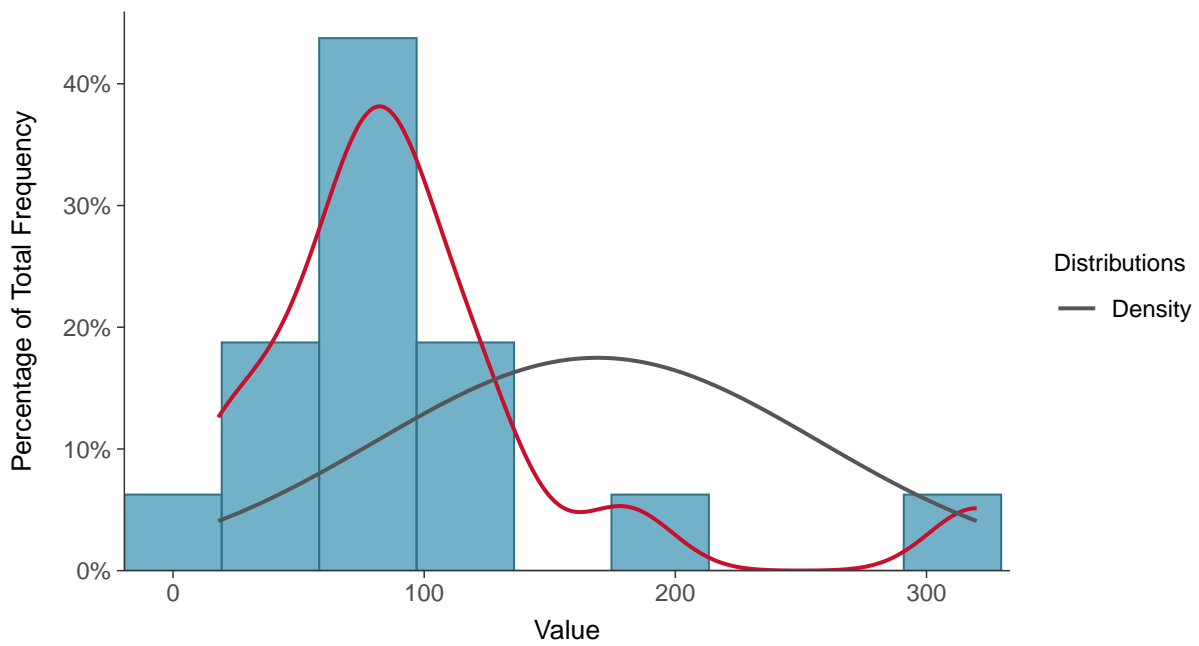
Scatter Plot

Barium, MW-17003 (ug/L)



Histogram

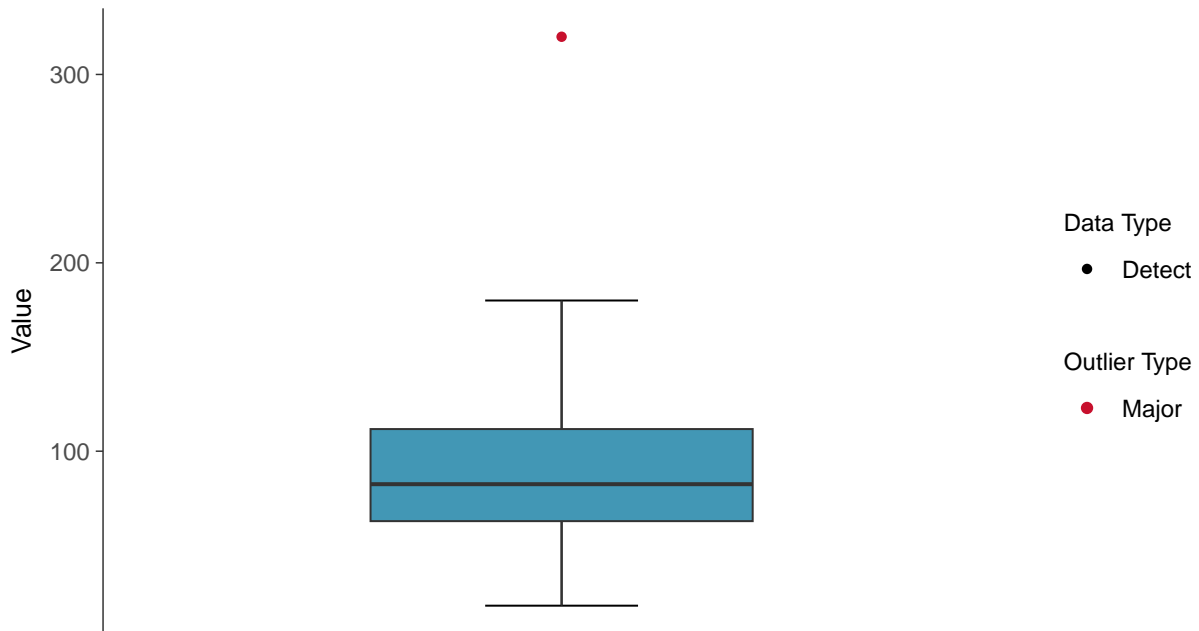
Barium, MW-17003 (ug/L)





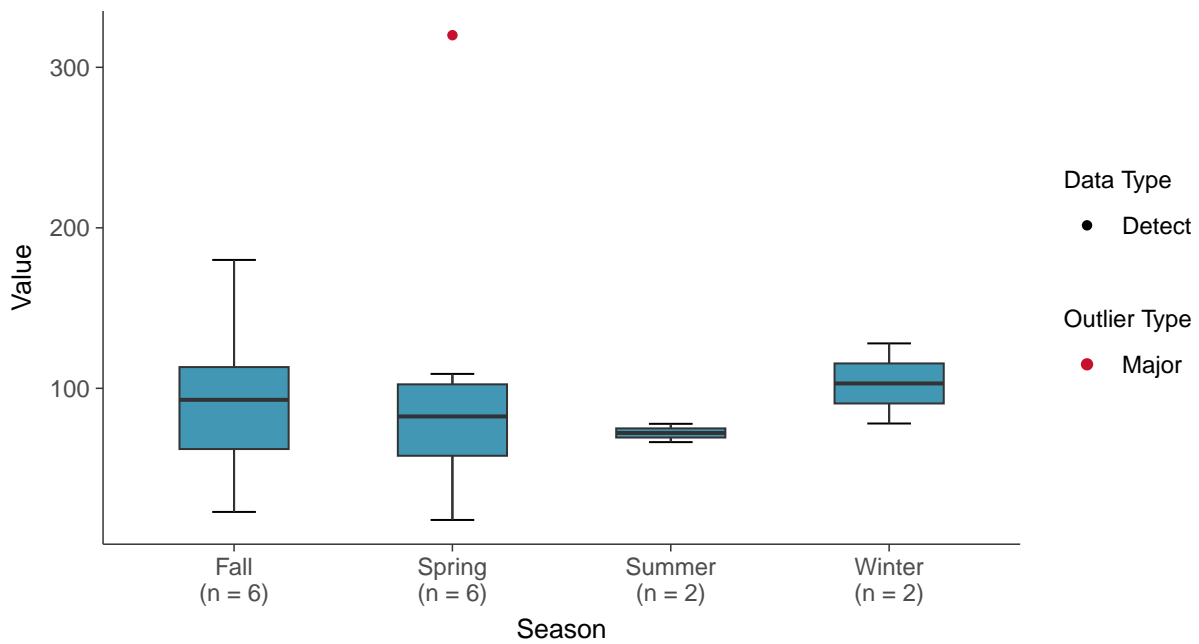
Boxplot

Barium, MW-17003 (ug/L)



Boxplot by Season

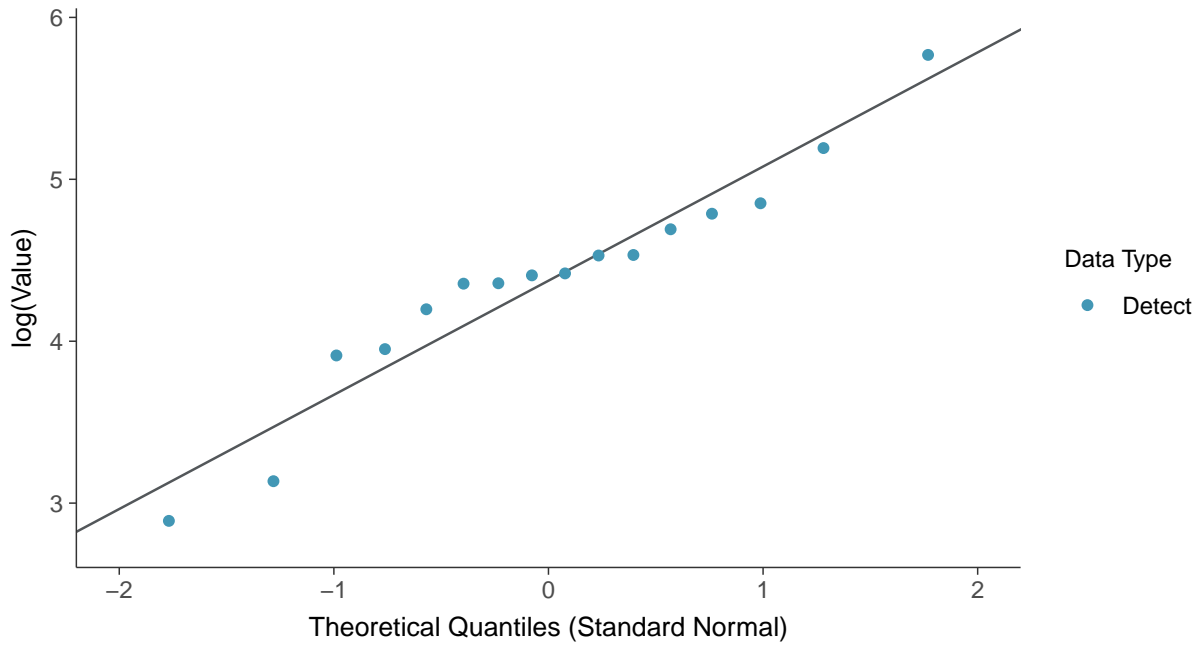
Barium, MW-17003 (ug/L)





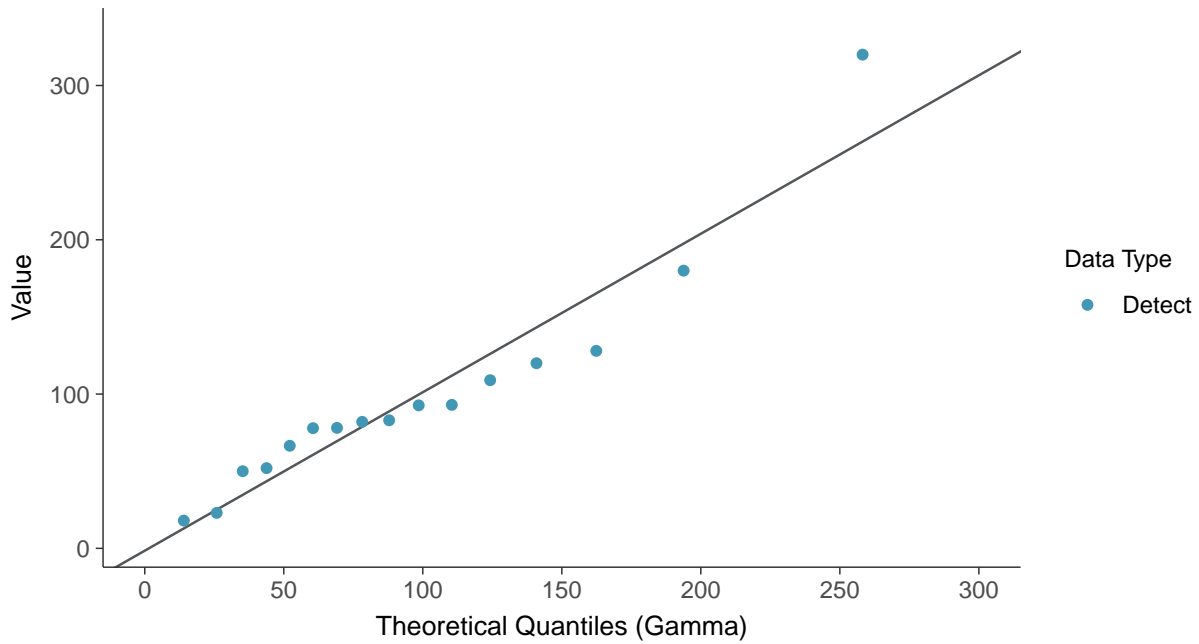
Lognormal Q-Q plot

Barium, MW-17003 (ug/L)



Gamma Q-Q plot

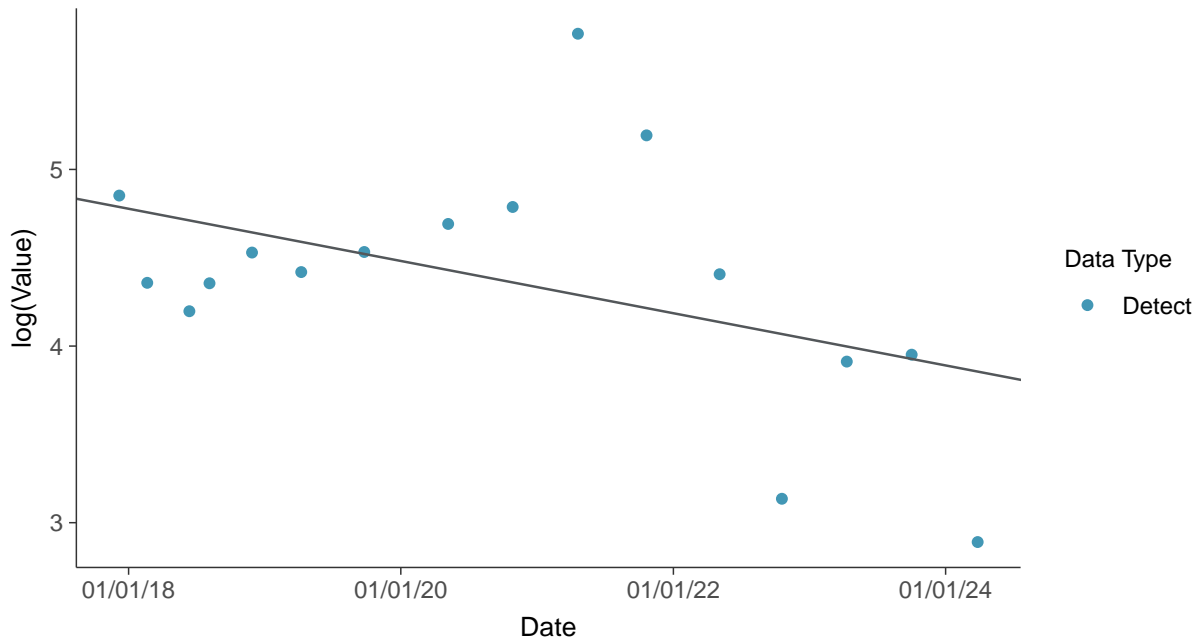
Barium, MW-17003 (ug/L)





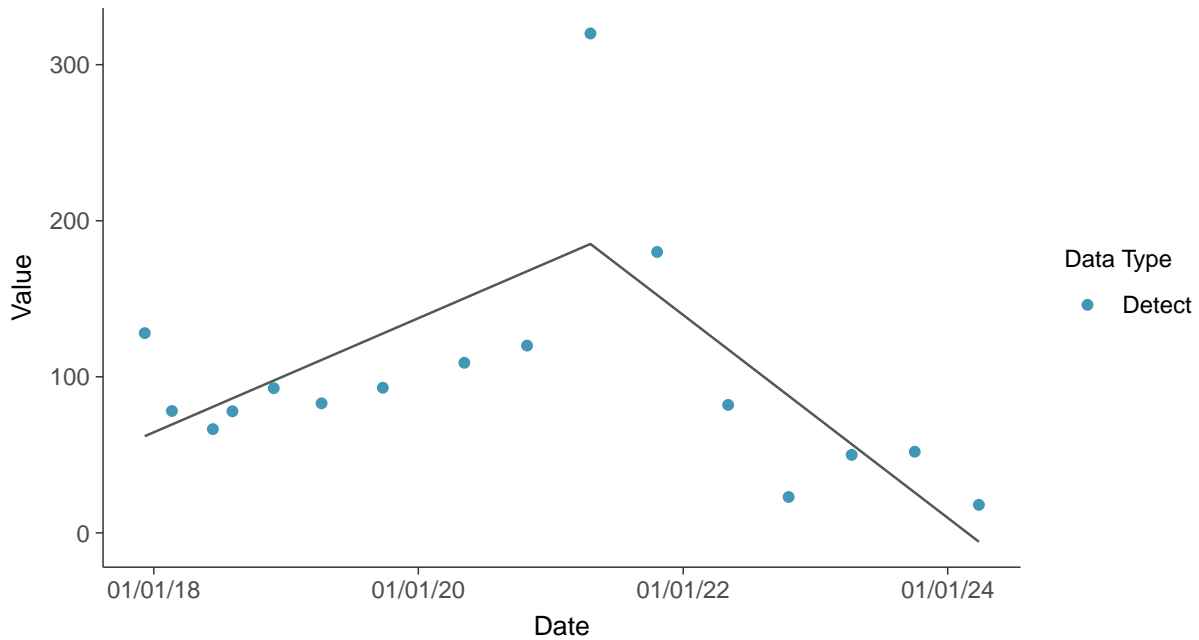
Trend Regression: Lognormal MLE

Barium, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

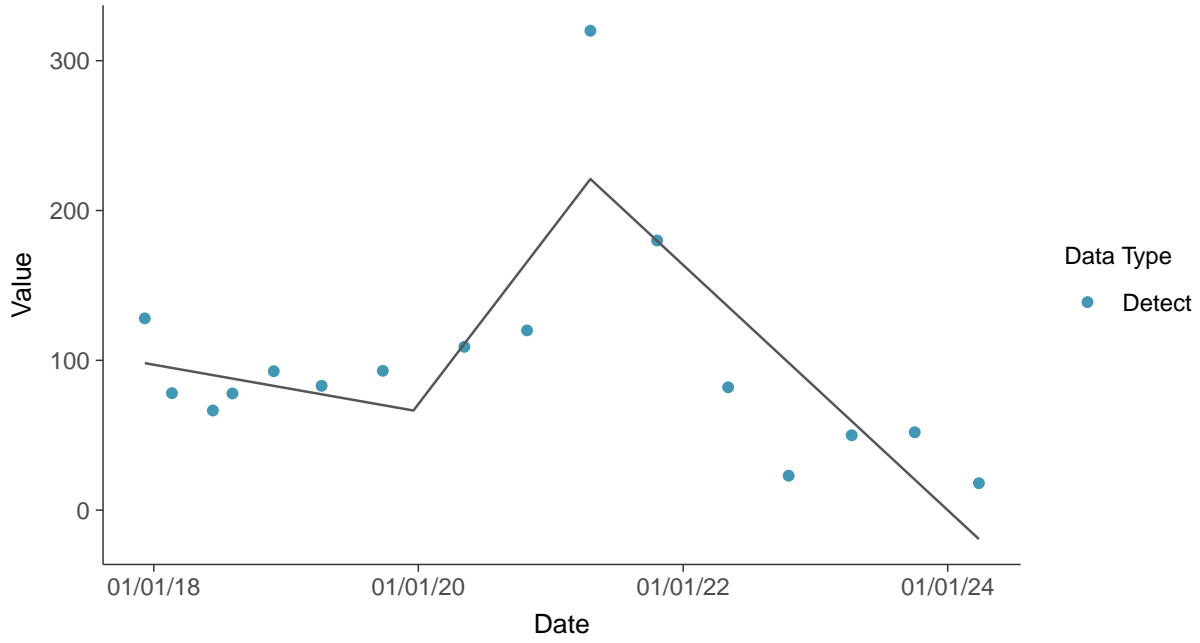
Barium, MW-17003 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

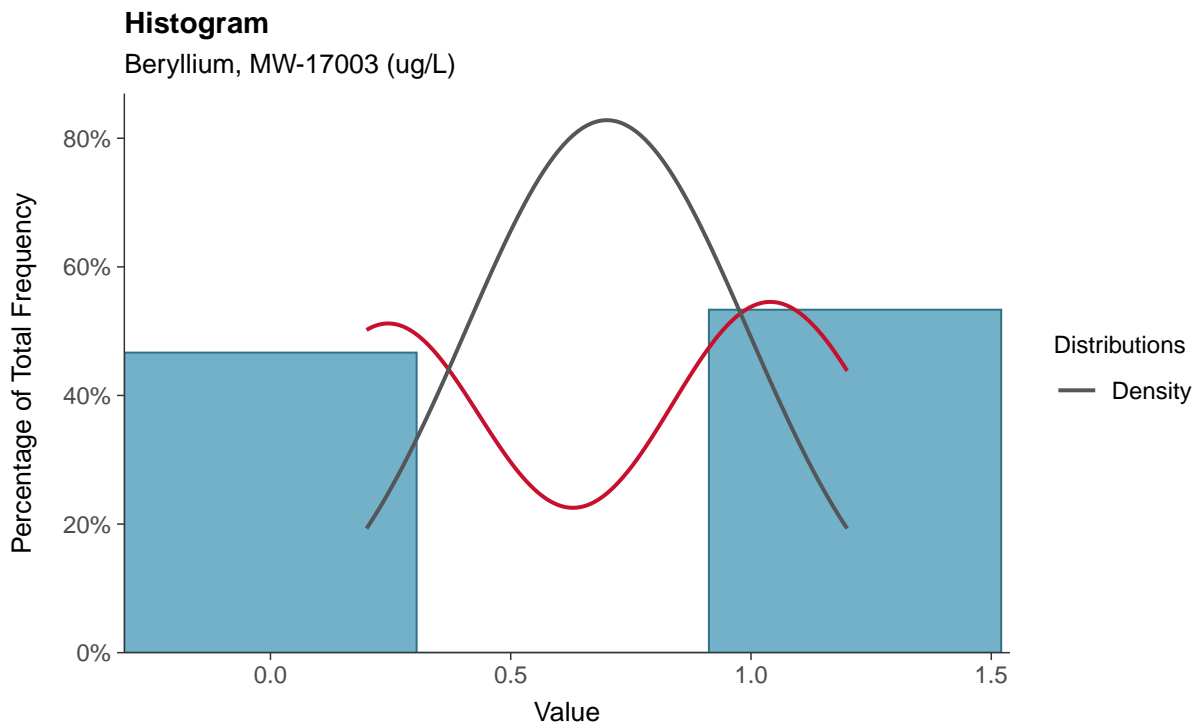
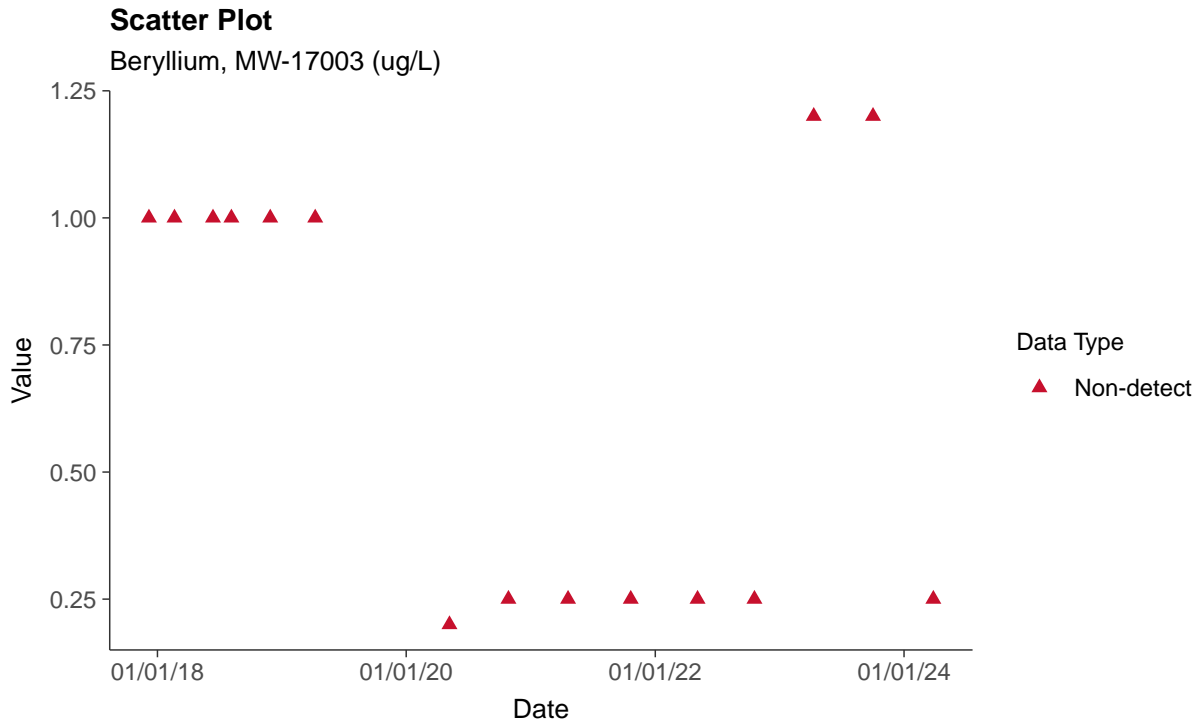
Barium, MW-17003 (ug/L)





Appendix IV: Beryllium, MW-17003

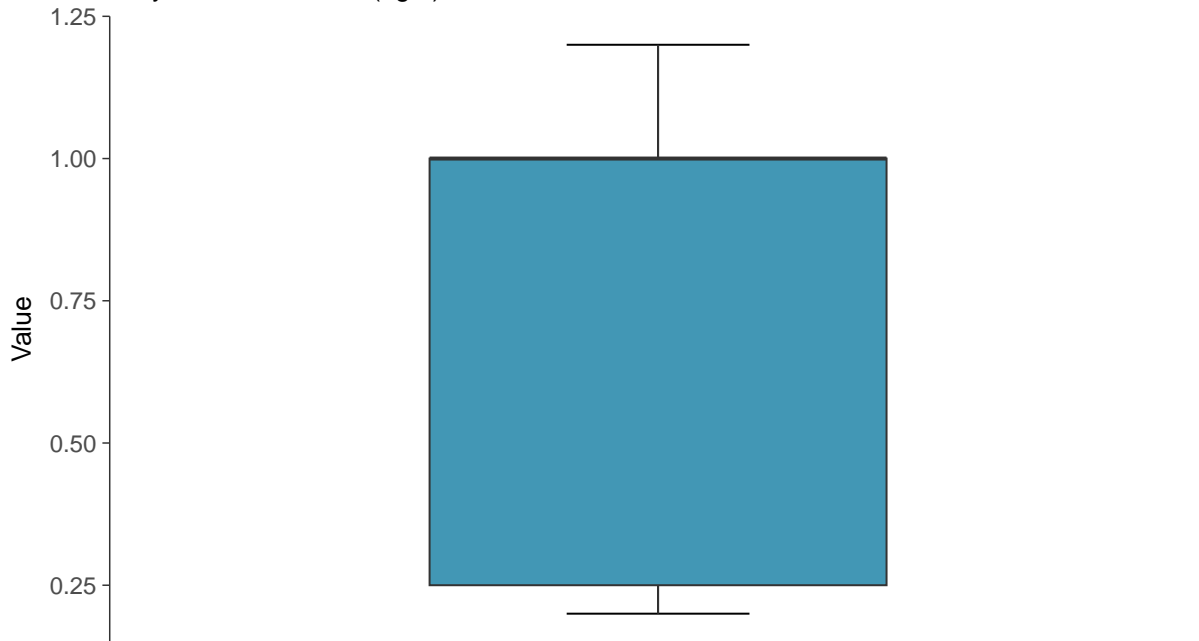
ID: 16_2_104





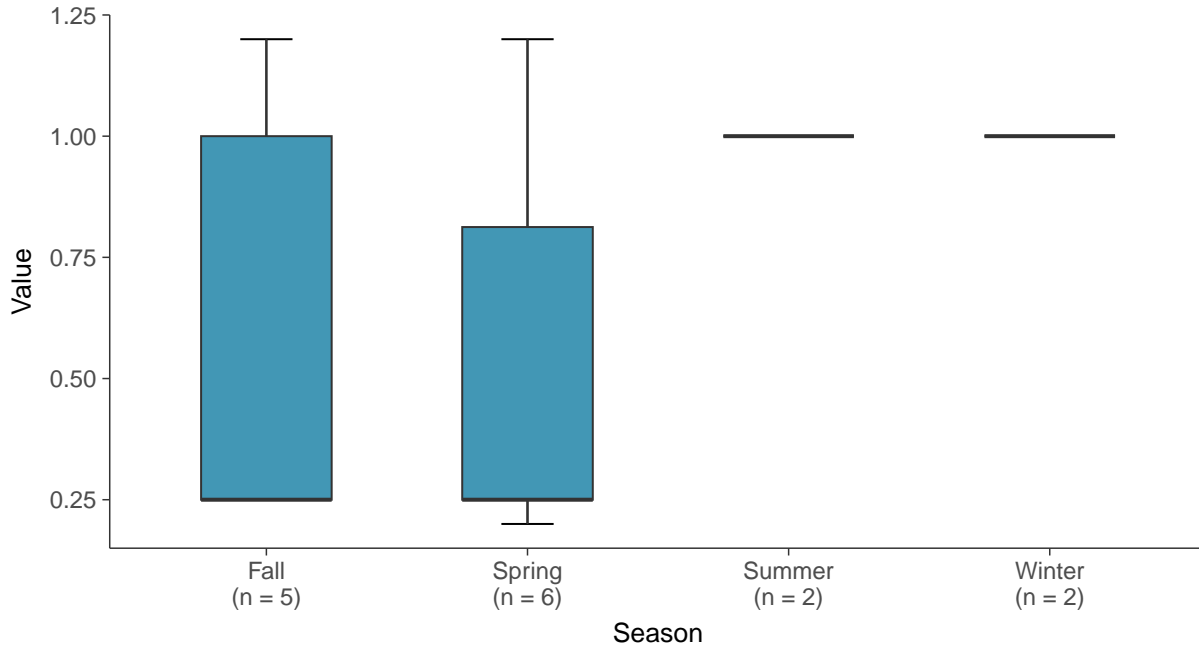
Boxplot

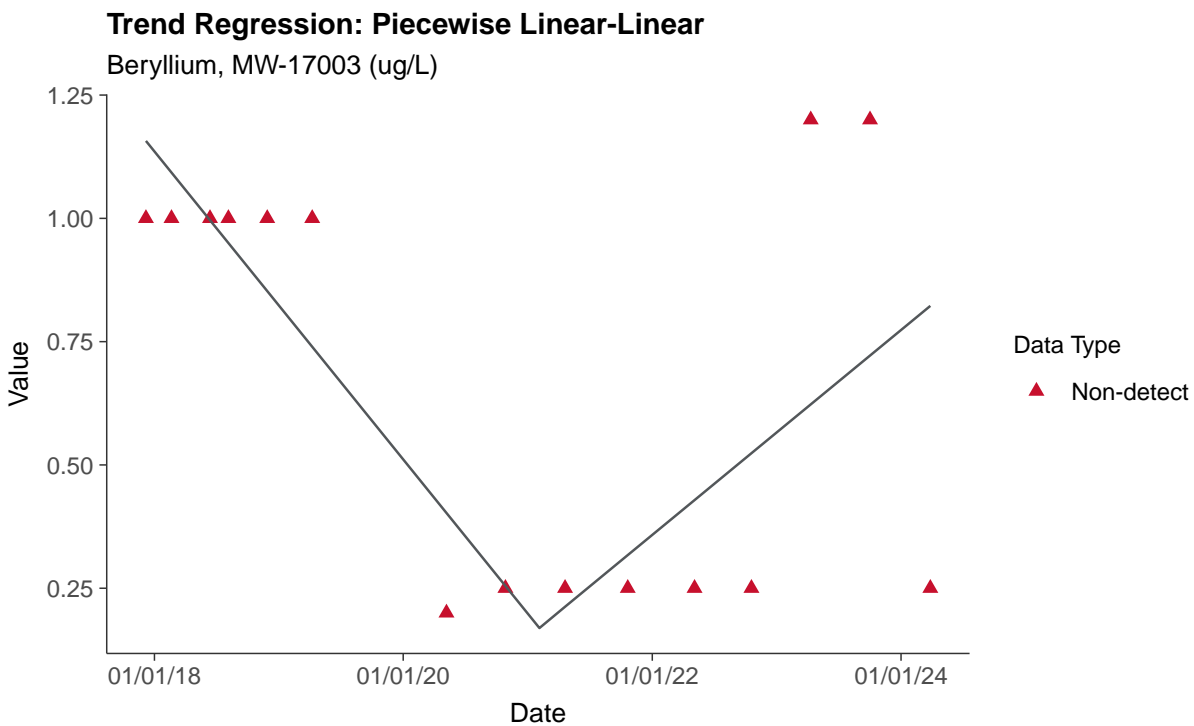
Beryllium, MW-17003 (ug/L)



Boxplot by Season

Beryllium, MW-17003 (ug/L)





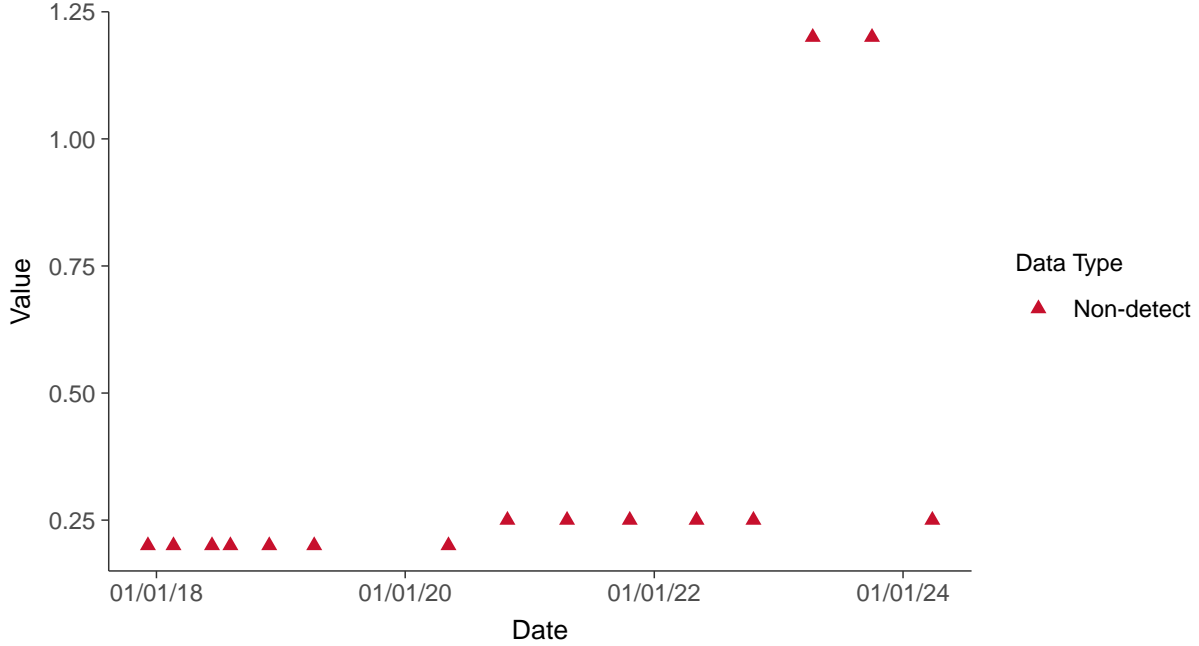


Appendix IV: Cadmium, MW-17003

ID: 16_2_106

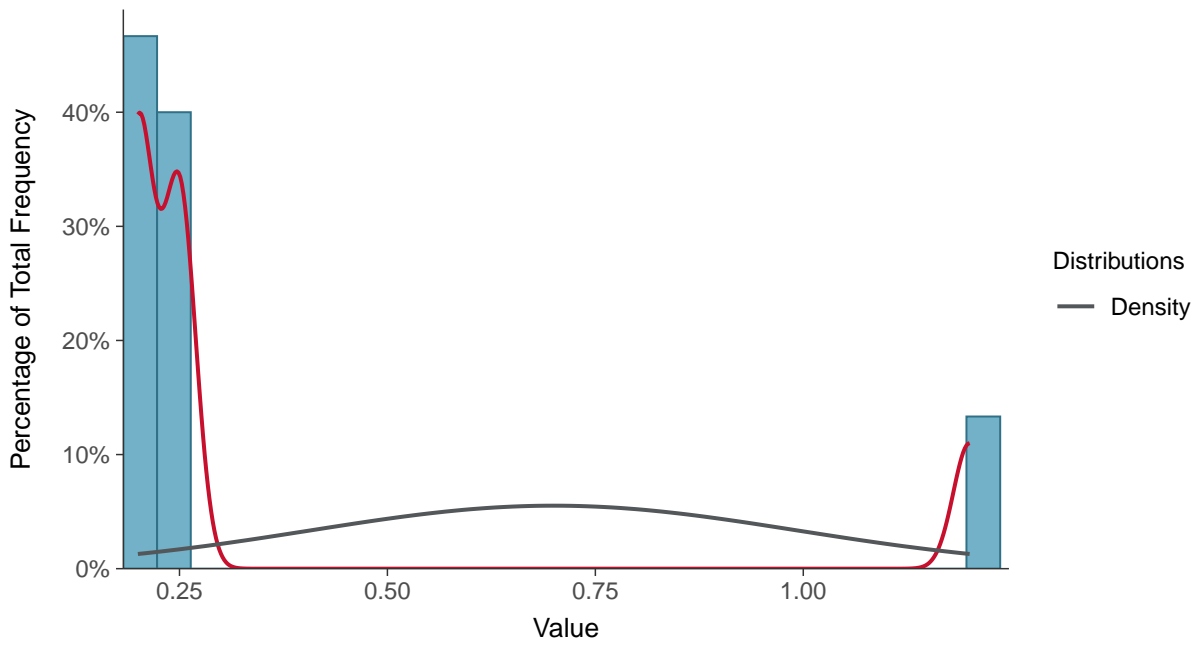
Scatter Plot

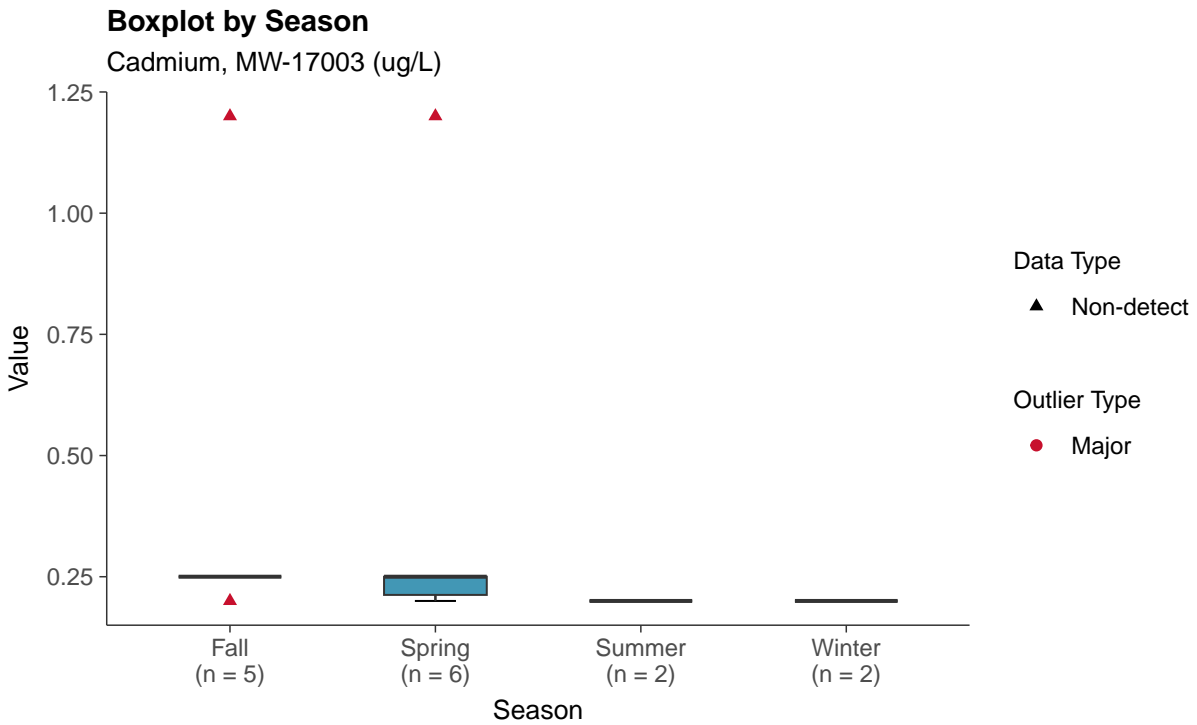
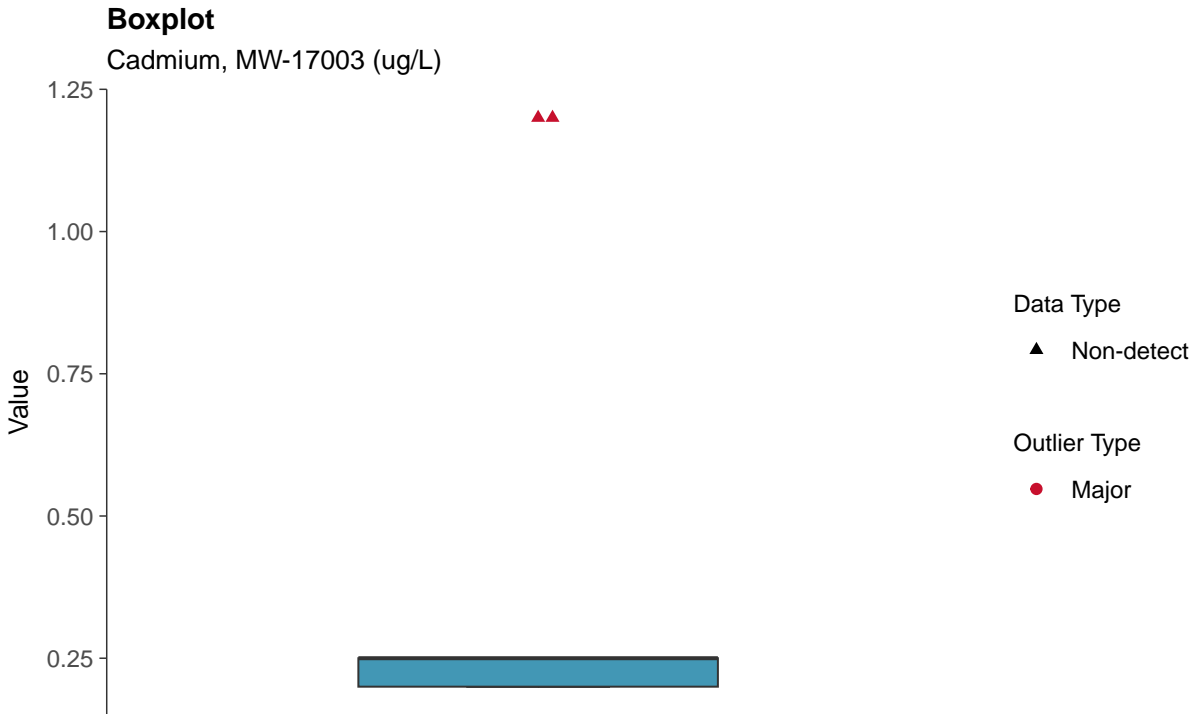
Cadmium, MW-17003 (ug/L)



Histogram

Cadmium, MW-17003 (ug/L)

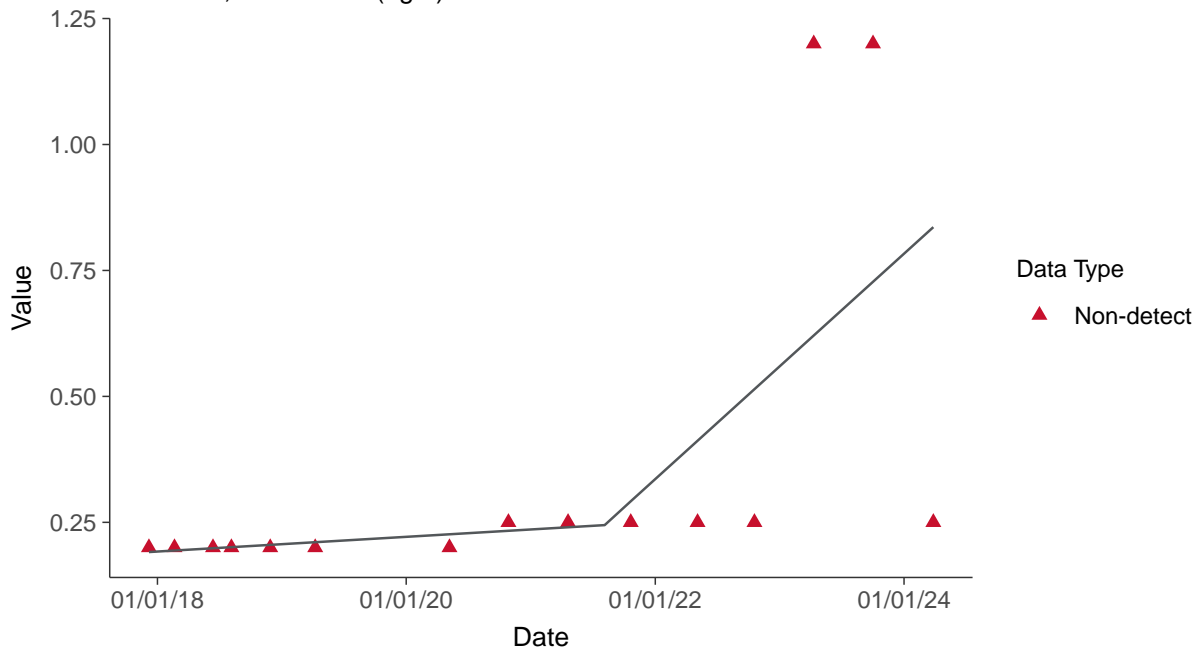






Trend Regression: Piecewise Linear-Linear

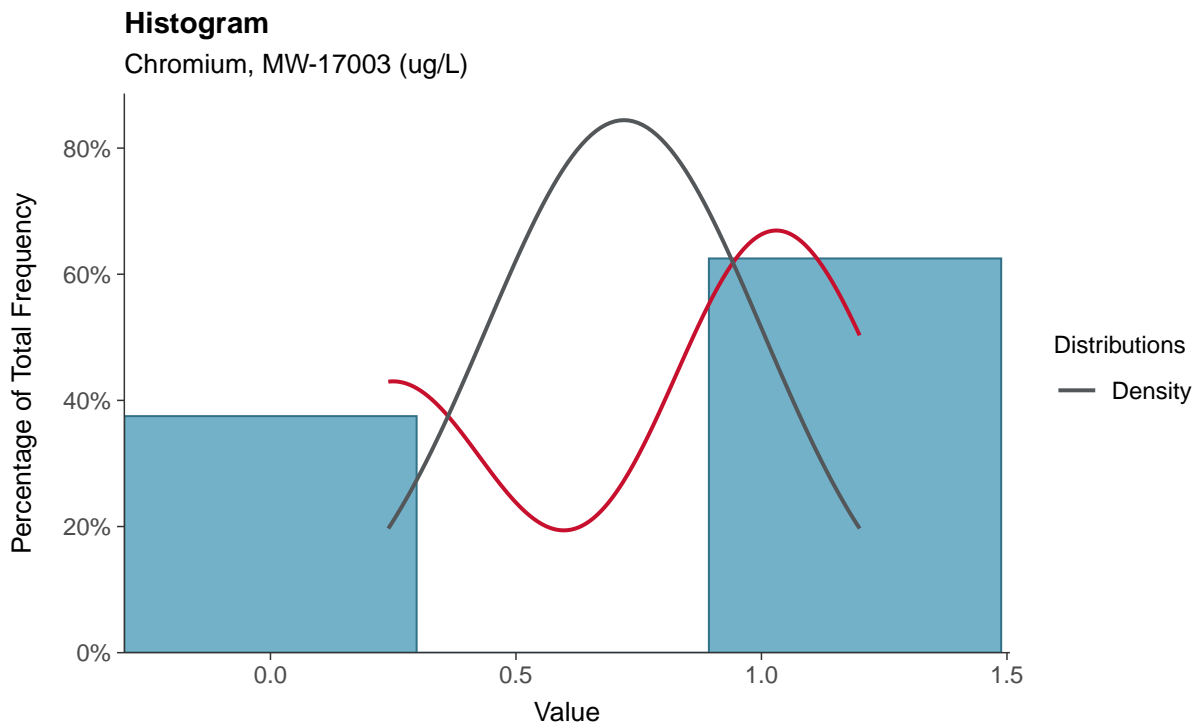
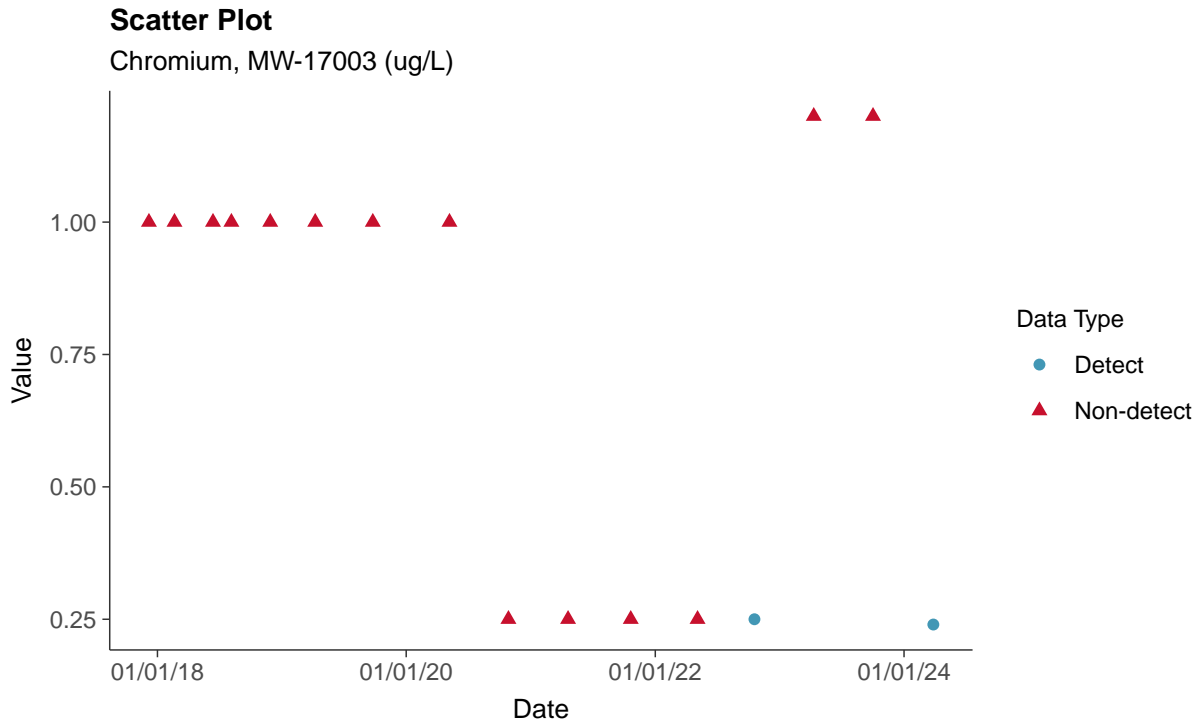
Cadmium, MW-17003 (ug/L)





Appendix IV: Chromium, MW-17003

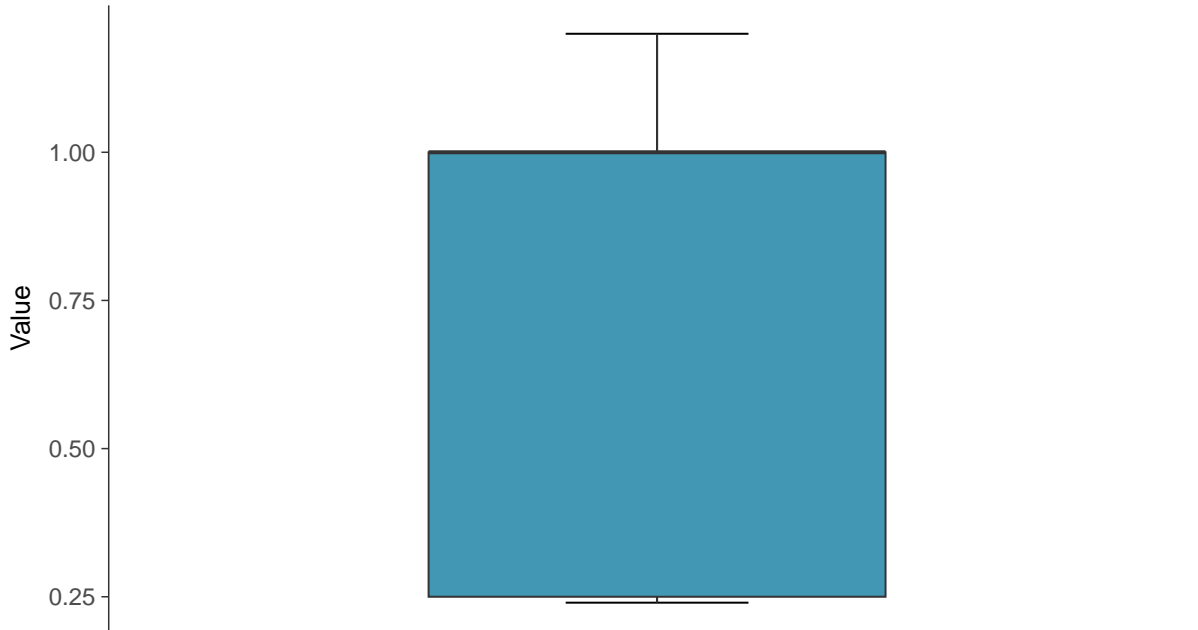
ID: 16_2_109





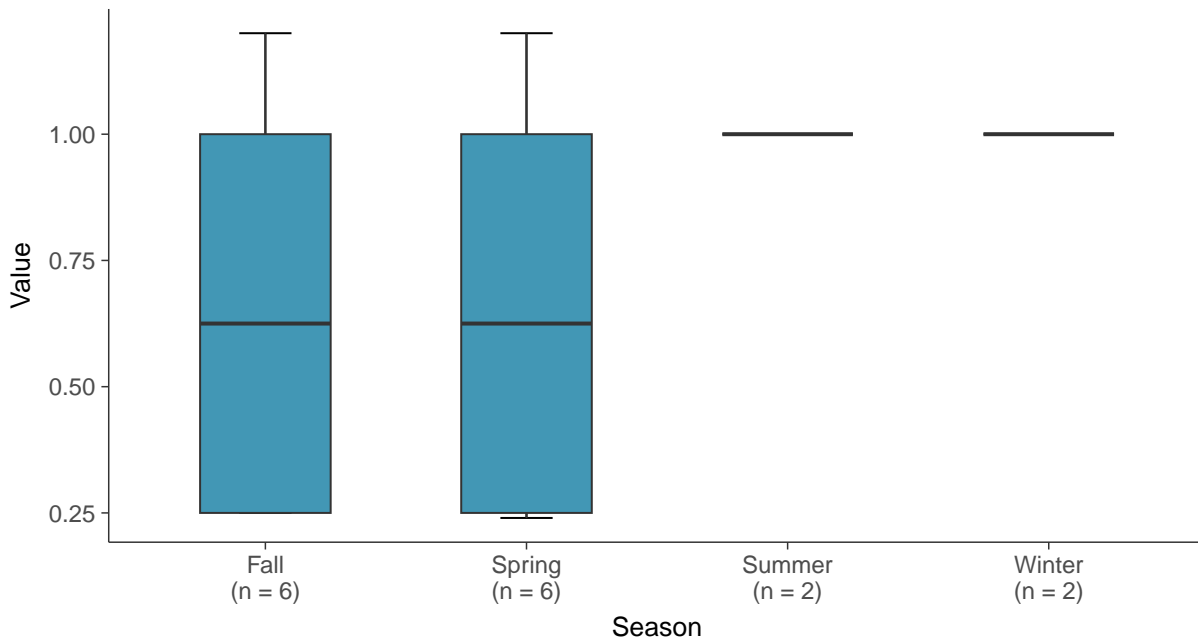
Boxplot

Chromium, MW-17003 (ug/L)



Boxplot by Season

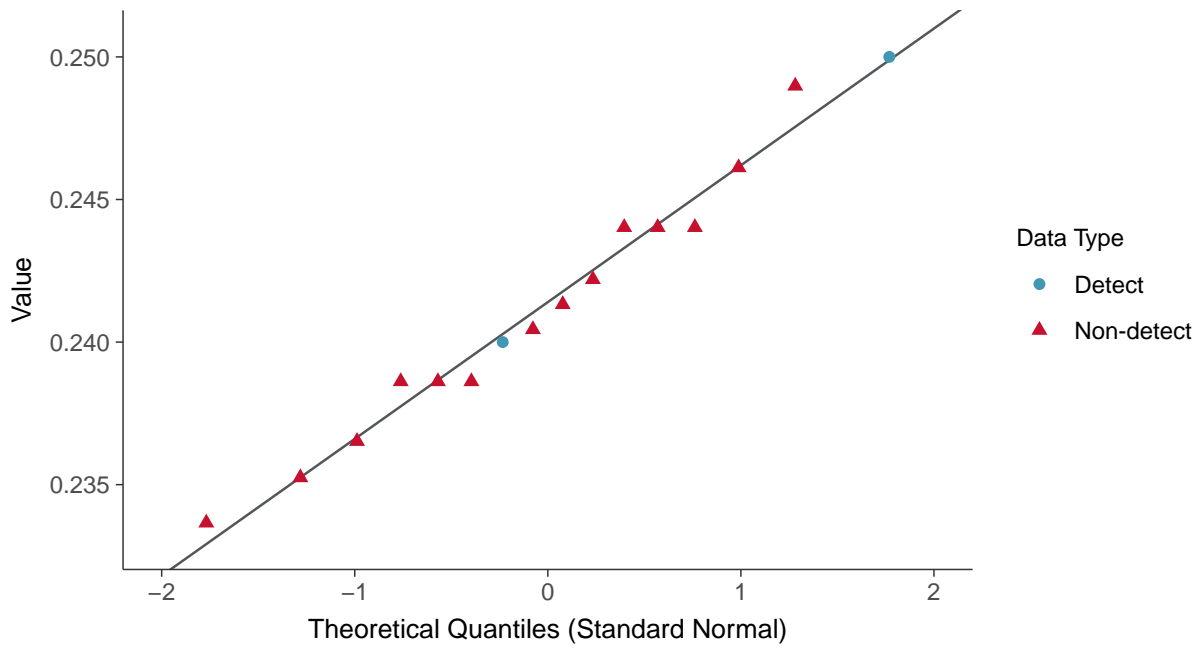
Chromium, MW-17003 (ug/L)





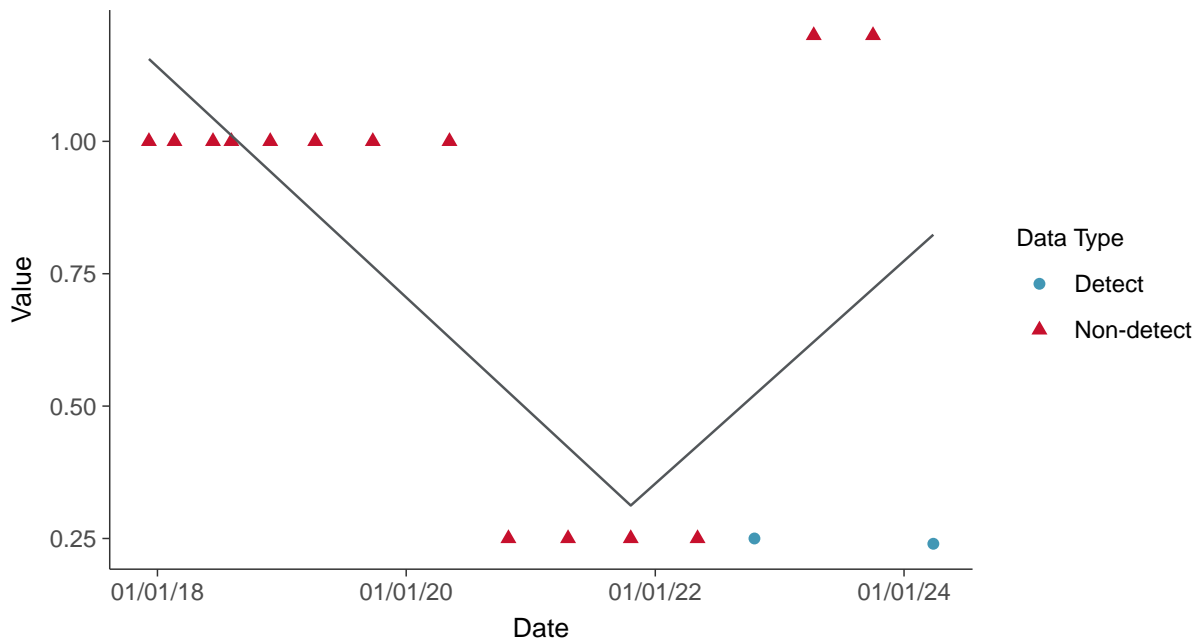
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

Chromium, MW-17003 (ug/L)



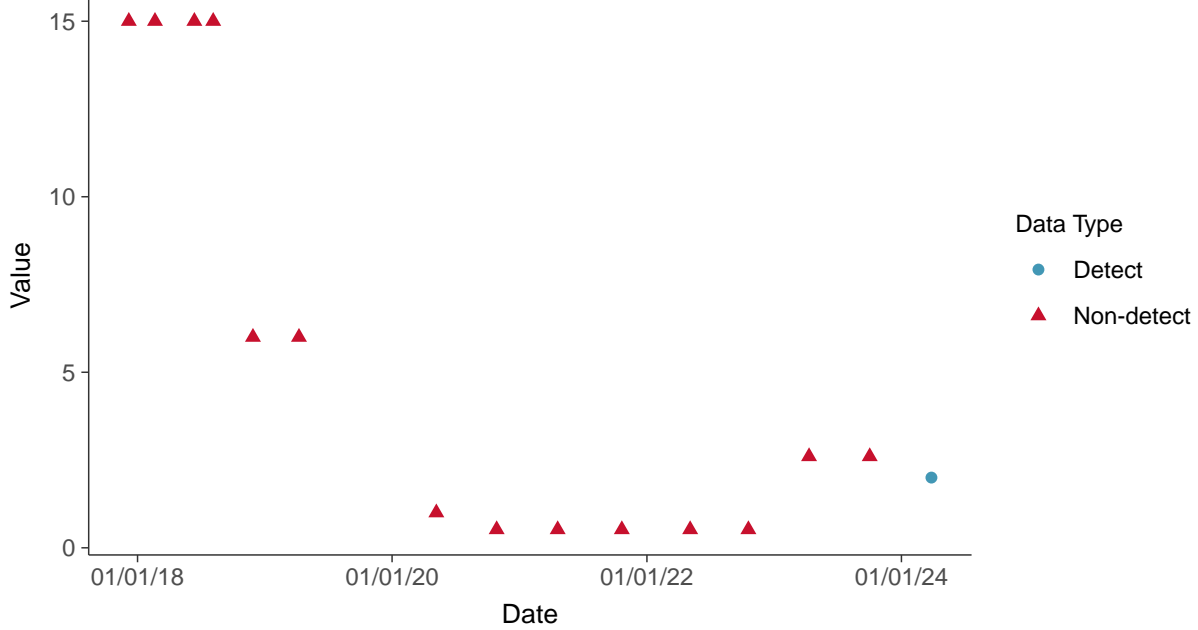


Appendix IV: Cobalt, MW-17003

ID: 16_2_110

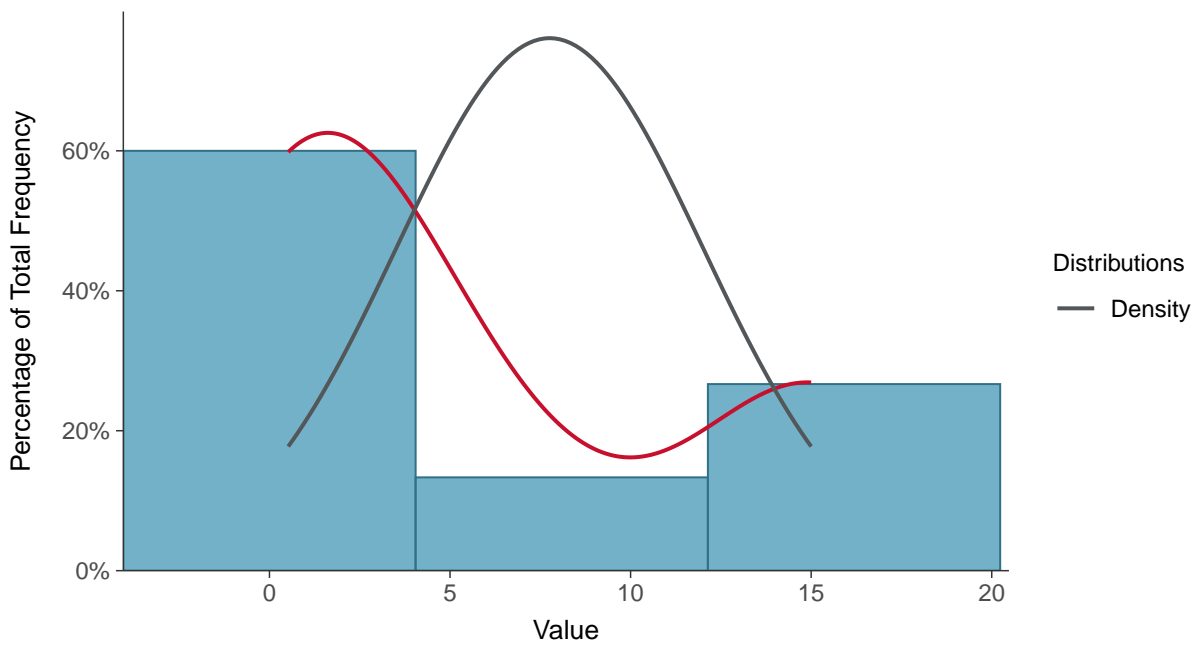
Scatter Plot

Cobalt, MW-17003 (ug/L)



Histogram

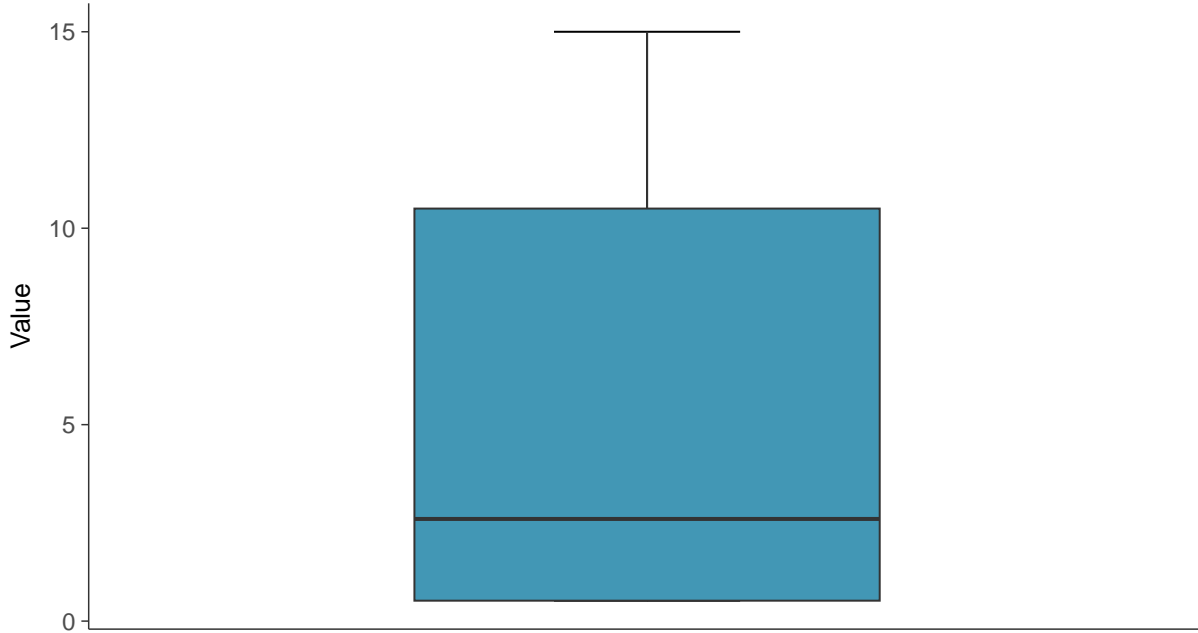
Cobalt, MW-17003 (ug/L)





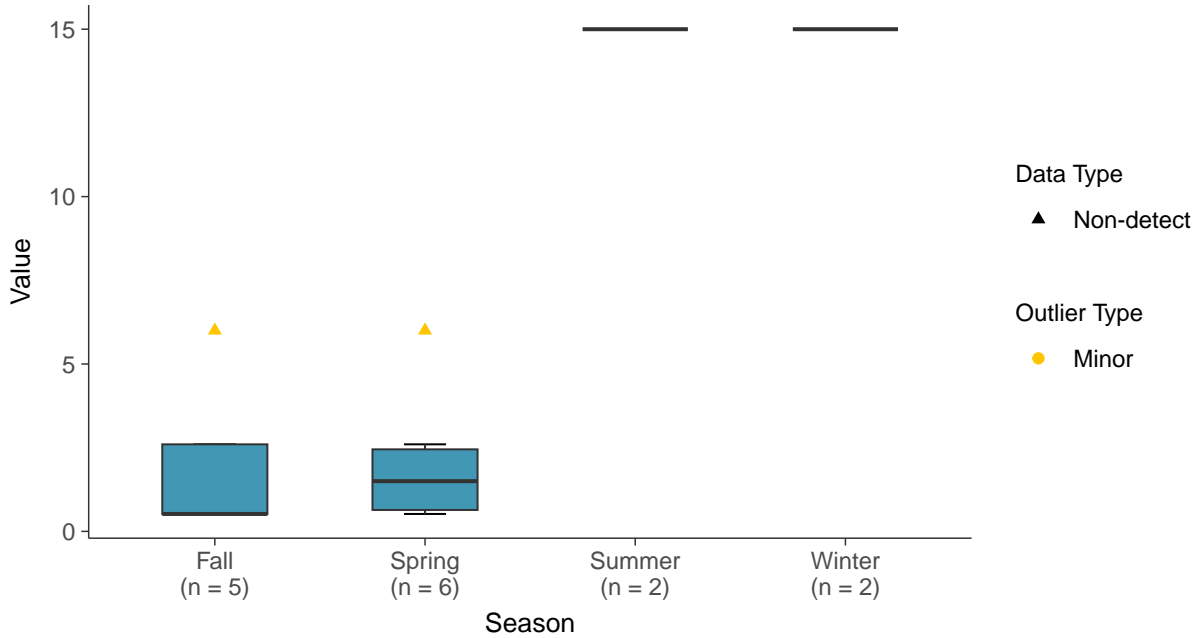
Boxplot

Cobalt, MW-17003 (ug/L)



Boxplot by Season

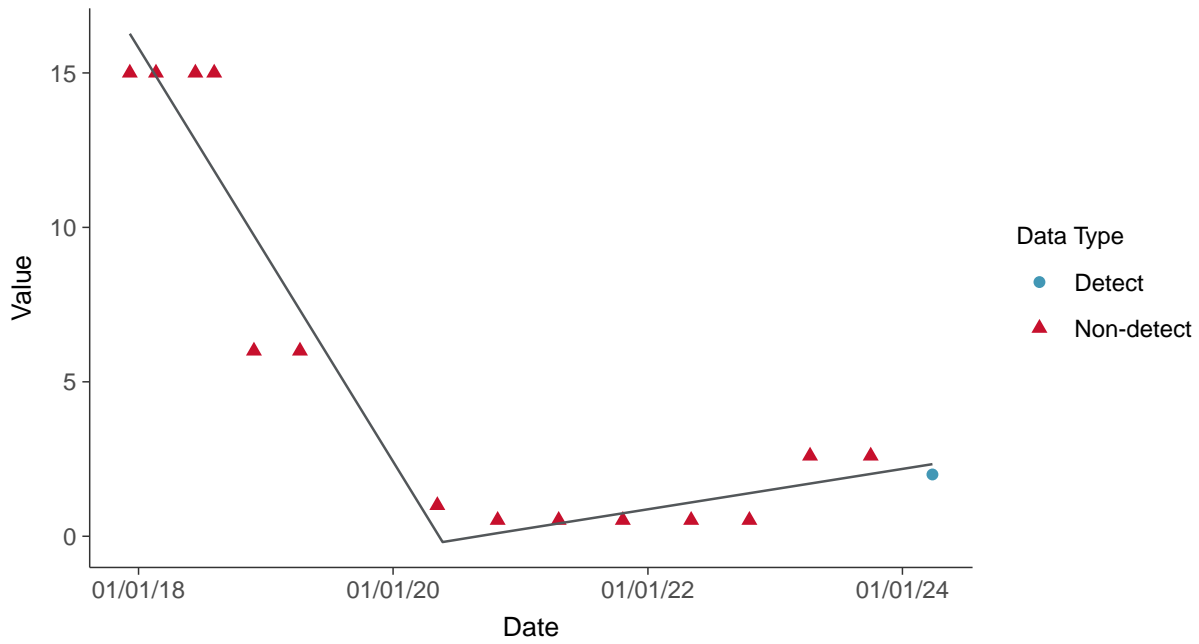
Cobalt, MW-17003 (ug/L)





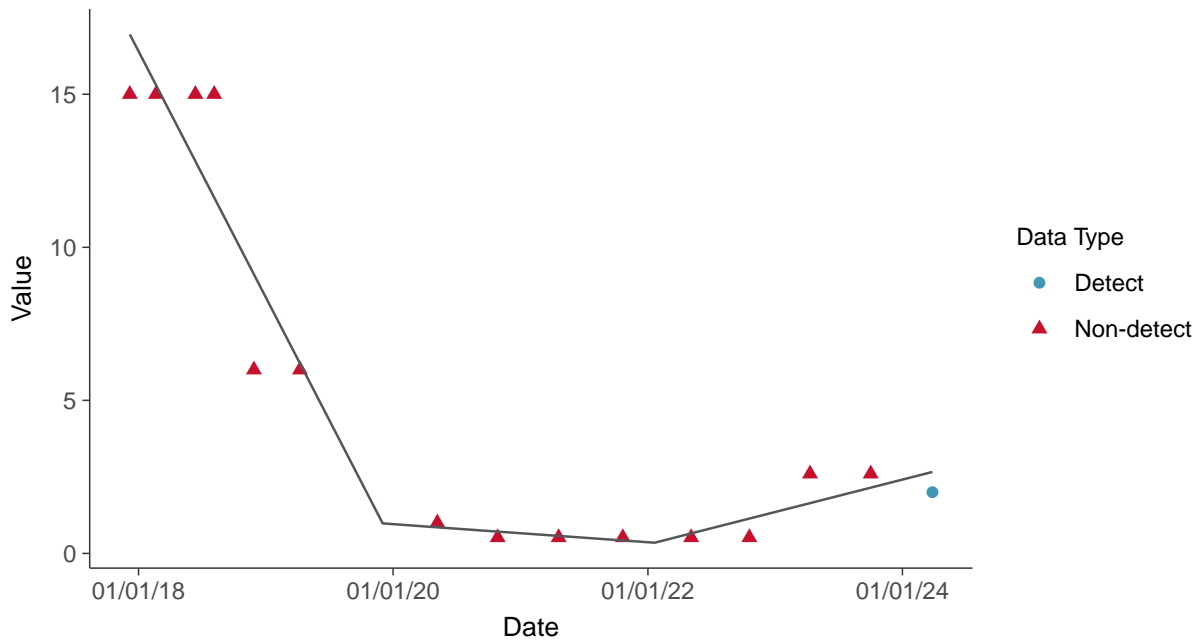
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

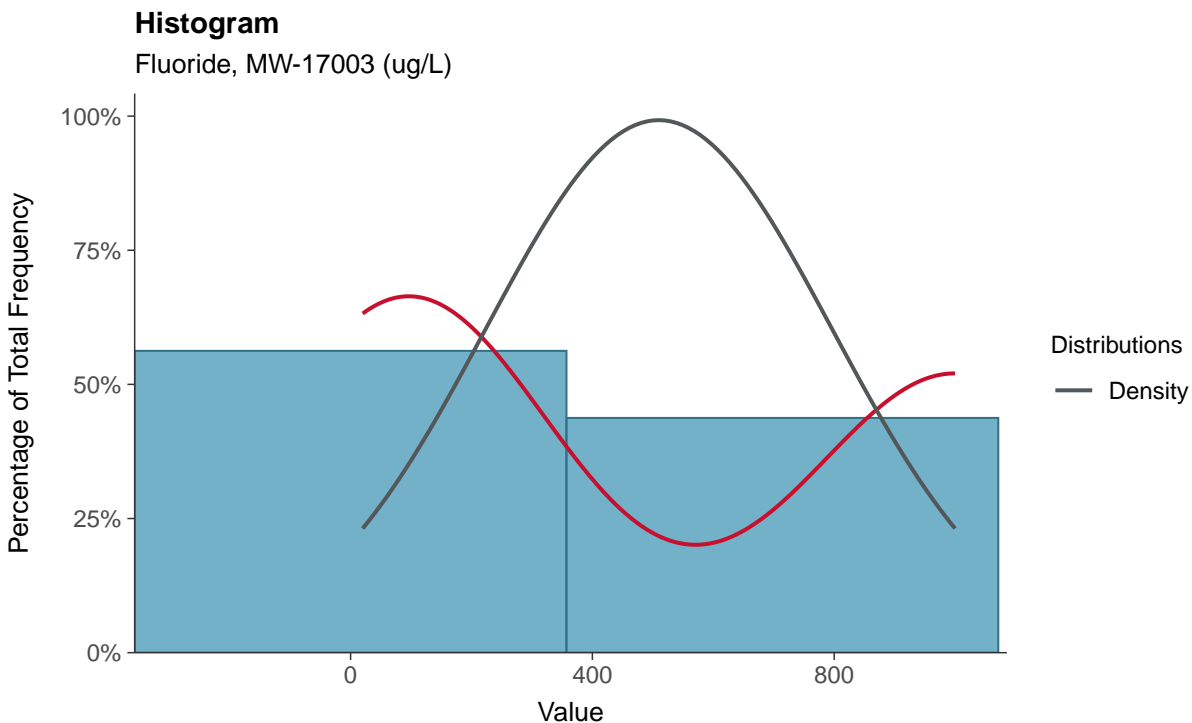
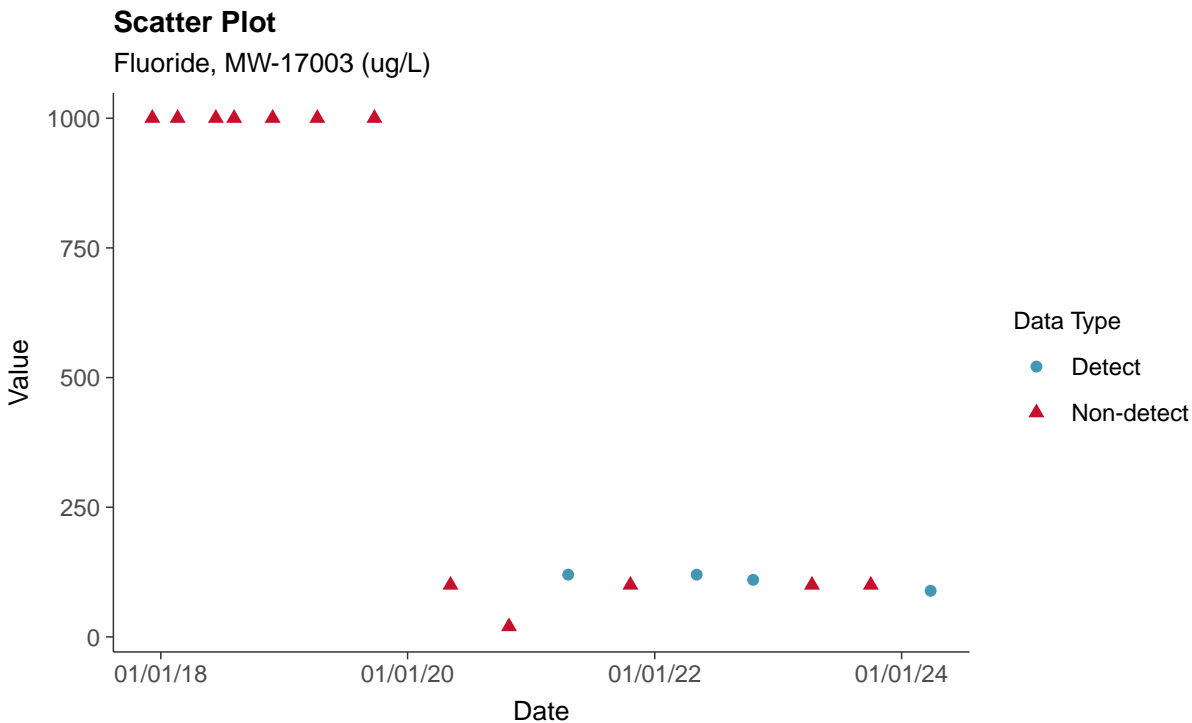
Cobalt, MW-17003 (ug/L)





Appendix IV: Fluoride, MW-17003

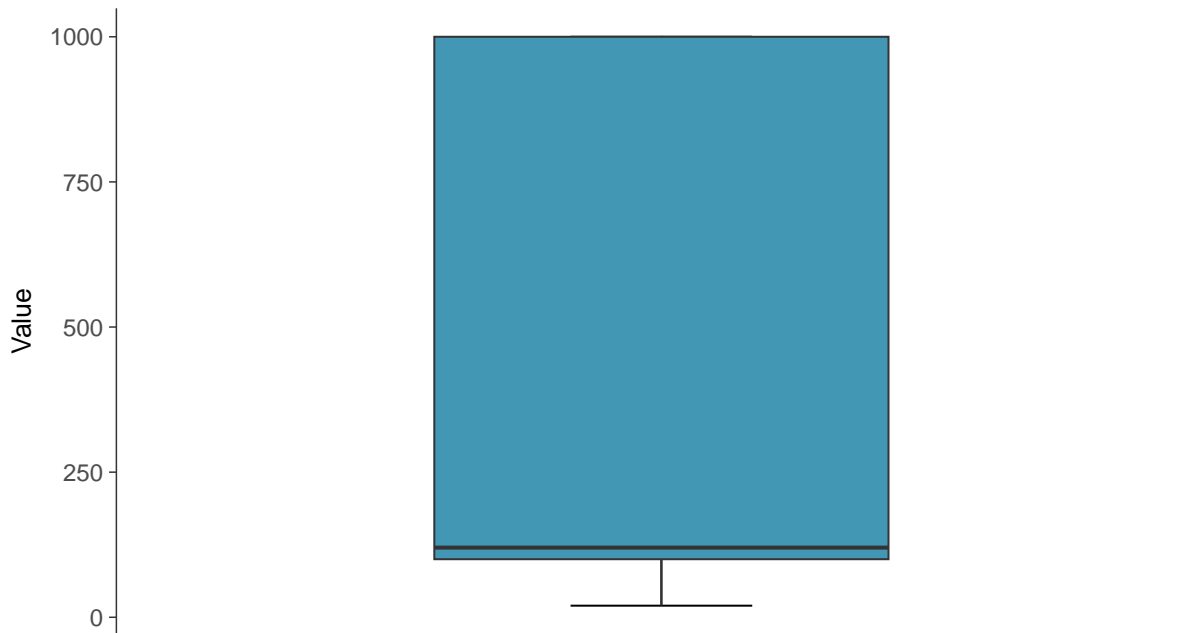
ID: 16_2_114





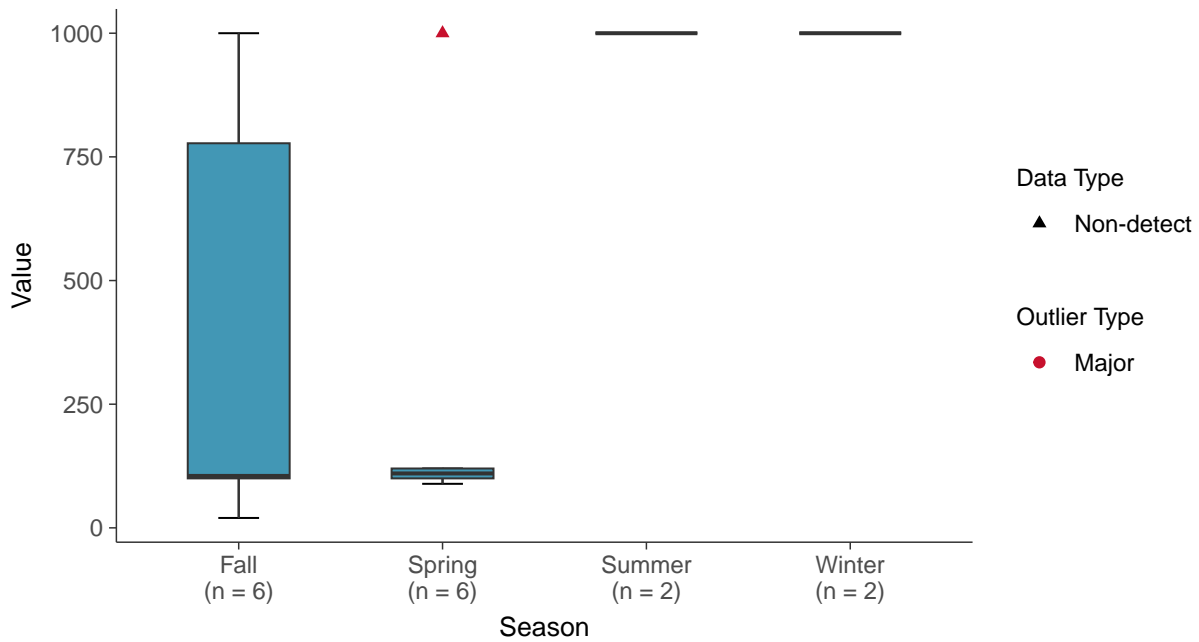
Boxplot

Fluoride, MW-17003 (ug/L)



Boxplot by Season

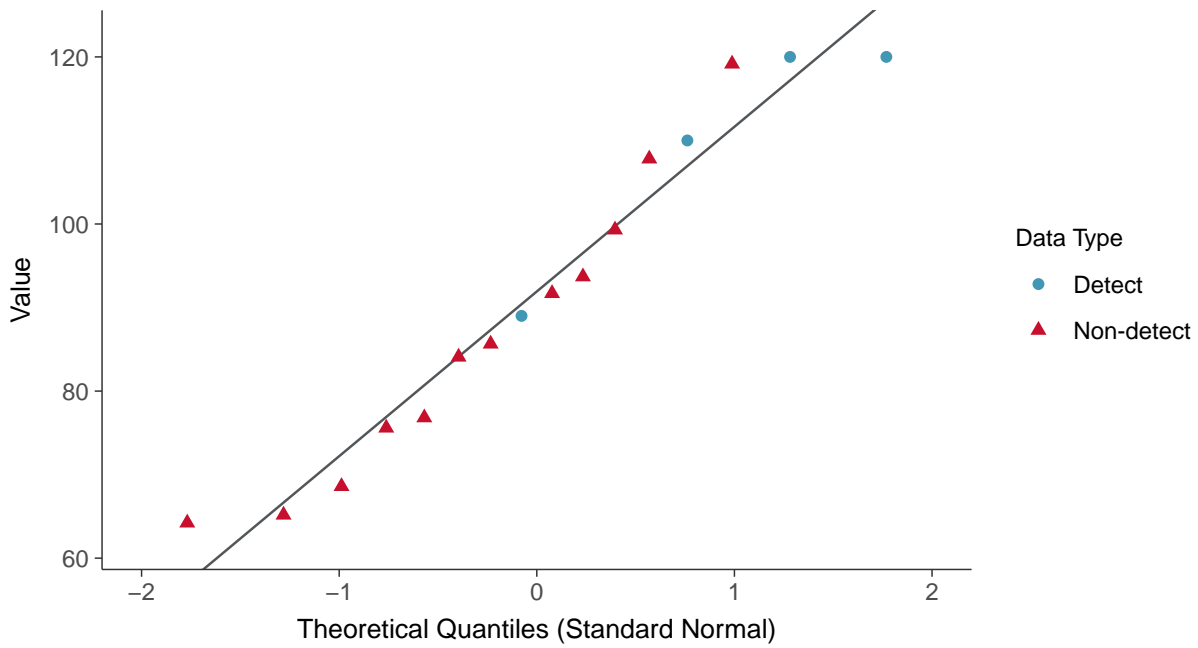
Fluoride, MW-17003 (ug/L)





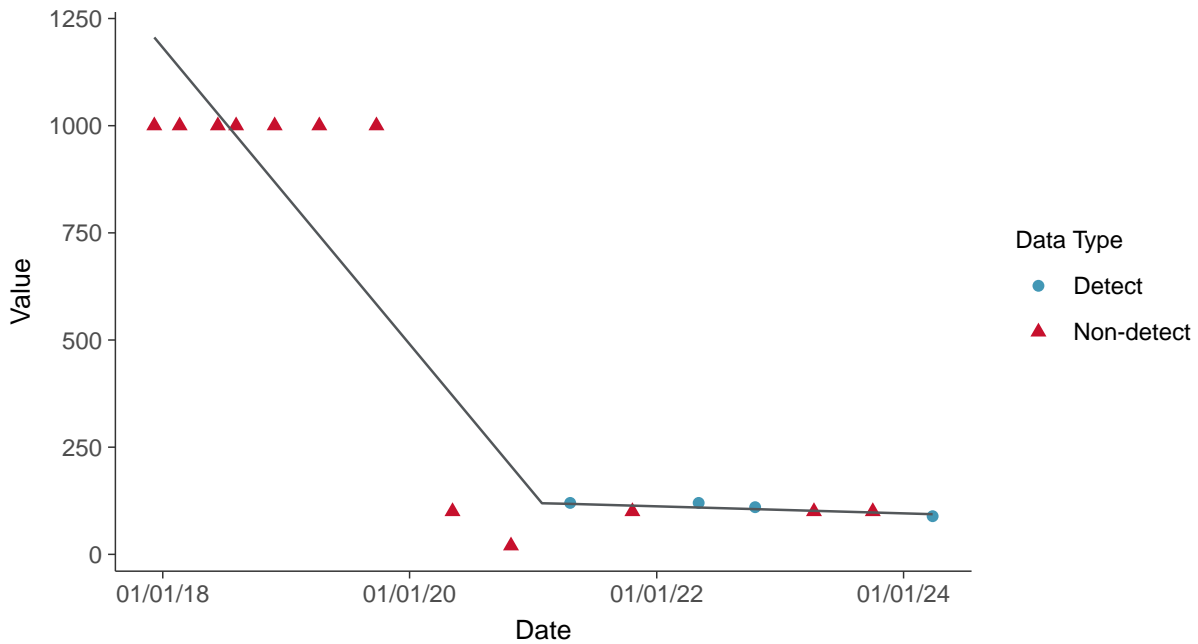
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

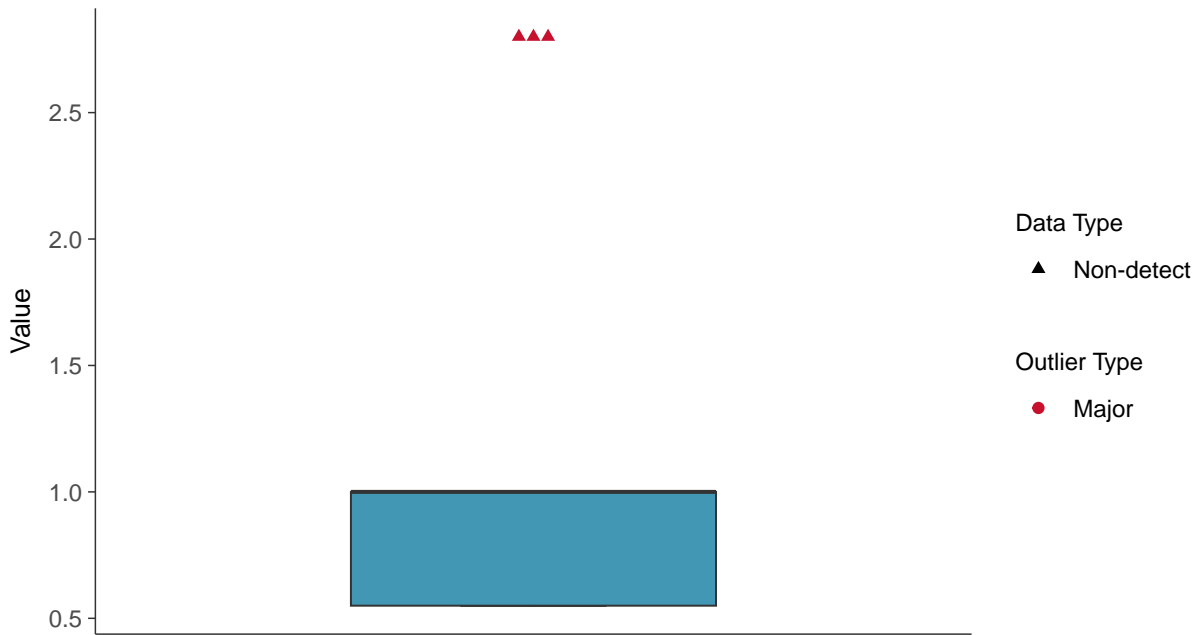
Fluoride, MW-17003 (ug/L)





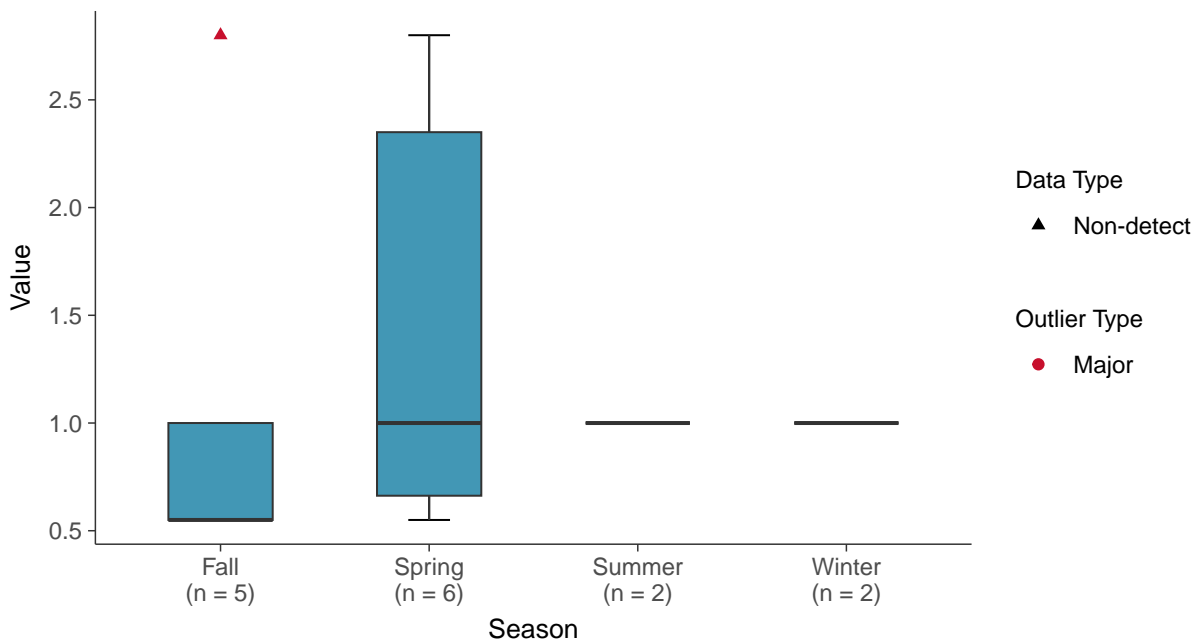
Boxplot

Lead, MW-17003 (ug/L)



Boxplot by Season

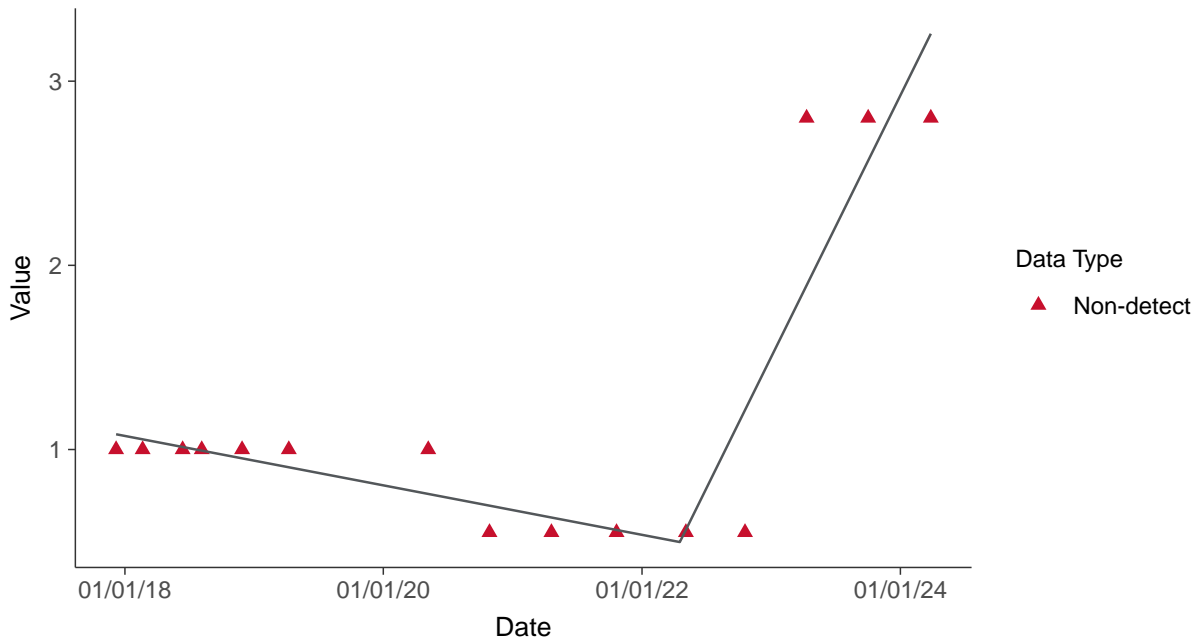
Lead, MW-17003 (ug/L)





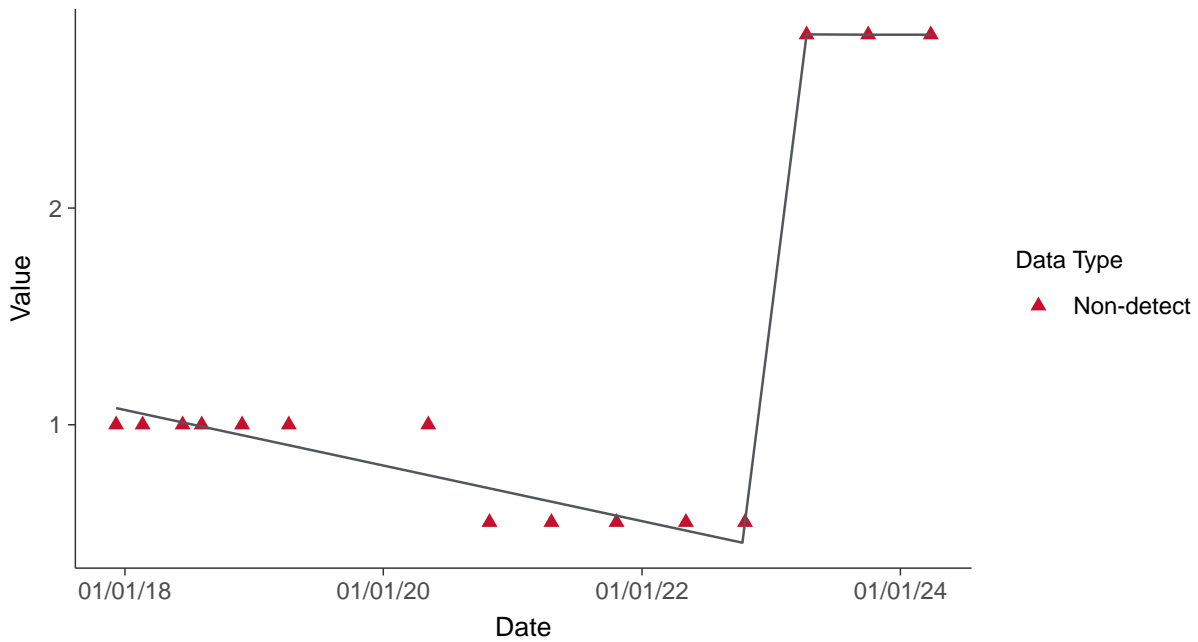
Trend Regression: Piecewise Linear-Linear

Lead, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-17003 (ug/L)



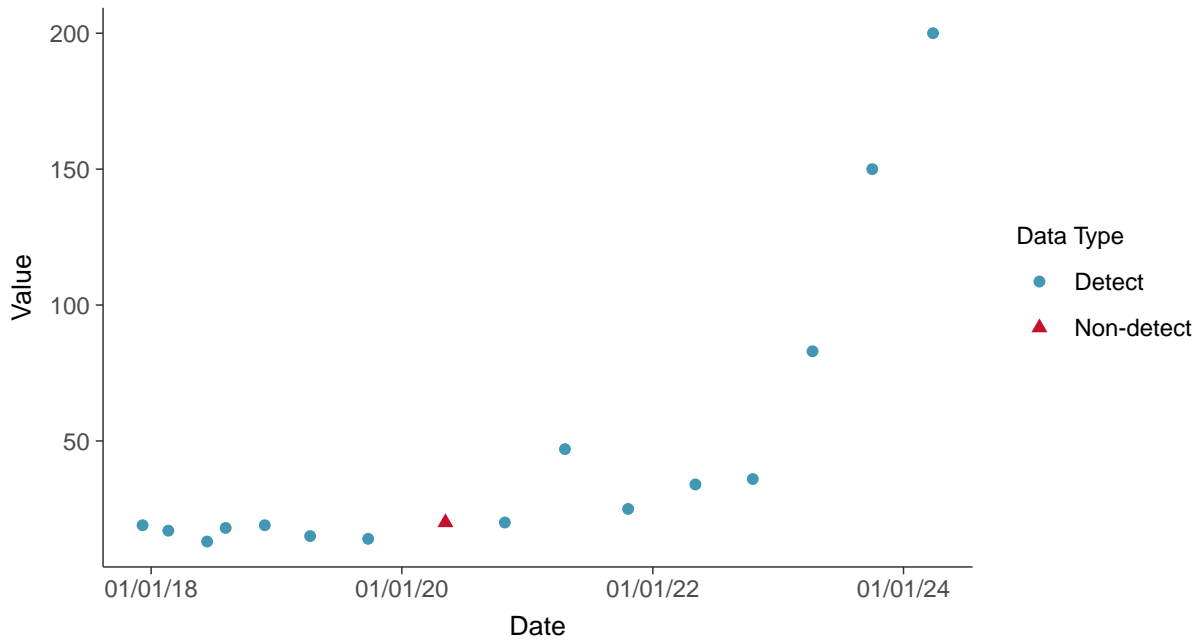


Appendix IV: Lithium, MW-17003

ID: 16_2_117

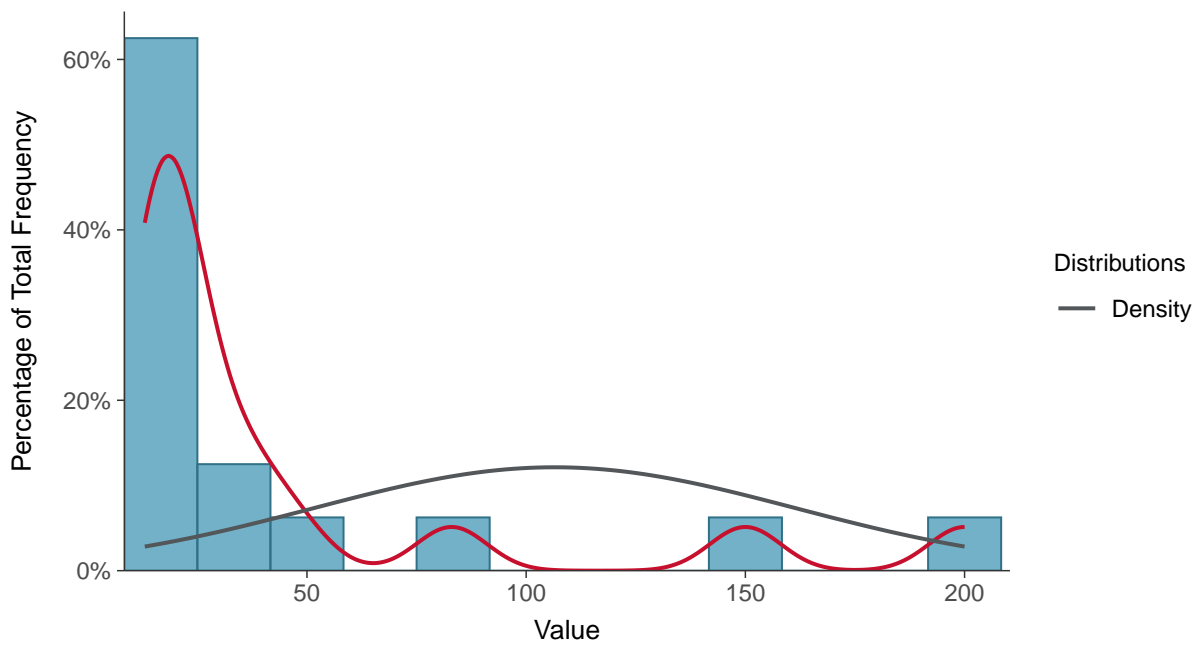
Scatter Plot

Lithium, MW-17003 (ug/L)



Histogram

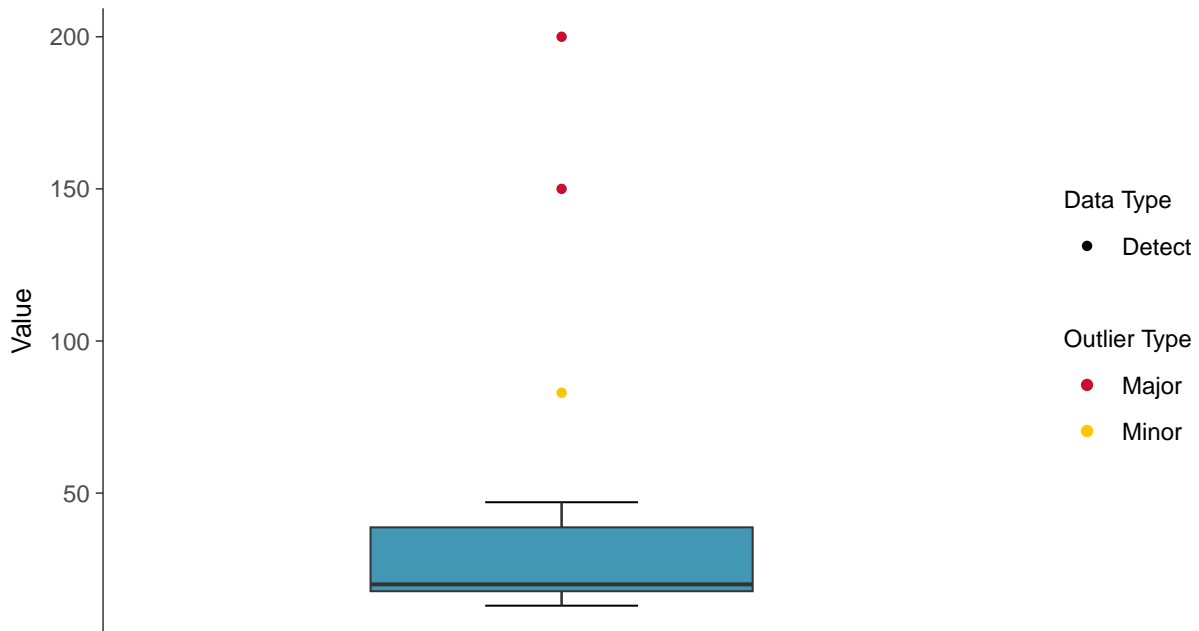
Lithium, MW-17003 (ug/L)





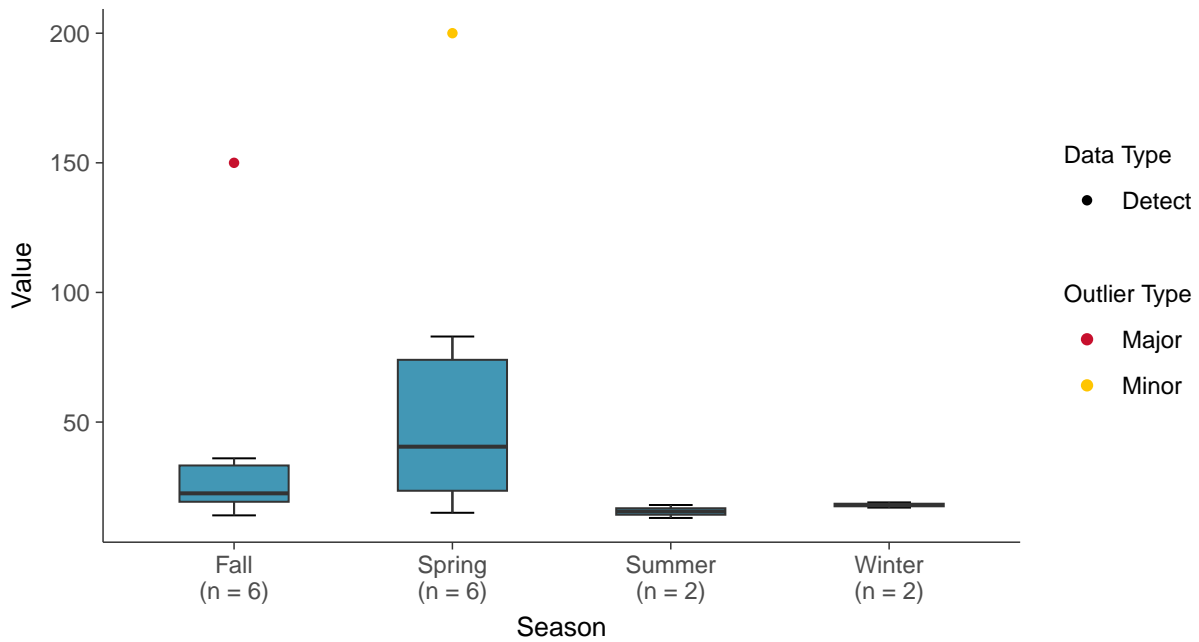
Boxplot

Lithium, MW-17003 (ug/L)



Boxplot by Season

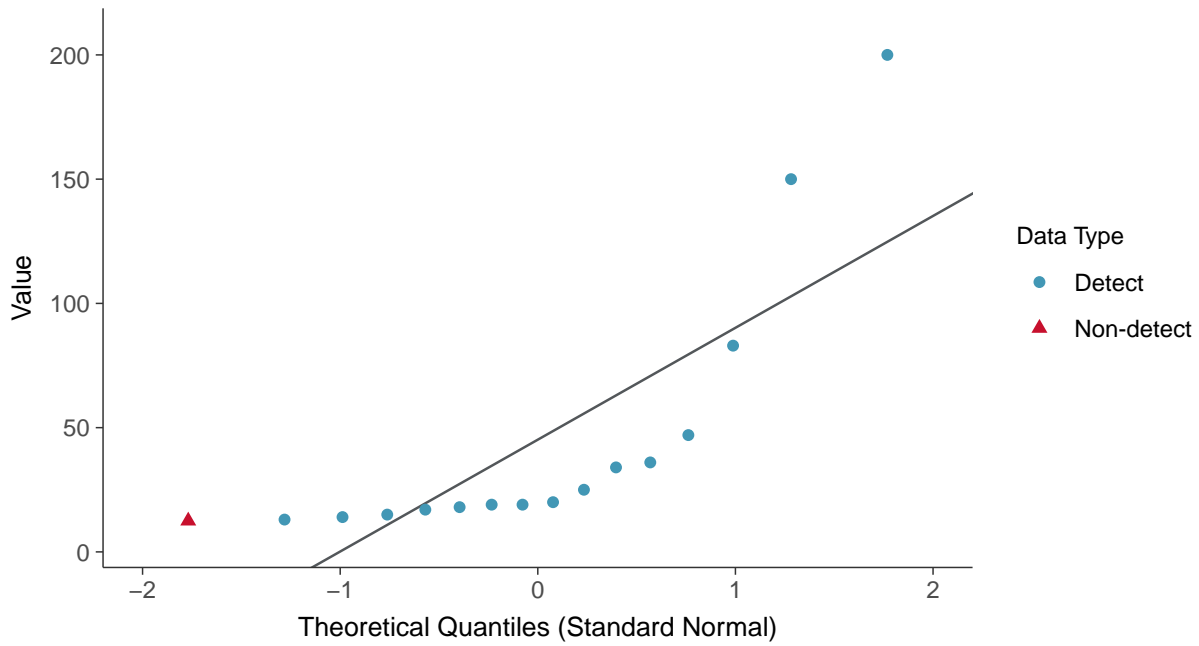
Lithium, MW-17003 (ug/L)





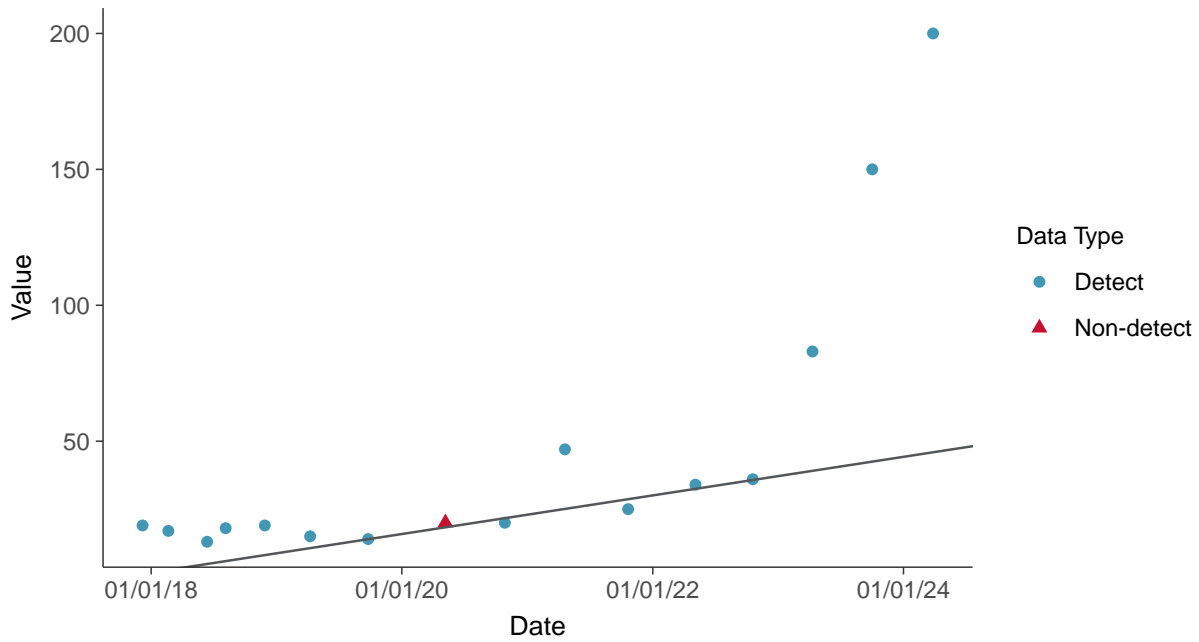
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-17003 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

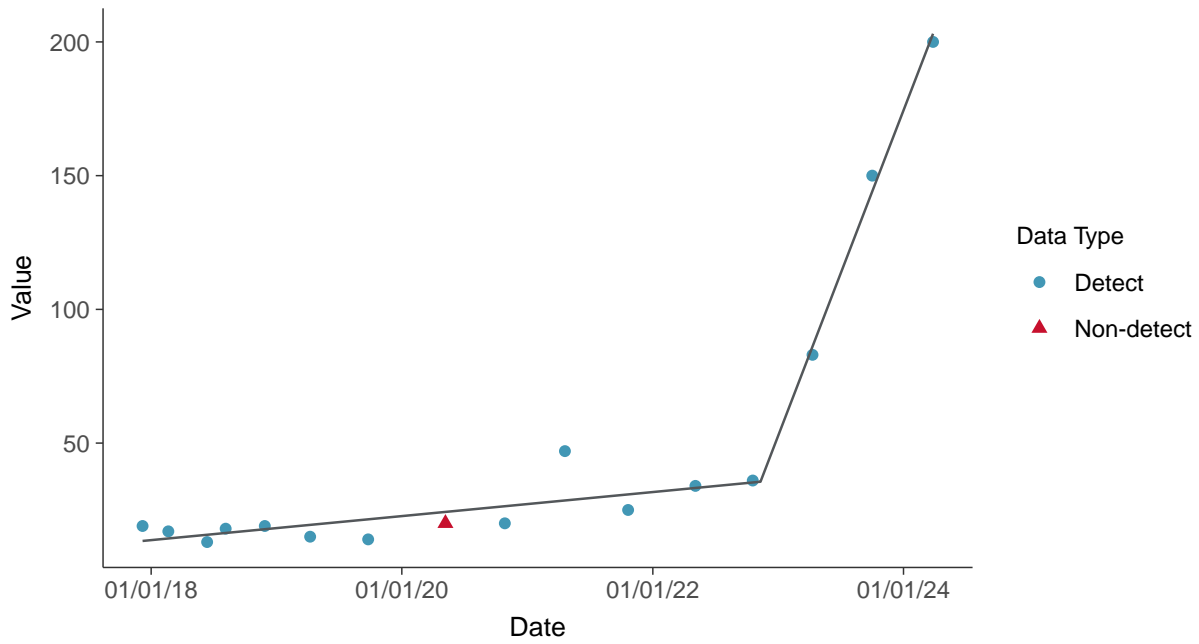
Lithium, MW-17003 (ug/L)





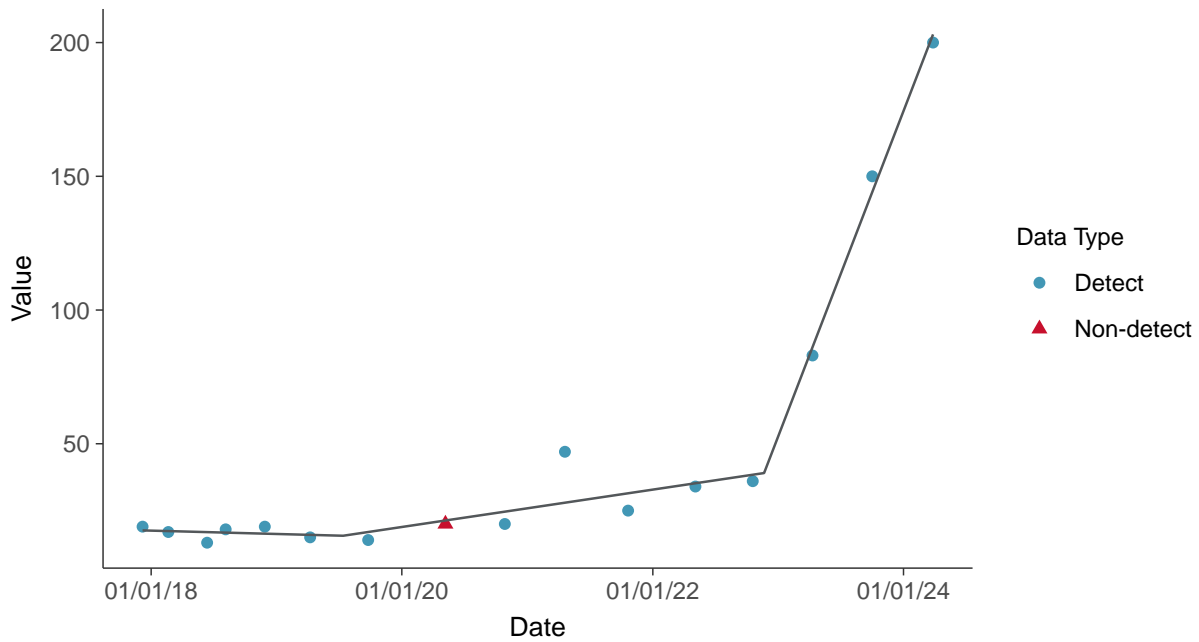
Trend Regression: Piecewise Linear-Linear

Lithium, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

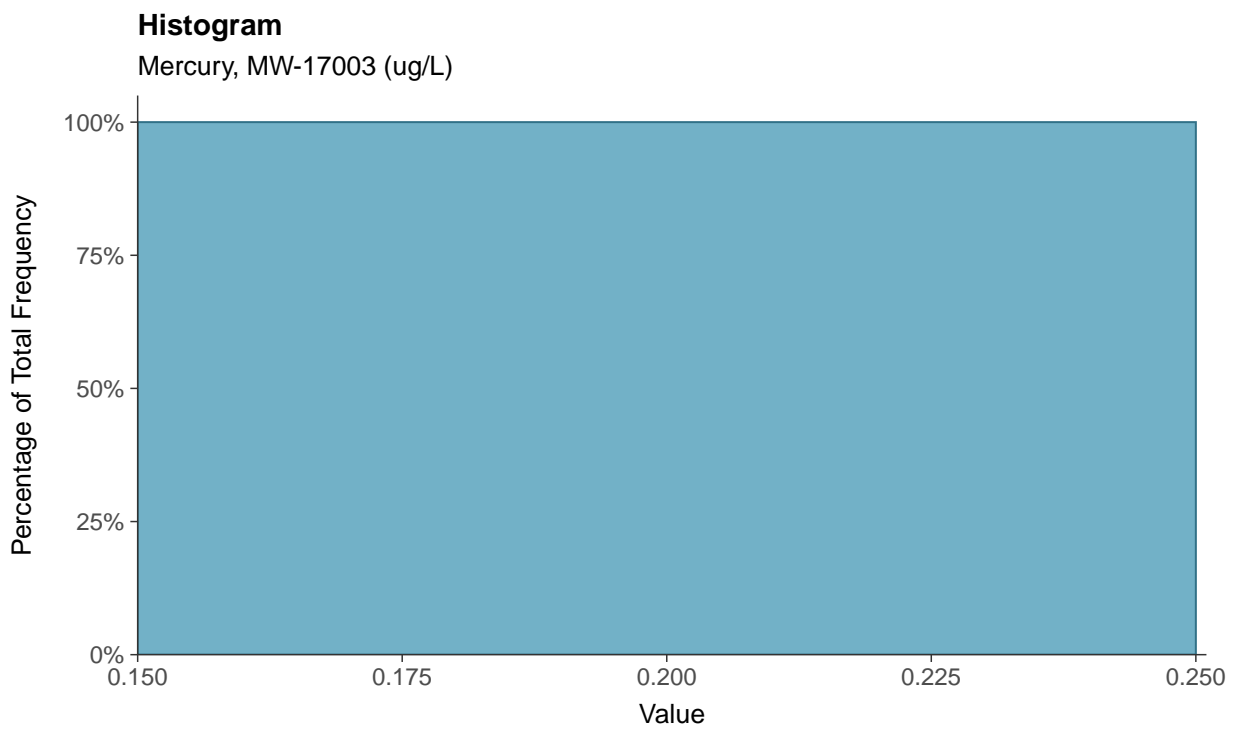
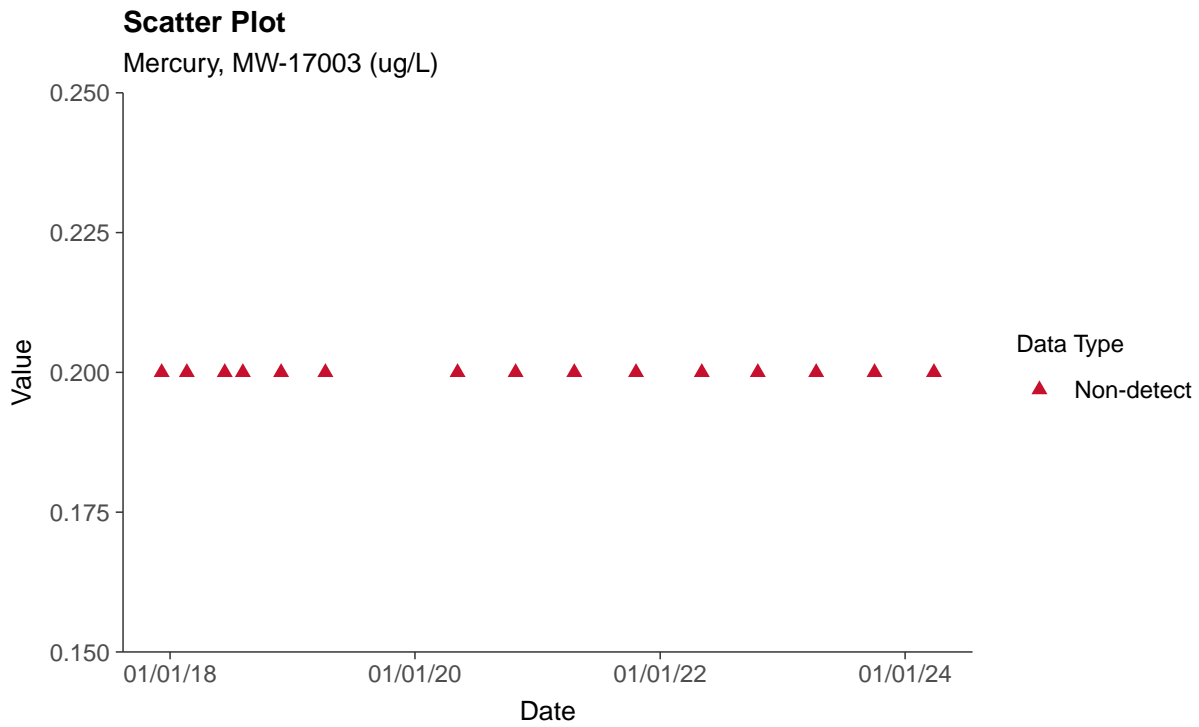
Lithium, MW-17003 (ug/L)





Appendix IV: Mercury, MW-17003

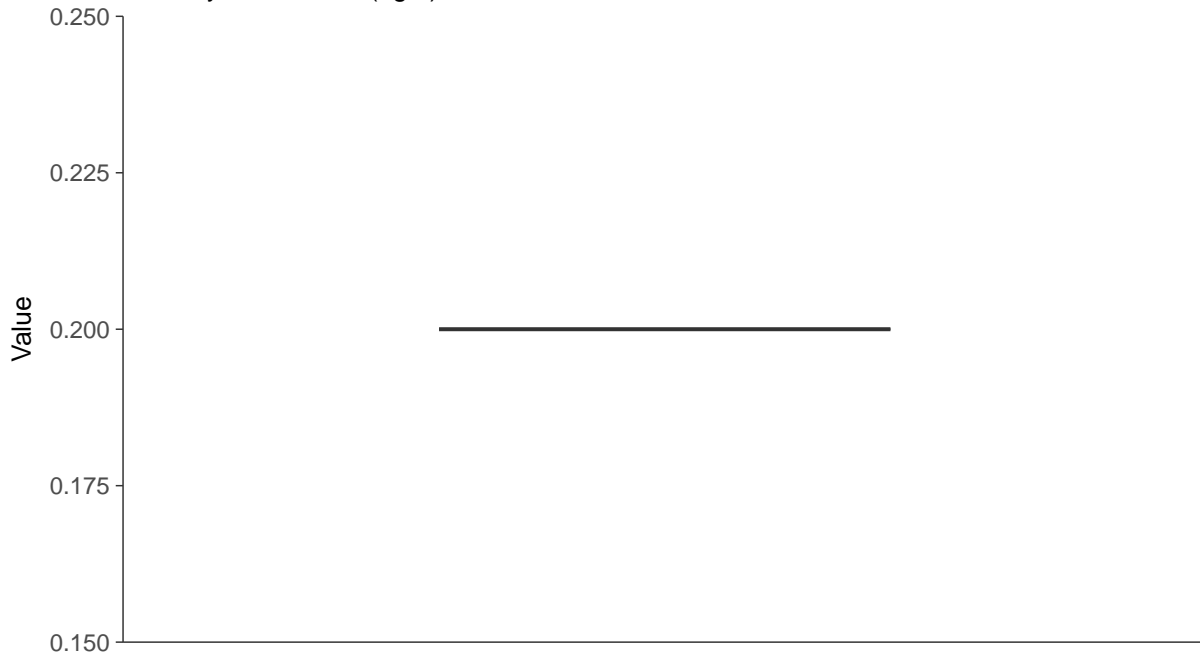
ID: 16_2_118





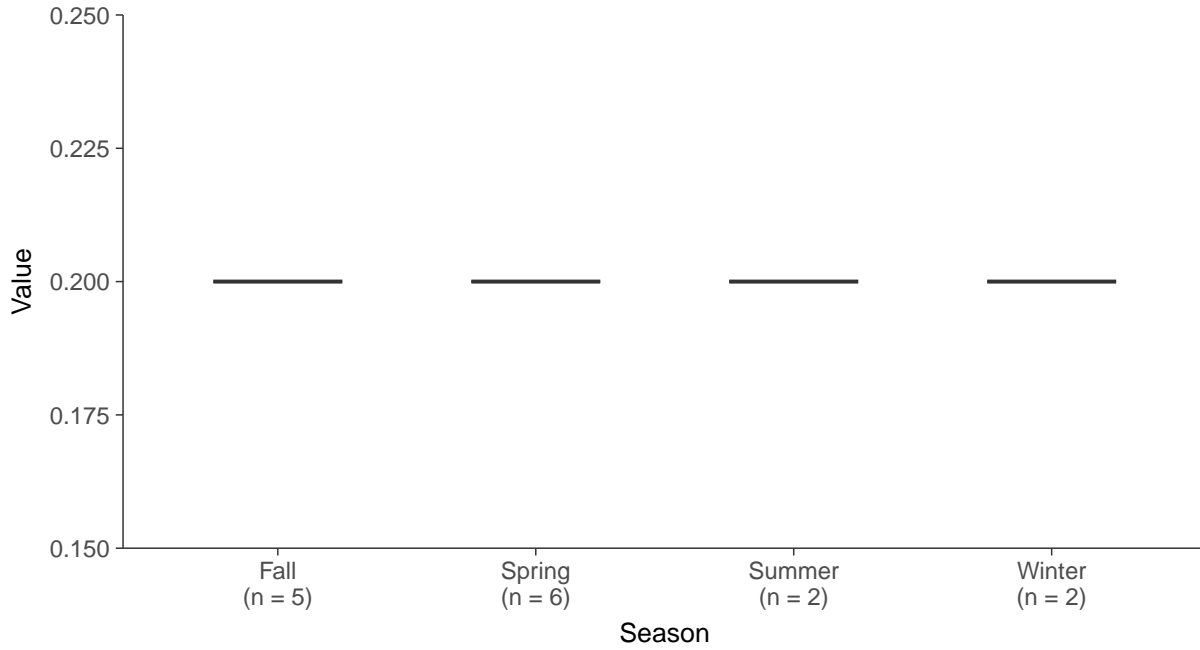
Boxplot

Mercury, MW-17003 (ug/L)



Boxplot by Season

Mercury, MW-17003 (ug/L)



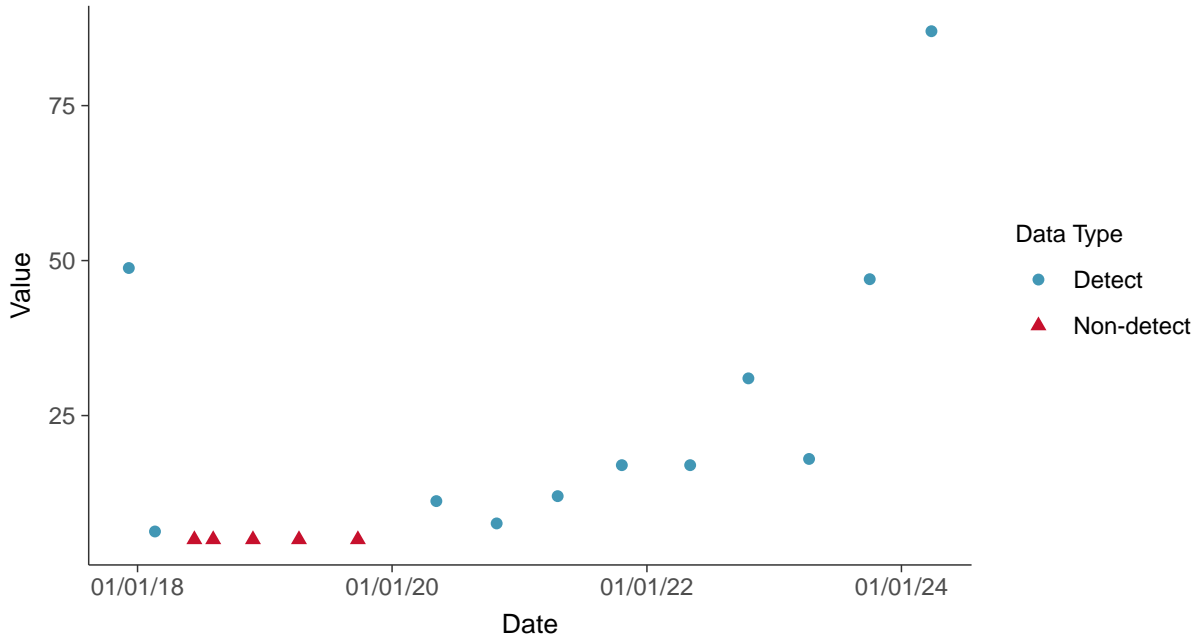


Appendix IV: Molybdenum, MW-17003

ID: 16_2_119

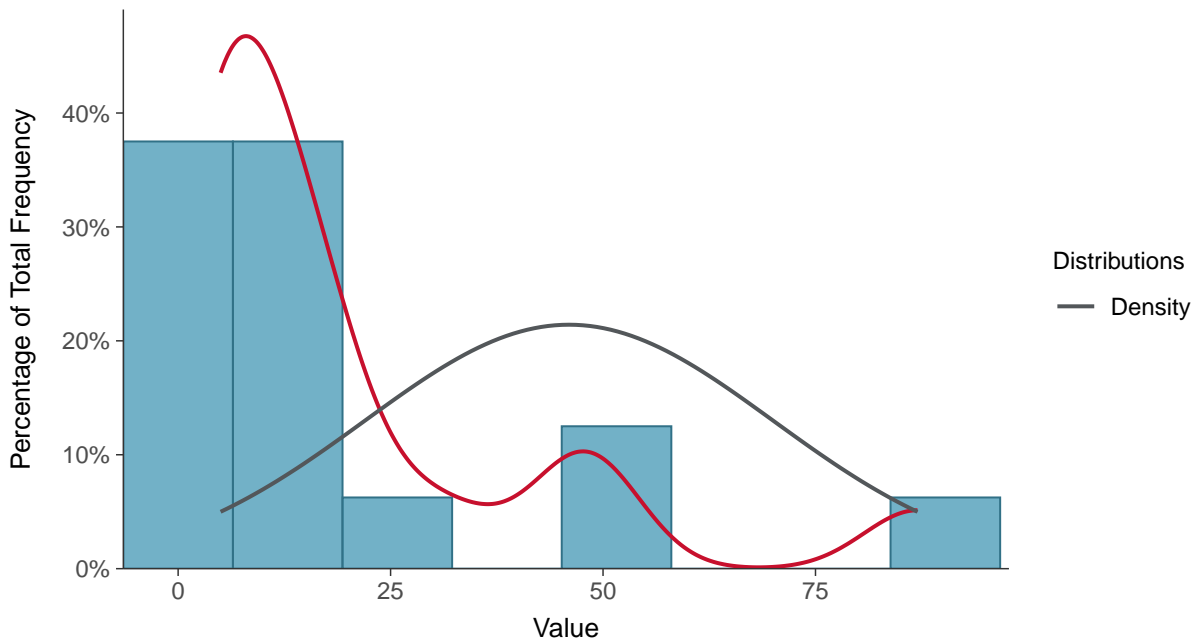
Scatter Plot

Molybdenum, MW-17003 (ug/L)



Histogram

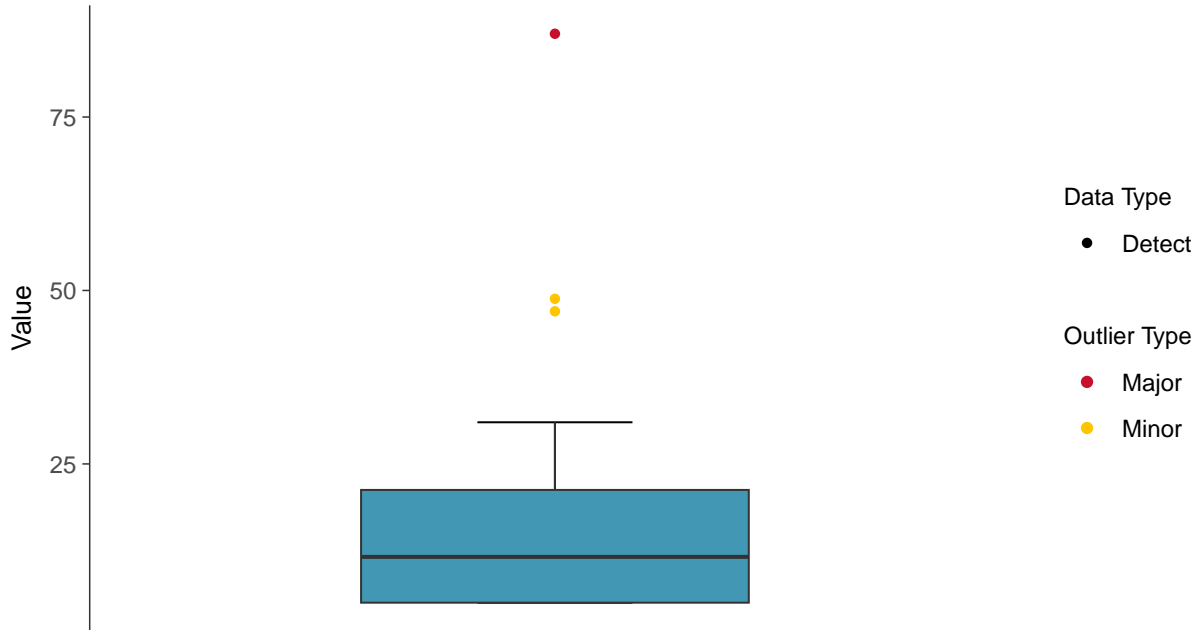
Molybdenum, MW-17003 (ug/L)





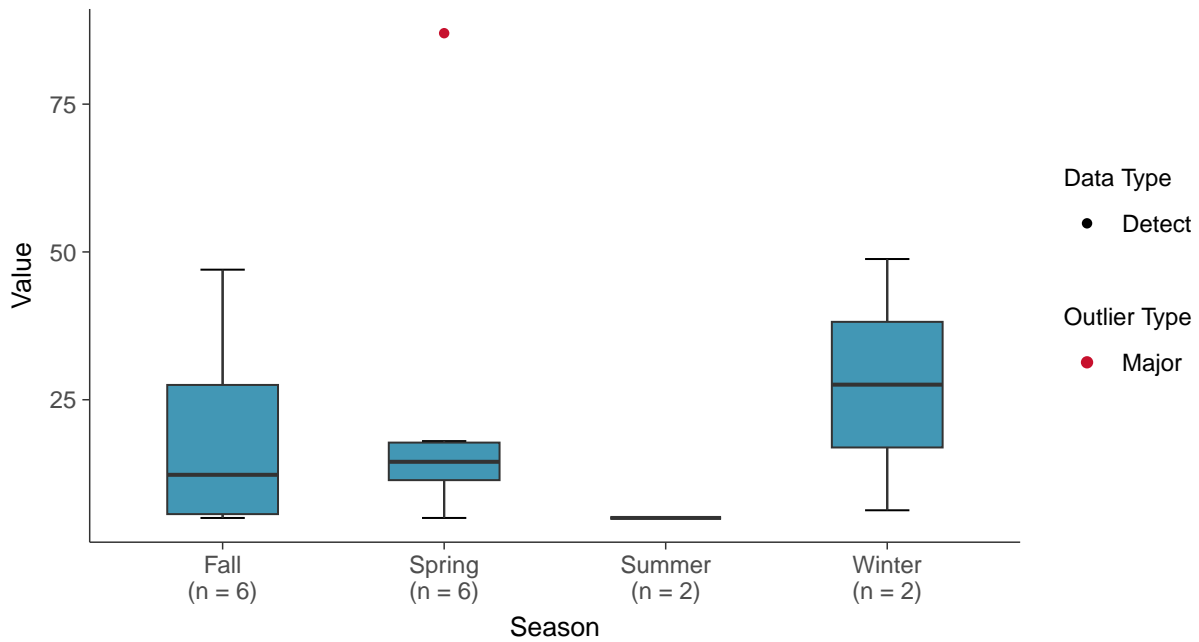
Boxplot

Molybdenum, MW-17003 (ug/L)



Boxplot by Season

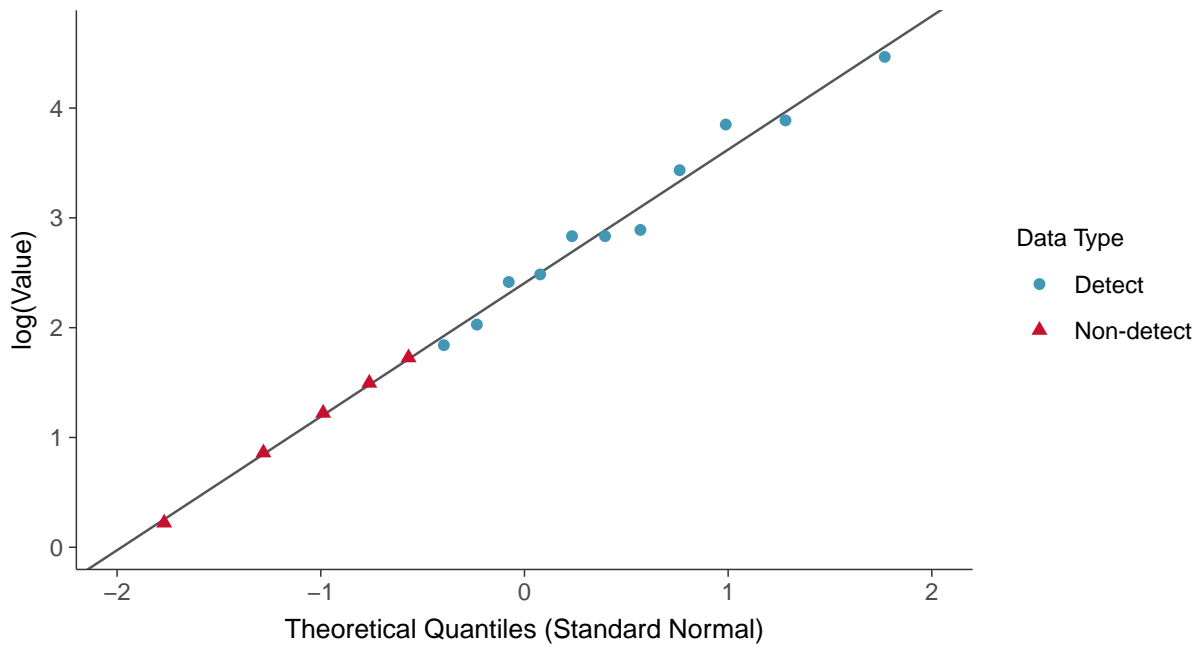
Molybdenum, MW-17003 (ug/L)





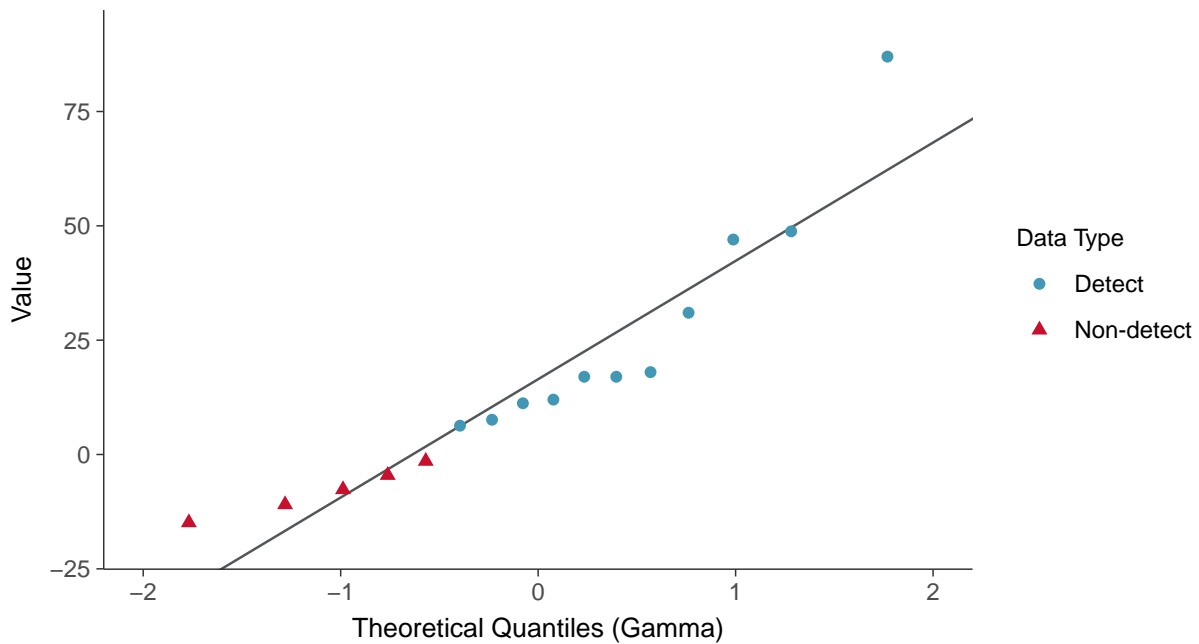
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17003 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

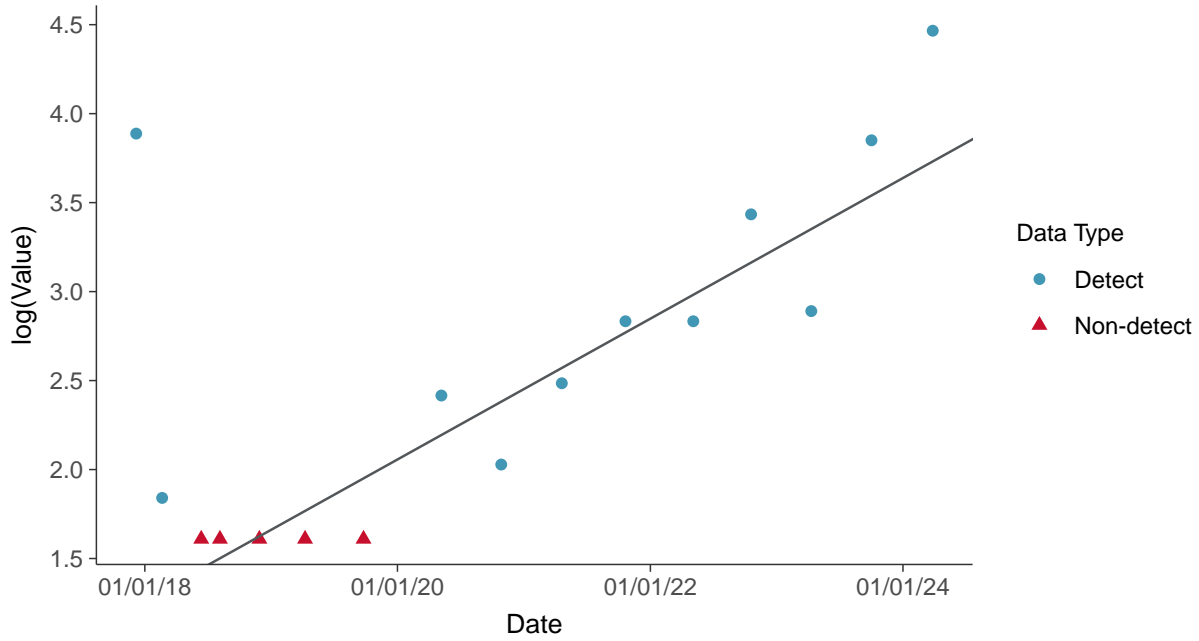
Molybdenum, MW-17003 (ug/L)





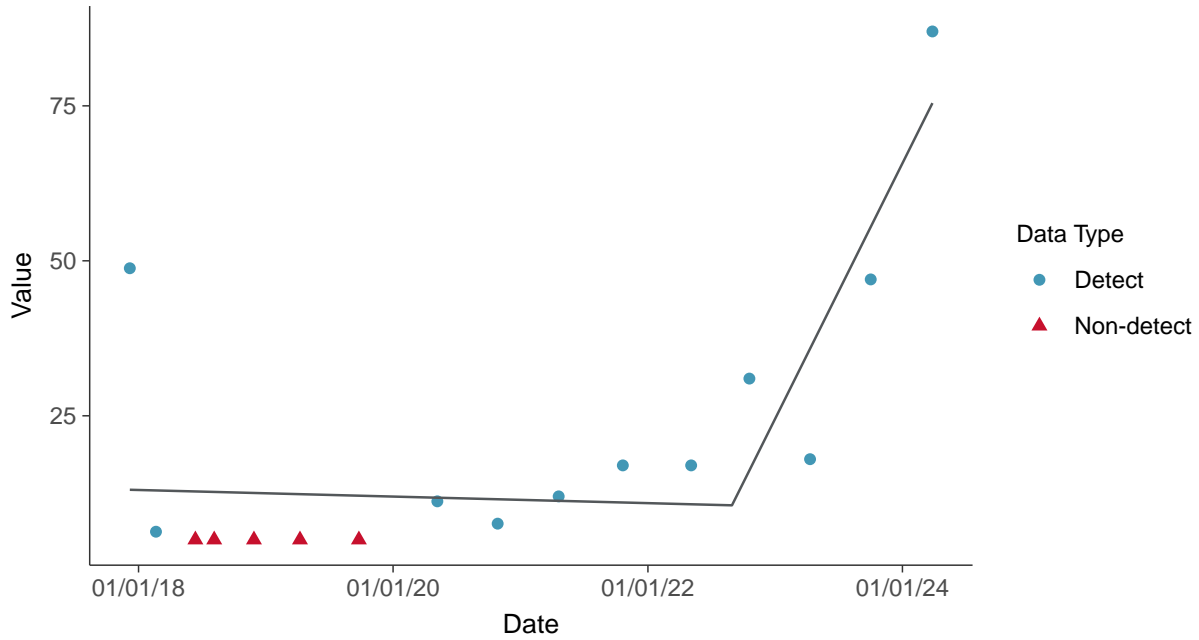
Trend Regression: Lognormal MLE

Molybdenum, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

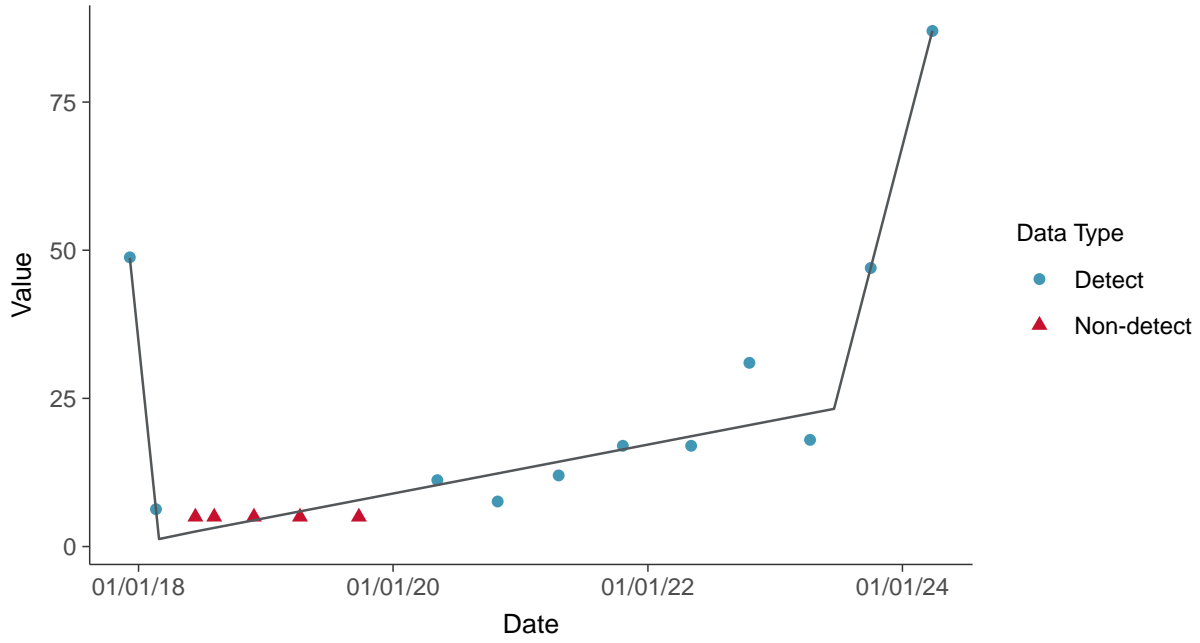
Molybdenum, MW-17003 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

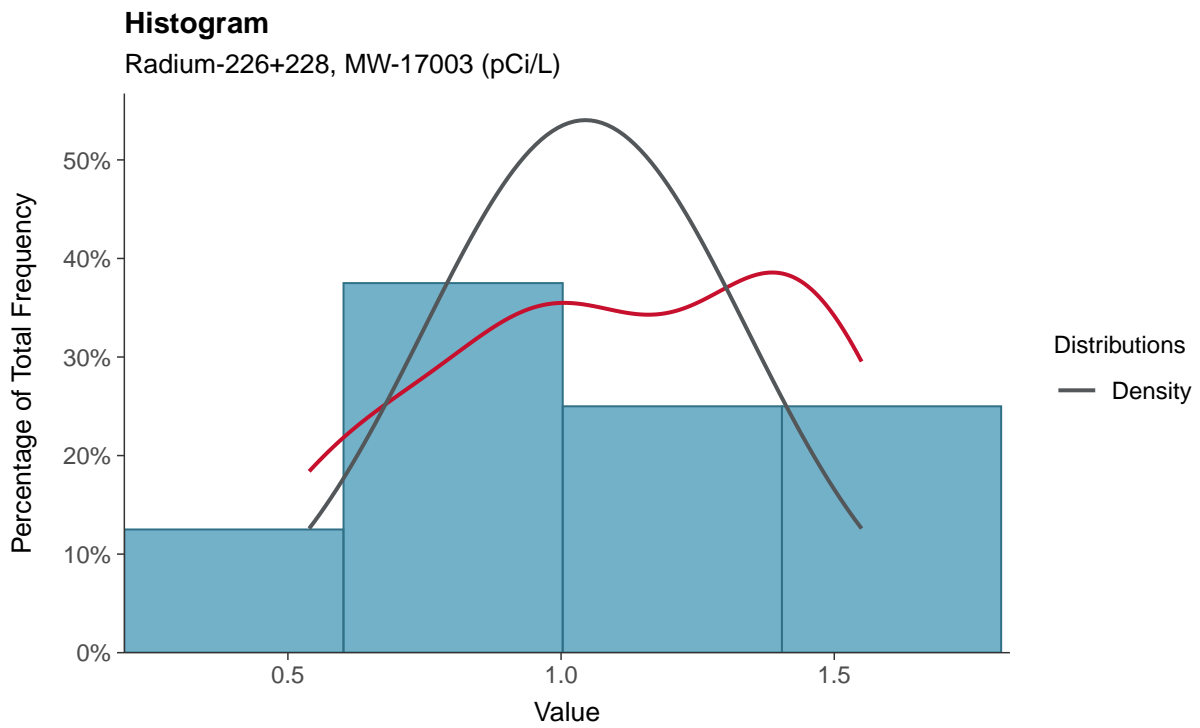
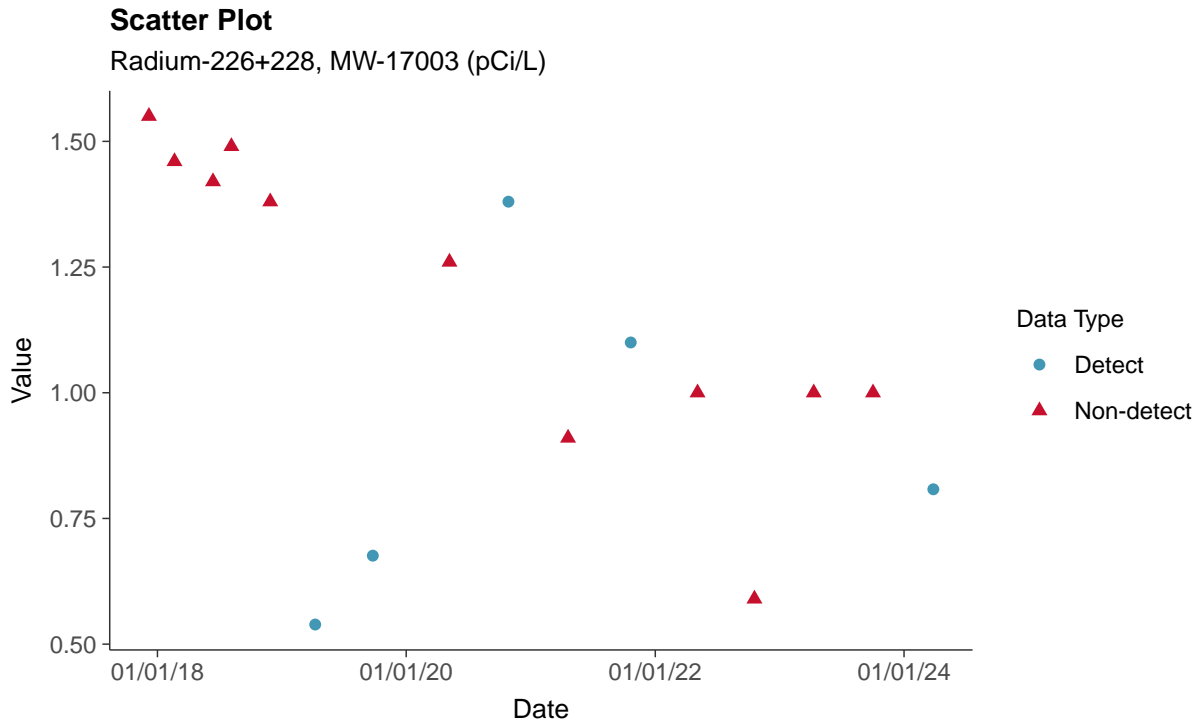
Molybdenum, MW-17003 (ug/L)





Appendix IV: Radium-226+228, MW-17003

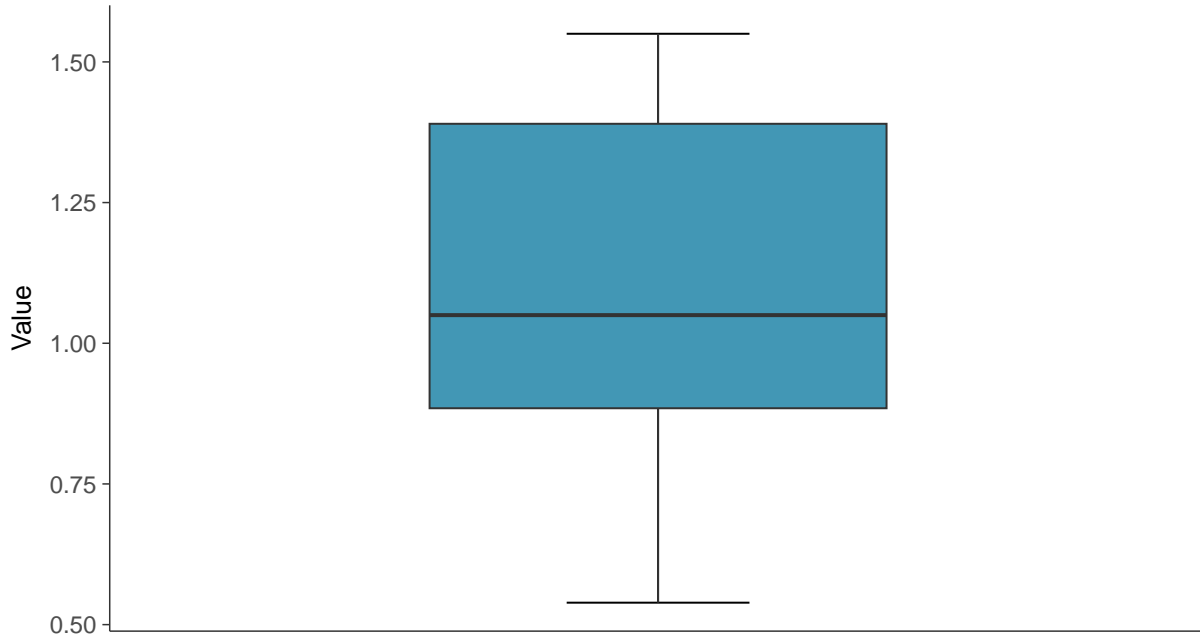
ID: 16_2_125





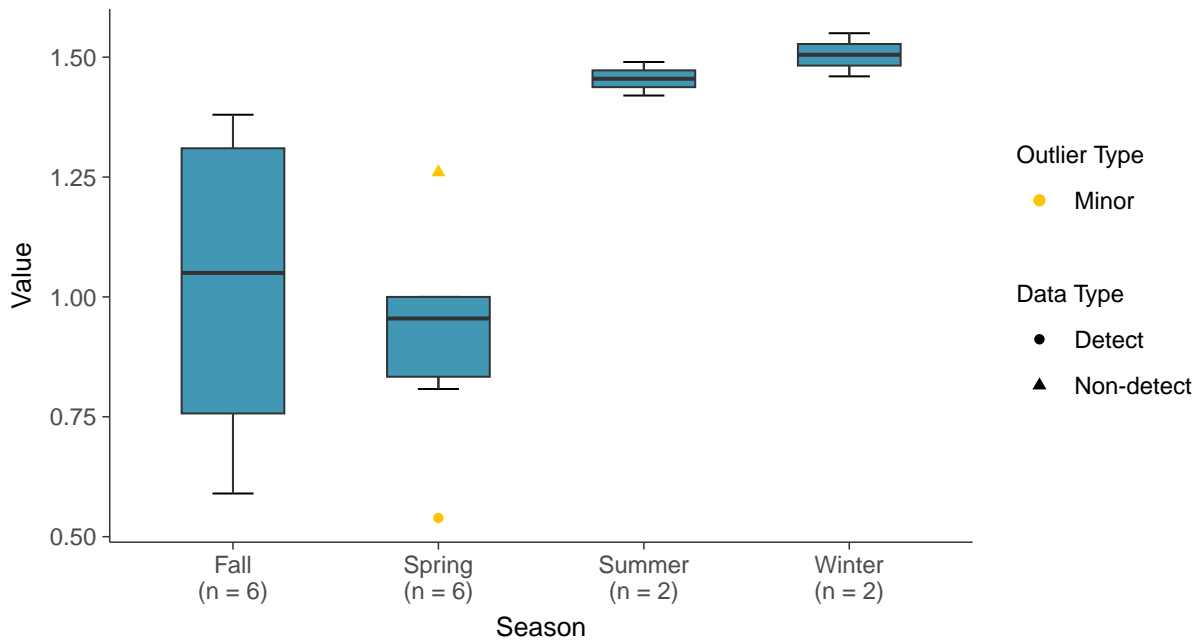
Boxplot

Radium-226+228, MW-17003 (pCi/L)



Boxplot by Season

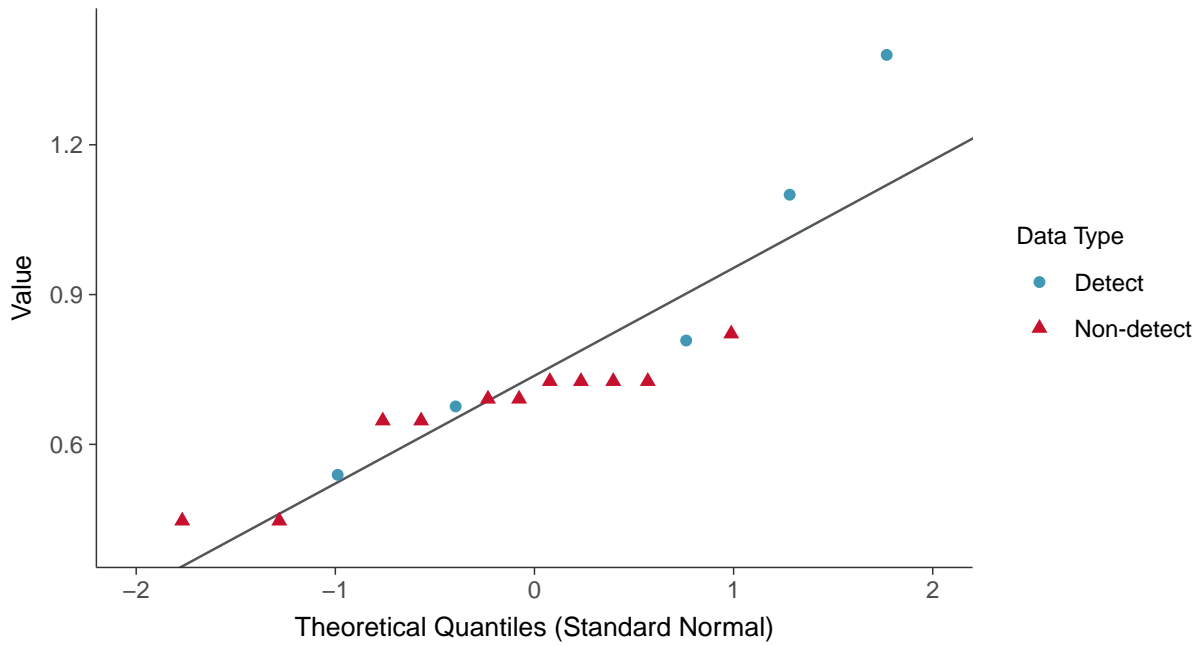
Radium-226+228, MW-17003 (pCi/L)





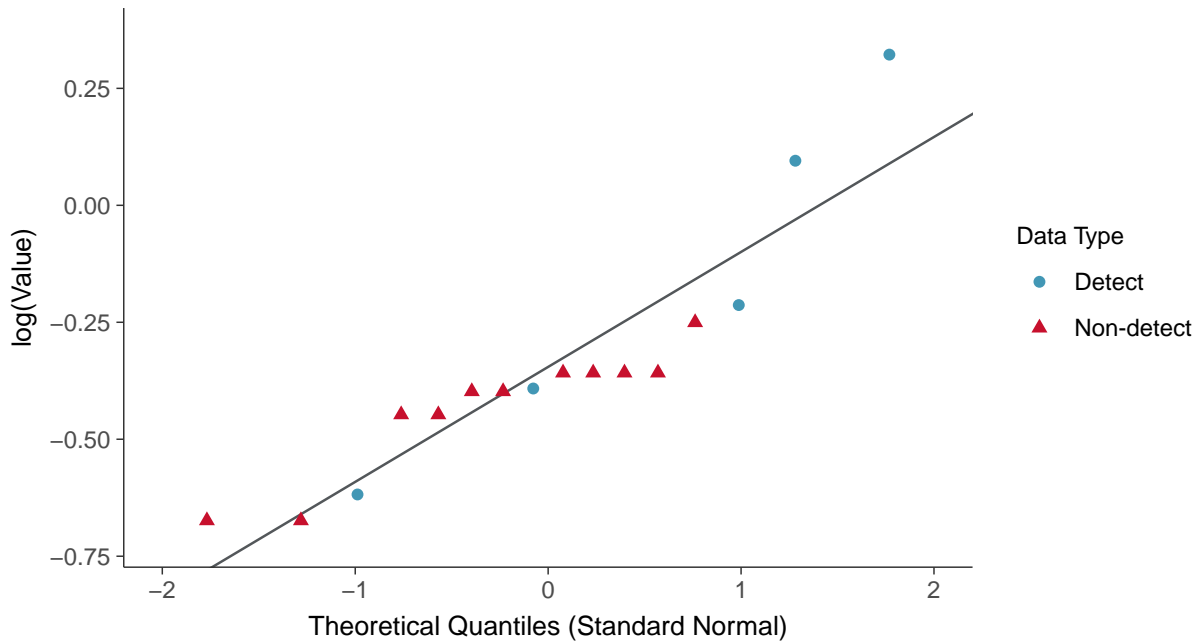
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17003 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

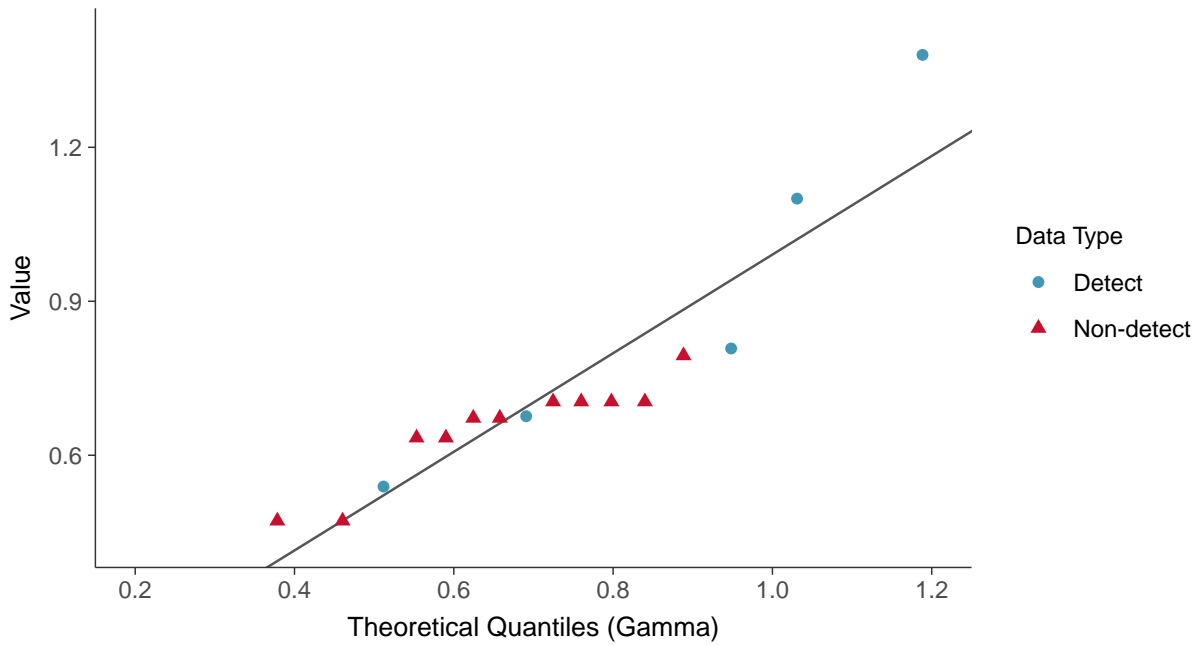
Radium-226+228, MW-17003 (pCi/L)





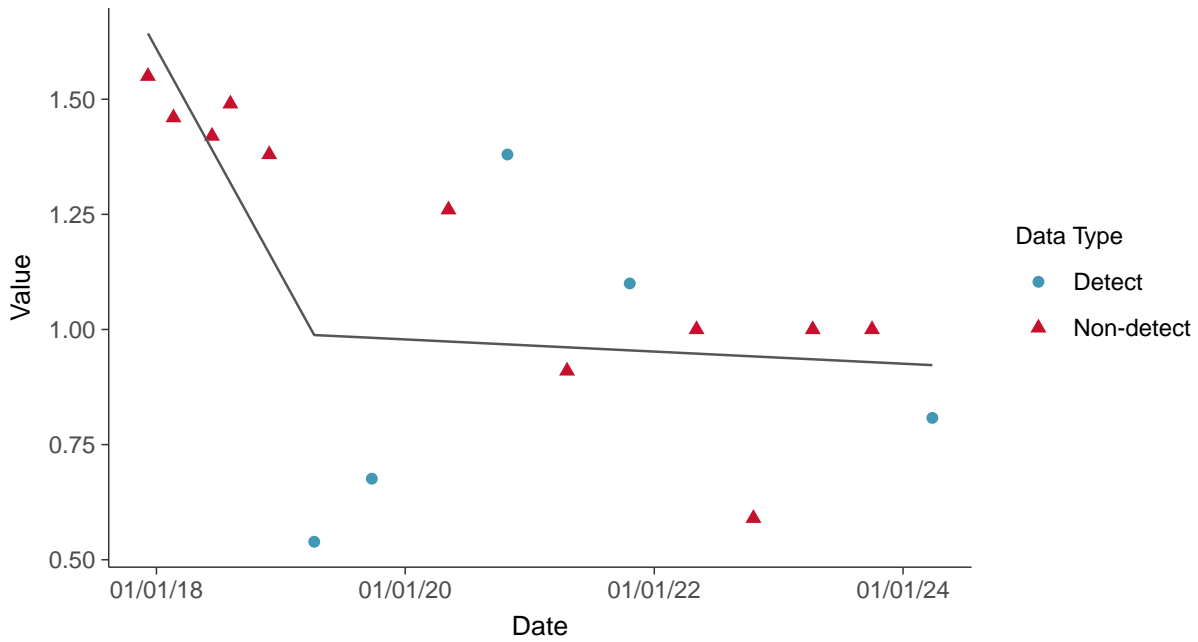
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17003 (pCi/L)



Trend Regression: Piecewise Linear-Linear

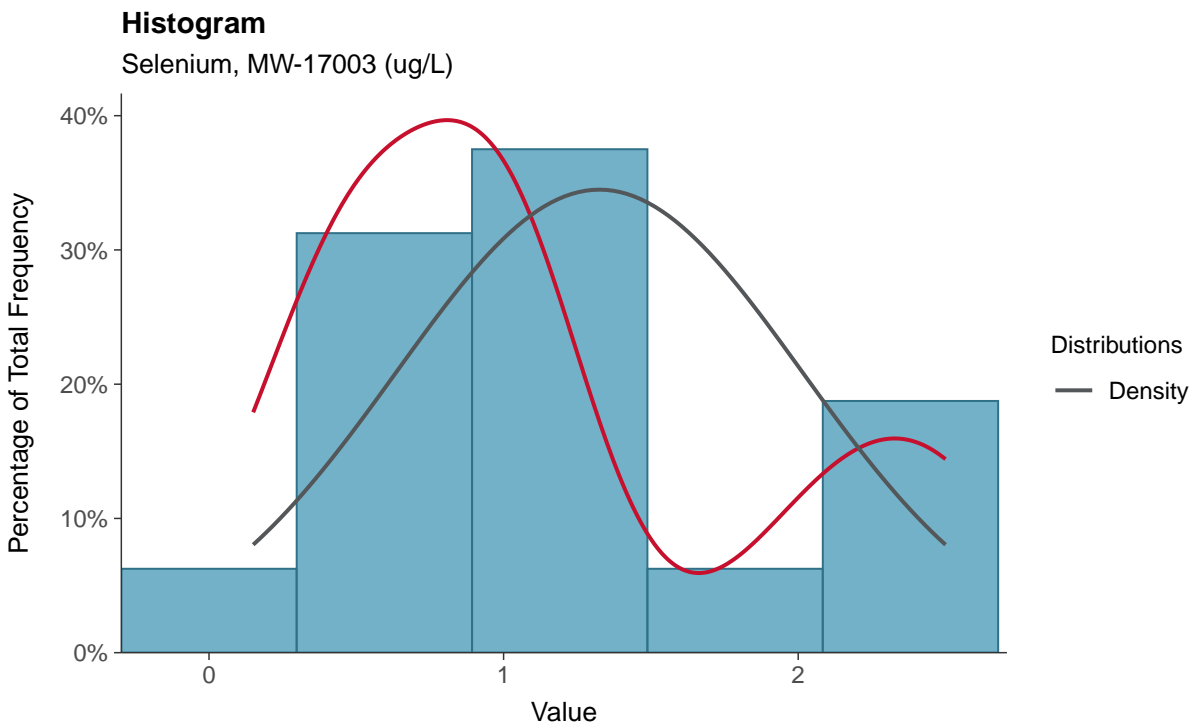
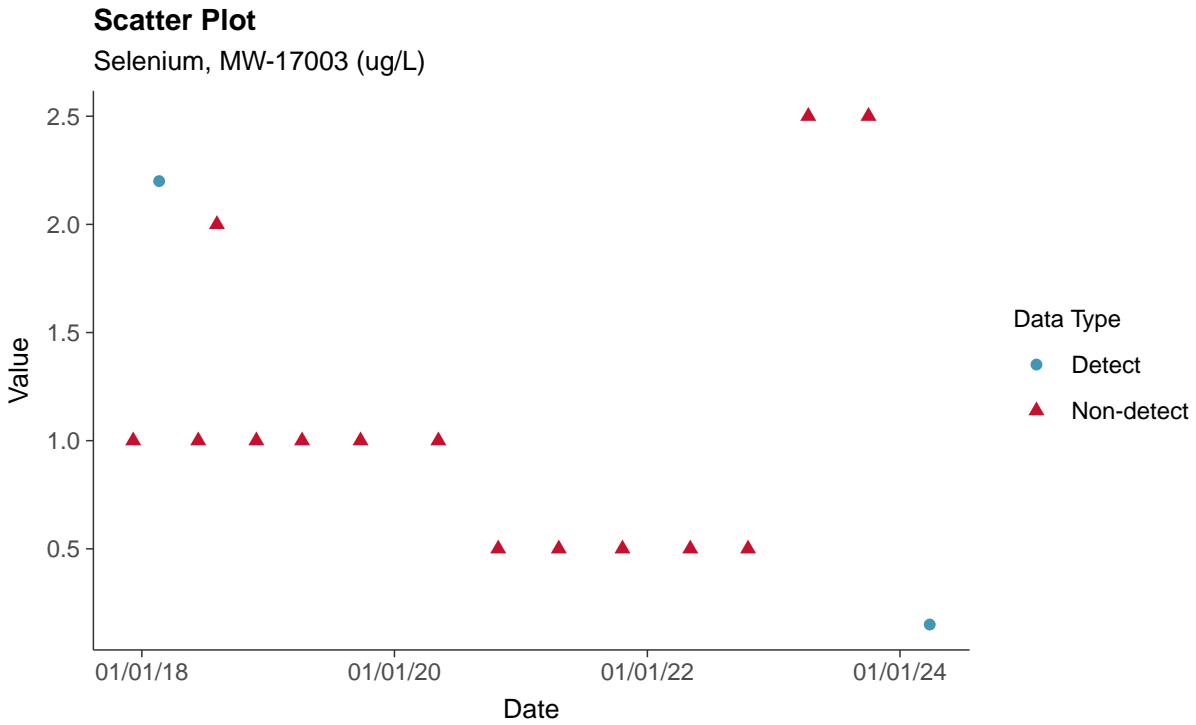
Radium-226+228, MW-17003 (pCi/L)





Appendix IV: Selenium, MW-17003

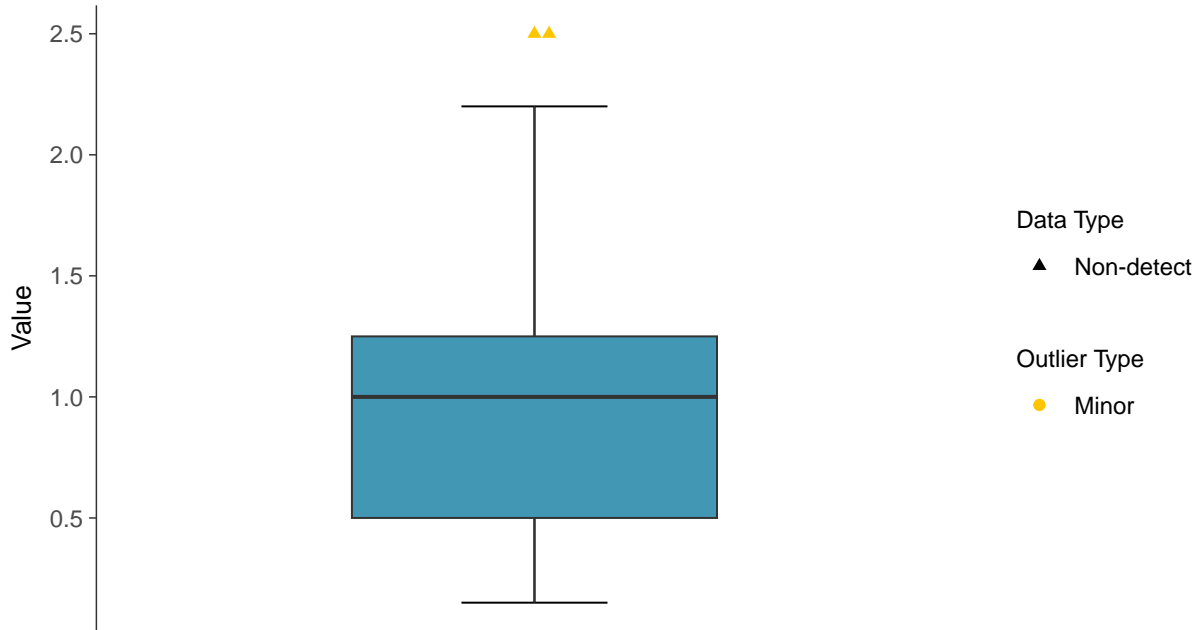
ID: 16_2_127





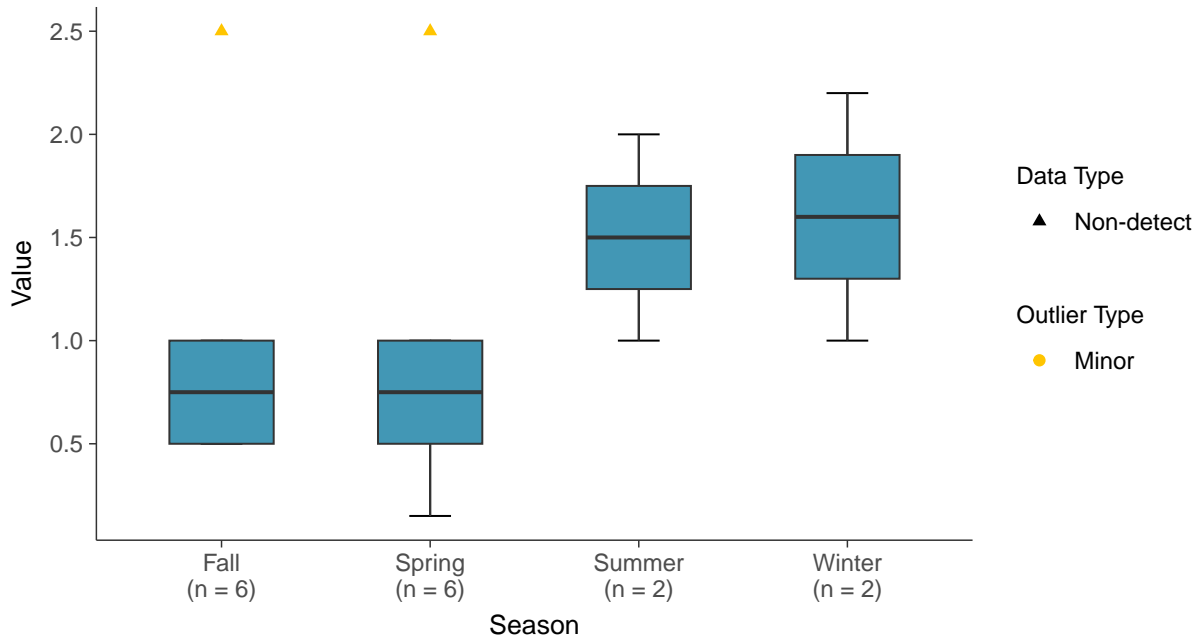
Boxplot

Selenium, MW-17003 (ug/L)



Boxplot by Season

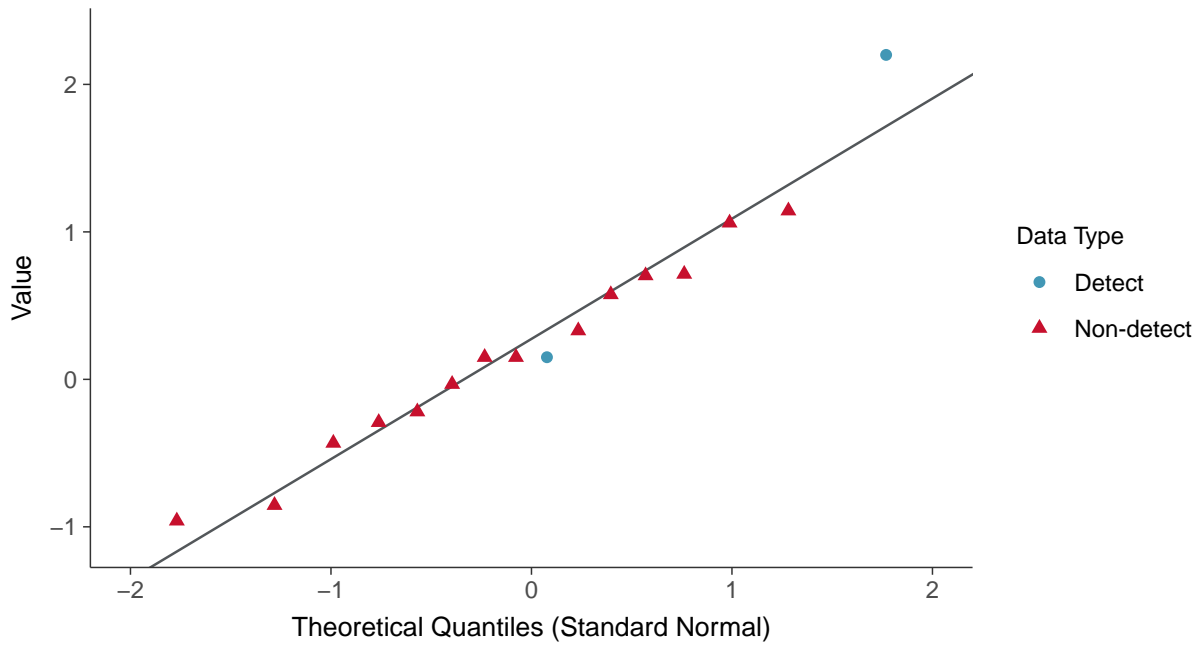
Selenium, MW-17003 (ug/L)





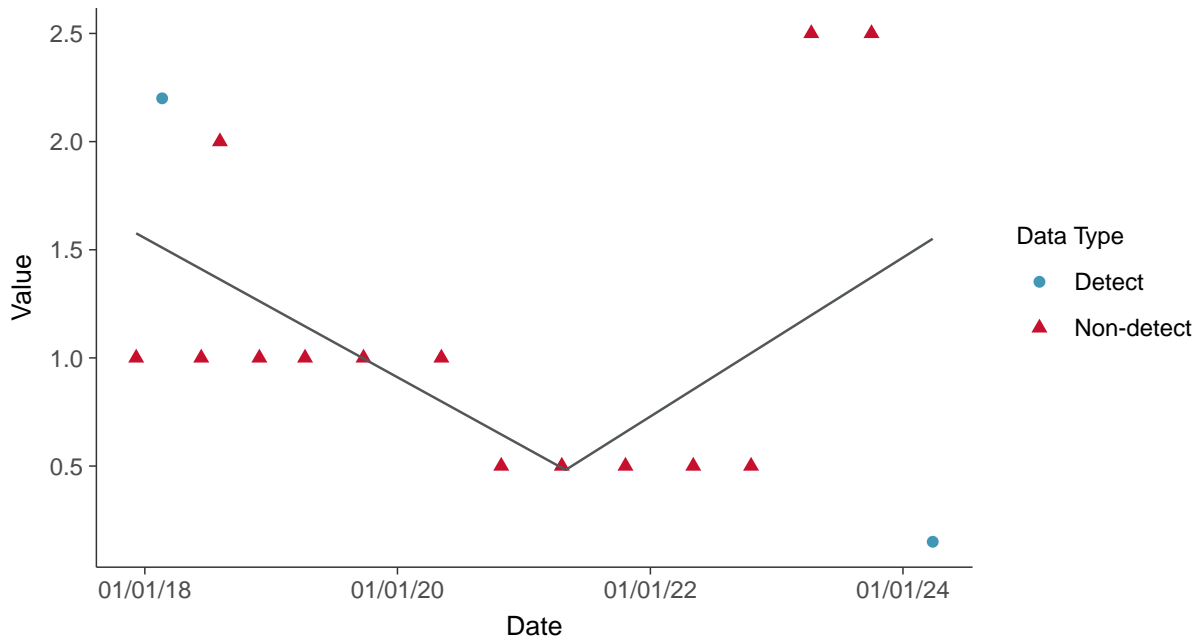
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

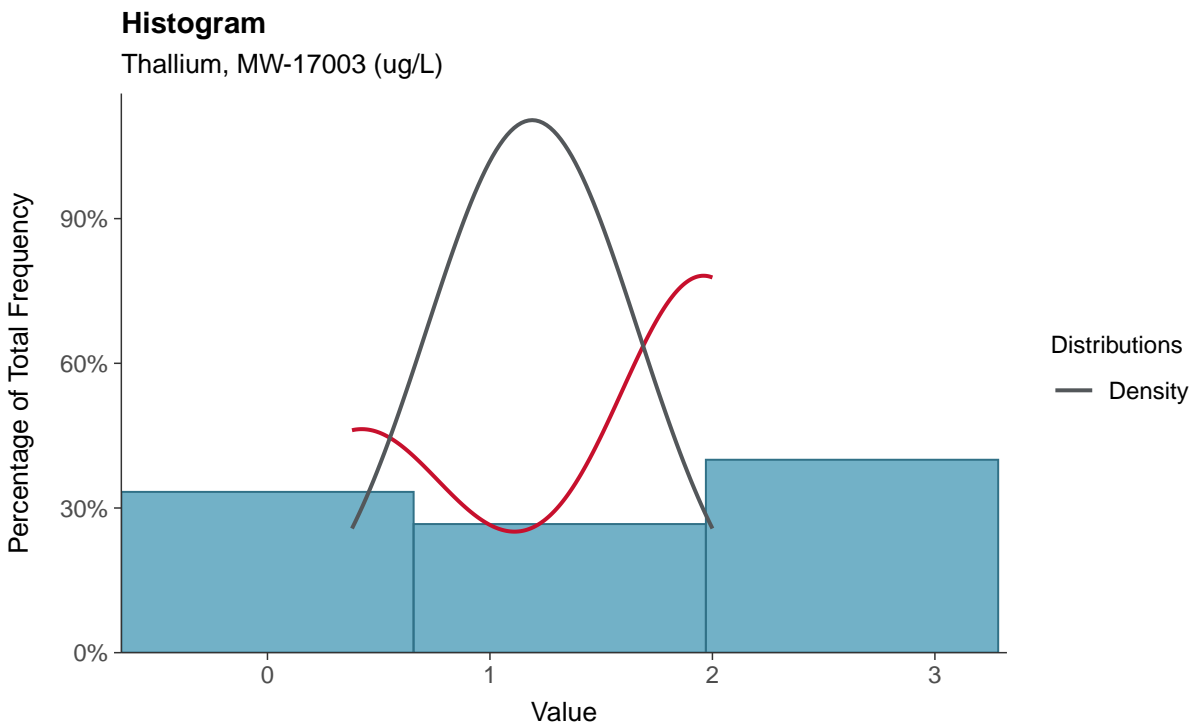
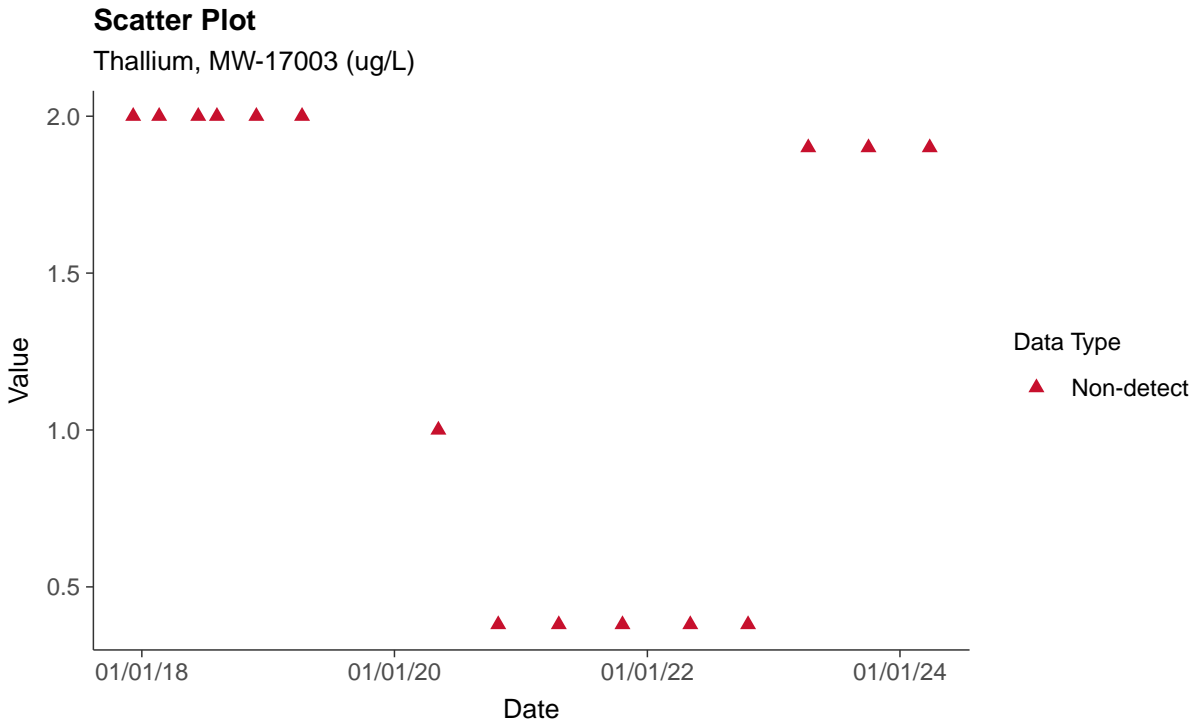
Selenium, MW-17003 (ug/L)





Appendix IV: Thallium, MW-17003

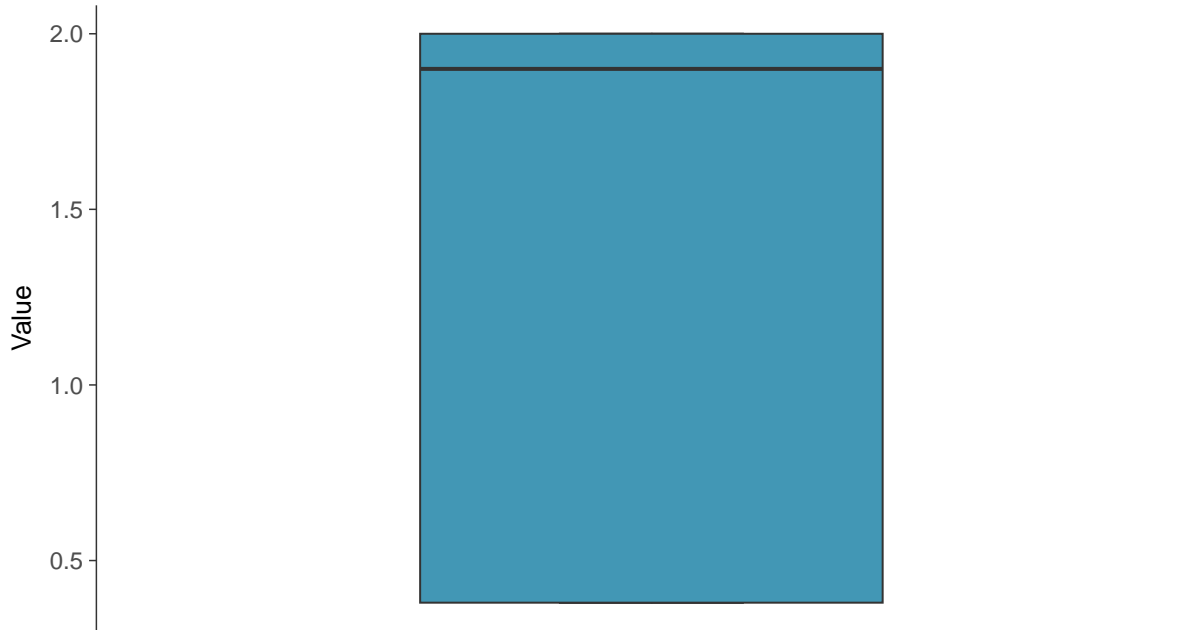
ID: 16_2_131





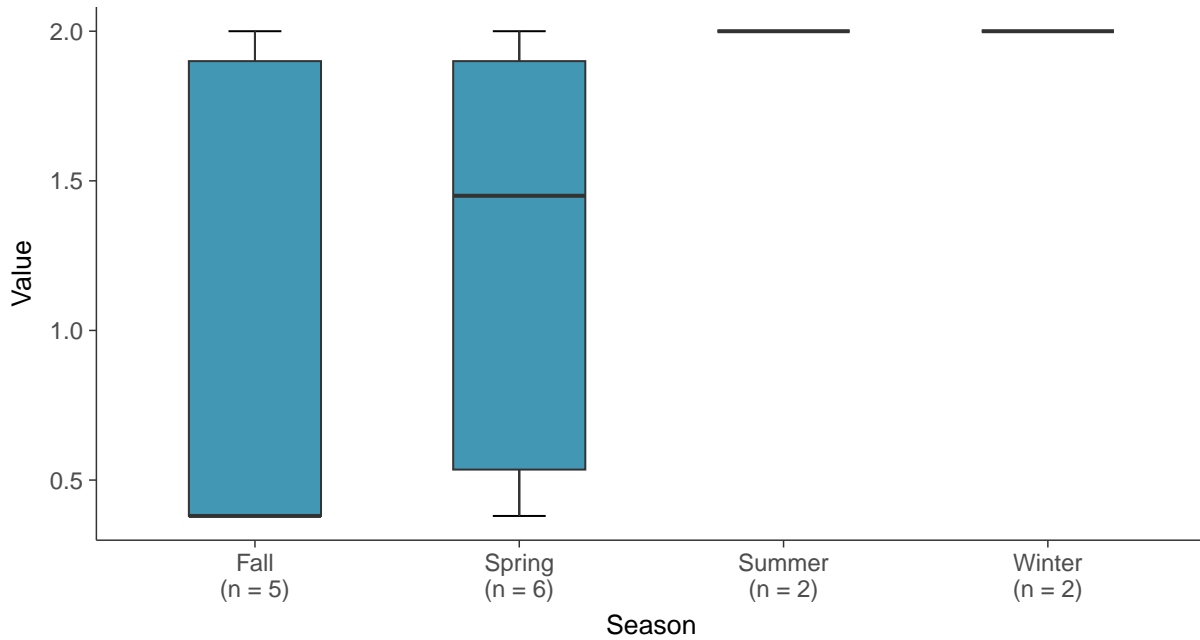
Boxplot

Thallium, MW-17003 (ug/L)



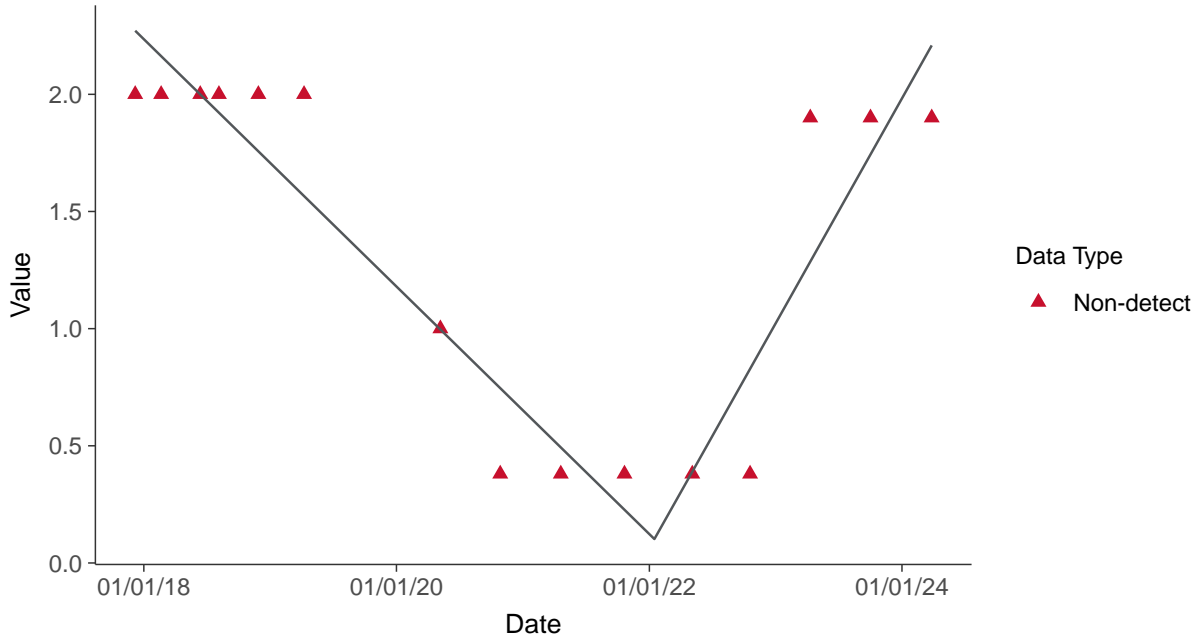
Boxplot by Season

Thallium, MW-17003 (ug/L)

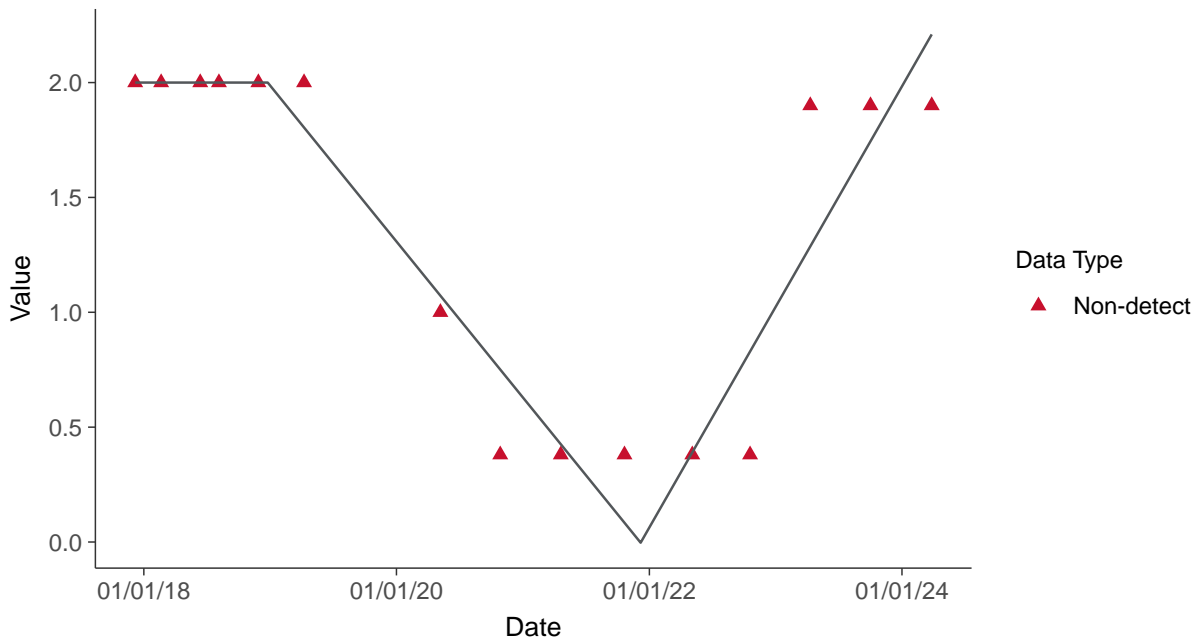




Trend Regression: Piecewise Linear-Linear
Thallium, MW-17003 (ug/L)



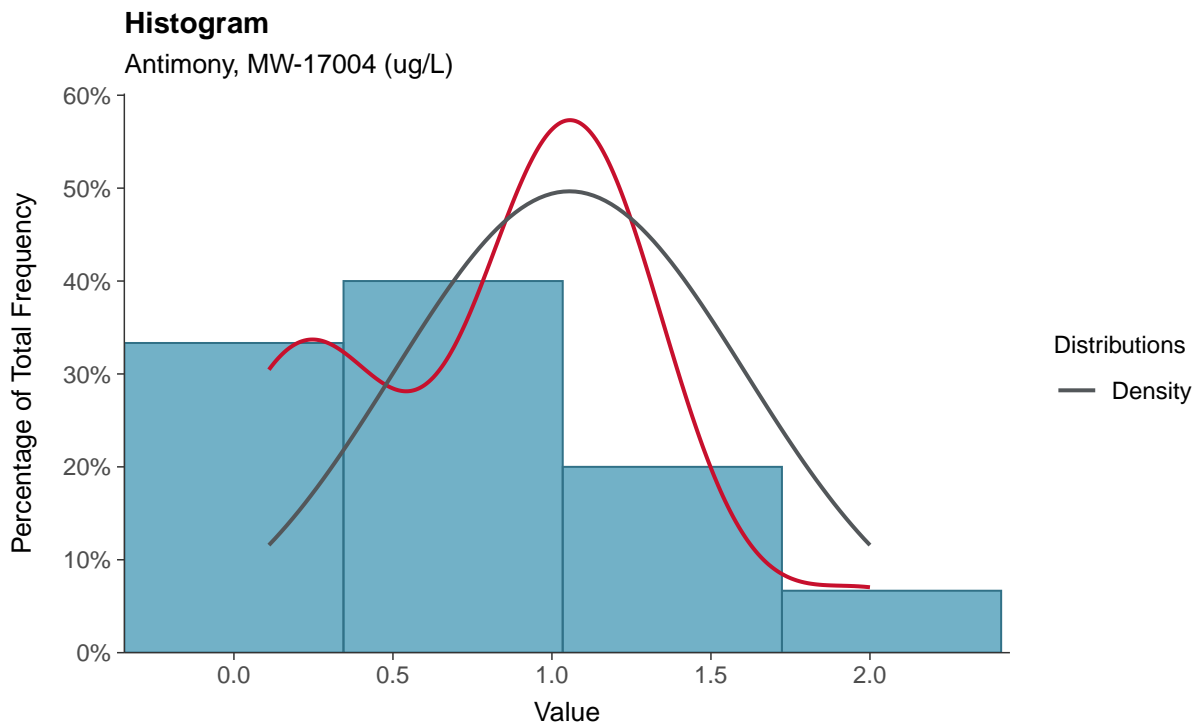
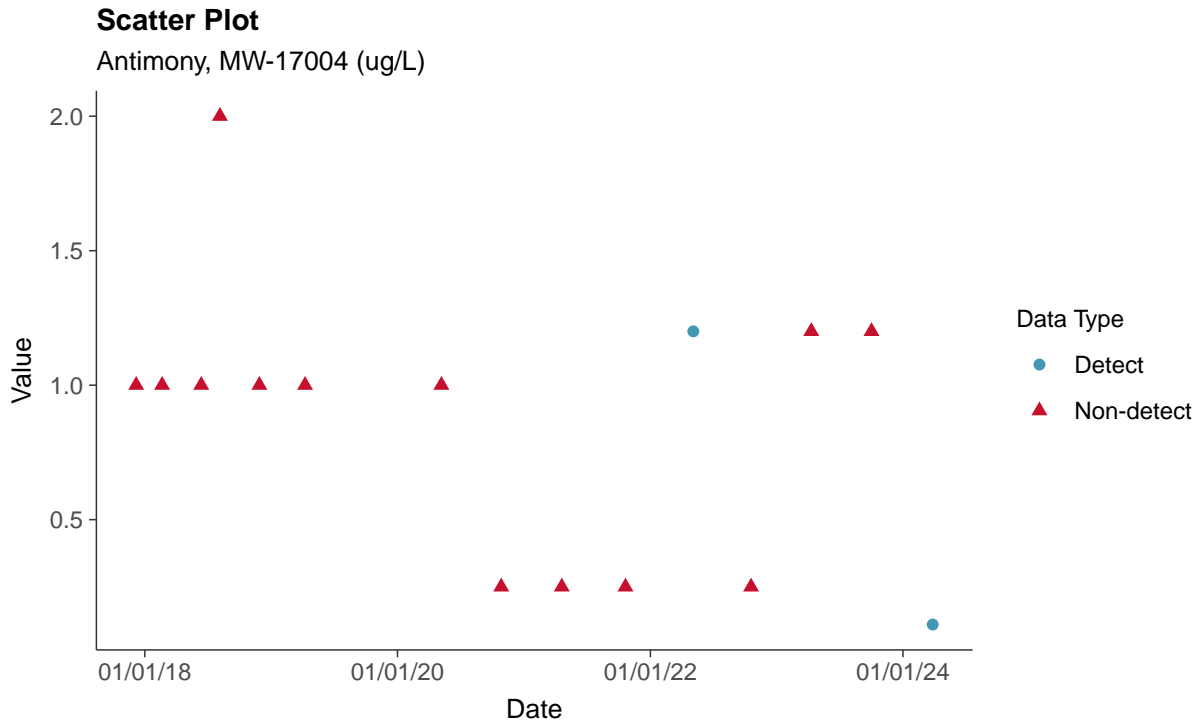
Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-17003 (ug/L)





Appendix IV: Antimony, MW-17004

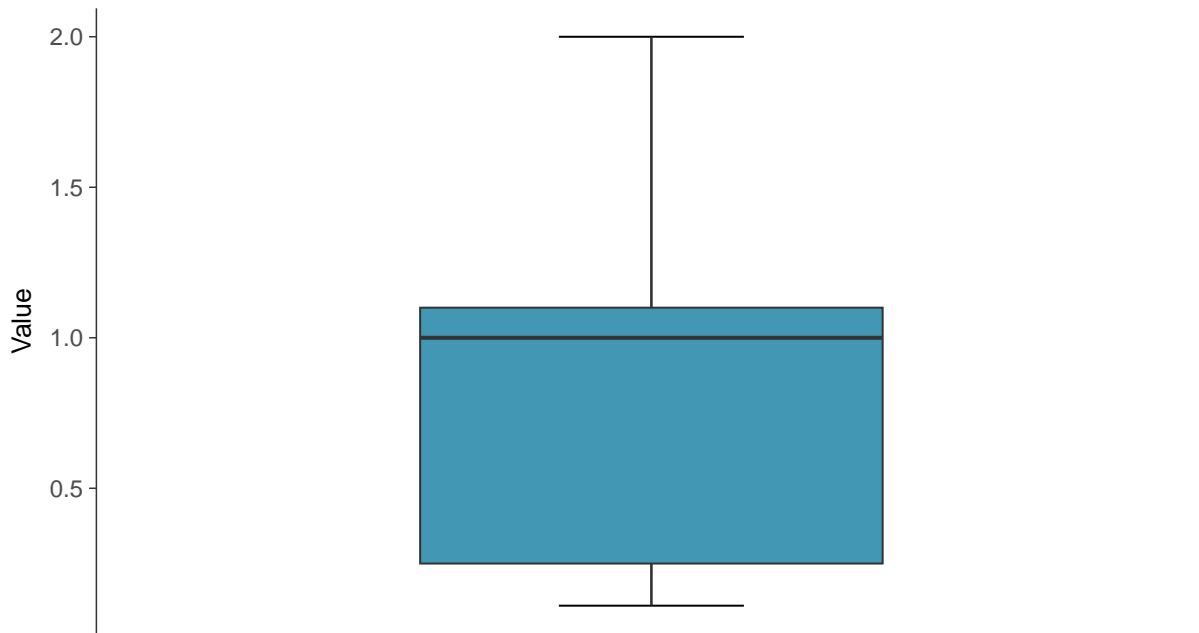
ID: 17_2_101





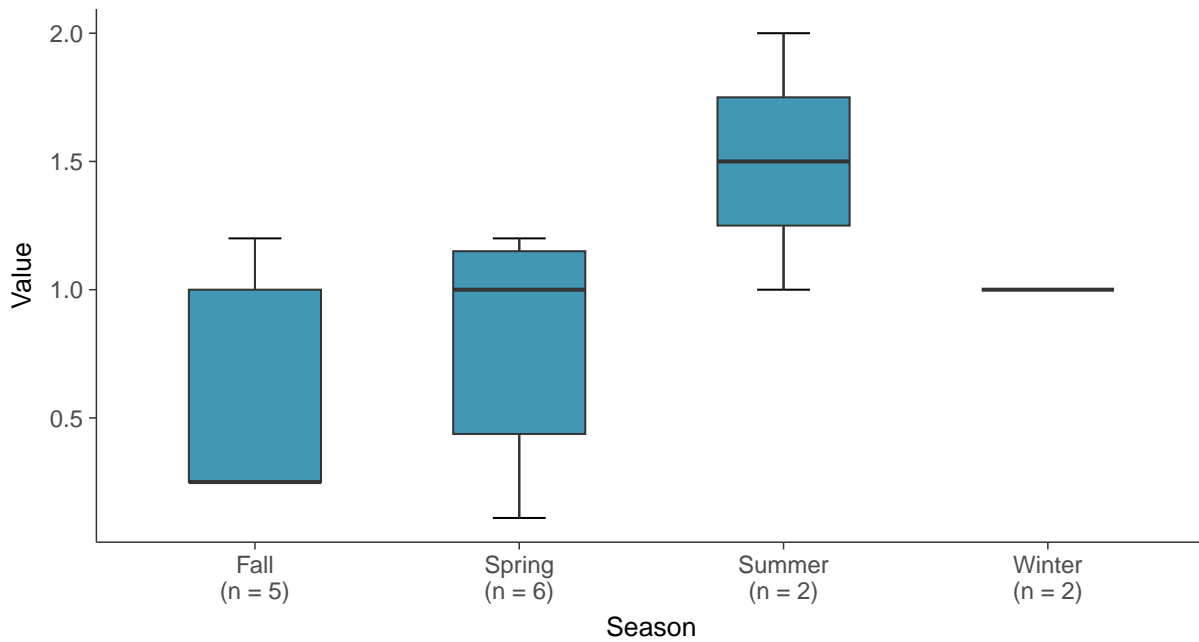
Boxplot

Antimony, MW-17004 (ug/L)



Boxplot by Season

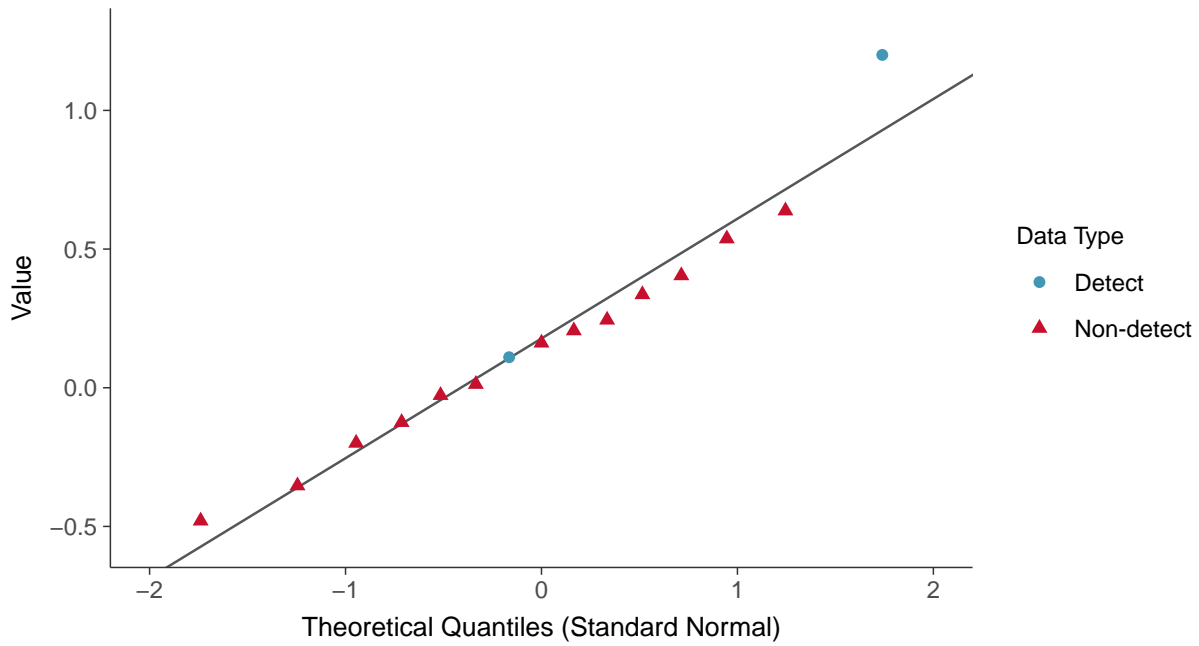
Antimony, MW-17004 (ug/L)





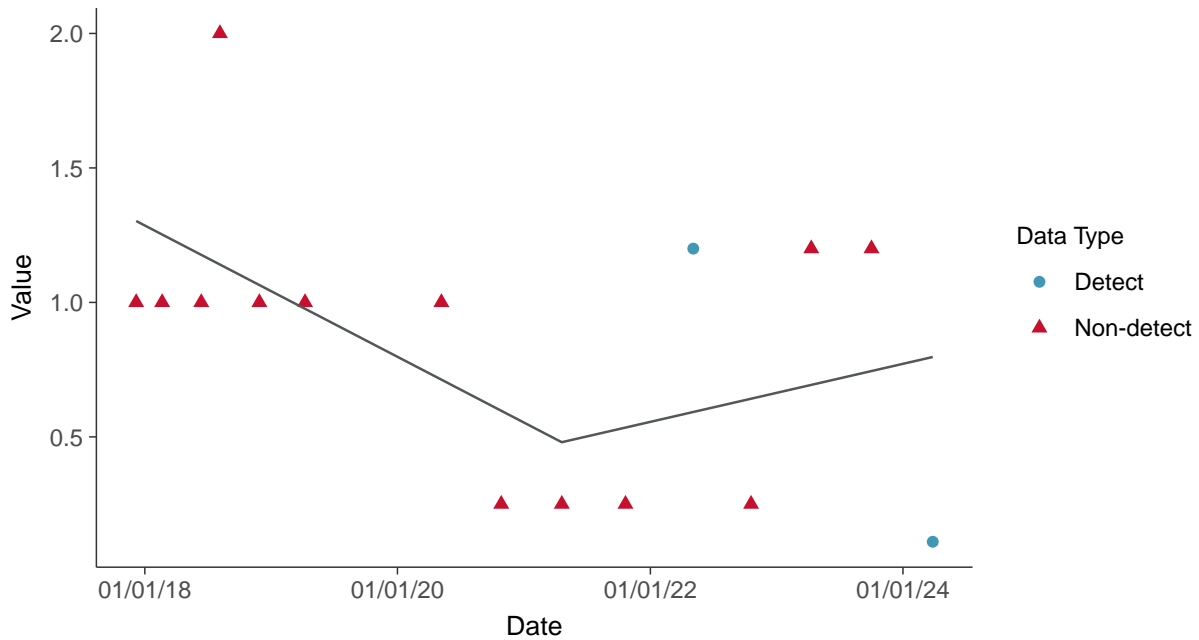
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

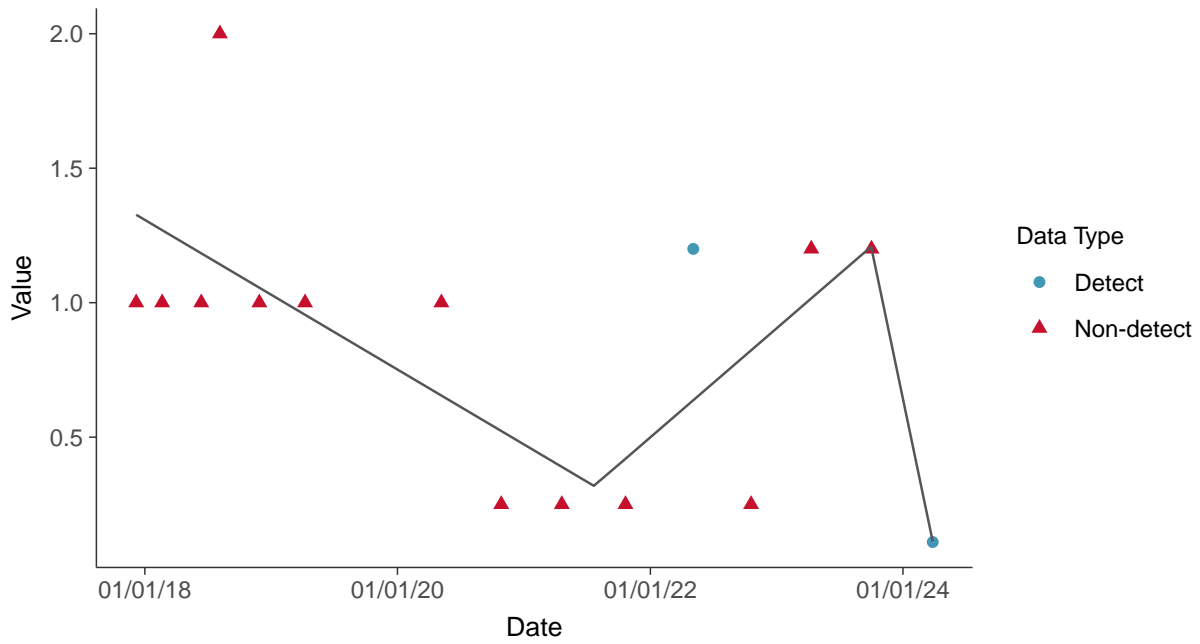
Antimony, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-17004 (ug/L)



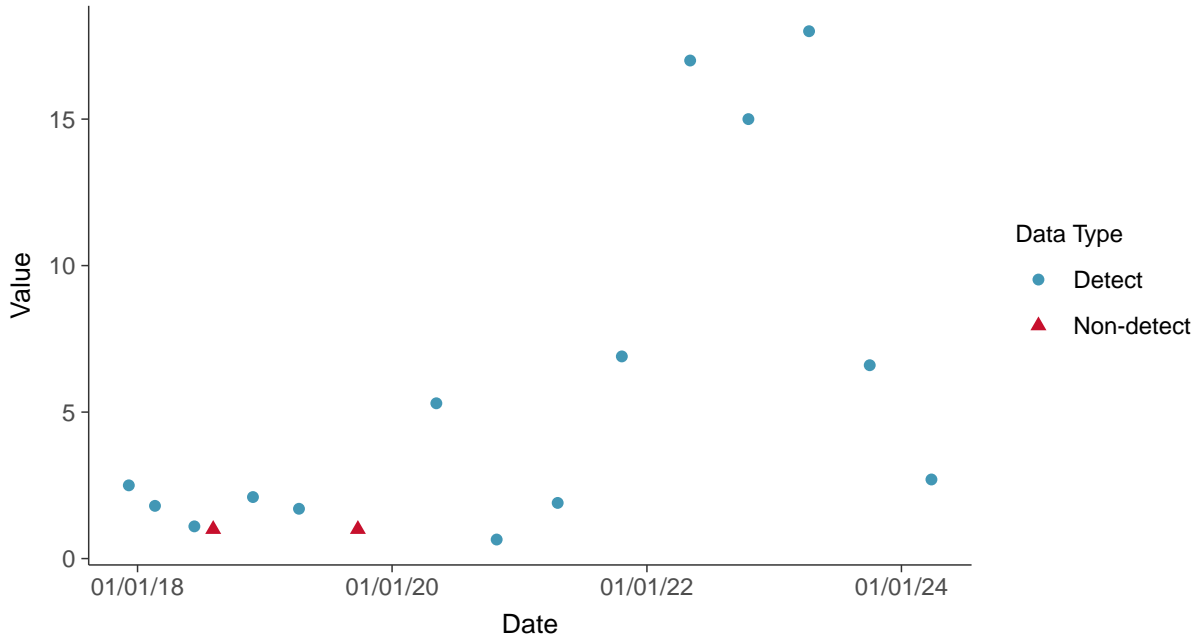


Appendix IV: Arsenic, MW-17004

ID: 17_2_102

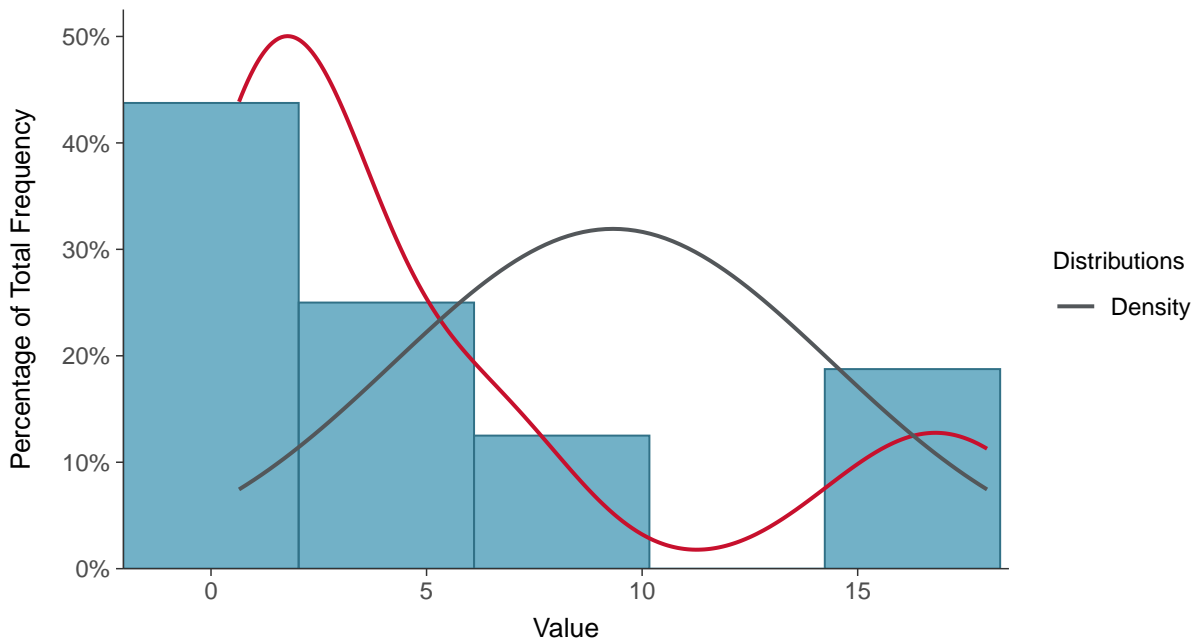
Scatter Plot

Arsenic, MW-17004 (ug/L)



Histogram

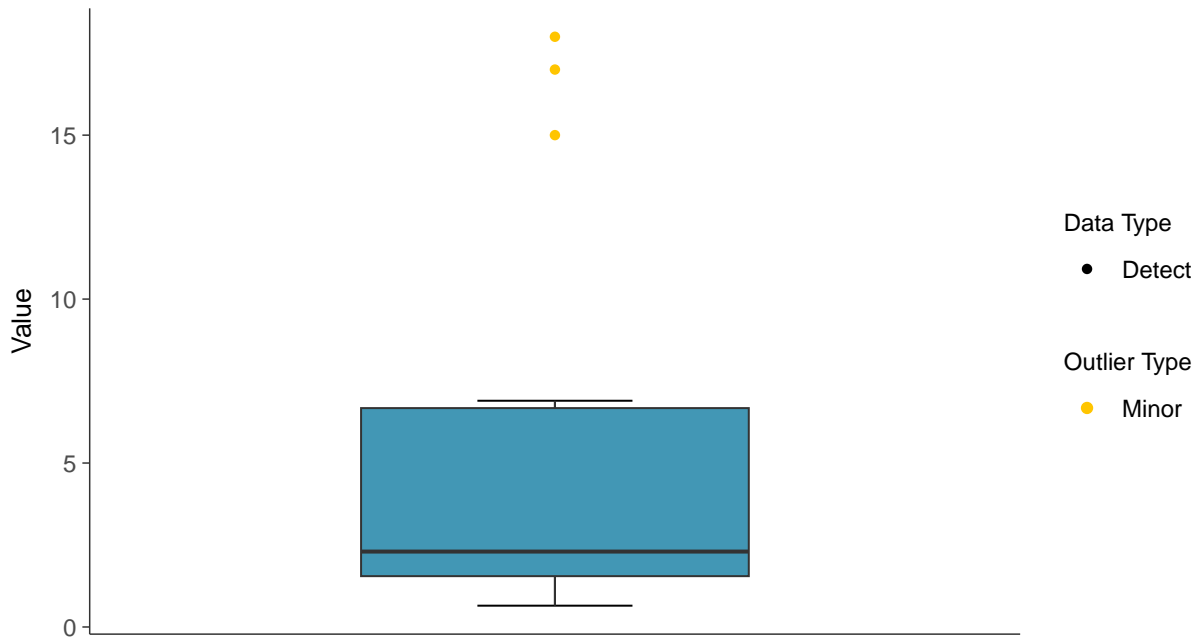
Arsenic, MW-17004 (ug/L)





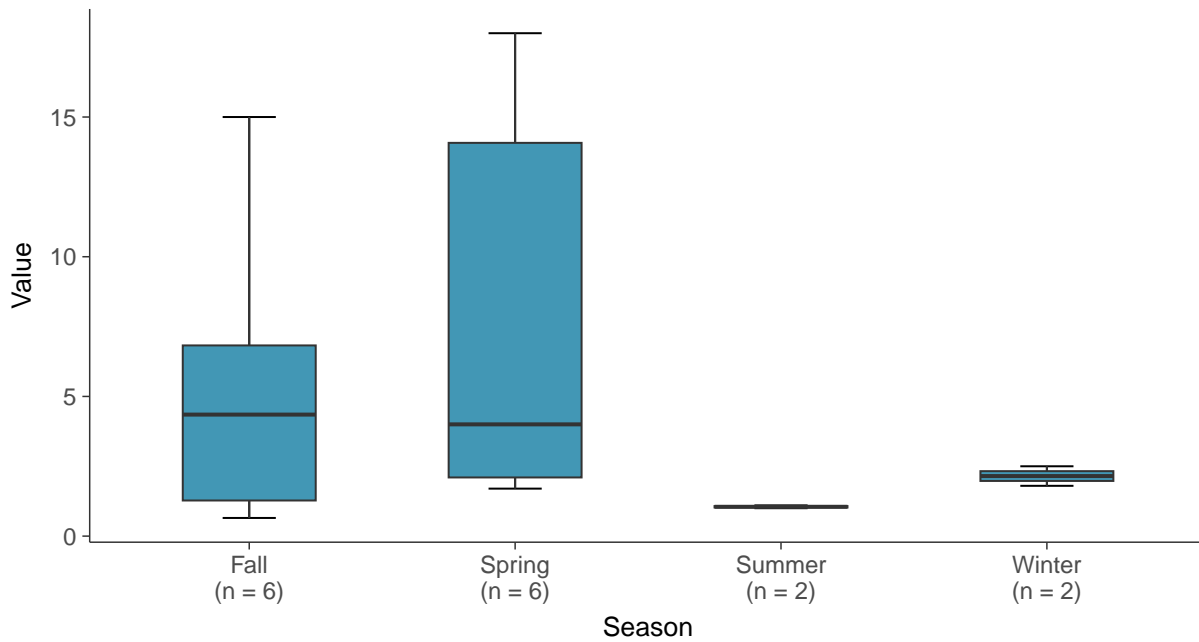
Boxplot

Arsenic, MW-17004 (ug/L)



Boxplot by Season

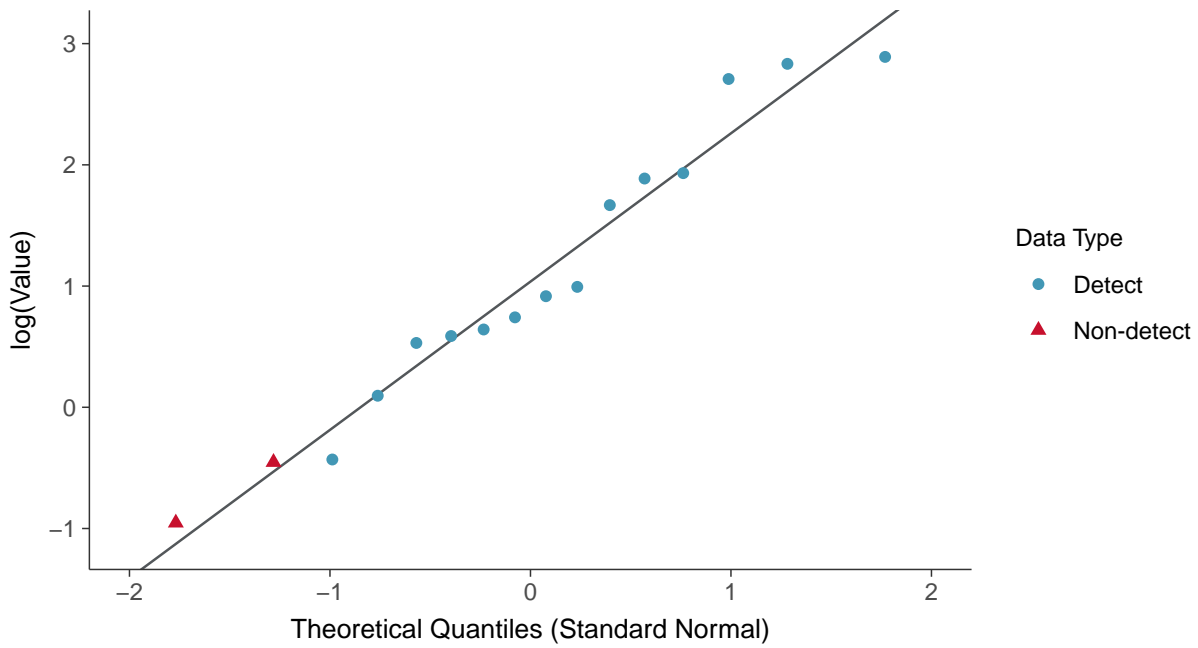
Arsenic, MW-17004 (ug/L)





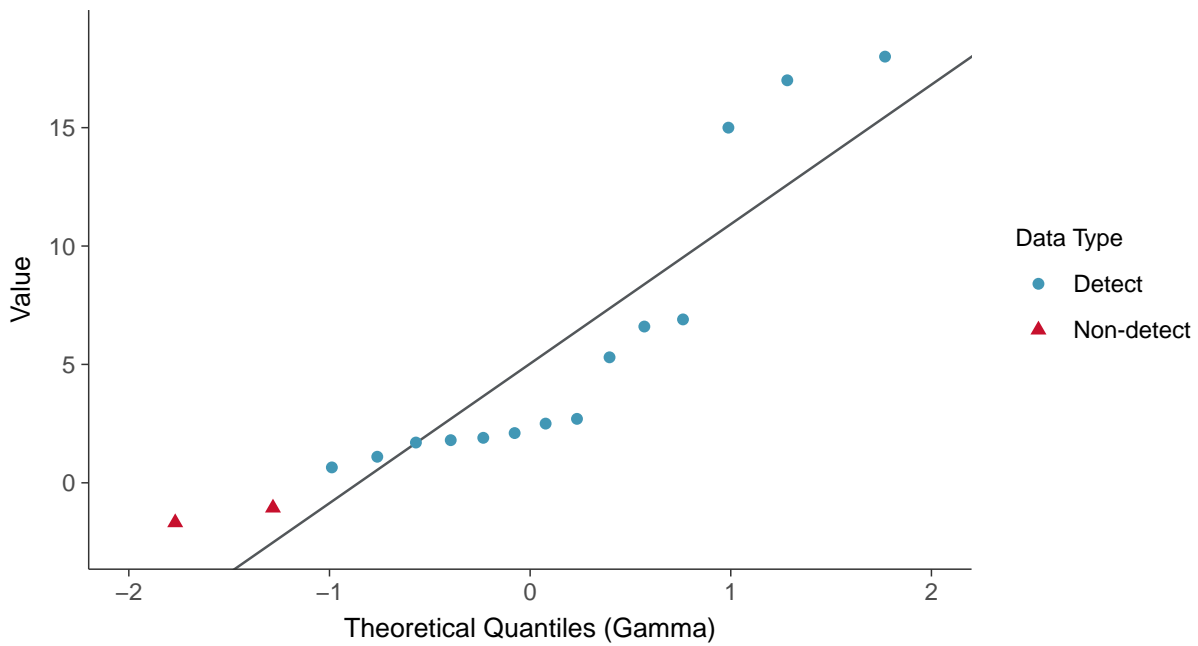
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17004 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

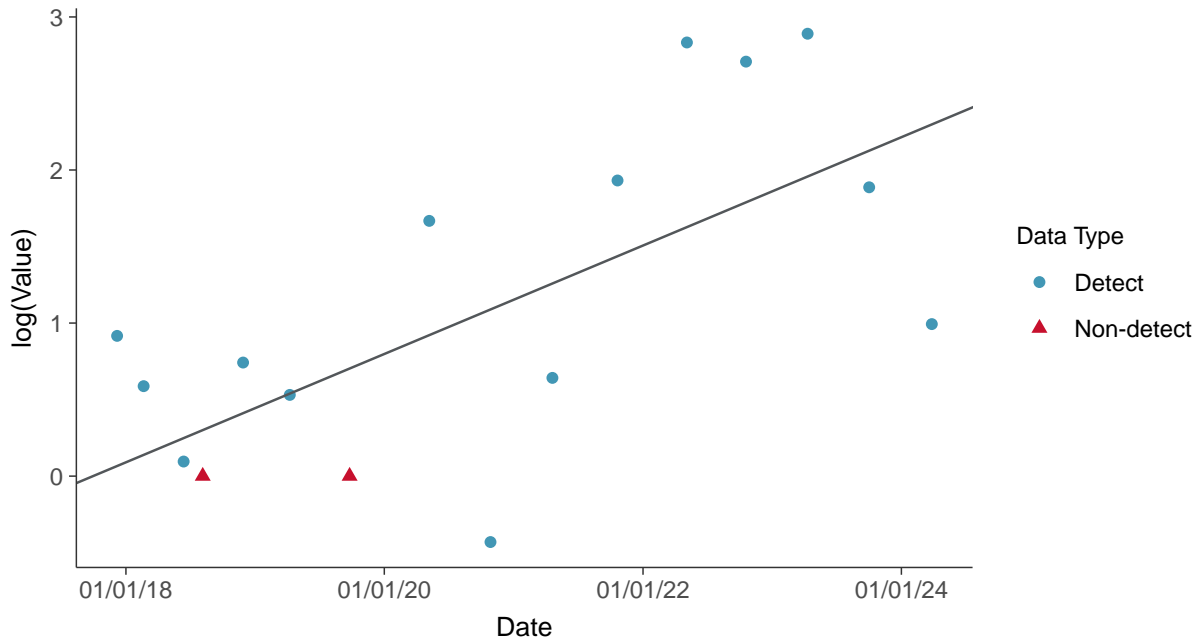
Arsenic, MW-17004 (ug/L)





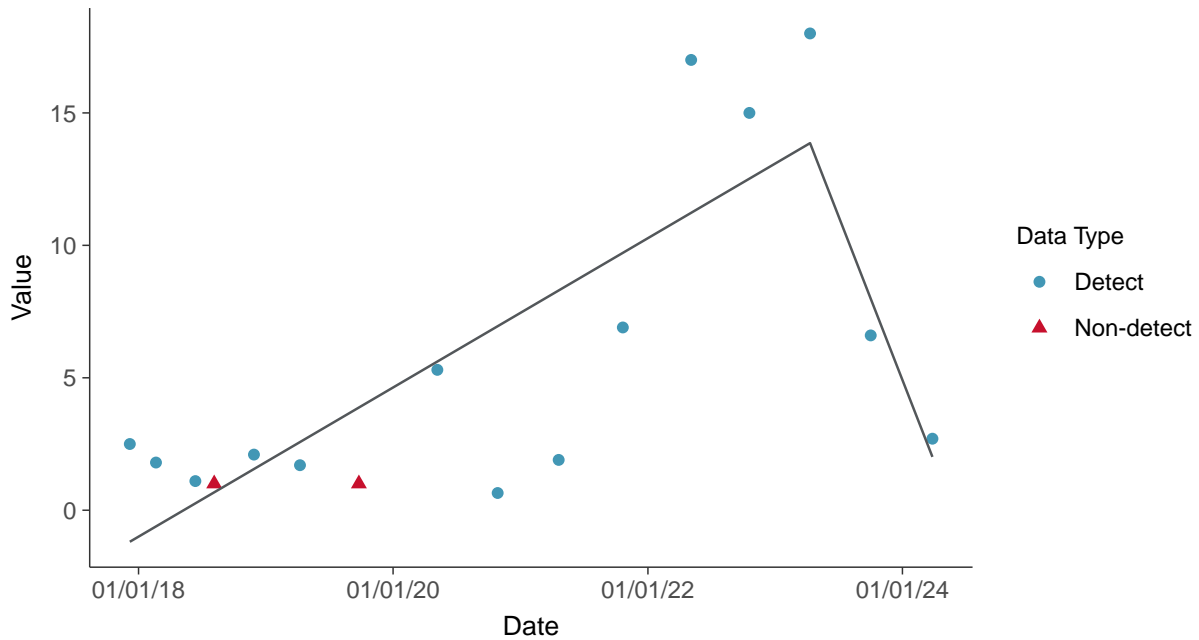
Trend Regression: Lognormal MLE

Arsenic, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

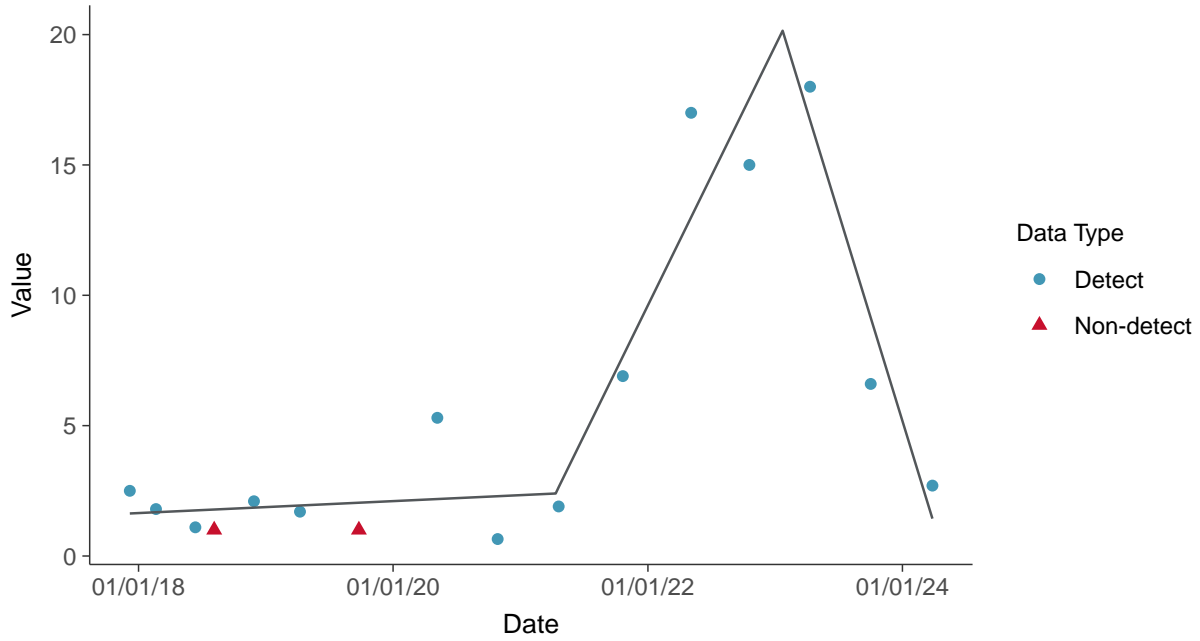
Arsenic, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-17004 (ug/L)



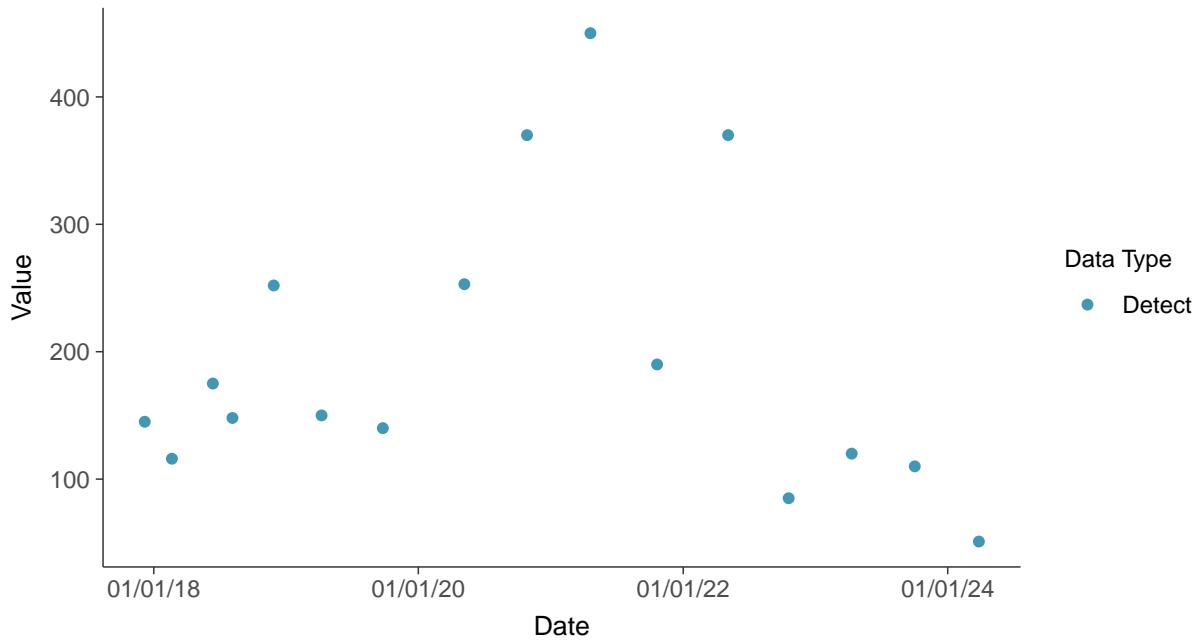


Appendix IV: Barium, MW-17004

ID: 17_2_103

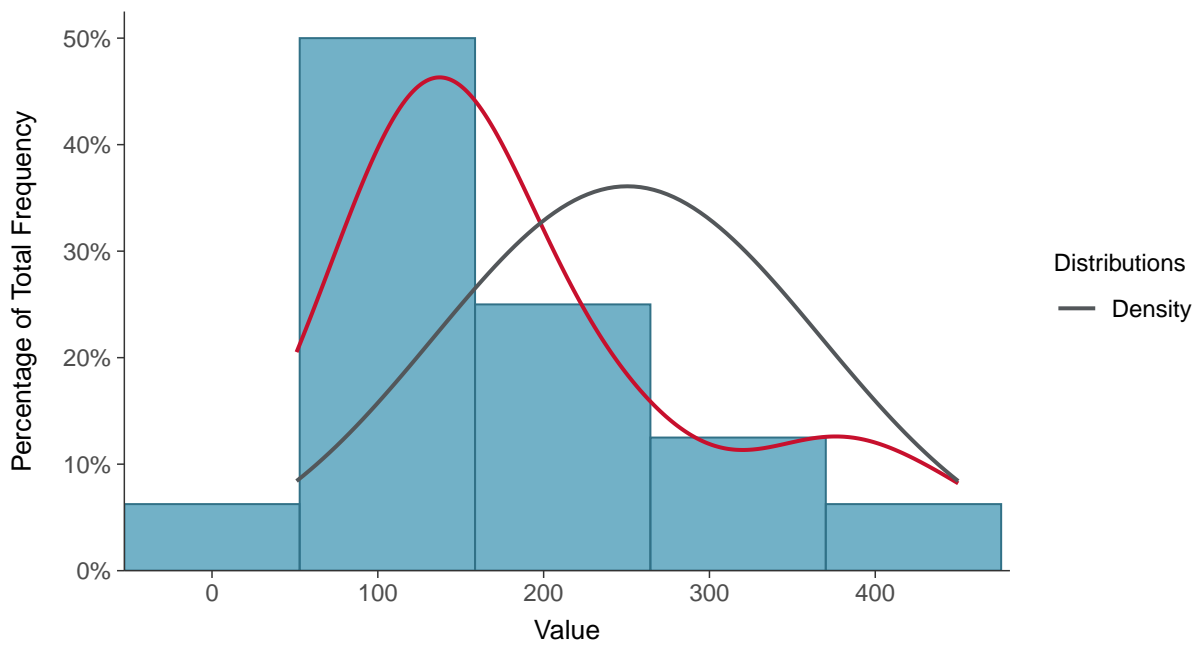
Scatter Plot

Barium, MW-17004 (ug/L)



Histogram

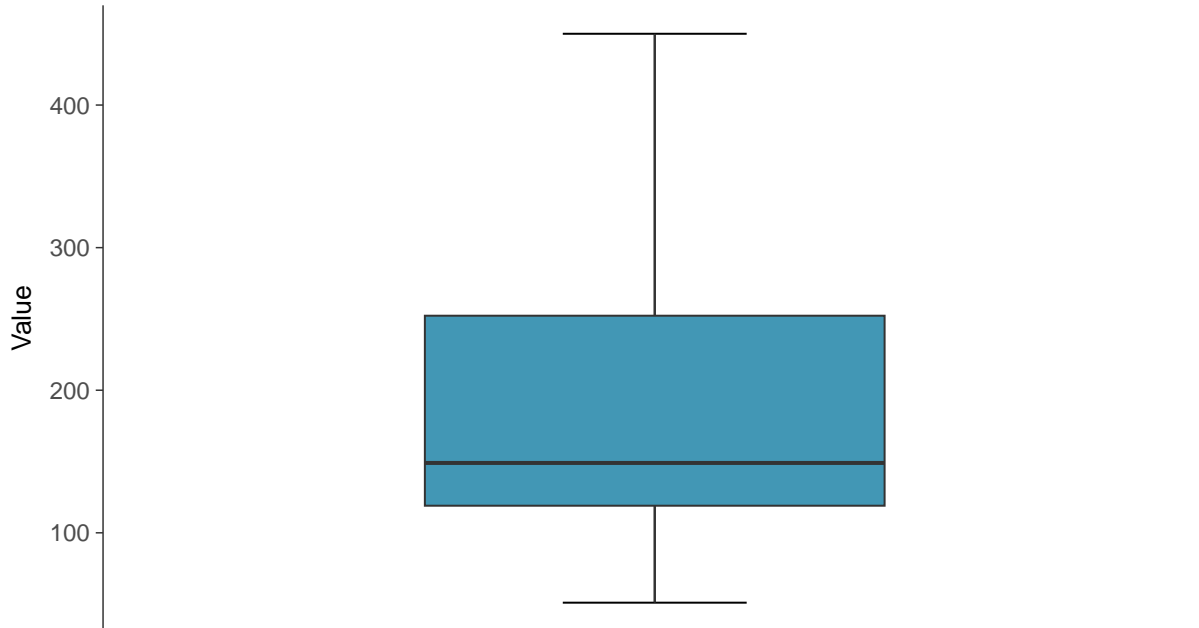
Barium, MW-17004 (ug/L)





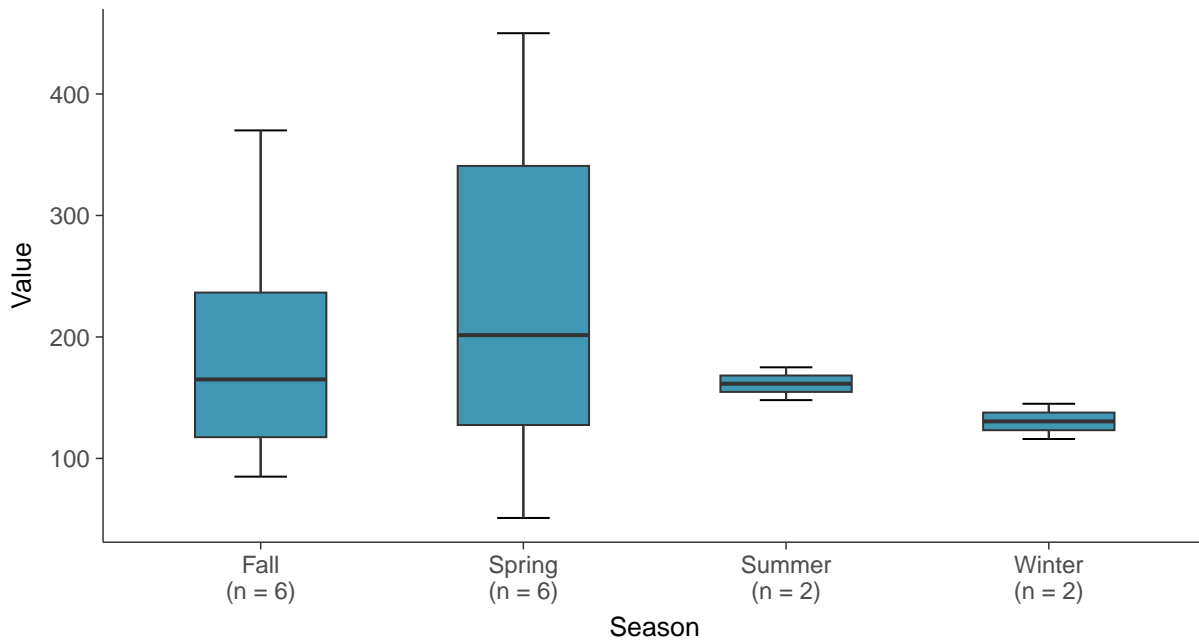
Boxplot

Barium, MW-17004 (ug/L)



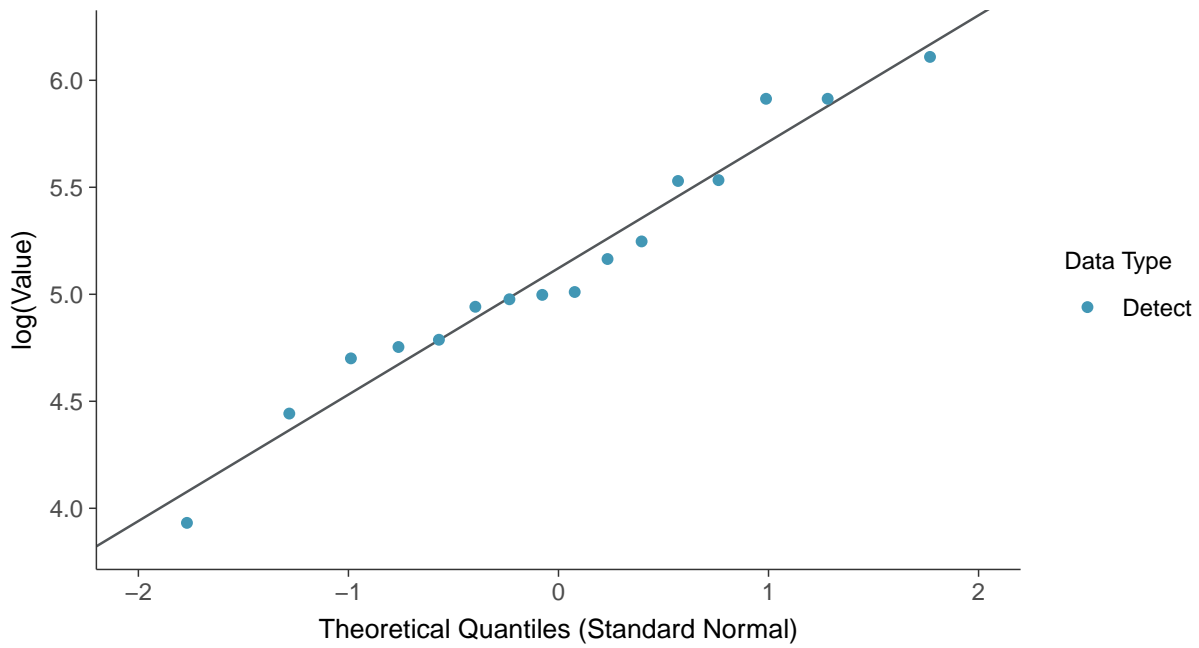
Boxplot by Season

Barium, MW-17004 (ug/L)

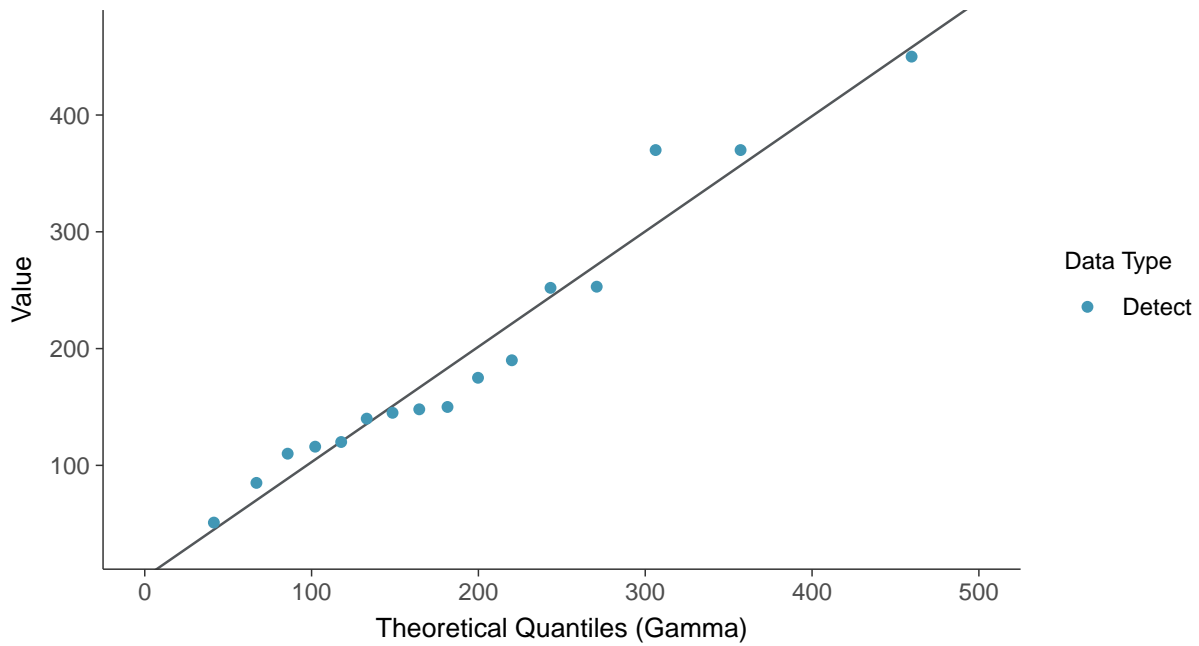




Lognormal Q-Q plot
Barium, MW-17004 (ug/L)



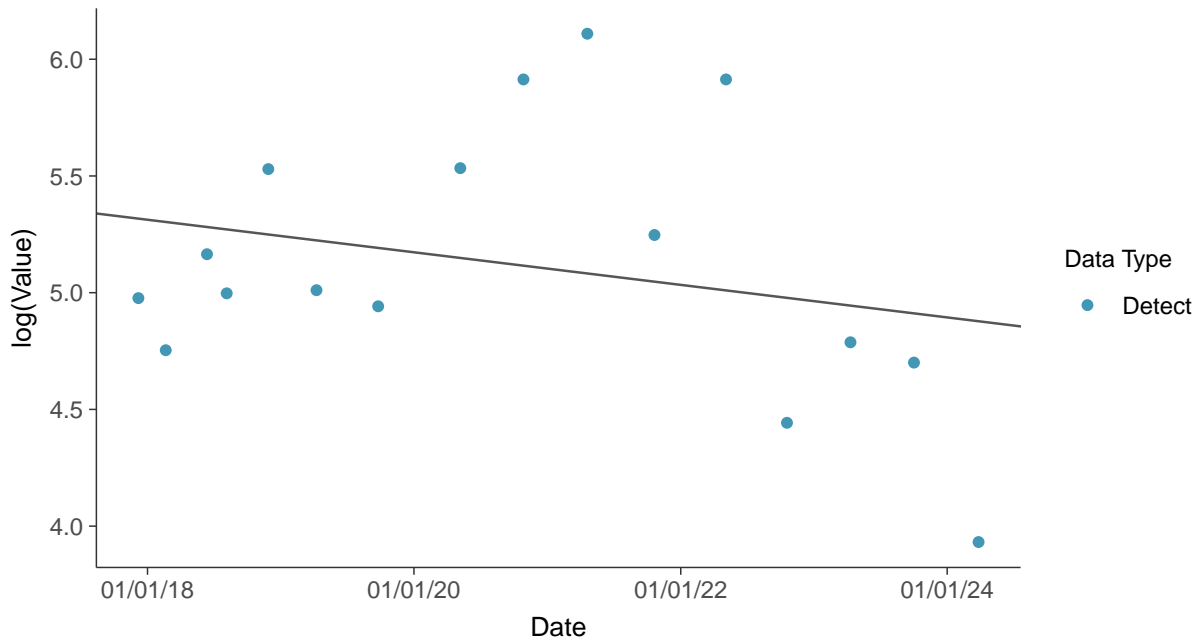
Gamma Q-Q plot
Barium, MW-17004 (ug/L)





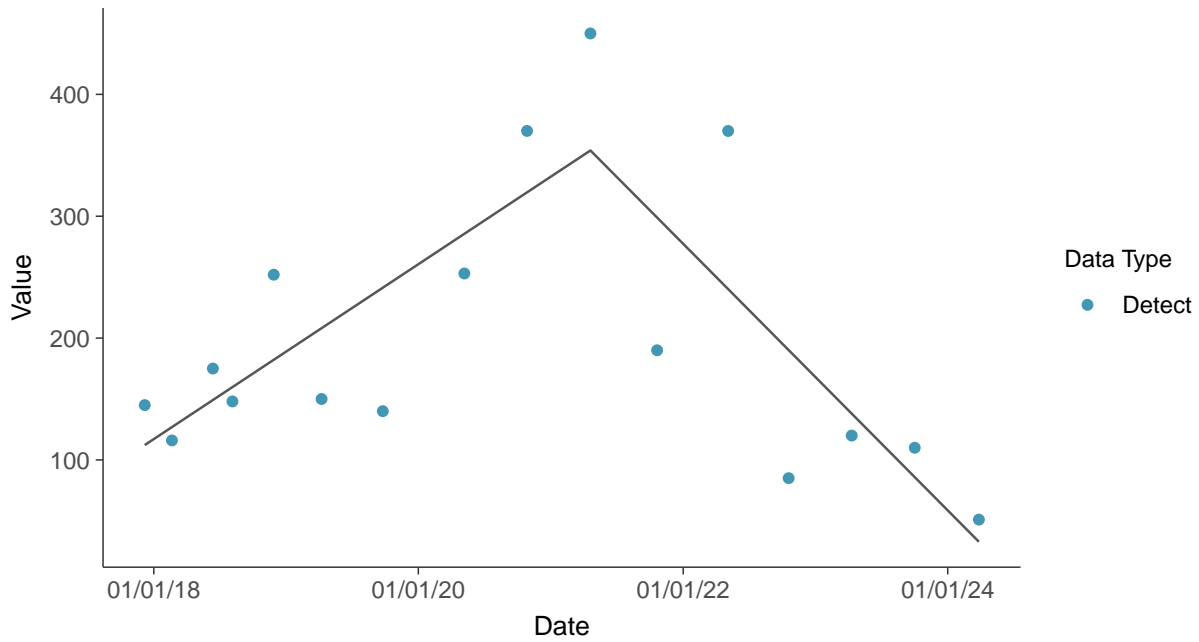
Trend Regression: Lognormal MLE

Barium, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

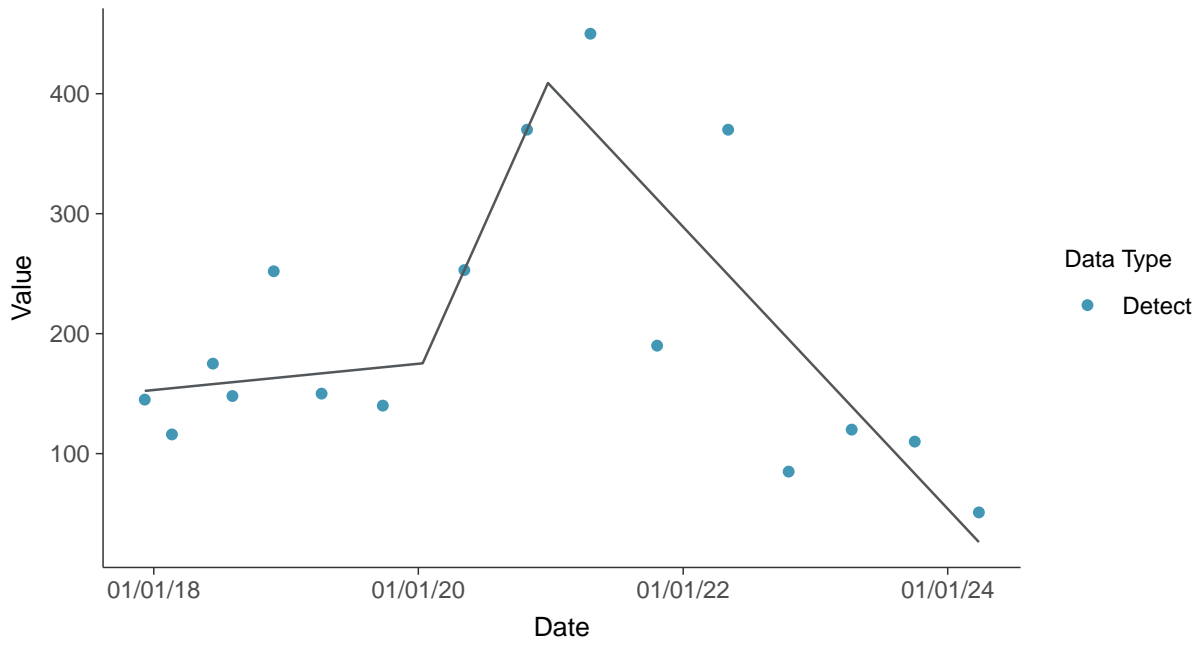
Barium, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

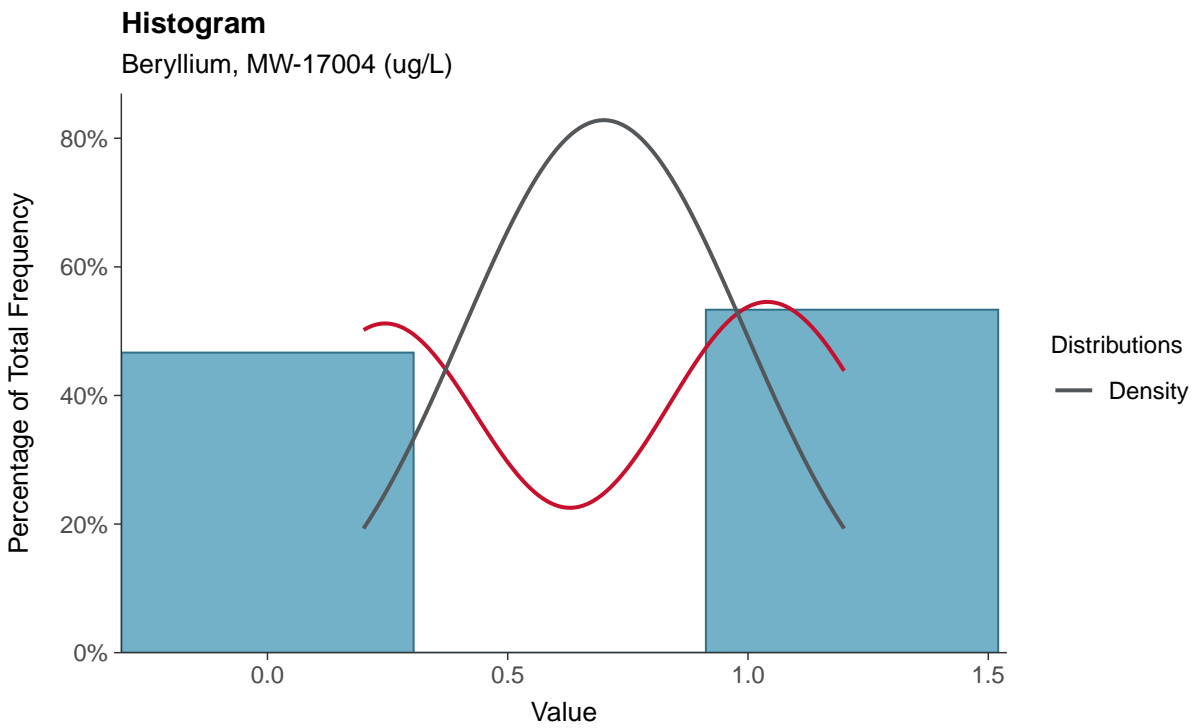
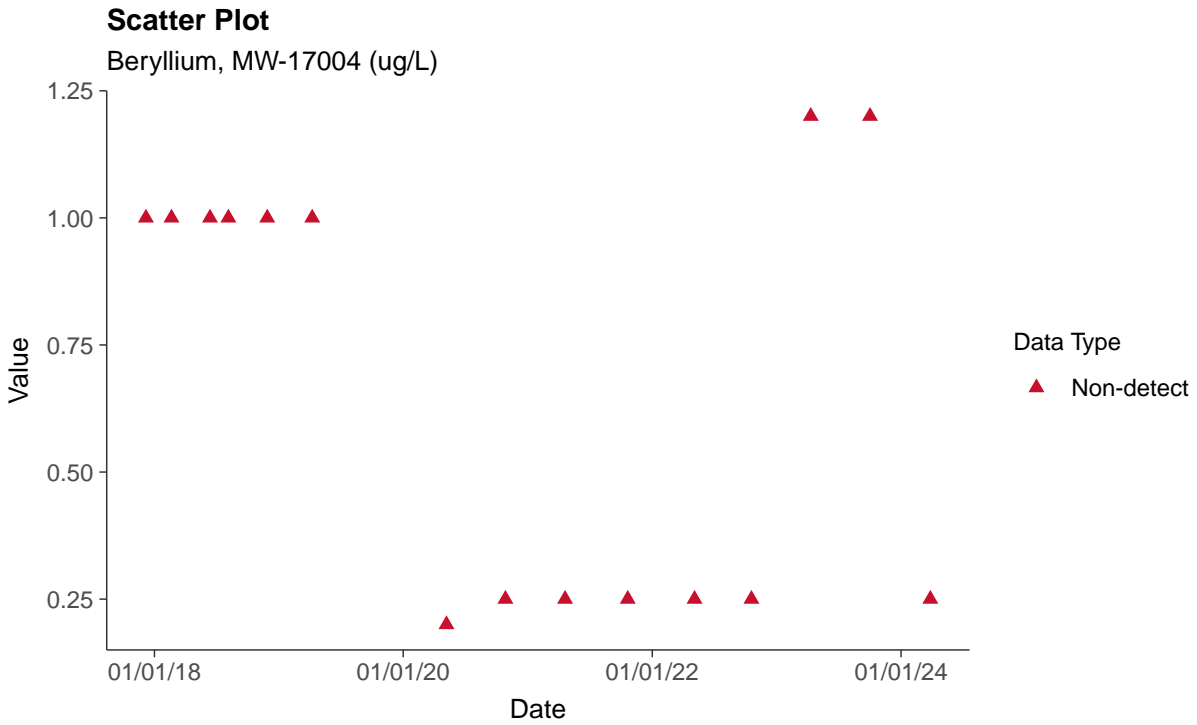
Barium, MW-17004 (ug/L)





Appendix IV: Beryllium, MW-17004

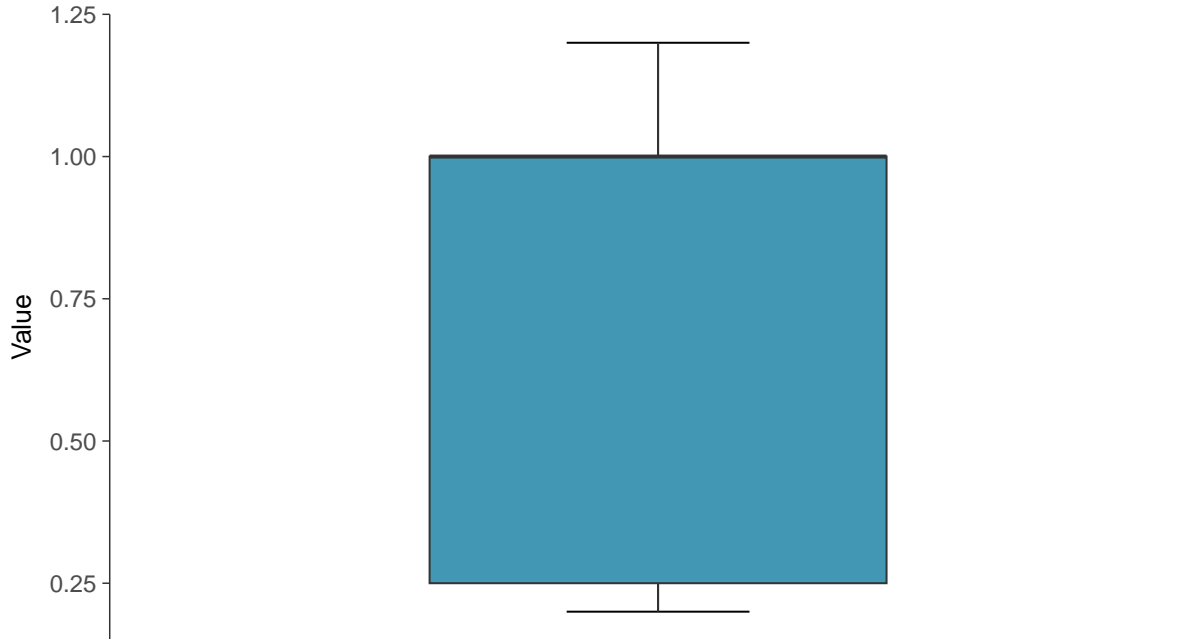
ID: 17_2_104





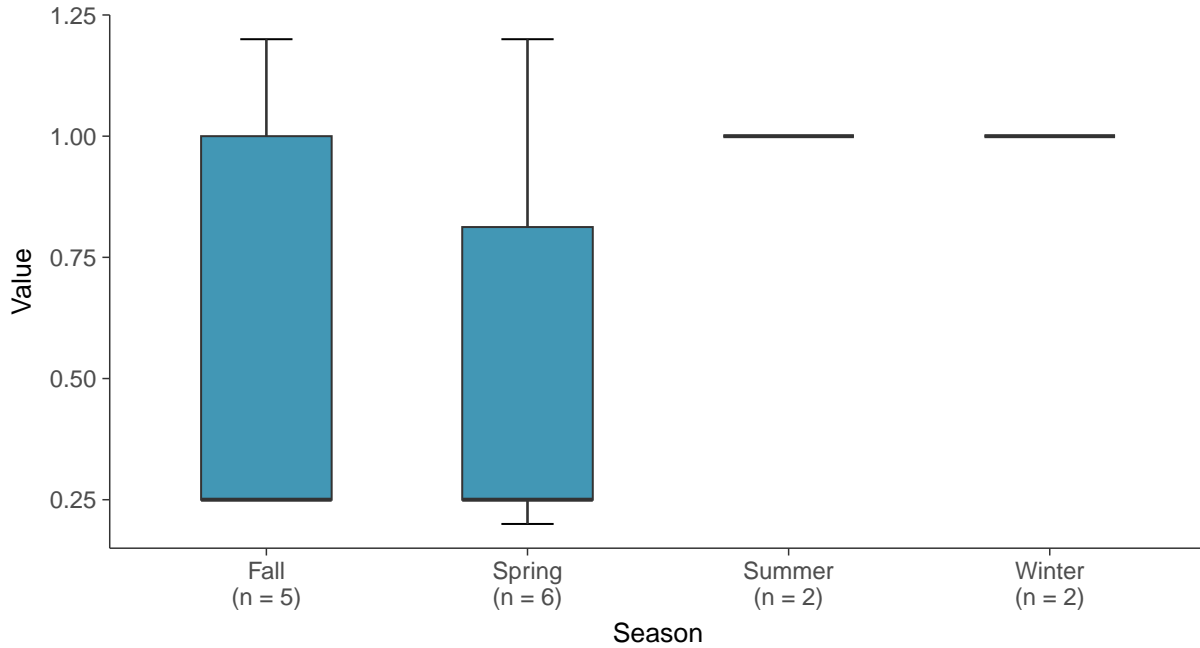
Boxplot

Beryllium, MW-17004 (ug/L)



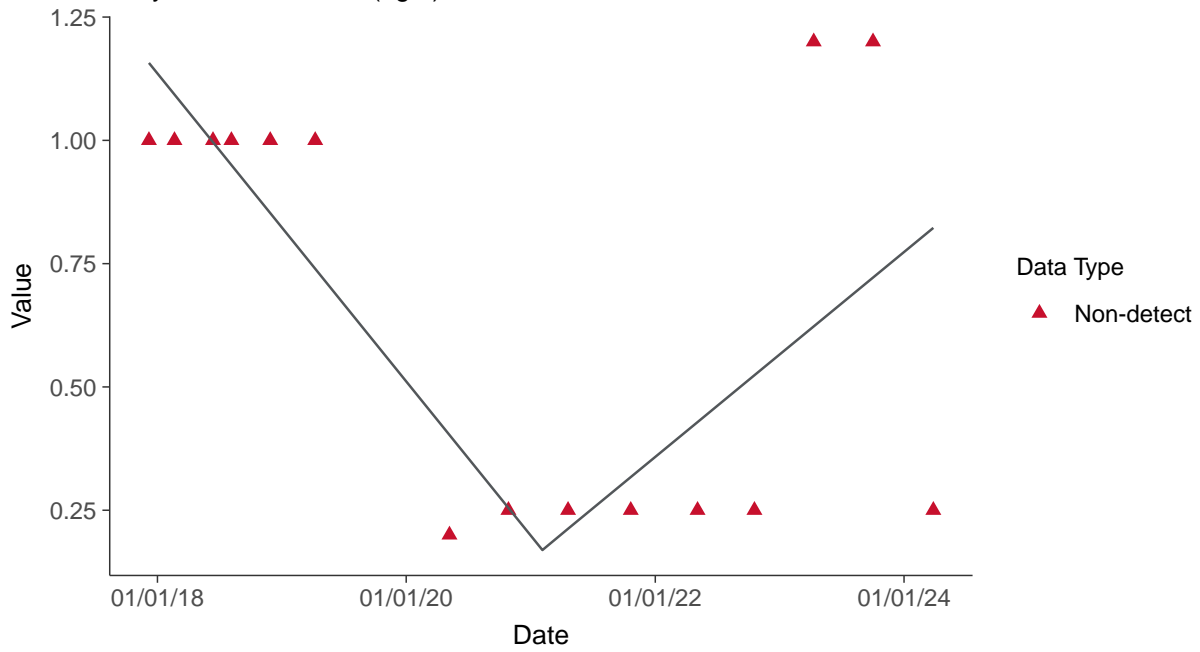
Boxplot by Season

Beryllium, MW-17004 (ug/L)





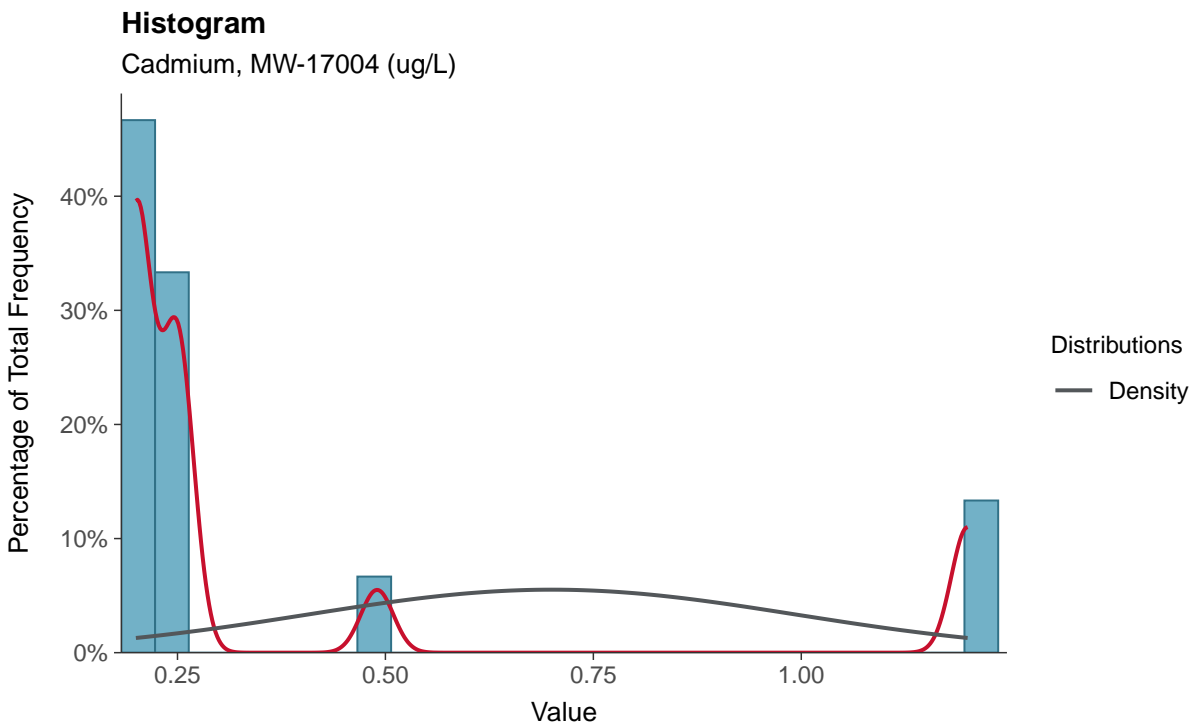
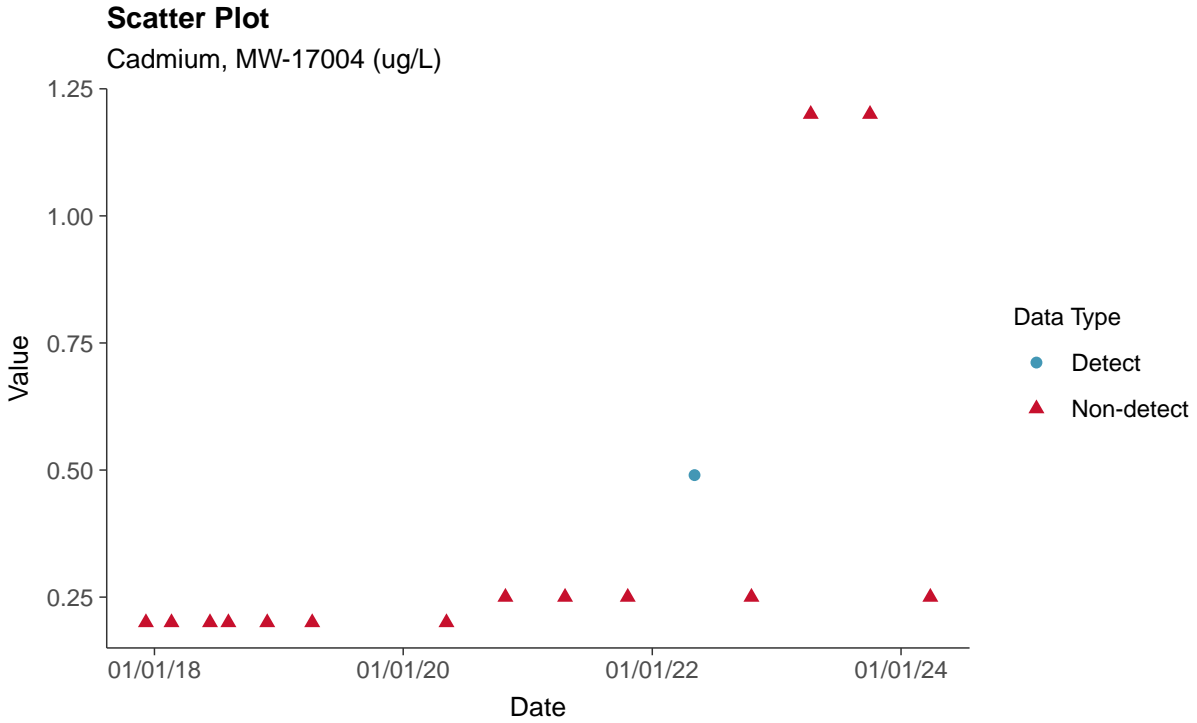
Trend Regression: Piecewise Linear-Linear
Beryllium, MW-17004 (ug/L)





Appendix IV: Cadmium, MW-17004

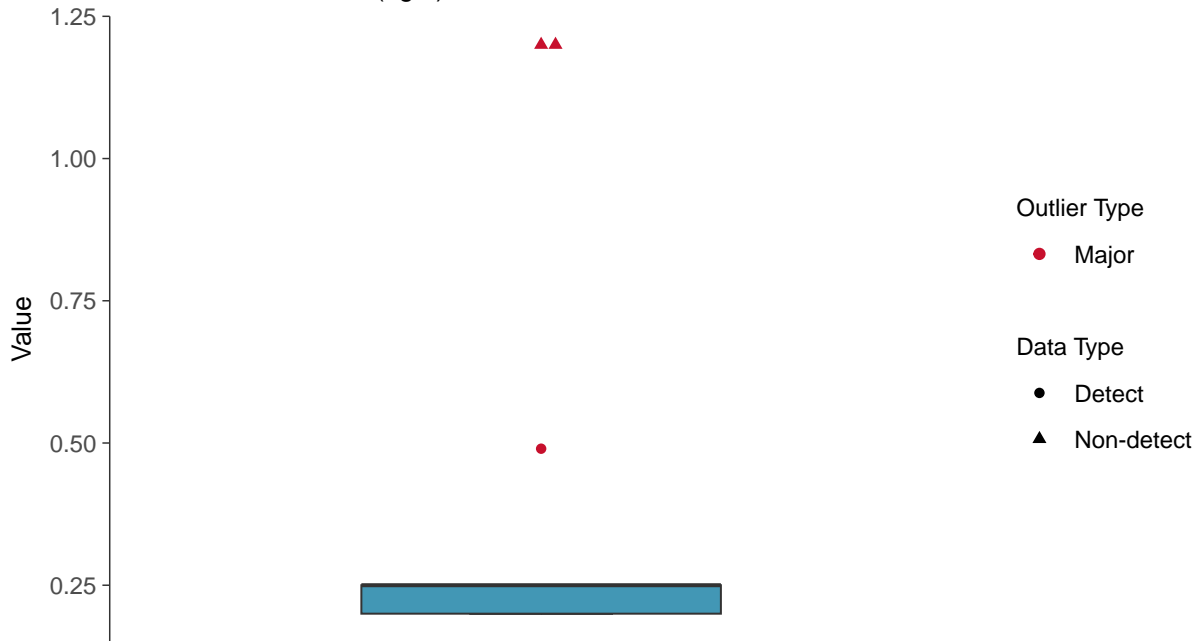
ID: 17_2_106





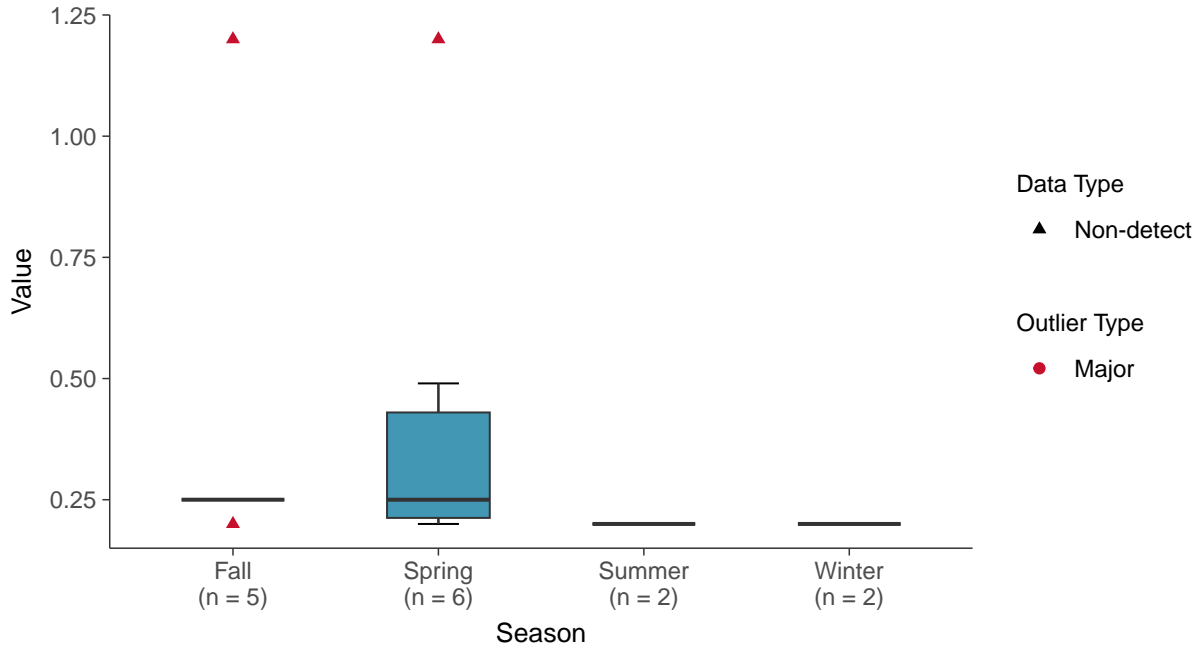
Boxplot

Cadmium, MW-17004 (ug/L)



Boxplot by Season

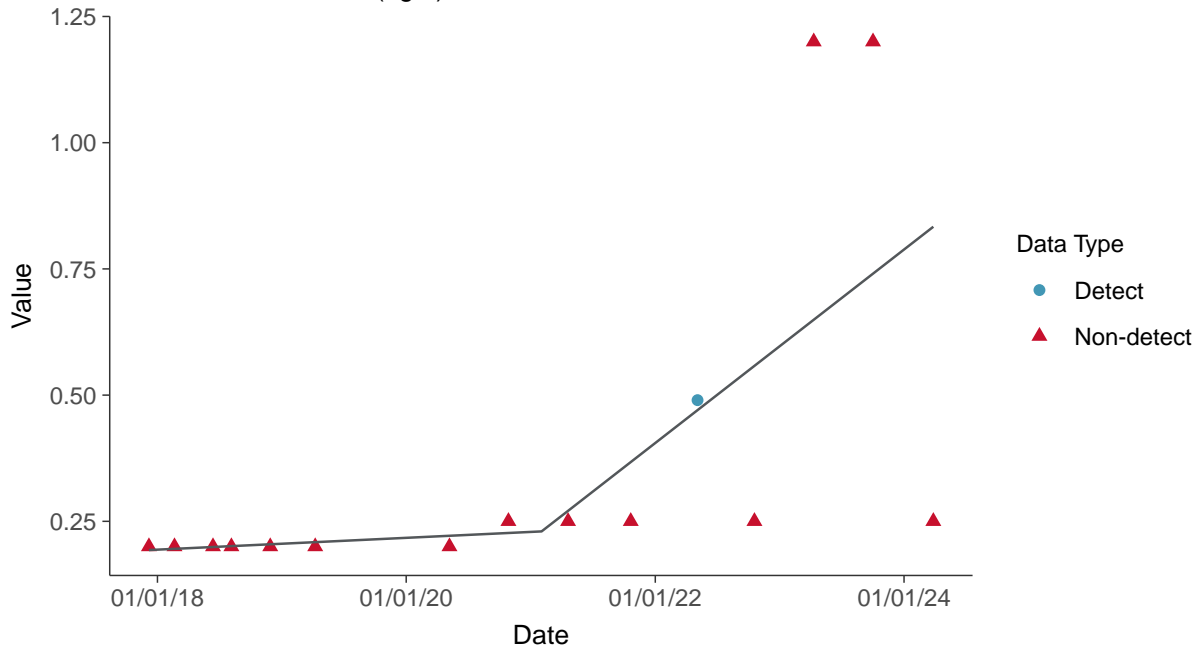
Cadmium, MW-17004 (ug/L)





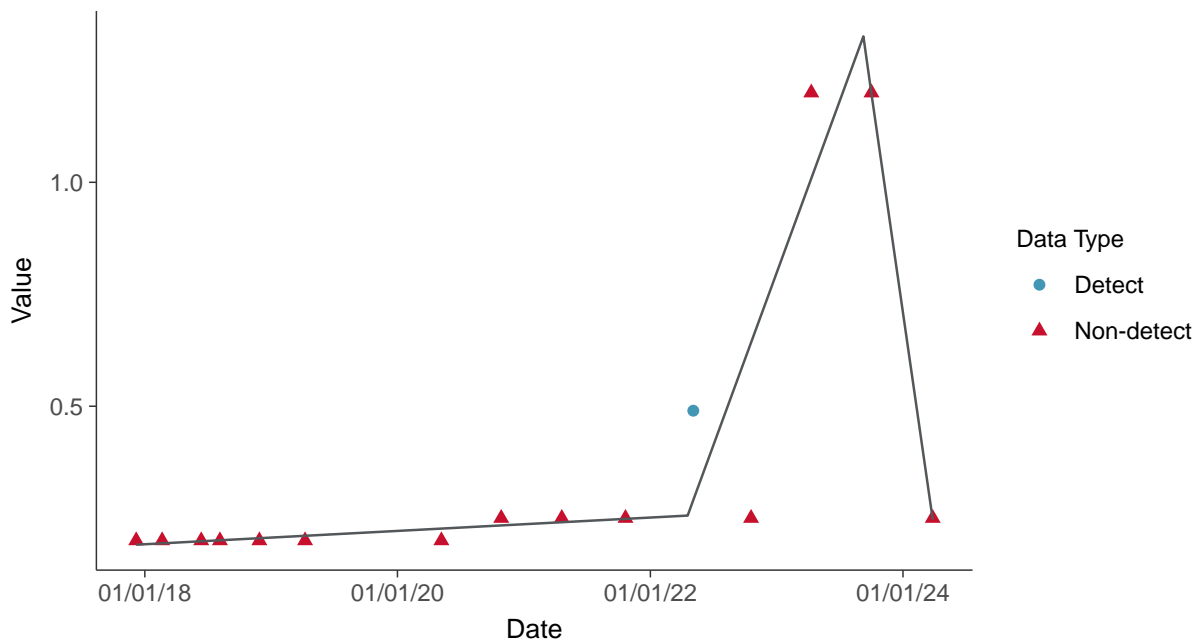
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-17004 (ug/L)



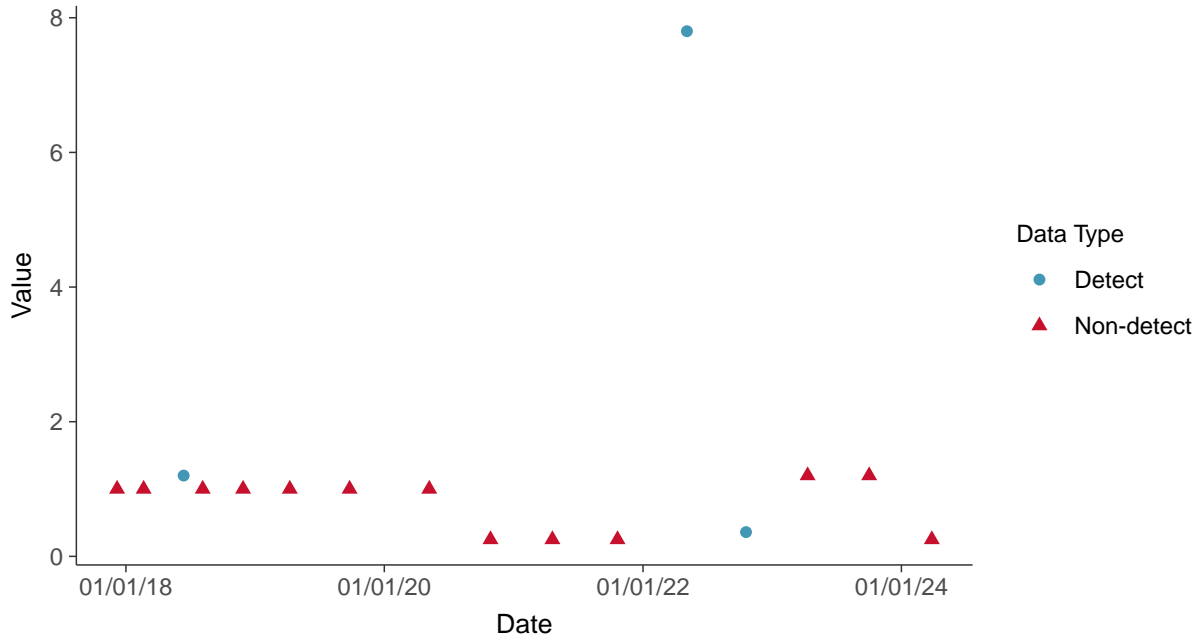


Appendix IV: Chromium, MW-17004

ID: 17_2_109

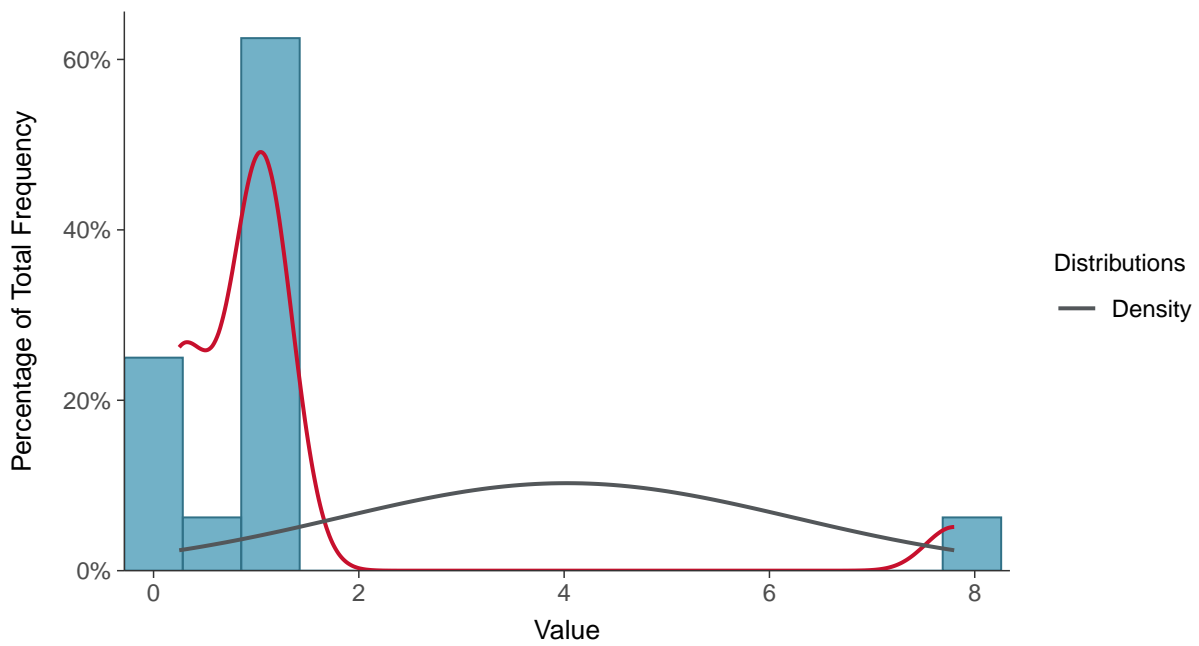
Scatter Plot

Chromium, MW-17004 (ug/L)



Histogram

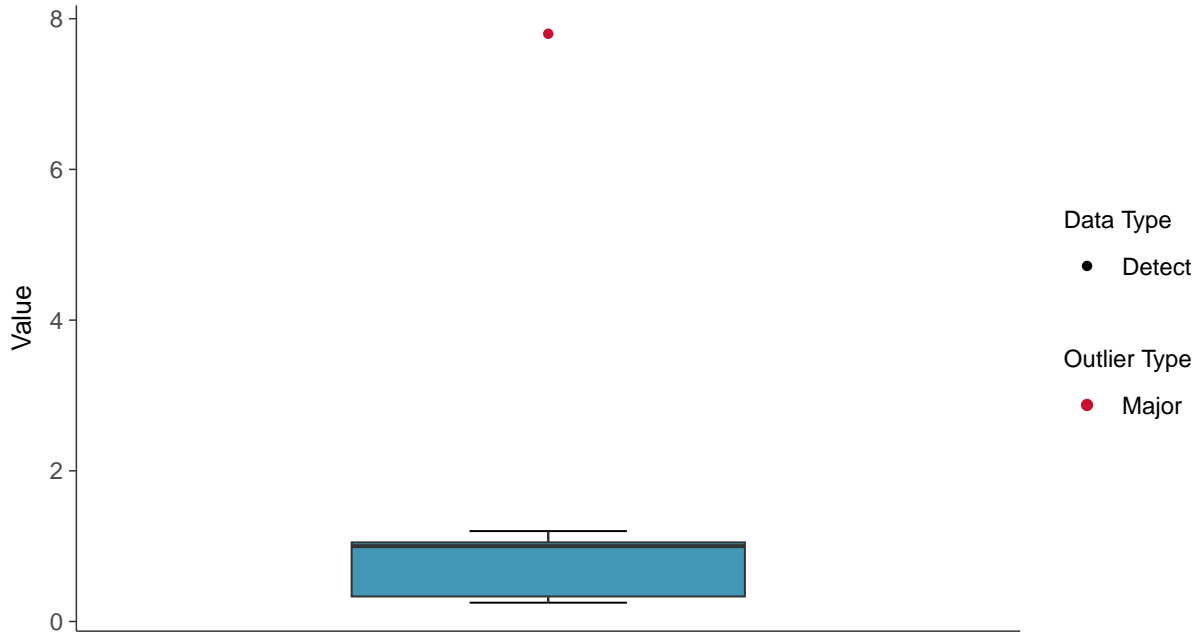
Chromium, MW-17004 (ug/L)





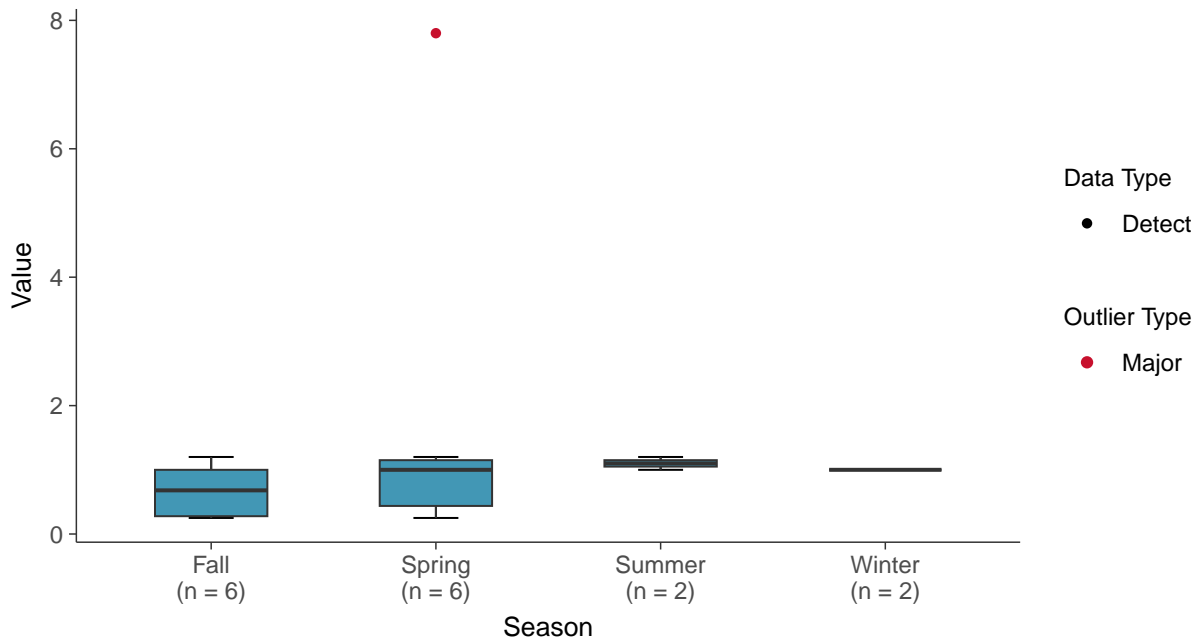
Boxplot

Chromium, MW-17004 (ug/L)



Boxplot by Season

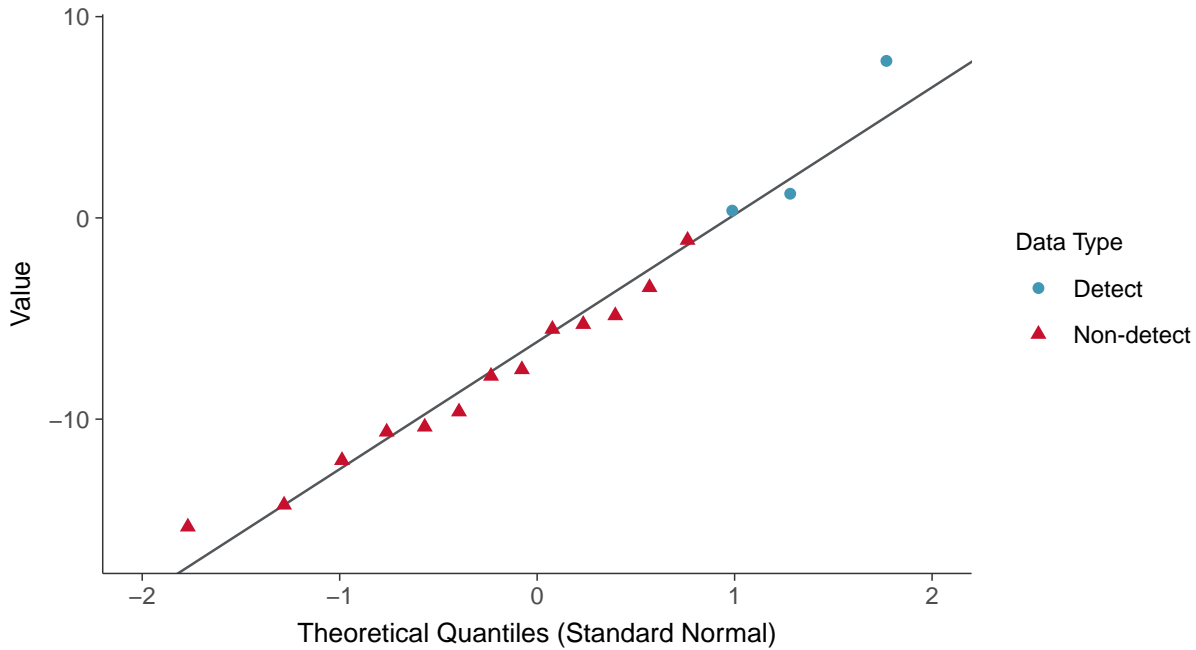
Chromium, MW-17004 (ug/L)





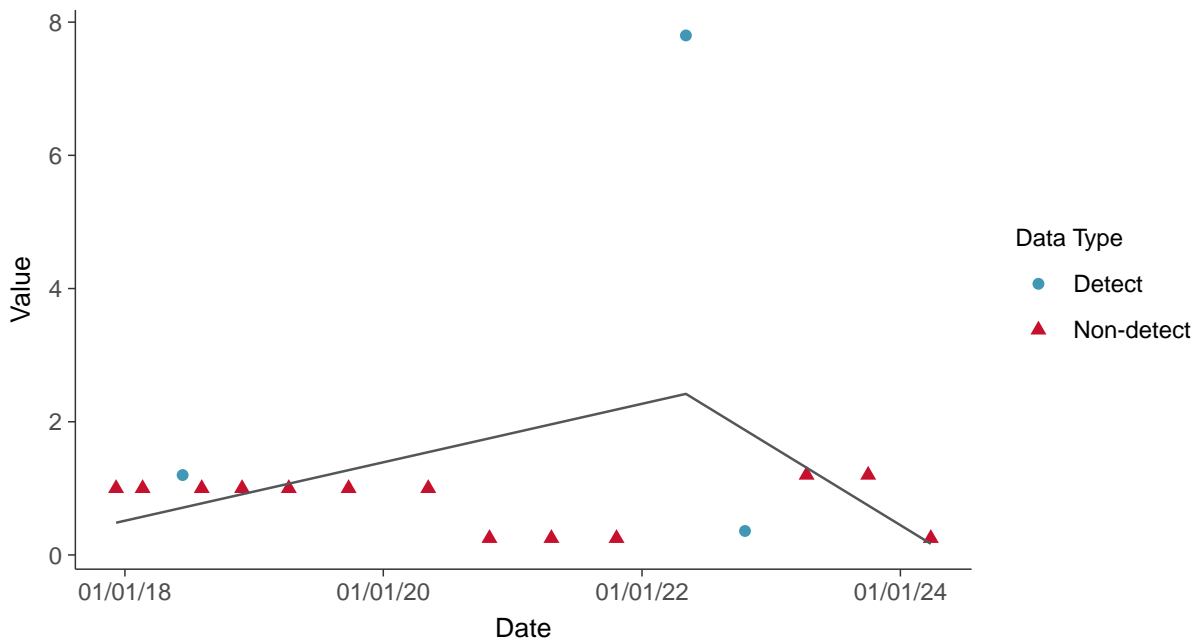
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

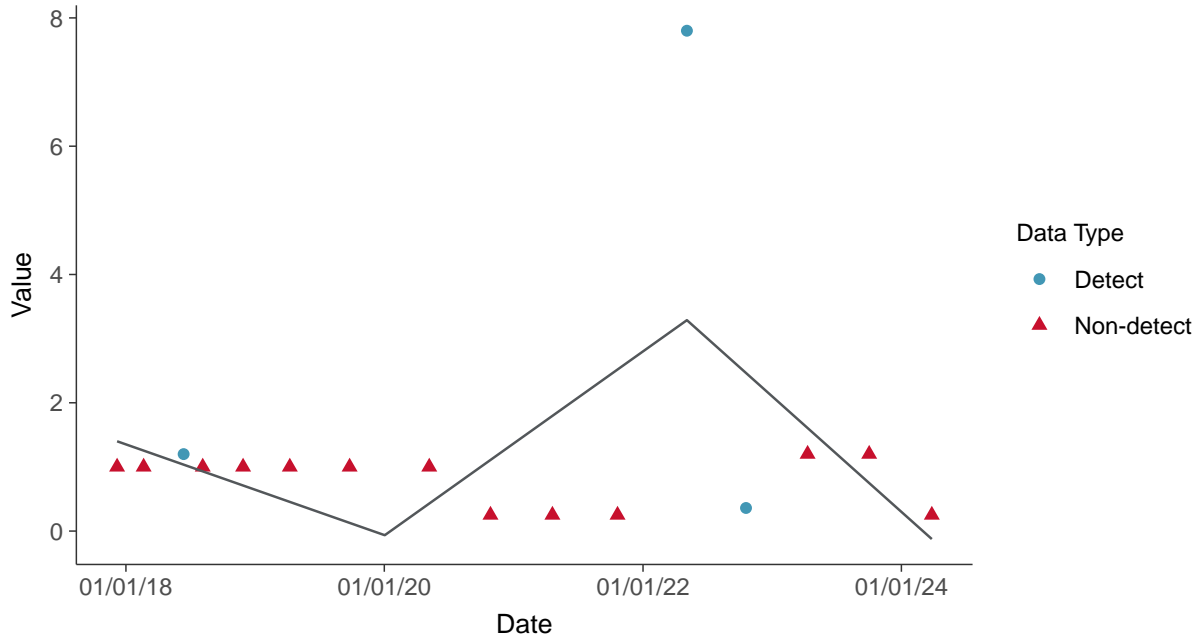
Chromium, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

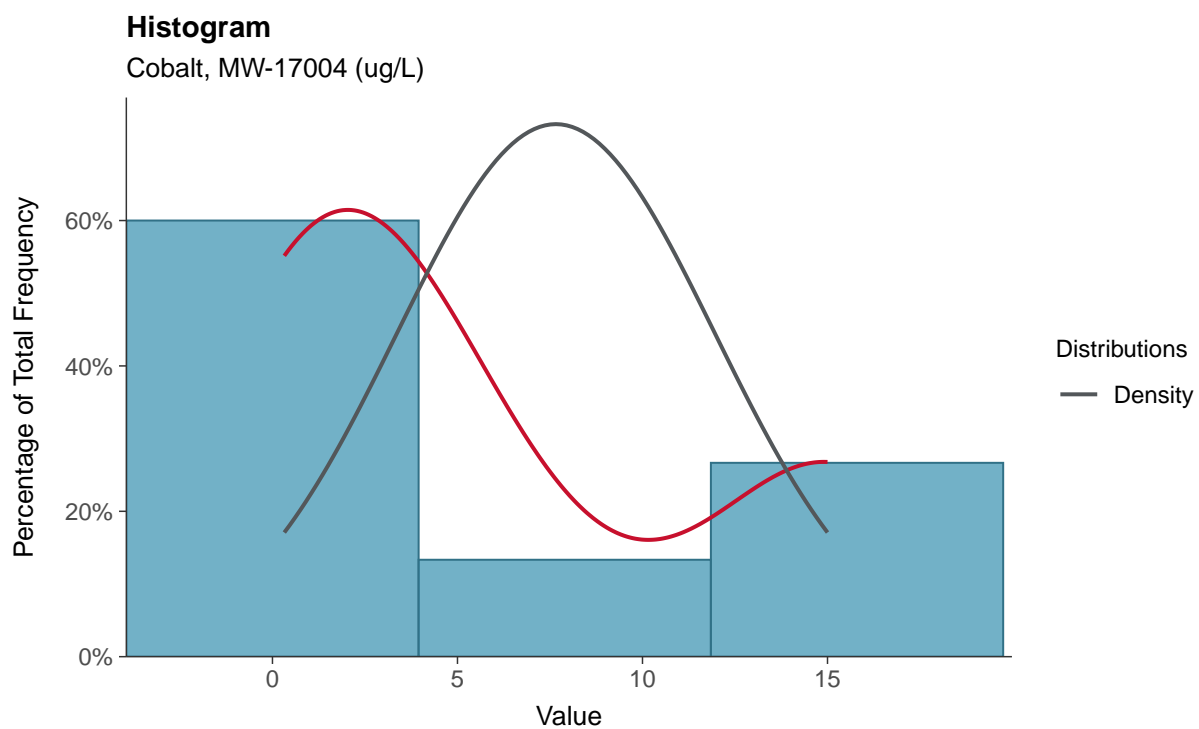
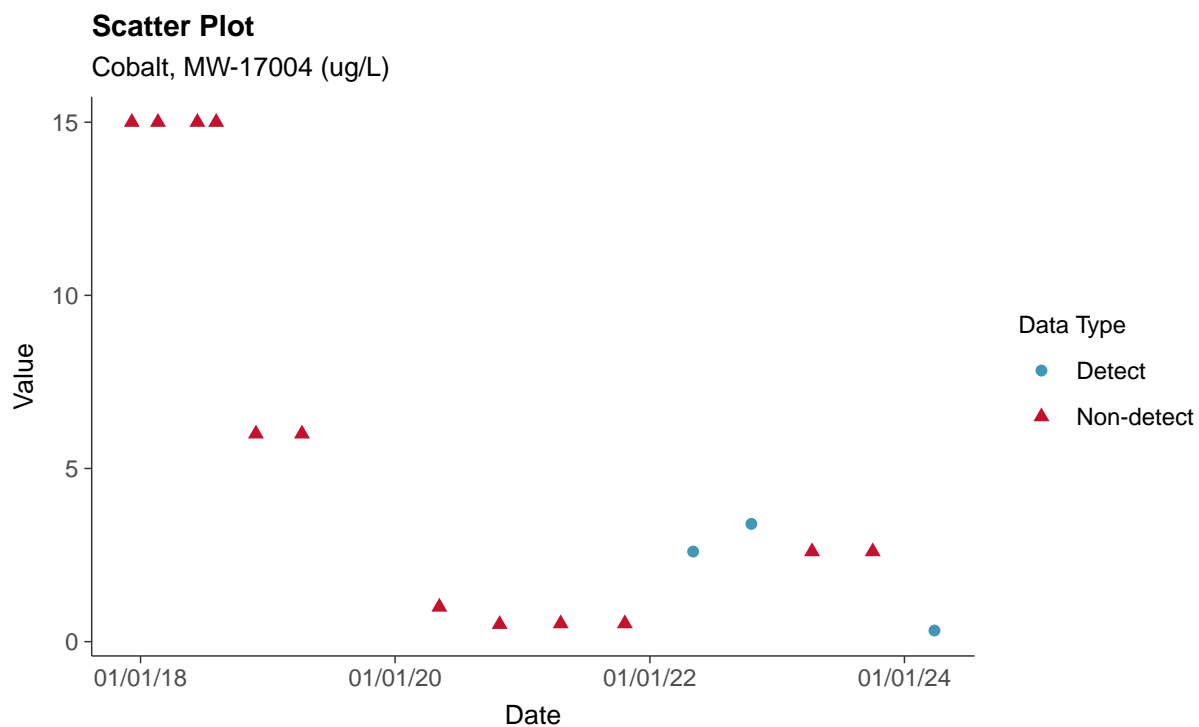
Chromium, MW-17004 (ug/L)





Appendix IV: Cobalt, MW-17004

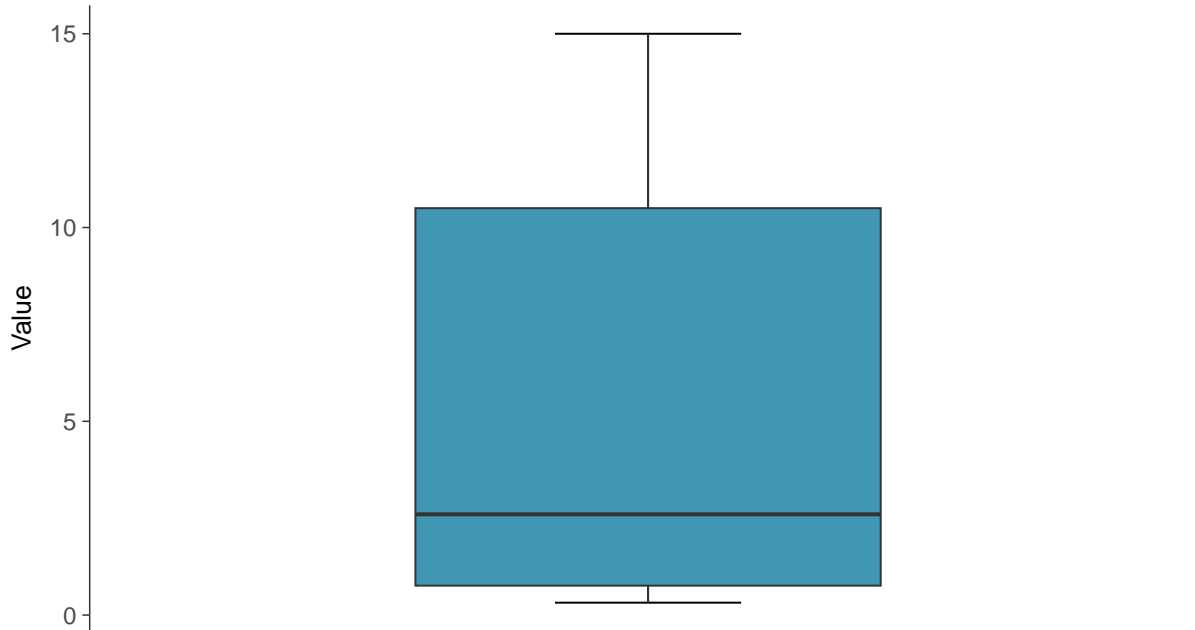
ID: 17_2_110





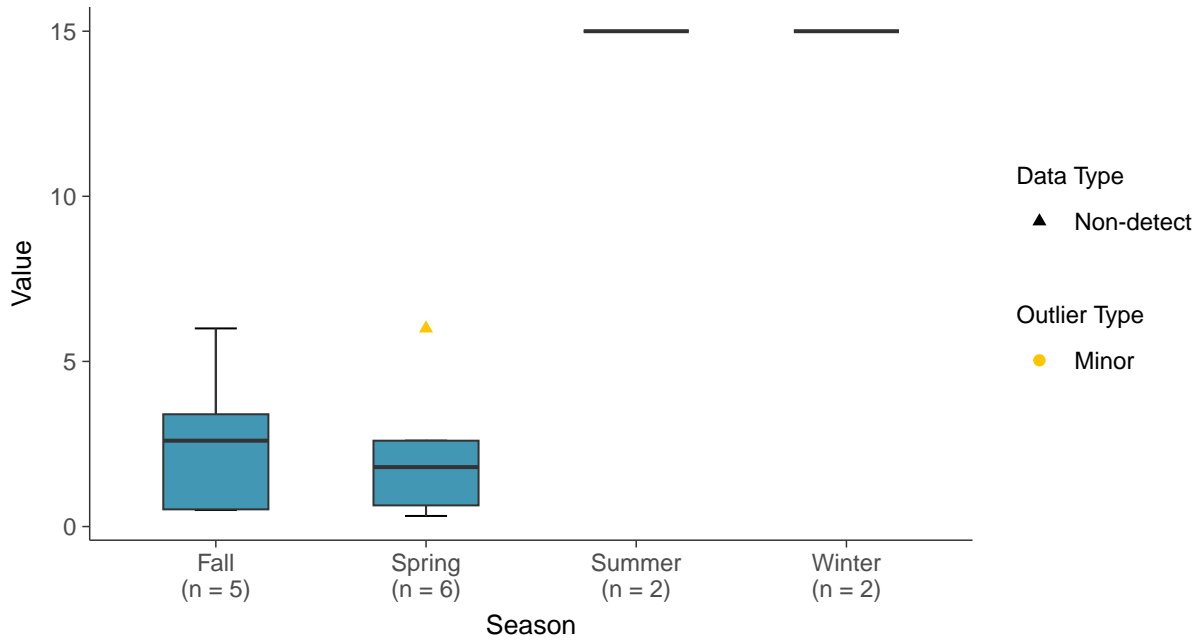
Boxplot

Cobalt, MW-17004 (ug/L)



Boxplot by Season

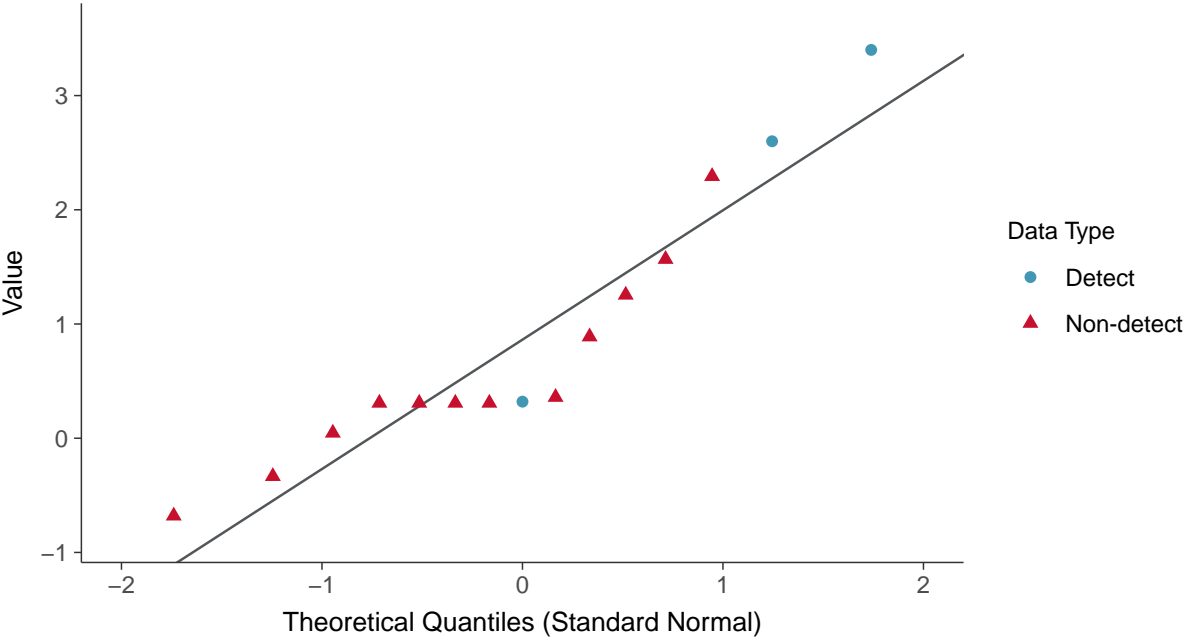
Cobalt, MW-17004 (ug/L)





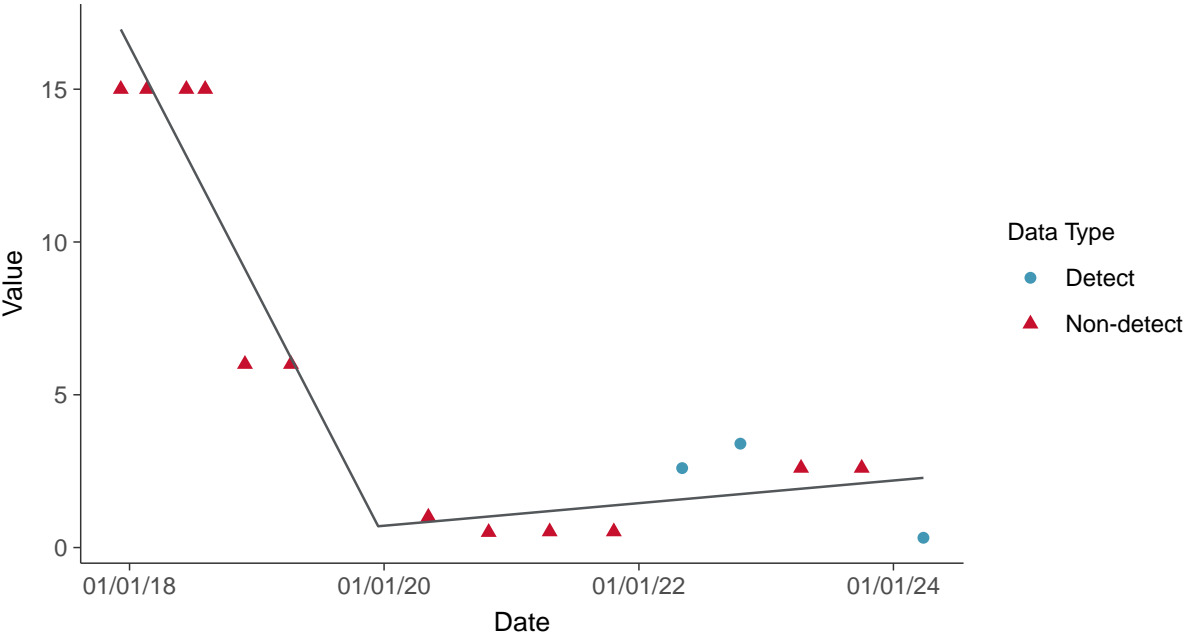
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

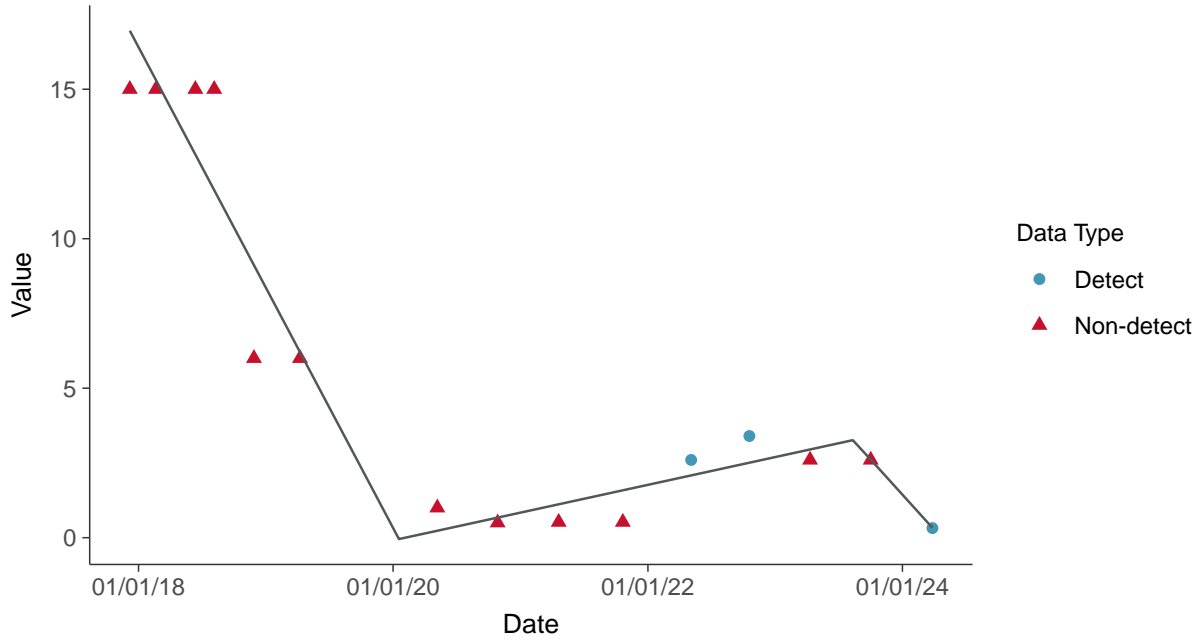
Cobalt, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

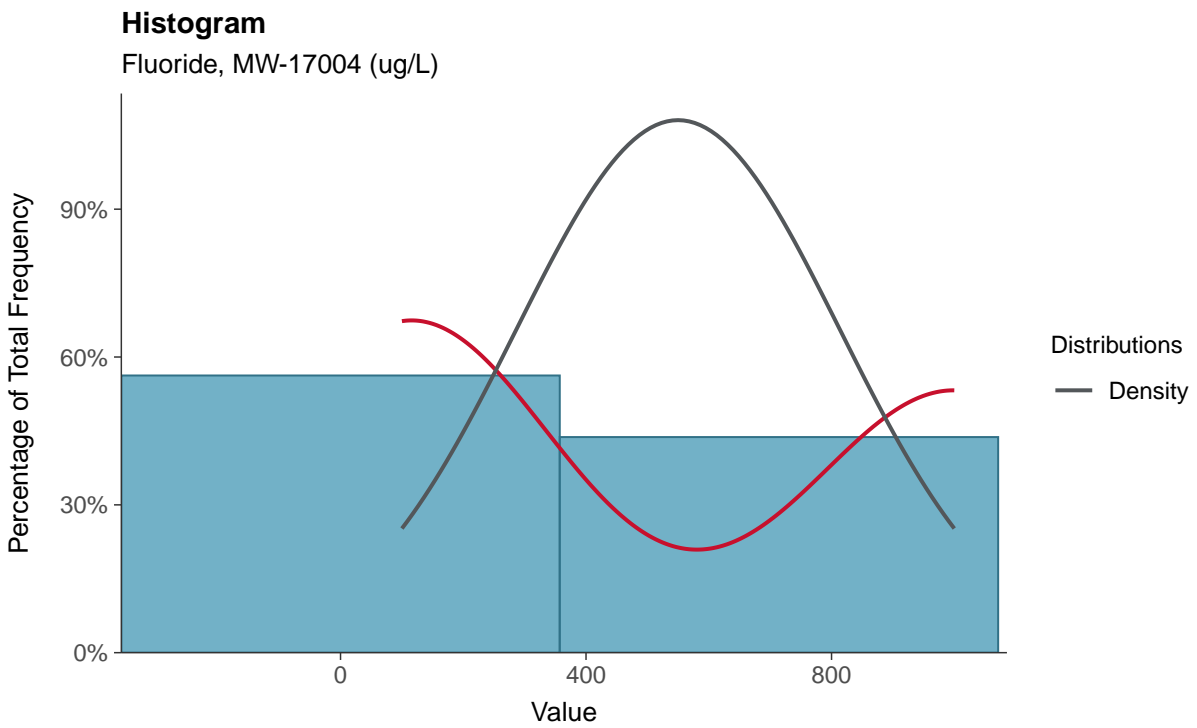
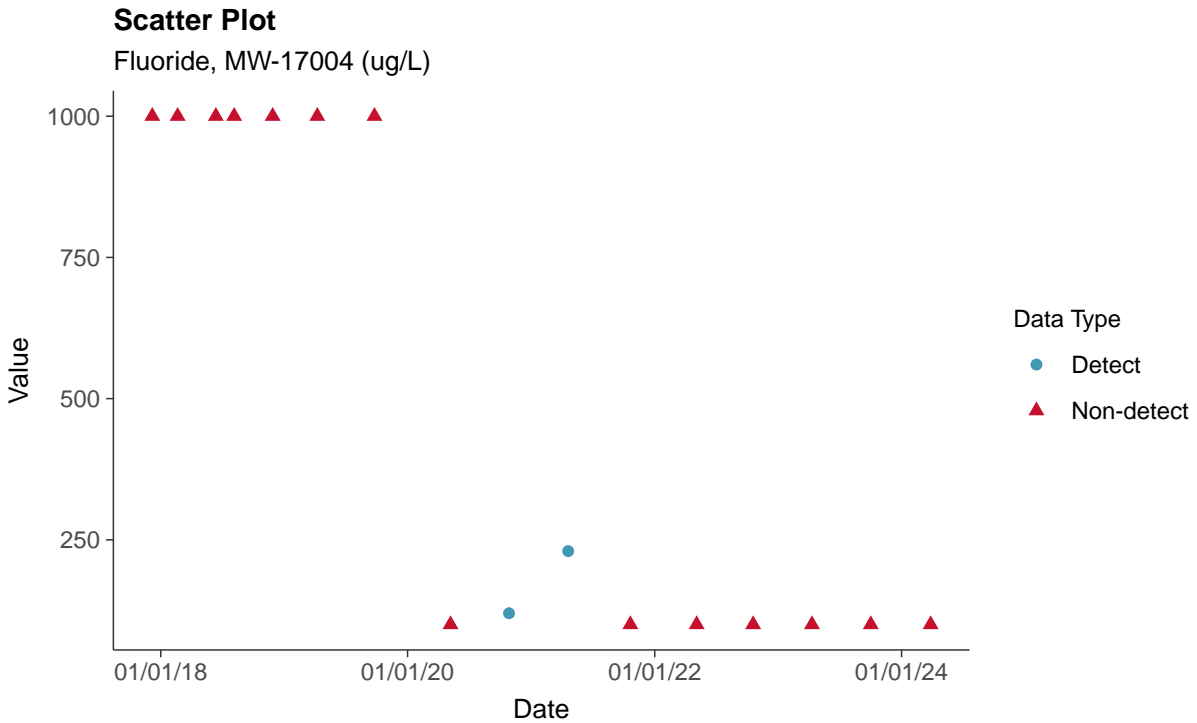
Cobalt, MW-17004 (ug/L)





Appendix IV: Fluoride, MW-17004

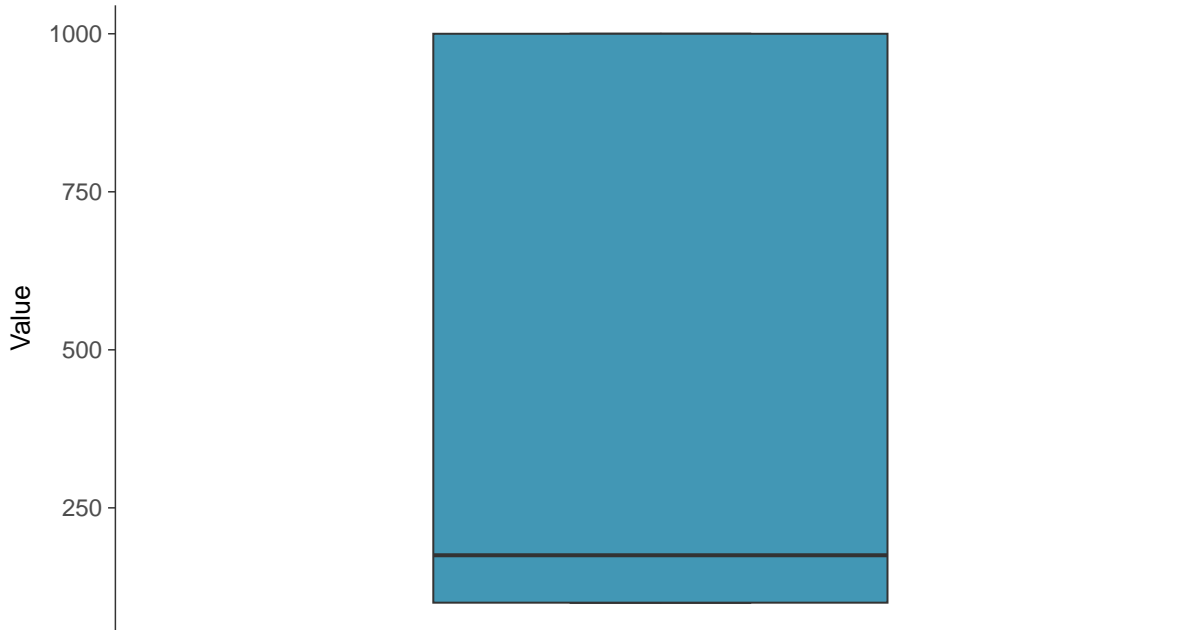
ID: 17_2_114





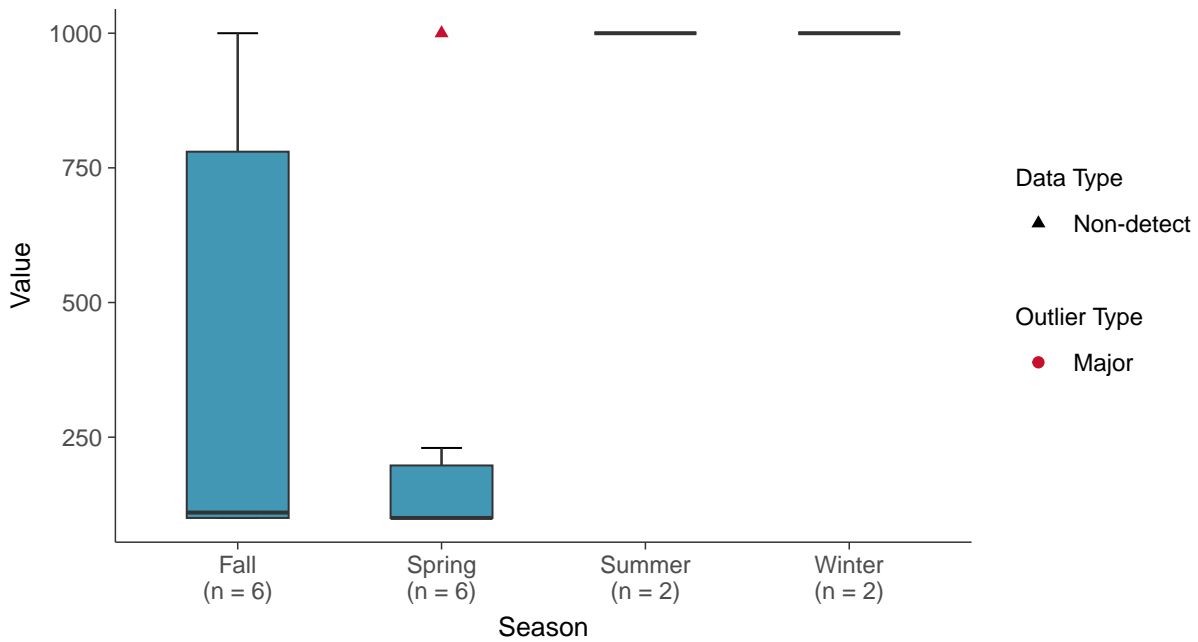
Boxplot

Fluoride, MW-17004 (ug/L)



Boxplot by Season

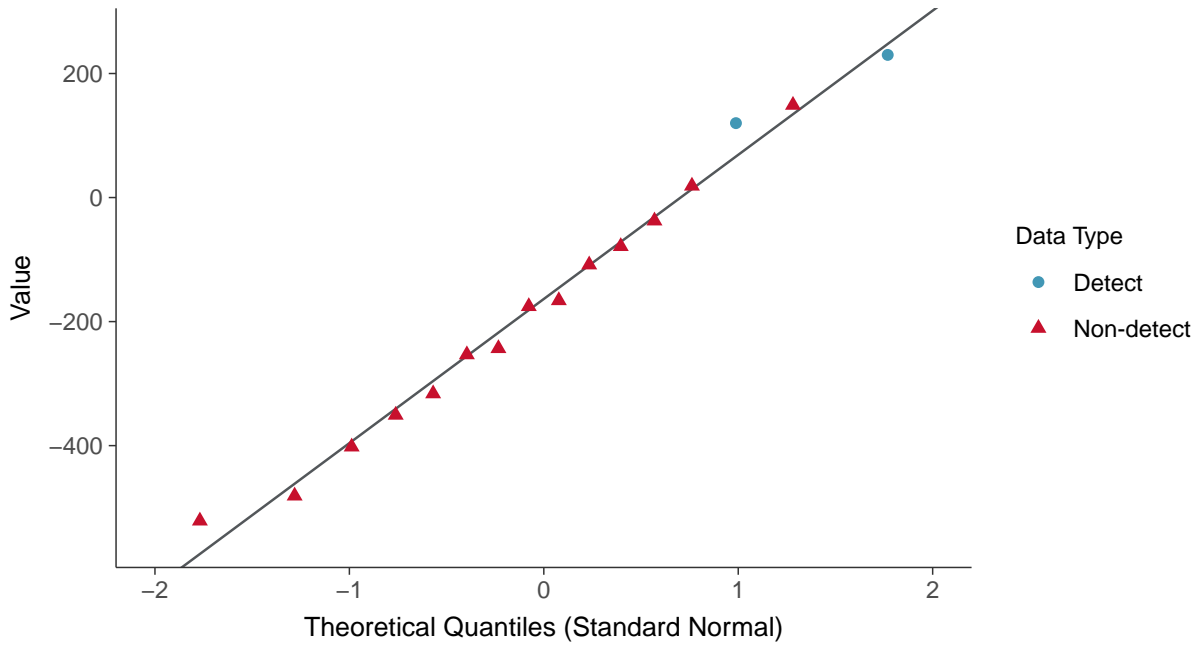
Fluoride, MW-17004 (ug/L)





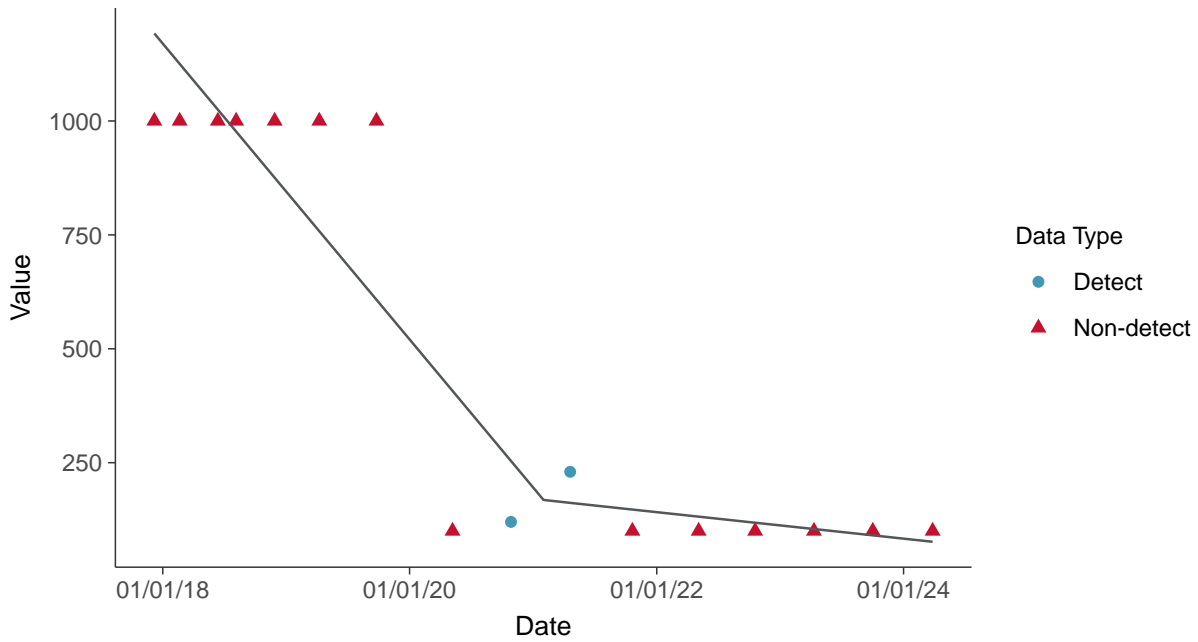
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-17004 (ug/L)



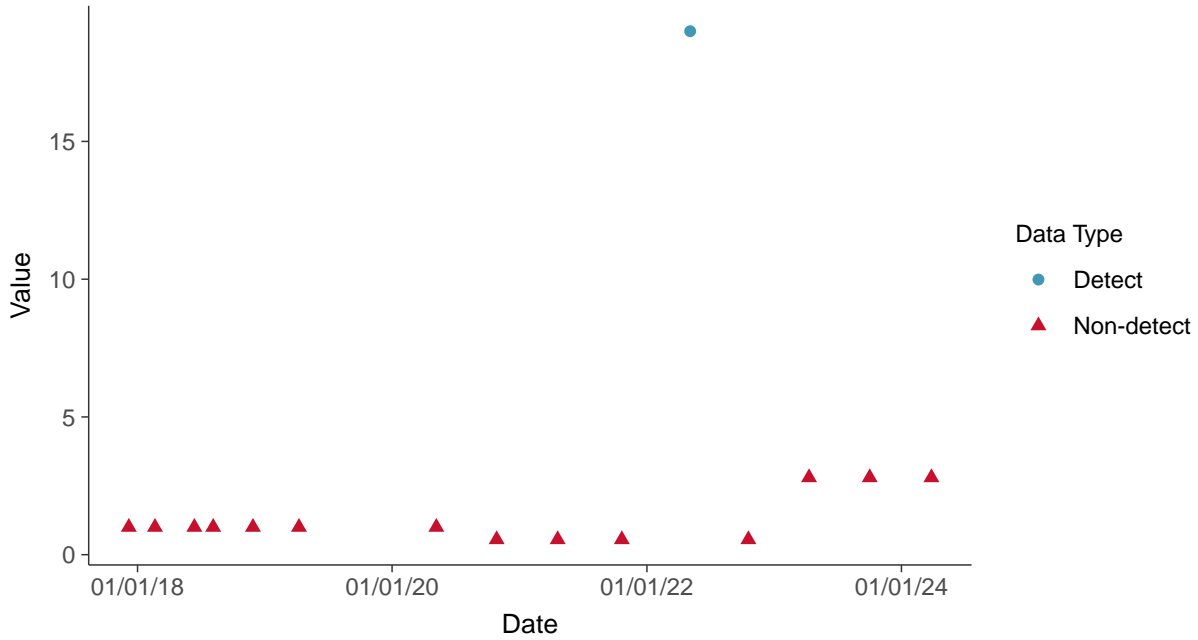


Appendix IV: Lead, MW-17004

ID: 17_2_116

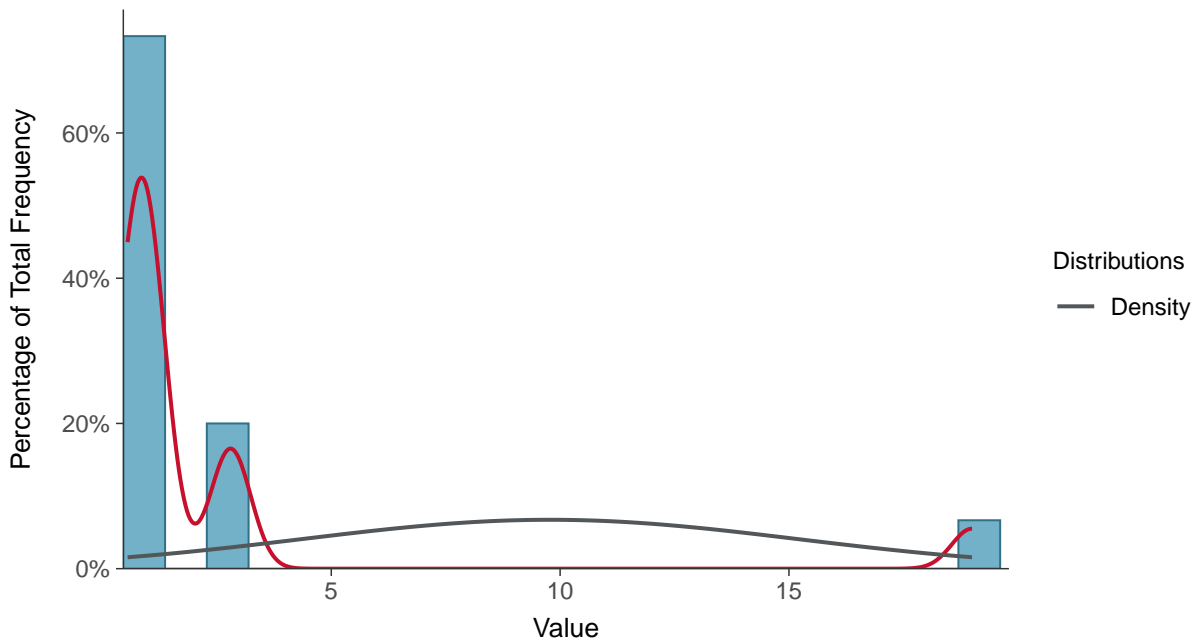
Scatter Plot

Lead, MW-17004 (ug/L)



Histogram

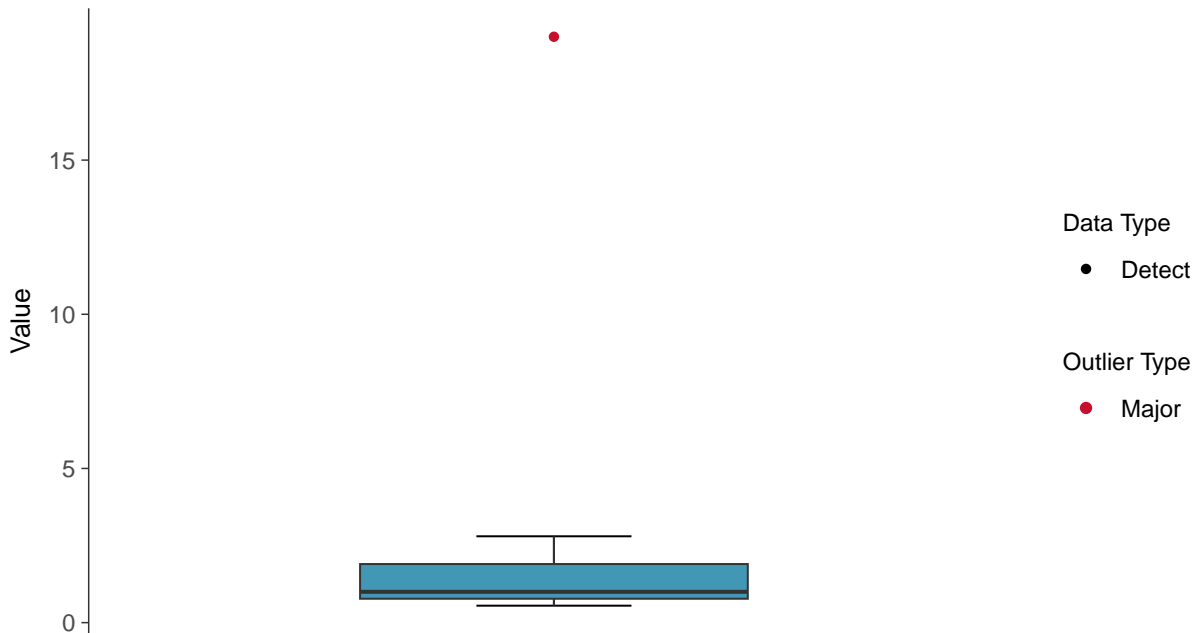
Lead, MW-17004 (ug/L)





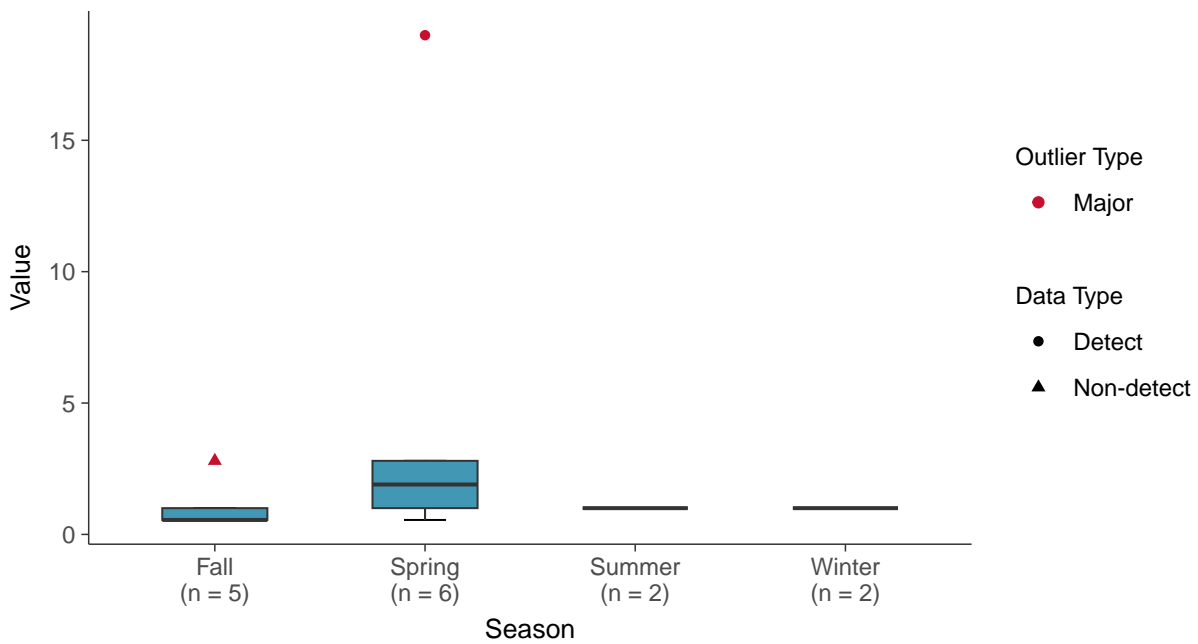
Boxplot

Lead, MW-17004 (ug/L)



Boxplot by Season

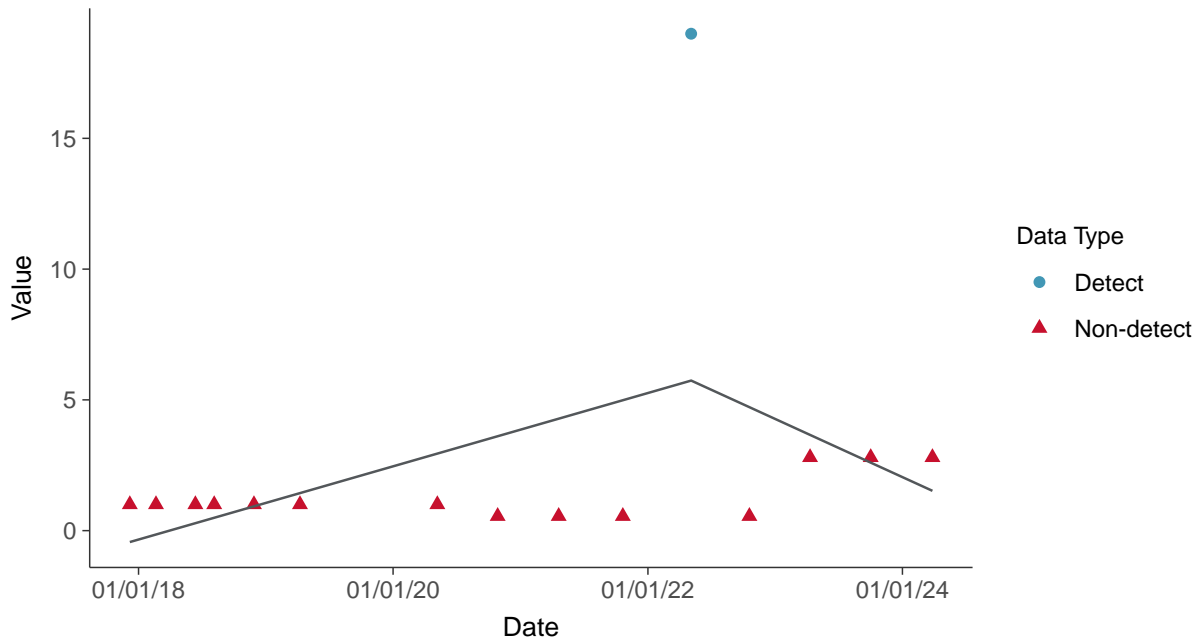
Lead, MW-17004 (ug/L)





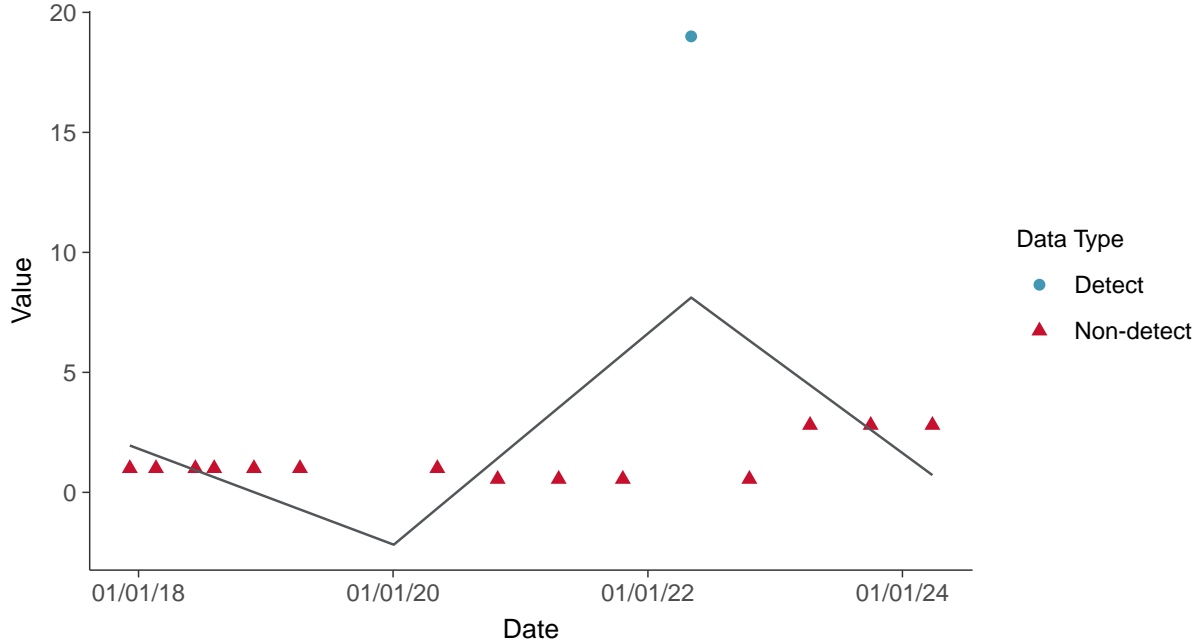
Trend Regression: Piecewise Linear-Linear

Lead, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-17004 (ug/L)



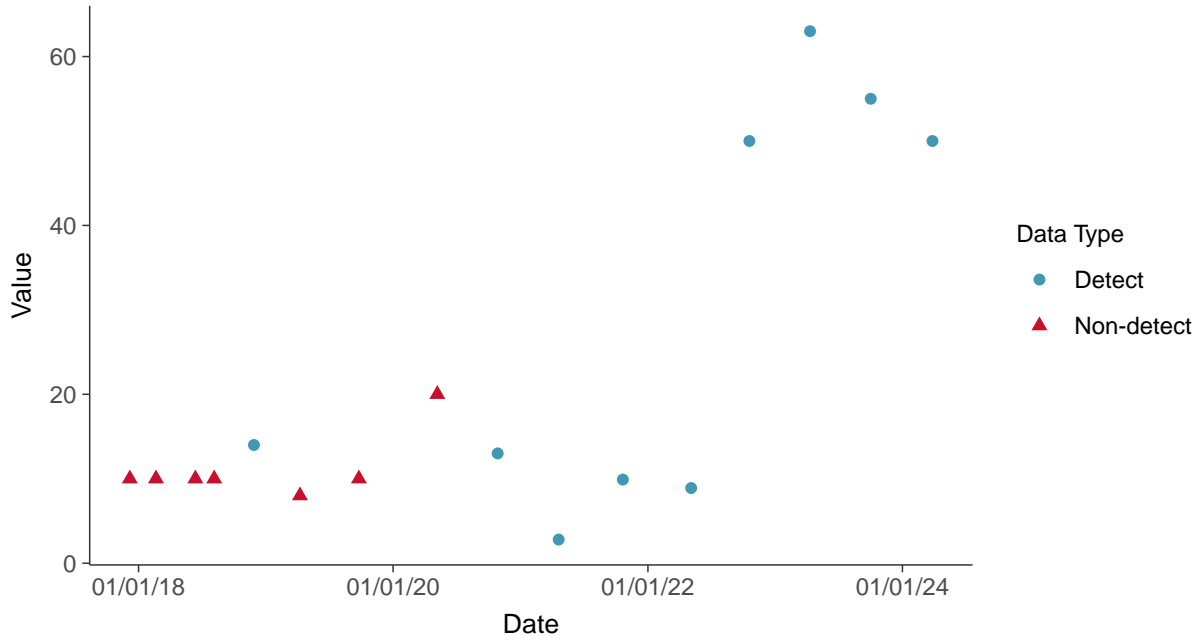


Appendix IV: Lithium, MW-17004

ID: 17_2_117

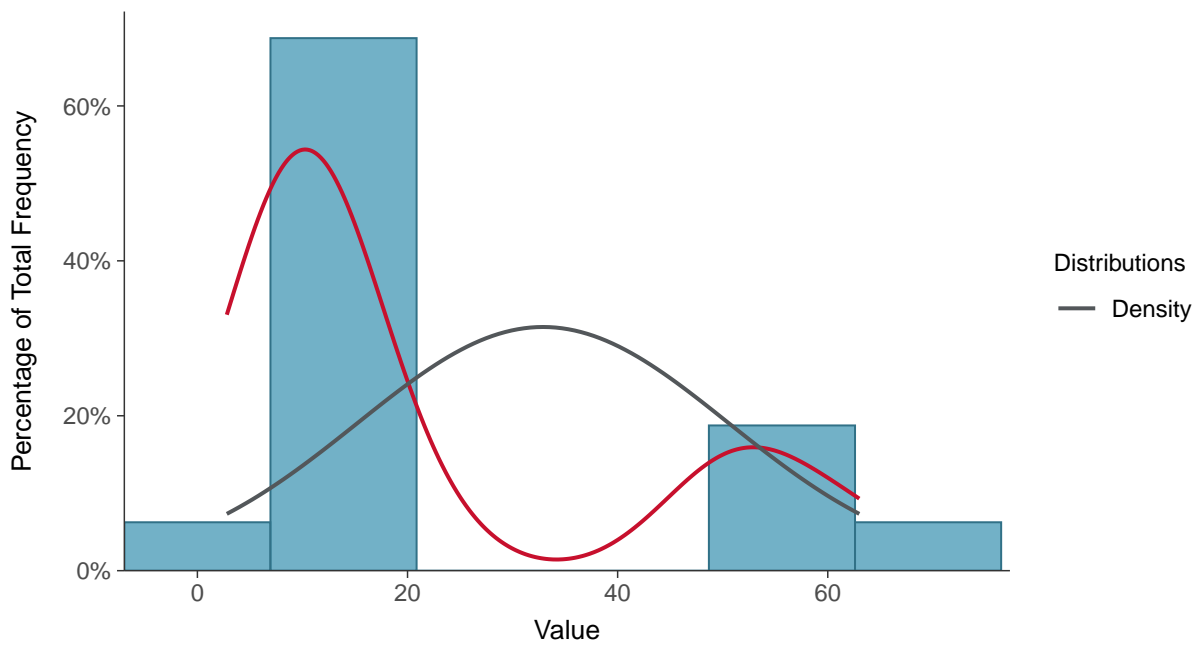
Scatter Plot

Lithium, MW-17004 (ug/L)



Histogram

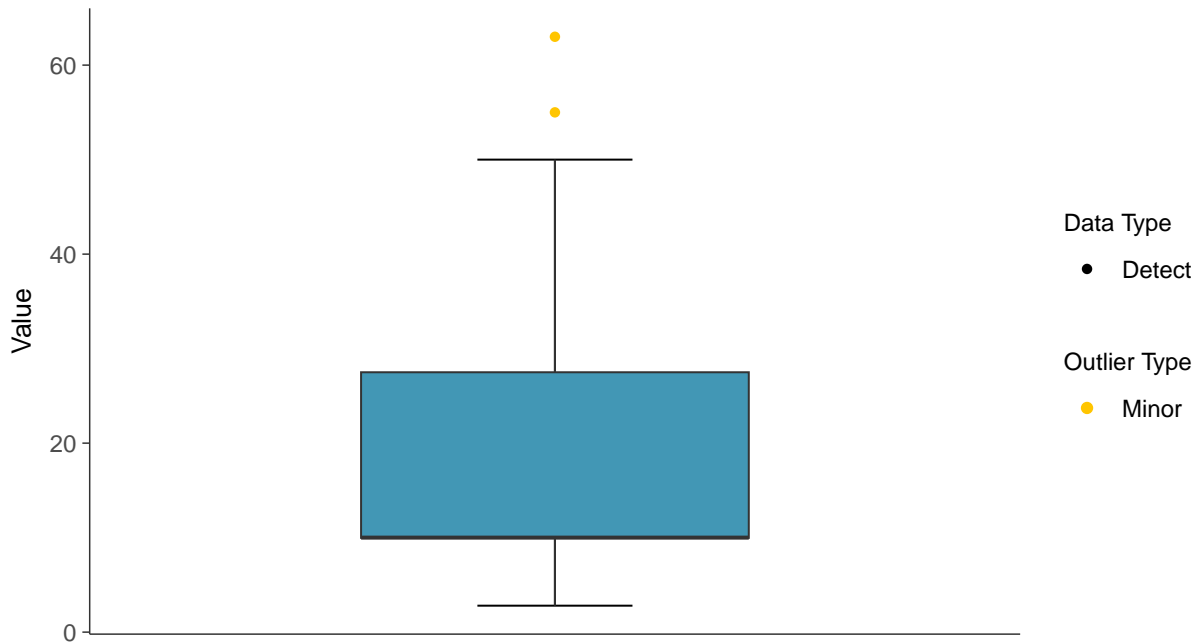
Lithium, MW-17004 (ug/L)





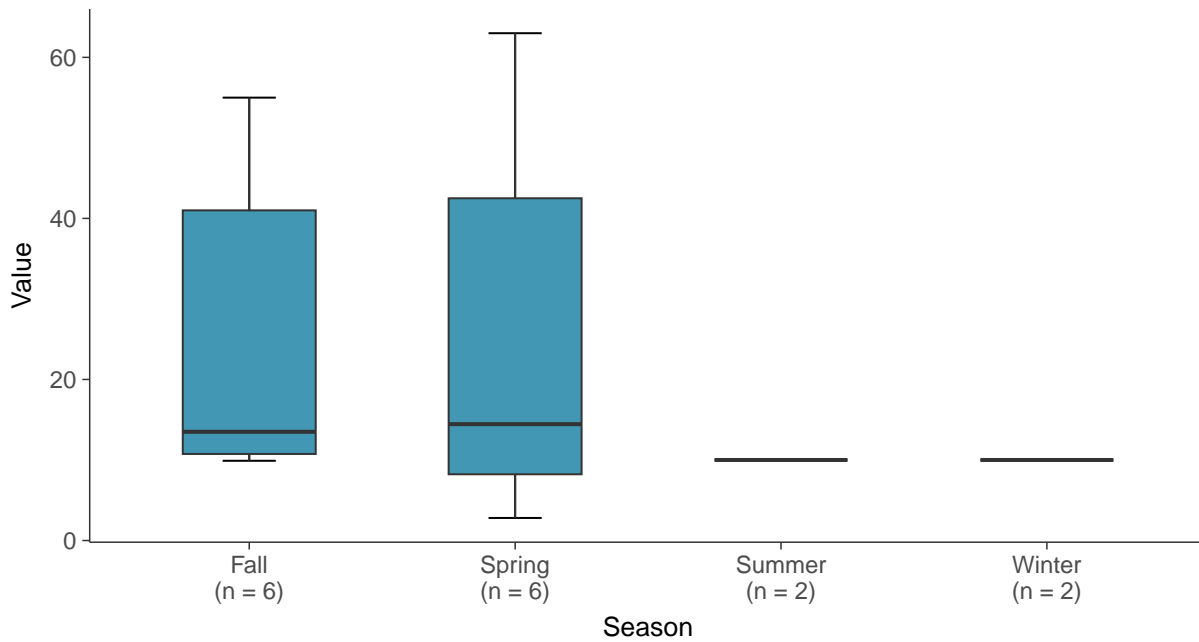
Boxplot

Lithium, MW-17004 (ug/L)



Boxplot by Season

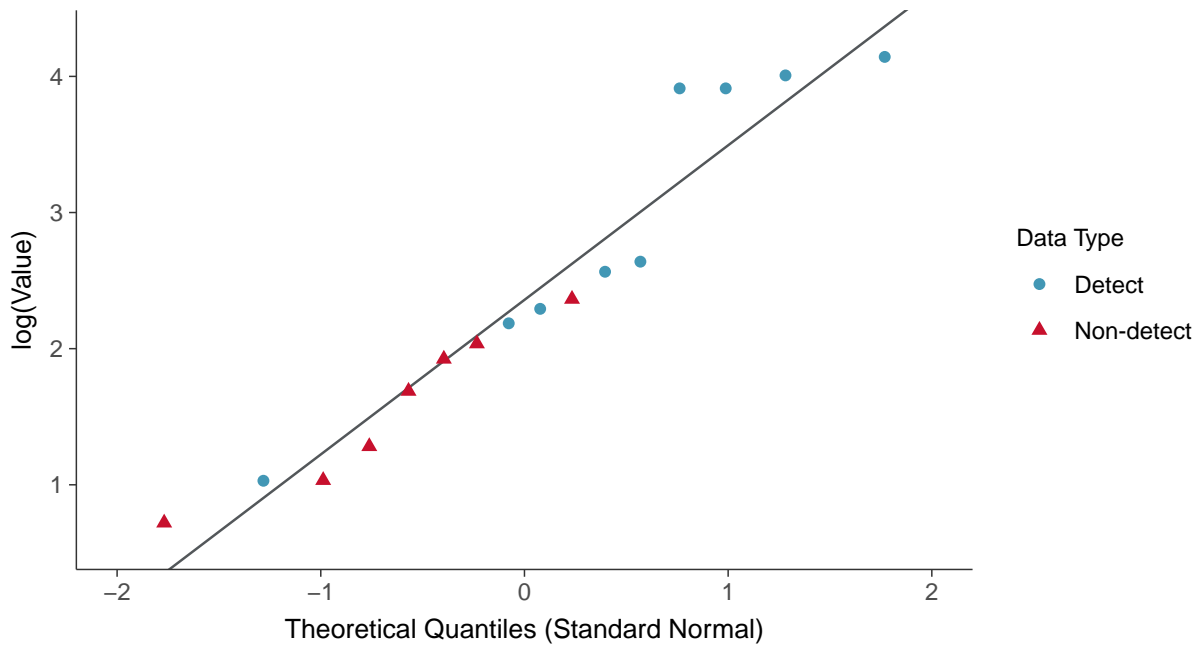
Lithium, MW-17004 (ug/L)





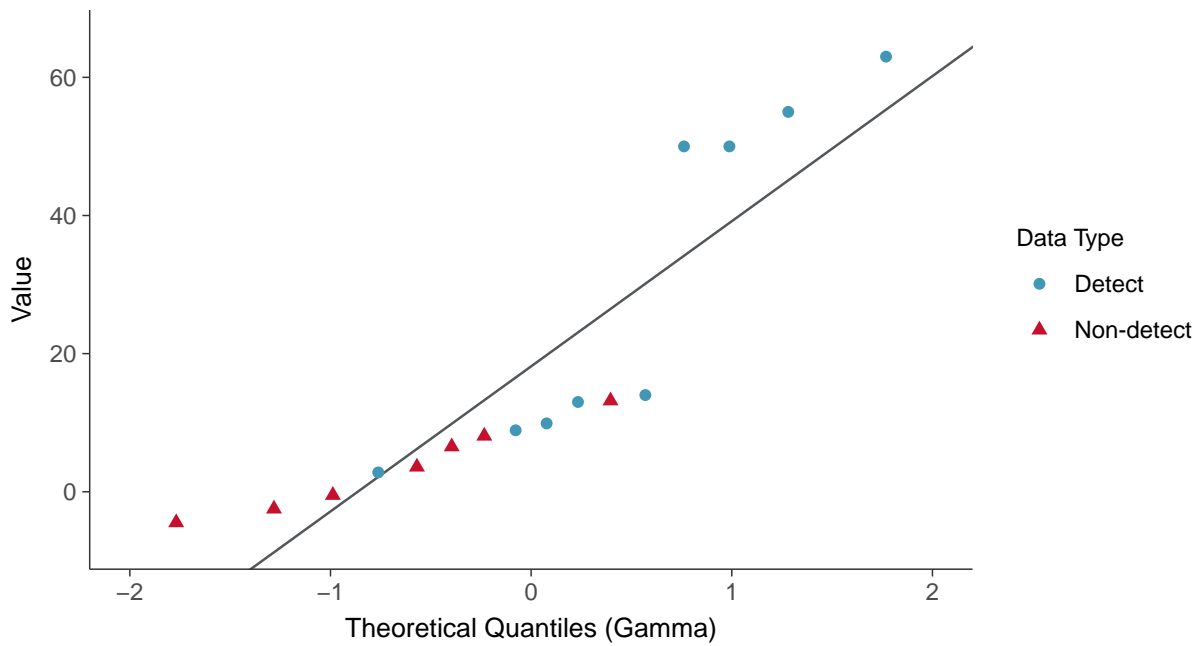
Lognormal Q-Q plot using ROS Imputed Estimates

Lithium, MW-17004 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

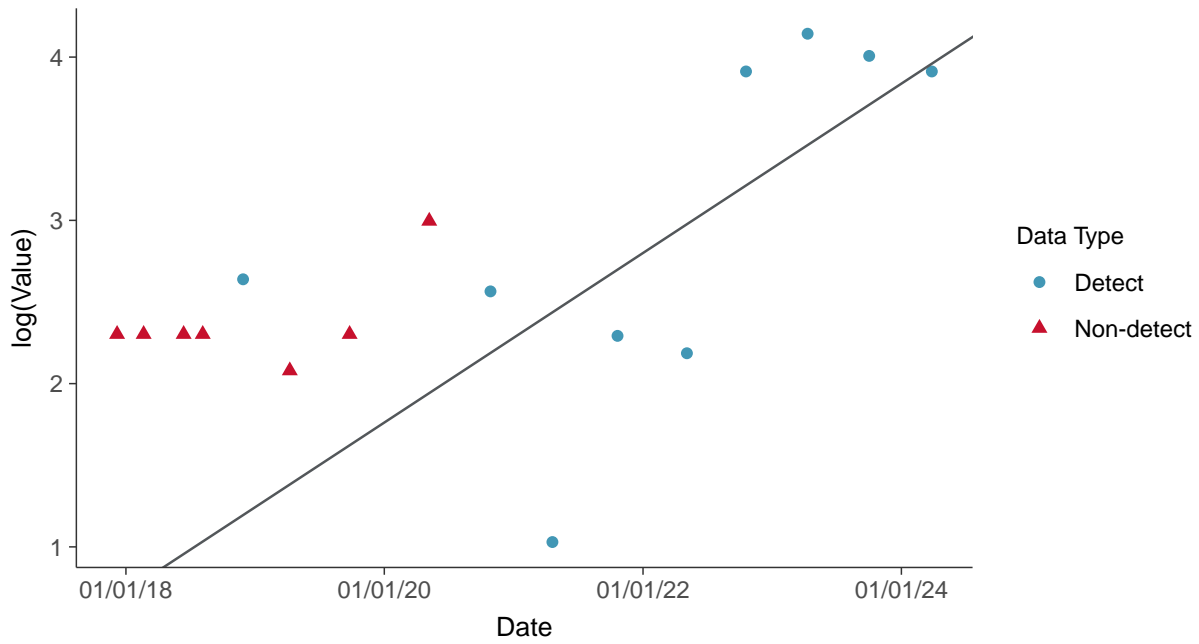
Lithium, MW-17004 (ug/L)





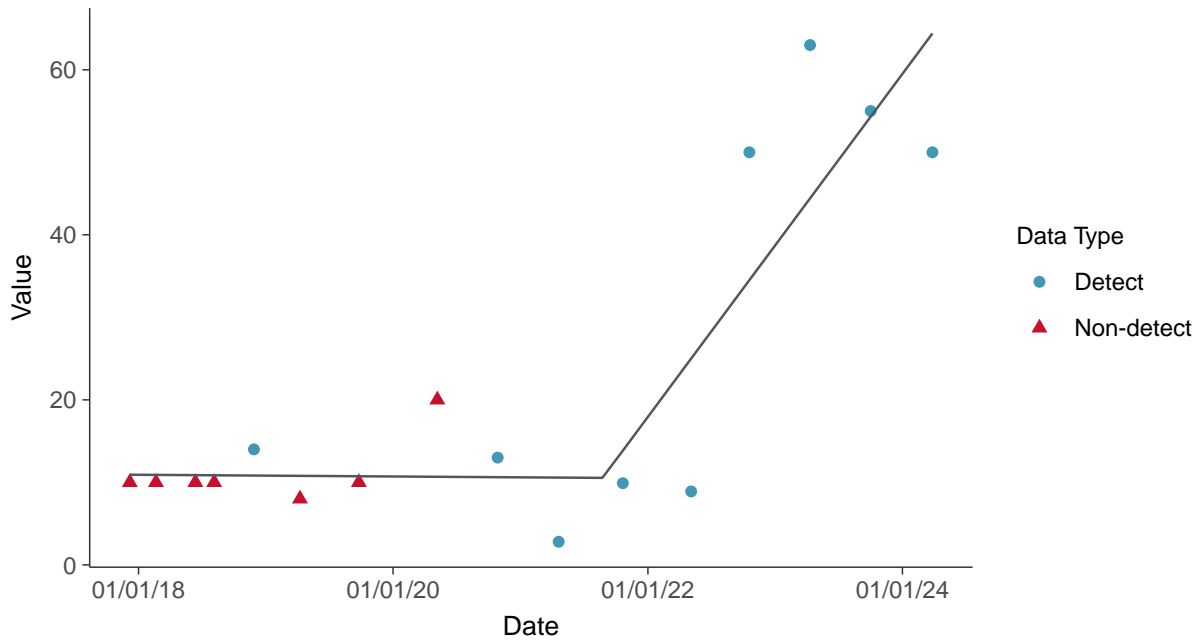
Trend Regression: Lognormal MLE

Lithium, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

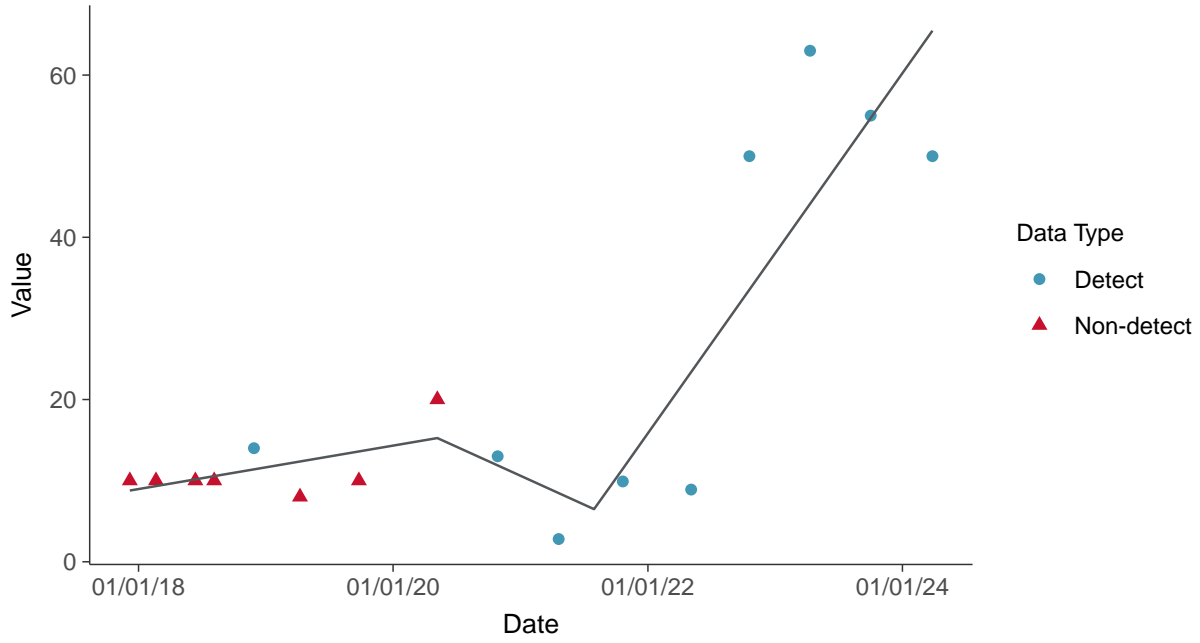
Lithium, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

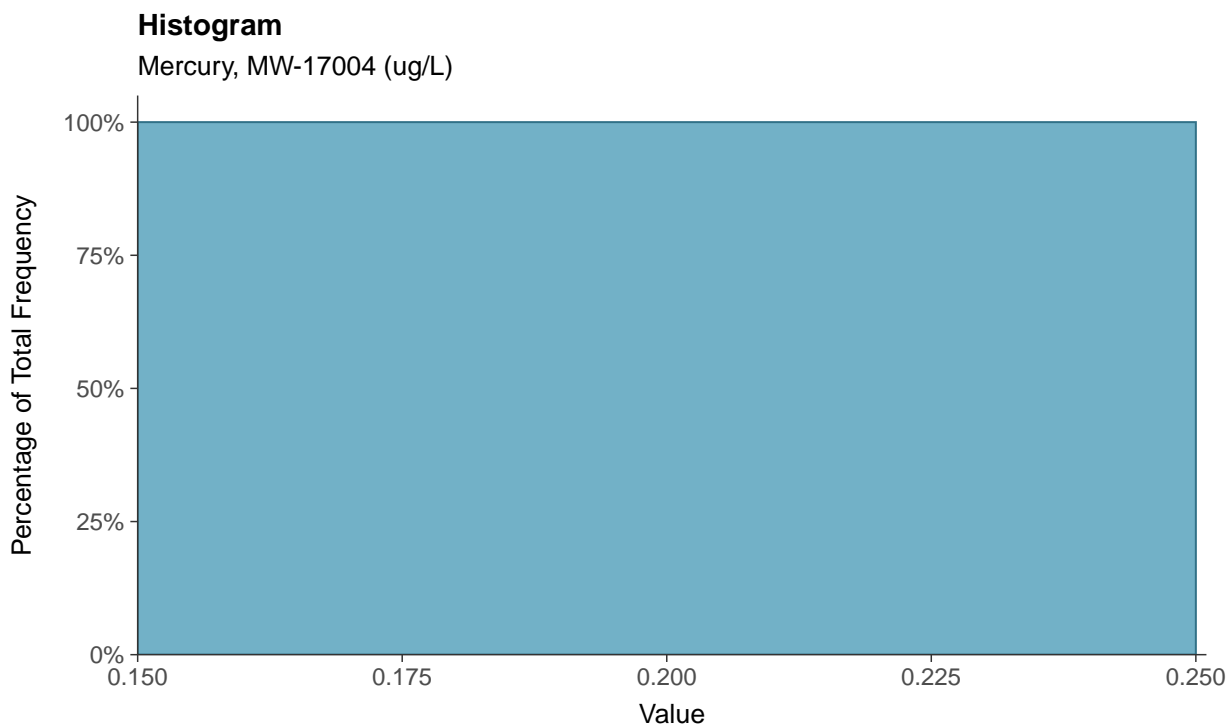
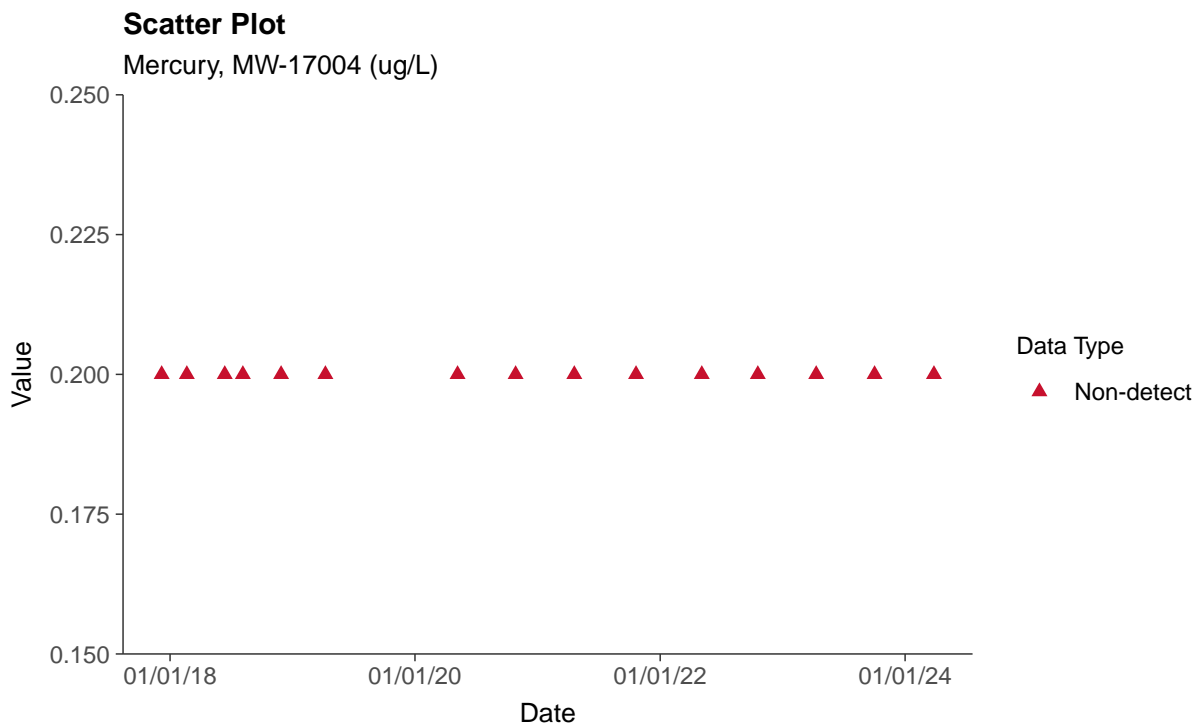
Lithium, MW-17004 (ug/L)





Appendix IV: Mercury, MW-17004

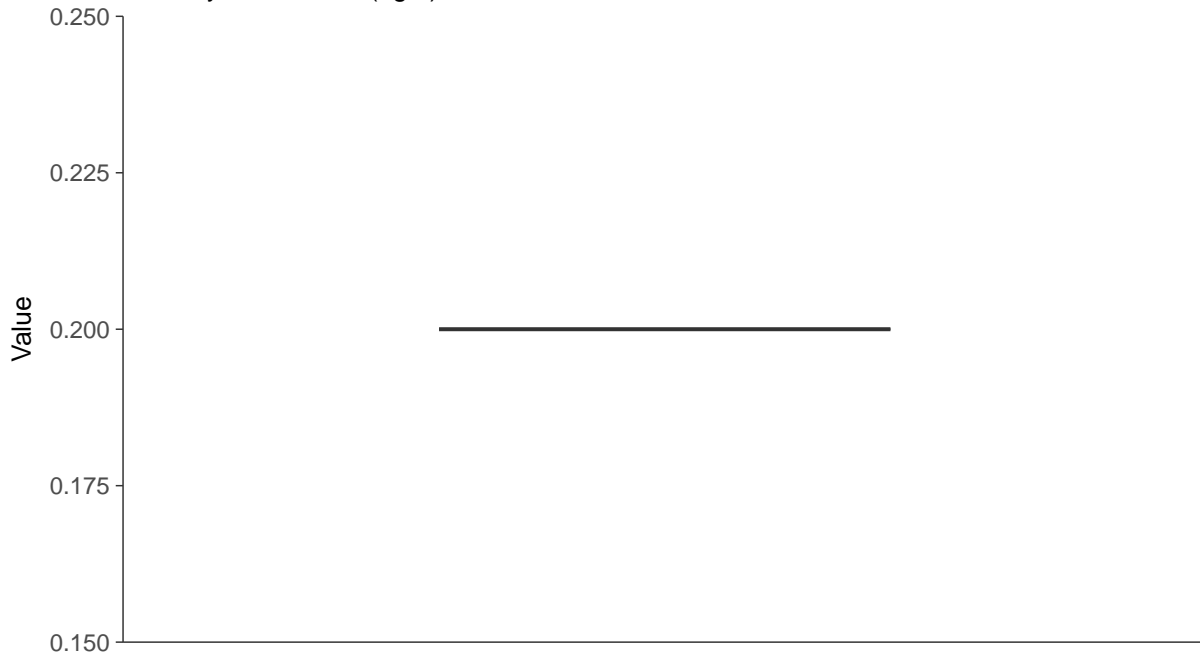
ID: 17_2_118





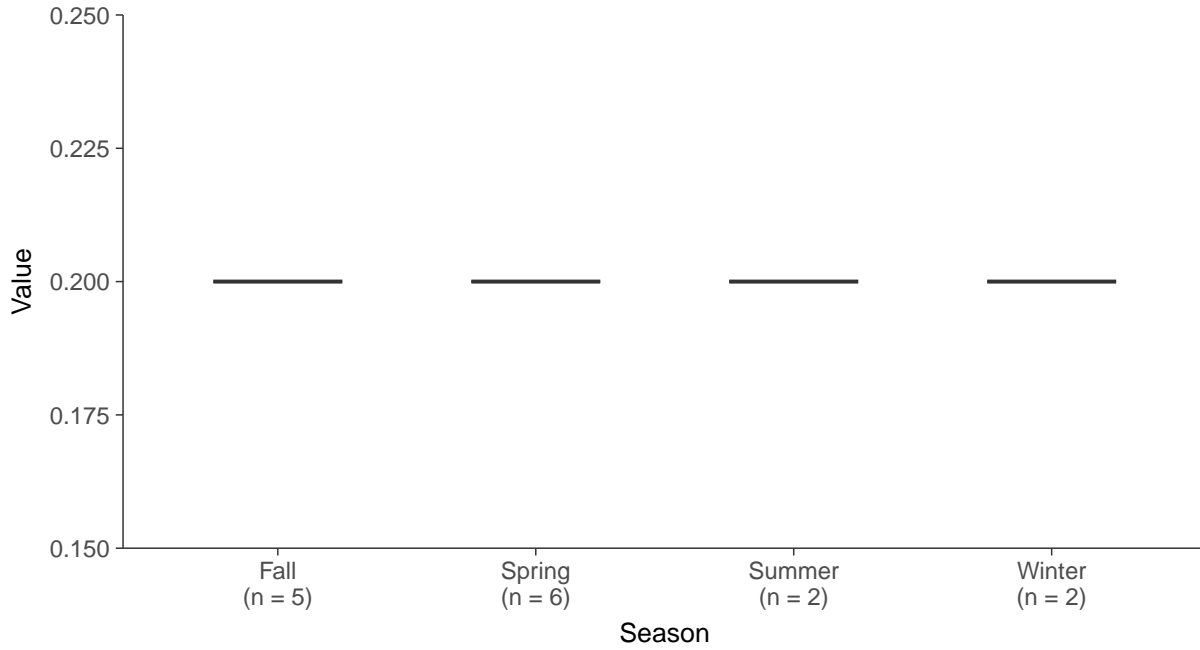
Boxplot

Mercury, MW-17004 (ug/L)



Boxplot by Season

Mercury, MW-17004 (ug/L)



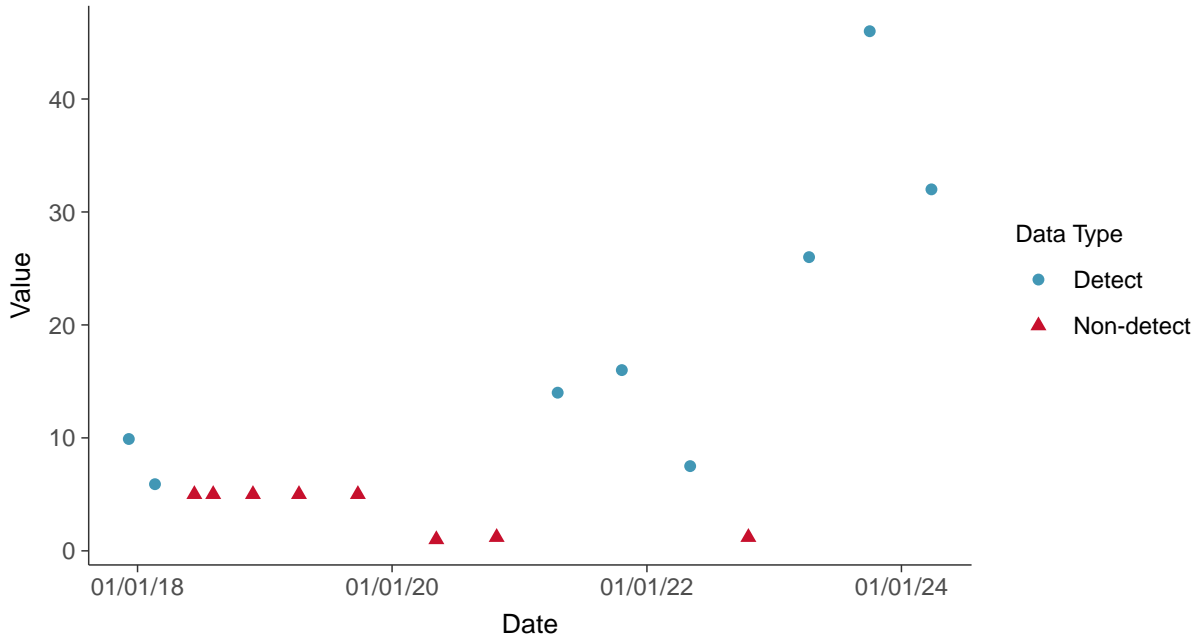


Appendix IV: Molybdenum, MW-17004

ID: 17_2_119

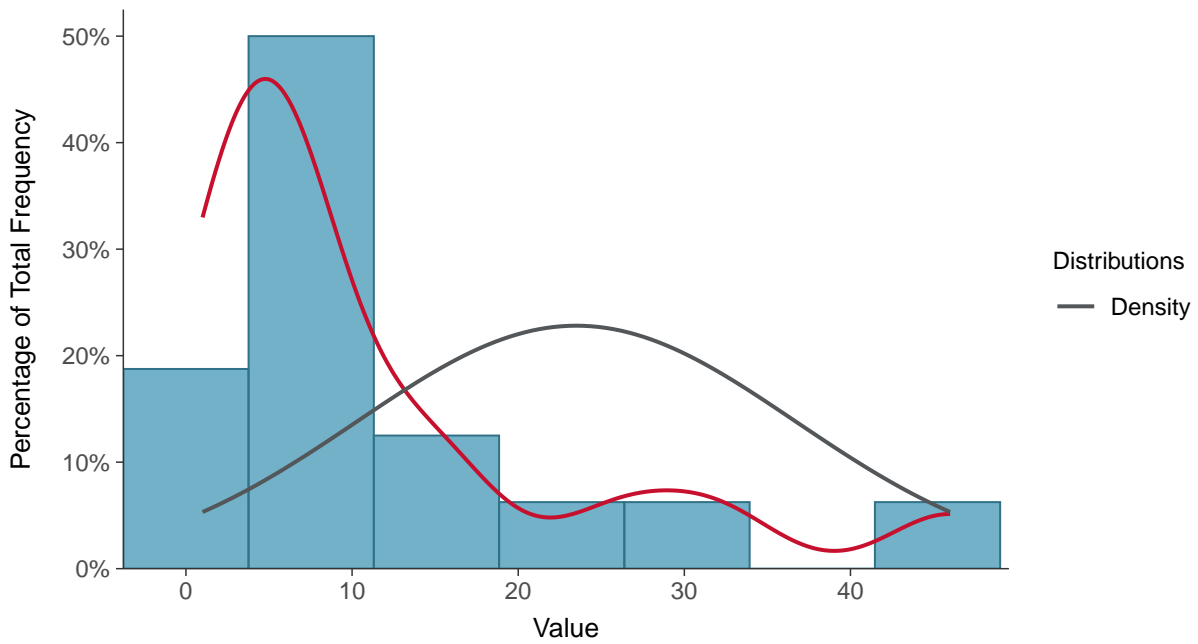
Scatter Plot

Molybdenum, MW-17004 (ug/L)



Histogram

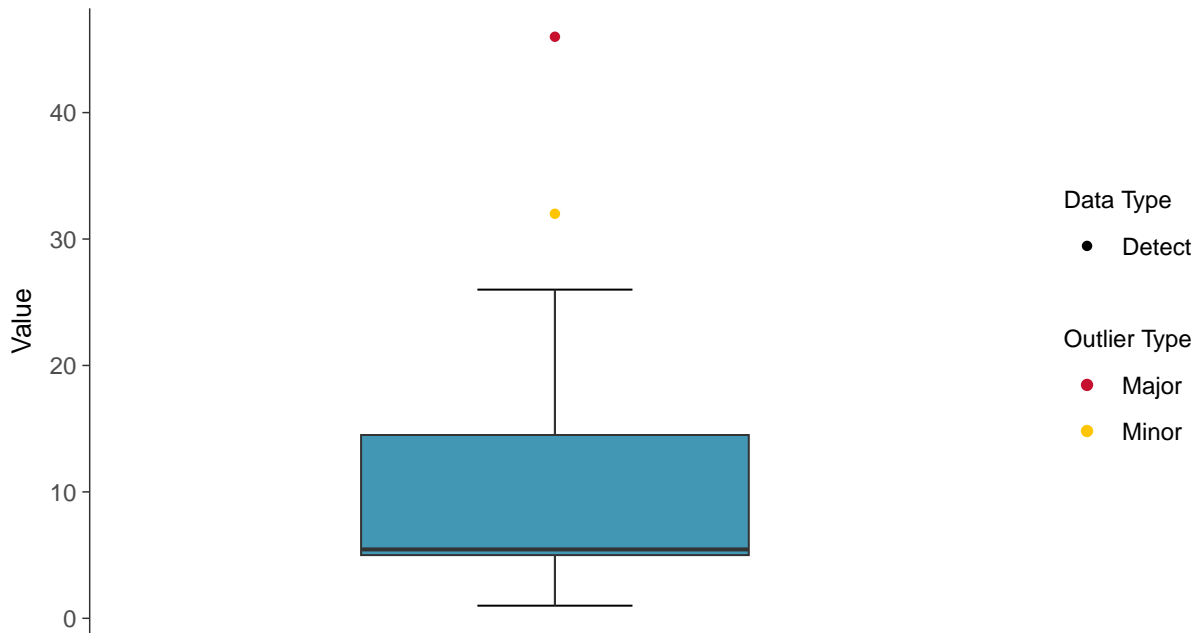
Molybdenum, MW-17004 (ug/L)





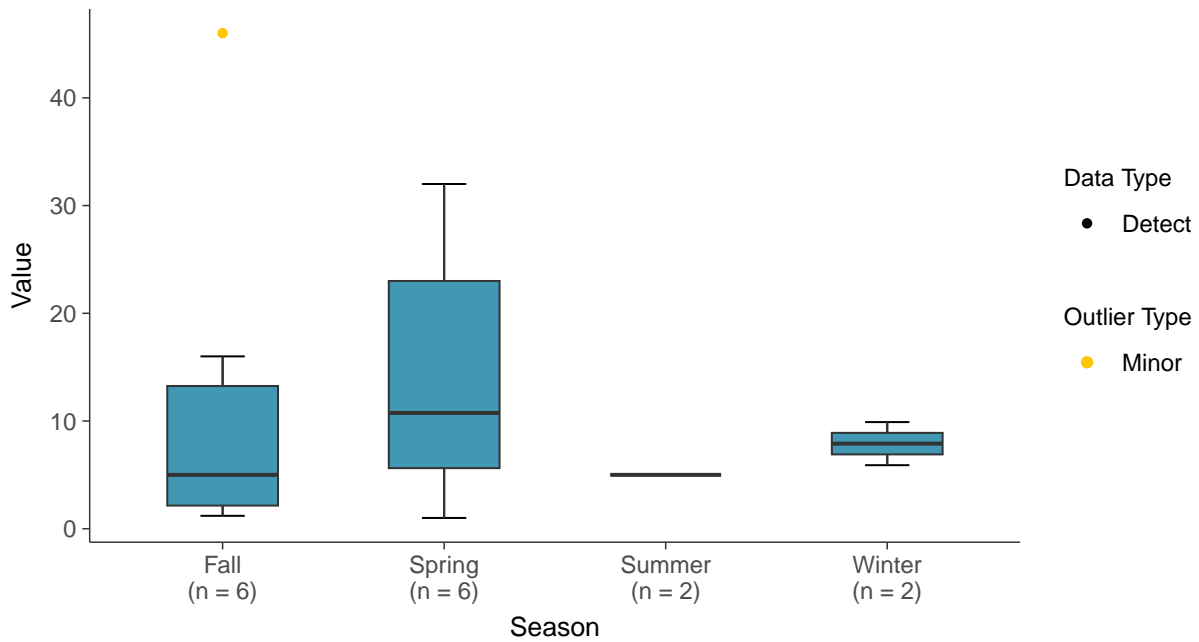
Boxplot

Molybdenum, MW-17004 (ug/L)



Boxplot by Season

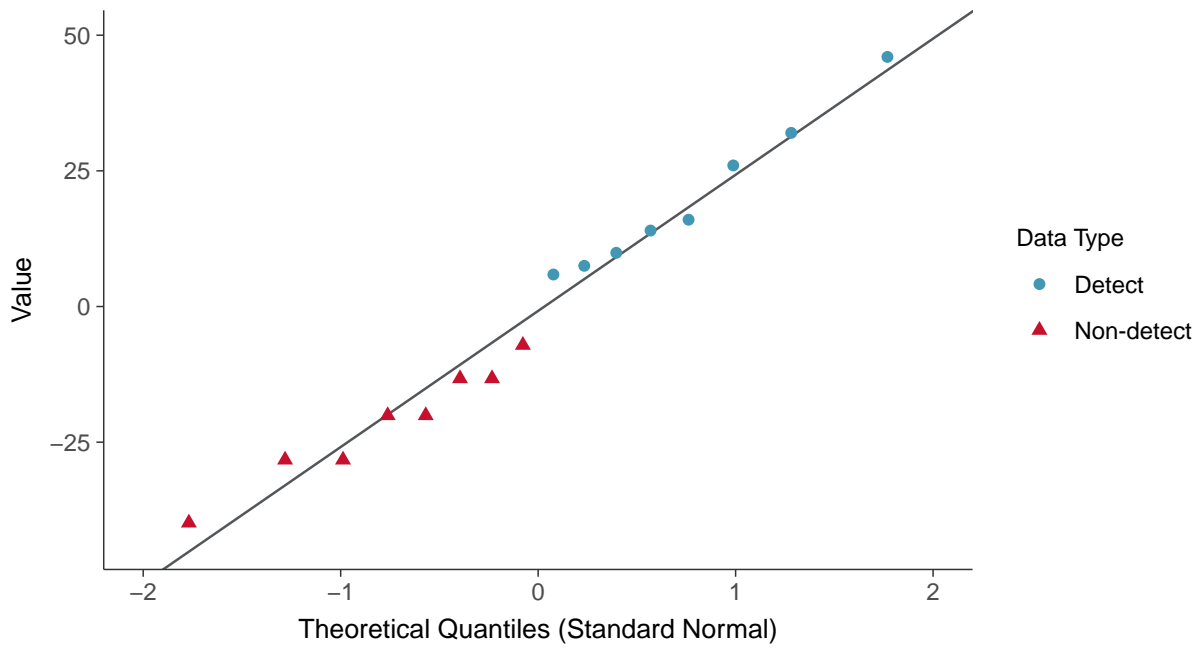
Molybdenum, MW-17004 (ug/L)





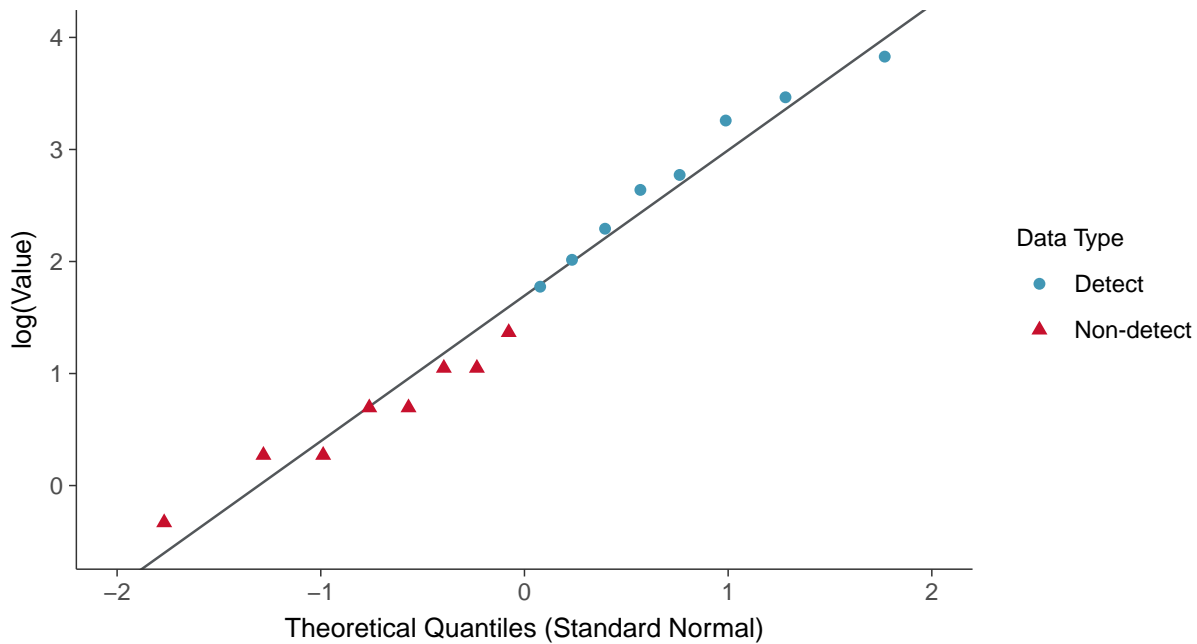
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17004 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

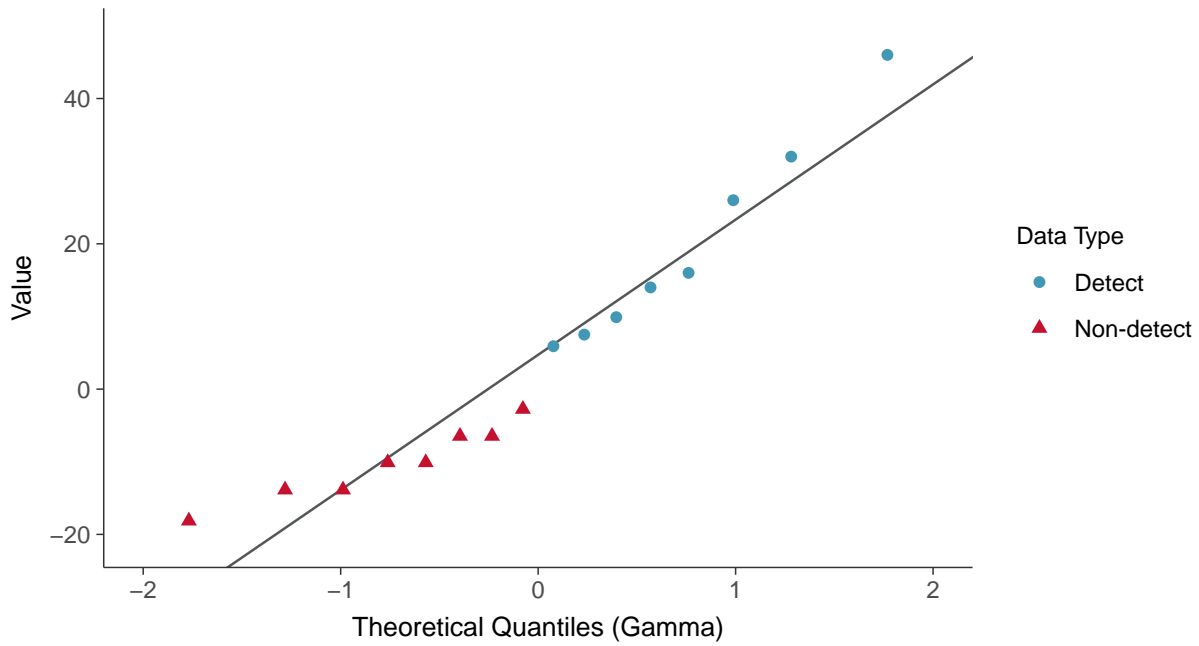
Molybdenum, MW-17004 (ug/L)





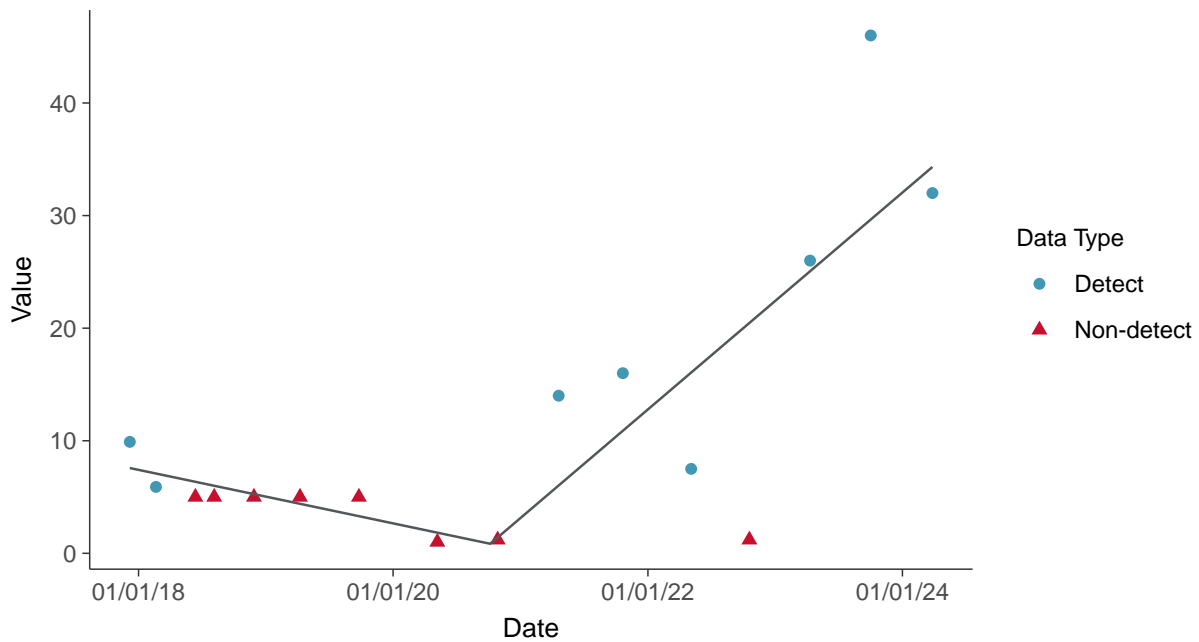
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

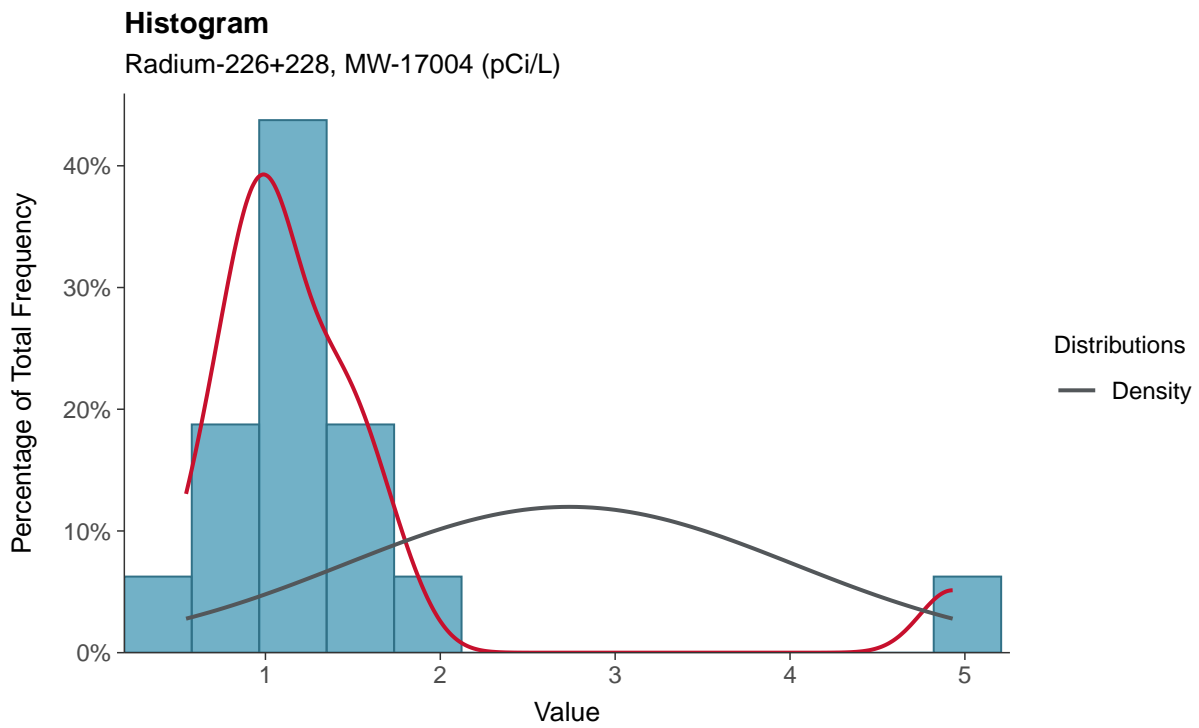
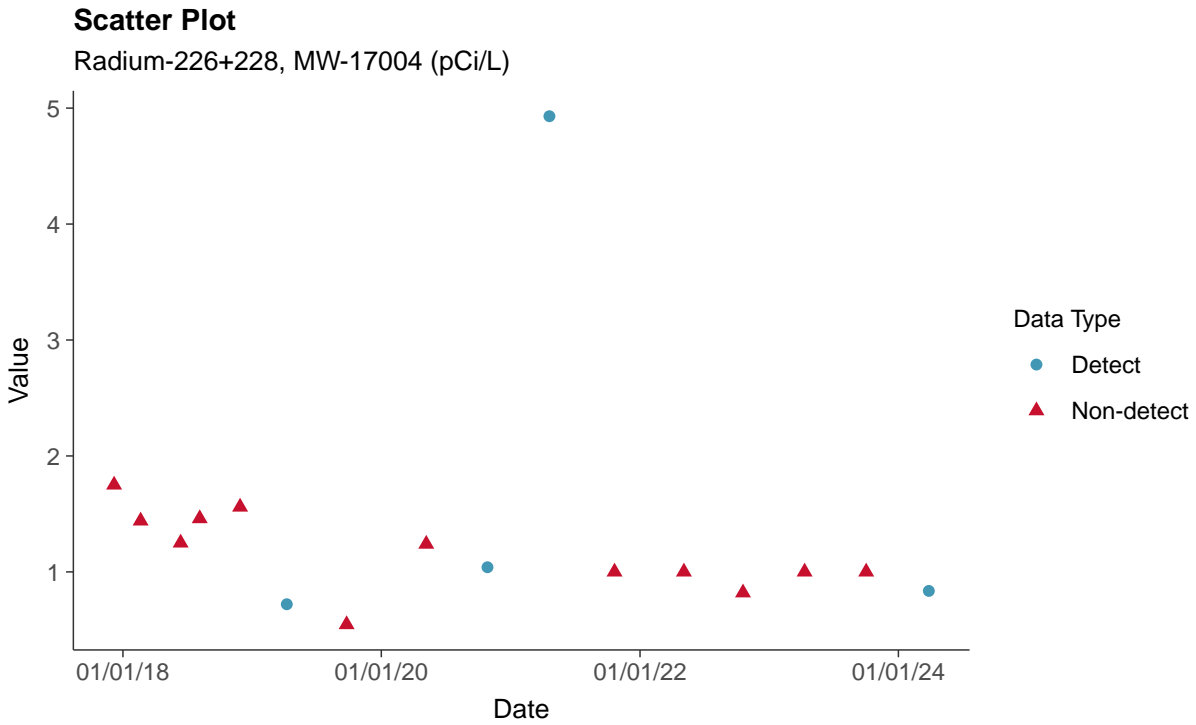
Molybdenum, MW-17004 (ug/L)





Appendix IV: Radium-226+228, MW-17004

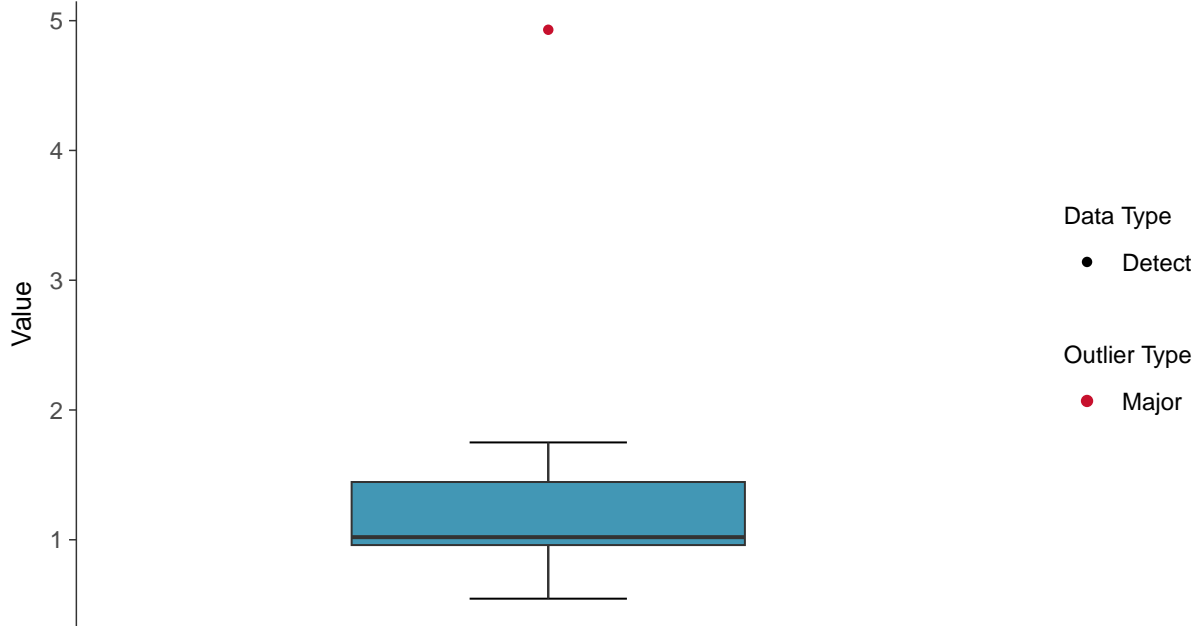
ID: 17_2_125





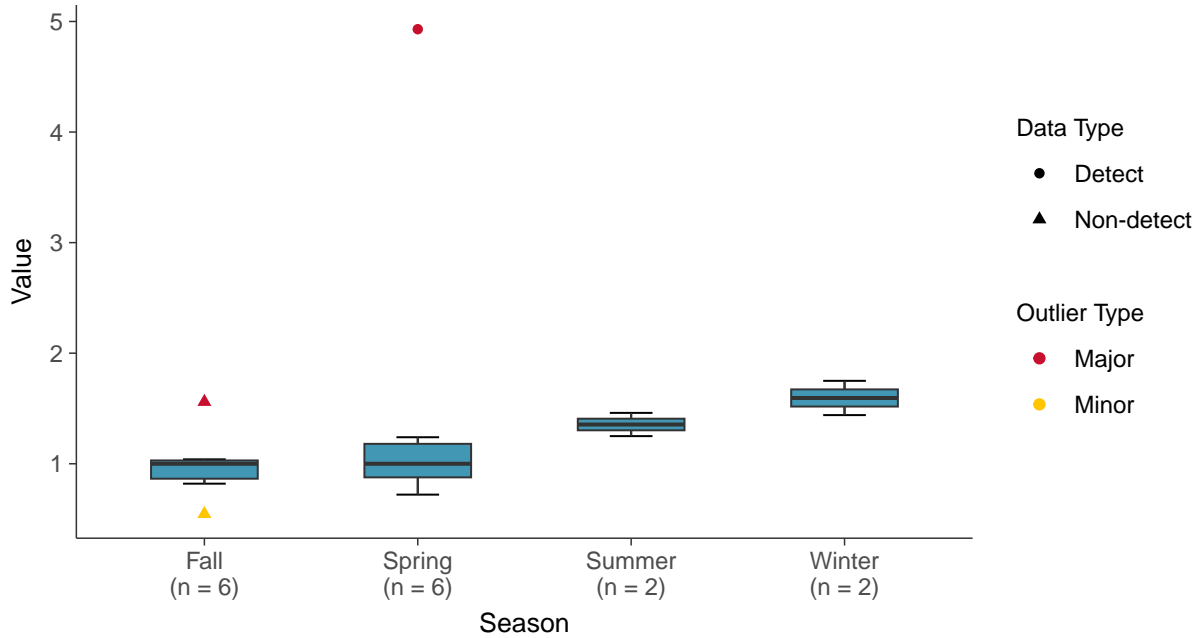
Boxplot

Radium-226+228, MW-17004 (pCi/L)



Boxplot by Season

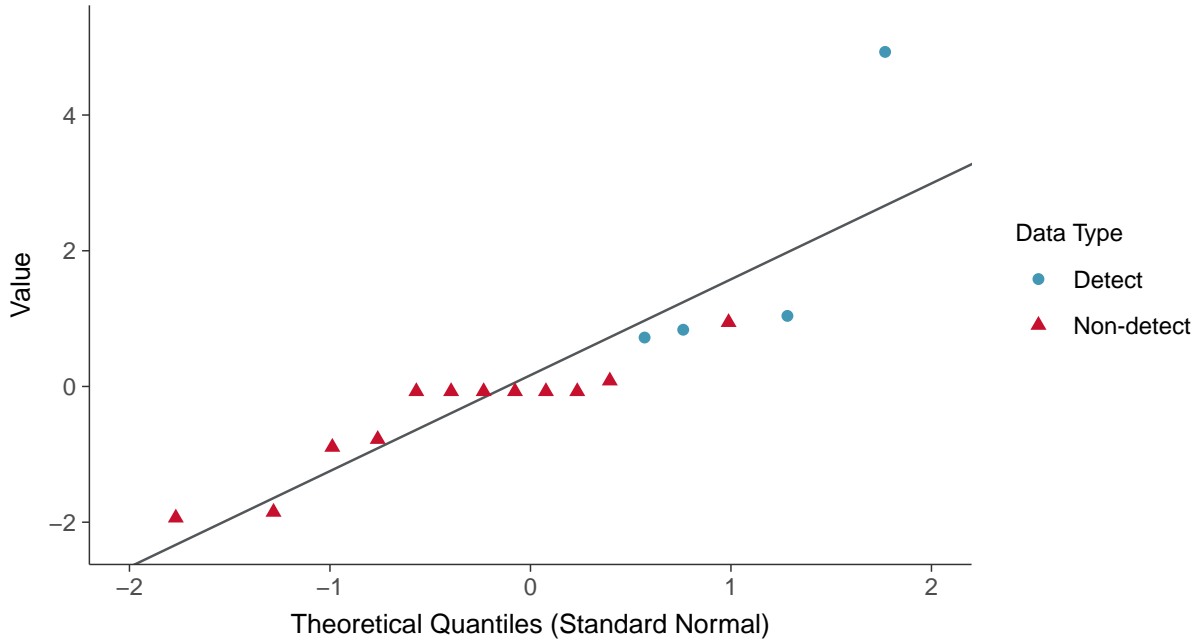
Radium-226+228, MW-17004 (pCi/L)





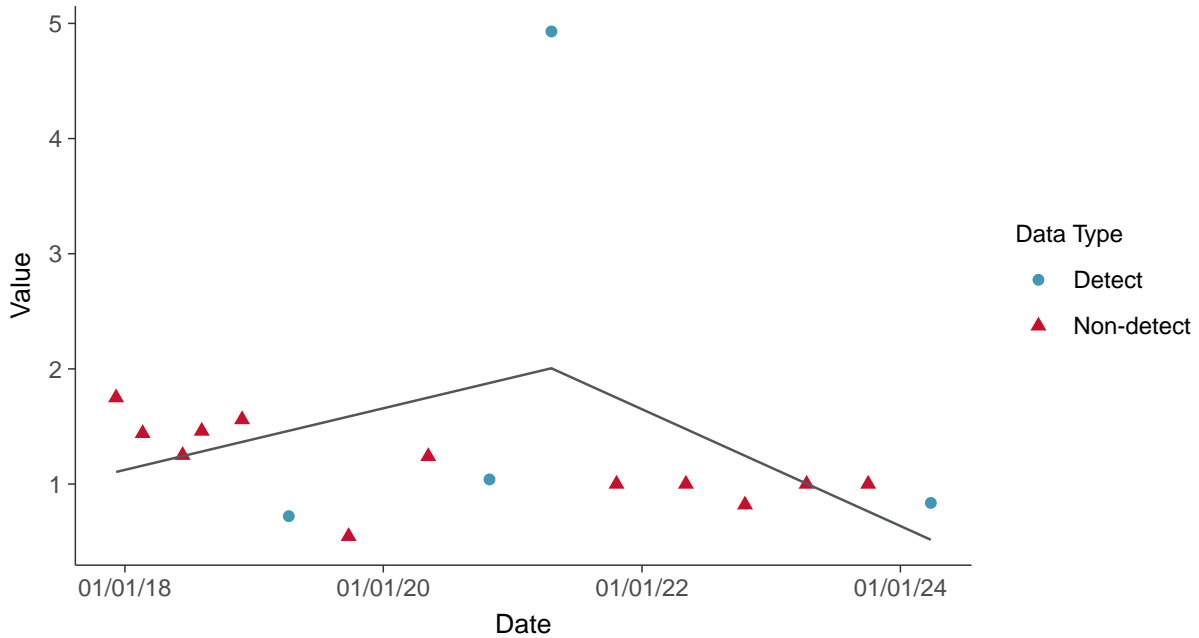
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17004 (pCi/L)



Trend Regression: Piecewise Linear-Linear

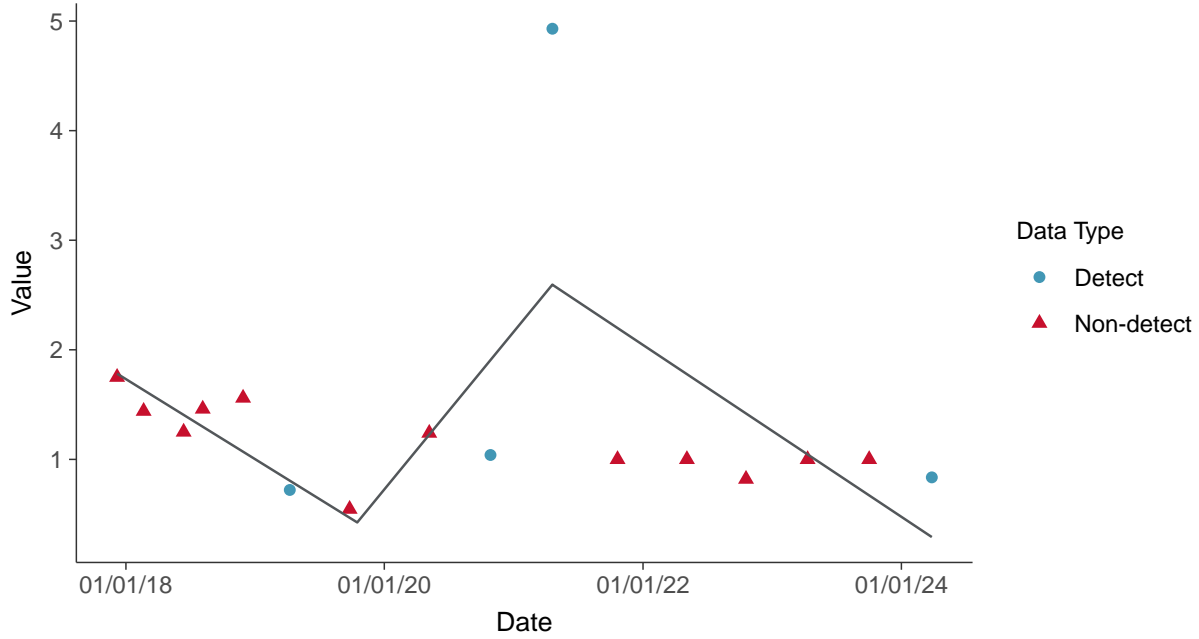
Radium-226+228, MW-17004 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

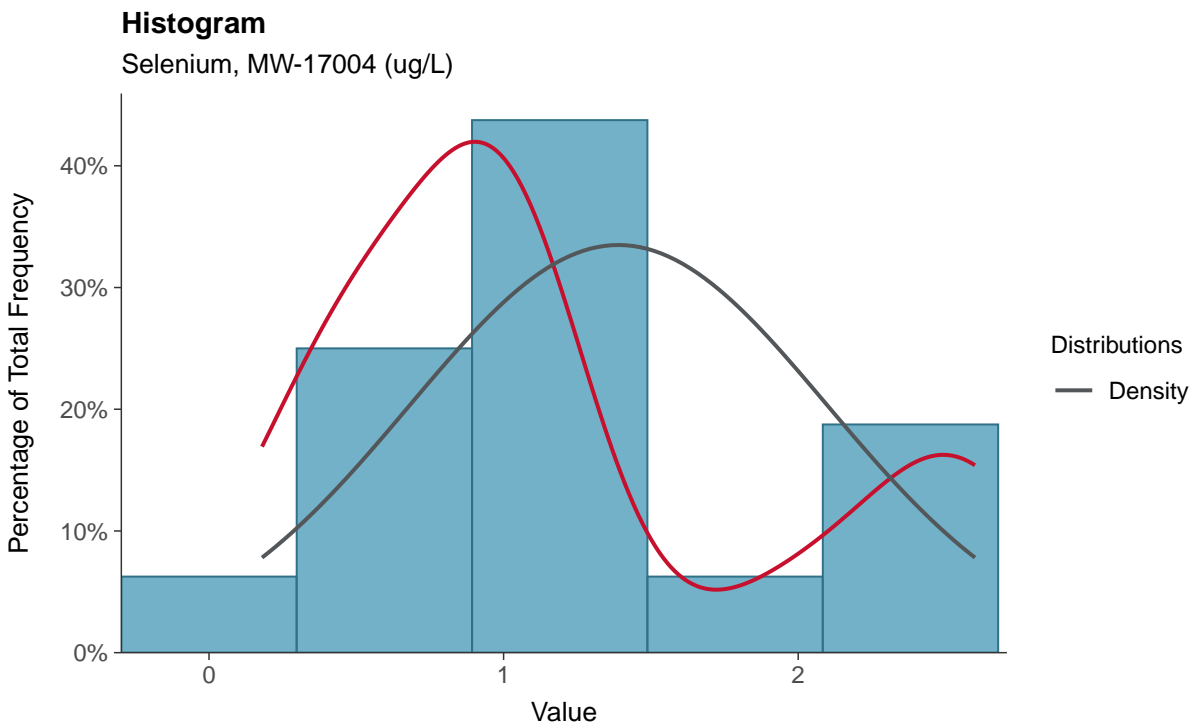
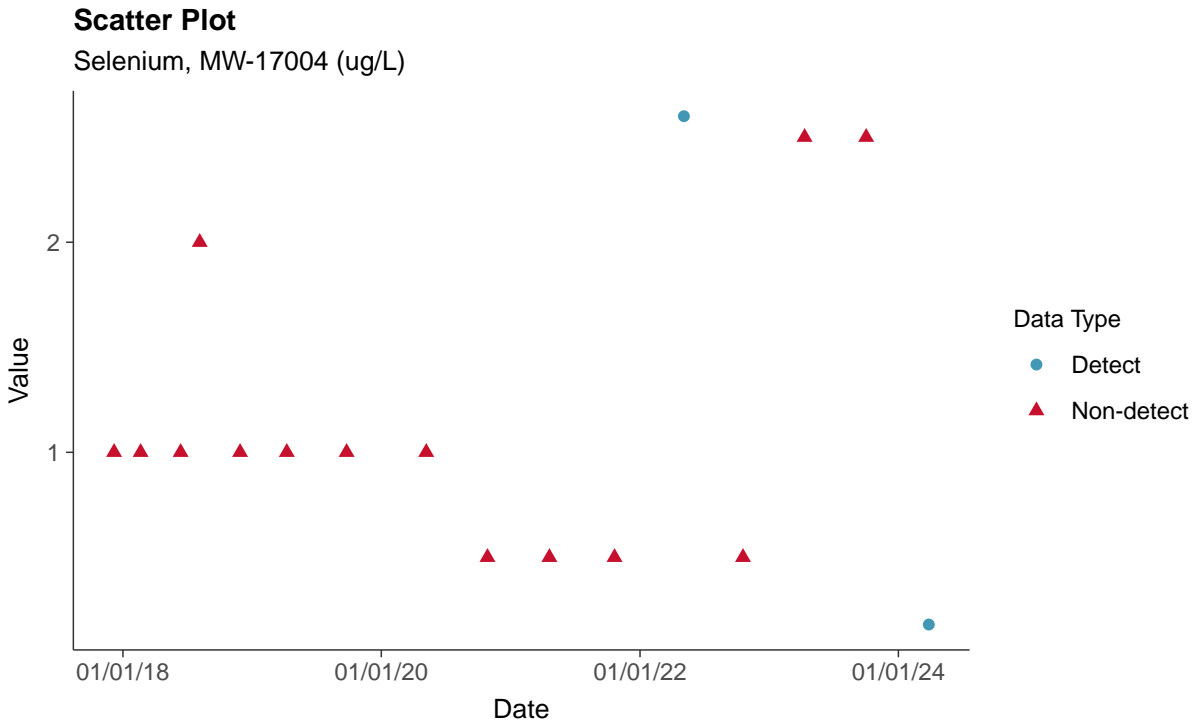
Radium-226+228, MW-17004 (pCi/L)





Appendix IV: Selenium, MW-17004

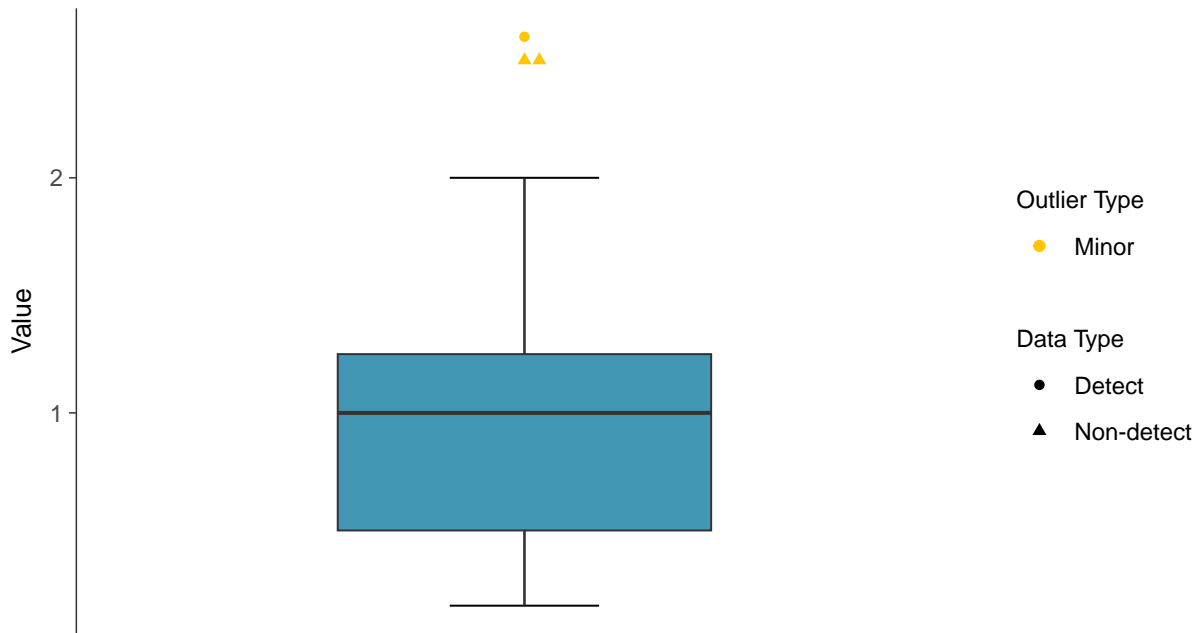
ID: 17_2_127





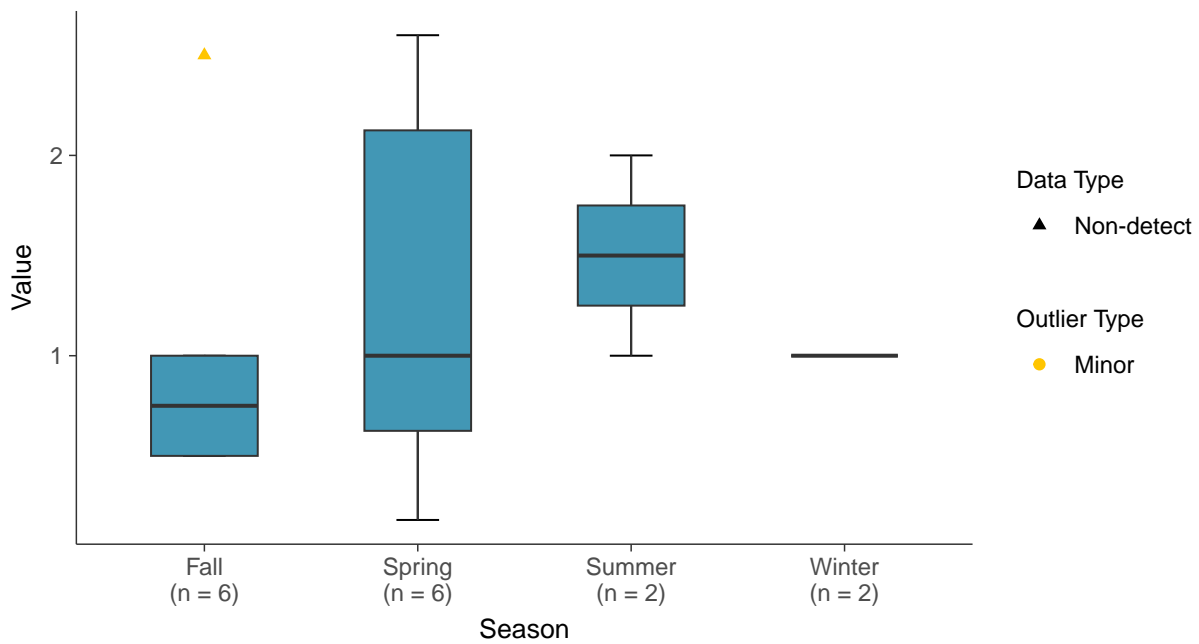
Boxplot

Selenium, MW-17004 (ug/L)



Boxplot by Season

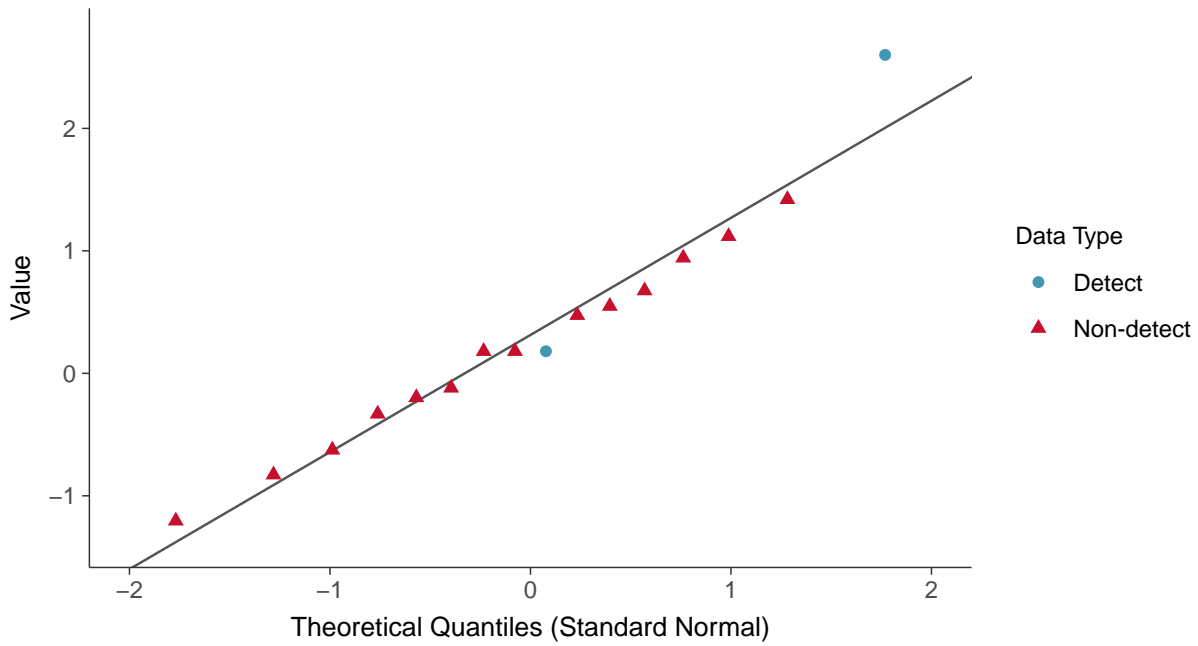
Selenium, MW-17004 (ug/L)





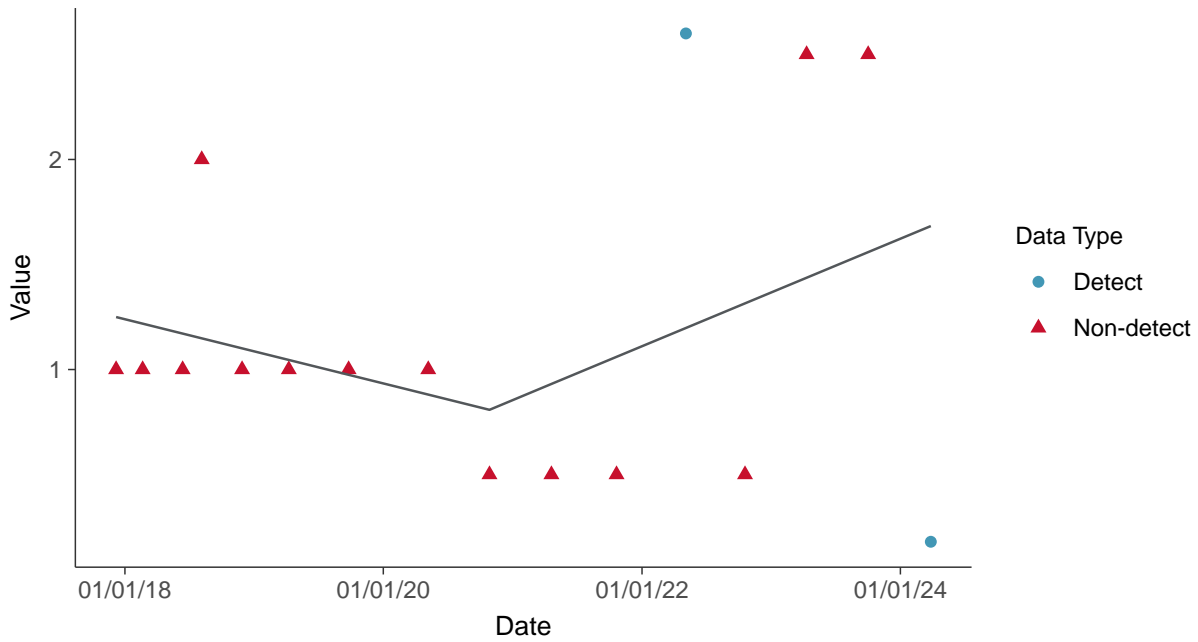
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

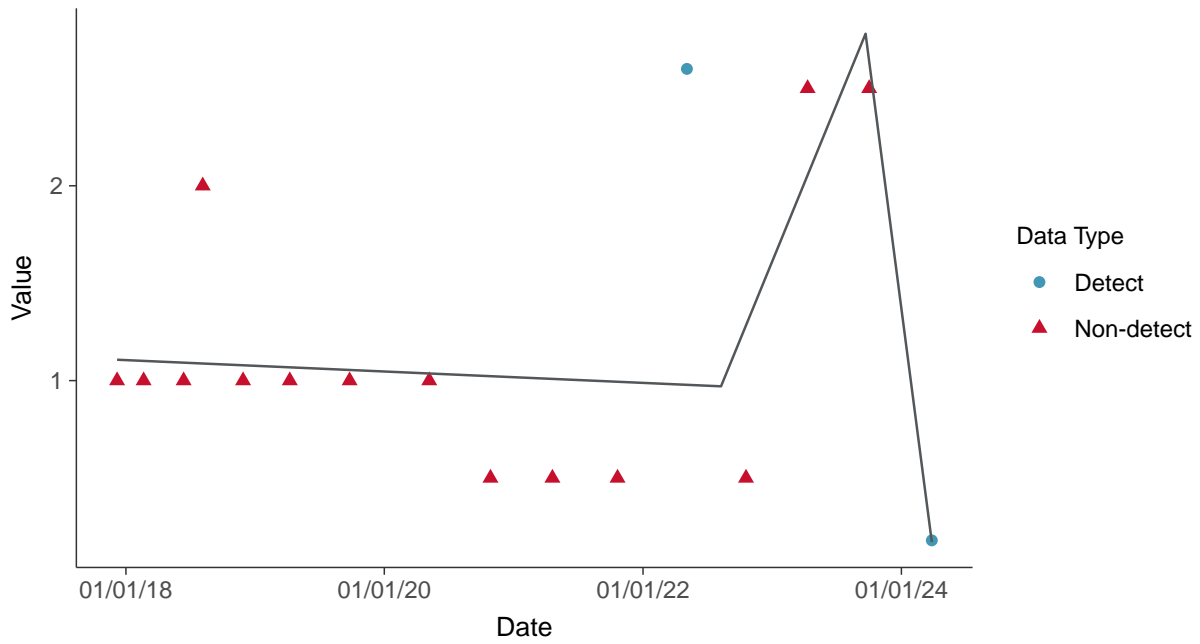
Selenium, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

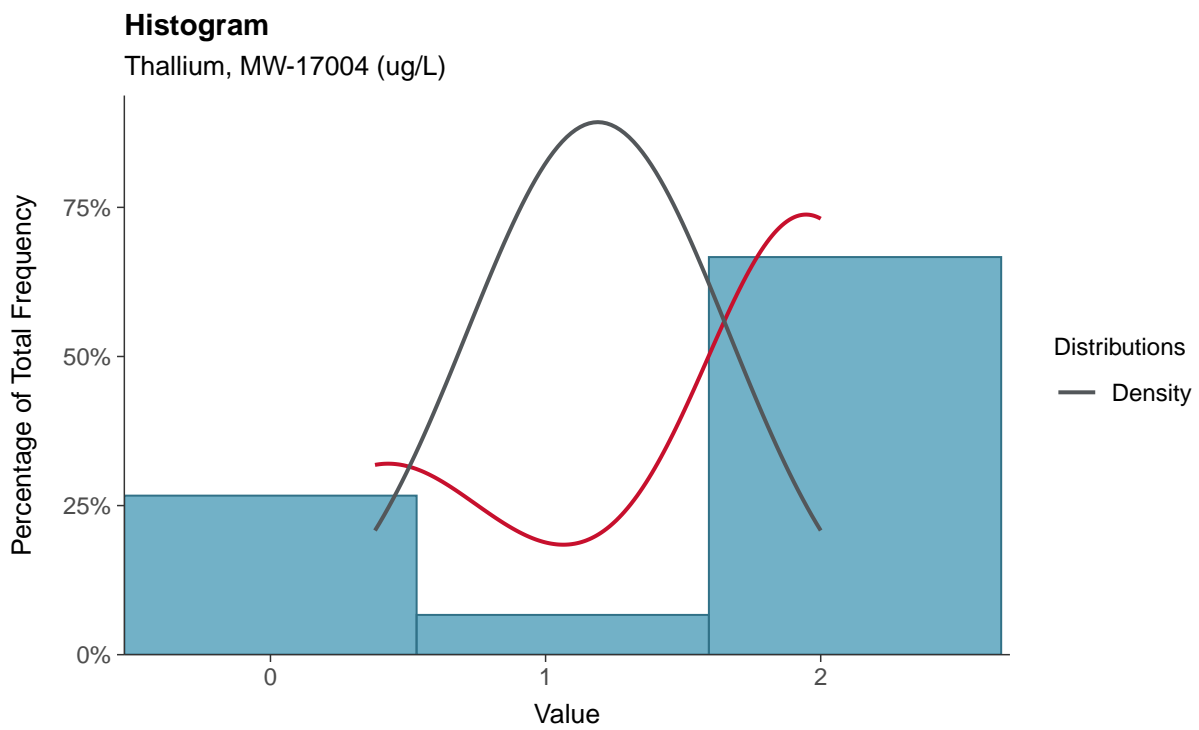
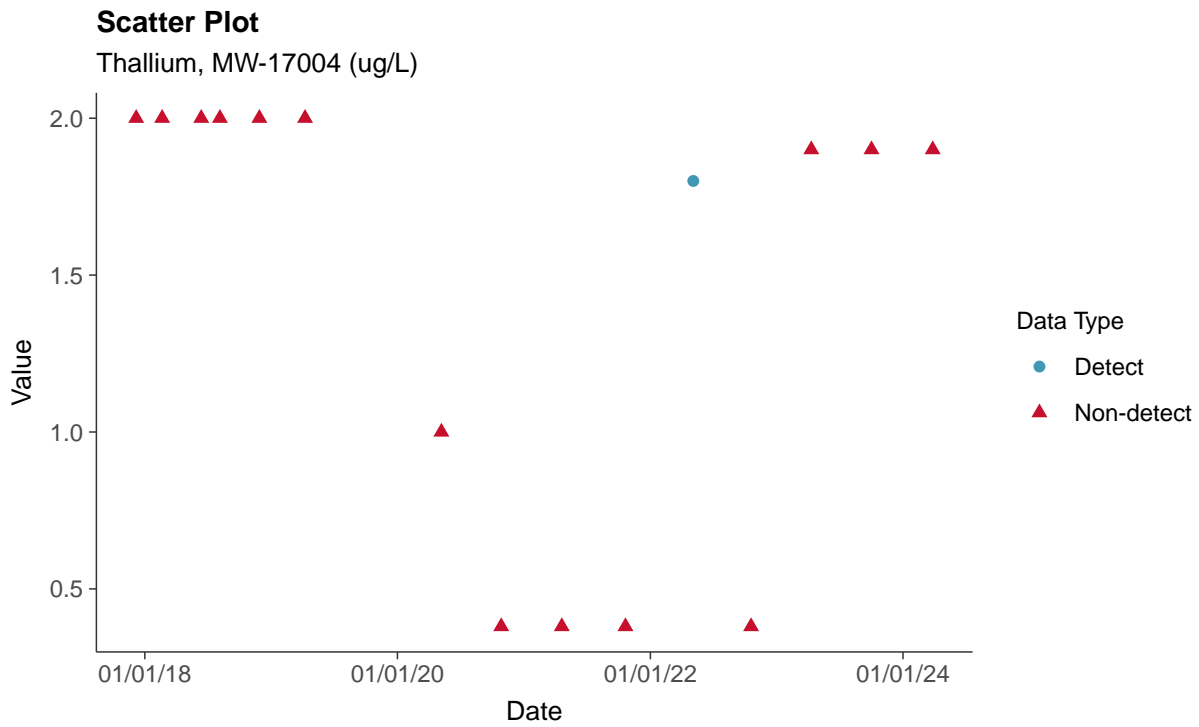
Selenium, MW-17004 (ug/L)





Appendix IV: Thallium, MW-17004

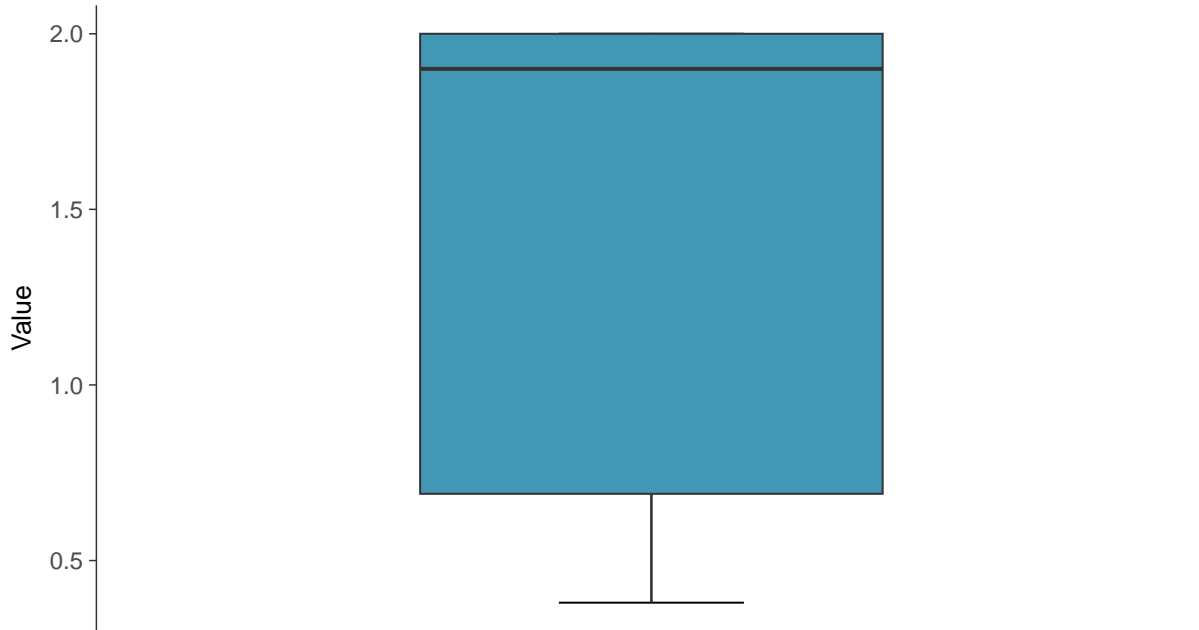
ID: 17_2_131





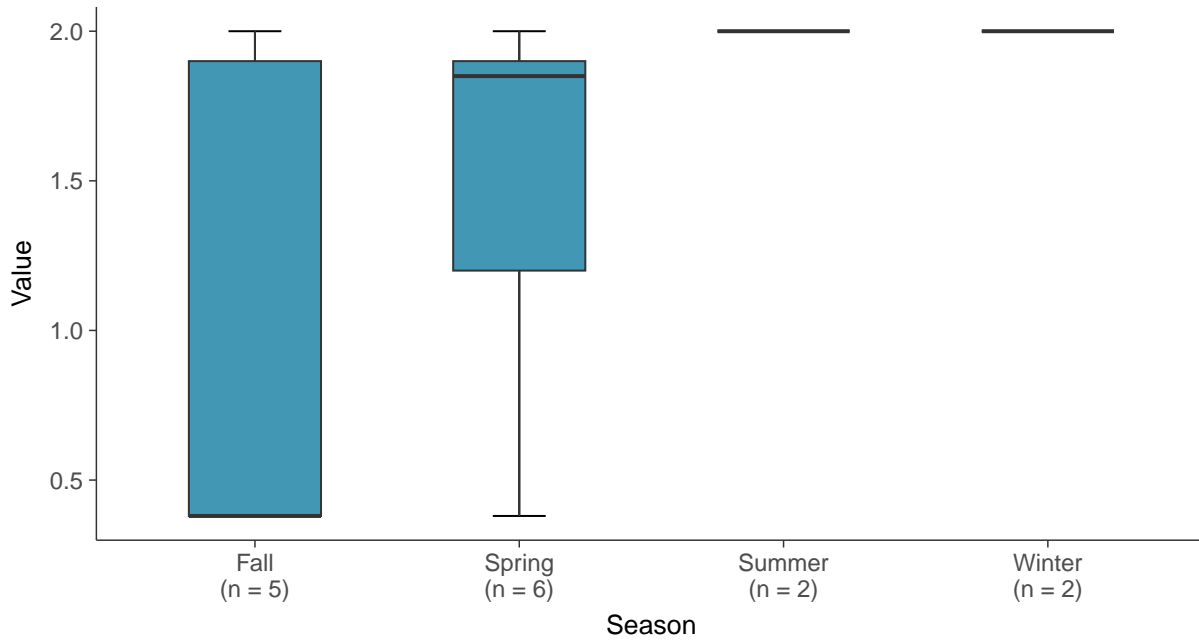
Boxplot

Thallium, MW-17004 (ug/L)



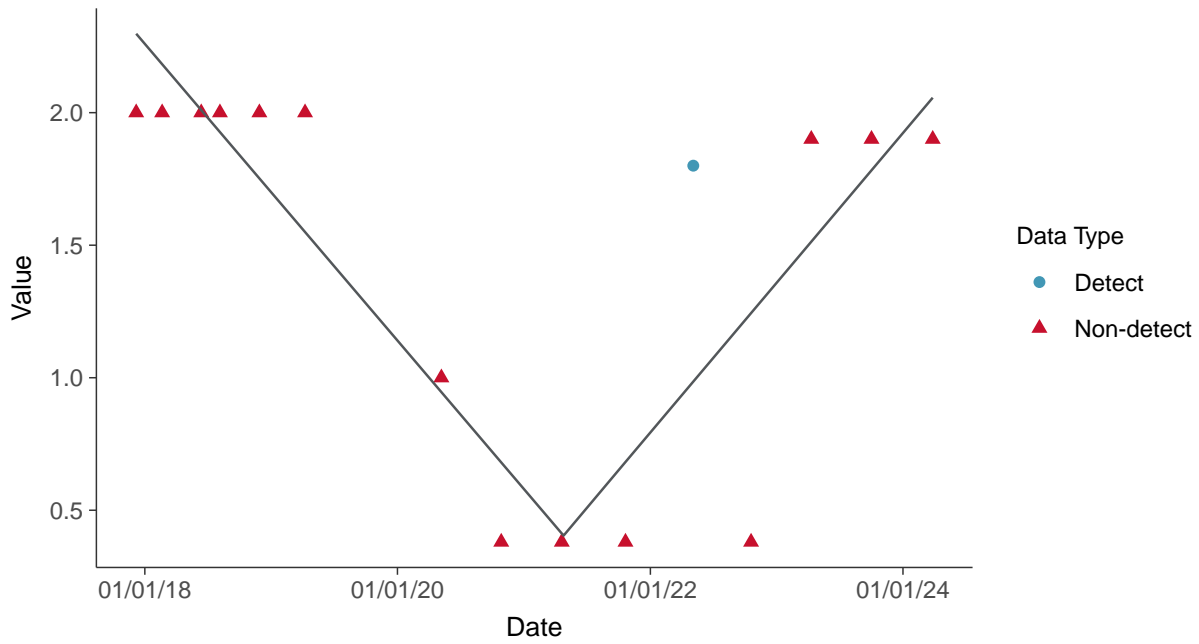
Boxplot by Season

Thallium, MW-17004 (ug/L)

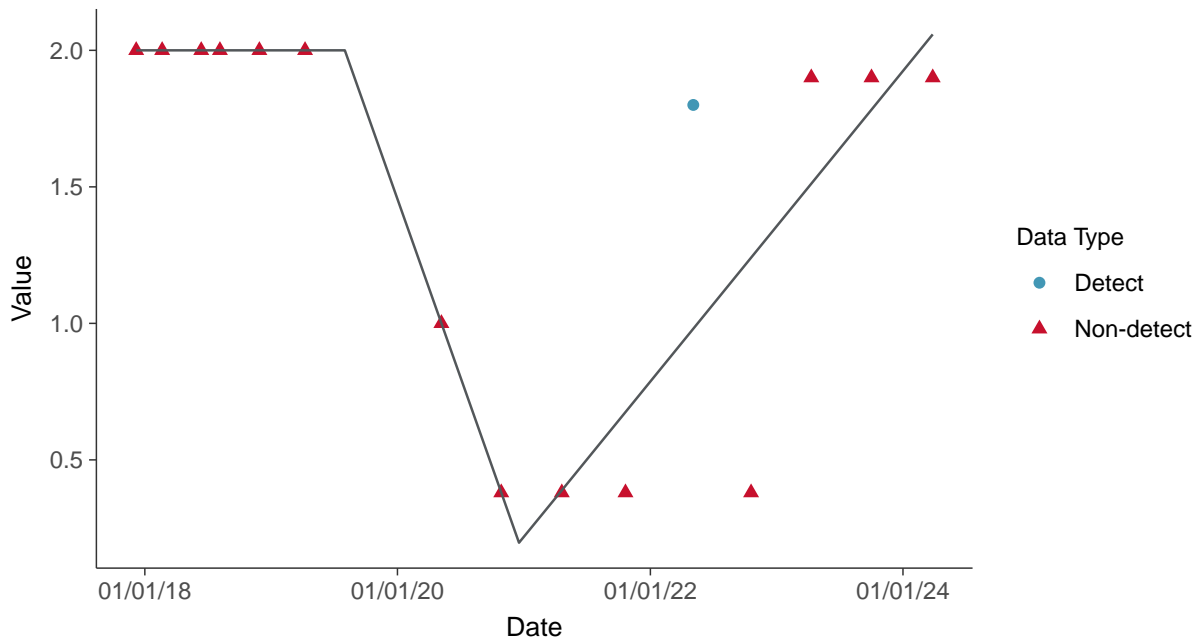




Trend Regression: Piecewise Linear-Linear
Thallium, MW-17004 (ug/L)



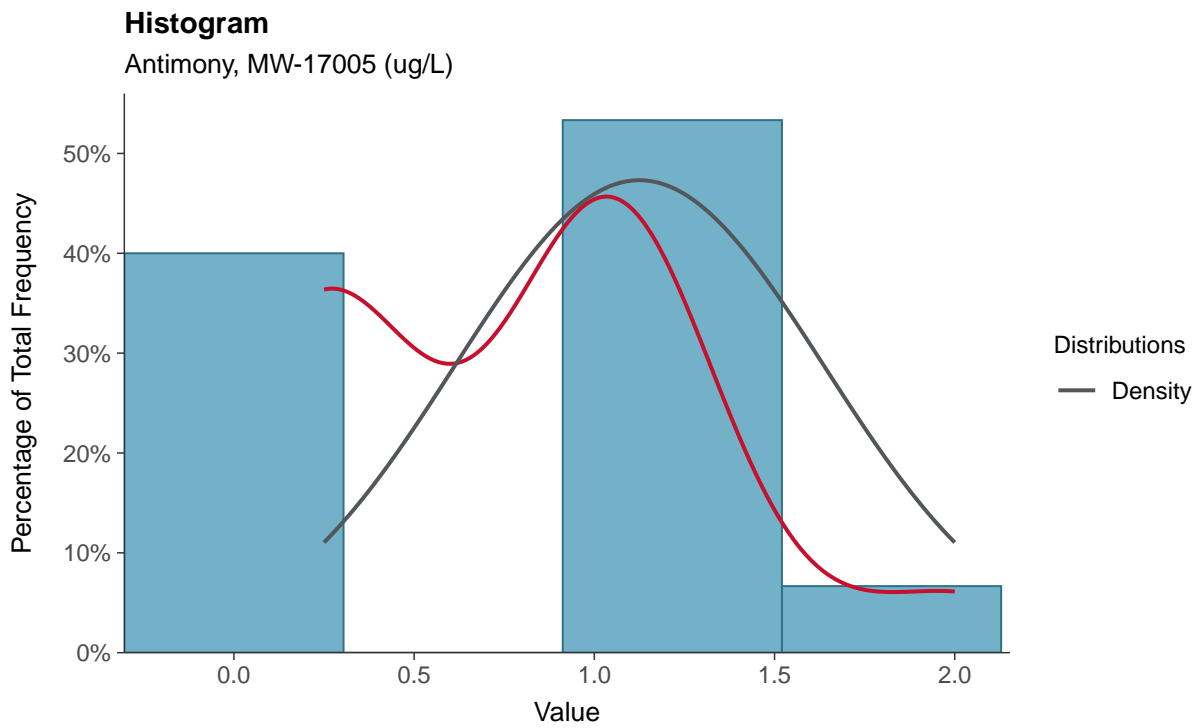
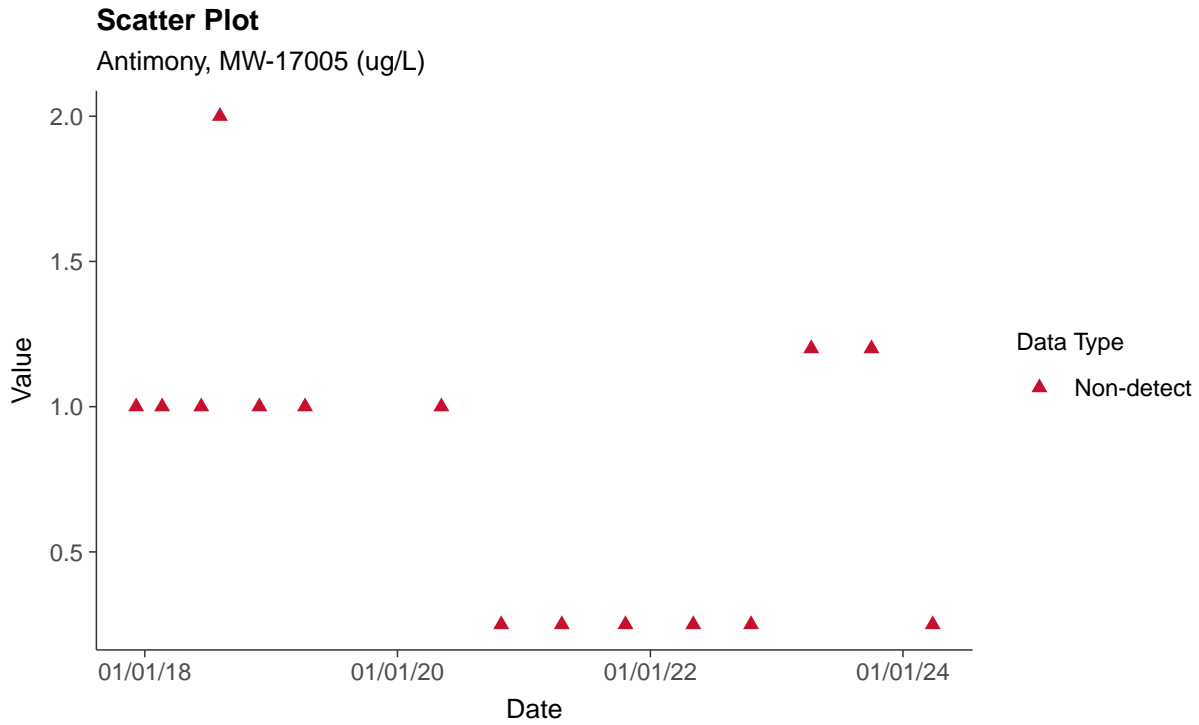
Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-17004 (ug/L)





Appendix IV: Antimony, MW-17005

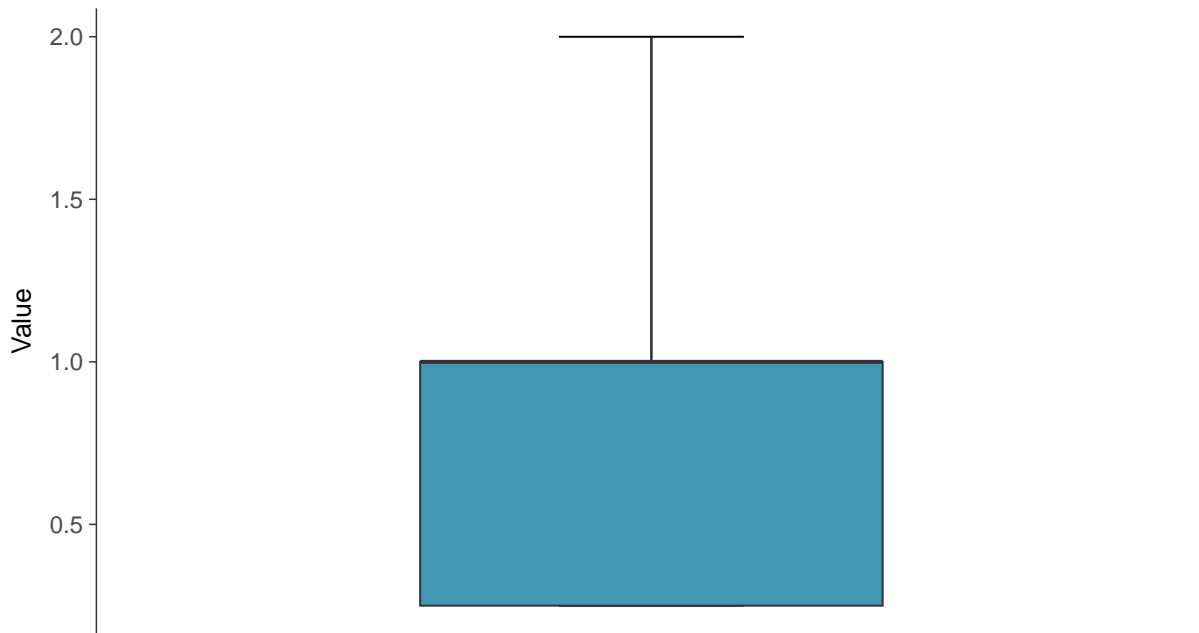
ID: 18_2_101





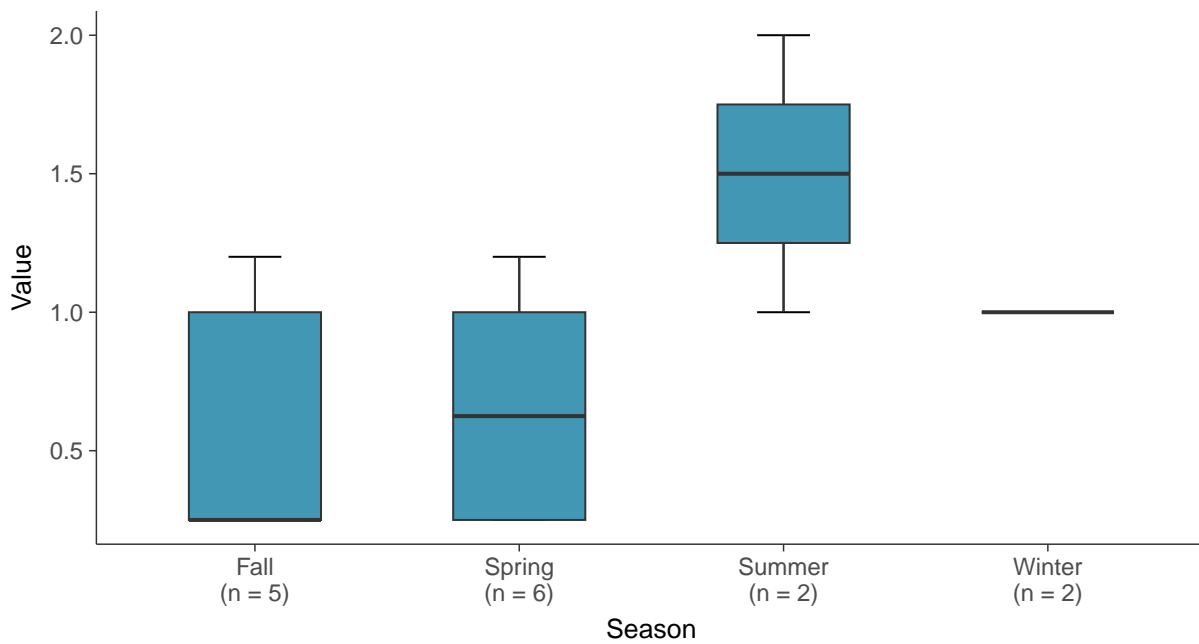
Boxplot

Antimony, MW-17005 (ug/L)



Boxplot by Season

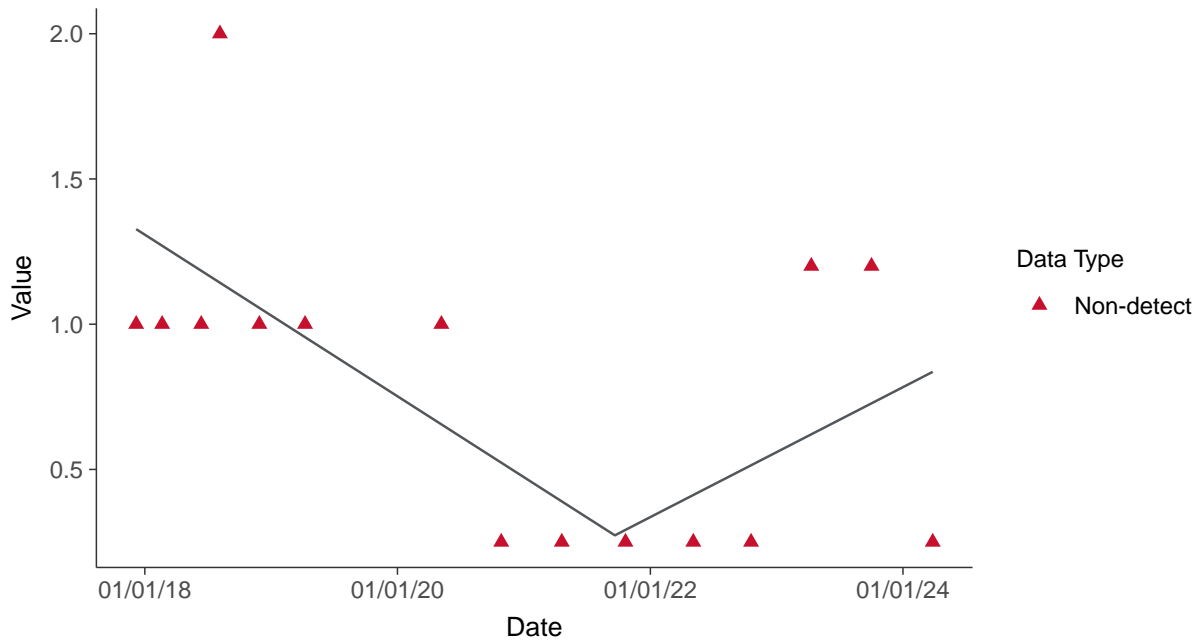
Antimony, MW-17005 (ug/L)





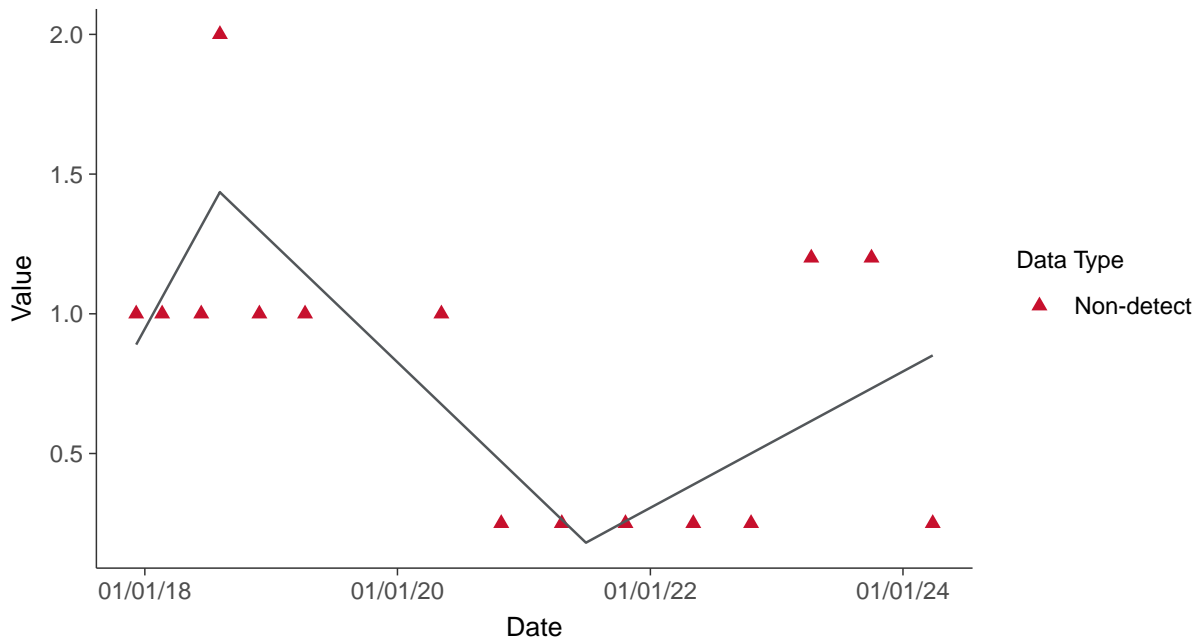
Trend Regression: Piecewise Linear-Linear

Antimony, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

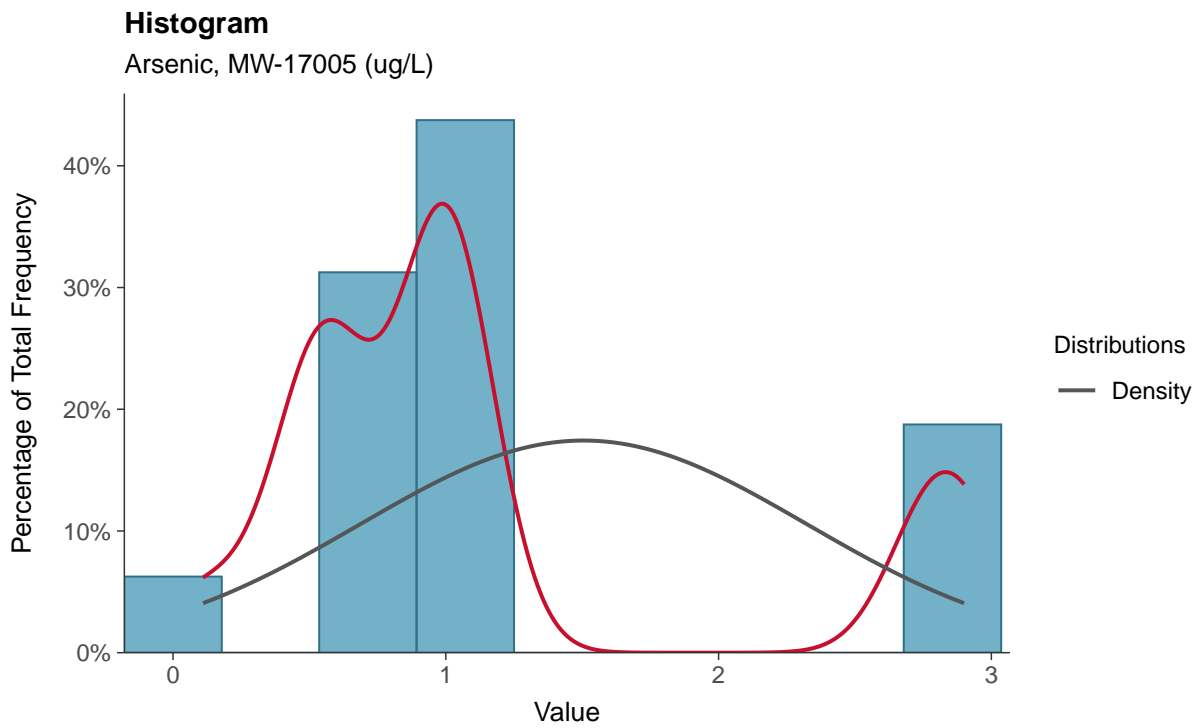
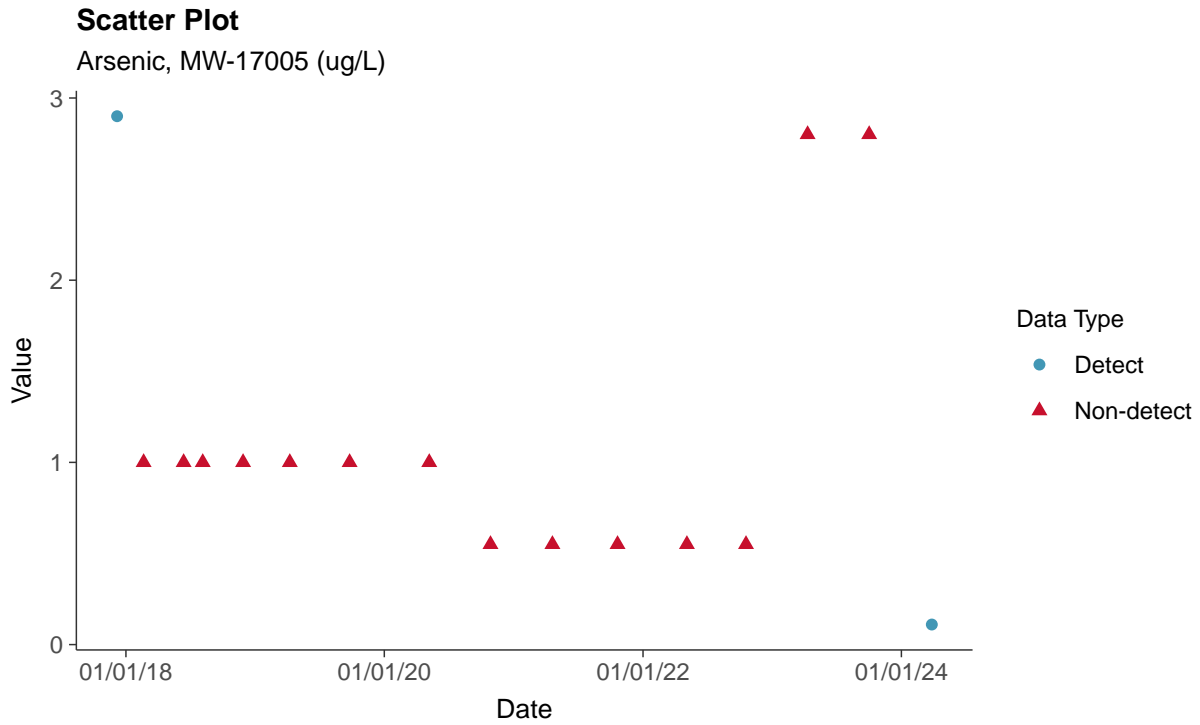
Antimony, MW-17005 (ug/L)





Appendix IV: Arsenic, MW-17005

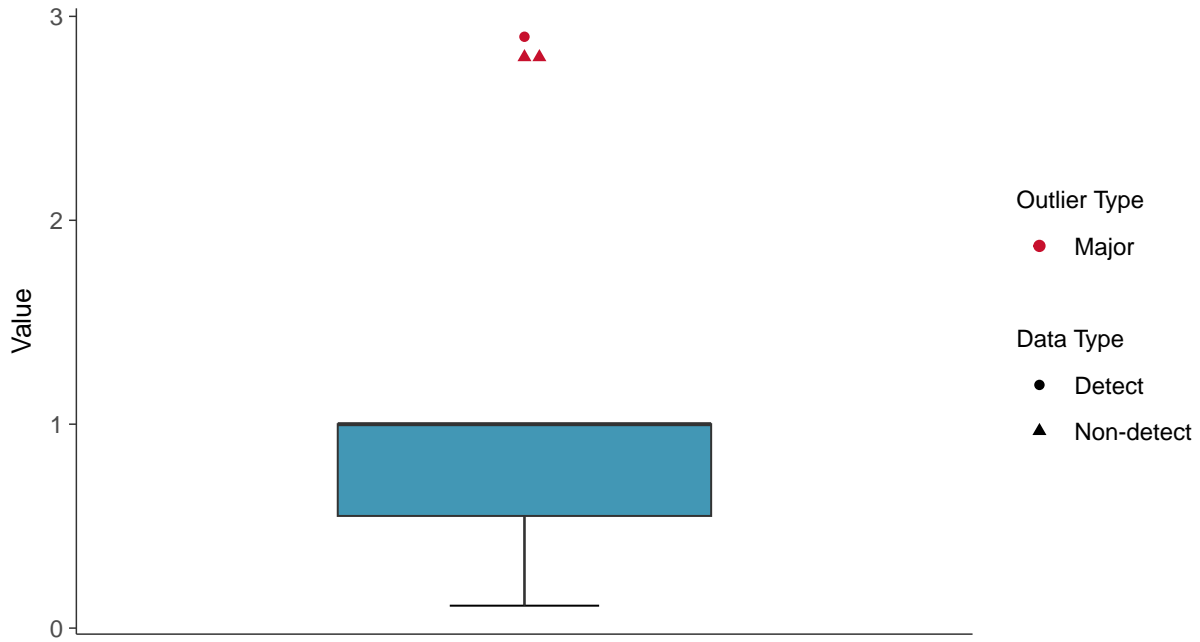
ID: 18_2_102





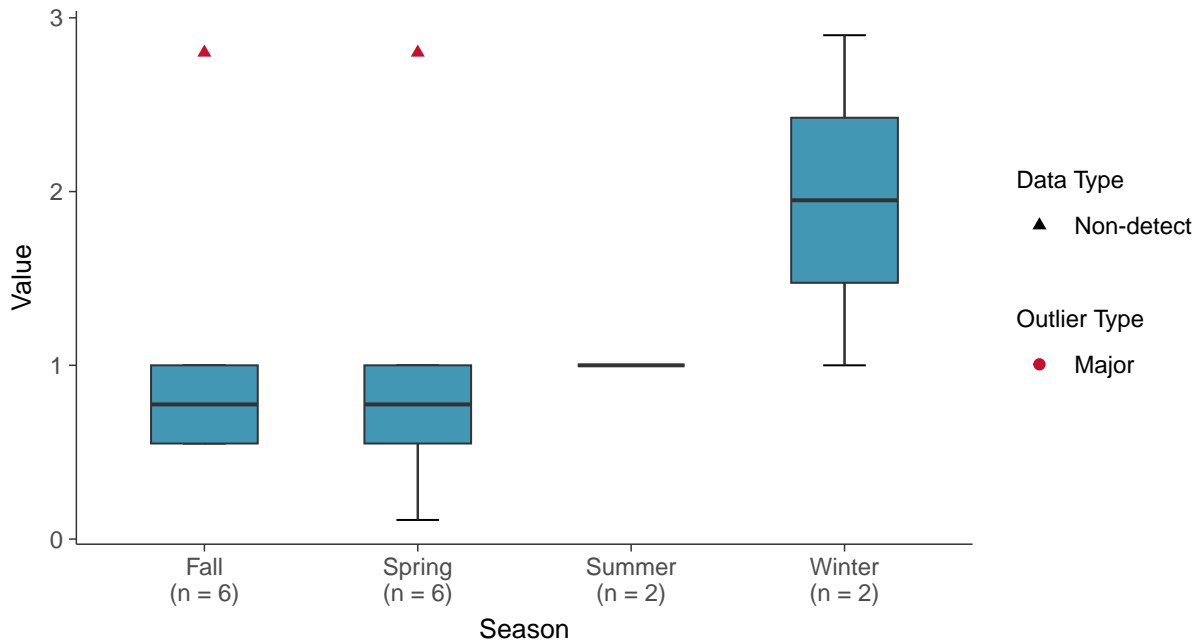
Boxplot

Arsenic, MW-17005 (ug/L)



Boxplot by Season

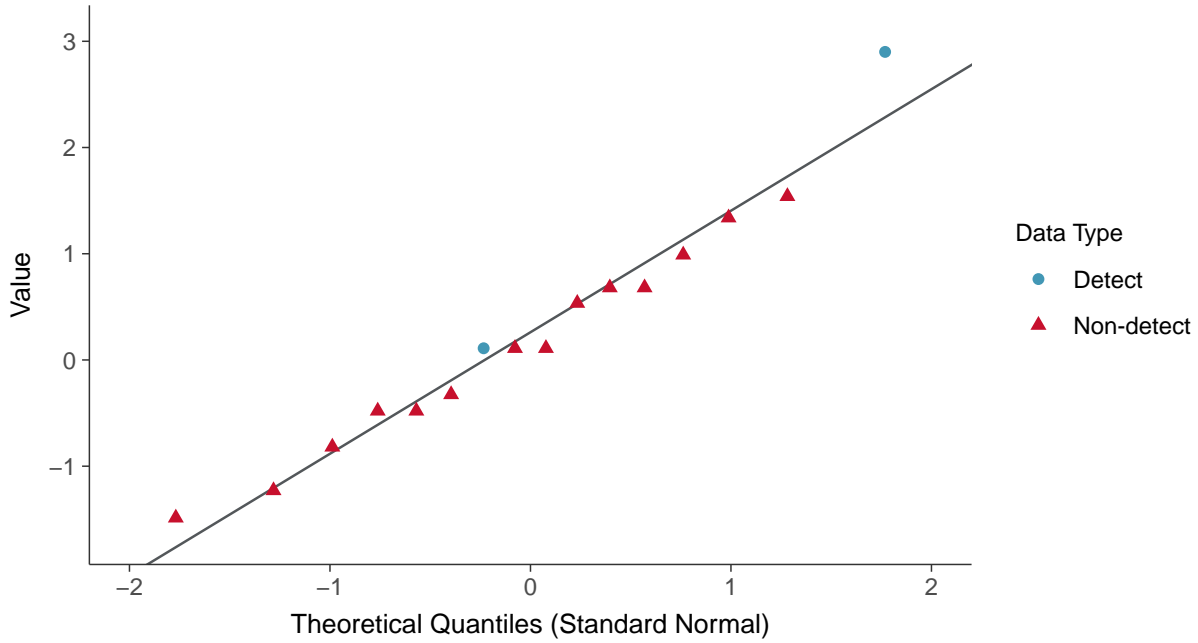
Arsenic, MW-17005 (ug/L)





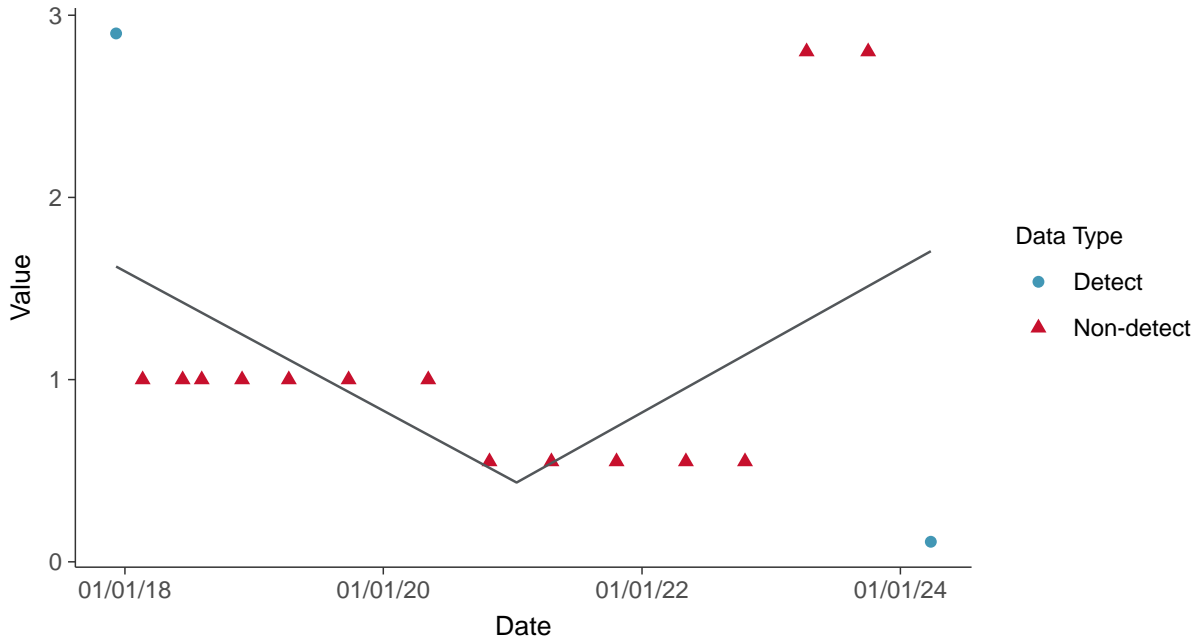
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear

Arsenic, MW-17005 (ug/L)



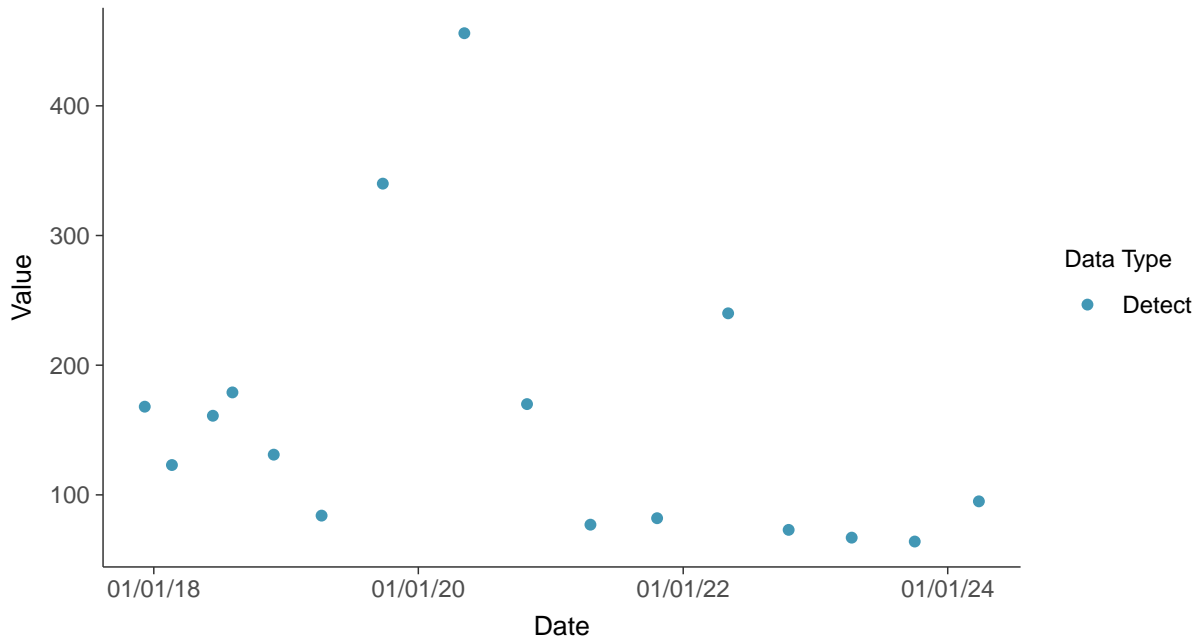


Appendix IV: Barium, MW-17005

ID: 18_2_103

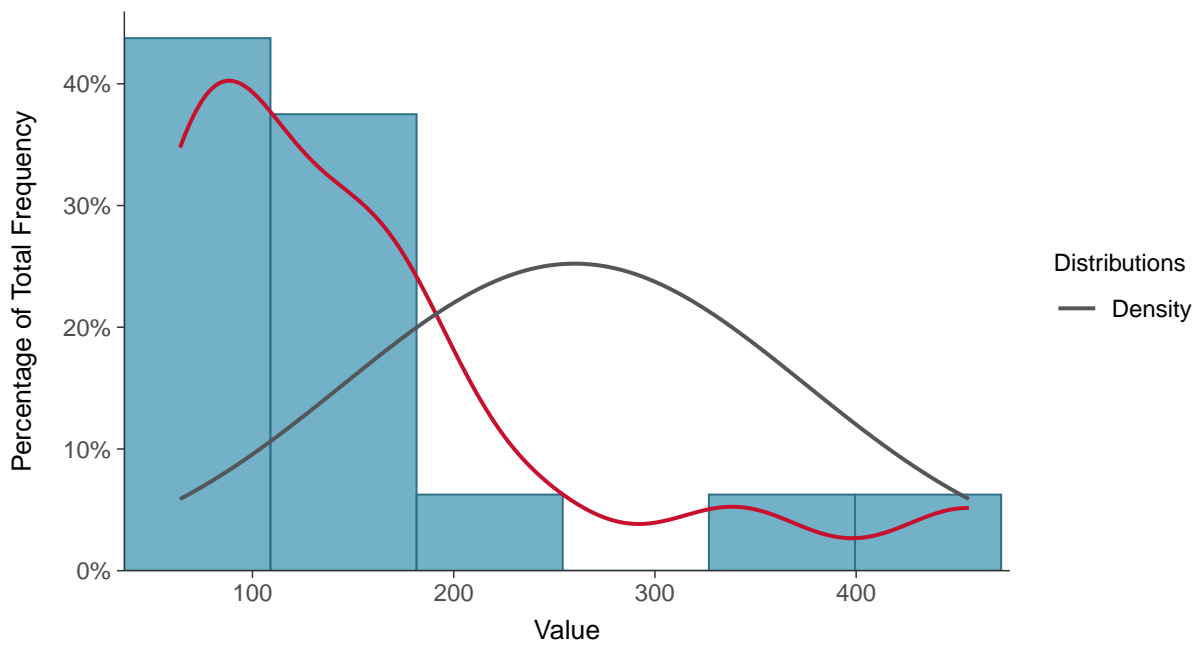
Scatter Plot

Barium, MW-17005 (ug/L)



Histogram

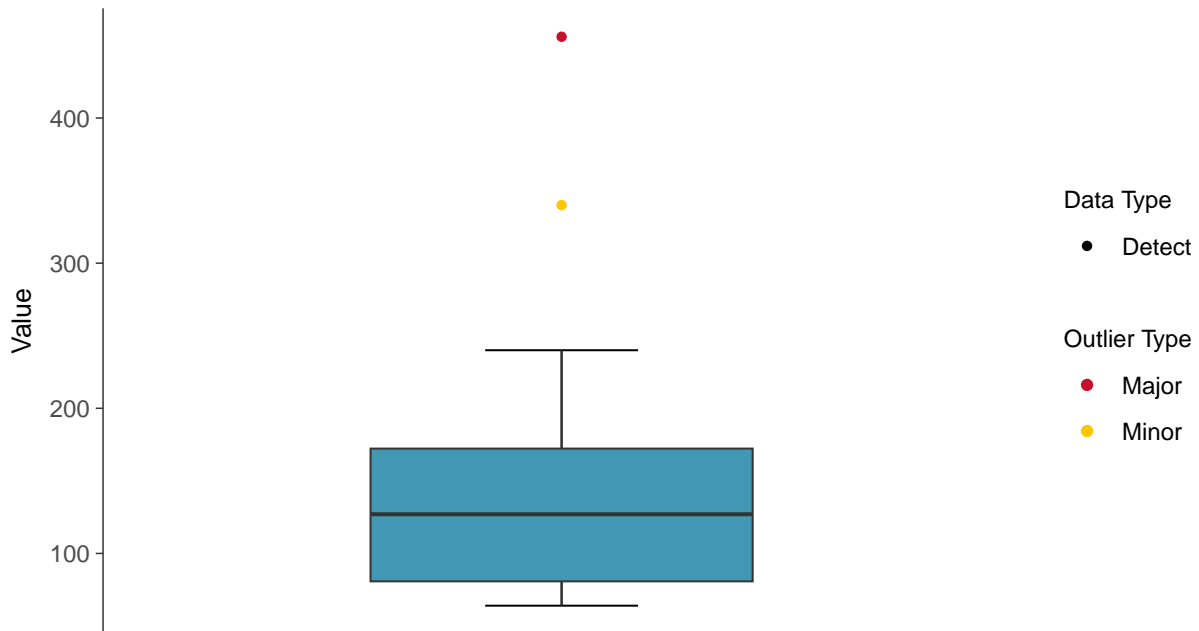
Barium, MW-17005 (ug/L)





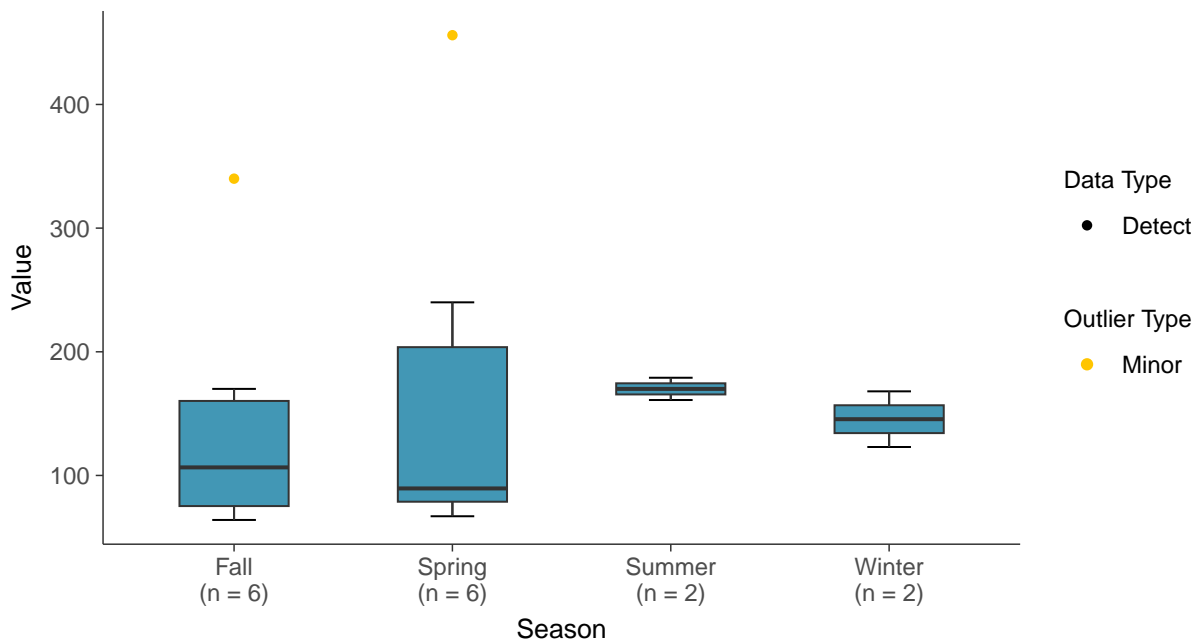
Boxplot

Barium, MW-17005 (ug/L)



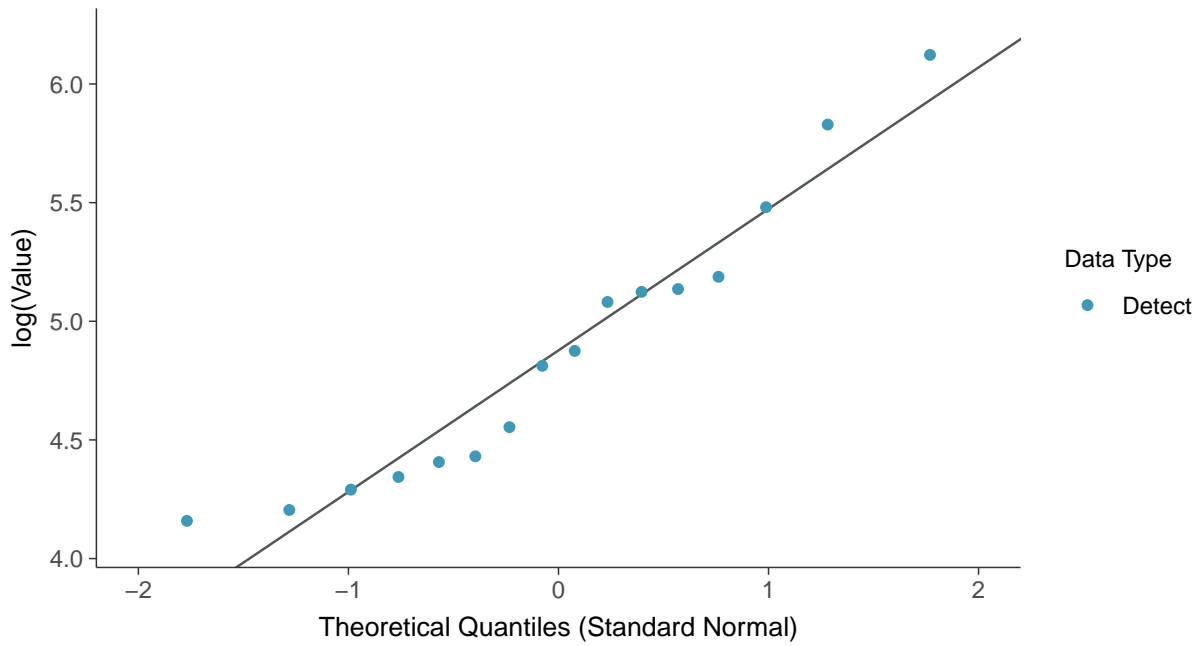
Boxplot by Season

Barium, MW-17005 (ug/L)

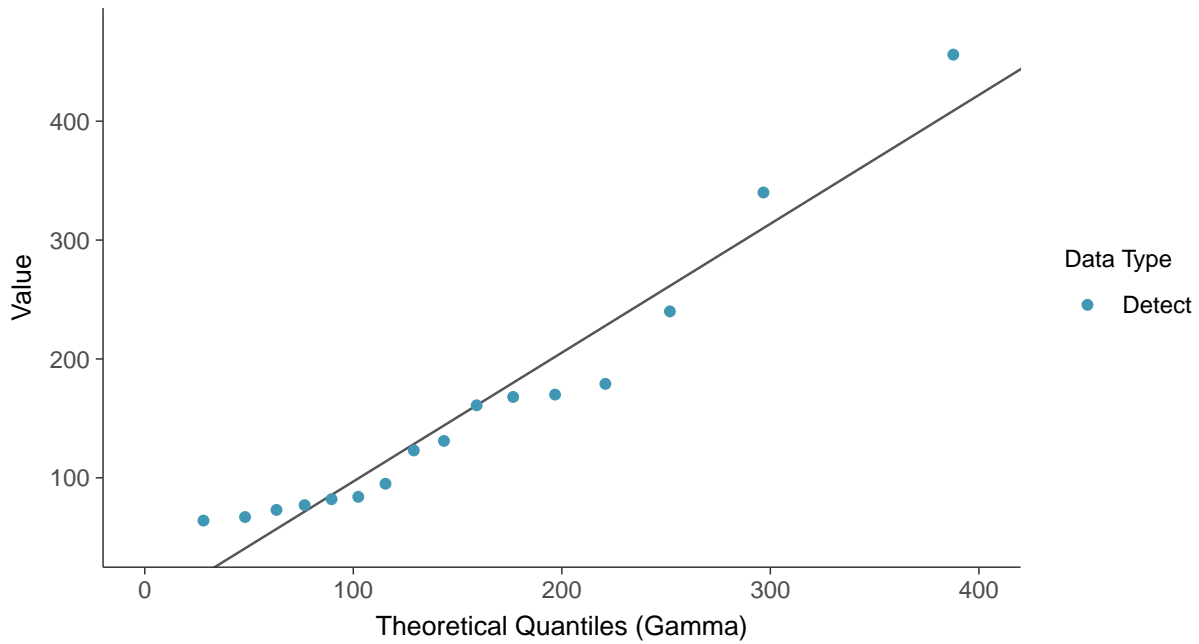




Lognormal Q-Q plot
Barium, MW-17005 (ug/L)



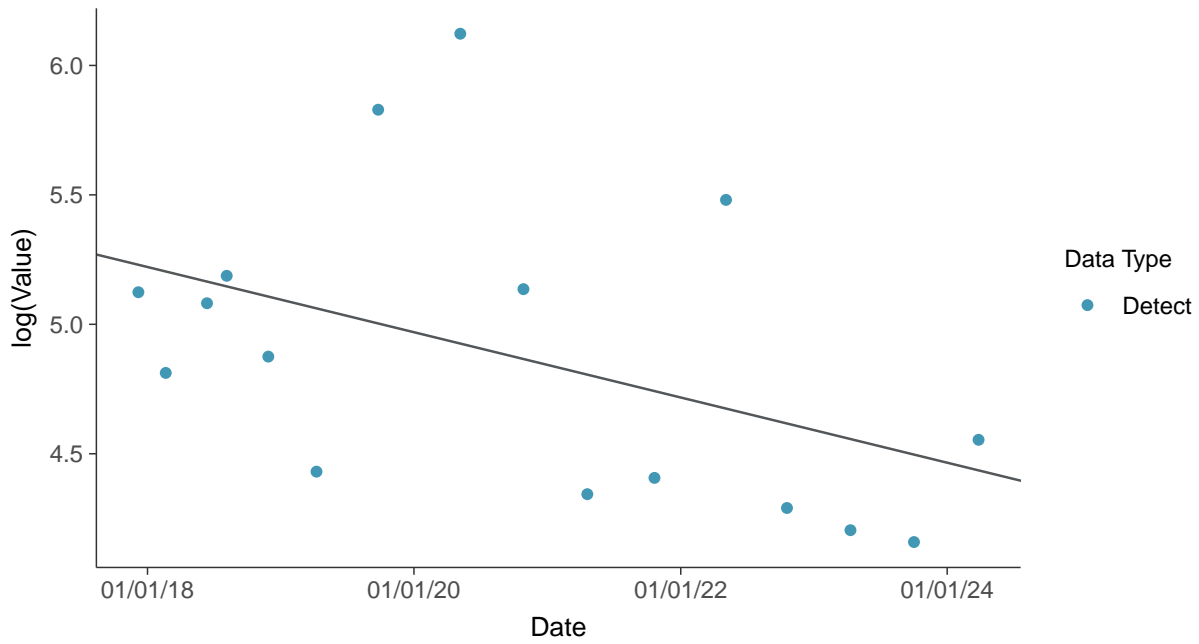
Gamma Q-Q plot
Barium, MW-17005 (ug/L)





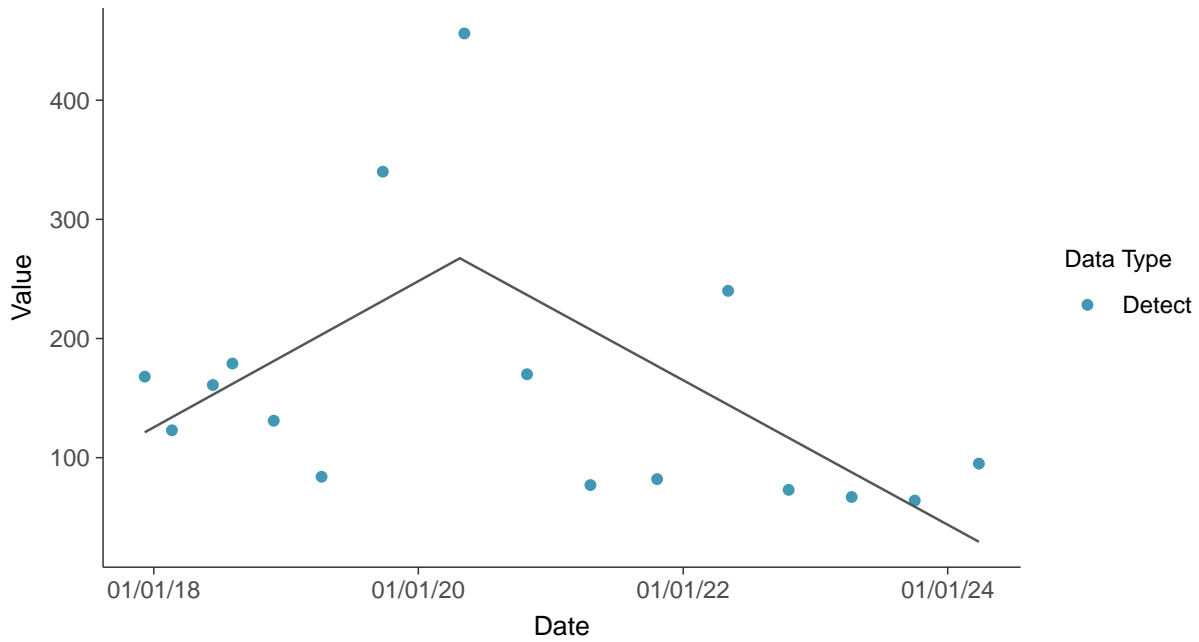
Trend Regression: Lognormal MLE

Barium, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear

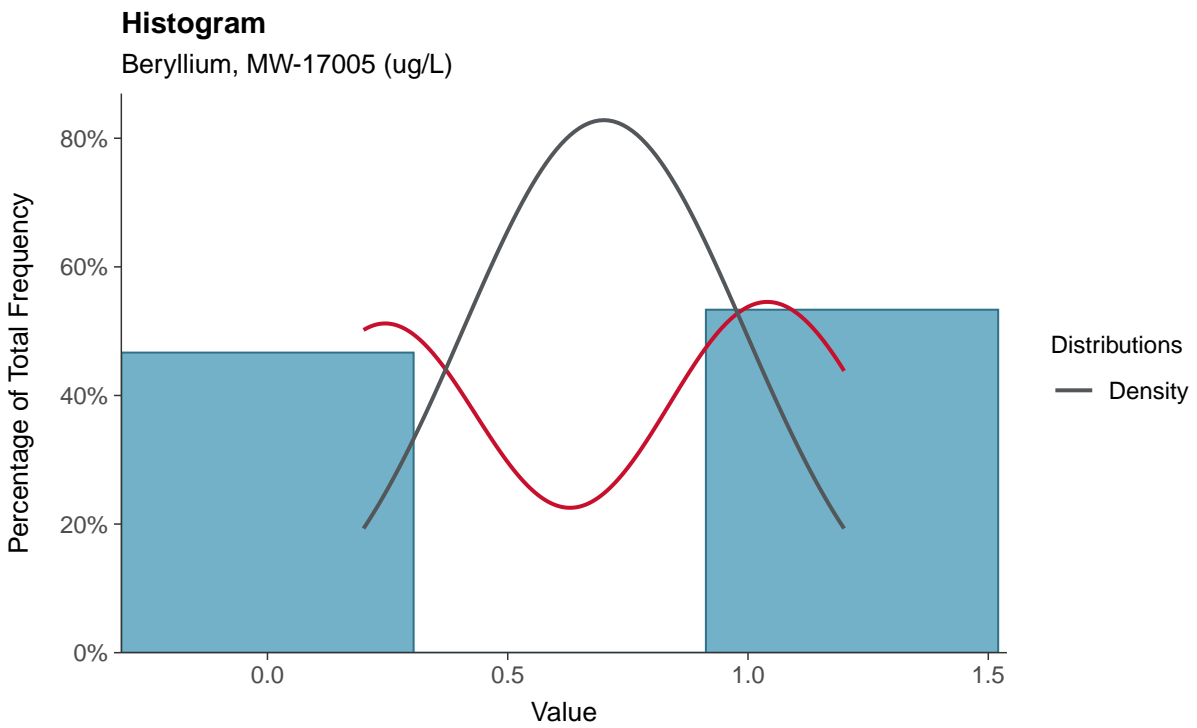
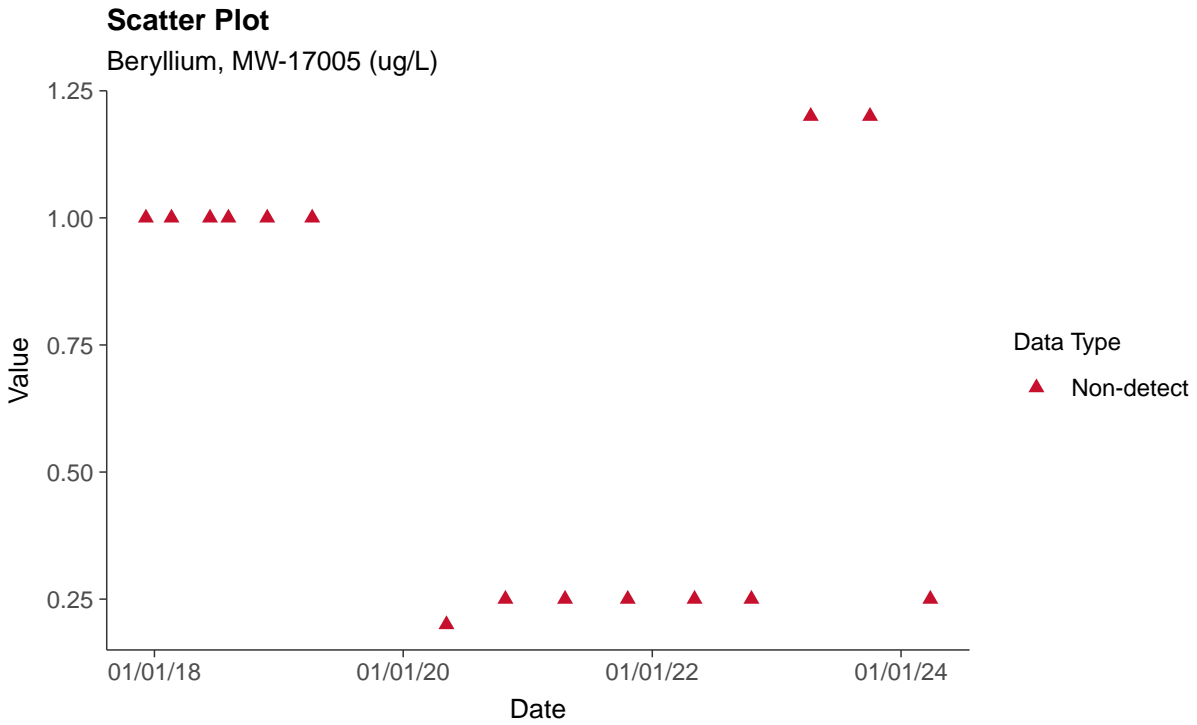
Barium, MW-17005 (ug/L)





Appendix IV: Beryllium, MW-17005

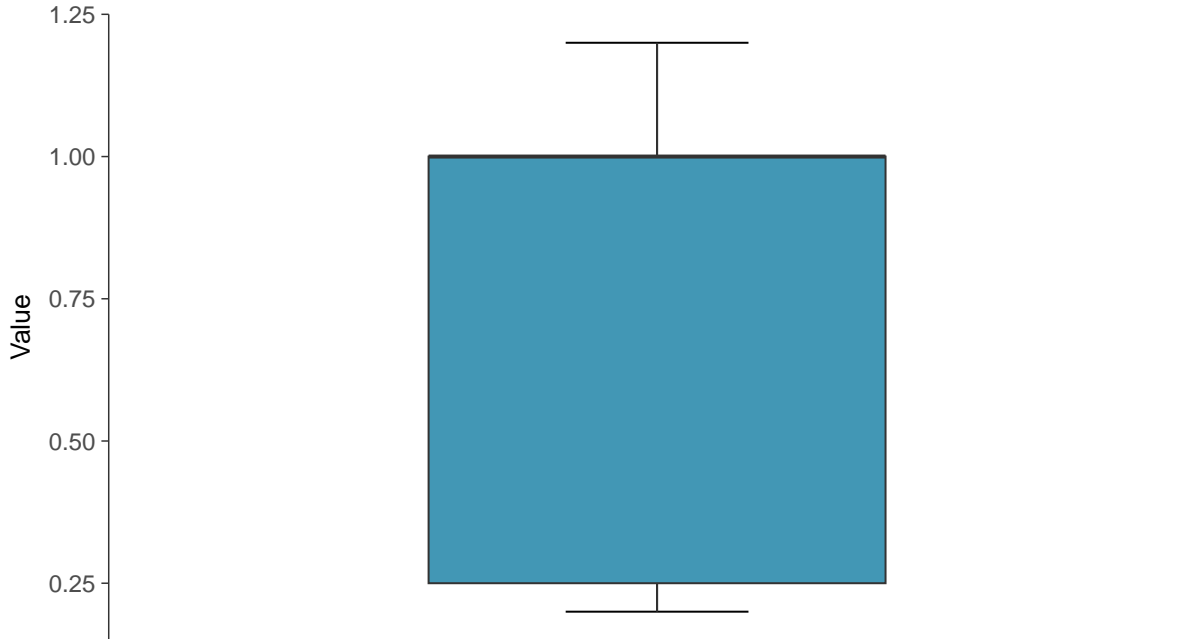
ID: 18_2_104





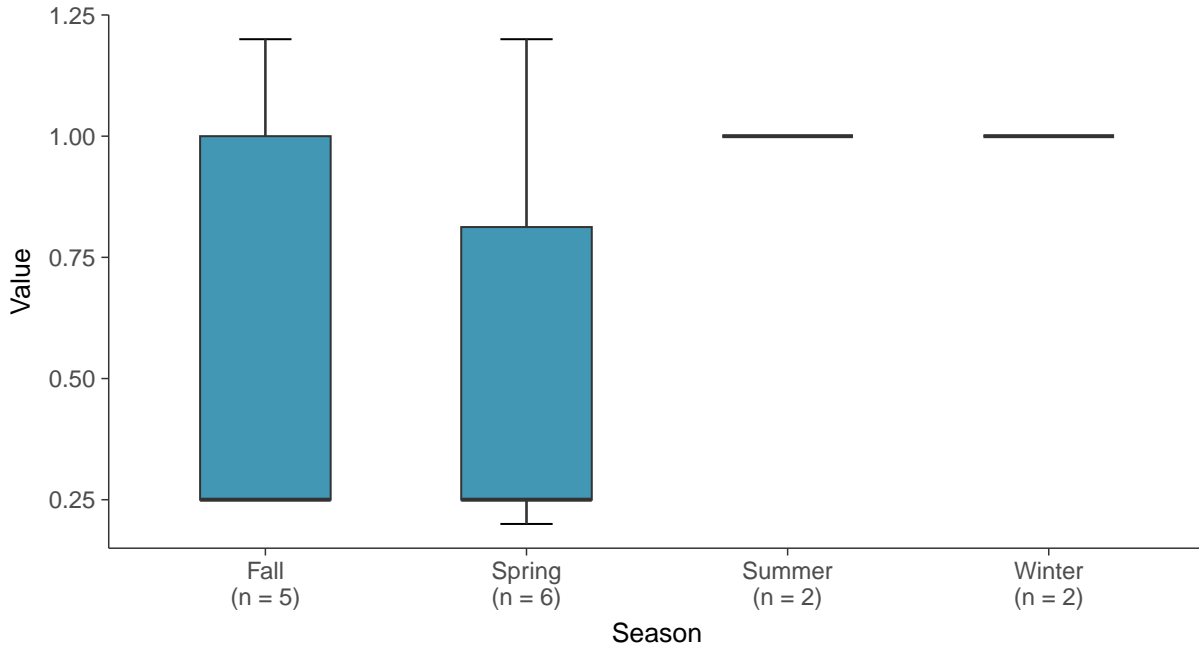
Boxplot

Beryllium, MW-17005 (ug/L)



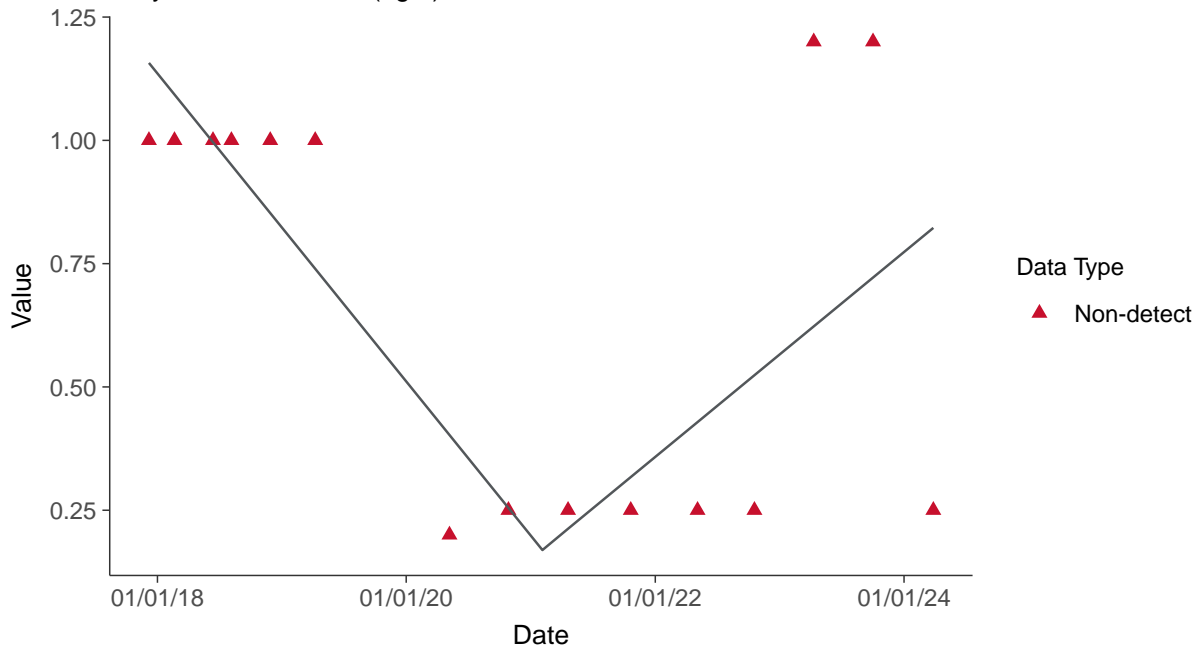
Boxplot by Season

Beryllium, MW-17005 (ug/L)





Trend Regression: Piecewise Linear-Linear
Beryllium, MW-17005 (ug/L)



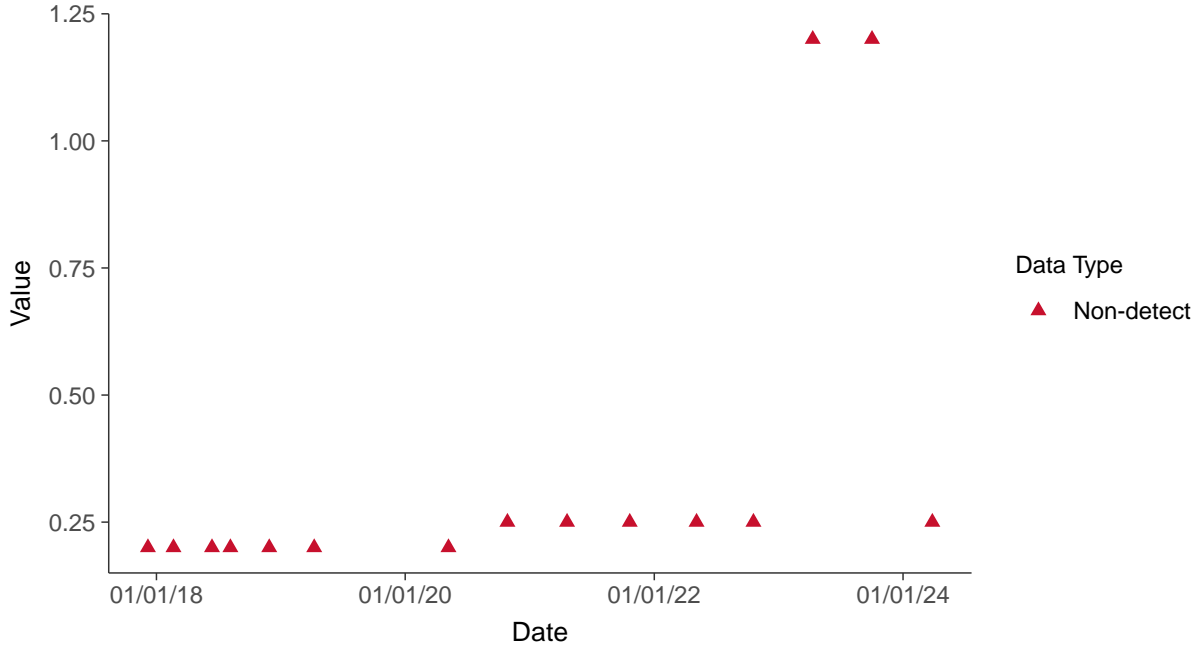


Appendix IV: Cadmium, MW-17005

ID: 18_2_106

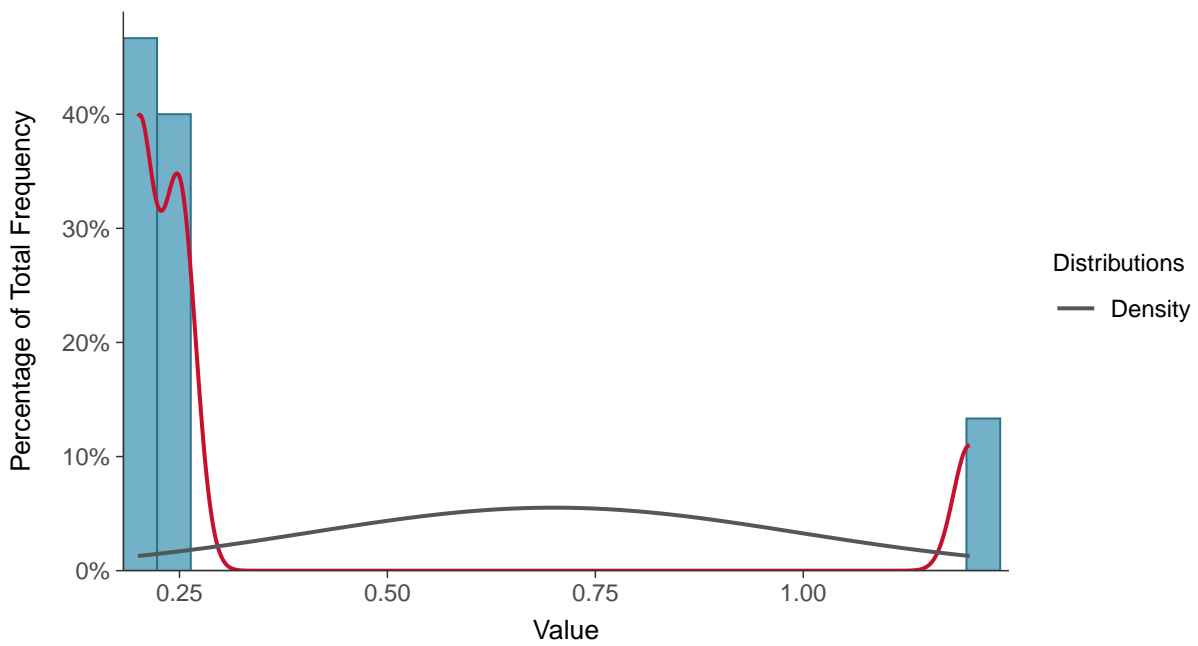
Scatter Plot

Cadmium, MW-17005 (ug/L)



Histogram

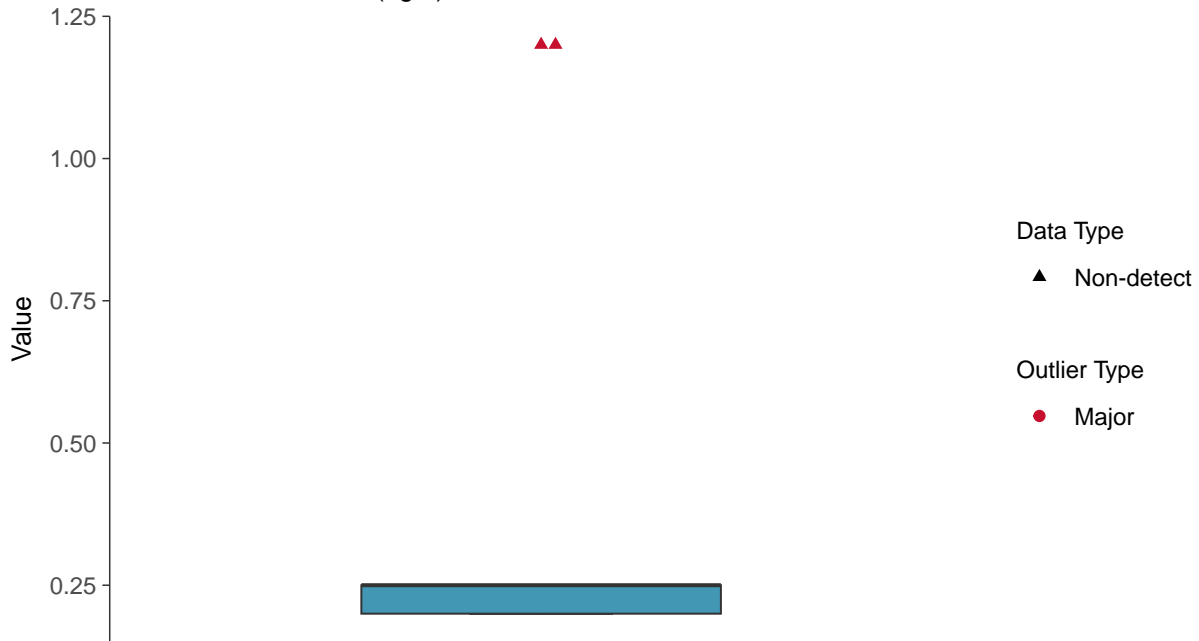
Cadmium, MW-17005 (ug/L)





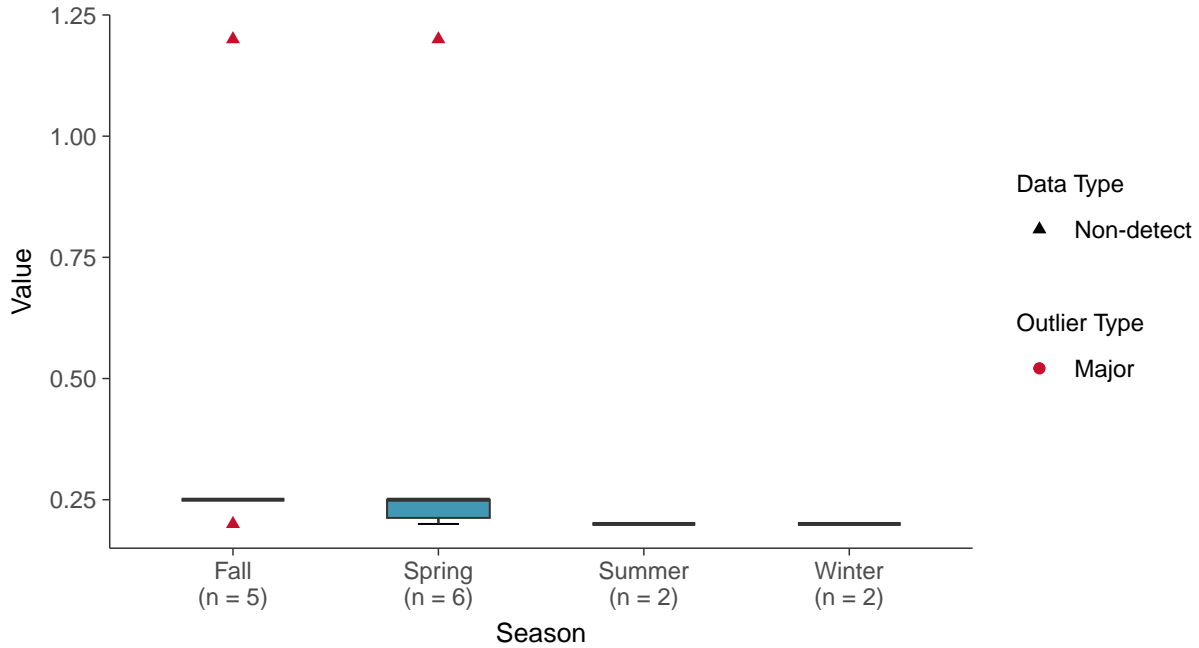
Boxplot

Cadmium, MW-17005 (ug/L)



Boxplot by Season

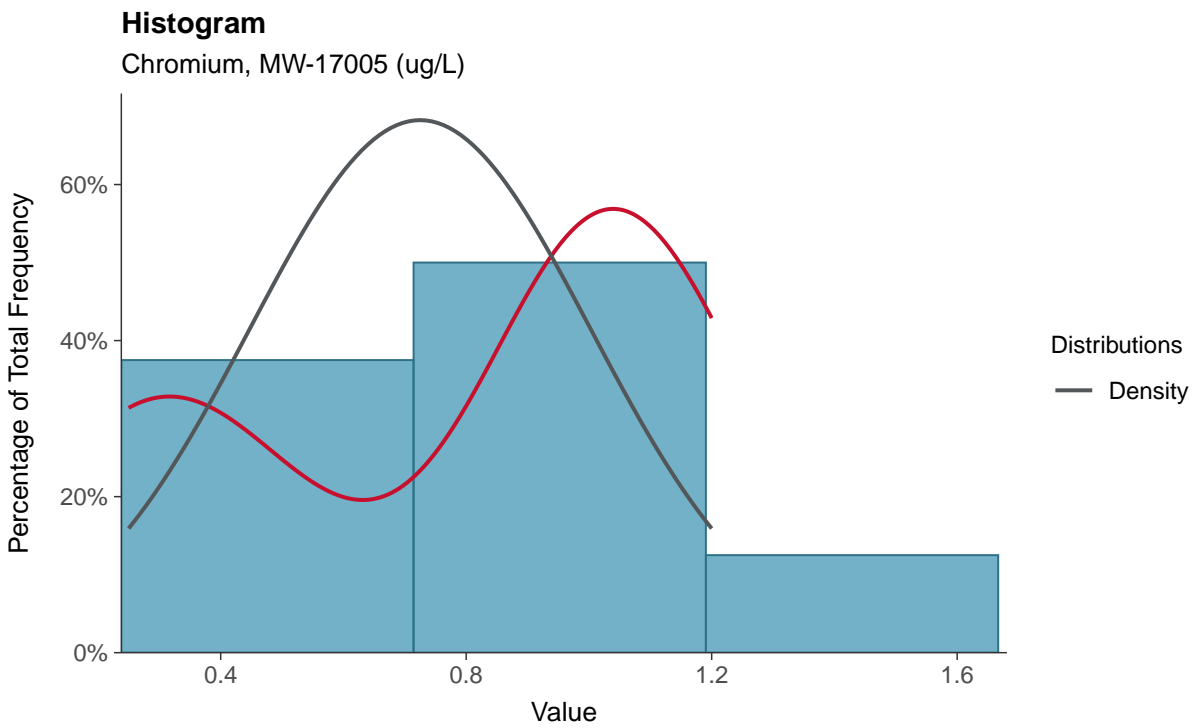
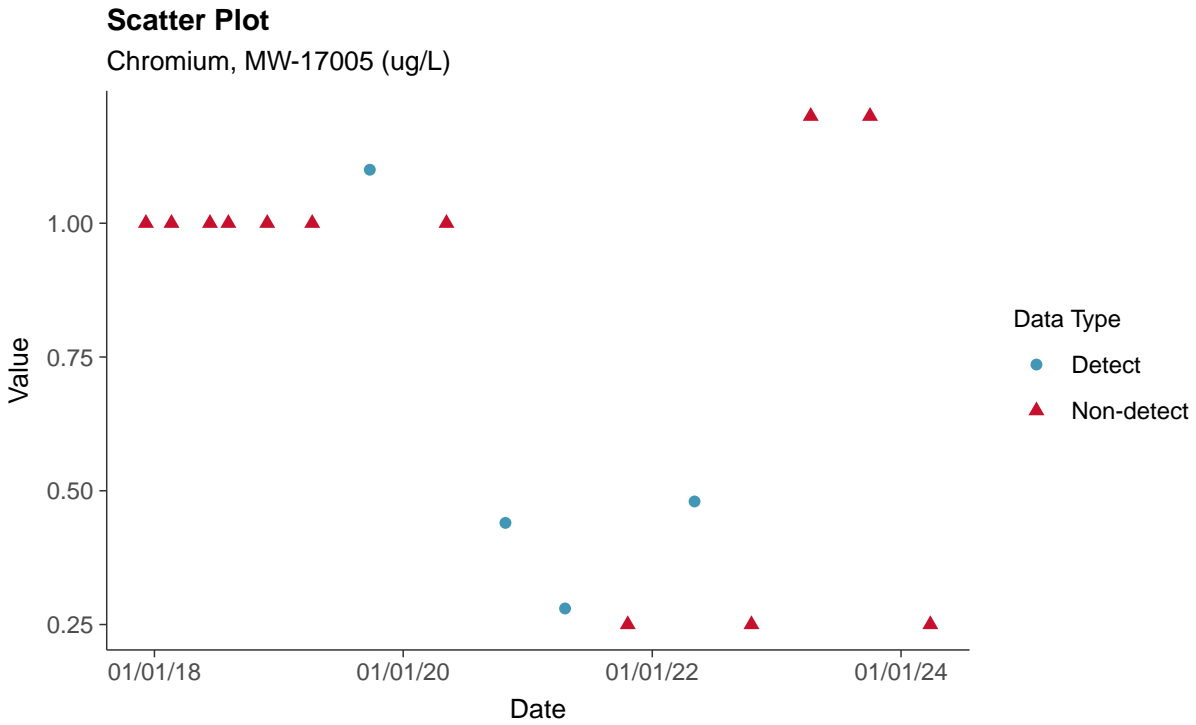
Cadmium, MW-17005 (ug/L)





Appendix IV: Chromium, MW-17005

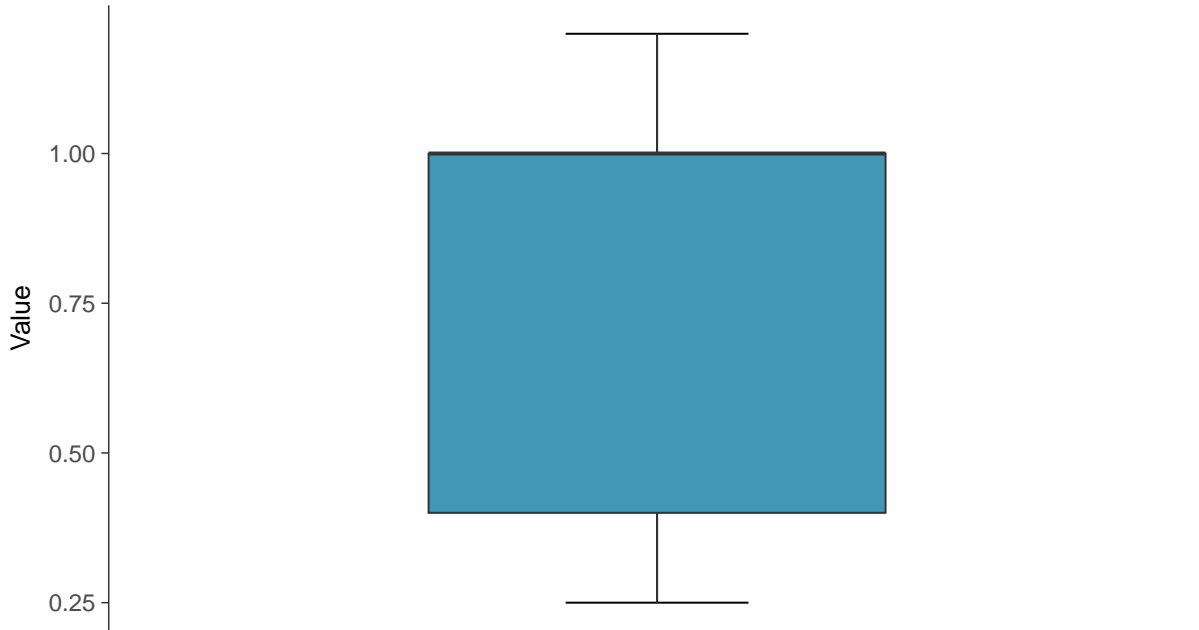
ID: 18_2_109





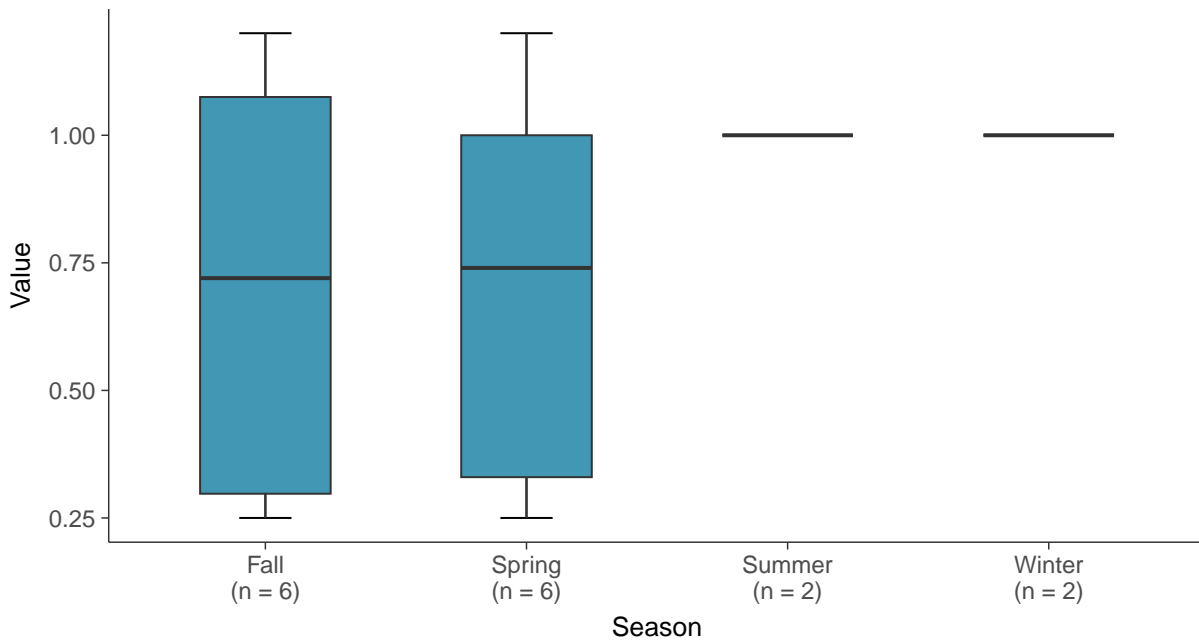
Boxplot

Chromium, MW-17005 (ug/L)



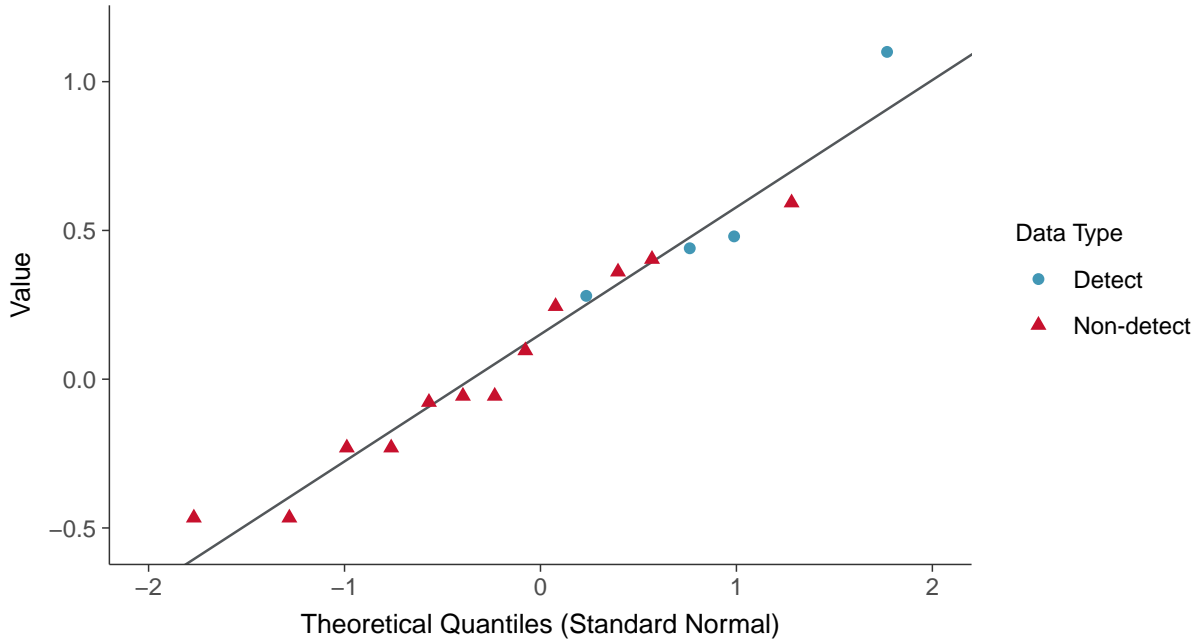
Boxplot by Season

Chromium, MW-17005 (ug/L)

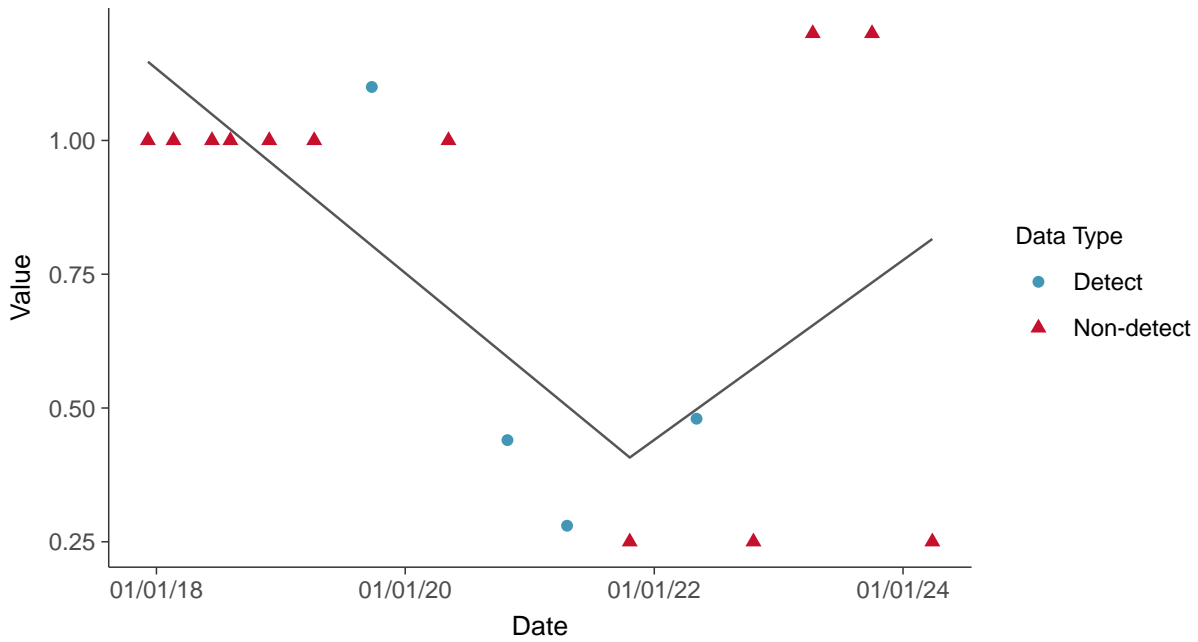




Normal Q-Q plot using ROS Imputed Estimates
Chromium, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear
Chromium, MW-17005 (ug/L)



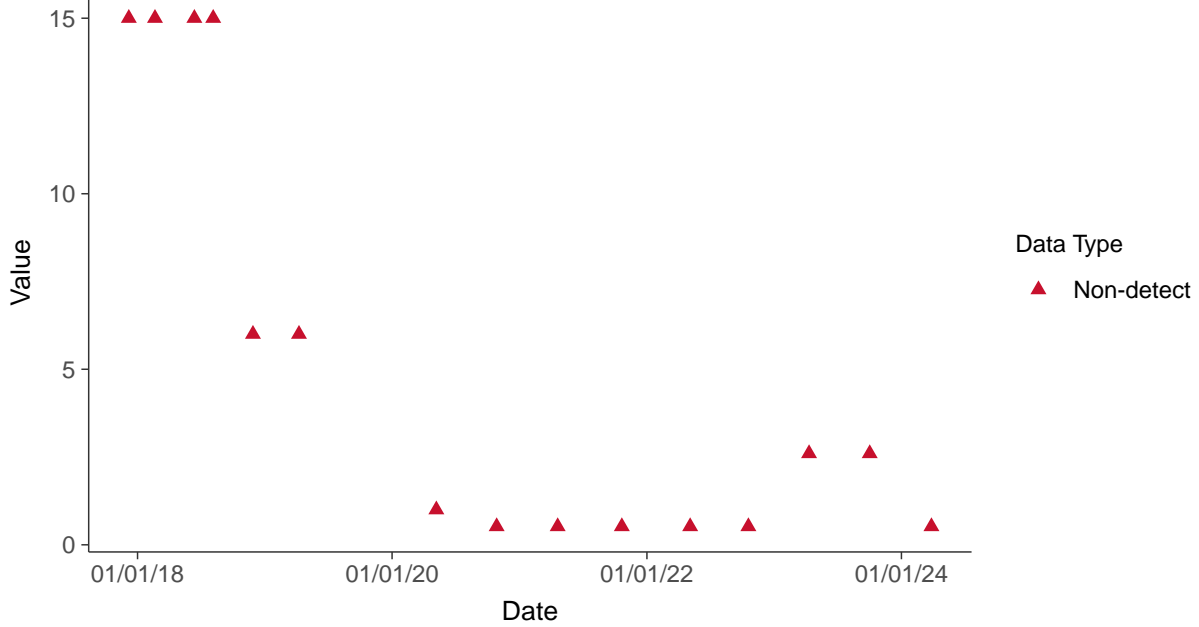


Appendix IV: Cobalt, MW-17005

ID: 18_2_110

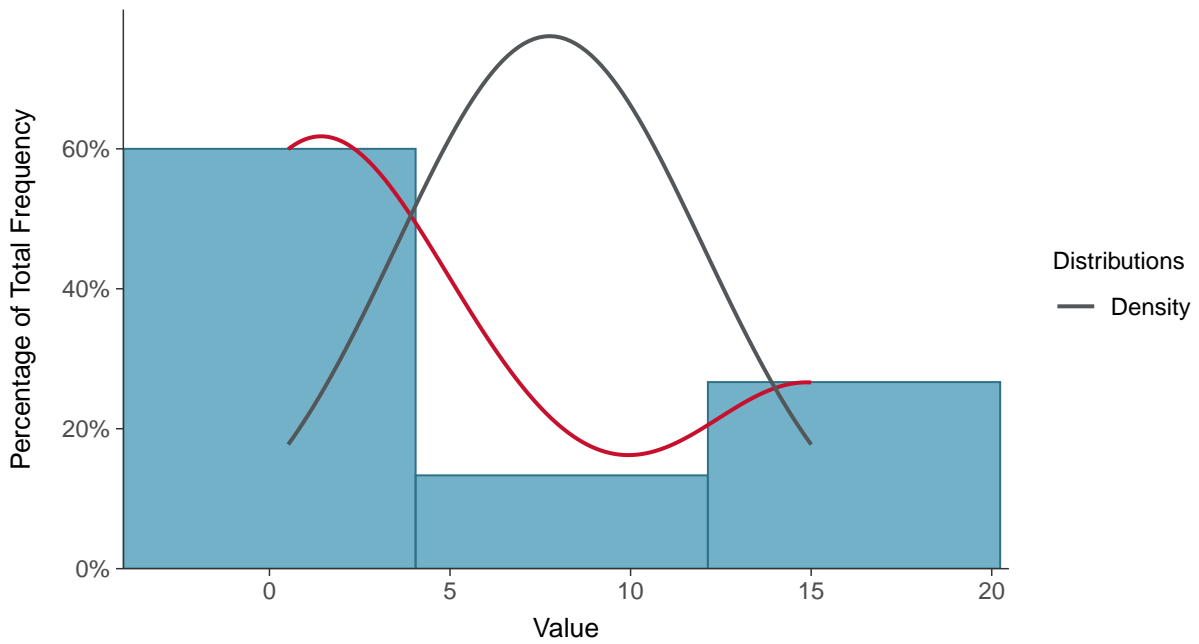
Scatter Plot

Cobalt, MW-17005 (ug/L)



Histogram

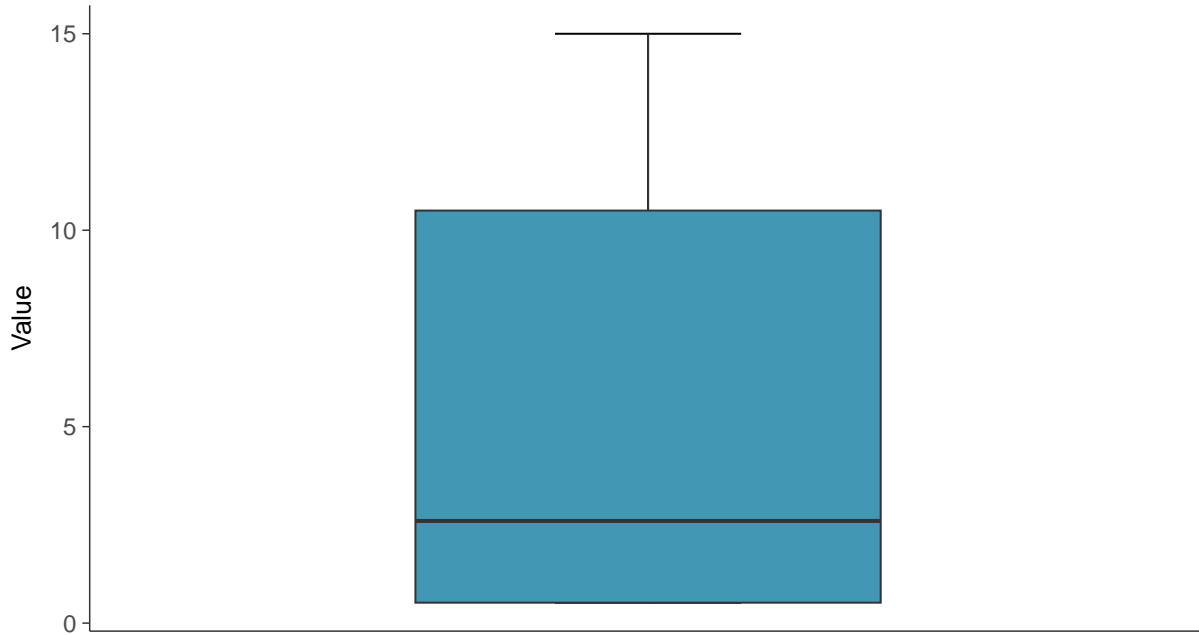
Cobalt, MW-17005 (ug/L)





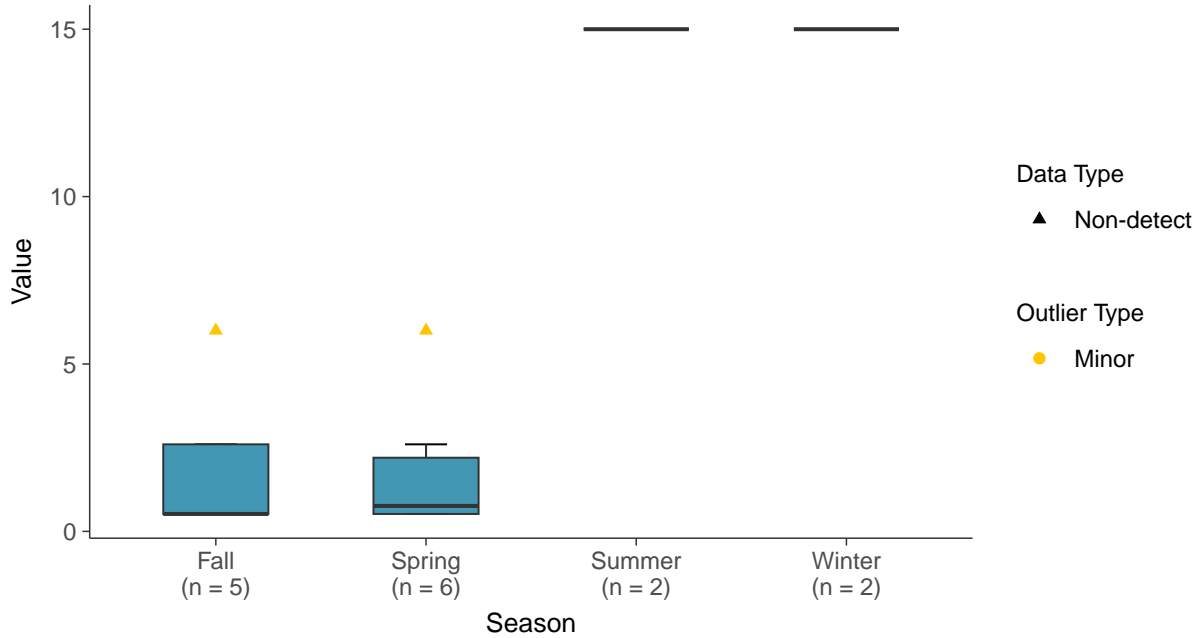
Boxplot

Cobalt, MW-17005 (ug/L)



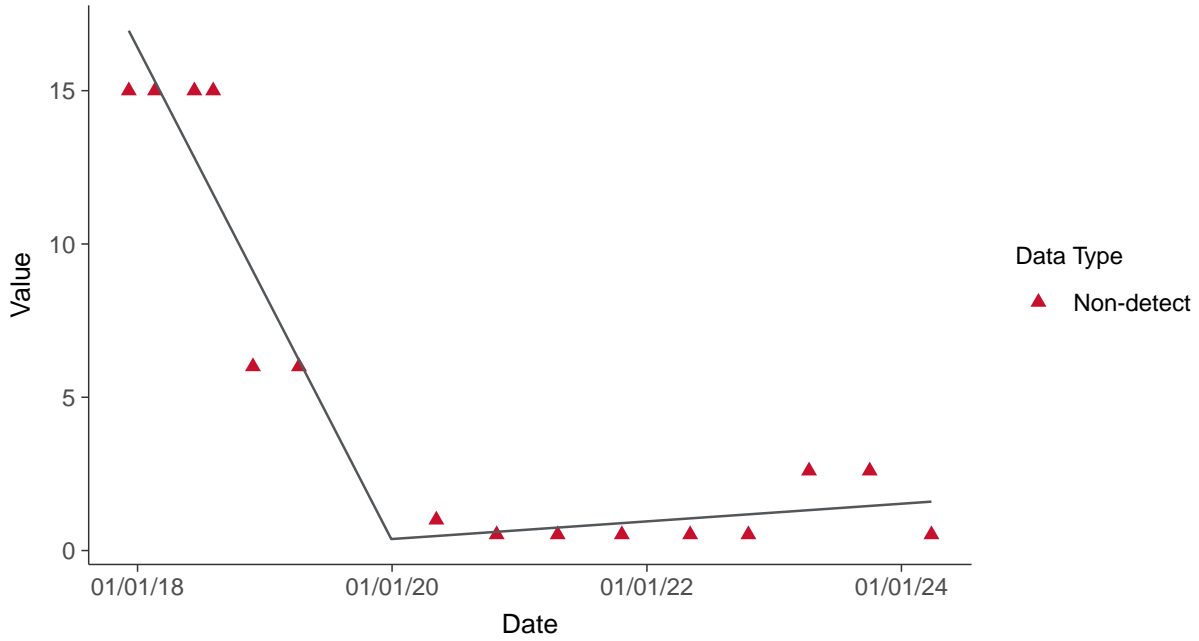
Boxplot by Season

Cobalt, MW-17005 (ug/L)

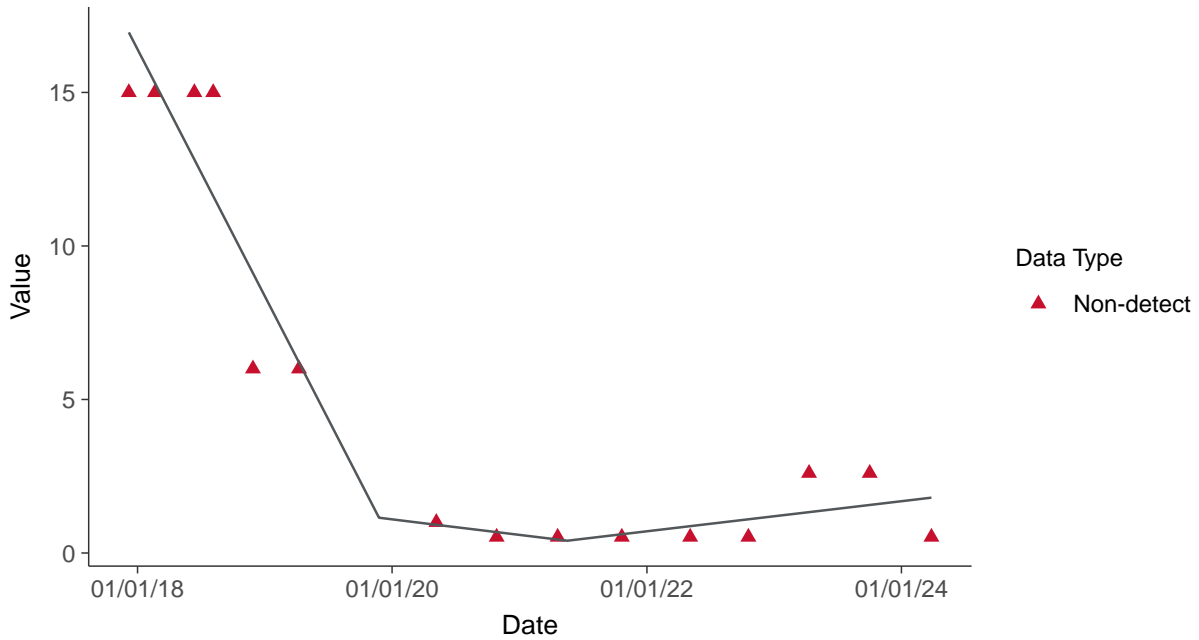




Trend Regression: Piecewise Linear-Linear
Cobalt, MW-17005 (ug/L)



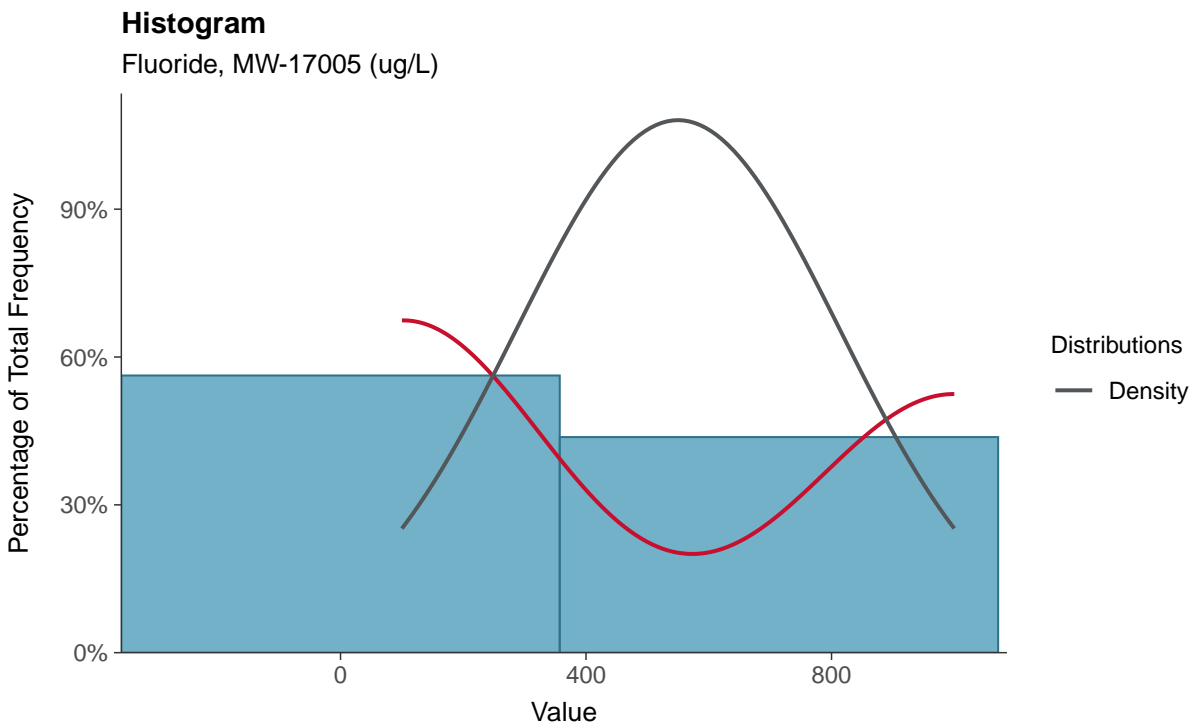
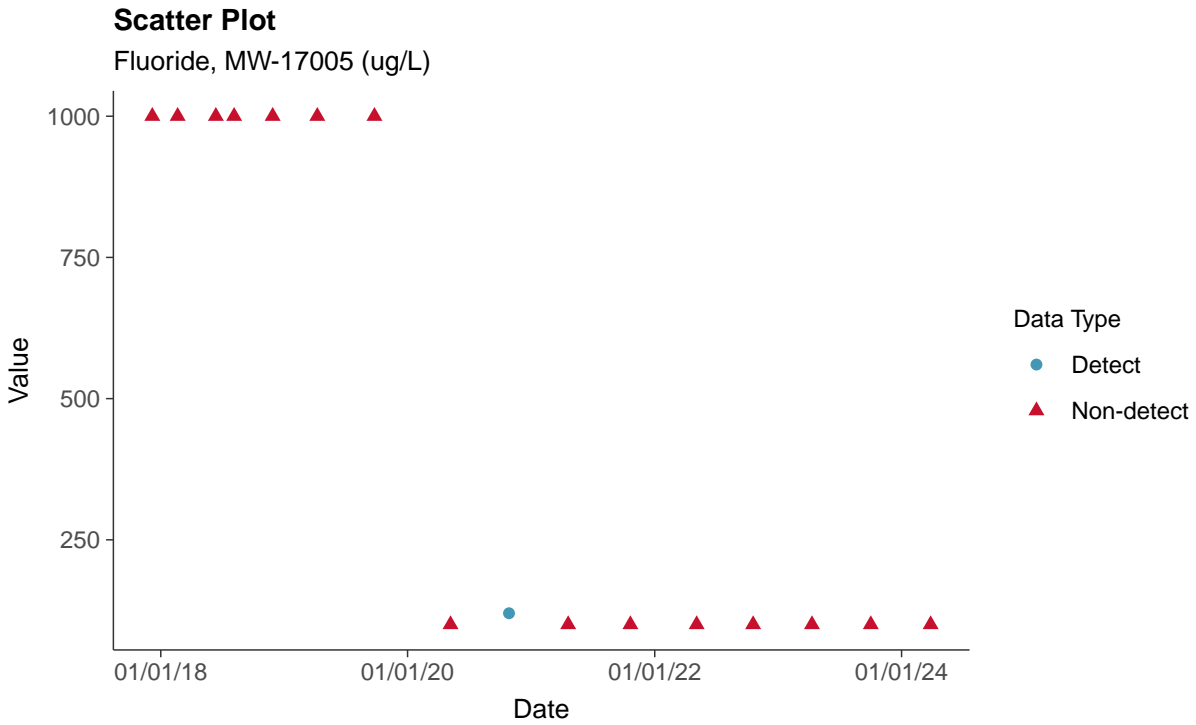
Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-17005 (ug/L)





Appendix IV: Fluoride, MW-17005

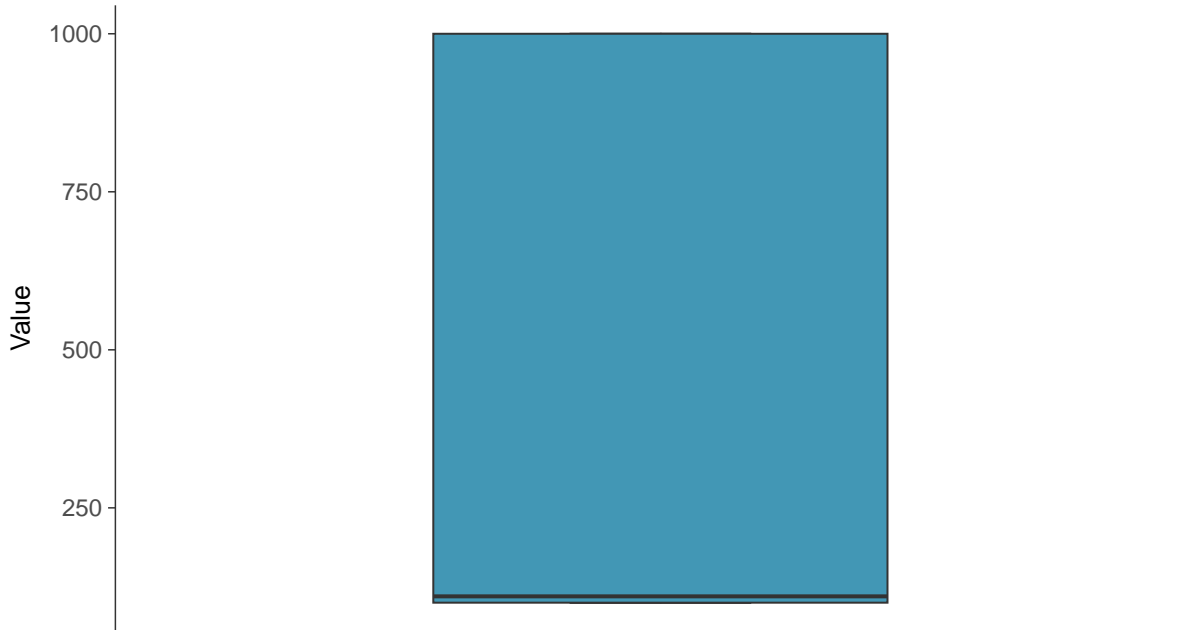
ID: 18_2_114





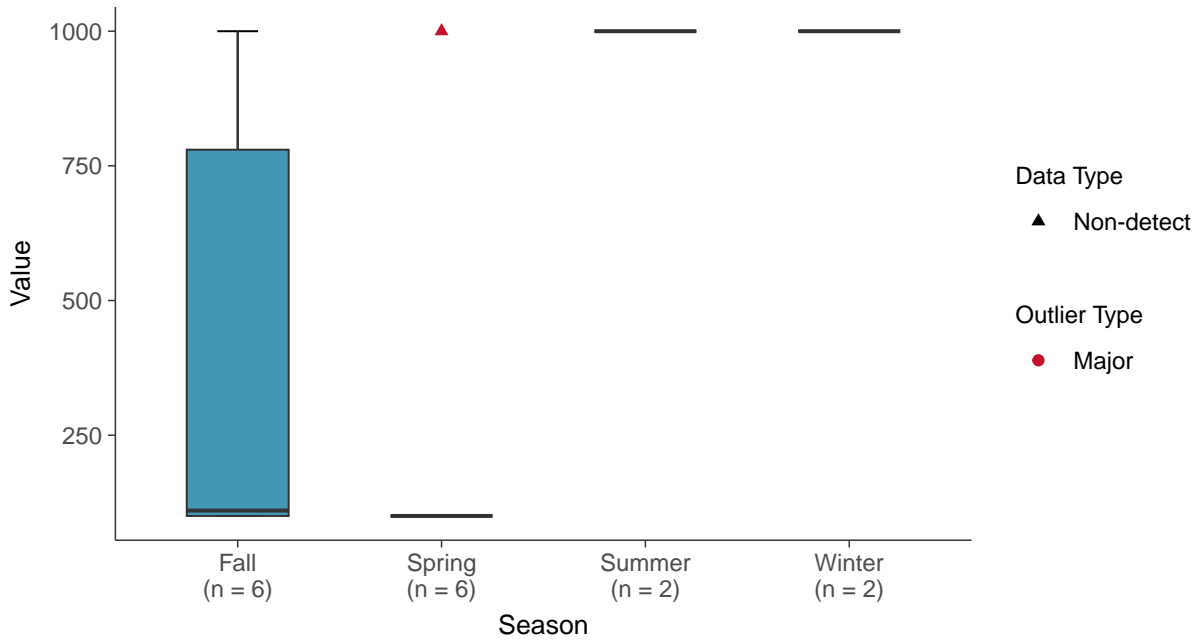
Boxplot

Fluoride, MW-17005 (ug/L)



Boxplot by Season

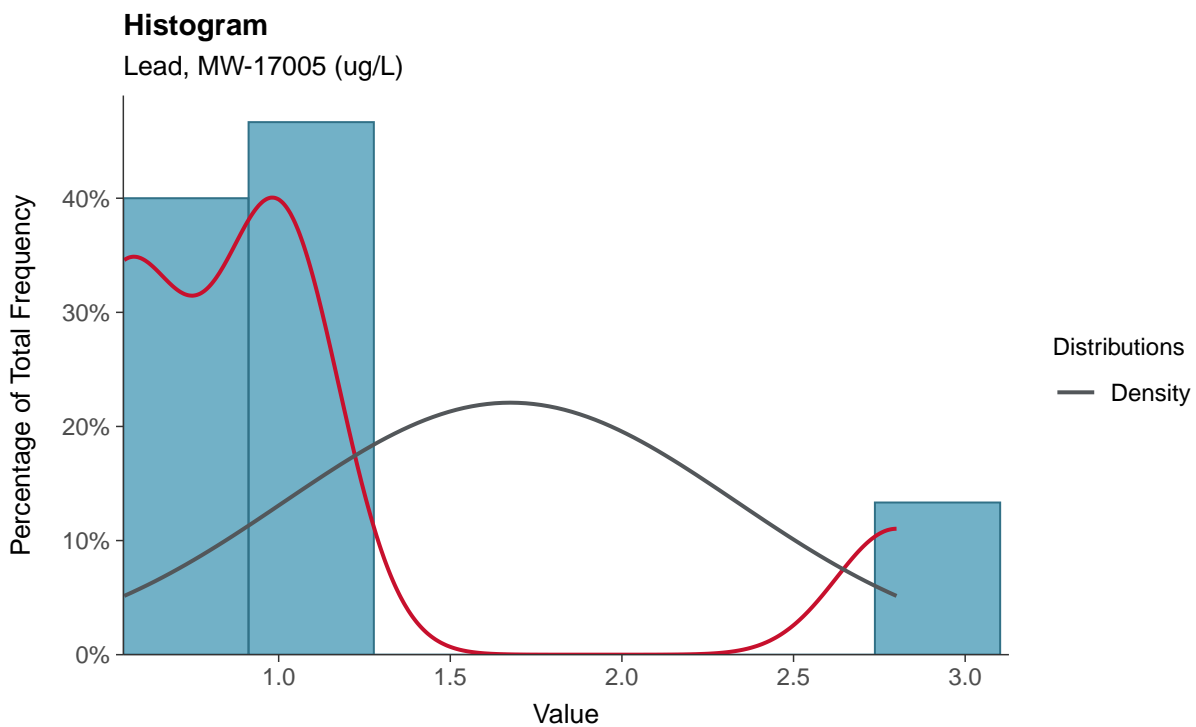
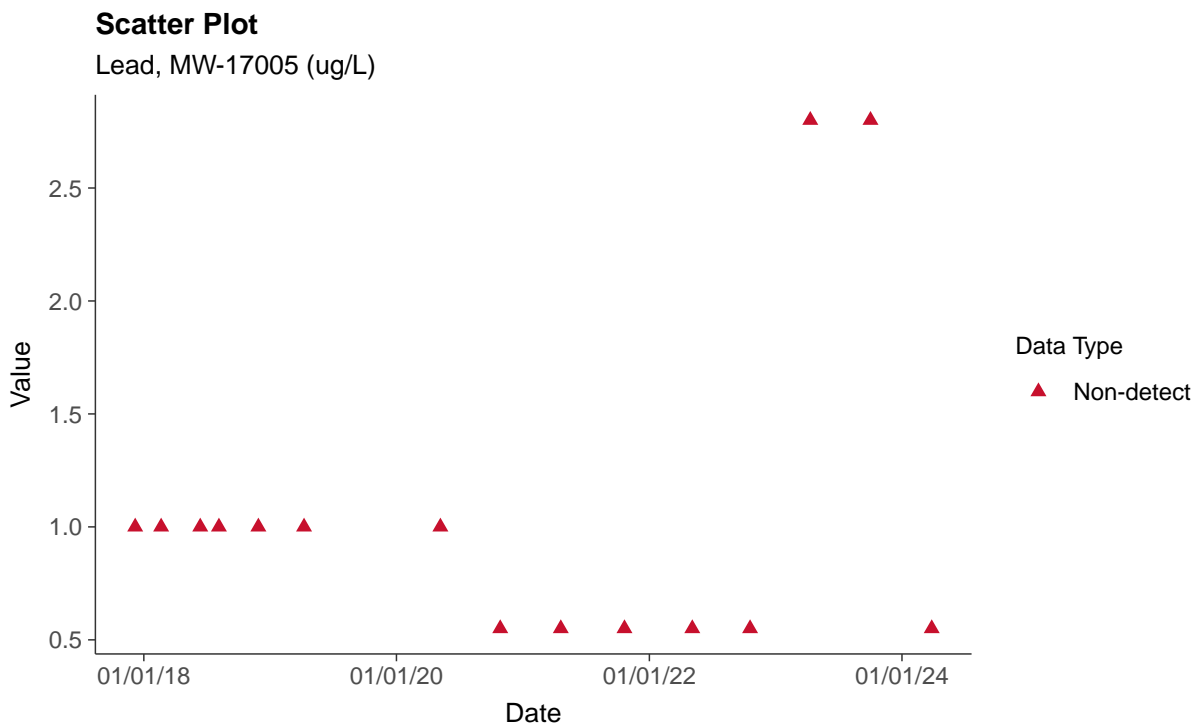
Fluoride, MW-17005 (ug/L)





Appendix IV: Lead, MW-17005

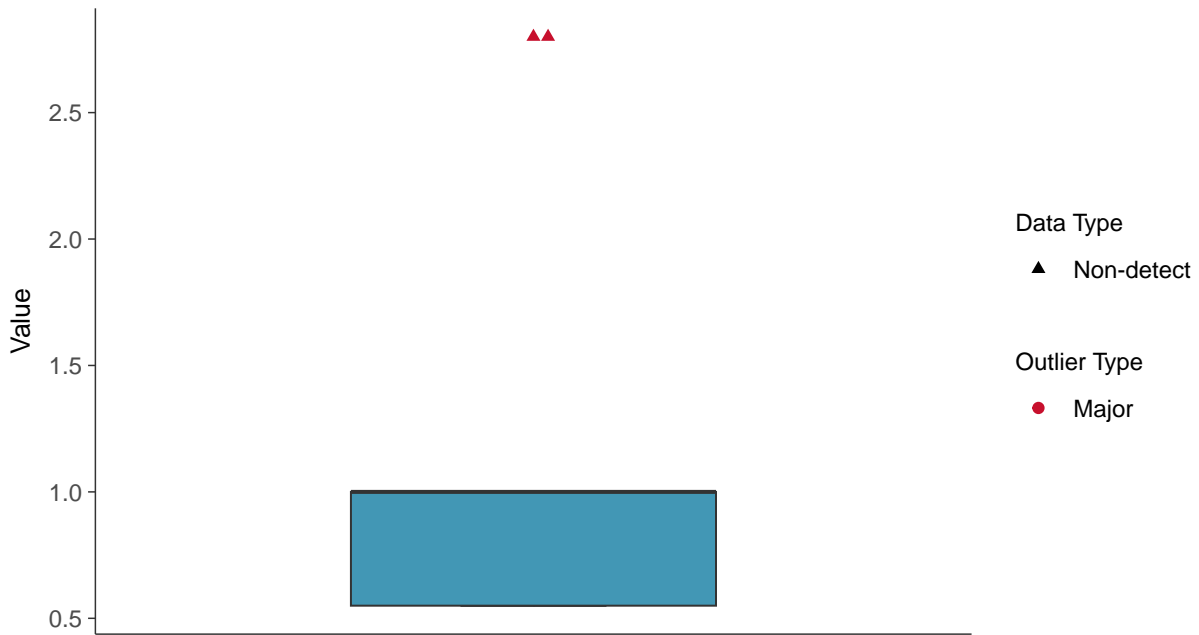
ID: 18_2_116





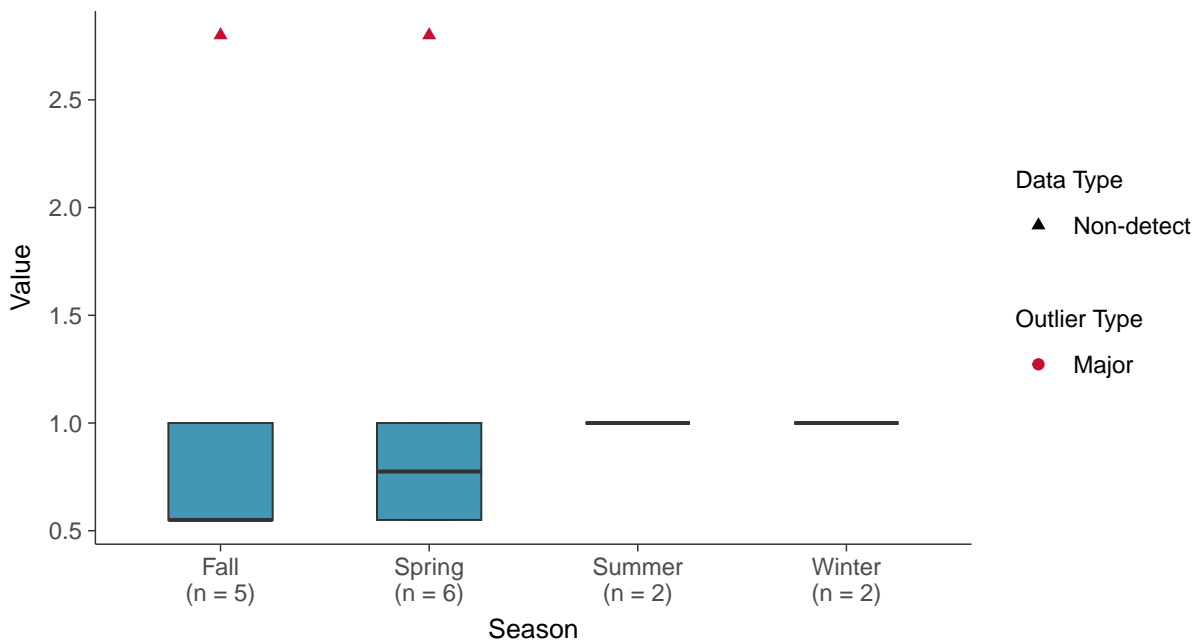
Boxplot

Lead, MW-17005 (ug/L)



Boxplot by Season

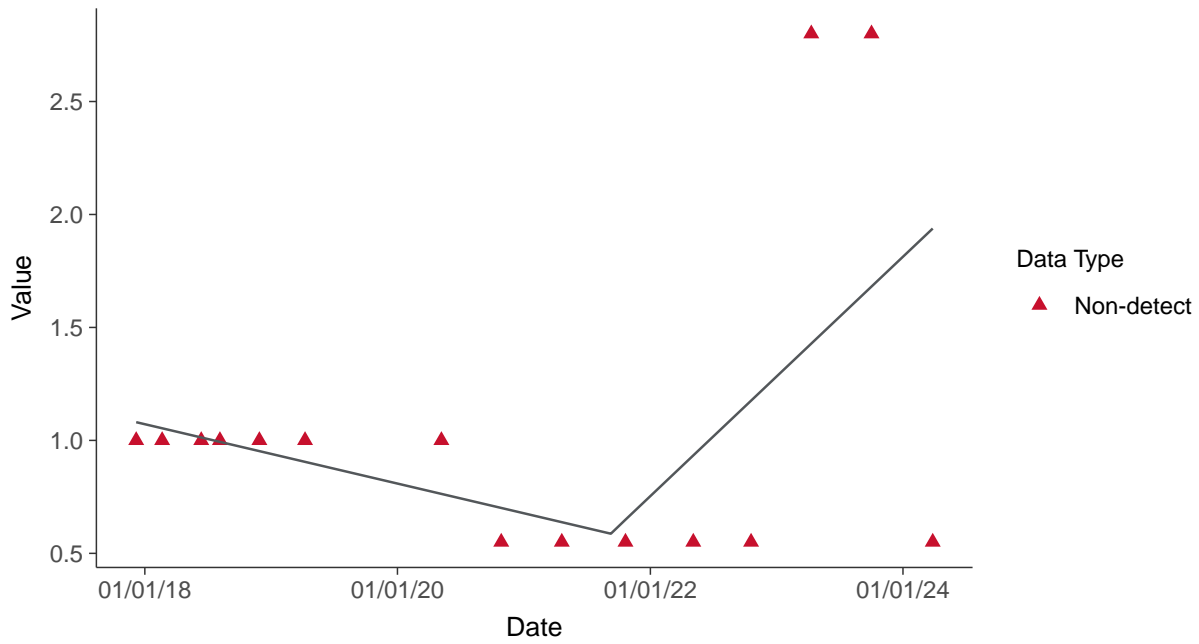
Lead, MW-17005 (ug/L)





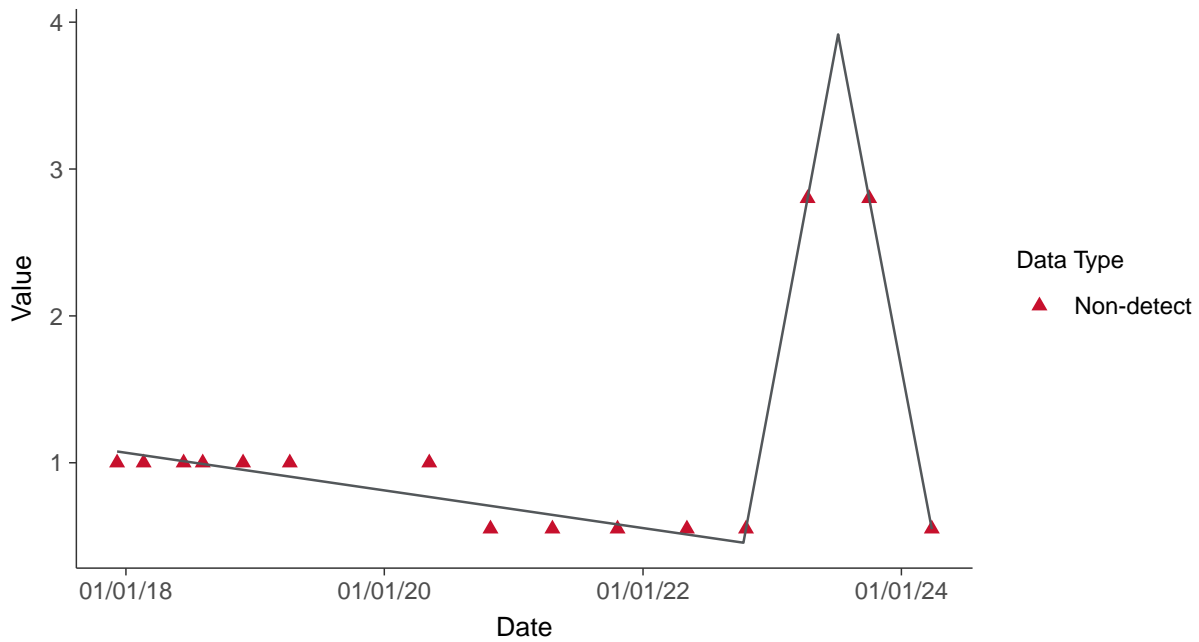
Trend Regression: Piecewise Linear-Linear

Lead, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-17005 (ug/L)



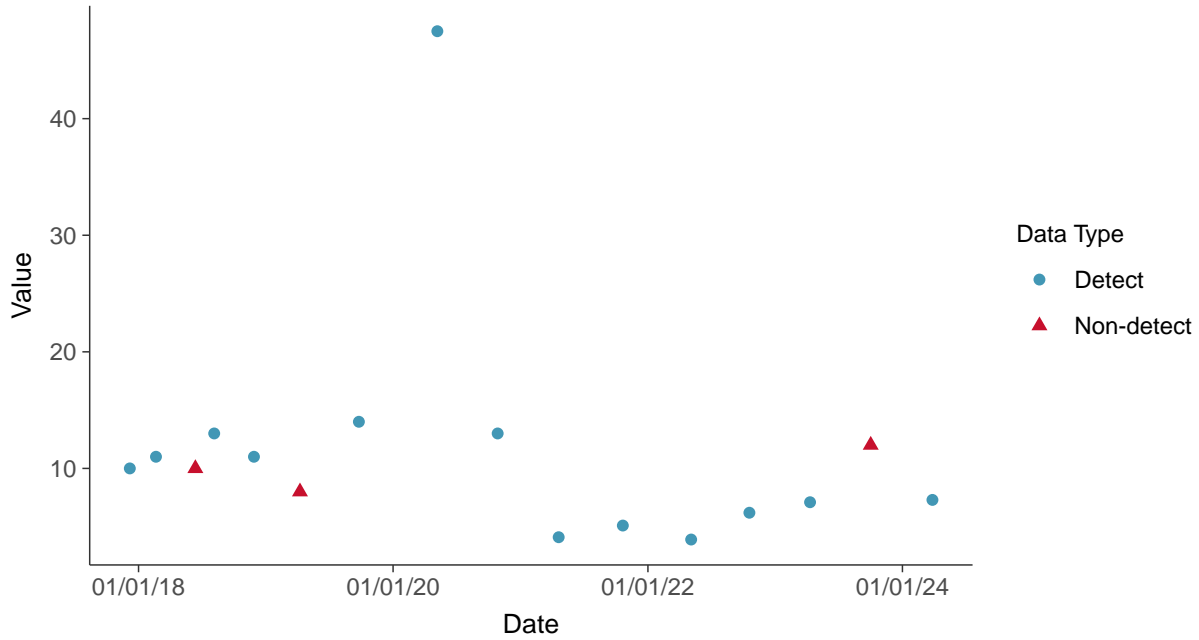


Appendix IV: Lithium, MW-17005

ID: 18_2_117

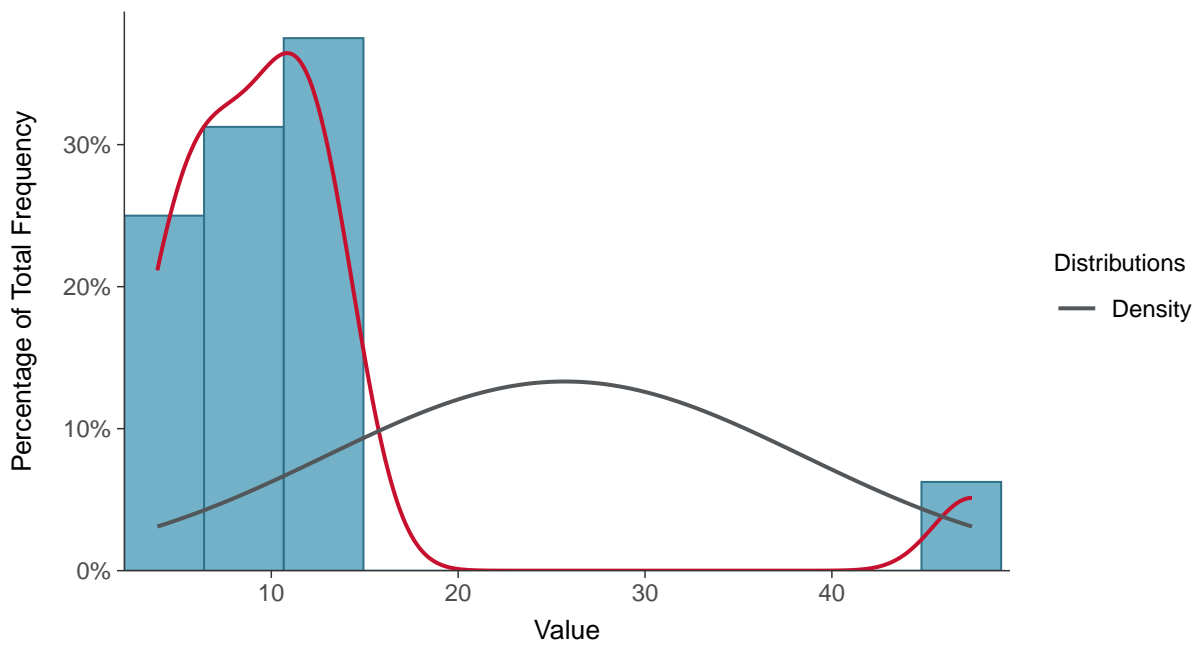
Scatter Plot

Lithium, MW-17005 (ug/L)



Histogram

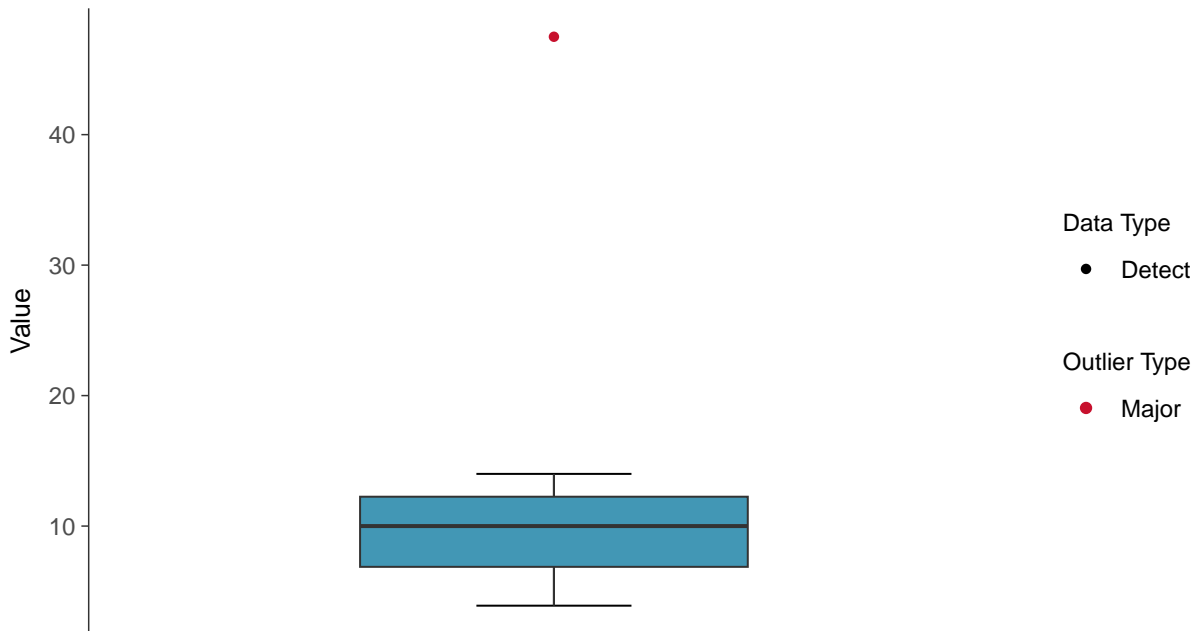
Lithium, MW-17005 (ug/L)





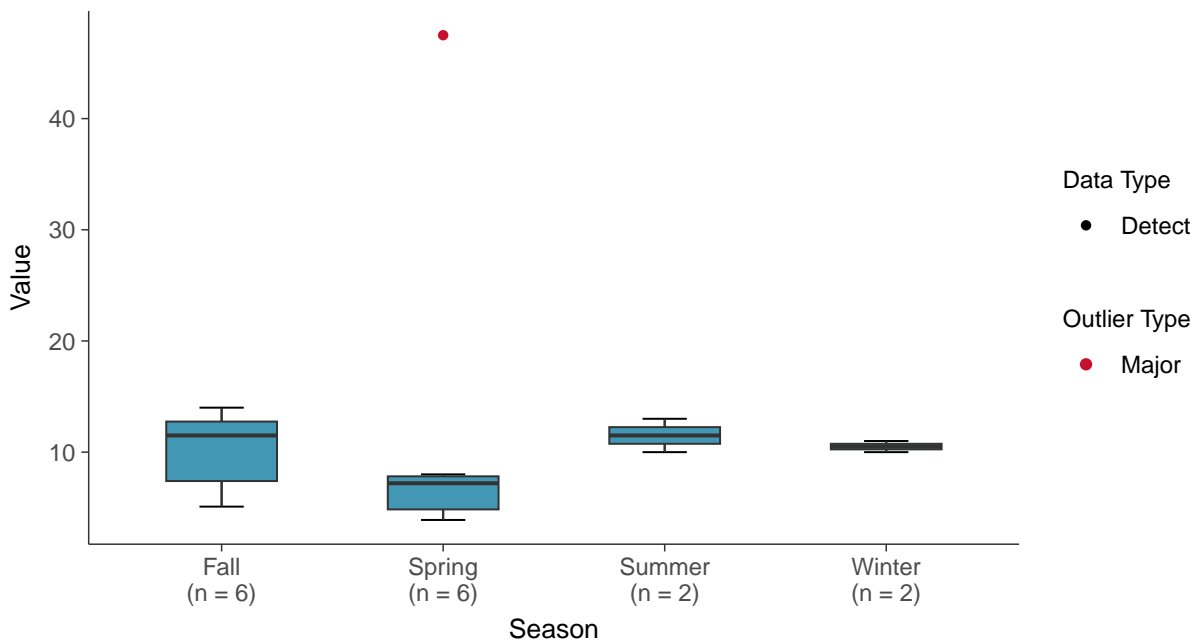
Boxplot

Lithium, MW-17005 (ug/L)



Boxplot by Season

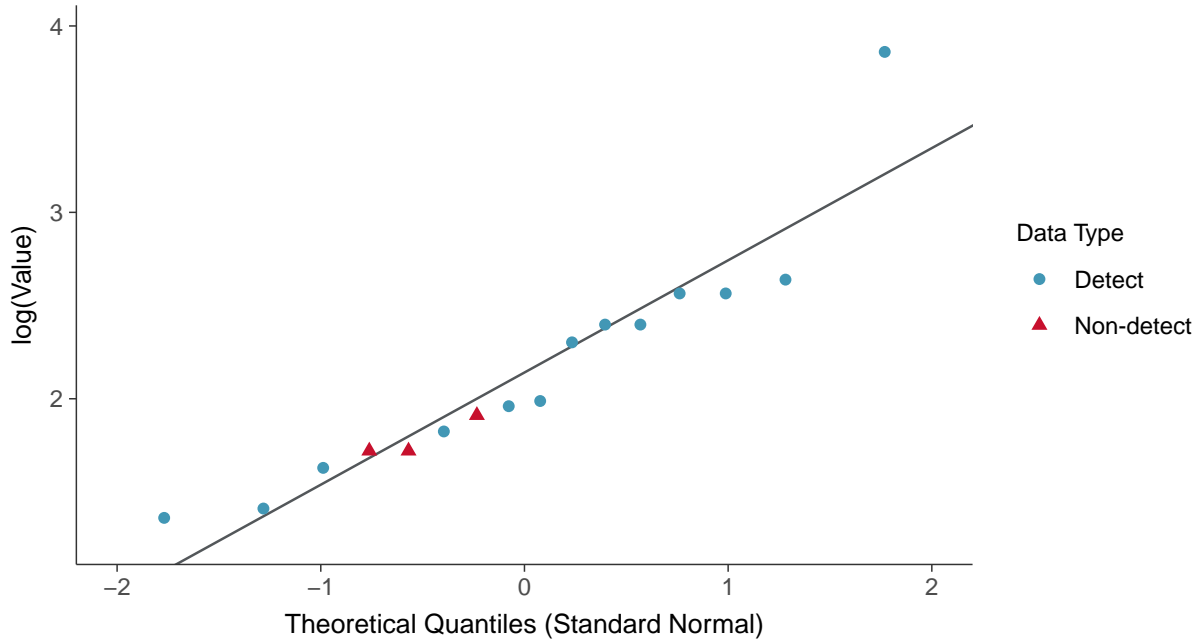
Lithium, MW-17005 (ug/L)





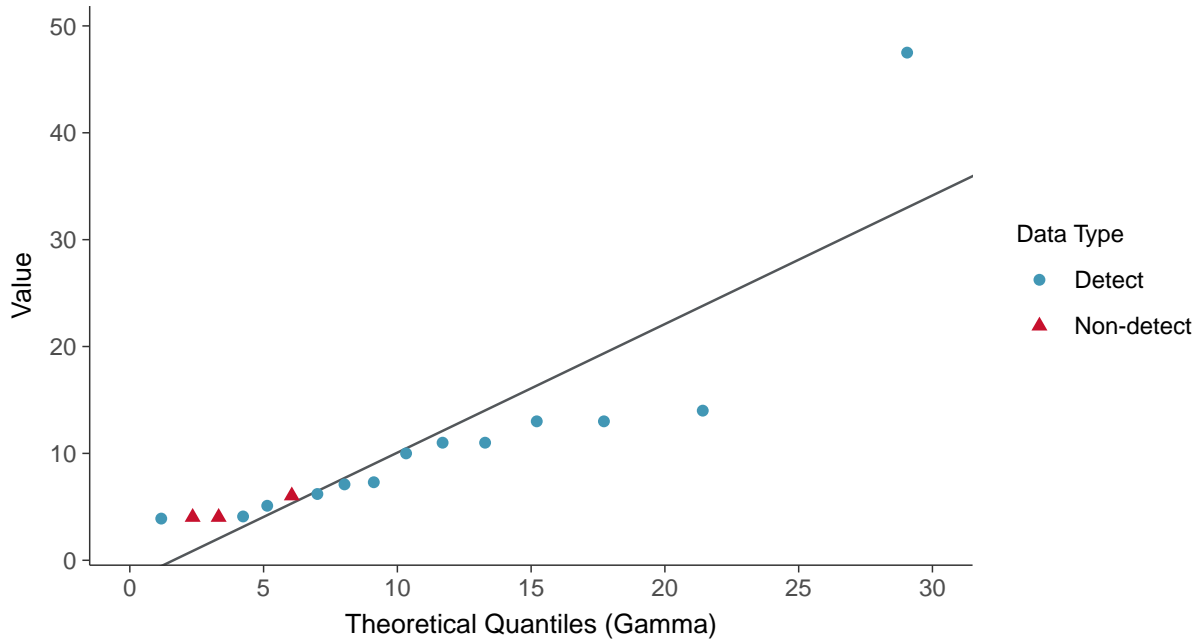
Lognormal Q-Q plot using ROS Imputed Estimates

Lithium, MW-17005 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

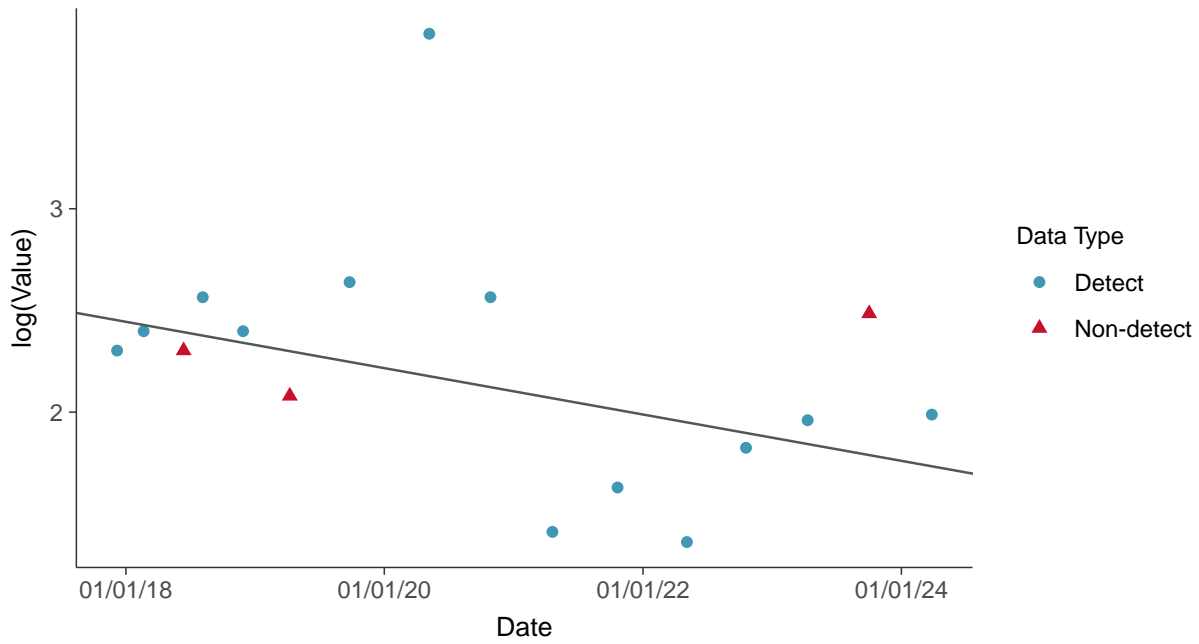
Lithium, MW-17005 (ug/L)





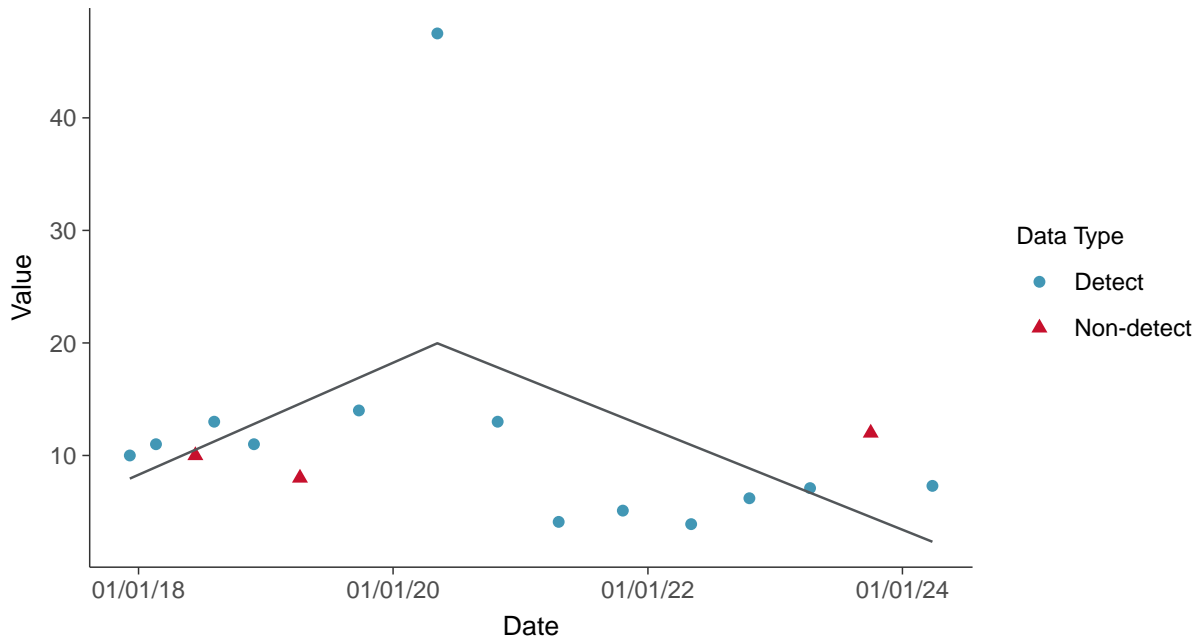
Trend Regression: Lognormal MLE

Lithium, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear

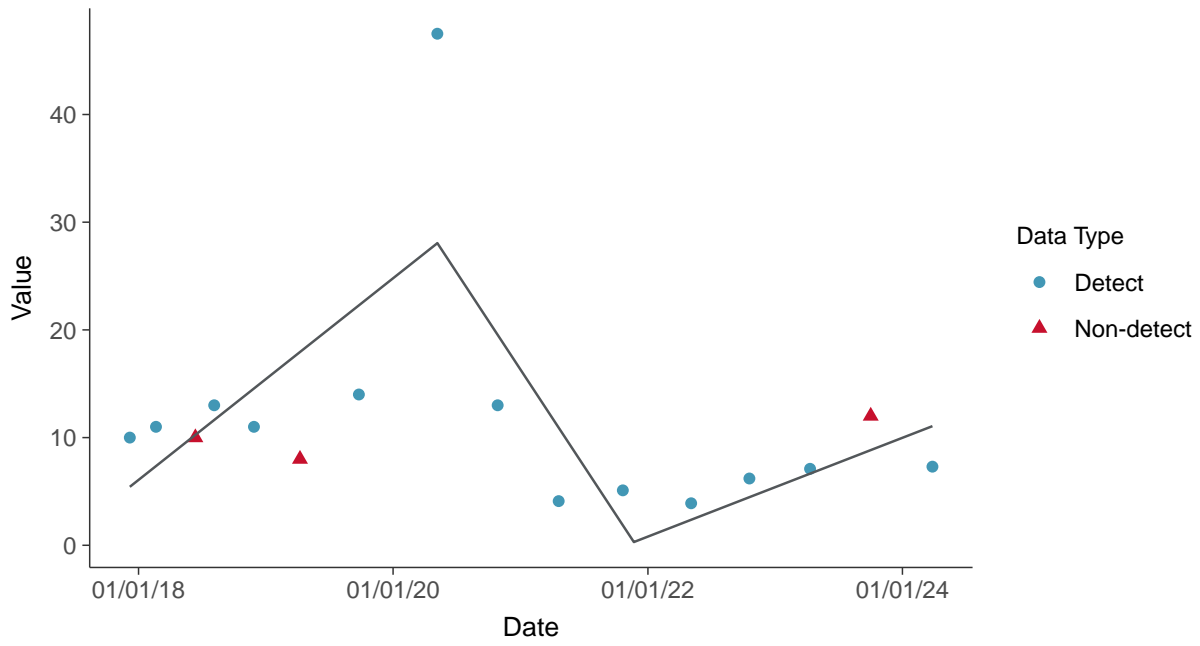
Lithium, MW-17005 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

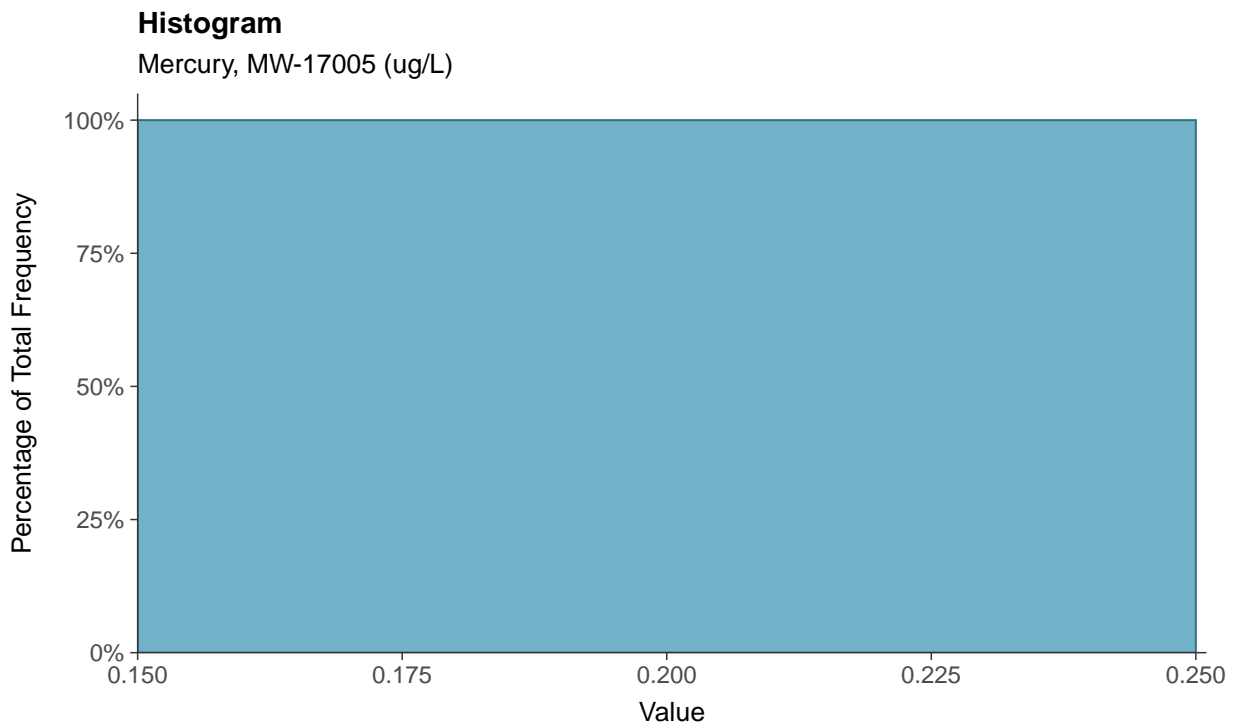
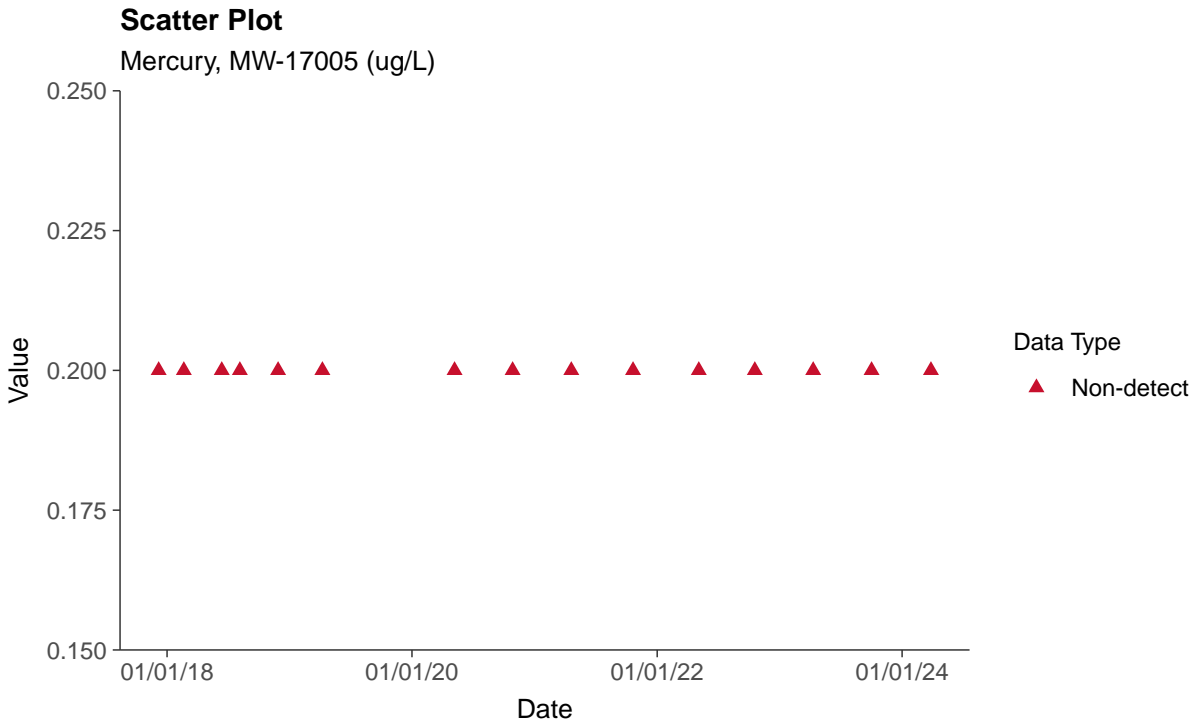
Lithium, MW-17005 (ug/L)





Appendix IV: Mercury, MW-17005

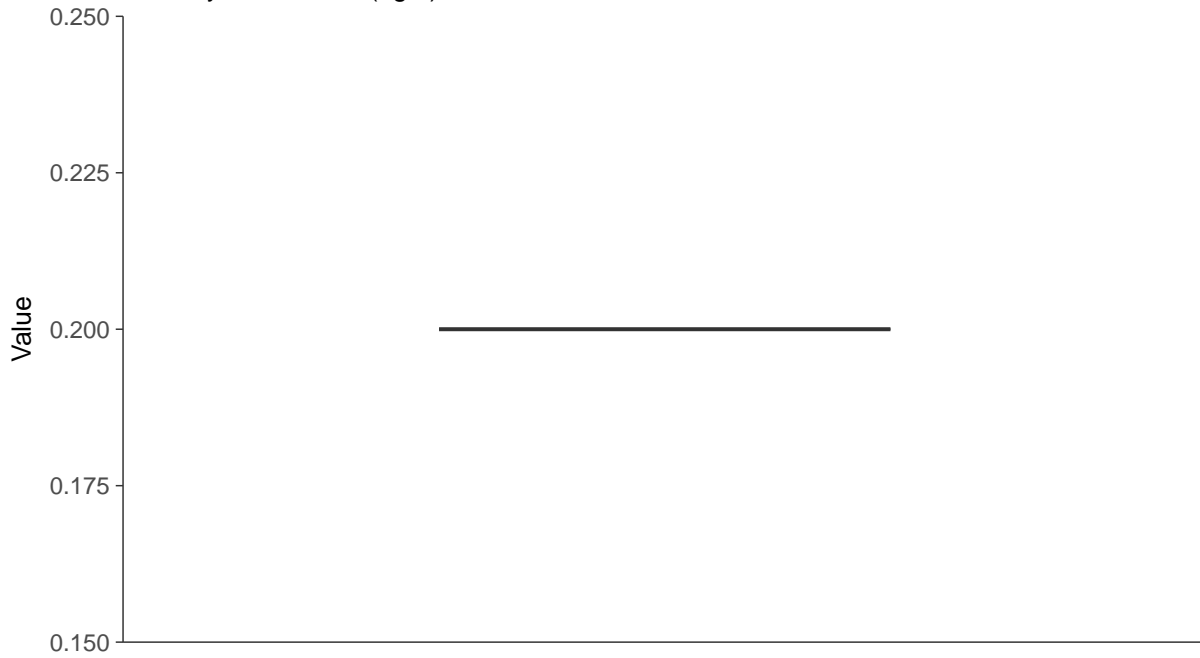
ID: 18_2_118





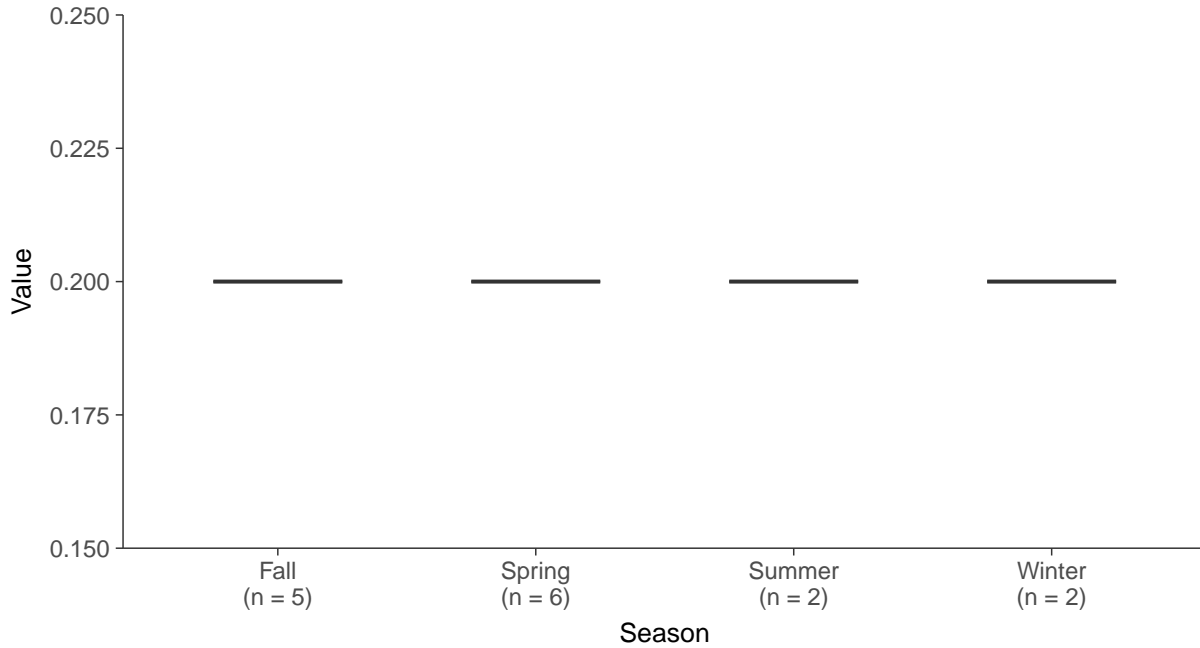
Boxplot

Mercury, MW-17005 (ug/L)



Boxplot by Season

Mercury, MW-17005 (ug/L)



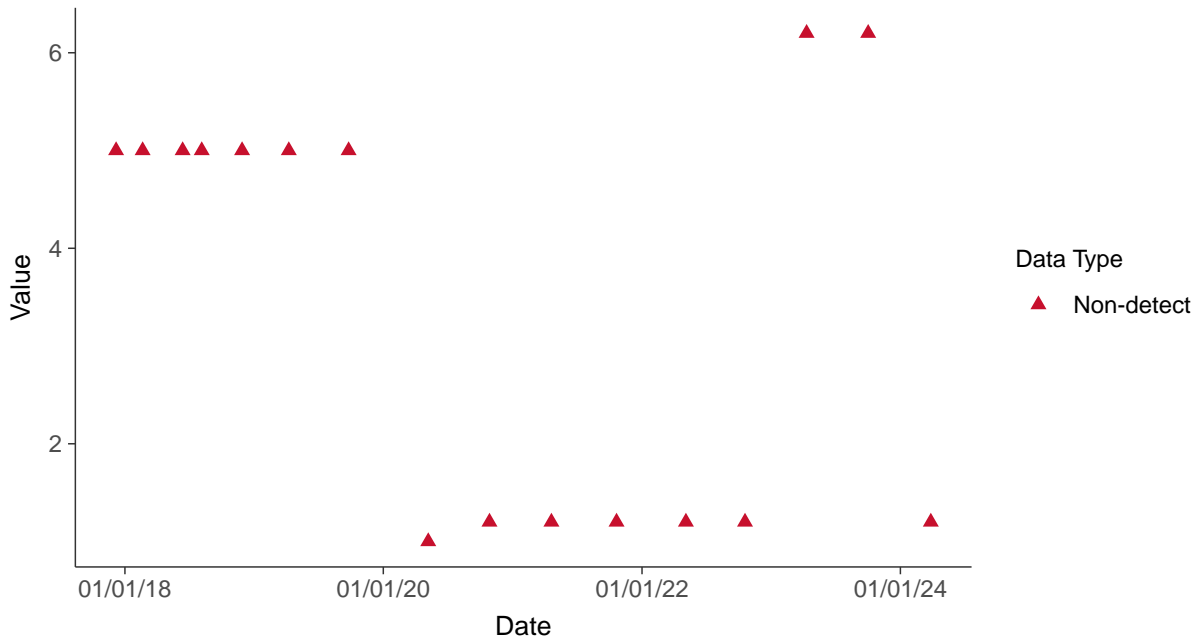


Appendix IV: Molybdenum, MW-17005

ID: 18_2_119

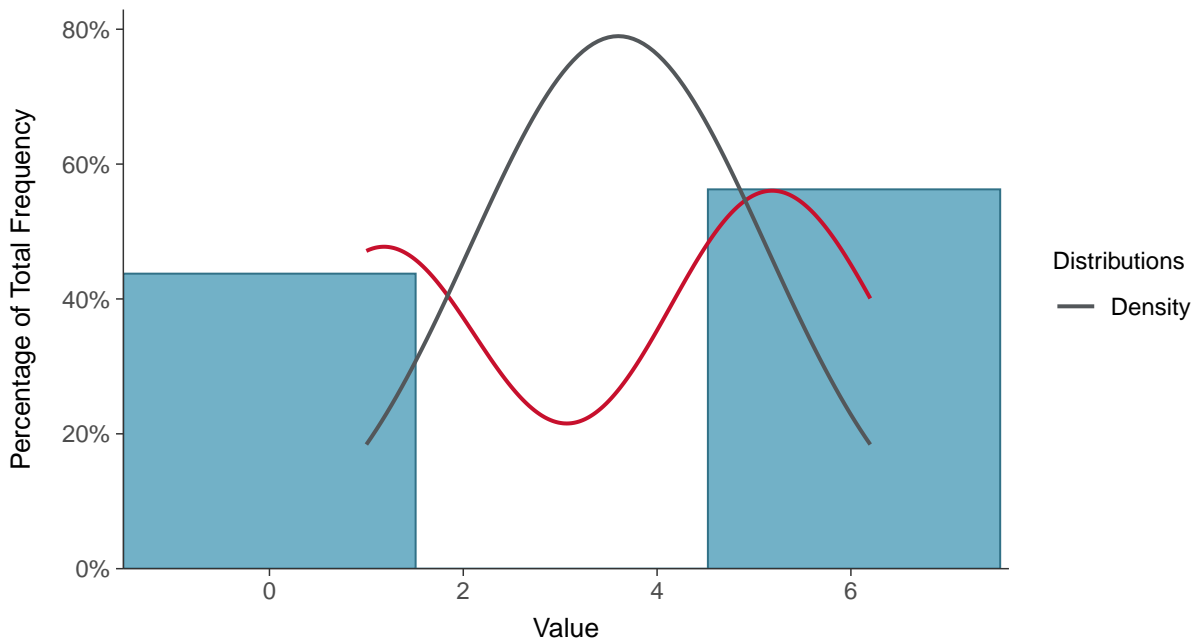
Scatter Plot

Molybdenum, MW-17005 (ug/L)



Histogram

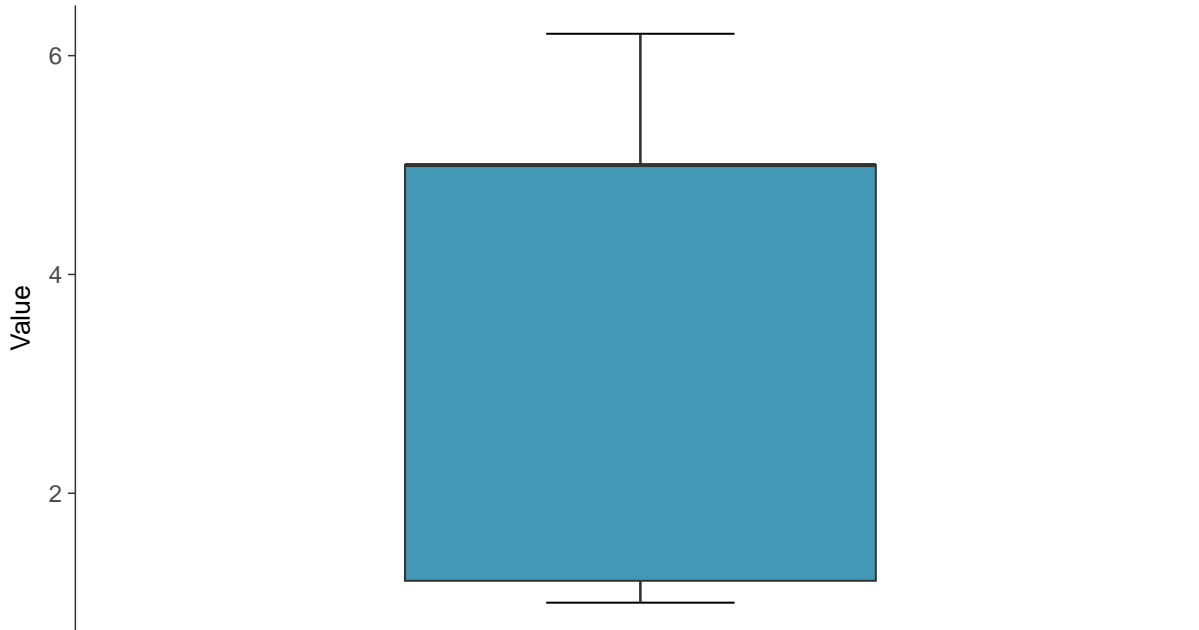
Molybdenum, MW-17005 (ug/L)





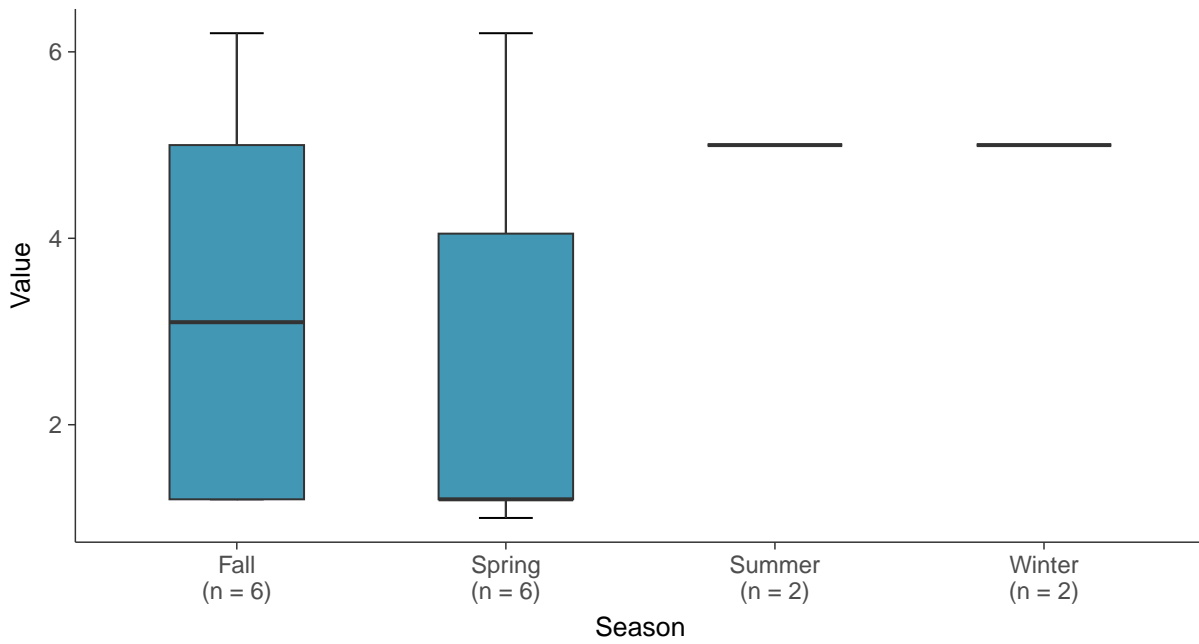
Boxplot

Molybdenum, MW-17005 (ug/L)



Boxplot by Season

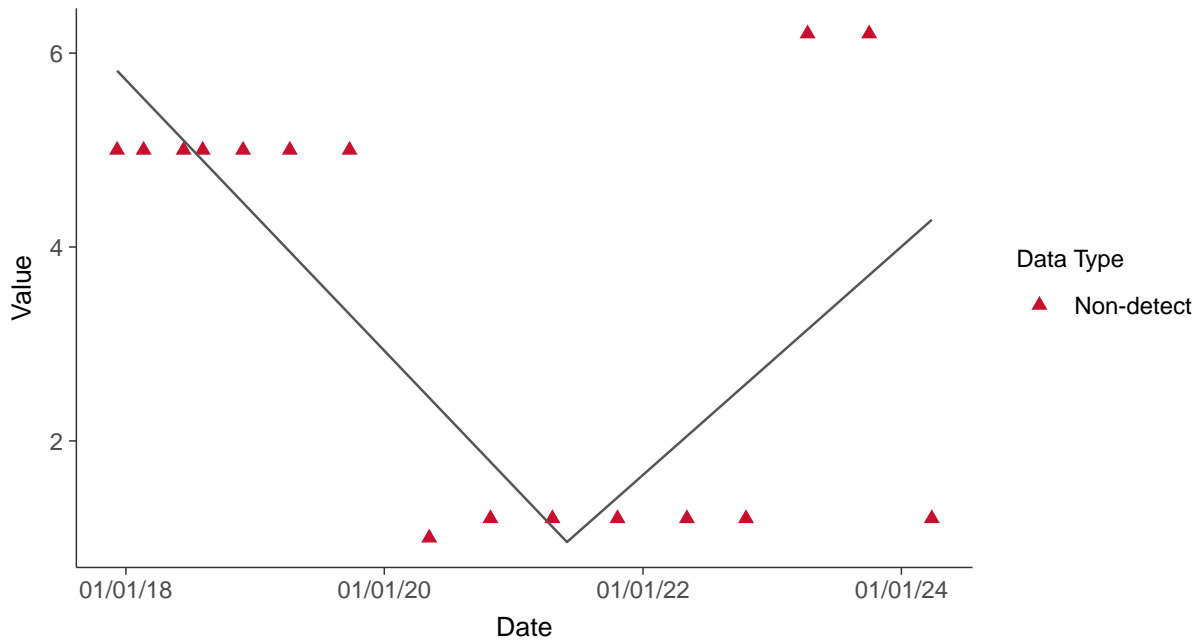
Molybdenum, MW-17005 (ug/L)





Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-17005 (ug/L)



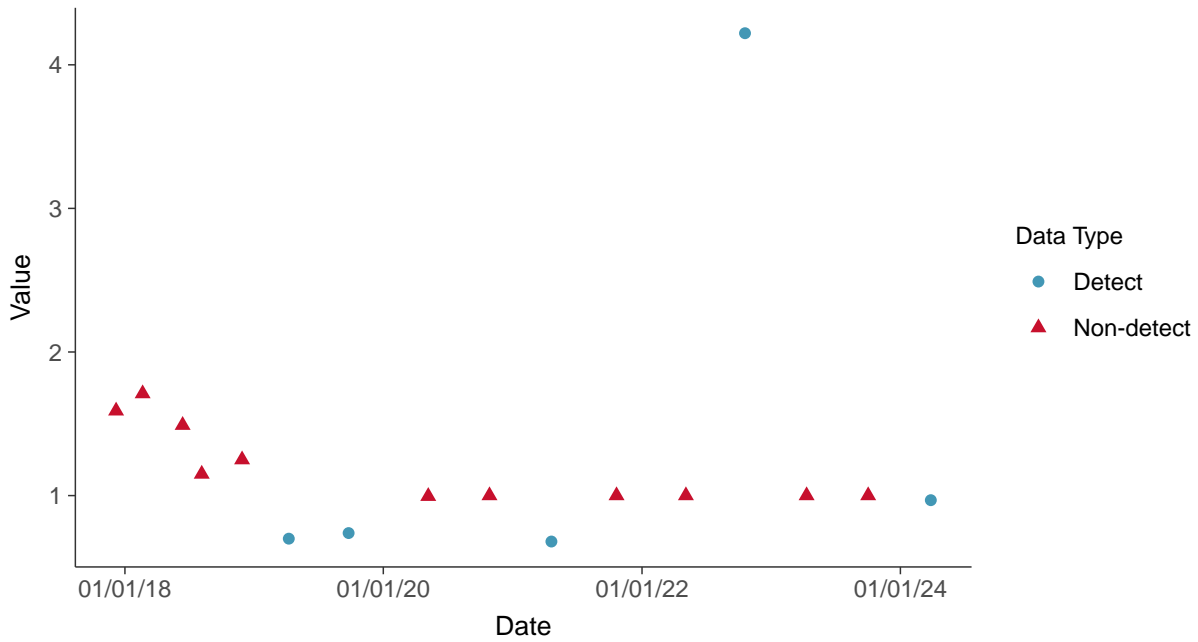


Appendix IV: Radium-226+228, MW-17005

ID: 18_2_125

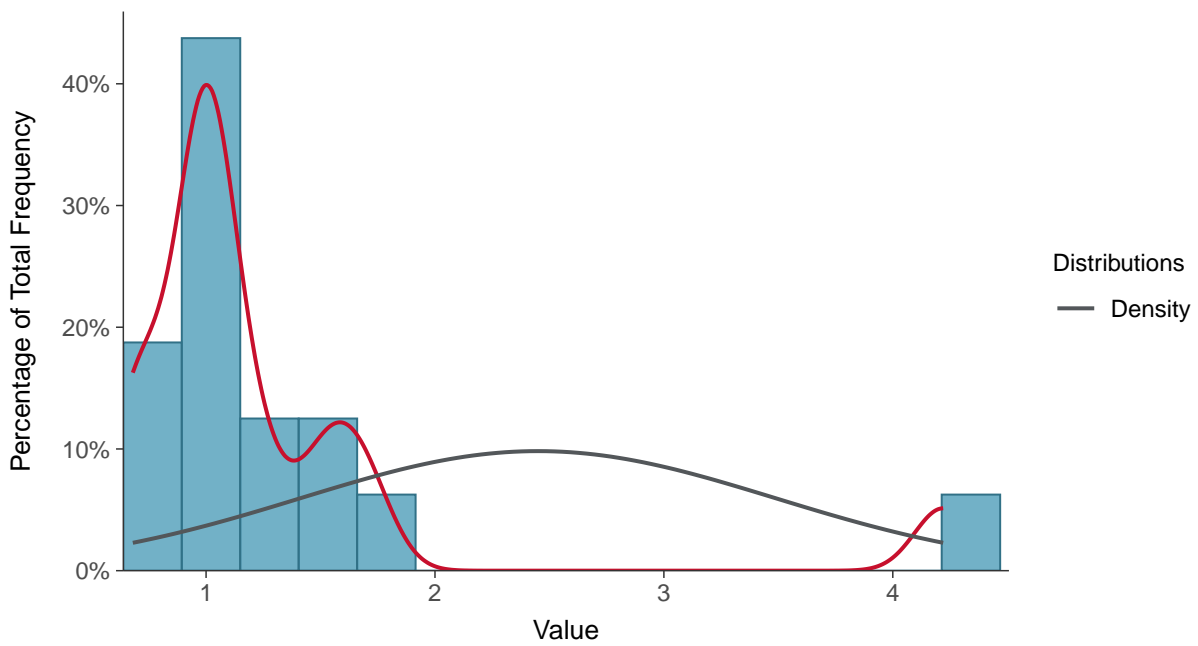
Scatter Plot

Radium-226+228, MW-17005 (pCi/L)



Histogram

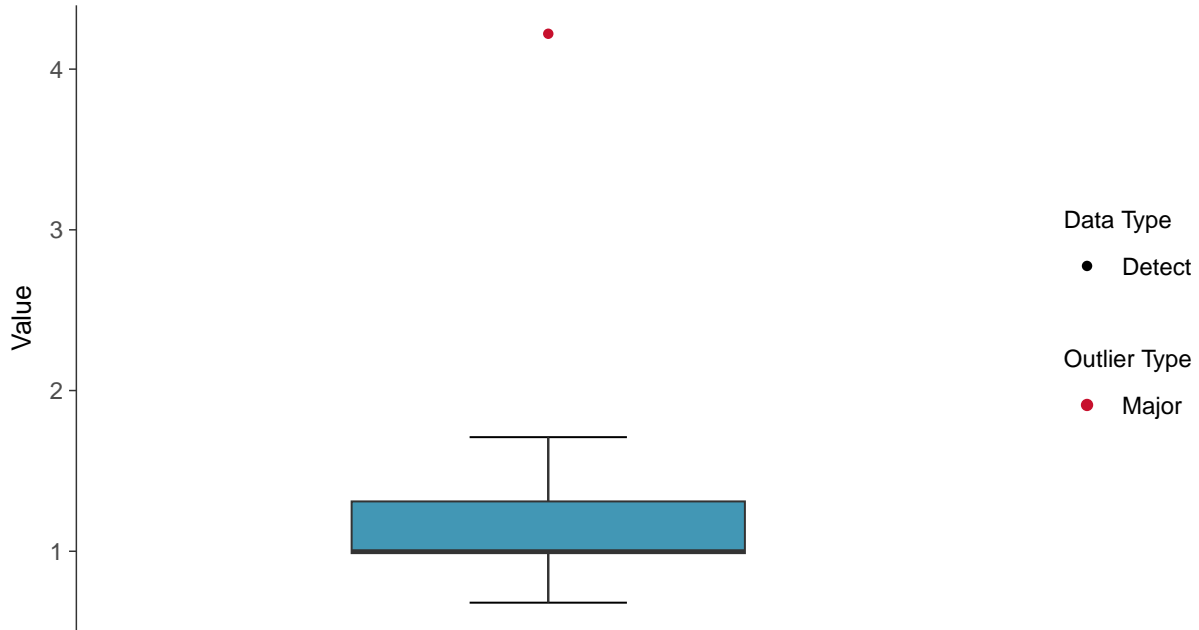
Radium-226+228, MW-17005 (pCi/L)





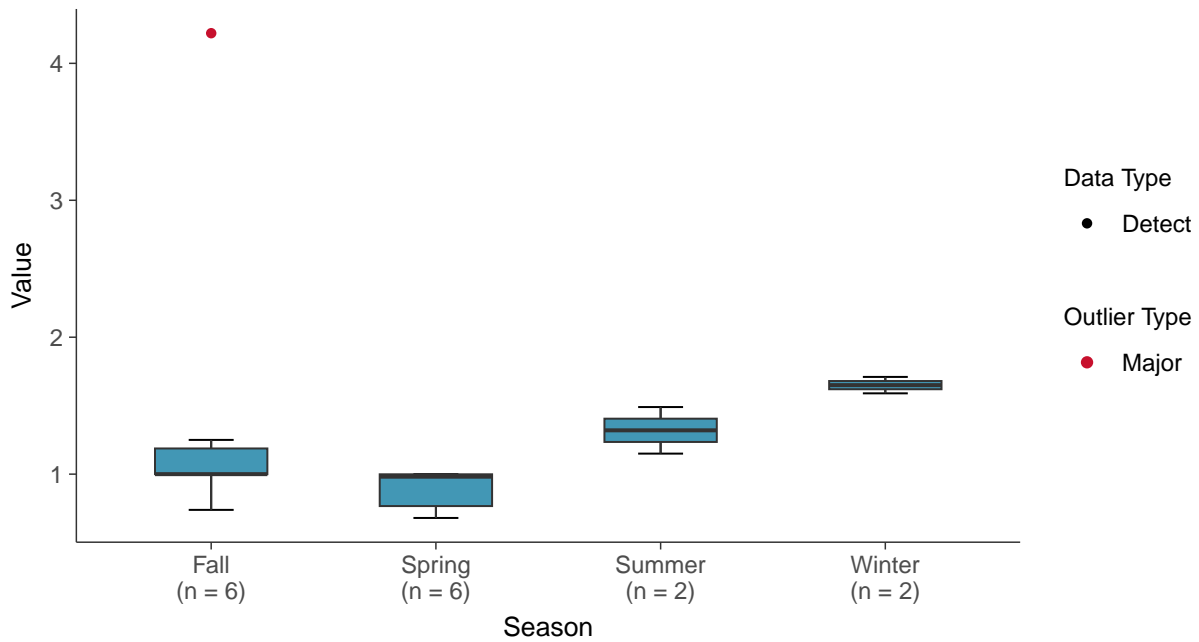
Boxplot

Radium-226+228, MW-17005 (pCi/L)



Boxplot by Season

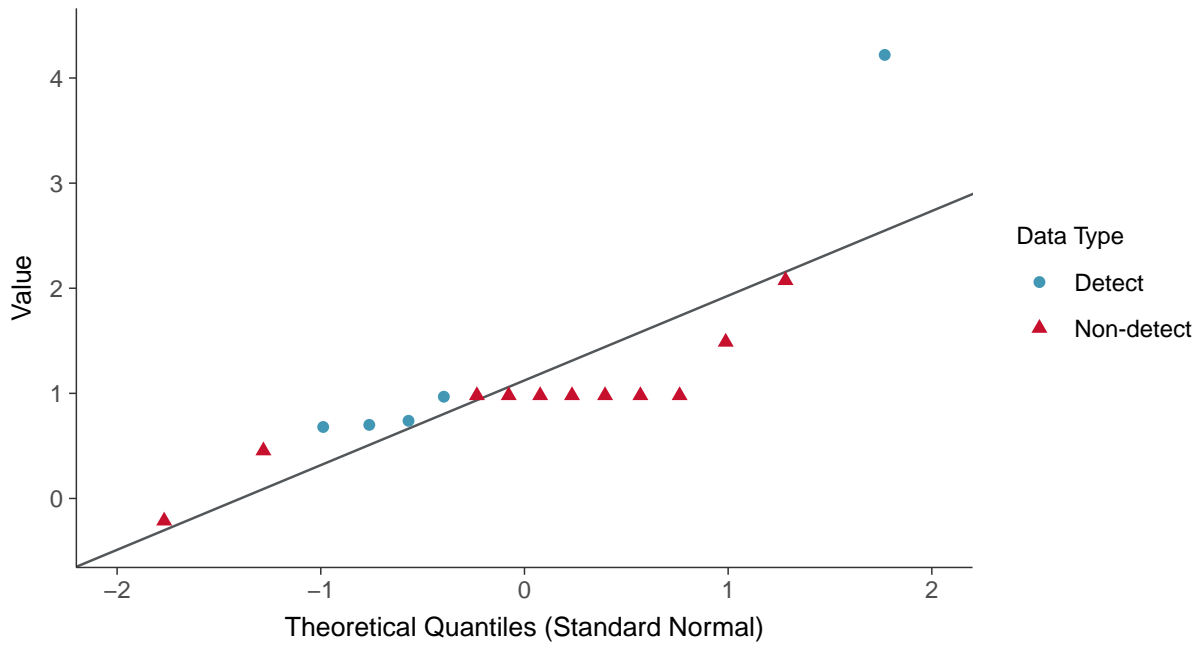
Radium-226+228, MW-17005 (pCi/L)





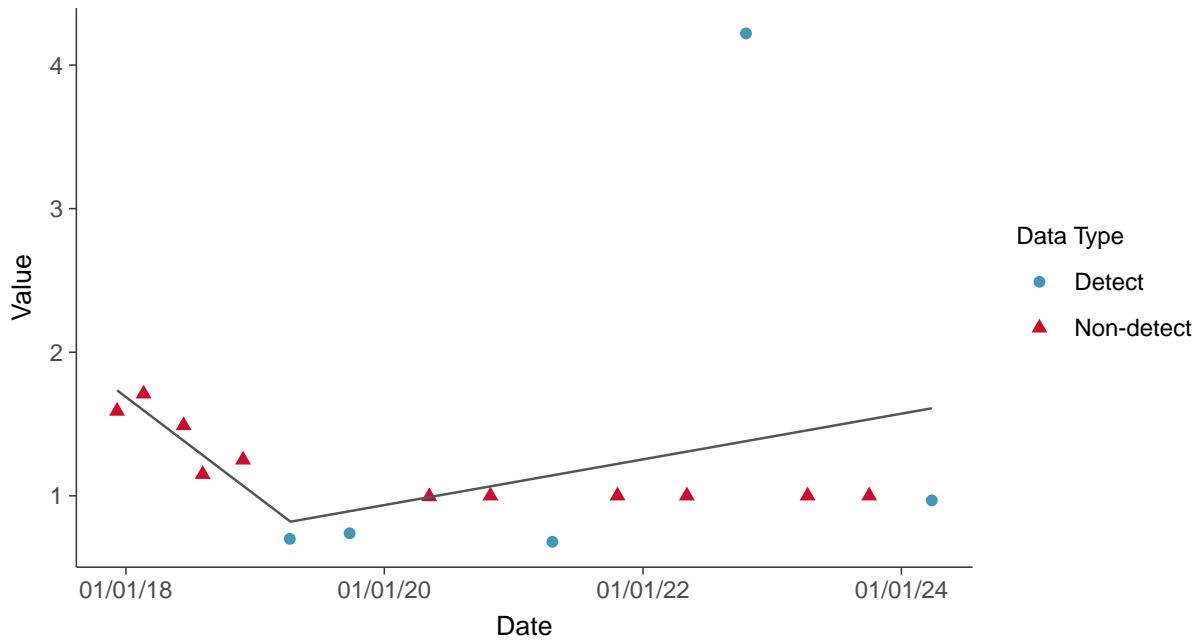
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17005 (pCi/L)



Trend Regression: Piecewise Linear-Linear

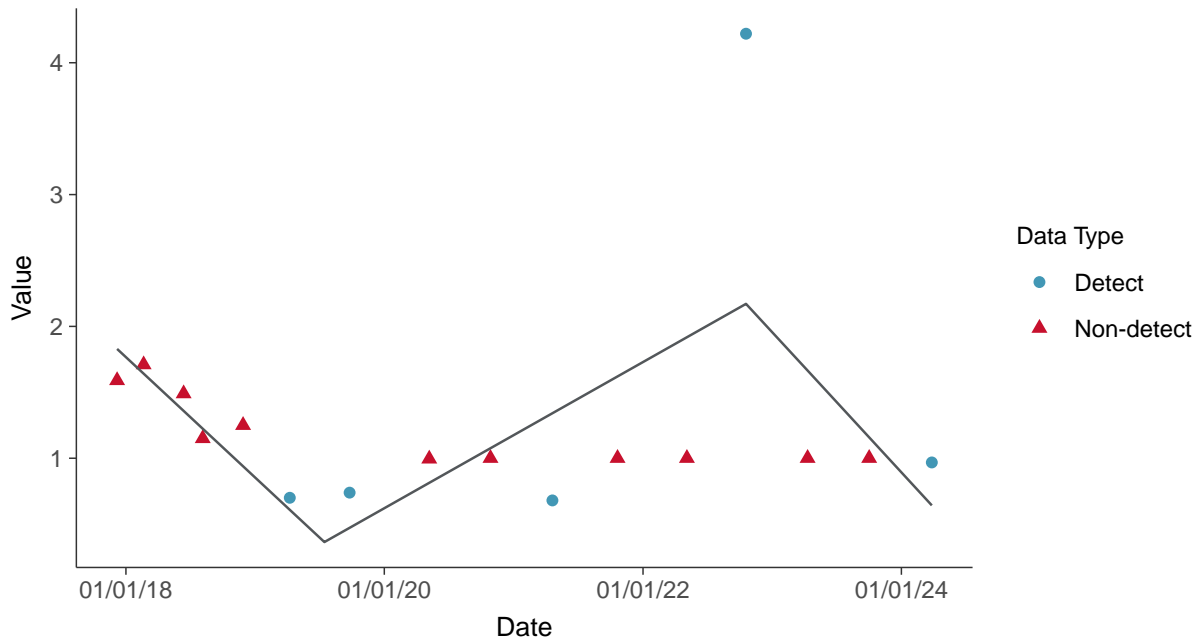
Radium-226+228, MW-17005 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-17005 (pCi/L)



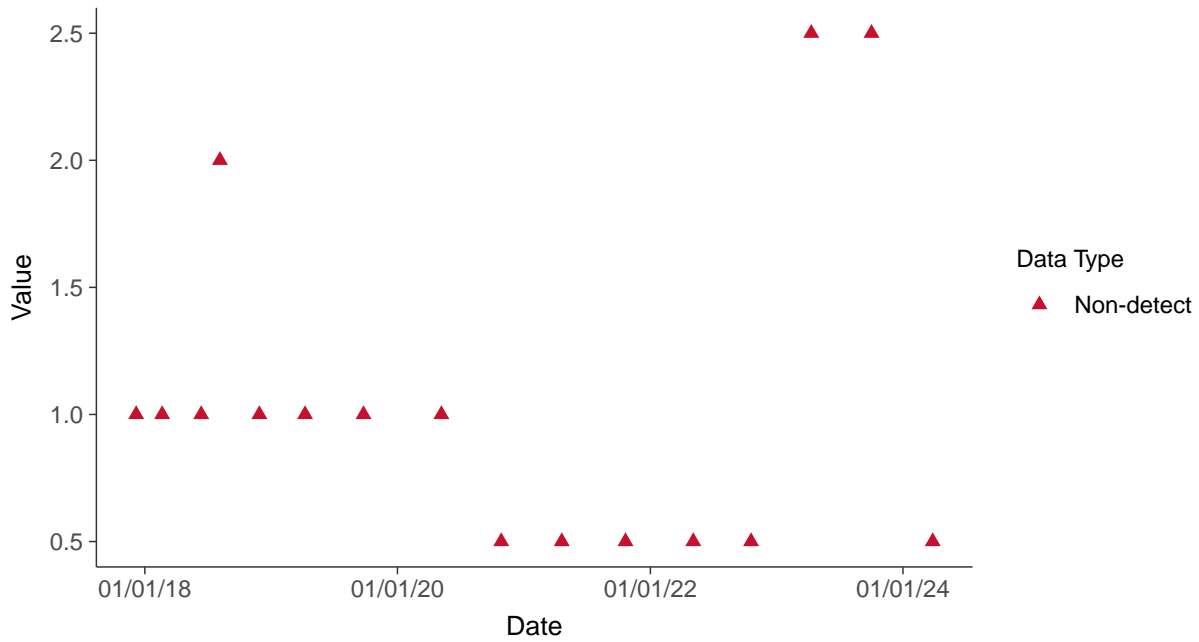


Appendix IV: Selenium, MW-17005

ID: 18_2_127

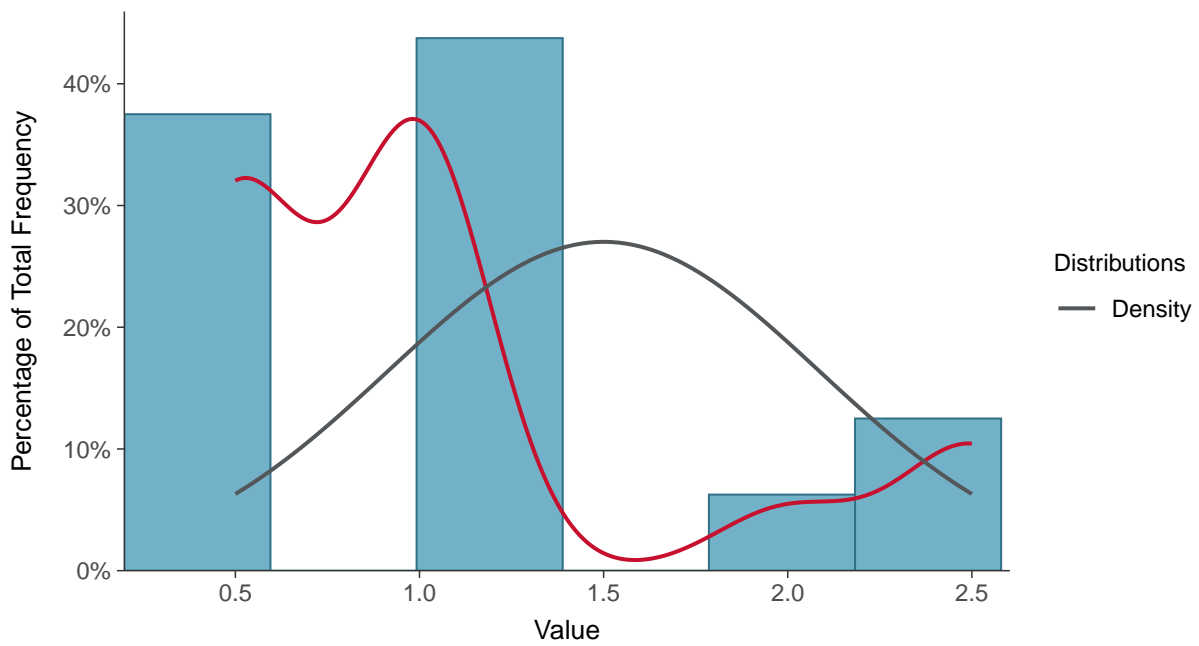
Scatter Plot

Selenium, MW-17005 (ug/L)



Histogram

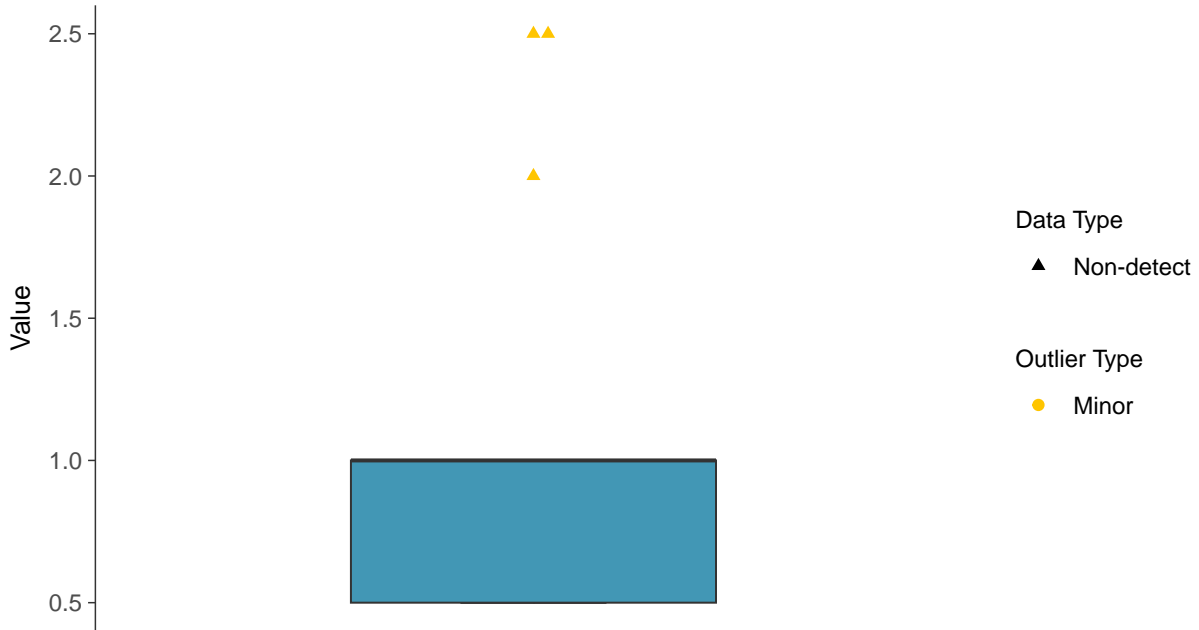
Selenium, MW-17005 (ug/L)





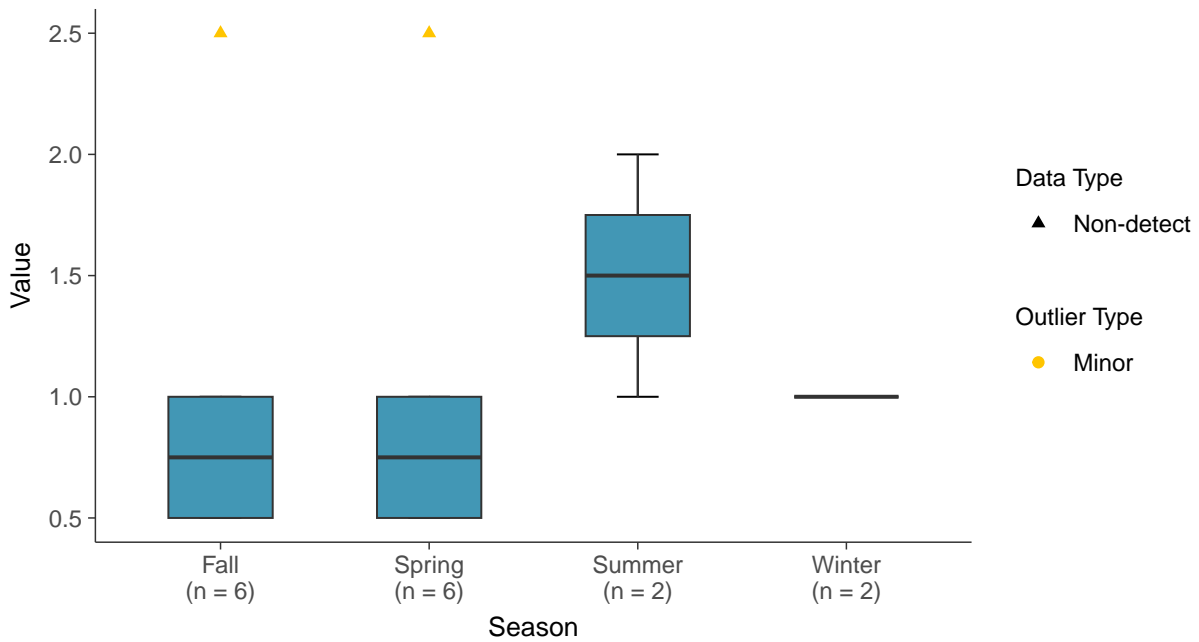
Boxplot

Selenium, MW-17005 (ug/L)



Boxplot by Season

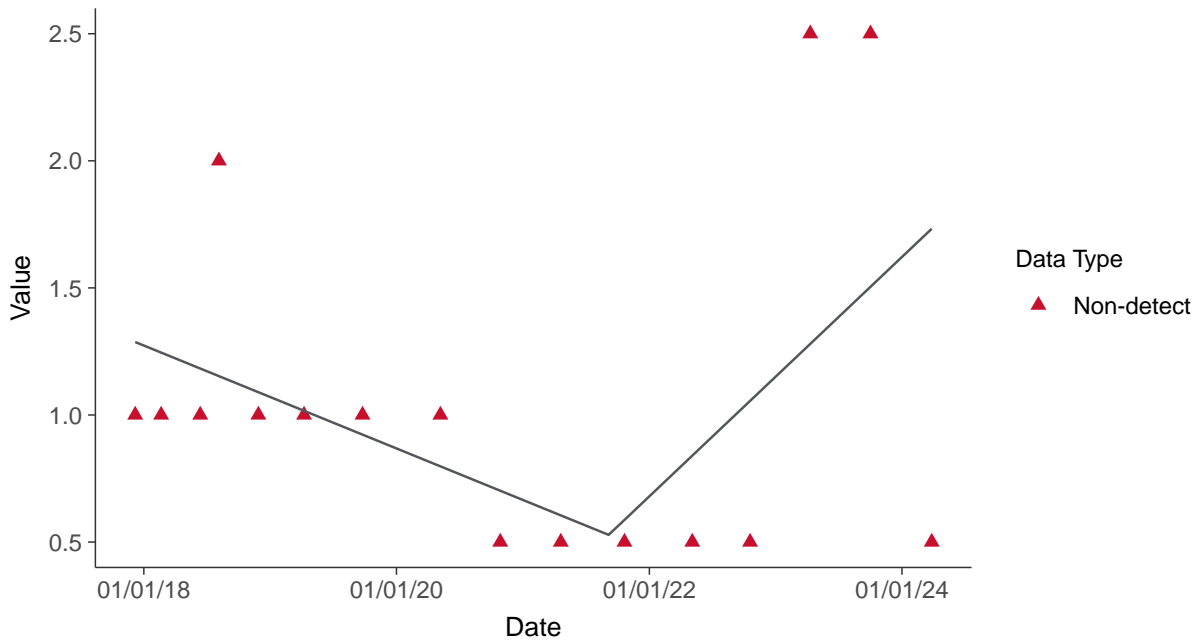
Selenium, MW-17005 (ug/L)





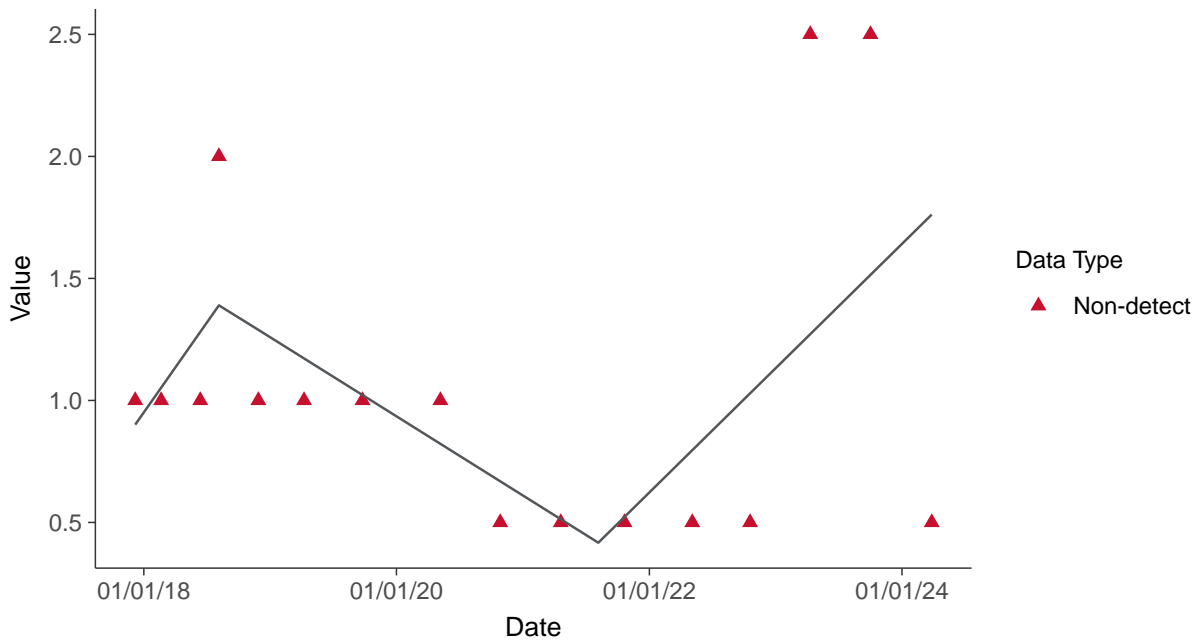
Trend Regression: Piecewise Linear-Linear

Selenium, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

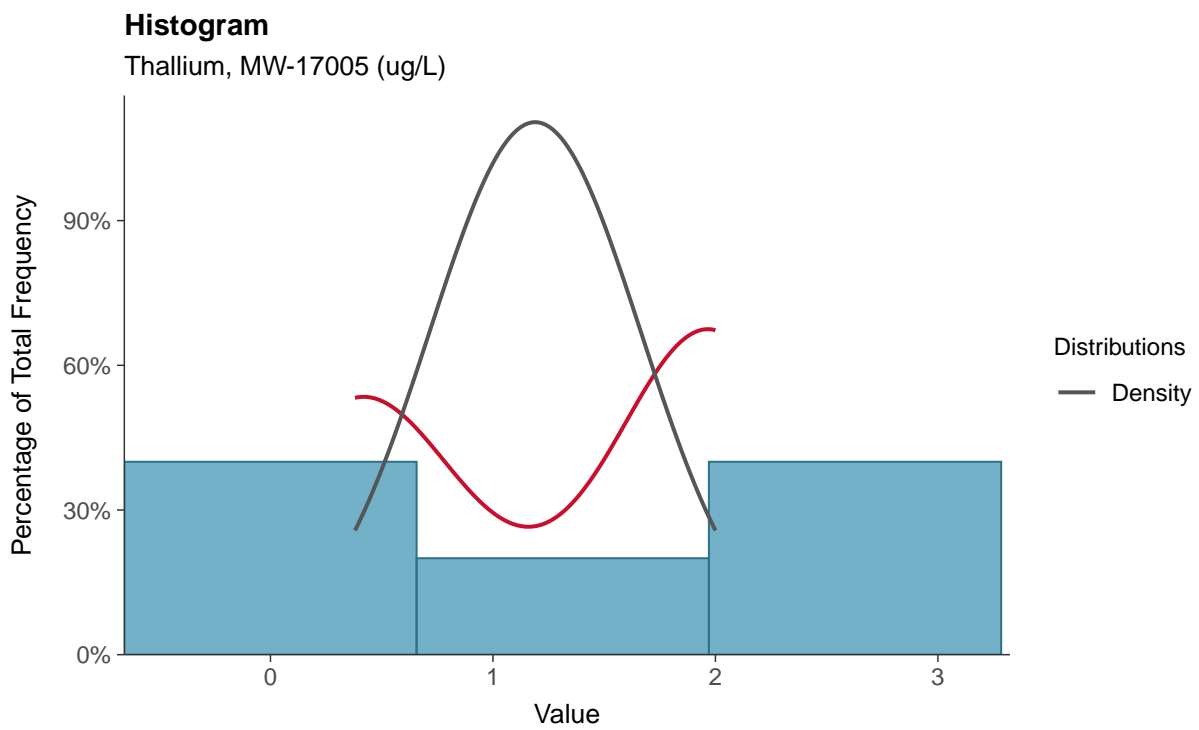
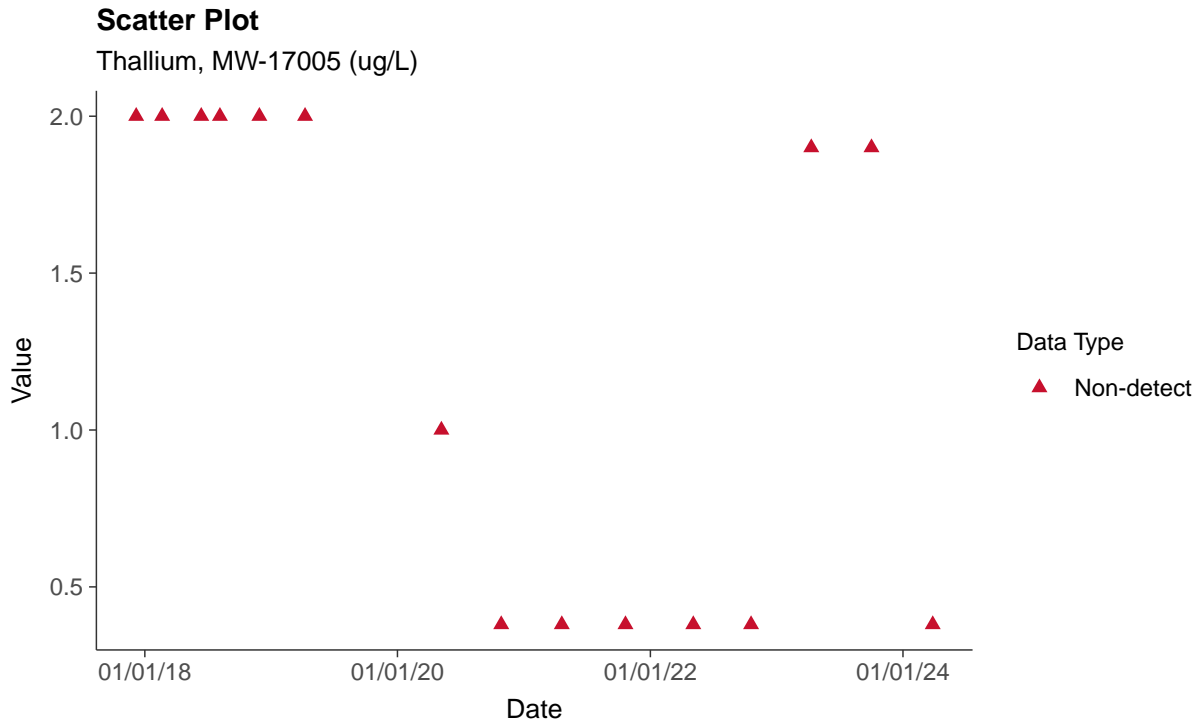
Selenium, MW-17005 (ug/L)





Appendix IV: Thallium, MW-17005

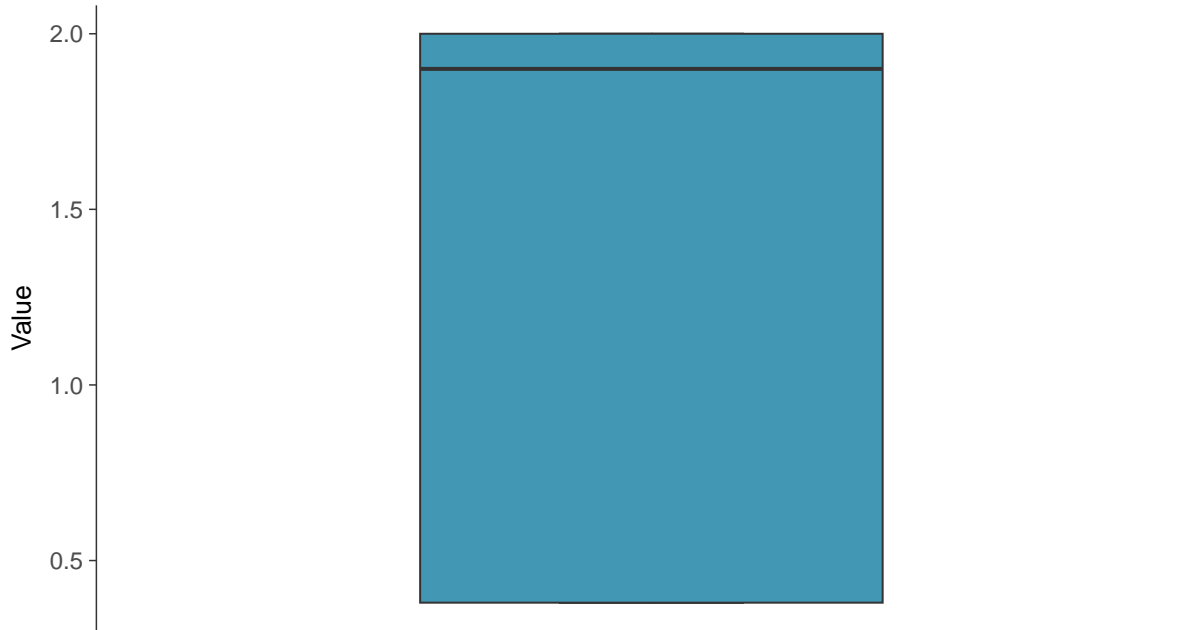
ID: 18_2_131





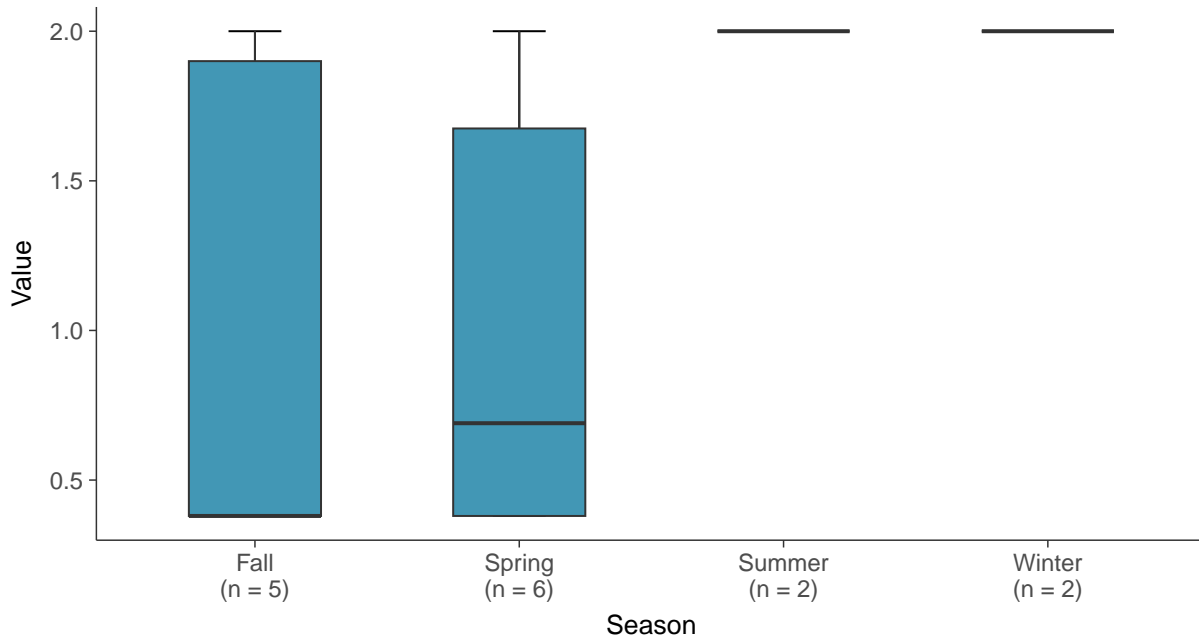
Boxplot

Thallium, MW-17005 (ug/L)



Boxplot by Season

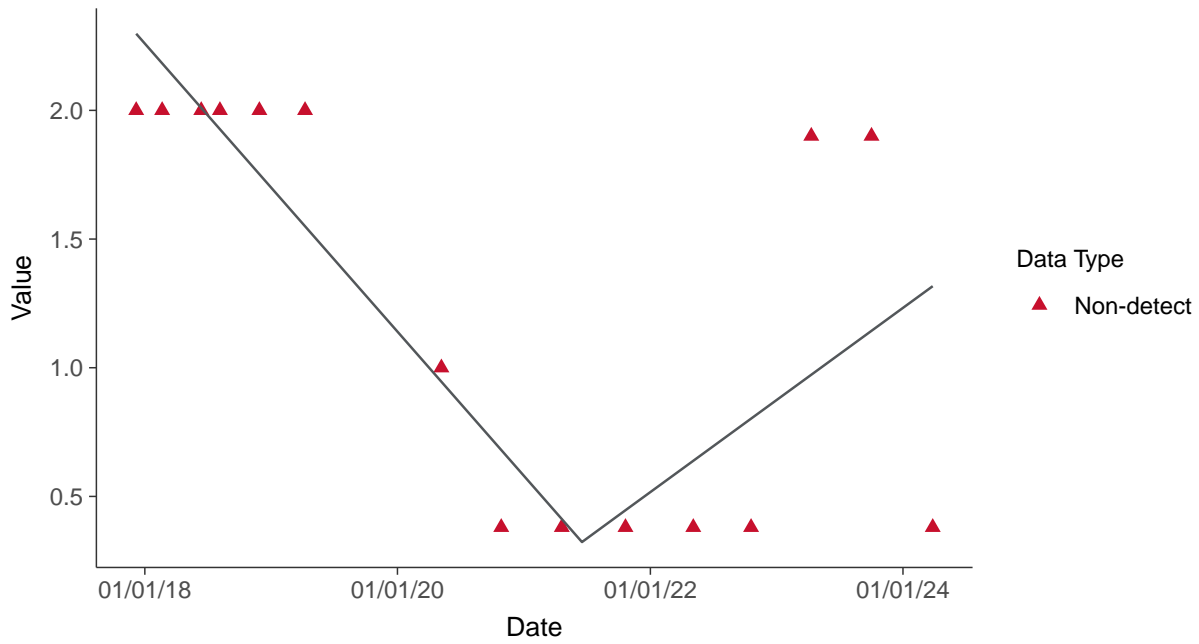
Thallium, MW-17005 (ug/L)





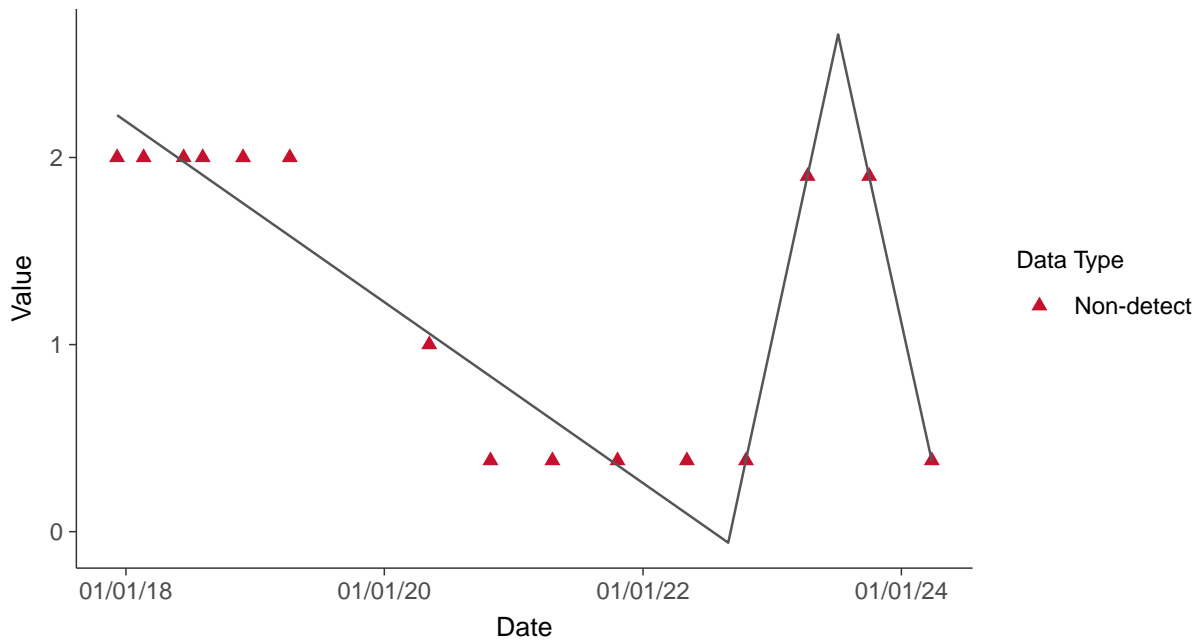
Trend Regression: Piecewise Linear-Linear

Thallium, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

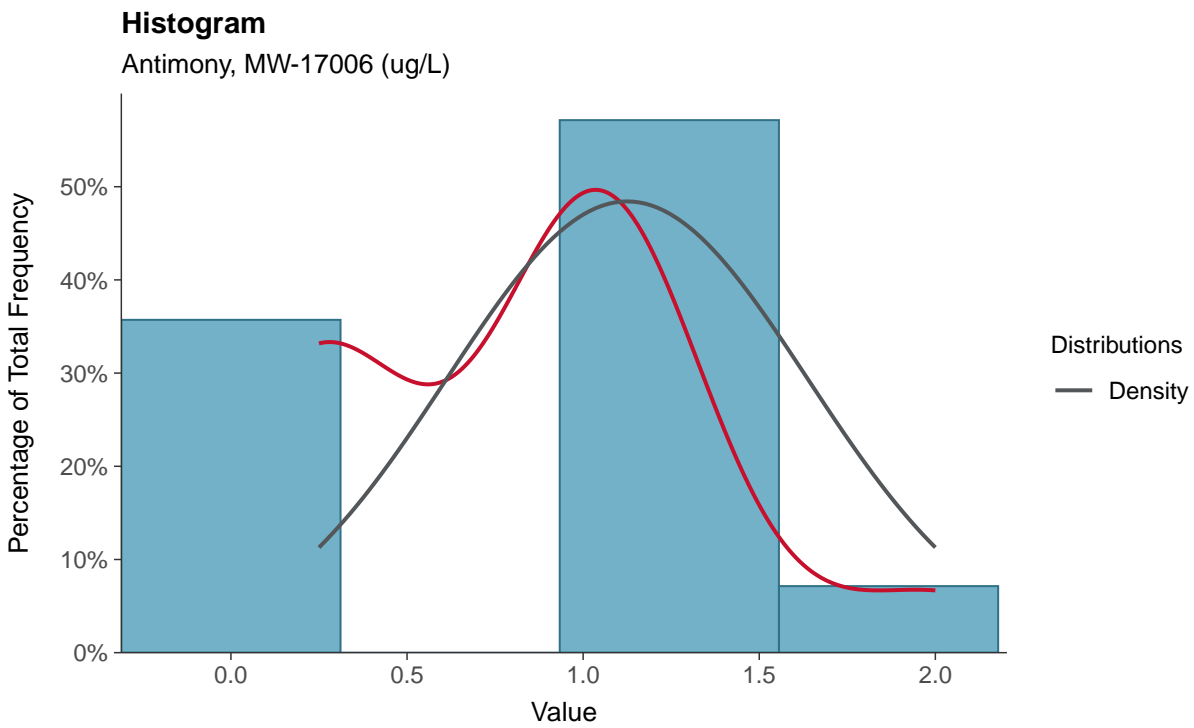
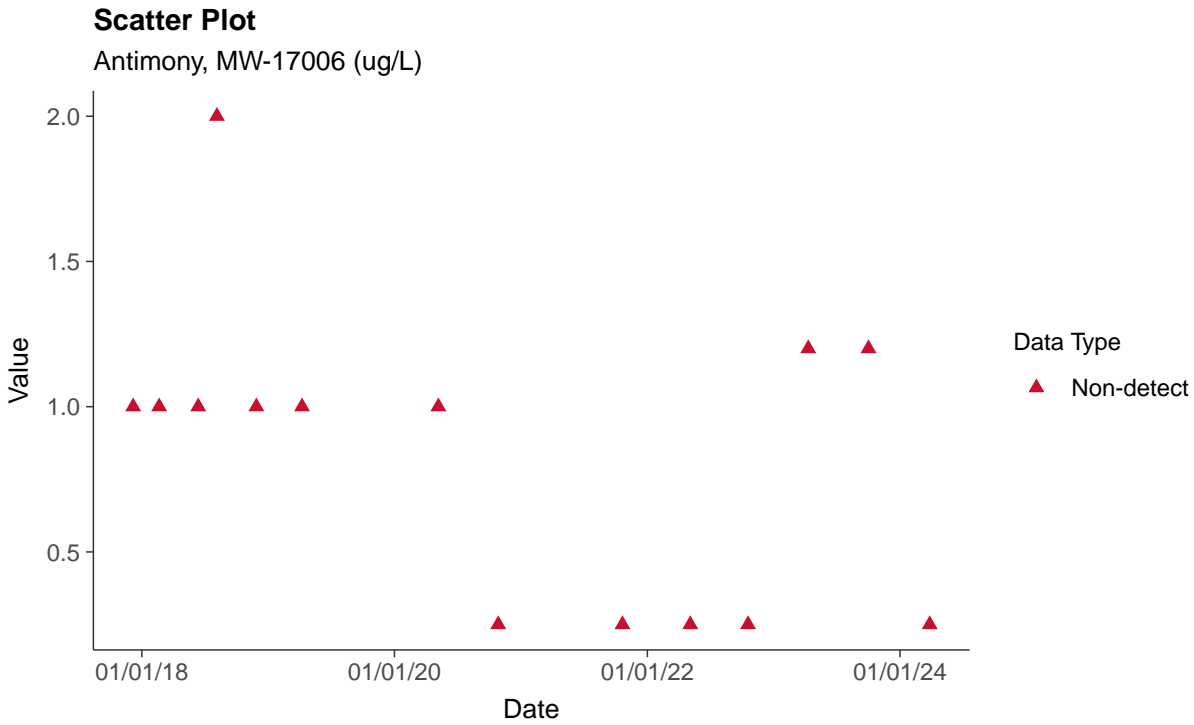
Thallium, MW-17005 (ug/L)





Appendix IV: Antimony, MW-17006

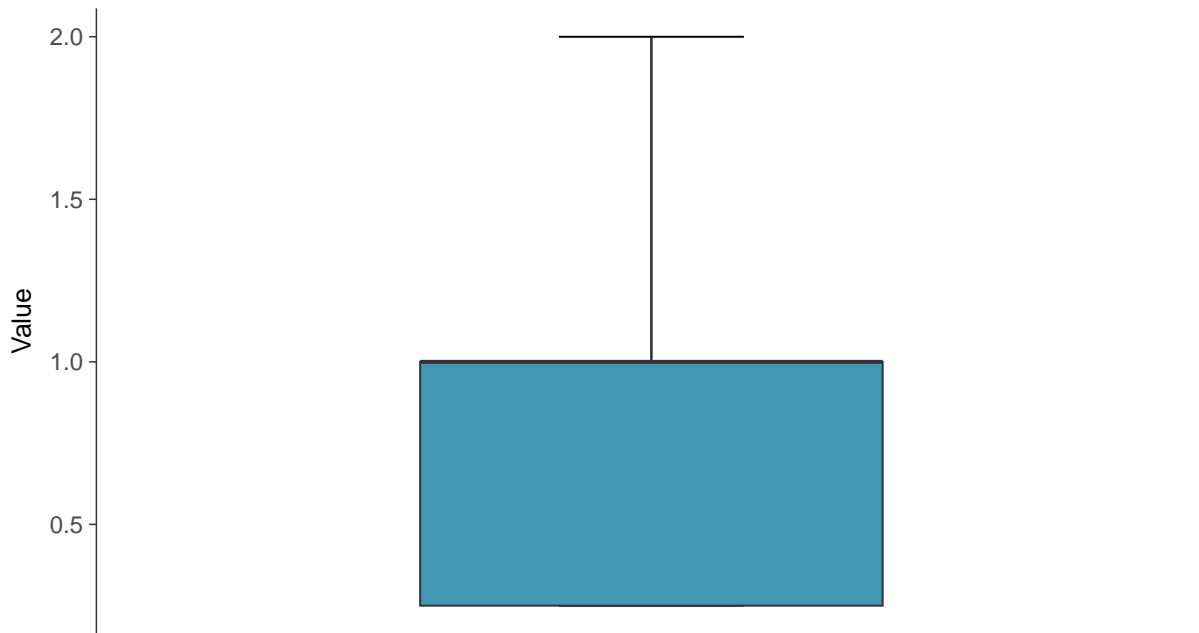
ID: 19_2_101





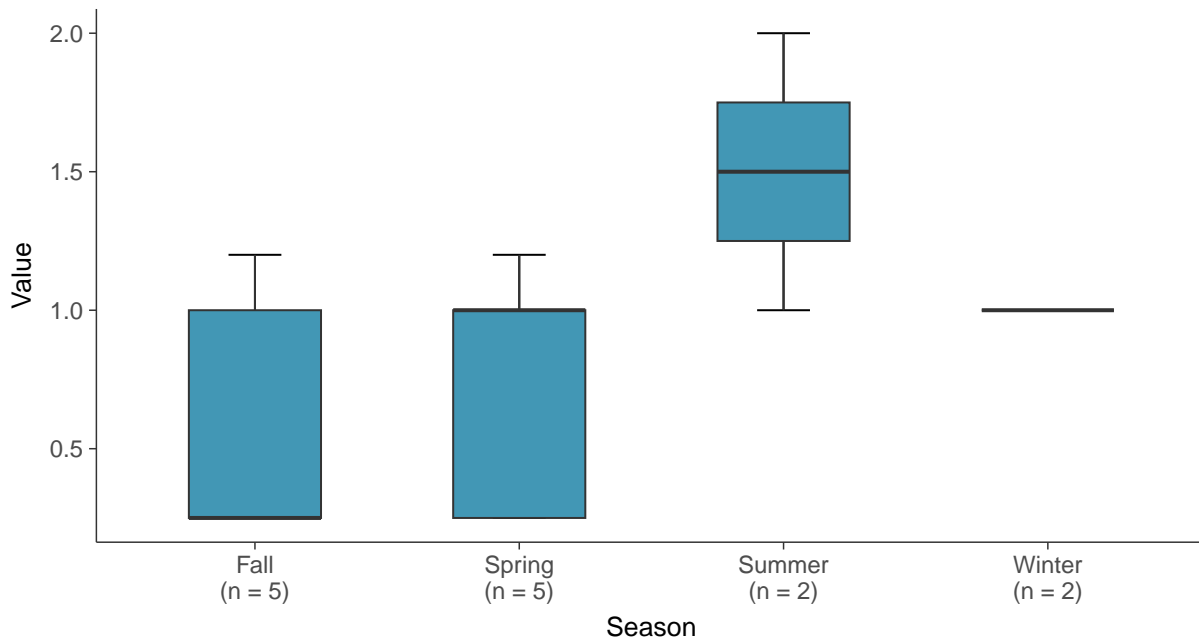
Boxplot

Antimony, MW-17006 (ug/L)



Boxplot by Season

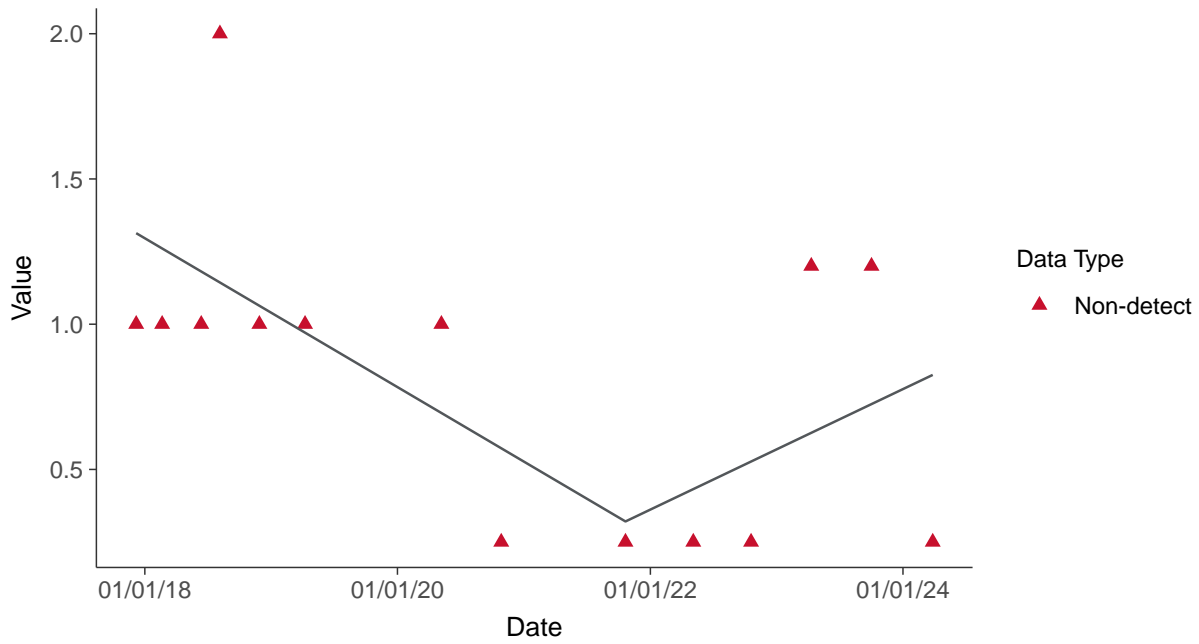
Antimony, MW-17006 (ug/L)





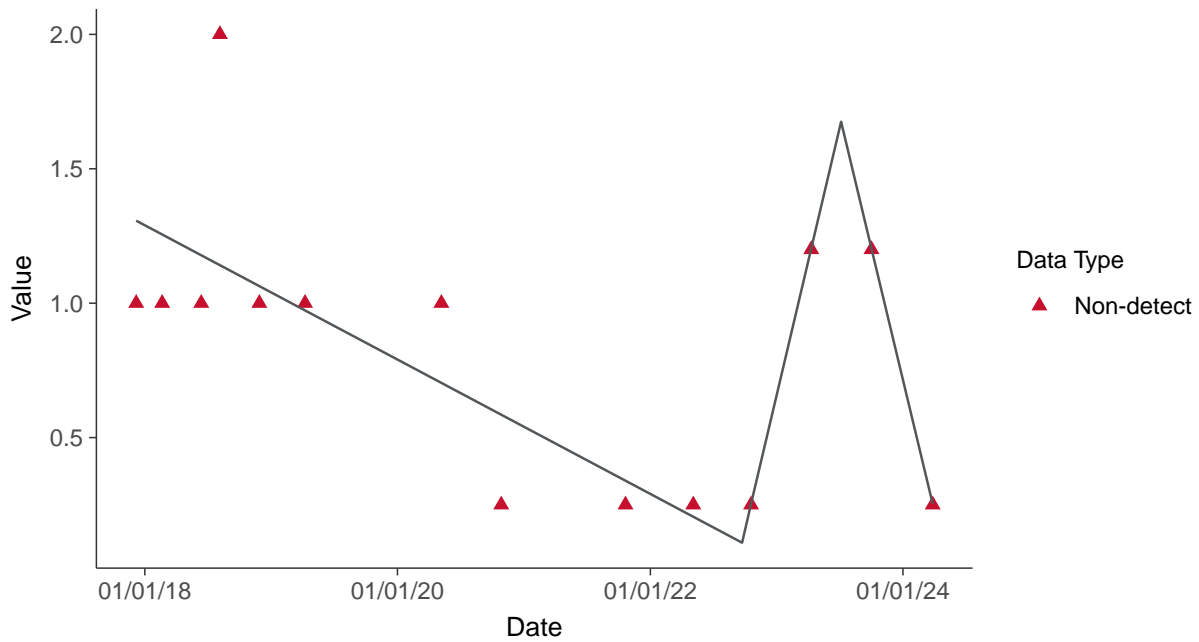
Trend Regression: Piecewise Linear-Linear

Antimony, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-17006 (ug/L)



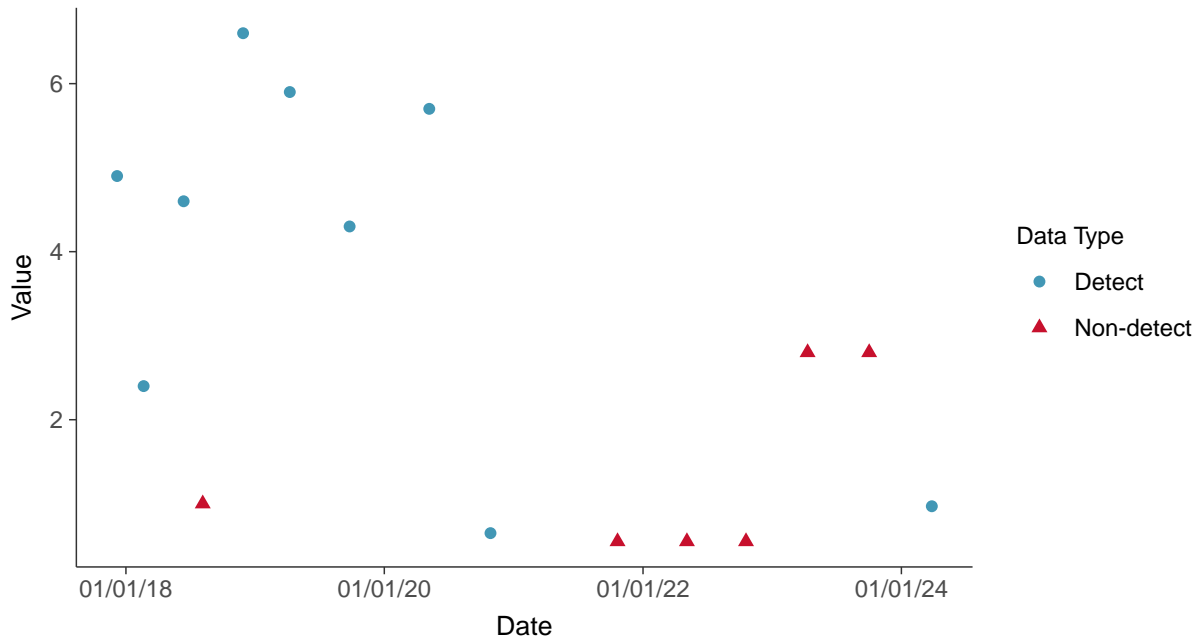


Appendix IV: Arsenic, MW-17006

ID: 19_2_102

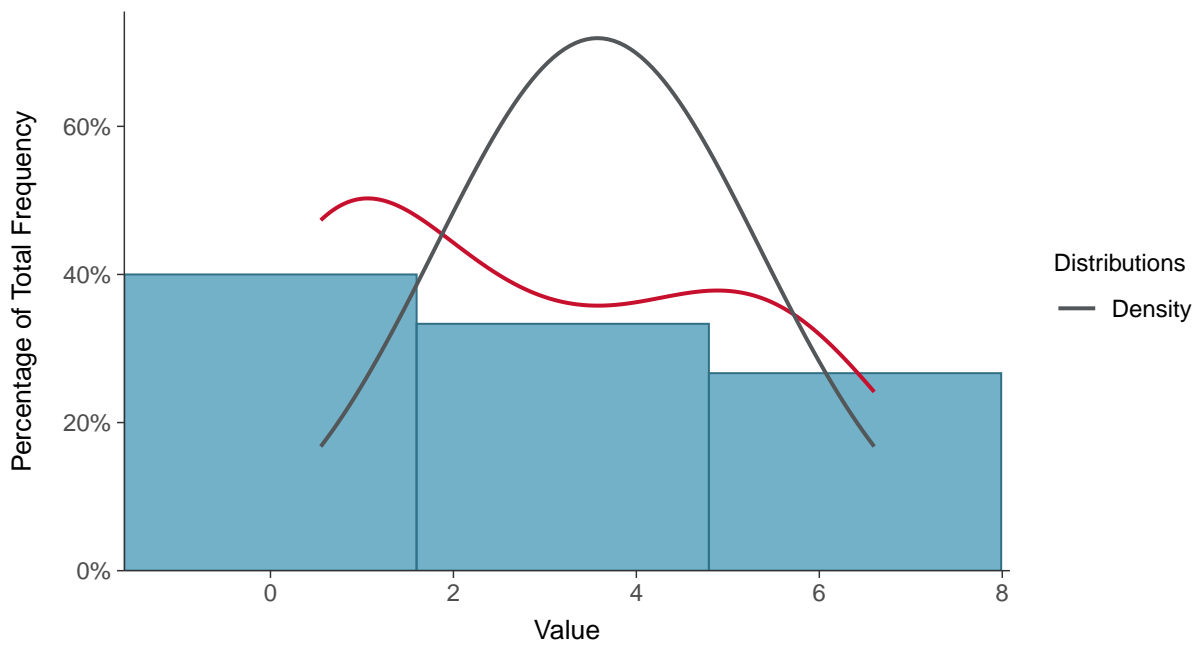
Scatter Plot

Arsenic, MW-17006 (ug/L)



Histogram

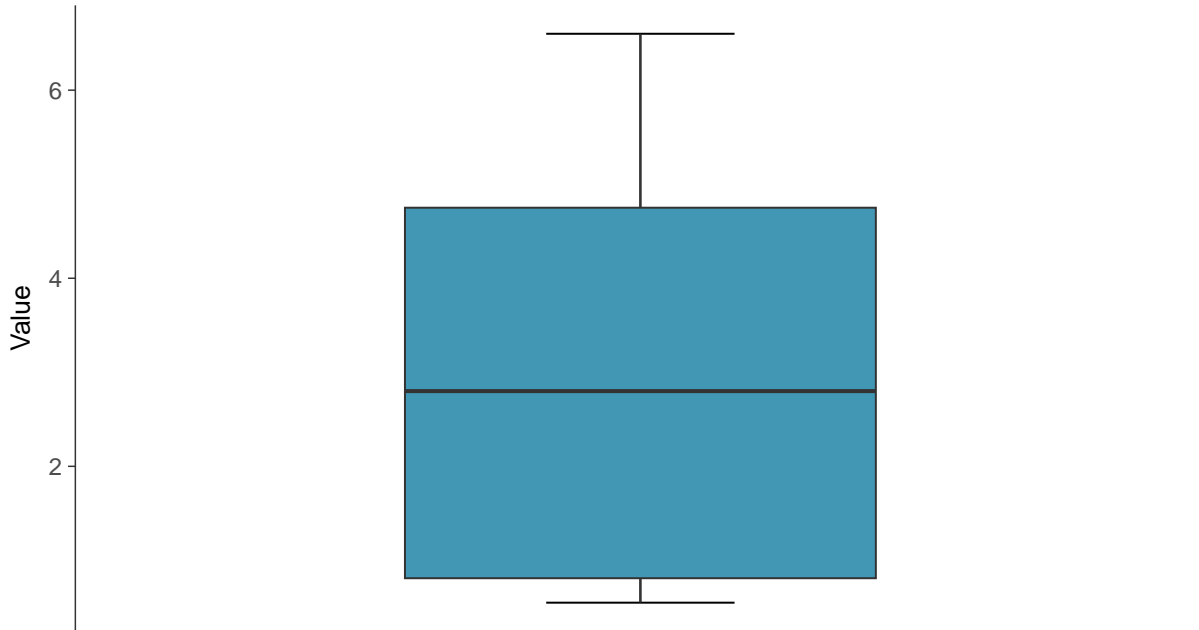
Arsenic, MW-17006 (ug/L)





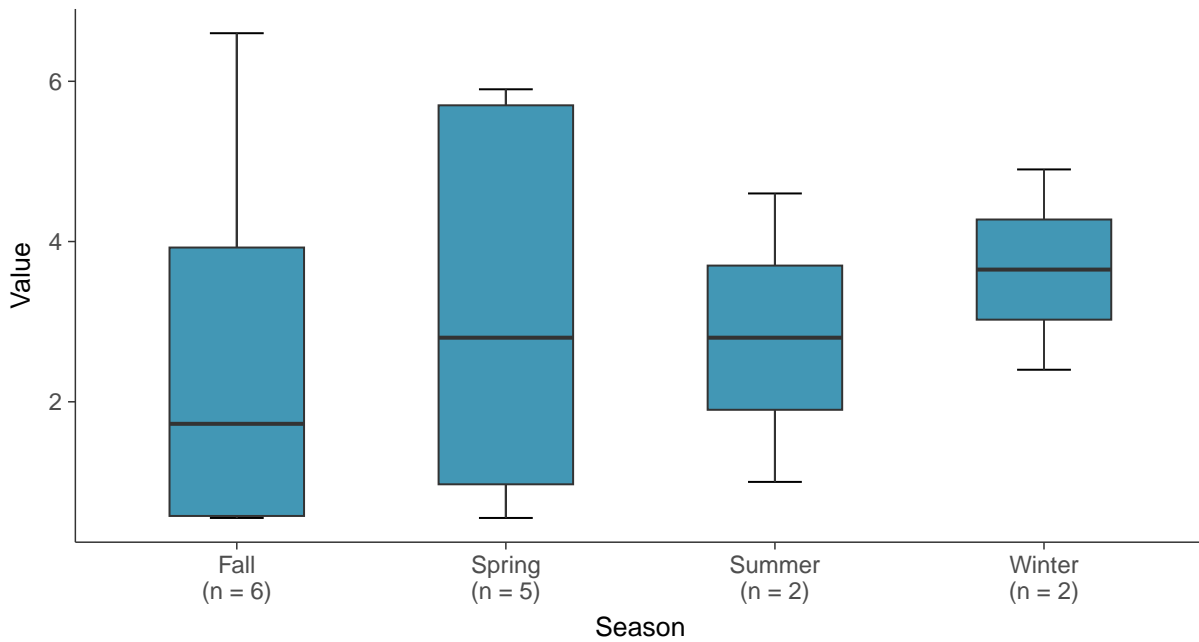
Boxplot

Arsenic, MW-17006 (ug/L)



Boxplot by Season

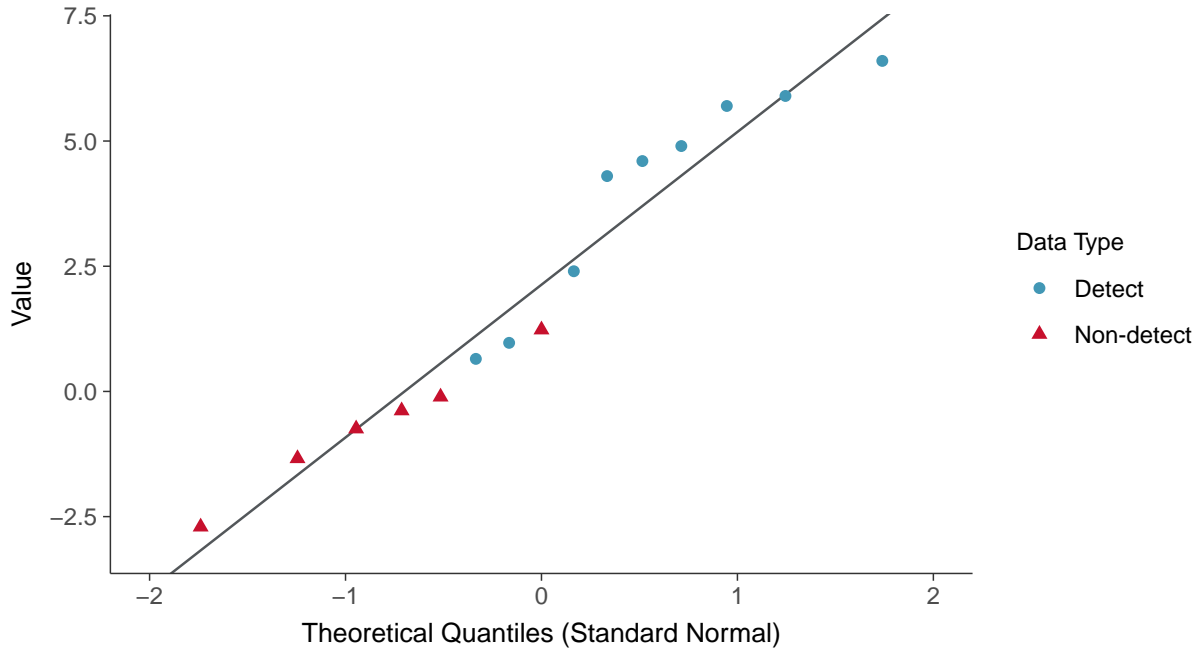
Arsenic, MW-17006 (ug/L)





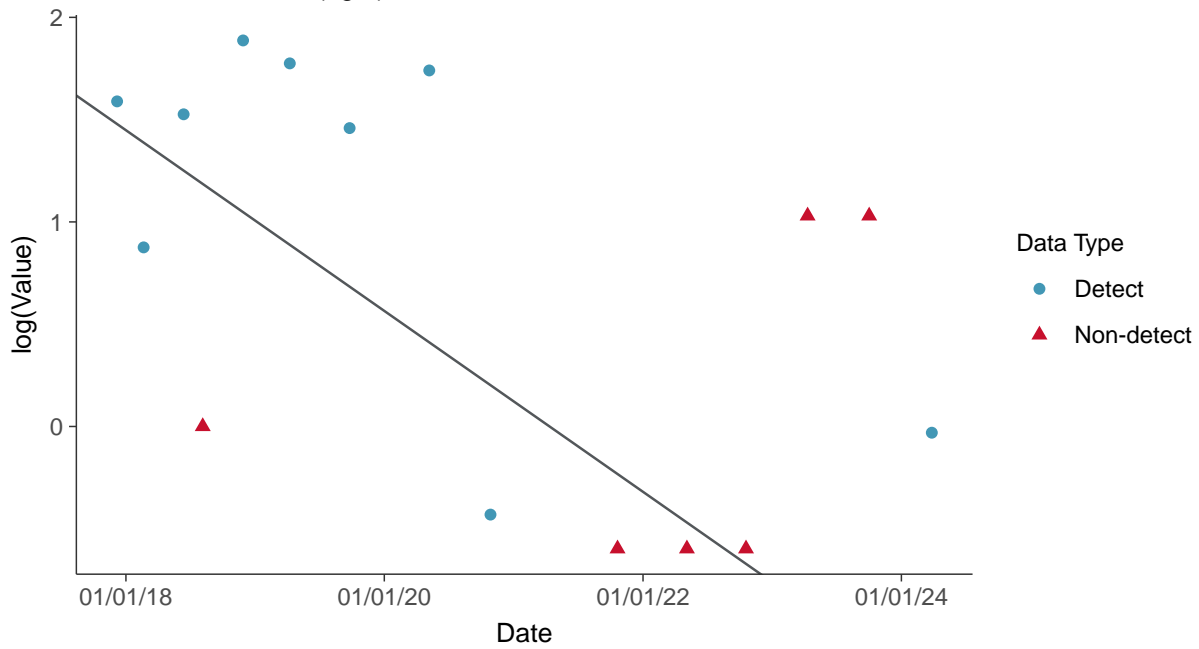
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17006 (ug/L)



Trend Regression: Lognormal MLE

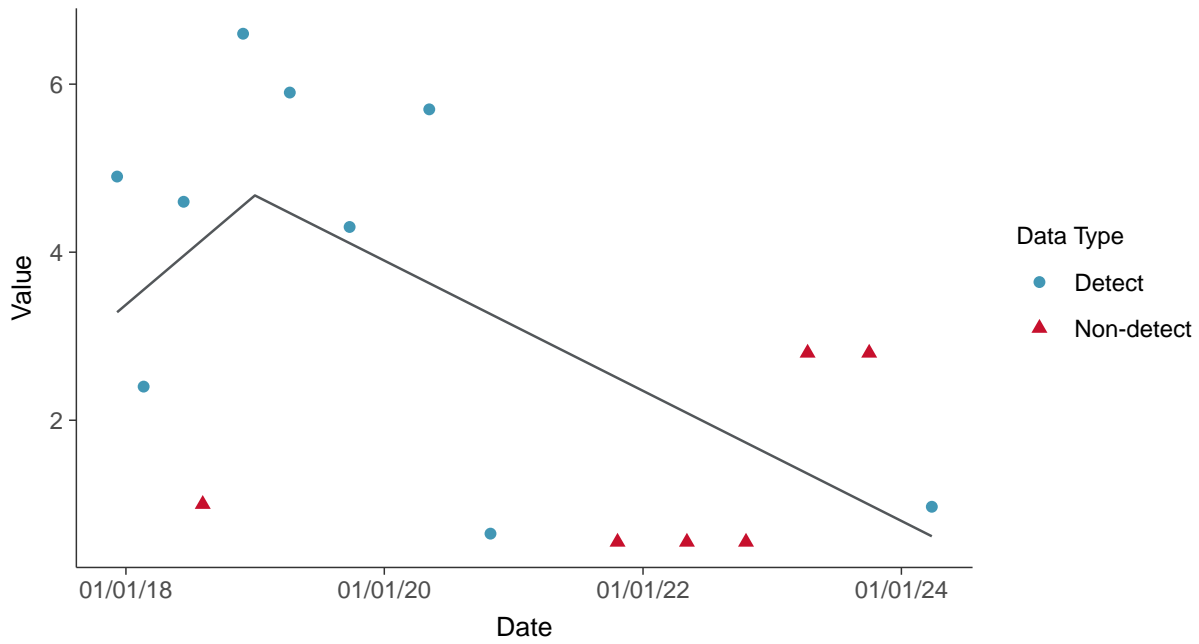
Arsenic, MW-17006 (ug/L)





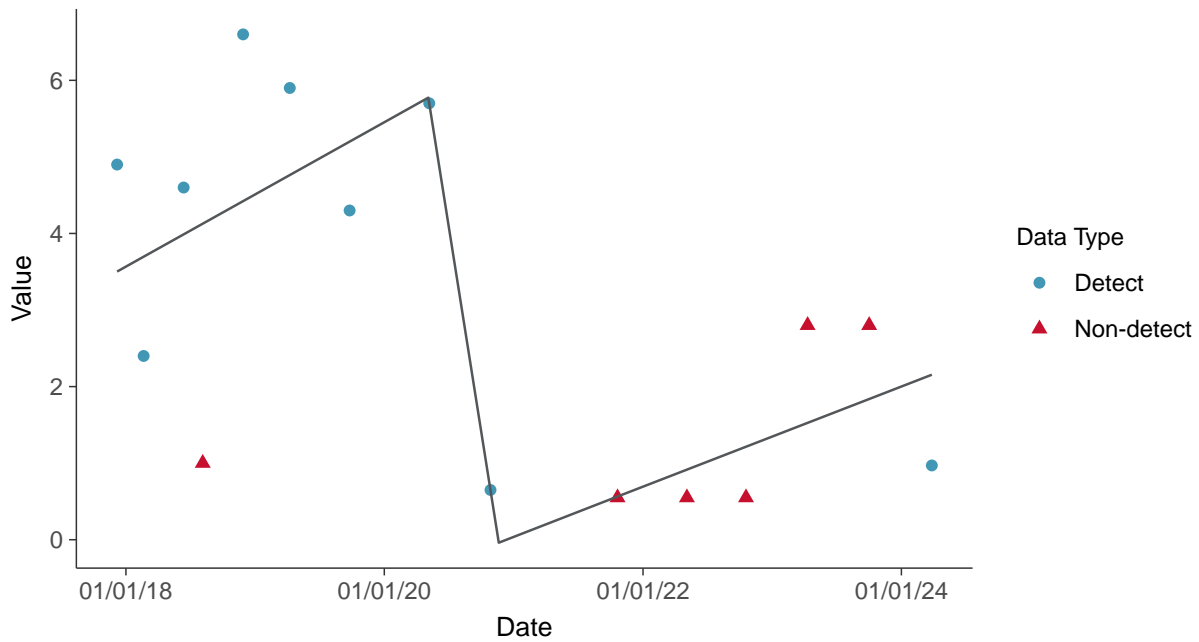
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-17006 (ug/L)



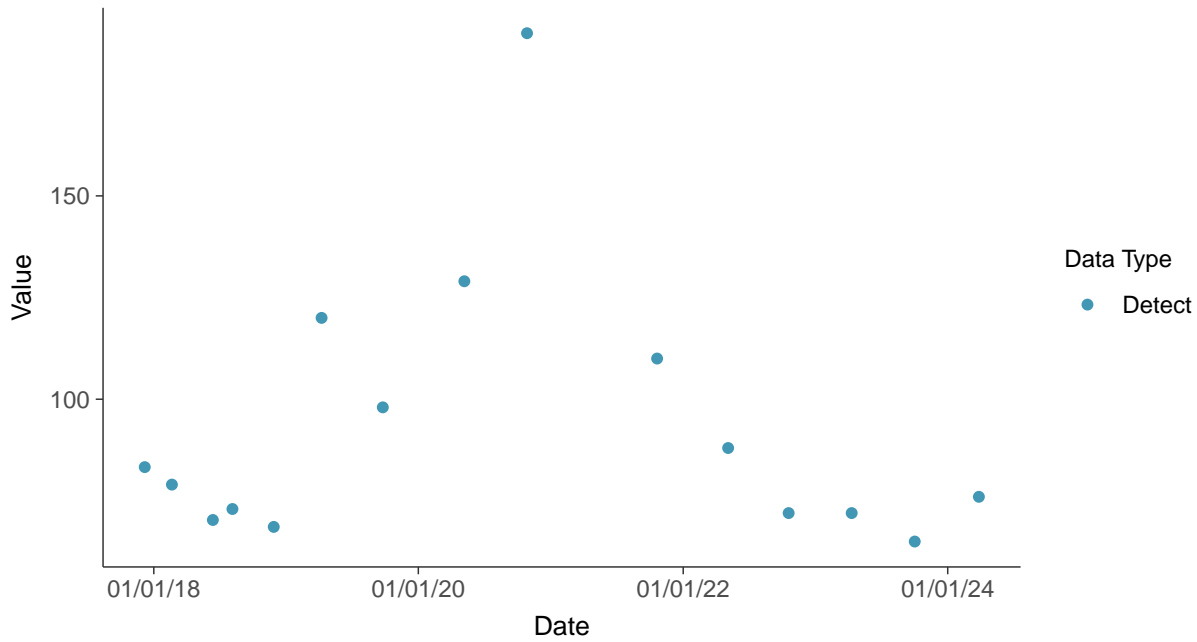


Appendix IV: Barium, MW-17006

ID: 19_2_103

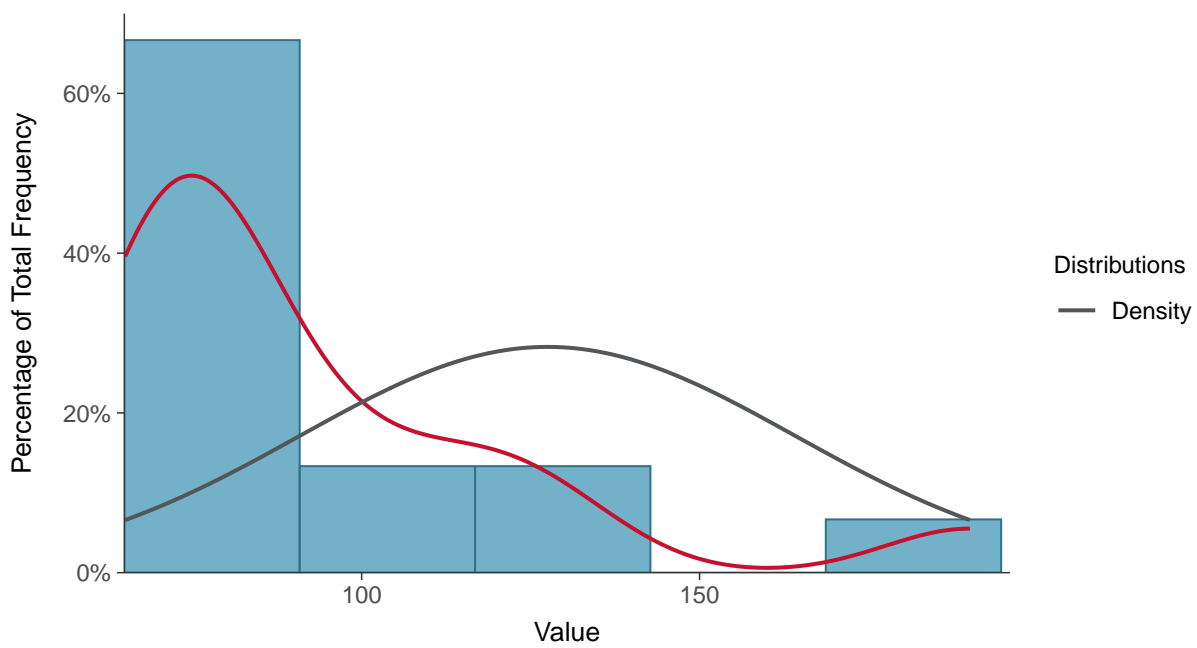
Scatter Plot

Barium, MW-17006 (ug/L)



Histogram

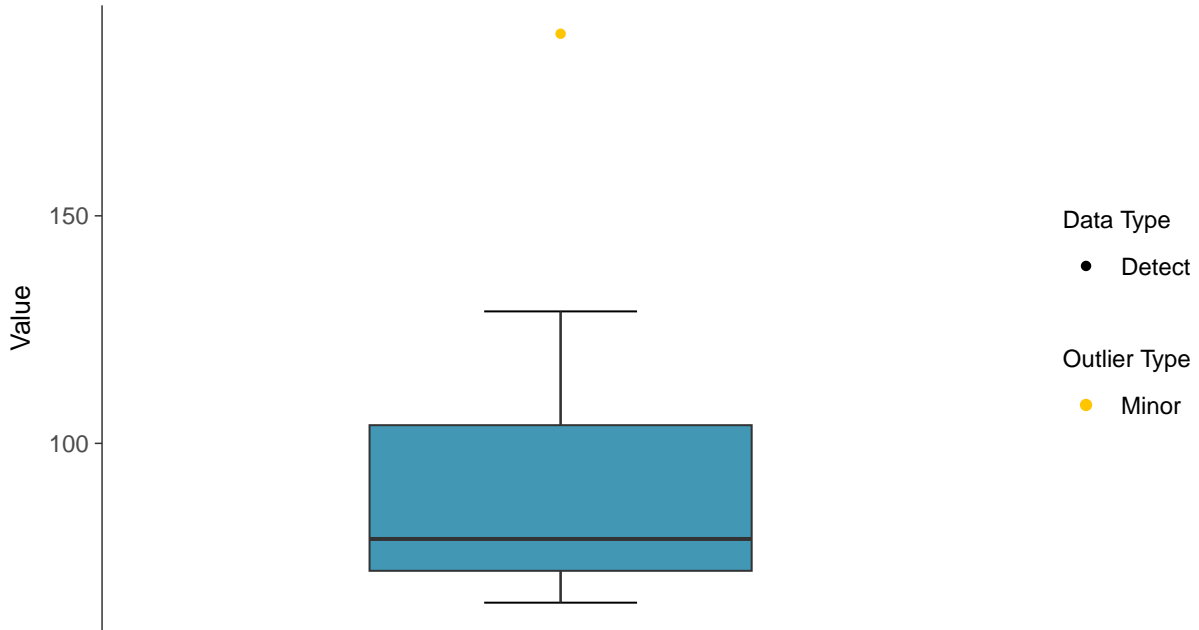
Barium, MW-17006 (ug/L)





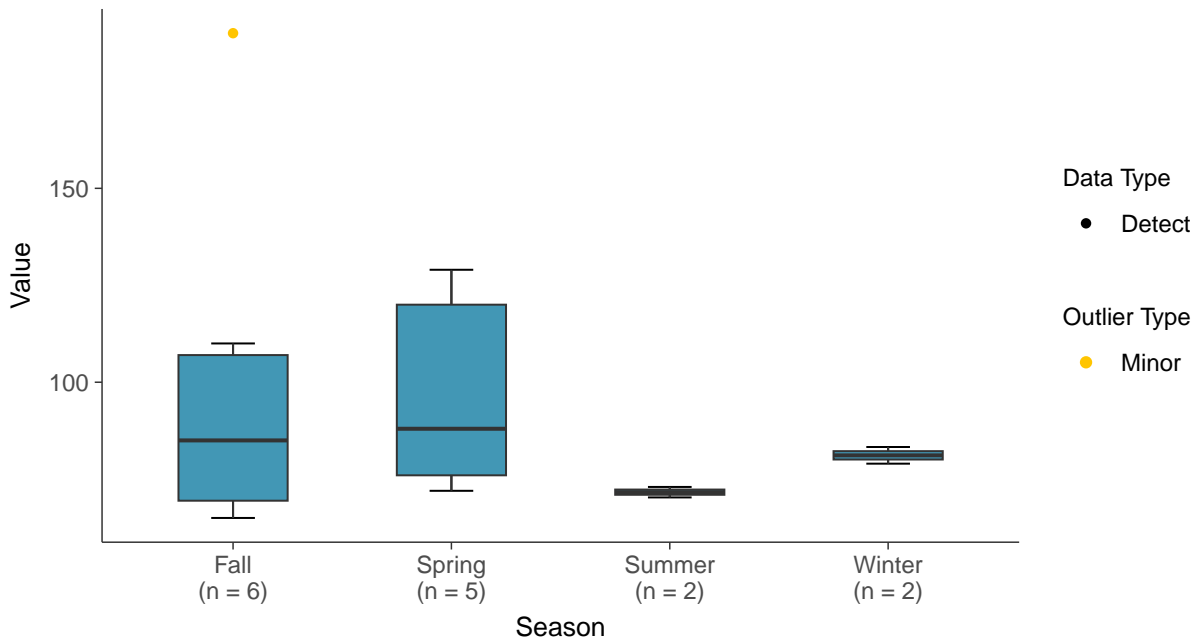
Boxplot

Barium, MW-17006 (ug/L)



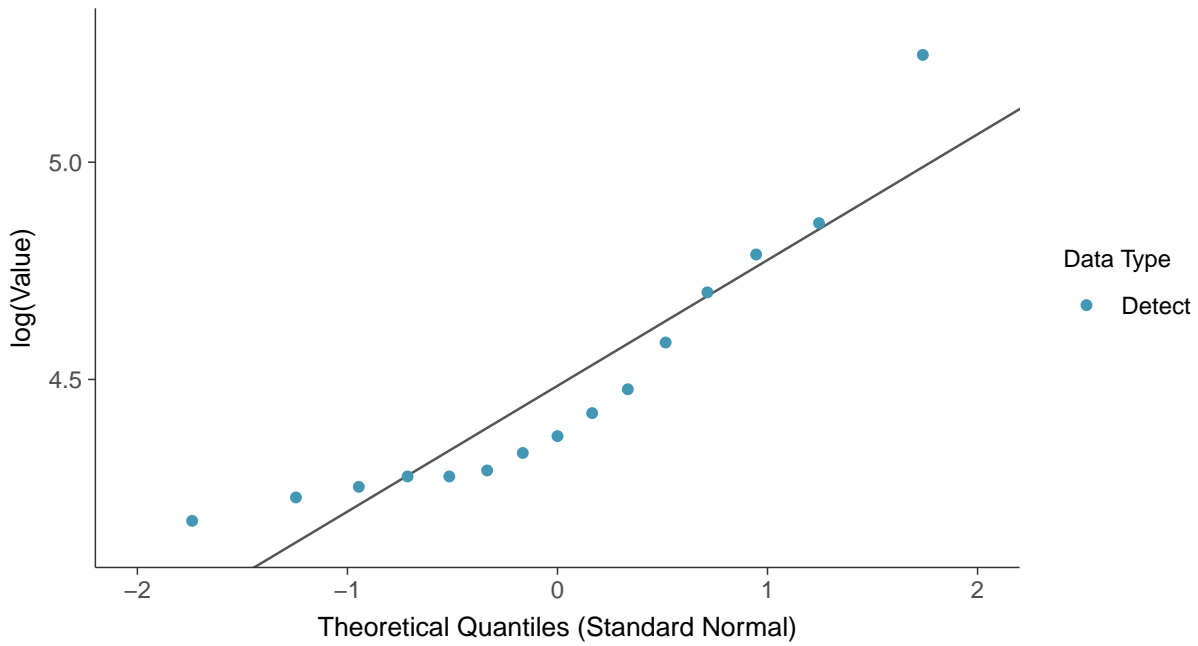
Boxplot by Season

Barium, MW-17006 (ug/L)

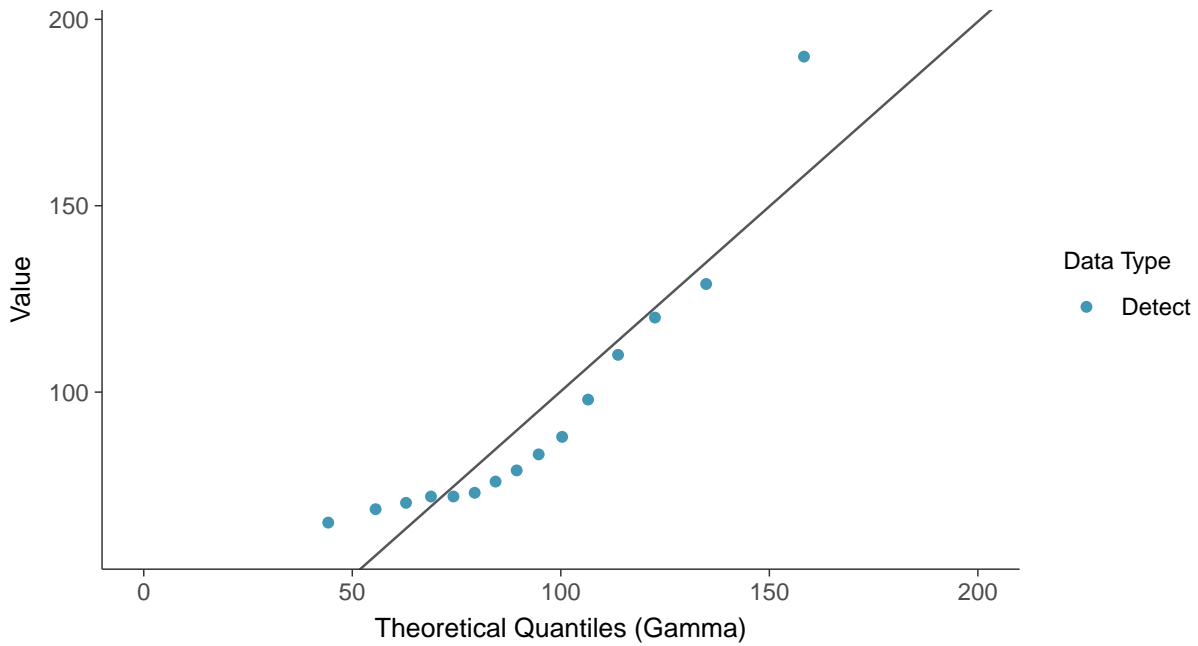




Lognormal Q-Q plot
Barium, MW-17006 (ug/L)



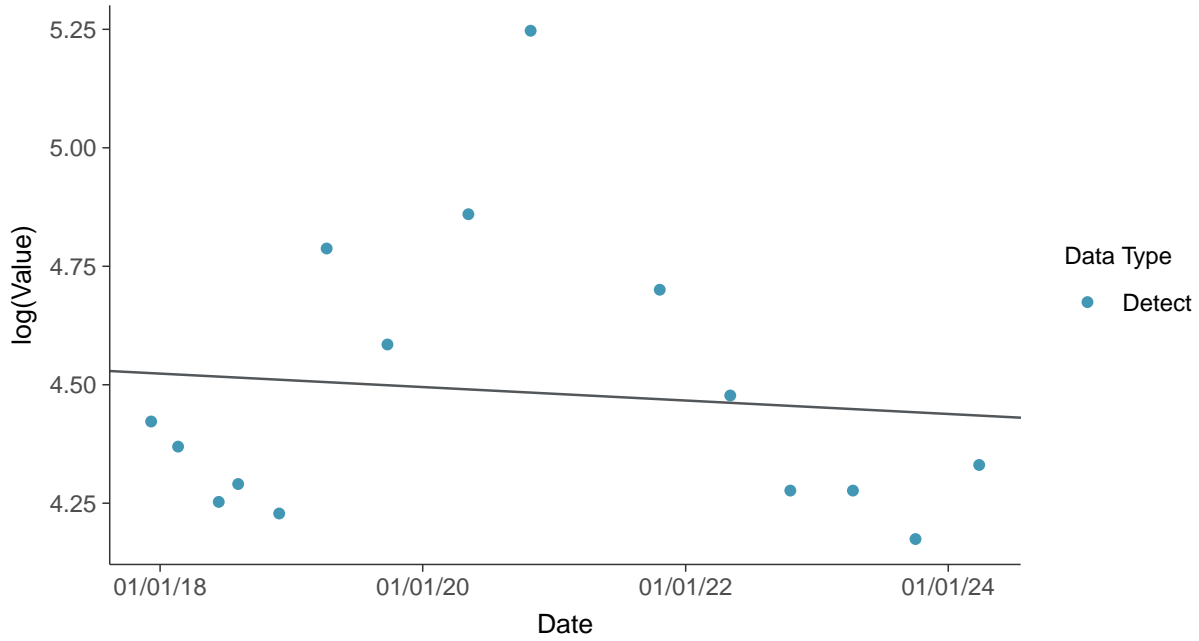
Gamma Q-Q plot
Barium, MW-17006 (ug/L)





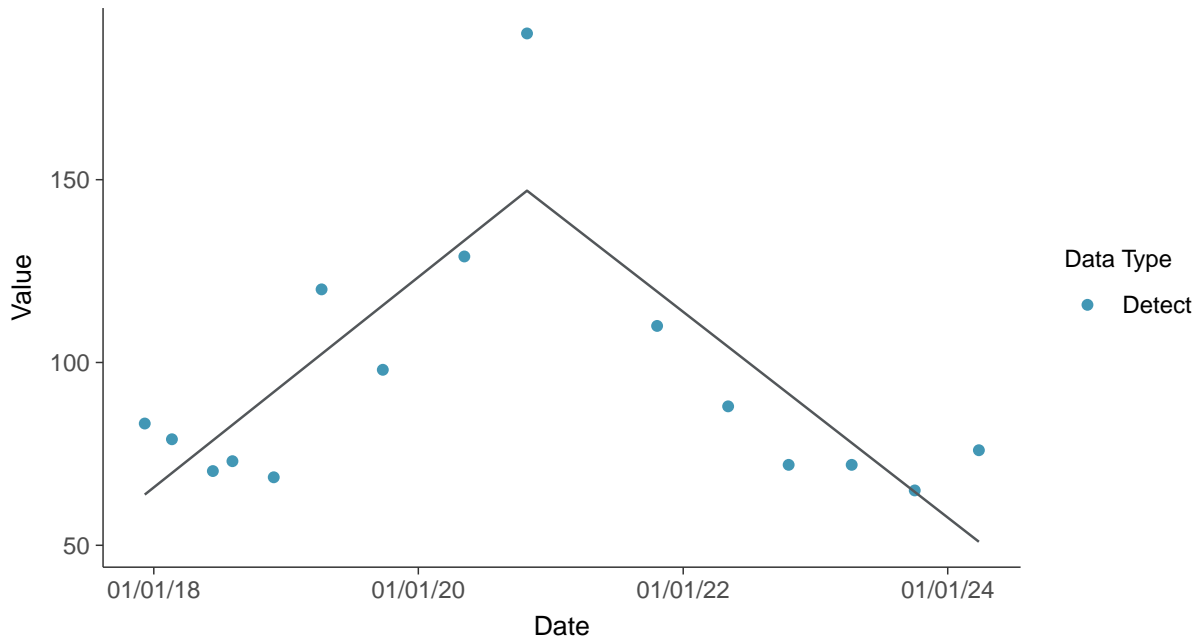
Trend Regression: Lognormal MLE

Barium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear

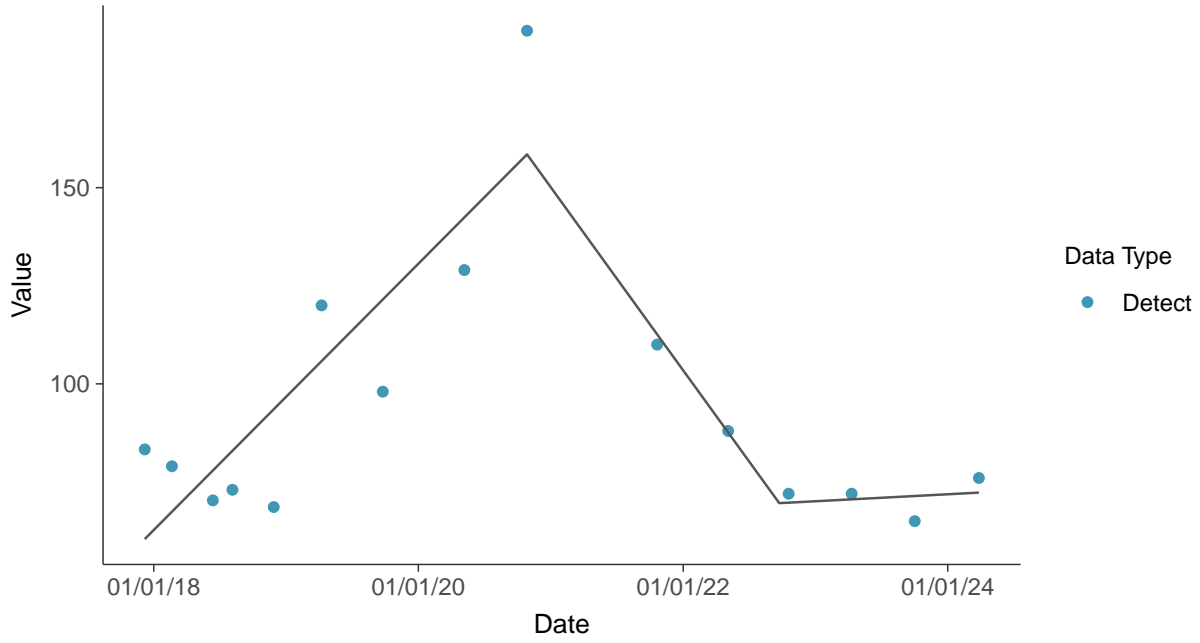
Barium, MW-17006 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

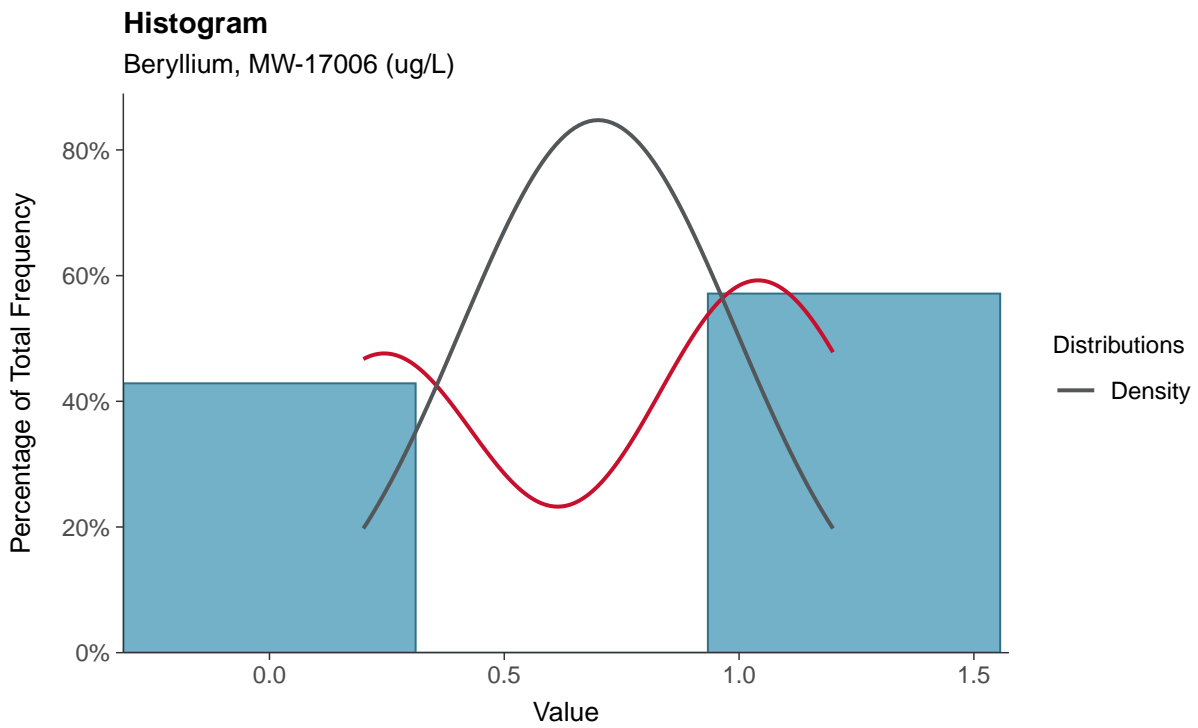
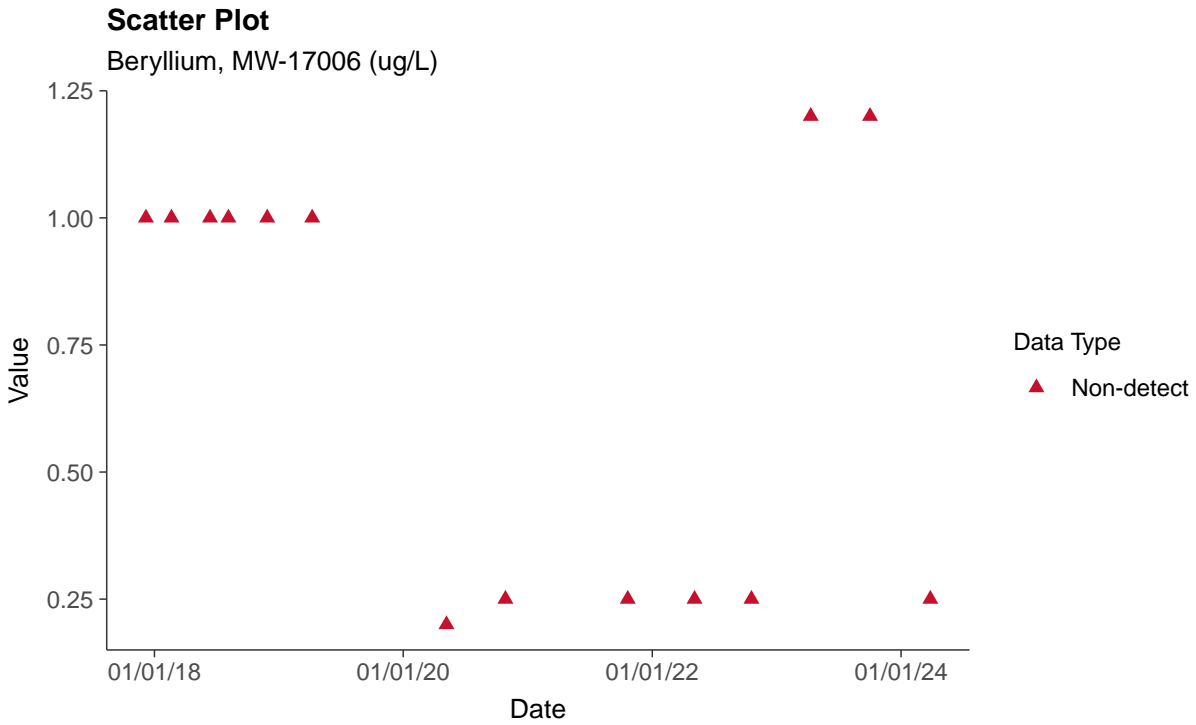
Barium, MW-17006 (ug/L)





Appendix IV: Beryllium, MW-17006

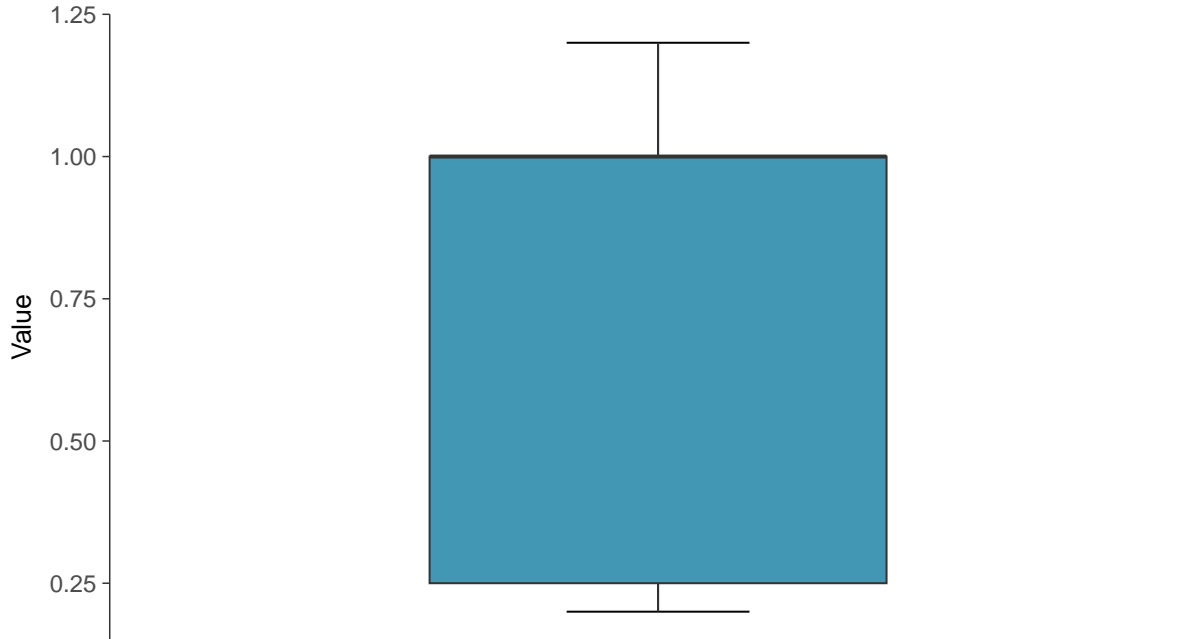
ID: 19_2_104





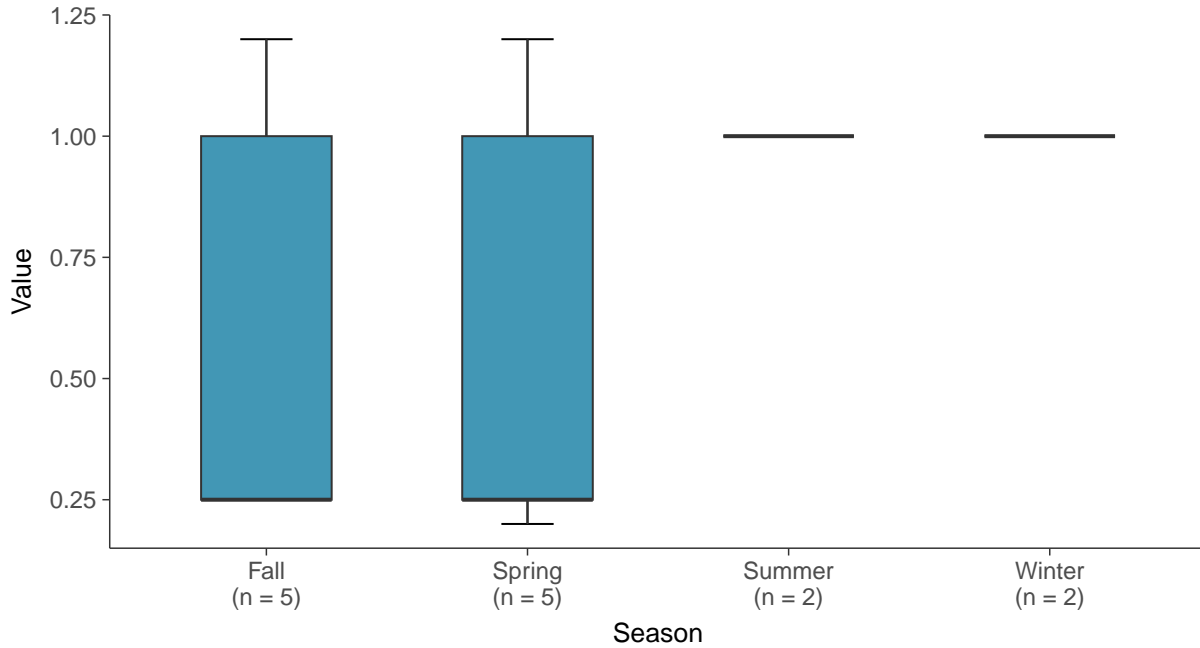
Boxplot

Beryllium, MW-17006 (ug/L)



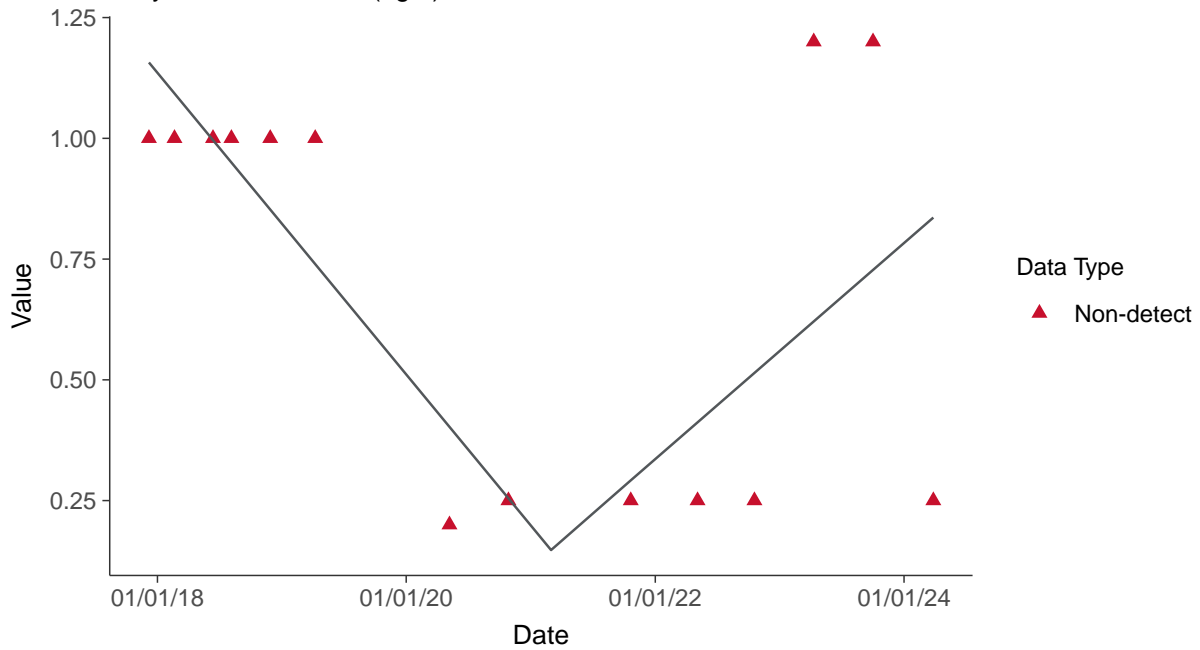
Boxplot by Season

Beryllium, MW-17006 (ug/L)

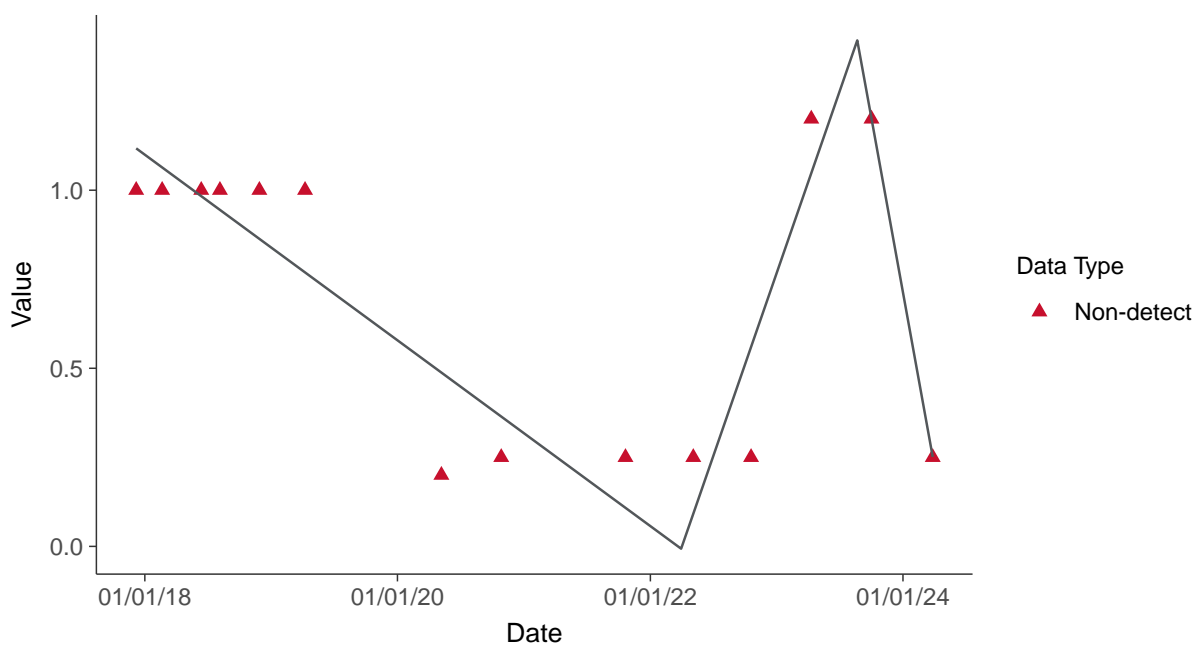


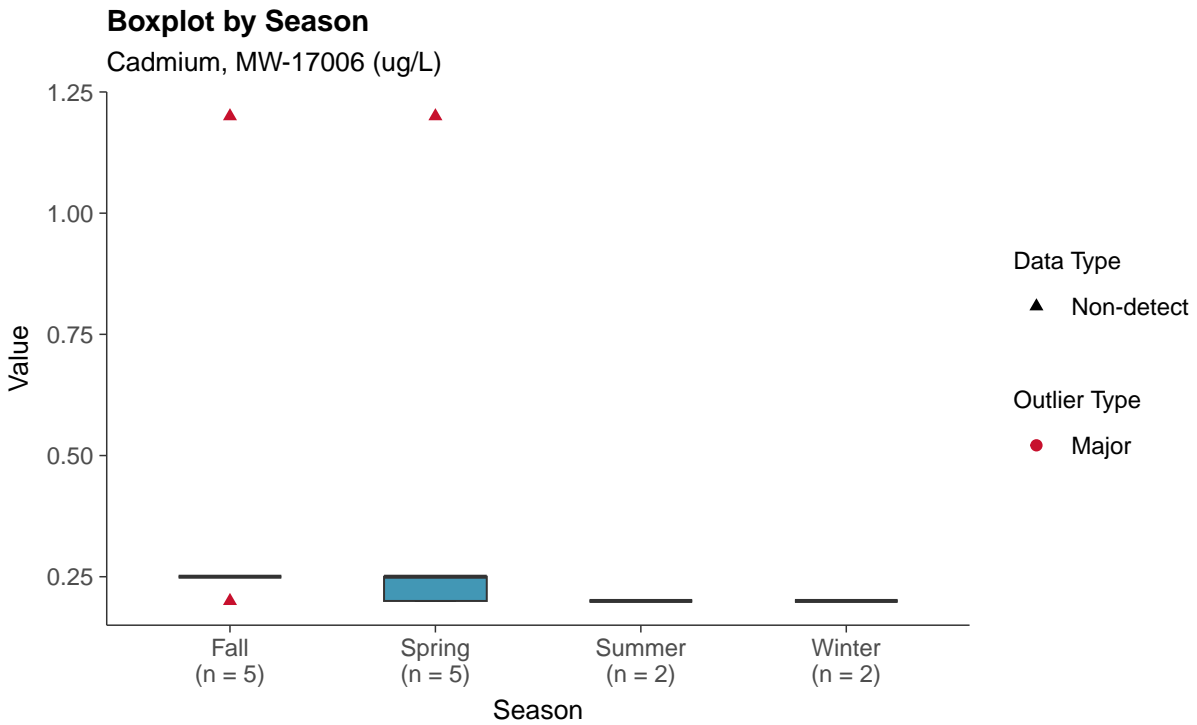
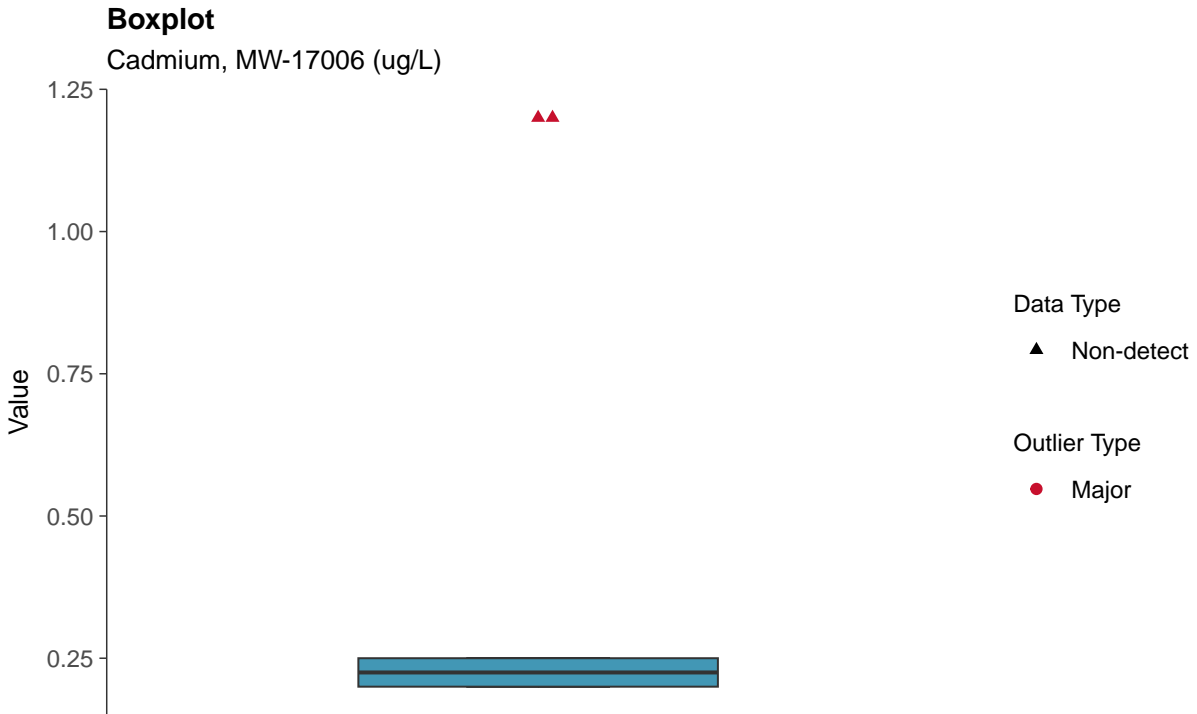


Trend Regression: Piecewise Linear-Linear
Beryllium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear
Beryllium, MW-17006 (ug/L)

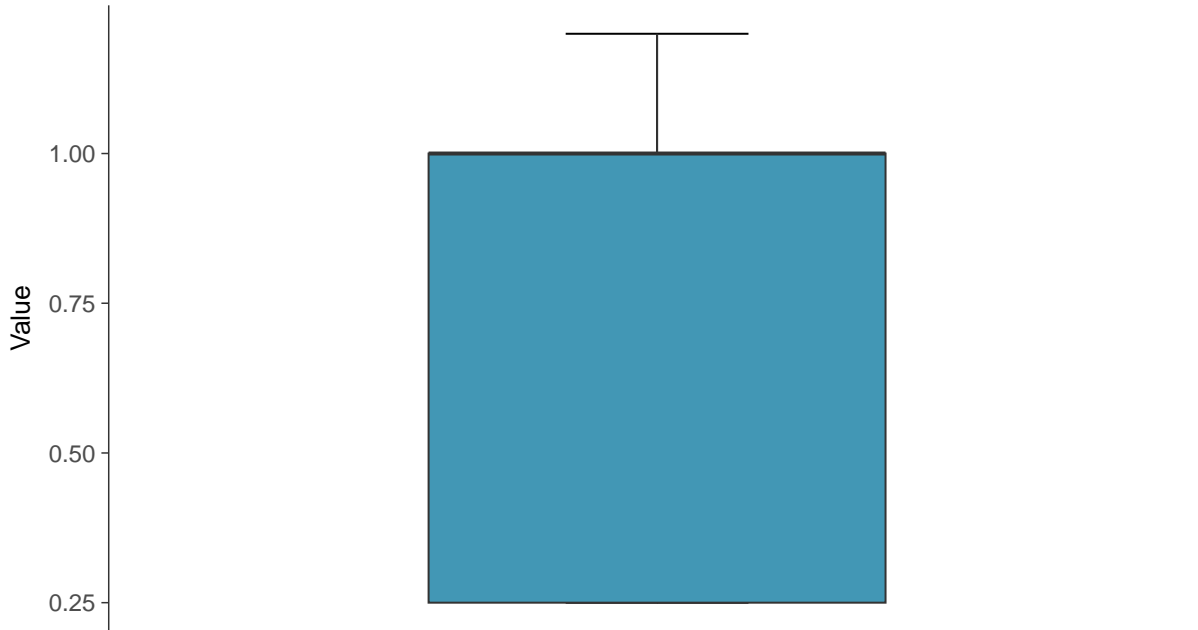






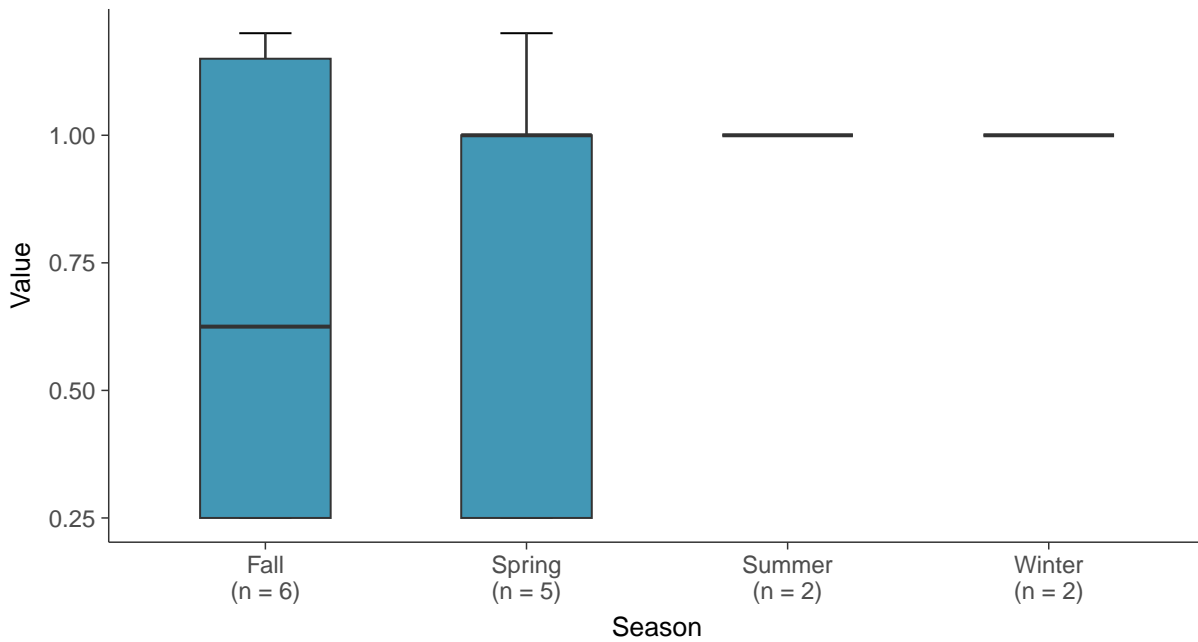
Boxplot

Chromium, MW-17006 (ug/L)



Boxplot by Season

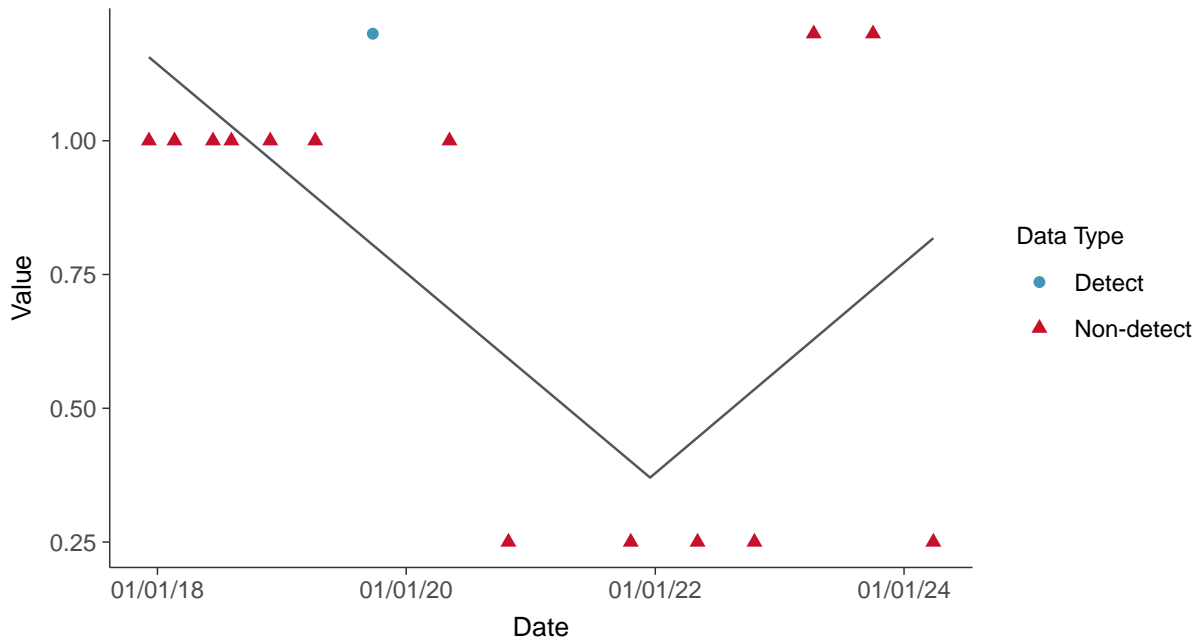
Chromium, MW-17006 (ug/L)





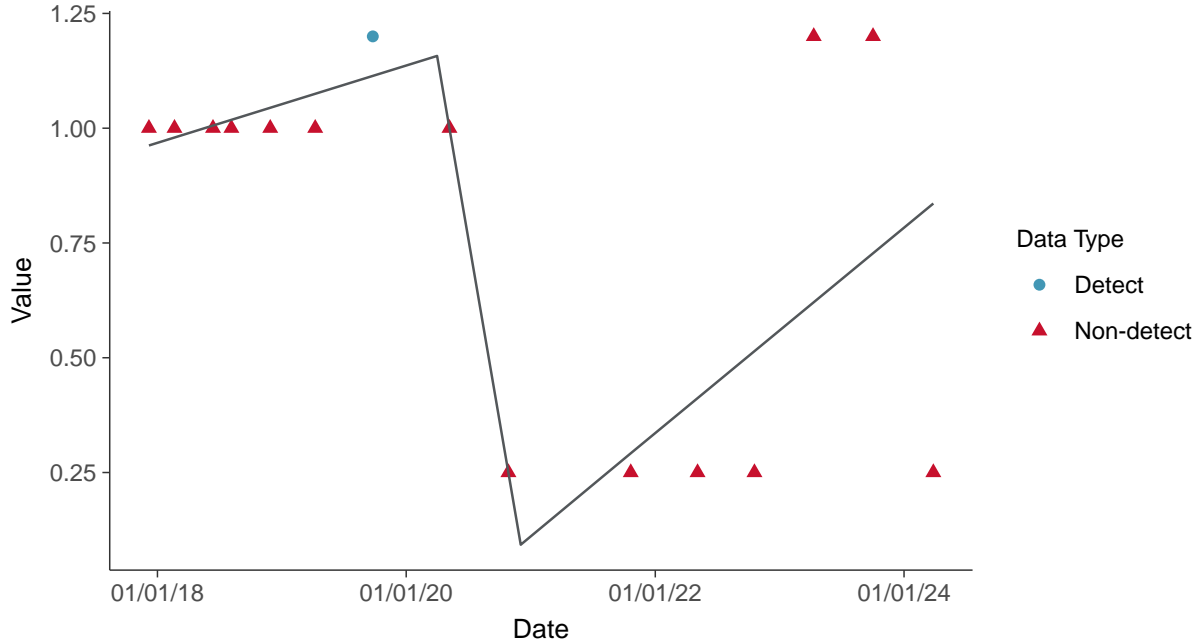
Trend Regression: Piecewise Linear-Linear

Chromium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

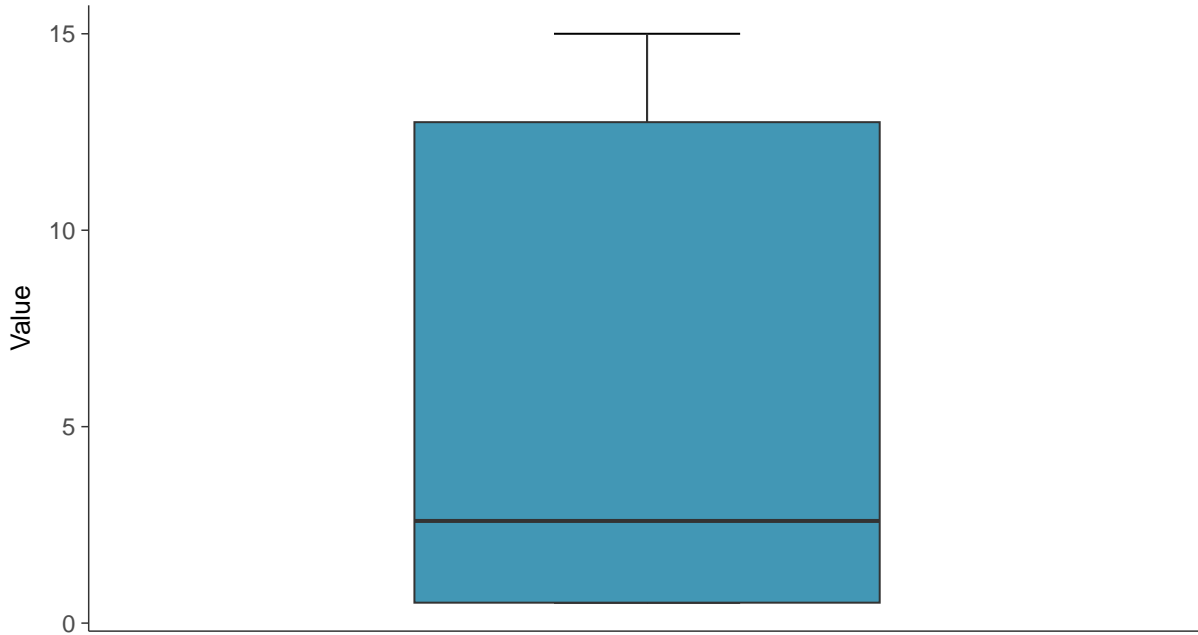
Chromium, MW-17006 (ug/L)





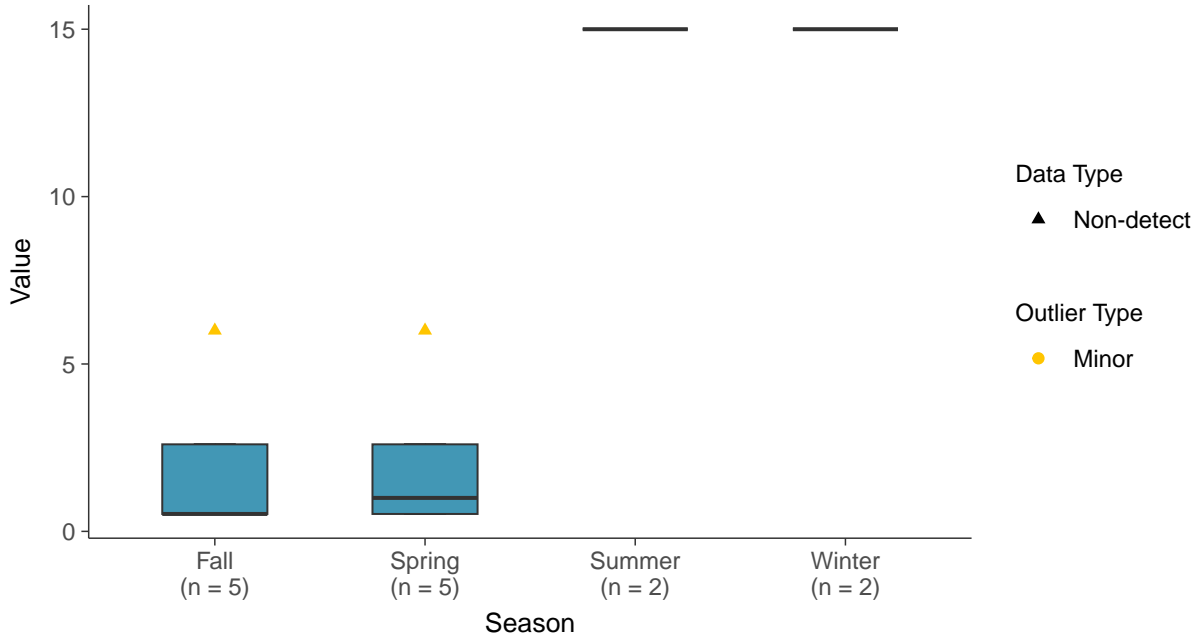
Boxplot

Cobalt, MW-17006 (ug/L)



Boxplot by Season

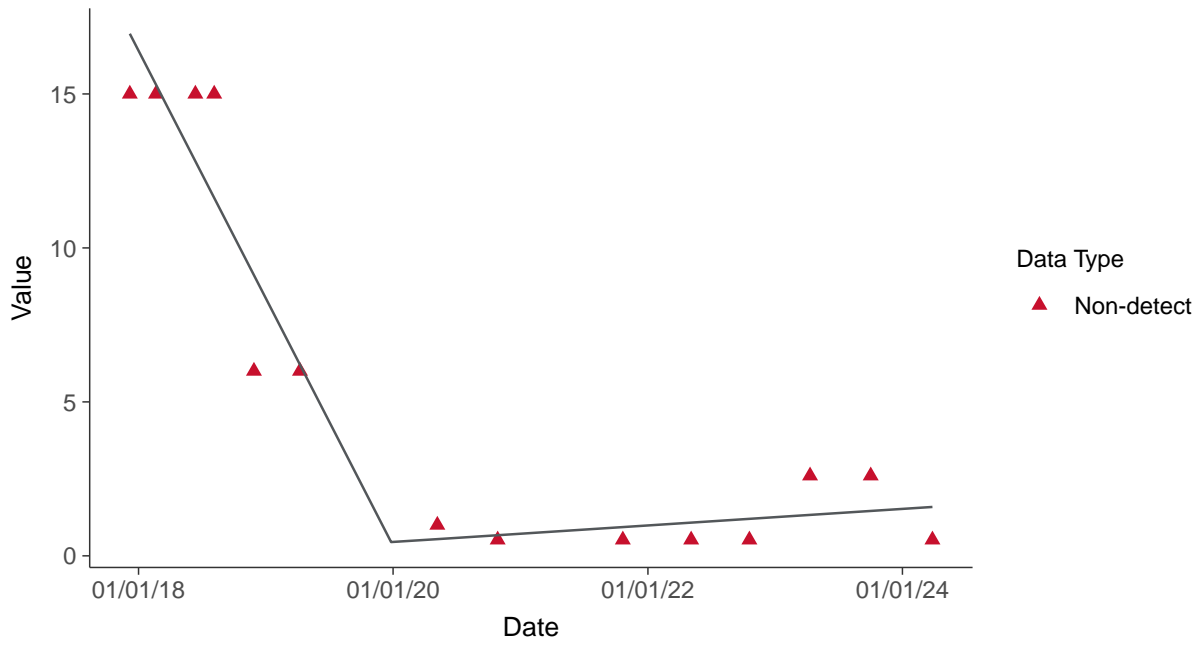
Cobalt, MW-17006 (ug/L)





Trend Regression: Piecewise Linear-Linear

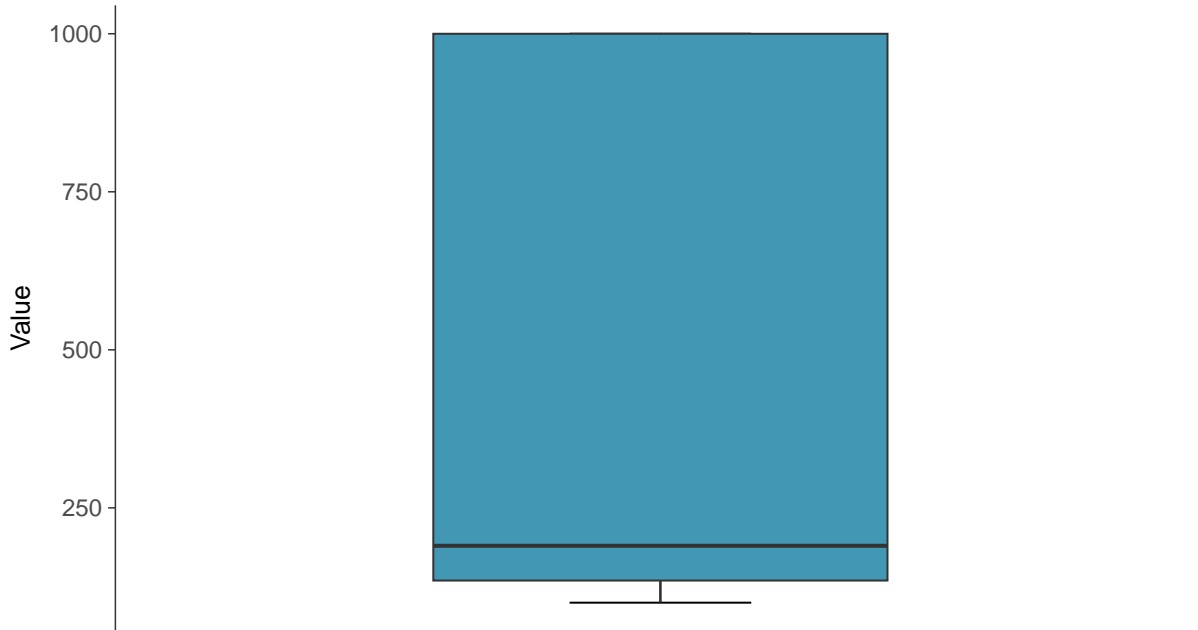
Cobalt, MW-17006 (ug/L)





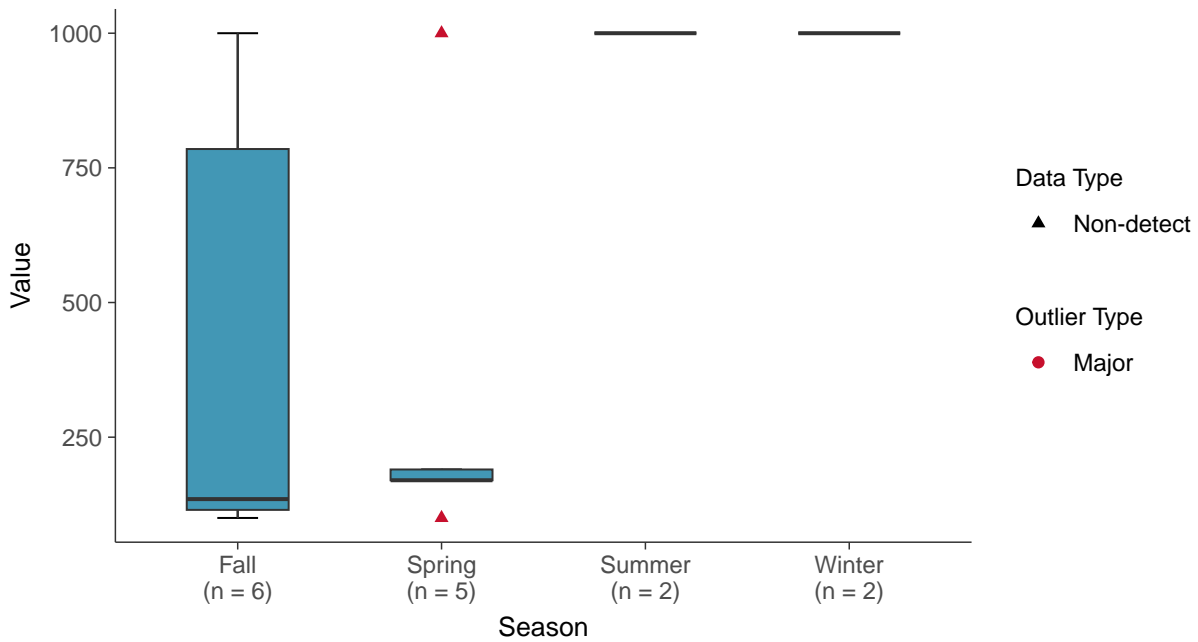
Boxplot

Fluoride, MW-17006 (ug/L)



Boxplot by Season

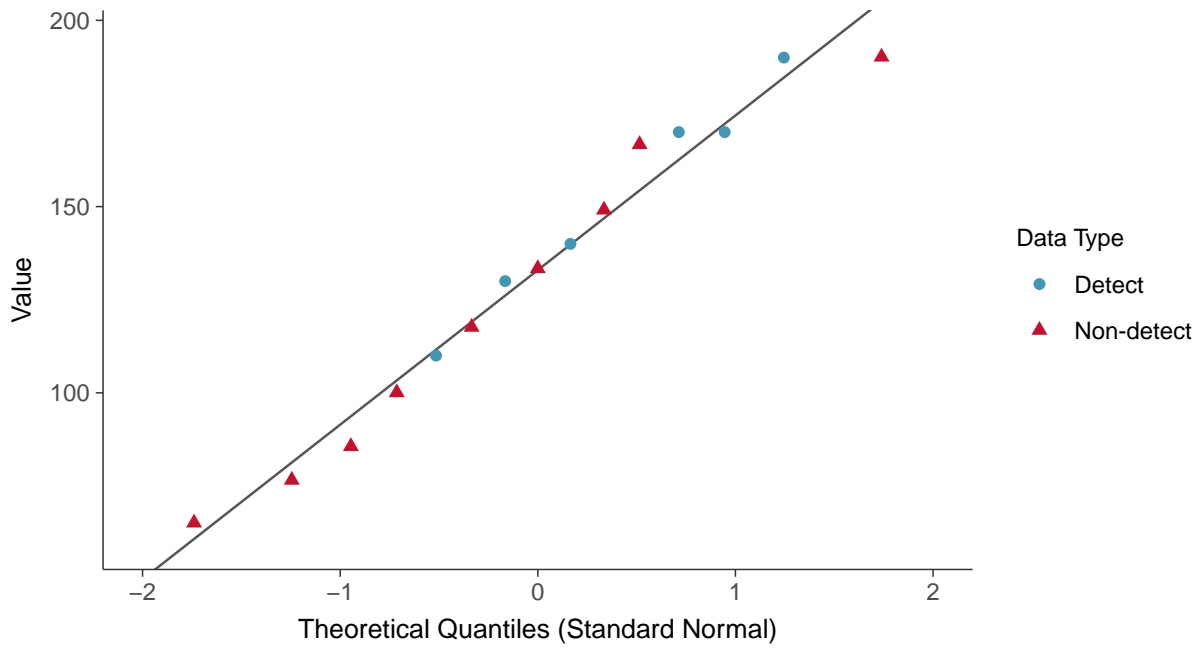
Fluoride, MW-17006 (ug/L)





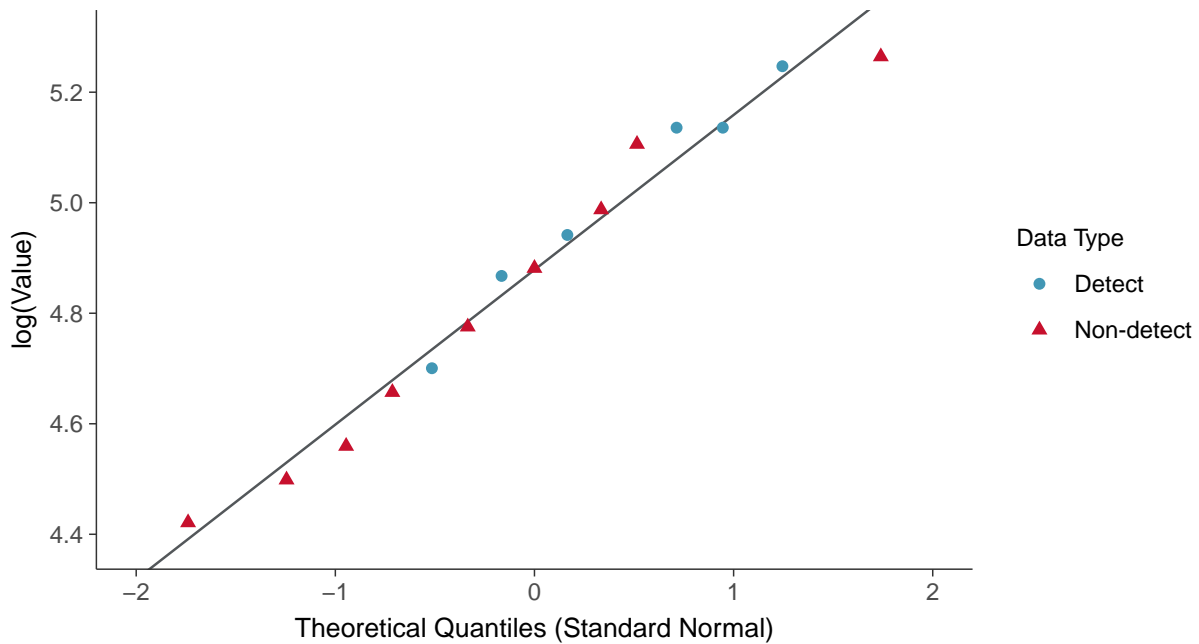
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17006 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

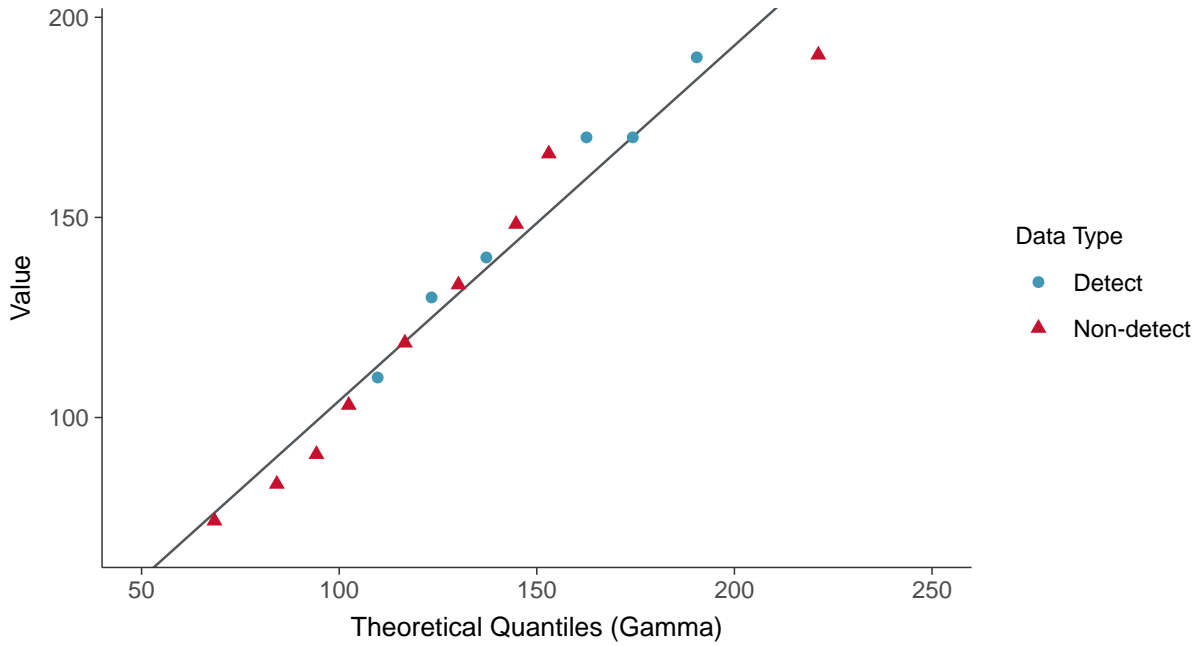
Fluoride, MW-17006 (ug/L)





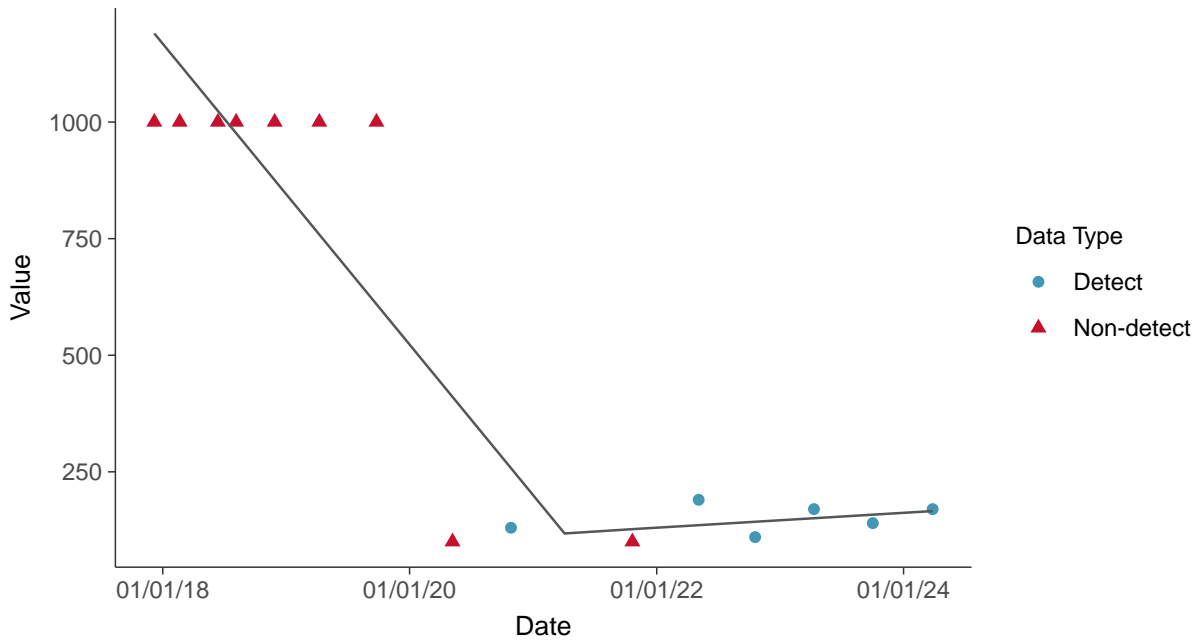
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-17006 (ug/L)



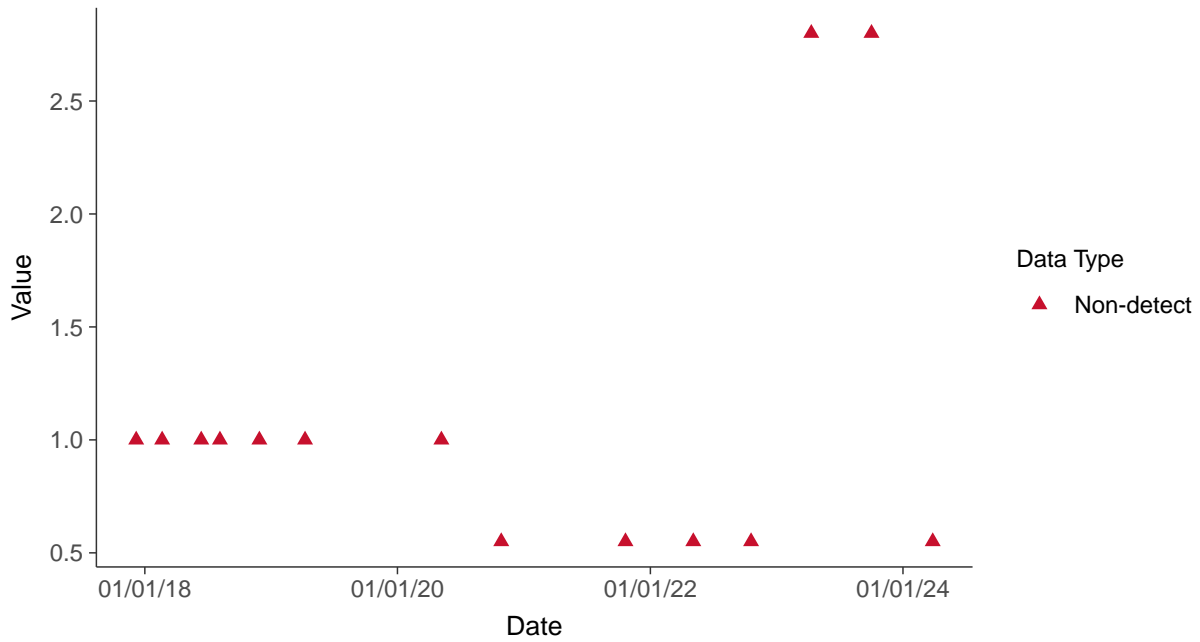


Appendix IV: Lead, MW-17006

ID: 19_2_116

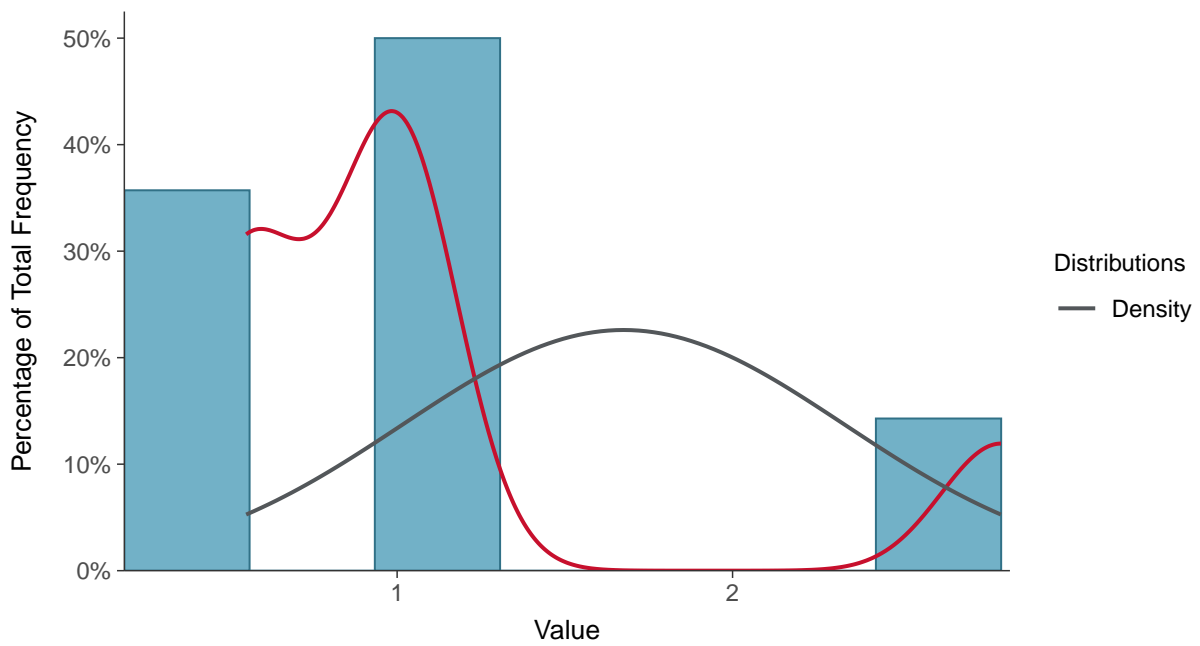
Scatter Plot

Lead, MW-17006 (ug/L)



Histogram

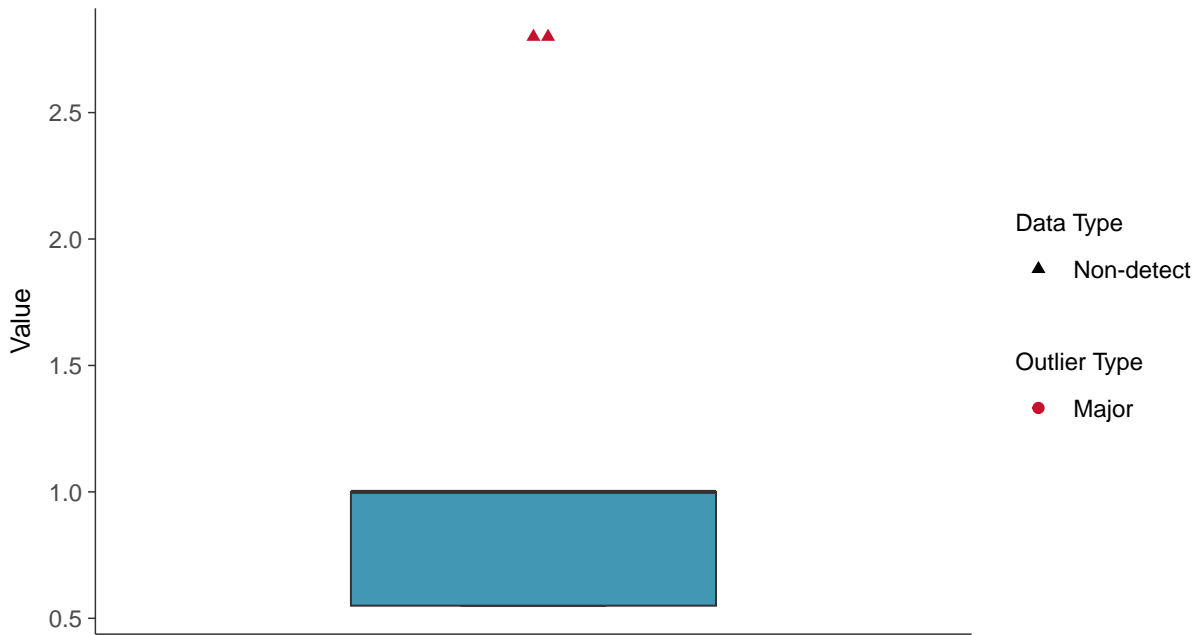
Lead, MW-17006 (ug/L)





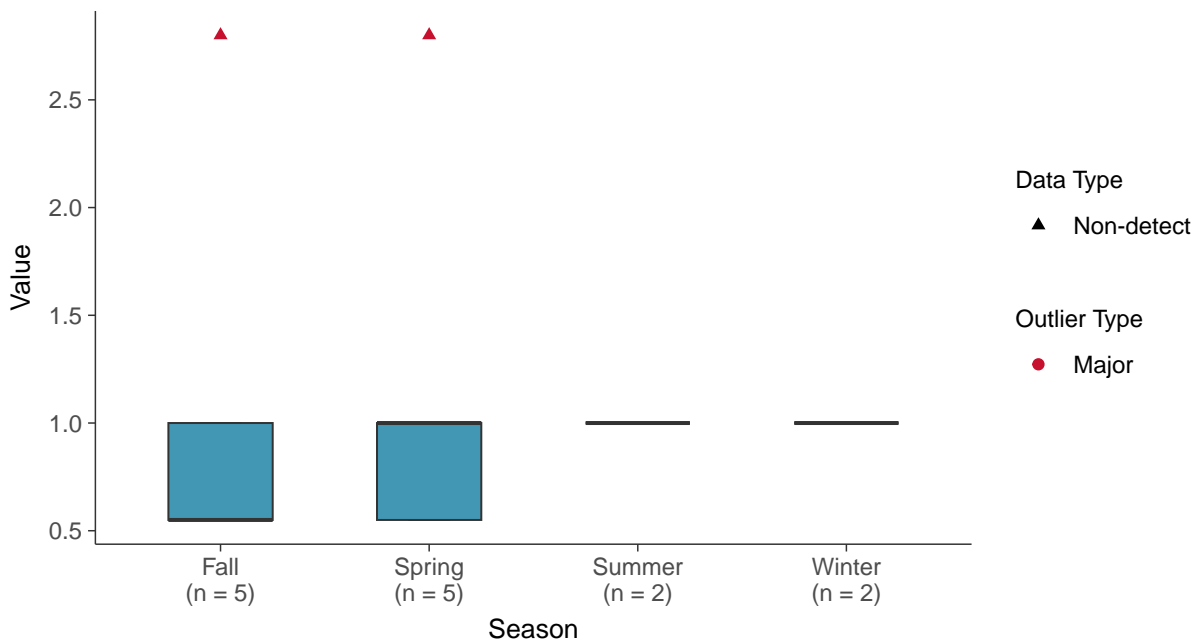
Boxplot

Lead, MW-17006 (ug/L)



Boxplot by Season

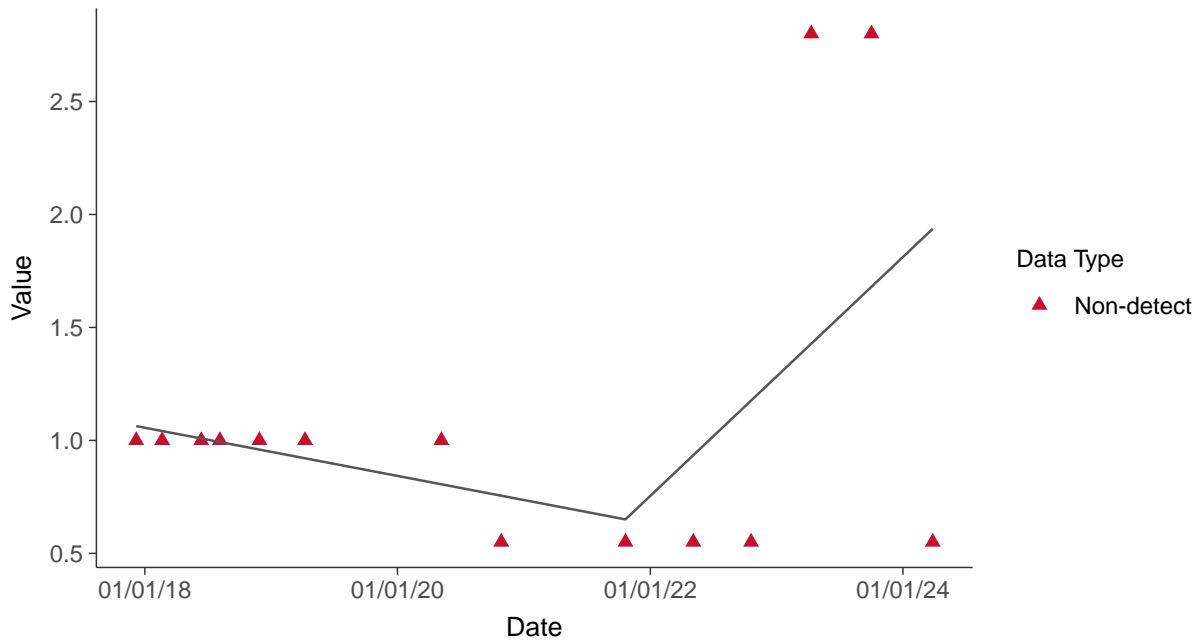
Lead, MW-17006 (ug/L)





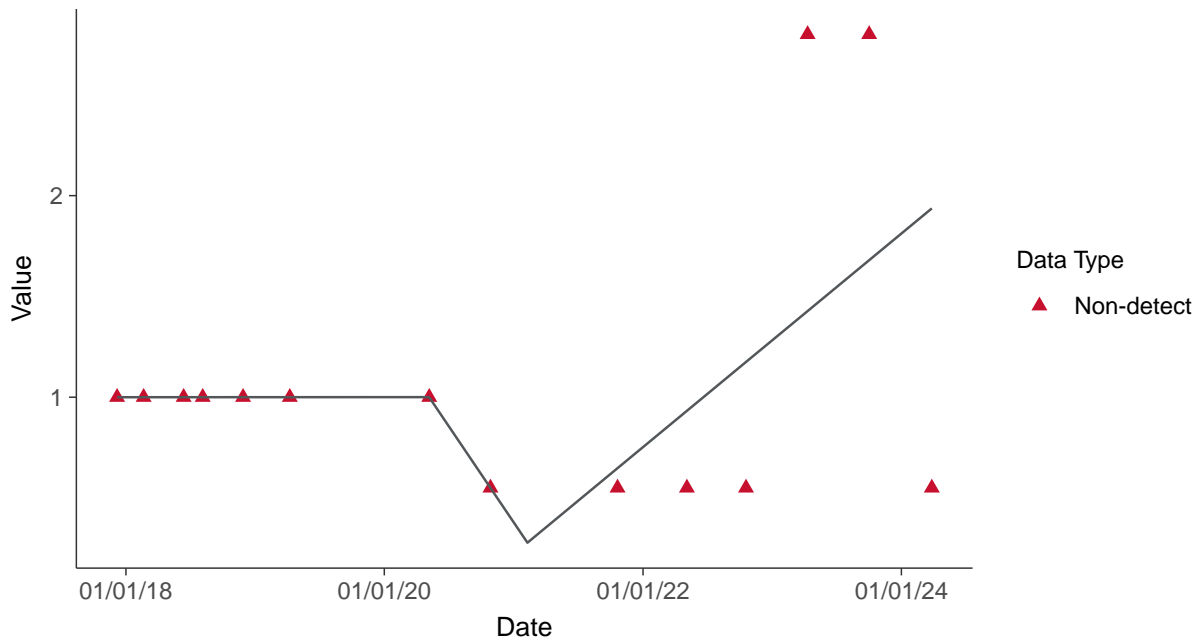
Trend Regression: Piecewise Linear-Linear

Lead, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-17006 (ug/L)



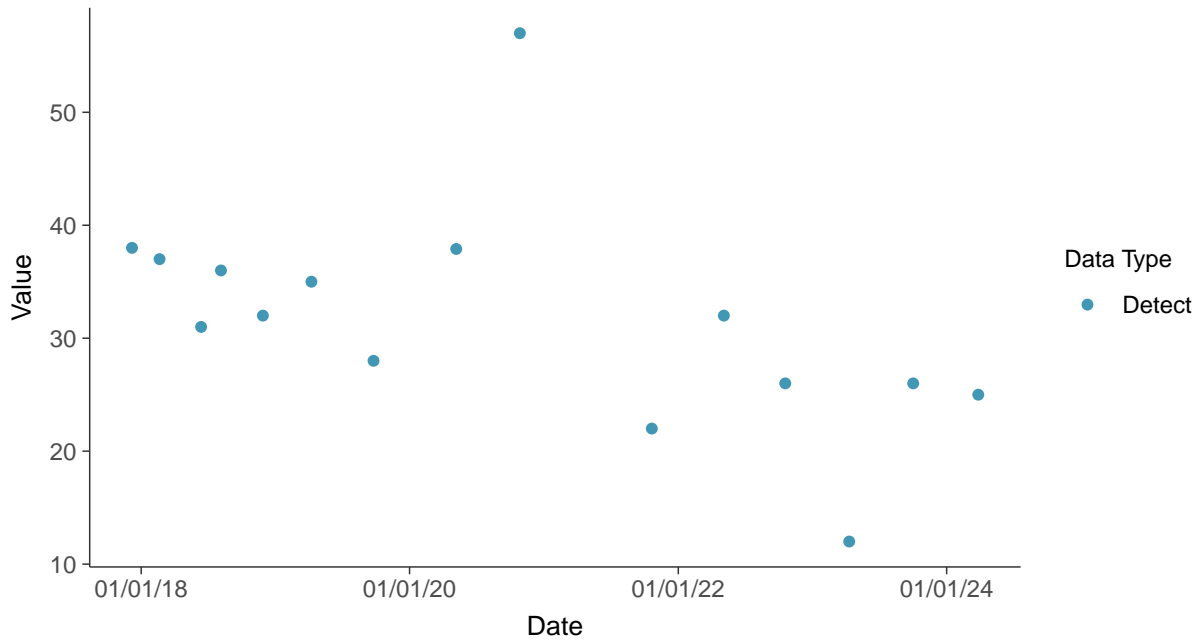


Appendix IV: Lithium, MW-17006

ID: 19_2_117

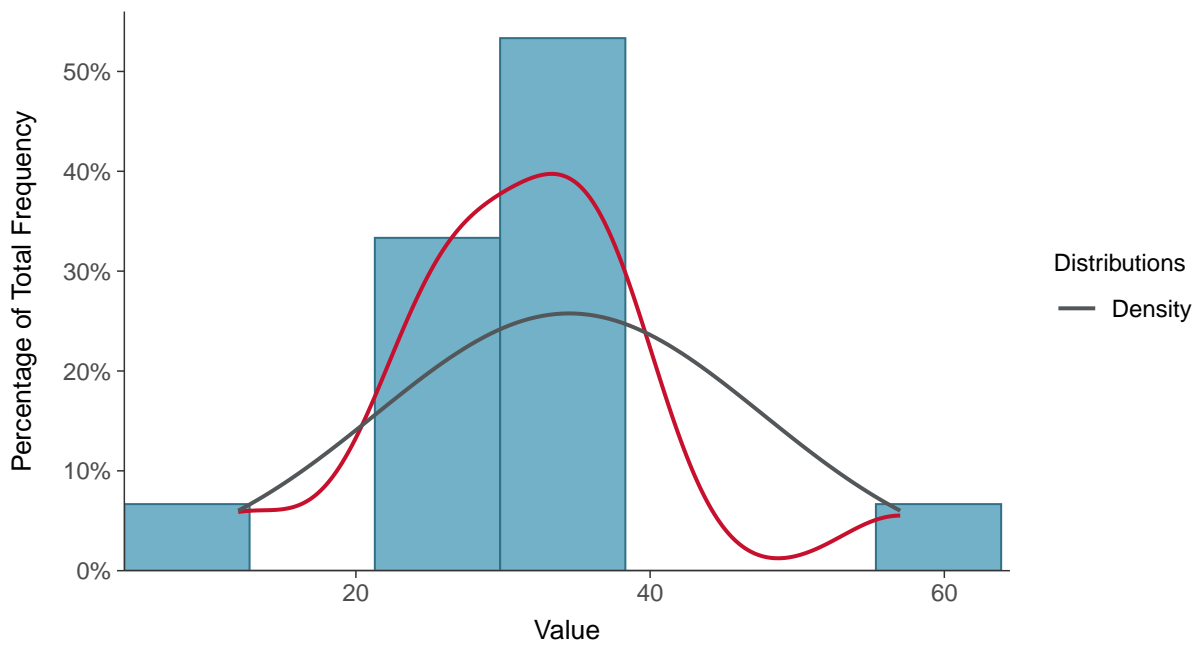
Scatter Plot

Lithium, MW-17006 (ug/L)



Histogram

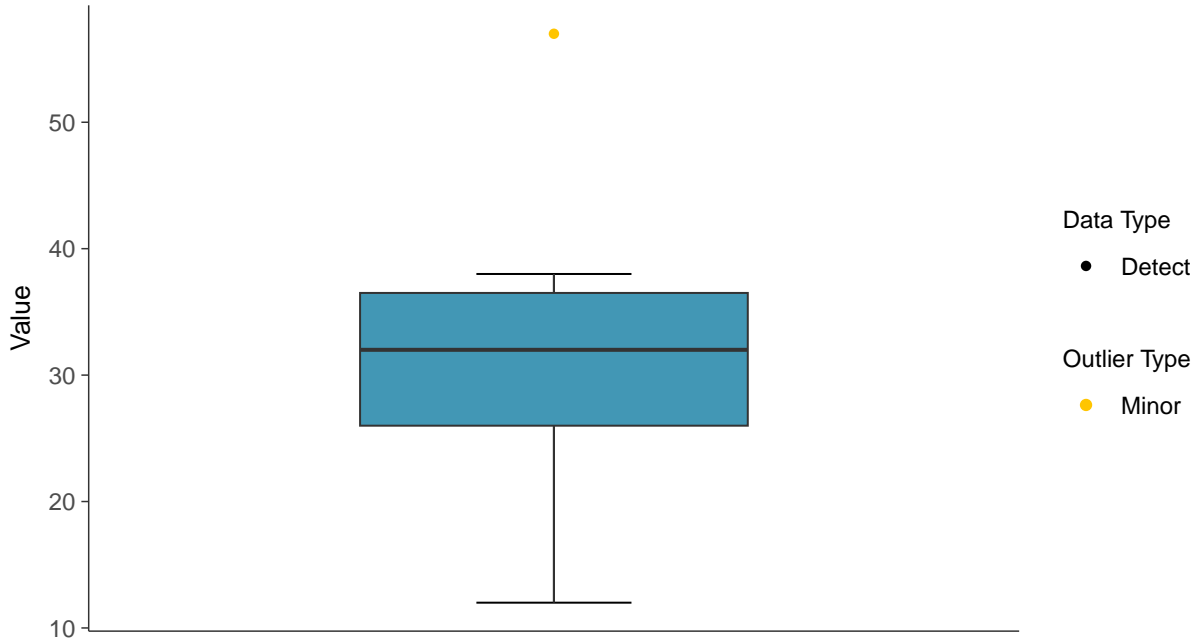
Lithium, MW-17006 (ug/L)





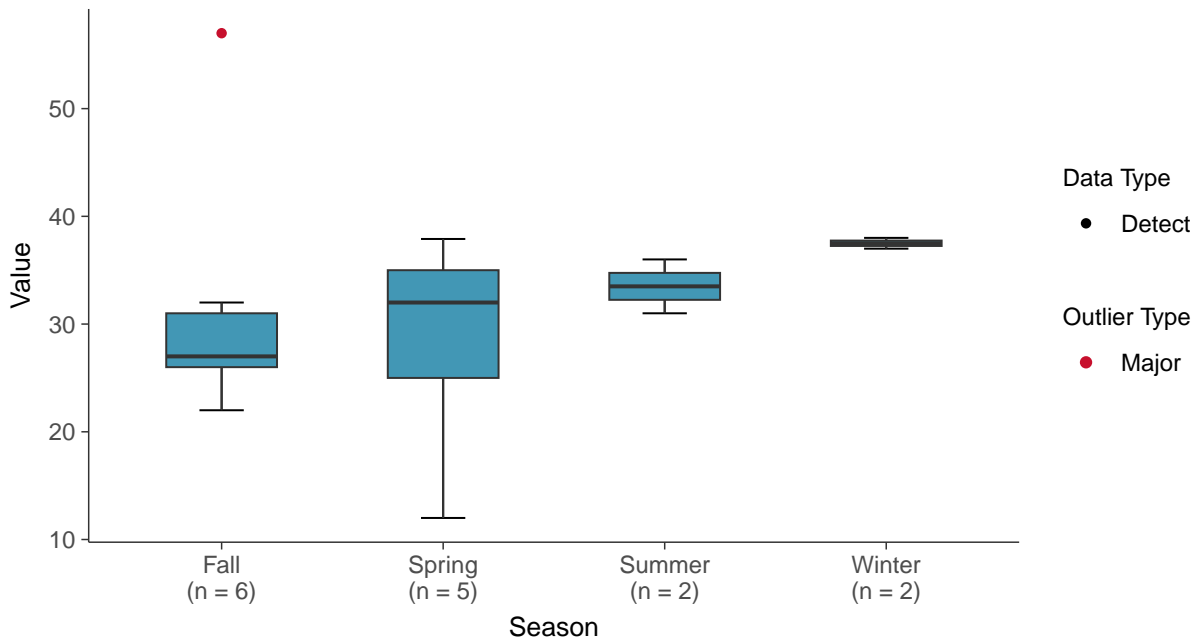
Boxplot

Lithium, MW-17006 (ug/L)



Boxplot by Season

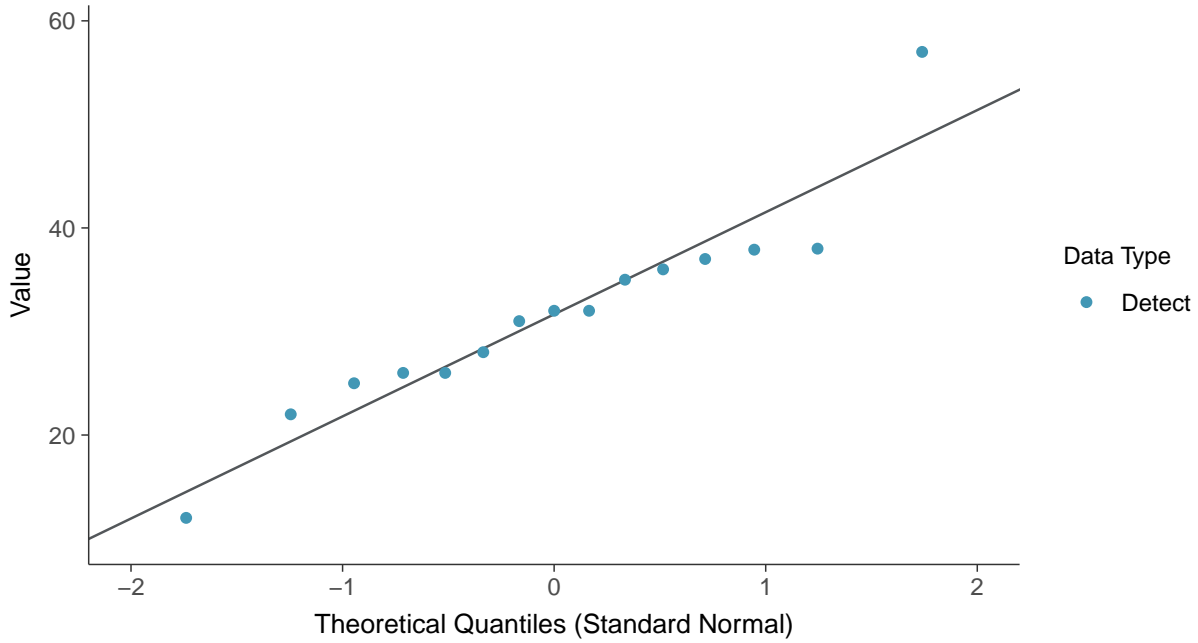
Lithium, MW-17006 (ug/L)





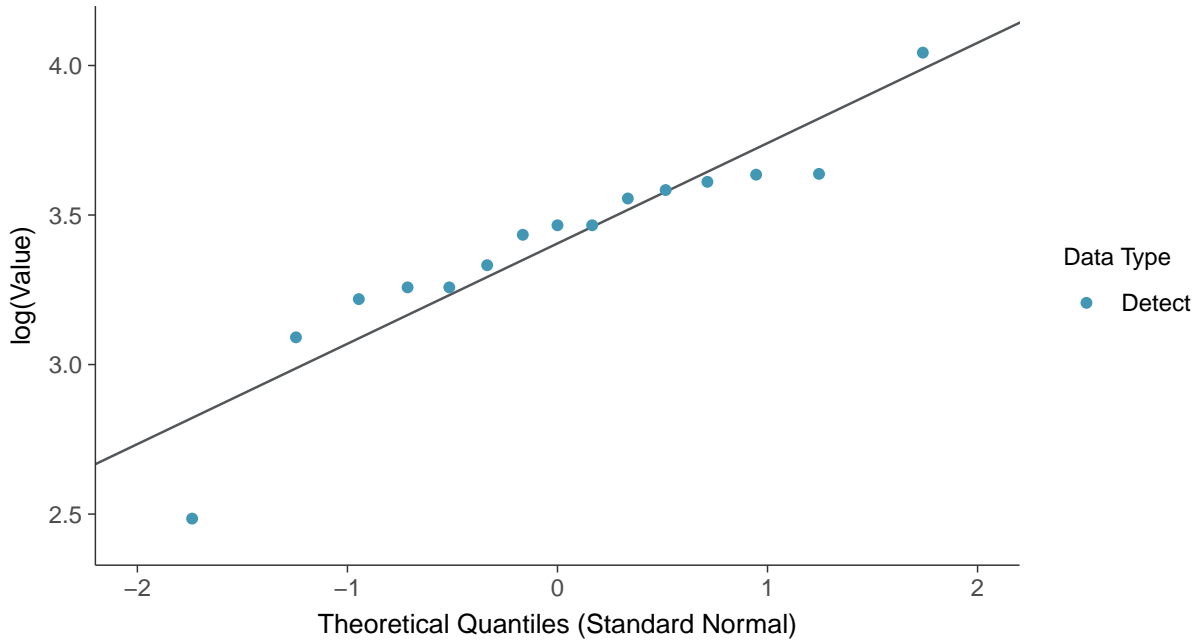
Normal Q-Q plot

Lithium, MW-17006 (ug/L)



Lognormal Q-Q plot

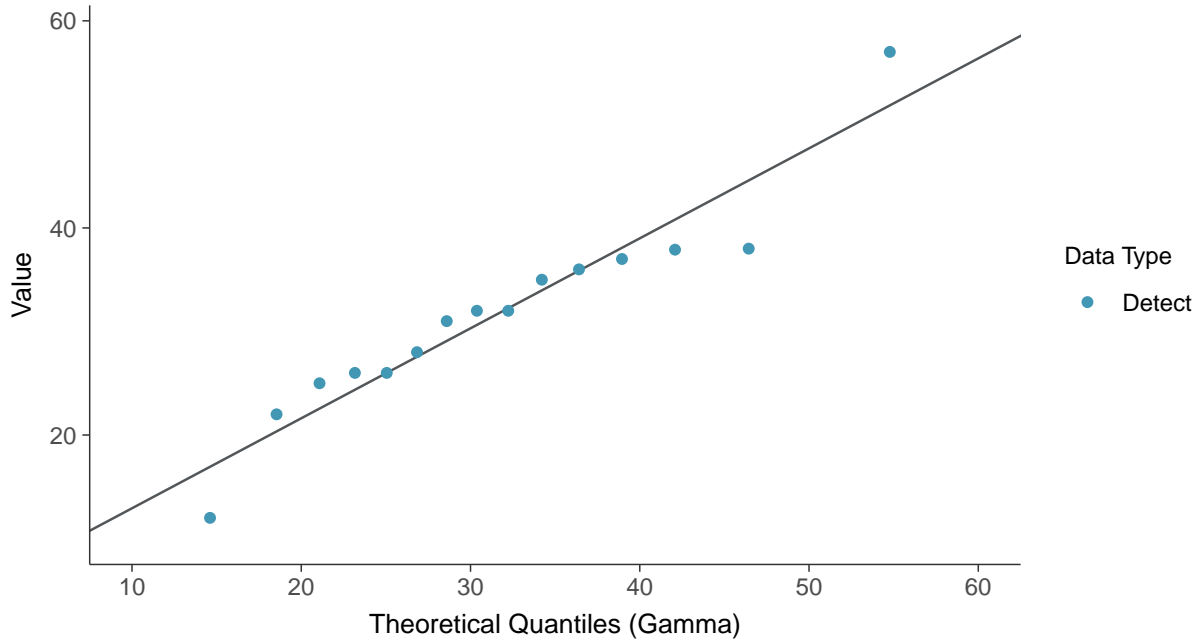
Lithium, MW-17006 (ug/L)





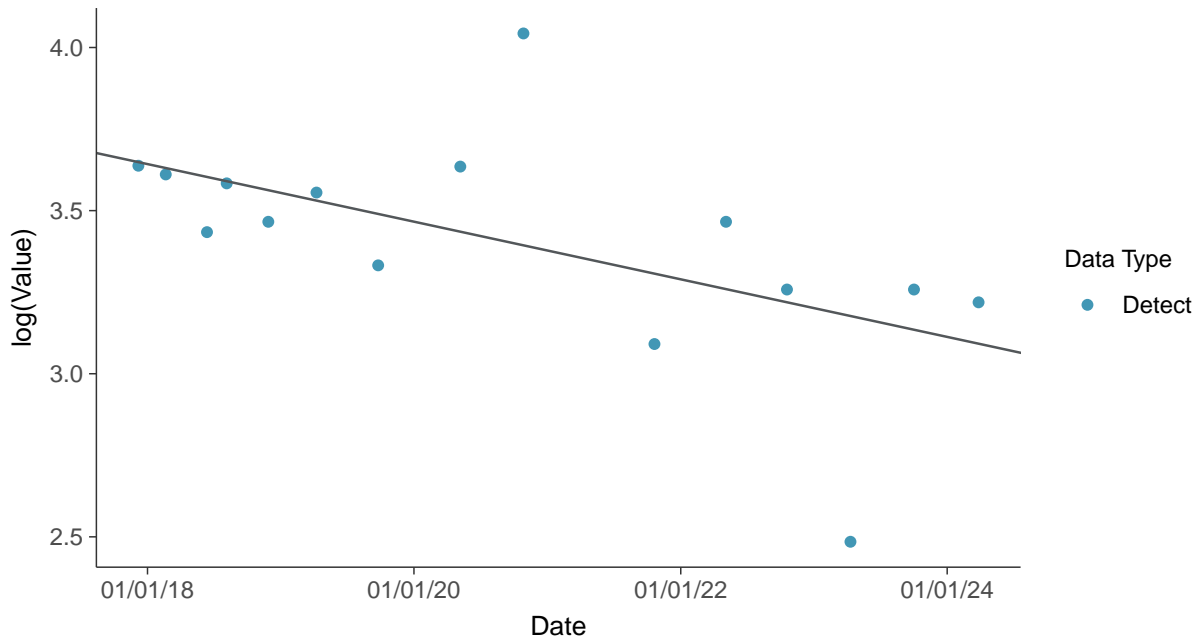
Gamma Q-Q plot

Lithium, MW-17006 (ug/L)



Trend Regression: Lognormal MLE

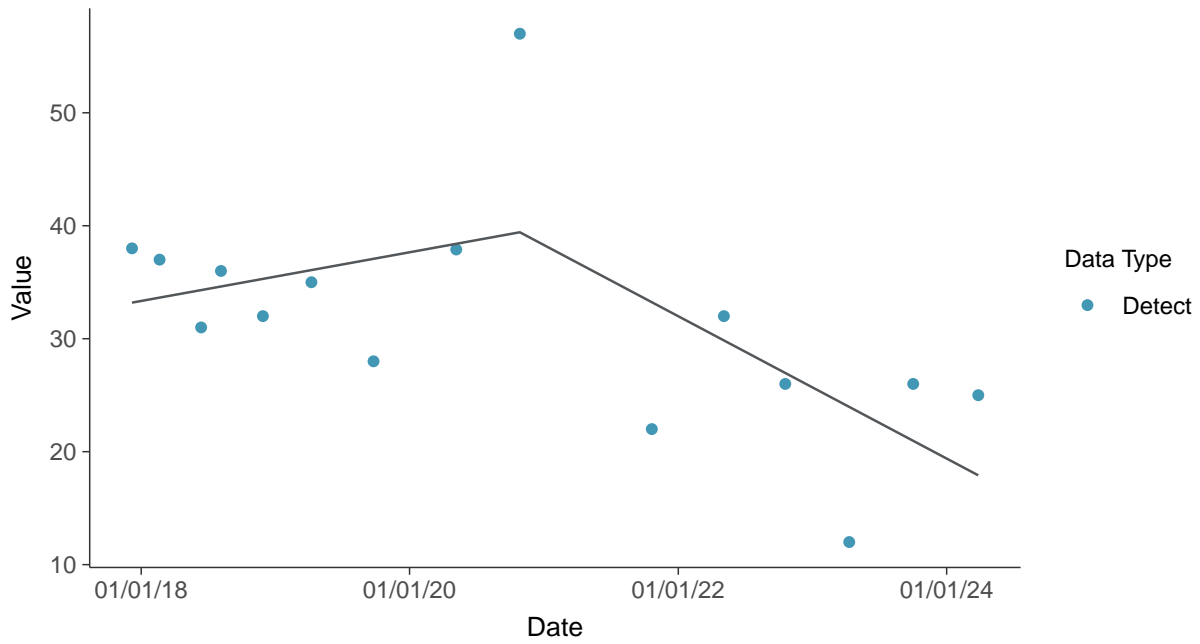
Lithium, MW-17006 (ug/L)





Trend Regression: Piecewise Linear-Linear

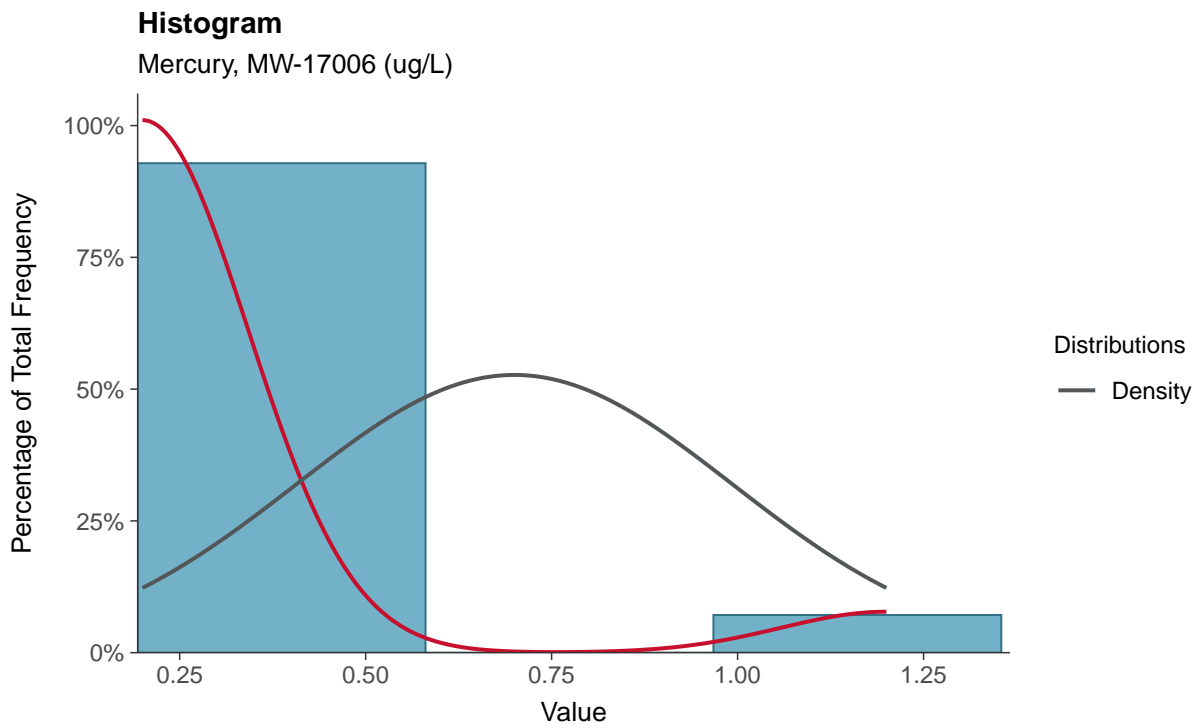
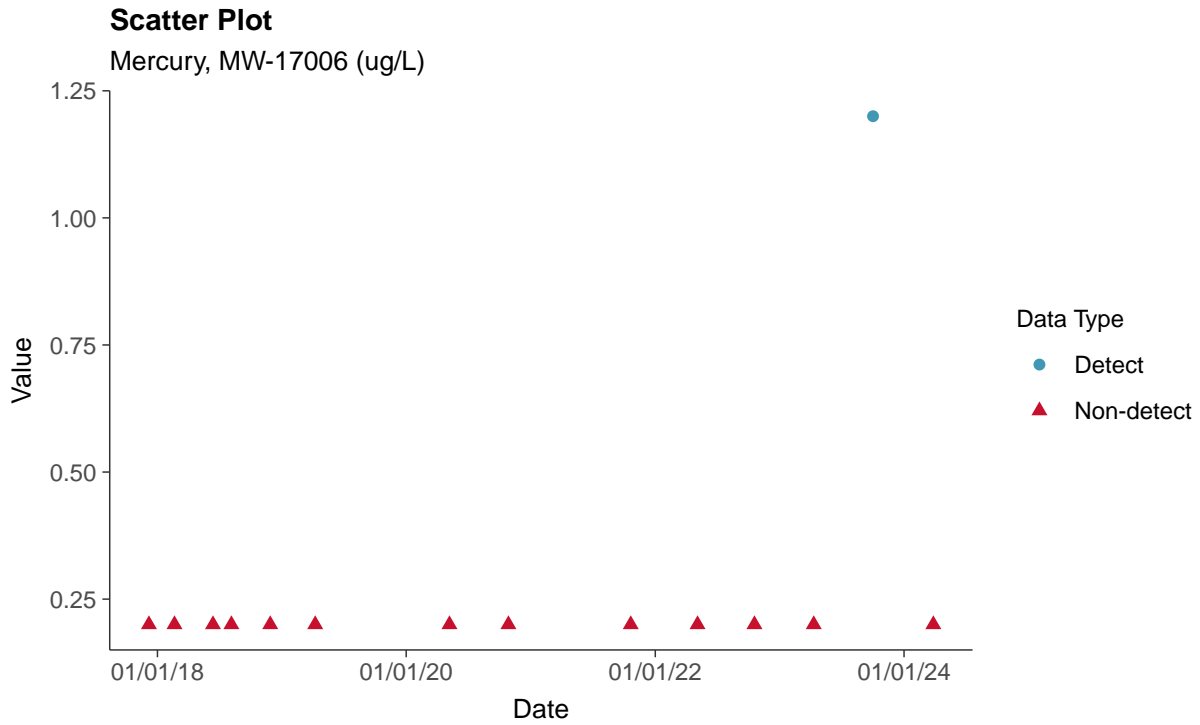
Lithium, MW-17006 (ug/L)





Appendix IV: Mercury, MW-17006

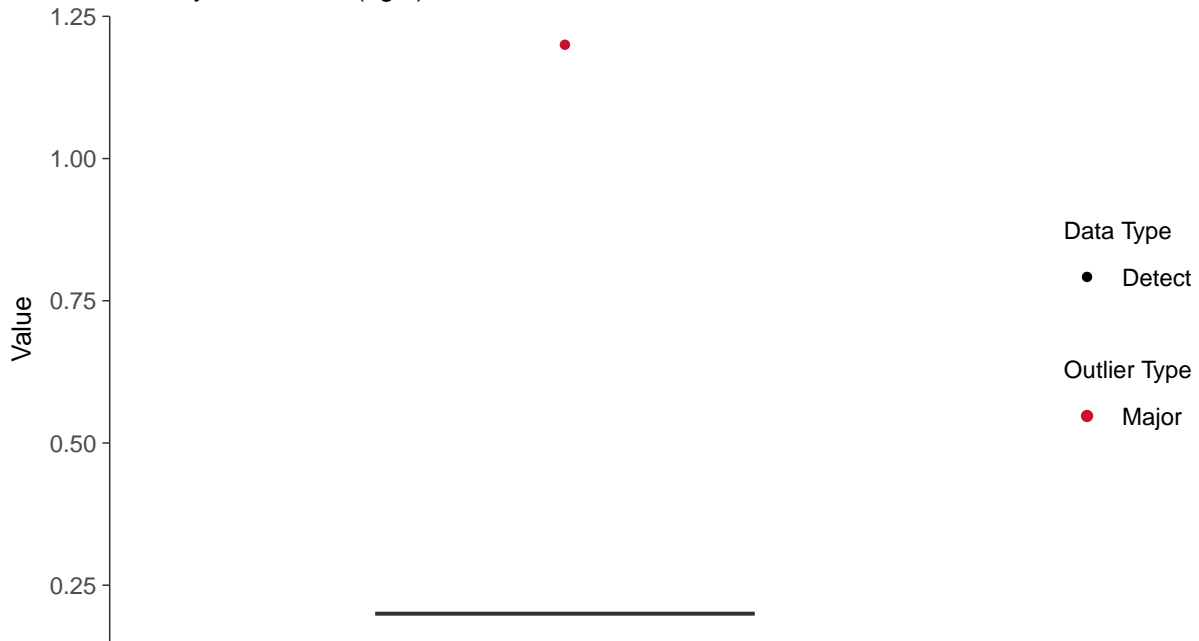
ID: 19_2_118





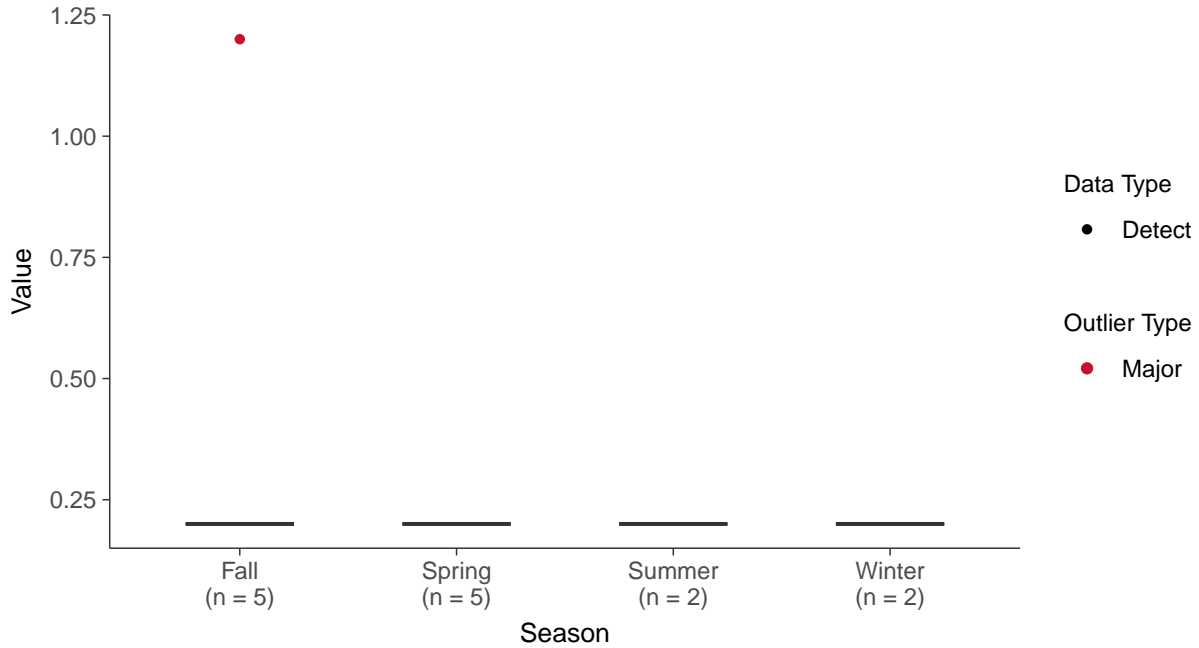
Boxplot

Mercury, MW-17006 (ug/L)



Boxplot by Season

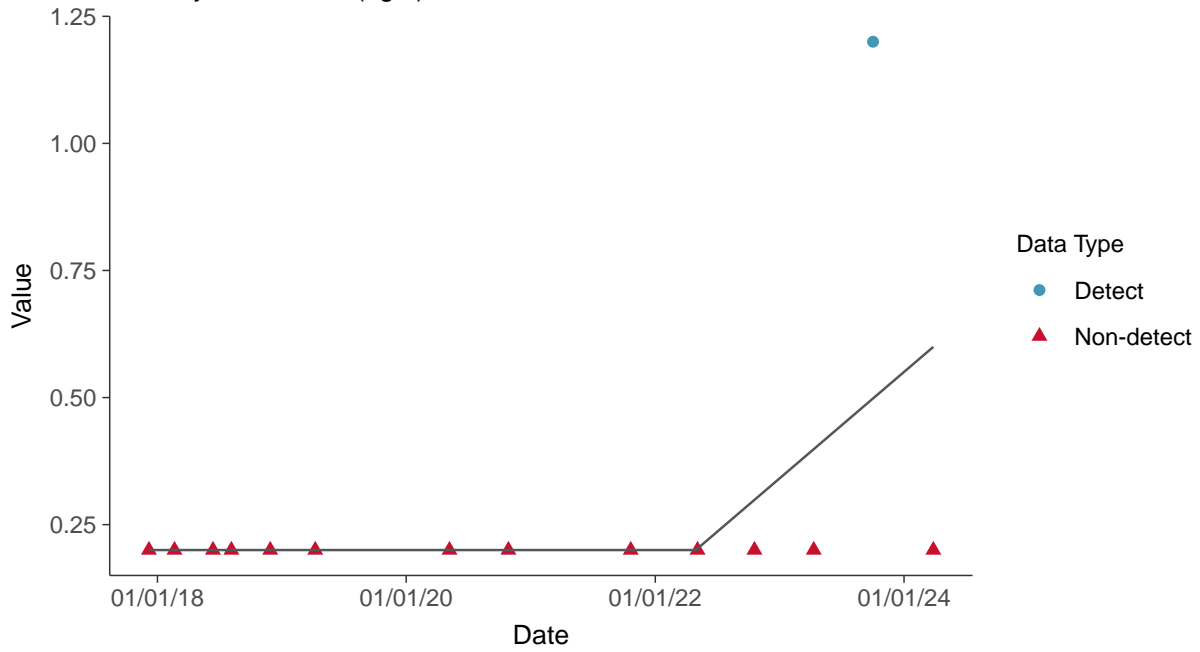
Mercury, MW-17006 (ug/L)





Trend Regression: Piecewise Linear-Linear

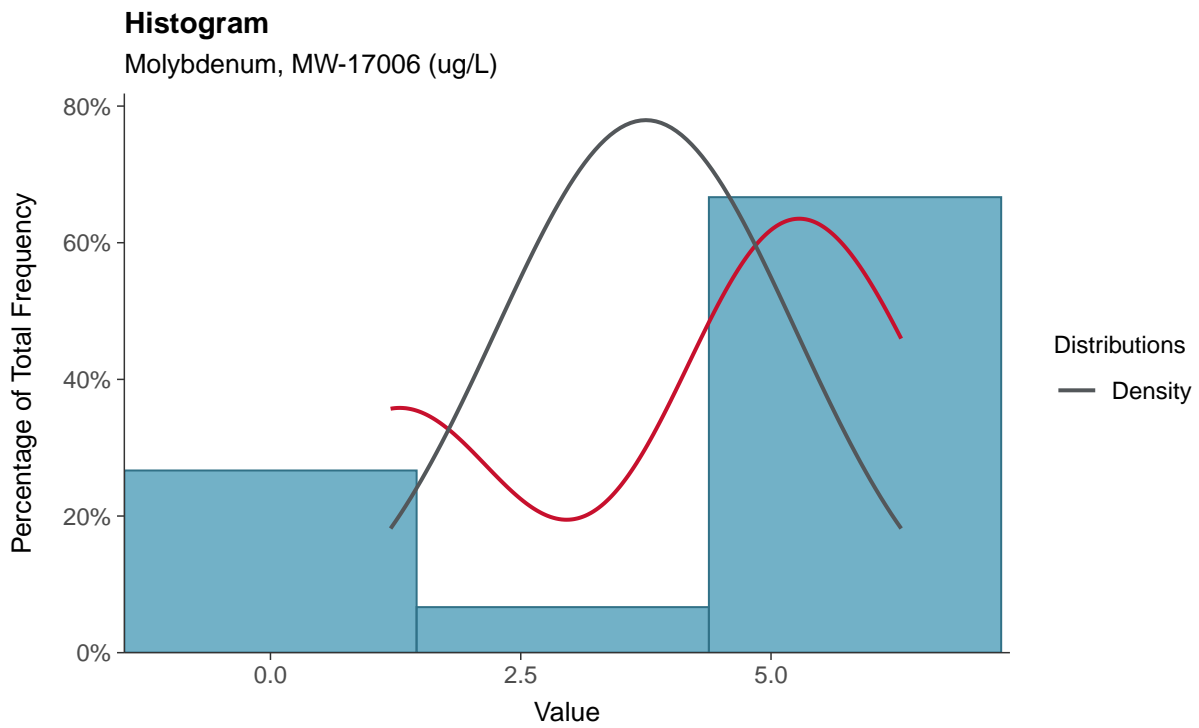
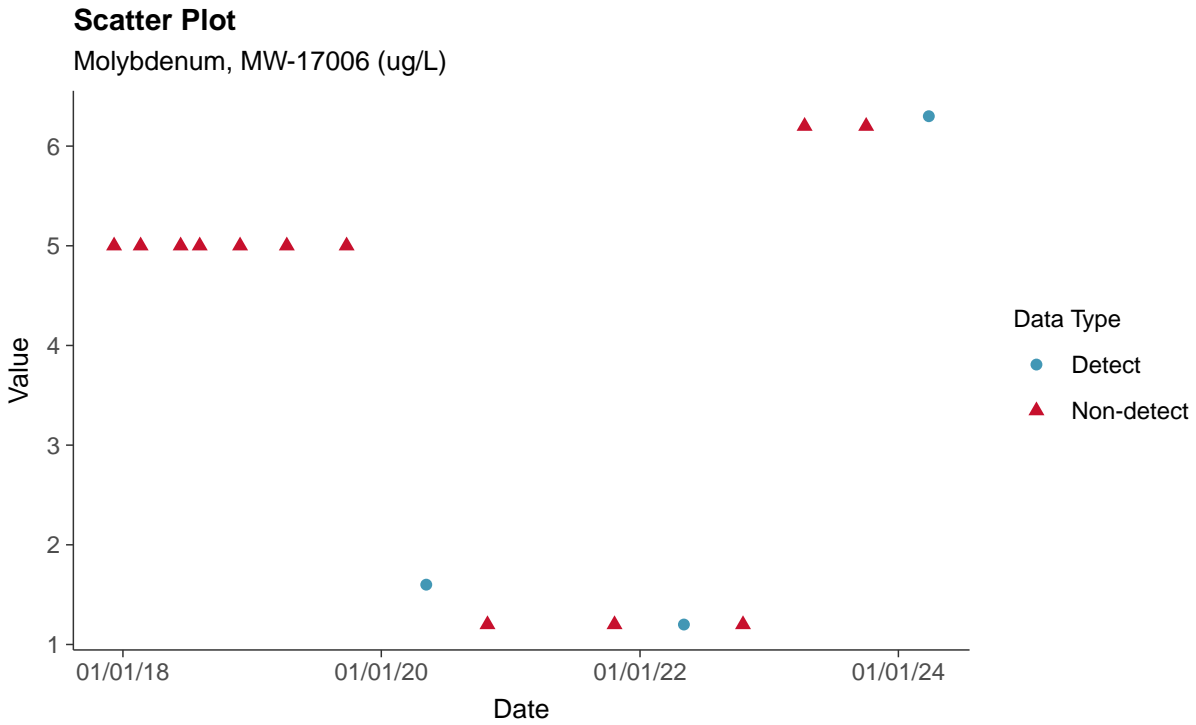
Mercury, MW-17006 (ug/L)





Appendix IV: Molybdenum, MW-17006

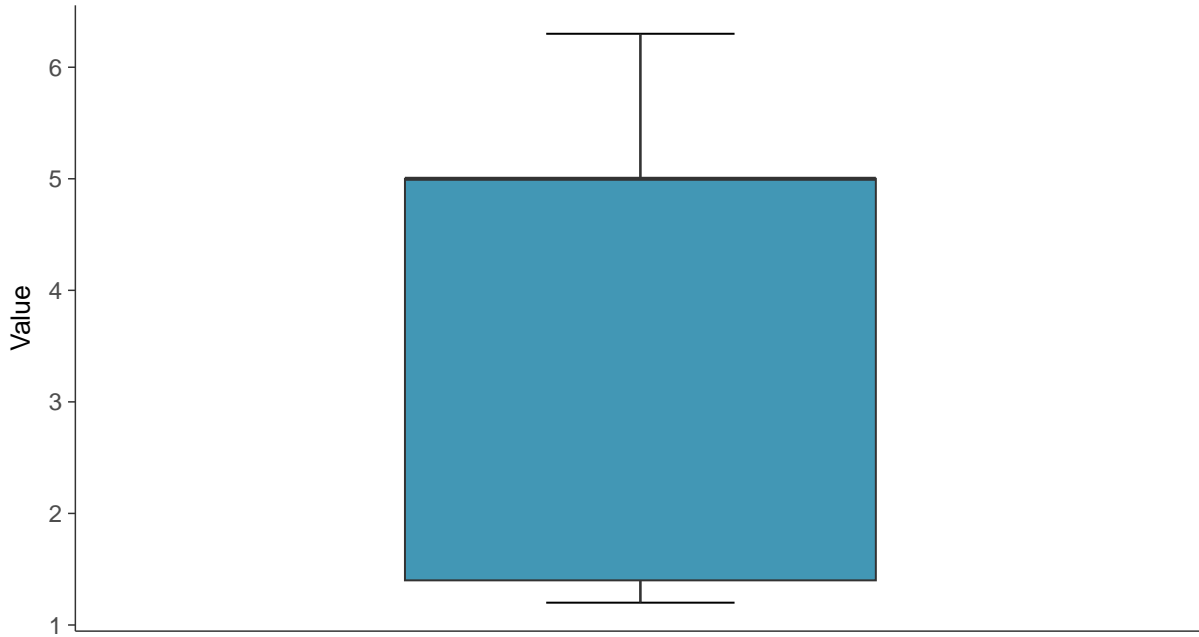
ID: 19_2_119





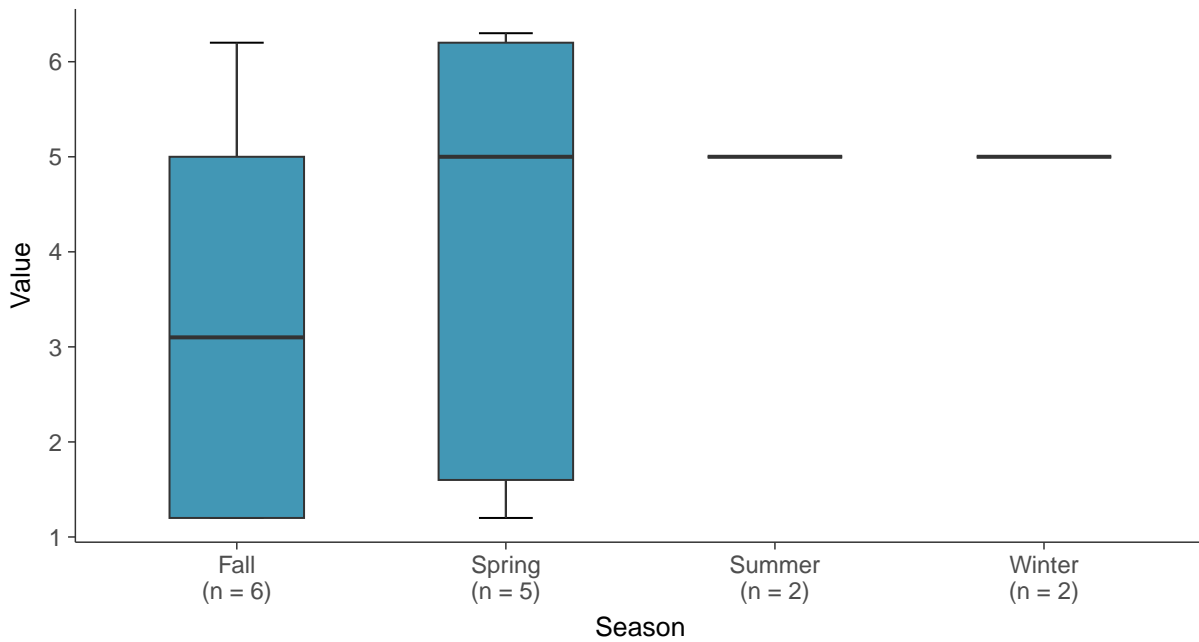
Boxplot

Molybdenum, MW-17006 (ug/L)



Boxplot by Season

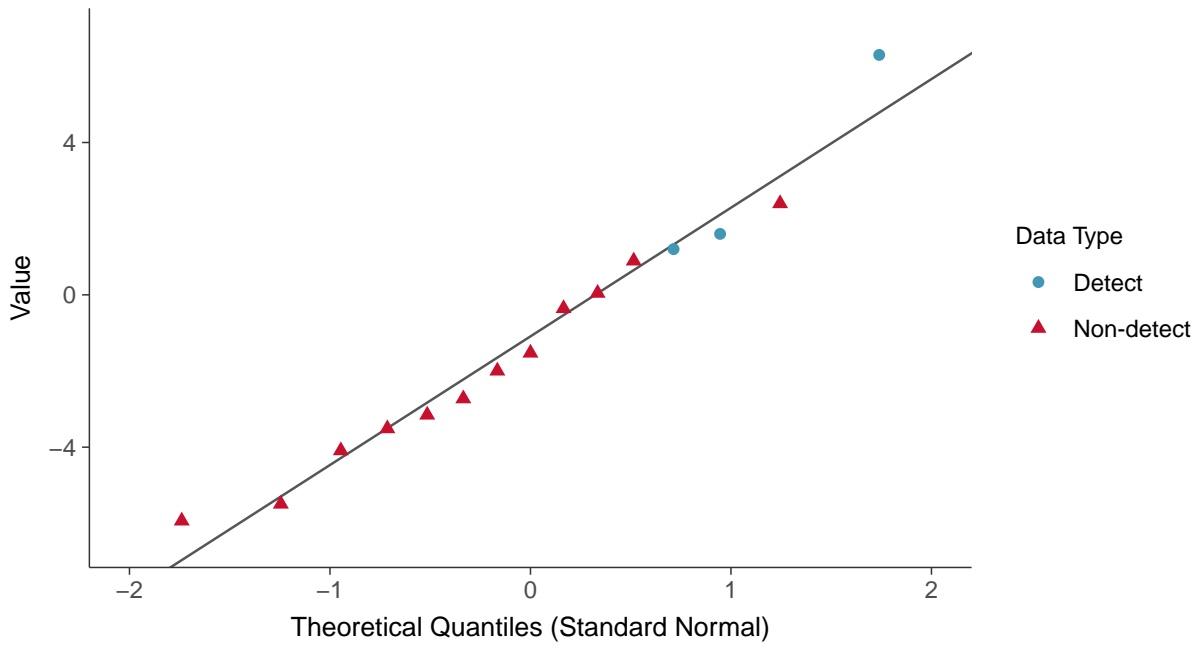
Molybdenum, MW-17006 (ug/L)





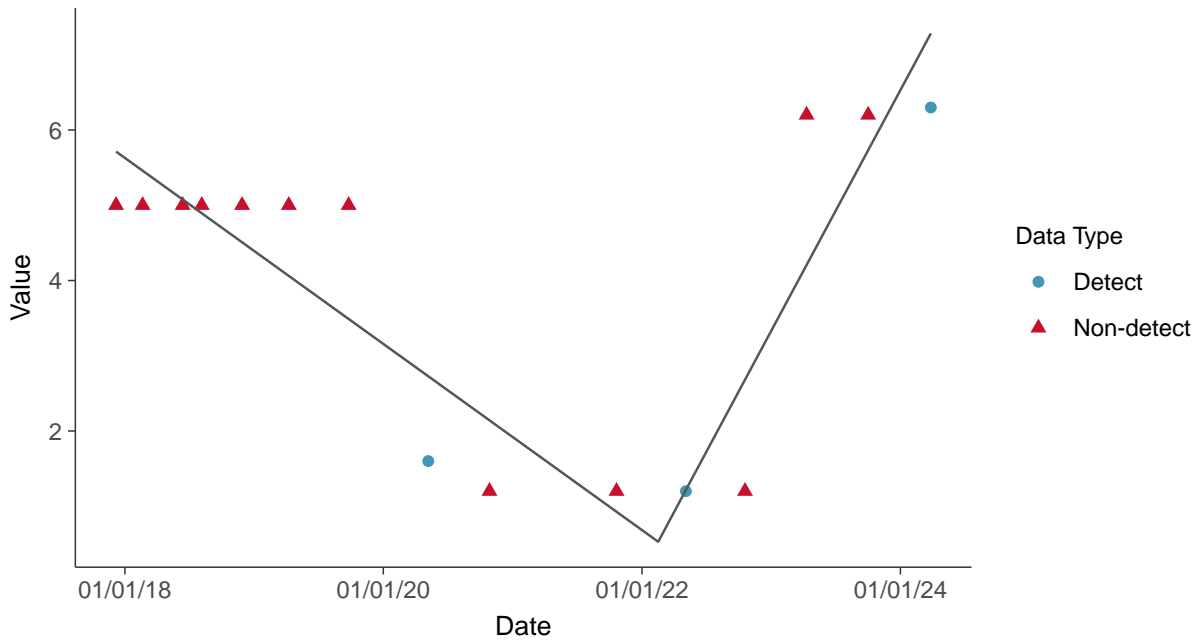
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17006 (ug/L)



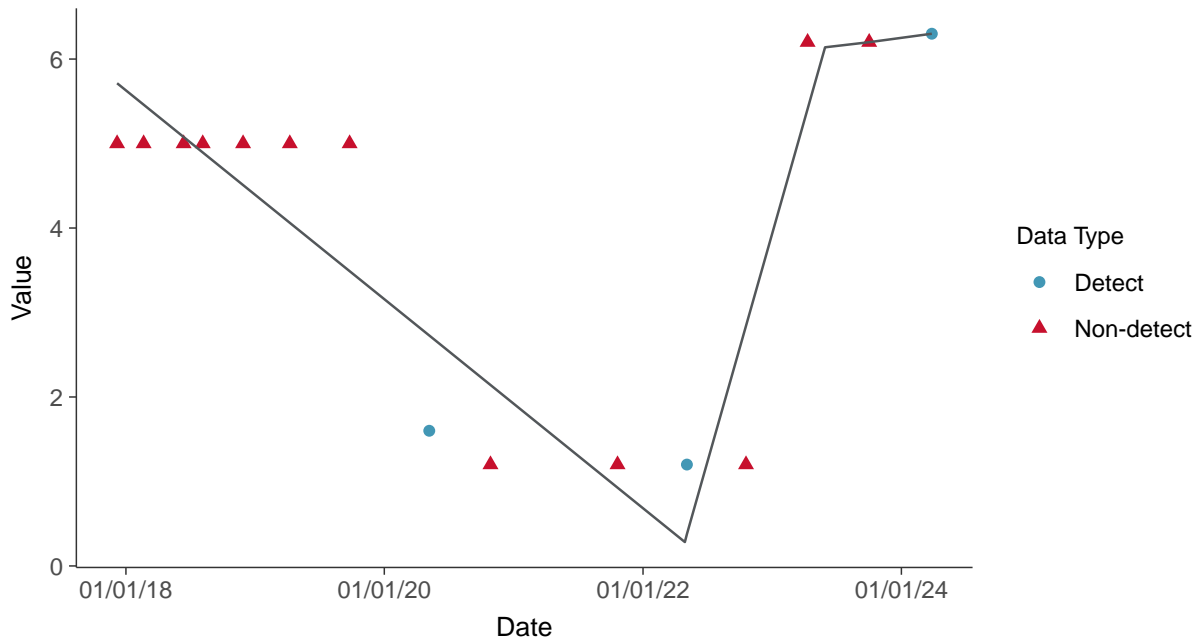
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-17006 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear Molybdenum, MW-17006 (ug/L)



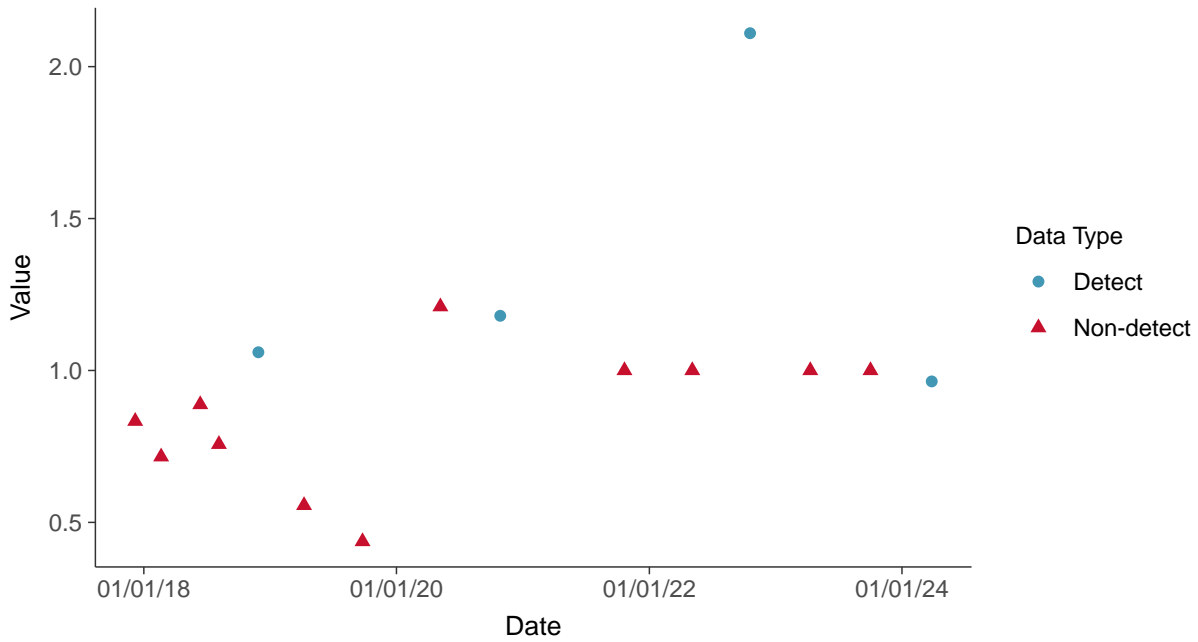


Appendix IV: Radium-226+228, MW-17006

ID: 19_2_125

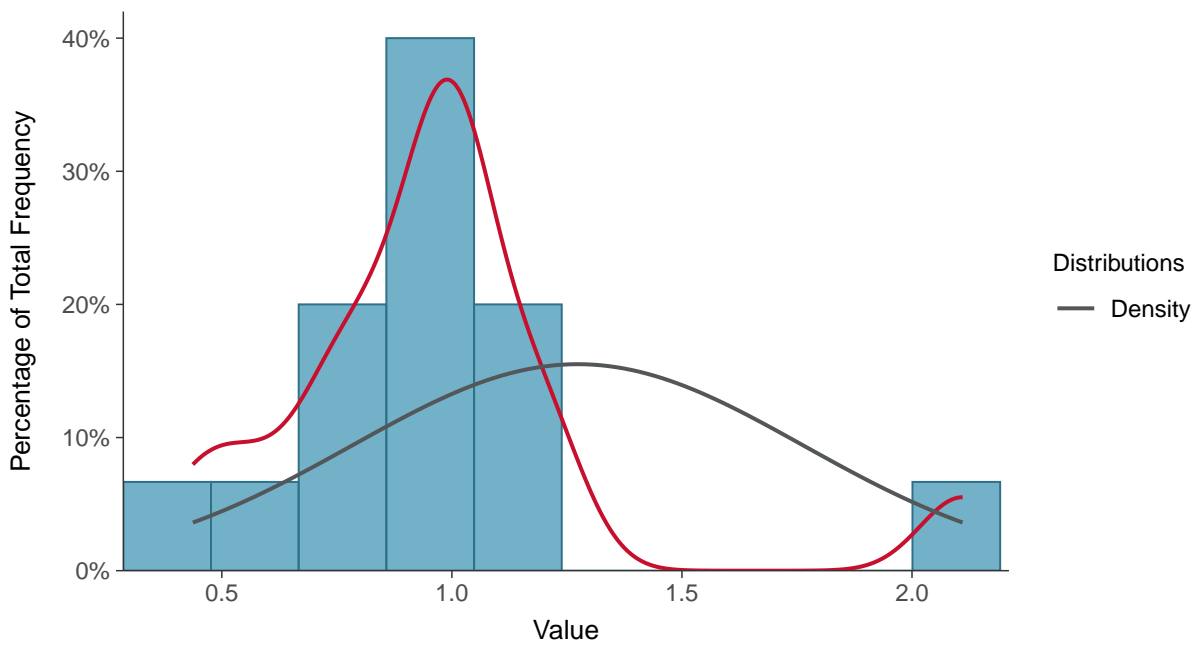
Scatter Plot

Radium-226+228, MW-17006 (pCi/L)



Histogram

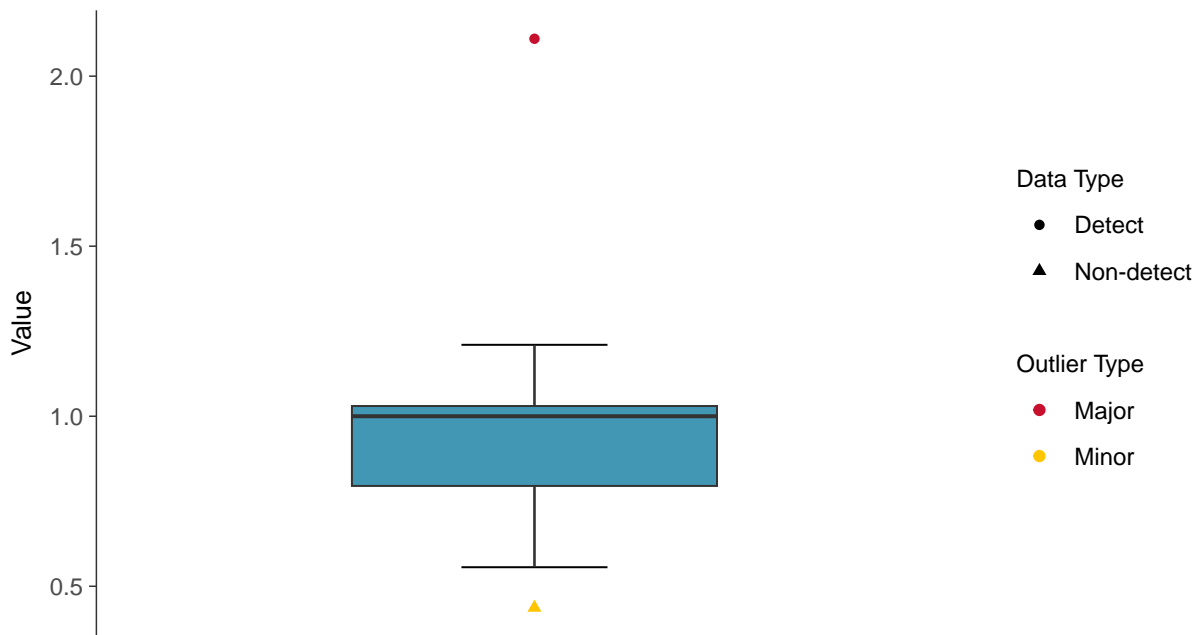
Radium-226+228, MW-17006 (pCi/L)





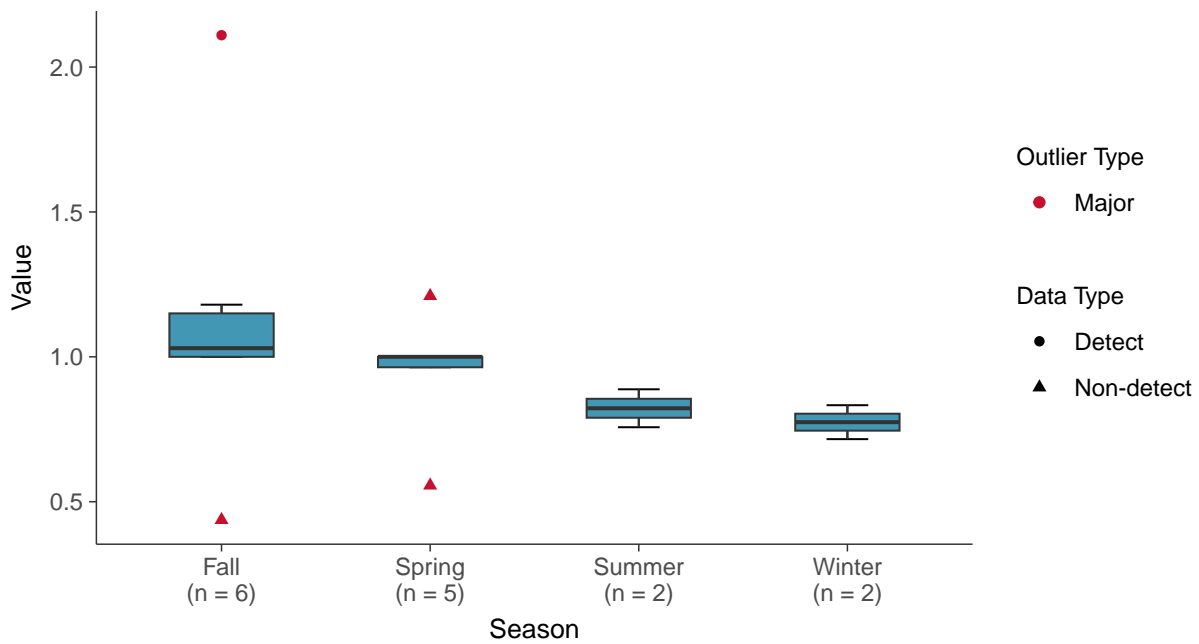
Boxplot

Radium-226+228, MW-17006 (pCi/L)



Boxplot by Season

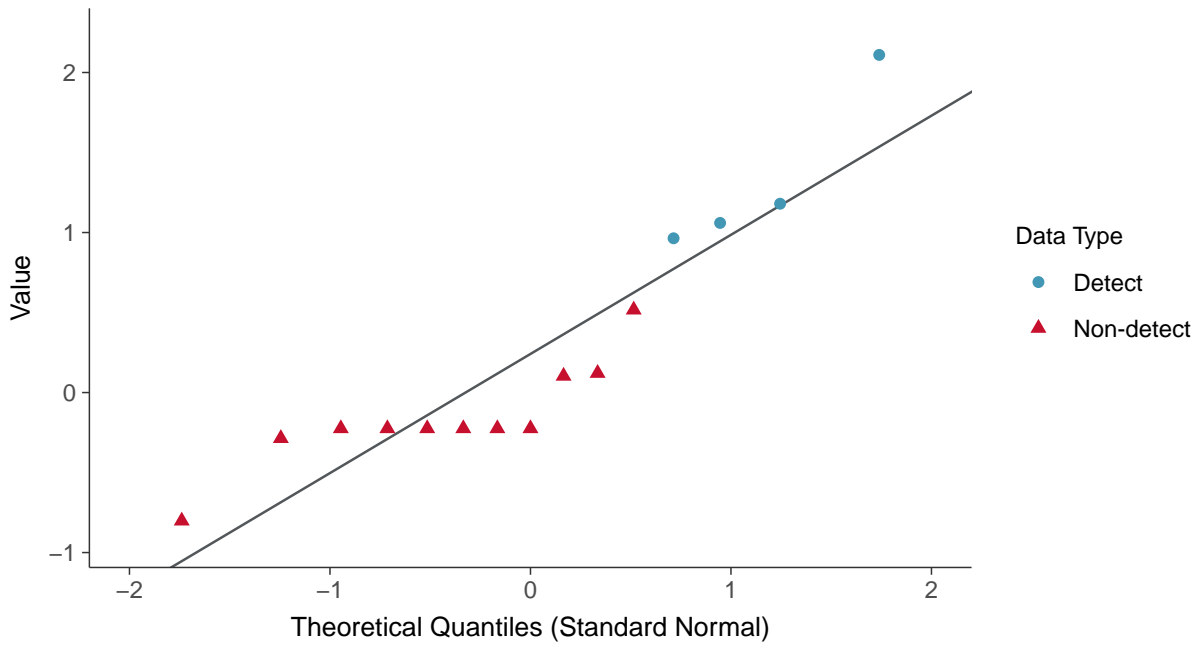
Radium-226+228, MW-17006 (pCi/L)





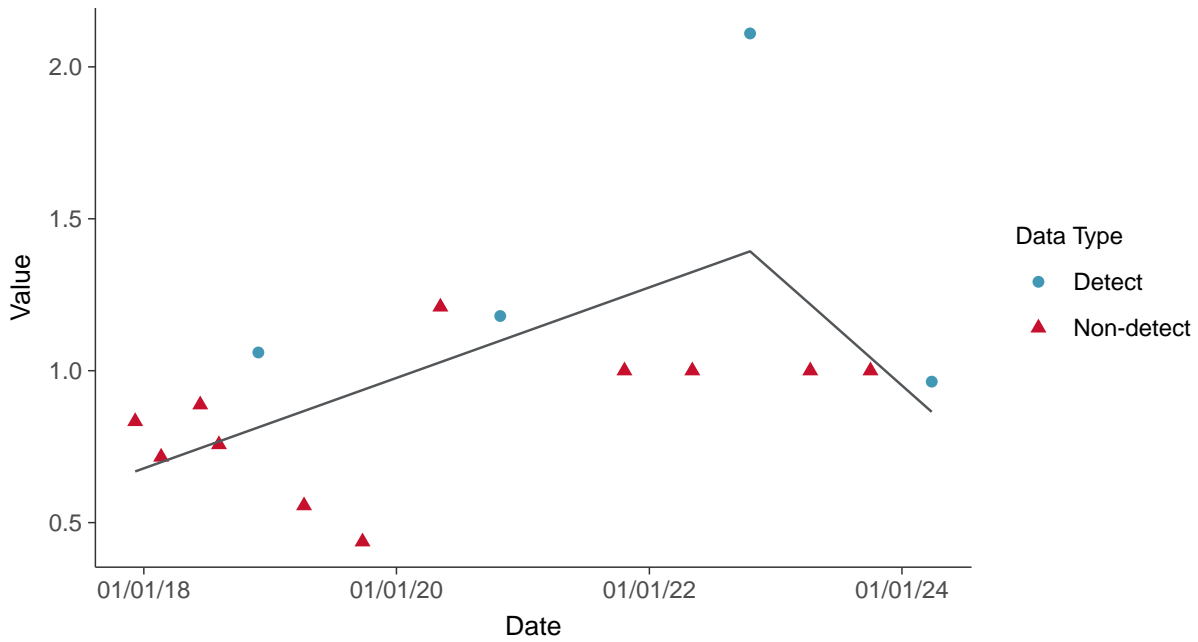
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17006 (pCi/L)



Trend Regression: Piecewise Linear-Linear

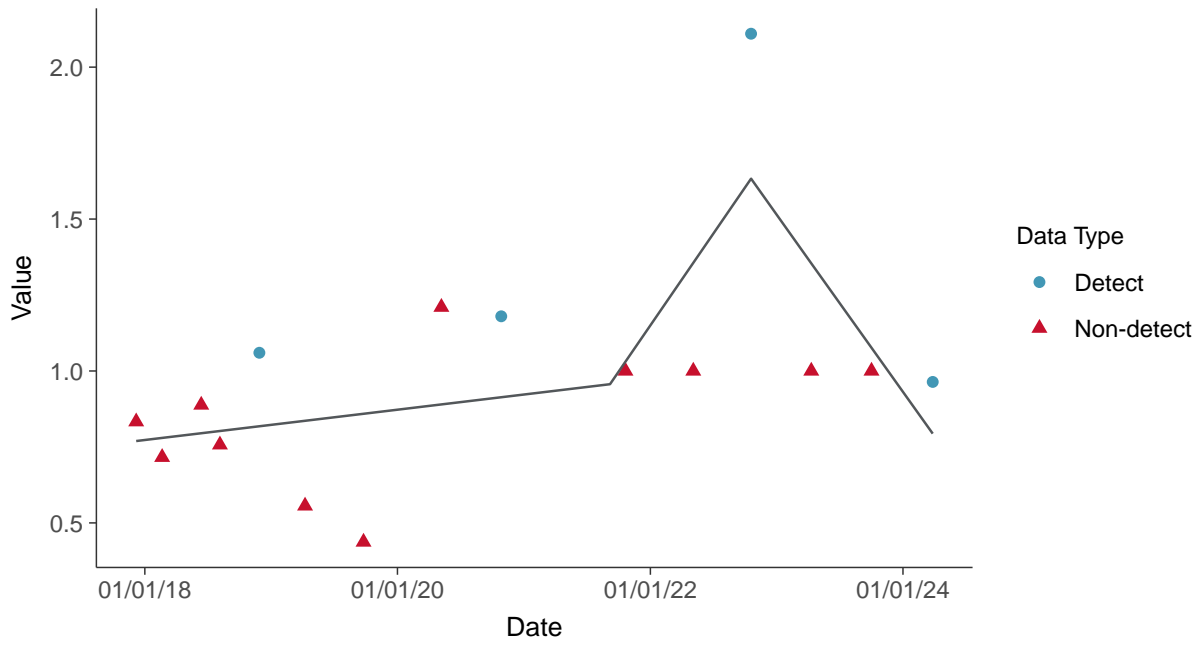
Radium-226+228, MW-17006 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-17006 (pCi/L)



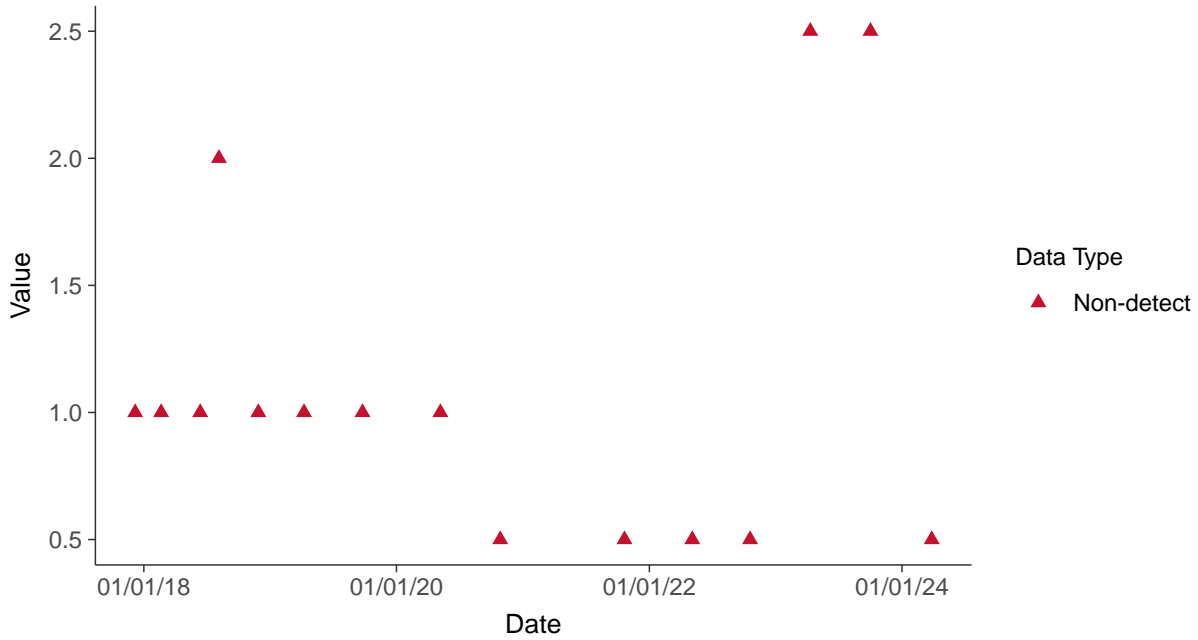


Appendix IV: Selenium, MW-17006

ID: 19_2_127

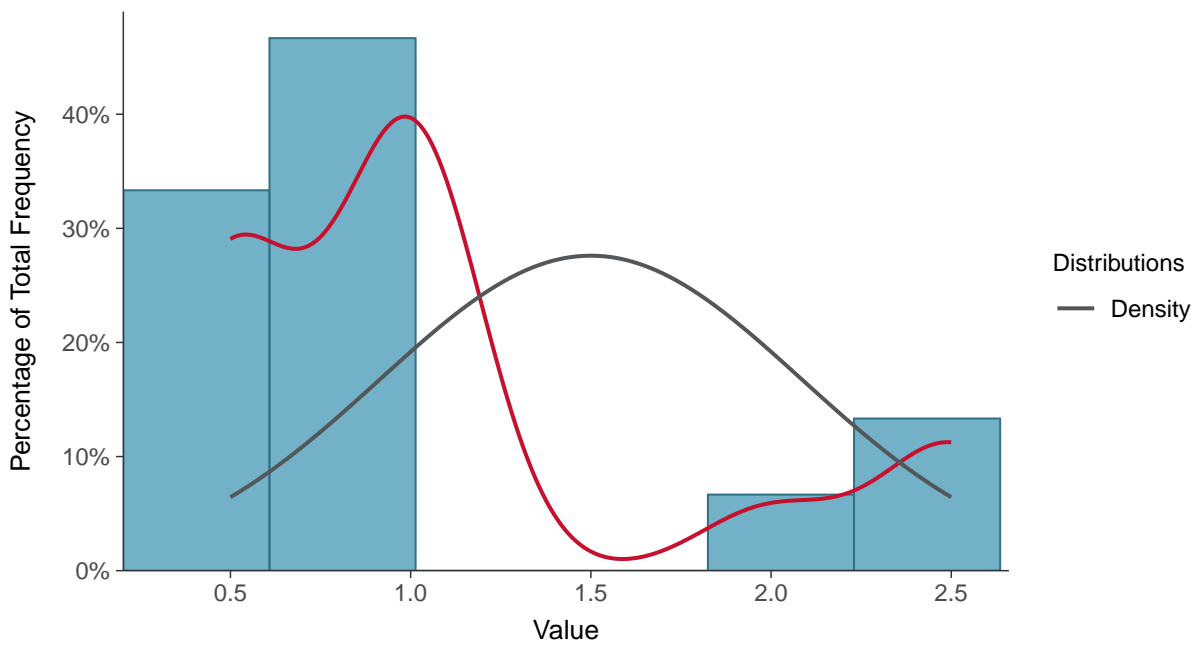
Scatter Plot

Selenium, MW-17006 (ug/L)



Histogram

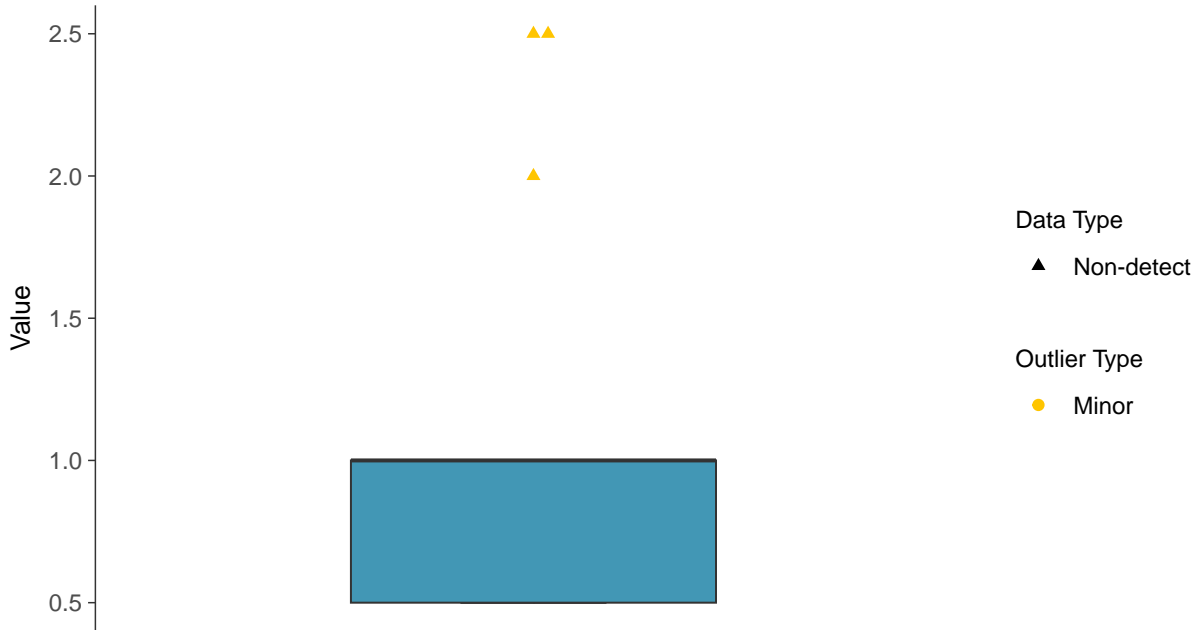
Selenium, MW-17006 (ug/L)





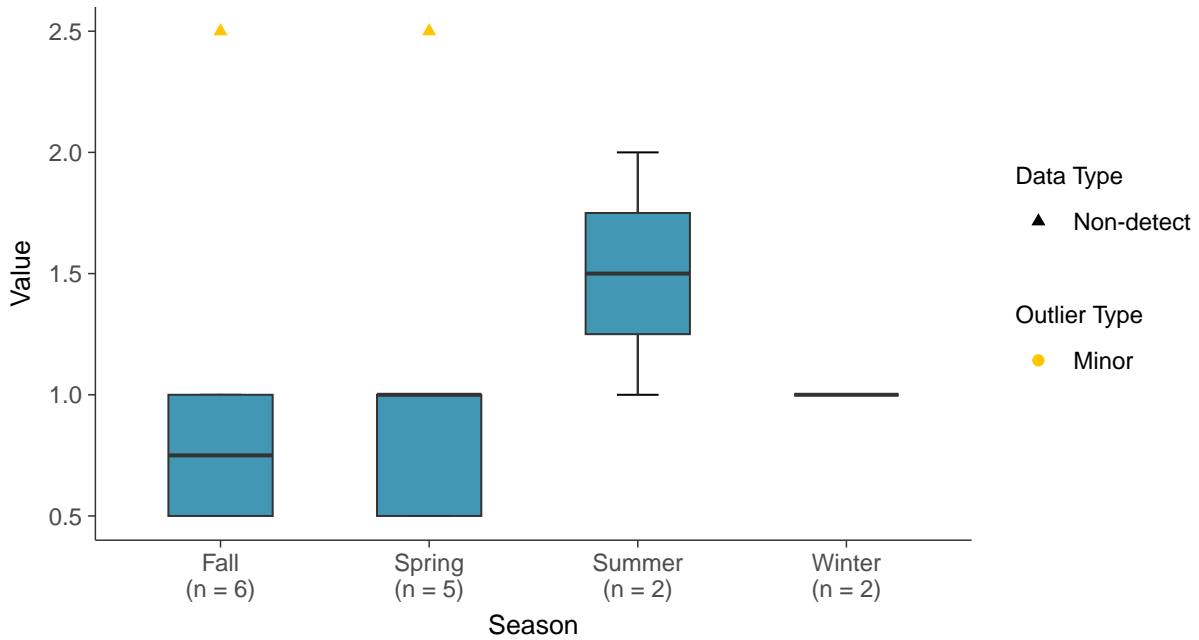
Boxplot

Selenium, MW-17006 (ug/L)



Boxplot by Season

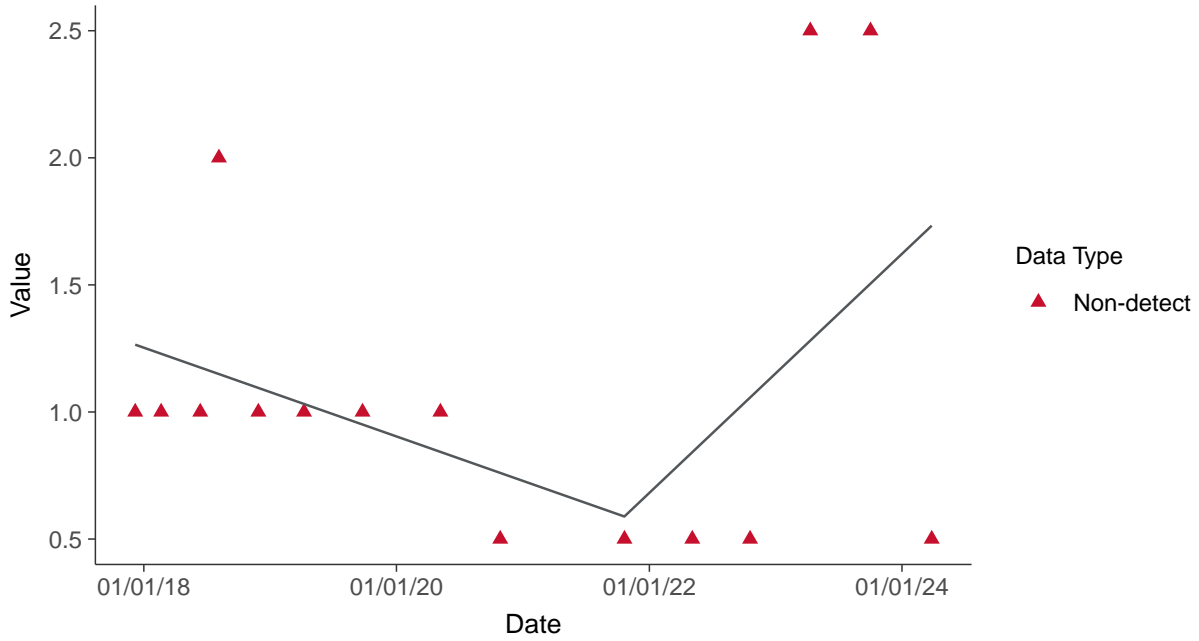
Selenium, MW-17006 (ug/L)





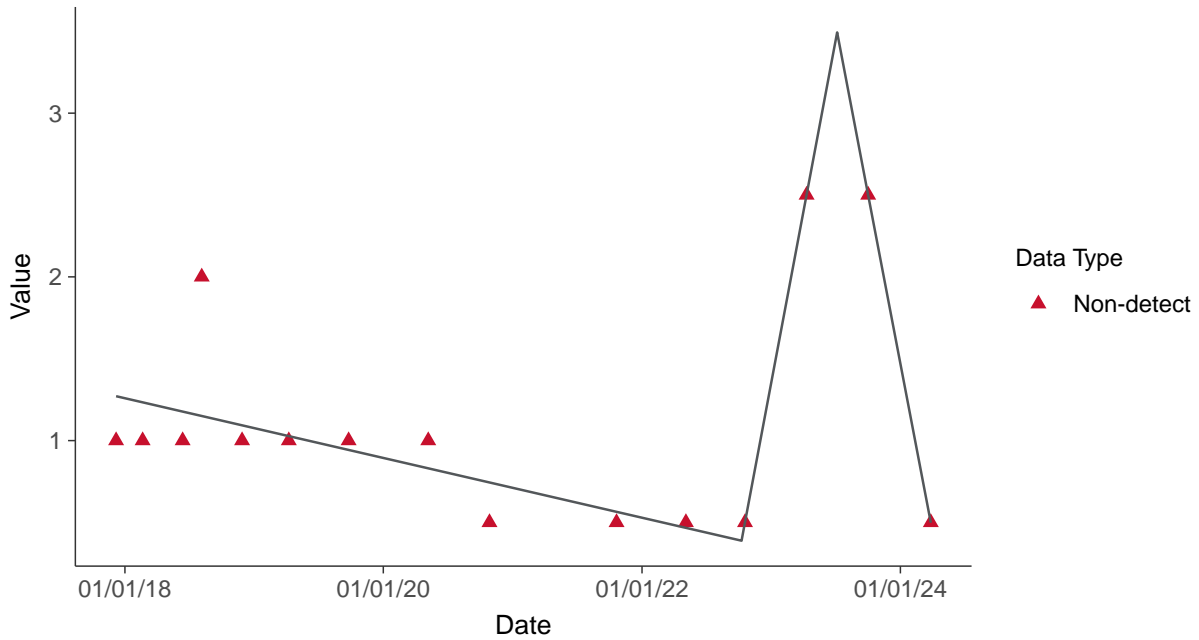
Trend Regression: Piecewise Linear-Linear

Selenium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

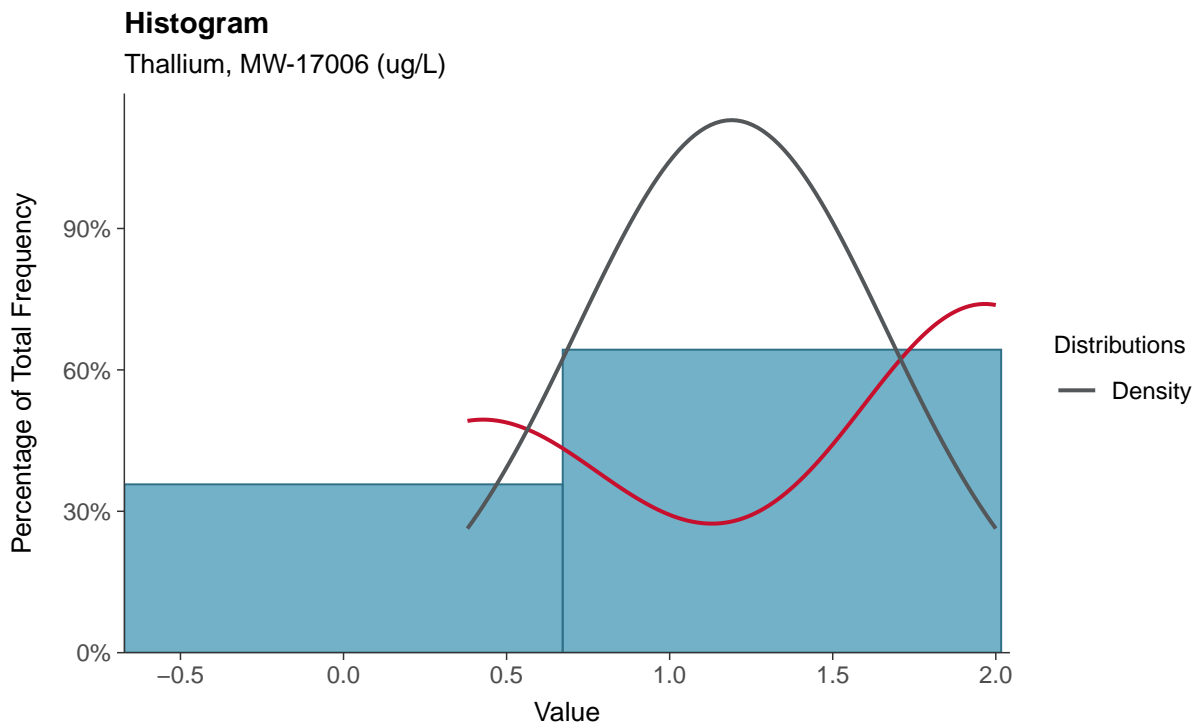
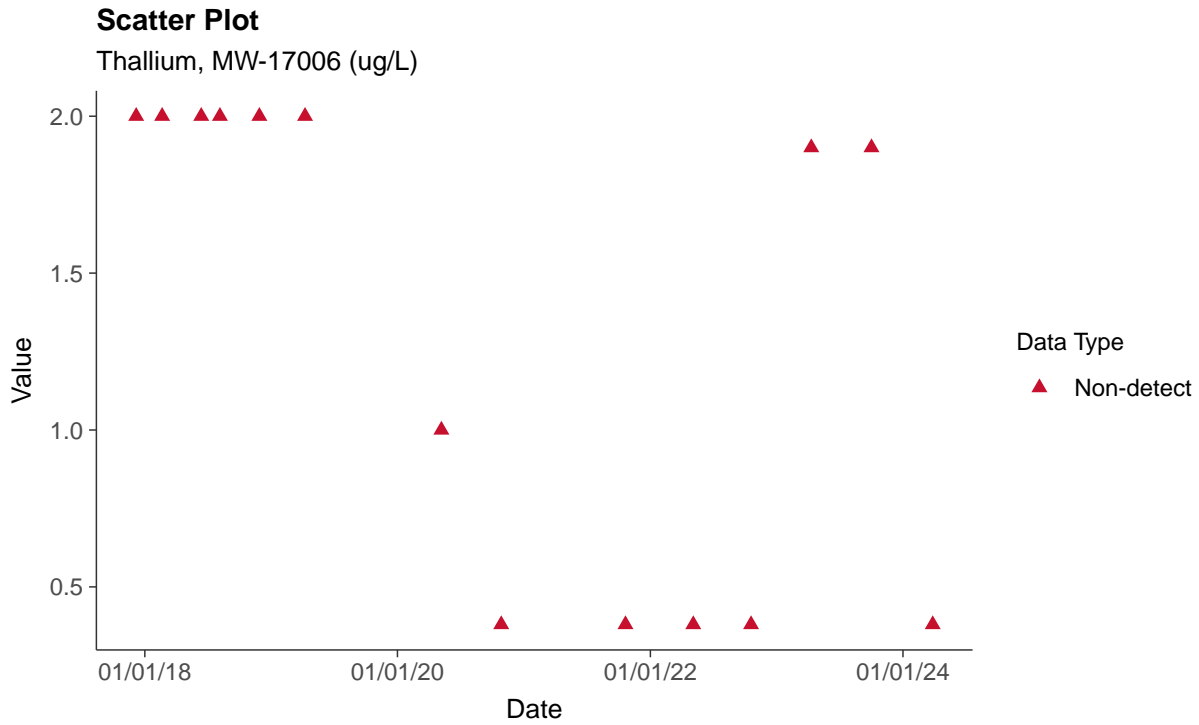
Selenium, MW-17006 (ug/L)





Appendix IV: Thallium, MW-17006

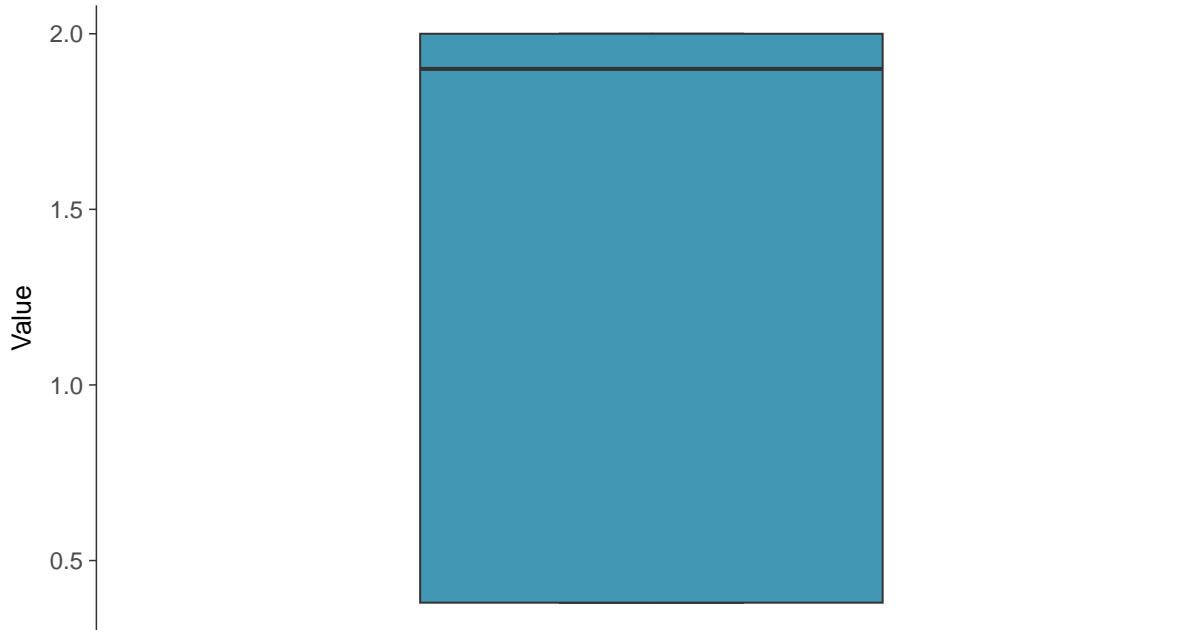
ID: 19_2_131





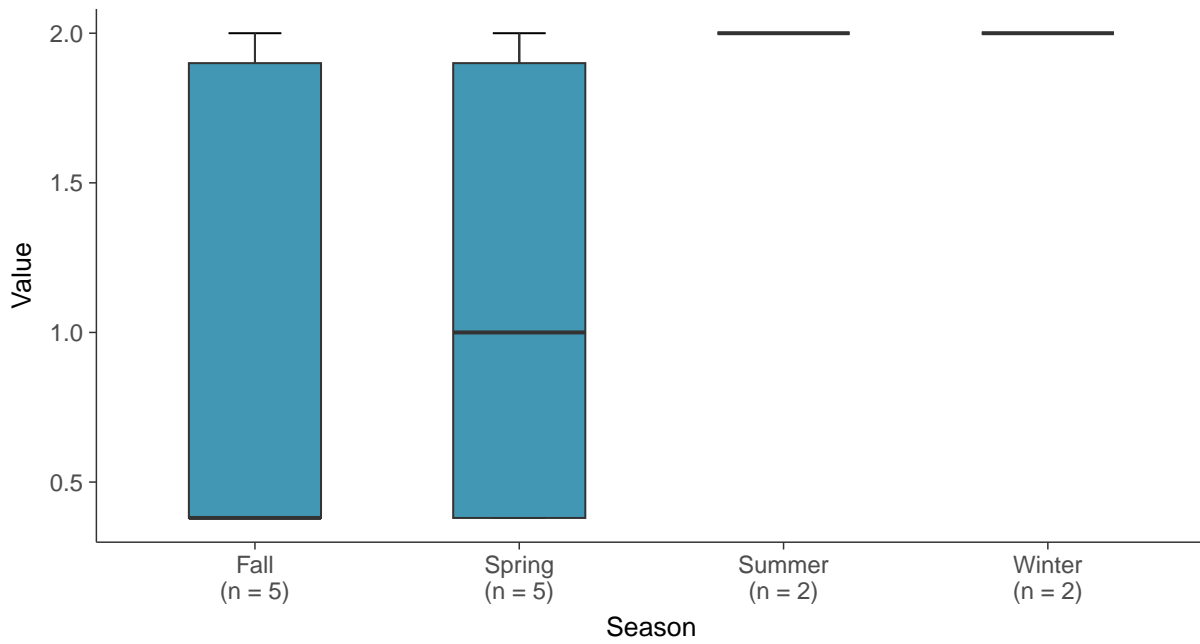
Boxplot

Thallium, MW-17006 (ug/L)



Boxplot by Season

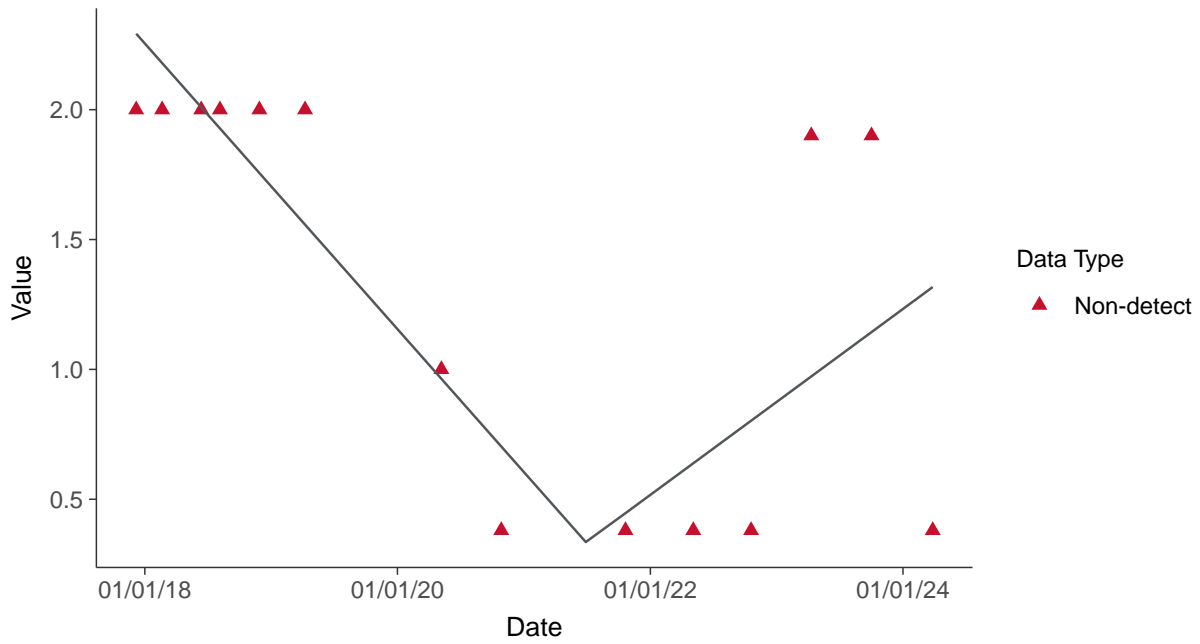
Thallium, MW-17006 (ug/L)





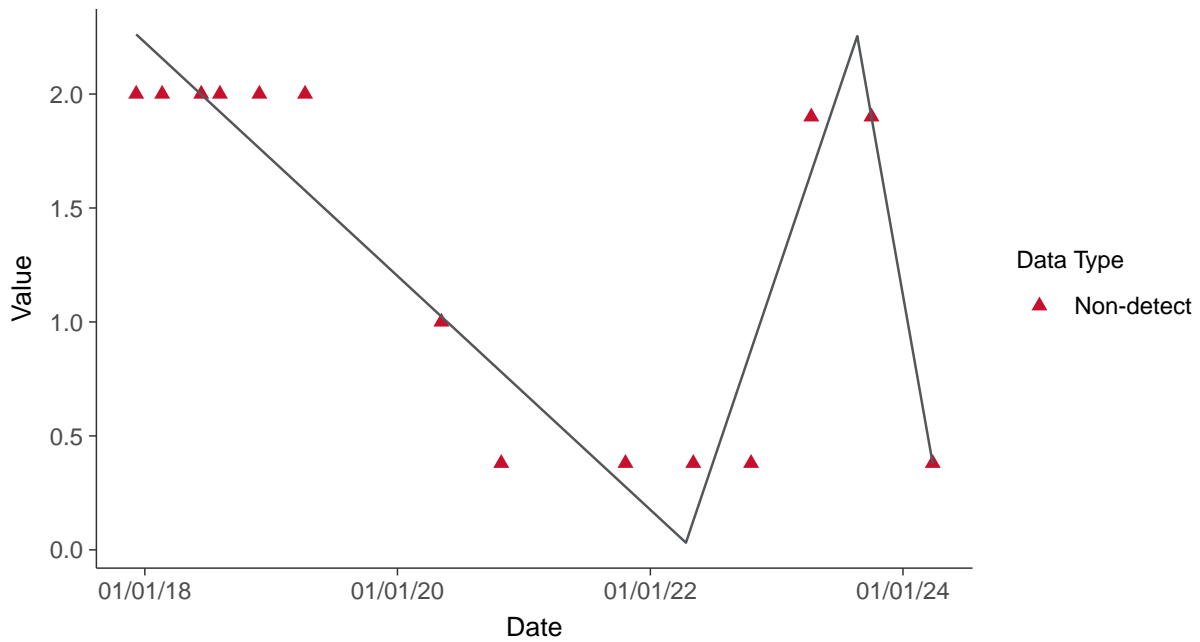
Trend Regression: Piecewise Linear-Linear

Thallium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-17006 (ug/L)



BC Cobb - 95% Lower Confidence Limits for Assessment Monitoring
Downgradient wells as of March, 2024

Well	Type	Constituent	Unit	n	% NDs	Range of Sampling Period	Method	LCL
MW-15009	Appendix IV	Antimony	ug/L	21	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15009	Appendix IV	Arsenic	ug/L	22	5%	2015-12-01 to 2024-03-27	Gamma MLE Normal Approx. LCL	7.5
MW-15009	Appendix IV	Barium	ug/L	22	0%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	12
MW-15009	Appendix IV	Beryllium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15009	Appendix IV	Cadmium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15009	Appendix IV	Chromium	ug/L	22	86%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15009	Appendix IV	Cobalt	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15009	Appendix IV	Fluoride	ug/L	23	87%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	100
MW-15009	Appendix IV	Lead	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15009	Appendix IV	Lithium	ug/L	22	0%	2015-12-01 to 2024-03-27	Normal LCL	19
MW-15009	Appendix IV	Mercury	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15009	Appendix IV	Molybdenum	ug/L	22	41%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median*	5.0
MW-15009	Appendix IV	Radium-226+228	pCi/L	22	86%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.487
MW-15009	Appendix IV	Selenium	ug/L	22	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15009	Appendix IV	Thallium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15010	Appendix IV	Antimony	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15010	Appendix IV	Arsenic	ug/L	23	96%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15010	Appendix IV	Barium	ug/L	23	0%	2015-12-01 to 2024-03-27	Adjusted Gamma LCL	60
MW-15010	Appendix IV	Beryllium	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15010	Appendix IV	Cadmium	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15010	Appendix IV	Chromium	ug/L	23	70%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15010	Appendix IV	Cobalt	ug/L	22	91%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.56
MW-15010	Appendix IV	Fluoride	ug/L	24	58%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	360
MW-15010	Appendix IV	Lead	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-15010	Appendix IV	Lithium	ug/L	23	0%	2015-12-01 to 2024-03-27	Normal LCL	25
MW-15010	Appendix IV	Mercury	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15010	Appendix IV	Molybdenum	ug/L	23	48%	2015-12-01 to 2024-03-27	Gamma MLE Normal Approx. LCL	3.4
MW-15010	Appendix IV	Radium-226+228	pCi/L	23	57%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.820
MW-15010	Appendix IV	Selenium	ug/L	23	91%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15010	Appendix IV	Thallium	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-15013	Appendix IV	Antimony	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15013	Appendix IV	Arsenic	ug/L	22	86%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15013	Appendix IV	Barium	ug/L	22	0%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	45
MW-15013	Appendix IV	Beryllium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15013	Appendix IV	Cadmium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15013	Appendix IV	Chromium	ug/L	22	86%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15013	Appendix IV	Cobalt	ug/L	21	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15013	Appendix IV	Fluoride	ug/L	23	78%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	280
MW-15013	Appendix IV	Lead	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15013	Appendix IV	Lithium	ug/L	22	5%	2015-12-01 to 2024-03-27	Normal MLE LCL	20
MW-15013	Appendix IV	Mercury	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15013	Appendix IV	Molybdenum	ug/L	22	23%	2015-12-01 to 2024-03-27	Gamma MLE Normal Approx. LCL	6.0
MW-15013	Appendix IV	Radium-226+228	pCi/L	22	68%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.598
MW-15013	Appendix IV	Selenium	ug/L	22	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15013	Appendix IV	Thallium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15014R	Appendix IV	Antimony	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15014R	Appendix IV	Arsenic	ug/L	7	71%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.28
MW-15014R	Appendix IV	Barium	ug/L	7	0%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	160
MW-15014R	Appendix IV	Beryllium	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15014R	Appendix IV	Cadmium	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15014R	Appendix IV	Chromium	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15014R	Appendix IV	Cobalt	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.52
MW-15014R	Appendix IV	Fluoride	ug/L	7	0%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	180
MW-15014R	Appendix IV	Lead	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-15014R	Appendix IV	Lithium	ug/L	7	0%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	36
MW-15014R	Appendix IV	Mercury	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15014R	Appendix IV	Molybdenum	ug/L	7	29%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.68
MW-15014R	Appendix IV	Radium-226+228	pCi/L	7	43%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.230
MW-15014R	Appendix IV	Selenium	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-15014R	Appendix IV	Thallium	ug/L	7	100%	2022-02-01 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-15015R	Appendix IV	Antimony	ug/L	10	60%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15015R	Appendix IV	Arsenic	ug/L	10	0%	2020-05-21 to 2024-03-27	Normal LCL	11
MW-15015R	Appendix IV	Barium	ug/L	10	0%	2020-05-21 to 2024-03-27	Normal LCL	100
MW-15015R	Appendix IV	Beryllium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15015R	Appendix IV	Cadmium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15015R	Appendix IV	Chromium	ug/L	10	80%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15015R	Appendix IV	Cobalt	ug/L	10	70%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.31
MW-15015R	Appendix IV	Fluoride	ug/L	10	40%	2020-05-21 to 2024-03-27	Normal MLE LCL	43
MW-15015R	Appendix IV	Lead	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-15015R	Appendix IV	Lithium	ug/L	10	0%	2020-05-21 to 2024-03-27	Adjusted Gamma LCL	29

MW-15015R	Appendix IV	Mercury	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15015R	Appendix IV	Molybdenum	ug/L	10	0%	2020-05-21 to 2024-03-27	Adjusted Gamma LCL	60
MW-15015R	Appendix IV	Radium-226+228	pCi/L	10	60%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.630
MW-15015R	Appendix IV	Selenium	ug/L	10	70%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-15015R	Appendix IV	Thallium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-15016R	Appendix IV	Antimony	ug/L	10	80%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.22
MW-15016R	Appendix IV	Arsenic	ug/L	10	20%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	1.4
MW-15016R	Appendix IV	Barium	ug/L	10	0%	2020-05-21 to 2024-03-27	Normal LCL	900
MW-15016R	Appendix IV	Beryllium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15016R	Appendix IV	Cadmium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15016R	Appendix IV	Chromium	ug/L	10	20%	2020-05-21 to 2024-03-27	Normal MLE LCL	0.71
MW-15016R	Appendix IV	Cobalt	ug/L	10	20%	2020-05-21 to 2024-03-27	Normal MLE LCL	0.88
MW-15016R	Appendix IV	Fluoride	ug/L	10	80%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	81
MW-15016R	Appendix IV	Lead	ug/L	10	90%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-15016R	Appendix IV	Lithium	ug/L	10	30%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	4.8
MW-15016R	Appendix IV	Mercury	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15016R	Appendix IV	Molybdenum	ug/L	10	80%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	1.2
MW-15016R	Appendix IV	Radium-226+228	pCi/L	10	0%	2020-05-21 to 2024-03-27	Normal LCL	3.37
MW-15016R	Appendix IV	Selenium	ug/L	10	80%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-15016R	Appendix IV	Thallium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-15017	Appendix IV	Antimony	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15017	Appendix IV	Arsenic	ug/L	22	9%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	2.0
MW-15017	Appendix IV	Barium	ug/L	22	0%	2015-12-01 to 2024-03-27	Normal LCL	940
MW-15017	Appendix IV	Beryllium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15017	Appendix IV	Cadmium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15017	Appendix IV	Chromium	ug/L	22	5%	2015-12-01 to 2024-03-27	Normal MLE LCL	2.3
MW-15017	Appendix IV	Cobalt	ug/L	21	67%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.3
MW-15017	Appendix IV	Fluoride	ug/L	23	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	100
MW-15017	Appendix IV	Lead	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15017	Appendix IV	Lithium	ug/L	22	77%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	10
MW-15017	Appendix IV	Mercury	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15017	Appendix IV	Molybdenum	ug/L	22	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.5
MW-15017	Appendix IV	Radium-226+228	pCi/L	22	0%	2015-12-01 to 2024-03-27	Normal LCL	4.58
MW-15017	Appendix IV	Selenium	ug/L	22	55%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15017	Appendix IV	Thallium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.9
MW-15018	Appendix IV	Antimony	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15018	Appendix IV	Arsenic	ug/L	22	73%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15018	Appendix IV	Barium	ug/L	22	0%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	130
MW-15018	Appendix IV	Beryllium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15018	Appendix IV	Cadmium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15018	Appendix IV	Chromium	ug/L	22	50%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15018	Appendix IV	Cobalt	ug/L	21	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15018	Appendix IV	Fluoride	ug/L	23	61%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	240
MW-15018	Appendix IV	Lead	ug/L	21	81%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15018	Appendix IV	Lithium	ug/L	22	0%	2015-12-01 to 2024-03-27	Normal LCL	19
MW-15018	Appendix IV	Mercury	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15018	Appendix IV	Molybdenum	ug/L	22	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.2
MW-15018	Appendix IV	Radium-226+228	pCi/L	22	36%	2015-12-01 to 2024-03-27	Normal MLE LCL	0.914
MW-15018	Appendix IV	Selenium	ug/L	22	91%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15018	Appendix IV	Thallium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15019	Appendix IV	Antimony	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15019	Appendix IV	Arsenic	ug/L	22	73%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15019	Appendix IV	Barium	ug/L	22	0%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	94
MW-15019	Appendix IV	Beryllium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15019	Appendix IV	Cadmium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15019	Appendix IV	Chromium	ug/L	22	64%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.91
MW-15019	Appendix IV	Cobalt	ug/L	21	67%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.8
MW-15019	Appendix IV	Fluoride	ug/L	23	96%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	100
MW-15019	Appendix IV	Lead	ug/L	21	90%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15019	Appendix IV	Lithium	ug/L	22	14%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	12
MW-15019	Appendix IV	Mercury	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15019	Appendix IV	Molybdenum	ug/L	22	86%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	5.0
MW-15019	Appendix IV	Radium-226+228	pCi/L	22	23%	2015-12-01 to 2024-03-27	Gamma MLE Normal Approx. LCL	1.11
MW-15019	Appendix IV	Selenium	ug/L	22	82%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-15019	Appendix IV	Thallium	ug/L	21	90%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.9
MW-15020	Appendix IV	Antimony	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15020	Appendix IV	Arsenic	ug/L	22	86%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15020	Appendix IV	Barium	ug/L	22	0%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median**	54
MW-15020	Appendix IV	Beryllium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15020	Appendix IV	Cadmium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15020	Appendix IV	Chromium	ug/L	22	64%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15020	Appendix IV	Cobalt	ug/L	21	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15020	Appendix IV	Fluoride	ug/L	23	96%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	100
MW-15020	Appendix IV	Lead	ug/L	21	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0

MW-15020	Appendix IV	Lithium	ug/L	22	23%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	10
MW-15020	Appendix IV	Mercury	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15020	Appendix IV	Molybdenum	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.2
MW-15020	Appendix IV	Radium-226+228	pCi/L	22	27%	2015-12-01 to 2024-03-27	Normal MLE LCL	0.853
MW-15020	Appendix IV	Selenium	ug/L	22	86%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15020	Appendix IV	Thallium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15021	Appendix IV	Antimony	ug/L	21	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15021	Appendix IV	Arsenic	ug/L	22	36%	2015-12-01 to 2024-03-27	Normal MLE LCL	0.79
MW-15021	Appendix IV	Barium	ug/L	22	0%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	240
MW-15021	Appendix IV	Beryllium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15021	Appendix IV	Cadmium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15021	Appendix IV	Chromium	ug/L	22	32%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15021	Appendix IV	Cobalt	ug/L	21	76%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15021	Appendix IV	Fluoride	ug/L	23	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	100
MW-15021	Appendix IV	Lead	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15021	Appendix IV	Lithium	ug/L	22	82%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	8.0
MW-15021	Appendix IV	Mercury	ug/L	21	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15021	Appendix IV	Molybdenum	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.2
MW-15021	Appendix IV	Radium-226+228	pCi/L	22	23%	2015-12-01 to 2024-03-27	Normal MLE LCL	1.29
MW-15021	Appendix IV	Selenium	ug/L	22	68%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15021	Appendix IV	Thallium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15022	Appendix IV	Antimony	ug/L	22	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15022	Appendix IV	Arsenic	ug/L	23	48%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median*	1.0
MW-15022	Appendix IV	Barium	ug/L	23	0%	2015-12-01 to 2024-03-27	Lognormal H-LCL	150
MW-15022	Appendix IV	Beryllium	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15022	Appendix IV	Cadmium	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15022	Appendix IV	Chromium	ug/L	23	78%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15022	Appendix IV	Cobalt	ug/L	22	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.52
MW-15022	Appendix IV	Fluoride	ug/L	24	79%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	280
MW-15022	Appendix IV	Lead	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-15022	Appendix IV	Lithium	ug/L	23	35%	2015-12-01 to 2024-03-27	Gamma MLE Normal Approx. LCL	14
MW-15022	Appendix IV	Mercury	ug/L	22	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15022	Appendix IV	Molybdenum	ug/L	23	52%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	3.6
MW-15022	Appendix IV	Radium-226+228	pCi/L	23	70%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.812
MW-15022	Appendix IV	Selenium	ug/L	23	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15022	Appendix IV	Thallium	ug/L	22	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-15023	Appendix IV	Antimony	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15023	Appendix IV	Arsenic	ug/L	22	45%	2015-12-01 to 2024-03-27	Lognormal MLE Likelihood Profile LCL	1.0
MW-15023	Appendix IV	Barium	ug/L	22	0%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	46
MW-15023	Appendix IV	Beryllium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-15023	Appendix IV	Cadmium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15023	Appendix IV	Chromium	ug/L	22	82%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15023	Appendix IV	Cobalt	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15023	Appendix IV	Fluoride	ug/L	23	70%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	260
MW-15023	Appendix IV	Lead	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15023	Appendix IV	Lithium	ug/L	22	32%	2015-12-01 to 2024-03-27	Normal MLE LCL	9.4
MW-15023	Appendix IV	Mercury	ug/L	21	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-15023	Appendix IV	Molybdenum	ug/L	22	18%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	6.0
MW-15023	Appendix IV	Radium-226+228	pCi/L	22	64%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	0.530
MW-15023	Appendix IV	Selenium	ug/L	22	95%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-15023	Appendix IV	Thallium	ug/L	21	100%	2015-12-01 to 2024-03-27	Nonparametric LCL around the Median	1.0
MW-17001R	Appendix IV	Antimony	ug/L	10	90%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17001R	Appendix IV	Arsenic	ug/L	10	50%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-17001R	Appendix IV	Barium	ug/L	10	0%	2020-05-21 to 2024-03-27	Normal LCL	130
MW-17001R	Appendix IV	Beryllium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17001R	Appendix IV	Cadmium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17001R	Appendix IV	Chromium	ug/L	10	60%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.18
MW-17001R	Appendix IV	Cobalt	ug/L	10	70%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.26
MW-17001R	Appendix IV	Fluoride	ug/L	10	20%	2020-05-21 to 2024-03-27	Normal MLE LCL	110
MW-17001R	Appendix IV	Lead	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-17001R	Appendix IV	Lithium	ug/L	10	0%	2020-05-21 to 2024-03-27	Normal LCL	48
MW-17001R	Appendix IV	Mercury	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17001R	Appendix IV	Molybdenum	ug/L	10	50%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.43
MW-17001R	Appendix IV	Radium-226+228	pCi/L	10	30%	2020-05-21 to 2024-03-27	Normal MLE LCL	0.621
MW-17001R	Appendix IV	Selenium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-17001R	Appendix IV	Thallium	ug/L	10	100%	2020-05-21 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-17002	Appendix IV	Antimony	ug/L	15	87%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17002	Appendix IV	Arsenic	ug/L	16	6%	2017-12-07 to 2024-03-27	Gamma MLE Normal Approx. LCL	14
MW-17002	Appendix IV	Barium	ug/L	16	0%	2017-12-07 to 2024-03-27	Normal LCL	80
MW-17002	Appendix IV	Beryllium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17002	Appendix IV	Cadmium	ug/L	15	87%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17002	Appendix IV	Chromium	ug/L	16	75%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.33
MW-17002	Appendix IV	Cobalt	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.52
MW-17002	Appendix IV	Fluoride	ug/L	16	44%	2017-12-07 to 2024-03-27	Normal MLE LCL	220

MW-17002	Appendix IV	Lead	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-17002	Appendix IV	Lithium	ug/L	16	0%	2017-12-07 to 2024-03-27	Normal LCL	130
MW-17002	Appendix IV	Mercury	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17002	Appendix IV	Molybdenum	ug/L	16	38%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median*	5.0
MW-17002	Appendix IV	Radium-226+228	pCi/L	16	50%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	1.00
MW-17002	Appendix IV	Selenium	ug/L	16	88%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-17002	Appendix IV	Thallium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-17003	Appendix IV	Antimony	ug/L	15	93%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17003	Appendix IV	Arsenic	ug/L	16	19%	2017-12-07 to 2024-03-27	Gamma MLE Normal Approx. LCL	10
MW-17003	Appendix IV	Barium	ug/L	16	0%	2017-12-07 to 2024-03-27	Adjusted Gamma LCL	73
MW-17003	Appendix IV	Beryllium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17003	Appendix IV	Cadmium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17003	Appendix IV	Chromium	ug/L	16	88%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17003	Appendix IV	Cobalt	ug/L	15	93%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.52
MW-17003	Appendix IV	Fluoride	ug/L	16	75%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	100
MW-17003	Appendix IV	Lead	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-17003	Appendix IV	Lithium	ug/L	16	6%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	18
MW-17003	Appendix IV	Mercury	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17003	Appendix IV	Molybdenum	ug/L	16	31%	2017-12-07 to 2024-03-27	Gamma MLE Normal Approx. LCL	9.8
MW-17003	Appendix IV	Radium-226+228	pCi/L	16	69%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.910
MW-17003	Appendix IV	Selenium	ug/L	16	88%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-17003	Appendix IV	Thallium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-17004	Appendix IV	Antimony	ug/L	15	87%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17004	Appendix IV	Arsenic	ug/L	16	12%	2017-12-07 to 2024-03-27	Gamma MLE Normal Approx. LCL	2.9
MW-17004	Appendix IV	Barium	ug/L	16	0%	2017-12-07 to 2024-03-27	Adjusted Gamma LCL	150
MW-17004	Appendix IV	Beryllium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17004	Appendix IV	Cadmium	ug/L	15	93%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17004	Appendix IV	Chromium	ug/L	16	81%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.36
MW-17004	Appendix IV	Cobalt	ug/L	15	80%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.52
MW-17004	Appendix IV	Fluoride	ug/L	16	88%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	100
MW-17004	Appendix IV	Lead	ug/L	15	93%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-17004	Appendix IV	Lithium	ug/L	16	44%	2017-12-07 to 2024-03-27	Gamma MLE Normal Approx. LCL	8.9
MW-17004	Appendix IV	Mercury	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17004	Appendix IV	Molybdenum	ug/L	16	50%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	5.0
MW-17004	Appendix IV	Radium-226+228	pCi/L	16	75%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	1.00
MW-17004	Appendix IV	Selenium	ug/L	16	88%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-17004	Appendix IV	Thallium	ug/L	15	93%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-17005	Appendix IV	Antimony	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17005	Appendix IV	Arsenic	ug/L	16	88%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-17005	Appendix IV	Barium	ug/L	16	0%	2017-12-07 to 2024-03-27	Adjusted Gamma LCL	120
MW-17005	Appendix IV	Beryllium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17005	Appendix IV	Cadmium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17005	Appendix IV	Chromium	ug/L	16	75%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.44
MW-17005	Appendix IV	Cobalt	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.52
MW-17005	Appendix IV	Fluoride	ug/L	16	94%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	100
MW-17005	Appendix IV	Lead	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-17005	Appendix IV	Lithium	ug/L	16	19%	2017-12-07 to 2024-03-27	Gamma MLE Normal Approx. LCL	7.5
MW-17005	Appendix IV	Mercury	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17005	Appendix IV	Molybdenum	ug/L	16	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	1.2
MW-17005	Appendix IV	Radium-226+228	pCi/L	16	69%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.995
MW-17005	Appendix IV	Selenium	ug/L	16	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-17005	Appendix IV	Thallium	ug/L	15	80%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.38
MW-17006	Appendix IV	Antimony	ug/L	14	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17006	Appendix IV	Arsenic	ug/L	15	40%	2017-12-07 to 2024-03-27	Normal MLE LCL	0.15
MW-17006	Appendix IV	Barium	ug/L	15	0%	2017-12-07 to 2024-03-27	Adjusted Gamma LCL	80
MW-17006	Appendix IV	Beryllium	ug/L	14	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17006	Appendix IV	Cadmium	ug/L	14	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17006	Appendix IV	Chromium	ug/L	15	93%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.25
MW-17006	Appendix IV	Cobalt	ug/L	14	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.52
MW-17006	Appendix IV	Fluoride	ug/L	15	60%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	130
MW-17006	Appendix IV	Lead	ug/L	14	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.55
MW-17006	Appendix IV	Lithium	ug/L	15	0%	2017-12-07 to 2024-03-27	Normal LCL	27
MW-17006	Appendix IV	Mercury	ug/L	14	93%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.20
MW-17006	Appendix IV	Molybdenum	ug/L	15	80%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	1.2
MW-17006	Appendix IV	Radium-226+228	pCi/L	15	73%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.757
MW-17006	Appendix IV	Selenium	ug/L	15	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.50
MW-17006	Appendix IV	Thallium	ug/L	14	100%	2017-12-07 to 2024-03-27	Nonparametric LCL around the Median	0.38

* While one or more parametric distributions fit the data, nonparametric methods were used to computed confidence limits due to non-convergence or negative LCLs.

**HDR revised the distribution to nonparametric from normal as the normal distribution does not fit the data well even after marginally passing the GOF test at the 5% level of significance. A review of the normal probability plot and the histogram visually confirmed a poor fit by the normal distribution.



Table 1: Summary Statistics, Non-Detects Included

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.693	1.00	0.250	1.00	0.377	0.544	-0.397	-2.04
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	23	1	4%	2015-12-01 to 2024-10-23	Gamma; Normal	Gamma	12.6	12.0	0.550	45.0	11.6	0.916	1.08	1.20
01_2_103	MW-15009	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	50.1	16.5	9.00	250	57.1	1.14	2.19	6.00
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.657	1.00	0.200	1.00	0.385	0.586	-0.199	-2.16
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.220	0.200	0.200	0.250	0.0252	0.114	0.397	-2.04
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	0.753	1.00	0.250	2.00	0.455	0.605	0.546	0.734
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	7.60	6.00	0.100	15.0	7.08	0.932	0.0718	-2.09
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	24	21	88%	2015-12-01 to 2024-10-23		Nonparametric	630	1000	20.0	1000	448	0.711	-0.379	-2.01
01_2_116	MW-15009	Appendix IV	Lead	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.816	1.00	0.550	1.00	0.226	0.278	-0.397	-2.04
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	24.1	21.0	11.0	63.9	12.1	0.503	1.85	4.46
01_2_118	MW-15009	Appendix IV	Mercury	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	23	8	35%	2015-12-01 to 2024-10-23	Normal	Nonparametric	19.6	5.20	1.00	60.0	22.2	1.13	0.736	-1.30
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	1.02	0.807	0.0300	3.85	0.838	0.825	2.22	5.63
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	0.848	1.00	0.500	2.00	0.351	0.415	1.37	3.99
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	1.29	2.00	0.380	2.00	0.804	0.623	-0.260	-2.08
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	0.674	1.00	0.250	1.00	0.380	0.564	-0.282	-2.11
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	24	22	92%	2015-12-01 to 2024-10-23		Nonparametric	0.797	1.00	0.330	1.00	0.250	0.313	-0.505	-1.63
02_2_103	MW-15010	Appendix IV	Barium	ug/L	24	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	76.5	60.5	28.0	210	47.0	0.615	1.24	1.12
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	0.631	1.00	0.0580	1.00	0.396	0.628	-0.129	-2.11
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	0.222	0.200	0.200	0.250	0.0253	0.114	0.282	-2.11
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	24	16	67%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	0.739	1.00	0.210	2.00	0.450	0.609	0.623	0.805
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	7.30	6.00	0.110	15.0	7.07	0.970	0.162	-2.06
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	25	15	60%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	698	1000	200	1000	350	0.501	-0.298	-2.02
02_2_116	MW-15010	Appendix IV	Lead	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	0.804	1.00	0.550	1.00	0.228	0.284	-0.282	-2.11
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	24	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	29.7	26.5	14.0	54.0	11.8	0.396	0.651	-0.773
02_2_118	MW-15010	Appendix IV	Mercury	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	24	11	46%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Gamma	8.24	5.00	1.10	33.0	9.78	1.19	1.50	1.10
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	24	14	58%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	1.09	1.03	0.280	2.03	0.566	0.518	0.0918	-1.39
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	24	22	92%	2015-12-01 to 2024-10-23		Nonparametric	0.792	1.00	0.500	1.00	0.252	0.318	-0.361	-2.05
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	1.25	2.00	0.380	2.00	0.809	0.646	-0.154	-2.12
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.693	1.00	0.250	1.00	0.377	0.544	-0.397	-2.04
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	23	19	83%	2015-12-01 to 2024-10-23		Nonparametric	0.818	1.00	0.200	1.30	0.287	0.351	-0.750	-0.311
03_2_103	MW-15013	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	72.3	51.0	31.0	180	40.8	0.565	1.30	0.769
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.657	1.00	0.200	1.00	0.385	0.586	-0.199	-2.16
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.220	0.200	0.200	0.250	0.0252	0.114	0.397	-2.04
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	0.750	1.00	0.250	2.00	0.459	0.611	0.533	0.672
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	22	20	91%	2015-12-01 to 2024-10-23		Nonparametric	7.58	6.00	0.110	15.0	7.10	0.936	0.0704	-2.09
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	24	19	79%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	820	1000	100	4000	786	0.958	2.92	11.9
03_2_116	MW-15013	Appendix IV	Lead	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.816	1.00	0.550	1.00	0.226	0.278	-0.397	-2.04
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	23	1	4%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	23.9	21.0	13.0	46.0	8.43	0.352	1.16	0.728
03_2_118	MW-15013	Appendix IV	Mercury	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23	5	22%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	10.1	5.00	0.620	77.2	15.8	1.57	3.76	16

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.



Table 1: Summary Statistics, Non-Detects Included (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	23	16	70%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.933	1.00	0.450	1.56	0.363	0.389	0.244	-1.08
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	0.804	1.00	0.500	1.00	0.250	0.310	-0.477	-1.95
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	1.29	2.00	0.380	2.00	0.804	0.623	-0.260	-2.08
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	8	8	100%	2022-02-01 to 2024-10-23		Nonparametric	0.369	0.250	0.250	1.20	0.336	0.911	2.83	8.00
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	8	5	62%	2022-02-01 to 2024-10-23		Nonparametric	0.611	0.550	0.260	1.60	0.419	0.686	2.29	6.03
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	8	0	0%	2022-02-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	175	170	160	200	14.1	0.0808	0.808	-0.229
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	8	7	88%	2022-02-01 to 2024-10-23		Nonparametric	0.231	0.250	0.100	0.250	0.0530	0.229	-2.83	8.00
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	8	8	100%	2022-02-01 to 2024-10-23		Nonparametric	0.369	0.250	0.250	1.20	0.336	0.911	2.83	8.00
04_2_109	MW-15014R	Appendix IV	Chromium	ug/L	8	8	100%	2022-02-01 to 2024-10-23		Nonparametric	0.250	0.250	0.250	0.250	0	0	NA	NA
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	8	7	88%	2022-02-01 to 2024-10-23		Nonparametric	0.471	0.520	0.130	0.520	0.138	0.293	-2.83	8.00
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	8	1	12%	2022-02-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	245	260	180	300	45.7	0.186	-0.336	-1.74
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	8	8	100%	2022-02-01 to 2024-10-23		Nonparametric	0.831	0.550	0.550	2.80	0.795	0.957	2.83	8.00
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	8	0	0%	2022-02-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	58.4	48.0	36.0	130	30.6	0.524	2.29	5.63
04_2_118	MW-15014R	Appendix IV	Mercury	ug/L	8	8	100%	2022-02-01 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	8	2	25%	2022-02-01 to 2024-10-23	Gamma; Lognormal	Gamma	2.94	1.60	0.680	11.0	3.39	1.16	2.42	6.21
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	8	4	50%	2022-02-01 to 2024-10-23		Nonparametric	1.04	1.00	0.230	1.76	0.496	0.478	-0.134	-0.493
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	8	7	88%	2022-02-01 to 2024-10-23		Nonparametric	0.451	0.500	0.110	0.500	0.138	0.306	-2.83	8.00
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	8	8	100%	2022-02-01 to 2024-10-23		Nonparametric	0.570	0.380	0.380	1.90	0.537	0.943	2.83	8.00
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	11	6	55%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	2.09	0.850	0.250	13.0	3.78	1.81	2.87	8.59
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	19.8	19.0	3.20	43.0	12.5	0.632	0.681	-0.278
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	117	120	60.0	170	33.7	0.287	-0.145	-0.748
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	11	10	91%	2020-05-21 to 2024-10-23		Nonparametric	0.223	0.250	0.0580	0.250	0.0584	0.261	-2.70	7.71
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.241	0.250	0.200	0.250	0.0202	0.0840	-1.92	2.04
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	11	9	82%	2020-05-21 to 2024-10-23		Nonparametric	0.315	0.250	0.220	1.00	0.227	0.720	3.31	11
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	11	7	64%	2020-05-21 to 2024-10-23		Nonparametric	0.435	0.520	0.210	0.520	0.127	0.291	-1.15	-0.427
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	11	6	55%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	121	100	12.0	200	56.1	0.465	-0.0990	0.163
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.836	0.550	0.550	2.80	0.676	0.808	2.93	8.96
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	45.8	41.0	3.80	120	29.3	0.639	1.55	4.29
05_2_118	MW-15015R	Appendix IV	Mercury	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal	Gamma	130	30.0	2.00	430	143	1.10	0.939	0.0708
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	11	7	64%	2020-05-21 to 2024-10-23		Nonparametric	1.11	1.00	0.460	2.12	0.572	0.515	0.842	-0.292
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	11	7	64%	2020-05-21 to 2024-10-23		Nonparametric	0.651	0.500	0.270	1.10	0.309	0.475	0.408	-1.64
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.631	0.380	0.380	1.90	0.489	0.774	2.12	4.40
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	11	9	82%	2020-05-21 to 2024-10-23		Nonparametric	0.237	0.250	0.140	0.250	0.0335	0.141	-2.95	8.92
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	11	1	9%	2020-05-21 to 2024-10-23	Nonparametric	Nonparametric	2.71	1.70	0.550	10.1	2.75	1.01	2.38	5.67
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1010	960	789	1300	163	0.161	0.323	-0.775
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	11	10	91%	2020-05-21 to 2024-10-23		Nonparametric	0.226	0.250	0.0850	0.250	0.0508	0.225	-2.53	6.76
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.241	0.250	0.200	0.250	0.0202	0.0840	-1.92	2.04
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	11	2	18%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	0.734	0.710	0.250	1.20	0.295	0.402	-0.341	0.100
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	11	1	9%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.06	0.960	0.520	1.90	0.405	0.382	0.961	0.652
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	11	9	82%	2020-05-21 to 2024-10-23		Nonparametric	113	100	20.0	200	51.5	0.457	0.447	0.812
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	11	9	82%	2020-05-21 to 2024-10-23		Nonparametric	0.505	0.550	0.0590	1.00	0.250	0.494	-0.265	1.79

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.



Table 1: Summary Statistics, Non-Detects Included (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	11	3	27%	2020-05-21 to 2024-10-23	Nonparametric	Nonparametric	15.7	5.90	2.50	110	31.4	2.01	3.27	10.8
06_2_118	MW-15016R	Appendix IV	Mercury	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	11	8	73%	2020-05-21 to 2024-10-23		Nonparametric	1.98	1.20	0.390	7.50	2.08	1.05	2.35	5.30
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Normal	Normal	4.12	4.08	1.60	5.64	1.23	0.298	-0.645	0.307
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	11	8	73%	2020-05-21 to 2024-10-23		Nonparametric	0.601	0.500	0.120	1.30	0.356	0.593	0.763	0.0742
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.493	0.380	0.380	1.00	0.251	0.509	1.92	2.04
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.693	1.00	0.250	1.00	0.377	0.544	-0.397	-2.04
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	23	1	4%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	3.88	2.10	0.550	13.0	3.63	0.938	1.79	2.04
07_2_103	MW-15017	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	980	980	772	1200	98.1	0.100	0.111	0.353
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.648	1.00	0.0660	1.00	0.396	0.611	-0.230	-2.09
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.220	0.200	0.200	0.250	0.0252	0.114	0.397	-2.04
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	1	4%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	3.25	3.10	0.250	11.0	2.67	0.822	1.43	2.51
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	22	13	59%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	7.76	6.00	0.500	15.0	6.92	0.891	0.0799	-2.09
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	23	100%	2015-12-01 to 2024-03-27		Nonparametric	644	1000	20.0	1000	454	0.704	-0.481	-1.94
07_2_116	MW-15017	Appendix IV	Lead	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.918	1.00	0.550	2.80	0.474	0.516	3.09	12.5
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	23	17	74%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	9.43	10.0	2.50	20.0	4.14	0.439	0.613	1.37
07_2_118	MW-15017	Appendix IV	Mercury	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	23	21	91%	2015-12-01 to 2024-10-23		Nonparametric	3.32	5.00	0.360	5.00	1.97	0.595	-0.314	-2.03
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	23	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	4.79	4.75	3.00	5.89	0.675	0.141	-0.535	0.680
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	23	12	52%	2015-12-01 to 2024-10-23	Gamma	Nonparametric	1.74	1.00	0.150	8.00	1.75	1.01	2.25	6.67
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	1.36	2.00	0.380	2.00	0.787	0.579	-0.462	-1.91
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.693	1.00	0.250	1.00	0.377	0.544	-0.397	-2.04
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	23	16	70%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	1.04	1.00	0.440	3.80	0.678	0.654	3.40	13.4
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	149	143	93.0	280	39.8	0.267	2.11	5.54
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.652	1.00	0.140	1.00	0.391	0.600	-0.209	-2.14
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.220	0.200	0.200	0.250	0.0252	0.114	0.397	-2.04
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	23	11	48%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	0.834	1.00	0.250	1.80	0.362	0.434	0.159	1.14
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	22	20	91%	2015-12-01 to 2024-10-23		Nonparametric	7.62	6.00	0.450	15.0	7.06	0.927	0.0733	-2.09
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	24	16	67%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	662	1000	110	1000	410	0.620	-0.378	-2.01
08_2_116	MW-15018	Appendix IV	Lead	ug/L	22	17	77%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	0.984	1.00	0.310	3.90	0.687	0.698	3.90	17.3
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	20.8	21.0	12.0	33.0	5.39	0.259	0.221	-0.298
08_2_118	MW-15018	Appendix IV	Mercury	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	23	21	91%	2015-12-01 to 2024-10-23		Nonparametric	3.31	5.00	0.530	5.00	1.97	0.597	-0.299	-2.07
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	23	8	35%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.21	1.17	0.586	1.84	0.317	0.261	0.190	0.223
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	0.921	1.00	0.190	4.00	0.723	0.785	3.71	16.3
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	1.28	2.00	0.170	2.00	0.817	0.637	-0.273	-2.05
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.920	1.00	0.250	6.00	1.19	1.30	3.95	17.4
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	23	15	65%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	1.24	1.00	0.450	8.10	1.53	1.24	4.48	20.8
09_2_103	MW-15019	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	201	114	78.0	640	152	0.753	1.48	1.70
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.821	1.00	0.0580	4.00	0.807	0.983	3.02	12
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.344	0.200	0.0780	3.10	0.617	1.79	4.66	21.8
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	23	14	61%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.772	1.00	0.250	1.00	0.302	0.392	-0.824	-1.07

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.



Table 1: Summary Statistics, Non-Detects Included (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	22	13	59%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	7.75	6.00	0.520	15.0	6.93	0.895	0.0761	-2.09
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	24	23	96%	2015-12-01 to 2024-10-23		Nonparametric	624	1000	20.0	1000	456	0.730	-0.373	-2.02
09_2_116	MW-15019	Appendix IV	Lead	ug/L	22	19	86%	2015-12-01 to 2024-10-23		Nonparametric	0.935	1.00	0.160	4.00	0.741	0.793	3.55	15.3
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	23	3	13%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	17.7	22.0	1.20	33.0	9.98	0.564	-0.505	-1.38
09_2_118	MW-15019	Appendix IV	Mercury	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	23	19	83%	2015-12-01 to 2024-10-23		Nonparametric	8.06	5.00	0.580	100	20.2	2.50	4.71	22.4
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	23	5	22%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.49	1.26	0.674	3.81	0.784	0.527	1.44	2.18
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	23	18	78%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.796	1.00	0.120	2.00	0.414	0.520	0.737	1.90
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	22	19	86%	2015-12-01 to 2024-10-23		Nonparametric	1.33	2.00	0.0970	2.00	0.829	0.624	-0.427	-1.96
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.693	1.00	0.250	1.00	0.377	0.544	-0.397	-2.04
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	23	19	83%	2015-12-01 to 2024-10-23		Nonparametric	0.808	1.00	0.240	1.00	0.259	0.321	-0.858	-0.742
10_2_103	MW-15020	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Normal	Nonparametric	175	148	47.0	393	122	0.702	0.488	-1.35
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.657	1.00	0.200	1.00	0.385	0.586	-0.199	-2.16
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.220	0.200	0.200	0.250	0.0252	0.114	0.397	-2.04
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	23	14	61%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.814	1.00	0.250	2.00	0.408	0.502	0.639	1.82
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	22	20	91%	2015-12-01 to 2024-10-23		Nonparametric	7.60	6.00	0.180	15.0	7.09	0.933	0.0714	-2.09
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	24	23	96%	2015-12-01 to 2024-10-23		Nonparametric	631	1000	20.0	1000	447	0.709	-0.378	-2.01
10_2_116	MW-15020	Appendix IV	Lead	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.823	1.00	0.550	1.00	0.220	0.267	-0.456	-1.93
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	23	5	22%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	11.8	14.0	1.20	20.0	5.71	0.483	-0.409	-1.08
10_2_118	MW-15020	Appendix IV	Mercury	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	3.30	5.00	0.250	5.00	1.99	0.605	-0.315	-2.03
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	23	6	26%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.63	1.44	0.467	4.68	1.05	0.641	1.20	1.74
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	0.865	1.00	0.500	2.00	0.369	0.426	1.20	2.69
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	1.29	2.00	0.380	2.00	0.804	0.623	-0.260	-2.08
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.689	1.00	0.150	1.00	0.384	0.557	-0.407	-2.01
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	23	7	30%	2015-12-01 to 2024-10-23	Gamma; Normal	Normal	1.28	1.00	0.120	3.00	0.610	0.475	0.940	1.75
11_2_103	MW-15021	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	293	250	211	480	78.9	0.269	1.02	-0.221
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.657	1.00	0.200	1.00	0.385	0.586	-0.199	-2.16
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.220	0.200	0.200	0.250	0.0252	0.114	0.397	-2.04
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	23	7	30%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	1.13	1.00	0.250	2.00	0.526	0.466	0.588	-0.204
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	22	15	68%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	7.74	6.00	0.520	15.0	6.94	0.897	0.0793	-2.09
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	24	24	100%	2015-12-01 to 2024-10-23		Nonparametric	630	1000	20.0	1000	448	0.712	-0.378	-2.01
11_2_116	MW-15021	Appendix IV	Lead	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.816	1.00	0.550	1.00	0.226	0.278	-0.397	-2.04
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	23	18	78%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	7.86	10.0	1.20	20.0	4.51	0.574	0.400	0.784
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.225	0.200	0.200	0.750	0.117	0.521	4.69	22.0
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	3.34	5.00	1.00	5.00	1.94	0.580	-0.283	-2.11
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	23	6	26%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.69	1.53	0.354	3.24	0.702	0.415	0.401	-0.0741
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	23	15	65%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.976	1.00	0.150	4.00	0.783	0.802	2.82	10.3
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	1.29	2.00	0.380	2.00	0.804	0.623	-0.260	-2.08
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	0.713	1.00	0.250	1.90	0.454	0.637	0.511	0.0847
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	24	11	46%	2015-12-01 to 2024-10-23	Normal	Nonparametric	2.63	1.00	0.190	8.00	2.75	1.04	0.895	-0.806
12_2_103	MW-15022	Appendix IV	Barium	ug/L	24	0	0%	2015-12-01 to 2024-10-23	Lognormal	Lognormal	167	140	102	290	54.5	0.327	0.765	-0.629

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.



Table 1: Summary Statistics, Non-Detects Included (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	0.639	1.00	0.200	1.00	0.386	0.603	-0.0955	-2.19
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	0.222	0.200	0.200	0.250	0.0253	0.114	0.282	-2.11
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	24	18	75%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.741	1.00	0.250	2.00	0.448	0.605	0.631	0.845
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	7.30	6.00	0.350	15.0	7.07	0.969	0.162	-2.06
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	25	20	80%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	790	1000	100	4000	784	0.992	2.88	11.8
12_2_116	MW-15022	Appendix IV	Lead	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	0.804	1.00	0.550	1.00	0.228	0.284	-0.282	-2.11
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	24	8	33%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	23.1	17.5	10.0	68.0	16.7	0.726	1.53	1.72
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	0.204	0.200	0.200	0.290	0.0188	0.0920	4.80	23.0
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	24	12	50%	2015-12-01 to 2024-10-23	Normal	Nonparametric	8.59	5.00	0.320	47.6	10.7	1.25	2.28	6.75
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	24	16	67%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	1.00	1.00	0.190	3.50	0.640	0.639	2.63	10.0
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	24	23	96%	2015-12-01 to 2024-10-23		Nonparametric	0.775	1.00	0.110	1.00	0.282	0.364	-0.684	-0.911
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	23	23	100%	2015-12-01 to 2024-10-23		Nonparametric	1.25	2.00	0.380	2.00	0.809	0.646	-0.154	-2.12
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.693	1.00	0.250	1.00	0.377	0.544	-0.397	-2.04
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	23	9	39%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	1.99	1.00	0.550	9.90	2.50	1.25	2.81	7.19
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Normal	Normal	70.6	57.0	38.0	190	34.6	0.490	1.91	5.38
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.657	1.00	0.200	1.00	0.385	0.586	-0.199	-2.16
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.220	0.200	0.200	0.250	0.0252	0.114	0.397	-2.04
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	23	18	78%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.760	1.00	0.250	2.00	0.449	0.590	0.553	0.875
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	7.60	6.00	0.110	15.0	7.08	0.932	0.0718	-2.09
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	24	17	71%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	650	1000	100	1000	424	0.653	-0.389	-1.99
13_2_116	MW-15023	Appendix IV	Lead	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	0.816	1.00	0.550	1.00	0.226	0.278	-0.397	-2.04
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	23	7	30%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	15.7	12.1	8.30	36.0	7.66	0.487	1.37	1.14
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.216	0.200	0.200	0.550	0.0746	0.346	4.69	22.0
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	23	4	17%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	9.90	6.60	5.00	34.0	8.17	0.825	2.14	3.66
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	23	14	61%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.930	1.00	0.178	1.85	0.492	0.530	0.307	-0.856
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	23	21	91%	2015-12-01 to 2024-10-23		Nonparametric	0.787	1.00	0.110	1.00	0.282	0.358	-0.811	-0.692
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	22	22	100%	2015-12-01 to 2024-10-23		Nonparametric	1.29	2.00	0.380	2.00	0.804	0.623	-0.260	-2.08
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	11	10	91%	2020-05-21 to 2024-10-23		Nonparametric	0.306	0.250	0.120	1.00	0.233	0.762	3.13	10.2
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	5	45%	2020-05-21 to 2024-10-23	Gamma; Lognormal	Gamma	1.25	0.550	0.190	7.30	2.06	1.66	3.03	9.44
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	165	180	90.6	230	56.6	0.344	-0.135	-2.01
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.241	0.250	0.200	0.250	0.0202	0.0840	-1.92	2.04
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.241	0.250	0.200	0.250	0.0202	0.0840	-1.92	2.04
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	11	6	55%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.243	0.250	0.170	0.330	0.0443	0.182	0.0735	0.814
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	11	6	55%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.467	0.520	0.250	0.830	0.166	0.355	0.625	1.24
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	11	4	36%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	143	130	100	200	39.0	0.273	0.367	-1.46
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.632	0.550	0.550	1.00	0.182	0.288	1.92	2.04
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	70.2	75.0	25.0	120	32.2	0.458	-0.0760	-1.35
14_2_118	MW-17001R	Appendix IV	Mercury	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	11	5	45%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.24	1.20	0.370	2.50	0.678	0.545	0.410	-0.383
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	11	3	27%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.19	1.08	0.308	2.02	0.481	0.403	0.148	0.439
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.591	0.500	0.500	1.00	0.202	0.342	1.92	2.04
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	11	11	100%	2020-05-21 to 2024-10-23		Nonparametric	0.493	0.380	0.380	1.00	0.251	0.509	1.92	2.04

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.



Table 1: Summary Statistics, Non-Detects Included (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	0.665	0.250	0.140	2.00	0.559	0.841	1.06	0.400
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	17	1	6%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	39.4	6.30	1.00	220	57.2	1.45	2.21	5.73
15_2_103	MW-17002	Appendix IV	Barium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	100	83.0	39.0	240	50.3	0.502	1.53	2.54
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.521	0.250	0.140	1.00	0.384	0.737	0.552	-1.92
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	16	13	81%	2017-12-07 to 2024-10-23		Nonparametric	0.241	0.250	0.200	0.350	0.0492	0.204	1.33	1.38
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	17	12	71%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.634	0.470	0.250	1.00	0.360	0.568	0.0530	-2.18
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	4.85	0.520	0.420	15.0	6.32	1.30	1.02	-0.843
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	17	8	47%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	571	340	160	1000	378	0.662	0.276	-2.07
15_2_116	MW-17002	Appendix IV	Lead	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	1.14	1.00	0.130	2.80	0.863	0.755	1.37	0.664
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	154	150	46.0	240	53.2	0.345	-0.214	-0.247
15_2_118	MW-17002	Appendix IV	Mercury	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	17	6	35%	2017-12-07 to 2024-10-23	Gamma; Normal	Nonparametric	476	8.80	2.70	1800	675	1.42	1.08	-0.399
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	17	8	47%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.83	1.07	0.474	5.04	1.38	0.753	1.46	1.33
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.763	0.500	0.110	2.00	0.443	0.581	1.20	2.60
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	1.29	1.90	0.120	2.00	0.806	0.622	-0.395	-1.98
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.647	0.250	0.250	2.00	0.521	0.806	1.20	1.27
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	3	18%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	35.2	20.0	1.00	210	54.8	1.55	2.56	6.66
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	94.5	82.0	18.0	320	70.8	0.750	2.17	6.19
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.522	0.250	0.160	1.00	0.383	0.733	0.557	-1.93
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	0.228	0.250	0.200	0.250	0.0256	0.112	-0.279	-2.22
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.618	0.520	0.240	1.00	0.376	0.609	0.0538	-2.21
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	16	13	81%	2017-12-07 to 2024-10-23		Nonparametric	7.30	1.50	0.520	38.0	10.2	1.40	2.01	4.65
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	17	13	76%	2017-12-07 to 2024-10-23		Nonparametric	480	200	20.0	1000	450	0.938	0.369	-2.09
16_2_116	MW-17003	Appendix IV	Lead	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	1.31	1.00	0.550	2.80	0.911	0.696	1.09	-0.598
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	17	1	6%	2017-12-07 to 2024-10-23	Nonparametric	Nonparametric	58.8	20.0	13.0	270	75.6	1.29	2.01	3.27
16_2_118	MW-17003	Appendix IV	Mercury	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	17	5	29%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	26.3	12.0	5.00	120	32.7	1.24	2.01	3.69
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	17	11	65%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	1.11	1.10	0.539	1.55	0.327	0.295	-0.365	-1.11
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.827	0.500	0.150	2.20	0.561	0.678	1.38	1.77
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	1.41	1.90	0.380	2.00	0.754	0.536	-0.664	-1.68
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	0.691	0.625	0.110	2.00	0.532	0.770	0.887	0.565
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	17	2	12%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	5.59	2.50	0.650	18.0	5.88	1.05	1.27	0.293
17_2_103	MW-17004	Appendix IV	Barium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	189	148	51.0	450	114	0.603	1.15	0.458
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	0.528	0.250	0.200	1.00	0.378	0.715	0.568	-1.93
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.243	0.250	0.200	0.490	0.0704	0.290	3.16	11.5
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	17	13	76%	2017-12-07 to 2024-10-23		Nonparametric	1.07	1.00	0.250	7.80	1.77	1.66	3.81	15.2
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	16	12	75%	2017-12-07 to 2024-10-23		Nonparametric	5.15	1.80	0.320	15.0	6.16	1.20	0.985	-0.845
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	17	15	88%	2017-12-07 to 2024-10-23		Nonparametric	491	200	100	1000	441	0.897	0.368	-2.09
17_2_116	MW-17004	Appendix IV	Lead	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	2.15	1.00	0.130	19.0	4.55	2.11	3.83	15
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	17	7	41%	2017-12-07 to 2024-10-23	Lognormal	Nonparametric	23.7	10.0	2.80	63.0	21.5	0.906	0.974	-0.952
17_2_118	MW-17004	Appendix IV	Mercury	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	17	8	47%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	13.0	5.90	1.00	46.0	13.7	1.05	1.35	0.775

(Table continues on next page)

^a Non-detects are excluded from goodness-of-fit tests.



Table 1: Summary Statistics, Non-Detects Included (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit ^a	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	17	12	71%	2017-12-07 to 2024-10-23	Nonparametric	Nonparametric	1.34	1.04	0.546	4.93	0.978	0.732	3.44	13.1
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.878	1.00	0.150	2.60	0.623	0.709	1.61	3.02
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	1.29	1.85	0.130	2.00	0.800	0.620	-0.387	-1.98
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	0.641	0.250	0.250	2.00	0.516	0.806	1.25	1.52
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.825	0.550	0.110	2.90	0.613	0.743	2.52	8.67
18_2_103	MW-17005	Appendix IV	Barium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	158	131	64.0	456	105	0.666	1.76	3.21
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.516	0.250	0.0600	1.00	0.390	0.755	0.517	-1.89
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	0.228	0.250	0.200	0.250	0.0256	0.112	-0.279	-2.22
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	17	12	71%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Nonparametric	0.641	0.480	0.250	1.10	0.367	0.573	0.0523	-2.14
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	4.86	0.520	0.520	15.0	6.32	1.30	1.03	-0.842
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	17	16	94%	2017-12-07 to 2024-10-23		Nonparametric	484	200	100	1000	446	0.923	0.379	-2.10
18_2_116	MW-17005	Appendix IV	Lead	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.721	0.550	0.130	1.00	0.274	0.381	-0.344	-0.695
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	3	18%	2017-12-07 to 2024-10-23	Lognormal	Lognormal	12.9	10.0	3.90	47.5	11.5	0.891	2.39	5.46
18_2_118	MW-17005	Appendix IV	Mercury	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	0.200	0.200	0.200	0.200	0	0	NA	NA
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	17	16	94%	2017-12-07 to 2024-10-23		Nonparametric	2.70	1.20	0.290	5.00	2.0	0.739	0.351	-2.06
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	17	12	71%	2017-12-07 to 2024-10-23	Nonparametric	Nonparametric	1.25	1.00	0.680	4.22	0.823	0.659	3.26	11.9
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	17	17	100%	2017-12-07 to 2024-10-23		Nonparametric	0.794	0.500	0.500	2.00	0.398	0.501	1.79	4.34
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	16	16	100%	2017-12-07 to 2024-10-23		Nonparametric	1.03	0.380	0.380	2.00	0.794	0.773	0.474	-1.96
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	15	15	100%	2017-12-07 to 2024-10-23		Nonparametric	0.667	0.250	0.250	2.00	0.523	0.785	1.16	1.33
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	16	6	38%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	2.60	1.45	0.550	6.60	2.30	0.883	0.593	-1.44
19_2_103	MW-17006	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	93.4	81.2	65.0	190	32.2	0.345	2.01	4.73
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	15	15	100%	2017-12-07 to 2024-10-23		Nonparametric	0.547	0.250	0.200	1.00	0.383	0.701	0.451	-2.09
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	15	15	100%	2017-12-07 to 2024-10-23		Nonparametric	0.227	0.250	0.200	0.250	0.0258	0.114	-0.149	-2.31
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	0.636	0.625	0.220	1.20	0.405	0.637	0.0518	-2.19
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	15	15	100%	2017-12-07 to 2024-10-23		Nonparametric	5.14	0.520	0.520	15.0	6.43	1.25	0.922	-1.08
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	16	11	69%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	519	200	100	1000	439	0.845	0.261	-2.20
19_2_116	MW-17006	Appendix IV	Lead	ug/L	15	15	100%	2017-12-07 to 2024-10-23		Nonparametric	0.760	0.550	0.550	1.00	0.232	0.306	0.149	-2.31
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	31.5	31.5	12.0	57.0	9.62	0.306	0.728	3.09
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	15	14	93%	2017-12-07 to 2024-10-23		Nonparametric	0.267	0.200	0.200	1.20	0.258	0.968	3.87	15.0
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	16	12	75%	2017-12-07 to 2024-10-23		Nonparametric	3.88	5.00	1.20	12.0	2.93	0.755	1.31	2.67
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	16	11	69%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	1.03	1.00	0.437	2.11	0.414	0.402	1.38	2.53
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.790	0.750	0.140	2.00	0.431	0.545	1.33	3.19
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	15	15	100%	2017-12-07 to 2024-10-23		Nonparametric	1.07	0.380	0.380	2.00	0.802	0.750	0.354	-2.09

^a Non-detects are excluded from goodness-of-fit tests.



Table 2: Summary Statistics, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	1.00	1.00	1.00	1.00	NA	NA	NA	NA
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	23	1	4%	2015-12-01 to 2024-10-23	Gamma; Normal	Gamma	13.2	12.5	0.740	45.0	11.5	0.875	1.05	1.19
01_2_103	MW-15009	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	50.1	16.5	9.00	250	57.1	1.14	2.19	6.00
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	1.11	1.00	0.320	2.00	0.845	0.764	0.559	NA
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.100	0.100	0.100	0.100	NA	NA	NA	NA
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	24	21	88%	2015-12-01 to 2024-10-23		Nonparametric	103	100	88.0	120	16.2	0.157	0.722	NA
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	24.1	21.0	11.0	63.9	12.1	0.503	1.85	4.46
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	23	8	35%	2015-12-01 to 2024-10-23	Normal	Nonparametric	28.9	38.0	1.40	60.0	22.5	0.778	-0.0319	-1.90
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	0.861	0.807	0.747	1.03	0.149	0.173	1.42	NA
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	2.00	2.00	2.00	2.00	NA	NA	NA	NA
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	24	22	92%	2015-12-01 to 2024-10-23		Nonparametric	0.370	0.370	0.330	0.410	0.0566	0.153	NA	NA
02_2_103	MW-15010	Appendix IV	Barium	ug/L	24	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	76.5	60.5	28.0	210	47.0	0.615	1.24	1.12
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	0.0580	0.0580	0.0580	0.0580	NA	NA	NA	NA
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	24	16	67%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	0.593	0.335	0.210	2.00	0.623	1.05	2.11	4.25
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	0.390	0.500	0.110	0.560	0.244	0.627	-1.62	NA
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	25	15	60%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	325	315	260	410	50.4	0.155	0.342	-1.09
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	24	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	29.7	26.5	14.0	54.0	11.8	0.396	0.651	-0.773
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	24	11	46%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Gamma	12.7	9.00	1.10	33.0	11.5	0.903	0.598	-1.13
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	24	14	58%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	1.35	1.32	0.451	2.03	0.528	0.391	-0.254	-1.07
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	24	22	92%	2015-12-01 to 2024-10-23		Nonparametric	1.00	1.00	1.00	1.00	0	0	NA	NA
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	23	19	83%	2015-12-01 to 2024-10-23		Nonparametric	0.630	0.510	0.200	1.30	0.519	0.824	0.788	-1.59
03_2_103	MW-15013	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	72.3	51.0	31.0	180	40.8	0.565	1.30	0.769
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	1.33	1.00	1.00	2.00	0.577	0.433	1.73	NA
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	22	20	91%	2015-12-01 to 2024-10-23		Nonparametric	0.115	0.115	0.110	0.120	0.00707	0.0615	NA	NA
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	24	19	79%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	218	230	140	280	61.4	0.282	-0.368	-2.33
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	23	1	4%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	24.1	22.0	13.0	46.0	8.58	0.356	1.09	0.535
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23	5	22%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	12.1	8.35	0.620	77.2	17.4	1.44	3.39	12.9
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	23	16	70%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.878	0.900	0.508	1.19	0.253	0.288	-0.440	-1.19
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	1.00	1.00	1.00	1.00	NA	NA	NA	NA
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	8	5	62%	2022-02-01 to 2024-10-23		Nonparametric	0.713	0.280	0.260	1.60	0.768	1.08	1.73	NA
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	8	0	0%	2022-02-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	175	170	160	200	14.1	0.0808	0.808	-0.229
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	8	7	88%	2022-02-01 to 2024-10-23		Nonparametric	0.100	0.100	0.100	0.100	NA	NA	NA	NA
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	8	7	88%	2022-02-01 to 2024-10-23		Nonparametric	0.130	0.130	0.130	0.130	NA	NA	NA	NA
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	8	1	12%	2022-02-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	251	270	180	300	45.3	0.180	-0.795	-0.832
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	8	0	0%	2022-02-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	58.4	48.0	36.0	130	30.6	0.524	2.29	5.63
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	8	2	25%	2022-02-01 to 2024-10-23	Gamma; Lognormal	Gamma	3.51	2.50	0.680	11.0	3.81	1.08	2.06	4.55
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	8	4	50%	2022-02-01 to 2024-10-23		Nonparametric	1.33	1.44	0.670	1.76	0.464	0.349	-1.34	2.53
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	8	7	88%	2022-02-01 to 2024-10-23		Nonparametric	0.110	0.110	0.110	0.110	NA	NA	NA	NA
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	11	6	55%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	3.99	1.70	0.410	13.0	5.22	1.31	1.88	3.55
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	19.8	19.0	3.20	43.0	12.5	0.632	0.681	-0.278
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	117	120	60.0	170	33.7	0.287	-0.145	-0.748
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	11	10	91%	2020-05-21 to 2024-10-23		Nonparametric	0.0580	0.0580	0.0580	0.0580	NA	NA	NA	NA
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	11	9	82%	2020-05-21 to 2024-10-23		Nonparametric	0.235	0.235	0.220	0.250	0.0212	0.0903	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	Kurtosis
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	11	7	64%	2020-05-21 to 2024-10-23		Nonparametric	0.290	0.265	0.210	0.420	0.0976	0.337	0.967	-0.636
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	11	6	55%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	105	110	12.0	180	63.2	0.601	-0.592	0.508
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	45.8	41.0	3.80	120	29.3	0.639	1.55	4.29
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal	Gamma	130	30.0	2.00	430	143	1.10	0.939	0.0708
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	11	7	64%	2020-05-21 to 2024-10-23		Nonparametric	1.67	1.81	0.918	2.12	0.554	0.332	-1.07	-0.101
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	11	7	64%	2020-05-21 to 2024-10-23		Nonparametric	0.665	0.645	0.270	1.10	0.447	0.671	0.0415	-5.74
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	11	9	82%	2020-05-21 to 2024-10-23		Nonparametric	0.180	0.180	0.140	0.220	0.0566	0.314	NA	NA
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	11	1	9%	2020-05-21 to 2024-10-23	Nonparametric	Nonparametric	2.93	1.75	1.30	10.1	2.80	0.955	2.34	5.30
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1010	960	789	1300	163	0.161	0.323	-0.775
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	11	10	91%	2020-05-21 to 2024-10-23		Nonparametric	0.0850	0.0850	0.0850	0.0850	NA	NA	NA	NA
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	11	2	18%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	0.841	0.790	0.650	1.20	0.193	0.229	1.08	0.0384
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	11	1	9%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.11	0.980	0.660	1.90	0.383	0.344	1.15	0.724
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	11	9	82%	2020-05-21 to 2024-10-23		Nonparametric	110	110	81.0	140	41.7	0.378	NA	NA
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	11	9	82%	2020-05-21 to 2024-10-23		Nonparametric	0.0795	0.0795	0.0590	0.100	0.0290	0.365	NA	NA
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	11	3	27%	2020-05-21 to 2024-10-23	Nonparametric	Nonparametric	19	5.65	3.70	110	36.8	1.94	2.81	7.92
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	11	8	73%	2020-05-21 to 2024-10-23		Nonparametric	4.06	4.30	0.390	7.50	3.56	0.876	-0.298	NA
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Normal	Normal	4.12	4.08	1.60	5.64	1.23	0.298	-0.645	0.307
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	11	8	73%	2020-05-21 to 2024-10-23		Nonparametric	0.537	0.190	0.120	1.30	0.662	1.23	1.71	NA
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	23	1	4%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	4.03	2.15	1.60	13.0	3.65	0.905	1.77	1.87
07_2_103	MW-15017	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	980	980	772	1200	98.1	0.100	0.111	0.353
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.0660	0.0660	0.0660	0.0660	NA	NA	NA	NA
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	1	4%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	3.39	3.25	0.510	11.0	2.65	0.783	1.44	2.56
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	22	13	59%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.918	0.890	0.500	1.30	0.233	0.253	0.0220	0.799
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	23	17	74%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	6.72	4.60	3.50	18.0	5.57	0.829	2.37	5.70
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	23	21	91%	2015-12-01 to 2024-10-23		Nonparametric	0.930	0.930	0.360	1.50	0.806	0.867	NA	NA
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	23	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	4.79	4.75	3.00	5.89	0.675	0.141	-0.535	0.680
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	23	12	52%	2015-12-01 to 2024-10-23	Gamma	Nonparametric	2.90	2.70	0.150	8.00	1.95	0.673	1.79	5.11
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	23	16	70%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	1.37	0.930	0.440	3.80	1.18	0.858	1.85	3.28
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	149	143	93.0	280	39.8	0.267	2.11	5.54
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.140	0.140	0.140	0.140	NA	NA	NA	NA
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	23	11	48%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	0.807	0.835	0.280	1.80	0.420	0.521	0.978	1.74
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	22	20	91%	2015-12-01 to 2024-10-23		Nonparametric	0.505	0.505	0.450	0.560	0.0778	0.154	NA	NA
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	24	16	67%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	185	185	110	250	52.4	0.283	-0.131	-1.56
08_2_116	MW-15018	Appendix IV	Lead	ug/L	22	17	77%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	1.29	0.740	0.310	3.90	1.47	1.14	2.13	4.67
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	20.8	21.0	12.0	33.0	5.39	0.259	0.221	-0.298
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	23	21	91%	2015-12-01 to 2024-10-23		Nonparametric	0.865	0.865	0.530	1.20	0.474	0.548	NA	NA
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	23	8	35%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.30	1.25	0.915	1.77	0.244	0.188	0.667	-0.0741
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	1.73	1.00	0.190	4.00	2.01	1.16	1.42	NA
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.170	0.170	0.170	0.170	NA	NA	NA	NA
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	23	15	65%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	1.79	0.740	0.450	8.10	2.60	1.45	2.63	7.09
09_2_103	MW-15019	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	201	114	78.0	640	152	0.753	1.48	1.70
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.0580	0.0580	0.0580	0.0580	NA	NA	NA	NA
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.0780	0.0780	0.0780	0.0780	NA	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	Kurtosis
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	23	14	61%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.668	0.630	0.300	1.00	0.256	0.383	0.133	-1.33
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	22	13	59%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	0.884	0.700	0.610	1.80	0.420	0.475	1.82	2.23
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	24	23	96%	2015-12-01 to 2024-10-23		Nonparametric	52.0	52.0	52.0	52.0	NA	NA	NA	NA
09_2_116	MW-15019	Appendix IV	Lead	ug/L	22	19	86%	2015-12-01 to 2024-10-23		Nonparametric	0.420	0.170	0.160	0.930	0.442	1.05	1.73	NA
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	23	3	13%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	19.9	23.0	4.40	33.0	8.75	0.440	-0.886	-0.522
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	23	19	83%	2015-12-01 to 2024-10-23		Nonparametric	3.57	2.45	0.580	8.80	3.74	1.05	1.31	1.17
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	23	5	22%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.53	1.18	0.674	3.81	0.860	0.560	1.32	1.40
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	23	18	78%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.762	0.340	0.120	2.00	0.820	1.08	1.07	-0.457
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	22	19	86%	2015-12-01 to 2024-10-23		Nonparametric	0.319	0.280	0.0970	0.580	0.244	0.764	0.701	NA
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	23	19	83%	2015-12-01 to 2024-10-23		Nonparametric	0.458	0.445	0.240	0.700	0.214	0.468	0.190	-3.67
10_2_103	MW-15020	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Normal	Nonparametric	175	148	47.0	393	122	0.702	0.488	-1.35
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	23	14	61%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.776	0.550	0.280	2.00	0.539	0.695	1.66	2.97
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	22	20	91%	2015-12-01 to 2024-10-23		Nonparametric	0.235	0.235	0.180	0.290	0.0778	0.331	NA	NA
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	24	23	96%	2015-12-01 to 2024-10-23		Nonparametric	120	120	120	120	NA	NA	NA	NA
10_2_116	MW-15020	Appendix IV	Lead	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.710	0.710	0.710	0.710	NA	NA	NA	NA
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	23	5	22%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	12.6	14.0	4.60	20.0	5.07	0.403	-0.528	-1.18
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	0.250	0.250	0.250	0.250	NA	NA	NA	NA
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	23	6	26%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.94	1.94	0.652	4.68	1.04	0.538	1.03	1.64
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	1.47	1.40	1.00	2.00	0.503	0.343	0.586	NA
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.150	0.150	0.150	0.150	NA	NA	NA	NA
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	23	7	30%	2015-12-01 to 2024-10-23	Gamma; Normal	Normal	1.43	1.30	0.120	3.00	0.673	0.469	0.414	1.03
11_2_103	MW-15021	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	293	250	211	480	78.9	0.269	1.02	-0.221
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	23	7	30%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	1.28	1.05	0.720	2.00	0.522	0.408	0.634	-1.44
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	22	15	68%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.880	0.890	0.740	1.00	0.111	0.126	-0.144	-2.13
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	23	18	78%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	2.90	2.70	2.10	3.70	0.762	0.263	0.272	-2.95
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.750	0.750	0.750	0.750	NA	NA	NA	NA
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	23	6	26%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.89	1.77	0.966	3.24	0.639	0.337	0.653	-0.535
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	23	15	65%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	1.37	1.00	0.150	4.00	1.23	0.902	1.51	2.84
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	1.90	1.90	1.90	1.90	NA	NA	NA	NA
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	24	11	46%	2015-12-01 to 2024-10-23	Normal	Nonparametric	4.28	4.00	0.190	8.00	2.82	0.658	-0.249	-1.33
12_2_103	MW-15022	Appendix IV	Barium	ug/L	24	0	0%	2015-12-01 to 2024-10-23	Lognormal	Lognormal	167	140	102	290	54.5	0.327	0.765	-0.629
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	24	18	75%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.840	0.695	0.280	2.00	0.653	0.778	1.29	1.44
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	23	20	87%	2015-12-01 to 2024-10-23		Nonparametric	0.407	0.350	0.350	0.520	0.0981	0.241	1.73	NA
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	25	20	80%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	212	160	110	380	115	0.541	0.911	-0.946
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	24	8	33%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Gamma	29.6	24.0	11.0	68.0	17.1	0.579	1.19	0.602
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	23	22	96%	2015-12-01 to 2024-10-23		Nonparametric	0.290	0.290	0.290	0.290	NA	NA	NA	NA
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	24	12	50%	2015-12-01 to 2024-10-23	Normal	Nonparametric	14.7	13.8	0.320	47.6	12.5	0.849	1.60	4.19
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	24	16	67%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	1.36	1.00	0.812	3.50	0.900	0.664	2.44	6.25
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	24	23	96%	2015-12-01 to 2024-10-23		Nonparametric	0.110	0.110	0.110	0.110	NA	NA	NA	NA
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	23	9	39%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	2.70	1.95	0.650	9.90	3.03	1.12	2.05	3.11
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0	0%	2015-12-01 to 2024-10-23	Normal	Normal	70.6	57.0	38.0	190	34.6	0.490	1.91	5.38
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	23	18	78%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.798	0.480	0.250	2.00	0.738	0.924	1.45	1.60
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.110	0.110	0.110	0.110	NA	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	Kurtosis
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	24	17	71%	2015-12-01 to 2024-10-23	Gamma; Lognormal	Nonparametric	159	120	100	260	70.3	0.444	1.11	-0.947
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	23	7	30%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Normal	17.5	14.0	8.30	36.0	8.34	0.477	1.01	0.0922
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	22	21	95%	2015-12-01 to 2024-10-23		Nonparametric	0.550	0.550	0.550	0.550	NA	NA	NA	NA
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	23	4	17%	2015-12-01 to 2024-10-23	Nonparametric	Nonparametric	10.9	7.00	5.10	34.0	8.67	0.793	1.88	2.46
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	23	14	61%	2015-12-01 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.872	0.924	0.178	1.71	0.493	0.565	0.382	-0.582
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	23	21	91%	2015-12-01 to 2024-10-23		Nonparametric	0.555	0.555	0.110	1.00	0.629	1.13	NA	NA
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	11	10	91%	2020-05-21 to 2024-10-23		Nonparametric	0.120	0.120	0.120	0.120	NA	NA	NA	NA
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	5	45%	2020-05-21 to 2024-10-23	Gamma; Lognormal	Gamma	1.83	0.635	0.190	7.30	2.76	1.51	2.16	4.75
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	165	180	90.6	230	56.6	0.344	-0.135	-2.01
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	11	6	55%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.234	0.210	0.170	0.330	0.0688	0.294	0.703	-1.57
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	11	6	55%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.404	0.290	0.250	0.830	0.244	0.605	1.97	3.93
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	11	4	36%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	139	130	100	180	28.5	0.206	0.200	-1.30
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	11	0	0%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	70.2	75.0	25.0	120	32.2	0.458	-0.0760	-1.35
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	11	5	45%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.28	1.19	0.370	2.50	0.957	0.748	0.187	-2.71
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	11	3	27%	2020-05-21 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.27	1.32	0.308	2.02	0.555	0.438	-0.355	0.0268
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	0.820	0.820	0.140	1.50	0.962	1.17	NA	NA
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	17	1	6%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	41.8	18.6	1.40	220	58.2	1.39	2.14	5.39
15_2_103	MW-17002	Appendix IV	Barium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	100	83.0	39.0	240	50.3	0.502	1.53	2.54
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.140	0.140	0.140	0.140	NA	NA	NA	NA
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	16	13	81%	2017-12-07 to 2024-10-23		Nonparametric	0.320	0.350	0.260	0.350	0.0520	0.162	-1.73	NA
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	17	12	71%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.356	0.330	0.250	0.470	0.0829	0.233	0.249	-0.0828
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.420	0.420	0.420	0.420	NA	NA	NA	NA
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	17	8	47%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	279	250	160	530	107	0.382	1.84	4.19
15_2_116	MW-17002	Appendix IV	Lead	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.130	0.130	0.130	0.130	NA	NA	NA	NA
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	154	150	46.0	240	53.2	0.345	-0.214	-0.247
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	17	6	35%	2017-12-07 to 2024-10-23	Gamma; Normal	Nonparametric	732	700	2.70	1800	723	0.987	0.347	-1.55
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	17	8	47%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	1.85	1.54	0.688	5.04	1.38	0.748	1.76	3.32
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.490	0.260	0.110	1.10	0.534	1.09	1.58	NA
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.120	0.120	0.120	0.120	NA	NA	NA	NA
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	1.10	1.10	1.10	1.10	NA	NA	NA	NA
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	3	18%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	42.6	23.6	1.00	210	58.0	1.36	2.34	5.38
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	94.5	82.0	18.0	320	70.8	0.750	2.17	6.19
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.160	0.160	0.160	0.160	NA	NA	NA	NA
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.337	0.250	0.240	0.520	0.159	0.472	1.72	NA
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	16	13	81%	2017-12-07 to 2024-10-23		Nonparametric	13.6	2.00	0.710	38.0	21.2	1.56	1.72	NA
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	17	13	76%	2017-12-07 to 2024-10-23		Nonparametric	110	115	89.0	120	14.6	0.133	-1.45	1.66
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	17	1	6%	2017-12-07 to 2024-10-23	Nonparametric	Nonparametric	61.2	22.5	13.0	270	77.4	1.26	1.92	2.86
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	17	5	29%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	35.2	17.5	6.30	120	35.5	1.01	1.61	2.00
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	17	11	65%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	0.964	0.954	0.539	1.38	0.340	0.353	0.0145	-2.06
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.853	0.210	0.150	2.20	1.17	1.37	1.73	NA
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	0.655	0.655	0.110	1.20	0.771	1.18	NA	NA
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	17	2	12%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	6.20	2.70	0.650	18.0	6.00	0.969	1.11	-0.171
17_2_103	MW-17004	Appendix IV	Barium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	189	148	51.0	450	114	0.603	1.15	0.458

(Table continues on next page)



Table 2: Summary Statistics, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness	Kurtosis
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.490	0.490	0.490	0.490	NA	NA	NA	NA
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	17	13	76%	2017-12-07 to 2024-10-23		Nonparametric	2.43	0.780	0.360	7.80	3.60	1.48	1.93	3.74
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	16	12	75%	2017-12-07 to 2024-10-23		Nonparametric	1.70	1.53	0.320	3.40	1.54	0.907	0.220	-4.65
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	17	15	88%	2017-12-07 to 2024-10-23		Nonparametric	175	175	120	230	77.8	0.444	NA	NA
17_2_116	MW-17004	Appendix IV	Lead	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	9.56	9.56	0.130	19.0	13.3	1.39	NA	NA
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	17	7	41%	2017-12-07 to 2024-10-23	Lognormal	Nonparametric	32.6	32.0	2.80	63.0	24.5	0.754	0.0327	-2.29
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	17	8	47%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	21.5	16.0	5.90	46.0	14.1	0.659	0.591	-0.976
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	17	12	71%	2017-12-07 to 2024-10-23	Nonparametric	Nonparametric	1.73	1.04	0.721	4.93	1.80	1.04	2.19	4.85
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	0.977	0.180	0.150	2.60	1.41	1.44	1.73	NA
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	0.965	0.965	0.130	1.80	1.18	1.22	NA	NA
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	17	14	82%	2017-12-07 to 2024-10-23		Nonparametric	1.06	0.160	0.110	2.90	1.60	1.51	1.73	NA
18_2_103	MW-17005	Appendix IV	Barium	ug/L	17	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Gamma	158	131	64.0	456	105	0.666	1.76	3.21
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.0600	0.0600	0.0600	0.0600	NA	NA	NA	NA
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	17	12	71%	2017-12-07 to 2024-10-23	Gamma; Lognormal	Nonparametric	0.530	0.440	0.280	1.10	0.328	0.619	1.92	3.94
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	17	16	94%	2017-12-07 to 2024-10-23		Nonparametric	120	120	120	120	NA	NA	NA	NA
18_2_116	MW-17005	Appendix IV	Lead	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.130	0.130	0.130	0.130	NA	NA	NA	NA
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	3	18%	2017-12-07 to 2024-10-23	Lognormal	Lognormal	13.5	10.5	3.90	47.5	12.6	0.934	2.11	3.95
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	17	16	94%	2017-12-07 to 2024-10-23		Nonparametric	0.290	0.290	0.290	0.290	NA	NA	NA	NA
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	17	12	71%	2017-12-07 to 2024-10-23	Nonparametric	Nonparametric	1.46	0.739	0.680	4.22	1.55	1.06	2.21	4.89
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	16	6	38%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	3.79	4.45	0.650	6.60	2.15	0.566	-0.316	-1.52
19_2_103	MW-17006	Appendix IV	Barium	ug/L	16	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	93.4	81.2	65.0	190	32.2	0.345	2.01	4.73
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	16	14	88%	2017-12-07 to 2024-10-23		Nonparametric	0.710	0.710	0.220	1.20	0.693	0.976	NA	NA
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	16	11	69%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	142	130	110	190	36.3	0.256	0.567	-2.23
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0	0%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Normal	31.5	31.5	12.0	57.0	9.62	0.306	0.728	3.09
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	15	14	93%	2017-12-07 to 2024-10-23		Nonparametric	1.20	1.20	1.20	1.20	NA	NA	NA	NA
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	16	12	75%	2017-12-07 to 2024-10-23		Nonparametric	5.28	3.95	1.20	12.0	5.05	0.957	0.975	-0.623
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	16	11	69%	2017-12-07 to 2024-10-23	Gamma; Lognormal; Normal	Nonparametric	1.41	1.18	0.964	2.11	0.497	0.351	0.775	-1.67
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	16	15	94%	2017-12-07 to 2024-10-23		Nonparametric	0.140	0.140	0.140	0.140	NA	NA	NA	NA



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric		
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	23	1	4%	0.898	0.027	0.148	0.239	0.906	0.039	0.188	0.042	0.140	>= 0.10	0.516	>= 0.10	1.254	Gamma; Normal	Gamma
01_2_103	MW-15009	Appendix IV	Barium	ug/L	23	0	0%	0.726	0.000	0.244	0.001	0.878	0.009	0.237	0.002	0.259	< 0.01	1.300	< 0.01	1.031	Nonparametric	Nonparametric
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	23	20	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.925	NA	Nonparametric	
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	24	21	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.156	NA	Nonparametric	
01_2_116	MW-15009	Appendix IV	Lead	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0	0%	0.823	0.001	0.170	0.084	0.951	0.302	0.128	0.419	0.131	>= 0.10	0.559	>= 0.10	0.435	Gamma; Lognormal; Normal	Normal
01_2_118	MW-15009	Appendix IV	Mercury	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	23	8	35%	0.855	0.020	0.191	0.150	0.840	0.013	0.269	0.005	0.265	0.01 <= p < 0.05	0.932	0.01 <= p < 0.05	1.340	Normal	Nonparametric
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	23	20	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.168	NA	Nonparametric	
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	24	22	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.153	NA	Nonparametric	
02_2_103	MW-15010	Appendix IV	Barium	ug/L	24	0	0%	0.839	0.001	0.237	0.001	0.938	0.144	0.150	0.175	0.174	0.05 <= p < 0.10	0.866	0.01 <= p < 0.05	0.570	Gamma; Lognormal	Gamma
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	24	16	67%	0.663	0.001	0.396	0.001	0.807	0.034	0.333	0.009	0.375	< 0.01	0.989	< 0.01	0.787	Nonparametric	Nonparametric
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	23	20	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.909	NA	Nonparametric	
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	25	15	60%	0.948	0.642	0.156	0.698	0.954	0.716	0.168	0.583	0.175	>= 0.10	0.264	>= 0.10	0.154	Gamma; Lognormal; Normal	Nonparametric
02_2_116	MW-15010	Appendix IV	Lead	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	24	0	0%	0.914	0.044	0.191	0.024	0.955	0.346	0.128	0.390	0.142	>= 0.10	0.555	>= 0.10	0.390	Gamma; Lognormal	Gamma
02_2_118	MW-15010	Appendix IV	Mercury	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	24	11	46%	0.875	0.062	0.181	0.288	0.889	0.095	0.183	0.270	0.177	>= 0.10	0.518	>= 0.10	1.250	Gamma; Lognormal; Normal	Gamma
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	24	14	58%	0.946	0.627	0.187	0.409	0.903	0.236	0.177	0.506	0.196	>= 0.10	0.331	>= 0.10	0.471	Gamma; Lognormal; Normal	Nonparametric
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	24	22	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.000	NA	Nonparametric	
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	23	19	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.908	NA	Nonparametric	
03_2_103	MW-15013	Appendix IV	Barium	ug/L	23	0	0%	0.814	0.001	0.256	0.000	0.898	0.023	0.223	0.004	0.243	< 0.01	1.304	< 0.01	0.496	Nonparametric	Nonparametric
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	23	20	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.400	NA	Nonparametric	
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	22	20	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.062	NA	Nonparametric	
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	24	19	79%	0.911	0.471	0.201	0.724	0.902	0.421	0.215	0.625	0.224	>= 0.10	0.354	>= 0.10	0.301	Gamma; Lognormal; Normal	Nonparametric
03_2_116	MW-15013	Appendix IV	Lead	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution		
								S-W		Lilliefors		S-W		Lilliefors		K-S					A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	23	1	4%	0.881	0.013	0.187	0.044	0.937	0.170	0.174	0.081	0.180	0.05 <= p < 0.10	0.753	0.01 <= p < 0.05	0.329	Gamma; Lognormal	Gamma
03_2_118	MW-15013	Appendix IV	Mercury	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Nonparametric
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23	5	22%	0.578	0.000	0.280	0.001	0.978	0.932	0.115	0.760	0.143	>= 0.10	0.401	>= 0.10	1.183	Gamma; Lognormal	Gamma
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	23	16	70%	0.934	0.587	0.193	0.596	0.904	0.353	0.195	0.583	0.212	>= 0.10	0.373	>= 0.10	0.318	Gamma; Lognormal; Normal	Nonparametric
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	8	5	62%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.028	Gamma; Lognormal; Normal	Nonparametric
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	8	0	0%	0.897	0.273	0.263	0.105	0.905	0.323	0.255	0.132	0.264	>= 0.10	0.421	>= 0.10	0.079	Gamma; Lognormal; Normal	Normal
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
04_2_109	MW-15014R	Appendix IV	Chromium	ug/L	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	8	1	12%	0.895	0.302	0.231	0.313	0.870	0.187	0.244	0.234	0.259	>= 0.10	0.537	>= 0.10	0.193	Gamma; Lognormal; Normal	Normal
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	8	0	0%	0.707	0.003	0.281	0.063	0.846	0.086	0.231	0.238	0.252	>= 0.10	0.720	0.01 <= p < 0.05	0.409	Gamma; Lognormal; Normal	Normal
04_2_118	MW-15014R	Appendix IV	Mercury	ug/L	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	8	2	25%	0.743	0.017	0.356	0.017	0.969	0.889	0.194	0.680	0.247	>= 0.10	0.340	>= 0.10	0.969	Gamma; Lognormal	Gamma
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	8	4	50%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.427	Gamma; Lognormal	Nonparametric
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Nonparametric
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Nonparametric
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	11	6	55%	0.764	0.040	0.299	0.148	0.984	0.953	0.146	0.978	0.219	>= 0.10	0.285	>= 0.10	1.347	Gamma; Lognormal; Normal	Nonparametric
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	11	0	0%	0.933	0.445	0.169	0.516	0.945	0.577	0.143	0.761	0.130	>= 0.10	0.217	>= 0.10	0.756	Gamma; Lognormal; Normal	Normal
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	11	0	0%	0.969	0.878	0.118	0.937	0.943	0.552	0.164	0.558	0.141	>= 0.10	0.275	>= 0.10	0.314	Gamma; Lognormal; Normal	Normal
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090	Gamma; Lognormal; Normal	Nonparametric
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.324	Gamma; Lognormal; Normal	Nonparametric
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	11	6	55%	0.981	0.942	0.169	0.911	0.792	0.070	0.330	0.080	0.287	>= 0.10	0.468	>= 0.10	1.080	Gamma; Lognormal; Normal	Nonparametric
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	11	0	0%	0.859	0.057	0.248	0.058	0.816	0.015	0.226	0.119	0.187	>= 0.10	0.548	>= 0.10	0.862	Gamma; Lognormal; Normal	Normal
05_2_118	MW-15015R	Appendix IV	Mercury	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Nonparametric
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	11	0	0%	0.820	0.017	0.303	0.006	0.903	0.204	0.224	0.126	0.228	>= 0.10	0.564	>= 0.10	1.789	Gamma; Lognormal	Gamma
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.387	Gamma; Lognormal	Nonparametric
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.764	Gamma; Lognormal	Nonparametric
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Nonparametric
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.320	Gamma; Lognormal	Nonparametric
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	11	1	9%	0.612	0.000	0.403	0.000	0.753	0.004	0.320	0.005	0.365	< 0.01	1.440	< 0.01	0.660	Gamma; Lognormal	Nonparametric
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	11	0	0%	0.949	0.632	0.165	0.549	0.954	0.698	0.183	0.387	0.186	>= 0.10	0.292	>= 0.10	0.161	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric			
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	11	2	18%	0.863	0.102	0.198	0.394	0.896	0.232	0.199	0.381	0.212	>= 0.10	0.505	>= 0.10	0.215	Gamma; Lognormal; Normal	Normal
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	11	1	9%	0.894	0.187	0.216	0.205	0.957	0.752	0.173	0.537	0.194	>= 0.10	0.363	>= 0.10	0.320	Gamma; Lognormal; Normal	Normal
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.387		Nonparametric	
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.373		Nonparametric	
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	11	3	27%	0.466	0.000	0.462	0.000	0.665	0.001	0.352	0.004	0.399	< 0.01	1.726	< 0.01	1.093	Nonparametric	Nonparametric
06_2_118	MW-15016R	Appendix IV	Mercury	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.571		Nonparametric	
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	11	0	0%	0.931	0.417	0.189	0.334	0.849	0.042	0.252	0.049	0.234	>= 0.10	0.505	>= 0.10	0.365	Gamma; Normal	Normal
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.264		Nonparametric	
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	23	1	4%	0.656	0.000	0.319	0.000	0.776	0.000	0.298	0.000	0.318	< 0.01	2.519	< 0.01	0.689	Nonparametric	Nonparametric
07_2_103	MW-15017	Appendix IV	Barium	ug/L	23	0	0%	0.974	0.775	0.118	0.551	0.973	0.763	0.114	0.614	0.109	>= 0.10	0.326	>= 0.10	0.101	Gamma; Lognormal; Normal	Normal
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	1	4%	0.853	0.004	0.181	0.059	0.926	0.100	0.211	0.012	0.161	>= 0.10	0.576	>= 0.10	0.877	Gamma; Lognormal; Normal	Normal
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	22	13	59%	0.943	0.614	0.206	0.332	0.912	0.328	0.212	0.291	0.190	>= 0.10	0.391	>= 0.10	0.273	Gamma; Lognormal; Normal	Nonparametric
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_116	MW-15017	Appendix IV	Lead	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	23	17	74%	0.613	0.001	0.420	0.001	0.741	0.016	0.342	0.027	0.382	0.01 <= p < 0.05	0.997	< 0.01	0.594	Nonparametric	Nonparametric
07_2_118	MW-15017	Appendix IV	Mercury	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	23	21	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.009		Nonparametric	
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	23	0	0%	0.960	0.469	0.090	0.898	0.921	0.070	0.108	0.700	0.097	>= 0.10	0.344	>= 0.10	0.151	Gamma; Lognormal; Normal	Normal
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	23	12	52%	0.813	0.014	0.299	0.007	0.741	0.002	0.306	0.005	0.241	0.05 <= p < 0.10	0.814	0.01 <= p < 0.05	0.983	Gamma	Nonparametric
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	23	16	70%	0.769	0.020	0.339	0.015	0.937	0.608	0.252	0.197	0.297	0.05 <= p < 0.10	0.470	>= 0.10	0.725	Gamma; Lognormal	Nonparametric
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0	0%	0.774	0.000	0.262	0.000	0.888	0.014	0.205	0.013	0.221	< 0.01	1.211	< 0.01	0.230	Nonparametric	Nonparametric
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	23	11	48%	0.878	0.082	0.240	0.054	0.914	0.242	0.233	0.070	0.228	>= 0.10	0.517	>= 0.10	0.553	Gamma; Lognormal; Normal	Normal
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	22	20	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.155		Nonparametric	
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	24	16	67%	0.936	0.575	0.180	0.625	0.931	0.526	0.177	0.649	0.195	>= 0.10	0.292	>= 0.10	0.301	Gamma; Lognormal; Normal	Nonparametric
08_2_116	MW-15018	Appendix IV	Lead	ug/L	22	17	77%	0.678	0.006	0.422	0.004	0.883	0.325	0.319	0.097	0.377	0.01 <= p < 0.05	0.626	0.05 <= p < 0.10	0.925	Gamma; Lognormal	Nonparametric
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	23	0	0%	0.975	0.801	0.082	0.952	0.968	0.636	0.126	0.452	0.111	>= 0.10	0.274	>= 0.10	0.268	Gamma; Lognormal; Normal	Normal
08_2_118	MW-15018	Appendix IV	Mercury	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	23	21	91%	NA	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)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution				
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	23	8	35%	0.933	0.303	0.186	0.177	0.959	0.679	0.153	0.449	0.161	>= 0.10	0.335	>= 0.10	0.184	Gamma; Lognormal; Normal	Normal
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	23	20	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.526		Nonparametric	
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	23	15	65%	0.580	0.000	0.374	0.002	0.833	0.064	0.222	0.293	0.244	>= 0.10	0.907	0.01 <= p < 0.05	0.983	Gamma; Lognormal	Nonparametric
09_2_103	MW-15019	Appendix IV	Barium	ug/L	23	0	0%	0.779	0.000	0.239	0.001	0.861	0.004	0.223	0.004	0.240	< 0.01	1.554	< 0.01	0.652	Nonparametric	Nonparametric
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	23	14	61%	0.927	0.456	0.161	0.716	0.937	0.546	0.154	0.778	0.172	>= 0.10	0.275	>= 0.10	0.416	Gamma; Lognormal; Normal	Nonparametric
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	22	13	59%	0.665	0.001	0.403	0.000	0.717	0.002	0.369	0.001	0.390	< 0.01	1.397	< 0.01	0.385	Nonparametric	Nonparametric
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	24	23	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
09_2_116	MW-15019	Appendix IV	Lead	ug/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.999		Nonparametric	
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	23	3	13%	0.823	0.002	0.296	0.000	0.724	0.000	0.353	0.000	0.345	< 0.01	2.442	< 0.01	0.664	Nonparametric	Nonparametric
09_2_118	MW-15019	Appendix IV	Mercury	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	23	19	83%	NA	NA	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	23	5	22%	0.854	0.010	0.197	0.062	0.937	0.253	0.169	0.190	0.184	>= 0.10	0.609	>= 0.10	0.507	Gamma; Lognormal; Normal	Normal
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	23	18	78%	0.840	0.165	0.297	0.157	0.906	0.444	0.201	0.728	0.242	>= 0.10	0.380	>= 0.10	1.246	Gamma; Lognormal; Normal	Nonparametric
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	22	19	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.899		Nonparametric	
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	23	19	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.497		Nonparametric	
10_2_103	MW-15020	Appendix IV	Barium	ug/L	23	0	0%	0.859	0.004	0.172	0.075	0.869	0.006	0.186	0.039	0.190	0.01 <= p < 0.05	1.040	< 0.01	0.795	Normal	Nonparametric
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	23	14	61%	0.830	0.044	0.218	0.251	0.962	0.822	0.159	0.734	0.194	>= 0.10	0.328	>= 0.10	0.619	Gamma; Lognormal; Normal	Nonparametric
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	22	20	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.337		Nonparametric	
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	24	23	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
10_2_116	MW-15020	Appendix IV	Lead	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	23	5	22%	0.869	0.017	0.278	0.001	0.808	0.002	0.329	0.000	0.320	< 0.01	1.470	< 0.01	0.505	Nonparametric	Nonparametric
10_2_118	MW-15020	Appendix IV	Mercury	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	23	6	26%	0.920	0.145	0.111	0.833	0.948	0.421	0.138	0.527	0.123	>= 0.10	0.299	>= 0.10	0.565	Gamma; Lognormal; Normal	Normal
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	23	20	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.347		Nonparametric	
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	23	7	30%	0.951	0.508	0.142	0.531	0.762	0.001	0.266	0.004	0.212	0.05 <= p < 0.10	0.680	0.05 <= p < 0.10	0.717	Gamma; Normal	Normal
11_2_103	MW-15021	Appendix IV	Barium	ug/L	23	0	0%	0.828	0.001	0.264	0.000	0.855	0.003	0.251	0.001	0.260	< 0.01	1.624	< 0.01	0.249	Nonparametric	Nonparametric
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Nonparametric	
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	23	7	30%	0.788	0.002	0.247	0.010	0.848	0.013	0.220	0.038	0.230	0.01 <= p < 0.05	1.161	< 0.01	0.395	Nonparametric	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution		
								S-W		Lilliefors		S-W		Lilliefors		K-S					A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	22	15	68%	0.883	0.238	0.193	0.601	0.883	0.239	0.197	0.565	0.215	>= 0.10	0.439	>= 0.10	0.128	Gamma; Lognormal; Normal	Nonparametric
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	24	24	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
11_2_116	MW-15021	Appendix IV	Lead	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	23	18	78%	0.846	0.183	0.253	0.363	0.868	0.260	0.248	0.394	0.277	>= 0.10	0.454	>= 0.10	0.264	Gamma; Lognormal; Normal	Nonparametric
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	23	6	26%	0.925	0.180	0.176	0.176	0.958	0.586	0.143	0.467	0.161	>= 0.10	0.447	>= 0.10	0.332	Gamma; Lognormal; Normal	Normal
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	23	15	65%	0.848	0.092	0.242	0.181	0.894	0.256	0.295	0.039	0.237	>= 0.10	0.370	>= 0.10	1.125	Gamma; Lognormal; Normal	Nonparametric
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	24	11	46%	0.908	0.174	0.166	0.420	0.774	0.003	0.313	0.001	0.285	0.01 <= p < 0.05	0.940	0.01 <= p < 0.05	1.304	Normal	Nonparametric
12_2_103	MW-15022	Appendix IV	Barium	ug/L	24	0	0%	0.884	0.010	0.231	0.002	0.917	0.051	0.201	0.013	0.216	< 0.01	1.014	0.01 <= p < 0.05	0.311	Lognormal	Lognormal
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	24	18	75%	0.837	0.124	0.255	0.258	0.905	0.407	0.253	0.267	0.279	>= 0.10	0.435	>= 0.10	0.764	Gamma; Lognormal; Normal	Nonparametric
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	23	20	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.229	NA	Nonparametric
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	25	20	80%	0.883	0.322	0.275	0.245	0.923	0.551	0.226	0.549	0.261	>= 0.10	0.352	>= 0.10	0.525	Gamma; Lognormal; Normal	Nonparametric
12_2_116	MW-15022	Appendix IV	Lead	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	24	8	33%	0.862	0.021	0.231	0.023	0.959	0.636	0.145	0.492	0.180	>= 0.10	0.424	>= 0.10	0.542	Gamma; Lognormal	Gamma
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	23	22	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	24	12	50%	0.841	0.028	0.199	0.210	0.777	0.005	0.332	0.001	0.283	0.01 <= p < 0.05	0.831	0.01 <= p < 0.05	1.553	Normal	Nonparametric
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	24	16	67%	0.647	0.001	0.307	0.025	0.784	0.019	0.234	0.219	0.240	>= 0.10	0.932	0.01 <= p < 0.05	0.487	Gamma; Lognormal	Nonparametric
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	24	23	96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	23	23	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	23	9	39%	0.633	0.000	0.377	0.000	0.864	0.034	0.234	0.036	0.300	< 0.01	1.169	< 0.01	0.879	Nonparametric	Nonparametric
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0	0%	0.782	0.000	0.178	0.057	0.889	0.015	0.190	0.030	0.195	0.01 <= p < 0.05	1.064	< 0.01	0.424	Normal	Normal
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	23	18	78%	0.827	0.132	0.267	0.286	0.906	0.445	0.212	0.652	0.231	>= 0.10	0.373	>= 0.10	0.897	Gamma; Lognormal; Normal	Nonparametric
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	24	17	71%	0.738	0.009	0.318	0.031	0.796	0.038	0.266	0.140	0.290	0.05 <= p < 0.10	0.850	0.01 <= p < 0.05	0.402	Gamma; Lognormal	Nonparametric
13_2_116	MW-15023	Appendix IV	Lead	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	23	7	30%	0.887	0.051	0.204	0.073	0.952	0.518	0.171	0.244	0.191	>= 0.10	0.433	>= 0.10	0.449	Gamma; Lognormal; Normal	Normal
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	22	21	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	23	4	17%	0.650	0.000	0.338	0.000	0.756	0.000	0.258	0.002	0.295	< 0.01	2.453	< 0.01	0.589	Nonparametric	Nonparametric
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	23	14	61%	0.971	0.902	0.155	0.775	0.940	0.585	0.190	0.459	0.172	>= 0.10	0.189	>= 0.10	0.698	Gamma; Lognormal; Normal	Nonparametric
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	23	21	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.561	NA	Nonparametric
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	22	22	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution		
								S-W		Lilliefors		S-W		Lilliefors		K-S					A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Gamma
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	5	45%	0.679	0.004	0.324	0.049	0.922	0.516	0.192	0.694	0.272	>= 0.10	0.462	>= 0.10	1.404	Gamma; Lognormal	Gamma
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	11	0	0%	0.858	0.054	0.188	0.340	0.855	0.050	0.208	0.204	0.212	>= 0.10	0.719	0.05 <= p < 0.10	0.371	Gamma; Lognormal; Normal	Normal
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	11	6	55%	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	Normal
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	11	6	55%	0.727	0.018	0.323	0.096	0.810	0.098	0.269	0.272	0.295	>= 0.10	0.636	0.05 <= p < 0.10	0.497	Gamma; Lognormal; Normal	Normal
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	11	4	36%	0.936	0.601	0.202	0.523	0.941	0.650	0.211	0.454	0.227	>= 0.10	0.343	>= 0.10	0.208	Gamma; Lognormal; Normal	Normal
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	11	0	0%	0.926	0.371	0.190	0.326	0.887	0.128	0.205	0.222	0.212	>= 0.10	0.506	>= 0.10	0.543	Gamma; Lognormal; Normal	Normal
14_2_118	MW-17001R	Appendix IV	Mercury	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	11	5	45%	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	Normal
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	11	3	27%	0.966	0.863	0.156	0.819	0.850	0.095	0.225	0.270	0.188	>= 0.10	0.391	>= 0.10	0.599	Gamma; Lognormal; Normal	Normal
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.677	Gamma; Lognormal	Gamma
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	17	1	6%	0.728	0.000	0.244	0.012	0.867	0.025	0.191	0.122	0.213	0.05 <= p < 0.10	0.833	0.01 <= p < 0.05	1.808	Gamma; Lognormal	Gamma
15_2_103	MW-17002	Appendix IV	Barium	ug/L	17	0	0%	0.858	0.014	0.216	0.034	0.968	0.782	0.145	0.443	0.173	>= 0.10	0.482	>= 0.10	0.451	Gamma; Lognormal	Gamma
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Gamma
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	16	13	81%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.172	Gamma; Lognormal	Gamma
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	17	12	71%	0.967	0.854	0.223	0.569	0.966	0.851	0.210	0.660	0.214	>= 0.10	0.254	>= 0.10	0.237	Gamma; Lognormal; Normal	Normal
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	17	8	47%	0.825	0.039	0.237	0.153	0.937	0.553	0.186	0.490	0.208	>= 0.10	0.450	>= 0.10	0.334	Gamma; Lognormal; Normal	Normal
15_2_116	MW-17002	Appendix IV	Lead	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	17	0	0%	0.964	0.707	0.127	0.657	0.889	0.044	0.182	0.143	0.154	>= 0.10	0.438	>= 0.10	0.421	Gamma; Lognormal; Normal	Normal
15_2_118	MW-17002	Appendix IV	Mercury	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	17	6	35%	0.851	0.044	0.220	0.146	0.818	0.016	0.259	0.038	0.238	>= 0.10	0.773	0.05 <= p < 0.10	2.613	Gamma; Normal	Normal
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	17	8	47%	0.811	0.027	0.250	0.107	0.947	0.657	0.146	0.838	0.189	>= 0.10	0.345	>= 0.10	0.658	Gamma; Lognormal; Normal	Normal
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	17	14	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.163	Gamma; Lognormal; Normal	Normal
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal; Normal	Normal
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Gamma
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	3	18%	0.673	0.000	0.320	0.000	0.972	0.904	0.140	0.643	0.171	>= 0.10	0.363	>= 0.10	1.376	Gamma; Lognormal	Gamma
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0	0%	0.793	0.002	0.214	0.037	0.964	0.713	0.166	0.245	0.129	>= 0.10	0.345	>= 0.10	0.709	Gamma; Lognormal	Gamma
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Gamma
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Gamma
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	17	14	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.435	Gamma; Lognormal	Gamma
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	16	13	81%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.065	Gamma; Lognormal	Gamma
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	17	13	76%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.141	Gamma; Lognormal	Gamma
16_2_116	MW-17003	Appendix IV	Lead	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Gamma; Lognormal	Gamma

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal		Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution					
								S-W		Lilliefors		S-W		Lilliefors					K-S		A-D		
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value	Stat.	p-Value	
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	17	1	6%	0.667	0.000	0.323	0.000	0.844	0.011	0.216	0.044	0.250	0.01 <= p < 0.05	1.494	< 0.01	0.995	Nonparametric	Nonparametric	
16_2_118	MW-17003	Appendix IV	Mercury	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	17	5	29%	0.784	0.006	0.270	0.016	0.950	0.635	0.190	0.268	0.238	0.05 <= p < 0.10	0.484	>= 0.10	0.941	Gamma; Lognormal	Gamma	
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	17	11	65%	0.935	0.621	0.176	0.808	0.936	0.627	0.192	0.694	0.197	>= 0.10	0.284	>= 0.10	0.375	Gamma; Lognormal; Normal	Nonparametric	
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	17	14	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.463		Nonparametric	
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.690		Nonparametric	
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	17	2	12%	0.807	0.005	0.253	0.011	0.943	0.420	0.168	0.307	0.216	0.05 <= p < 0.10	0.558	>= 0.10	1.041	Gamma; Lognormal	Gamma	
17_2_103	MW-17004	Appendix IV	Barium	ug/L	17	0	0%	0.870	0.022	0.221	0.027	0.971	0.844	0.136	0.557	0.172	>= 0.10	0.409	>= 0.10	0.583	Gamma; Lognormal	Gamma	
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	17	13	76%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.453		Nonparametric	
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	16	12	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.191		Nonparametric	
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	17	15	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.460		Nonparametric	
17_2_116	MW-17004	Appendix IV	Lead	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.525		Nonparametric	
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	17	7	41%	0.820	0.025	0.275	0.031	0.857	0.070	0.281	0.024	0.294	0.01 <= p < 0.05	0.771	0.01 <= p < 0.05	1.078	Lognormal	Nonparametric	
17_2_118	MW-17004	Appendix IV	Mercury	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	17	8	47%	0.919	0.386	0.206	0.329	0.948	0.672	0.158	0.749	0.143	>= 0.10	0.267	>= 0.10	0.729	Gamma; Lognormal; Normal	Normal	
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	17	12	71%	0.635	0.002	0.434	0.002	0.757	0.035	0.373	0.022	0.417	< 0.01	0.861	0.01 <= p < 0.05	0.773	Nonparametric	Nonparametric	
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	17	14	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.597		Nonparametric	
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.858		Nonparametric	
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	17	14	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.791		Nonparametric	
18_2_103	MW-17005	Appendix IV	Barium	ug/L	17	0	0%	0.803	0.002	0.242	0.009	0.934	0.255	0.143	0.466	0.161	>= 0.10	0.567	>= 0.10	0.576	Gamma; Lognormal	Gamma	
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	17	12	71%	0.772	0.047	0.361	0.032	0.897	0.394	0.283	0.209	0.315	>= 0.10	0.481	>= 0.10	0.520	Gamma; Lognormal	Nonparametric	
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	17	16	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_116	MW-17005	Appendix IV	Lead	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	3	18%	0.694	0.000	0.342	0.000	0.920	0.223	0.188	0.196	0.242	0.01 <= p < 0.05	0.808	0.01 <= p < 0.05	0.729	Lognormal	Lognormal	
18_2_118	MW-17005	Appendix IV	Mercury	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	17	16	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	17	12	71%	0.611	0.001	0.425	0.003	0.691	0.008	0.354	0.040	0.400	0.01 <= p < 0.05	0.986	< 0.01	0.777	Nonparametric	Nonparametric	
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	17	17	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	16	16	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	Nonparametric
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	16	6	38%	0.918	0.340	0.194	0.358	0.855	0.067	0.269	0.038	0.261	0.05 <= p < 0.10	0.569	>= 0.10	0.811	Gamma; Lognormal; Normal	Normal	
19_2_103	MW-17006	Appendix IV	Barium	ug/L	16	0	0%	0.782	0.002	0.191	0.121	0.878	0.037	0.164	0.294	0.175	>= 0.10	0.822	0.01 <= p < 0.05	0.290	Gamma; Lognormal; Normal	Normal	

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.



Table 3: Goodness-of-Fit Tests, Non-Detects Excluded (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Normal		Lognormal				Gamma				Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution		
								S-W		Lilliefors		S-W		Lilliefors		K-S					A-D	
								Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value				Stat.	p-Value
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric		
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric		
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	16	14	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.200	NA	Nonparametric		
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric		
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	16	11	69%	0.867	0.254	0.229	0.523	0.870	0.266	0.220	0.591	0.244	>= 0.10	0.434	>= 0.10	0.251	Gamma; Lognormal; Normal	Nonparametric
19_2_116	MW-17006	Appendix IV	Lead	ug/L	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0	0%	0.920	0.171	0.187	0.141	0.898	0.075	0.177	0.200	0.168	>= 0.10	0.497	>= 0.10	0.332	Gamma; Lognormal; Normal	Normal
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	16	12	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.099	NA	Nonparametric	
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	16	11	69%	0.878	0.299	0.282	0.213	0.899	0.406	0.254	0.359	0.282	>= 0.10	0.403	>= 0.10	0.339	Gamma; Lognormal; Normal	Nonparametric
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	16	15	94%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nonparametric	
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	15	15	100%	NA	NA	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	22	21	95%	NA	NA	
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	23	1	4%	0.714	0.000	***
01_2_103	MW-15009	Appendix IV	Barium	ug/L	23	0	0%	0.451	0.021	*
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	23	20	87%	-0.559	0.126	
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	22	21	95%	NA	NA	
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	24	21	88%	-0.014	0.970	
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0	0%	0.559	0.004	**
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	23	8	35%	0.824	0.000	***
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	23	20	87%	-0.066	0.856	
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	23	22	96%	NA	NA	
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	24	22	92%	-0.500	0.157	
02_2_103	MW-15010	Appendix IV	Barium	ug/L	24	0	0%	0.738	0.000	***
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	23	22	96%	NA	NA	
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	24	16	67%	0.332	0.261	
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	23	20	87%	-0.657	0.072	
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	25	15	60%	0.010	0.971	
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	24	0	0%	0.627	0.001	**
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	24	11	46%	0.644	0.009	**
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	24	14	58%	0.389	0.155	
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	24	22	92%	NA	NA	
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	23	19	83%	0.252	0.476	
03_2_103	MW-15013	Appendix IV	Barium	ug/L	23	0	0%	0.567	0.004	**
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	23	20	87%	-0.167	0.648	
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	22	20	91%	-0.500	0.157	
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	24	19	79%	0.234	0.488	
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	23	1	4%	0.514	0.010	**
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23	5	22%	0.009	0.968	
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	23	16	70%	0.052	0.865	
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	23	22	96%	NA	NA	
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	8	5	62%	-0.159	0.663	
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	8	0	0%	-0.482	0.103	
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	8	7	88%	NA	NA	
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	8	7	88%	NA	NA	
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	8	1	12%	-0.108	0.726	
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	8	0	0%	-0.092	0.756	
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	8	2	25%	0.106	0.742	
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	8	4	50%	-0.546	0.122	
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	8	7	88%	NA	NA	
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	11	6	55%	-0.374	0.269	
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	11	0	0%	0.369	0.162	
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	11	0	0%	-0.169	0.523	
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	11	10	91%	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_109	MW-15015R	Appendix IV	Chromium	ug/L	11	9	82%	-0.500	0.157	
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	11	7	64%	0.238	0.501	
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	11	6	55%	0.106	0.754	
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	11	0	0%	0.136	0.606	
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	11	0	0%	0.212	0.422	
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	11	7	64%	-0.448	0.205	
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	11	7	64%	0.270	0.445	
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	11	9	82%	-0.500	0.157	
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	11	1	9%	0.281	0.305	
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	11	0	0%	0.454	0.086	
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	11	10	91%	NA	NA	
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	11	2	18%	-0.443	0.119	
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	11	1	9%	0.353	0.198	
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	11	9	82%	-0.500	0.157	
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	11	9	82%	-0.500	0.157	
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	11	3	27%	-0.166	0.575	
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	11	8	73%	-0.466	0.202	
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	11	0	0%	0.226	0.392	
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	11	8	73%	-0.198	0.587	
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	23	1	4%	0.594	0.003	**
07_2_103	MW-15017	Appendix IV	Barium	ug/L	23	0	0%	0.478	0.015	*
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	22	21	95%	NA	NA	
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	1	4%	0.715	0.000	***
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	22	13	59%	0.171	0.547	
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	23	17	74%	-0.203	0.529	
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	23	21	91%	-0.500	0.157	
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	23	0	0%	0.083	0.672	
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	23	12	52%	-0.025	0.924	
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	23	16	70%	0.200	0.517	
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0	0%	0.567	0.004	**
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	22	21	95%	NA	NA	
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	23	11	48%	0.005	0.984	
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	22	20	91%	-0.500	0.157	
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	24	16	67%	-0.051	0.864	
08_2_116	MW-15018	Appendix IV	Lead	ug/L	22	17	77%	-0.036	0.915	
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	23	0	0%	0.502	0.010	*
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	23	21	91%	-0.500	0.157	
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	23	8	35%	0.089	0.704	
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	23	20	87%	-0.640	0.080	
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	22	21	95%	NA	NA	
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	23	15	65%	-0.065	0.826	
09_2_103	MW-15019	Appendix IV	Barium	ug/L	23	0	0%	0.145	0.458	

(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.
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	22	21	95%	NA	NA	
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	22	21	95%	NA	NA	
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	23	14	61%	-0.011	0.970	
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	22	13	59%	0.271	0.341	
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	24	23	96%	NA	NA	
09_2_116	MW-15019	Appendix IV	Lead	ug/L	22	19	86%	-0.160	0.661	
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	23	3	13%	0.259	0.212	
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	23	19	83%	-0.110	0.755	
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	23	5	22%	0.220	0.311	
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	23	18	78%	0.380	0.261	
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	22	19	86%	-0.013	0.972	
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	23	19	83%	0.238	0.501	
10_2_103	MW-15020	Appendix IV	Barium	ug/L	23	0	0%	0.706	0.000	***
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	23	14	61%	0.292	0.304	
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	22	20	91%	-0.500	0.157	
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	24	23	96%	NA	NA	
10_2_116	MW-15020	Appendix IV	Lead	ug/L	22	21	95%	NA	NA	
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	23	5	22%	0.774	0.000	***
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	23	22	96%	NA	NA	
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	23	6	26%	0.366	0.100	
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	23	20	87%	-0.561	0.124	
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	22	21	95%	NA	NA	
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	23	7	30%	0.168	0.463	
11_2_103	MW-15021	Appendix IV	Barium	ug/L	23	0	0%	0.769	0.000	***
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	23	7	30%	0.535	0.019	*
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	22	15	68%	-0.499	0.106	
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	23	18	78%	-0.414	0.221	
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	22	21	95%	NA	NA	
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	23	6	26%	0.063	0.777	
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	23	15	65%	-0.125	0.672	
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	23	22	96%	NA	NA	
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	24	11	46%	0.600	0.016	*
12_2_103	MW-15022	Appendix IV	Barium	ug/L	24	0	0%	0.298	0.121	
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	24	18	75%	0.380	0.239	
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	23	20	87%	-0.167	0.648	
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	25	20	80%	0.293	0.387	
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	24	8	33%	0.436	0.056	
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	23	22	96%	NA	NA	
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	24	12	50%	-0.023	0.929	
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	24	16	67%	-0.139	0.639	
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	24	23	96%	NA	NA	
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	23	9	39%	0.417	0.083	

(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.
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0	0%	0.323	0.099	
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	23	18	78%	0.277	0.412	
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	22	21	95%	NA	NA	
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	24	17	71%	0.334	0.279	
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	23	7	30%	0.299	0.190	
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	22	21	95%	NA	NA	
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	23	4	17%	0.336	0.114	
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	23	14	61%	0.012	0.966	
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	23	21	91%	-0.500	0.157	
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	11	10	91%	NA	NA	
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	5	45%	0.181	0.576	
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	11	0	0%	0.754	0.004	**
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	11	6	55%	0.163	0.630	
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	11	6	55%	-0.378	0.264	
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	11	4	36%	-0.003	0.991	
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	11	0	0%	0.168	0.525	
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	11	5	45%	-0.253	0.433	
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	11	3	27%	0.128	0.665	
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	16	14	88%	-0.500	0.157	
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	17	1	6%	0.410	0.073	
15_2_103	MW-17002	Appendix IV	Barium	ug/L	17	0	0%	-0.060	0.786	
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	16	15	94%	NA	NA	
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	16	13	81%	-0.167	0.648	
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	17	12	71%	-0.152	0.652	
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	16	15	94%	NA	NA	
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	17	8	47%	-0.124	0.663	
15_2_116	MW-17002	Appendix IV	Lead	ug/L	16	15	94%	NA	NA	
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	17	0	0%	0.264	0.235	
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	17	6	35%	0.446	0.091	
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	17	8	47%	0.101	0.723	
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	17	14	82%	-0.254	0.487	
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	16	15	94%	NA	NA	
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	16	15	94%	NA	NA	
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	3	18%	0.442	0.066	
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0	0%	0.482	0.030	*
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	16	15	94%	NA	NA	
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	17	14	82%	-0.185	0.612	
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	16	13	81%	-0.149	0.682	
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	17	13	76%	0.160	0.651	
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	17	1	6%	0.661	0.004	**
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	17	5	29%	0.526	0.040	*
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	17	11	65%	-0.020	0.952	

(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_127	MW-17003	Appendix IV	Selenium	ug/L	17	14	82%	-0.182	0.619	
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	16	14	88%	-0.500	0.157	
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	17	2	12%	0.605	0.010	**
17_2_103	MW-17004	Appendix IV	Barium	ug/L	17	0	0%	0.373	0.093	
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	16	15	94%	NA	NA	
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	17	13	76%	-0.345	0.329	
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	16	12	75%	0.124	0.726	
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	17	15	88%	-0.500	0.157	
17_2_116	MW-17004	Appendix IV	Lead	ug/L	16	14	88%	-0.500	0.157	
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	17	7	41%	0.702	0.010	*
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	17	8	47%	0.545	0.055	
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	17	12	71%	-0.295	0.382	
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	17	14	82%	-0.161	0.660	
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	16	14	88%	-0.500	0.157	
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	17	14	82%	-0.176	0.630	
18_2_103	MW-17005	Appendix IV	Barium	ug/L	17	0	0%	0.327	0.142	
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	16	15	94%	NA	NA	
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	17	12	71%	-0.017	0.960	
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	17	16	94%	NA	NA	
18_2_116	MW-17005	Appendix IV	Lead	ug/L	16	15	94%	NA	NA	
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	3	18%	0.092	0.701	
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	17	16	94%	NA	NA	
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	17	12	71%	-0.251	0.458	
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	16	6	38%	0.380	0.165	
19_2_103	MW-17006	Appendix IV	Barium	ug/L	16	0	0%	0.488	0.033	*
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	16	14	88%	-0.500	0.157	
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	16	11	69%	-0.739	0.029	*
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0	0%	0.130	0.570	
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	15	14	93%	NA	NA	
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	16	12	75%	0.232	0.512	
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	16	11	69%	-0.556	0.100	
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	16	15	94%	NA	NA	

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 5: Outlier Counts by Date

Date	Count
2016-04-18	1
2016-07-12	1
2016-09-28	1
2020-05-07	4
2020-05-21	1
2020-10-27	1
2021-04-20	3
2021-10-21	1
2022-02-01	1
2022-05-05	3
2022-10-19	1
2023-04-11	3
2023-10-02	1
2024-10-23	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	23	0	0%	23	2022-05-05	250
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0	0%	23	2020-05-07	63.9
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	23	20	87%	3	2016-04-18	2.00
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23	5	22%	18	2020-05-07	77.2
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	8	0	0%	8	2023-04-11	130
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	8	2	25%	6	2022-02-01	11.0
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	11	3	27%	8	2023-04-11	110
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	1	4%	22	2016-09-28	11.0
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	23	17	74%	6	2023-04-11	18.0
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	23	12	52%	11	2016-07-12	8.00
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0	0%	23	2021-04-20	280
08_2_116	MW-15018	Appendix IV	Lead	ug/L	22	17	77%	5	2021-10-21	3.90
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	23	15	65%	8	2022-05-05	8.10
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	23	20	87%	3	2023-10-02	0.520
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	24	16	67%	8	2020-05-07	3.50
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	23	9	39%	14	2024-10-23	9.90
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0	0%	23	2024-10-23	190
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	5	45%	6	2020-05-21	7.30
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	16	13	81%	3	2022-05-05	0.260
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	3	18%	14	2024-10-23	210
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0	0%	17	2021-04-20	320
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	17	12	71%	5	2021-04-20	4.93
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	3	18%	14	2020-05-07	47.5

(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
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	17	12	71%	5	2022-10-19	4.22
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0	0%	16	2020-10-27	57.0



Table 7: Seasonality Tests

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value		Sample Size					p-Value			
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	95%	3	9	3	7	22	0.086	0.074	0.074	1	0	0	0	1	NA	NA	NA
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	4%	3	9	3	8	23	0.141	0.024 *	0.150	3	8	3	8	22	0.152	0.029 *	0.146
01_2_103	MW-15009	Appendix IV	Barium	ug/L	0%	3	9	3	8	23	0.177	0.292	0.108	3	9	3	8	23	0.177	0.292	0.108
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	100%	3	9	3	7	22	0.090	0.061	0.064	NA	NA	NA	NA	NA	NA	NA	NA
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	87%	3	9	3	8	23	0.070	0.034 *	0.067	0	2	1	0	3	0.221	0.264	0.422
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	95%	3	9	3	7	22	0.029 *	0.011 *	0.024 *	0	0	0	1	1	NA	NA	NA
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	88%	3	9	3	9	24	0.166	0.136	0.177	0	3	0	0	3	NA	NA	NA
01_2_116	MW-15009	Appendix IV	Lead	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	0%	3	9	3	8	23	0.158	0.284	0.179	3	9	3	8	23	0.158	0.284	0.179
01_2_118	MW-15009	Appendix IV	Mercury	ug/L	100%	3	9	3	7	22	NA	0.085	0.085	NA	NA	NA	NA	NA	NA	NA	NA
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	35%	3	9	3	8	23	0.030 *	0.005 **	0.014 *	3	4	3	5	15	0.075	0.082	0.041 *
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	87%	3	9	3	8	23	0.284	0.017 *	0.404	1	0	0	2	3	0.221	0.538	0.519
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	96%	3	9	3	8	23	0.201	0.429	0.261	0	1	0	0	1	NA	NA	NA
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	100%	3	9	3	7	22	0.071	0.056	0.059	NA	NA	NA	NA	NA	NA	NA	NA
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	100%	3	9	4	7	23	0.182	0.181	0.181	NA	NA	NA	NA	NA	NA	NA	NA
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	92%	3	9	4	8	24	0.273	0.275	0.282	0	1	0	1	2	0.317	NA	NA
02_2_103	MW-15010	Appendix IV	Barium	ug/L	0%	3	9	4	8	24	0.231	0.439	0.270	3	9	4	8	24	0.231	0.439	0.270
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	96%	3	9	4	7	23	0.164	0.148	0.144	0	0	0	1	1	NA	NA	NA
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	100%	3	9	4	7	23	0.182	0.181	0.181	NA	NA	NA	NA	NA	NA	NA	NA
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	67%	3	9	4	8	24	0.244	0.432	0.285	1	3	1	3	8	0.408	0.702	0.557
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	87%	3	9	4	7	23	0.092	0.047 *	0.109	0	2	0	1	3	1.000	0.745	0.706
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	60%	3	9	4	9	25	0.280	0.299	0.294	0	5	1	4	10	0.560	0.604	0.587
02_2_116	MW-15010	Appendix IV	Lead	ug/L	100%	3	9	4	7	23	0.182	0.181	0.181	NA	NA	NA	NA	NA	NA	NA	NA
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	0%	3	9	4	8	24	0.772	0.832	0.730	3	9	4	8	24	0.772	0.832	0.730
02_2_118	MW-15010	Appendix IV	Mercury	ug/L	100%	3	9	4	7	23	NA	0.071	NA	NA	NA	NA	NA	NA	NA	NA	NA
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	46%	3	9	4	8	24	0.074	0.016 *	0.049 *	3	5	2	3	13	0.201	0.249	0.194
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	58%	3	9	4	8	24	0.407	0.505	0.538	1	3	2	4	10	0.194	0.166	0.159
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	92%	3	9	4	8	24	0.274	0.285	0.285	0	1	1	0	2	NA	NA	NA
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	100%	3	9	4	7	23	0.160	0.156	0.160	NA	NA	NA	NA	NA	NA	NA	NA
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	83%	3	9	3	8	23	0.255	0.318	0.401	0	2	0	2	4	1.000	0.733	0.896
03_2_103	MW-15013	Appendix IV	Barium	ug/L	0%	3	9	3	8	23	0.351	0.333	0.439	3	9	3	8	23	0.351	0.333	0.439
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	100%	3	9	3	7	22	0.090	0.061	0.064	NA	NA	NA	NA	NA	NA	NA	NA
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	87%	3	9	3	8	23	0.201	0.318	0.184	0	1	1	1	3	0.368	NA	NA
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	91%	3	9	3	7	22	0.038 *	0.011 *	0.036 *	0	1	0	1	2	0.317	NA	NA
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	79%	3	9	3	9	24	0.335	0.684	0.364	0	4	0	1	5	0.480	0.462	0.508
03_2_116	MW-15013	Appendix IV	Lead	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects												
						Sample Size					p-Value		Sample Size					p-Value							
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA				
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	4%	3	9	3	8	23	0.605	0.551	0.613	3	8	3	8	22	0.661	0.552	0.615				
03_2_118	MW-15013	Appendix IV	Mercury	ug/L	100%	3	9	3	7	22	NA	0.085	0.085	NA	NA	NA	NA	NA	NA	NA	NA				
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22%	3	9	3	8	23	0.130	0.631	0.249	3	7	2	6	18	0.275	0.725	0.509				
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	70%	3	9	3	8	23	0.484	0.429	0.521	1	3	1	2	7	0.376	0.463	0.498				
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	96%	3	9	3	8	23	0.136	0.130	0.130	0	0	1	0	1	NA	NA	NA				
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	100%	3	9	3	7	22	0.071	0.056	0.059	NA	NA	NA	NA	NA	NA	NA	NA				
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	100%	1	4	0	3	8	0.030	*	0.000	***	0.000	***	NA	NA	NA	NA	NA	NA			
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	62%	1	4	0	3	8	0.203	0.002	**	0.065	1	1	0	1	3	0.368	NA	NA			
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	0%	1	4	0	3	8	0.107	0.104	0.097	1	4	0	3	8	0.107	0.104	0.097				
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	88%	1	4	0	3	8	0.435	0.507	0.507	0	0	0	1	1	NA	NA	NA				
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	100%	1	4	0	3	8	0.030	*	0.000	***	0.000	***	NA	NA	NA	NA	NA	NA			
04_2_109	MW-15014R	Appendix IV	Chromium	ug/L	100%	1	4	0	3	8	NA	0.000	***	0.000	***	NA	NA	NA	NA	NA	NA	NA			
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	88%	1	4	0	3	8	0.484	0.507	0.507	0	0	0	1	1	NA	NA	NA				
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	12%	1	4	0	3	8	0.075	0.005	**	0.003	**	1	4	0	2	7	0.143	0.019	*	0.013	*
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	100%	1	4	0	3	8	0.030	*	0.000	***	0.000	***	NA	NA	NA	NA	NA	NA	NA	NA	
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	0%	1	4	0	3	8	0.517	0.843	0.841	1	4	0	3	8	0.517	0.843	0.841				
04_2_118	MW-15014R	Appendix IV	Mercury	ug/L	100%	1	4	0	3	8	NA	0.000	***	0.000	***	NA	NA	NA	NA	NA	NA	NA	NA		
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	25%	1	4	0	3	8	0.275	0.001	**	0.078	1	3	0	2	6	0.304	0.016	*	0.227		
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	50%	1	4	0	3	8	0.292	0.285	0.411	1	2	0	1	4	0.259	0.669	0.725				
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	88%	1	4	0	3	8	0.435	0.507	0.507	0	0	0	1	1	NA	NA	NA				
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	100%	1	4	0	3	8	0.030	*	0.000	***	0.000	***	NA	NA	NA	NA	NA	NA	NA		
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	55%	0	5	1	5	11	0.097	0.344	0.120	0	3	0	2	5	0.083	0.297	0.088				
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	0%	0	5	1	5	11	0.635	0.697	0.721	0	5	1	5	11	0.635	0.697	0.721				
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	0%	0	5	1	5	11	0.438	0.439	0.468	0	5	1	5	11	0.438	0.439	0.468				
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	91%	0	5	1	5	11	0.362	0.726	0.710	0	0	0	1	1	NA	NA	NA				
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	100%	0	5	1	5	11	0.078	0.057	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA			
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	82%	0	5	1	5	11	0.050	*	0.000	***	0.000	***	0	2	0	0	2	NA	NA	NA	
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	64%	0	5	1	5	11	0.583	0.629	0.744	0	2	1	1	4	0.407	0.836	0.814				
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	55%	0	5	1	5	11	0.150	0.063	0.000	***	0	3	1	1	5	0.344	0.309	0.064			
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	100%	0	5	1	5	11	0.362	0.724	0.690	NA	NA	NA	NA	NA	NA	NA	NA	NA			
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	0%	0	5	1	5	11	0.336	0.754	0.746	0	5	1	5	11	0.336	0.754	0.746				
05_2_118	MW-15015R	Appendix IV	Mercury	ug/L	100%	0	5	1	5	11	NA	0.600	0.600	NA	NA	NA	NA	NA	NA	NA	NA	NA			
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	0%	0	5	1	5	11	0.565	0.483	0.743	0	5	1	5	11	0.565	0.483	0.743				
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	64%	0	5	1	5	11	0.250	0.188	0.329	0	2	1	1	4	0.407	0.834	0.848				
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	64%	0	5	1	5	11	0.531	0.463	0.523	0	2	0	2	4	1.000	0.948	0.991				
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	100%	0	5	1	5	11	0.362	0.666	0.521	NA	NA	NA	NA	NA	NA	NA	NA	NA			
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	82%	0	5	1	5	11	0.050	*	0.000	***	0.000	***	0	1	1	0	2	0.317	NA	NA	
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	9%	0	5	1	5	11	0.280	0.002	**	0.061	0	4	1	5	10	0.275	0.002	**	0.022	*	
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	0%	0	5	1	5	11	0.279	0.405	0.343	0	5	1	5	11	0.279	0.405	0.343				

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value		Sample Size					p-Value			
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	91%	0	5	1	5	11	0.362	0.717	0.726	0	0	0	1	1	NA	NA	NA
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	100%	0	5	1	5	11	0.078	0.057	0.057	NA	NA	NA	NA	NA	NA	NA	NA
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	18%	0	5	1	5	11	0.884	0.975	0.947	0	4	1	4	9	0.875	0.946	0.960
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	9%	0	5	1	5	11	0.441	0.385	0.452	0	4	1	5	10	0.449	0.296	0.353
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	82%	0	5	1	5	11	0.376	0.646	0.866	0	1	1	0	2	0.317	NA	NA
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	82%	0	5	1	5	11	0.131	0.104	0.580	0	1	0	1	2	0.317	NA	NA
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	27%	0	5	1	5	11	0.418	0.579	0.468	0	4	1	3	8	0.297	0.648	0.523
06_2_118	MW-15016R	Appendix IV	Mercury	ug/L	100%	0	5	1	5	11	NA	0.600	0.600	NA	NA	NA	NA	NA	NA	NA	NA
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	73%	0	5	1	5	11	0.073	0.001 **	0.024 *	0	1	1	1	3	0.368	NA	NA
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	0%	0	5	1	5	11	0.612	0.662	0.530	0	5	1	5	11	0.612	0.662	0.530
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	73%	0	5	1	5	11	0.325	0.304	0.548	0	2	0	1	3	1.000	0.700	0.783
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	100%	0	5	1	5	11	0.078	0.057	0.057	NA	NA	NA	NA	NA	NA	NA	NA
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	4%	3	9	3	8	23	0.046 *	0.057	0.034 *	3	8	3	8	22	0.045 *	0.080	0.034 *
07_2_103	MW-15017	Appendix IV	Barium	ug/L	0%	3	9	3	8	23	0.621	0.491	0.455	3	9	3	8	23	0.621	0.491	0.455
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	95%	3	9	3	7	22	0.086	0.058	0.069	0	0	0	1	1	NA	NA	NA
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	4%	3	9	3	8	23	0.055	0.217	0.113	3	9	3	7	22	0.073	0.252	0.159
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	59%	3	9	3	7	22	0.046 *	0.011 *	0.028 *	0	4	0	5	9	1.000	0.796	0.926
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	100%	3	9	3	8	23	0.181	0.169	0.198	NA	NA	NA	NA	NA	NA	NA	NA
07_2_116	MW-15017	Appendix IV	Lead	ug/L	100%	3	9	3	7	22	0.359	0.837	0.676	NA	NA	NA	NA	NA	NA	NA	NA
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	74%	3	9	3	8	23	0.451	0.342	0.296	0	3	0	3	6	0.827	0.411	0.449
07_2_118	MW-15017	Appendix IV	Mercury	ug/L	100%	3	9	3	7	22	NA	0.085	0.085	NA	NA	NA	NA	NA	NA	NA	NA
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	91%	3	9	3	8	23	0.122	0.098	0.113	0	1	0	1	2	0.317	NA	NA
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	0%	3	9	3	8	23	0.280	0.421	0.489	3	9	3	8	23	0.280	0.421	0.489
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	52%	3	9	3	8	23	0.013 *	0.003 **	0.003 **	3	3	3	2	11	0.322	0.355	0.147
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	100%	3	9	3	7	22	0.090	0.131	0.146	NA	NA	NA	NA	NA	NA	NA	NA
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	70%	3	9	3	8	23	0.255	0.662	0.491	1	2	1	3	7	0.565	0.828	0.727
08_2_103	MW-15018	Appendix IV	Barium	ug/L	0%	3	9	3	8	23	0.373	0.972	0.917	3	9	3	8	23	0.373	0.972	0.917
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	95%	3	9	3	7	22	0.086	0.059	0.061	0	0	0	1	1	NA	NA	NA
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	48%	3	9	3	8	23	0.421	0.629	0.507	1	5	1	5	12	0.712	0.865	0.827
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	91%	3	9	3	7	22	0.035 *	0.011 *	0.024 *	0	0	0	2	2	NA	NA	NA
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	67%	3	9	3	9	24	0.172	0.136	0.148	0	5	0	3	8	0.881	0.951	0.838
08_2_116	MW-15018	Appendix IV	Lead	ug/L	77%	3	9	3	7	22	0.377	0.688	0.597	0	2	0	3	5	0.083	0.394	0.242
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	0%	3	9	3	8	23	0.695	0.902	0.866	3	9	3	8	23	0.695	0.902	0.866
08_2_118	MW-15018	Appendix IV	Mercury	ug/L	100%	3	9	3	7	22	NA	0.085	0.085	NA	NA	NA	NA	NA	NA	NA	NA
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	91%	3	9	3	8	23	0.124	0.099	0.106	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)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value			Sample Size					p-Value		
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	35%	3	9	3	8	23	0.358	0.263	0.242	2	5	2	6	15	0.957	0.851	0.872
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	87%	3	9	3	8	23	0.072	0.028 *	0.038 *	0	1	1	1	3	0.368	NA	NA
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	95%	3	9	3	7	22	0.067	0.054	0.054	0	0	0	1	1	NA	NA	NA
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	100%	3	9	3	7	22	0.133	0.685	0.222	NA	NA	NA	NA	NA	NA	NA	NA
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	65%	3	9	3	8	23	0.764	0.726	0.869	0	4	0	4	8	1.000	0.358	0.509
09_2_103	MW-15019	Appendix IV	Barium	ug/L	0%	3	9	3	8	23	0.066	0.077	0.057	3	9	3	8	23	0.066	0.077	0.057
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	95%	3	9	3	7	22	0.116	0.538	0.129	0	0	0	1	1	NA	NA	NA
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	95%	3	9	3	7	22	0.246	0.690	0.551	0	0	0	1	1	NA	NA	NA
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	61%	3	9	3	8	23	0.141	0.169	0.204	0	4	1	4	9	0.357	0.395	0.414
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	59%	3	9	3	7	22	0.046 *	0.011 *	0.028 *	0	4	0	5	9	1.000	0.682	0.769
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	96%	3	9	3	9	24	0.161	0.136	0.169	0	1	0	0	1	NA	NA	NA
09_2_116	MW-15019	Appendix IV	Lead	ug/L	86%	3	9	3	7	22	0.174	0.759	0.578	0	1	0	2	3	1.000	0.674	0.686
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	13%	3	9	3	8	23	0.095	0.116	0.234	3	8	3	6	20	0.174	0.248	0.283
09_2_118	MW-15019	Appendix IV	Mercury	ug/L	100%	3	9	3	7	22	NA	0.085	0.085	NA	NA	NA	NA	NA	NA	NA	NA
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	83%	3	9	3	8	23	0.138	0.645	0.177	0	3	0	1	4	0.180	0.467	0.265
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	22%	3	9	3	8	23	0.251	0.194	0.212	3	7	2	6	18	0.123	0.137	0.129
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	78%	3	9	3	8	23	0.037 *	0.015 *	0.116	0	2	2	1	5	0.223	0.128	0.108
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	86%	3	9	3	7	22	0.087	0.066	0.067	0	2	0	1	3	0.221	0.422	0.265
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	83%	3	9	3	8	23	0.159	0.173	0.264	0	2	0	2	4	1.000	0.933	0.952
10_2_103	MW-15020	Appendix IV	Barium	ug/L	0%	3	9	3	8	23	0.062	0.093	0.035 *	3	9	3	8	23	0.062	0.093	0.035 *
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	100%	3	9	3	7	22	0.090	0.061	0.064	NA	NA	NA	NA	NA	NA	NA	NA
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	61%	3	9	3	8	23	0.175	0.048 *	0.126	1	2	1	5	9	0.334	0.035 *	0.179
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	91%	3	9	3	7	22	0.038 *	0.011 *	0.031 *	0	1	0	1	2	0.317	NA	NA
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	96%	3	9	3	9	24	0.165	0.136	0.177	0	1	0	0	1	NA	NA	NA
10_2_116	MW-15020	Appendix IV	Lead	ug/L	95%	3	9	3	7	22	0.074	0.061	0.060	0	1	0	0	1	NA	NA	NA
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	22%	3	9	3	8	23	0.238	0.253	0.350	3	7	3	5	18	0.352	0.312	0.297
10_2_118	MW-15020	Appendix IV	Mercury	ug/L	100%	3	9	3	7	22	NA	0.085	0.085	NA	NA	NA	NA	NA	NA	NA	NA
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	96%	3	9	3	8	23	0.124	0.099	0.125	0	0	0	1	1	NA	NA	NA
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	26%	3	9	3	8	23	0.135	0.364	0.127	1	7	1	8	17	0.581	0.664	0.588
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	87%	3	9	3	8	23	0.032 *	0.005 **	0.017 *	1	0	2	0	3	0.221	0.407	0.344
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	100%	3	9	3	7	22	0.071	0.056	0.059	NA	NA	NA	NA	NA	NA	NA	NA
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	95%	3	8	4	7	22	0.224	0.187	0.220	0	1	0	0	1	NA	NA	NA
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	30%	3	8	4	8	23	0.365	0.138	0.221	3	4	3	6	16	0.625	0.389	0.315
11_2_103	MW-15021	Appendix IV	Barium	ug/L	0%	3	8	4	8	23	0.302	0.423	0.412	3	8	4	8	23	0.302	0.423	0.412
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	100%	3	8	4	7	22	0.209	0.181	0.187	NA	NA	NA	NA	NA	NA	NA	NA
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	100%	3	8	4	7	22	0.172	0.171	0.171	NA	NA	NA	NA	NA	NA	NA	NA
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	30%	3	8	4	8	23	0.172	0.148	0.309	2	5	3	6	16	0.167	0.071	0.100

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value		Sample Size					p-Value			
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	68%	3	8	4	7	22	0.145	0.056	0.107	0	2	1	4	7	0.336	0.452	0.437
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	100%	3	8	4	9	24	0.383	0.362	0.399	NA	NA	NA	NA	NA	NA	NA	NA
11_2_116	MW-15021	Appendix IV	Lead	ug/L	100%	3	8	4	7	22	0.172	0.171	0.171	NA	NA	NA	NA	NA	NA	NA	NA
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	78%	3	8	4	8	23	0.770	0.743	0.685	0	2	0	3	5	0.767	0.848	0.852
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	95%	3	8	4	7	22	0.543	0.575	0.575	0	0	0	1	1	NA	NA	NA
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	100%	3	8	4	8	23	0.282	0.274	0.277	NA	NA	NA	NA	NA	NA	NA	NA
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	26%	3	8	4	8	23	0.366	0.368	0.448	3	4	3	7	17	0.360	0.299	0.220
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	65%	3	8	4	8	23	0.105	0.068	0.120	2	3	2	1	8	0.186	0.214	0.196
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	100%	3	8	4	7	22	0.165	0.163	0.161	NA	NA	NA	NA	NA	NA	NA	NA
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	96%	3	9	4	7	23	0.233	0.321	0.225	0	1	0	0	1	NA	NA	NA
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	46%	3	9	4	8	24	0.115	0.100	0.093	3	4	3	3	13	0.699	0.719	0.644
12_2_103	MW-15022	Appendix IV	Barium	ug/L	0%	3	9	4	8	24	0.280	0.142	0.198	3	9	4	8	24	0.280	0.142	0.198
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	100%	3	9	4	7	23	0.183	0.162	0.165	NA	NA	NA	NA	NA	NA	NA	NA
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	100%	3	9	4	7	23	0.182	0.181	0.181	NA	NA	NA	NA	NA	NA	NA	NA
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	75%	3	9	4	8	24	0.452	0.515	0.436	1	2	1	2	6	0.759	0.830	0.804
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	87%	3	9	4	7	23	0.111	0.047 *	0.087	0	1	0	2	3	0.480	0.667	0.667
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	80%	3	9	4	9	25	0.504	0.727	0.563	0	4	1	0	5	1.000	0.681	0.773
12_2_116	MW-15022	Appendix IV	Lead	ug/L	100%	3	9	4	7	23	0.182	0.181	0.181	NA	NA	NA	NA	NA	NA	NA	NA
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	33%	3	9	4	8	24	0.069	0.125	0.067	0	7	2	7	16	0.603	0.375	0.411
12_2_118	MW-15022	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
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	50%	3	9	4	8	24	0.159	0.423	0.200	3	4	2	3	12	0.318	0.510	0.639
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	67%	3	9	4	8	24	0.129	0.241	0.129	0	6	0	2	8	0.505	0.428	0.341
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	96%	3	9	4	8	24	0.243	0.239	0.262	0	0	0	1	1	NA	NA	NA
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	100%	3	9	4	7	23	0.160	0.156	0.160	NA	NA	NA	NA	NA	NA	NA	NA
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	39%	3	9	3	8	23	0.151	0.993	0.663	3	4	2	5	14	0.609	0.977	0.944
13_2_103	MW-15023	Appendix IV	Barium	ug/L	0%	3	9	3	8	23	0.250	0.526	0.409	3	9	3	8	23	0.250	0.526	0.409
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	100%	3	9	3	7	22	0.090	0.061	0.064	NA	NA	NA	NA	NA	NA	NA	NA
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	78%	3	9	3	8	23	0.267	0.367	0.238	0	2	1	2	5	0.741	0.715	0.731
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	95%	3	9	3	7	22	0.029 *	0.011 *	0.024 *	0	0	0	1	1	NA	NA	NA
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	71%	3	9	3	9	24	0.168	0.137	0.154	0	4	0	3	7	0.719	0.968	0.970
13_2_116	MW-15023	Appendix IV	Lead	ug/L	100%	3	9	3	7	22	0.086	0.074	0.074	NA	NA	NA	NA	NA	NA	NA	NA
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	30%	3	9	3	8	23	0.499	0.483	0.464	2	7	1	6	16	0.644	0.759	0.737
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	95%	3	9	3	7	22	0.543	0.575	0.575	0	0	0	1	1	NA	NA	NA
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	17%	3	9	3	8	23	0.721	0.745	0.755	3	5	3	8	19	0.595	0.505	0.495
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	61%	3	9	3	8	23	0.318	0.287	0.515	2	5	0	2	9	0.487	0.510	0.713
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	91%	3	9	3	8	23	0.128	0.124	0.184	0	0	1	1	2	0.317	NA	NA
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	100%	3	9	3	7	22	0.071	0.056	0.059	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full											Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value					
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA			
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	91%	0	5	1	5	11	0.050	*	0.000	***	0.001	**	0	1	0	0	1	NA	NA	NA
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	45%	0	5	1	5	11	0.415		0.609		0.439		0	2	1	3	6	0.501	0.541	0.658
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	0%	0	5	1	5	11	0.440		0.488		0.481		0	5	1	5	11	0.440	0.488	0.481
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	100%	0	5	1	5	11	0.078		0.057		0.057		NA	NA	NA	NA	NA	NA	NA	NA
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	100%	0	5	1	5	11	0.078		0.057		0.057		NA	NA	NA	NA	NA	NA	NA	NA
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	55%	0	5	1	5	11	0.368		0.297		0.256		0	2	1	2	5	0.497	0.700	0.692
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	55%	0	5	1	5	11	0.198		0.229		0.199		0	2	1	2	5	0.165	0.405	0.289
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	36%	0	5	1	5	11	0.617		0.608		0.630		0	5	1	1	7	0.273	0.310	0.383
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	100%	0	5	1	5	11	0.078		0.057		0.057		NA	NA	NA	NA	NA	NA	NA	NA
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	0%	0	5	1	5	11	0.960		0.965		0.922		0	5	1	5	11	0.960	0.965	0.922
14_2_118	MW-17001R	Appendix IV	Mercury	ug/L	100%	0	5	1	5	11	NA		0.600		0.600		NA	NA	NA	NA	NA	NA	NA	NA
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	45%	0	5	1	5	11	0.242		0.387		0.237		0	3	1	2	6	0.343	0.646	0.600
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	27%	0	5	1	5	11	0.251		0.245		0.344		0	4	1	3	8	0.097	0.117	0.302
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	100%	0	5	1	5	11	0.078		0.057		0.057		NA	NA	NA	NA	NA	NA	NA	NA
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	100%	0	5	1	5	11	0.078		0.057		0.057		NA	NA	NA	NA	NA	NA	NA	NA
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	88%	2	6	2	6	16	0.053		0.011	*	0.029	*	1	1	0	0	2	0.317	NA	NA
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	6%	2	6	2	7	17	0.971		0.590		0.749		2	5	2	7	16	0.777	0.429	0.478
15_2_103	MW-17002	Appendix IV	Barium	ug/L	0%	2	6	2	7	17	0.234		0.578		0.491		2	6	2	7	17	0.234	0.578	0.491
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	94%	2	6	2	6	16	0.068		0.018	*	0.023	*	0	0	0	1	1	NA	NA	NA
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	81%	2	6	2	6	16	0.136		0.303		0.224		0	2	0	1	3	0.480	0.667	0.667
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	71%	2	6	2	7	17	0.179		0.136		0.151		0	2	0	3	5	0.139	0.165	0.152
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	94%	2	6	2	6	16	0.024	*	0.000	***	0.001	**	0	0	0	1	1	NA	NA	NA
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	47%	2	6	2	7	17	0.132		0.058		0.079		0	5	0	4	9	0.806	0.795	0.999
15_2_116	MW-17002	Appendix IV	Lead	ug/L	94%	2	6	2	6	16	0.519		0.784		0.613		0	0	0	1	1	NA	NA	NA
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	0%	2	6	2	7	17	0.750		0.733		0.732		2	6	2	7	17	0.750	0.733	0.732
15_2_118	MW-17002	Appendix IV	Mercury	ug/L	100%	2	6	2	6	16	NA		0.050	*	0.050	*	NA	NA	NA	NA	NA	NA	NA	NA
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	35%	2	6	2	7	17	0.625		0.349		0.520		1	5	0	5	11	0.693	0.485	0.814
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	47%	2	6	2	7	17	0.050	*	0.096		0.037	*	0	2	1	6	9	0.213	0.527	0.401
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	82%	2	6	2	7	17	0.072		0.025	*	0.151		1	1	0	1	3	0.368	NA	NA
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	94%	2	6	2	6	16	0.074		0.184		0.197		0	0	0	1	1	NA	NA	NA
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	94%	2	6	2	6	16	0.038	*	0.013	*	0.026	*	1	0	0	0	1	NA	NA	NA
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	18%	2	6	2	7	17	0.181		0.731		0.102		1	6	1	6	14	0.457	0.869	0.148
16_2_103	MW-17003	Appendix IV	Barium	ug/L	0%	2	6	2	7	17	0.806		0.904		0.944		2	6	2	7	17	0.806	0.904	0.944
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	94%	2	6	2	6	16	0.068		0.018	*	0.021	*	0	0	0	1	1	NA	NA	NA
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	100%	2	6	2	6	16	0.080		0.059		0.059		NA	NA	NA	NA	NA	NA	NA	NA
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	82%	2	6	2	7	17	0.163		0.138		0.151		0	1	0	2	3	0.221	0.647	0.637
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	81%	2	6	2	6	16	0.091		0.272		0.054		0	1	0	2	3	1.000	0.686	0.828
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	76%	2	6	2	7	17	0.112		0.045	*	0.090		0	3	0	1	4	0.637	0.989	0.955
16_2_116	MW-17003	Appendix IV	Lead	ug/L	100%	2	6	2	6	16	0.974		0.910		0.989		NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full							Without Non-Detects								
						Sample Size					p-Value		Sample Size					p-Value			
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	6%	2	6	2	7	17	0.160	0.684	0.435	2	5	2	7	16	0.180	0.668	0.379
16_2_118	MW-17003	Appendix IV	Mercury	ug/L	100%	2	6	2	6	16	NA	0.050 *	0.050 *	NA	NA	NA	NA	NA	NA	NA	NA
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	29%	2	6	2	7	17	0.343	0.795	0.536	2	5	0	5	12	0.793	0.781	0.778
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	65%	2	6	2	7	17	0.023 *	0.040 *	0.106	0	2	0	4	6	0.165	0.153	0.148
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	82%	2	6	2	7	17	0.072	0.014 *	0.074	1	1	0	1	3	0.368	NA	NA
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	100%	2	6	2	6	16	0.088	0.366	0.414	NA	NA	NA	NA	NA	NA	NA	NA
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	88%	2	6	2	6	16	0.136	0.035 *	0.097	0	2	0	0	2	NA	NA	NA
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	12%	2	6	2	7	17	0.290	0.470	0.340	2	6	1	6	15	0.402	0.600	0.503
17_2_103	MW-17004	Appendix IV	Barium	ug/L	0%	2	6	2	7	17	0.706	0.698	0.906	2	6	2	7	17	0.706	0.698	0.906
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	100%	2	6	2	6	16	0.052	0.018 *	0.018 *	NA	NA	NA	NA	NA	NA	NA	NA
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	94%	2	6	2	6	16	0.110	0.497	0.373	0	1	0	0	1	NA	NA	NA
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	76%	2	6	2	7	17	0.240	0.692	0.476	0	1	1	2	4	0.223	0.000 ***	0.000 ***
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	75%	2	6	2	6	16	0.033 *	0.000 ***	0.007 **	0	2	0	2	4	0.439	0.822	0.842
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	88%	2	6	2	7	17	0.093	0.045 *	0.053	0	1	0	1	2	0.317	NA	NA
17_2_116	MW-17004	Appendix IV	Lead	ug/L	88%	2	6	2	6	16	0.048 *	0.494	0.105	0	1	0	1	2	0.317	NA	NA
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	41%	2	6	2	7	17	0.594	0.556	0.594	0	4	0	6	10	0.593	0.894	0.567
17_2_118	MW-17004	Appendix IV	Mercury	ug/L	100%	2	6	2	6	16	NA	0.050 *	0.050 *	NA	NA	NA	NA	NA	NA	NA	NA
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	47%	2	6	2	7	17	0.822	0.767	0.961	2	4	0	3	9	0.100	0.148	0.109
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	71%	2	6	2	7	17	0.186	0.739	0.571	0	3	0	2	5	0.564	0.586	0.739
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	82%	2	6	2	7	17	0.202	0.322	0.335	0	2	0	1	3	0.221	0.660	0.630
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	88%	2	6	2	6	16	0.042 *	0.025 *	0.024 *	0	1	0	1	2	0.317	NA	NA
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	100%	2	6	2	6	16	0.053	0.015 *	0.029 *	NA	NA	NA	NA	NA	NA	NA	NA
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	82%	2	6	2	7	17	0.106	0.020 *	0.168	1	1	0	1	3	0.368	NA	NA
18_2_103	MW-17005	Appendix IV	Barium	ug/L	0%	2	6	2	7	17	0.892	0.984	0.941	2	6	2	7	17	0.892	0.984	0.941
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	94%	2	6	2	6	16	0.068	0.019 *	0.046 *	0	0	0	1	1	NA	NA	NA
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	100%	2	6	2	6	16	0.080	0.059	0.059	NA	NA	NA	NA	NA	NA	NA	NA
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	71%	2	6	2	7	17	0.305	0.168	0.177	0	2	0	3	5	0.564	0.484	0.466
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	100%	2	6	2	6	16	0.027 *	0.000 ***	0.001 **	NA	NA	NA	NA	NA	NA	NA	NA
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	94%	2	6	2	7	17	0.055	0.042 *	0.039 *	0	0	0	1	1	NA	NA	NA
18_2_116	MW-17005	Appendix IV	Lead	ug/L	94%	2	6	2	6	16	0.083	0.075	0.186	0	0	0	1	1	NA	NA	NA
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	18%	2	6	2	7	17	0.441	0.986	0.849	2	5	1	6	14	0.593	0.990	0.907
18_2_118	MW-17005	Appendix IV	Mercury	ug/L	100%	2	6	2	6	16	NA	0.050 *	0.050 *	NA	NA	NA	NA	NA	NA	NA	NA
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	94%	2	6	2	7	17	0.098	0.050 *	0.097	0	0	0	1	1	NA	NA	NA
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	71%	2	6	2	7	17	0.047 *	0.630	0.316	0	3	0	2	5	0.248	0.284	0.302
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	100%	2	6	2	7	17	0.080	0.017 *	0.033 *	NA	NA	NA	NA	NA	NA	NA	NA
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	100%	2	6	2	6	16	0.052	0.022 *	0.029 *	NA	NA	NA	NA	NA	NA	NA	NA
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	100%	2	5	2	6	15	0.063	0.021 *	0.038 *	NA	NA	NA	NA	NA	NA	NA	NA
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	38%	2	5	2	7	16	0.684	0.895	0.712	2	3	1	4	10	0.919	0.959	0.928
19_2_103	MW-17006	Appendix IV	Barium	ug/L	0%	2	5	2	7	16	0.577	0.703	0.664	2	5	2	7	16	0.577	0.703	0.664

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 7: Seasonality Tests (continued)

ID	Well	Constituent Type	Constituent	Unit	% NDs	Full										Without Non-Detects									
						Sample Size					p-Value					Sample Size					p-Value				
						Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA				
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	100%	2	5	2	6	15	0.069	0.029	*	0.030	*	NA	NA	NA	NA	NA	NA	NA	NA	NA	
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	100%	2	5	2	6	15	0.095	0.073		0.073		NA	NA	NA	NA	NA	NA	NA	NA	NA	
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	88%	2	5	2	7	16	0.314	0.230		0.188		0	0	0	2	2	NA	NA	NA	NA	
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	100%	2	5	2	6	15	0.030	*	0.000	***	0.002	**	NA	NA	NA	NA	NA	NA	NA	NA	NA
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	69%	2	5	2	7	16	0.140	0.070		0.082		0	3	0	2	5	0.374	0.334	0.356		
19_2_116	MW-17006	Appendix IV	Lead	ug/L	100%	2	5	2	6	15	0.095	0.073		0.073		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	0%	2	5	2	7	16	0.302	0.750		0.644		2	5	2	7	16	0.302	0.750	0.644		
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	93%	2	5	2	6	15	0.682	0.729		0.729		0	0	0	1	1	NA	NA	NA	NA	NA
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	75%	2	5	2	7	16	0.627	0.840		0.538		0	3	0	1	4	0.180	0.112	0.247		
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	69%	2	5	2	7	16	0.199	0.433		0.612		0	1	0	4	5	0.157	0.383	0.332		
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	94%	2	5	2	7	16	0.102	0.032	*	0.127		0	0	0	1	1	NA	NA	NA	NA	NA
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	100%	2	5	2	6	15	0.064	0.033	*	0.040	*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

*** p < 0.001, ** p < 0.01, * p < 0.05



Table 8: Trend Tests: Lognormal MLE and MK

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	23	1	4%	Parametric	Lognormal MLE	-0.000518	0.044	↔
01_2_103	MW-15009	Appendix IV	Barium	ug/L	23	0	0%	Nonparametric	MK	0.0295	0.000	↑
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0	0%	Parametric	Lognormal MLE	0.000236	0.001	↑
02_2_103	MW-15010	Appendix IV	Barium	ug/L	24	0	0%	Parametric	Lognormal MLE	0.000454	0.000	↑
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	24	0	0%	Parametric	Lognormal MLE	0.0000707	0.345	↔
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	24	11	46%	Parametric	Lognormal MLE	-0.00116	0.000	↓
03_2_103	MW-15013	Appendix IV	Barium	ug/L	23	0	0%	Nonparametric	MK	0.0171	0.086	↔
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	23	1	4%	Parametric	Lognormal MLE	0.000219	0.000	↑
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23	5	22%	Parametric	Lognormal MLE	-0.000996	0.000	↓
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	8	0	0%	Parametric	Lognormal MLE	0.0000228	0.763	↔
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	8	1	12%	Parametric	Lognormal MLE	-0.000299	0.144	↔
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	8	0	0%	Parametric	Lognormal MLE	0.000121	0.757	↔
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	8	2	25%	Parametric	Lognormal MLE	-0.00208	0.000	↓
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	11	0	0%	Parametric	Lognormal MLE	0.000965	0.001	↑
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	11	0	0%	Parametric	Lognormal MLE	-0.000248	0.100	↔
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	11	0	0%	Parametric	Lognormal MLE	0.000782	0.048	↔
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	11	0	0%	Parametric	Lognormal MLE	0.00184	0.019	↔
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	11	1	9%	Nonparametric	MK	-0.000381	0.815	↔
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	11	0	0%	Parametric	Lognormal MLE	0.000183	0.005	↑
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	11	2	18%	Parametric	Lognormal MLE	-0.000278	0.398	↔
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	11	1	9%	Parametric	Lognormal MLE	-0.000422	0.013	↔
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	11	0	0%	Parametric	Lognormal MLE	0.000306	0.075	↔
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	23	1	4%	Nonparametric	MK	-0.00145	0.000	↓
07_2_103	MW-15017	Appendix IV	Barium	ug/L	23	0	0%	Parametric	Lognormal MLE	0.0000421	0.020	↔
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	1	4%	Parametric	Lognormal MLE	-0.000796	0.000	↓
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	23	0	0%	Parametric	Lognormal MLE	-0.0000568	0.039	↔
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0	0%	Nonparametric	MK	-0.0102	0.076	↔
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	23	11	48%	Parametric	Lognormal MLE	-0.000284	0.011	↔
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	23	0	0%	Parametric	Lognormal MLE	-0.0000720	0.161	↔
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	23	8	35%	Parametric	Lognormal MLE	-0.0000815	0.269	↔
09_2_103	MW-15019	Appendix IV	Barium	ug/L	23	0	0%	Nonparametric	MK	0.0720	0.000	↑
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	23	5	22%	Parametric	Lognormal MLE	0.000267	0.003	↑
10_2_103	MW-15020	Appendix IV	Barium	ug/L	23	0	0%	Nonparametric	MK	0.0729	0.000	↑
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	23	6	26%	Parametric	Lognormal MLE	0.000438	0.001	↑
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	23	7	30%	Parametric	Lognormal MLE	-0.000186	0.212	↔
11_2_103	MW-15021	Appendix IV	Barium	ug/L	23	0	0%	Nonparametric	MK	0.0493	0.001	↑
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	23	6	26%	Parametric	Lognormal MLE	0.000119	0.318	↔
12_2_103	MW-15022	Appendix IV	Barium	ug/L	24	0	0%	Parametric	Lognormal MLE	0.000173	0.000	↑
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	24	8	33%	Parametric	Lognormal MLE	0.000705	0.000	↑
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0	0%	Parametric	Lognormal MLE	0.000181	0.017	↔
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	23	7	30%	Parametric	Lognormal MLE	0.000223	0.032	↔
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	23	4	17%	Nonparametric	MK	0.00119	0.009	↑
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	5	45%	Parametric	Lognormal MLE	-0.00162	0.000	↓

(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
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	11	0	0%	Parametric	Lognormal MLE	0.000617	0.000	↑
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	11	4	36%	Parametric	Lognormal MLE	-0.000281	0.075	↔
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	11	0	0%	Parametric	Lognormal MLE	0.000214	0.450	↔
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	11	5	45%	Parametric	Lognormal MLE	-0.000333	0.454	↔
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	11	3	27%	Parametric	Lognormal MLE	0.000722	0.002	↑
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	17	1	6%	Parametric	Lognormal MLE	0.00164	0.000	↑
15_2_103	MW-17002	Appendix IV	Barium	ug/L	17	0	0%	Parametric	Lognormal MLE	-0.0000799	0.539	↔
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	17	8	47%	Parametric	Lognormal MLE	-0.000109	0.608	↔
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	17	0	0%	Parametric	Lognormal MLE	0.000274	0.008	↑
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	17	6	35%	Nonparametric	MK	0.385	0.014	↔
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	17	8	47%	Parametric	Lognormal MLE	-0.0000174	0.951	↔
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	3	18%	Parametric	Lognormal MLE	0.00183	0.000	↑
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0	0%	Parametric	Lognormal MLE	-0.000440	0.013	↔
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	17	1	6%	Nonparametric	MK	0.0298	0.000	↑
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	17	5	29%	Parametric	Lognormal MLE	0.00119	0.000	↑
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	17	2	12%	Parametric	Lognormal MLE	0.000937	0.000	↑
17_2_103	MW-17004	Appendix IV	Barium	ug/L	17	0	0%	Parametric	Lognormal MLE	-0.000246	0.124	↔
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	17	8	47%	Parametric	Lognormal MLE	0.00127	0.014	↔
18_2_103	MW-17005	Appendix IV	Barium	ug/L	17	0	0%	Parametric	Lognormal MLE	-0.000240	0.129	↔
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	3	18%	Parametric	Lognormal MLE	-0.0000373	0.867	↔
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	16	6	38%	Parametric	Lognormal MLE	-0.00101	0.004	↓
19_2_103	MW-17006	Appendix IV	Barium	ug/L	16	0	0%	Parametric	Lognormal MLE	-0.0000161	0.849	↔
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0	0%	Parametric	Lognormal MLE	-0.000200	0.016	↔

Table 9: Trend Tests: Piecewise Linear-Linear

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	22	21	95%	0	1.000	↔	-0.000396	0.000	↓	2018-02-16	0.832	↔
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	23	1	4%	-0.0239	0.000	↓	0.0147	0.000	↑	2020-01-19	0.825	↔
01_2_103	MW-15009	Appendix IV	Barium	ug/L	23	0	0%	-0.00478	0.948	↔	0.0517	0.001	↑	2018-02-04	0.577	↔
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	22	22	100%	-0.000410	0.000	↓	0	1.000	↔	2022-01-10	0.845	↔
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	22	22	100%	0	1.000	↔	0.0000264	0.000	↑	2018-02-16	0.832	↔
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	23	20	87%	-0.000405	0.000	↓	0	1.000	↔	2022-12-08	0.699	↔
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	22	21	95%	-0.00873	0.000	↓	-0.000218	0.911	↔	2021-04-19	0.914	↔
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	24	21	88%	-0.468	0.000	↓	0.105	0.781	↔	2022-06-26	0.799	↔
01_2_116	MW-15009	Appendix IV	Lead	ug/L	22	22	100%	0	1.000	↔	-0.000238	0.000	↓	2018-02-16	0.832	↔
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0	0%	0.0165	0.004	↑	-0.00798	0.259	↔	2020-05-07	0.461	↔
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	23	8	35%	-0.0497	0.000	↓	0.000169	0.921	↔	2019-03-02	0.976	↔
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	23	20	87%	0.00242	0.081	↔	-0.000593	0.027	↔	2017-11-23	0.349	↔
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	23	22	96%	0.00197	0.636	↔	-0.000288	0.000	↓	2016-04-17	0.641	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.000808	0.000	↓	2017-09-07	0.863	↔
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	23	23	100%	0	1.000	↔	-0.000401	0.000	↓	2018-02-13	0.839	↔
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	24	22	92%	0	1.000	↔	-0.000309	0.000	↓	2018-10-13	0.894	↔
02_2_103	MW-15010	Appendix IV	Barium	ug/L	24	0	0%	0.0151	0.233	↔	0.0702	0.006	↑	2020-10-27	0.720	↔
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	23	22	96%	-0.000405	0.000	↓	-0.000125	0.462	↔	2021-10-20	0.855	↔
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	23	23	100%	0	1.000	↔	0.0000267	0.000	↑	2018-02-13	0.839	↔
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	24	16	67%	-0.000408	0.000	↓	-0.000143	0.699	↔	2022-05-05	0.724	↔
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	23	20	87%	-0.00873	0.000	↓	-0.000174	0.939	↔	2021-04-22	0.917	↔
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	25	15	60%	0	1.000	↔	-0.377	0.000	↓	2017-12-29	0.866	↔
02_2_116	MW-15010	Appendix IV	Lead	ug/L	23	23	100%	0	1.000	↔	-0.000241	0.000	↓	2018-02-13	0.839	↔
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	24	0	0%	0.0256	0.025	↔	-0.00806	0.064	↔	2018-08-10	0.360	↔
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	24	11	46%	-0.0538	0.000	↓	-0.00294	0.002	↓	2017-03-12	0.923	↓
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	24	14	58%	0.000352	0.004	↑	-0.00486	0.137	↔	2024-01-02	0.412	↔
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	24	22	92%	0	1.000	↔	-0.000279	0.000	↓	2018-05-13	0.829	↔
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	23	23	100%	-0.000821	0.000	↓	0	1.000	↔	2022-06-20	0.877	↔
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	22	22	100%	0	1.000	↔	-0.000396	0.000	↓	2018-02-16	0.832	↔
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	23	19	83%	0	1.000	↔	-0.000427	0.000	↓	2019-11-13	0.813	↔
03_2_103	MW-15013	Appendix IV	Barium	ug/L	23	0	0%	-0.0155	0.318	↔	0.0633	0.000	↑	2019-08-18	0.780	↔
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	22	22	100%	-0.000410	0.000	↓	0	1.000	↔	2022-01-10	0.845	↔
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	22	22	100%	0	1.000	↔	0.0000264	0.000	↑	2018-02-16	0.832	↔
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	23	20	87%	-0.000420	0.000	↓	0	1.000	↔	2022-10-04	0.717	↔
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	22	20	91%	-0.00872	0.000	↓	-0.000325	0.868	↔	2021-04-19	0.914	↔
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	24	19	79%	0.156	0.645	↔	-1.00	0.122	↔	2020-10-27	0.262	↔
03_2_116	MW-15013	Appendix IV	Lead	ug/L	22	22	100%	0	1.000	↔	-0.000238	0.000	↓	2018-02-16	0.832	↔
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	23	1	4%	0.00158	0.518	↔	0.0150	0.003	↑	2021-03-27	0.670	↔
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23	5	22%	0.00399	0.688	↔	-0.0140	0.160	↔	2020-05-06	0.155	↔
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	23	16	70%	0.000521	0.277	↔	-0.000128	0.352	↔	2018-05-13	0.133	↔
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	23	22	96%	0	1.000	↔	-0.000276	0.000	↓	2018-05-15	0.821	↔
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.000808	0.000	↓	2017-09-07	0.863	↔
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	8	8	100%	-0.0257	0.000	↓	0	0.357	↔	2022-03-10	1.000	↔
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	8	7	88%	0	0.250	↔	-0.000714	0.000	↓	2024-03-26	1.000	↔
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	8	8	100%	-0.0257	0.000	↓	0	0.357	↔	2022-03-10	1.000	↔
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	8	7	88%	0	0.289	↔	-0.00186	0.000	↓	2024-03-26	1.000	↔
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	8	1	12%	-0.302	0.687	↔	0.0341	0.692	↔	2022-10-18	0.417	↔
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	8	8	100%	-0.0608	0.000	↓	0	0.357	↔	2022-03-10	1.000	↔
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	8	0	0%	0.124	0.219	↔	-0.101	0.416	↔	2023-04-11	0.426	↔
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	8	2	25%	-0.0757	0.069	↔	-0.00124	0.743	↔	2022-05-06	0.796	↔
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	8	7	88%	0	0.248	↔	-0.00186	0.000	↓	2024-03-26	1.000	↔
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	8	8	100%	-0.0411	0.000	↓	0	0.357	↔	2022-03-10	1.000	↔
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	11	6	55%	0.00600	0.125	↔	-0.0117	0.407	↔	2023-04-11	0.357	↔
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	11	0	0%	-0.00872	0.906	↔	0.0229	0.017	↔	2021-04-19	0.665	↔
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	11	0	0%	0.0275	0.487	↔	-0.0978	0.236	↔	2022-10-19	0.390	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	11	10	91%	0.0000327	0.048	↔	-0.000914	0.000	↓	2024-03-09	0.937	↔
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	11	11	100%	0.000334	0.000	↑	0	1.000	↔	2020-10-29	0.991	↔
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	11	9	82%	-0.00174	0.376	↔	0	1.000	↔	2020-12-06	0.329	↔
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	11	7	64%	0.000164	0.106	↔	-0.000655	0.008	↓	2023-02-22	0.759	↔
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	11	6	55%	0.475	0.876	↔	0.0204	0.601	↔	2020-10-26	0.398	↔
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	11	11	100%	0.00122	0.657	↔	-0.00105	0.197	↔	2021-10-19	0.247	↔
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	11	0	0%	0.0532	0.069	↔	-0.0452	0.650	↔	2023-04-11	0.443	↔
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	11	0	0%	0.381	0.222	↔	-0.0988	0.571	↔	2022-05-04	0.467	↔
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	11	7	64%	0.000367	0.518	↔	-0.00201	0.363	↔	2023-04-11	0.312	↔
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	11	7	64%	0.0000278	0.950	↔	-0.000825	0.124	↔	2022-10-18	0.457	↔
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	11	11	100%	-0.00167	0.956	↔	-0.000283	0.473	↔	2020-10-26	0.204	↔
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	11	9	82%	0.000399	0.087	↔	0	1.000	↔	2020-11-15	0.631	↔
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	11	1	9%	-0.0375	0.024	↔	0.000366	0.794	↔	2020-11-16	0.771	↔
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	11	0	0%	0.403	0.011	↔	-0.400	0.137	↔	2023-03-18	0.740	↔
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	11	10	91%	0.0000327	0.048	↔	-0.000786	0.000	↓	2024-03-06	0.917	↔
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	11	11	100%	0.000334	0.000	↑	0	1.000	↔	2020-10-29	0.991	↔
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	11	2	18%	-0.000359	0.102	↔	0.00262	0.155	↔	2023-12-28	0.520	↔
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	11	1	9%	-0.000952	0.021	↔	0.000785	0.262	↔	2023-03-17	0.692	↔
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	11	9	82%	-0.366	0.885	↔	0.0832	0.031	↔	2020-10-26	0.512	↔
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	11	9	82%	0.0000206	0.920	↔	-0.00214	0.246	↔	2024-03-20	0.291	↔
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	11	3	27%	0.0442	0.186	↔	-0.0891	0.467	↔	2023-04-11	0.287	↔
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	11	8	73%	-0.0287	0.015	↔	-0.000384	0.691	↔	2020-10-31	0.810	↔
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	11	0	0%	-0.00290	0.767	↔	0.00198	0.082	↔	2021-04-19	0.396	↔
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	11	8	73%	-0.00113	0.942	↔	-0.000445	0.052	↔	2020-10-26	0.609	↔
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	11	11	100%	-0.00414	0.000	↓	0	1.000	↔	2020-10-29	0.991	↔
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	22	22	100%	0	1.000	↔	-0.000396	0.000	↓	2018-02-16	0.832	↔
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	23	1	4%	-0.0122	0.002	↓	-0.000202	0.763	↔	2017-12-01	0.753	↔
07_2_103	MW-15017	Appendix IV	Barium	ug/L	23	0	0%	0.0693	0.006	↑	-0.286	0.366	↔	2023-04-22	0.358	↔
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	22	21	95%	-0.000406	0.000	↓	-0.000121	0.498	↔	2021-10-20	0.848	↔
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	22	22	100%	0	1.000	↔	0.0000264	0.000	↑	2018-02-16	0.832	↔
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	1	4%	-0.00265	0.002	↓	0.000297	0.875	↔	2021-10-10	0.619	↔
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	22	13	59%	-0.00848	0.000	↓	-0.000135	0.954	↔	2021-05-06	0.912	↔
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	23	100%	0	1.000	↔	-0.510	0.000	↓	2017-12-16	0.813	↔
07_2_116	MW-15017	Appendix IV	Lead	ug/L	22	22	100%	0.0000767	0.653	↔	-0.000724	0.254	↔	2021-10-21	0.191	↔
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	23	17	74%	0.00137	0.592	↔	-0.00413	0.109	↔	2020-05-06	0.189	↔
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	23	21	91%	0	1.000	↔	-0.00201	0.000	↓	2017-10-26	0.815	↔
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	23	0	0%	0.0111	0.347	↔	-0.000317	0.037	↔	2016-02-23	0.238	↔
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	23	12	52%	-0.00261	0.006	↓	-0.000316	0.608	↔	2019-05-21	0.626	↔
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.000784	0.000	↓	2017-12-13	0.787	↔
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	22	22	100%	0	1.000	↔	-0.000396	0.000	↓	2018-02-16	0.832	↔
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	23	16	70%	0.000169	0.544	↔	-0.000970	0.187	↔	2021-10-20	0.145	↔
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0	0%	0.0287	0.040	↔	-0.0839	0.022	↔	2021-04-20	0.437	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	22	21	95%	-0.000409	0.000	↓	-0.0000854	0.628	↔	2021-10-20	0.848	↔
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	22	22	100%	0	1.000	↔	0.0000264	0.000	↑	2018-02-16	0.832	↔
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	23	11	48%	0	1.000	↔	-0.000335	0.051	↔	2019-06-17	0.380	↔
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	22	20	91%	-0.00874	0.000	↓	-0.0000671	0.978	↔	2021-04-23	0.913	↔
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	24	16	67%	-0.413	0.000	↓	0.0912	0.790	↔	2022-10-04	0.805	↔
08_2_116	MW-15018	Appendix IV	Lead	ug/L	22	17	77%	0.000233	0.366	↔	-0.000990	0.294	↔	2021-10-21	0.144	↔
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	23	0	0%	0.00893	0.163	↔	-0.00450	0.020	↔	2018-04-18	0.314	↔
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	23	21	91%	0	1.000	↔	-0.00202	0.000	↓	2017-10-29	0.821	↔
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	23	8	35%	0.000918	0.054	↔	-0.000292	0.003	↓	2018-01-08	0.473	↔
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	23	20	87%	-0.000578	0.626	↔	-0.000320	0.162	↔	2018-04-15	0.305	↔
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	22	21	95%	0	1.000	↔	-0.000839	0.000	↓	2017-10-10	0.879	↔
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	22	22	100%	0.000670	0.430	↔	-0.00139	0.061	↔	2020-05-06	0.227	↔
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	23	15	65%	0.000842	0.089	↔	-0.00297	0.258	↔	2022-05-05	0.204	↔
09_2_103	MW-15019	Appendix IV	Barium	ug/L	23	0	0%	0.00586	0.986	↔	0.107	0.005	↑	2017-02-21	0.475	↔
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	22	21	95%	0.000309	0.565	↔	-0.00103	0.031	↔	2020-05-06	0.316	↔
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	22	21	95%	0.000578	0.109	↔	-0.000614	0.164	↔	2020-05-07	0.216	↔
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	23	14	61%	0	1.000	↔	-0.000300	0.000	↓	2018-02-24	0.704	↔
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	22	13	59%	-0.00874	0.000	↓	-0.000414	0.834	↔	2021-02-11	0.908	↔
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	24	23	96%	-0.473	0.000	↓	0.114	0.768	↔	2022-07-14	0.798	↔
09_2_116	MW-15019	Appendix IV	Lead	ug/L	22	19	86%	0.000490	0.215	↔	-0.00103	0.041	↔	2020-05-07	0.329	↔
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	23	3	13%	-0.00151	0.872	↔	-0.00856	0.005	↓	2018-04-16	0.549	↔
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	23	19	83%	0.0153	0.230	↔	-0.0191	0.130	↔	2020-05-06	0.176	↔
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	23	5	22%	0.000438	0.020	↔	-0.00429	0.384	↔	2024-03-05	0.283	↔
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	23	18	78%	0.00156	0.518	↔	-0.000373	0.000	↓	2016-07-11	0.725	↔
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	22	19	86%	0	1.000	↔	-0.000912	0.000	↓	2018-04-16	0.871	↔
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	22	22	100%	0	1.000	↔	-0.000396	0.000	↓	2018-02-16	0.832	↔
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	23	19	83%	0	1.000	↔	-0.000345	0.000	↓	2019-02-12	0.909	↔
10_2_103	MW-15020	Appendix IV	Barium	ug/L	23	0	0%	0.186	0.000	↑	-0.108	0.043	↔	2020-10-26	0.721	↔
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	22	22	100%	-0.000410	0.000	↓	0	1.000	↔	2022-01-10	0.845	↔
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	22	22	100%	0	1.000	↔	0.0000264	0.000	↑	2018-02-16	0.832	↔
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	23	14	61%	-0.000203	0.244	↔	-0.000430	0.002	↓	2019-09-24	0.725	↔
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	22	20	91%	-0.00873	0.000	↓	-0.000241	0.920	↔	2021-04-20	0.914	↔
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	24	23	96%	-0.467	0.000	↓	0.111	0.769	↔	2022-06-29	0.797	↔
10_2_116	MW-15020	Appendix IV	Lead	ug/L	22	21	95%	0	1.000	↔	-0.000239	0.000	↓	2018-04-10	0.854	↔
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	23	5	22%	-0.00466	0.000	↓	0.0122	0.656	↔	2023-10-02	0.574	↔
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	23	22	96%	0	1.000	↔	-0.00206	0.000	↓	2017-11-15	0.828	↔
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	23	6	26%	0.00152	0.006	↑	-0.000801	0.114	↔	2020-05-06	0.509	↔
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	23	20	87%	0.00160	0.503	↔	-0.000320	0.000	↓	2016-07-11	0.660	↔
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.000808	0.000	↓	2017-09-07	0.863	↔
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	22	21	95%	0	1.000	↔	-0.000411	0.000	↓	2018-03-16	0.848	↔
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	23	7	30%	-0.00101	0.039	↔	0.000169	0.494	↔	2019-01-25	0.361	↔
11_2_103	MW-15021	Appendix IV	Barium	ug/L	23	0	0%	-0.0255	0.538	↔	0.0975	0.000	↑	2018-09-11	0.791	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	22	22	100%	-0.000408	0.000	↓	0	1.000	↔	2022-01-22	0.846	↔
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	22	22	100%	0	1.000	↔	0.0000266	0.000	↑	2018-02-26	0.836	↔
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	23	7	30%	-0.000442	0.000	↓	0.00147	0.551	↔	2023-10-02	0.595	↔
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	22	15	68%	-0.00871	0.000	↓	-0.0000392	0.984	↔	2021-03-24	0.910	↔
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	24	24	100%	-0.468	0.000	↓	0.111	0.768	↔	2022-06-27	0.800	↔
11_2_116	MW-15021	Appendix IV	Lead	ug/L	22	22	100%	0	1.000	↔	-0.000239	0.000	↓	2018-02-26	0.836	↔
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	23	18	78%	-0.000247	0.914	↔	-0.00548	0.023	↔	2020-05-06	0.454	↔
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	22	21	95%	0	1.000	↔	0.000107	0.313	↔	2021-04-21	0.135	↔
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	23	23	100%	-0.00195	0.000	↓	0	1.000	↔	2022-06-13	0.807	↔
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	23	6	26%	0.000366	0.023	↔	-0.00711	0.105	↔	2024-03-09	0.326	↔
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	23	15	65%	-0.000813	0.334	↔	-0.000374	0.131	↔	2018-05-07	0.421	↔
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.000811	0.000	↓	2017-09-17	0.866	↔
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	23	22	96%	0.000239	0.604	↔	-0.000509	0.000	↓	2018-04-15	0.736	↔
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	24	11	46%	-0.00665	0.000	↓	-0.000693	0.083	↔	2018-06-12	0.876	↔
12_2_103	MW-15022	Appendix IV	Barium	ug/L	24	0	0%	0.0411	0.121	↔	0.0106	0.759	↔	2020-10-26	0.337	↔
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	23	23	100%	-0.000410	0.000	↓	0	1.000	↔	2022-01-10	0.852	↔
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	23	23	100%	0	1.000	↔	0.0000267	0.000	↑	2018-02-13	0.839	↔
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	24	18	75%	-0.000410	0.000	↓	0.000248	0.693	↔	2023-02-19	0.713	↔
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	23	20	87%	-0.00874	0.000	↓	-0.000171	0.940	↔	2021-04-20	0.917	↔
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	25	20	80%	0.150	0.693	↔	-1.06	0.048	↔	2020-10-26	0.293	↔
12_2_116	MW-15022	Appendix IV	Lead	ug/L	23	23	100%	0	1.000	↔	-0.000241	0.000	↓	2018-02-13	0.839	↔
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	24	8	33%	0.00579	0.070	↔	0.0372	0.000	↑	2021-10-20	0.827	↔
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	23	22	96%	0	1.000	↔	0.0000188	0.341	↔	2021-07-26	0.129	↔
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	24	12	50%	-0.00772	0.027	↔	-0.00102	0.928	↔	2022-01-05	0.391	↔
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	24	16	67%	0.000696	0.038	↔	-0.000539	0.216	↔	2020-05-07	0.262	↔
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	24	23	96%	0	1.000	↔	-0.000347	0.000	↓	2018-10-27	0.869	↔
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	23	23	100%	-0.000821	0.000	↓	0	1.000	↔	2022-06-20	0.877	↔
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	22	22	100%	0	1.000	↔	-0.000396	0.000	↓	2018-02-16	0.832	↔
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	23	9	39%	-0.000475	0.084	↔	0.0232	0.000	↑	2023-07-17	0.864	↔
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0	0%	0.00482	0.389	↔	0.433	0.011	↔	2024-01-24	0.627	↔
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	22	22	100%	-0.000410	0.000	↓	0	1.000	↔	2022-01-10	0.845	↔
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	22	22	100%	0	1.000	↔	0.0000264	0.000	↑	2018-02-16	0.832	↔
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	23	18	78%	-0.000411	0.000	↓	0.000610	0.533	↔	2023-07-03	0.703	↔
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	22	21	95%	-0.00873	0.000	↓	-0.000215	0.929	↔	2021-04-20	0.914	↔
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	24	17	71%	-0.423	0.000	↓	0.115	0.811	↔	2022-12-05	0.811	↔
13_2_116	MW-15023	Appendix IV	Lead	ug/L	22	22	100%	0	1.000	↔	-0.000238	0.000	↓	2018-02-16	0.832	↔
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	23	7	30%	0.000872	0.584	↔	0.0555	0.020	↔	2023-10-01	0.476	↔
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	22	21	95%	0	1.000	↔	0.0000667	0.313	↔	2021-03-30	0.135	↔
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	23	4	17%	0.00293	0.109	↔	0.0289	0.248	↔	2023-06-25	0.429	↔
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	23	14	61%	0.00149	0.090	↔	-0.000105	0.511	↔	2017-07-11	0.238	↔
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	23	21	91%	0	1.000	↔	-0.000346	0.000	↓	2018-10-29	0.864	↔
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.000808	0.000	↓	2017-09-07	0.863	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	11	10	91%	-0.00132	0.539	↔	0	1.000	↔	2020-12-25	0.218	↔
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	5	45%	-0.212	0.000	↓	-0.000290	0.007	↓	2020-06-20	0.998	↓
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	11	0	0%	0.127	0.000	↑	0.00210	0.954	↔	2023-04-10	0.953	↔
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	11	11	100%	0.000334	0.000	↑	0	1.000	↔	2020-10-29	0.991	↔
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	11	11	100%	0.000334	0.000	↑	0	1.000	↔	2020-10-29	0.991	↔
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	11	6	55%	0.000510	0.028	↔	-0.0000594	0.017	↔	2021-02-04	0.823	↔
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	11	6	55%	0.000512	0.213	↔	-0.000183	0.429	↔	2021-12-22	0.324	↔
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	11	4	36%	-0.0511	0.293	↔	0.120	0.227	↔	2022-12-06	0.347	↔
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	11	11	100%	-0.00301	0.000	↓	0	1.000	↔	2020-10-29	0.991	↔
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	11	0	0%	-0.177	0.071	↔	0.0720	0.017	↔	2021-07-06	0.669	↔
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	11	5	45%	0.000525	0.617	↔	-0.00193	0.124	↔	2022-10-18	0.380	↔
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	11	3	27%	0.00107	0.113	↔	-0.000194	0.774	↔	2022-10-18	0.575	↔
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	11	11	100%	-0.00334	0.000	↓	0	1.000	↔	2020-10-29	0.991	↔
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	11	11	100%	-0.00414	0.000	↓	0	1.000	↔	2020-10-29	0.991	↔
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	16	14	88%	-0.000919	0.002	↓	-0.0000422	0.894	↔	2021-07-04	0.780	↔
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	17	1	6%	-0.0397	0.608	↔	0.0789	0.010	↔	2020-01-20	0.543	↔
15_2_103	MW-17002	Appendix IV	Barium	ug/L	17	0	0%	0.0453	0.172	↔	-0.0870	0.199	↔	2021-10-21	0.255	↔
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	16	15	94%	-0.000848	0.000	↓	-0.0000416	0.638	↔	2020-10-18	0.921	↔
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	16	13	81%	0.0000352	0.000	↑	0.000250	0.002	↑	2023-09-25	0.900	↑
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	17	12	71%	-0.000577	0.000	↓	0.0000822	0.707	↔	2022-02-15	0.839	↔
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	16	15	94%	-0.0220	0.000	↓	-0.000176	0.859	↔	2019-12-13	0.950	↔
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	17	8	47%	-0.749	0.001	↓	-0.111	0.465	↔	2020-10-27	0.832	↔
15_2_116	MW-17002	Appendix IV	Lead	ug/L	16	15	94%	0.000344	0.396	↔	-0.00144	0.678	↔	2023-07-15	0.074	↔
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	17	0	0%	0.00569	0.884	↔	0.0861	0.024	↔	2021-04-19	0.553	↔
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	17	6	35%	-0.0224	0.978	↔	0.898	0.006	↑	2020-02-04	0.652	↔
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	17	8	47%	-0.00467	0.185	↔	0.000265	0.713	↔	2019-04-09	0.235	↔
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	17	14	82%	-0.000573	0.022	↔	-0.000274	0.371	↔	2021-04-20	0.674	↔
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	16	15	94%	-0.00137	0.060	↔	0.0000867	0.881	↔	2020-10-27	0.463	↔
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	16	15	94%	-0.000793	0.006	↓	0	1.000	↔	2021-09-28	0.728	↔
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	3	18%	0.0134	0.033	↔	0.445	0.000	↑	2023-09-11	0.951	↔
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0	0%	0.0912	0.056	↔	-0.148	0.025	↔	2021-04-20	0.504	↔
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	16	15	94%	-0.000848	0.000	↓	-0.0000341	0.698	↔	2020-10-22	0.922	↔
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	16	16	100%	0.0000408	0.000	↑	0	1.000	↔	2021-11-26	0.865	↔
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	17	14	82%	-0.000587	0.000	↓	0.000303	0.335	↔	2022-07-14	0.826	↔
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	16	13	81%	-0.00754	0.000	↓	0.171	0.000	↑	2024-02-18	0.906	↔
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	17	13	76%	-0.948	0.000	↓	0.0493	0.759	↔	2021-02-20	0.865	↔
16_2_116	MW-17003	Appendix IV	Lead	ug/L	16	16	100%	-0.000367	0.228	↔	0.00283	0.000	↑	2022-01-23	0.810	↔
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	17	1	6%	0.0123	0.002	↑	0.328	0.000	↑	2022-11-06	0.993	↑
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	17	5	29%	0.00338	0.529	↔	0.188	0.001	↑	2023-04-15	0.882	↔
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	17	11	65%	-0.00145	0.148	↔	0.0000359	0.772	↔	2019-04-08	0.469	↔
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	17	14	82%	-0.000887	0.022	↔	-0.000250	0.422	↔	2020-11-26	0.681	↔
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	16	16	100%	-0.00153	0.000	↓	0.00180	0.000	↑	2021-09-07	0.820	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	16	14	88%	-0.000653	0.126	↔	-0.000225	0.521	↔	2021-04-19	0.551	↔
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	17	2	12%	0.00696	0.005	↑	-0.0135	0.218	↔	2023-04-10	0.559	↔
17_2_103	MW-17004	Appendix IV	Barium	ug/L	17	0	0%	0.183	0.011	↔	-0.255	0.009	↓	2021-04-20	0.605	↔
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	16	16	100%	-0.000855	0.000	↓	0	1.000	↔	2020-11-02	0.922	↔
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	16	15	94%	0.000884	0.019	↔	-0.000101	0.346	↔	2022-05-05	0.430	↔
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	17	13	76%	0.000994	0.341	↔	-0.00287	0.380	↔	2022-05-05	0.143	↔
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	16	12	75%	-0.0220	0.000	↓	-0.000162	0.887	↔	2019-11-22	0.930	↔
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	17	15	88%	-0.831	0.000	↓	0.0803	0.675	↔	2021-07-19	0.867	↔
17_2_116	MW-17004	Appendix IV	Lead	ug/L	16	14	88%	0.00375	0.162	↔	-0.00666	0.417	↔	2022-05-05	0.196	↔
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	17	7	41%	-0.000282	0.973	↔	0.0462	0.001	↑	2021-05-30	0.811	↔
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	17	8	47%	0.00279	0.526	↔	0.0406	0.010	↔	2022-07-04	0.738	↔
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	17	12	71%	0.000628	0.534	↔	-0.00103	0.254	↔	2021-04-19	0.130	↔
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	17	14	82%	-0.0000354	0.927	↔	-0.00113	0.170	↔	2022-05-04	0.290	↔
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	16	14	88%	-0.00148	0.039	↔	0.000221	0.694	↔	2020-10-27	0.488	↔
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	16	16	100%	-0.000762	0.009	↓	0	1.000	↔	2021-10-20	0.708	↔
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	17	14	82%	-0.00540	0.009	↓	-0.000305	0.044	↔	2018-08-06	0.758	↔
18_2_103	MW-17005	Appendix IV	Barium	ug/L	17	0	0%	0.168	0.369	↔	-0.109	0.106	↔	2020-01-13	0.236	↔
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	16	15	94%	-0.000848	0.000	↓	-0.0000719	0.439	↔	2020-10-01	0.917	↔
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	16	16	100%	0.0000408	0.000	↑	0	1.000	↔	2021-11-26	0.865	↔
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	17	12	71%	-0.000497	0.000	↓	0.000167	0.685	↔	2023-01-04	0.831	↔
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	16	16	100%	-0.0220	0.000	↓	-0.000145	0.884	↔	2019-12-14	0.950	↔
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	17	16	94%	-0.888	0.000	↓	0.0803	0.672	↔	2021-05-19	0.874	↔
18_2_116	MW-17005	Appendix IV	Lead	ug/L	16	15	94%	-0.000344	0.005	↓	-0.000231	0.114	↔	2021-04-20	0.823	↔
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	3	18%	-0.00341	0.425	↔	0.0707	0.362	↔	2023-11-06	0.239	↔
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	17	16	94%	-0.00389	0.000	↓	-0.000432	0.535	↔	2021-01-21	0.872	↔
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	17	12	71%	0.000326	0.444	↔	-0.00142	0.507	↔	2022-10-19	0.101	↔
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	17	17	100%	-0.000555	0.009	↓	0	1.000	↔	2021-10-24	0.604	↔
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	16	16	100%	-0.00153	0.000	↓	0	1.000	↔	2021-05-11	0.949	↔
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	15	15	100%	-0.000710	0.011	↔	0	1.000	↔	2022-01-15	0.703	↔
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	16	6	38%	-0.00235	0.024	↔	0.00245	0.593	↔	2023-03-30	0.478	↔
19_2_103	MW-17006	Appendix IV	Barium	ug/L	16	0	0%	0.0684	0.053	↔	-0.0546	0.018	↔	2020-10-26	0.504	↔
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	15	15	100%	-0.000855	0.000	↓	0	1.000	↔	2020-11-02	0.919	↔
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	15	15	100%	0.0000375	0.000	↑	0	1.000	↔	2022-03-15	0.869	↔
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	16	14	88%	-0.000549	0.000	↓	-0.0000342	0.921	↔	2022-06-03	0.817	↔
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	15	15	100%	-0.0220	0.000	↓	-0.000168	0.876	↔	2019-12-12	0.948	↔
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	16	11	69%	-0.884	0.000	↓	0.0473	0.810	↔	2021-04-02	0.861	↔
19_2_116	MW-17006	Appendix IV	Lead	ug/L	15	15	100%	-0.000337	0.000	↓	0	1.000	↔	2022-03-15	0.869	↔
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0	0%	0.00357	0.754	↔	-0.0122	0.105	↔	2020-10-26	0.325	↔
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	15	14	93%	0	1.000	↔	0.000187	0.529	↔	2021-03-14	0.116	↔
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	16	12	75%	-0.00257	0.000	↓	0.0279	0.000	↑	2023-08-19	0.933	↔
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	16	11	69%	-0.000100	0.917	↔	0.000331	0.129	↔	2019-04-09	0.330	↔
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	16	15	94%	0.00126	0.553	↔	-0.000469	0.001	↓	2018-08-05	0.670	↔

(Table continues on next page)



Table 9: Trend Tests: Piecewise Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Break 1	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend			
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	15	15	100%	-0.00151	0.000	↓	0	1.000	↔	2021-05-28	0.946	↔

Table 10: Trend Tests: Piecewise Linear-Linear-Linear

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	22	21	95%	0	0.329	↔	-0.00434	0.000	↓	0	0.056	↔	2020-05-06	2020-10-27	1.000	↔
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	23	1	4%	-0.0750	0.000	↓	-0.00832	0.000	↓	0.0260	0.000	↑	2016-11-23	2021-12-21	0.952	↔
01_2_103	MW-15009	Appendix IV	Barium	ug/L	23	0	0%	-0.0103	0.749	↔	0.103	0.043	↔	-0.0383	0.446	↔	2019-01-02	2022-05-04	0.679	↔
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	22	22	100%	0.0000319	0.444	↔	-0.00142	0.000	↓	0.0000408	0.243	↔	2019-01-08	2020-08-06	0.989	↔
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	22	22	100%	0	0.303	↔	0.000289	0.000	↑	0	0.067	↔	2020-05-06	2020-10-27	1.000	↔
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	23	20	87%	-0.000121	0.439	↔	-0.00146	0.157	↔	0.0000421	0.871	↔	2019-12-08	2021-05-11	0.780	↔
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	22	21	95%	0	1.000	↔	-0.0311	0.000	↓	-0.000275	0.589	↔	2018-05-06	2019-08-06	0.990	↔
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	24	21	88%	0	1.000	↔	-4.00	0.000	↓	0.0765	0.001	↑	2019-09-24	2020-05-20	0.997	↔
01_2_116	MW-15009	Appendix IV	Lead	ug/L	22	22	100%	0	0.073	↔	-0.00260	0.000	↓	0	0.189	↔	2020-05-06	2020-10-27	1.000	↔
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0	0%	-0.000250	0.989	↔	0.0284	0.074	↔	-0.0111	0.124	↔	2017-11-25	2020-05-07	0.518	↔
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	23	8	35%	-0.0497	0.000	↓	-0.00821	0.347	↔	0.00326	0.313	↔	2018-12-12	2021-01-24	0.979	↔
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	23	22	96%	0.00234	0.579	↔	-0.000345	0.000	↓	0.000135	0.809	↔	2016-04-17	2022-12-14	0.673	↔
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	22	22	100%	0	0.450	↔	-0.00358	0.000	↓	0	0.512	↔	2019-08-01	2020-10-27	1.000	↔
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	23	23	100%	0	0.043	↔	-0.00434	0.000	↓	0	0.163	↔	2020-05-06	2020-10-27	1.000	↔
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	24	22	92%	0.0000627	0.450	↔	-0.000487	0.000	↓	-0.000167	0.049	↔	2018-11-19	2021-05-02	0.925	↔
02_2_103	MW-15010	Appendix IV	Barium	ug/L	24	0	0%	0.00850	0.278	↔	0.190	0.013	↔	-0.105	0.031	↔	2021-07-29	2023-04-10	0.875	↔
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	23	22	96%	0.000252	0.226	↔	-0.000740	0.000	↓	-0.0000370	0.700	↔	2017-11-12	2021-02-27	0.939	↔
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	23	23	100%	0	0.157	↔	0.000289	0.000	↑	0	0.063	↔	2020-05-06	2020-10-27	1.000	↔
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	24	16	67%	-0.000166	0.261	↔	-0.00222	0.249	↔	0.00000618	0.975	↔	2020-04-19	2021-02-08	0.798	↔
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	23	20	87%	0	1.000	↔	-0.0311	0.000	↓	-0.000253	0.609	↔	2018-05-06	2019-08-07	0.990	↔
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	25	15	60%	0.0442	0.466	↔	-1.19	0.000	↓	-0.0717	0.166	↔	2019-03-08	2020-10-01	0.969	↔
02_2_116	MW-15010	Appendix IV	Lead	ug/L	23	23	100%	0	0.039	↔	-0.00260	0.000	↓	0	1.000	↔	2020-05-06	2020-10-27	1.000	↔
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	24	0	0%	0.0287	0.002	↑	-0.0298	0.074	↔	0.00617	0.527	↔	2019-01-14	2021-04-20	0.505	↔
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	24	11	46%	-0.0534	0.000	↓	-0.00680	0.002	↓	0.000855	0.703	↔	2017-01-25	2020-10-31	0.945	↔
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	24	14	58%	0.000775	0.220	↔	0.000205	0.354	↔	-0.00442	0.185	↔	2018-04-16	2024-01-05	0.445	↔
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	24	22	92%	0	0.084	↔	-0.00289	0.000	↓	0	0.222	↔	2020-05-06	2020-10-27	1.000	↔
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	22	22	100%	0	0.329	↔	-0.00434	0.000	↓	0	0.056	↔	2020-05-06	2020-10-27	1.000	↔
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	23	19	83%	0	1.000	↔	0	1.000	↔	-0.000427	0.000	↓	2016-07-17	2019-11-13	0.813	↔
03_2_103	MW-15013	Appendix IV	Barium	ug/L	23	0	0%	-0.0118	0.455	↔	0.0574	0.001	↑	0.187	0.203	↔	2019-09-12	2024-03-09	0.796	↔
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	22	22	100%	0.0000319	0.444	↔	-0.00142	0.000	↓	0.0000408	0.243	↔	2019-01-08	2020-08-06	0.989	↔
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	22	22	100%	0	0.303	↔	0.000289	0.000	↑	0	0.067	↔	2020-05-06	2020-10-27	1.000	↔
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	23	20	87%	-0.000169	0.260	↔	-0.00240	0.222	↔	0.0000659	0.744	↔	2020-04-26	2021-02-20	0.803	↔
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	22	20	91%	0	1.000	↔	-0.0311	0.000	↓	-0.000364	0.476	↔	2018-05-06	2019-08-04	0.990	↔
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	24	19	79%	-0.117	0.834	↔	0.877	0.855	↔	-1.16	0.045	↔	2019-04-28	2020-10-23	0.278	↔

(Table continues on next page)



Table 10: Trend Tests: Piecewise Linear-Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
03_2_116	MW-15013	Appendix IV	Lead	ug/L	22	22	100%	0	0.073	↔	-0.00260	0.000	↓	0	0.189	↔	2020-05-06	2020-10-27	1.000	↔
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	23	1	4%	0.00913	0.086	↔	-0.0455	0.388	↔	0.0139	0.000	↑	2018-09-28	2019-06-17	0.750	↔
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	23	5	22%	-0.0304	0.278	↔	0.0286	0.424	↔	-0.0204	0.041	↔	2017-11-29	2020-05-06	0.298	↔
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	23	16	70%	0.000481	0.329	↔	-0.0000640	0.719	↔	-0.00189	0.464	↔	2018-04-20	2024-03-09	0.177	↔
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	23	22	96%	0	0.153	↔	-0.00289	0.000	↓	0	0.135	↔	2020-05-06	2020-10-27	1.000	↔
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	22	22	100%	0	0.450	↔	-0.00358	0.000	↓	0	0.512	↔	2019-08-01	2020-10-27	1.000	↔
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	8	8	100%	-0.0257	0.000	↓	0	0.491	↔	0	0.868	↔	2022-03-10	2022-11-11	1.000	↔
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	8	5	62%	-0.0284	0.011	↔	0	1.000	↔	-0.000729	0.128	↔	2022-03-10	2023-07-26	0.990	↔
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	8	8	100%	-0.0257	0.000	↓	0	0.491	↔	0	0.868	↔	2022-03-10	2022-11-11	1.000	↔
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	8	1	12%	-0.580	0.546	↔	0.124	0.625	↔	-0.317	0.471	↔	2022-08-04	2024-03-26	0.610	↔
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	8	8	100%	-0.0608	0.000	↓	0	0.510	↔	0	0.851	↔	2022-03-10	2022-11-23	1.000	↔
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	8	4	50%	-0.00703	0.419	↔	0.00351	0.202	↔	-0.00324	0.406	↔	2022-08-16	2023-12-15	0.753	↔
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	8	8	100%	-0.0411	0.000	↓	0	0.691	↔	0	0.832	↔	2022-03-10	2023-03-14	1.000	↔
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	11	6	55%	-0.00596	0.701	↔	0.0117	0.475	↔	-0.0146	0.179	↔	2021-05-17	2023-04-10	0.470	↔
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	11	0	0%	0.158	0.617	↔	-0.0294	0.567	↔	-0.131	0.612	↔	2021-01-21	2023-10-03	0.434	↔
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	11	10	91%	0.000334	0.000	↑	0	1.000	↔	-0.000914	0.000	↓	2020-10-29	2024-03-26	0.999	↔
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	11	7	64%	0.000808	0.228	↔	0	1.000	↔	-0.000778	0.030	↔	2020-12-04	2023-07-20	0.842	↔
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	11	6	55%	0.553	0.248	↔	-0.182	0.383	↔	0.111	0.264	↔	2021-01-21	2022-06-19	0.585	↔
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	11	11	100%	0.00221	0.232	↔	-0.00343	0.593	↔	0.000553	0.759	↔	2021-10-21	2023-01-06	0.446	↔
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	11	0	0%	-0.0500	0.641	↔	0.102	0.374	↔	-0.0701	0.324	↔	2021-05-14	2023-04-10	0.583	↔
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	11	7	64%	-0.00297	0.486	↔	0.00178	0.185	↔	-0.00269	0.065	↔	2021-04-19	2023-03-30	0.652	↔
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	11	1	9%	-0.0377	0.055	↔	-0.000777	0.818	↔	0.00196	0.781	↔	2020-11-01	2023-04-11	0.780	↔
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	11	10	91%	0.000334	0.000	↑	0	1.000	↔	-0.000786	0.000	↓	2020-10-29	2024-03-26	0.999	↔
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	11	2	18%	0.000174	0.497	↔	-0.00345	0.038	↔	0.00246	0.007	↑	2022-10-01	2023-06-24	0.868	↔
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	11	1	9%	-0.0119	0.384	↔	-0.000519	0.136	↔	0.000592	0.496	↔	2020-07-18	2023-04-11	0.851	↔
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	11	9	82%	-0.482	0.871	↔	0.191	0.656	↔	0.0672	0.256	↔	2020-10-26	2021-07-28	0.534	↔
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	11	3	27%	-0.0321	0.813	↔	0.108	0.452	↔	-0.119	0.206	↔	2021-09-10	2023-04-10	0.411	↔
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	11	8	73%	-0.0287	0.039	↔	0	1.000	↔	-0.00386	0.667	↔	2020-11-07	2024-03-26	0.819	↔
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	11	0	0%	-0.00503	0.576	↔	0.00391	0.080	↔	-0.00388	0.344	↔	2021-04-19	2023-09-18	0.657	↔
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	11	8	73%	-0.00933	0.607	↔	0.000513	0.841	↔	-0.000586	0.123	↔	2020-07-01	2021-05-28	0.644	↔
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	22	22	100%	0	0.329	↔	-0.00434	0.000	↓	0	0.056	↔	2020-05-06	2020-10-27	1.000	↔
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	23	1	4%	-0.0122	0.004	↓	-0.00345	0.946	↔	-0.000158	0.854	↔	2017-09-20	2018-07-07	0.753	↔
07_2_103	MW-15017	Appendix IV	Barium	ug/L	23	0	0%	-0.295	0.019	↔	0.139	0.001	↑	-0.400	0.017	↔	2017-07-11	2023-04-10	0.681	↔
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	22	21	95%	0.000252	0.238	↔	-0.000741	0.000	↓	-0.0000317	0.749	↔	2017-11-12	2021-03-06	0.937	↔
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	22	22	100%	0	0.303	↔	0.000289	0.000	↑	0	0.067	↔	2020-05-06	2020-10-27	1.000	↔
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	1	4%	0.0195	0.198	↔	-0.00417	0.000	↓	0.000196	0.875	↔	2016-07-11	2020-11-10	0.776	↔
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	22	13	59%	0	1.000	↔	-0.0311	0.000	↓	-0.000331	0.517	↔	2018-05-06	2019-07-23	0.989	↔
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	23	100%	0	1.000	↔	-4.00	0.000	↓	0.0376	0.009	↑	2019-09-24	2020-05-16	0.999	↔
07_2_116	MW-15017	Appendix IV	Lead	ug/L	22	22	100%	-0.000166	0.852	↔	0.000179	0.637	↔	-0.000787	0.242	↔	2017-12-07	2021-10-21	0.201	↔
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	23	17	74%	0.00456	0.954	↔	-0.000299	0.813	↔	-0.0114	0.474	↔	2016-02-23	2023-04-13	0.173	↔
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	23	21	91%	0.000303	0.450	↔	-0.00762	0.000	↓	-0.000102	0.758	↔	2019-03-07	2020-08-24	0.959	↔
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	23	0	0%	-0.00000661	0.983	↔	-0.00200	0.694	↔	0.000898	0.315	↔	2020-10-27	2022-04-29	0.287	↔

(Table continues on next page)



Table 10: Trend Tests: Piecewise Linear-Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	23	12	52%	0.0128	0.552	↔	-0.00337	0.014	↔	-0.000335	0.540	↔	2016-03-19	2018-12-31	0.658	↔
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	22	22	100%	0	1.000	↔	-0.00104	0.002	↓	0	1.000	↔	2018-06-12	2022-09-14	0.815	↔
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	22	22	100%	0	0.329	↔	-0.00434	0.000	↓	0	0.056	↔	2020-05-06	2020-10-27	1.000	↔
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	23	16	70%	-0.000579	0.648	↔	0.000540	0.322	↔	-0.00121	0.208	↔	2018-01-28	2021-10-21	0.197	↔
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0	0%	-0.136	0.690	↔	0.0353	0.083	↔	-0.0879	0.007	↓	2016-06-05	2021-04-19	0.463	↔
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	22	21	95%	0.000653	0.524	↔	-0.000425	0.000	↓	0.000115	0.775	↔	2016-08-10	2022-12-01	0.865	↔
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	22	22	100%	0	0.303	↔	0.000289	0.000	↑	0	0.067	↔	2020-05-06	2020-10-27	1.000	↔
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	23	11	48%	-0.0000255	0.809	↔	-0.00124	0.318	↔	0.000870	0.422	↔	2021-11-03	2023-08-02	0.504	↔
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	22	20	91%	0	1.000	↔	-0.0311	0.000	↓	-0.000171	0.736	↔	2018-05-06	2019-08-08	0.990	↔
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	24	16	67%	0.0233	0.792	↔	-1.43	0.000	↓	0.0762	0.395	↔	2019-03-30	2020-12-20	0.951	↔
08_2_116	MW-15018	Appendix IV	Lead	ug/L	22	17	77%	-0.000330	0.802	↔	0.000478	0.486	↔	-0.00114	0.150	↔	2017-12-18	2021-10-20	0.169	↔
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	23	0	0%	-0.0389	0.157	↔	0.0408	0.068	↔	-0.00490	0.004	↓	2016-09-08	2017-08-24	0.506	↔
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	23	21	91%	0.000303	0.424	↔	-0.00762	0.000	↓	-0.000118	0.705	↔	2019-03-07	2020-08-25	0.964	↔
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	23	8	35%	0.000956	0.042	↔	-0.000365	0.002	↓	0.00177	0.293	↔	2018-01-31	2024-03-09	0.551	↔
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	23	20	87%	0.00494	0.447	↔	-0.00117	0.141	↔	-0.000213	0.468	↔	2016-07-11	2019-01-07	0.423	↔
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	22	21	95%	0.0000639	0.254	↔	-0.00249	0.000	↓	-0.0000889	0.116	↔	2019-01-31	2020-11-18	0.996	↔
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	22	22	100%	0.000891	0.203	↔	-0.00221	0.168	↔	0.00173	0.687	↔	2020-05-07	2023-06-15	0.288	↔
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	23	15	65%	-0.000353	0.618	↔	0.00581	0.274	↔	-0.00535	0.007	↓	2020-09-10	2022-05-04	0.437	↔
09_2_103	MW-15019	Appendix IV	Barium	ug/L	23	0	0%	0.00998	0.964	↔	0.150	0.036	↔	-0.165	0.573	↔	2017-12-29	2023-04-10	0.518	↔
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	22	21	95%	-0.000304	0.888	↔	0.000493	0.687	↔	-0.00109	0.032	↔	2017-03-29	2020-05-06	0.324	↔
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	22	21	95%	-0.000496	0.650	↔	0.00118	0.584	↔	-0.000785	0.047	↔	2017-09-11	2020-05-06	0.291	↔
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	23	14	61%	0	1.000	↔	-0.00164	0.115	↔	-0.0000794	0.491	↔	2019-09-24	2020-07-10	0.791	↔
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	22	13	59%	0	1.000	↔	-0.0311	0.000	↓	-0.000112	0.834	↔	2018-05-06	2019-08-01	0.988	↔
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	24	23	96%	0	1.000	↔	-4.21	0.000	↓	0.0674	0.000	↑	2019-09-24	2020-05-09	0.998	↔
09_2_116	MW-15019	Appendix IV	Lead	ug/L	22	19	86%	0.000676	0.100	↔	-0.00193	0.248	↔	-0.000166	0.887	↔	2020-05-07	2022-05-06	0.384	↔
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	23	3	13%	-0.000937	0.859	↔	-0.0333	0.205	↔	-0.00197	0.750	↔	2019-09-14	2020-10-27	0.607	↔
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	23	19	83%	0.0234	0.037	↔	-0.0927	0.563	↔	0.000996	0.962	↔	2020-05-07	2021-04-24	0.281	↔
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	23	5	22%	0.000225	0.577	↔	0.000802	0.321	↔	-0.00413	0.420	↔	2020-05-07	2024-01-01	0.304	↔
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	23	18	78%	0.00298	0.046	↔	-0.00169	0.475	↔	-0.000317	0.000	↓	2016-07-12	2017-03-30	0.766	↔
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	22	19	86%	0.000164	0.548	↔	-0.00154	0.000	↓	-0.000146	0.675	↔	2018-10-06	2021-11-15	0.928	↔
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	22	22	100%	0	0.329	↔	-0.00434	0.000	↓	0	0.056	↔	2020-05-06	2020-10-27	1.000	↔
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	23	19	83%	0.0000157	0.733	↔	-0.00104	0.096	↔	-0.000227	0.002	↓	2020-01-10	2020-12-16	0.940	↔
10_2_103	MW-15020	Appendix IV	Barium	ug/L	23	0	0%	0.0151	0.901	↔	0.319	0.007	↑	-0.112	0.032	↔	2017-10-20	2020-05-07	0.772	↔
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	22	22	100%	0.0000319	0.444	↔	-0.00142	0.000	↓	0.0000408	0.243	↔	2019-01-08	2020-08-06	0.989	↔
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	22	22	100%	0	0.303	↔	0.000289	0.000	↑	0	0.067	↔	2020-05-06	2020-10-27	1.000	↔
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	23	14	61%	-0.00125	0.215	↔	0	1.000	↔	-0.000453	0.002	↓	2016-10-04	2019-05-25	0.753	↔
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	22	20	91%	0	1.000	↔	-0.0311	0.000	↓	-0.000295	0.562	↔	2018-05-06	2019-08-06	0.990	↔
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	24	23	96%	0	1.000	↔	-4.00	0.000	↓	0.0837	0.000	↑	2019-09-24	2020-05-21	0.998	↔
10_2_116	MW-15020	Appendix IV	Lead	ug/L	22	21	95%	0	1.000	↔	-0.000830	0.005	↓	0	1.000	↔	2020-01-04	2021-06-29	0.939	↔
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	23	5	22%	0.00249	0.442	↔	-0.0138	0.122	↔	0.000663	0.835	↔	2018-12-15	2021-04-19	0.682	↔
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	23	22	96%	0.000311	0.429	↔	-0.00770	0.000	↓	-0.000230	0.481	↔	2019-03-07	2020-08-12	0.962	↔
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	23	6	26%	0.000456	0.845	↔	0.00183	0.092	↔	-0.000899	0.092	↔	2017-03-31	2020-05-06	0.523	↔

(Table continues on next page)



Table 10: Trend Tests: Piecewise Linear-Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	23	20	87%	0.000197	0.664	↔	-0.000465	0.025	↔	-0.00000221	0.995	↔	2017-07-11	2021-11-01	0.652	↔
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	22	22	100%	0	0.450	↔	-0.00358	0.000	↓	0	0.512	↔	2019-08-01	2020-10-27	1.000	↔
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	22	21	95%	0.0000354	0.649	↔	-0.00106	0.010	↔	-0.00000186	0.987	↔	2019-06-18	2021-07-18	0.944	↔
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	23	7	30%	-0.0154	0.100	↔	-0.000616	0.171	↔	0.000165	0.532	↔	2016-02-23	2019-07-09	0.504	↔
11_2_103	MW-15021	Appendix IV	Barium	ug/L	23	0	0%	-0.00913	0.660	↔	0.276	0.003	↑	-0.000247	0.996	↔	2020-04-18	2021-12-20	0.868	↔
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	22	22	100%	0.0000320	0.441	↔	-0.00143	0.000	↓	0.0000421	0.235	↔	2019-01-08	2020-08-06	0.989	↔
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	22	22	100%	0	0.184	↔	0.000289	0.000	↑	0	0.461	↔	2020-05-06	2020-10-27	1.000	↔
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	23	7	30%	0.00890	0.164	↔	-0.000502	0.000	↓	0.00160	0.212	↔	2016-02-23	2023-09-24	0.682	↔
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	22	15	68%	0	1.000	↔	-0.0311	0.000	↓	0.00000616	0.990	↔	2018-05-06	2019-08-06	0.989	↔
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	24	24	100%	0	1.000	↔	-4.00	0.000	↓	0.0876	0.000	↑	2019-09-24	2020-05-23	0.998	↔
11_2_116	MW-15021	Appendix IV	Lead	ug/L	22	22	100%	0	0.049	↔	-0.00260	0.000	↓	0	0.242	↔	2020-05-06	2020-10-27	1.000	↔
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	23	18	78%	0.000251	0.899	↔	-0.00732	0.080	↔	0.00857	0.732	↔	2020-05-07	2023-11-11	0.493	↔
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	22	21	95%	-0.0000336	0.517	↔	0.000304	0.138	↔	-0.000724	0.076	↔	2021-03-17	2023-10-01	0.395	↔
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	23	23	100%	0.000284	0.437	↔	-0.00744	0.000	↓	0.000149	0.626	↔	2019-03-07	2020-09-22	0.965	↔
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	23	6	26%	0.000134	0.491	↔	0.00239	0.340	↔	-0.00856	0.049	↔	2022-05-05	2024-01-08	0.436	↔
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	23	15	65%	0.00964	0.426	↔	-0.000735	0.087	↔	-0.000211	0.662	↔	2016-02-23	2020-10-14	0.464	↔
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	22	22	100%	0	0.363	↔	-0.00358	0.000	↓	0	0.364	↔	2019-08-01	2020-10-27	1.000	↔
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	23	22	96%	0.000517	0.173	↔	-0.000932	0.000	↓	0.0000246	0.906	↔	2018-04-15	2021-07-15	0.847	↔
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	24	11	46%	0.0176	0.309	↔	-0.00851	0.000	↓	-0.000623	0.081	↔	2016-03-28	2018-04-16	0.911	↔
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	23	23	100%	0.0000655	0.487	↔	-0.000877	0.000	↓	0.0000773	0.316	↔	2018-07-11	2021-03-24	0.960	↔
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	23	23	100%	0	0.157	↔	0.000289	0.000	↑	0	0.063	↔	2020-05-06	2020-10-27	1.000	↔
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	24	18	75%	-0.000171	0.245	↔	-0.00234	0.225	↔	0.000133	0.499	↔	2020-04-26	2021-03-03	0.798	↔
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	23	20	87%	0	1.000	↔	-0.0311	0.000	↓	-0.000237	0.630	↔	2018-05-06	2019-08-07	0.990	↔
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	25	20	80%	0.337	0.302	↔	-2.08	0.192	↔	0.818	0.627	↔	2020-10-27	2023-01-09	0.388	↔
12_2_116	MW-15022	Appendix IV	Lead	ug/L	23	23	100%	0	0.039	↔	-0.00260	0.000	↓	0	1.000	↔	2020-05-06	2020-10-27	1.000	↔
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	24	8	33%	0.00206	0.980	↔	0.00591	0.150	↔	0.0371	0.000	↑	2016-05-28	2021-10-20	0.827	↔
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	23	22	96%	-0.00000111	0.691	↔	0.000332	0.001	↑	-0.000219	0.005	↓	2023-02-25	2023-10-02	0.771	↔
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	24	12	50%	0.00165	0.832	↔	-0.0241	0.458	↔	0.000901	0.889	↔	2018-11-28	2020-10-22	0.466	↔
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	24	16	67%	0.000919	0.007	↑	-0.00172	0.453	↔	0.000471	0.512	↔	2020-05-07	2022-02-28	0.376	↔
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	24	23	96%	0.0000704	0.526	↔	-0.000553	0.007	↓	-0.000217	0.024	↔	2018-11-19	2021-01-27	0.894	↔
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	22	22	100%	0	0.329	↔	-0.00434	0.000	↓	0	0.056	↔	2020-05-06	2020-10-27	1.000	↔
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	23	9	39%	-0.000805	0.157	↔	0.000540	0.695	↔	0.0232	0.000	↑	2020-10-26	2023-08-13	0.871	↔
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0	0%	0.0471	0.003	↑	-0.0286	0.008	↓	0.435	0.001	↑	2019-04-08	2023-11-24	0.838	↔
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	22	22	100%	0.0000319	0.444	↔	-0.00142	0.000	↓	0.0000408	0.243	↔	2019-01-08	2020-08-06	0.989	↔
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	22	22	100%	0	0.303	↔	0.000289	0.000	↑	0	0.067	↔	2020-05-06	2020-10-27	1.000	↔
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	23	18	78%	-0.000175	0.253	↔	-0.00226	0.259	↔	0.000168	0.419	↔	2020-04-26	2021-03-24	0.786	↔
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	22	21	95%	0	1.000	↔	-0.0311	0.000	↓	-0.000272	0.593	↔	2018-05-06	2019-08-06	0.990	↔
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	24	17	71%	0.0496	0.414	↔	-2.18	0.000	↓	0.00703	0.905	↔	2019-05-26	2020-07-10	0.971	↔
13_2_116	MW-15023	Appendix IV	Lead	ug/L	22	22	100%	0	0.073	↔	-0.00260	0.000	↓	0	0.189	↔	2020-05-06	2020-10-27	1.000	↔
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	23	7	30%	0.0121	0.002	↑	-0.0102	0.043	↔	0.0449	0.001	↑	2019-04-09	2023-02-23	0.727	↔
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	22	21	95%	-0.00000971	0.570	↔	0.000625	0.009	↑	-0.000708	0.059	↔	2022-09-03	2023-10-02	0.633	↔
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	23	4	17%	-0.00224	0.860	↔	0.00448	0.197	↔	0.0289	0.269	↔	2017-11-23	2023-08-18	0.444	↔

(Table continues on next page)



Table 10: Trend Tests: Piecewise Linear-Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	23	14	61%	0.00145	0.001	↑	-0.00582	0.149	↔	0.000398	0.050	↔	2018-11-03	2019-06-30	0.589	↔
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	23	21	91%	-0.0000198	0.870	↔	-0.000318	0.000	↓	-0.00105	0.186	↔	2018-11-02	2024-03-09	0.875	↔
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	22	22	100%	0	0.450	↔	-0.00358	0.000	↓	0	0.512	↔	2019-08-01	2020-10-27	1.000	↔
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	5	45%	-0.212	0.000	↓	-0.000122	0.323	↔	-0.000903	0.032	↔	2020-06-21	2023-09-06	0.999	↔
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	11	0	0%	0.0739	0.159	↔	0.221	0.005	↑	0.00190	0.949	↔	2021-10-17	2022-11-18	0.978	↔
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	11	6	55%	0.00149	0.866	↔	0.000117	0.577	↔	-0.000813	0.193	↔	2020-10-25	2023-10-01	0.603	↔
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	11	4	36%	-0.297	0.904	↔	-0.00859	0.910	↔	0.117	0.294	↔	2020-10-26	2023-02-22	0.430	↔
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	11	0	0%	-0.177	0.120	↔	0.0527	0.295	↔	0.143	0.437	↔	2021-06-03	2024-01-02	0.695	↔
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	11	5	45%	-0.0519	0.190	↔	0.00477	0.374	↔	-0.00116	0.129	↔	2020-07-02	2021-07-28	0.602	↔
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	17	1	6%	-0.00606	0.792	↔	0.355	0.030	↔	-0.142	0.281	↔	2022-02-11	2023-04-11	0.753	↔
15_2_103	MW-17002	Appendix IV	Barium	ug/L	17	0	0%	-0.0340	0.704	↔	0.120	0.562	↔	-0.109	0.059	↔	2019-11-18	2021-10-20	0.337	↔
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	16	13	81%	0.00000999	0.992	↔	0.0000392	0.004	↑	0.000247	0.079	↔	2018-10-30	2023-10-02	0.903	↔
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	17	12	71%	0	1.000	↔	-0.00347	0.000	↓	0.0000842	0.102	↔	2020-05-06	2020-12-14	0.984	↔
15_2_116	MW-17002	Appendix IV	Lead	ug/L	16	15	94%	-0.000461	0.749	↔	0.00183	0.828	↔	-0.000220	0.841	↔	2020-05-09	2021-07-23	0.070	↔
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	17	0	0%	1.13	0.157	↔	-0.164	0.624	↔	0.0623	0.006	↑	2018-02-23	2019-03-11	0.618	↔
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	17	8	47%	-0.00542	0.119	↔	0.00185	0.186	↔	-0.00288	0.370	↔	2019-07-13	2022-10-19	0.406	↔
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	17	14	82%	0.00237	0.240	↔	-0.00214	0.173	↔	-0.000338	0.028	↔	2018-08-05	2019-05-25	0.772	↔
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	16	15	94%	-0.0000330	0.964	↔	-0.00434	0.092	↔	0	1.000	↔	2020-03-30	2020-10-27	0.802	↔
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	3	18%	-0.333	0.192	↔	0.0176	0.017	↔	0.445	0.000	↑	2018-02-22	2023-09-18	0.963	↔
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0	0%	0.113	0.018	↔	-0.529	0.184	↔	-0.0115	0.900	↔	2021-08-23	2022-07-12	0.633	↔
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	16	16	100%	0	0.401	↔	0.000289	0.000	↑	0	0.138	↔	2020-05-06	2020-10-27	1.000	↔
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	17	14	82%	0	1.000	↔	-0.00434	0.000	↓	0.000125	0.040	↔	2020-05-06	2020-11-11	0.981	↔
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	16	13	81%	-0.0220	0.000	↓	-0.000135	0.930	↔	0.171	0.000	↑	2019-12-14	2024-03-18	0.981	↔
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	17	13	76%	0.000000128	1.000	↔	-4.00	0.000	↓	0.0751	0.013	↔	2019-09-24	2020-05-19	0.996	↔
16_2_116	MW-17003	Appendix IV	Lead	ug/L	16	16	100%	0	1.000	↔	-0.000755	0.548	↔	0.00283	0.001	↑	2019-11-05	2021-12-15	0.814	↔
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	17	1	6%	-0.00341	0.847	↔	0.0191	0.021	↔	0.328	0.000	↑	2019-07-14	2022-11-16	0.994	↔
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	17	5	29%	-0.567	0.000	↓	0.0113	0.000	↑	0.188	0.000	↑	2018-02-28	2023-05-13	0.988	↔
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	17	14	82%	-0.000887	0.034	↔	0	1.000	↔	-0.000718	0.613	↔	2021-04-04	2023-06-14	0.689	↔
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	16	16	100%	0	1.000	↔	-0.00235	0.003	↓	0.00180	0.000	↑	2019-03-14	2021-06-19	0.866	↔
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	16	14	88%	0.00273	0.210	↔	-0.00236	0.579	↔	-0.000267	0.284	↔	2018-08-06	2019-07-24	0.650	↔
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	17	2	12%	0.000407	0.870	↔	0.0515	0.042	↔	-0.0137	0.027	↔	2021-07-22	2022-05-13	0.808	↔
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	16	15	94%	-0.0000247	0.868	↔	0.000209	0.184	↔	-0.000150	0.081	↔	2020-03-11	2022-05-04	0.548	↔
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	17	13	76%	-0.00198	0.686	↔	0.00224	0.505	↔	-0.00353	0.195	↔	2019-06-13	2022-05-04	0.197	↔
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	16	12	75%	-0.0221	0.001	↓	0.00200	0.441	↔	-0.00312	0.506	↔	2020-01-08	2022-10-19	0.938	↔
17_2_116	MW-17004	Appendix IV	Lead	ug/L	16	14	88%	-0.00194	0.658	↔	0.0212	0.211	↔	-0.0120	0.136	↔	2021-01-24	2022-05-05	0.415	↔
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	17	12	71%	-0.00212	0.400	↔	0.00316	0.196	↔	-0.00155	0.158	↔	2019-08-25	2021-04-20	0.319	↔
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	16	16	100%	0.00226	0.280	↔	-0.00119	0.002	↓	0.0000422	0.883	↔	2018-08-05	2021-06-02	0.825	↔
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	17	14	82%	-0.0253	0.000	↓	0	1.000	↔	-0.000392	0.000	↓	2018-02-20	2019-03-15	0.966	↔
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	16	16	100%	0	0.401	↔	0.000289	0.000	↑	0	0.138	↔	2020-05-06	2020-10-27	1.000	↔
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	17	12	71%	0.000115	0.361	↔	-0.00324	0.000	↓	-0.00000956	0.874	↔	2020-04-12	2020-12-08	0.976	↔
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	16	16	100%	-0.0220	0.000	↓	-0.00277	0.848	↔	0	1.000	↔	2019-11-08	2020-10-27	0.950	↔
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	17	16	94%	0	1.000	↔	-4.00	0.000	↓	0.0484	0.051	↔	2019-09-24	2020-05-11	0.997	↔

(Table continues on next page)



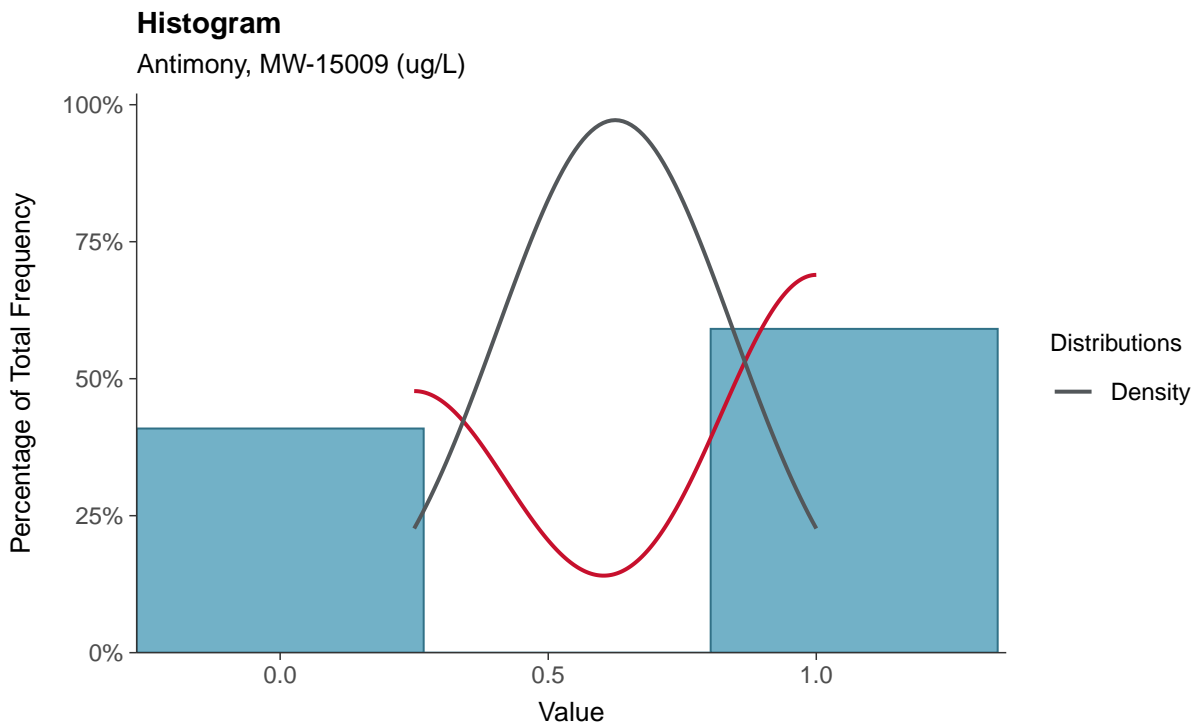
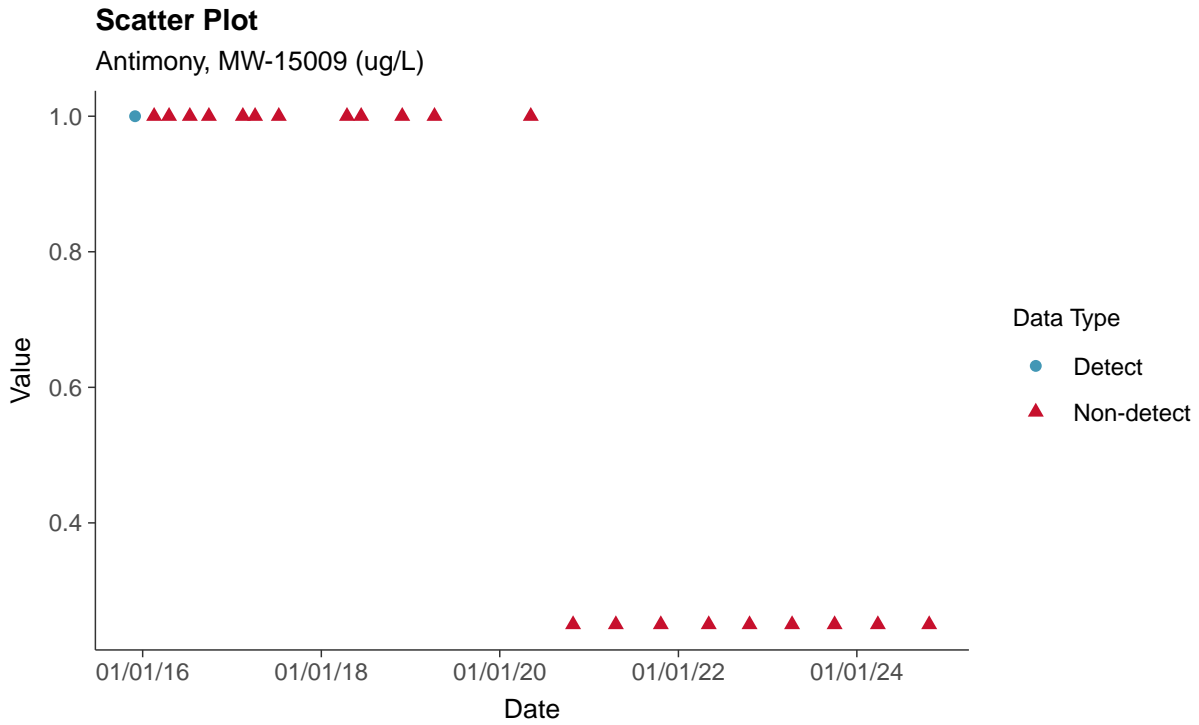
Table 10: Trend Tests: Piecewise Linear-Linear-Linear (continued)

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Line 1			Line 2			Line 3			Break 1	Break 2	R-Squared	Overall Trend
								Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend				
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	3	18%	0.0246	0.066	↔	-0.0450	0.258	↔	0.0313	0.033	↔	2020-05-07	2022-03-24	0.522	↔
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	17	12	71%	-0.00133	0.194	↔	0.00224	0.120	↔	-0.00260	0.185	↔	2020-06-25	2022-10-19	0.403	↔
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	17	17	100%	0.00208	0.270	↔	-0.000932	0.005	↓	0.0000424	0.870	↔	2018-08-05	2021-05-09	0.750	↔
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	16	16	100%	0	0.336	↔	-0.00358	0.000	↓	0	1.000	↔	2019-08-01	2020-10-27	1.000	↔
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	15	15	100%	0.00220	0.321	↔	-0.00113	0.020	↔	0.0000569	0.851	↔	2018-08-05	2021-07-23	0.816	↔
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	16	6	38%	0.00258	0.340	↔	-0.0292	0.034	↔	0.000992	0.533	↔	2020-05-04	2020-11-20	0.731	↔
19_2_103	MW-17006	Appendix IV	Barium	ug/L	16	0	0%	0.0835	0.002	↑	-0.0892	0.036	↔	0.187	0.205	↔	2020-10-27	2023-12-28	0.730	↔
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	15	15	100%	0	0.279	↔	0.000289	0.000	↑	0	0.113	↔	2020-05-06	2020-10-27	1.000	↔
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	15	15	100%	-0.0220	0.001	↓	-0.00277	0.856	↔	0	1.000	↔	2019-11-08	2020-10-27	0.948	↔
19_2_116	MW-17006	Appendix IV	Lead	ug/L	15	15	100%	0	0.009	↑	-0.00260	0.000	↓	0	1.000	↔	2020-05-06	2020-10-27	1.000	↔
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0	0%	0.00959	0.236	↔	-0.0280	0.185	↔	0.0235	0.431	↔	2020-10-27	2023-04-15	0.559	↔
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	15	14	93%	-0.00107	0.848	↔	0.000167	0.219	↔	-0.000968	0.628	↔	2018-02-28	2023-11-23	0.207	↔
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	16	12	75%	-0.00364	0.001	↓	0	1.000	↔	0.0279	0.000	↑	2021-05-22	2023-09-29	0.952	↔
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	16	15	94%	0.00214	0.304	↔	-0.000976	0.027	↔	-0.000175	0.544	↔	2018-08-05	2020-11-20	0.750	↔



Appendix IV: Antimony, MW-15009

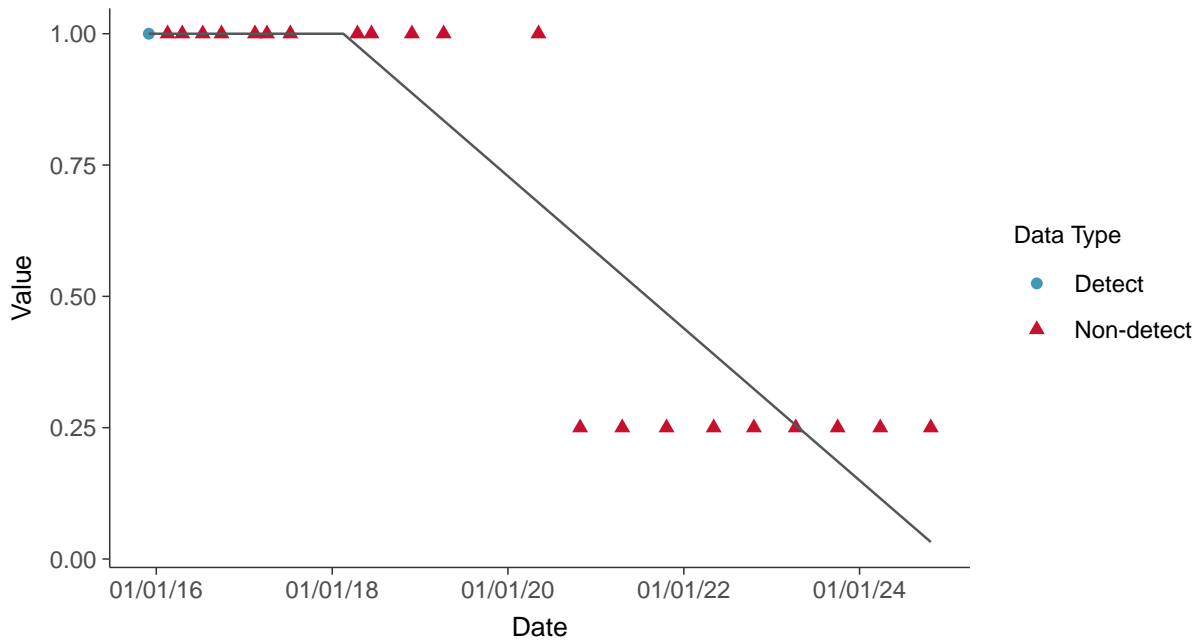
ID: 01_2_101





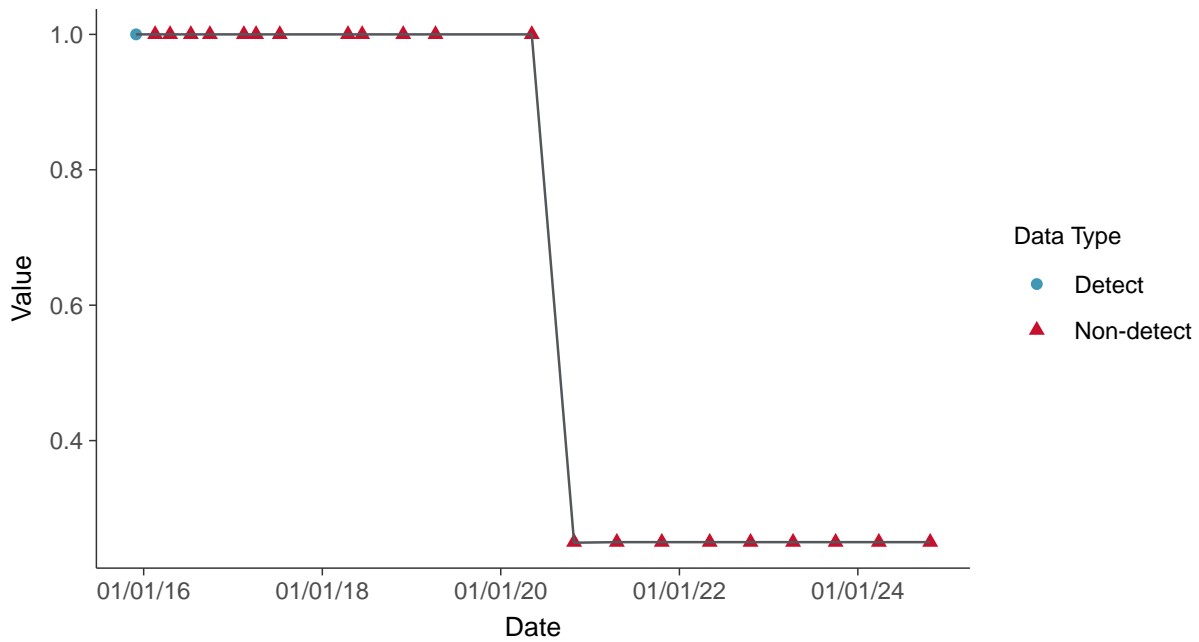
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15009 (ug/L)



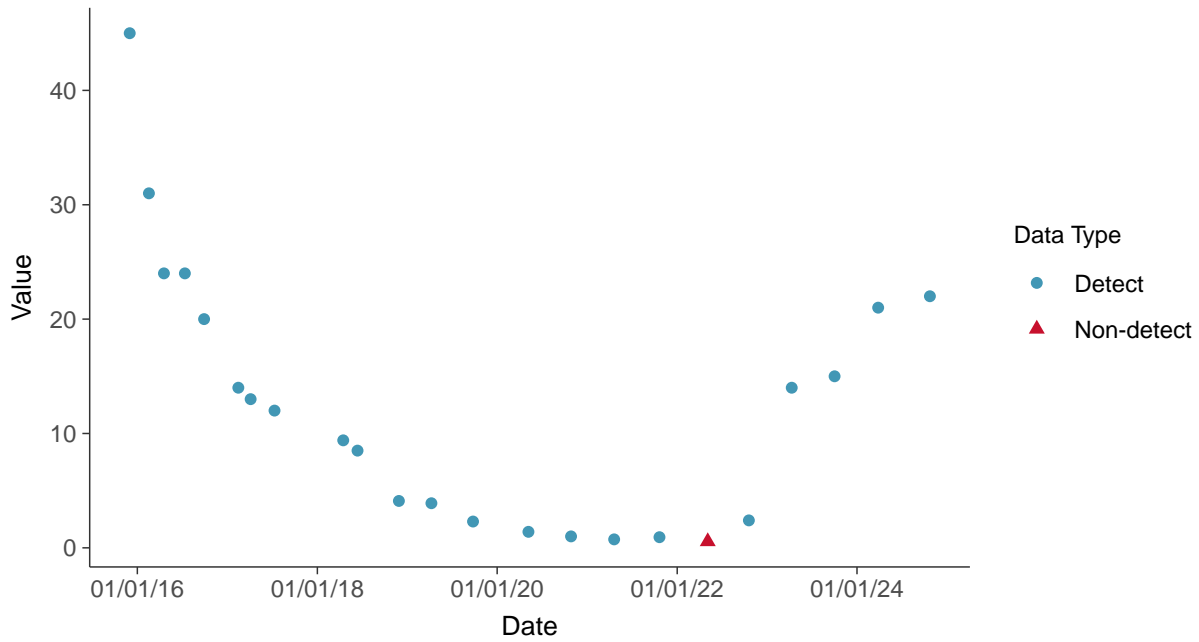


Appendix IV: Arsenic, MW-15009

ID: 01_2_102

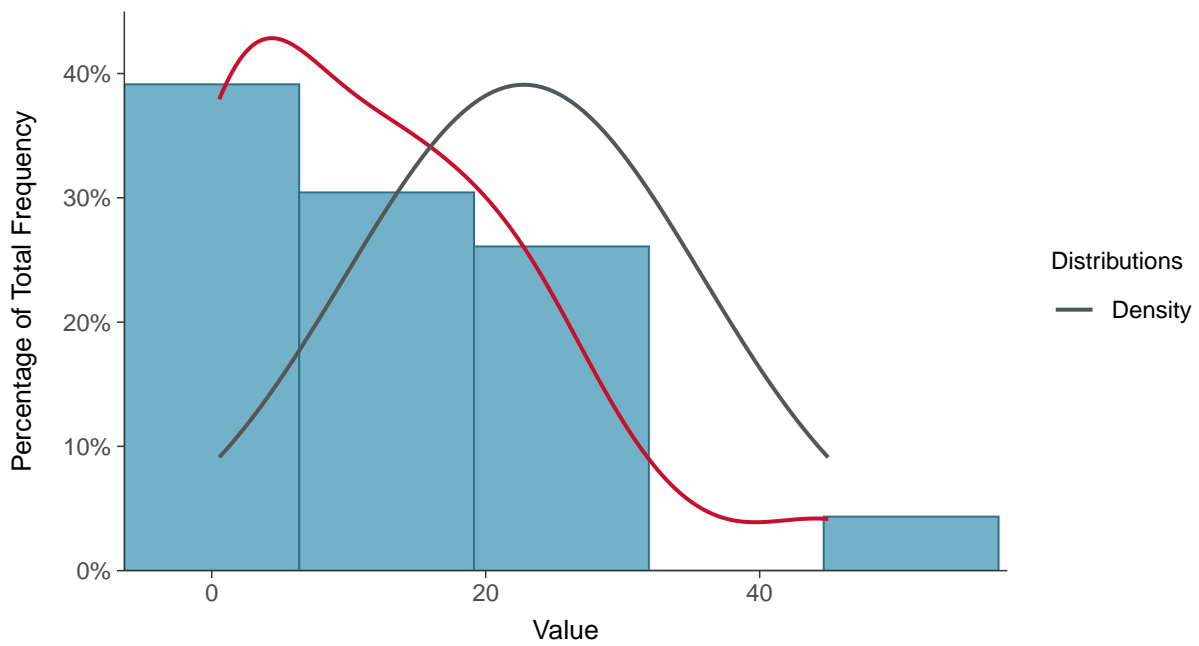
Scatter Plot

Arsenic, MW-15009 (ug/L)



Histogram

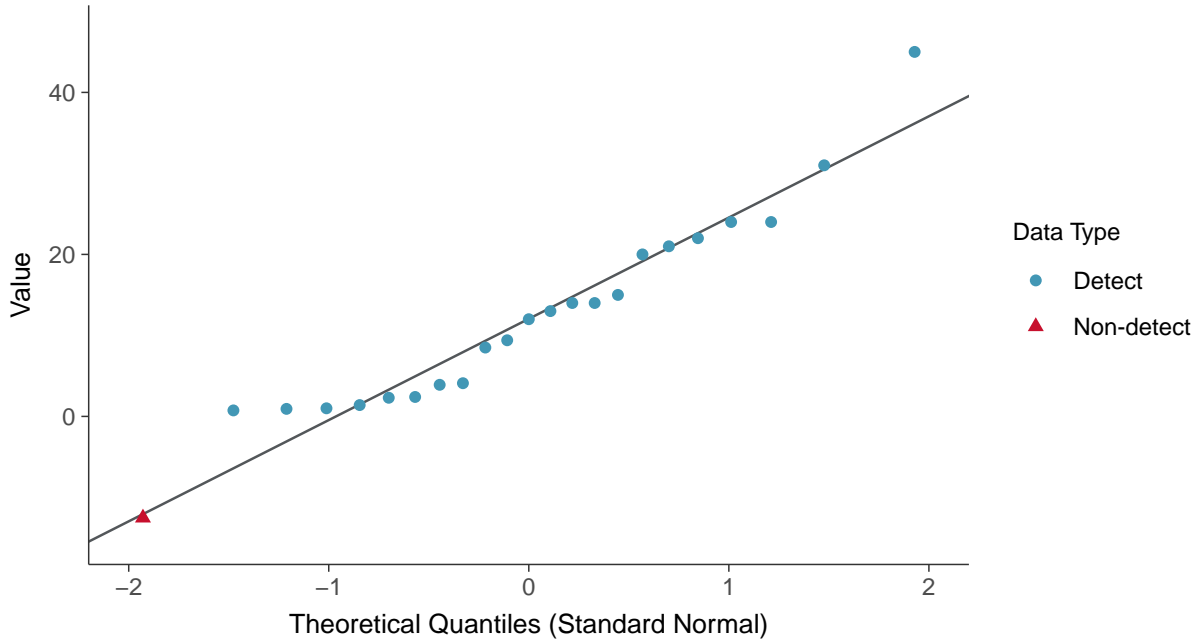
Arsenic, MW-15009 (ug/L)





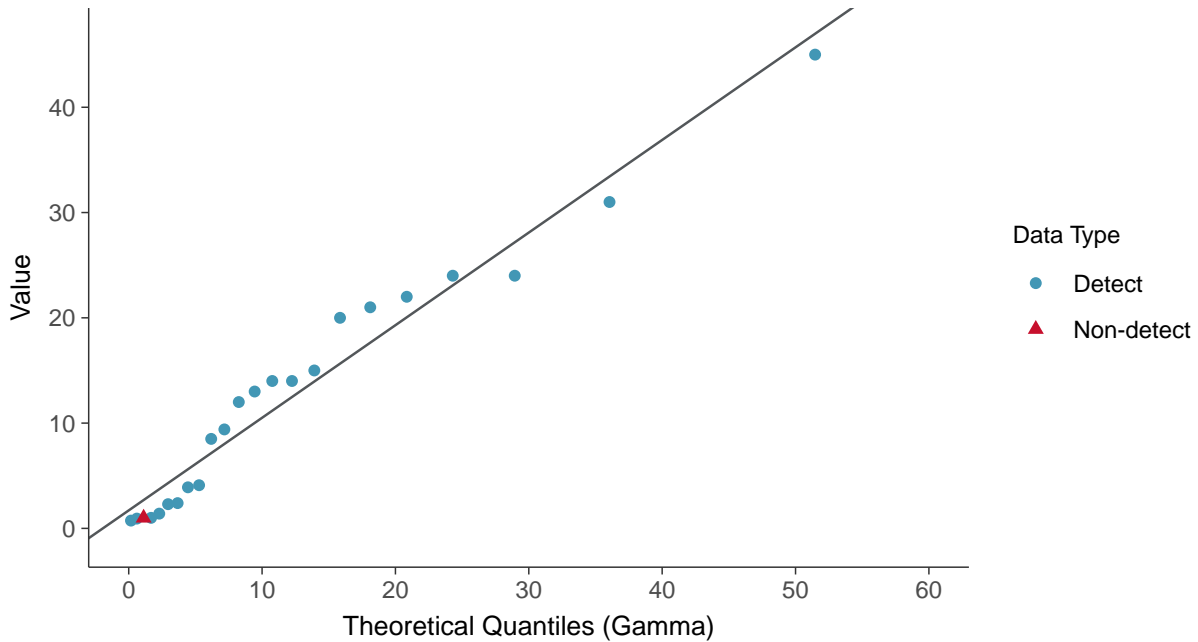
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15009 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

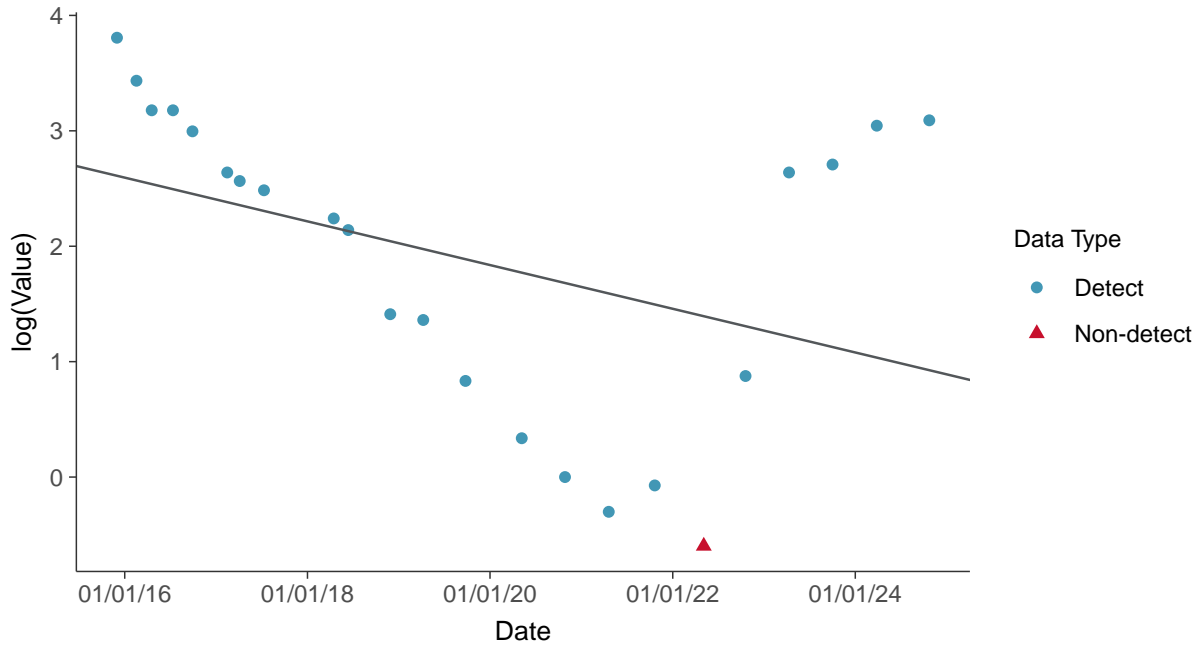
Arsenic, MW-15009 (ug/L)





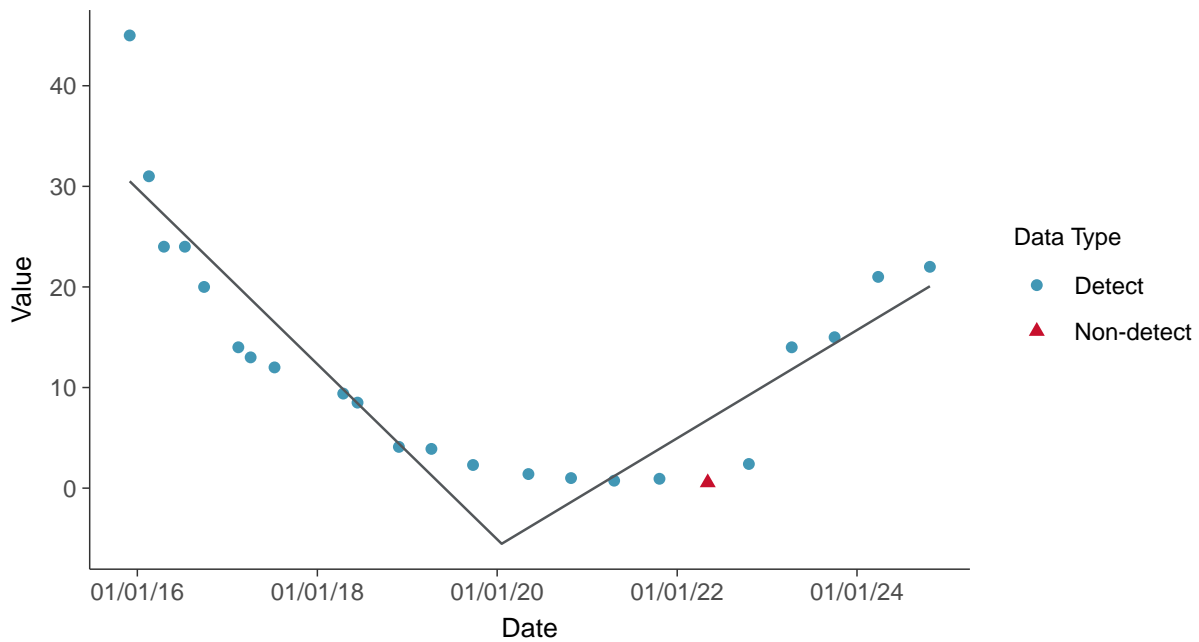
Trend Regression: Lognormal MLE

Arsenic, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear

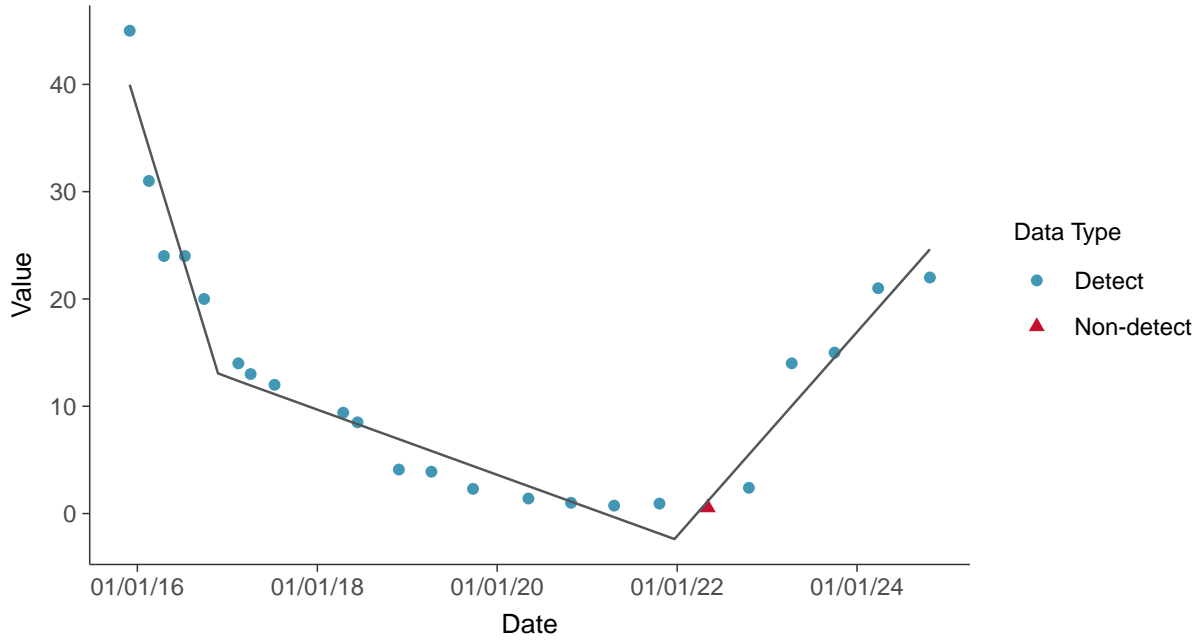
Arsenic, MW-15009 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

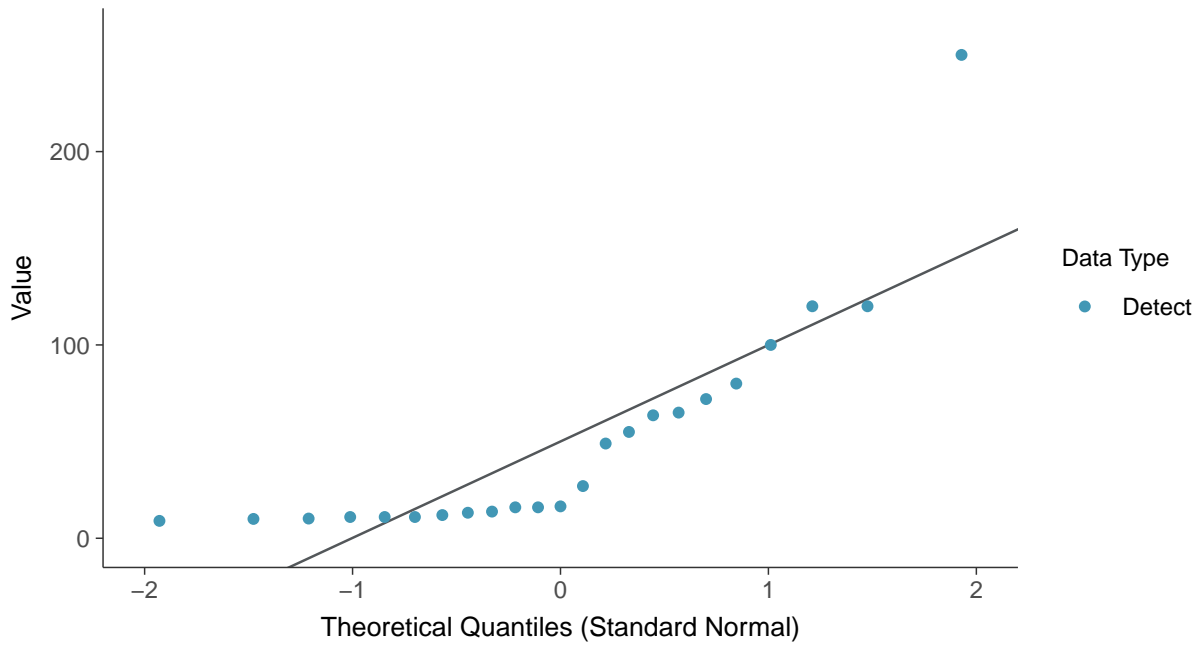
Arsenic, MW-15009 (ug/L)





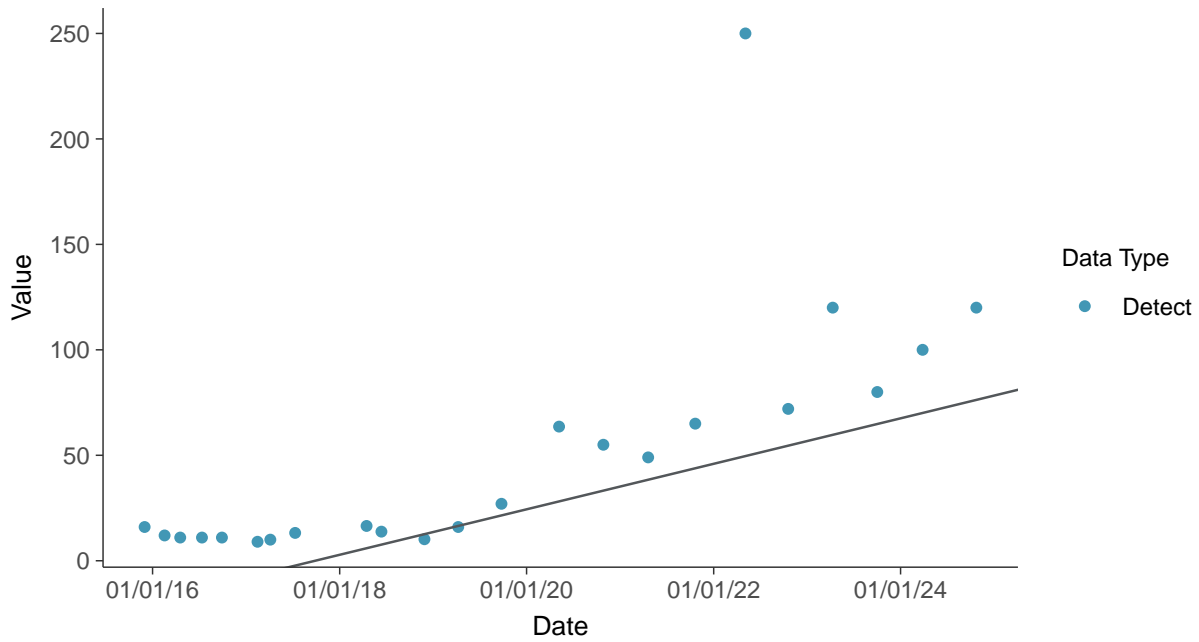
Normal Q-Q plot

Barium, MW-15009 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

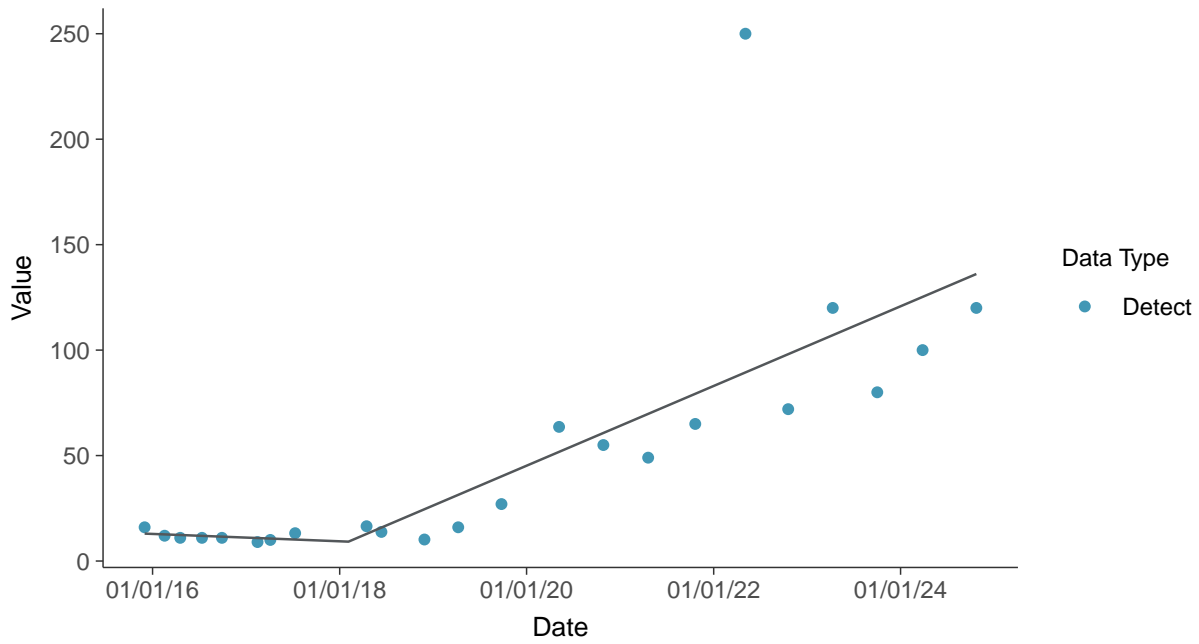
Barium, MW-15009 (ug/L)





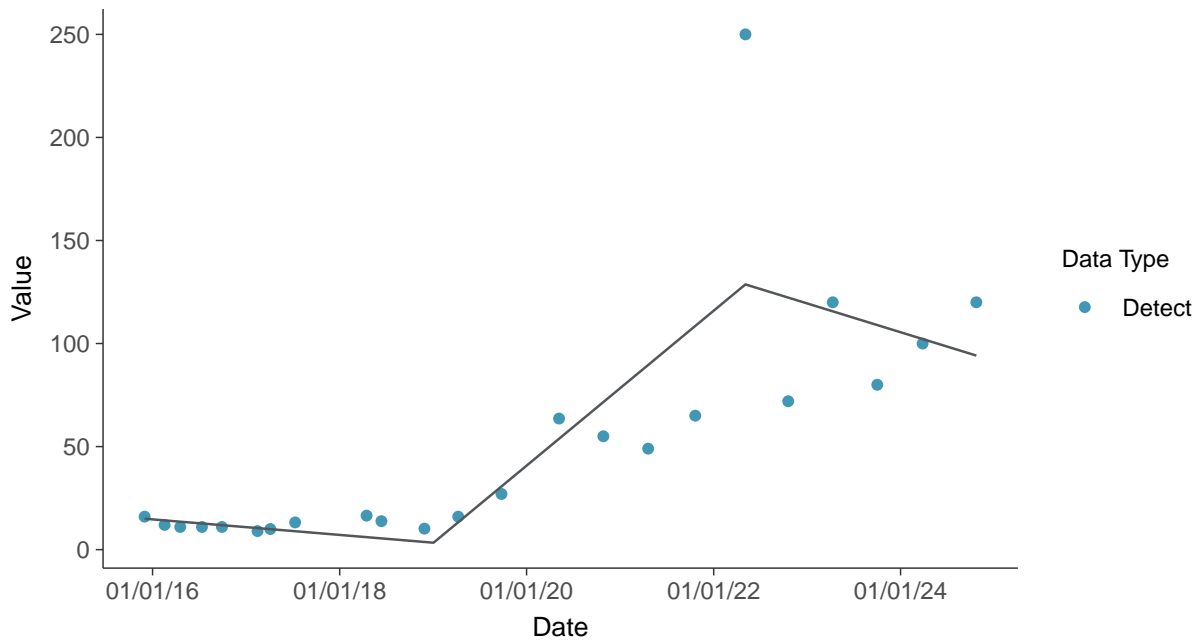
Trend Regression: Piecewise Linear-Linear

Barium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

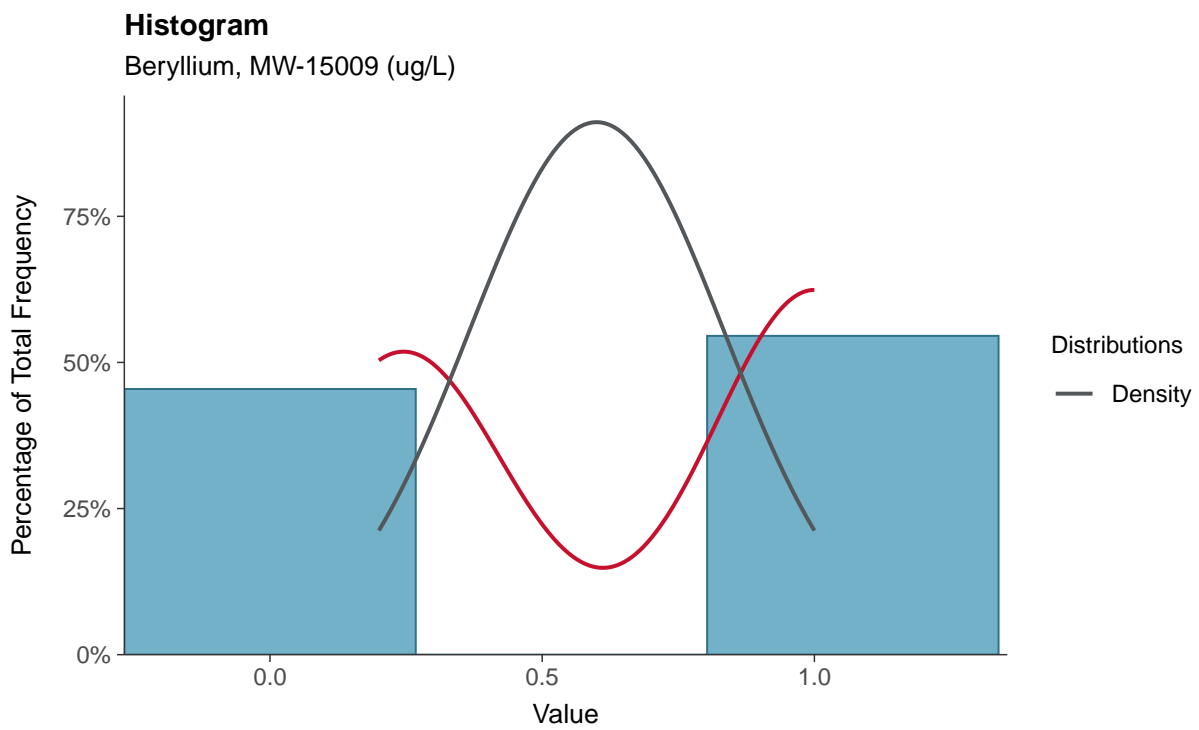
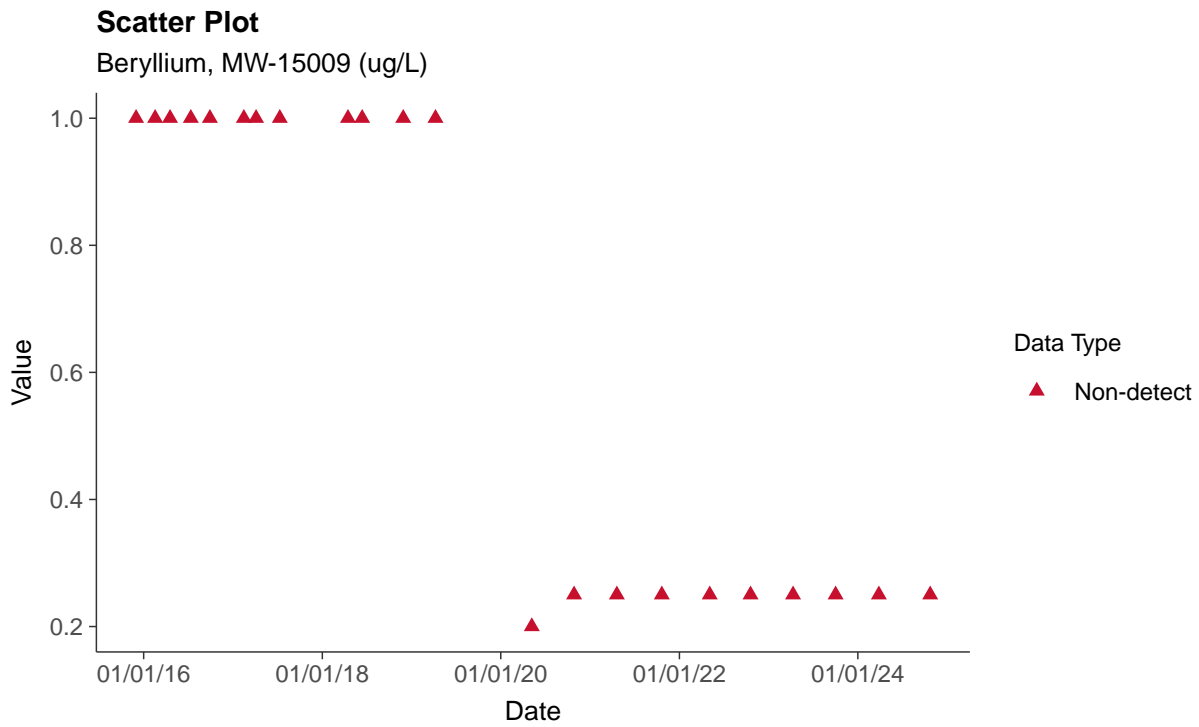
Barium, MW-15009 (ug/L)





Appendix IV: Beryllium, MW-15009

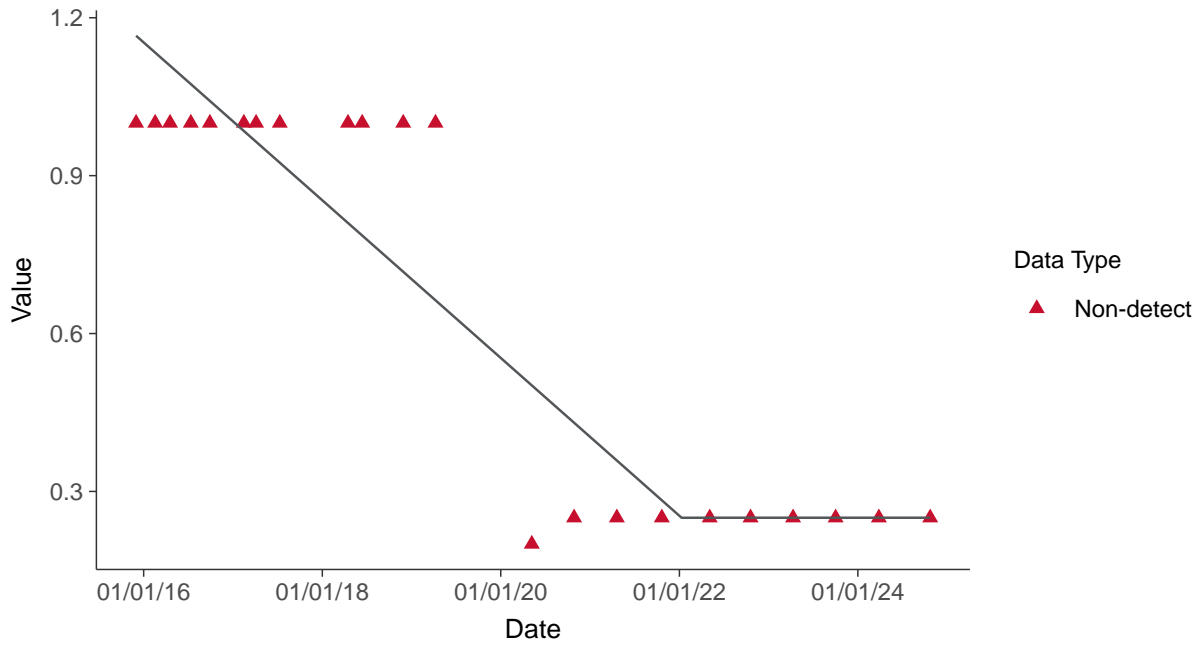
ID: 01_2_104





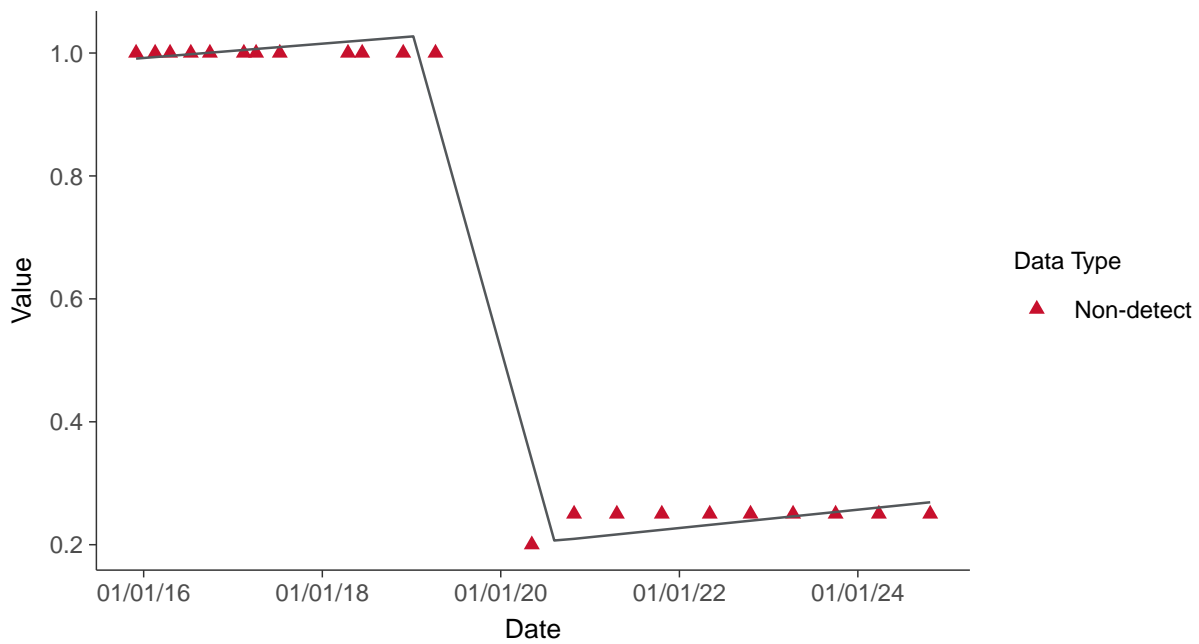
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

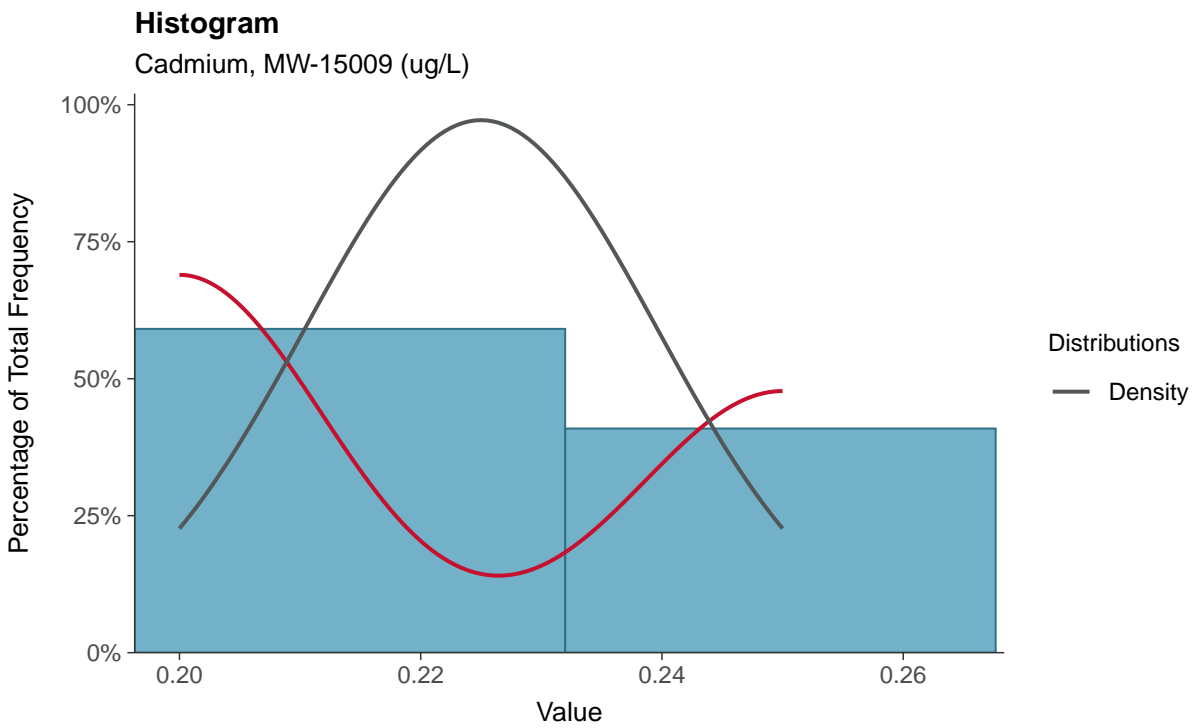
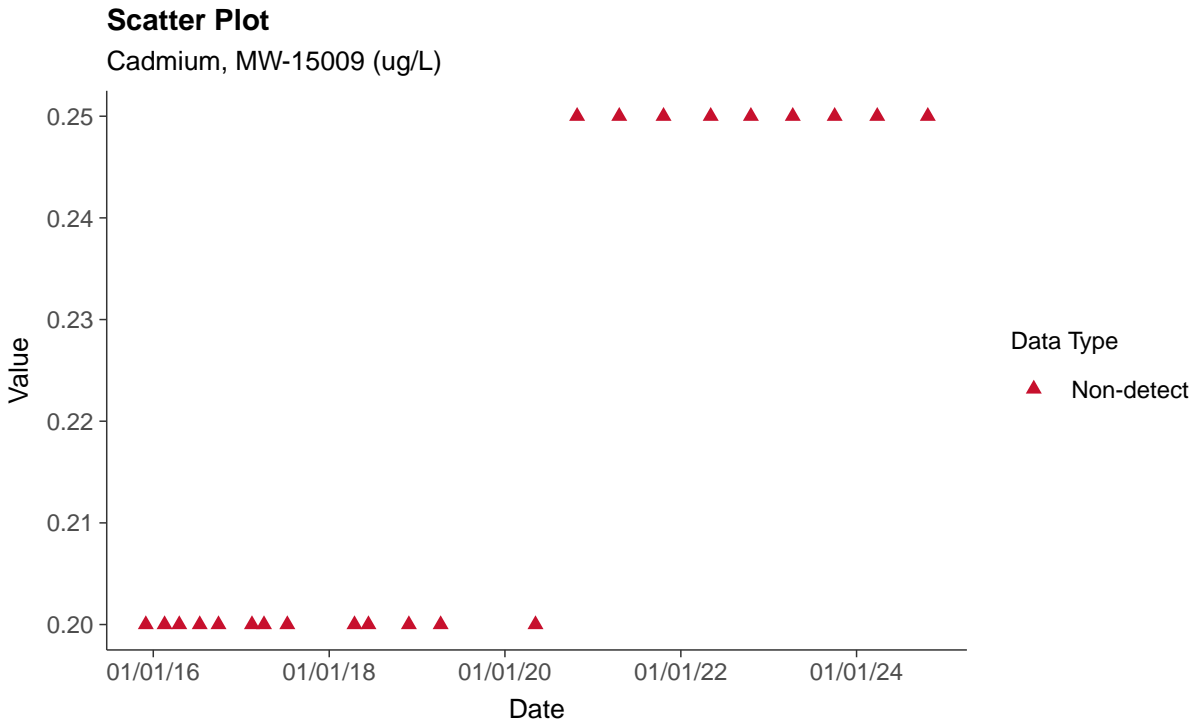
Beryllium, MW-15009 (ug/L)





Appendix IV: Cadmium, MW-15009

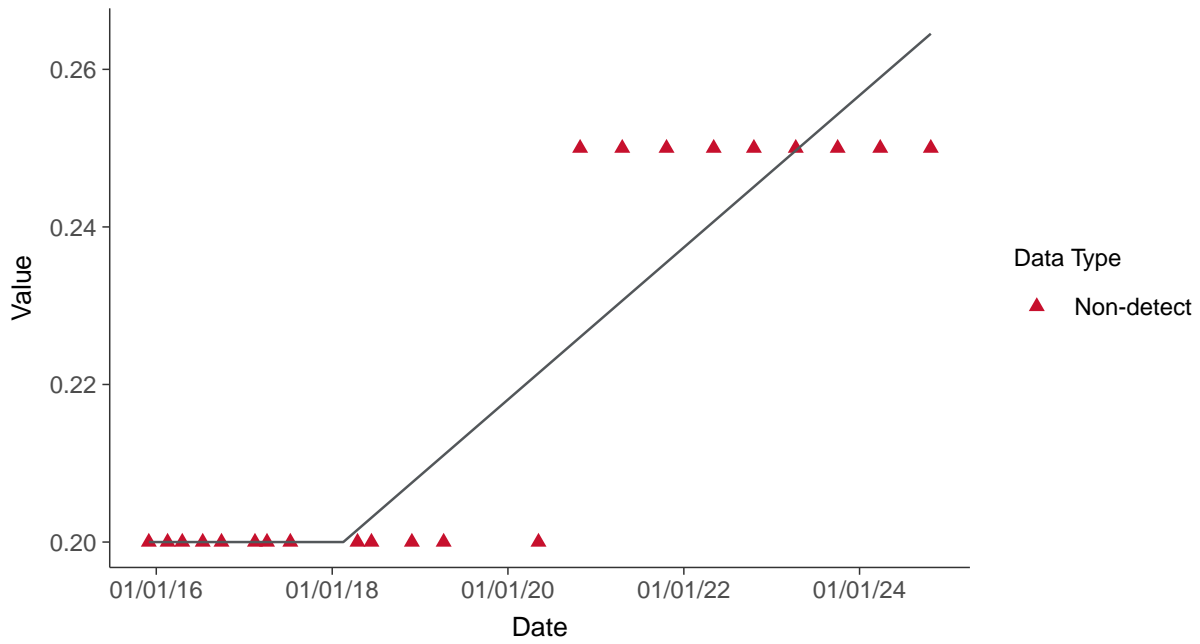
ID: 01_2_106





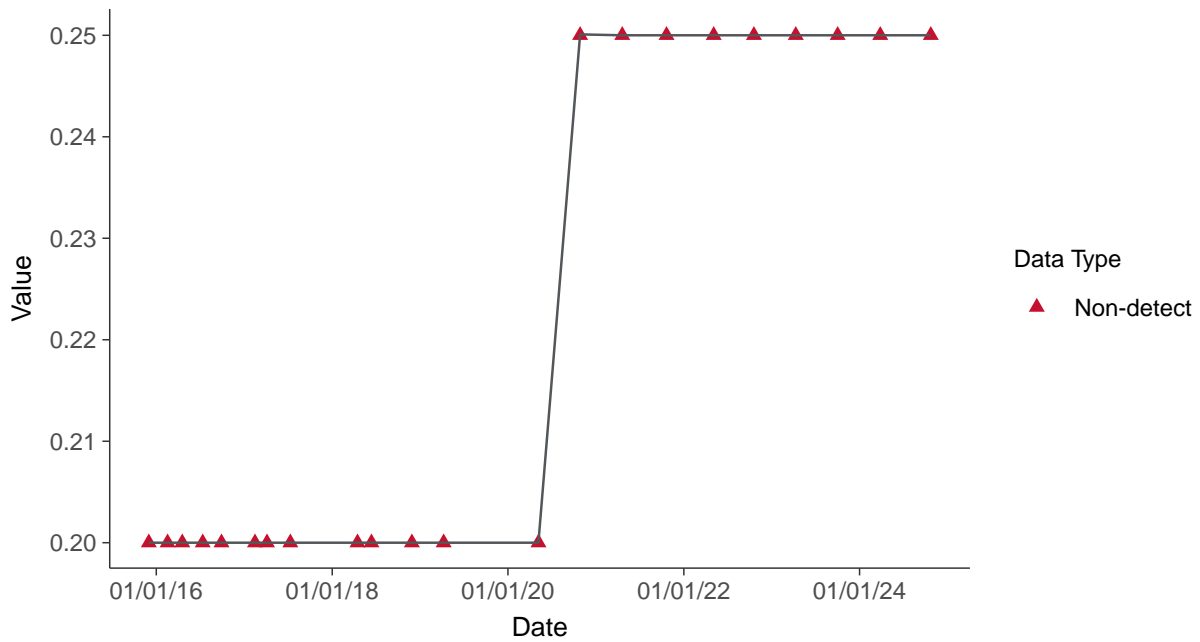
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

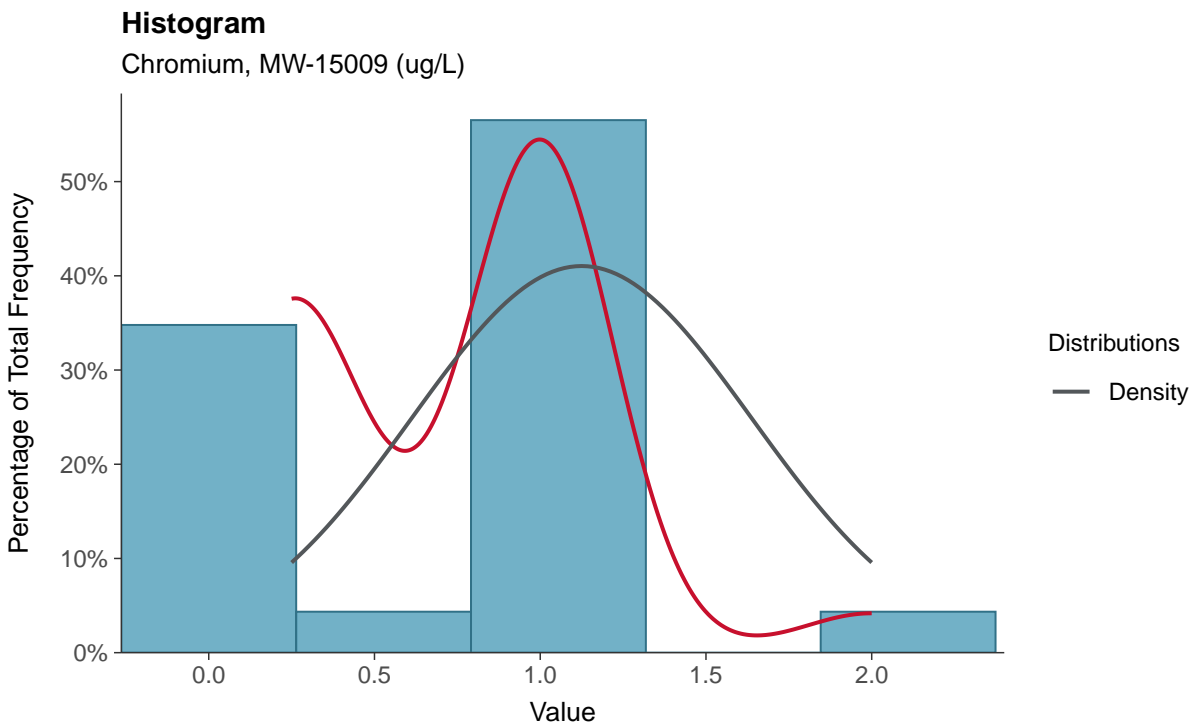
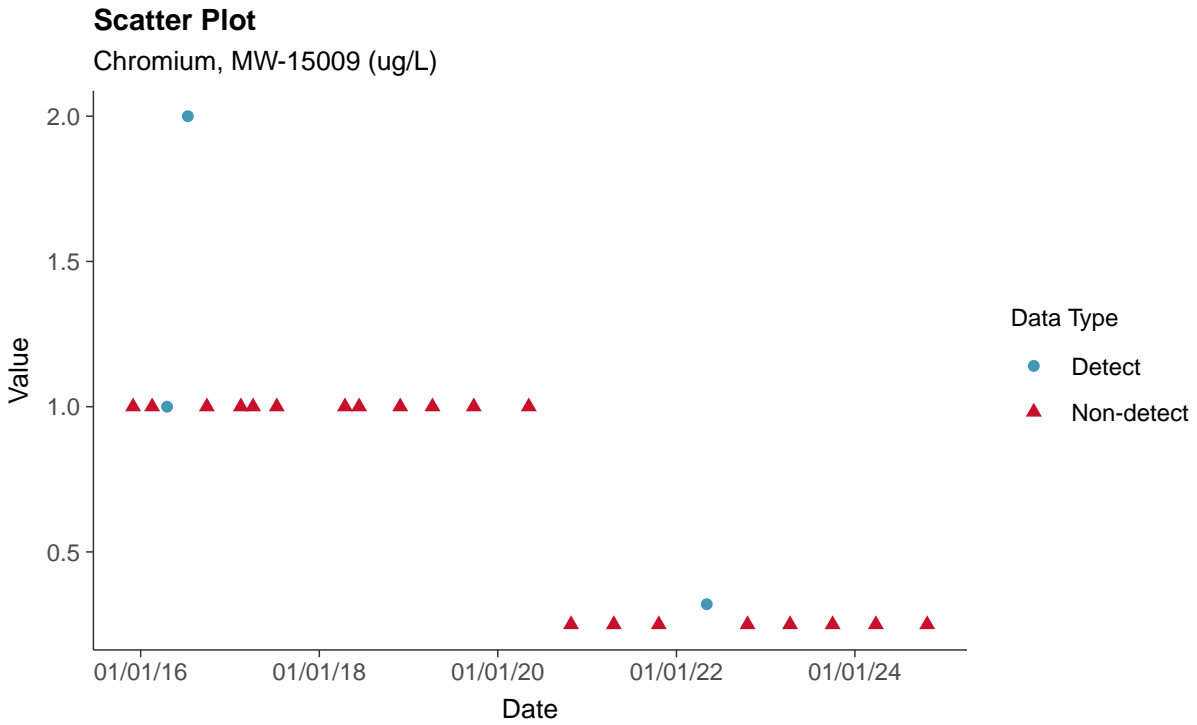
Cadmium, MW-15009 (ug/L)





Appendix IV: Chromium, MW-15009

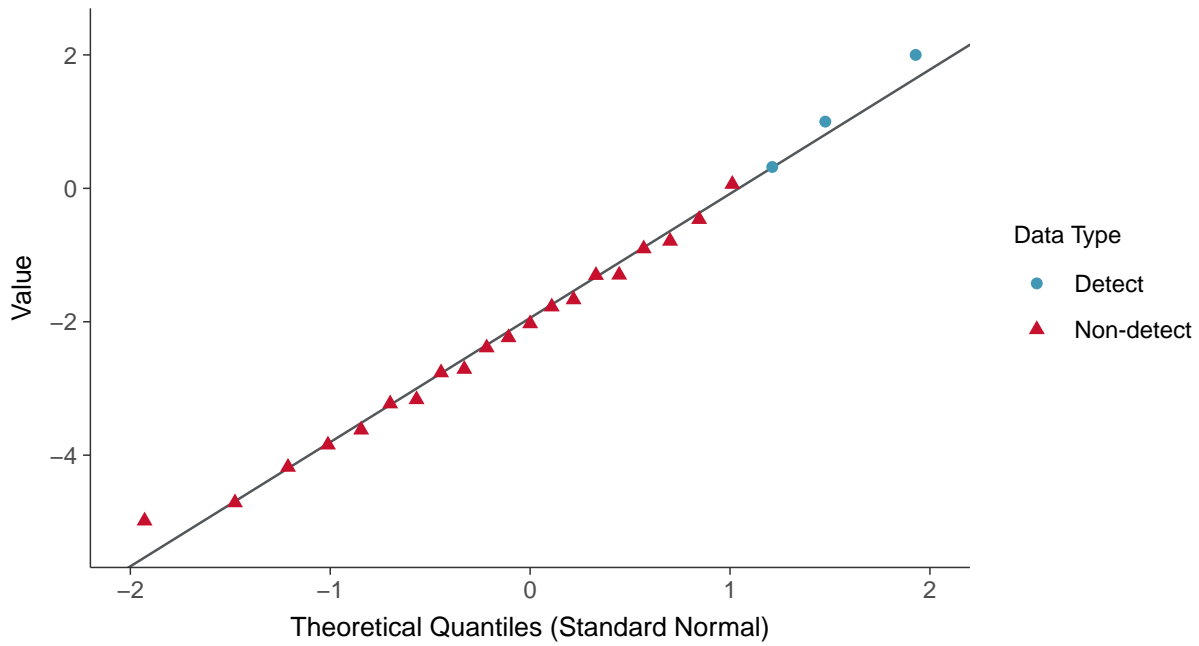
ID: 01_2_109





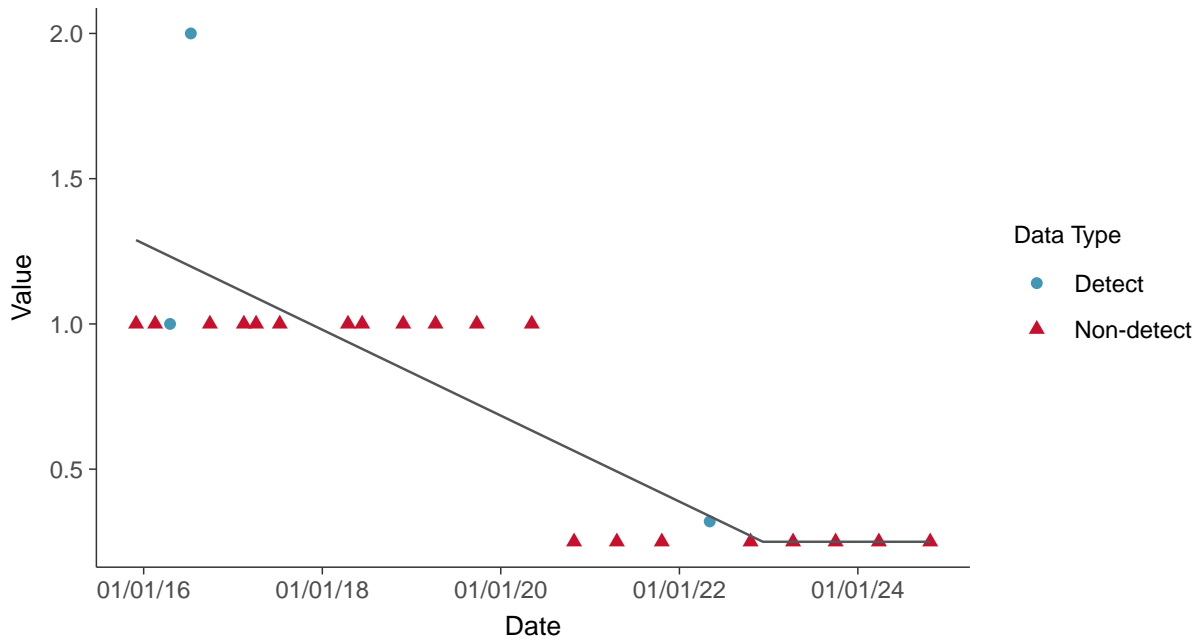
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear

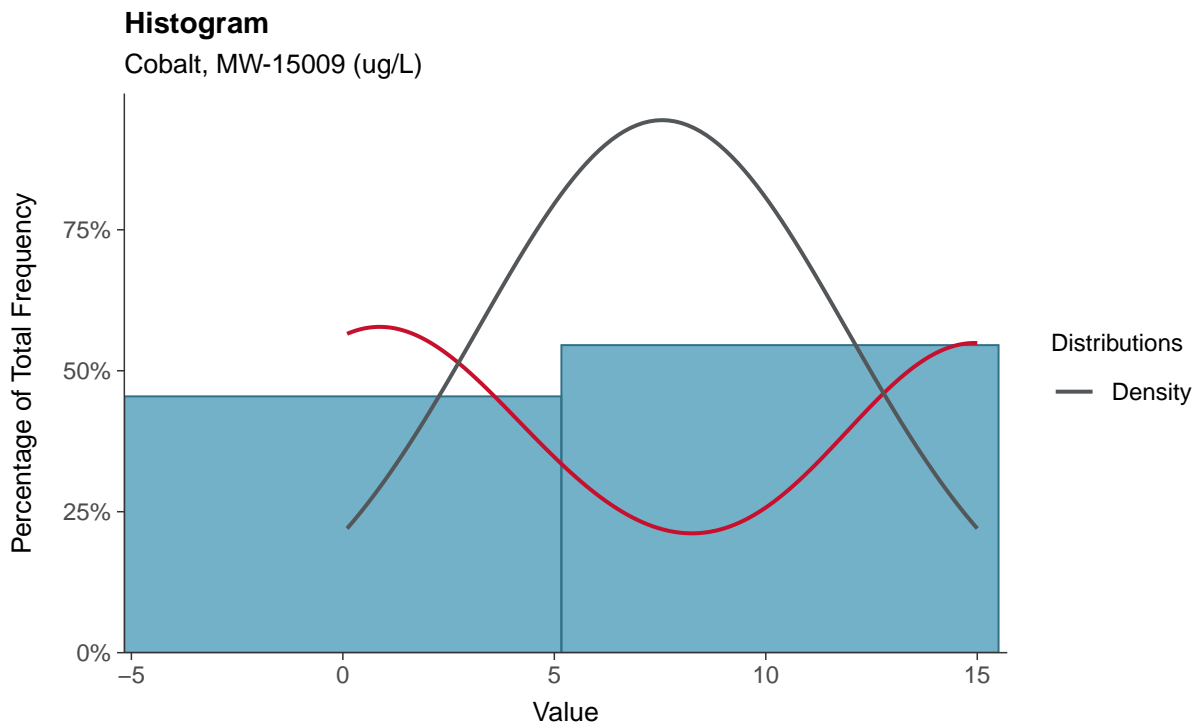
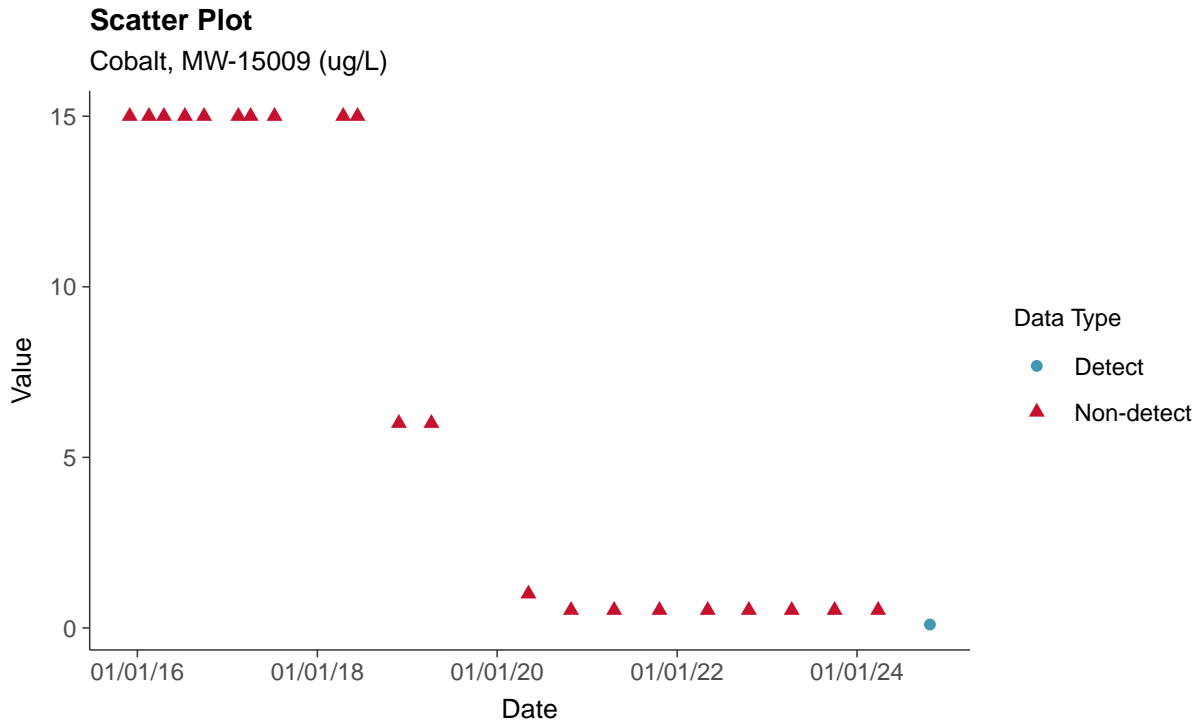
Chromium, MW-15009 (ug/L)





Appendix IV: Cobalt, MW-15009

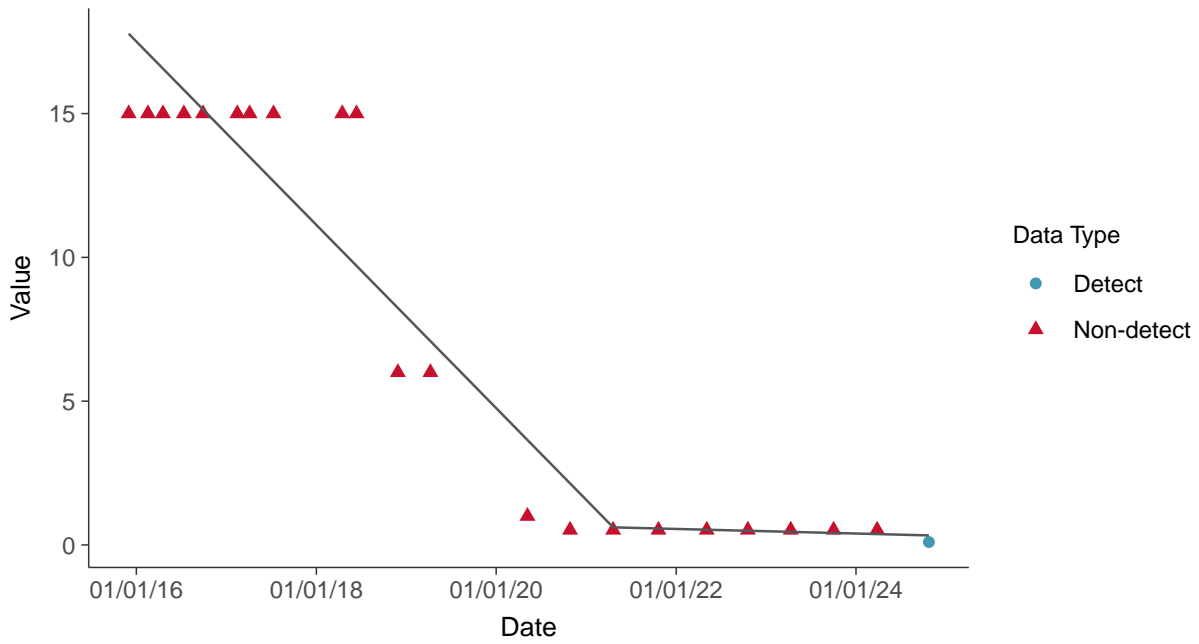
ID: 01_2_110





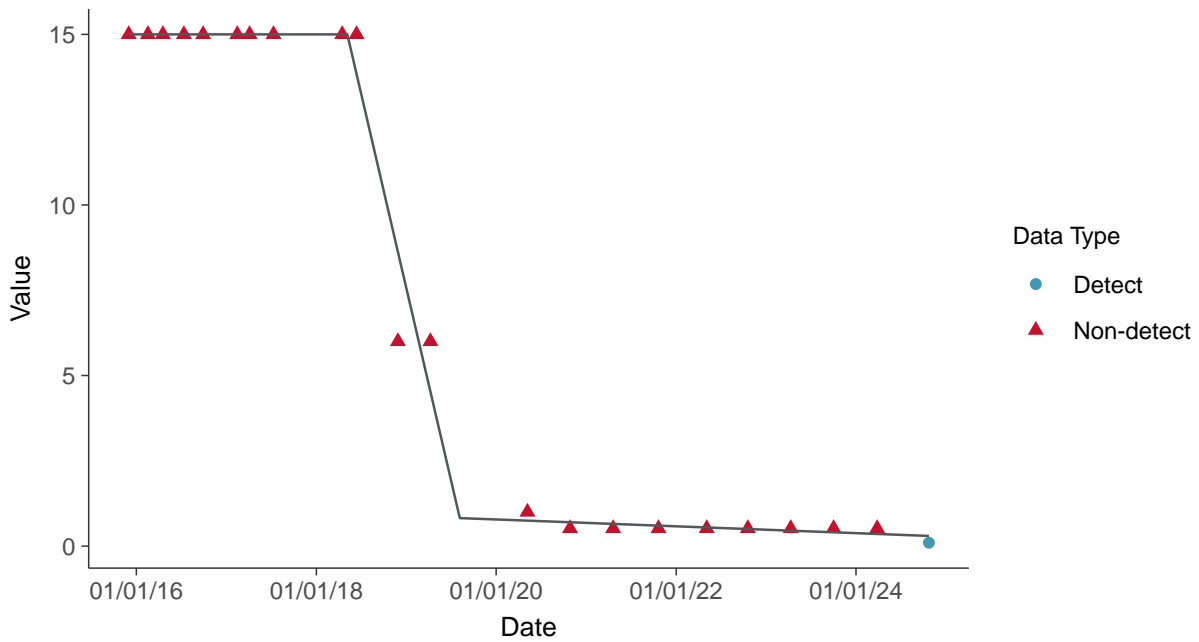
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

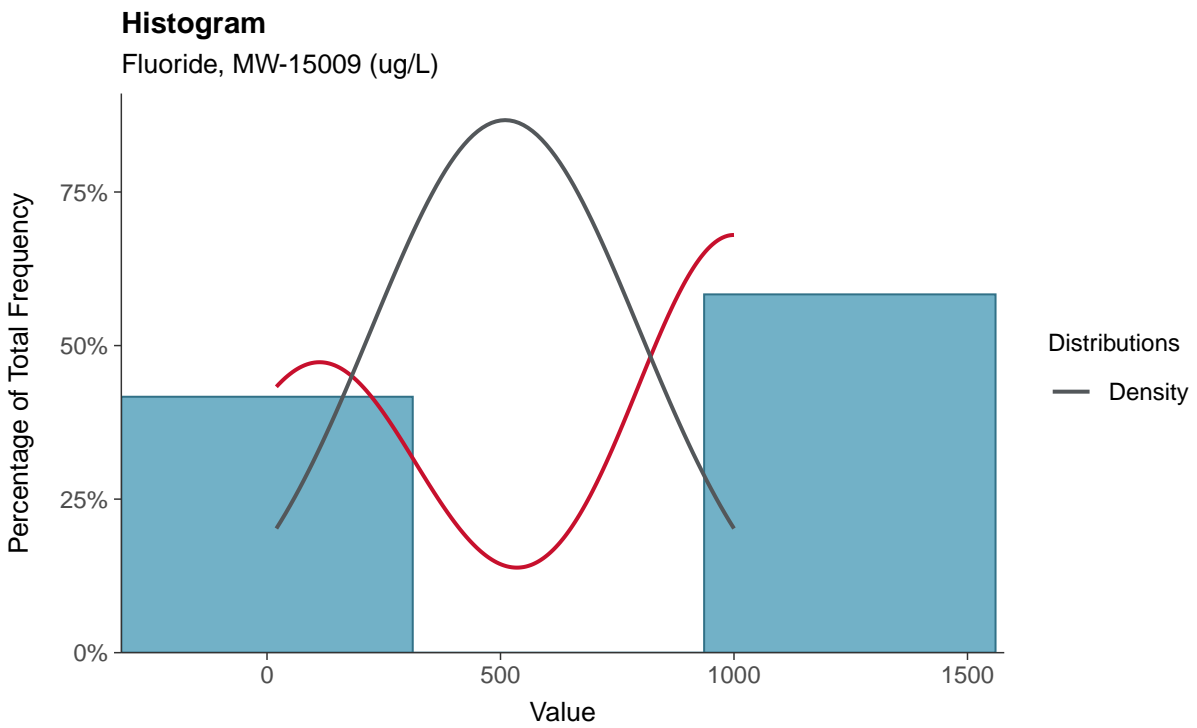
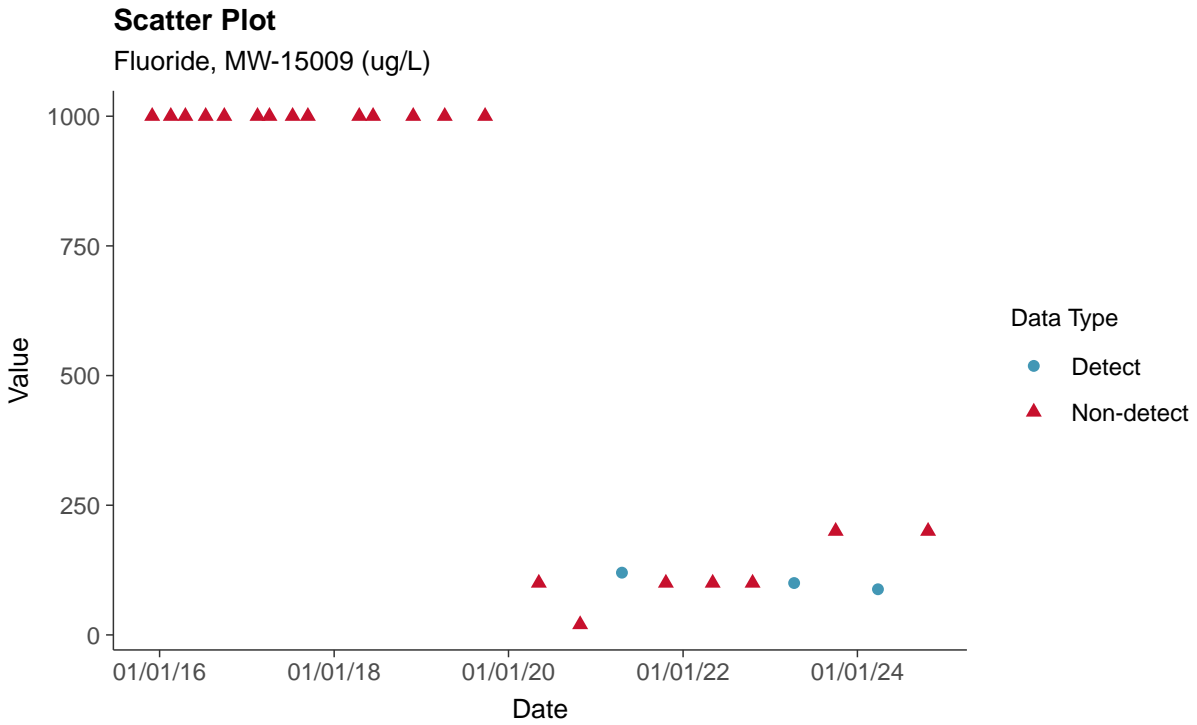
Cobalt, MW-15009 (ug/L)





Appendix IV: Fluoride, MW-15009

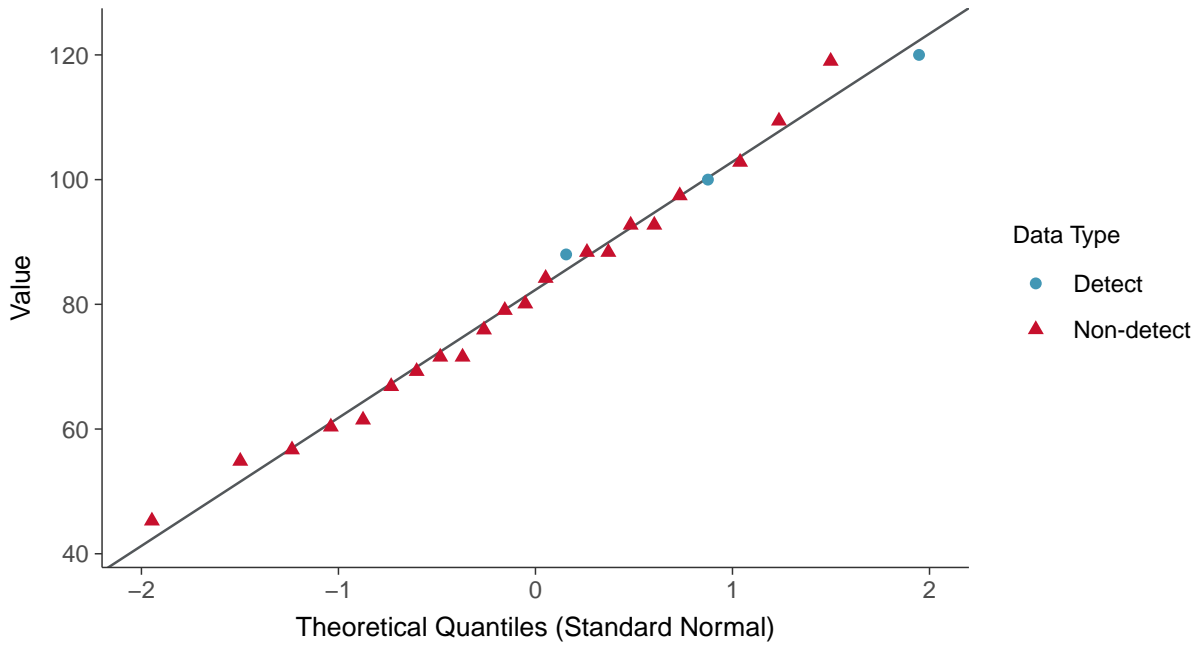
ID: 01_2_114





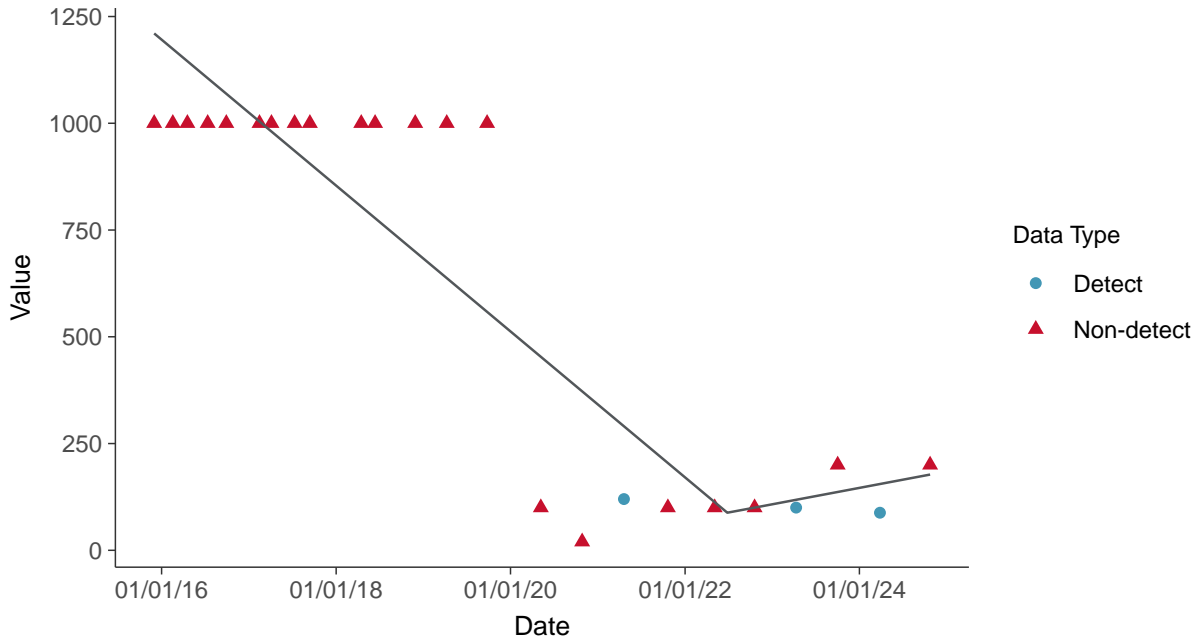
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15009 (ug/L)



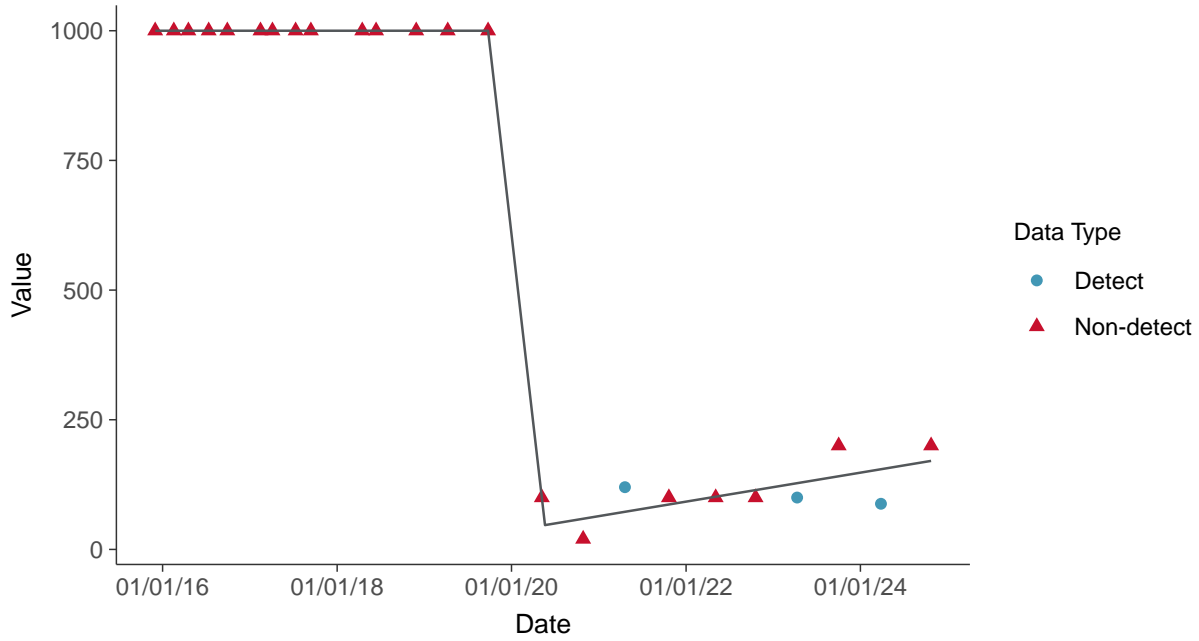
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15009 (ug/L)





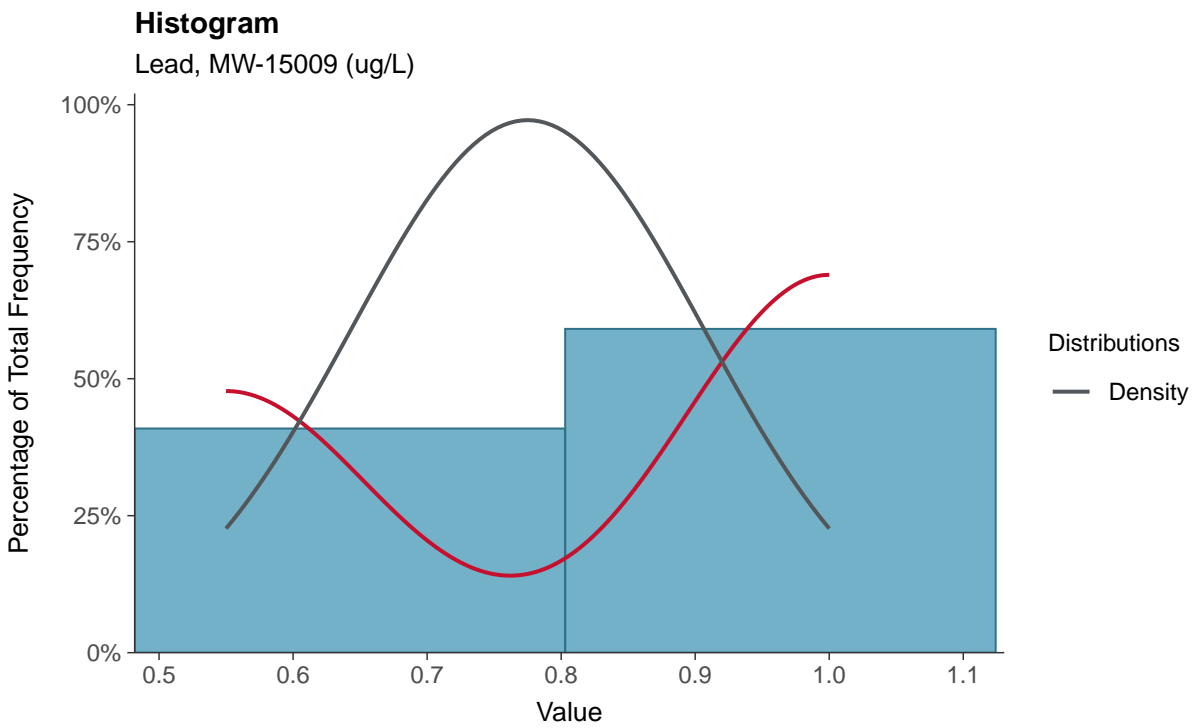
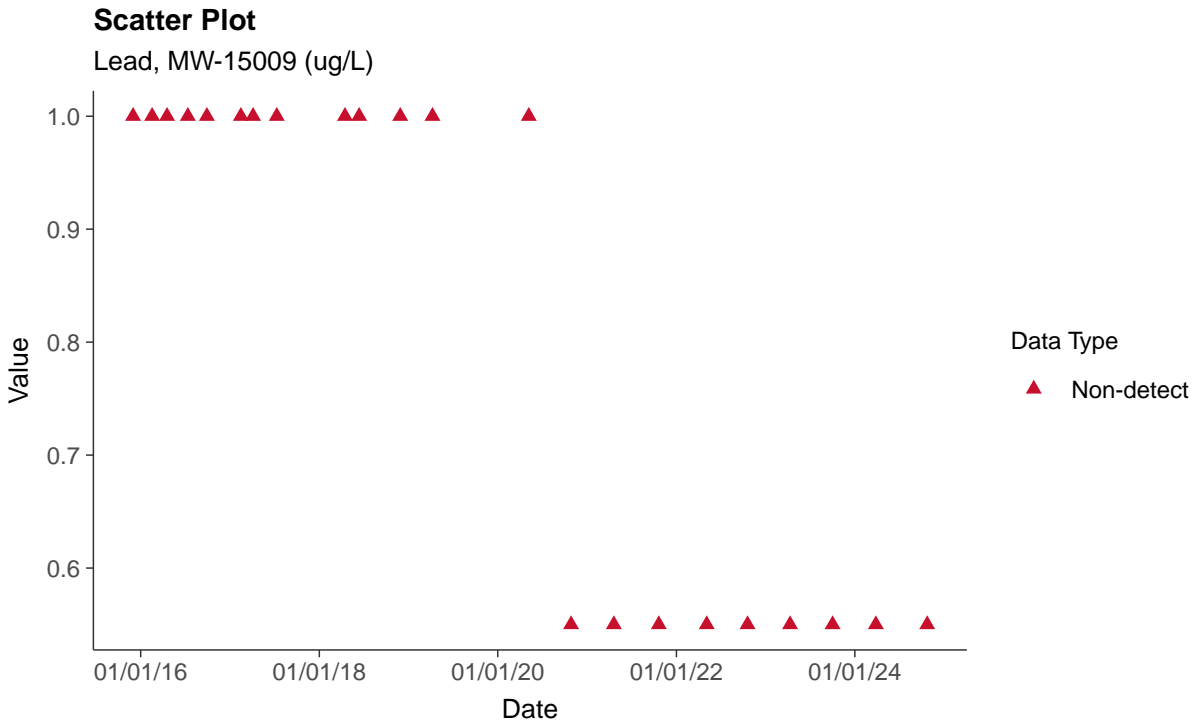
Trend Regression: Piecewise Linear-Linear-Linear
Fluoride, MW-15009 (ug/L)





Appendix IV: Lead, MW-15009

ID: 01_2_116



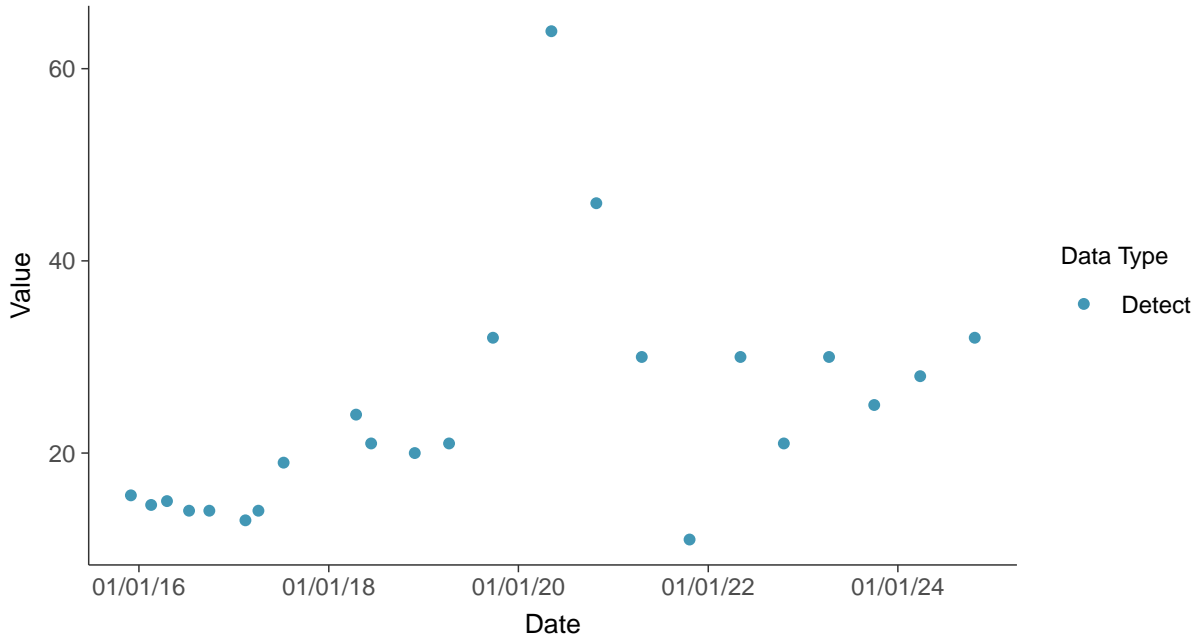


Appendix IV: Lithium, MW-15009

ID: 01_2_117

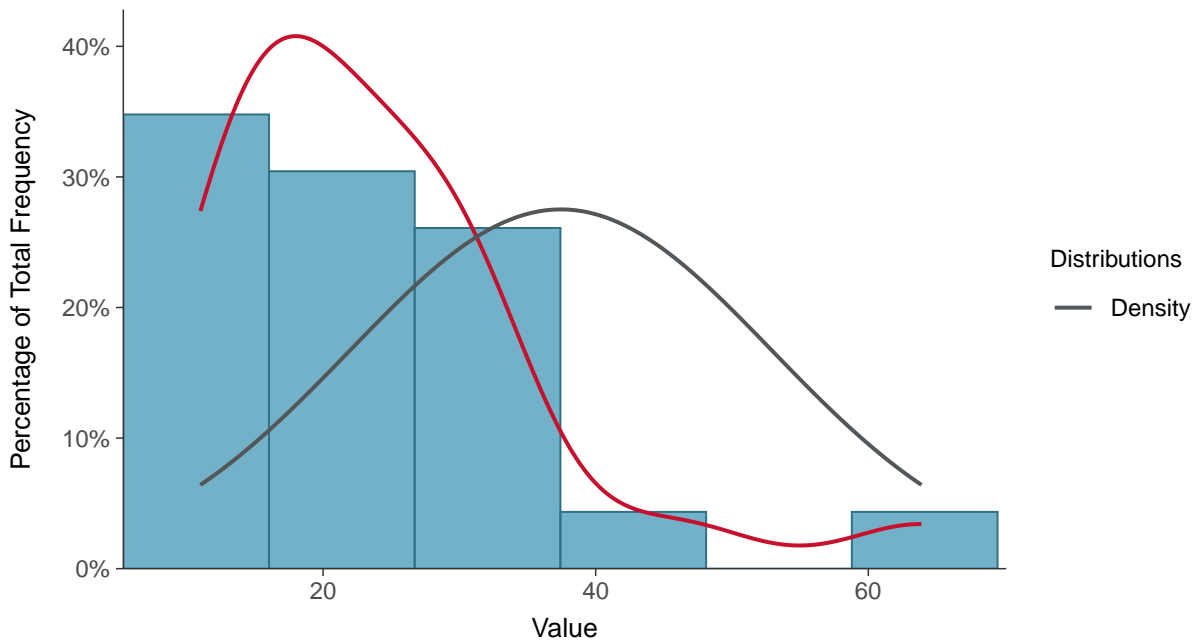
Scatter Plot

Lithium, MW-15009 (ug/L)



Histogram

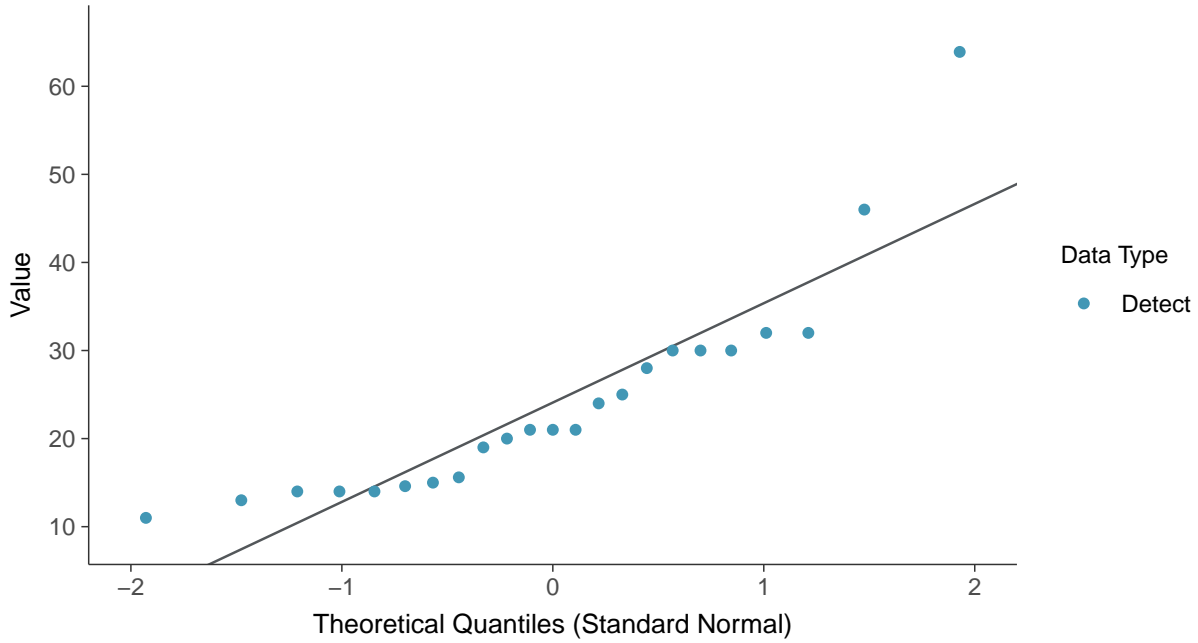
Lithium, MW-15009 (ug/L)





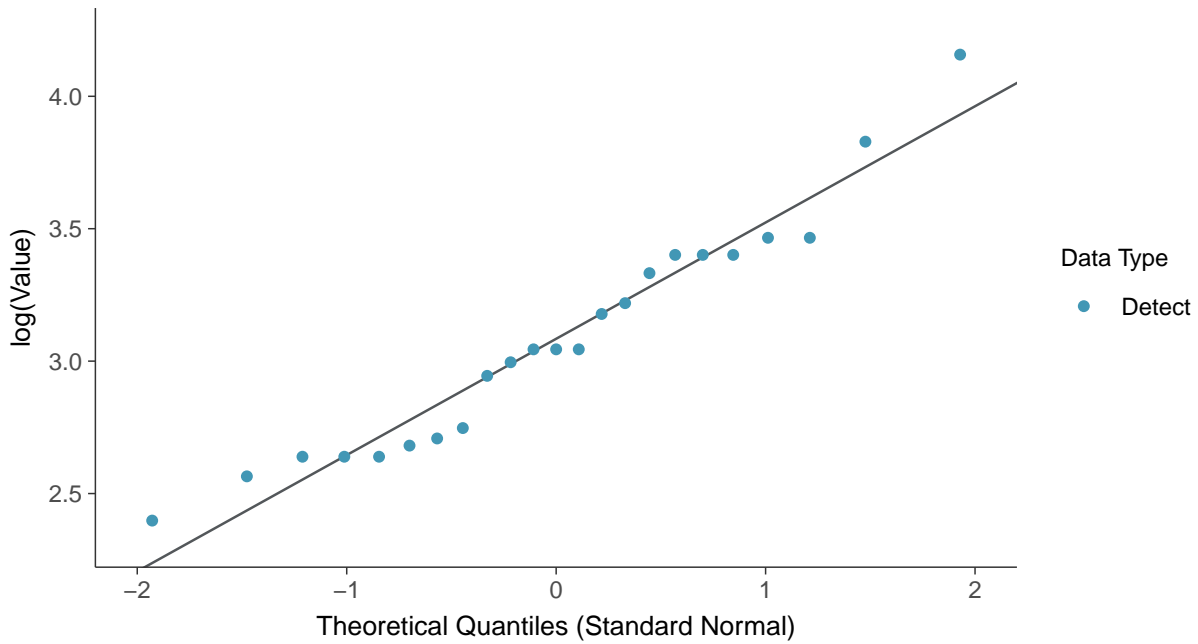
Normal Q-Q plot

Lithium, MW-15009 (ug/L)



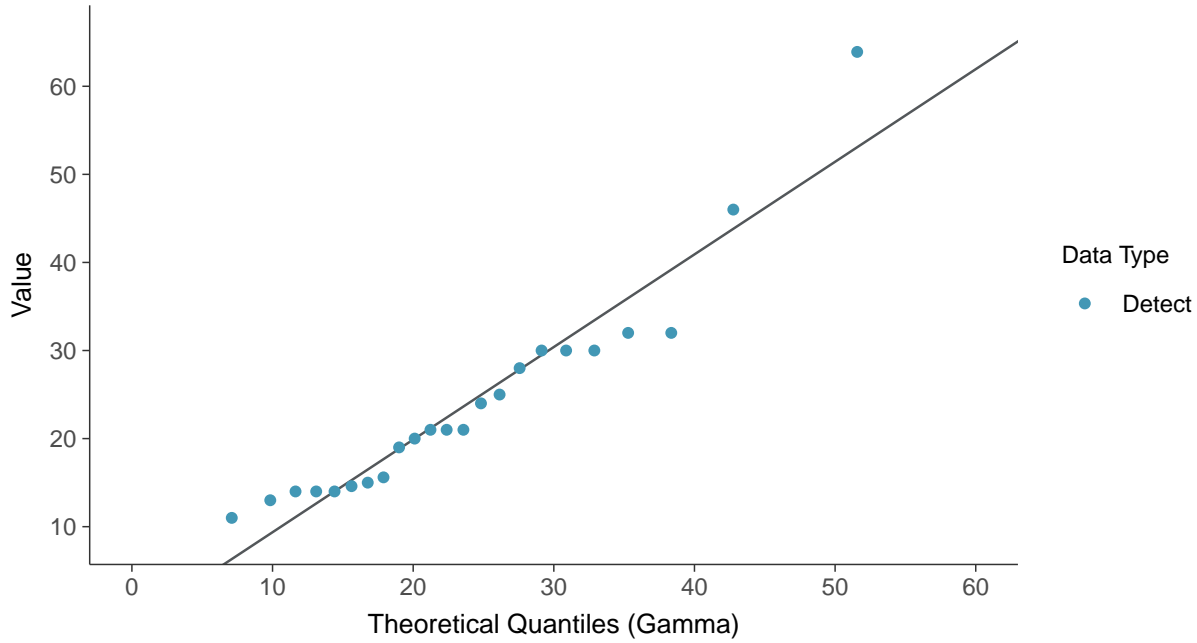
Lognormal Q-Q plot

Lithium, MW-15009 (ug/L)

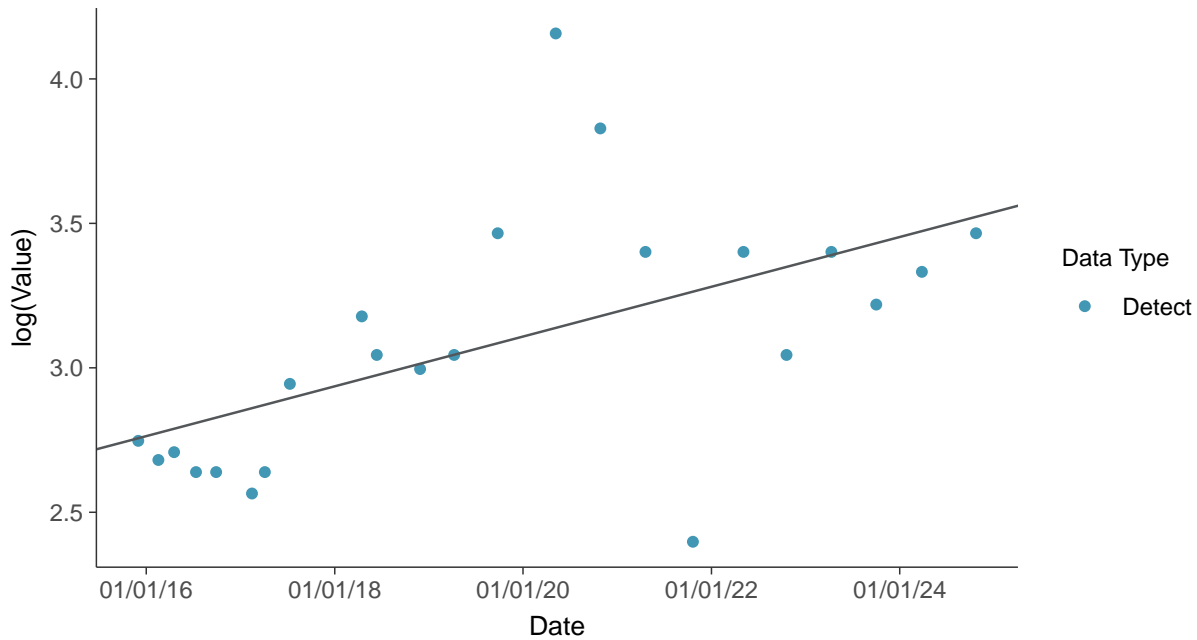




Gamma Q-Q plot
Lithium, MW-15009 (ug/L)



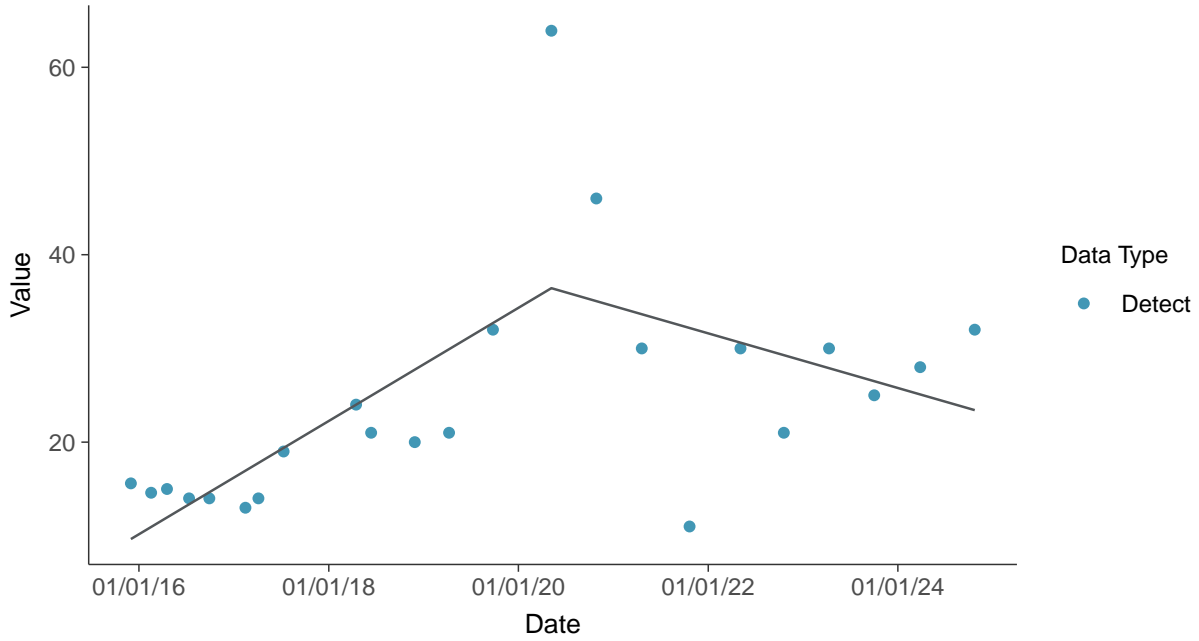
Trend Regression: Lognormal MLE
Lithium, MW-15009 (ug/L)





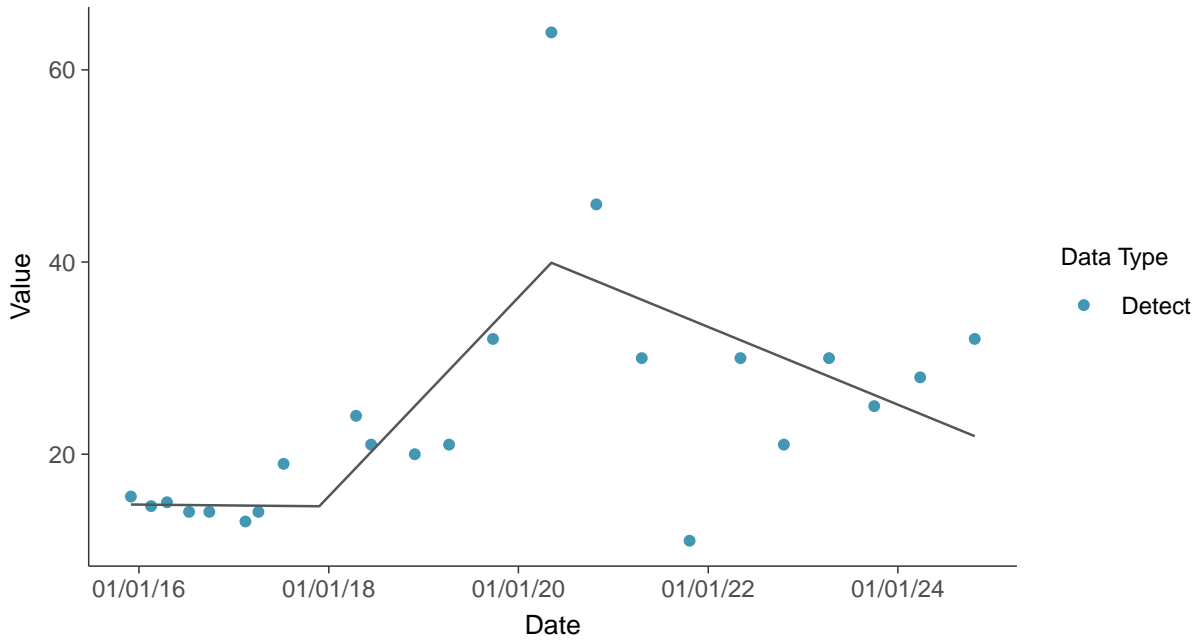
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

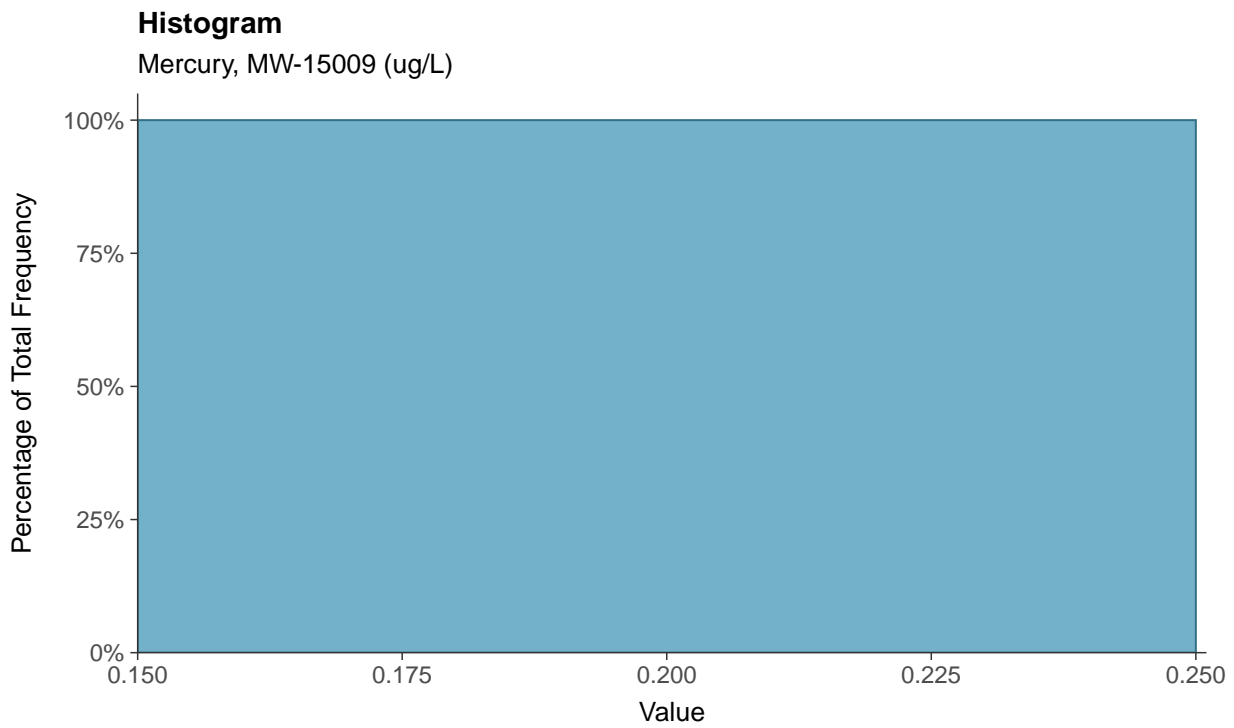
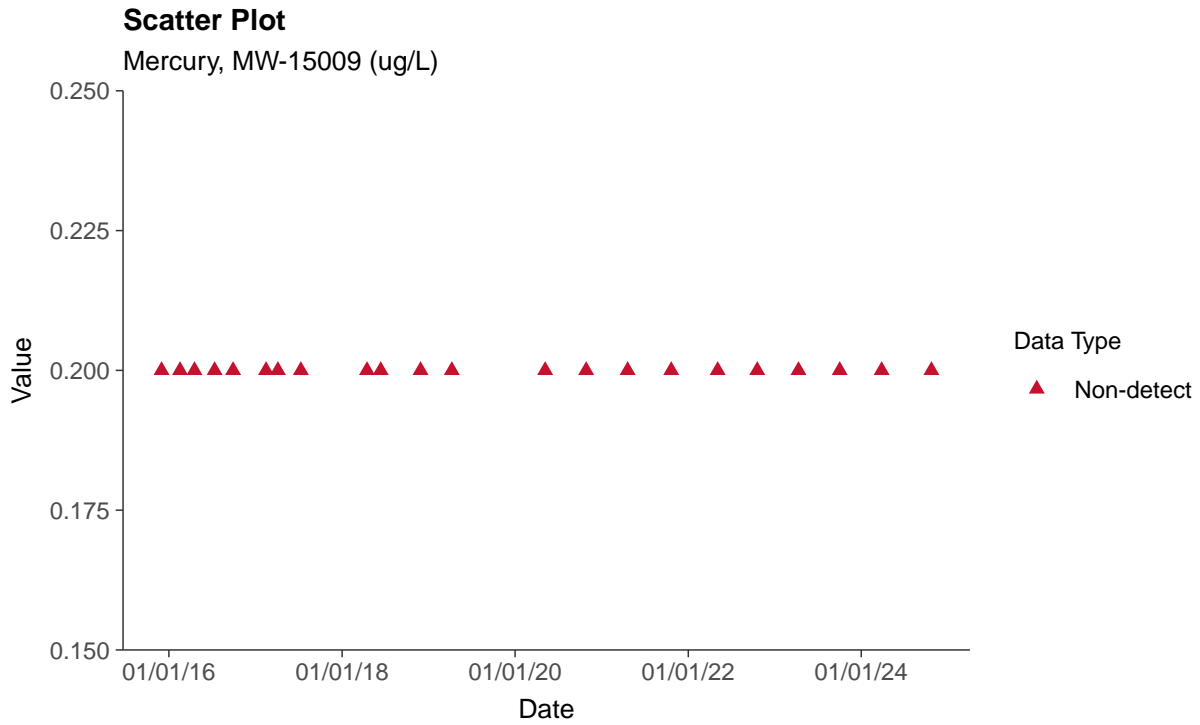
Lithium, MW-15009 (ug/L)





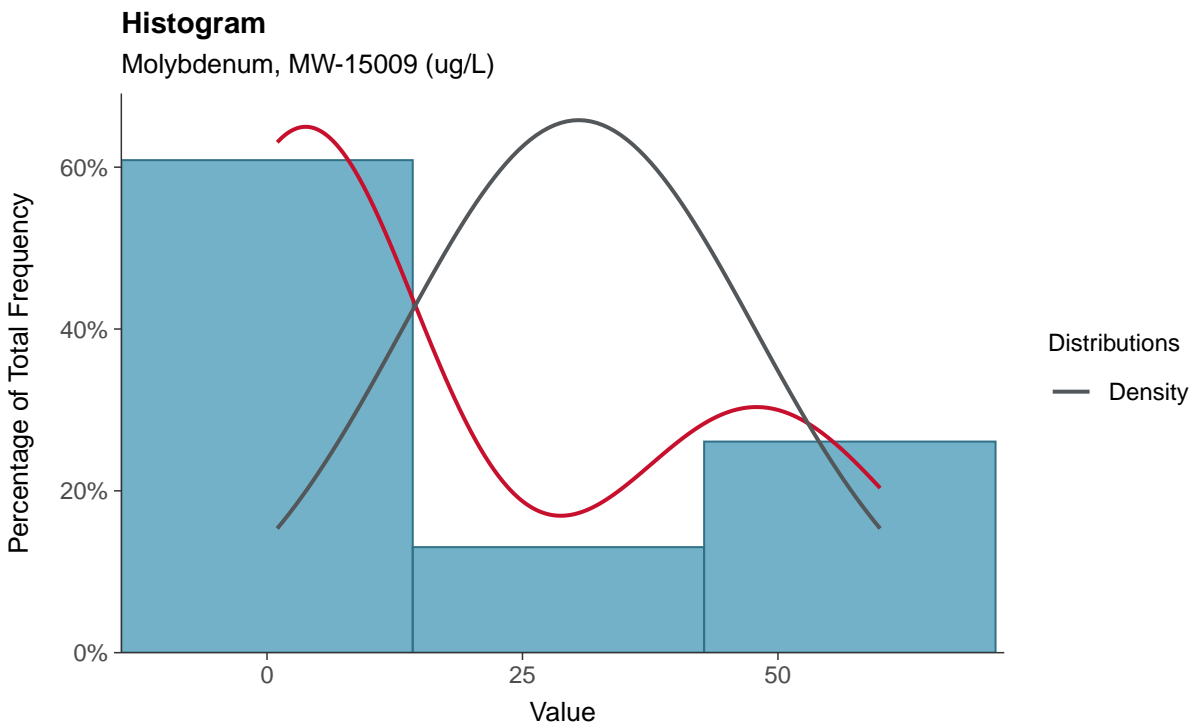
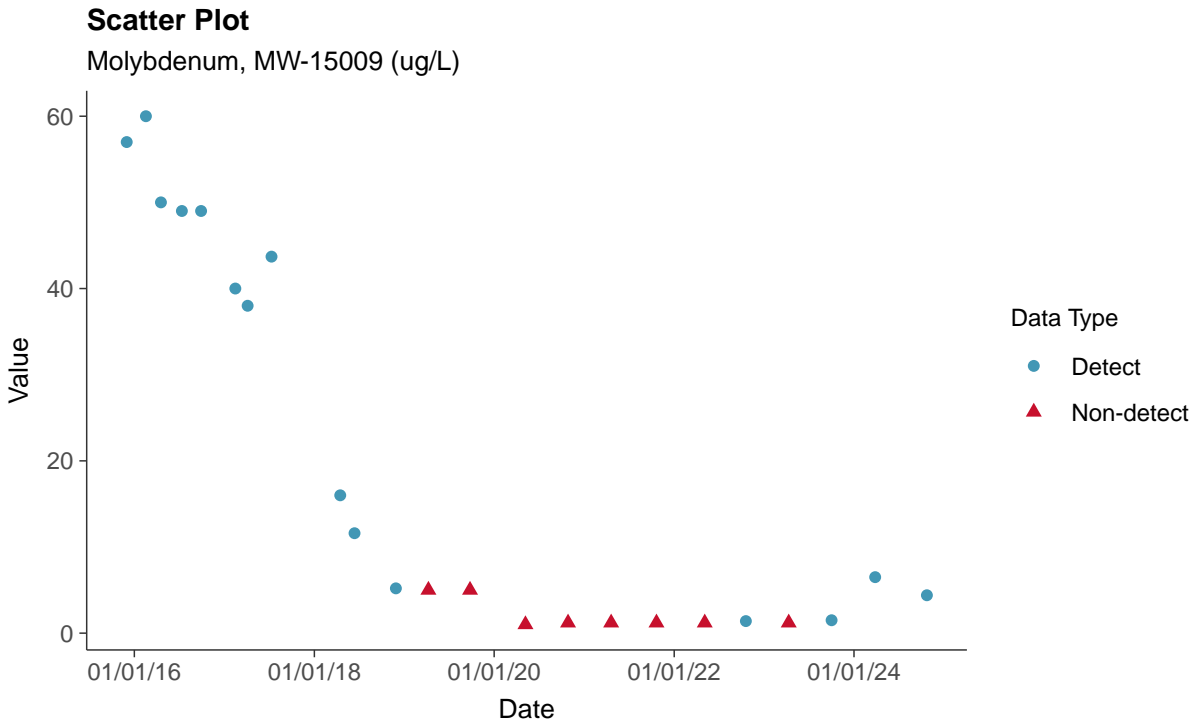
Appendix IV: Mercury, MW-15009

ID: 01_2_118



Appendix IV: Molybdenum, MW-15009

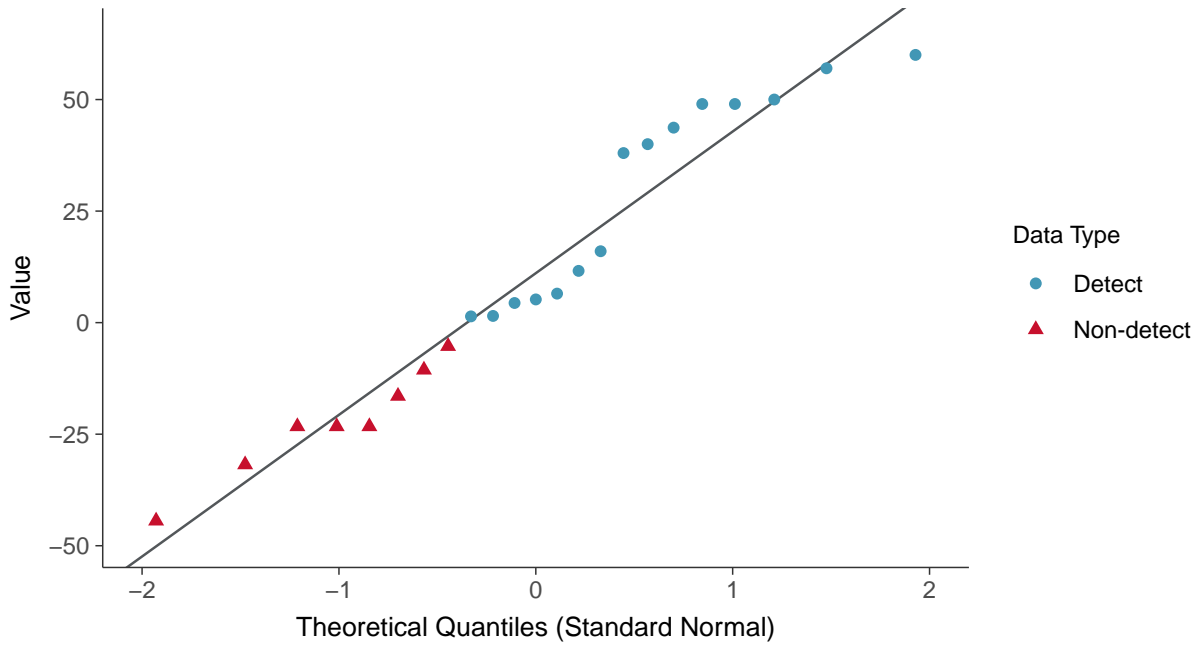
ID: 01_2_119





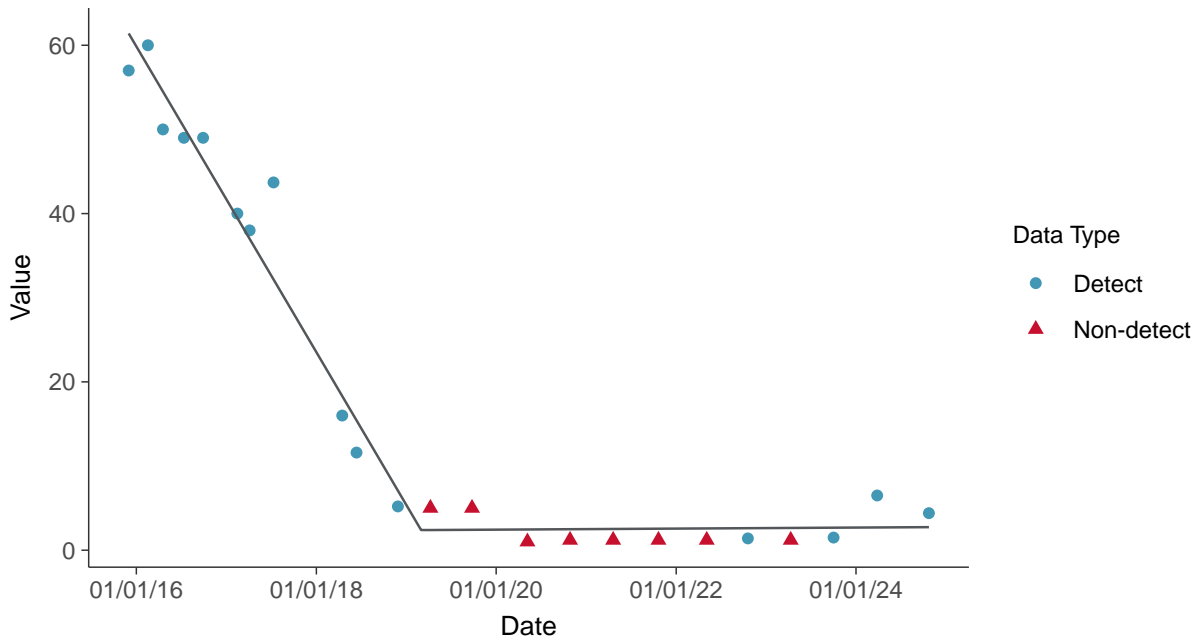
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear

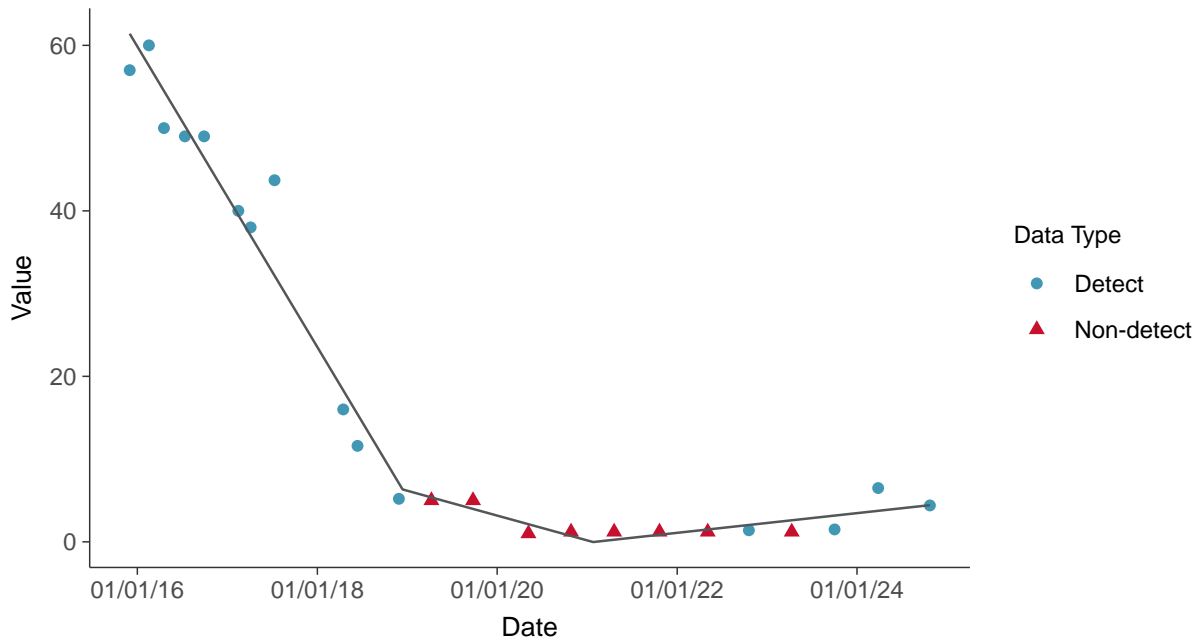
Molybdenum, MW-15009 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

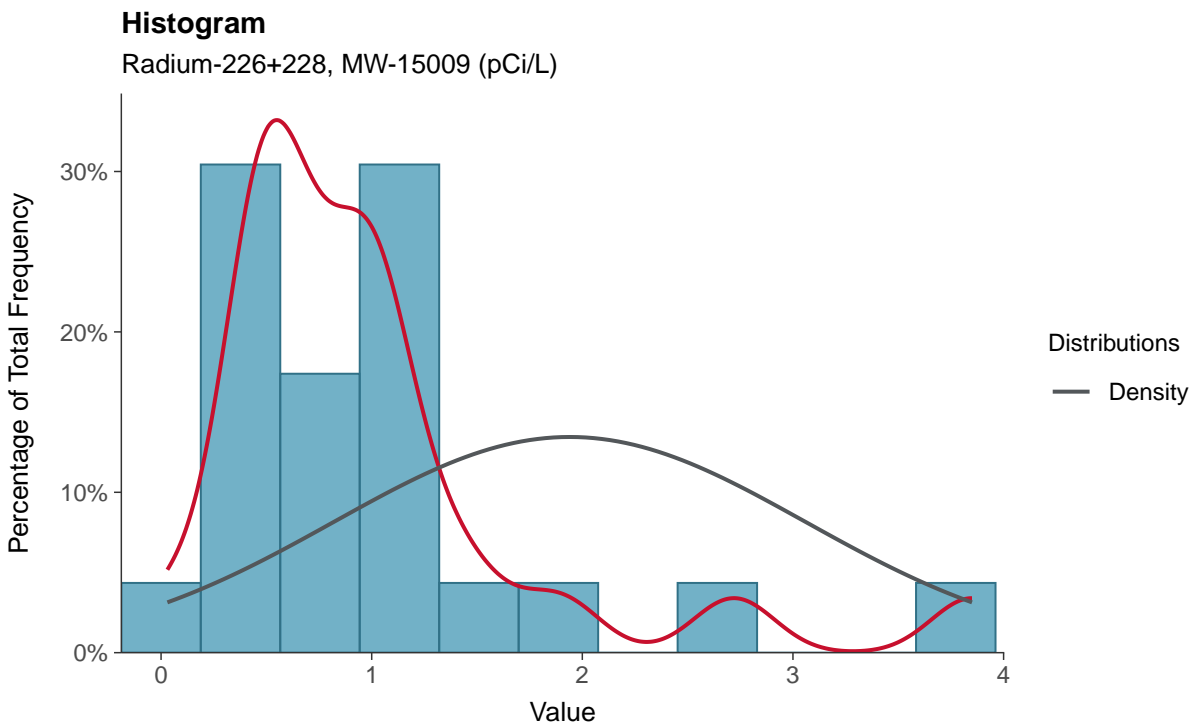
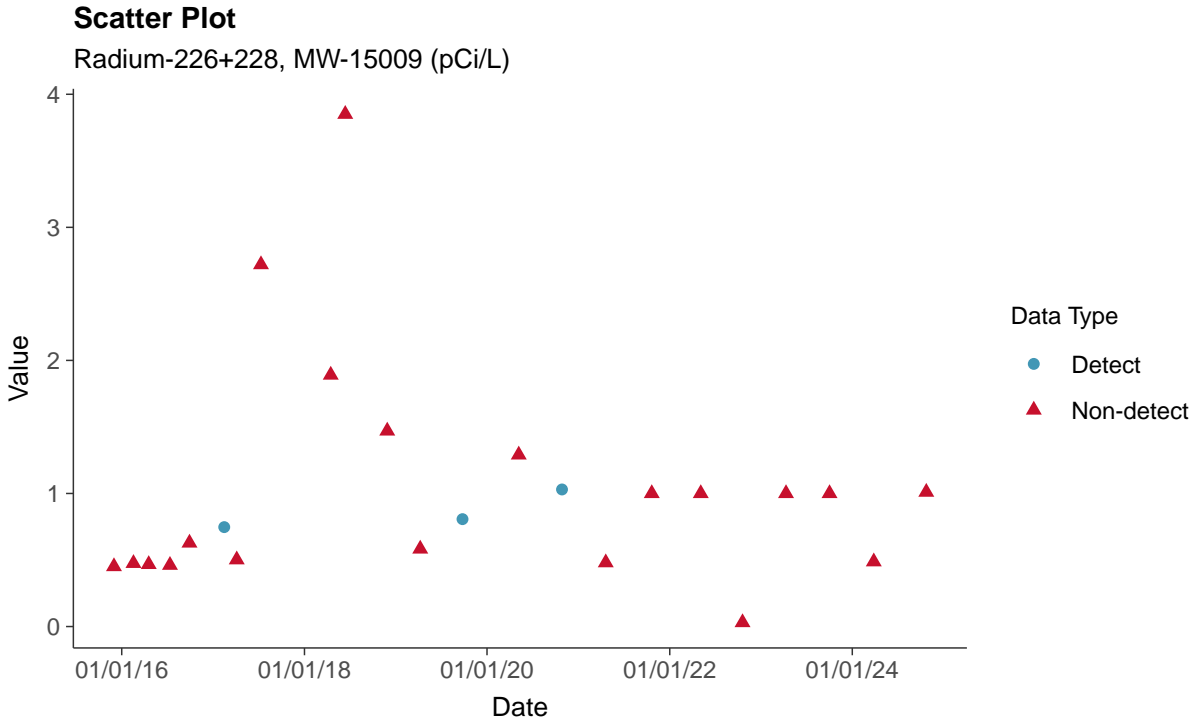
Molybdenum, MW-15009 (ug/L)





Appendix IV: Radium-226+228, MW-15009

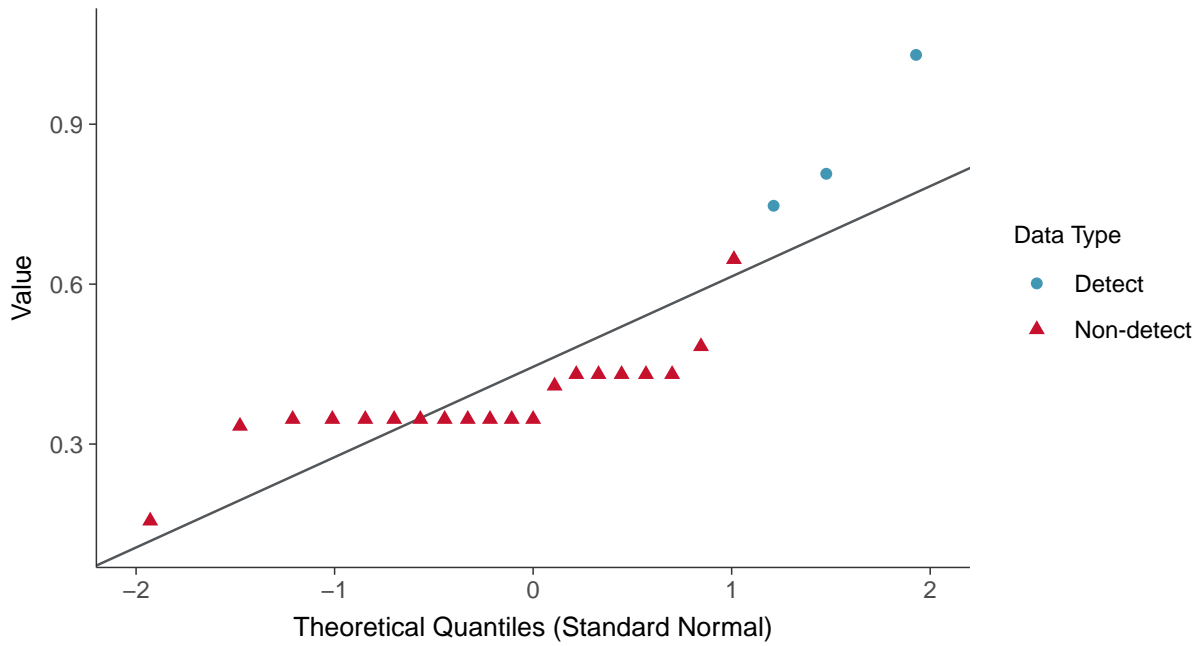
ID: 01_2_125





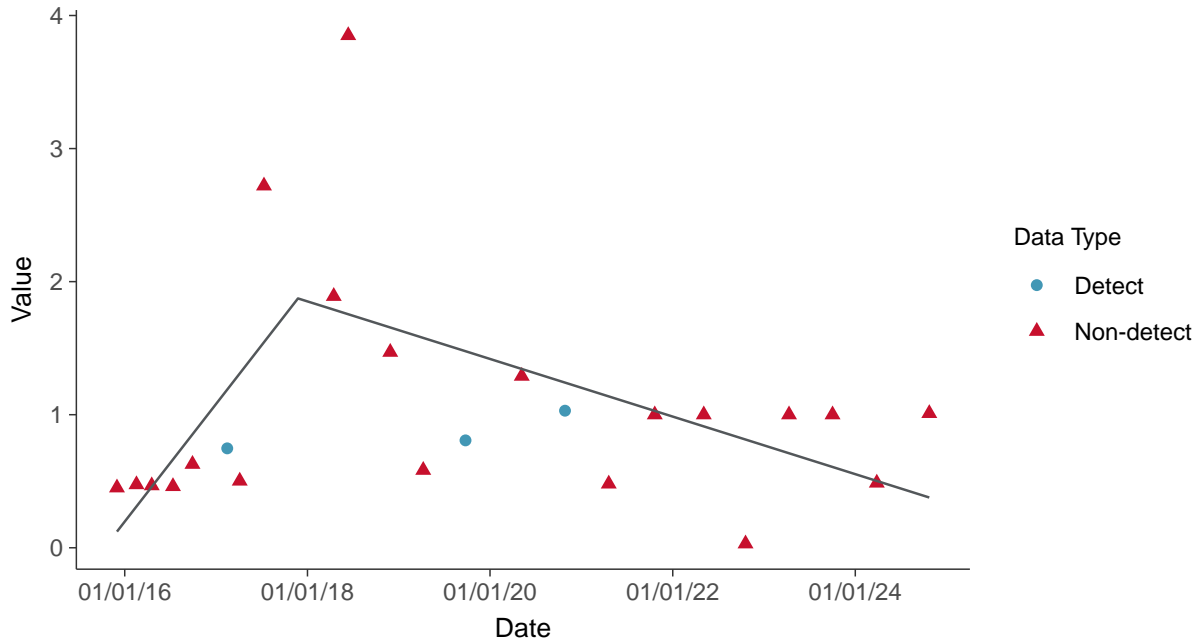
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15009 (pCi/L)



Trend Regression: Piecewise Linear-Linear

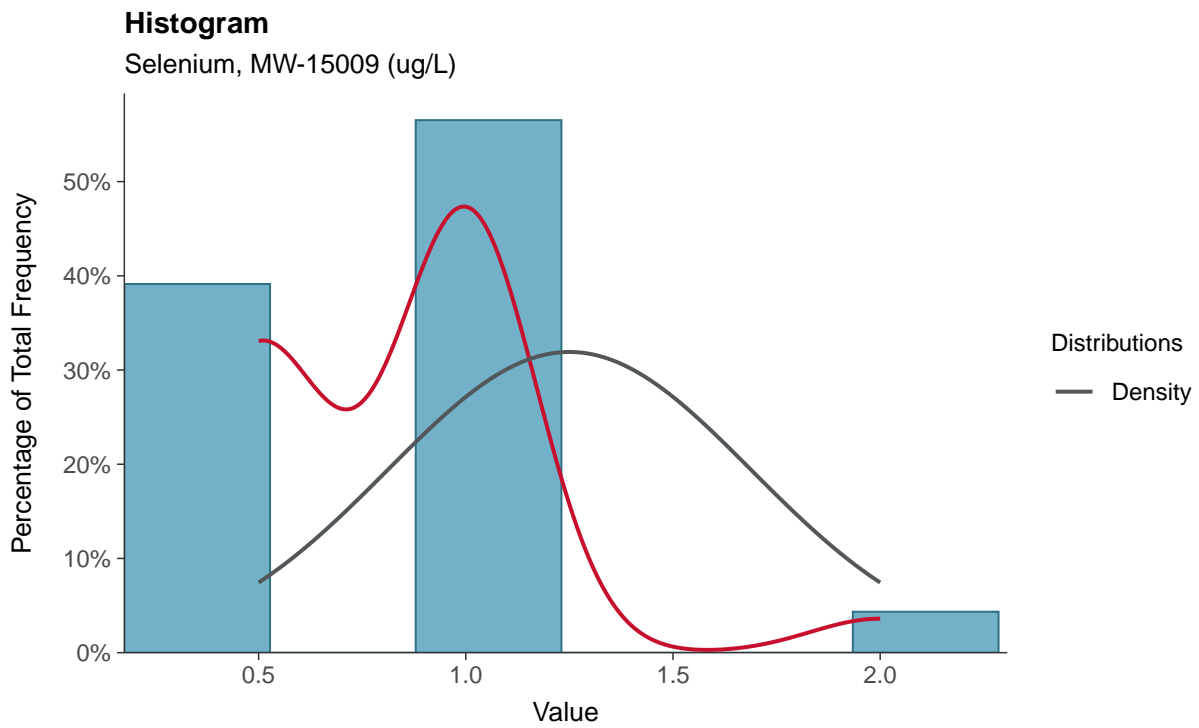
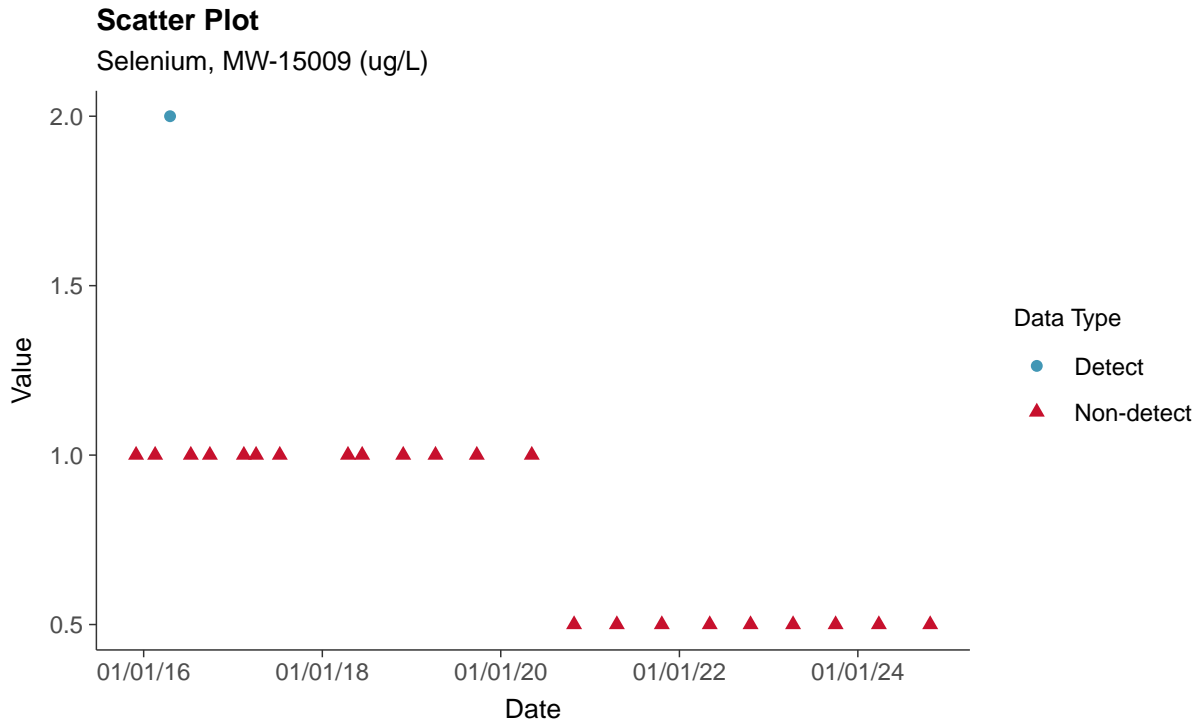
Radium-226+228, MW-15009 (pCi/L)





Appendix IV: Selenium, MW-15009

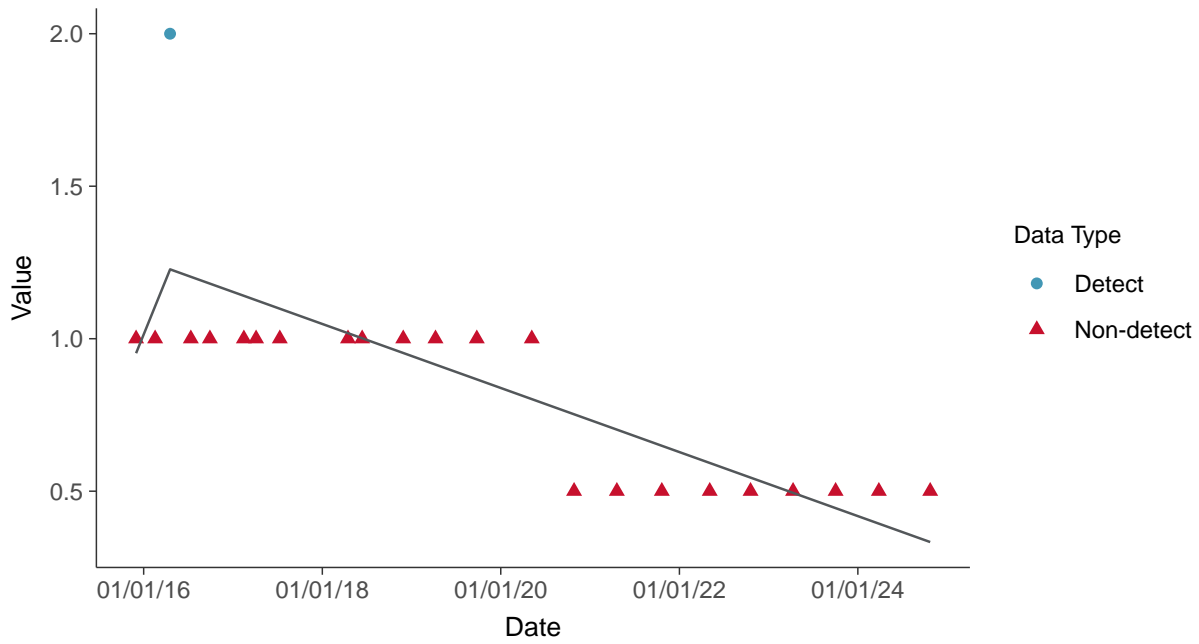
ID: 01_2_127





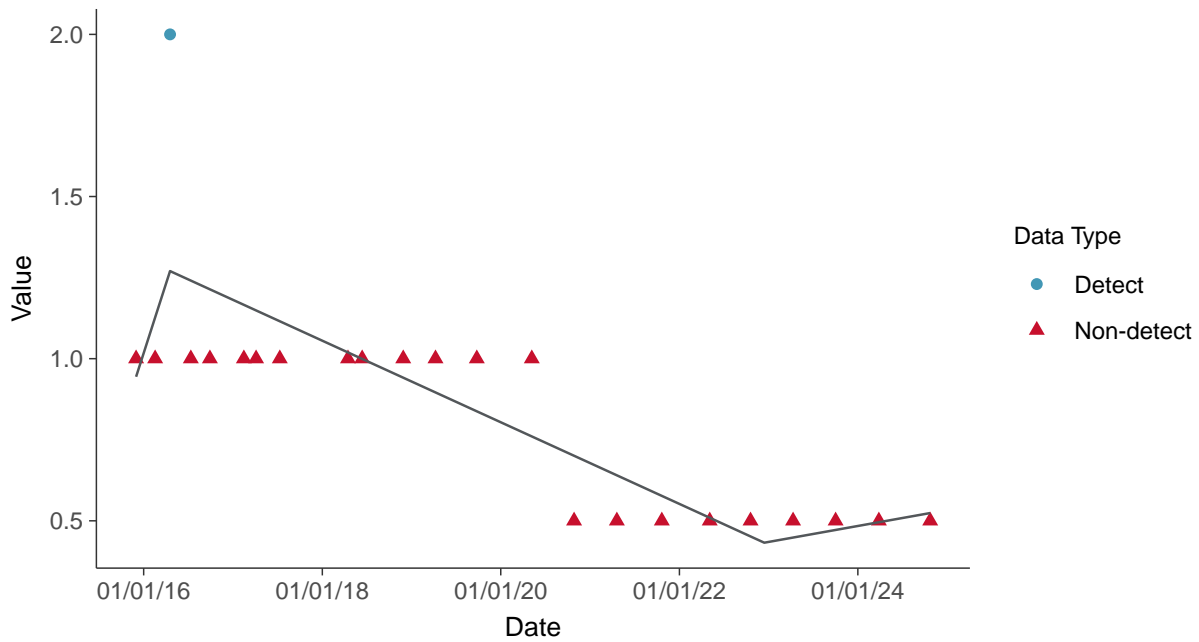
Trend Regression: Piecewise Linear-Linear

Selenium, MW-15009 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

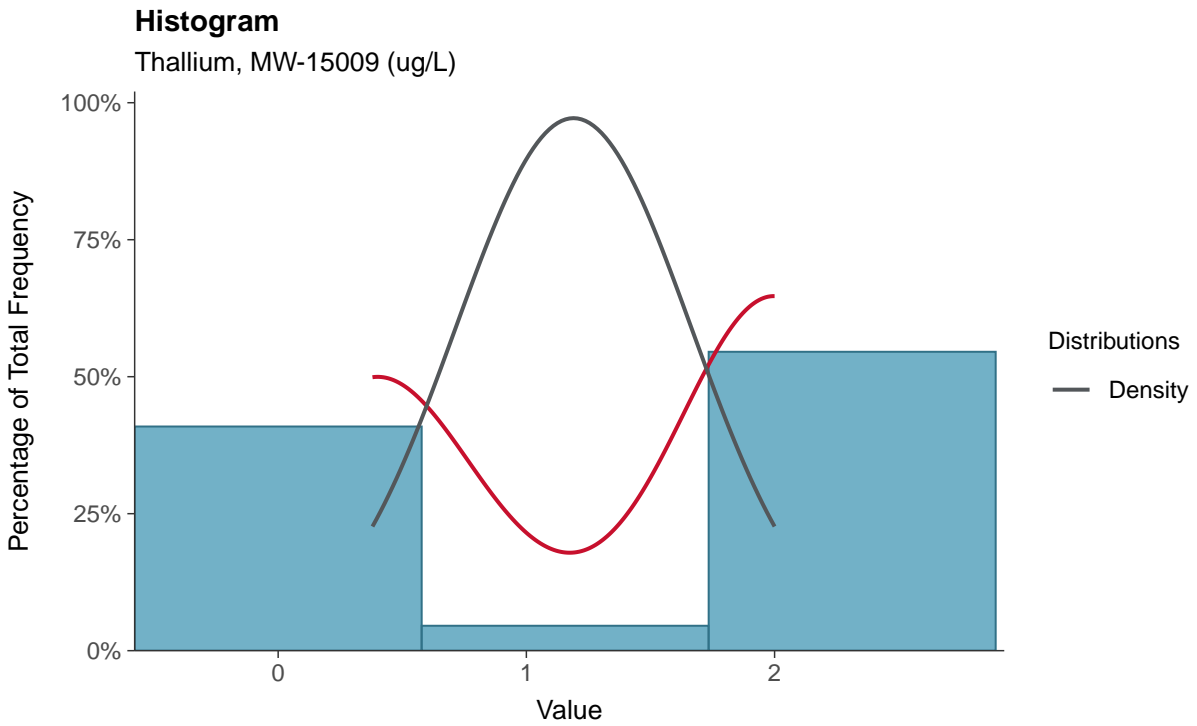
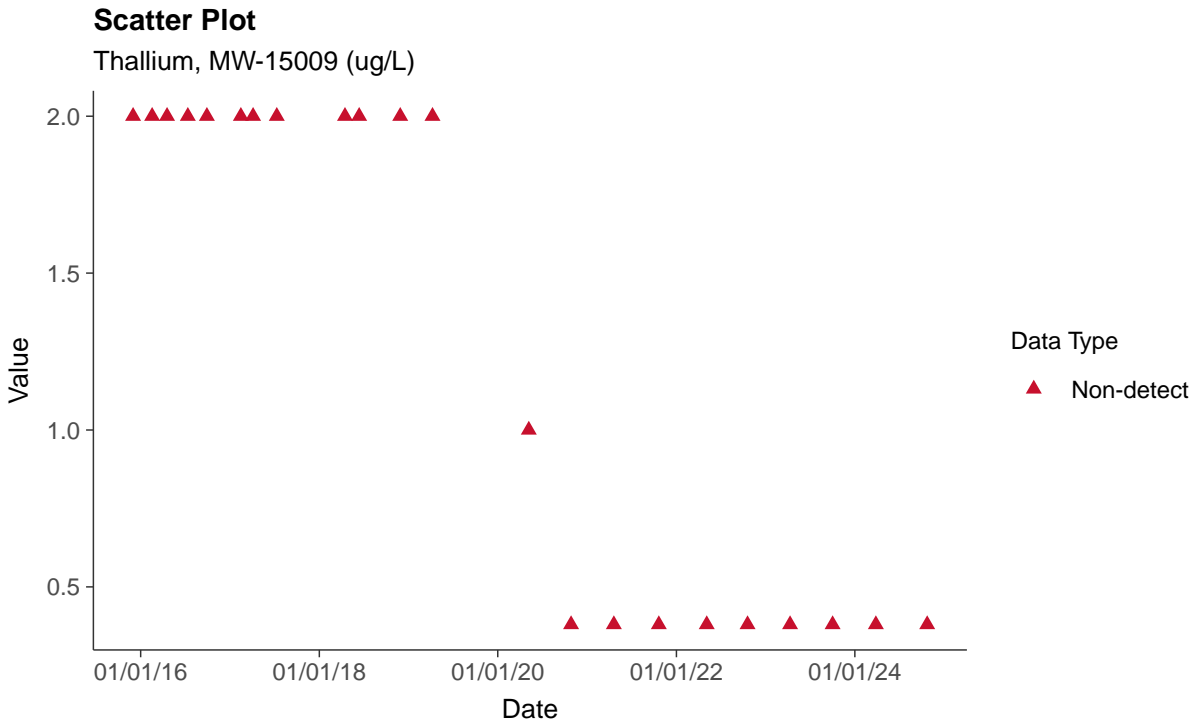
Selenium, MW-15009 (ug/L)





Appendix IV: Thallium, MW-15009

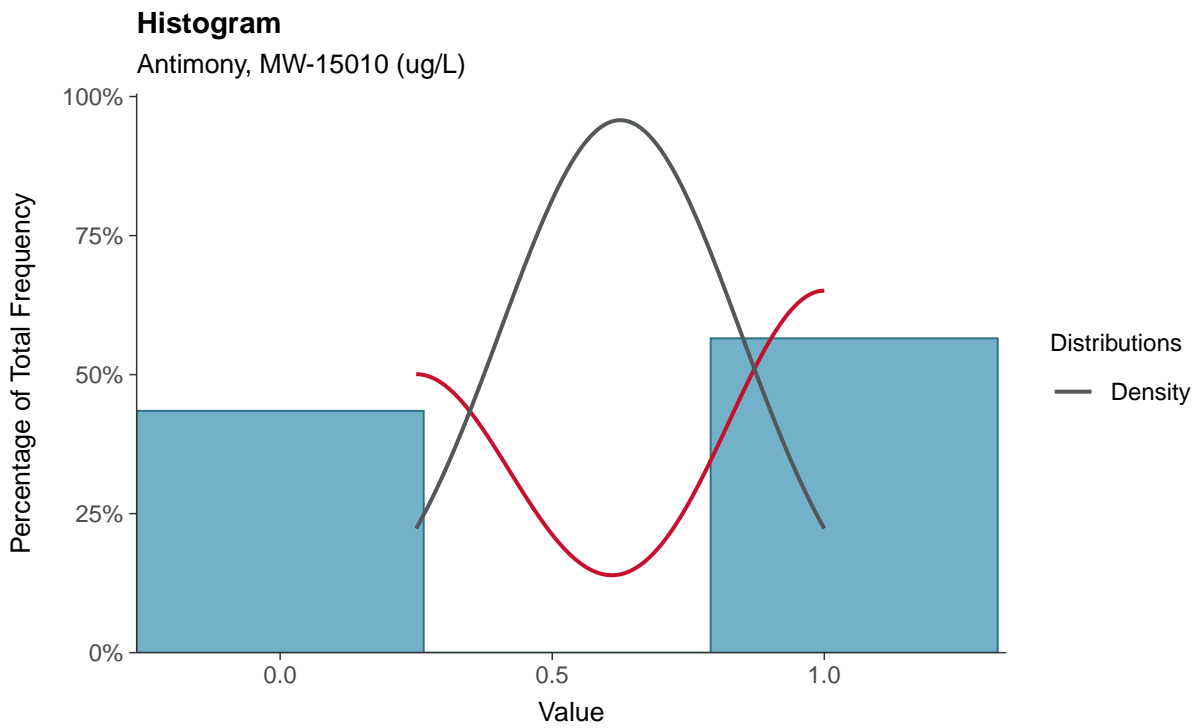
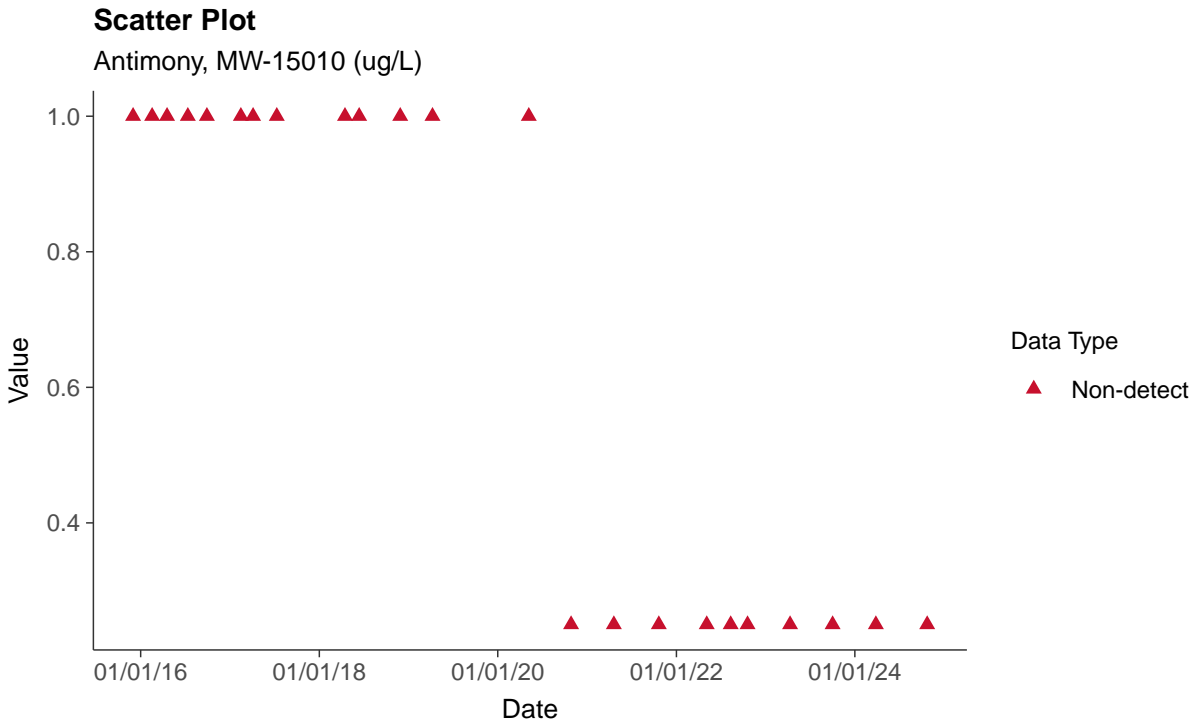
ID: 01_2_131

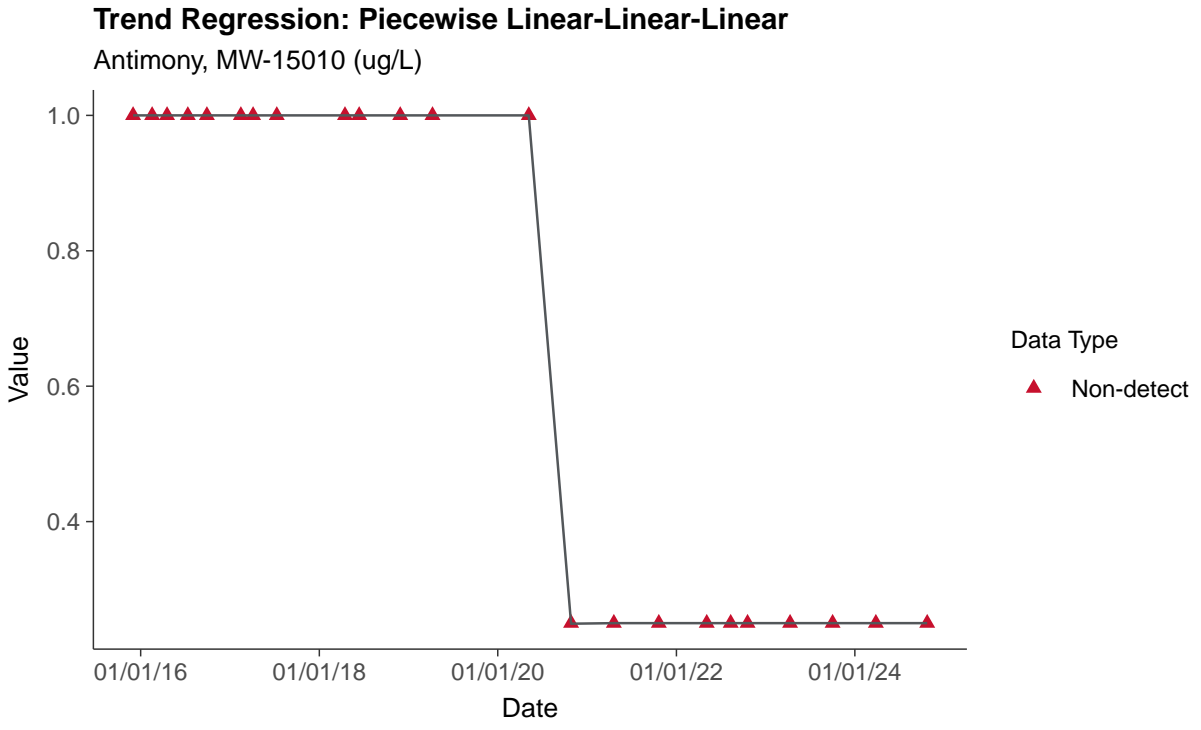
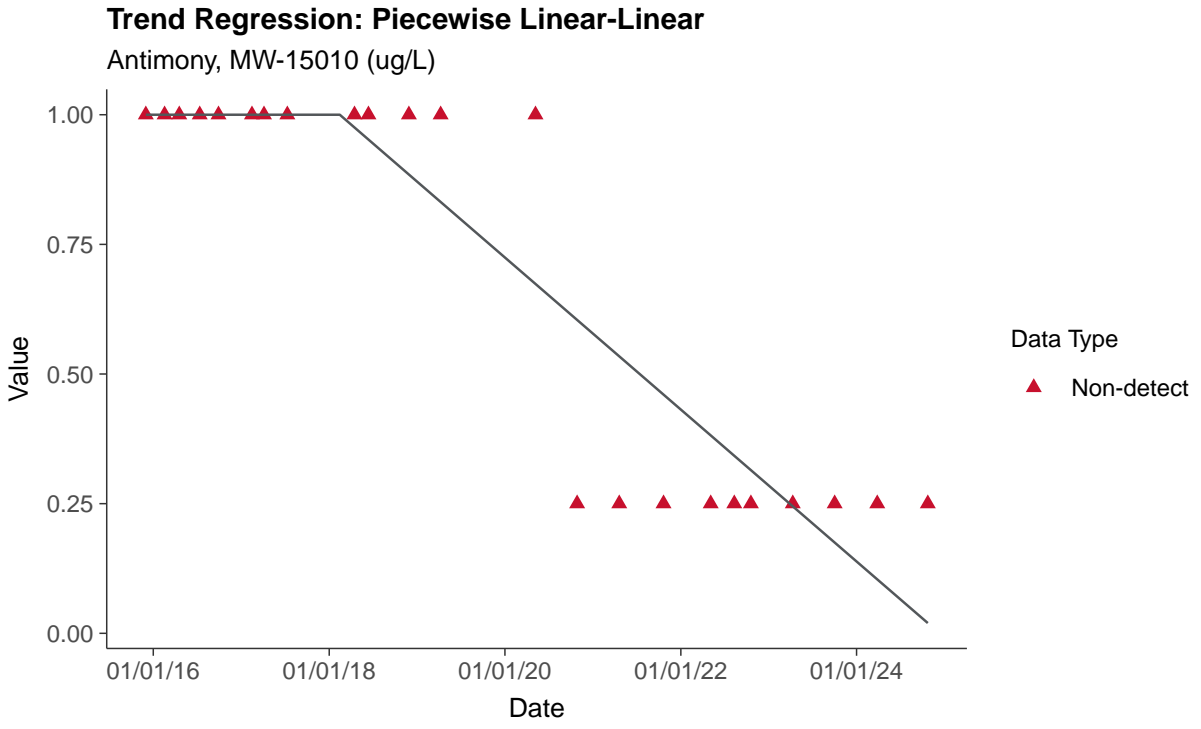




Appendix IV: Antimony, MW-15010

ID: 02_2_101

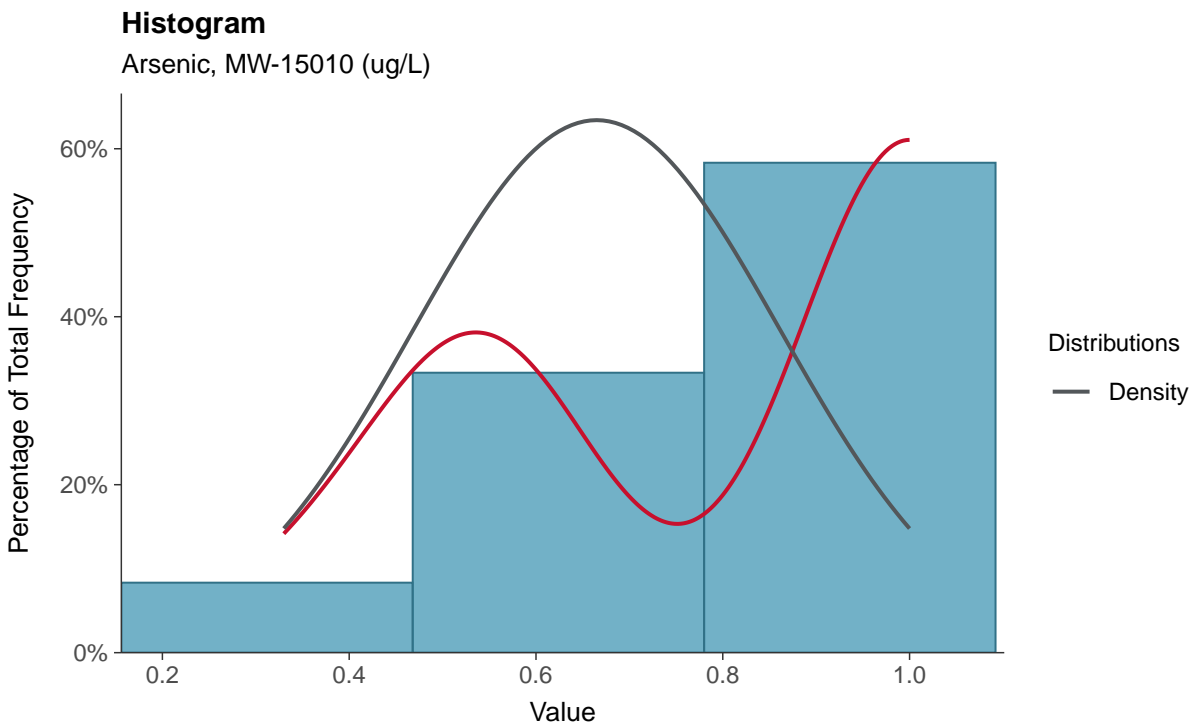
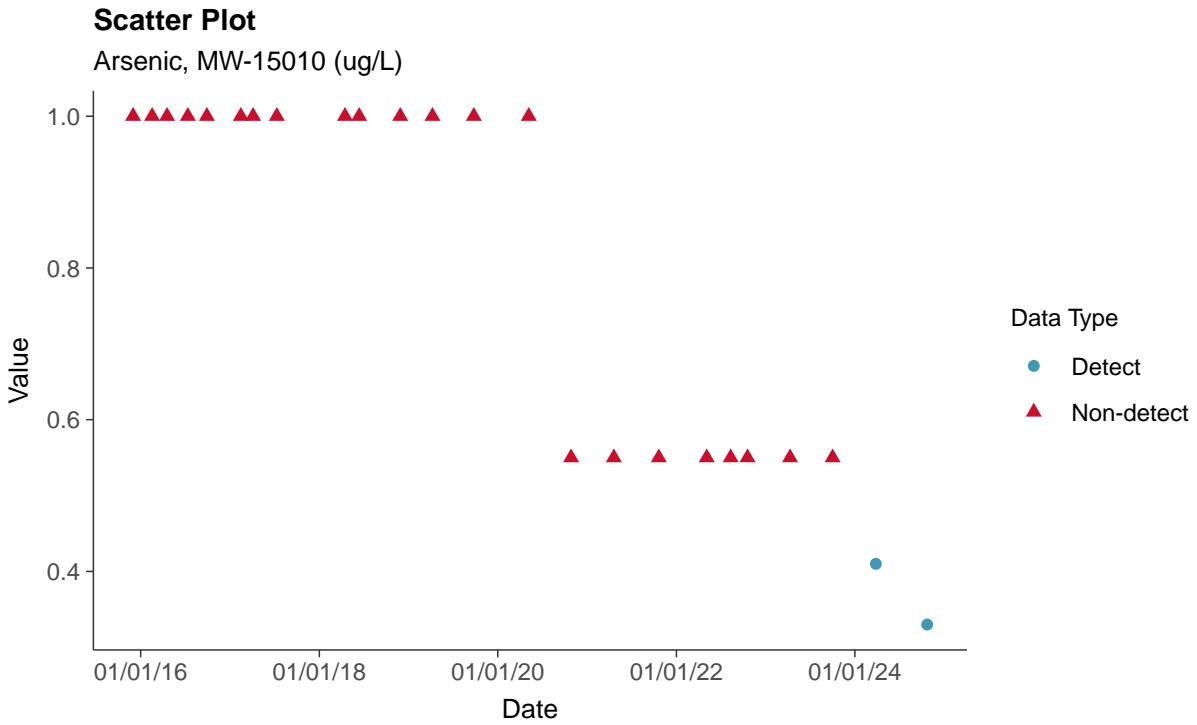






Appendix IV: Arsenic, MW-15010

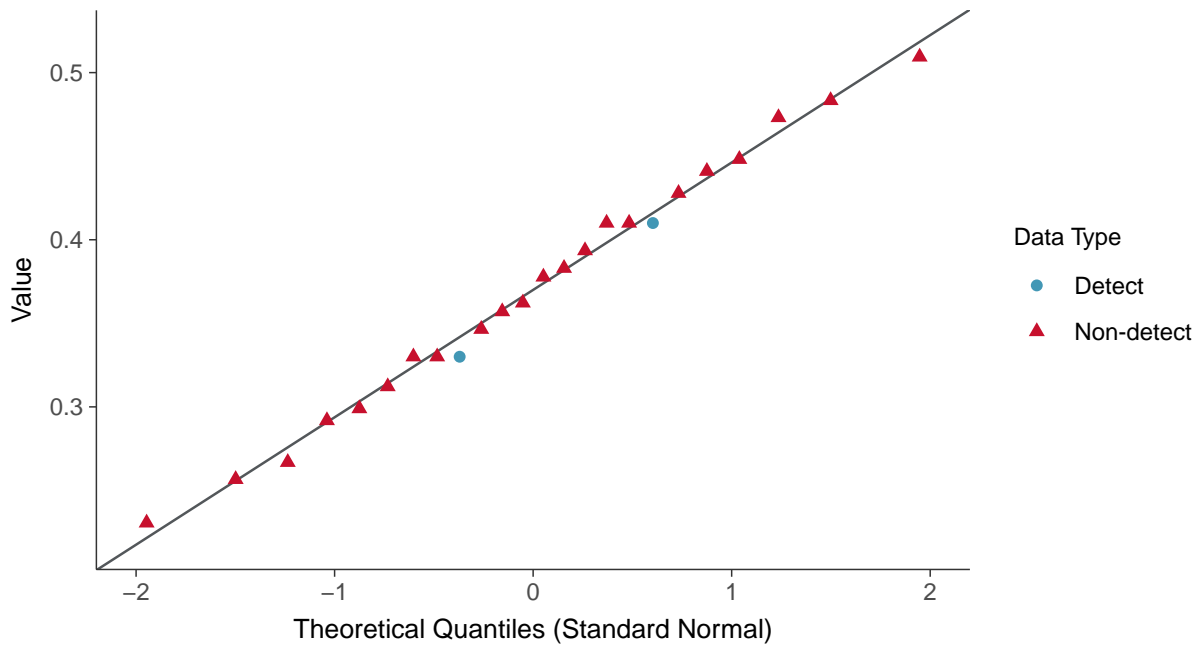
ID: 02_2_102





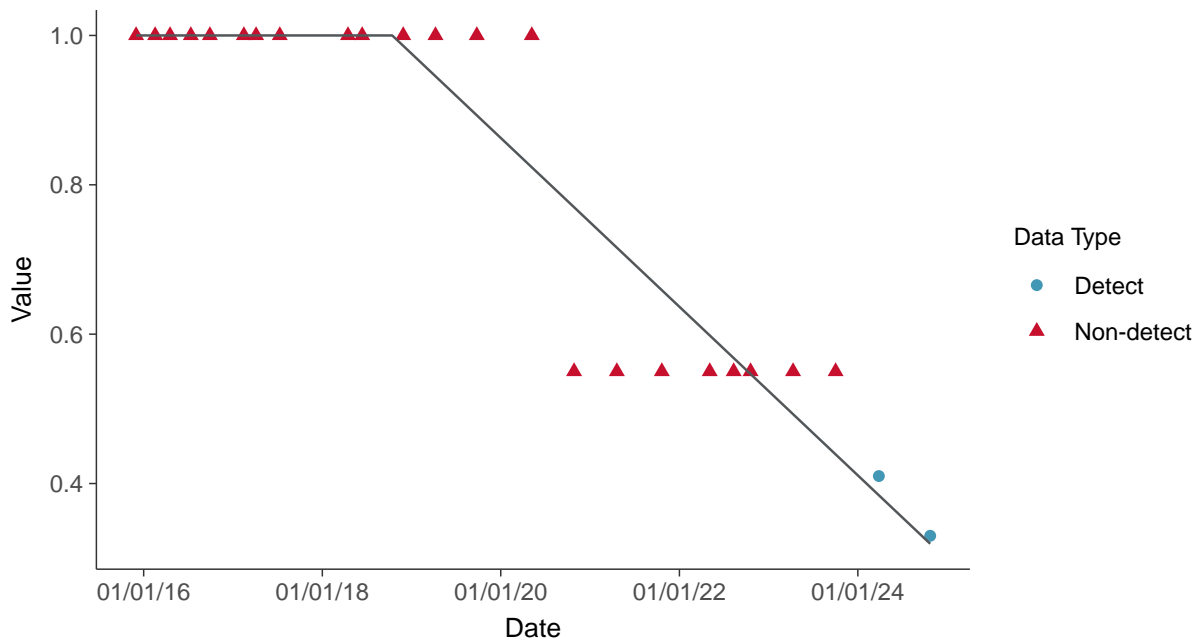
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15010 (ug/L)



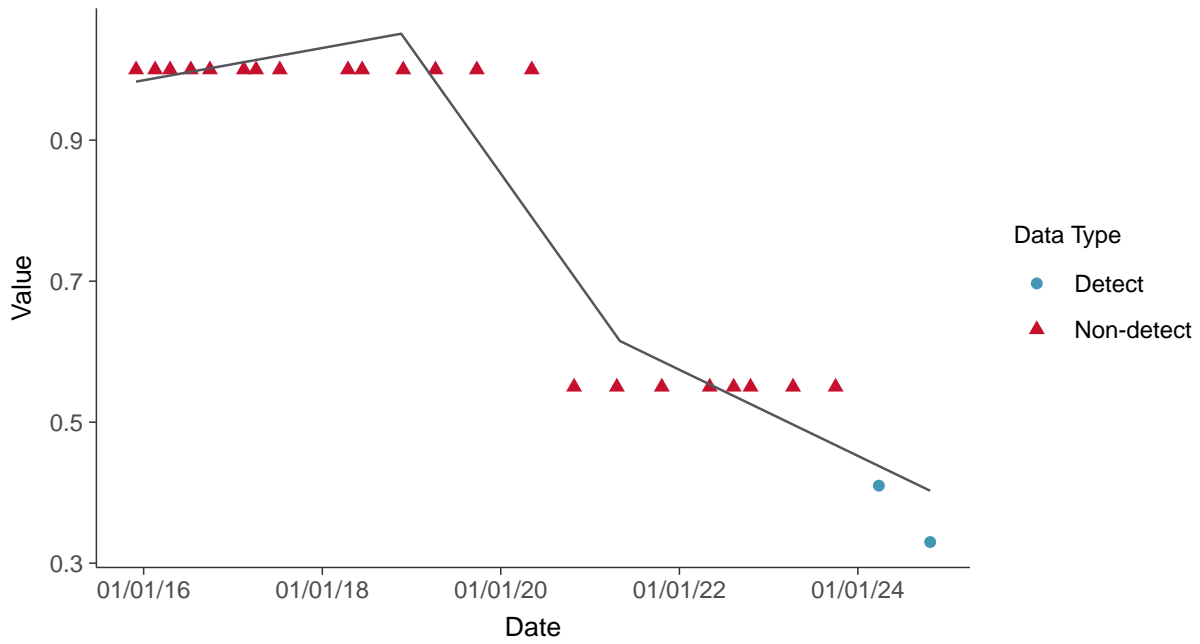
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear
Arsenic, MW-15010 (ug/L)



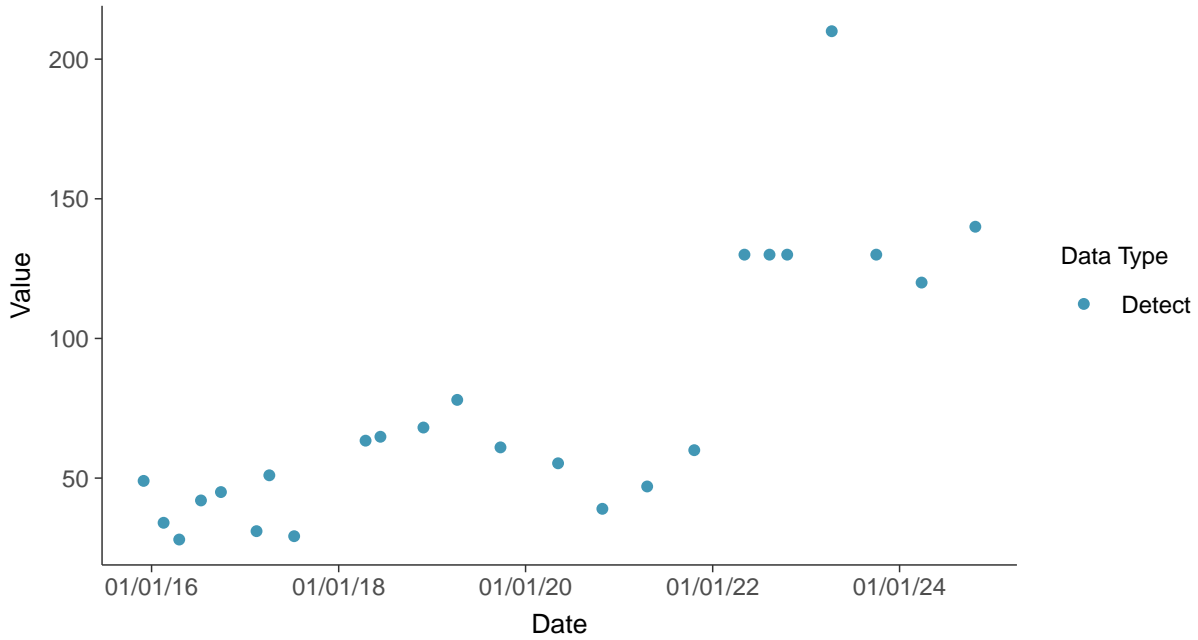


Appendix IV: Barium, MW-15010

ID: 02_2_103

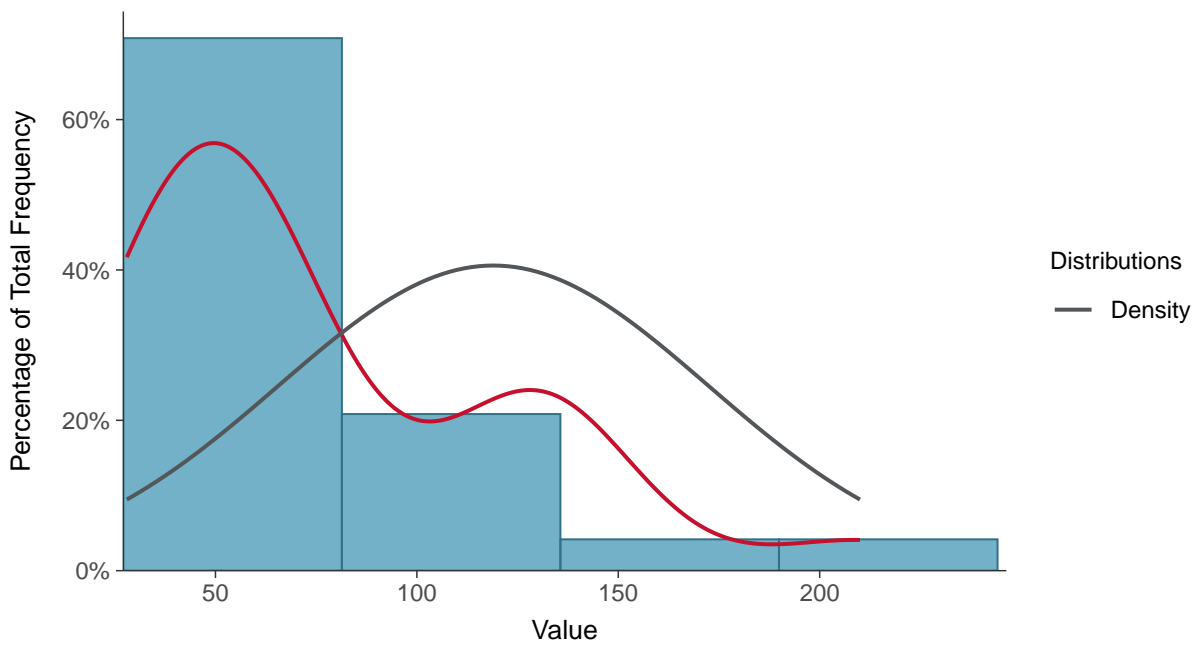
Scatter Plot

Barium, MW-15010 (ug/L)



Histogram

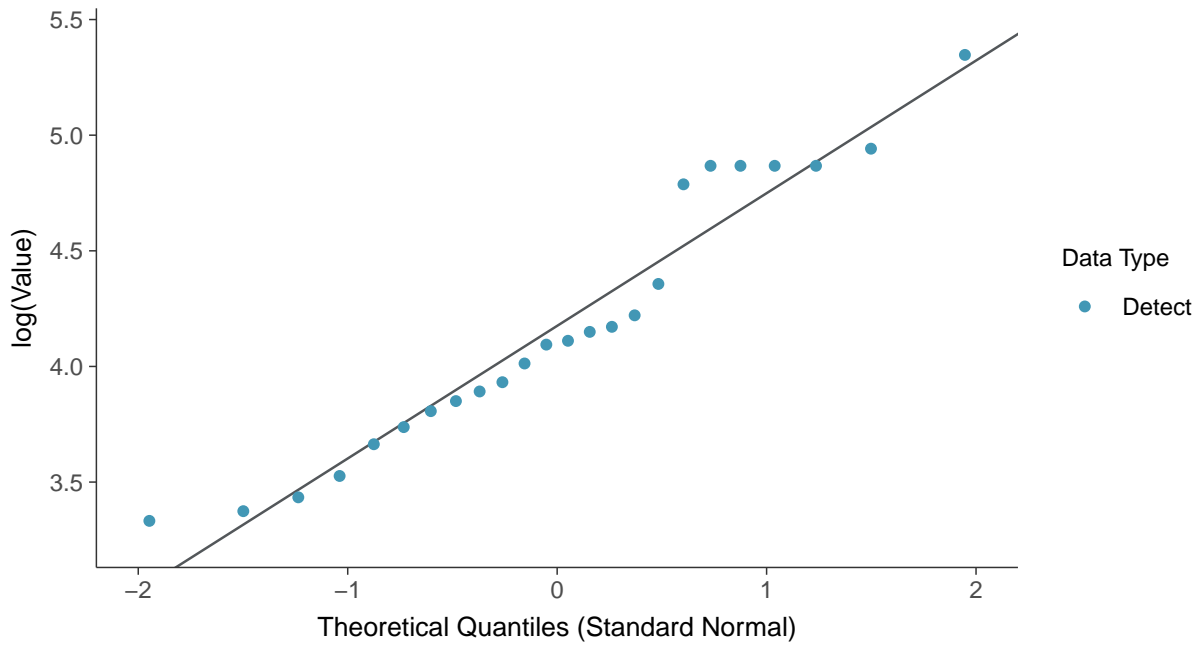
Barium, MW-15010 (ug/L)





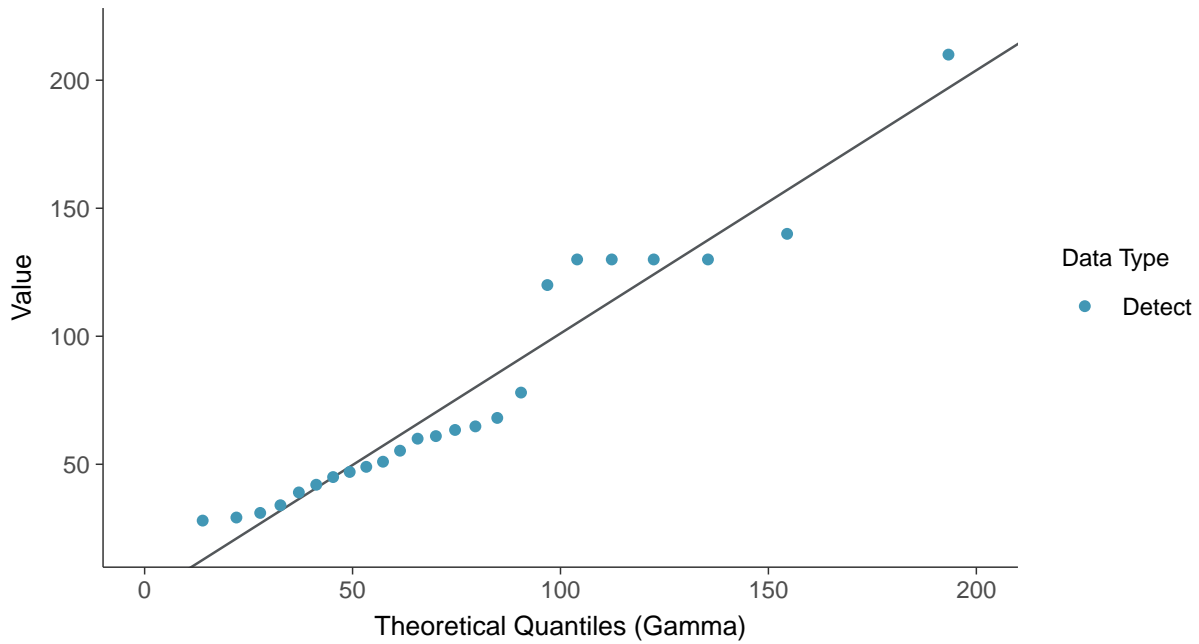
Lognormal Q-Q plot

Barium, MW-15010 (ug/L)



Gamma Q-Q plot

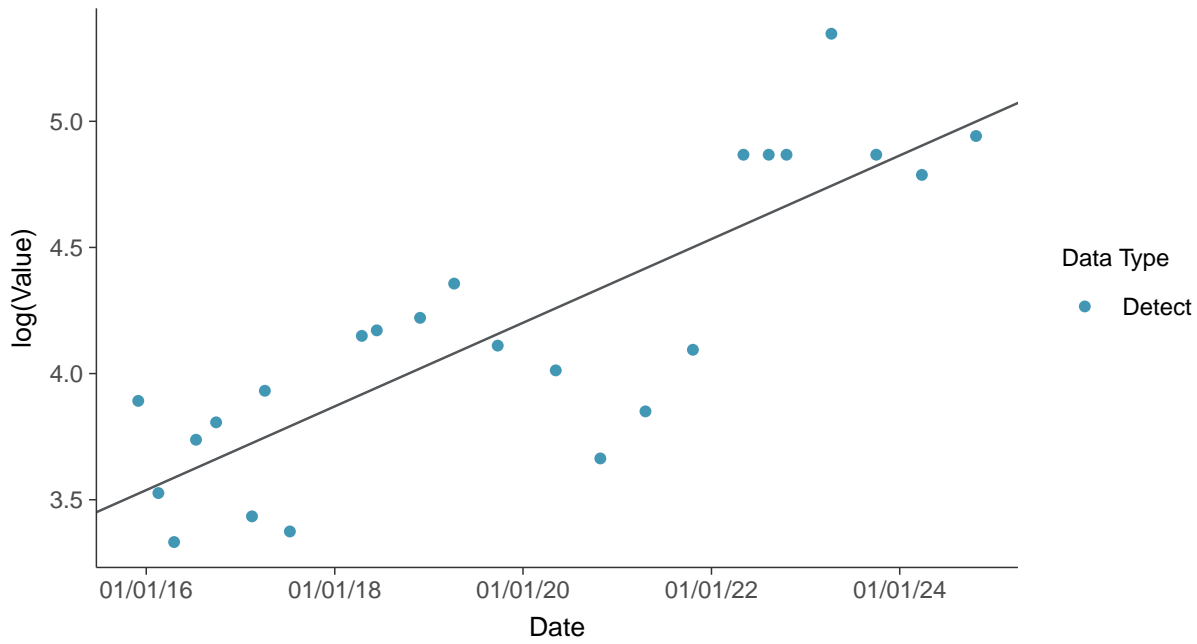
Barium, MW-15010 (ug/L)





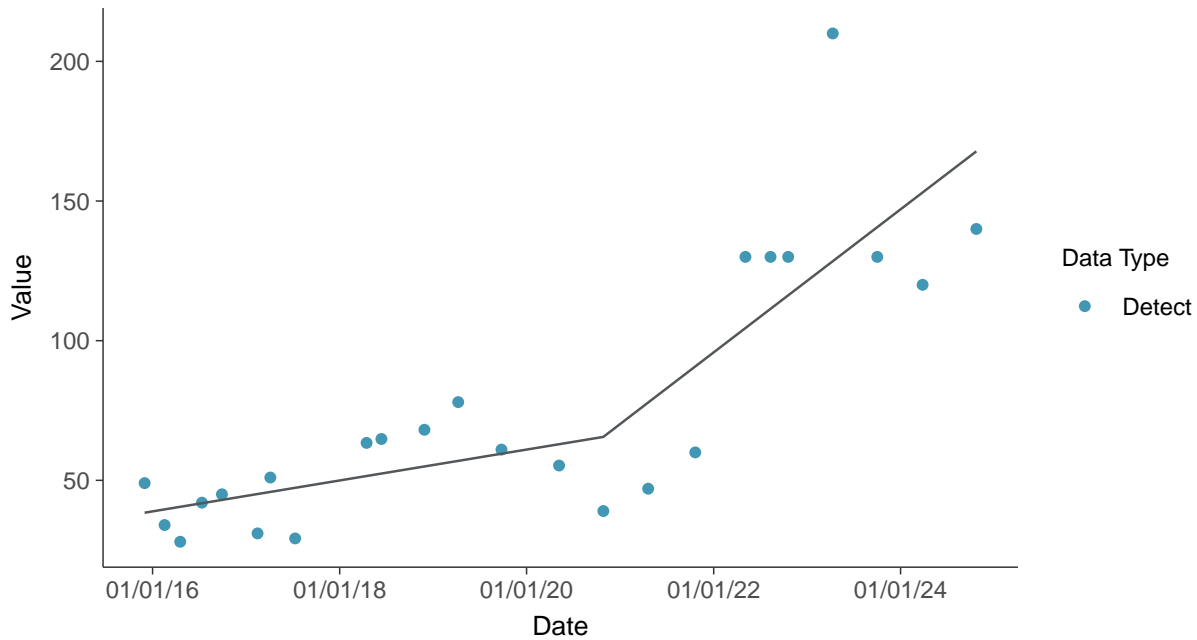
Trend Regression: Lognormal MLE

Barium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear

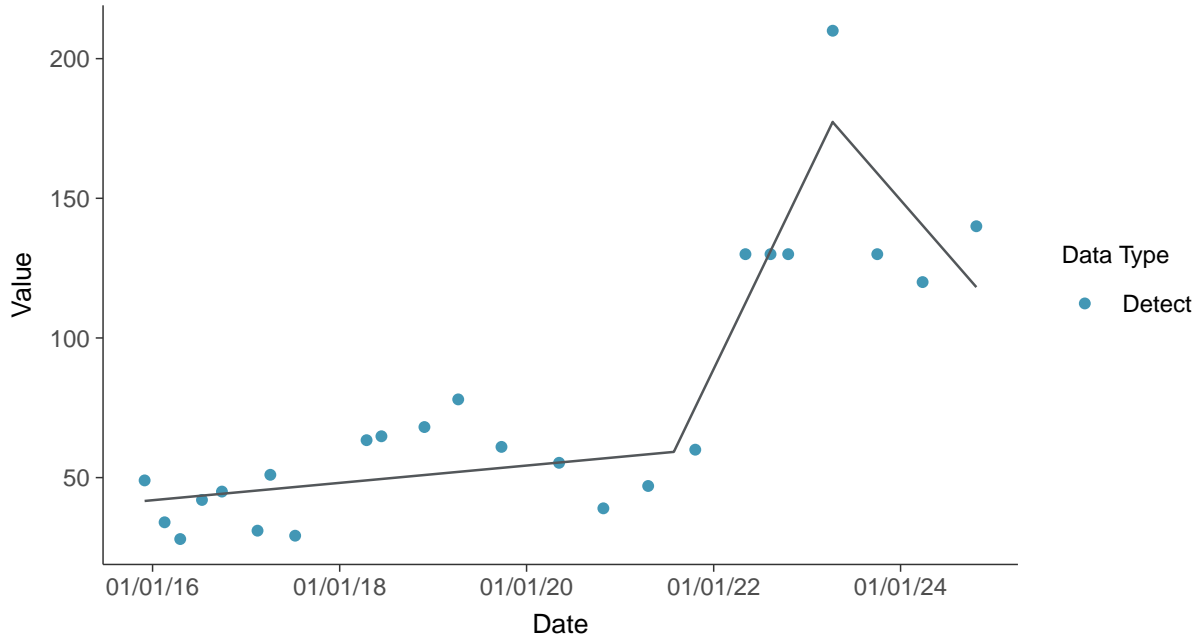
Barium, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

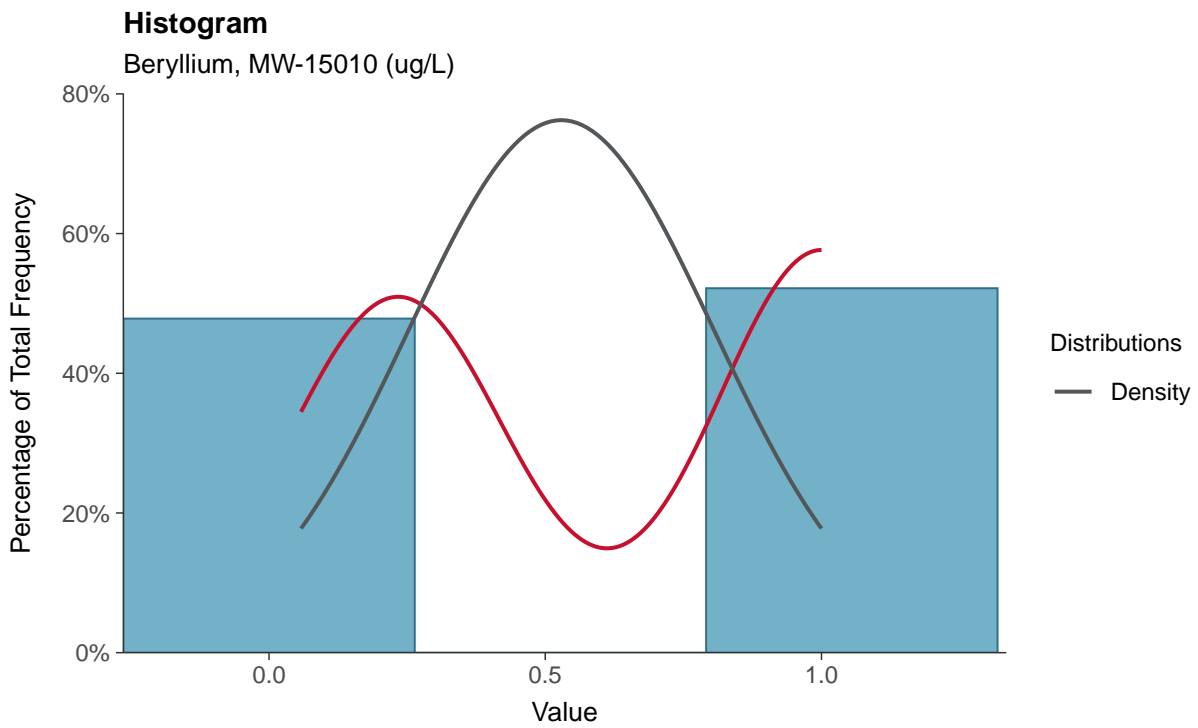
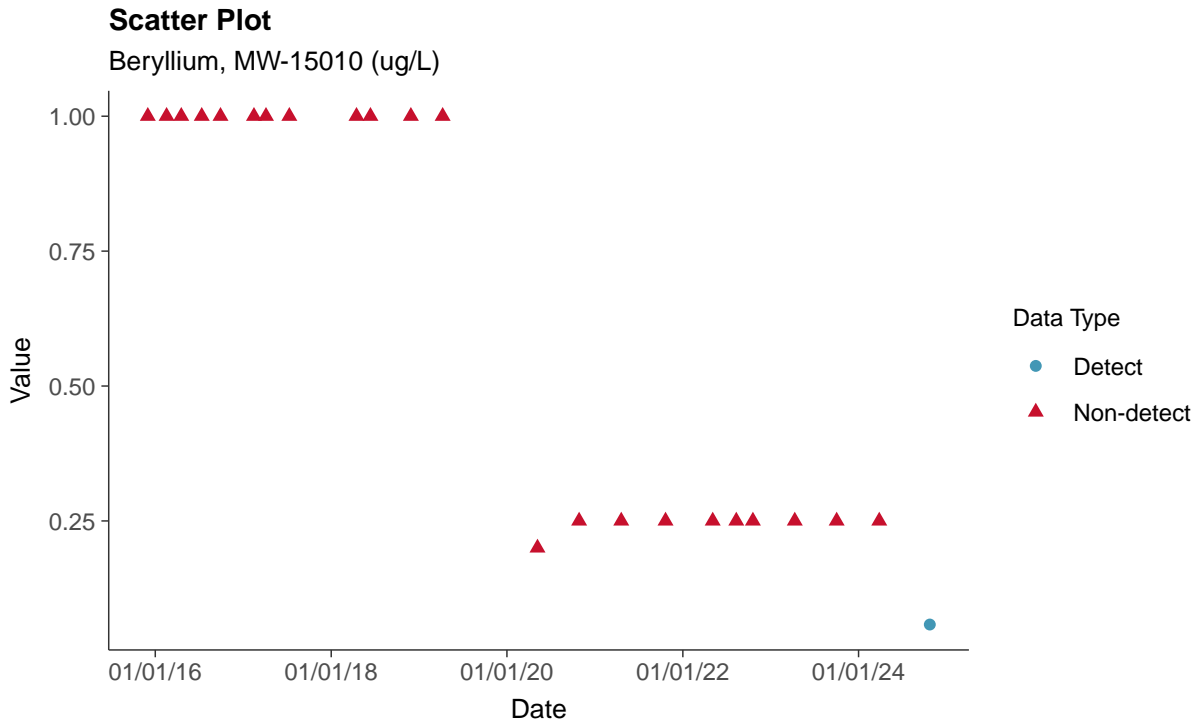
Barium, MW-15010 (ug/L)





Appendix IV: Beryllium, MW-15010

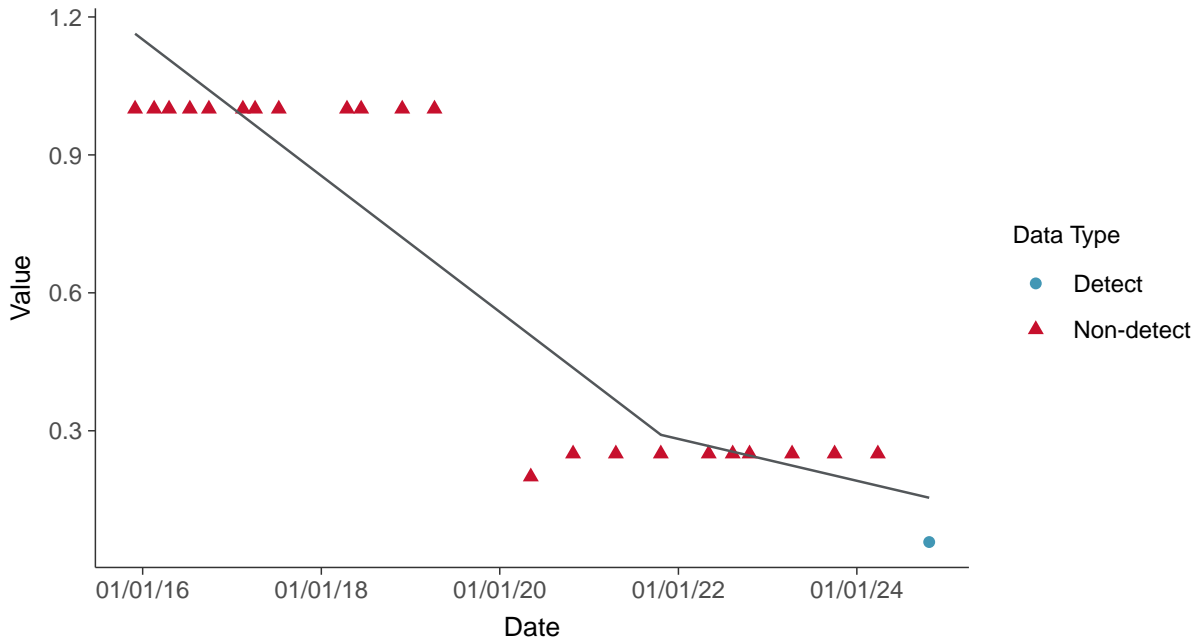
ID: 02_2_104





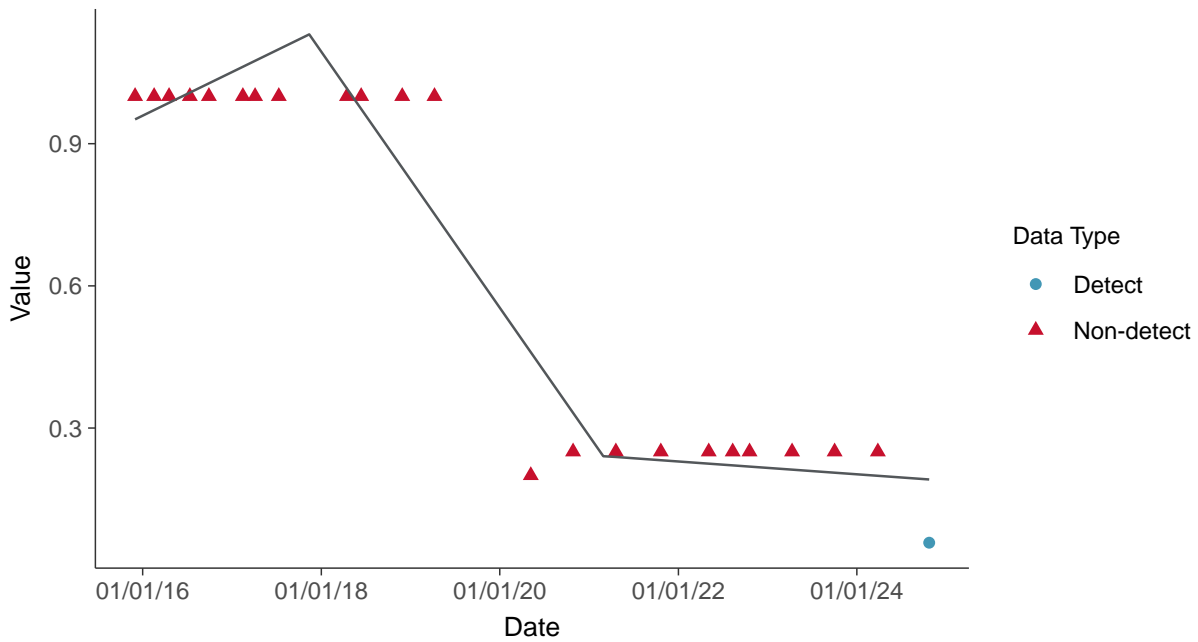
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

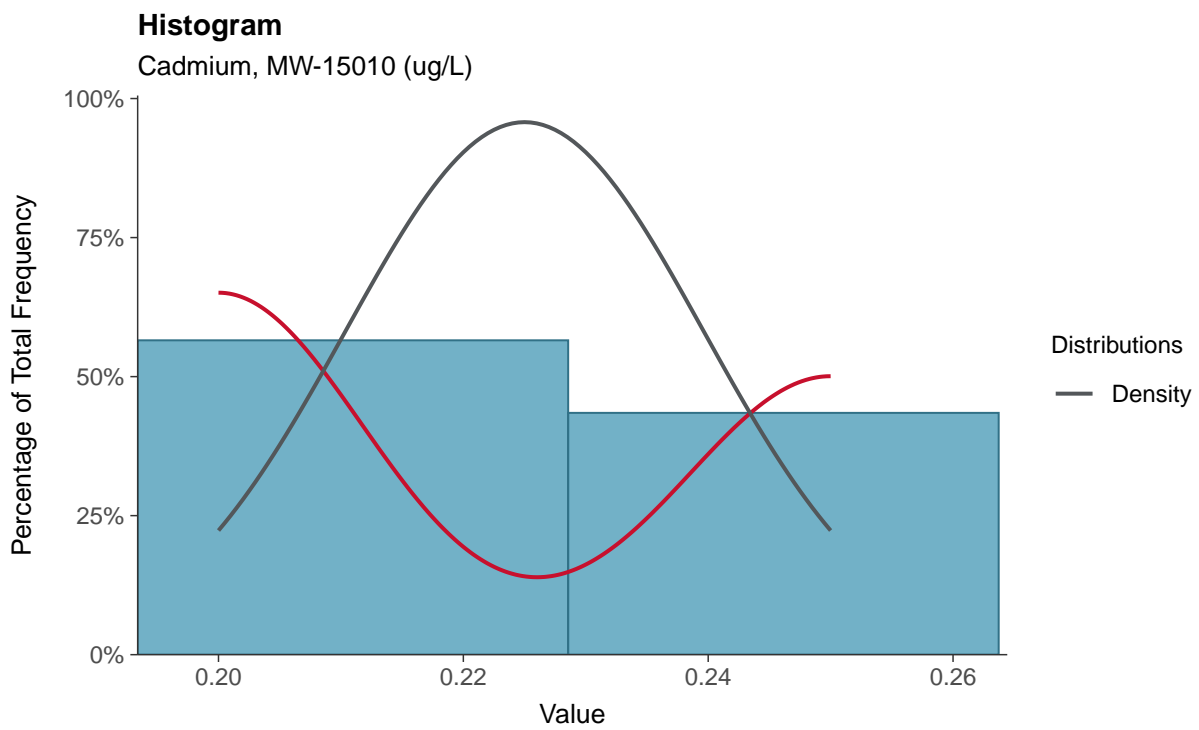
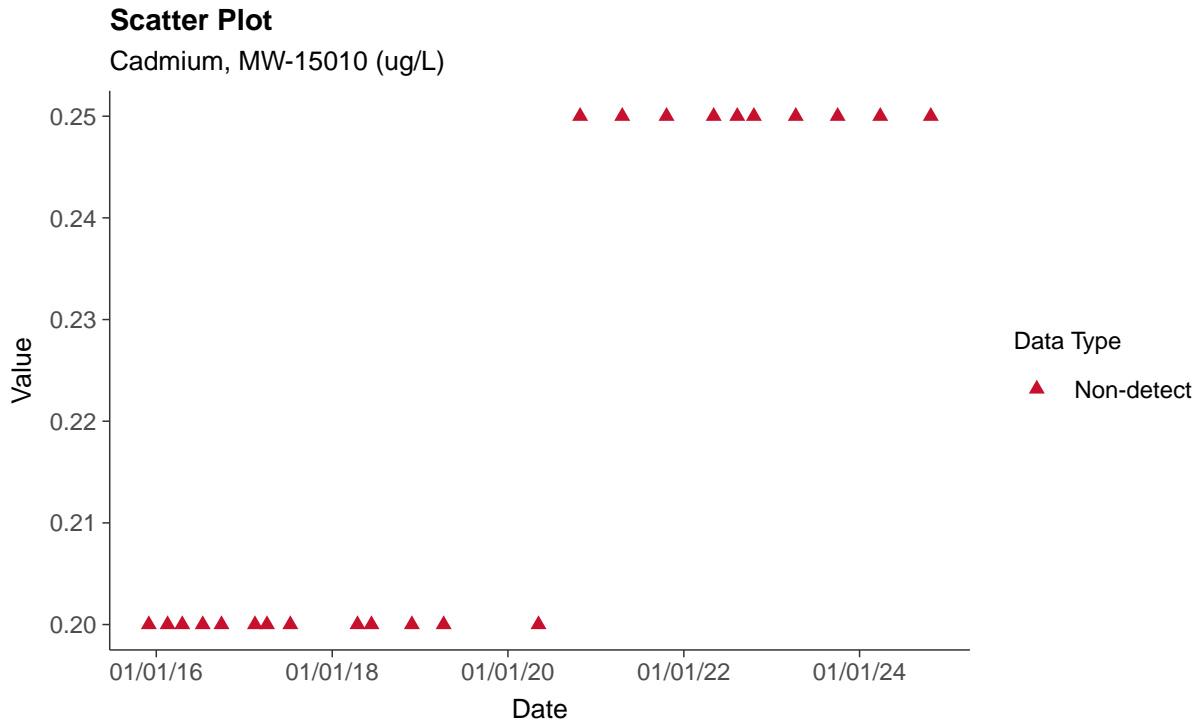
Beryllium, MW-15010 (ug/L)





Appendix IV: Cadmium, MW-15010

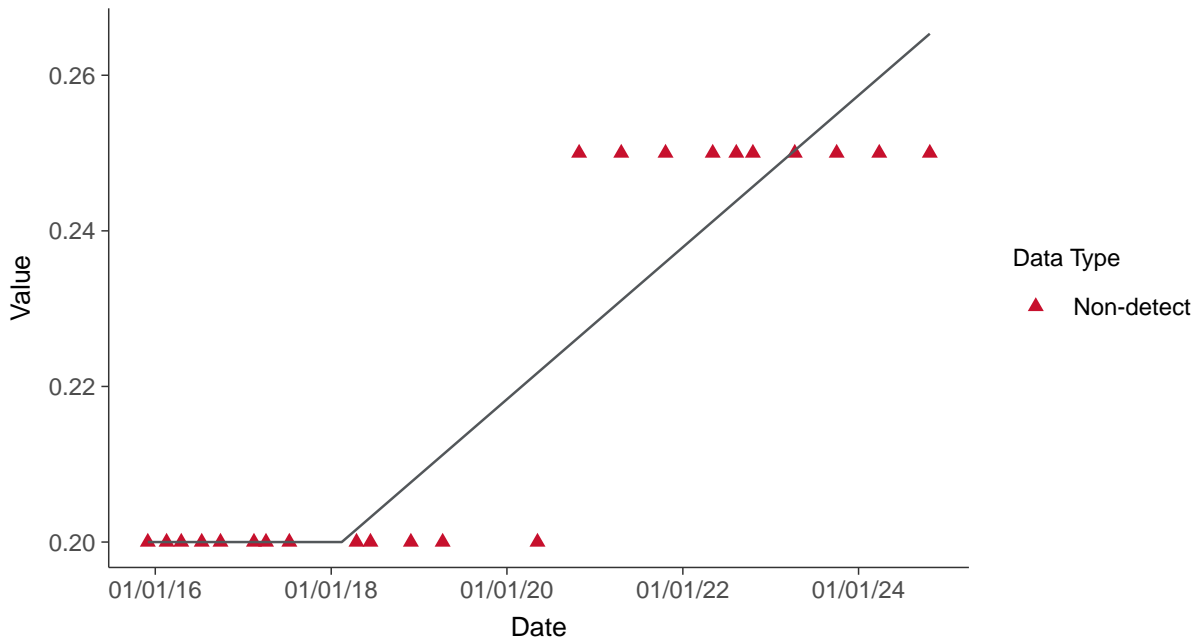
ID: 02_2_106





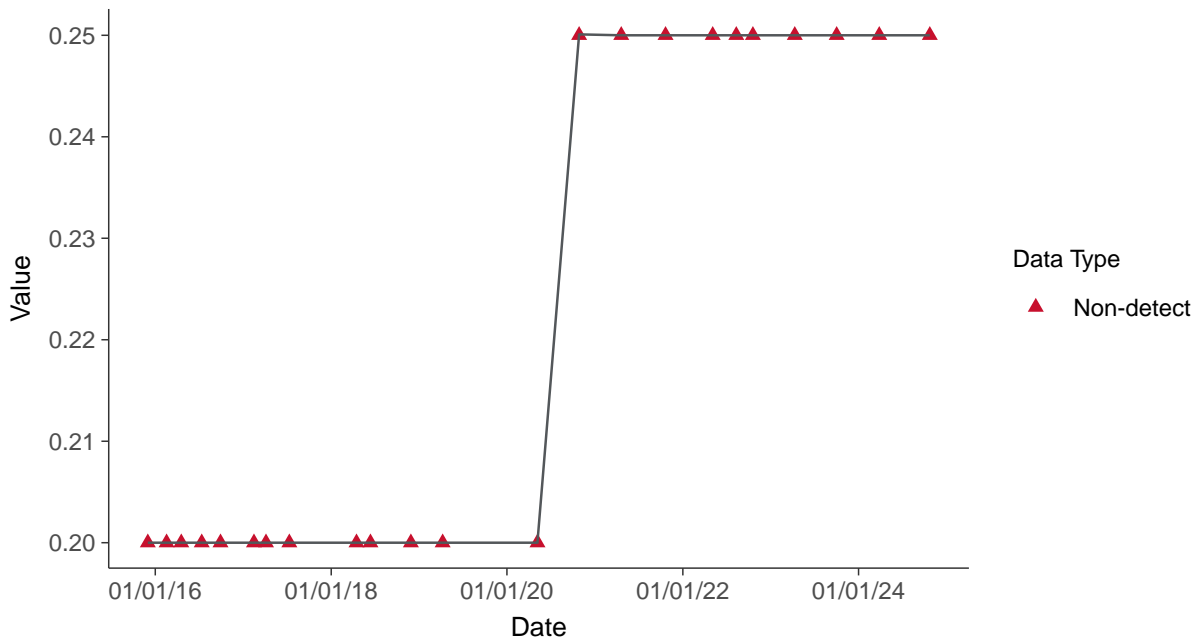
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

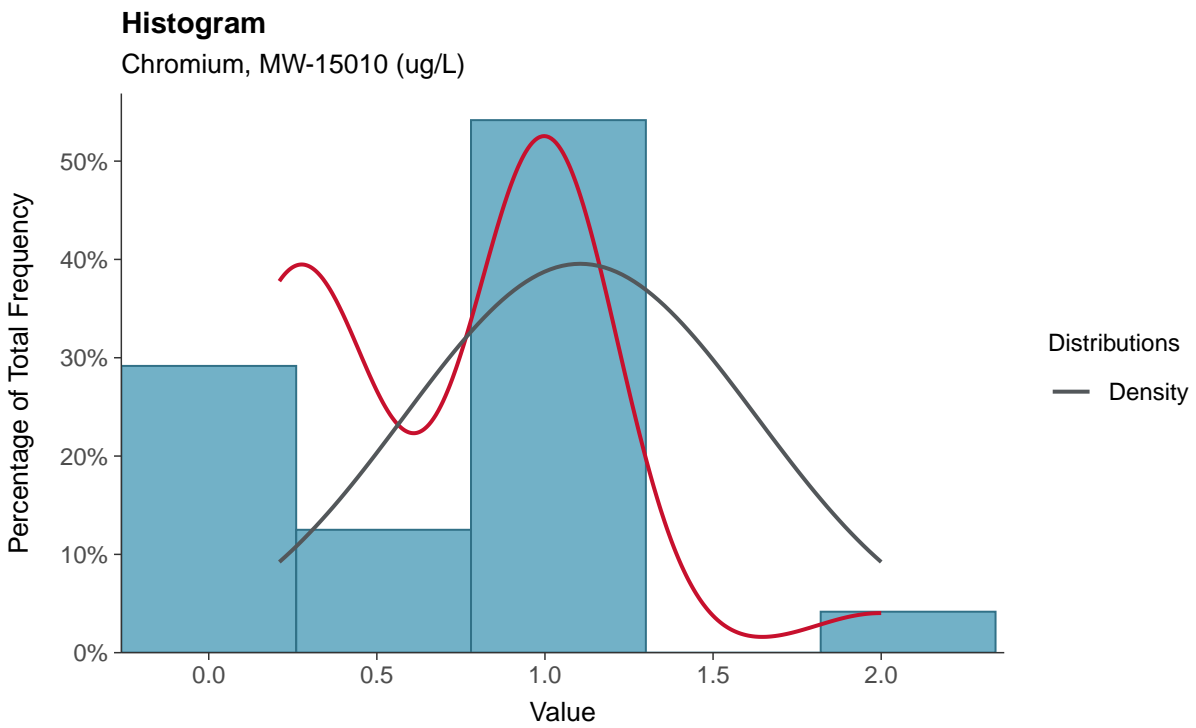
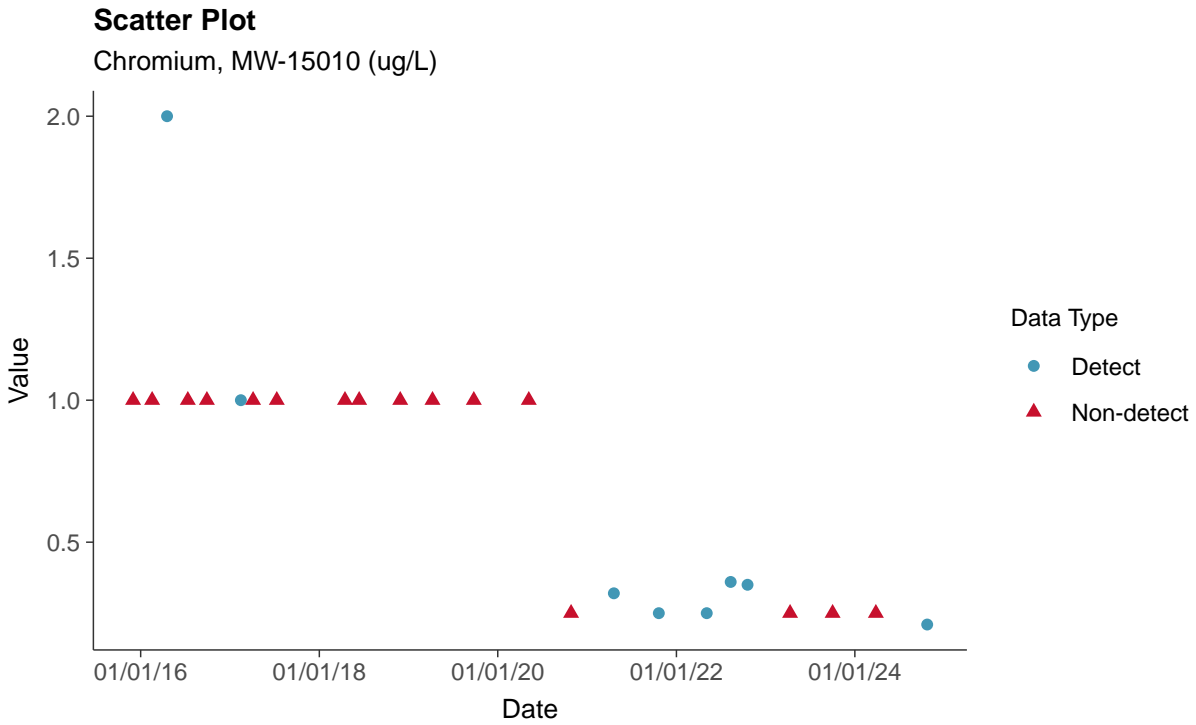
Cadmium, MW-15010 (ug/L)





Appendix IV: Chromium, MW-15010

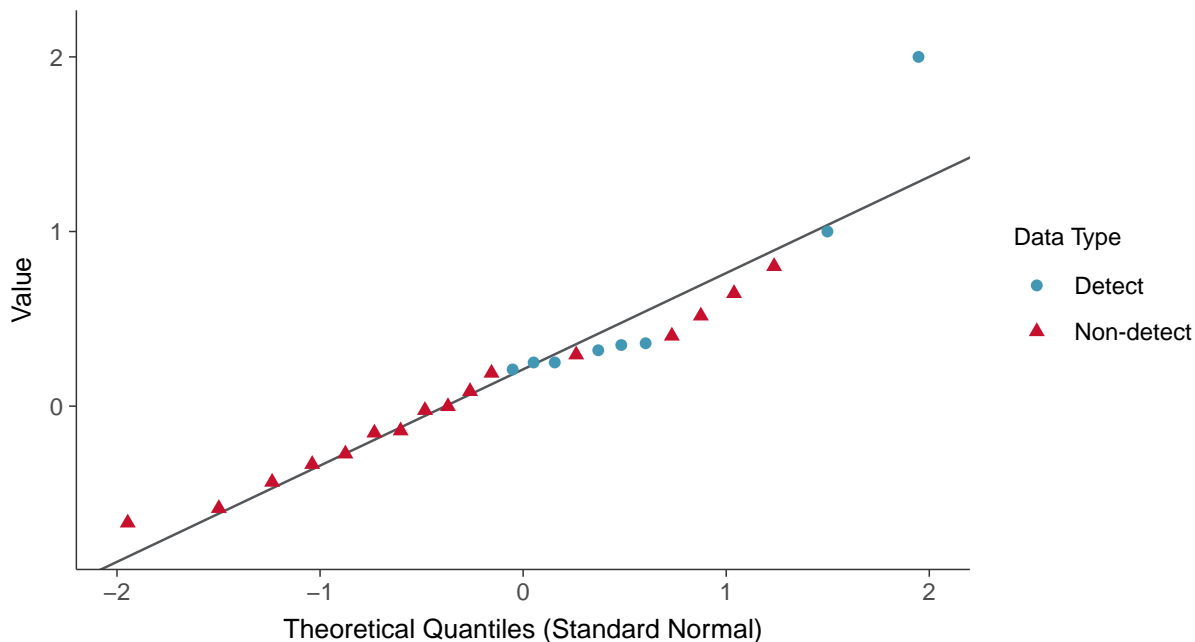
ID: 02_2_109





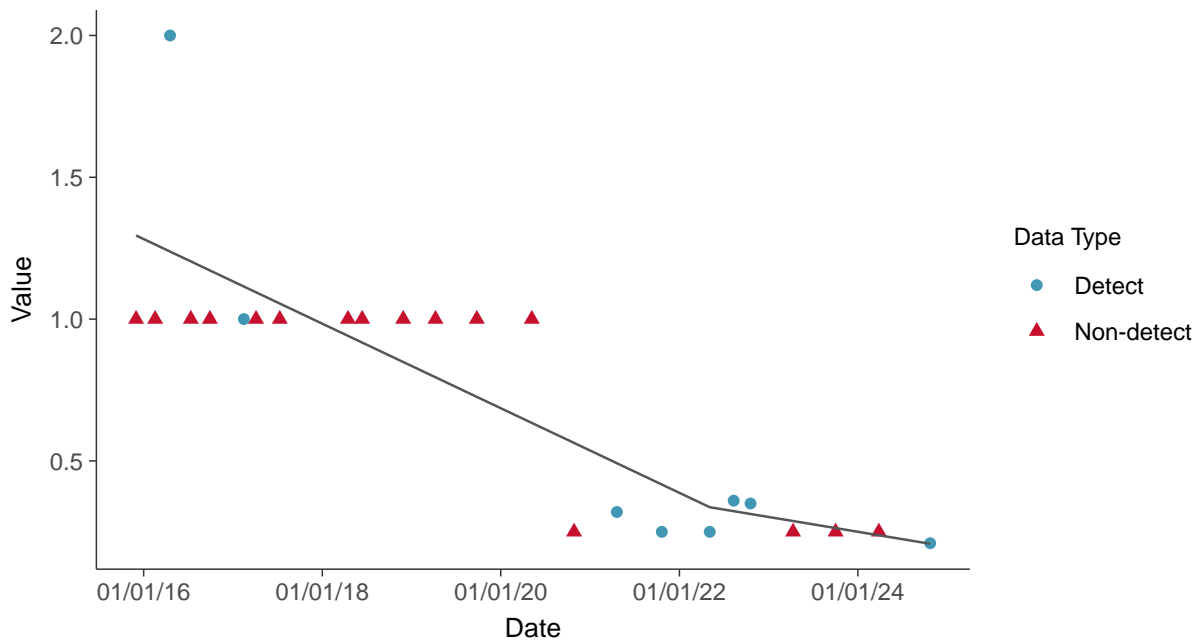
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15010 (ug/L)



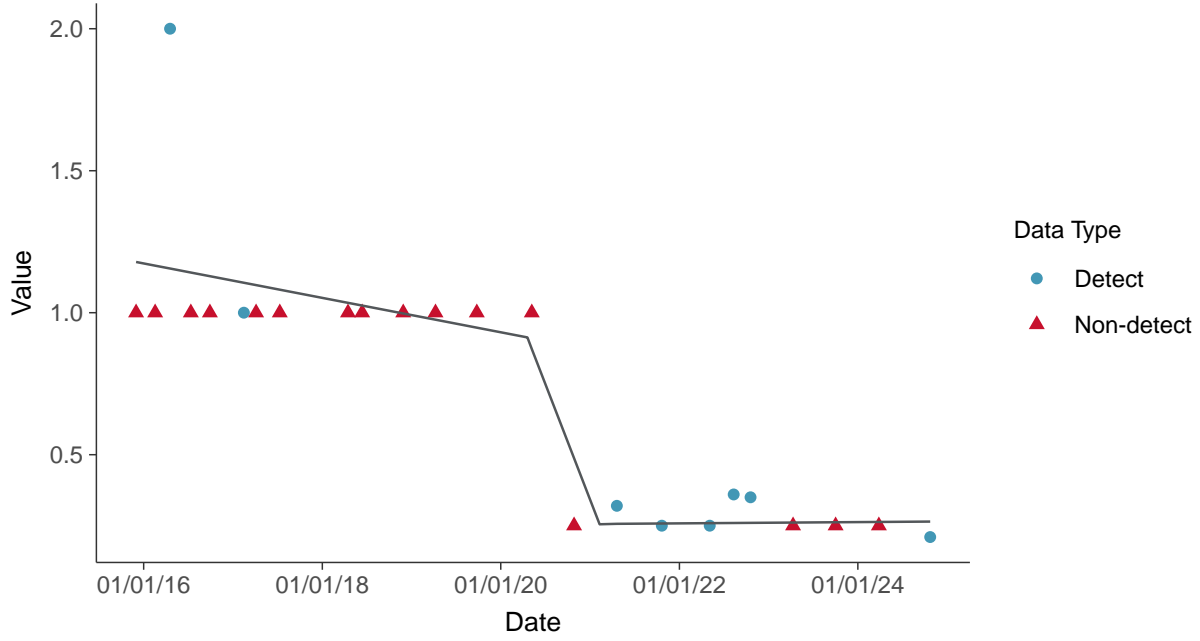
Trend Regression: Piecewise Linear-Linear

Chromium, MW-15010 (ug/L)





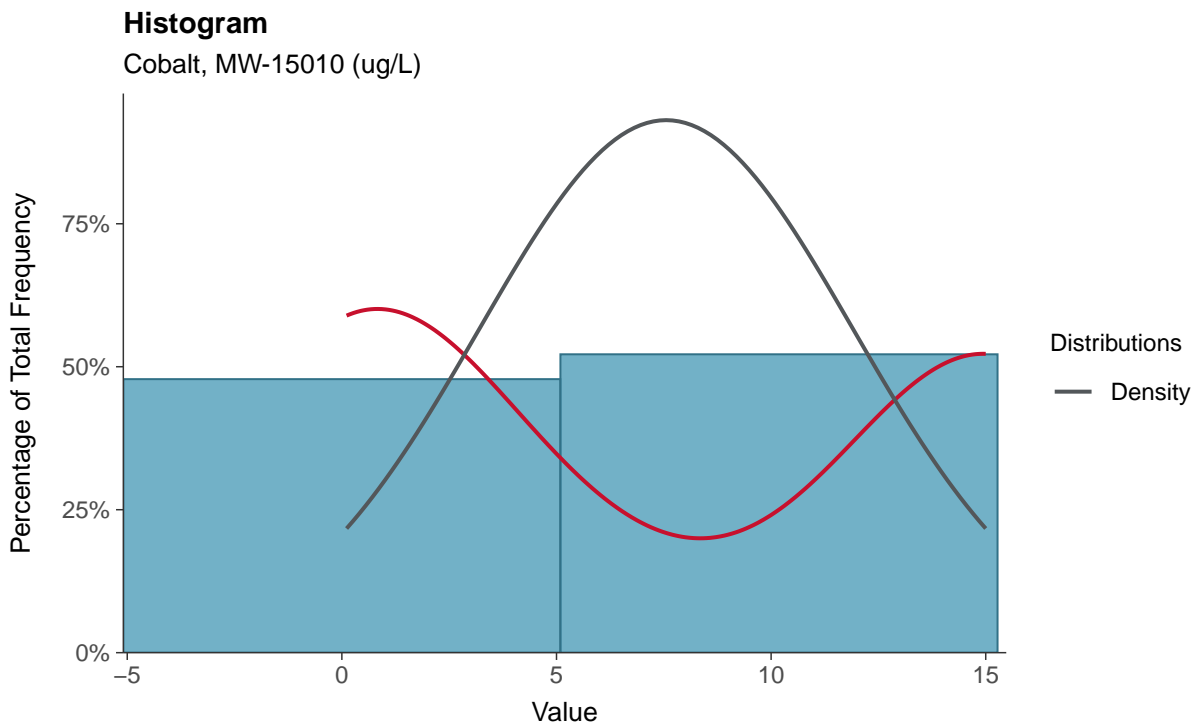
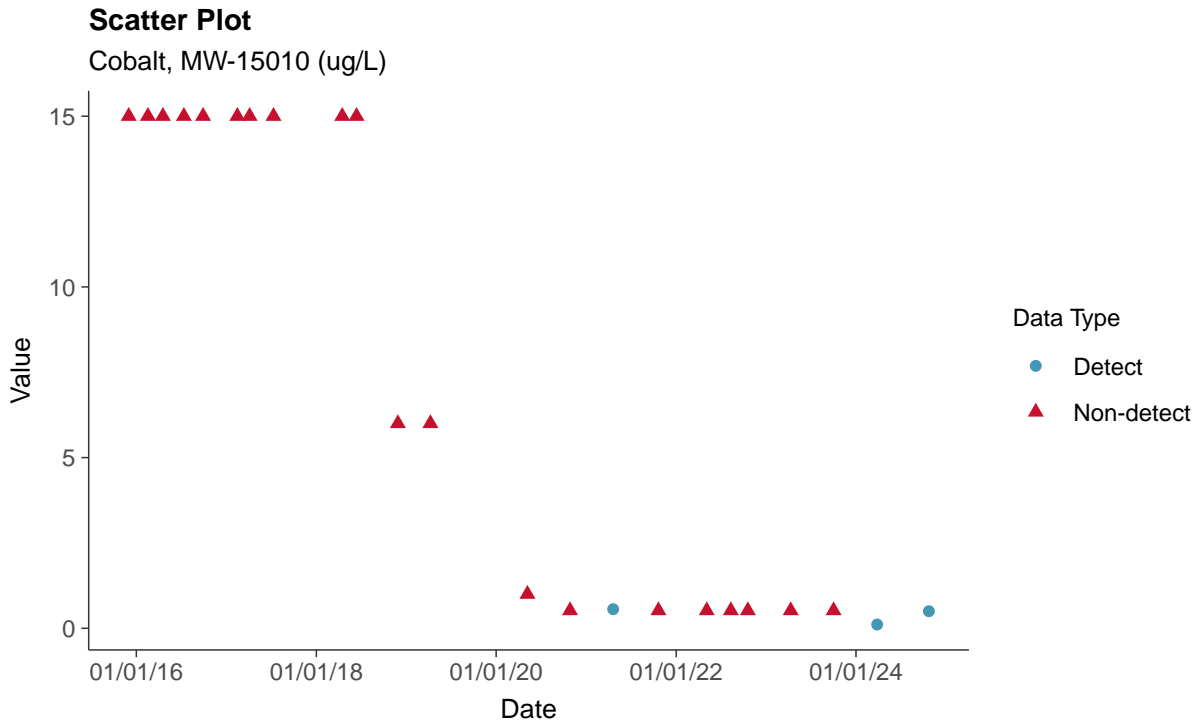
Trend Regression: Piecewise Linear-Linear-Linear
 Chromium, MW-15010 (ug/L)





Appendix IV: Cobalt, MW-15010

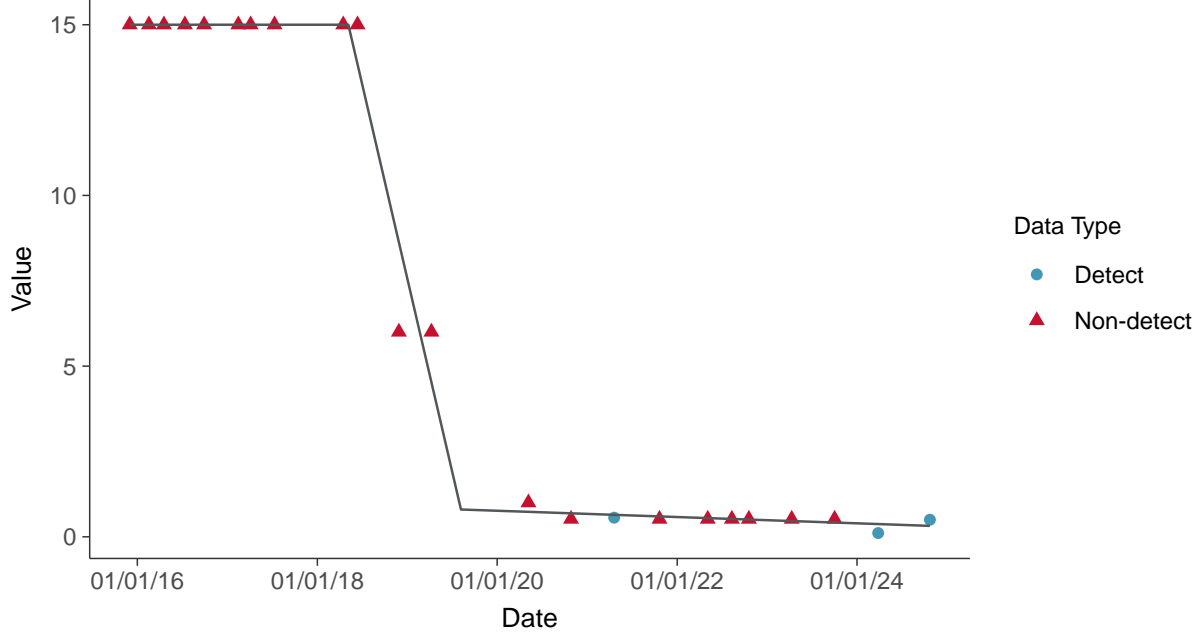
ID: 02_2_110





Trend Regression: Piecewise Linear-Linear-Linear

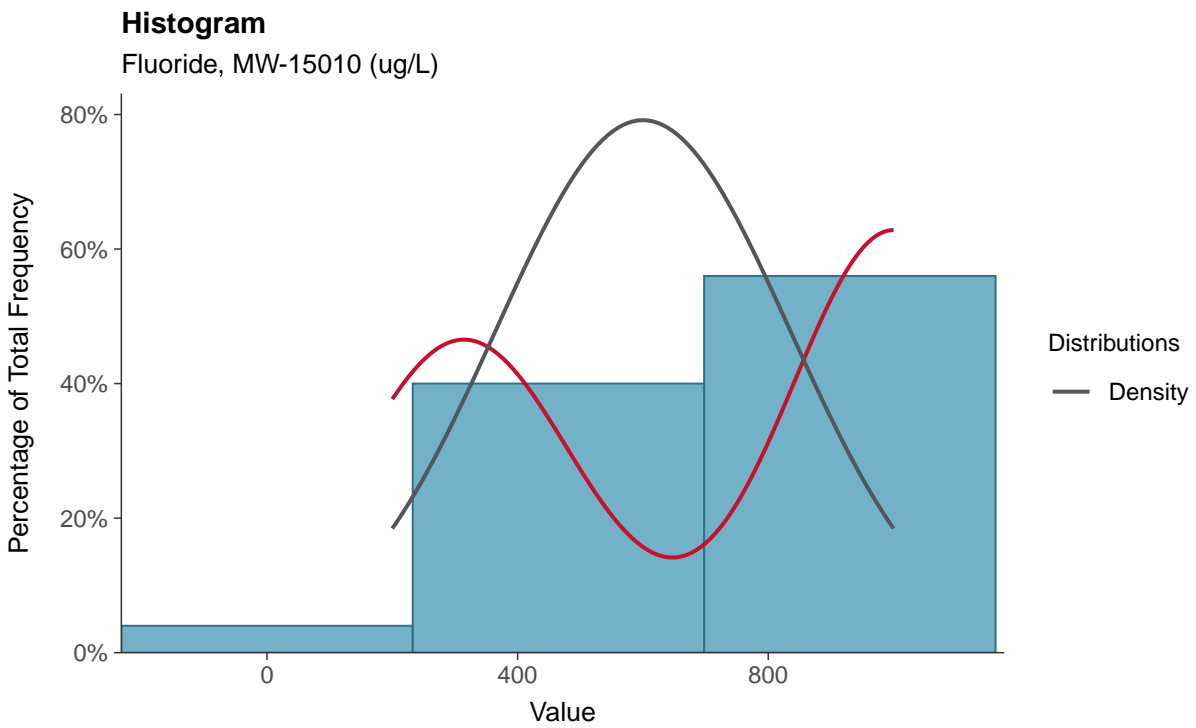
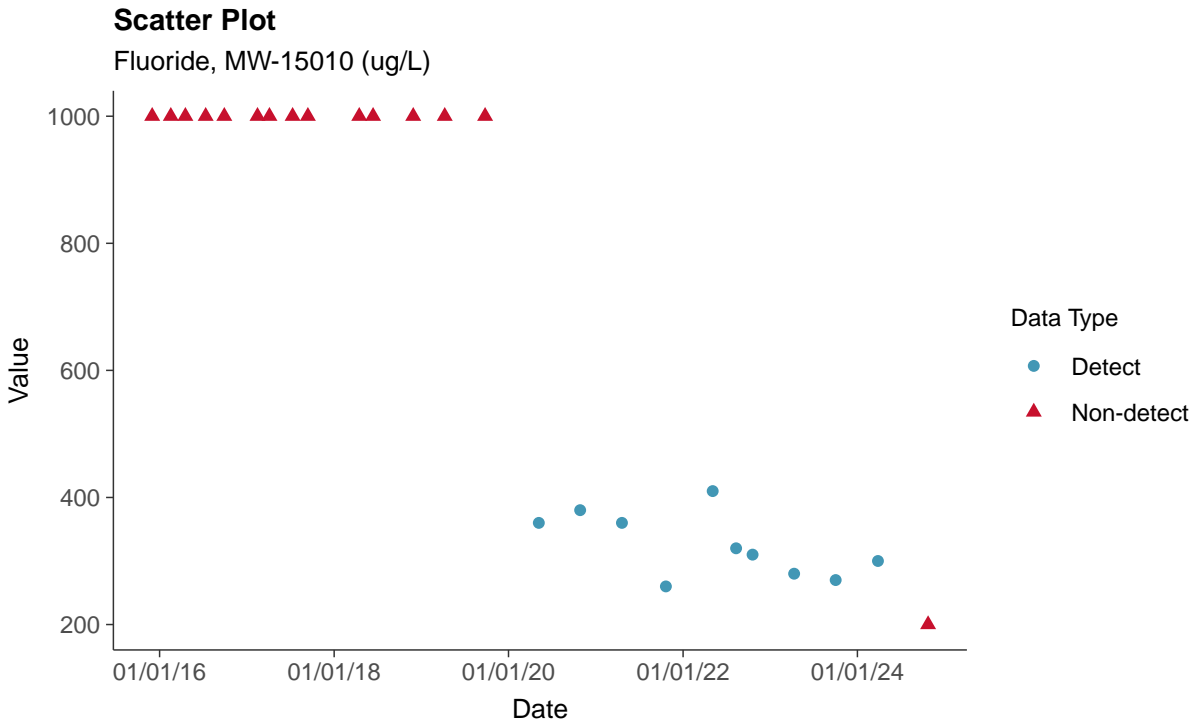
Cobalt, MW-15010 (ug/L)





Appendix IV: Fluoride, MW-15010

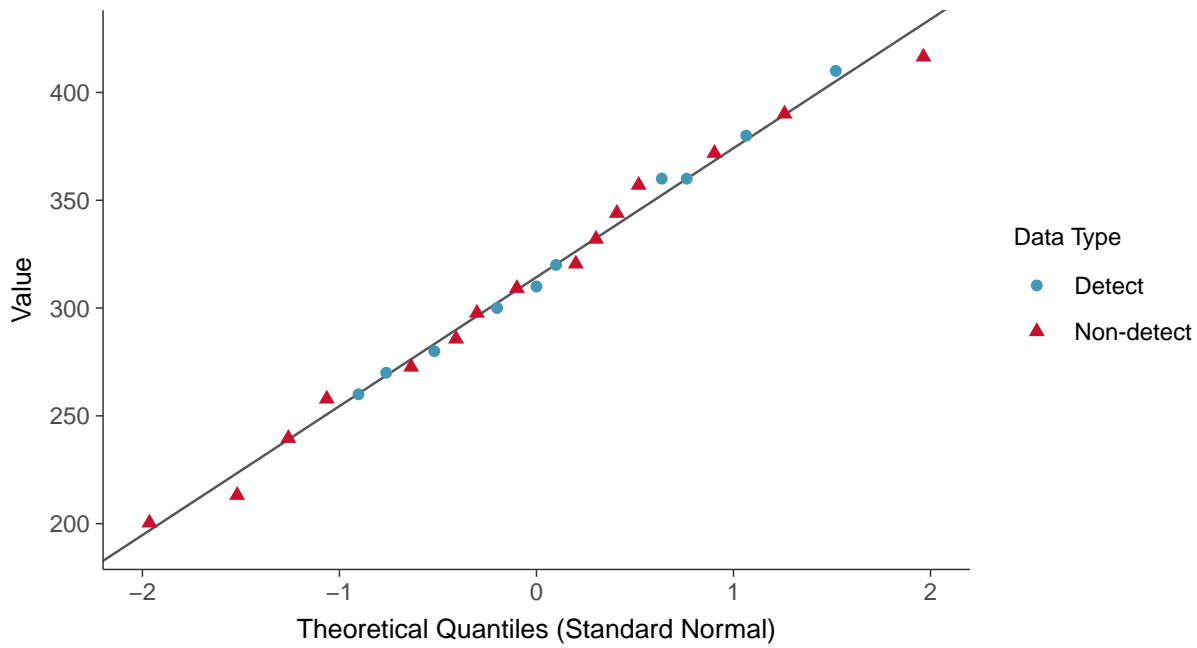
ID: 02_2_114





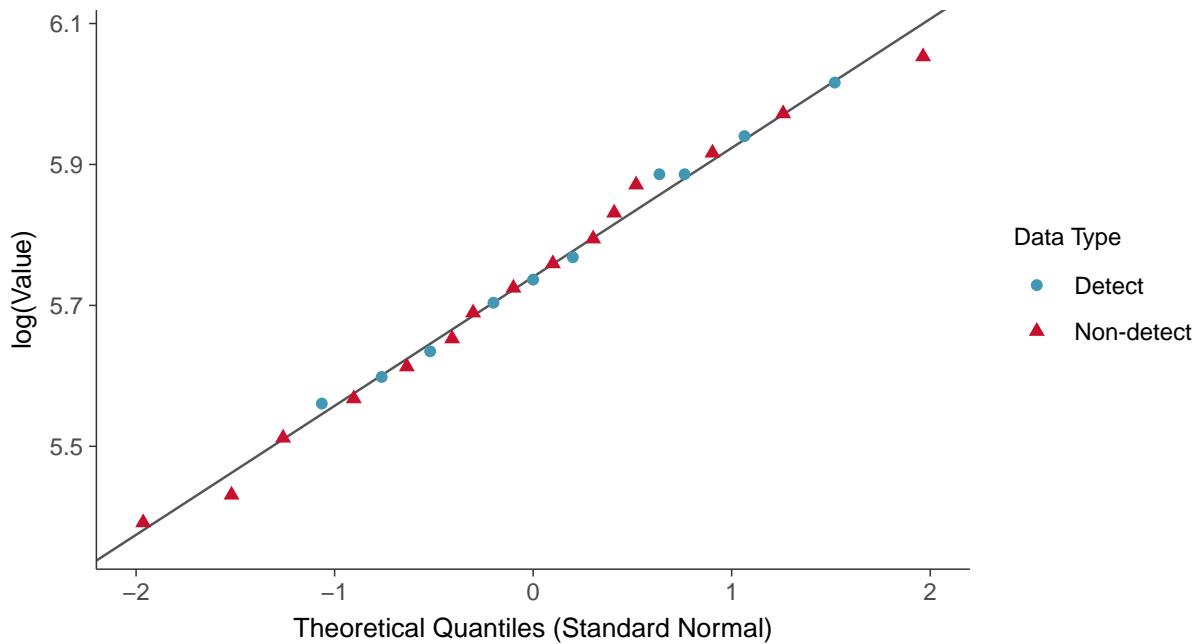
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15010 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

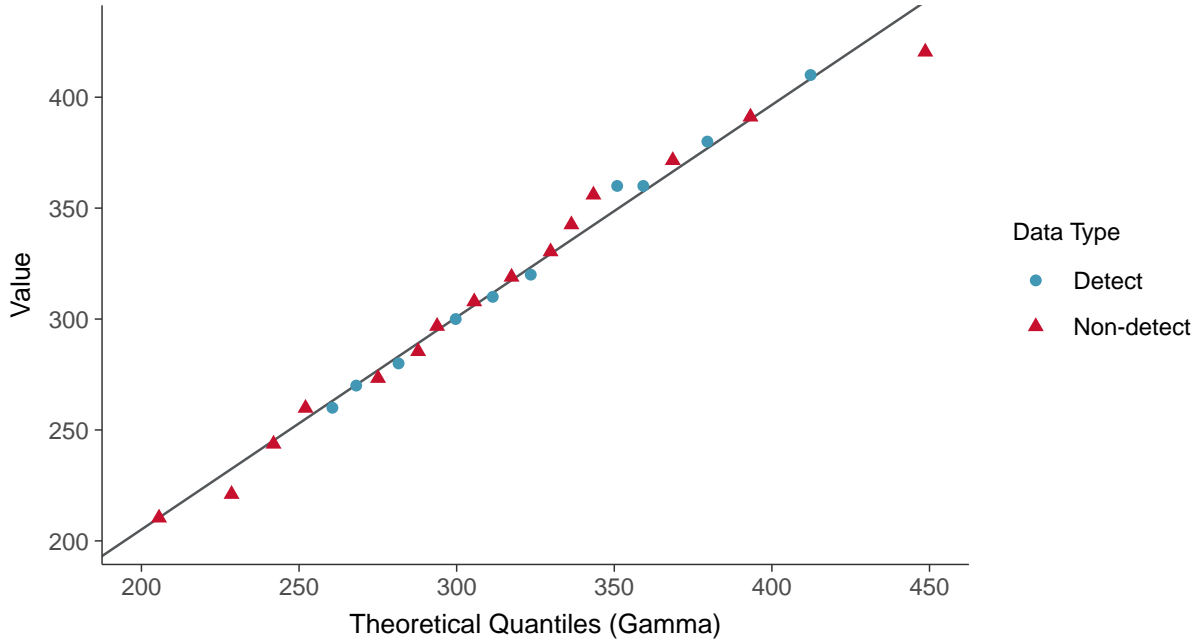
Fluoride, MW-15010 (ug/L)





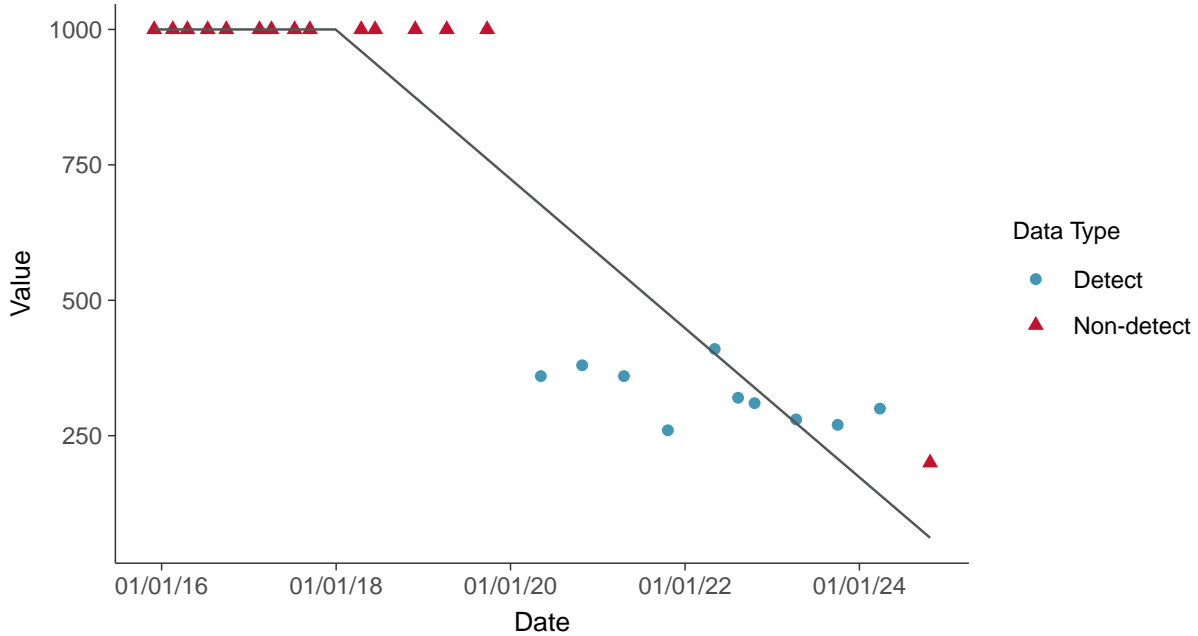
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear

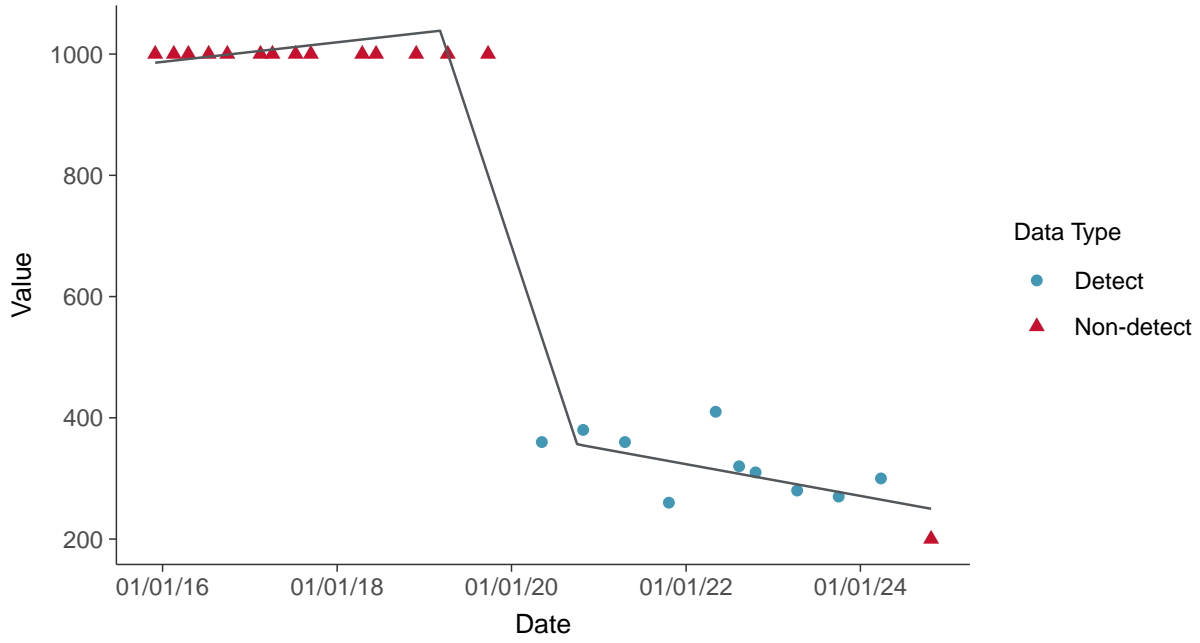
Fluoride, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

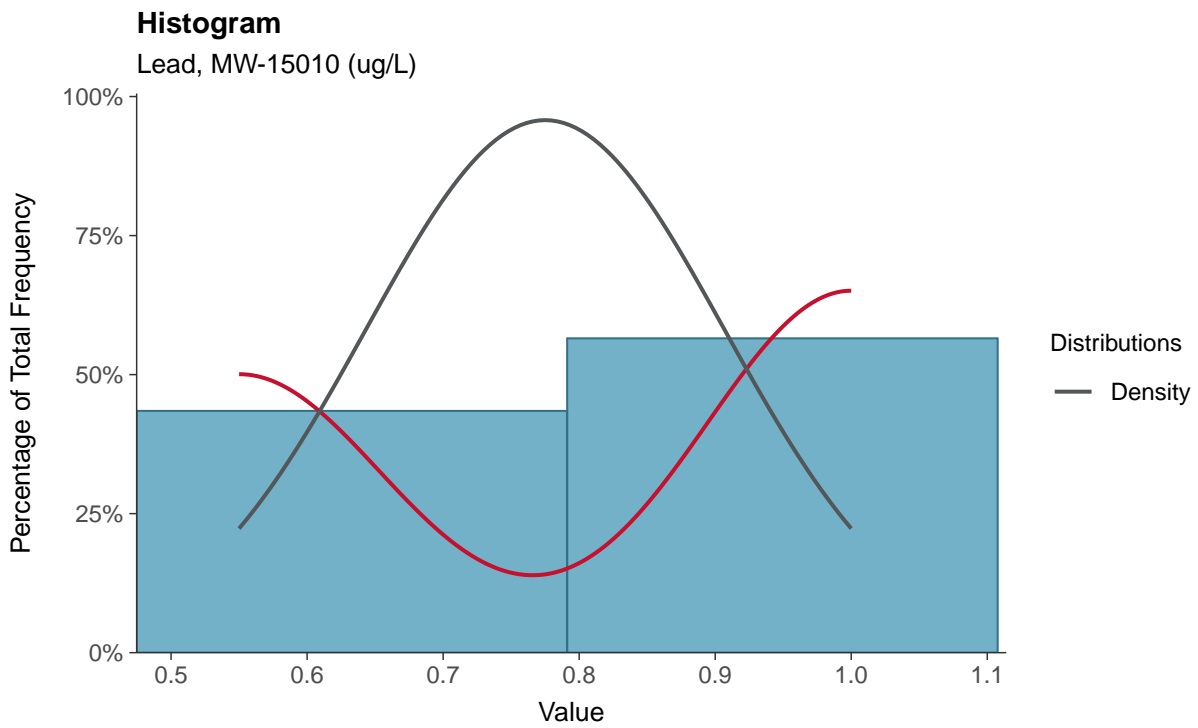
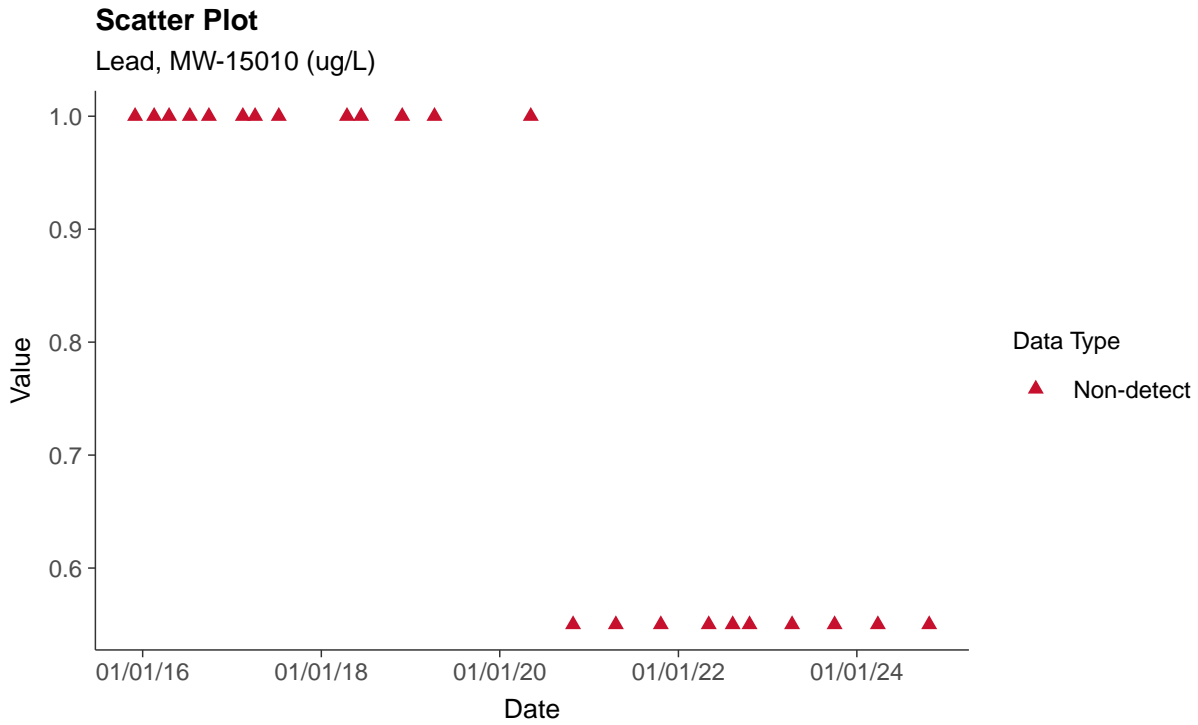
Fluoride, MW-15010 (ug/L)

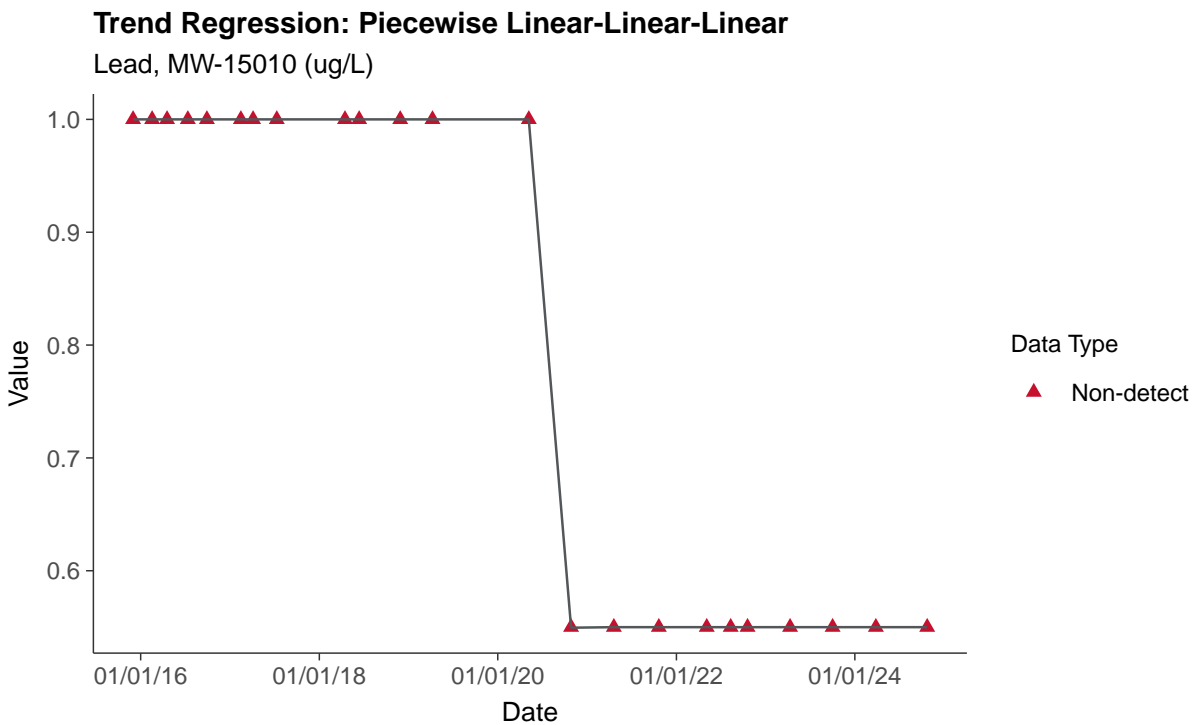
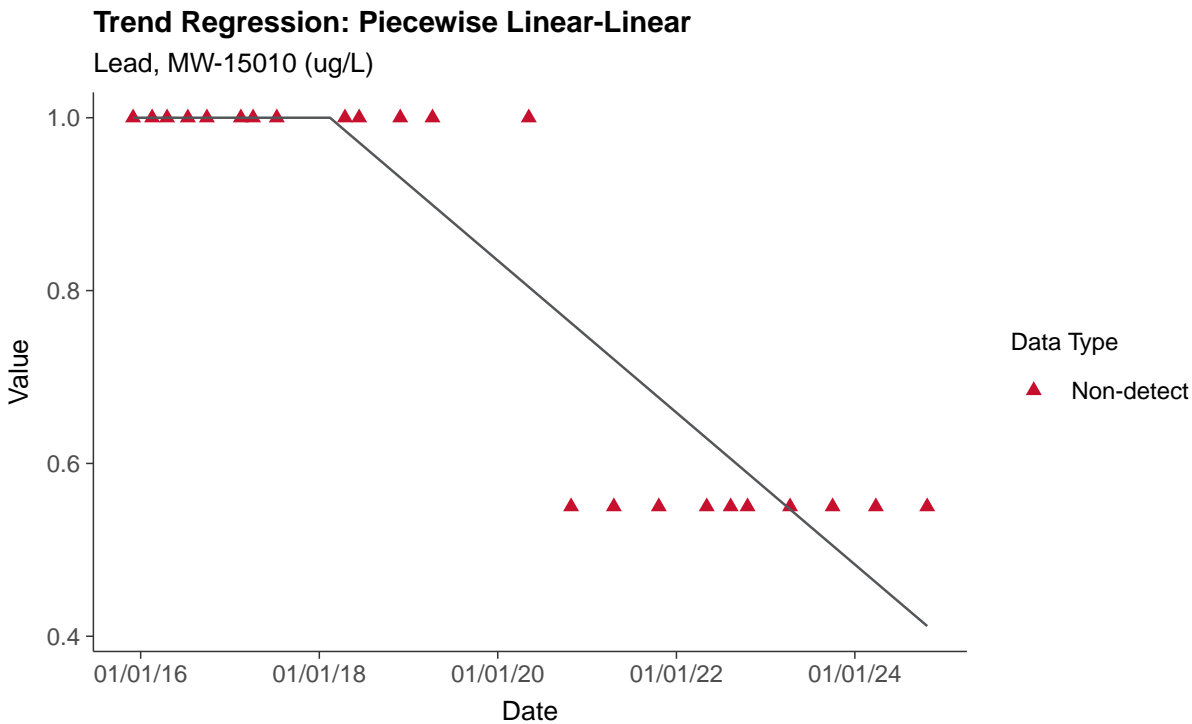




Appendix IV: Lead, MW-15010

ID: 02_2_116





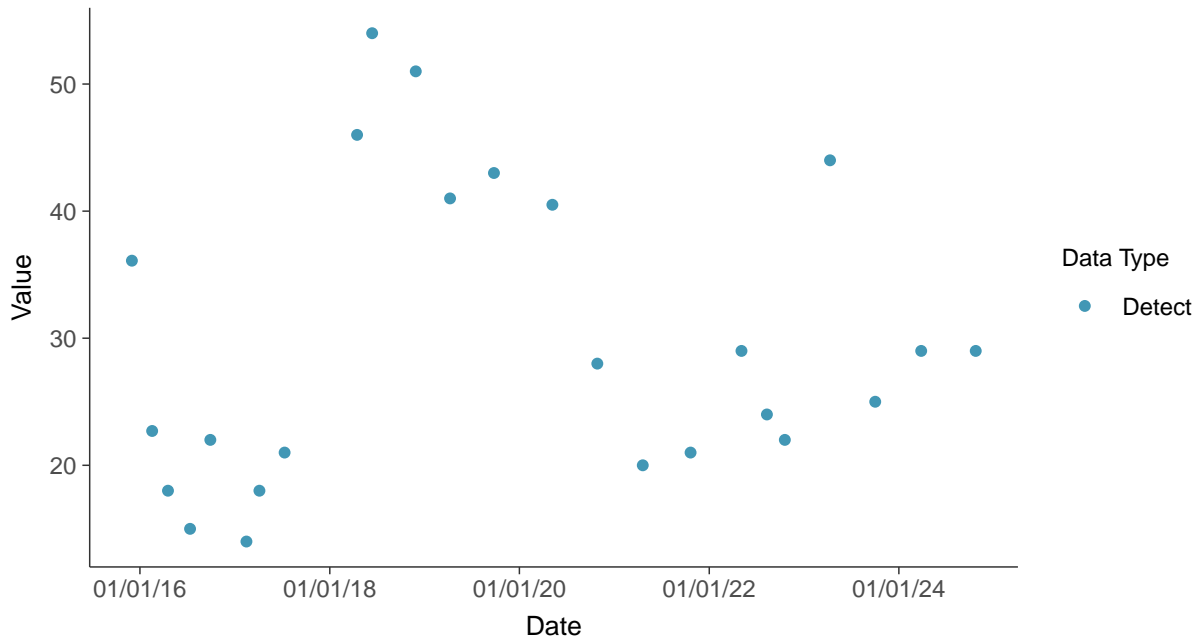


Appendix IV: Lithium, MW-15010

ID: 02_2_117

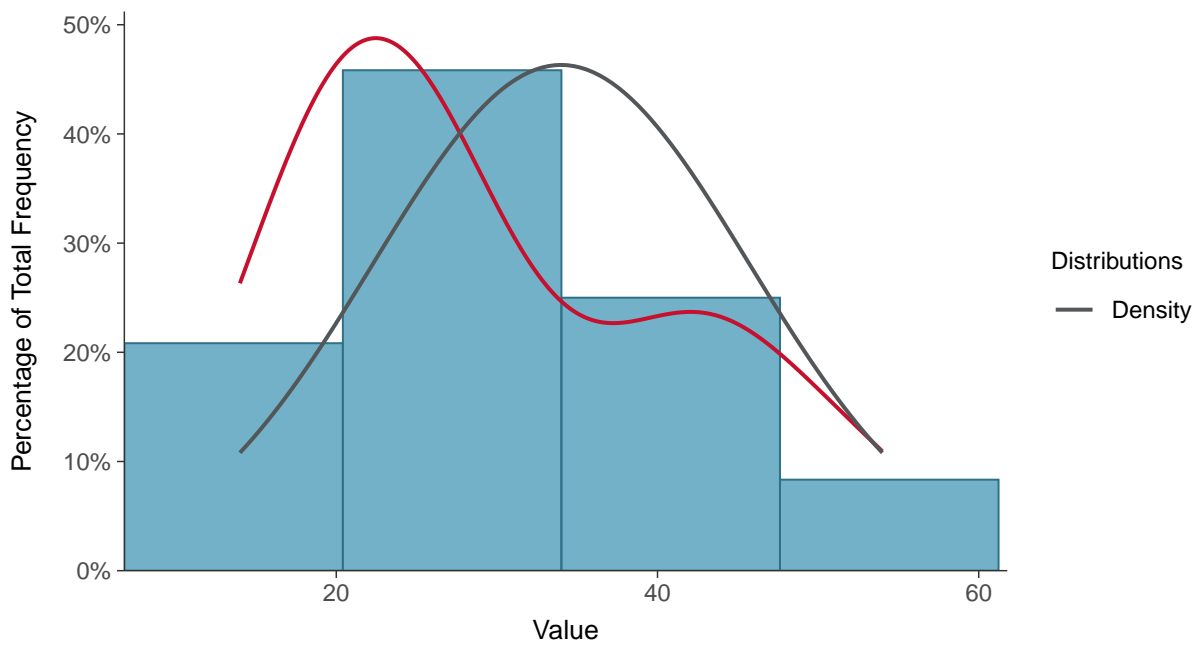
Scatter Plot

Lithium, MW-15010 (ug/L)



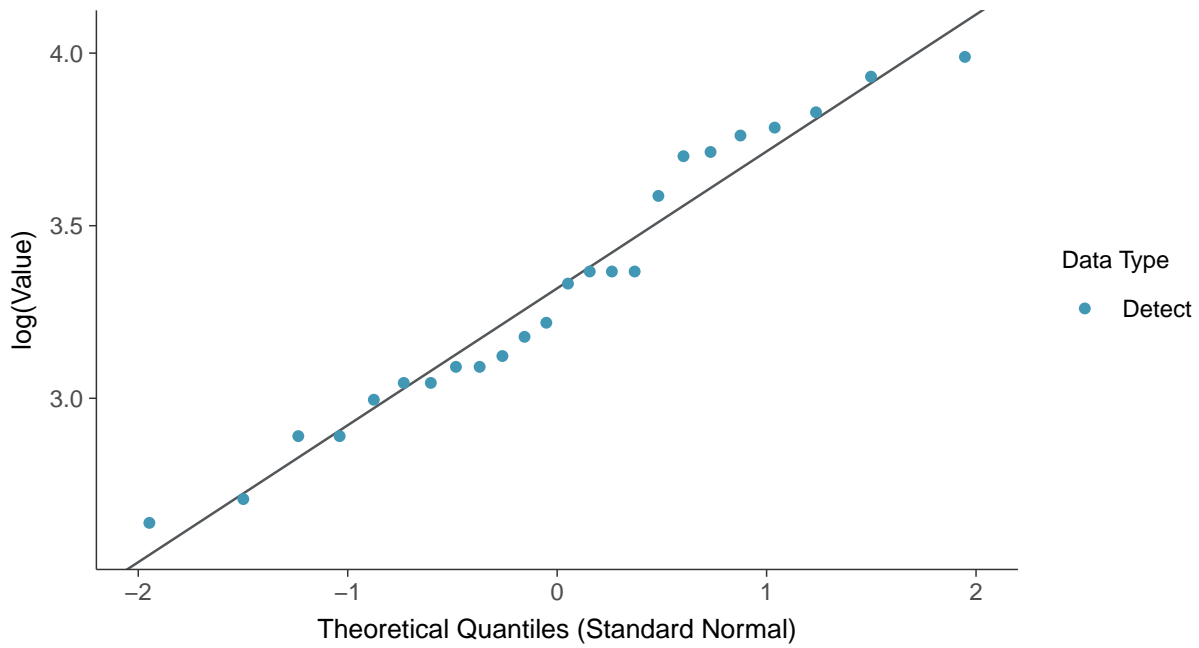
Histogram

Lithium, MW-15010 (ug/L)

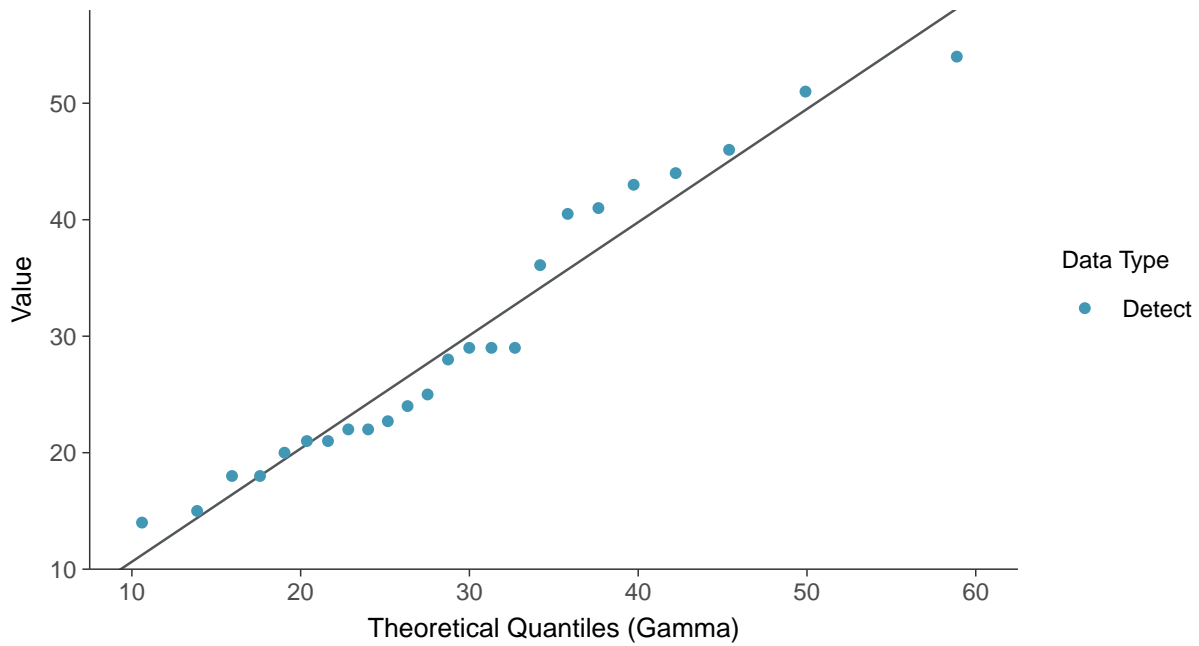




Lognormal Q-Q plot
Lithium, MW-15010 (ug/L)



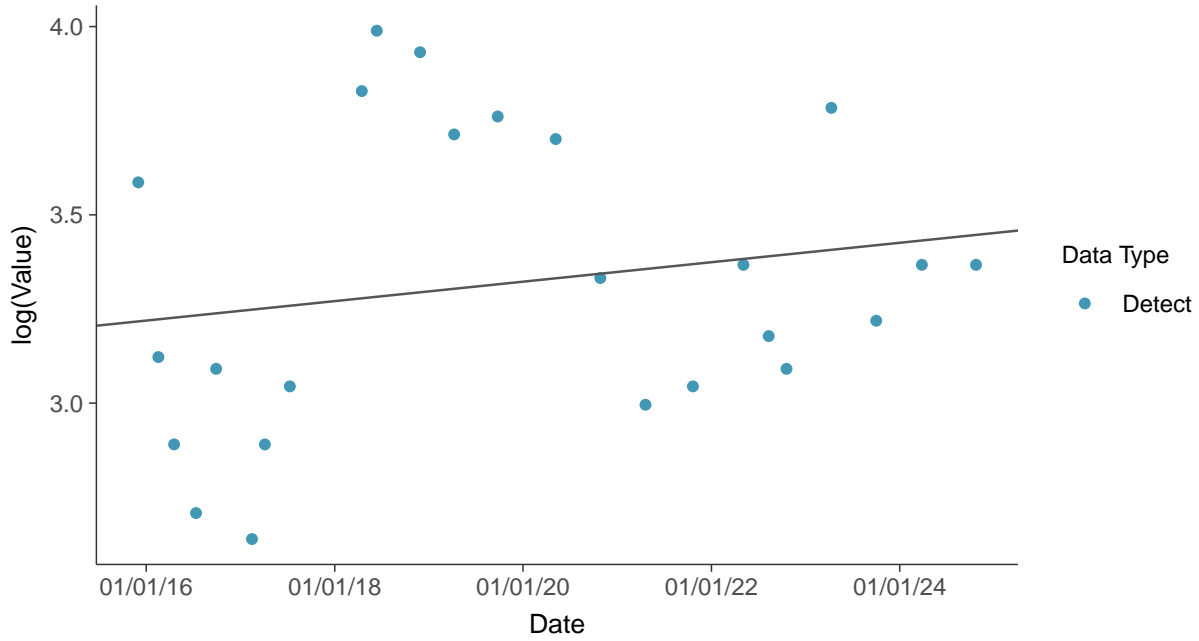
Gamma Q-Q plot
Lithium, MW-15010 (ug/L)





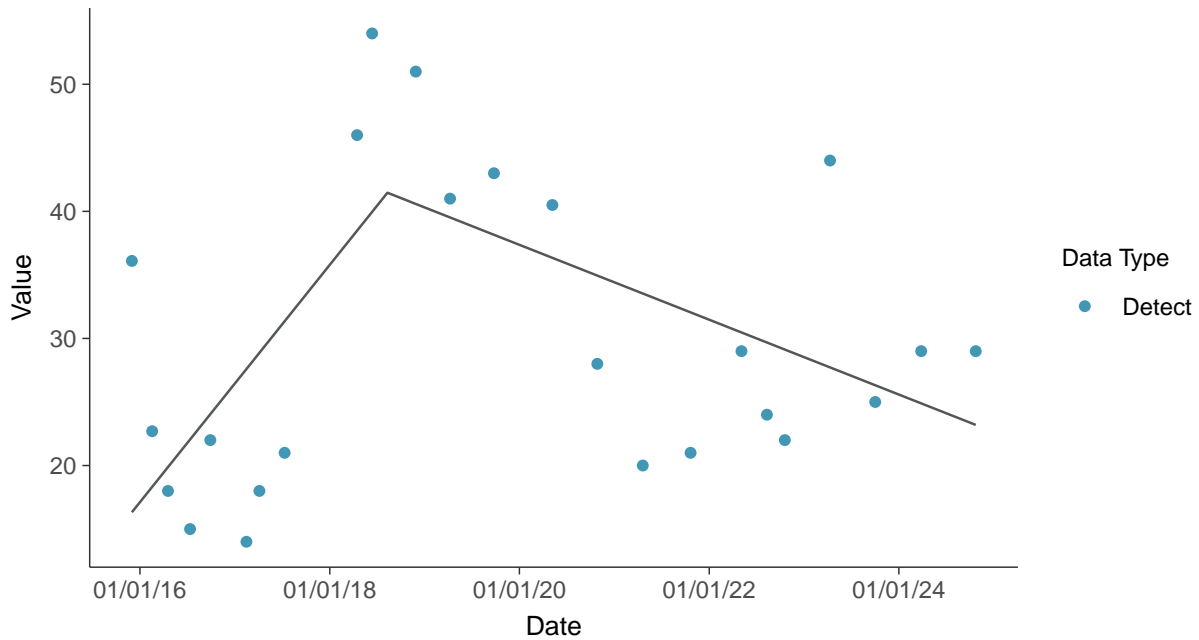
Trend Regression: Lognormal MLE

Lithium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear

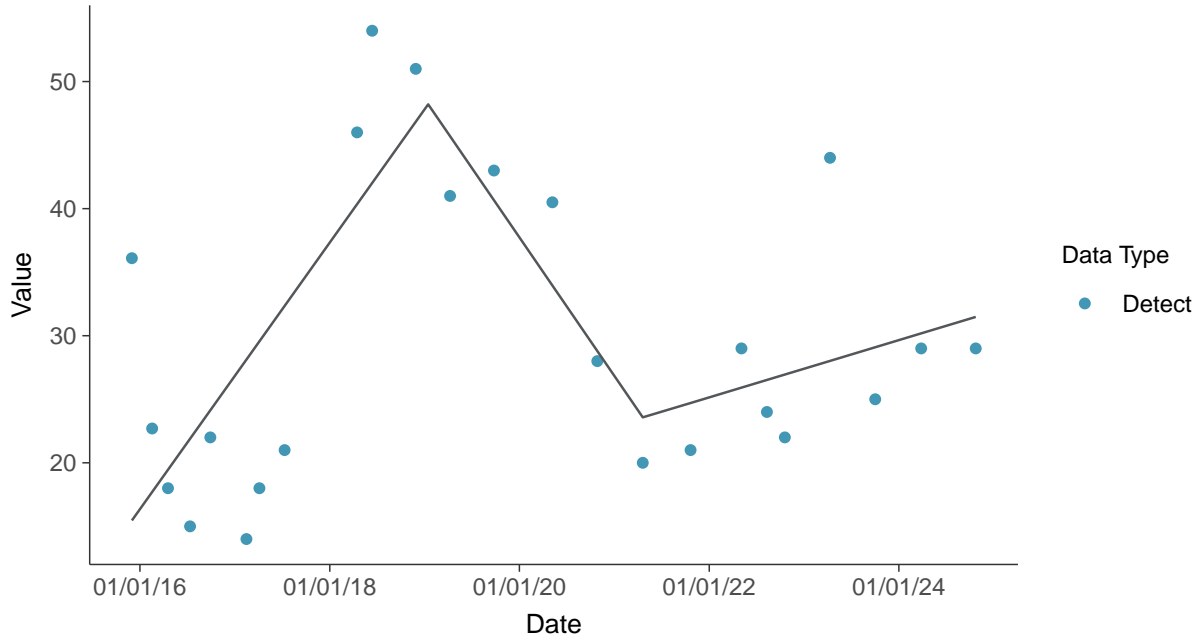
Lithium, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-15010 (ug/L)



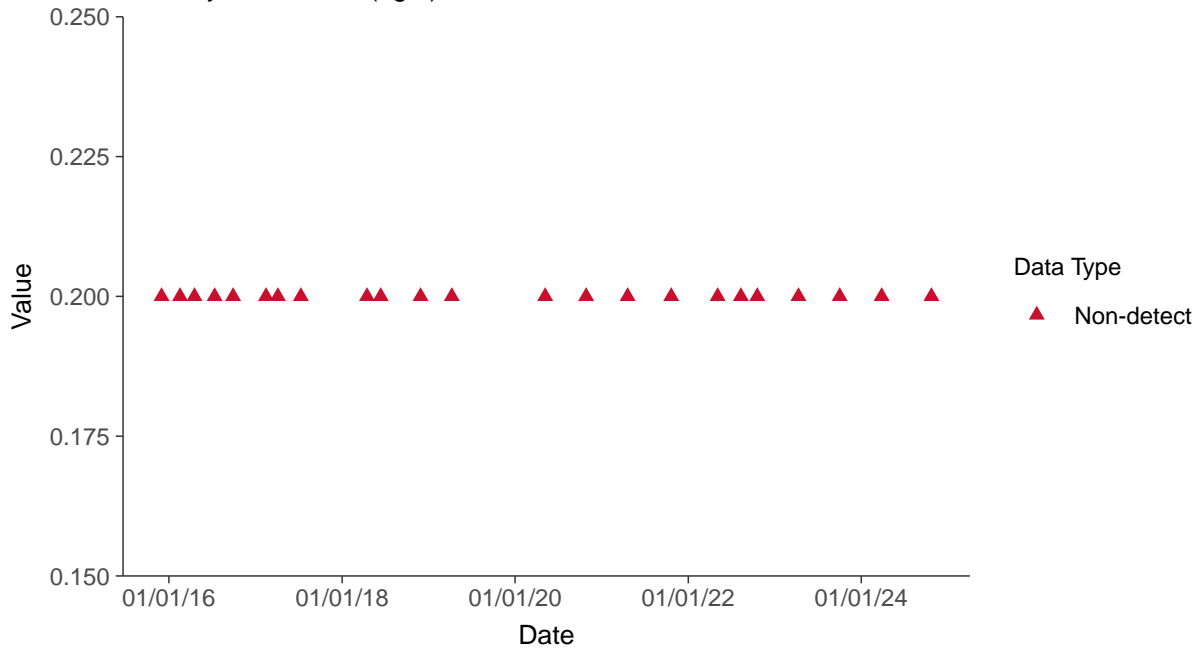


Appendix IV: Mercury, MW-15010

ID: 02_2_118

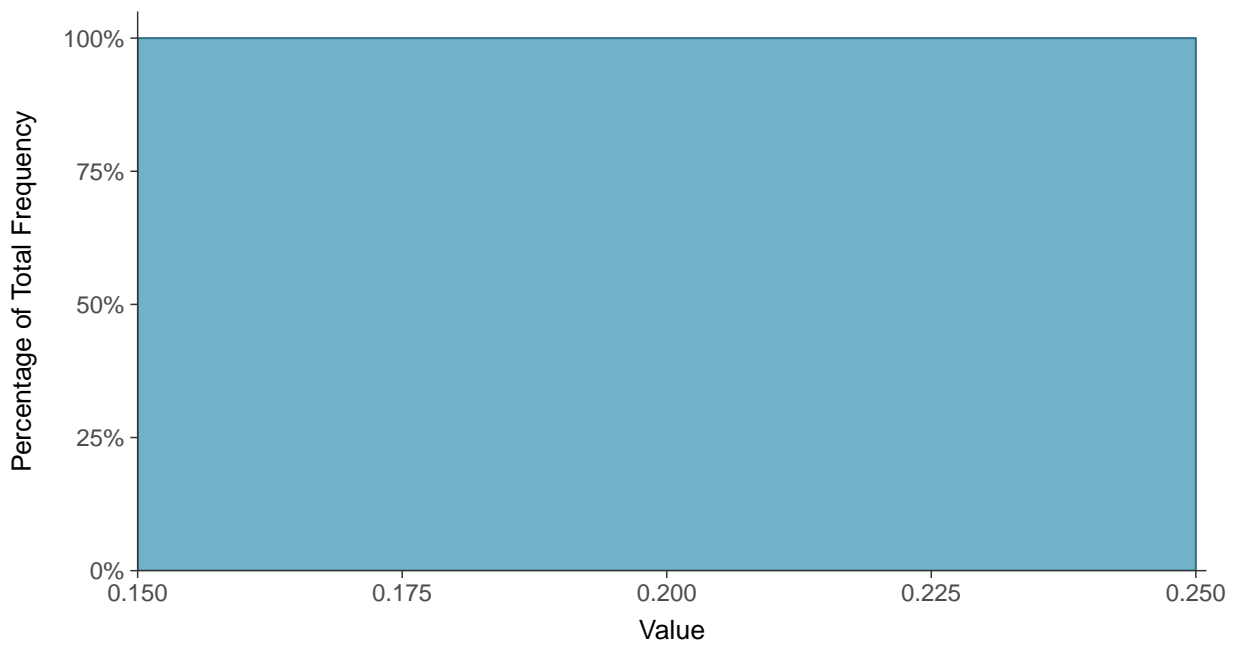
Scatter Plot

Mercury, MW-15010 (ug/L)



Histogram

Mercury, MW-15010 (ug/L)



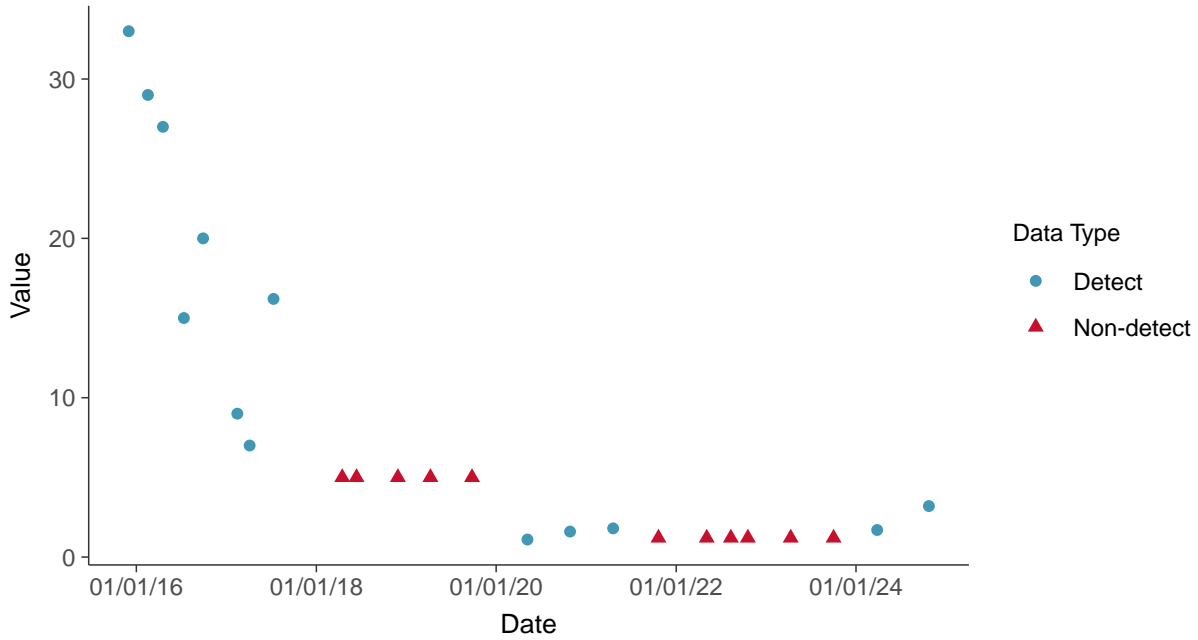


Appendix IV: Molybdenum, MW-15010

ID: 02_2_119

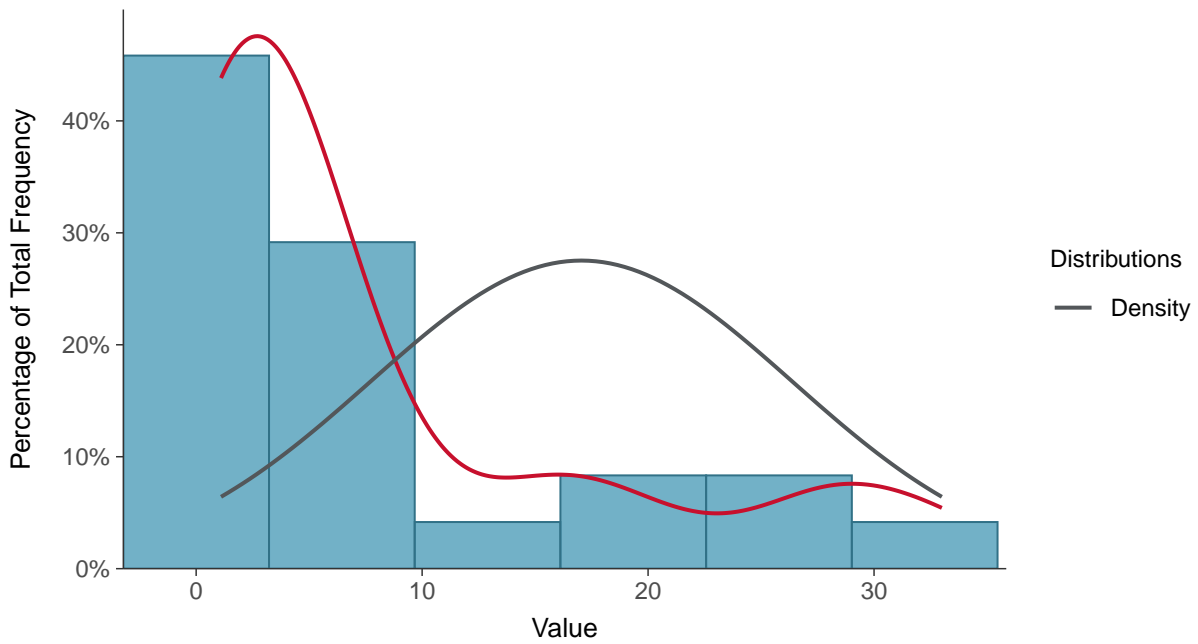
Scatter Plot

Molybdenum, MW-15010 (ug/L)



Histogram

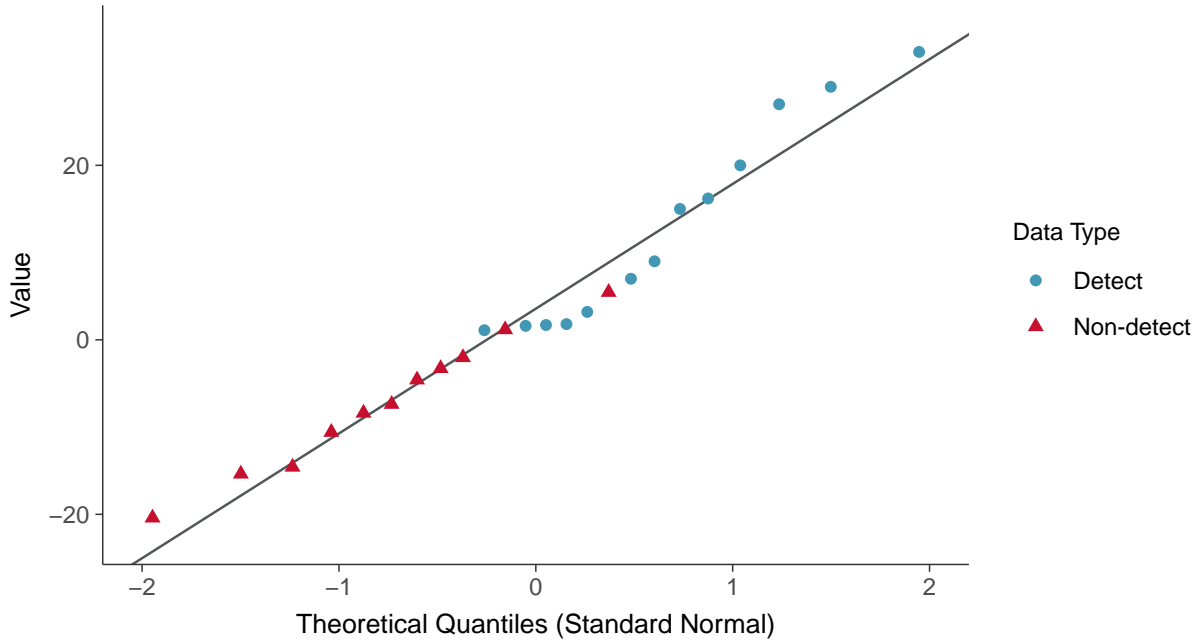
Molybdenum, MW-15010 (ug/L)





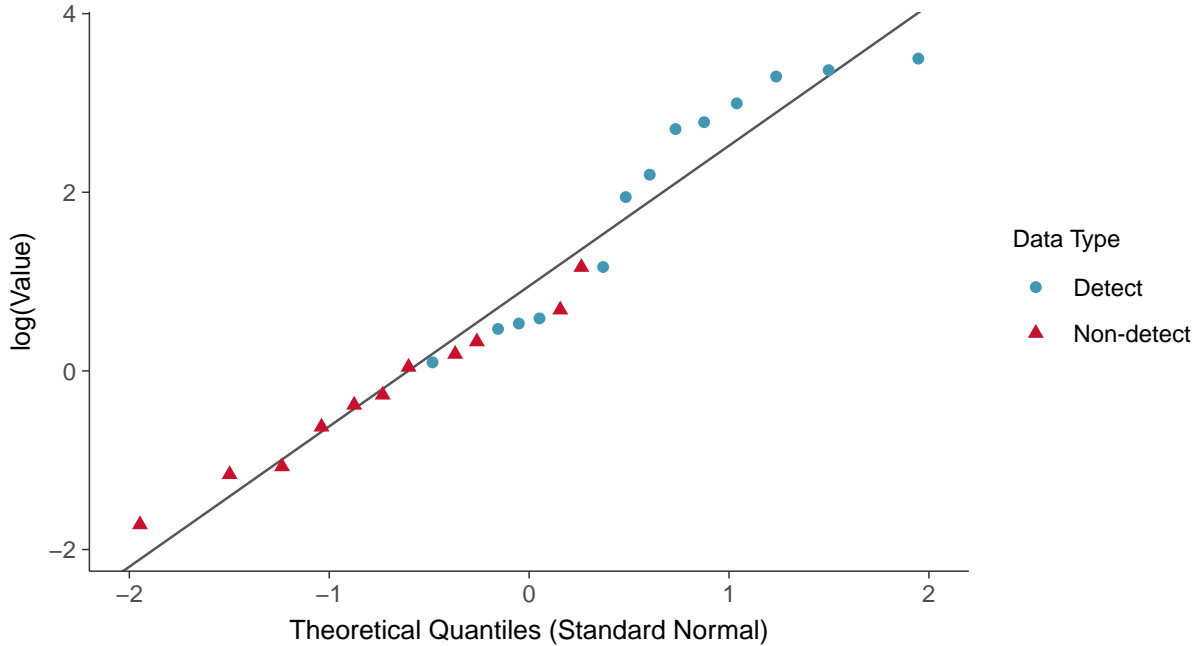
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15010 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

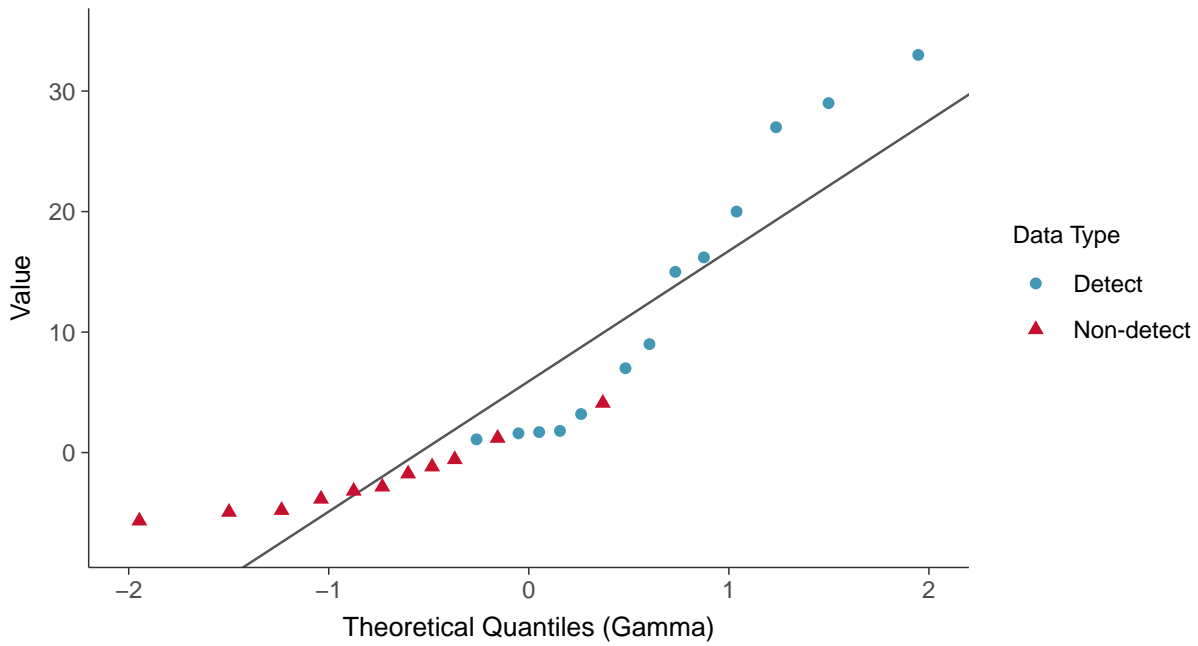
Molybdenum, MW-15010 (ug/L)





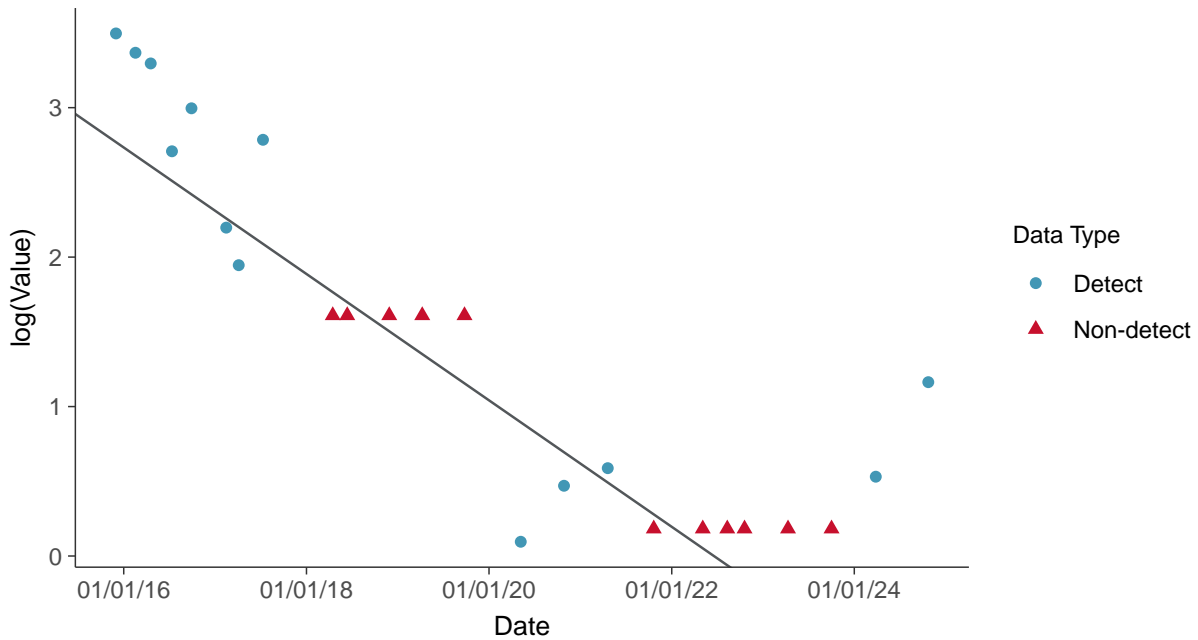
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15010 (ug/L)



Trend Regression: Lognormal MLE

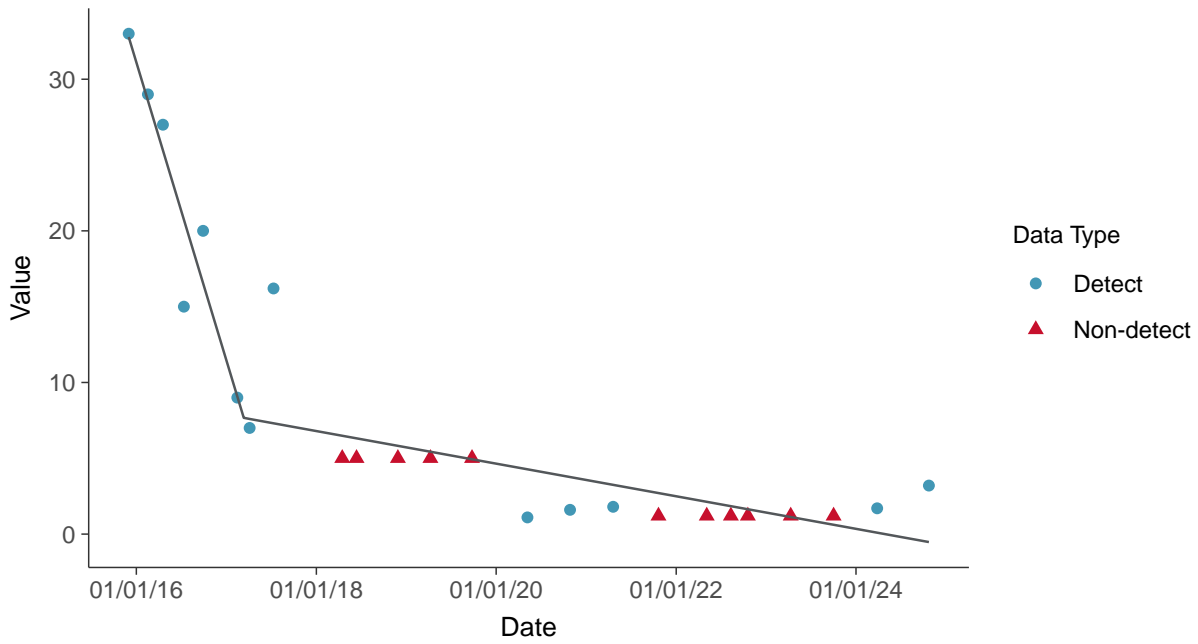
Molybdenum, MW-15010 (ug/L)





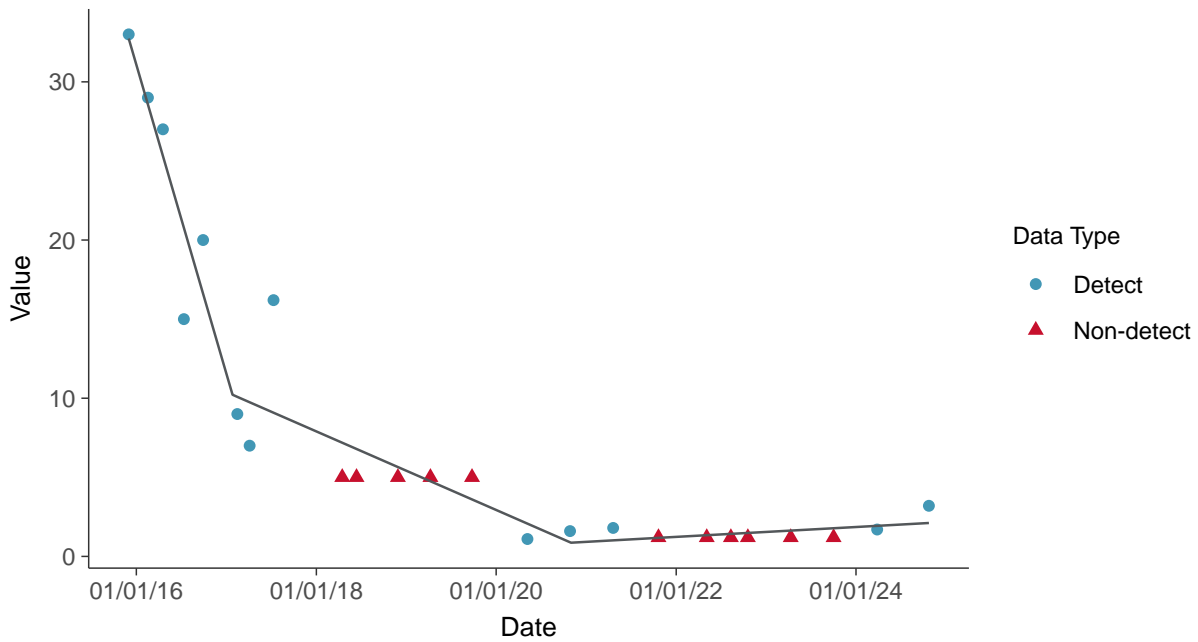
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15010 (ug/L)



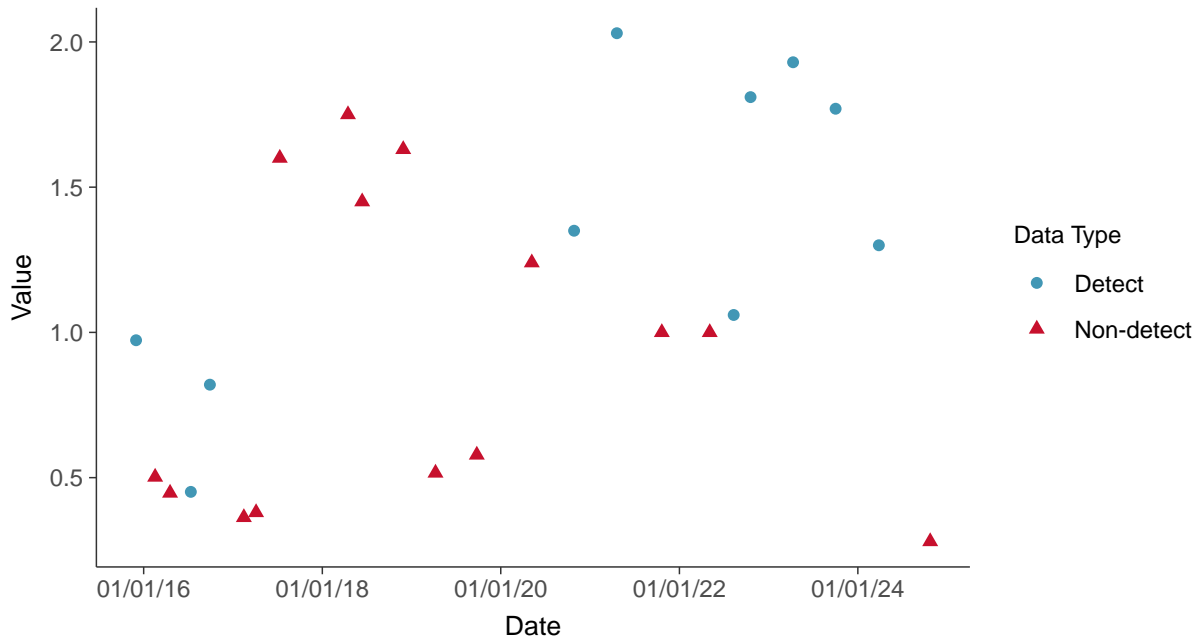


Appendix IV: Radium-226+228, MW-15010

ID: 02_2_125

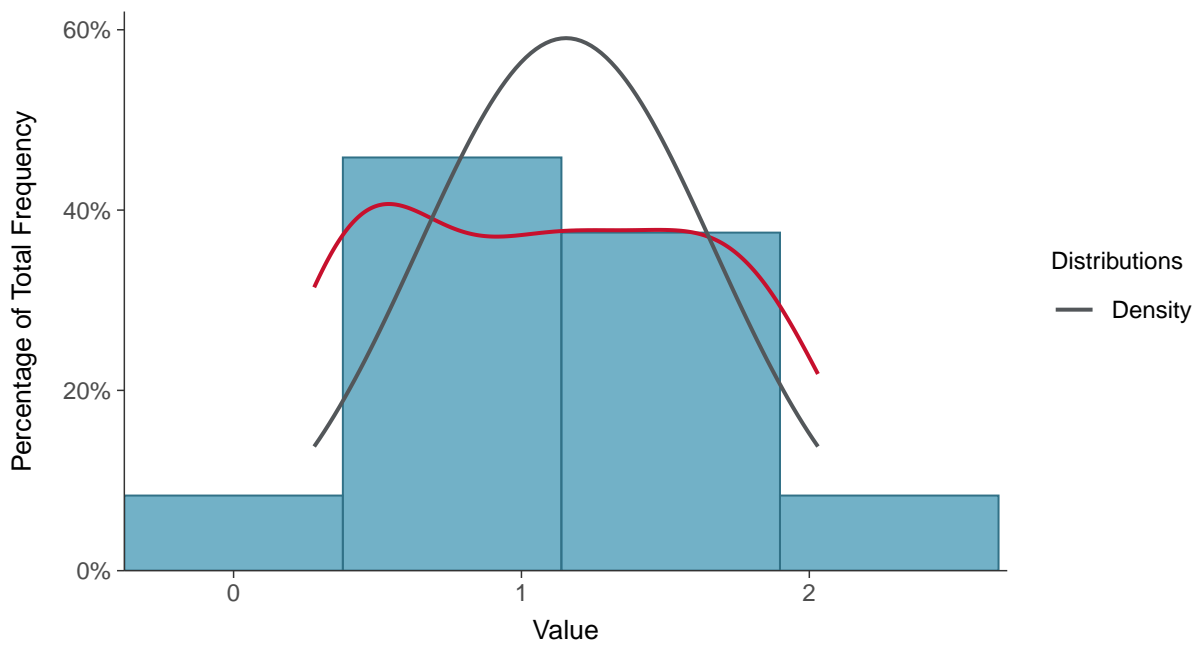
Scatter Plot

Radium-226+228, MW-15010 (pCi/L)



Histogram

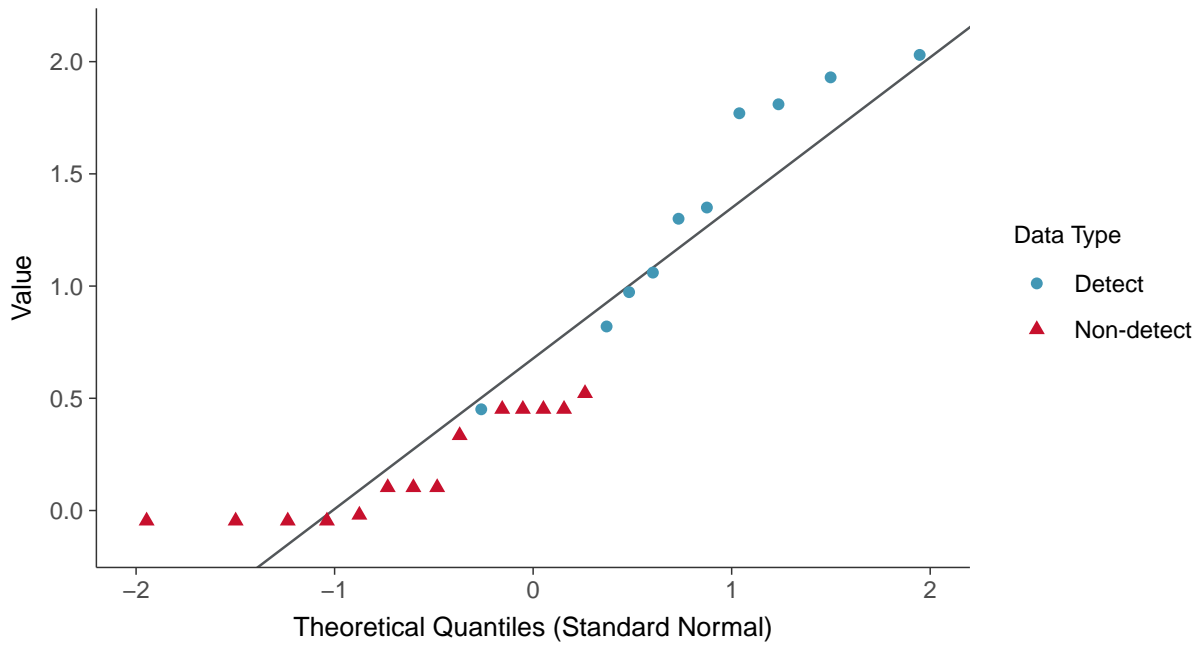
Radium-226+228, MW-15010 (pCi/L)





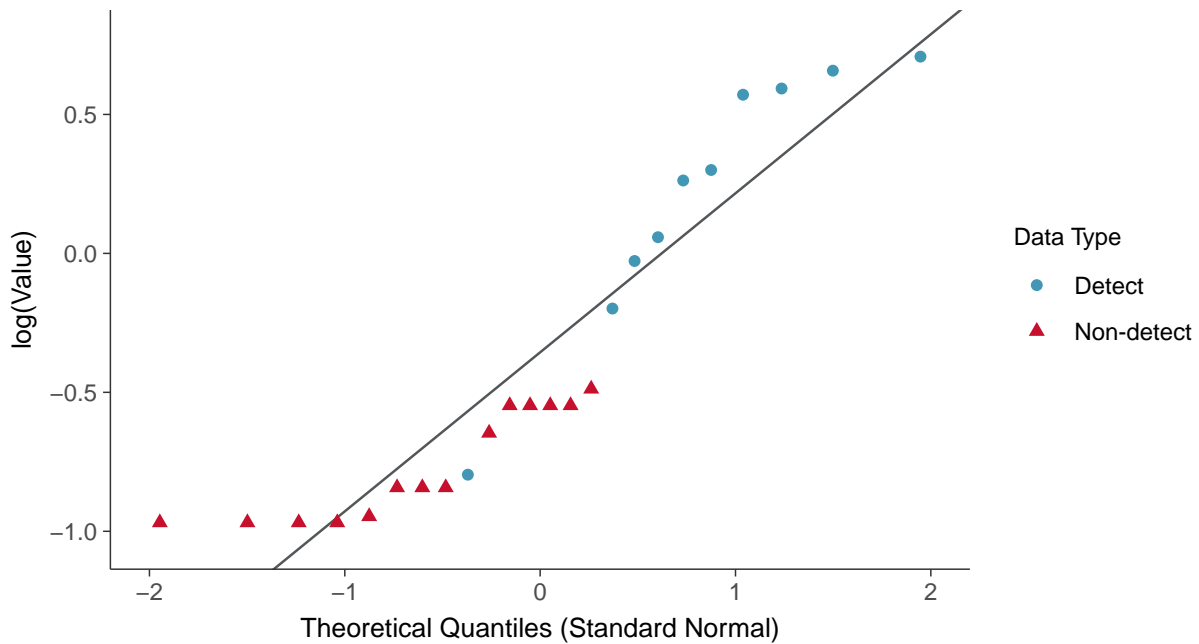
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15010 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

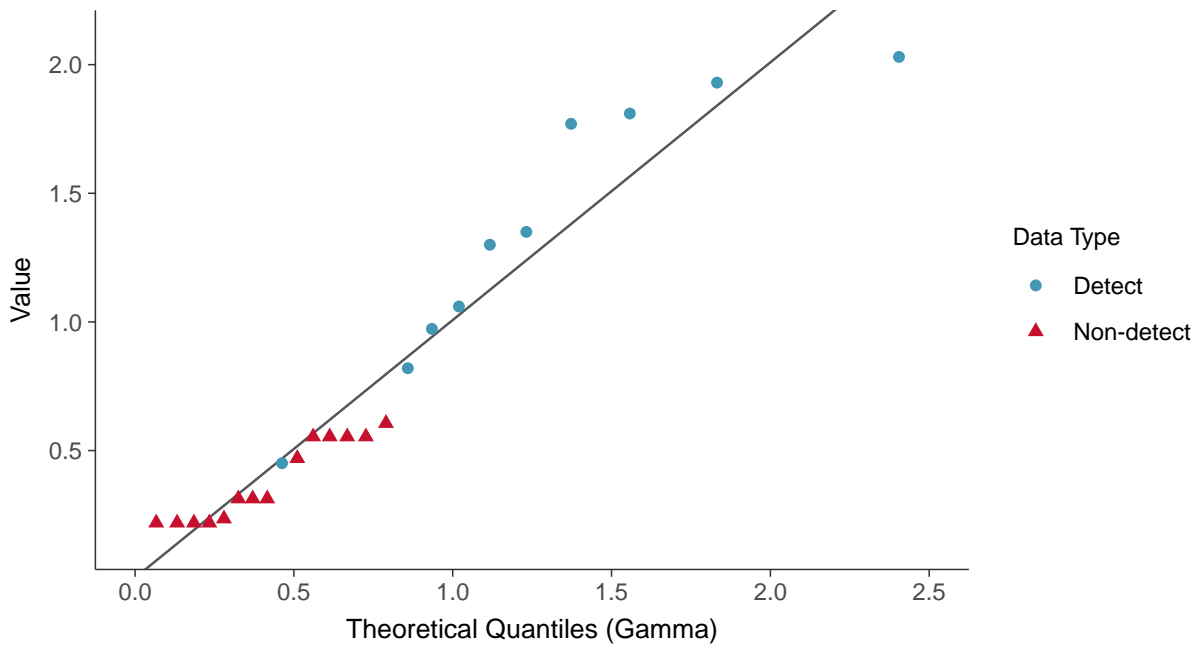
Radium-226+228, MW-15010 (pCi/L)





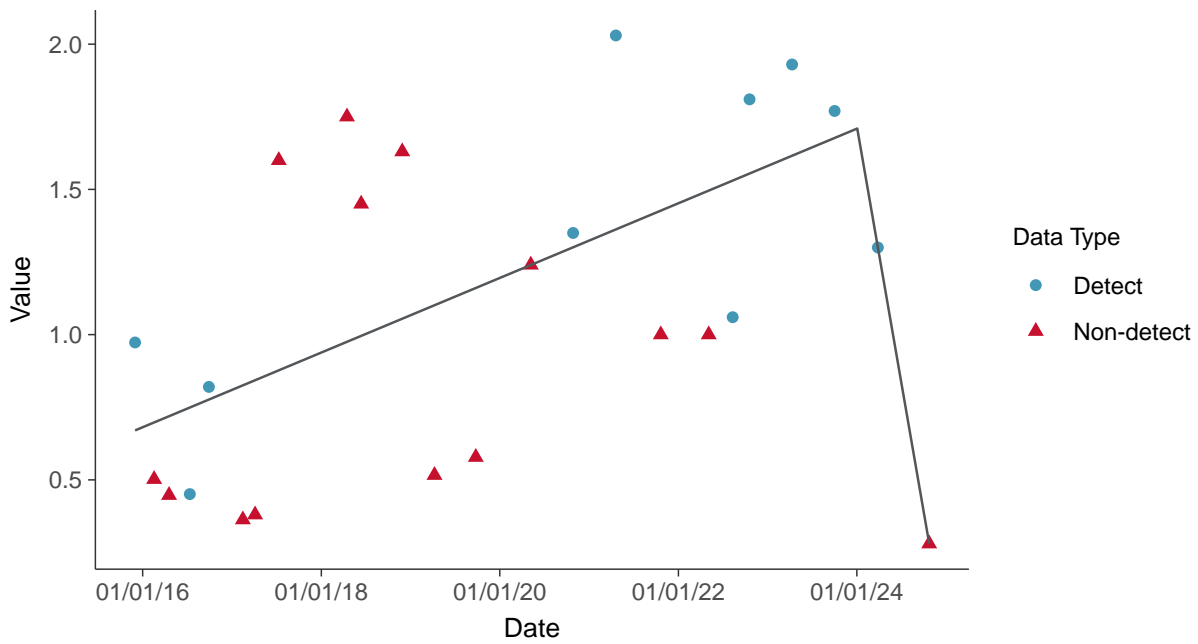
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15010 (pCi/L)



Trend Regression: Piecewise Linear-Linear

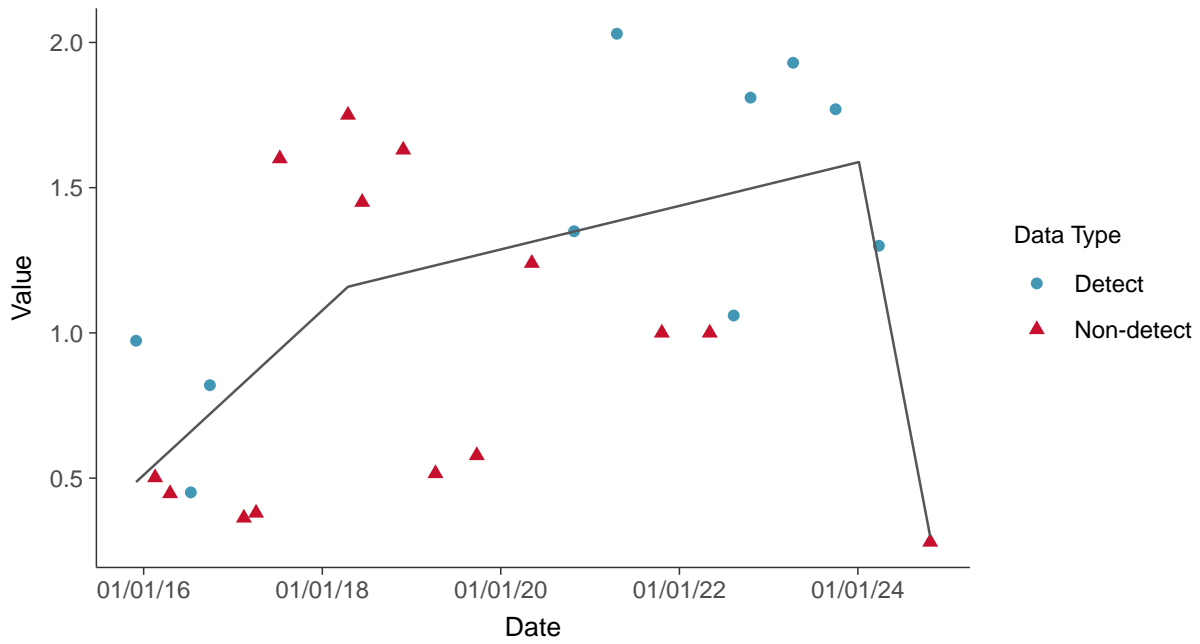
Radium-226+228, MW-15010 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

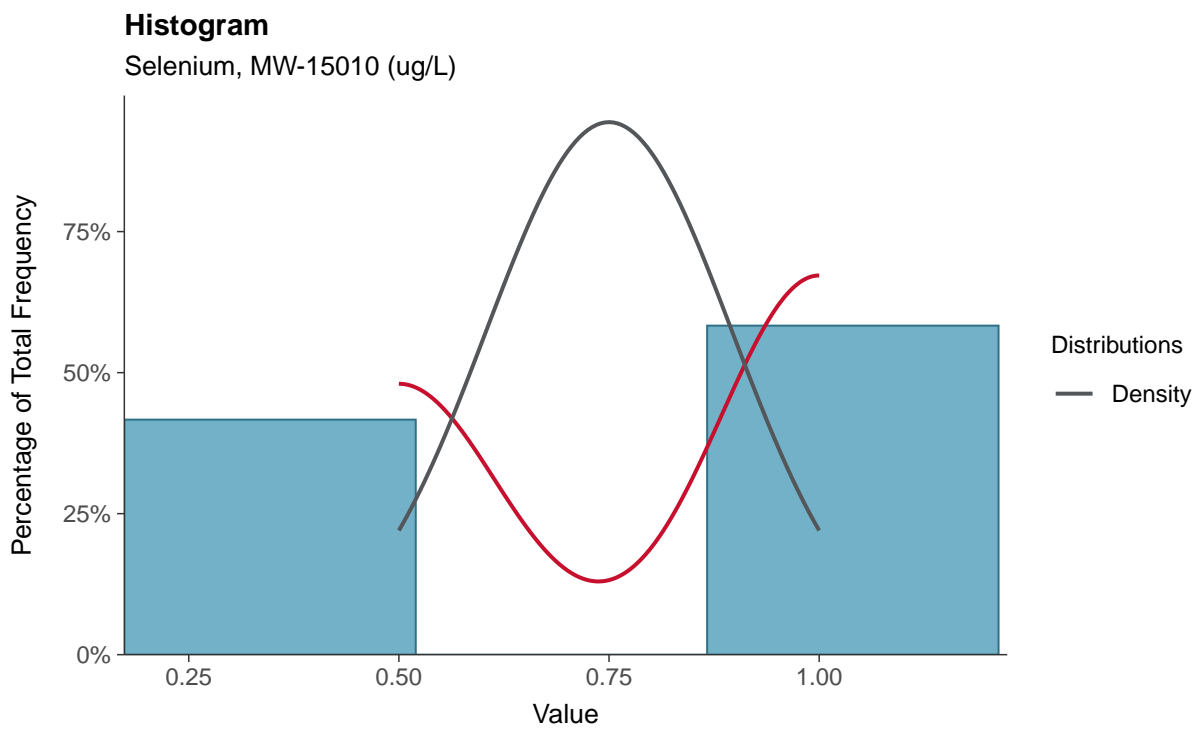
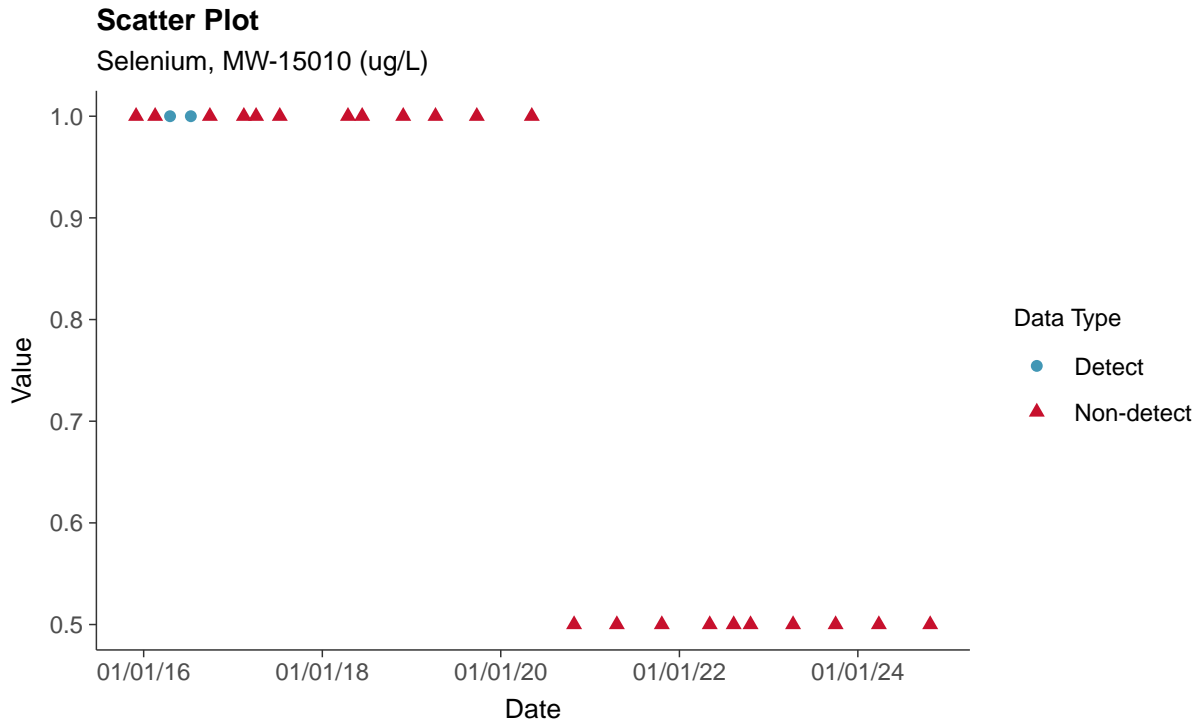
Radium-226+228, MW-15010 (pCi/L)





Appendix IV: Selenium, MW-15010

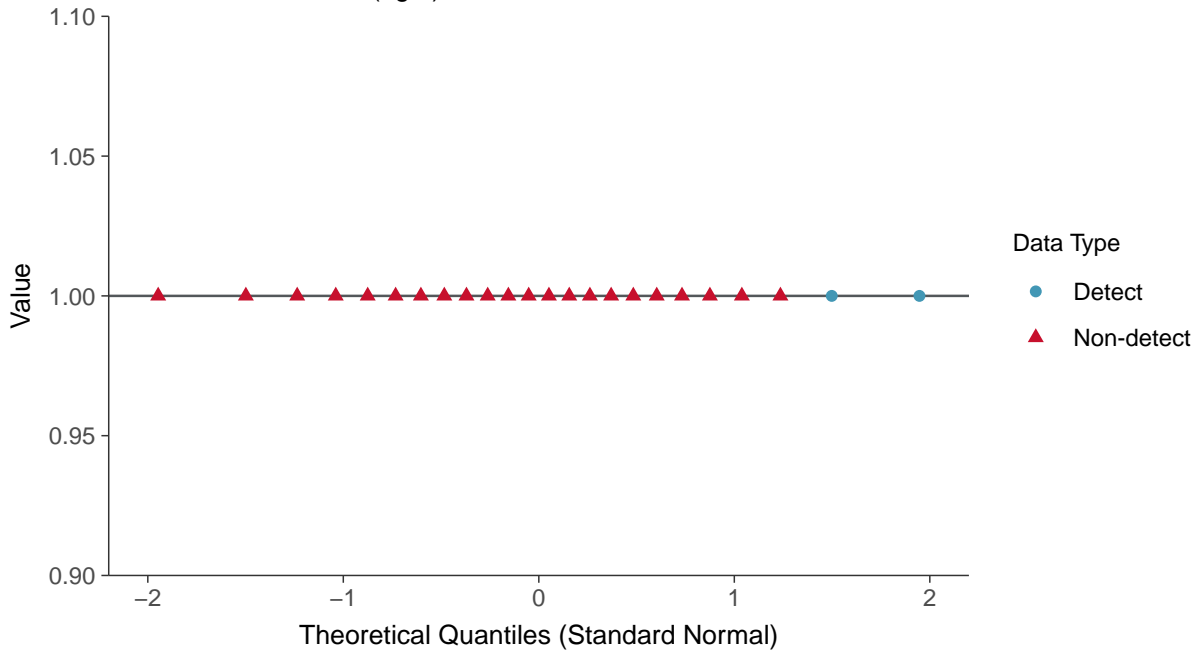
ID: 02_2_127





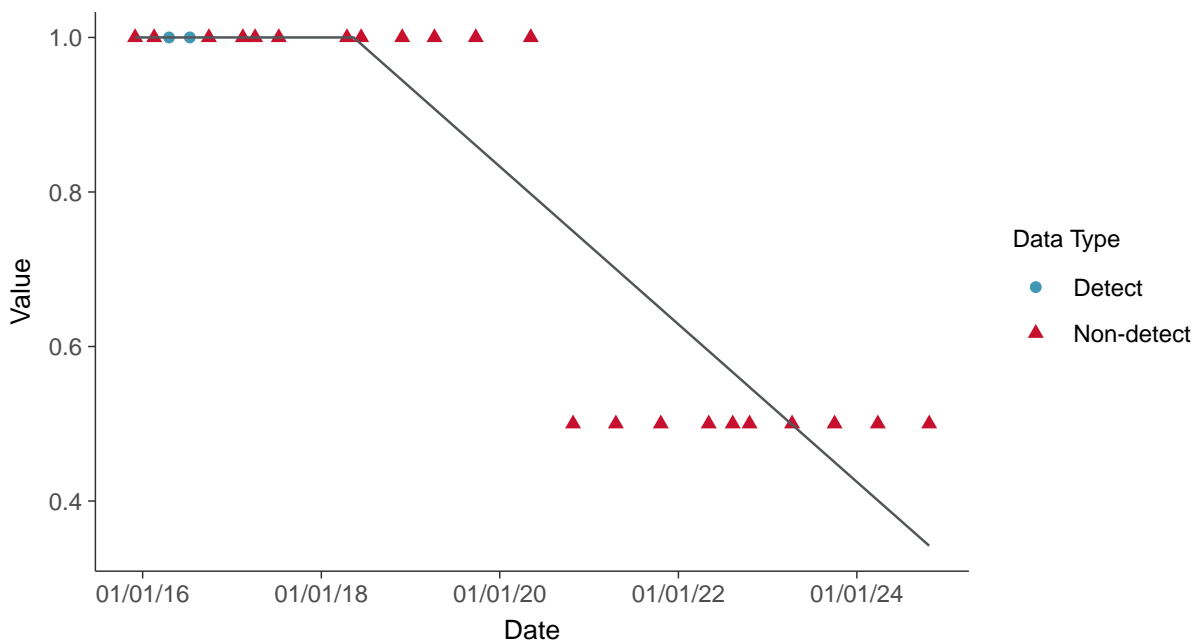
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15010 (ug/L)



Trend Regression: Piecewise Linear-Linear

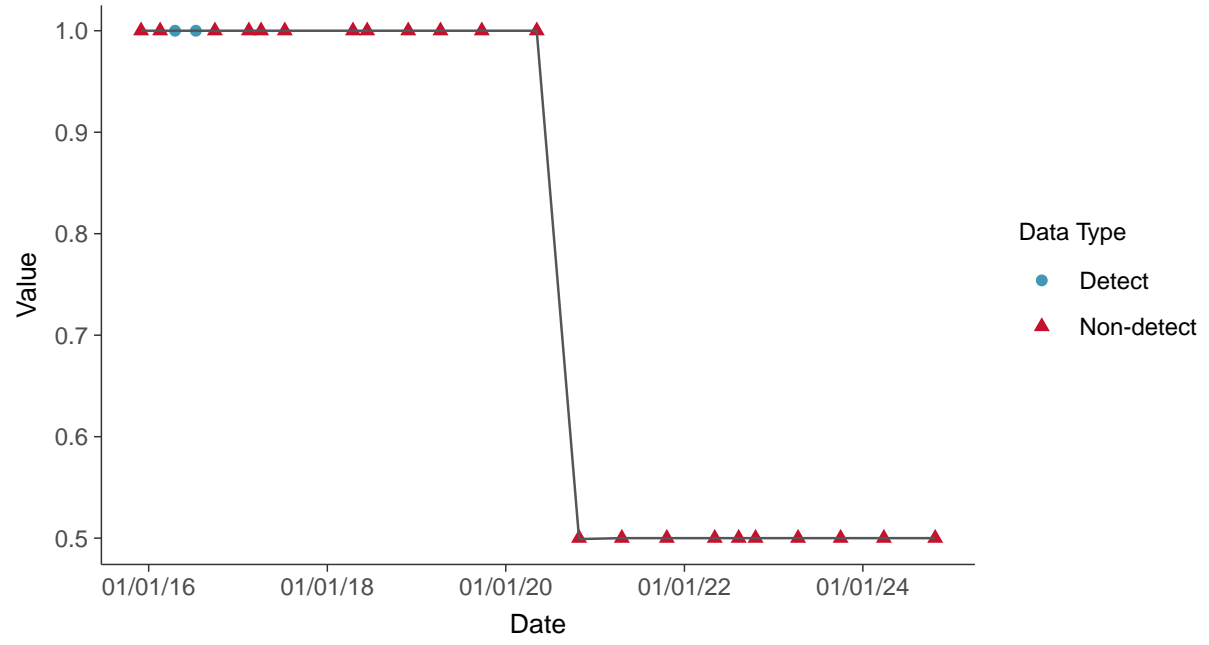
Selenium, MW-15010 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

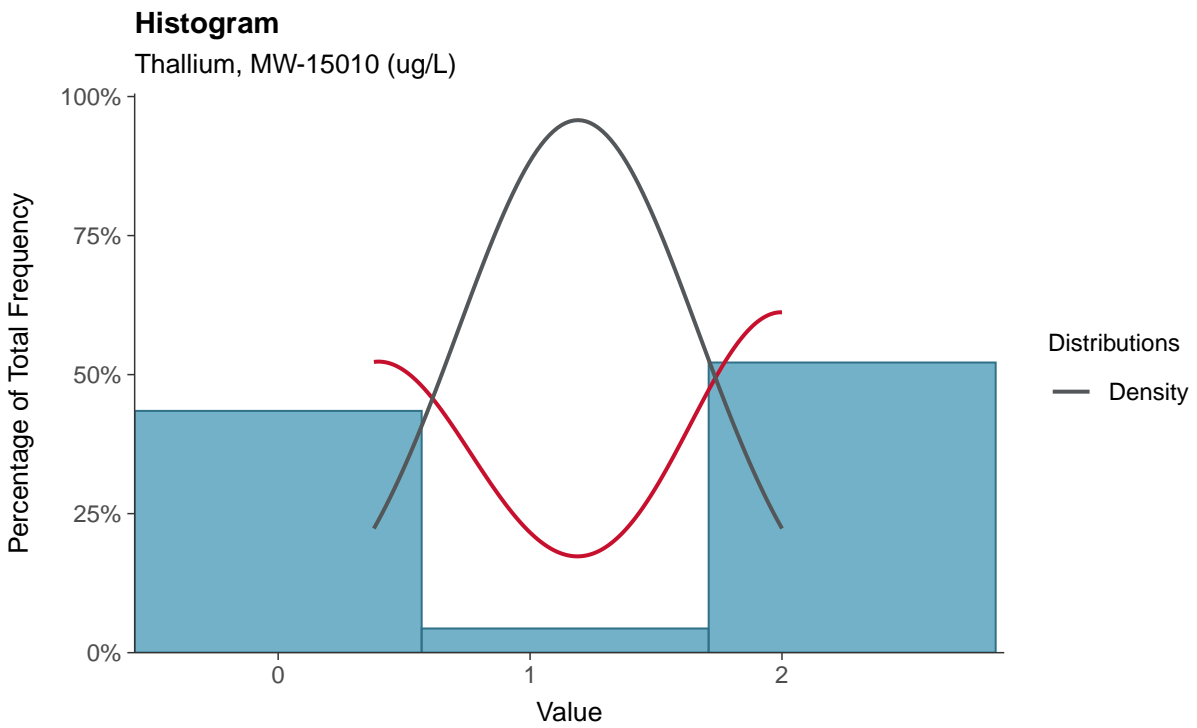
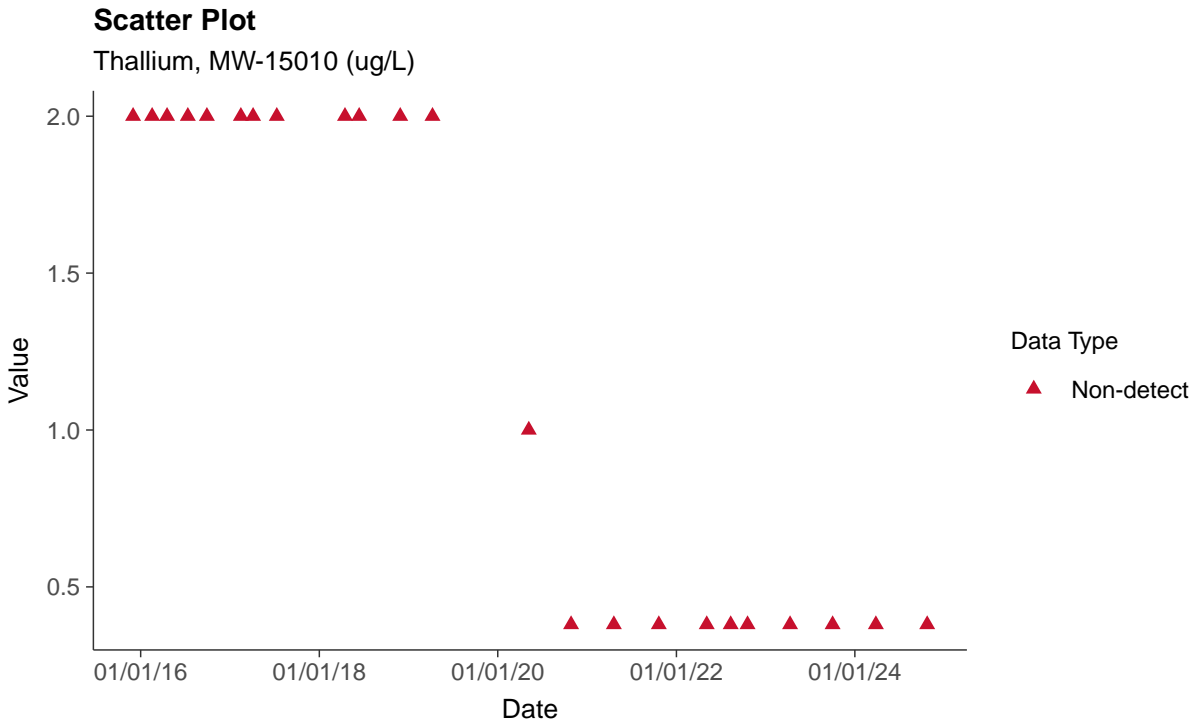
Selenium, MW-15010 (ug/L)





Appendix IV: Thallium, MW-15010

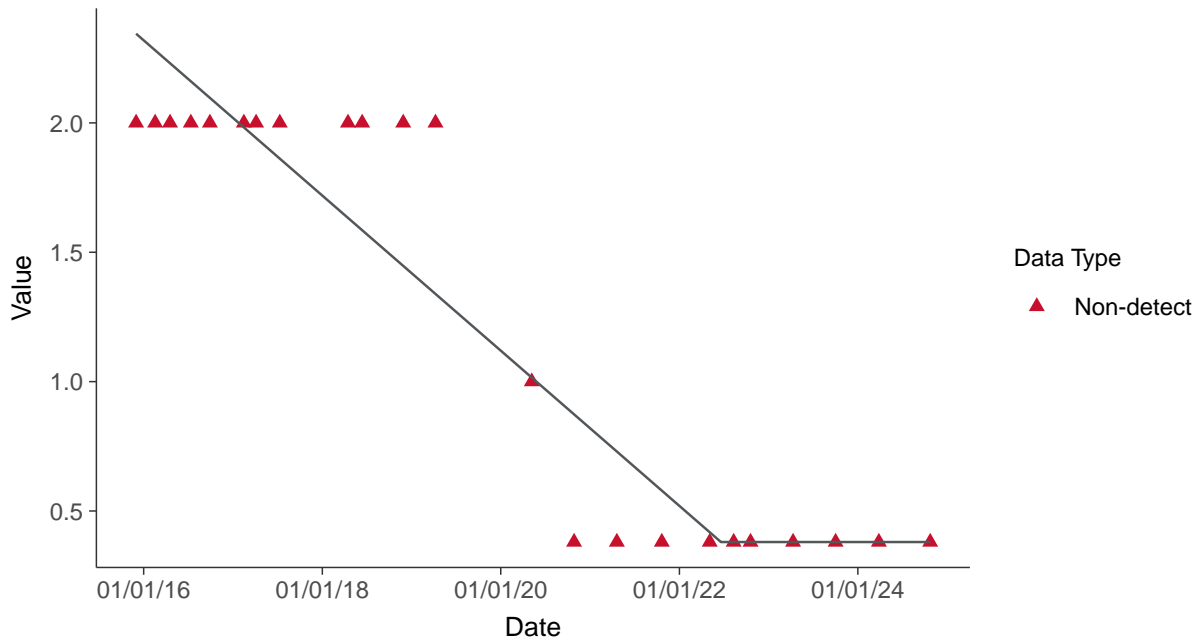
ID: 02_2_131





Trend Regression: Piecewise Linear-Linear

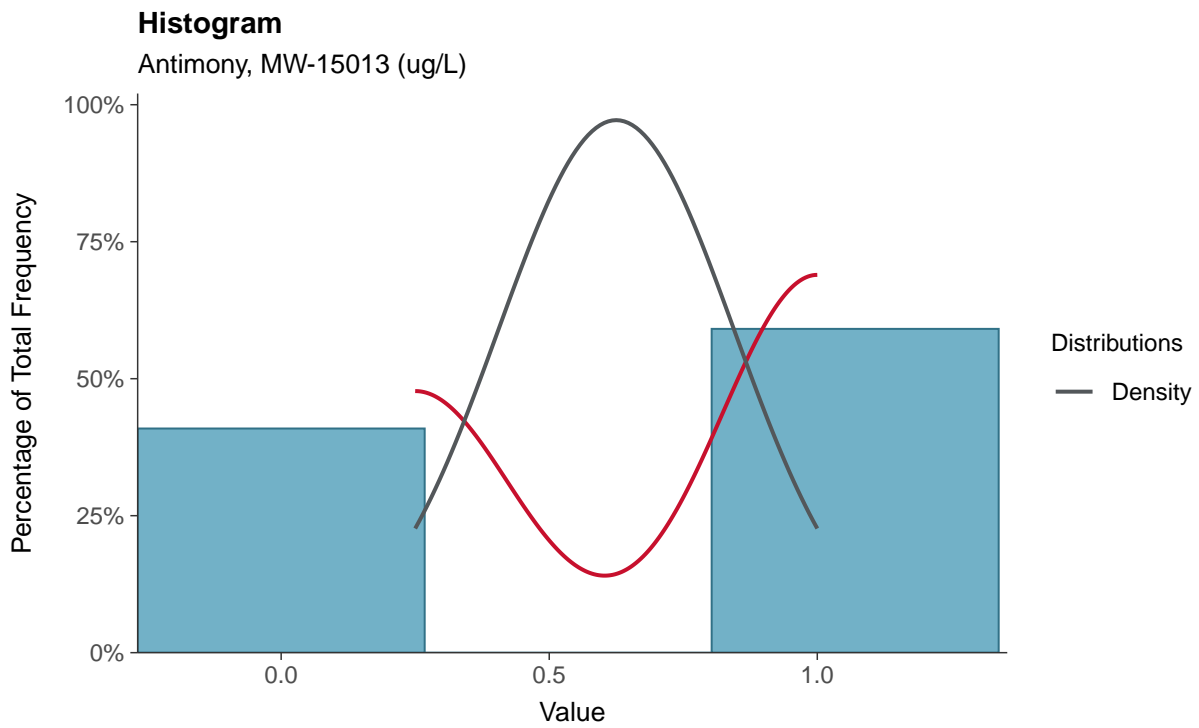
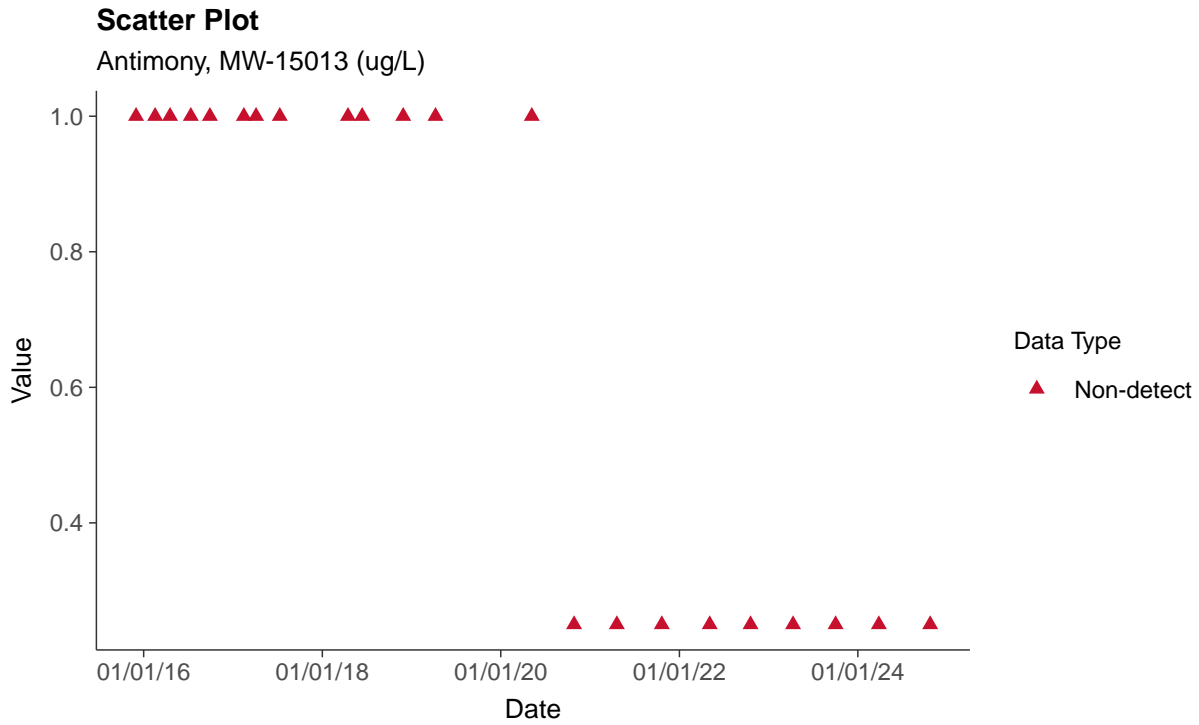
Thallium, MW-15010 (ug/L)





Appendix IV: Antimony, MW-15013

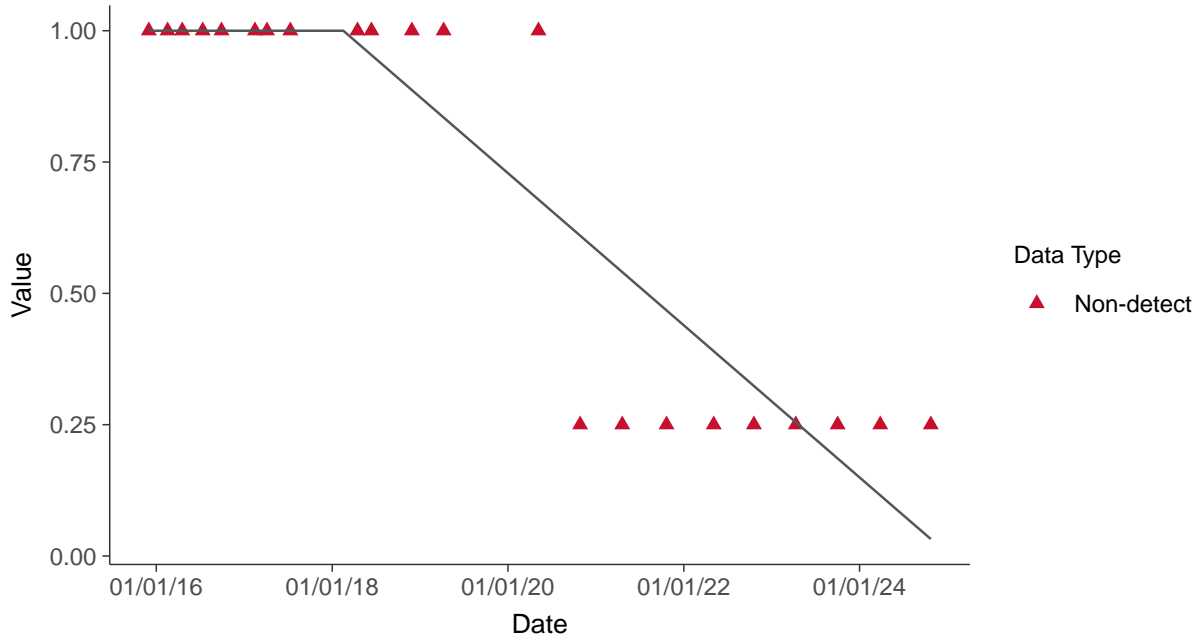
ID: 03_2_101





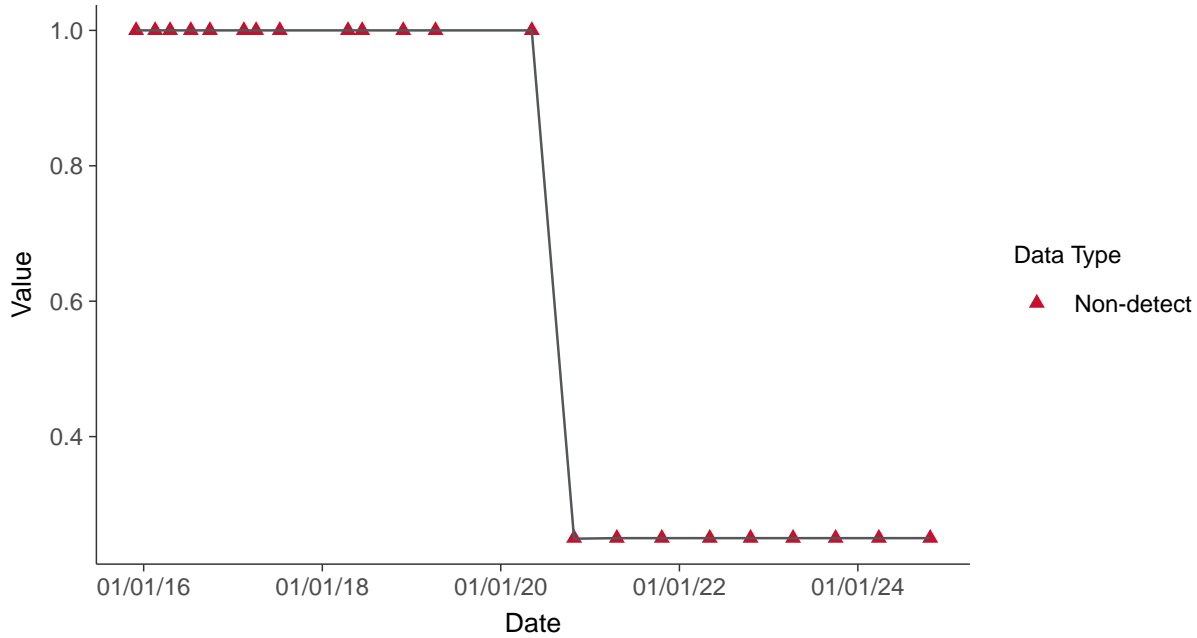
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15013 (ug/L)



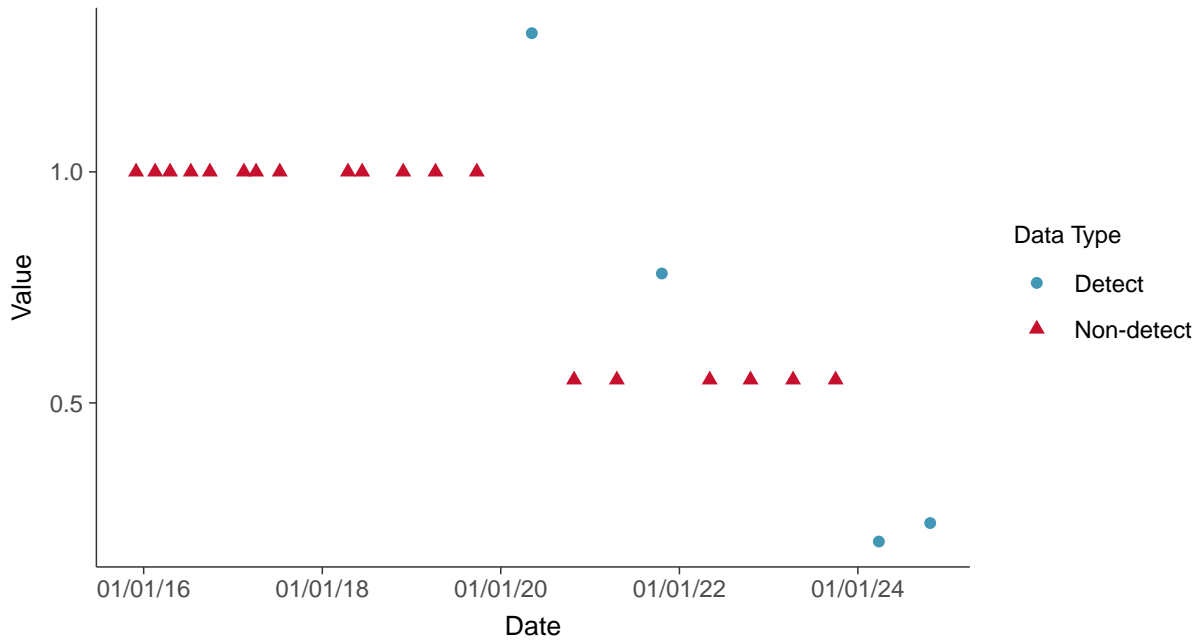


Appendix IV: Arsenic, MW-15013

ID: 03_2_102

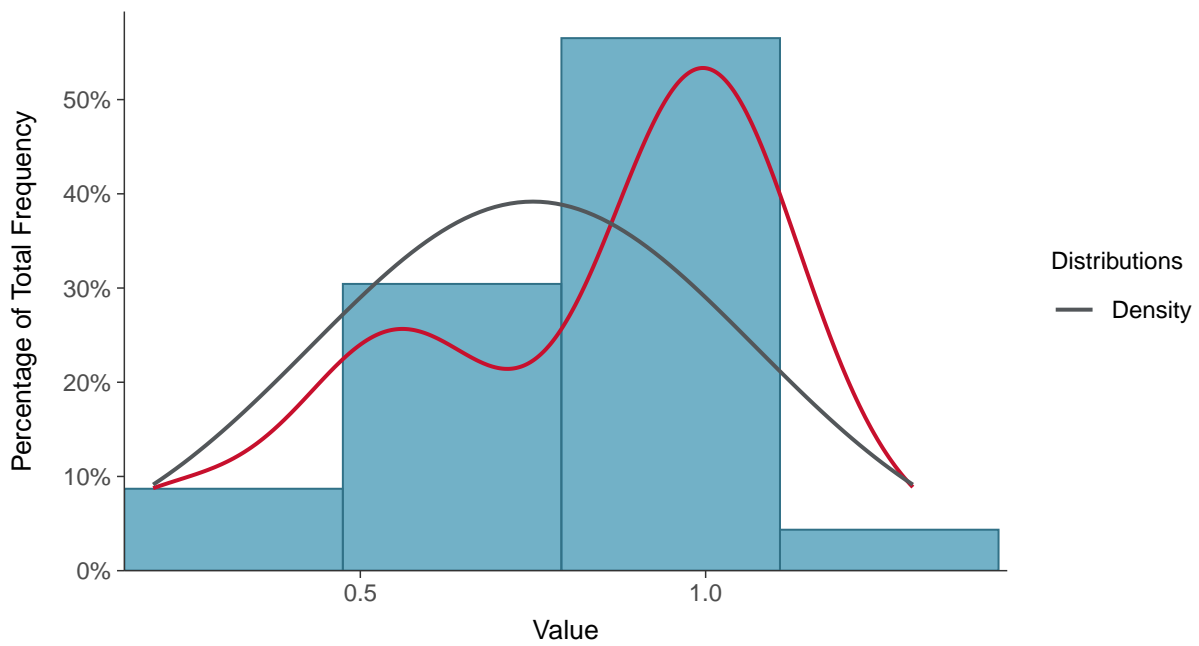
Scatter Plot

Arsenic, MW-15013 (ug/L)



Histogram

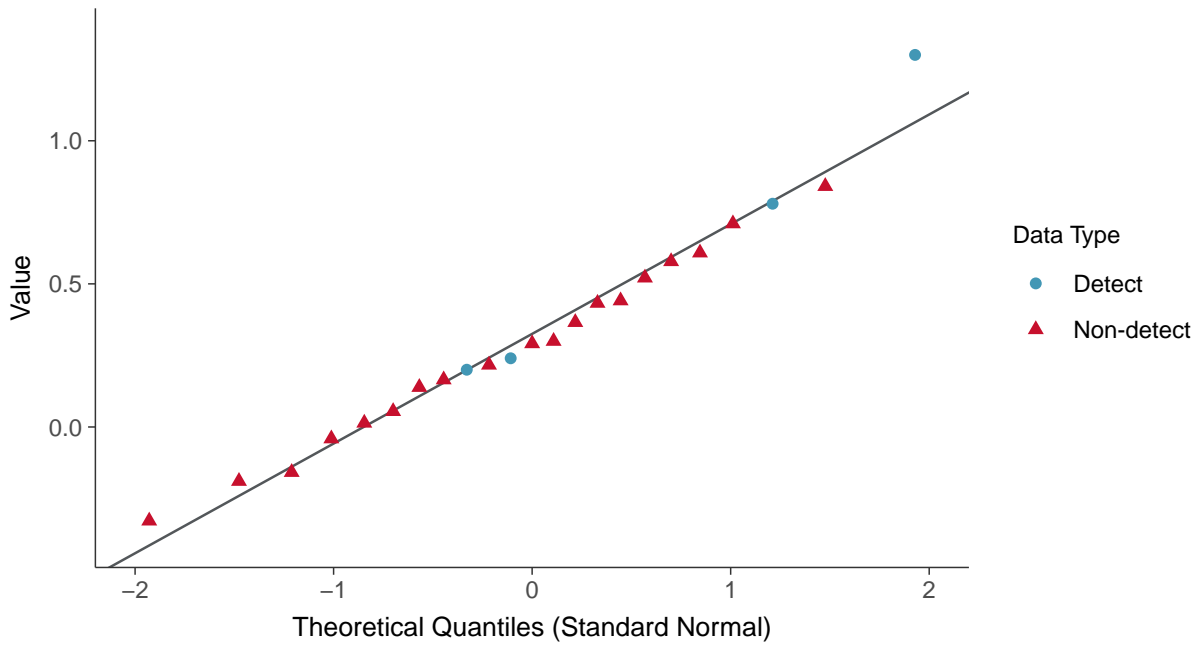
Arsenic, MW-15013 (ug/L)





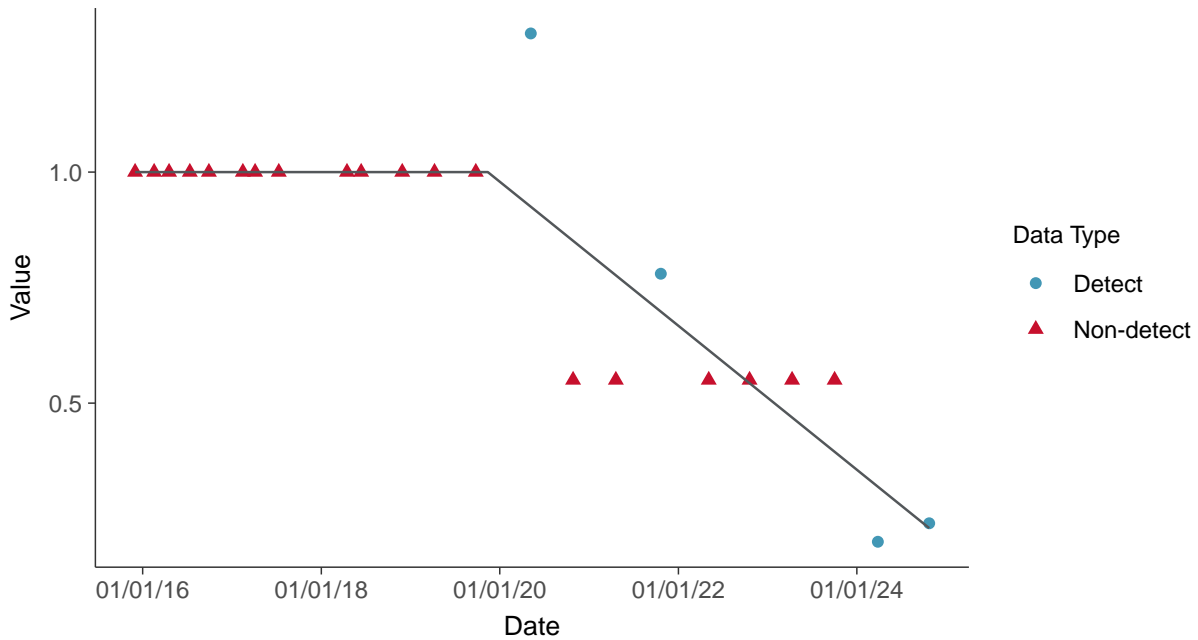
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear

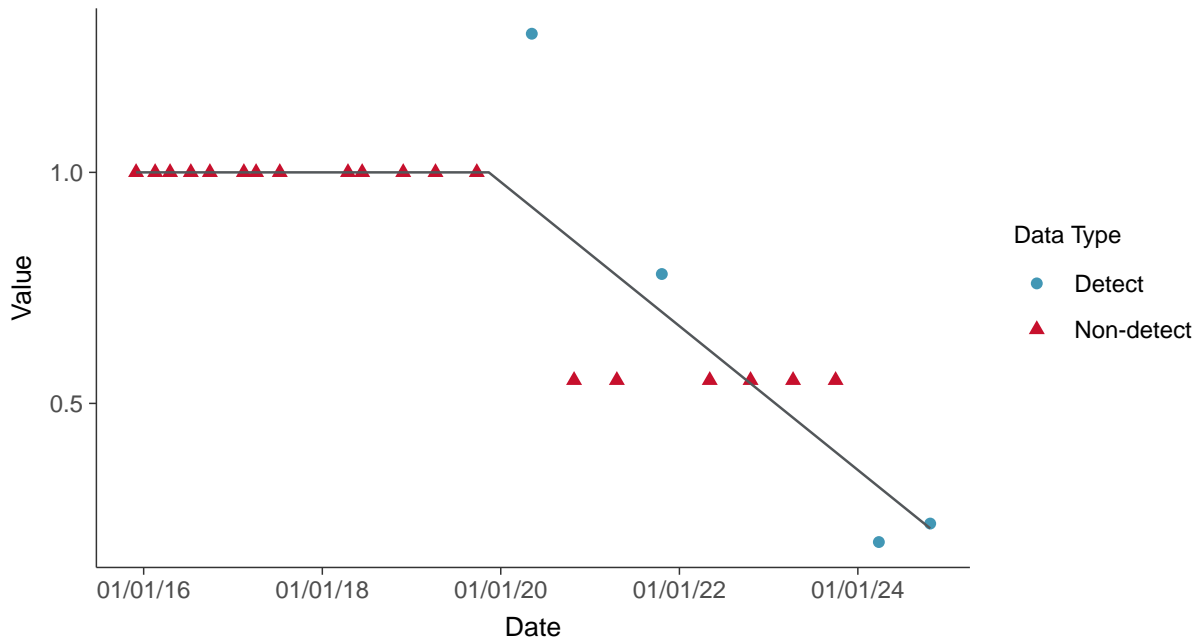
Arsenic, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15013 (ug/L)



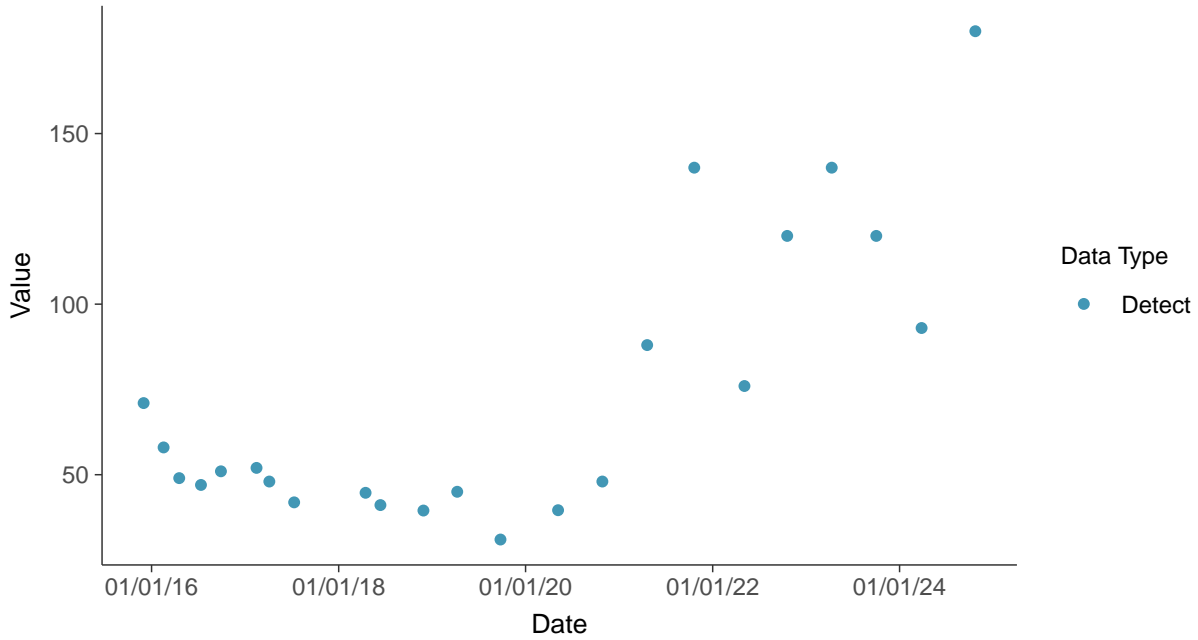


Appendix IV: Barium, MW-15013

ID: 03_2_103

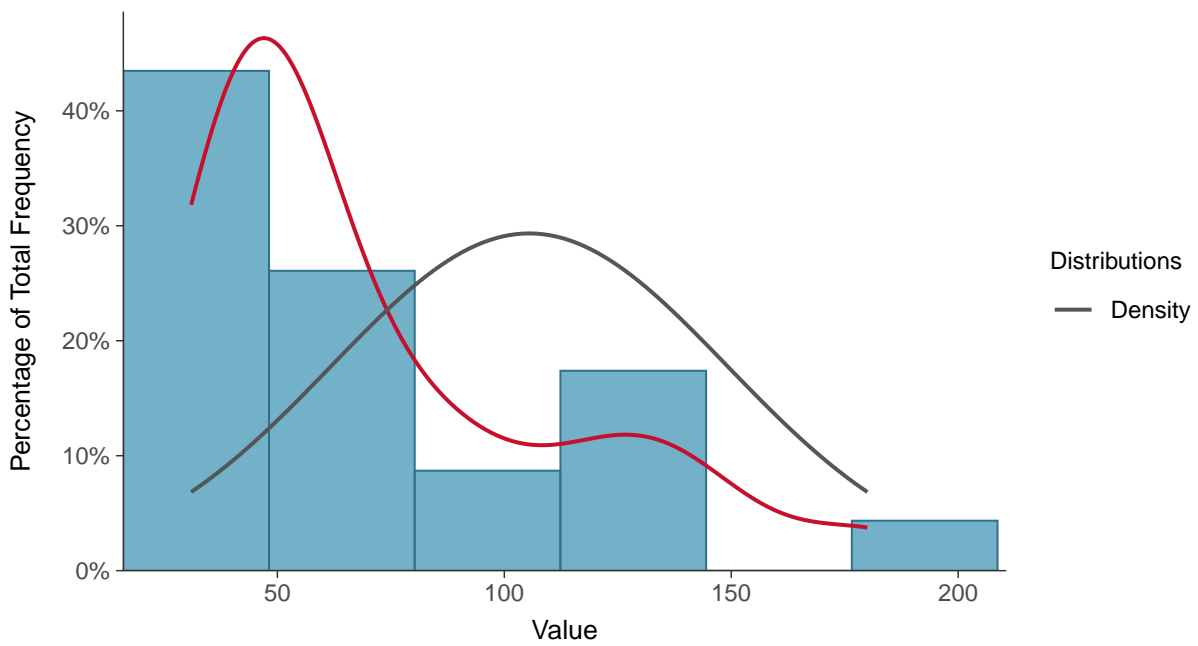
Scatter Plot

Barium, MW-15013 (ug/L)



Histogram

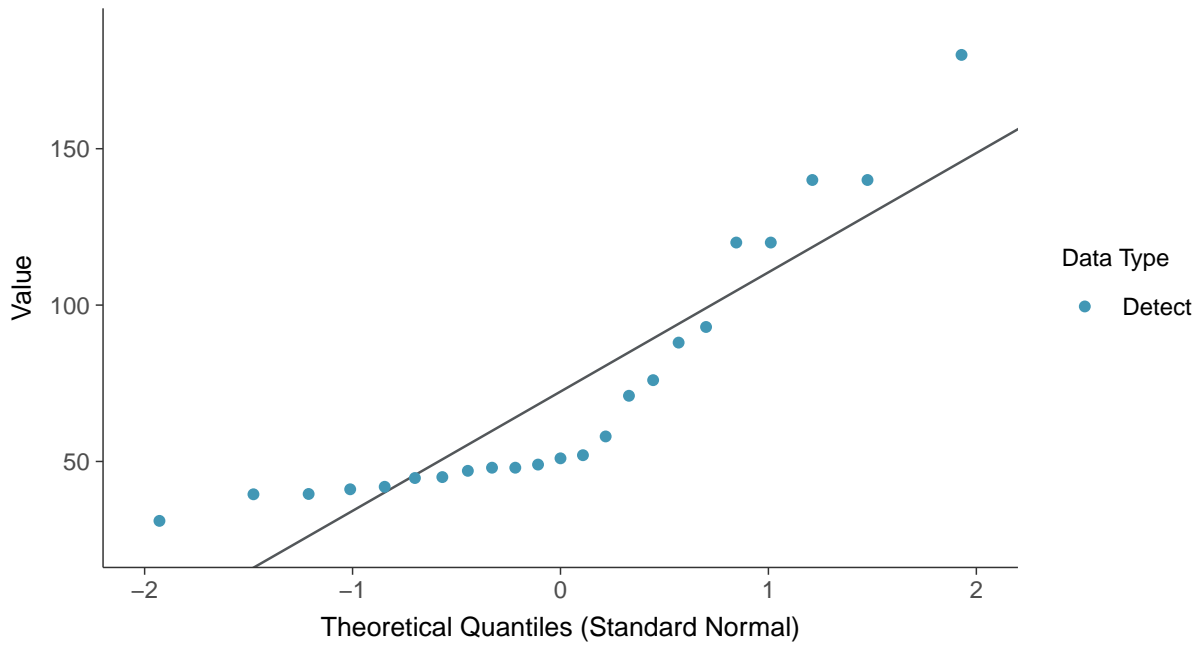
Barium, MW-15013 (ug/L)





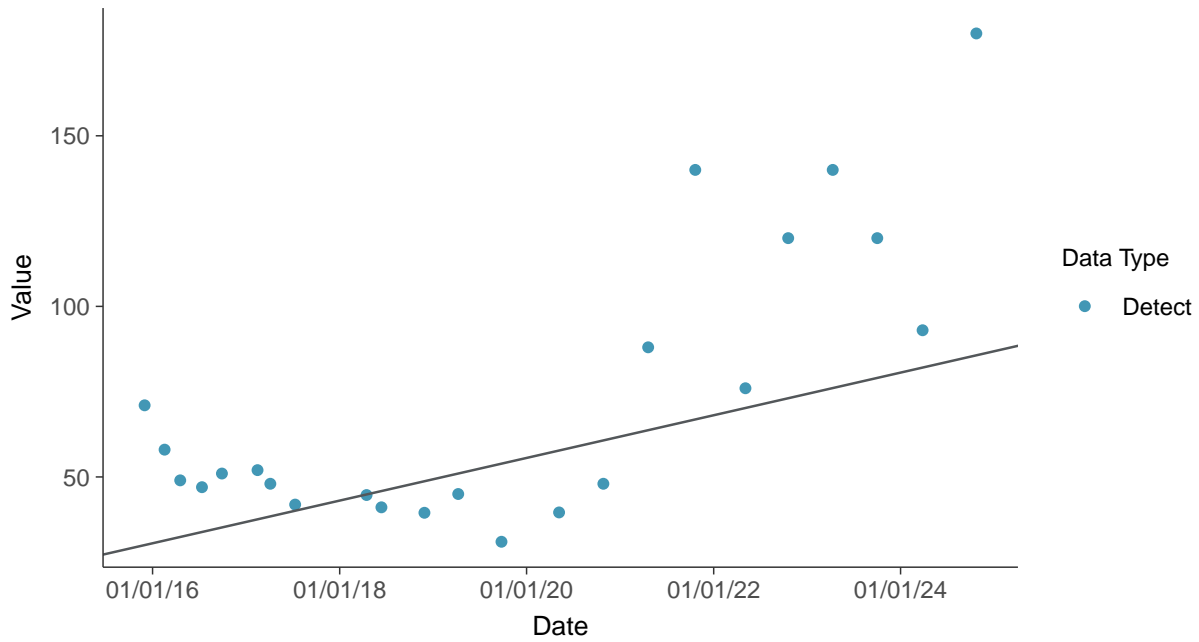
Normal Q-Q plot

Barium, MW-15013 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

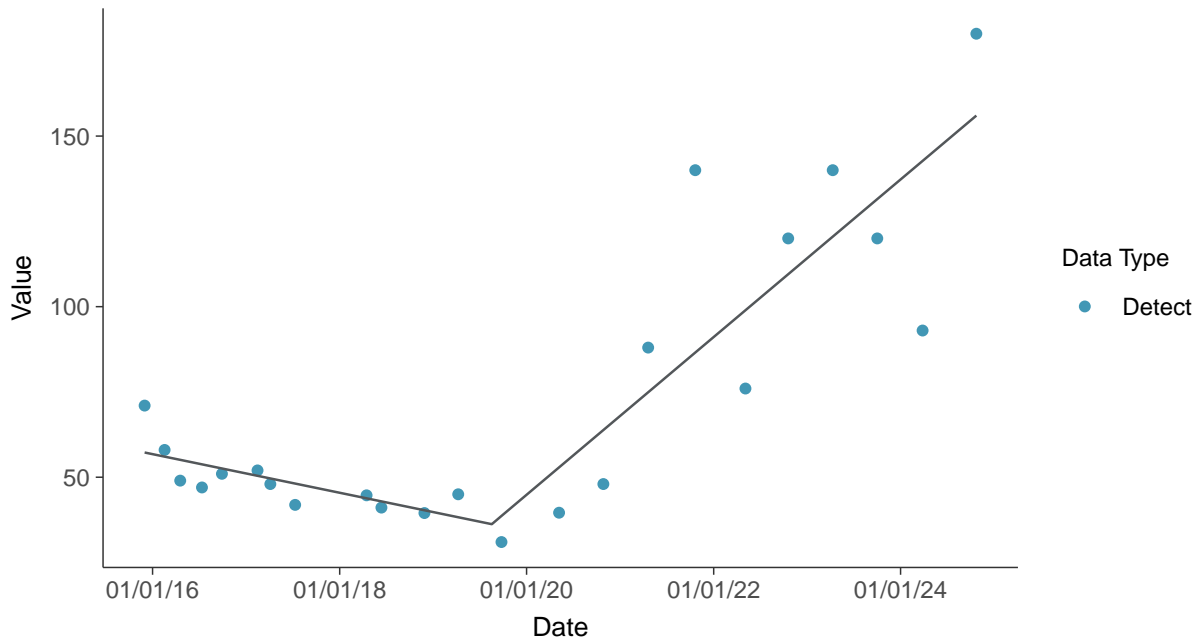
Barium, MW-15013 (ug/L)





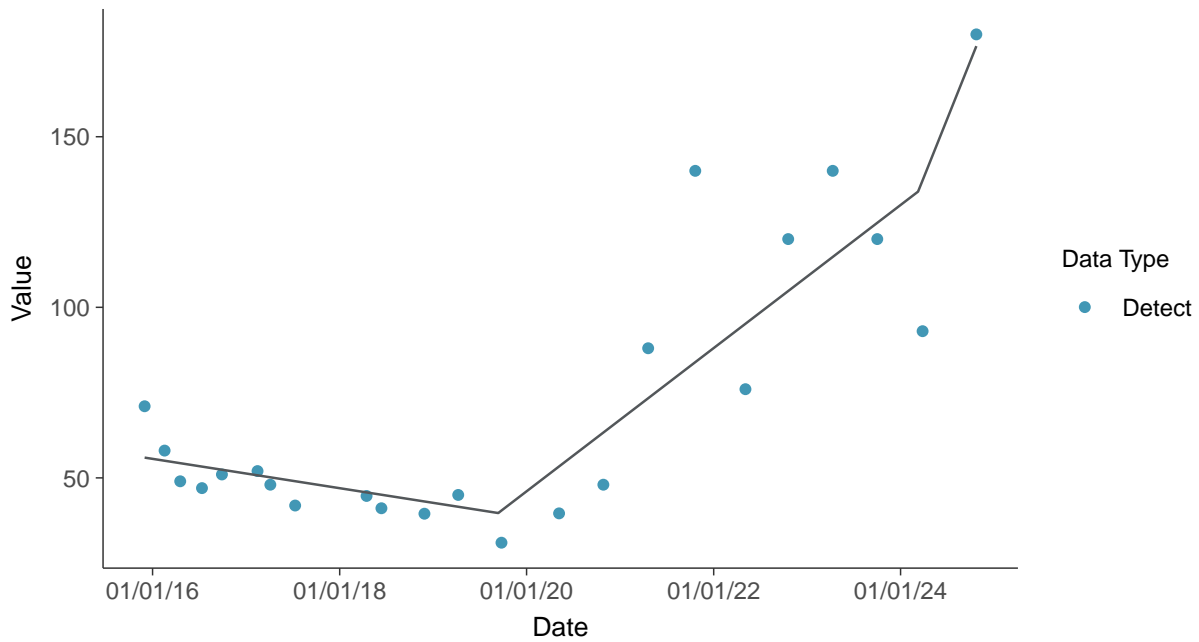
Trend Regression: Piecewise Linear-Linear

Barium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

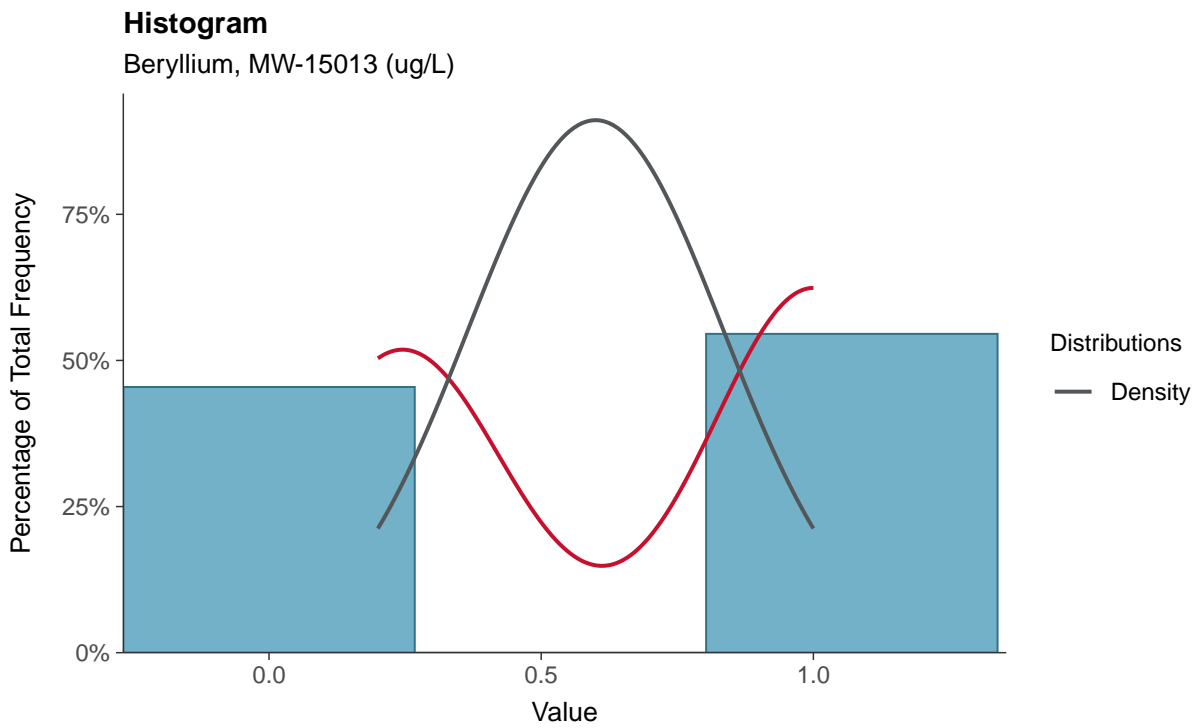
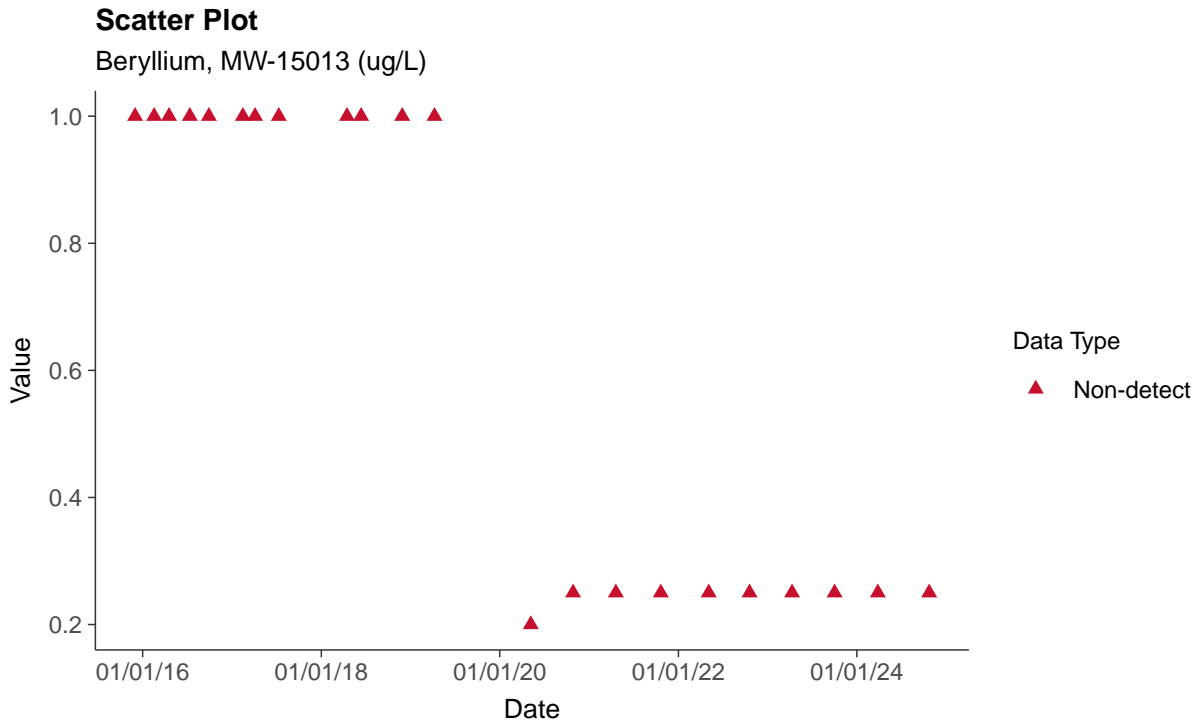
Barium, MW-15013 (ug/L)





Appendix IV: Beryllium, MW-15013

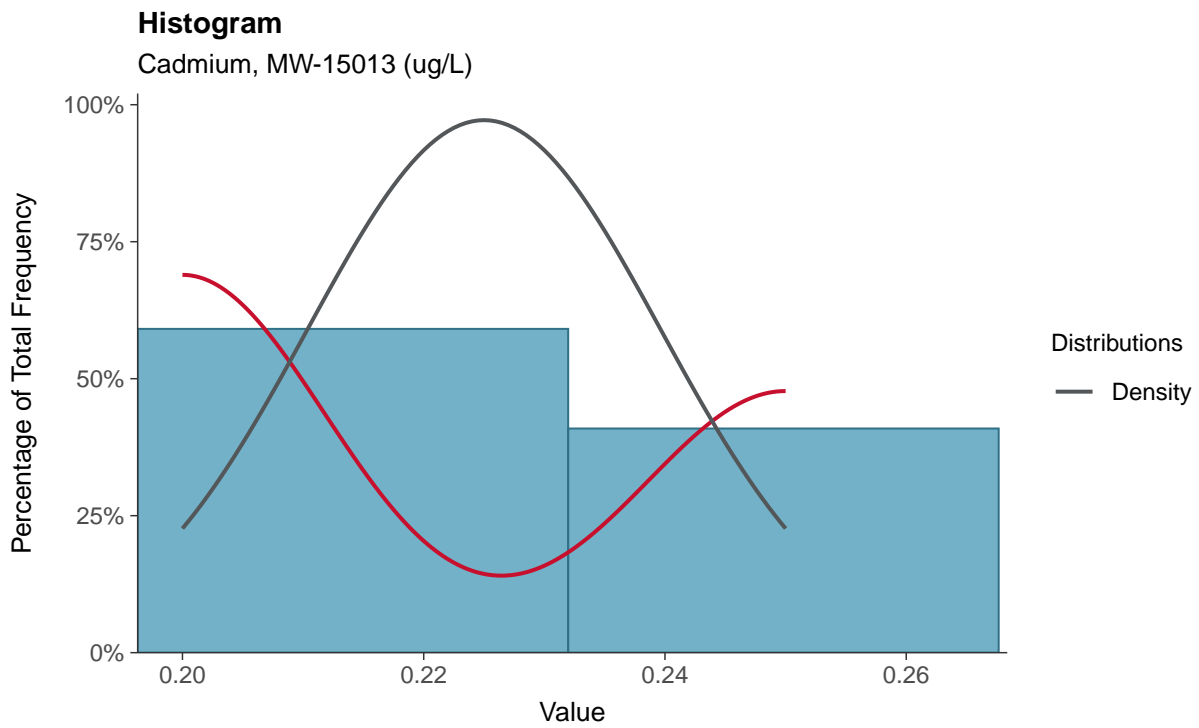
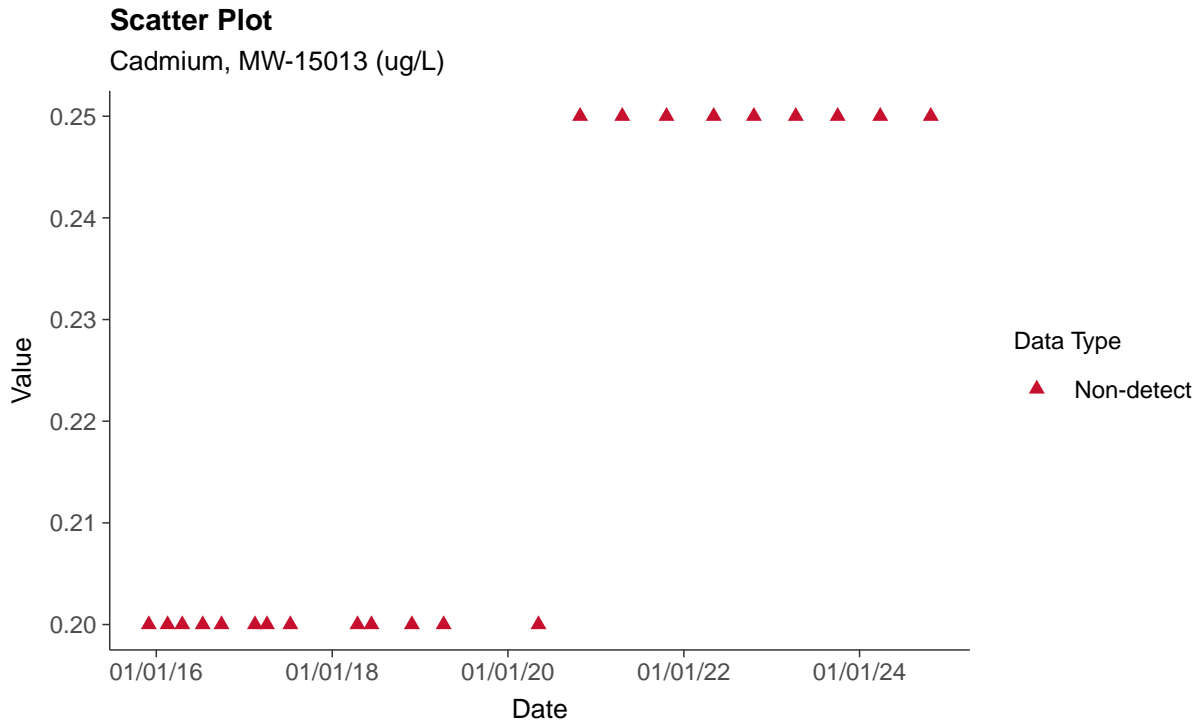
ID: 03_2_104





Appendix IV: Cadmium, MW-15013

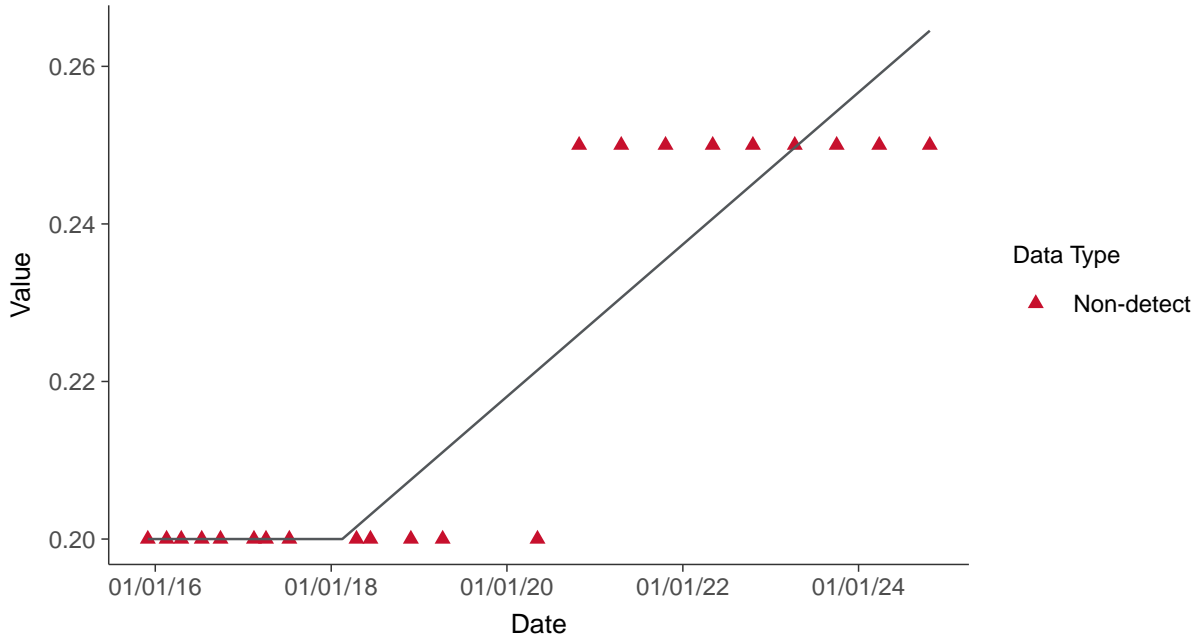
ID: 03_2_106





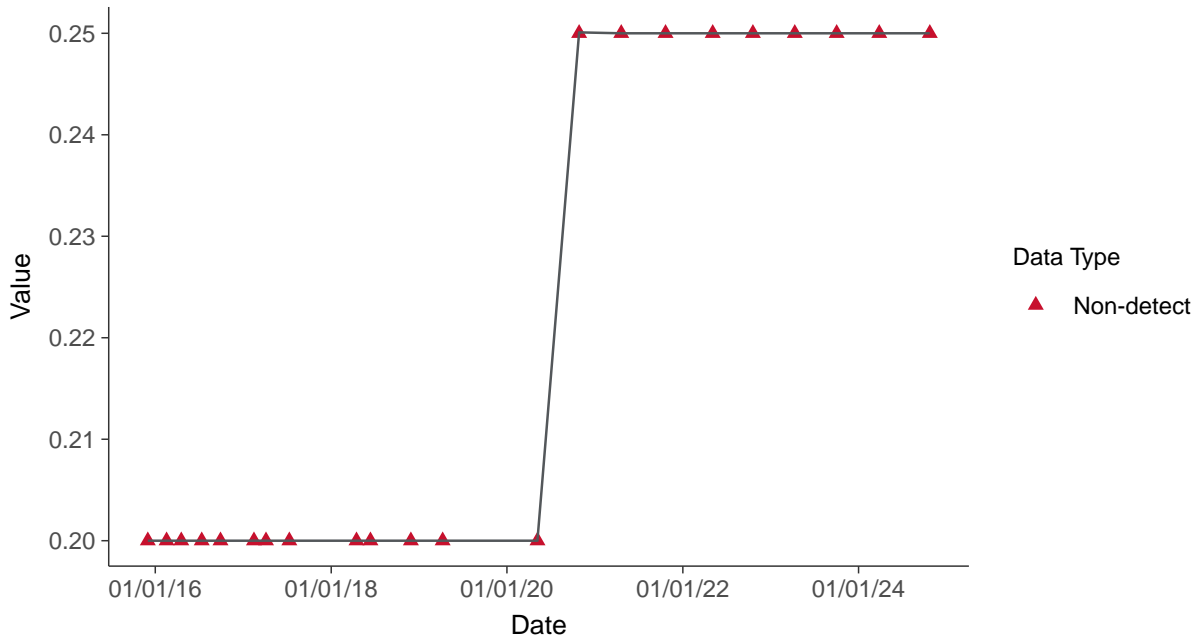
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15013 (ug/L)



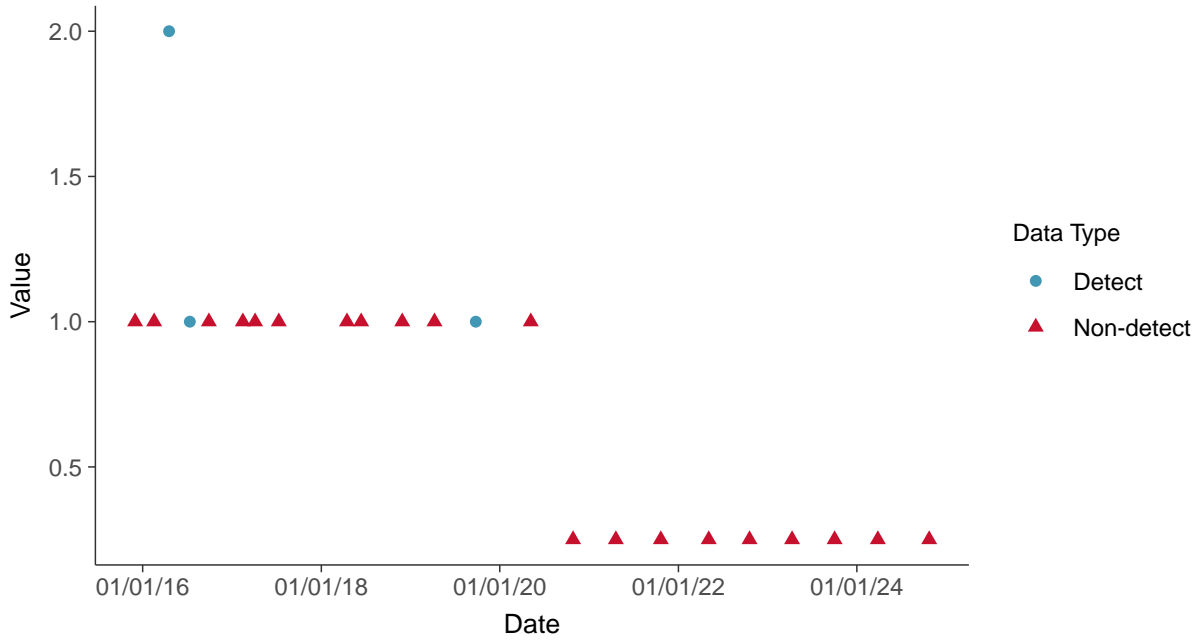


Appendix IV: Chromium, MW-15013

ID: 03_2_109

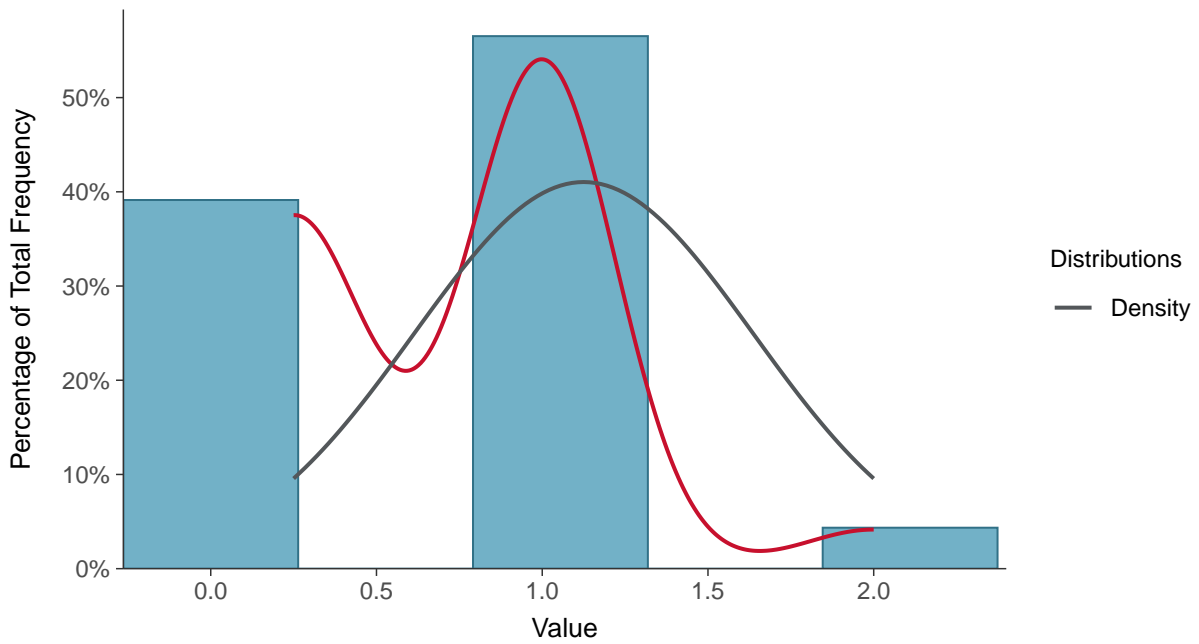
Scatter Plot

Chromium, MW-15013 (ug/L)



Histogram

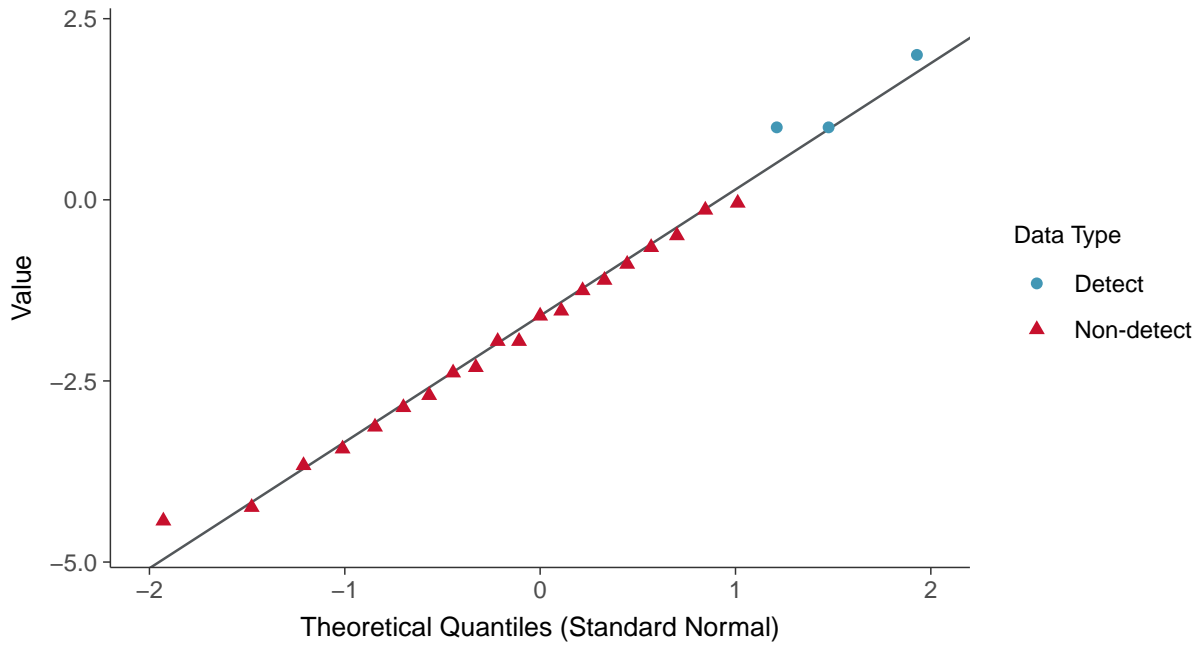
Chromium, MW-15013 (ug/L)





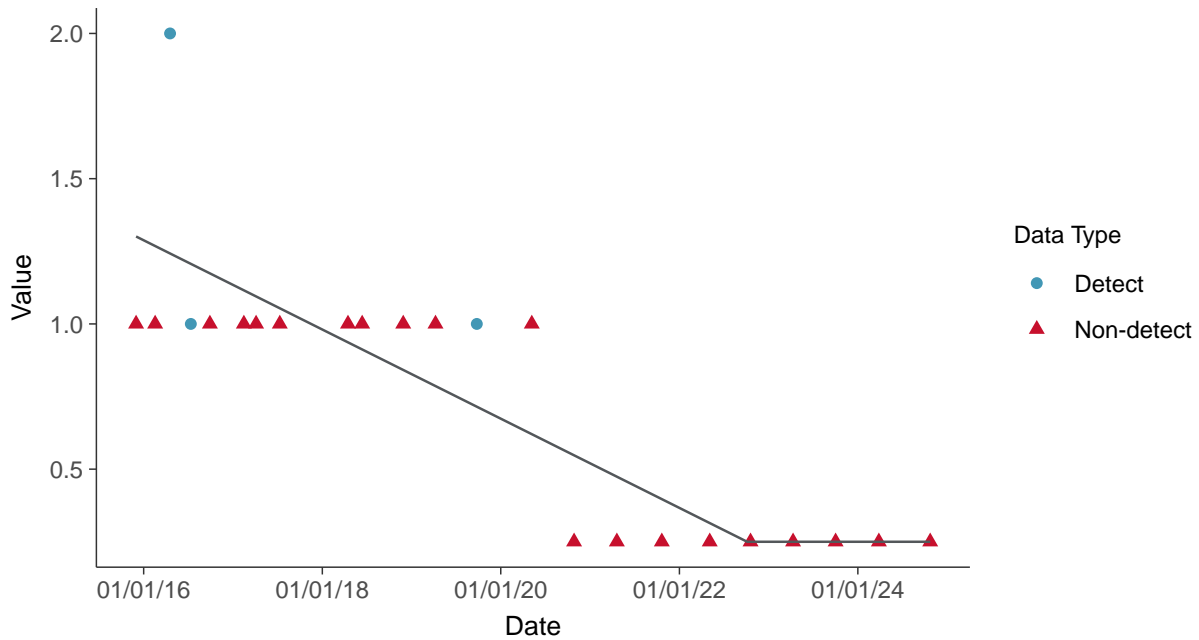
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear

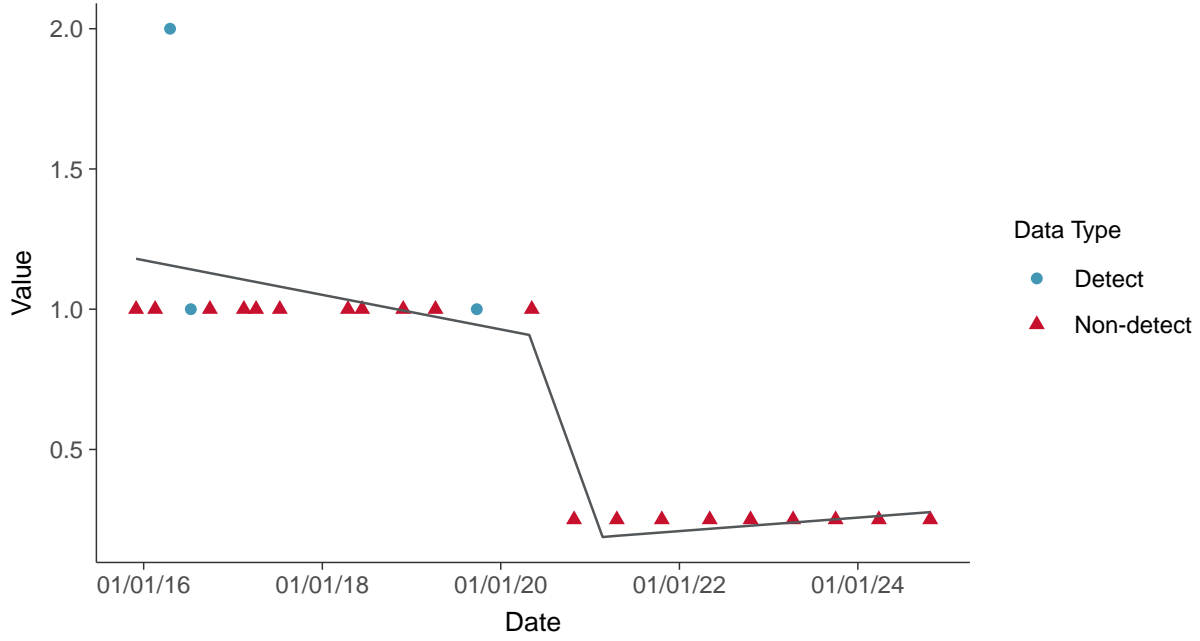
Chromium, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

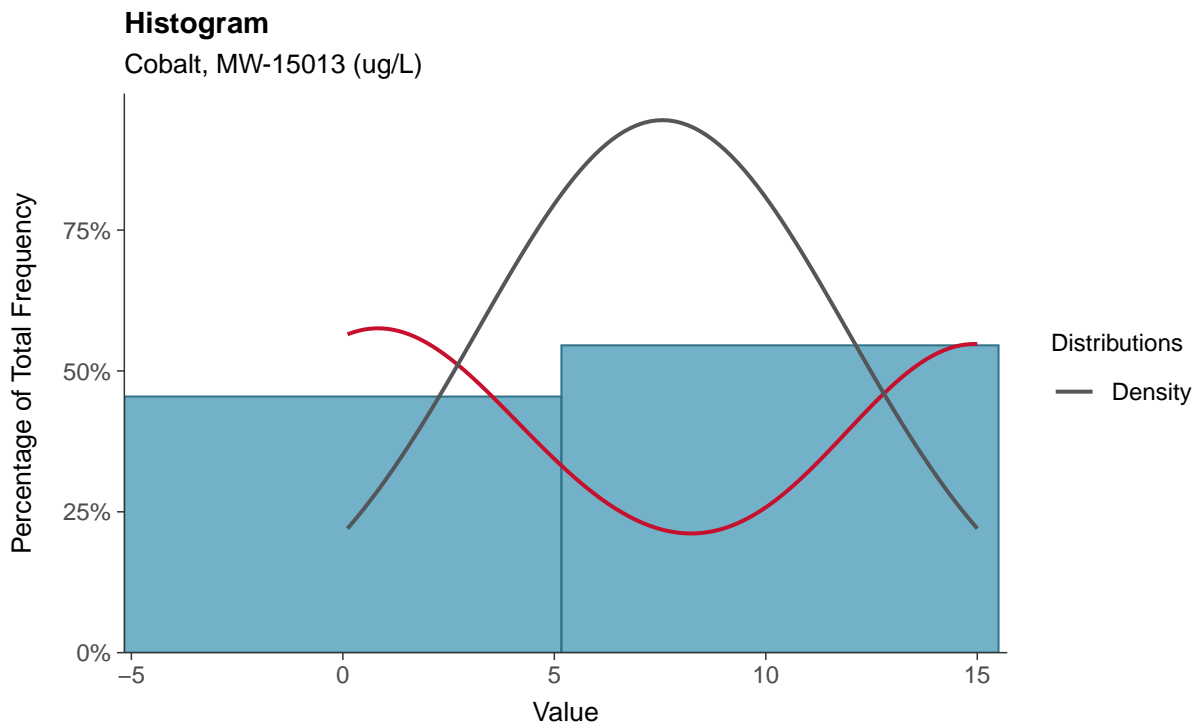
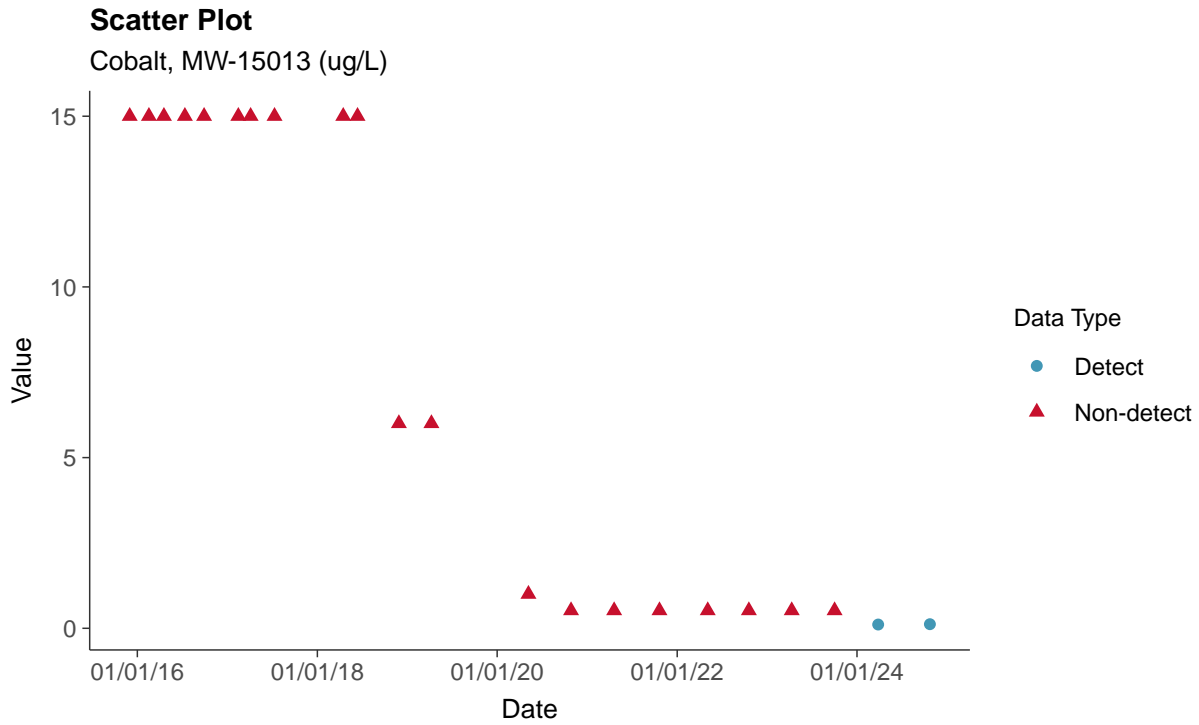
Chromium, MW-15013 (ug/L)





Appendix IV: Cobalt, MW-15013

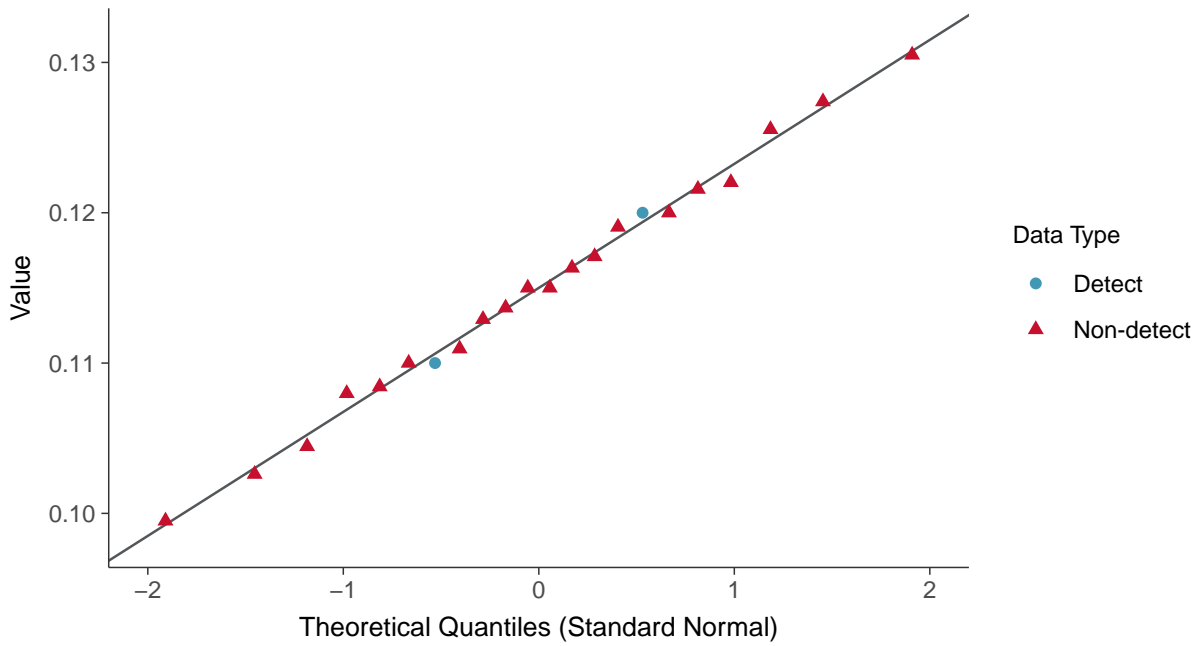
ID: 03_2_110





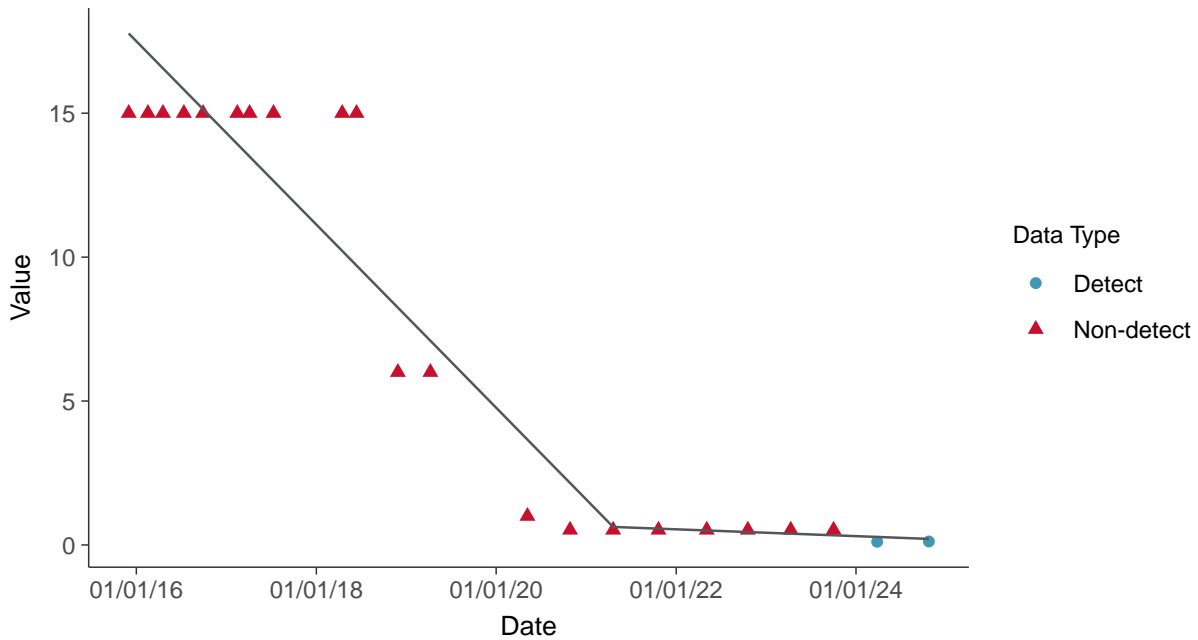
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15013 (ug/L)



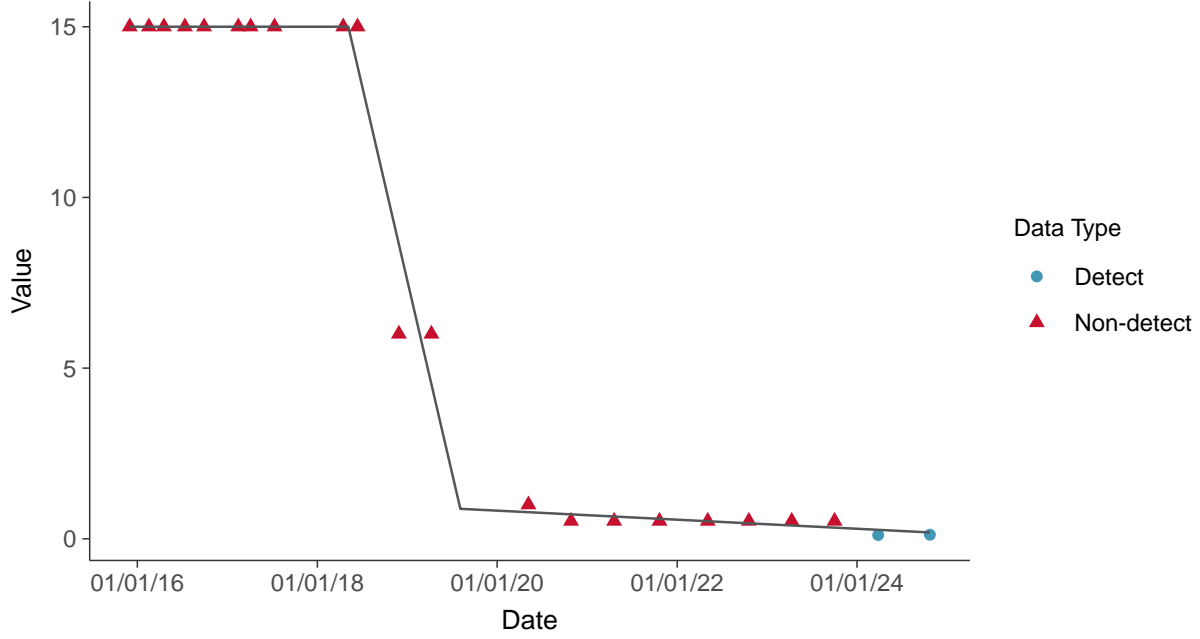
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear Cobalt, MW-15013 (ug/L)



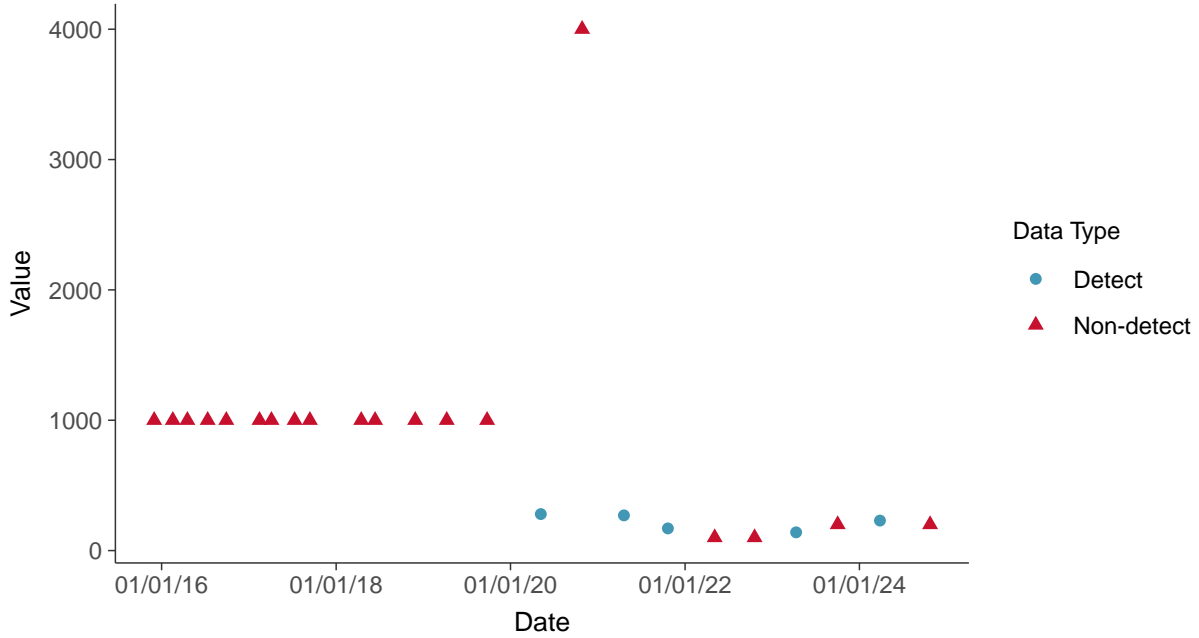


Appendix IV: Fluoride, MW-15013

ID: 03_2_114

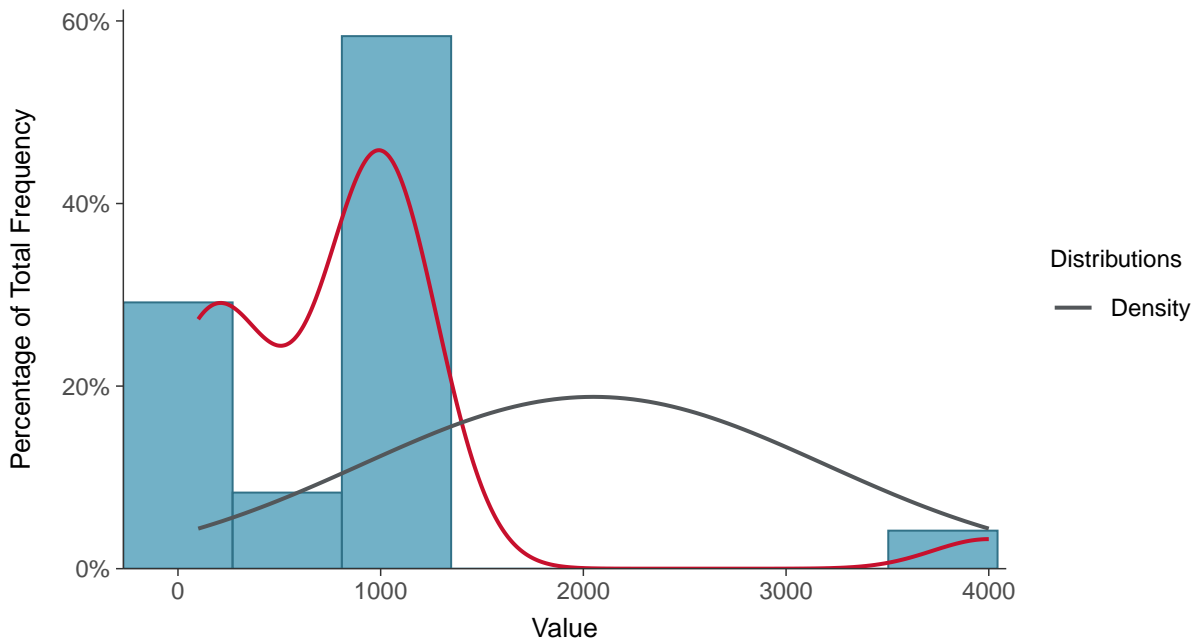
Scatter Plot

Fluoride, MW-15013 (ug/L)



Histogram

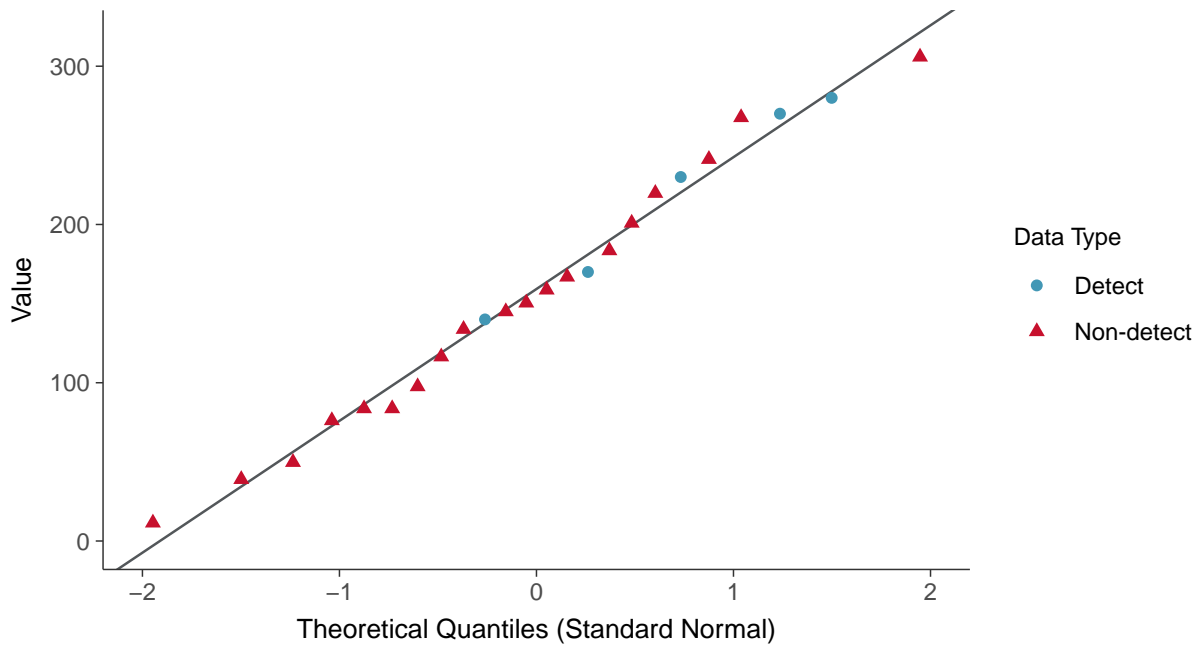
Fluoride, MW-15013 (ug/L)





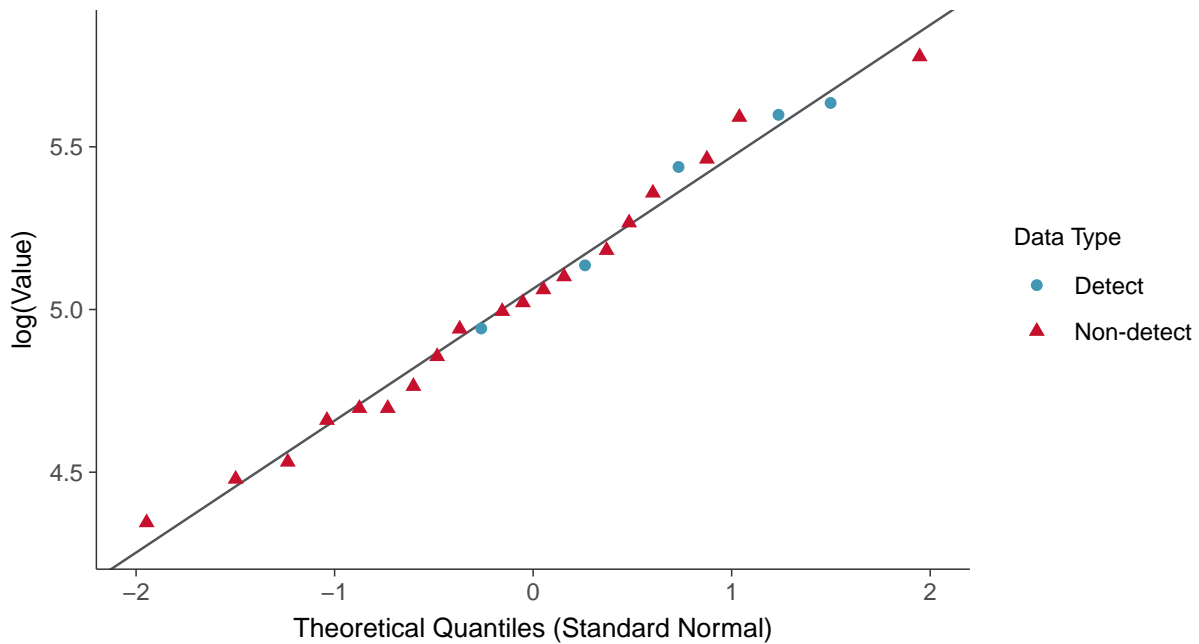
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15013 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

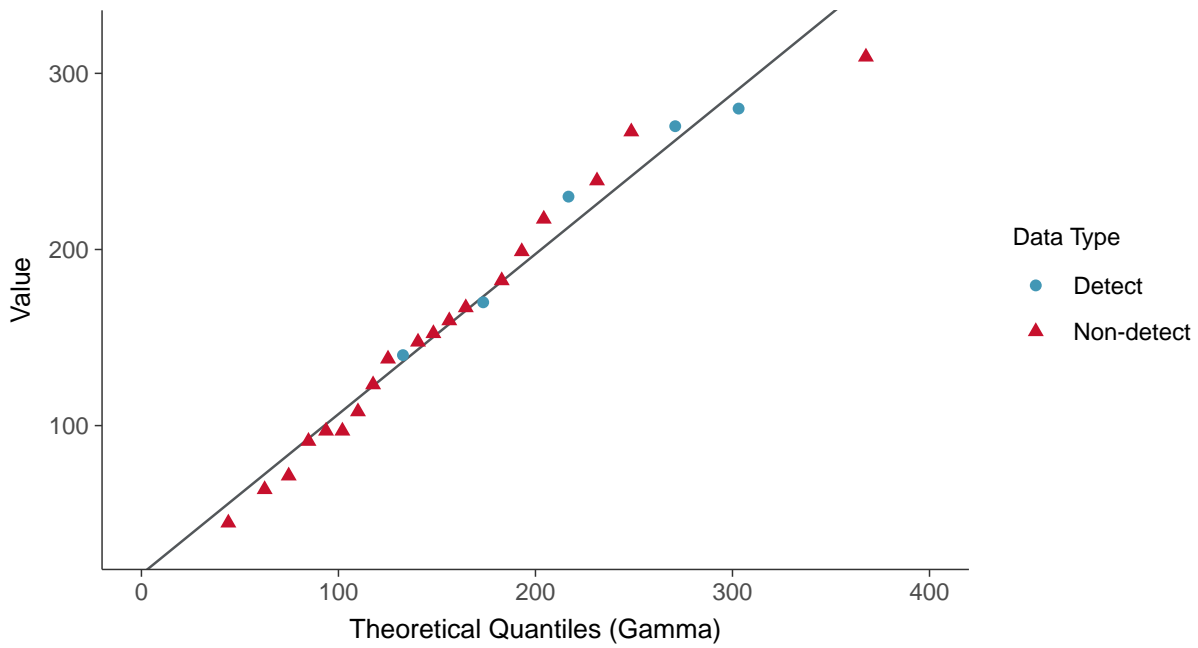
Fluoride, MW-15013 (ug/L)





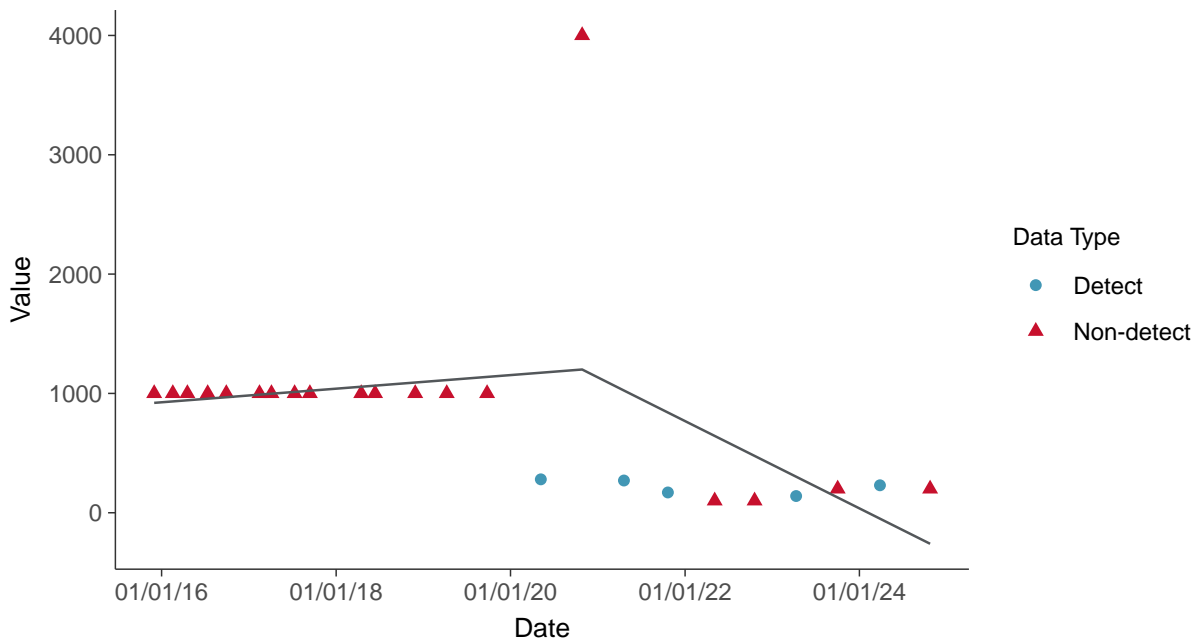
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear

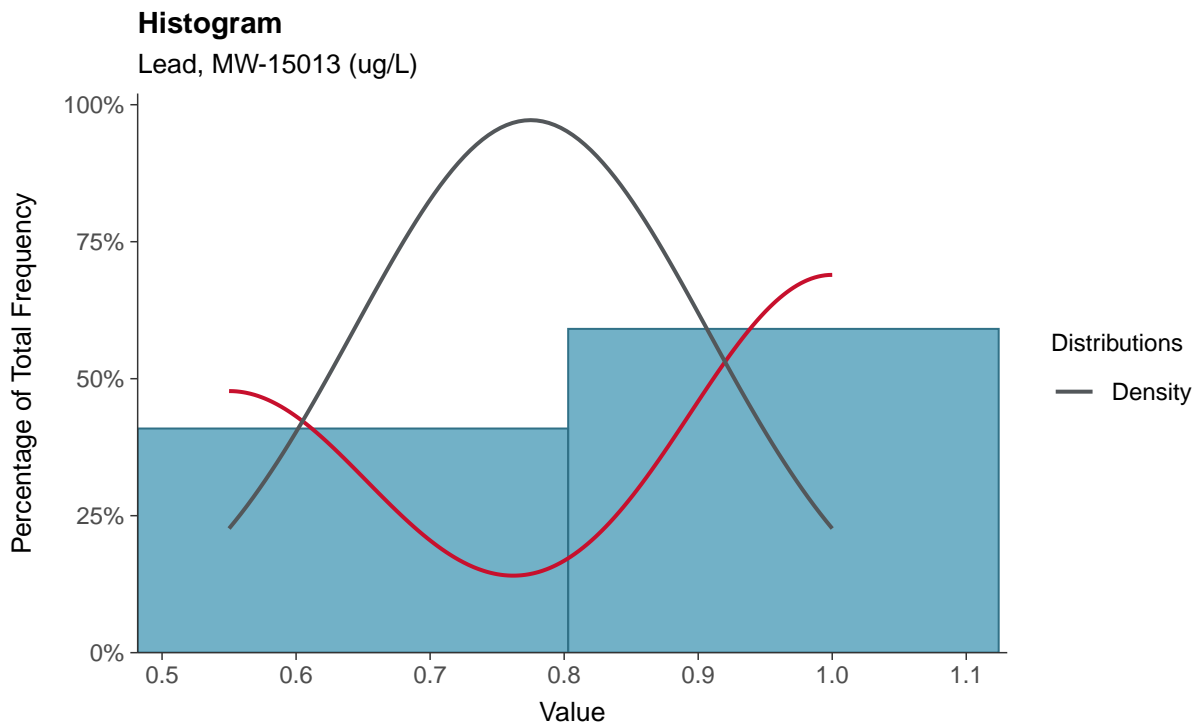
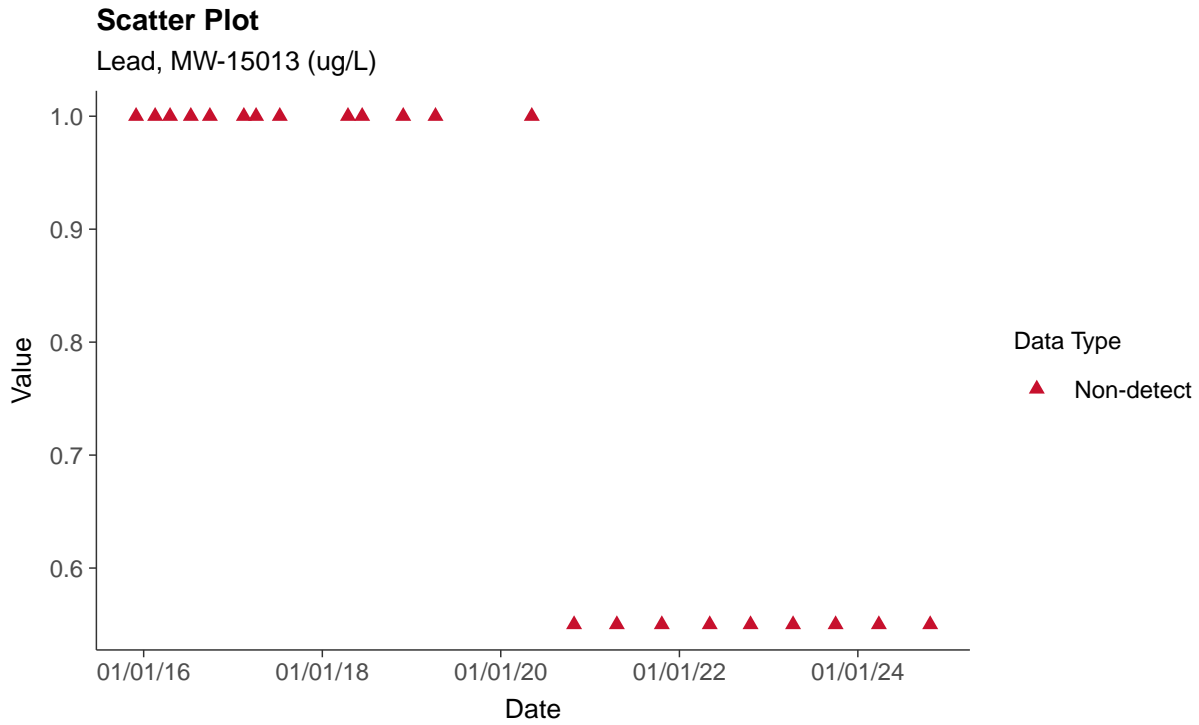
Fluoride, MW-15013 (ug/L)





Appendix IV: Lead, MW-15013

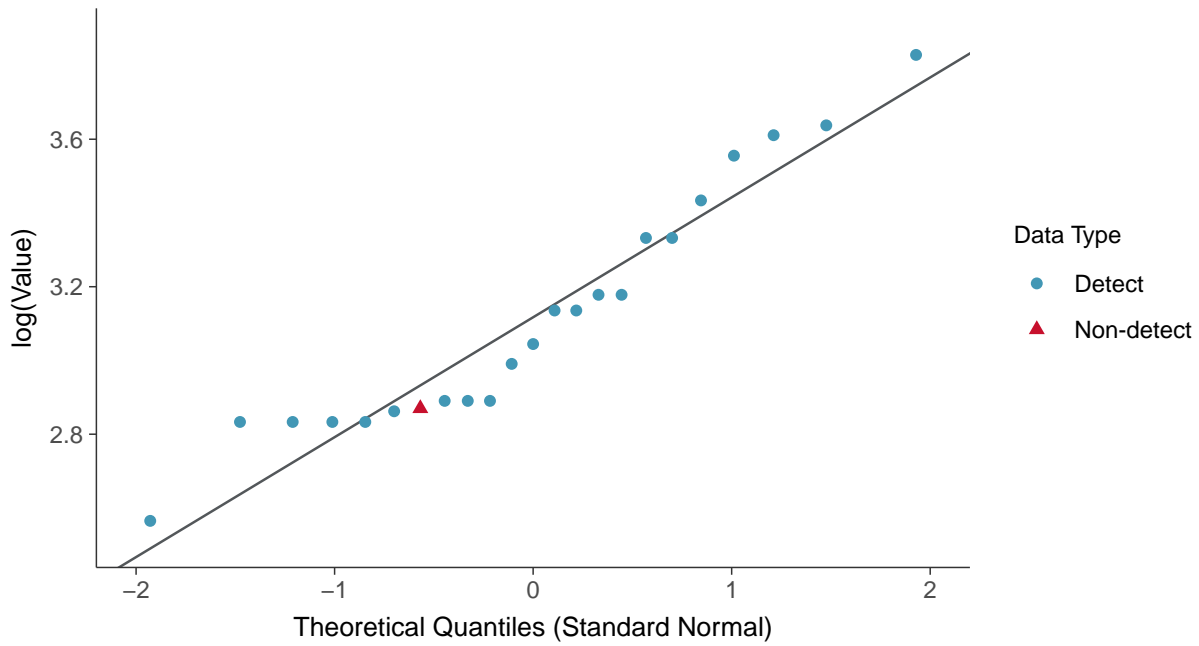
ID: 03_2_116





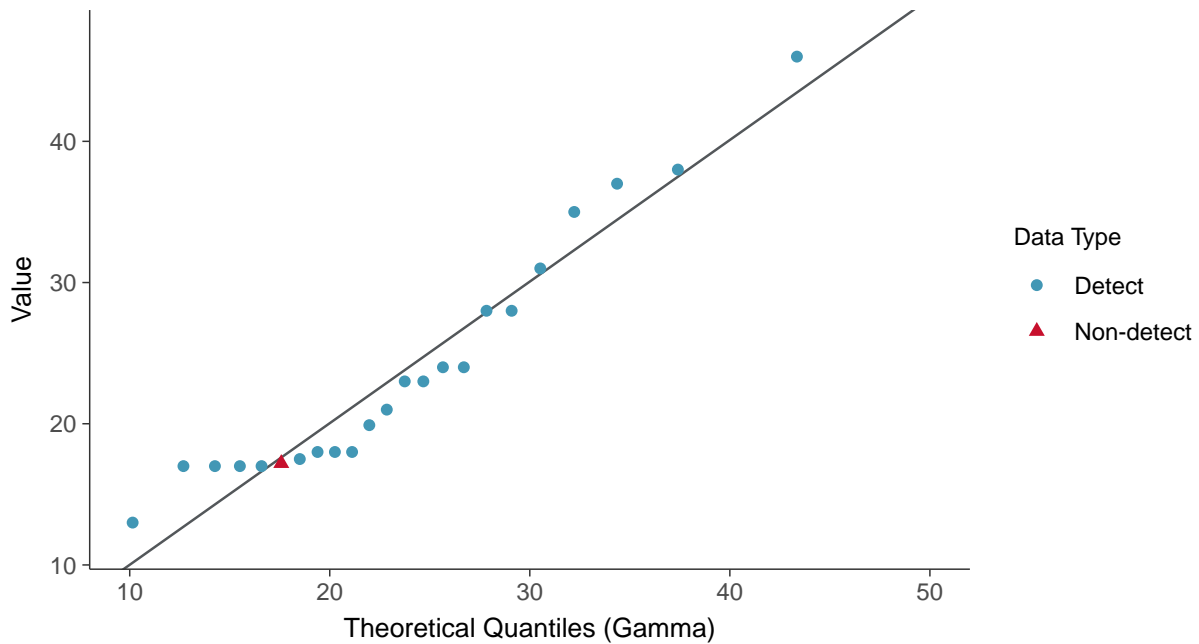
Lognormal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15013 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

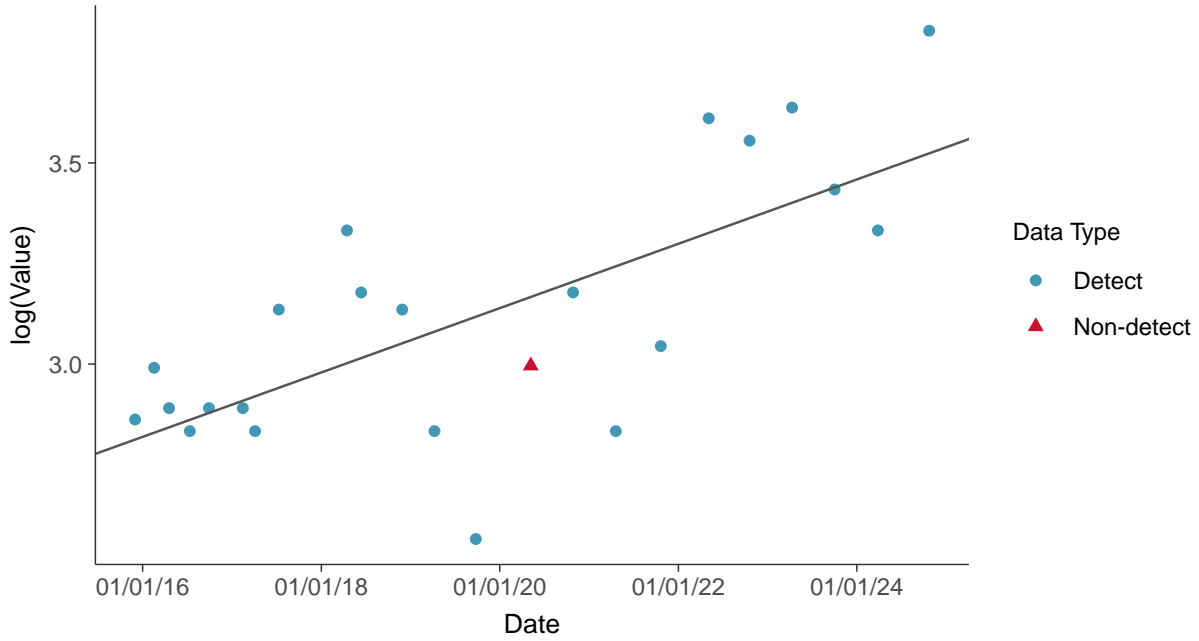
Lithium, MW-15013 (ug/L)





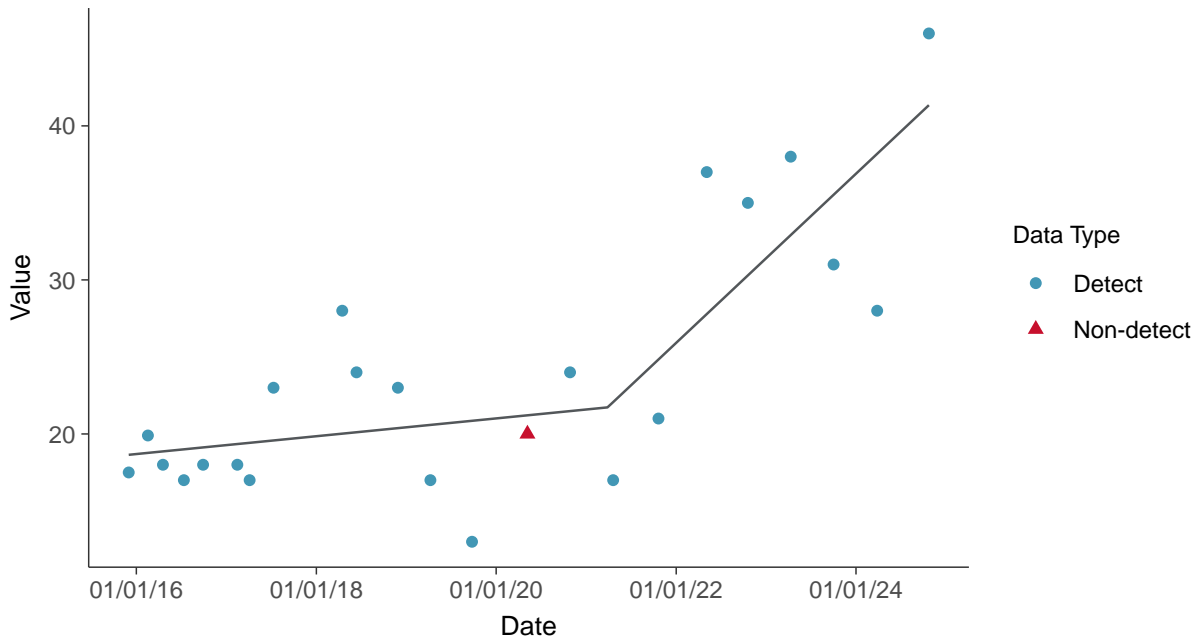
Trend Regression: Lognormal MLE

Lithium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear

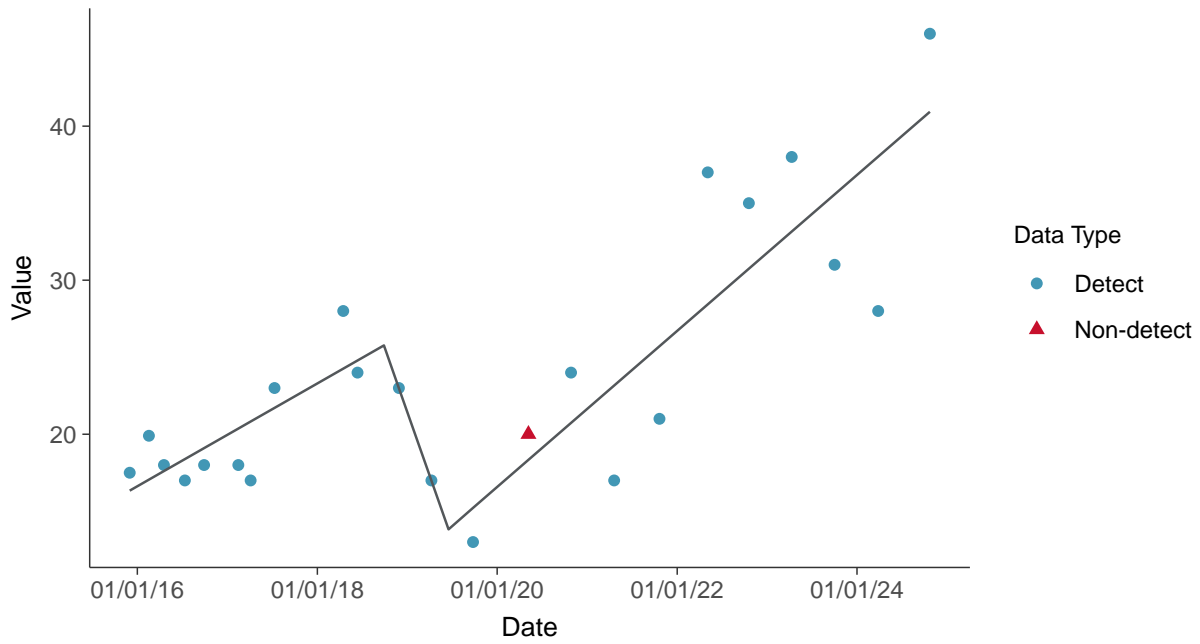
Lithium, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-15013 (ug/L)



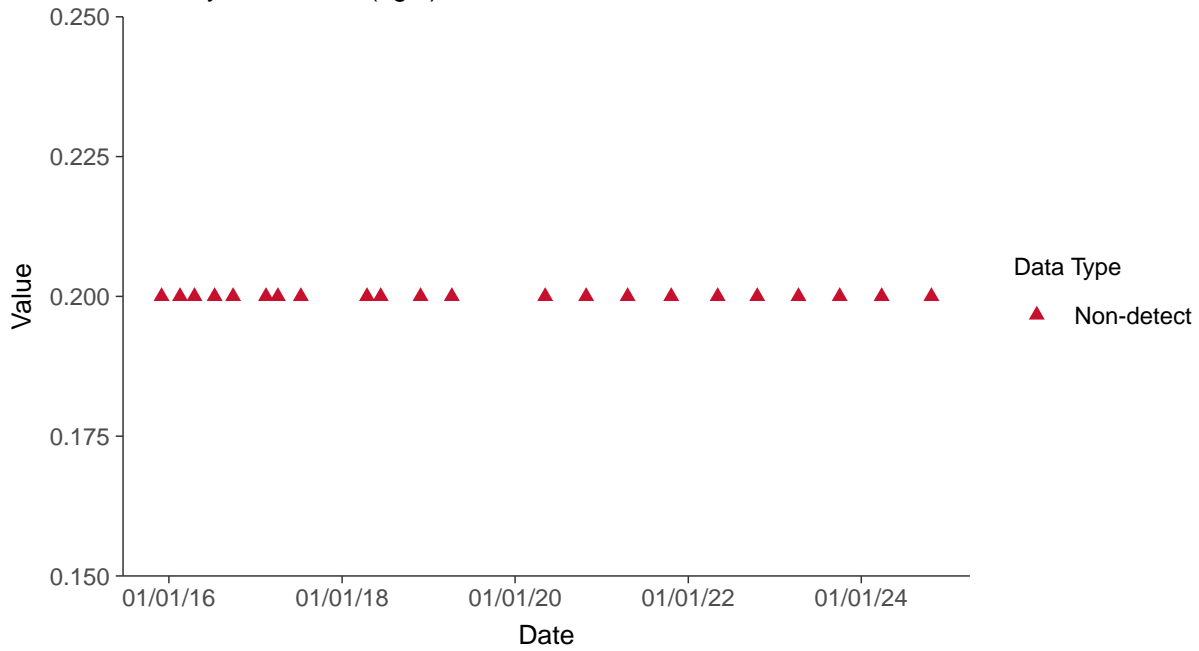


Appendix IV: Mercury, MW-15013

ID: 03_2_118

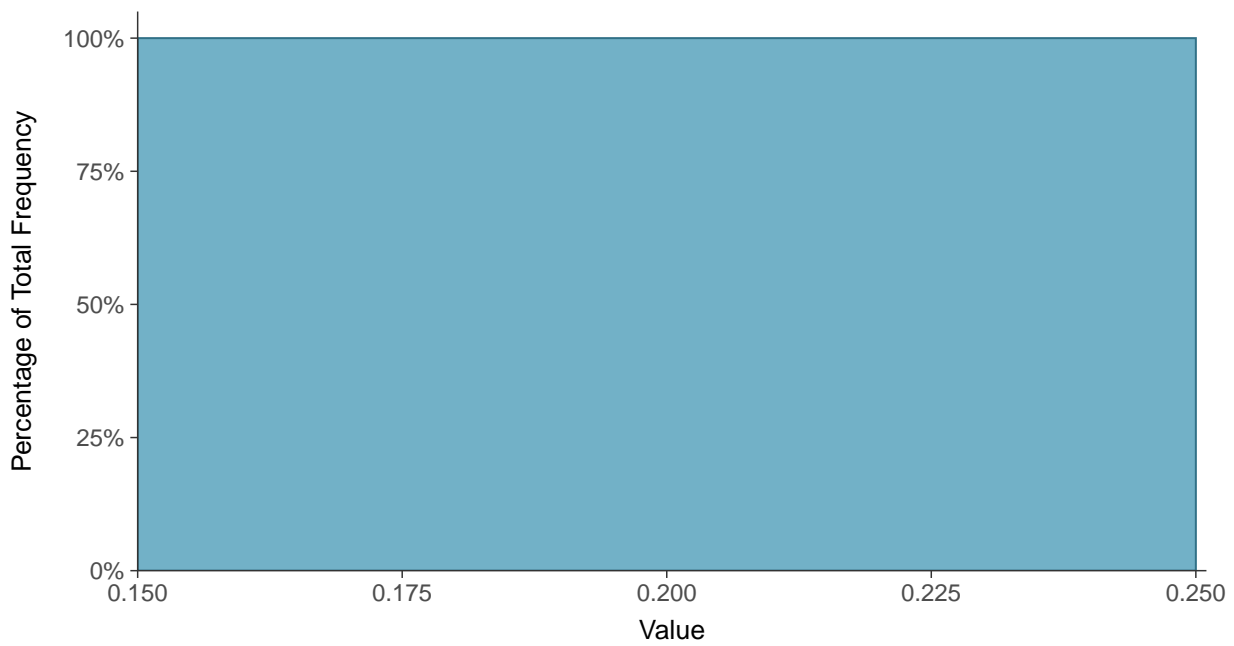
Scatter Plot

Mercury, MW-15013 (ug/L)



Histogram

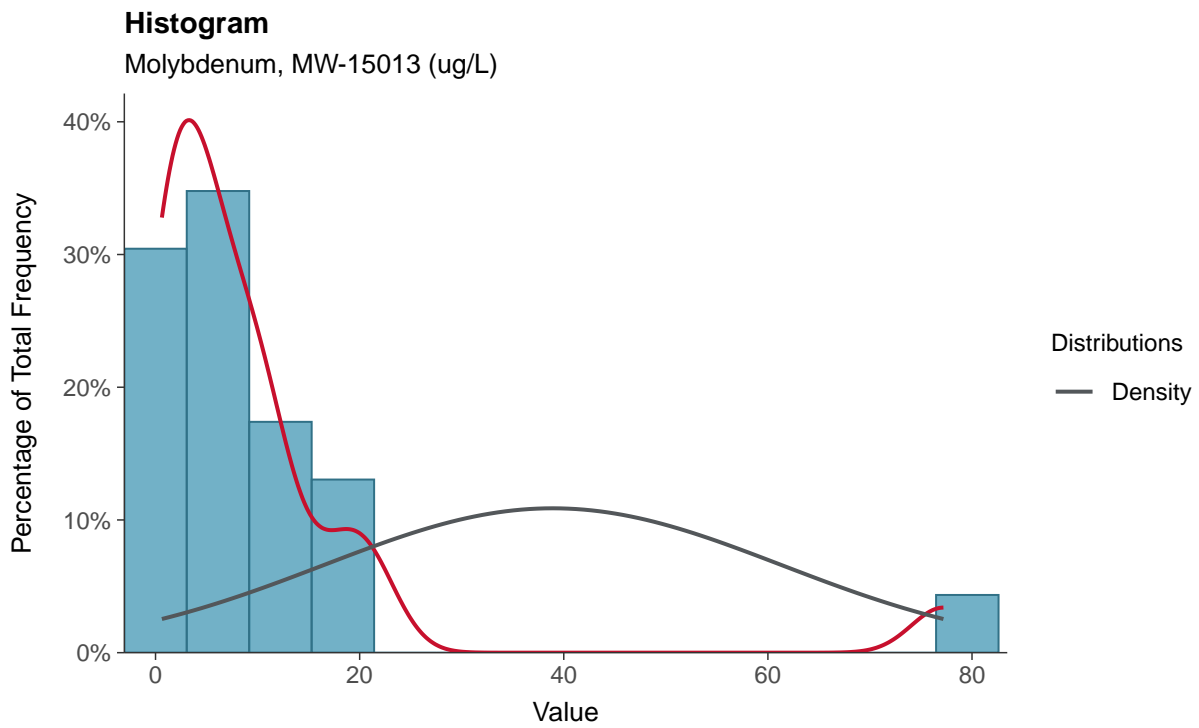
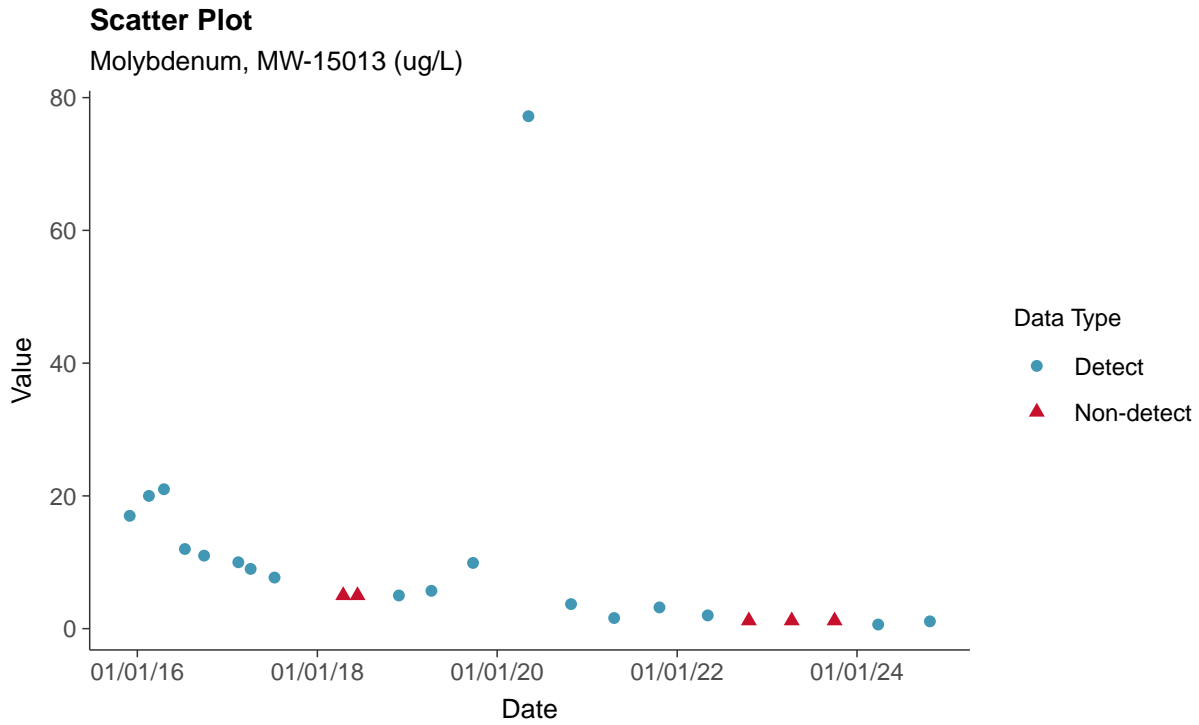
Mercury, MW-15013 (ug/L)





Appendix IV: Molybdenum, MW-15013

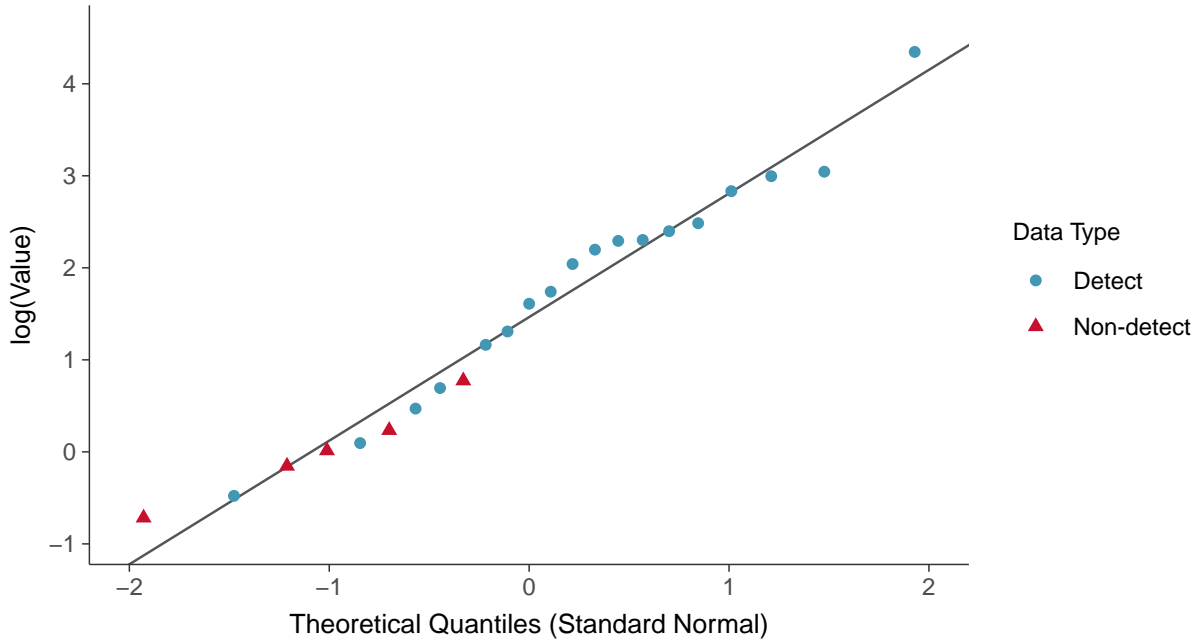
ID: 03_2_119





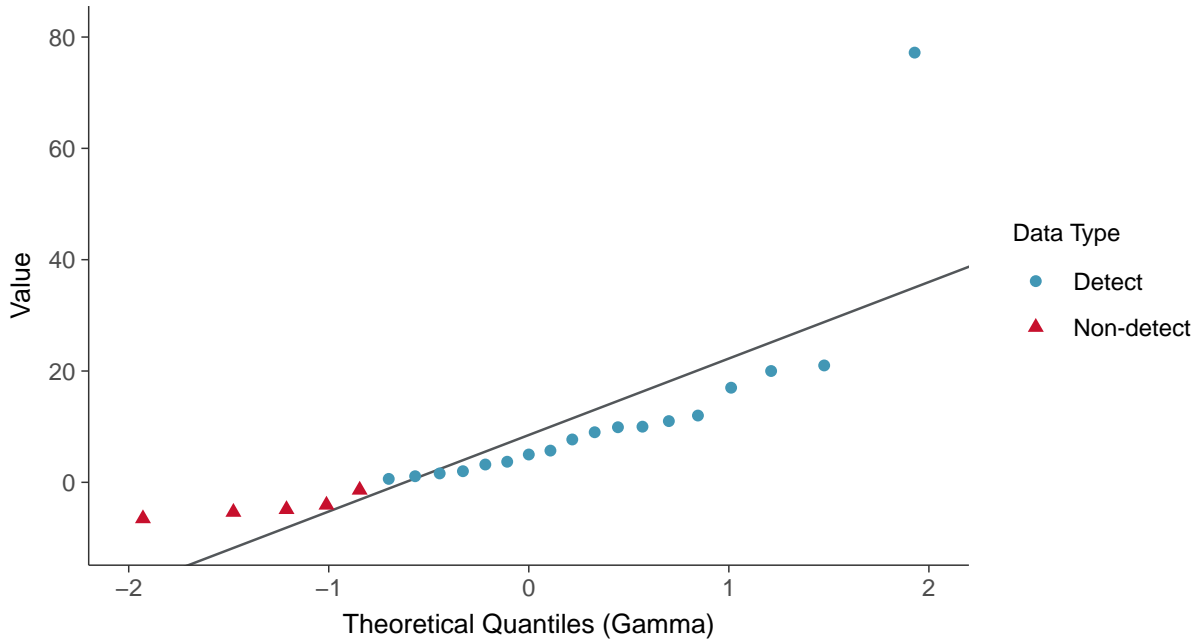
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15013 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

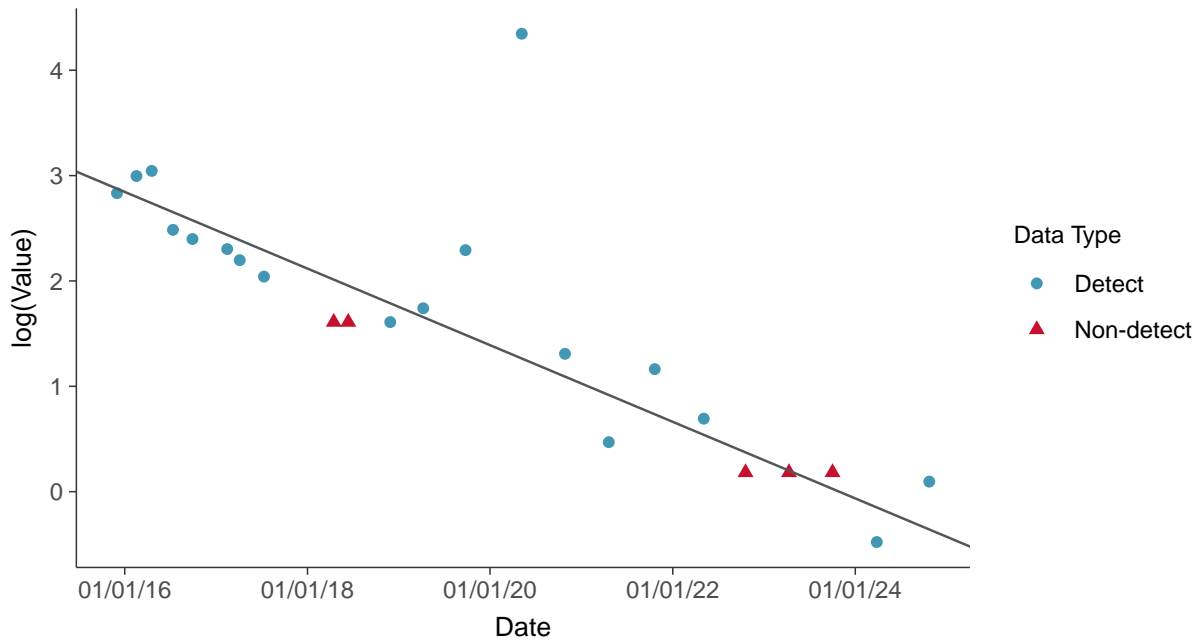
Molybdenum, MW-15013 (ug/L)





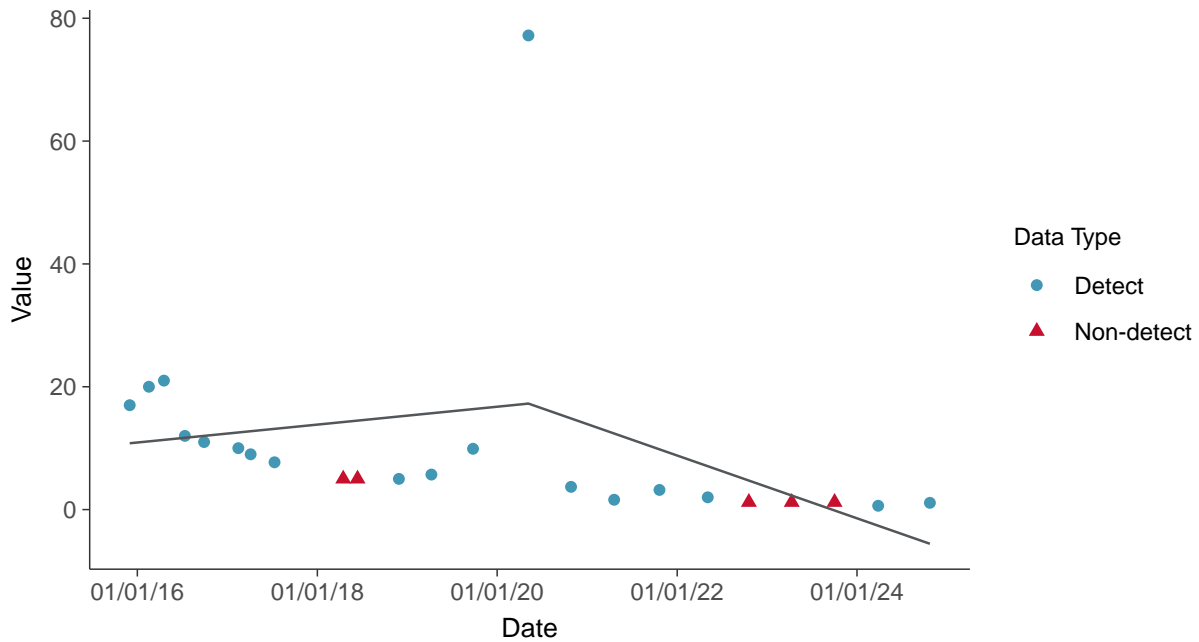
Trend Regression: Lognormal MLE

Molybdenum, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear

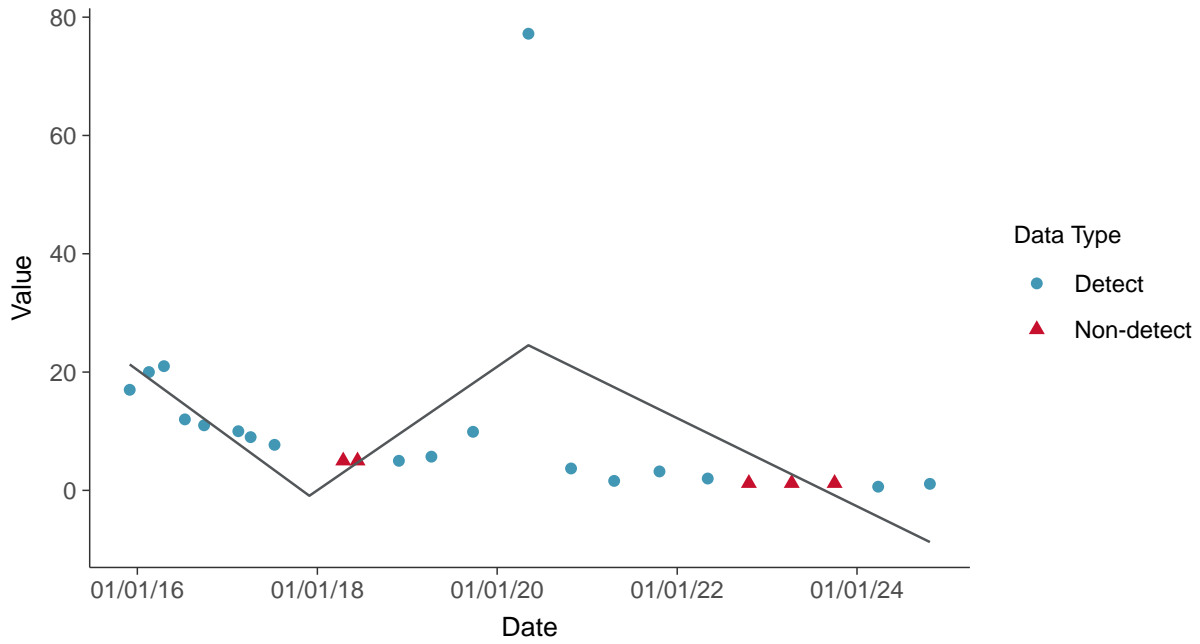
Molybdenum, MW-15013 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15013 (ug/L)



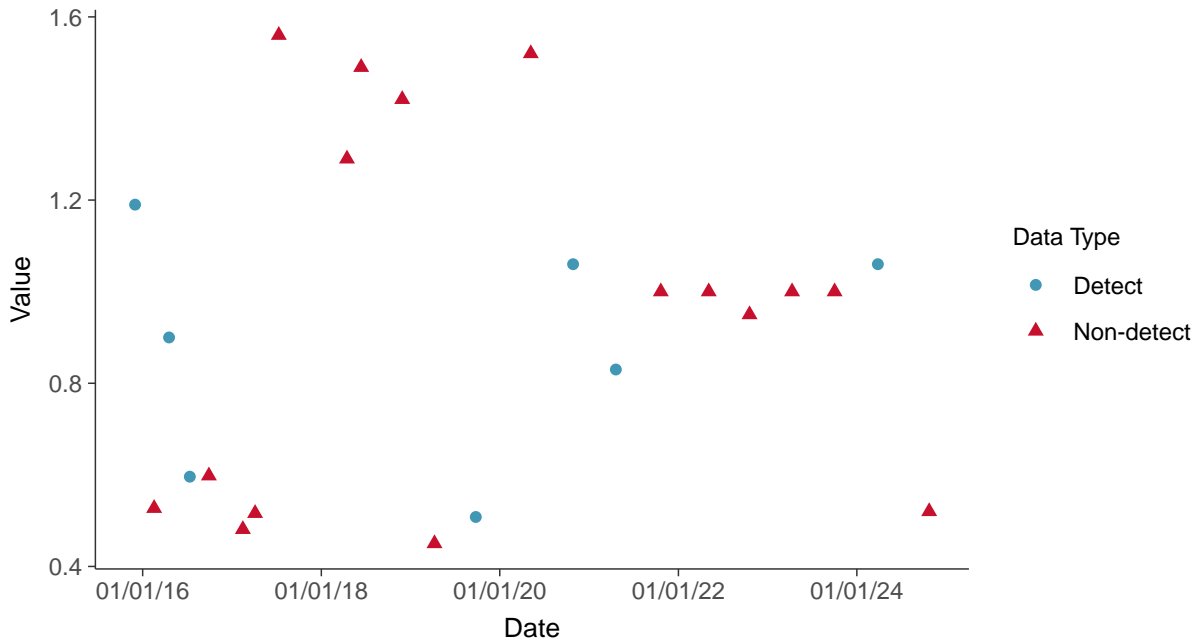


Appendix IV: Radium-226+228, MW-15013

ID: 03_2_125

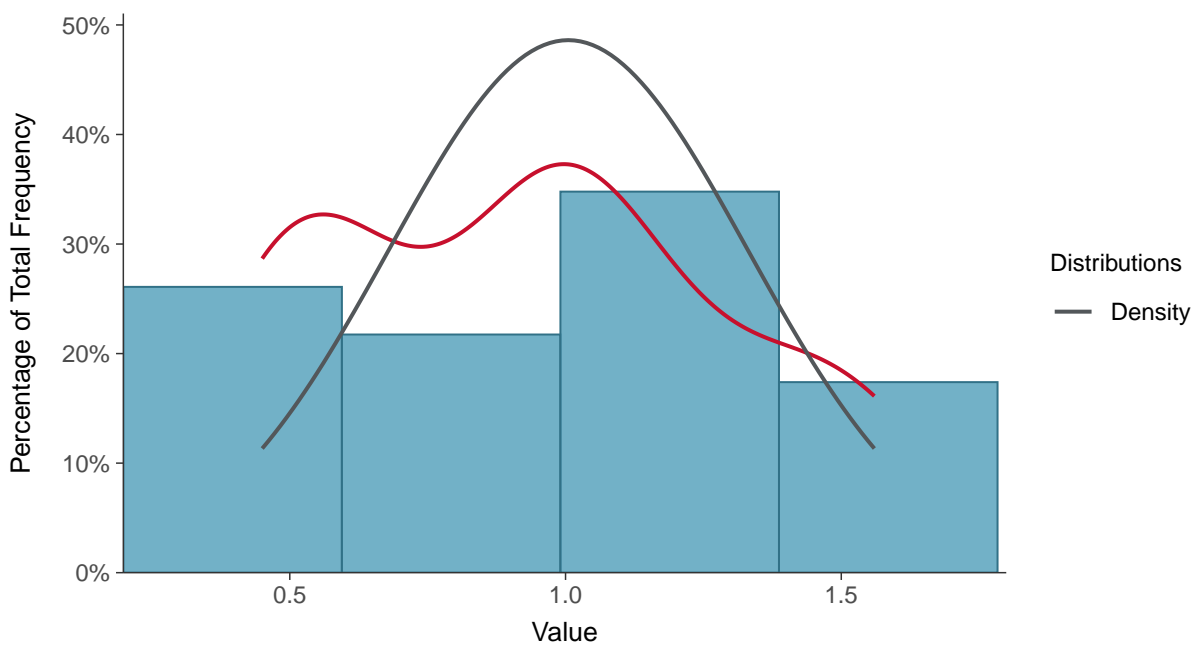
Scatter Plot

Radium-226+228, MW-15013 (pCi/L)



Histogram

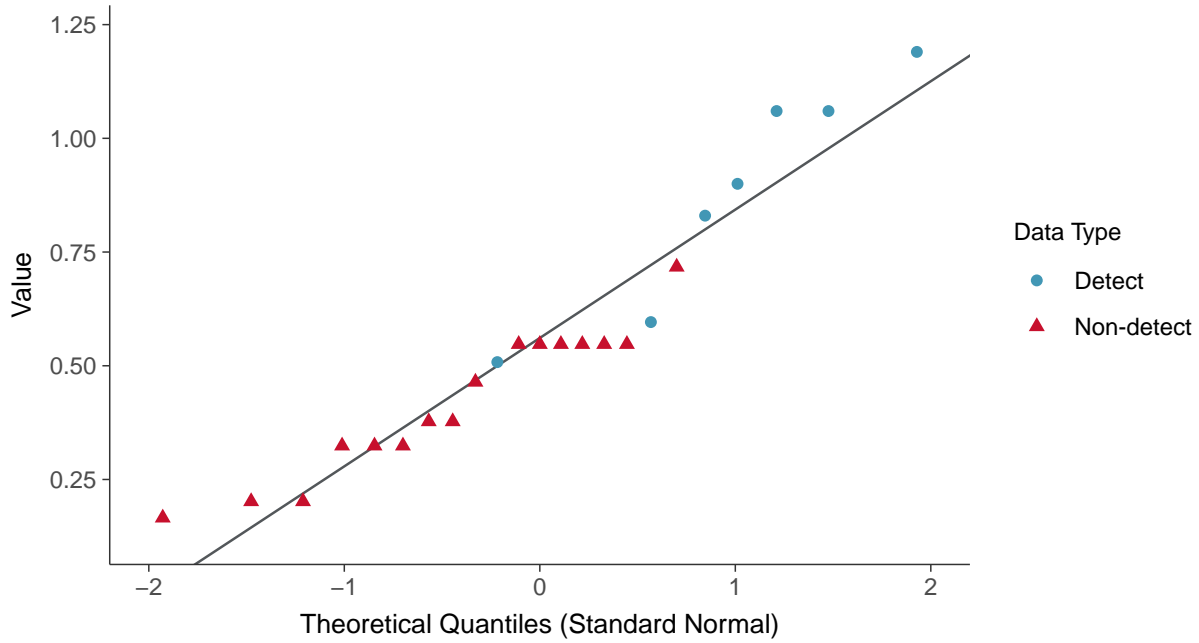
Radium-226+228, MW-15013 (pCi/L)





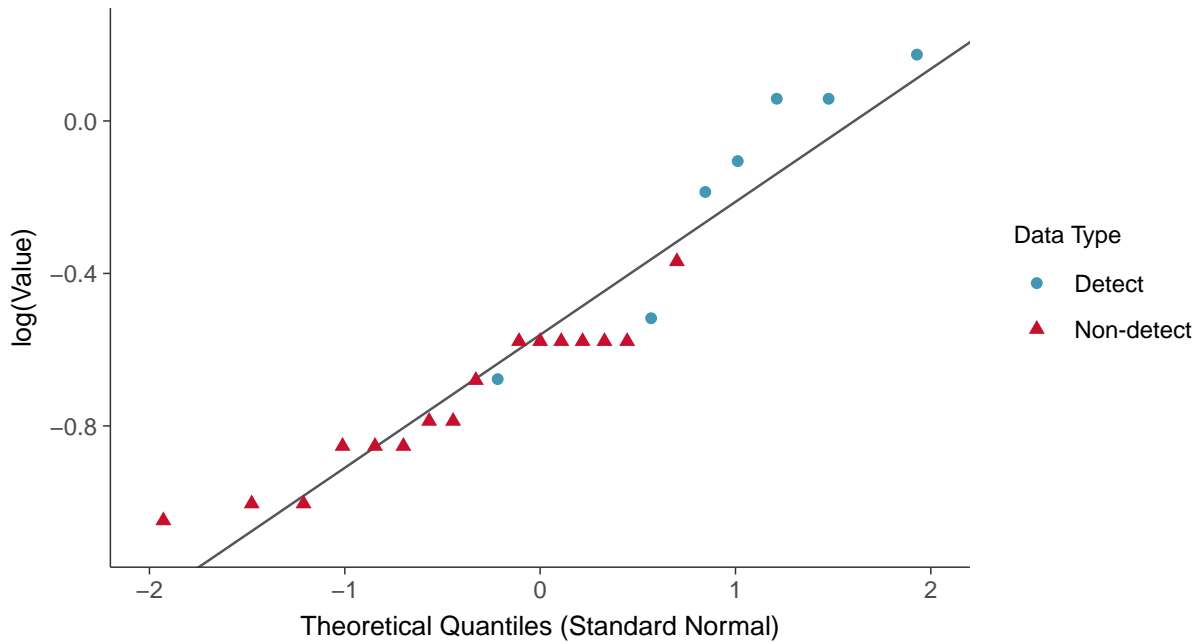
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15013 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

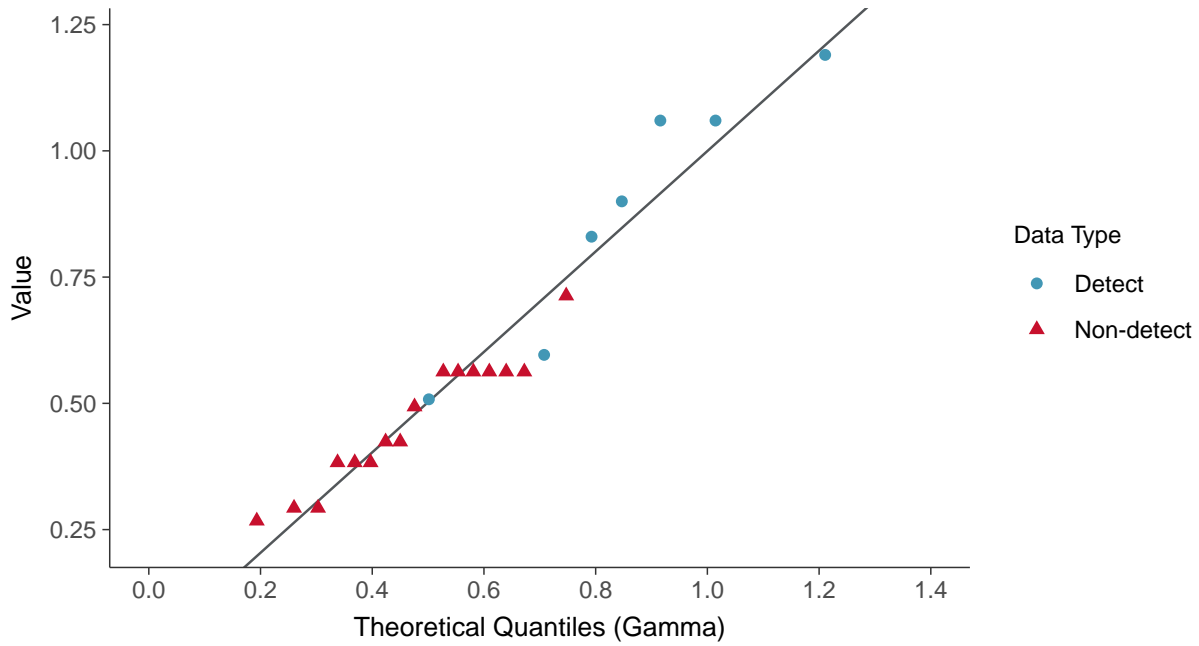
Radium-226+228, MW-15013 (pCi/L)





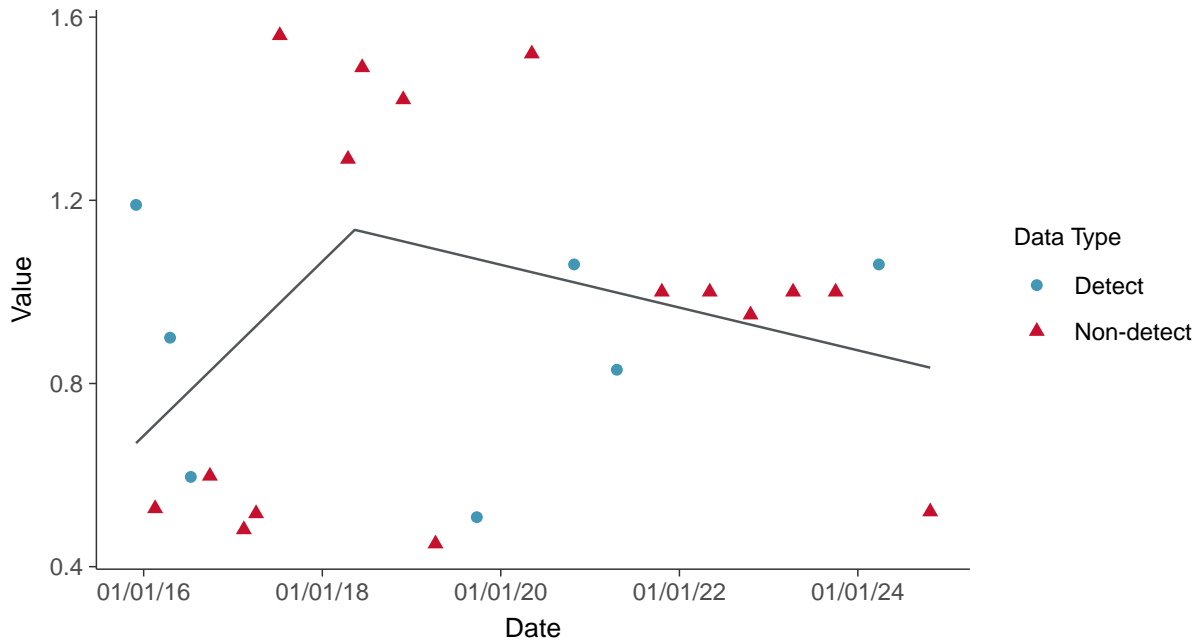
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15013 (pCi/L)



Trend Regression: Piecewise Linear-Linear

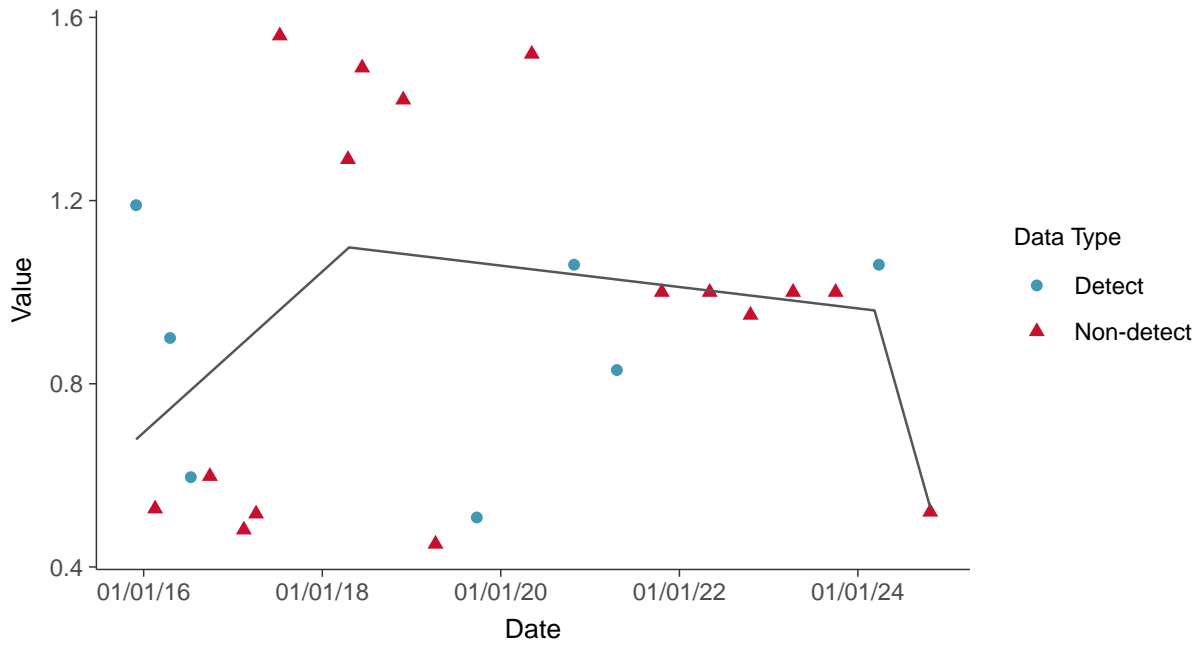
Radium-226+228, MW-15013 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

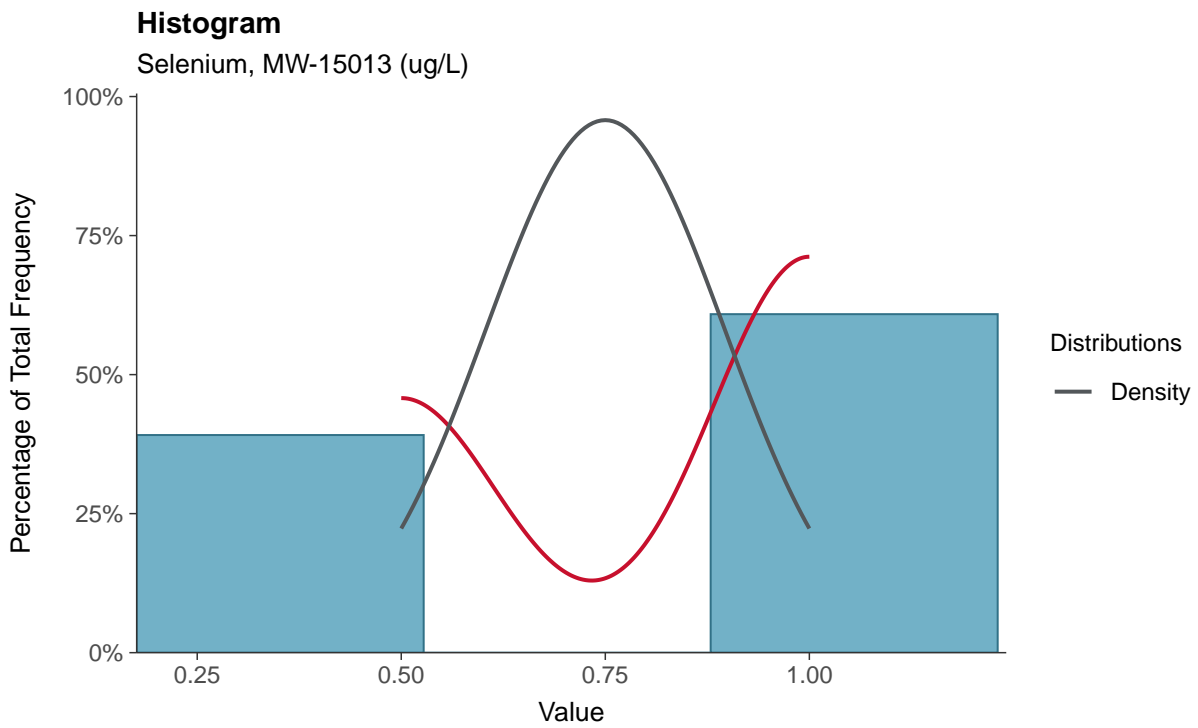
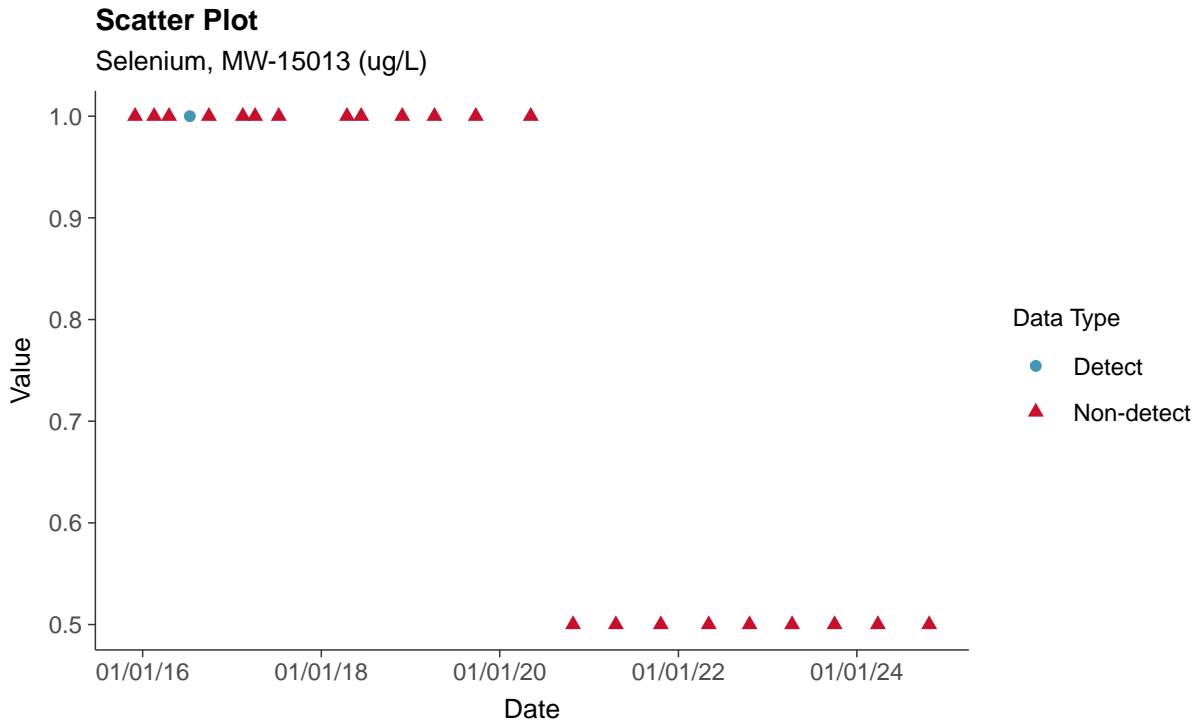
Radium-226+228, MW-15013 (pCi/L)





Appendix IV: Selenium, MW-15013

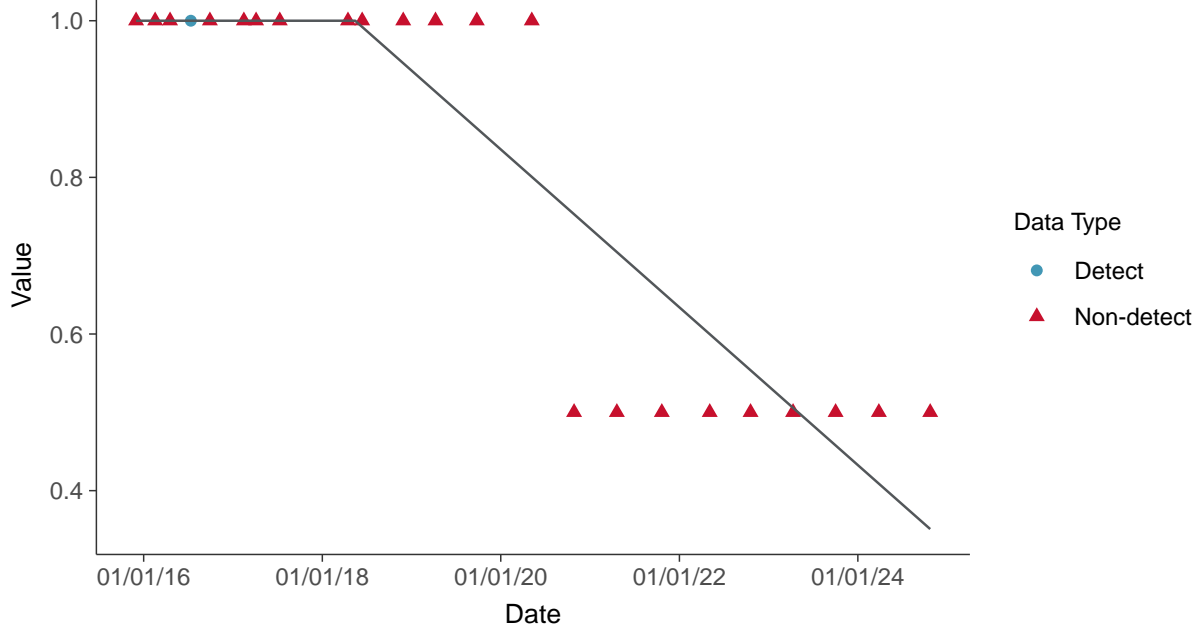
ID: 03_2_127





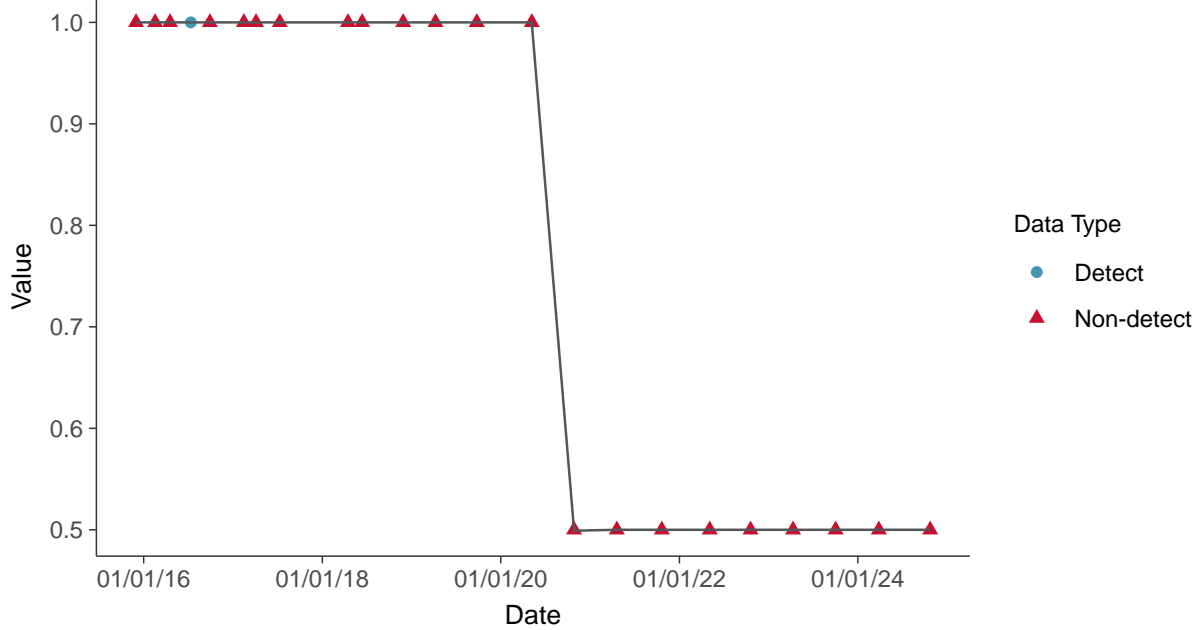
Trend Regression: Piecewise Linear-Linear

Selenium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

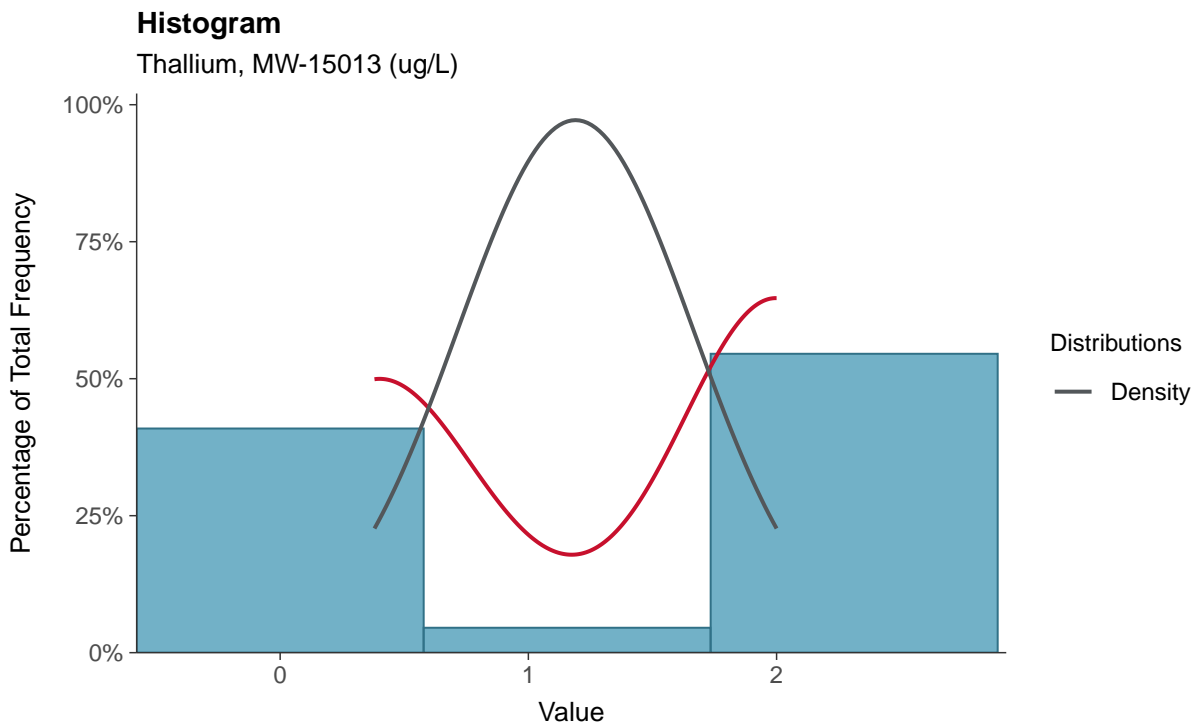
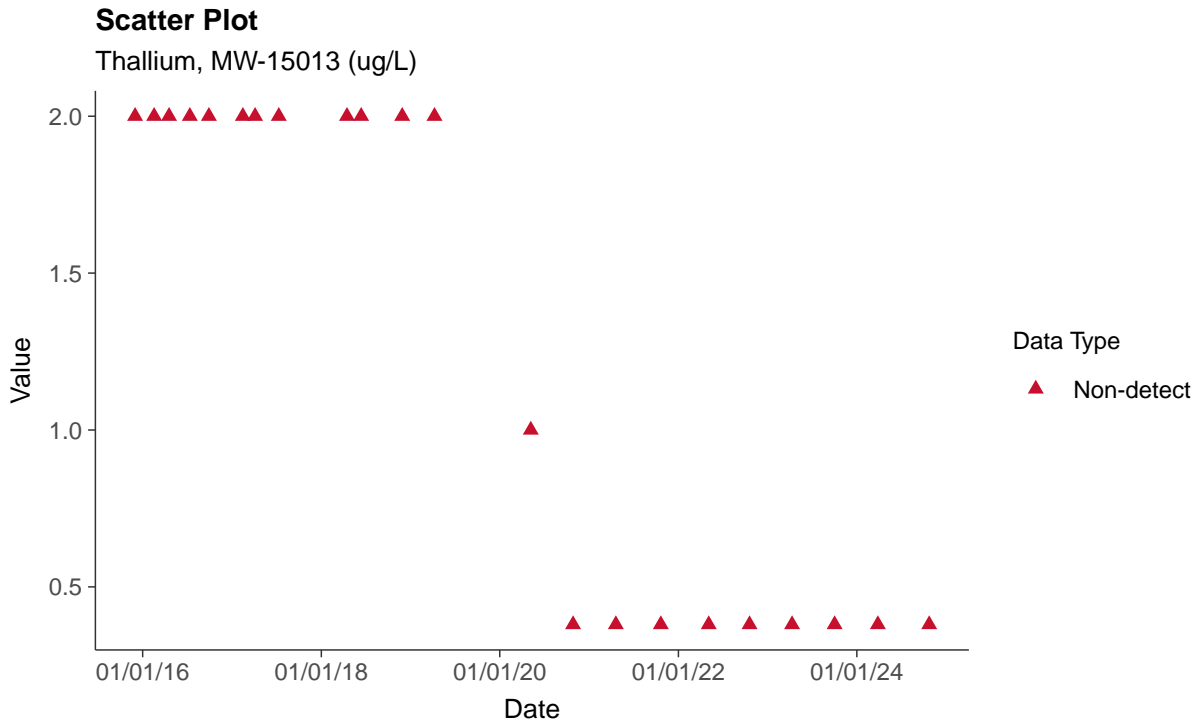
Selenium, MW-15013 (ug/L)





Appendix IV: Thallium, MW-15013

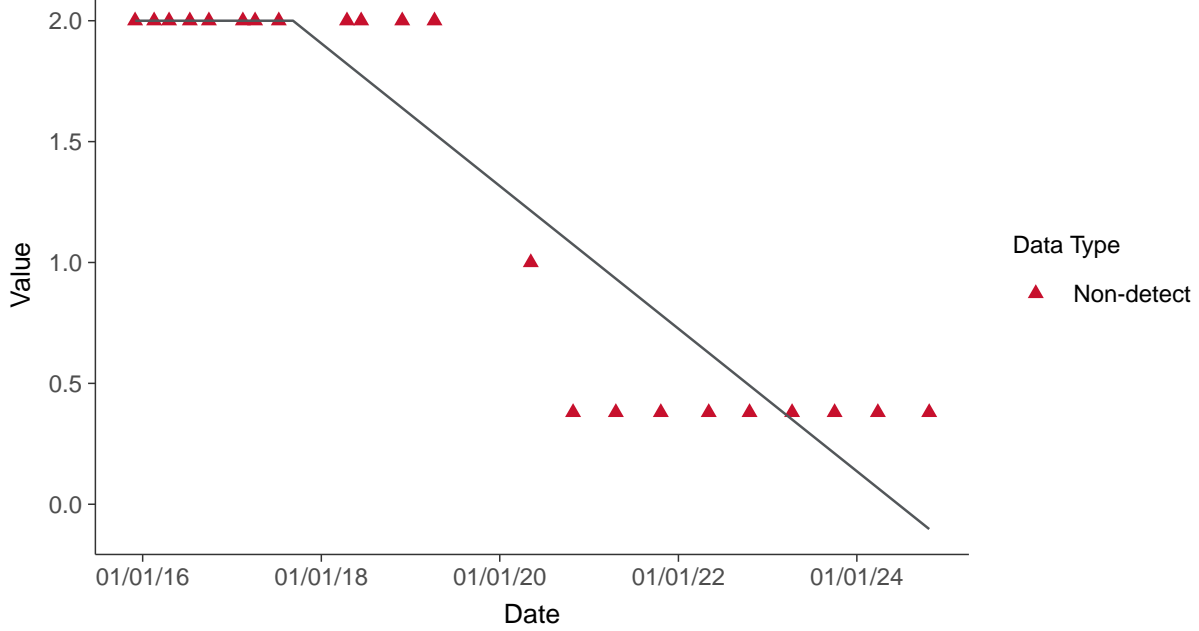
ID: 03_2_131





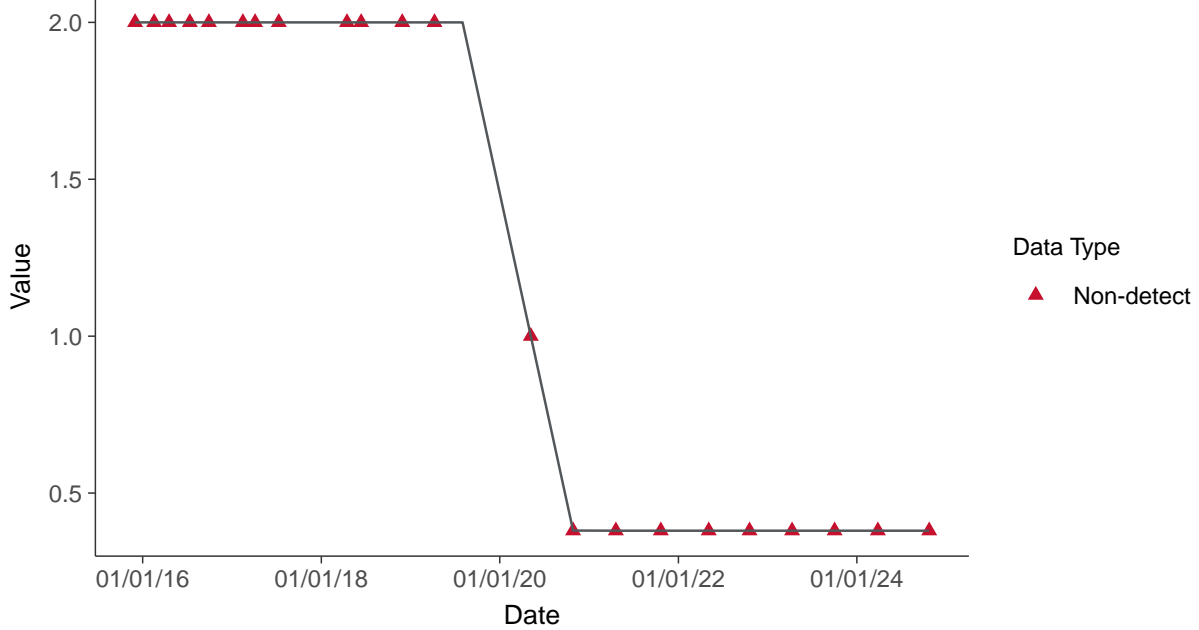
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15013 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

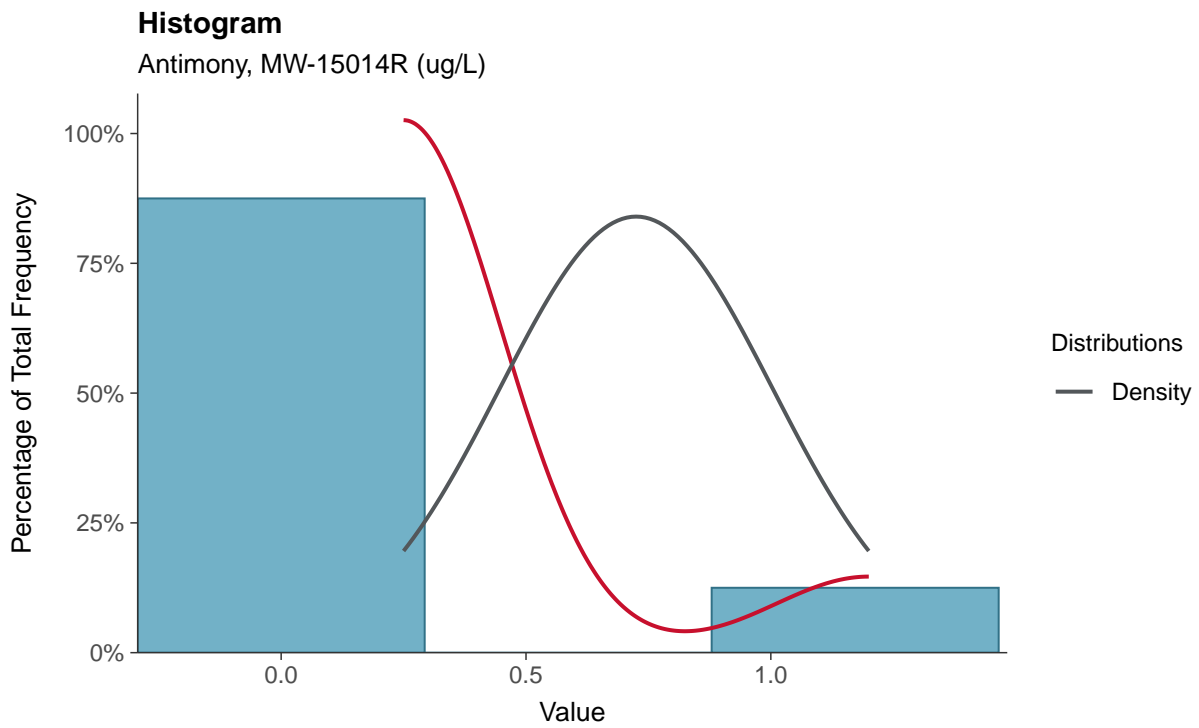
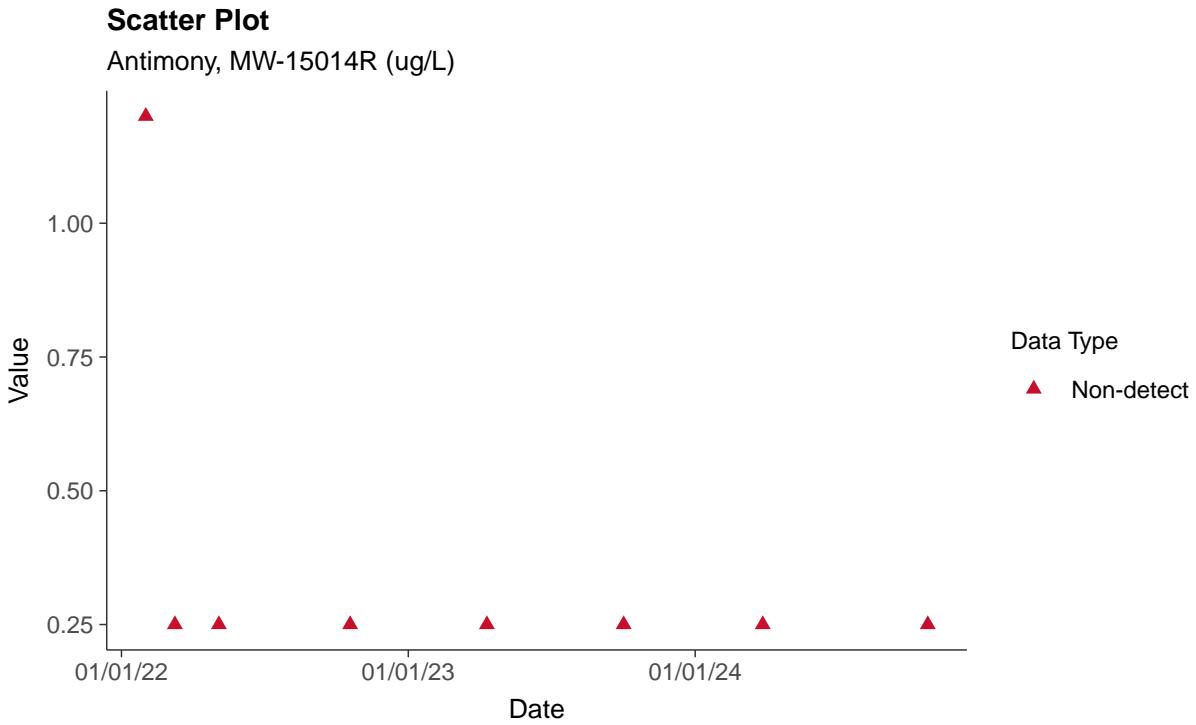
Thallium, MW-15013 (ug/L)





Appendix IV: Antimony, MW-15014R

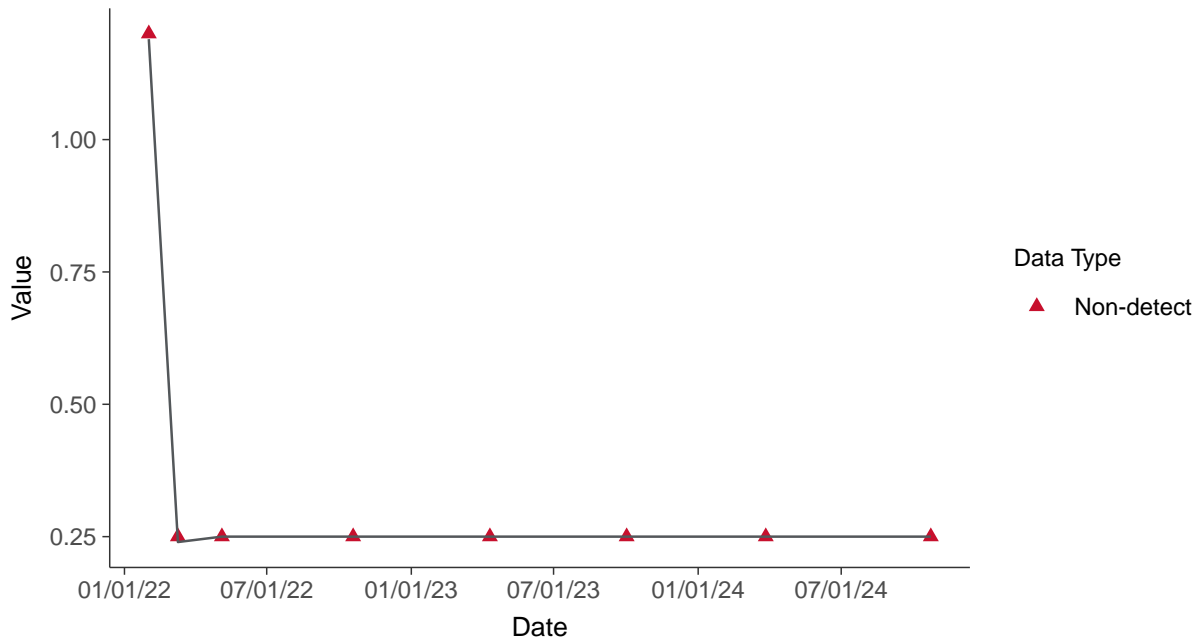
ID: 04_2_101





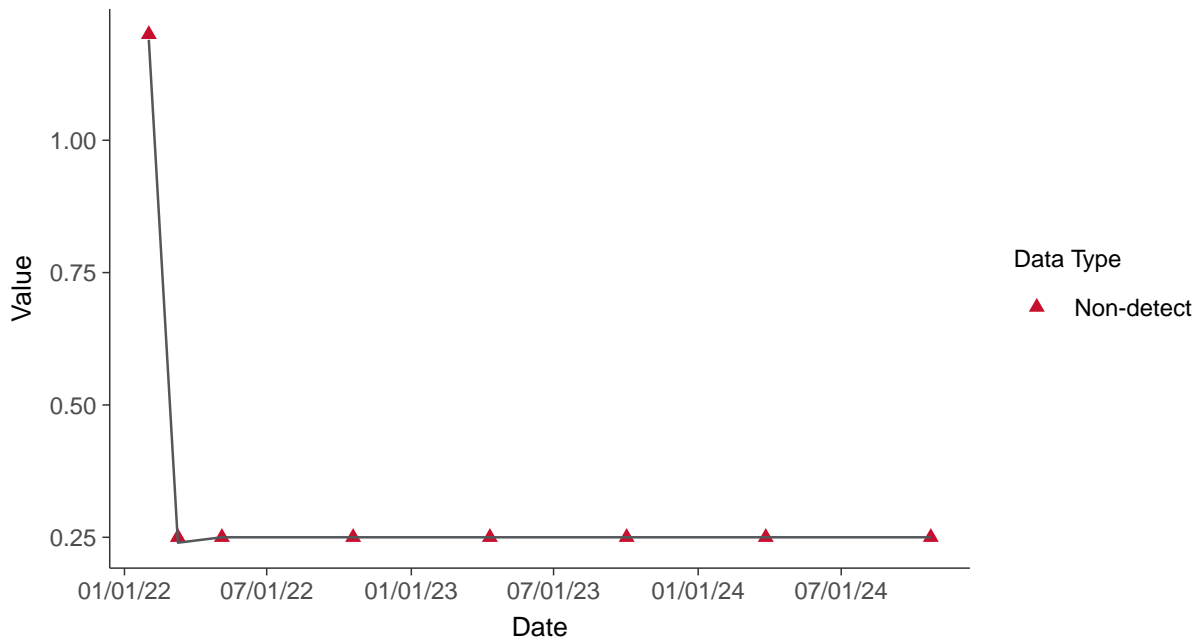
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15014R (ug/L)



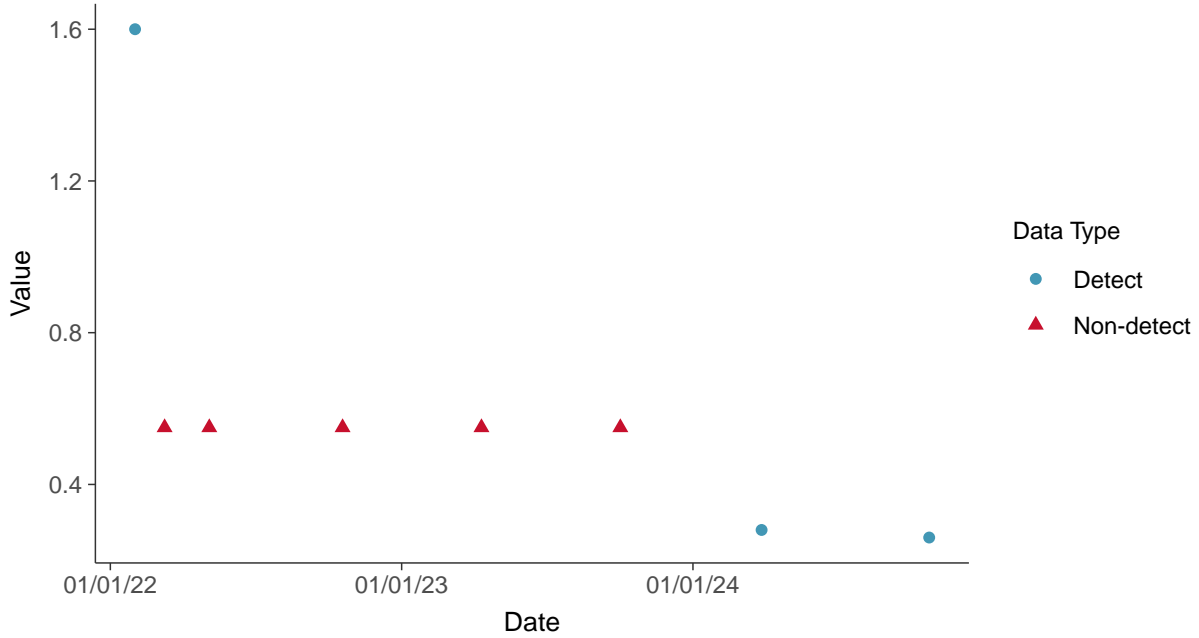


Appendix IV: Arsenic, MW-15014R

ID: 04_2_102

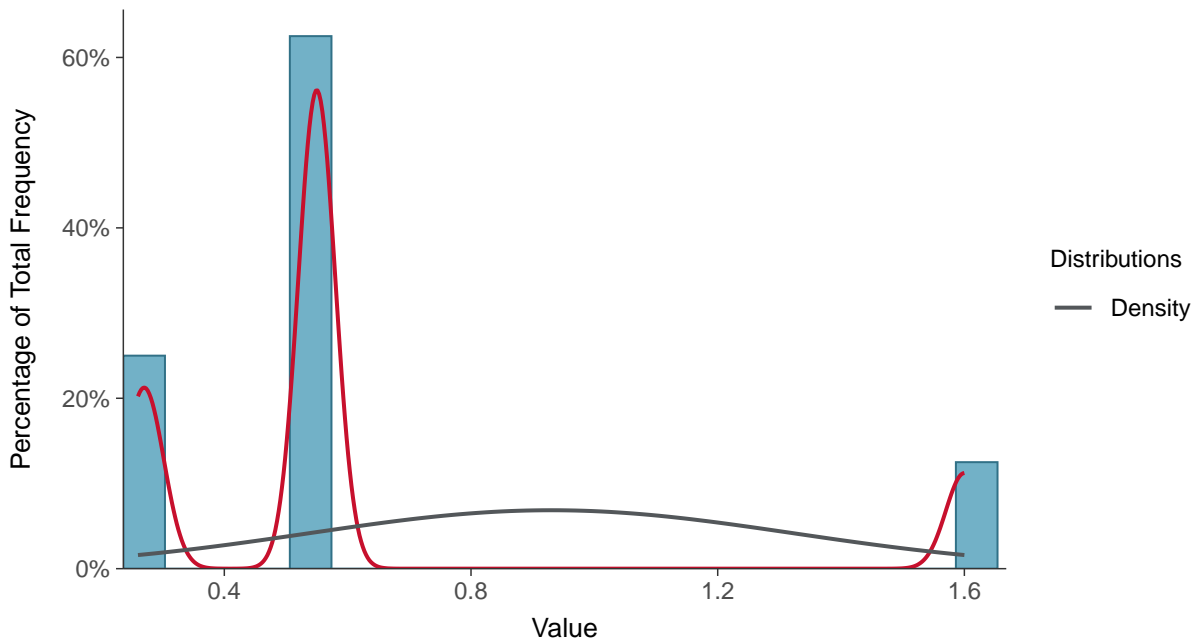
Scatter Plot

Arsenic, MW-15014R (ug/L)



Histogram

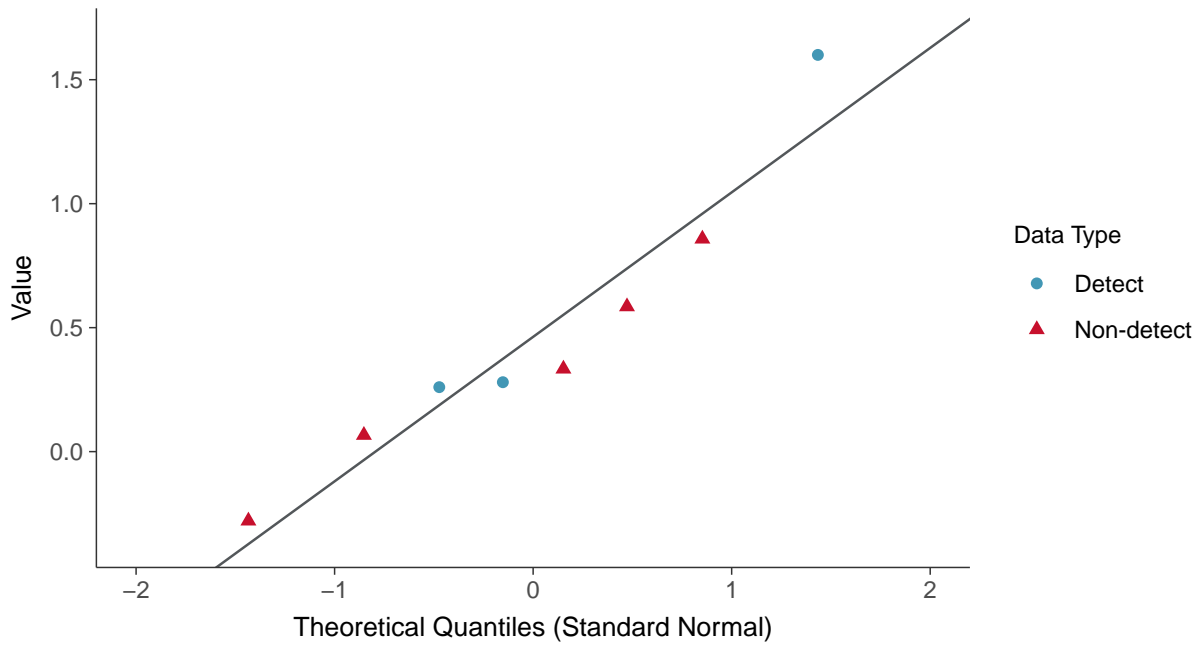
Arsenic, MW-15014R (ug/L)





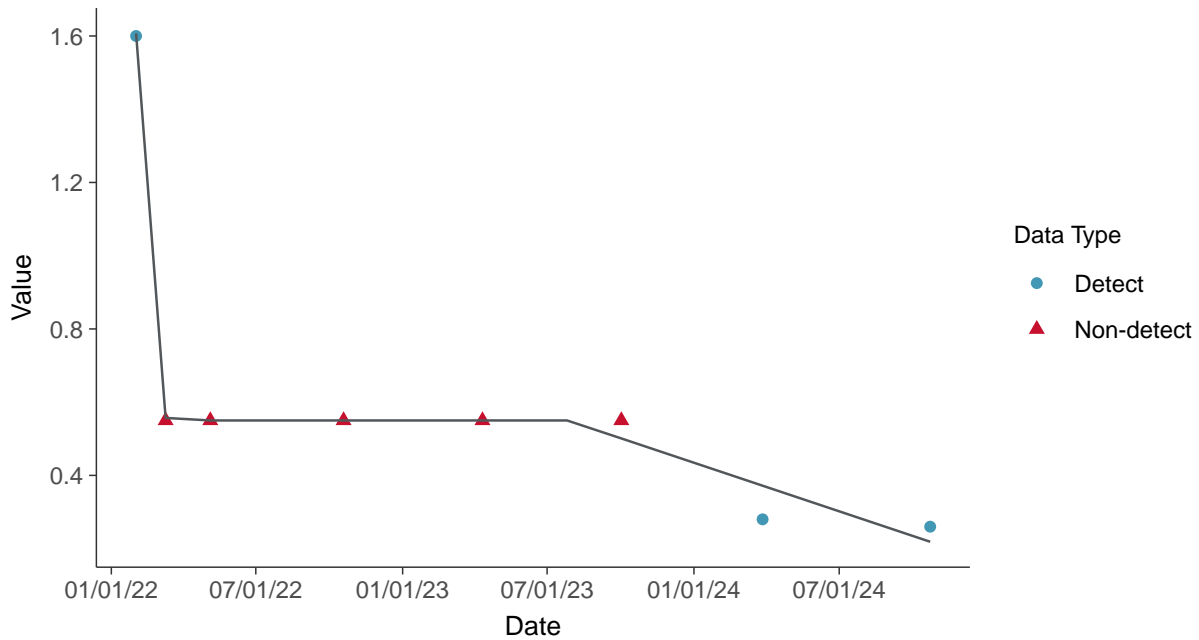
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15014R (ug/L)



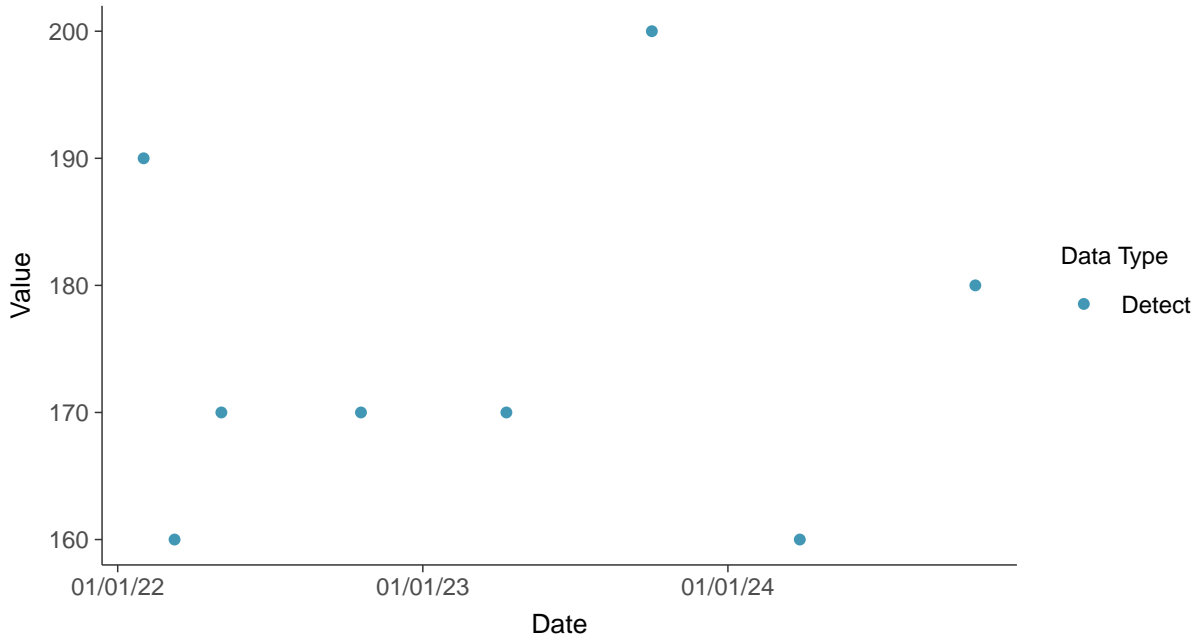


Appendix IV: Barium, MW-15014R

ID: 04_2_103

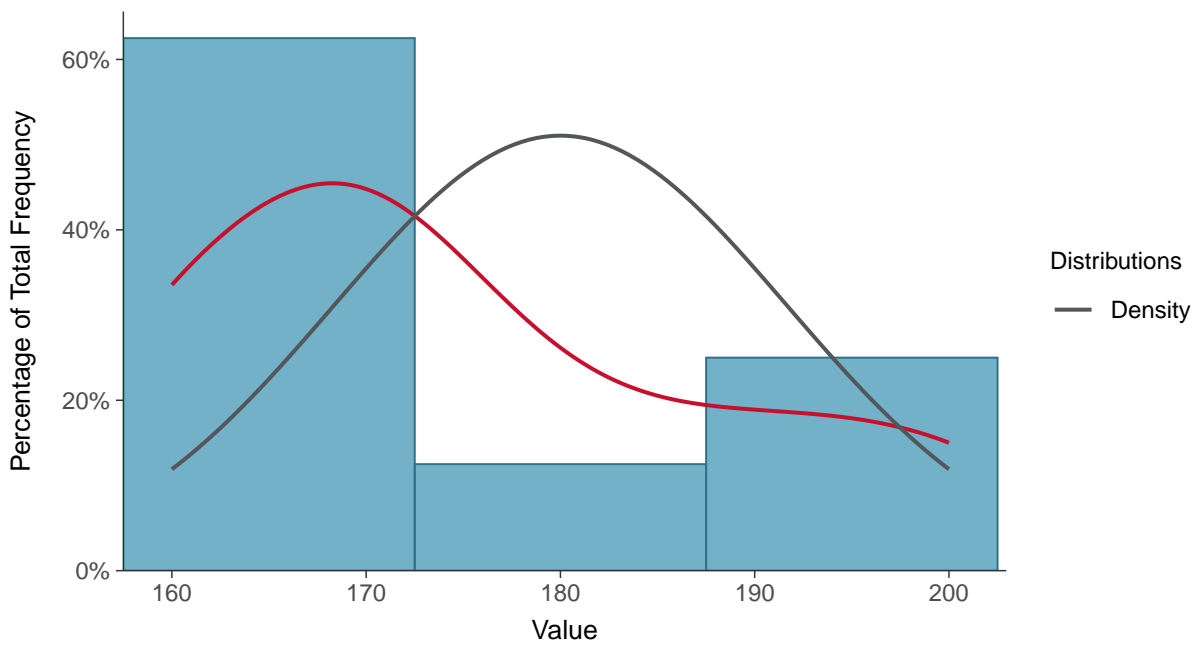
Scatter Plot

Barium, MW-15014R (ug/L)



Histogram

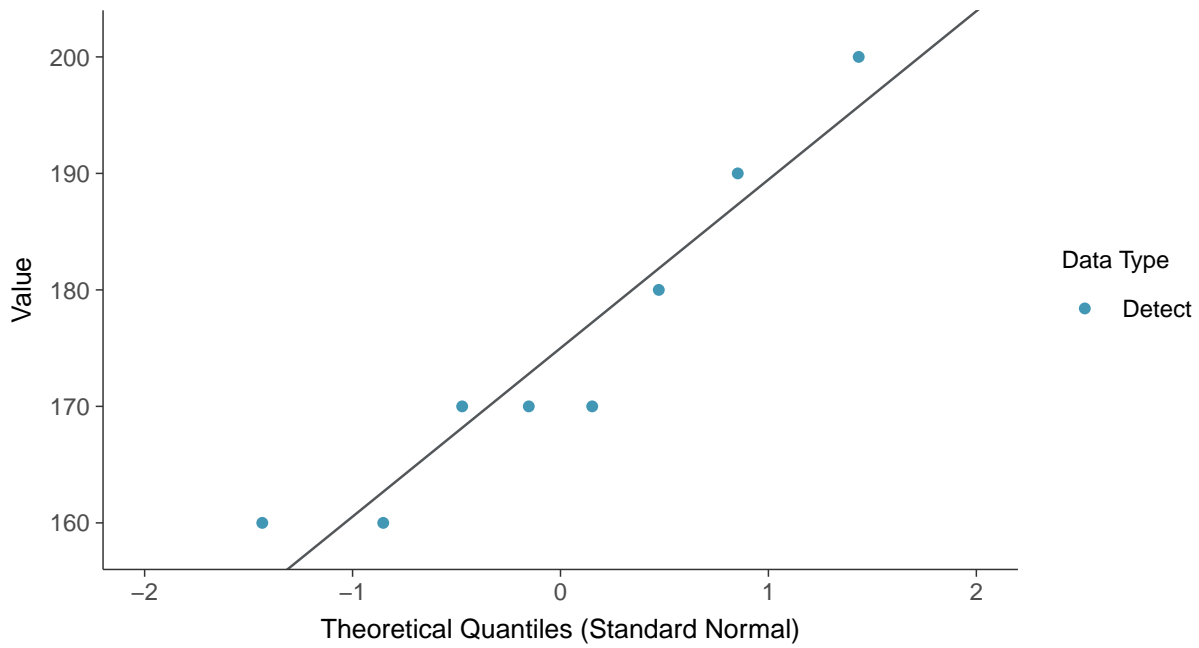
Barium, MW-15014R (ug/L)





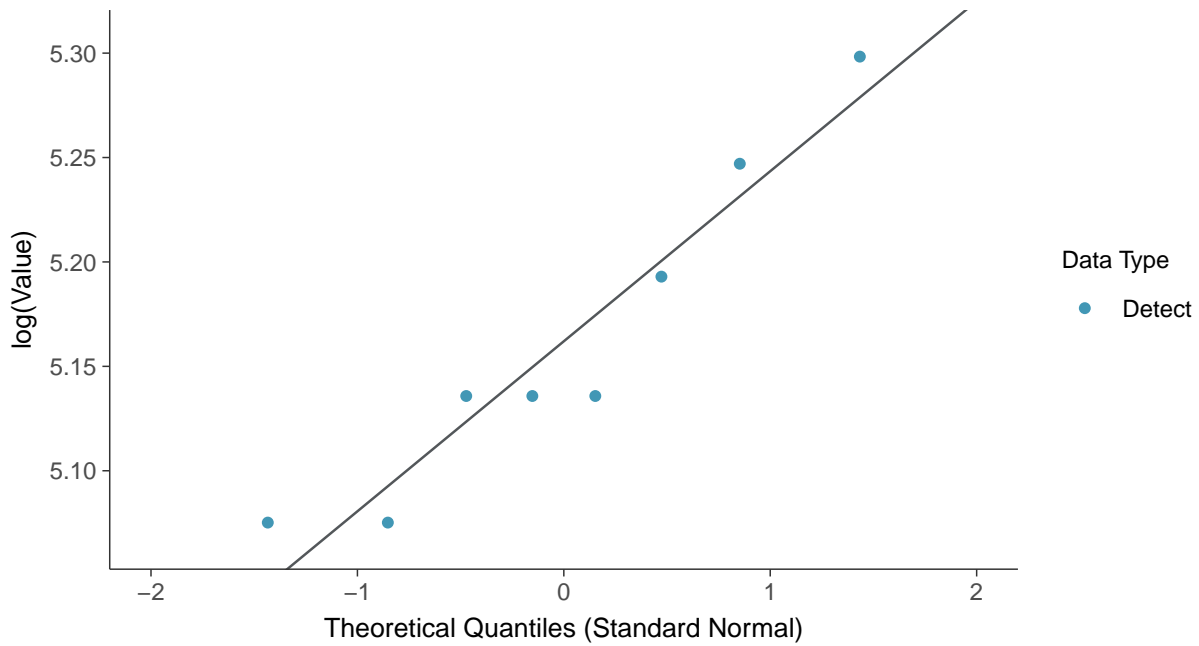
Normal Q-Q plot

Barium, MW-15014R (ug/L)



Lognormal Q-Q plot

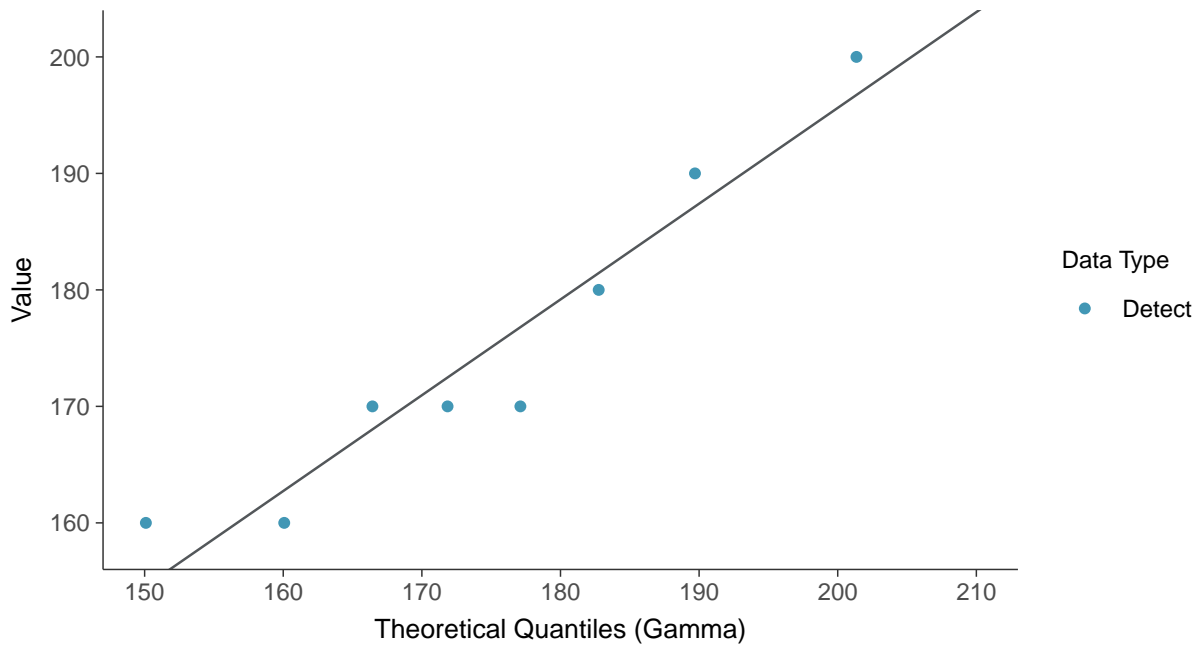
Barium, MW-15014R (ug/L)





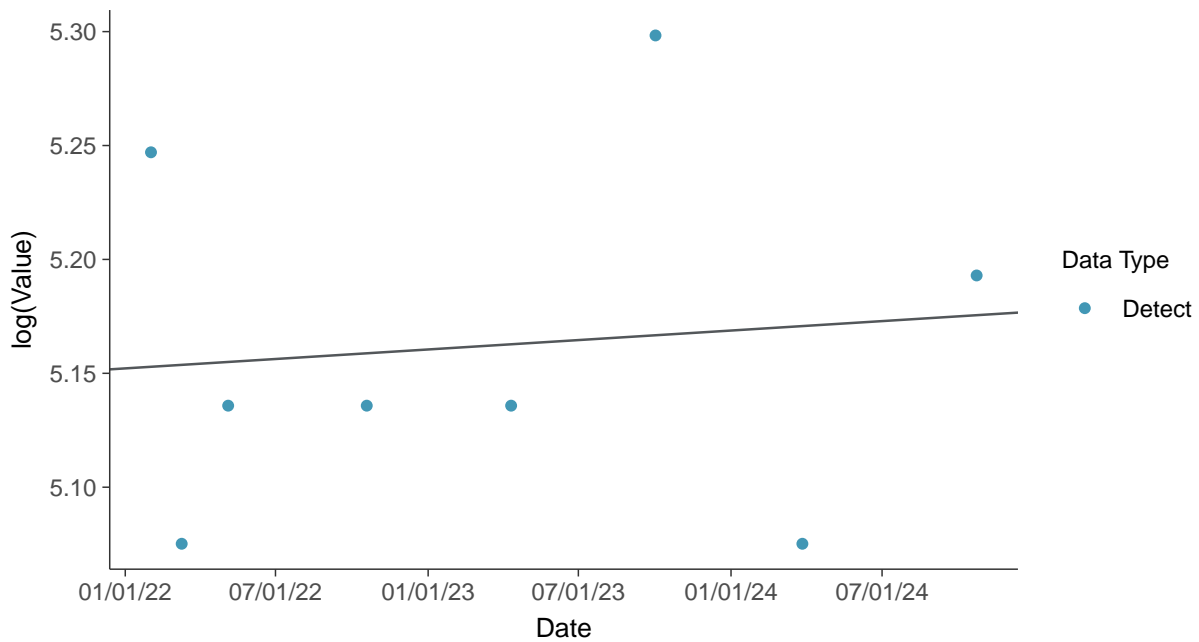
Gamma Q-Q plot

Barium, MW-15014R (ug/L)



Trend Regression: Lognormal MLE

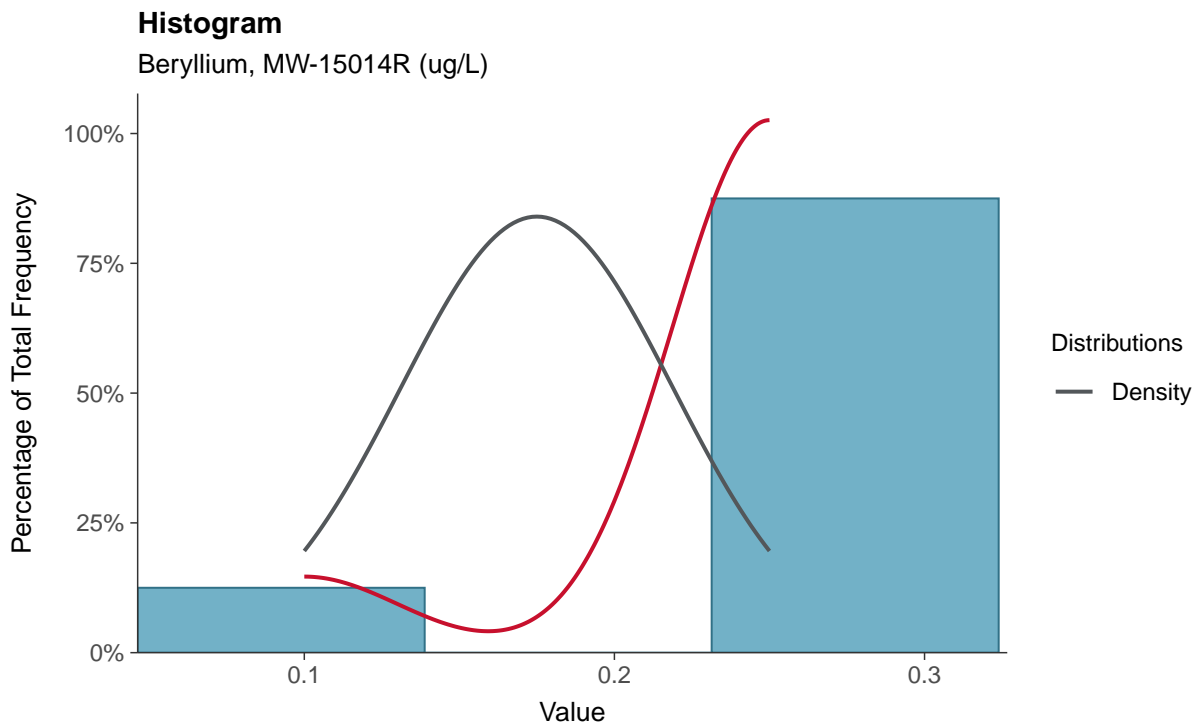
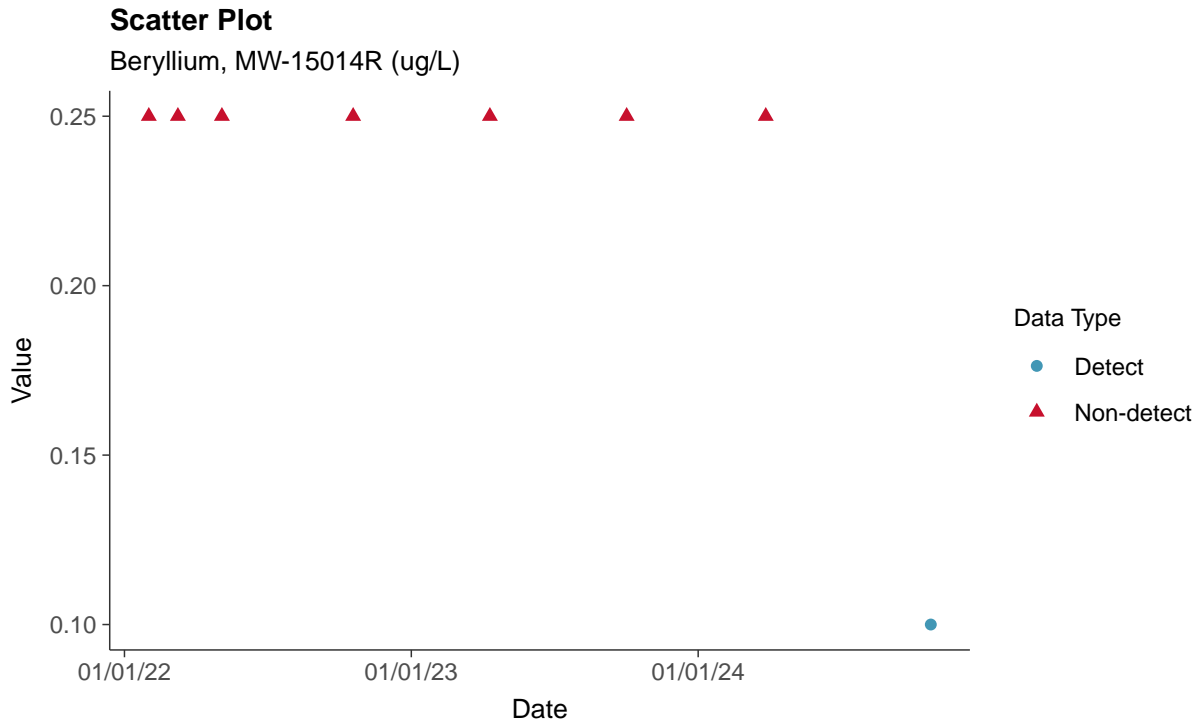
Barium, MW-15014R (ug/L)





Appendix IV: Beryllium, MW-15014R

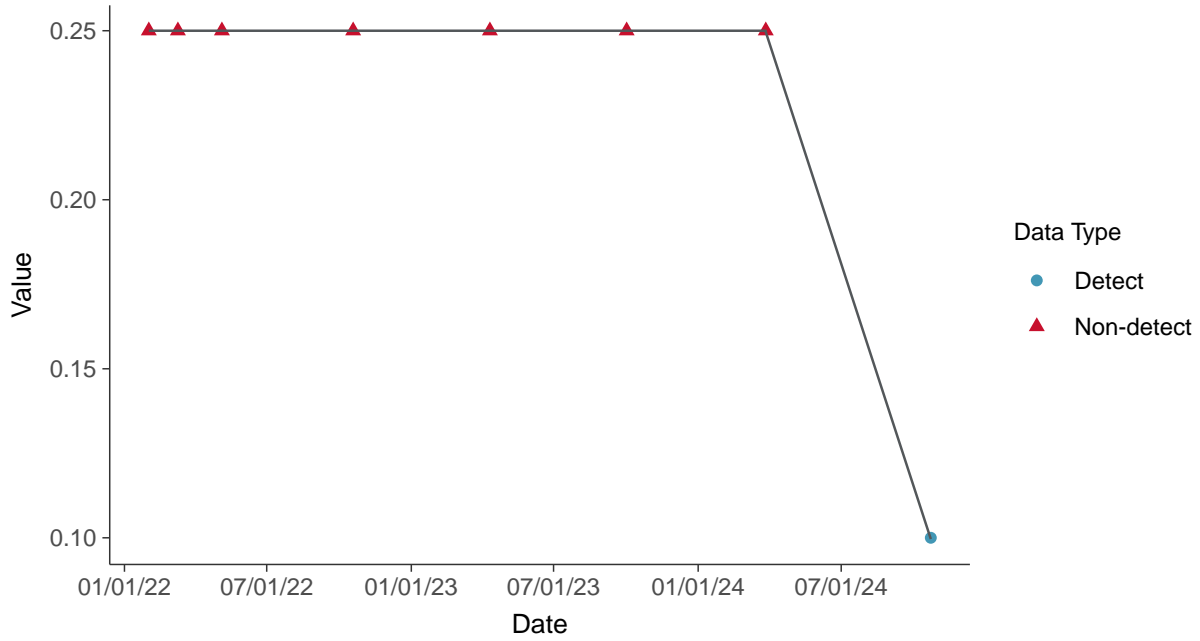
ID: 04_2_104





Trend Regression: Piecewise Linear-Linear

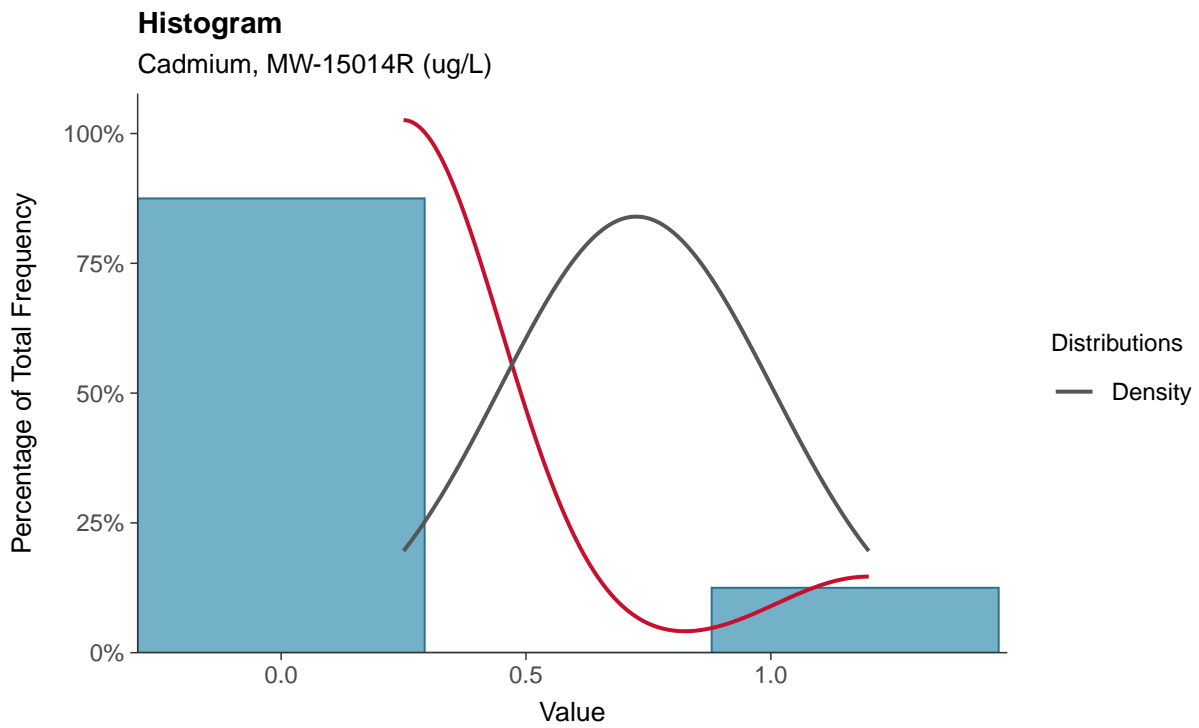
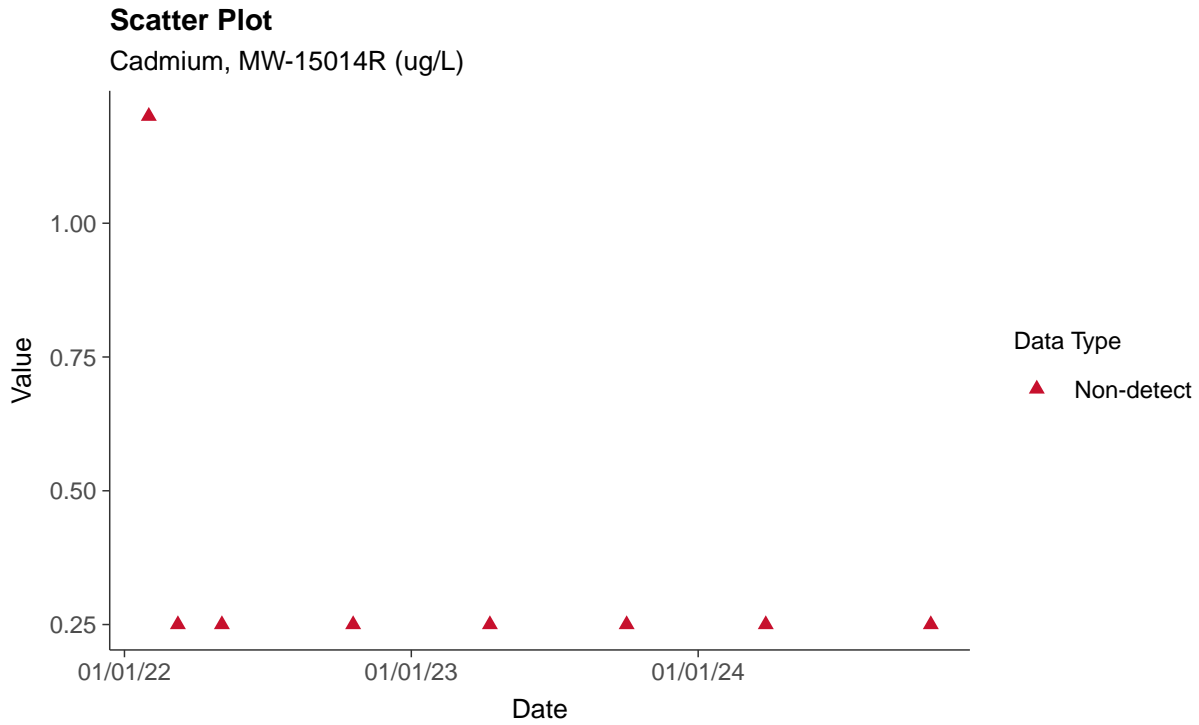
Beryllium, MW-15014R (ug/L)





Appendix IV: Cadmium, MW-15014R

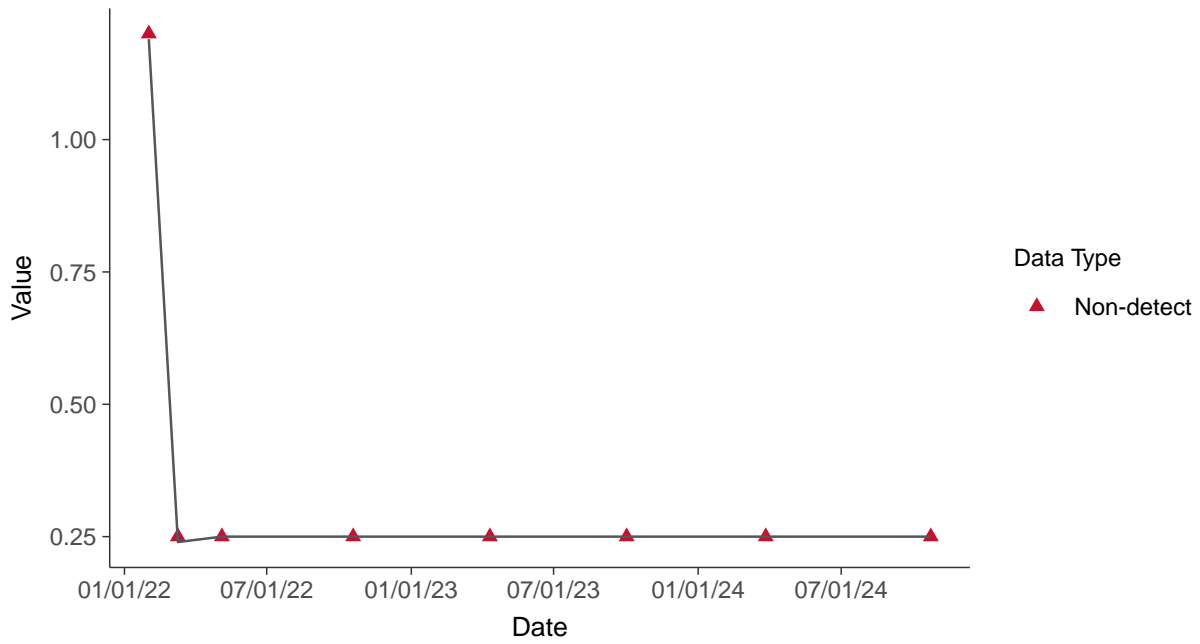
ID: 04_2_106





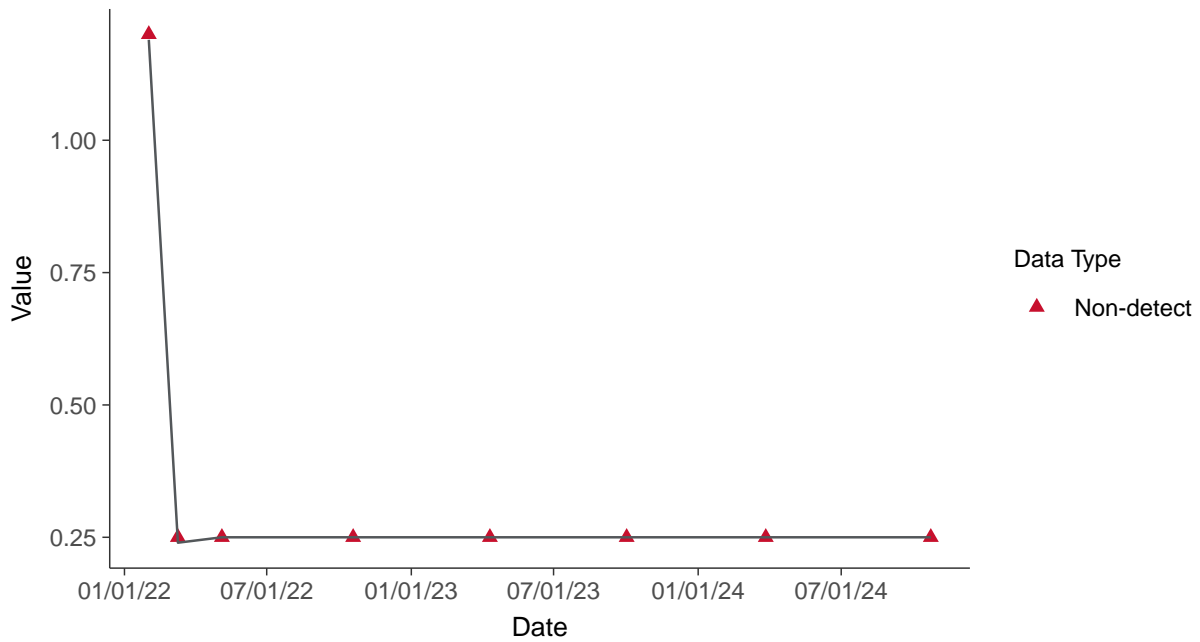
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15014R (ug/L)



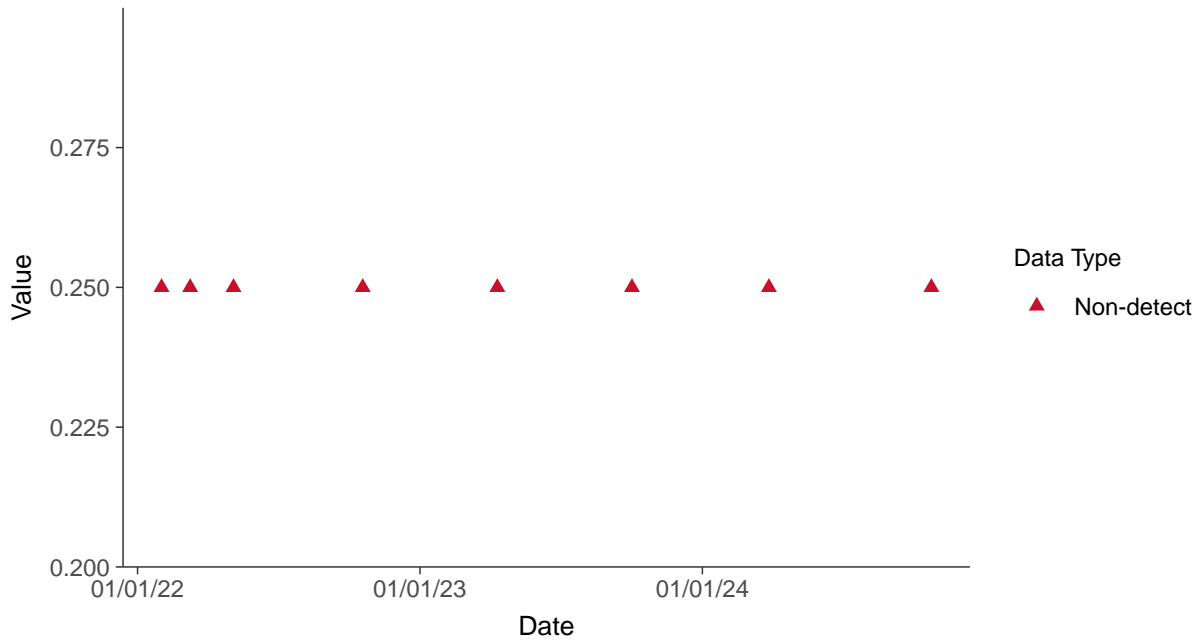


Appendix IV: Chromium, MW-15014R

ID: 04_2_109

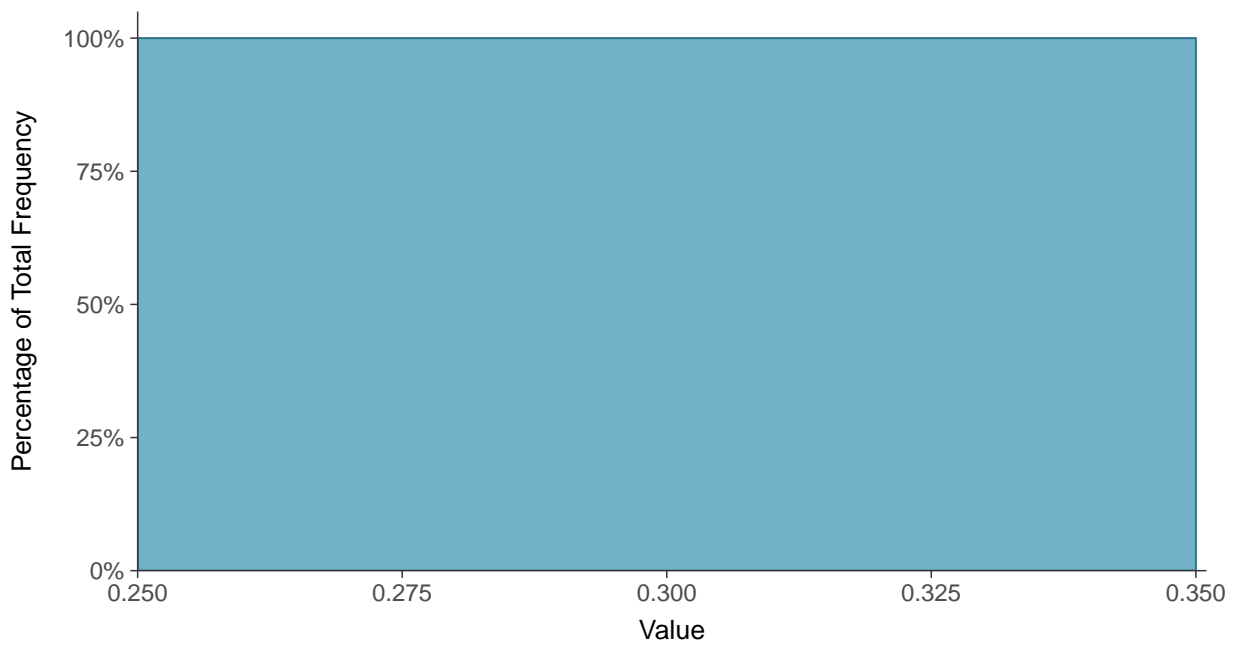
Scatter Plot

Chromium, MW-15014R (ug/L)



Histogram

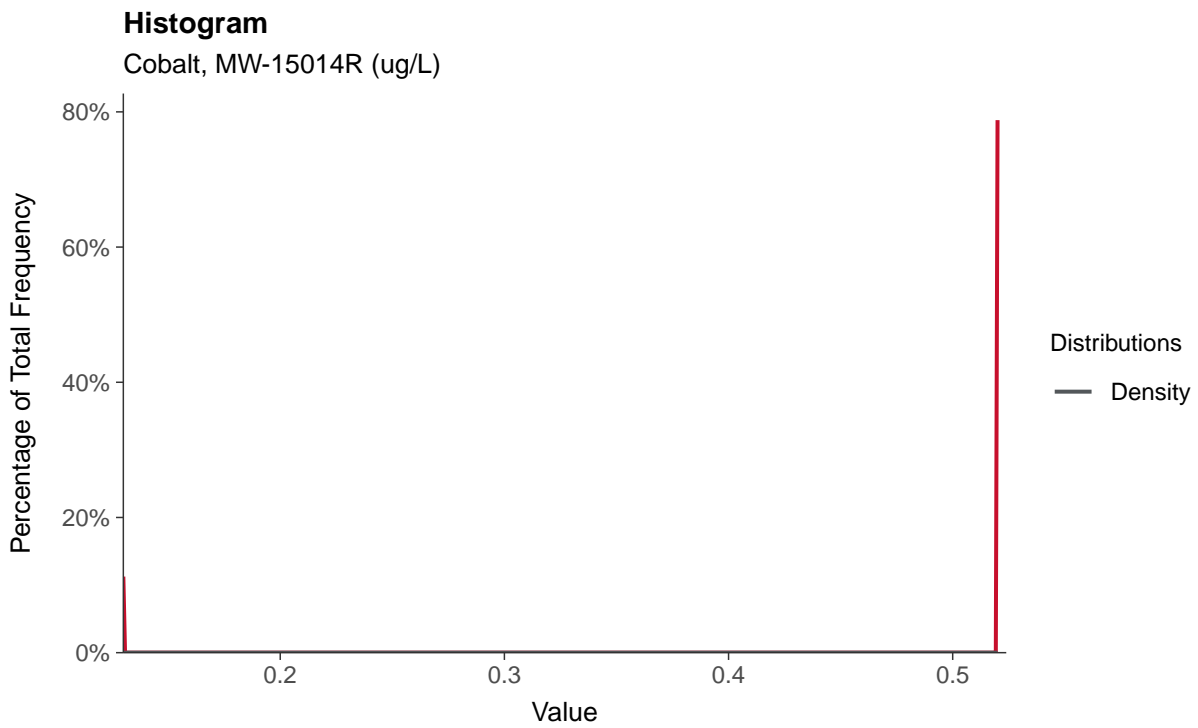
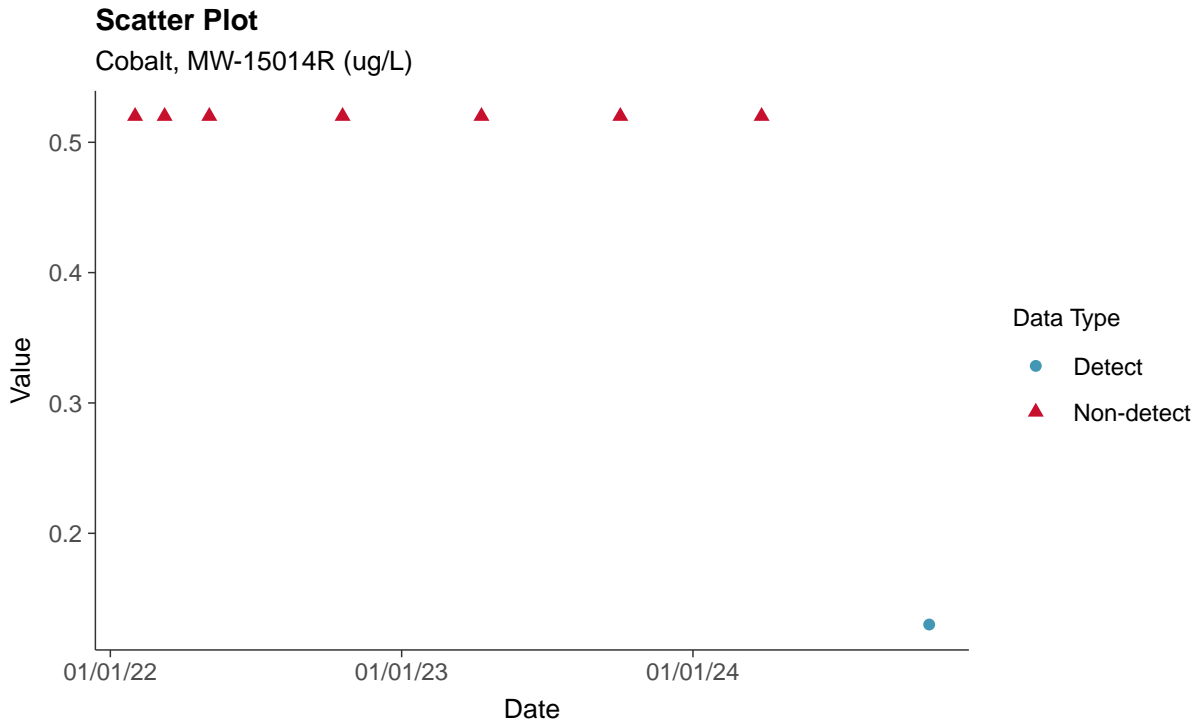
Chromium, MW-15014R (ug/L)





Appendix IV: Cobalt, MW-15014R

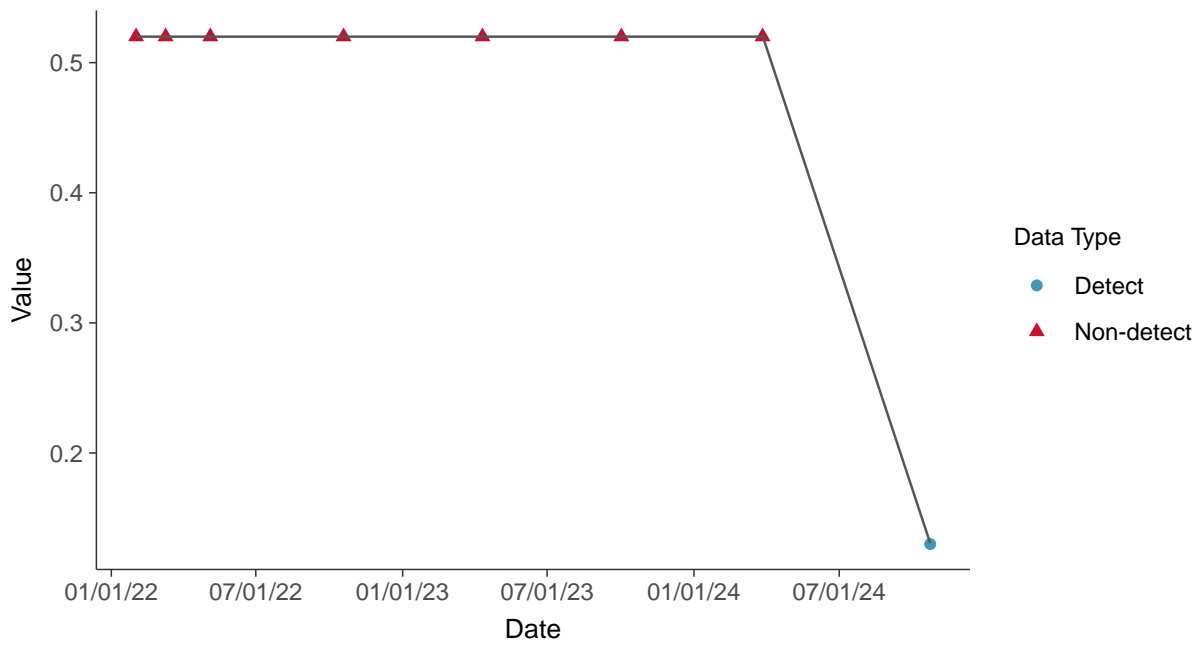
ID: 04_2_110





Trend Regression: Piecewise Linear-Linear

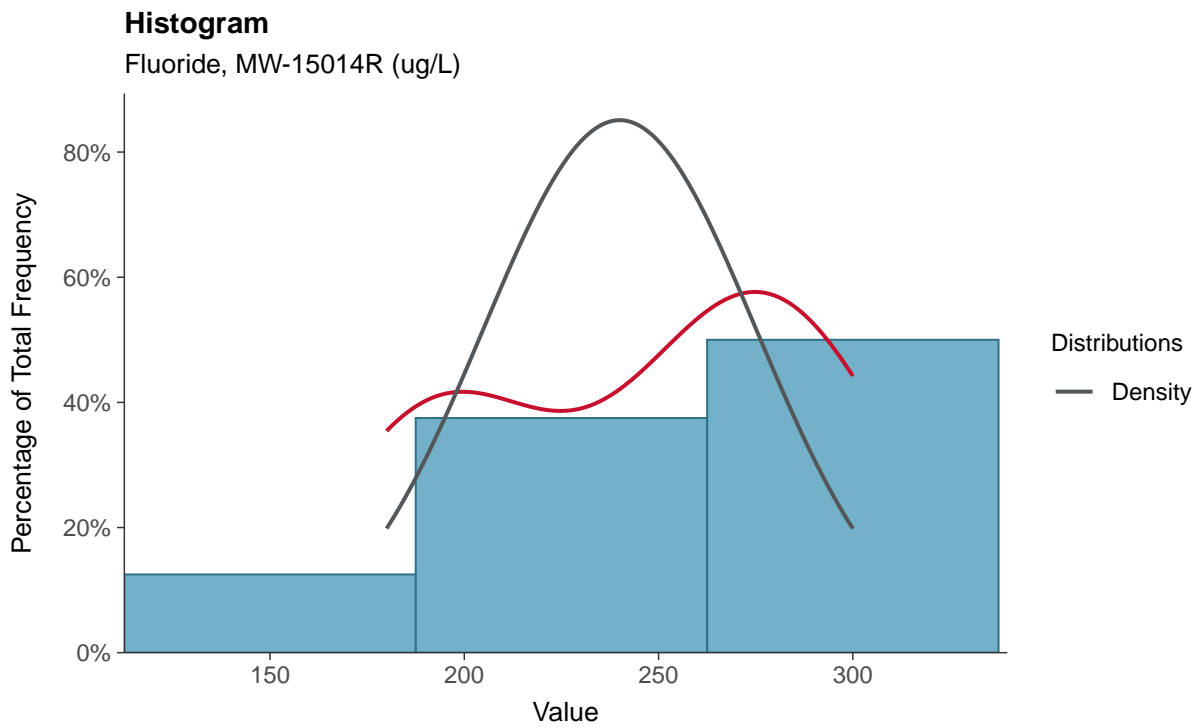
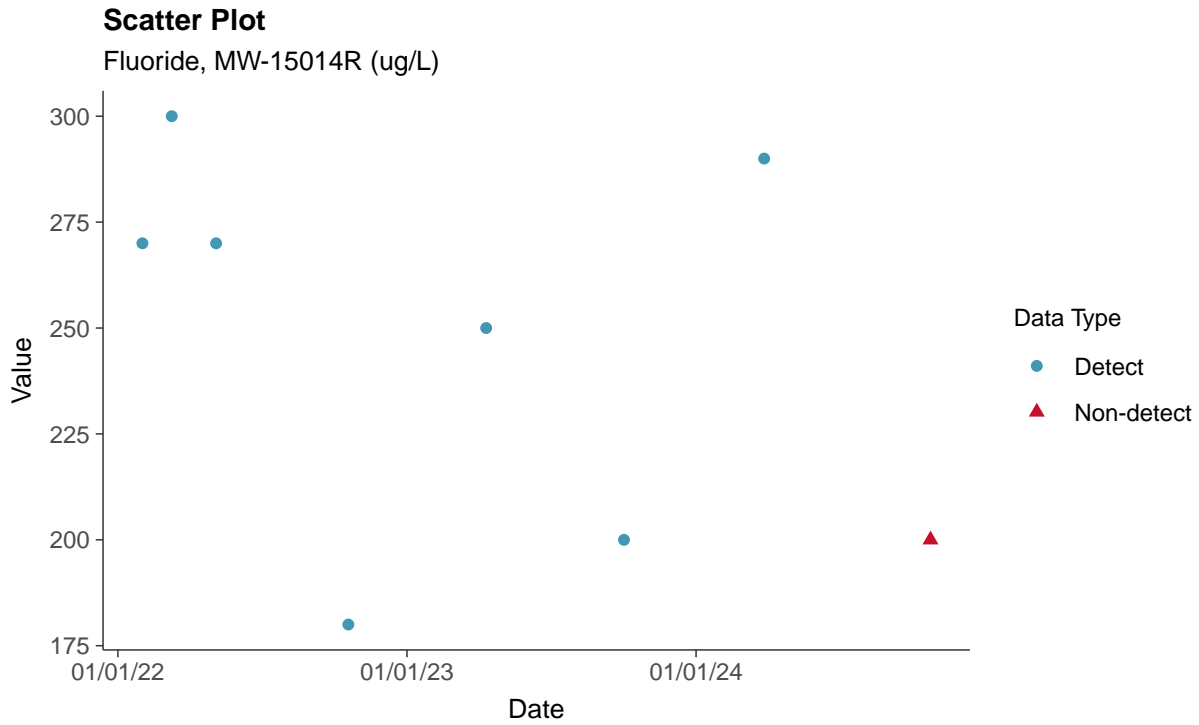
Cobalt, MW-15014R (ug/L)





Appendix IV: Fluoride, MW-15014R

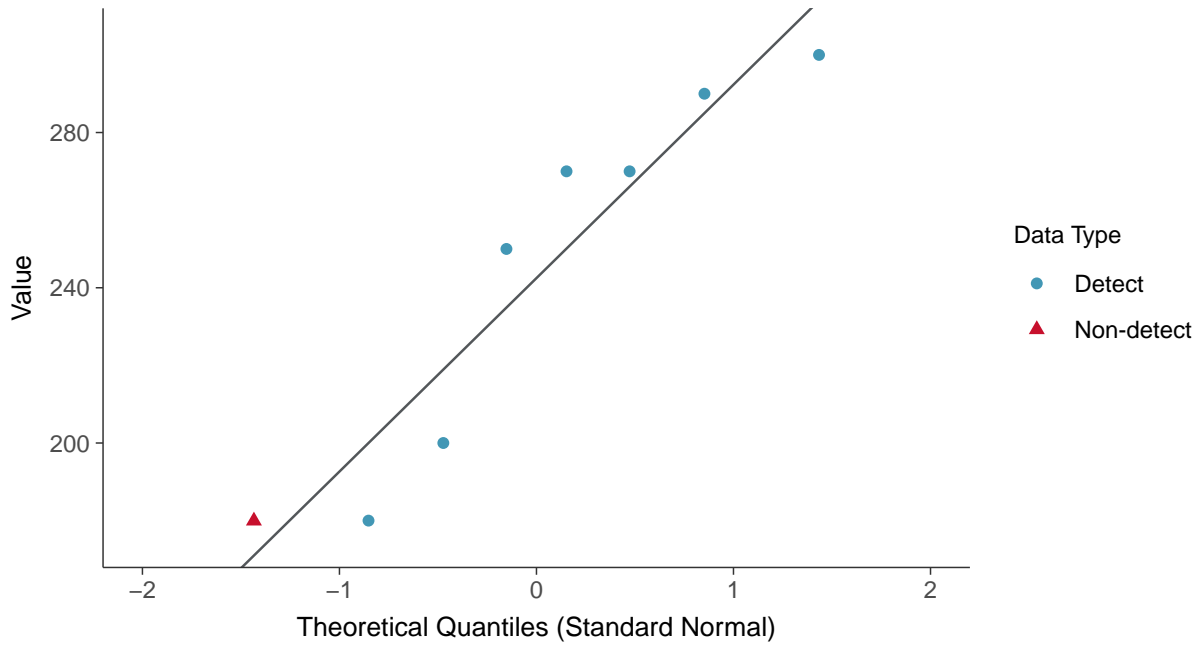
ID: 04_2_114





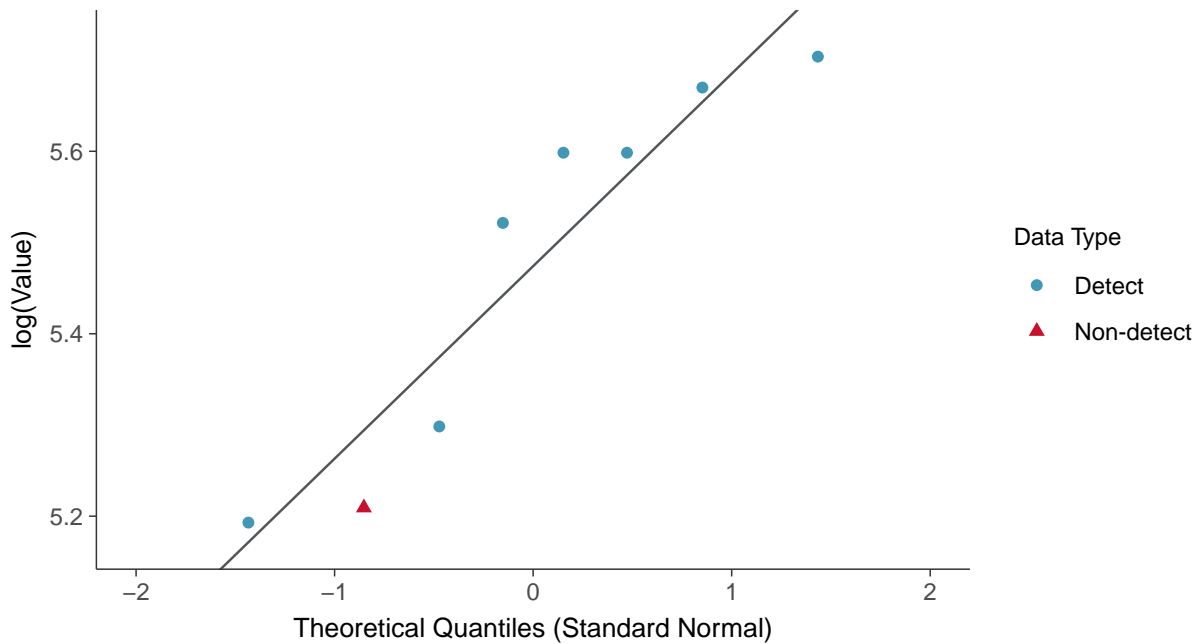
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15014R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

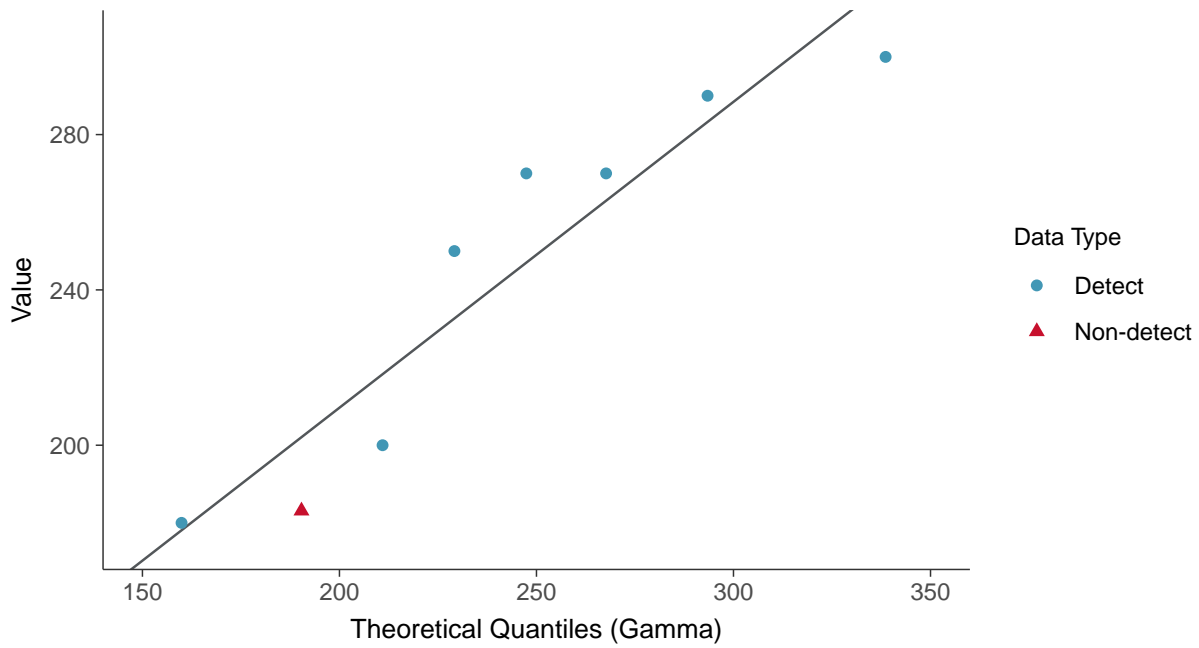
Fluoride, MW-15014R (ug/L)





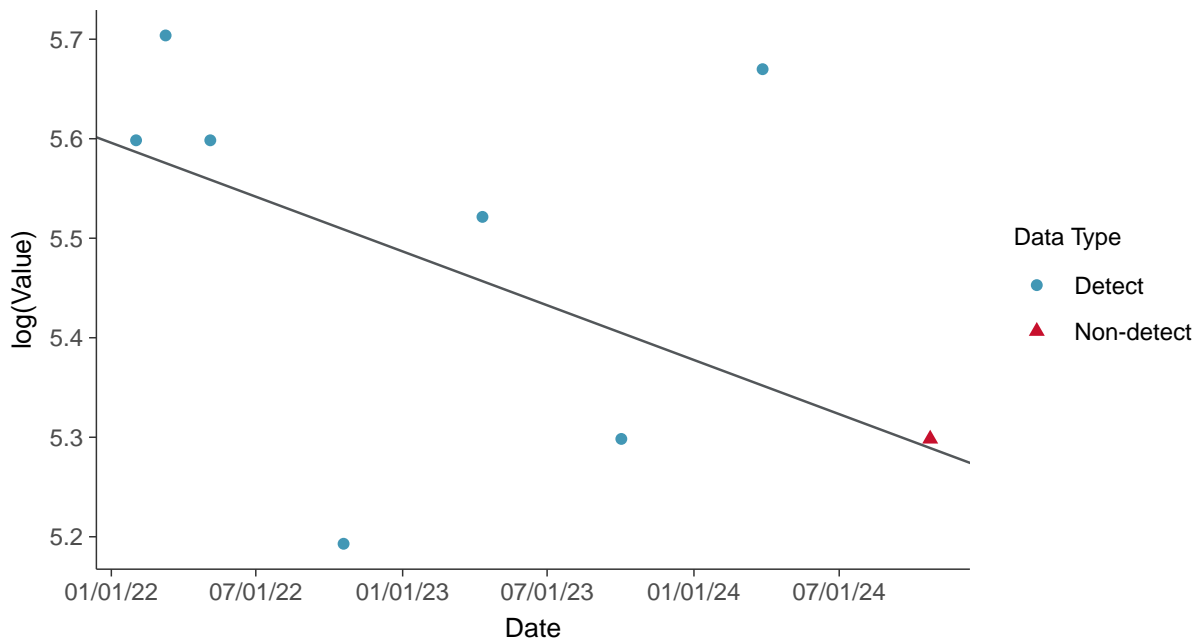
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15014R (ug/L)



Trend Regression: Lognormal MLE

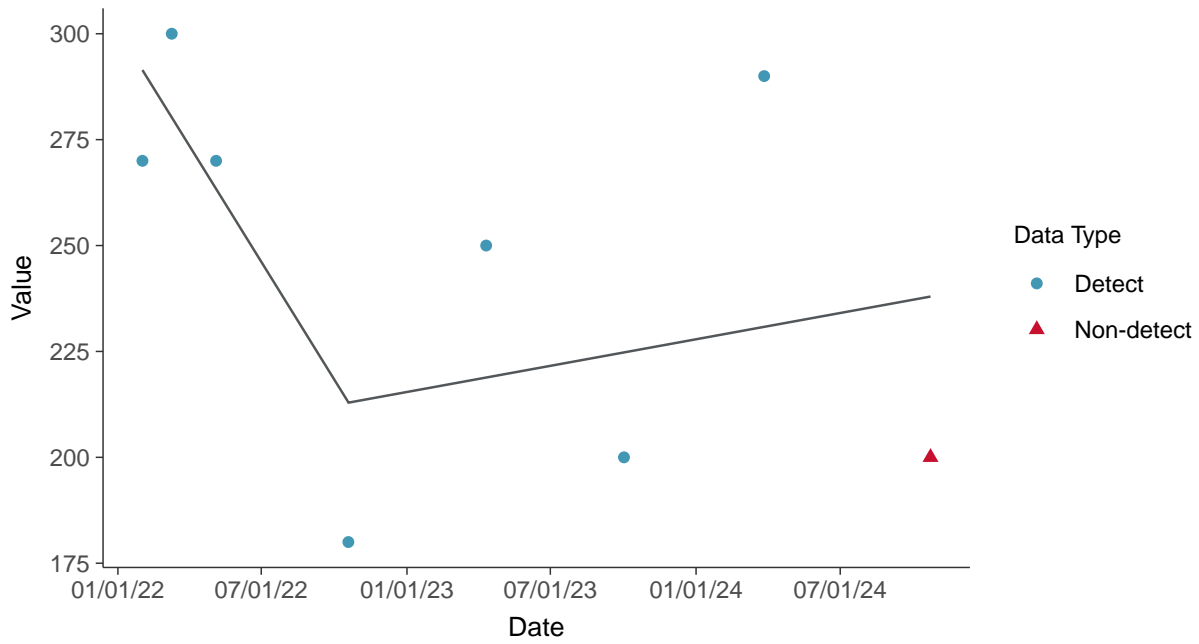
Fluoride, MW-15014R (ug/L)





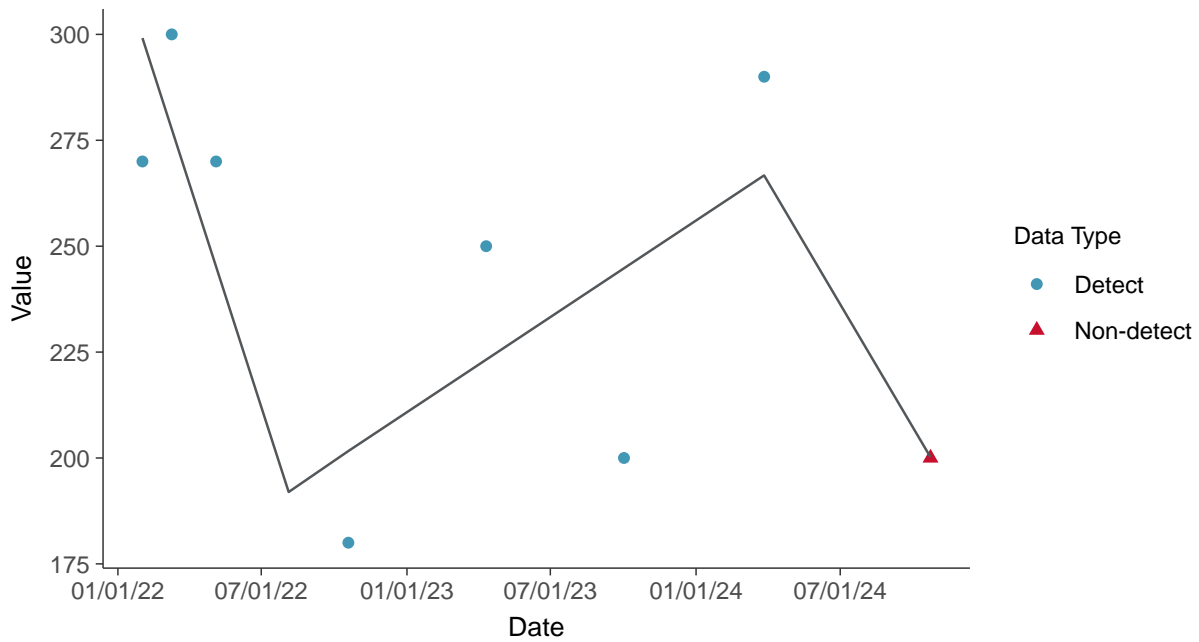
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

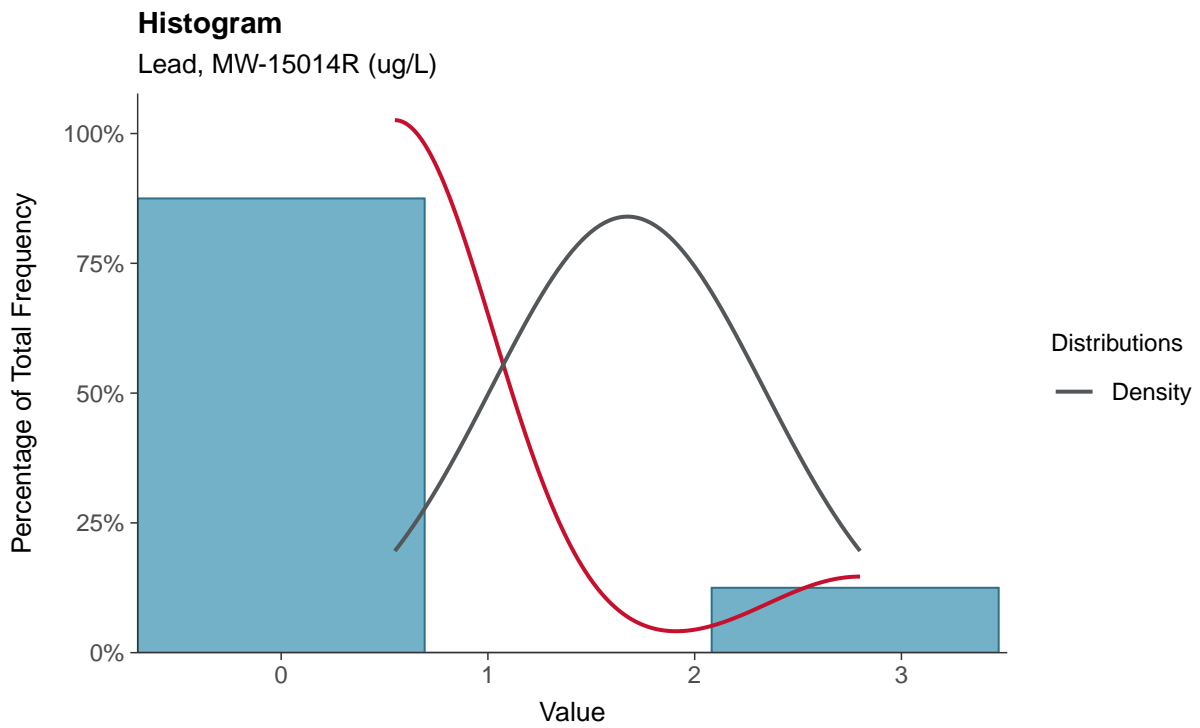
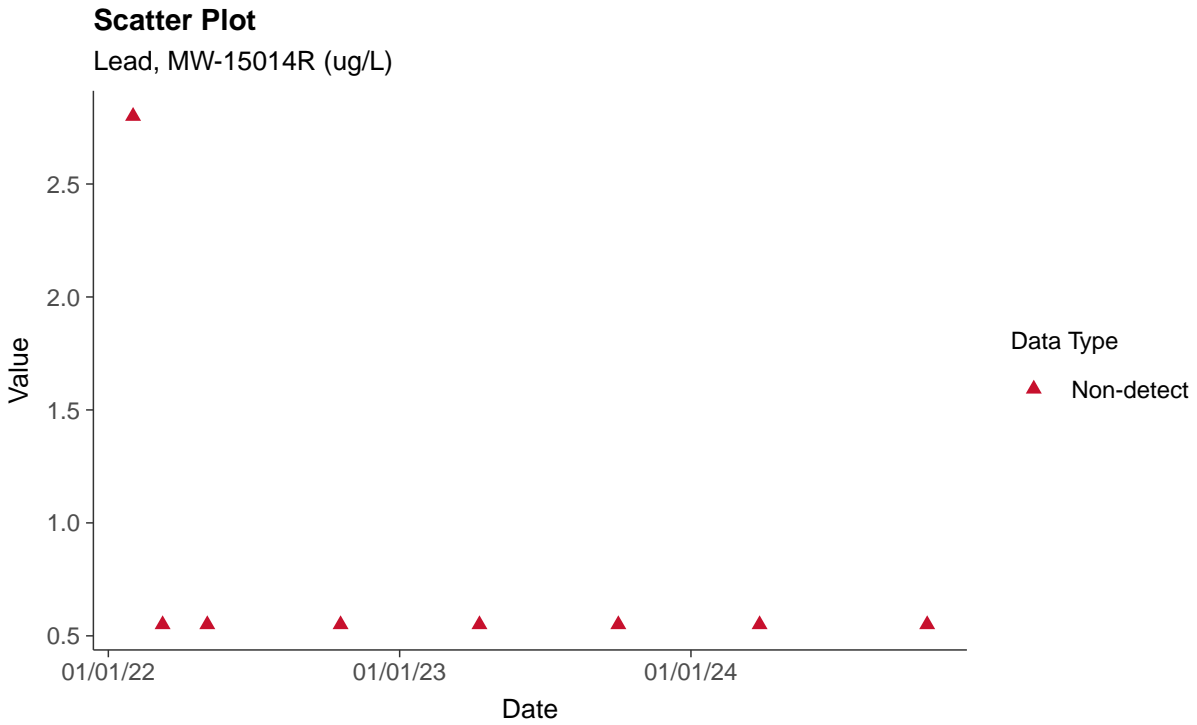
Fluoride, MW-15014R (ug/L)





Appendix IV: Lead, MW-15014R

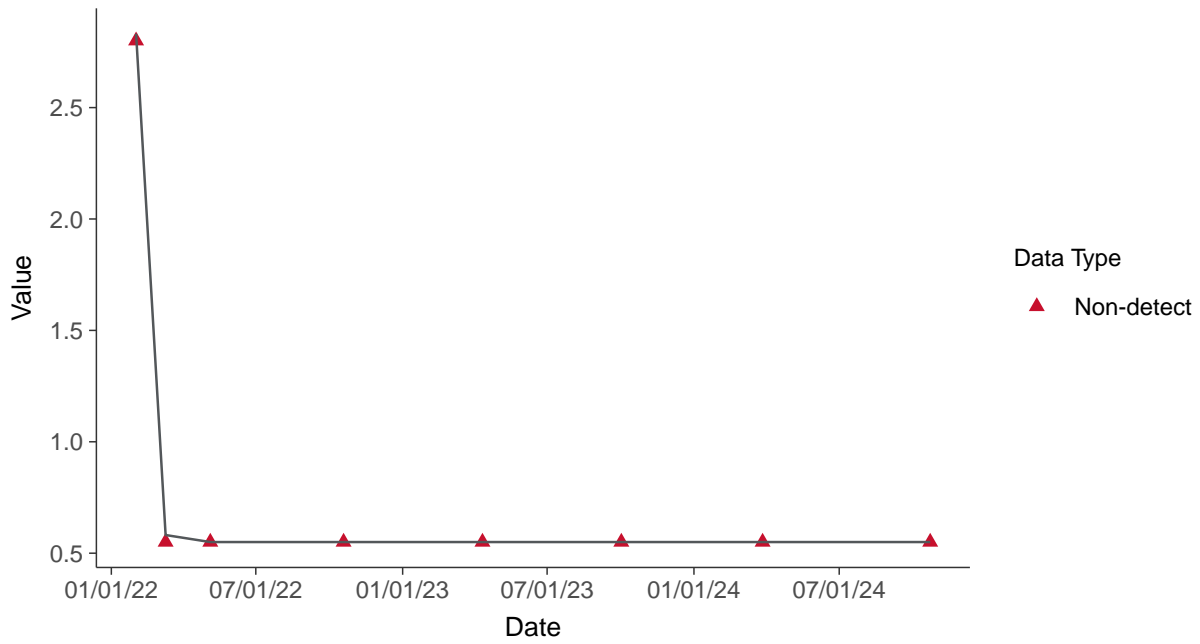
ID: 04_2_116





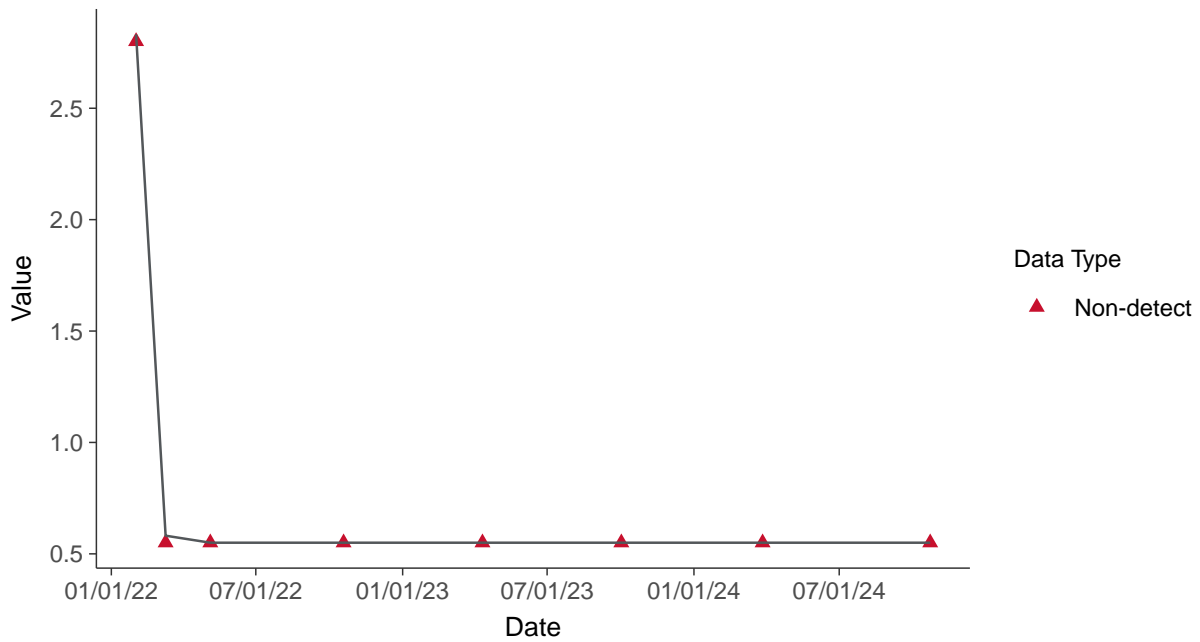
Trend Regression: Piecewise Linear-Linear

Lead, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-15014R (ug/L)



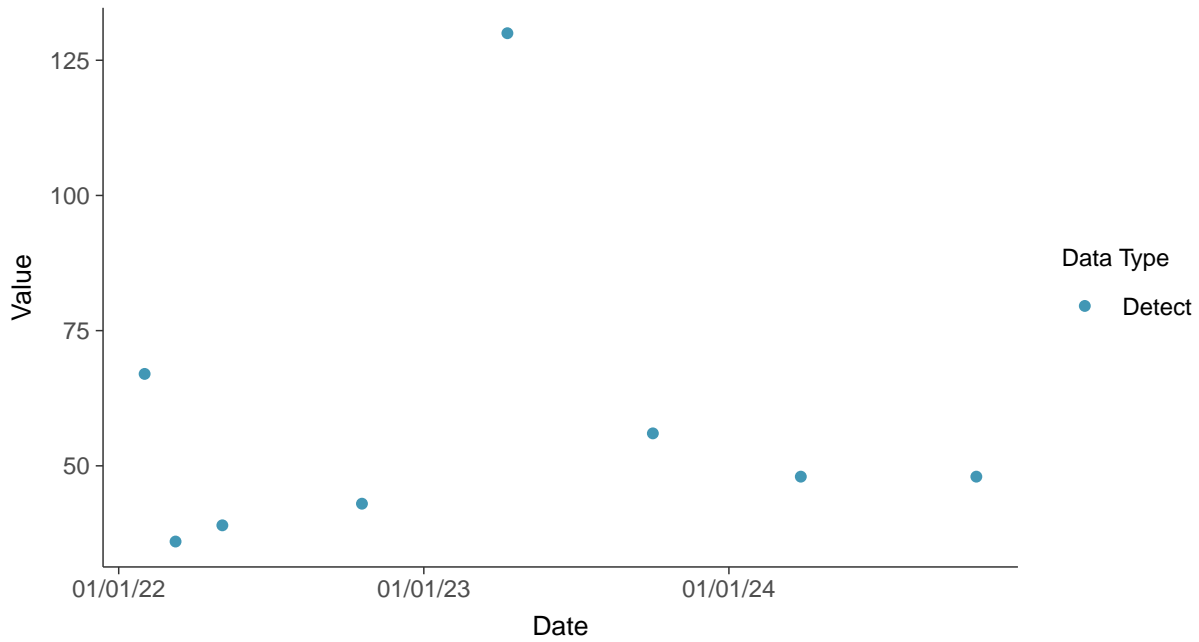


Appendix IV: Lithium, MW-15014R

ID: 04_2_117

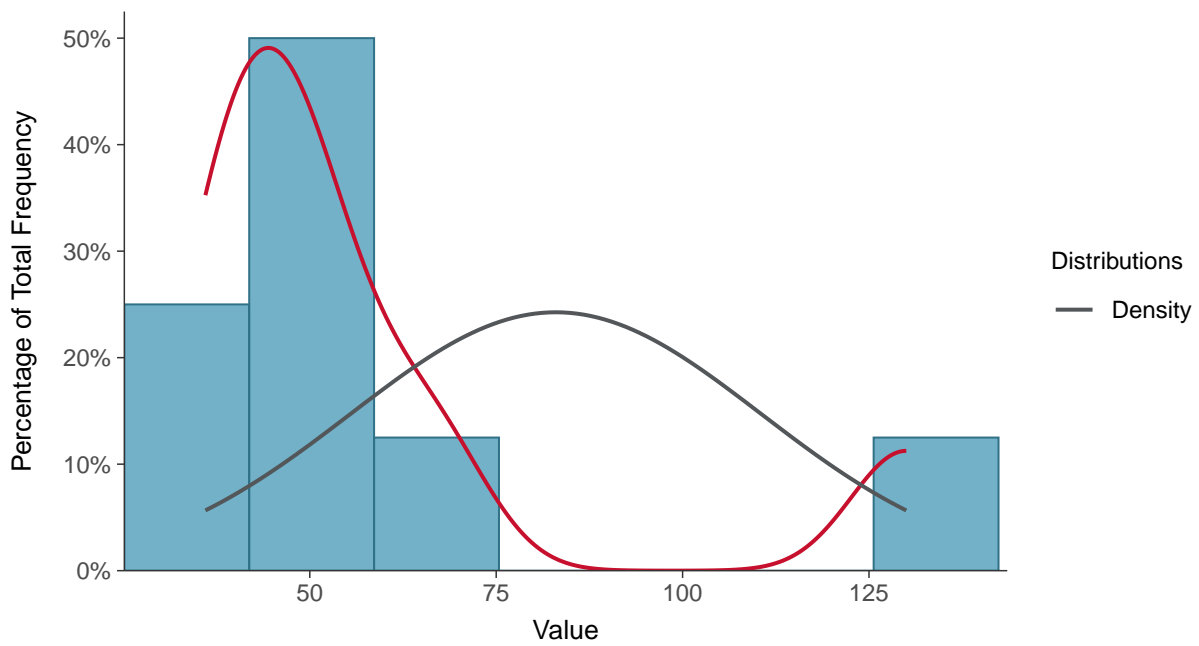
Scatter Plot

Lithium, MW-15014R (ug/L)



Histogram

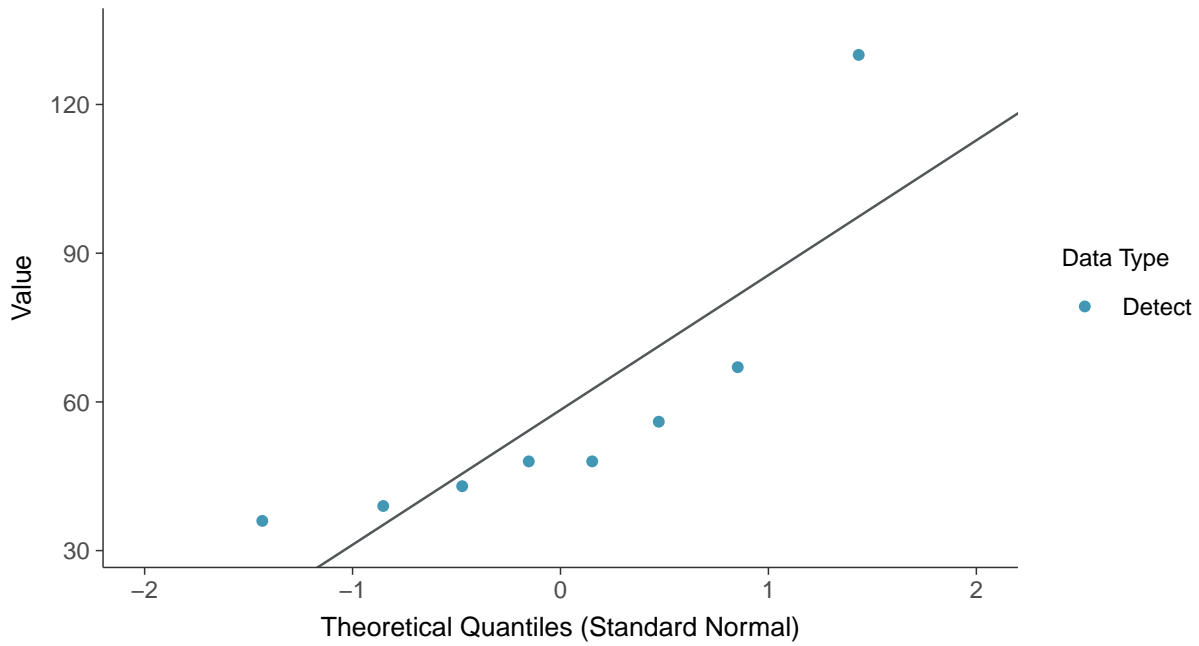
Lithium, MW-15014R (ug/L)





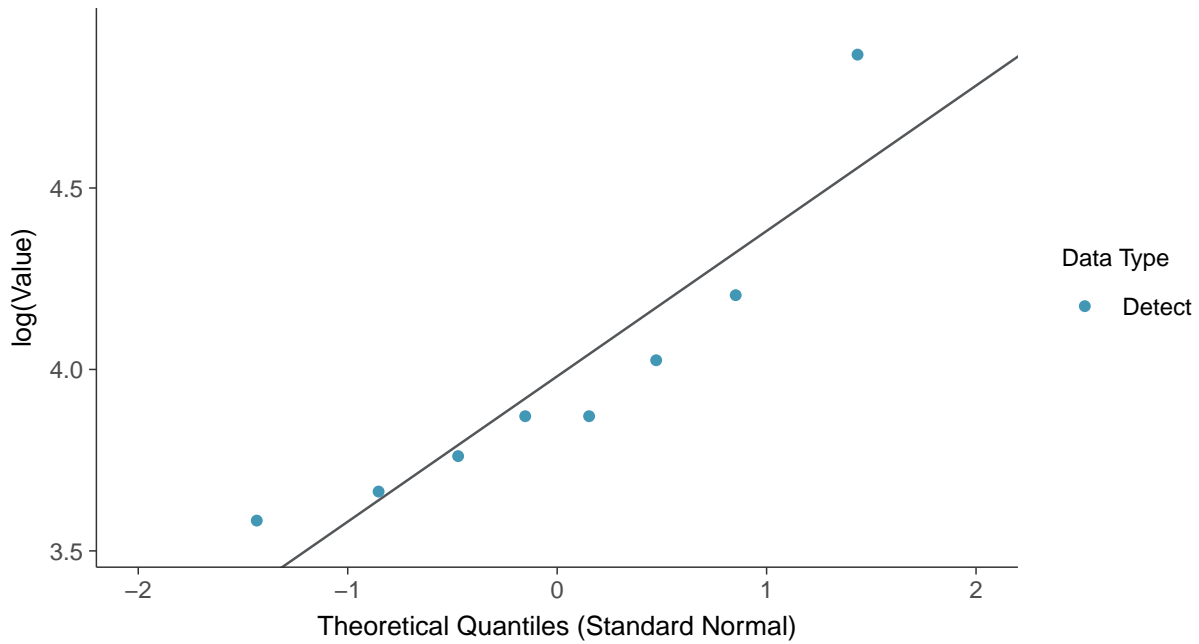
Normal Q-Q plot

Lithium, MW-15014R (ug/L)



Lognormal Q-Q plot

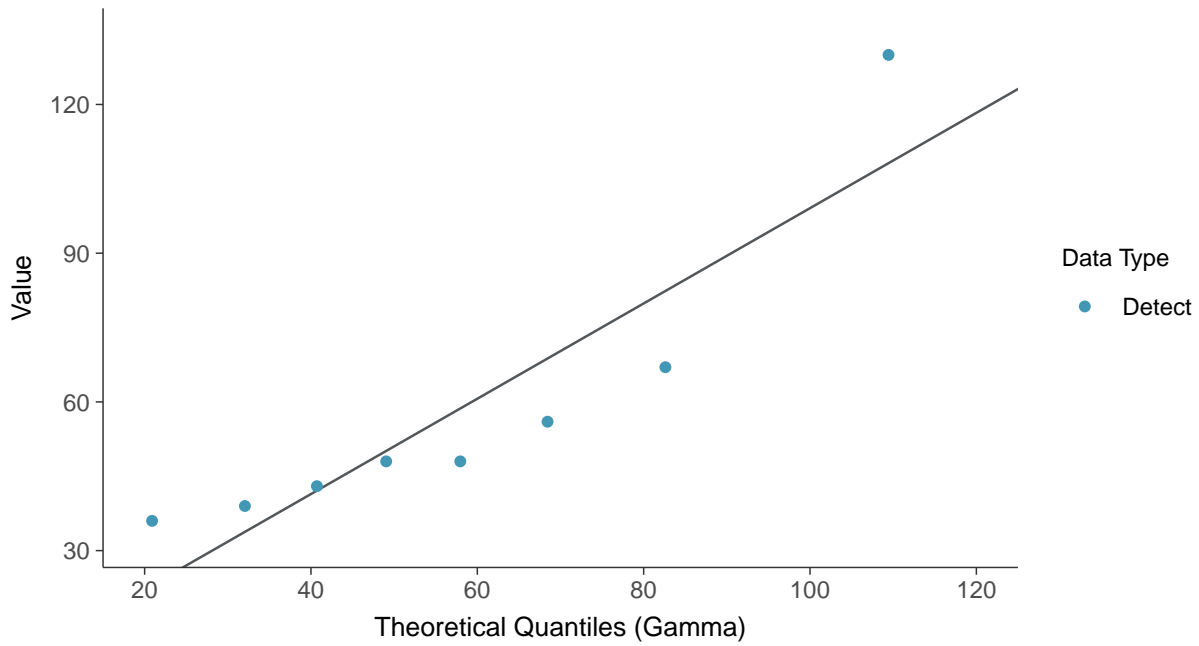
Lithium, MW-15014R (ug/L)





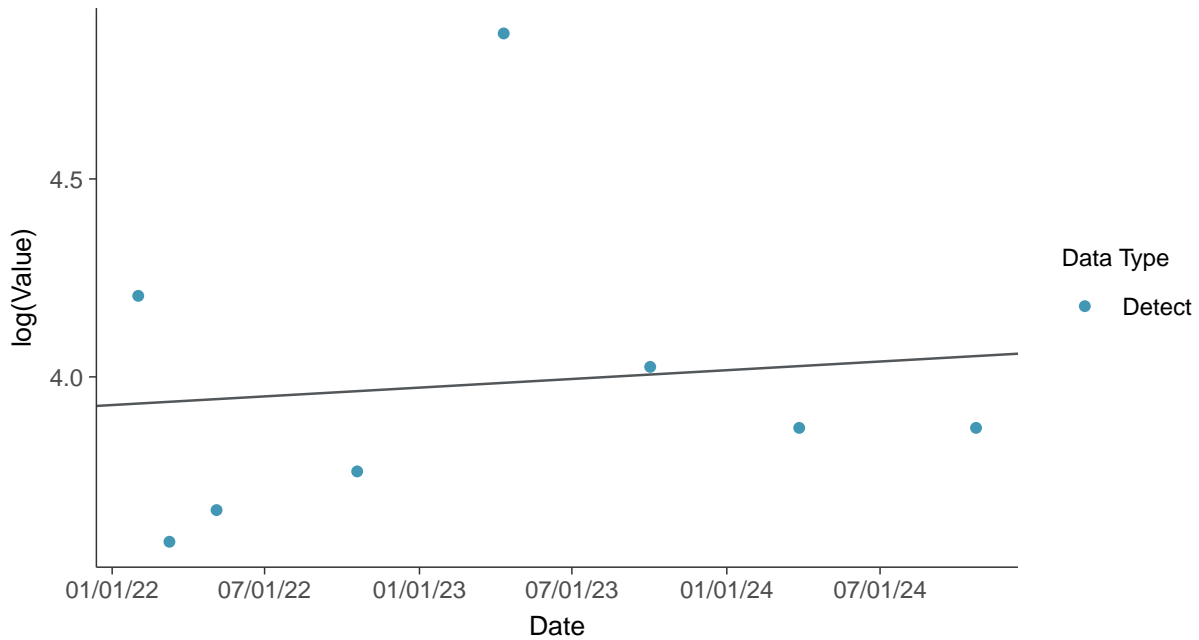
Gamma Q-Q plot

Lithium, MW-15014R (ug/L)



Trend Regression: Lognormal MLE

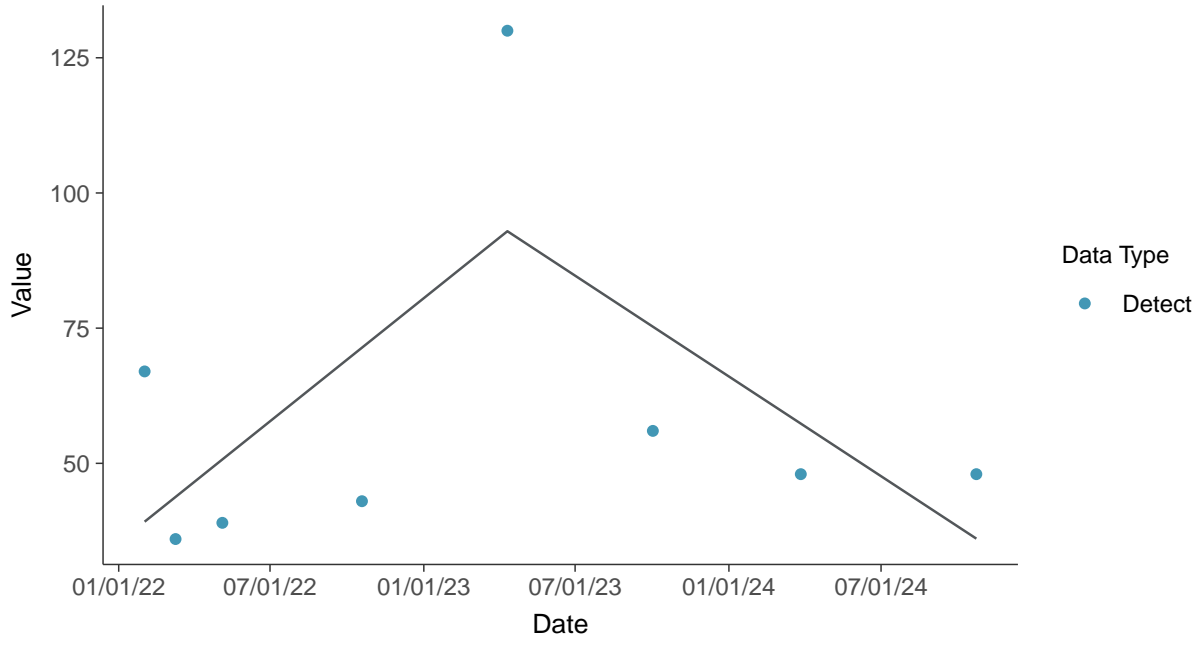
Lithium, MW-15014R (ug/L)





Trend Regression: Piecewise Linear-Linear

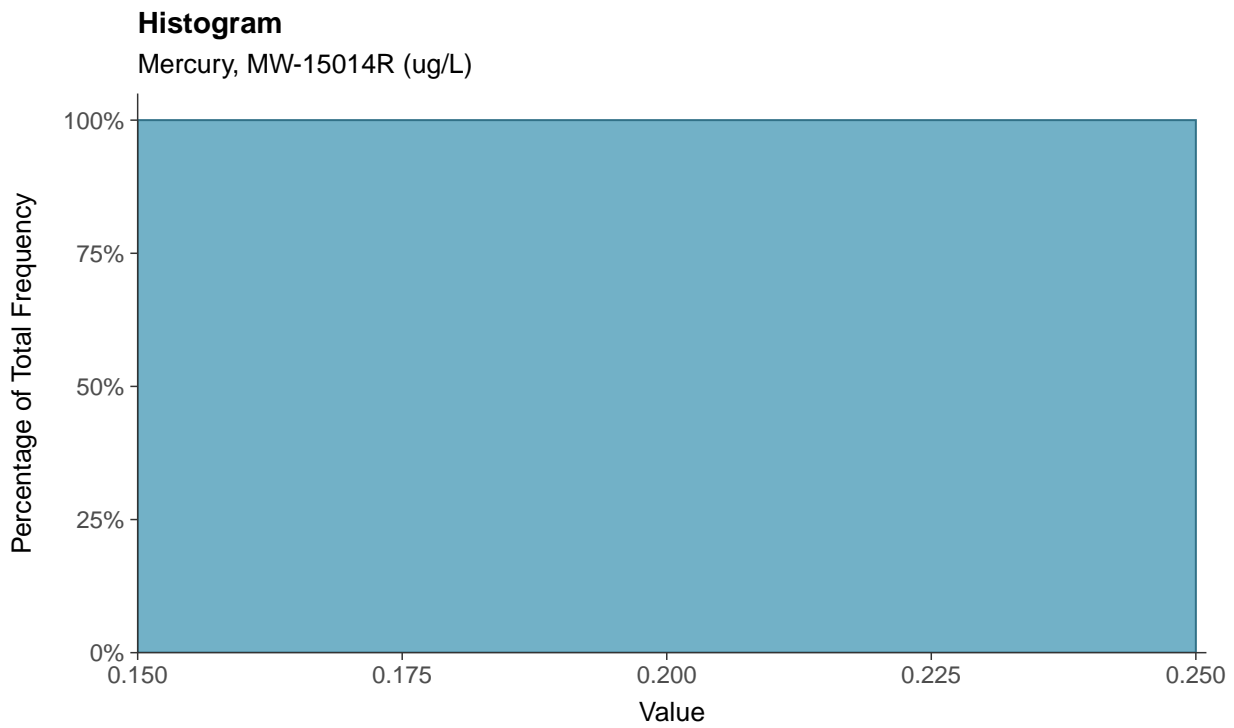
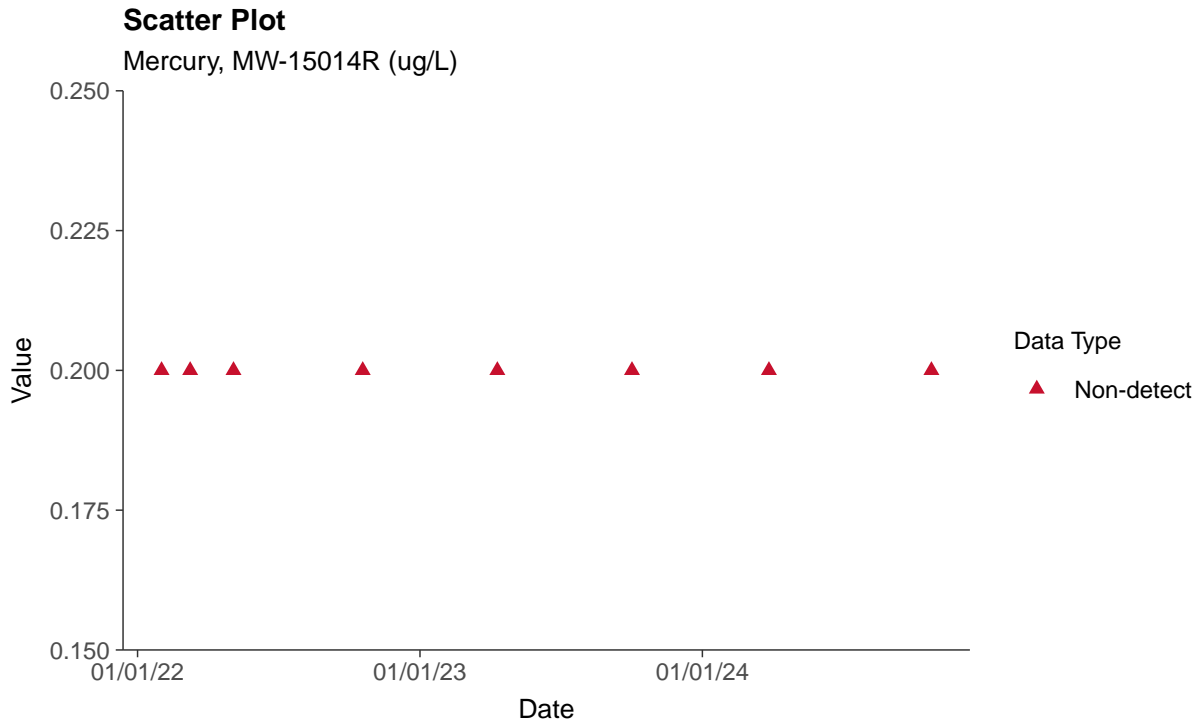
Lithium, MW-15014R (ug/L)





Appendix IV: Mercury, MW-15014R

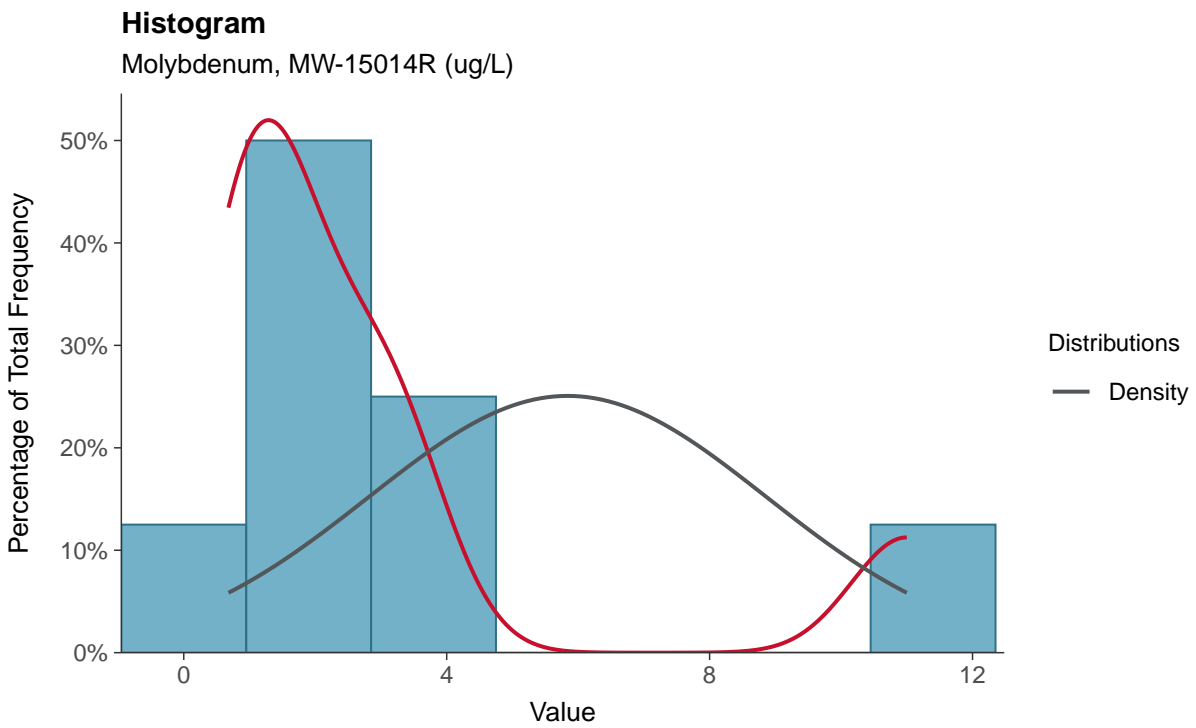
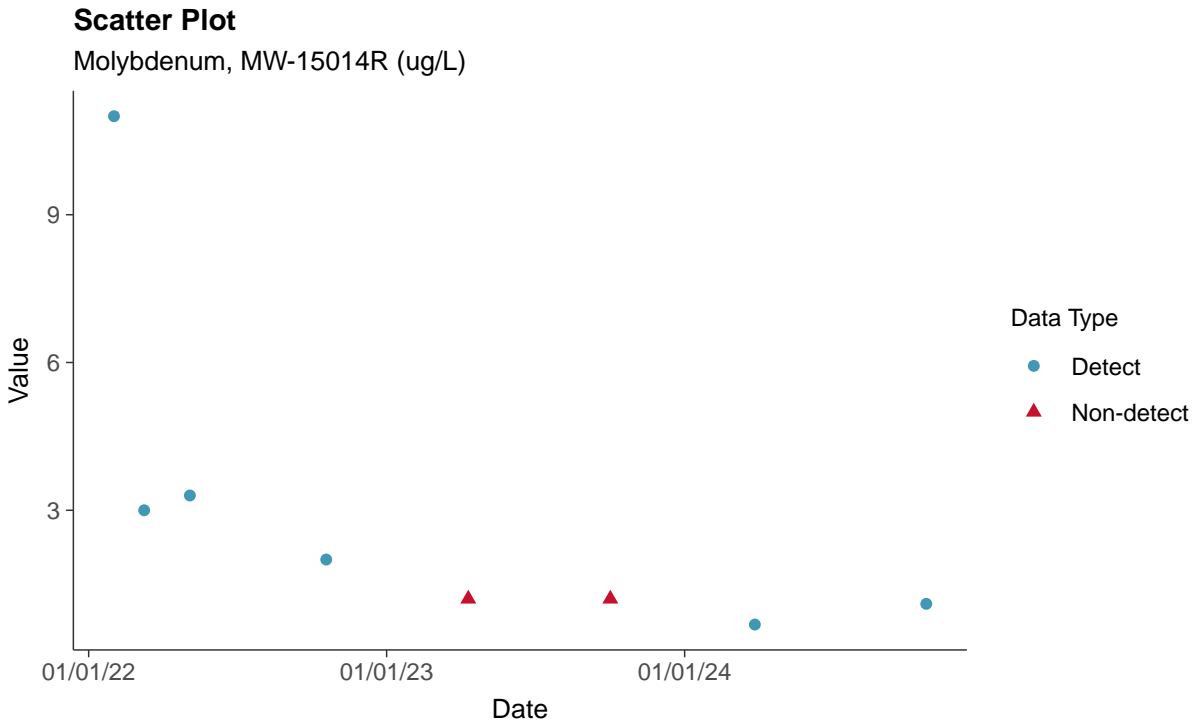
ID: 04_2_118





Appendix IV: Molybdenum, MW-15014R

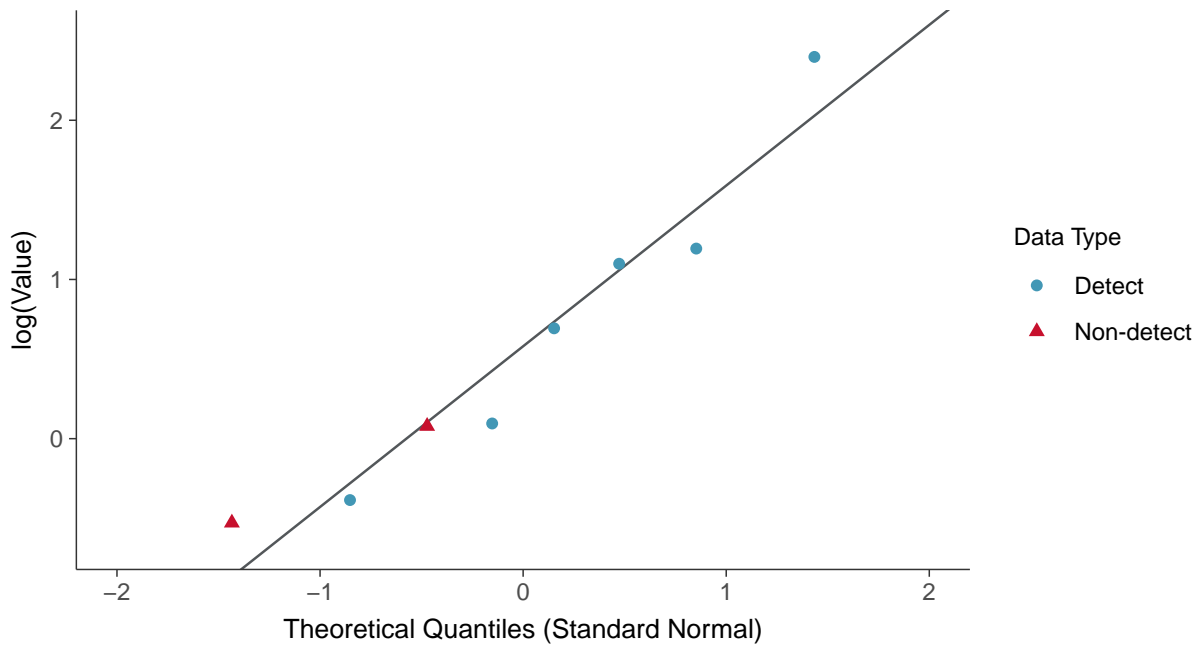
ID: 04_2_119





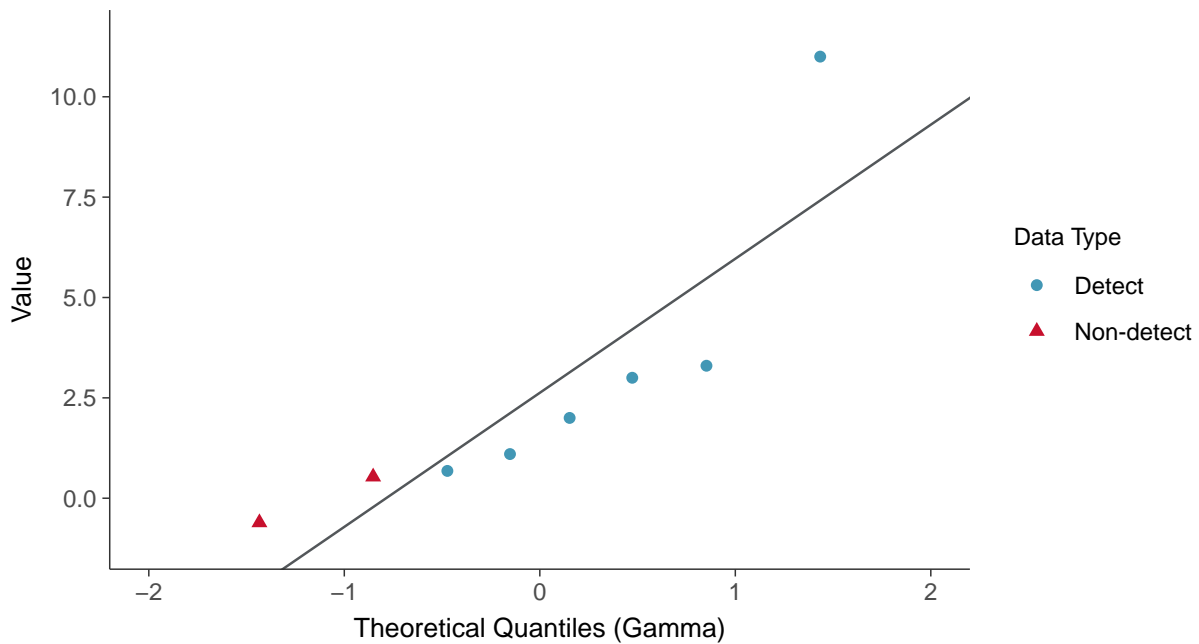
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15014R (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

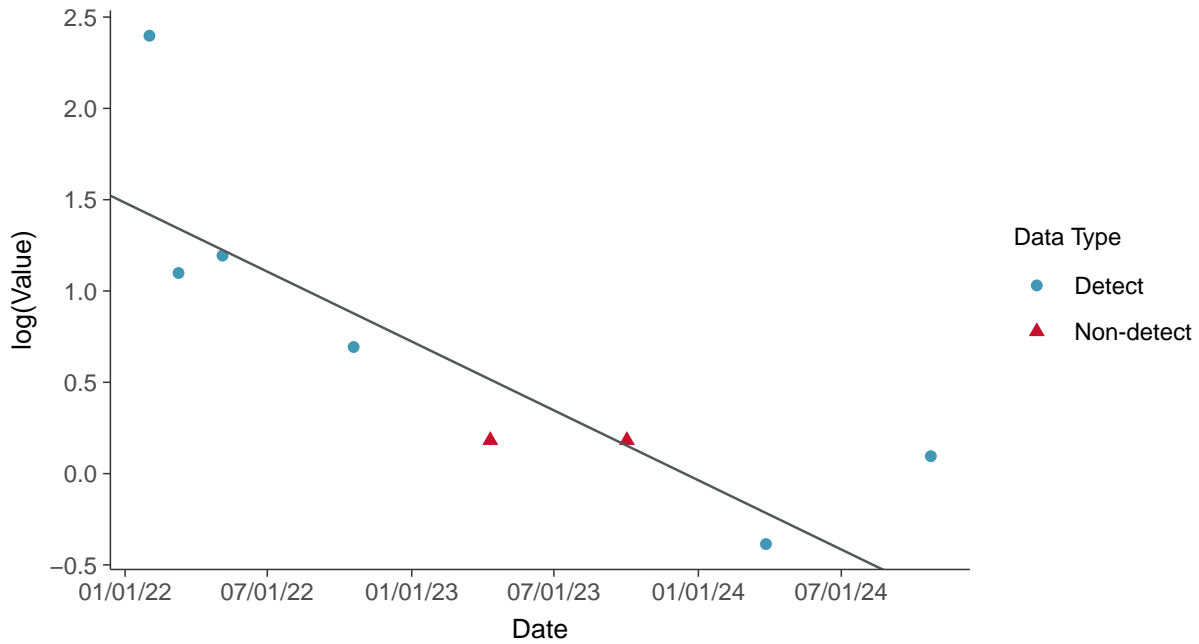
Molybdenum, MW-15014R (ug/L)





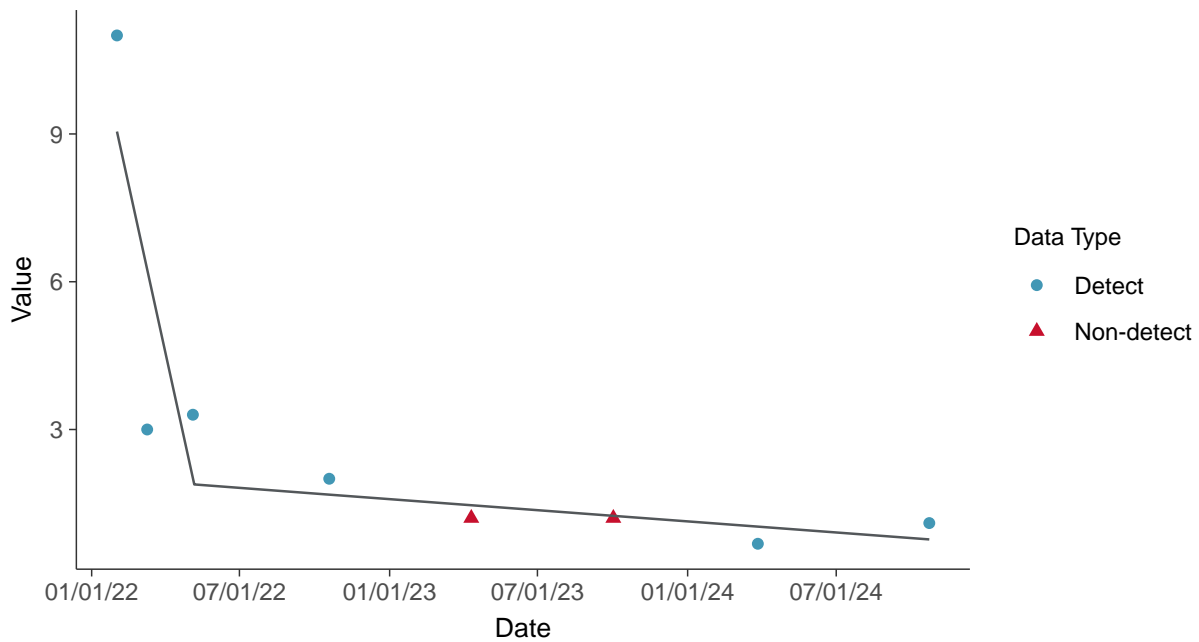
Trend Regression: Lognormal MLE

Molybdenum, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15014R (ug/L)



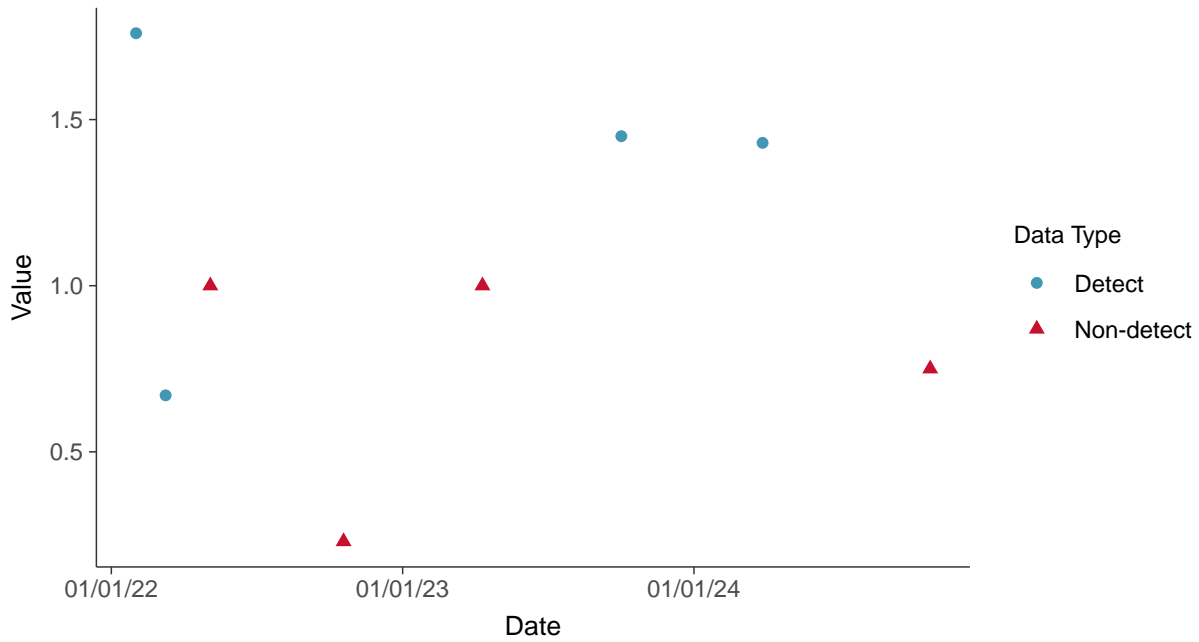


Appendix IV: Radium-226+228, MW-15014R

ID: 04_2_125

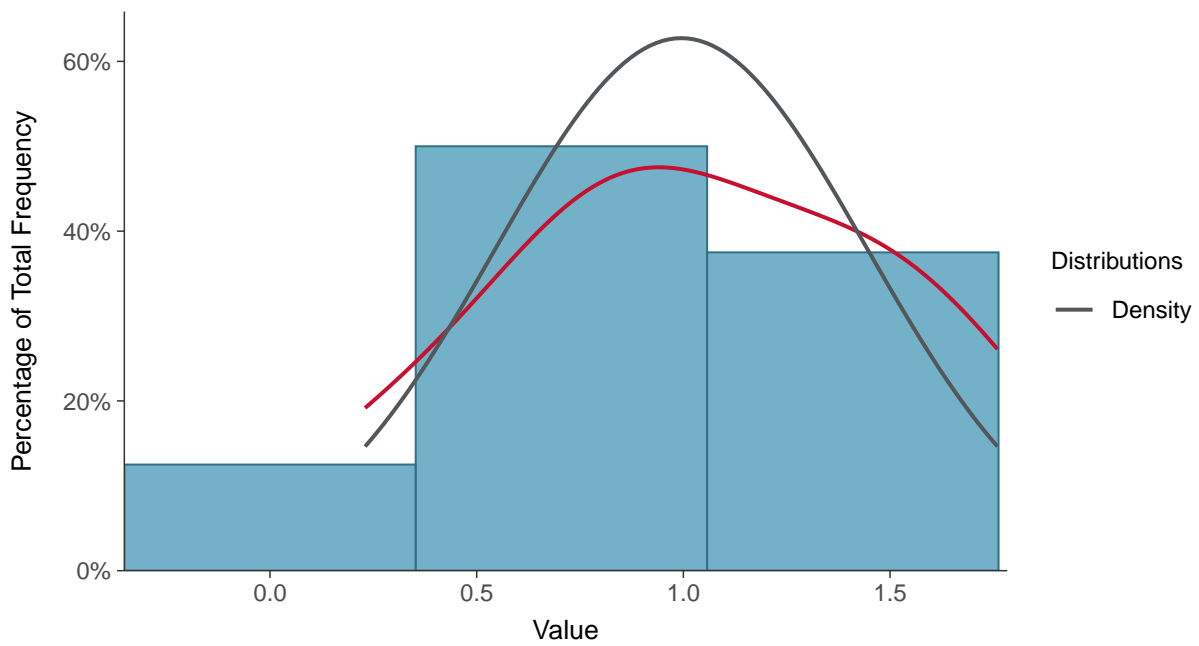
Scatter Plot

Radium-226+228, MW-15014R (pCi/L)



Histogram

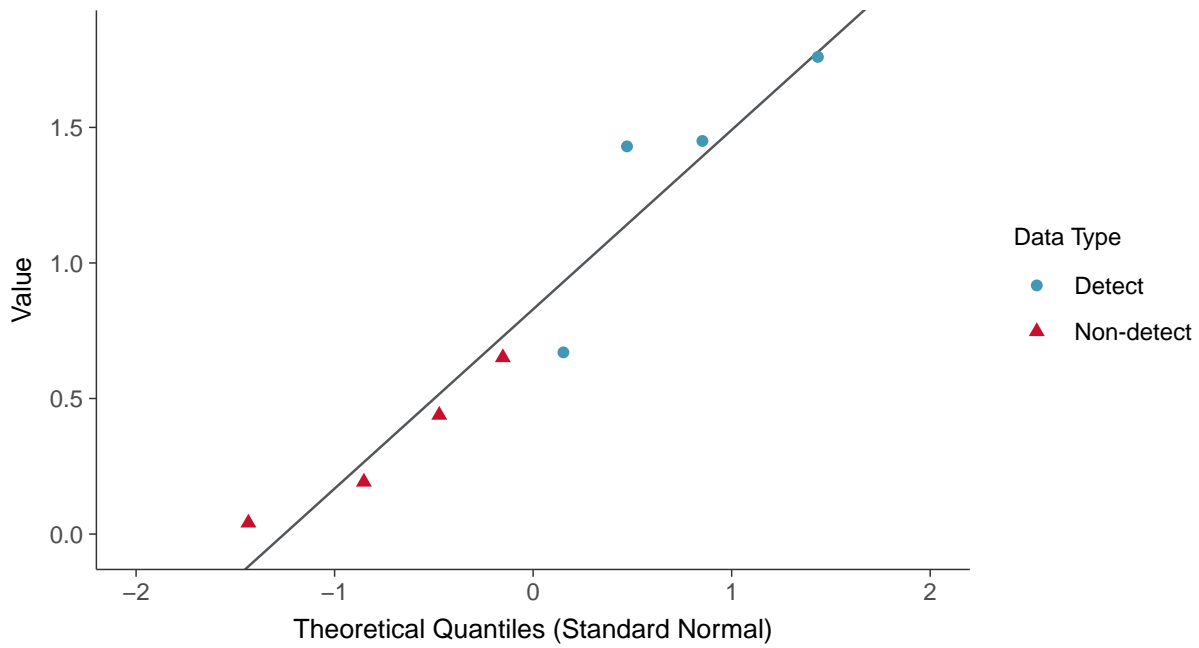
Radium-226+228, MW-15014R (pCi/L)





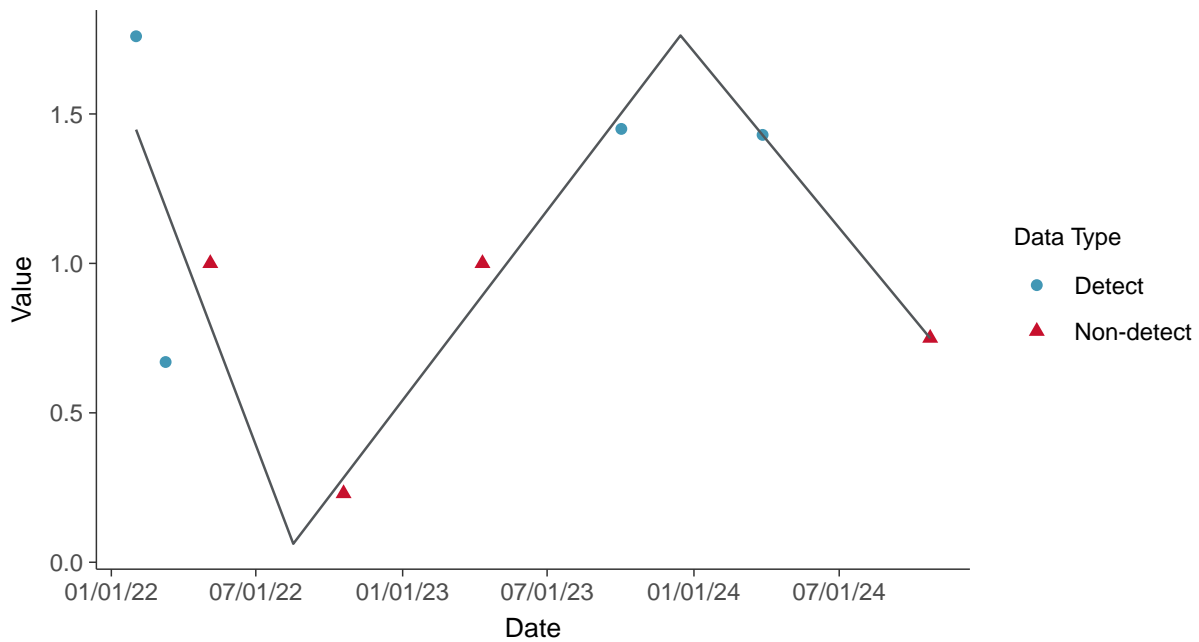
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15014R (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

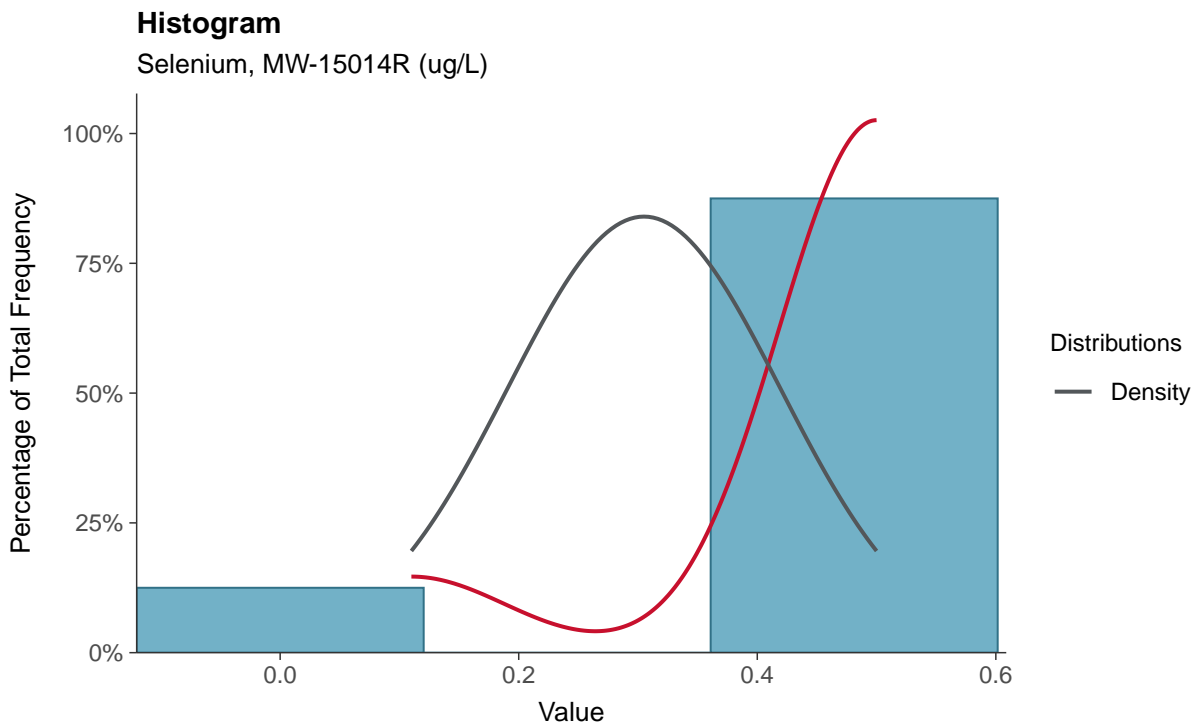
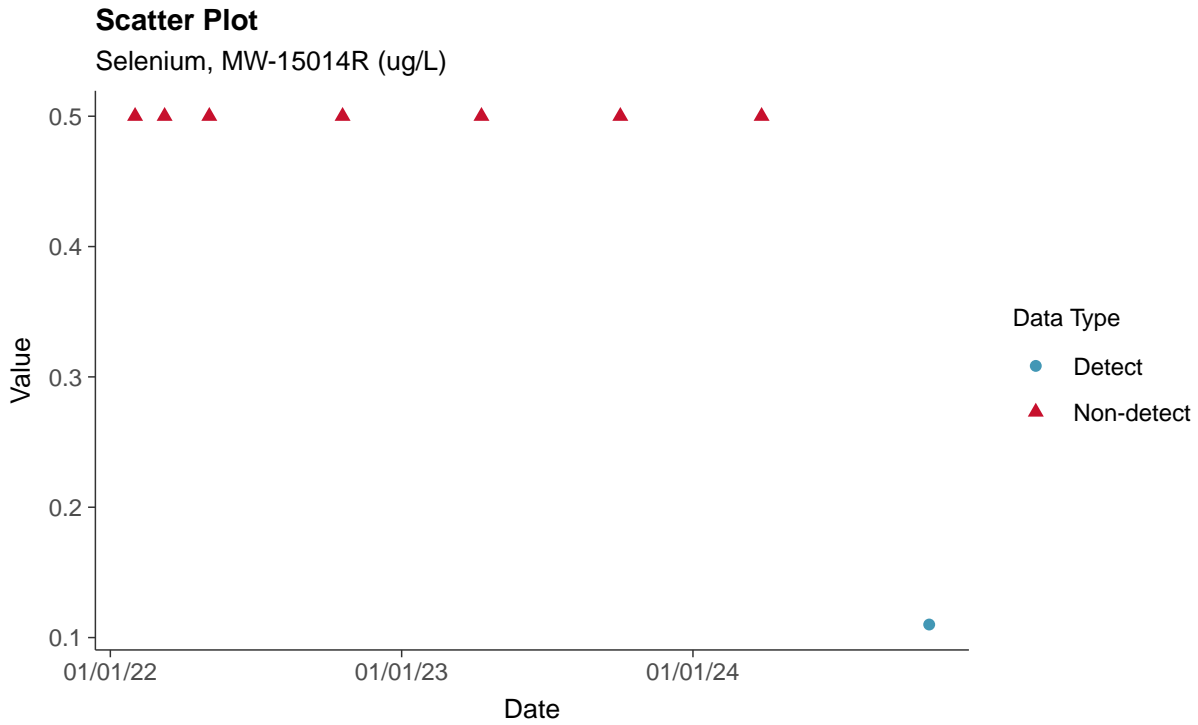
Radium-226+228, MW-15014R (pCi/L)





Appendix IV: Selenium, MW-15014R

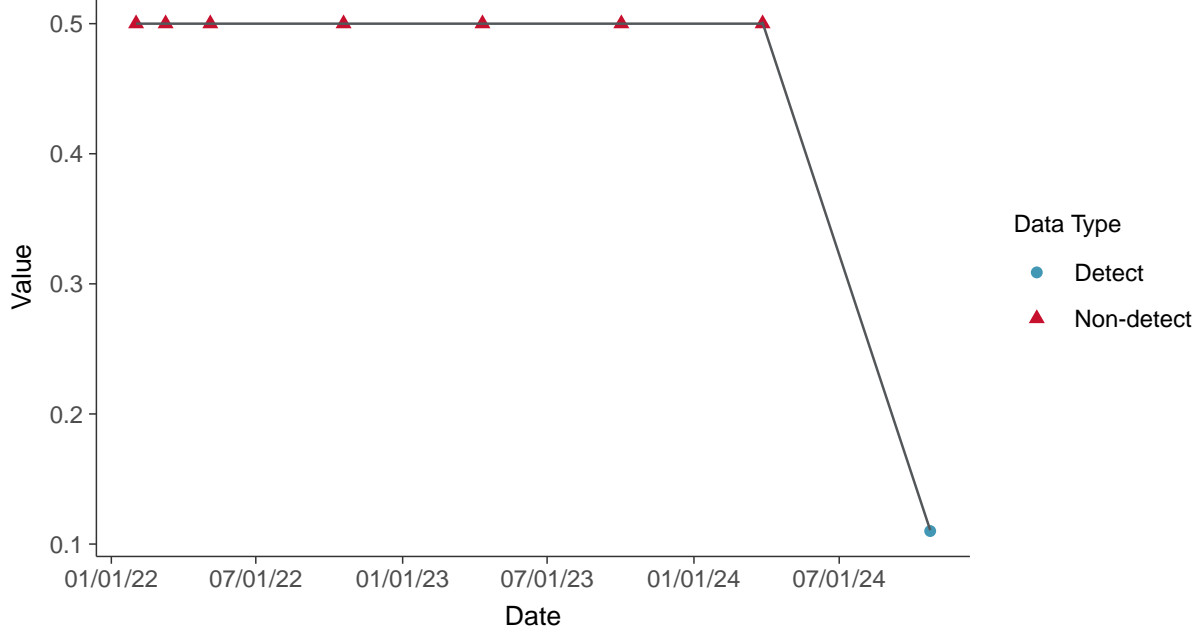
ID: 04_2_127





Trend Regression: Piecewise Linear-Linear

Selenium, MW-15014R (ug/L)



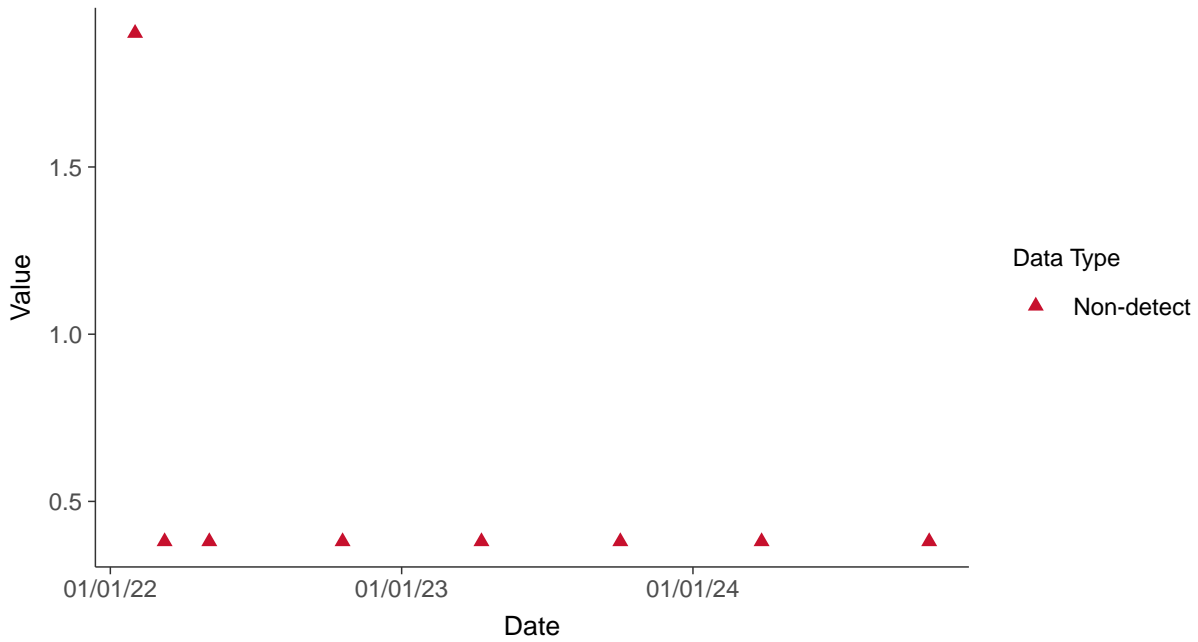


Appendix IV: Thallium, MW-15014R

ID: 04_2_131

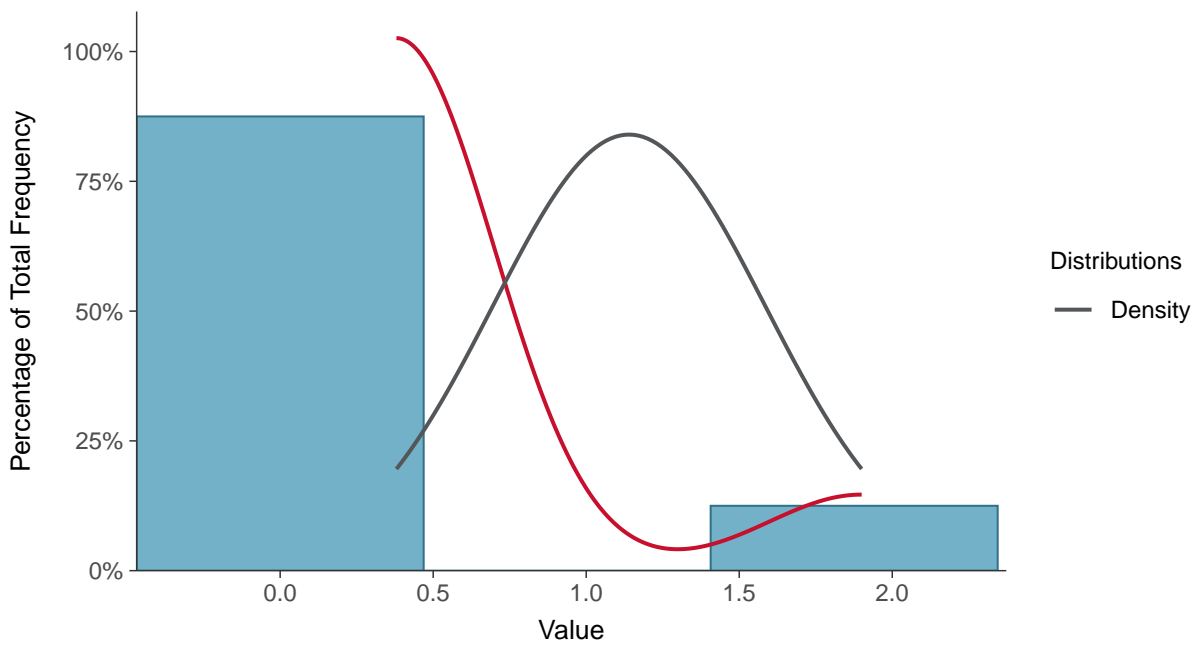
Scatter Plot

Thallium, MW-15014R (ug/L)



Histogram

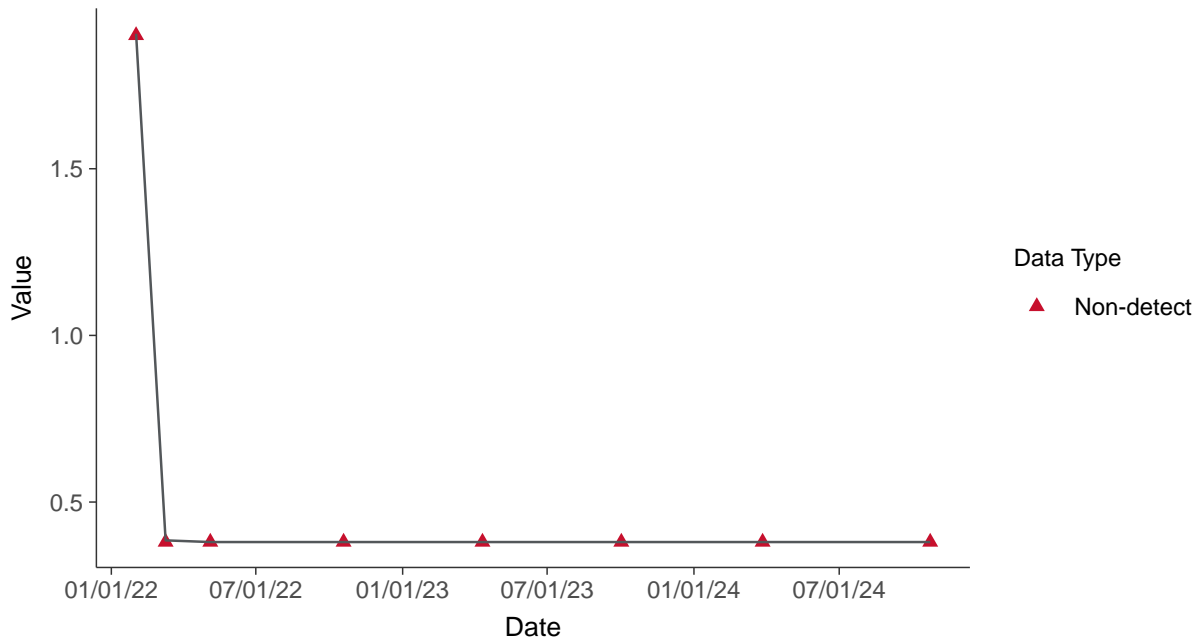
Thallium, MW-15014R (ug/L)





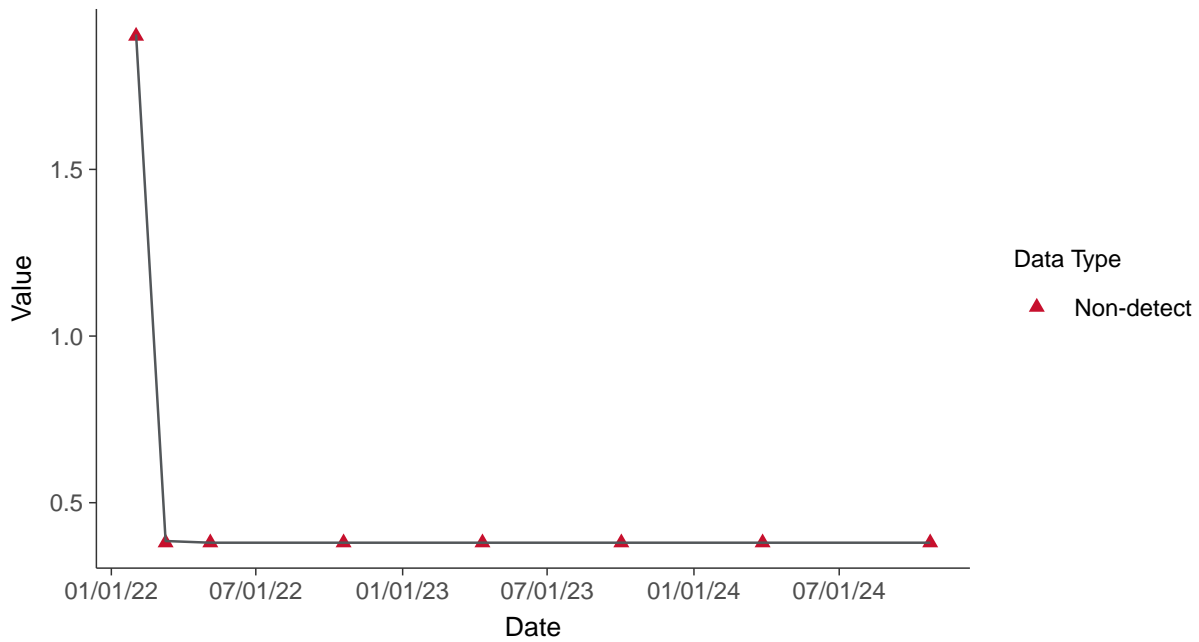
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15014R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Thallium, MW-15014R (ug/L)



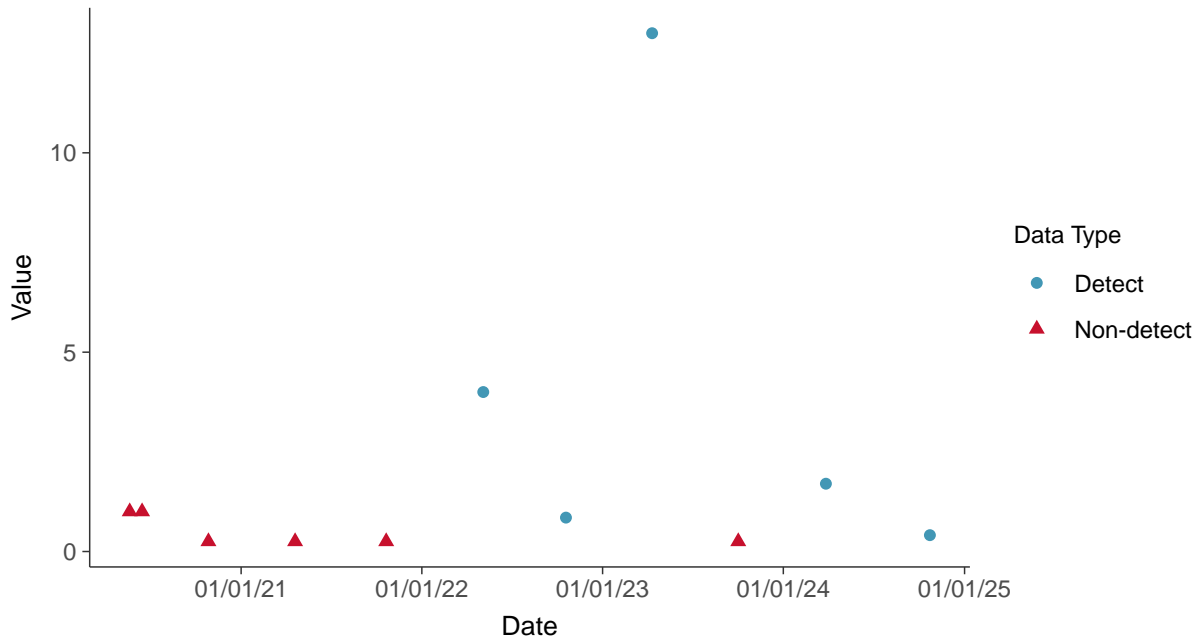


Appendix IV: Antimony, MW-15015R

ID: 05_2_101

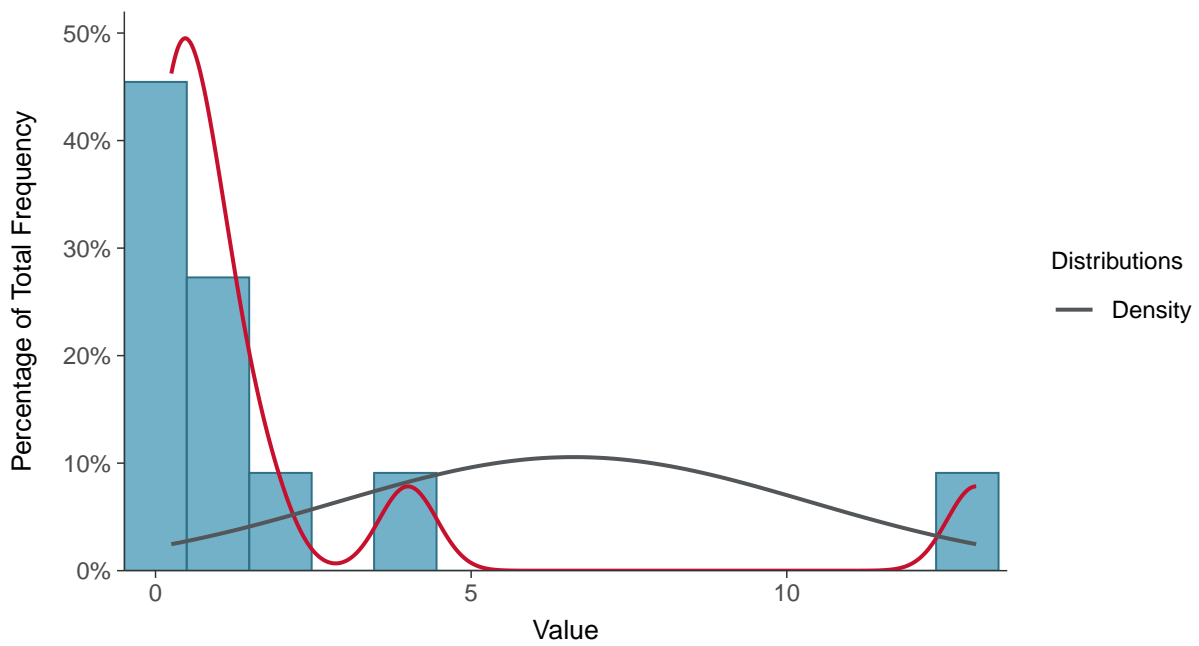
Scatter Plot

Antimony, MW-15015R (ug/L)



Histogram

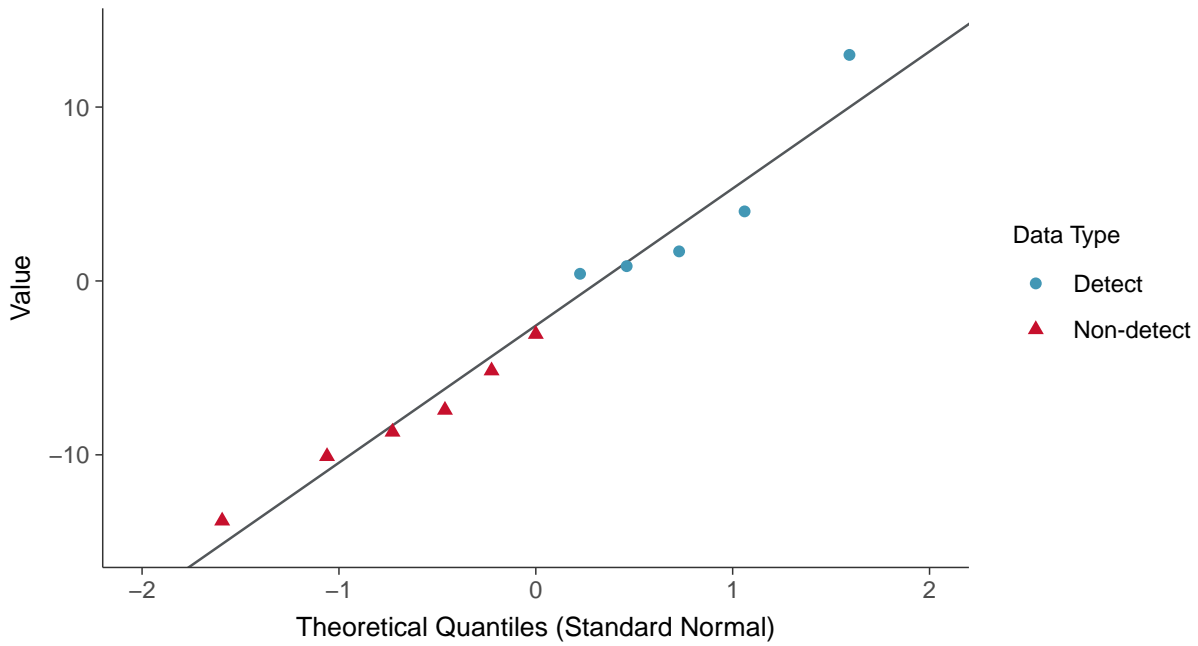
Antimony, MW-15015R (ug/L)





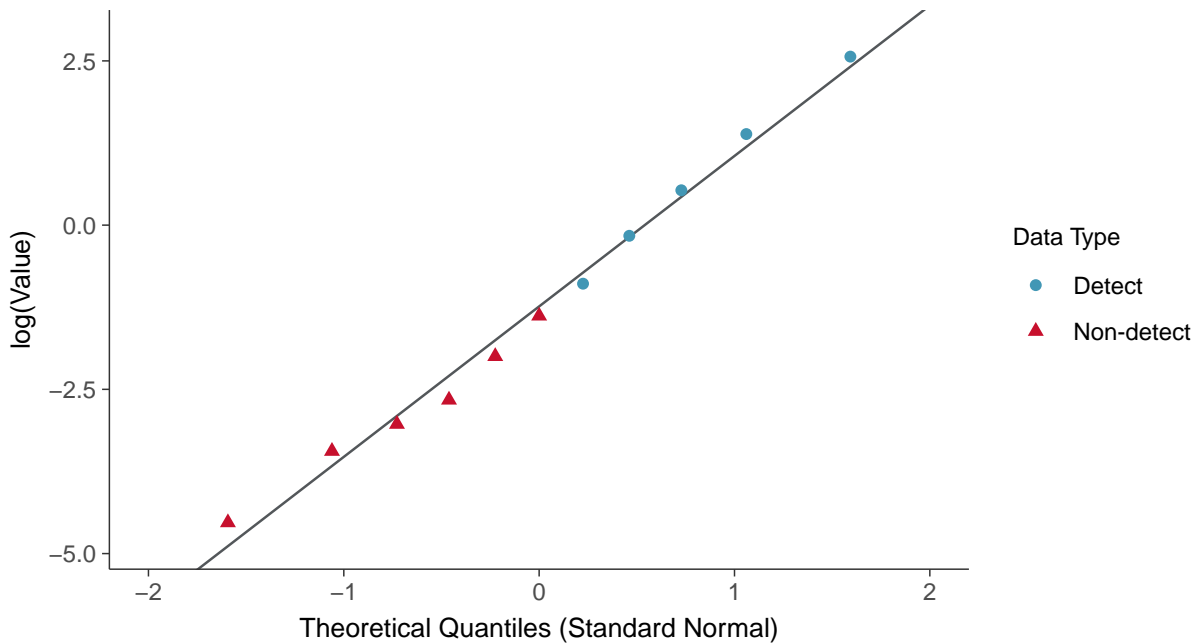
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-15015R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

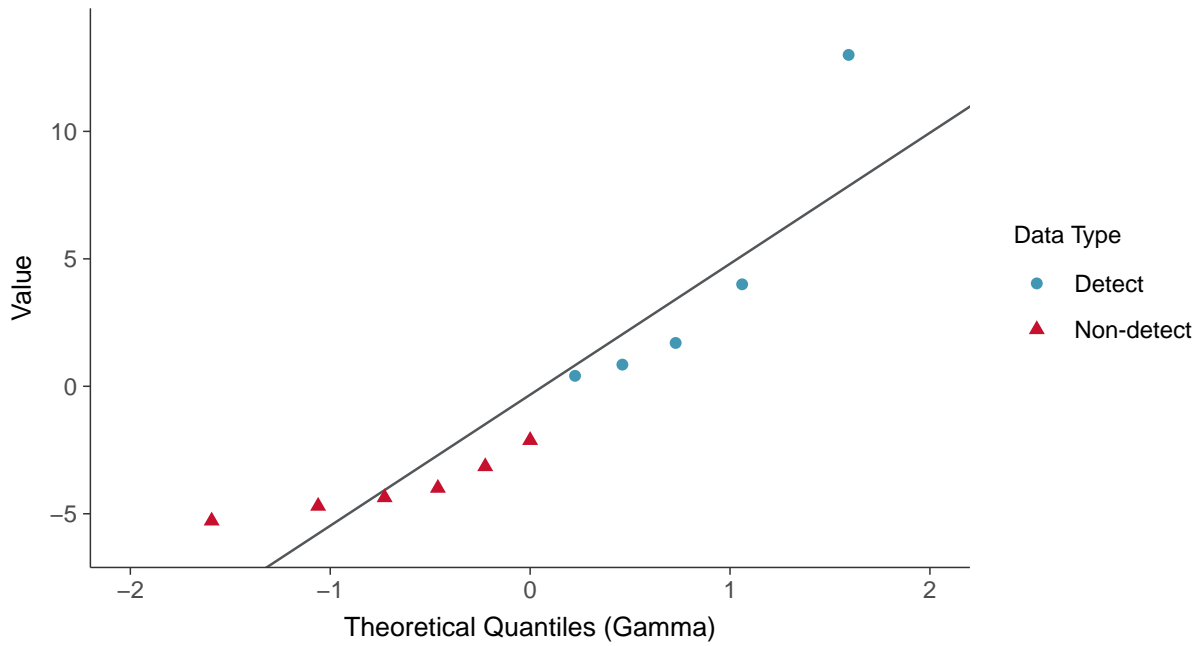
Antimony, MW-15015R (ug/L)





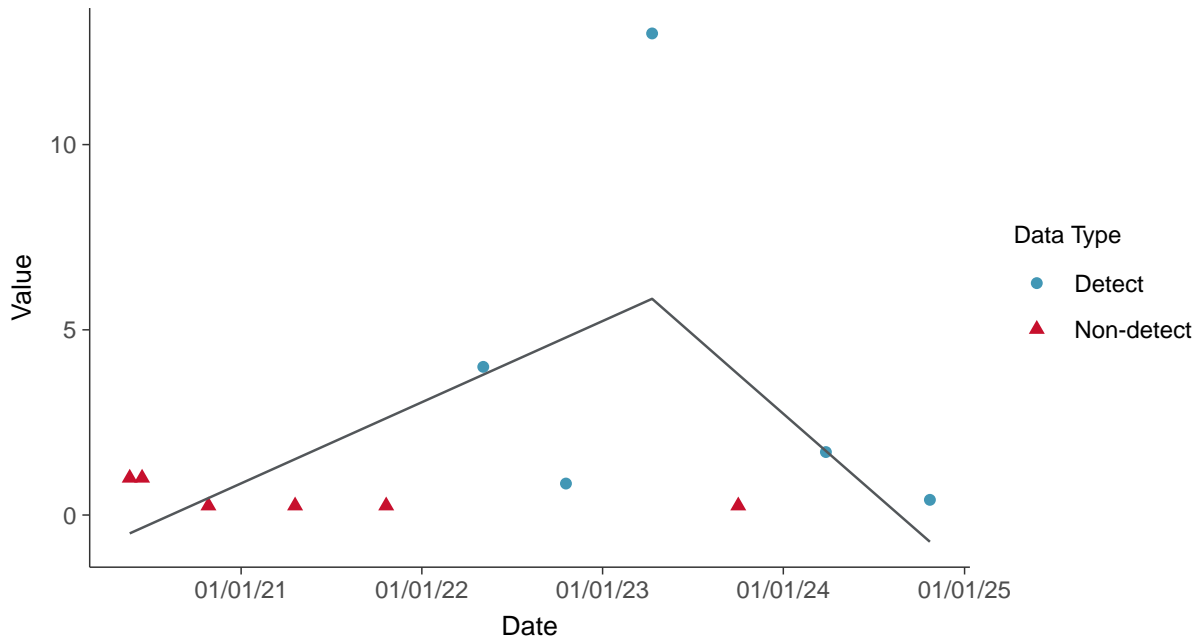
Gamma Q-Q plot using ROS Imputed Estimates

Antimony, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

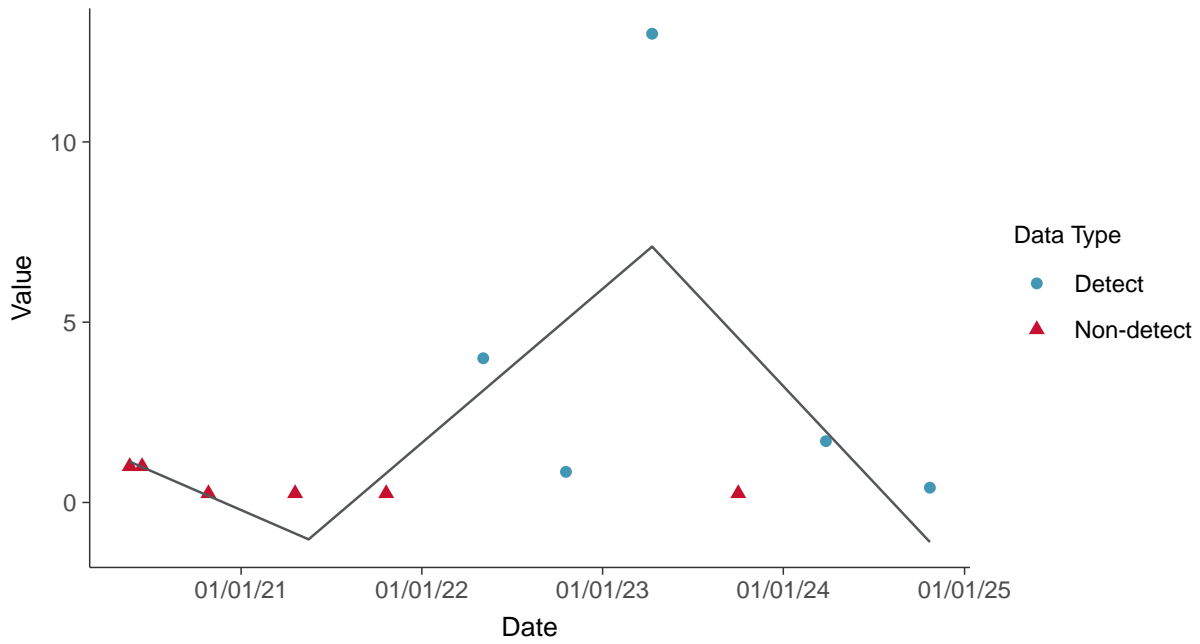
Antimony, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15015R (ug/L)



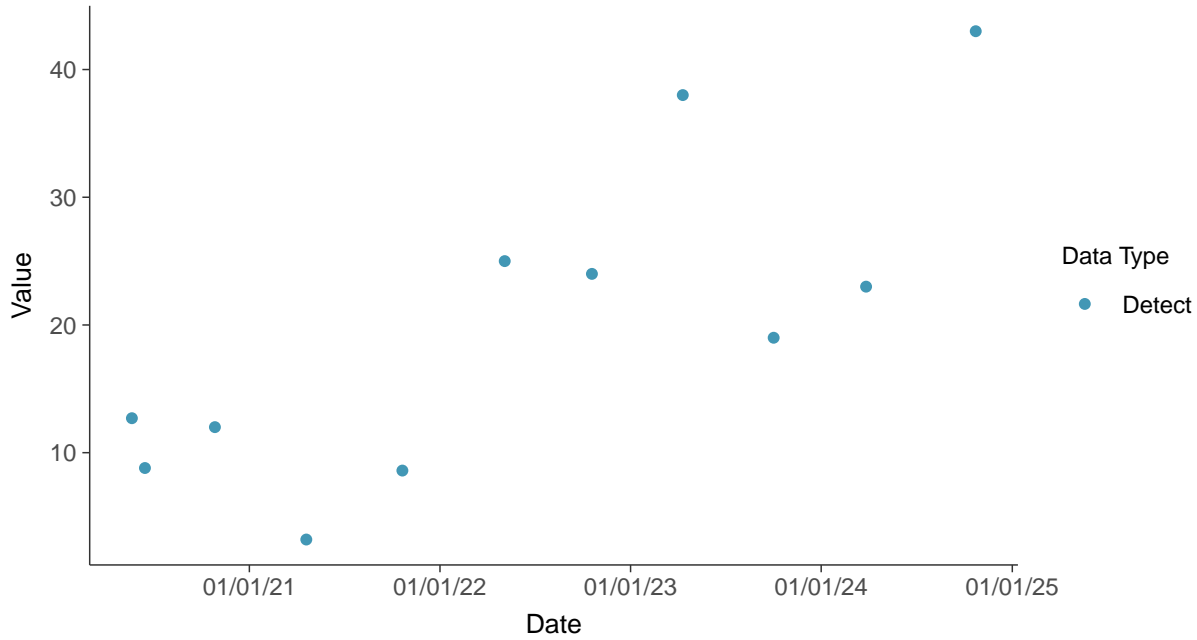


Appendix IV: Arsenic, MW-15015R

ID: 05_2_102

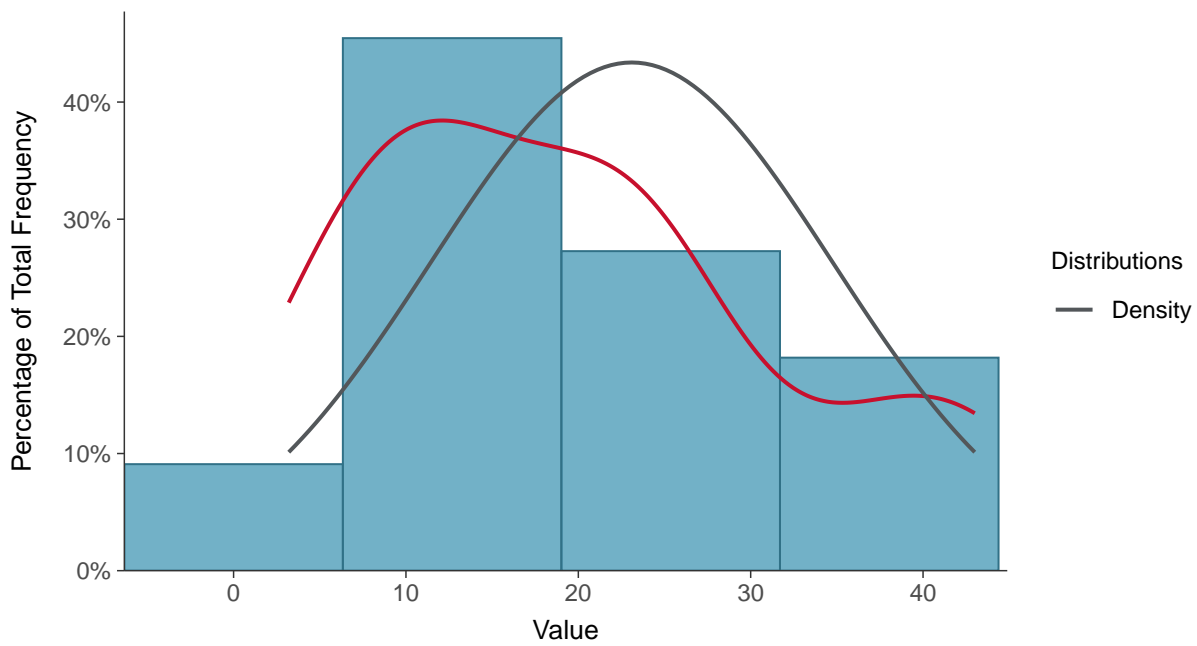
Scatter Plot

Arsenic, MW-15015R (ug/L)



Histogram

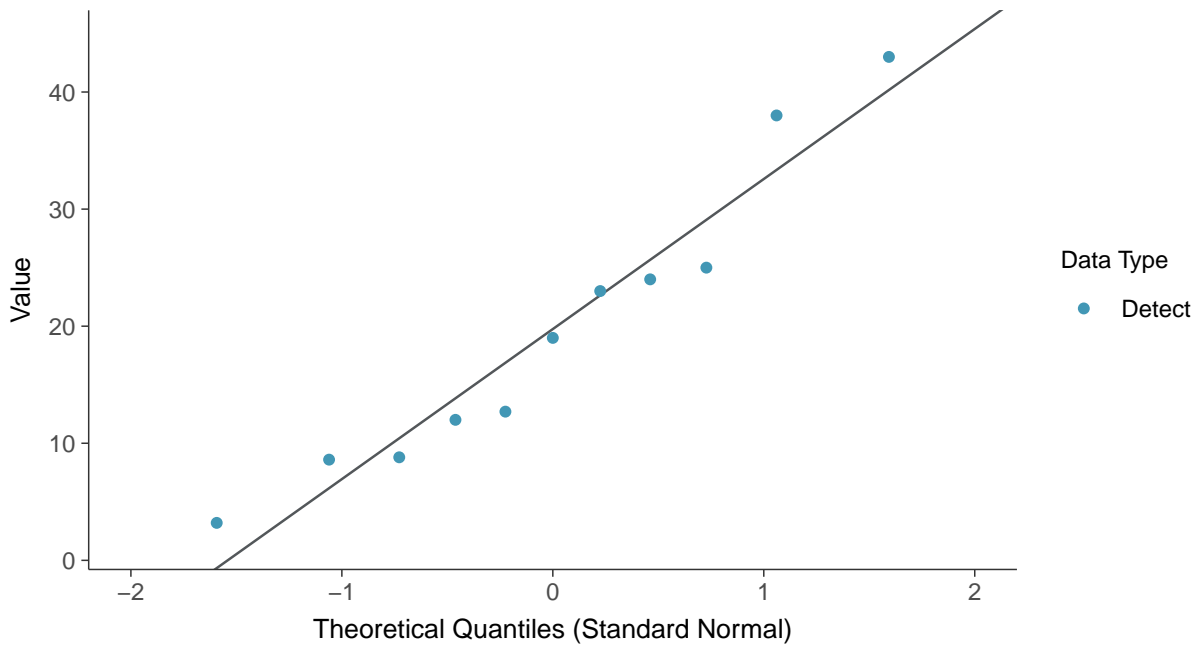
Arsenic, MW-15015R (ug/L)





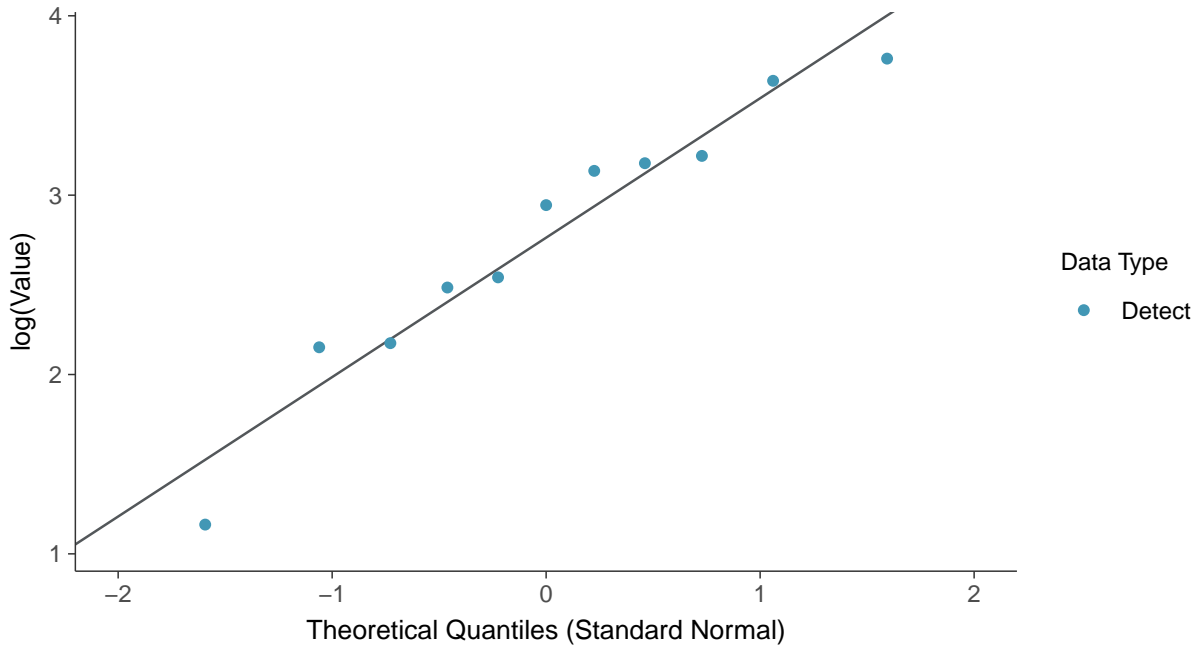
Normal Q-Q plot

Arsenic, MW-15015R (ug/L)



Lognormal Q-Q plot

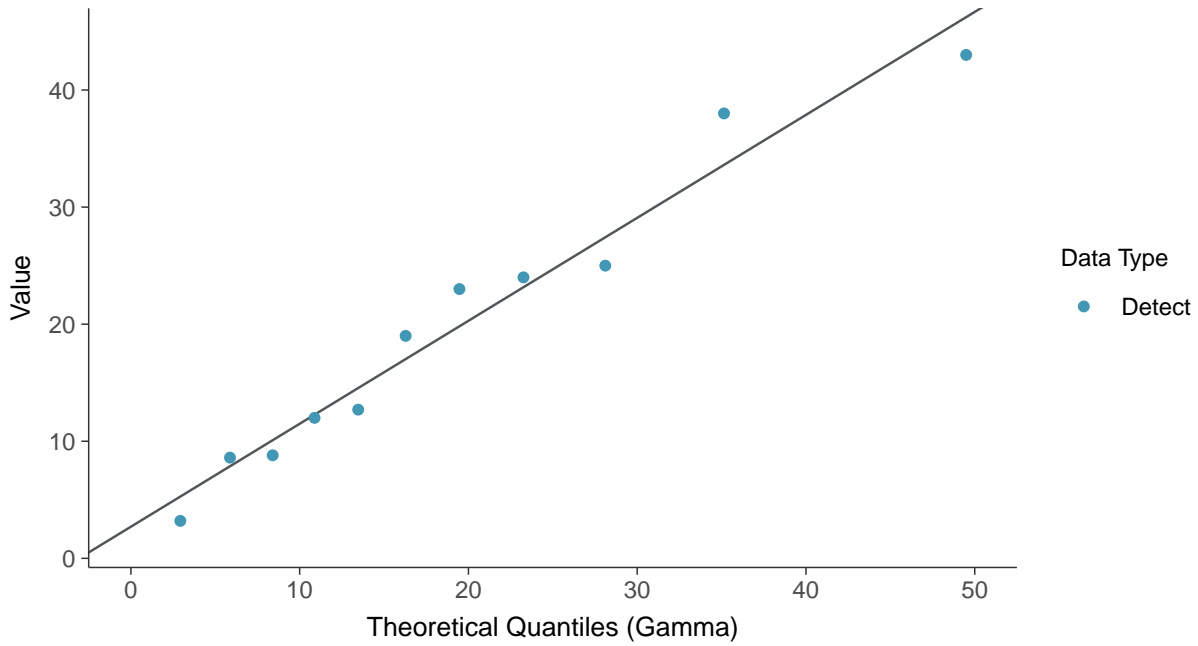
Arsenic, MW-15015R (ug/L)





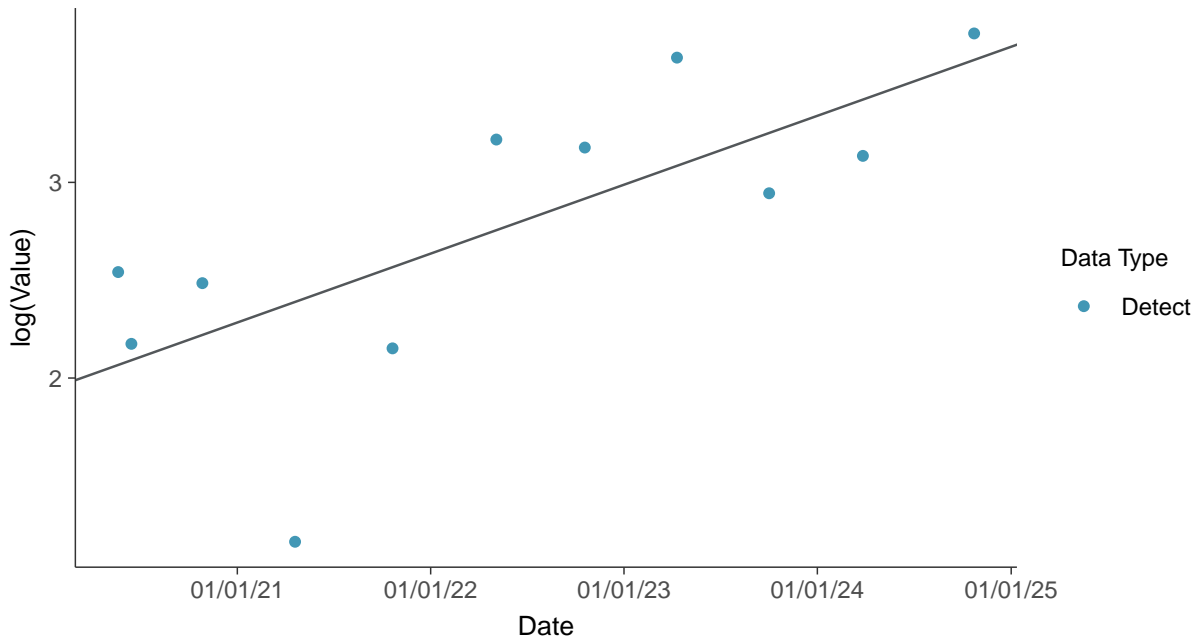
Gamma Q-Q plot

Arsenic, MW-15015R (ug/L)



Trend Regression: Lognormal MLE

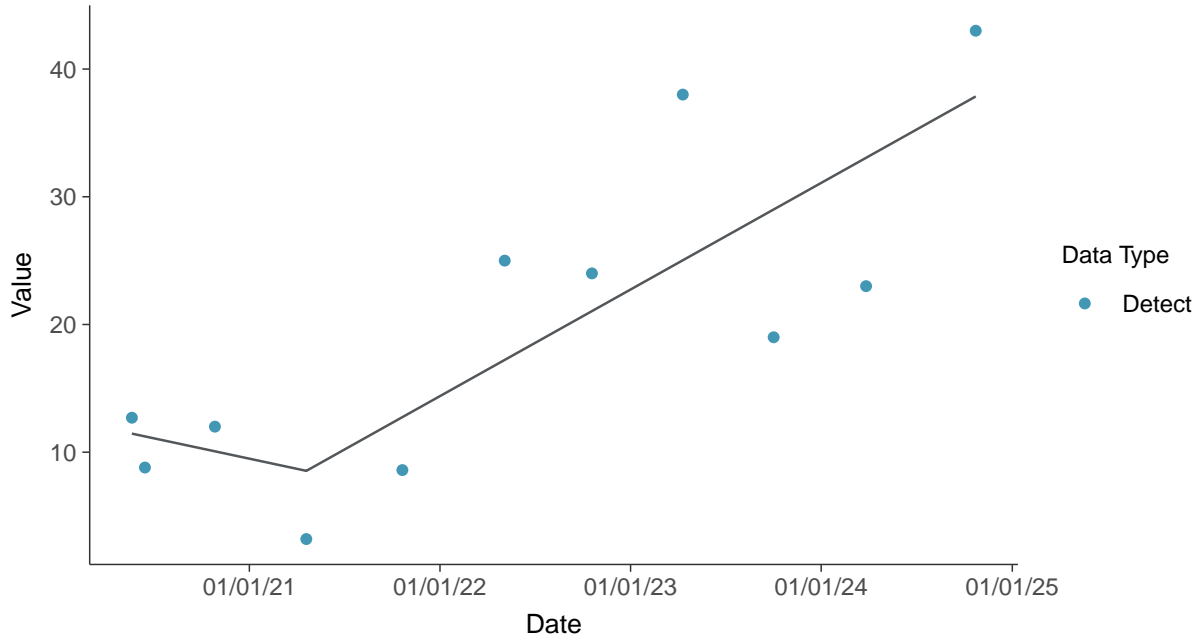
Arsenic, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear

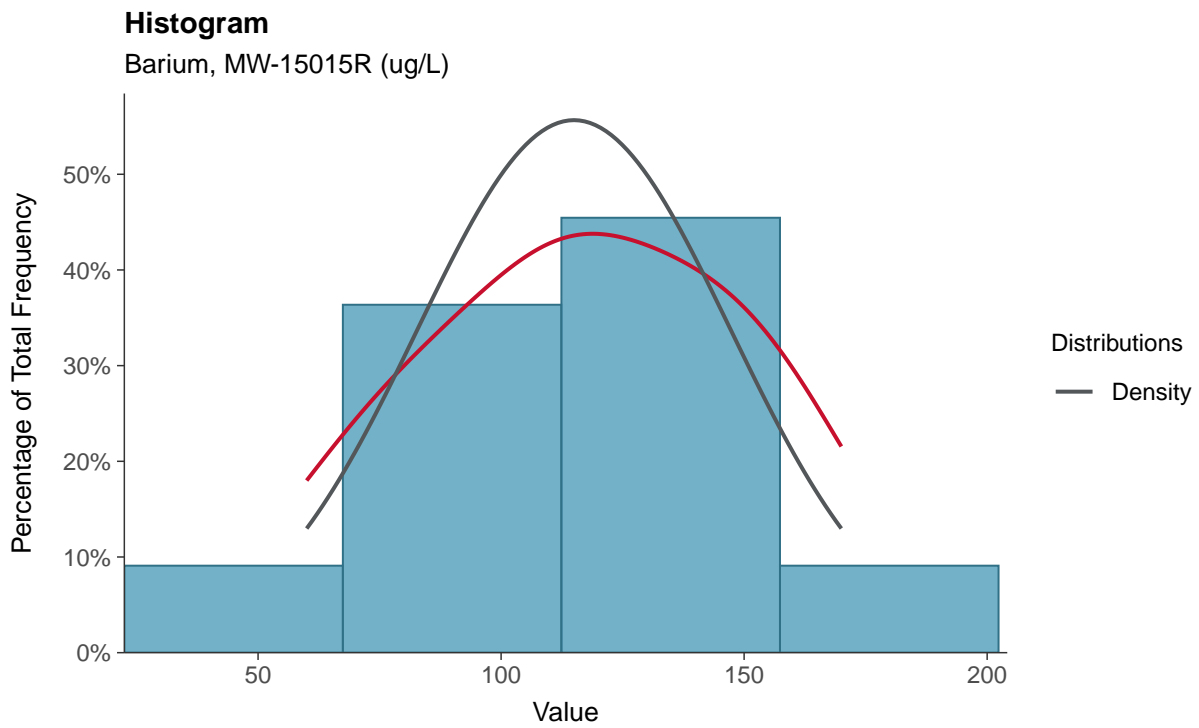
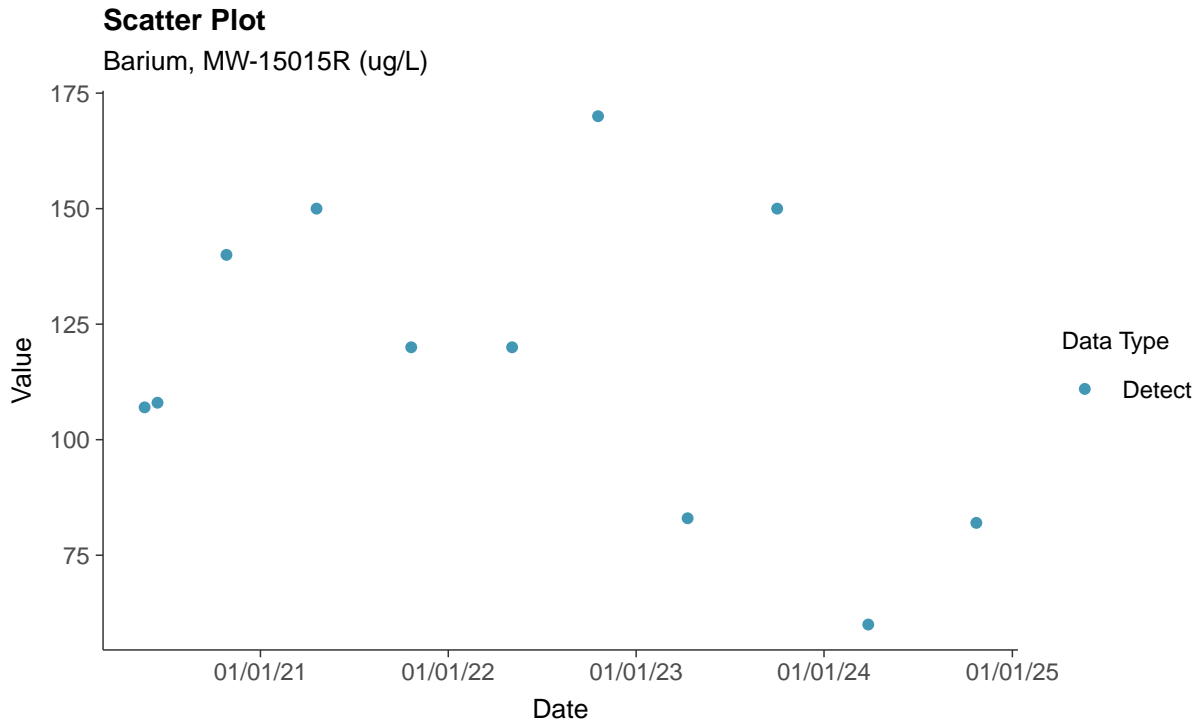
Arsenic, MW-15015R (ug/L)





Appendix IV: Barium, MW-15015R

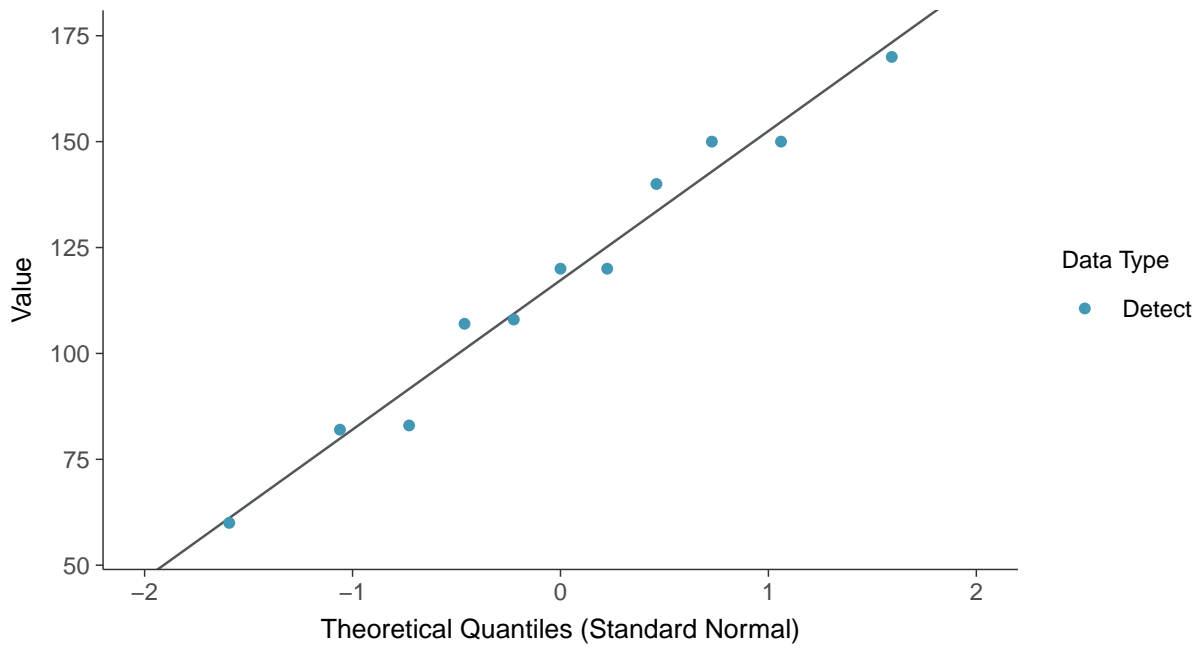
ID: 05_2_103





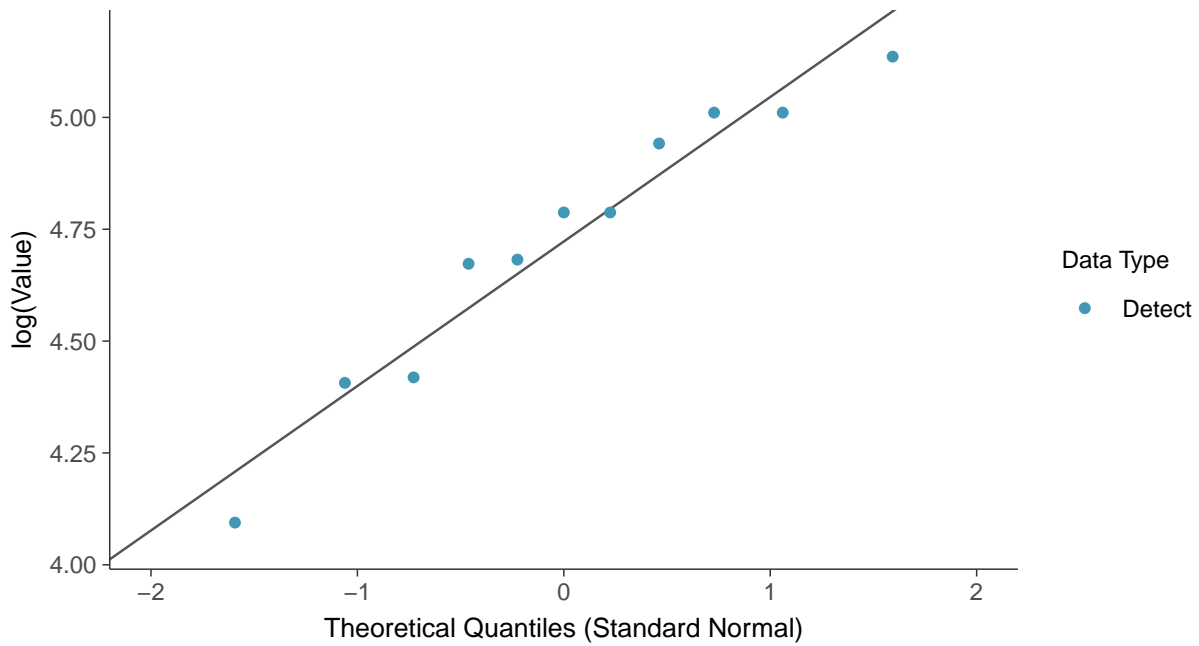
Normal Q-Q plot

Barium, MW-15015R (ug/L)



Lognormal Q-Q plot

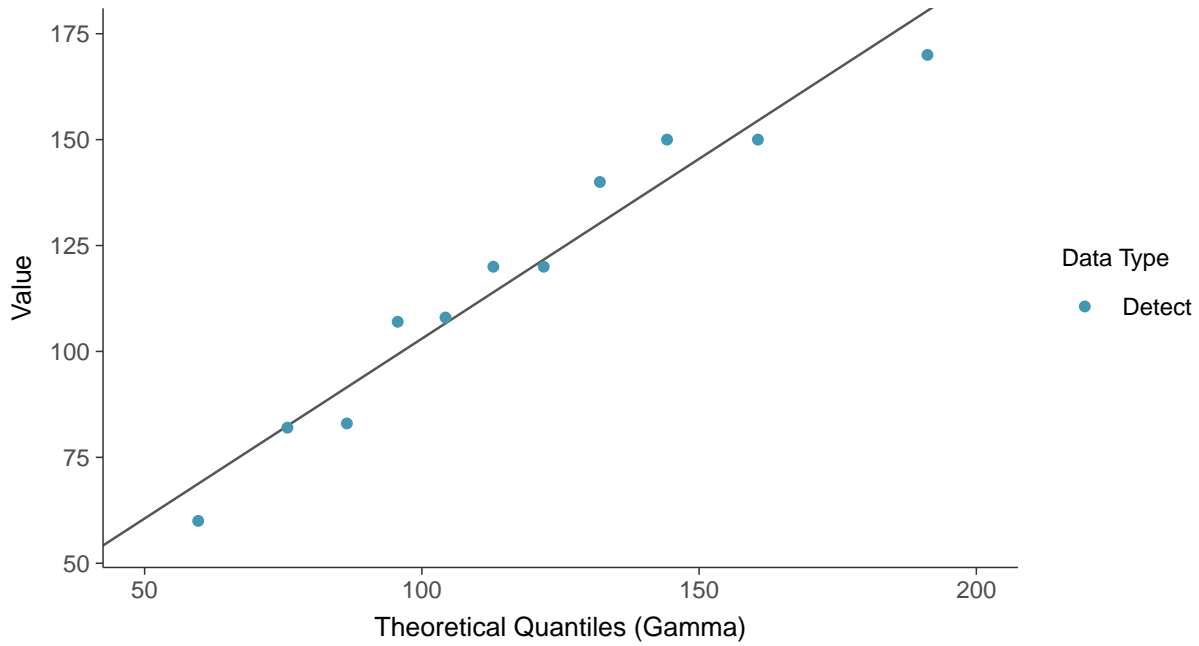
Barium, MW-15015R (ug/L)





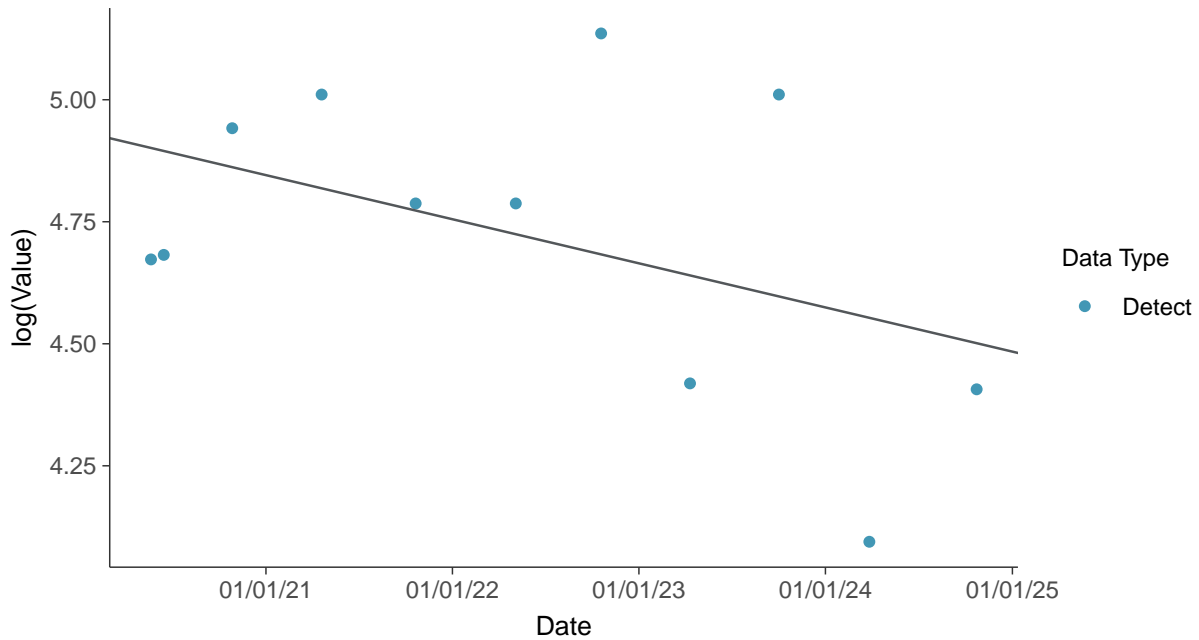
Gamma Q-Q plot

Barium, MW-15015R (ug/L)



Trend Regression: Lognormal MLE

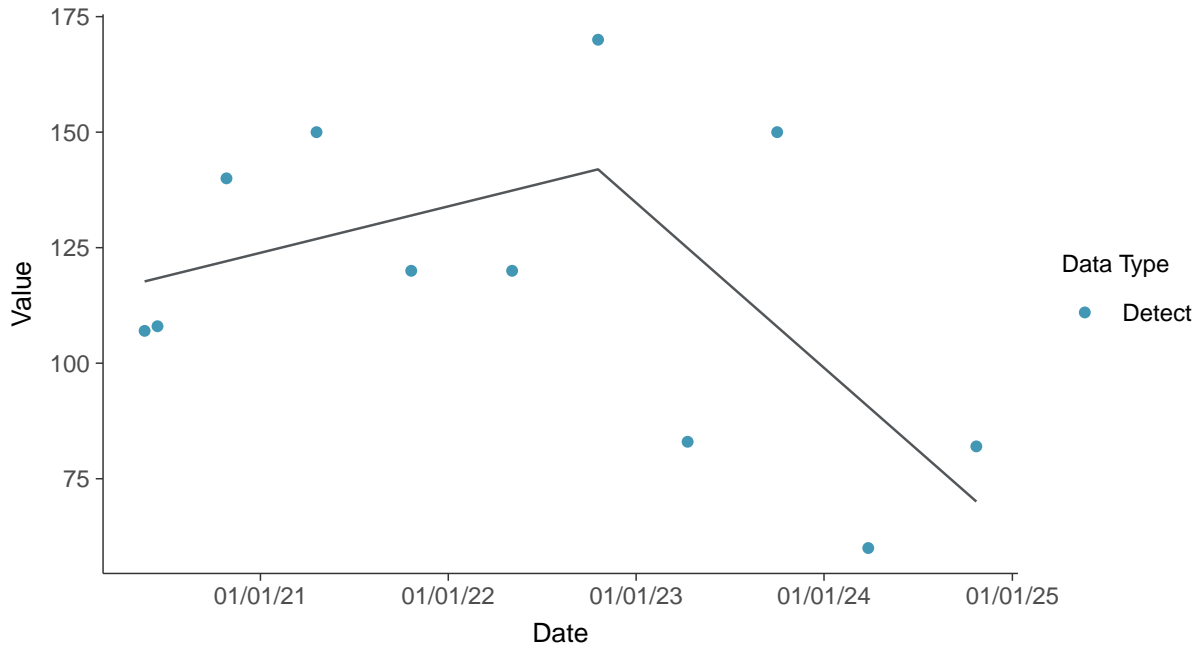
Barium, MW-15015R (ug/L)





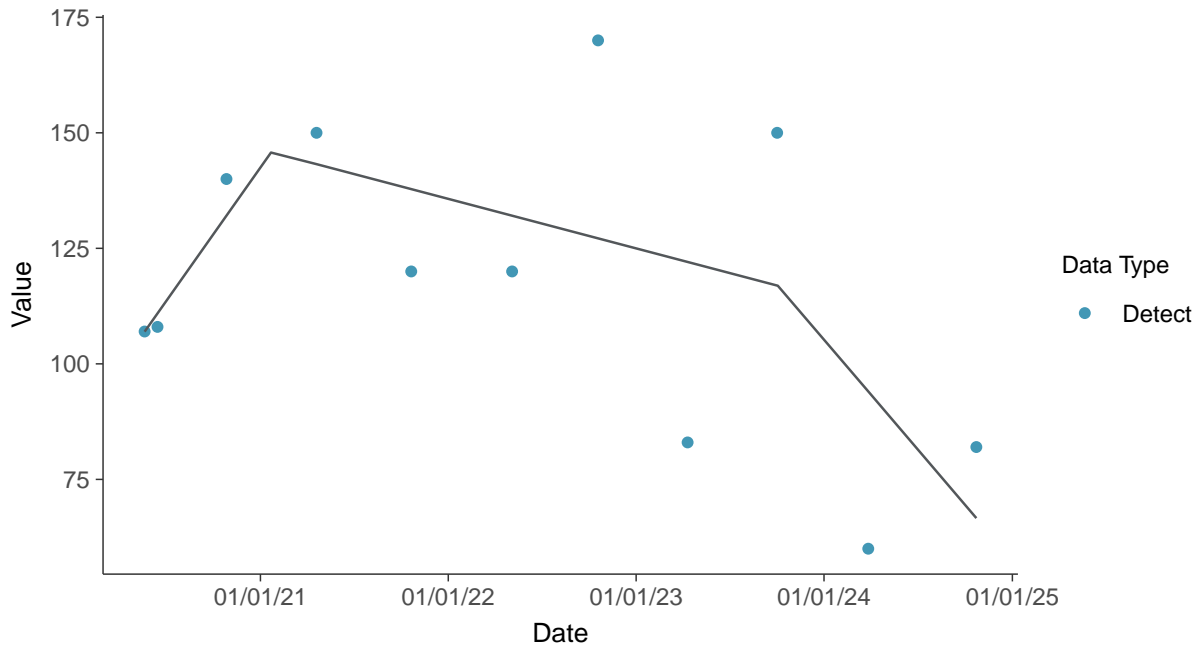
Trend Regression: Piecewise Linear-Linear

Barium, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

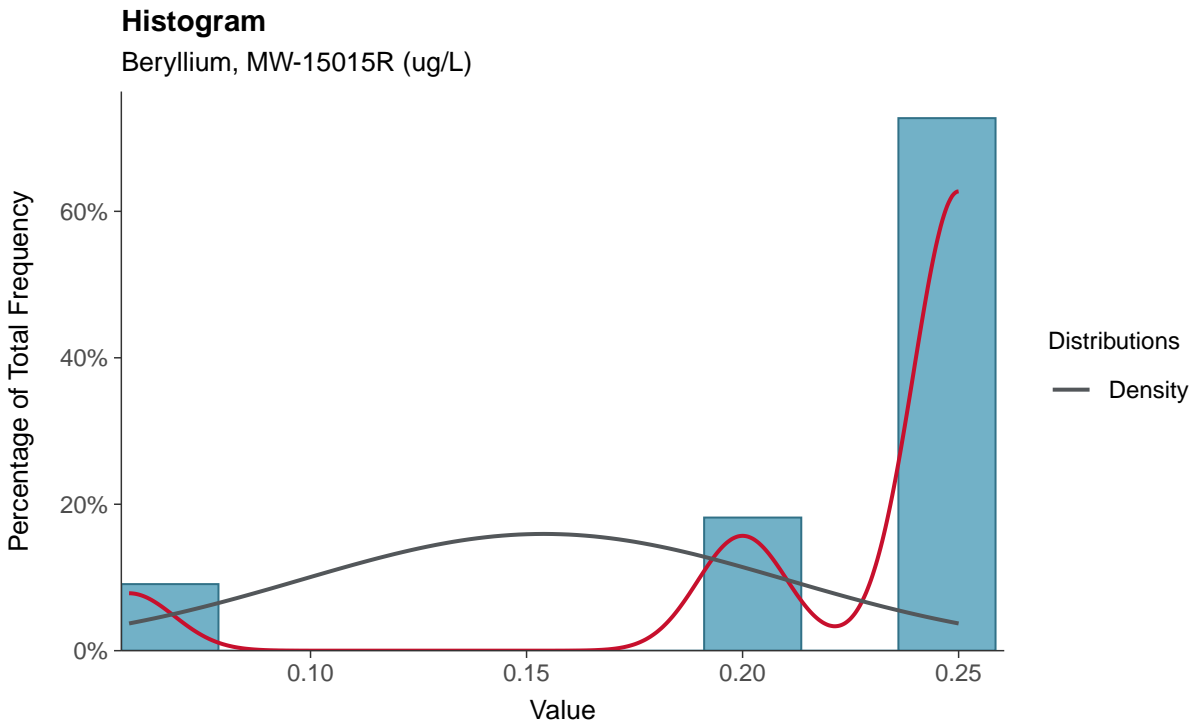
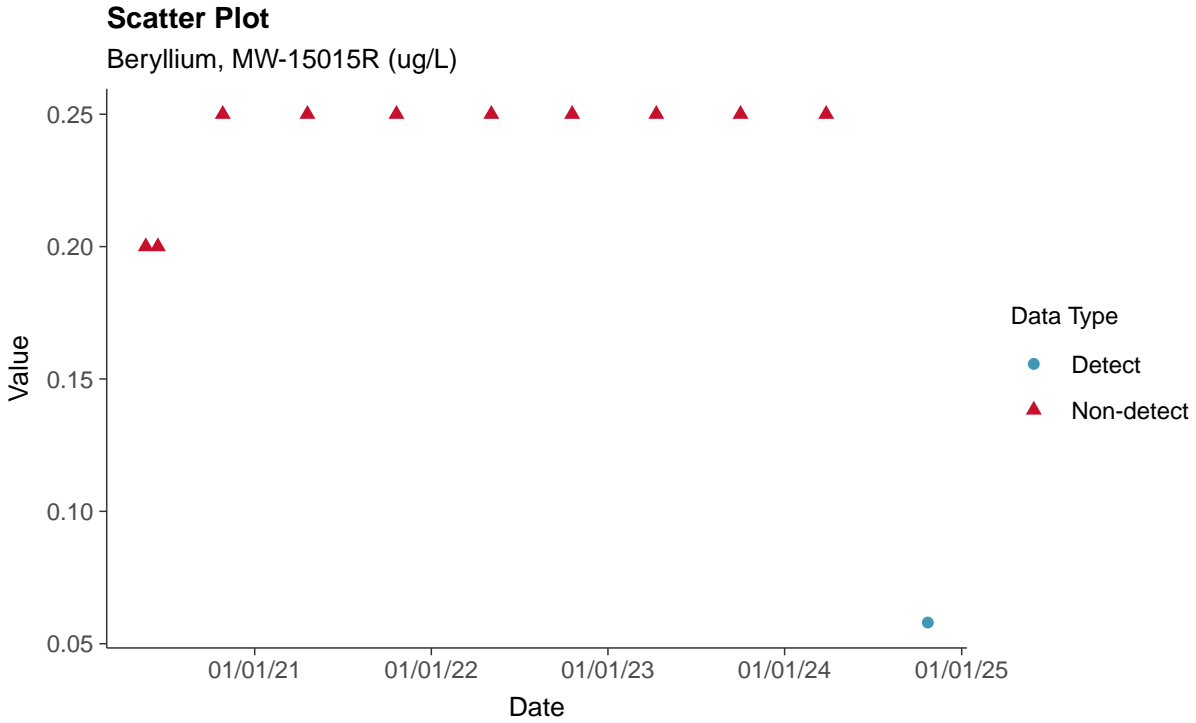
Barium, MW-15015R (ug/L)





Appendix IV: Beryllium, MW-15015R

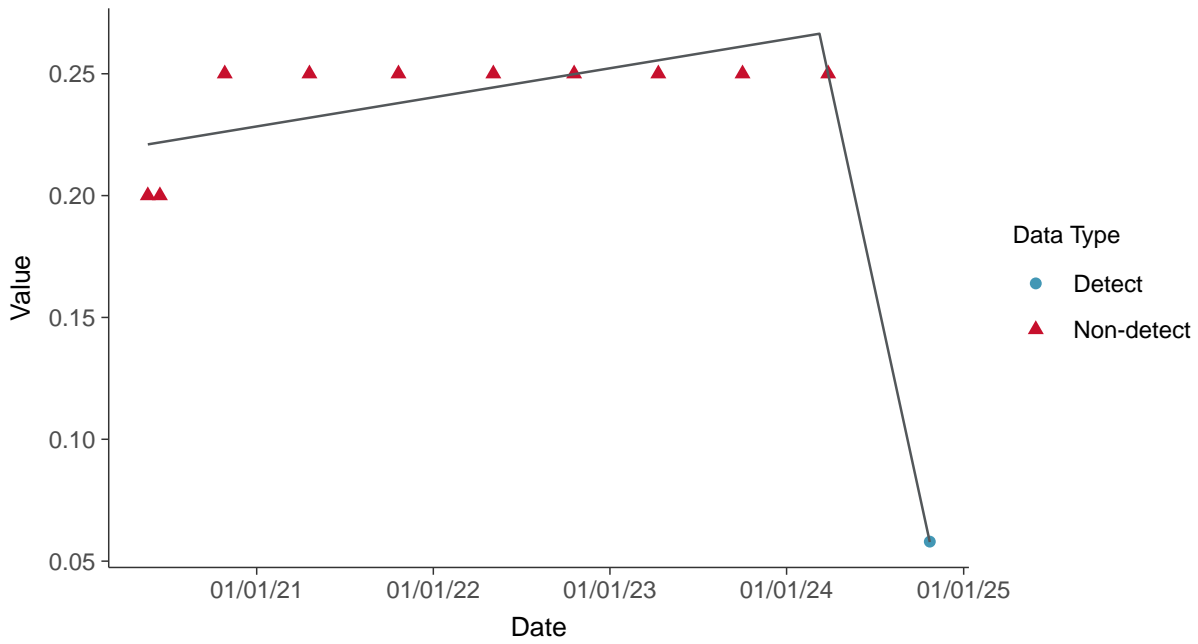
ID: 05_2_104





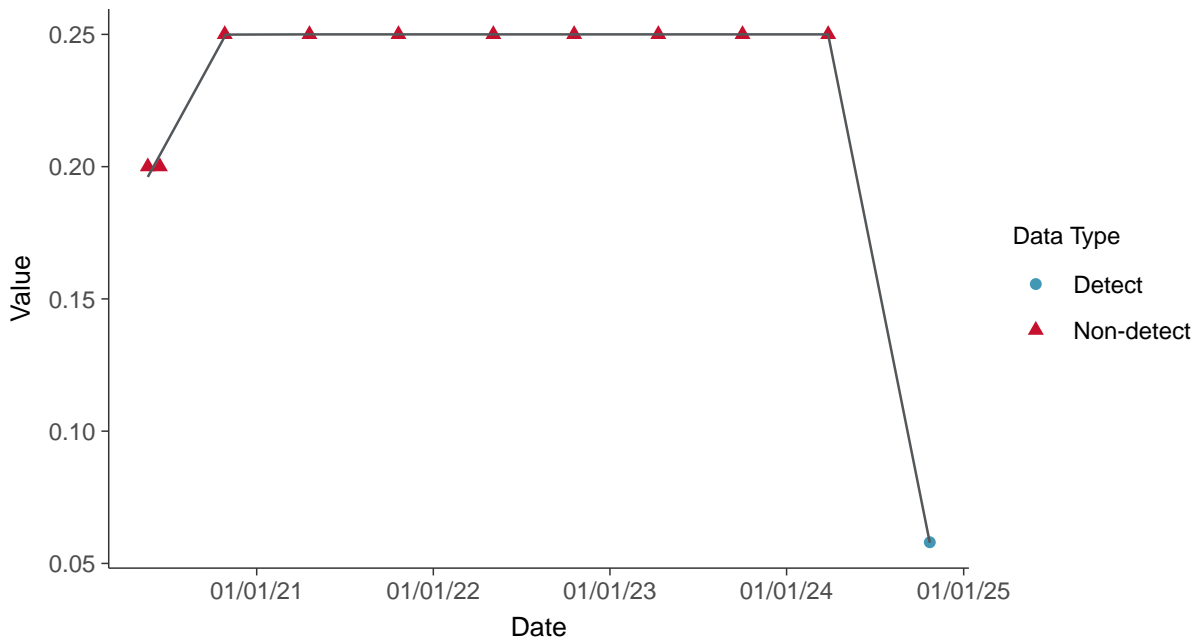
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

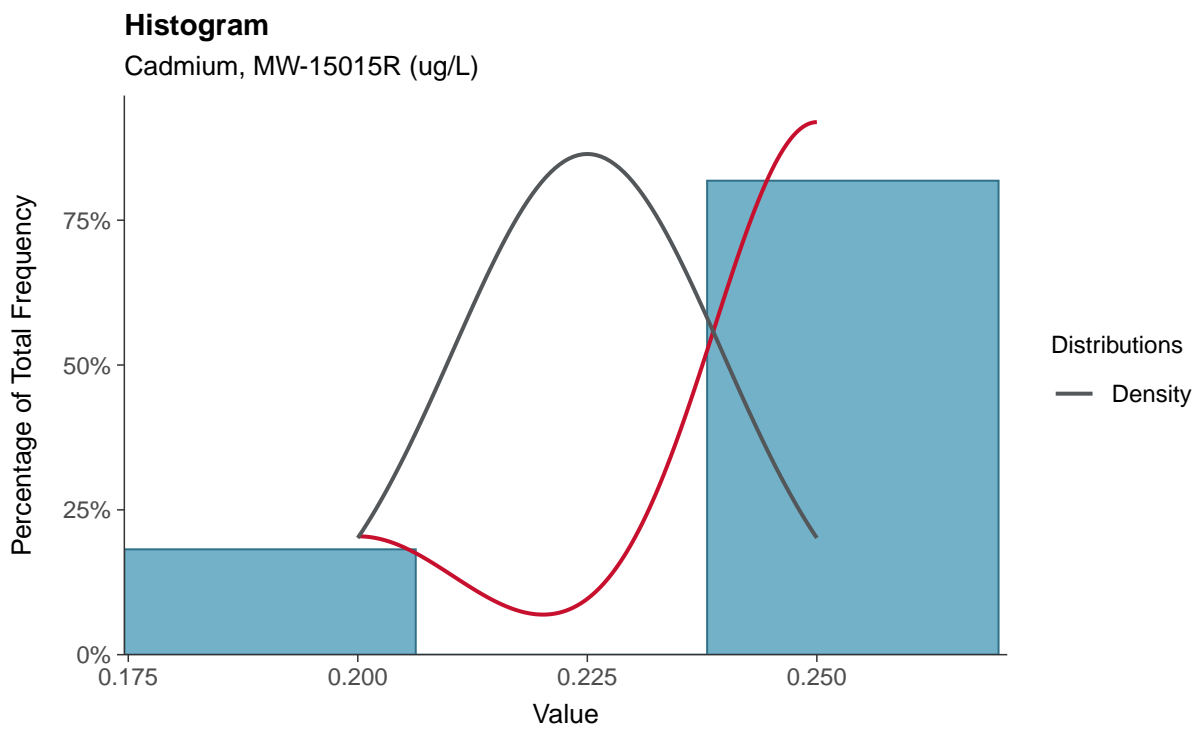
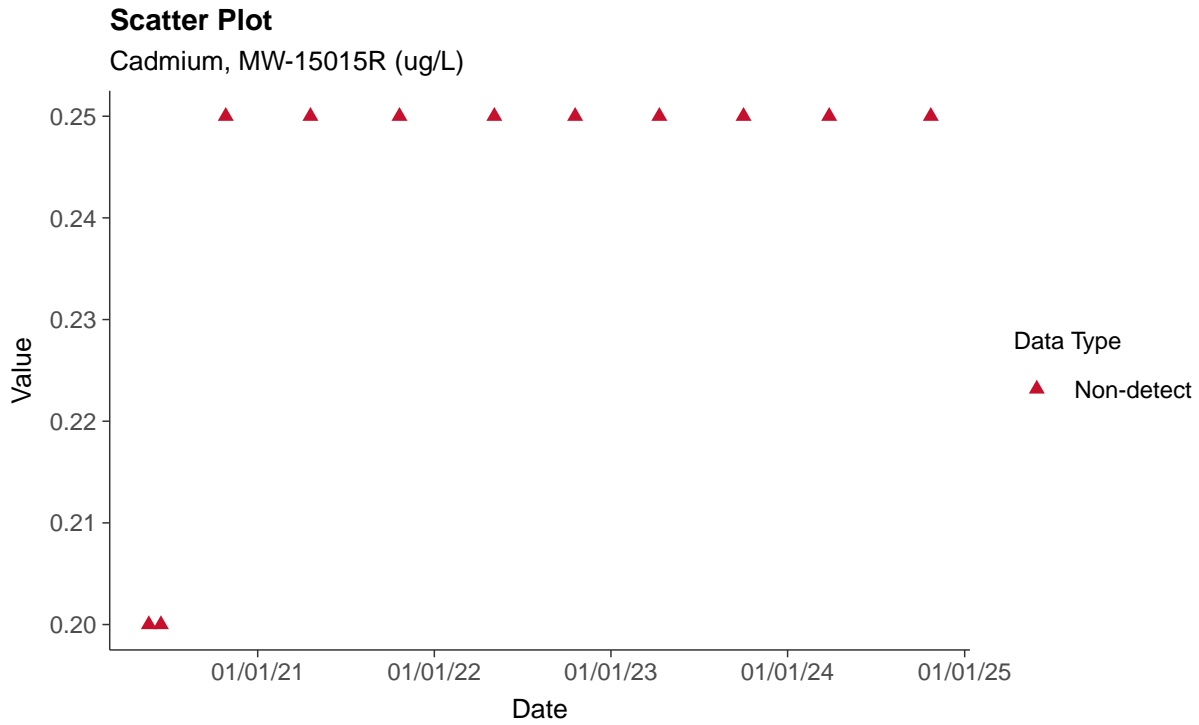
Beryllium, MW-15015R (ug/L)





Appendix IV: Cadmium, MW-15015R

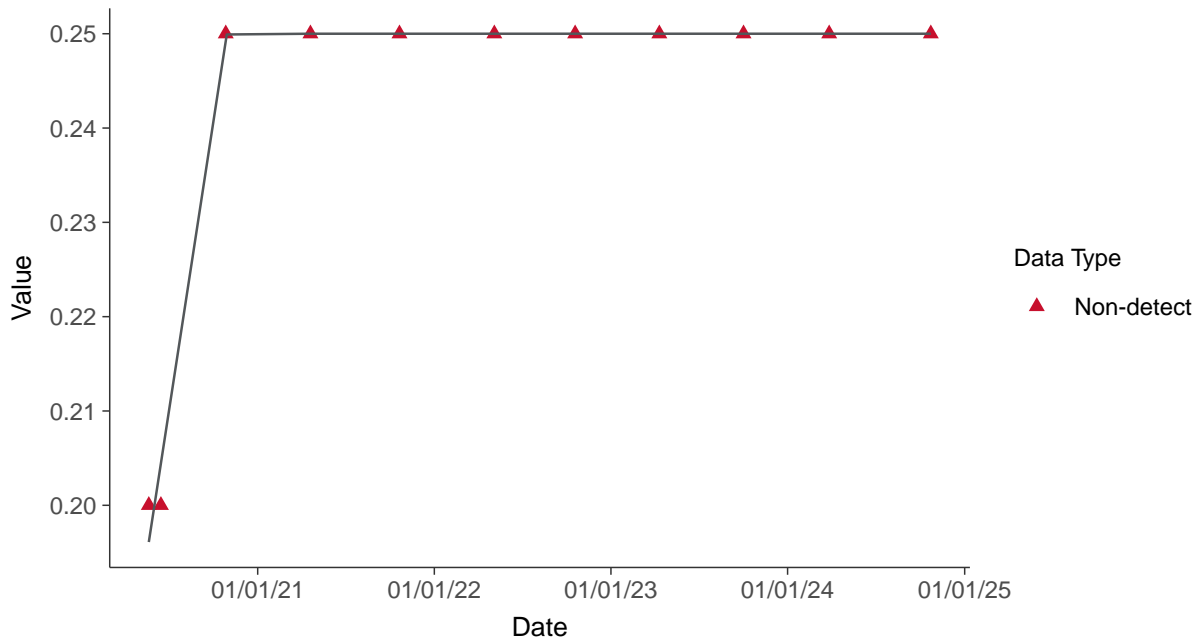
ID: 05_2_106





Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15015R (ug/L)



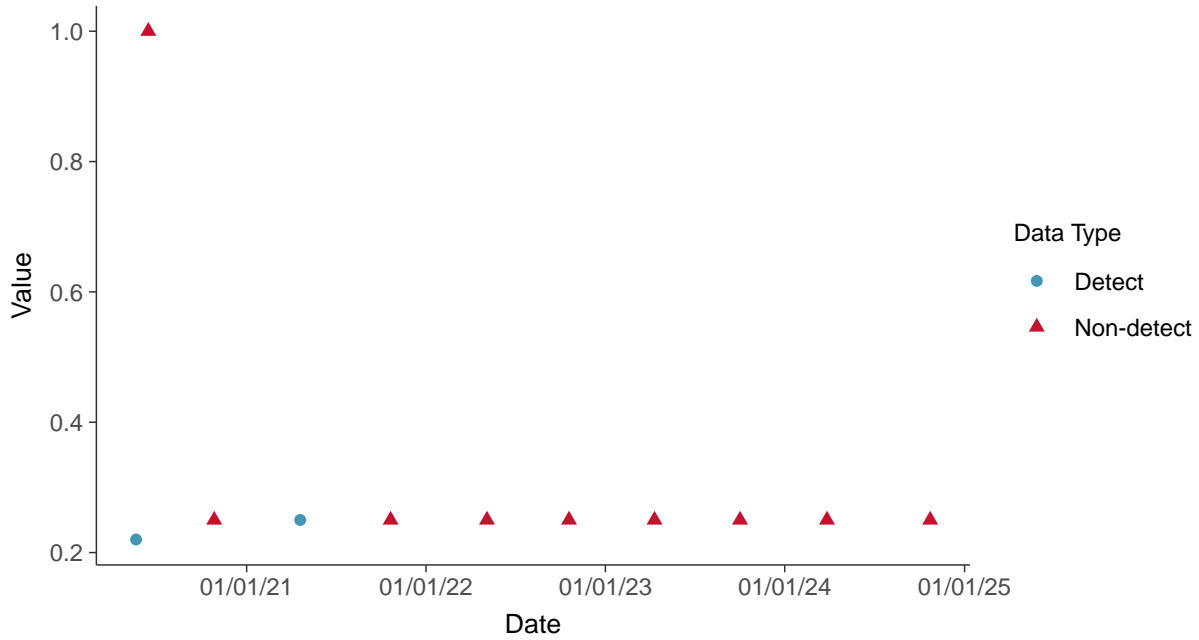


Appendix IV: Chromium, MW-15015R

ID: 05_2_109

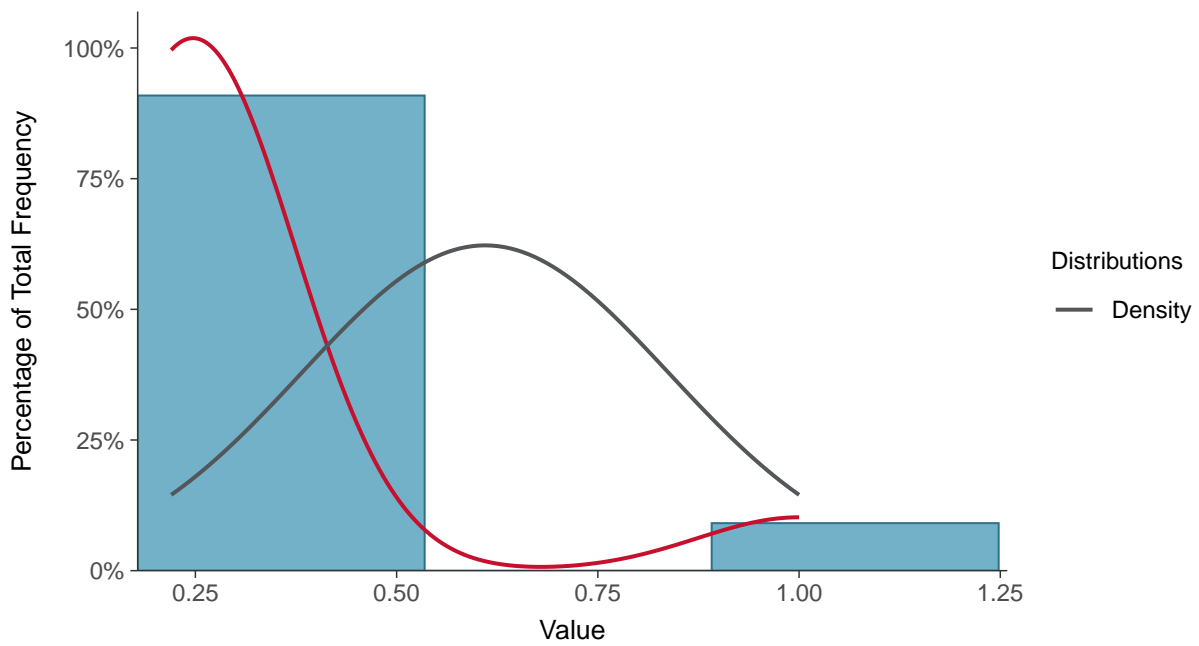
Scatter Plot

Chromium, MW-15015R (ug/L)



Histogram

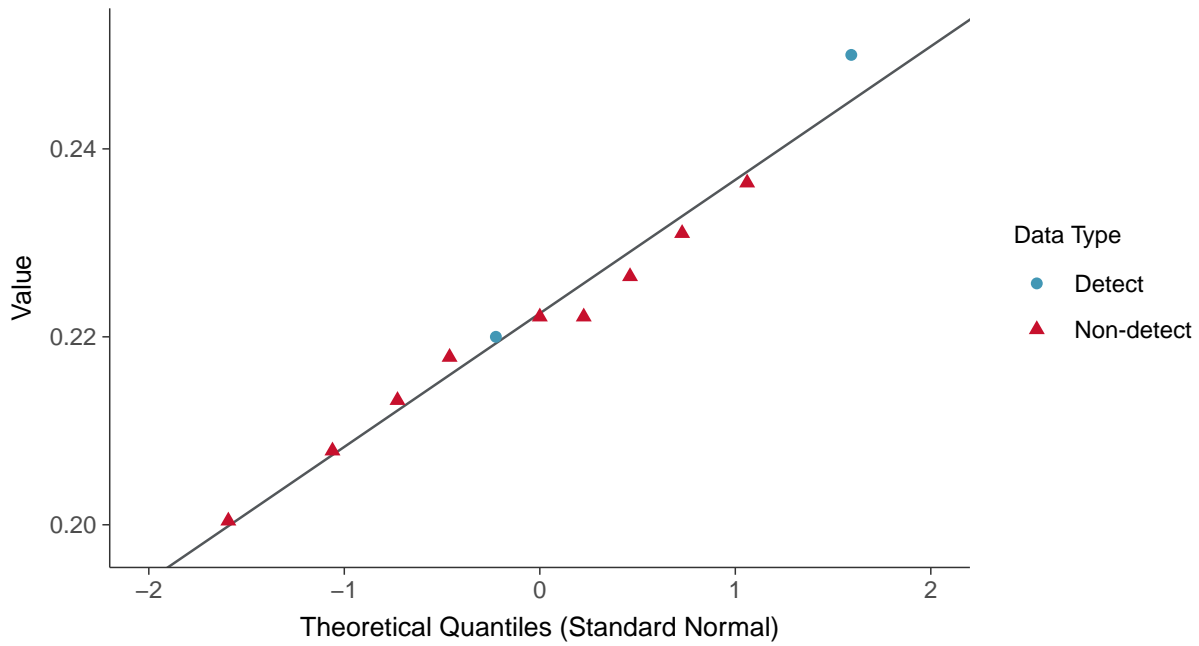
Chromium, MW-15015R (ug/L)





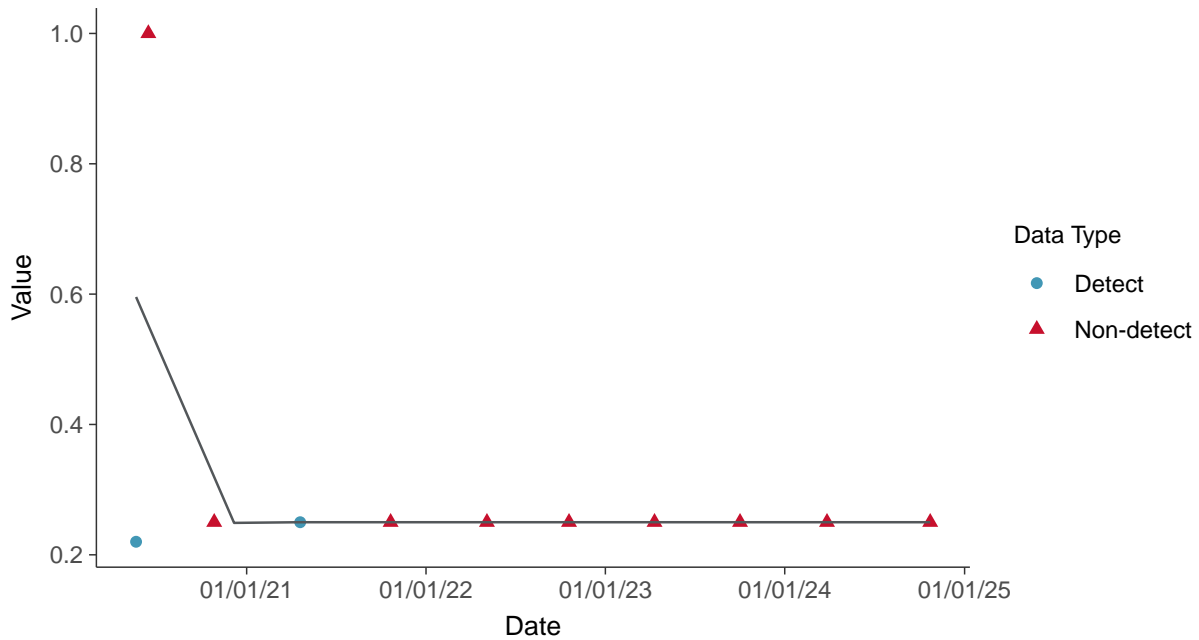
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

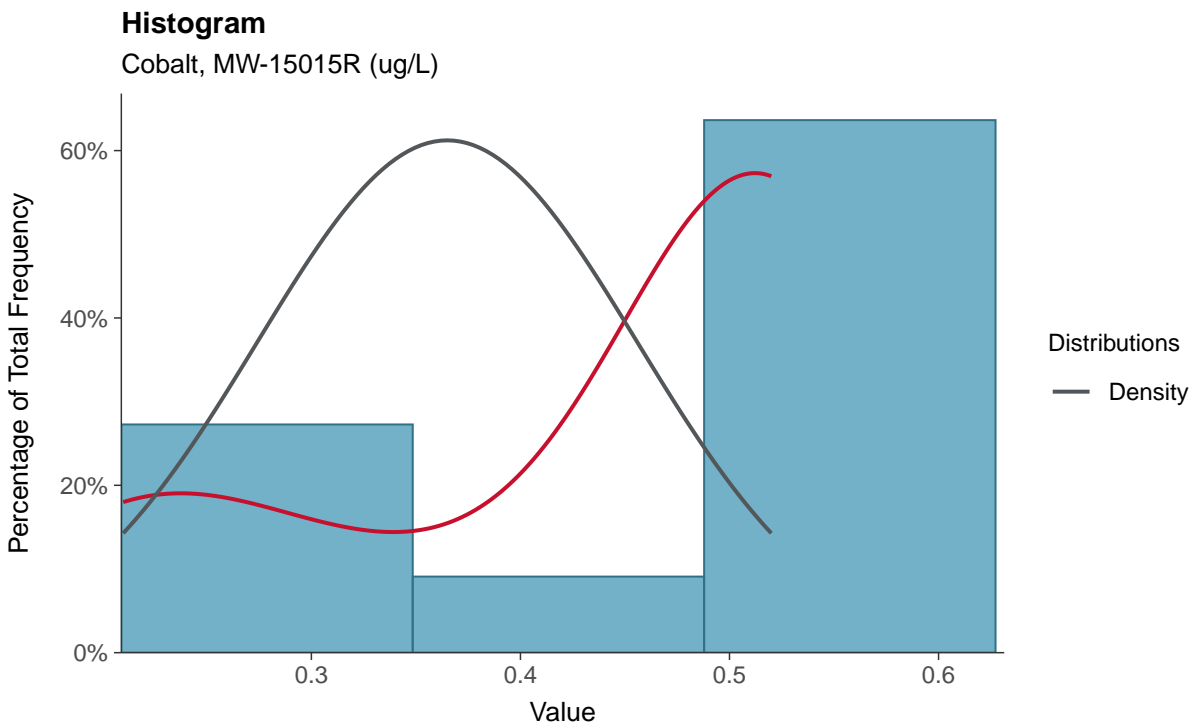
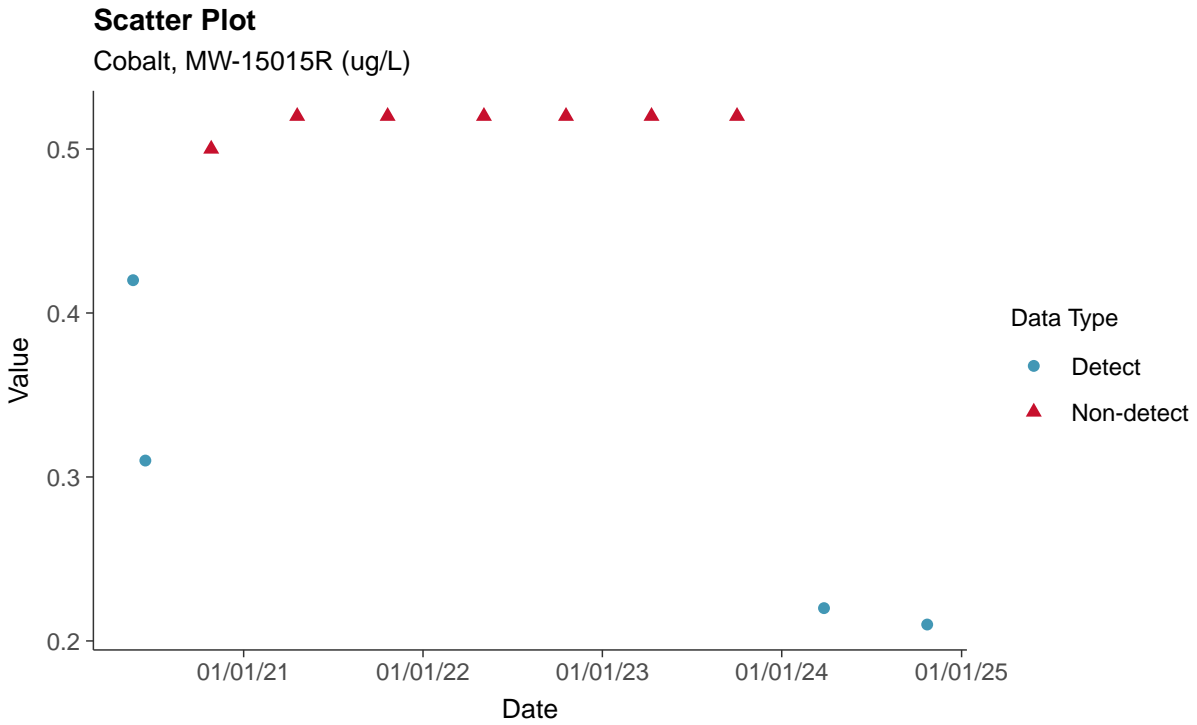
Chromium, MW-15015R (ug/L)





Appendix IV: Cobalt, MW-15015R

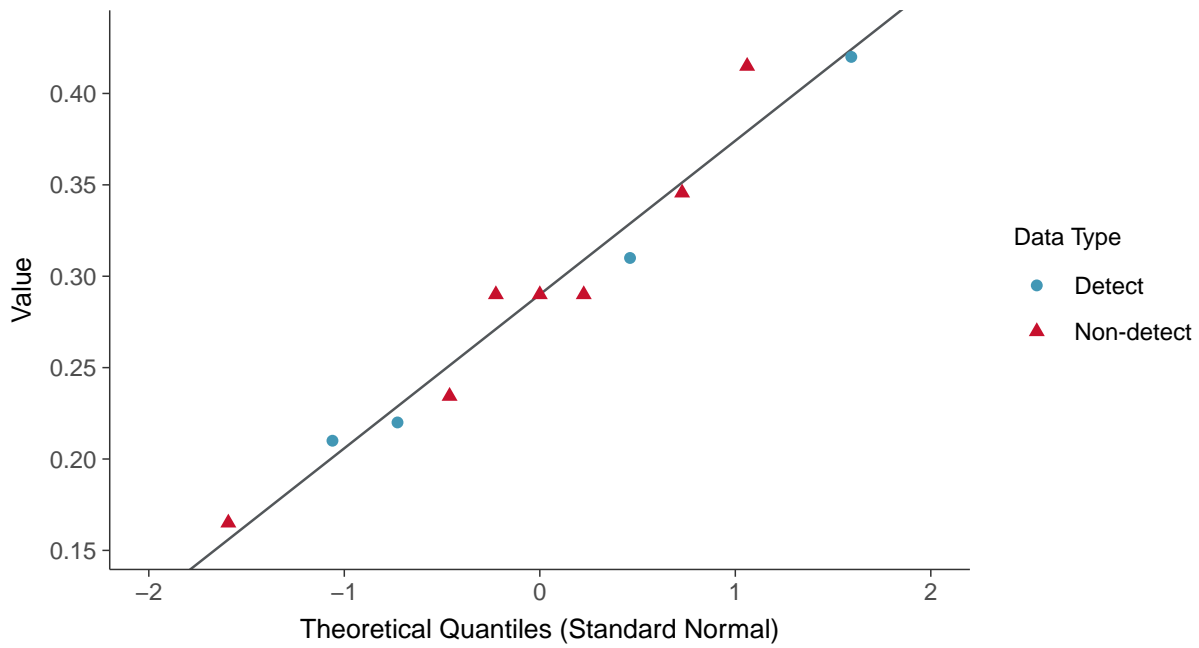
ID: 05_2_110





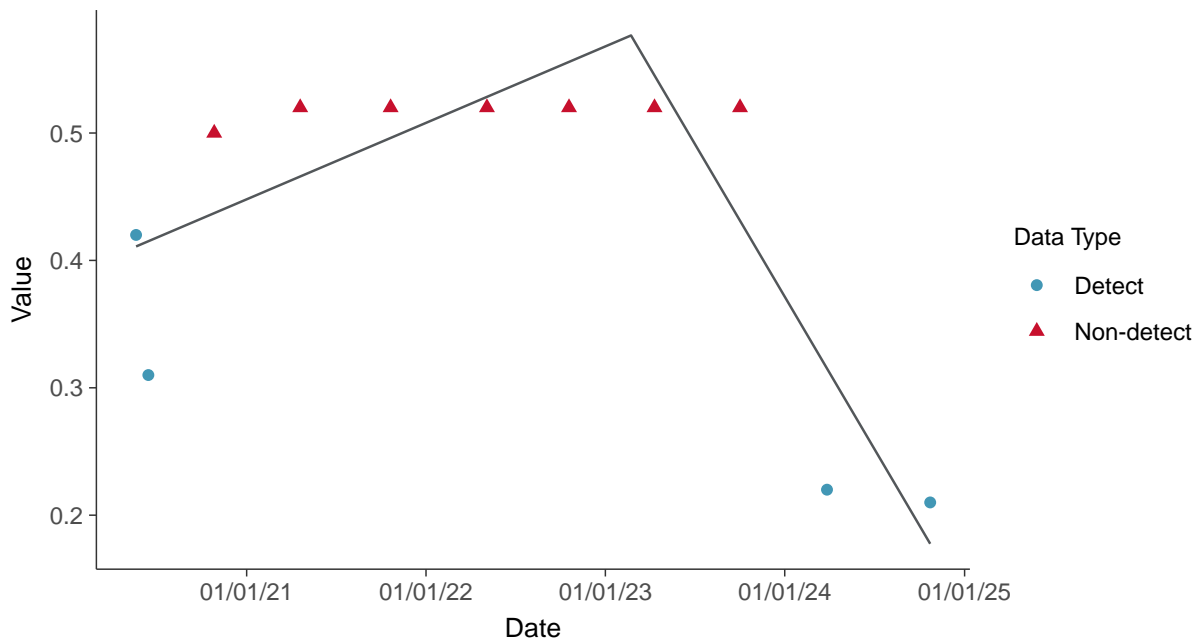
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

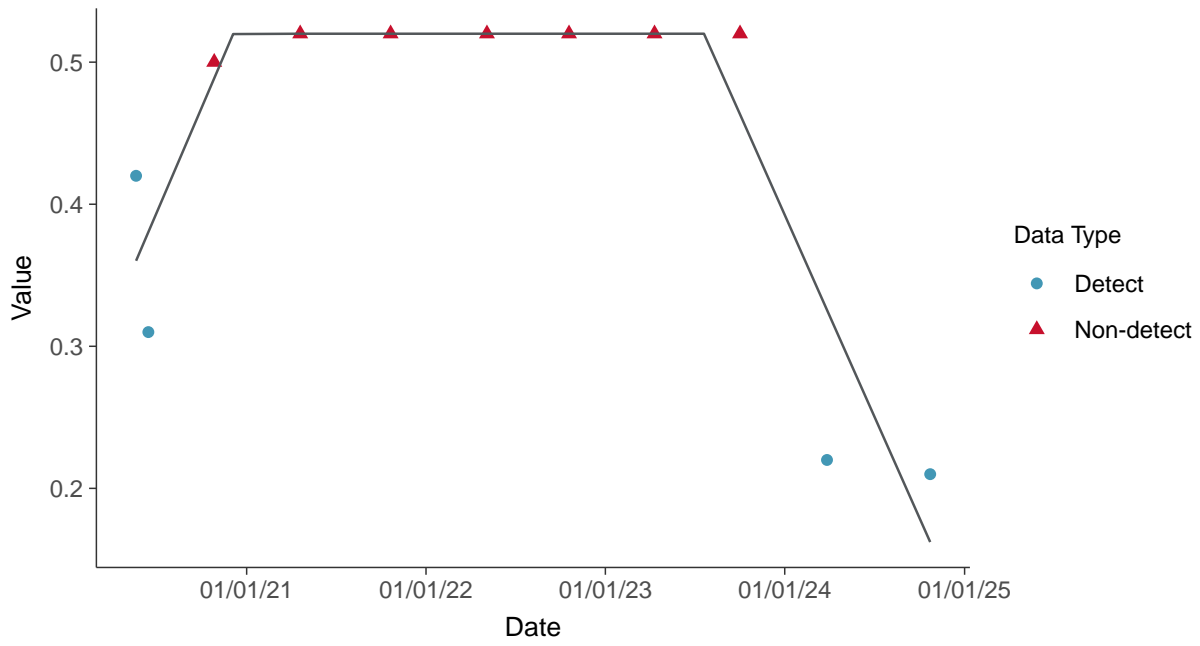
Cobalt, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-15015R (ug/L)



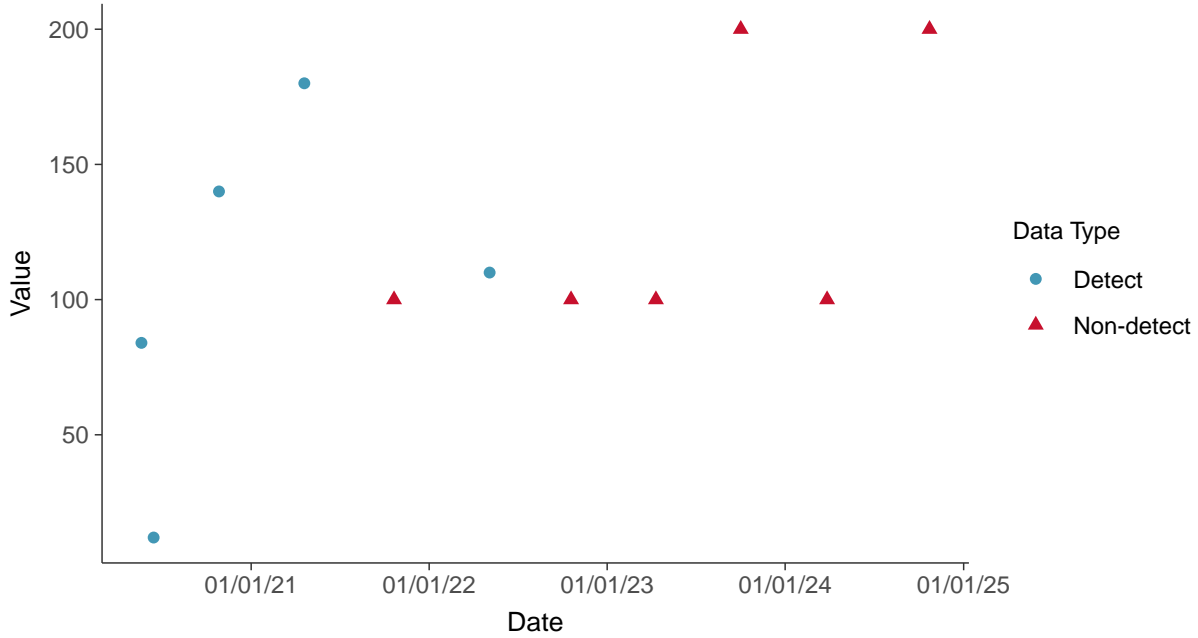


Appendix IV: Fluoride, MW-15015R

ID: 05_2_114

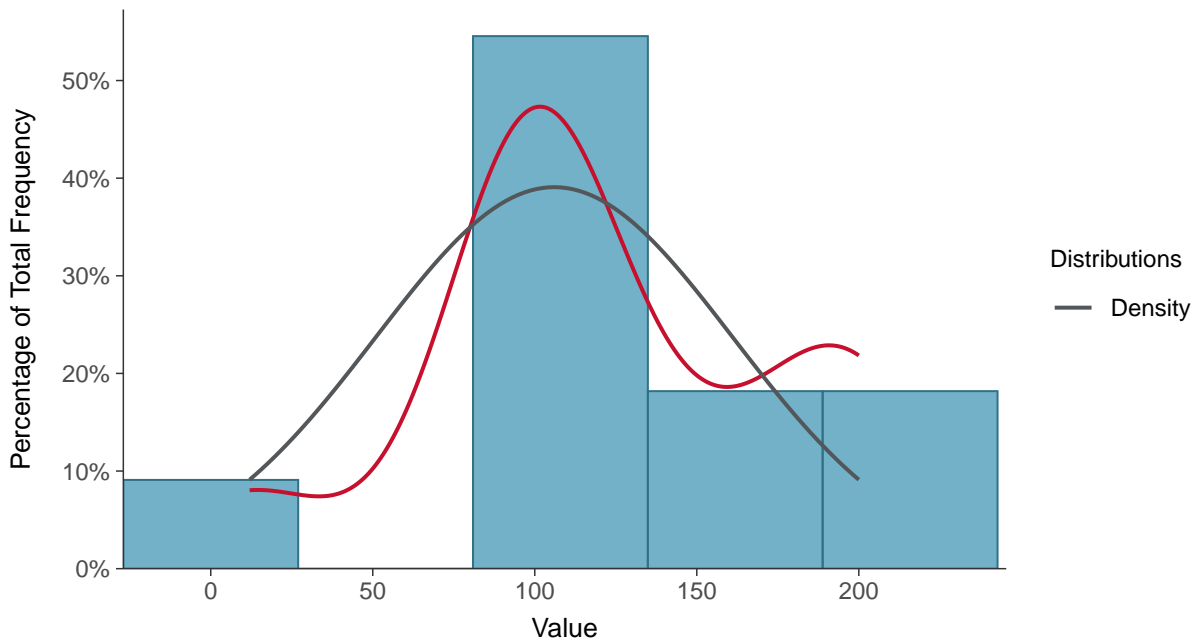
Scatter Plot

Fluoride, MW-15015R (ug/L)



Histogram

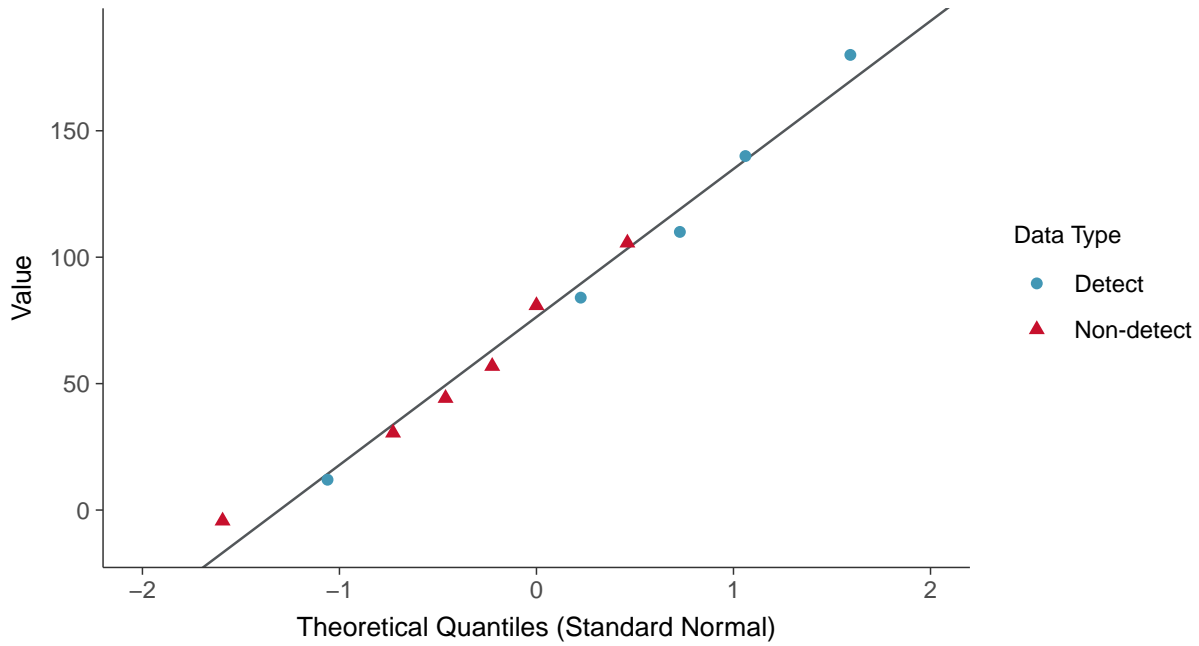
Fluoride, MW-15015R (ug/L)





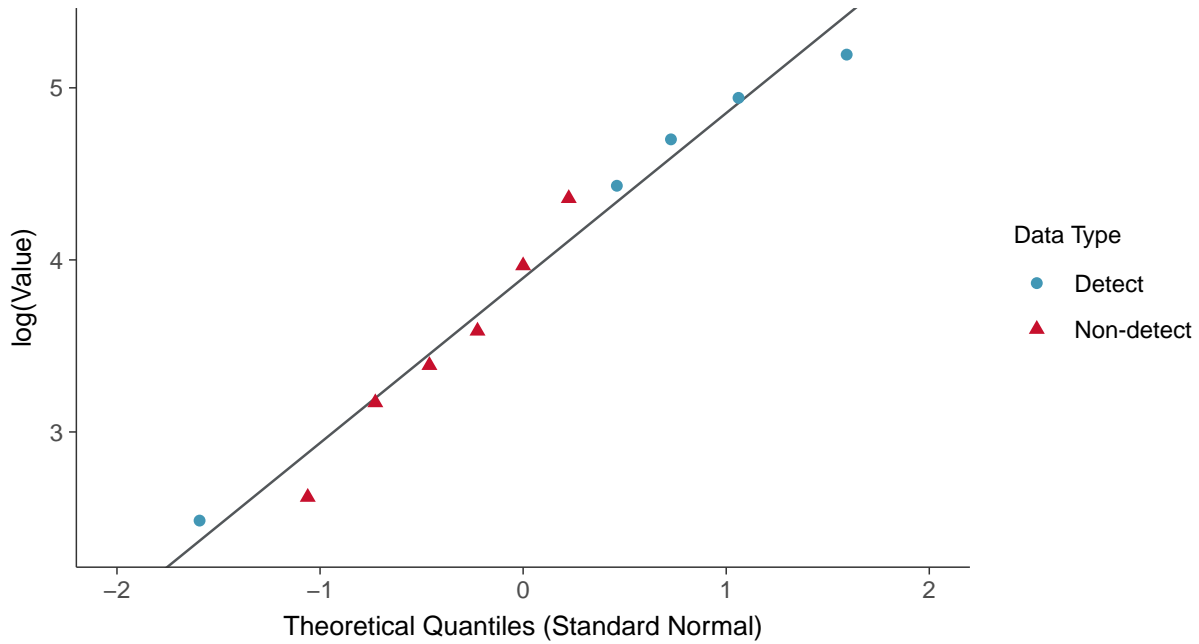
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15015R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

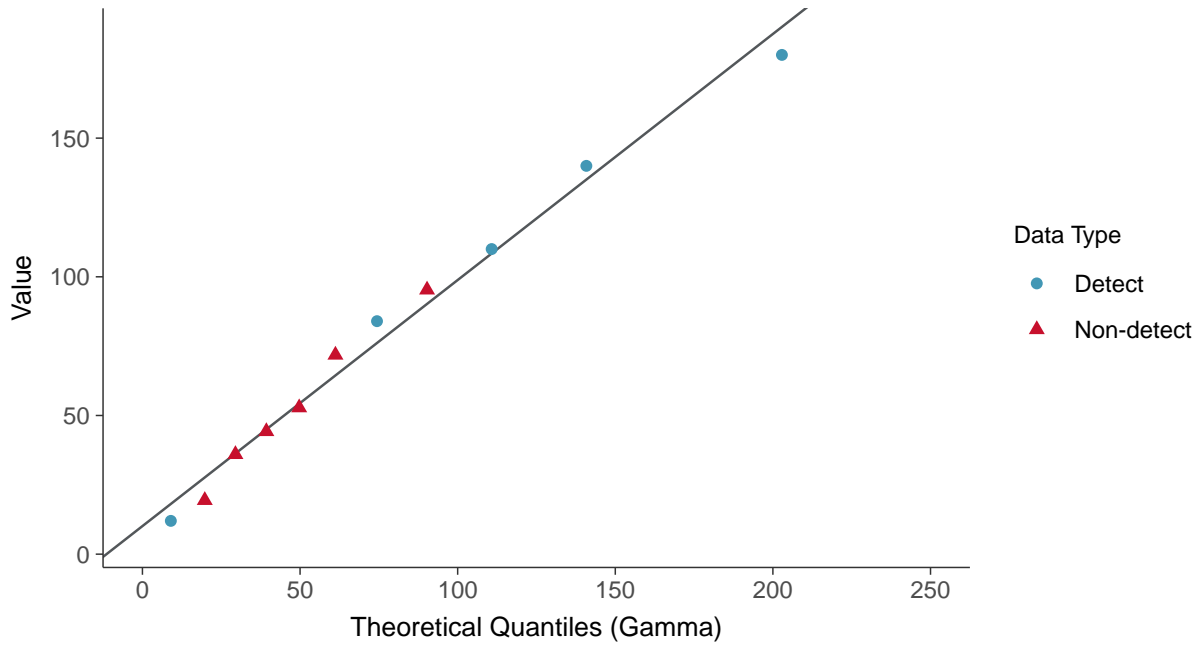
Fluoride, MW-15015R (ug/L)





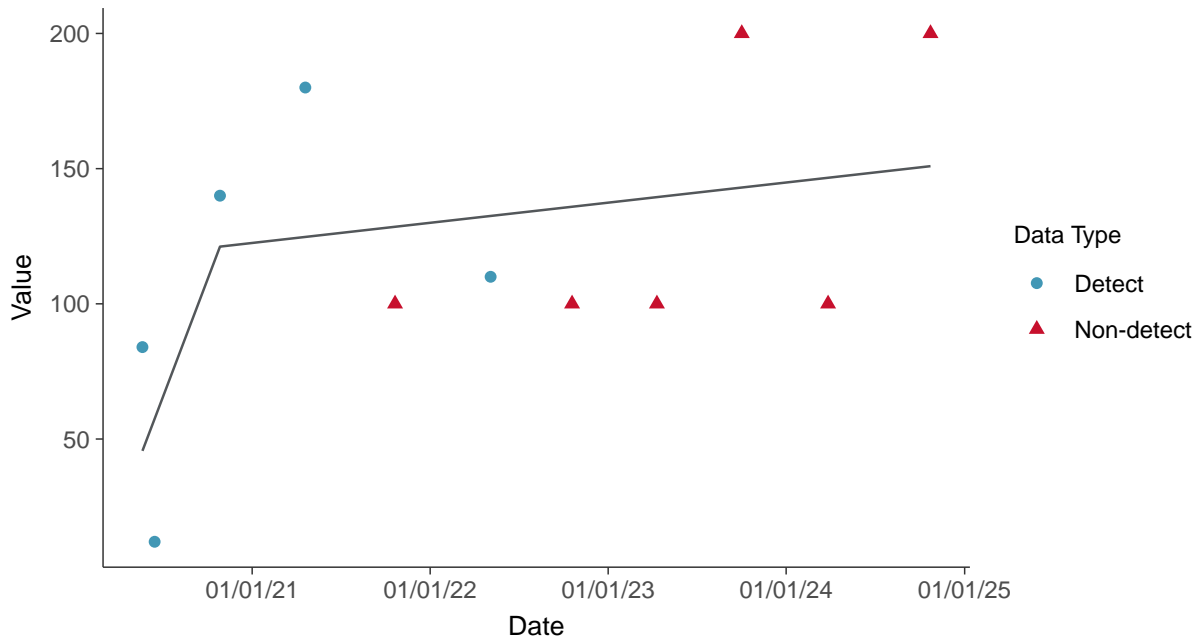
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

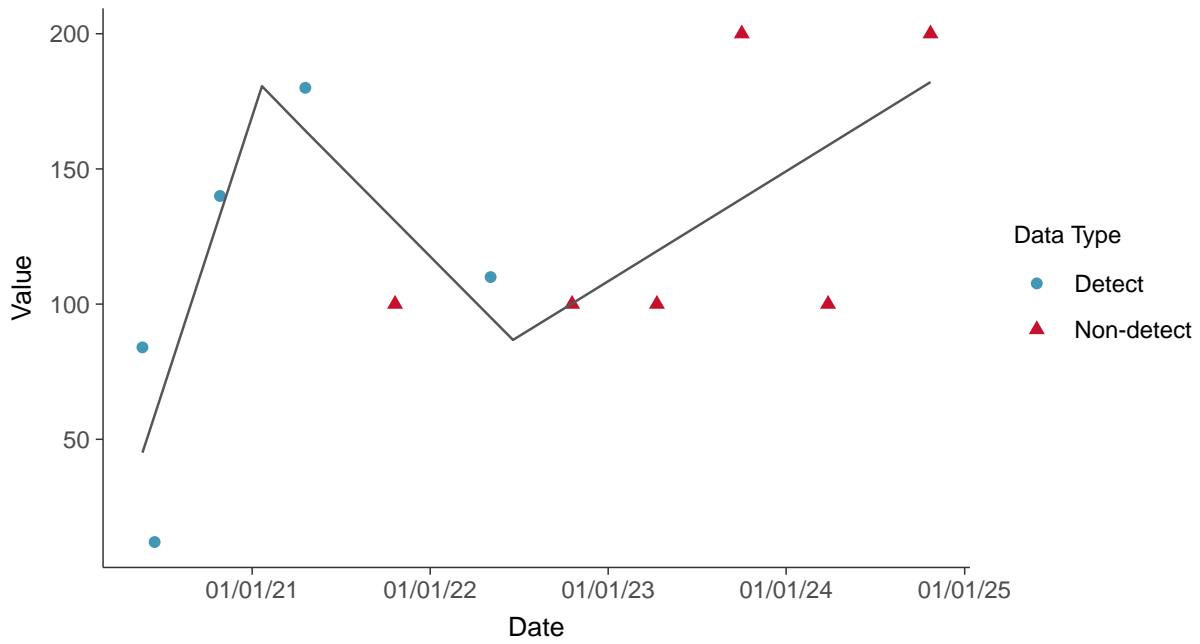
Fluoride, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

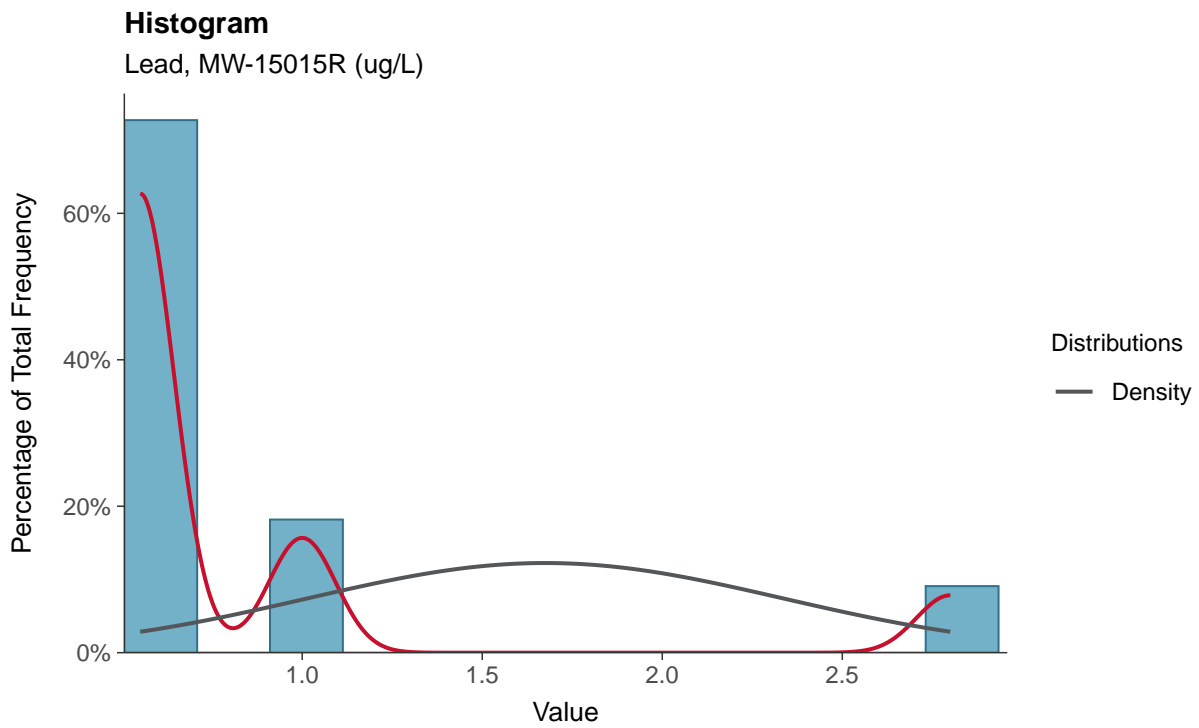
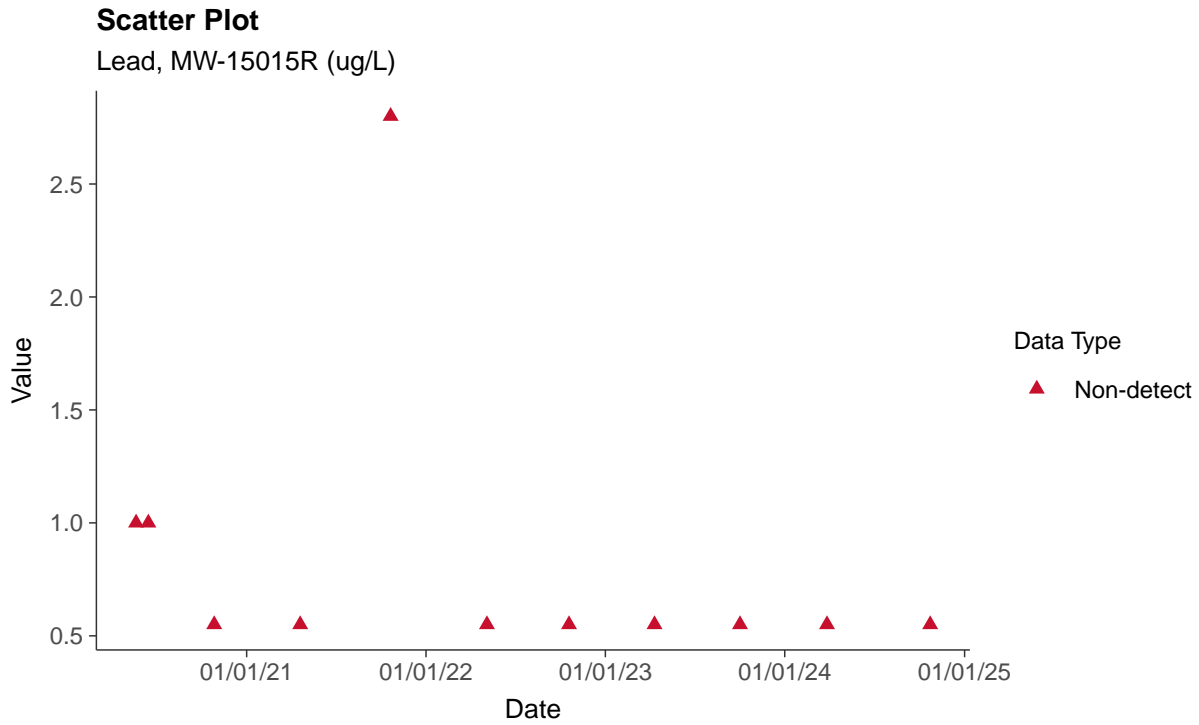
Fluoride, MW-15015R (ug/L)





Appendix IV: Lead, MW-15015R

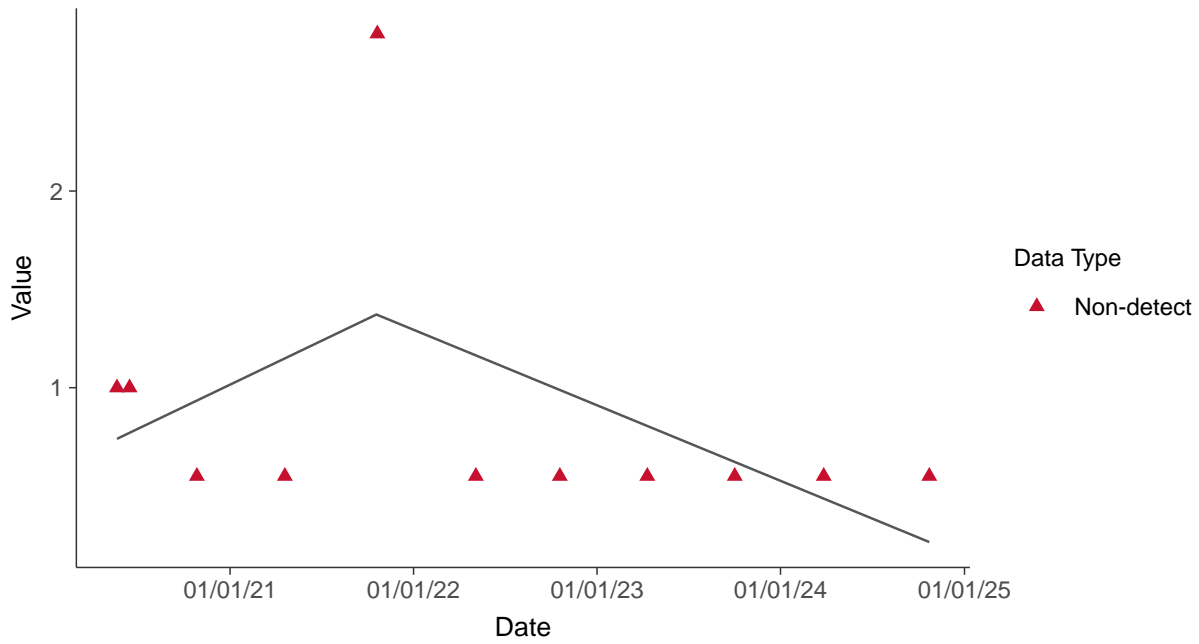
ID: 05_2_116





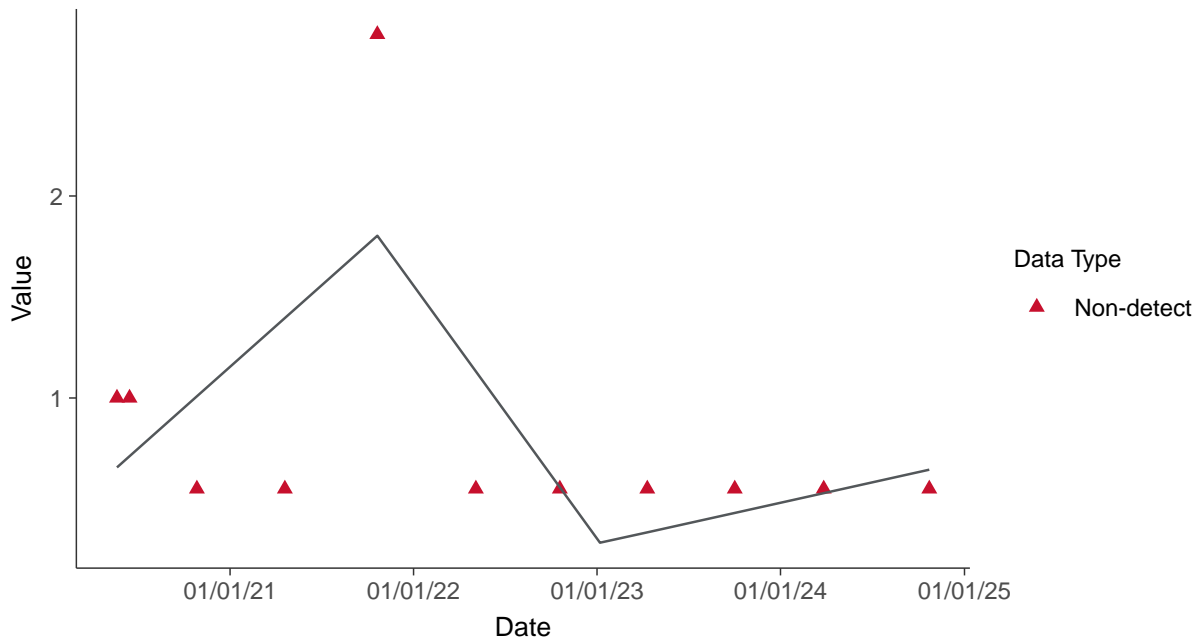
Trend Regression: Piecewise Linear-Linear

Lead, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-15015R (ug/L)



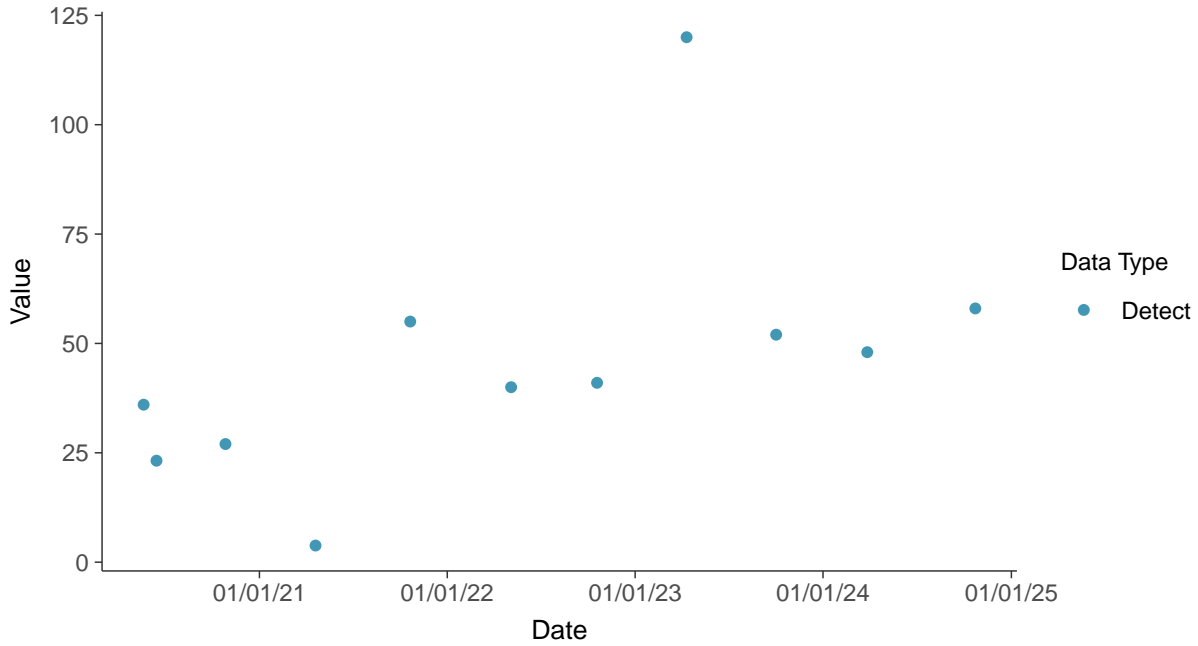


Appendix IV: Lithium, MW-15015R

ID: 05_2_117

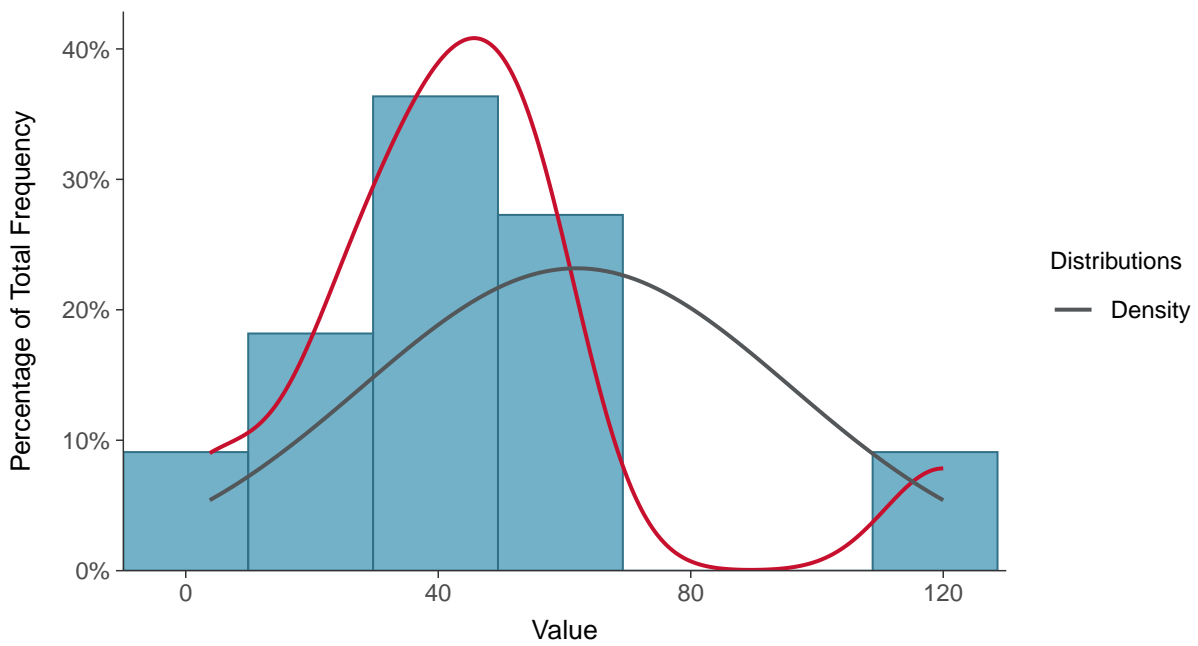
Scatter Plot

Lithium, MW-15015R (ug/L)



Histogram

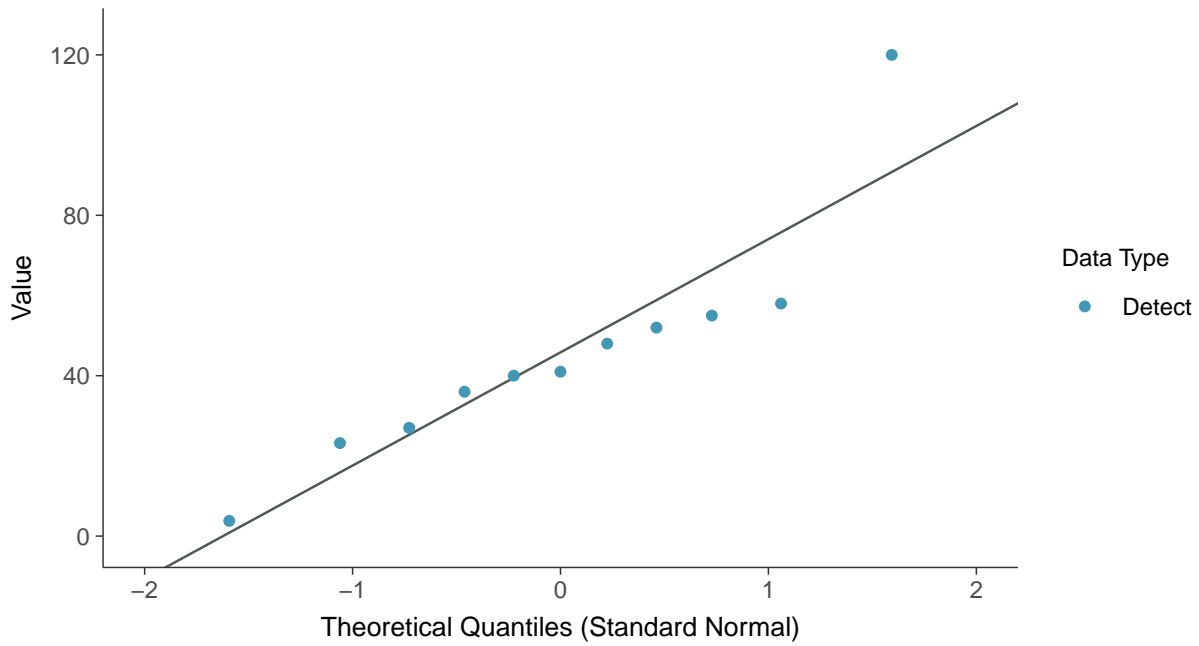
Lithium, MW-15015R (ug/L)





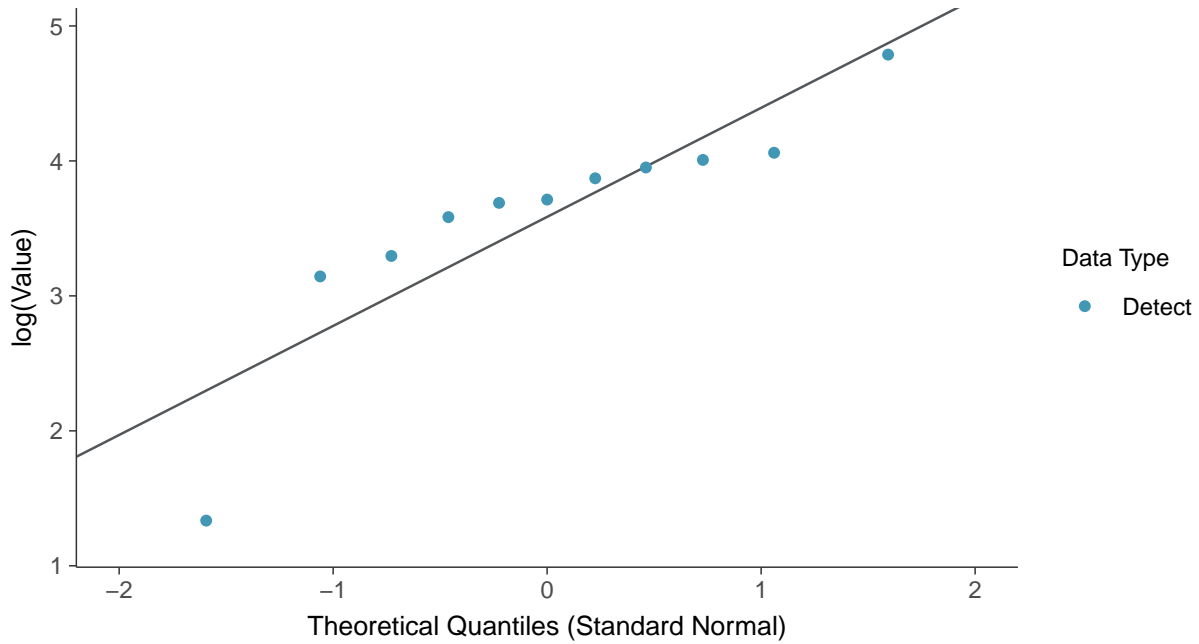
Normal Q-Q plot

Lithium, MW-15015R (ug/L)



Lognormal Q-Q plot

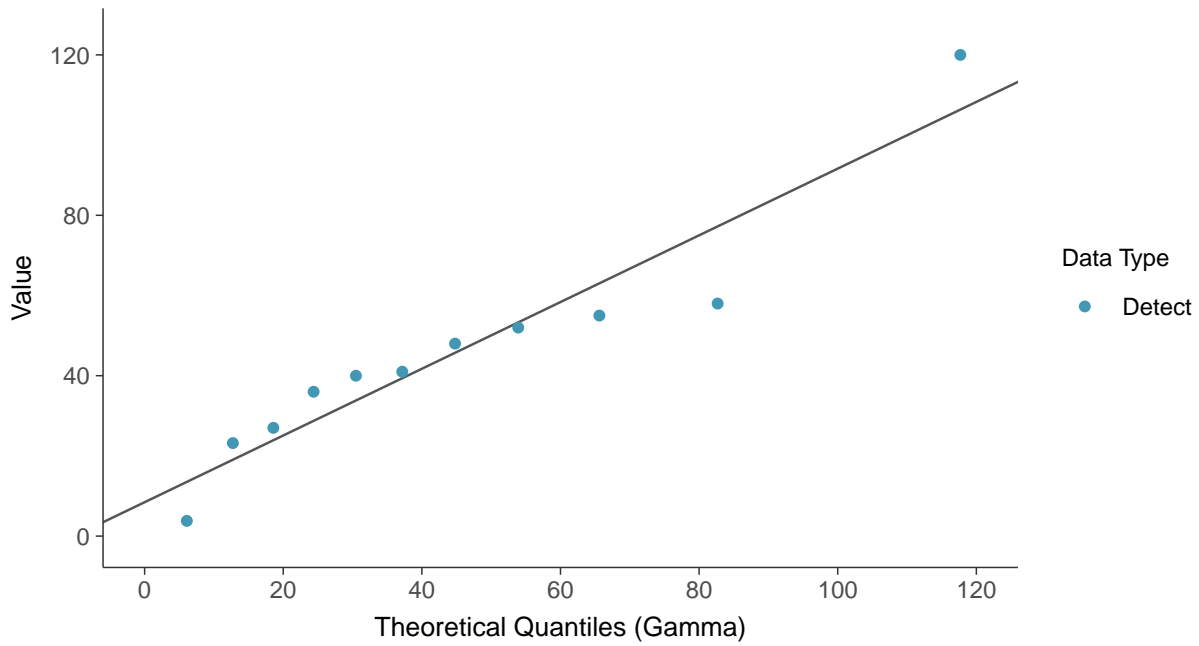
Lithium, MW-15015R (ug/L)





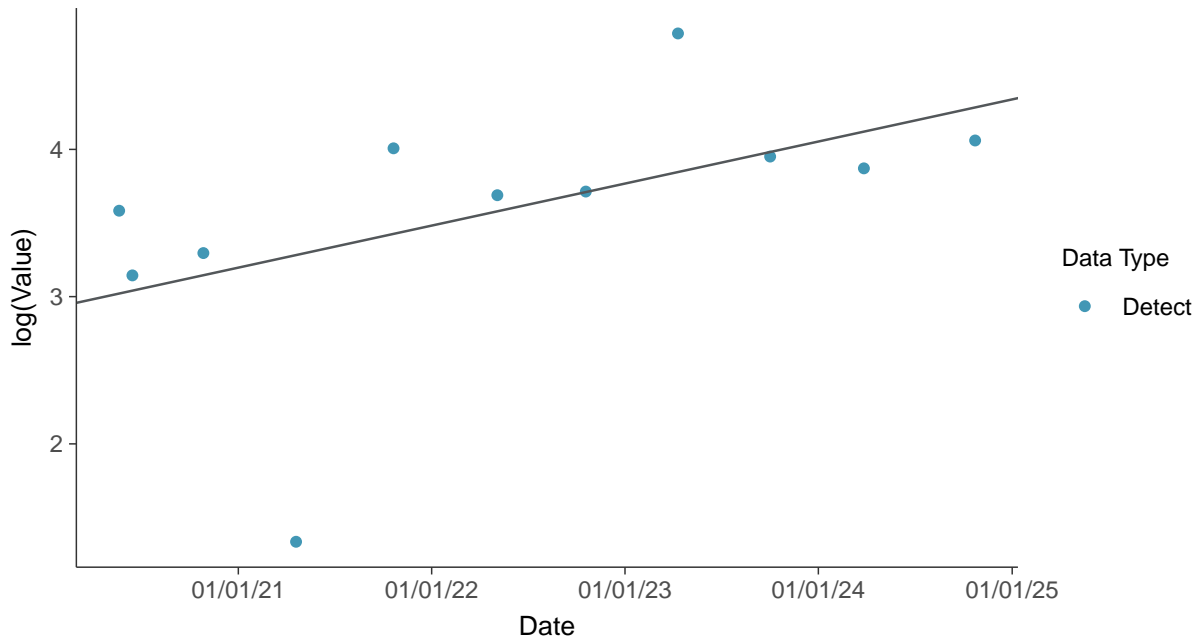
Gamma Q-Q plot

Lithium, MW-15015R (ug/L)



Trend Regression: Lognormal MLE

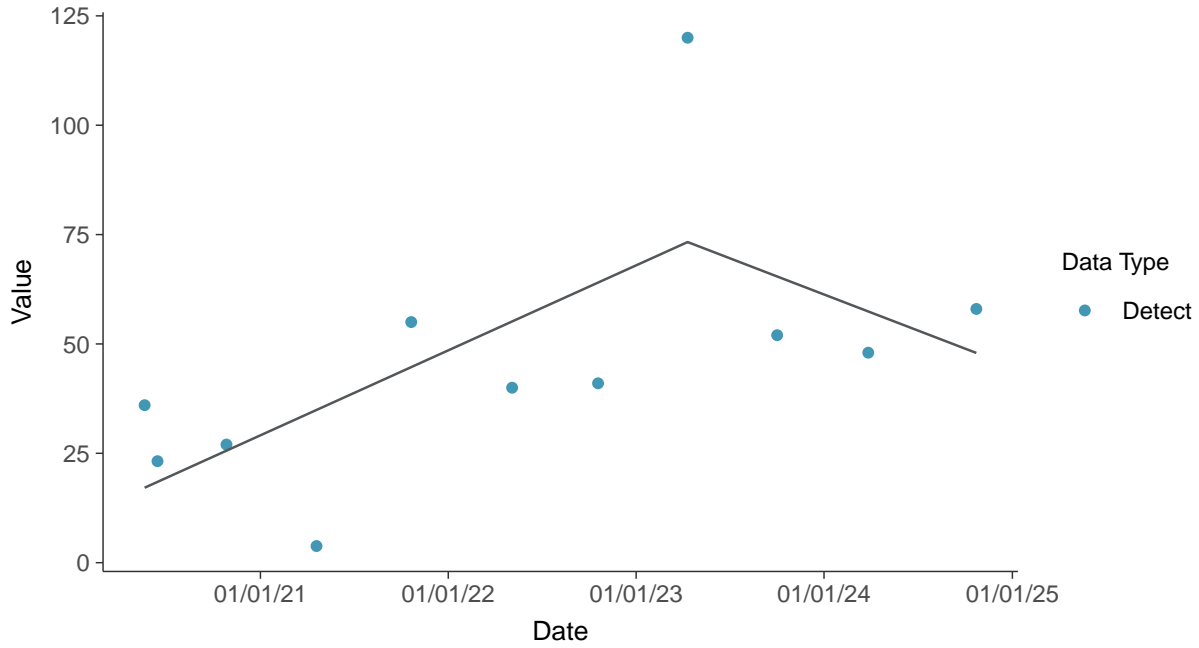
Lithium, MW-15015R (ug/L)





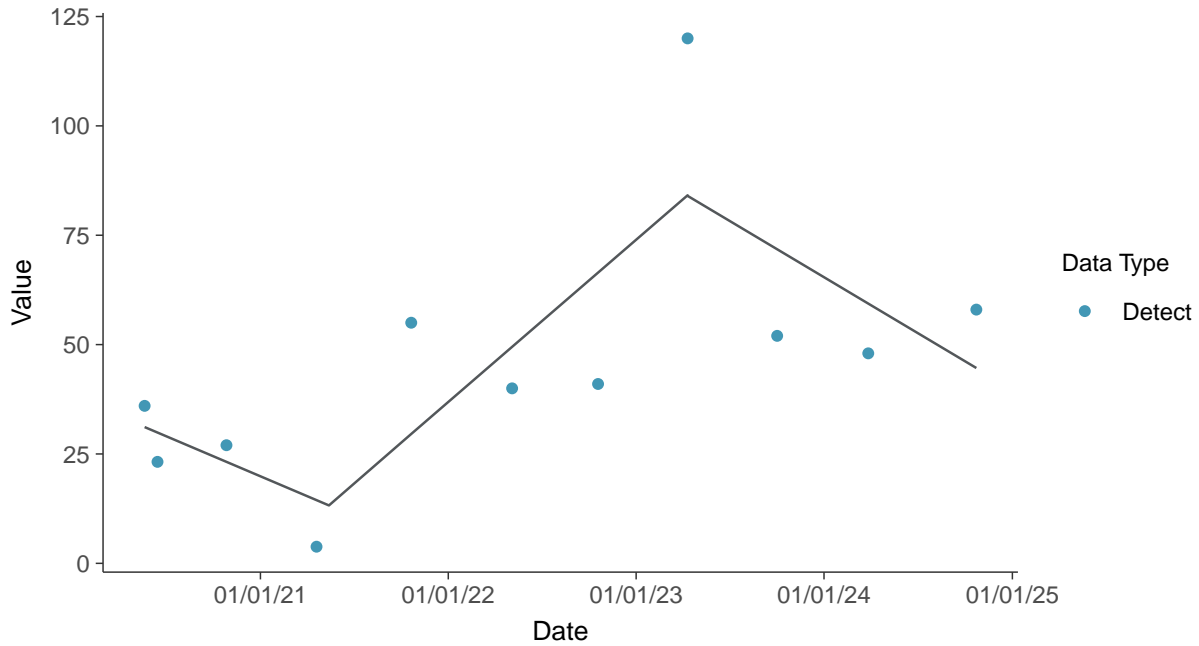
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-15015R (ug/L)



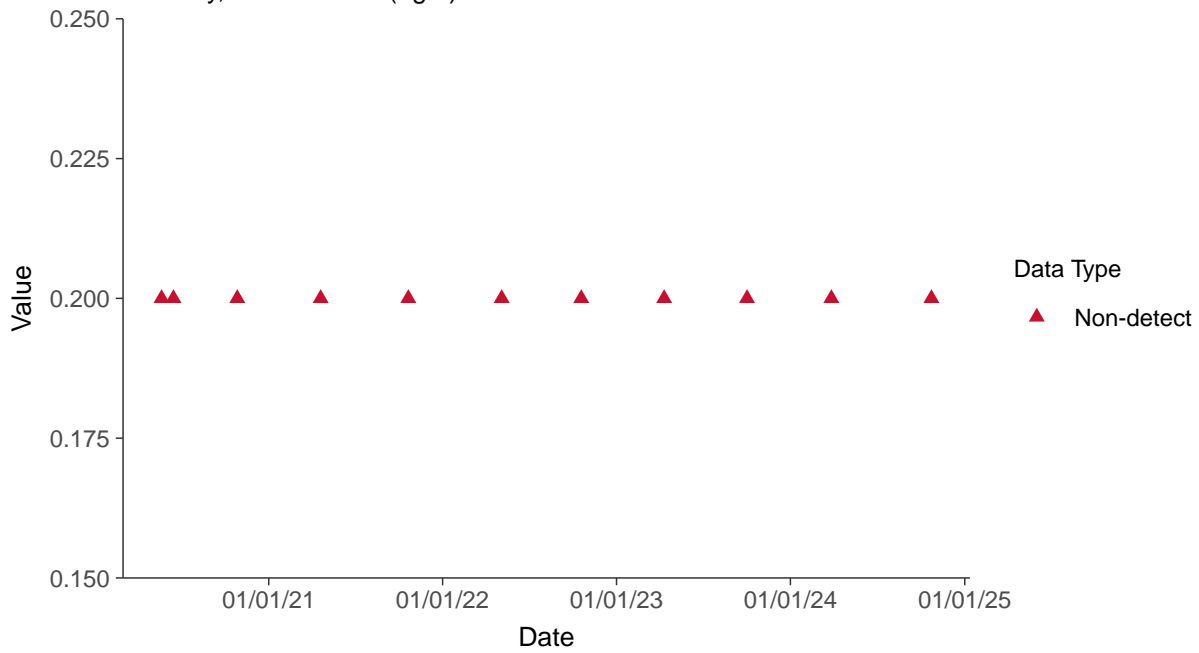


Appendix IV: Mercury, MW-15015R

ID: 05_2_118

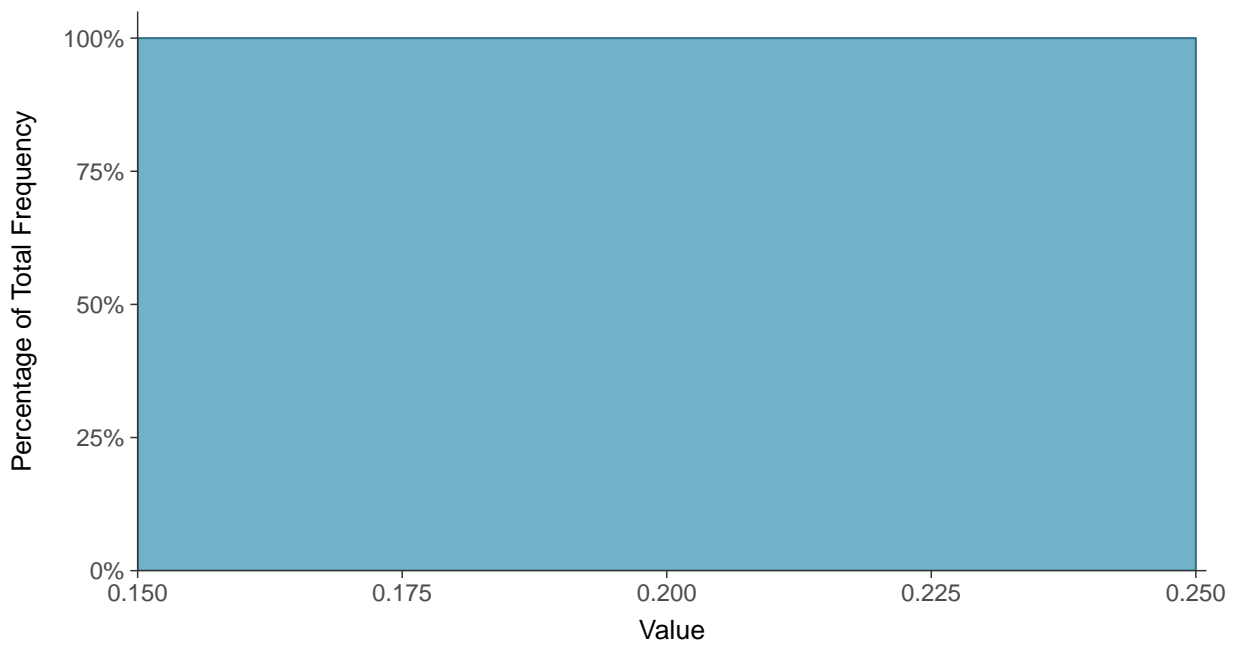
Scatter Plot

Mercury, MW-15015R (ug/L)



Histogram

Mercury, MW-15015R (ug/L)



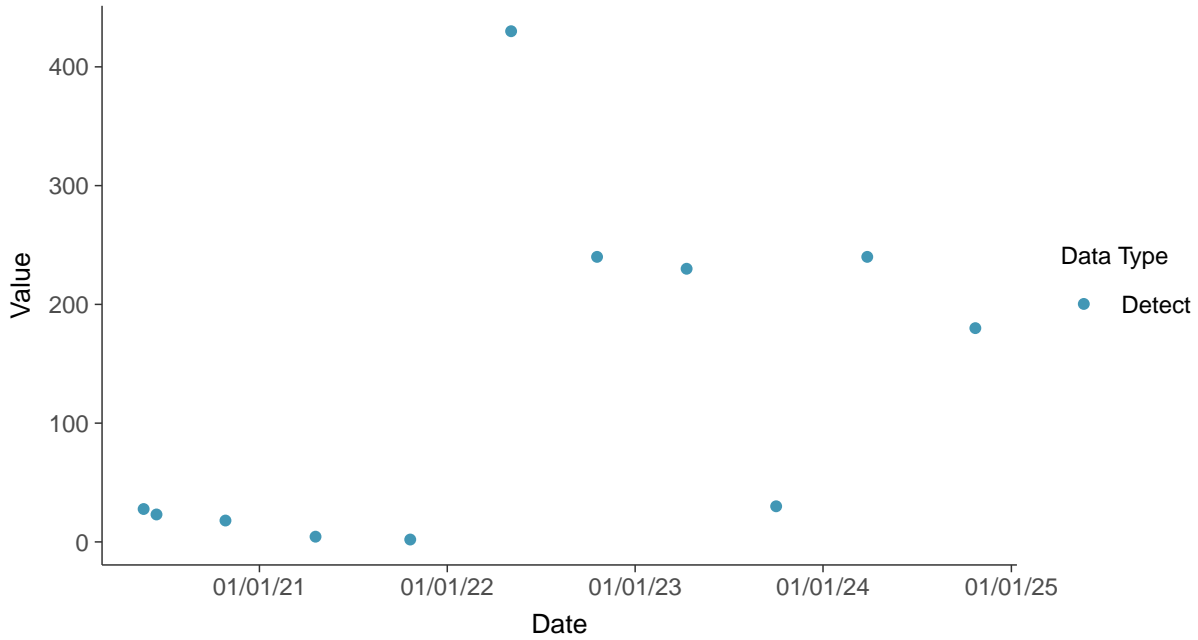


Appendix IV: Molybdenum, MW-15015R

ID: 05_2_119

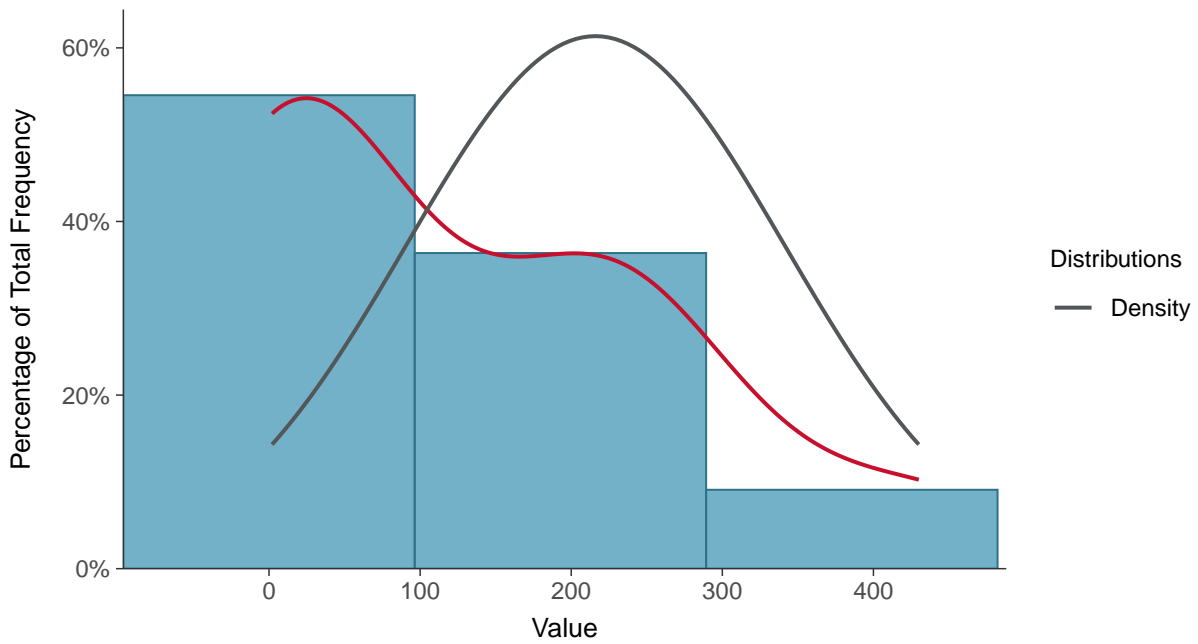
Scatter Plot

Molybdenum, MW-15015R (ug/L)



Histogram

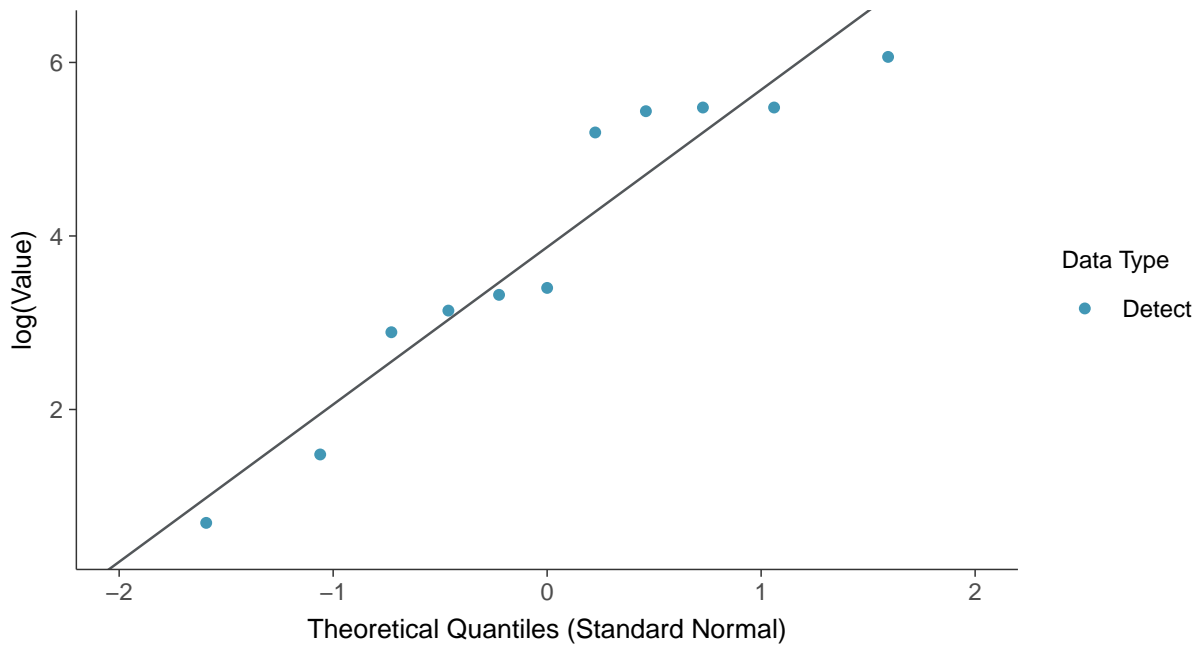
Molybdenum, MW-15015R (ug/L)





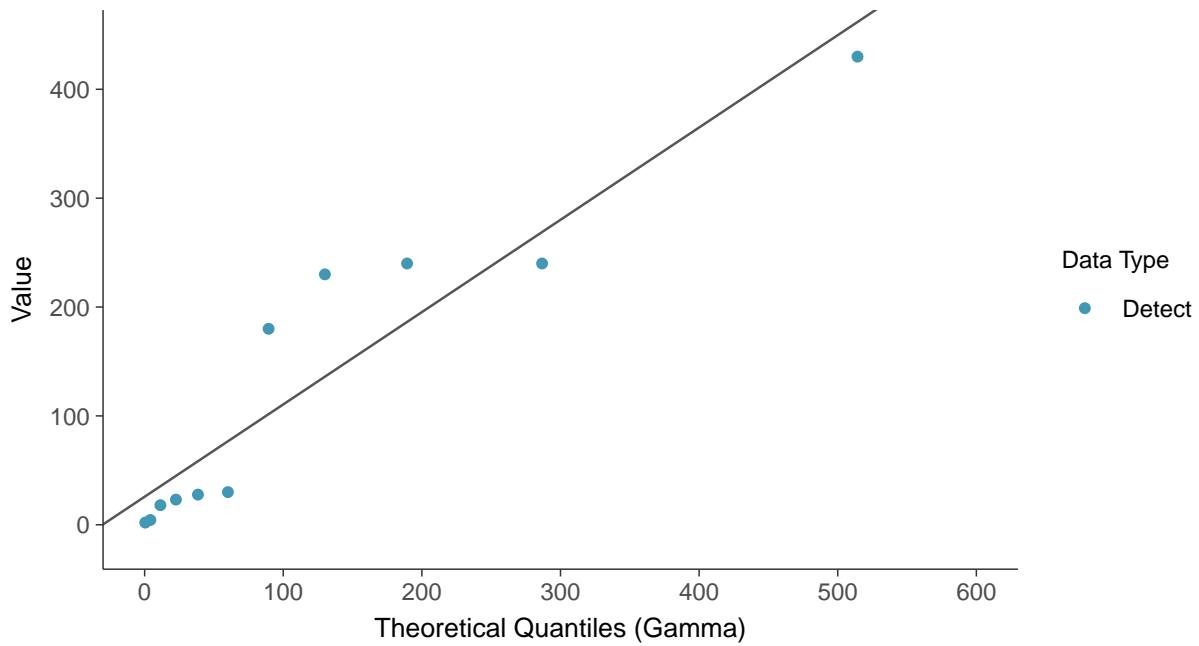
Lognormal Q-Q plot

Molybdenum, MW-15015R (ug/L)



Gamma Q-Q plot

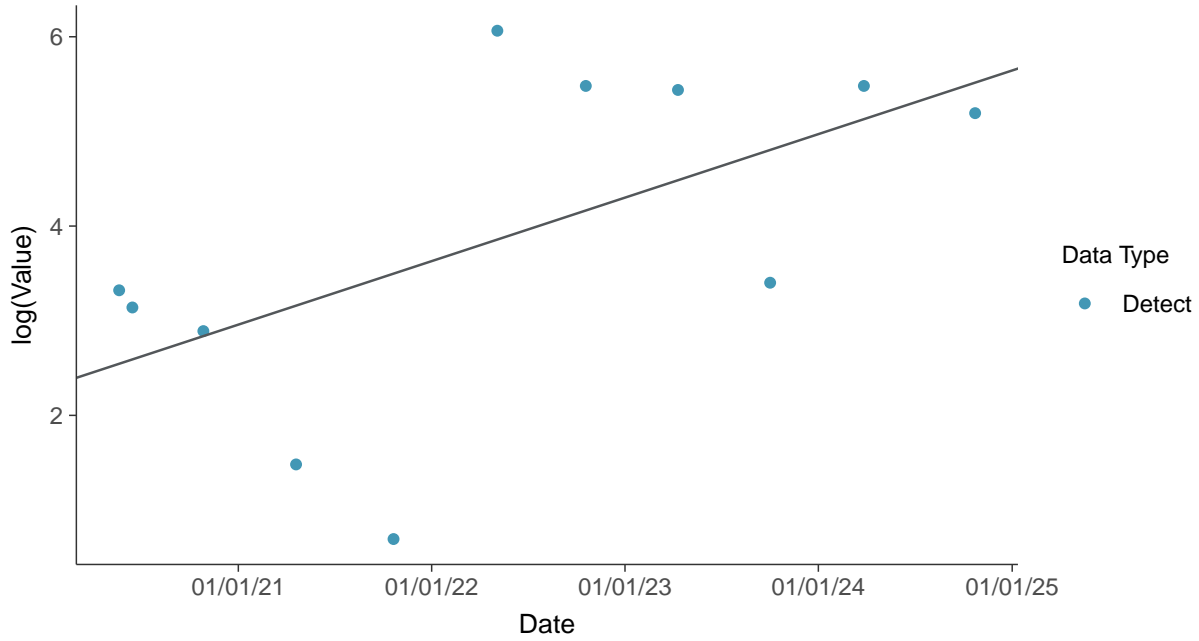
Molybdenum, MW-15015R (ug/L)





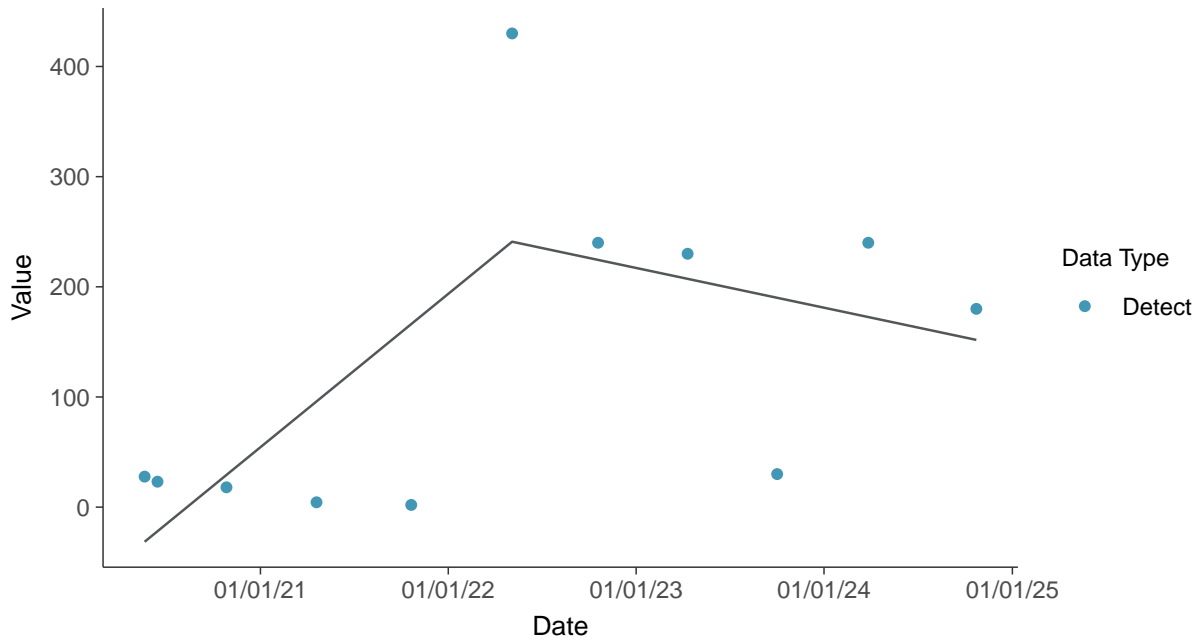
Trend Regression: Lognormal MLE

Molybdenum, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15015R (ug/L)



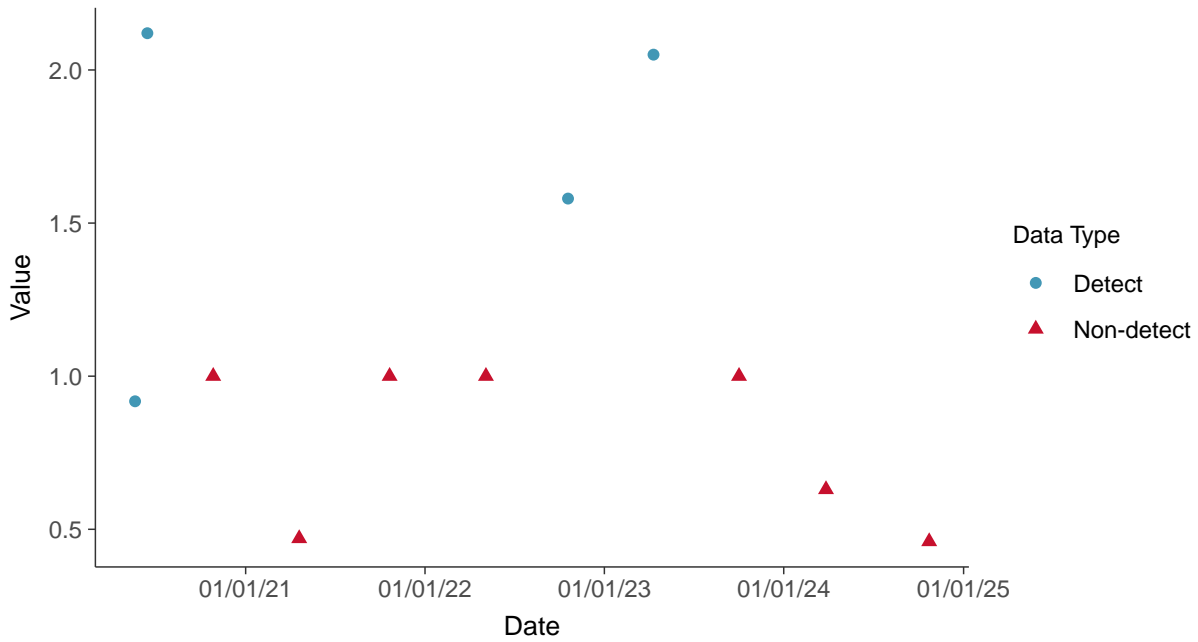


Appendix IV: Radium-226+228, MW-15015R

ID: 05_2_125

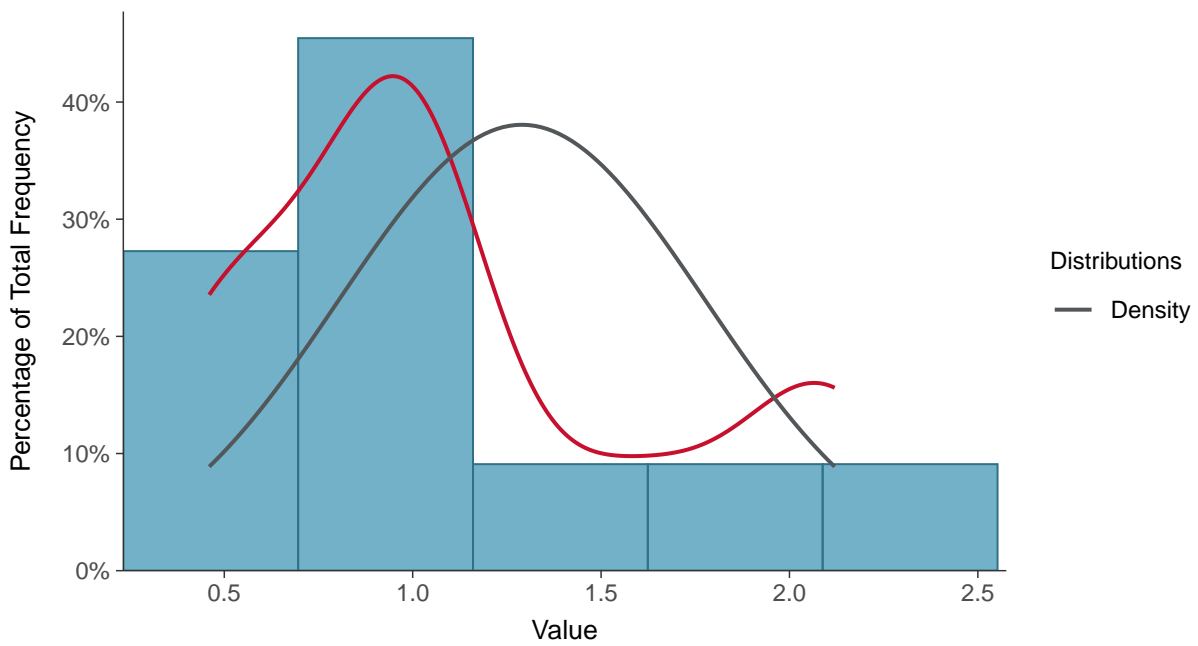
Scatter Plot

Radium-226+228, MW-15015R (pCi/L)



Histogram

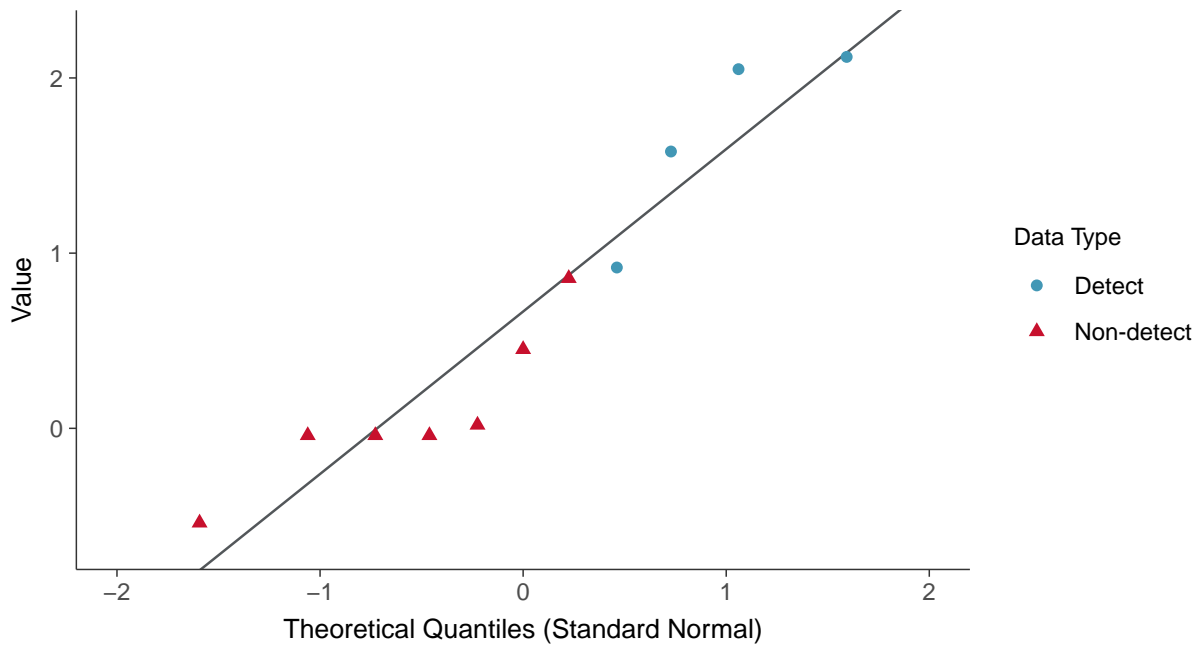
Radium-226+228, MW-15015R (pCi/L)





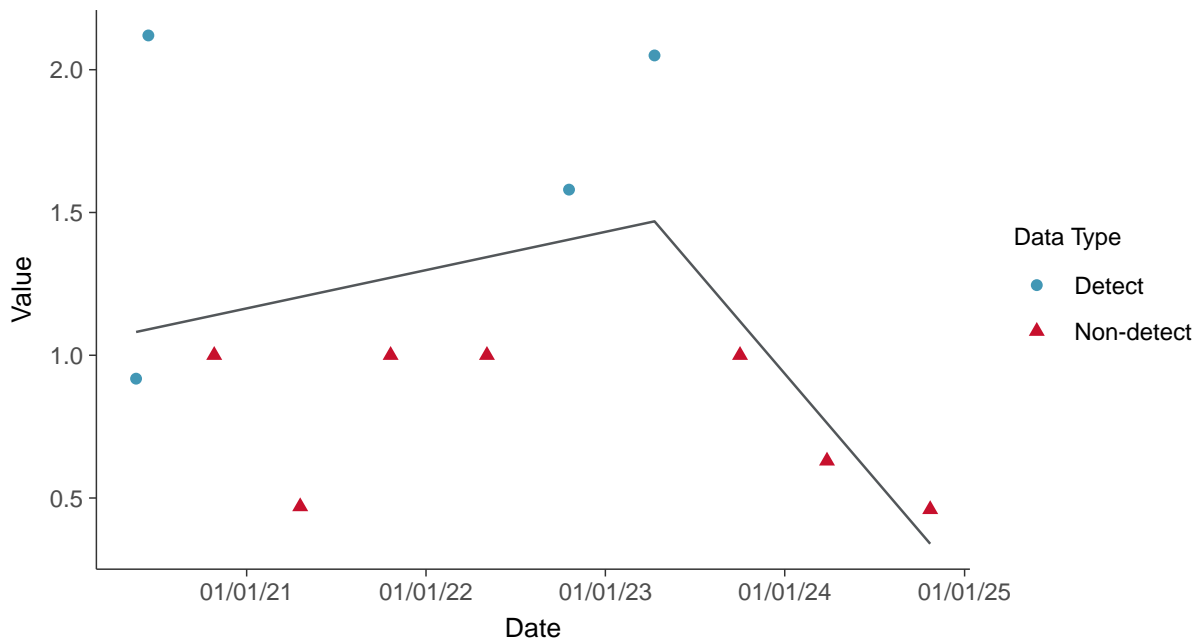
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15015R (pCi/L)



Trend Regression: Piecewise Linear-Linear

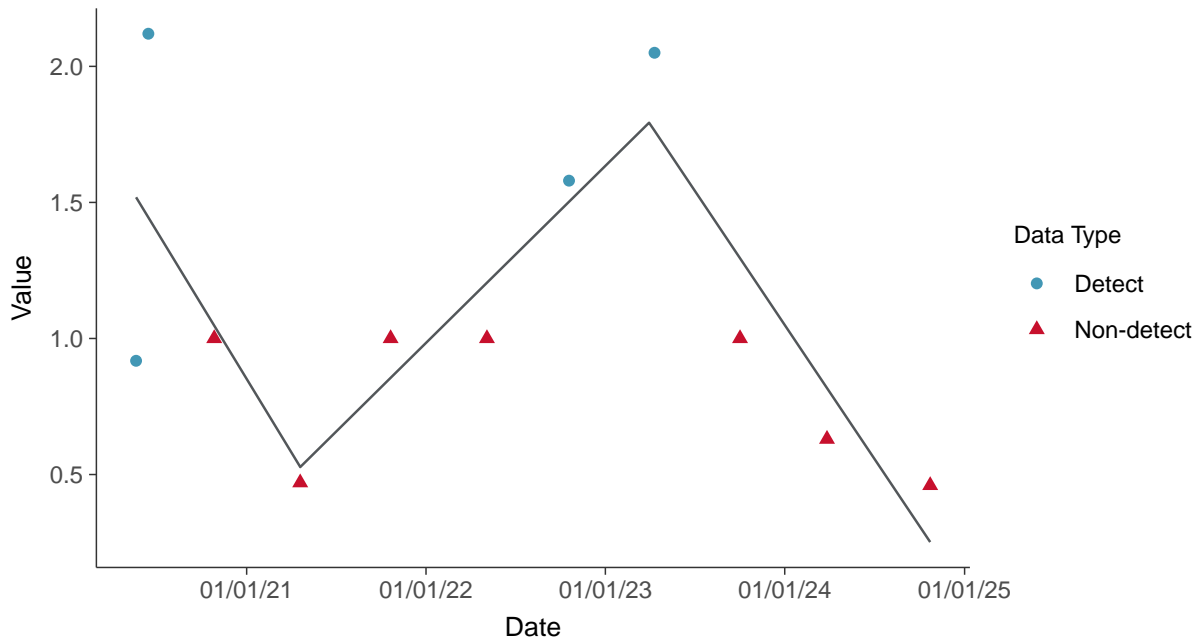
Radium-226+228, MW-15015R (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

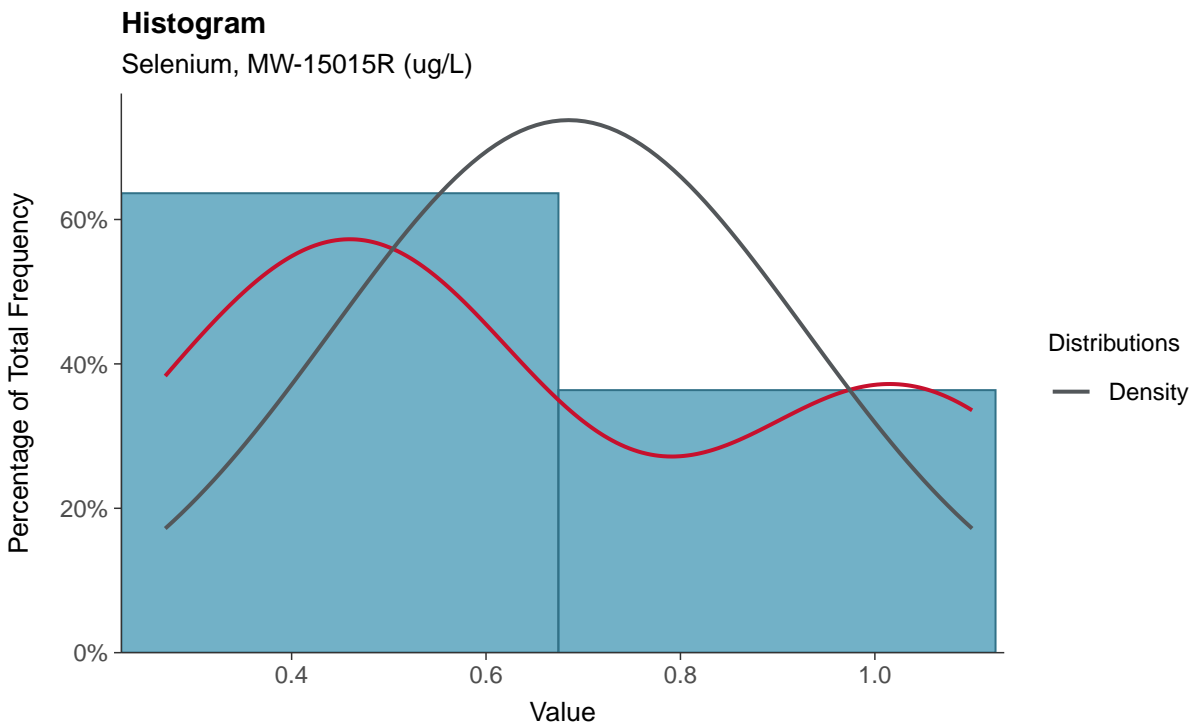
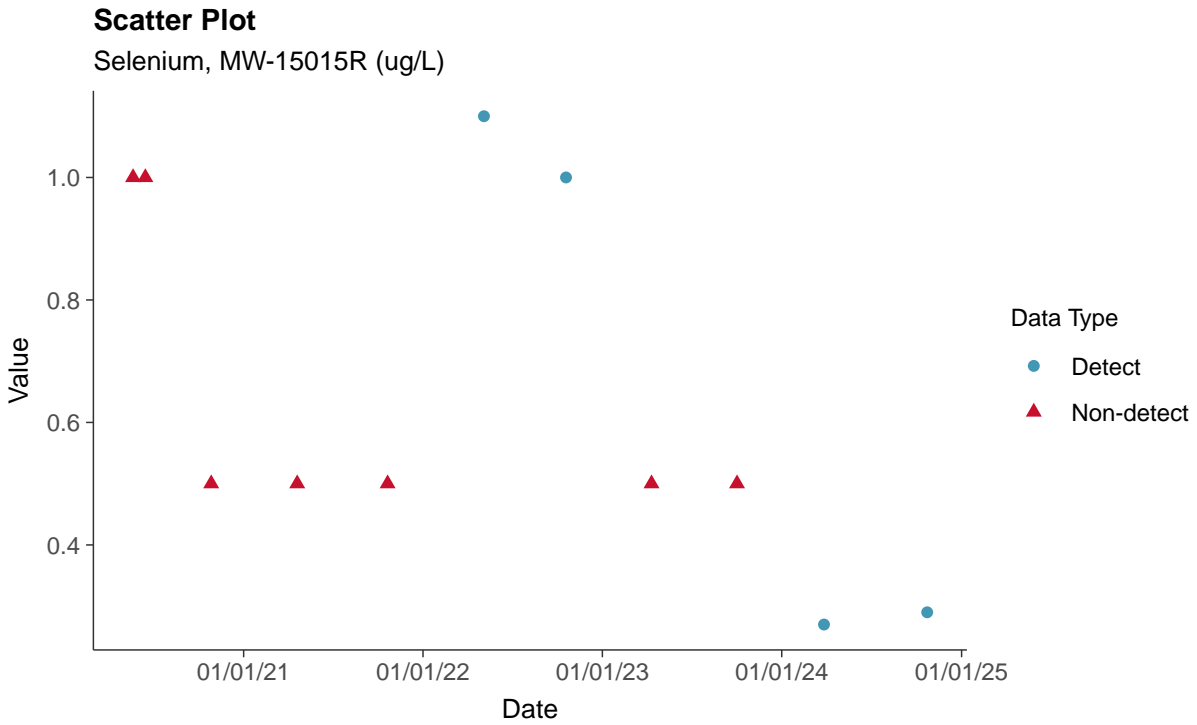
Radium-226+228, MW-15015R (pCi/L)





Appendix IV: Selenium, MW-15015R

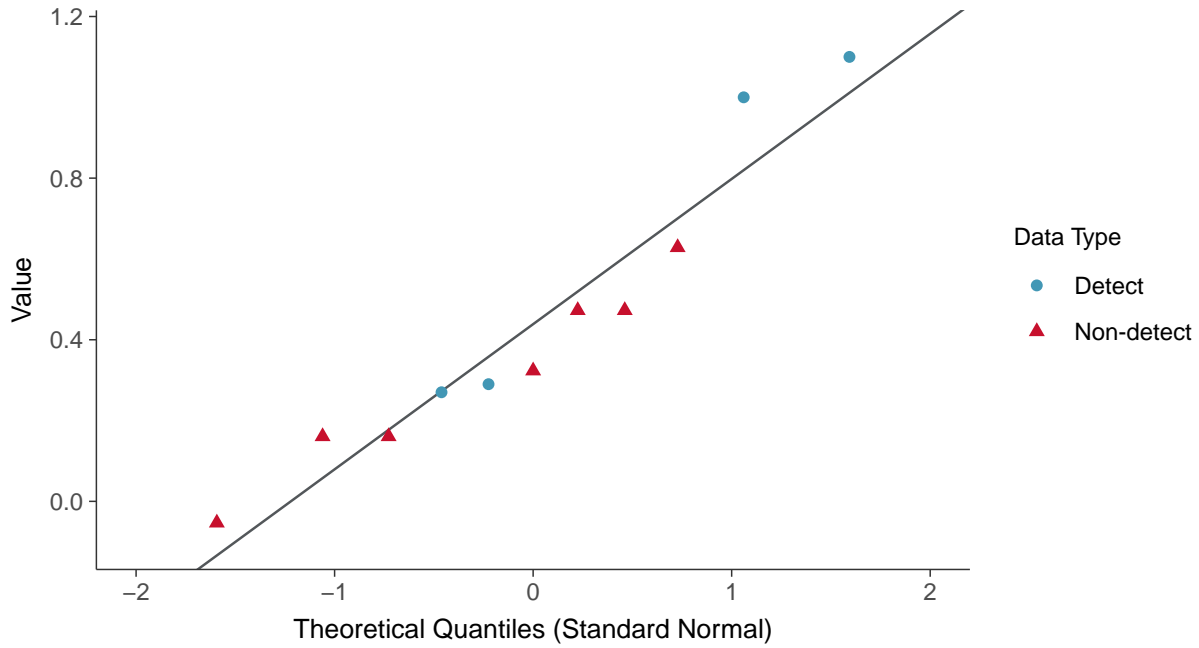
ID: 05_2_127





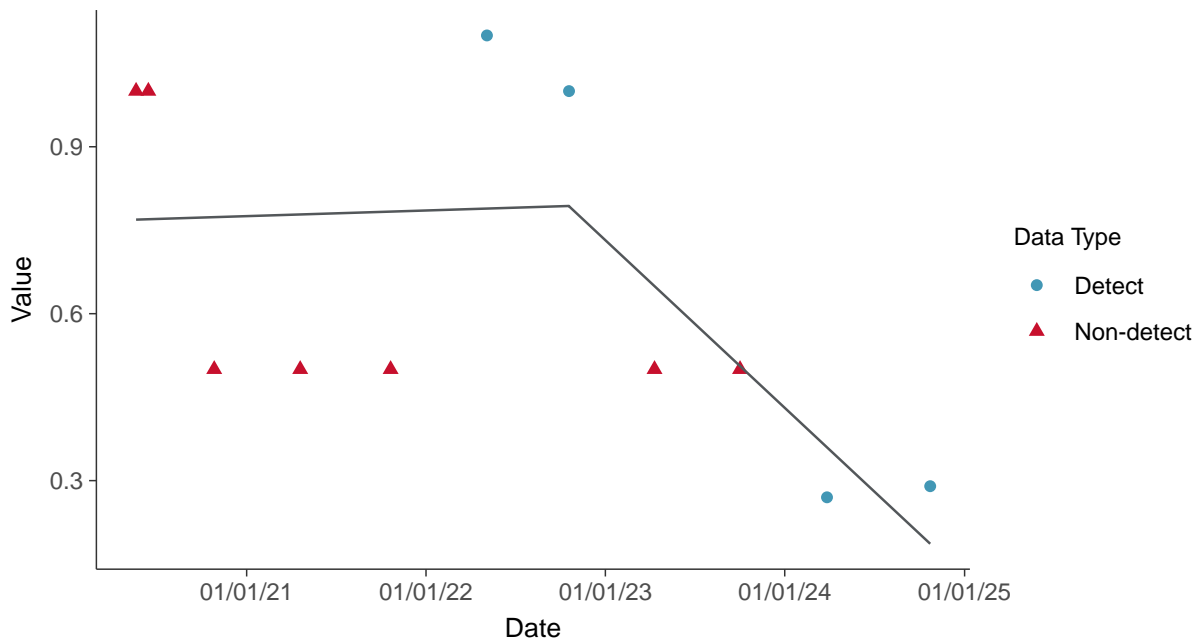
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15015R (ug/L)



Trend Regression: Piecewise Linear-Linear

Selenium, MW-15015R (ug/L)



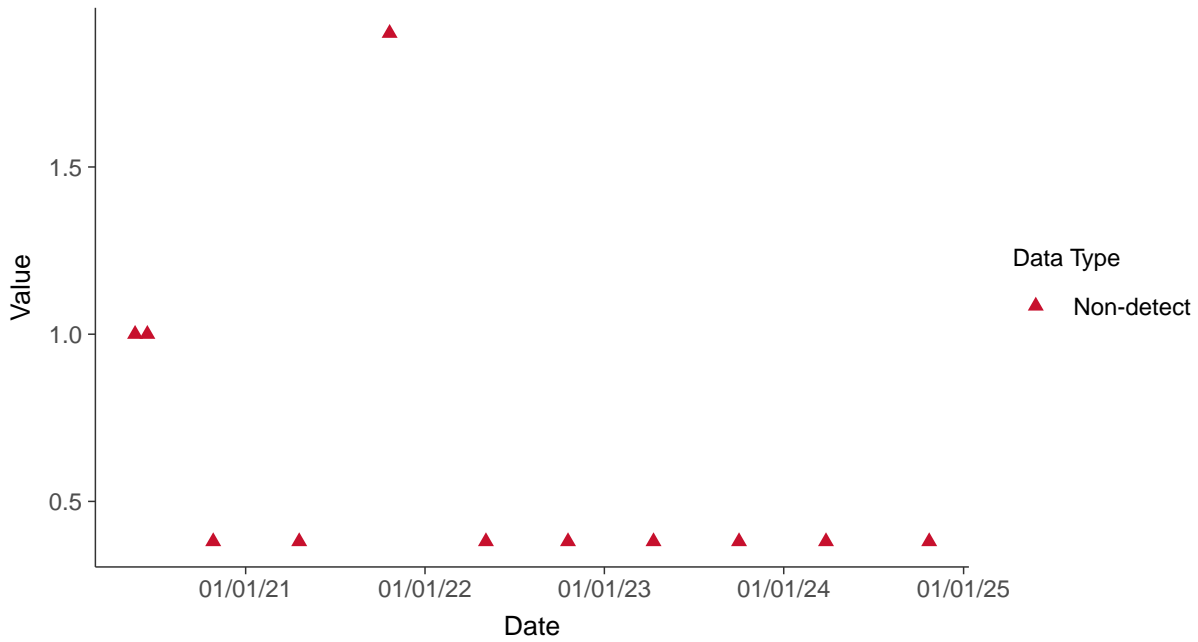


Appendix IV: Thallium, MW-15015R

ID: 05_2_131

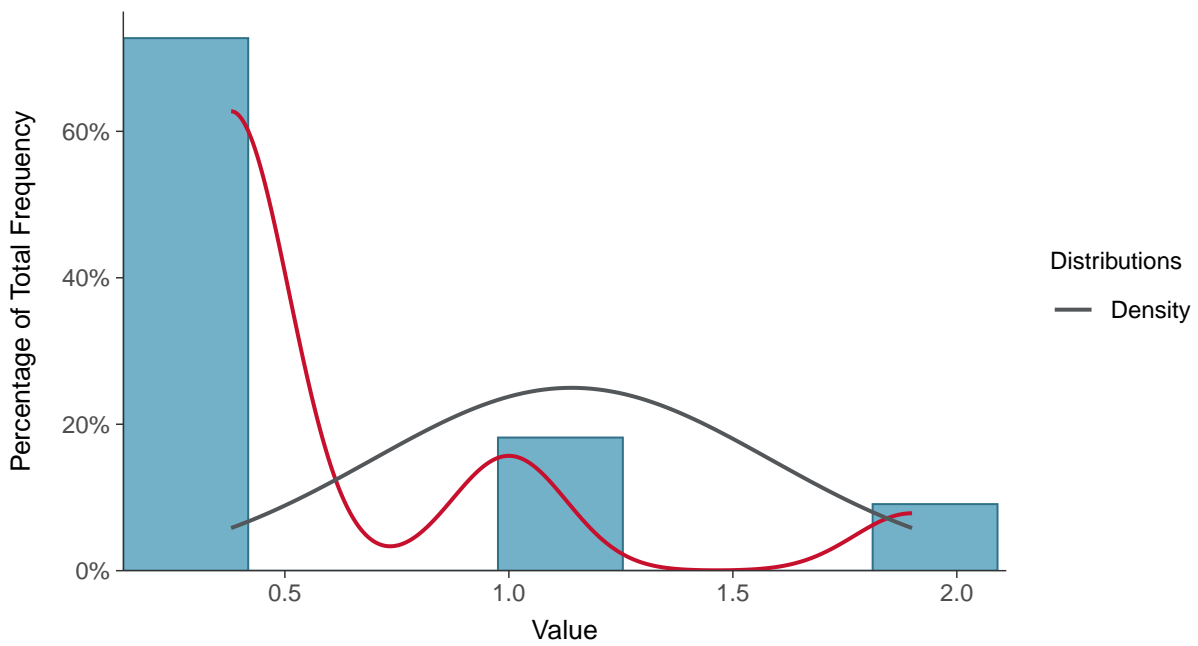
Scatter Plot

Thallium, MW-15015R (ug/L)



Histogram

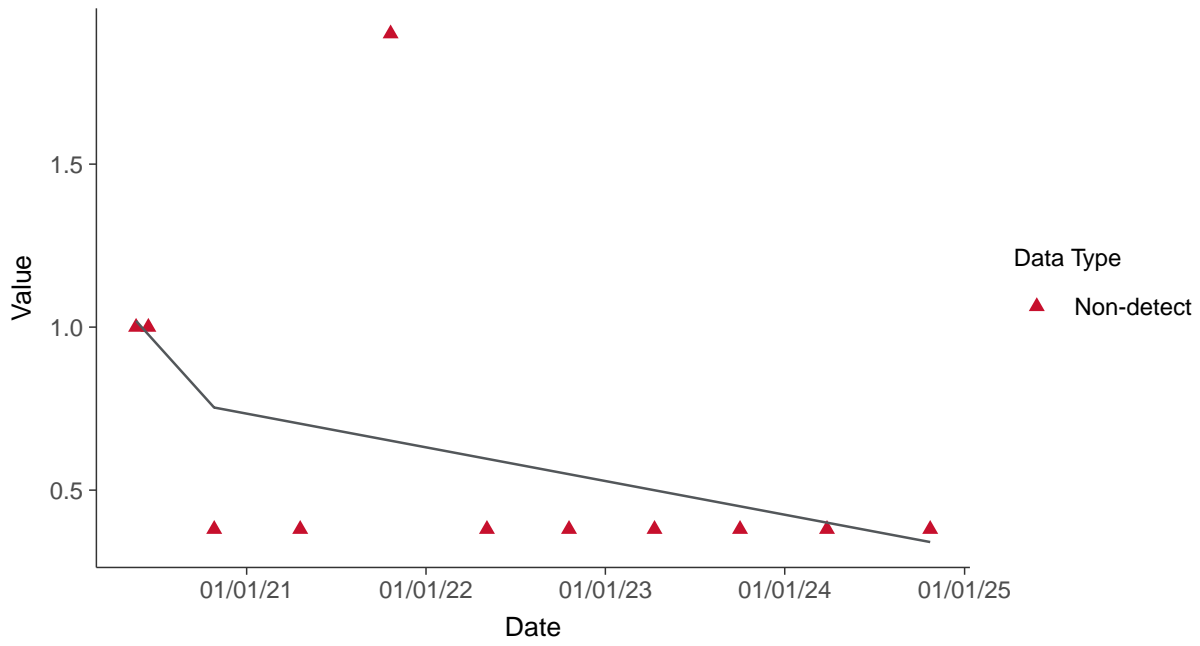
Thallium, MW-15015R (ug/L)





Trend Regression: Piecewise Linear-Linear

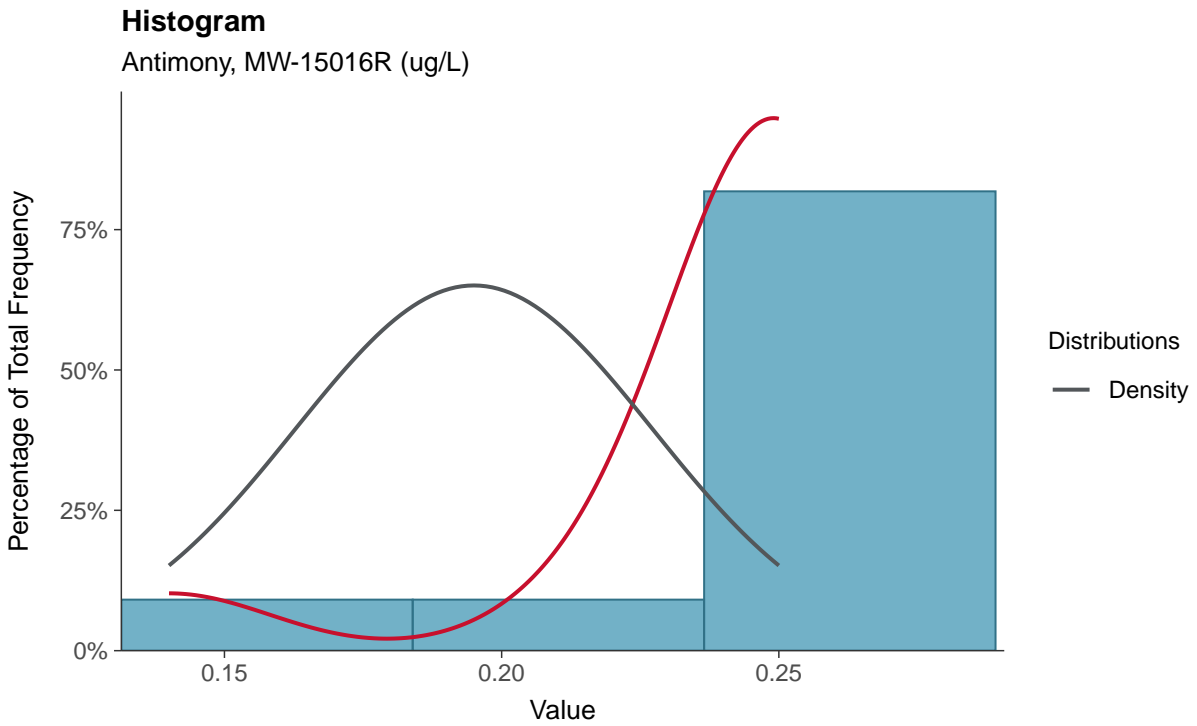
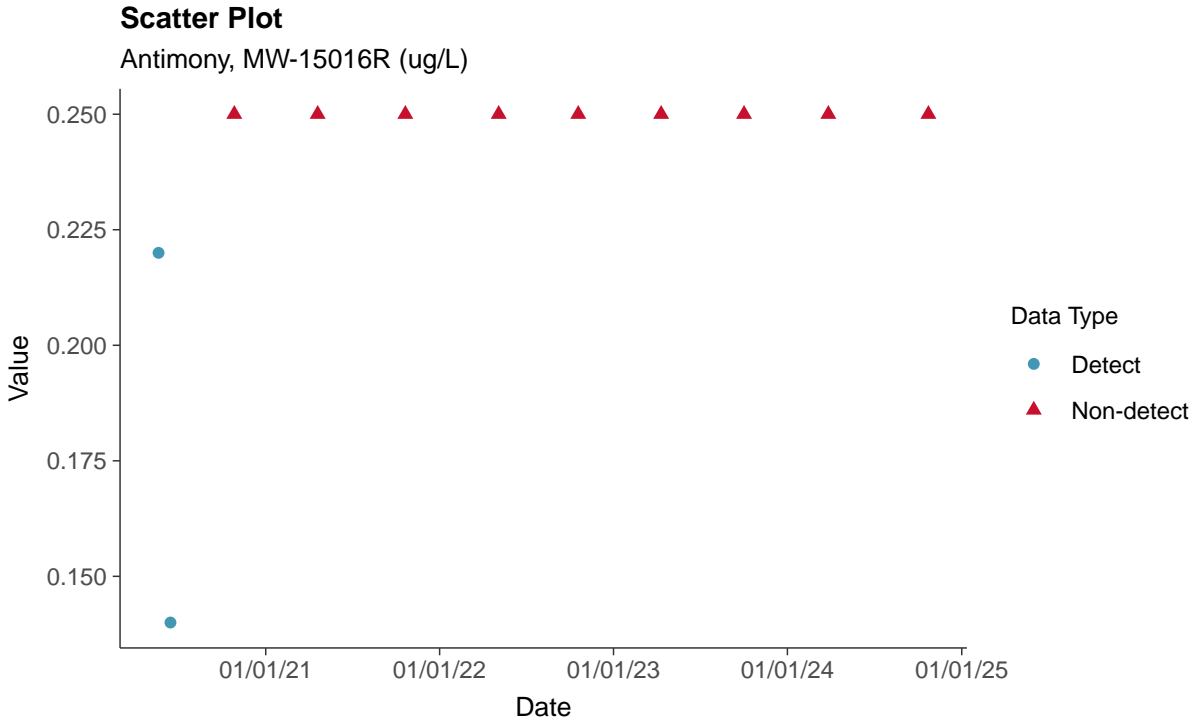
Thallium, MW-15015R (ug/L)





Appendix IV: Antimony, MW-15016R

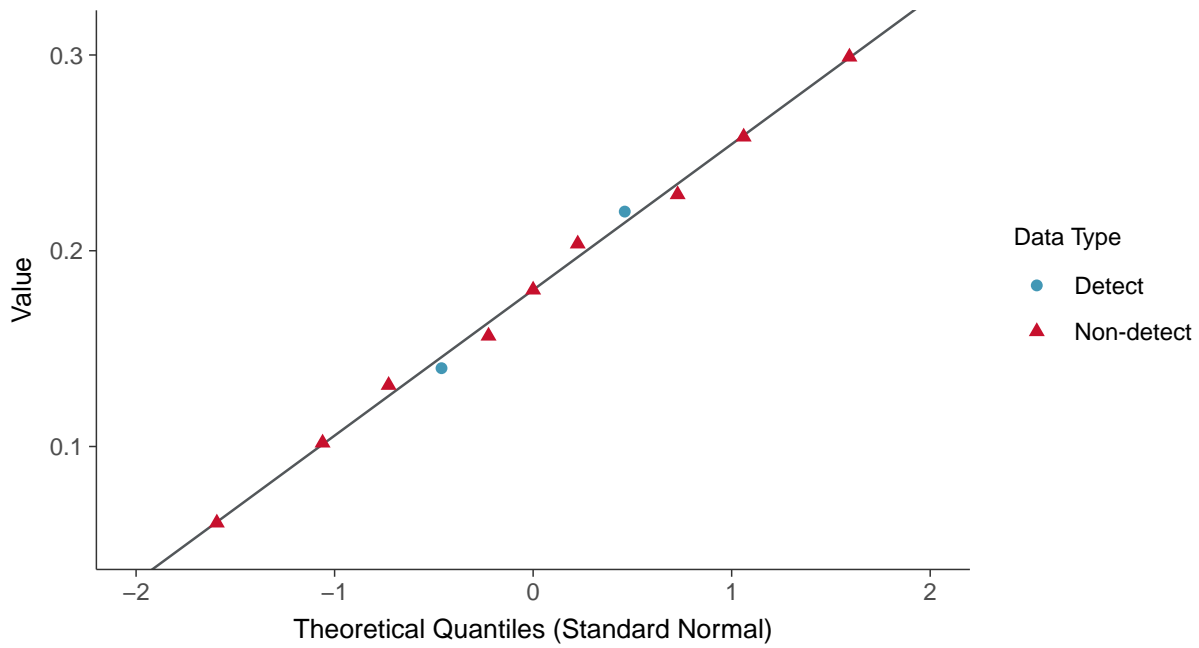
ID: 06_2_101





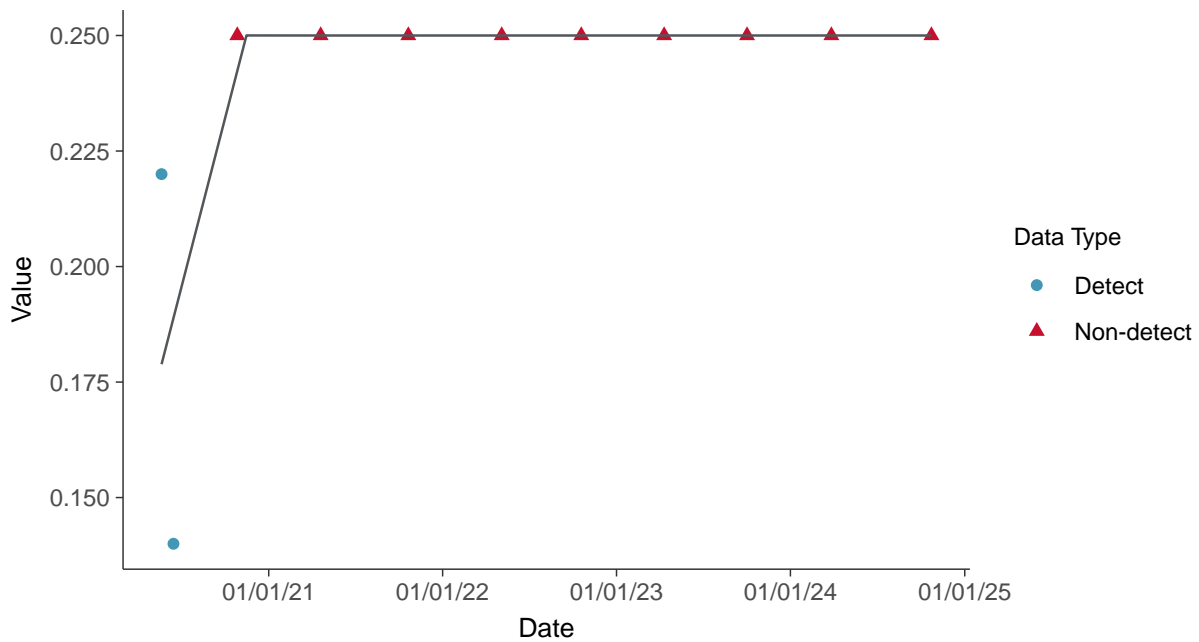
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

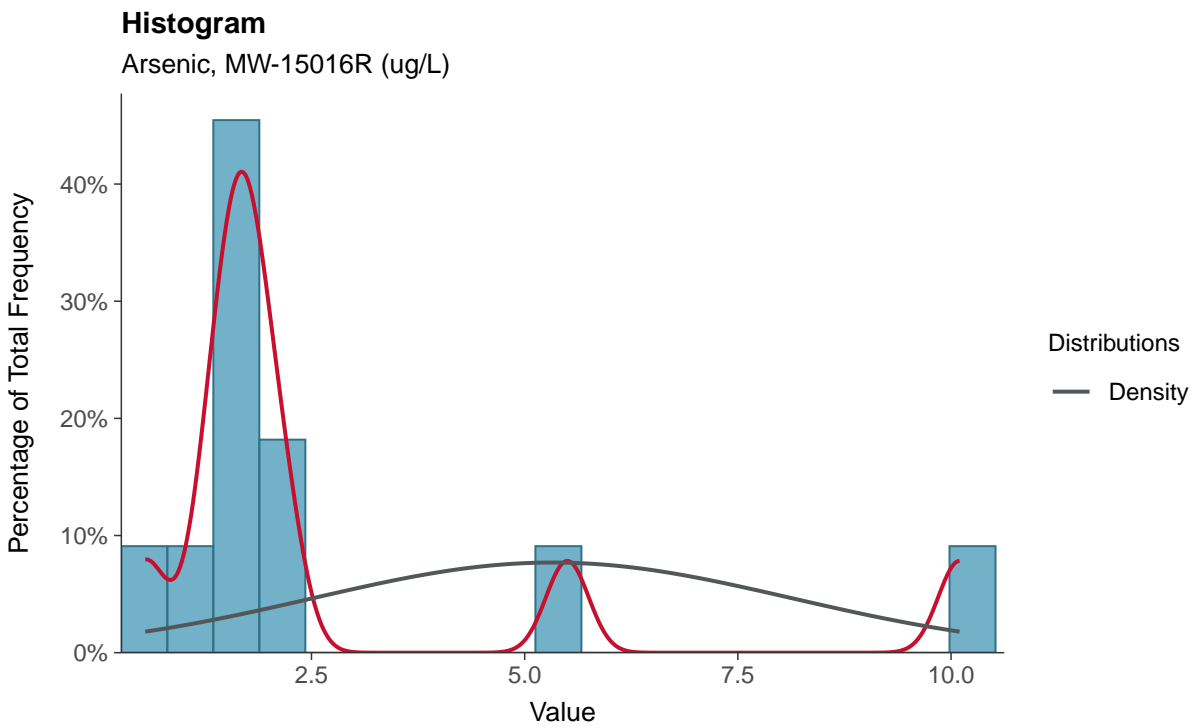
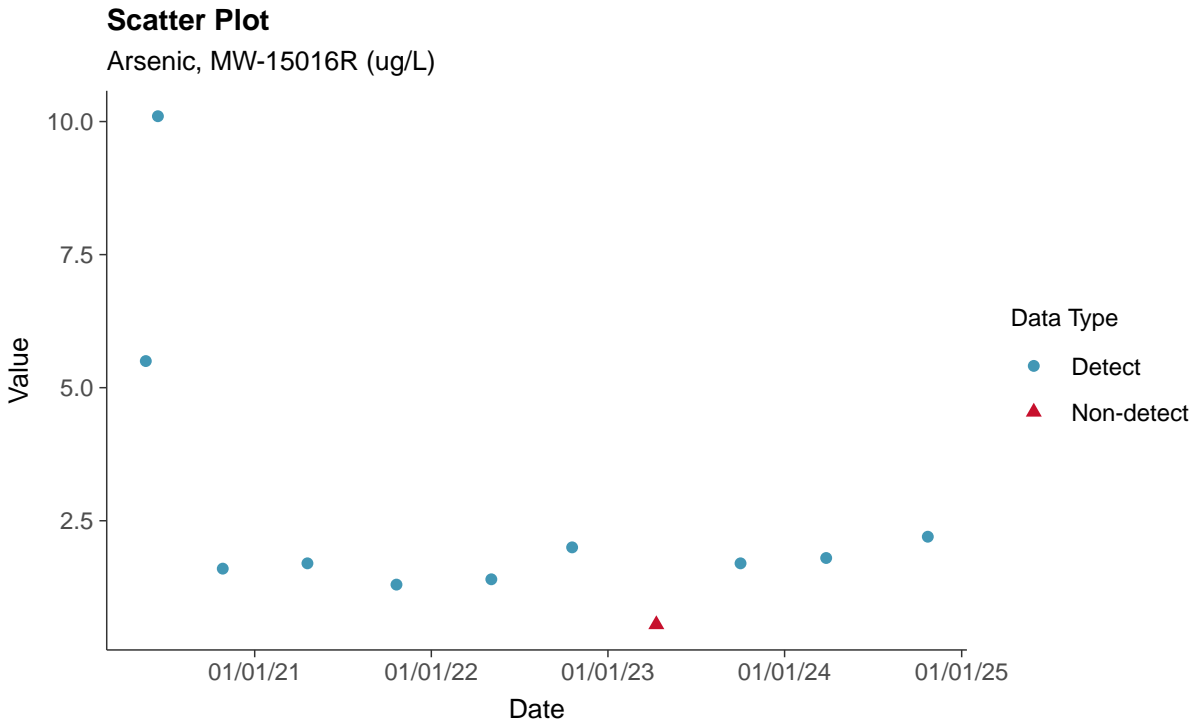
Antimony, MW-15016R (ug/L)





Appendix IV: Arsenic, MW-15016R

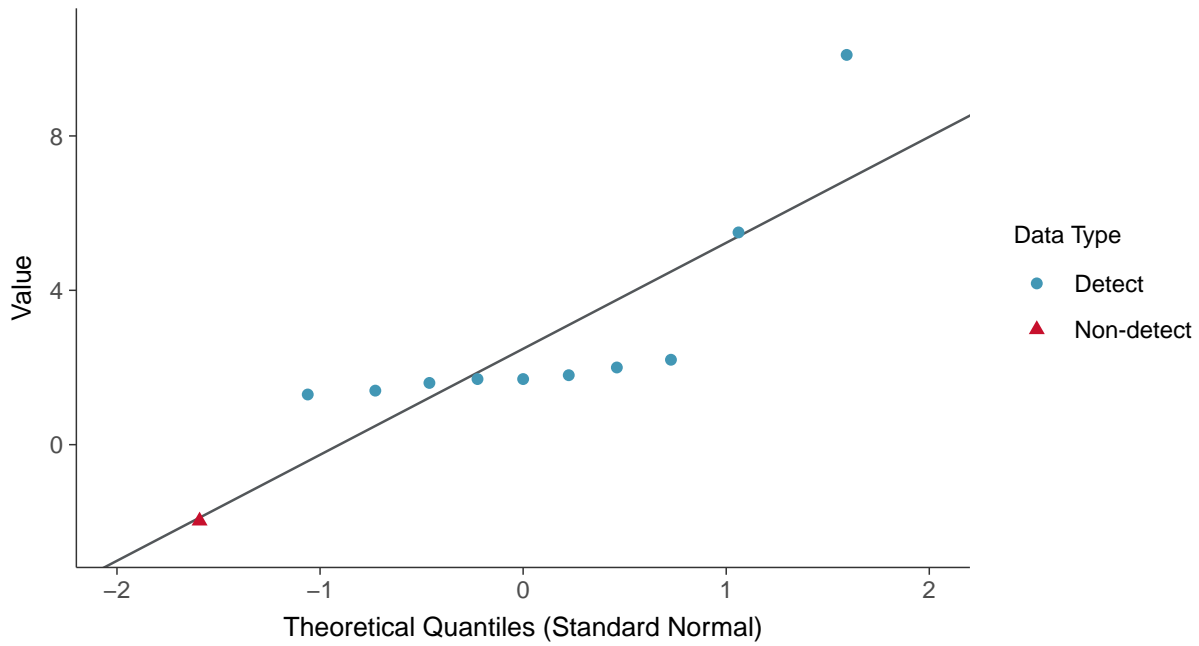
ID: 06_2_102





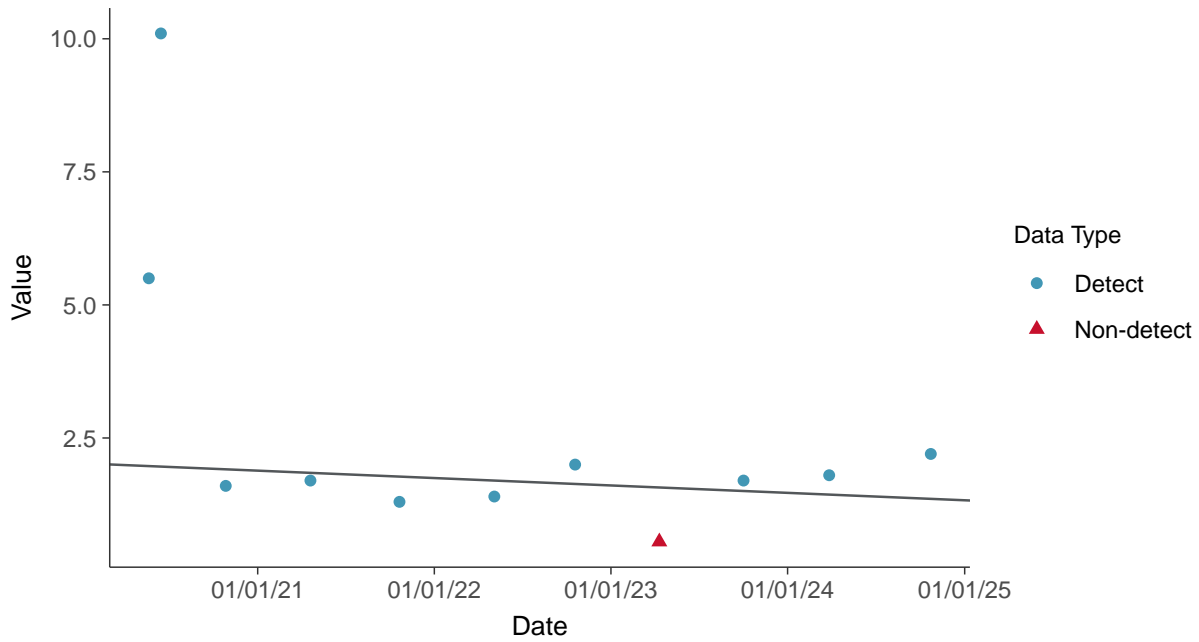
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15016R (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

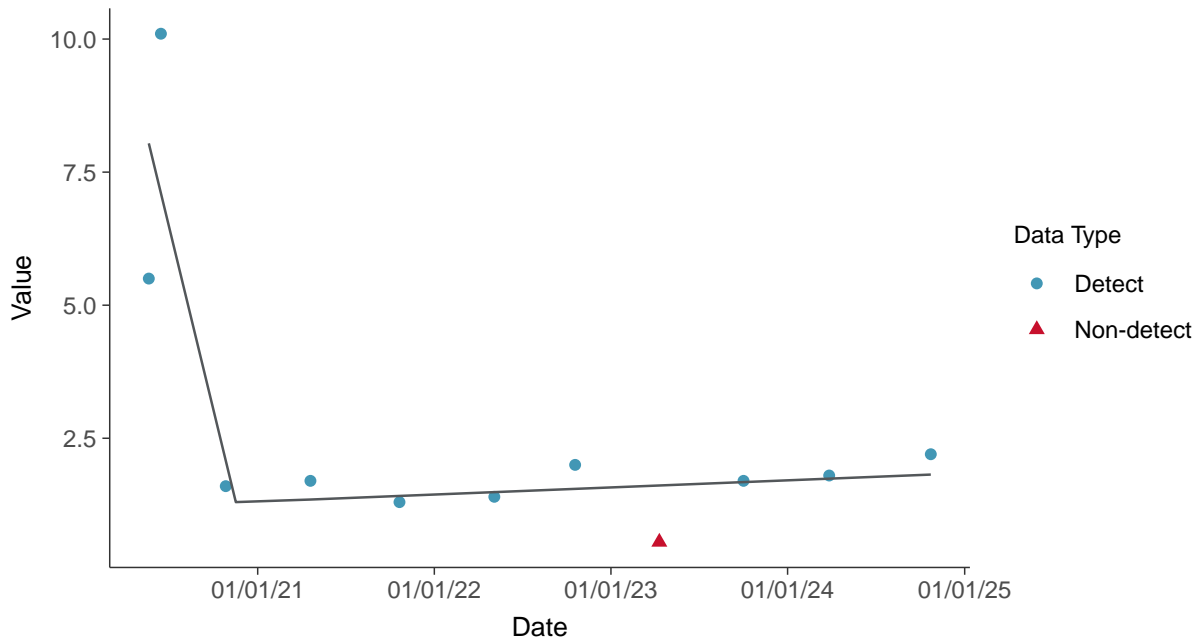
Arsenic, MW-15016R (ug/L)





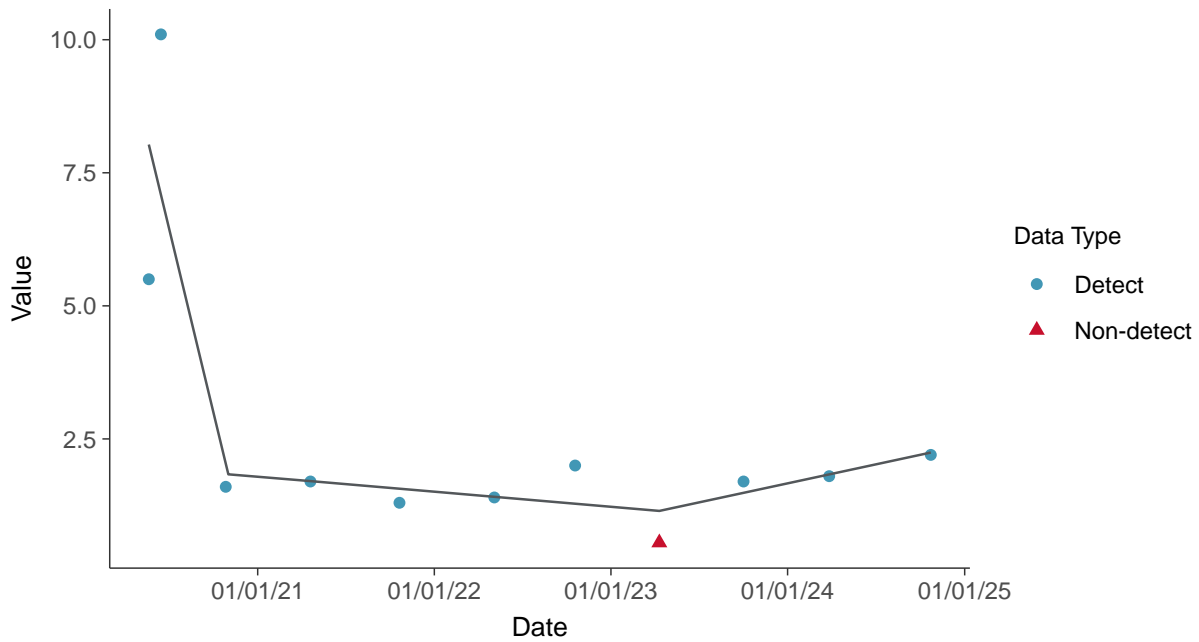
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15016R (ug/L)



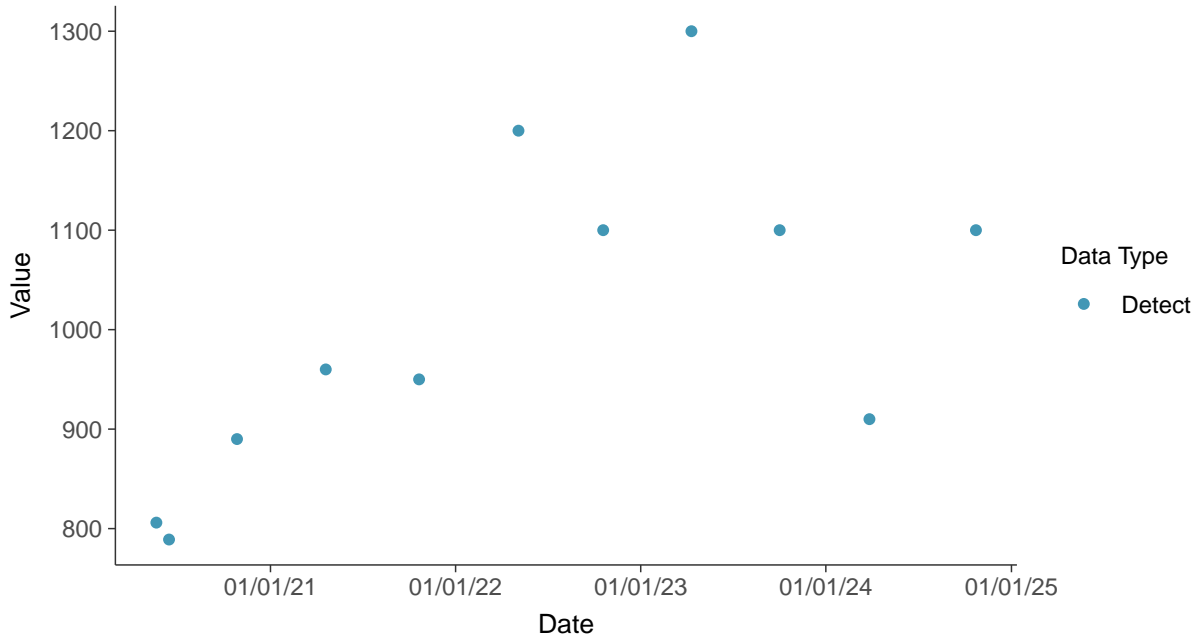


Appendix IV: Barium, MW-15016R

ID: 06_2_103

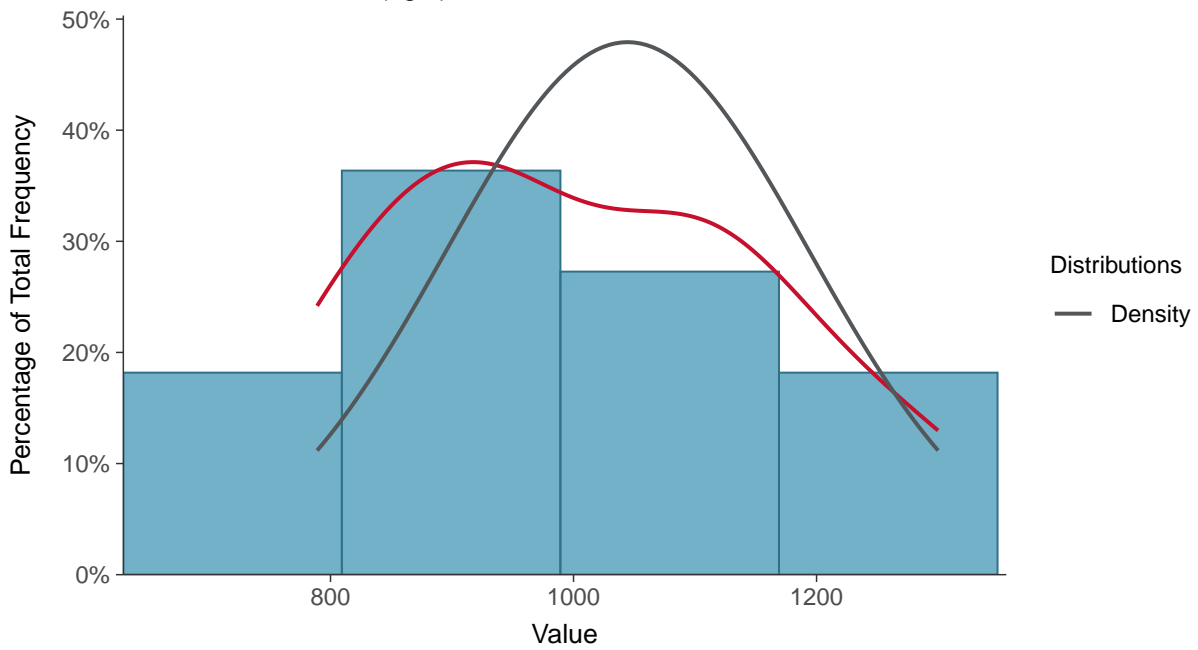
Scatter Plot

Barium, MW-15016R (ug/L)



Histogram

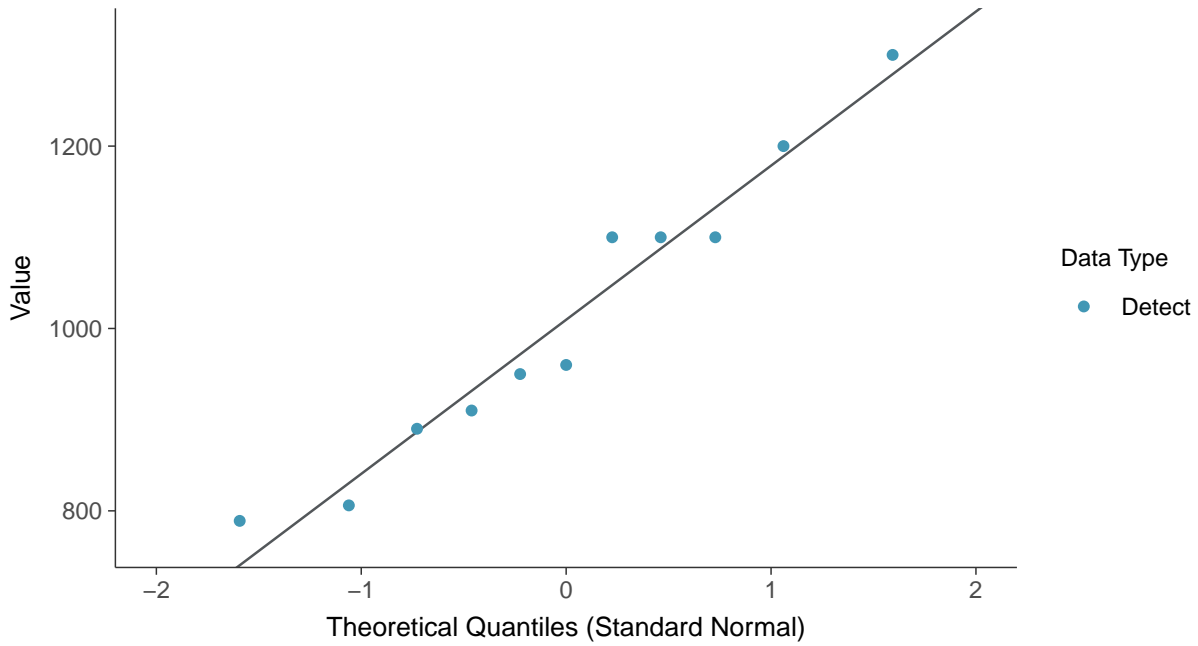
Barium, MW-15016R (ug/L)





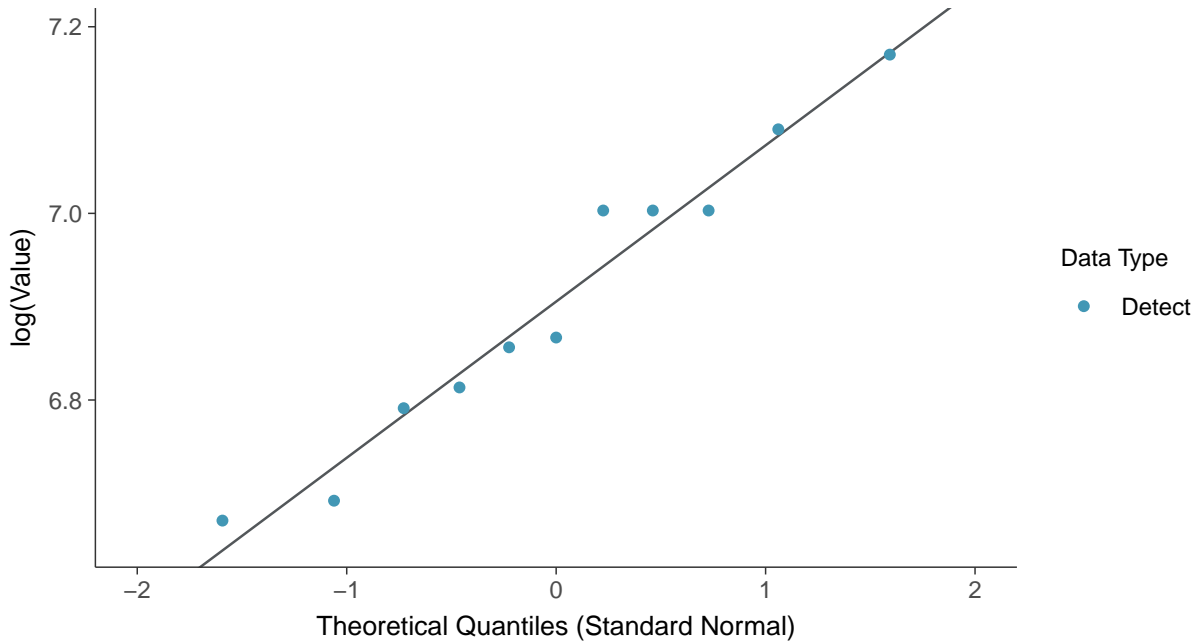
Normal Q-Q plot

Barium, MW-15016R (ug/L)



Lognormal Q-Q plot

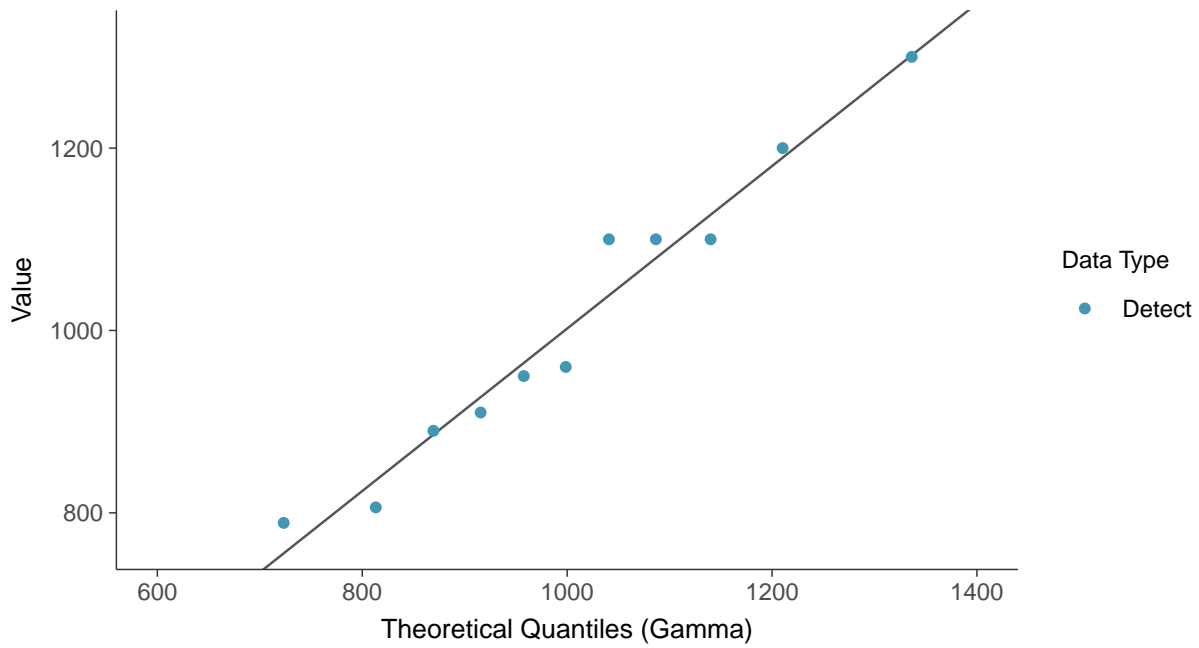
Barium, MW-15016R (ug/L)





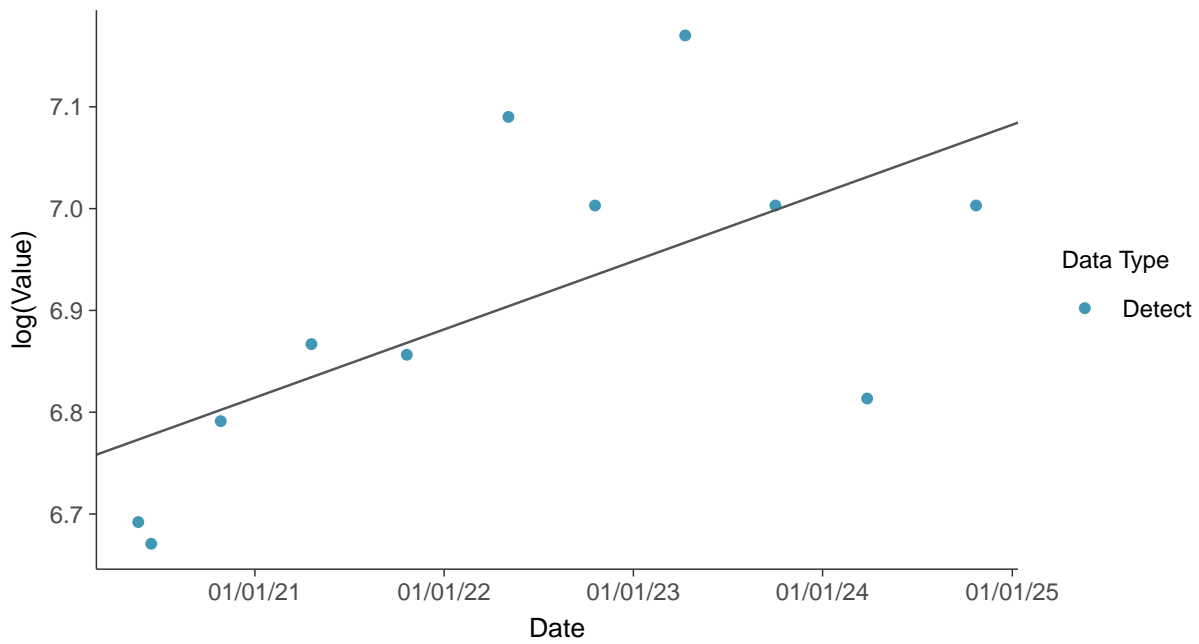
Gamma Q-Q plot

Barium, MW-15016R (ug/L)



Trend Regression: Lognormal MLE

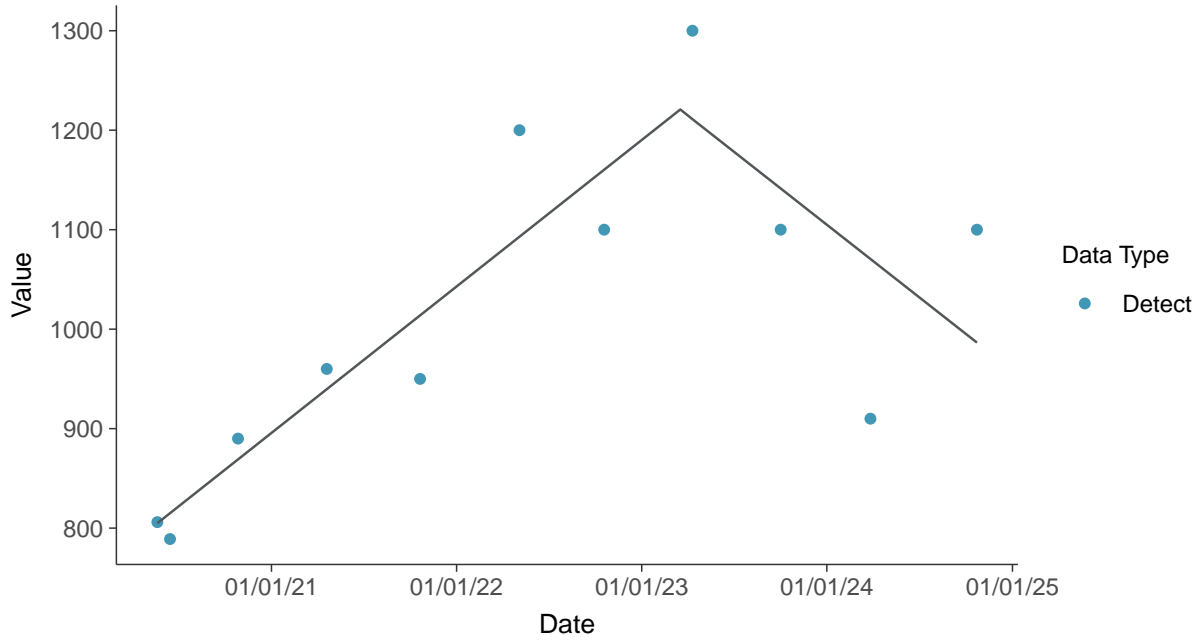
Barium, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear

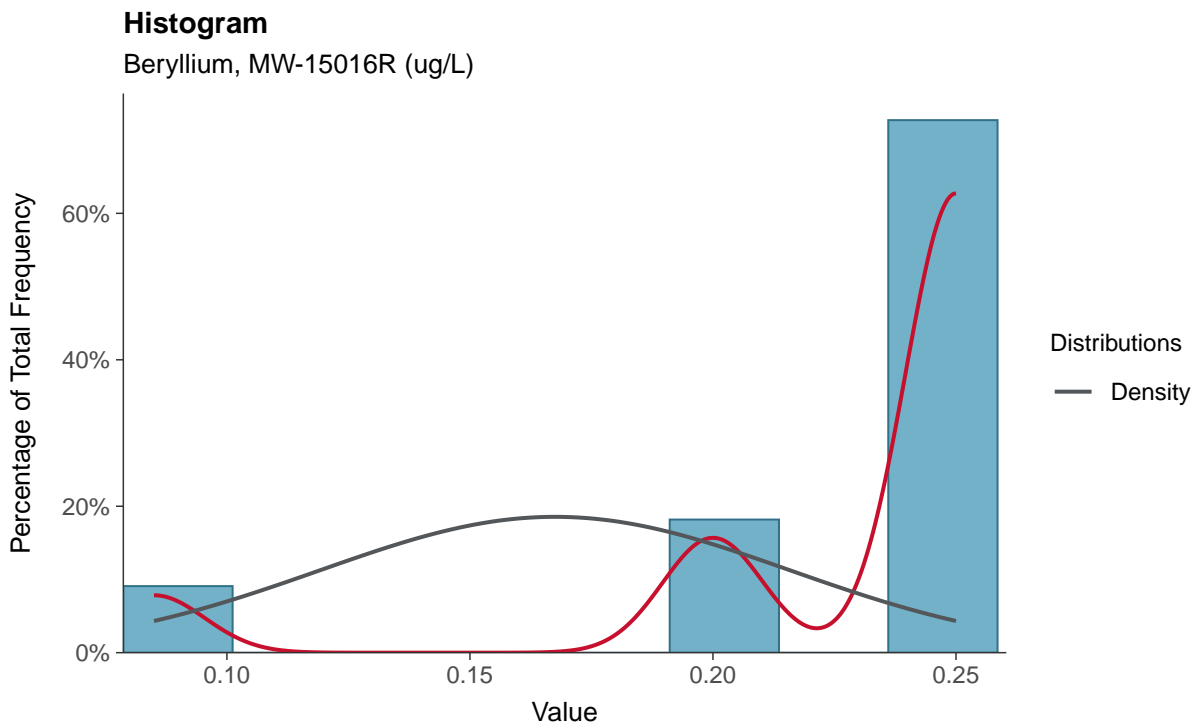
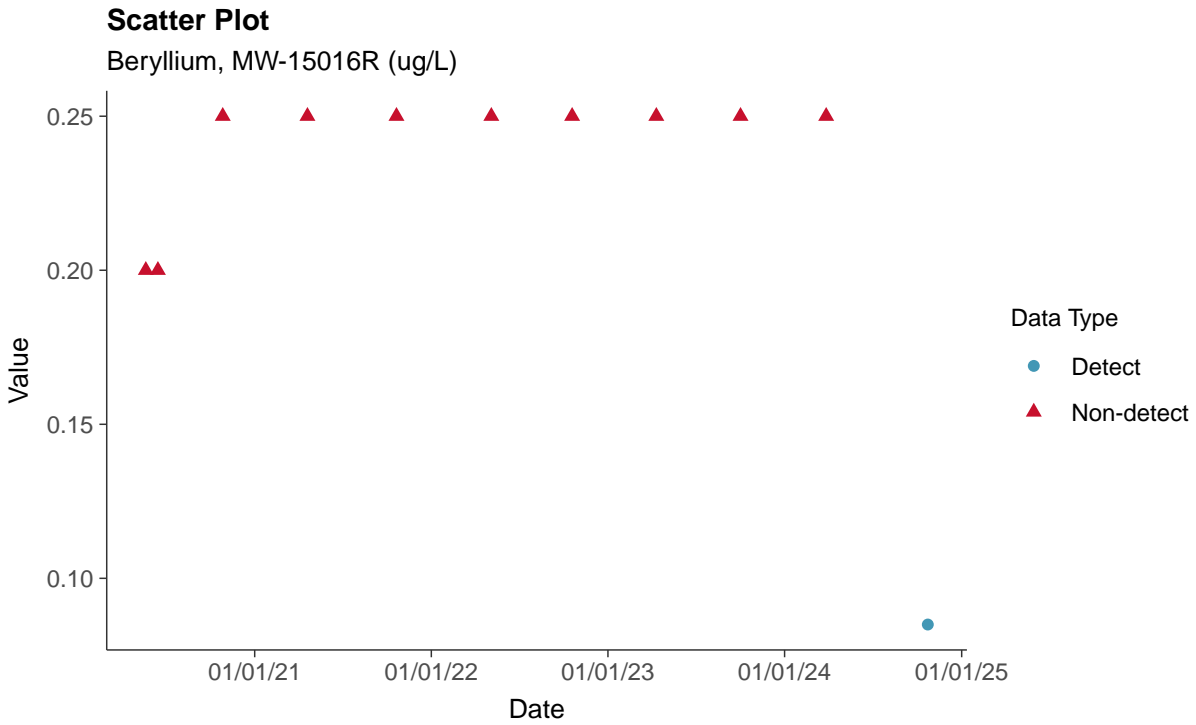
Barium, MW-15016R (ug/L)





Appendix IV: Beryllium, MW-15016R

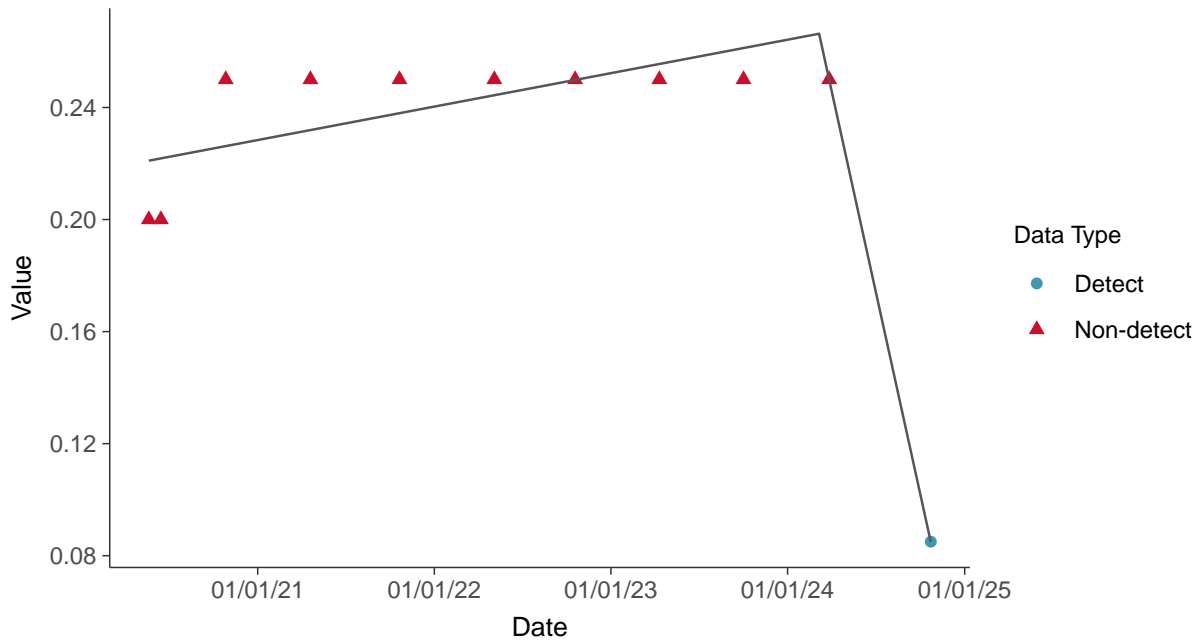
ID: 06_2_104





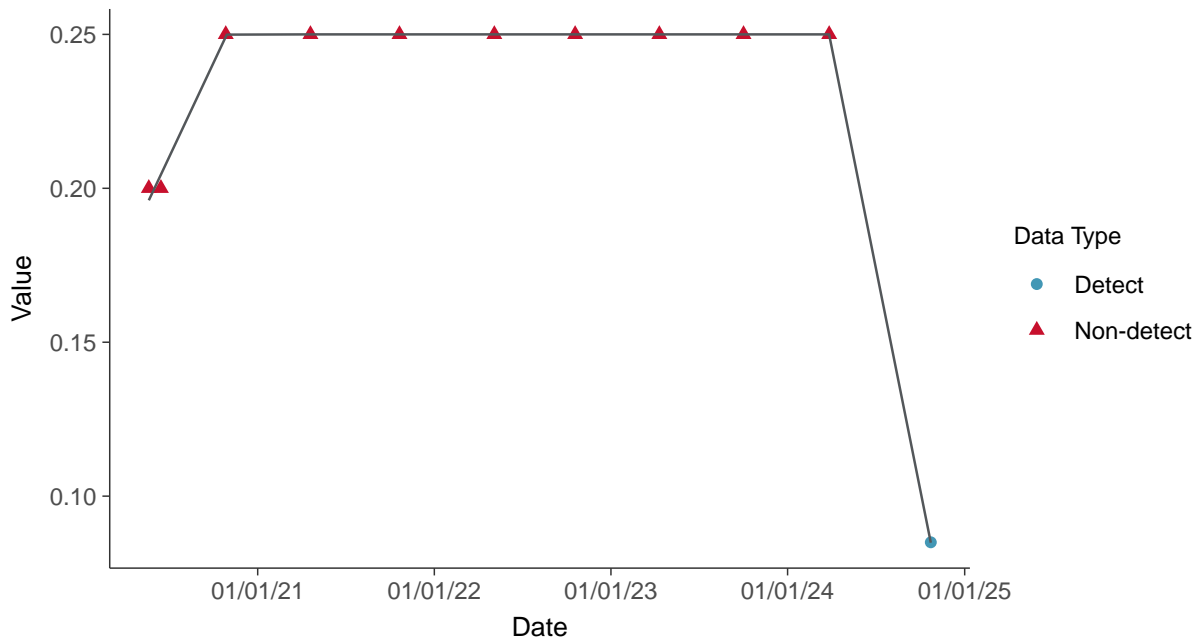
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

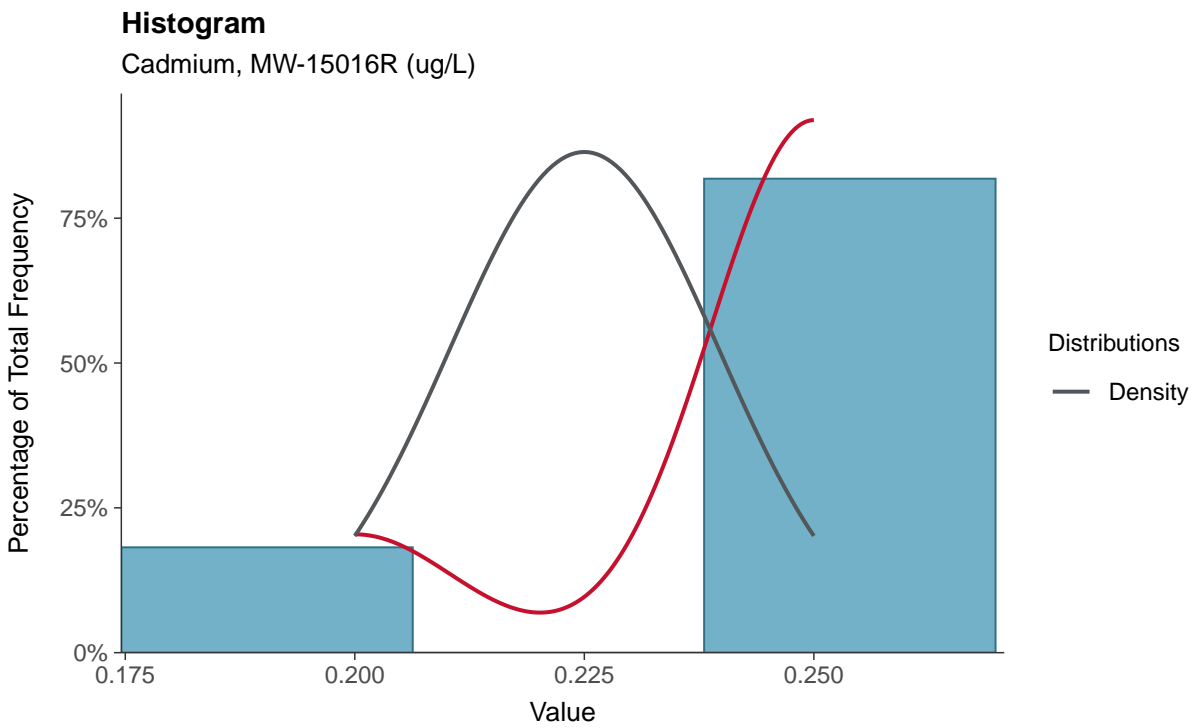
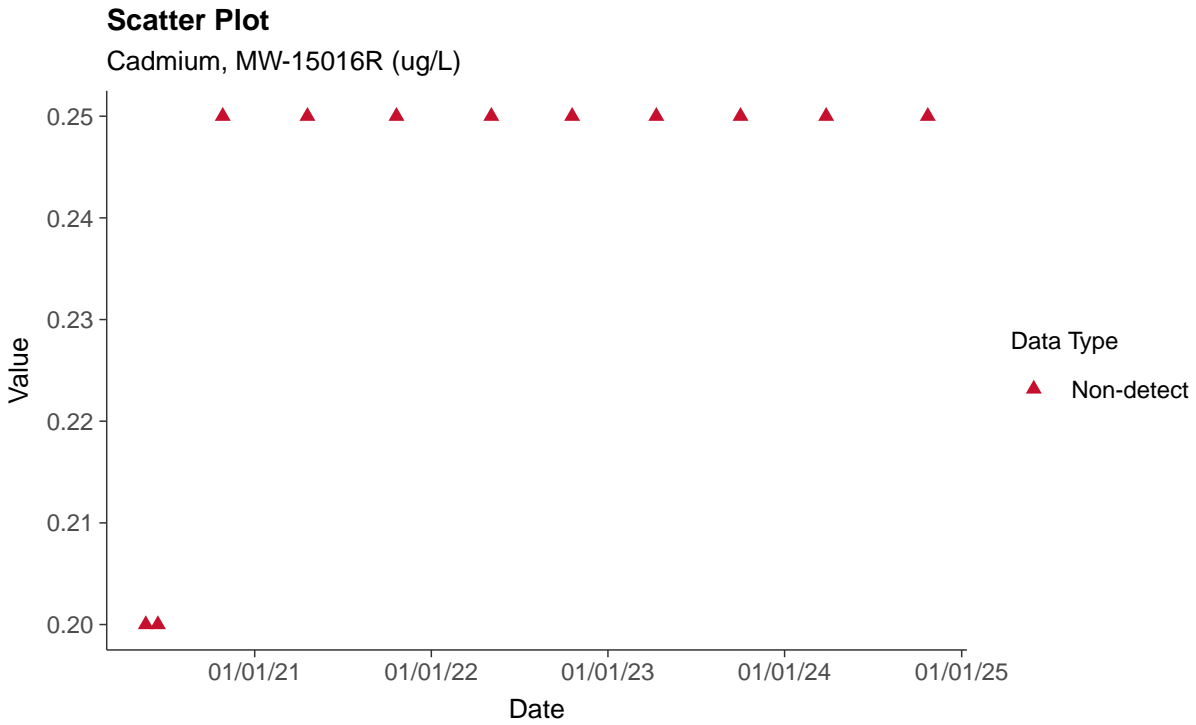
Beryllium, MW-15016R (ug/L)





Appendix IV: Cadmium, MW-15016R

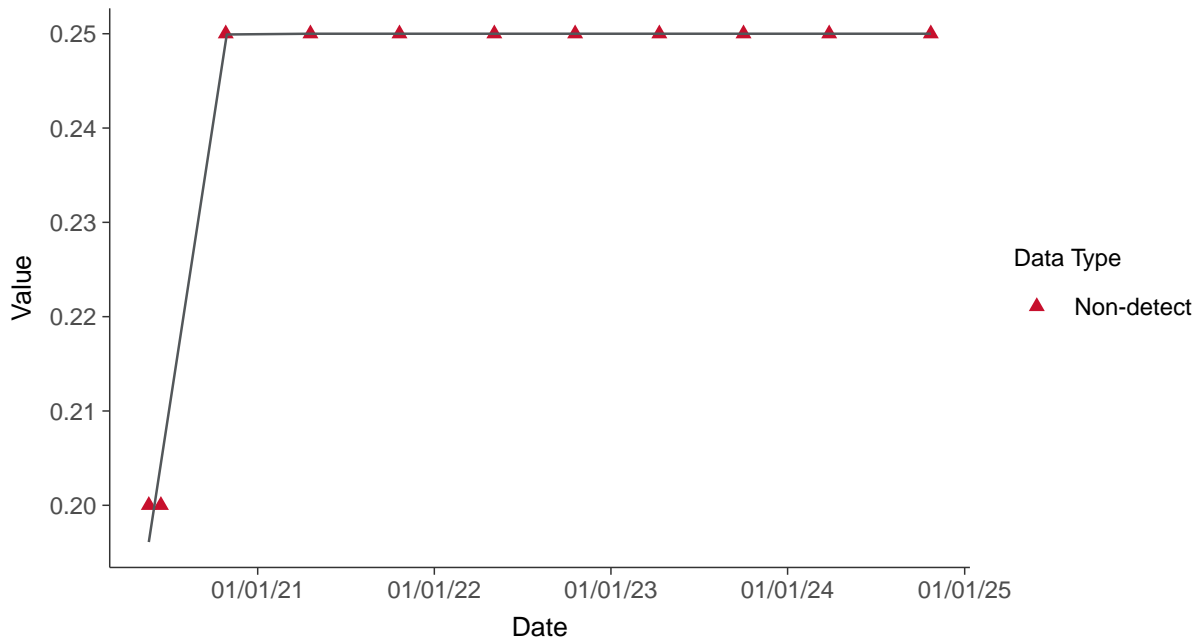
ID: 06_2_106





Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15016R (ug/L)



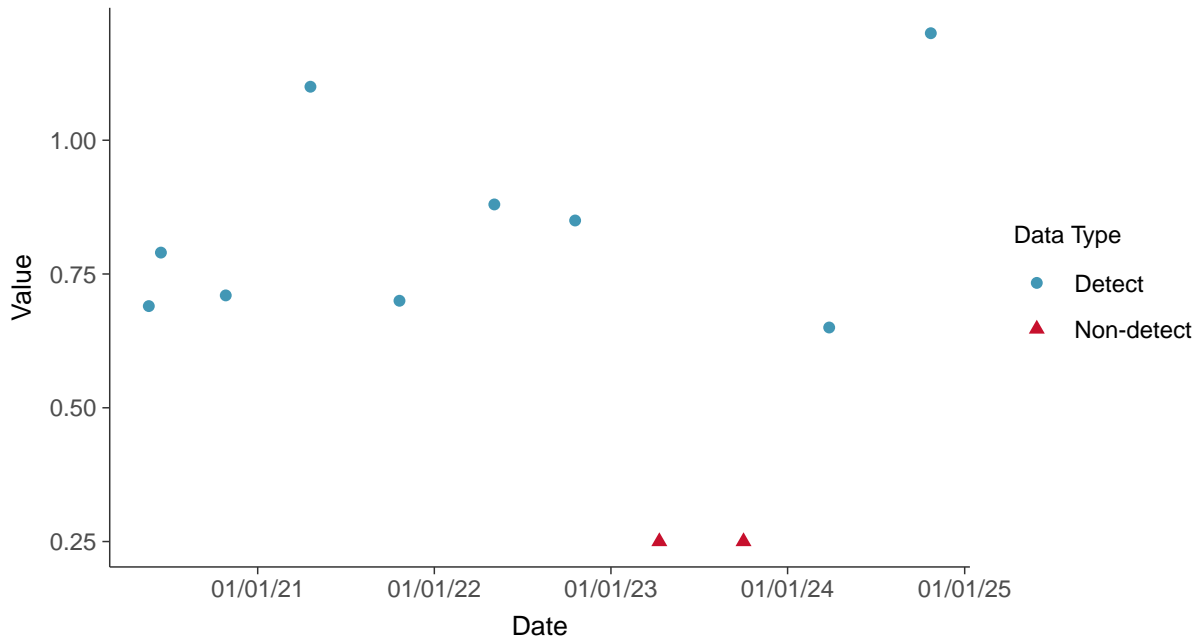


Appendix IV: Chromium, MW-15016R

ID: 06_2_109

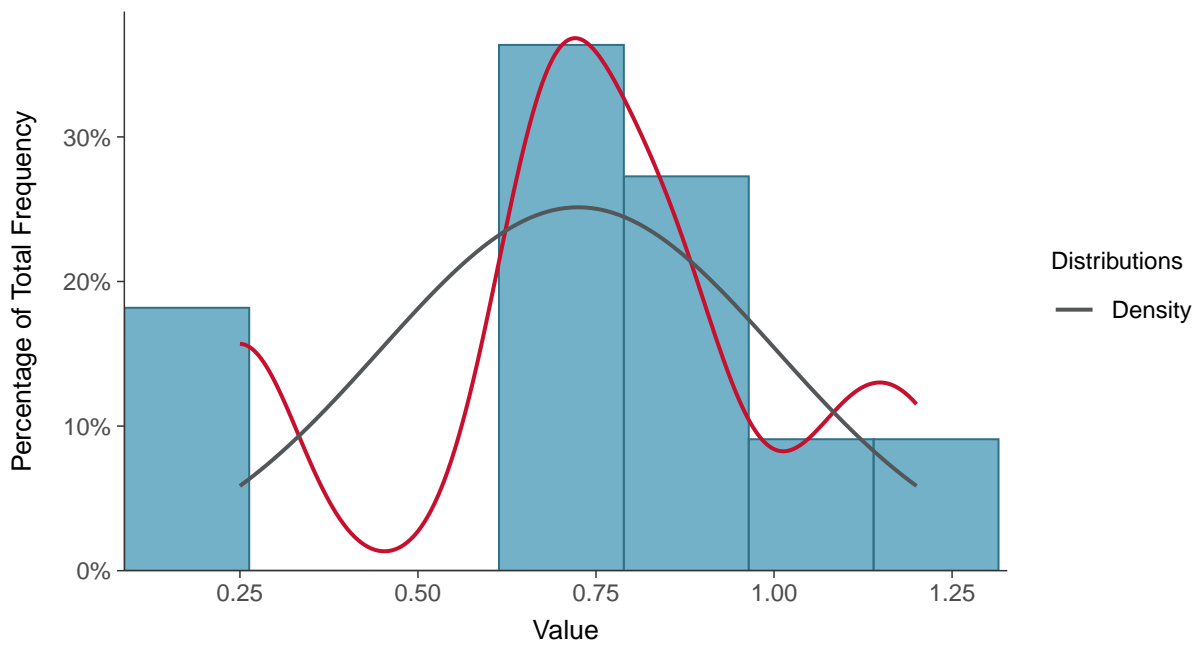
Scatter Plot

Chromium, MW-15016R (ug/L)



Histogram

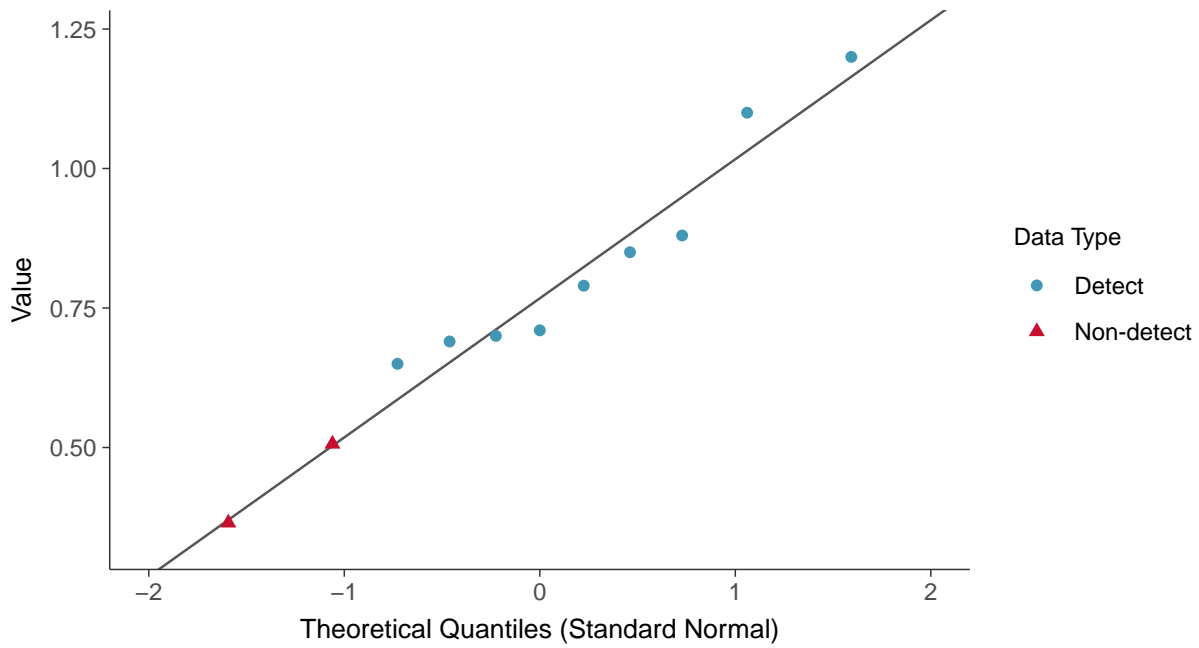
Chromium, MW-15016R (ug/L)





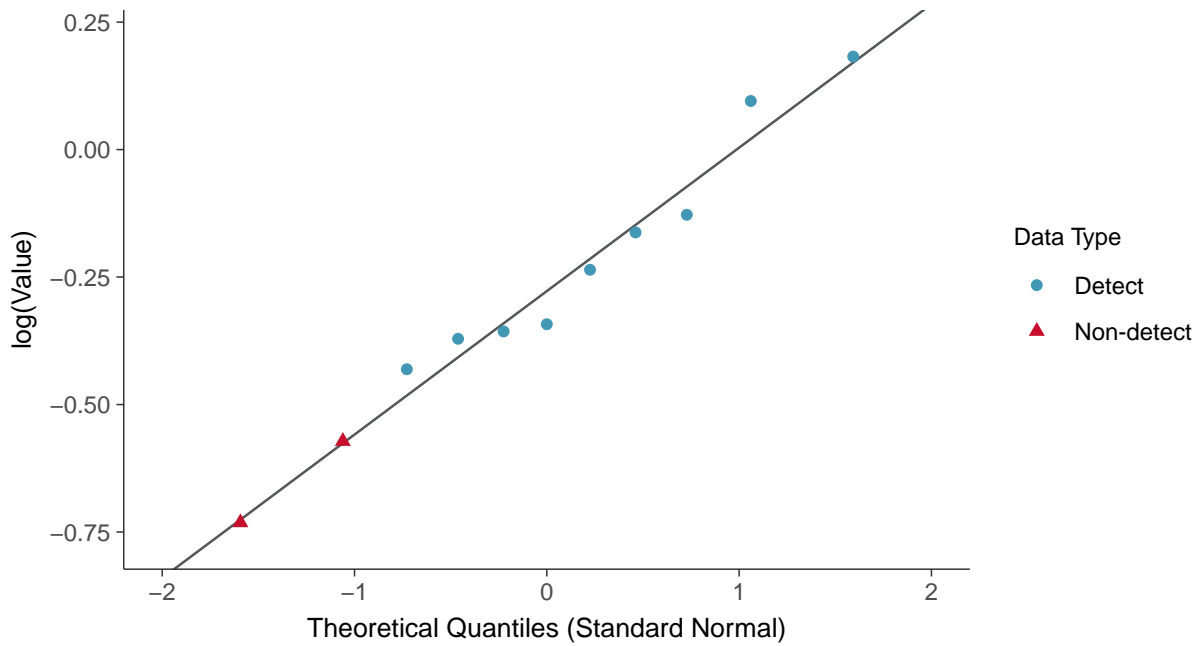
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15016R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

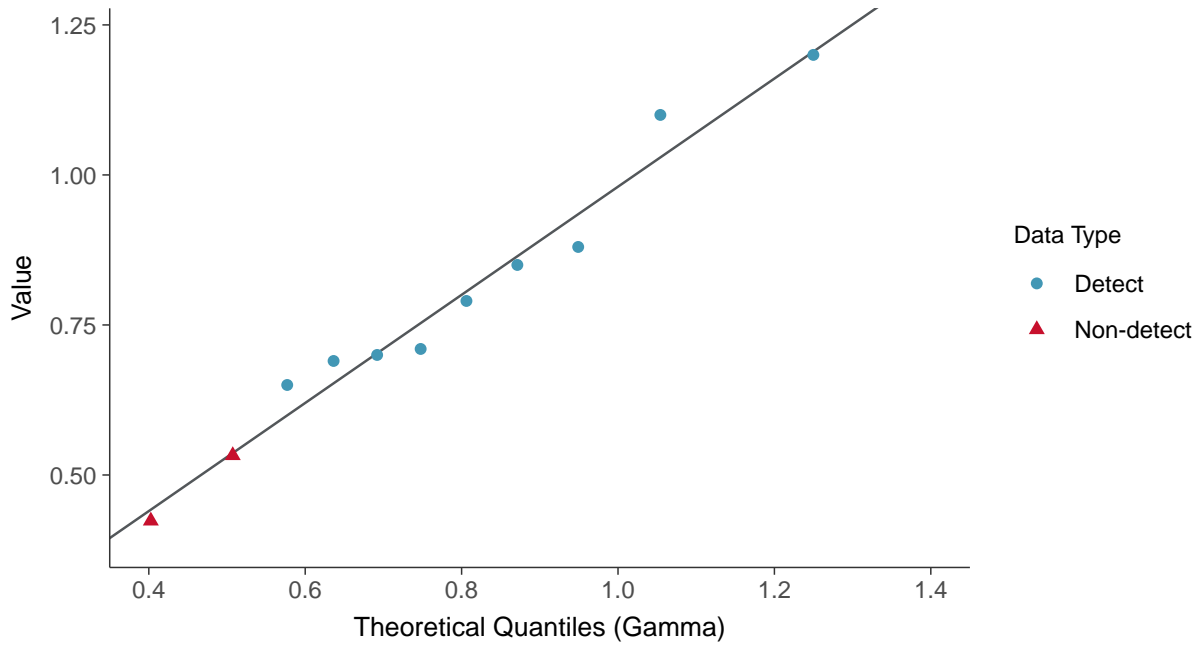
Chromium, MW-15016R (ug/L)





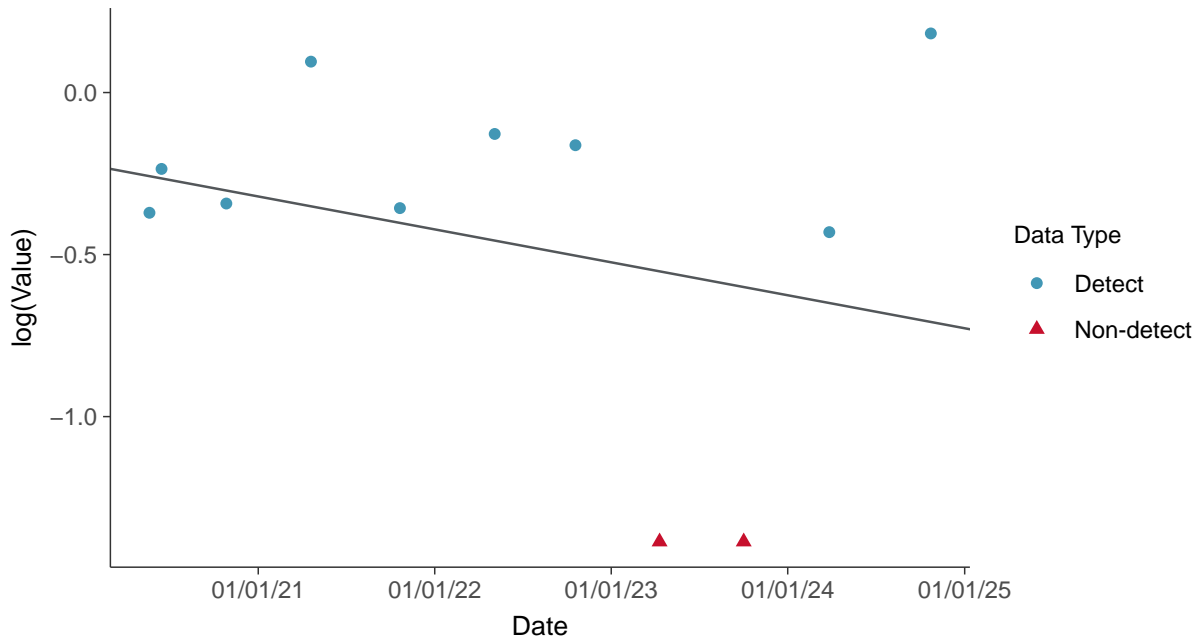
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15016R (ug/L)



Trend Regression: Lognormal MLE

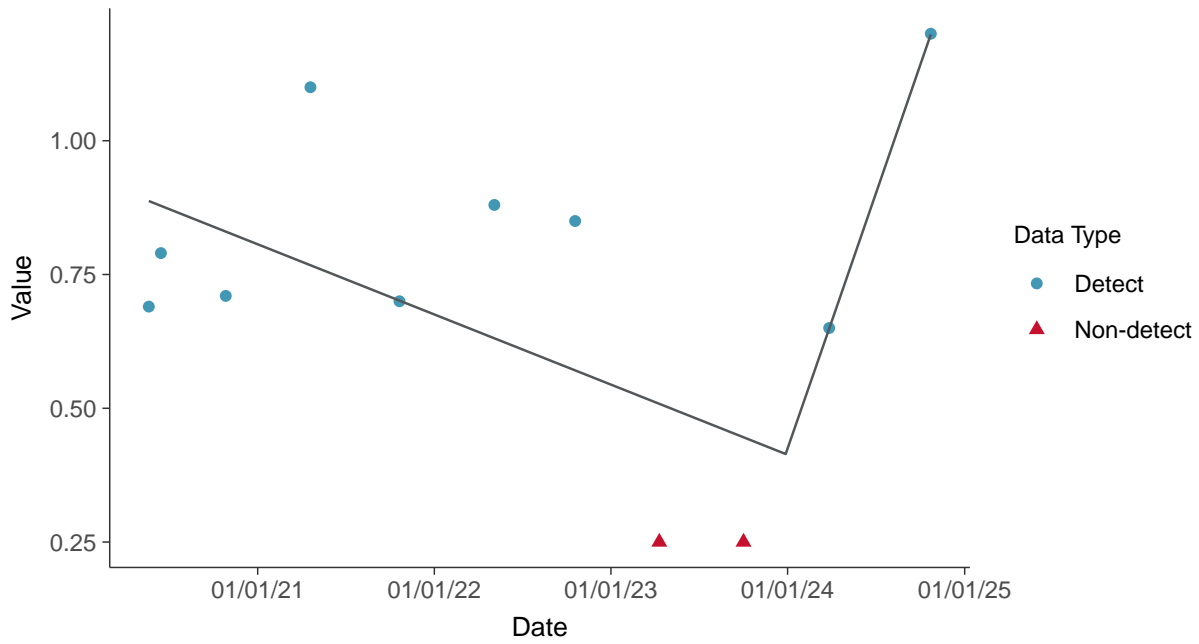
Chromium, MW-15016R (ug/L)





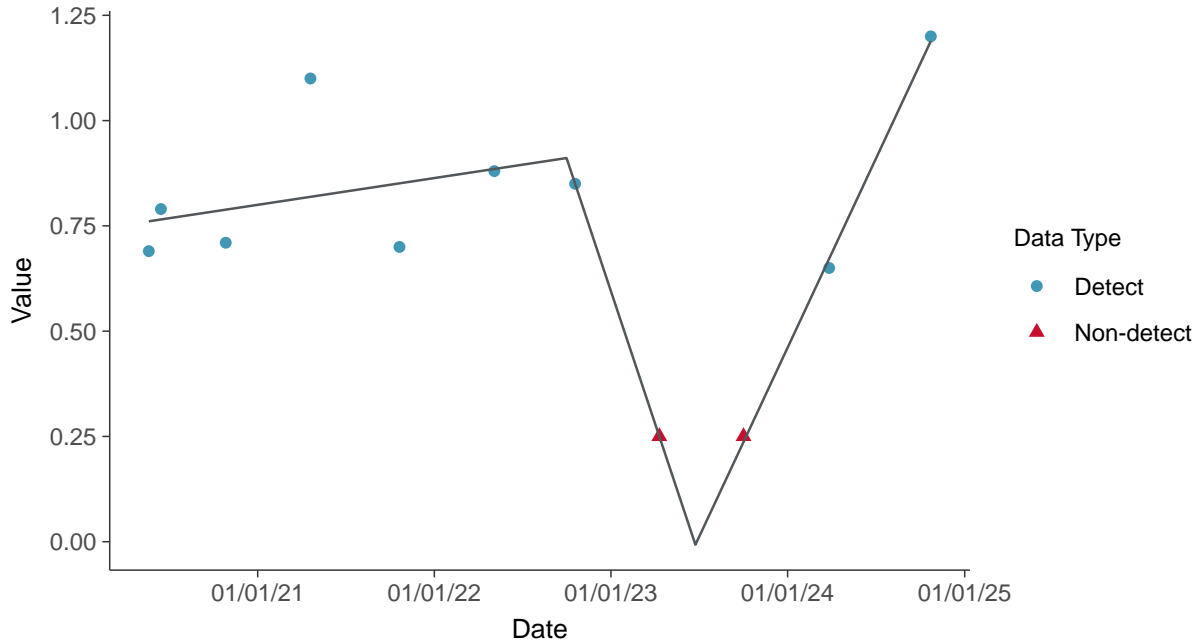
Trend Regression: Piecewise Linear-Linear

Chromium, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

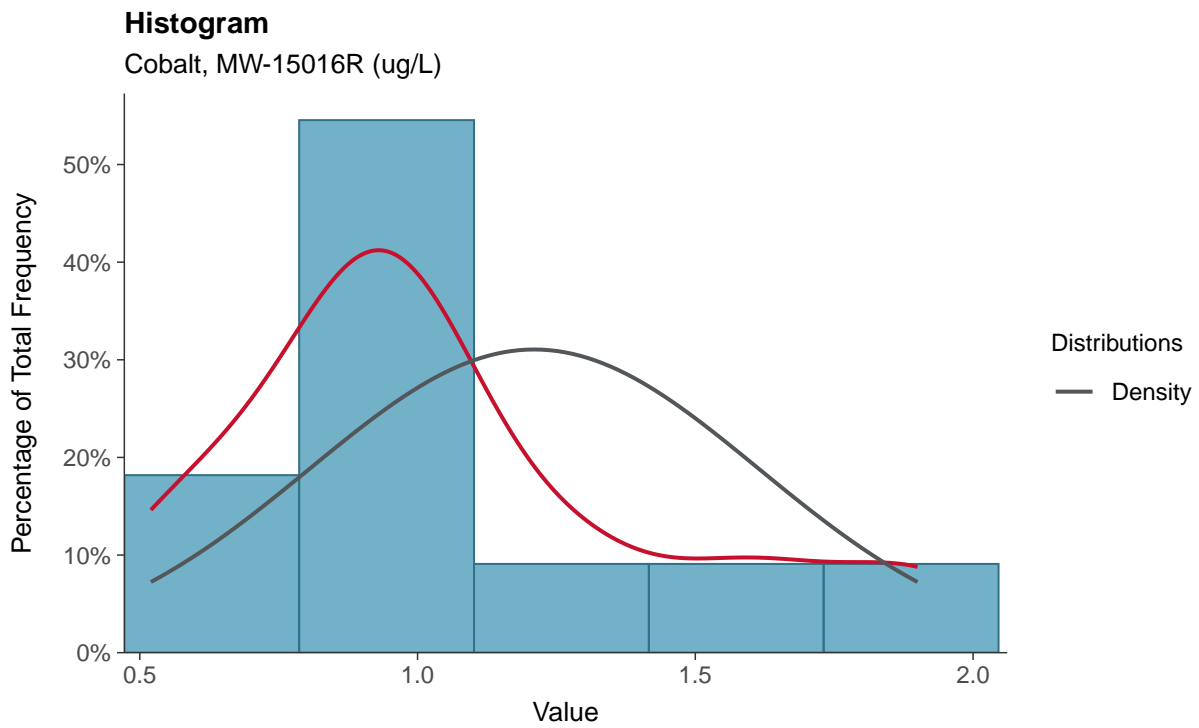
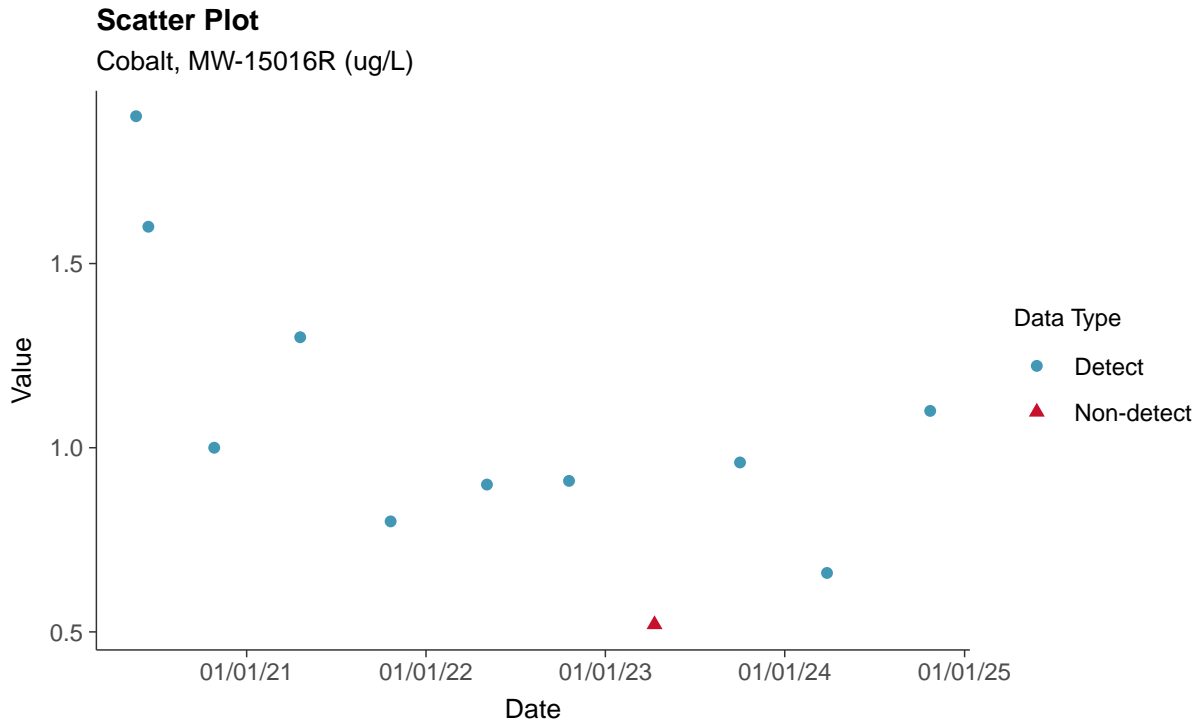
Chromium, MW-15016R (ug/L)





Appendix IV: Cobalt, MW-15016R

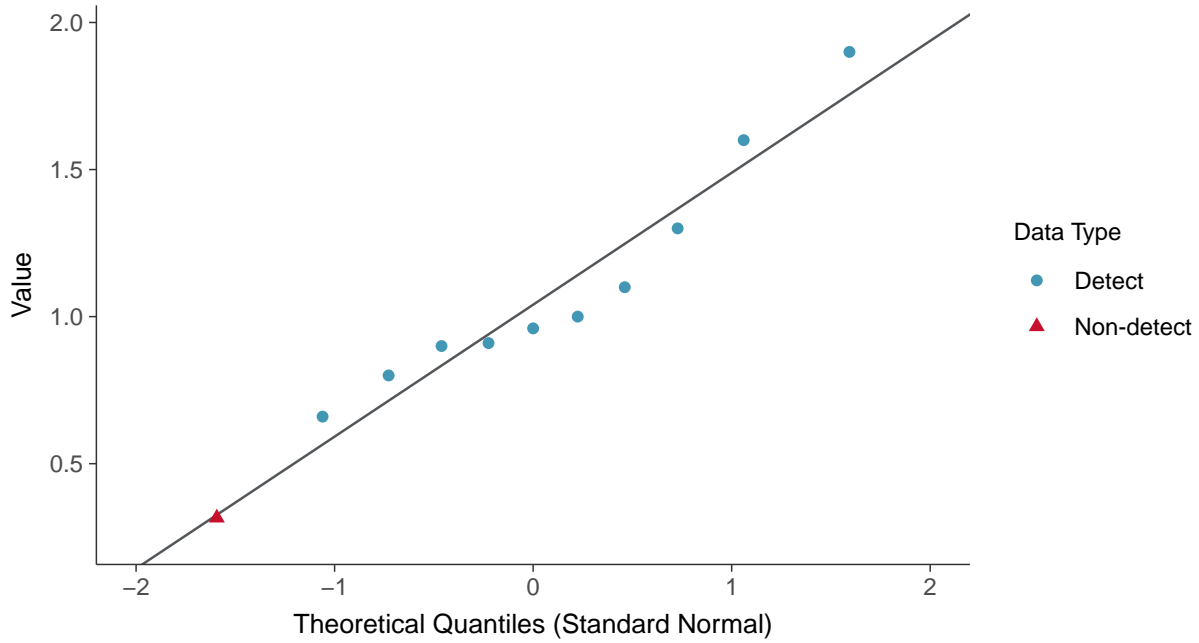
ID: 06_2_110





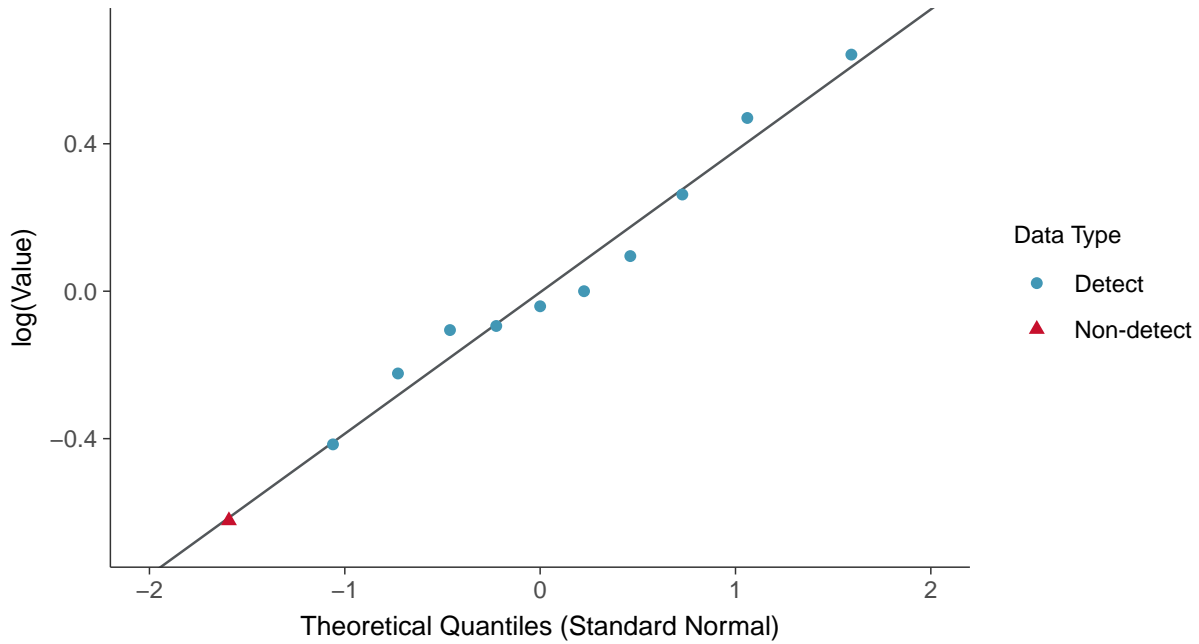
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15016R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

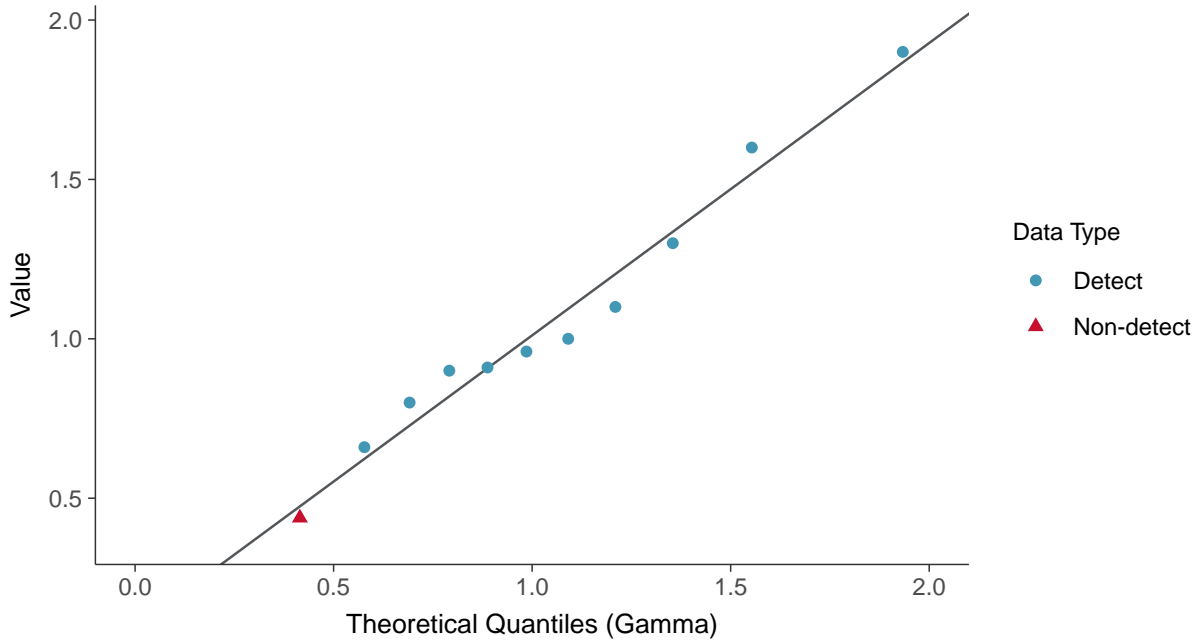
Cobalt, MW-15016R (ug/L)





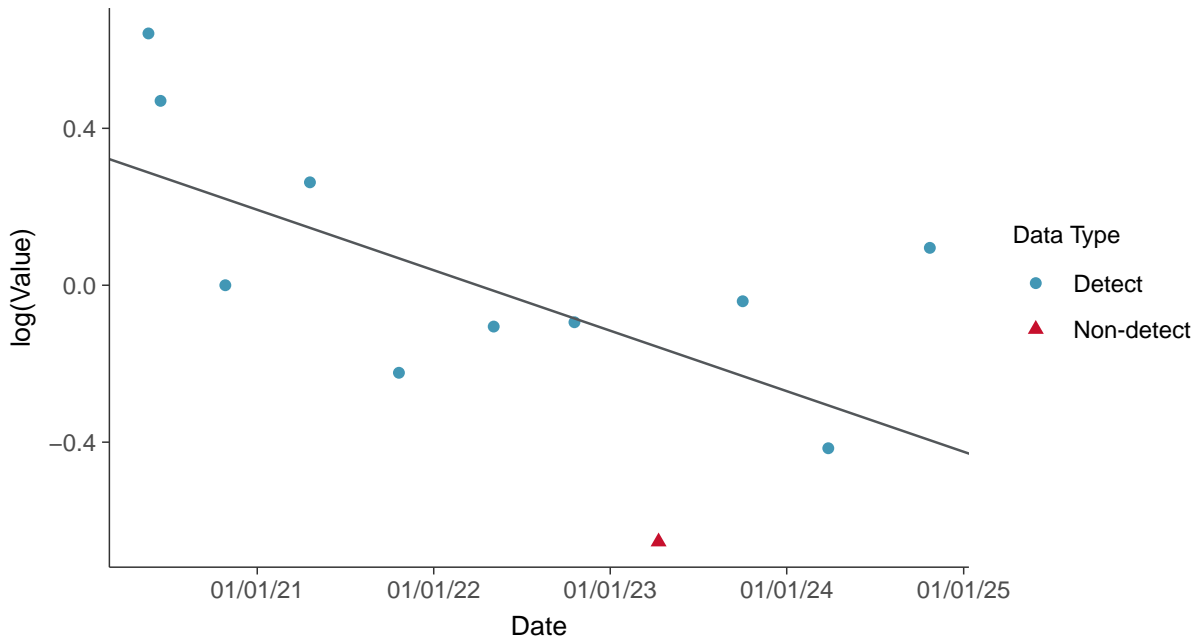
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15016R (ug/L)



Trend Regression: Lognormal MLE

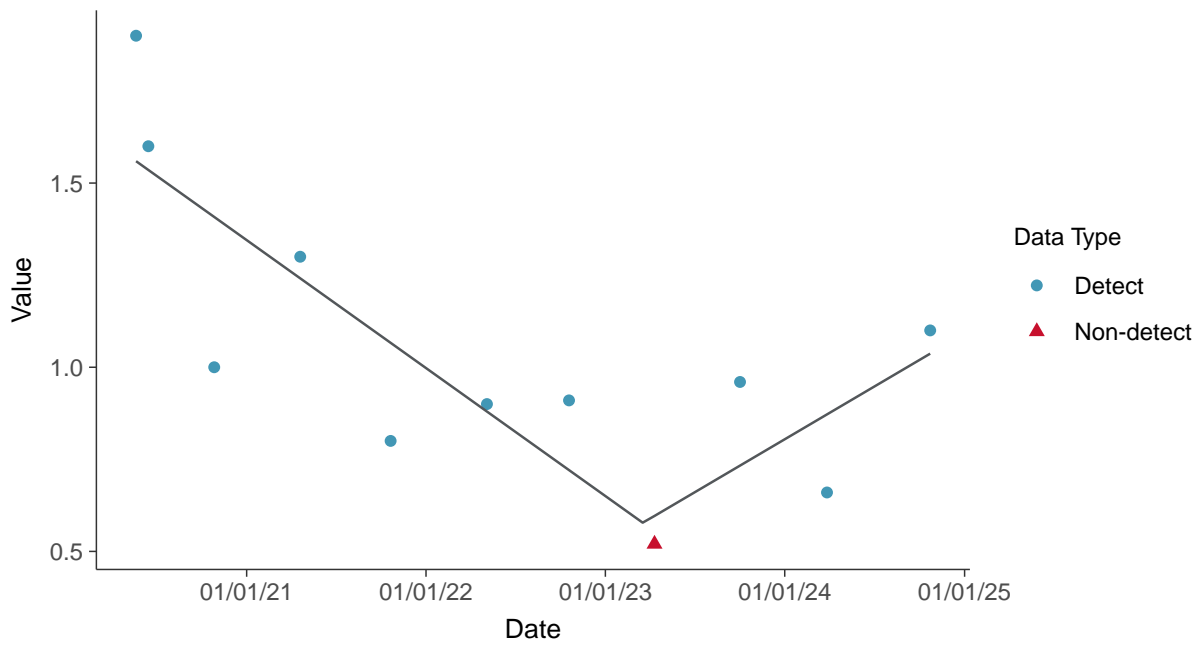
Cobalt, MW-15016R (ug/L)





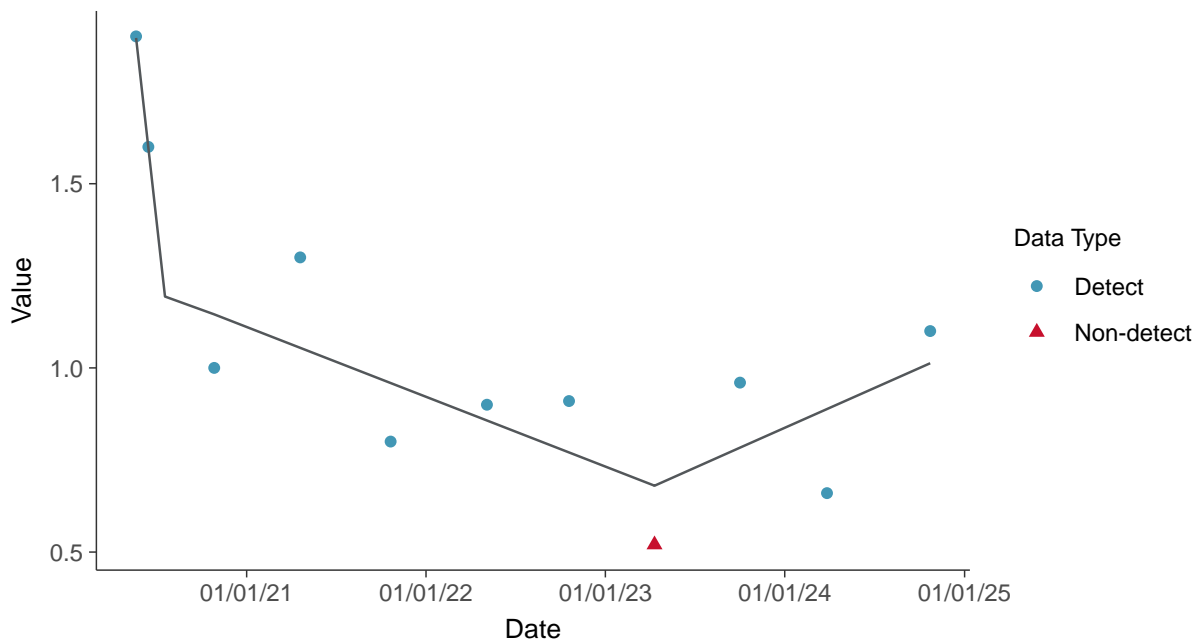
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-15016R (ug/L)



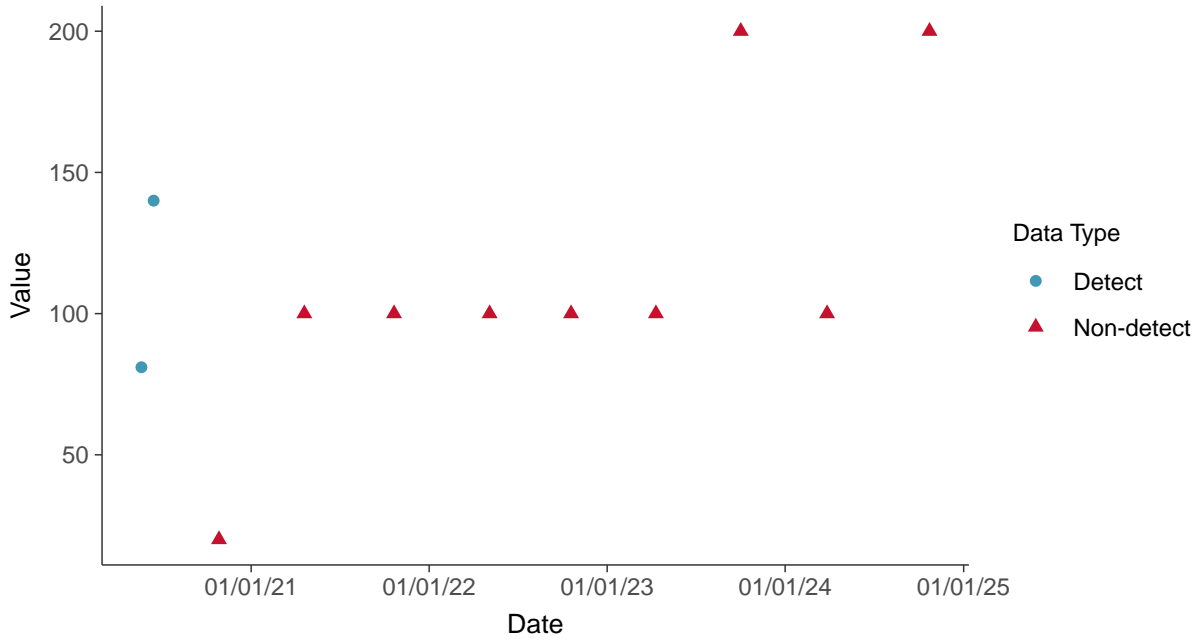


Appendix IV: Fluoride, MW-15016R

ID: 06_2_114

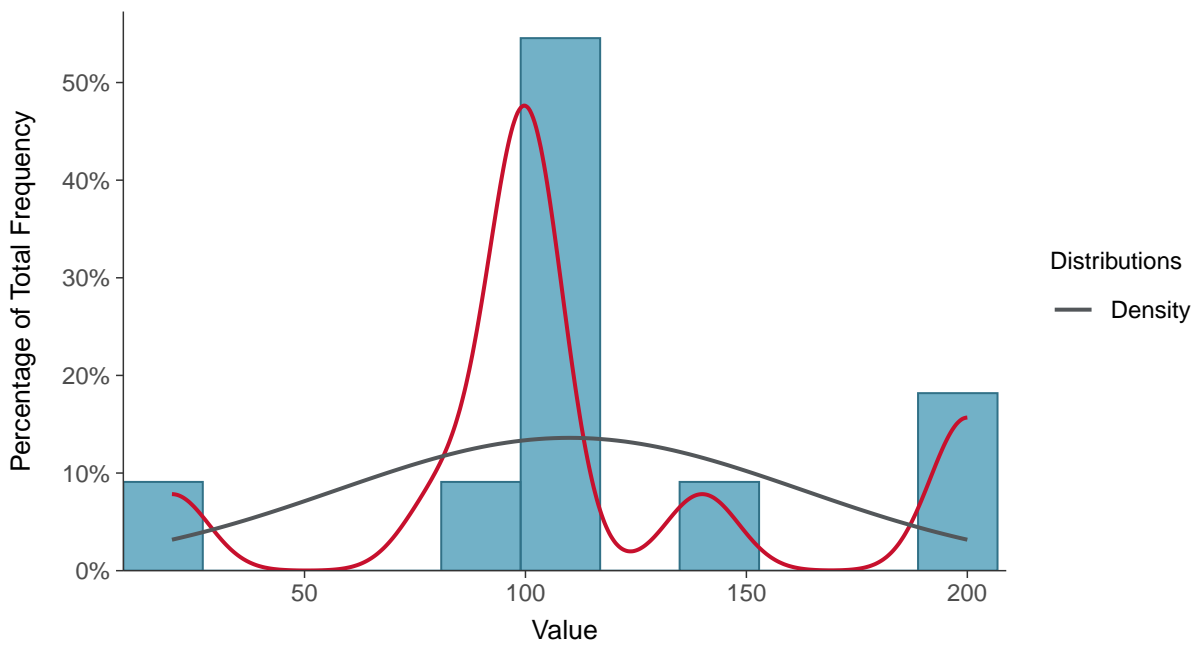
Scatter Plot

Fluoride, MW-15016R (ug/L)



Histogram

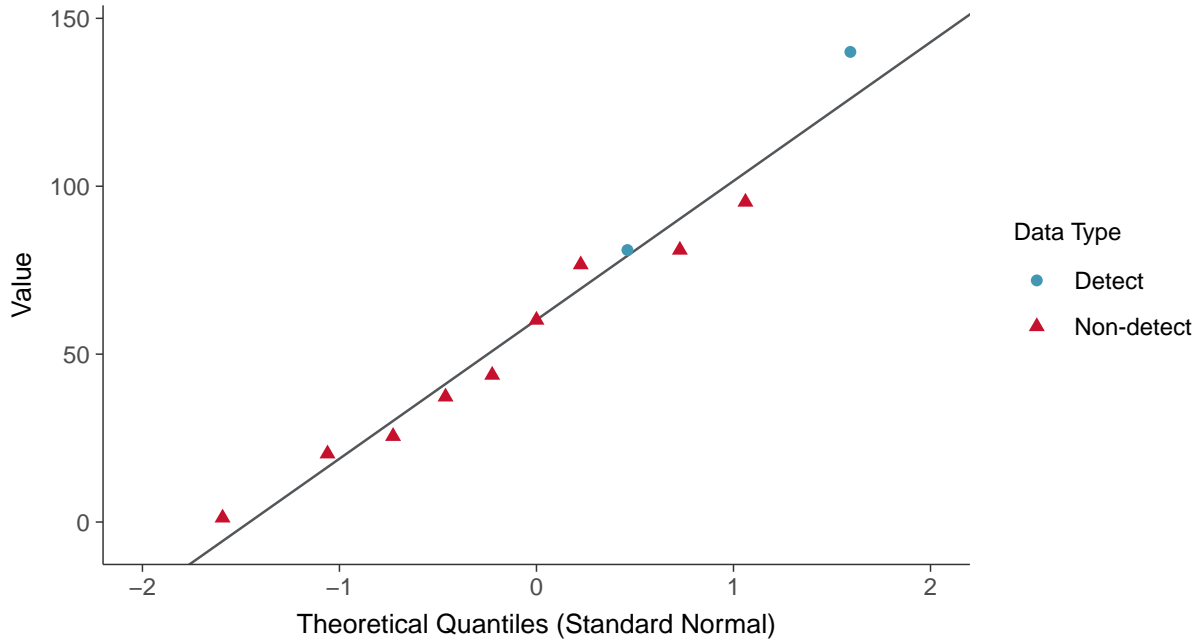
Fluoride, MW-15016R (ug/L)





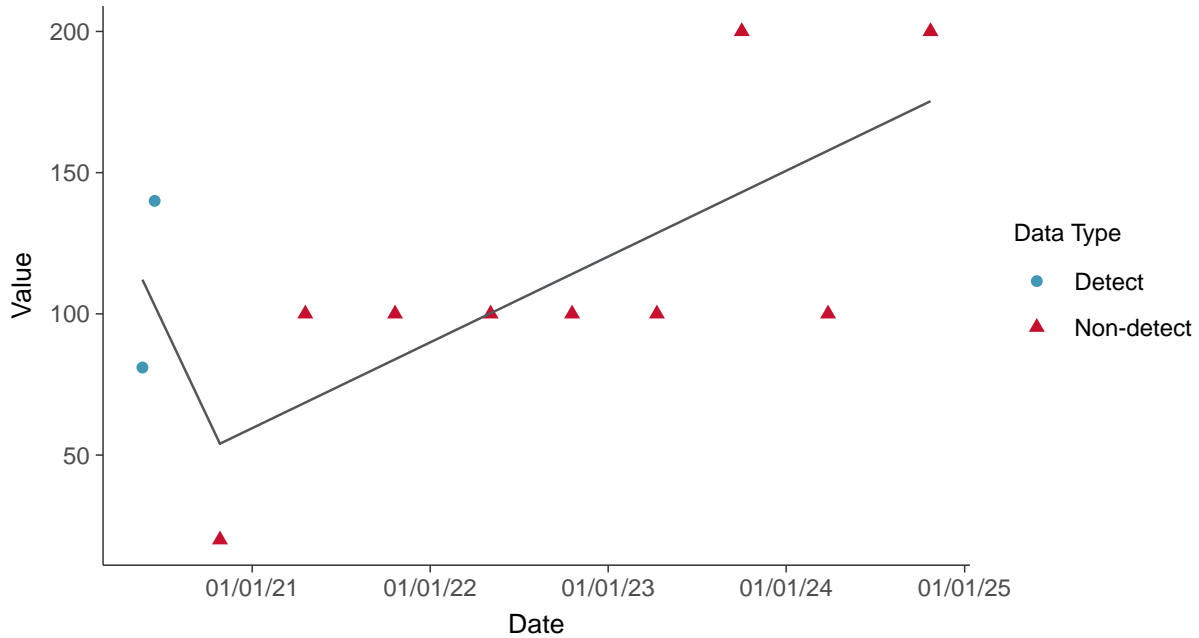
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

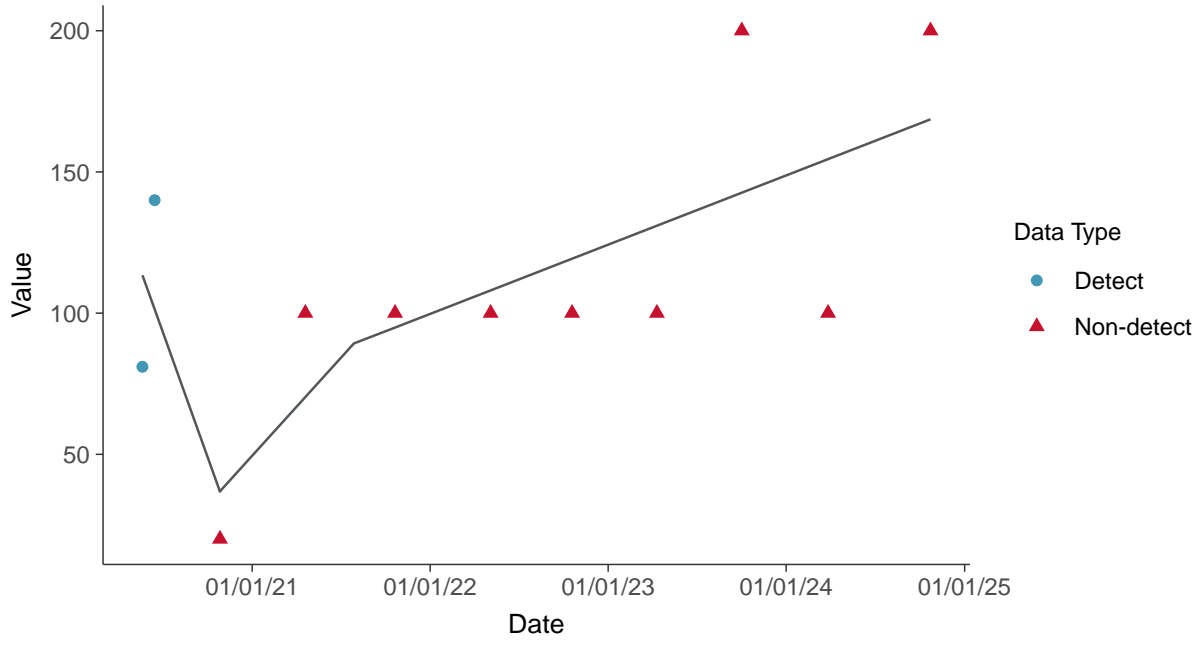
Fluoride, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

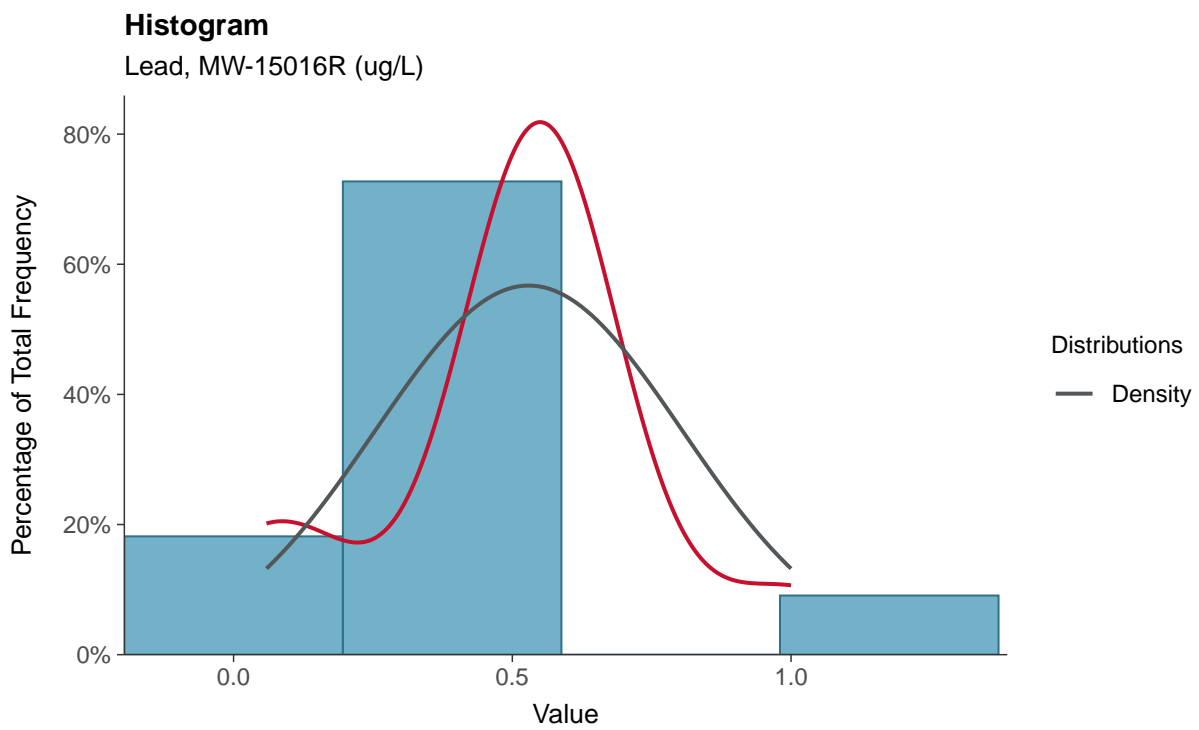
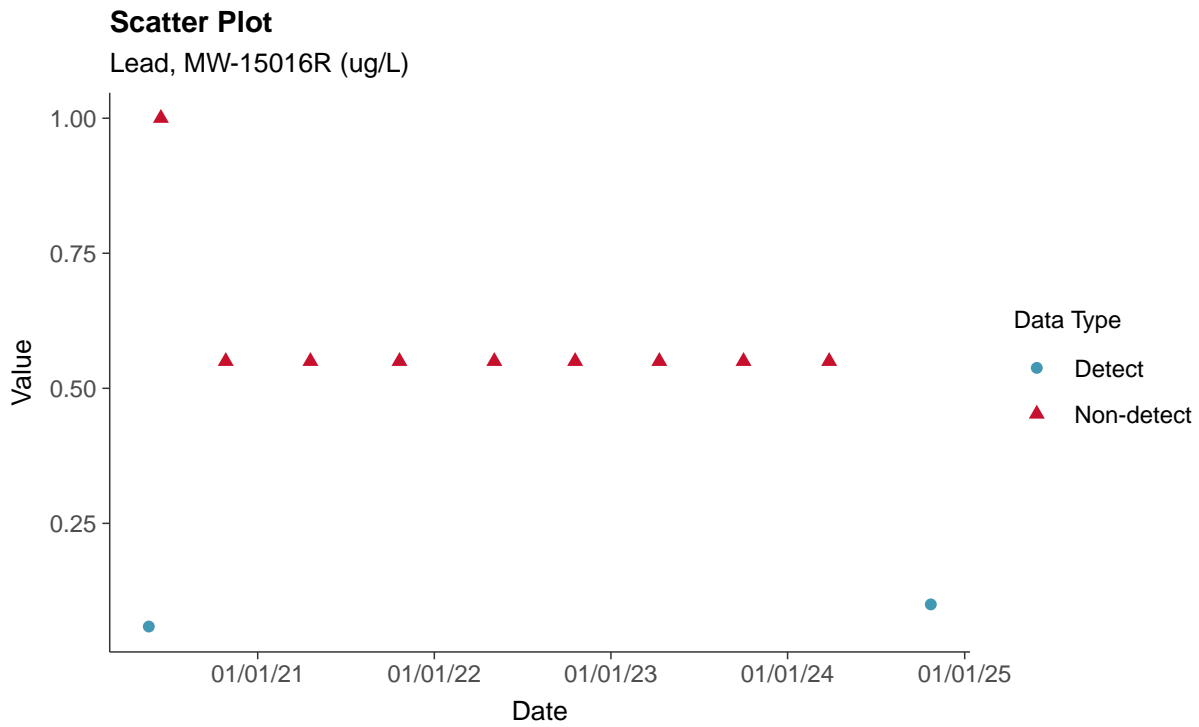
Fluoride, MW-15016R (ug/L)





Appendix IV: Lead, MW-15016R

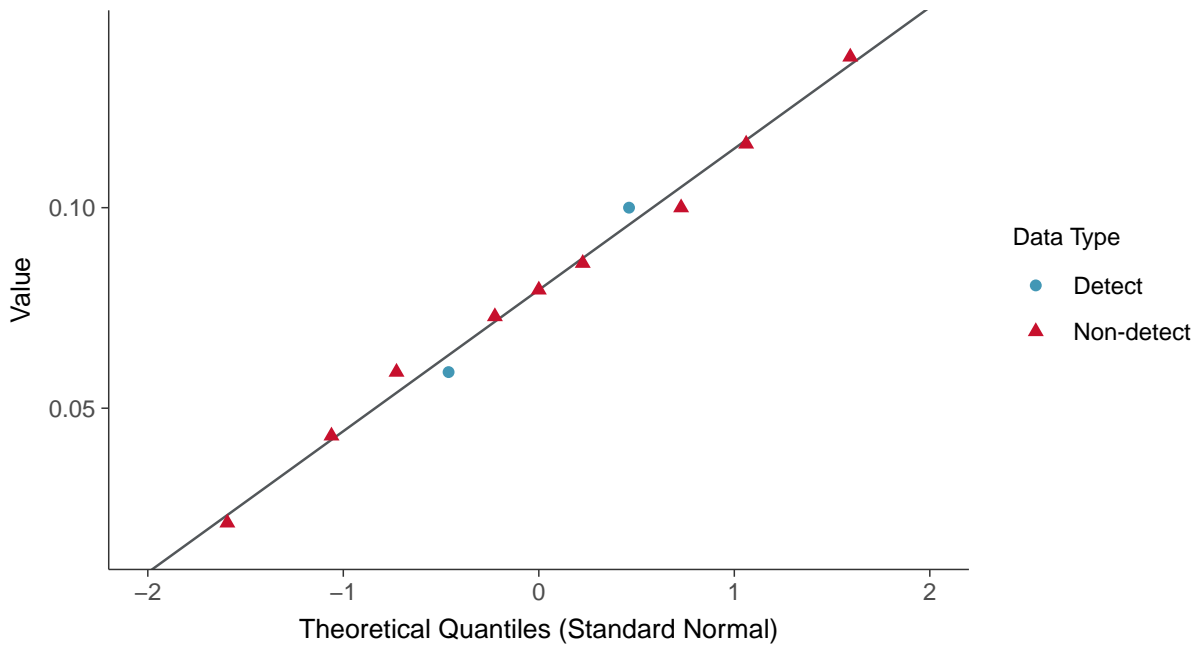
ID: 06_2_116





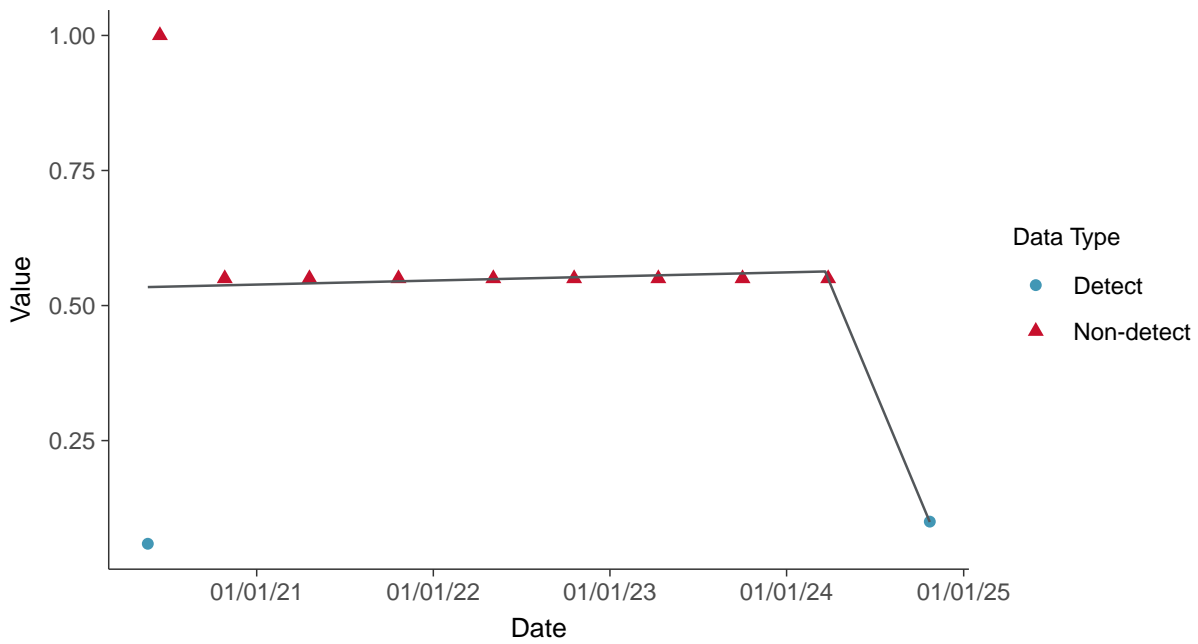
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

Lead, MW-15016R (ug/L)



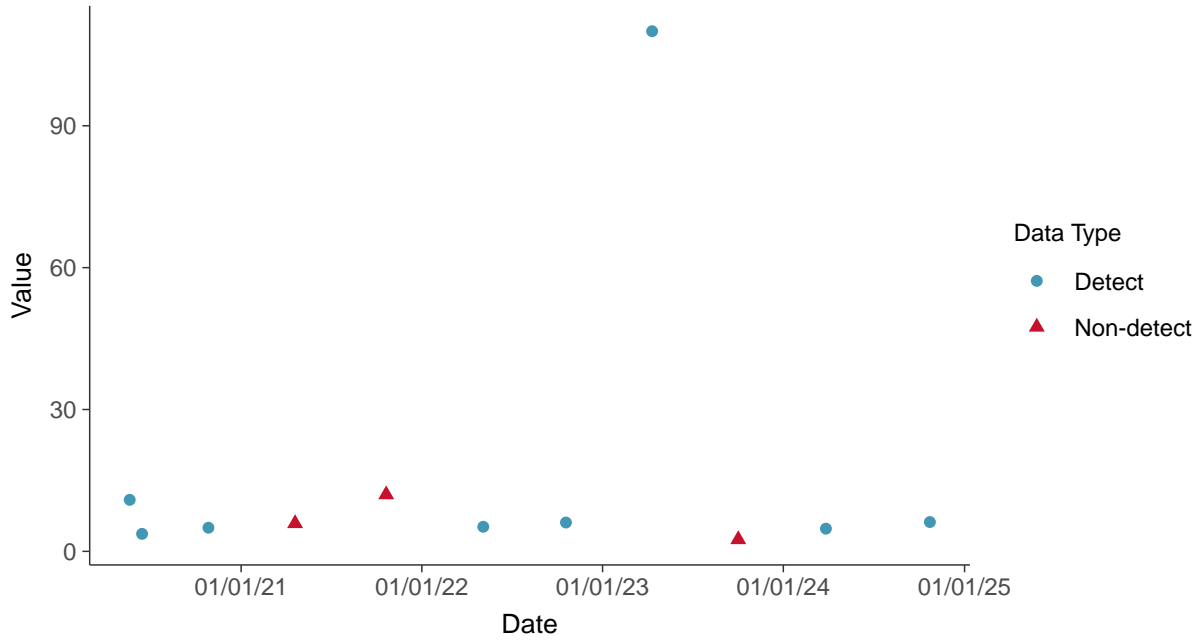


Appendix IV: Lithium, MW-15016R

ID: 06_2_117

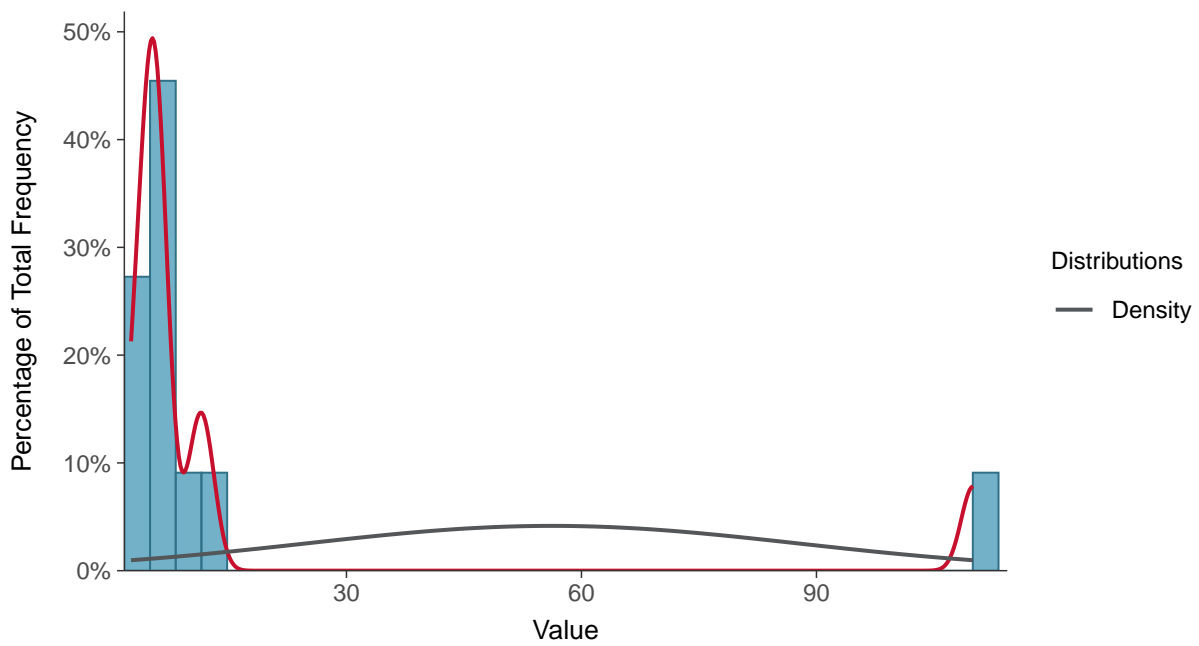
Scatter Plot

Lithium, MW-15016R (ug/L)



Histogram

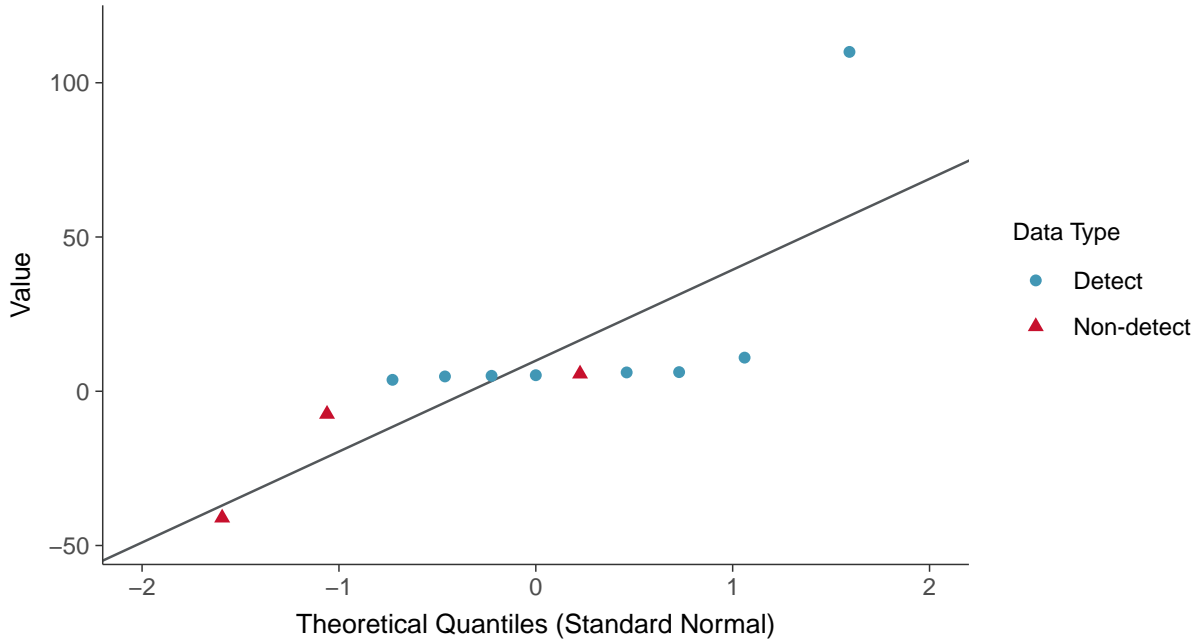
Lithium, MW-15016R (ug/L)





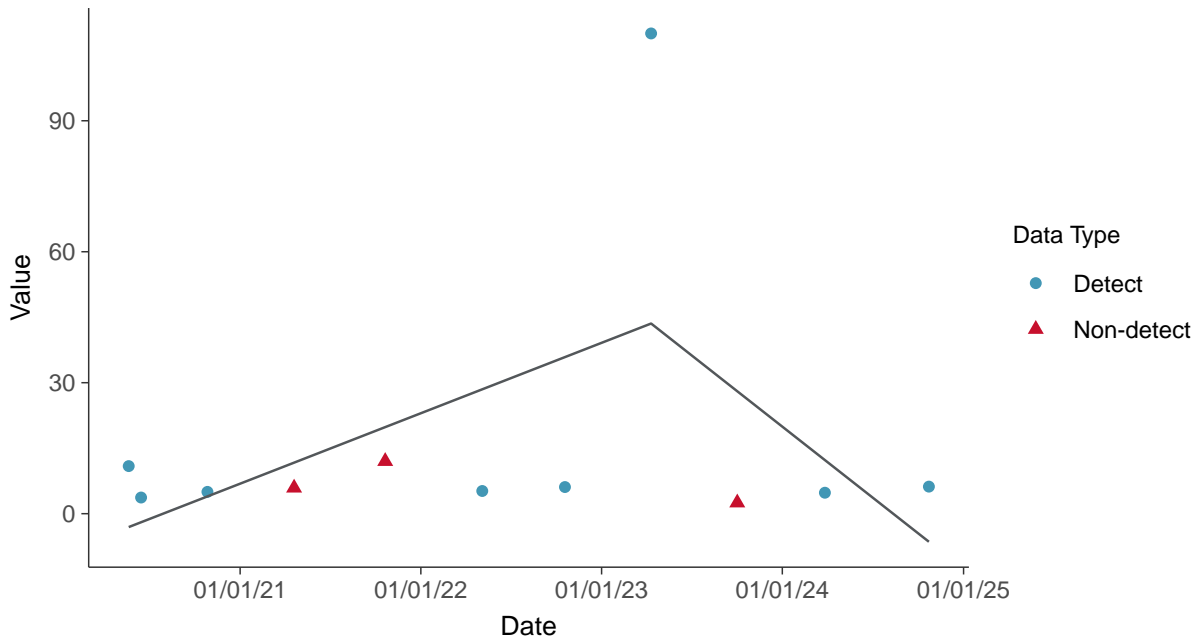
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

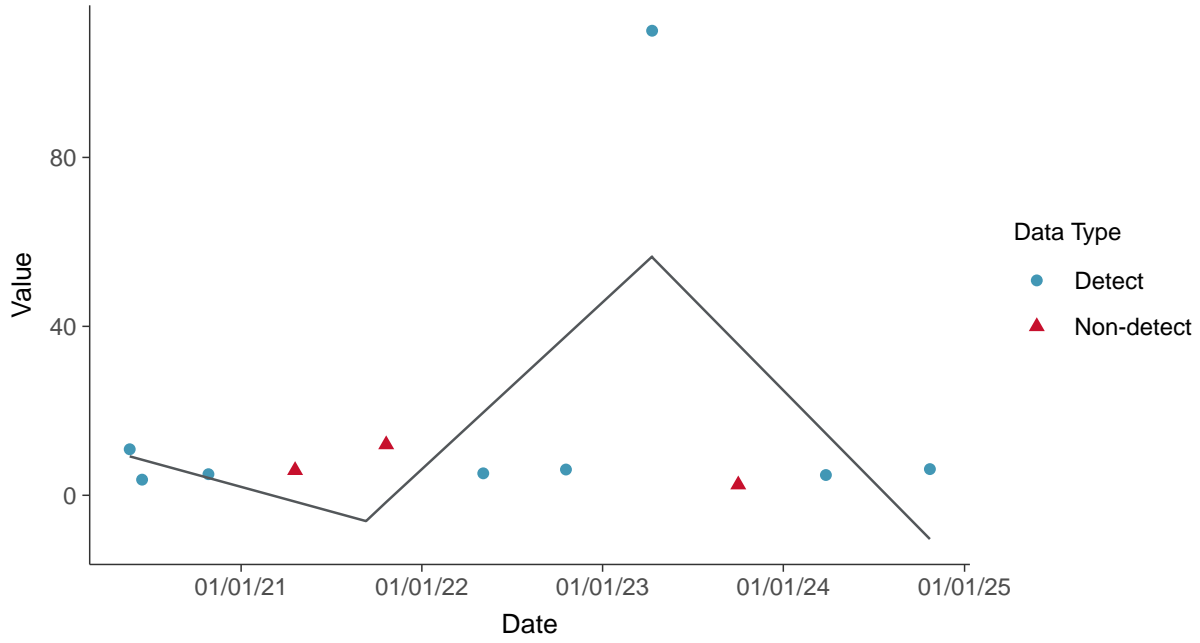
Lithium, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

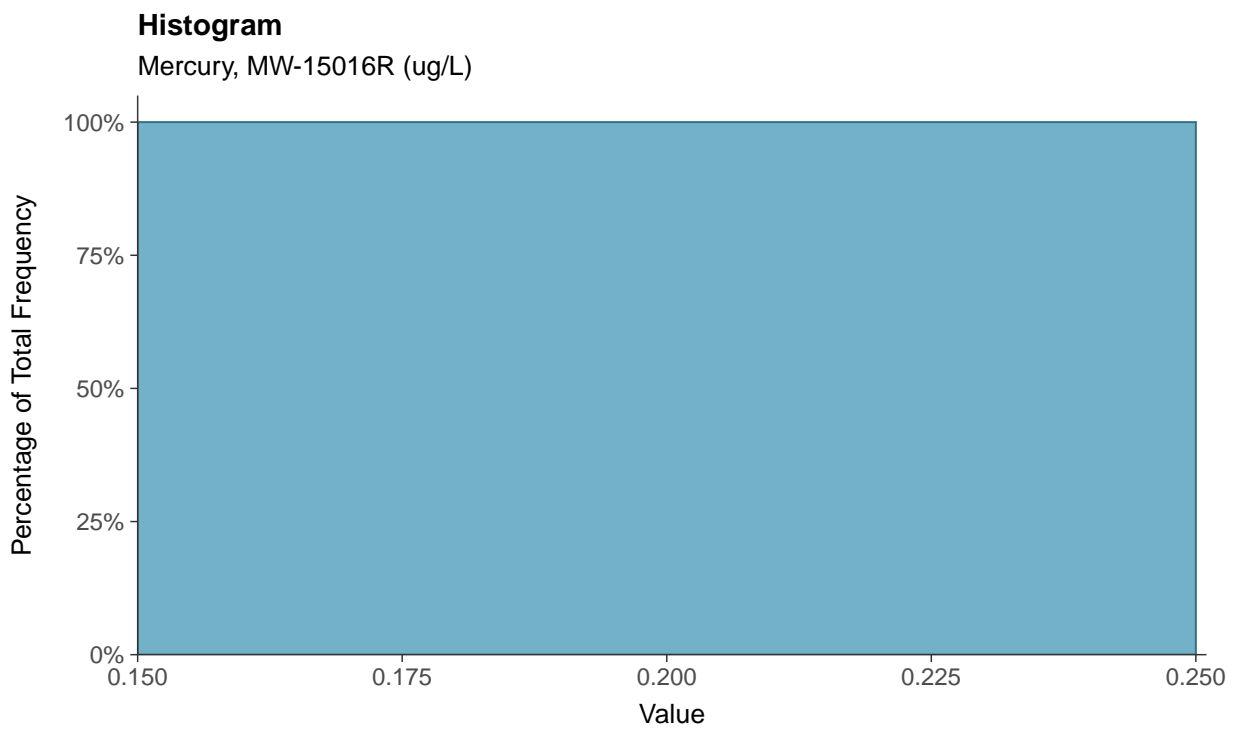
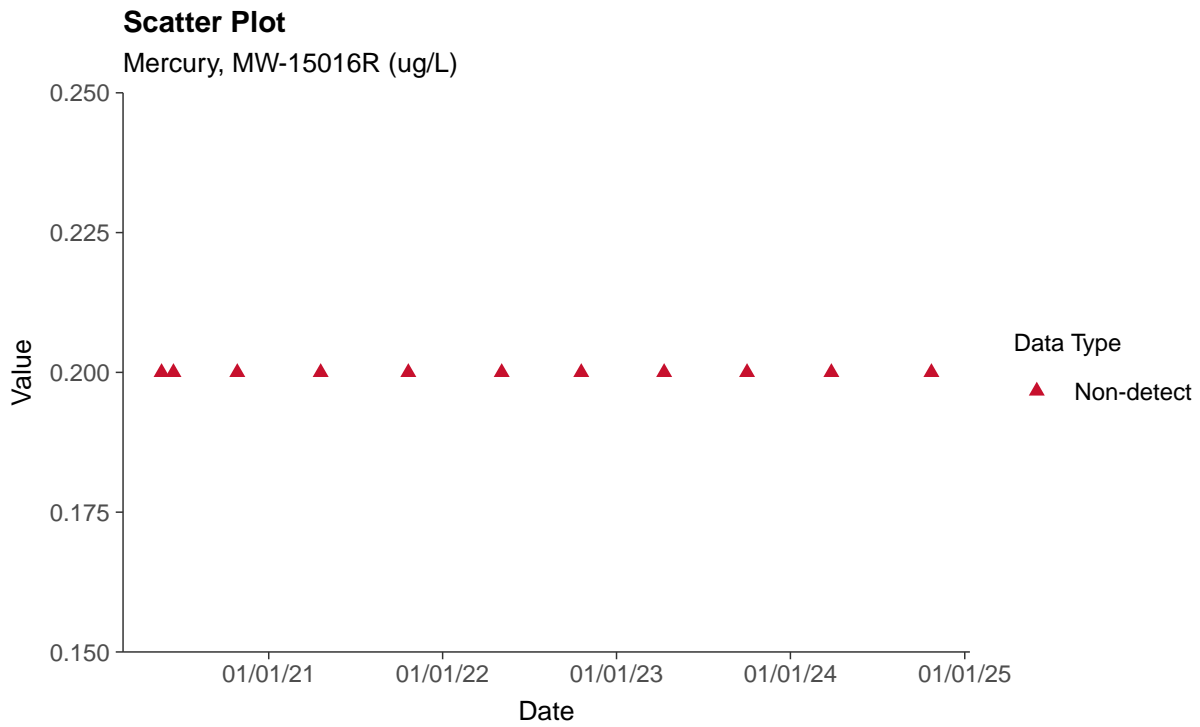
Lithium, MW-15016R (ug/L)





Appendix IV: Mercury, MW-15016R

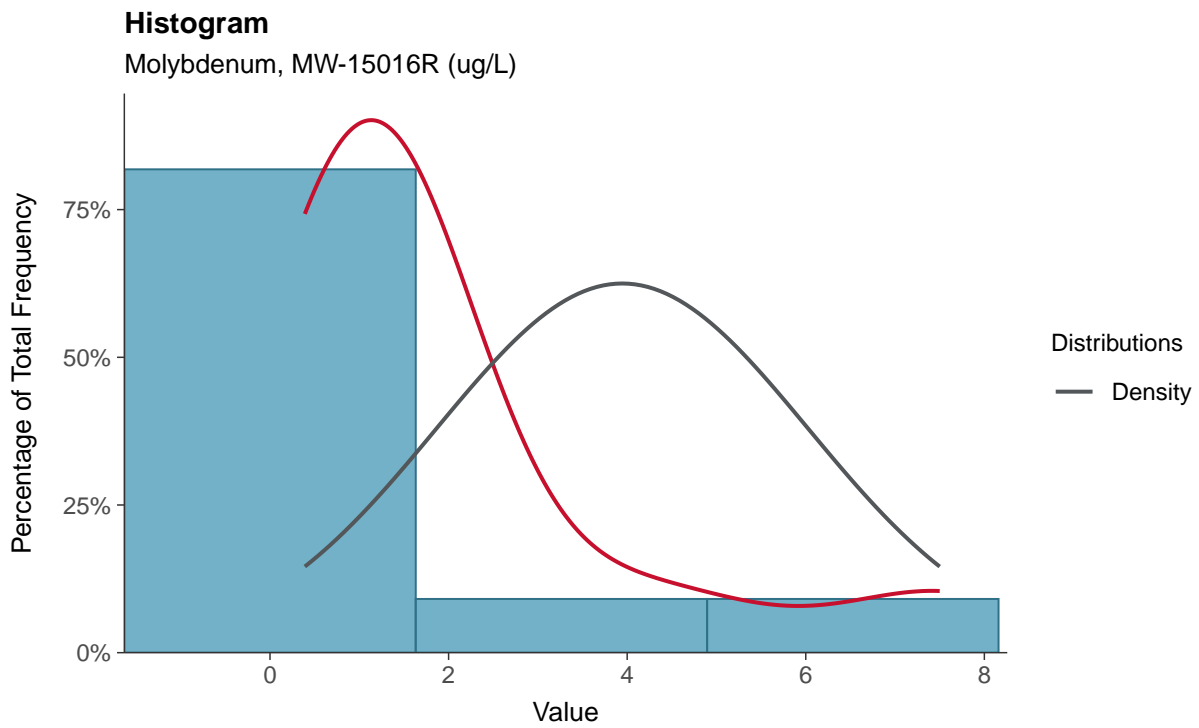
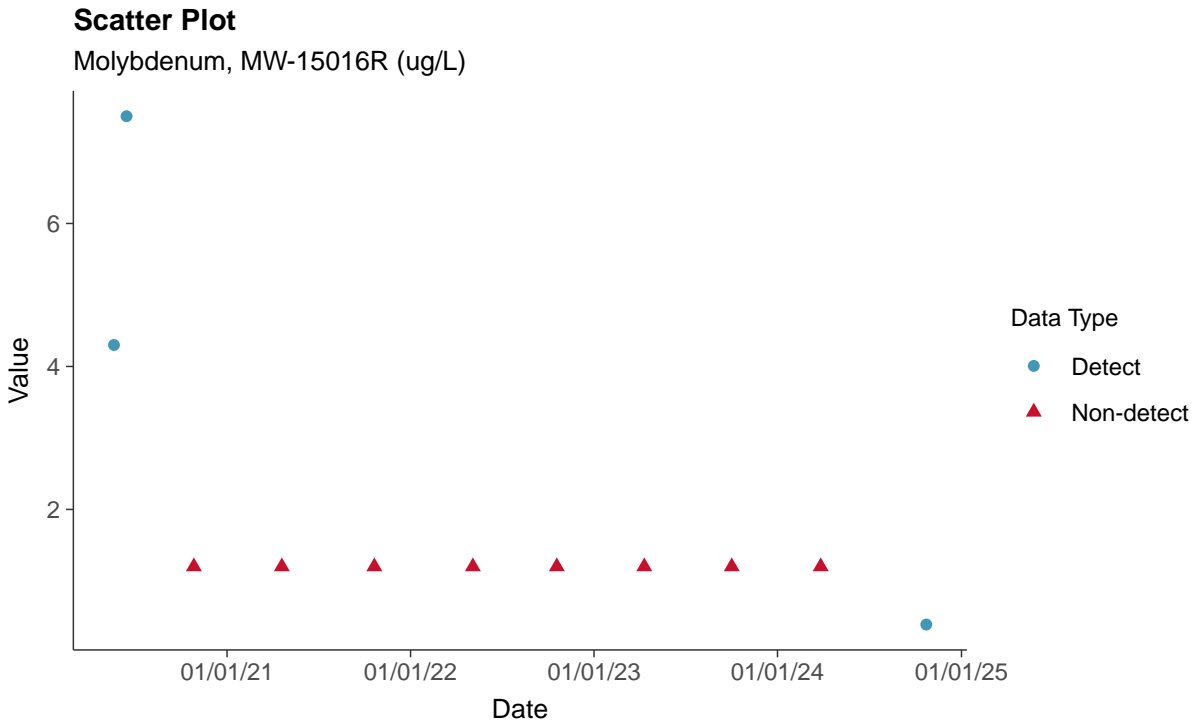
ID: 06_2_118





Appendix IV: Molybdenum, MW-15016R

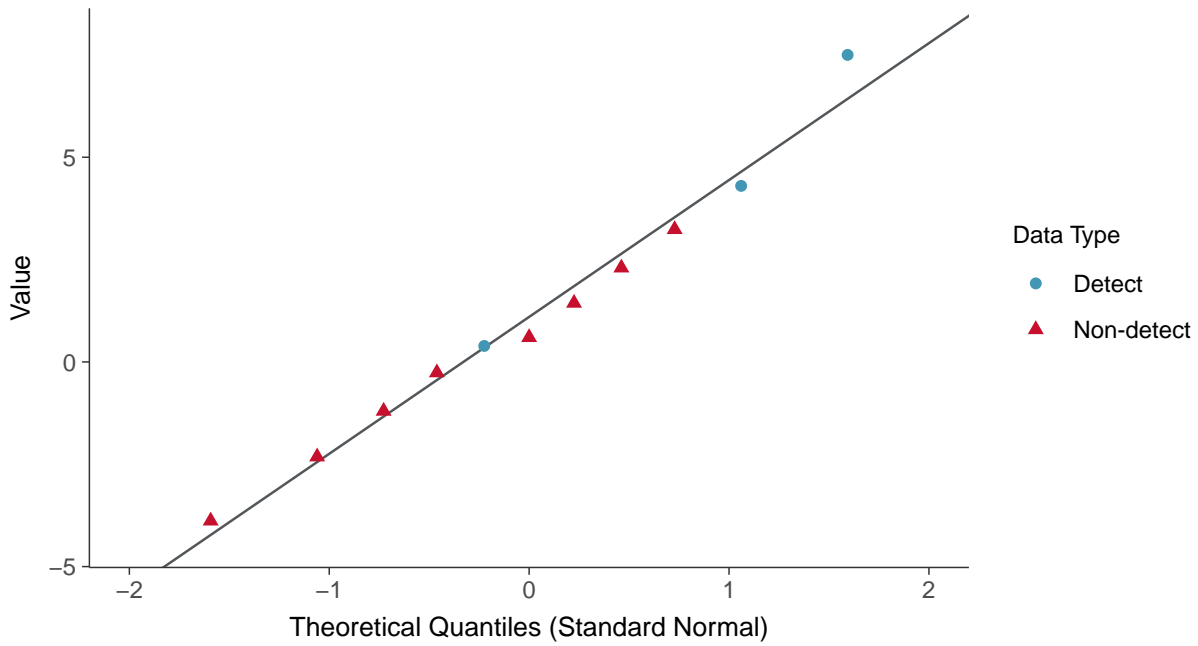
ID: 06_2_119





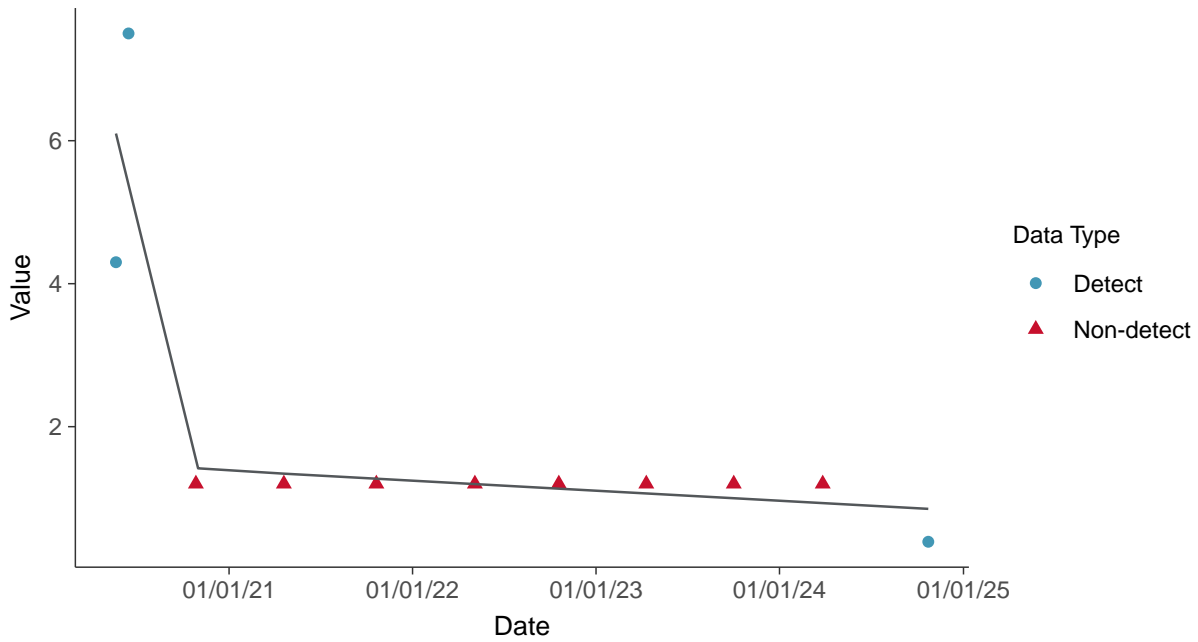
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

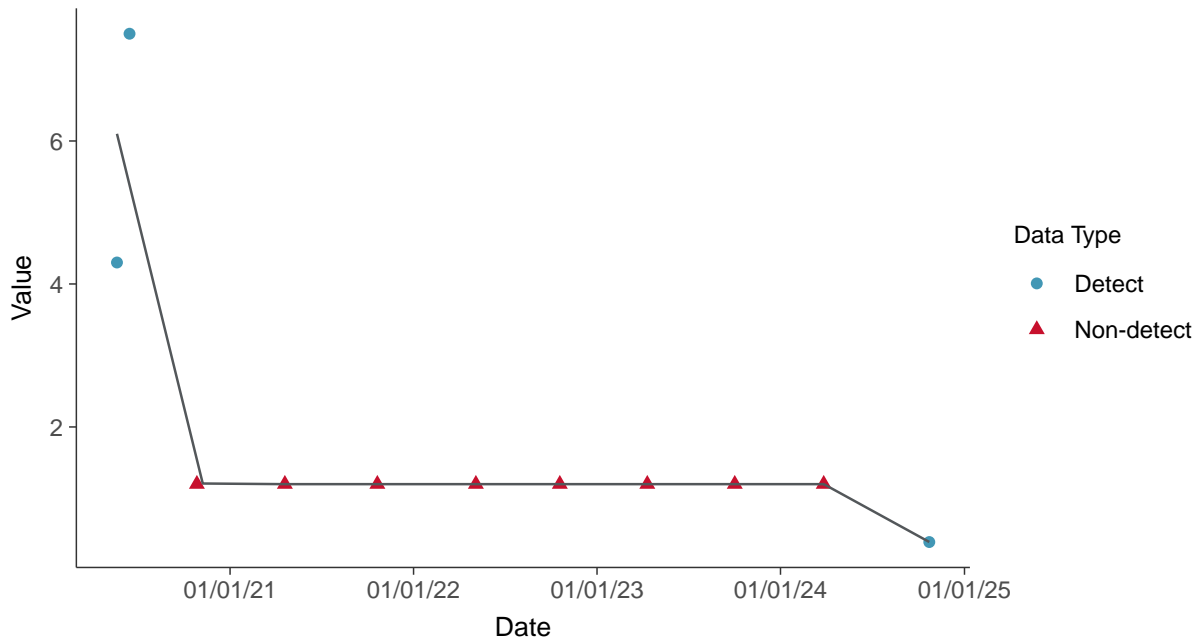
Molybdenum, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15016R (ug/L)



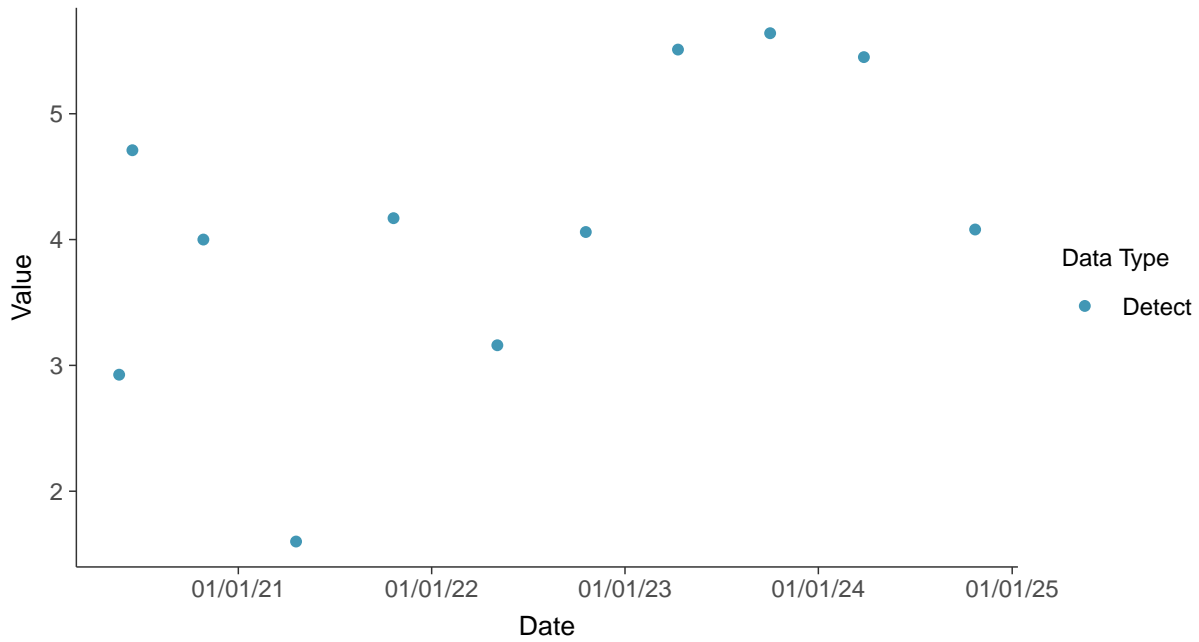


Appendix IV: Radium-226+228, MW-15016R

ID: 06_2_125

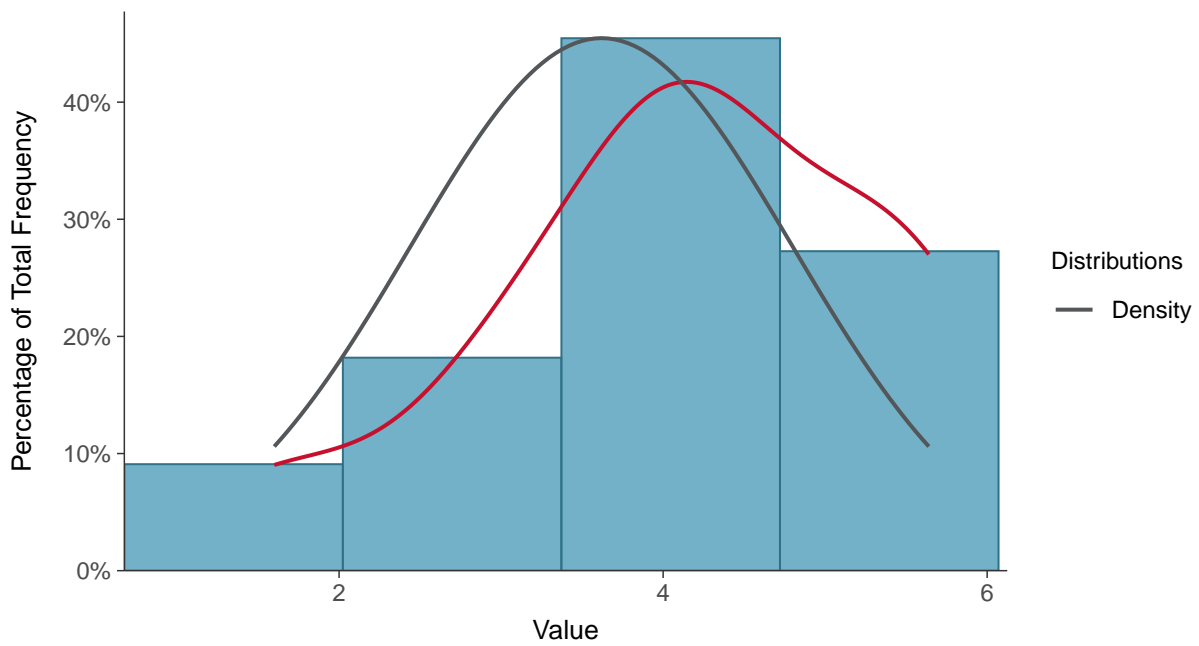
Scatter Plot

Radium-226+228, MW-15016R (pCi/L)



Histogram

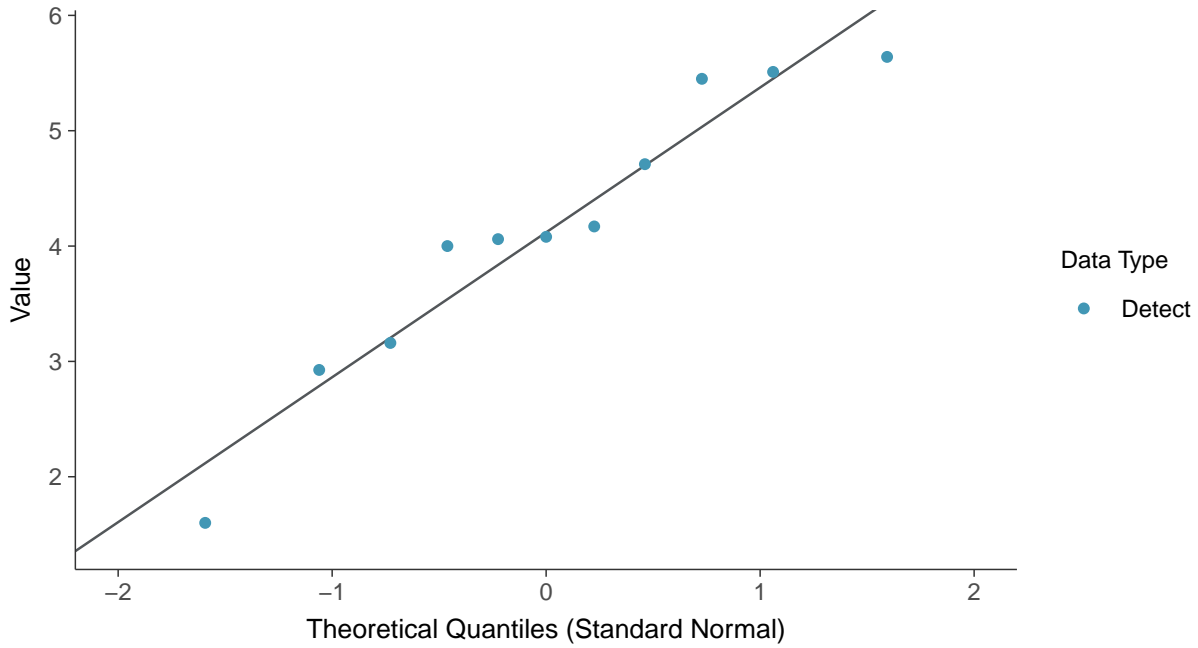
Radium-226+228, MW-15016R (pCi/L)





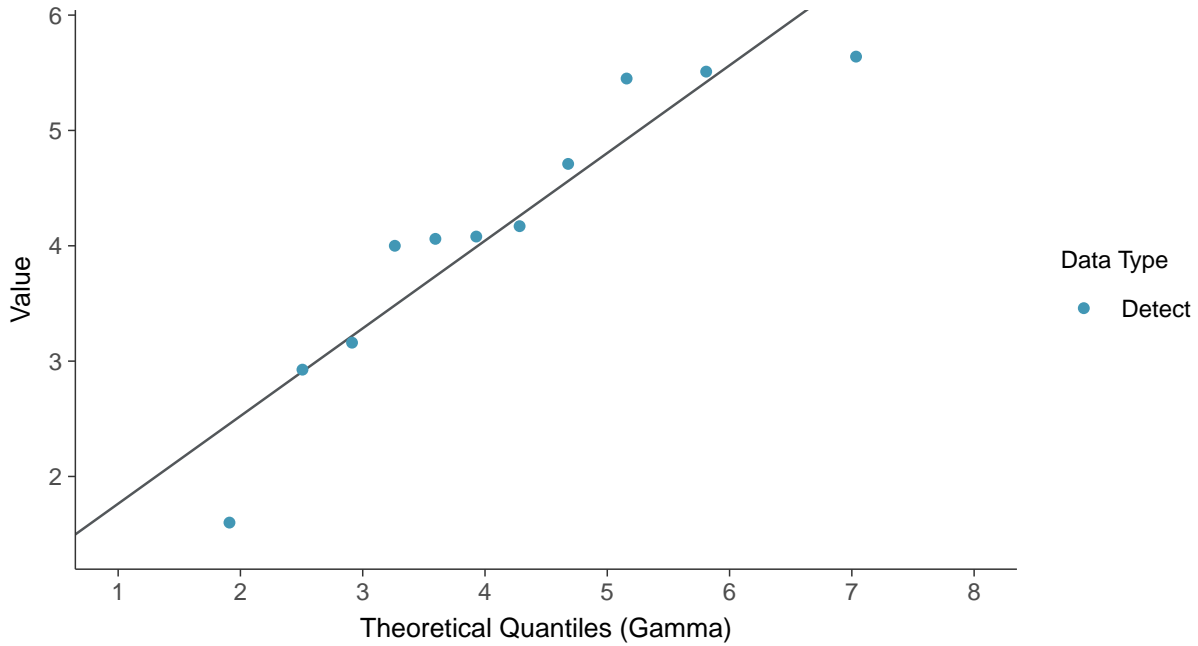
Normal Q-Q plot

Radium-226+228, MW-15016R (pCi/L)



Gamma Q-Q plot

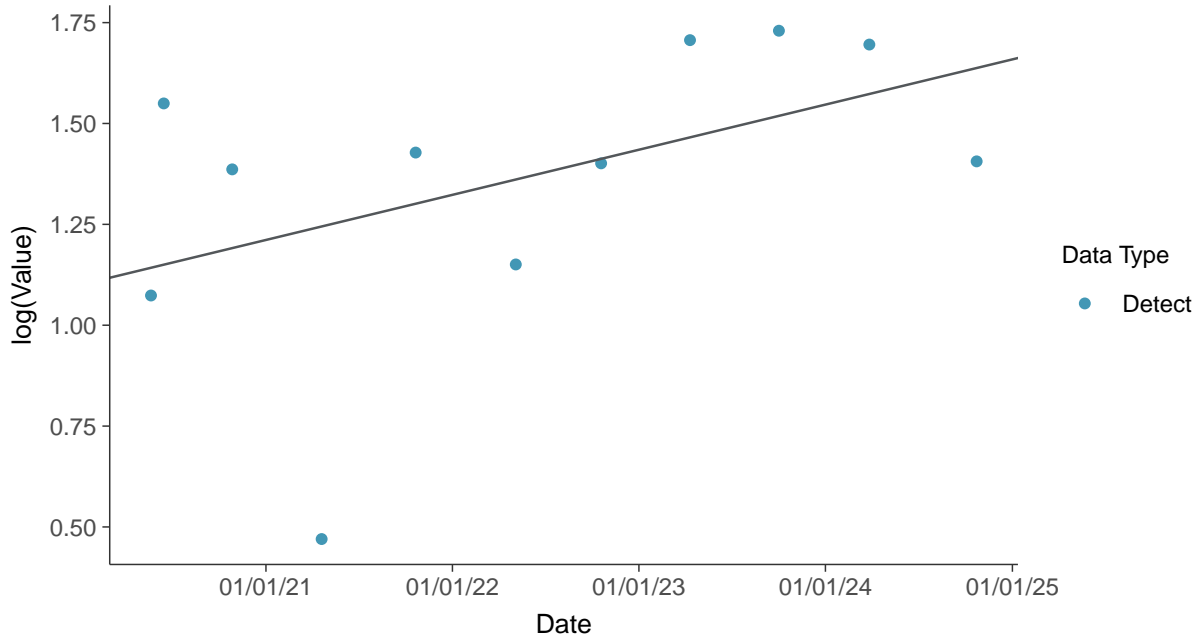
Radium-226+228, MW-15016R (pCi/L)





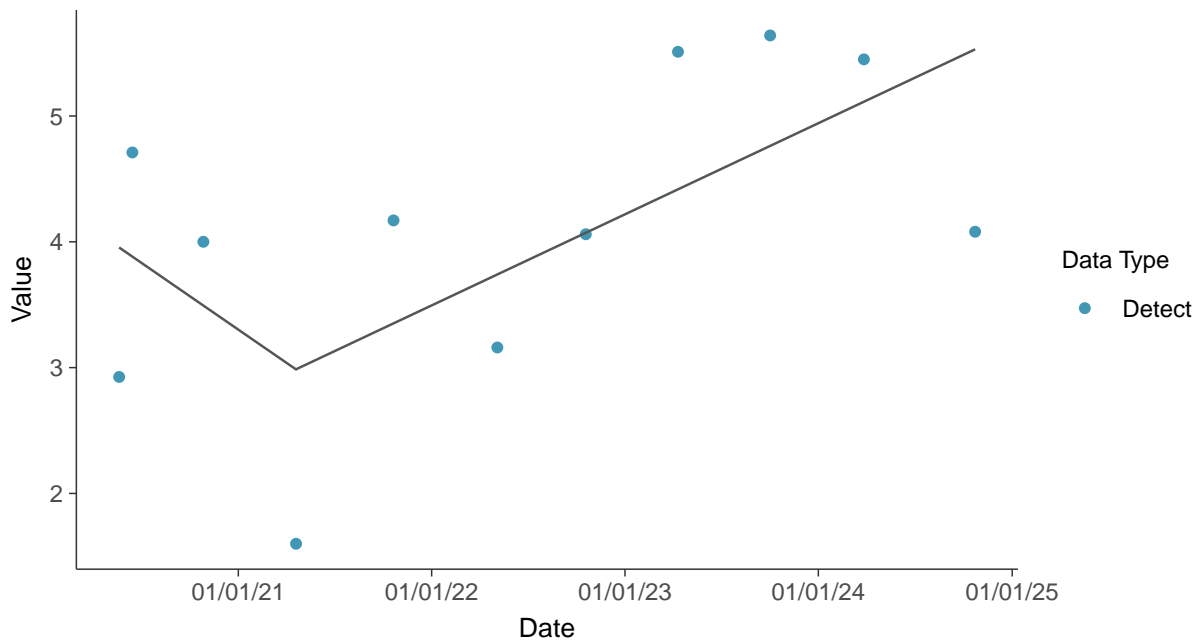
Trend Regression: Lognormal MLE

Radium-226+228, MW-15016R (pCi/L)



Trend Regression: Piecewise Linear-Linear

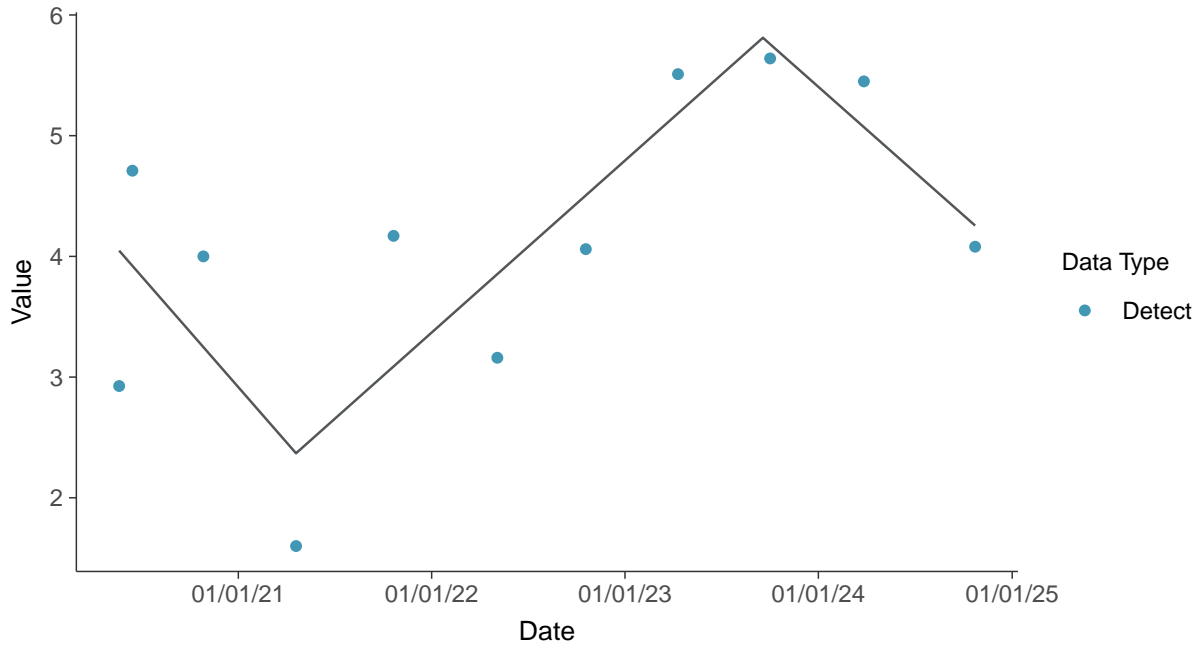
Radium-226+228, MW-15016R (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-15016R (pCi/L)



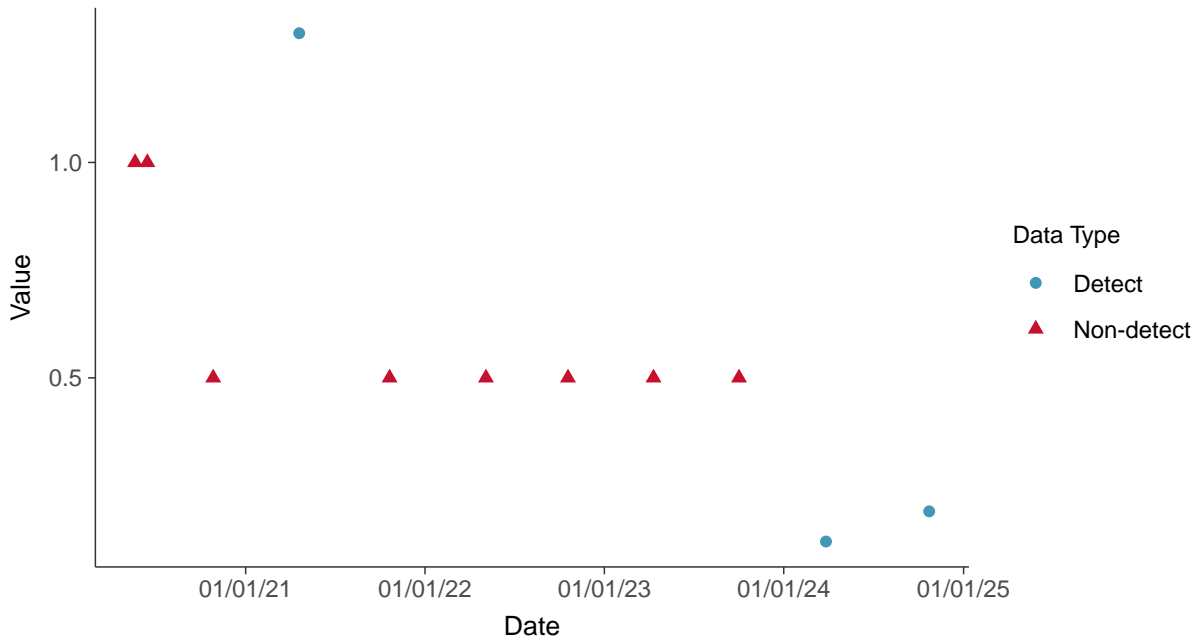


Appendix IV: Selenium, MW-15016R

ID: 06_2_127

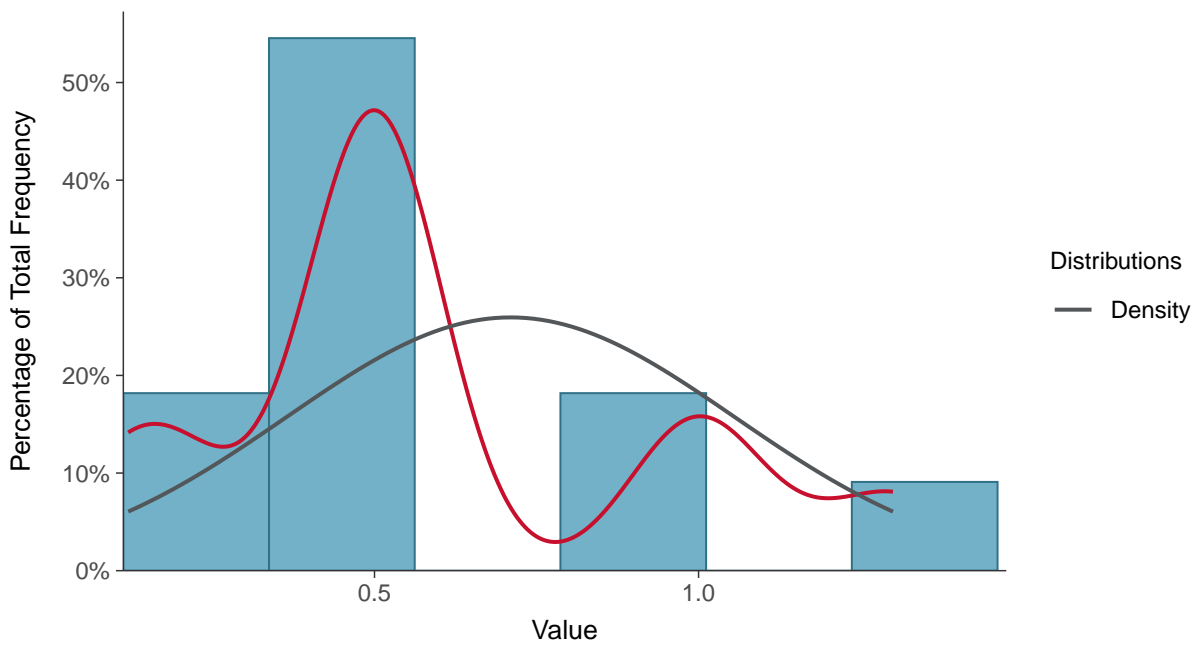
Scatter Plot

Selenium, MW-15016R (ug/L)



Histogram

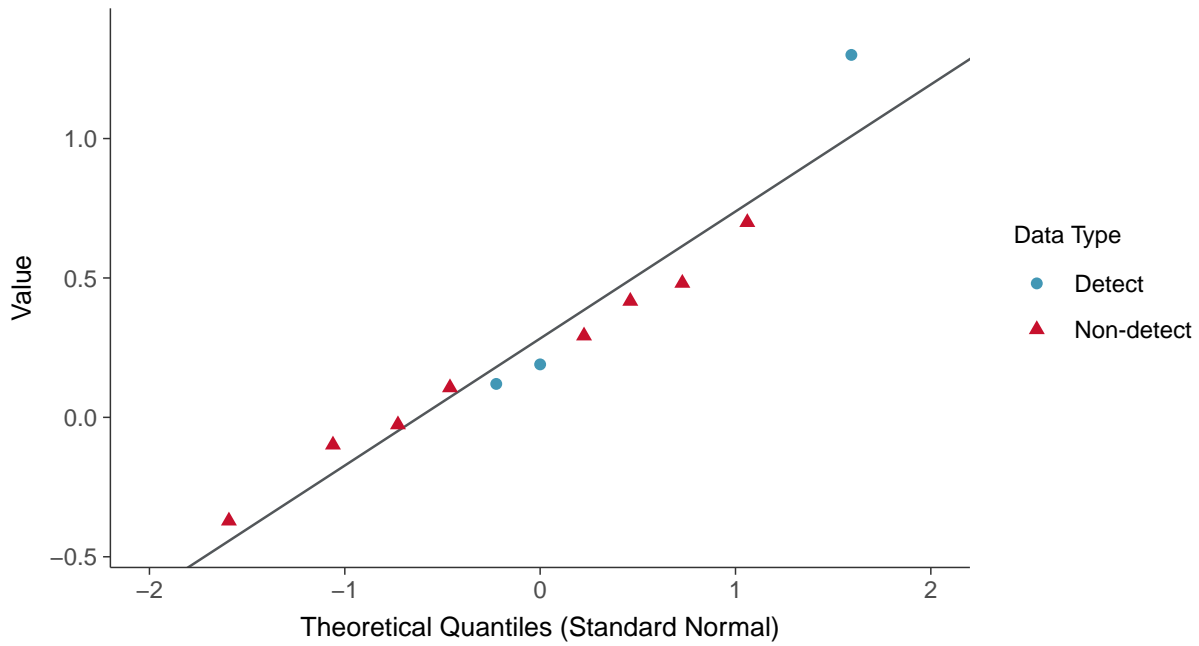
Selenium, MW-15016R (ug/L)





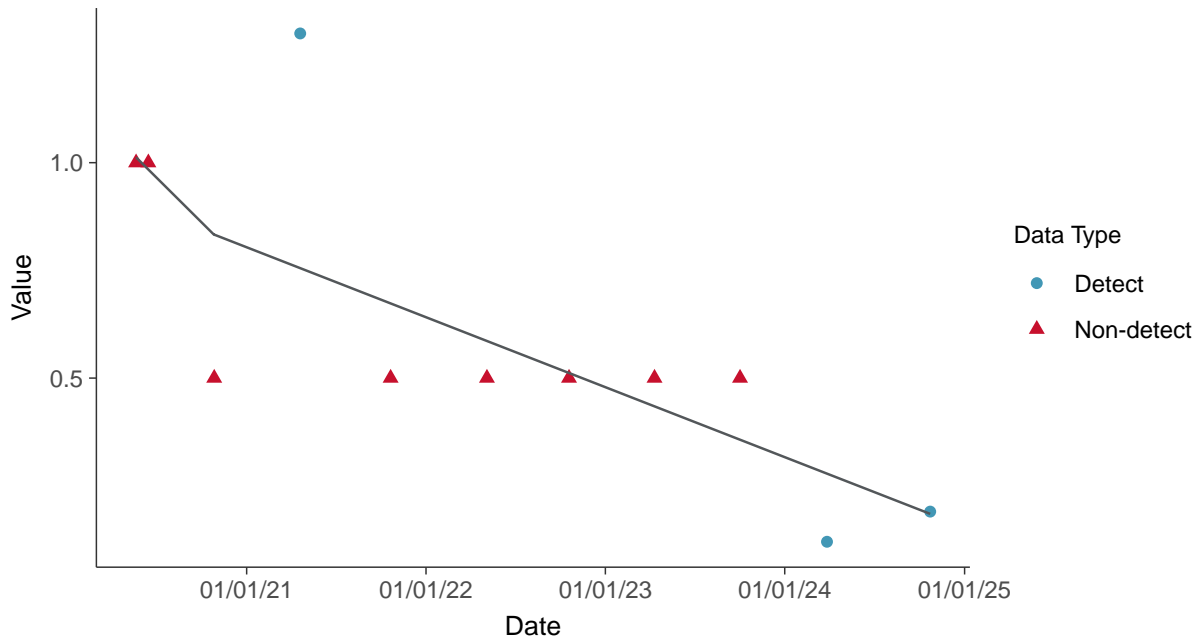
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15016R (ug/L)



Trend Regression: Piecewise Linear-Linear

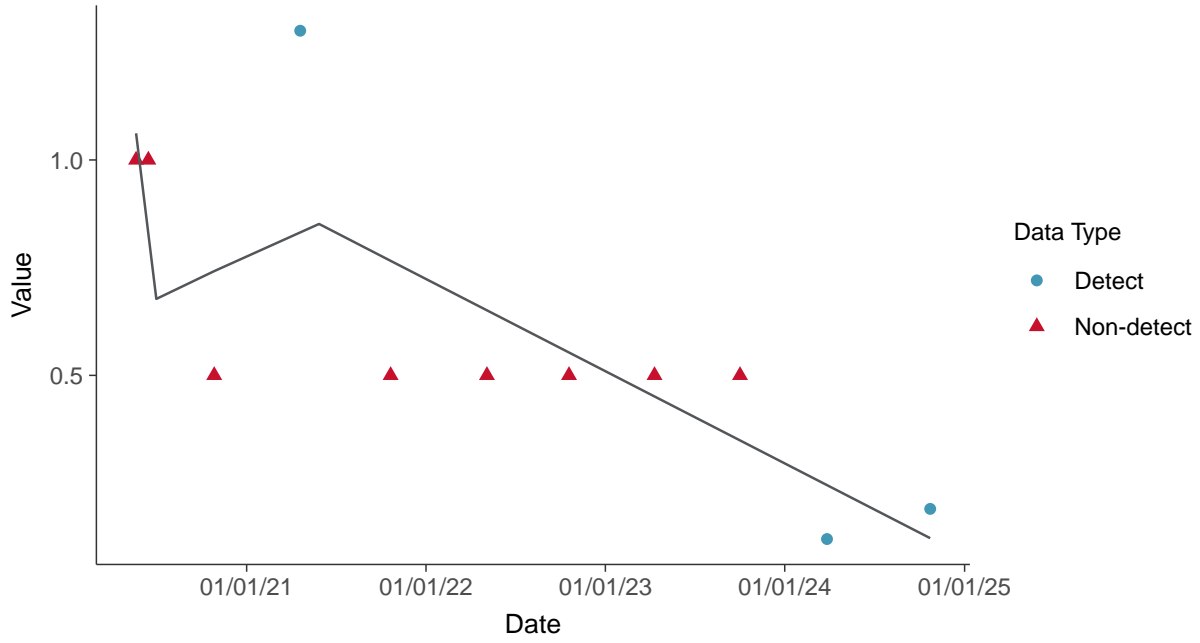
Selenium, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-15016R (ug/L)



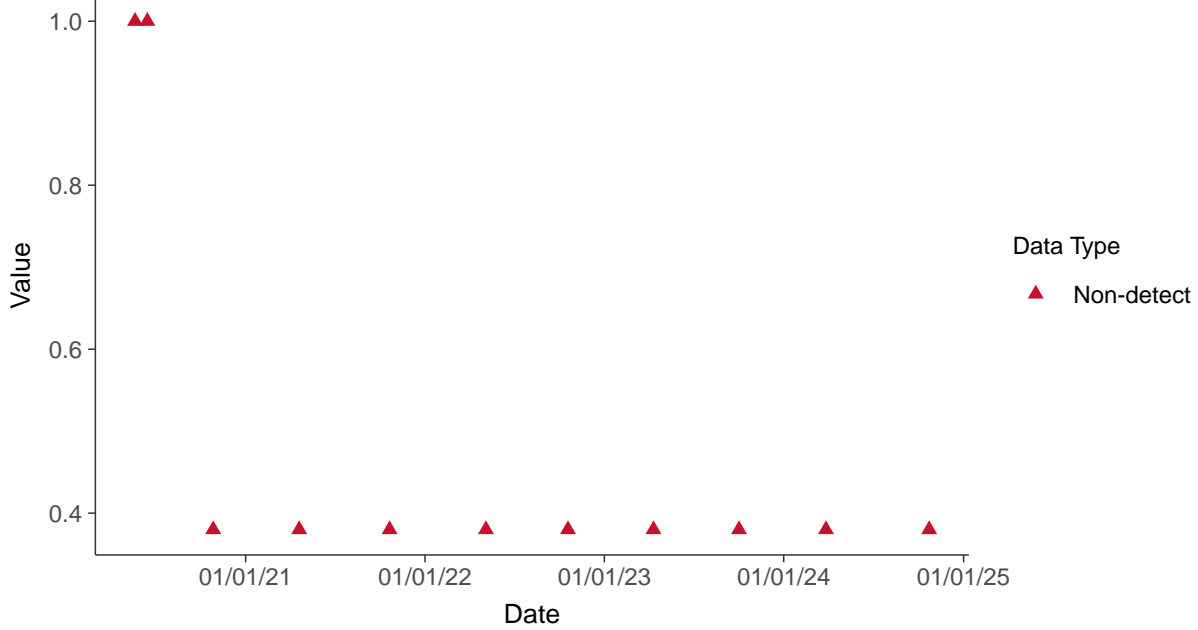


Appendix IV: Thallium, MW-15016R

ID: 06_2_131

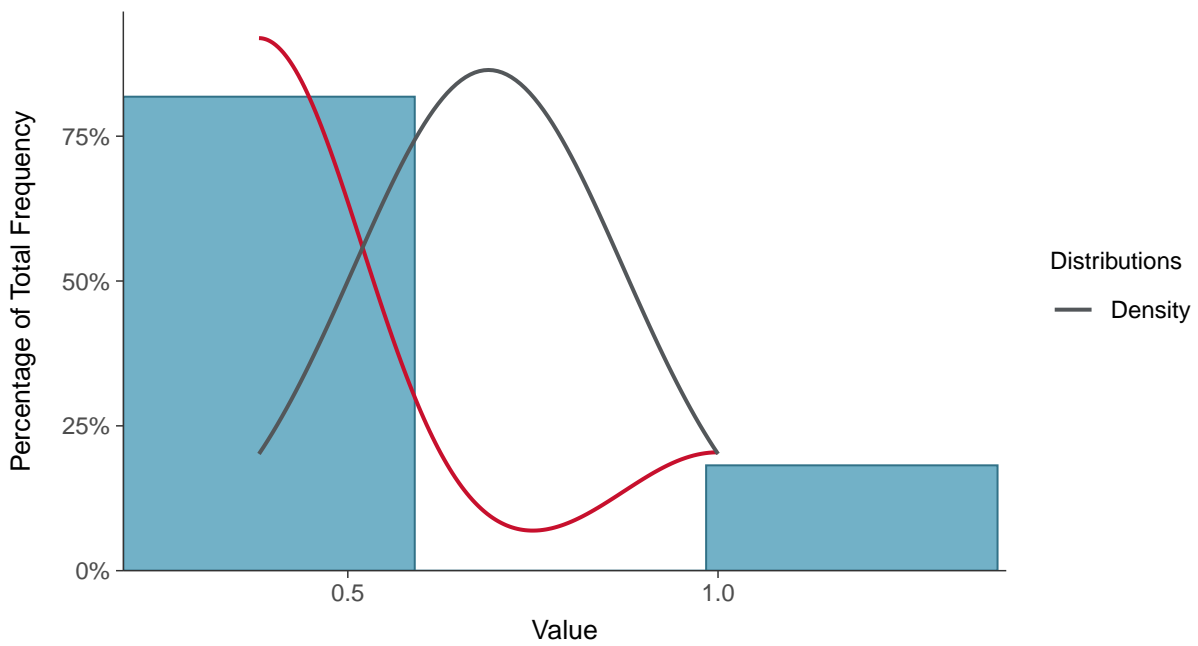
Scatter Plot

Thallium, MW-15016R (ug/L)



Histogram

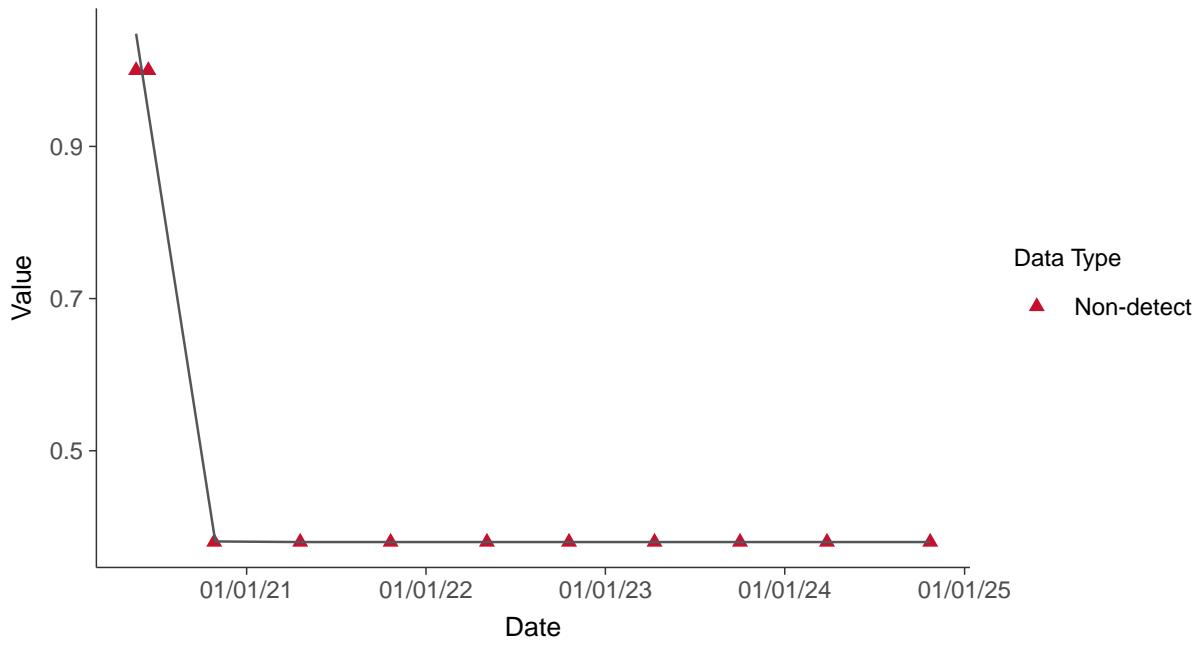
Thallium, MW-15016R (ug/L)





Trend Regression: Piecewise Linear-Linear

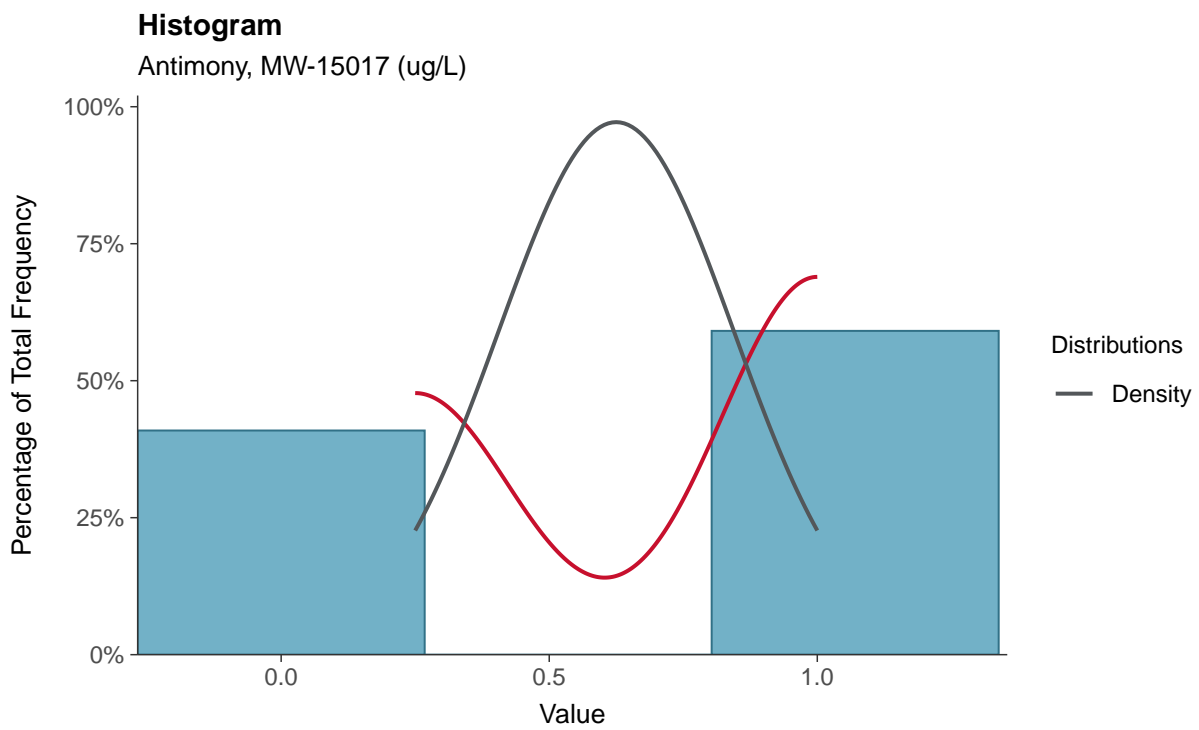
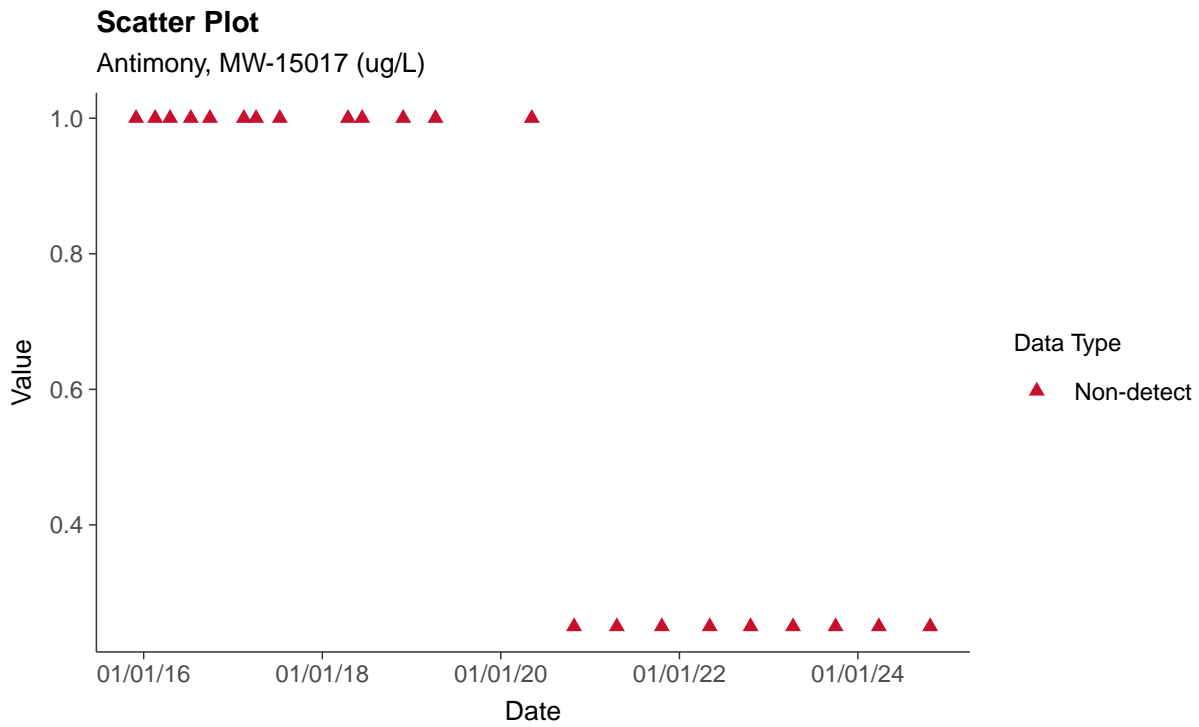
Thallium, MW-15016R (ug/L)





Appendix IV: Antimony, MW-15017

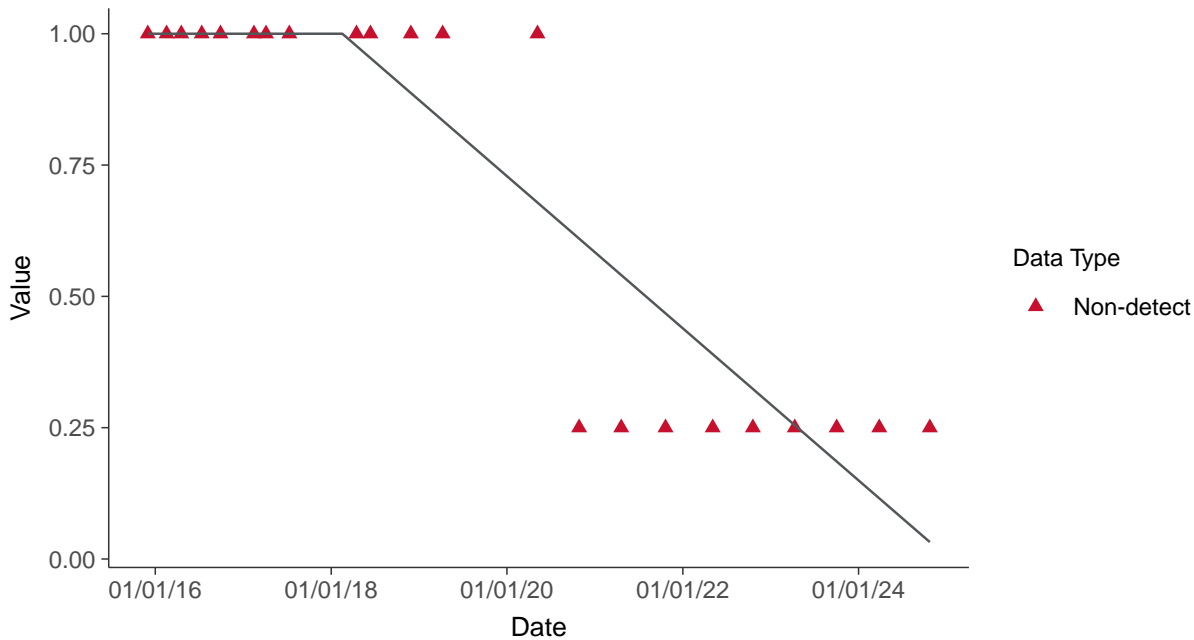
ID: 07_2_101





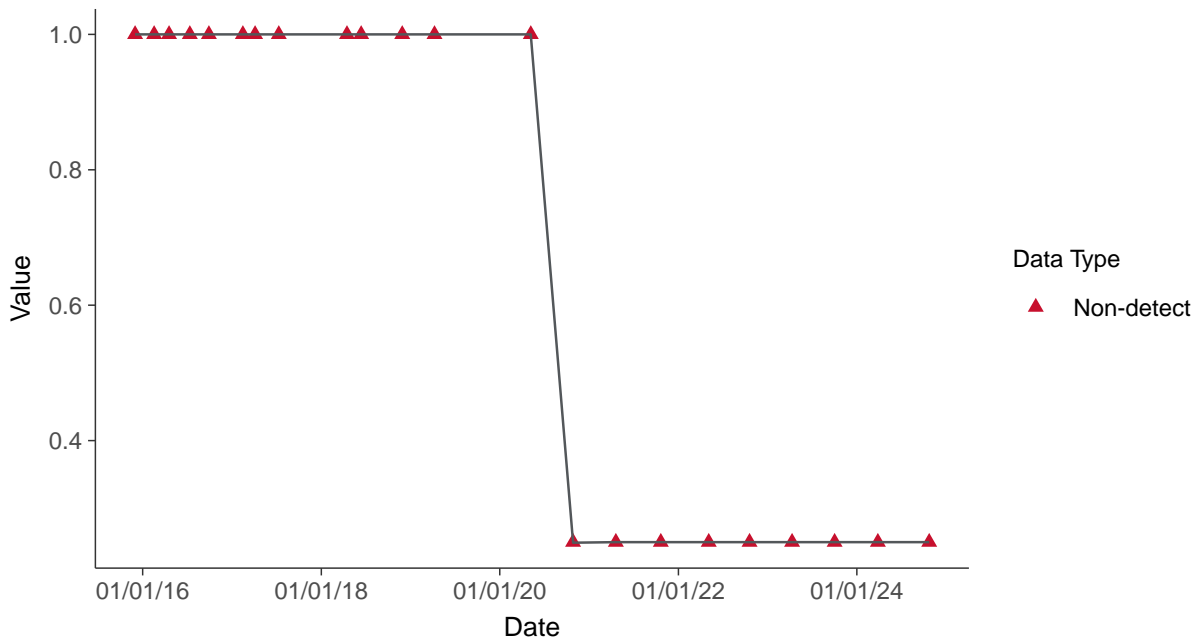
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15017 (ug/L)



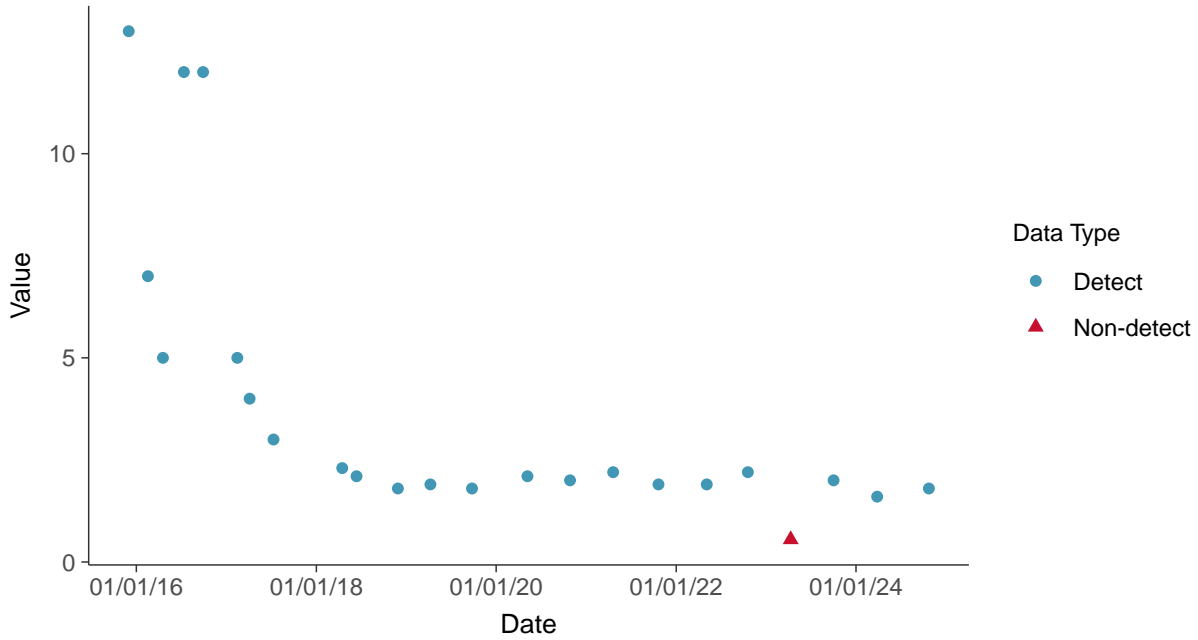


Appendix IV: Arsenic, MW-15017

ID: 07_2_102

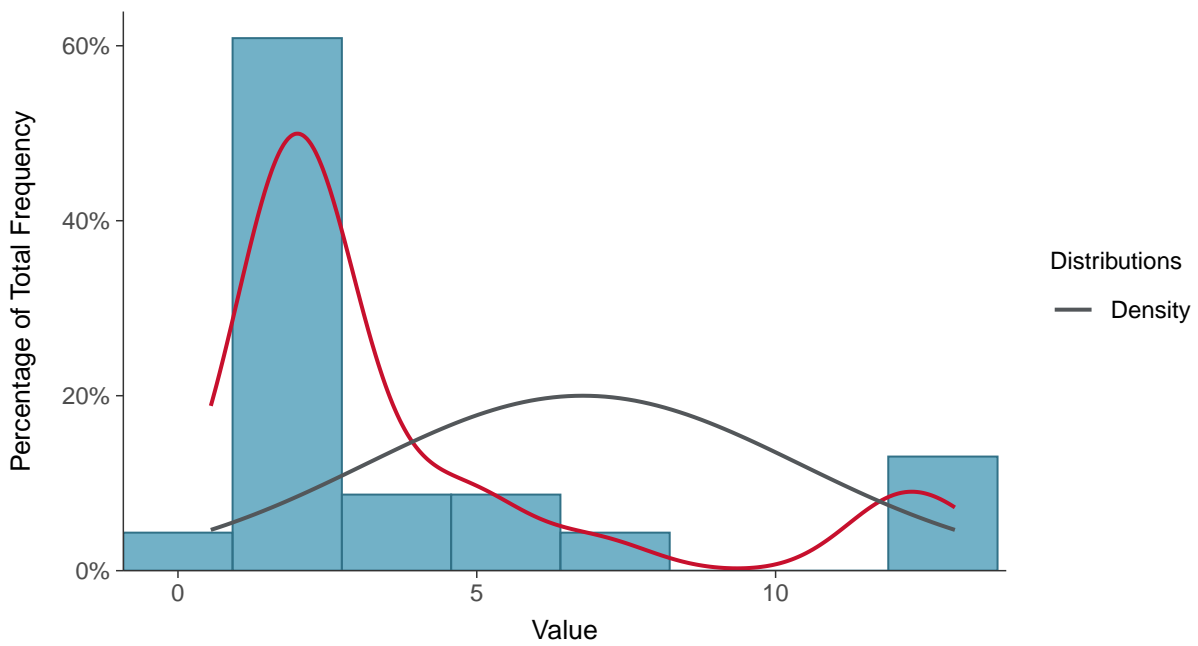
Scatter Plot

Arsenic, MW-15017 (ug/L)



Histogram

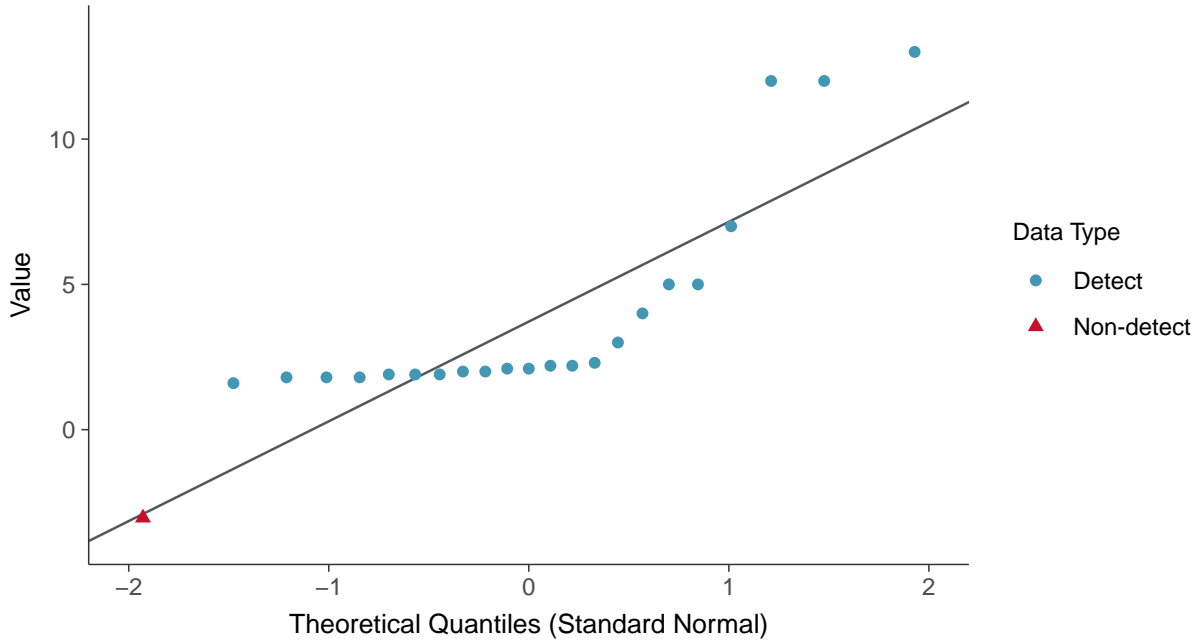
Arsenic, MW-15017 (ug/L)





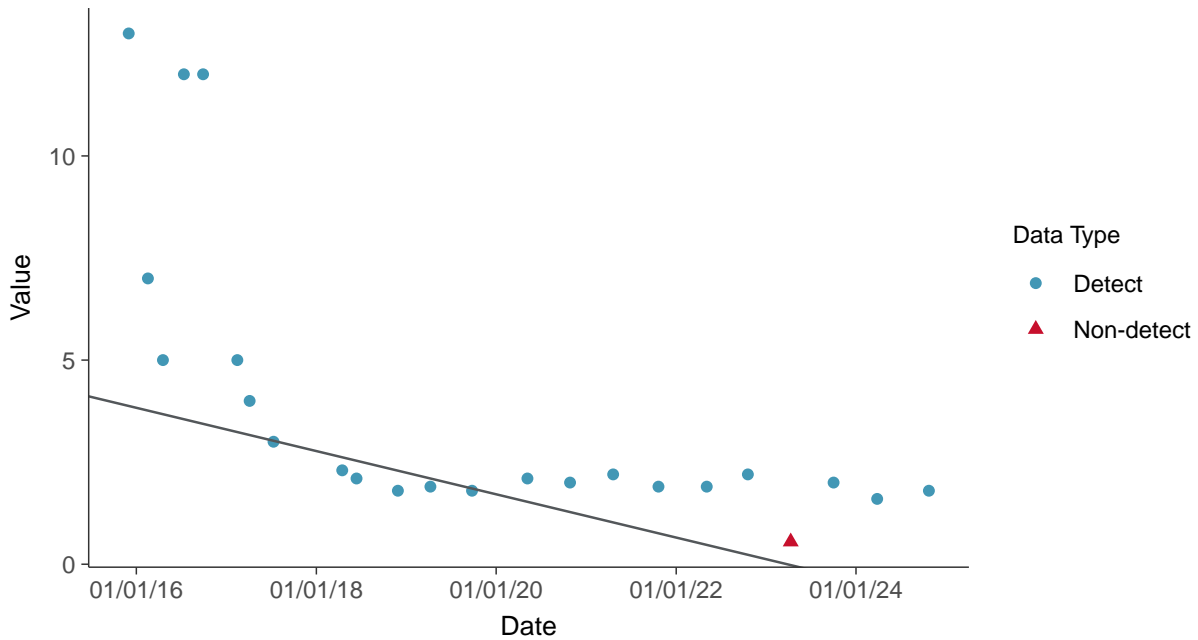
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15017 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

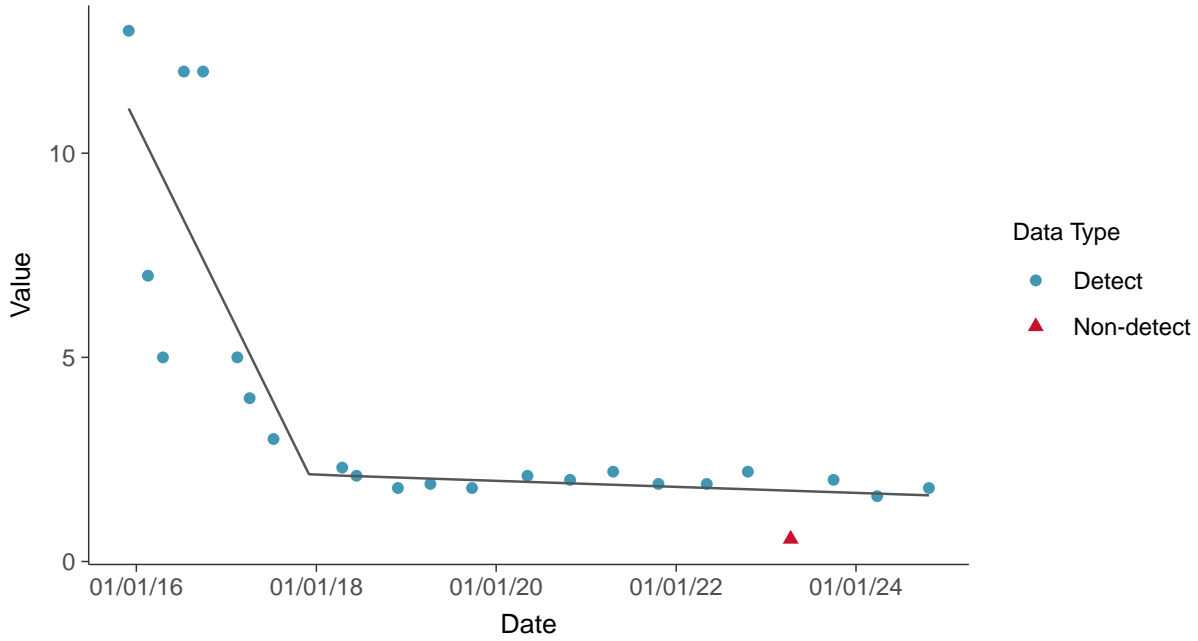
Arsenic, MW-15017 (ug/L)





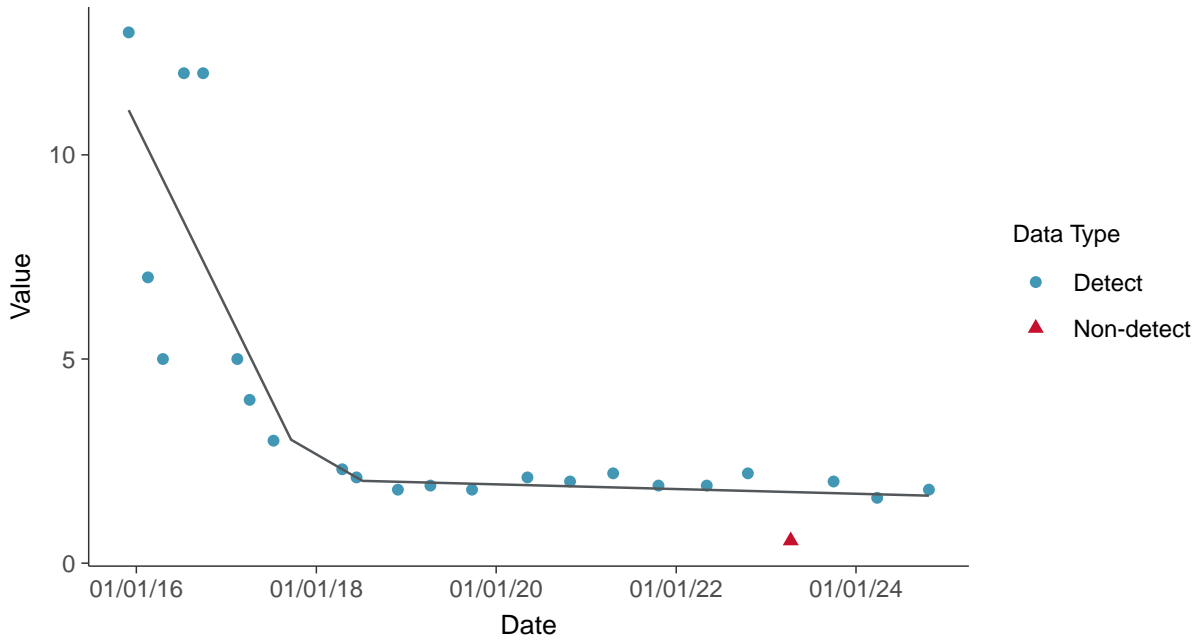
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15017 (ug/L)



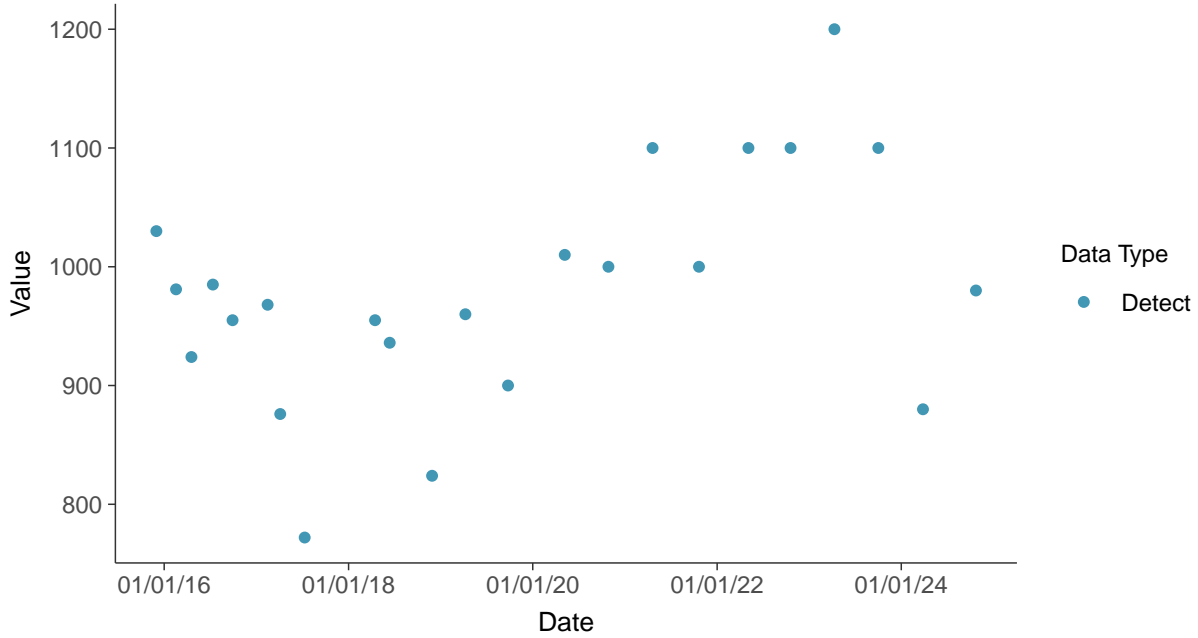


Appendix IV: Barium, MW-15017

ID: 07_2_103

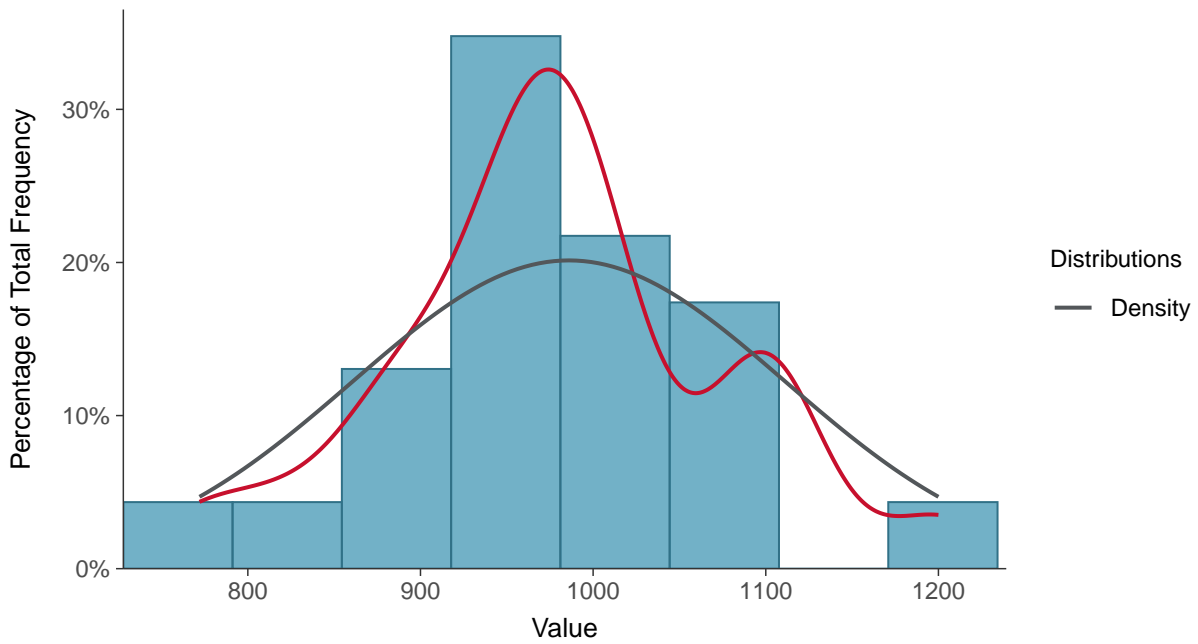
Scatter Plot

Barium, MW-15017 (ug/L)



Histogram

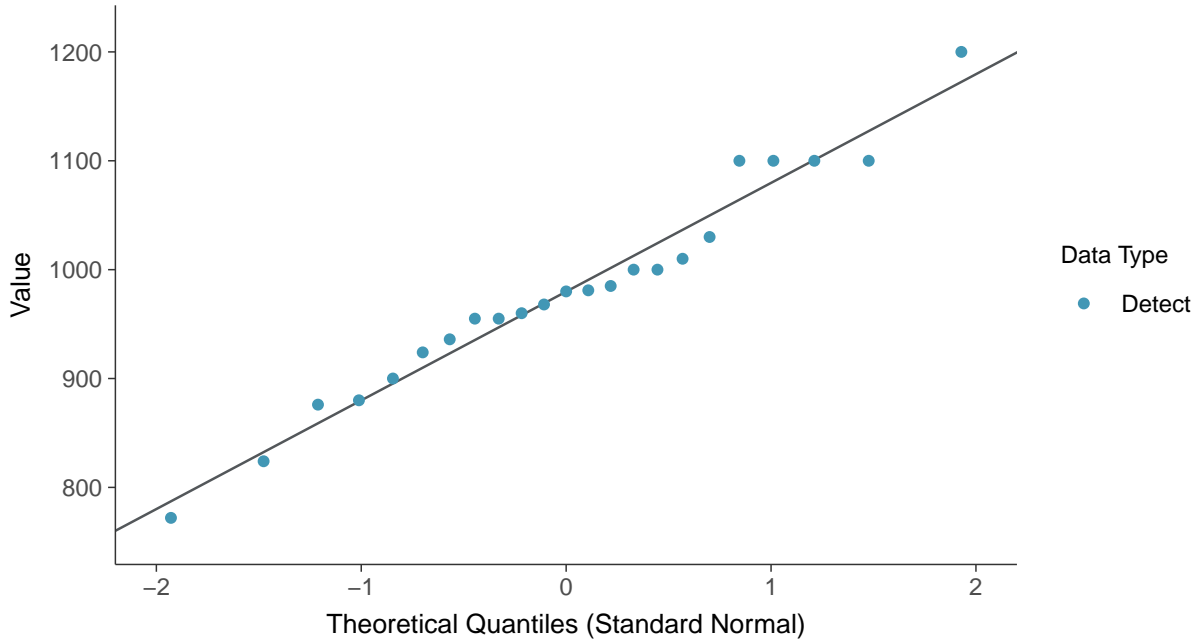
Barium, MW-15017 (ug/L)





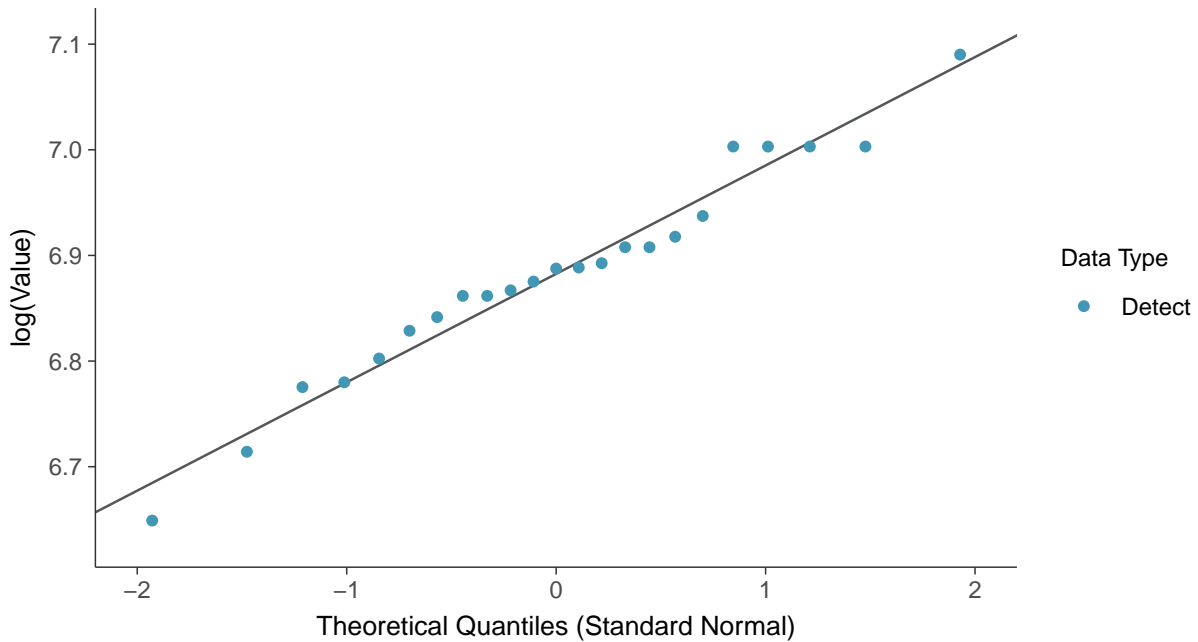
Normal Q-Q plot

Barium, MW-15017 (ug/L)



Lognormal Q-Q plot

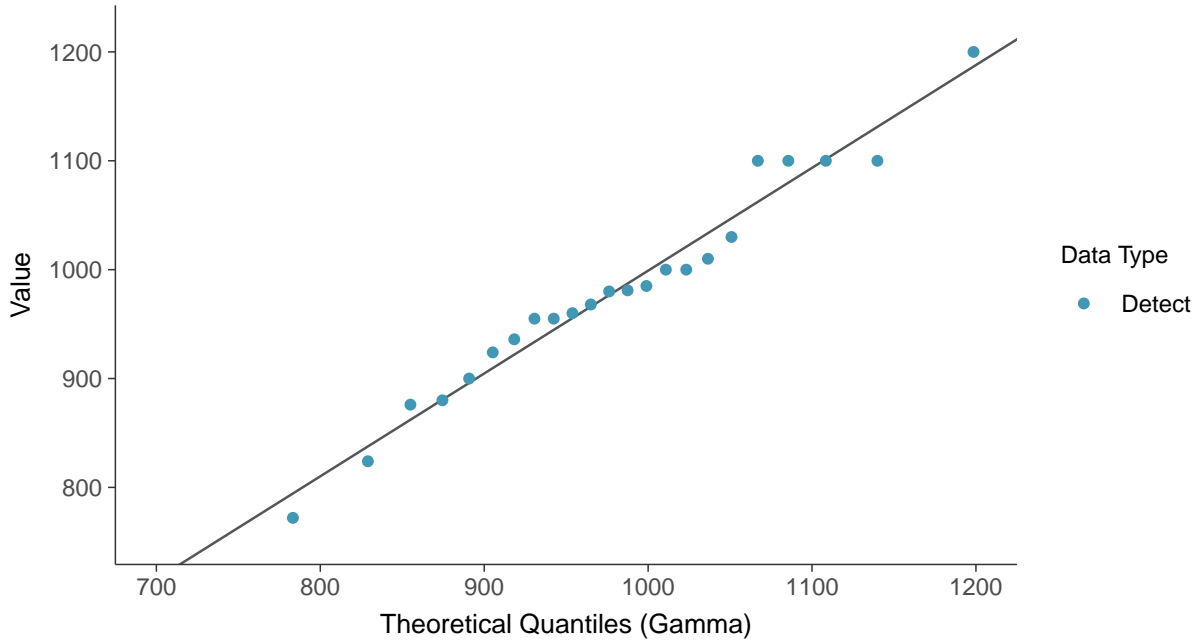
Barium, MW-15017 (ug/L)





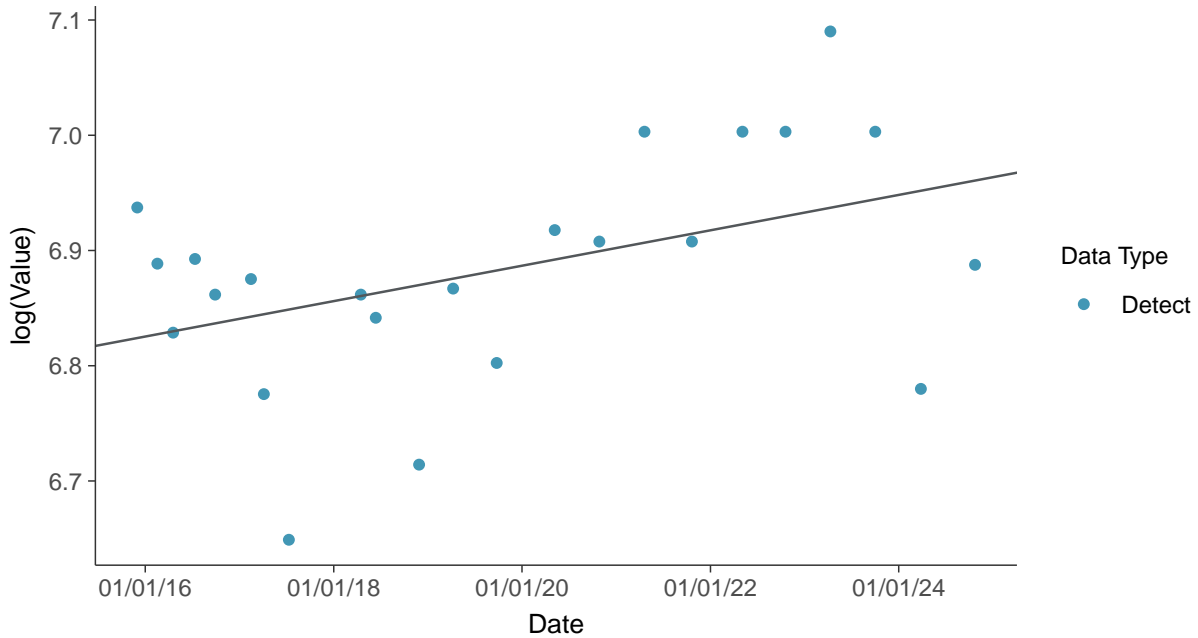
Gamma Q-Q plot

Barium, MW-15017 (ug/L)



Trend Regression: Lognormal MLE

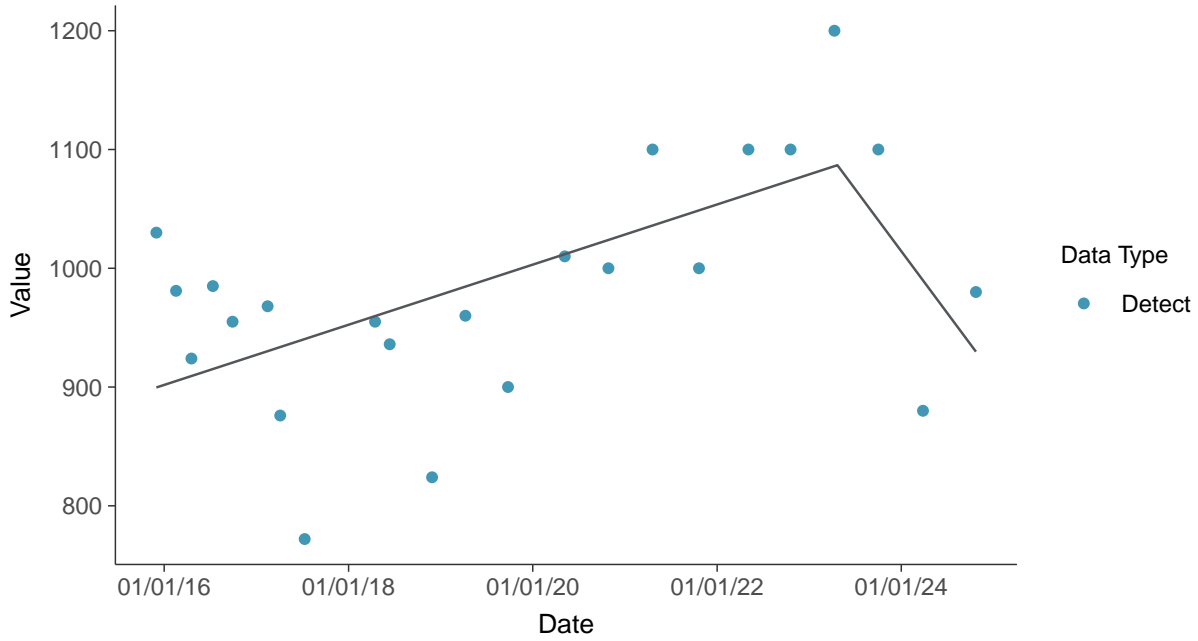
Barium, MW-15017 (ug/L)





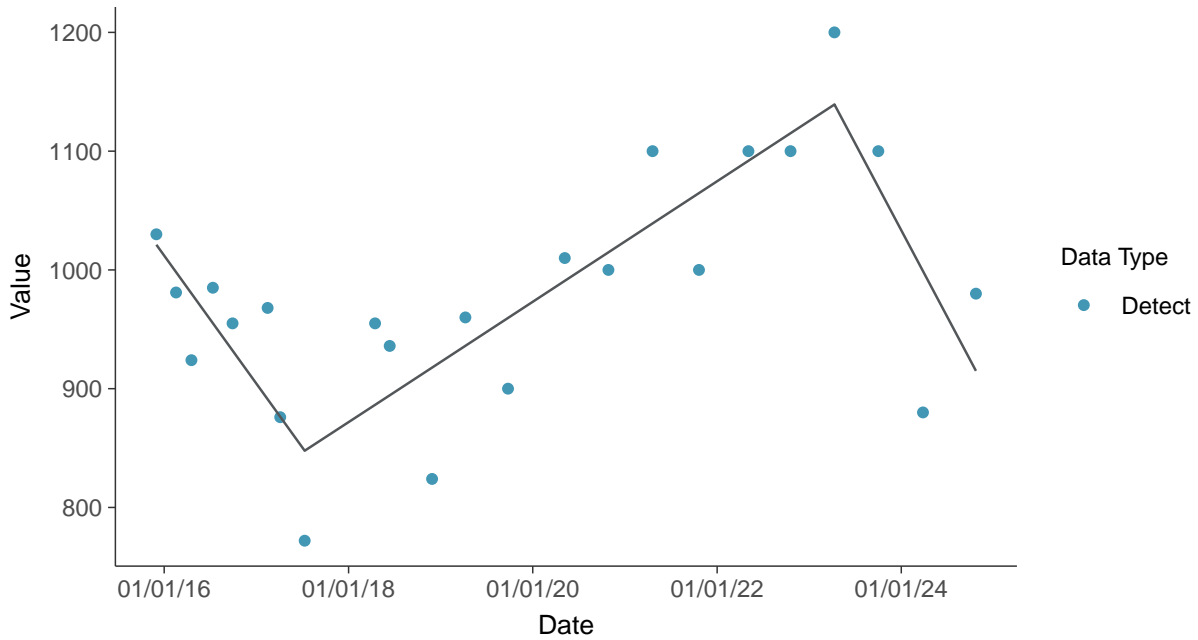
Trend Regression: Piecewise Linear-Linear

Barium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

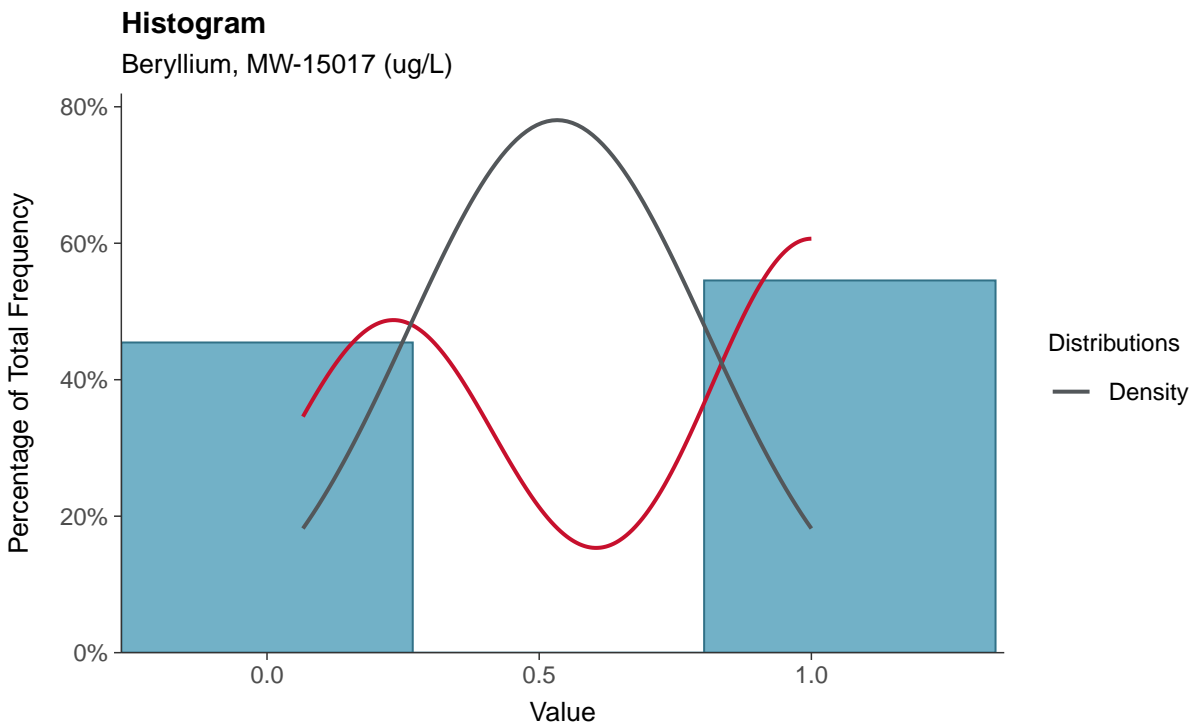
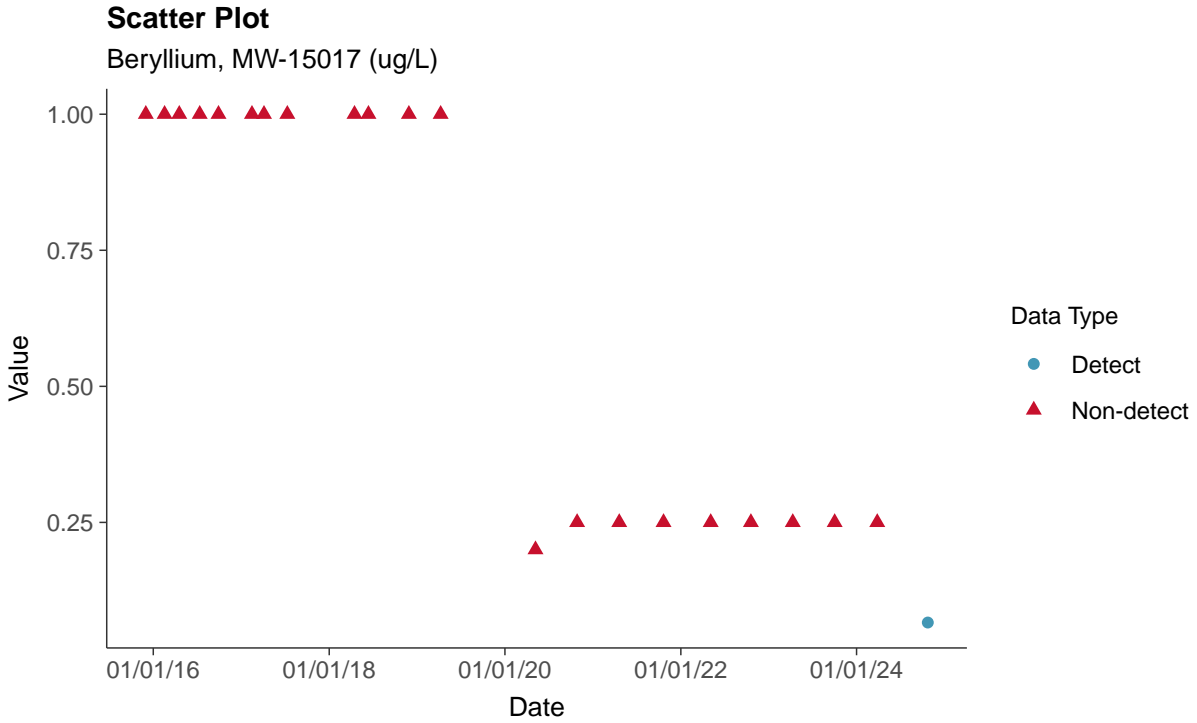
Barium, MW-15017 (ug/L)





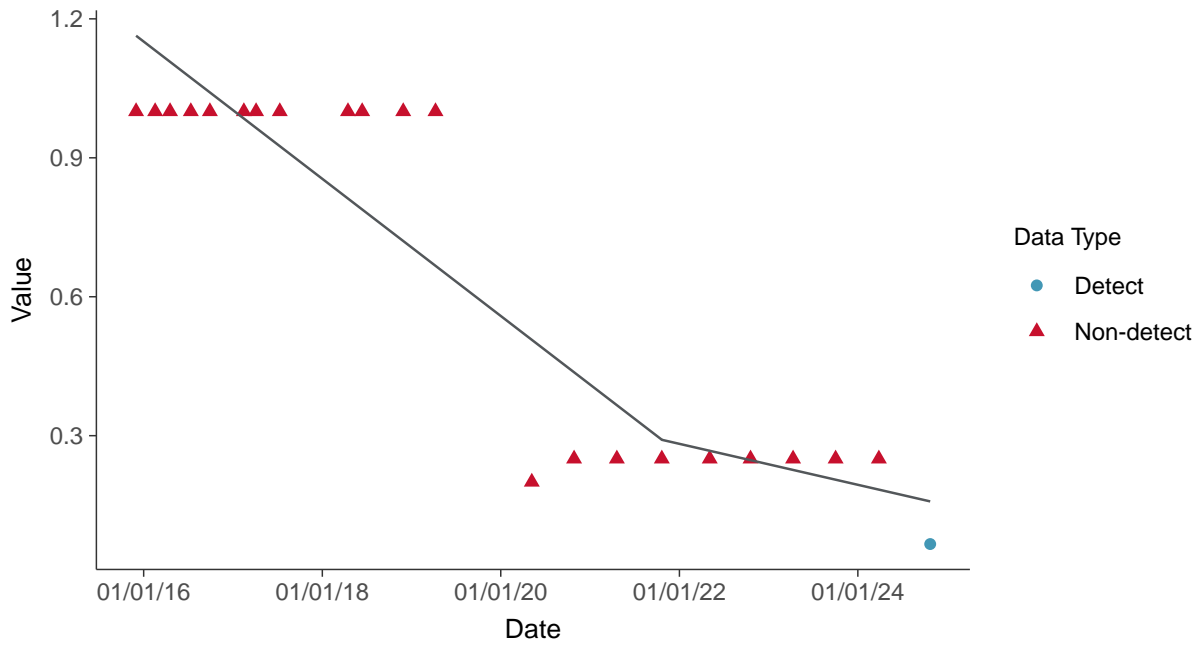
Appendix IV: Beryllium, MW-15017

ID: 07_2_104

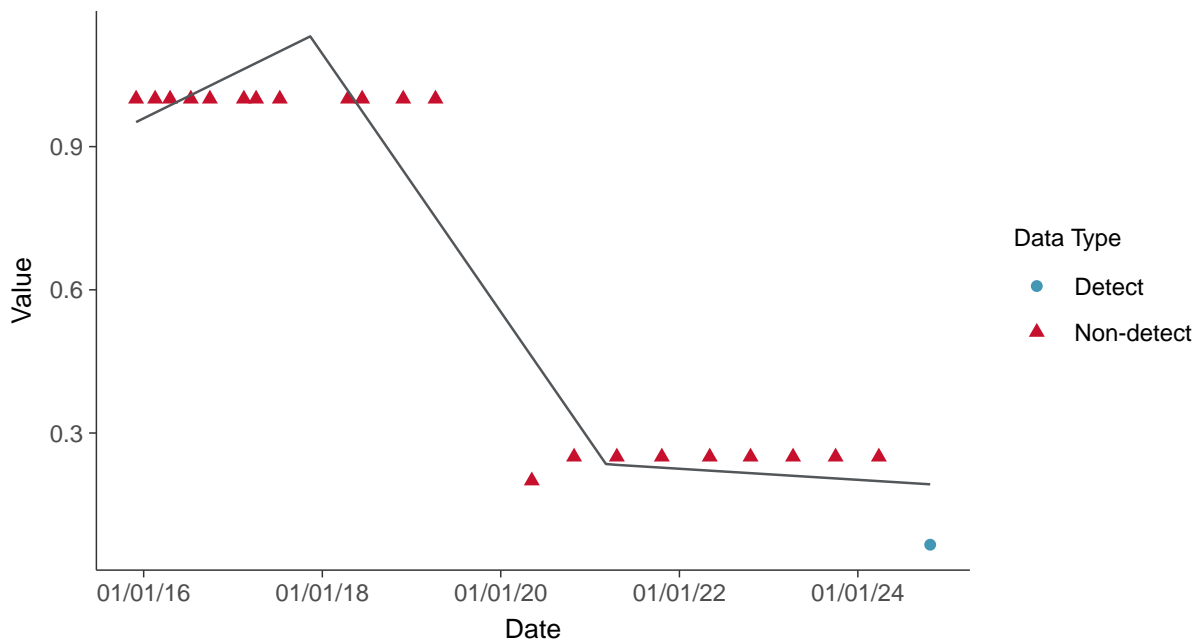




Trend Regression: Piecewise Linear-Linear
Beryllium, MW-15017 (ug/L)



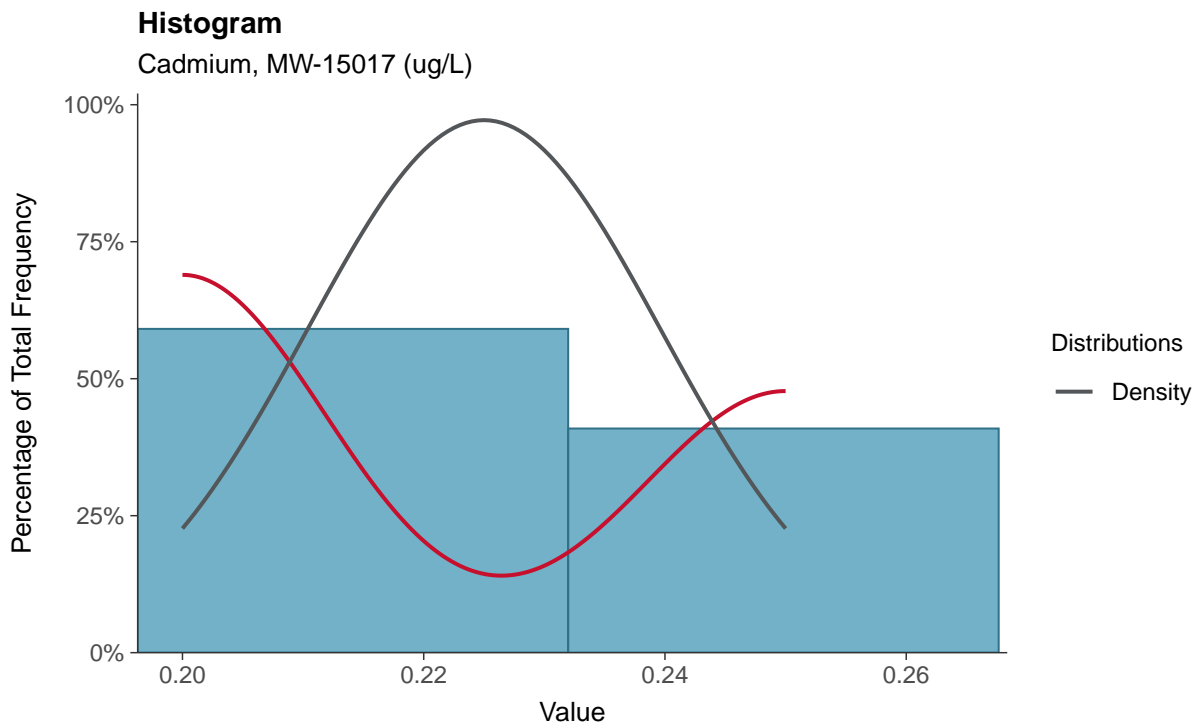
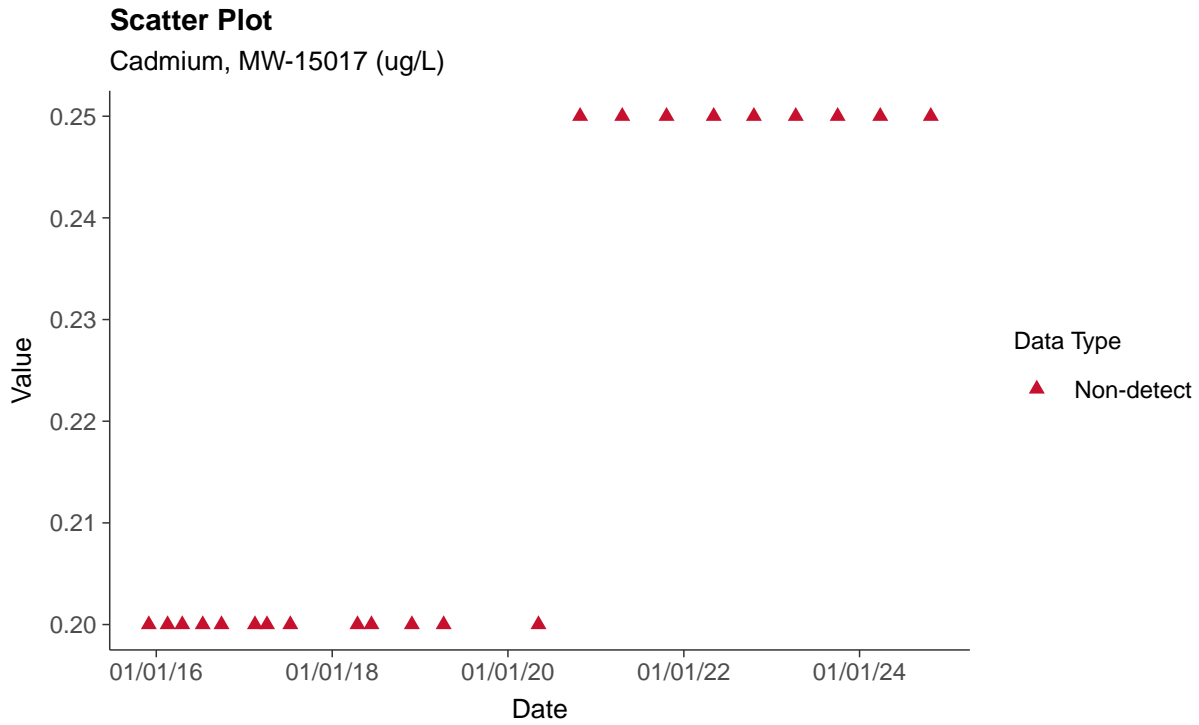
Trend Regression: Piecewise Linear-Linear-Linear
Beryllium, MW-15017 (ug/L)





Appendix IV: Cadmium, MW-15017

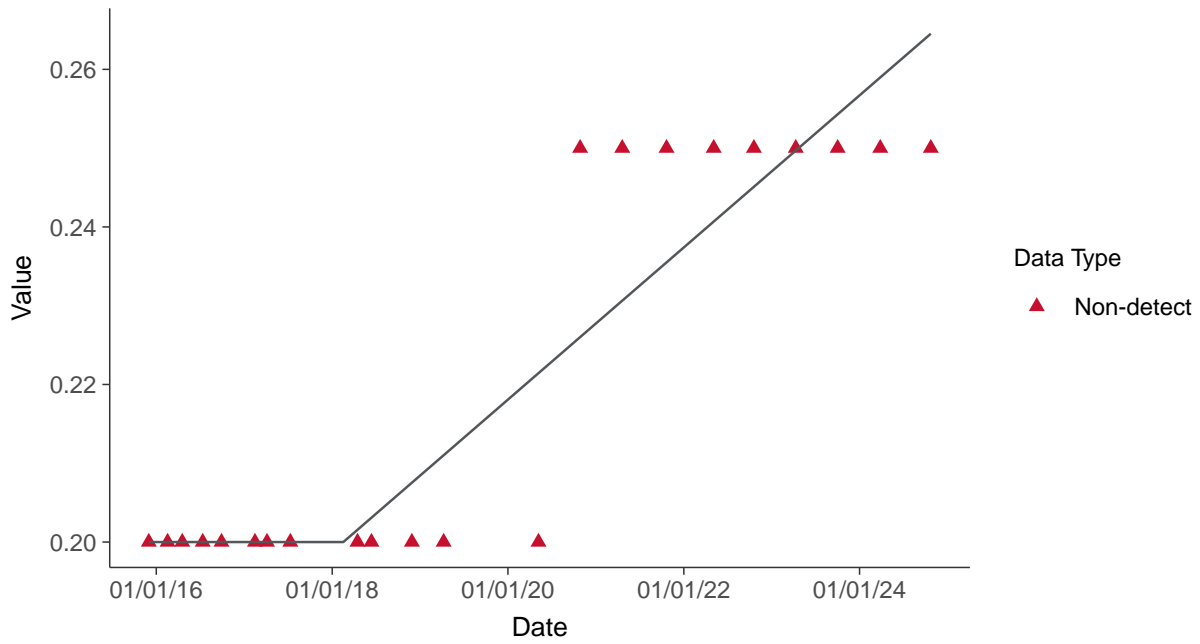
ID: 07_2_106





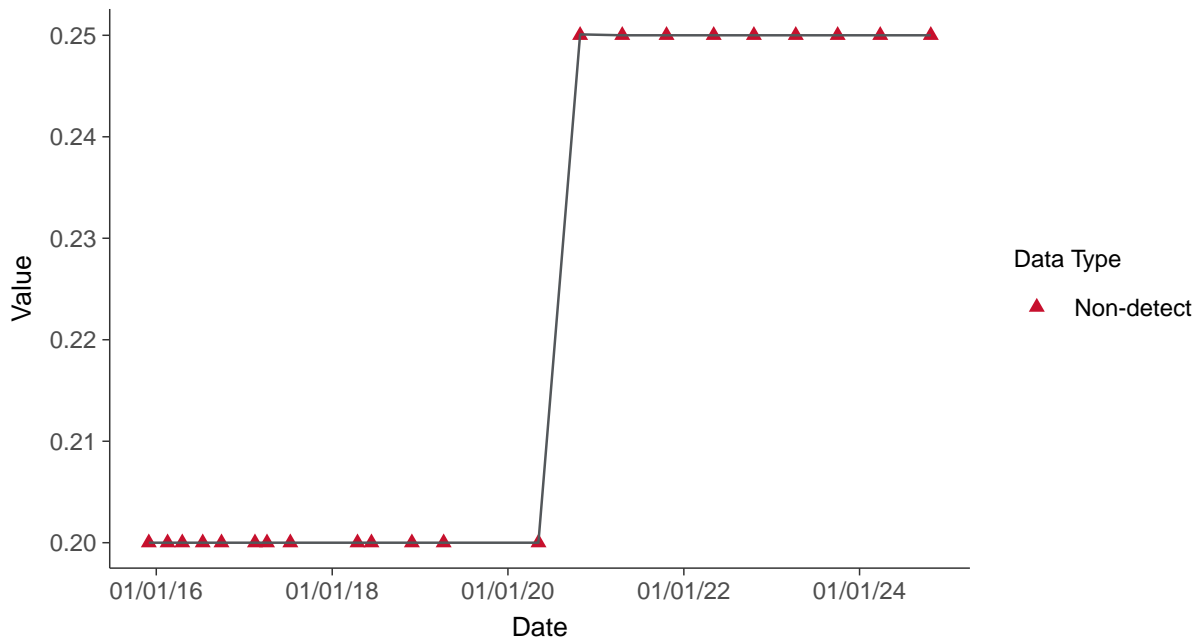
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

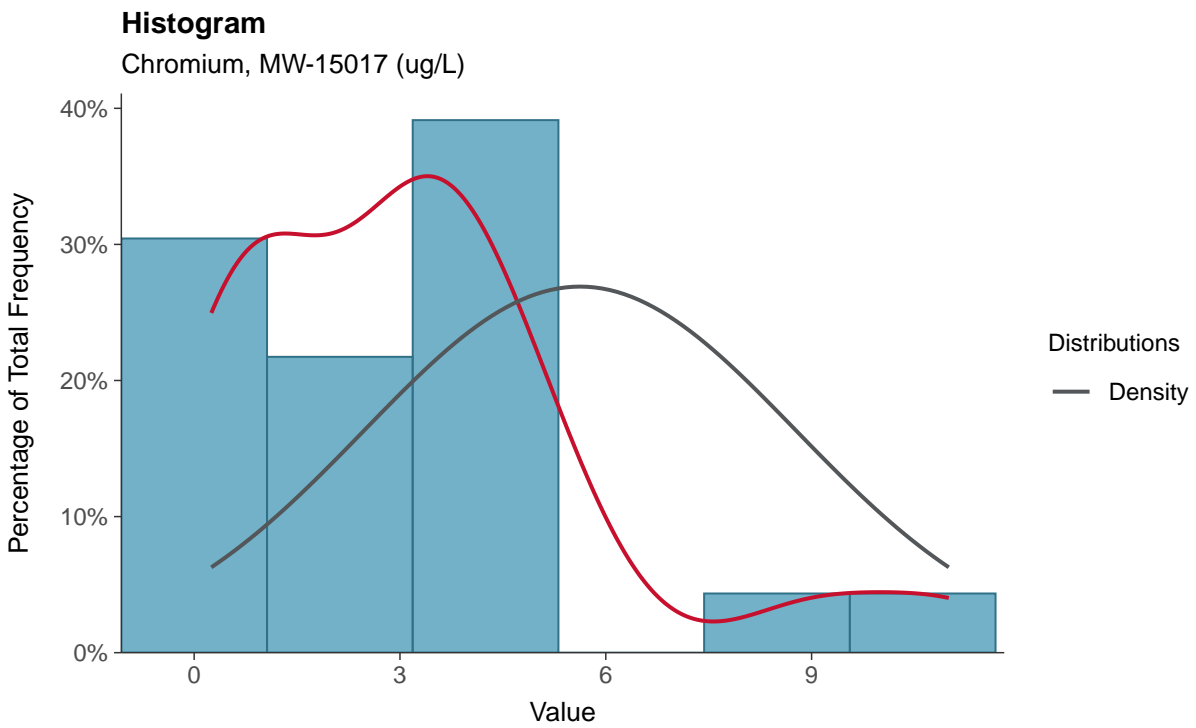
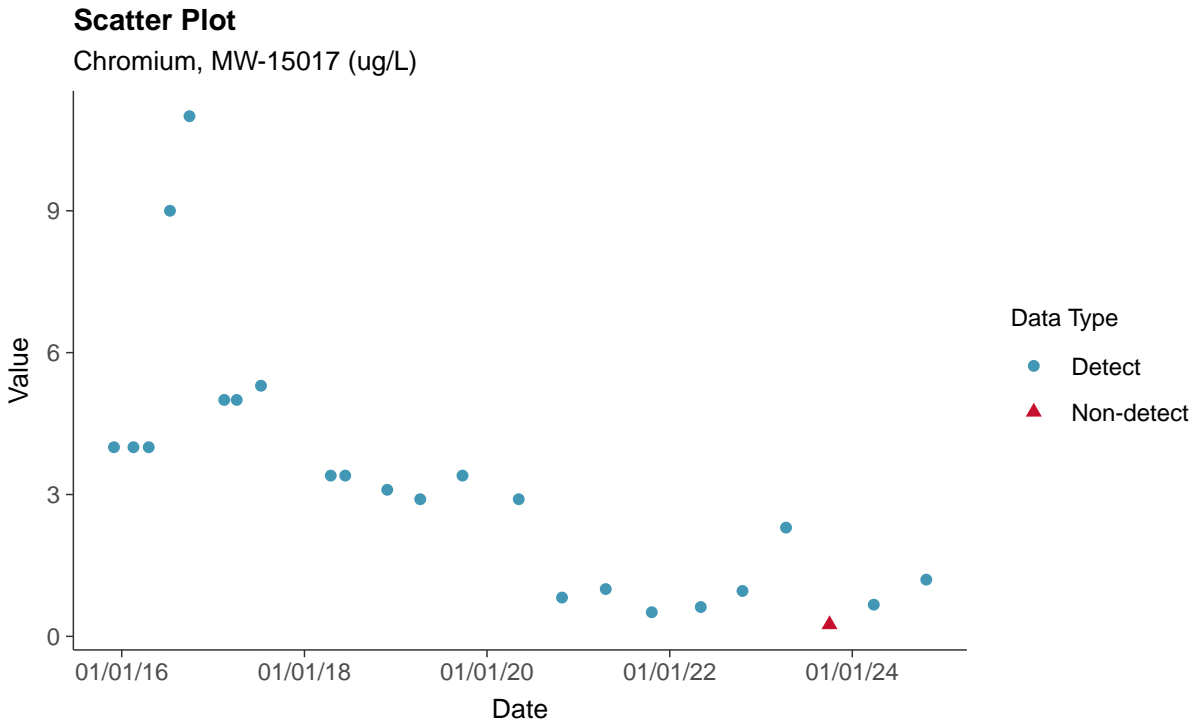
Cadmium, MW-15017 (ug/L)





Appendix IV: Chromium, MW-15017

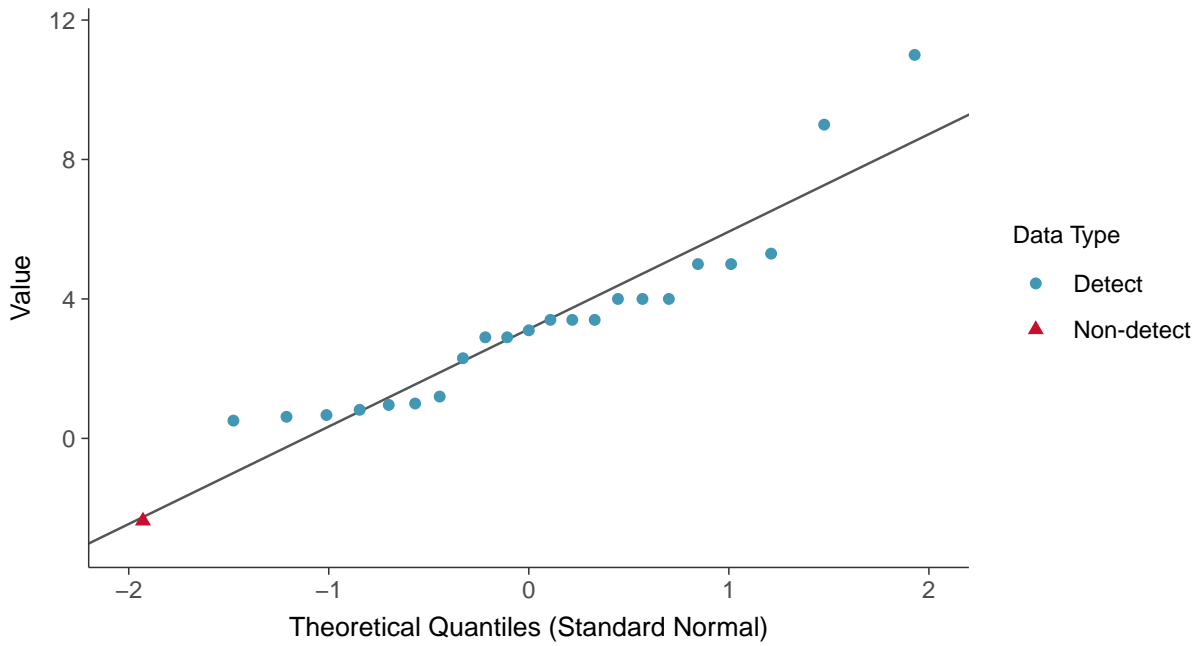
ID: 07_2_109





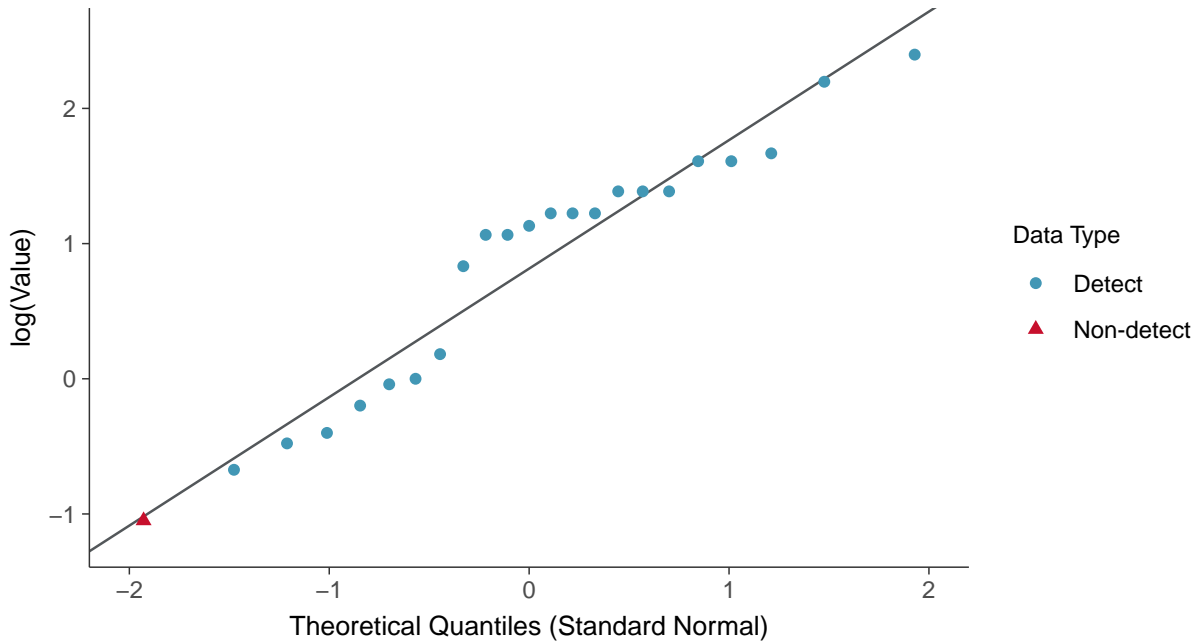
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15017 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

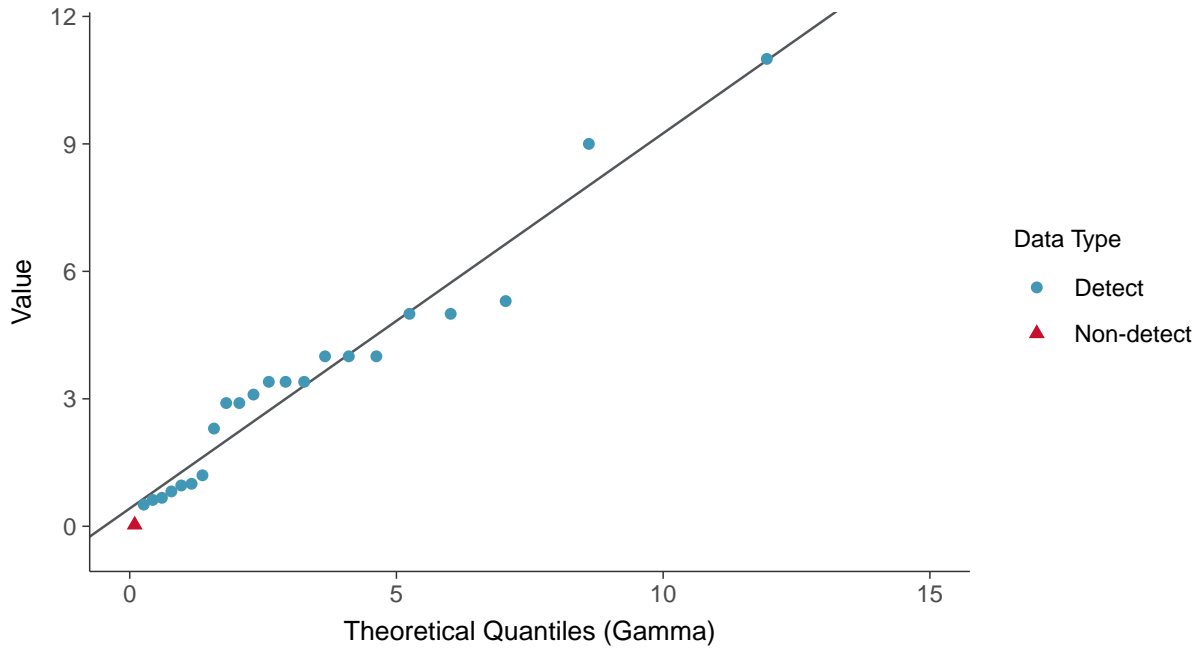
Chromium, MW-15017 (ug/L)





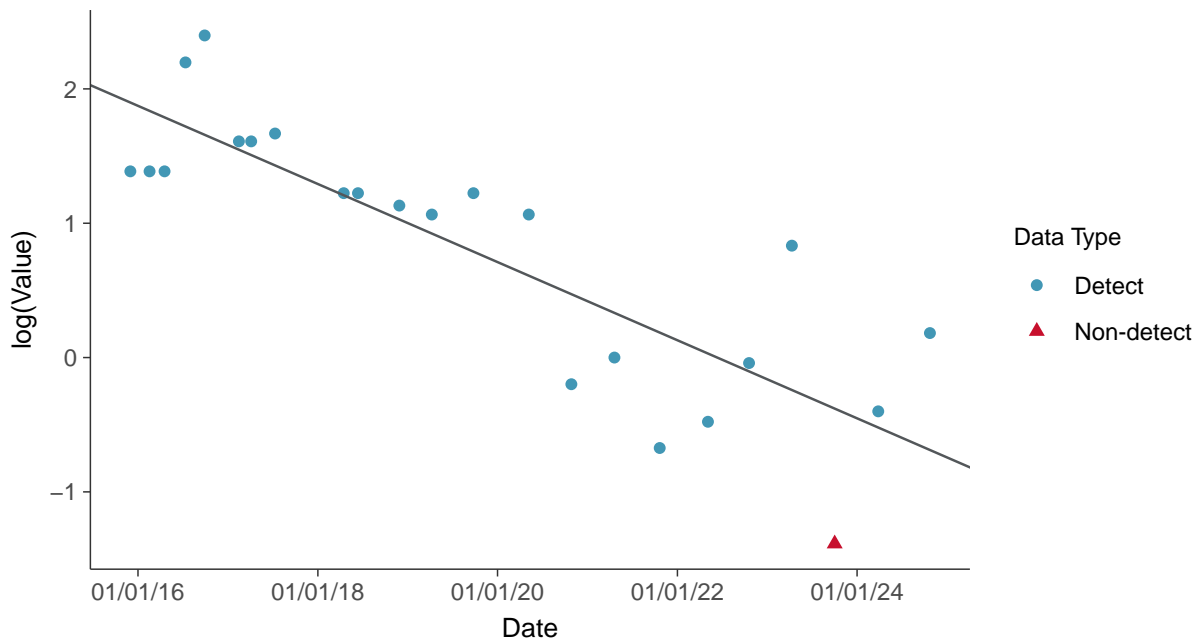
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15017 (ug/L)



Trend Regression: Lognormal MLE

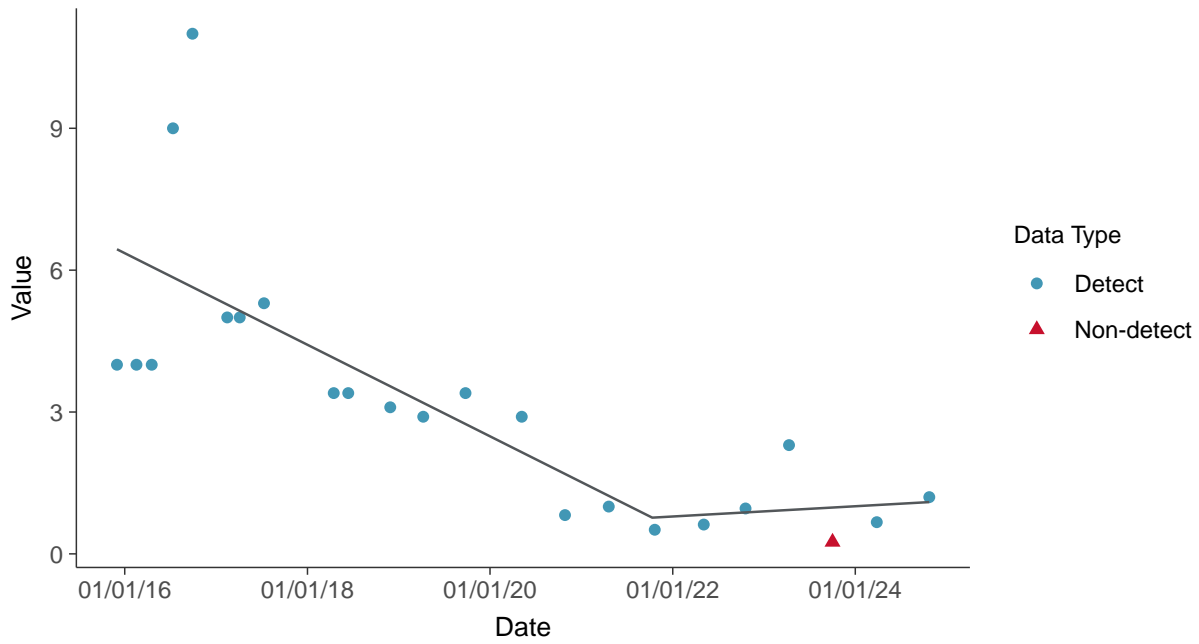
Chromium, MW-15017 (ug/L)





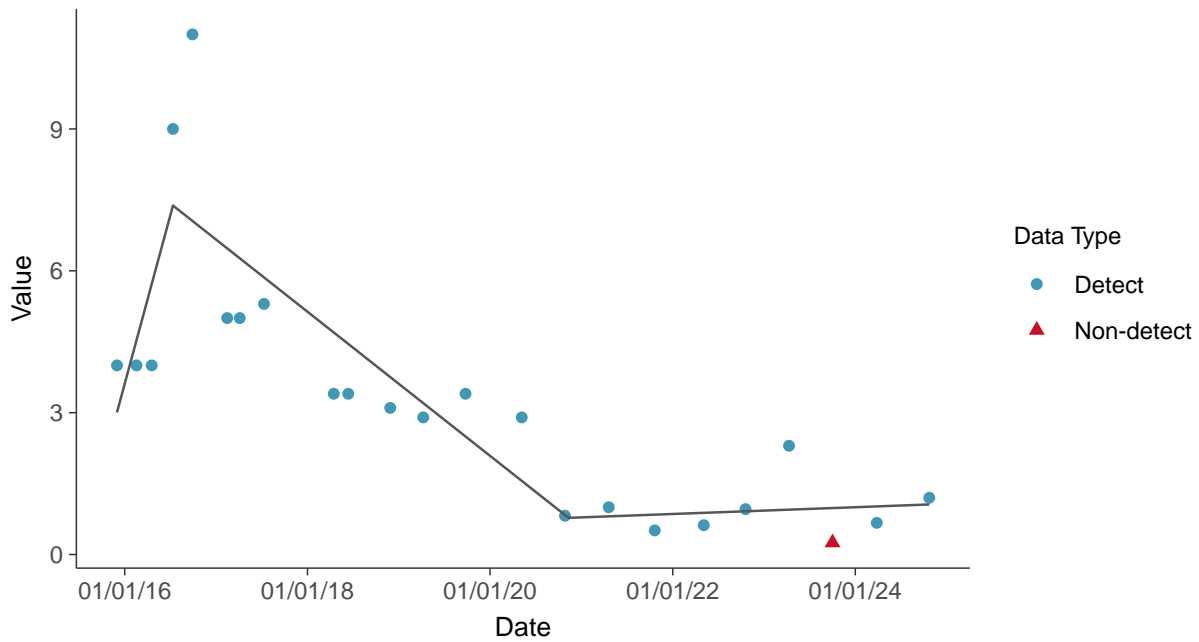
Trend Regression: Piecewise Linear-Linear

Chromium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

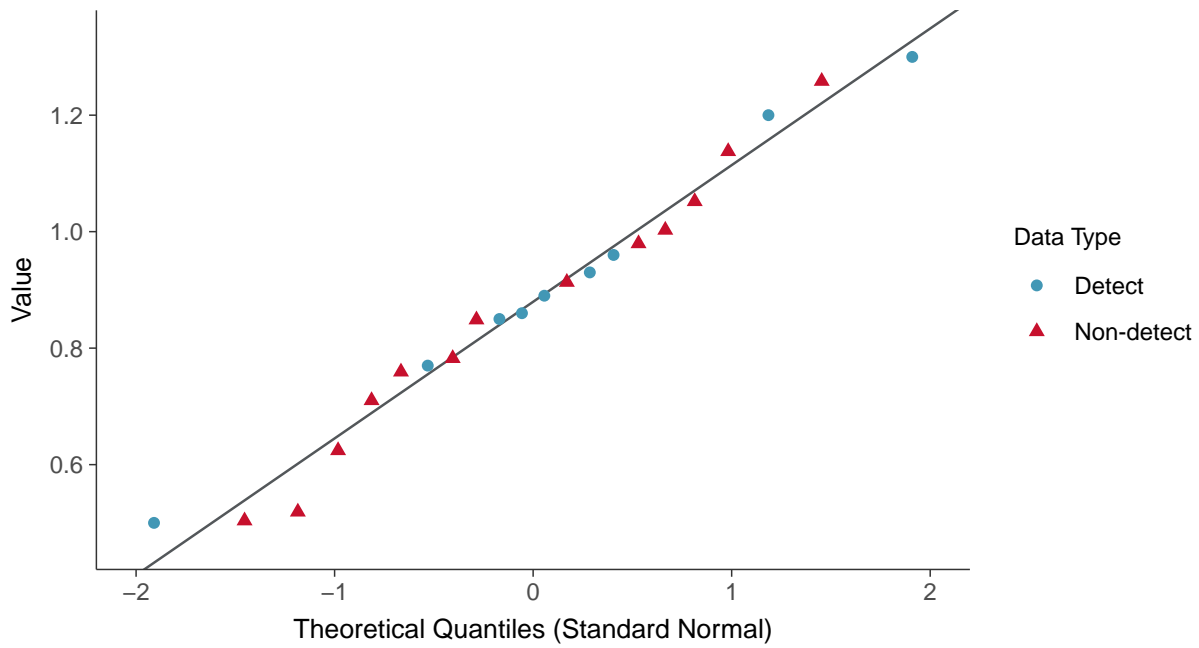
Chromium, MW-15017 (ug/L)





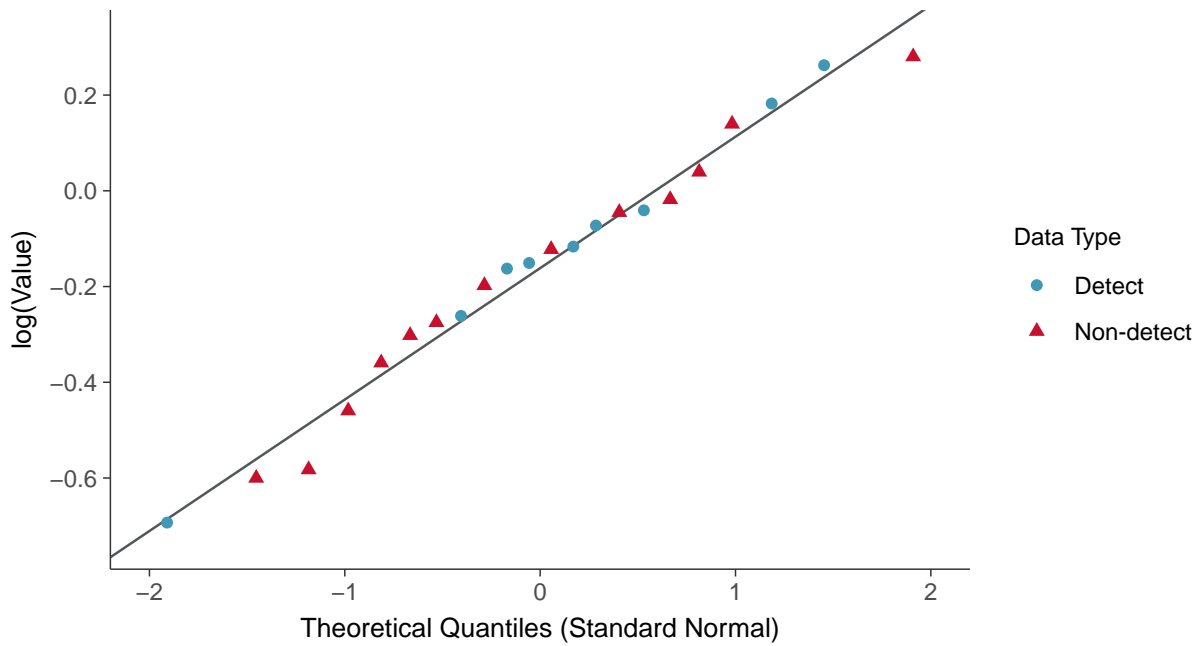
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15017 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

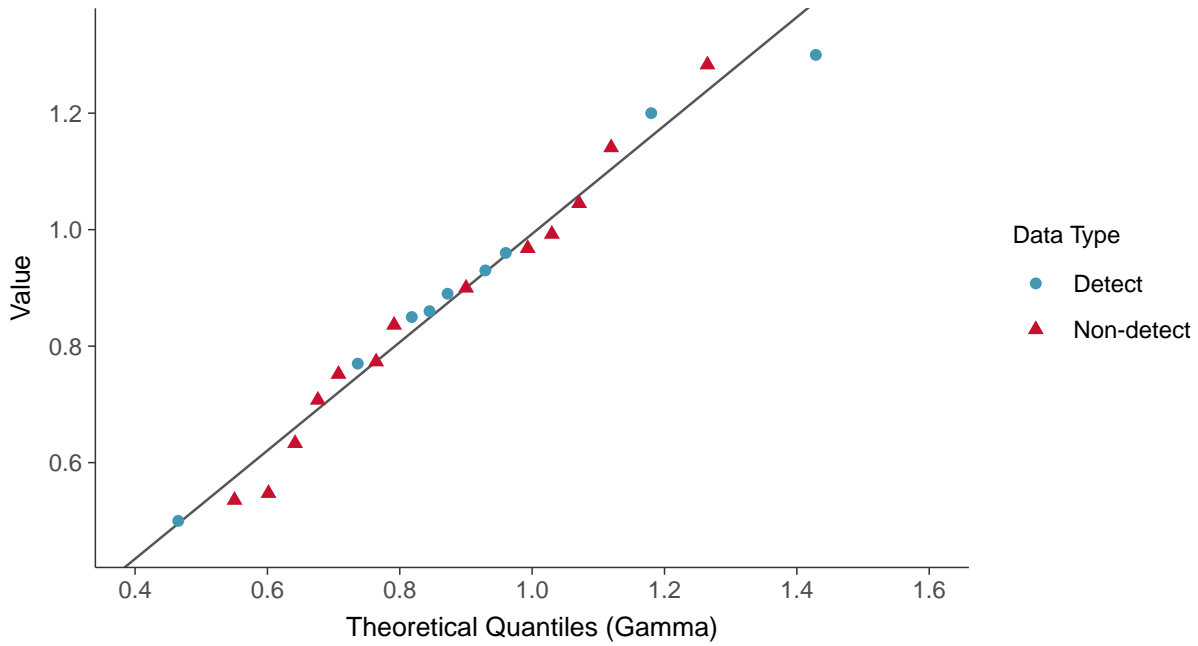
Cobalt, MW-15017 (ug/L)





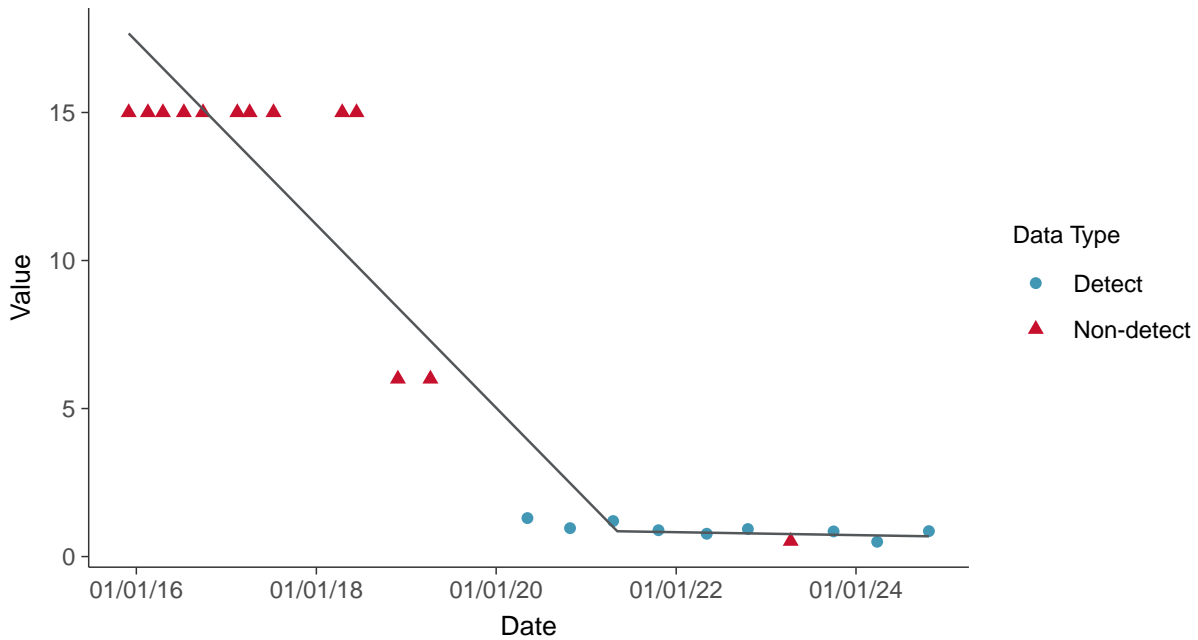
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear

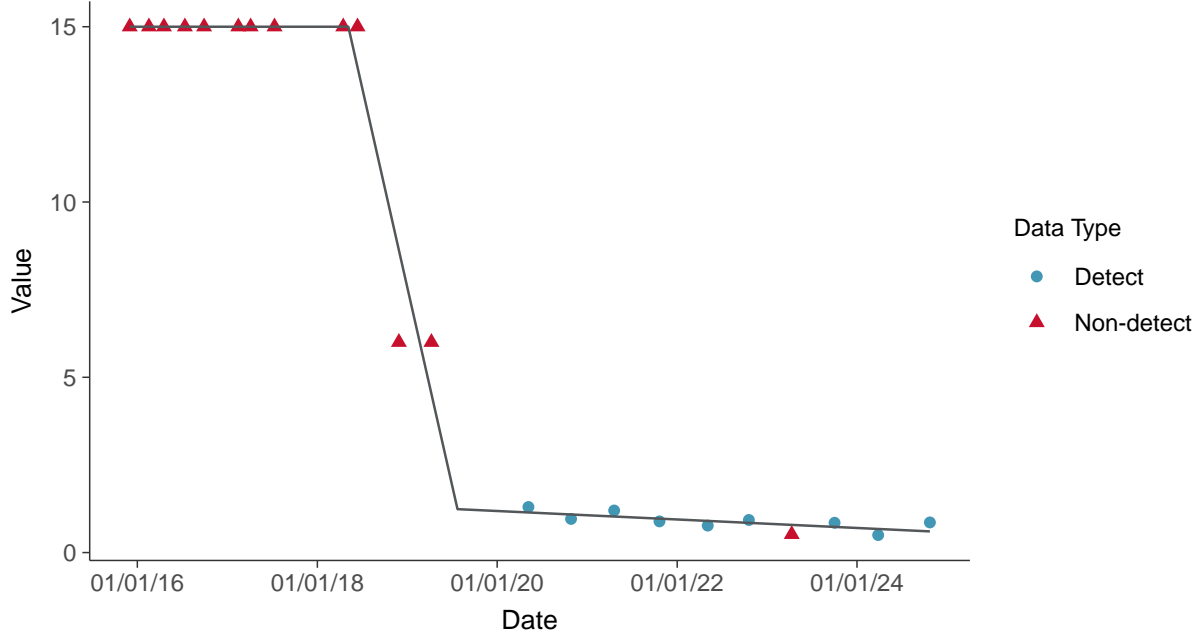
Cobalt, MW-15017 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

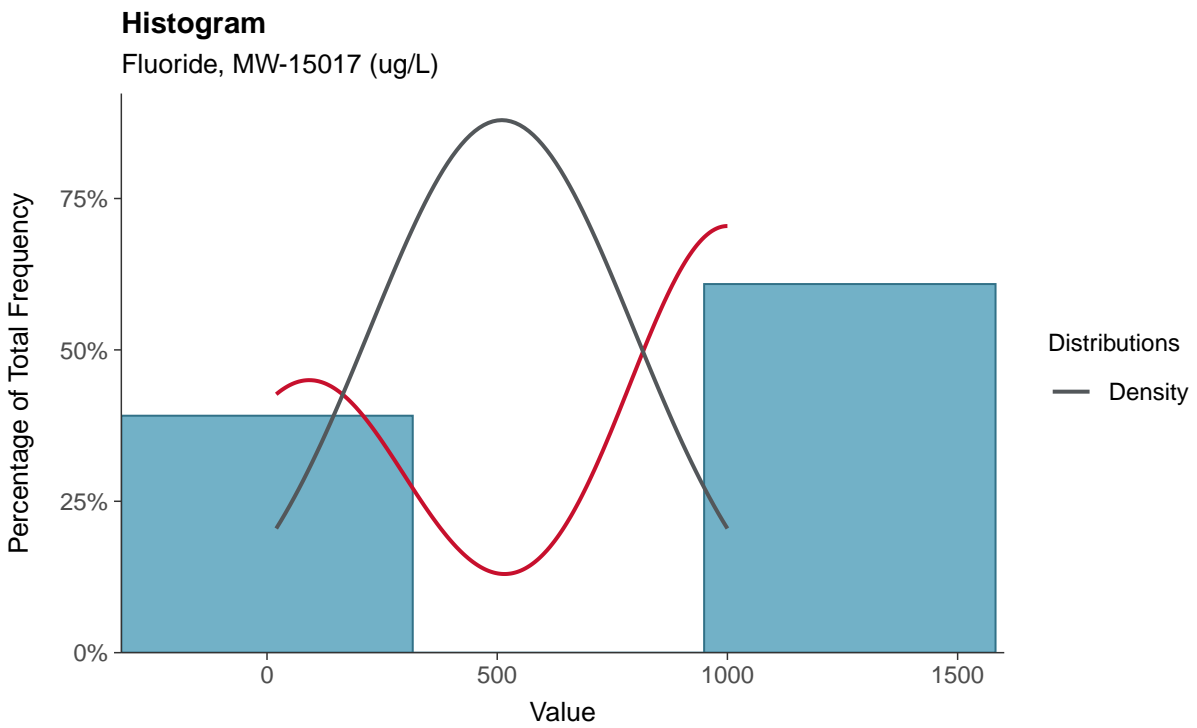
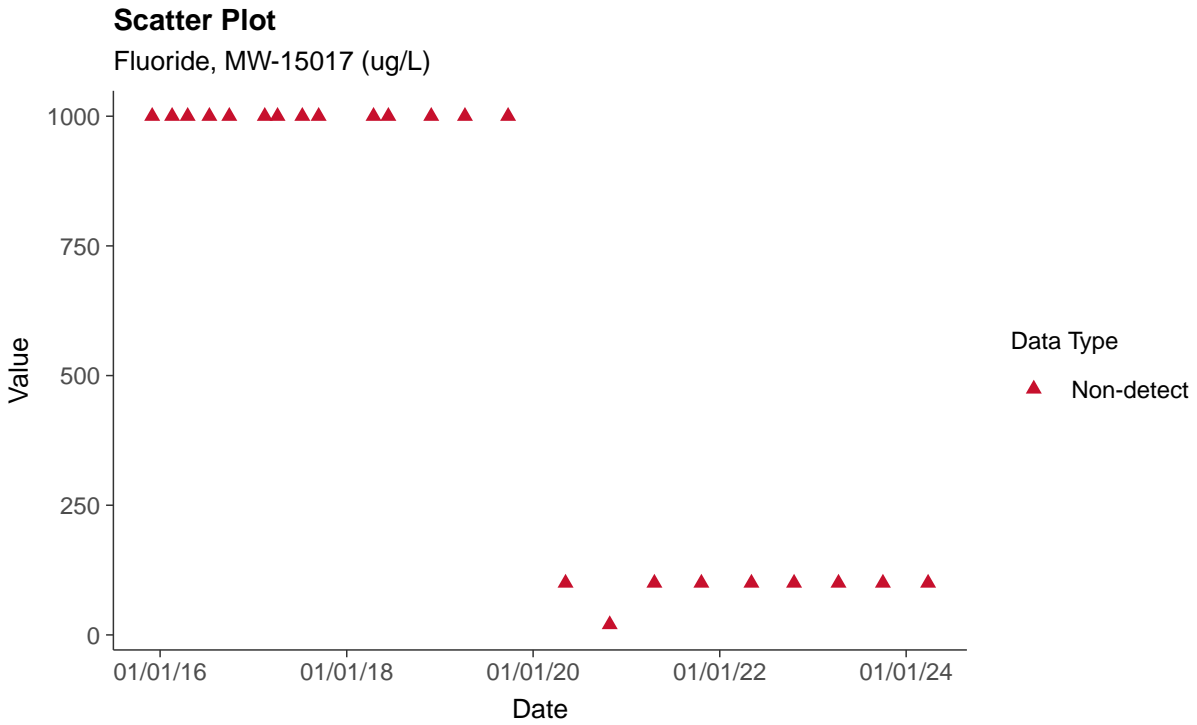
Cobalt, MW-15017 (ug/L)





Appendix IV: Fluoride, MW-15017

ID: 07_2_114



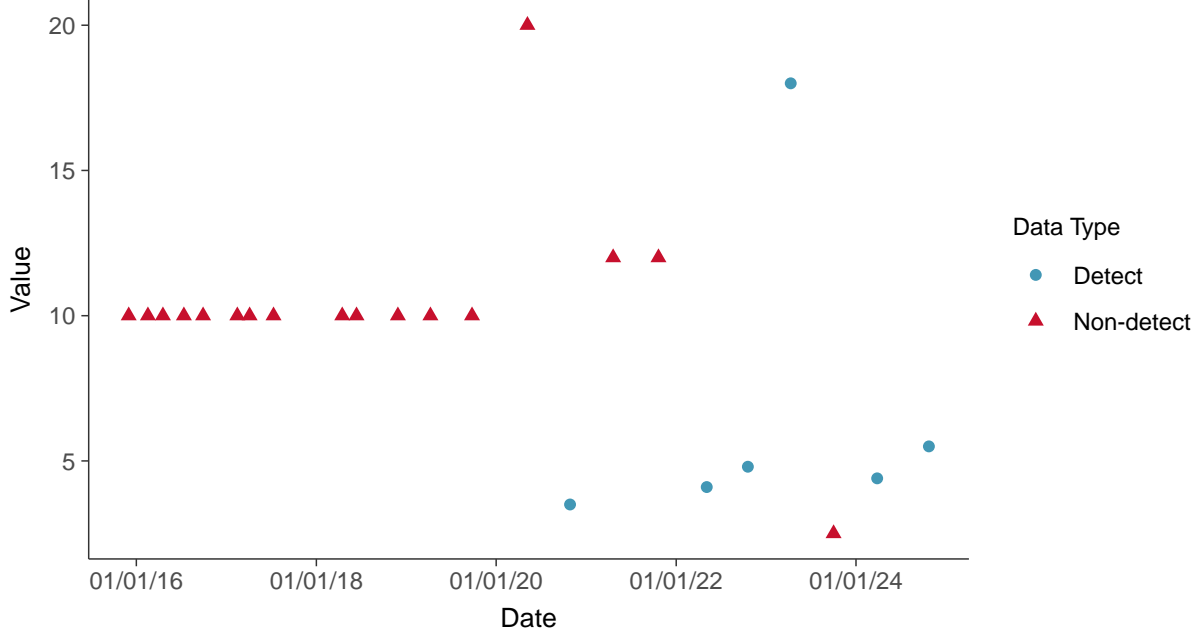


Appendix IV: Lithium, MW-15017

ID: 07_2_117

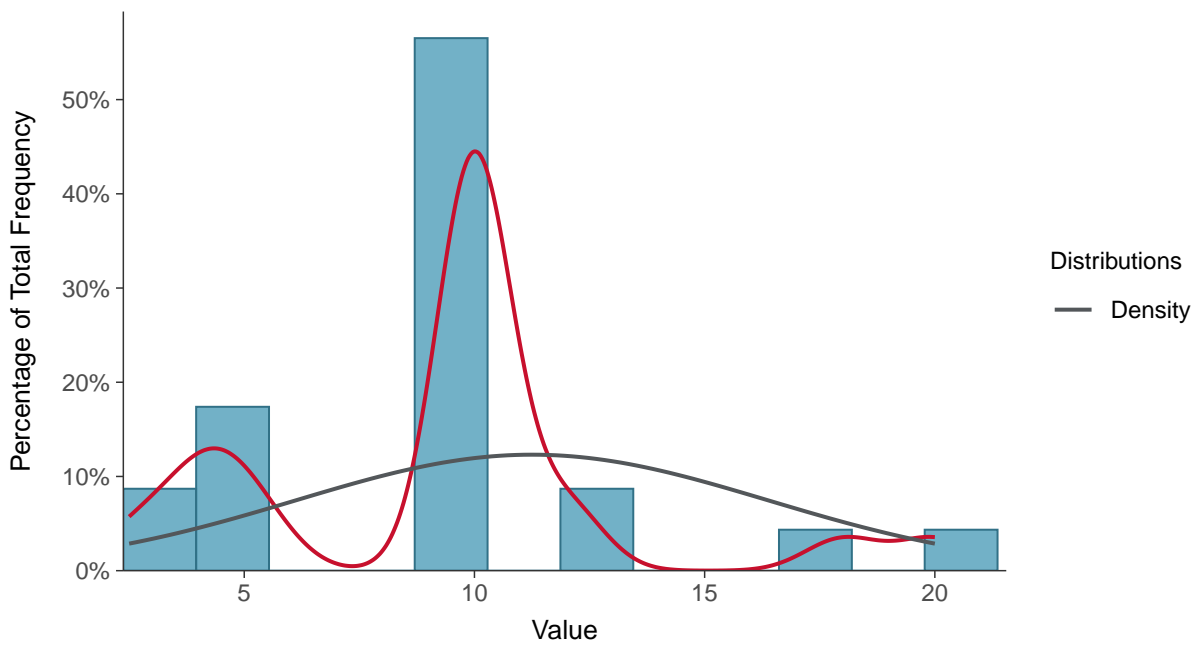
Scatter Plot

Lithium, MW-15017 (ug/L)



Histogram

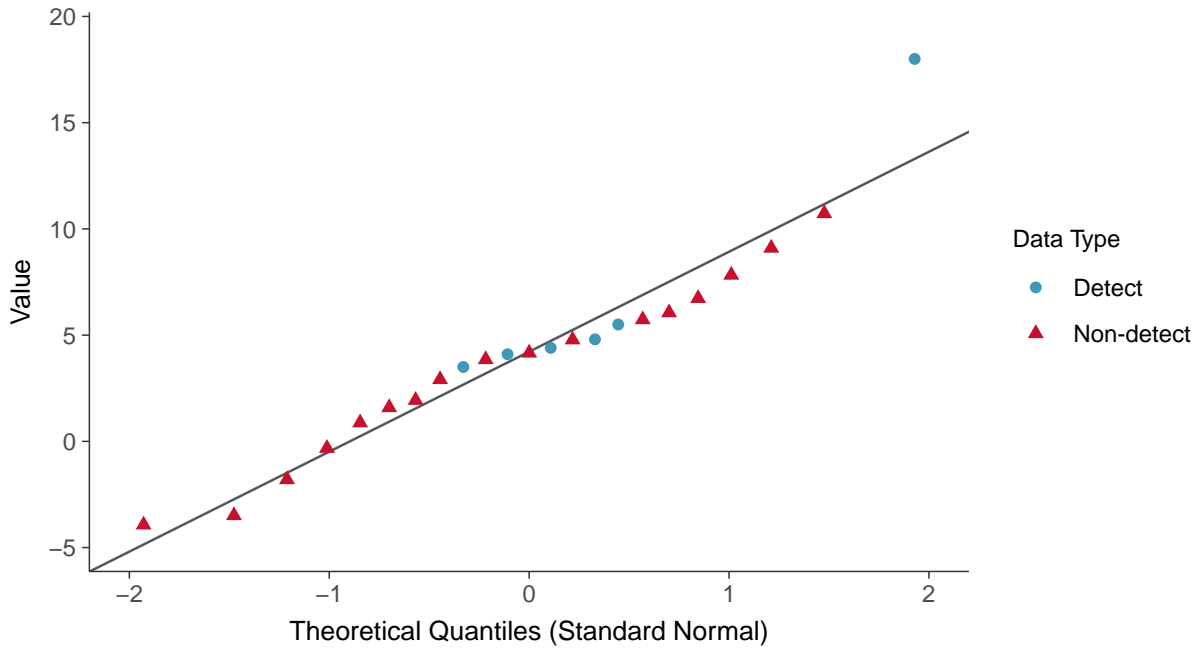
Lithium, MW-15017 (ug/L)





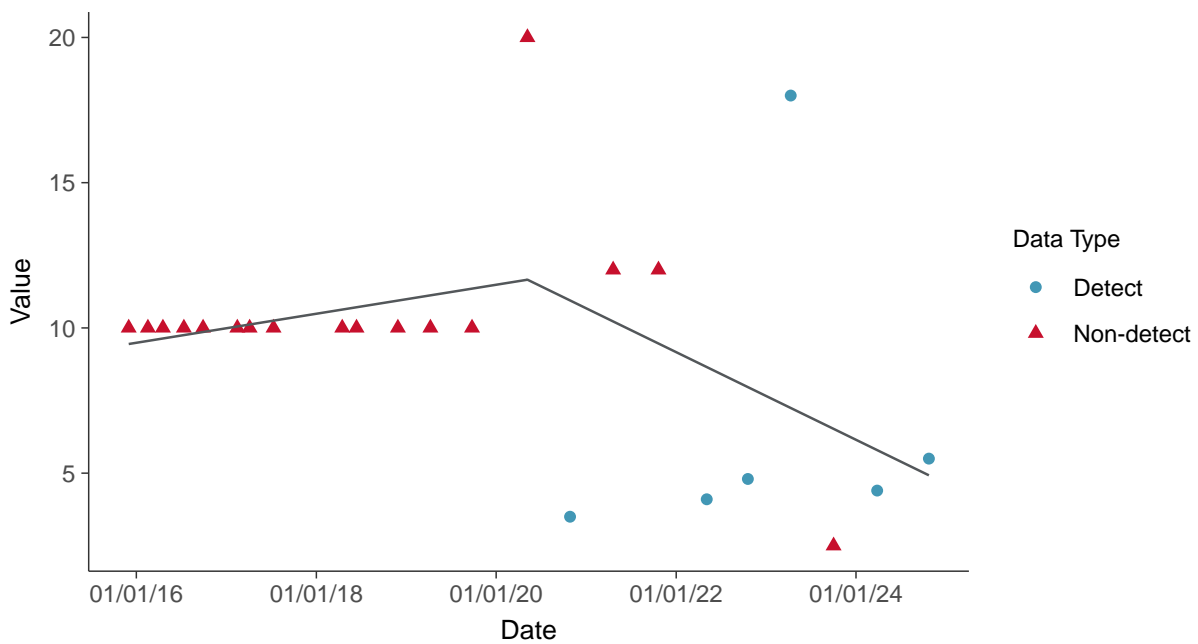
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear

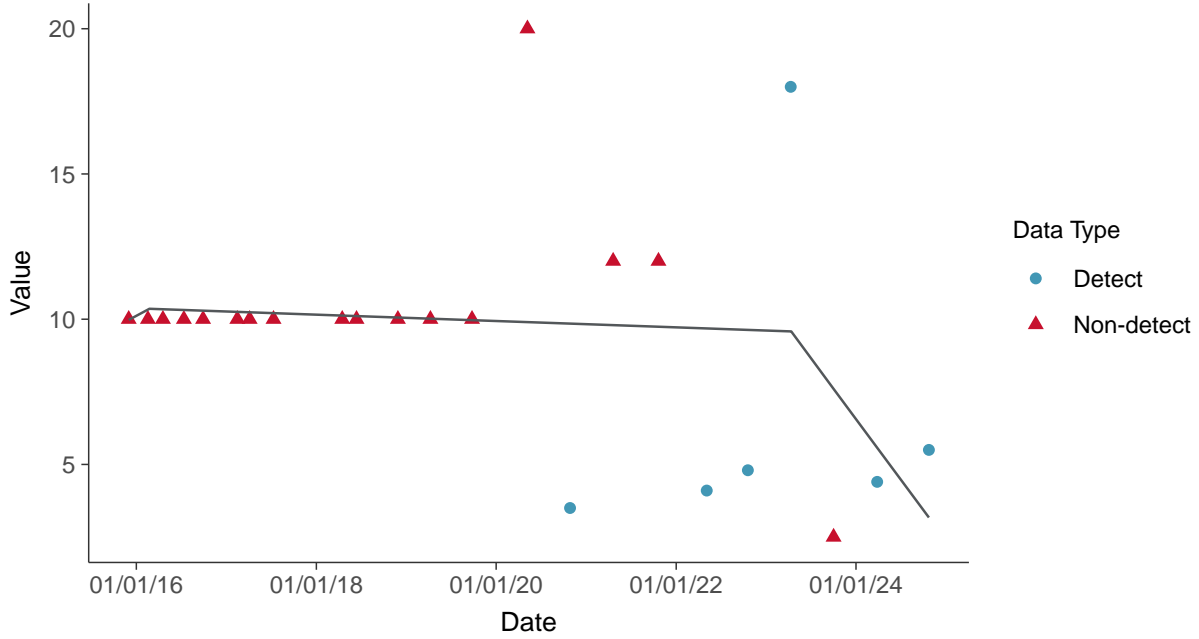
Lithium, MW-15017 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

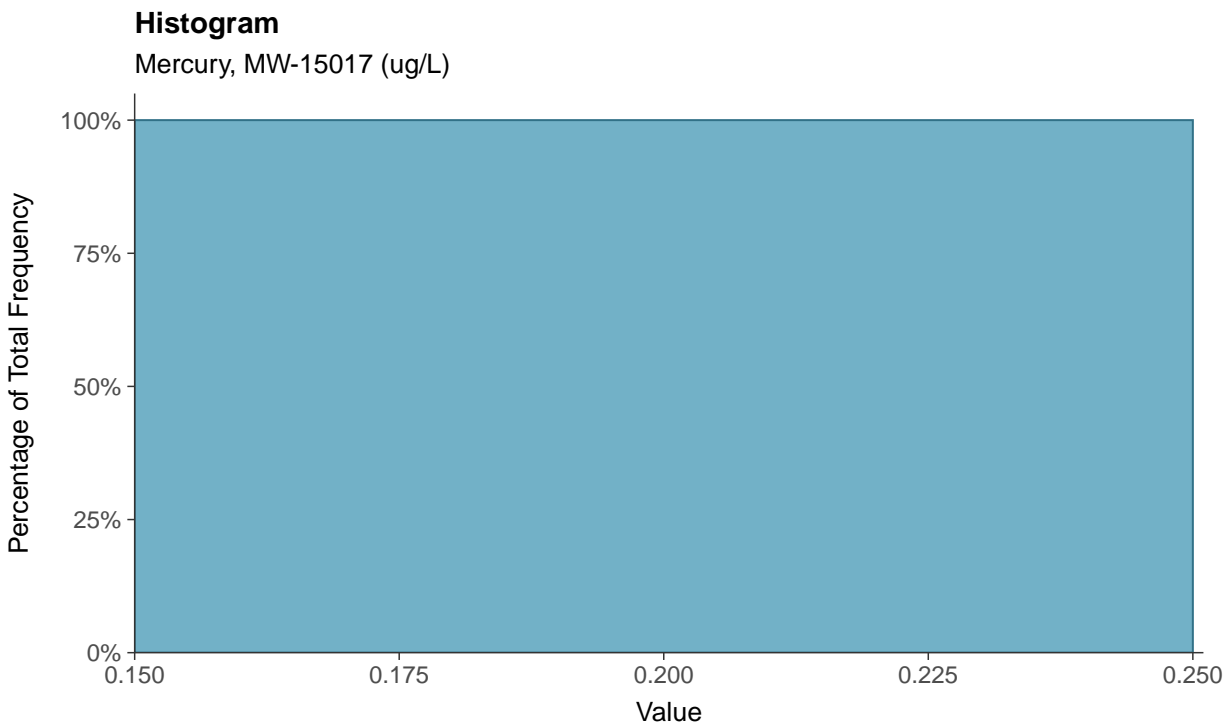
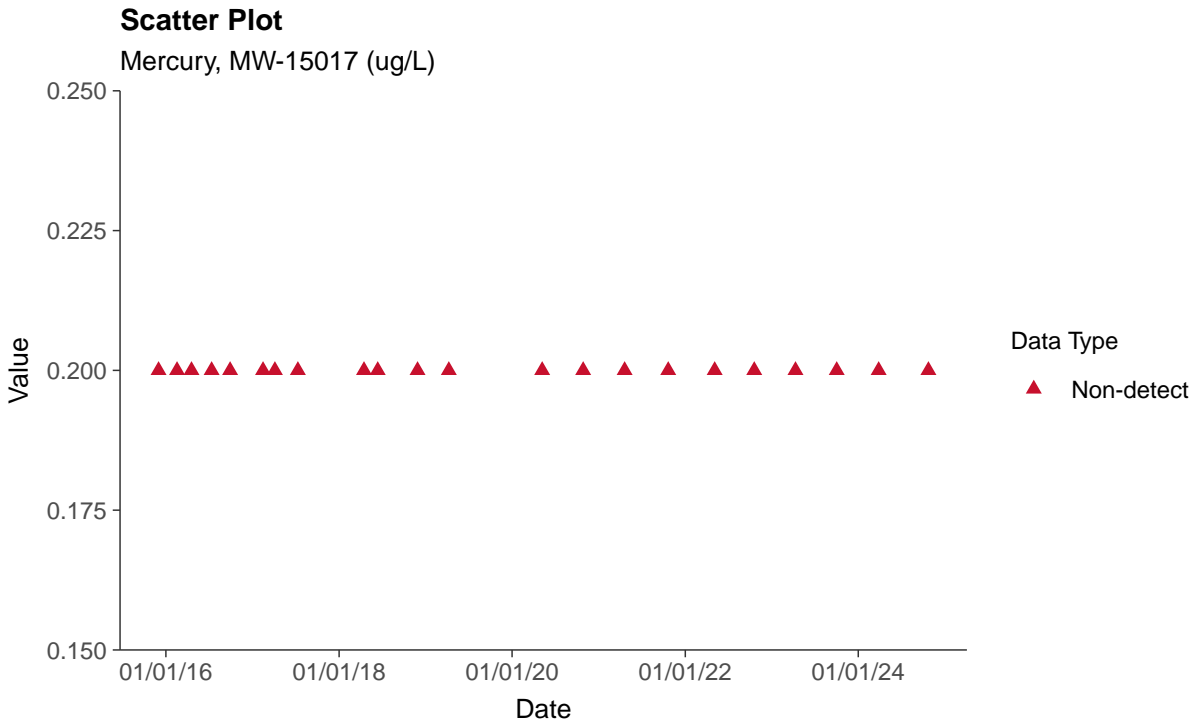
Lithium, MW-15017 (ug/L)





Appendix IV: Mercury, MW-15017

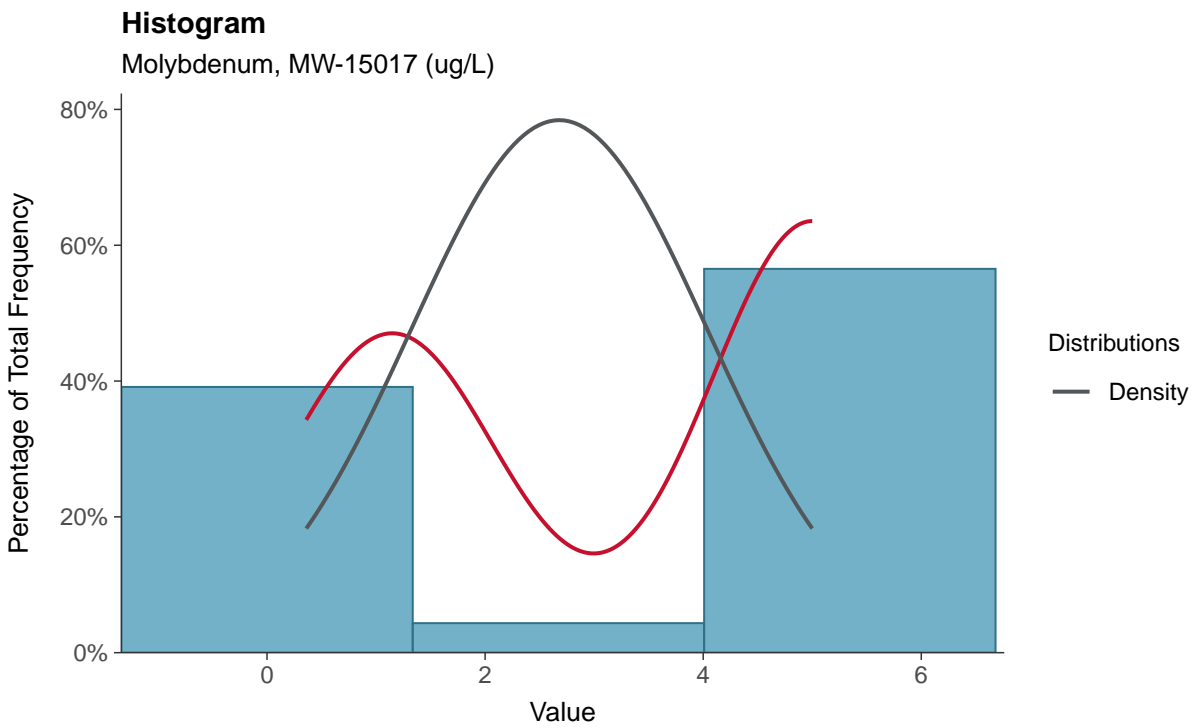
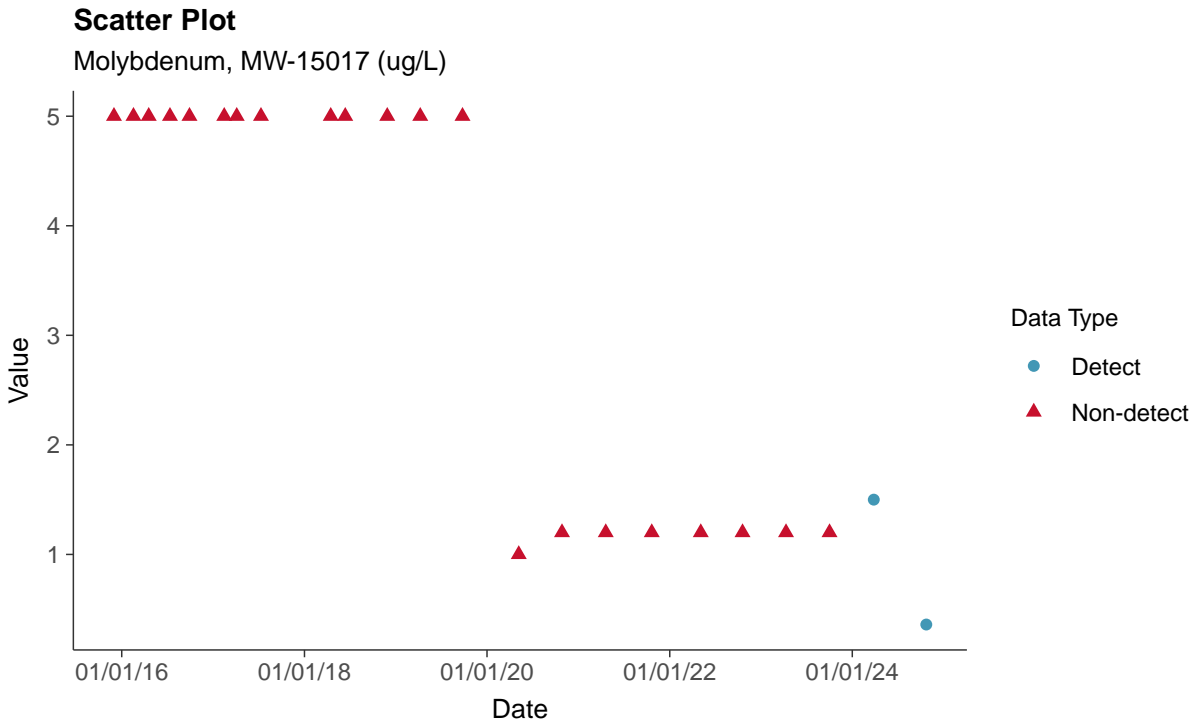
ID: 07_2_118





Appendix IV: Molybdenum, MW-15017

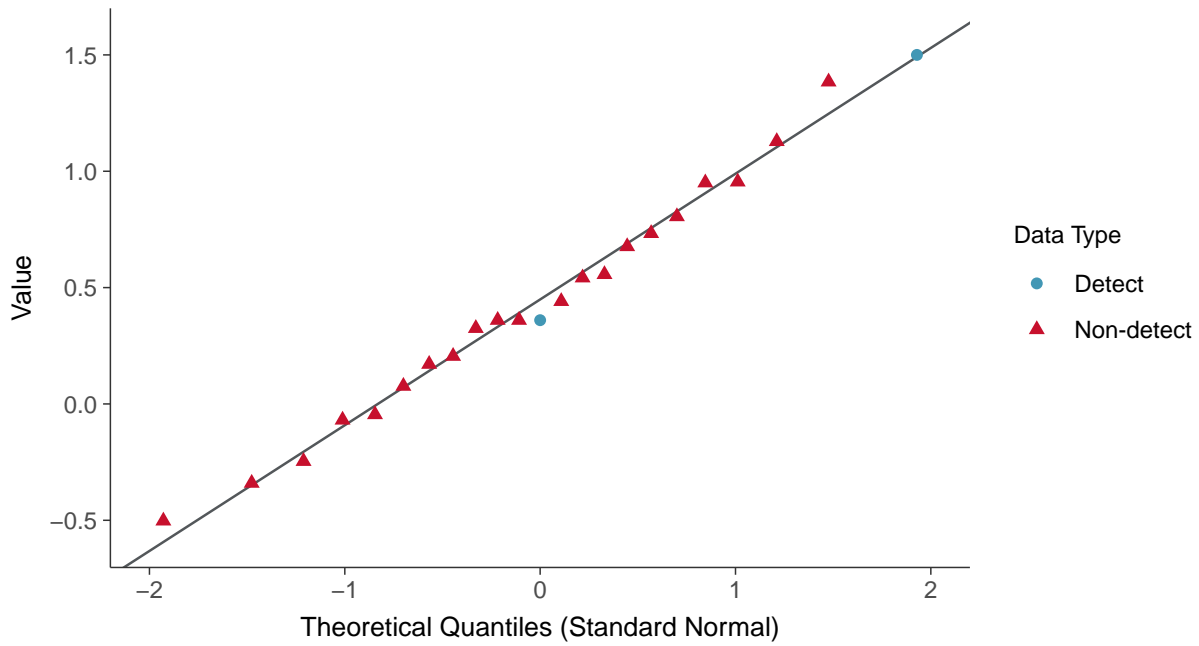
ID: 07_2_119





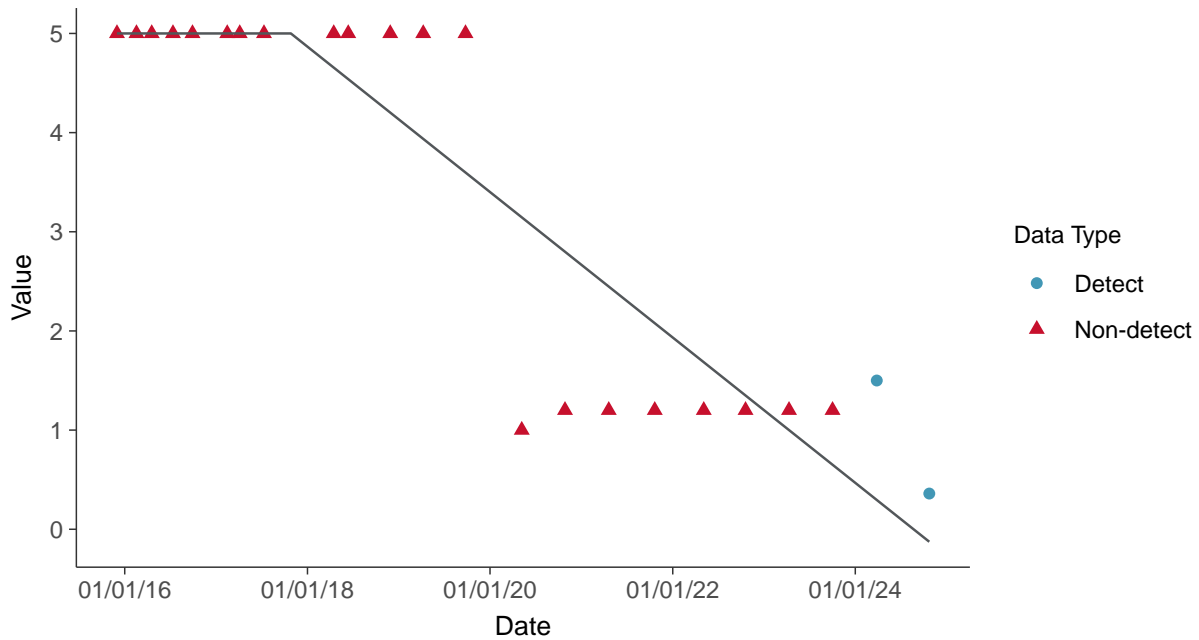
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear

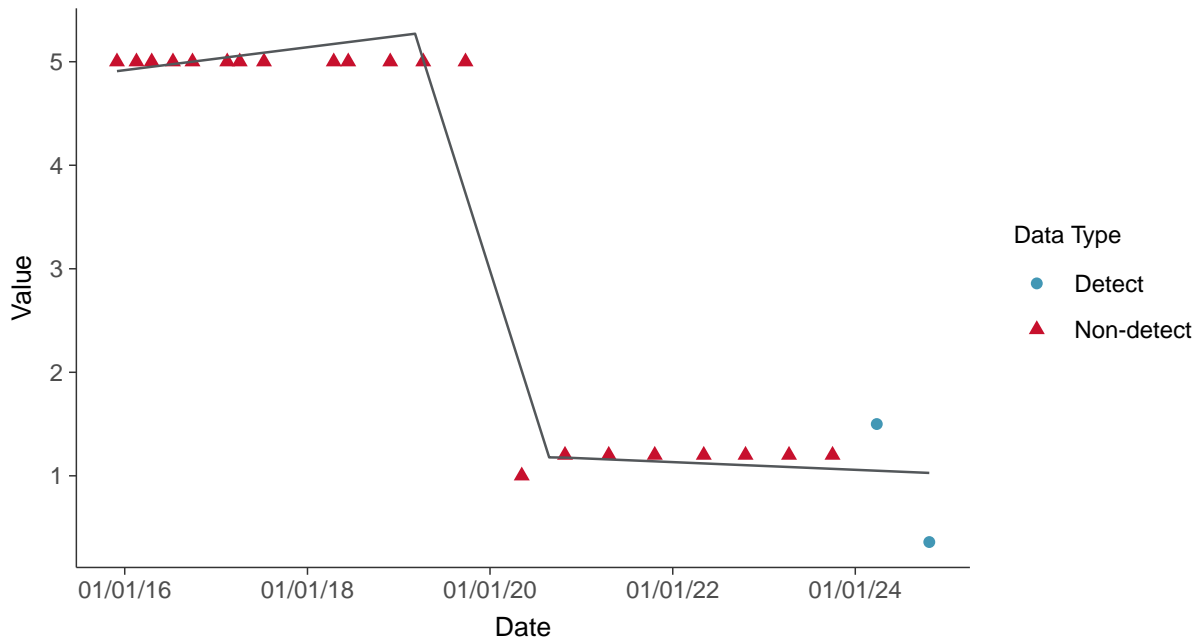
Molybdenum, MW-15017 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15017 (ug/L)



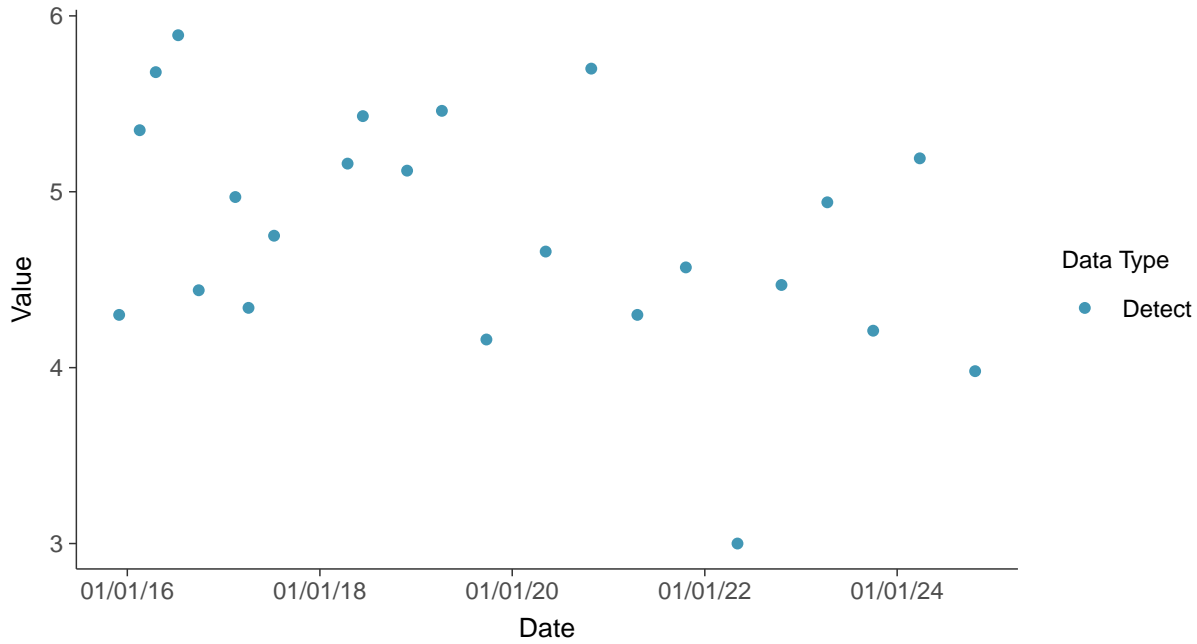


Appendix IV: Radium-226+228, MW-15017

ID: 07_2_125

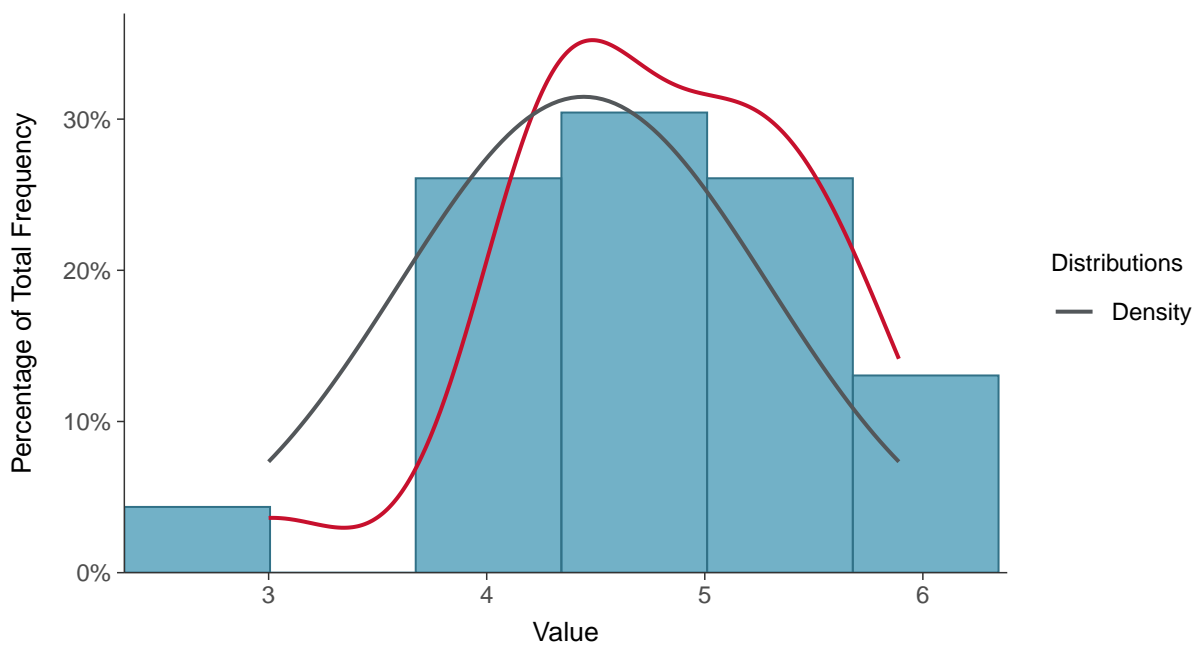
Scatter Plot

Radium-226+228, MW-15017 (pCi/L)



Histogram

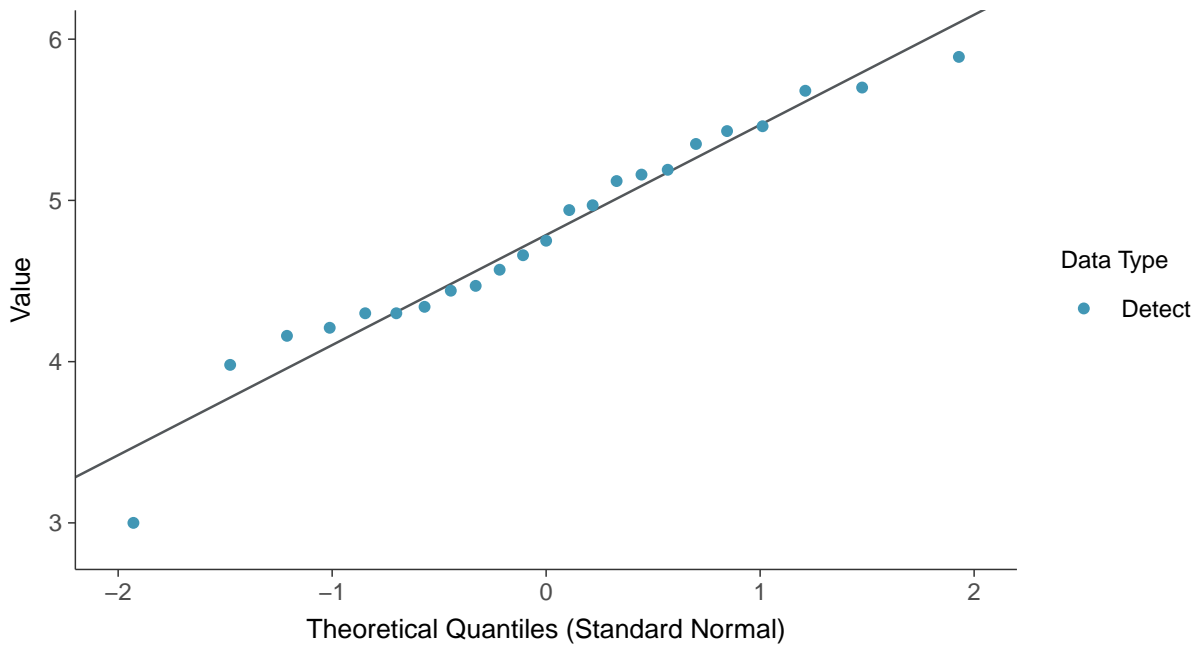
Radium-226+228, MW-15017 (pCi/L)





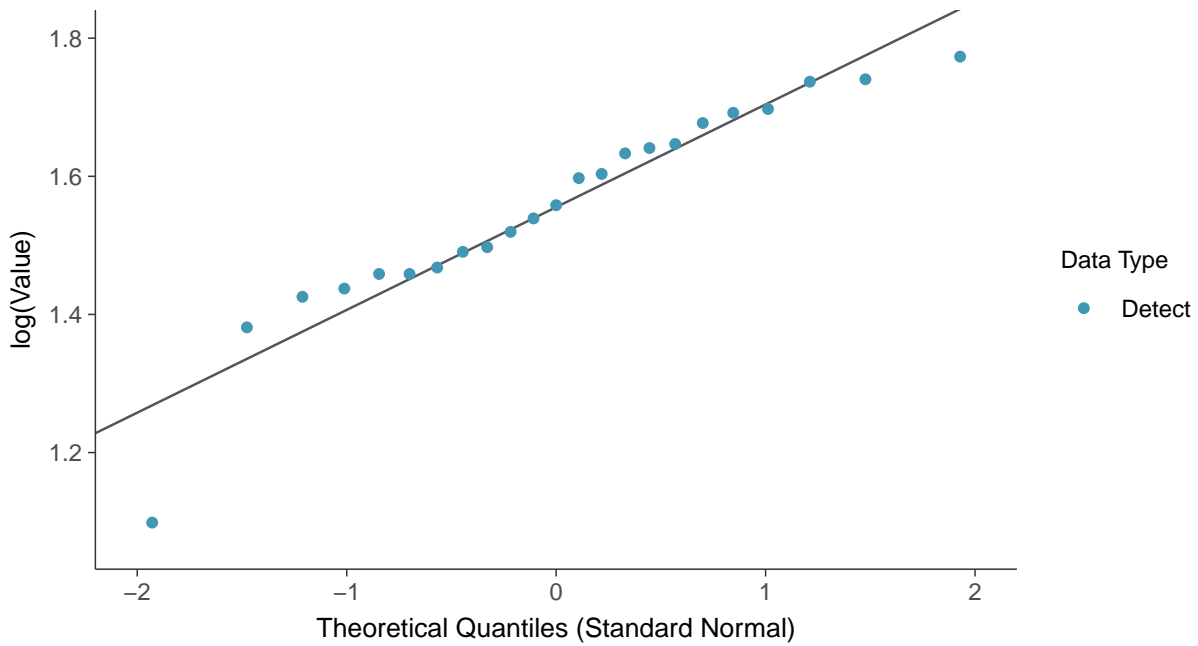
Normal Q-Q plot

Radium-226+228, MW-15017 (pCi/L)



Lognormal Q-Q plot

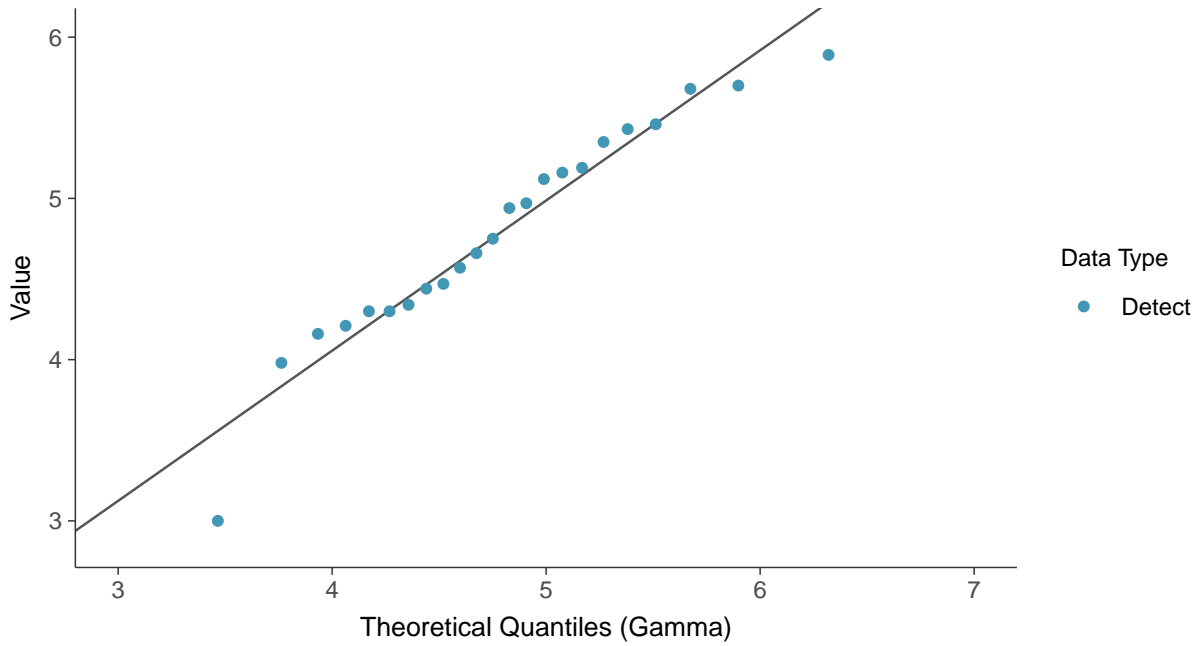
Radium-226+228, MW-15017 (pCi/L)





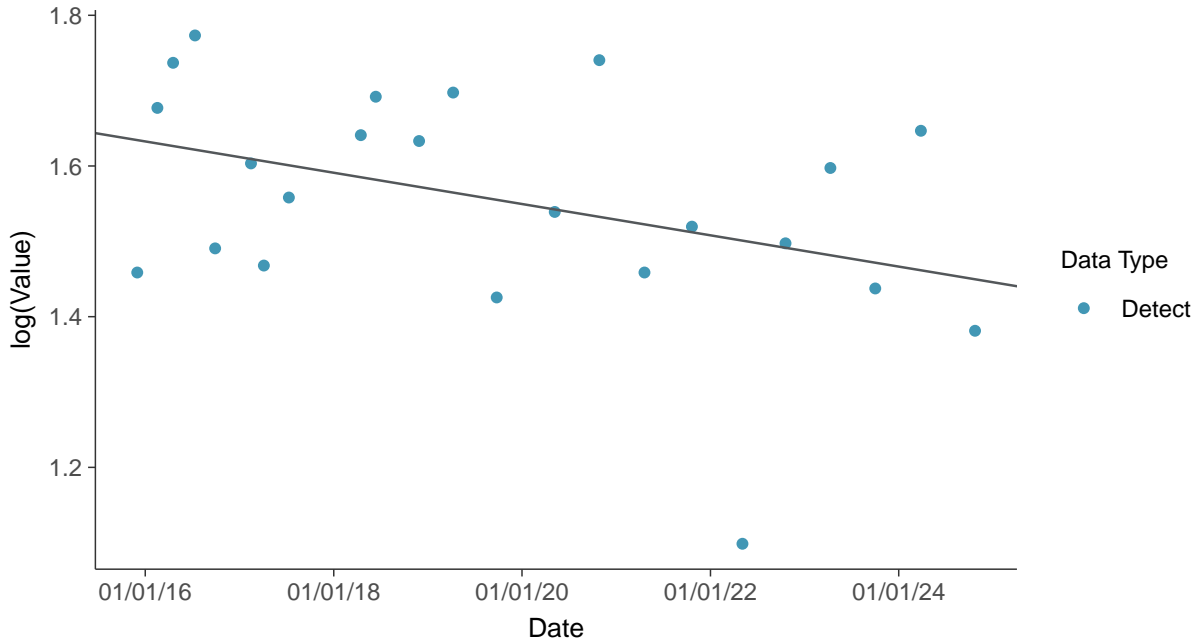
Gamma Q-Q plot

Radium-226+228, MW-15017 (pCi/L)



Trend Regression: Lognormal MLE

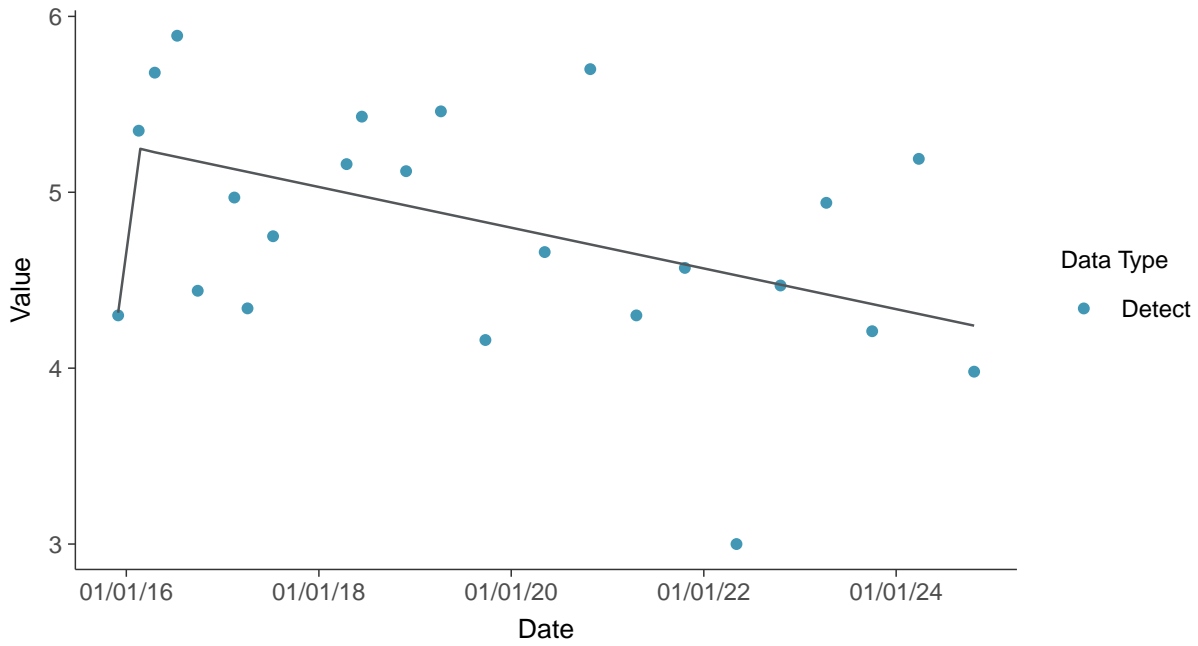
Radium-226+228, MW-15017 (pCi/L)





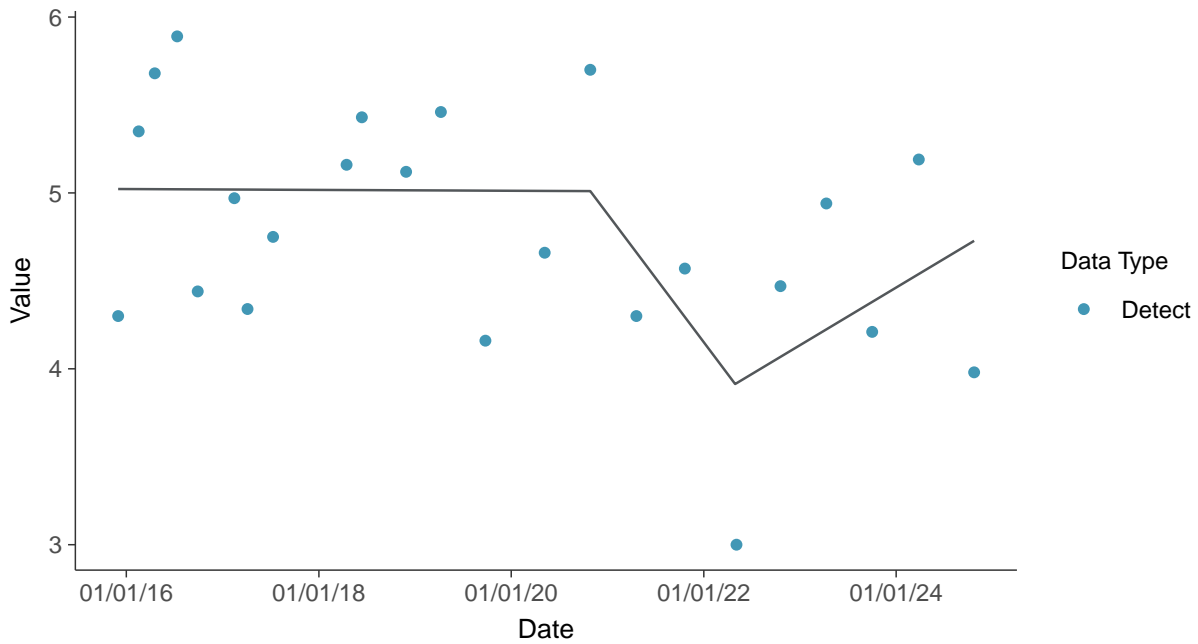
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15017 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

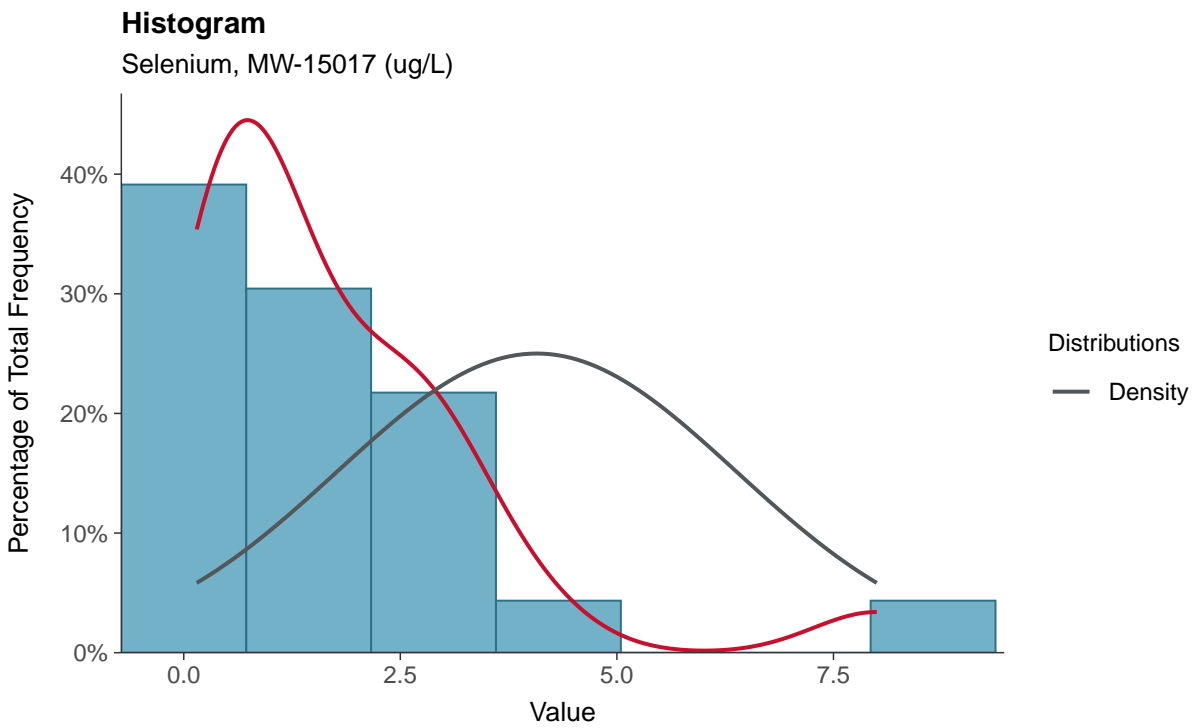
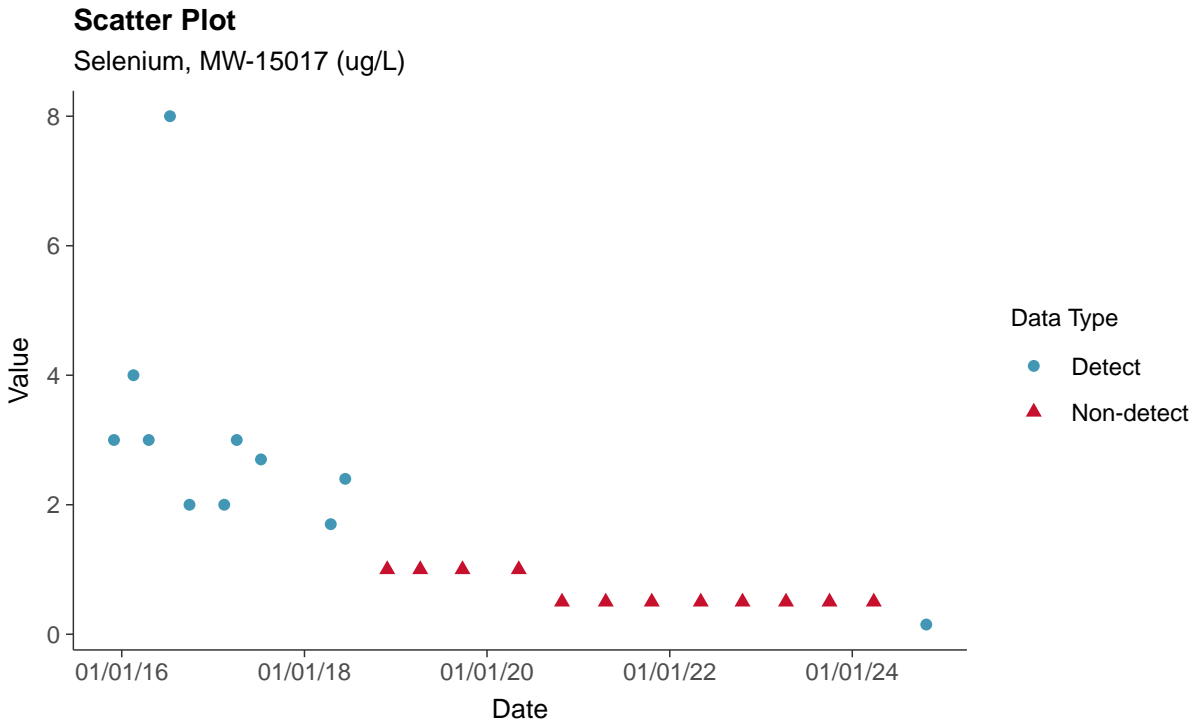
Radium-226+228, MW-15017 (pCi/L)





Appendix IV: Selenium, MW-15017

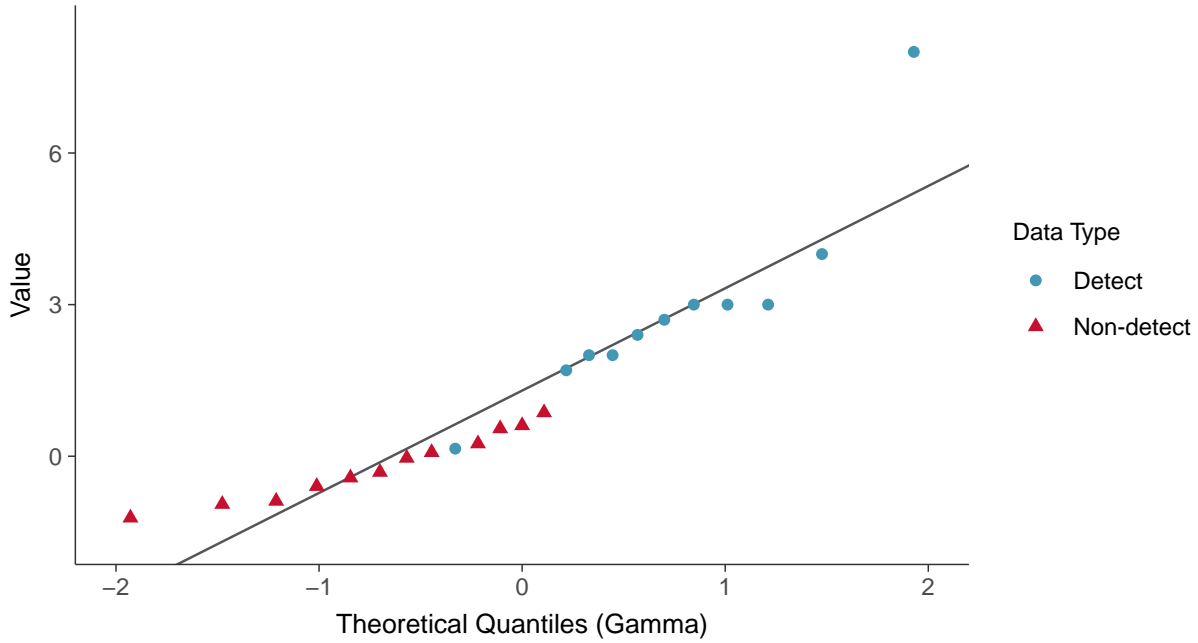
ID: 07_2_127





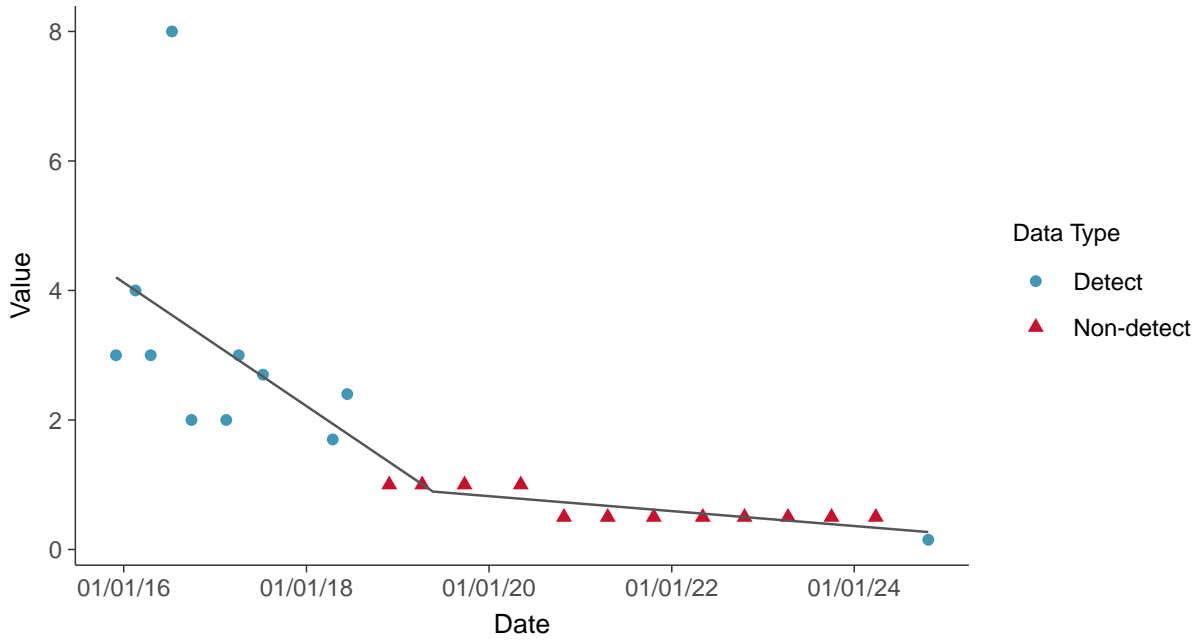
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-15017 (ug/L)



Trend Regression: Piecewise Linear-Linear

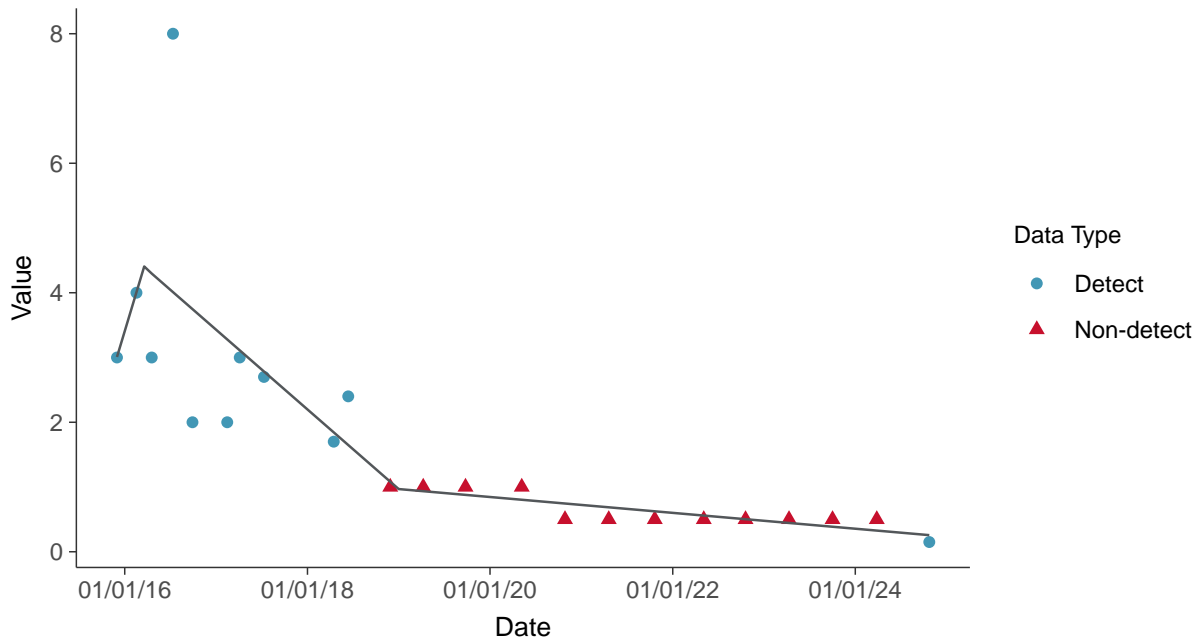
Selenium, MW-15017 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

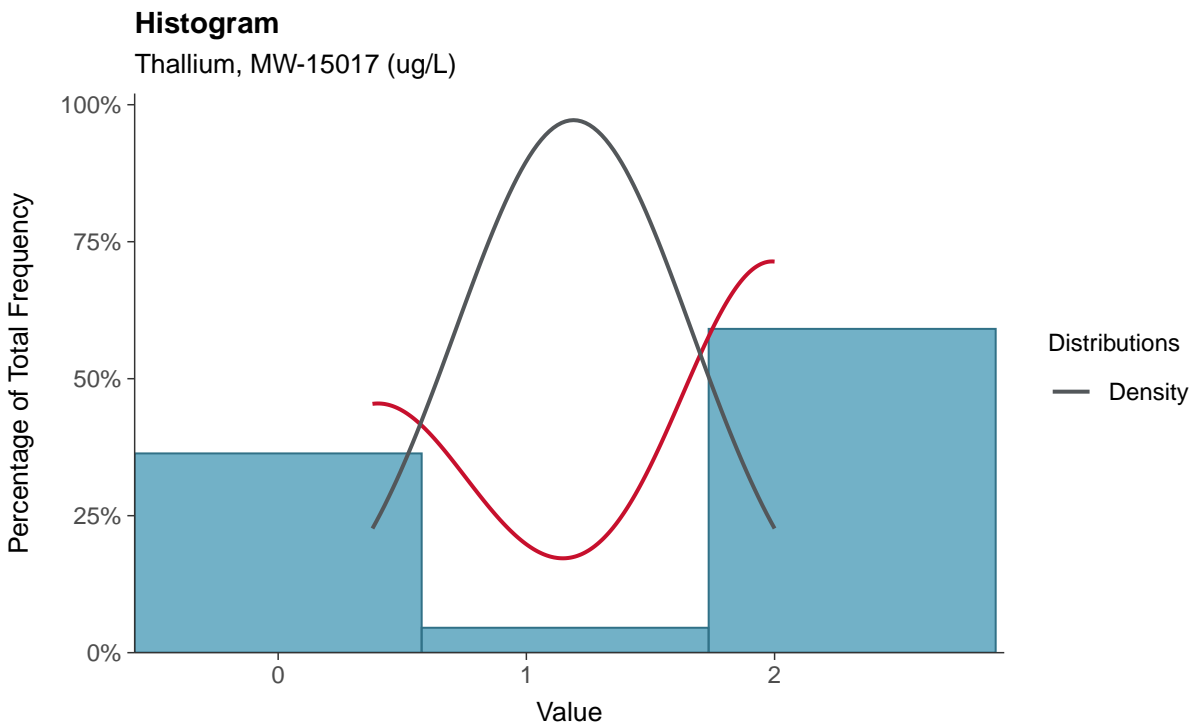
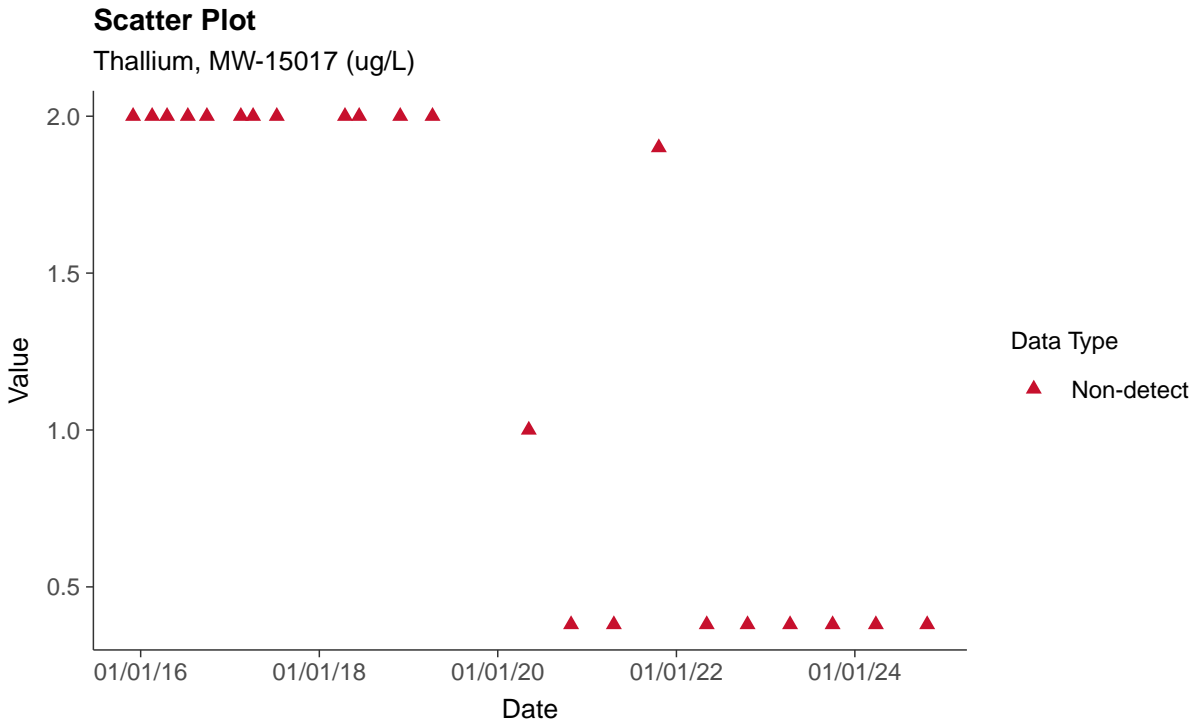
Selenium, MW-15017 (ug/L)





Appendix IV: Thallium, MW-15017

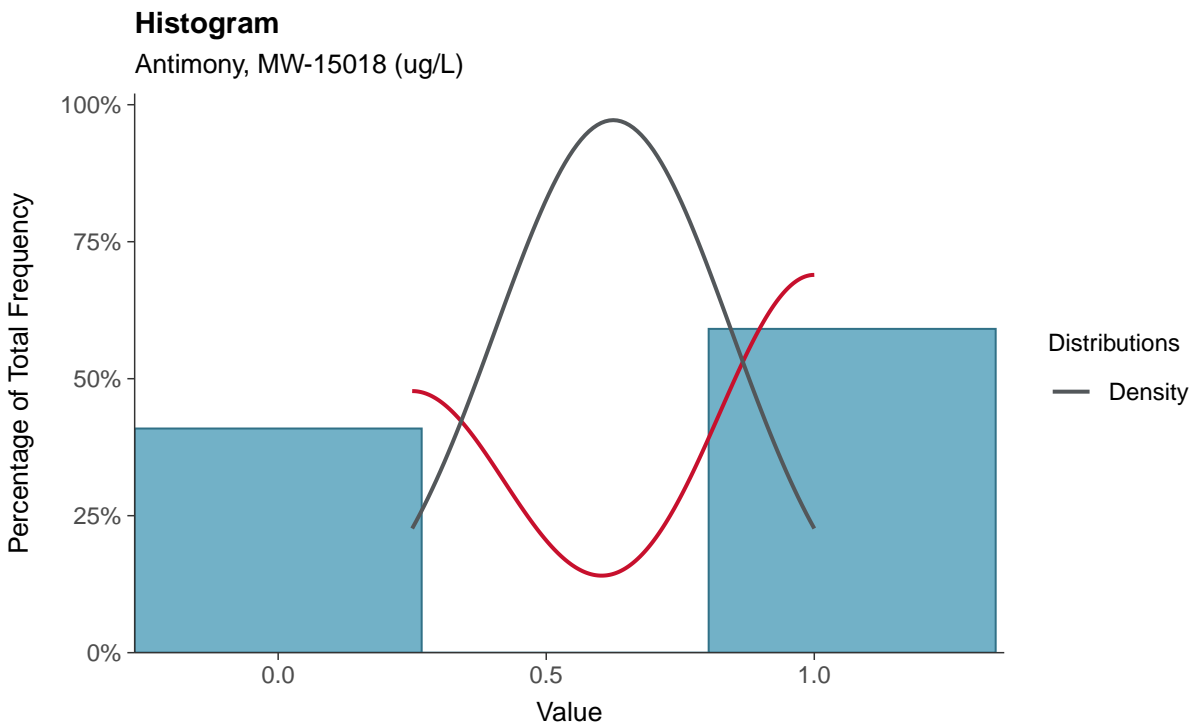
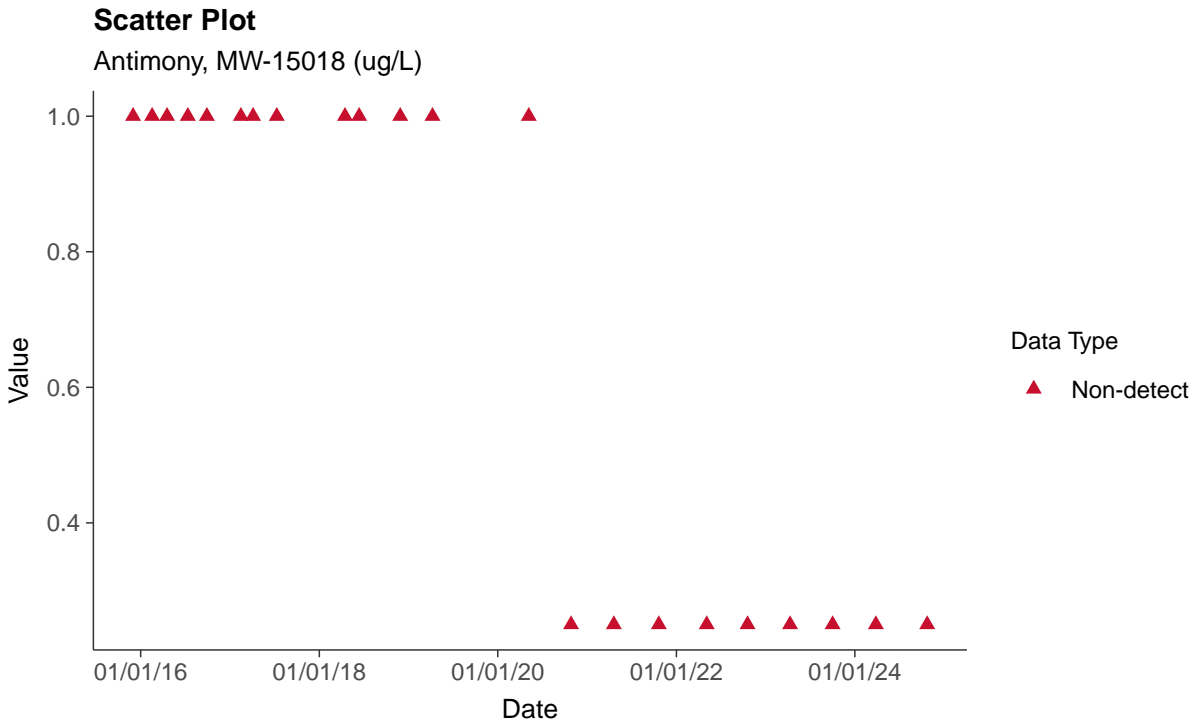
ID: 07_2_131





Appendix IV: Antimony, MW-15018

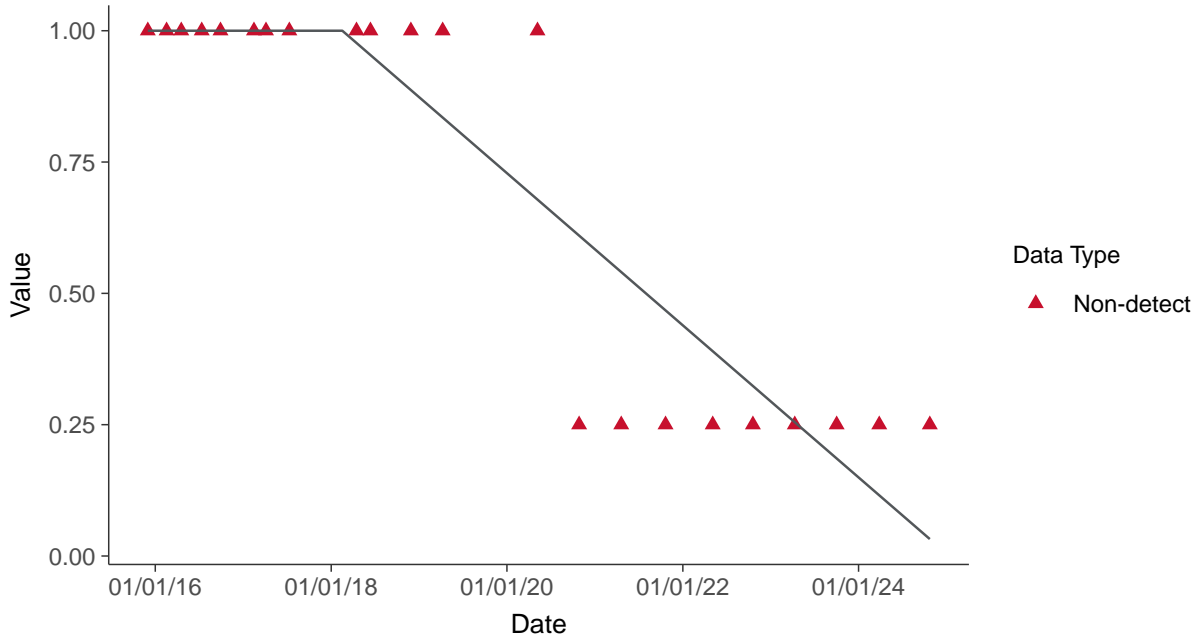
ID: 08_2_101





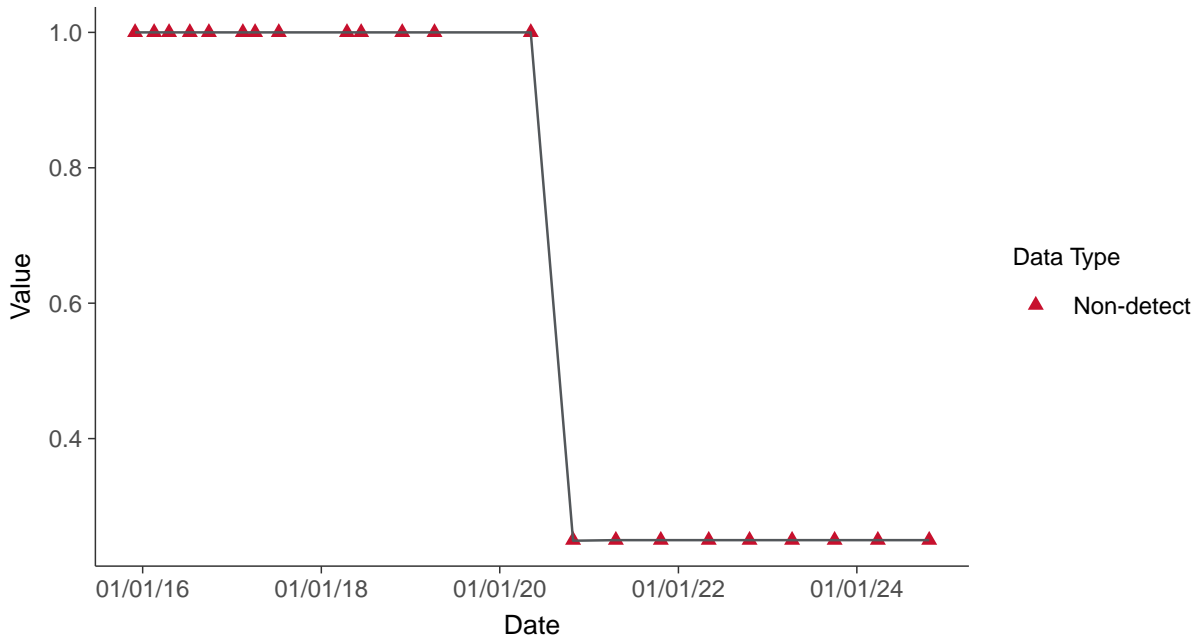
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

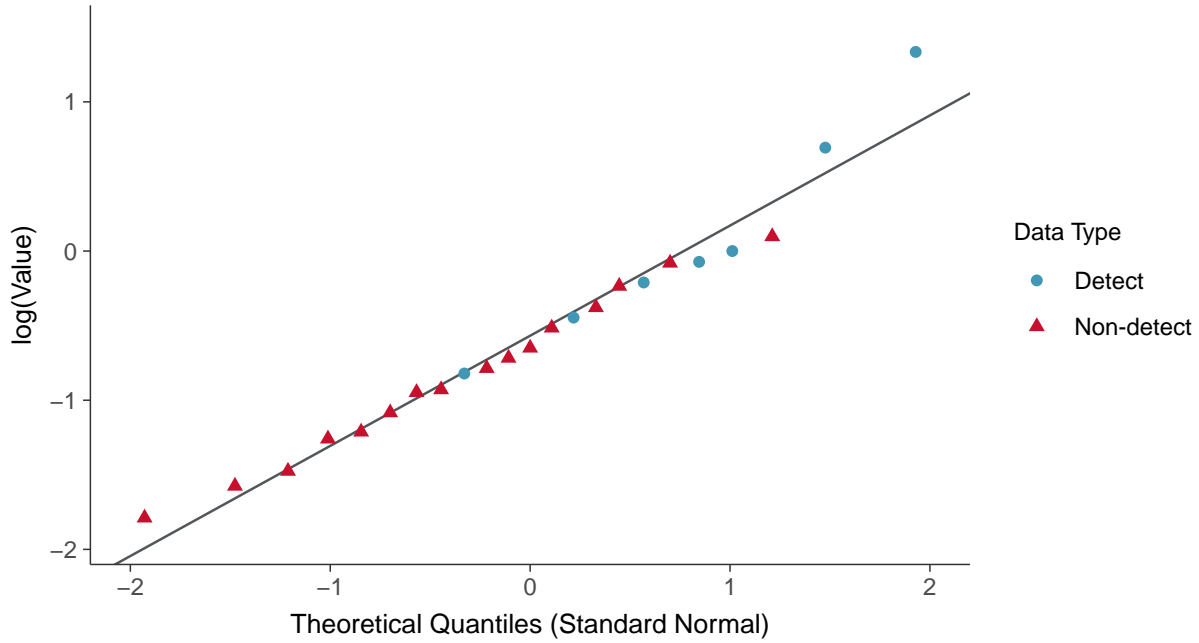
Antimony, MW-15018 (ug/L)





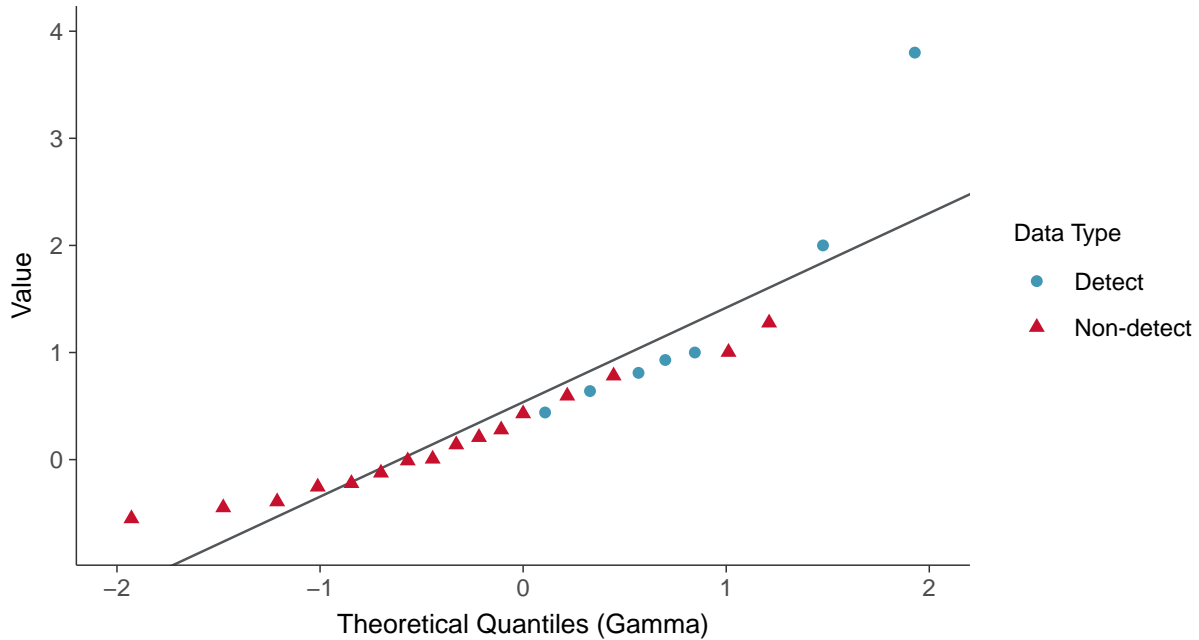
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15018 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

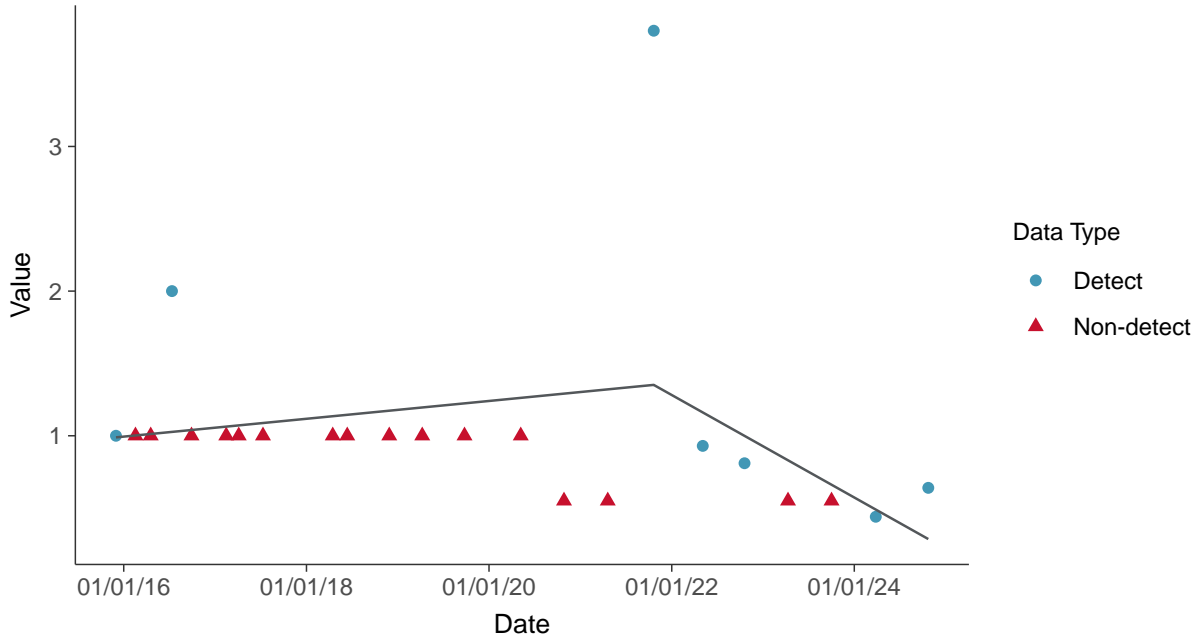
Arsenic, MW-15018 (ug/L)





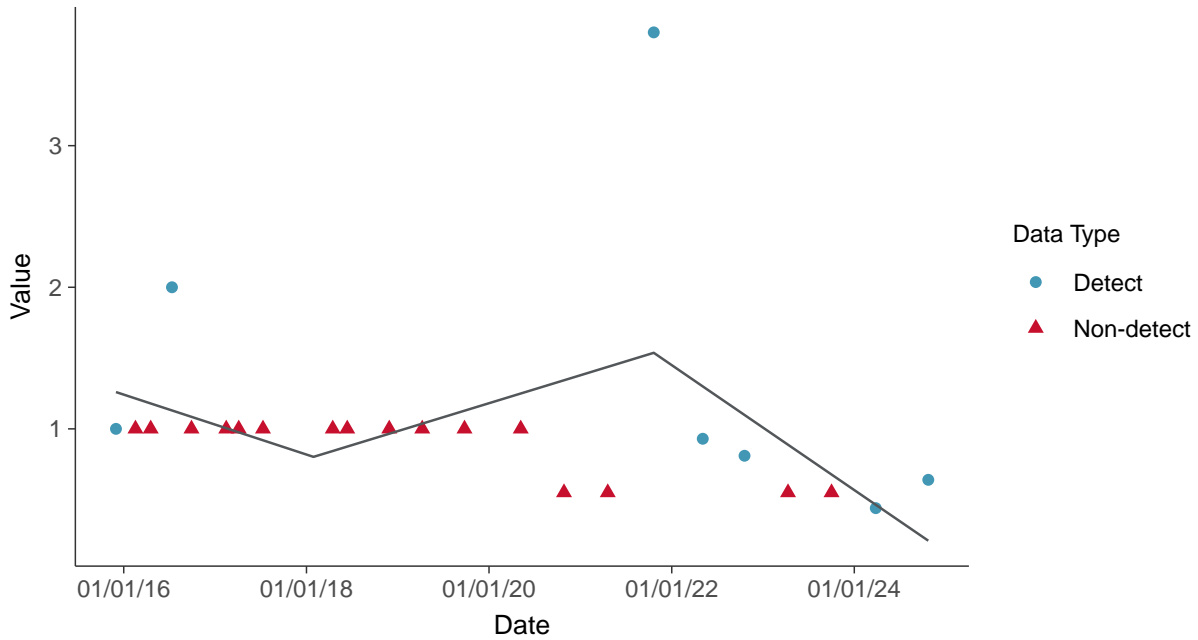
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15018 (ug/L)



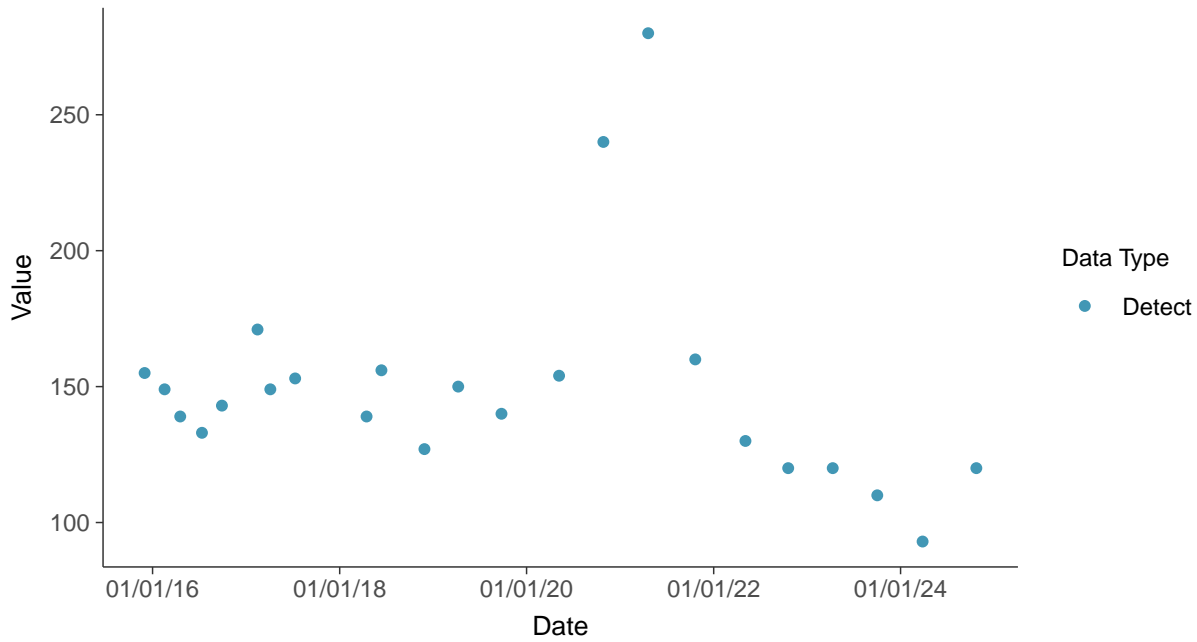


Appendix IV: Barium, MW-15018

ID: 08_2_103

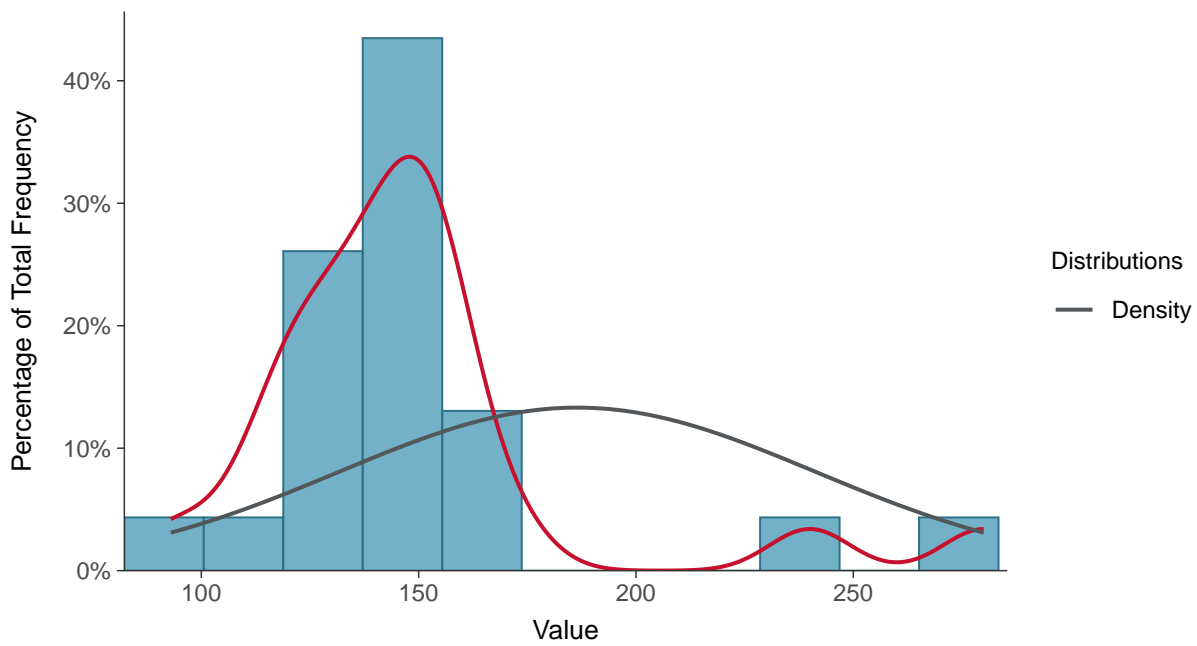
Scatter Plot

Barium, MW-15018 (ug/L)



Histogram

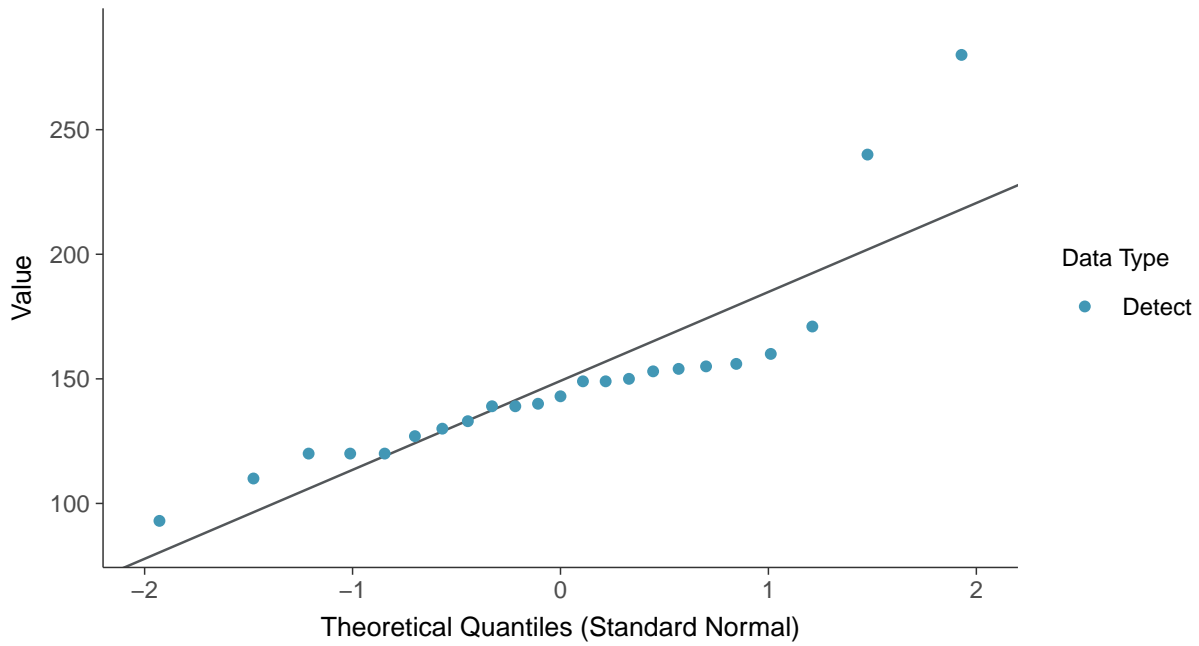
Barium, MW-15018 (ug/L)





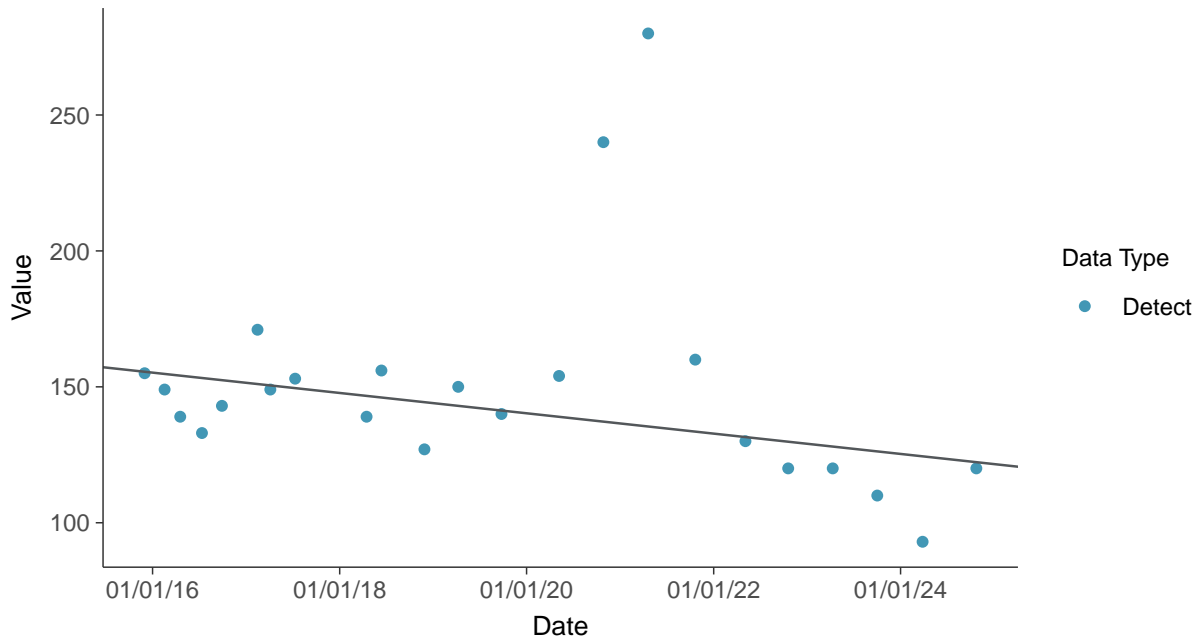
Normal Q-Q plot

Barium, MW-15018 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

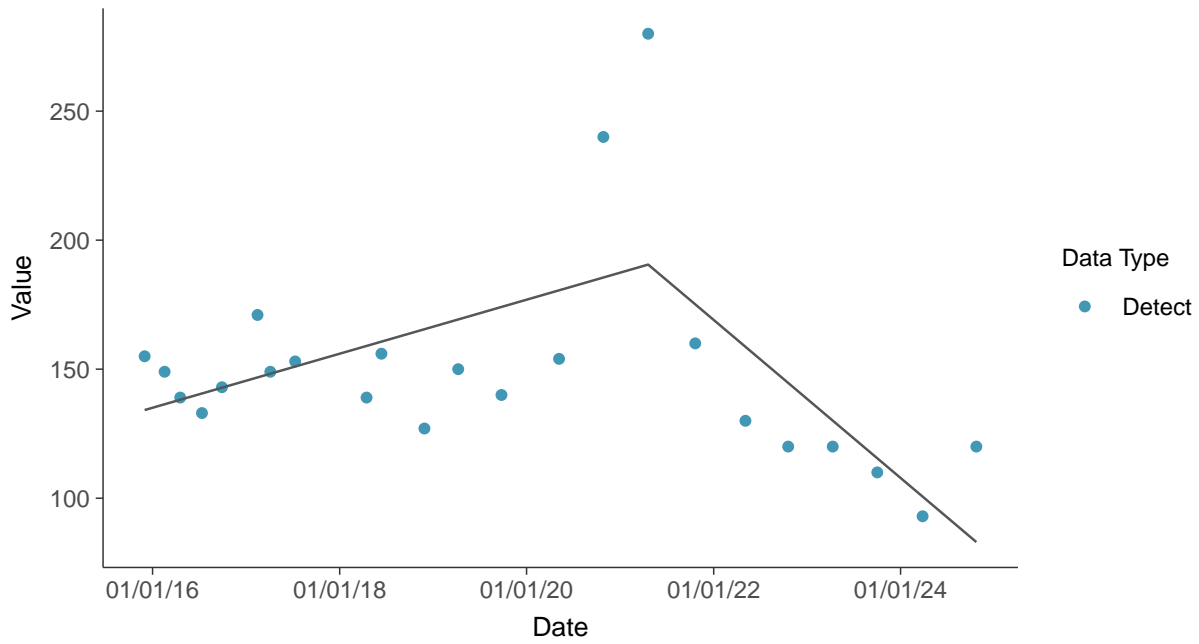
Barium, MW-15018 (ug/L)





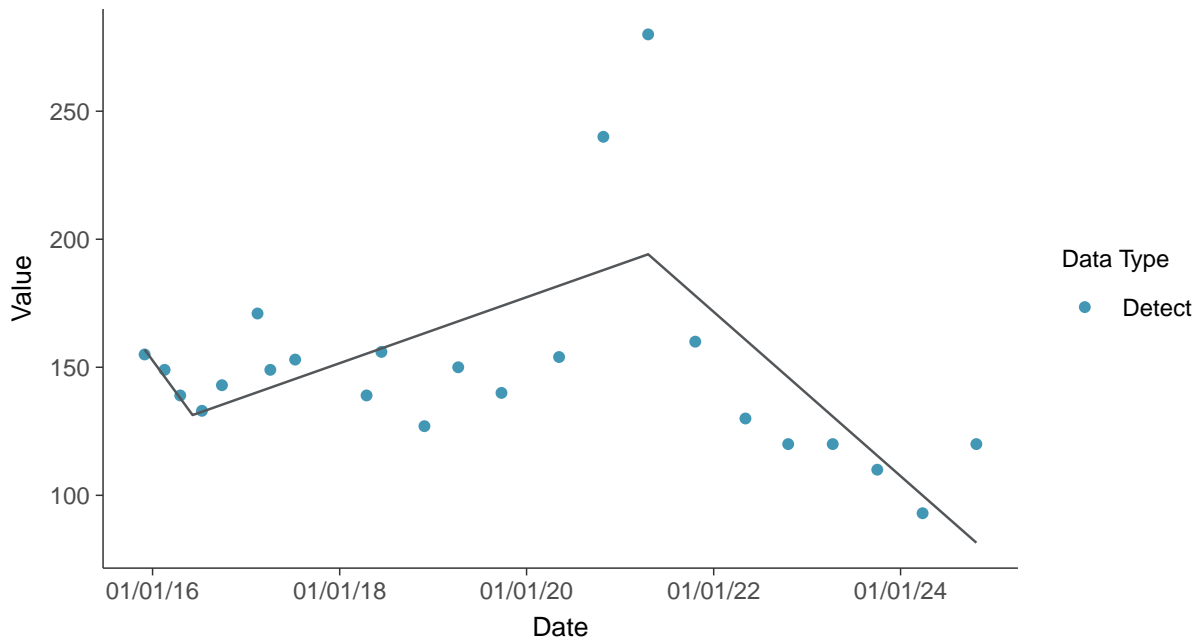
Trend Regression: Piecewise Linear-Linear

Barium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

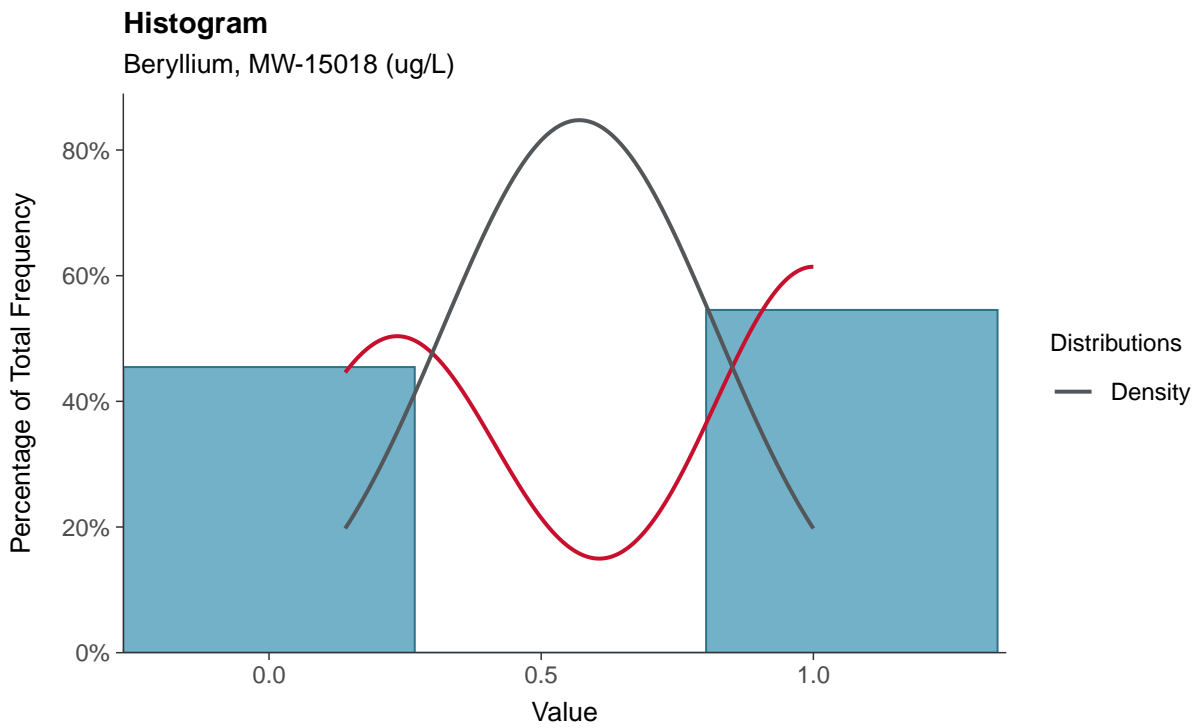
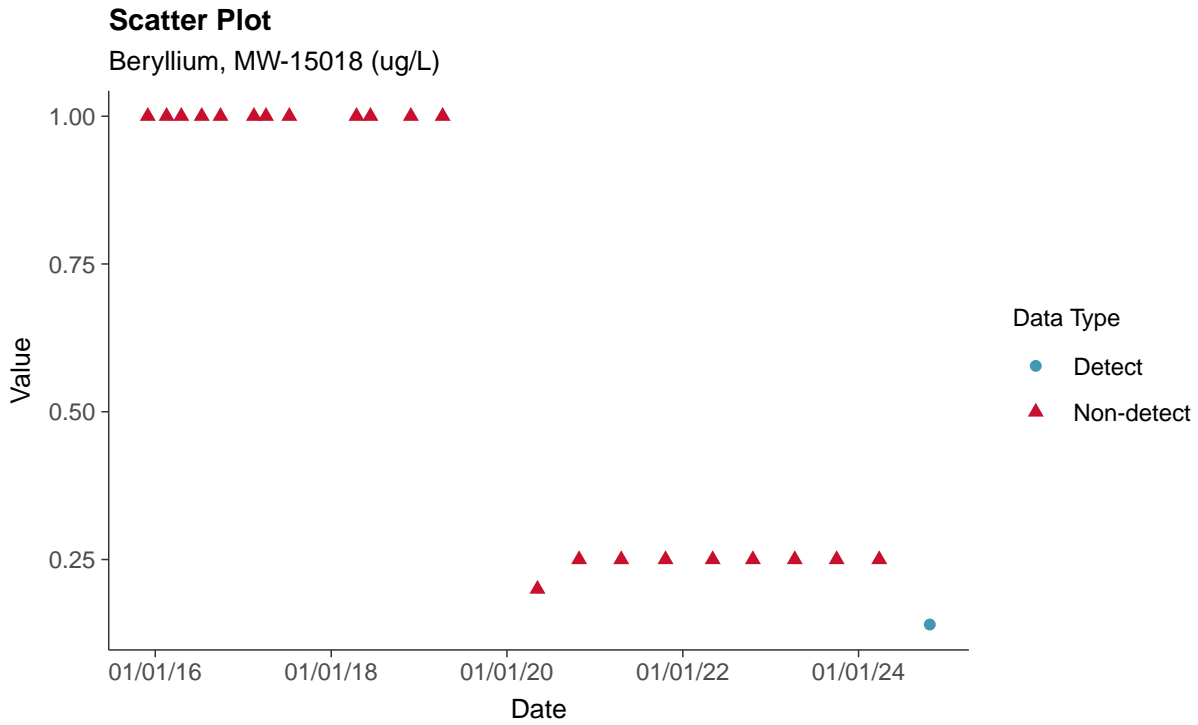
Barium, MW-15018 (ug/L)





Appendix IV: Beryllium, MW-15018

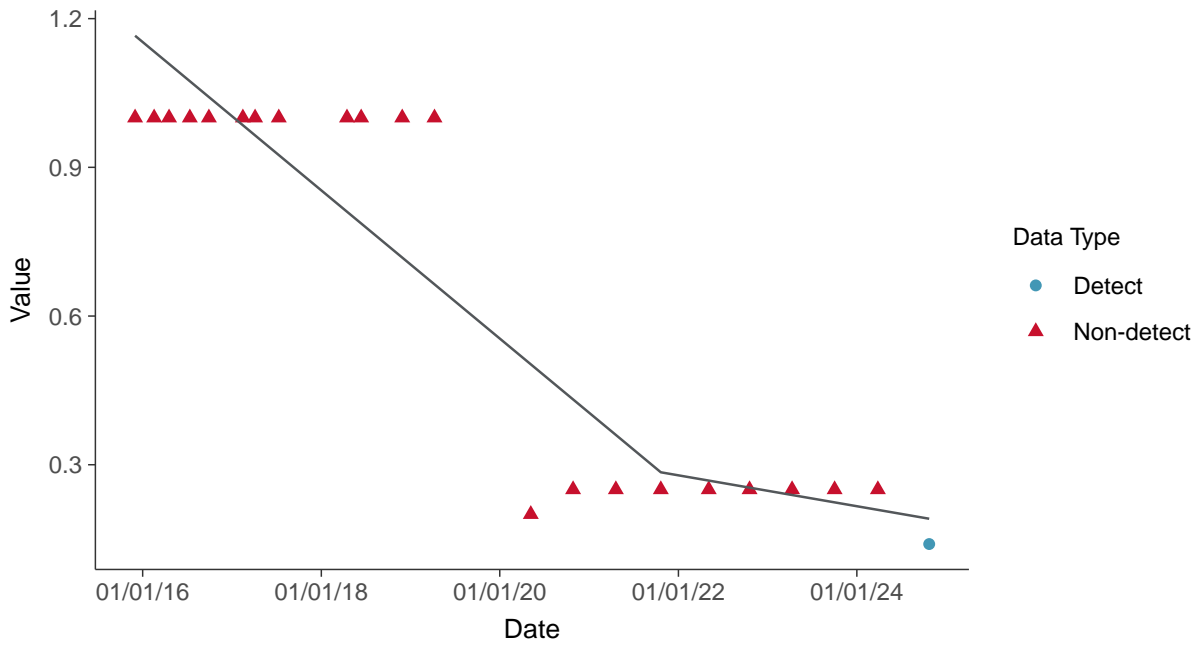
ID: 08_2_104





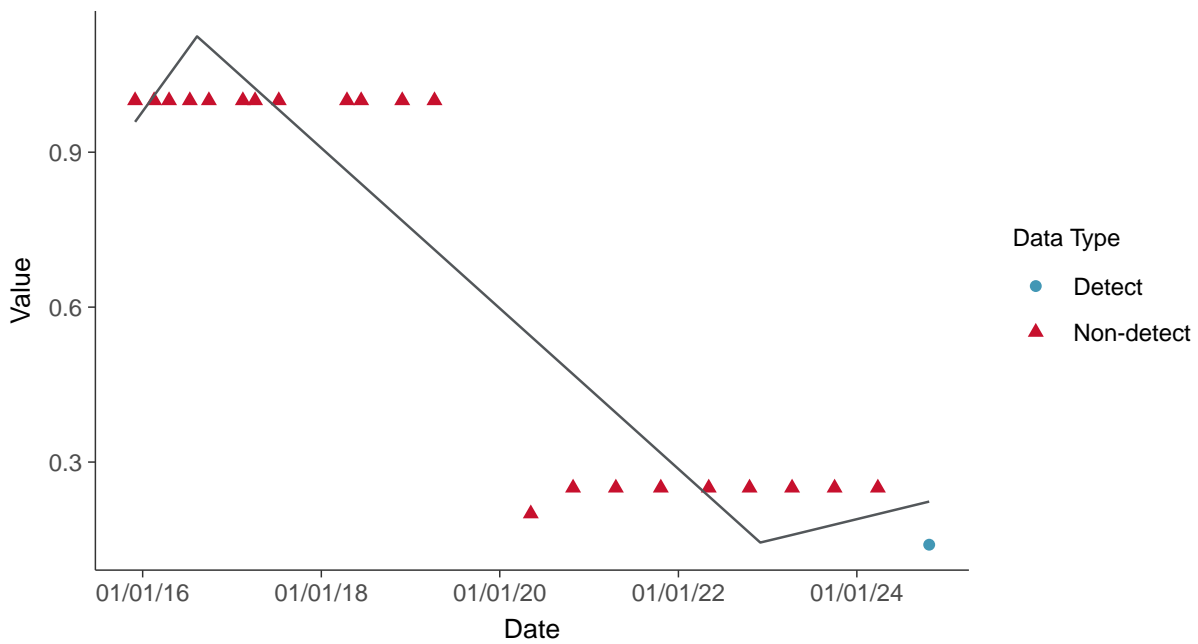
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

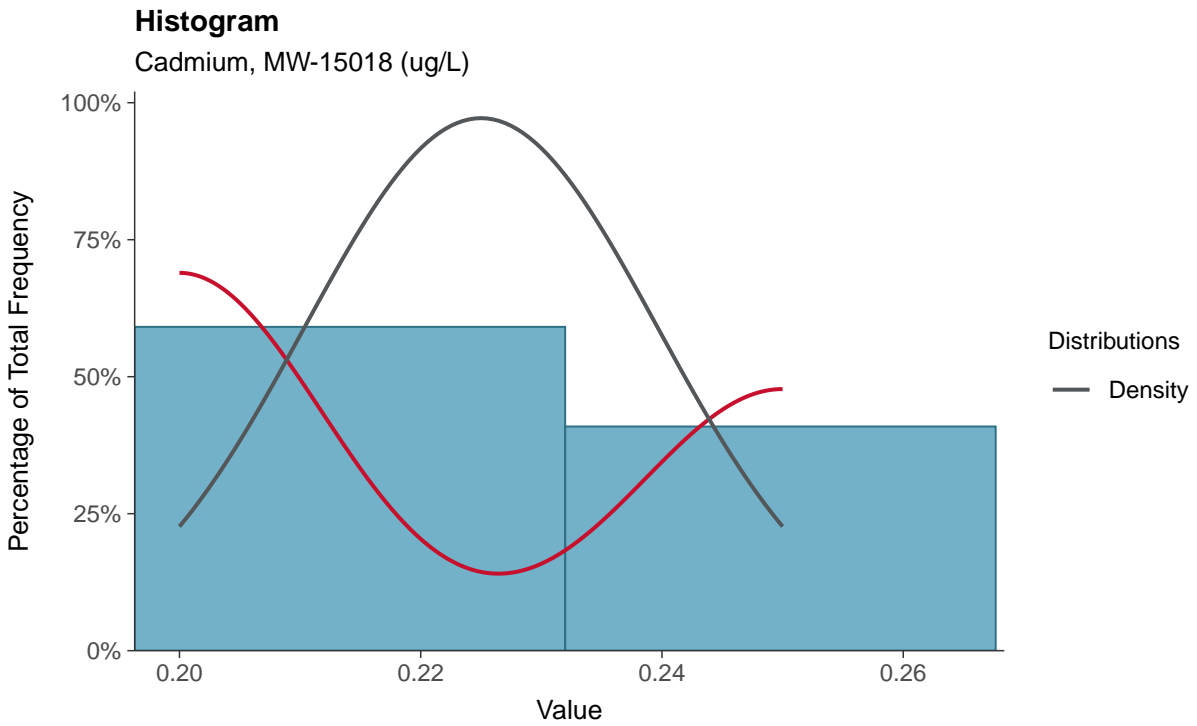
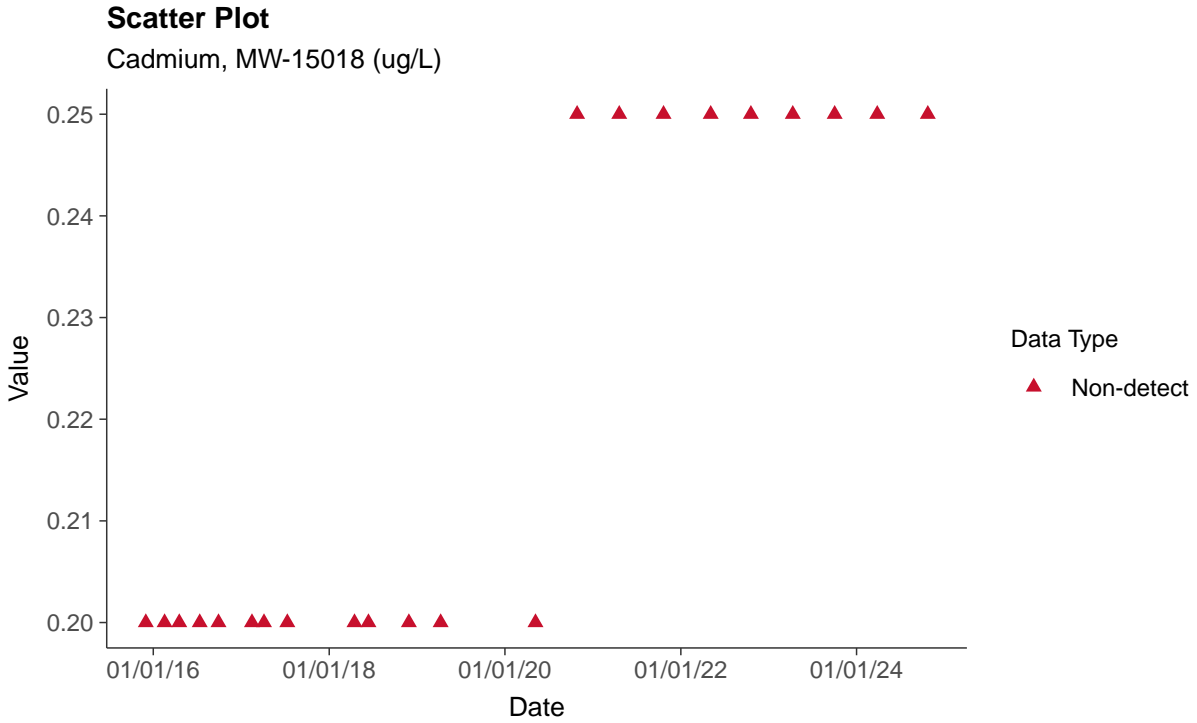
Beryllium, MW-15018 (ug/L)





Appendix IV: Cadmium, MW-15018

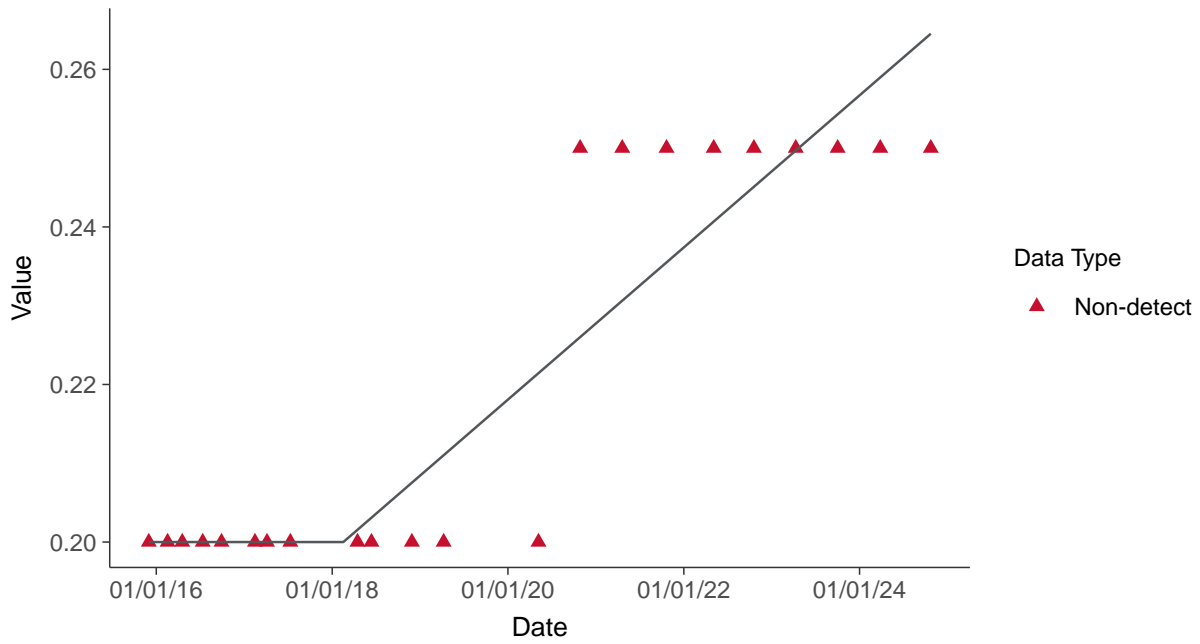
ID: 08_2_106





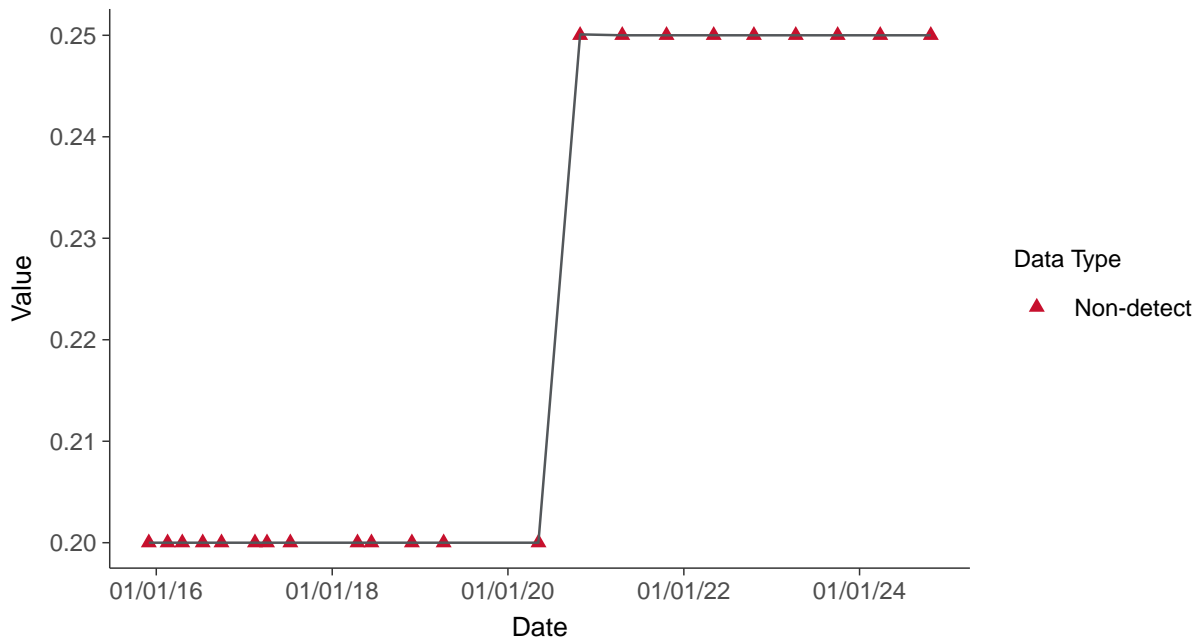
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15018 (ug/L)



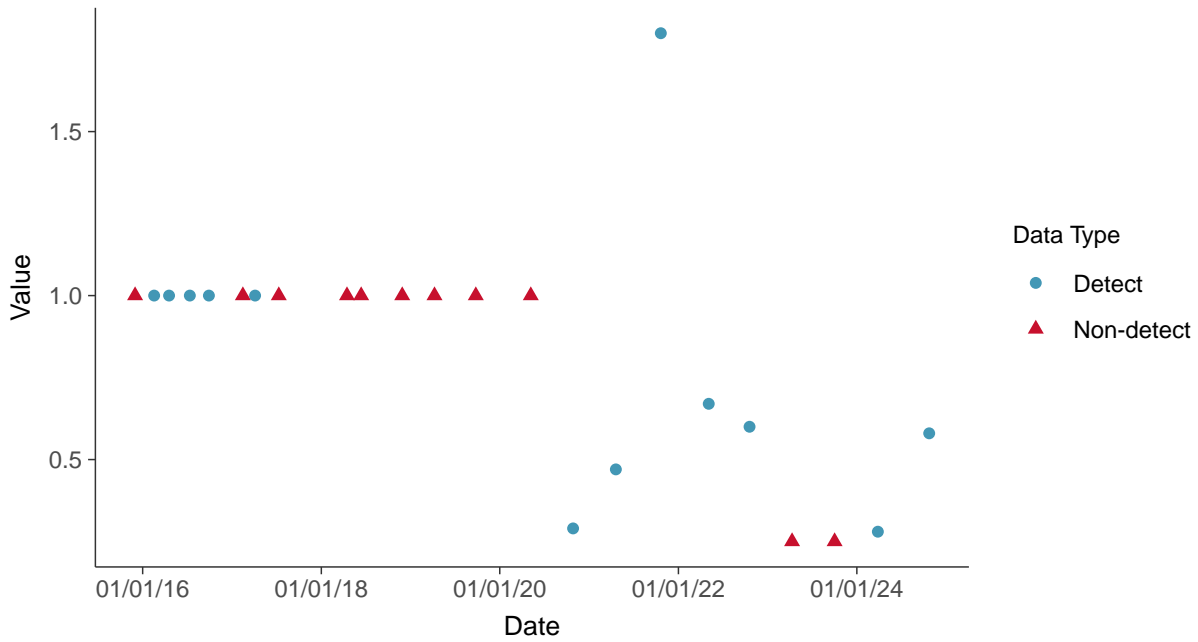


Appendix IV: Chromium, MW-15018

ID: 08_2_109

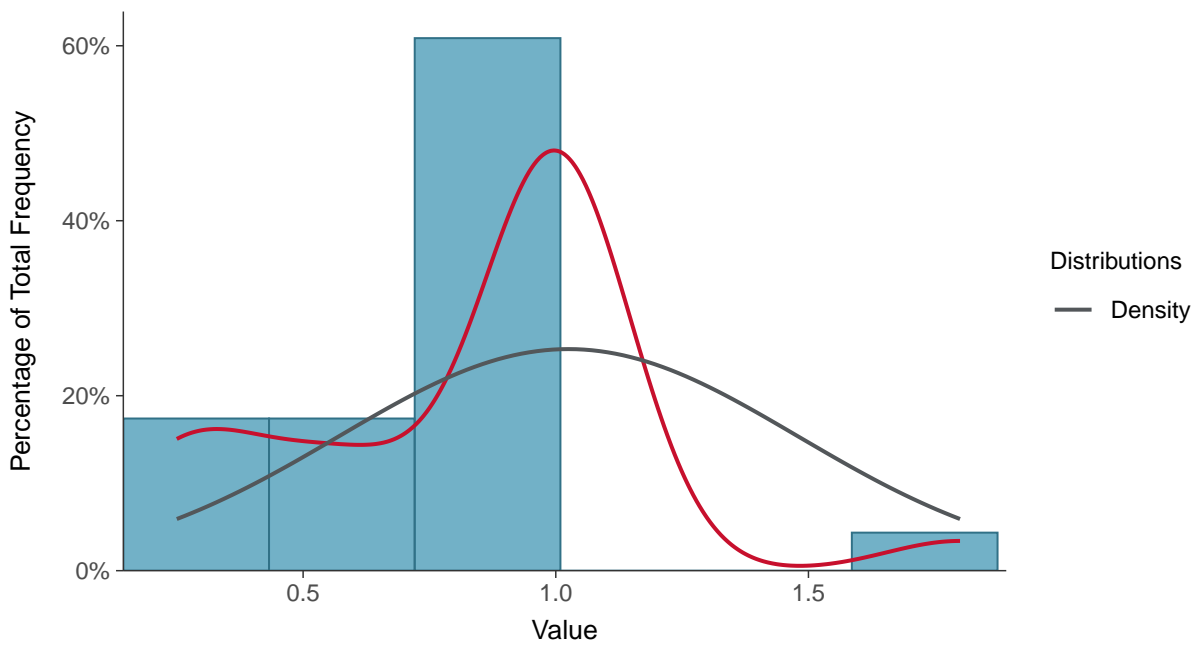
Scatter Plot

Chromium, MW-15018 (ug/L)



Histogram

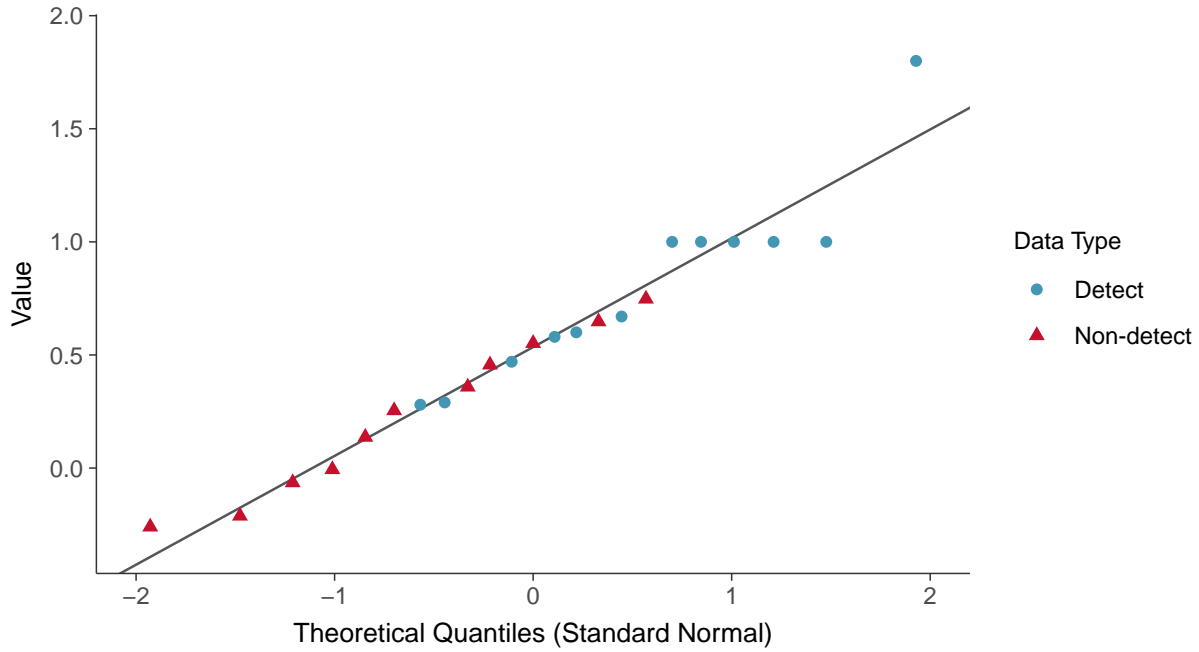
Chromium, MW-15018 (ug/L)





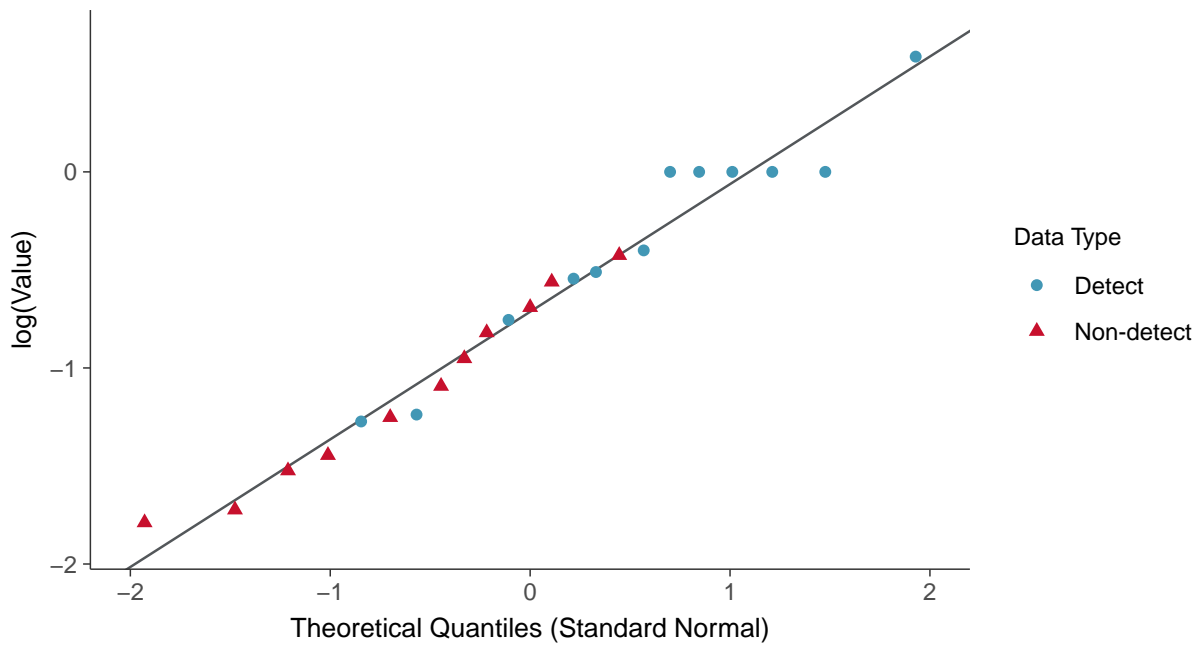
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15018 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

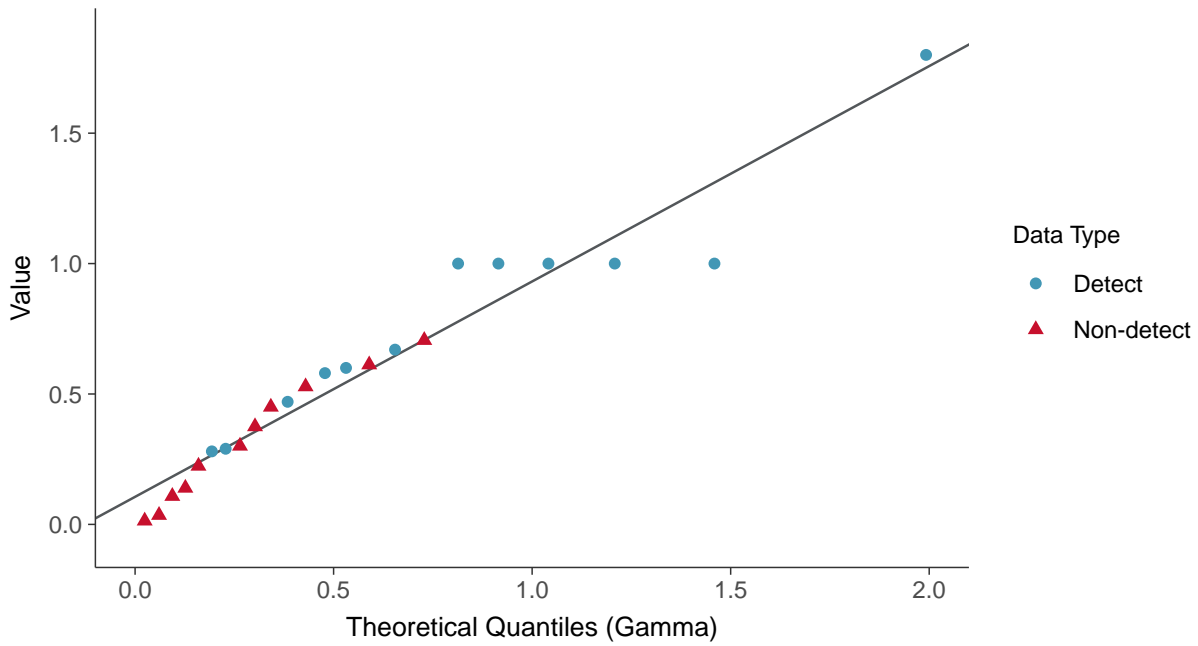
Chromium, MW-15018 (ug/L)





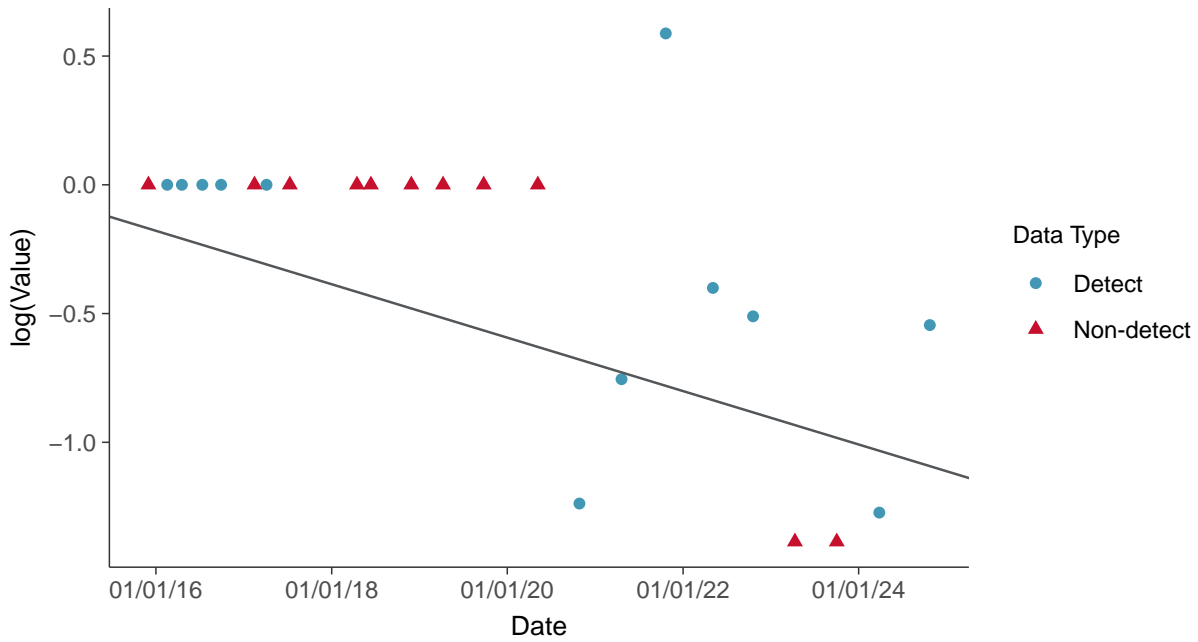
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15018 (ug/L)



Trend Regression: Lognormal MLE

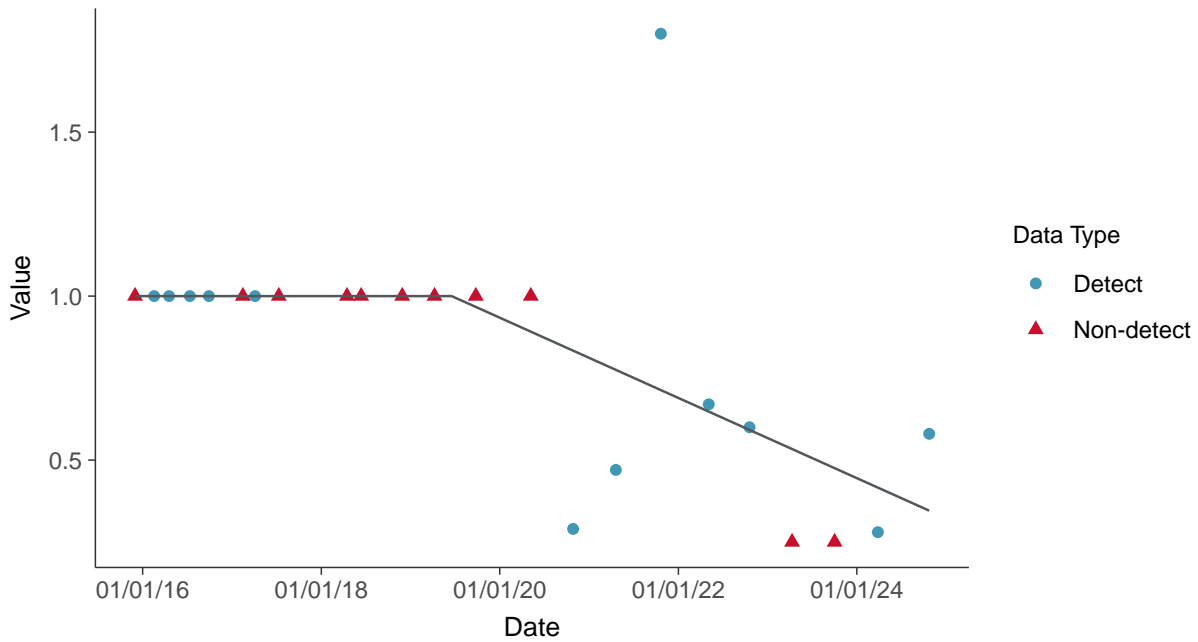
Chromium, MW-15018 (ug/L)





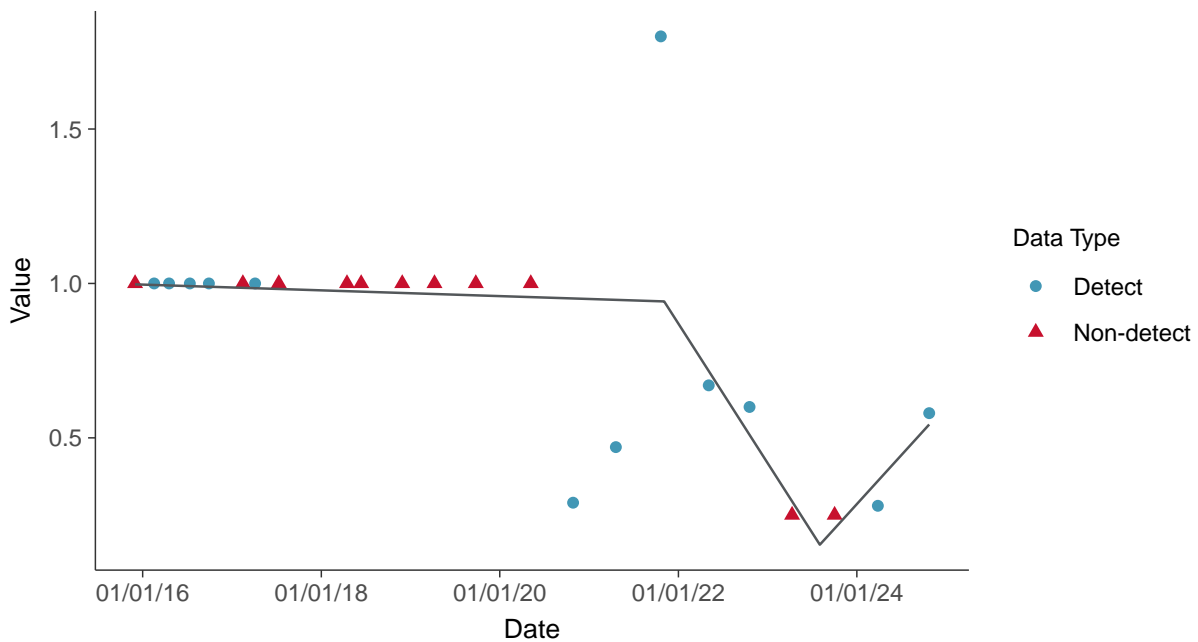
Trend Regression: Piecewise Linear-Linear

Chromium, MW-15018 (ug/L)



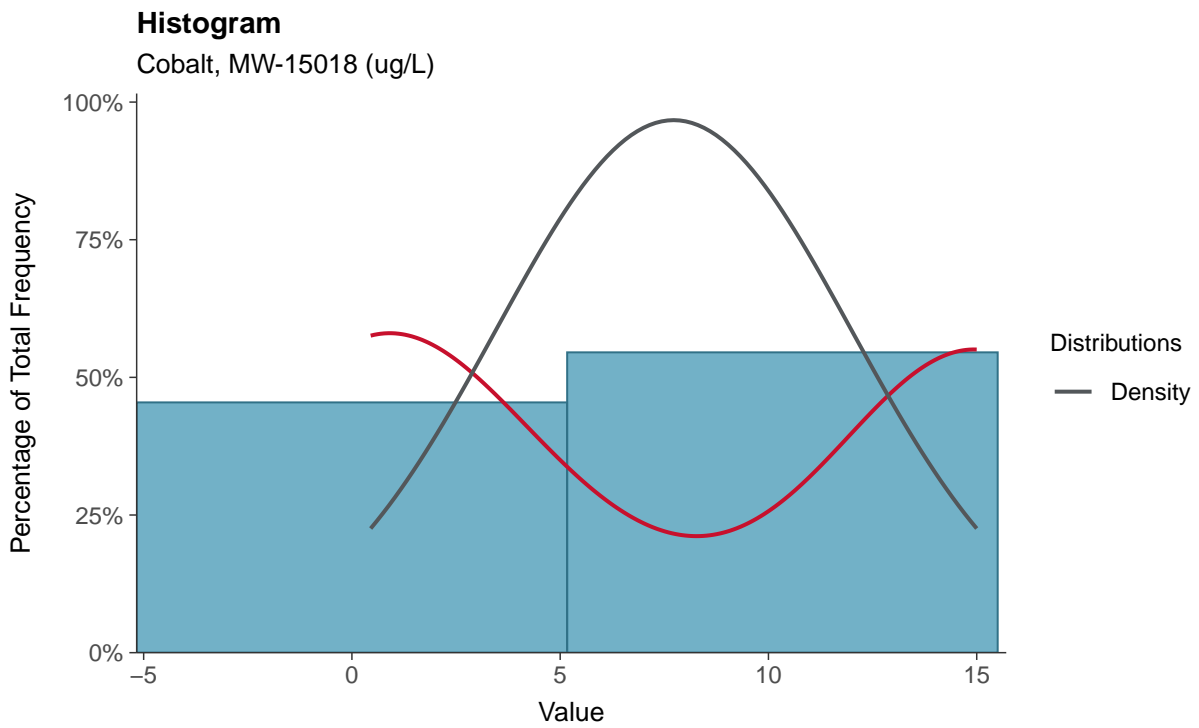
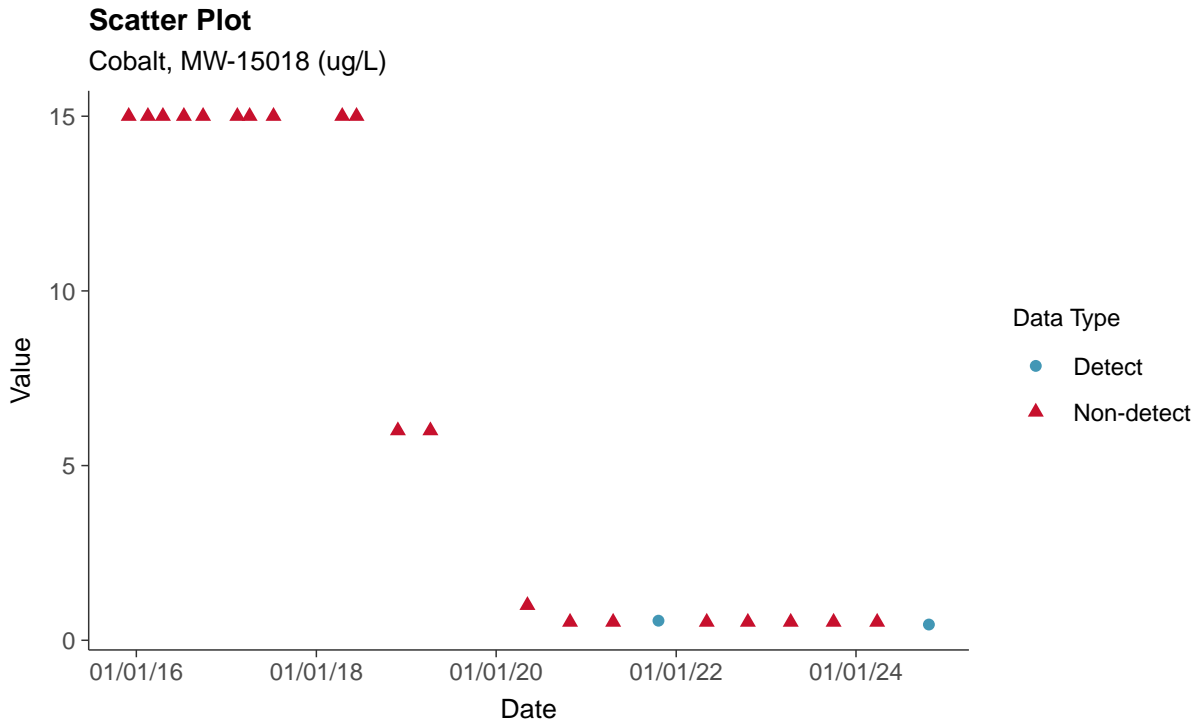
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, MW-15018 (ug/L)



Appendix IV: Cobalt, MW-15018

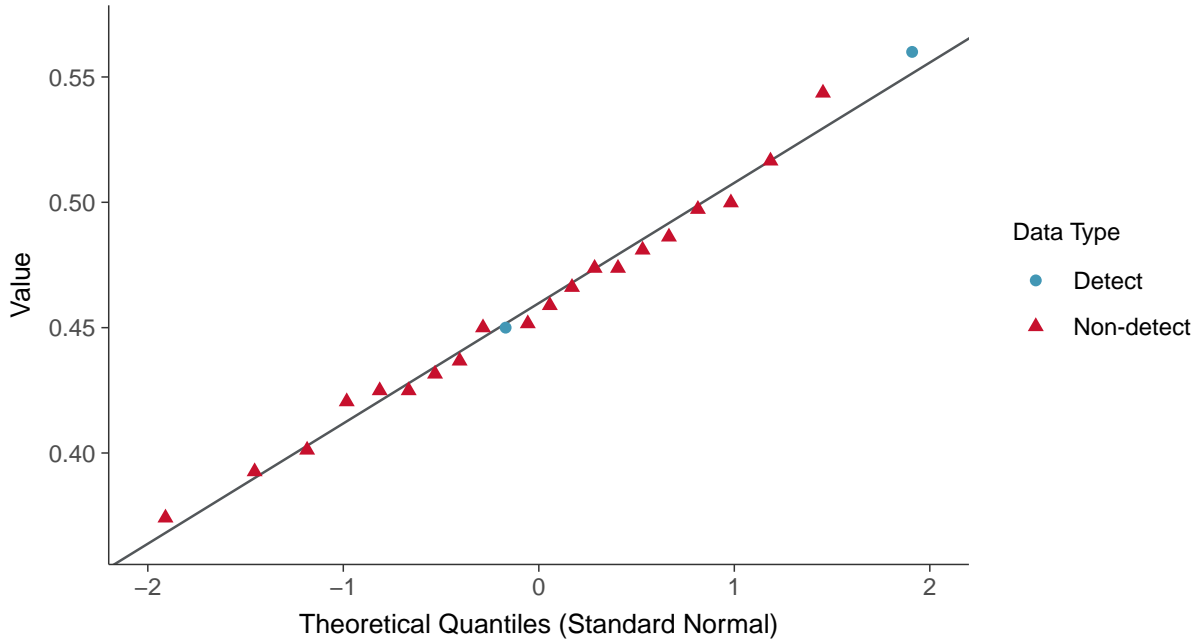
ID: 08_2_110





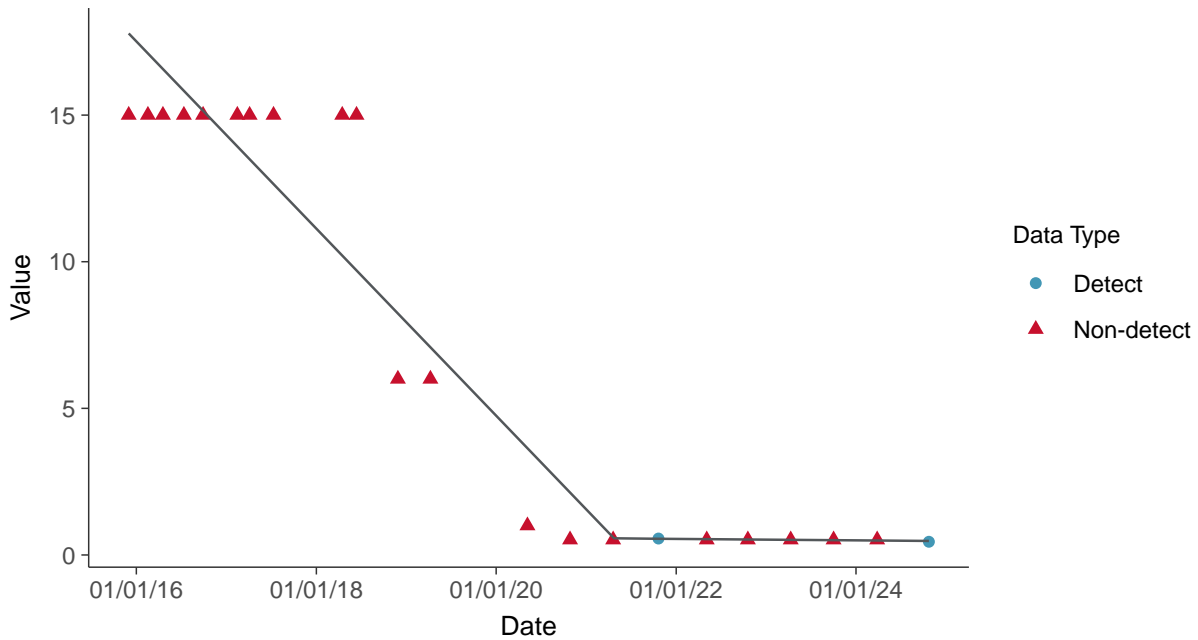
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear

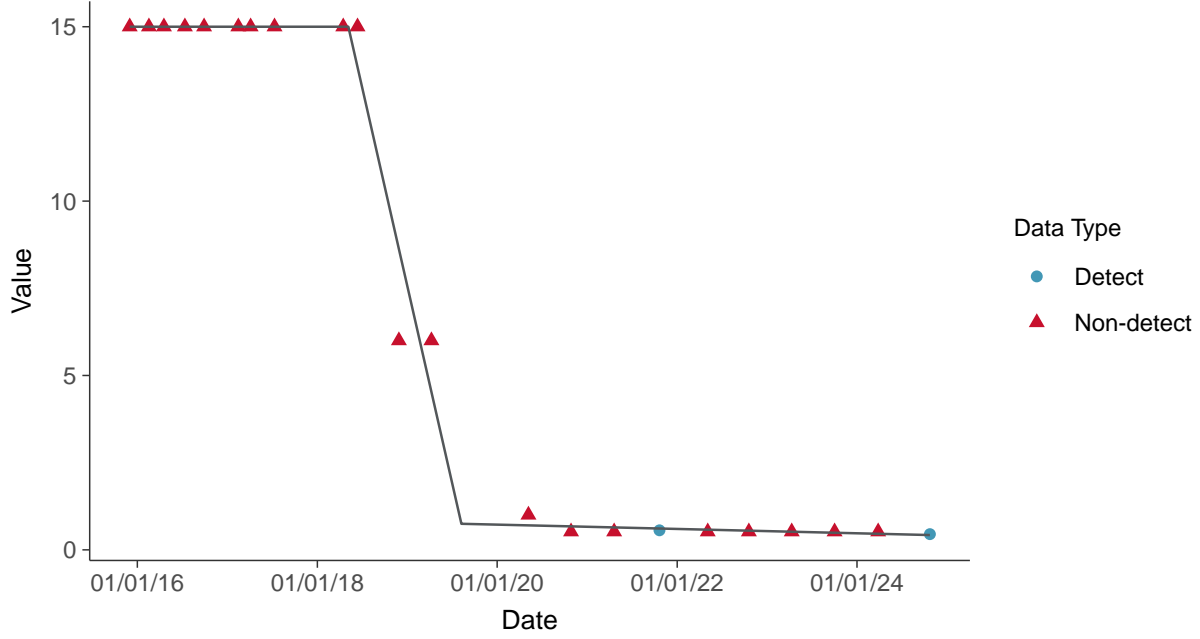
Cobalt, MW-15018 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

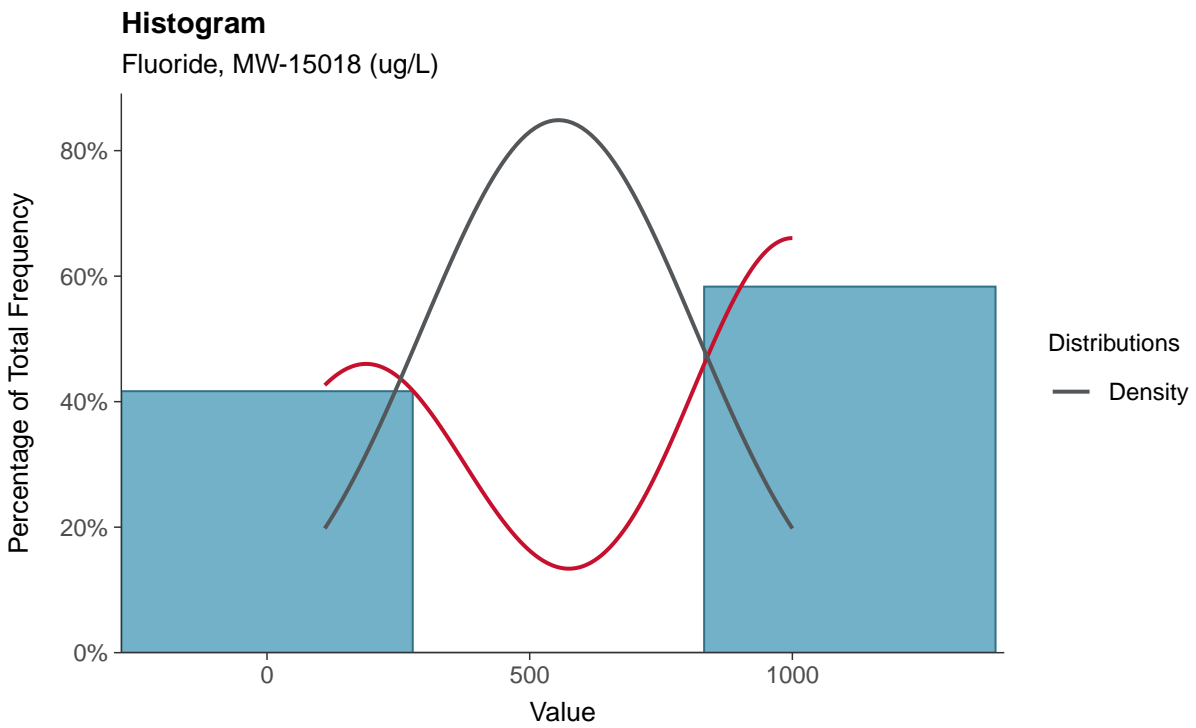
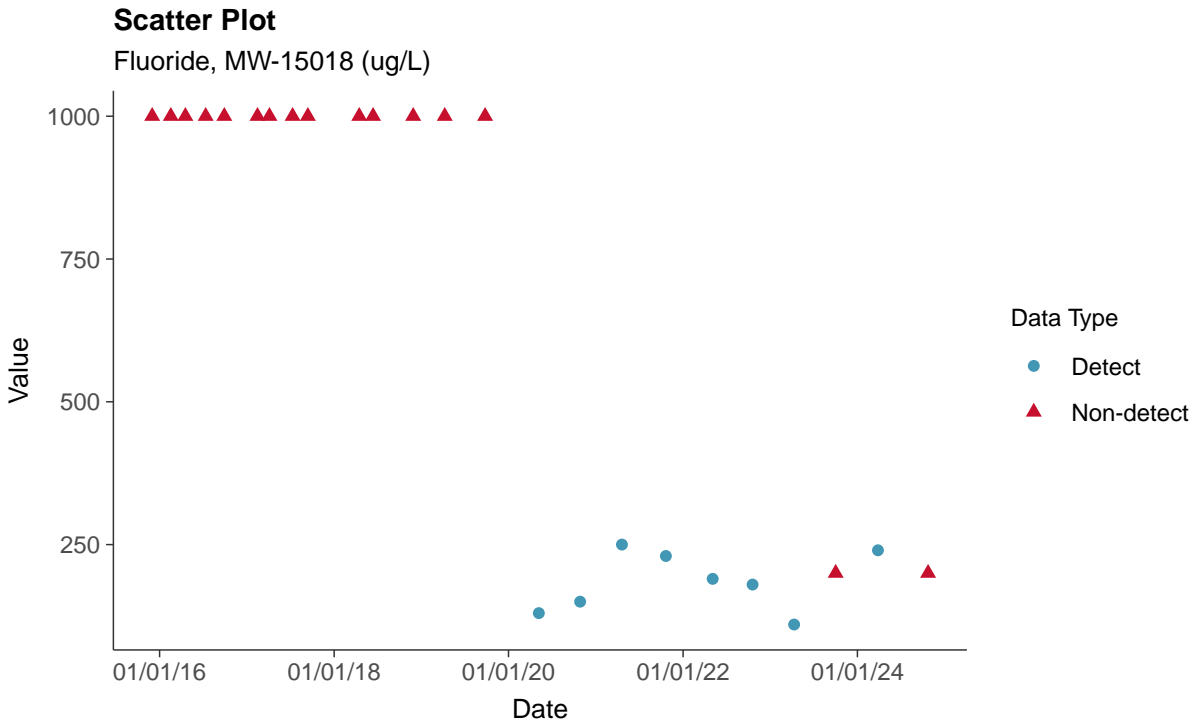
Cobalt, MW-15018 (ug/L)





Appendix IV: Fluoride, MW-15018

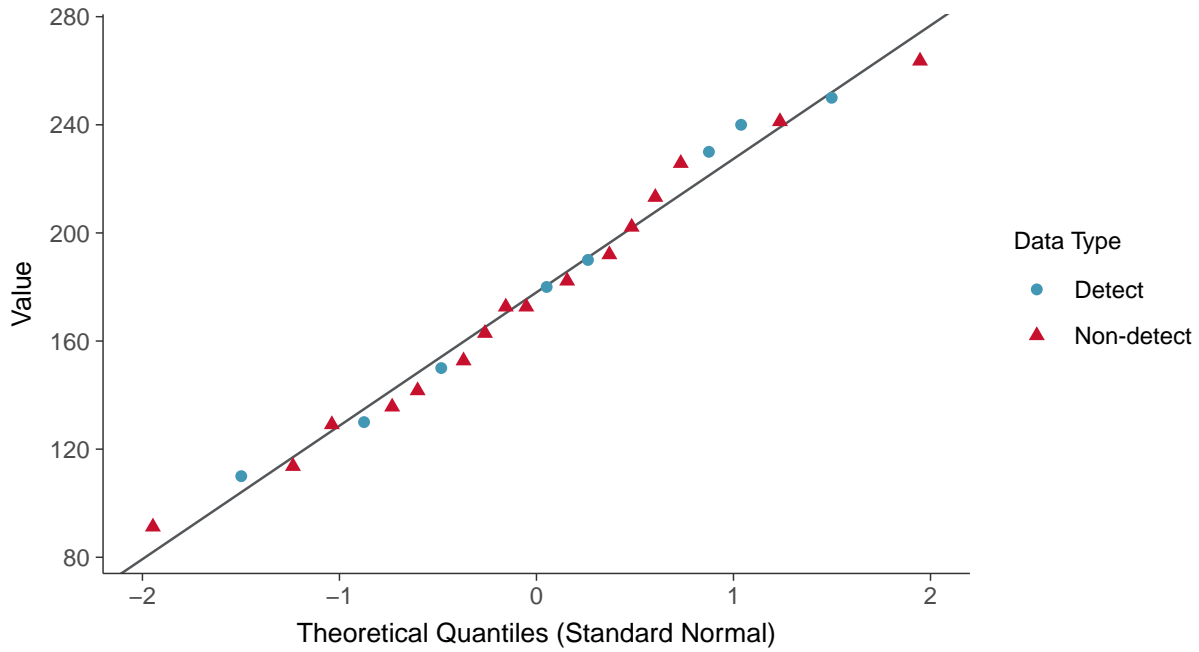
ID: 08_2_114





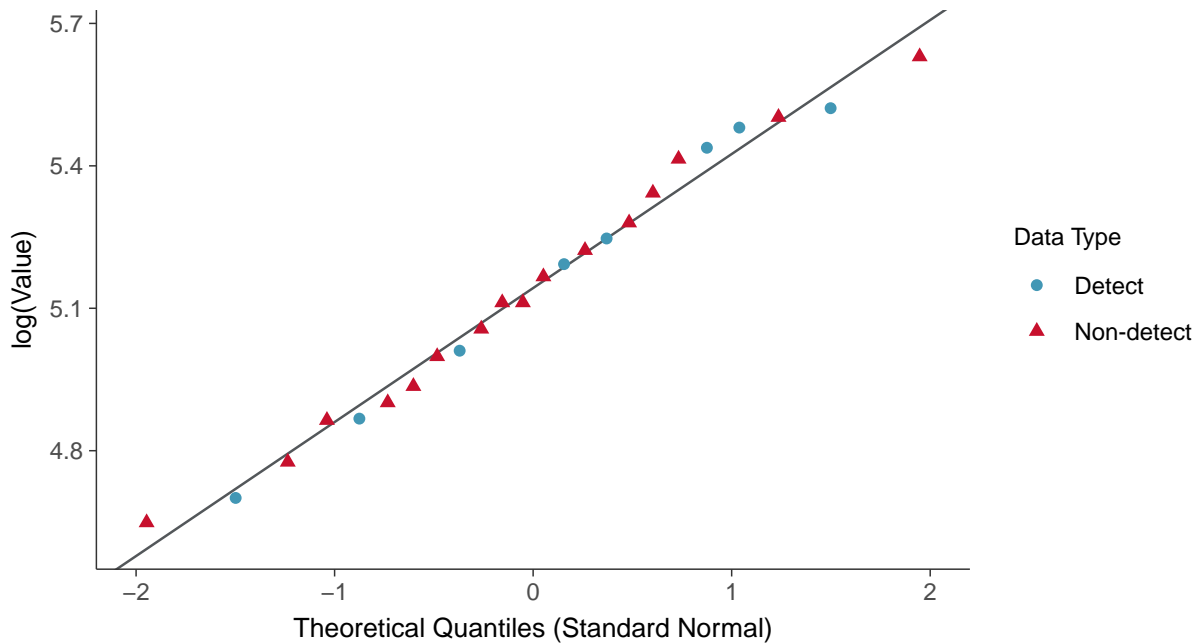
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15018 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

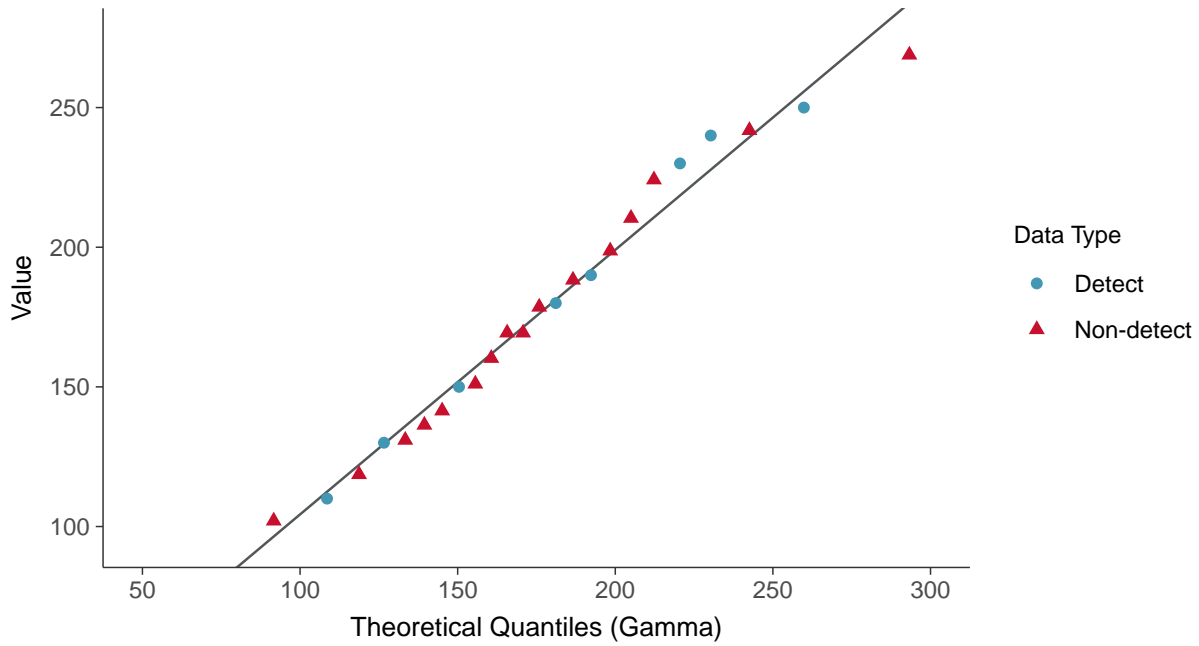
Fluoride, MW-15018 (ug/L)





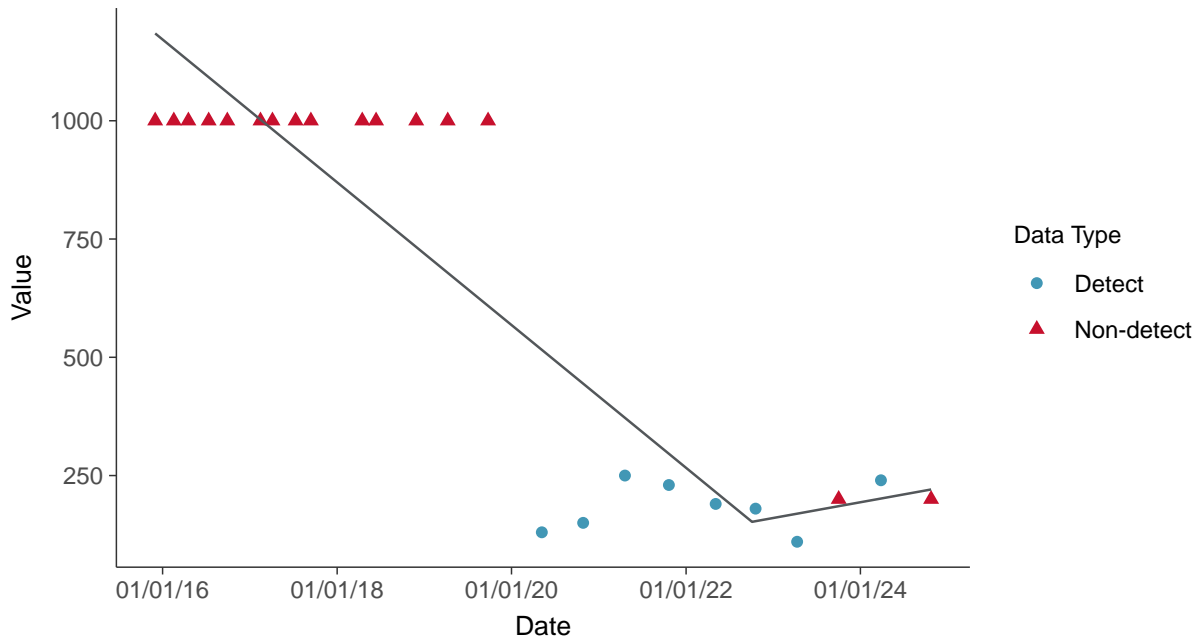
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear

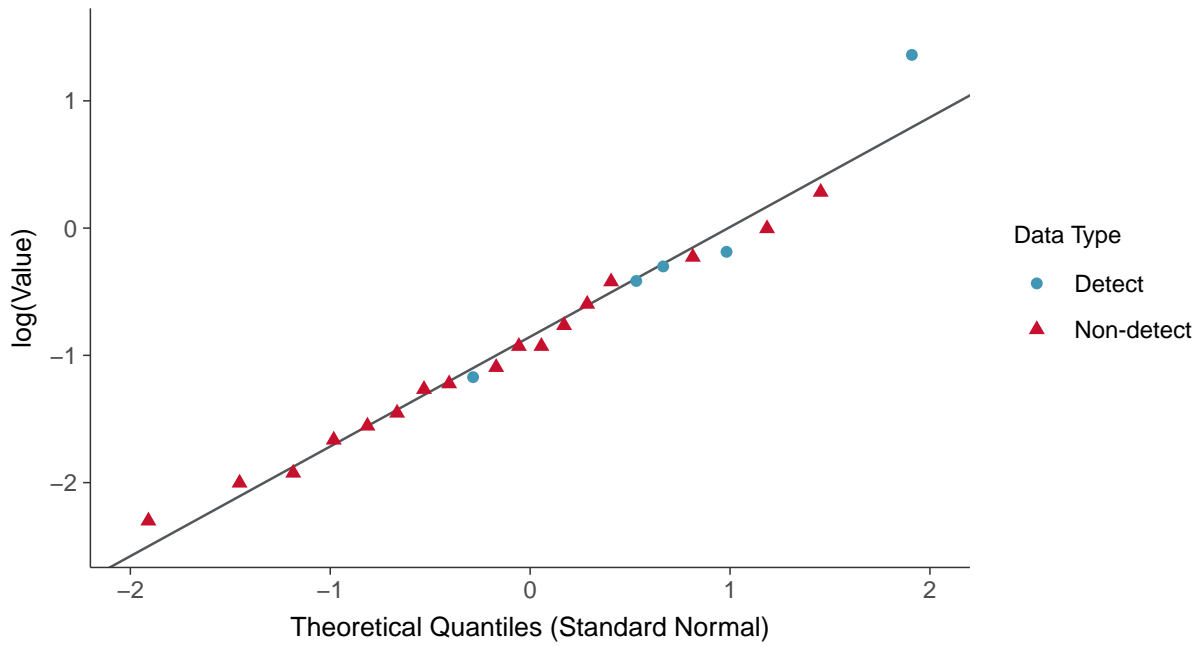
Fluoride, MW-15018 (ug/L)





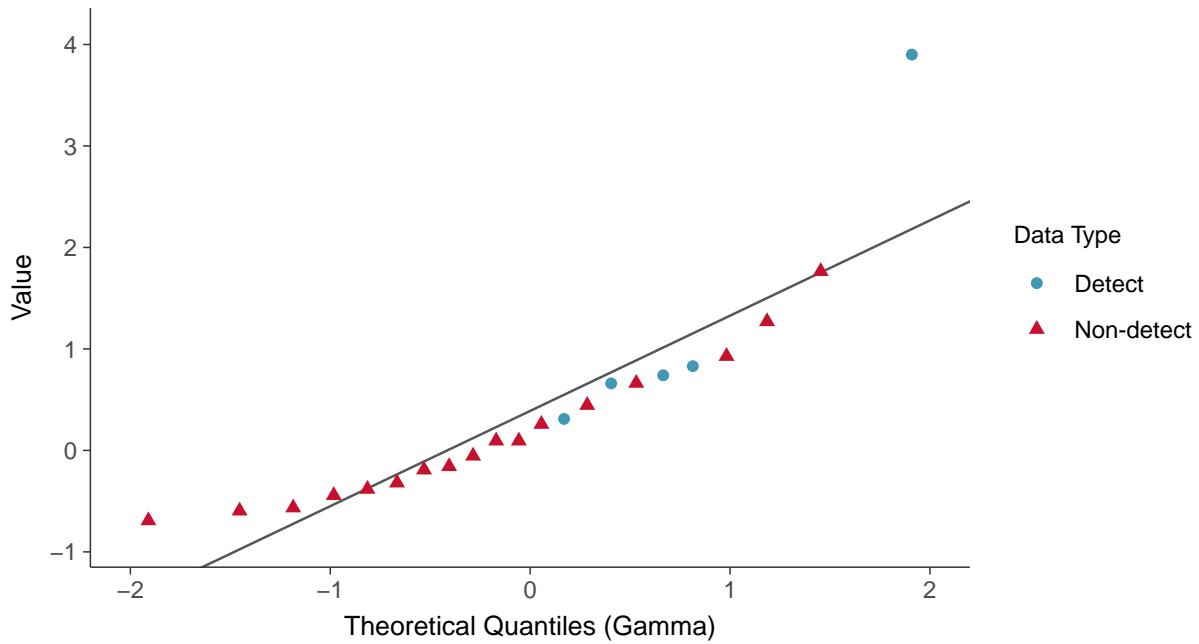
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-15018 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

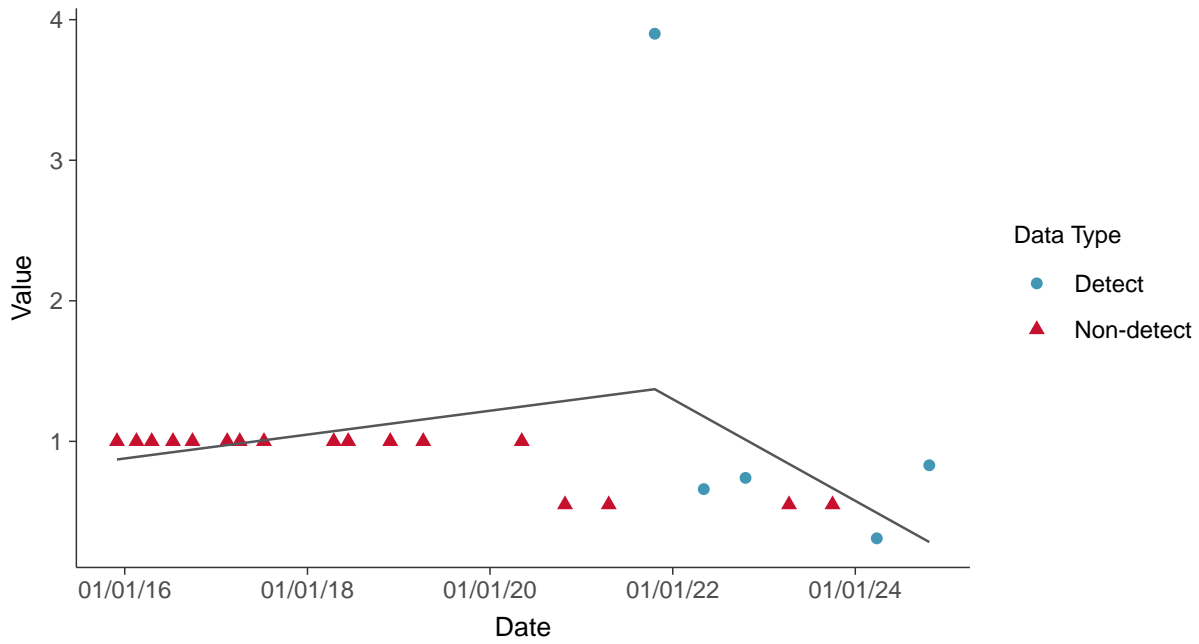
Lead, MW-15018 (ug/L)





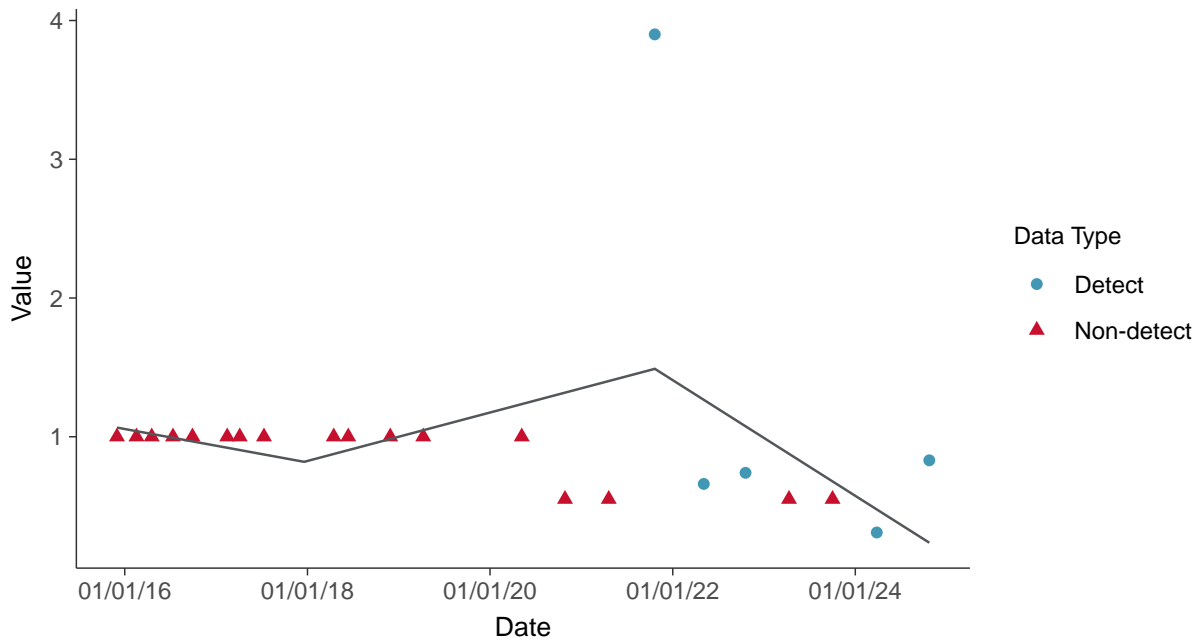
Trend Regression: Piecewise Linear-Linear

Lead, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-15018 (ug/L)



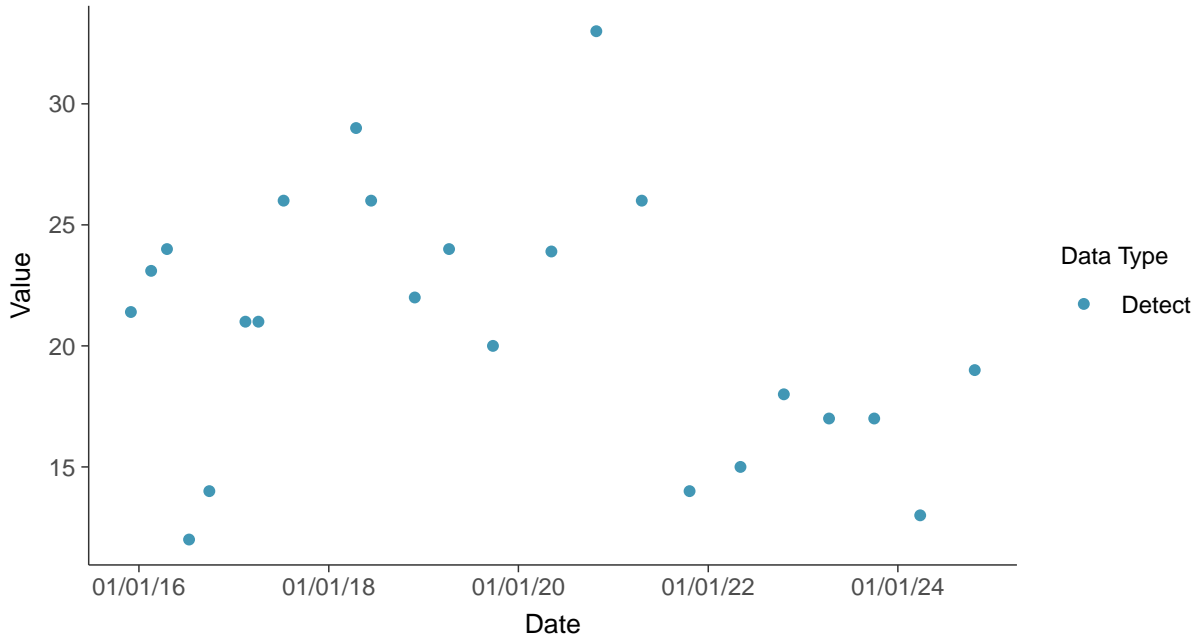


Appendix IV: Lithium, MW-15018

ID: 08_2_117

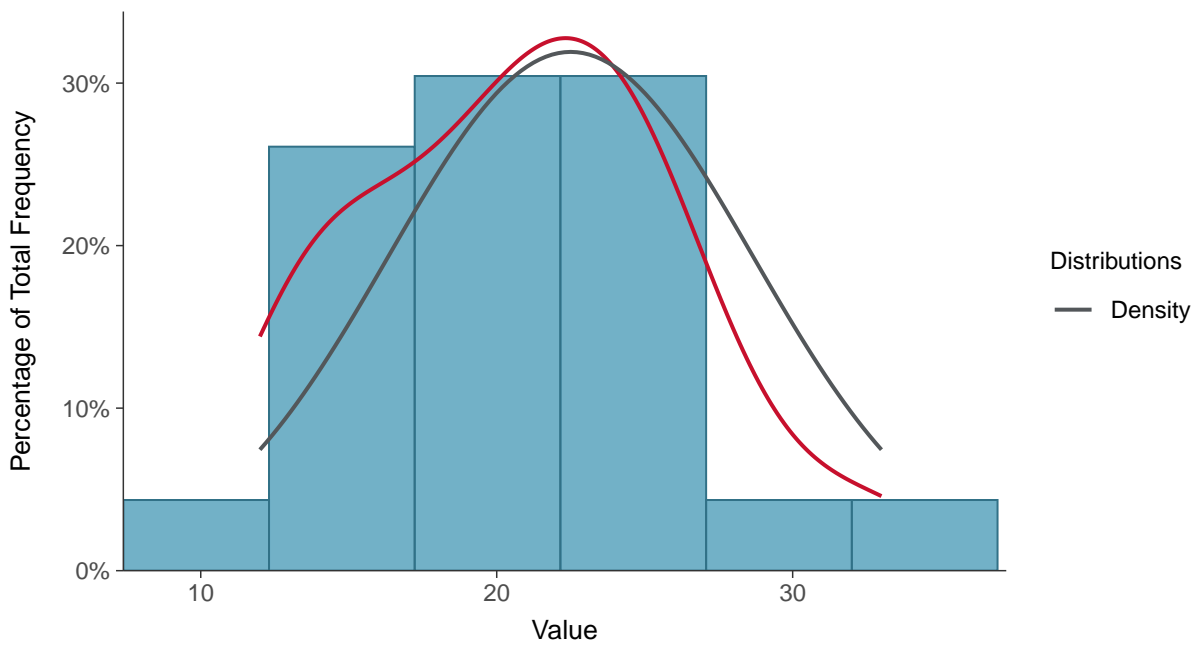
Scatter Plot

Lithium, MW-15018 (ug/L)



Histogram

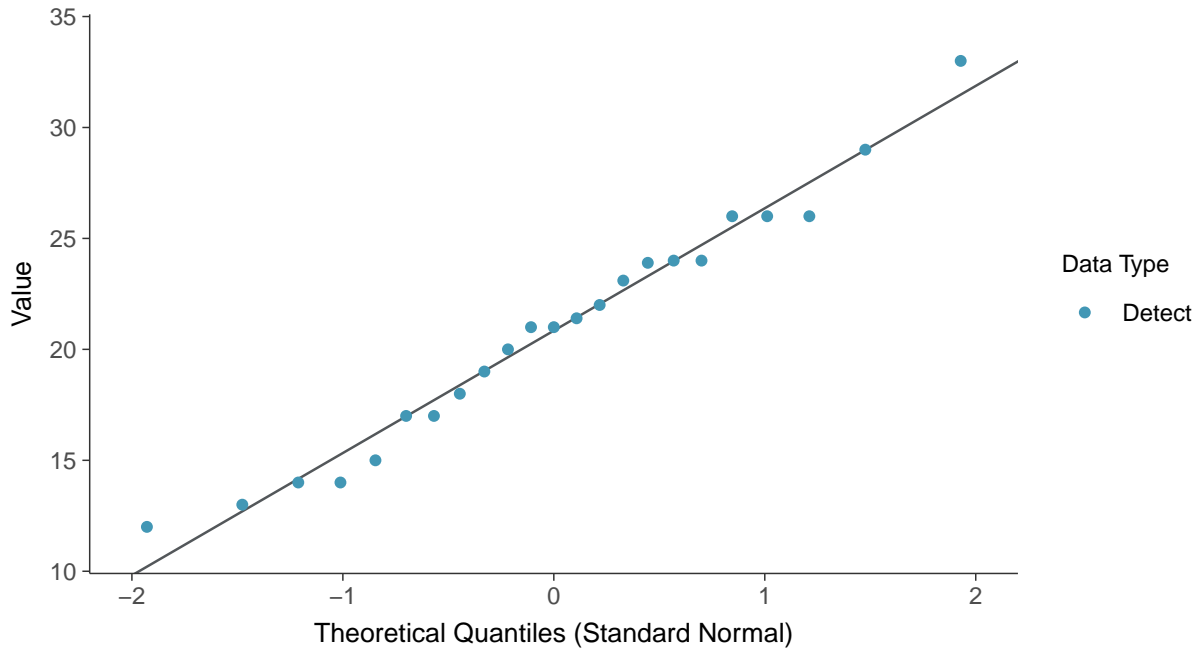
Lithium, MW-15018 (ug/L)





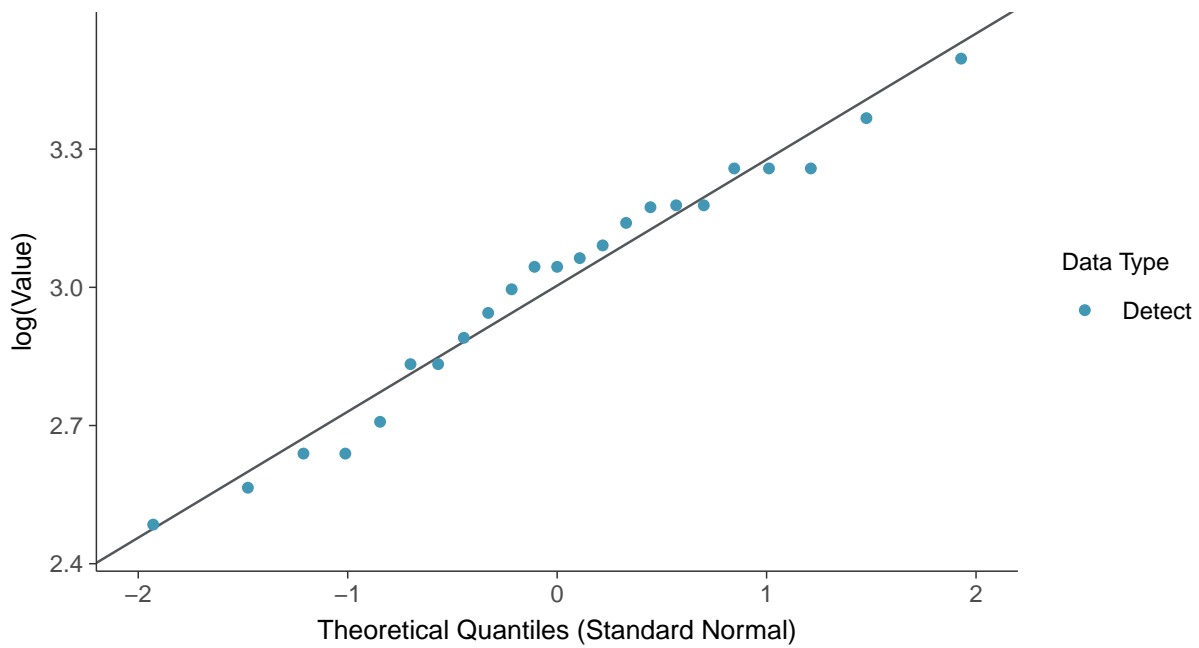
Normal Q-Q plot

Lithium, MW-15018 (ug/L)



Lognormal Q-Q plot

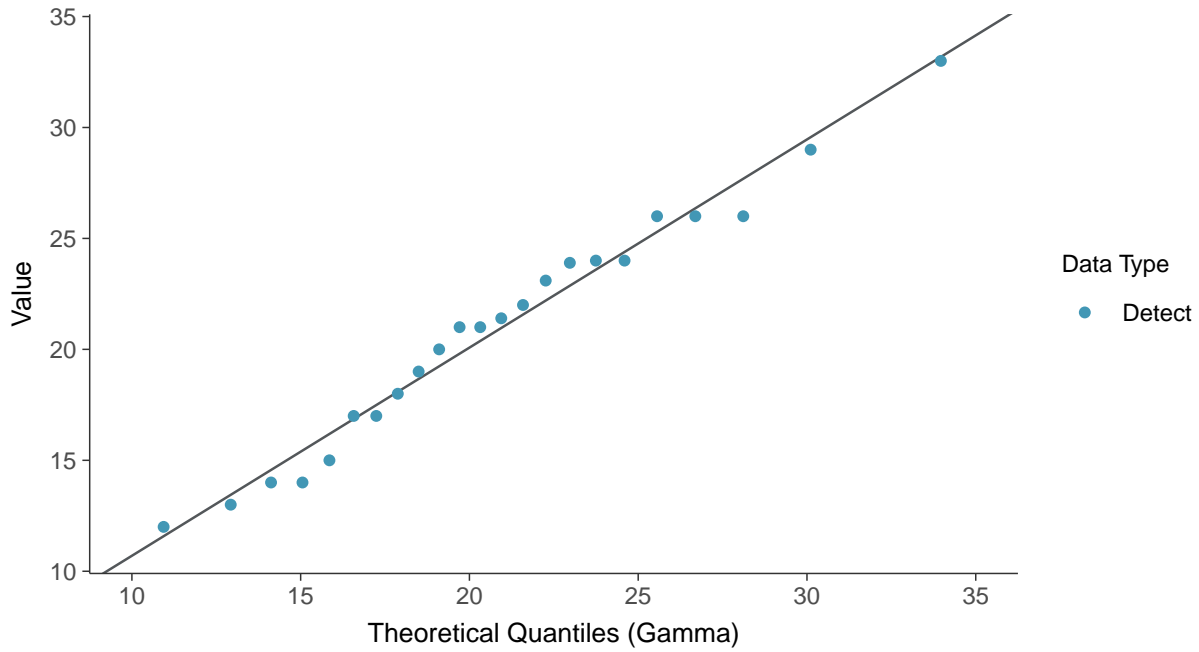
Lithium, MW-15018 (ug/L)





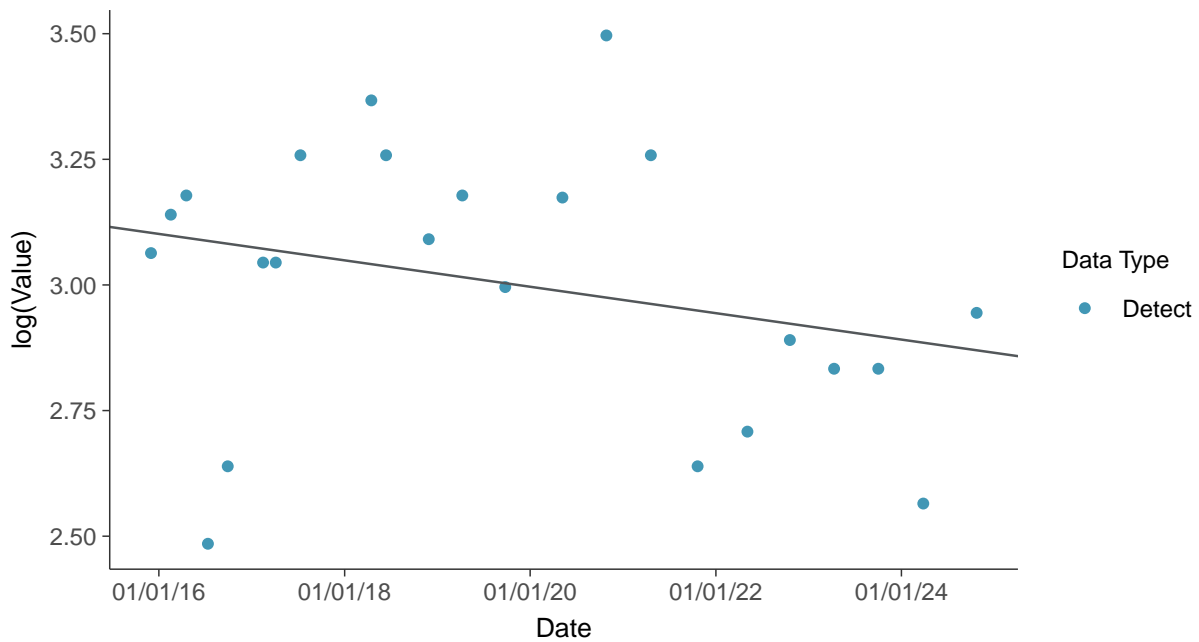
Gamma Q-Q plot

Lithium, MW-15018 (ug/L)



Trend Regression: Lognormal MLE

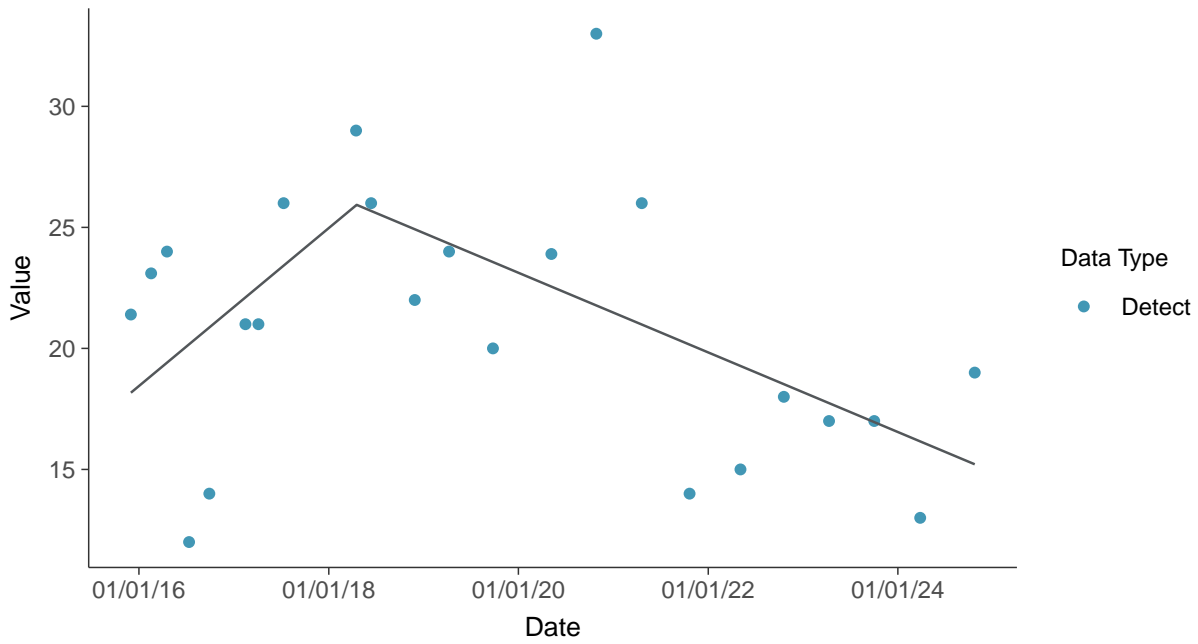
Lithium, MW-15018 (ug/L)





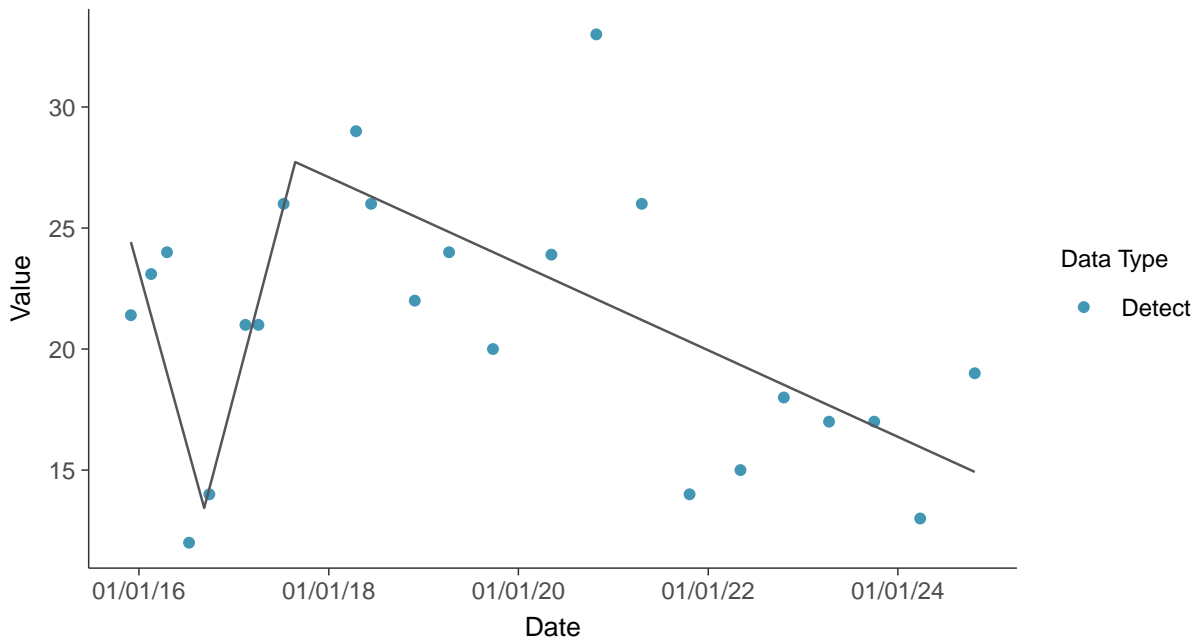
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

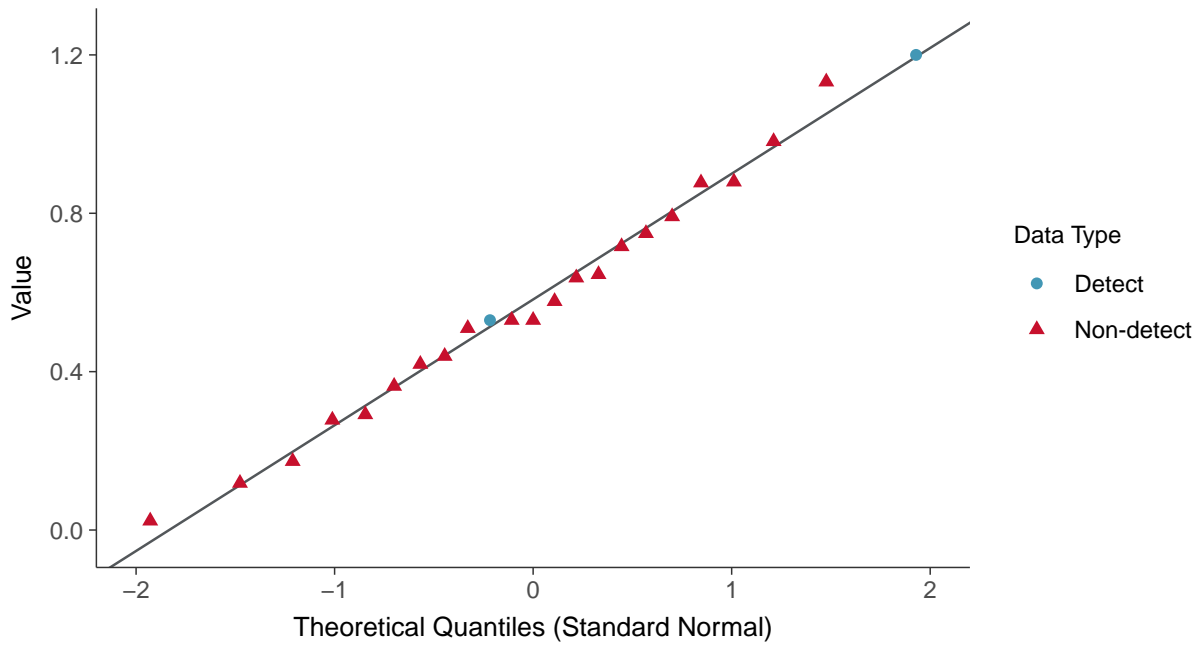
Lithium, MW-15018 (ug/L)





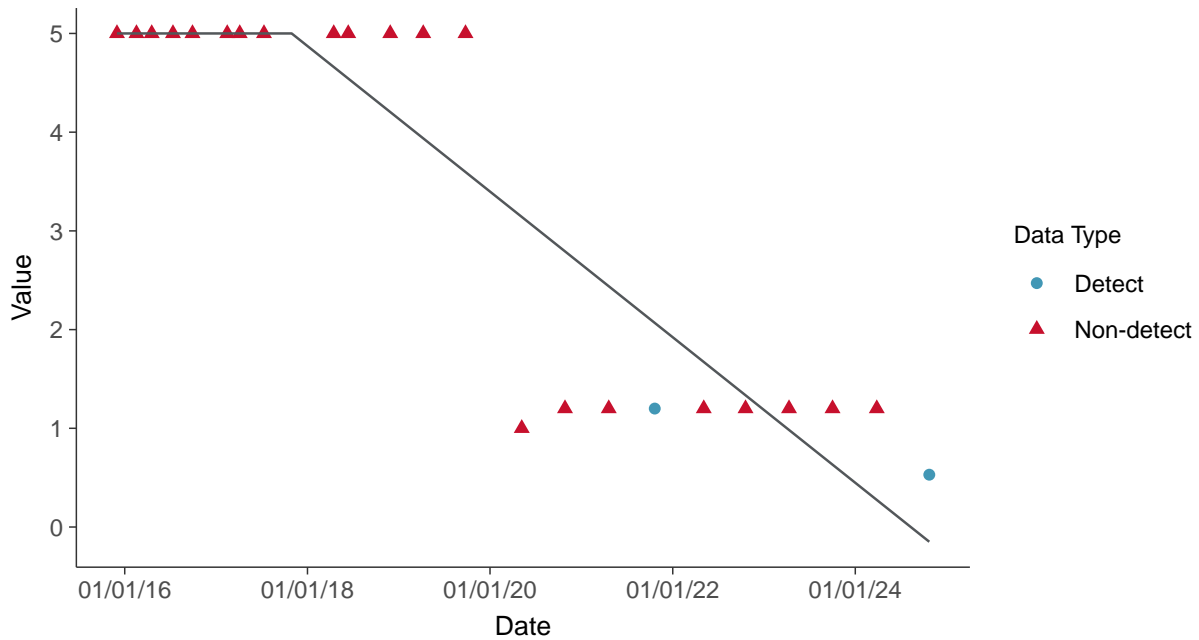
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15018 (ug/L)



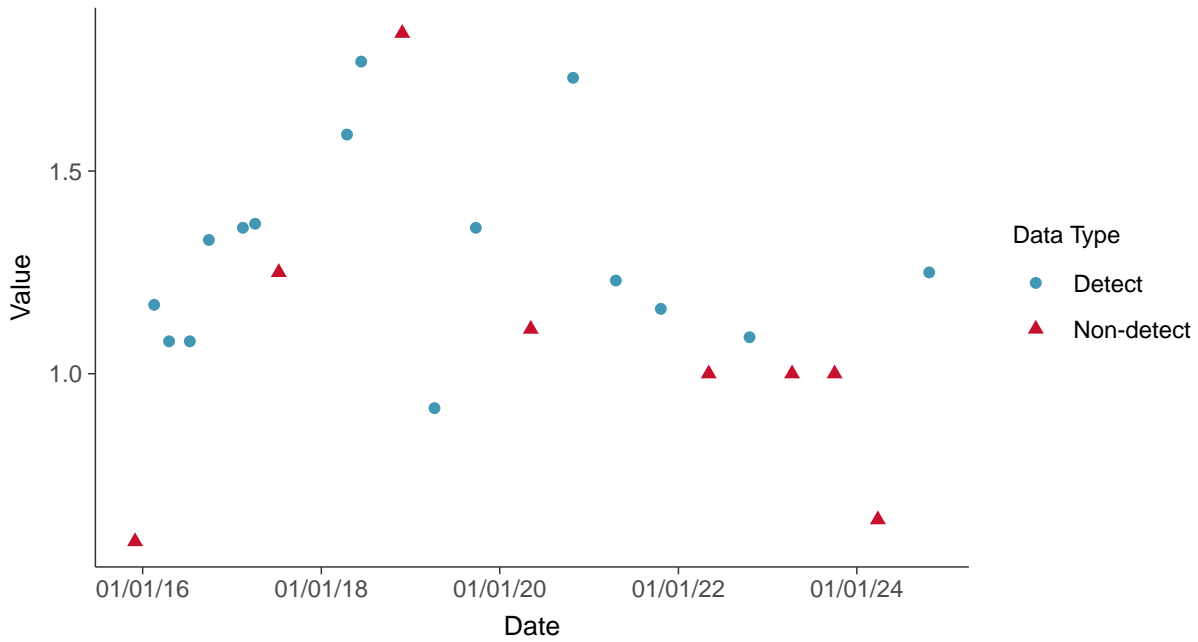


Appendix IV: Radium-226+228, MW-15018

ID: 08_2_125

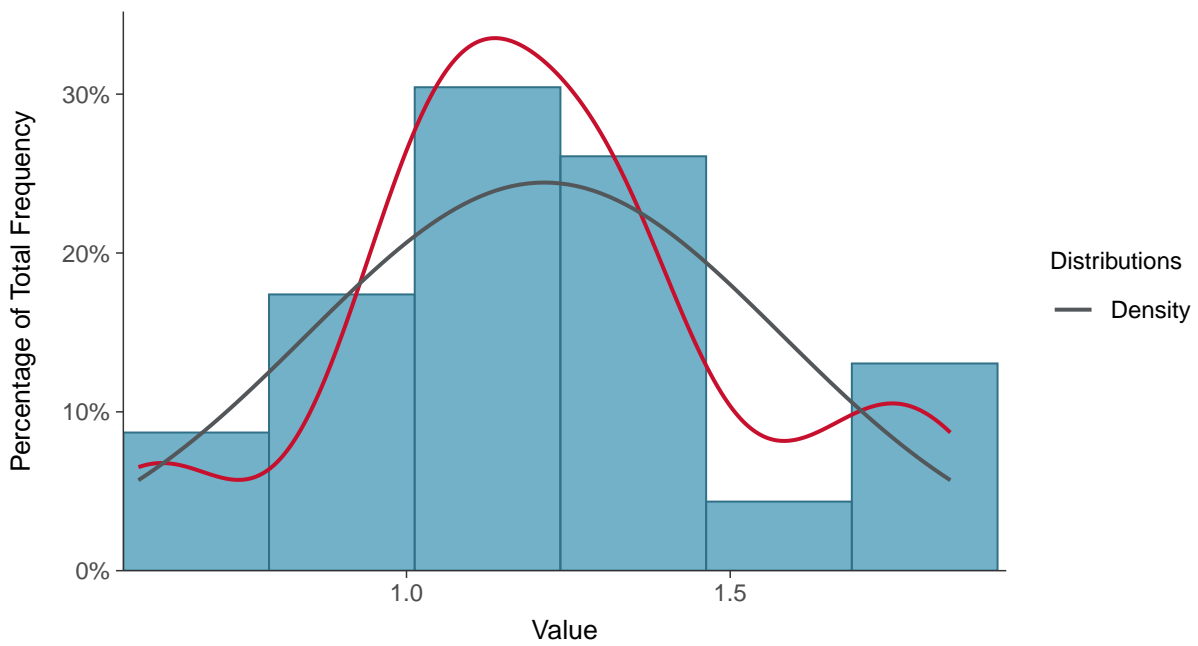
Scatter Plot

Radium-226+228, MW-15018 (pCi/L)



Histogram

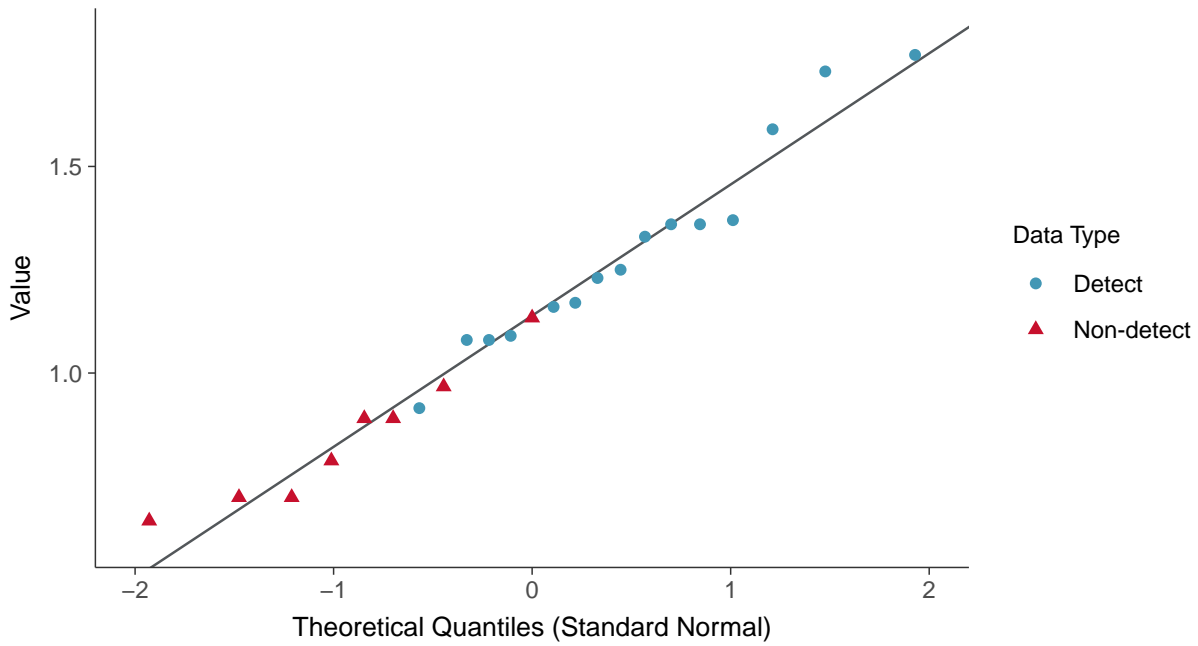
Radium-226+228, MW-15018 (pCi/L)





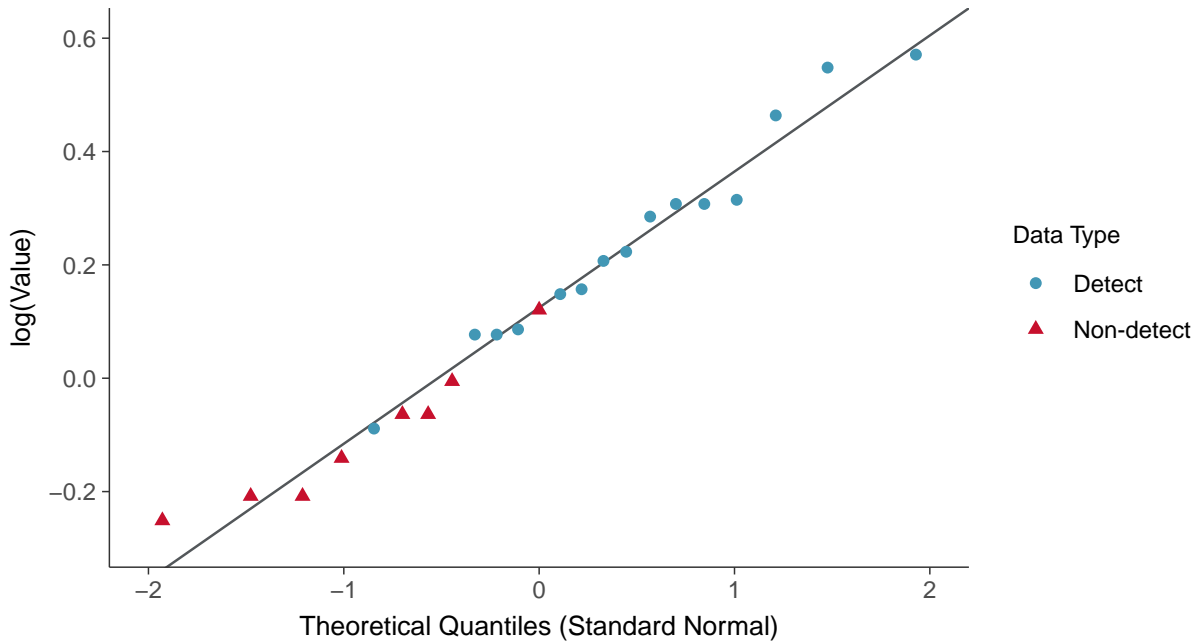
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15018 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

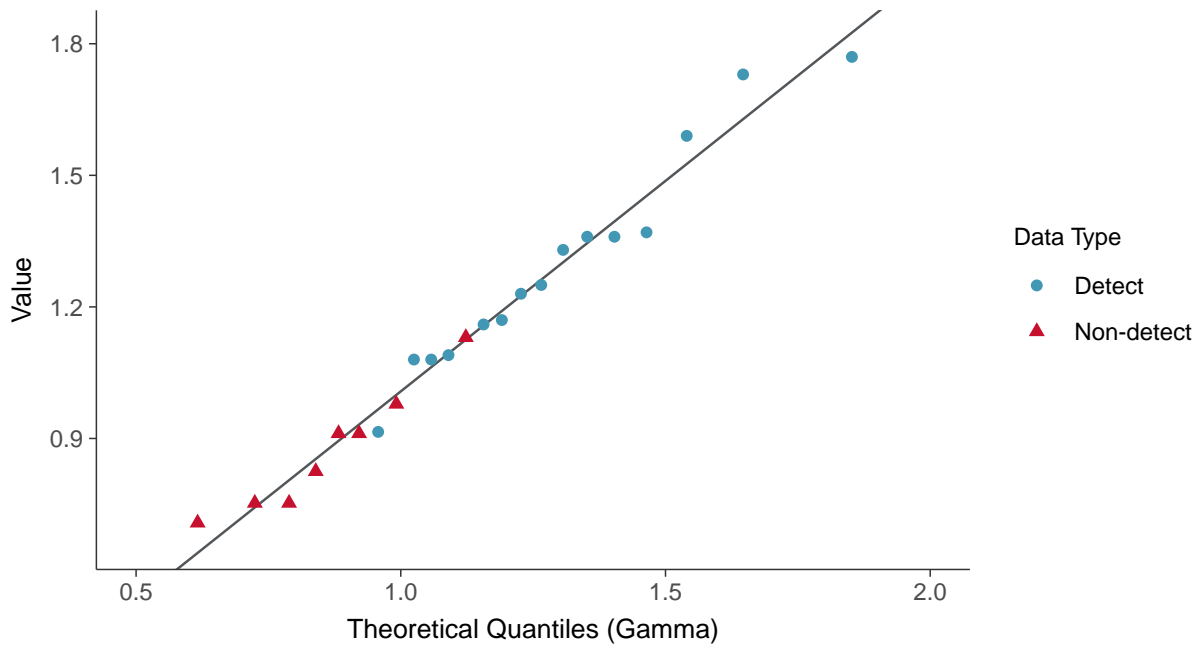
Radium-226+228, MW-15018 (pCi/L)





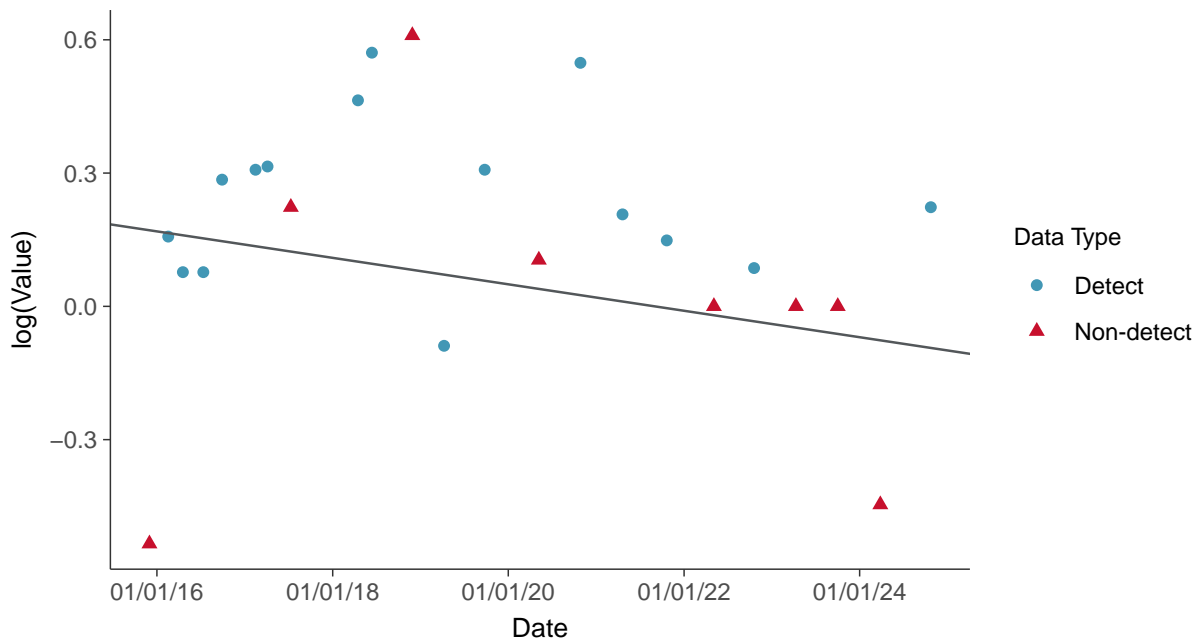
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15018 (pCi/L)



Trend Regression: Lognormal MLE

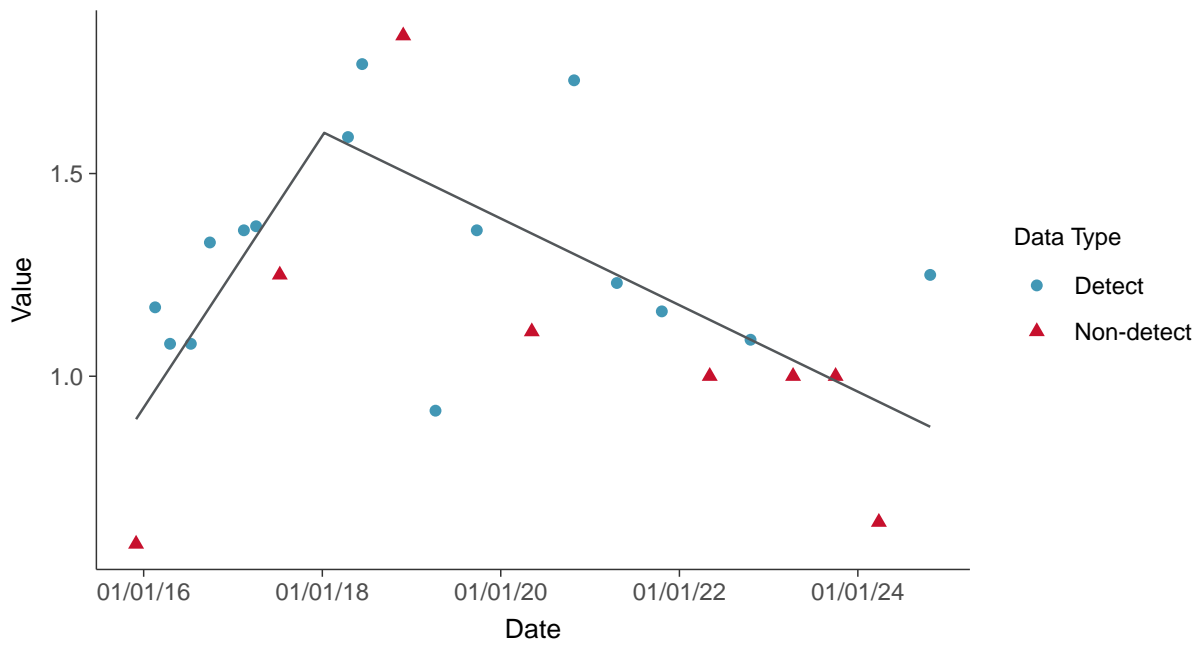
Radium-226+228, MW-15018 (pCi/L)





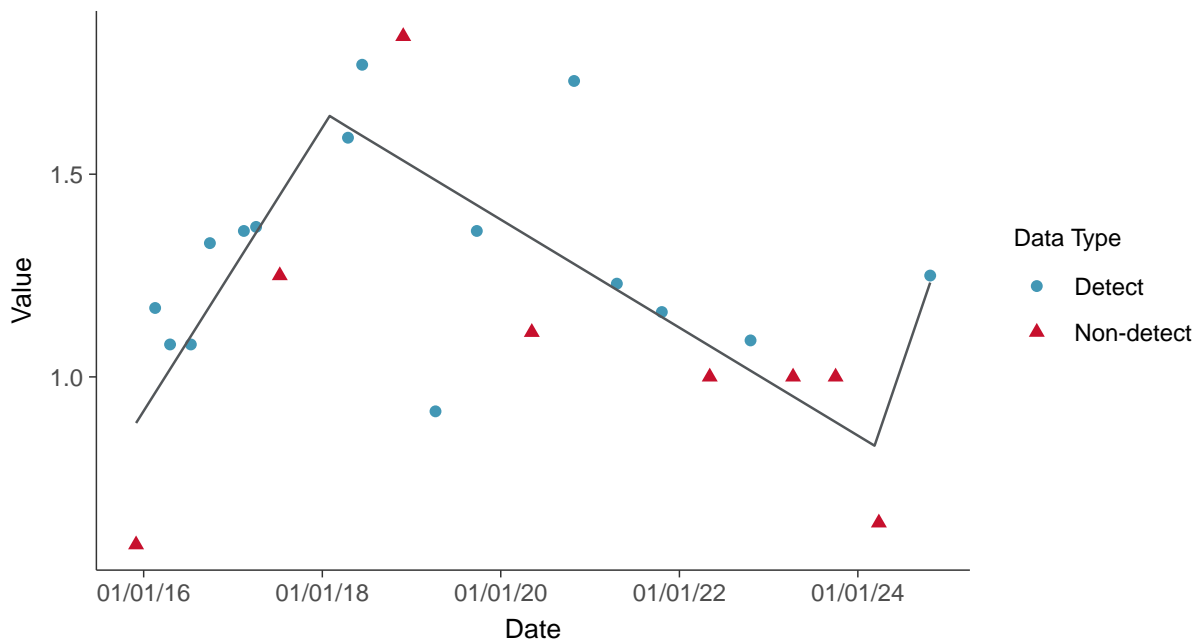
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15018 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

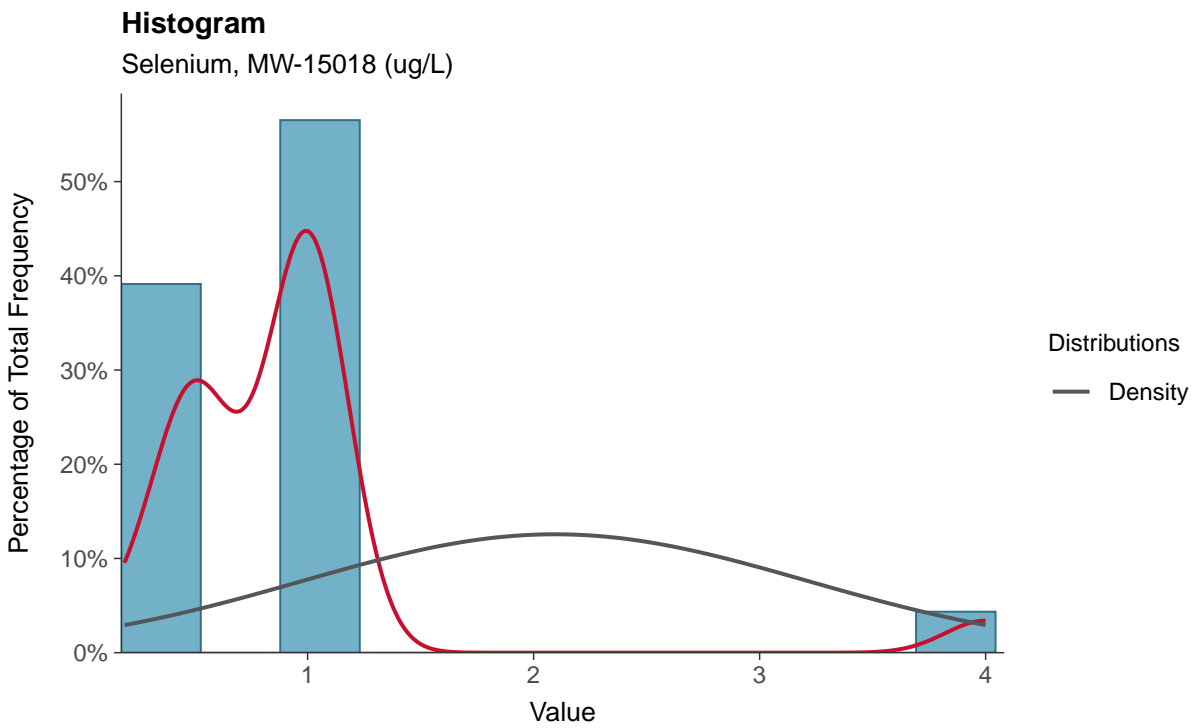
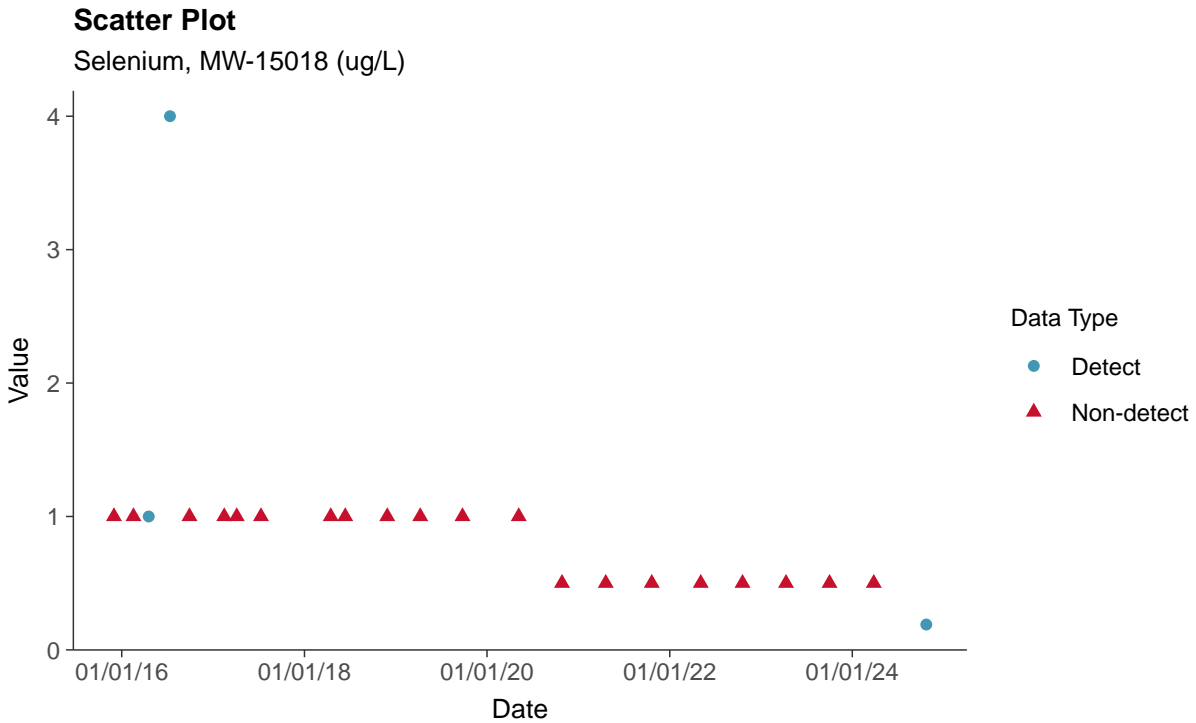
Radium-226+228, MW-15018 (pCi/L)





Appendix IV: Selenium, MW-15018

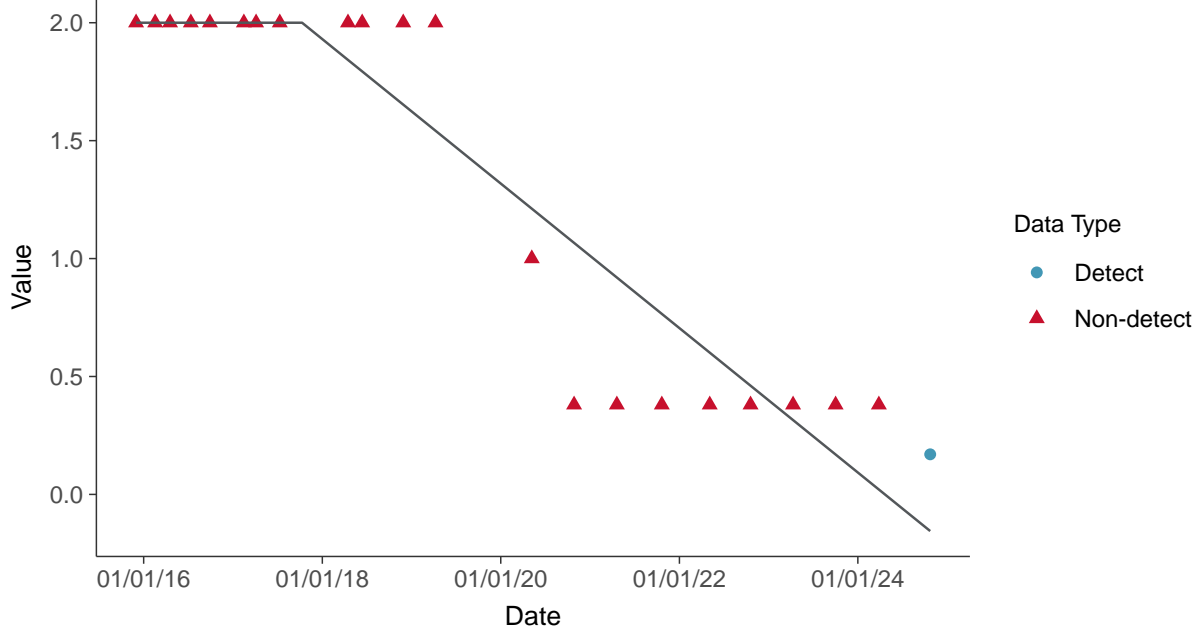
ID: 08_2_127





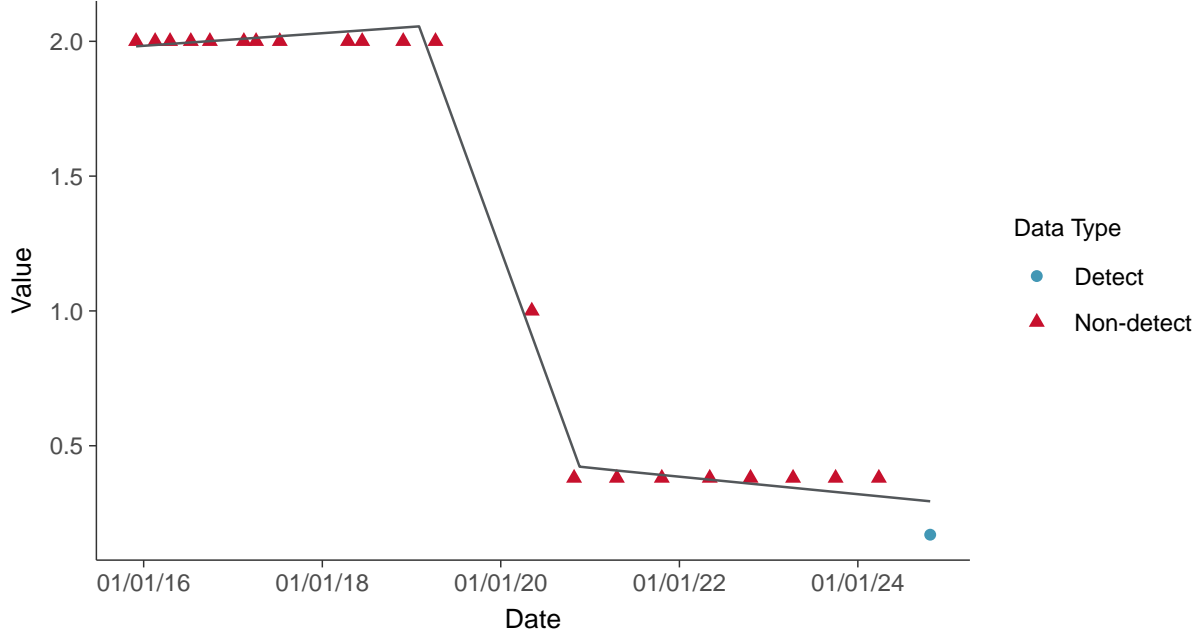
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15018 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

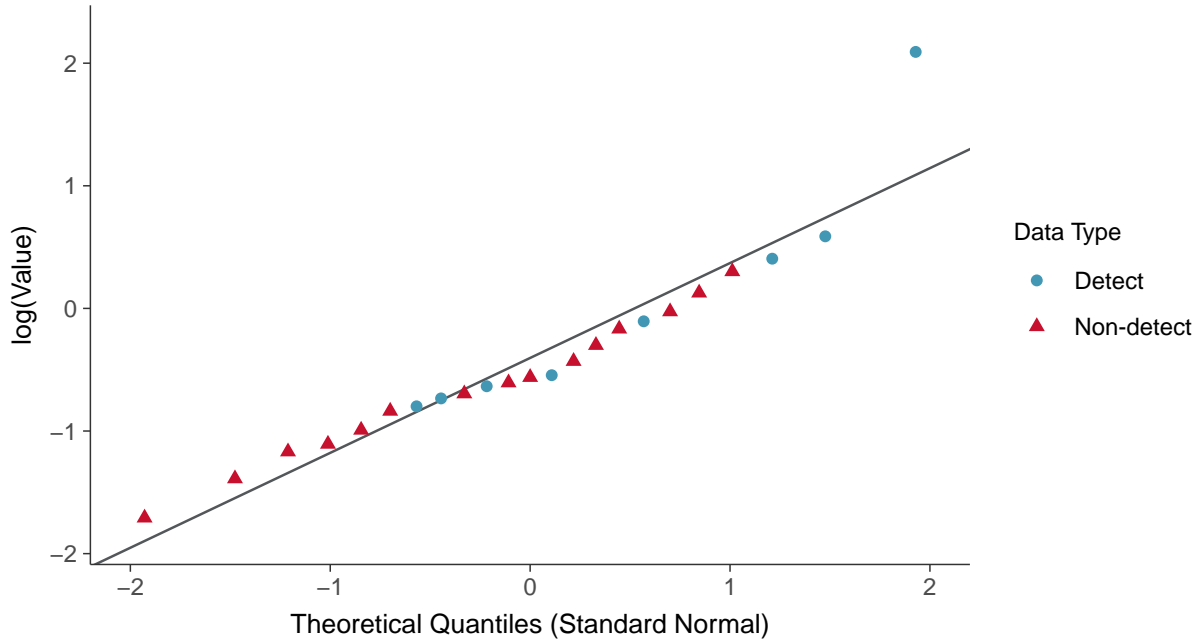
Thallium, MW-15018 (ug/L)





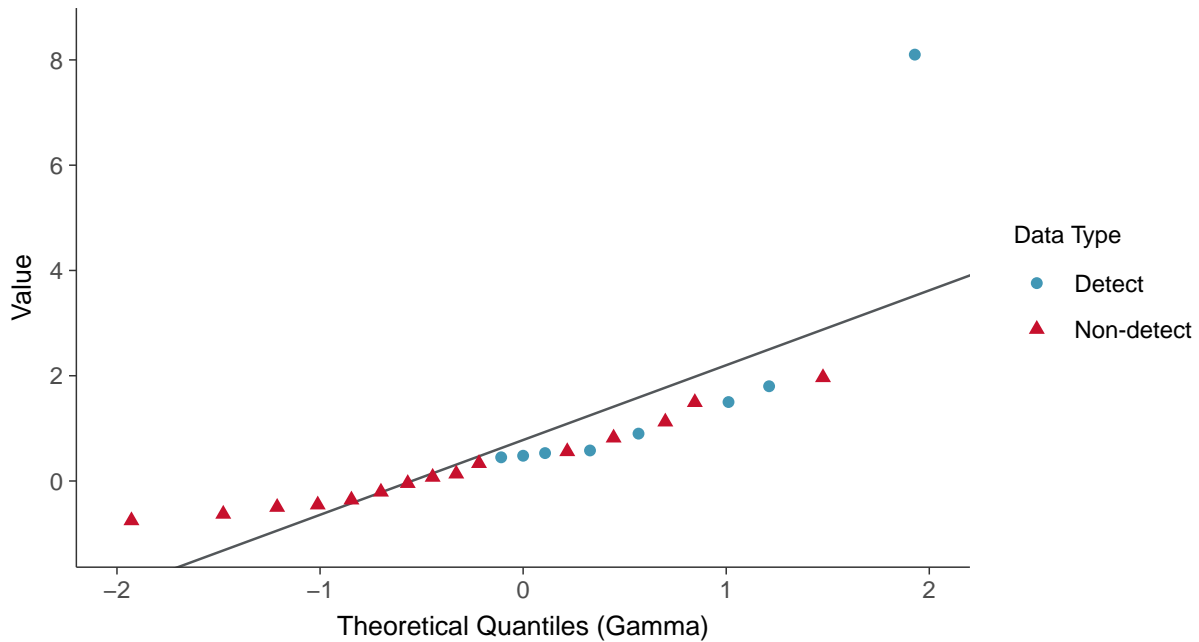
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15019 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

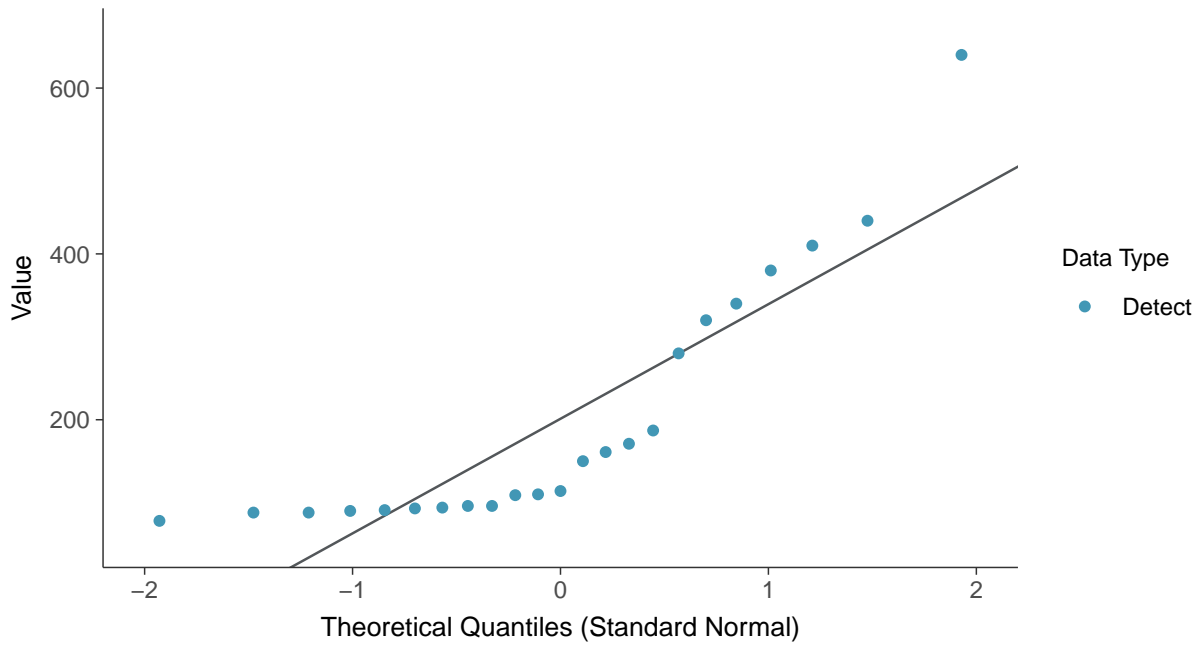
Arsenic, MW-15019 (ug/L)





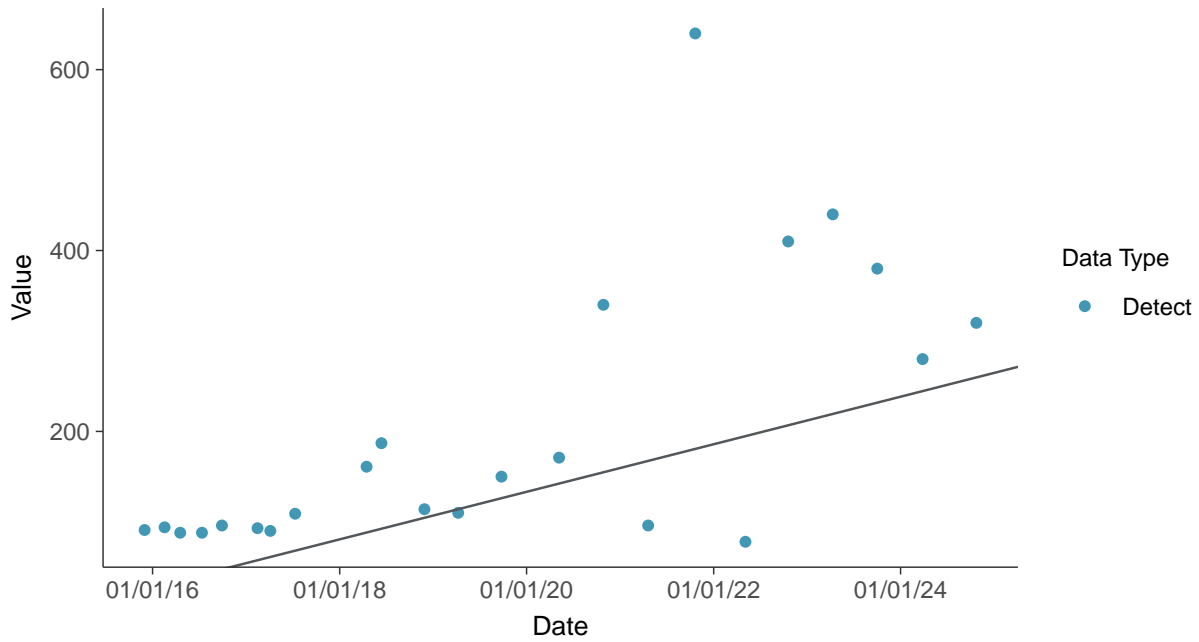
Normal Q-Q plot

Barium, MW-15019 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

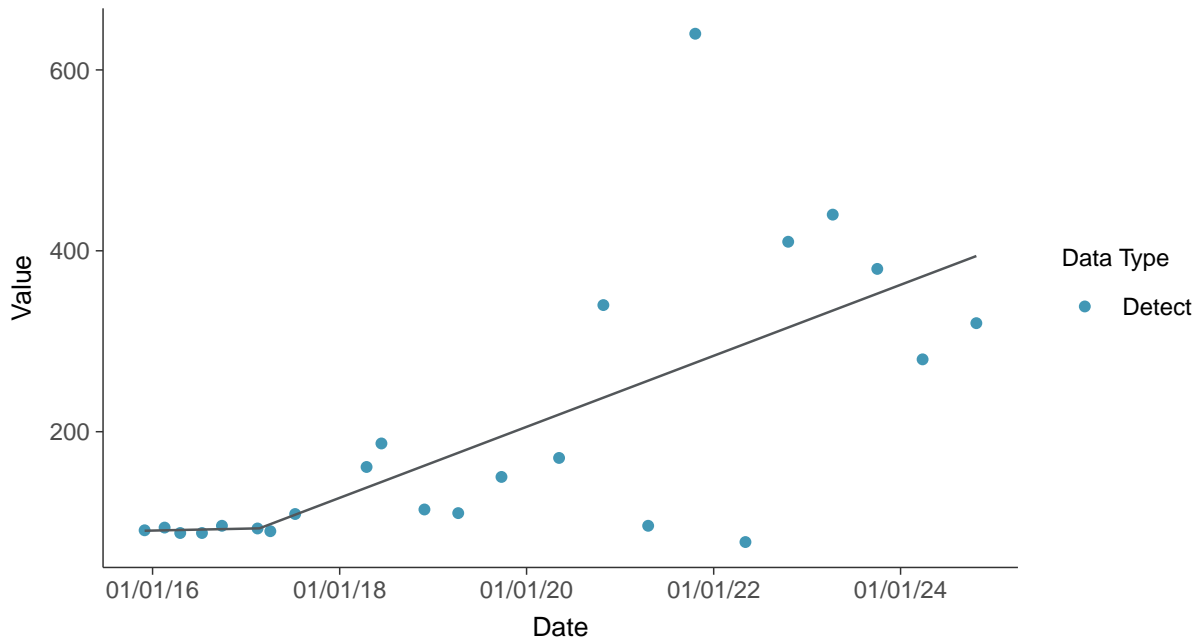
Barium, MW-15019 (ug/L)





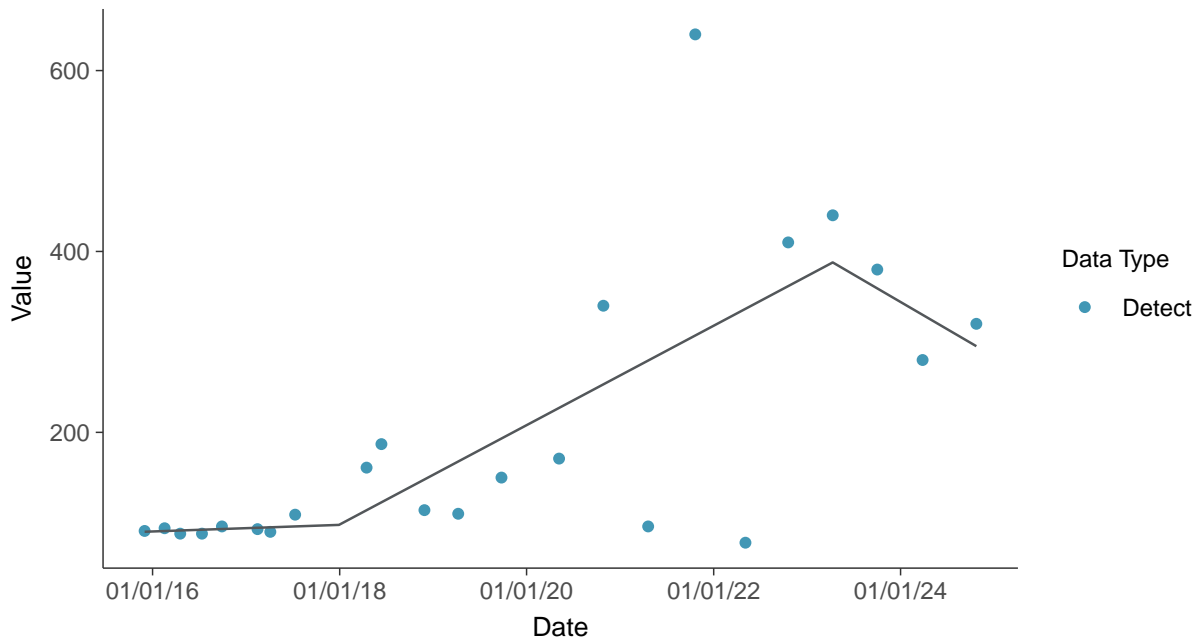
Trend Regression: Piecewise Linear-Linear

Barium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

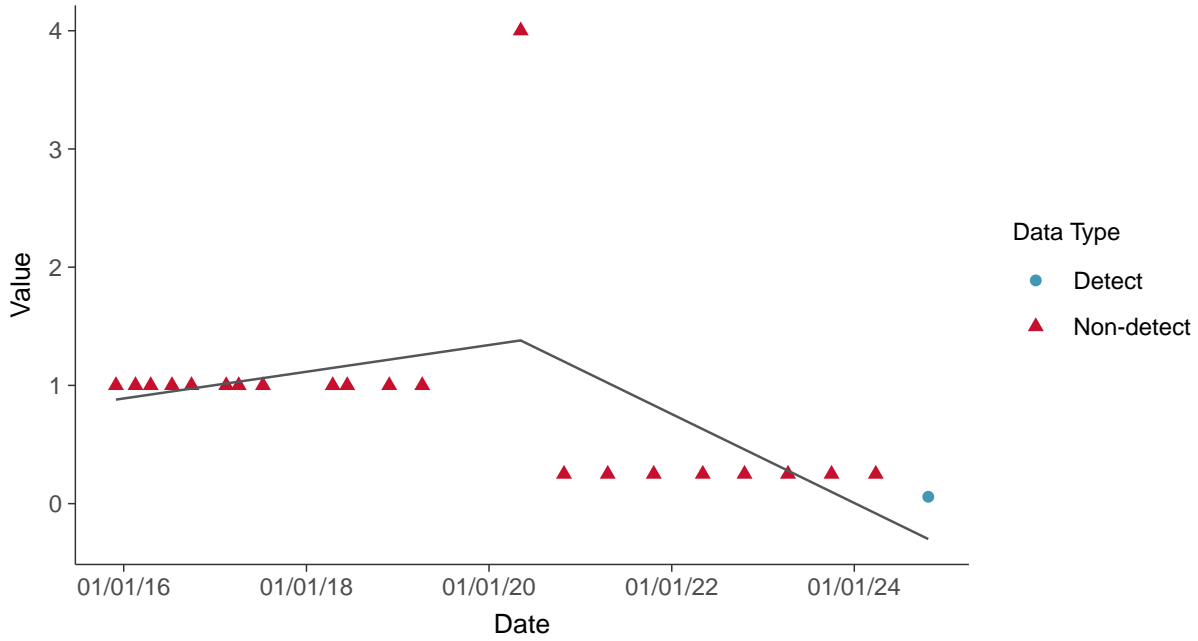
Barium, MW-15019 (ug/L)





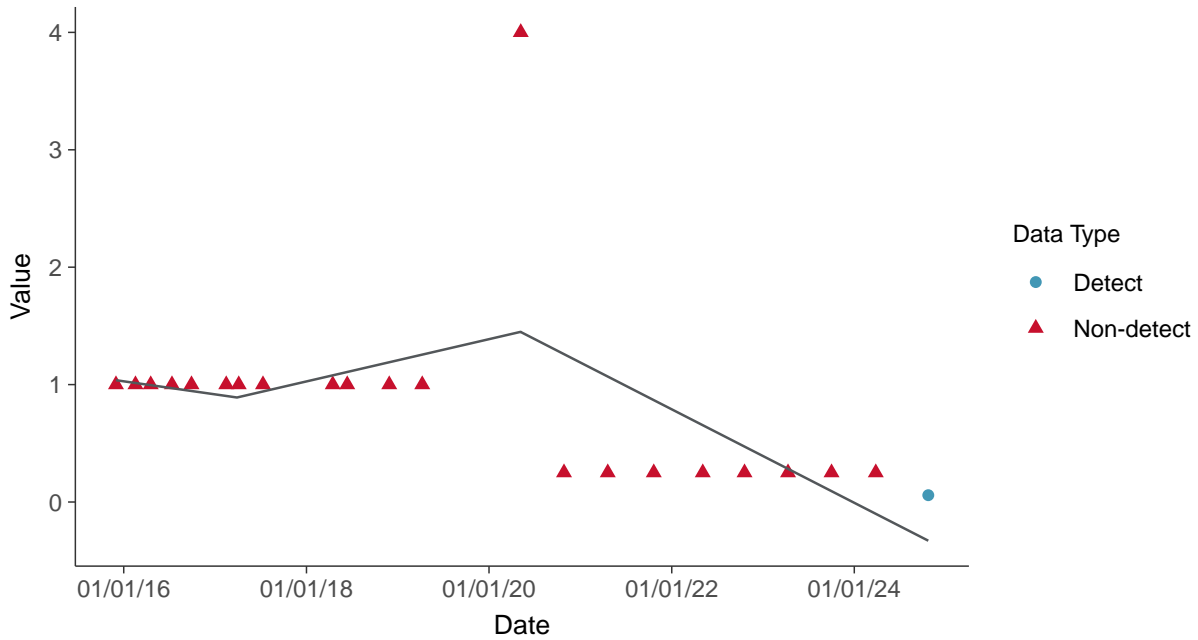
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

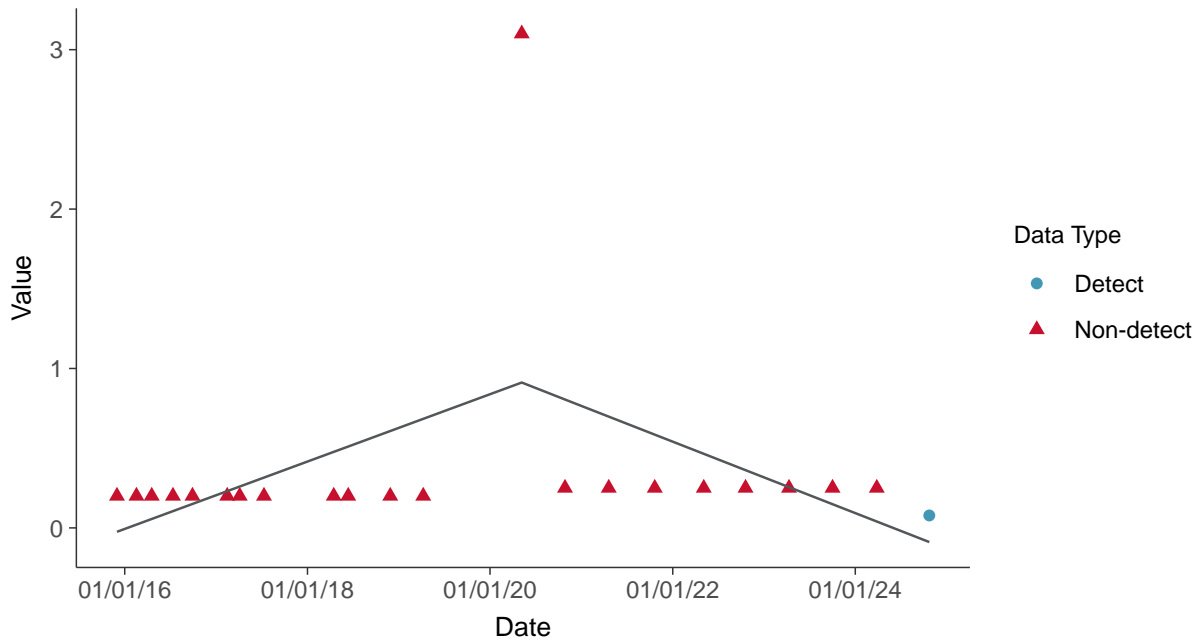
Beryllium, MW-15019 (ug/L)





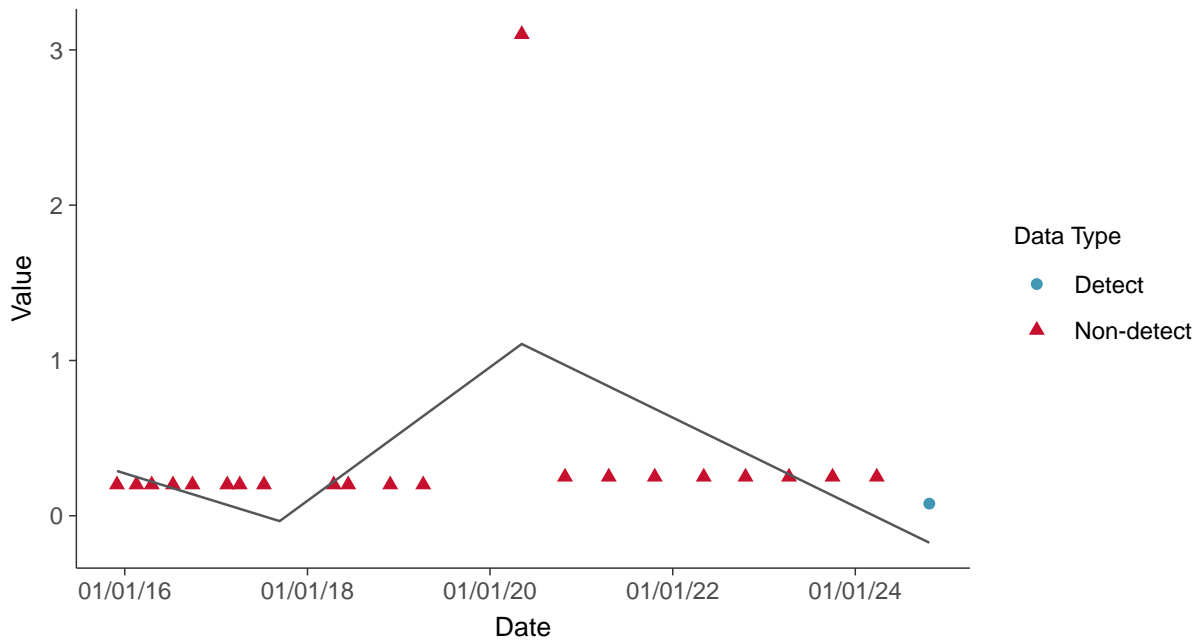
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

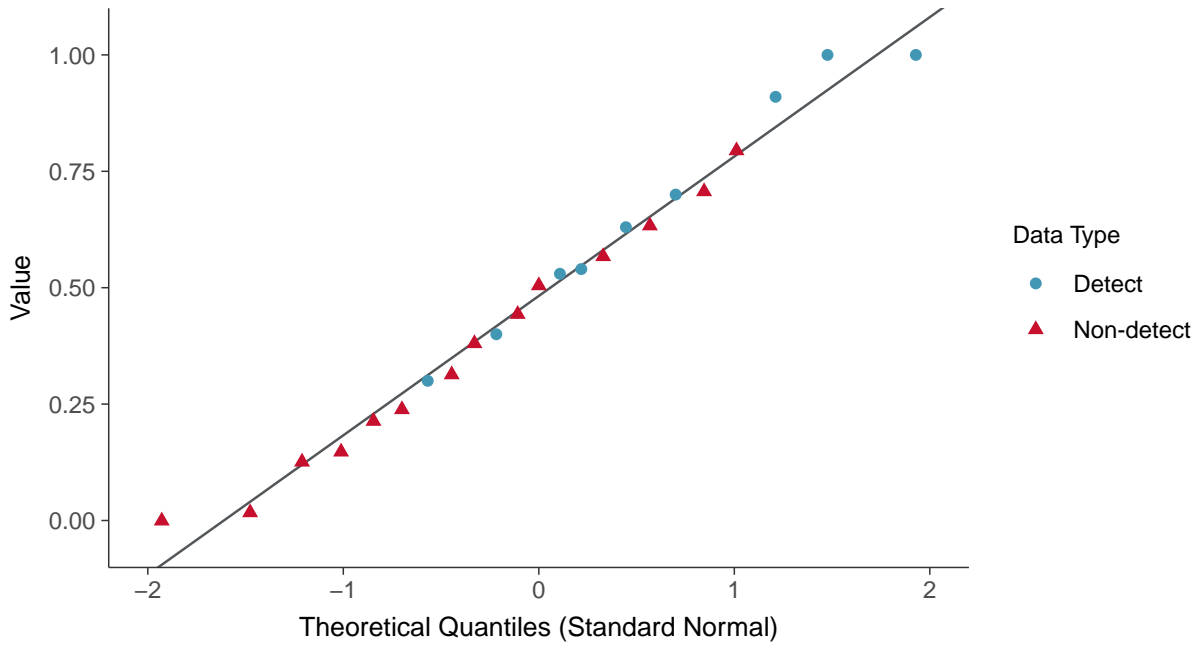
Cadmium, MW-15019 (ug/L)





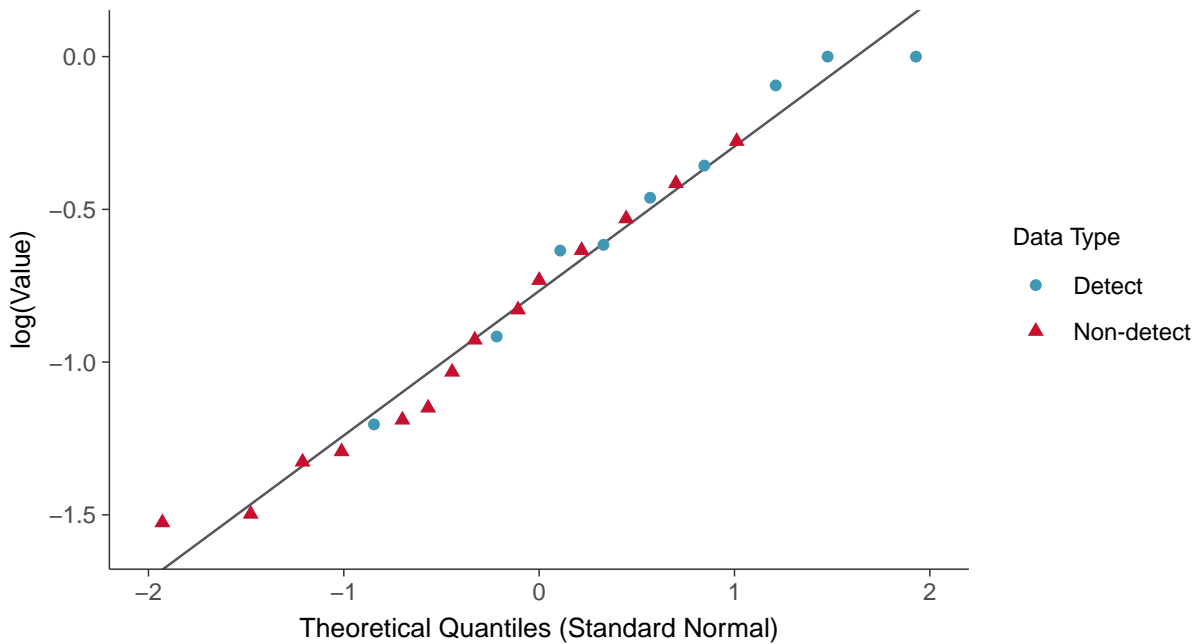
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15019 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

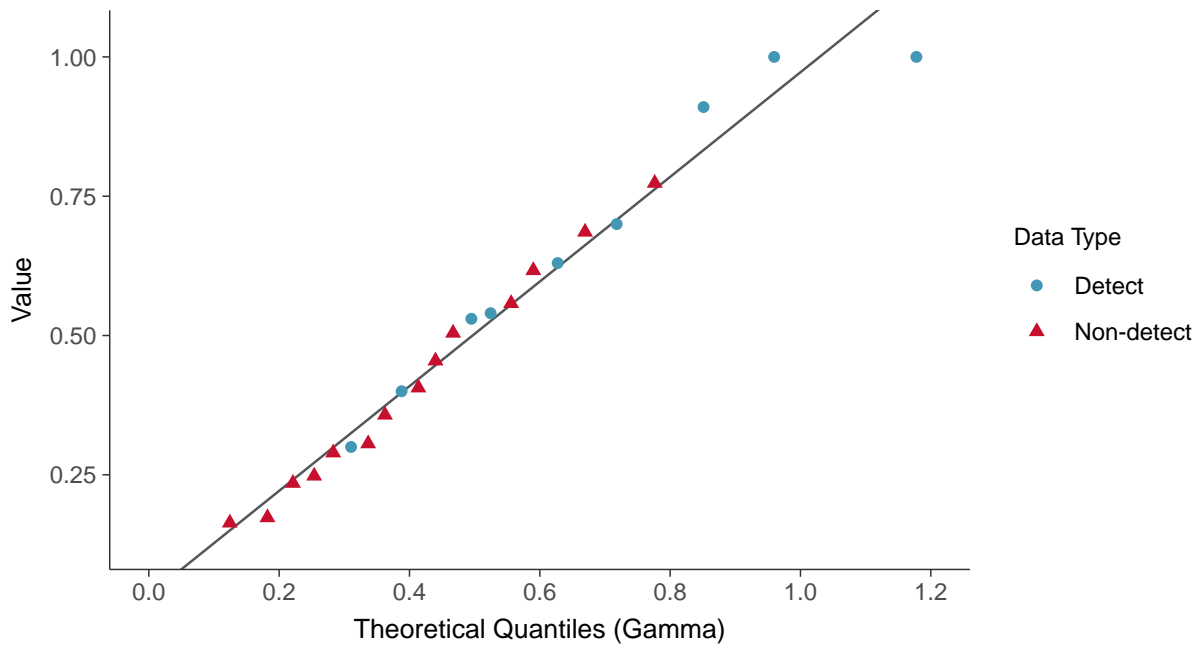
Chromium, MW-15019 (ug/L)





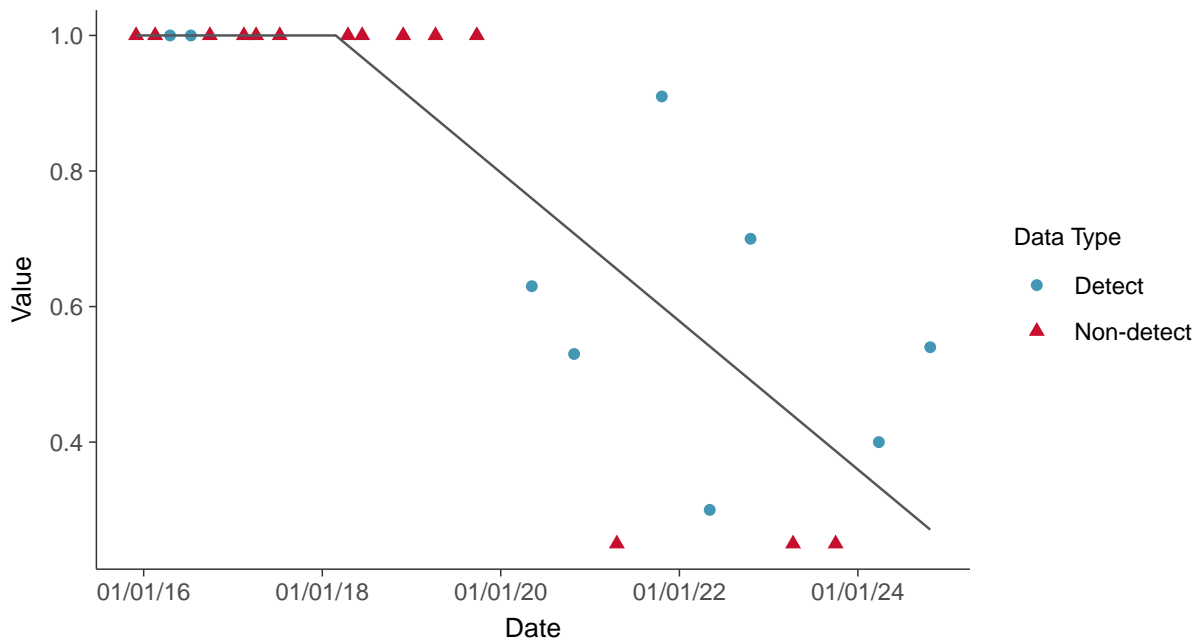
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15019 (ug/L)



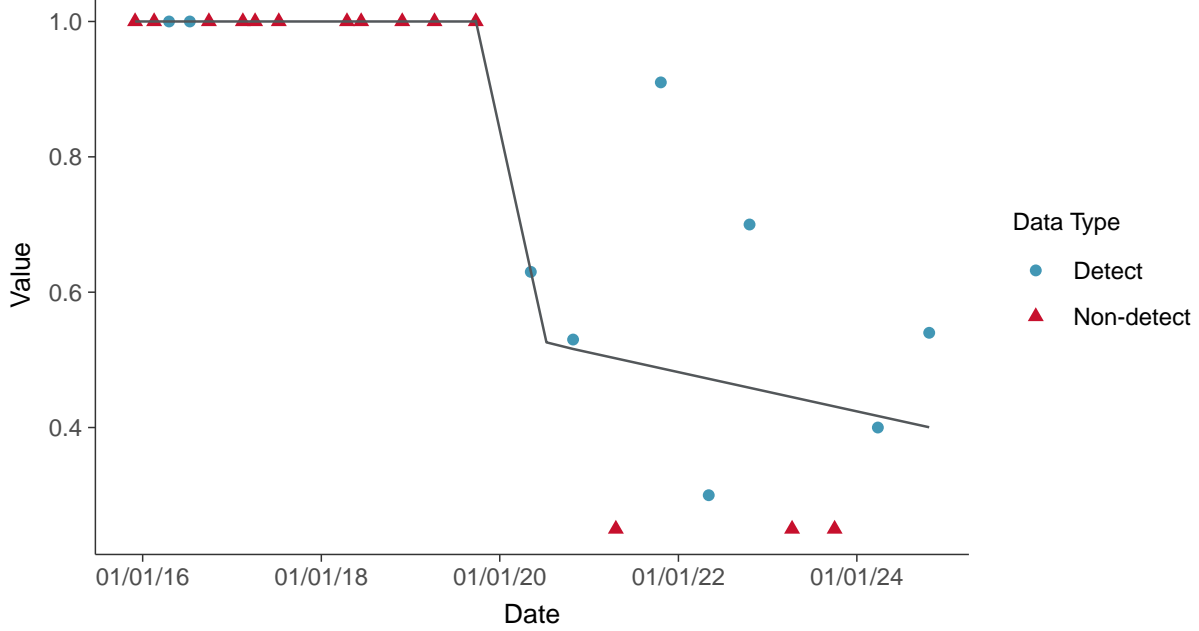
Trend Regression: Piecewise Linear-Linear

Chromium, MW-15019 (ug/L)





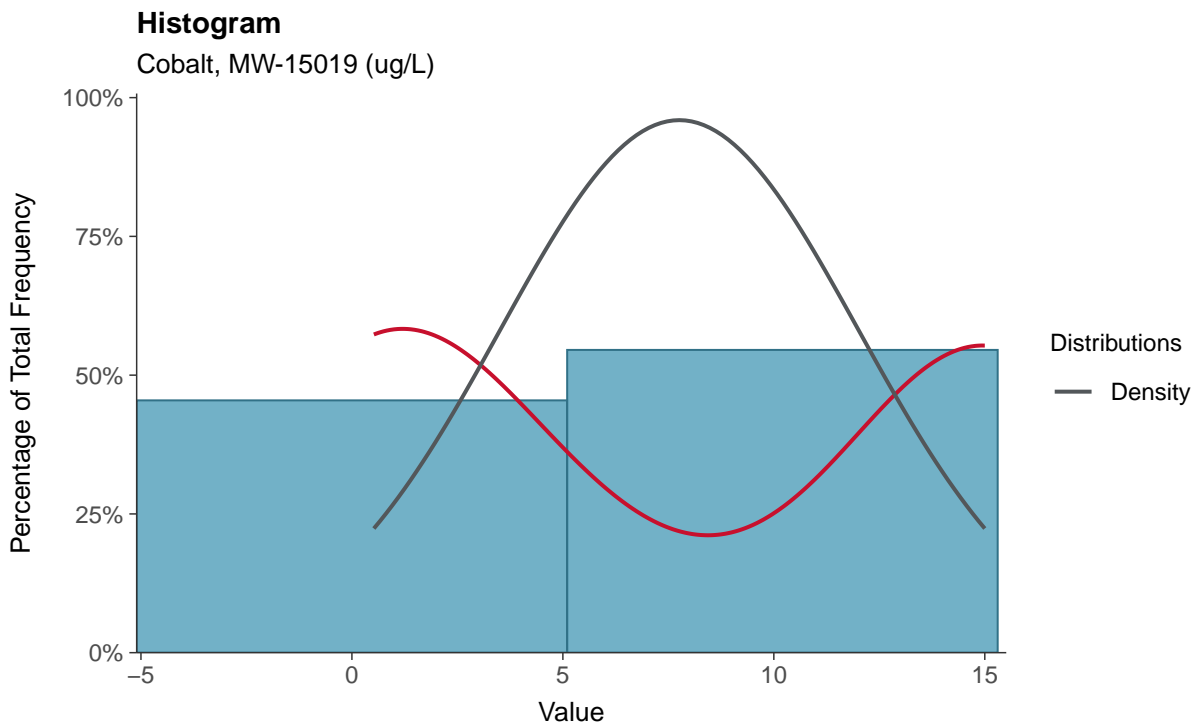
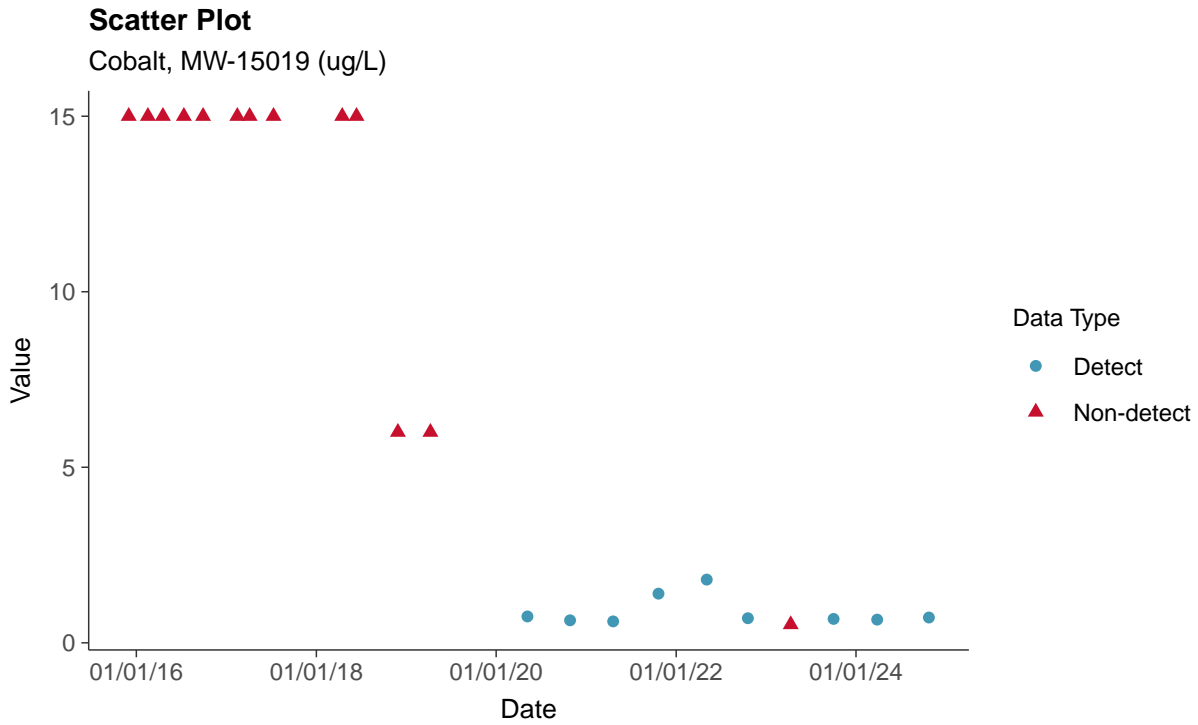
Trend Regression: Piecewise Linear-Linear-Linear
Chromium, MW-15019 (ug/L)





Appendix IV: Cobalt, MW-15019

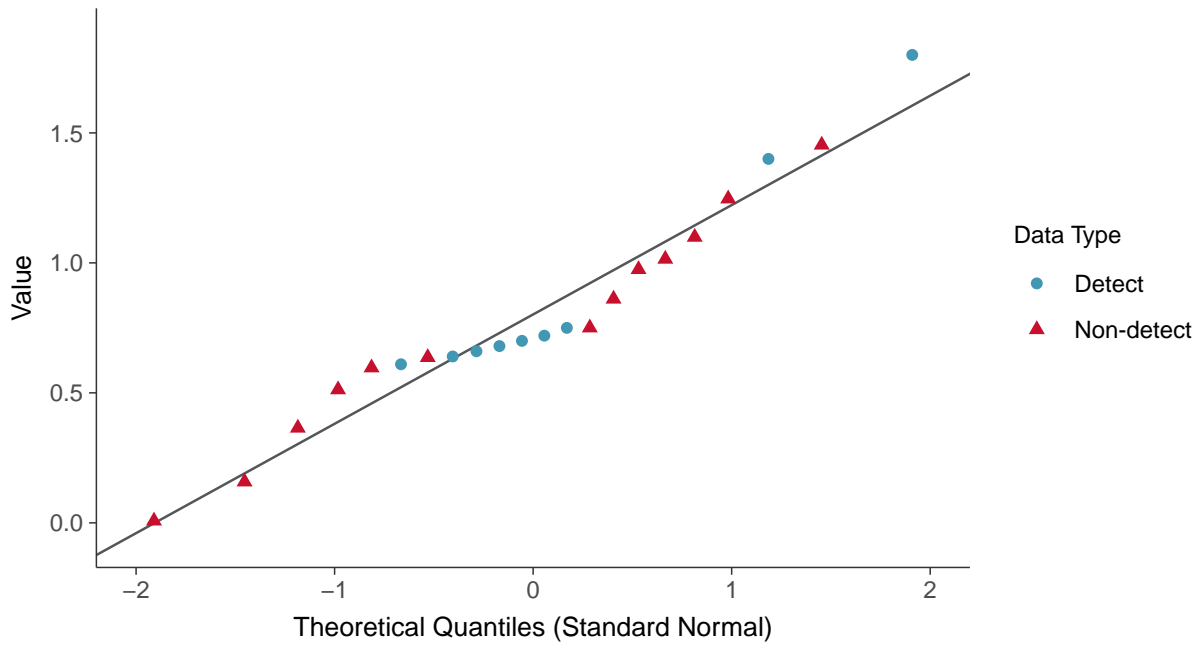
ID: 09_2_110





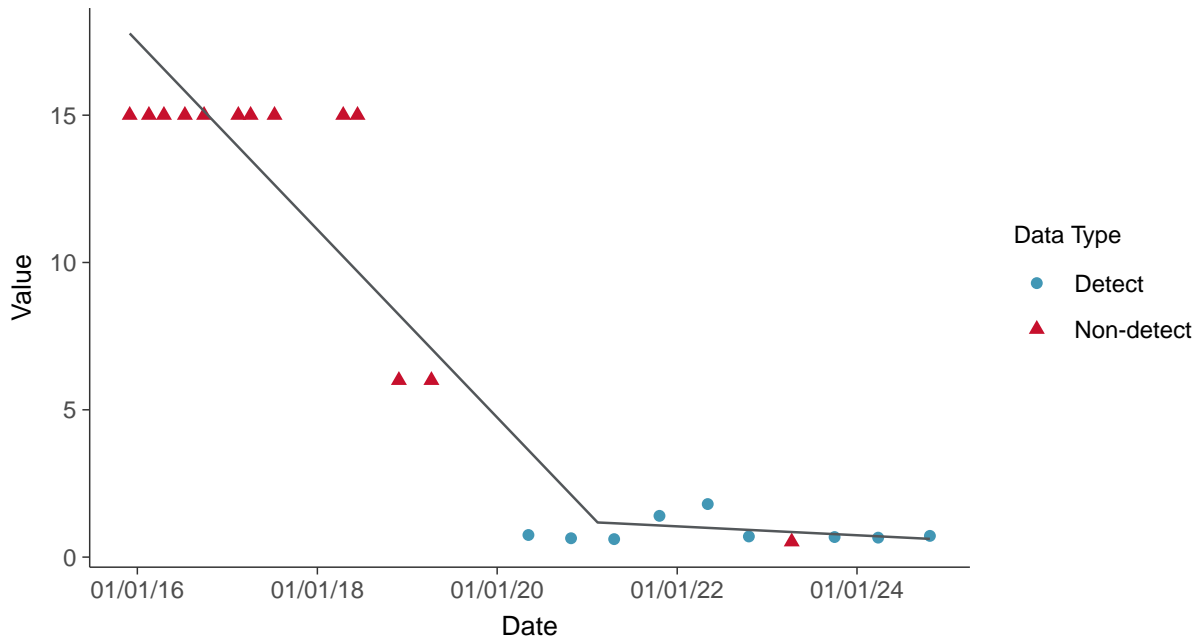
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

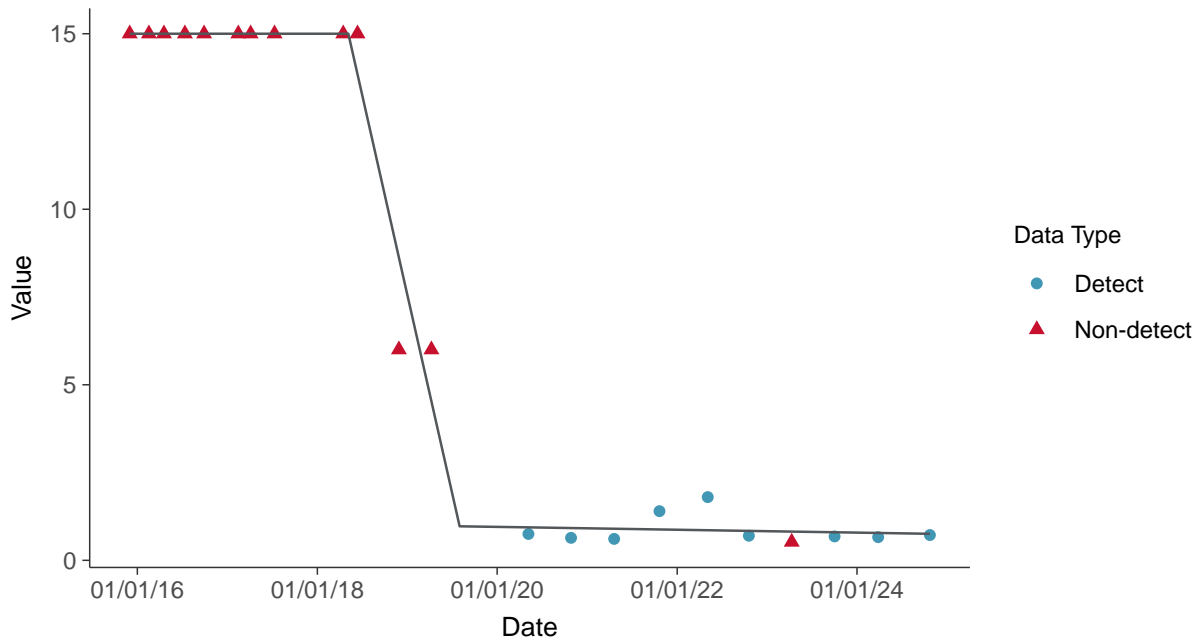
Cobalt, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

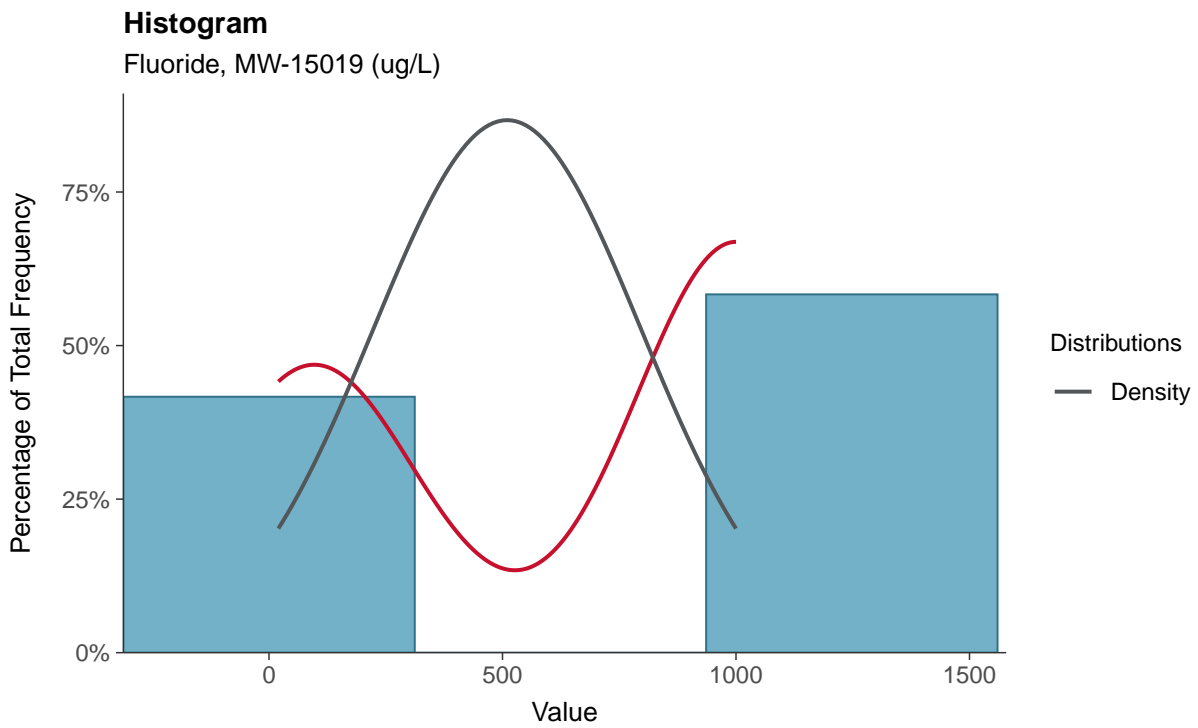
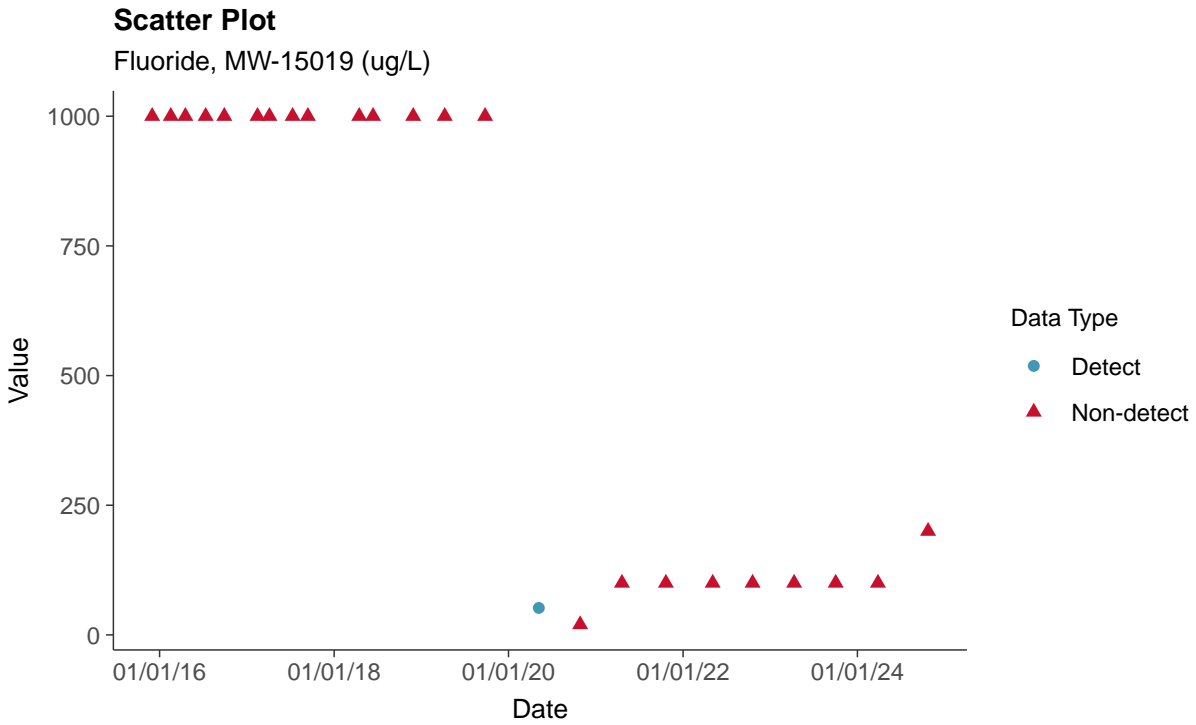
Cobalt, MW-15019 (ug/L)





Appendix IV: Fluoride, MW-15019

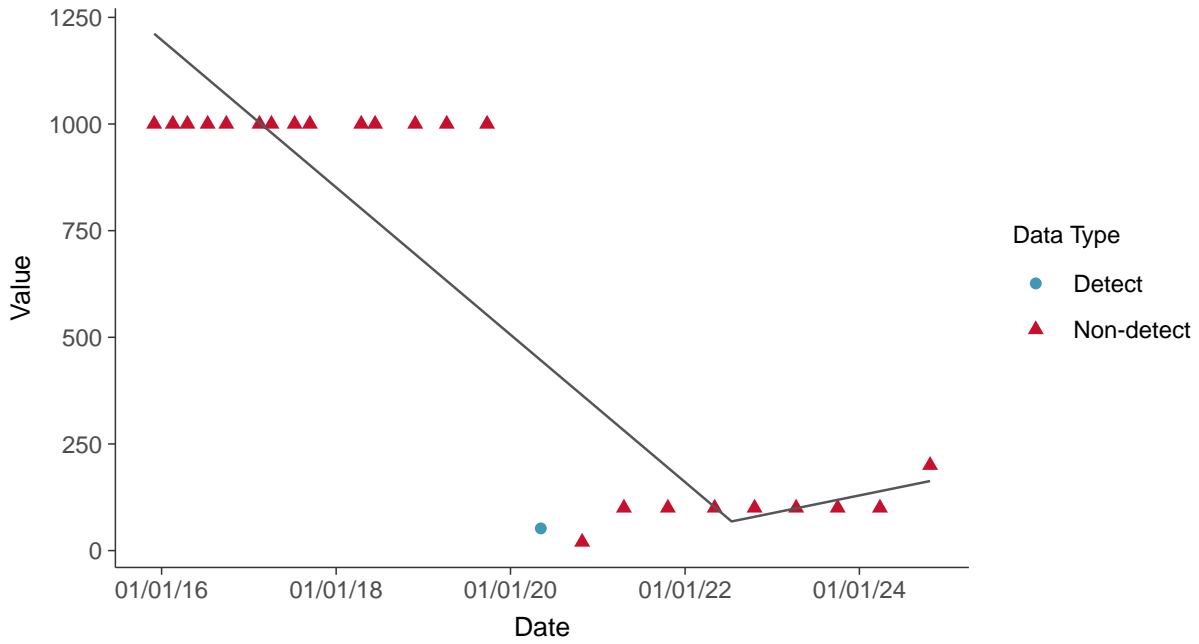
ID: 09_2_114





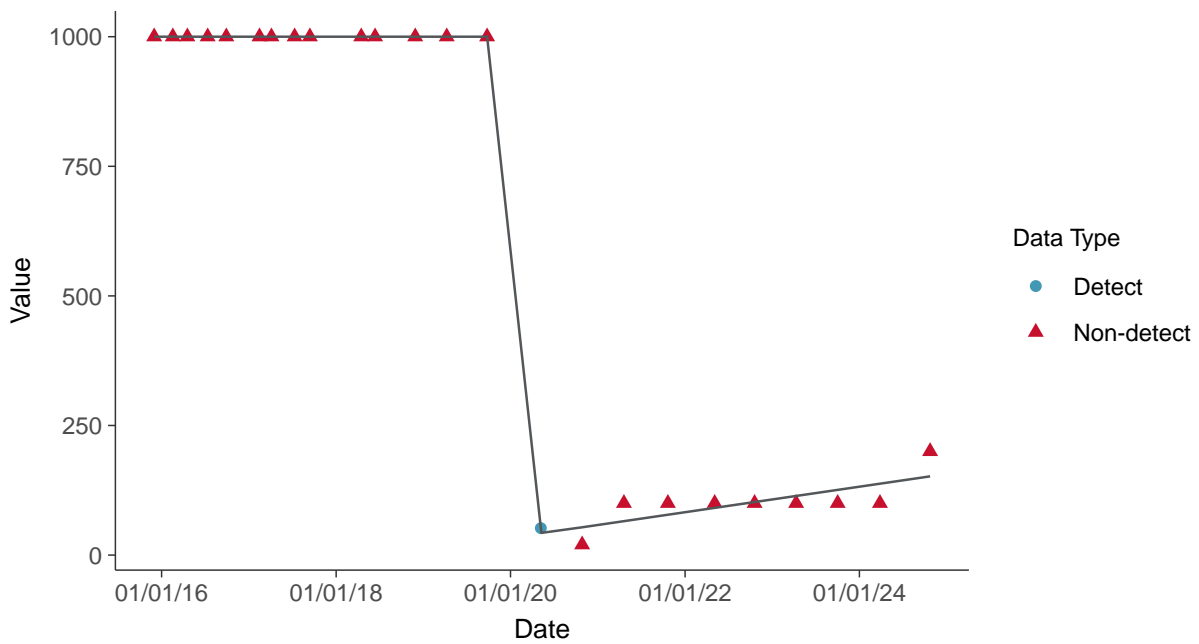
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

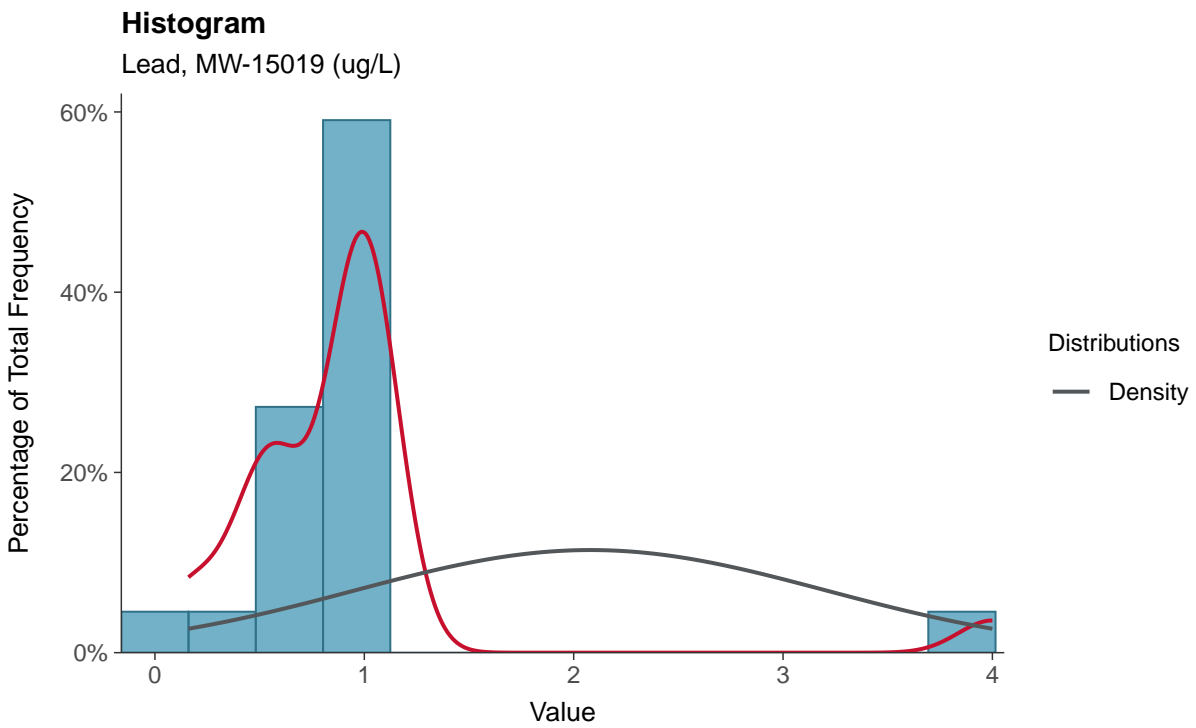
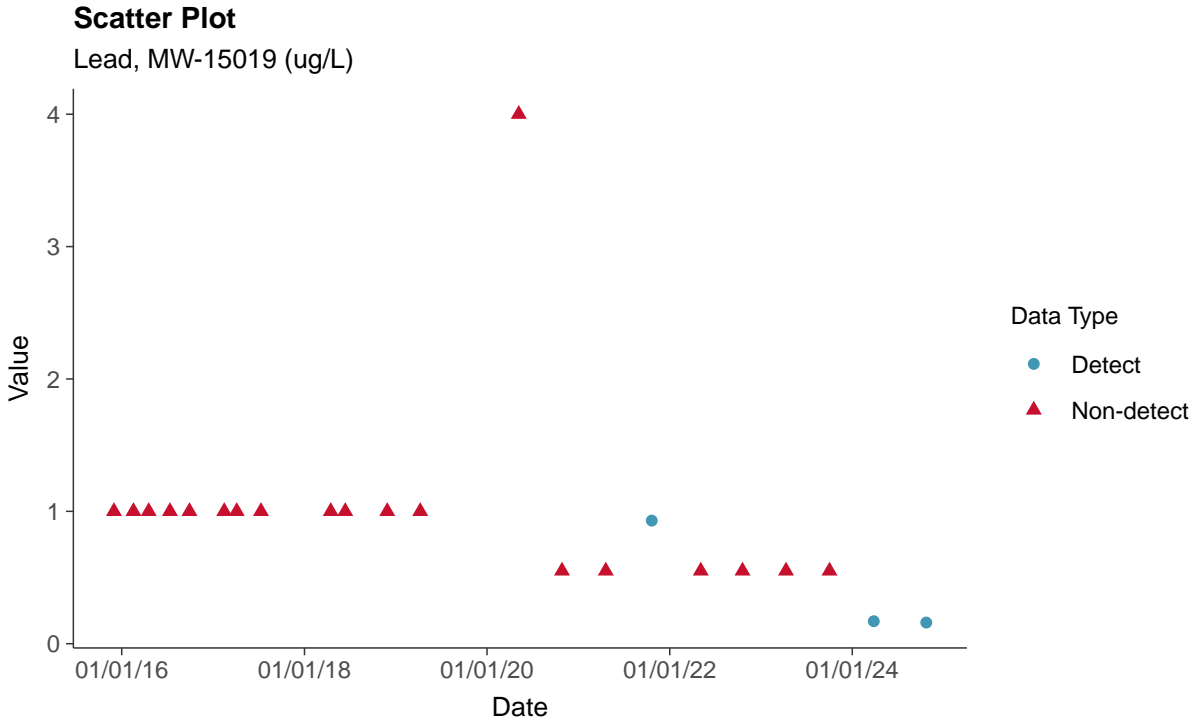
Fluoride, MW-15019 (ug/L)





Appendix IV: Lead, MW-15019

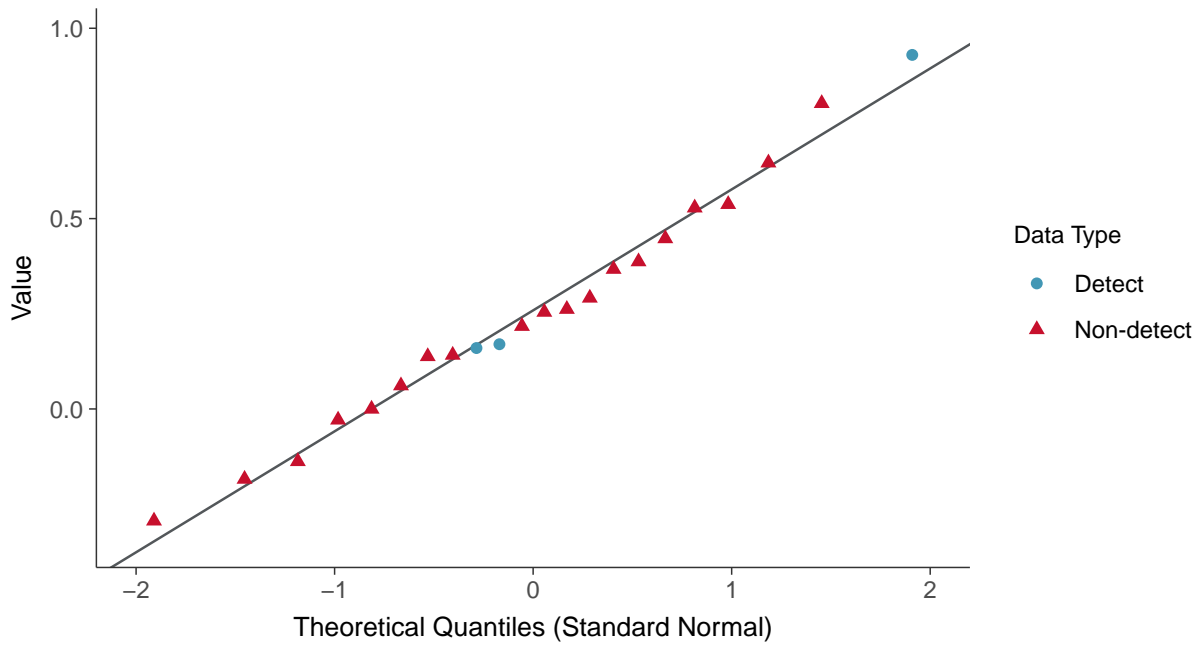
ID: 09_2_116





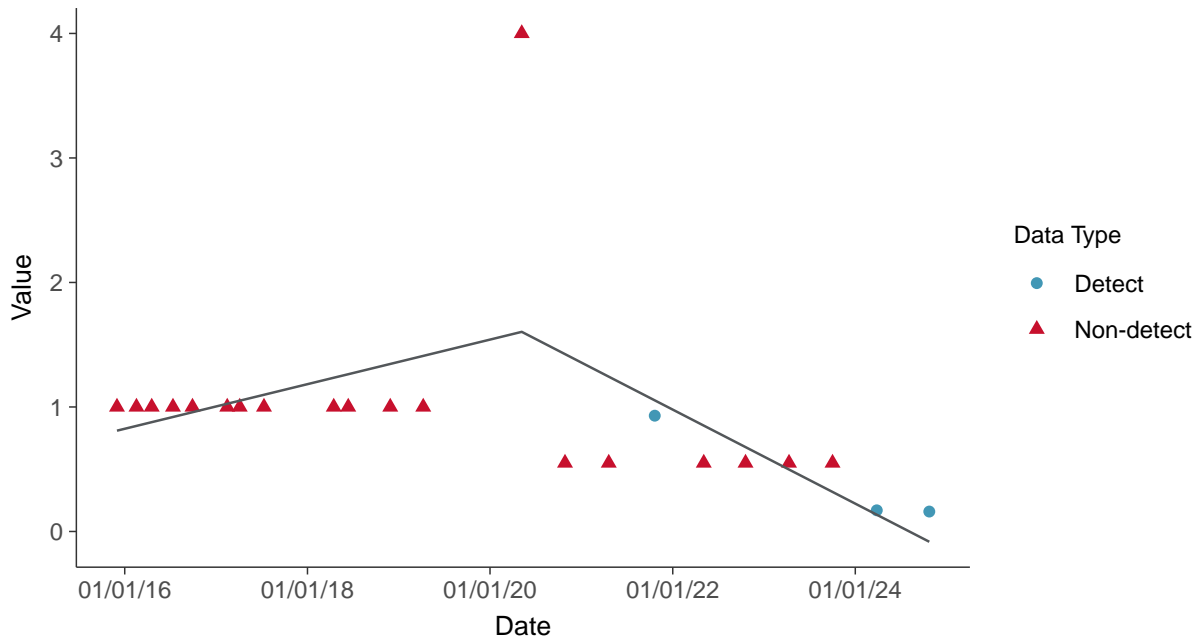
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

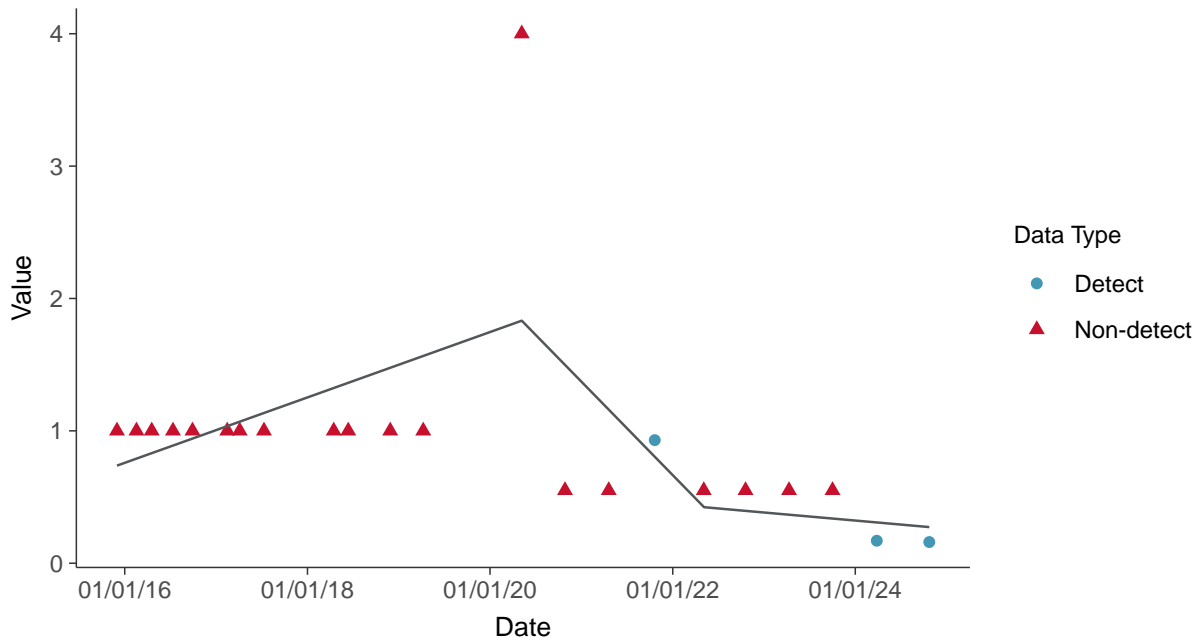
Lead, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-15019 (ug/L)



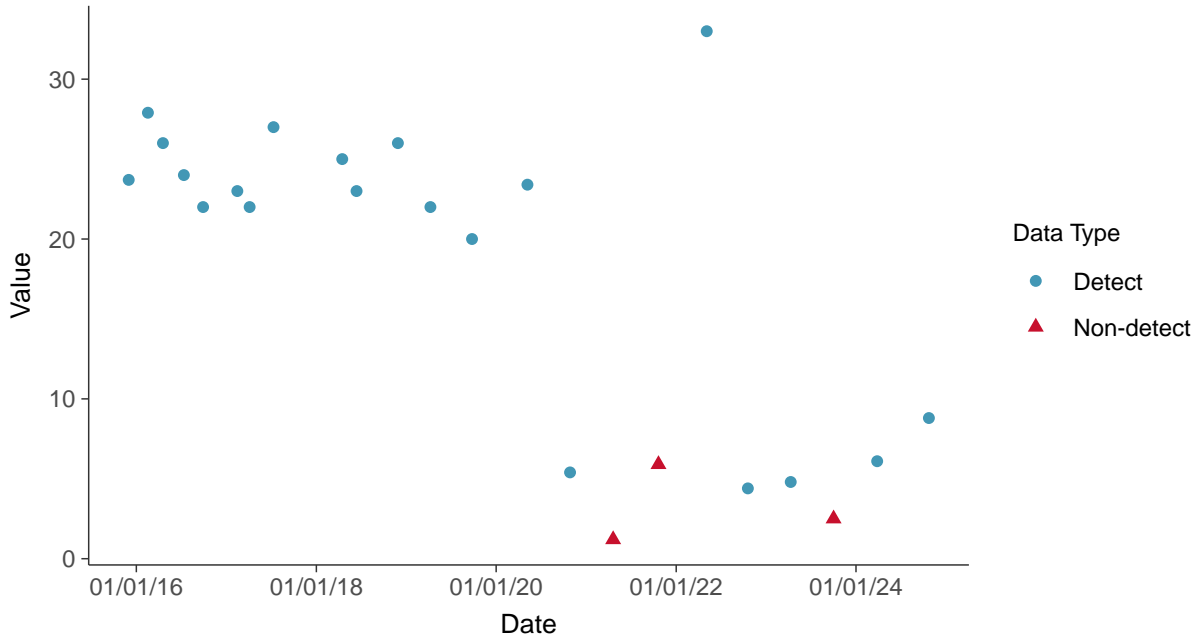


Appendix IV: Lithium, MW-15019

ID: 09_2_117

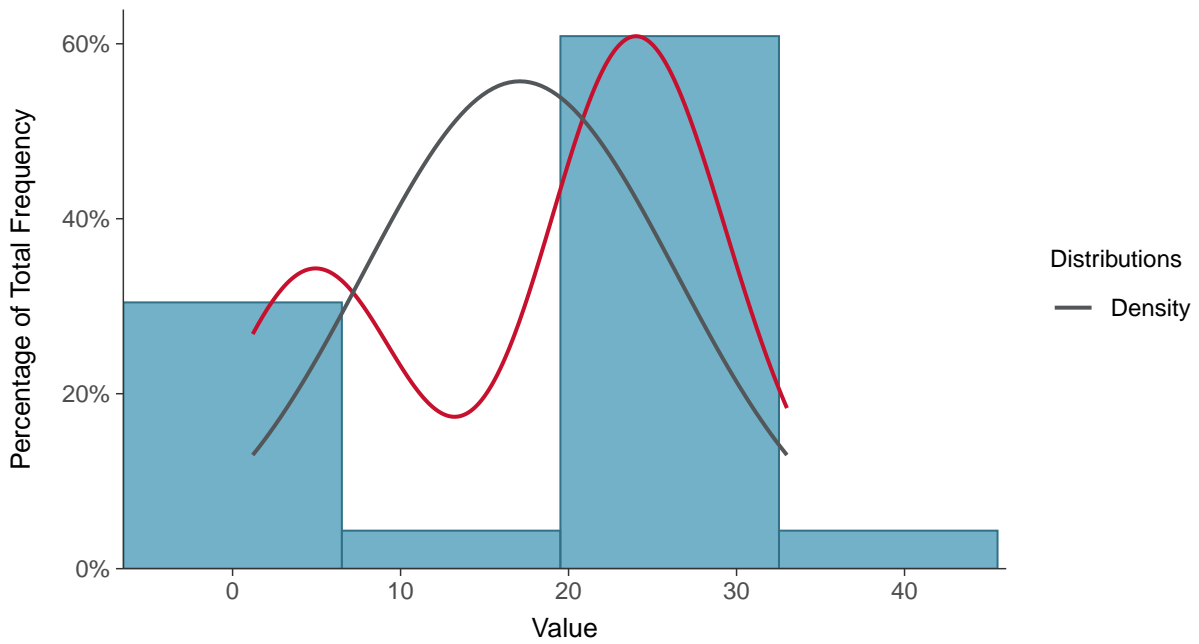
Scatter Plot

Lithium, MW-15019 (ug/L)



Histogram

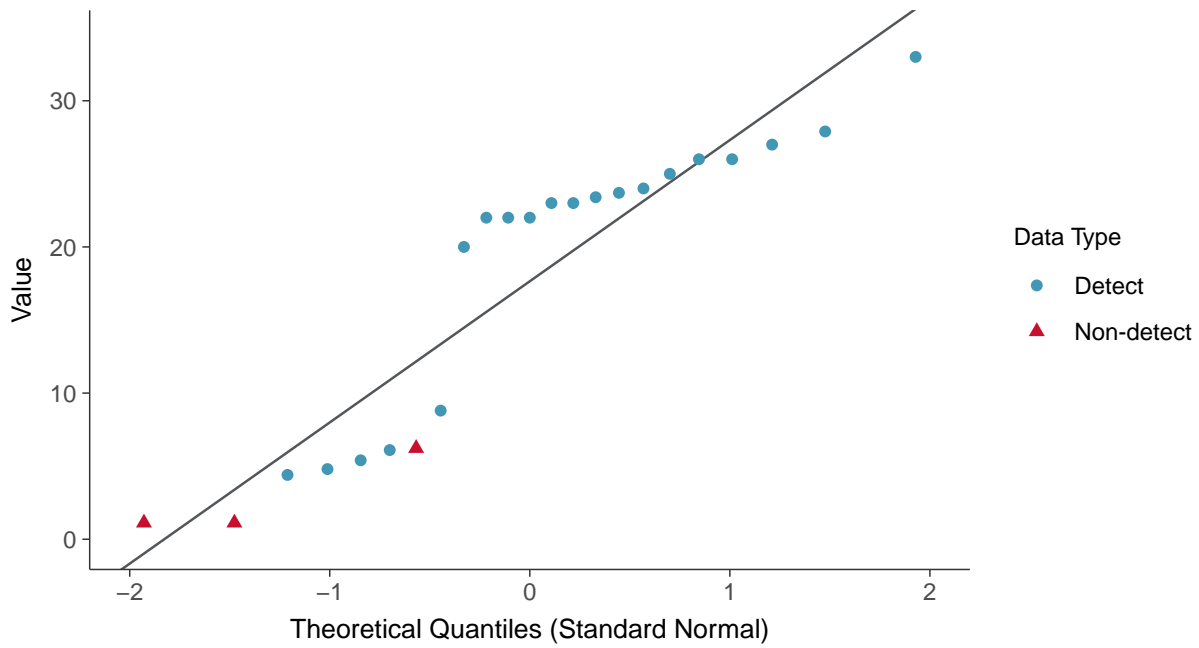
Lithium, MW-15019 (ug/L)





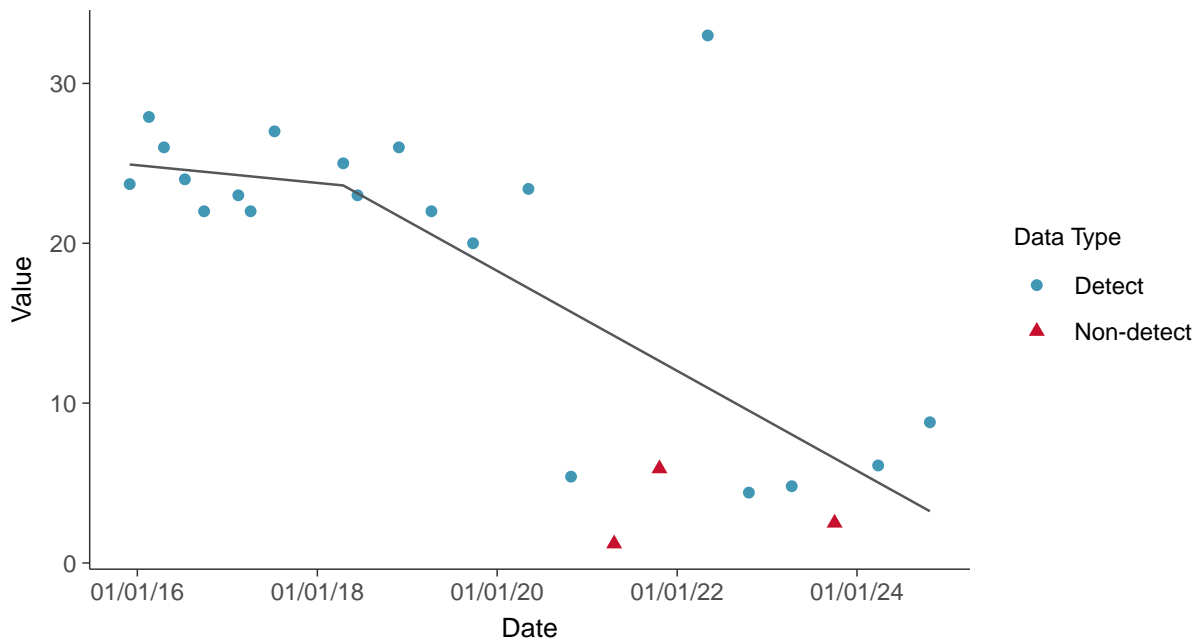
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

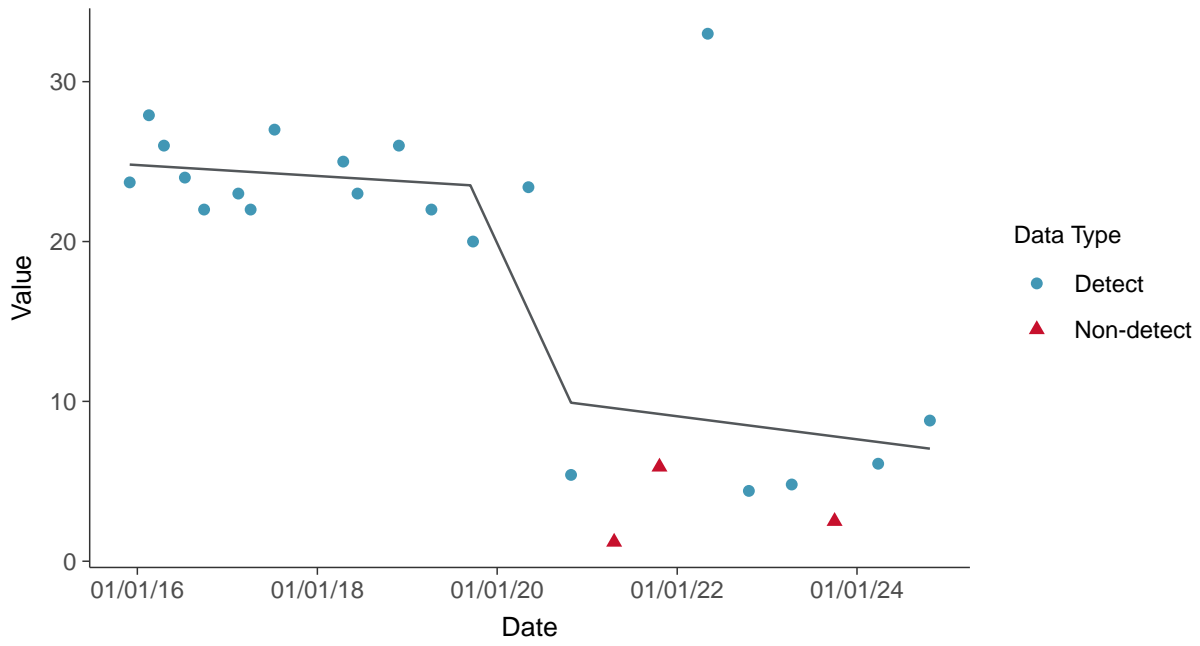
Lithium, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

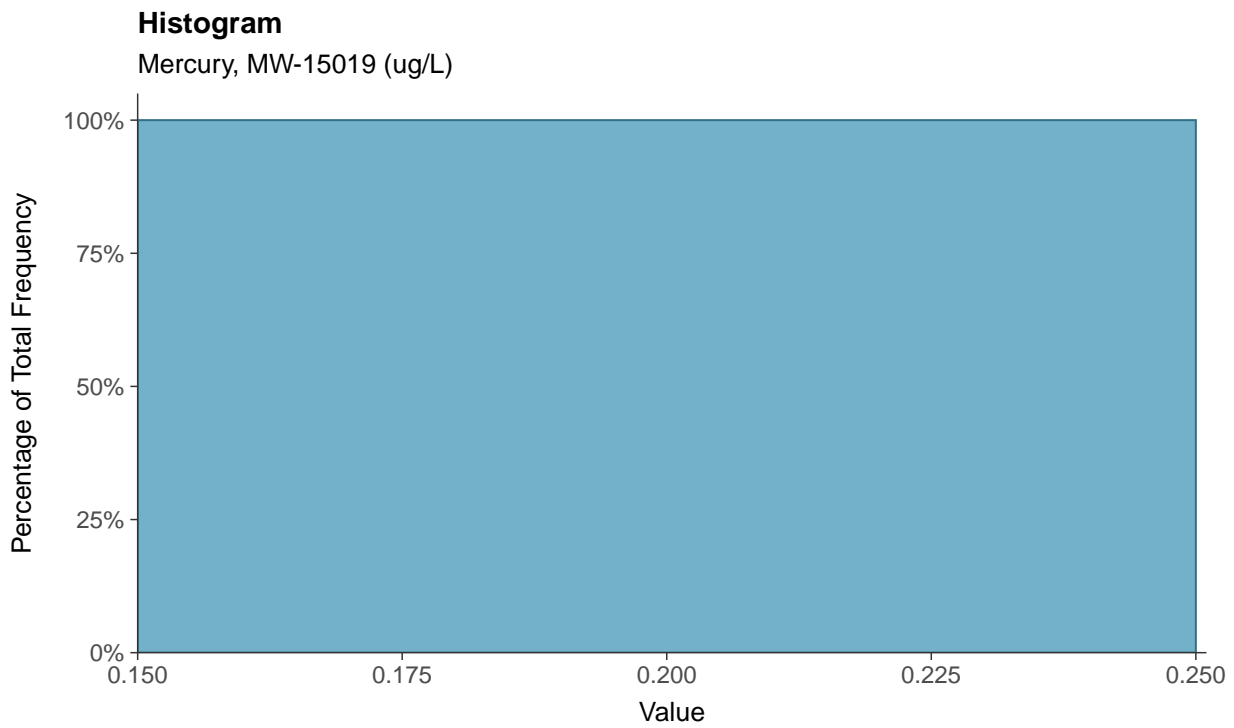
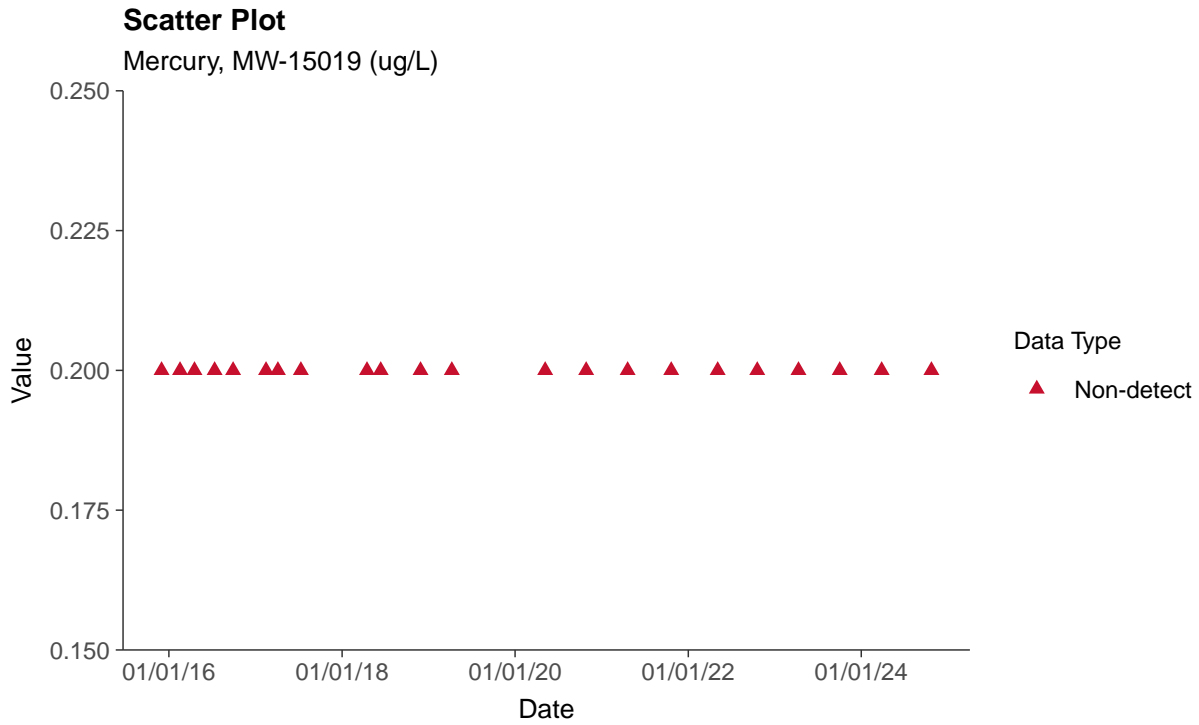
Lithium, MW-15019 (ug/L)





Appendix IV: Mercury, MW-15019

ID: 09_2_118



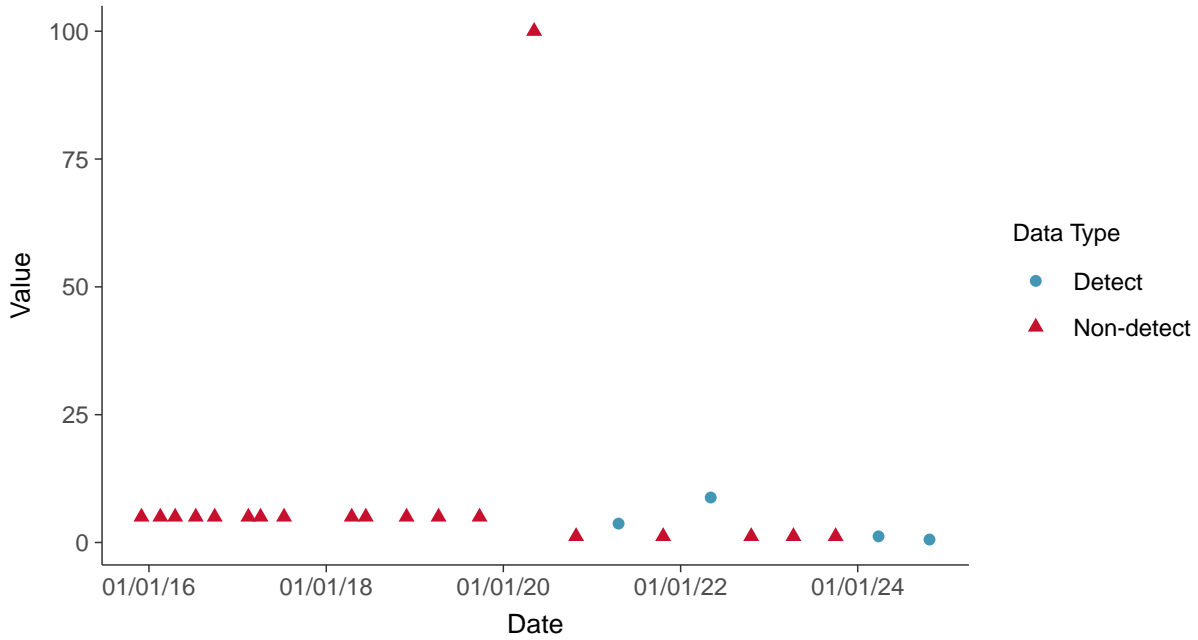


Appendix IV: Molybdenum, MW-15019

ID: 09_2_119

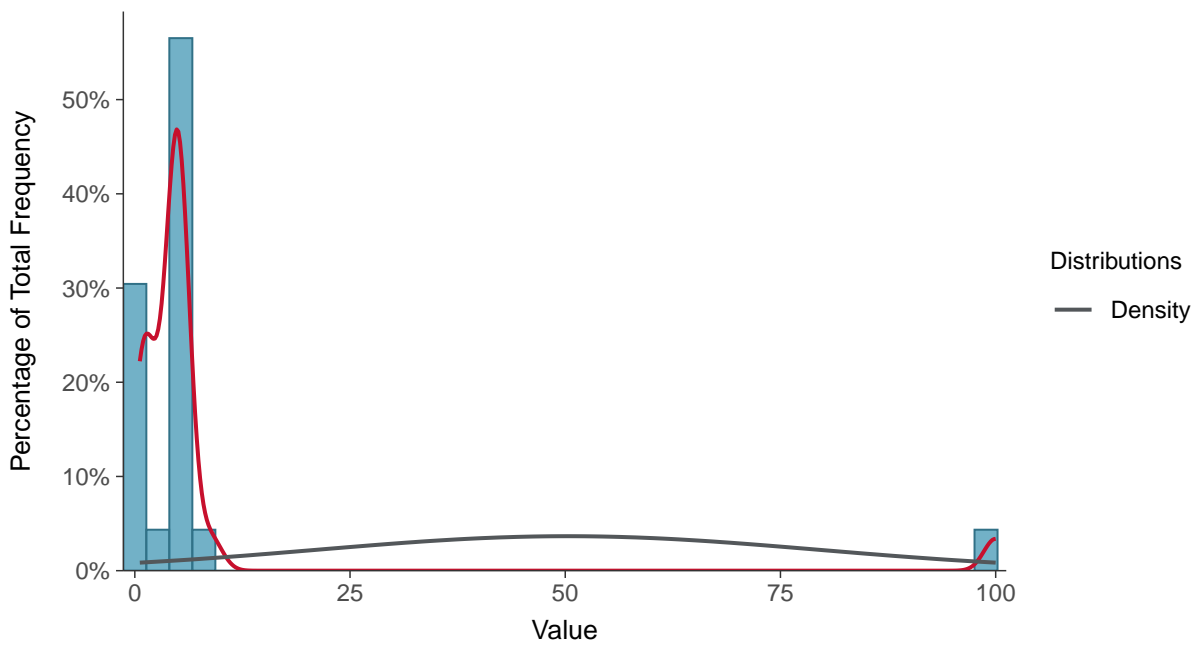
Scatter Plot

Molybdenum, MW-15019 (ug/L)



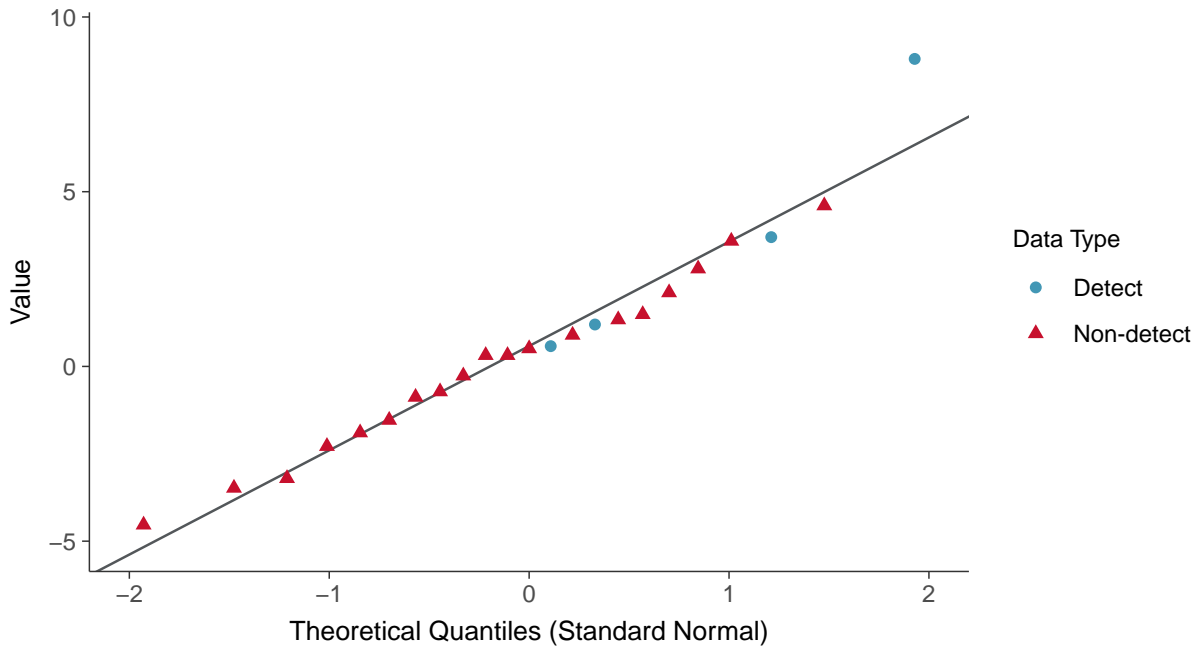
Histogram

Molybdenum, MW-15019 (ug/L)



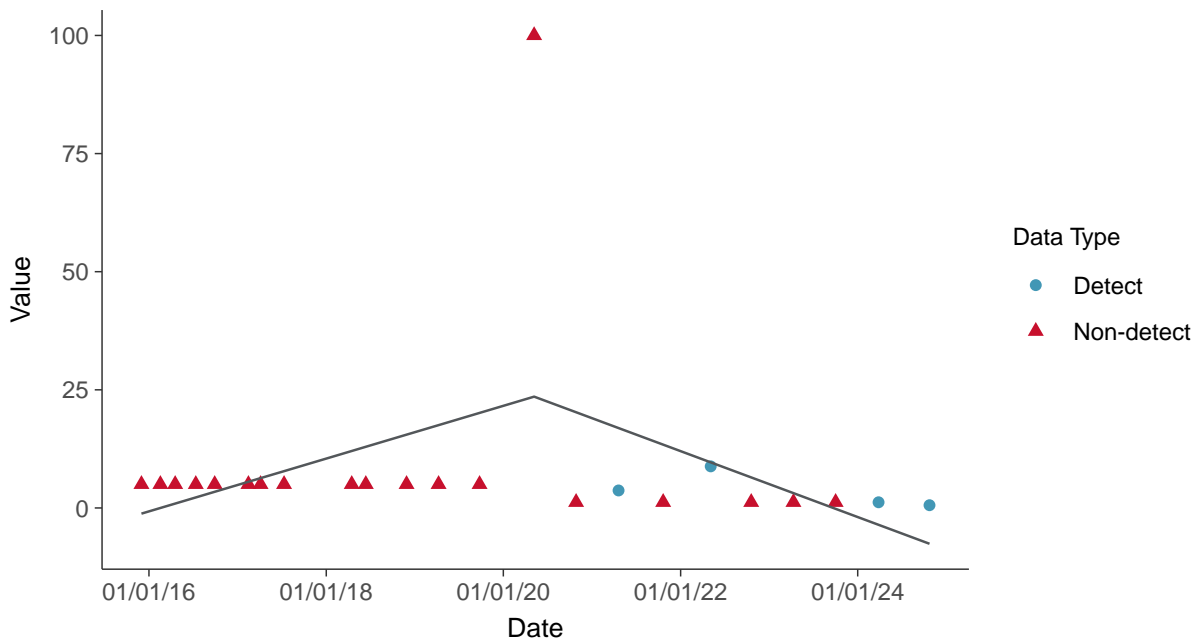
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

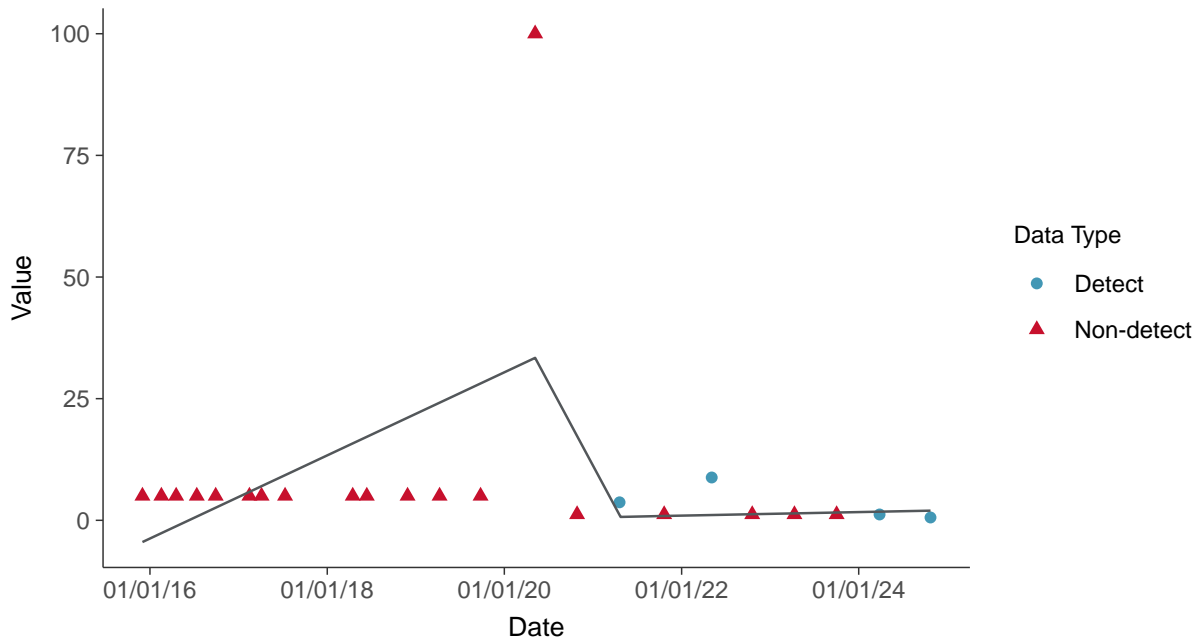
Molybdenum, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15019 (ug/L)



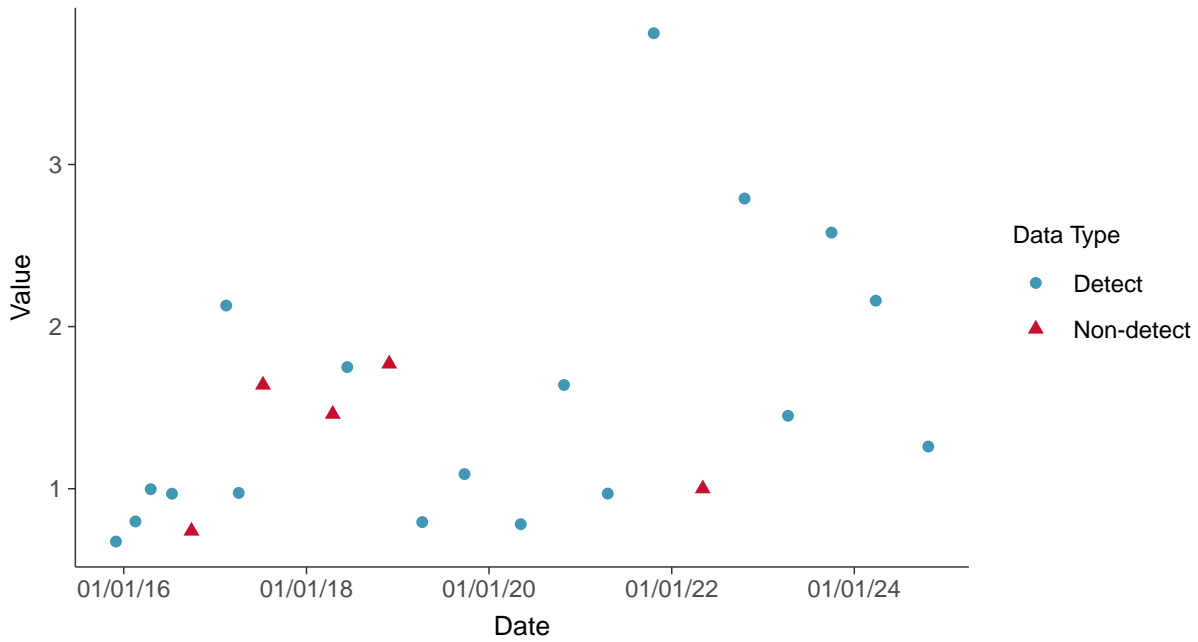


Appendix IV: Radium-226+228, MW-15019

ID: 09_2_125

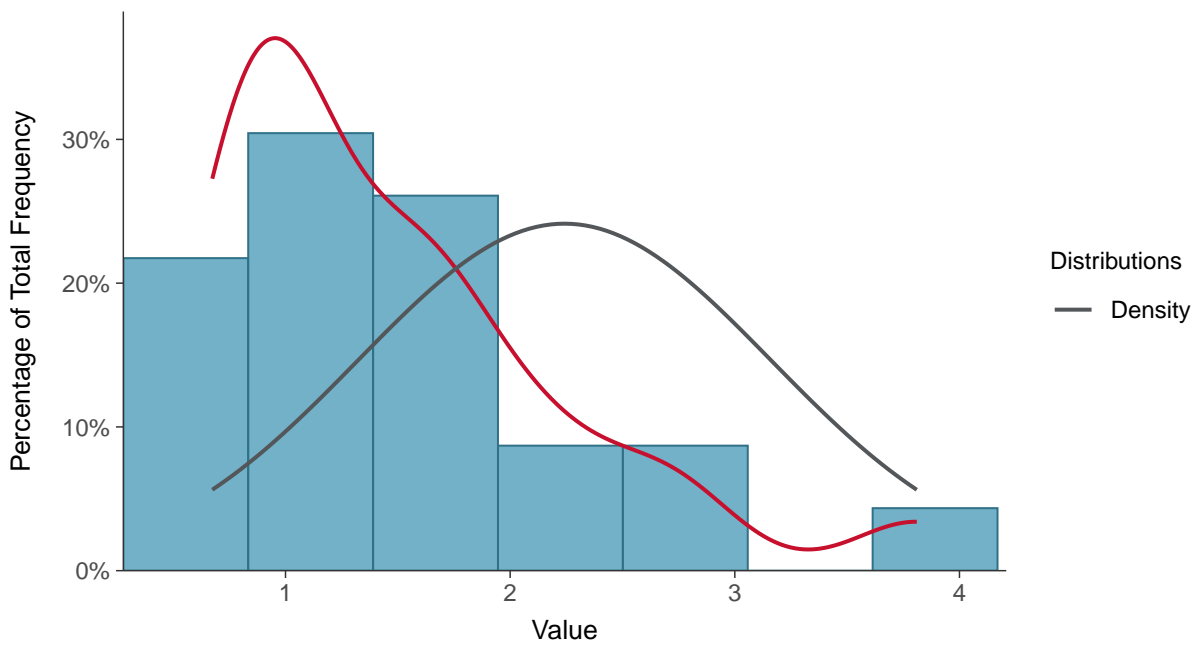
Scatter Plot

Radium-226+228, MW-15019 (pCi/L)



Histogram

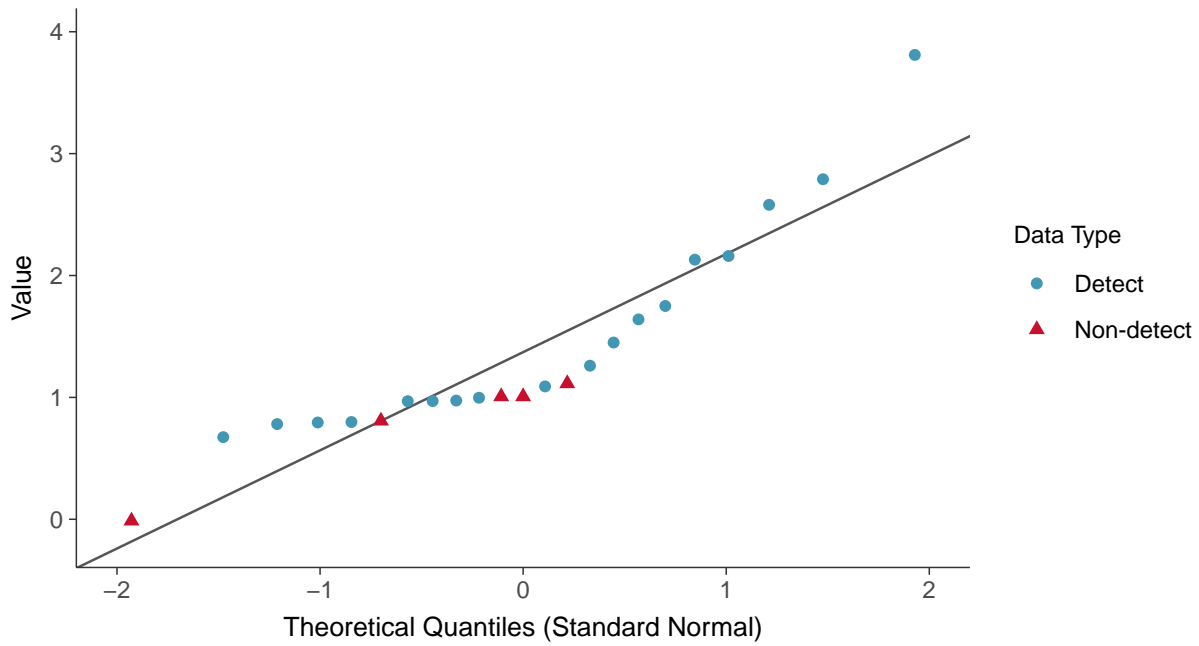
Radium-226+228, MW-15019 (pCi/L)





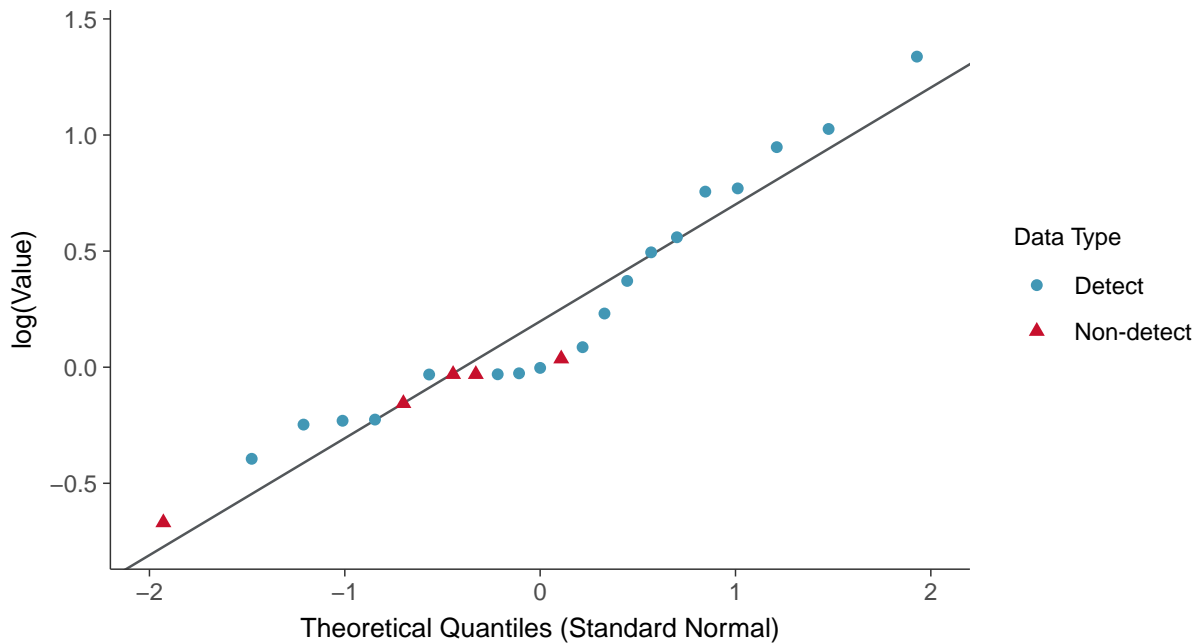
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15019 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

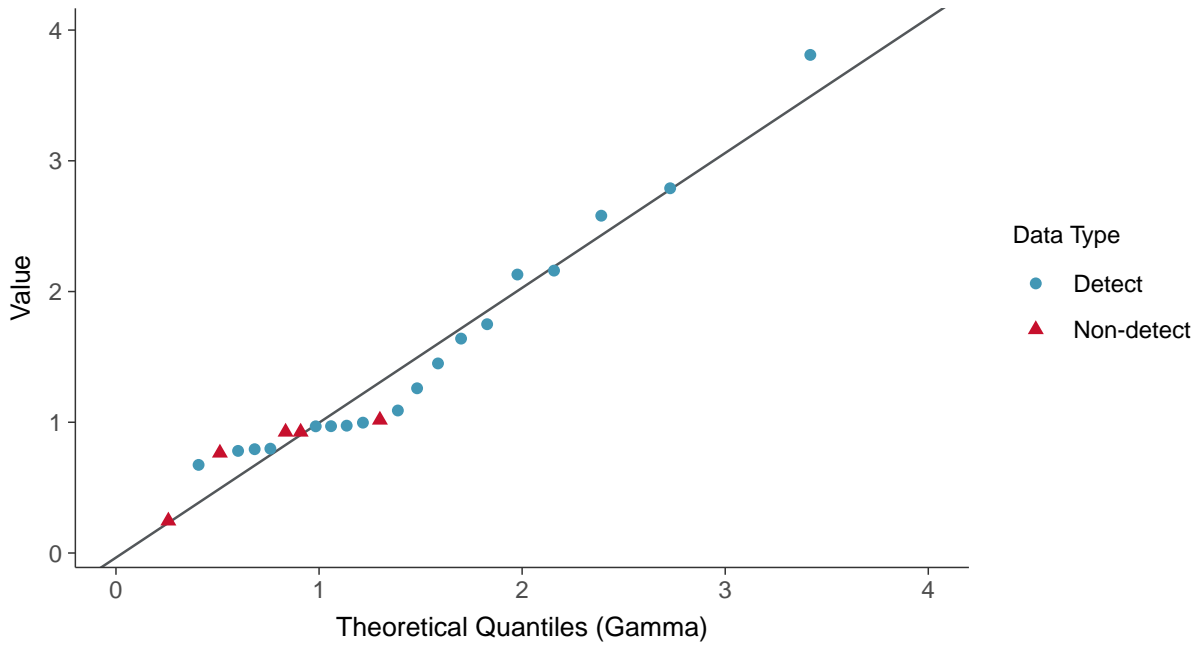
Radium-226+228, MW-15019 (pCi/L)





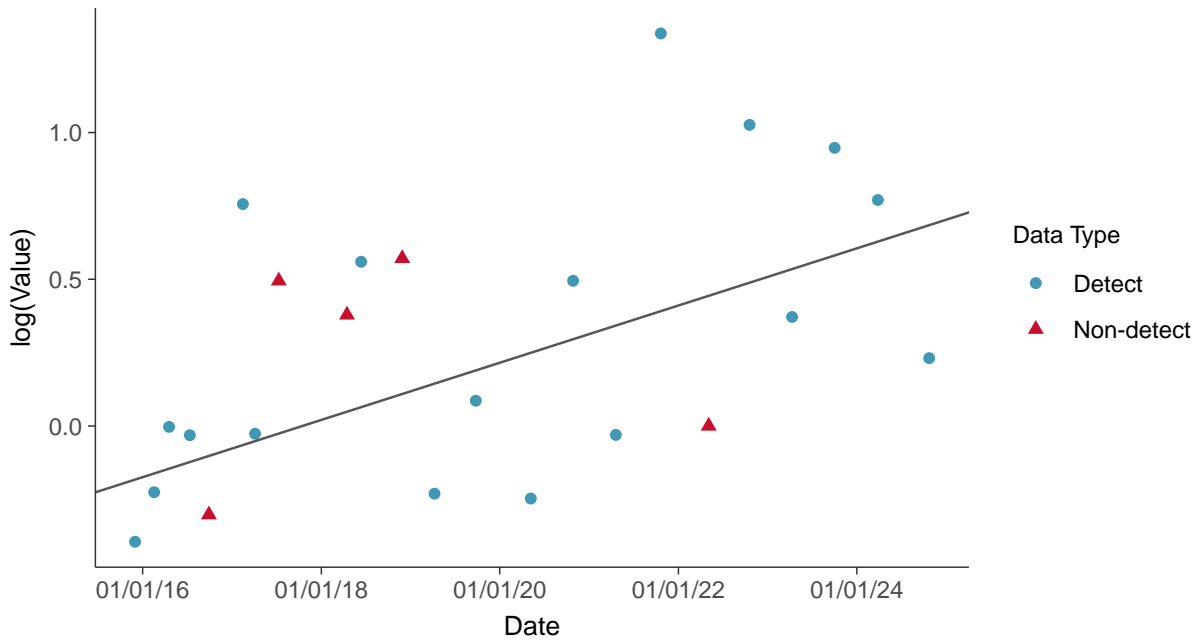
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15019 (pCi/L)



Trend Regression: Lognormal MLE

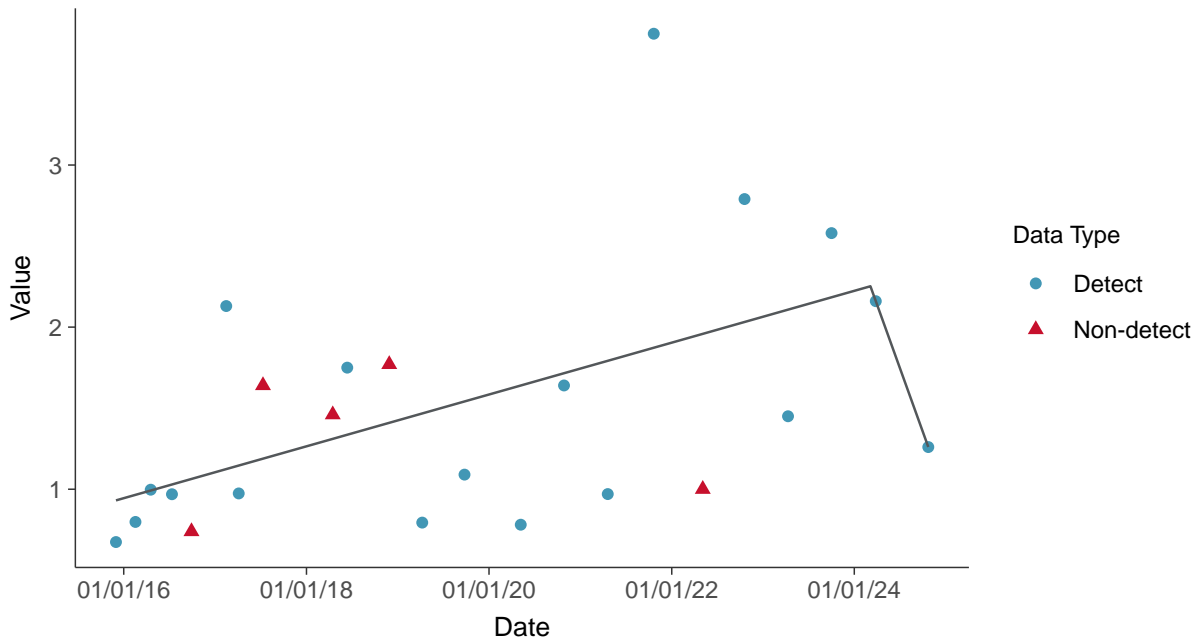
Radium-226+228, MW-15019 (pCi/L)





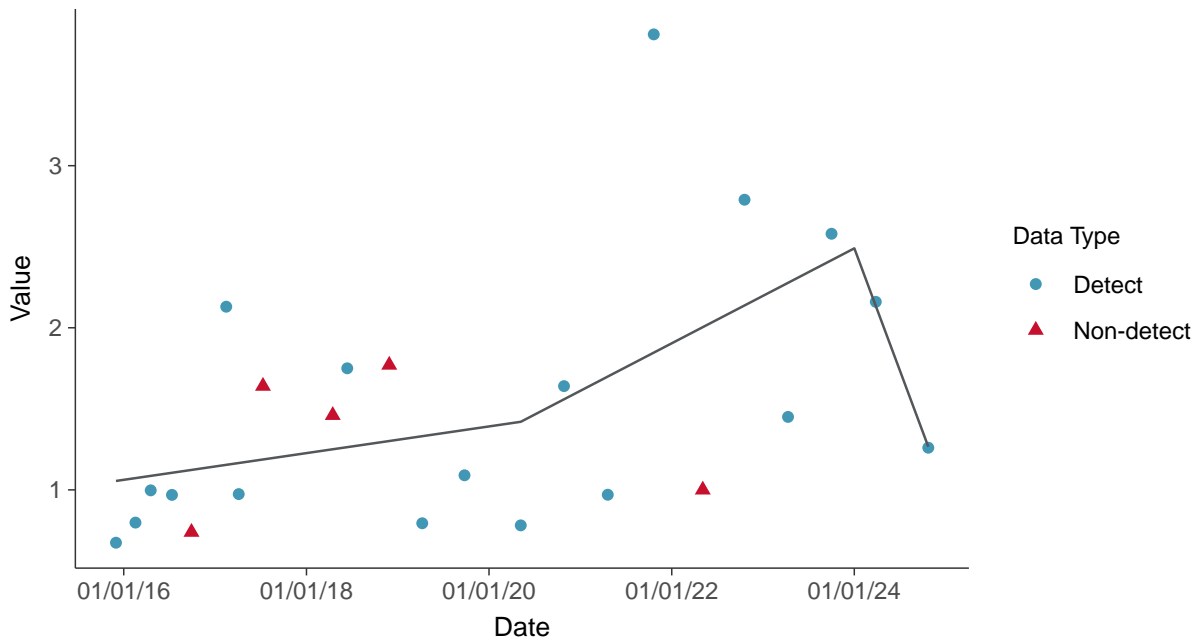
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15019 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

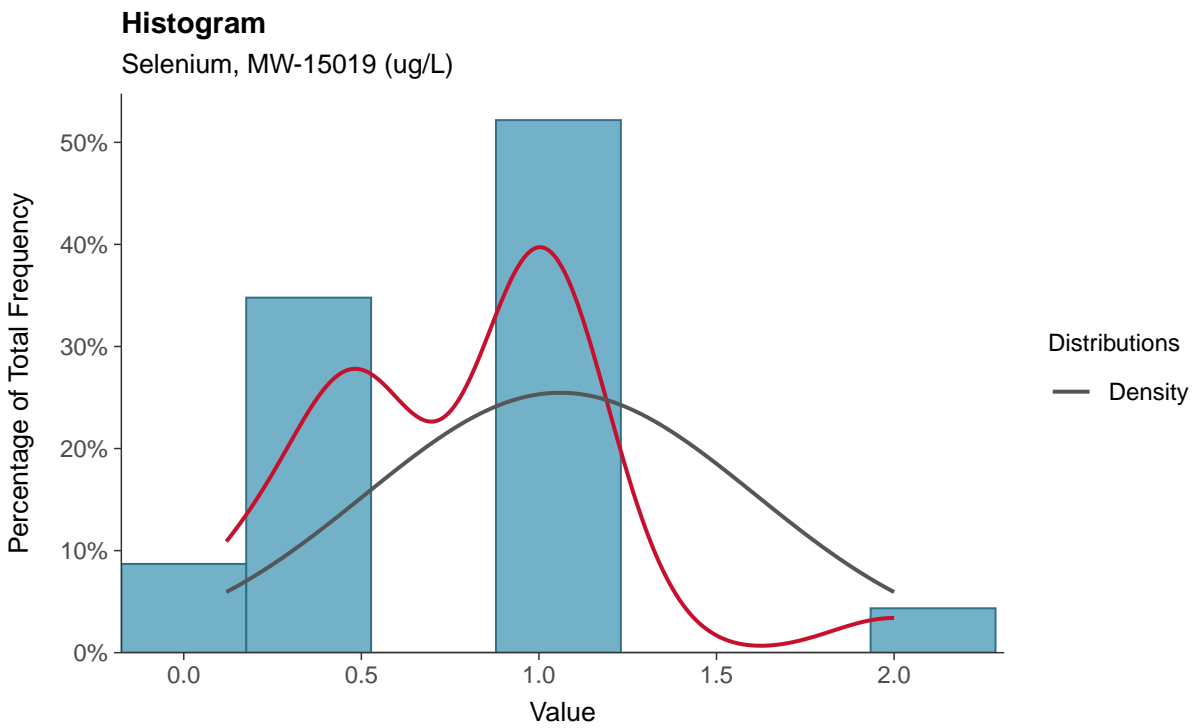
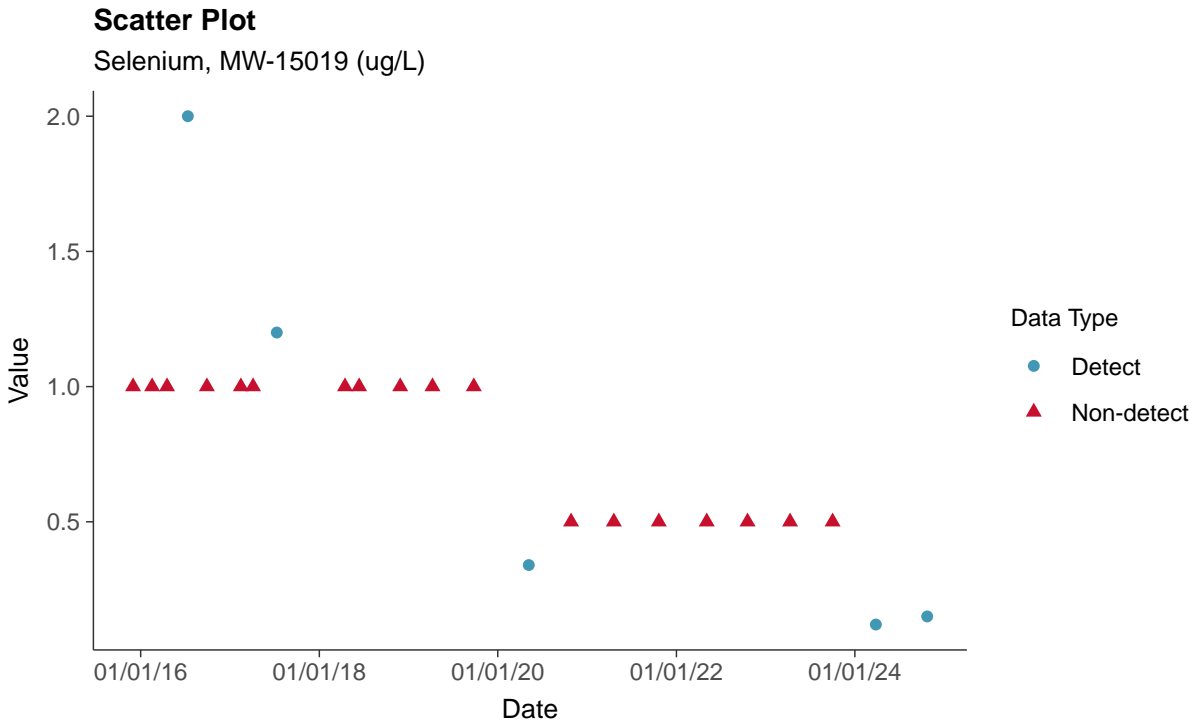
Radium-226+228, MW-15019 (pCi/L)





Appendix IV: Selenium, MW-15019

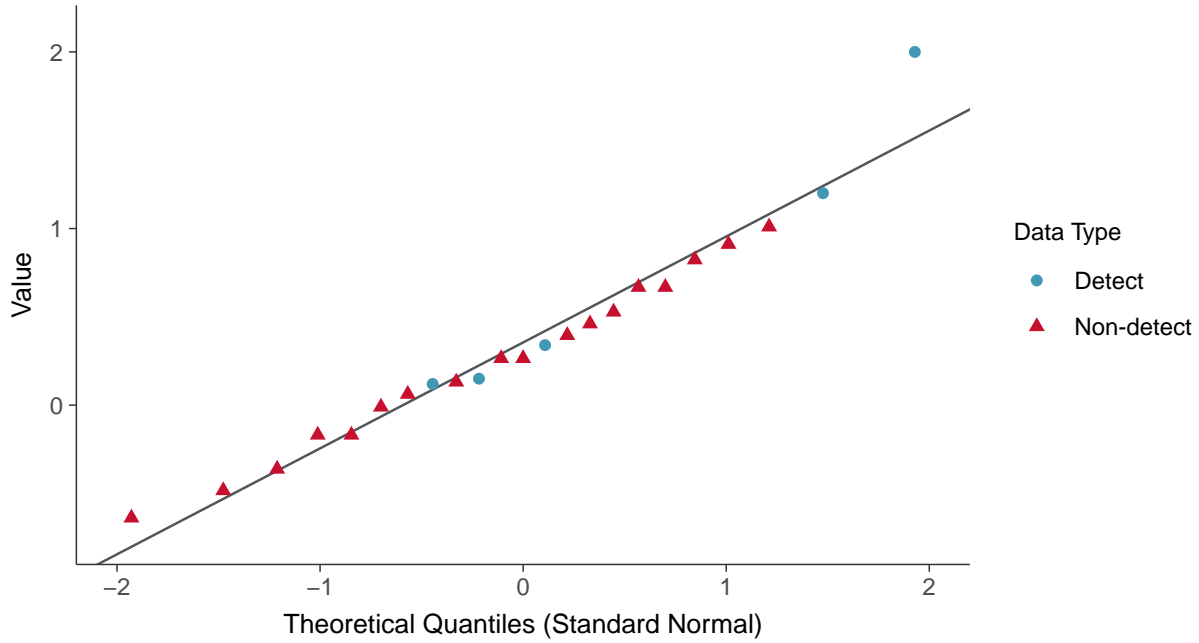
ID: 09_2_127





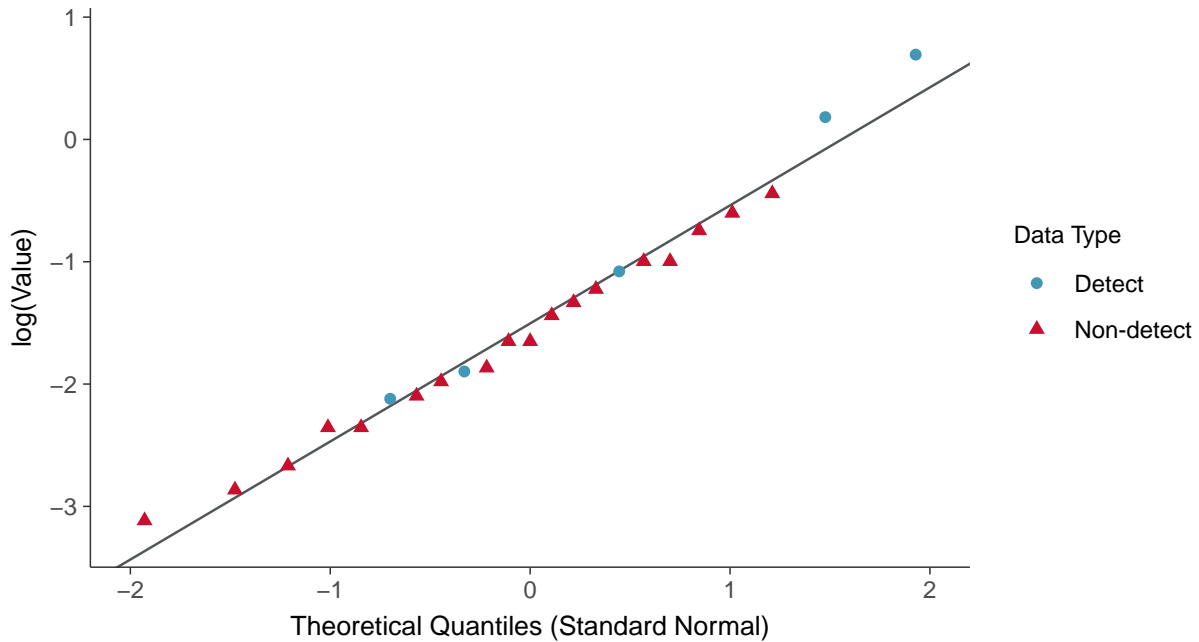
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15019 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

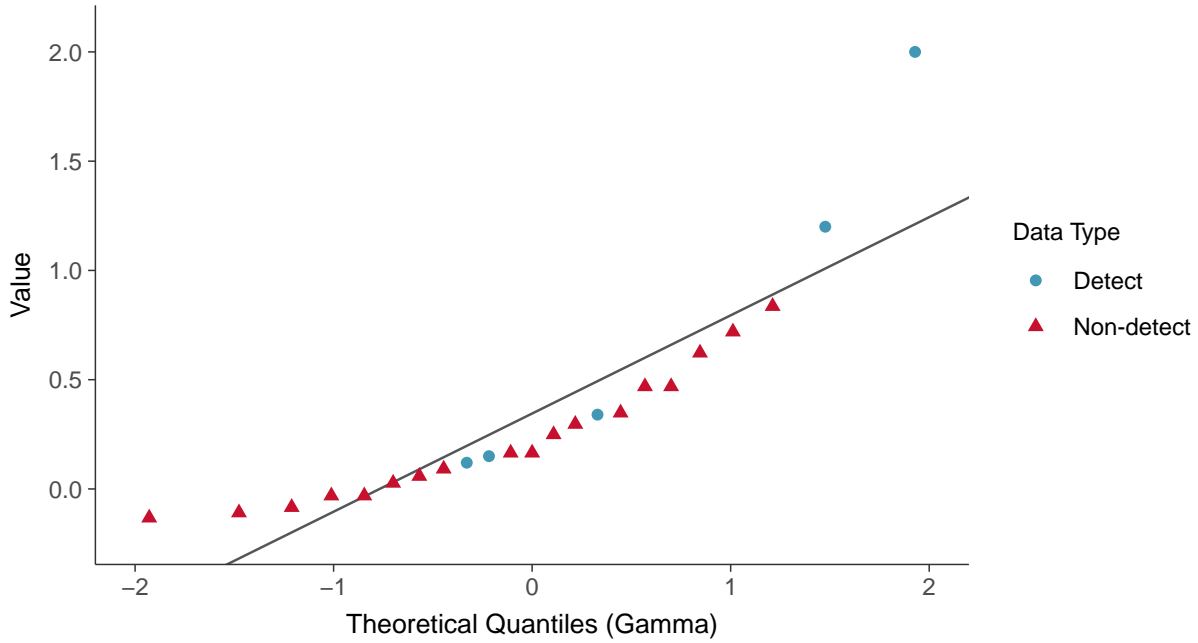
Selenium, MW-15019 (ug/L)





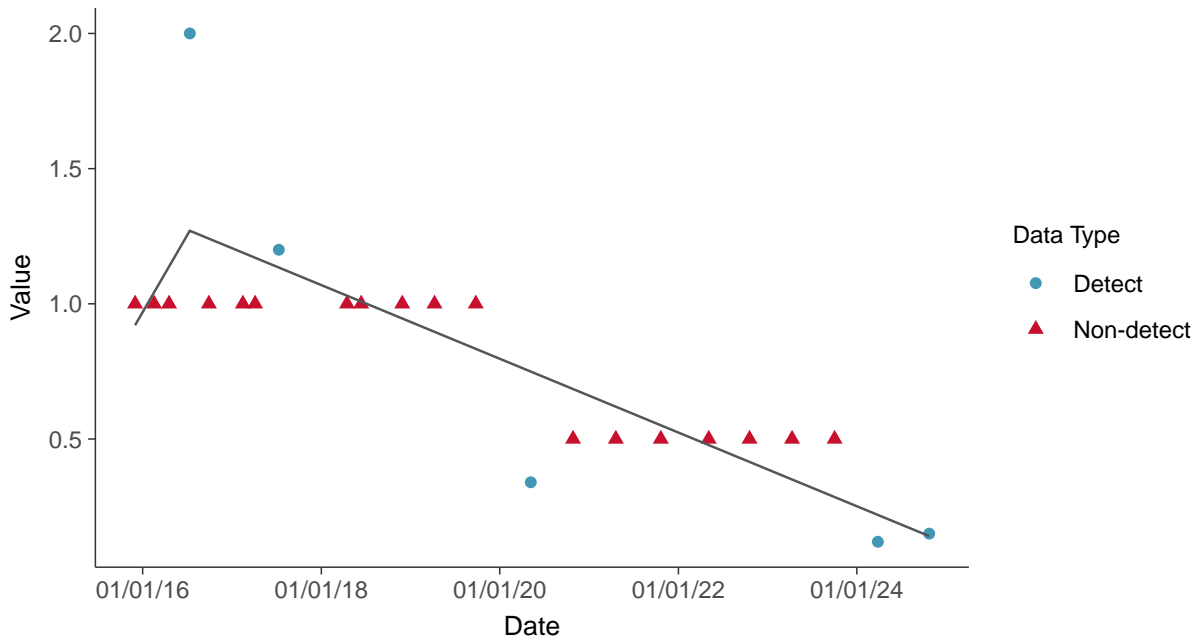
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

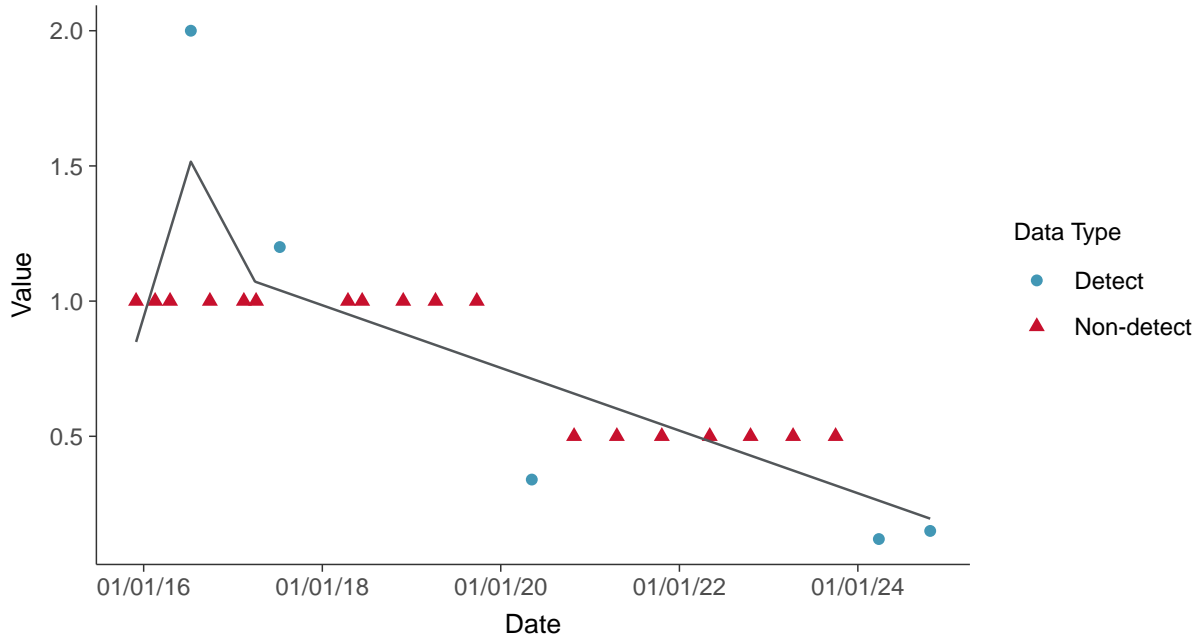
Selenium, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

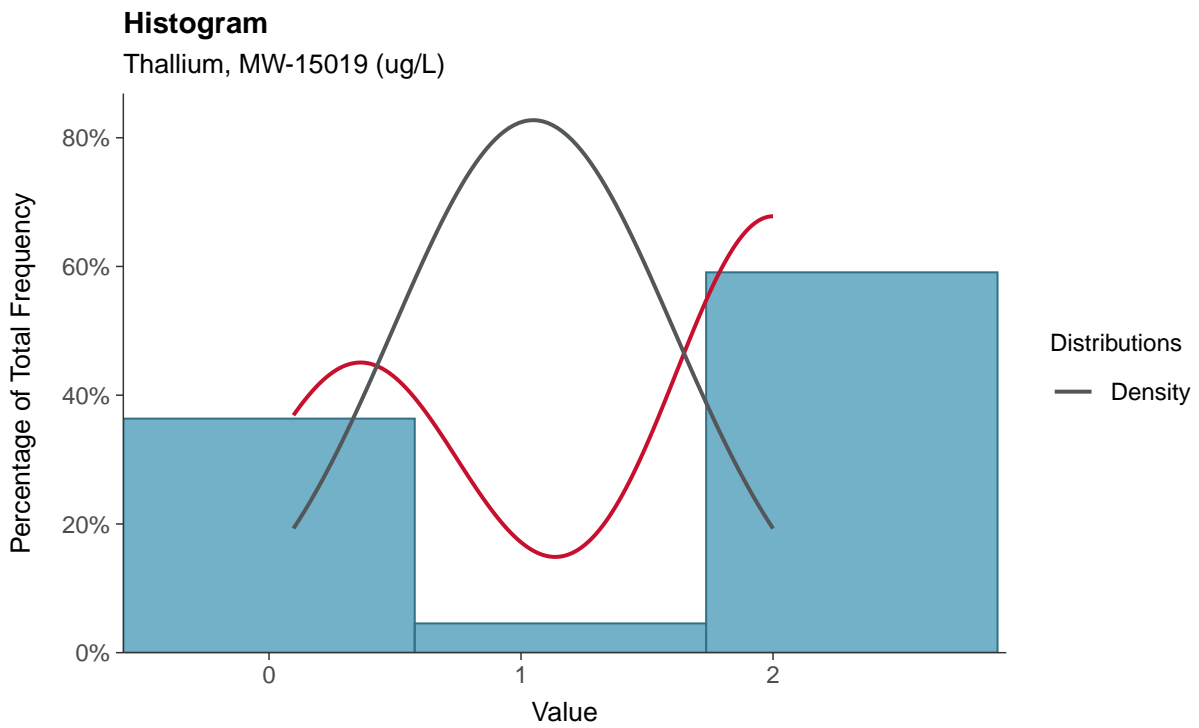
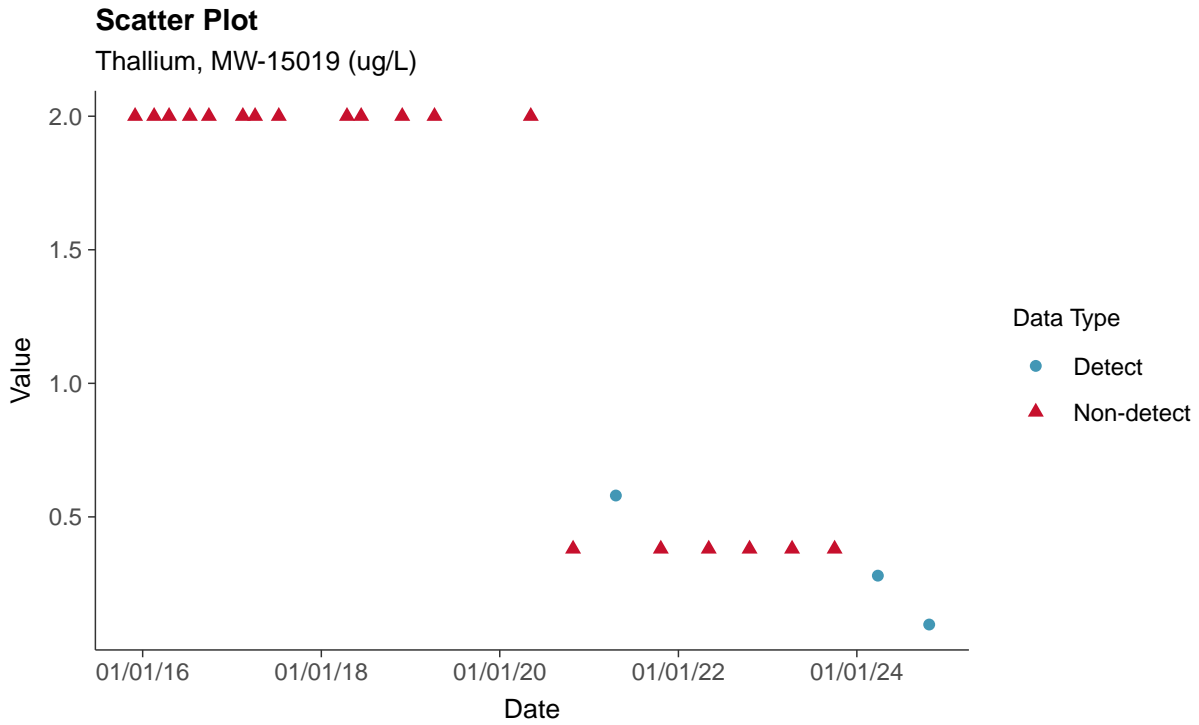
Selenium, MW-15019 (ug/L)





Appendix IV: Thallium, MW-15019

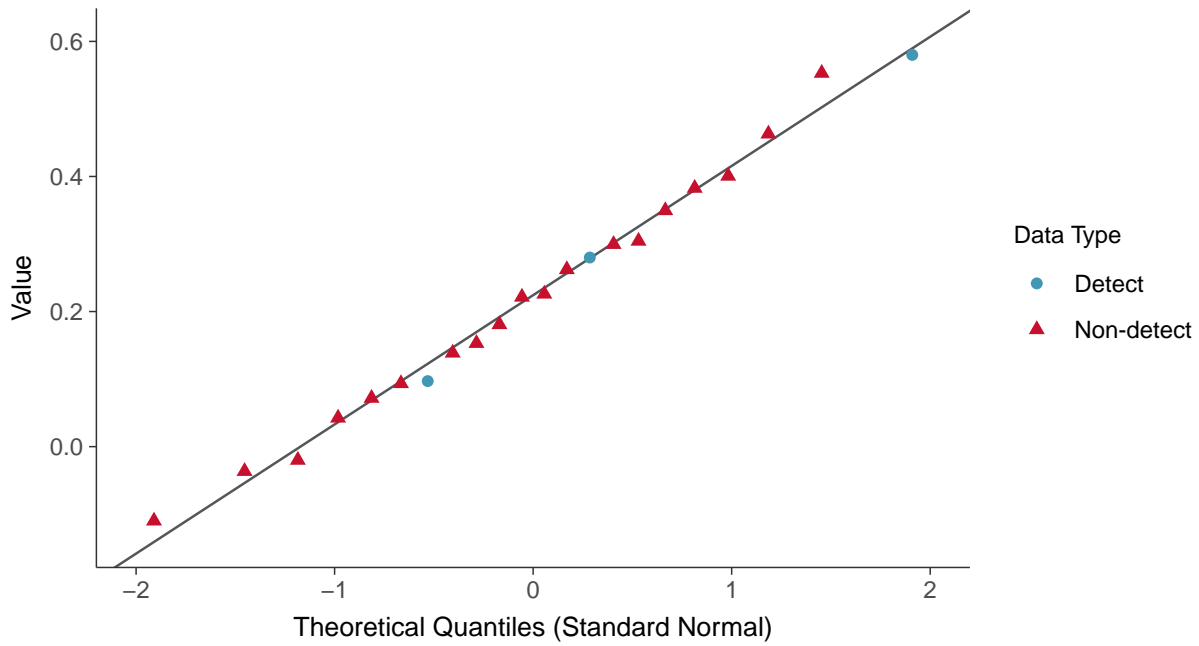
ID: 09_2_131





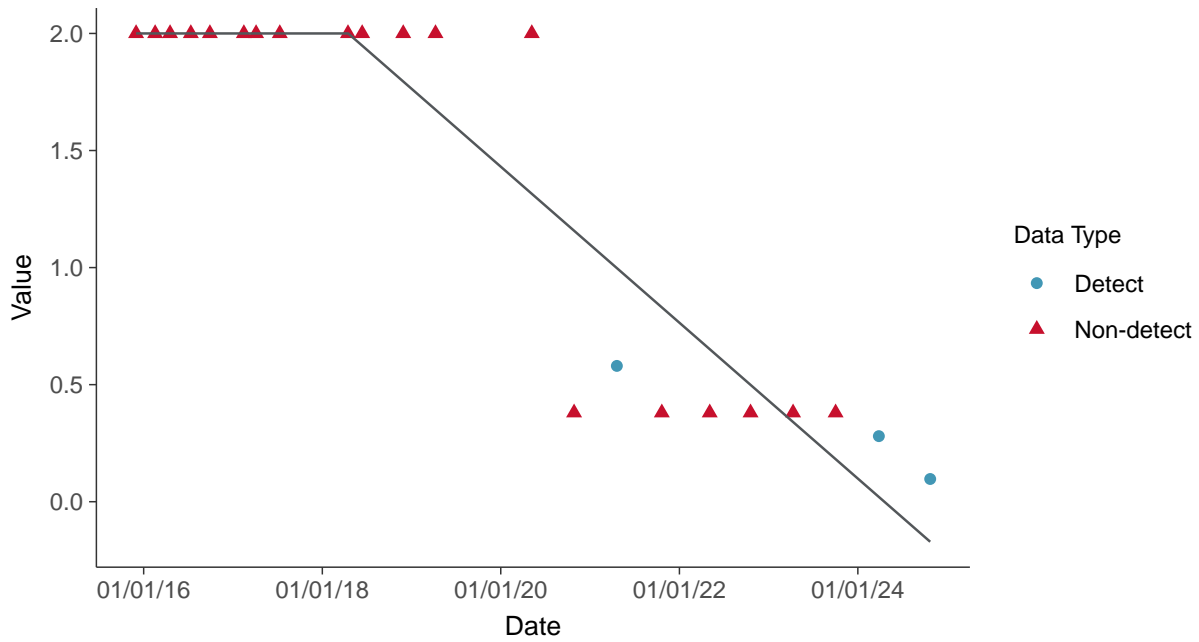
Normal Q-Q plot using ROS Imputed Estimates

Thallium, MW-15019 (ug/L)



Trend Regression: Piecewise Linear-Linear

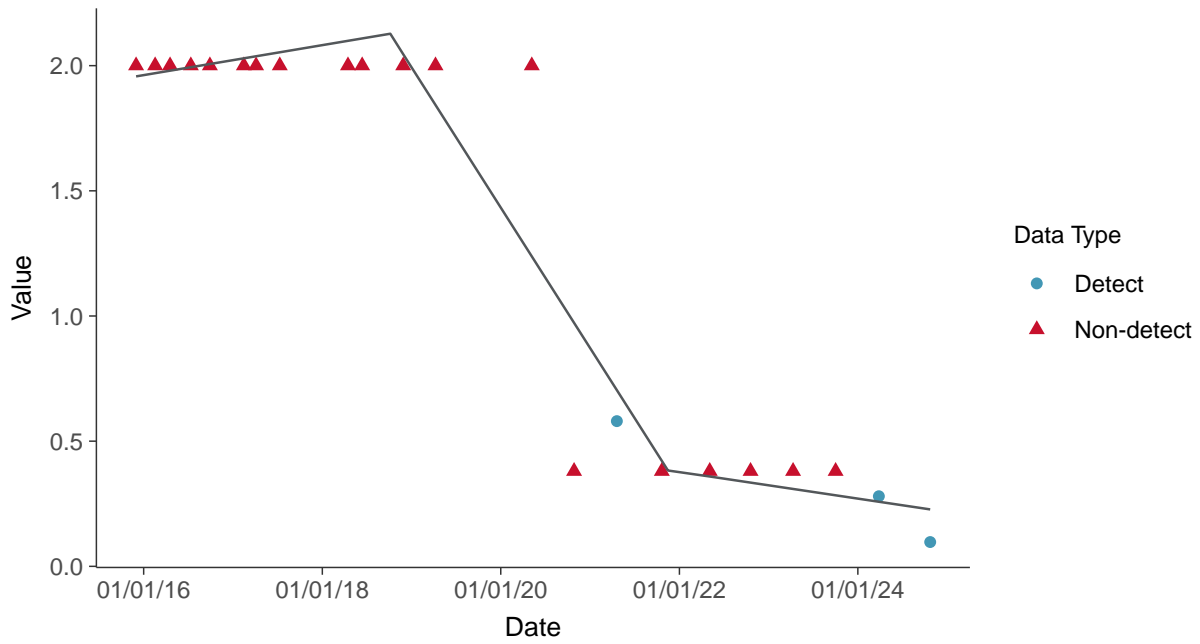
Thallium, MW-15019 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

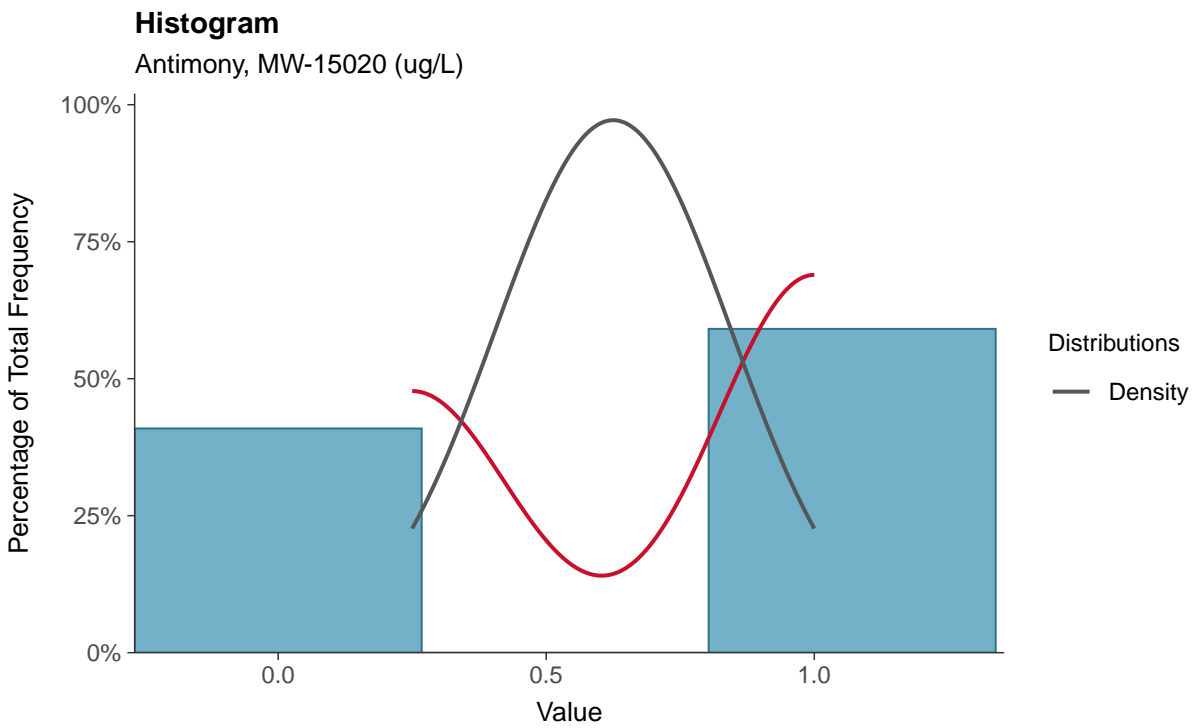
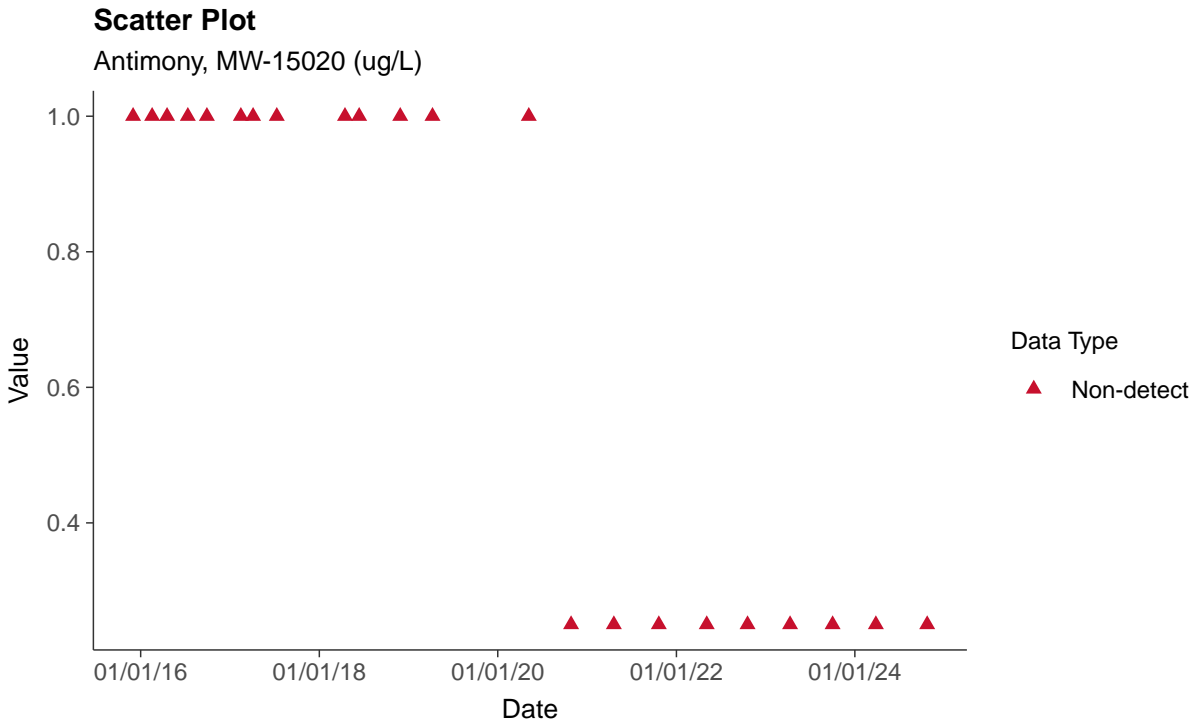
Thallium, MW-15019 (ug/L)





Appendix IV: Antimony, MW-15020

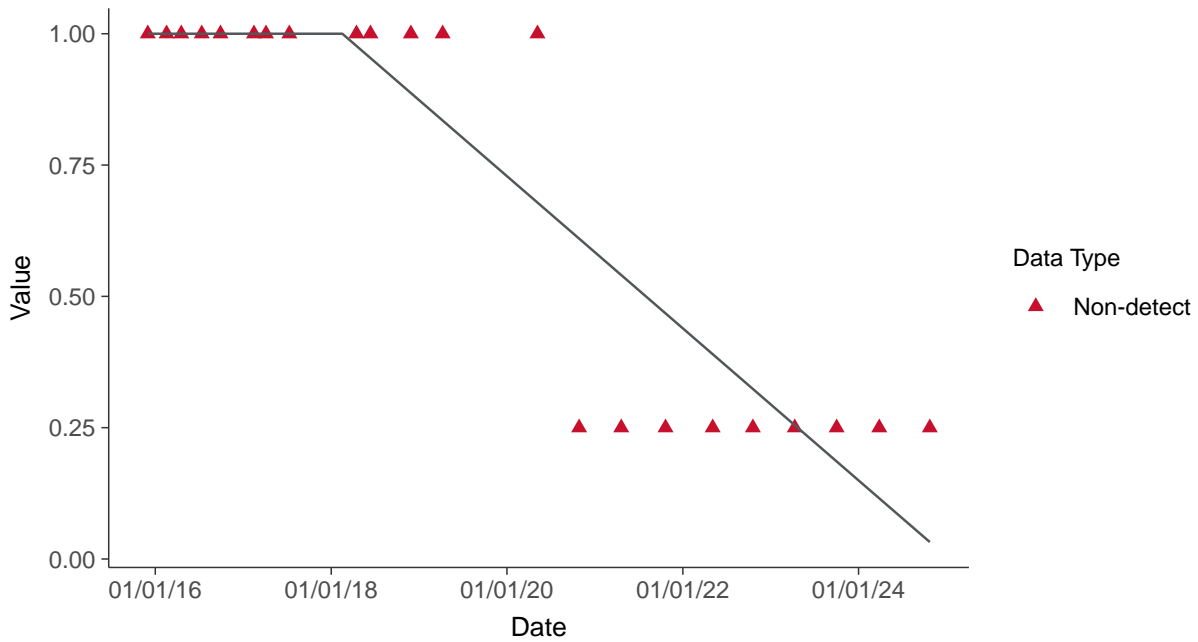
ID: 10_2_101





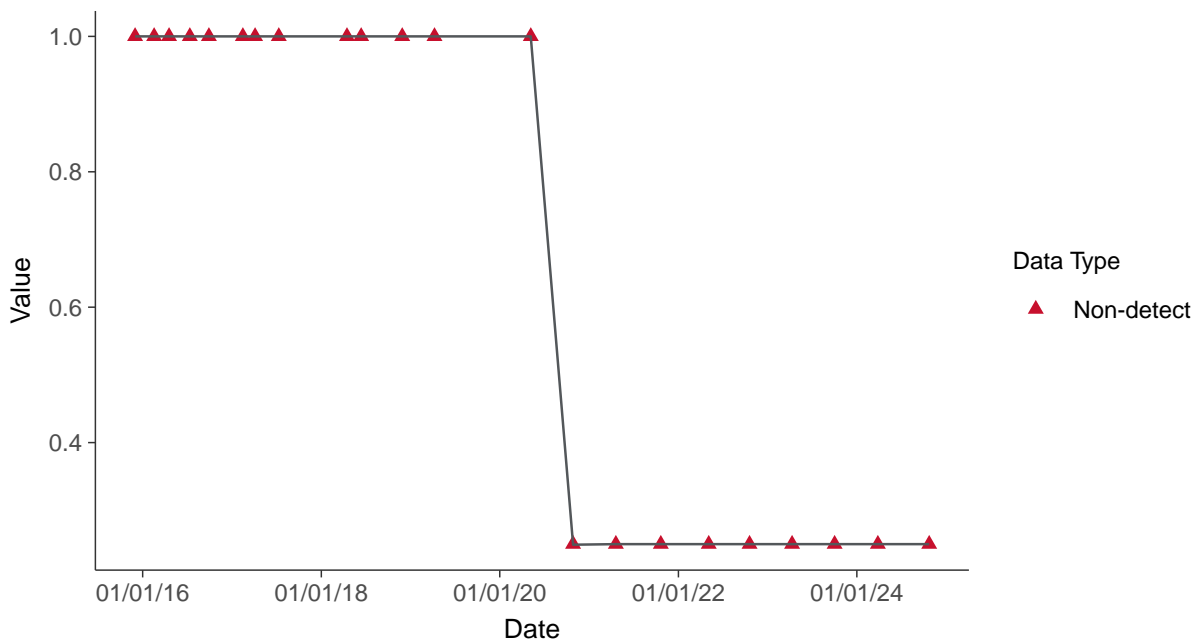
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15020 (ug/L)



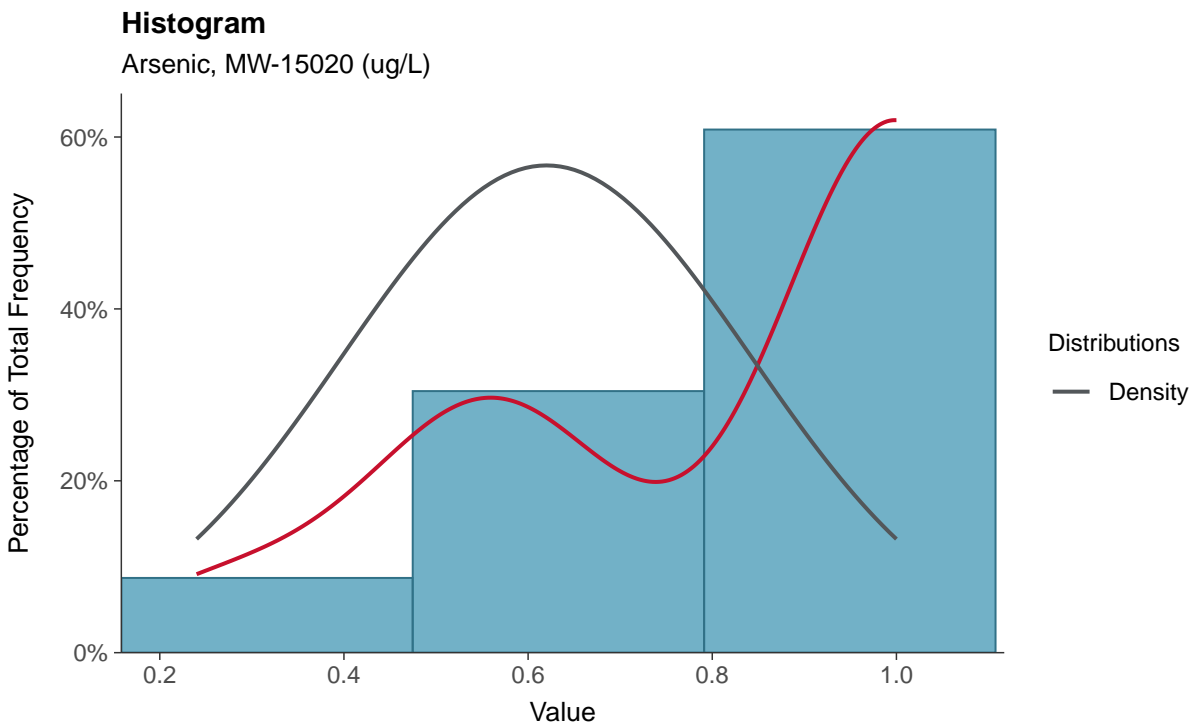
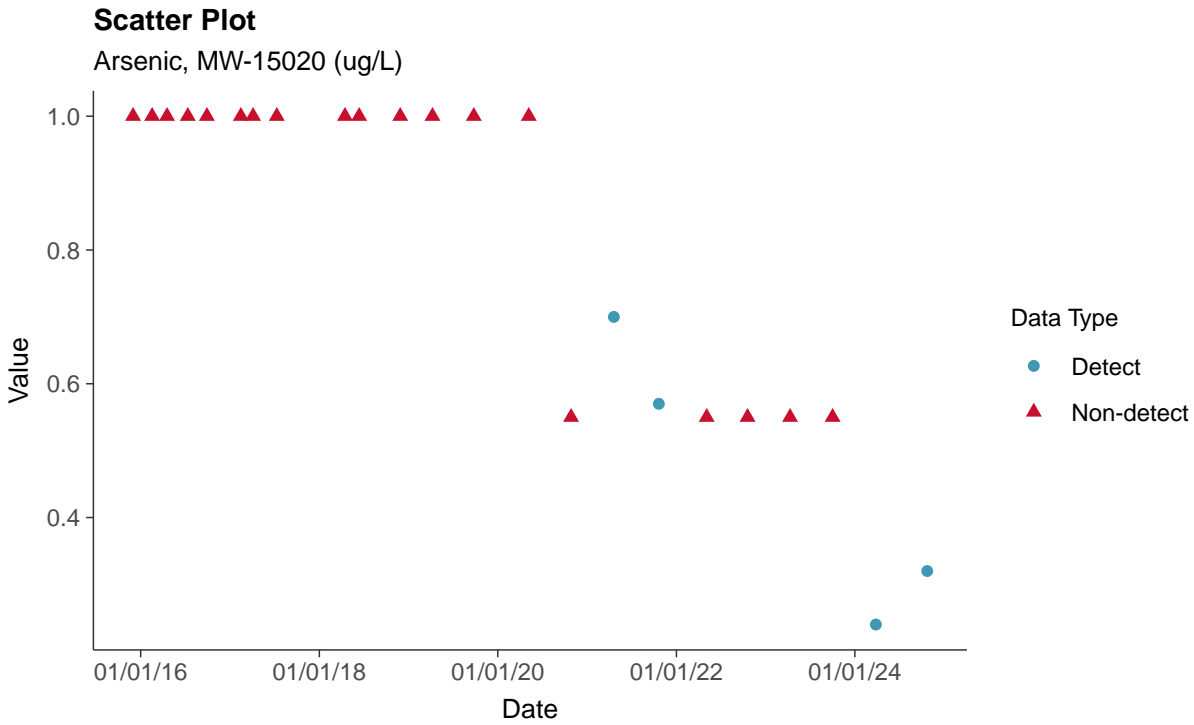
Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15020 (ug/L)



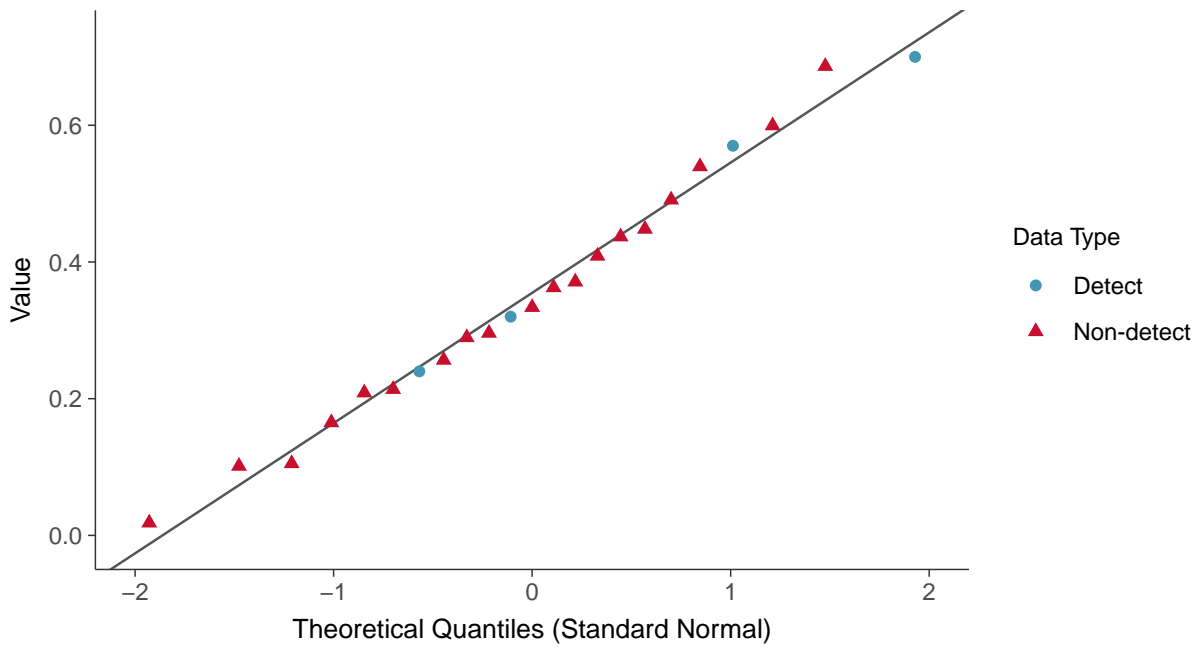
Appendix IV: Arsenic, MW-15020

ID: 10_2_102

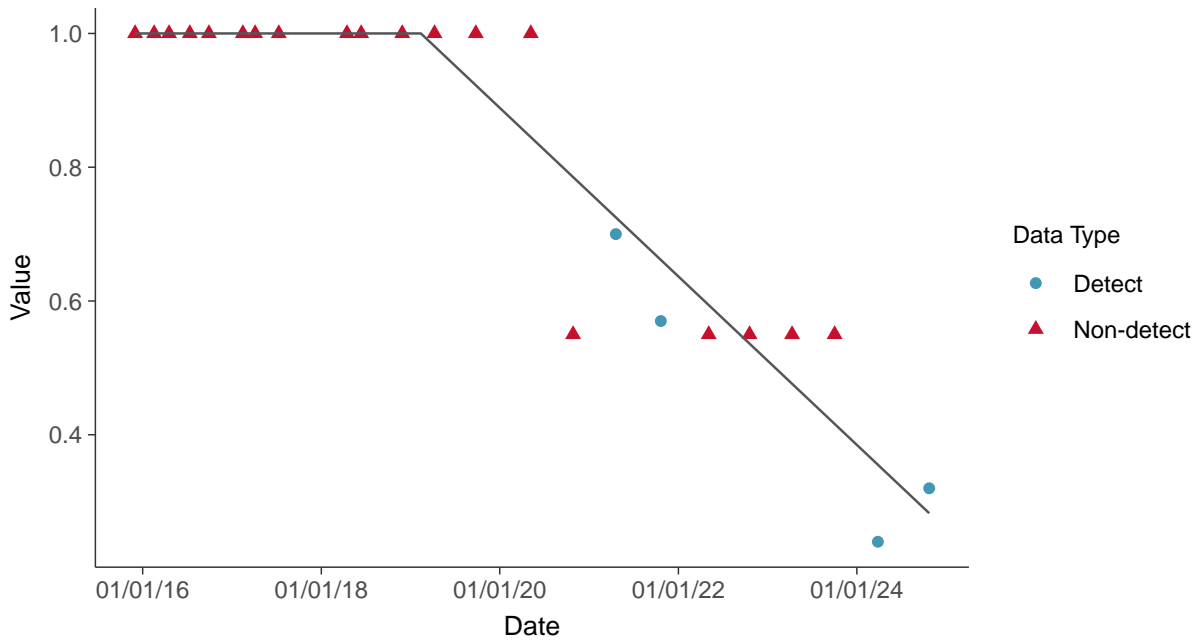




Normal Q-Q plot using ROS Imputed Estimates
Arsenic, MW-15020 (ug/L)



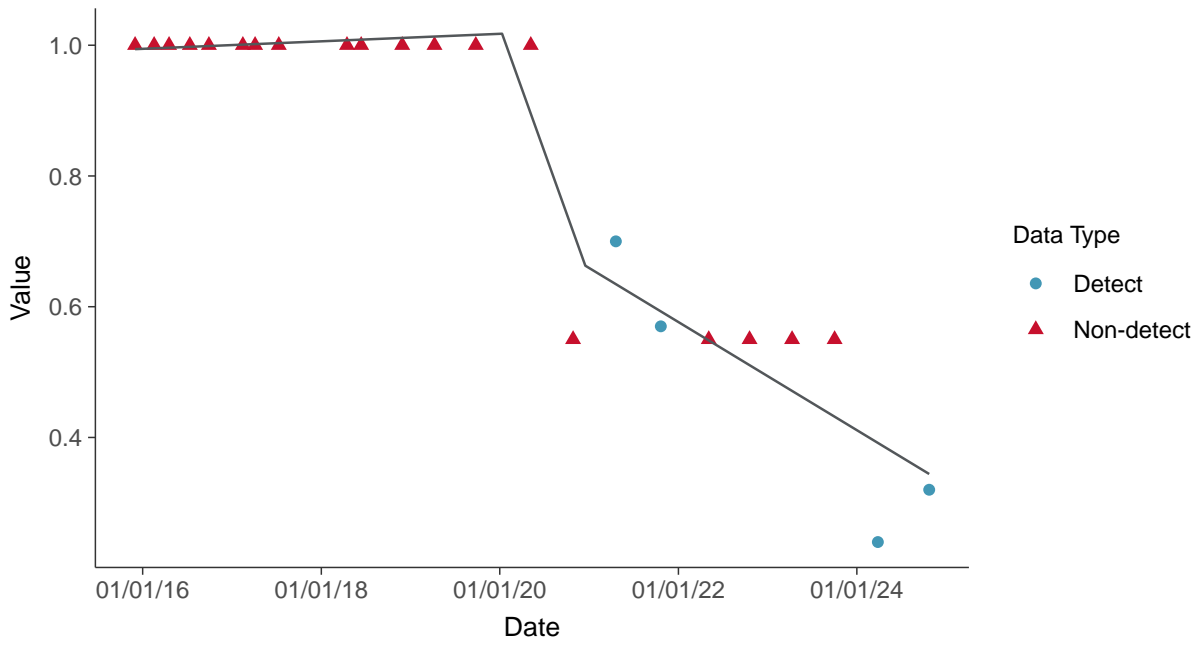
Trend Regression: Piecewise Linear-Linear
Arsenic, MW-15020 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15020 (ug/L)



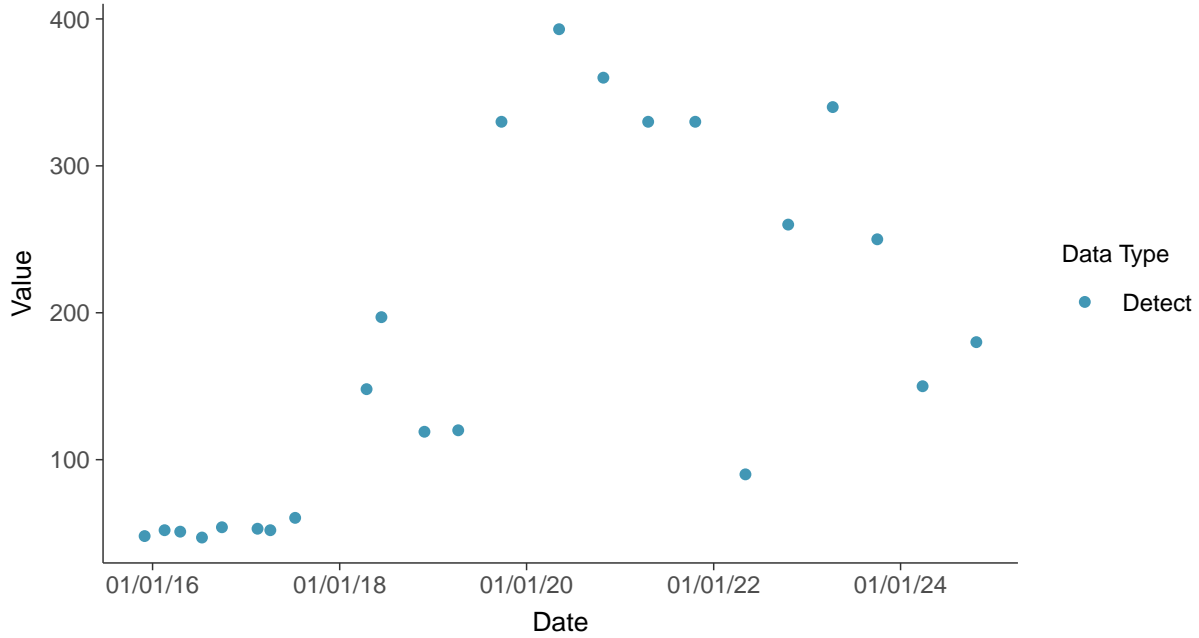


Appendix IV: Barium, MW-15020

ID: 10_2_103

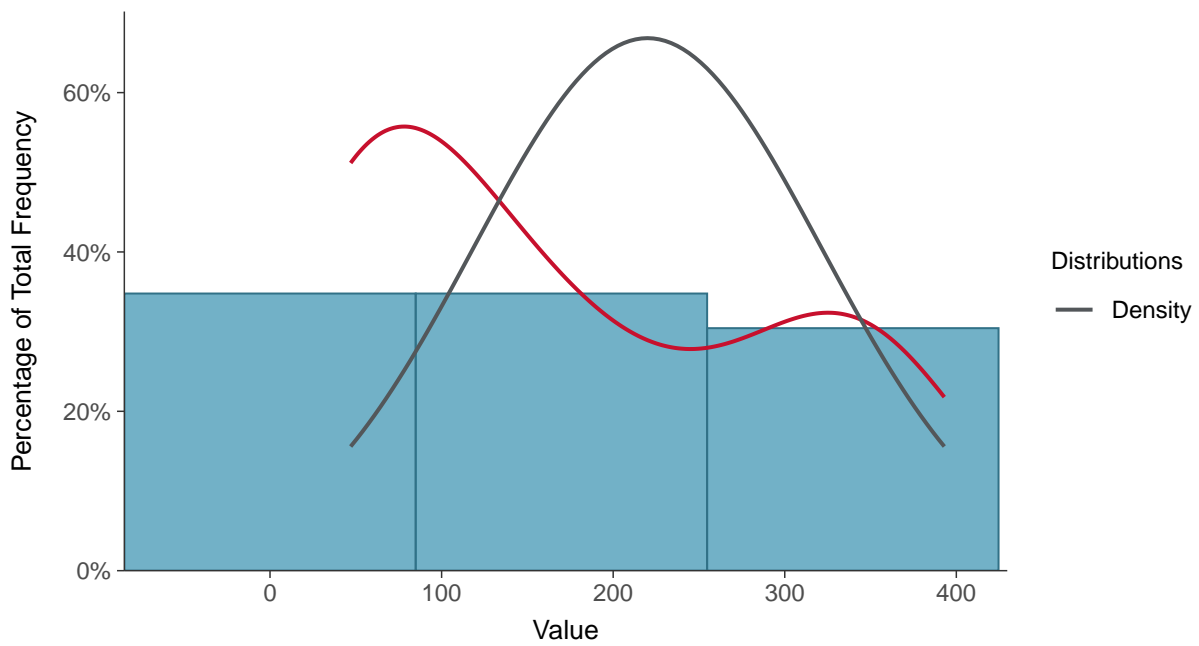
Scatter Plot

Barium, MW-15020 (ug/L)



Histogram

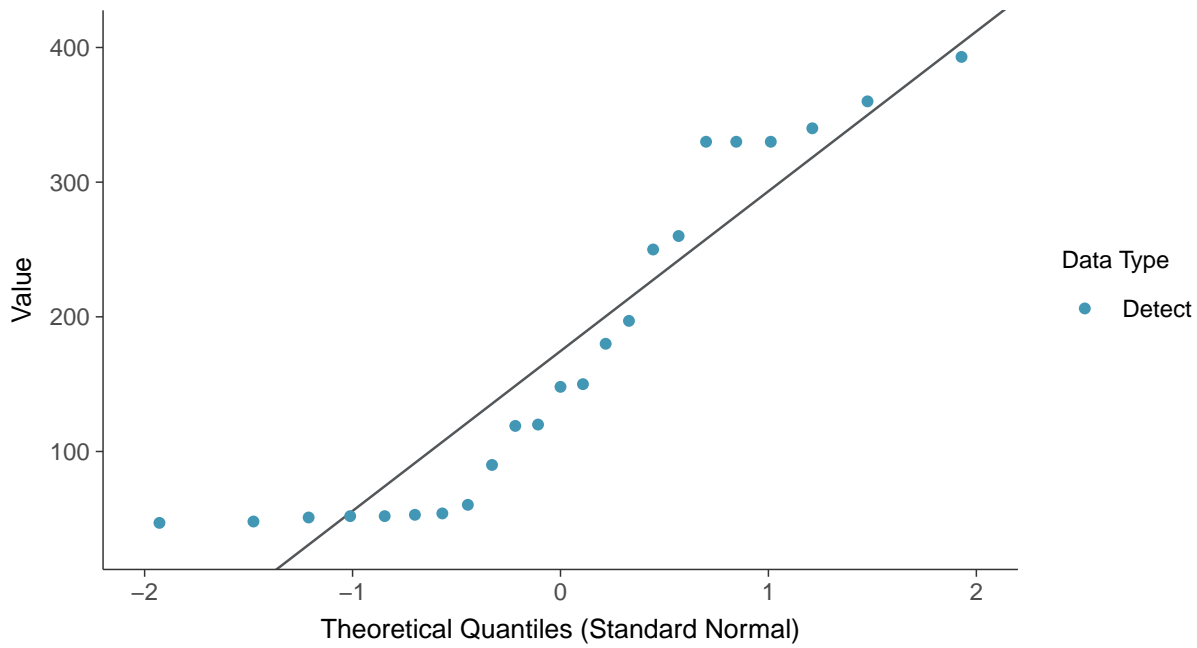
Barium, MW-15020 (ug/L)





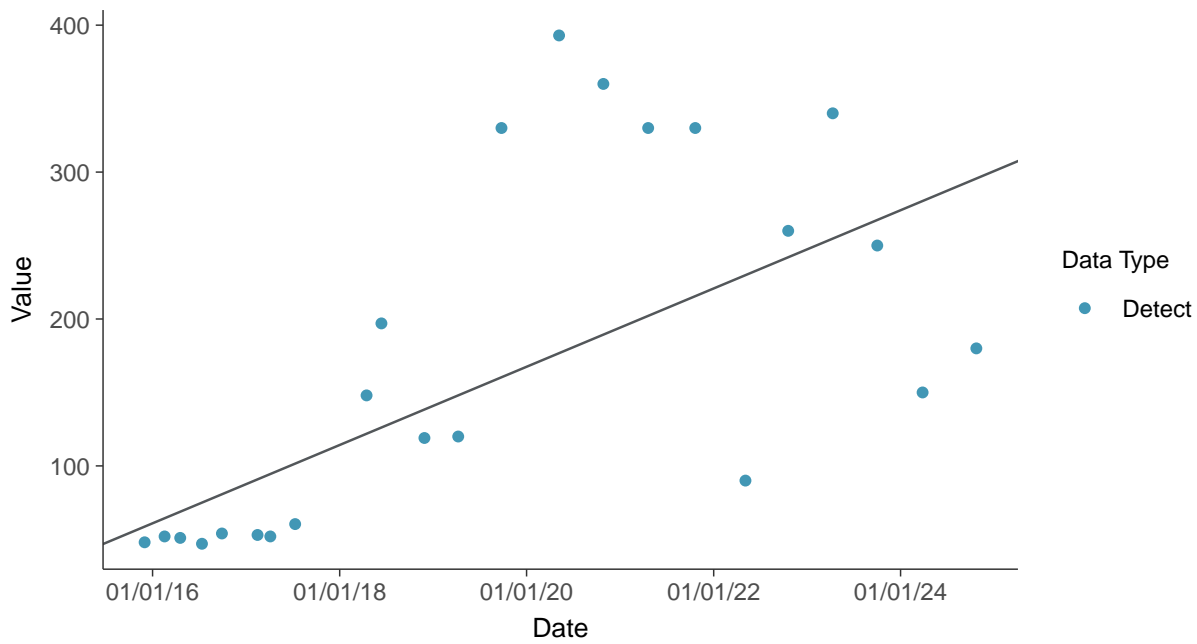
Normal Q-Q plot

Barium, MW-15020 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

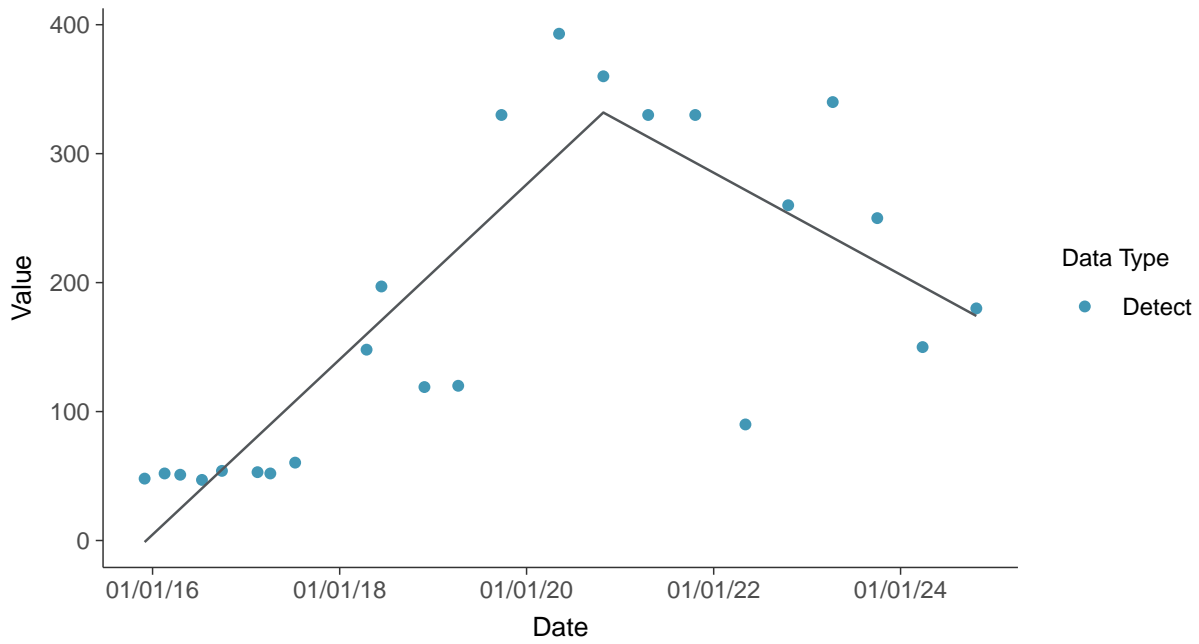
Barium, MW-15020 (ug/L)





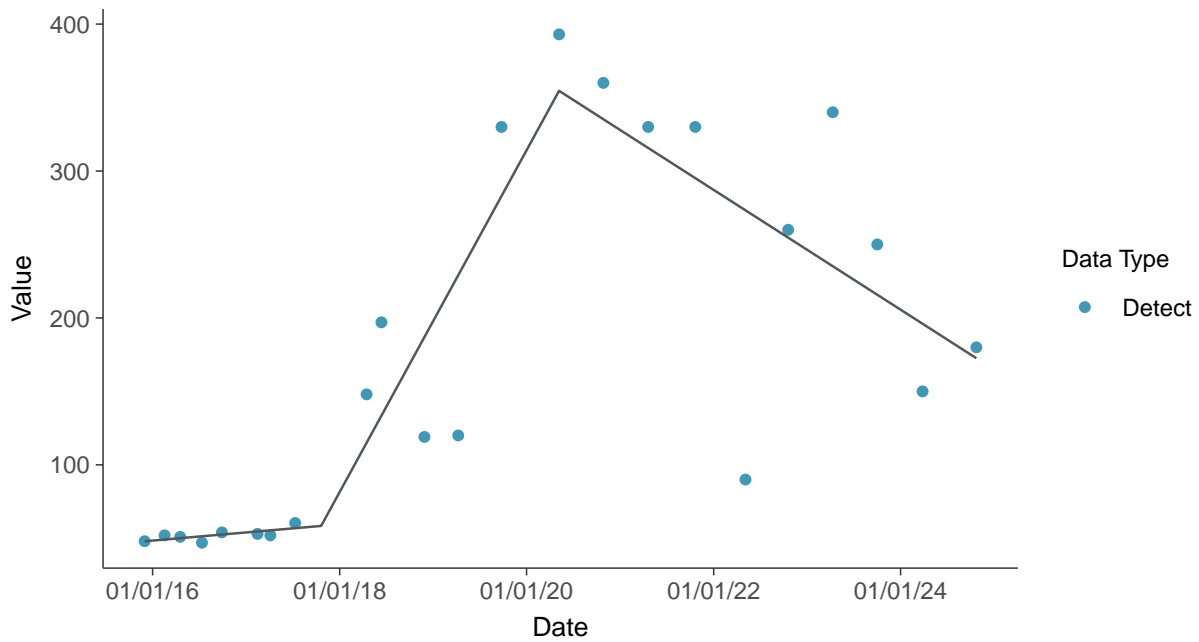
Trend Regression: Piecewise Linear-Linear

Barium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

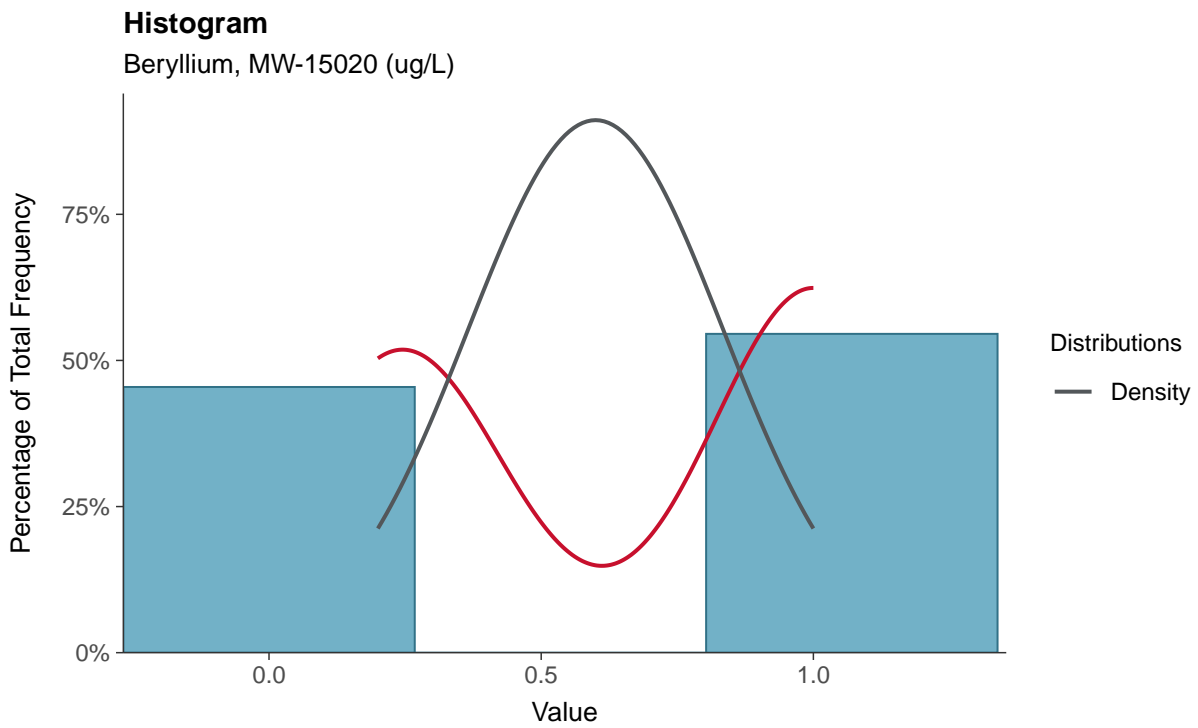
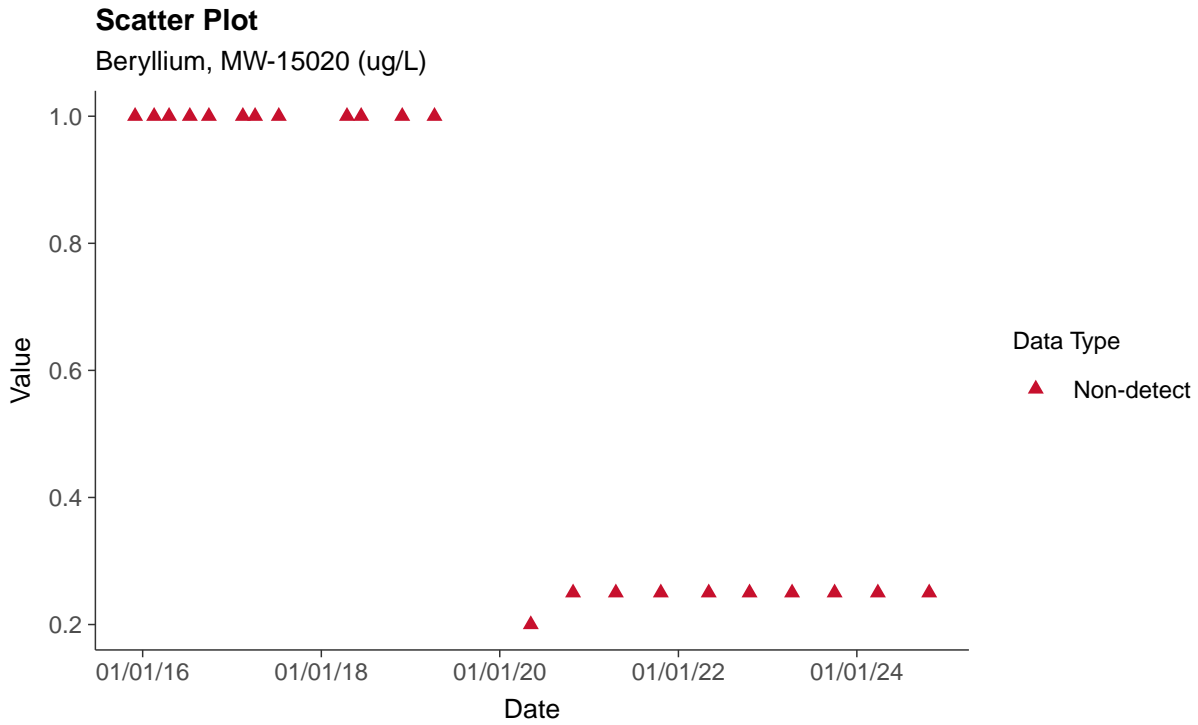
Barium, MW-15020 (ug/L)





Appendix IV: Beryllium, MW-15020

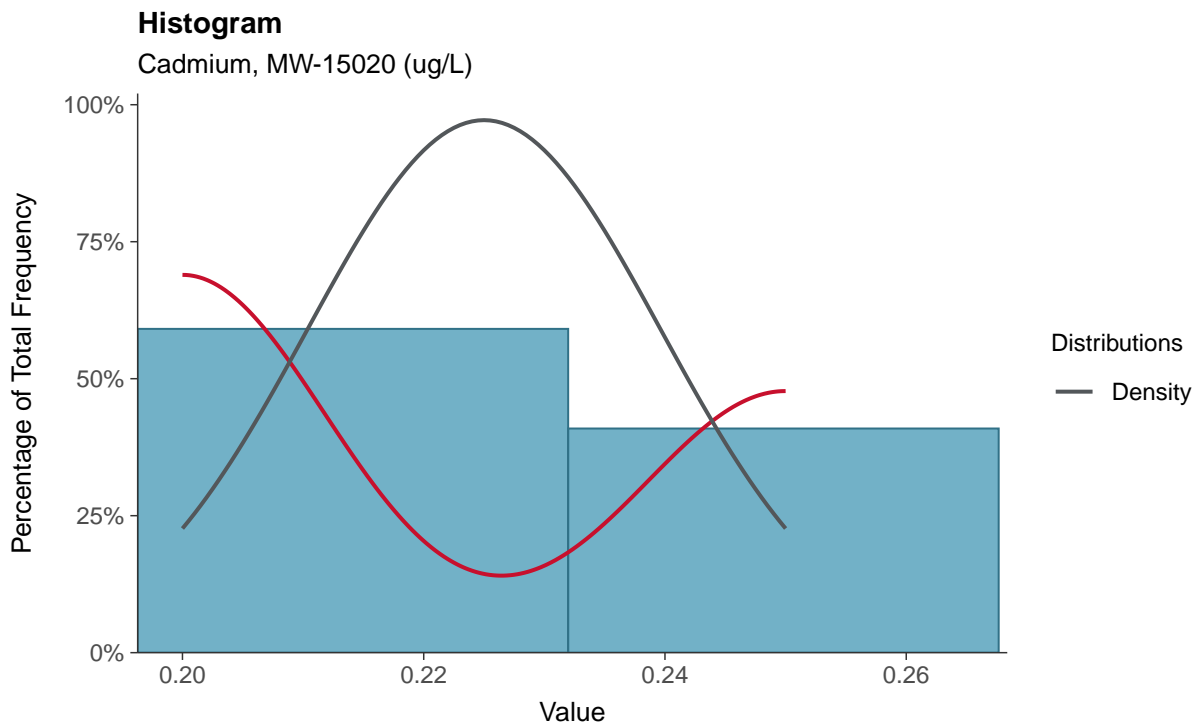
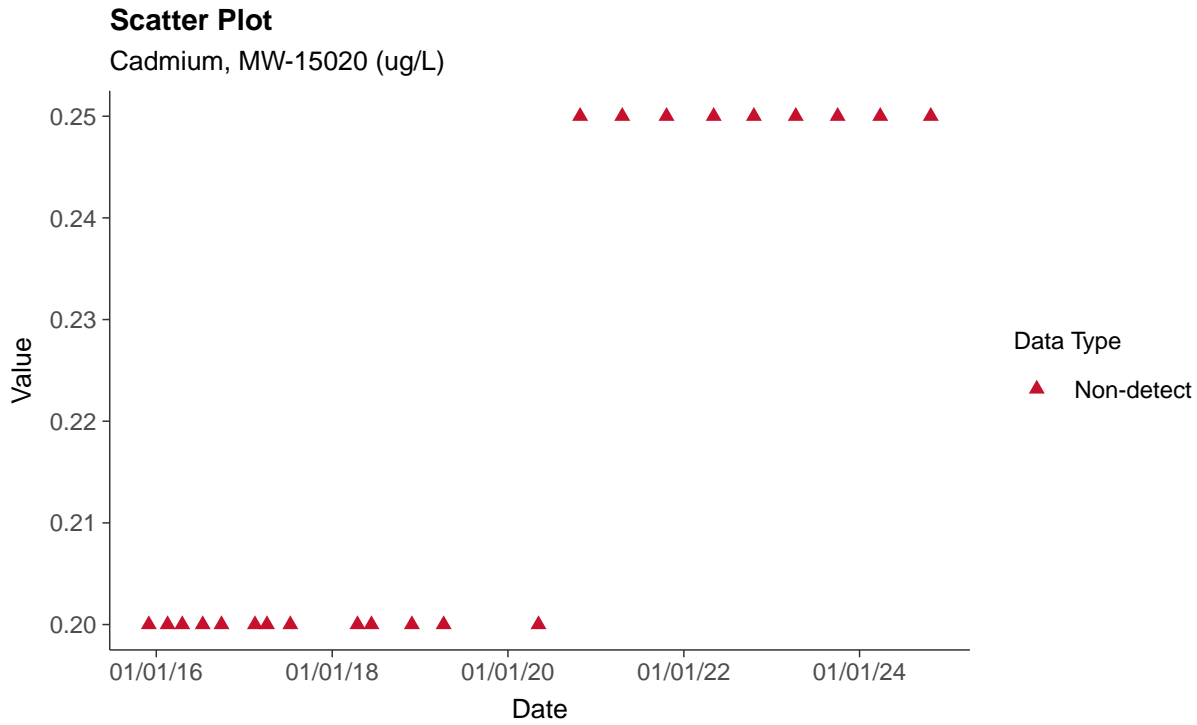
ID: 10_2_104





Appendix IV: Cadmium, MW-15020

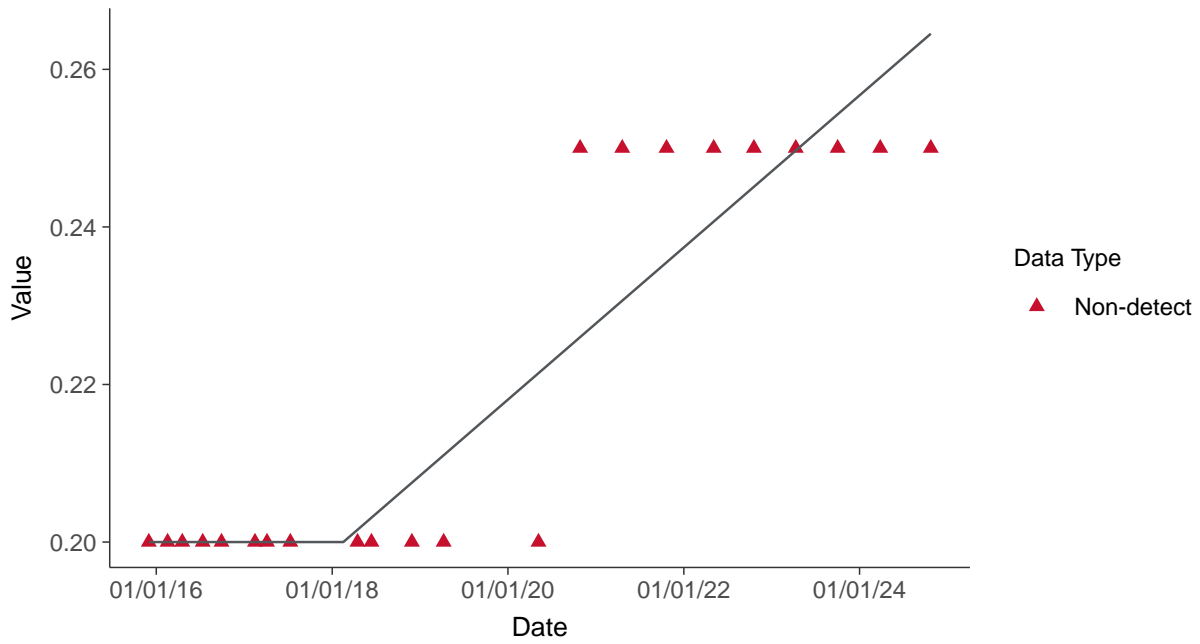
ID: 10_2_106





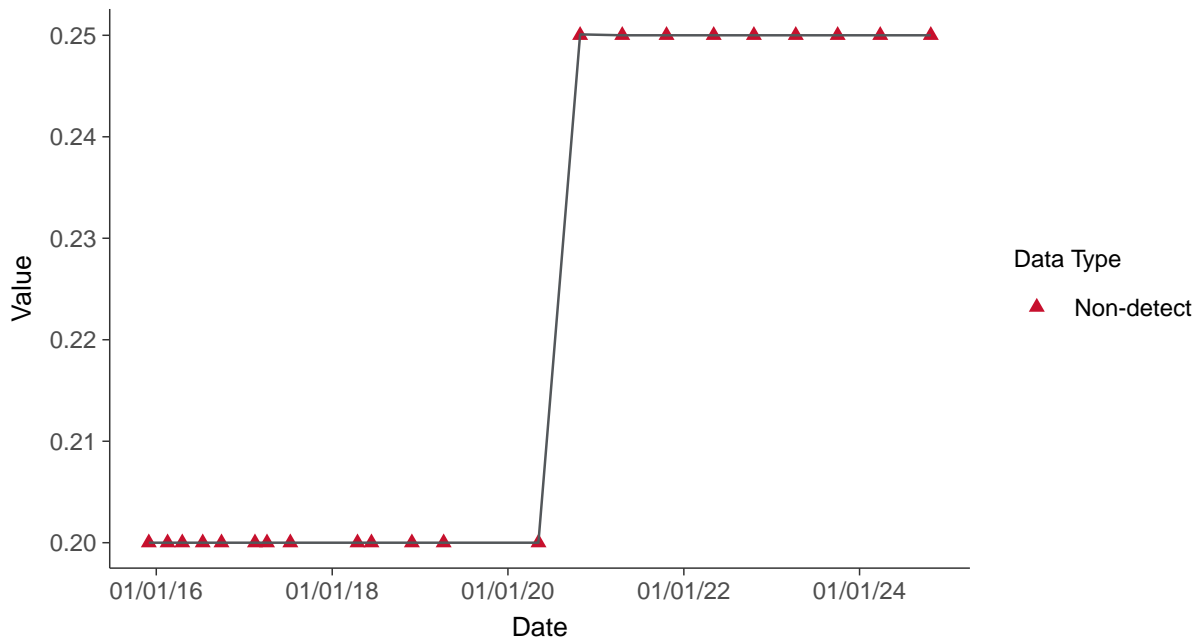
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15020 (ug/L)



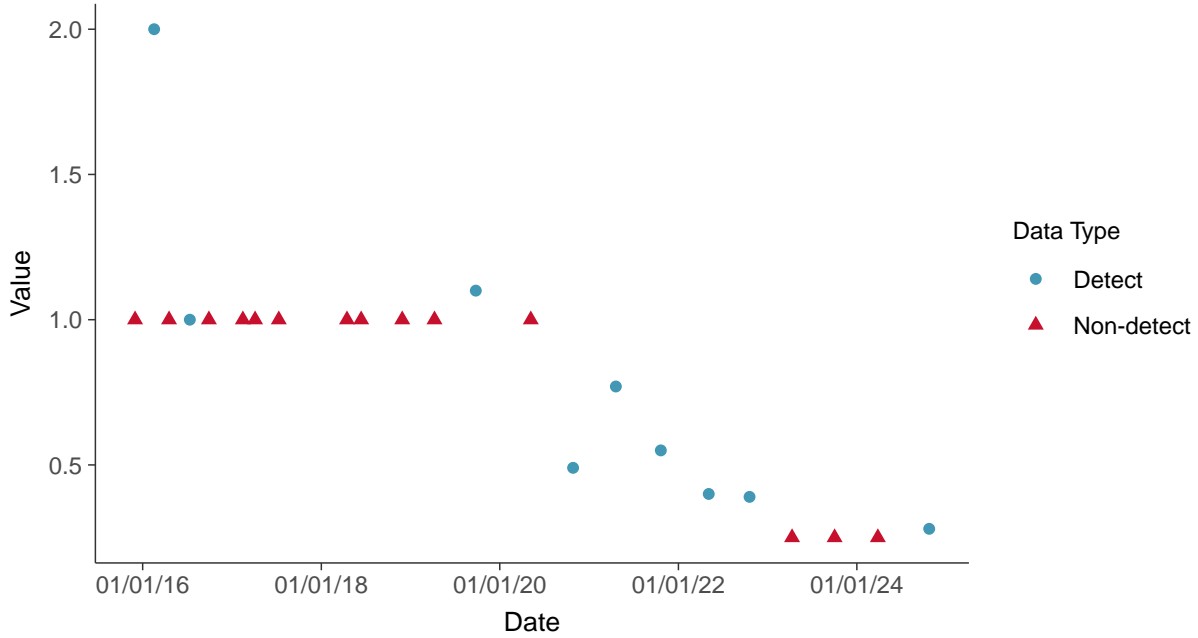


Appendix IV: Chromium, MW-15020

ID: 10_2_109

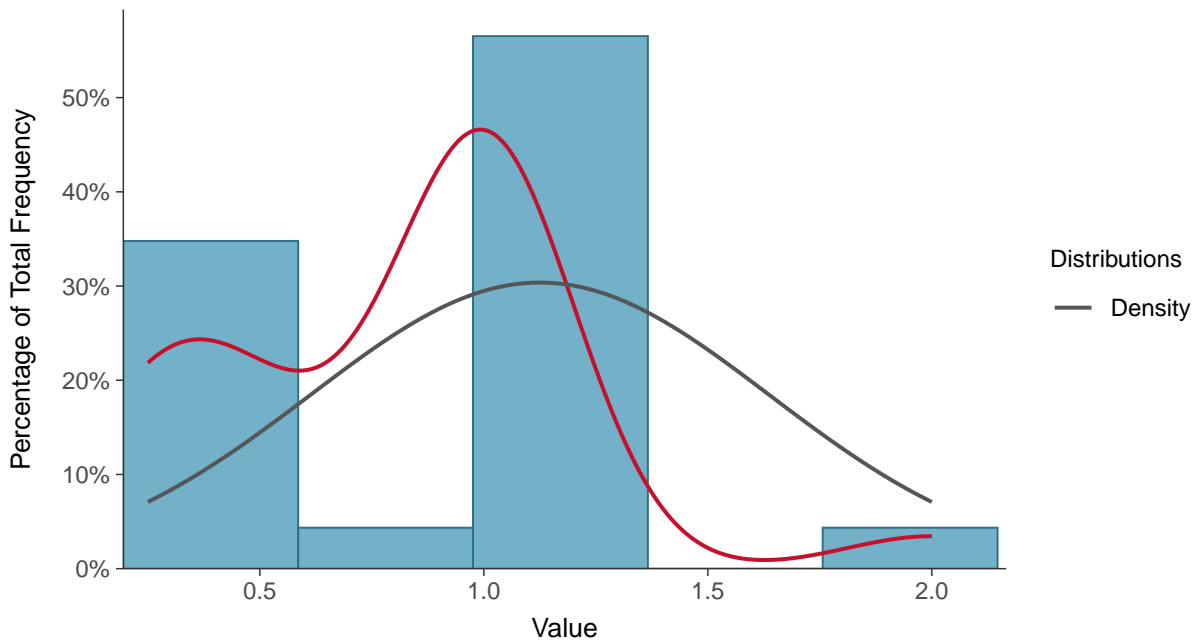
Scatter Plot

Chromium, MW-15020 (ug/L)



Histogram

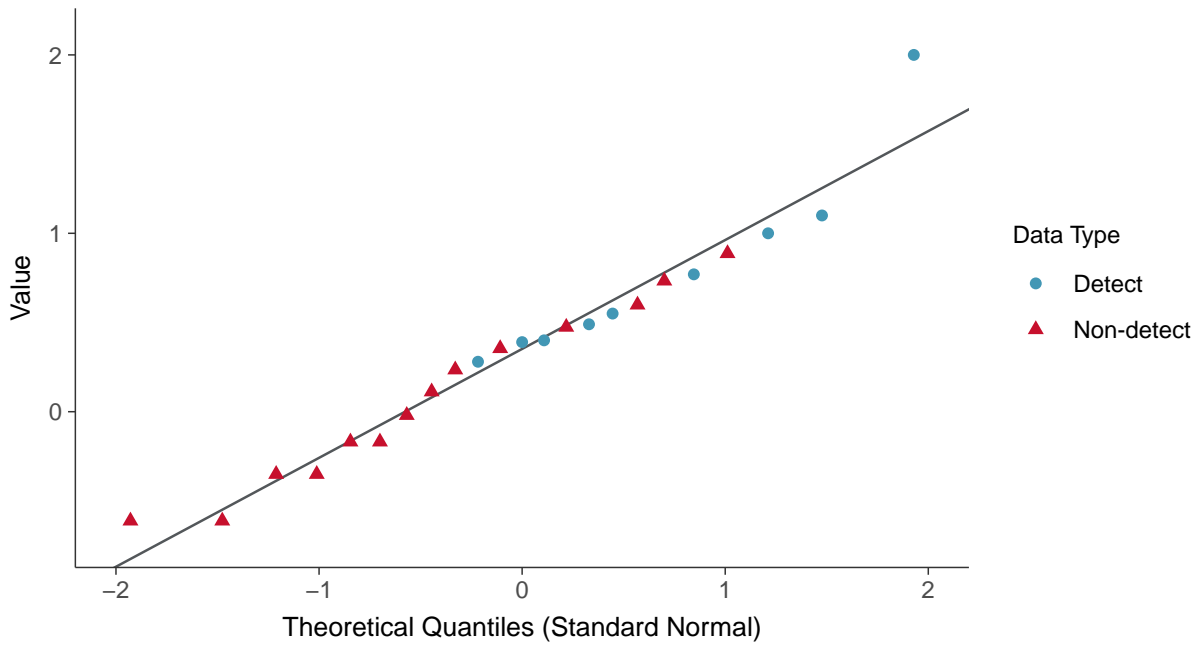
Chromium, MW-15020 (ug/L)





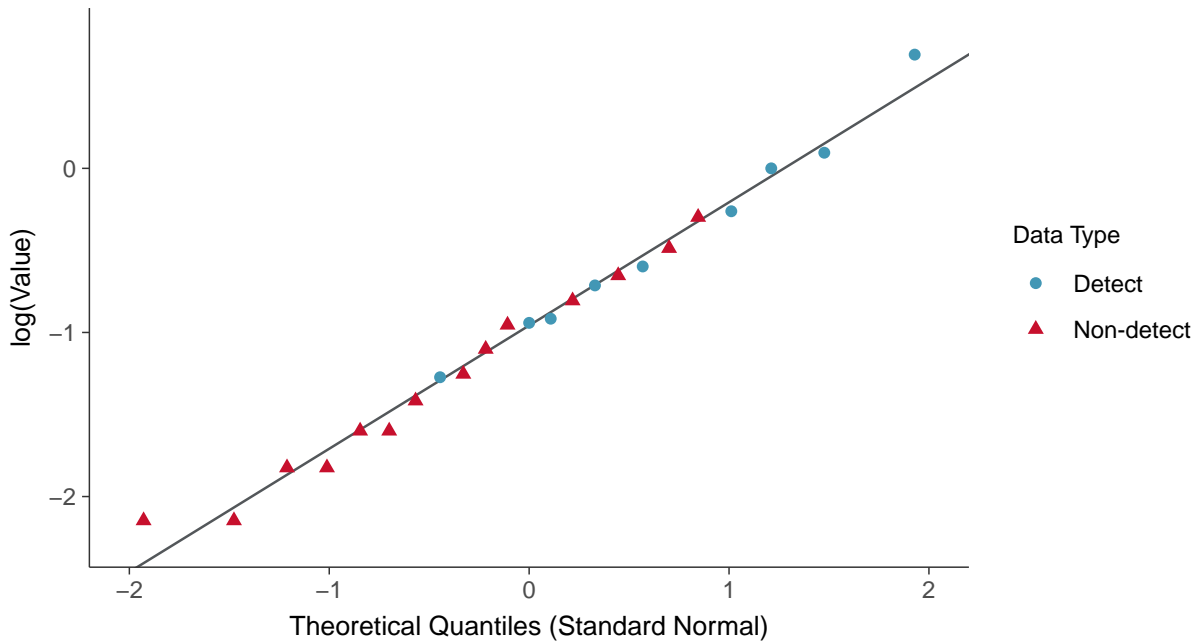
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15020 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

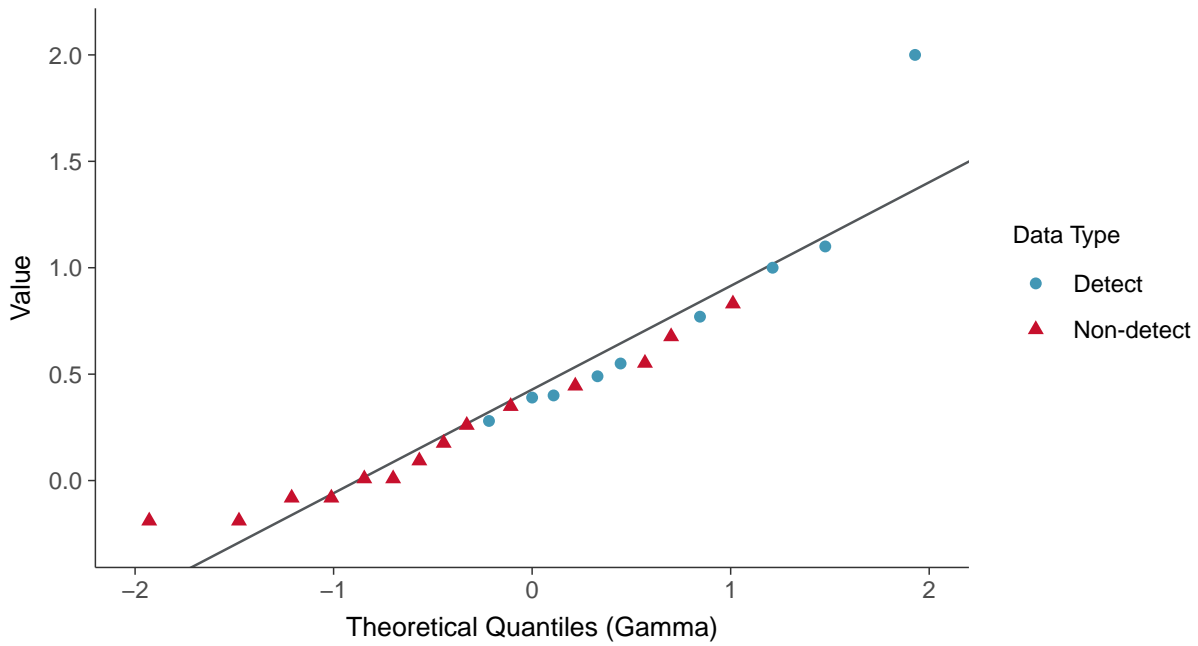
Chromium, MW-15020 (ug/L)





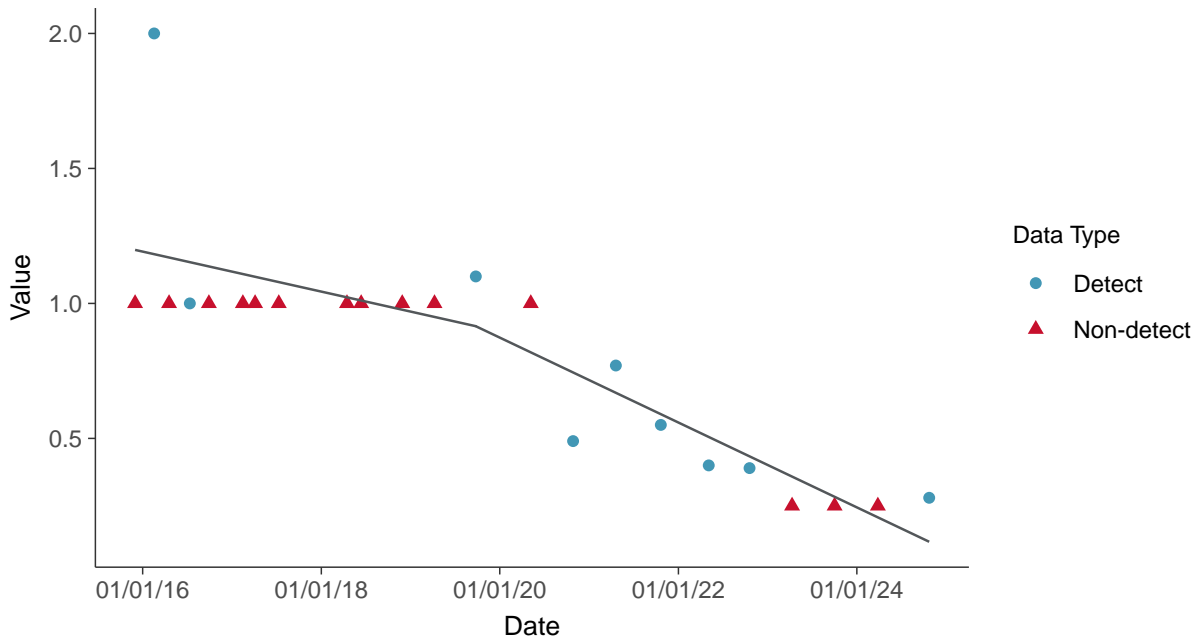
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear

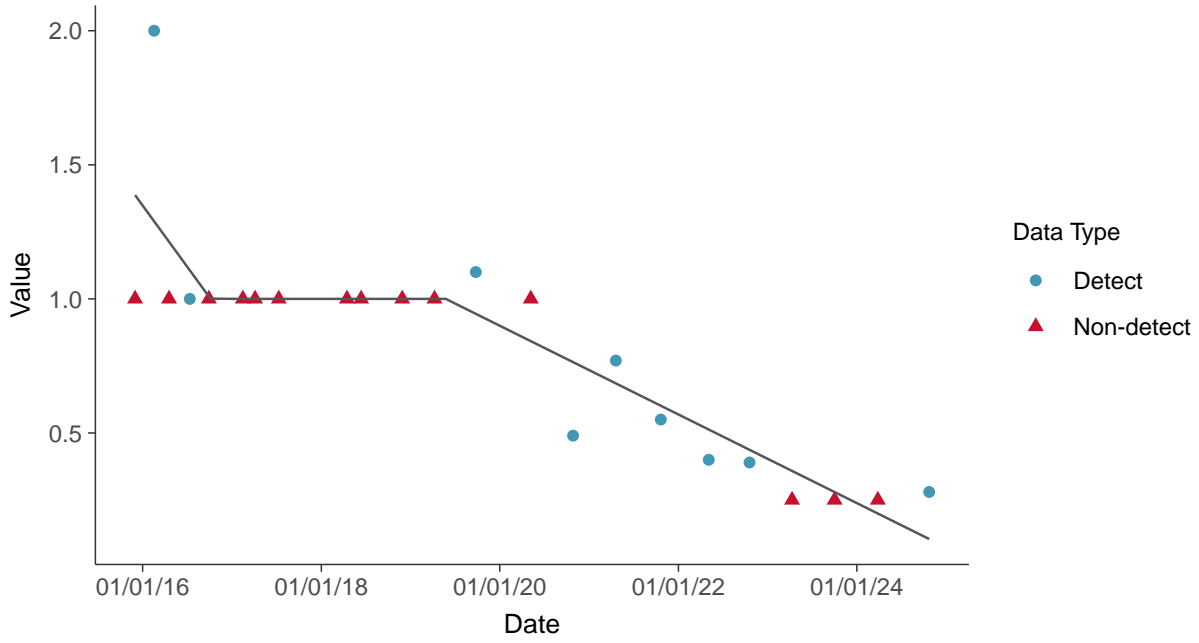
Chromium, MW-15020 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

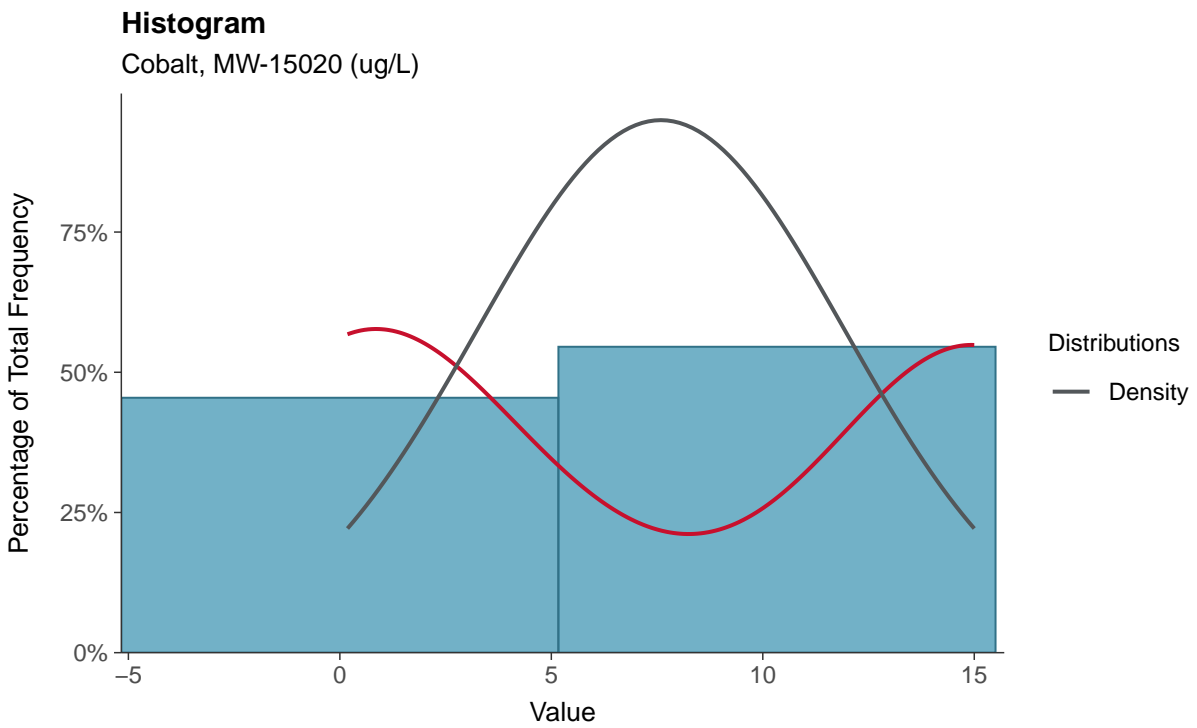
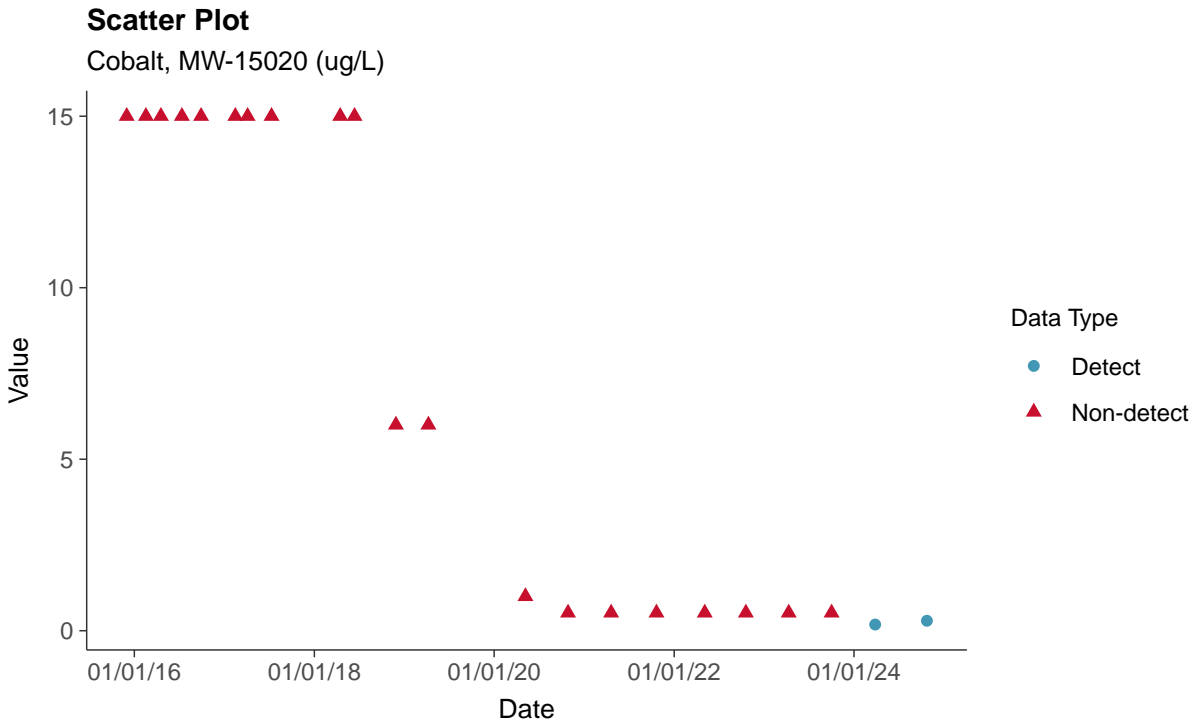
Chromium, MW-15020 (ug/L)





Appendix IV: Cobalt, MW-15020

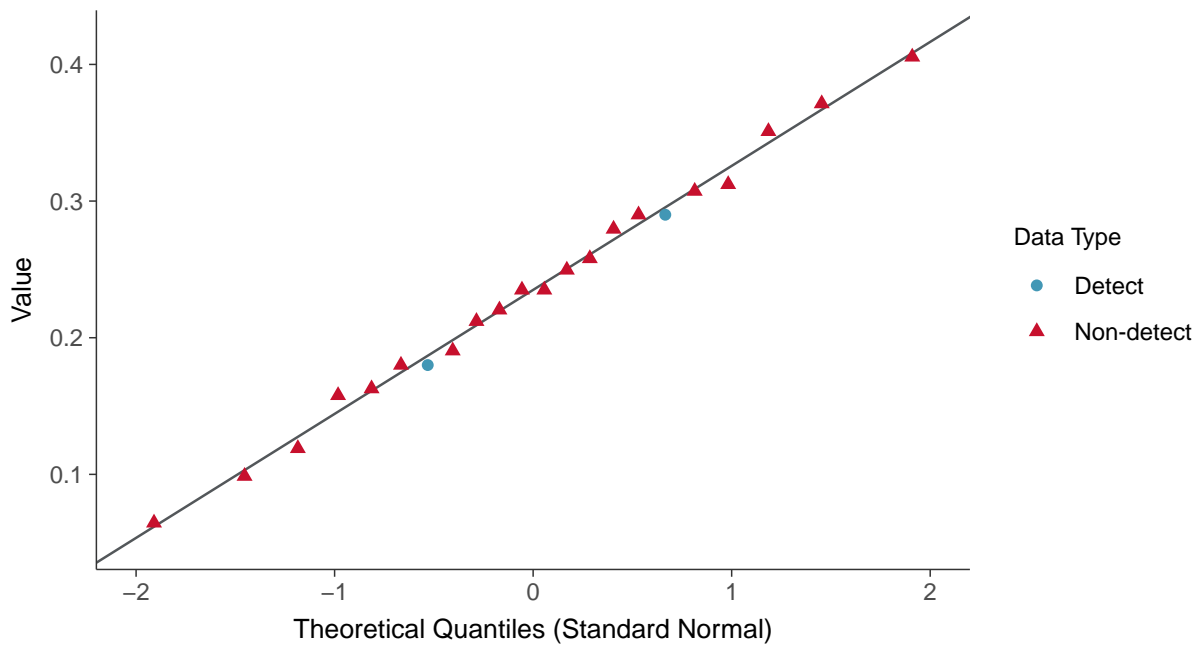
ID: 10_2_110





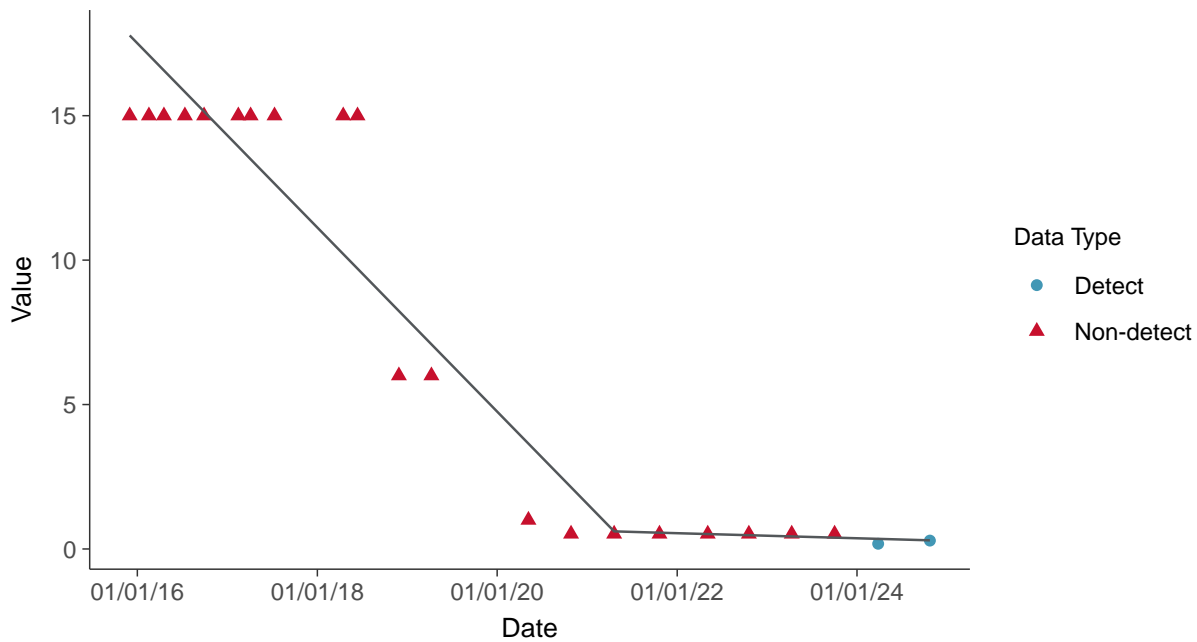
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear

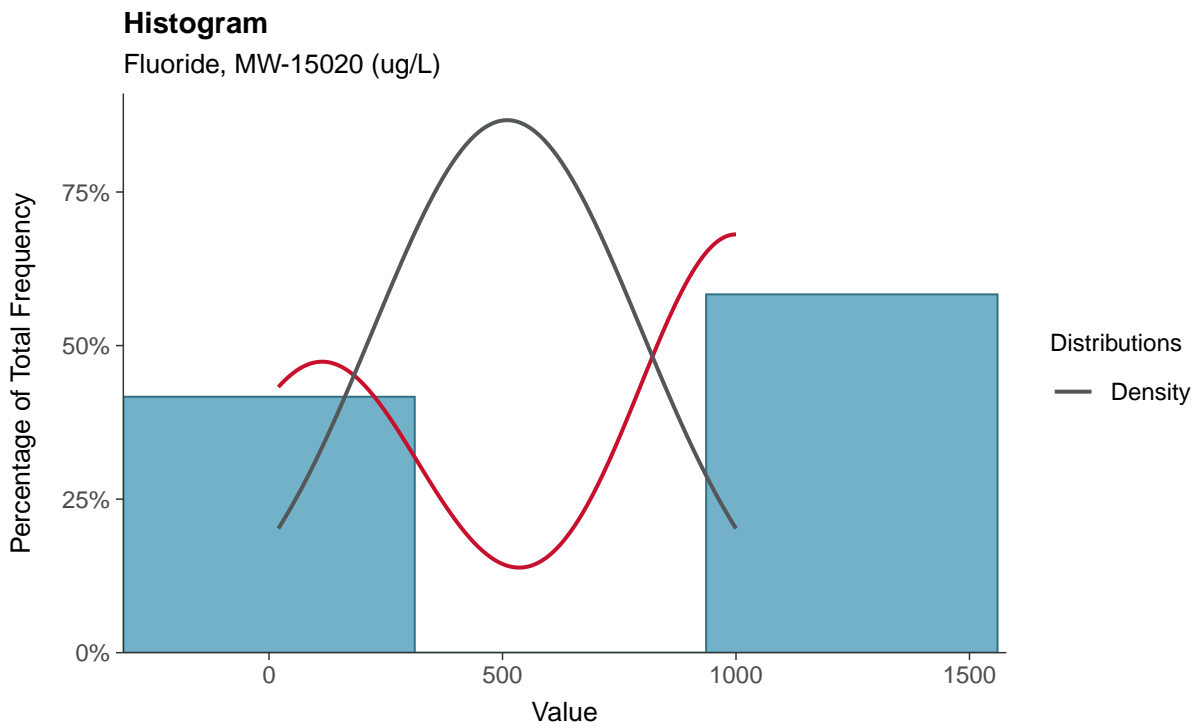
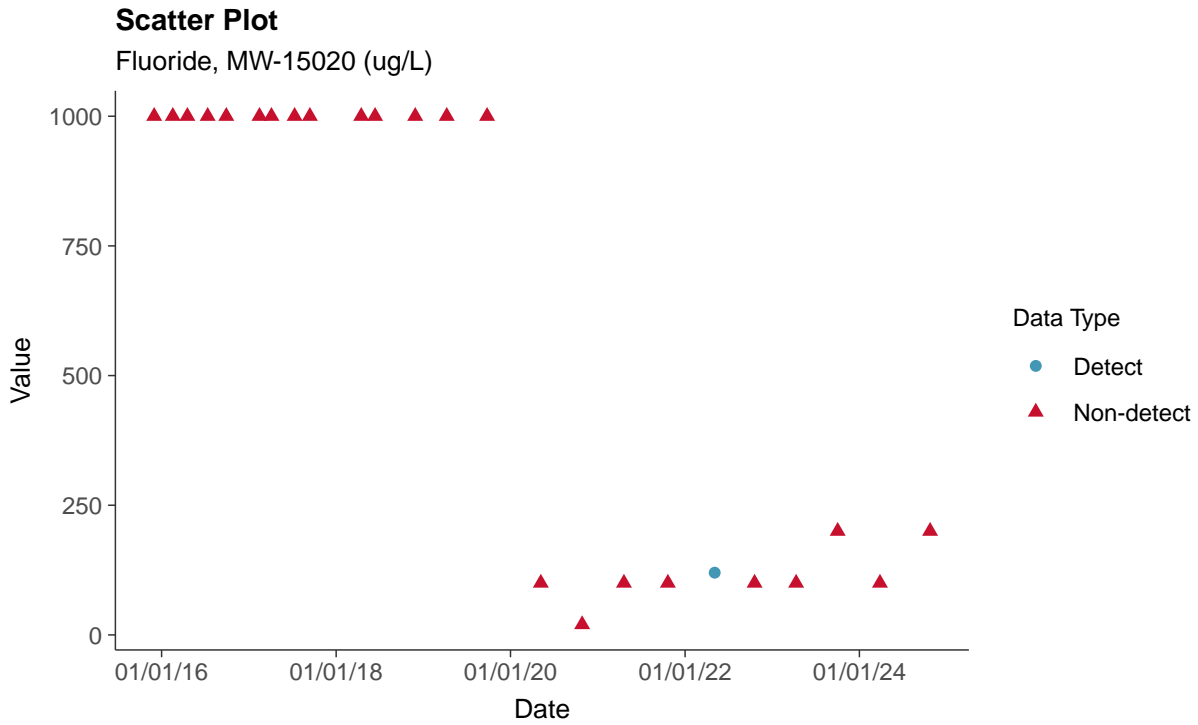
Cobalt, MW-15020 (ug/L)





Appendix IV: Fluoride, MW-15020

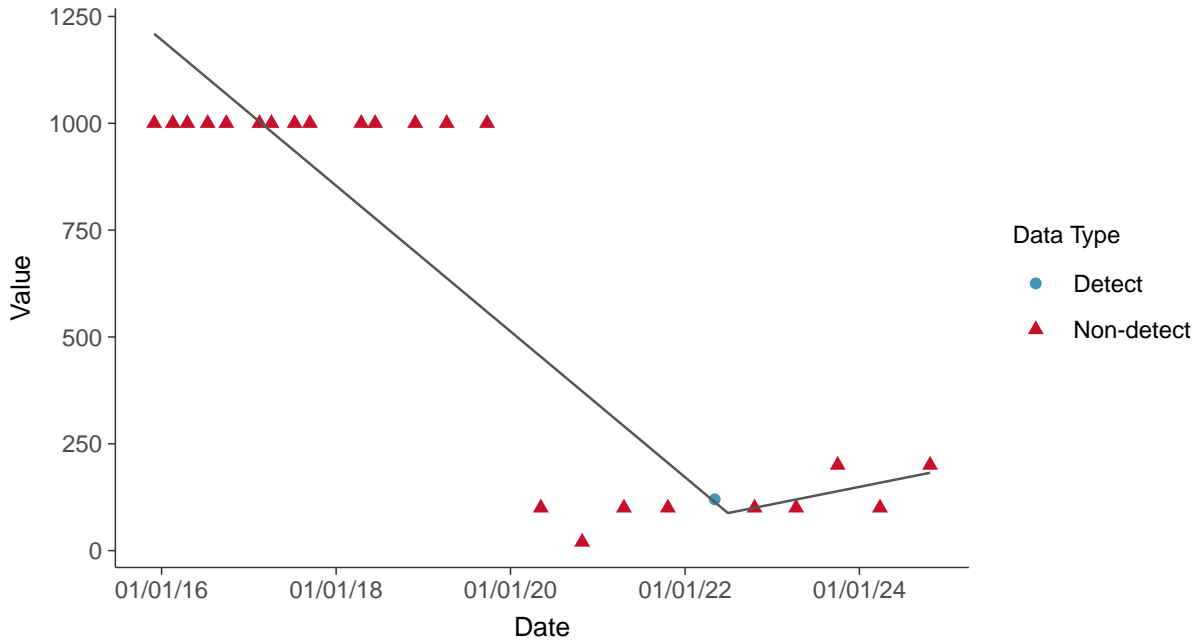
ID: 10_2_114





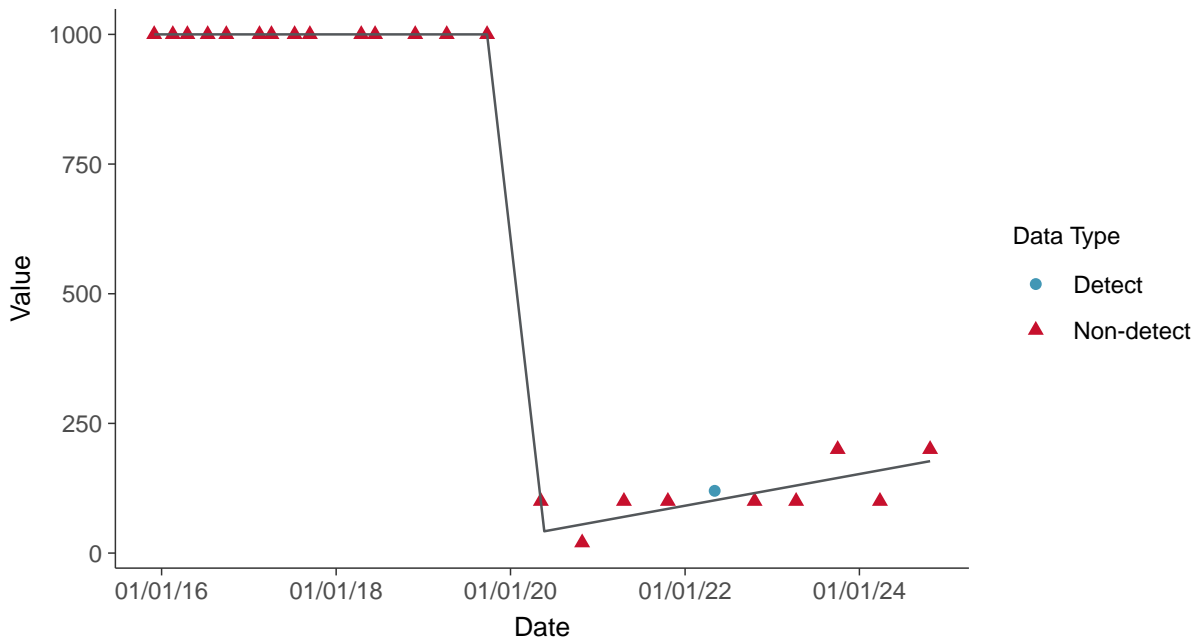
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

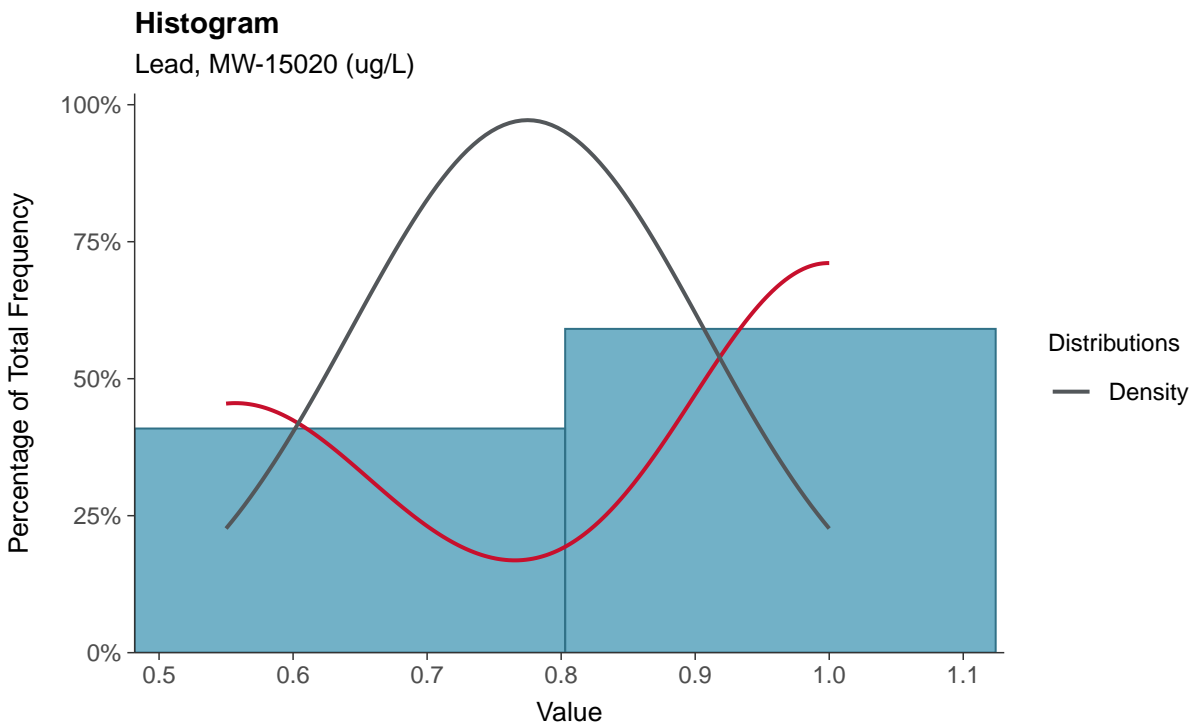
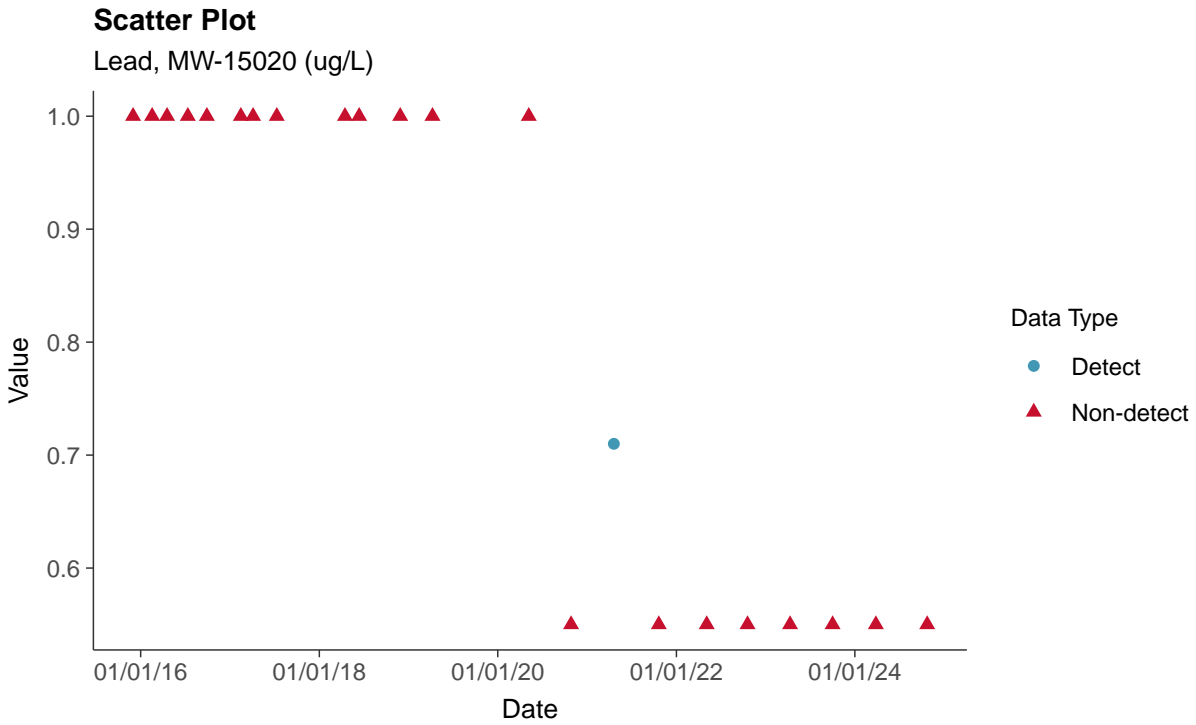
Fluoride, MW-15020 (ug/L)





Appendix IV: Lead, MW-15020

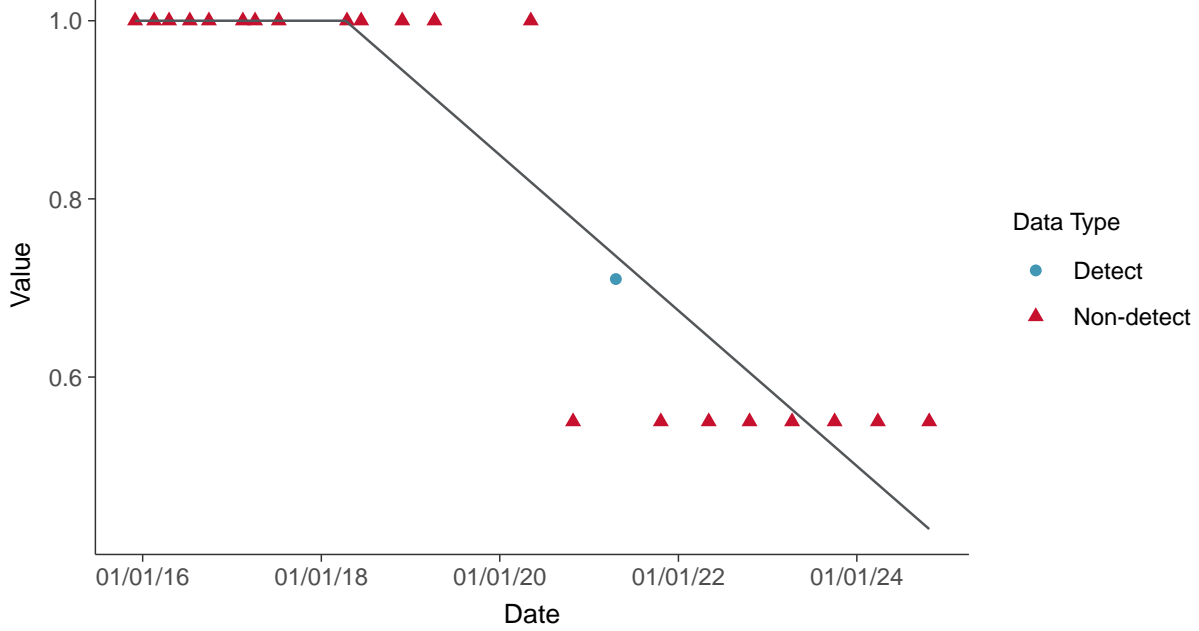
ID: 10_2_116





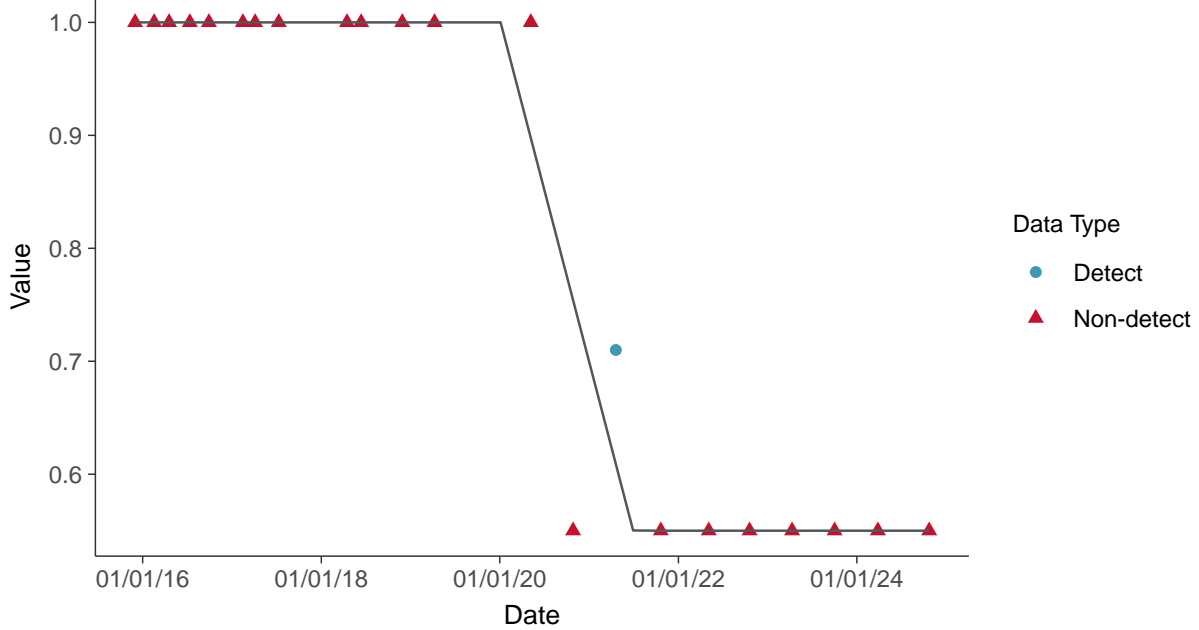
Trend Regression: Piecewise Linear-Linear

Lead, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-15020 (ug/L)



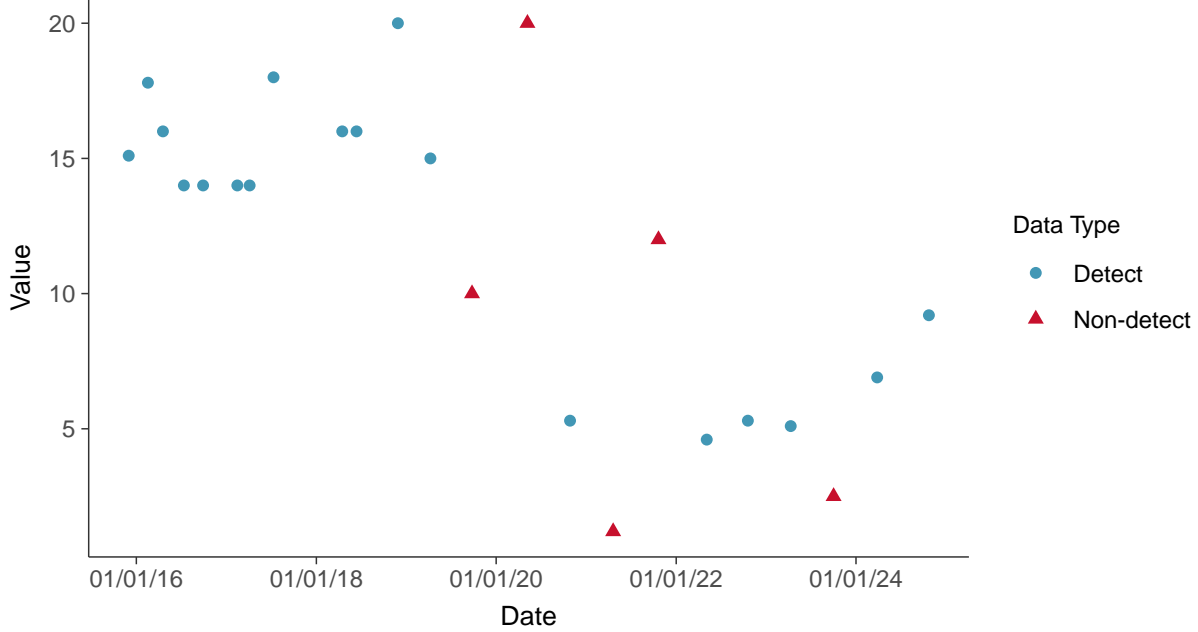


Appendix IV: Lithium, MW-15020

ID: 10_2_117

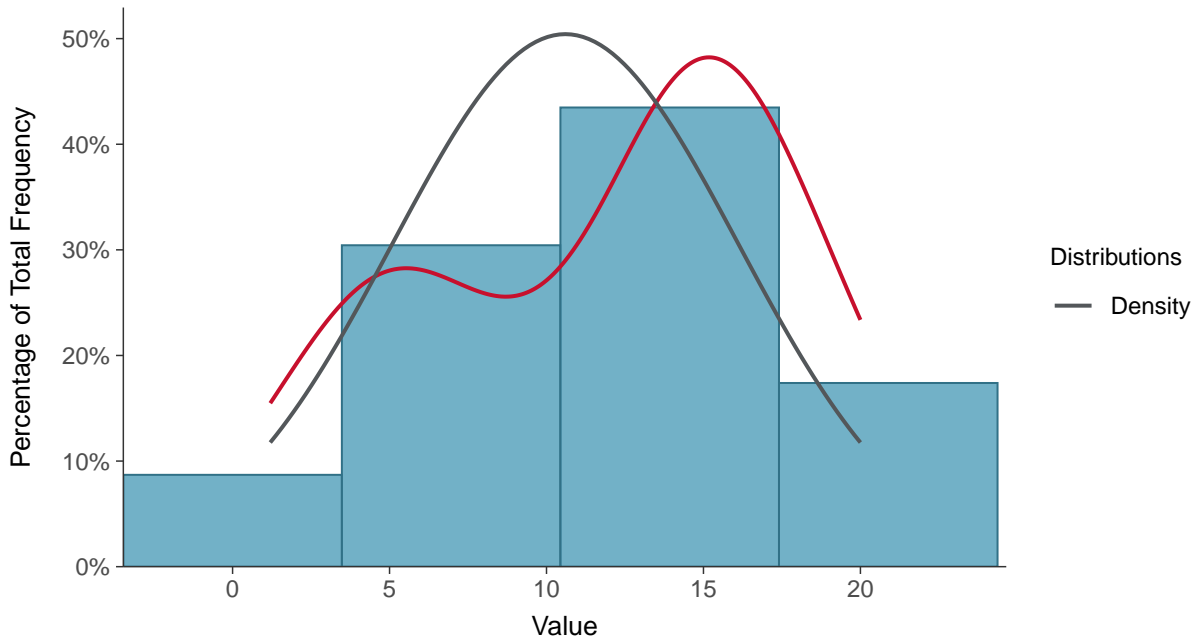
Scatter Plot

Lithium, MW-15020 (ug/L)



Histogram

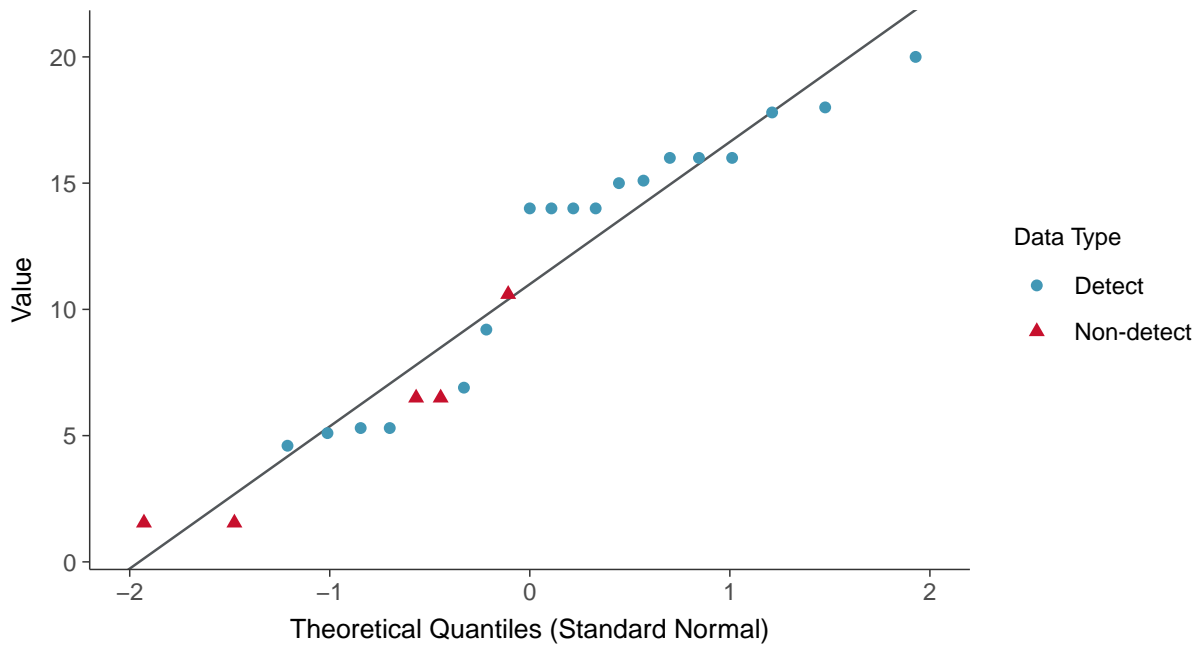
Lithium, MW-15020 (ug/L)





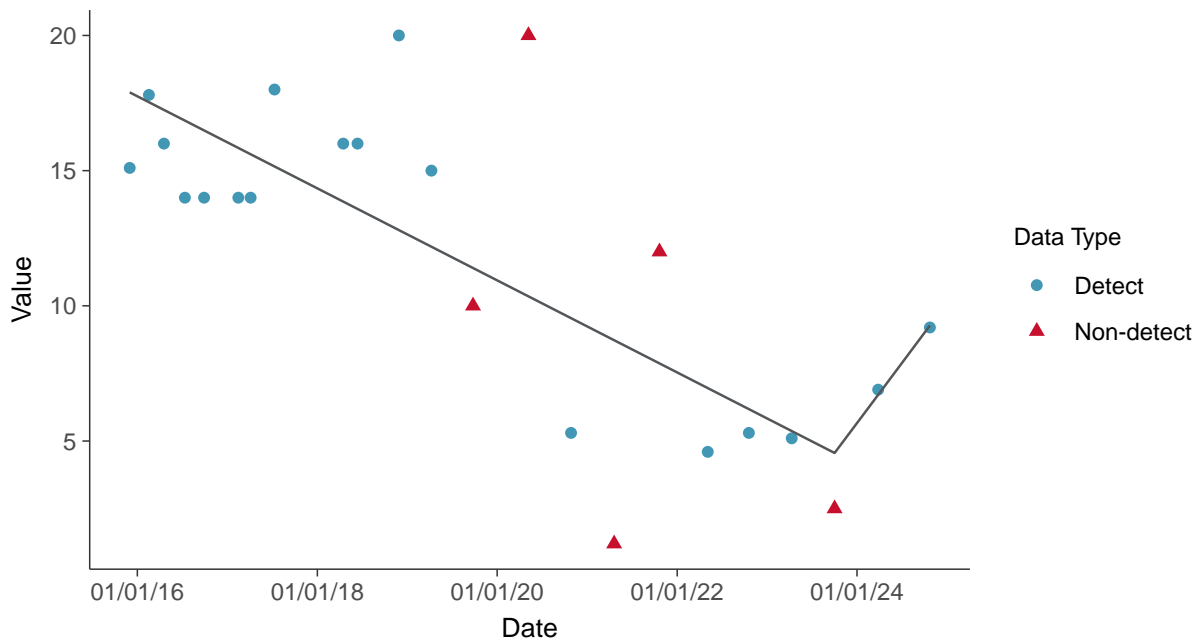
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear

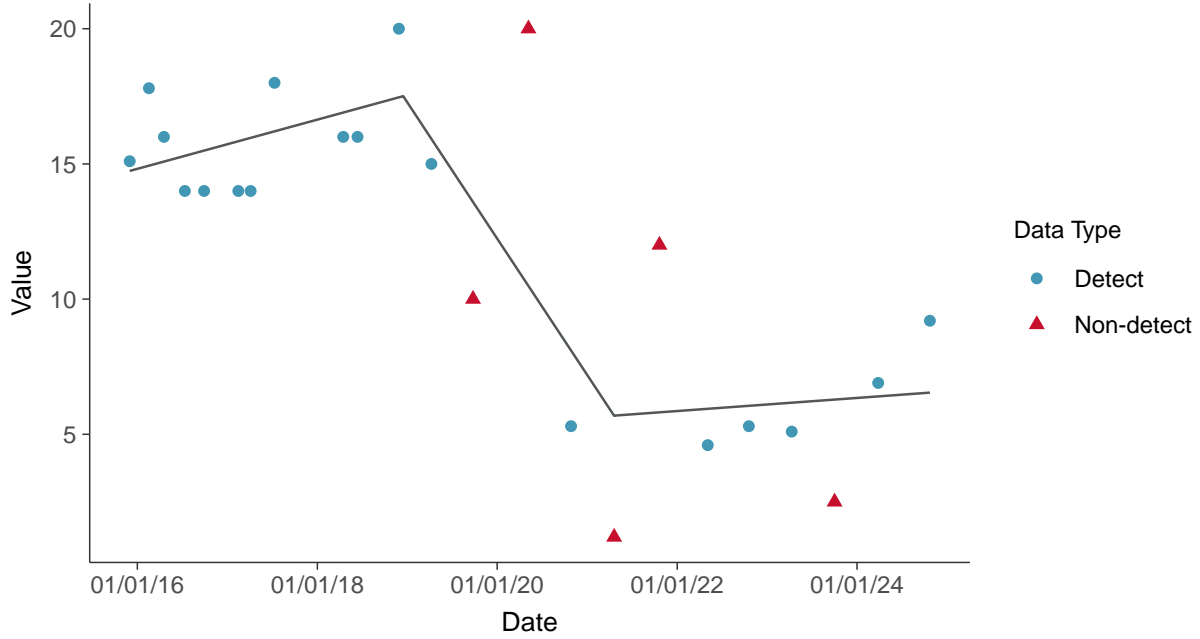
Lithium, MW-15020 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

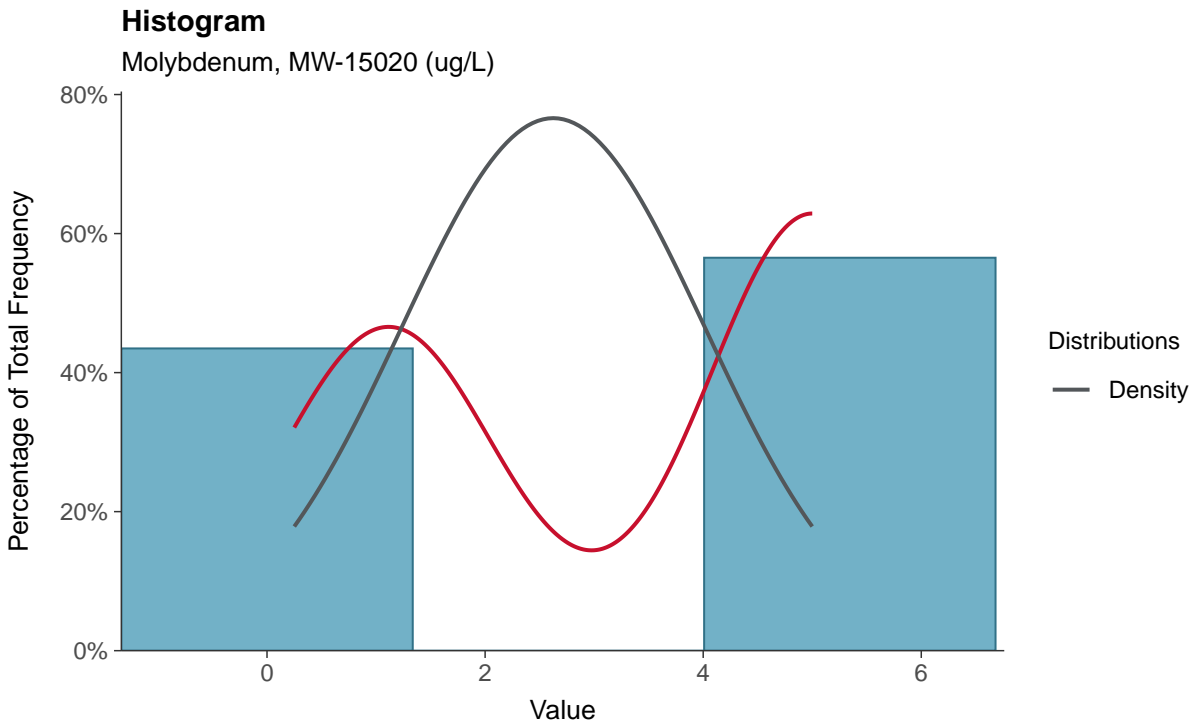
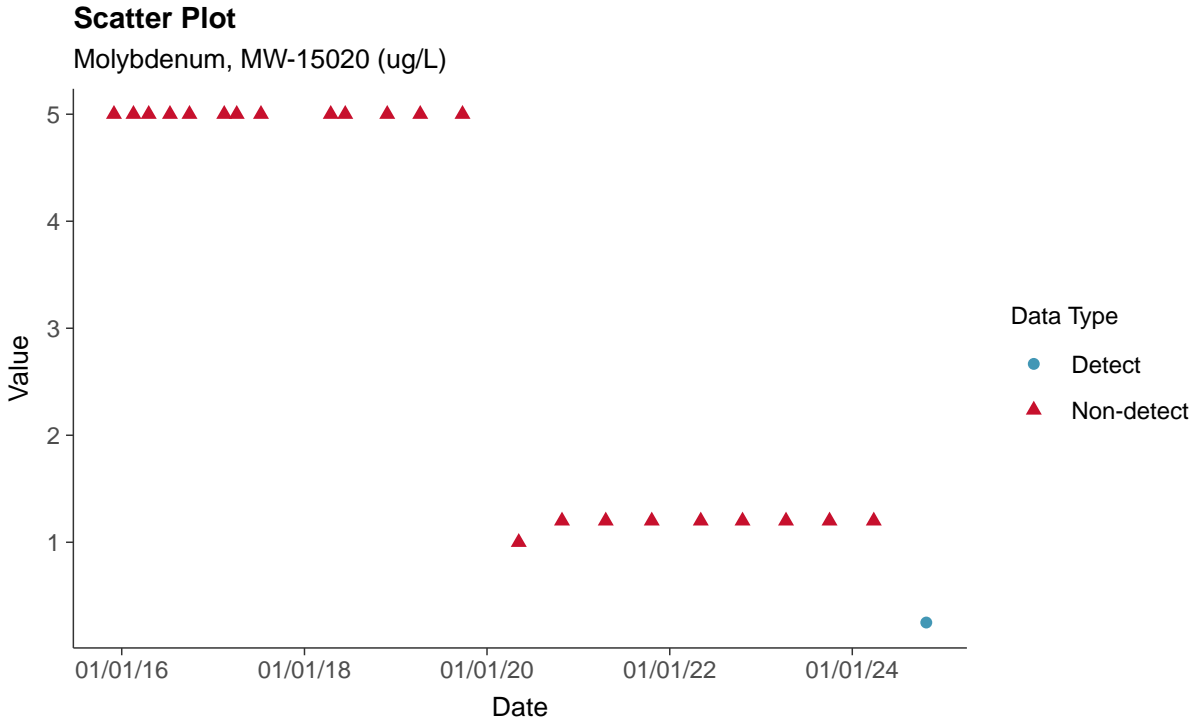
Lithium, MW-15020 (ug/L)





Appendix IV: Molybdenum, MW-15020

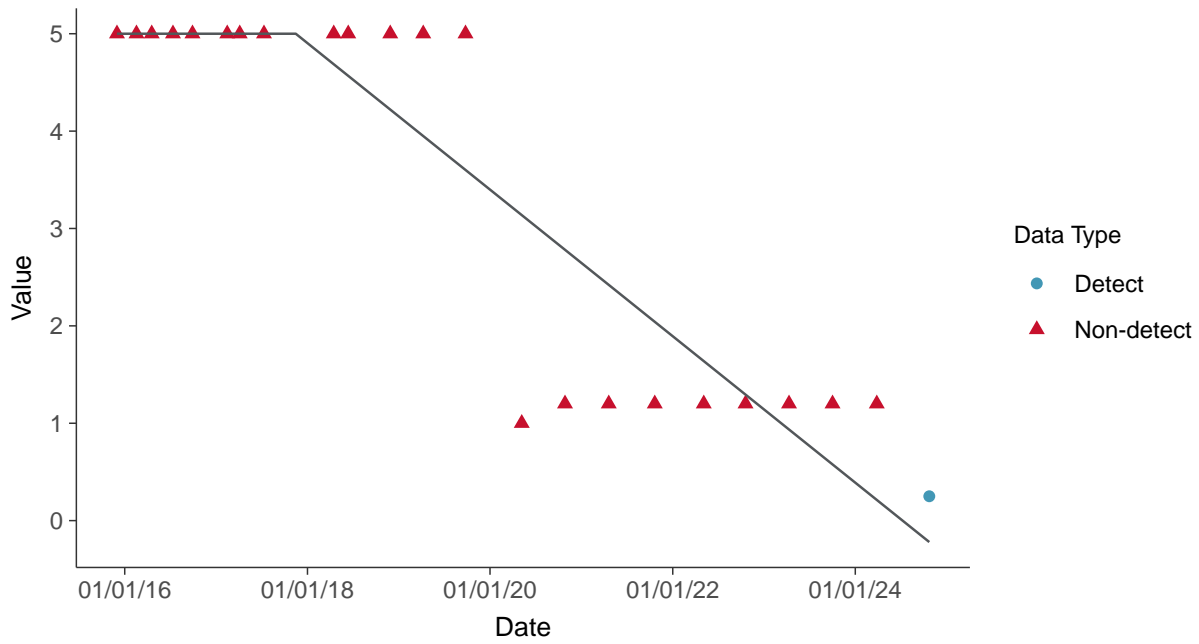
ID: 10_2_119





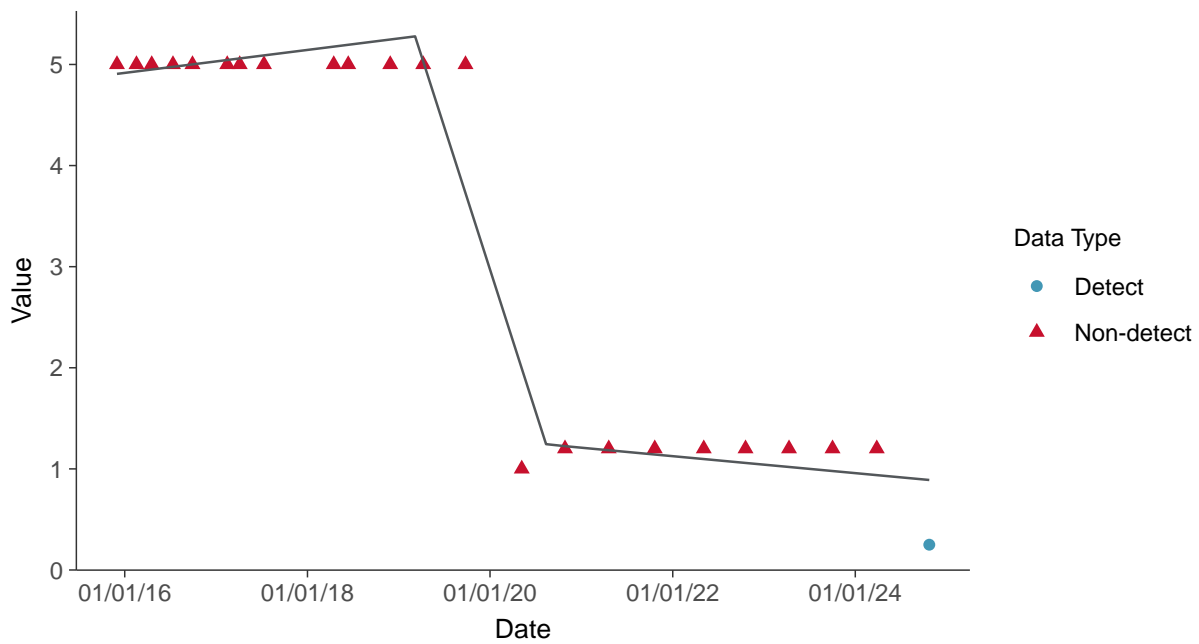
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15020 (ug/L)



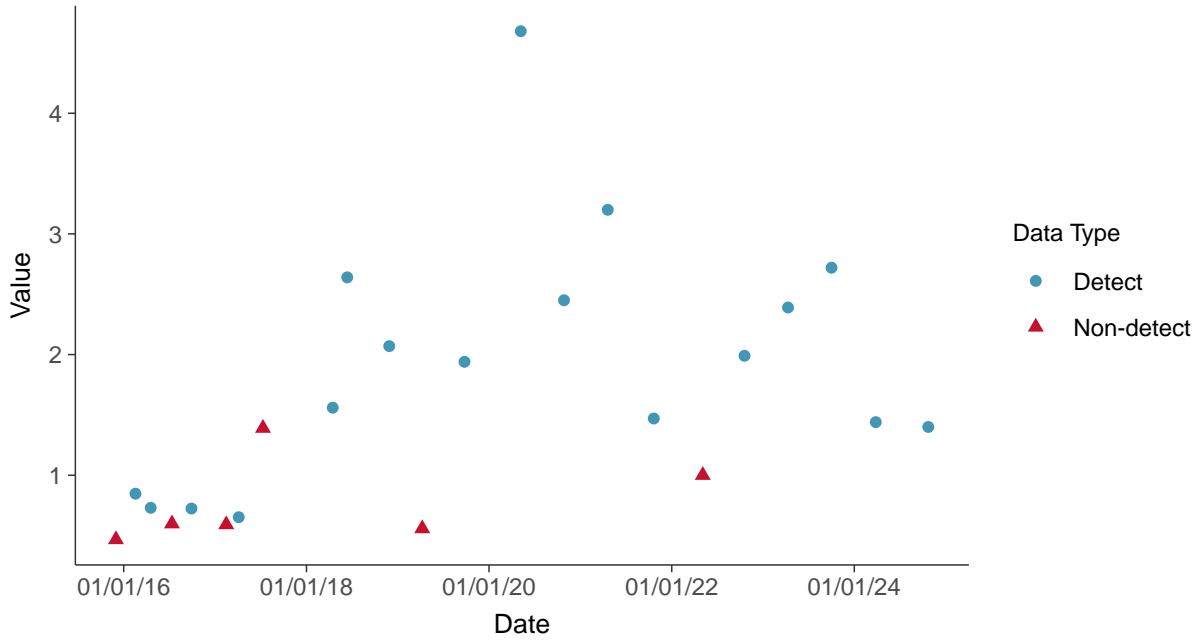


Appendix IV: Radium-226+228, MW-15020

ID: 10_2_125

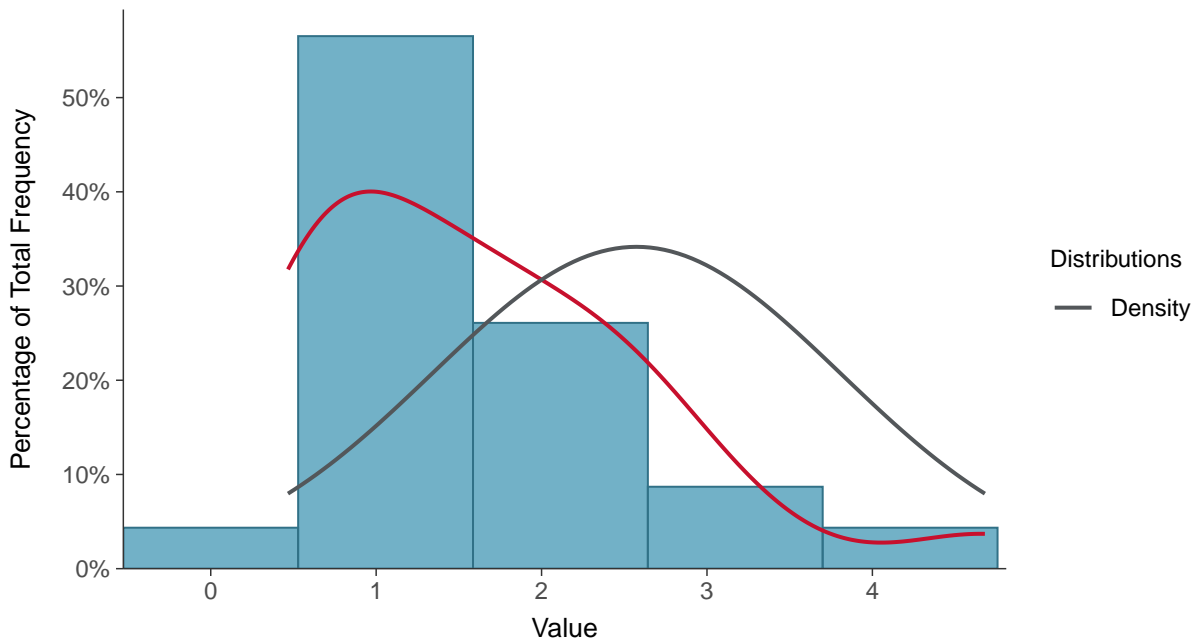
Scatter Plot

Radium-226+228, MW-15020 (pCi/L)



Histogram

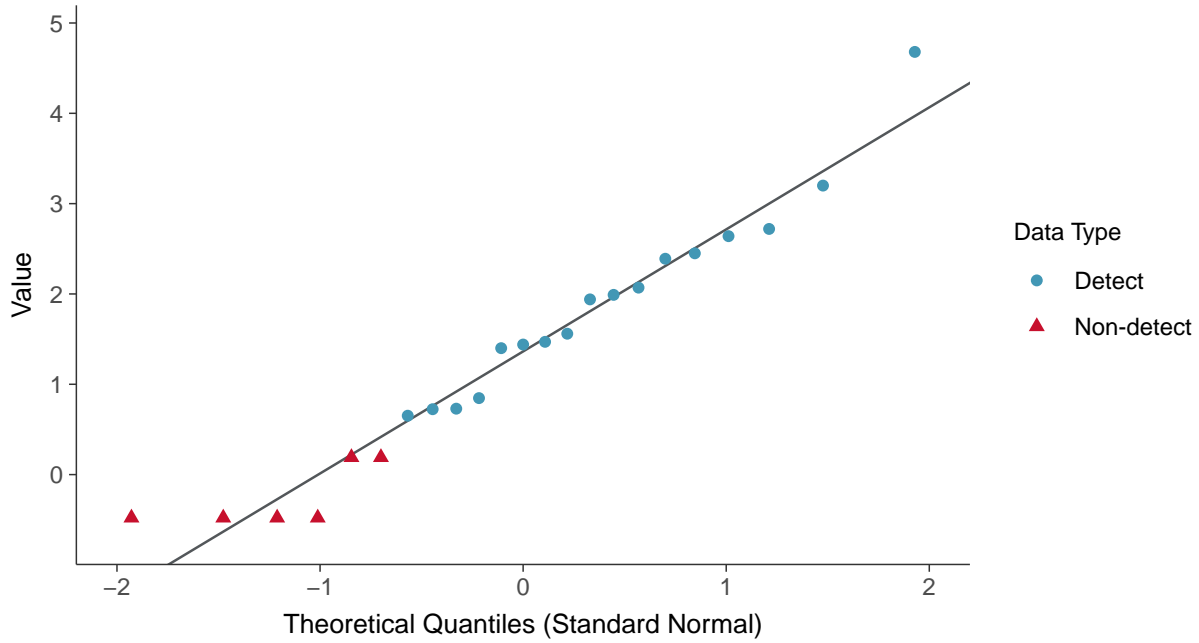
Radium-226+228, MW-15020 (pCi/L)





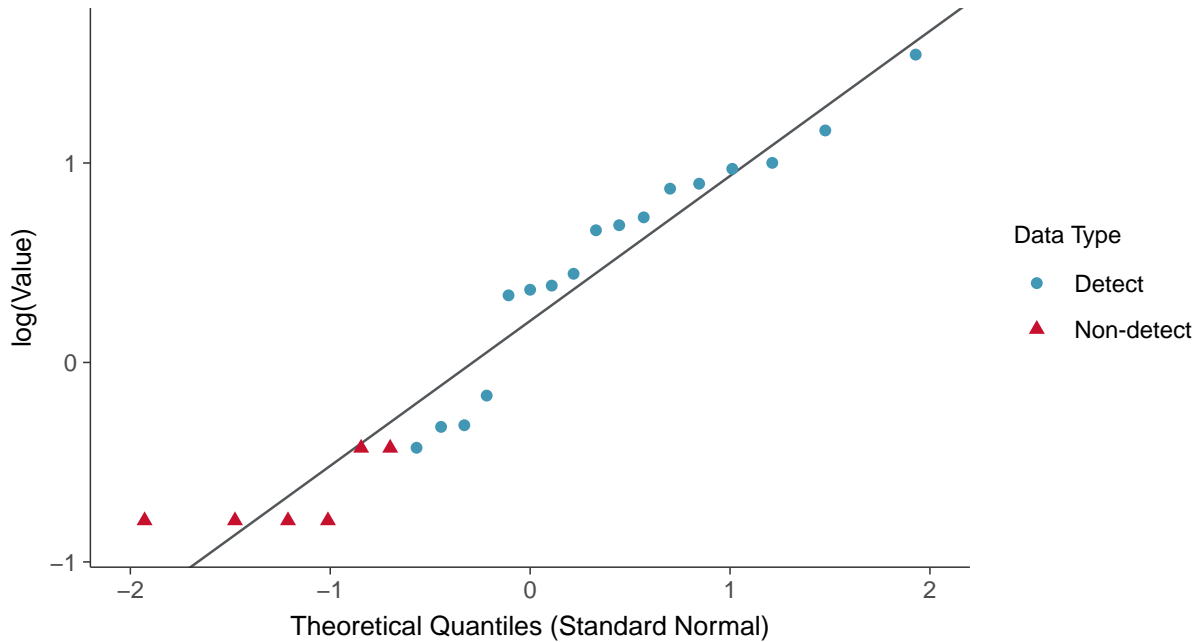
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15020 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

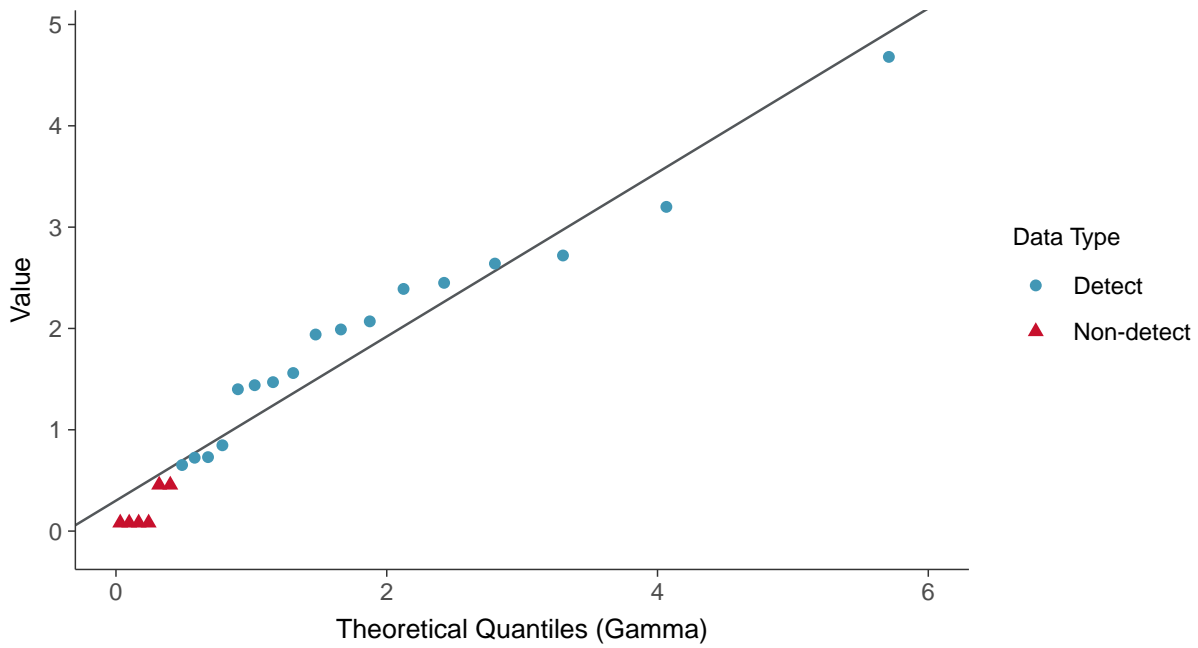
Radium-226+228, MW-15020 (pCi/L)





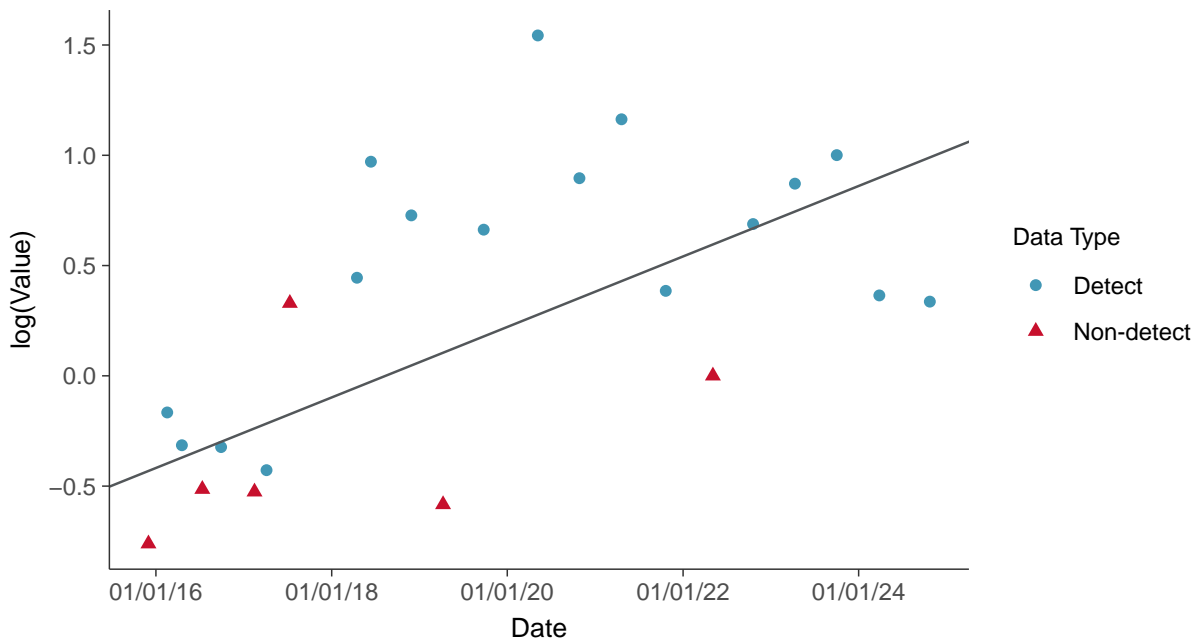
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15020 (pCi/L)



Trend Regression: Lognormal MLE

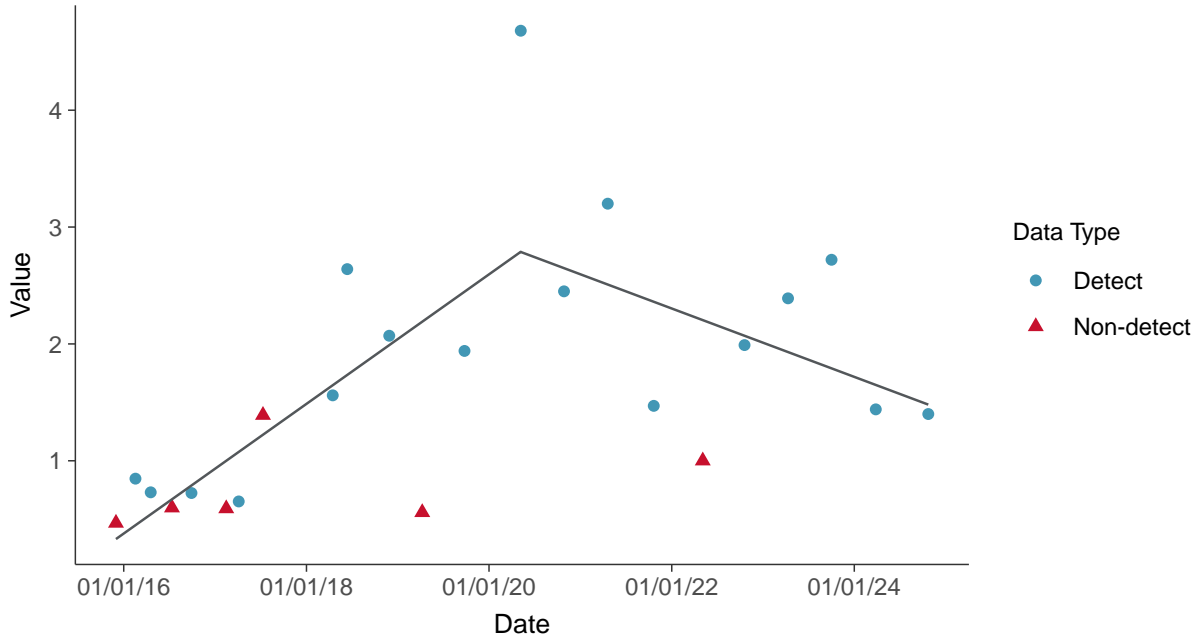
Radium-226+228, MW-15020 (pCi/L)





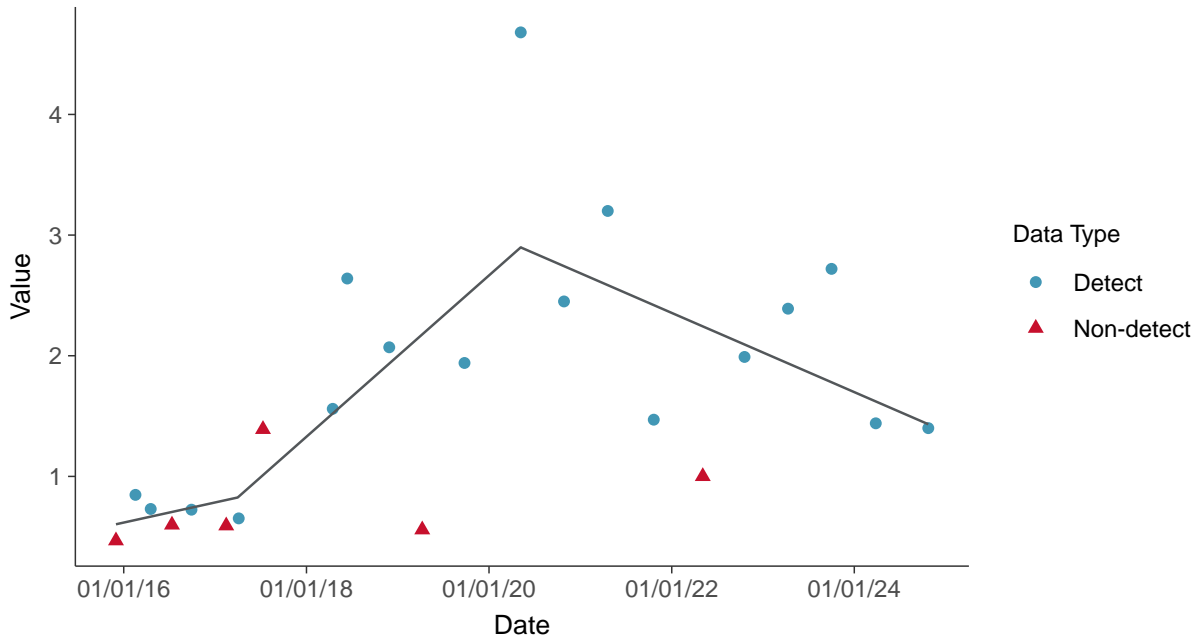
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15020 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

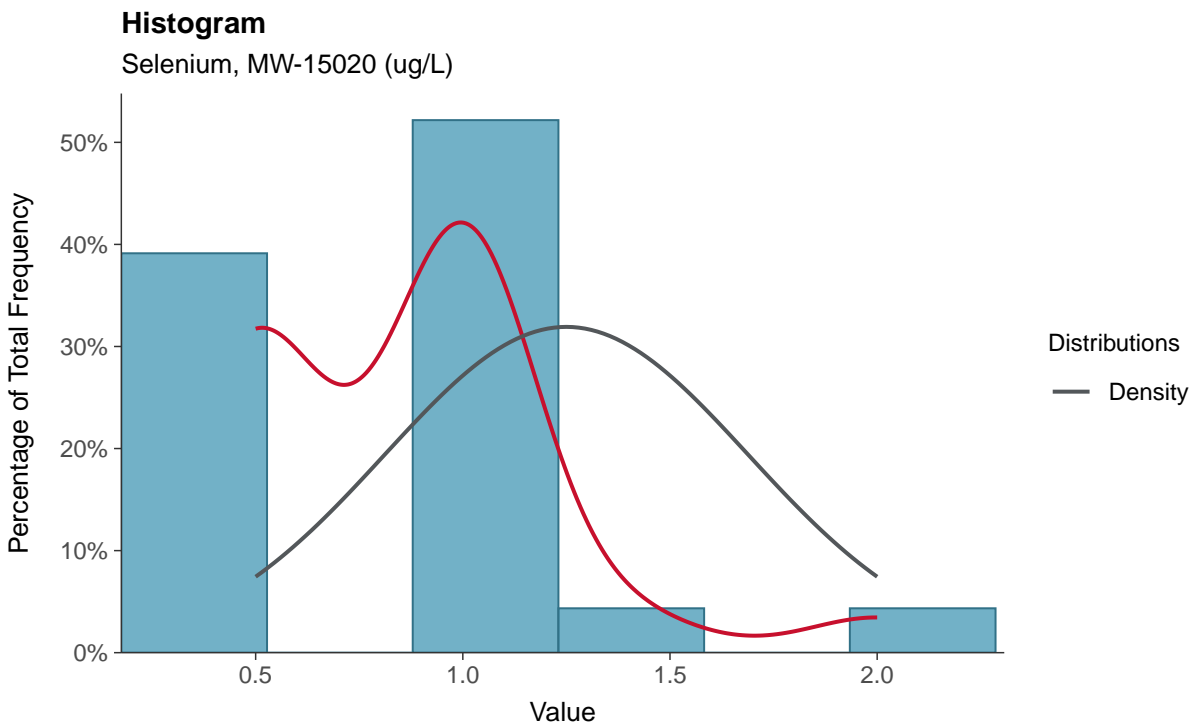
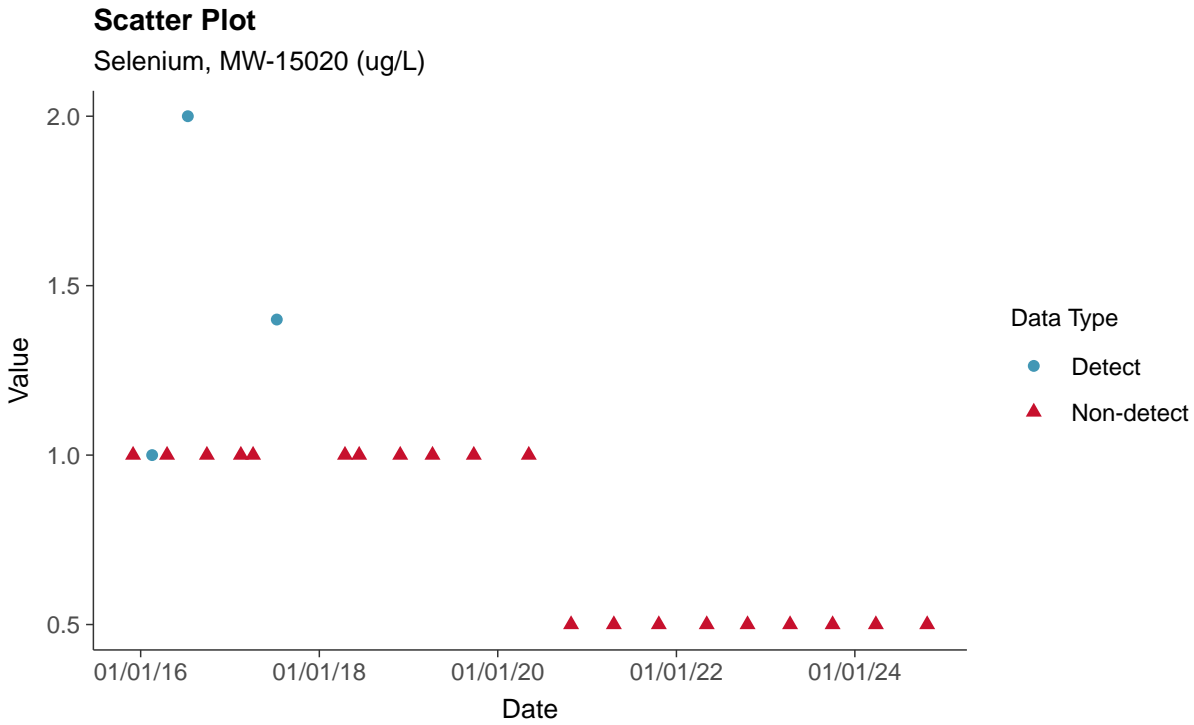
Radium-226+228, MW-15020 (pCi/L)





Appendix IV: Selenium, MW-15020

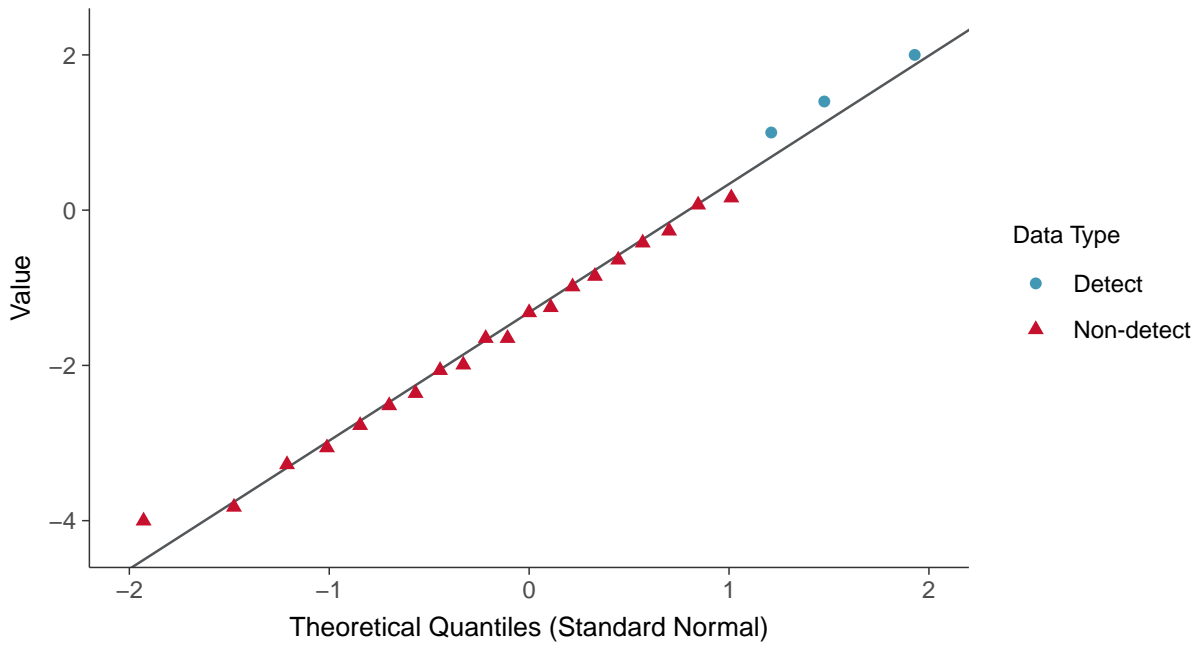
ID: 10_2_127





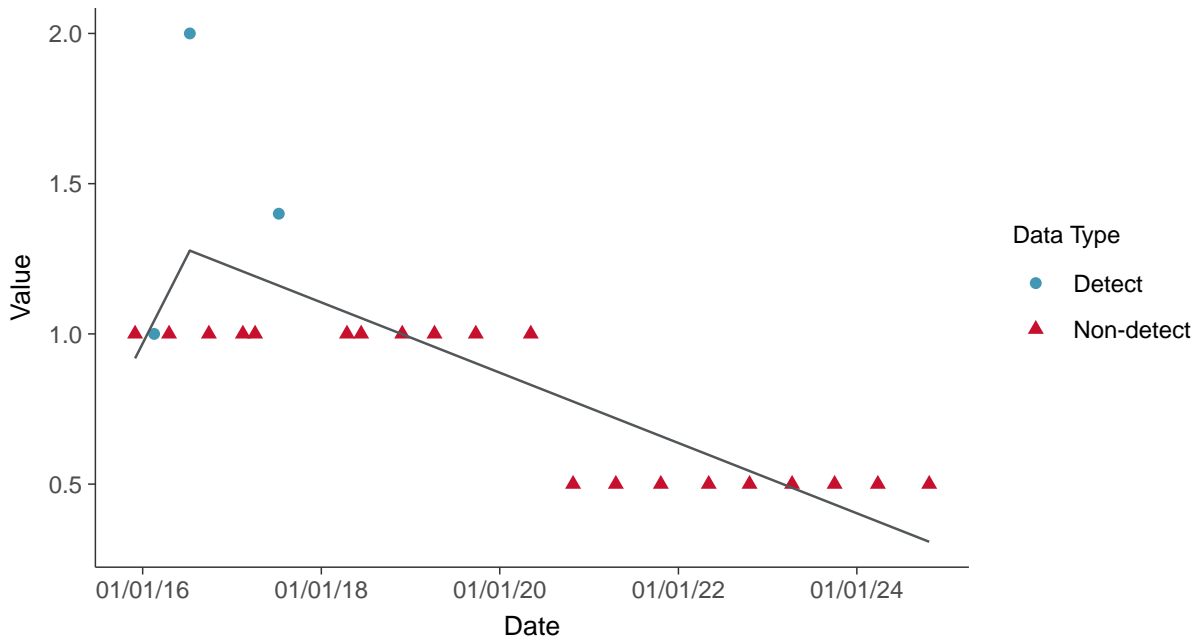
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15020 (ug/L)



Trend Regression: Piecewise Linear-Linear

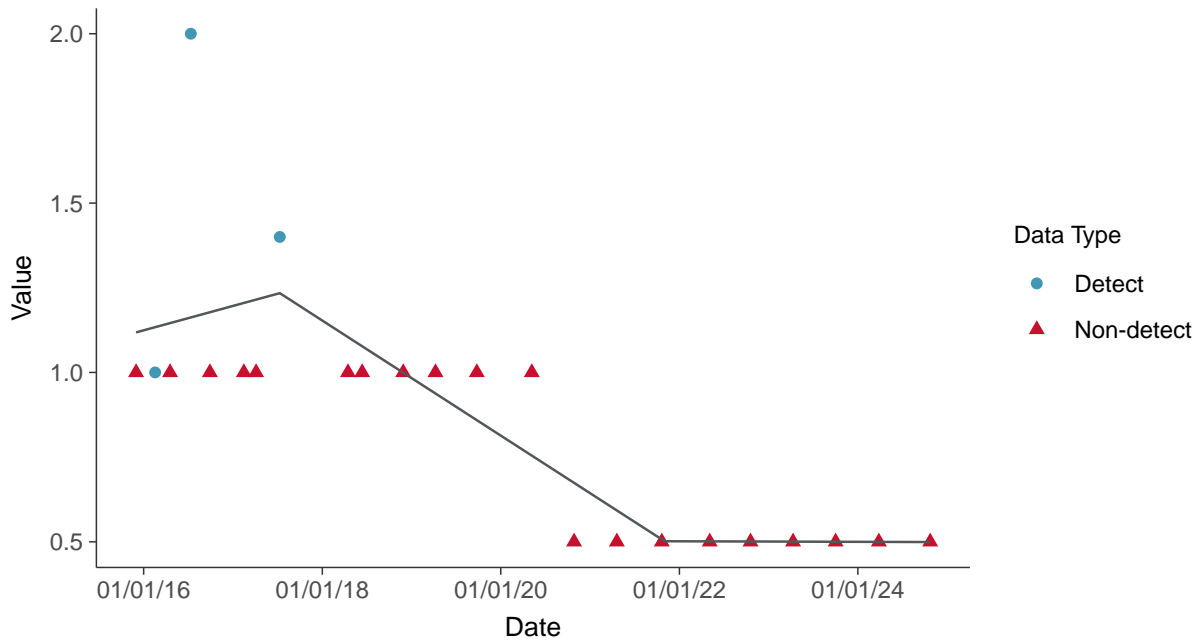
Selenium, MW-15020 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

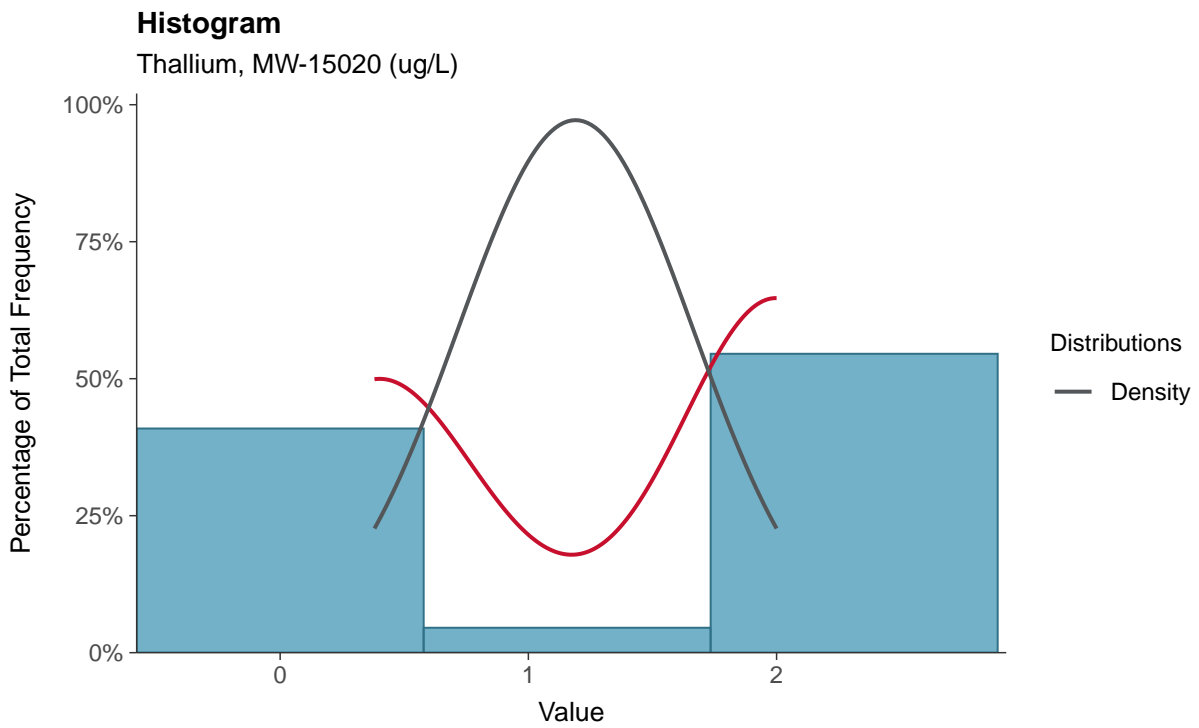
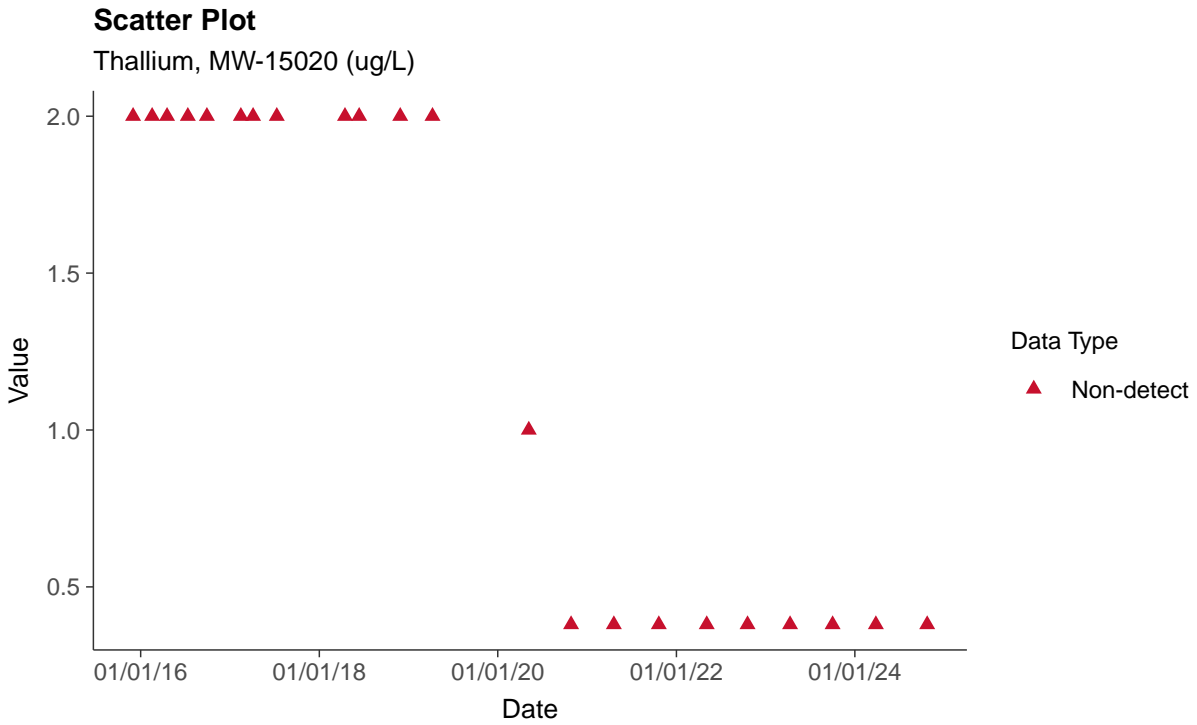
Selenium, MW-15020 (ug/L)

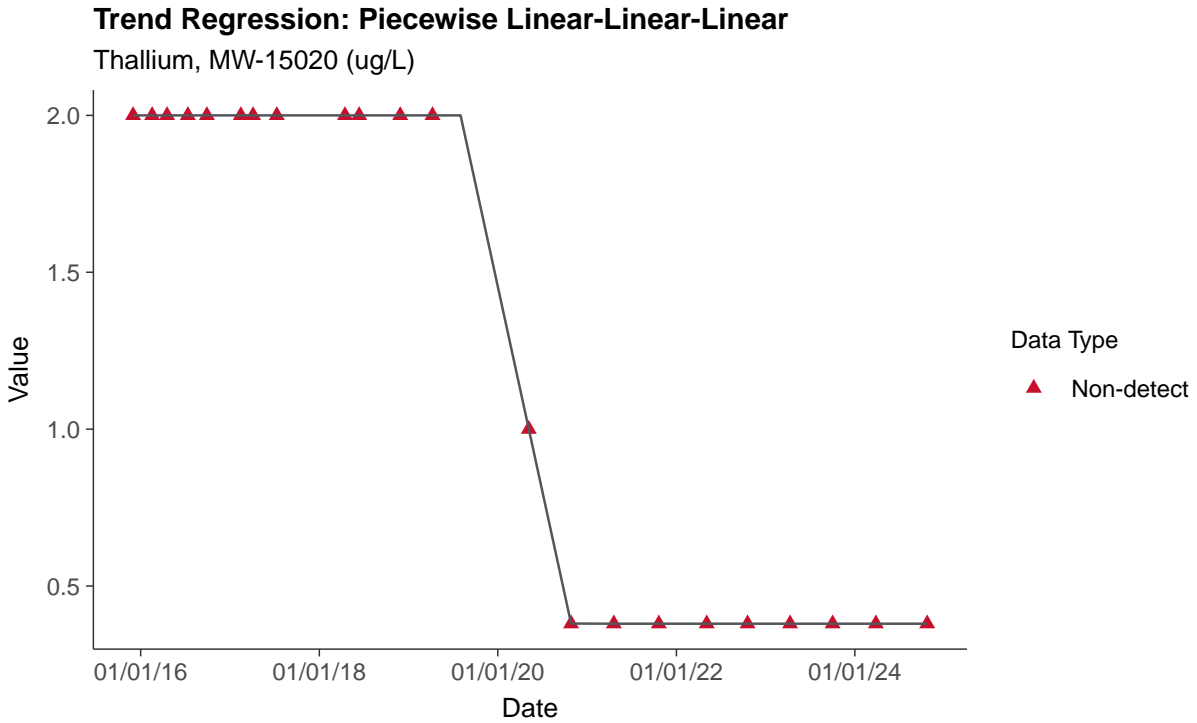
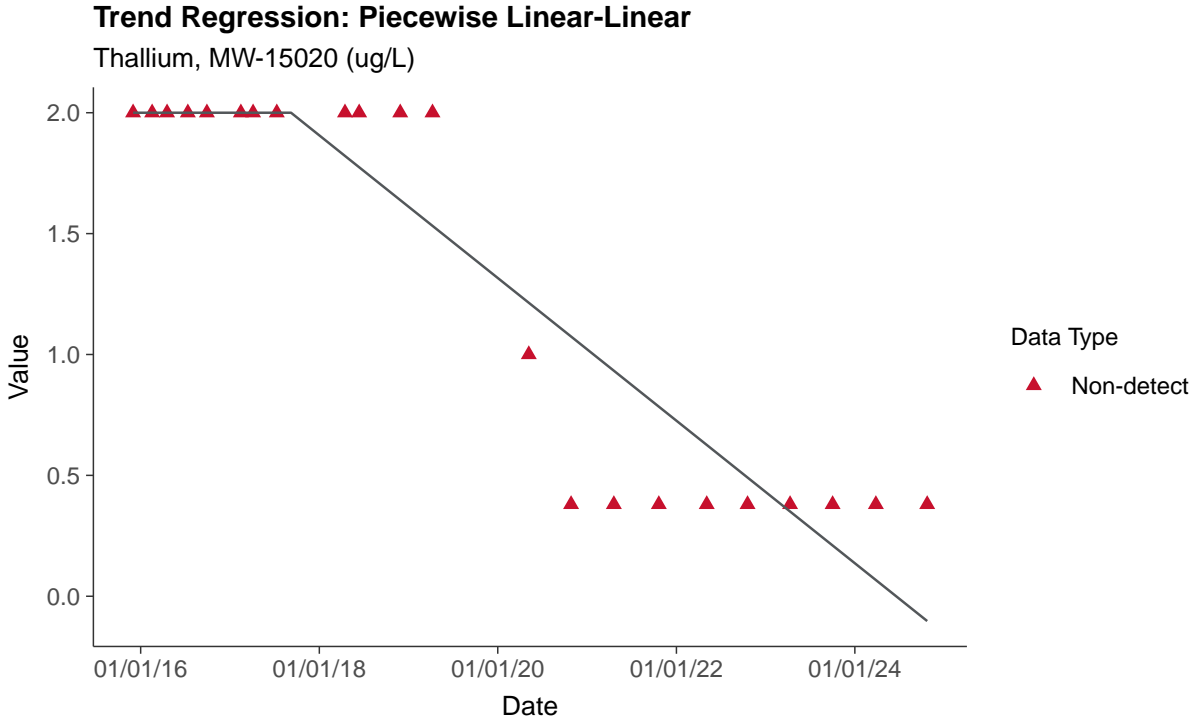




Appendix IV: Thallium, MW-15020

ID: 10_2_131

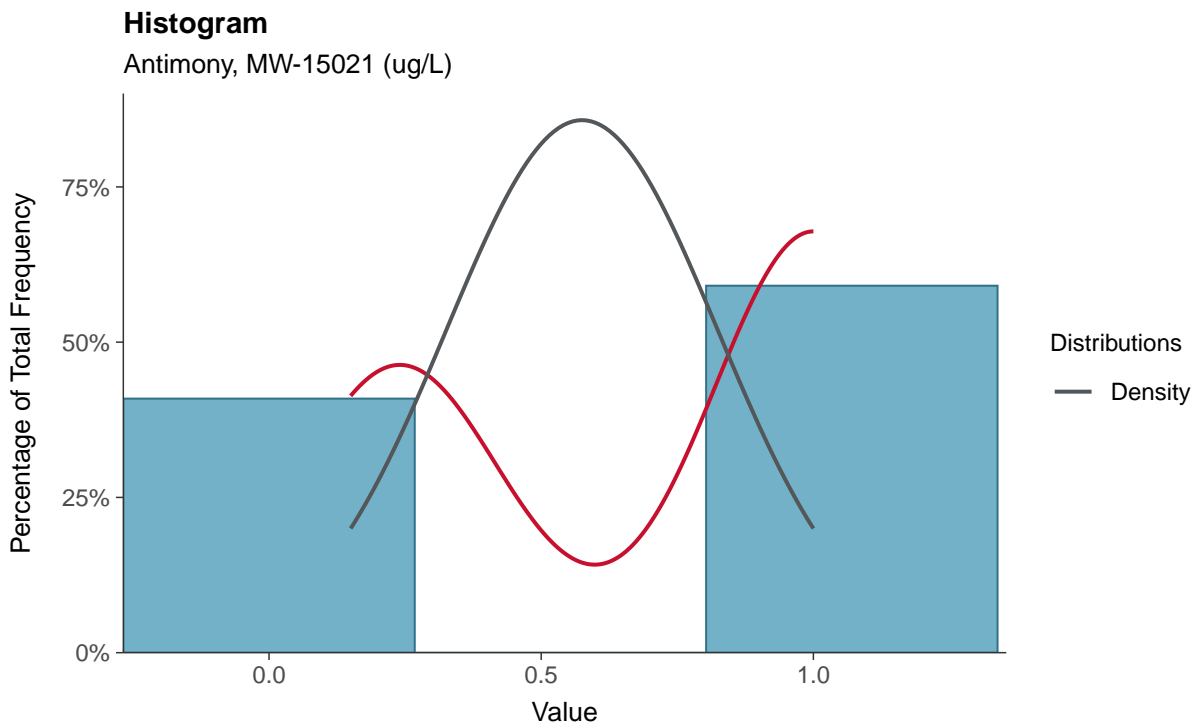
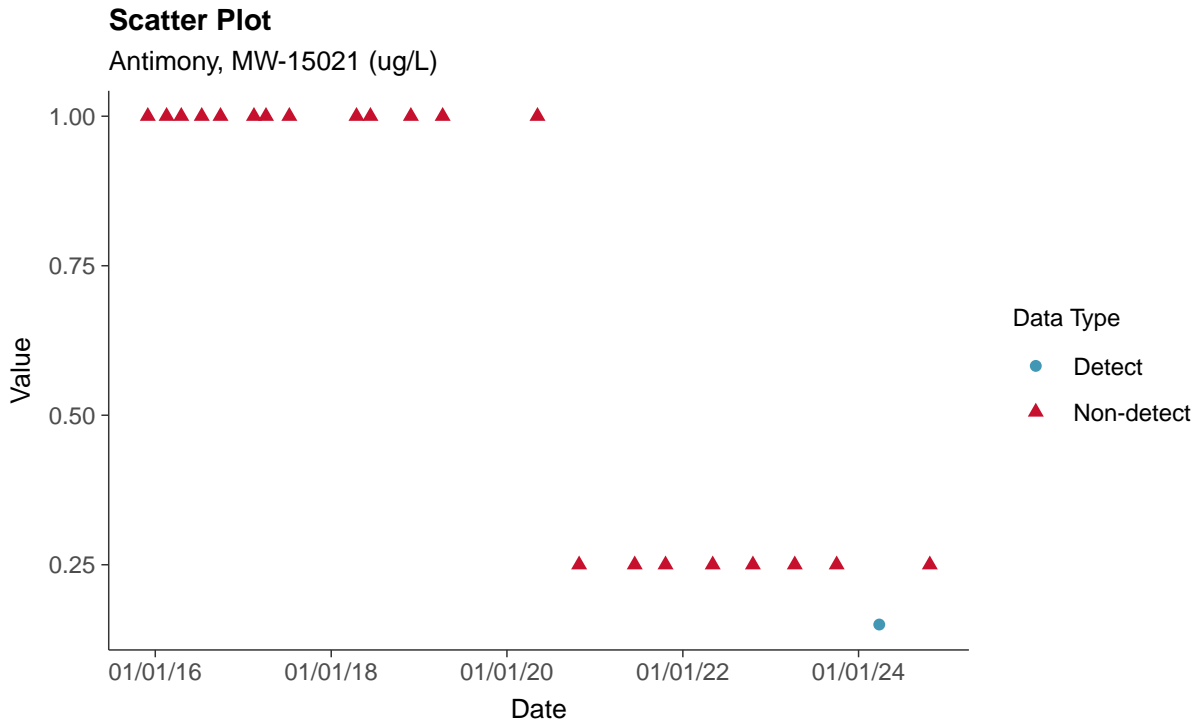






Appendix IV: Antimony, MW-15021

ID: 11_2_101



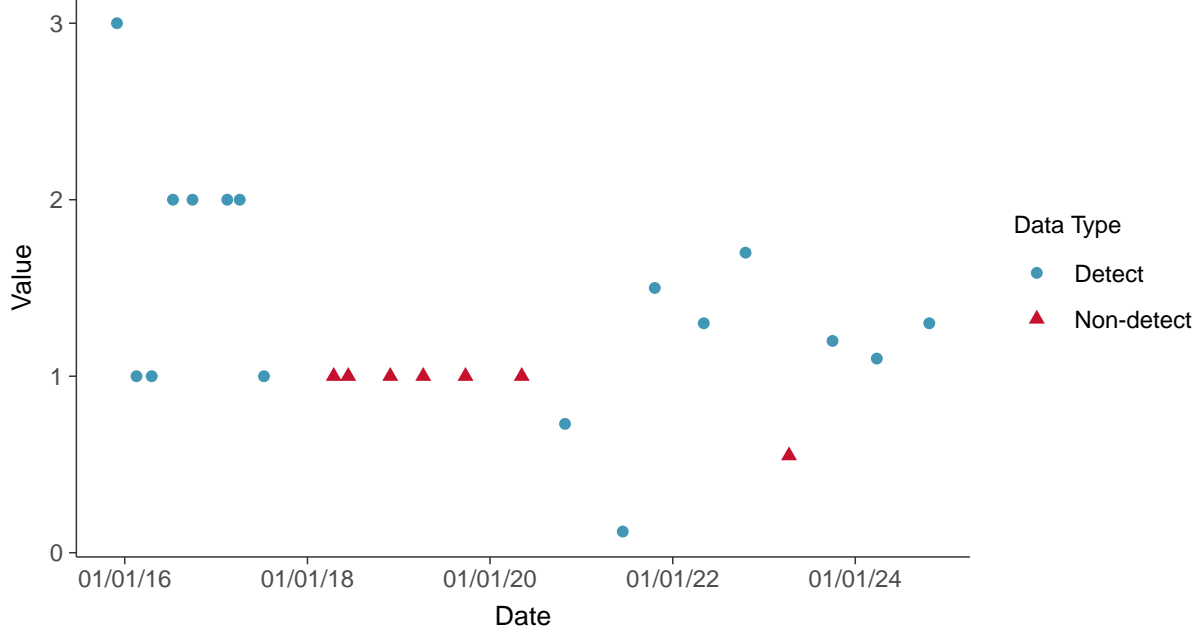


Appendix IV: Arsenic, MW-15021

ID: 11_2_102

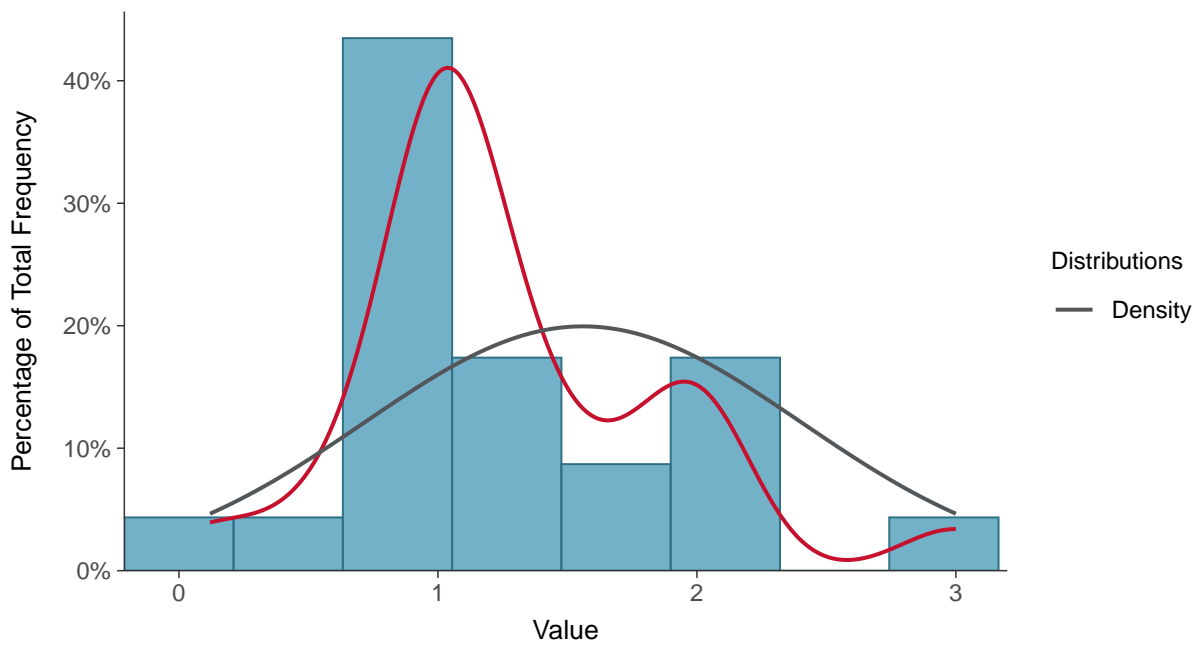
Scatter Plot

Arsenic, MW-15021 (ug/L)



Histogram

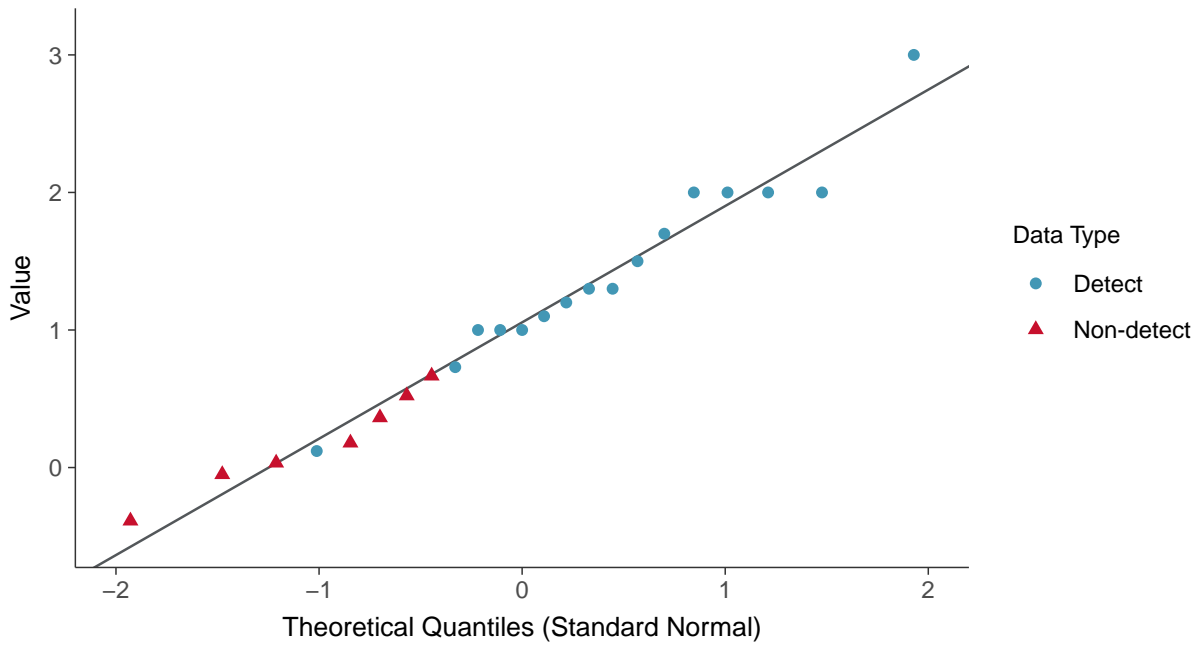
Arsenic, MW-15021 (ug/L)





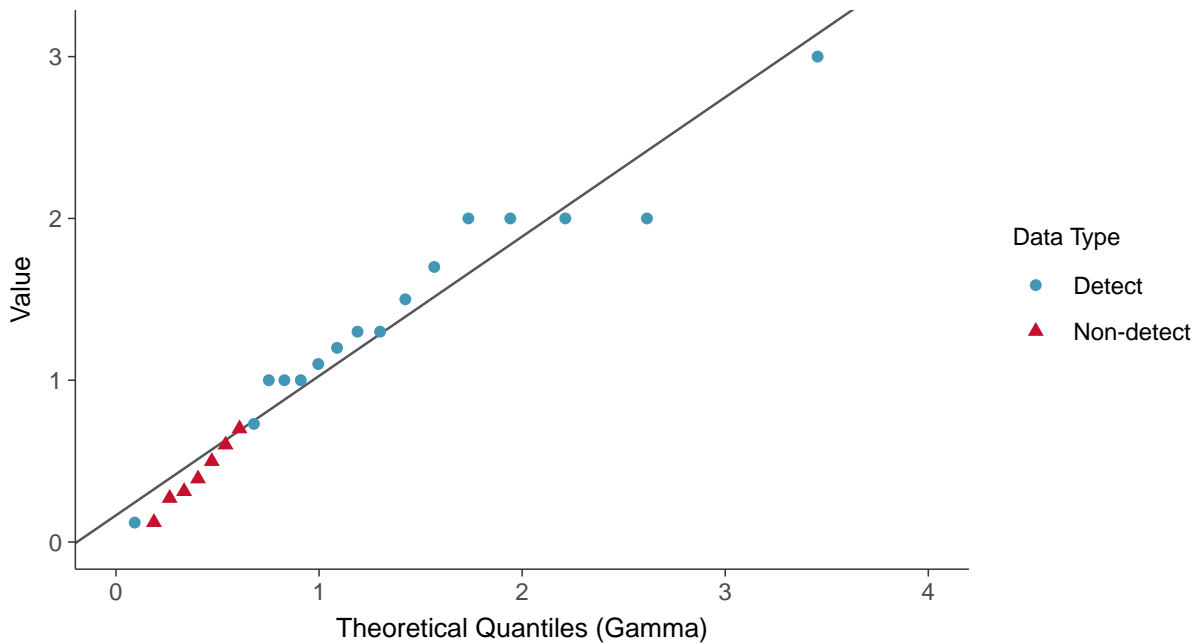
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15021 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

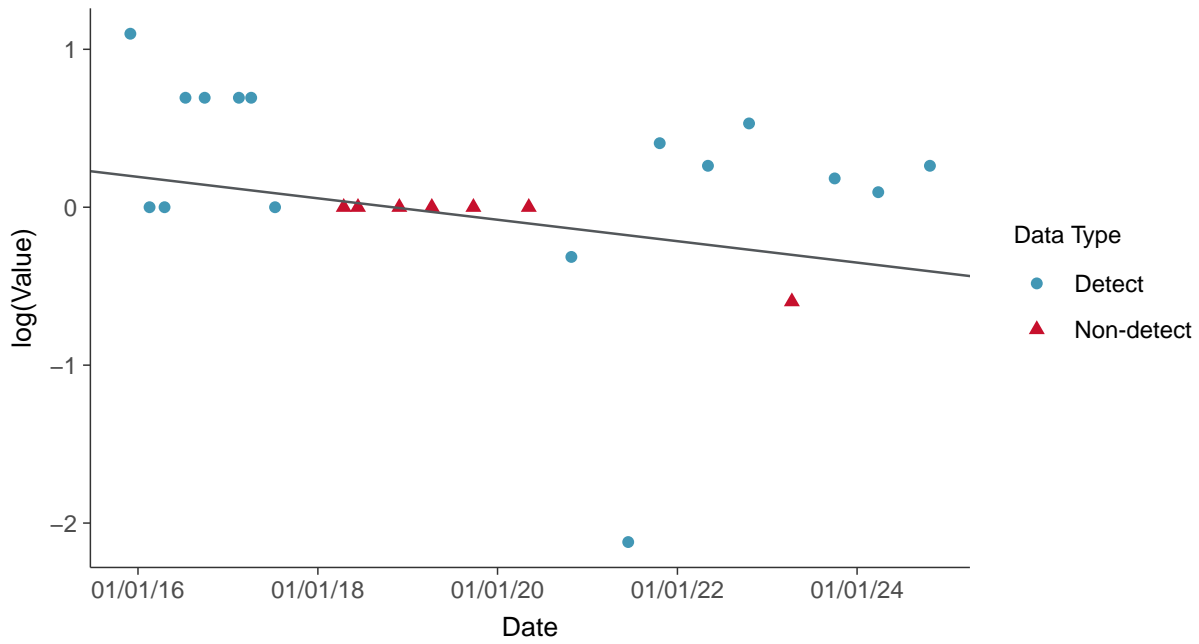
Arsenic, MW-15021 (ug/L)





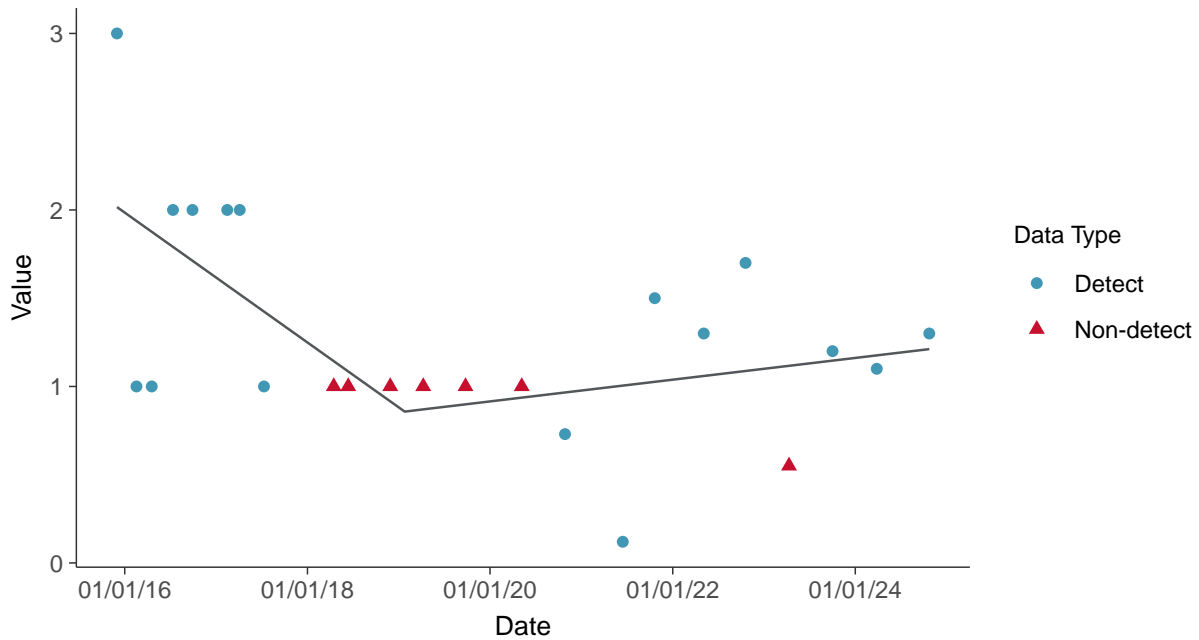
Trend Regression: Lognormal MLE

Arsenic, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

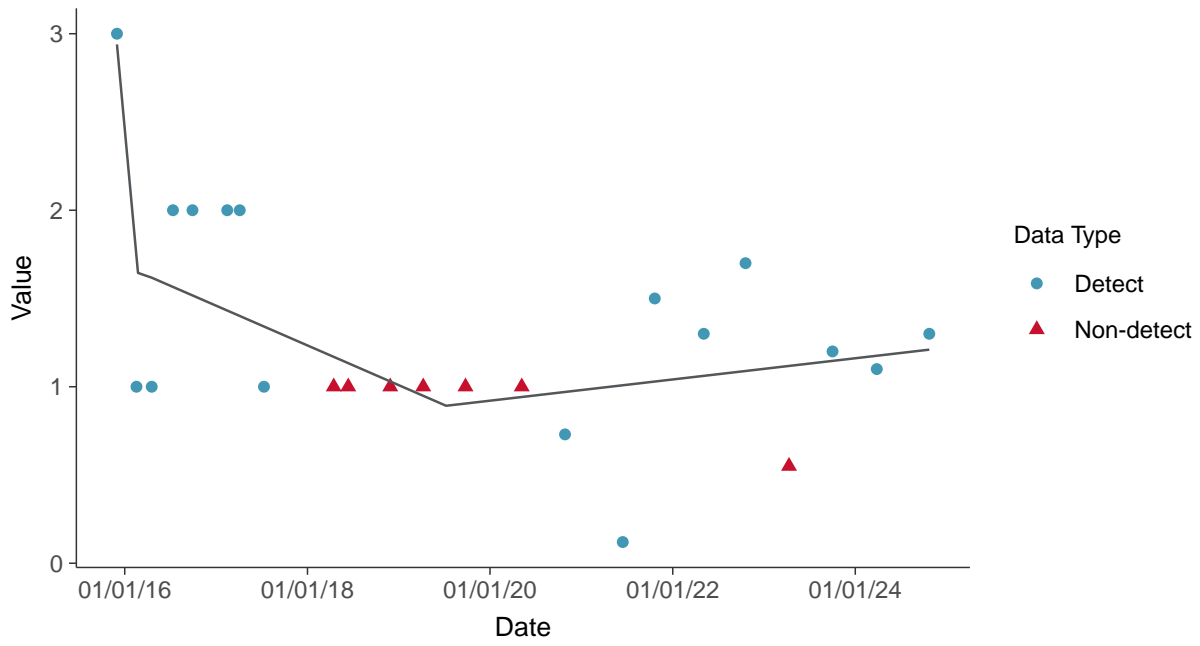
Arsenic, MW-15021 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15021 (ug/L)



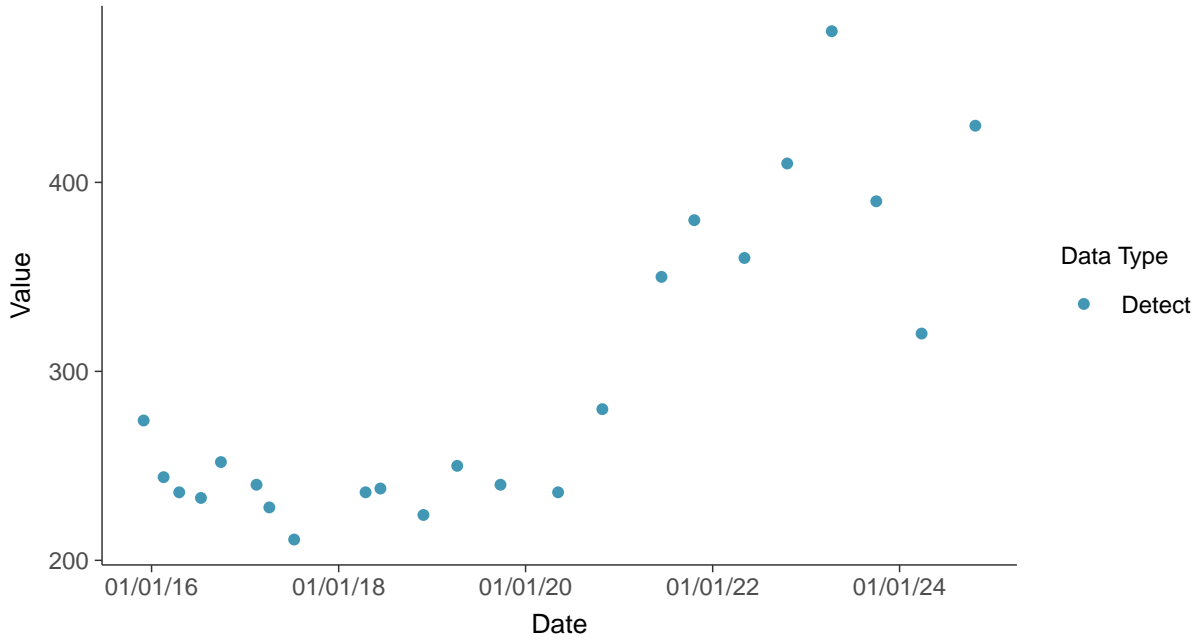


Appendix IV: Barium, MW-15021

ID: 11_2_103

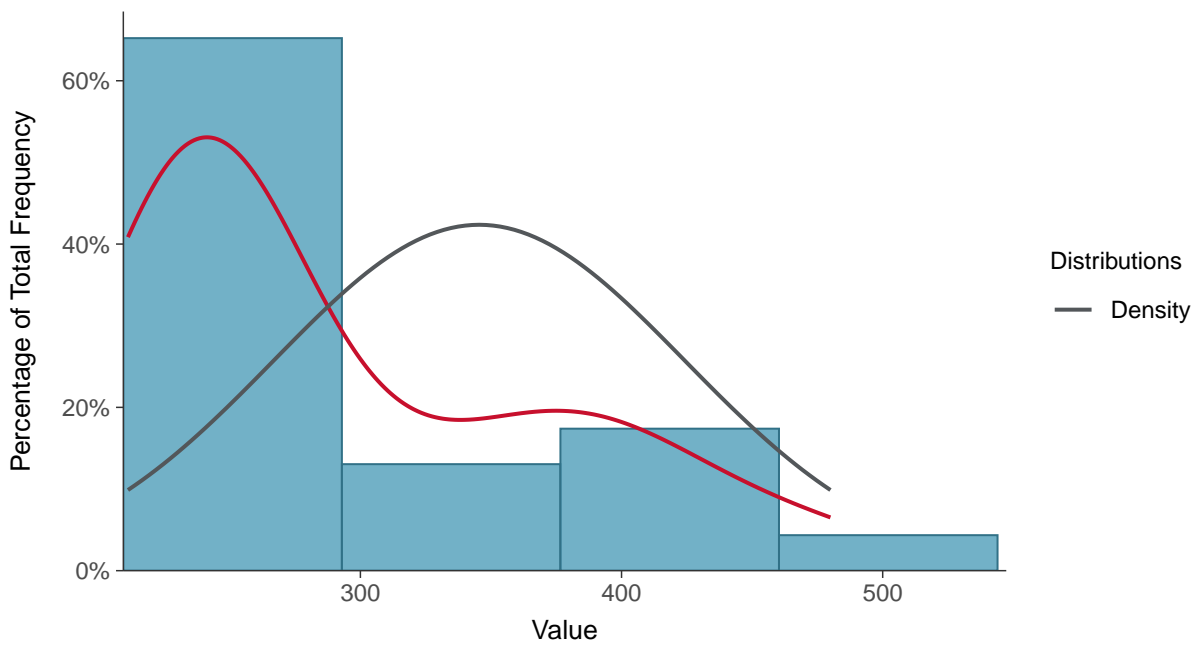
Scatter Plot

Barium, MW-15021 (ug/L)



Histogram

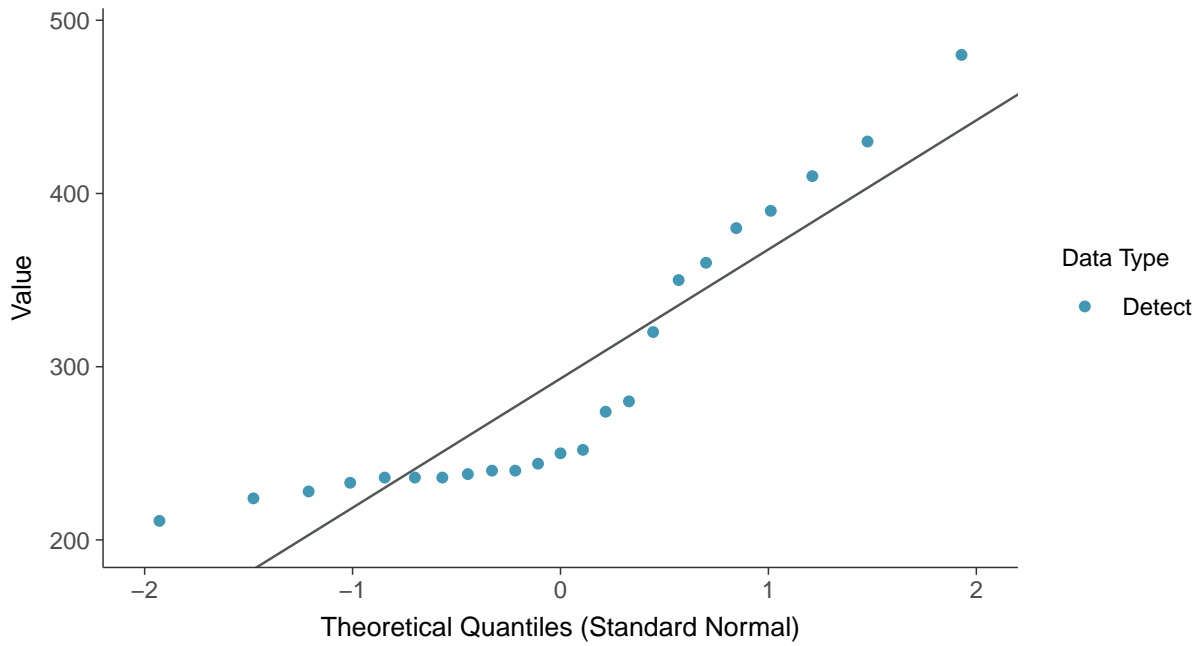
Barium, MW-15021 (ug/L)





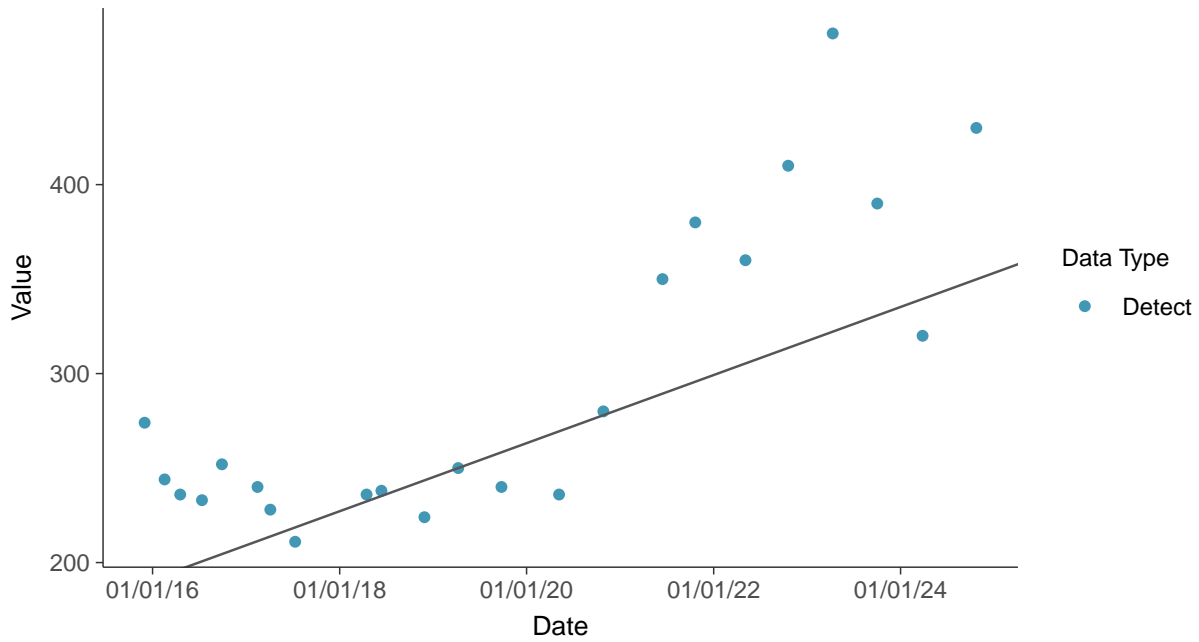
Normal Q-Q plot

Barium, MW-15021 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

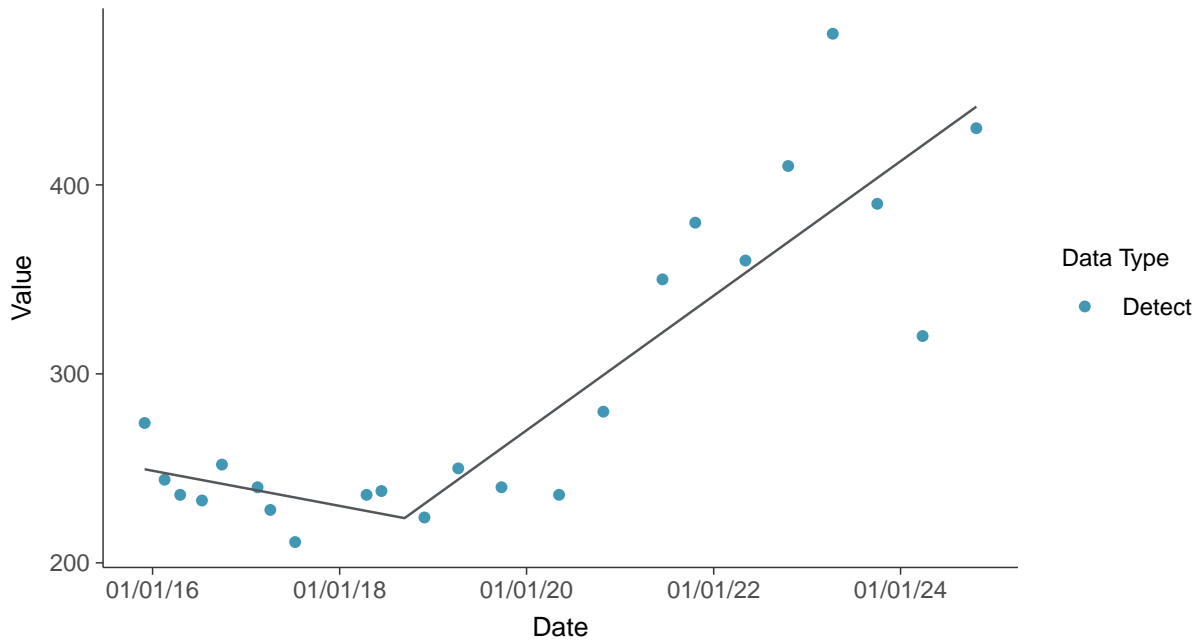
Barium, MW-15021 (ug/L)





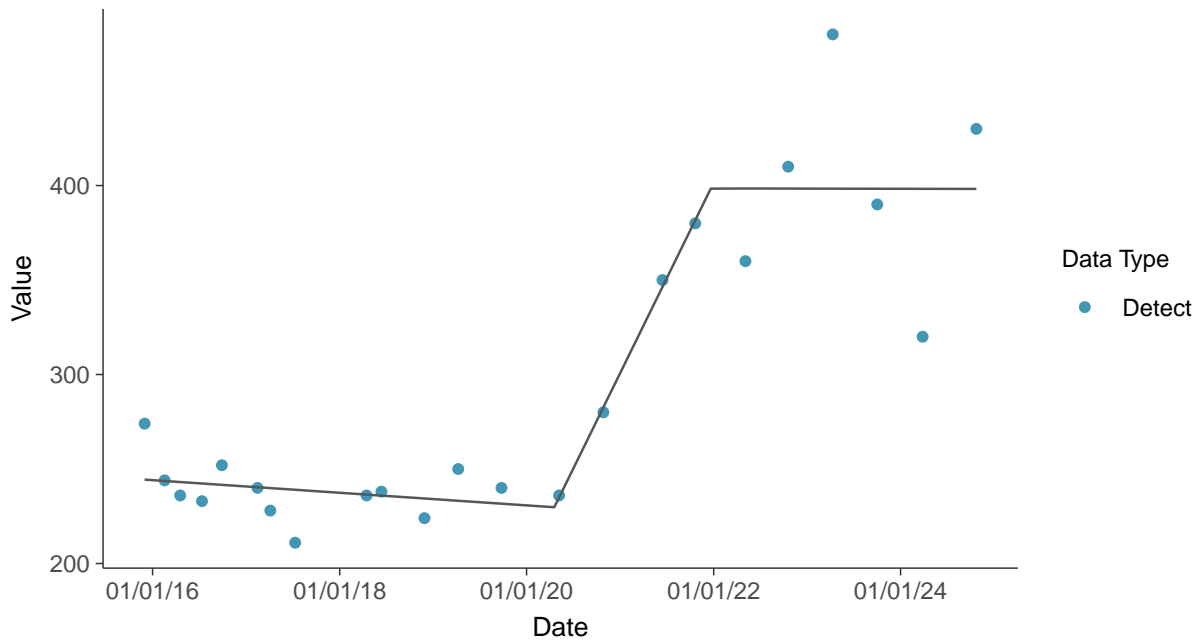
Trend Regression: Piecewise Linear-Linear

Barium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

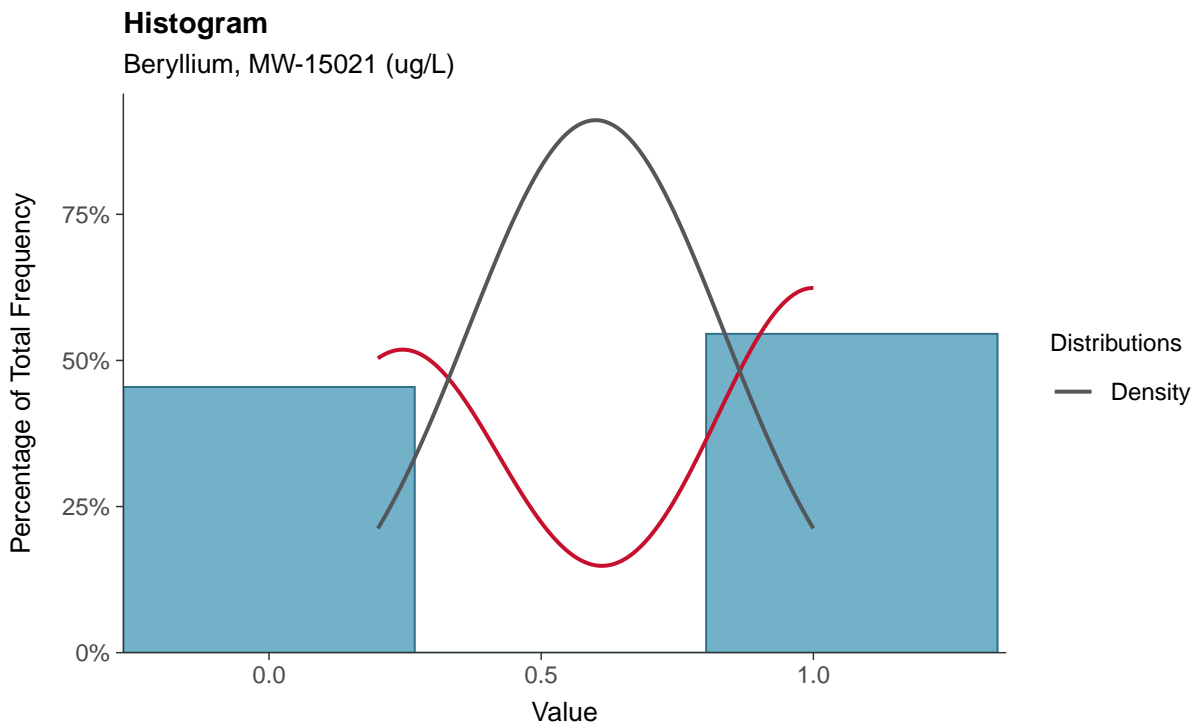
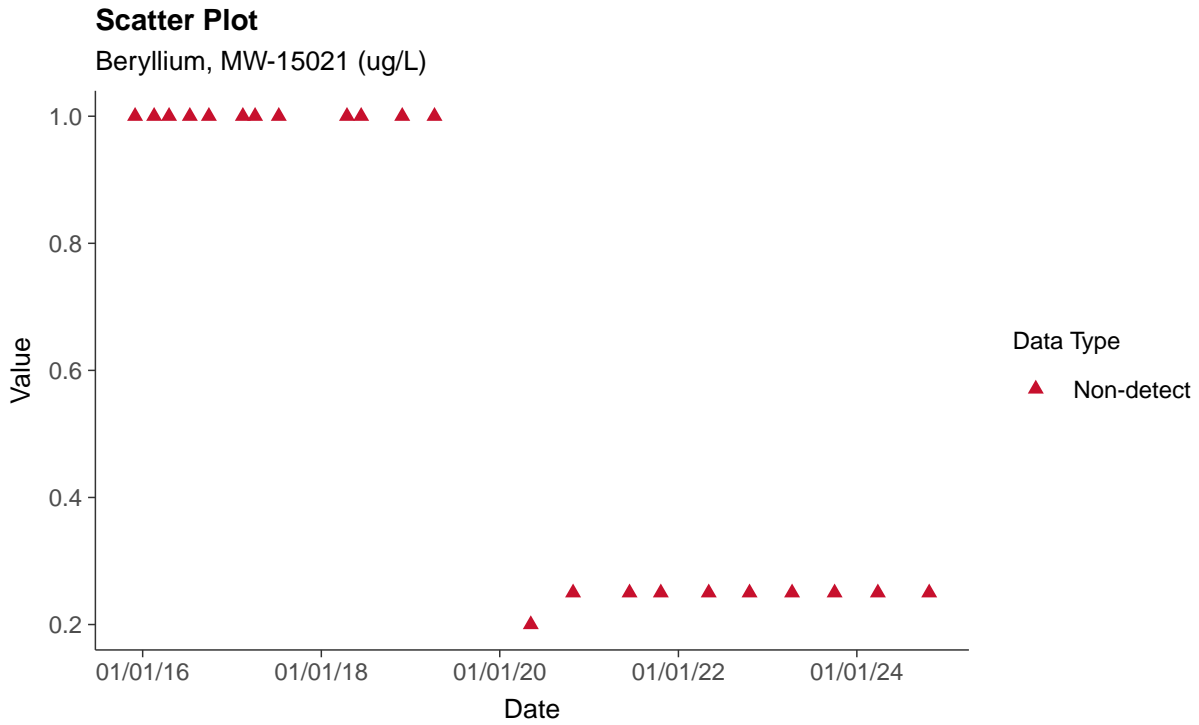
Barium, MW-15021 (ug/L)





Appendix IV: Beryllium, MW-15021

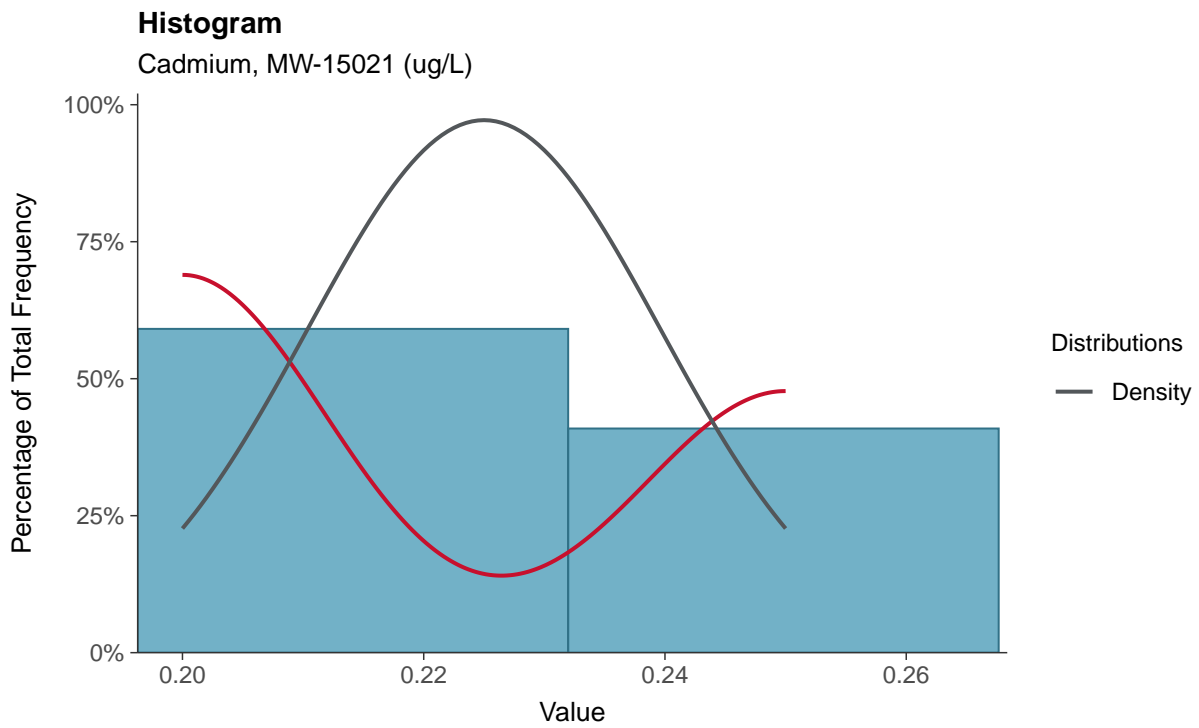
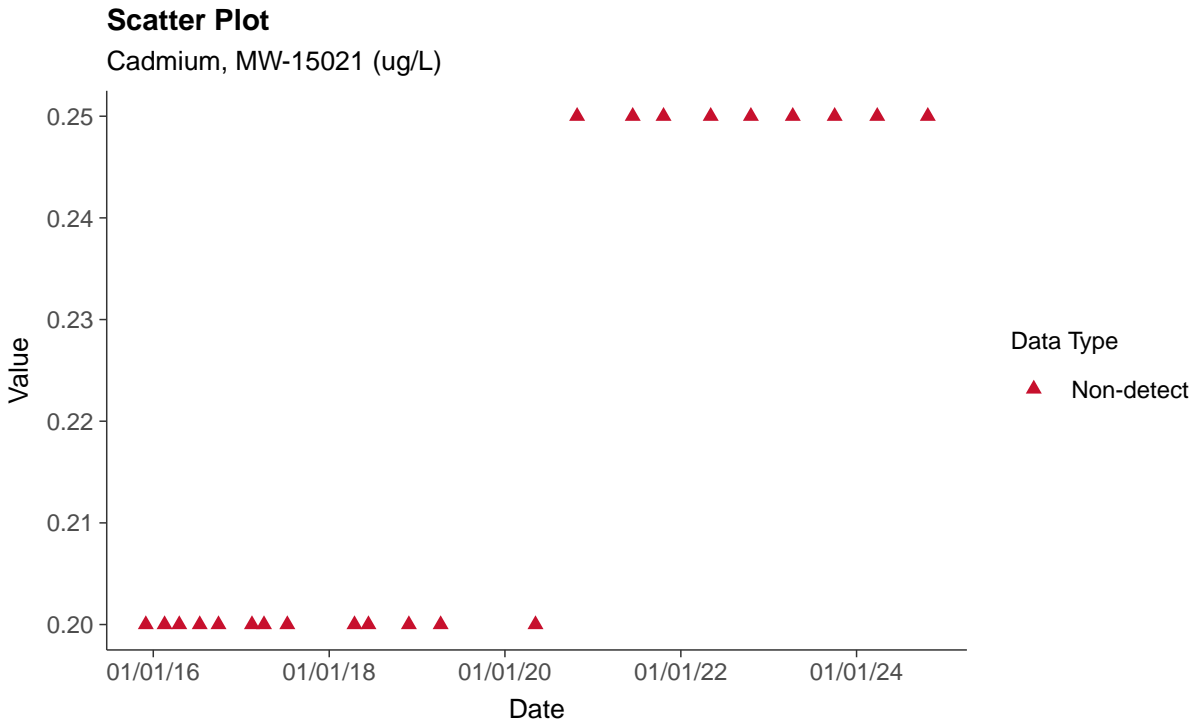
ID: 11_2_104





Appendix IV: Cadmium, MW-15021

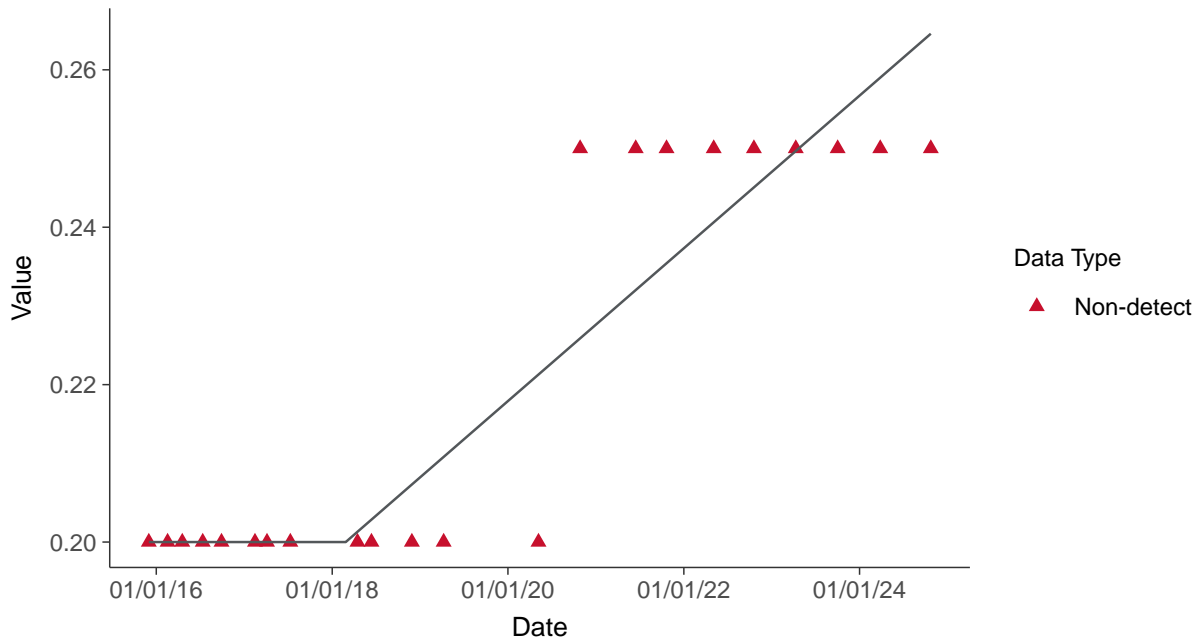
ID: 11_2_106





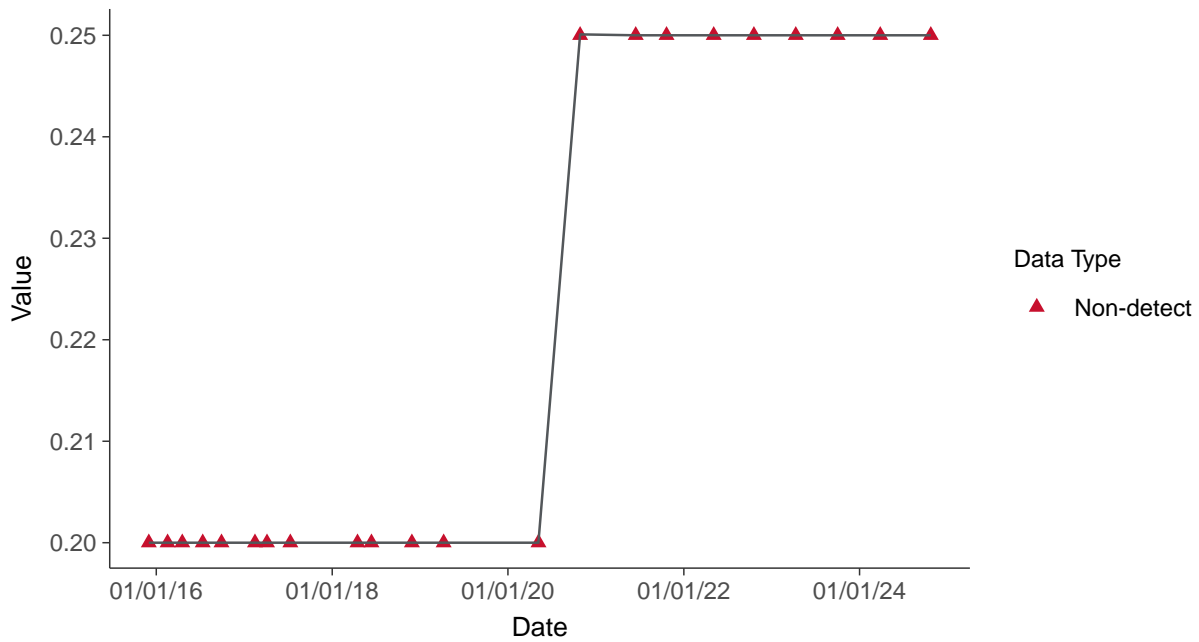
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

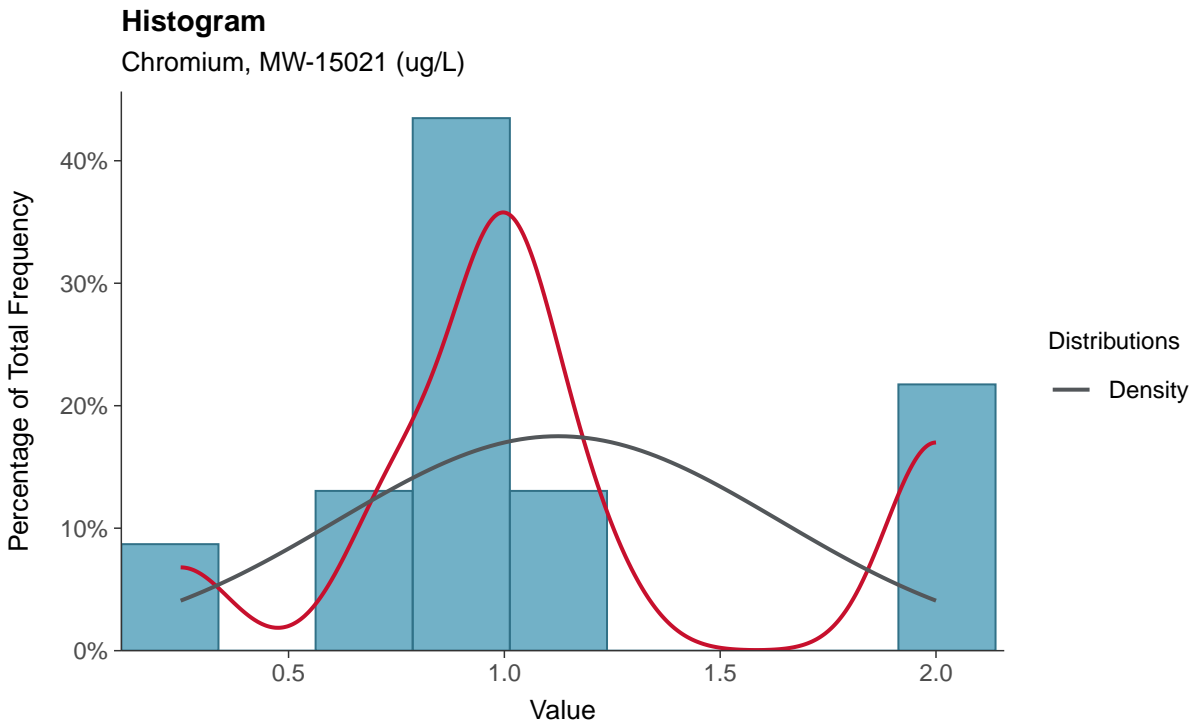
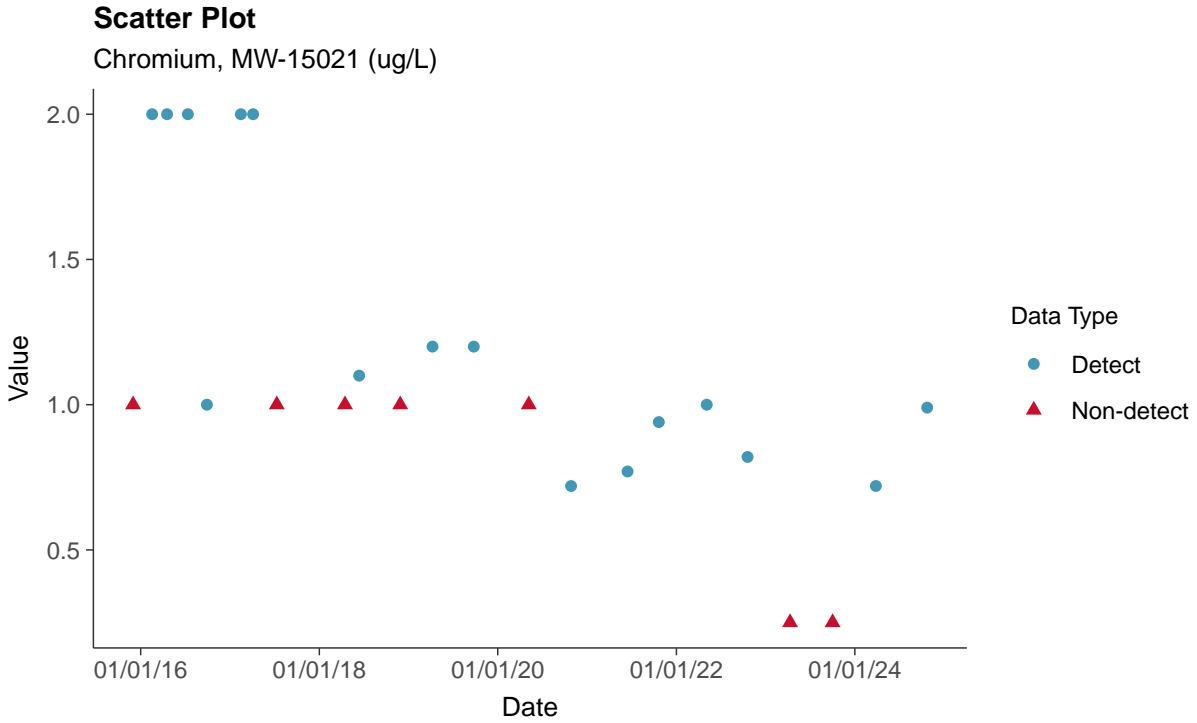
Cadmium, MW-15021 (ug/L)





Appendix IV: Chromium, MW-15021

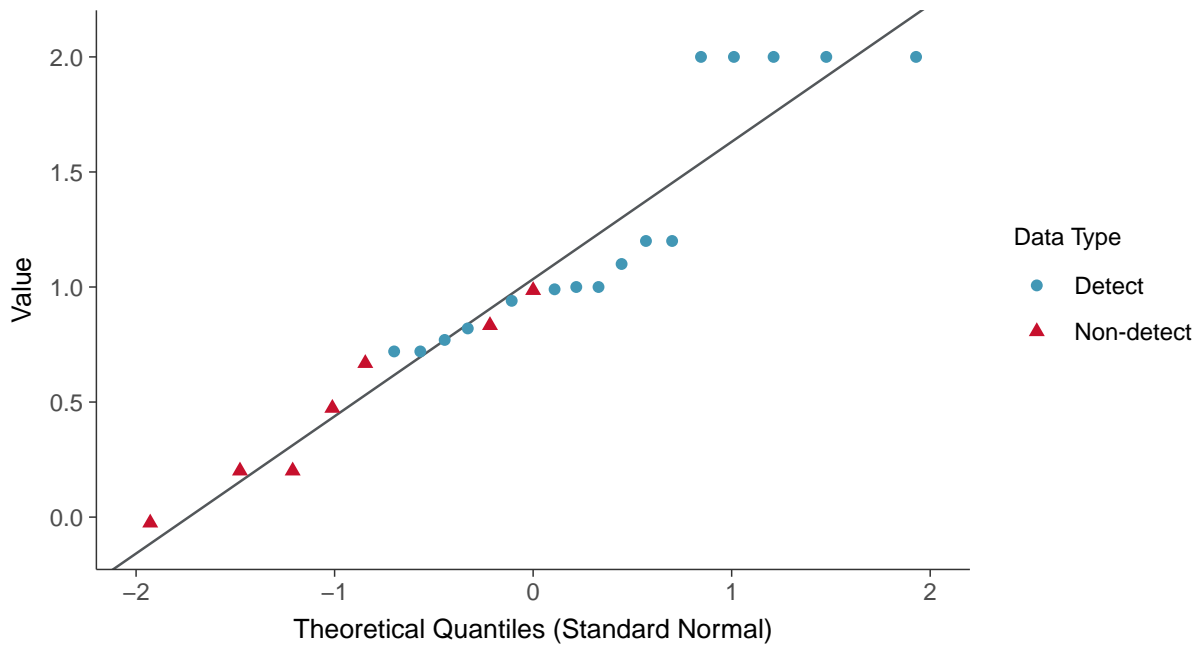
ID: 11_2_109





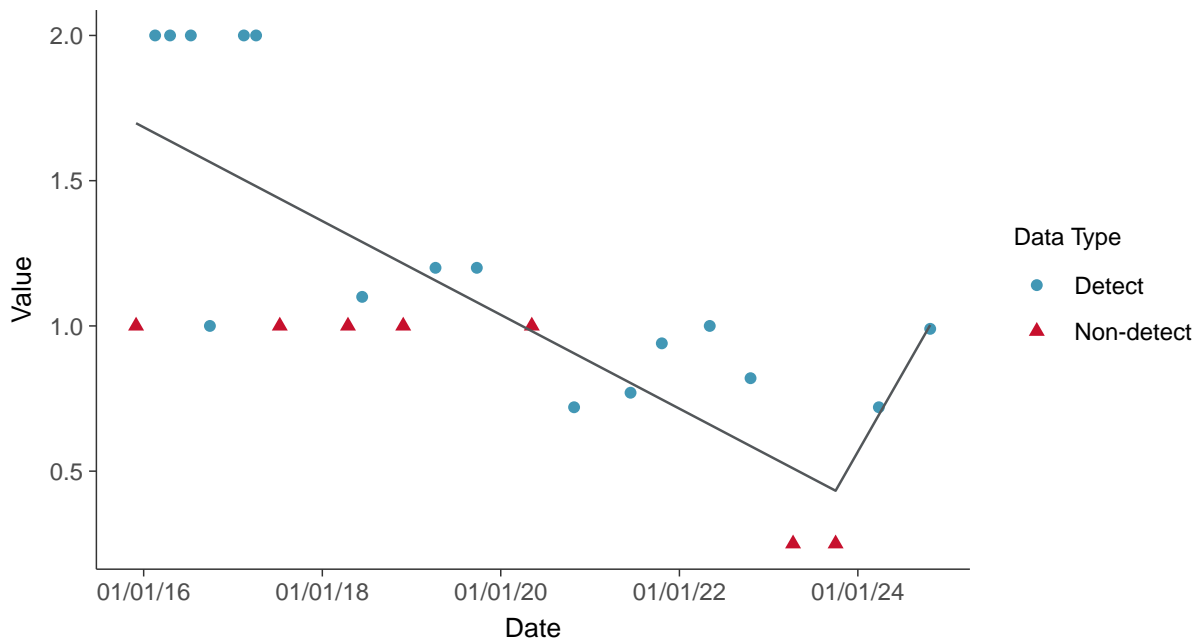
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

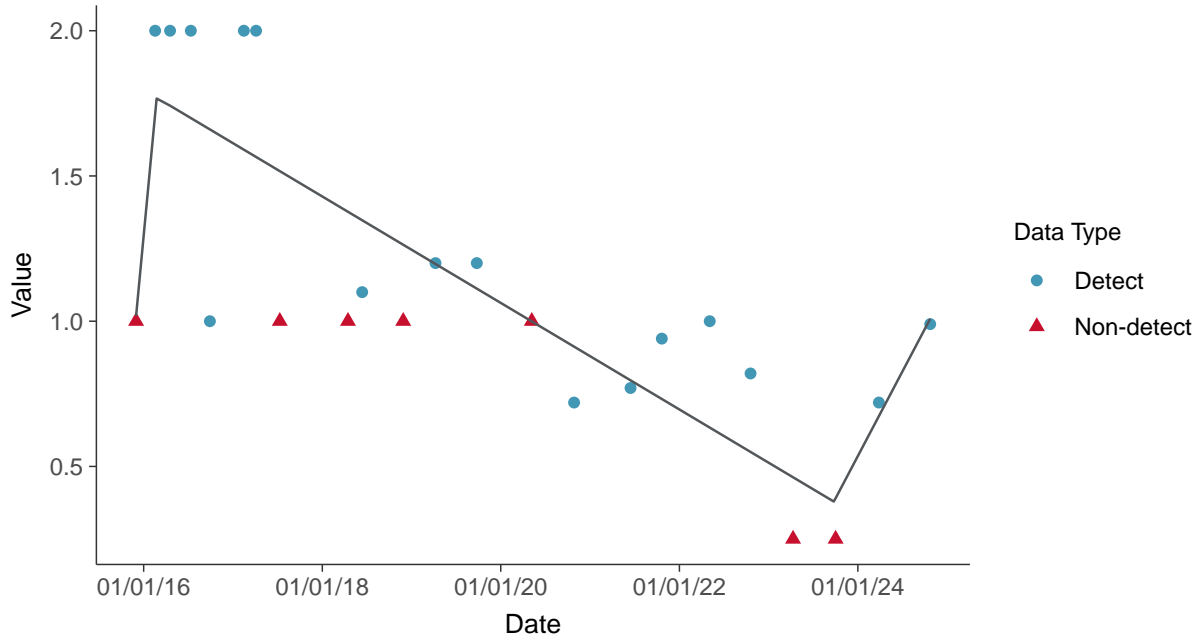
Chromium, MW-15021 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

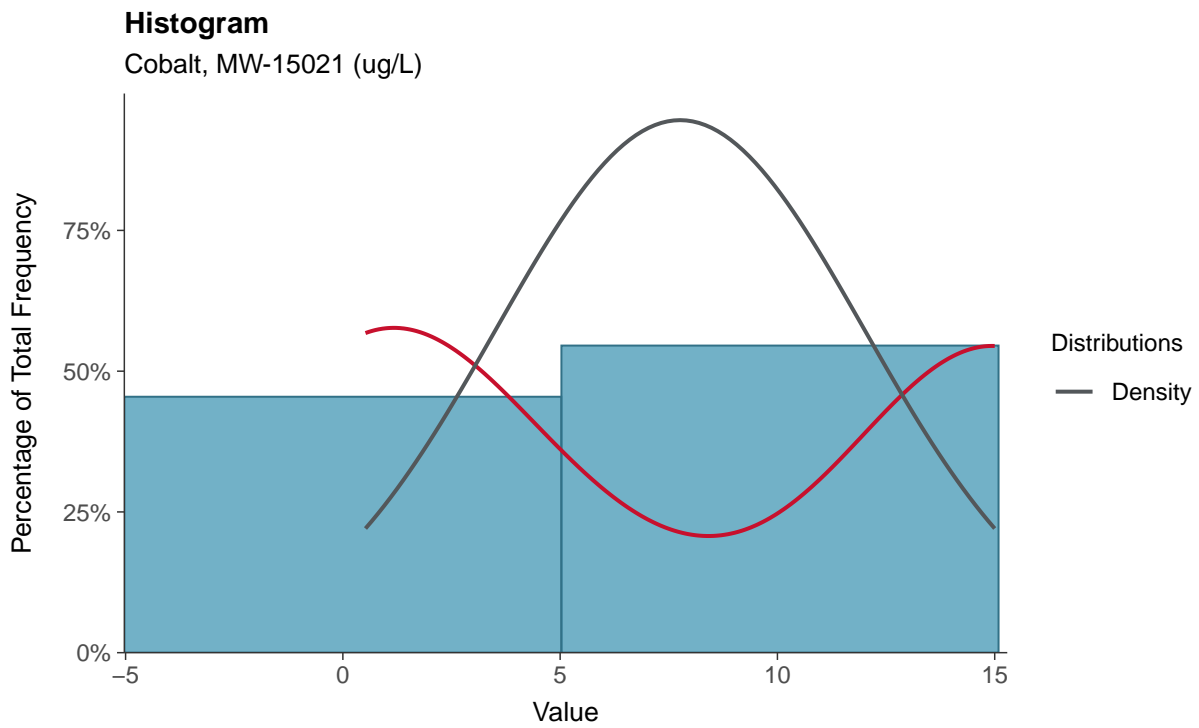
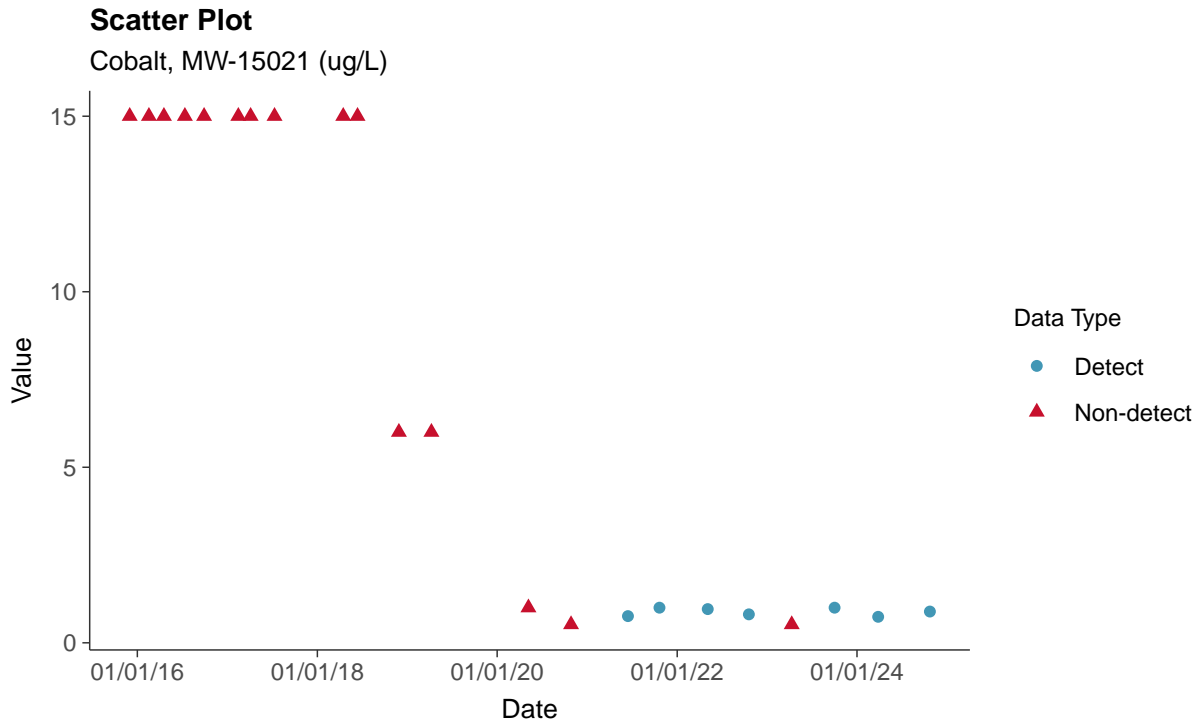
Chromium, MW-15021 (ug/L)





Appendix IV: Cobalt, MW-15021

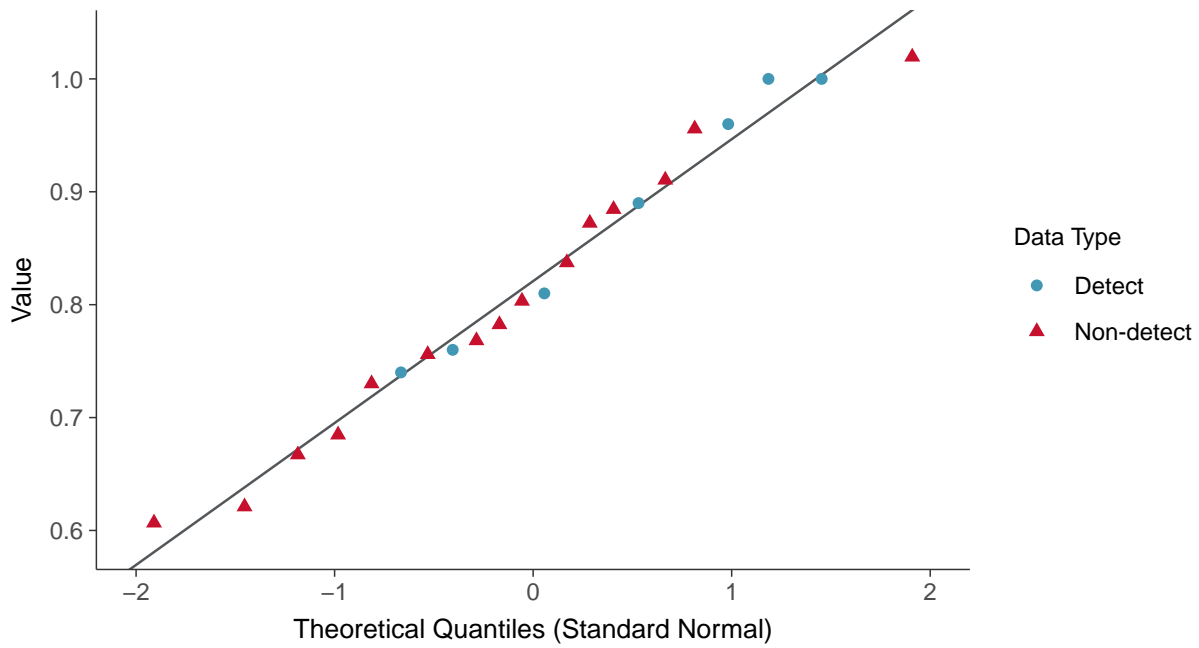
ID: 11_2_110





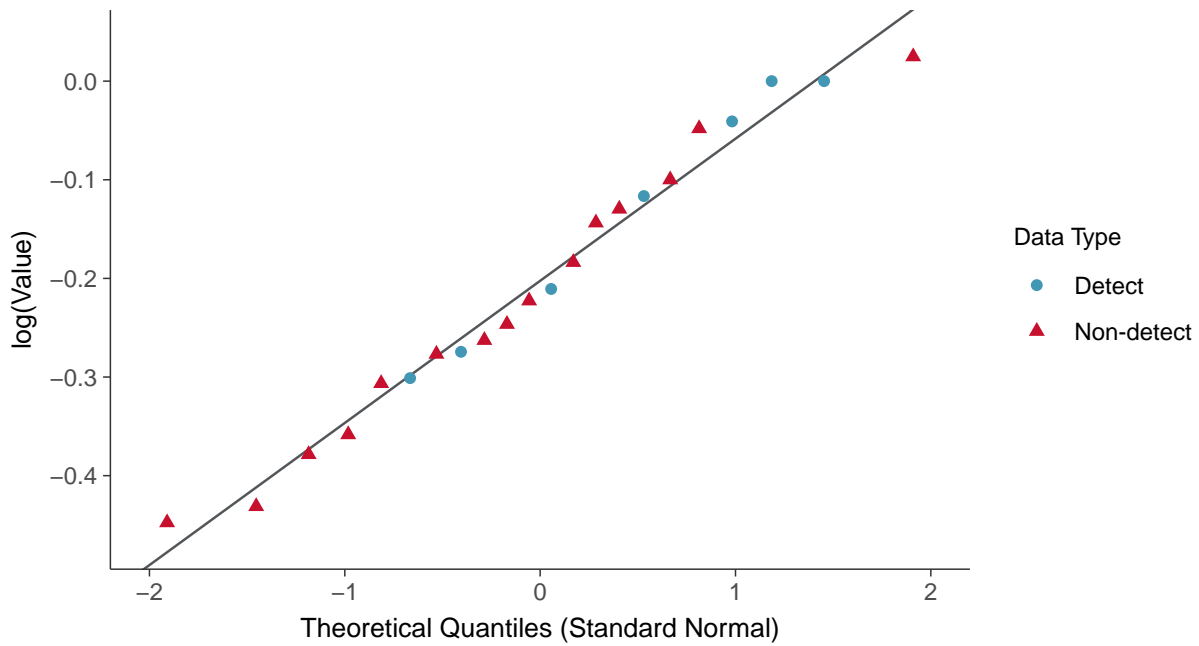
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15021 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

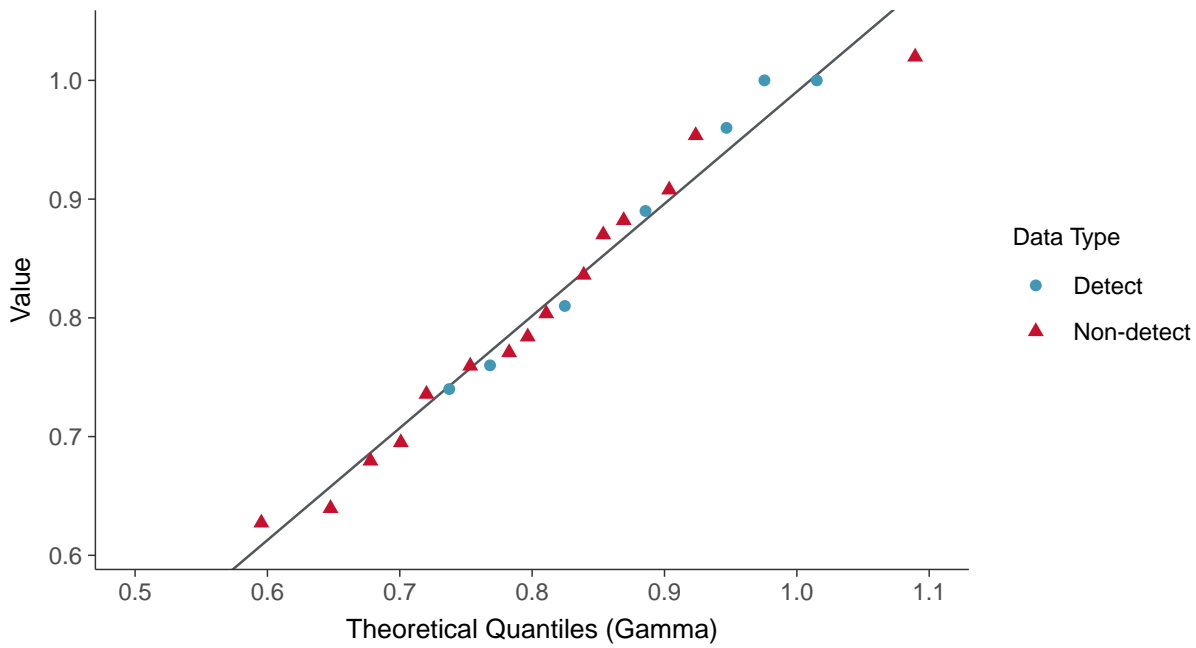
Cobalt, MW-15021 (ug/L)





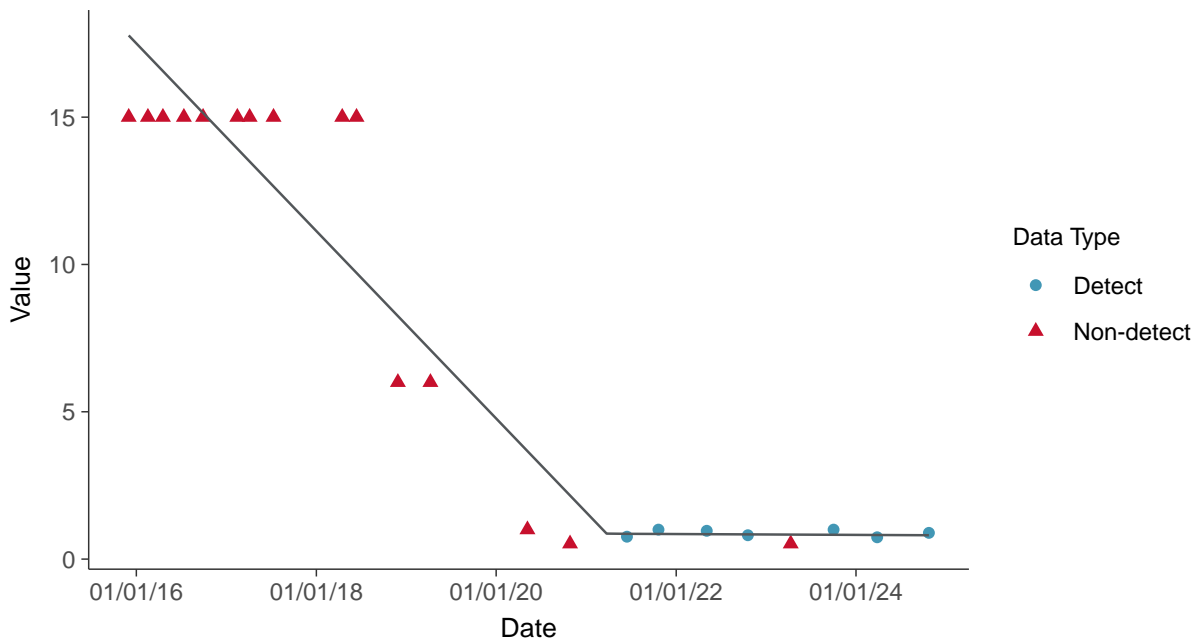
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

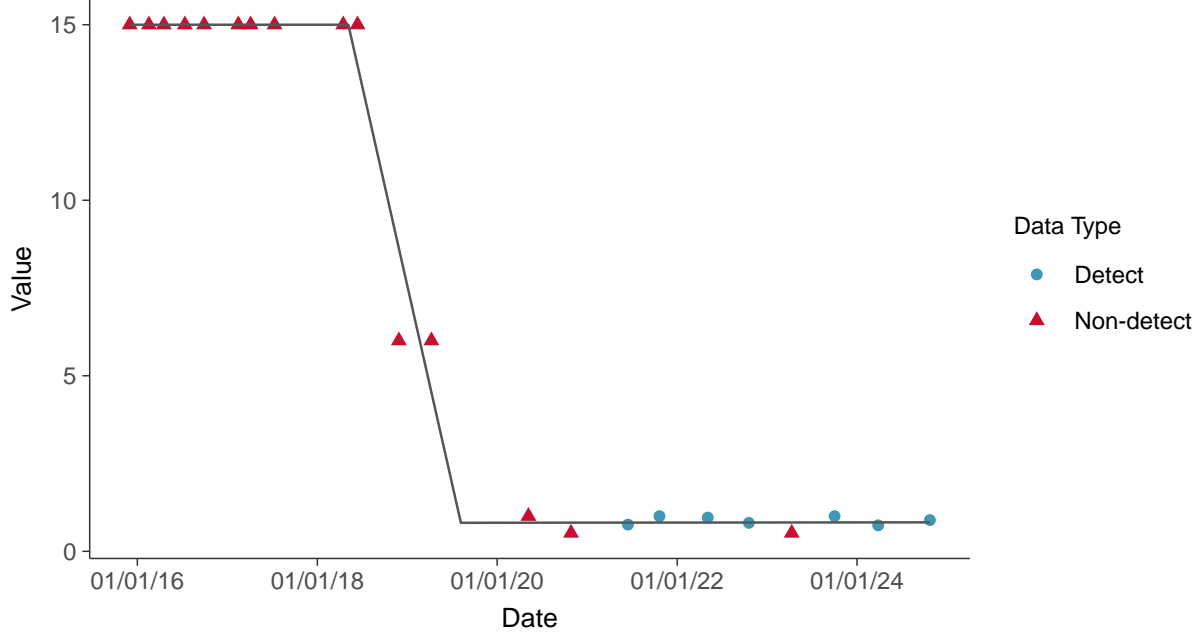
Cobalt, MW-15021 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

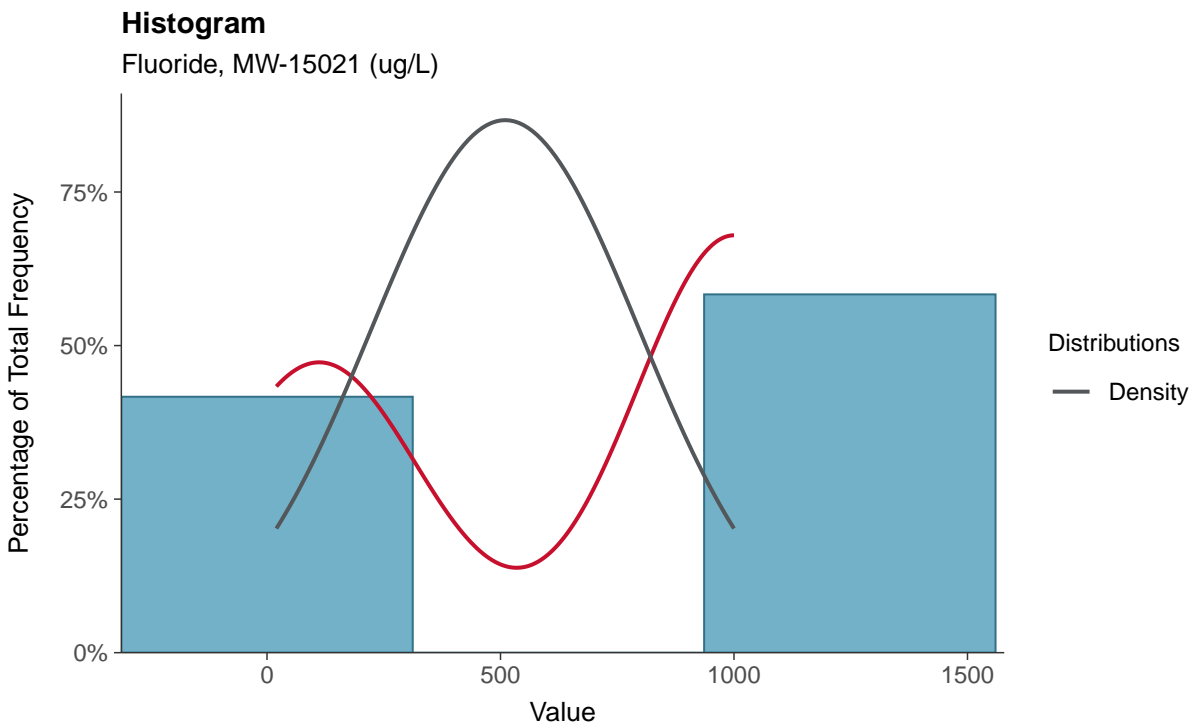
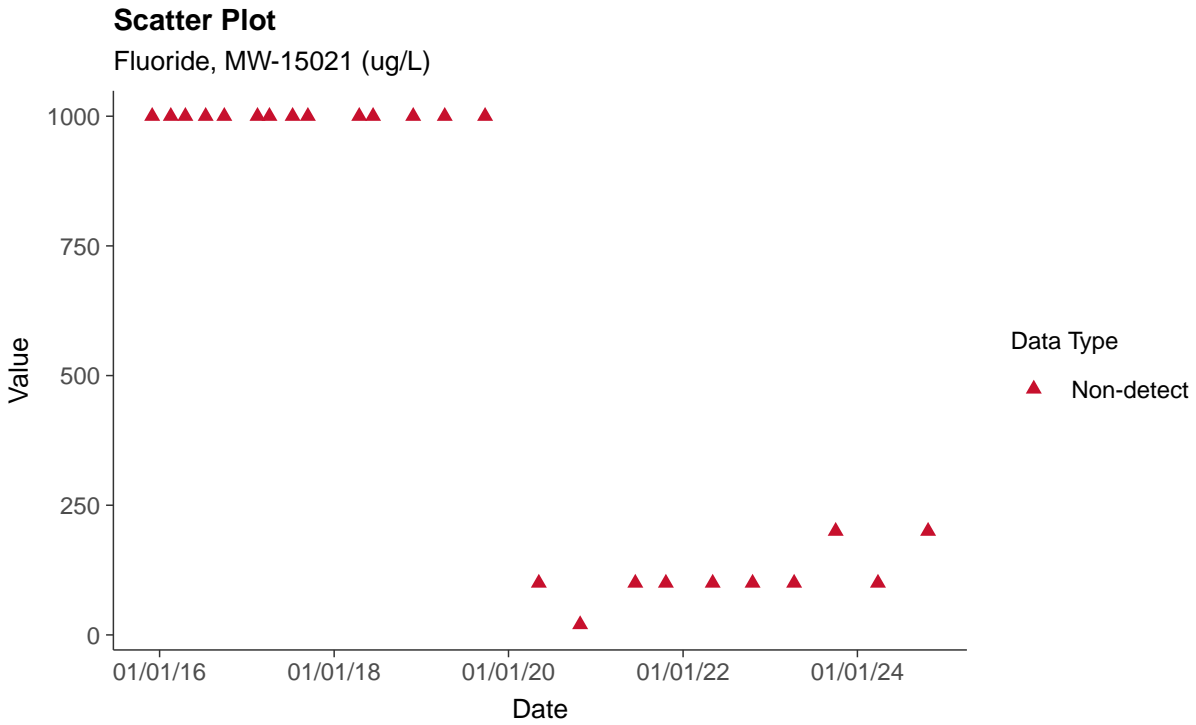
Cobalt, MW-15021 (ug/L)





Appendix IV: Fluoride, MW-15021

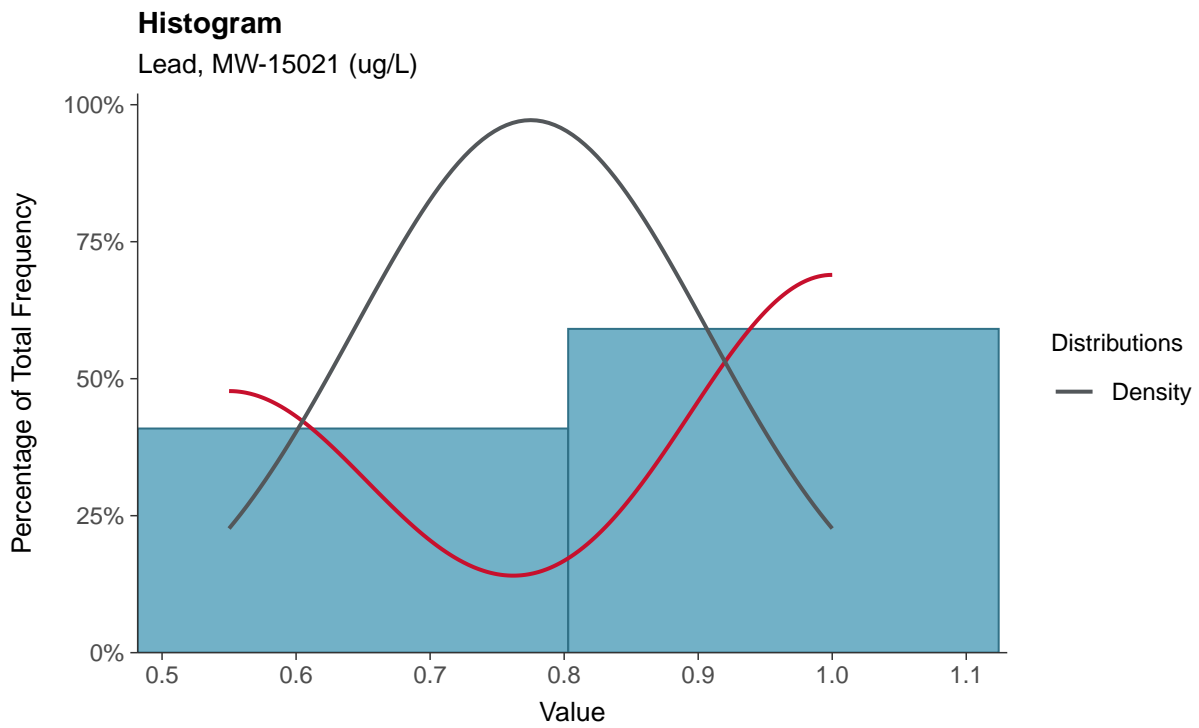
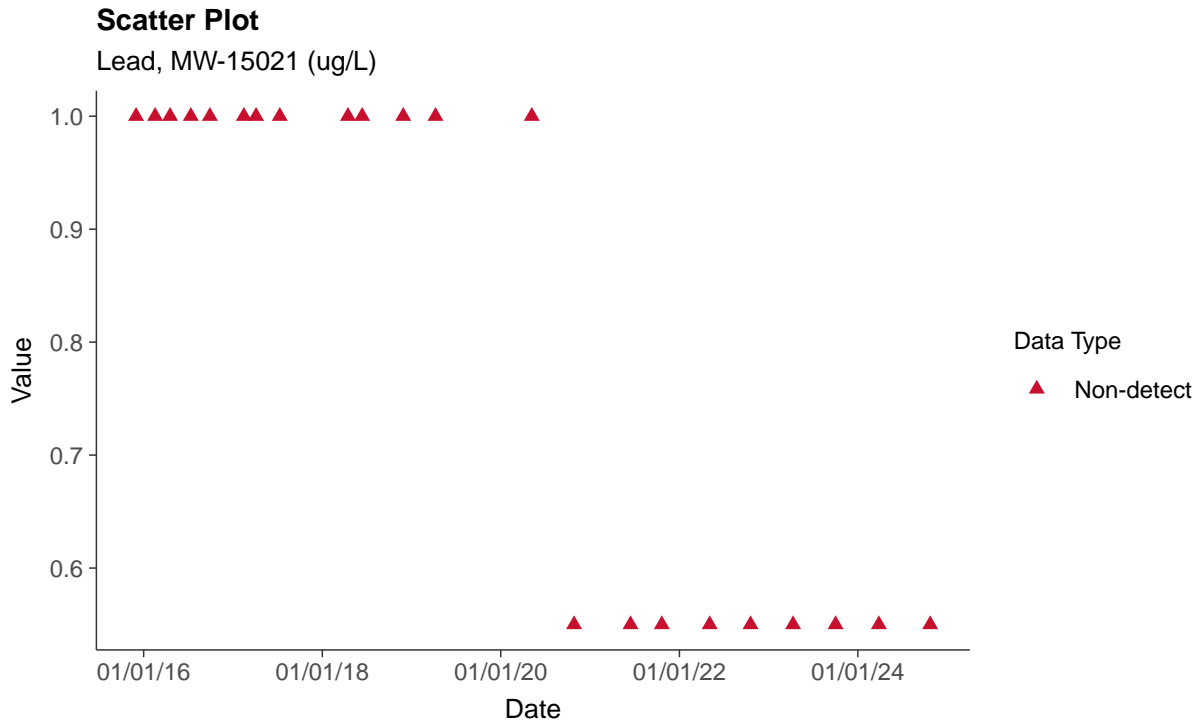
ID: 11_2_114





Appendix IV: Lead, MW-15021

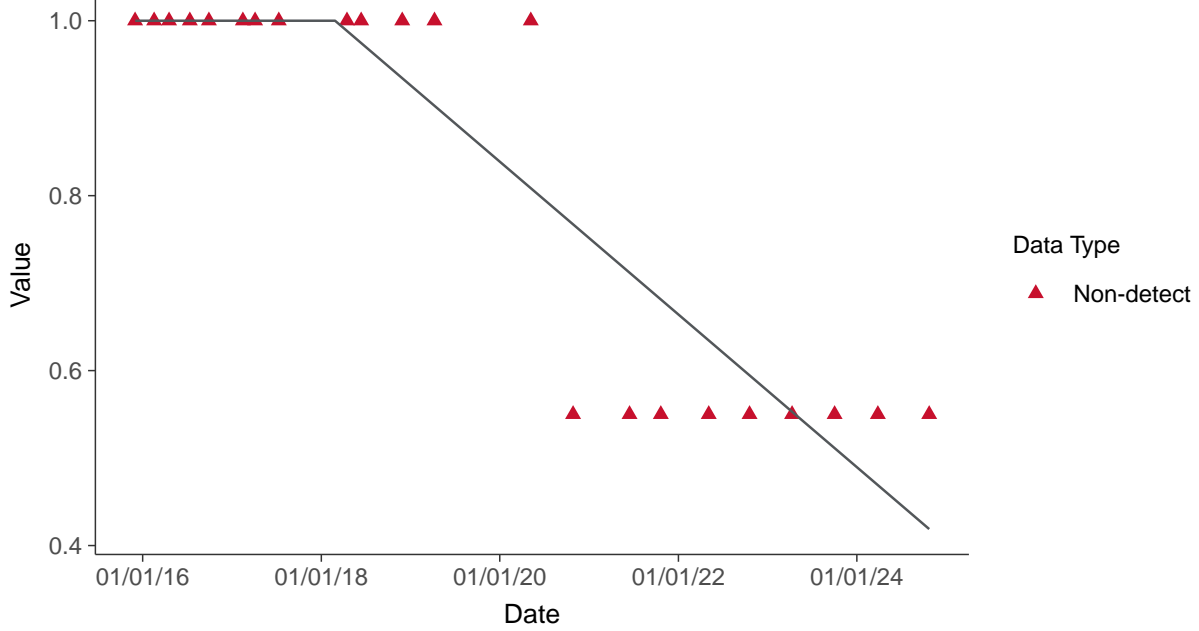
ID: 11_2_116





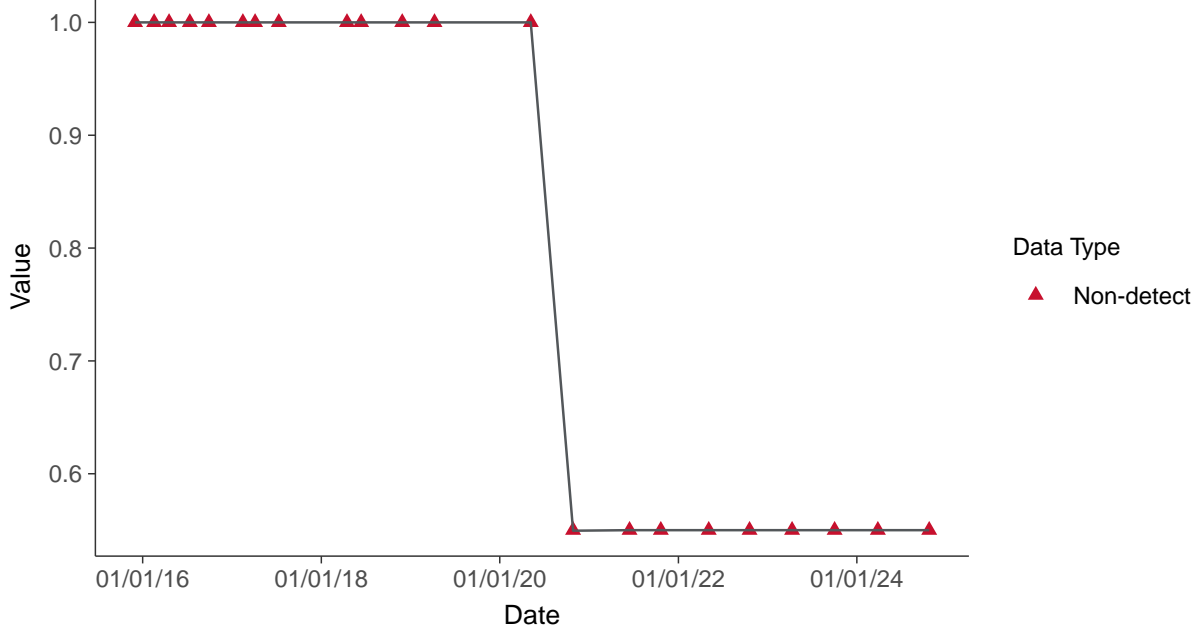
Trend Regression: Piecewise Linear-Linear

Lead, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-15021 (ug/L)



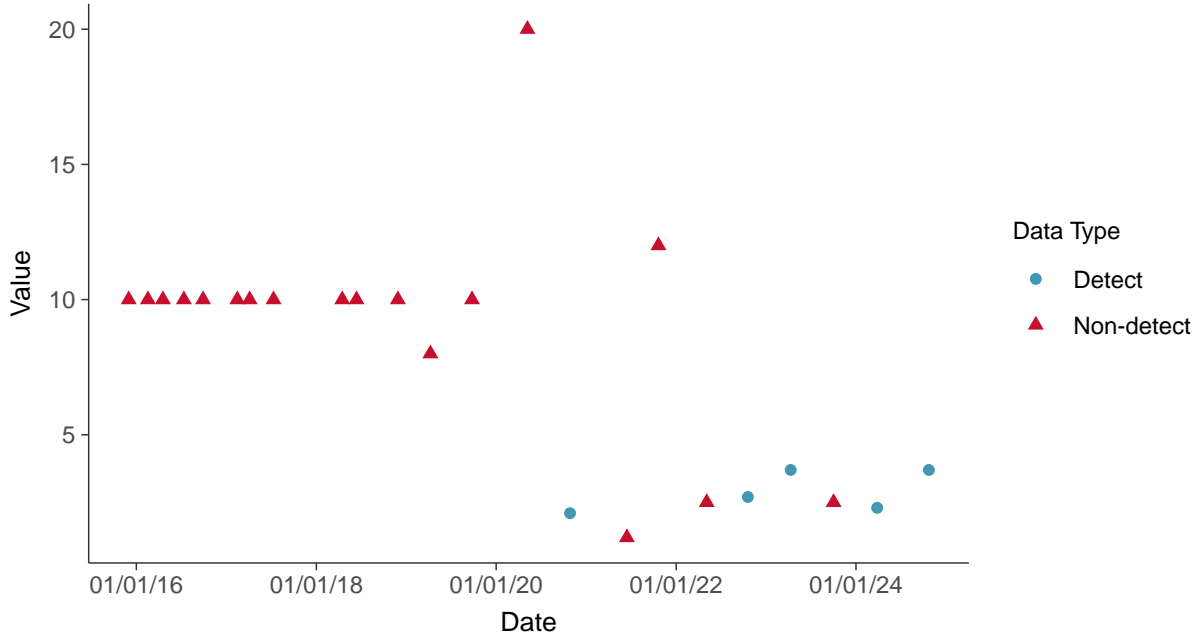


Appendix IV: Lithium, MW-15021

ID: 11_2_117

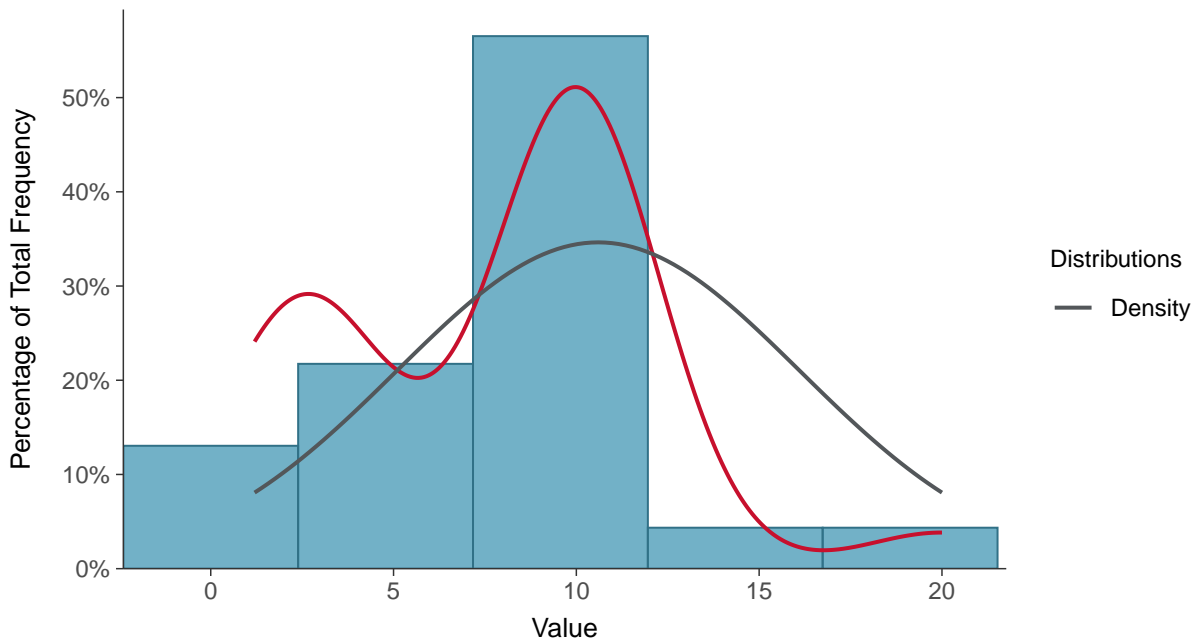
Scatter Plot

Lithium, MW-15021 (ug/L)



Histogram

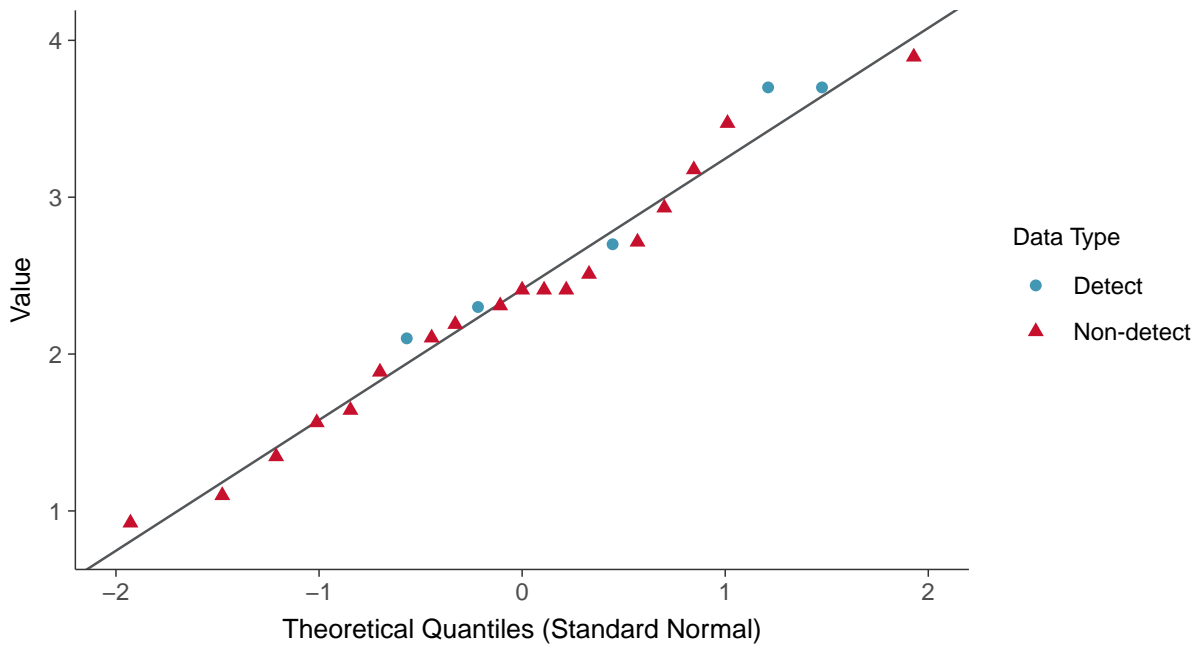
Lithium, MW-15021 (ug/L)





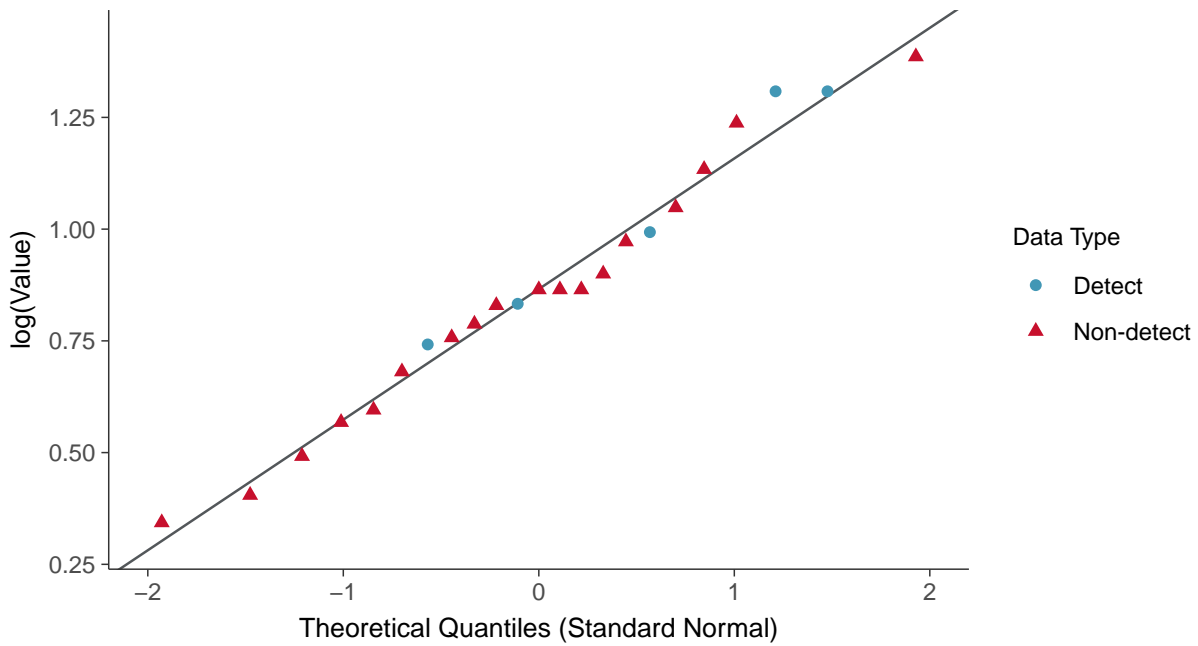
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15021 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

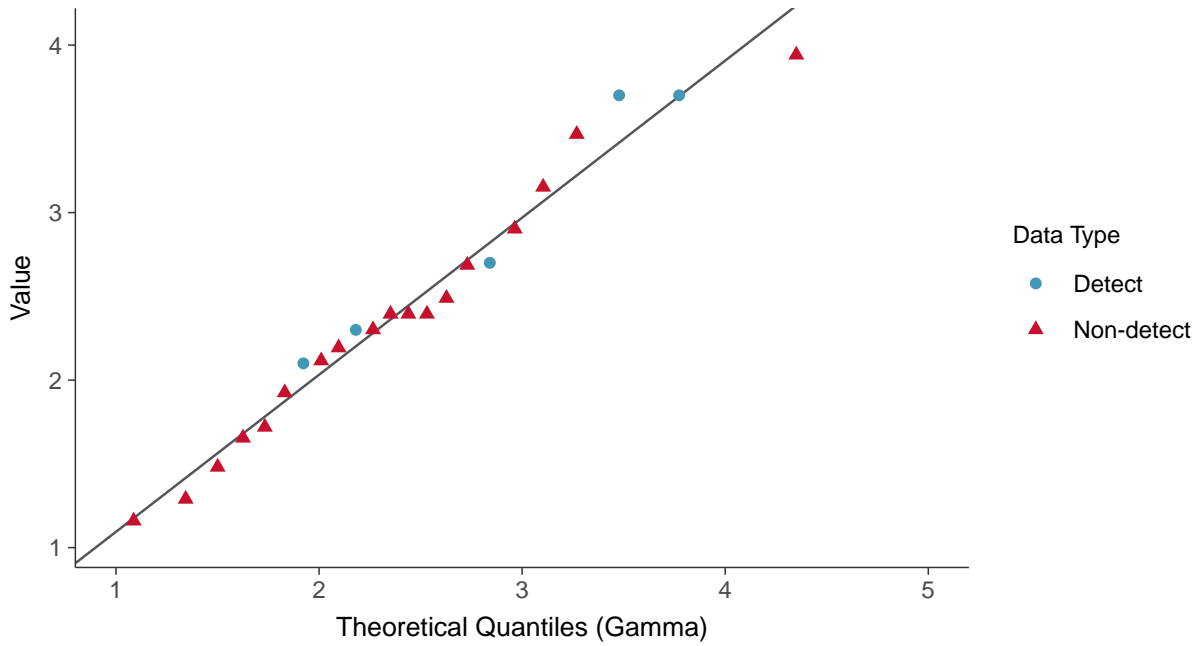
Lithium, MW-15021 (ug/L)





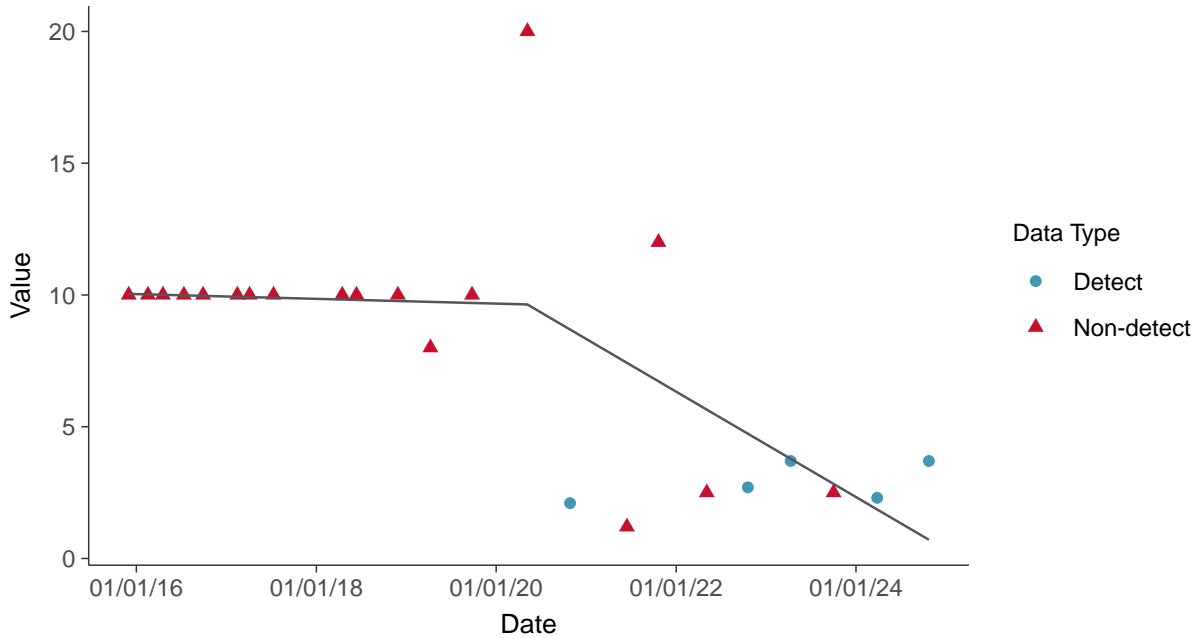
Gamma Q-Q plot using ROS Imputed Estimates

Lithium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

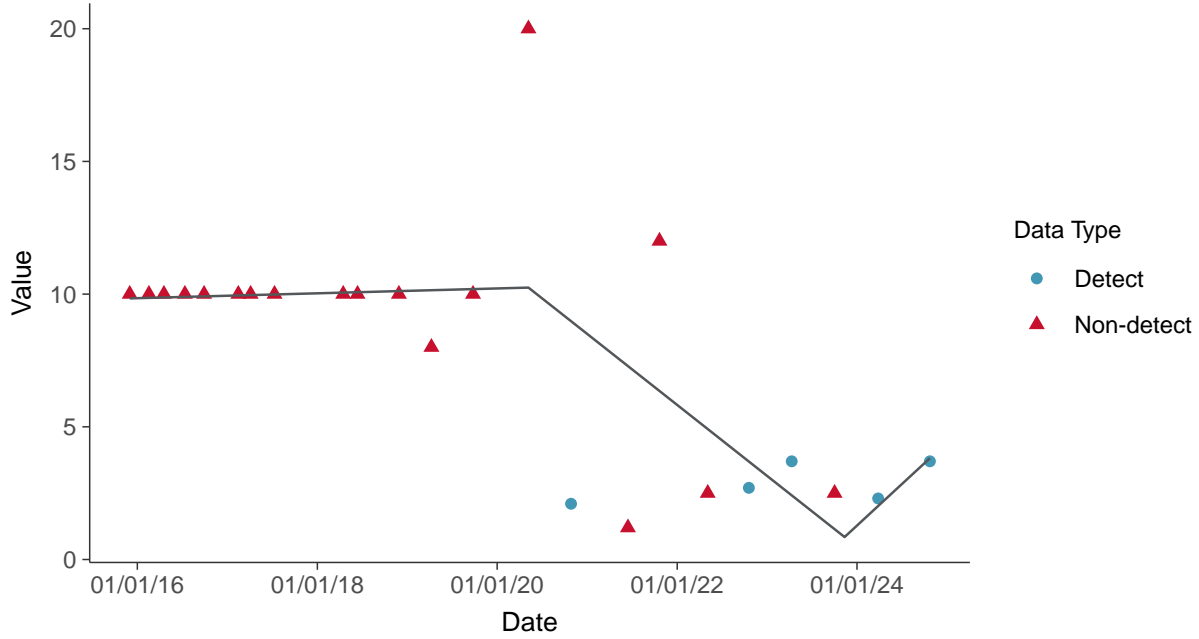
Lithium, MW-15021 (ug/L)





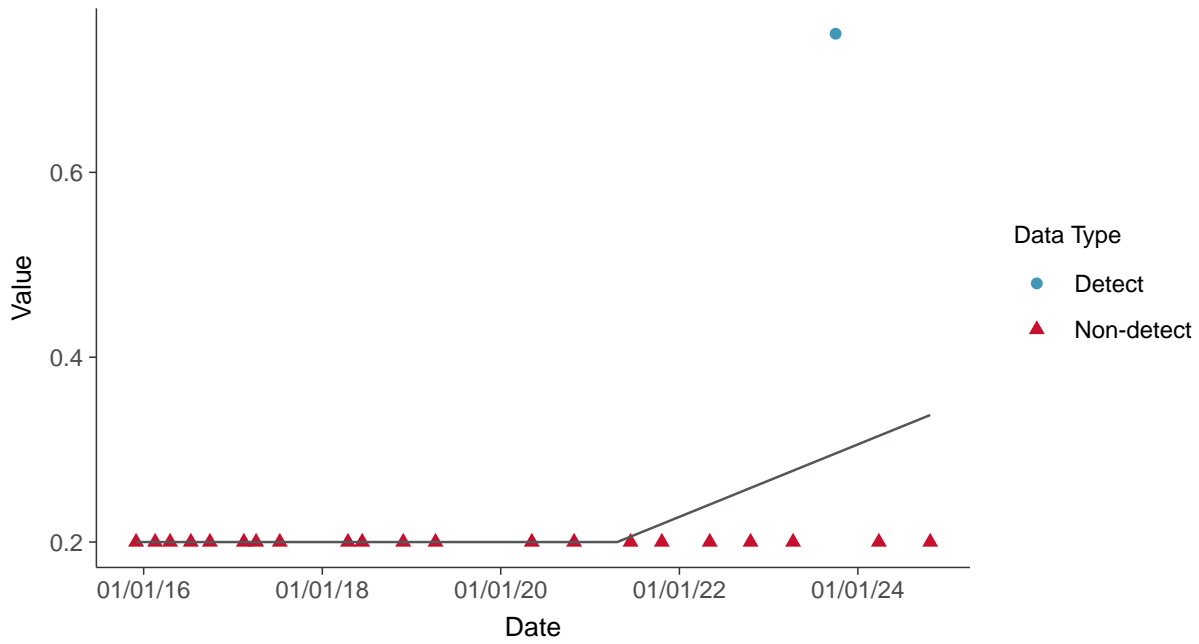
Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-15021 (ug/L)



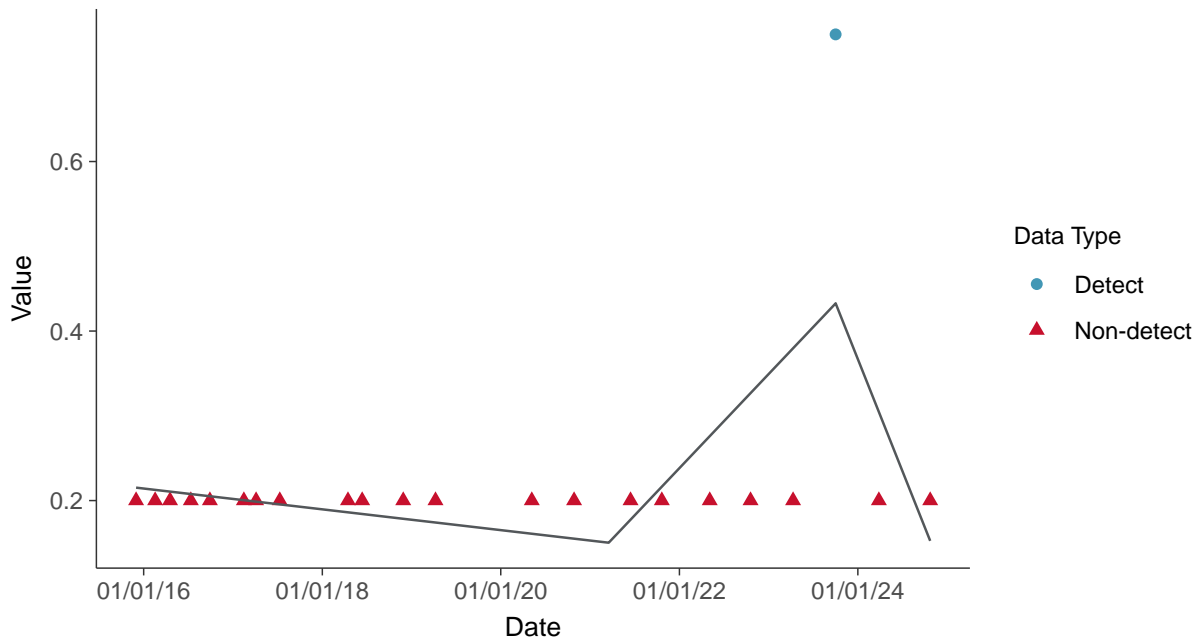
Trend Regression: Piecewise Linear-Linear

Mercury, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

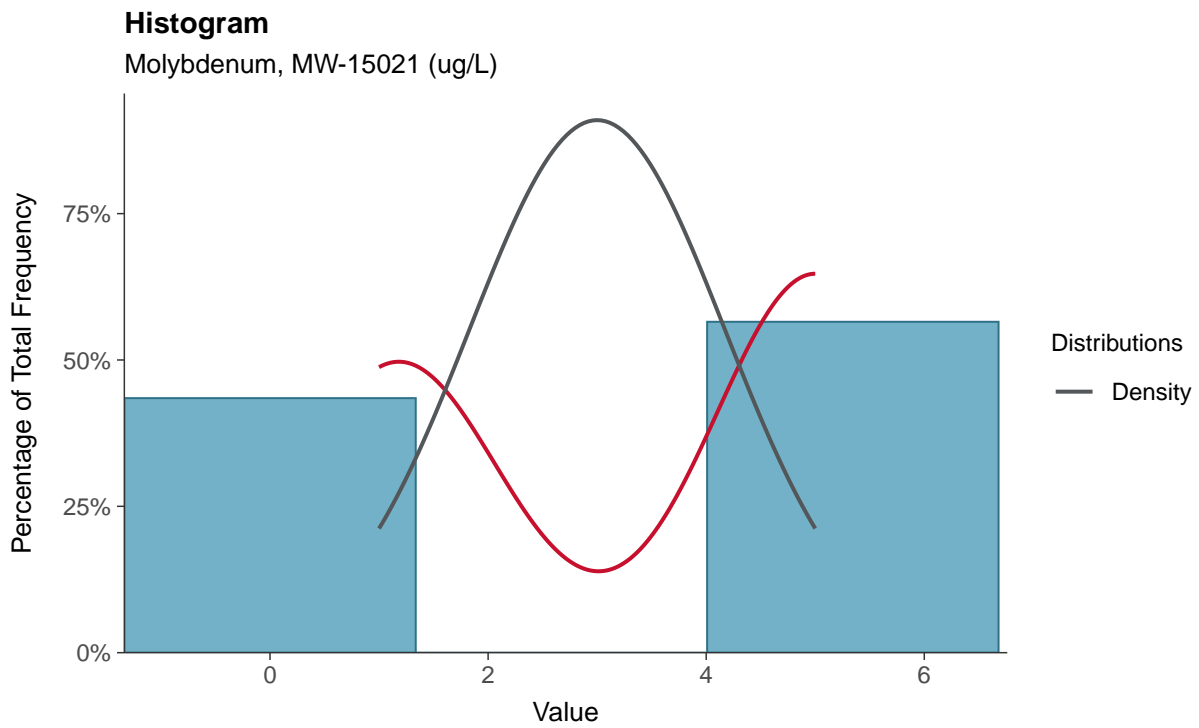
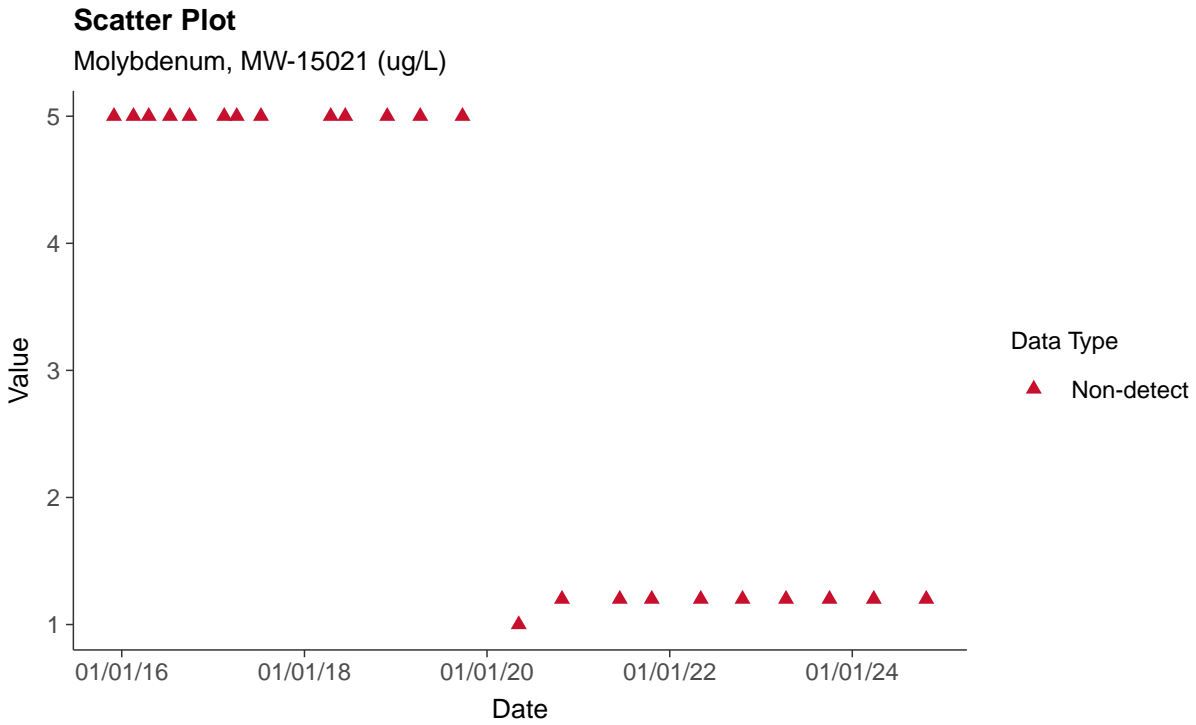
Mercury, MW-15021 (ug/L)





Appendix IV: Molybdenum, MW-15021

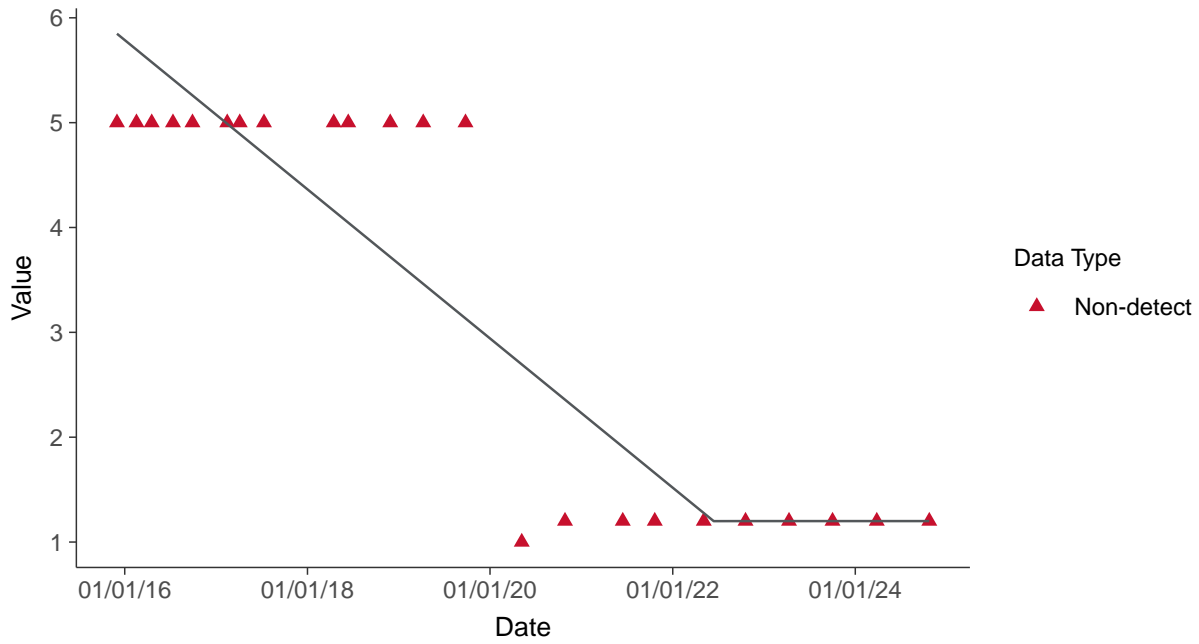
ID: 11_2_119





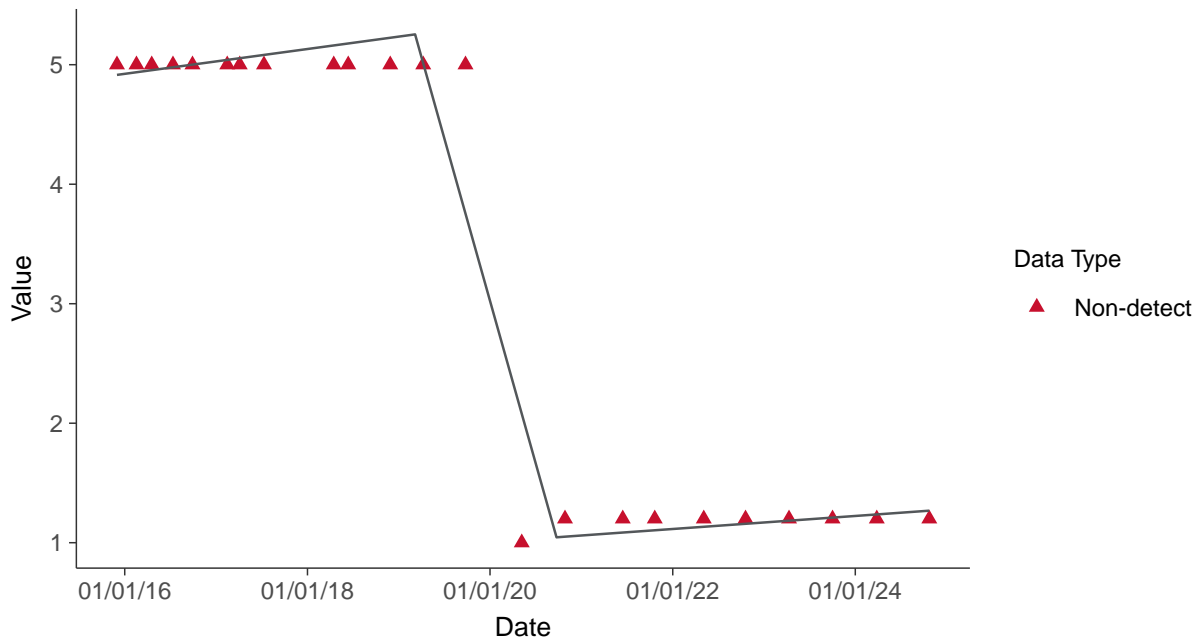
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15021 (ug/L)



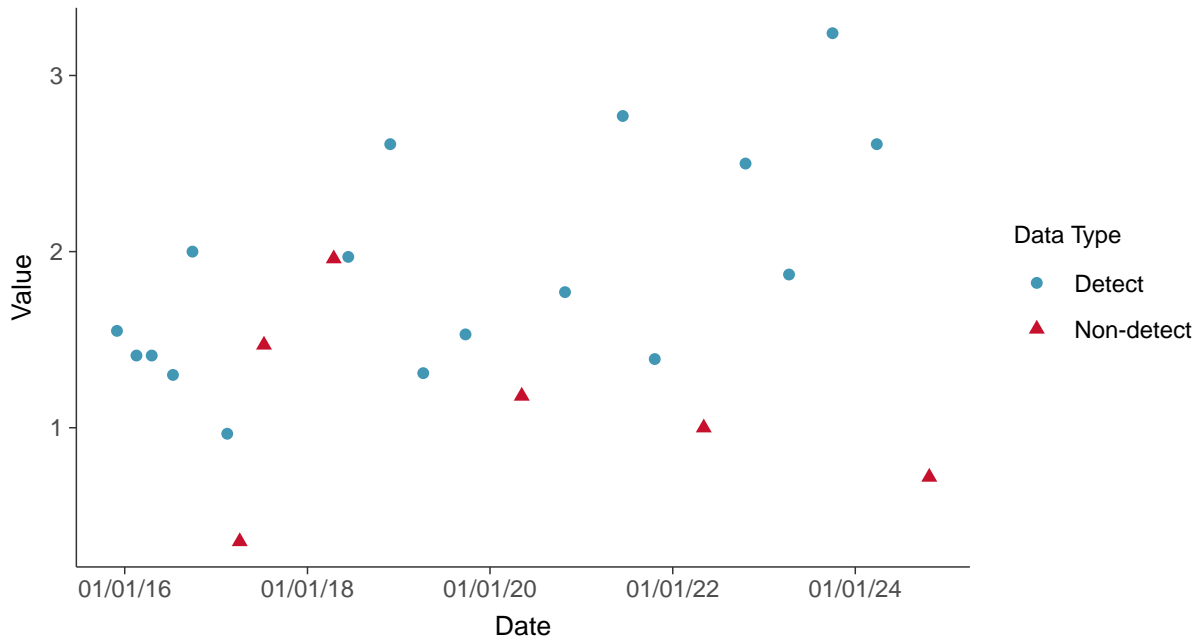


Appendix IV: Radium-226+228, MW-15021

ID: 11_2_125

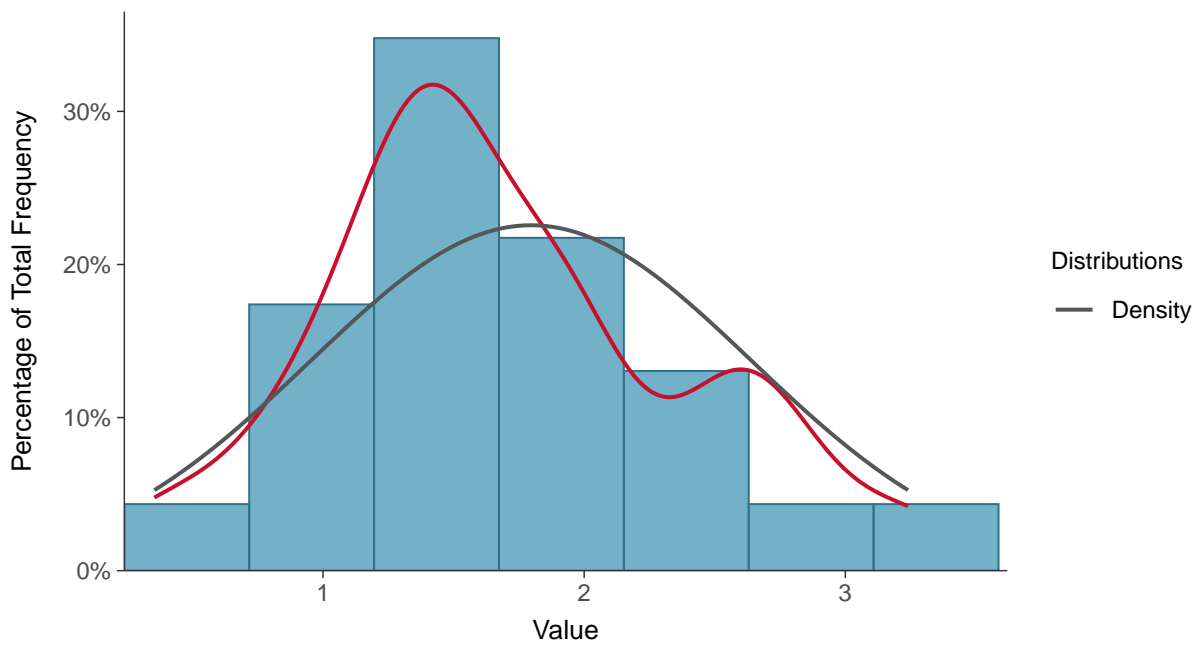
Scatter Plot

Radium-226+228, MW-15021 (pCi/L)



Histogram

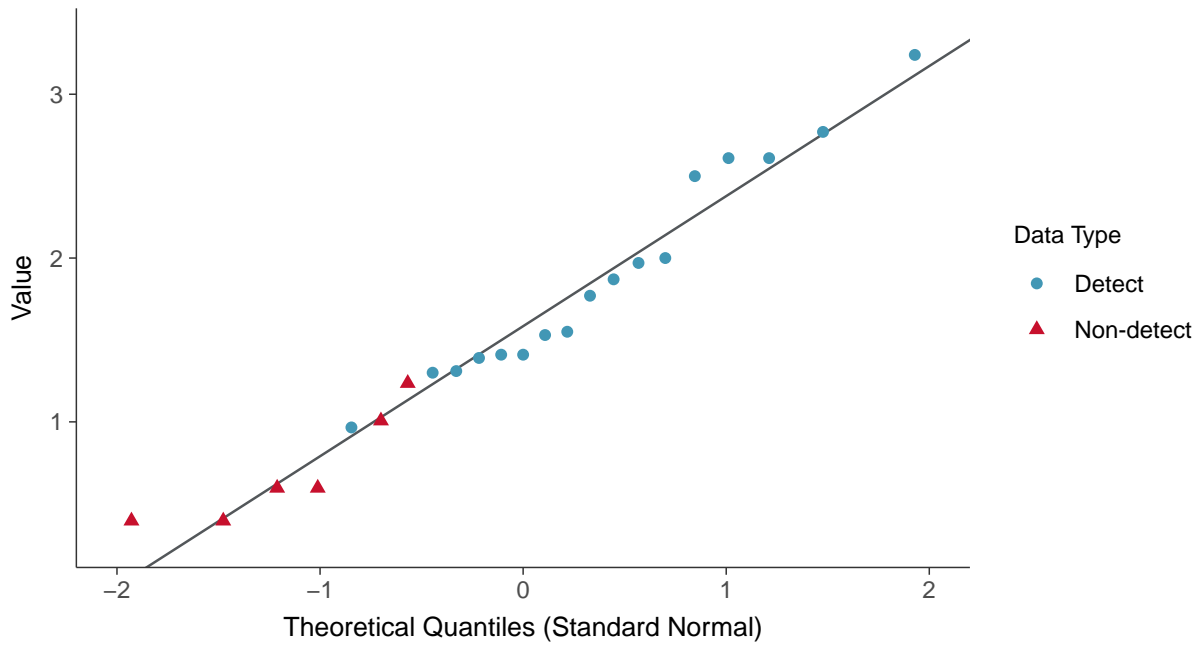
Radium-226+228, MW-15021 (pCi/L)





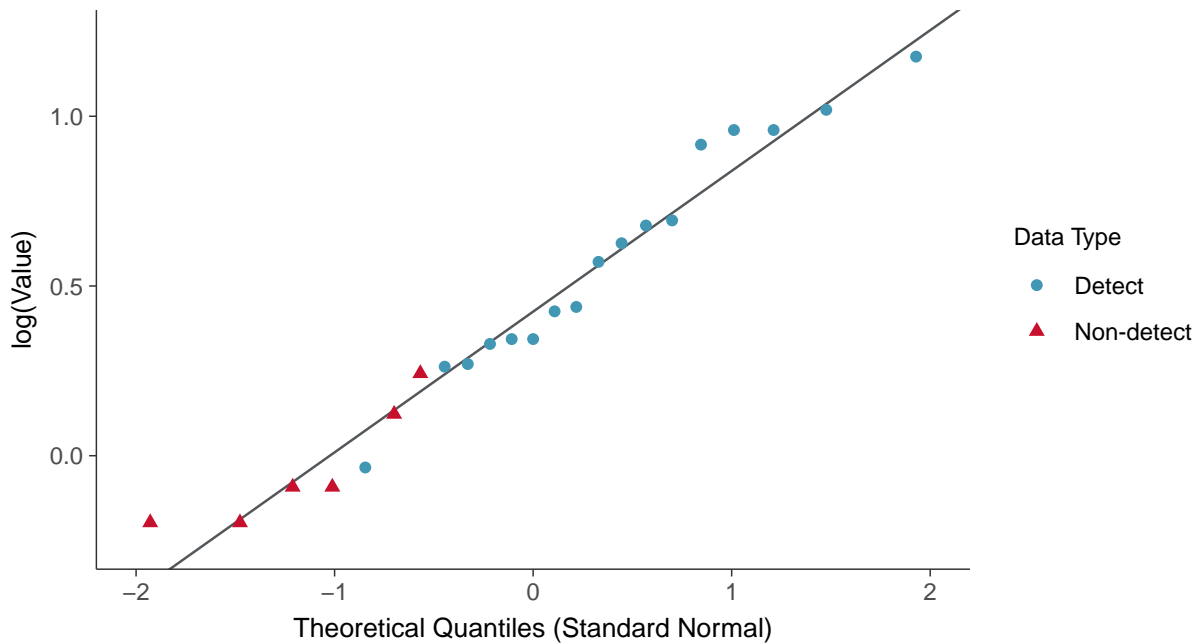
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15021 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

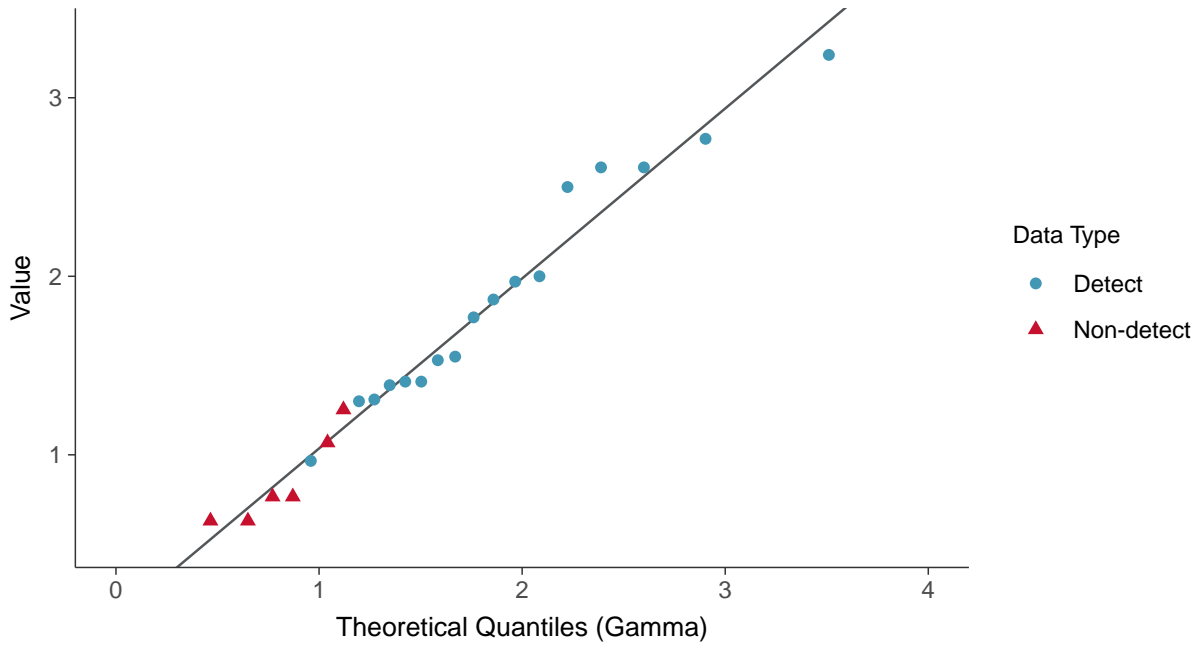
Radium-226+228, MW-15021 (pCi/L)





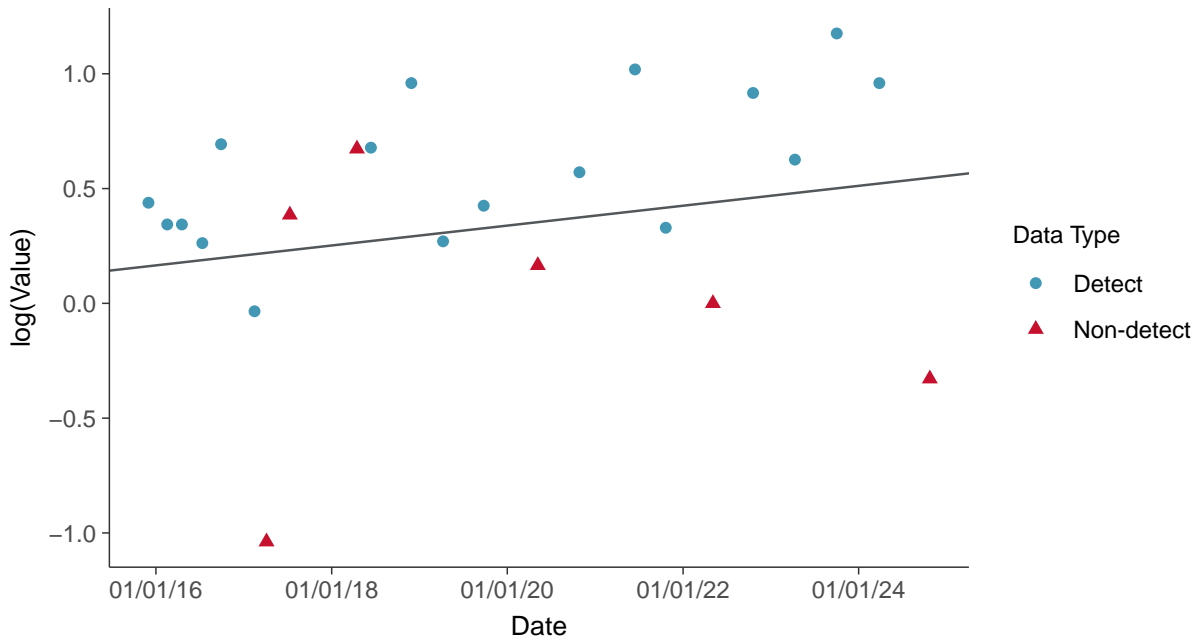
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15021 (pCi/L)



Trend Regression: Lognormal MLE

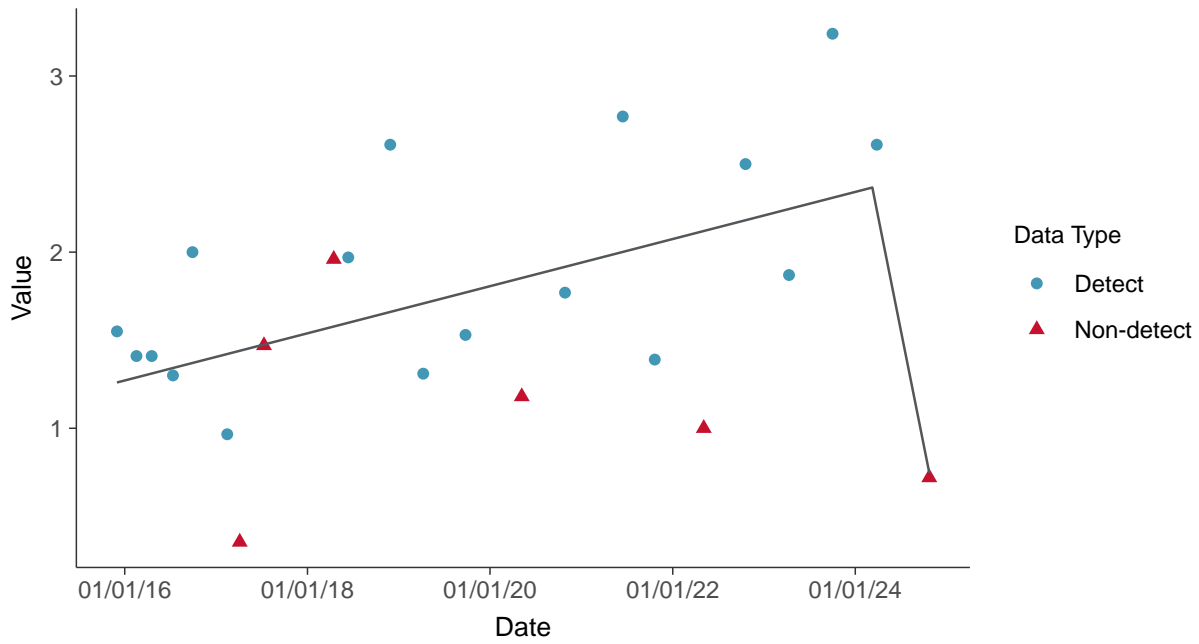
Radium-226+228, MW-15021 (pCi/L)





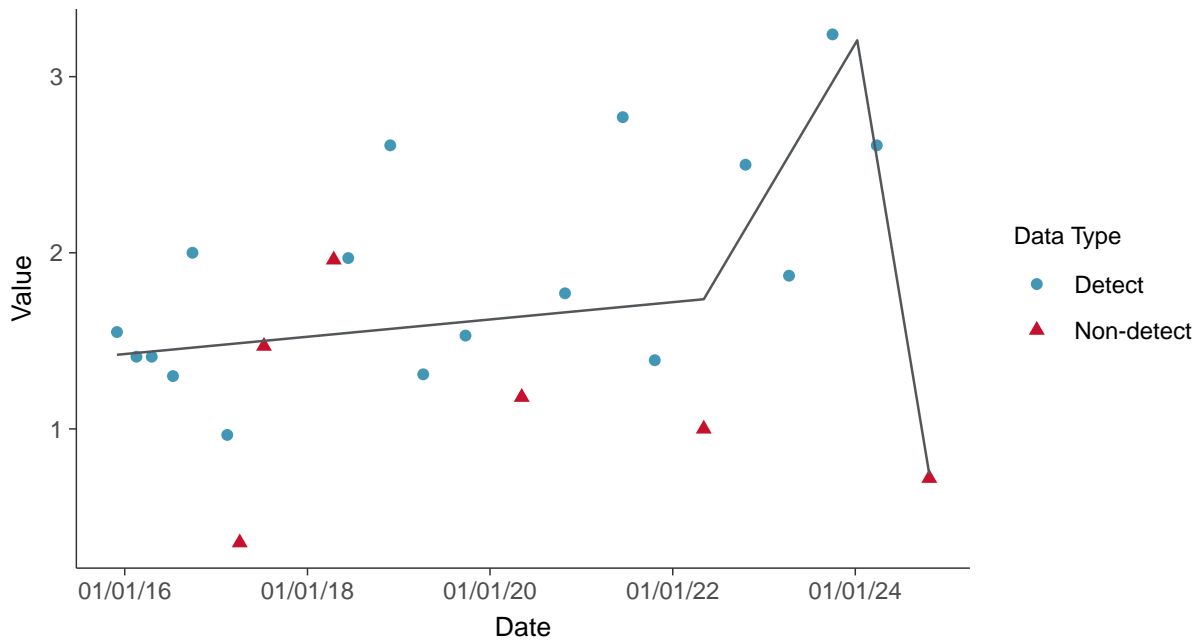
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15021 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

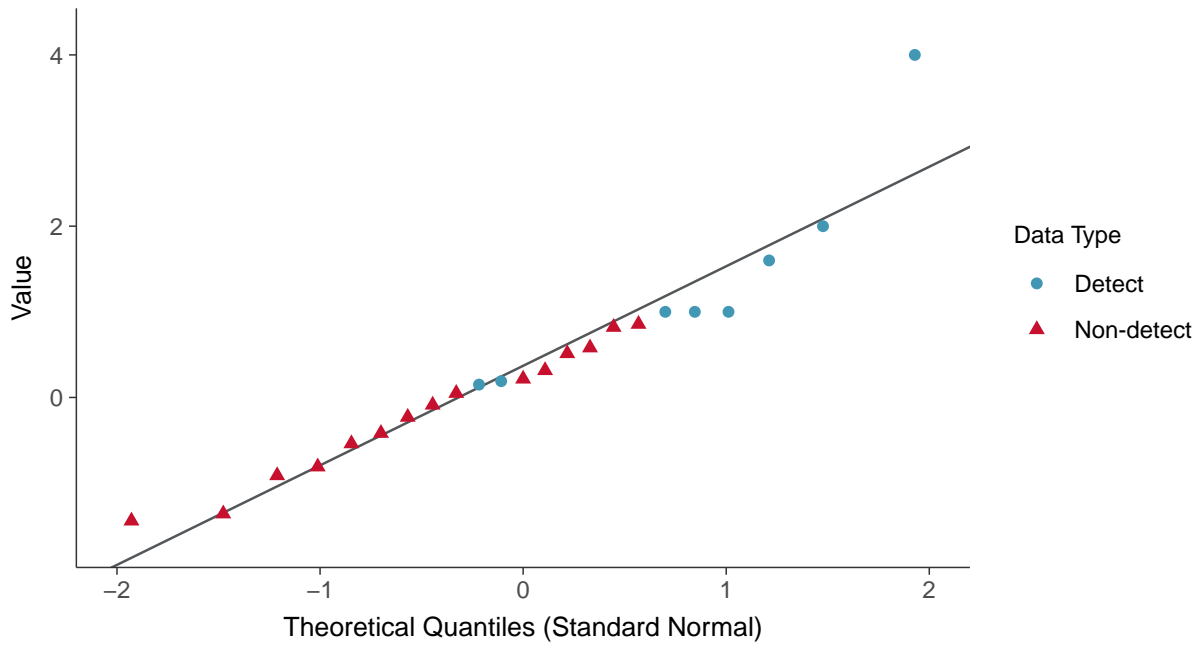
Radium-226+228, MW-15021 (pCi/L)





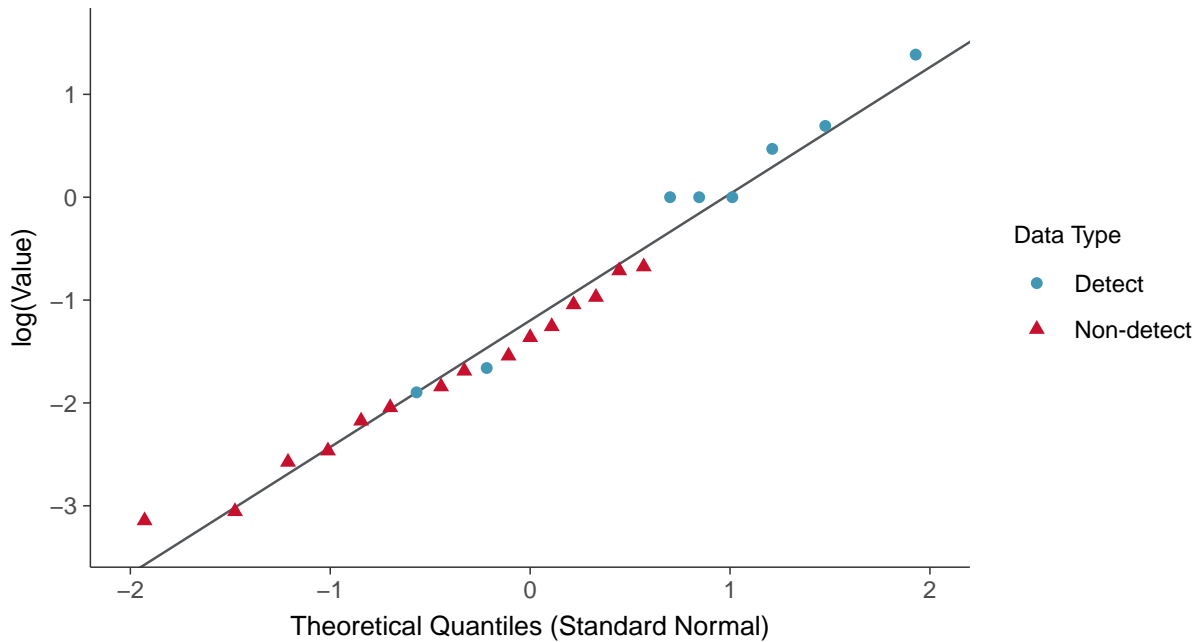
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15021 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

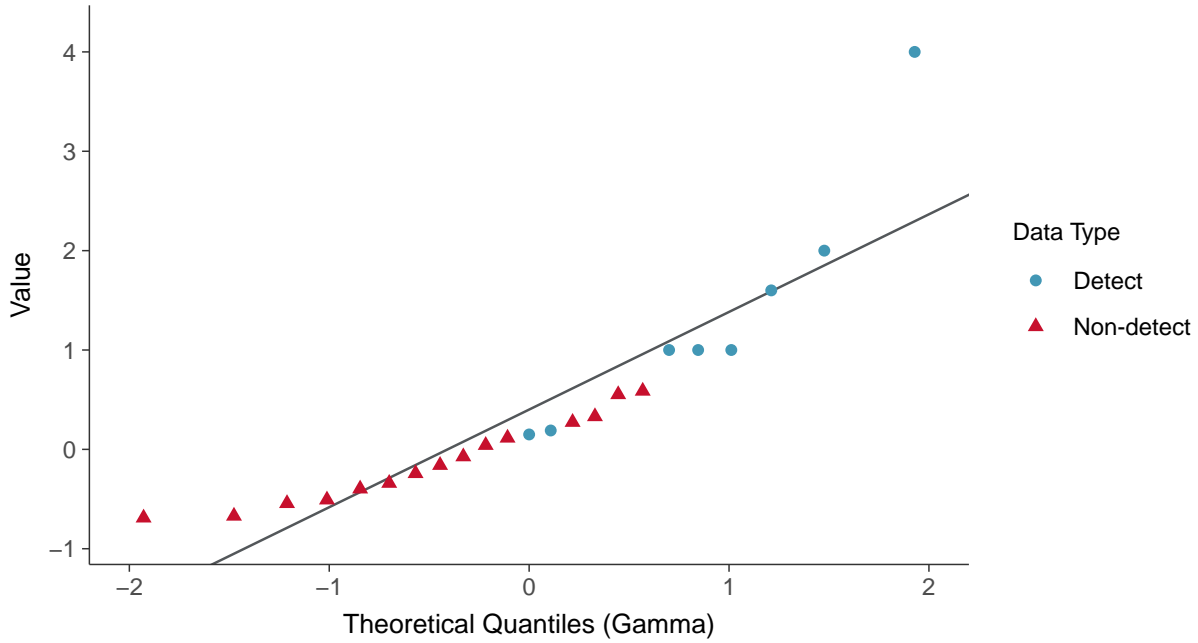
Selenium, MW-15021 (ug/L)





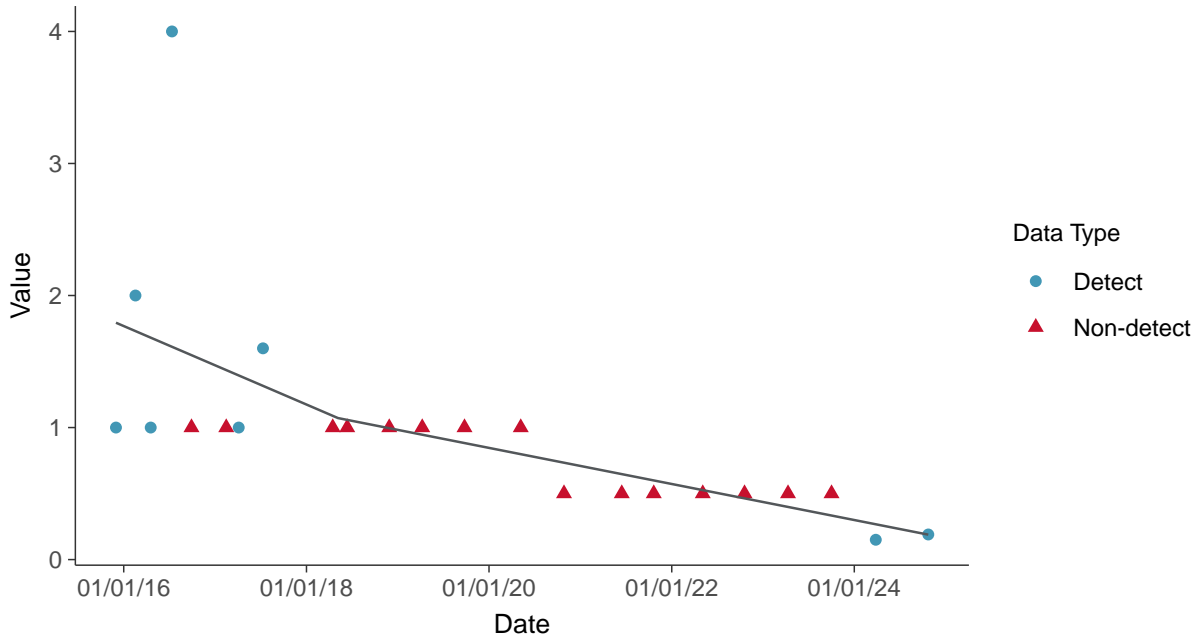
Gamma Q-Q plot using ROS Imputed Estimates

Selenium, MW-15021 (ug/L)



Trend Regression: Piecewise Linear-Linear

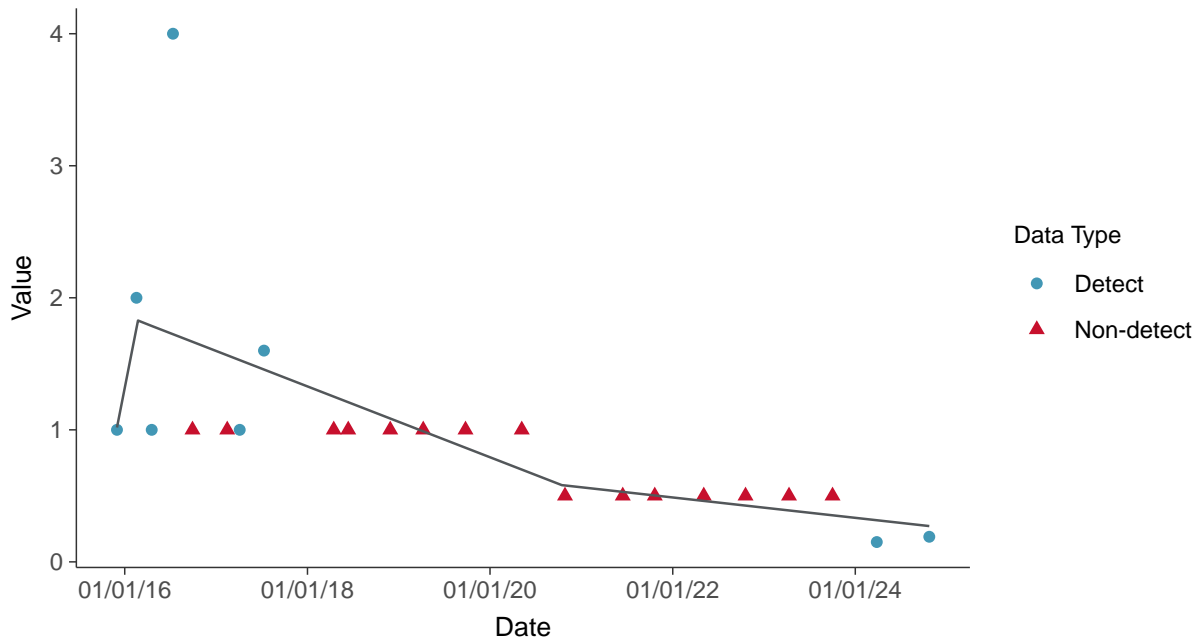
Selenium, MW-15021 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Selenium, MW-15021 (ug/L)



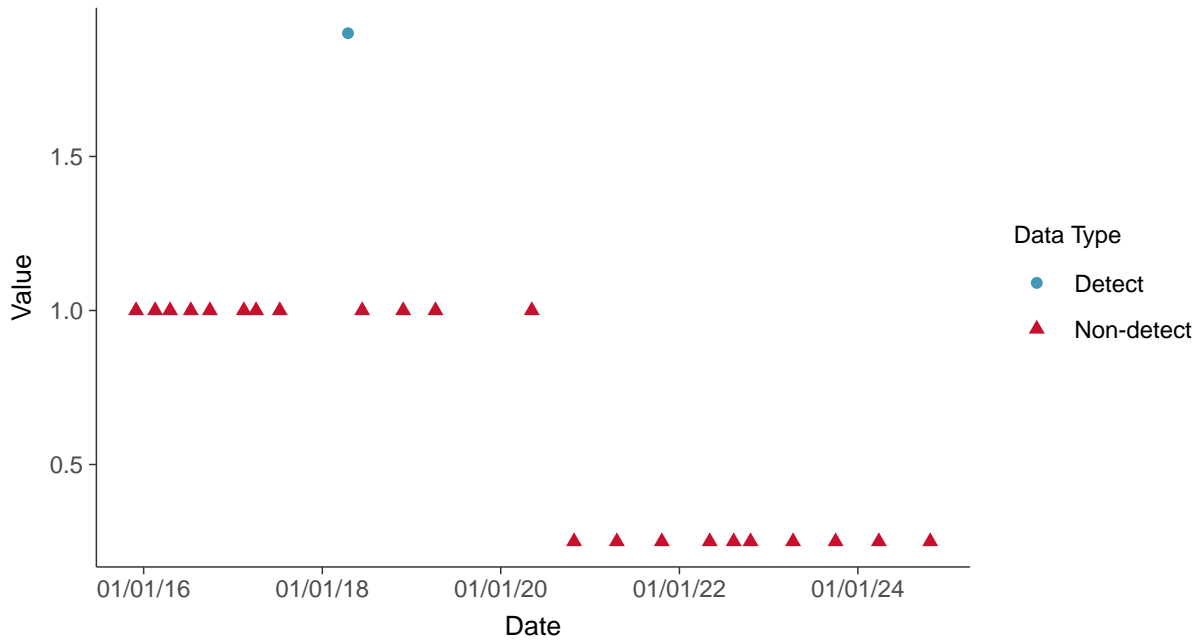


Appendix IV: Antimony, MW-15022

ID: 12_2_101

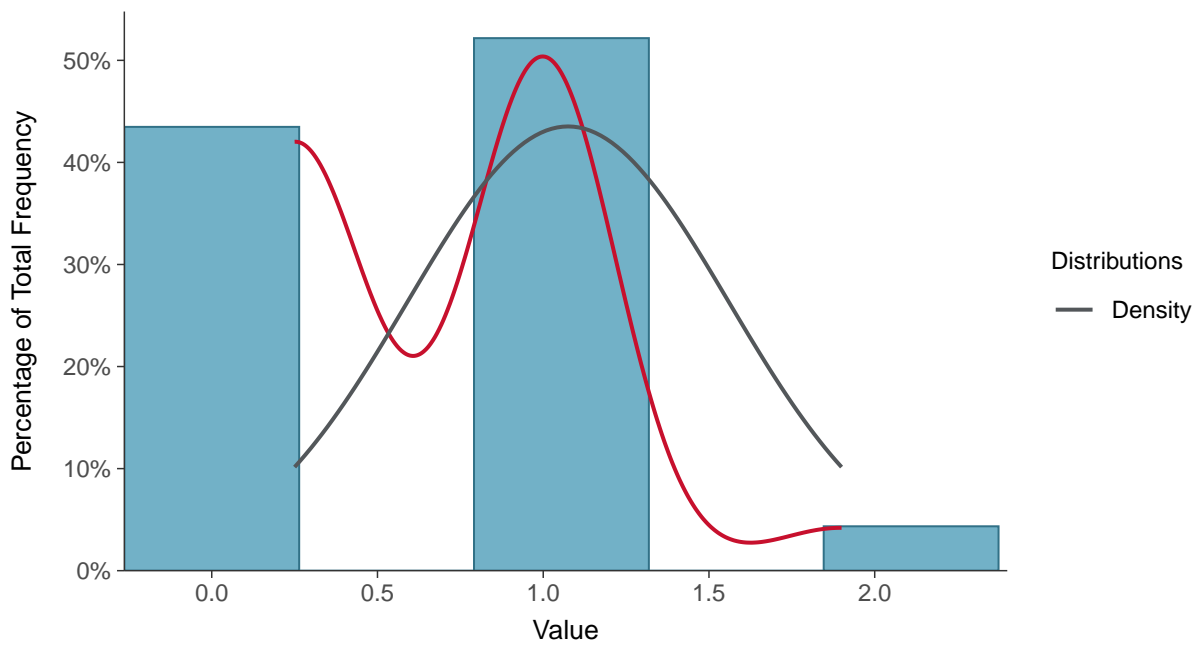
Scatter Plot

Antimony, MW-15022 (ug/L)



Histogram

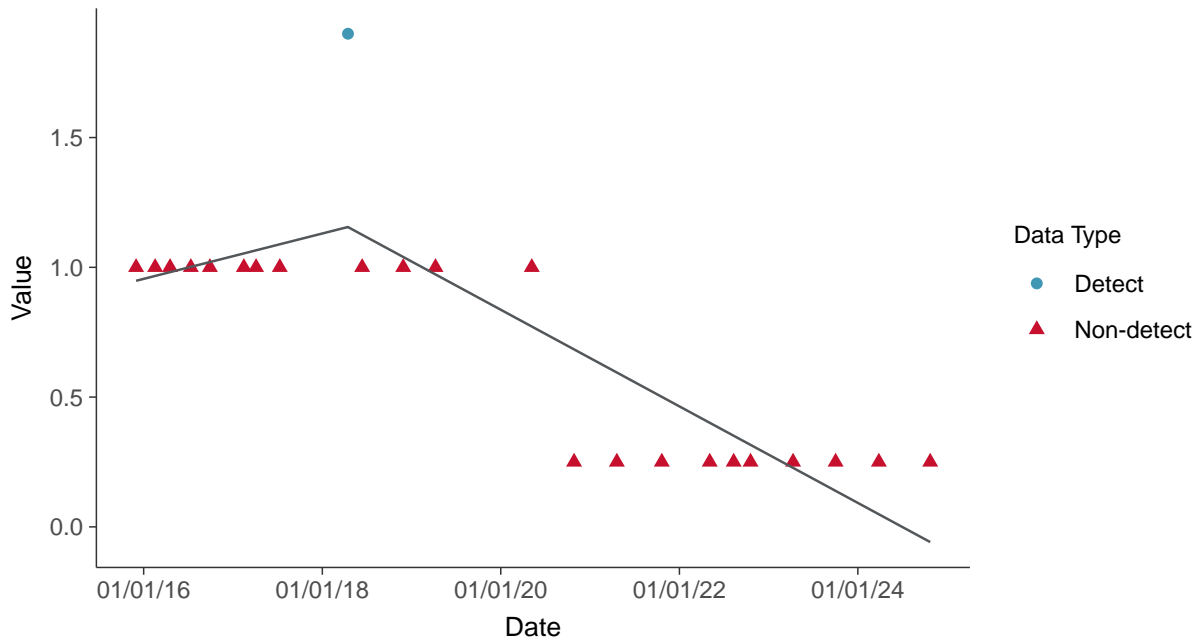
Antimony, MW-15022 (ug/L)





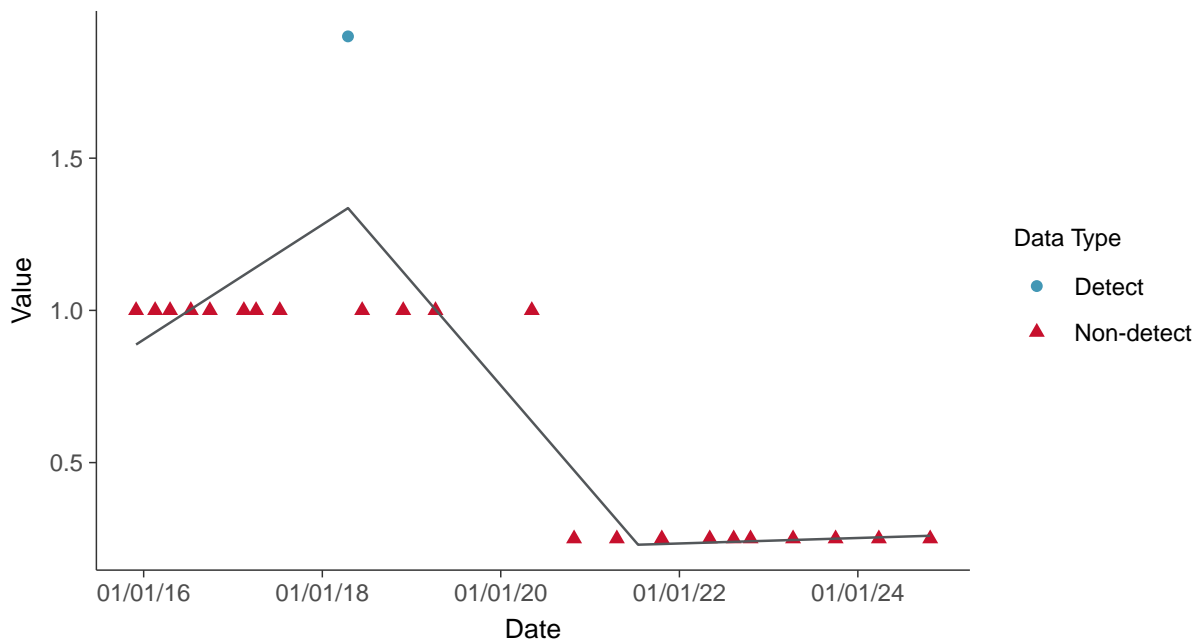
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

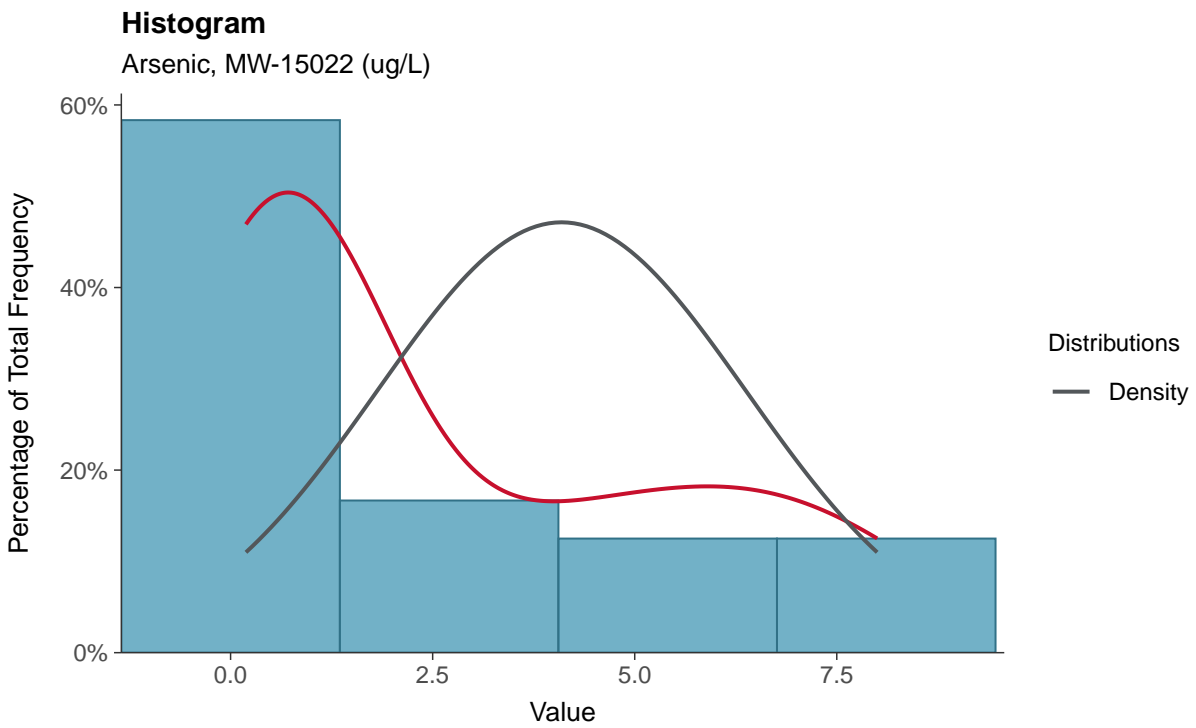
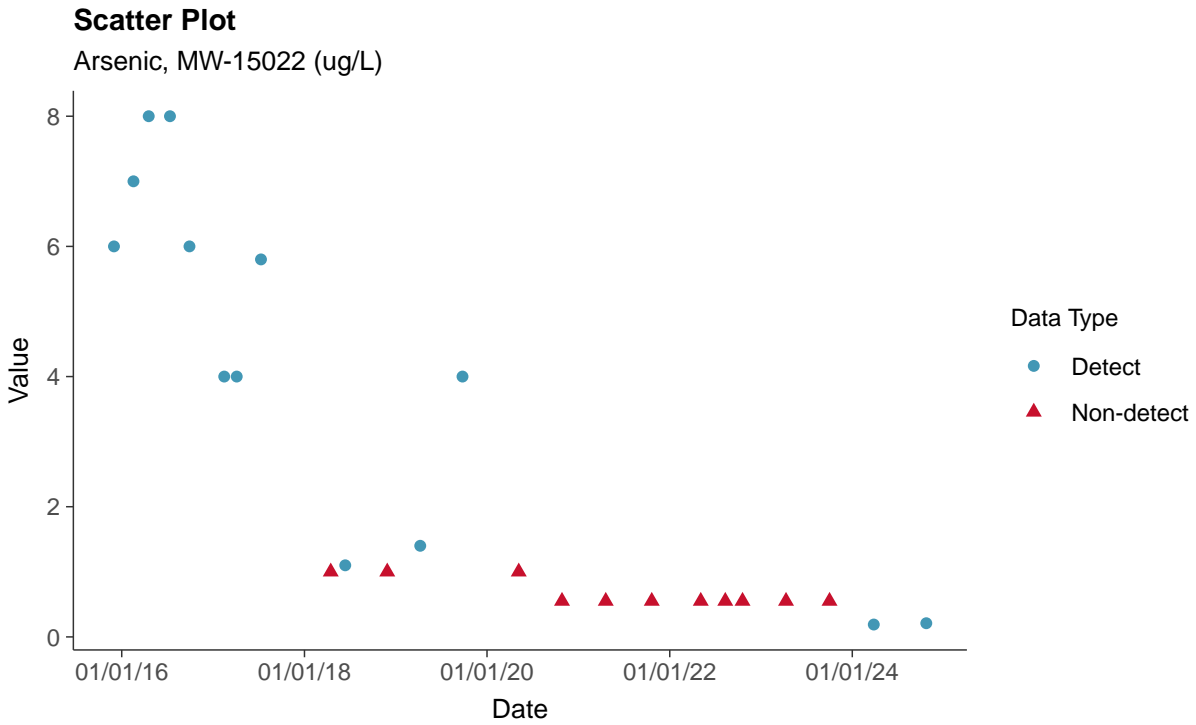
Antimony, MW-15022 (ug/L)





Appendix IV: Arsenic, MW-15022

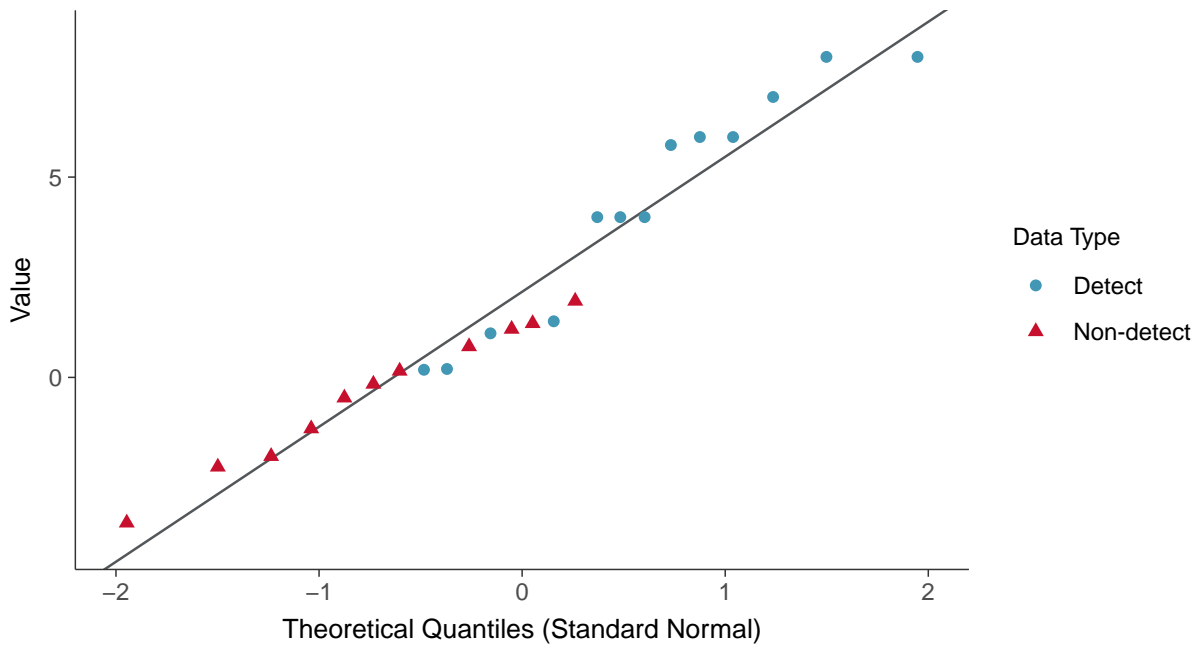
ID: 12_2_102





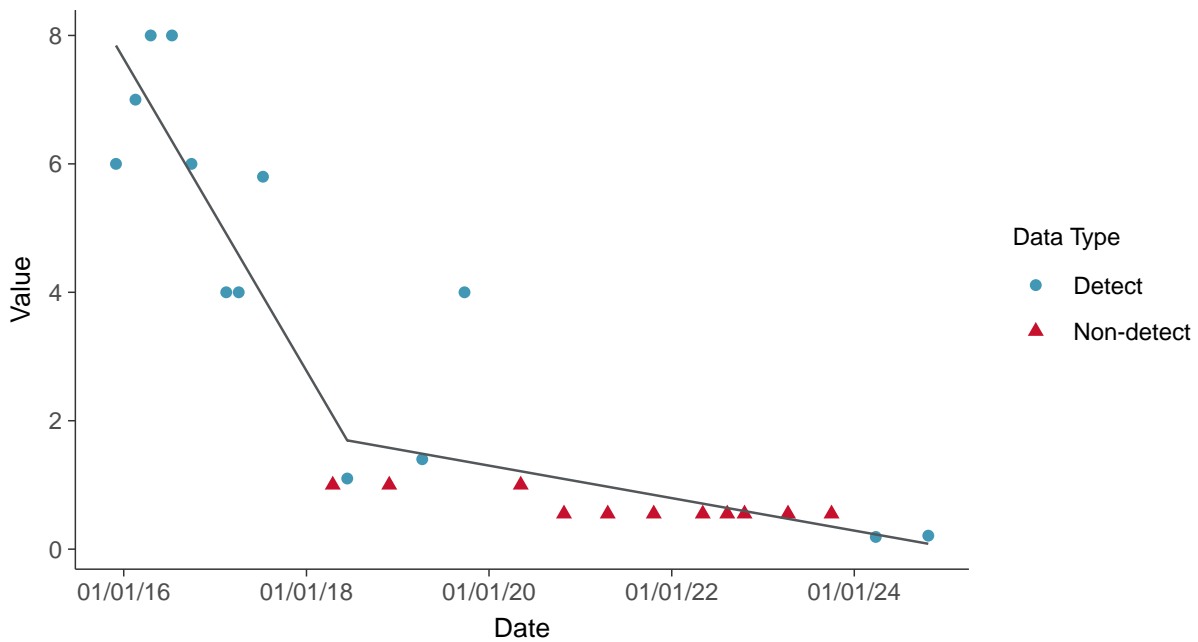
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear

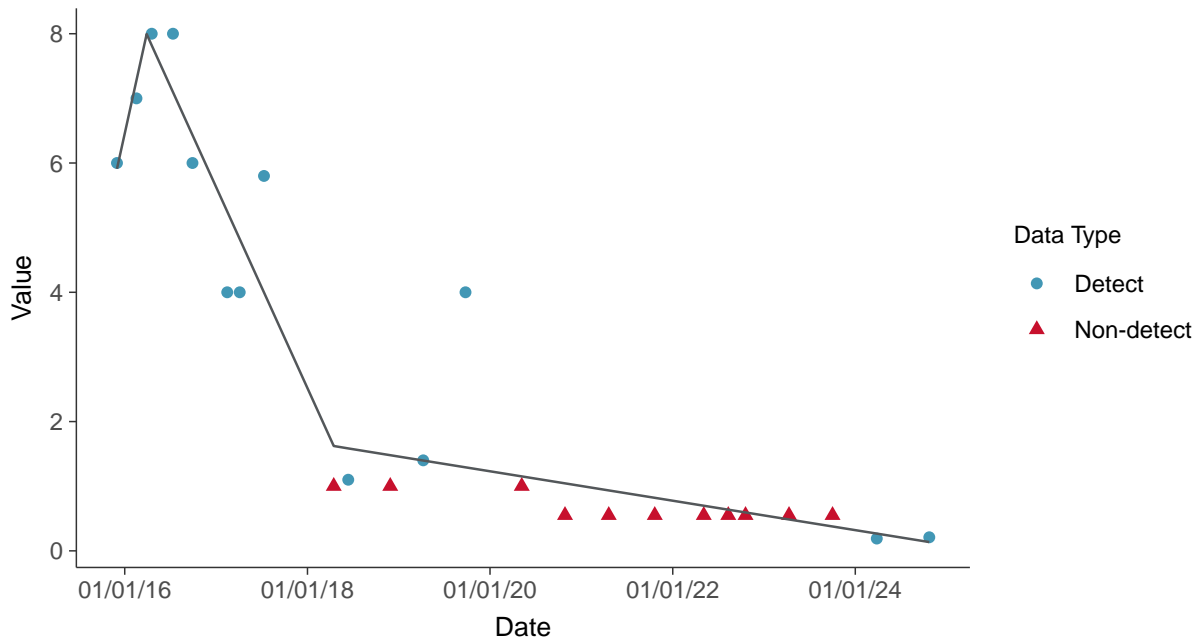
Arsenic, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15022 (ug/L)



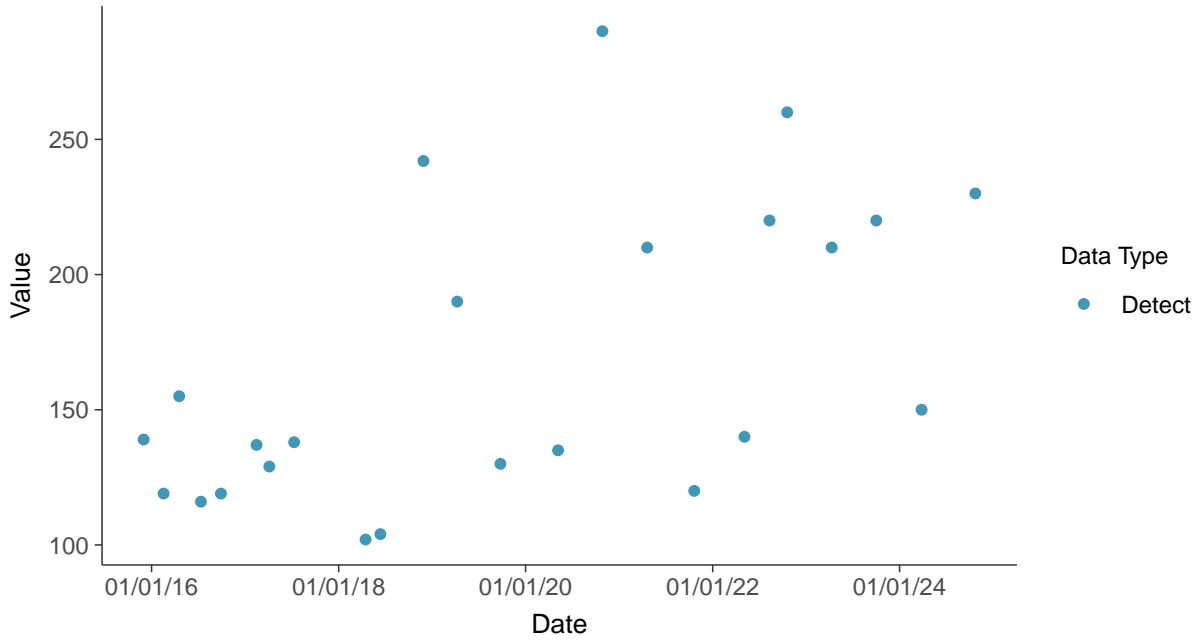


Appendix IV: Barium, MW-15022

ID: 12_2_103

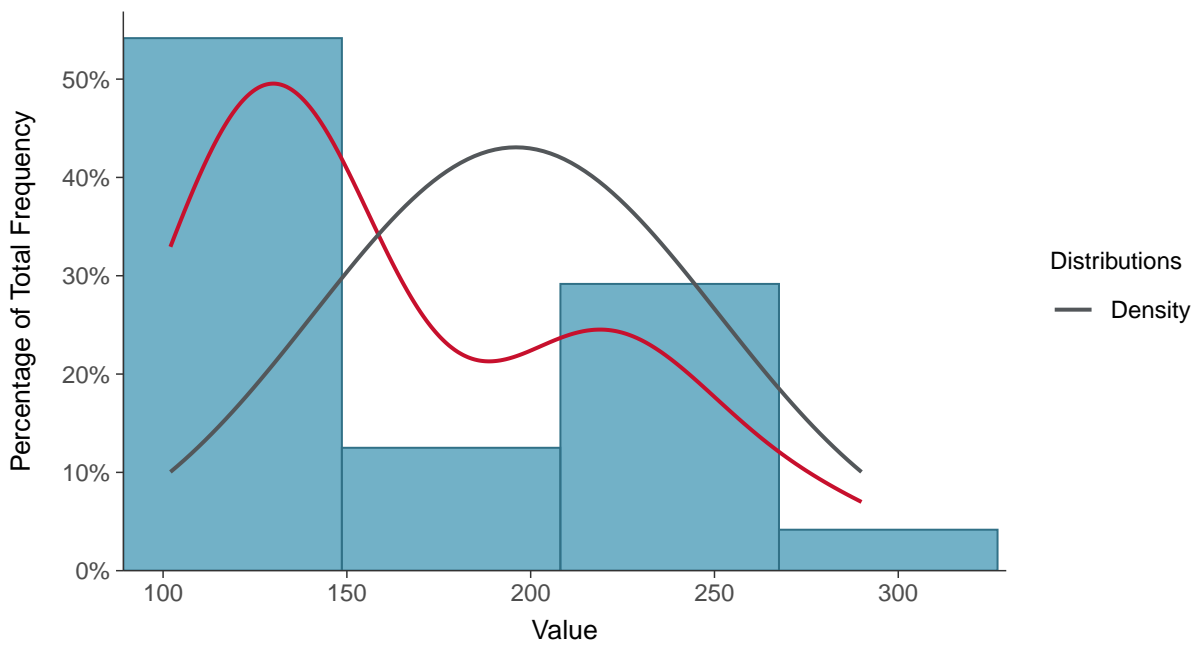
Scatter Plot

Barium, MW-15022 (ug/L)



Histogram

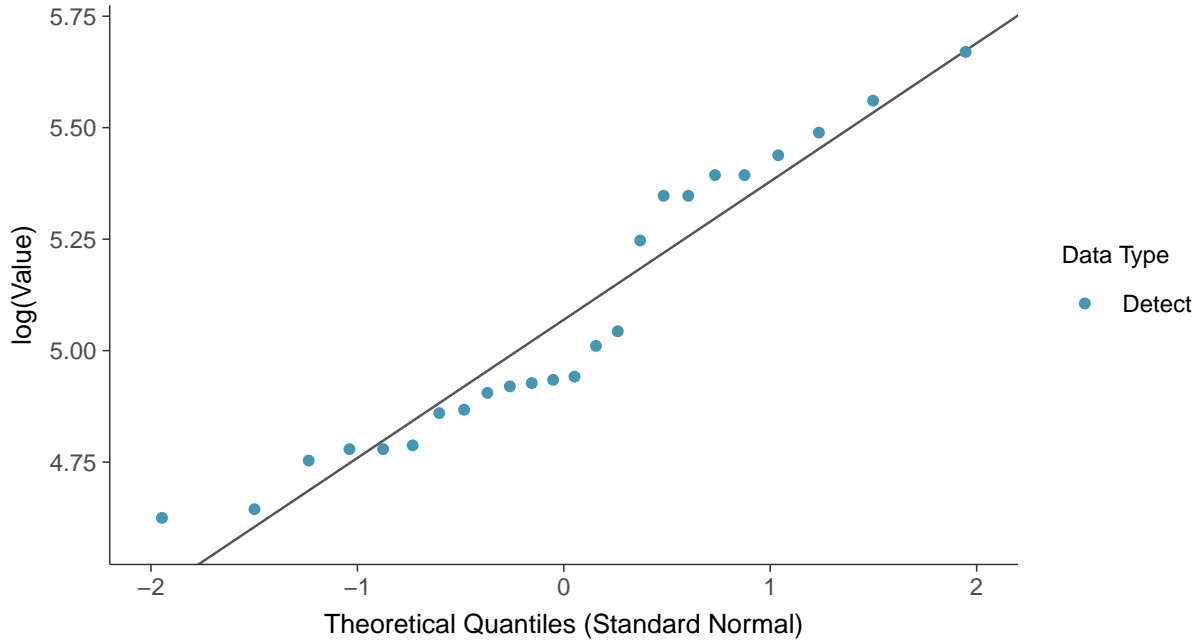
Barium, MW-15022 (ug/L)





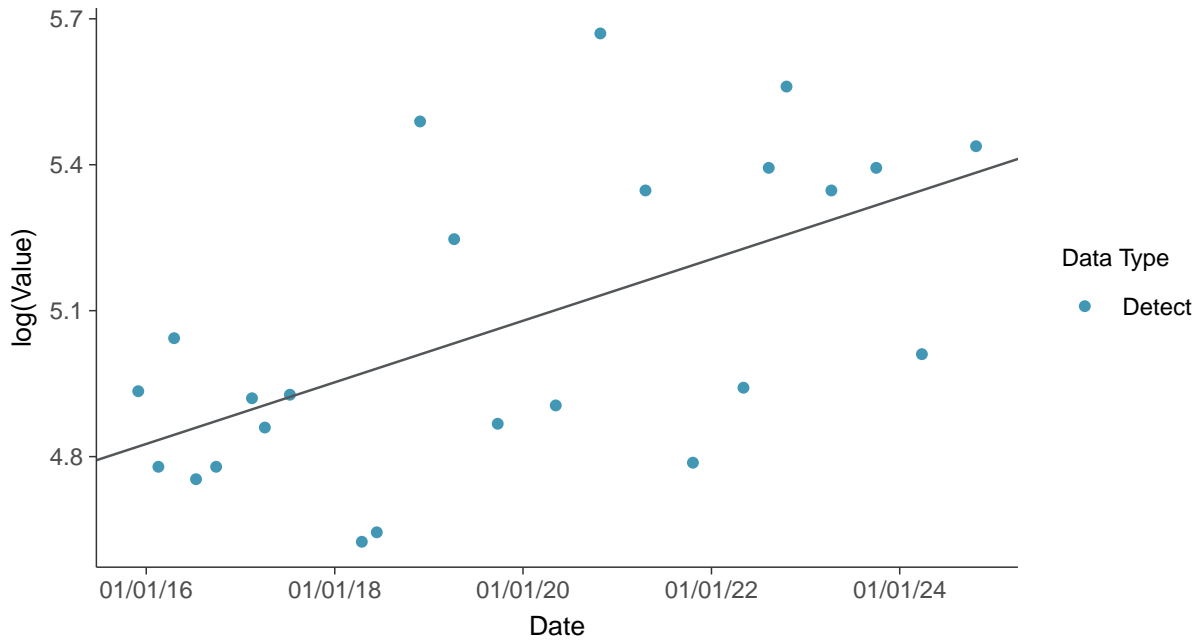
Lognormal Q-Q plot

Barium, MW-15022 (ug/L)



Trend Regression: Lognormal MLE

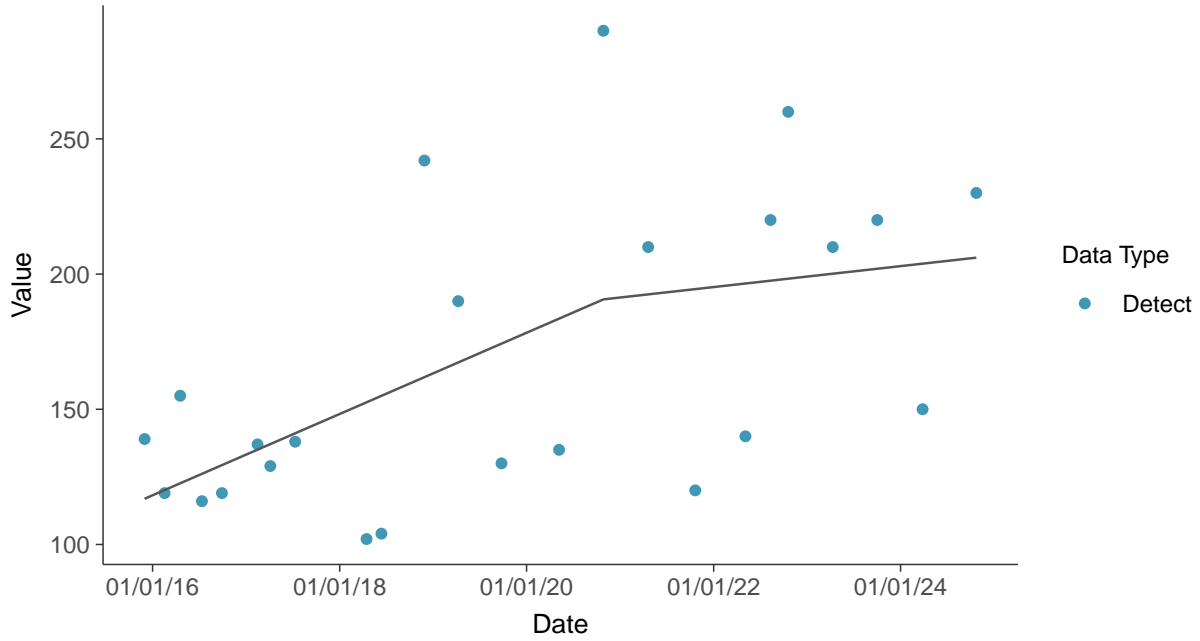
Barium, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear

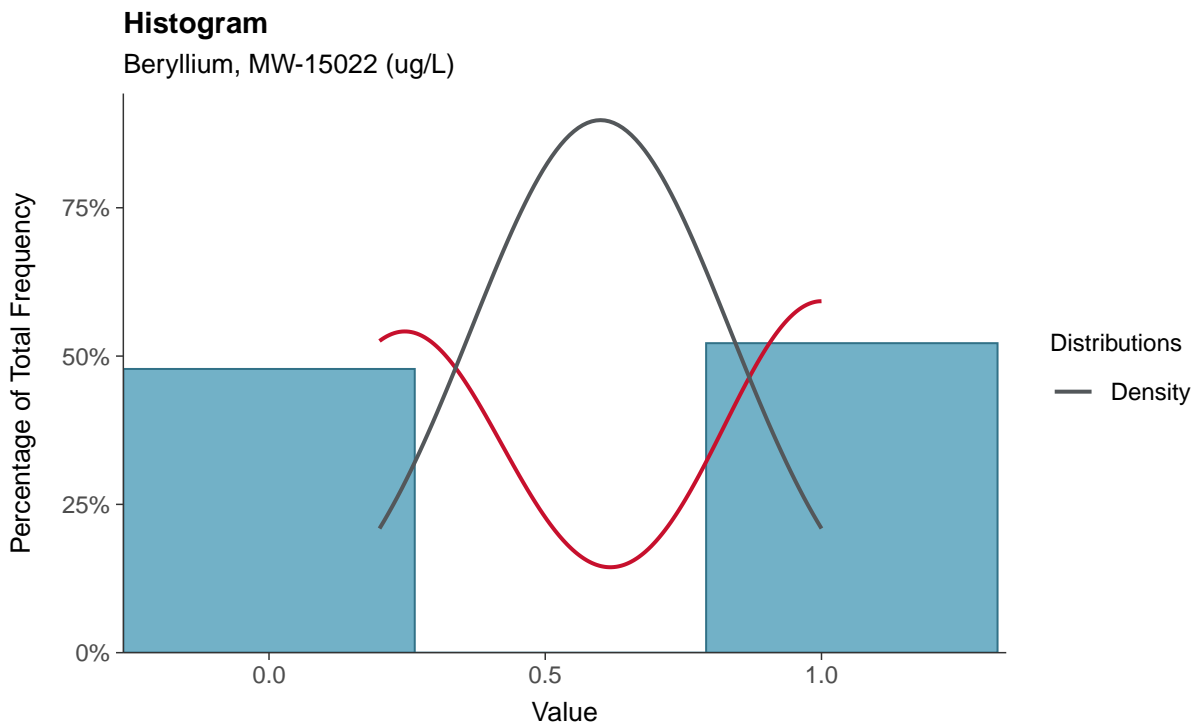
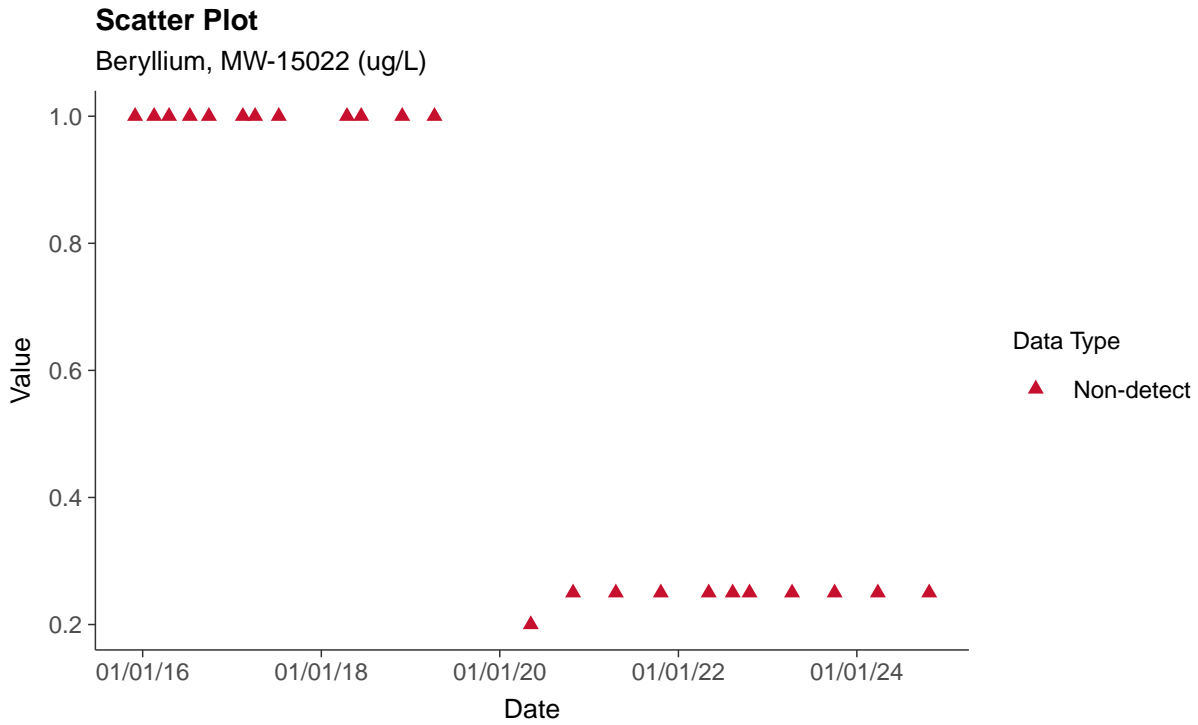
Barium, MW-15022 (ug/L)





Appendix IV: Beryllium, MW-15022

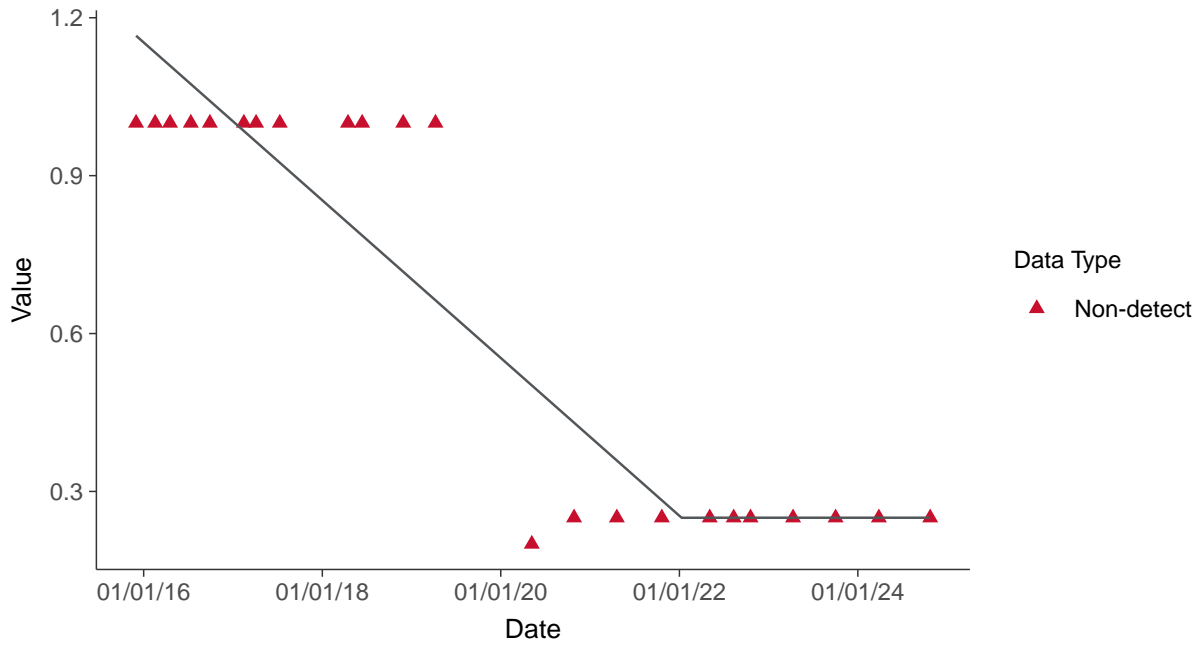
ID: 12_2_104





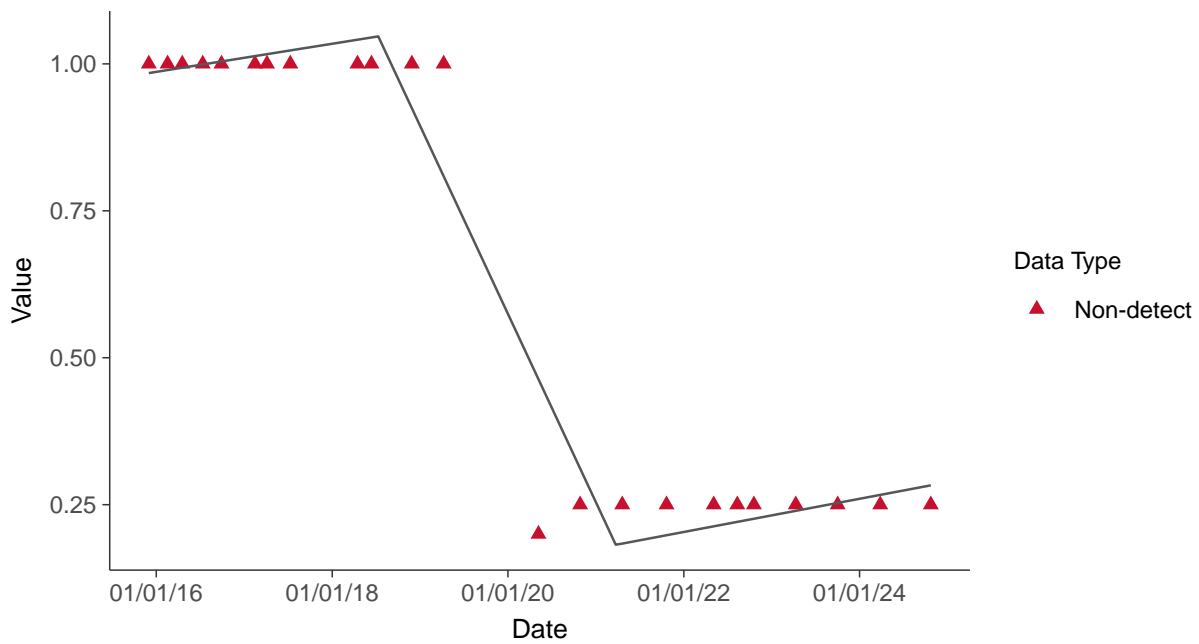
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

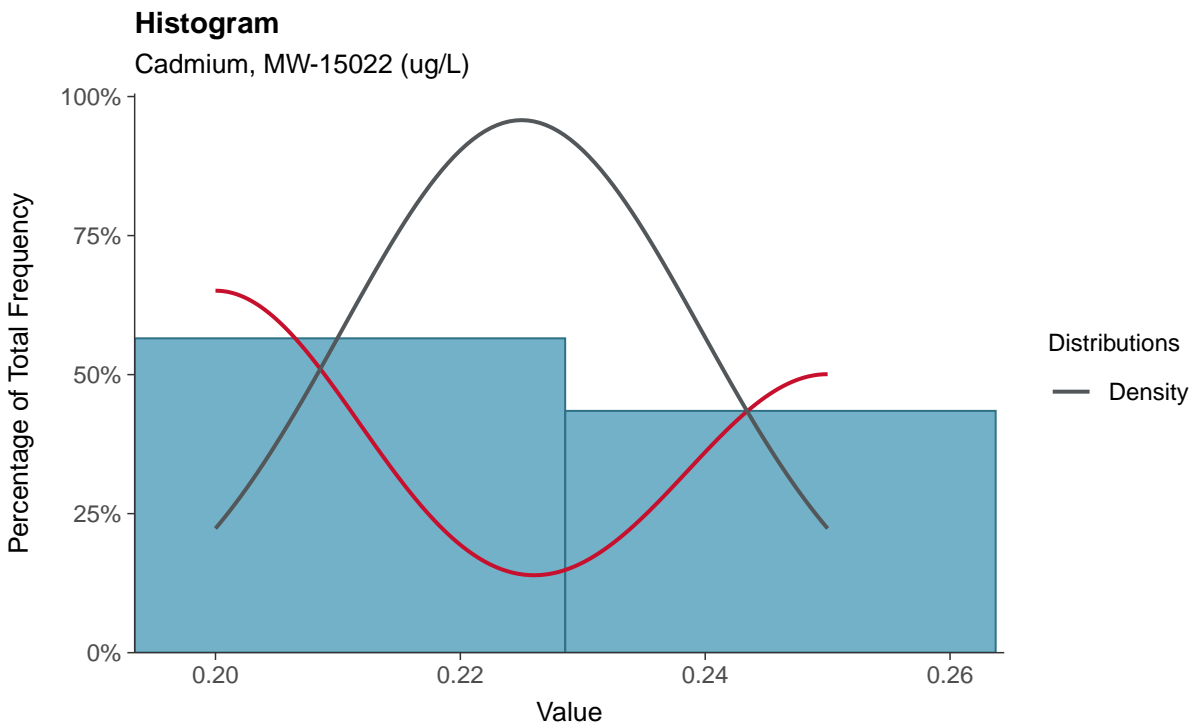
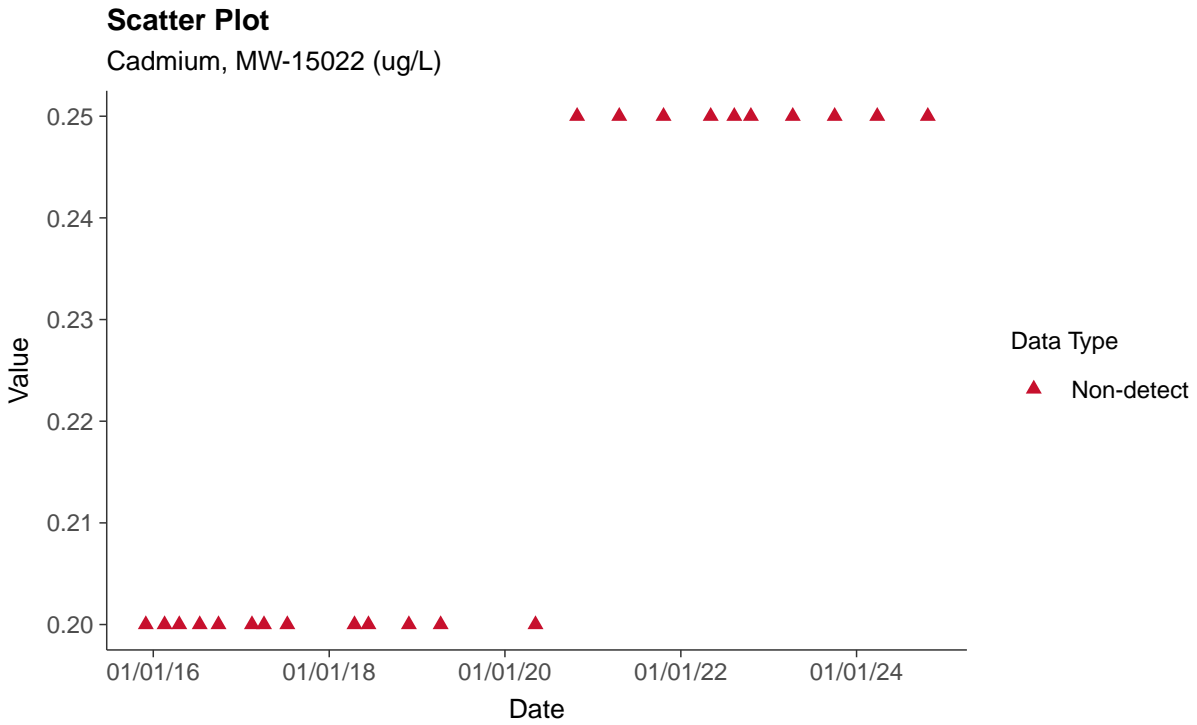
Beryllium, MW-15022 (ug/L)





Appendix IV: Cadmium, MW-15022

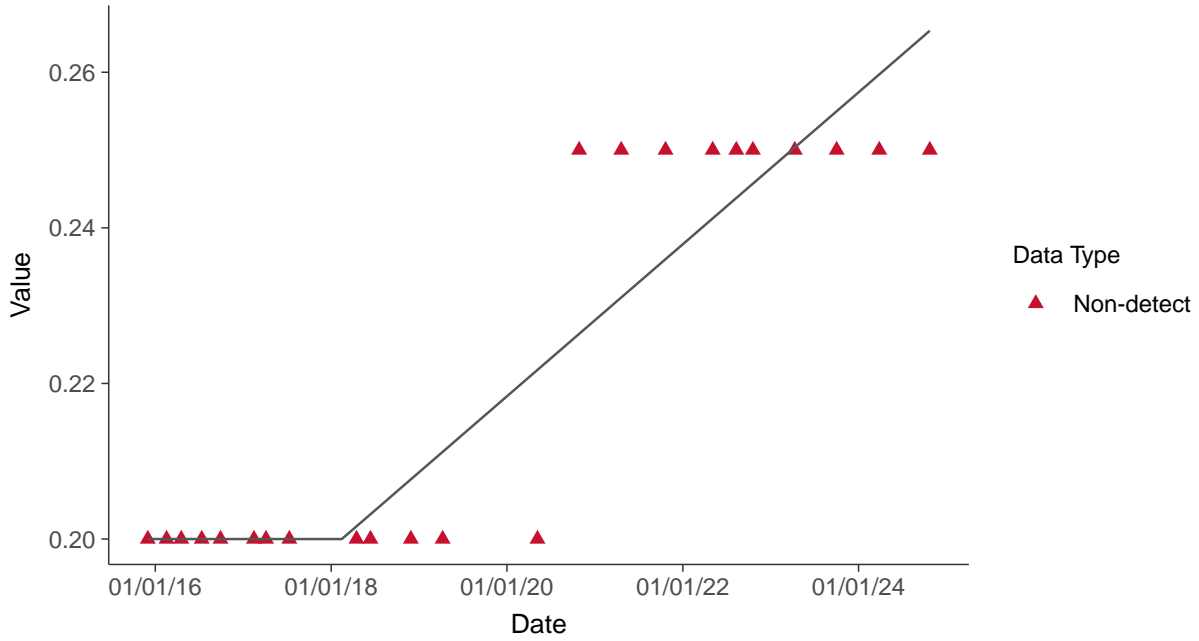
ID: 12_2_106





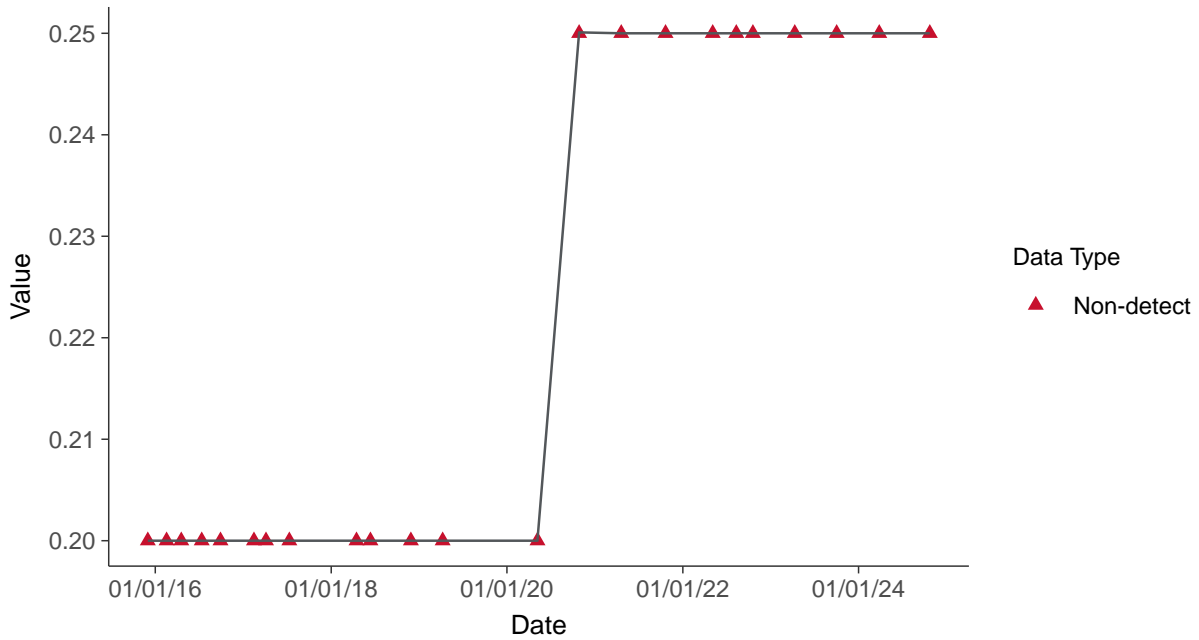
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

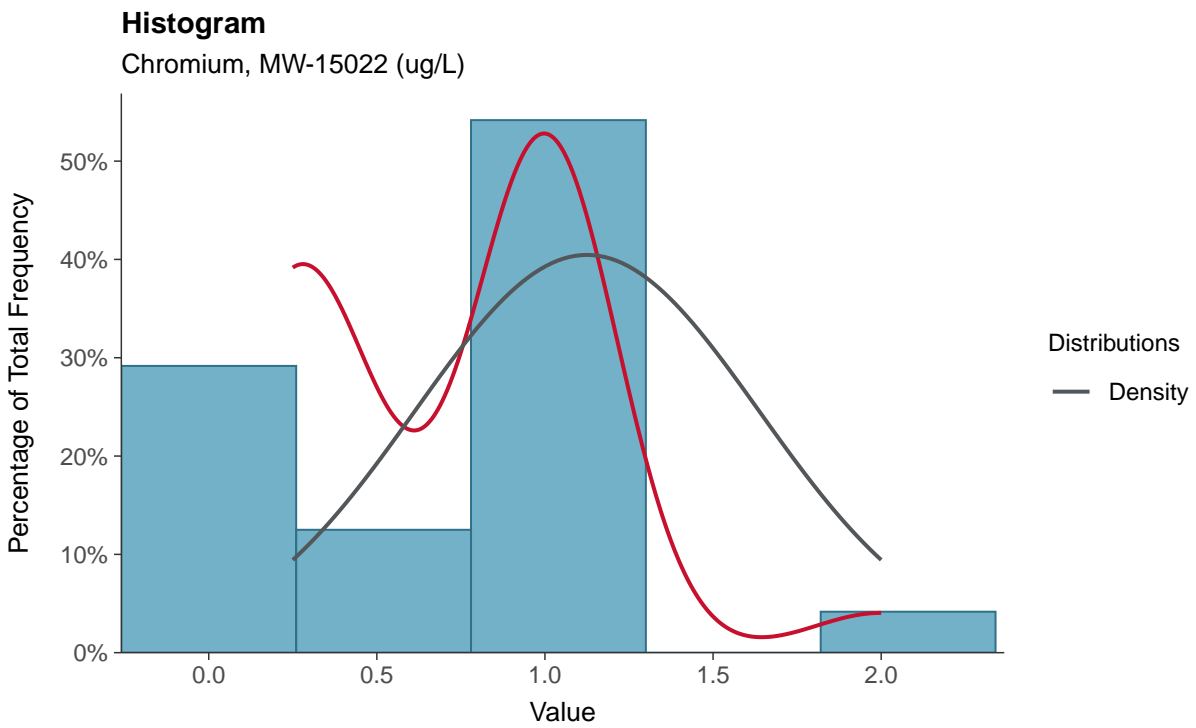
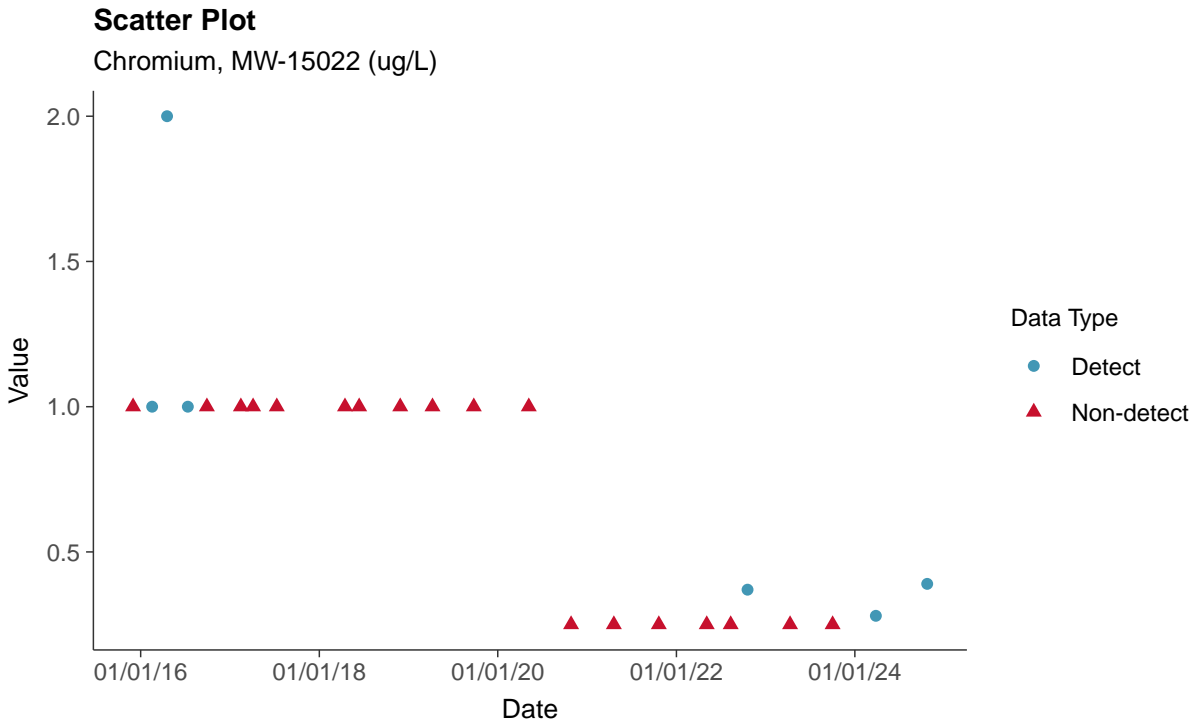
Cadmium, MW-15022 (ug/L)





Appendix IV: Chromium, MW-15022

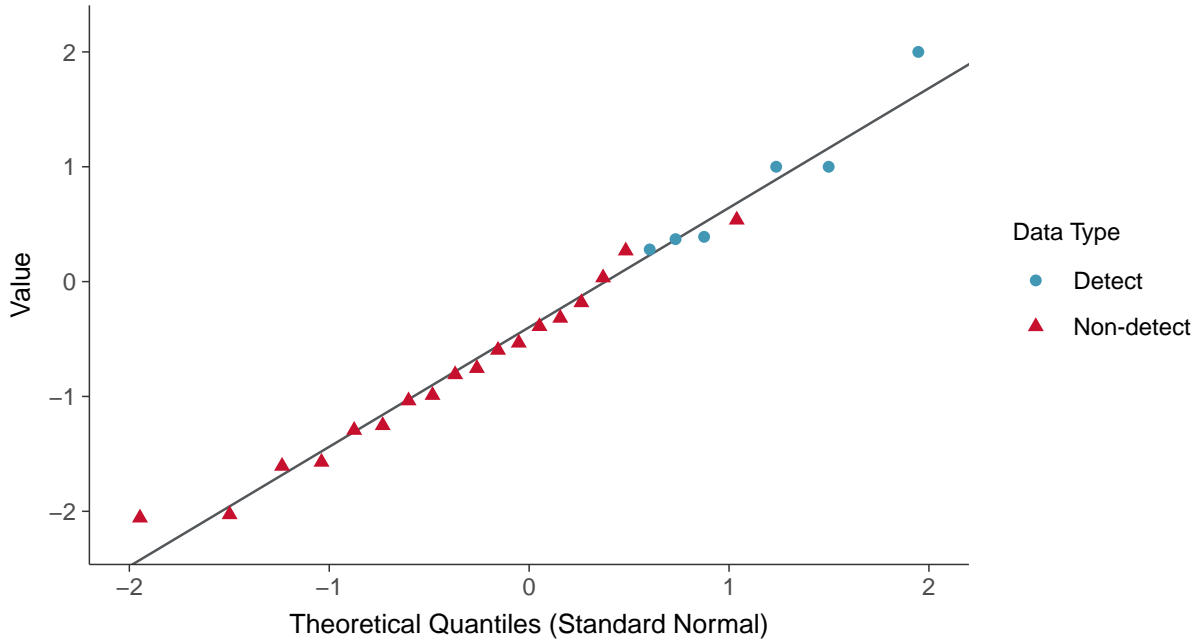
ID: 12_2_109





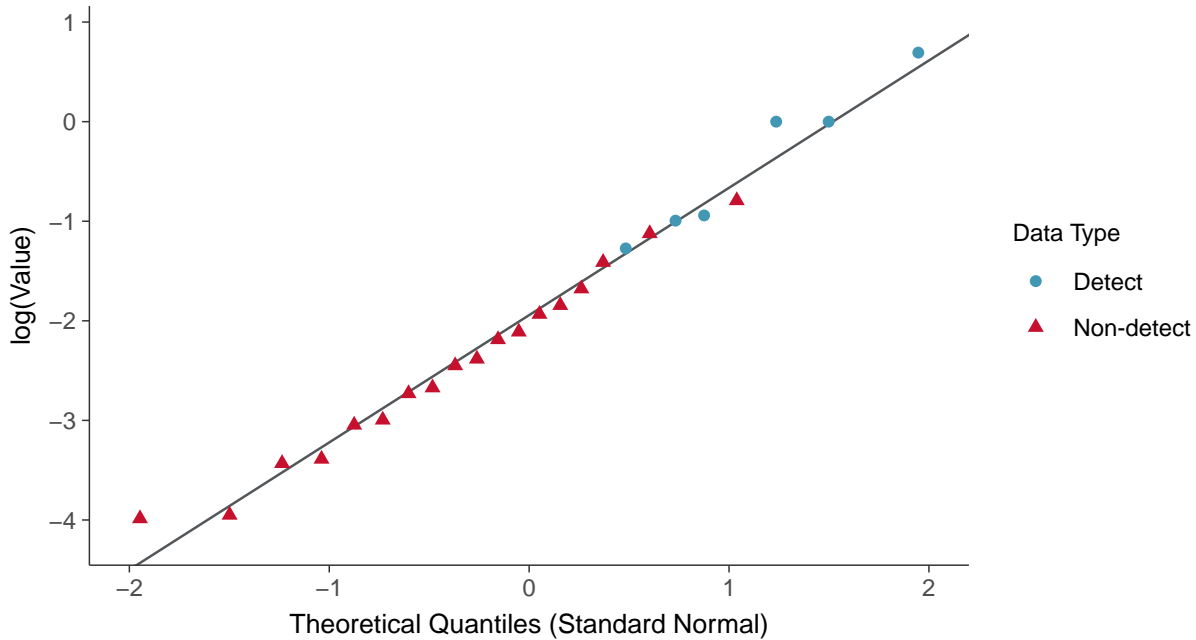
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15022 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

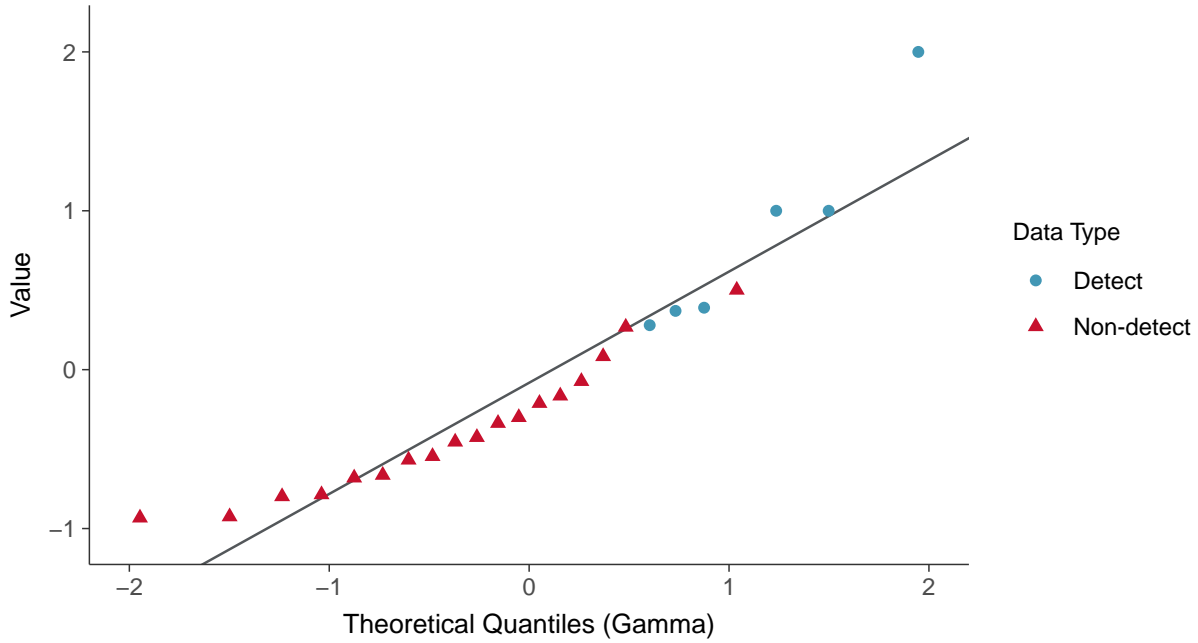
Chromium, MW-15022 (ug/L)





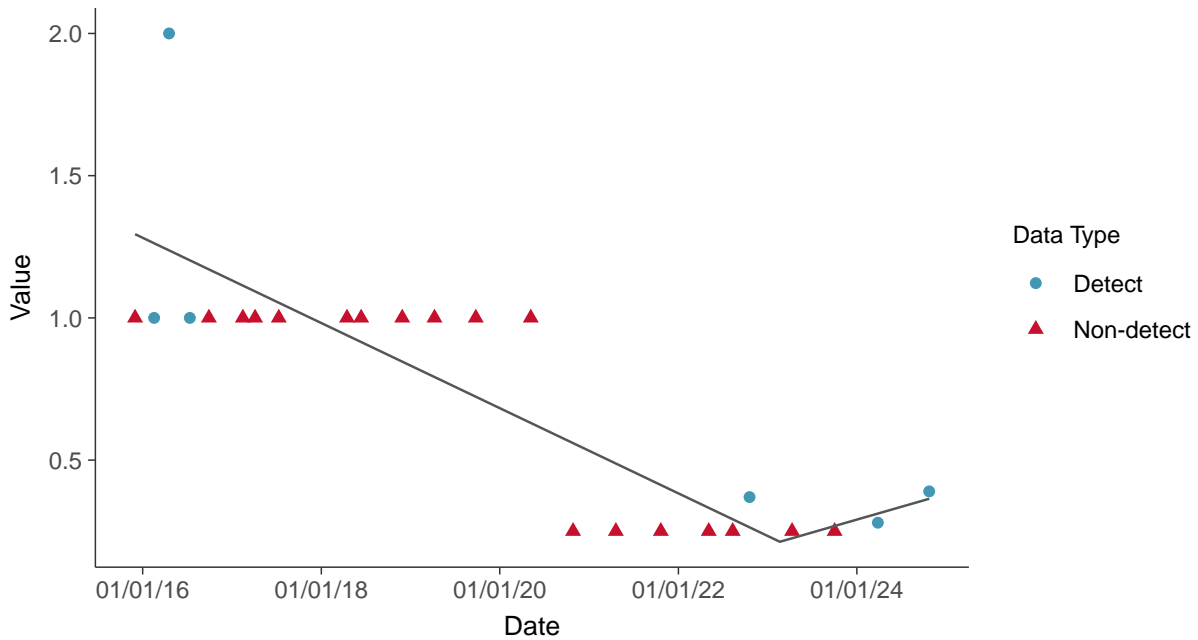
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear

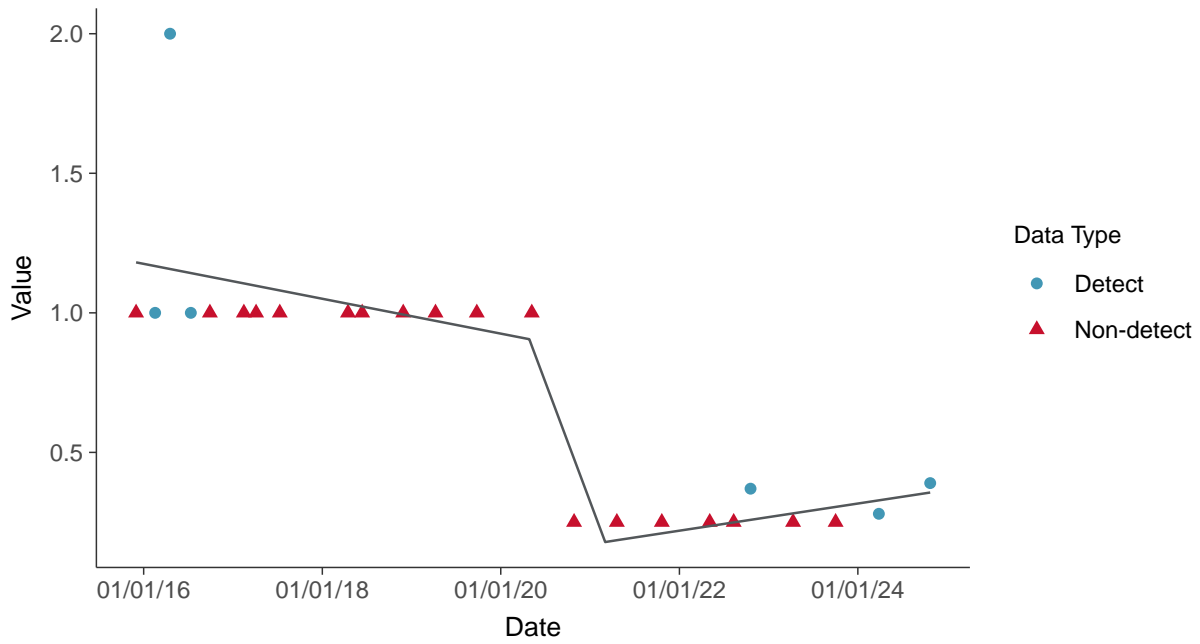
Chromium, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

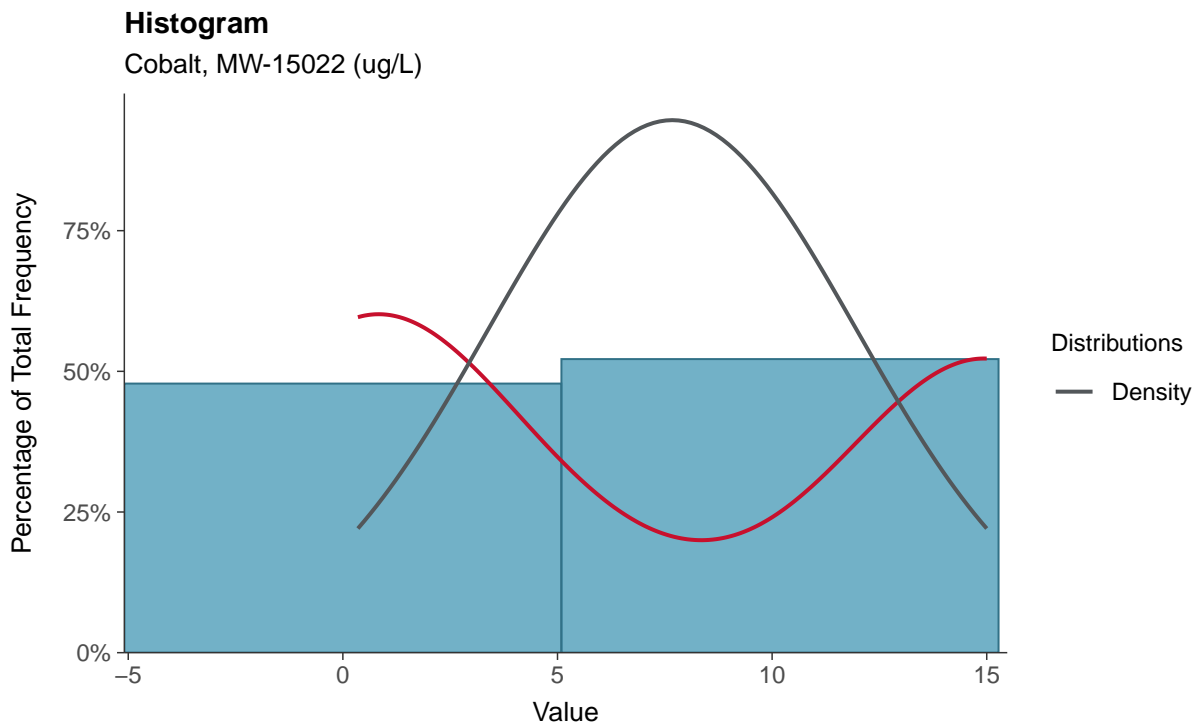
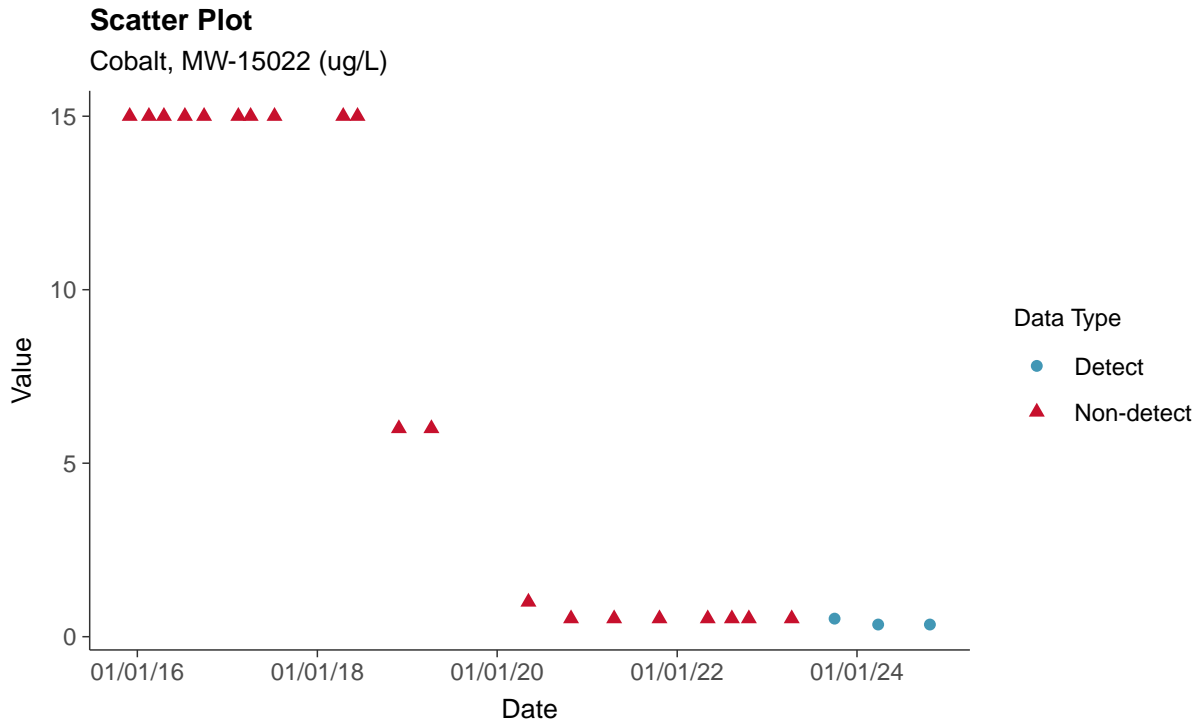
Chromium, MW-15022 (ug/L)





Appendix IV: Cobalt, MW-15022

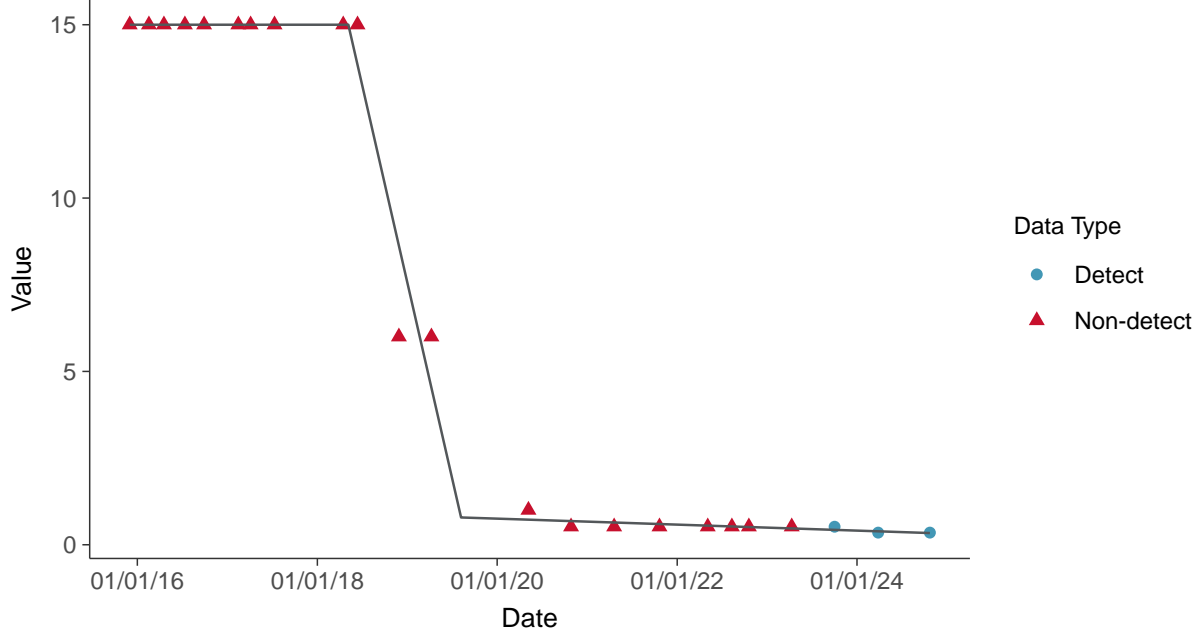
ID: 12_2_110





Trend Regression: Piecewise Linear-Linear-Linear

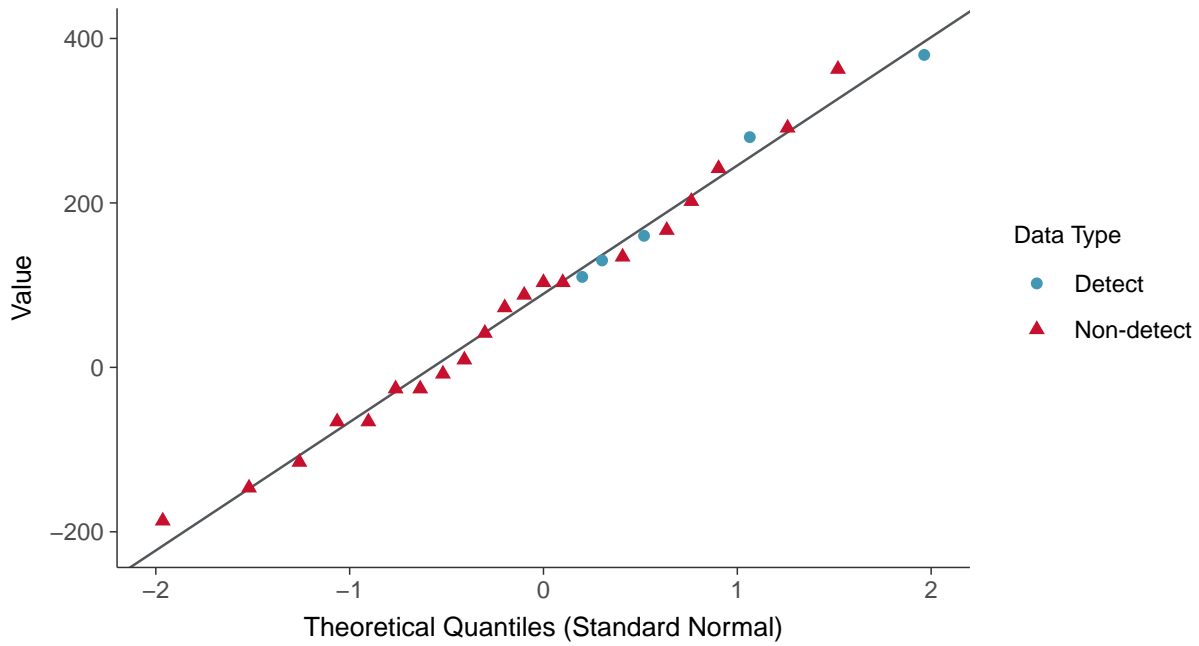
Cobalt, MW-15022 (ug/L)





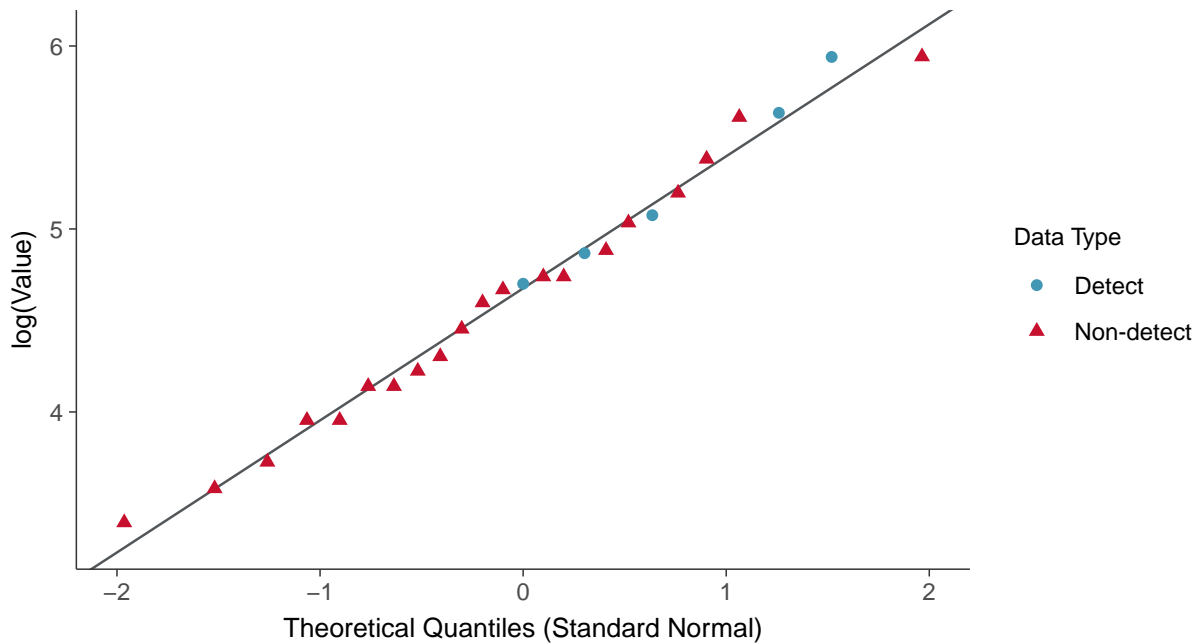
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15022 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

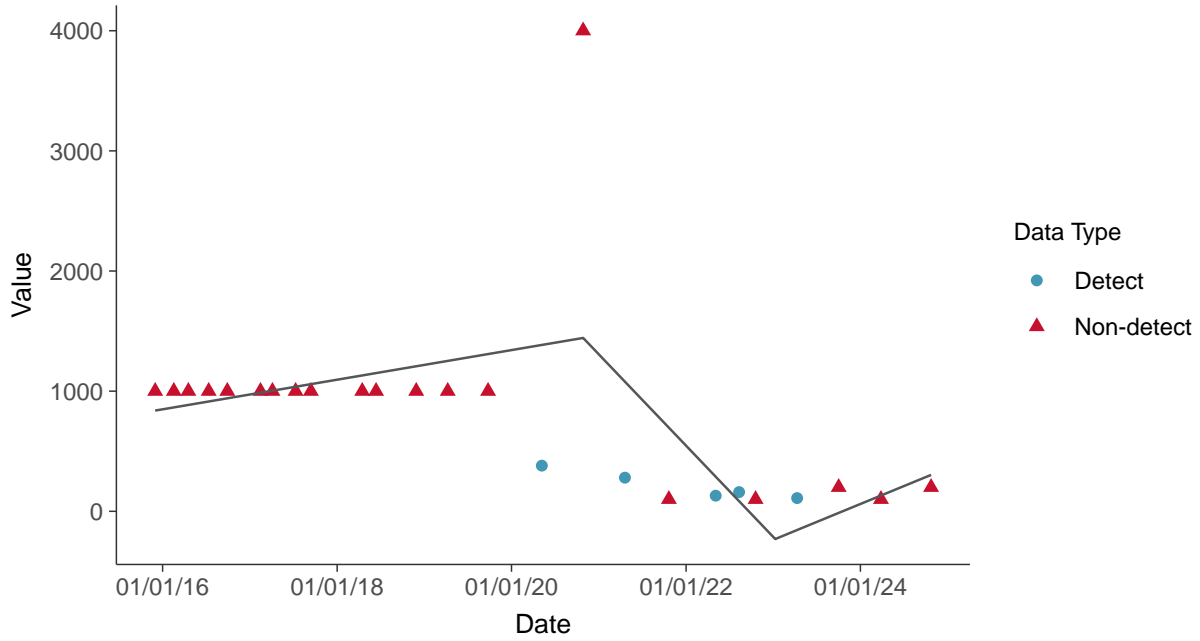
Fluoride, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

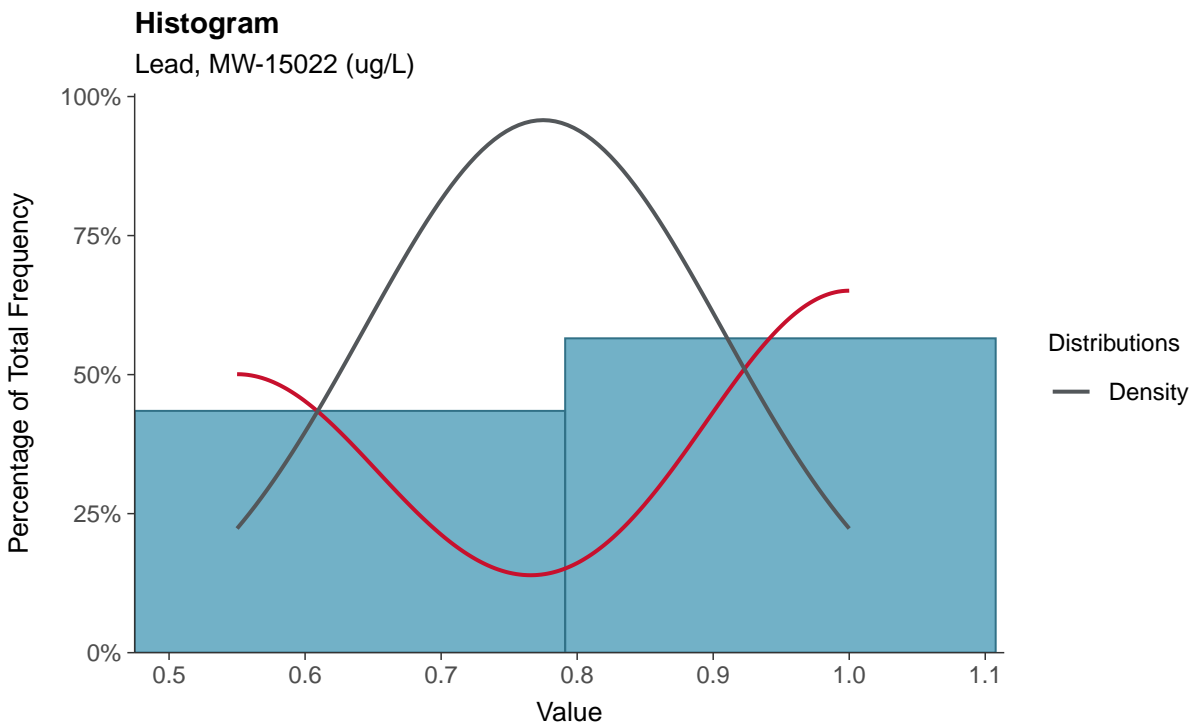
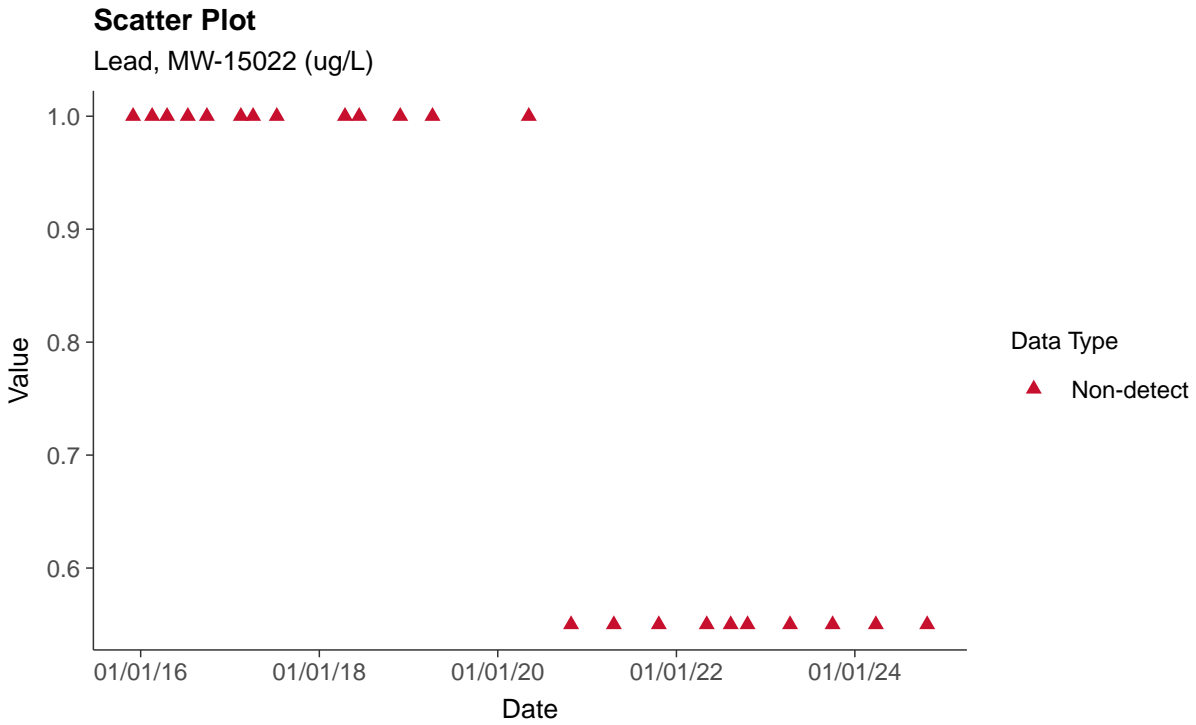
Fluoride, MW-15022 (ug/L)





Appendix IV: Lead, MW-15022

ID: 12_2_116



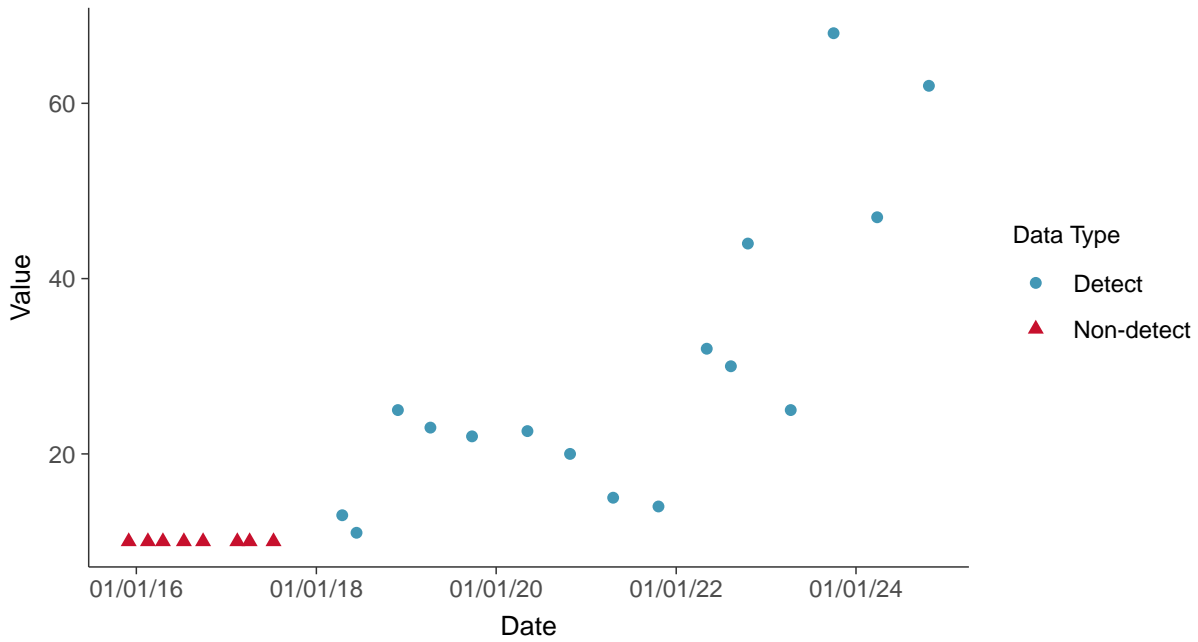


Appendix IV: Lithium, MW-15022

ID: 12_2_117

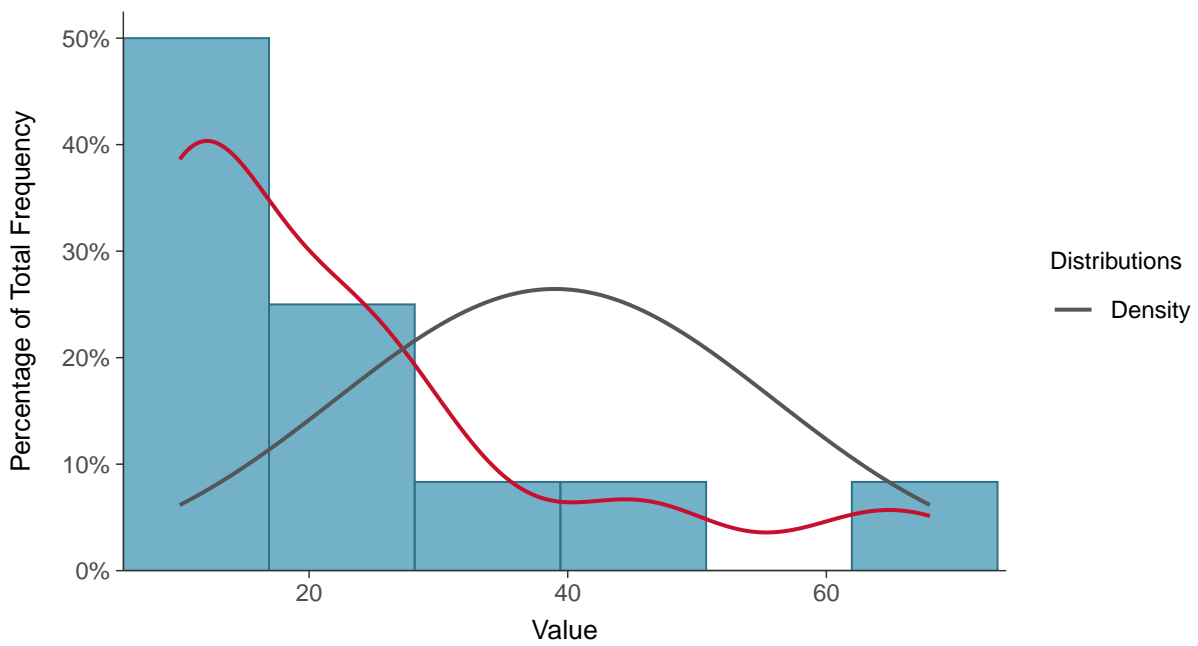
Scatter Plot

Lithium, MW-15022 (ug/L)



Histogram

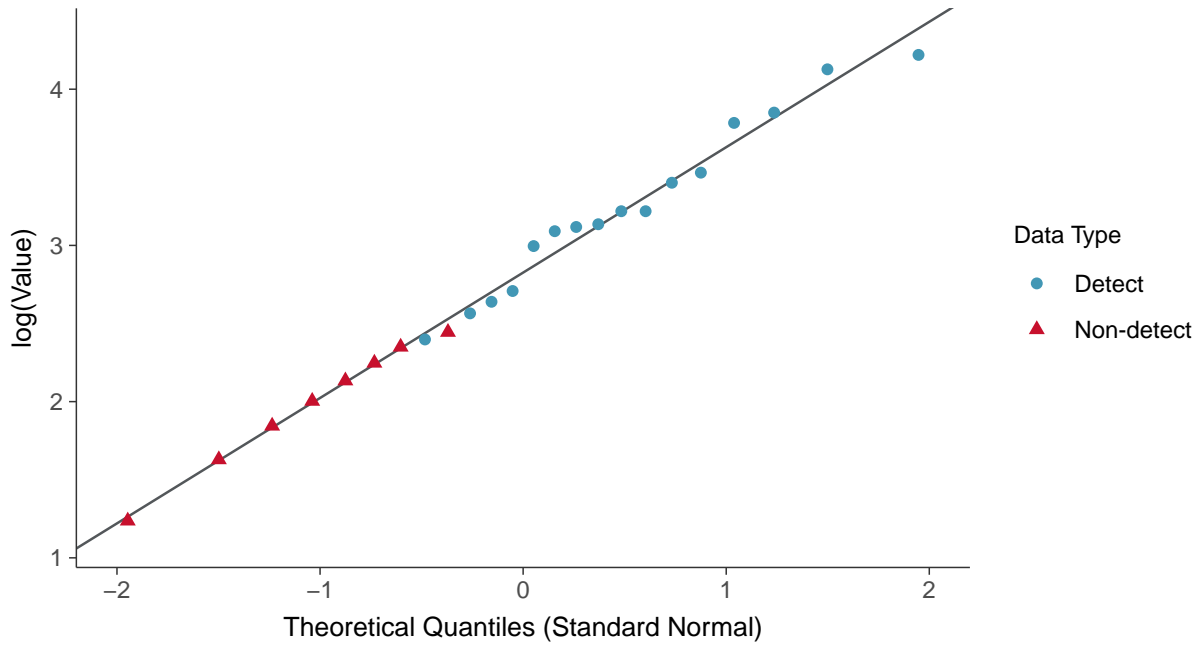
Lithium, MW-15022 (ug/L)





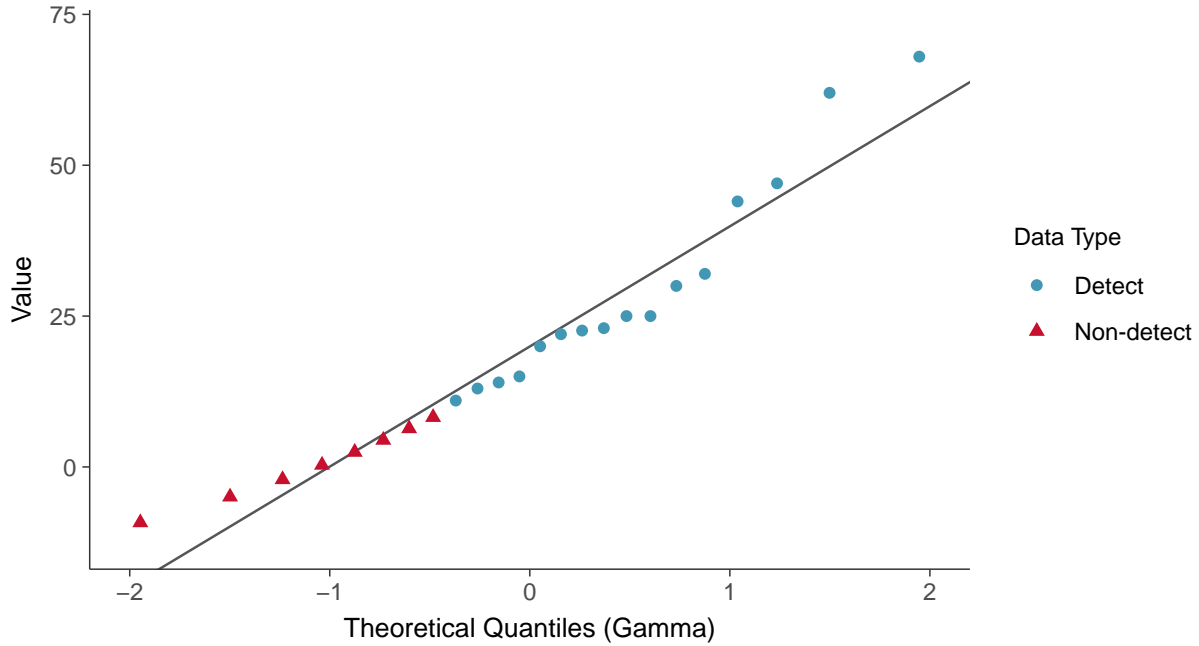
Lognormal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15022 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

Lithium, MW-15022 (ug/L)



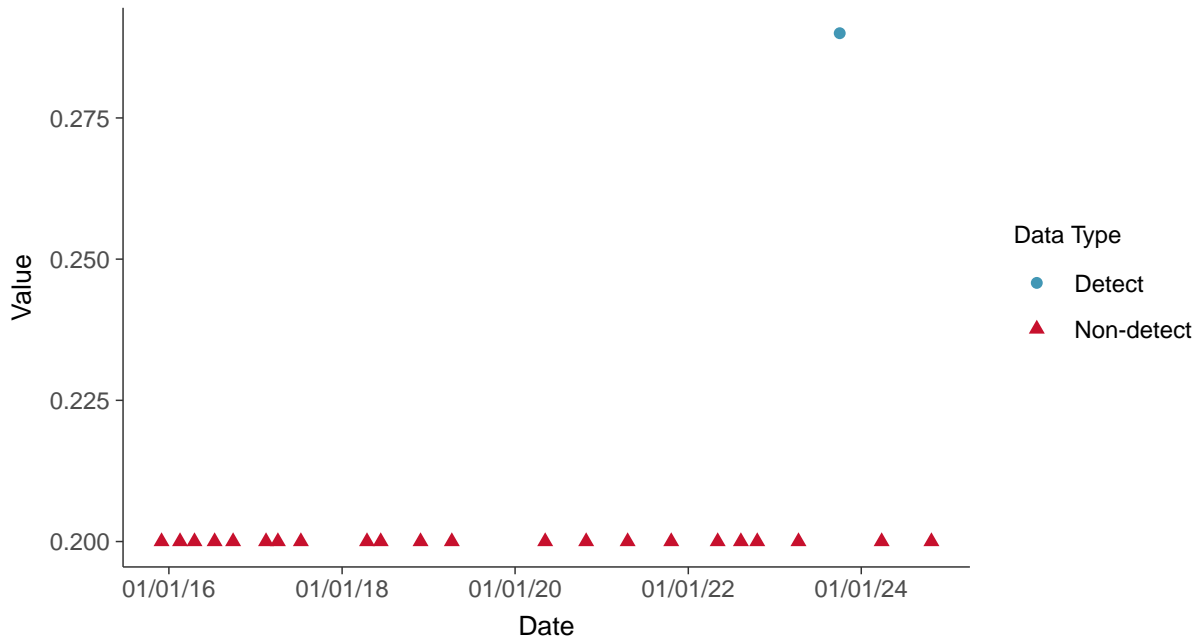


Appendix IV: Mercury, MW-15022

ID: 12_2_118

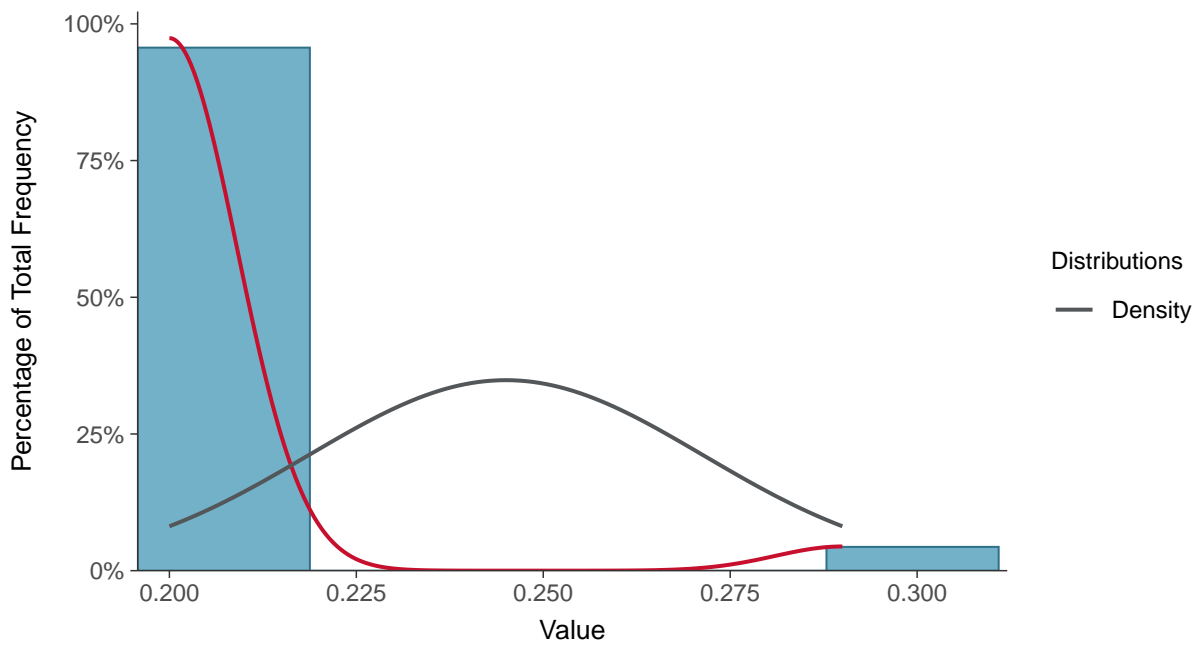
Scatter Plot

Mercury, MW-15022 (ug/L)



Histogram

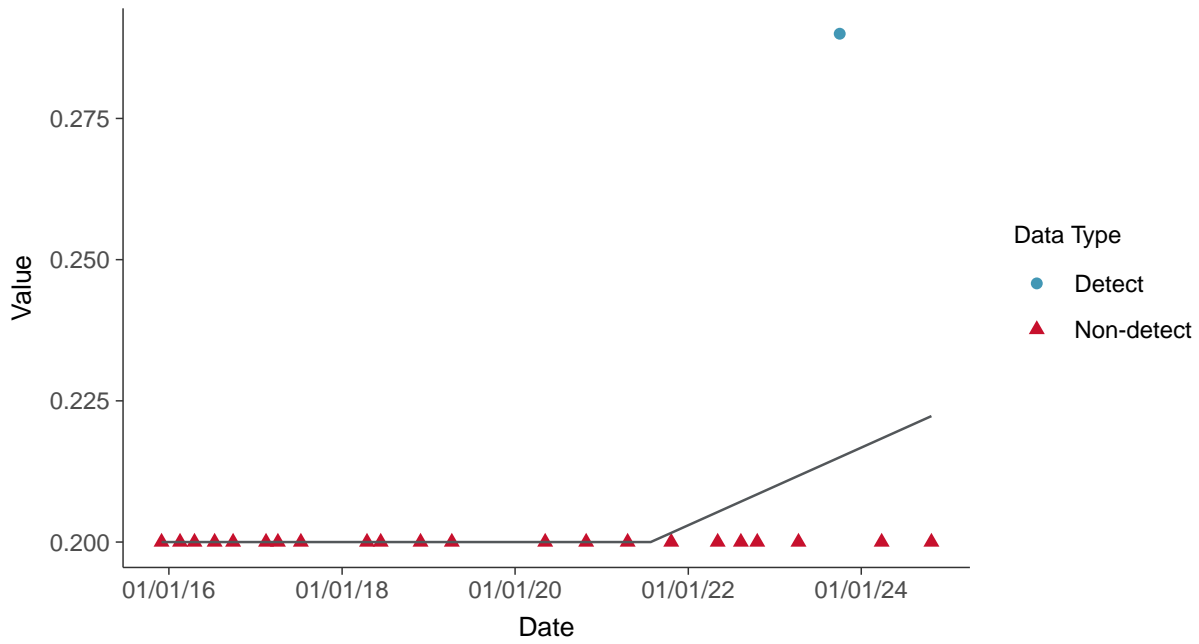
Mercury, MW-15022 (ug/L)





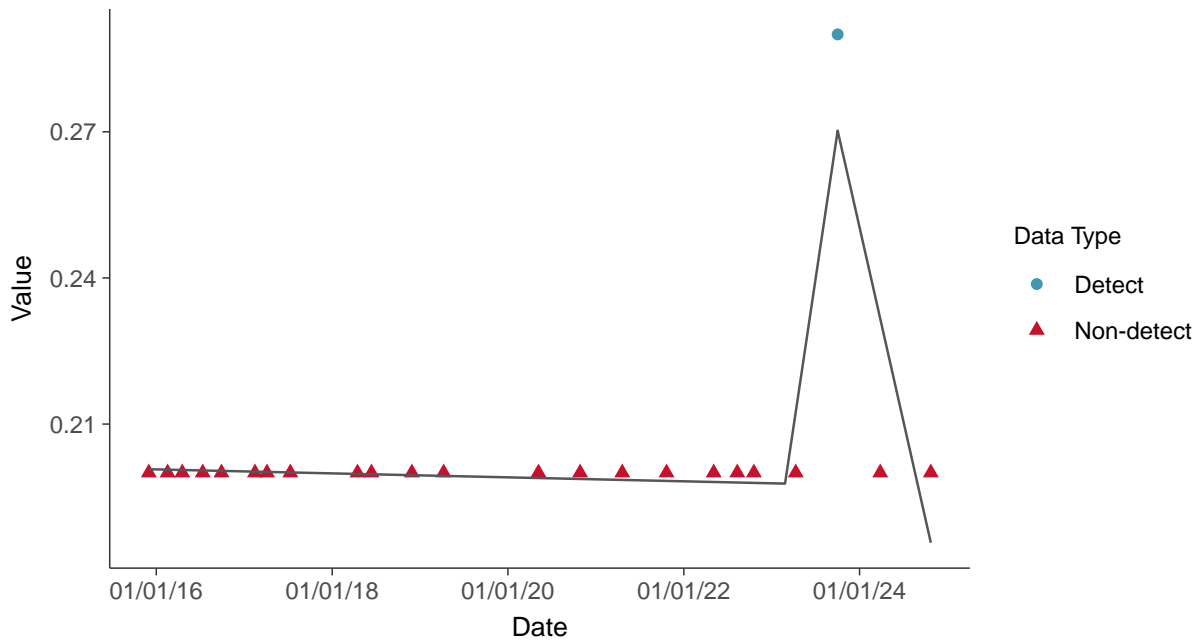
Trend Regression: Piecewise Linear-Linear

Mercury, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-15022 (ug/L)



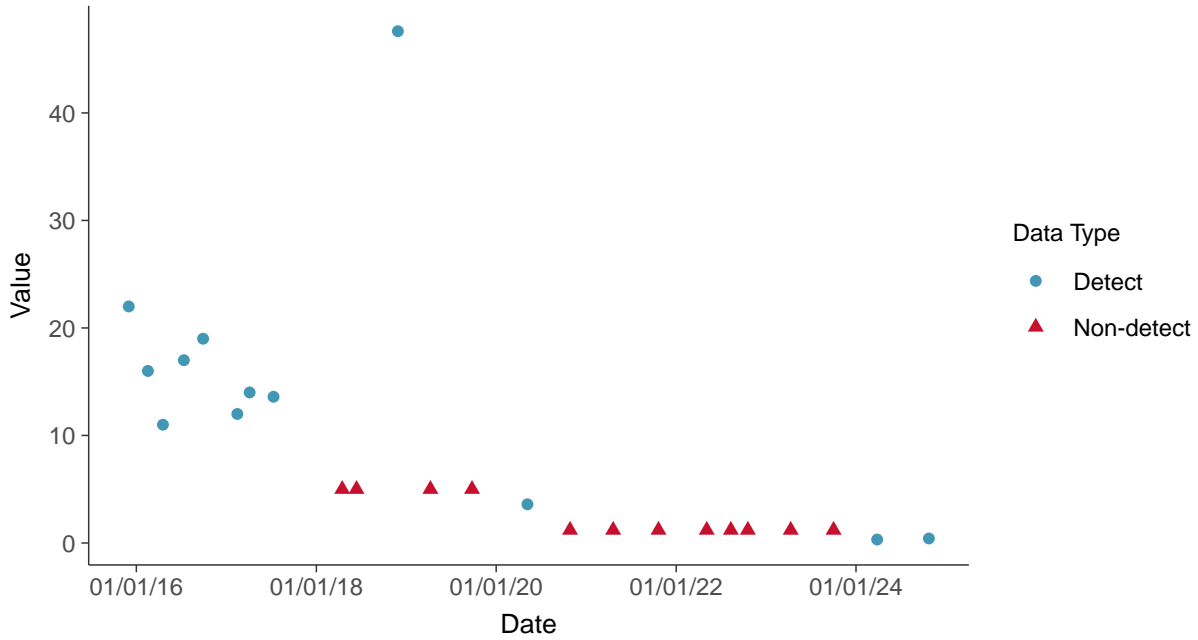


Appendix IV: Molybdenum, MW-15022

ID: 12_2_119

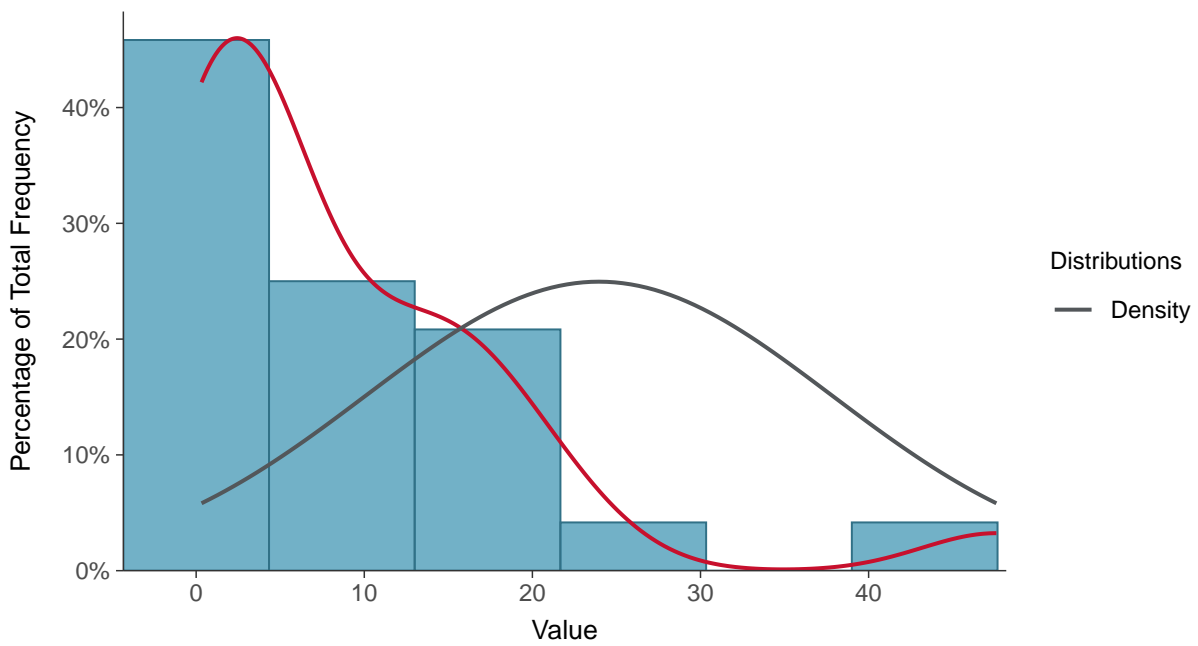
Scatter Plot

Molybdenum, MW-15022 (ug/L)



Histogram

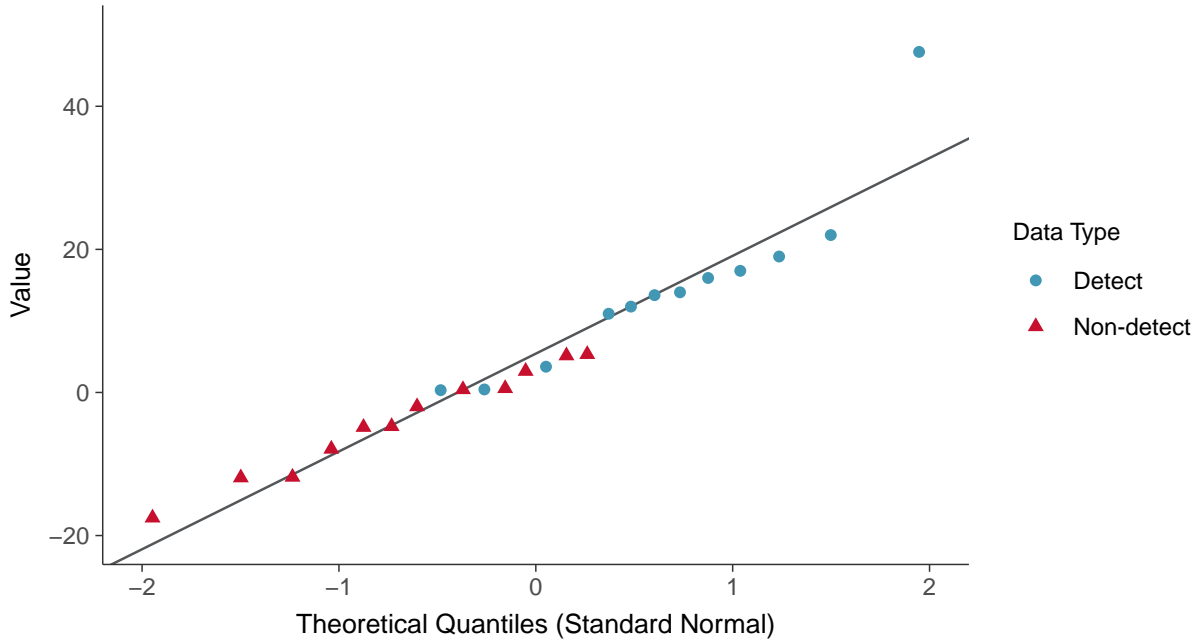
Molybdenum, MW-15022 (ug/L)





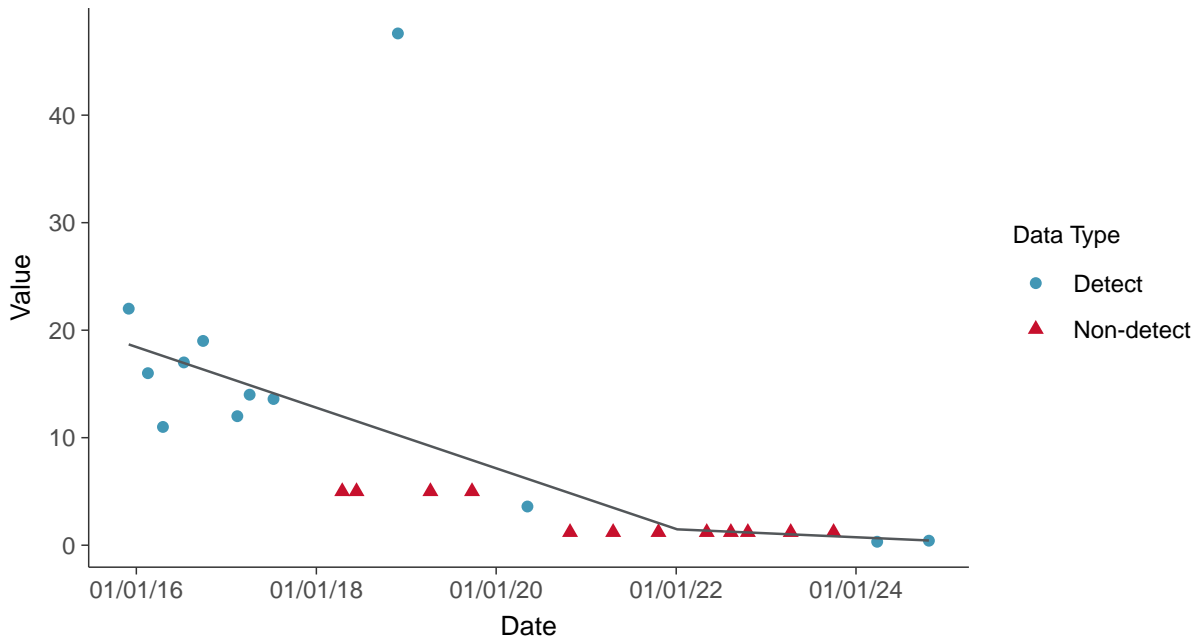
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15022 (ug/L)



Trend Regression: Piecewise Linear-Linear

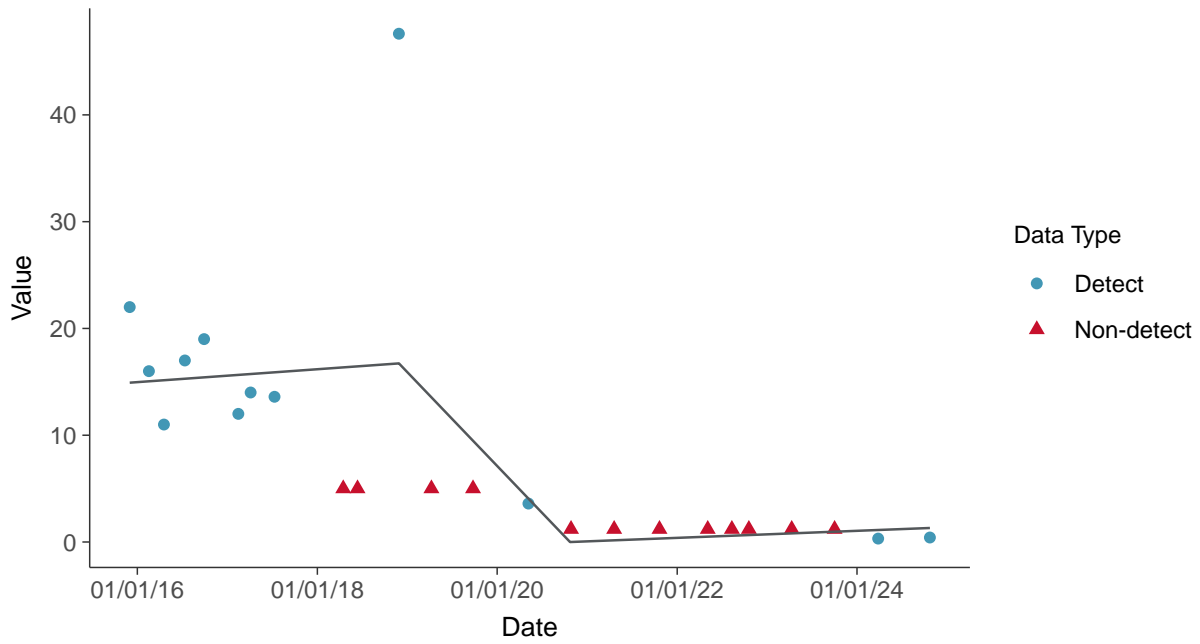
Molybdenum, MW-15022 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15022 (ug/L)



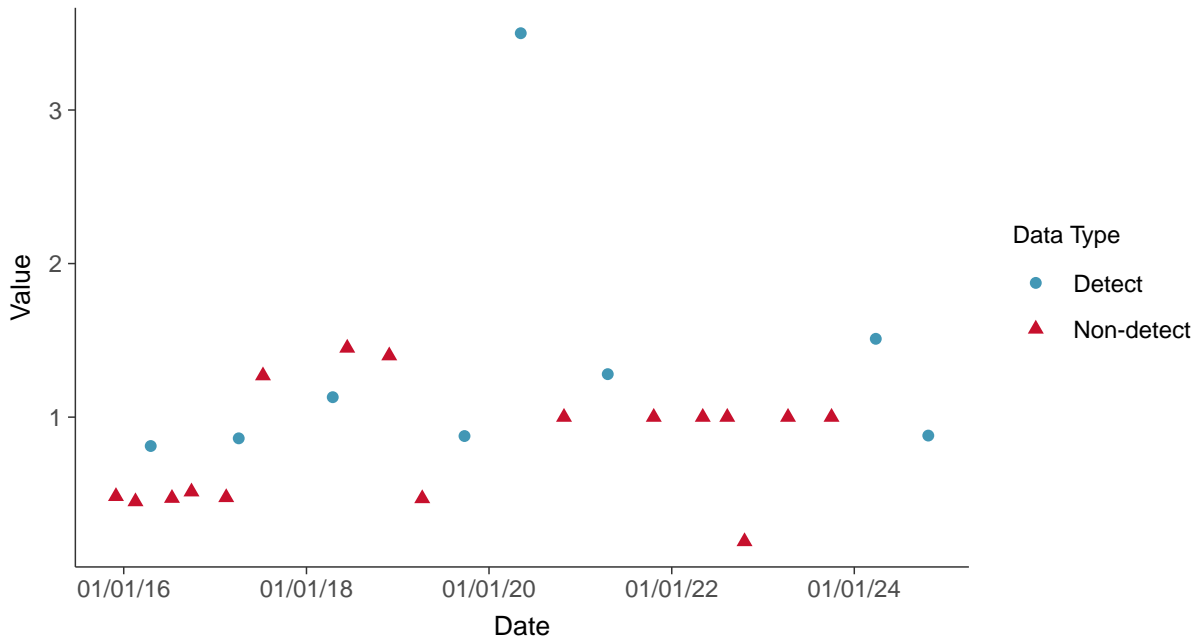


Appendix IV: Radium-226+228, MW-15022

ID: 12_2_125

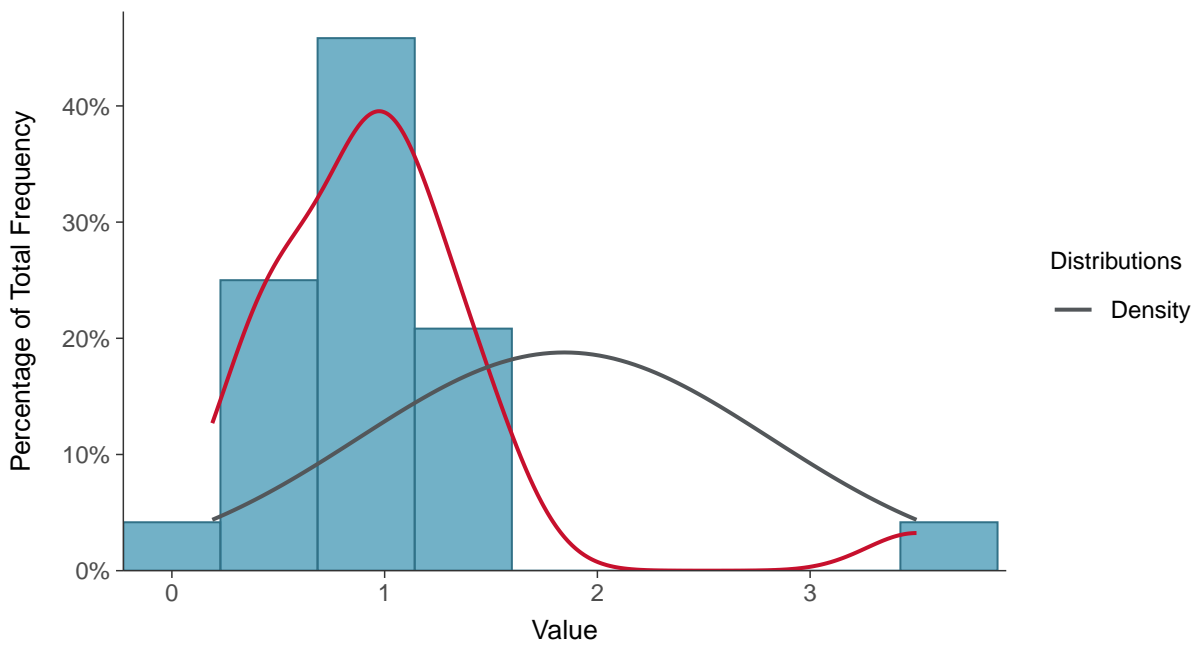
Scatter Plot

Radium-226+228, MW-15022 (pCi/L)



Histogram

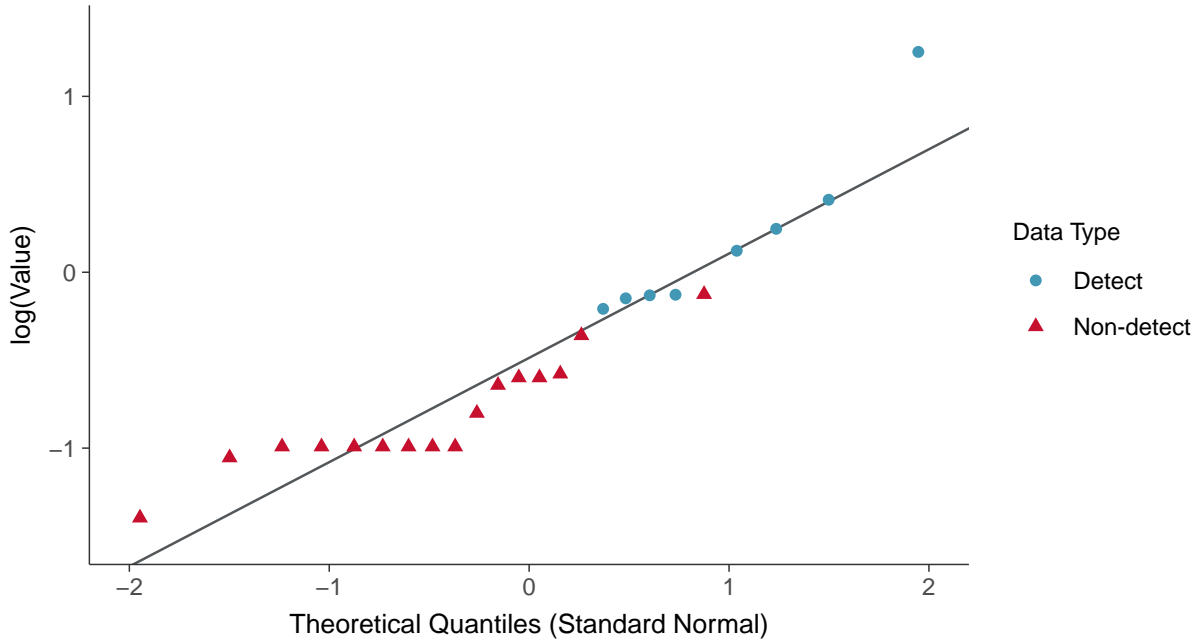
Radium-226+228, MW-15022 (pCi/L)





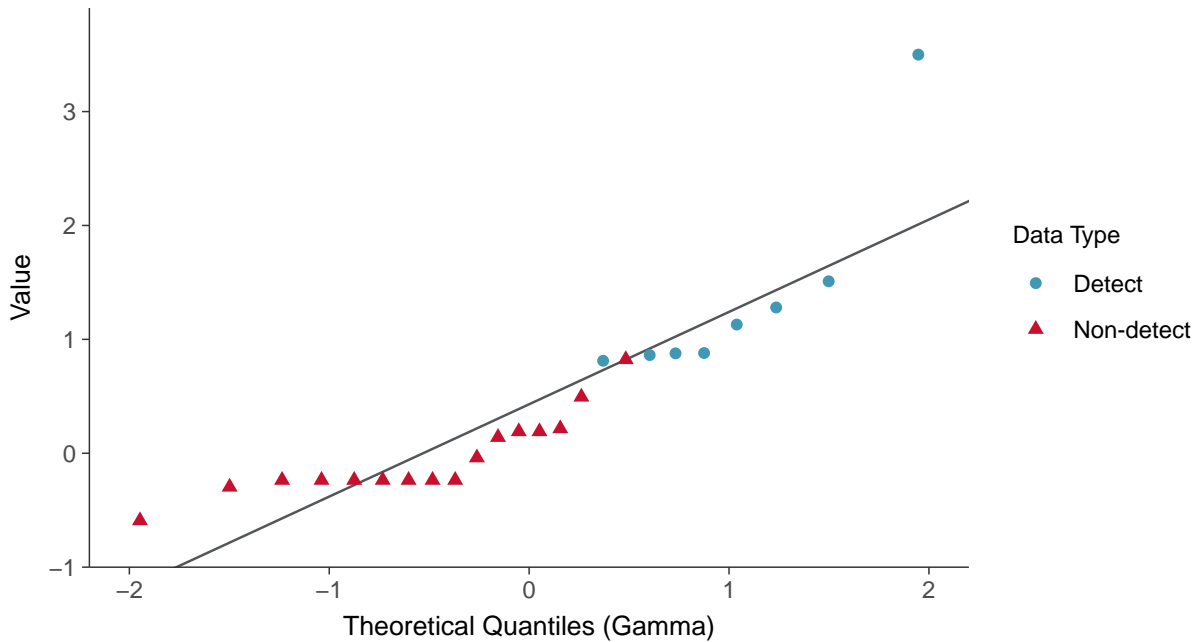
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15022 (pCi/L)



Gamma Q-Q plot using ROS Imputed Estimates

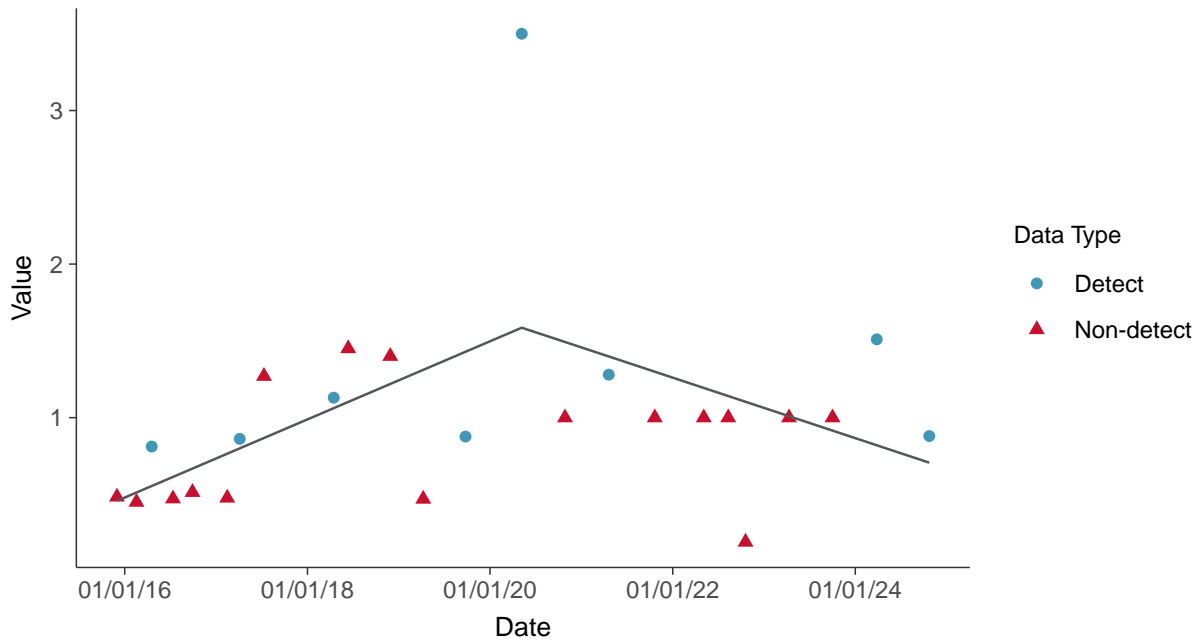
Radium-226+228, MW-15022 (pCi/L)





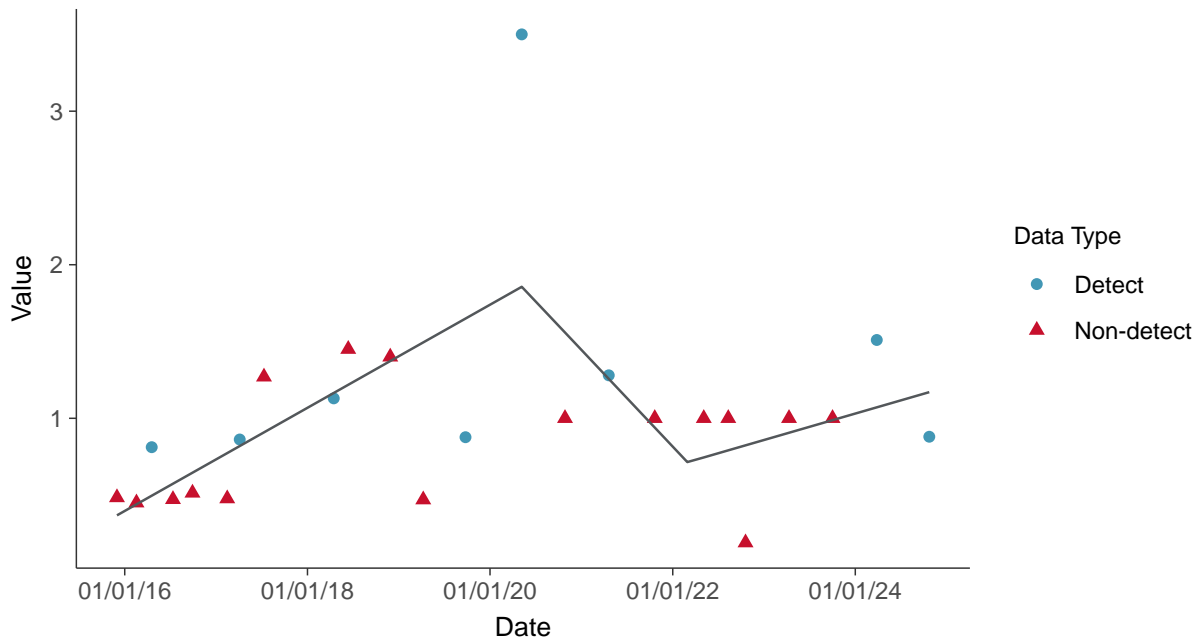
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-15022 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

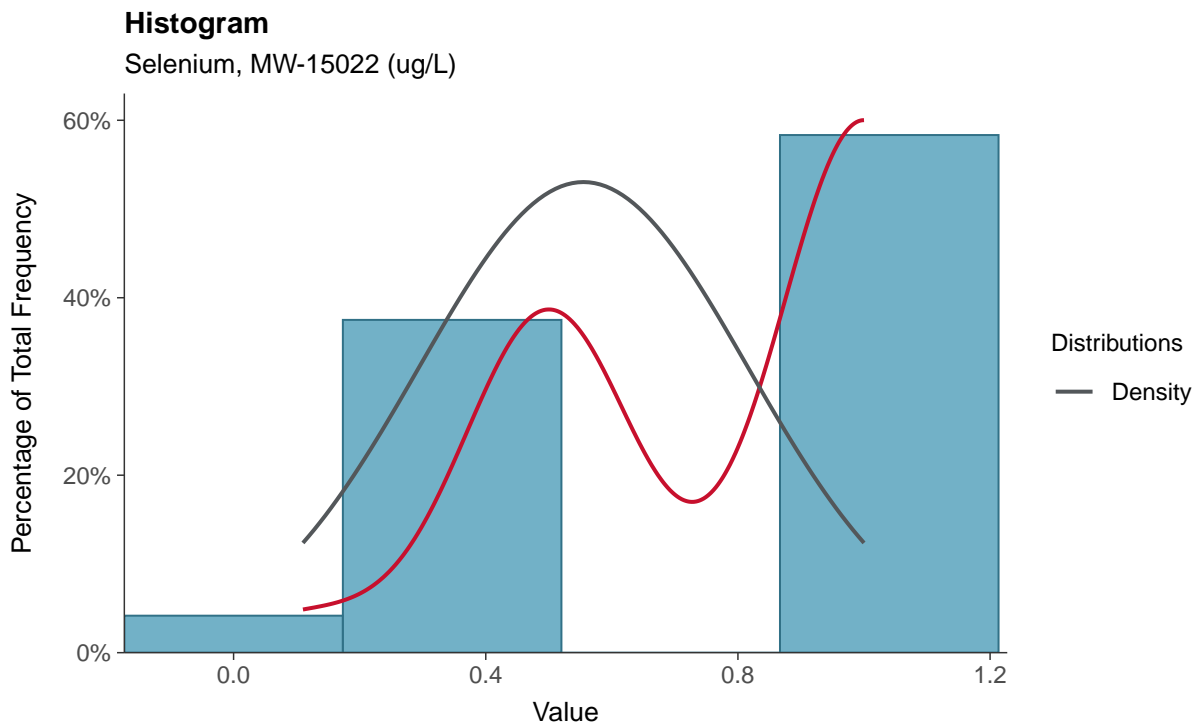
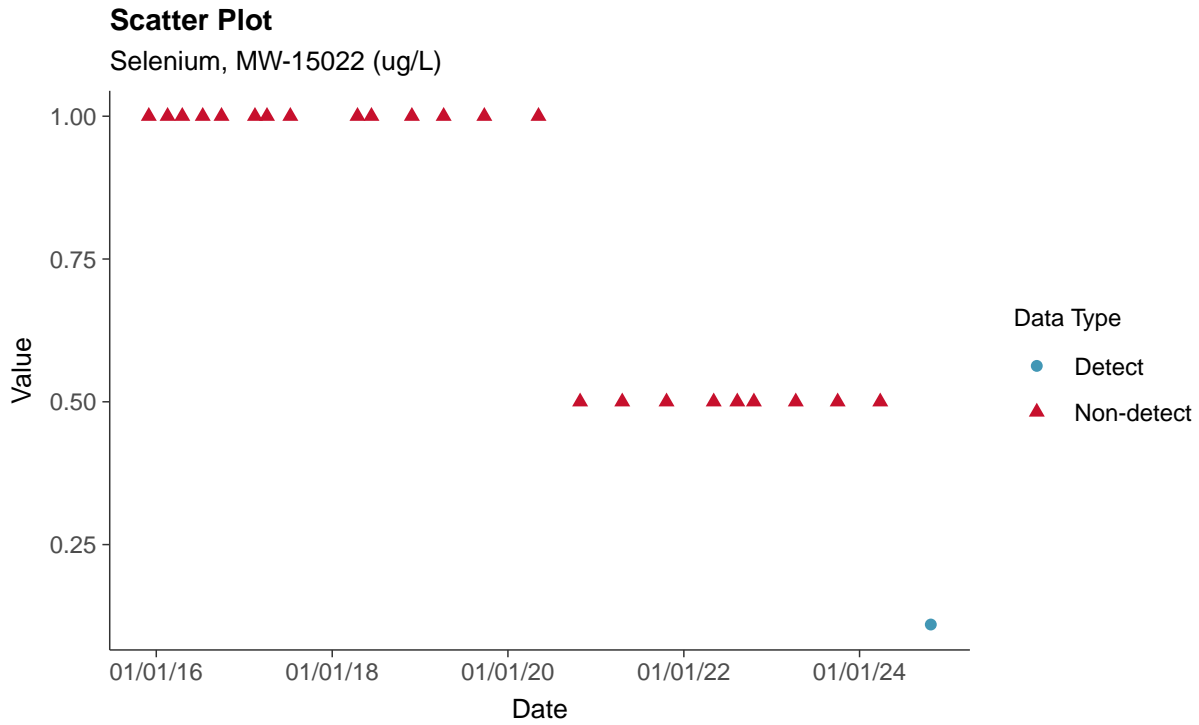
Radium-226+228, MW-15022 (pCi/L)

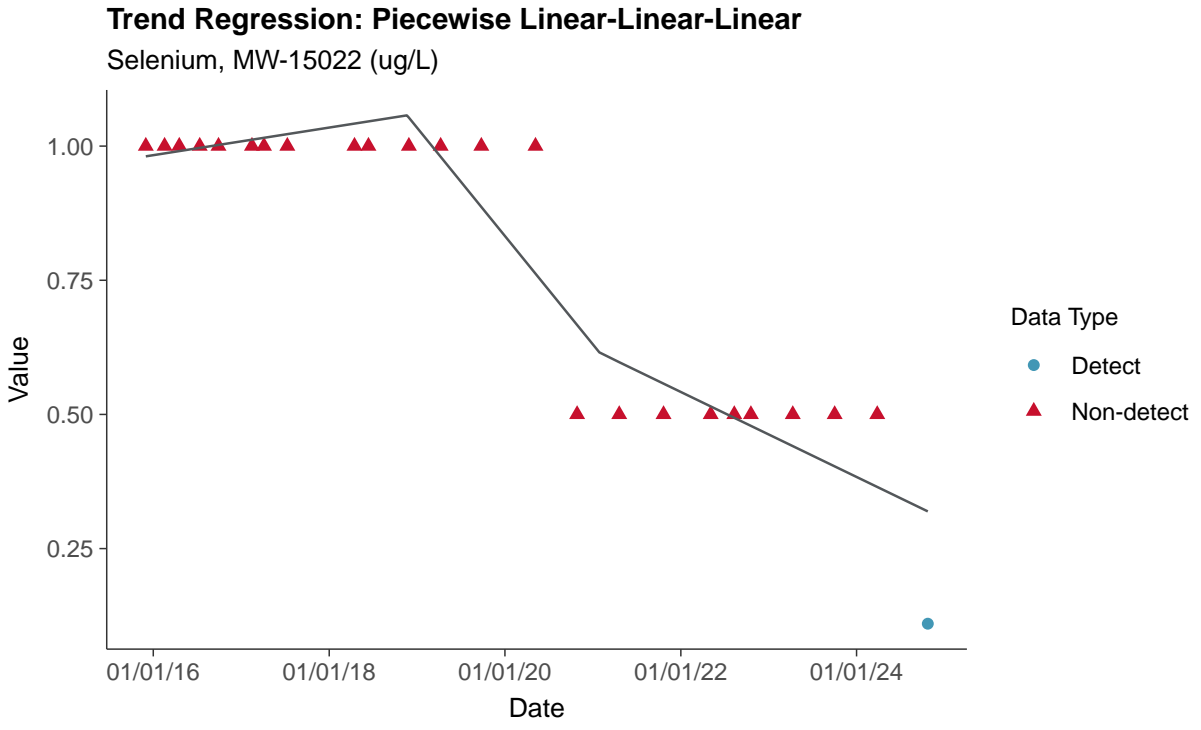
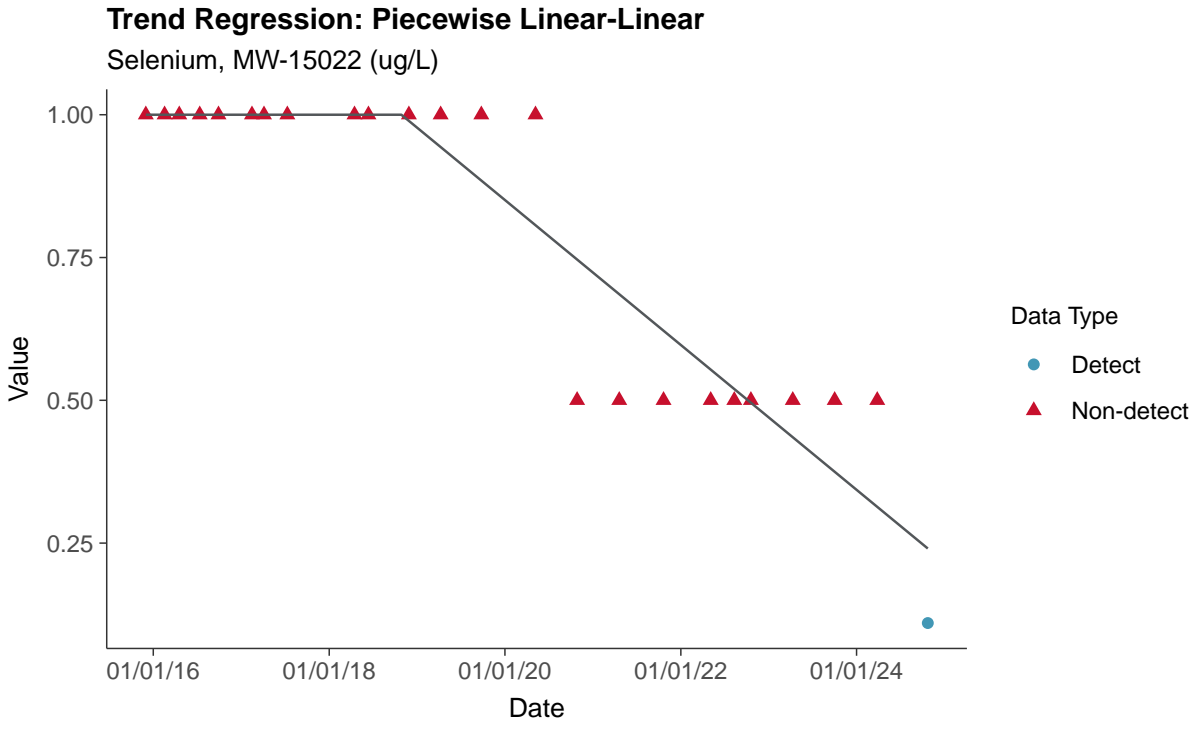




Appendix IV: Selenium, MW-15022

ID: 12_2_127

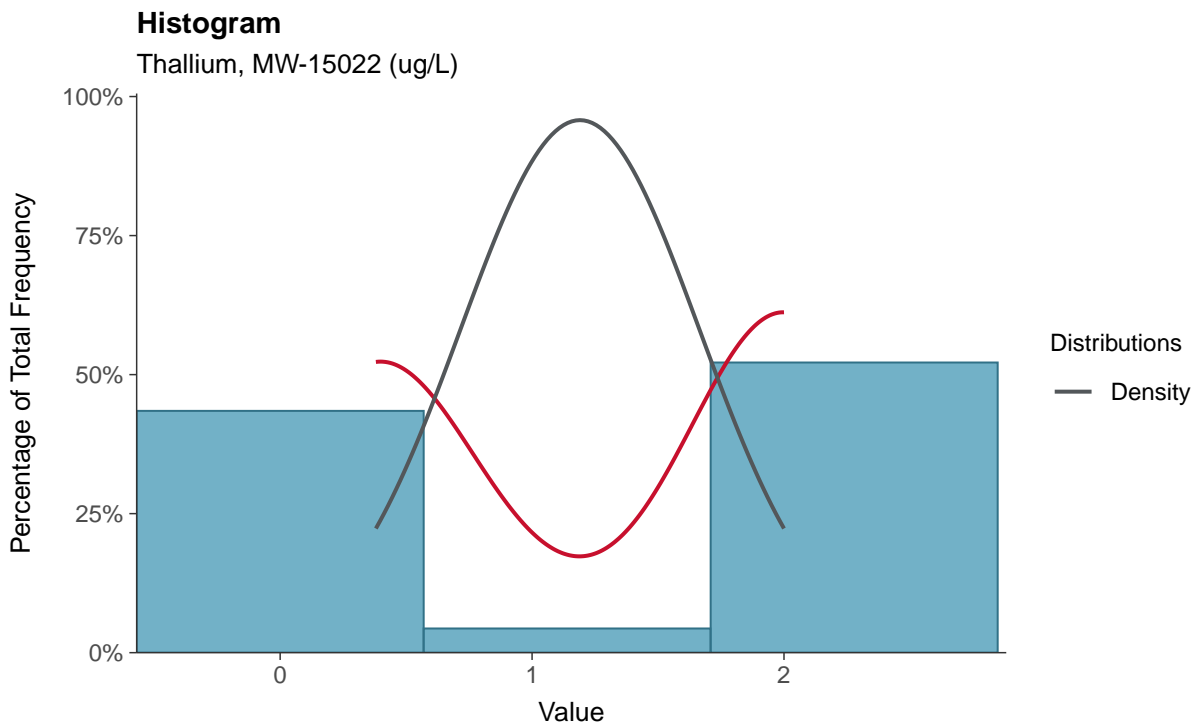
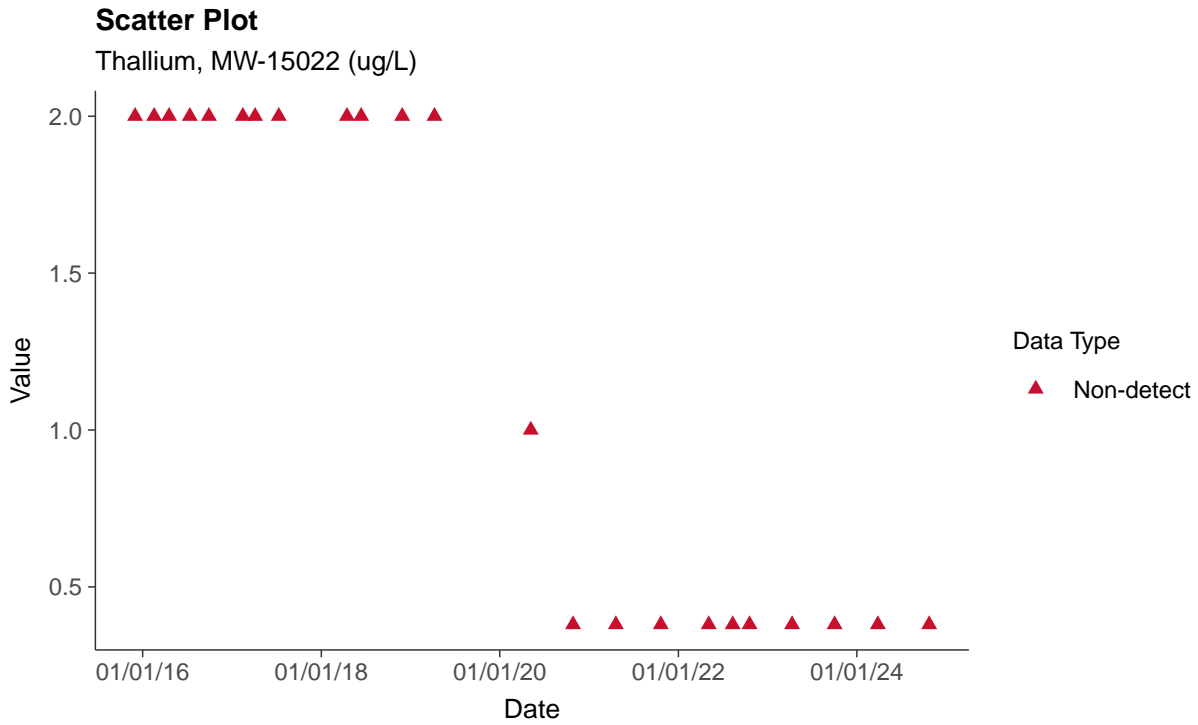






Appendix IV: Thallium, MW-15022

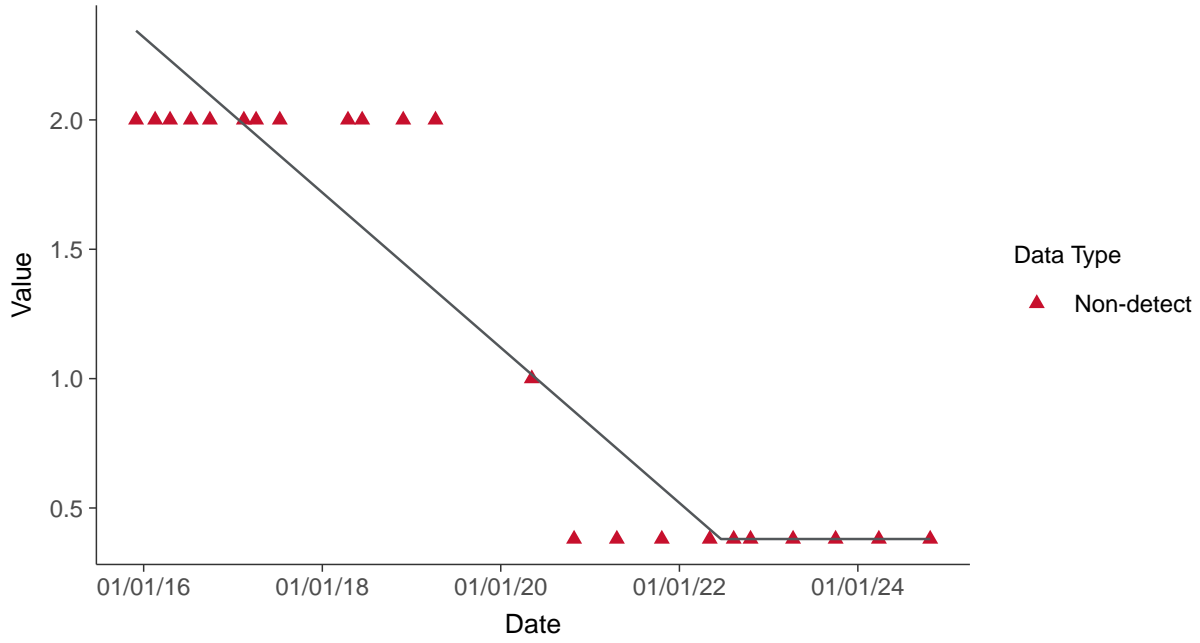
ID: 12_2_131





Trend Regression: Piecewise Linear-Linear

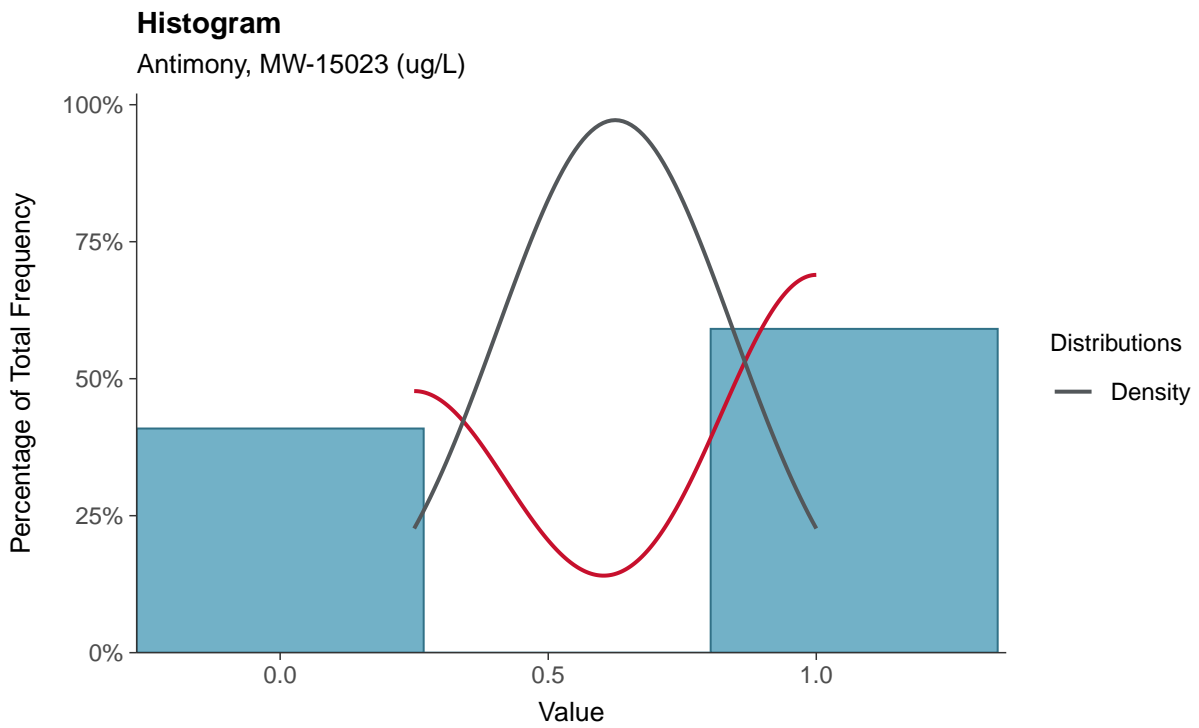
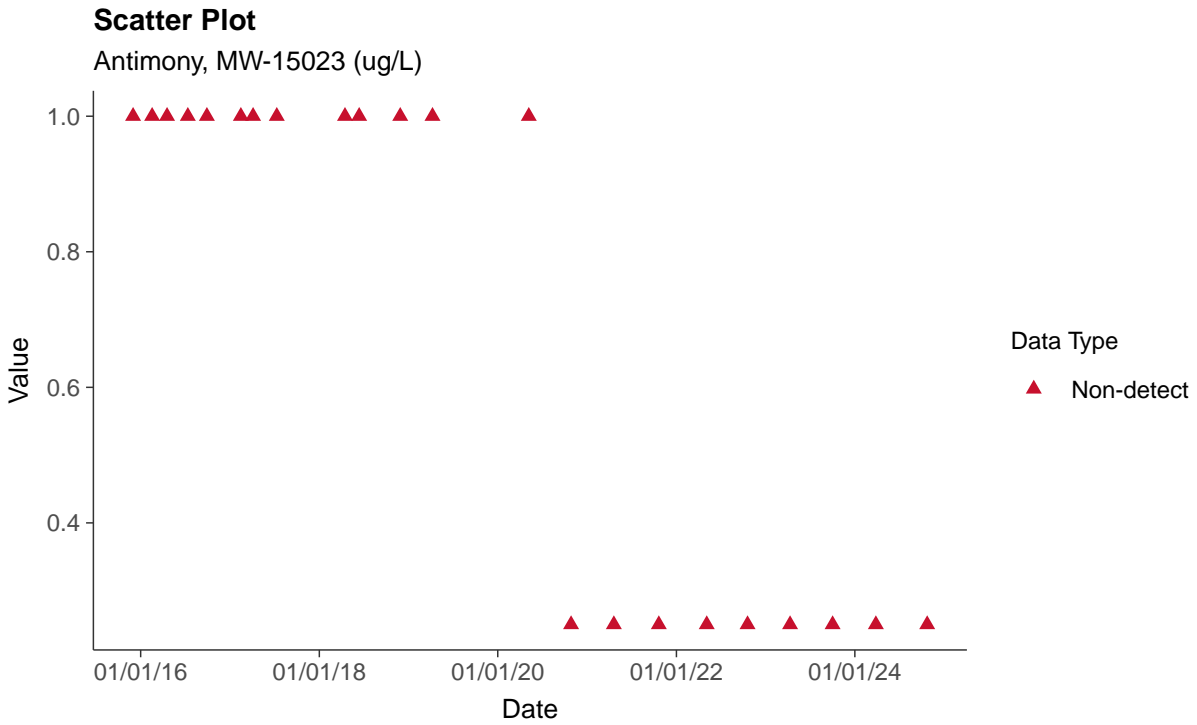
Thallium, MW-15022 (ug/L)





Appendix IV: Antimony, MW-15023

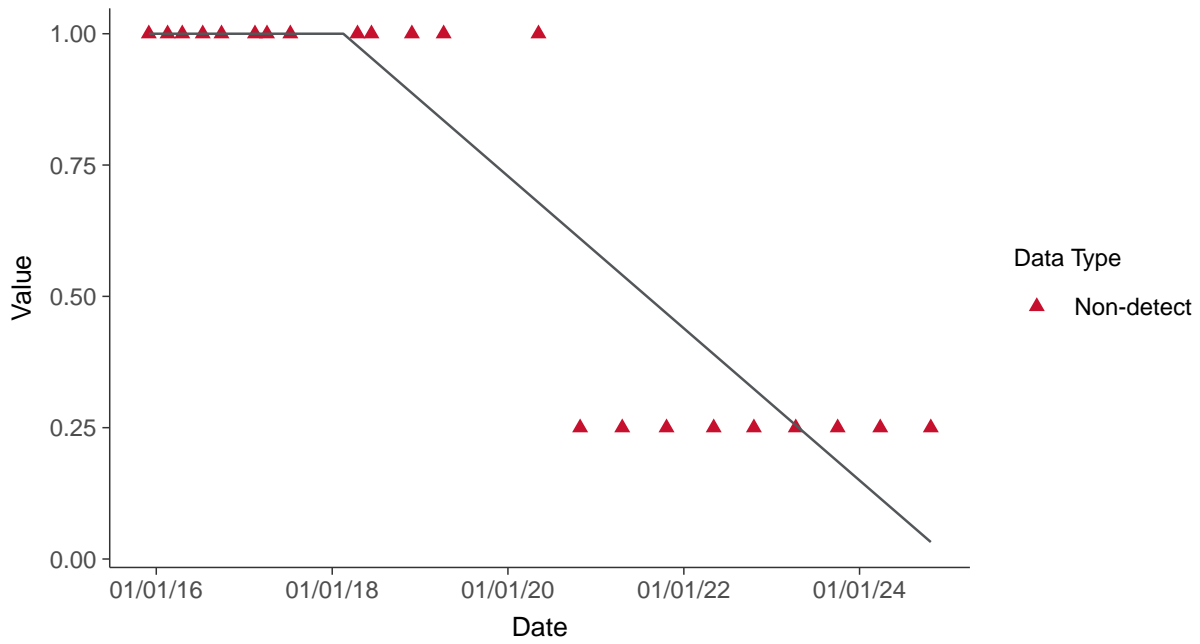
ID: 13_2_101





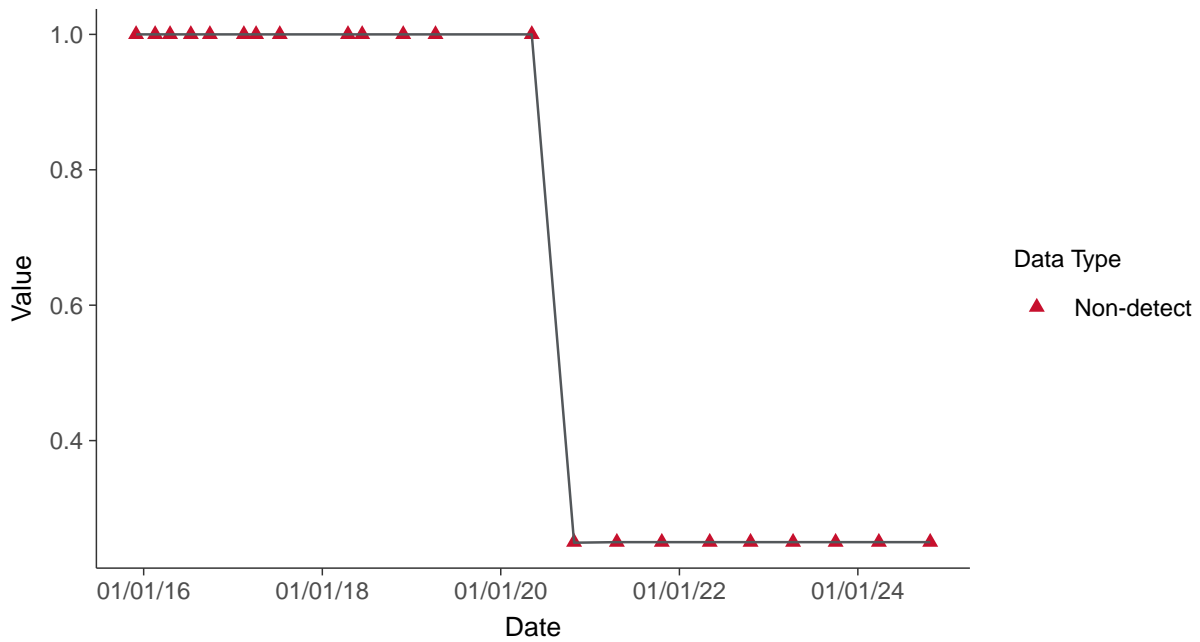
Trend Regression: Piecewise Linear-Linear

Antimony, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-15023 (ug/L)



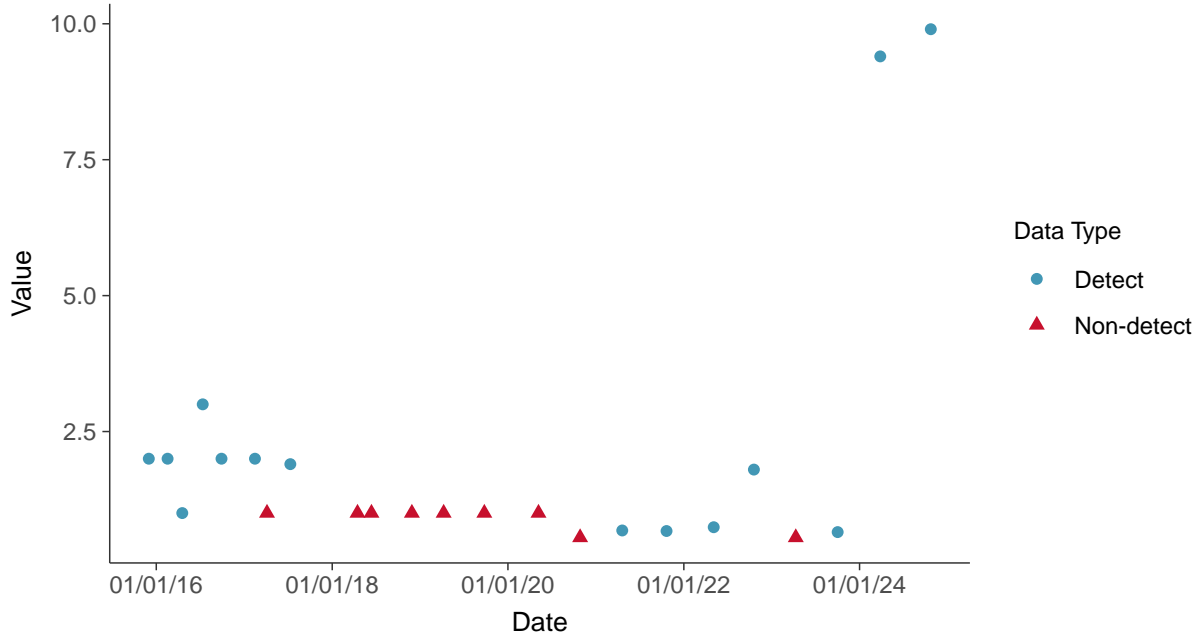


Appendix IV: Arsenic, MW-15023

ID: 13_2_102

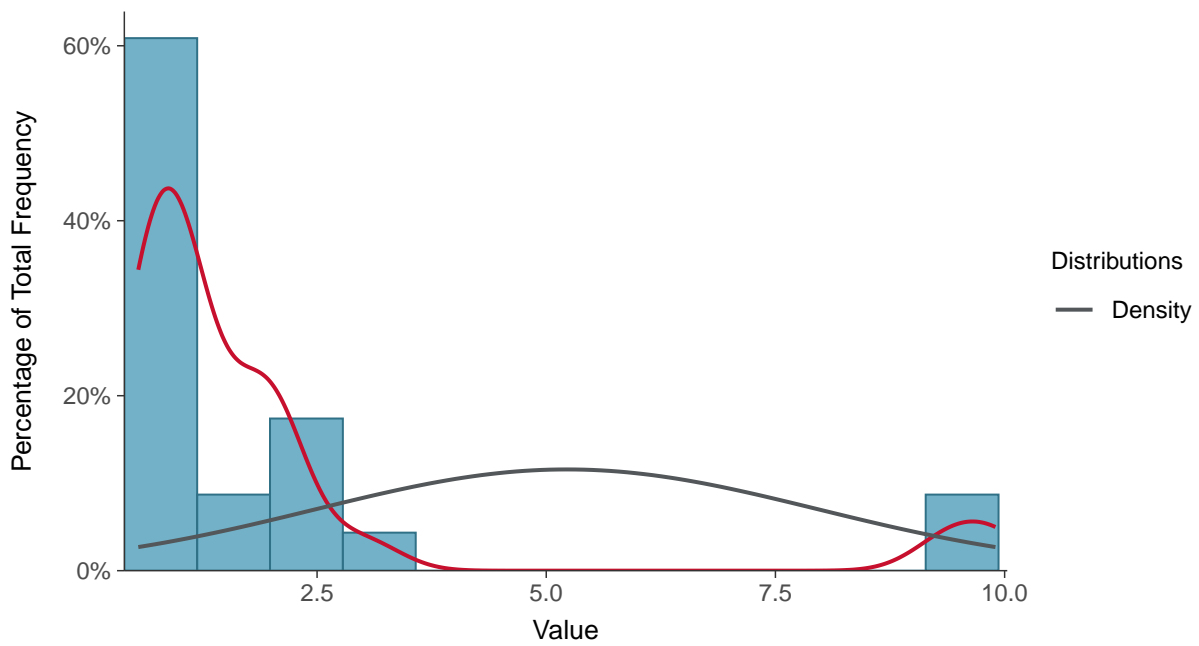
Scatter Plot

Arsenic, MW-15023 (ug/L)



Histogram

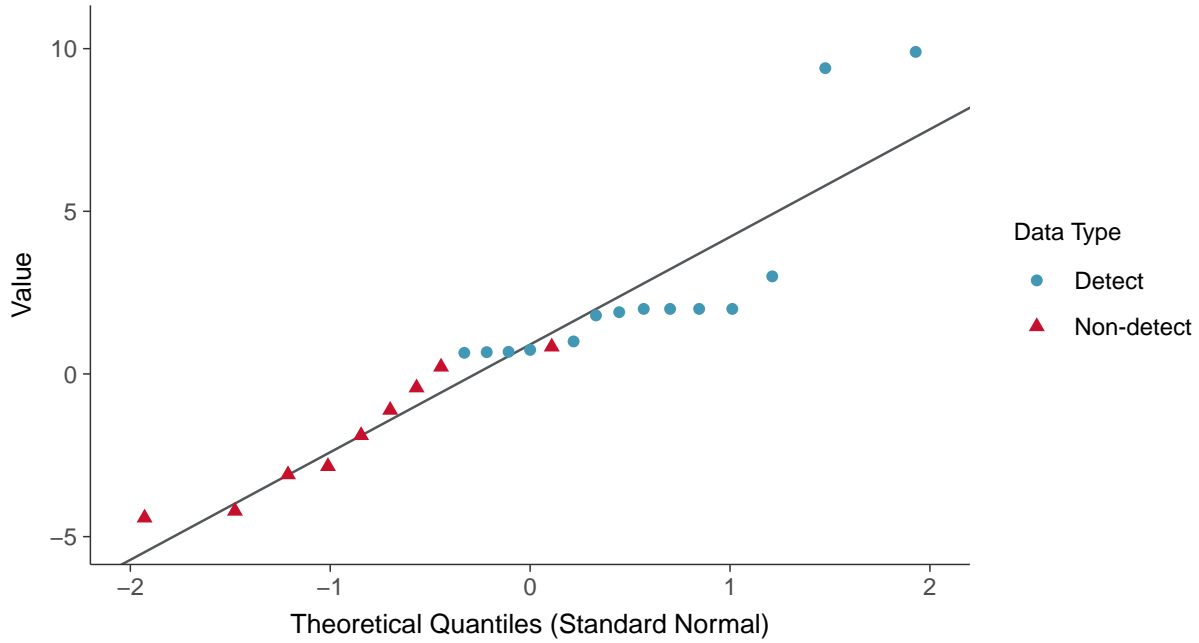
Arsenic, MW-15023 (ug/L)





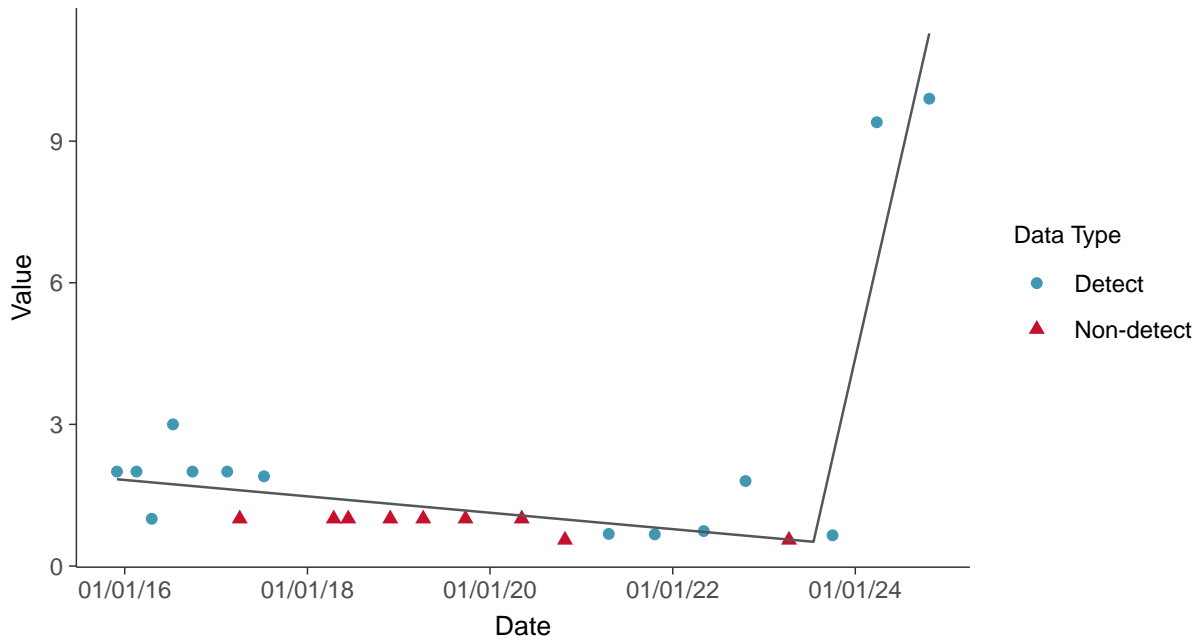
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear

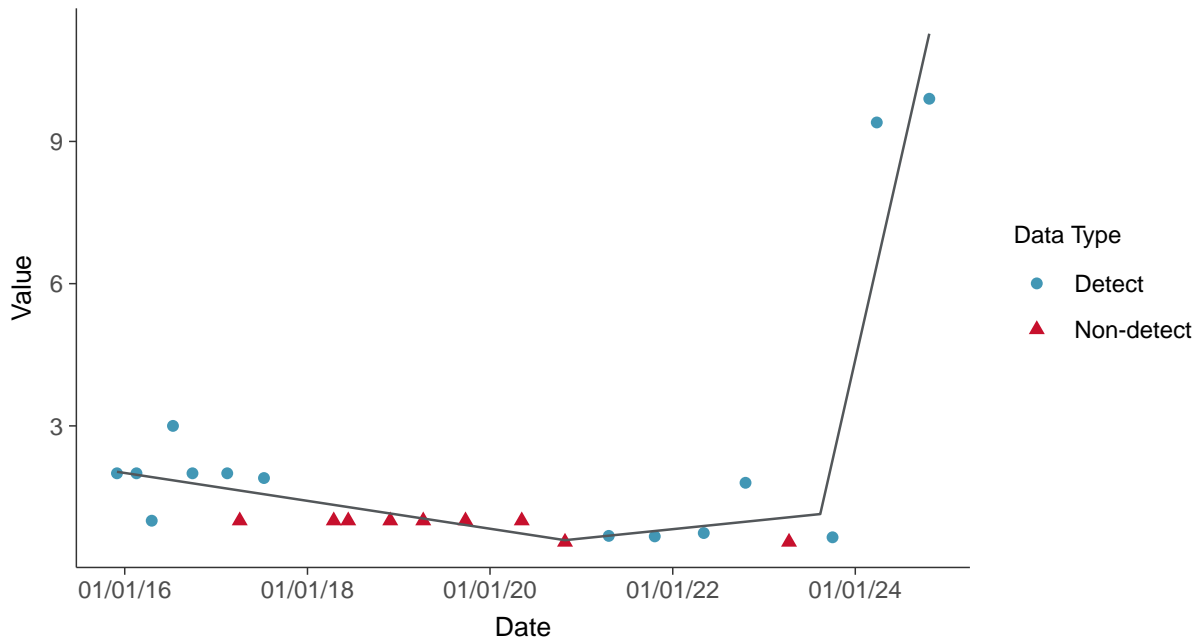
Arsenic, MW-15023 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-15023 (ug/L)



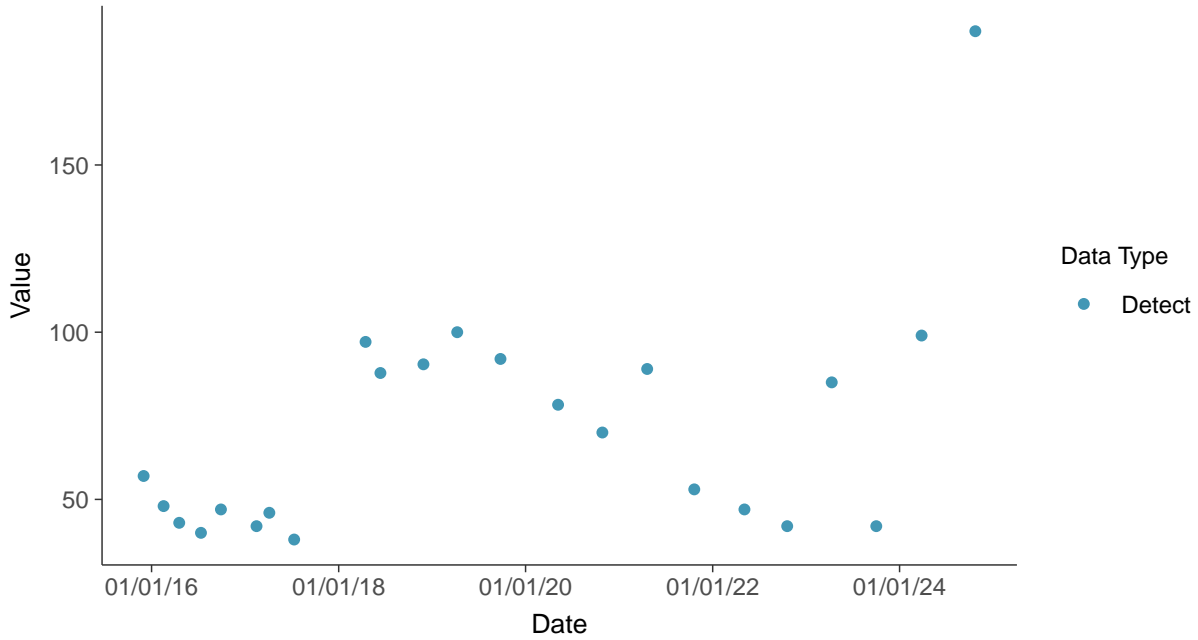


Appendix IV: Barium, MW-15023

ID: 13_2_103

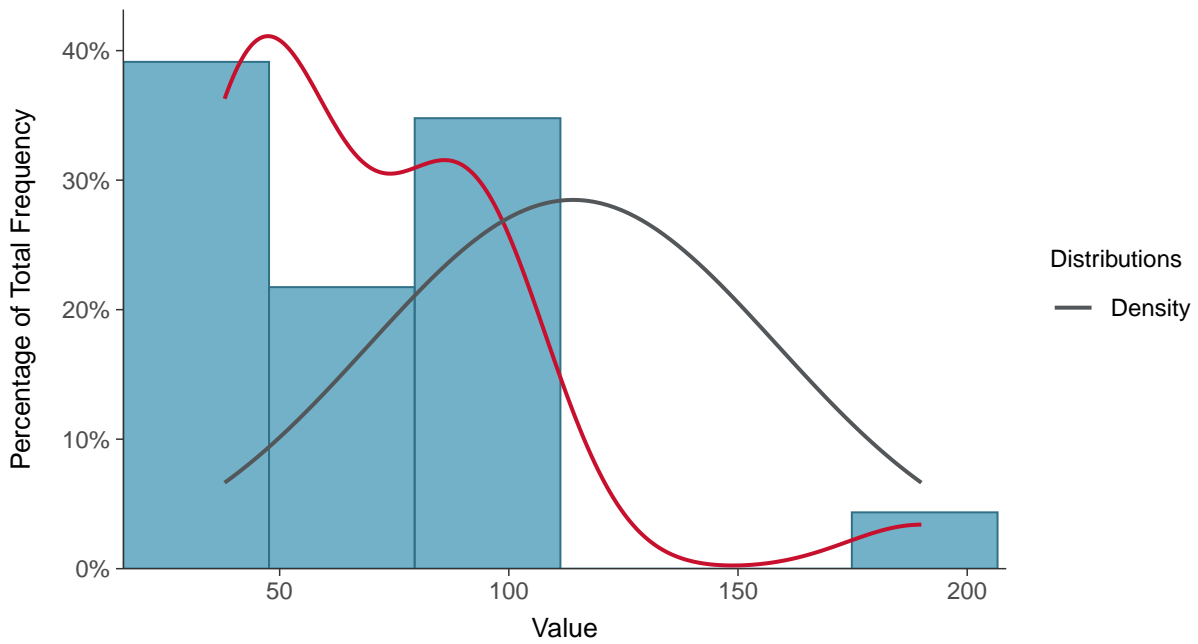
Scatter Plot

Barium, MW-15023 (ug/L)



Histogram

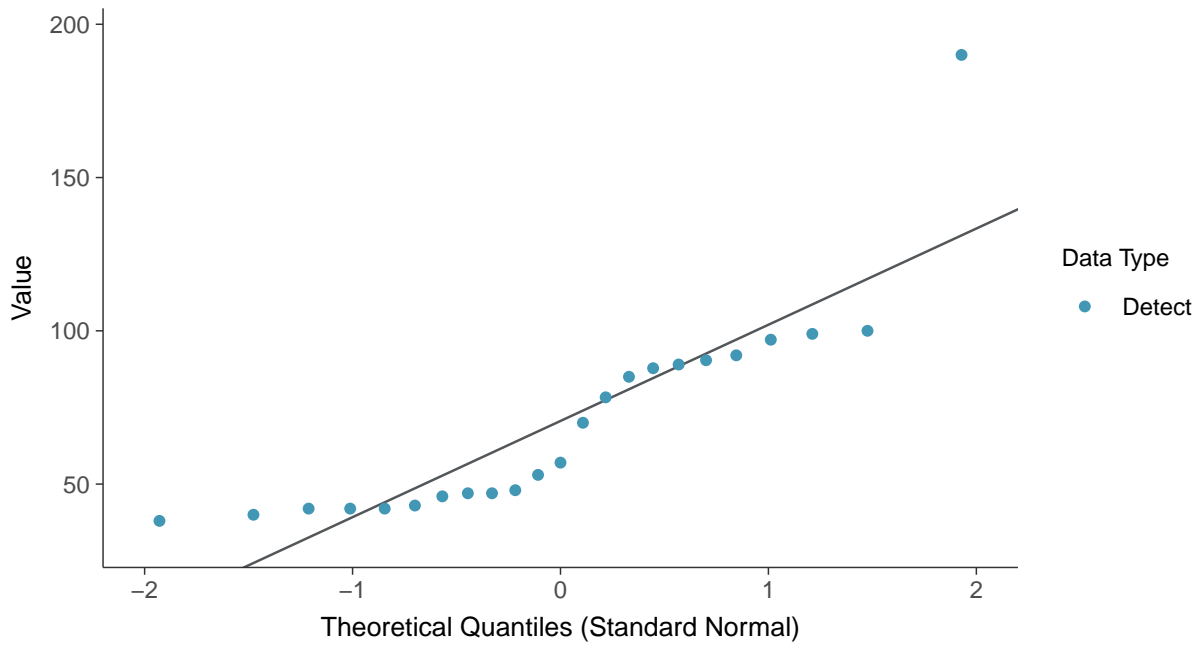
Barium, MW-15023 (ug/L)





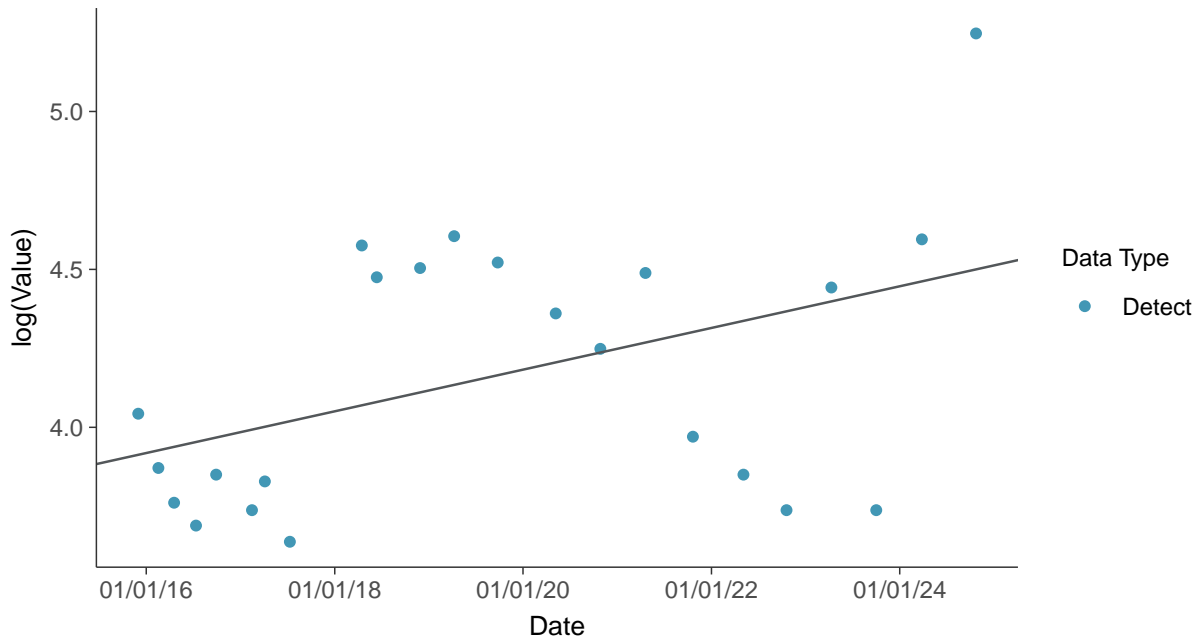
Normal Q-Q plot

Barium, MW-15023 (ug/L)



Trend Regression: Lognormal MLE

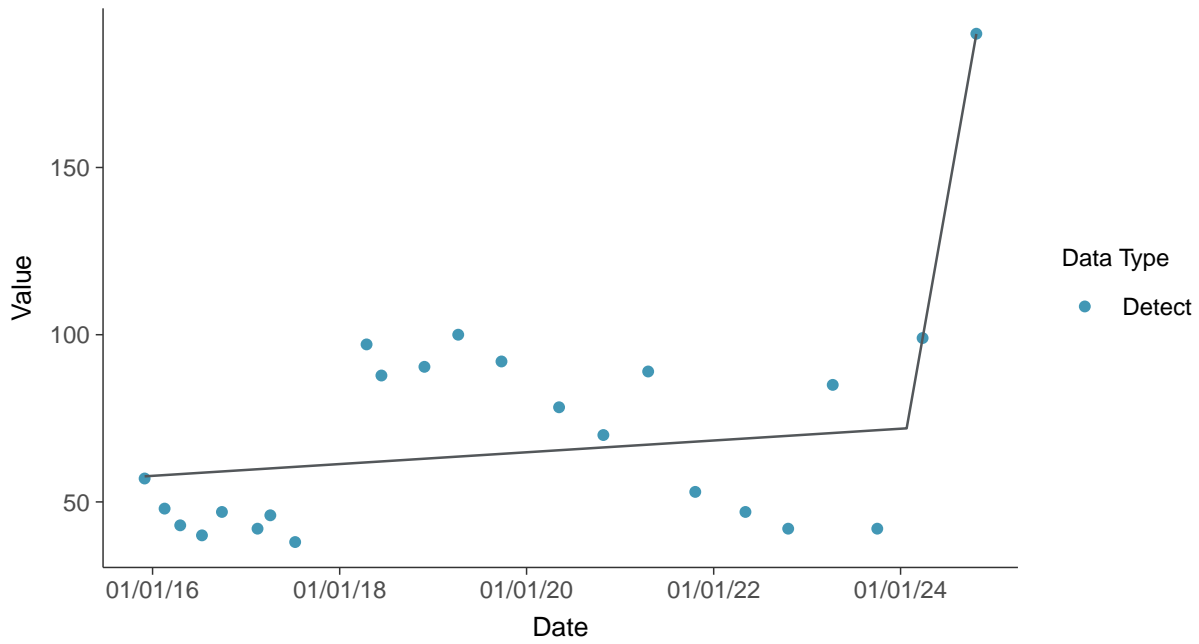
Barium, MW-15023 (ug/L)





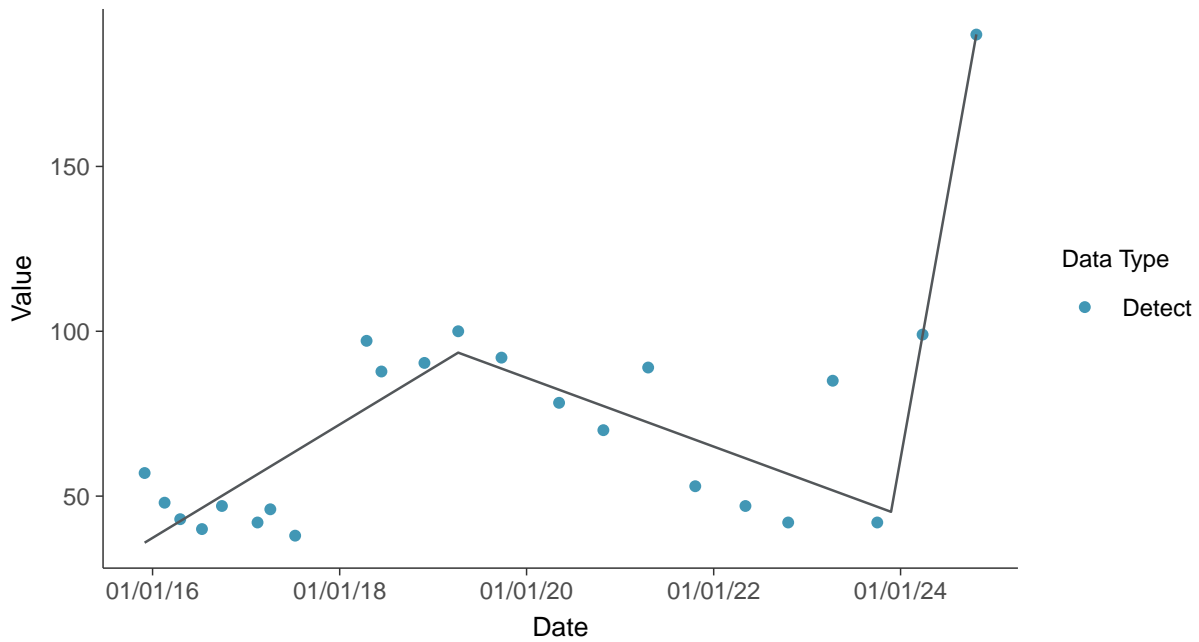
Trend Regression: Piecewise Linear-Linear

Barium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

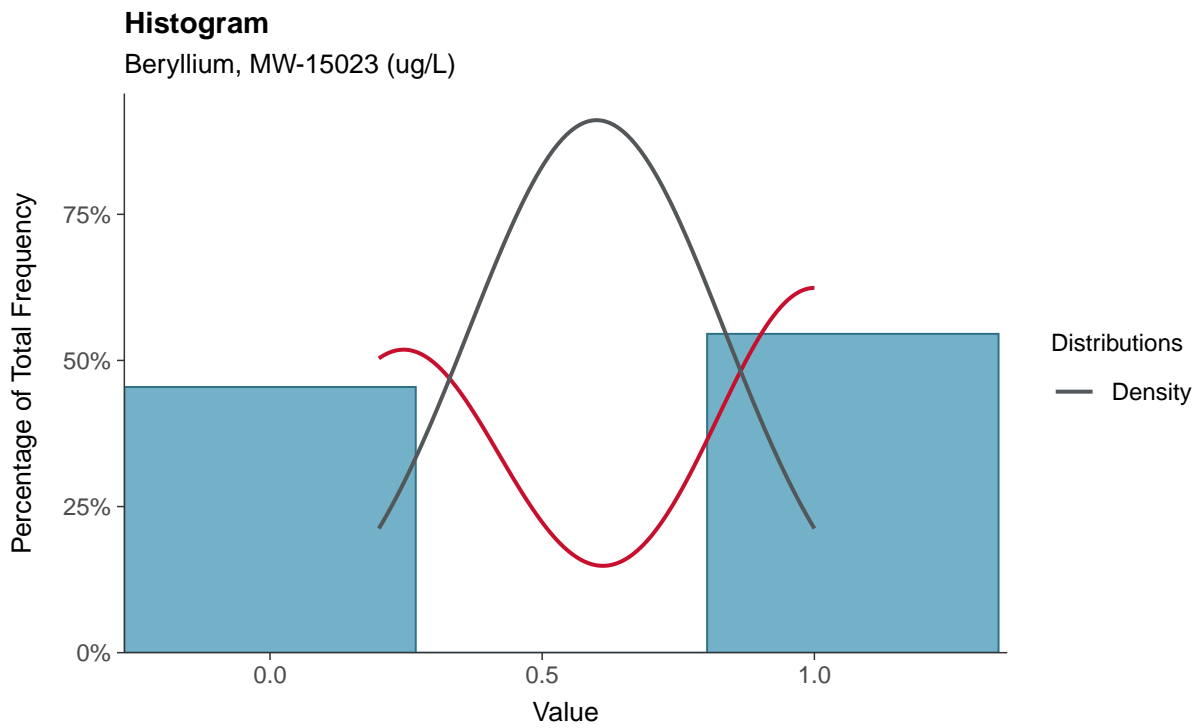
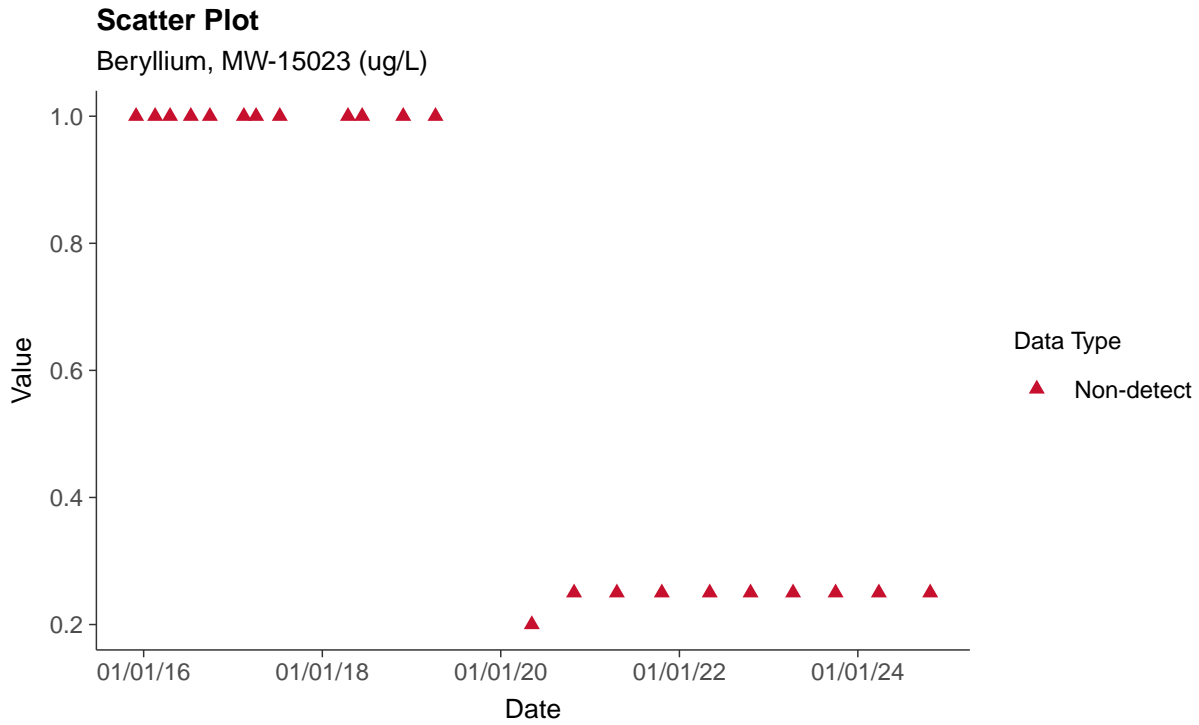
Barium, MW-15023 (ug/L)





Appendix IV: Beryllium, MW-15023

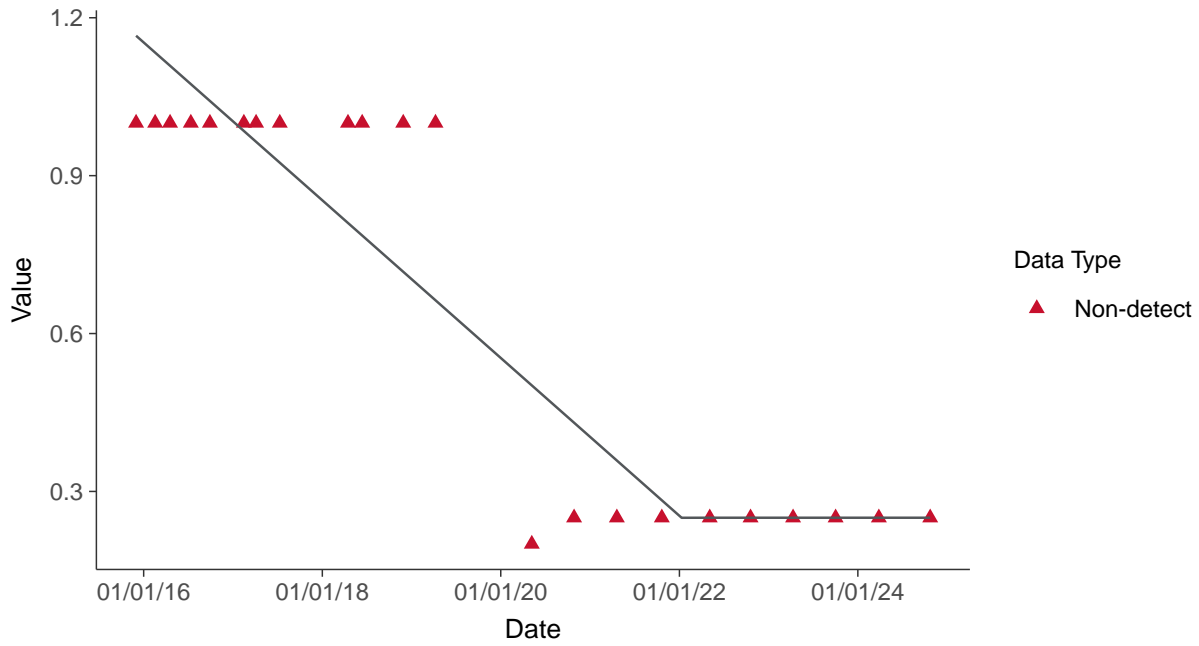
ID: 13_2_104





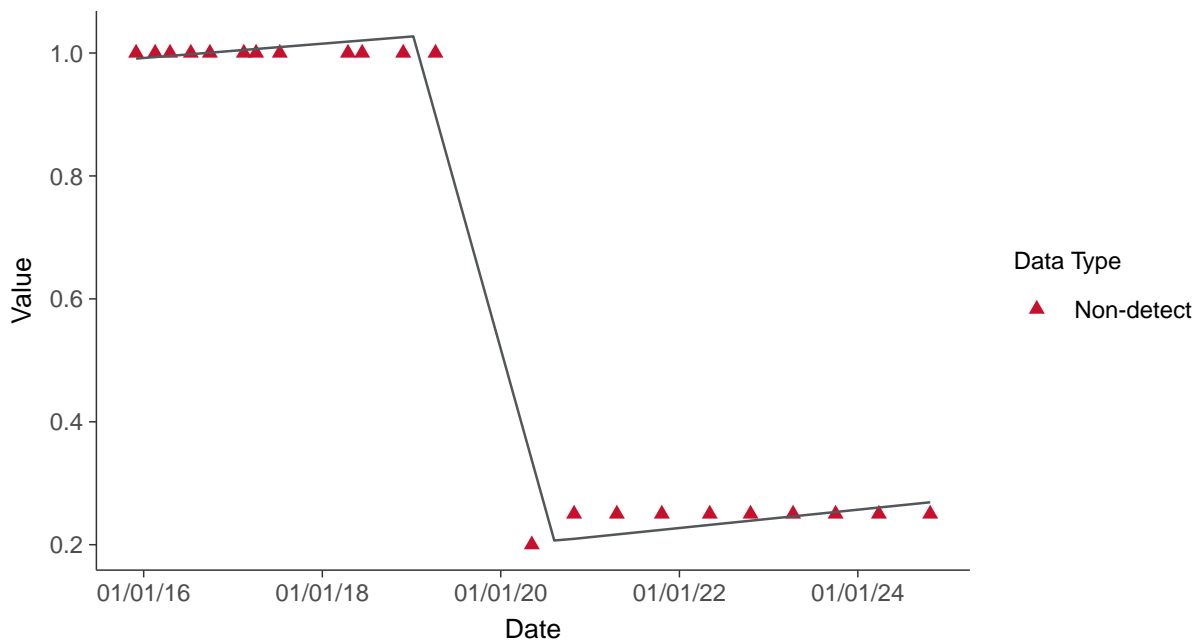
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

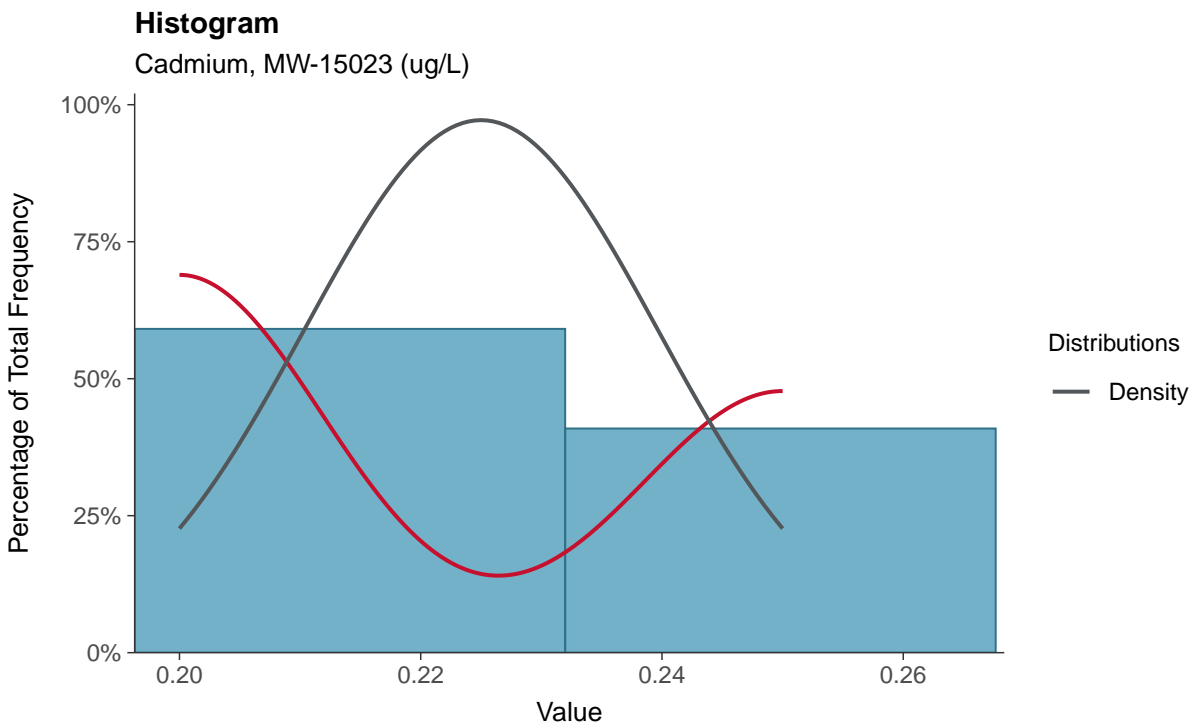
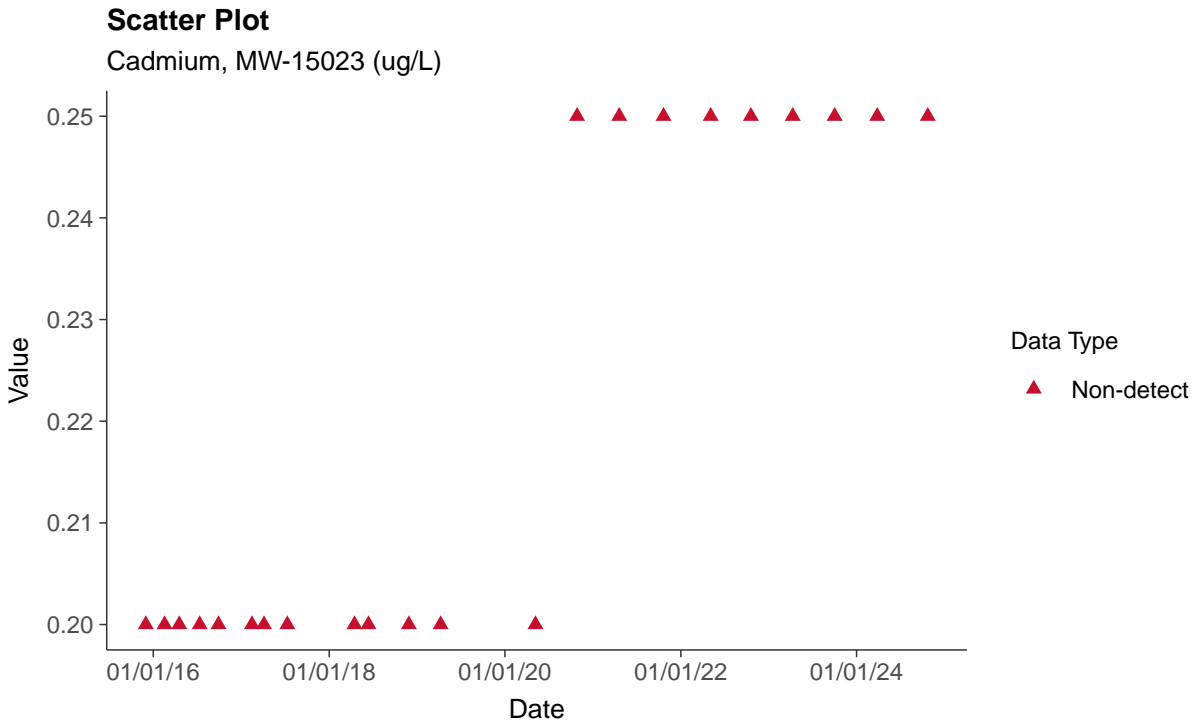
Beryllium, MW-15023 (ug/L)





Appendix IV: Cadmium, MW-15023

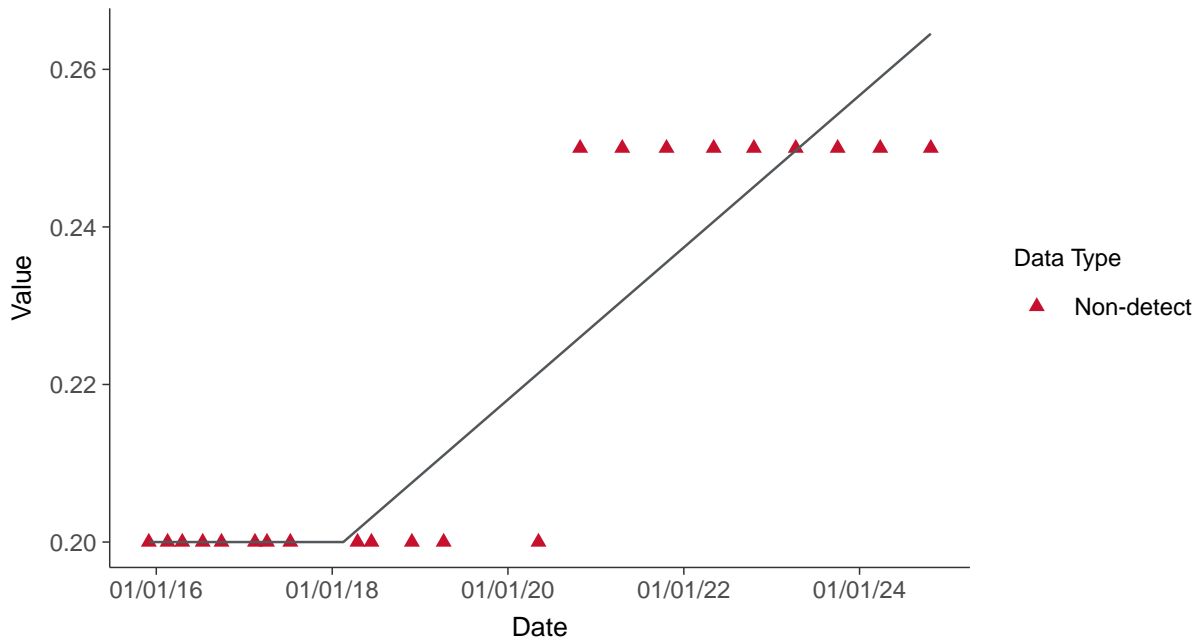
ID: 13_2_106





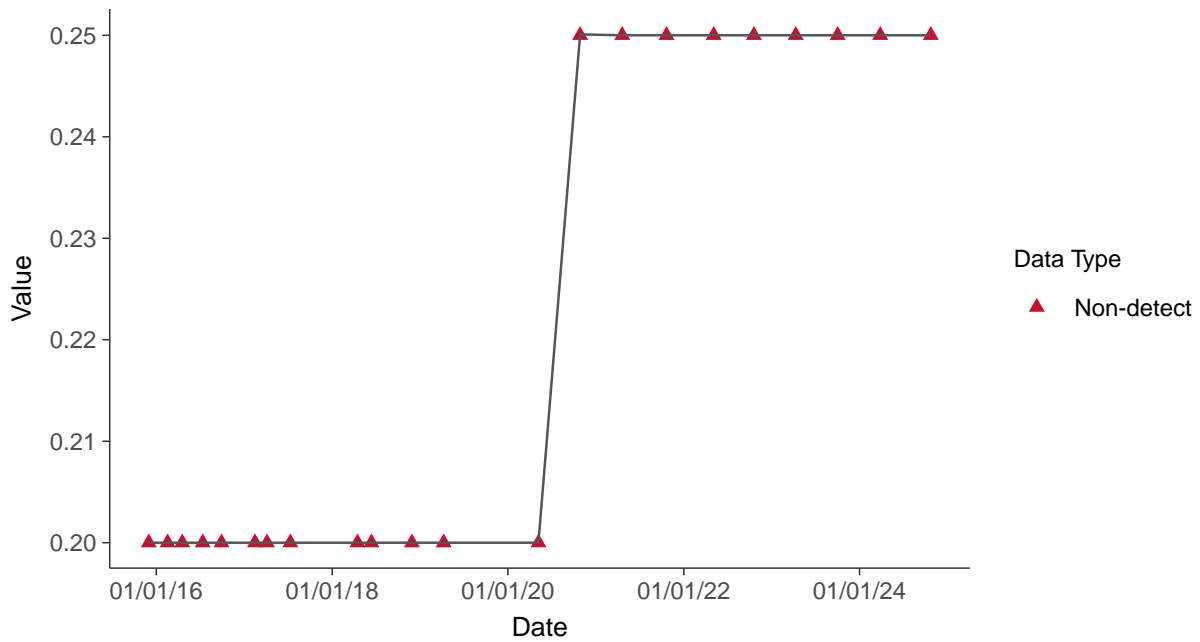
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15023 (ug/L)



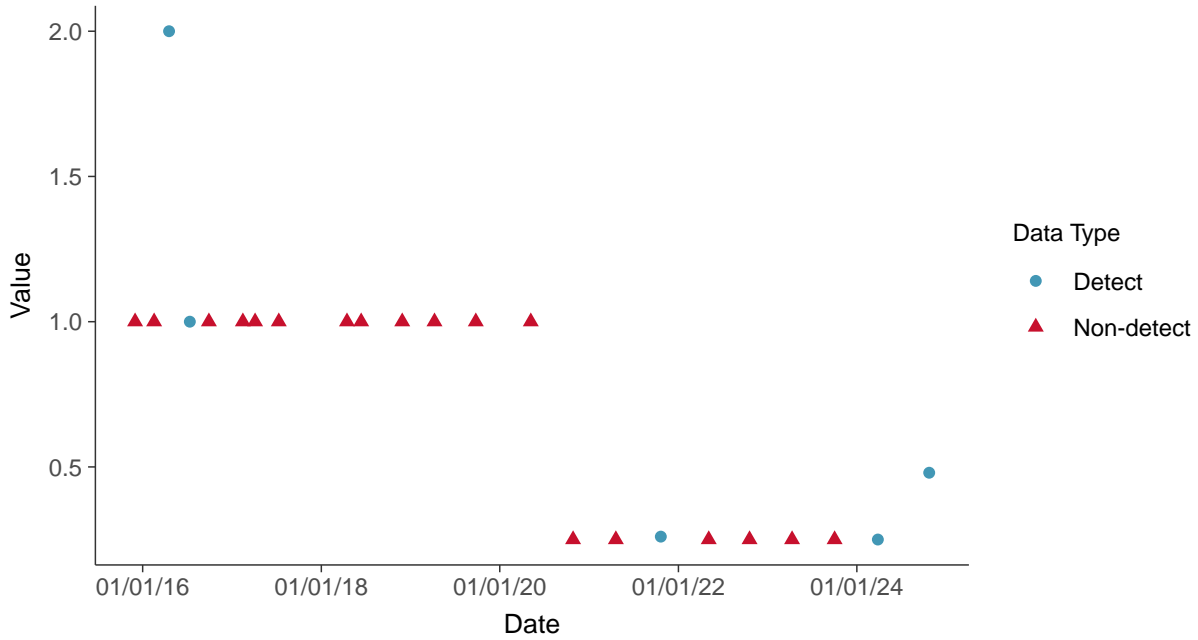


Appendix IV: Chromium, MW-15023

ID: 13_2_109

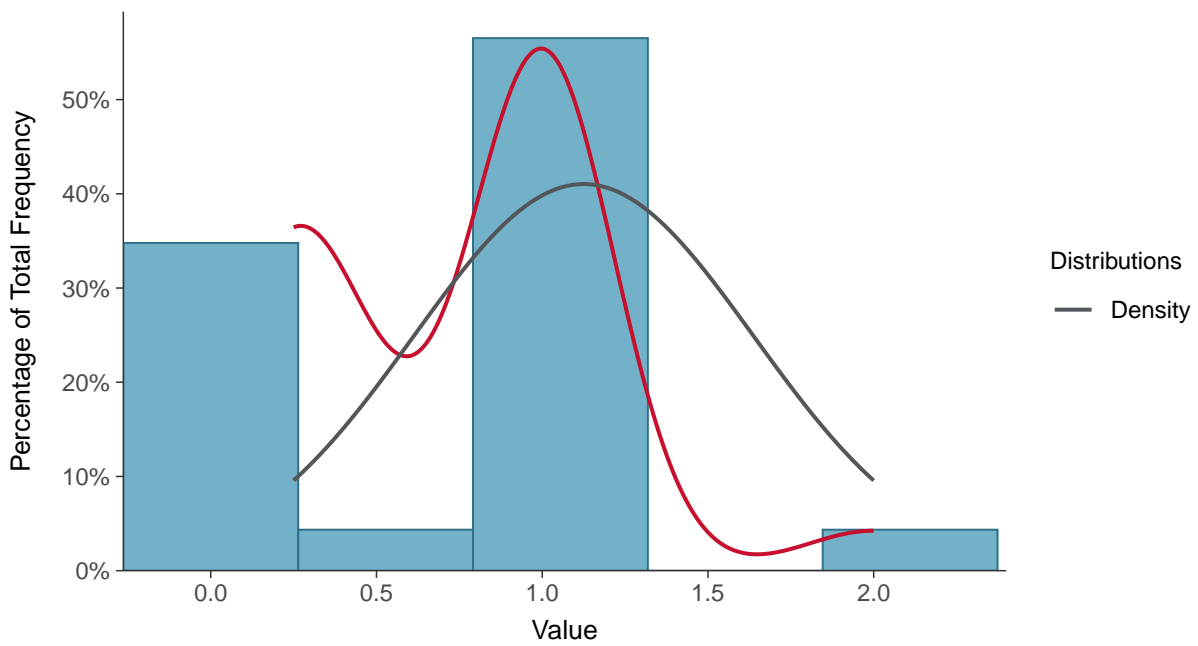
Scatter Plot

Chromium, MW-15023 (ug/L)



Histogram

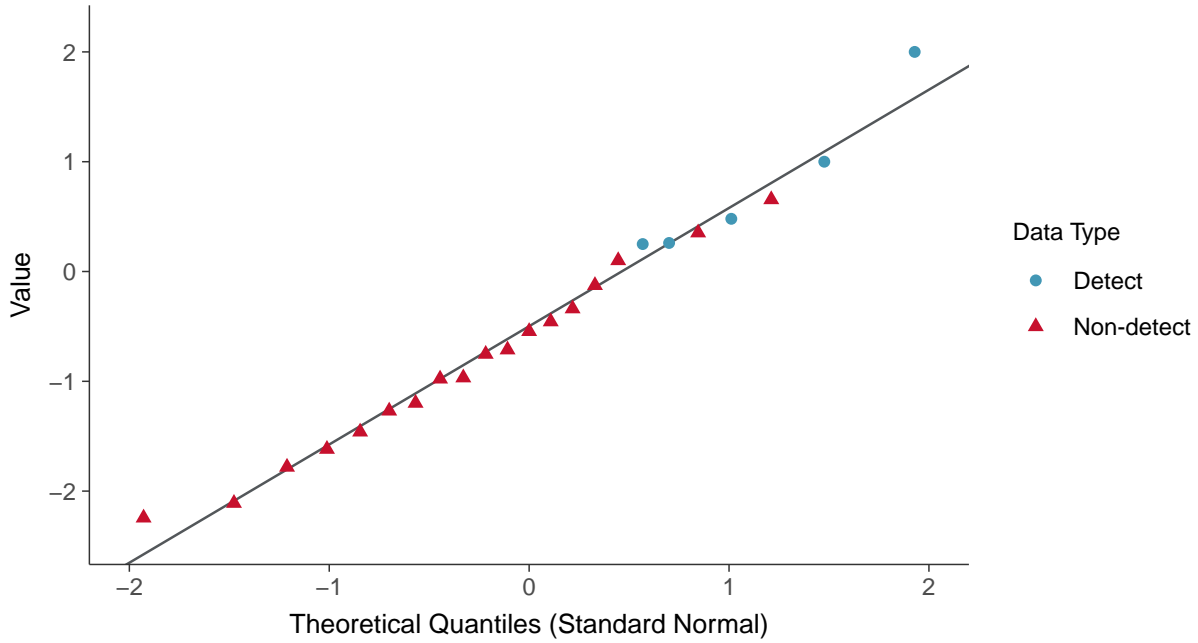
Chromium, MW-15023 (ug/L)





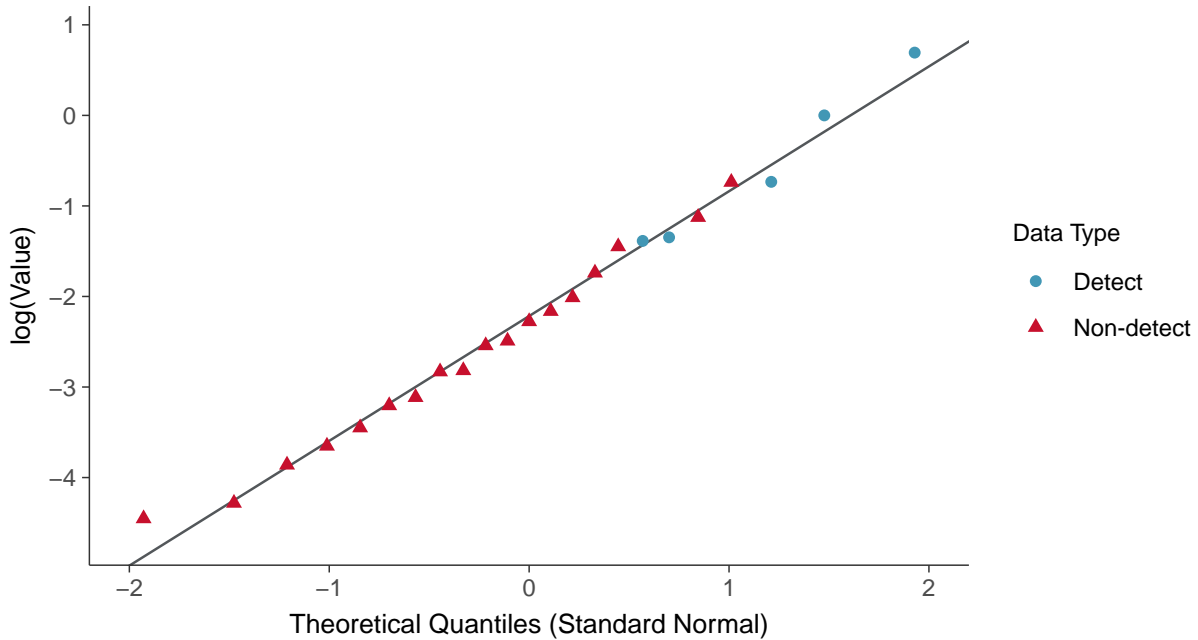
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-15023 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

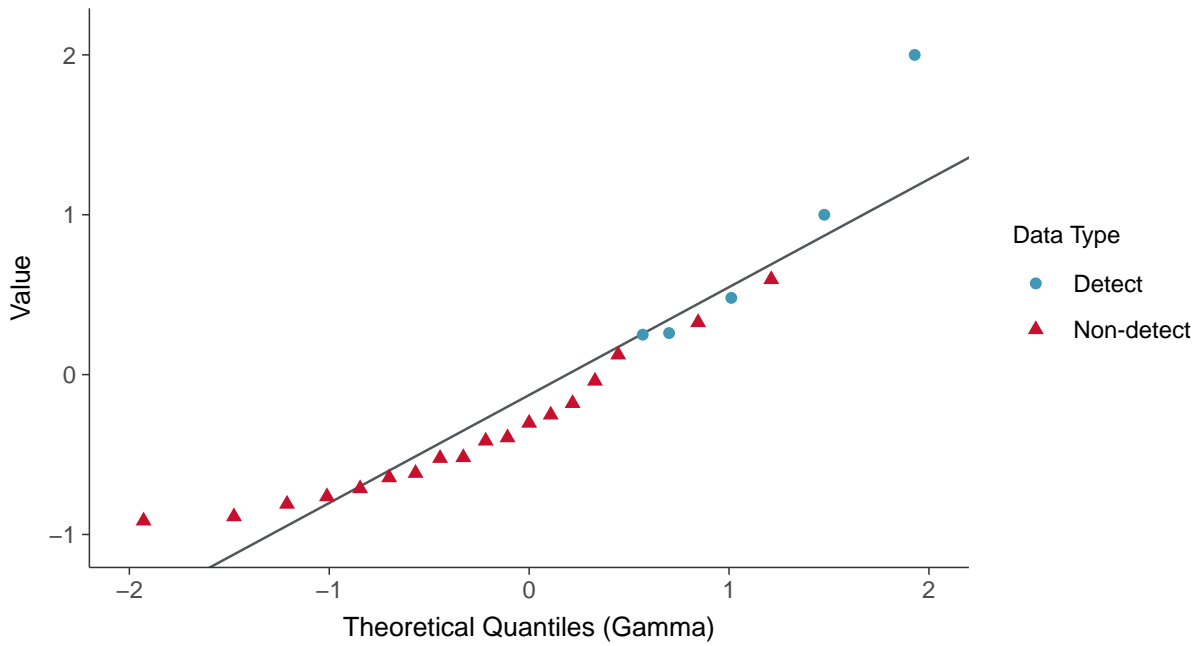
Chromium, MW-15023 (ug/L)





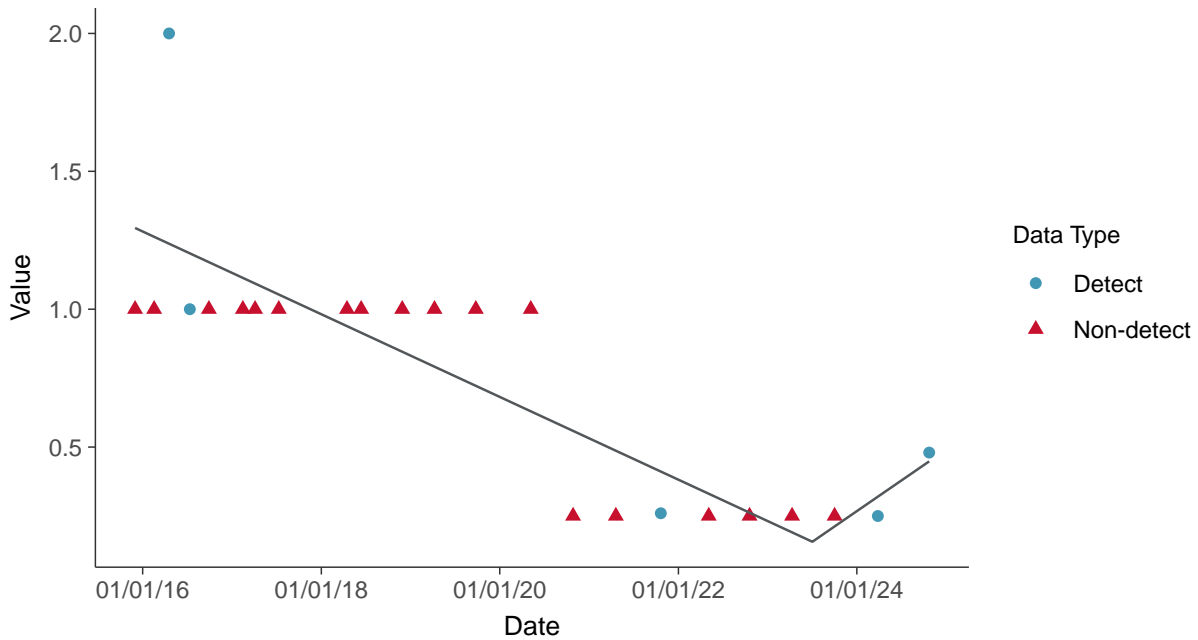
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear

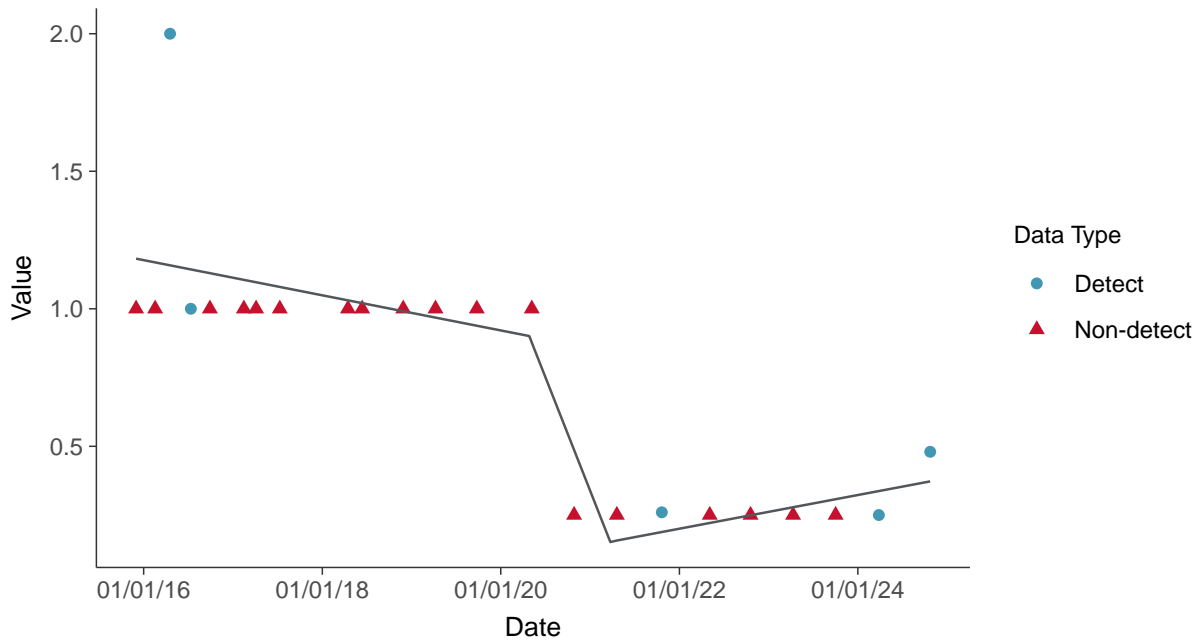
Chromium, MW-15023 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

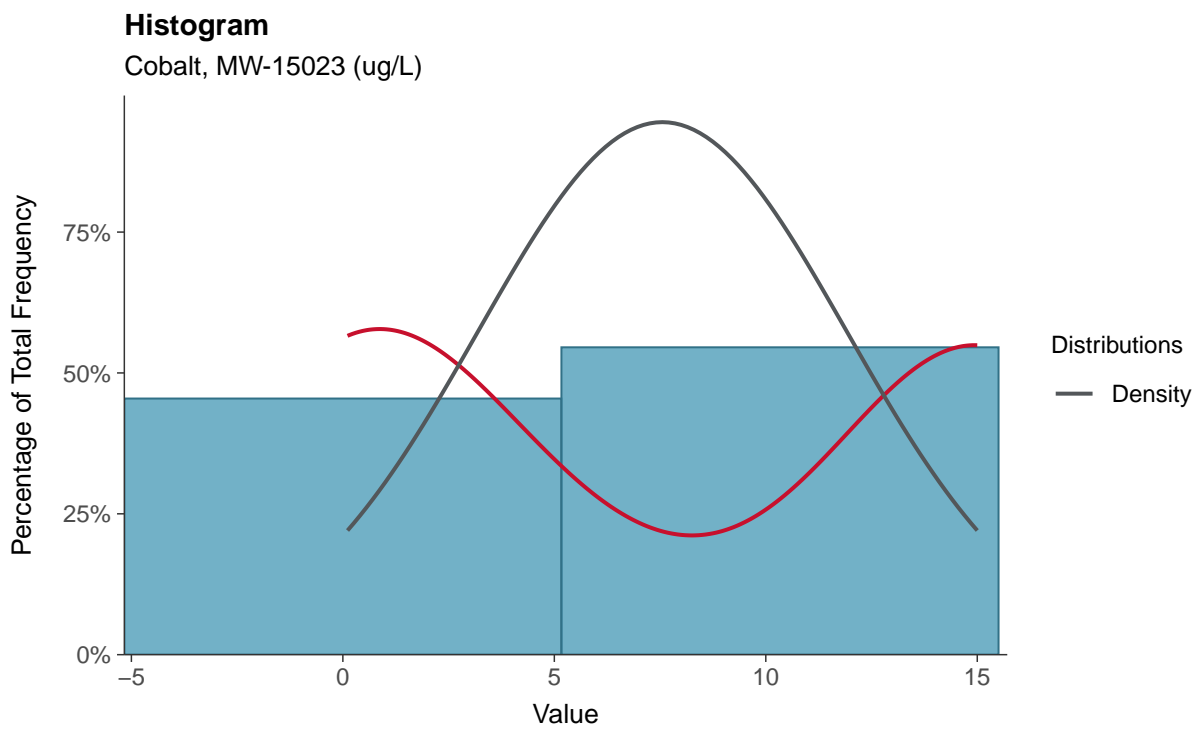
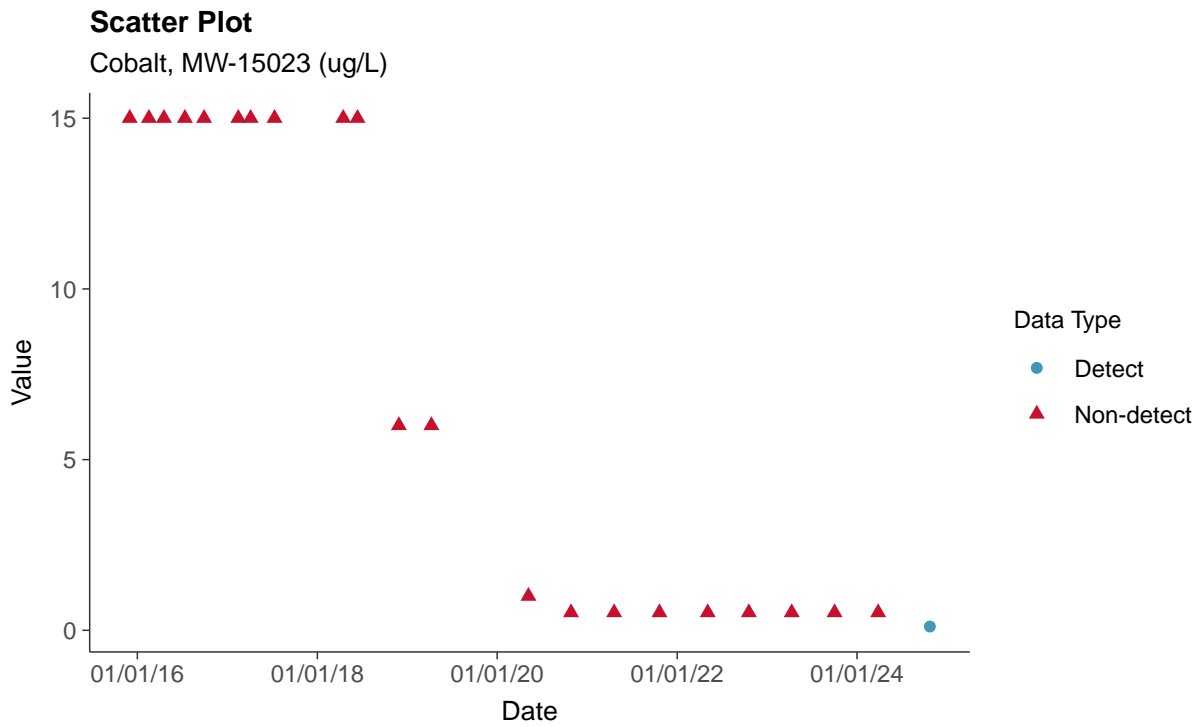
Chromium, MW-15023 (ug/L)





Appendix IV: Cobalt, MW-15023

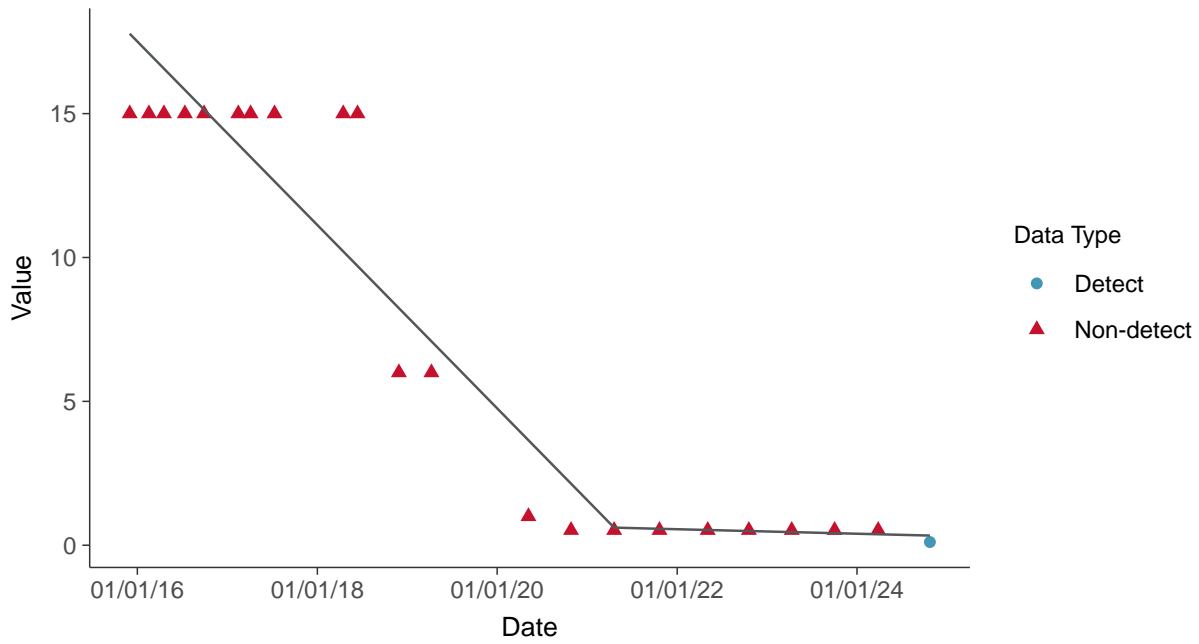
ID: 13_2_110





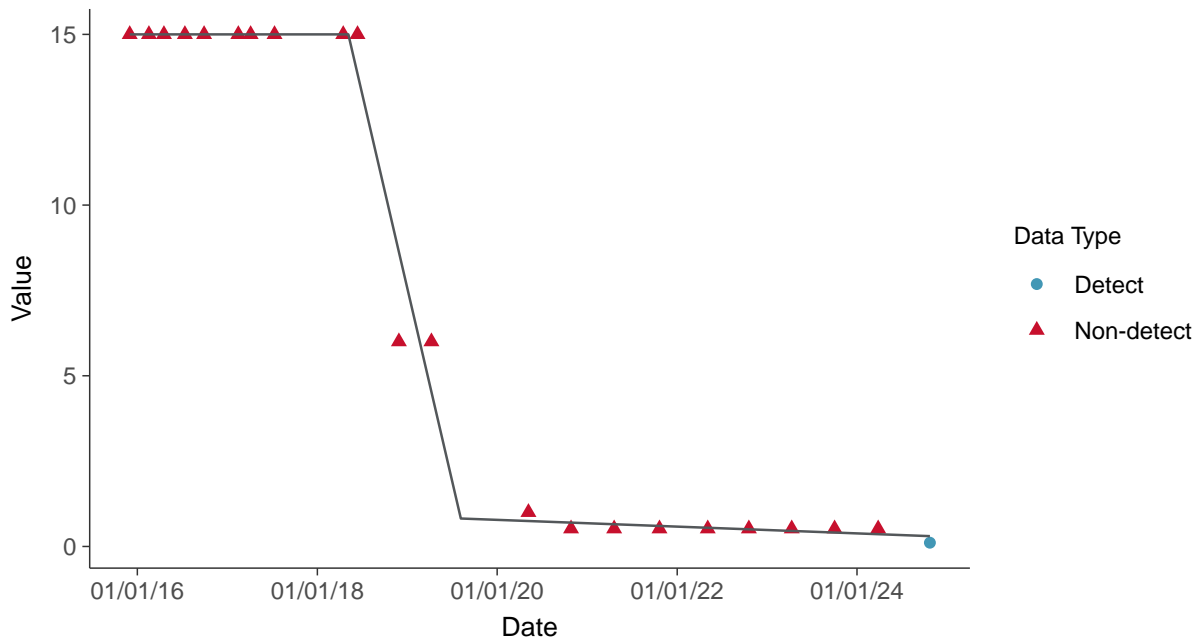
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

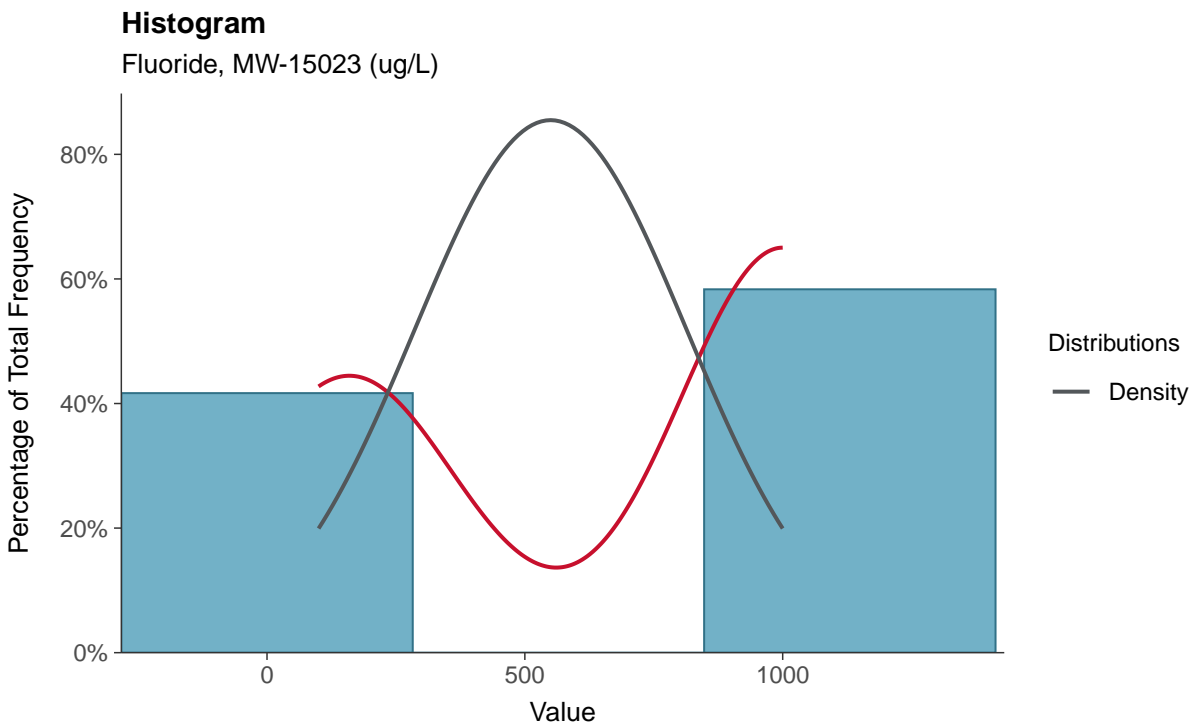
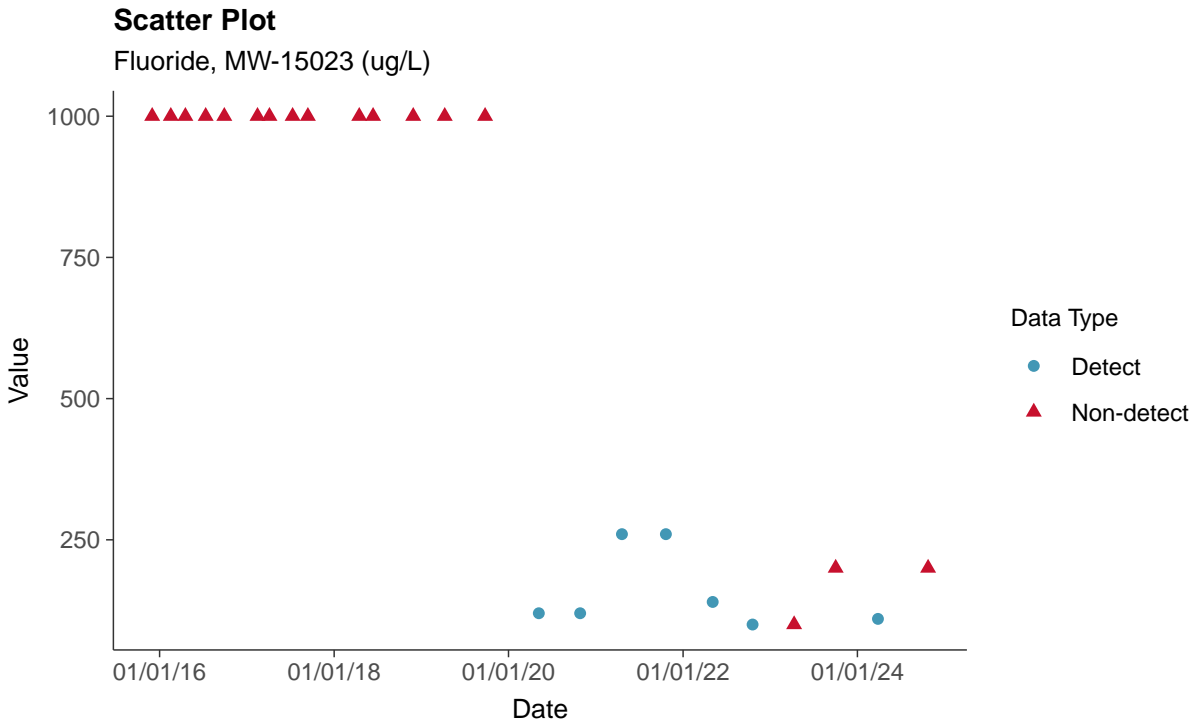
Cobalt, MW-15023 (ug/L)





Appendix IV: Fluoride, MW-15023

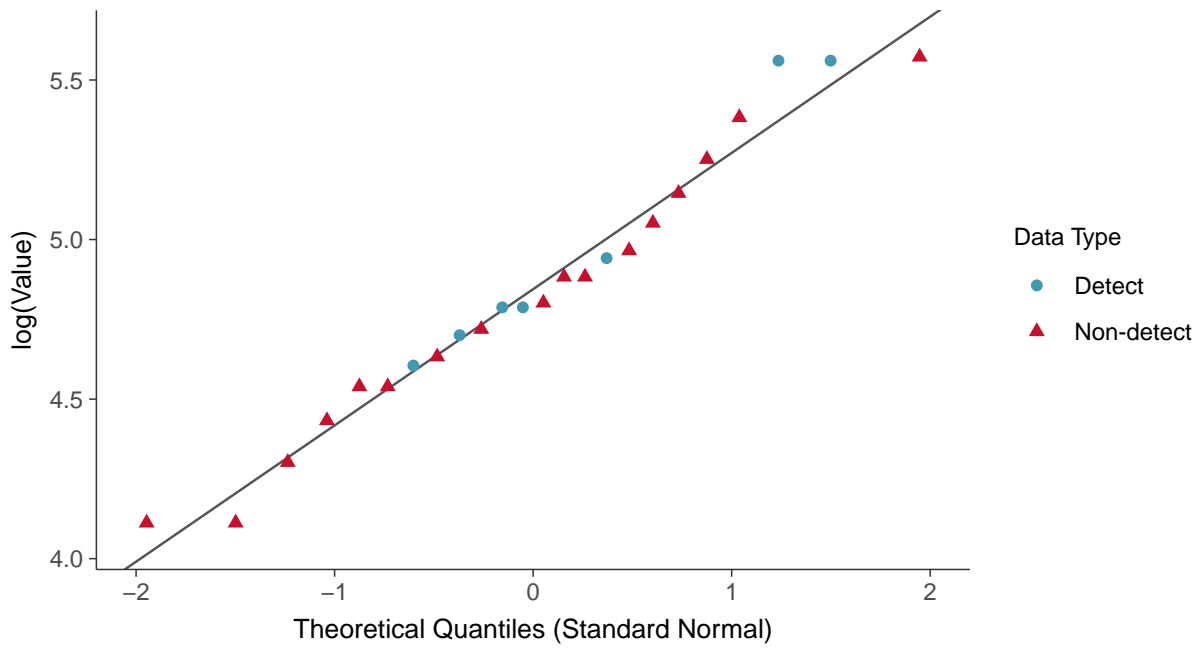
ID: 13_2_114





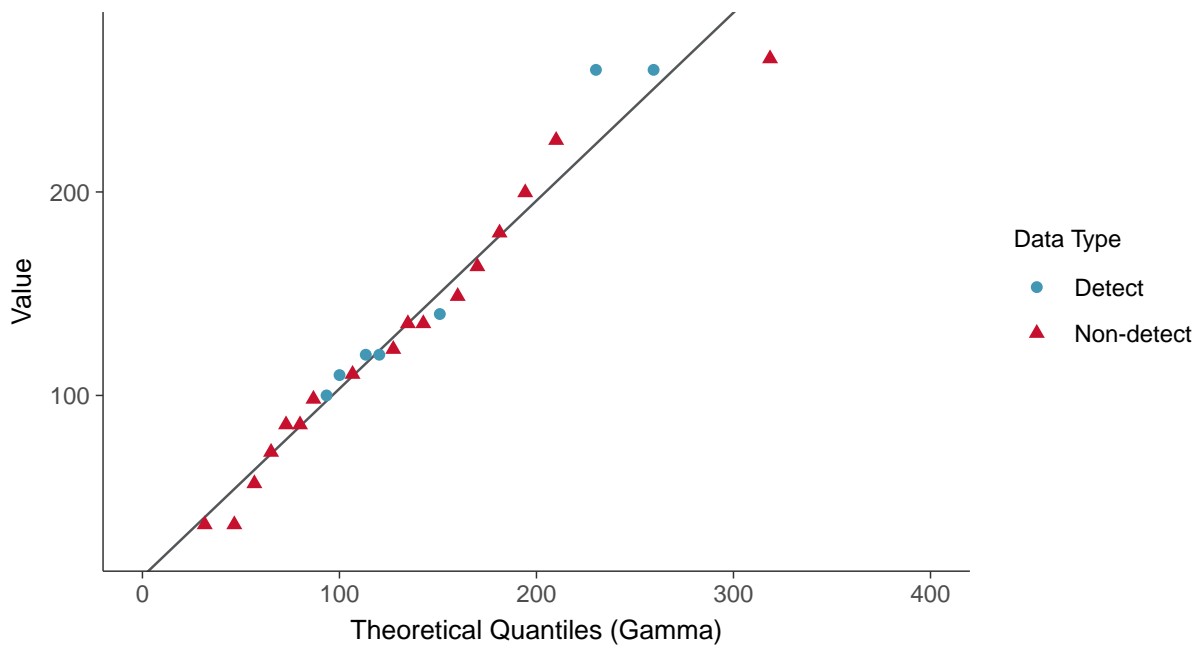
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15023 (ug/L)



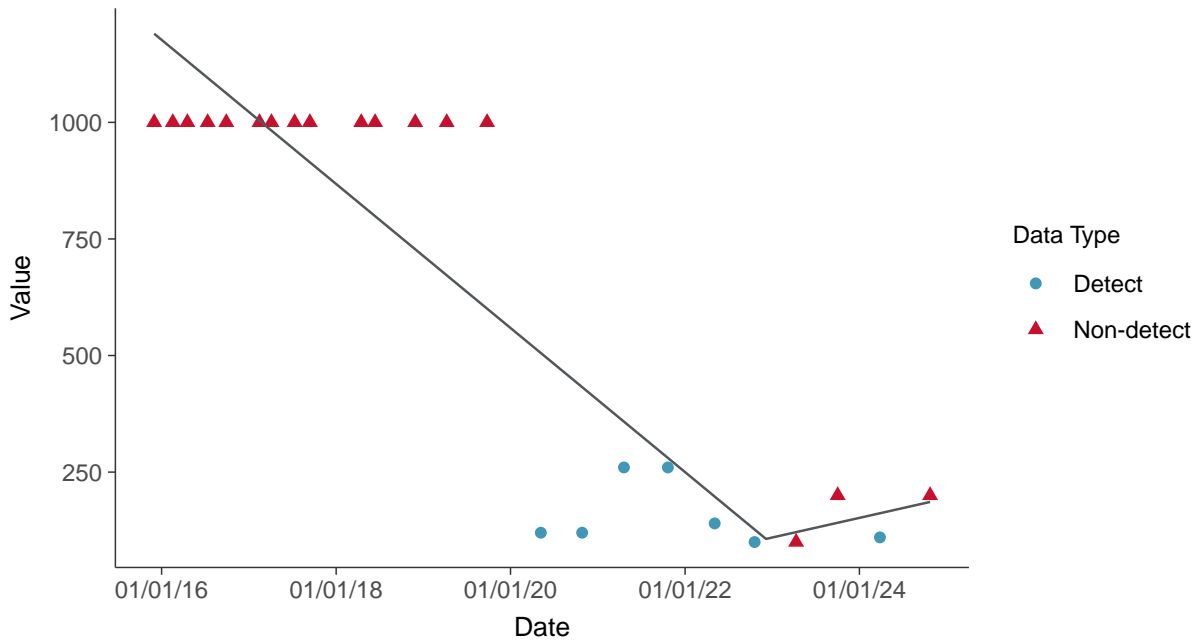
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-15023 (ug/L)

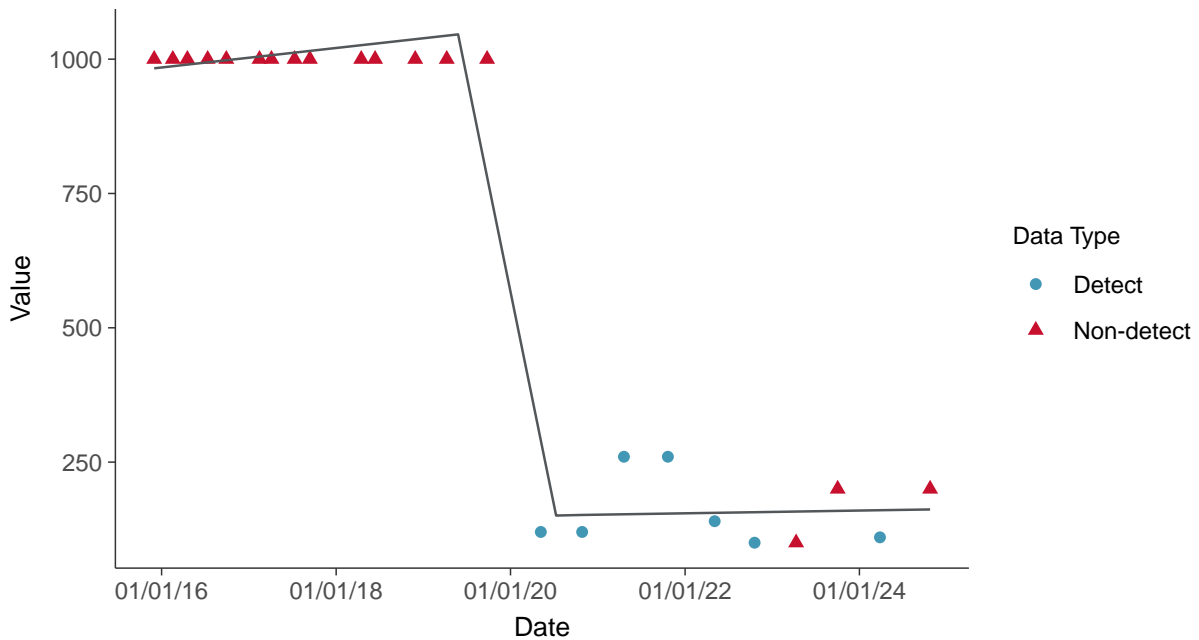




Trend Regression: Piecewise Linear-Linear
Fluoride, MW-15023 (ug/L)



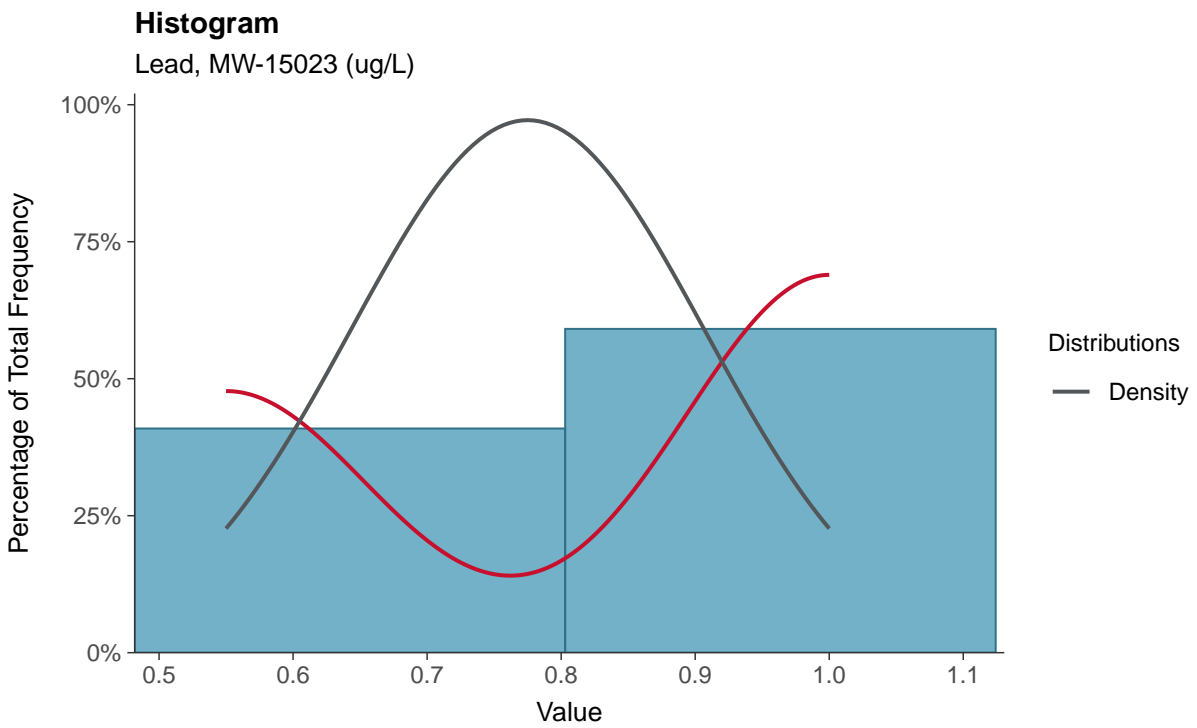
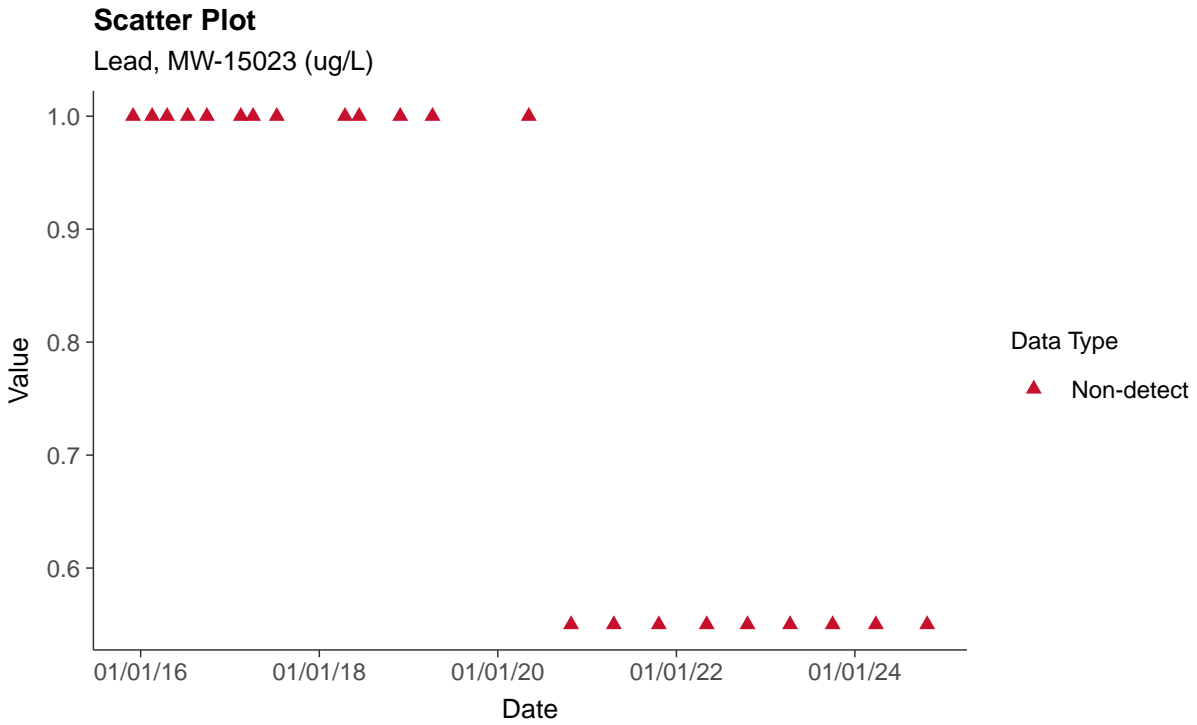
Trend Regression: Piecewise Linear-Linear-Linear
Fluoride, MW-15023 (ug/L)





Appendix IV: Lead, MW-15023

ID: 13_2_116



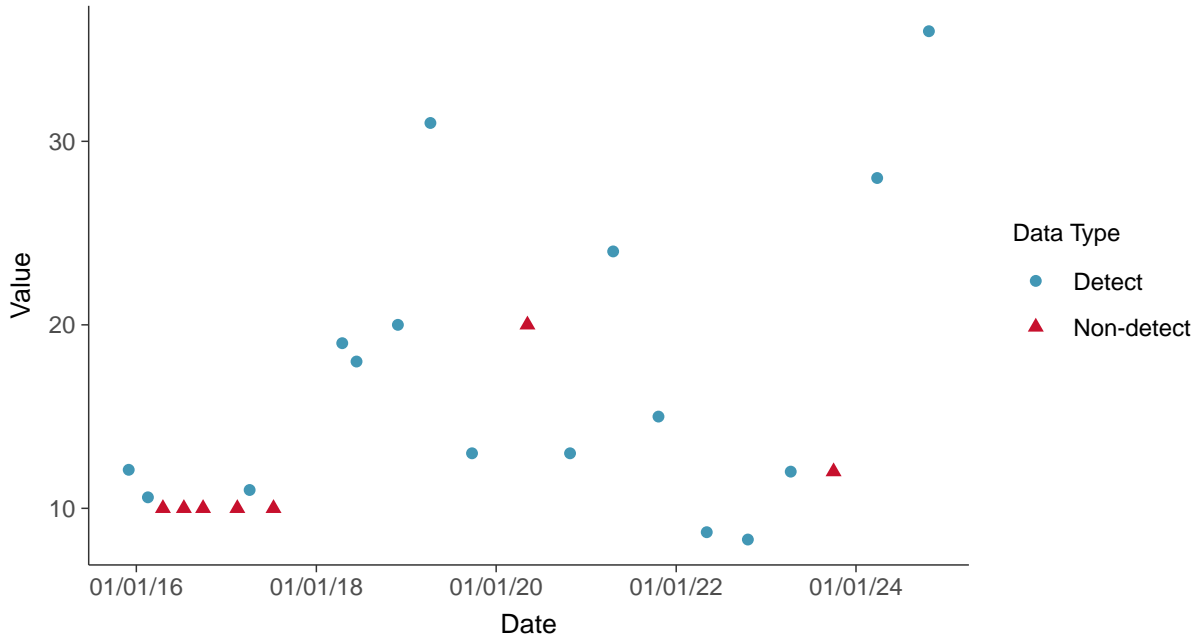


Appendix IV: Lithium, MW-15023

ID: 13_2_117

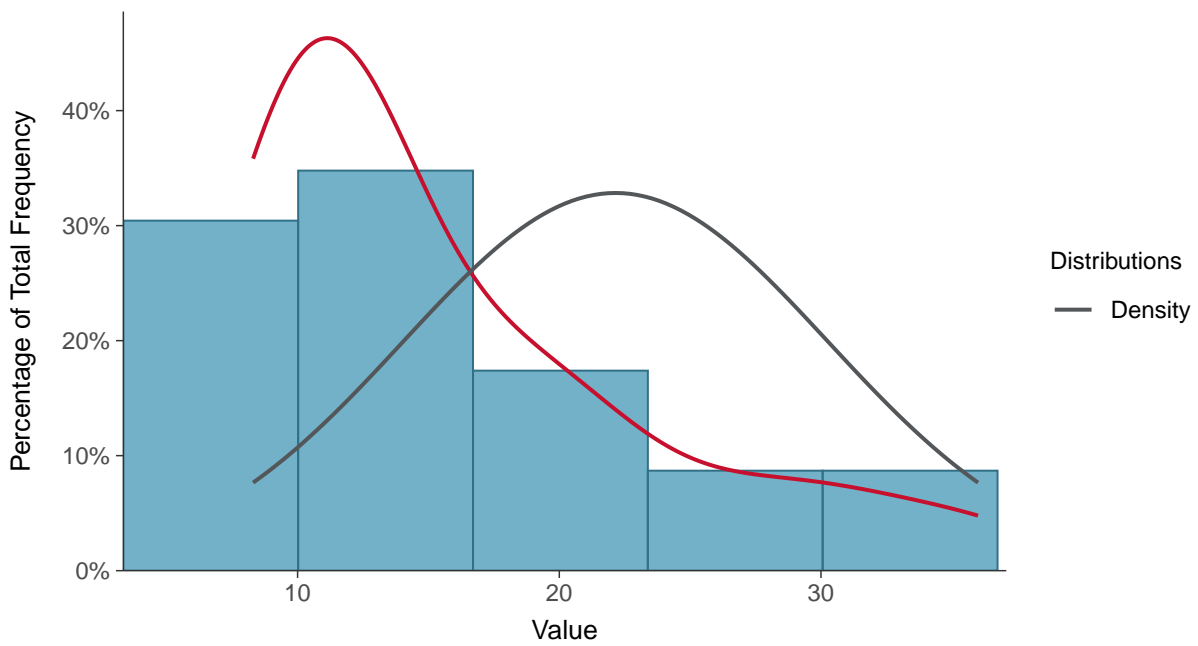
Scatter Plot

Lithium, MW-15023 (ug/L)



Histogram

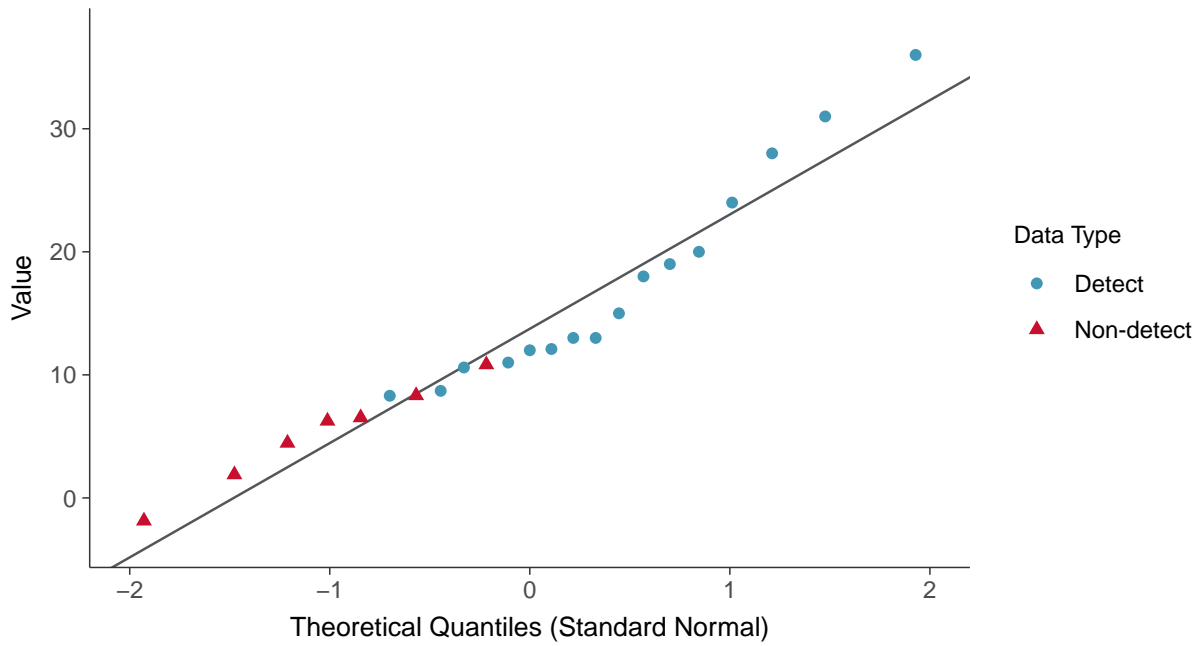
Lithium, MW-15023 (ug/L)





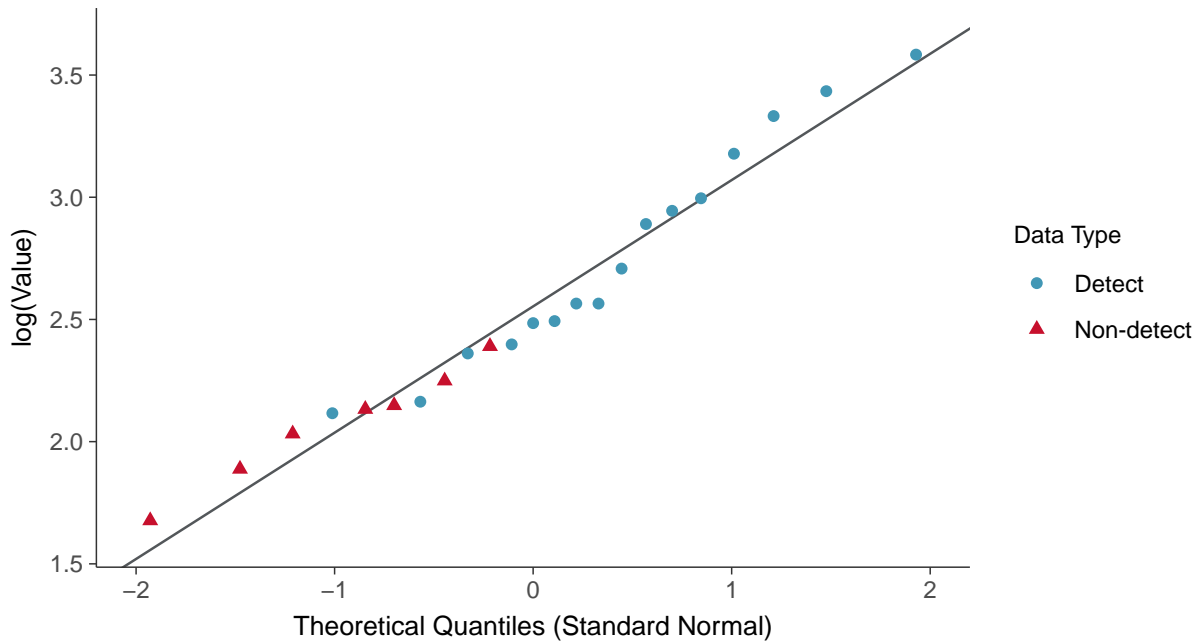
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-15023 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

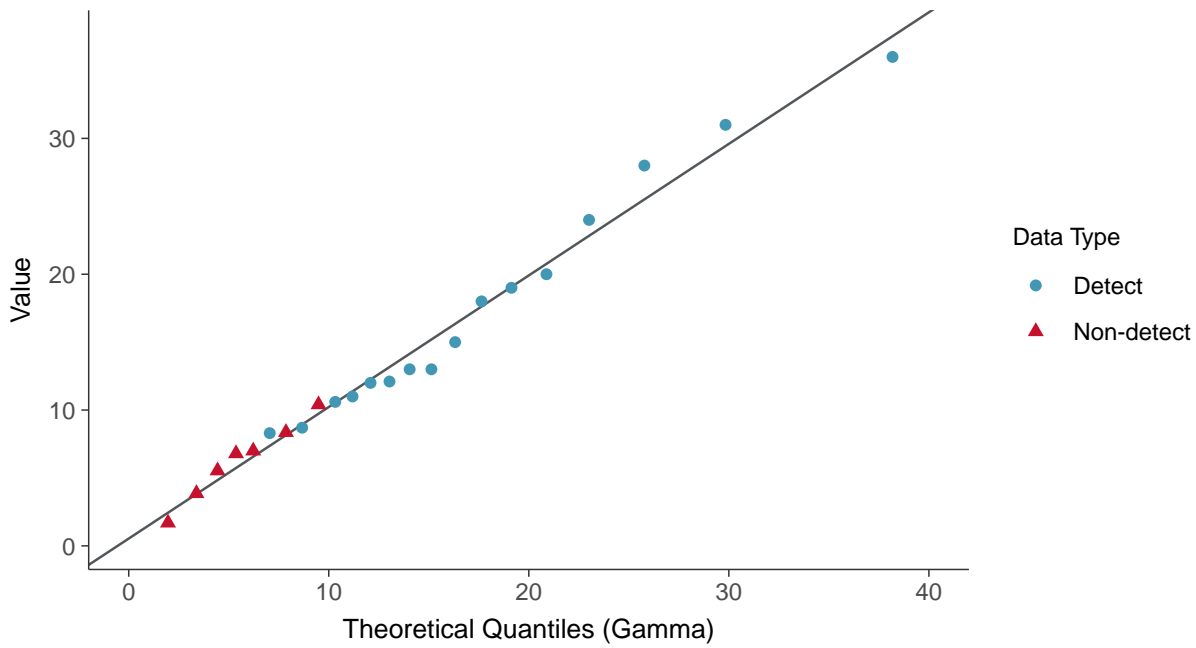
Lithium, MW-15023 (ug/L)





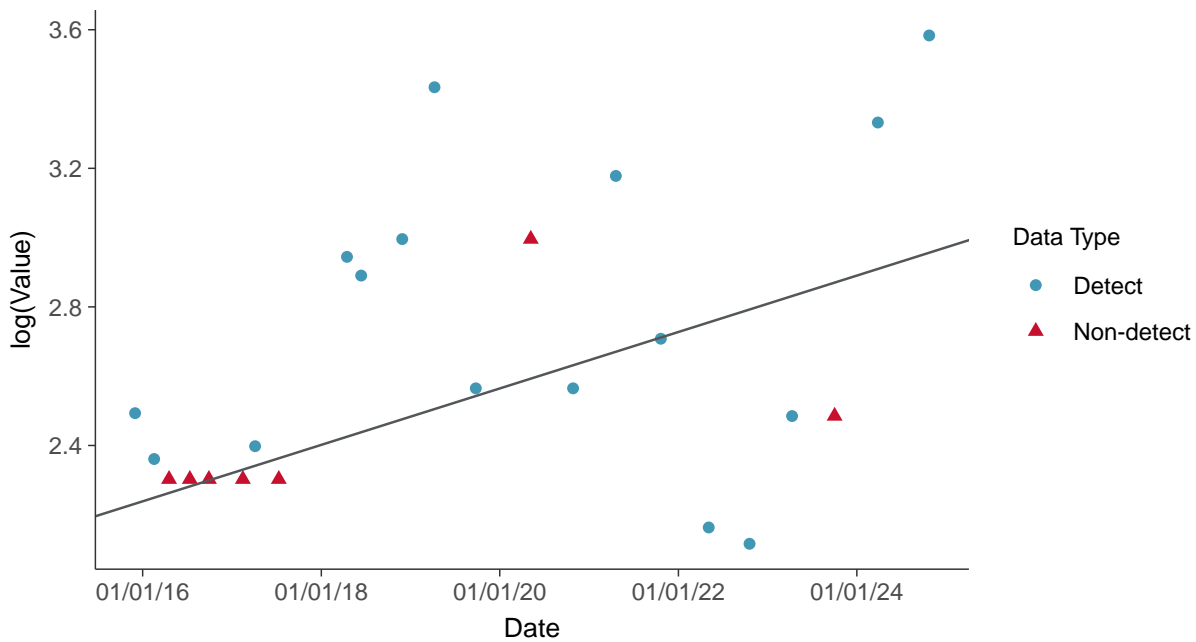
Gamma Q-Q plot using ROS Imputed Estimates

Lithium, MW-15023 (ug/L)



Trend Regression: Lognormal MLE

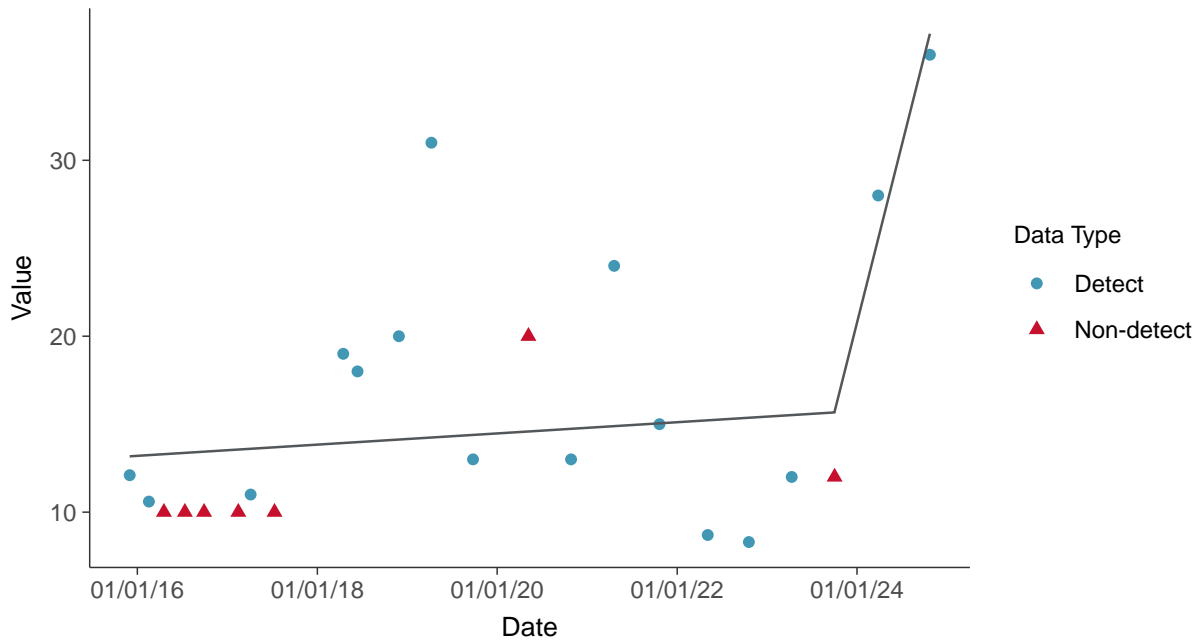
Lithium, MW-15023 (ug/L)





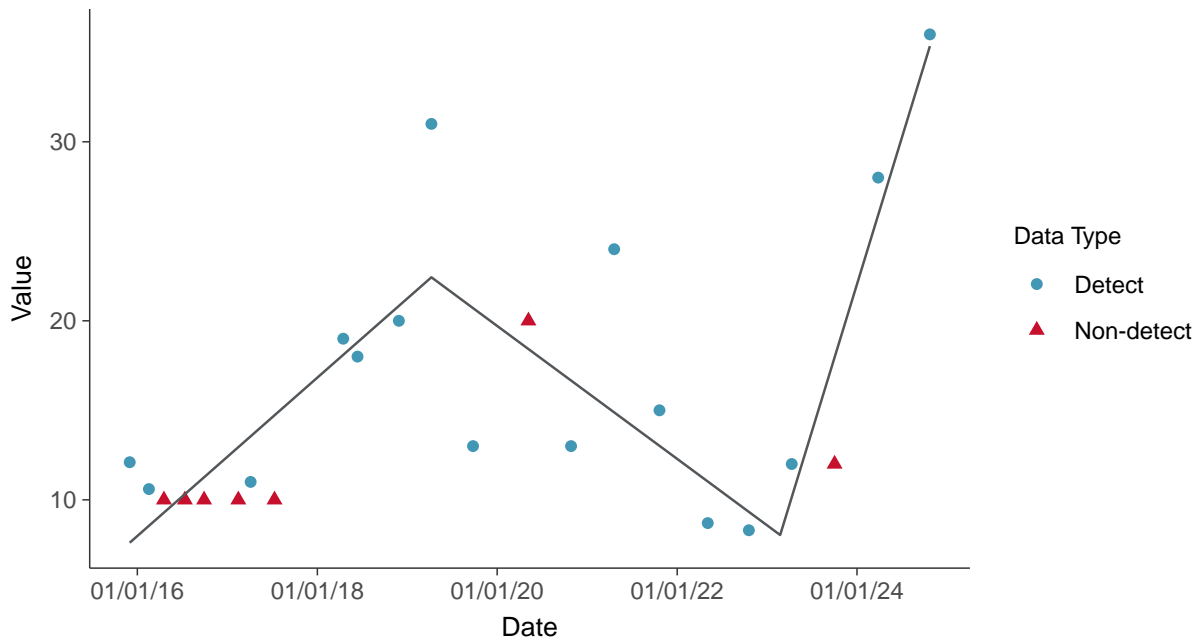
Trend Regression: Piecewise Linear-Linear

Lithium, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

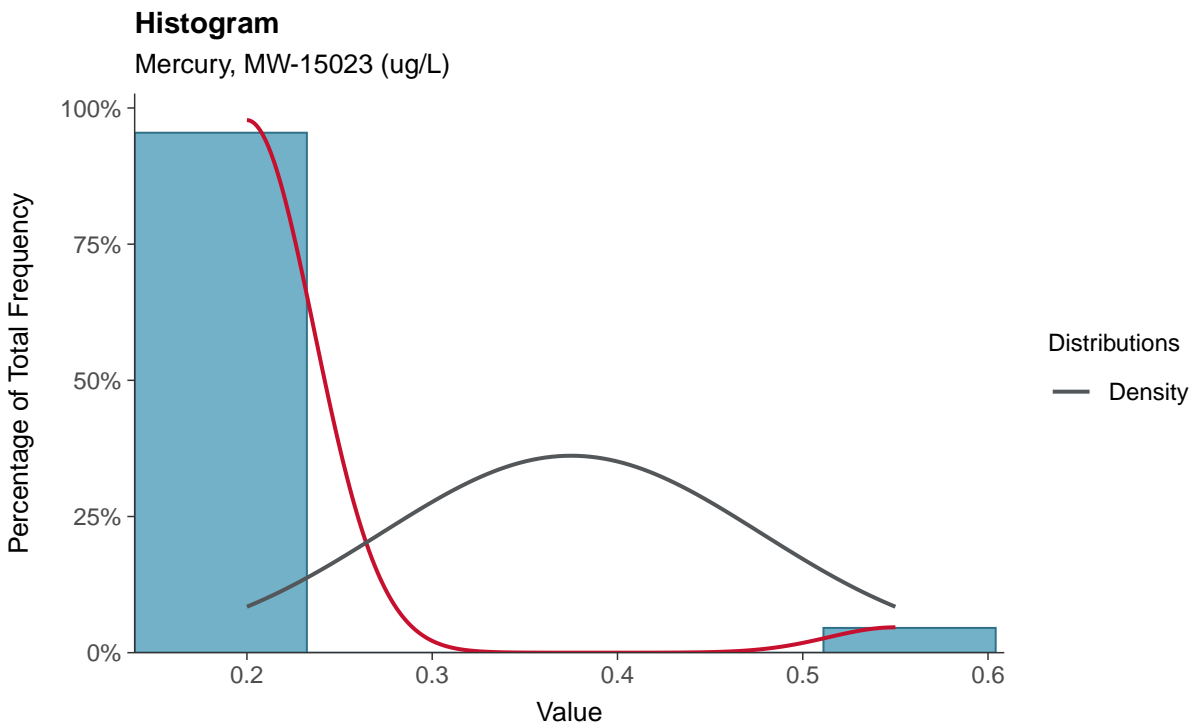
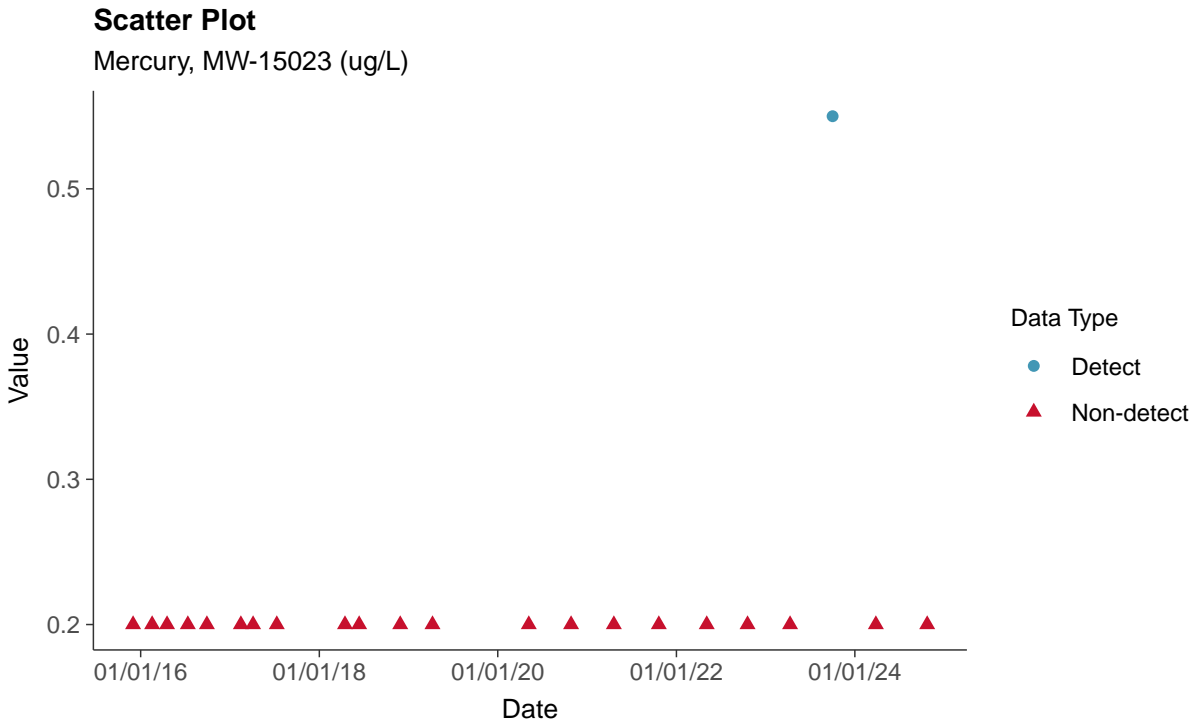
Lithium, MW-15023 (ug/L)





Appendix IV: Mercury, MW-15023

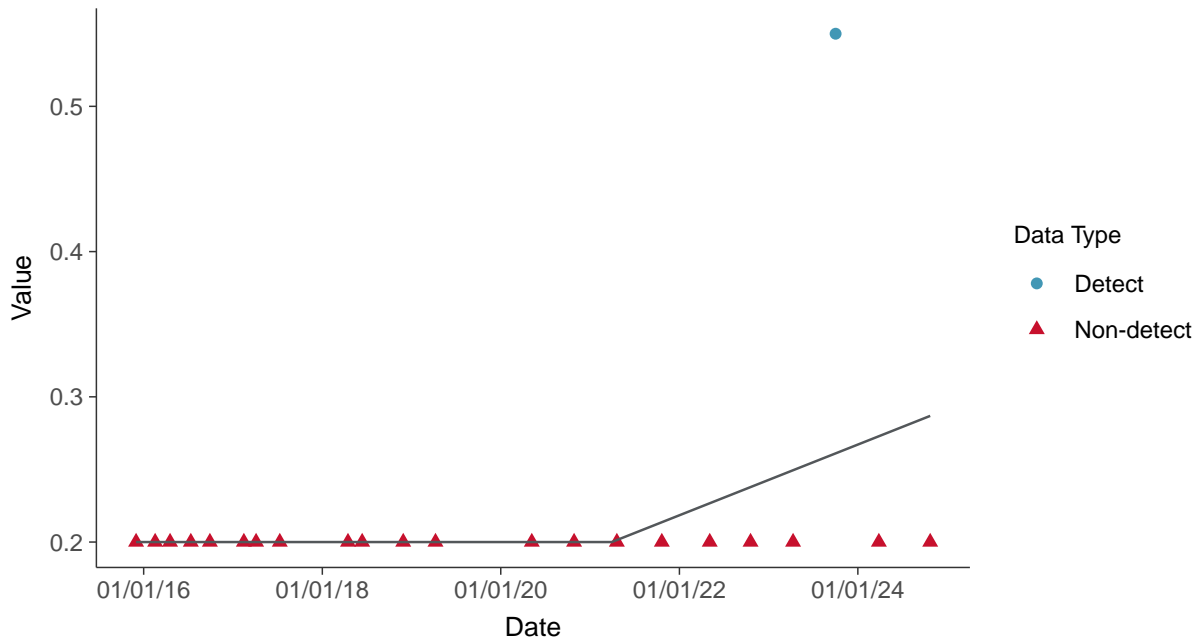
ID: 13_2_118





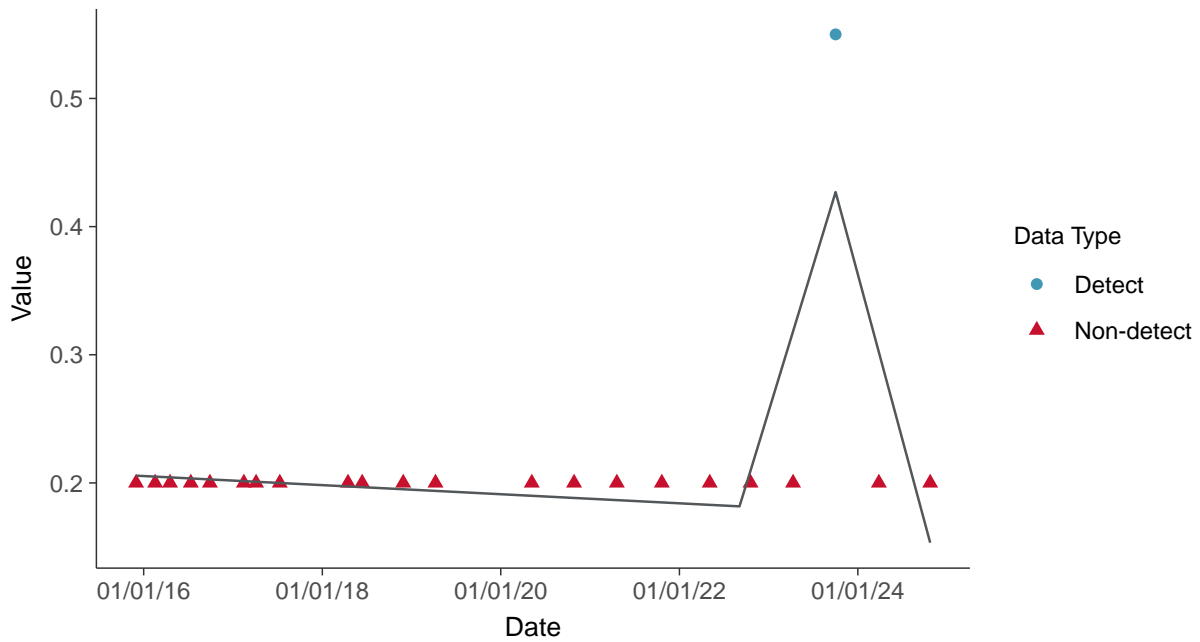
Trend Regression: Piecewise Linear-Linear

Mercury, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Mercury, MW-15023 (ug/L)



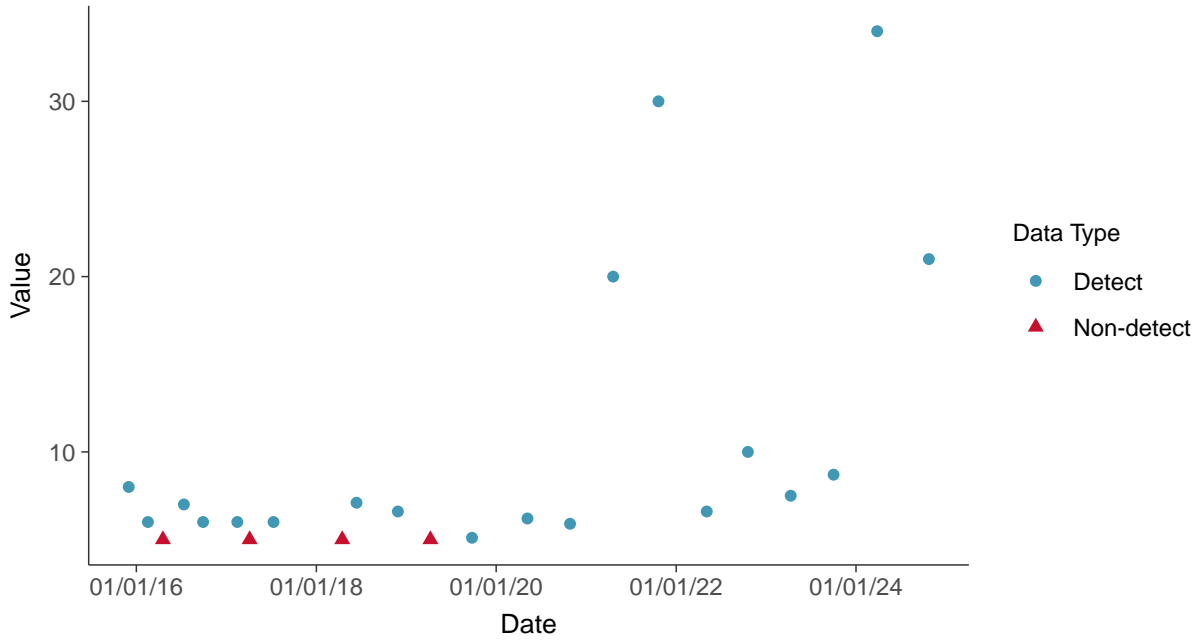


Appendix IV: Molybdenum, MW-15023

ID: 13_2_119

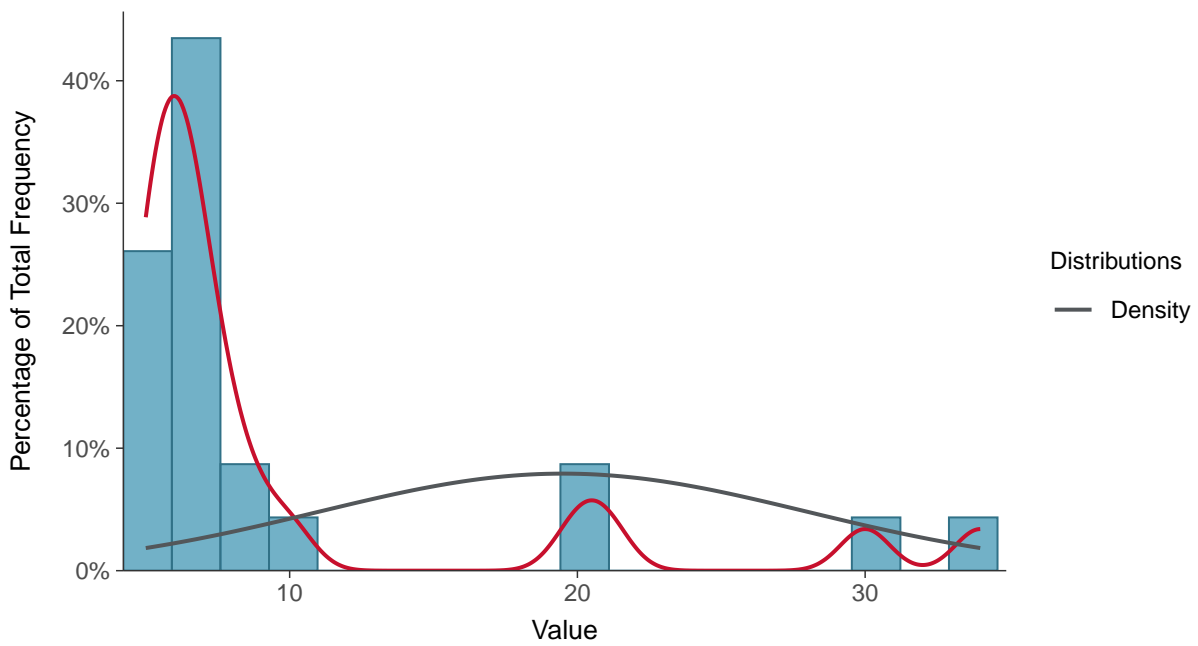
Scatter Plot

Molybdenum, MW-15023 (ug/L)



Histogram

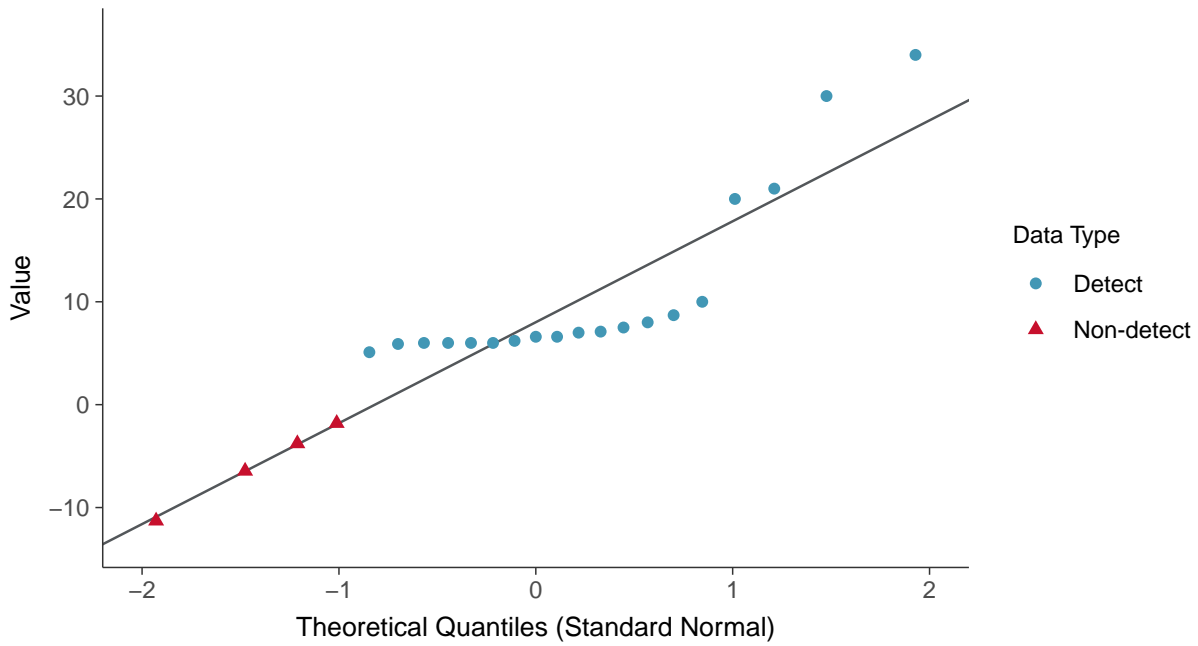
Molybdenum, MW-15023 (ug/L)





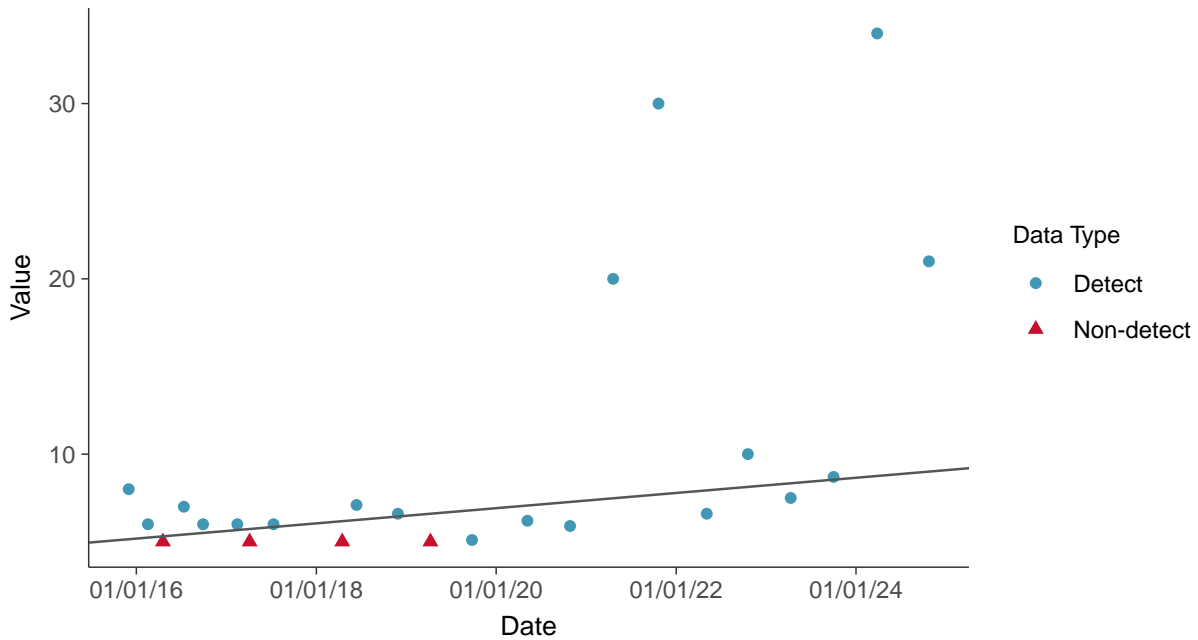
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-15023 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

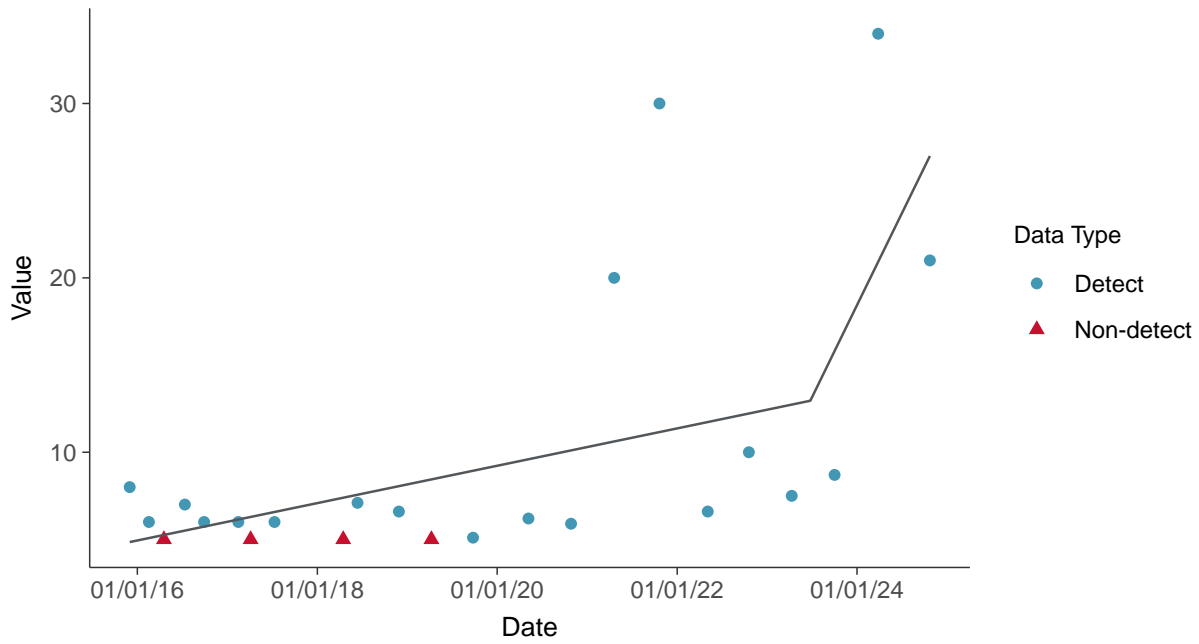
Molybdenum, MW-15023 (ug/L)





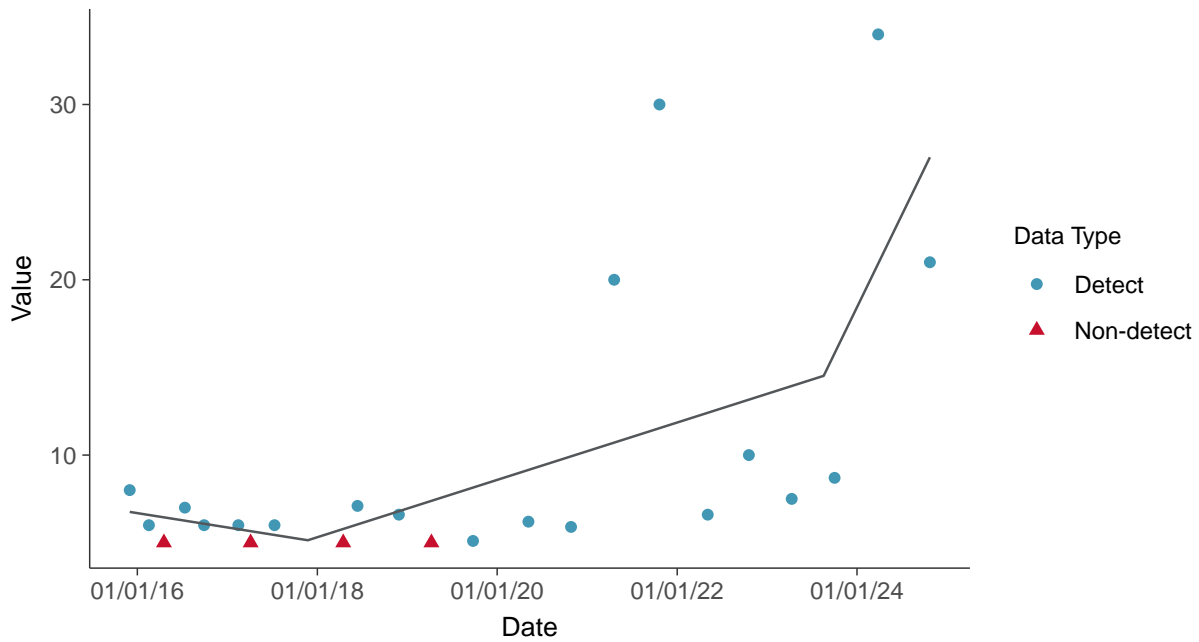
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-15023 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-15023 (ug/L)



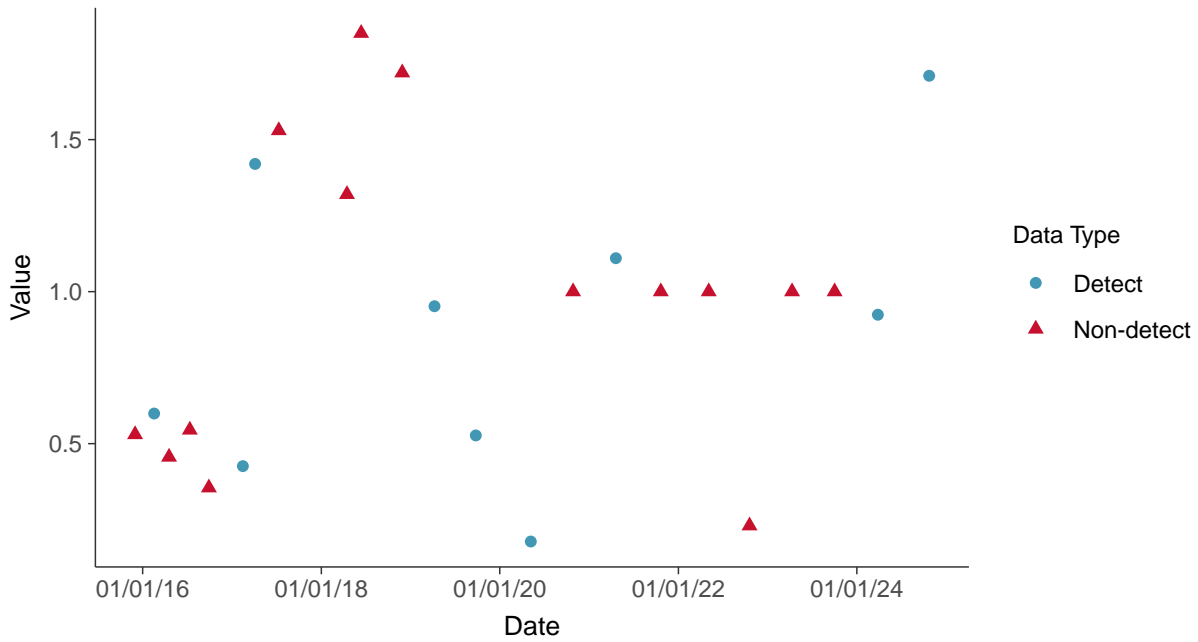


Appendix IV: Radium-226+228, MW-15023

ID: 13_2_125

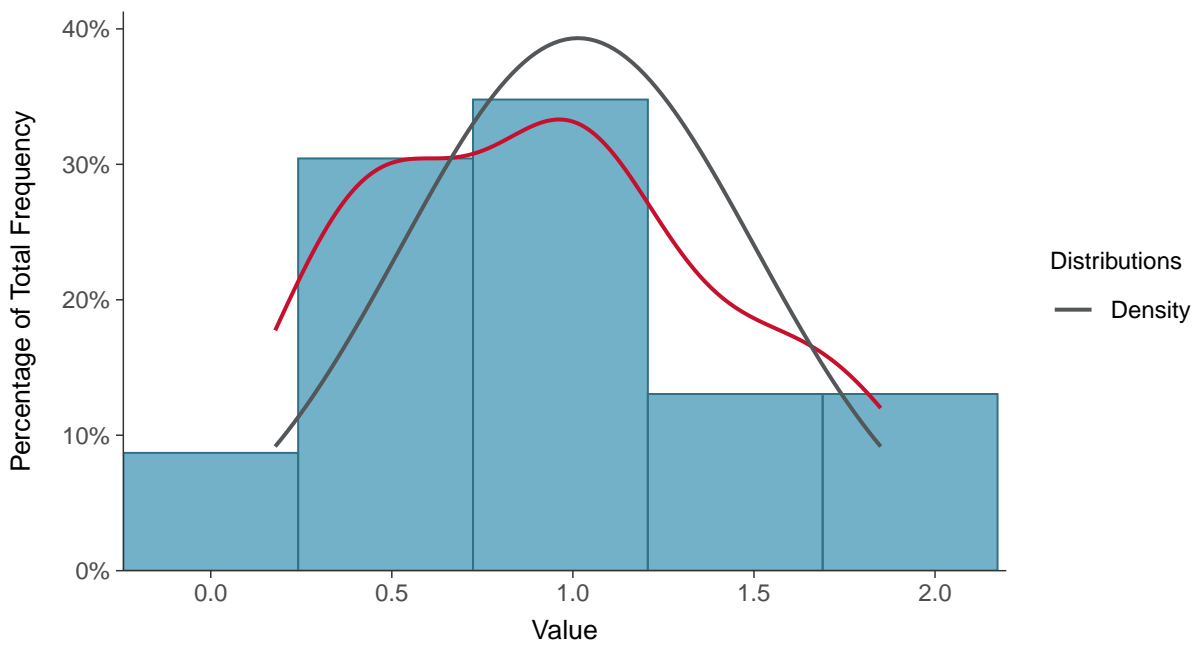
Scatter Plot

Radium-226+228, MW-15023 (pCi/L)



Histogram

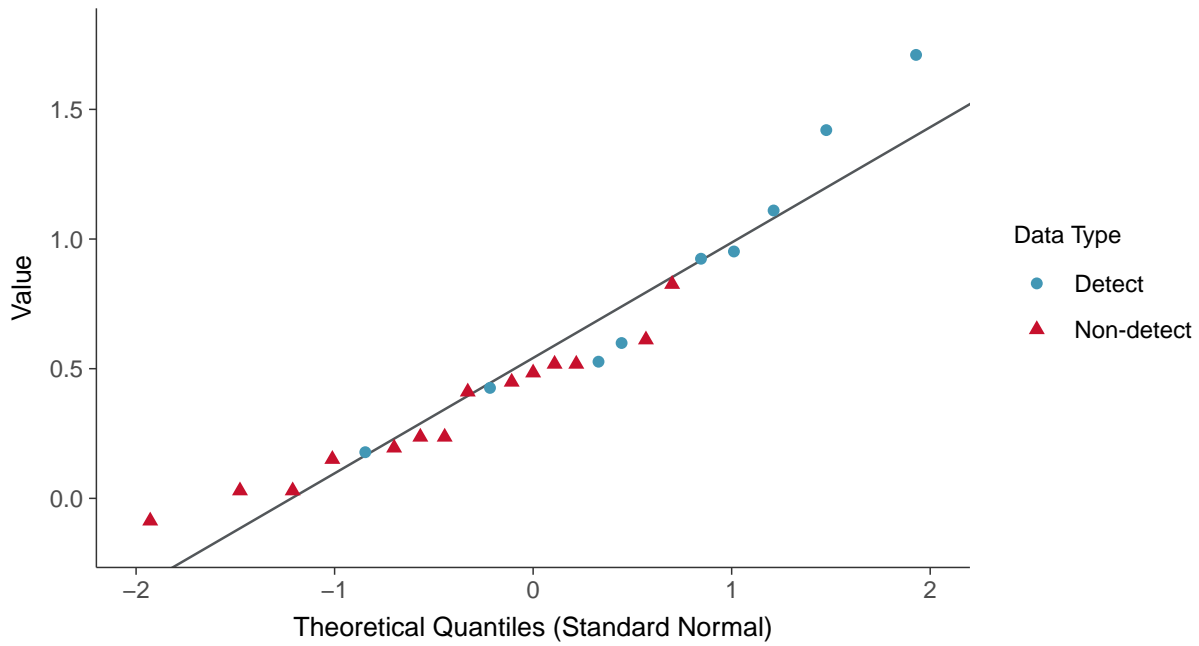
Radium-226+228, MW-15023 (pCi/L)





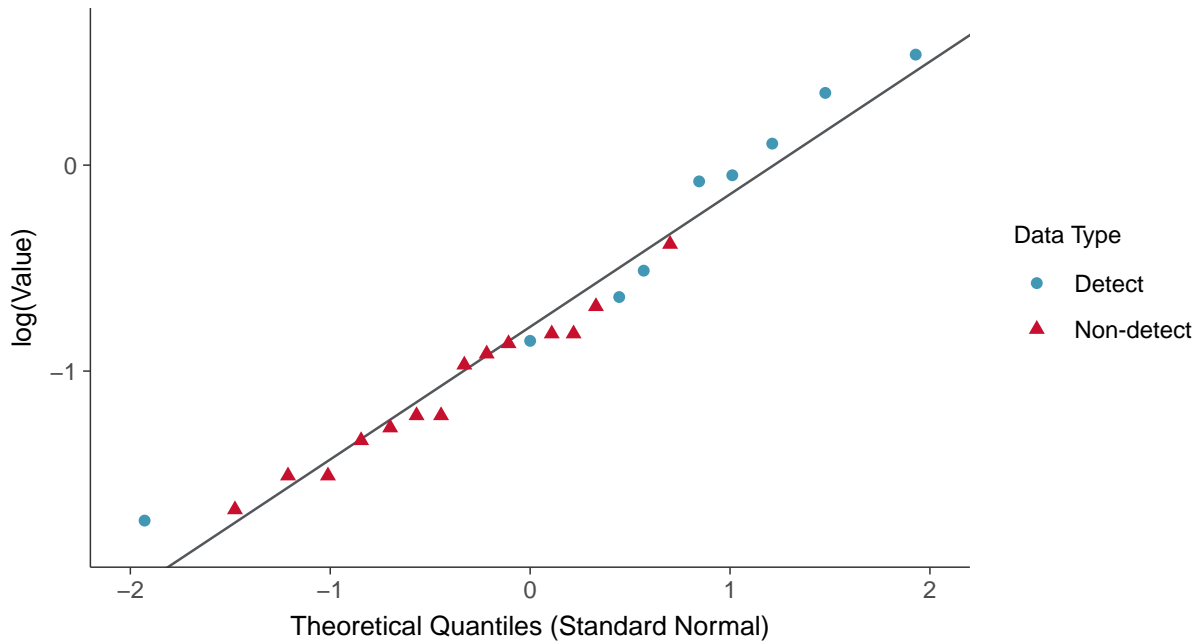
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15023 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

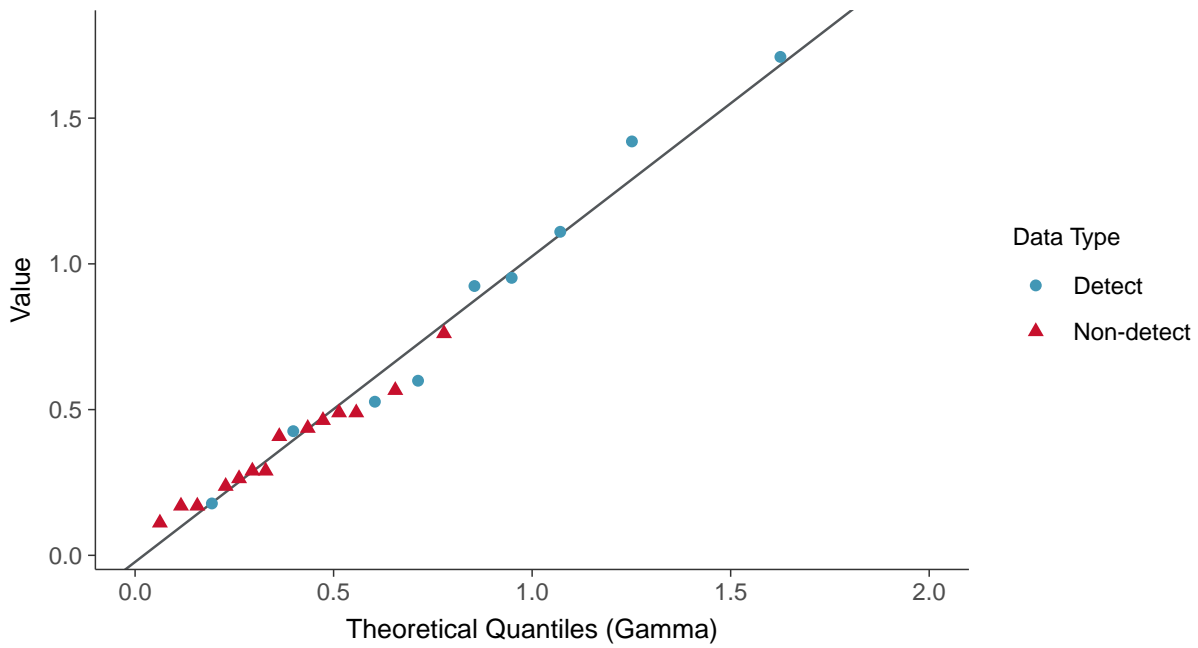
Radium-226+228, MW-15023 (pCi/L)





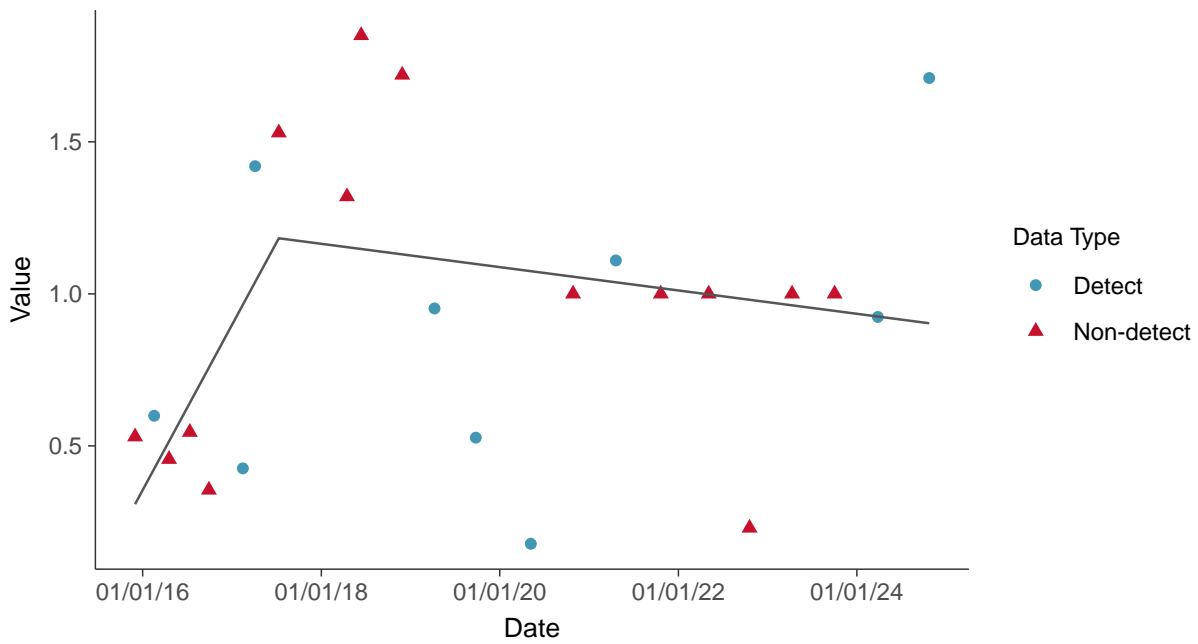
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-15023 (pCi/L)



Trend Regression: Piecewise Linear-Linear

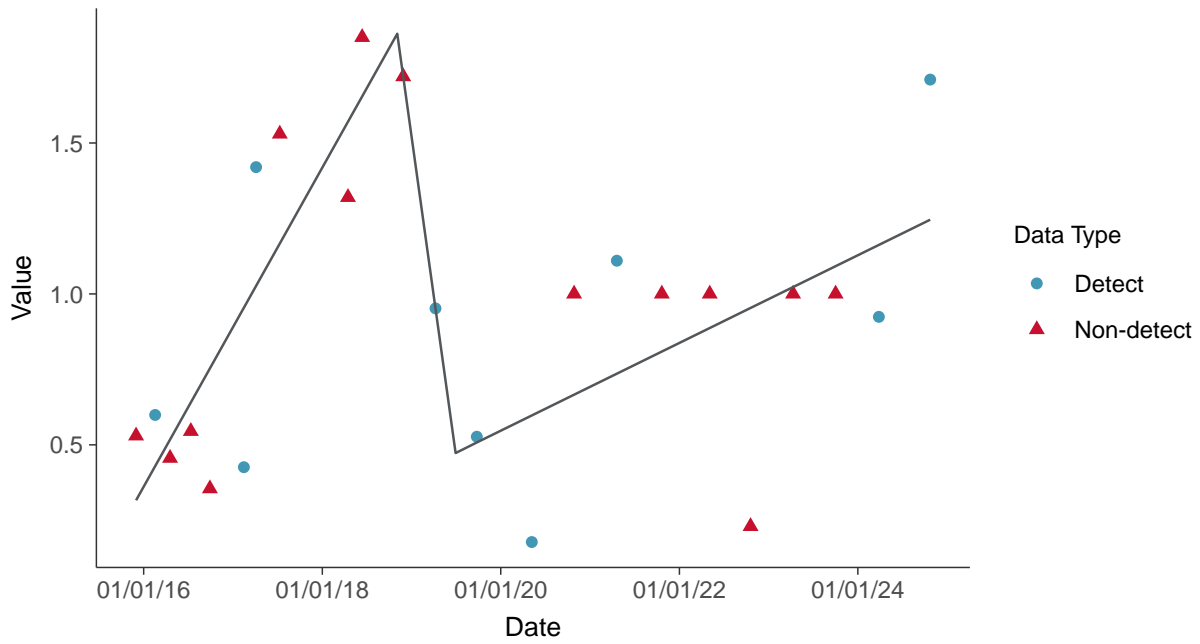
Radium-226+228, MW-15023 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

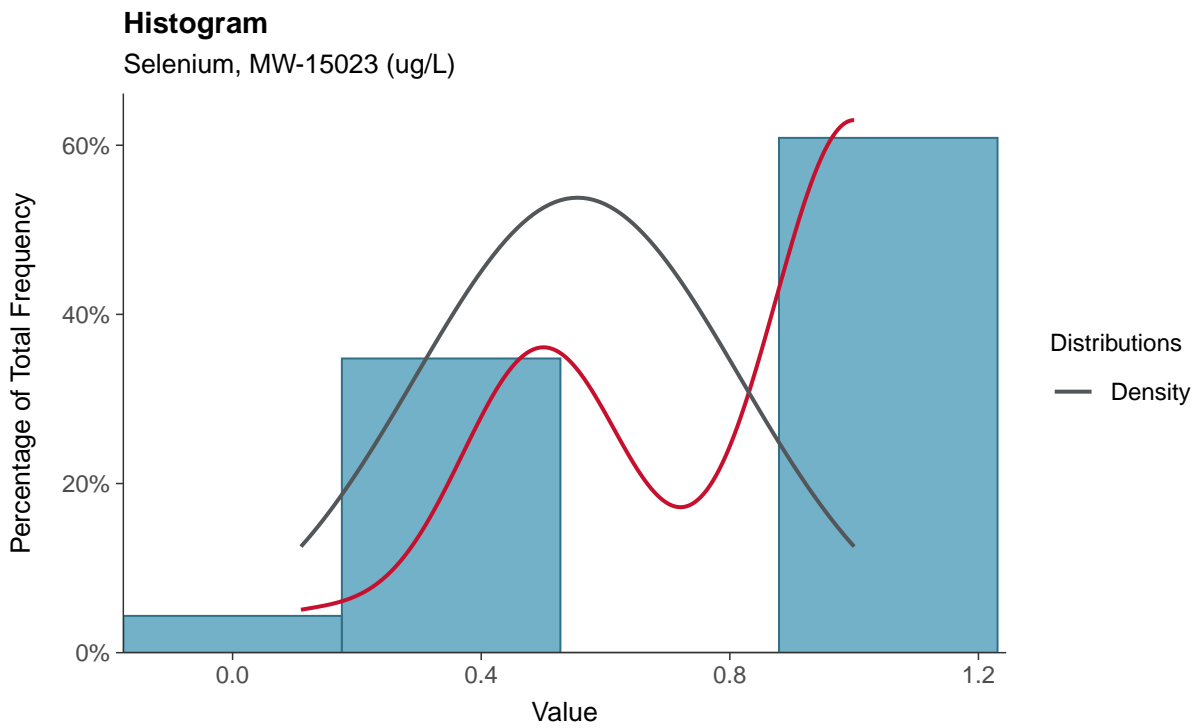
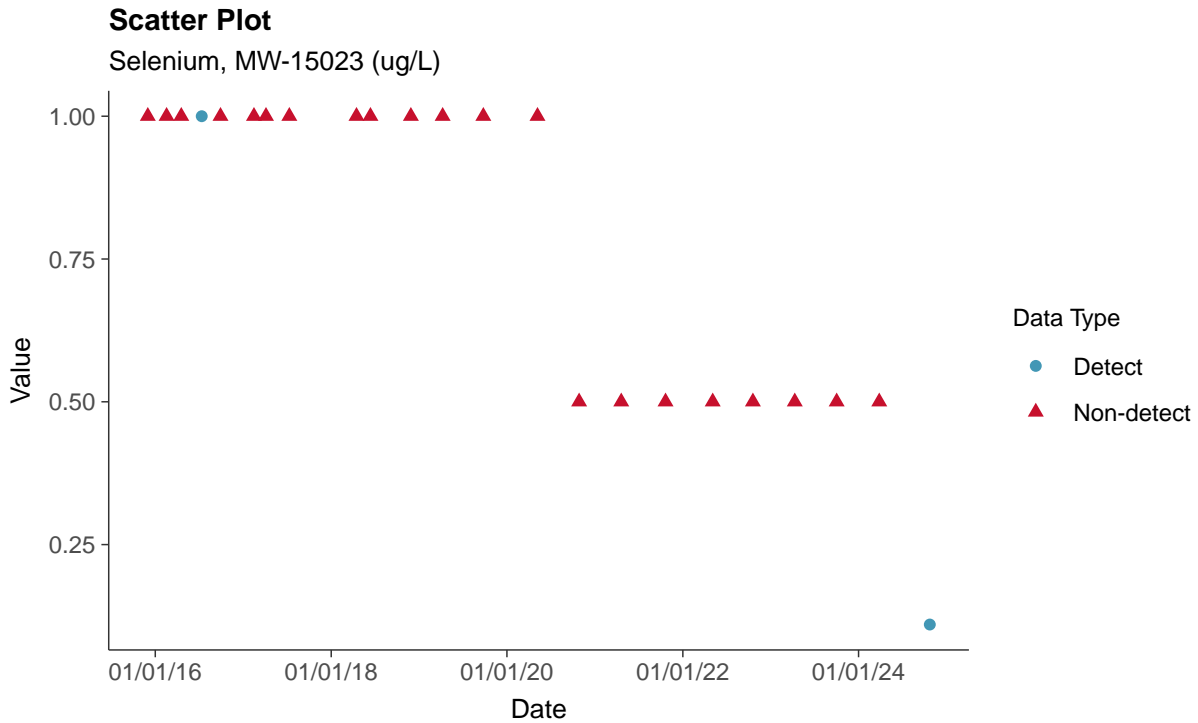
Radium-226+228, MW-15023 (pCi/L)





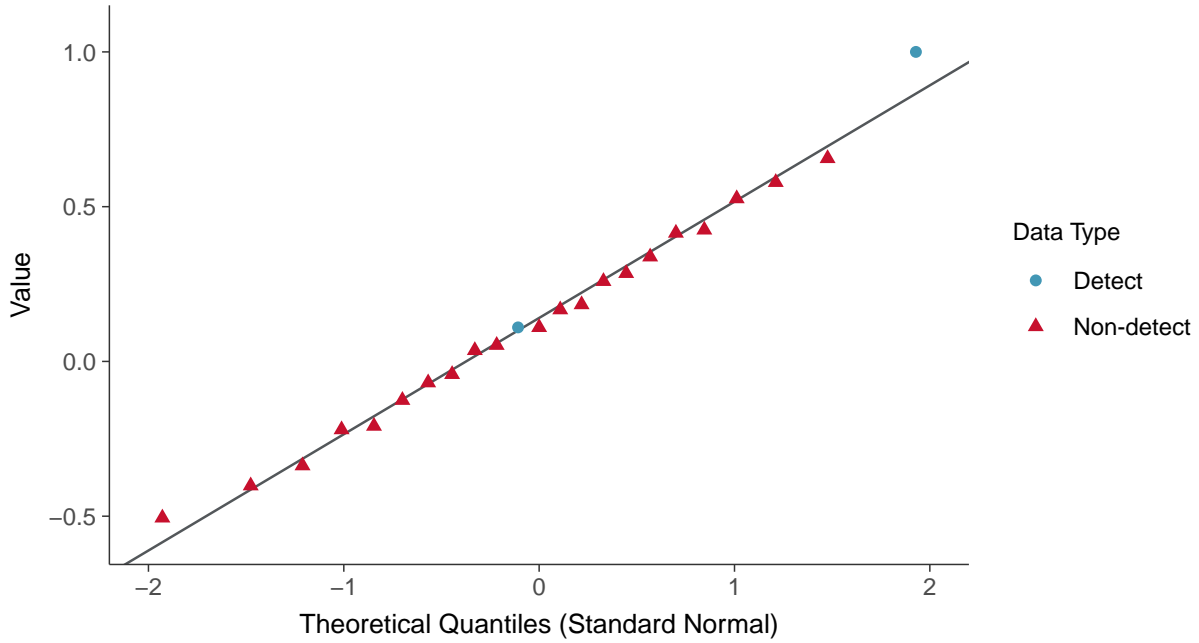
Appendix IV: Selenium, MW-15023

ID: 13_2_127

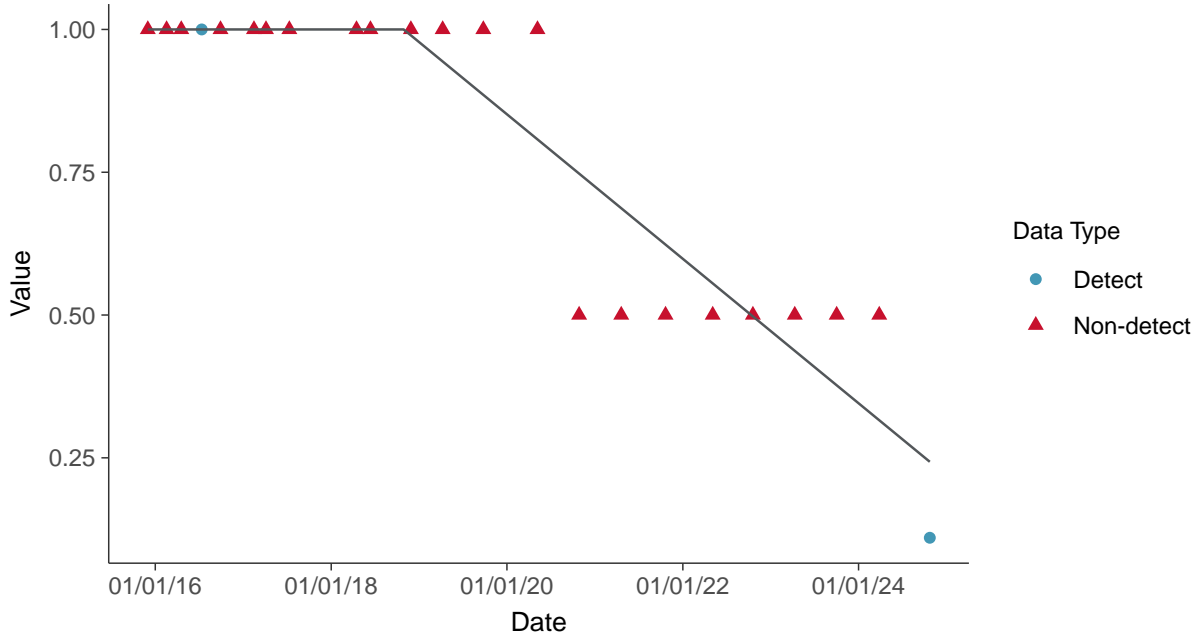




Normal Q-Q plot using ROS Imputed Estimates
Selenium, MW-15023 (ug/L)



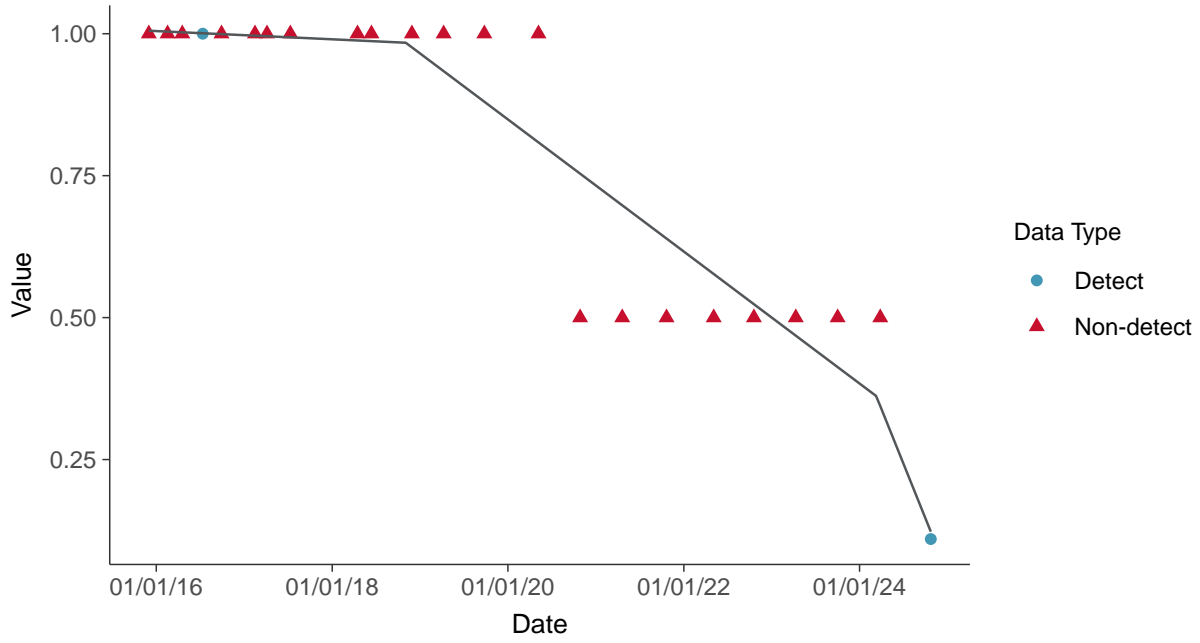
Trend Regression: Piecewise Linear-Linear
Selenium, MW-15023 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

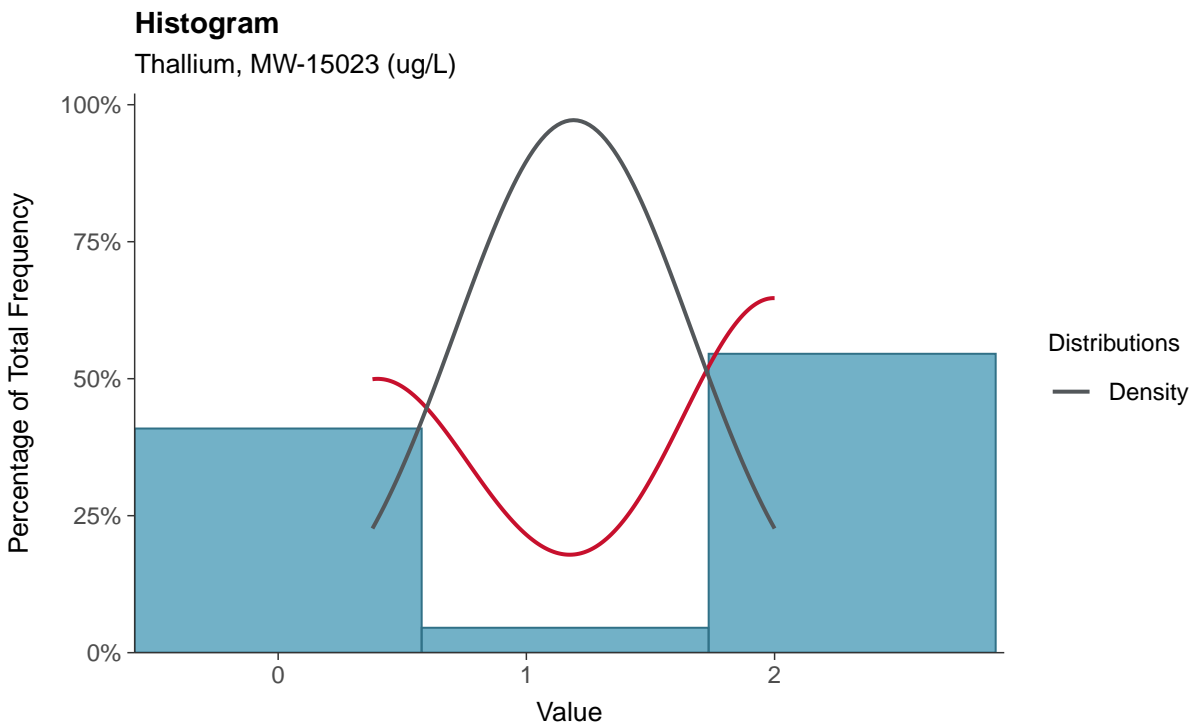
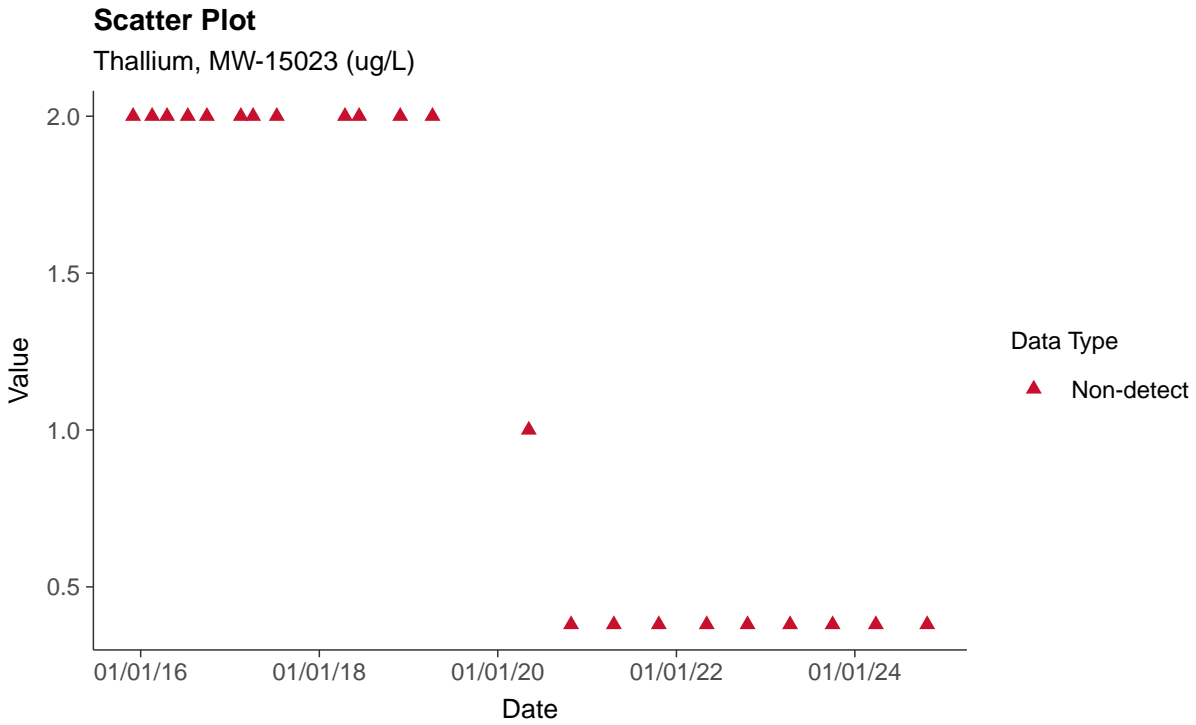
Selenium, MW-15023 (ug/L)





Appendix IV: Thallium, MW-15023

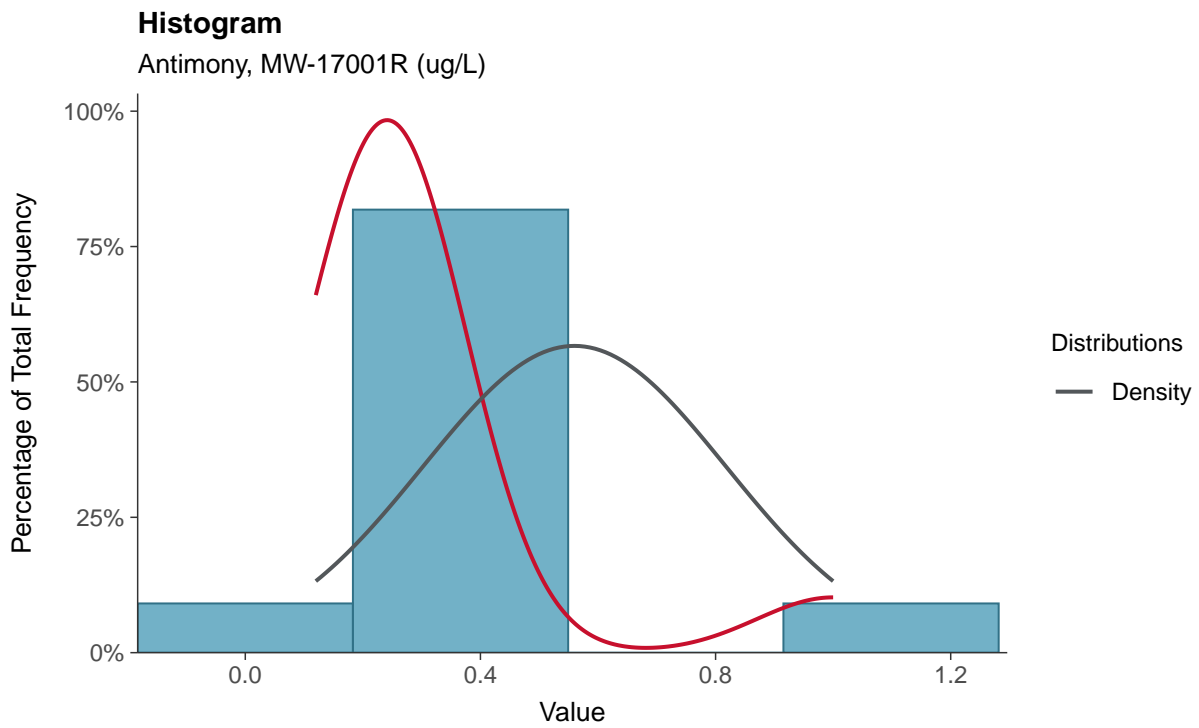
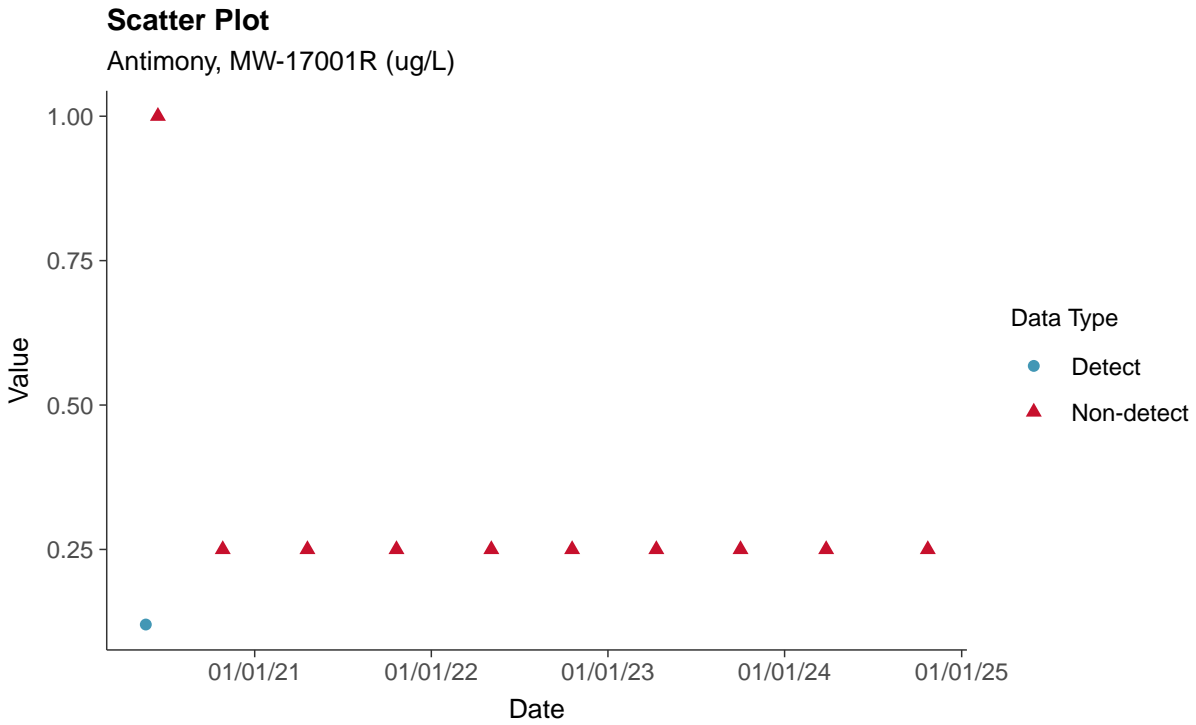
ID: 13_2_131





Appendix IV: Antimony, MW-17001R

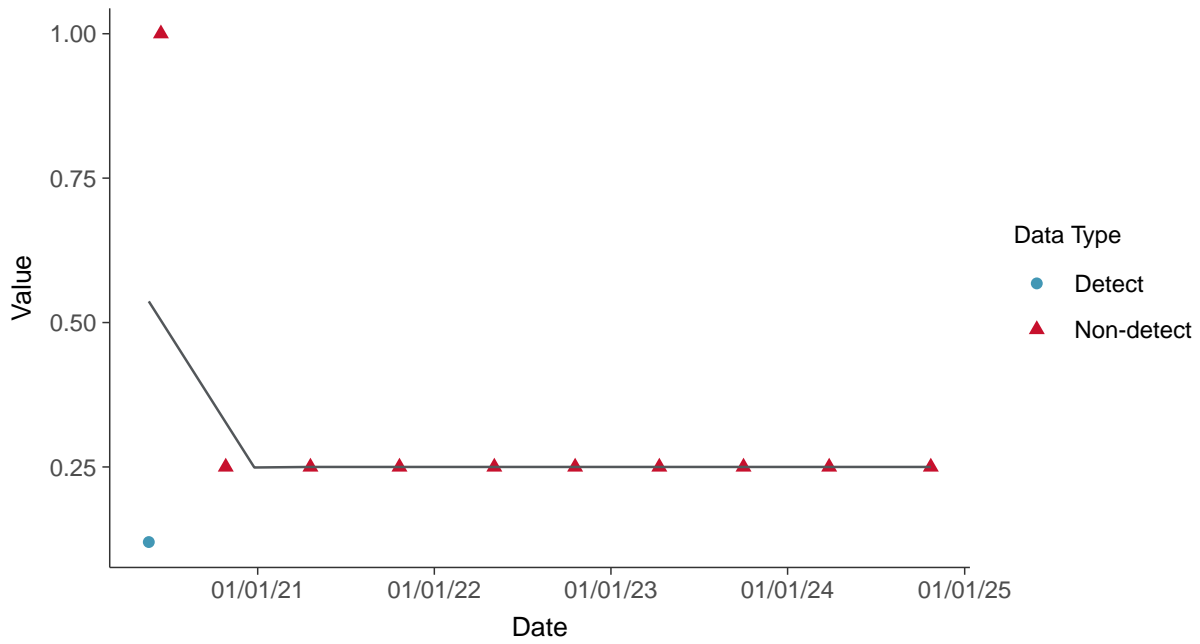
ID: 14_2_101





Trend Regression: Piecewise Linear-Linear

Antimony, MW-17001R (ug/L)



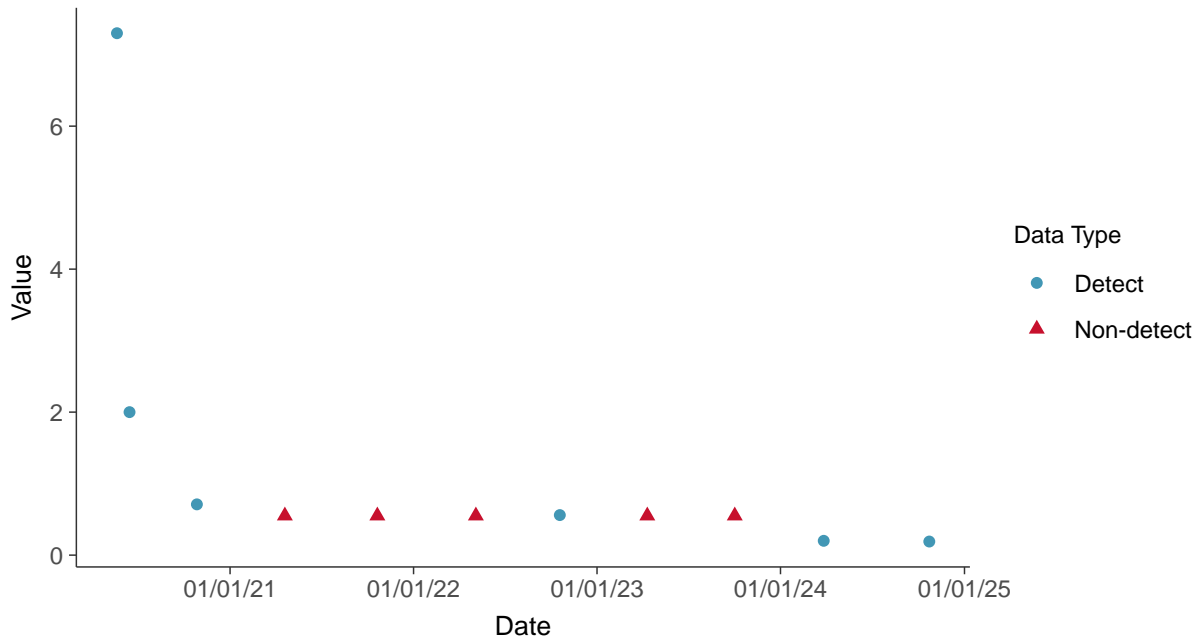


Appendix IV: Arsenic, MW-17001R

ID: 14_2_102

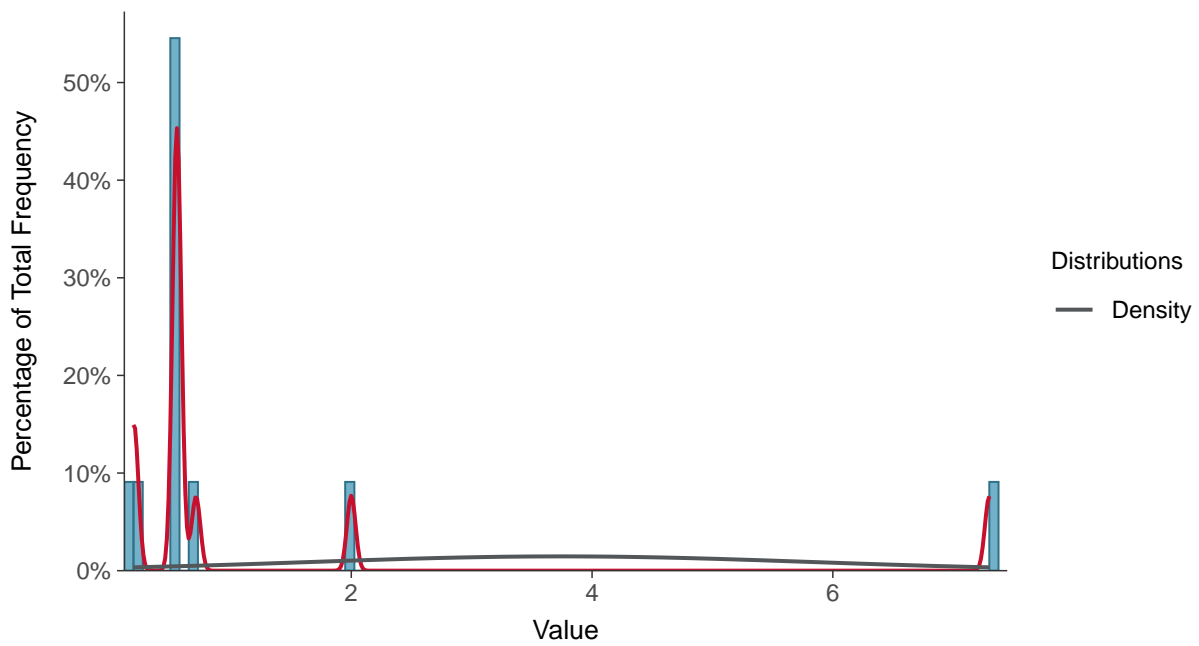
Scatter Plot

Arsenic, MW-17001R (ug/L)



Histogram

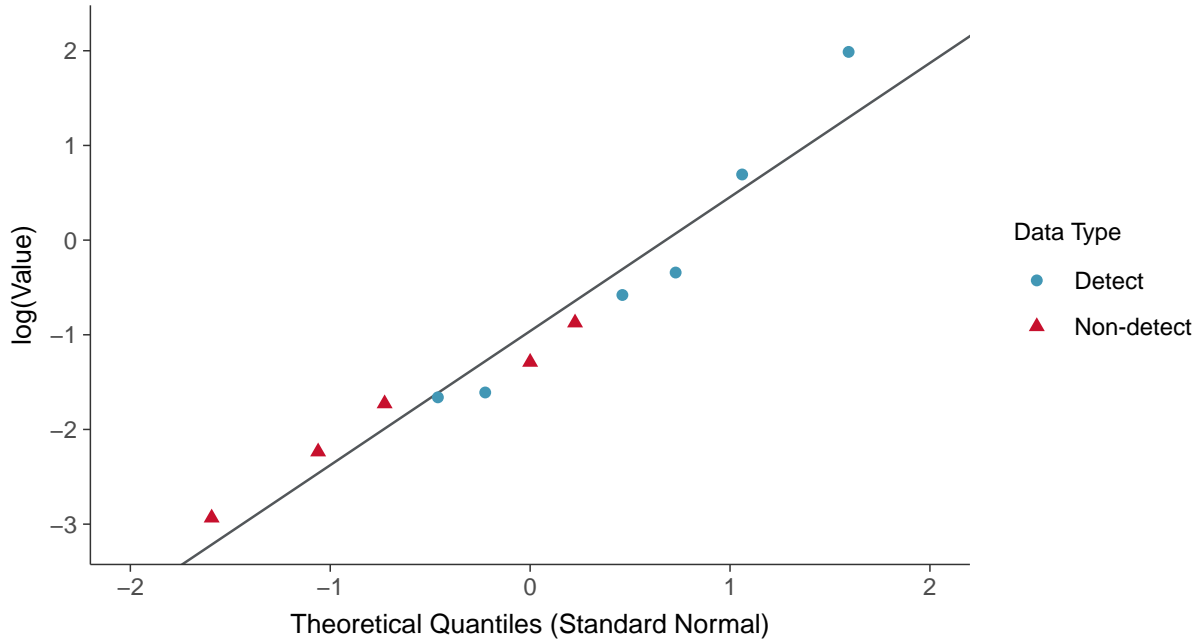
Arsenic, MW-17001R (ug/L)





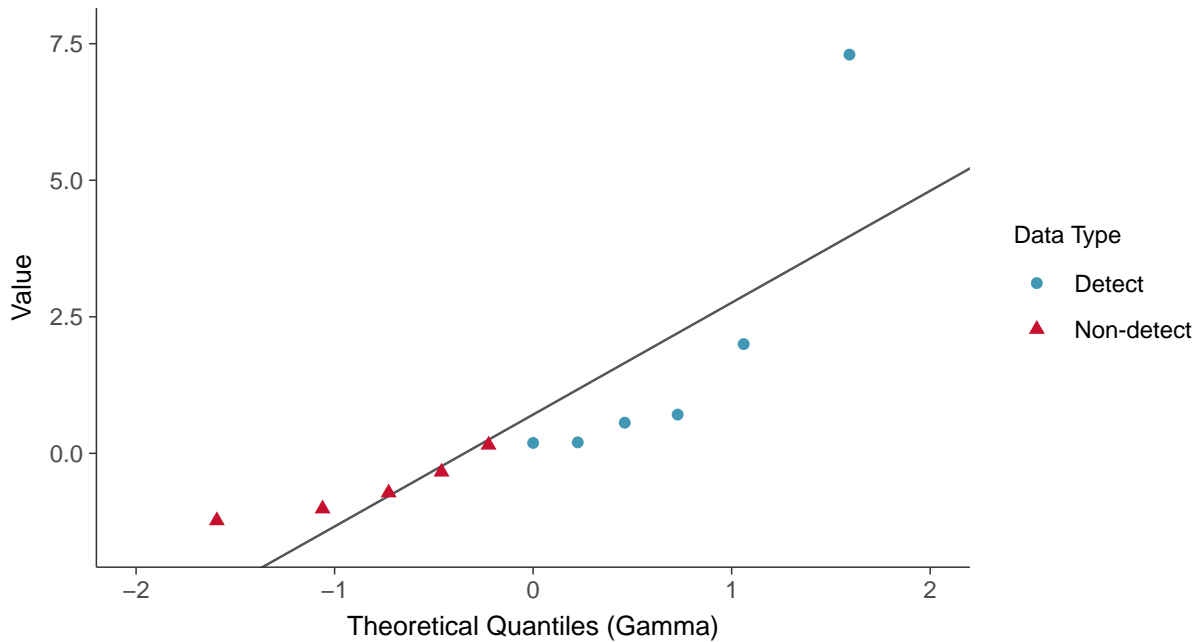
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17001R (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

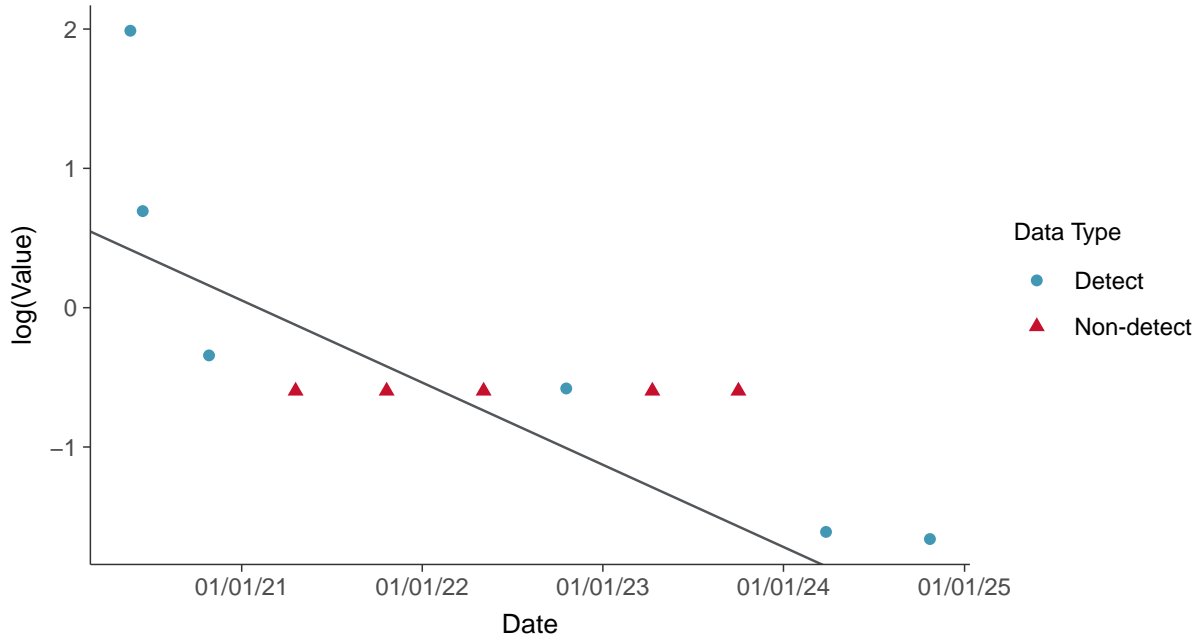
Arsenic, MW-17001R (ug/L)





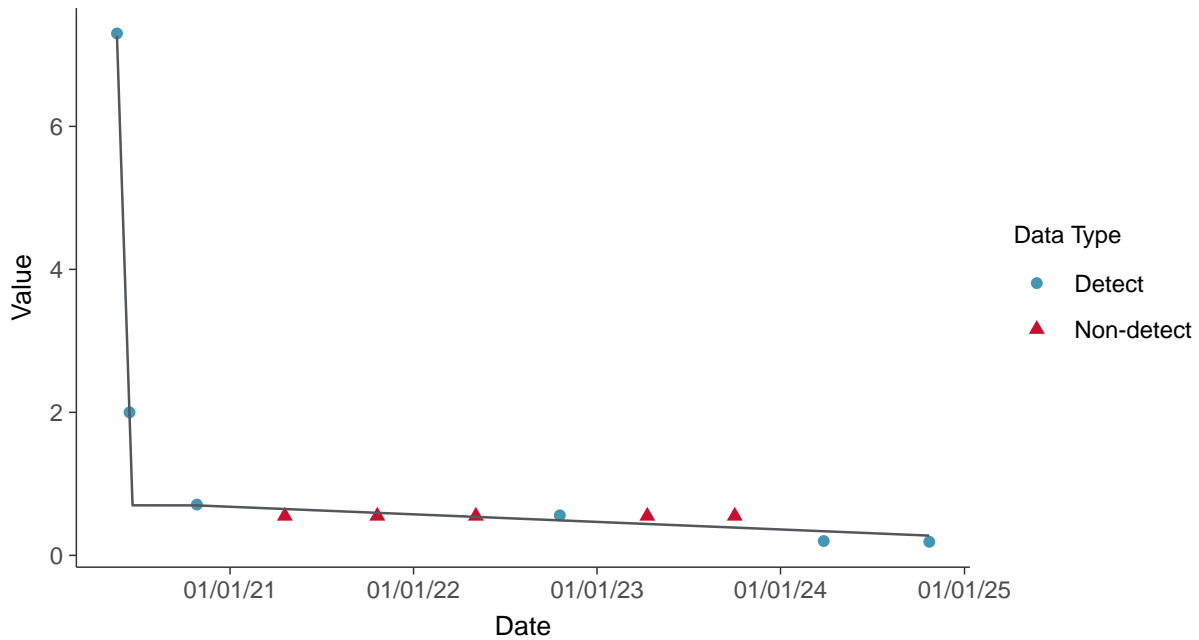
Trend Regression: Lognormal MLE

Arsenic, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear

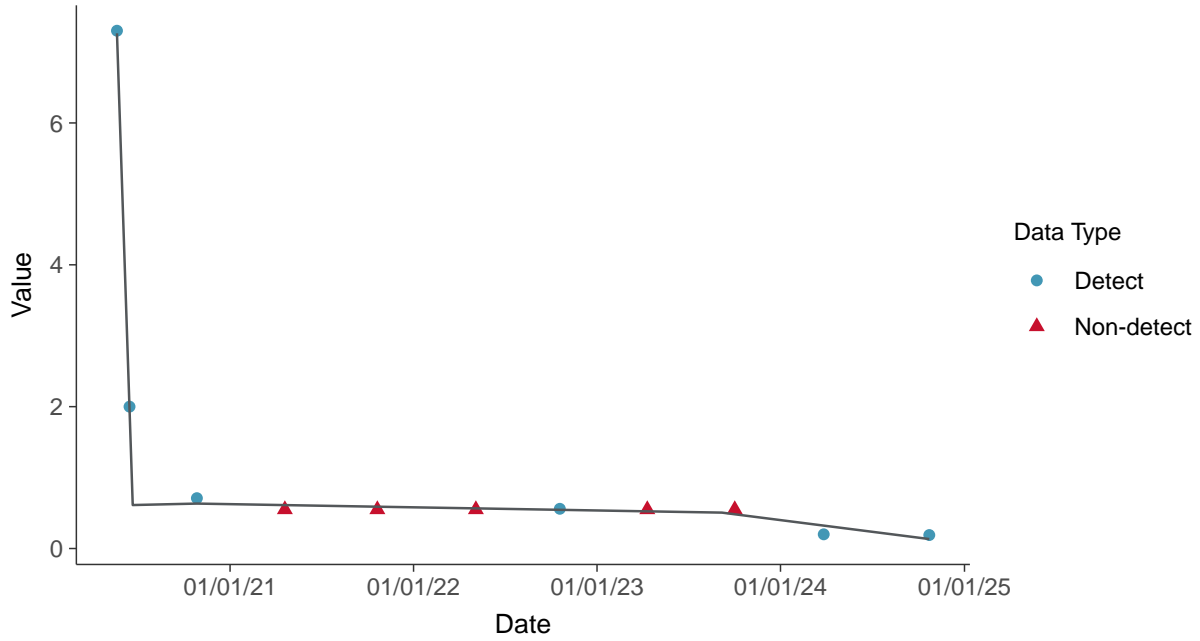
Arsenic, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-17001R (ug/L)



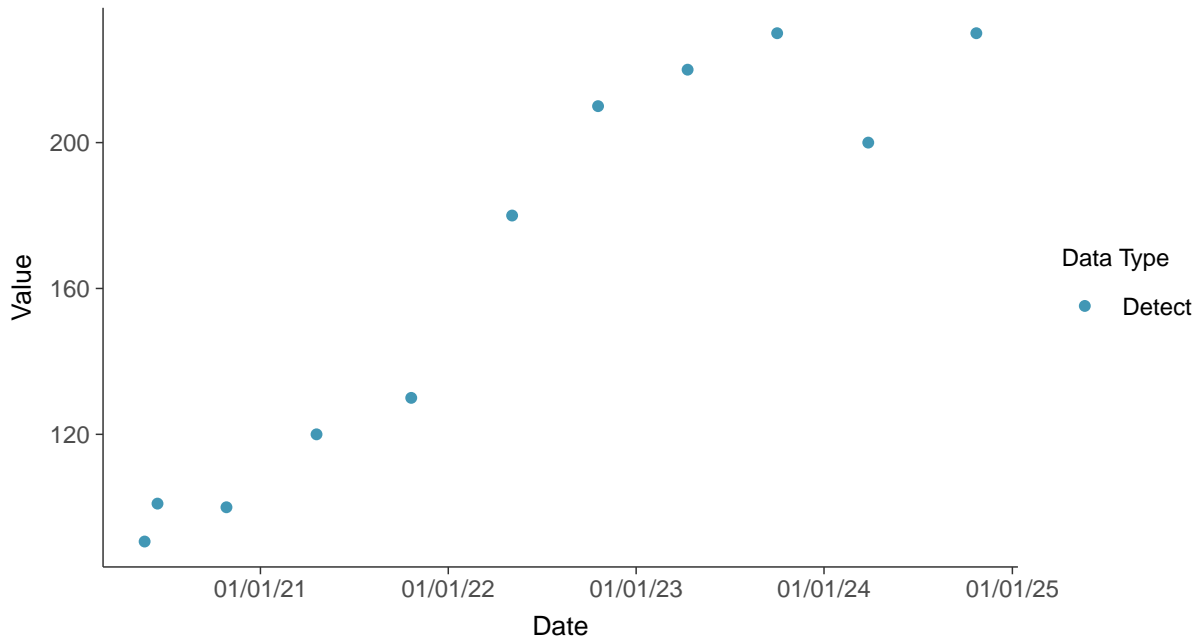


Appendix IV: Barium, MW-17001R

ID: 14_2_103

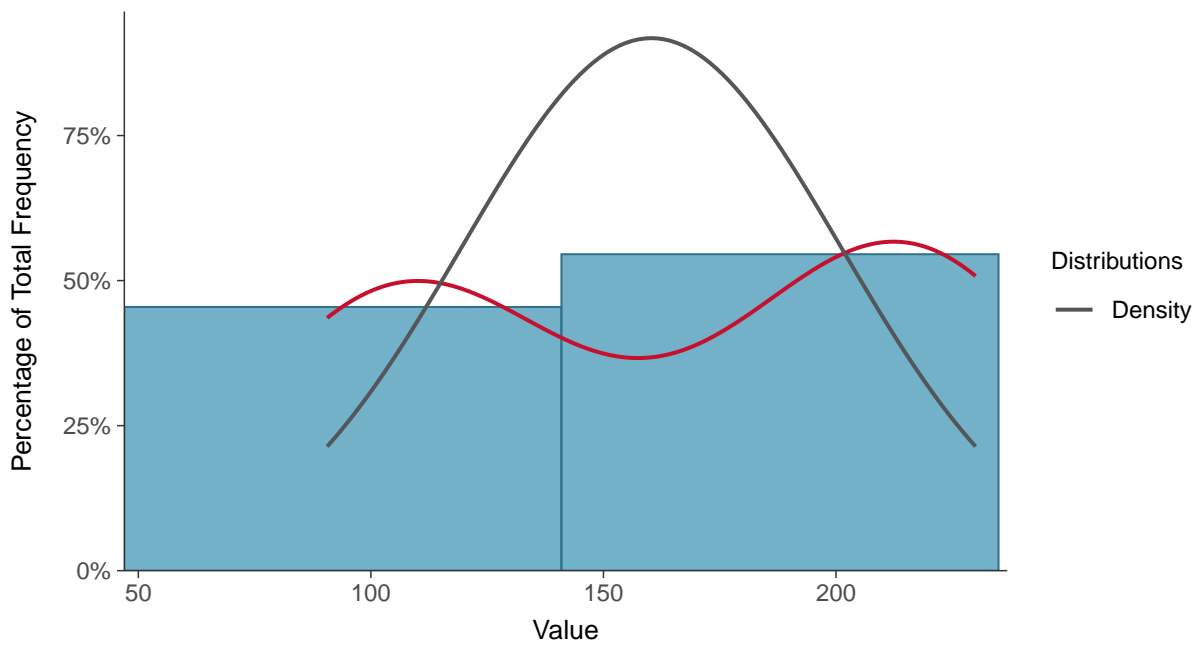
Scatter Plot

Barium, MW-17001R (ug/L)



Histogram

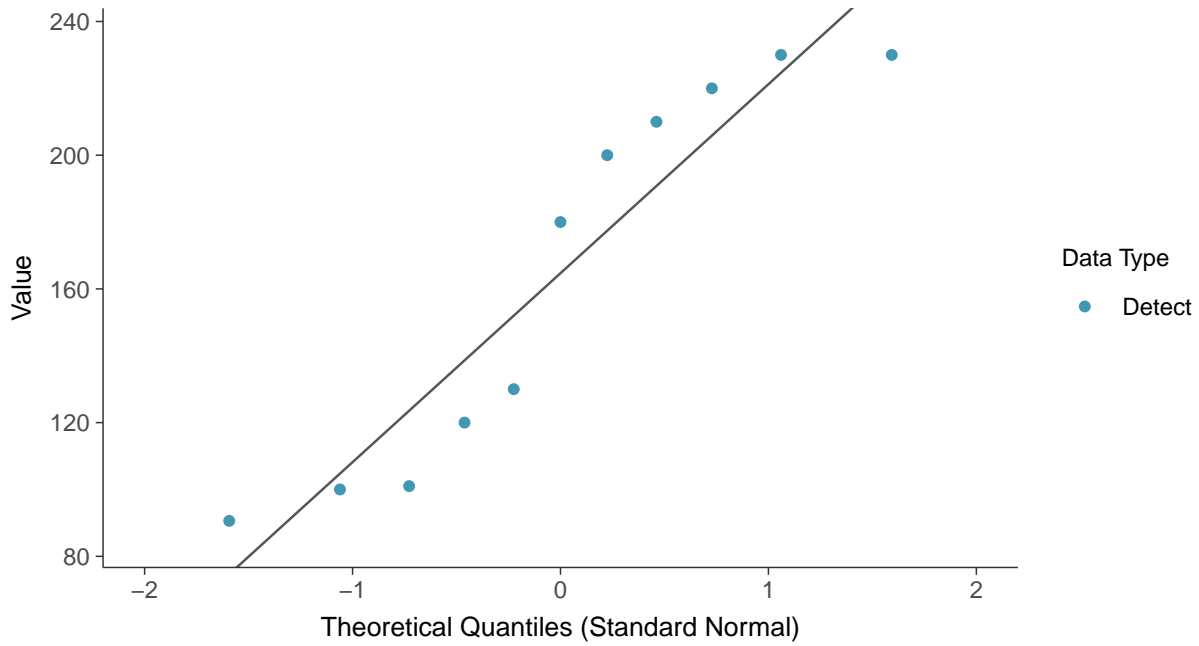
Barium, MW-17001R (ug/L)





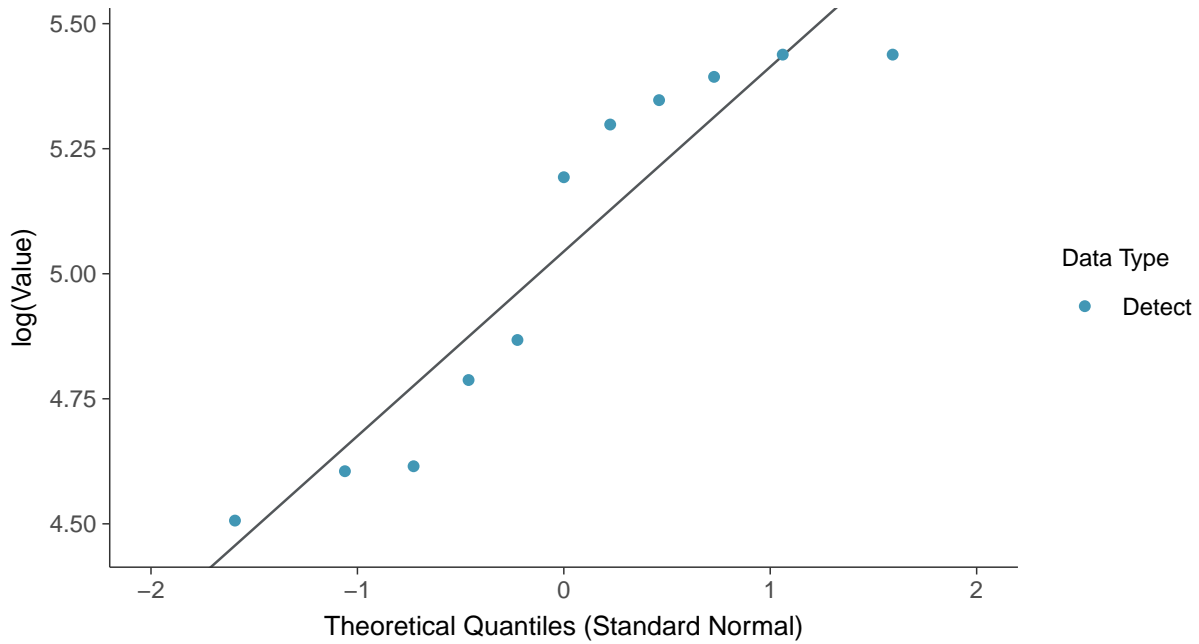
Normal Q-Q plot

Barium, MW-17001R (ug/L)



Lognormal Q-Q plot

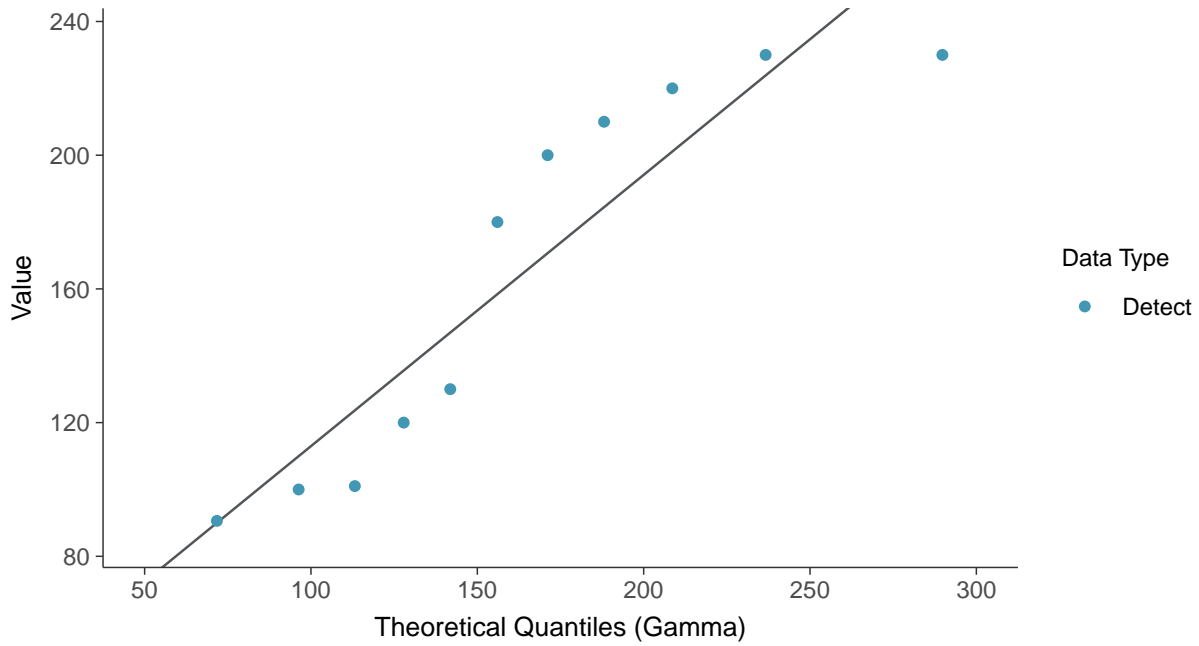
Barium, MW-17001R (ug/L)





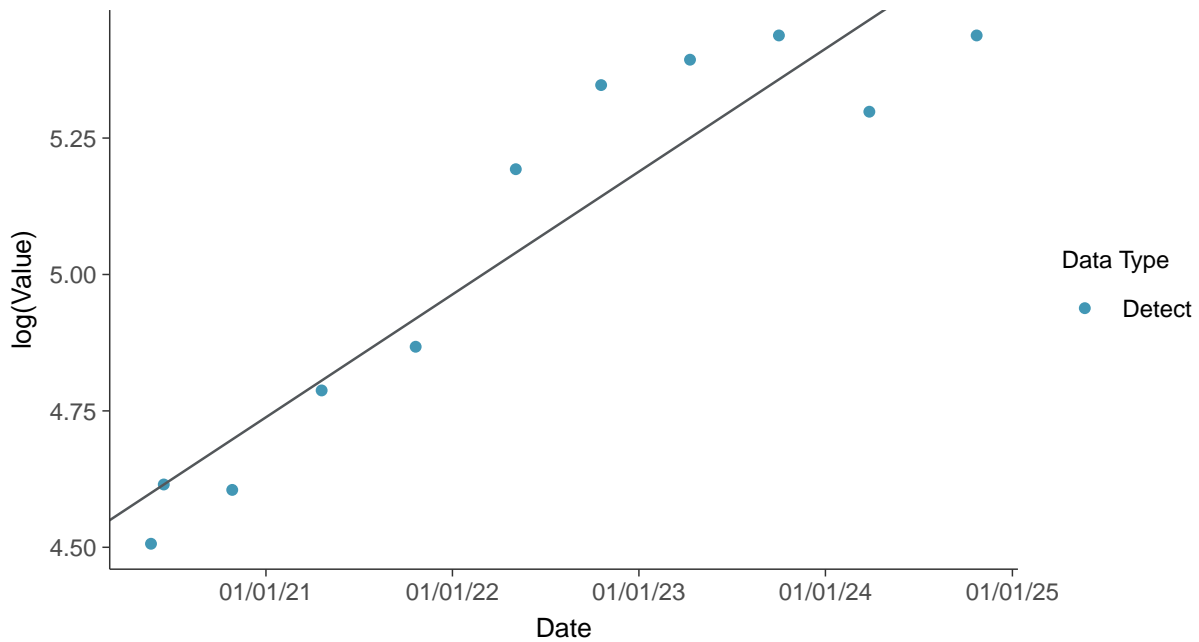
Gamma Q-Q plot

Barium, MW-17001R (ug/L)



Trend Regression: Lognormal MLE

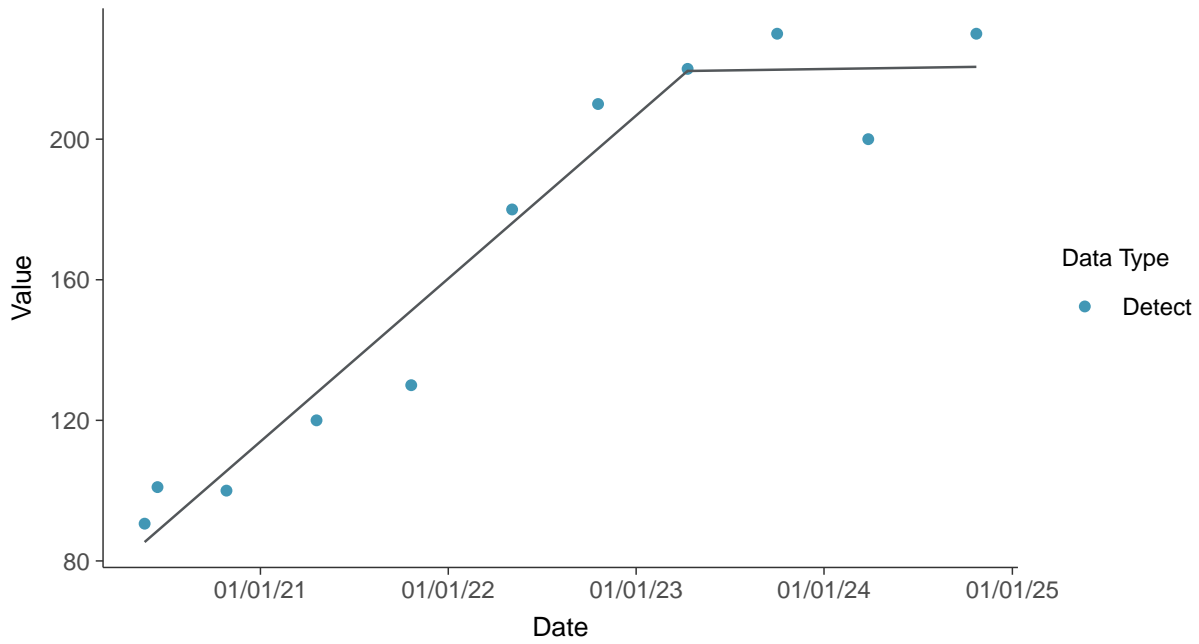
Barium, MW-17001R (ug/L)





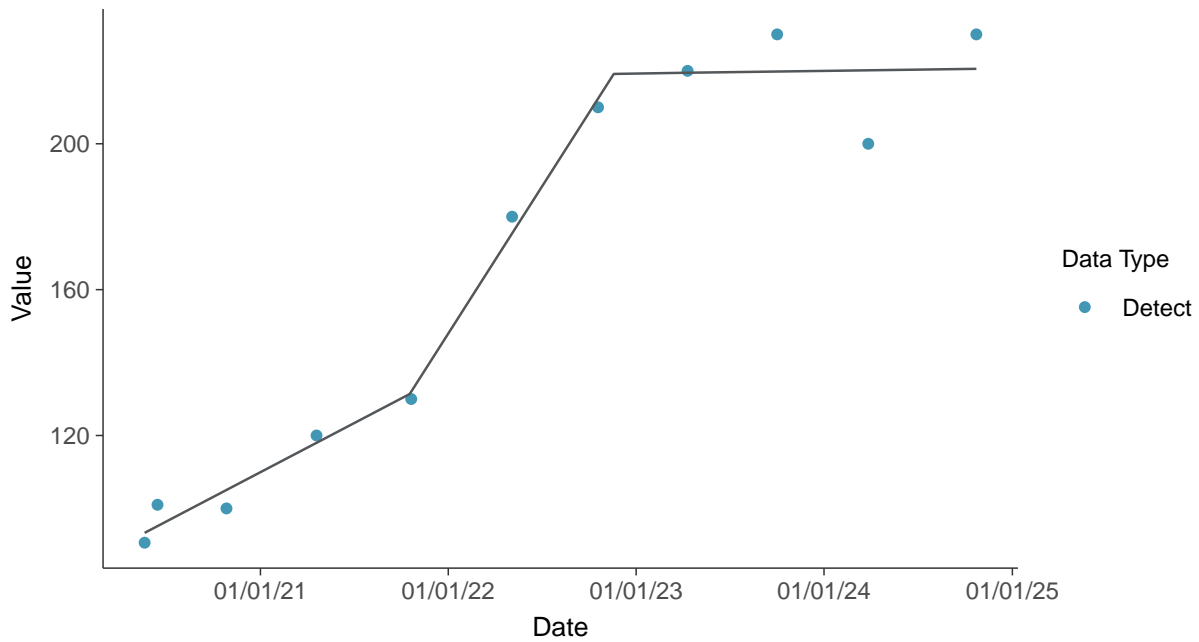
Trend Regression: Piecewise Linear-Linear

Barium, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

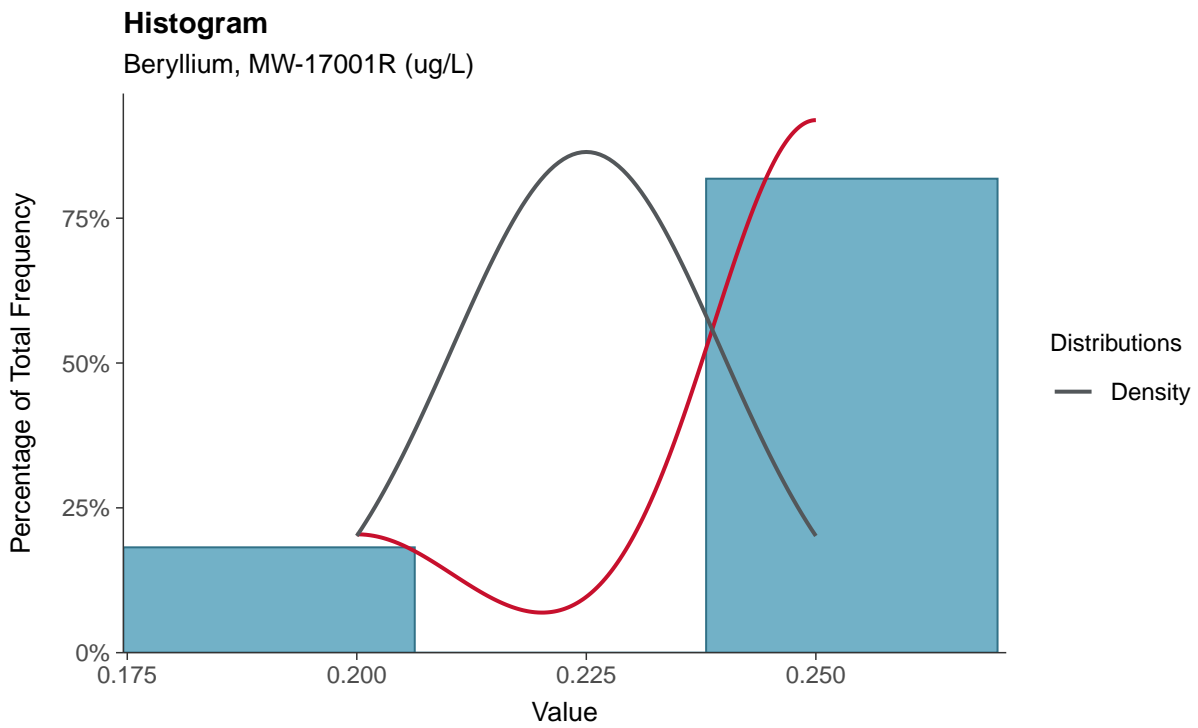
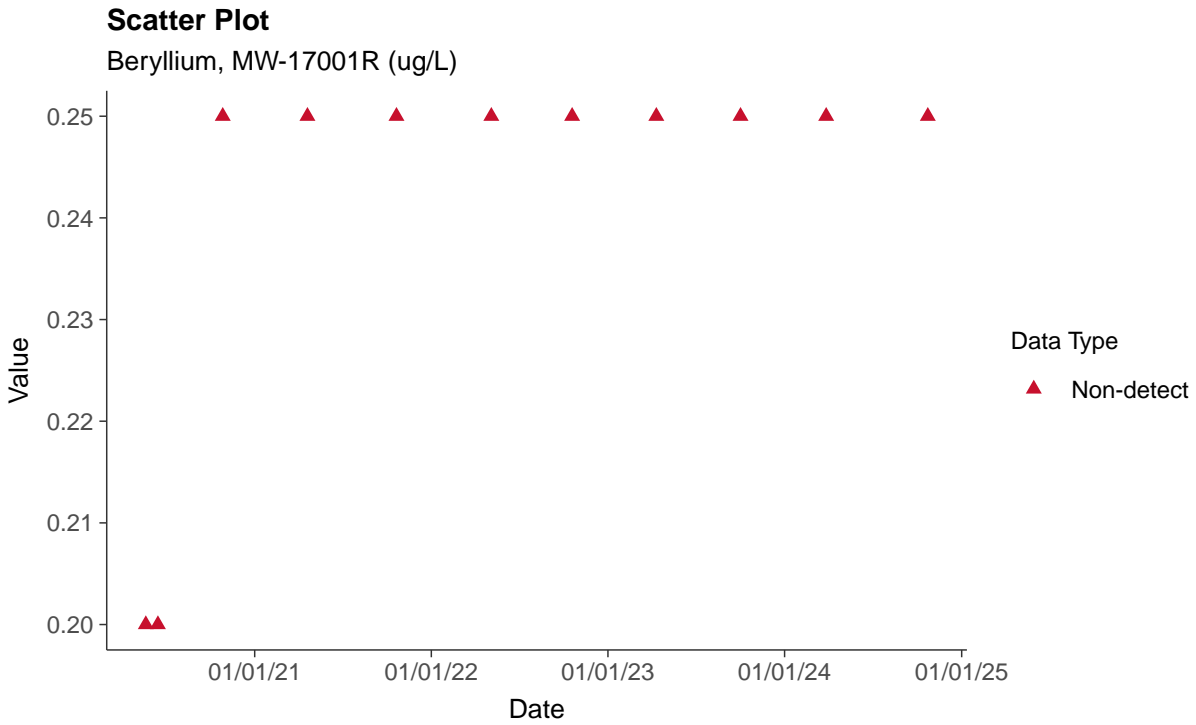
Barium, MW-17001R (ug/L)





Appendix IV: Beryllium, MW-17001R

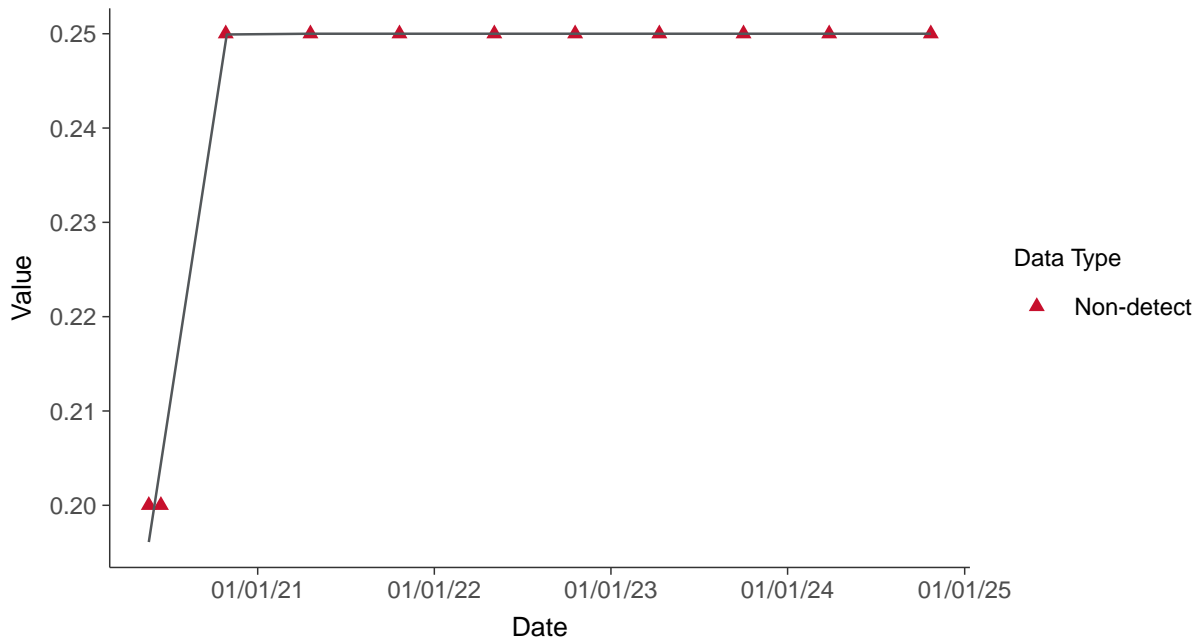
ID: 14_2_104





Trend Regression: Piecewise Linear-Linear

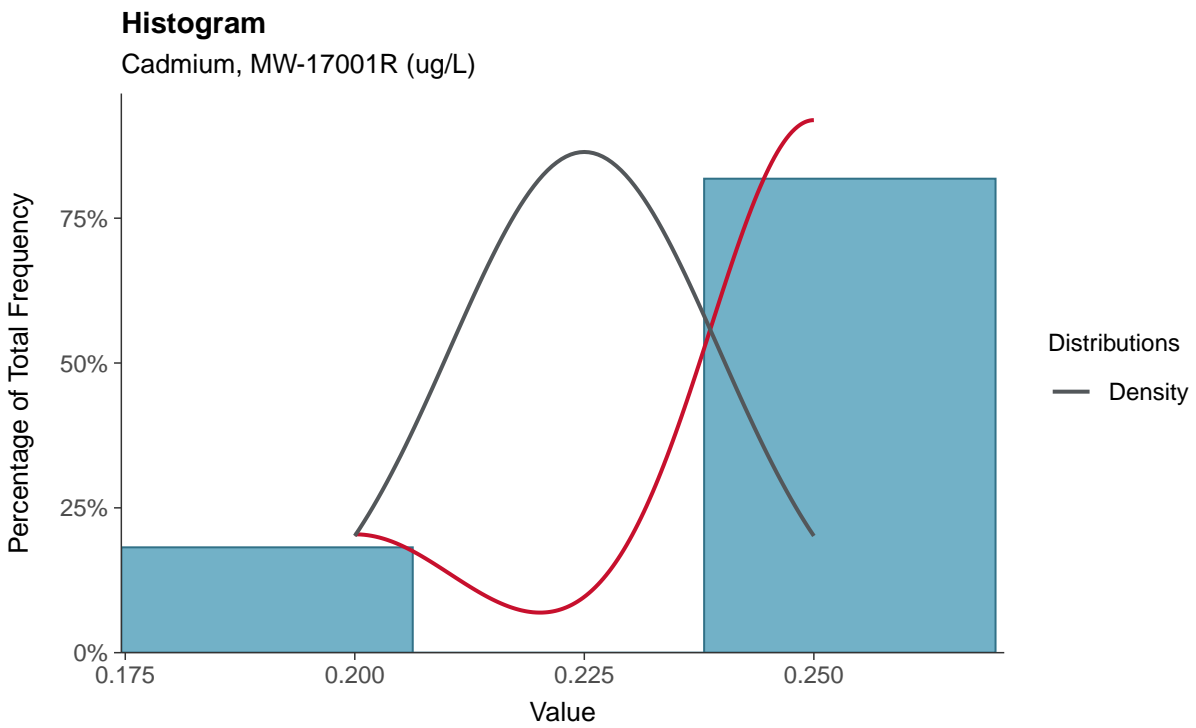
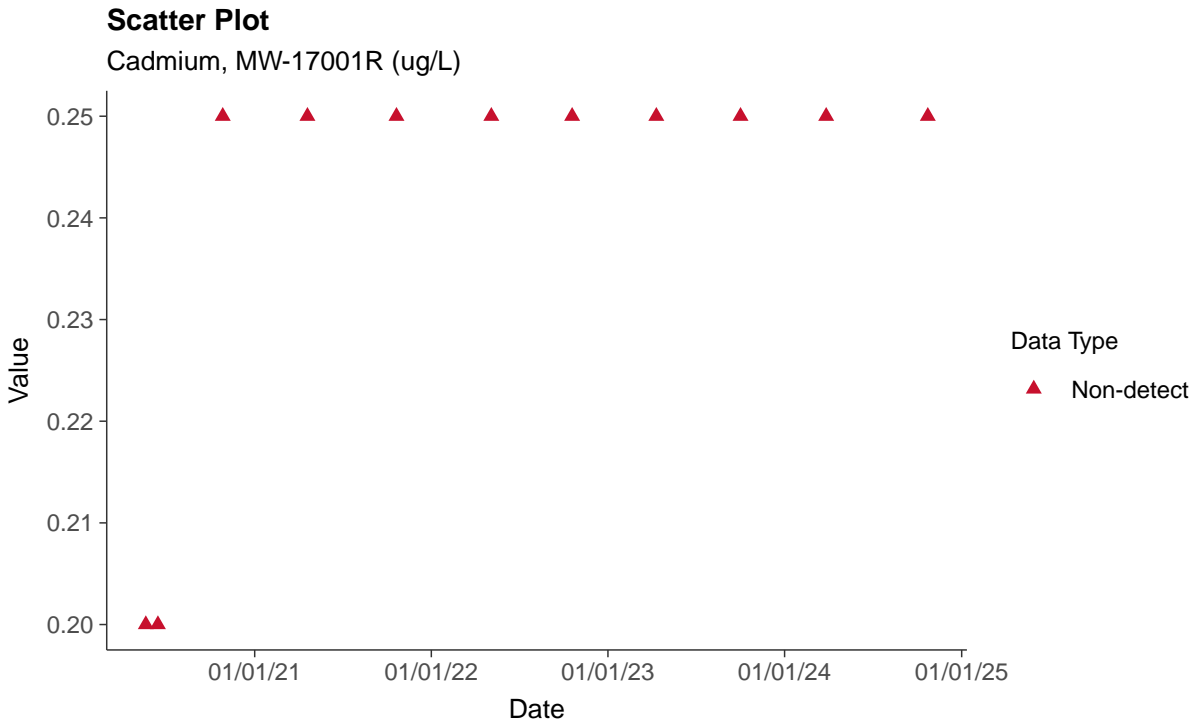
Beryllium, MW-17001R (ug/L)





Appendix IV: Cadmium, MW-17001R

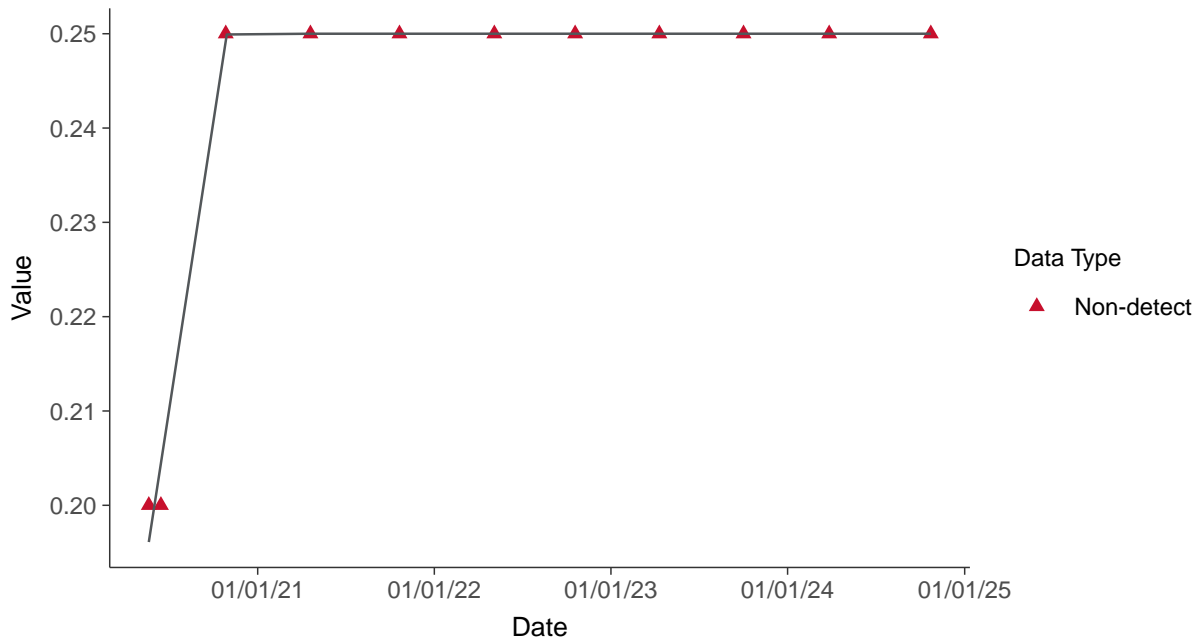
ID: 14_2_106





Trend Regression: Piecewise Linear-Linear

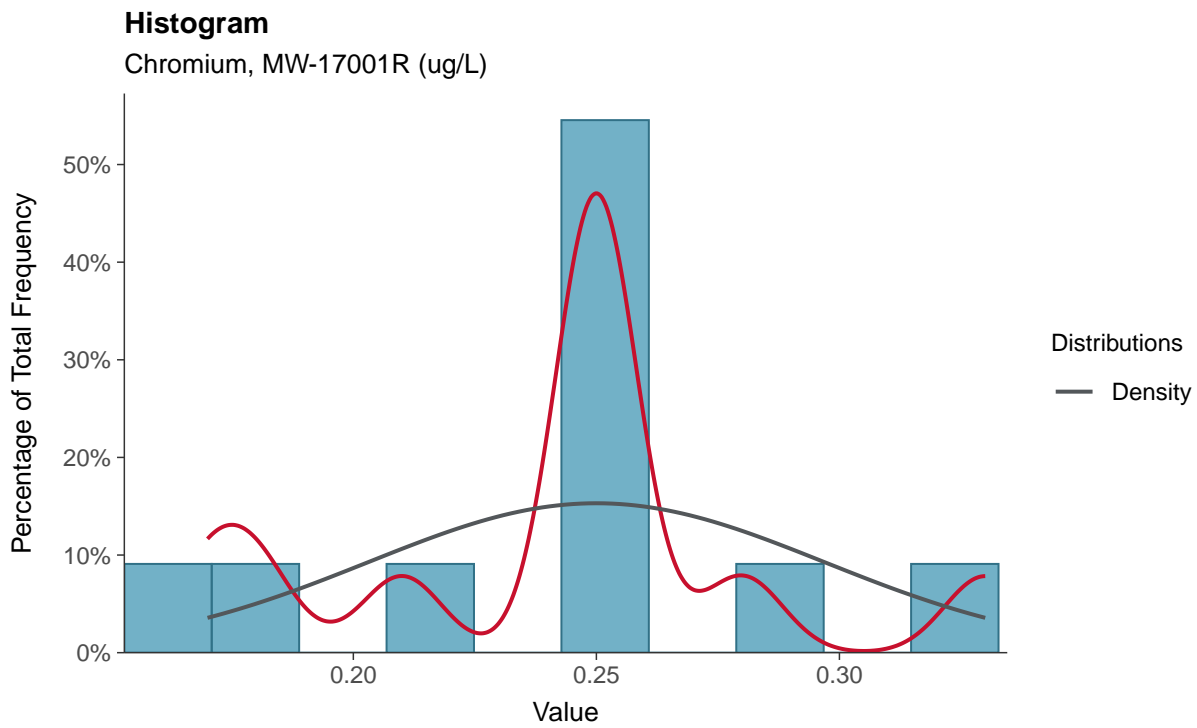
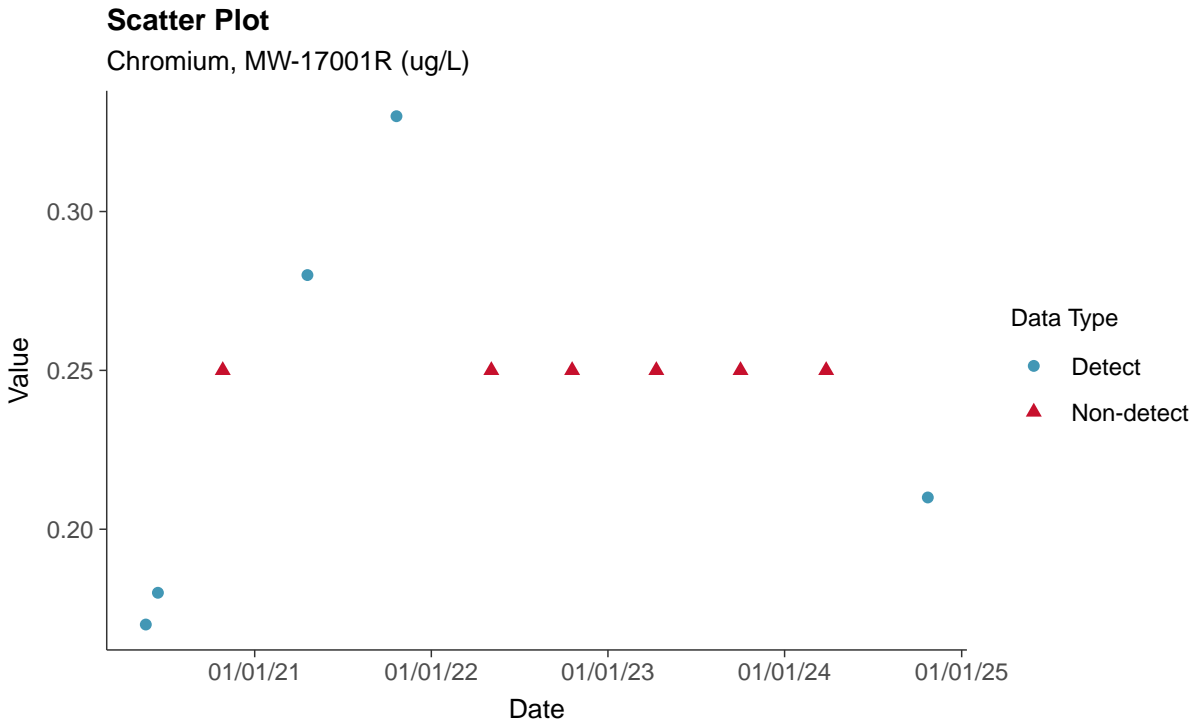
Cadmium, MW-17001R (ug/L)





Appendix IV: Chromium, MW-17001R

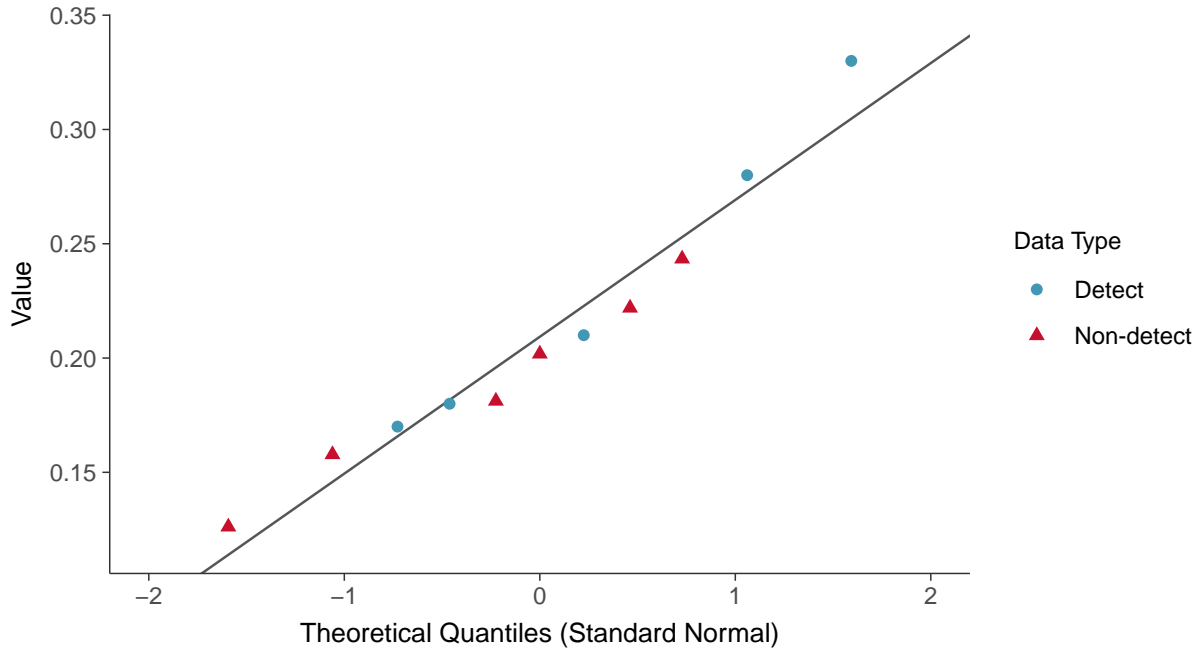
ID: 14_2_109





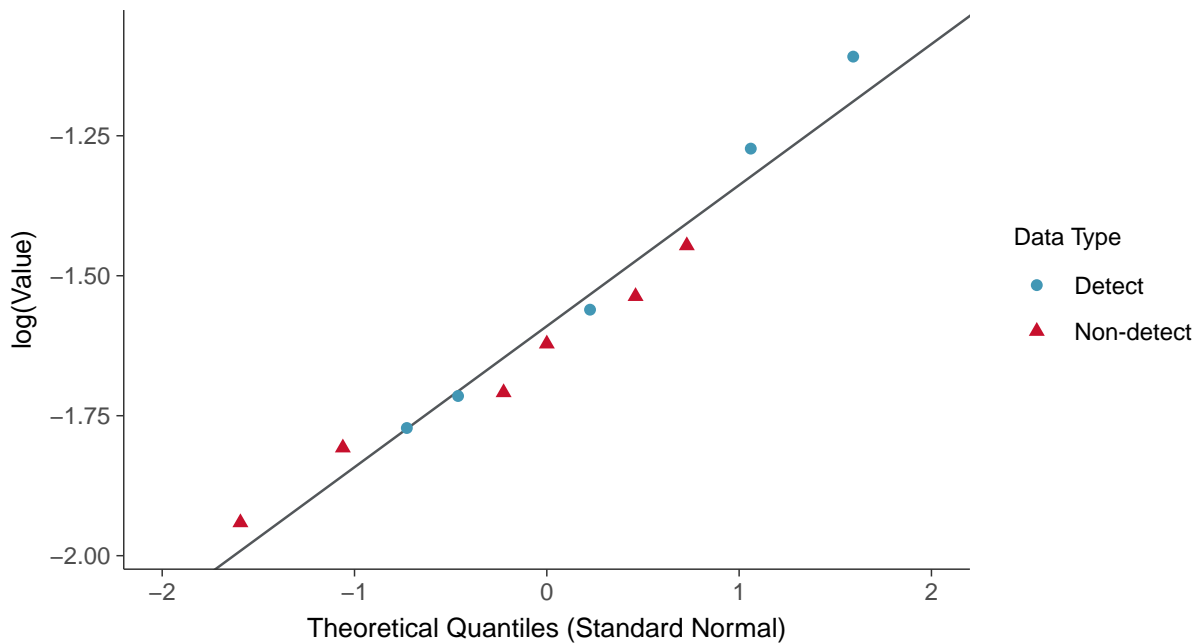
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17001R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

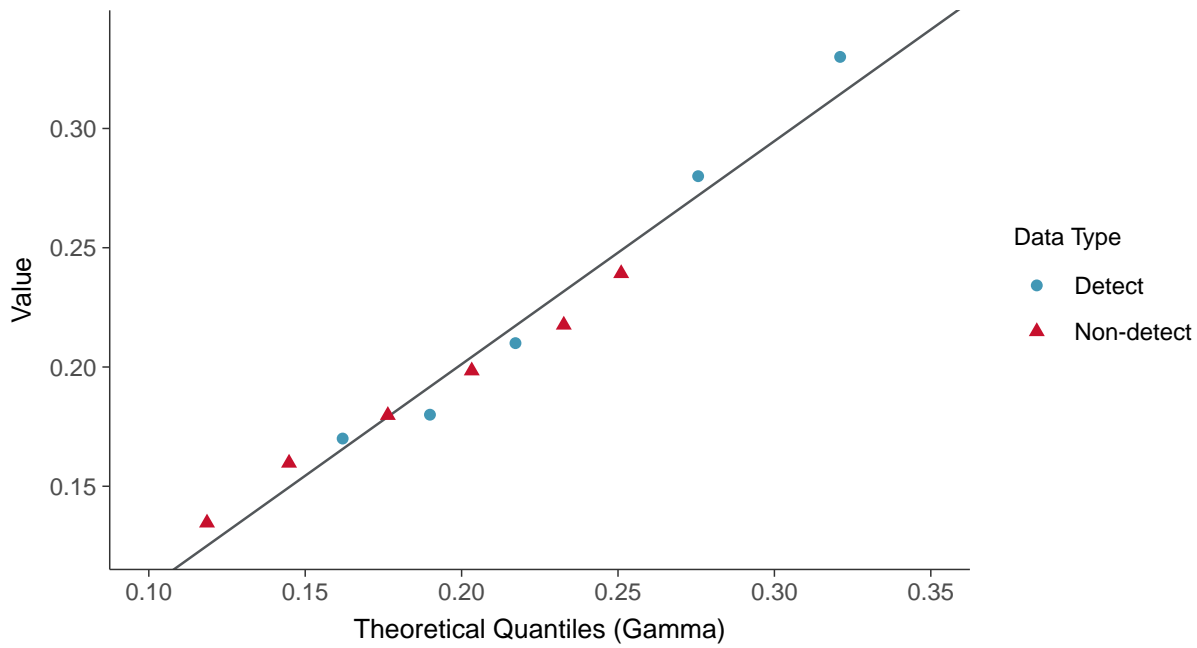
Chromium, MW-17001R (ug/L)





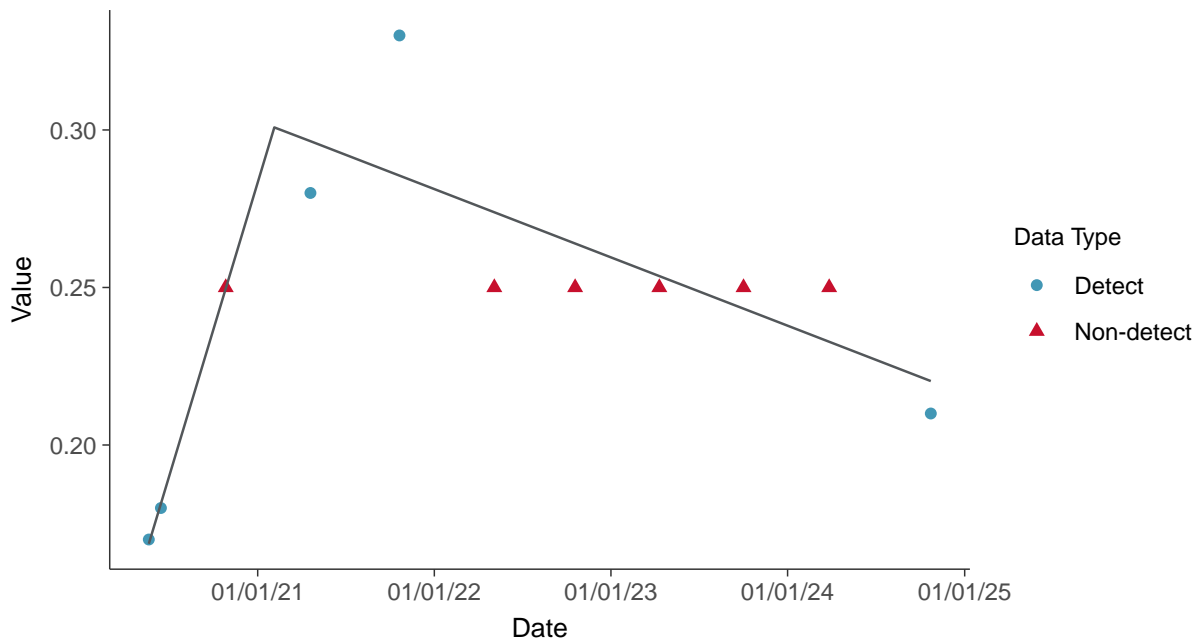
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear

Chromium, MW-17001R (ug/L)



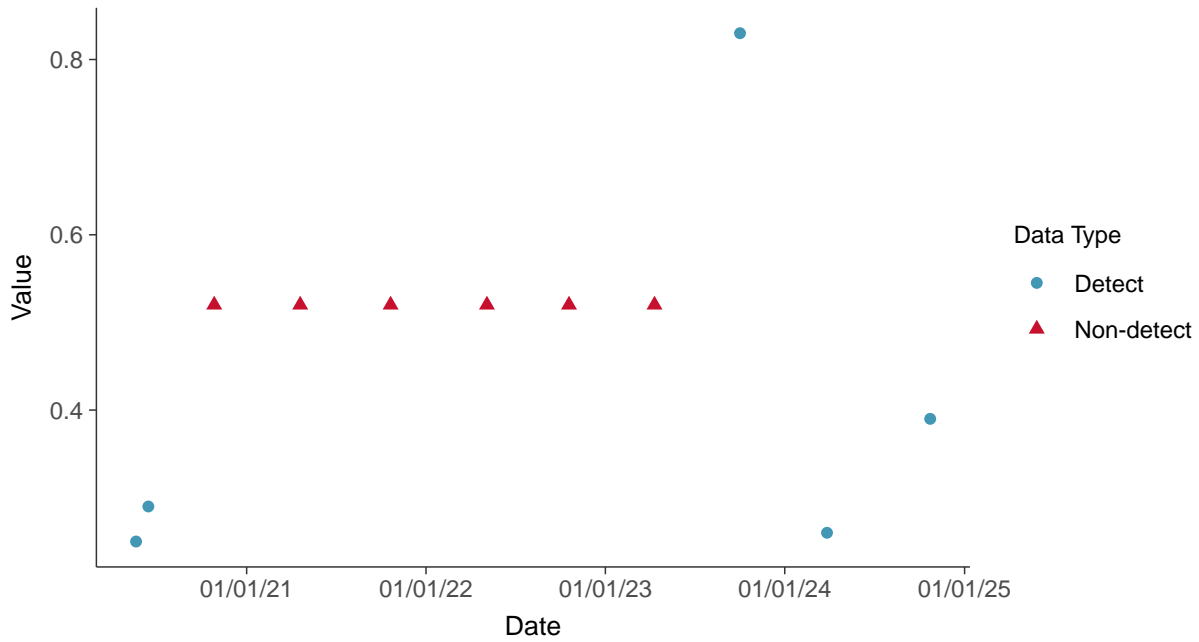


Appendix IV: Cobalt, MW-17001R

ID: 14_2_110

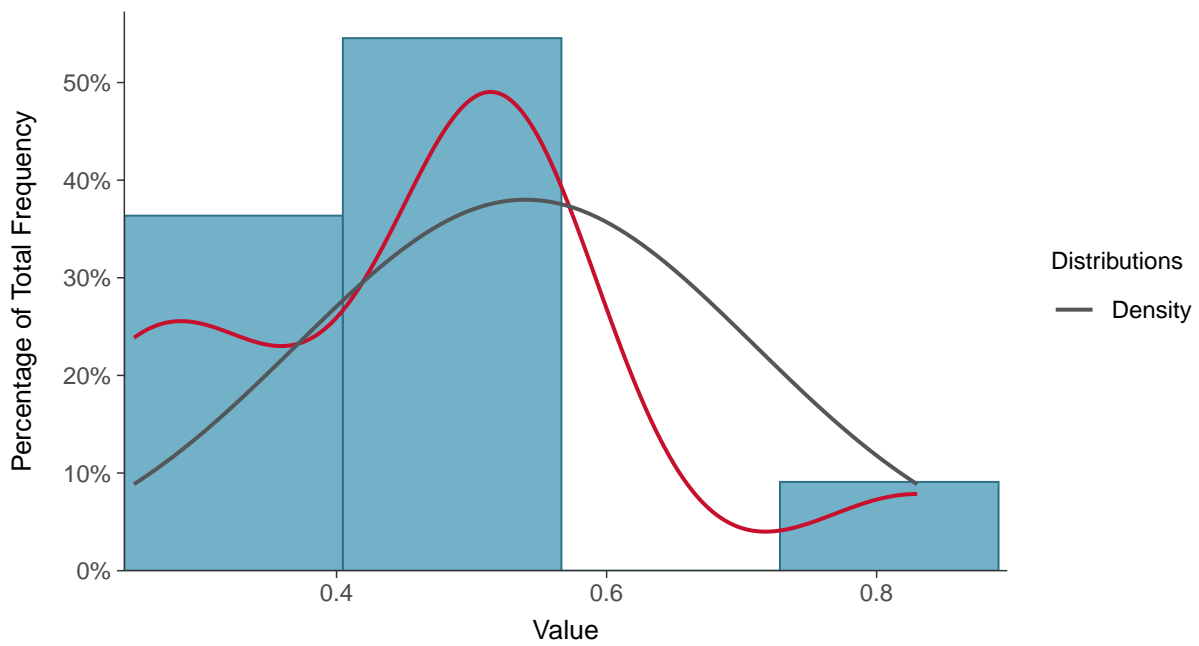
Scatter Plot

Cobalt, MW-17001R (ug/L)



Histogram

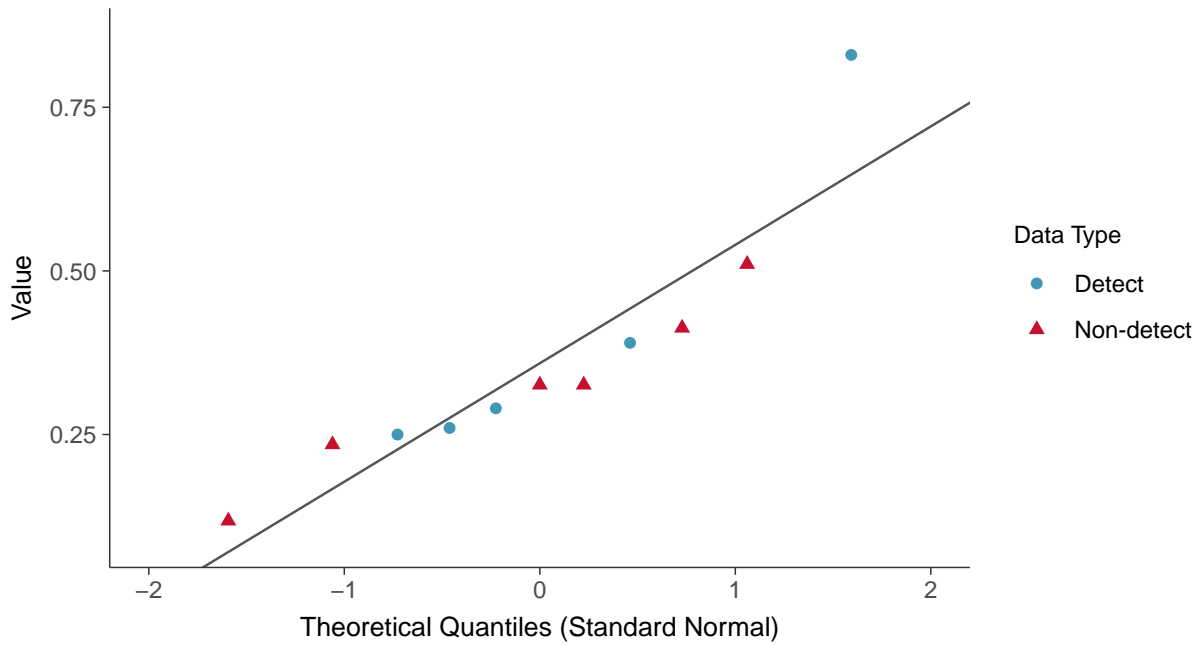
Cobalt, MW-17001R (ug/L)





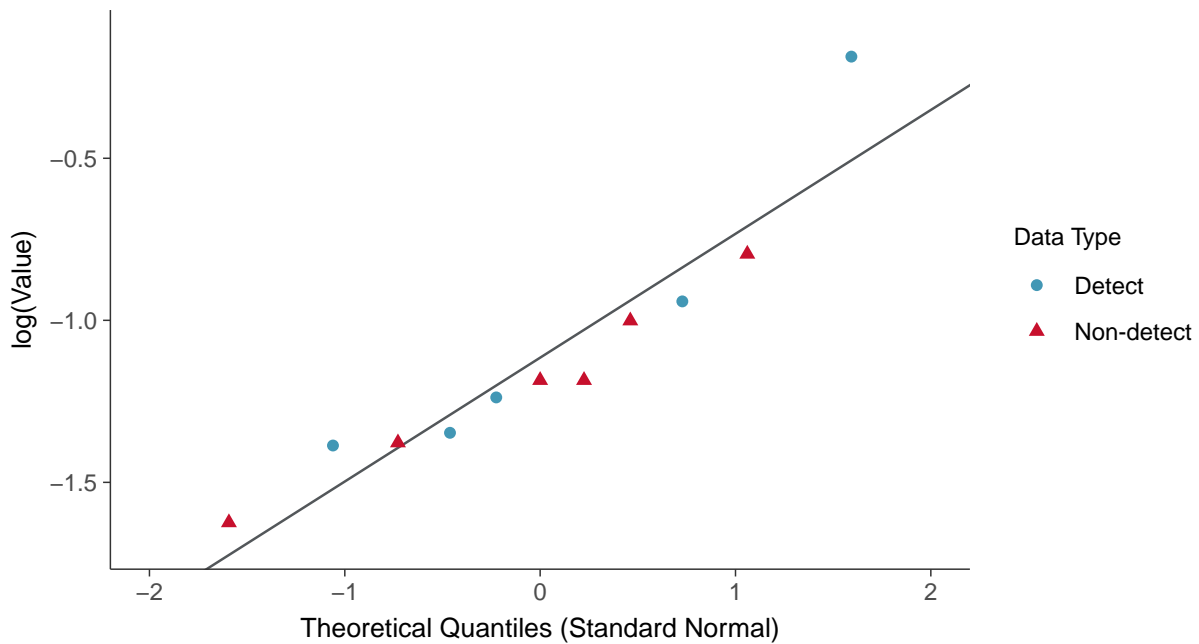
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-17001R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

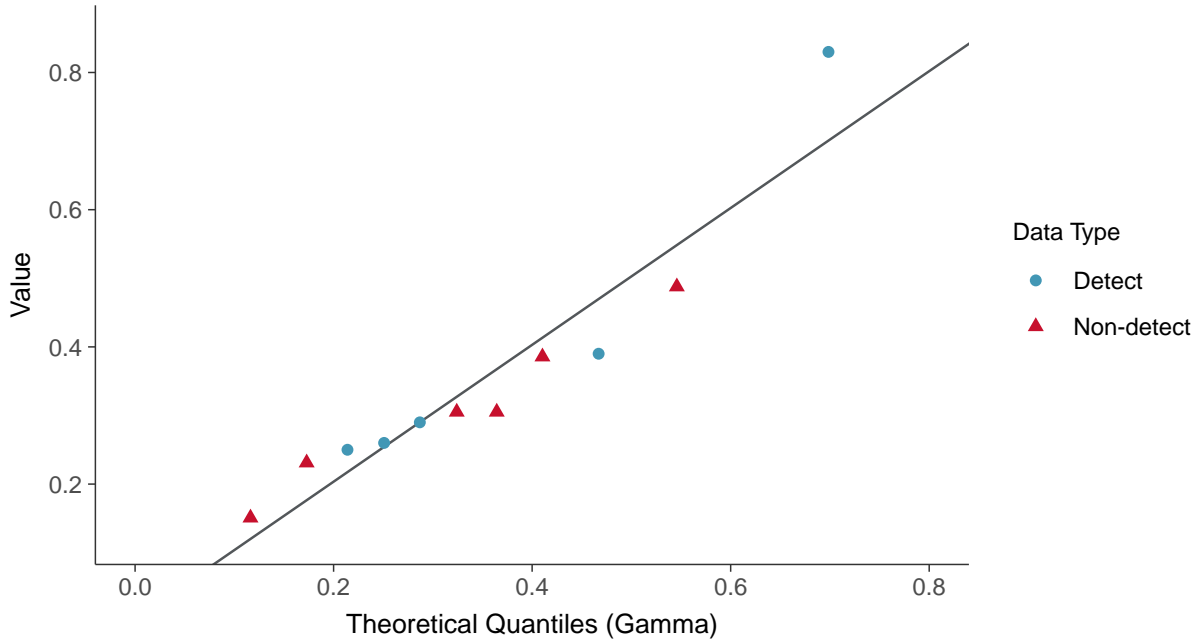
Cobalt, MW-17001R (ug/L)





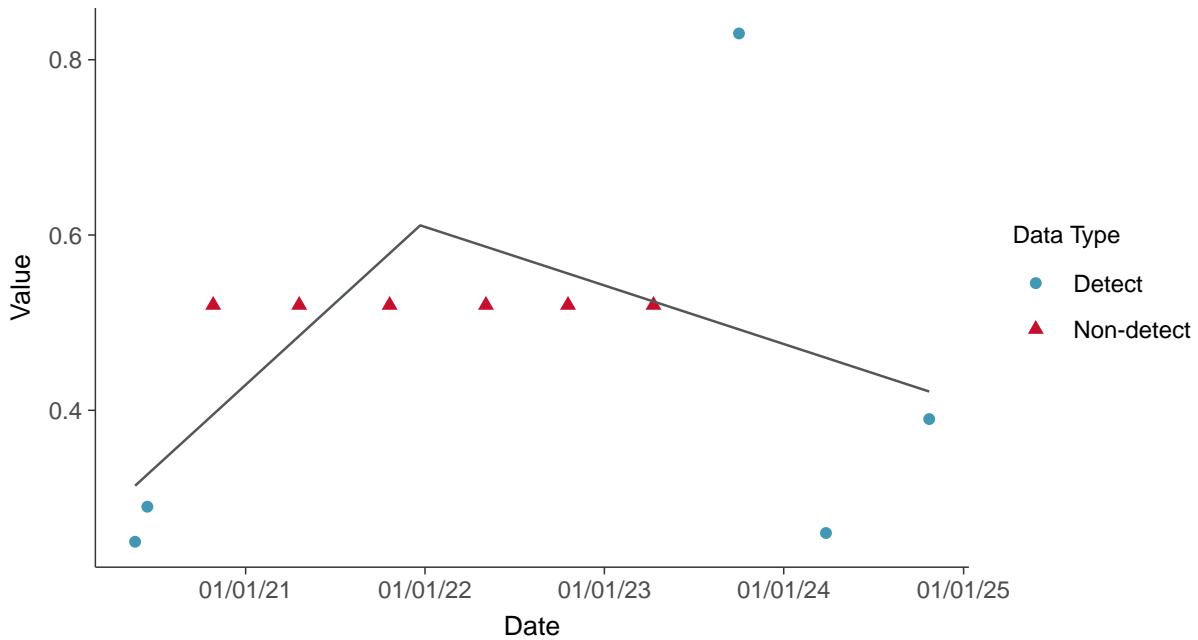
Gamma Q-Q plot using ROS Imputed Estimates

Cobalt, MW-17001R (ug/L)



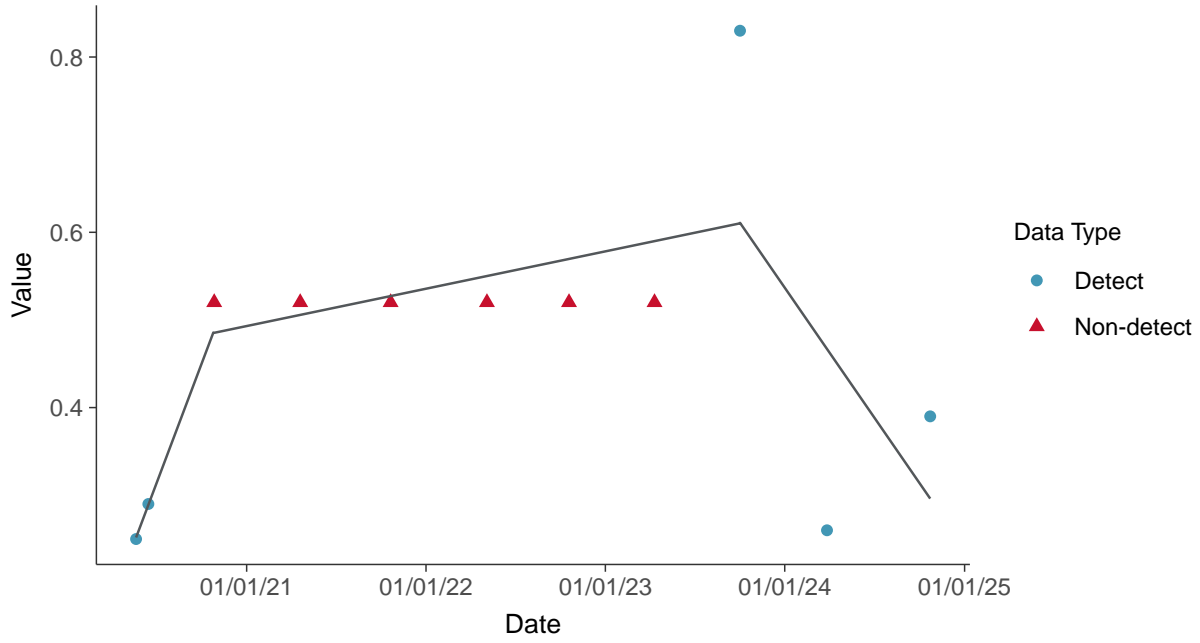
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-17001R (ug/L)



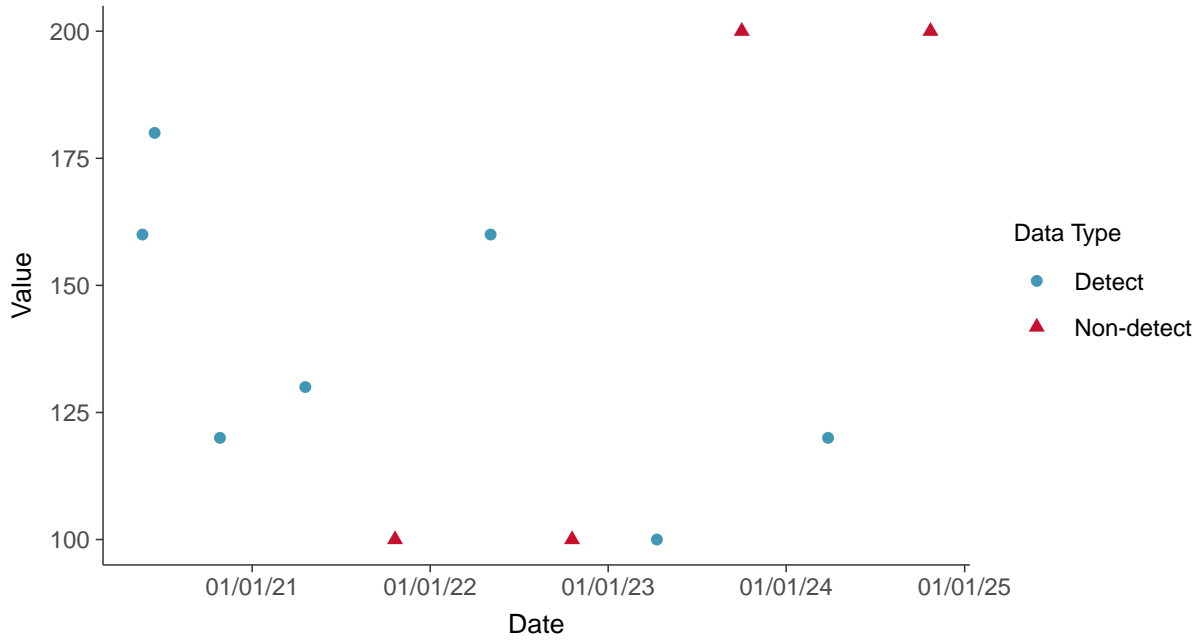


Appendix IV: Fluoride, MW-17001R

ID: 14_2_114

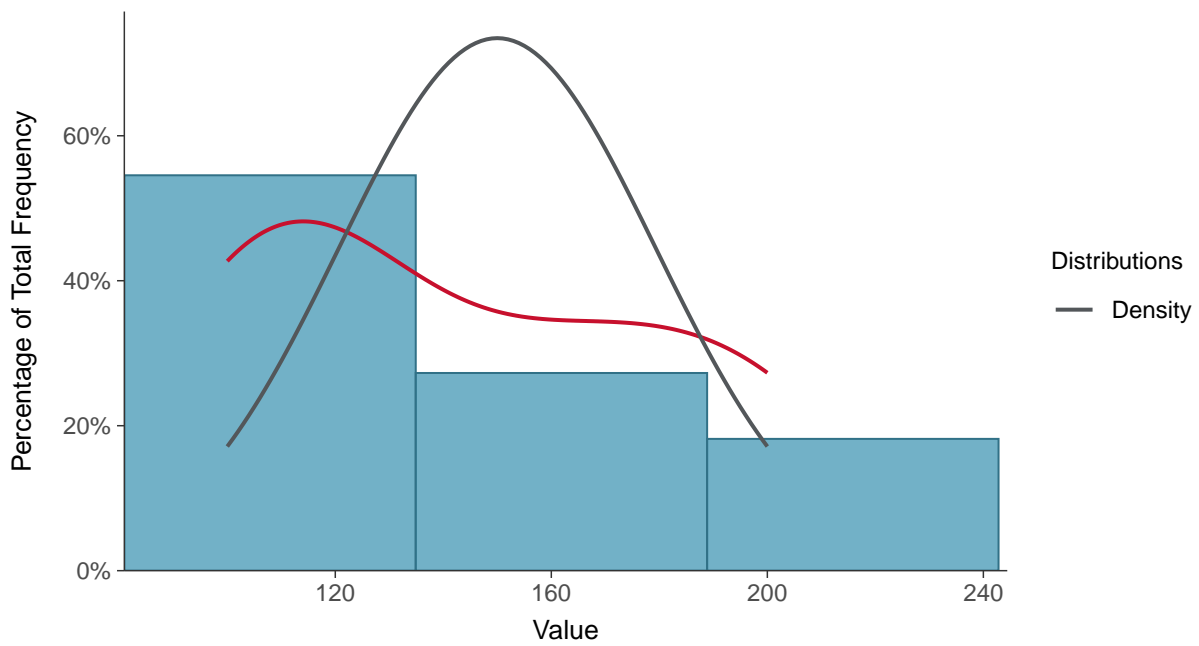
Scatter Plot

Fluoride, MW-17001R (ug/L)



Histogram

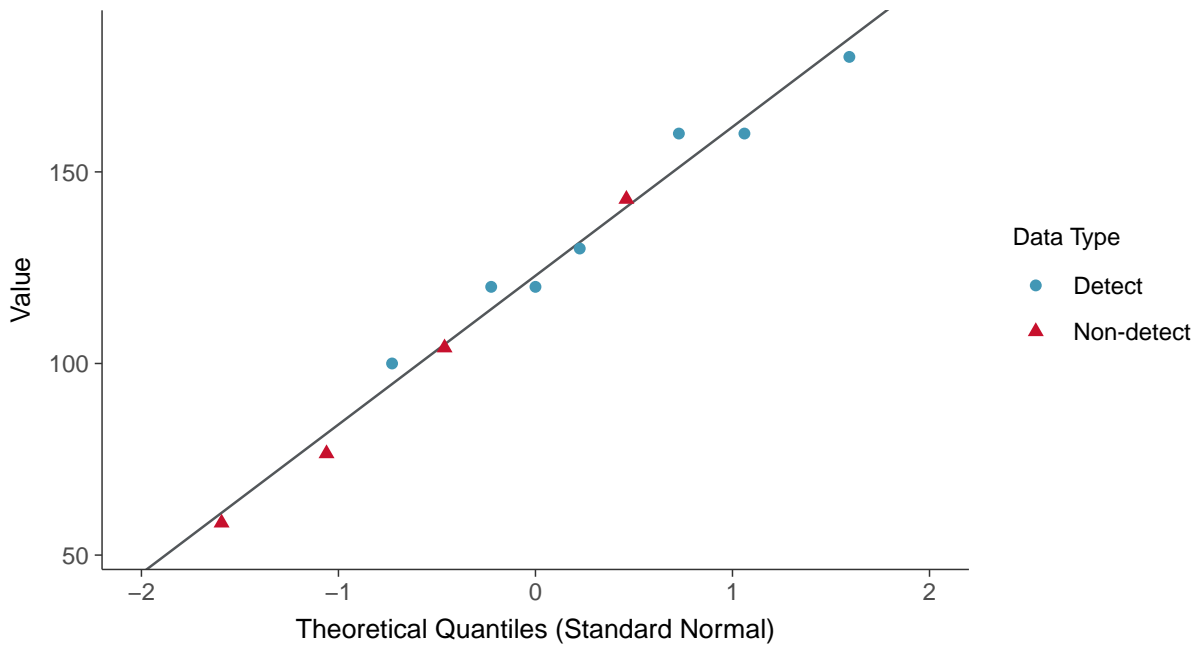
Fluoride, MW-17001R (ug/L)





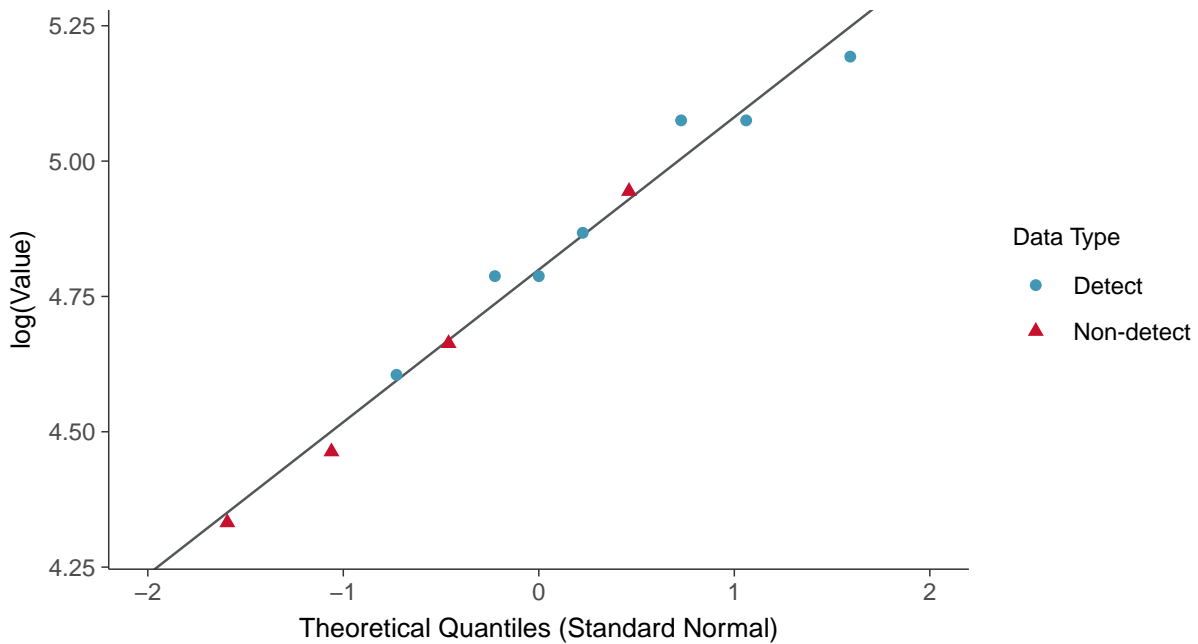
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17001R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

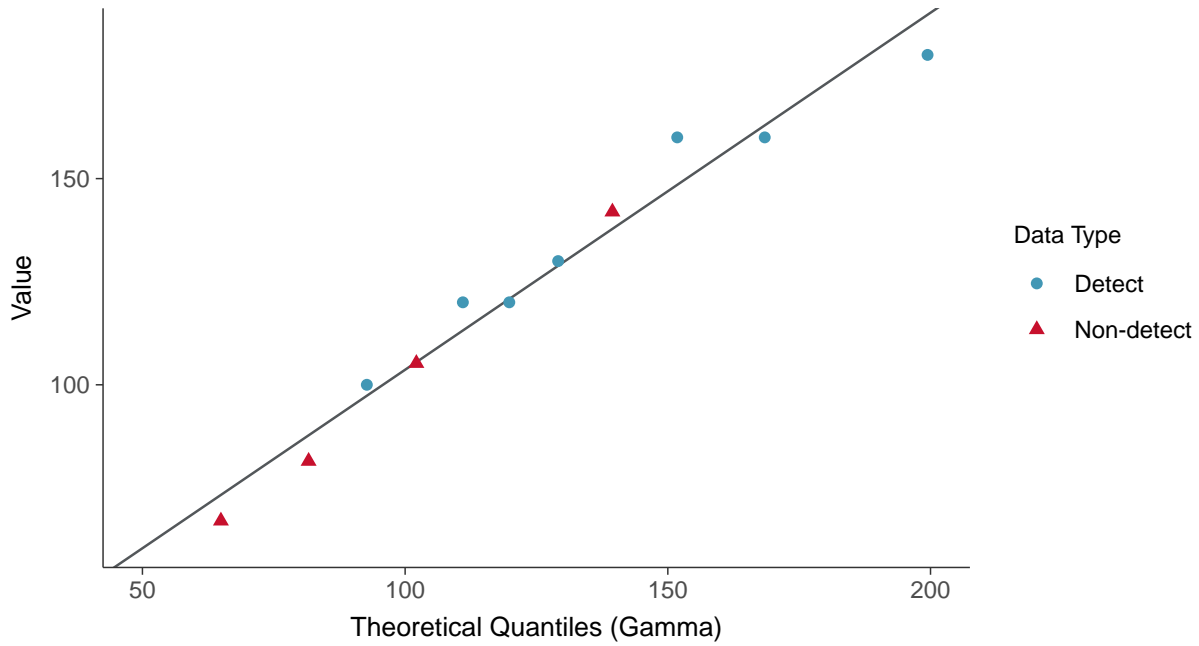
Fluoride, MW-17001R (ug/L)





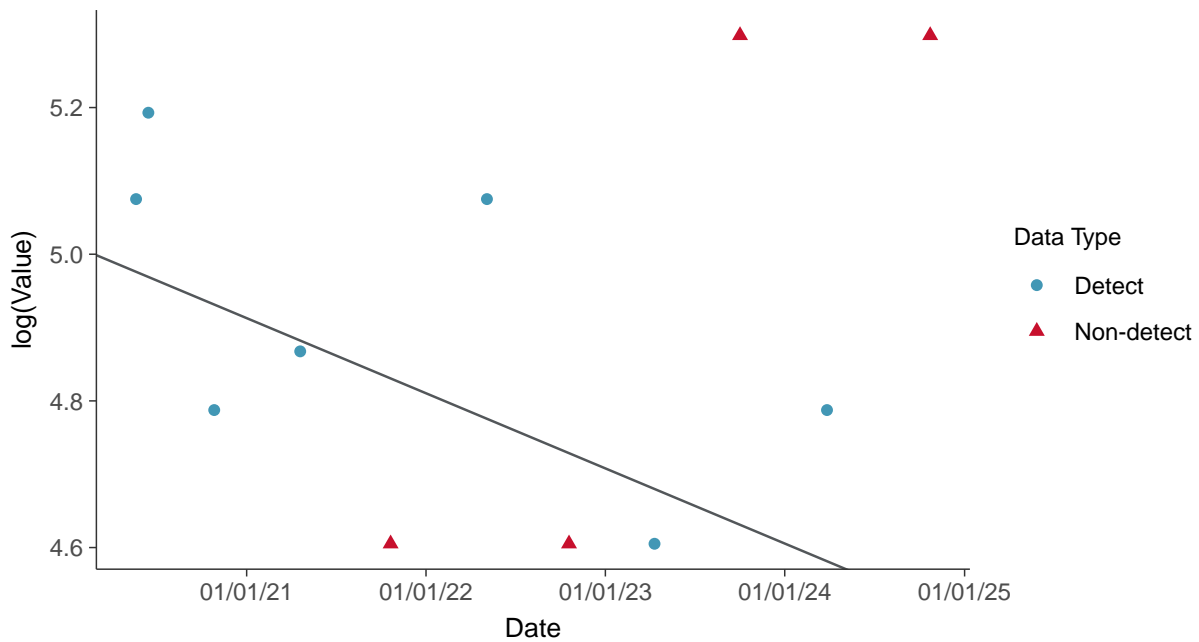
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17001R (ug/L)



Trend Regression: Lognormal MLE

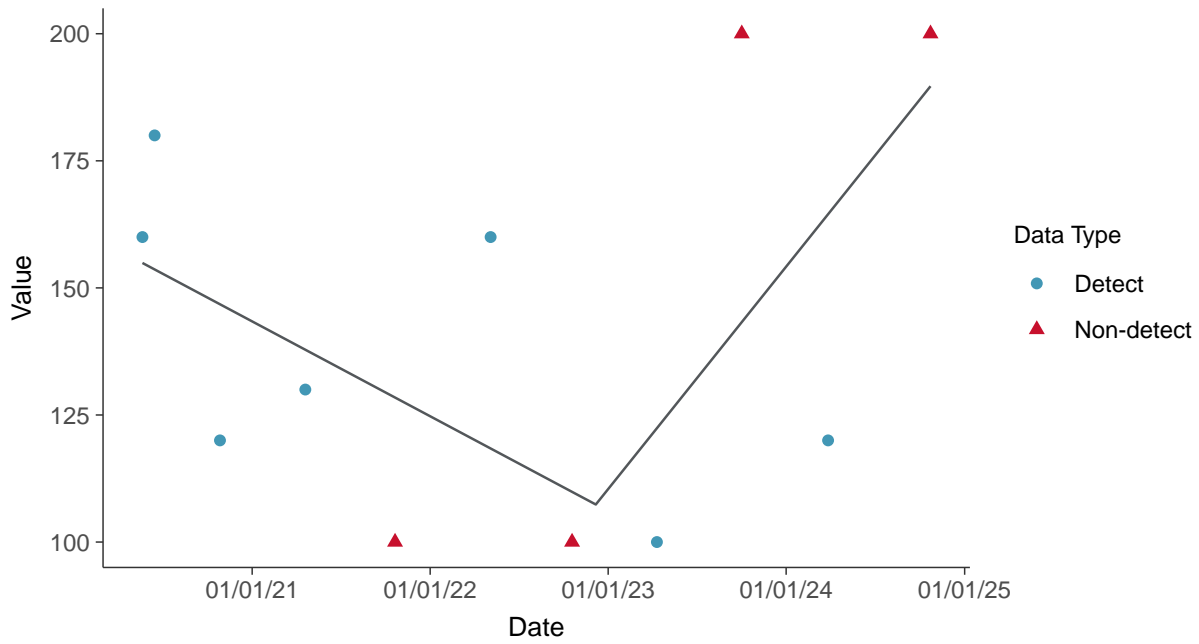
Fluoride, MW-17001R (ug/L)





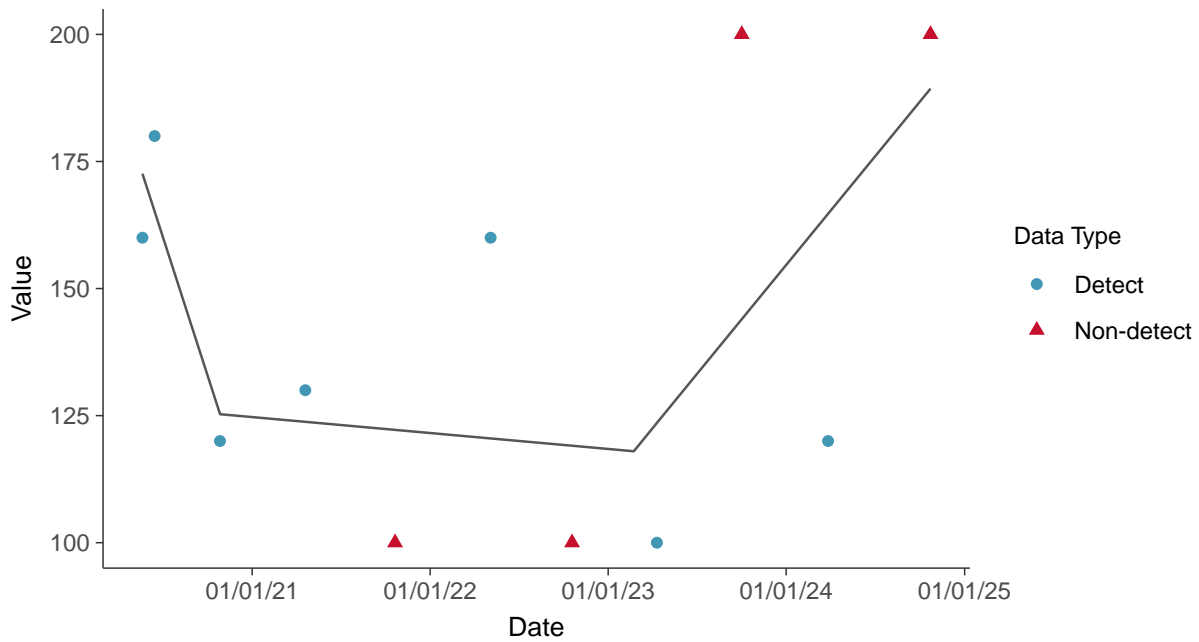
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

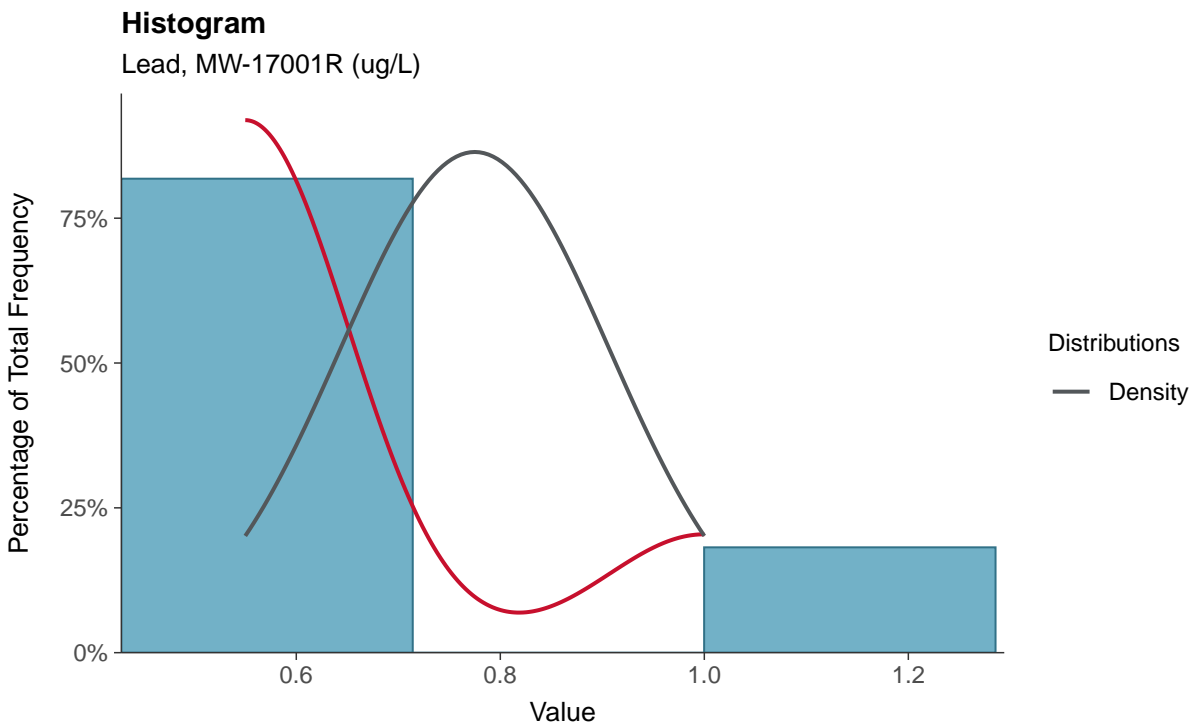
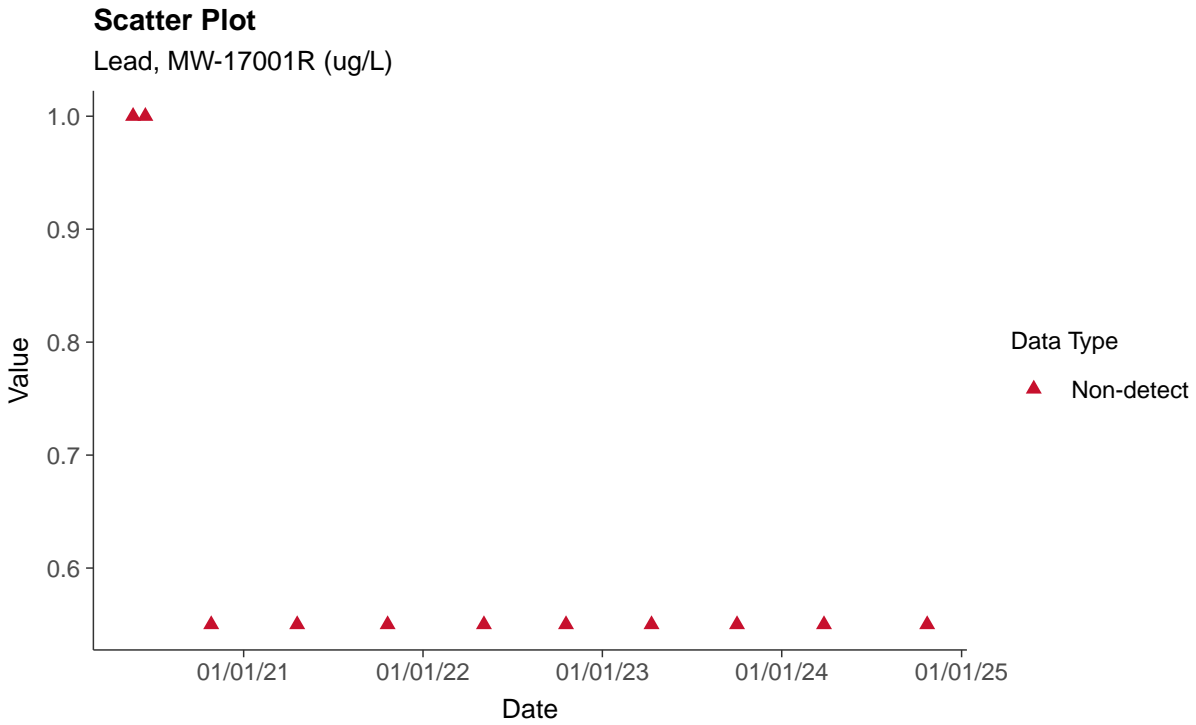
Fluoride, MW-17001R (ug/L)





Appendix IV: Lead, MW-17001R

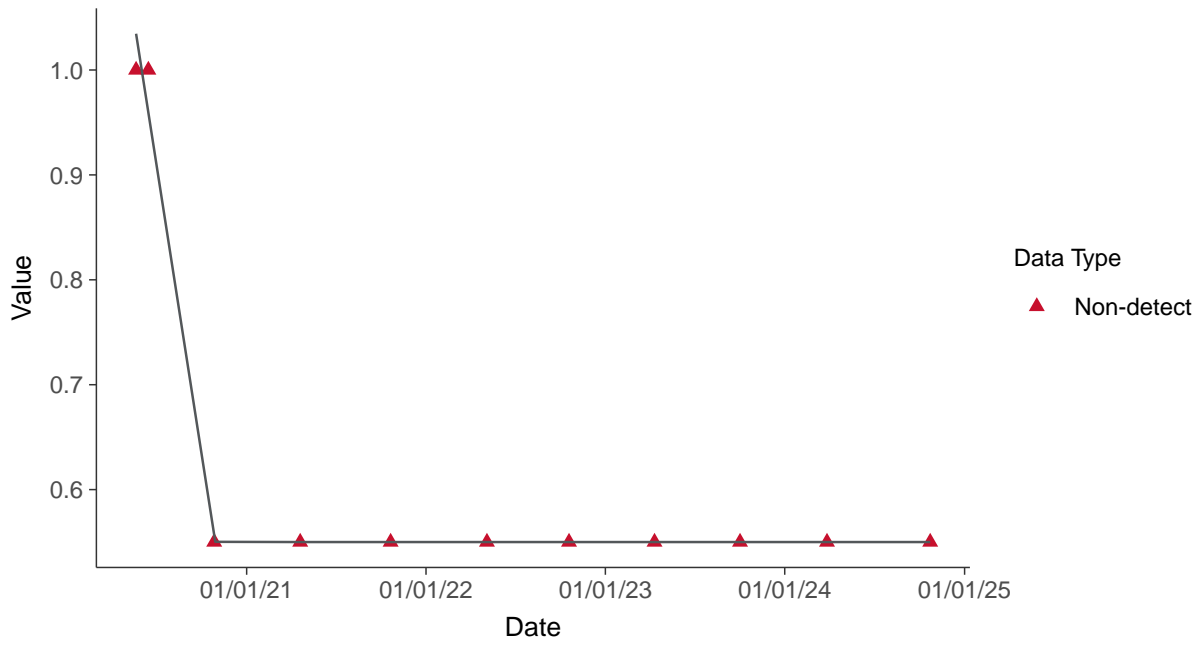
ID: 14_2_116





Trend Regression: Piecewise Linear-Linear

Lead, MW-17001R (ug/L)



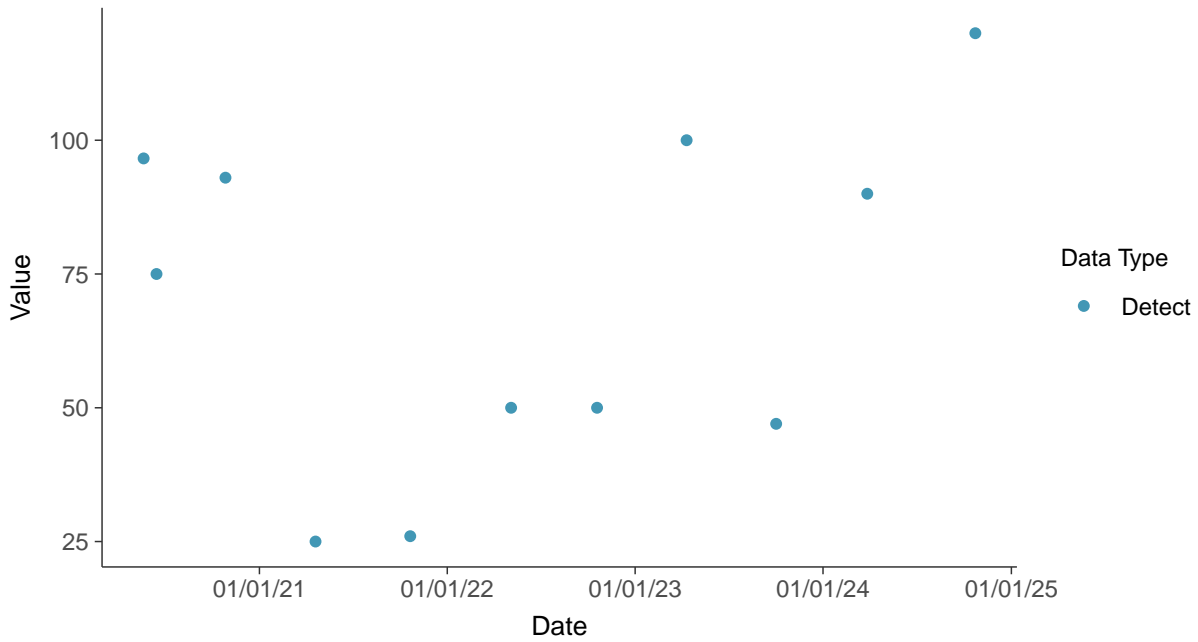


Appendix IV: Lithium, MW-17001R

ID: 14_2_117

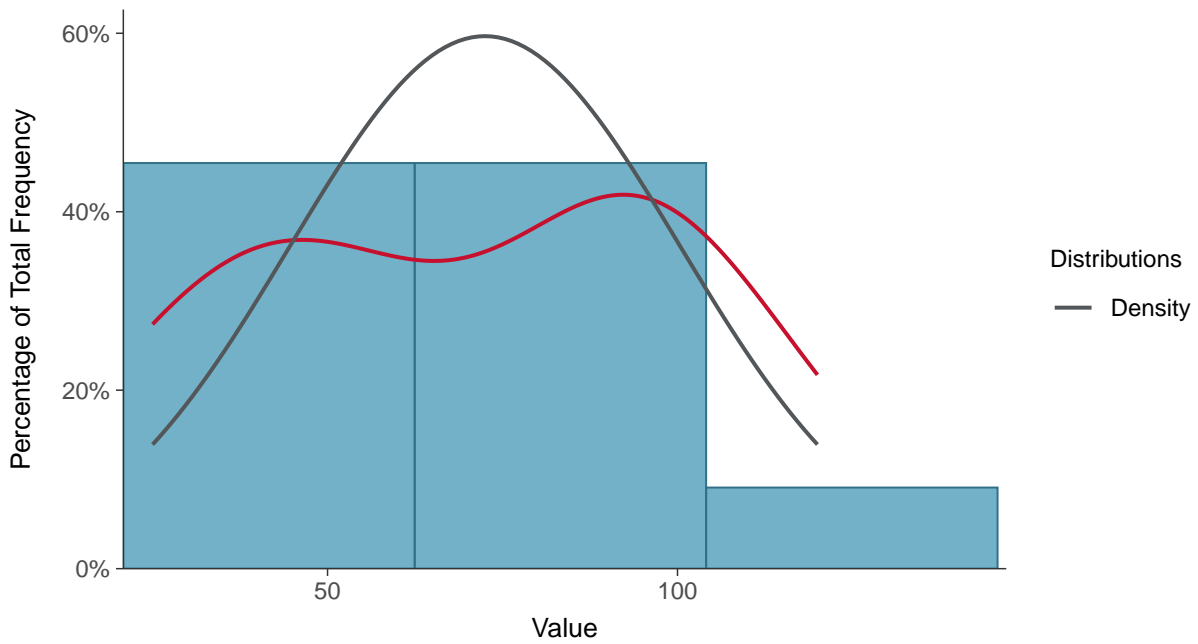
Scatter Plot

Lithium, MW-17001R (ug/L)



Histogram

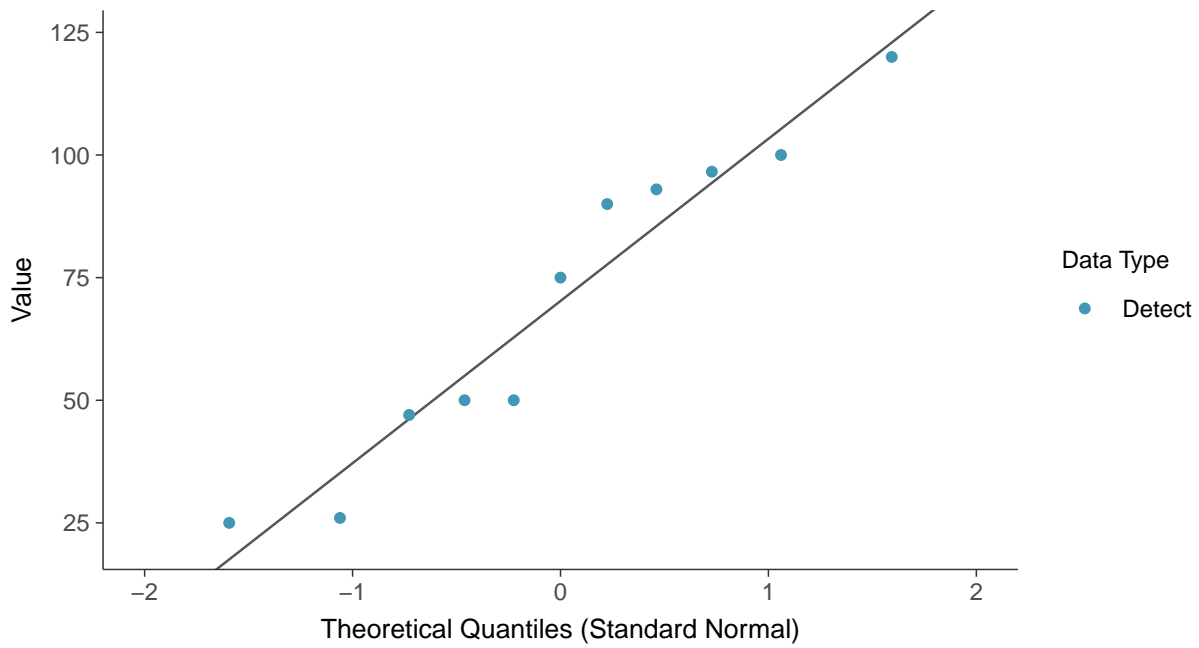
Lithium, MW-17001R (ug/L)





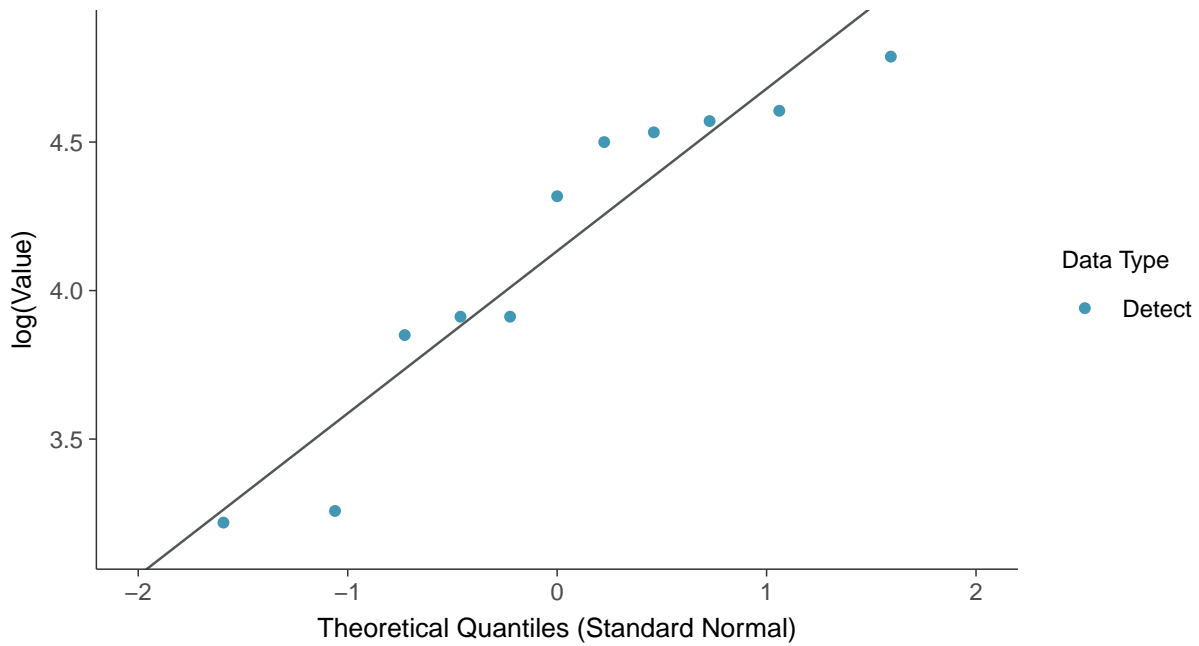
Normal Q-Q plot

Lithium, MW-17001R (ug/L)



Lognormal Q-Q plot

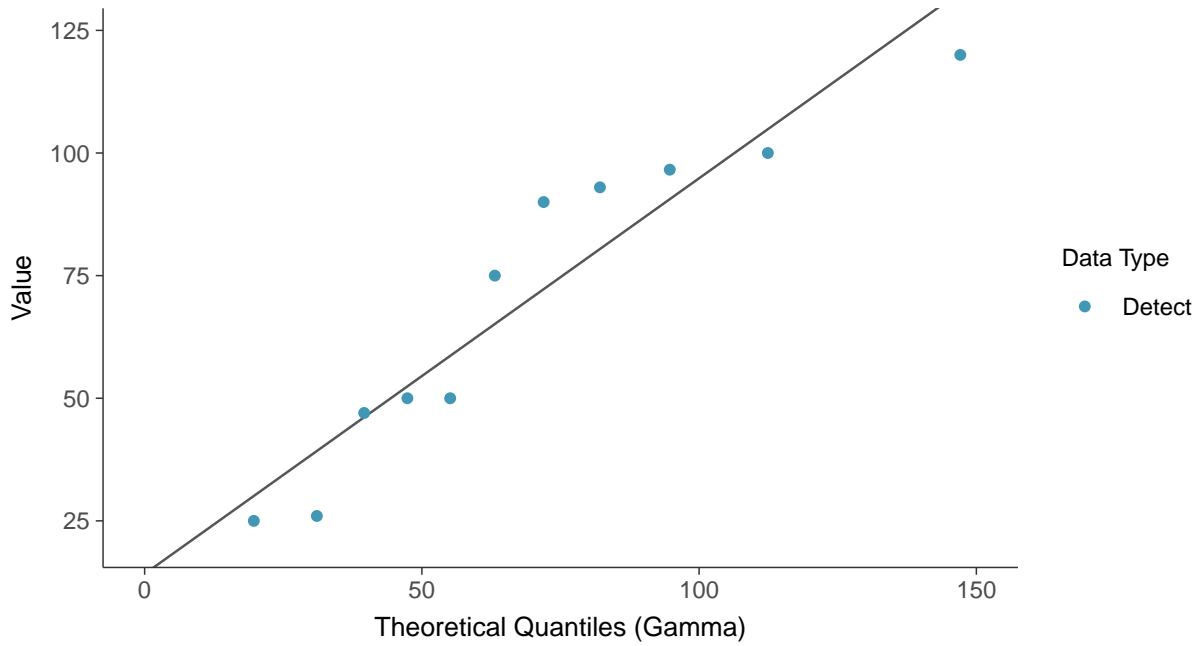
Lithium, MW-17001R (ug/L)





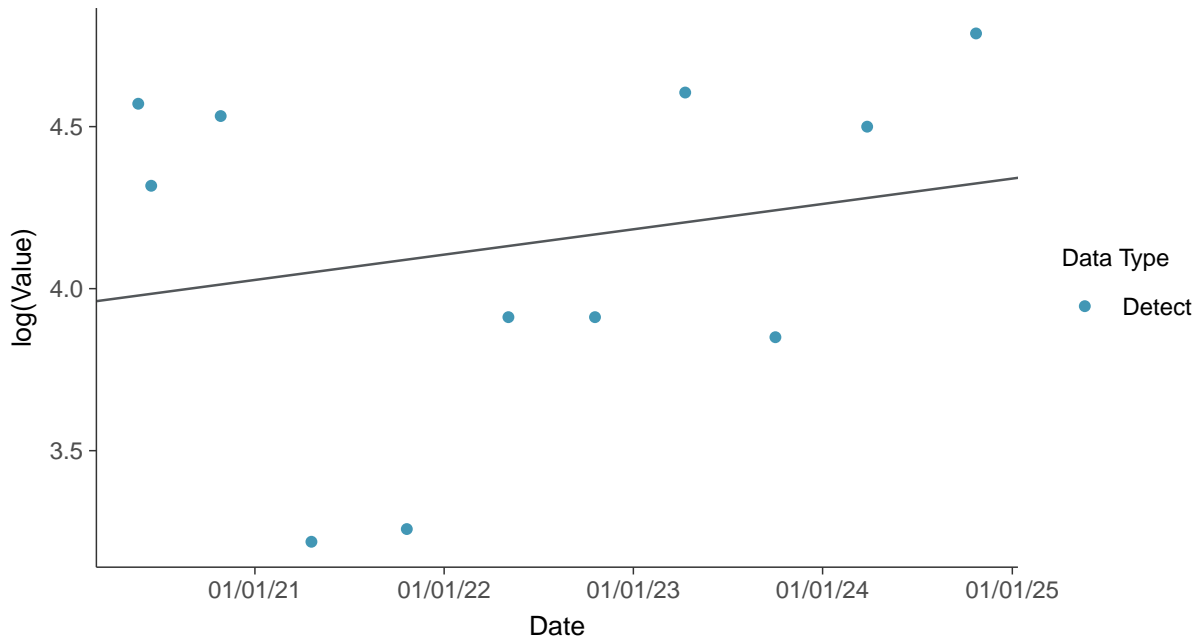
Gamma Q-Q plot

Lithium, MW-17001R (ug/L)



Trend Regression: Lognormal MLE

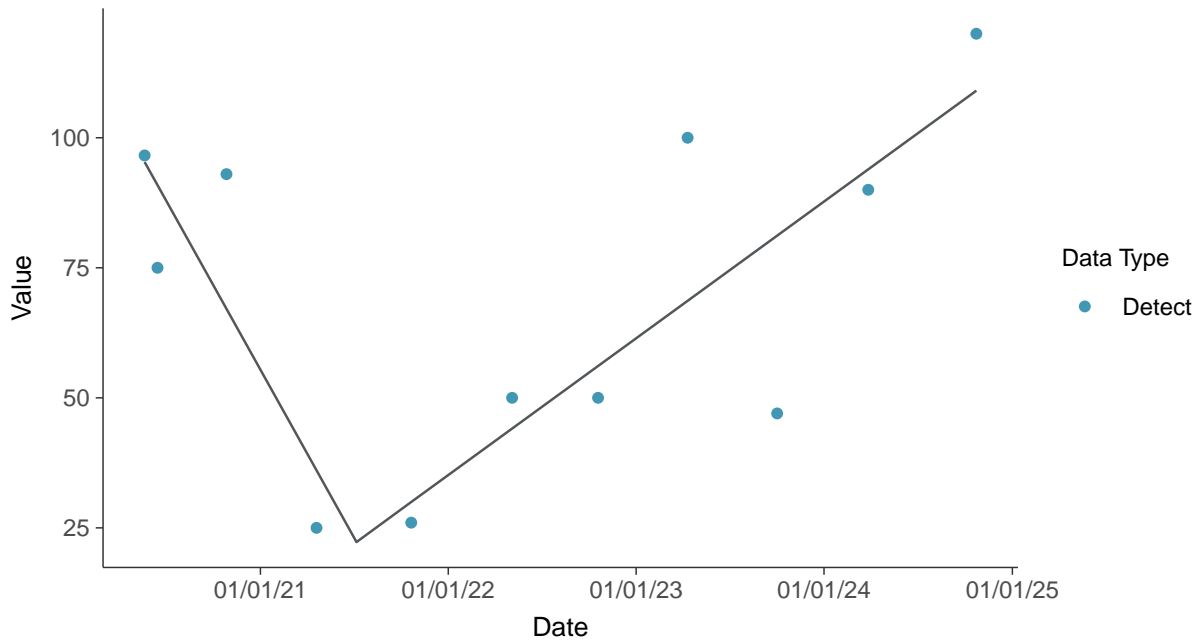
Lithium, MW-17001R (ug/L)





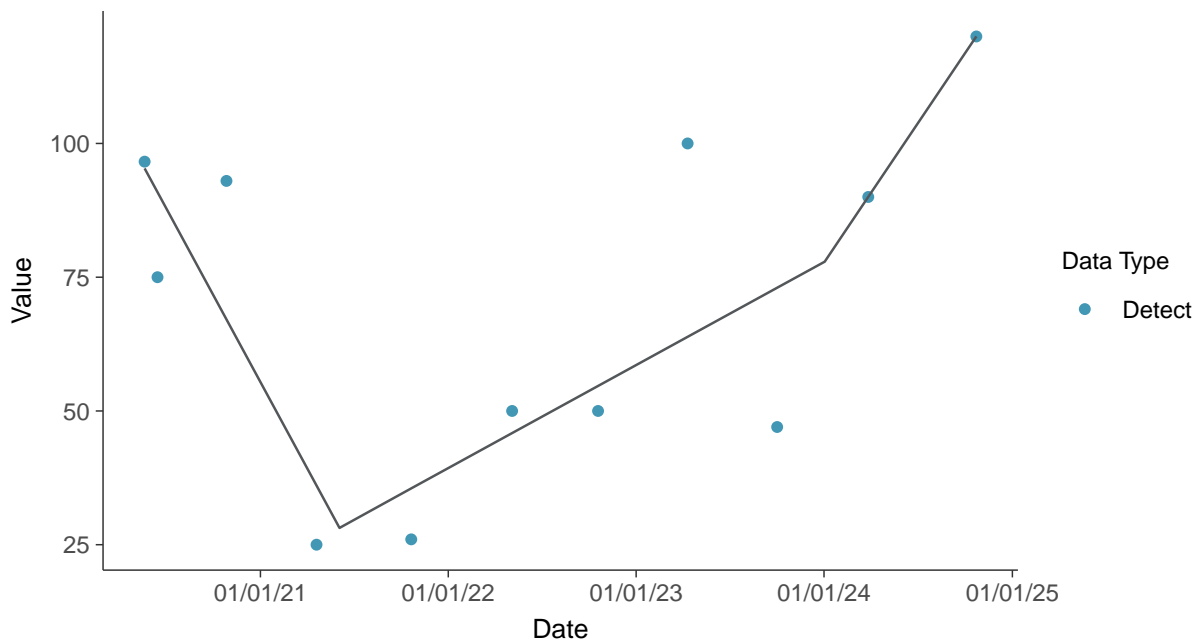
Trend Regression: Piecewise Linear-Linear

Lithium, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lithium, MW-17001R (ug/L)



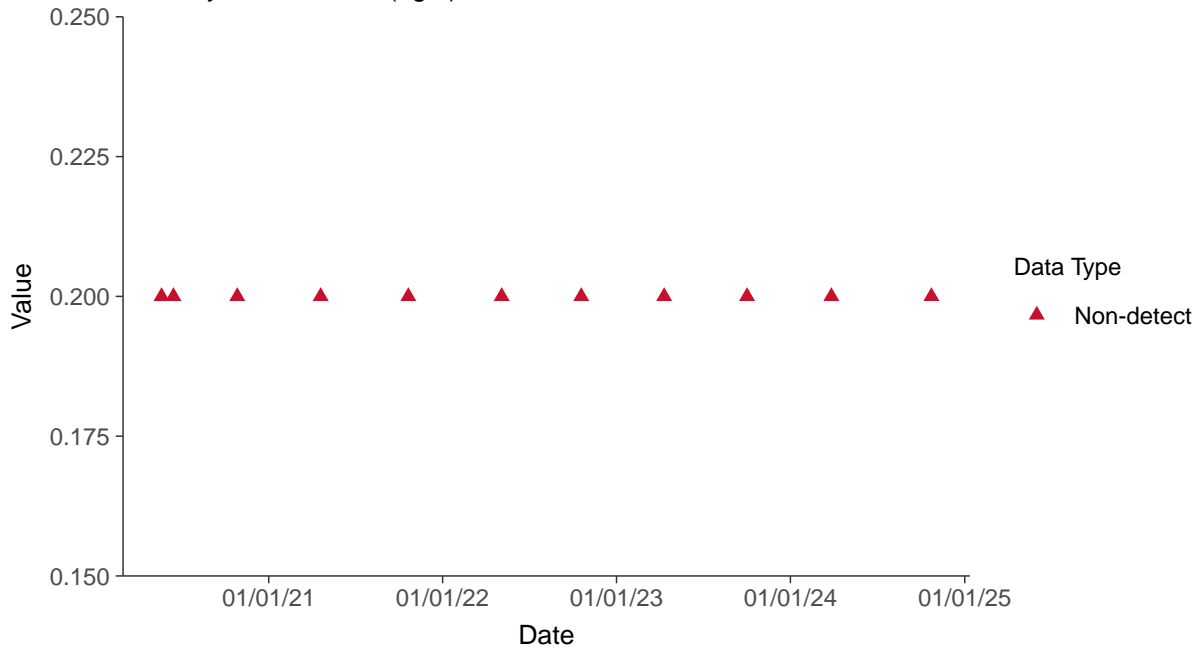


Appendix IV: Mercury, MW-17001R

ID: 14_2_118

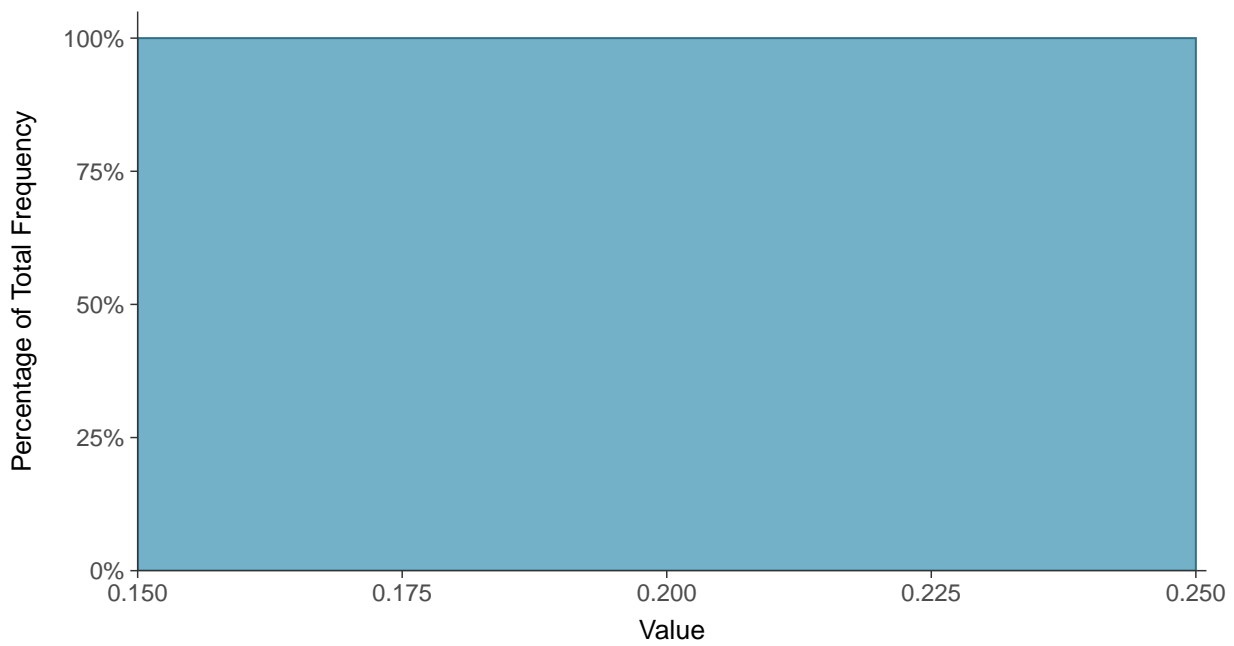
Scatter Plot

Mercury, MW-17001R (ug/L)



Histogram

Mercury, MW-17001R (ug/L)



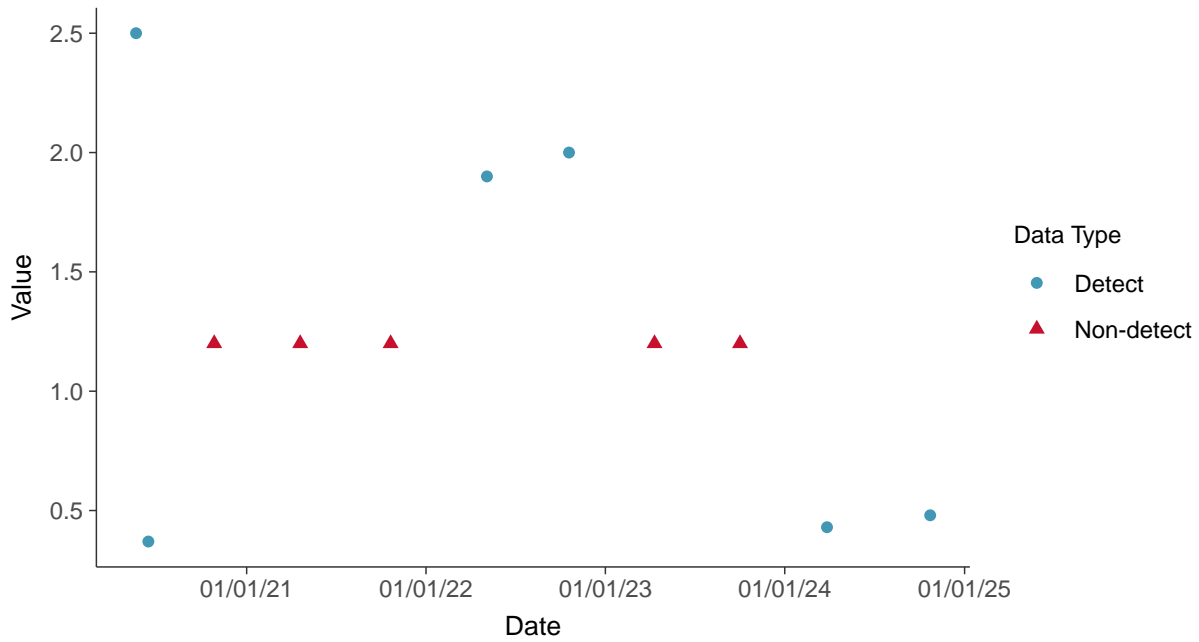


Appendix IV: Molybdenum, MW-17001R

ID: 14_2_119

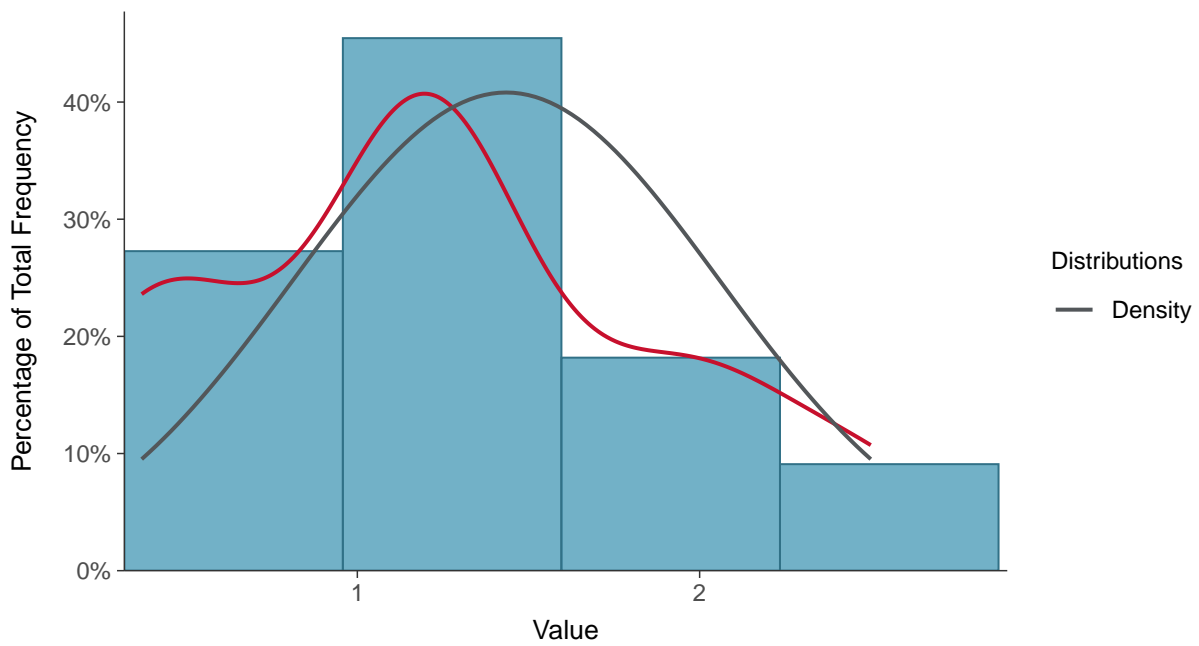
Scatter Plot

Molybdenum, MW-17001R (ug/L)



Histogram

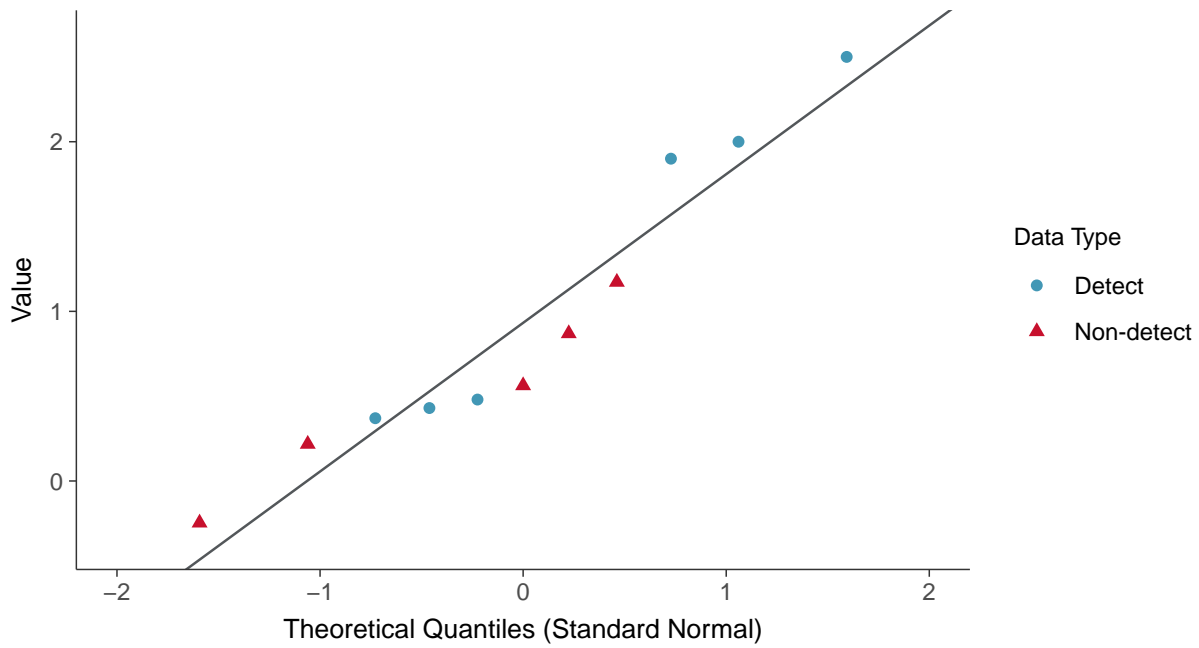
Molybdenum, MW-17001R (ug/L)





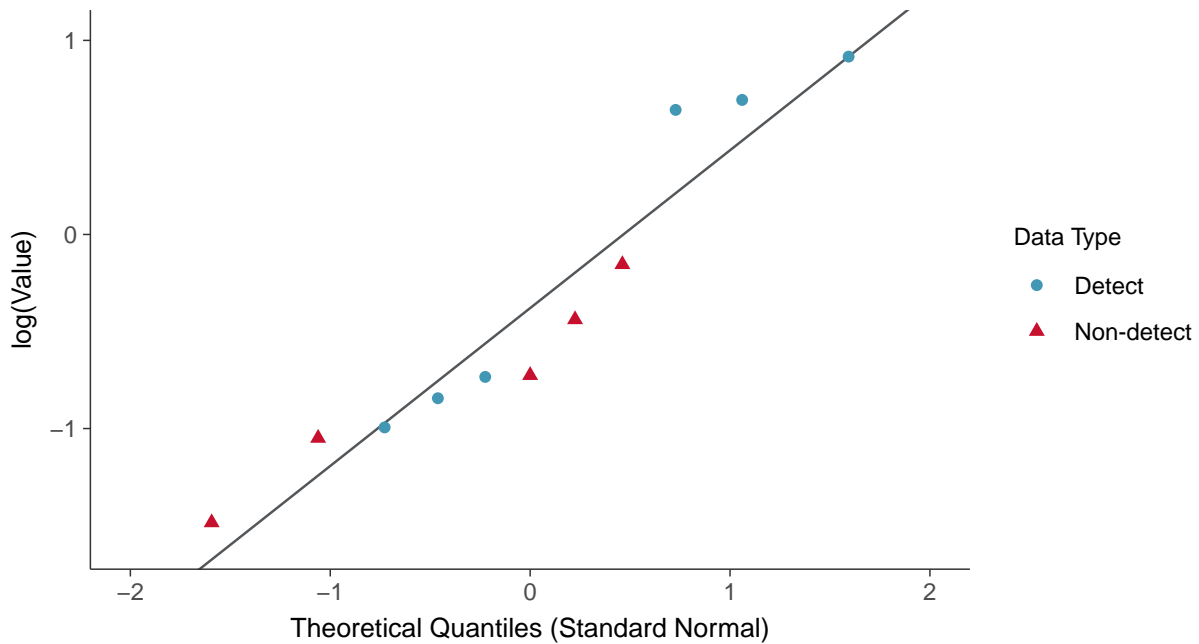
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17001R (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

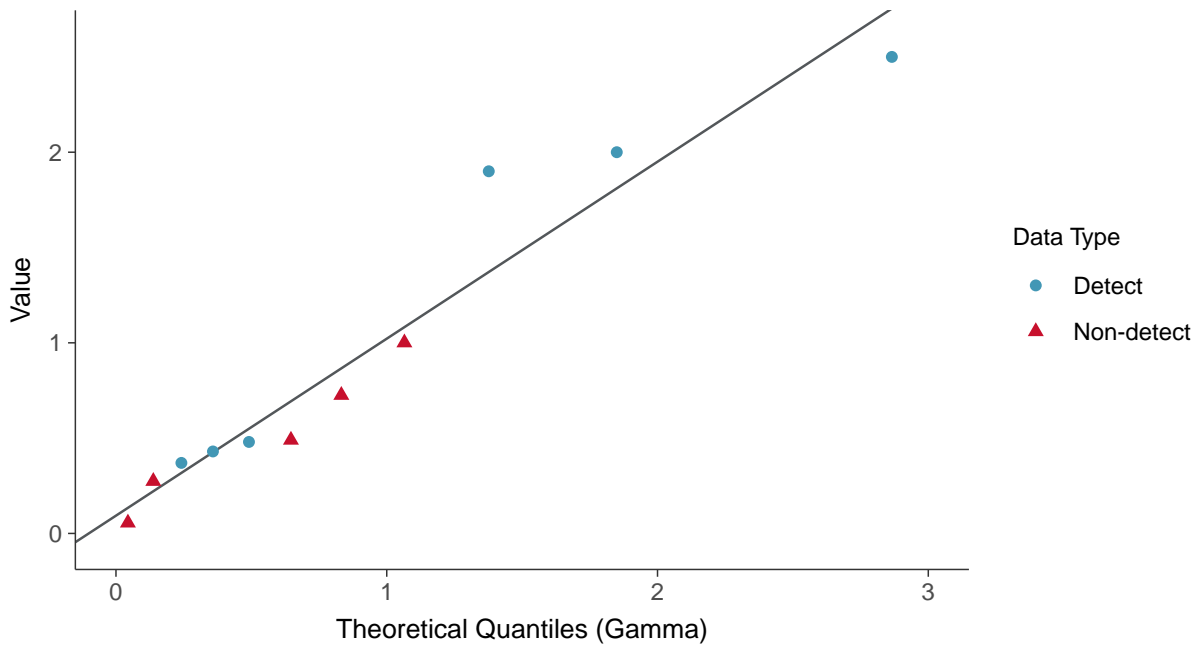
Molybdenum, MW-17001R (ug/L)





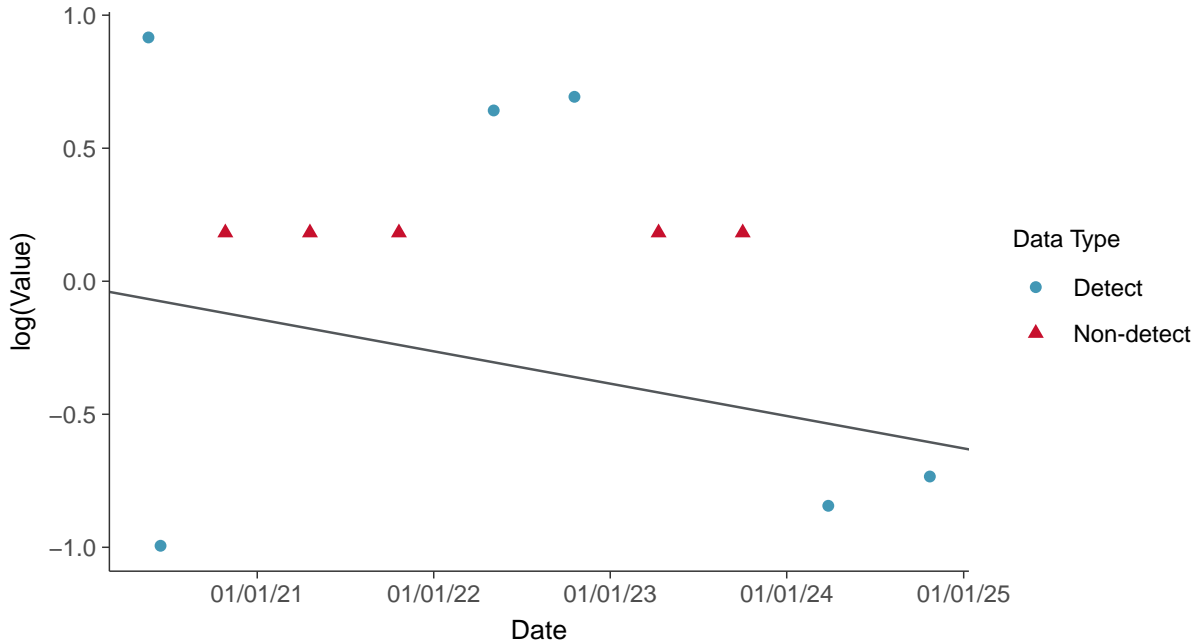
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17001R (ug/L)



Trend Regression: Lognormal MLE

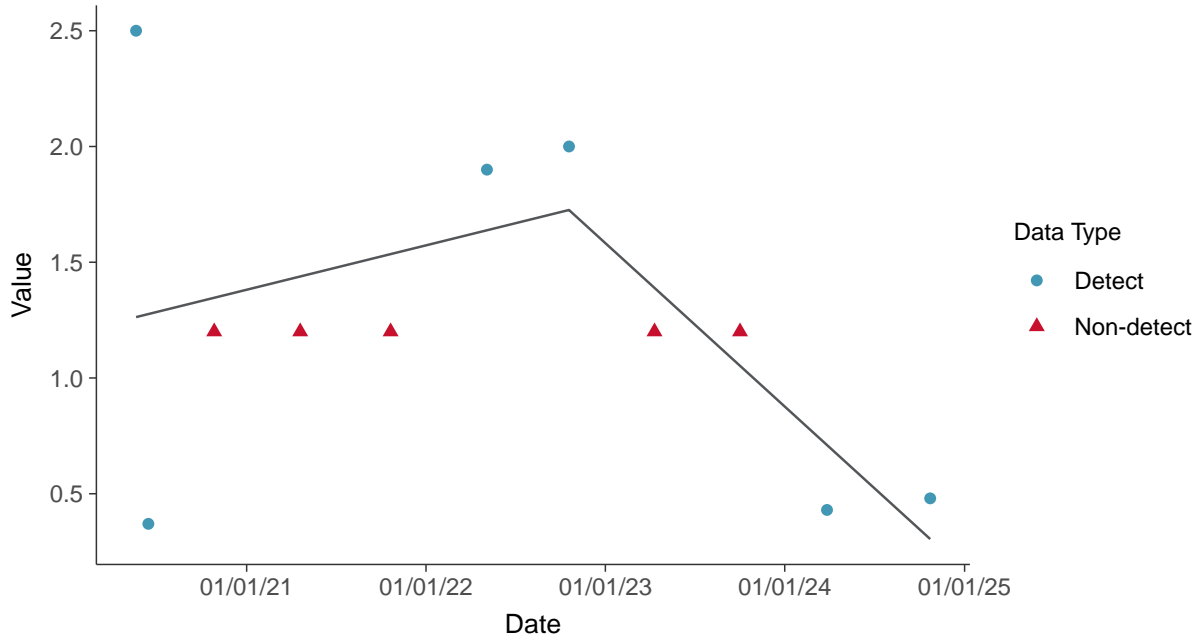
Molybdenum, MW-17001R (ug/L)





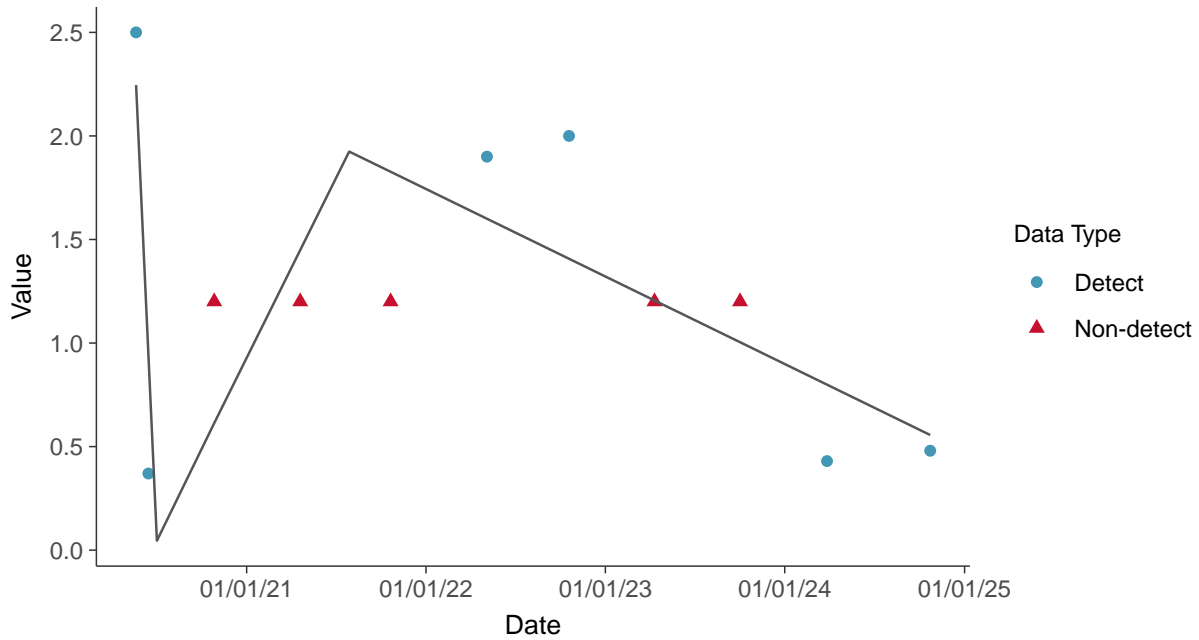
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-17001R (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-17001R (ug/L)



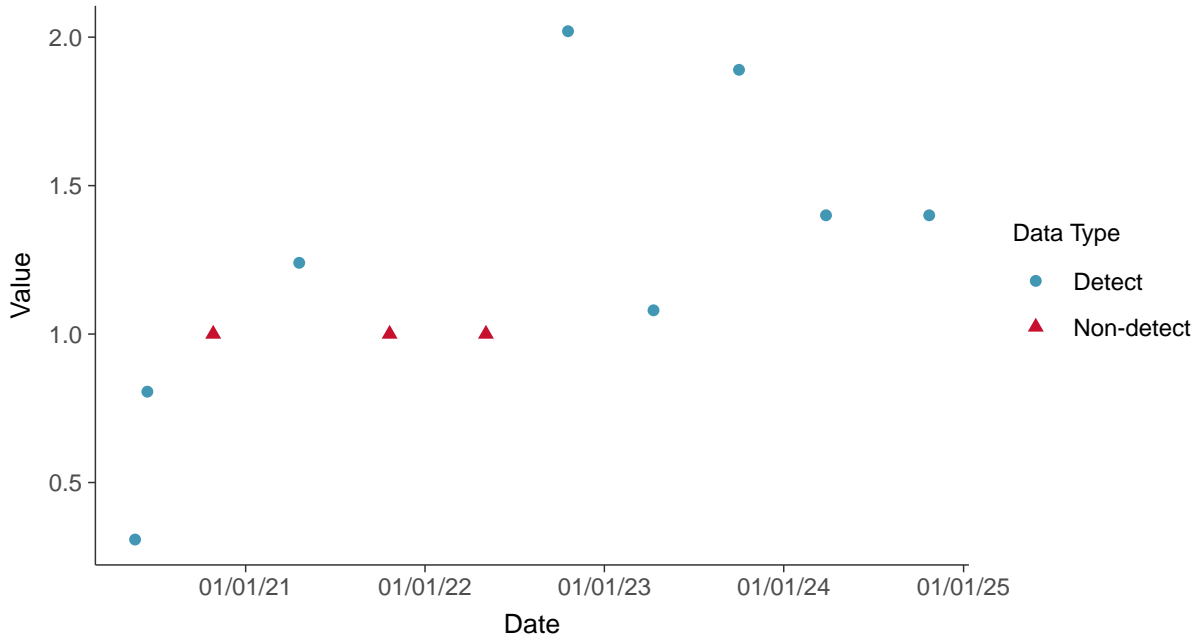


Appendix IV: Radium-226+228, MW-17001R

ID: 14_2_125

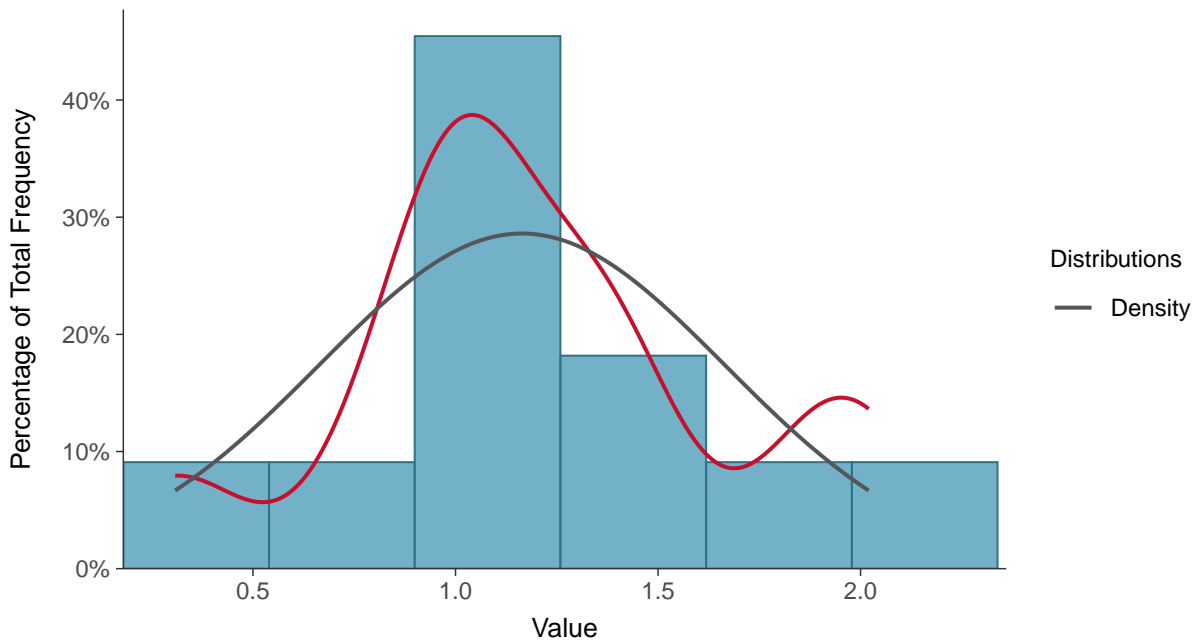
Scatter Plot

Radium-226+228, MW-17001R (pCi/L)



Histogram

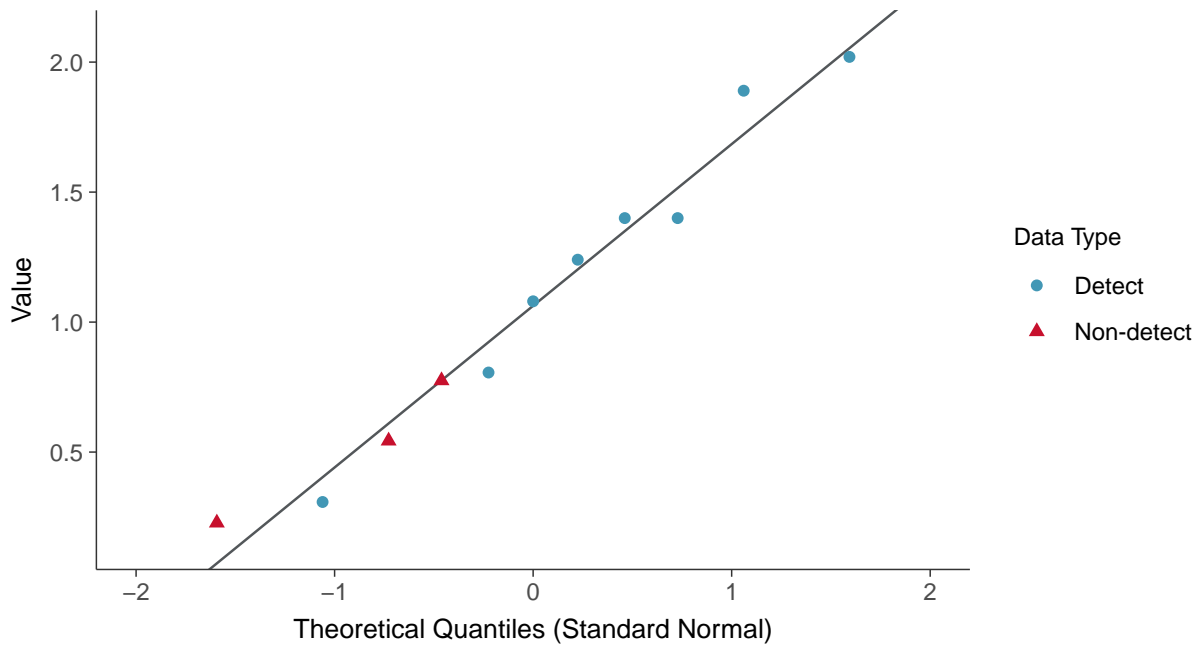
Radium-226+228, MW-17001R (pCi/L)





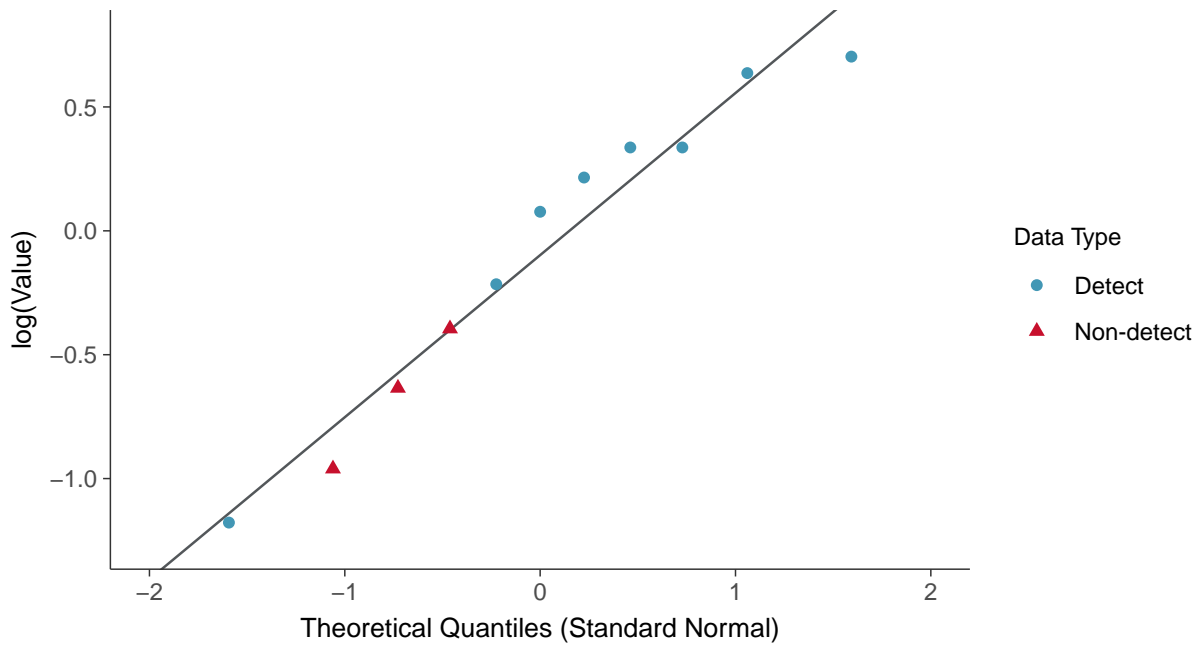
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17001R (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

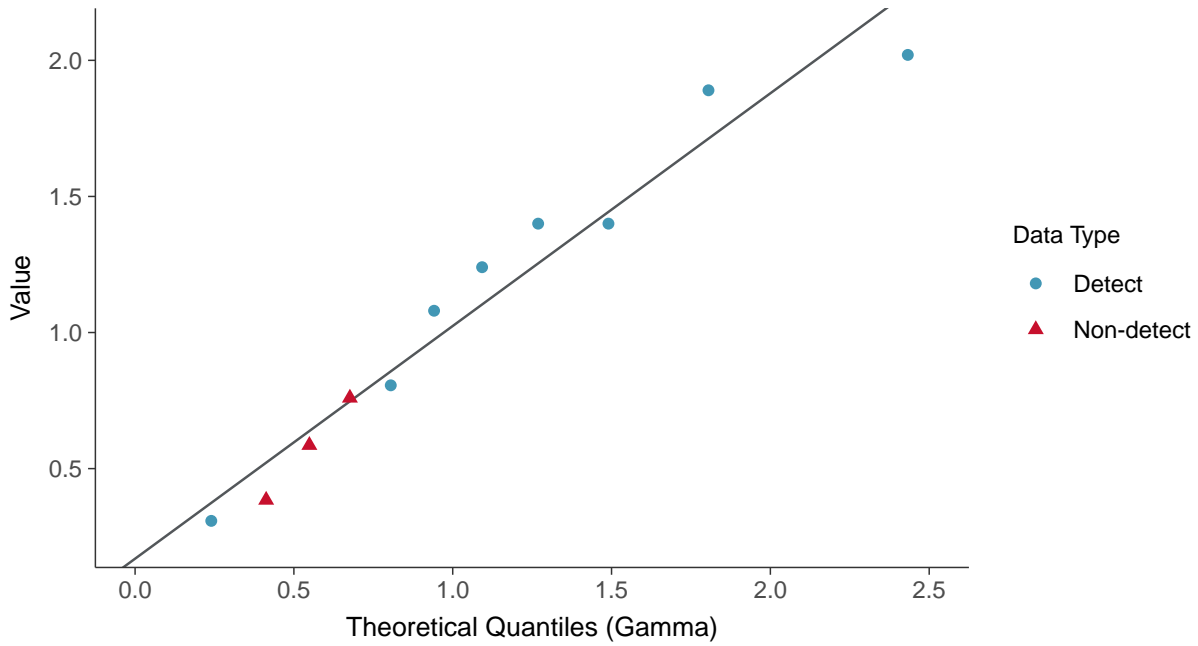
Radium-226+228, MW-17001R (pCi/L)





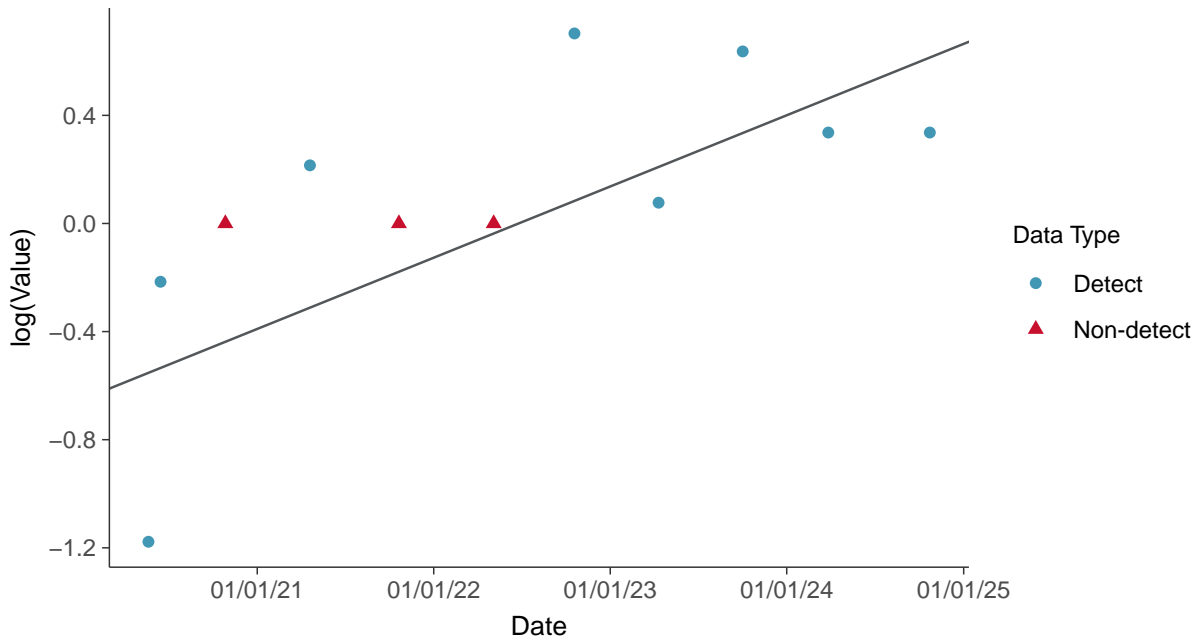
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17001R (pCi/L)



Trend Regression: Lognormal MLE

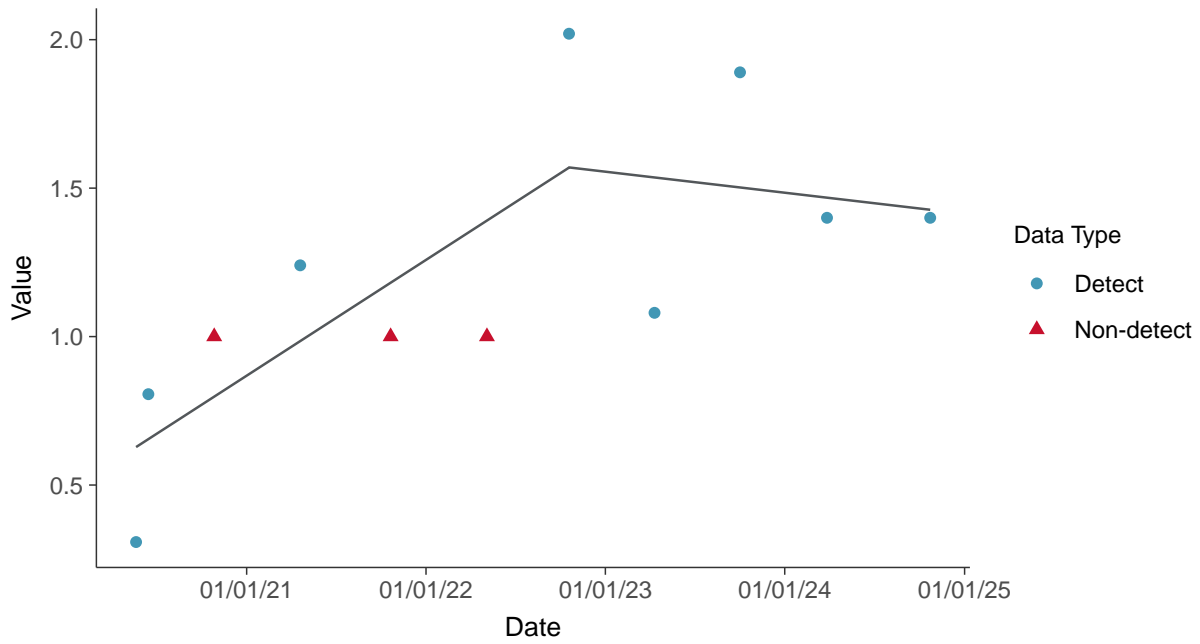
Radium-226+228, MW-17001R (pCi/L)





Trend Regression: Piecewise Linear-Linear

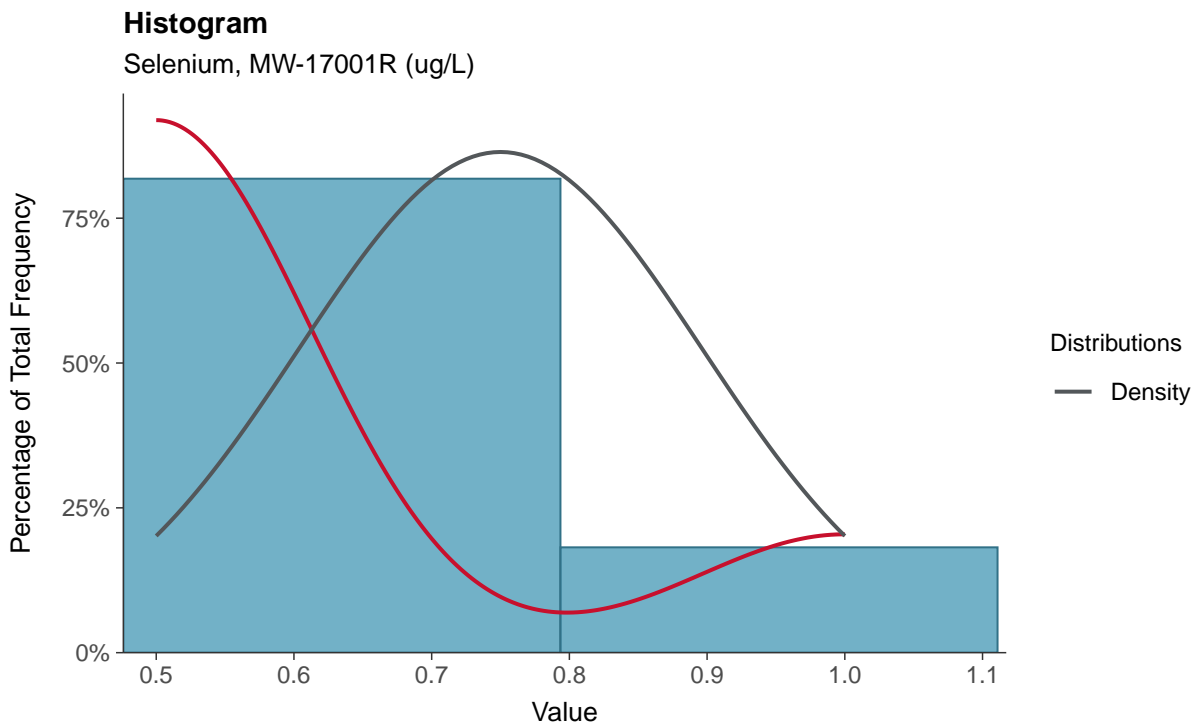
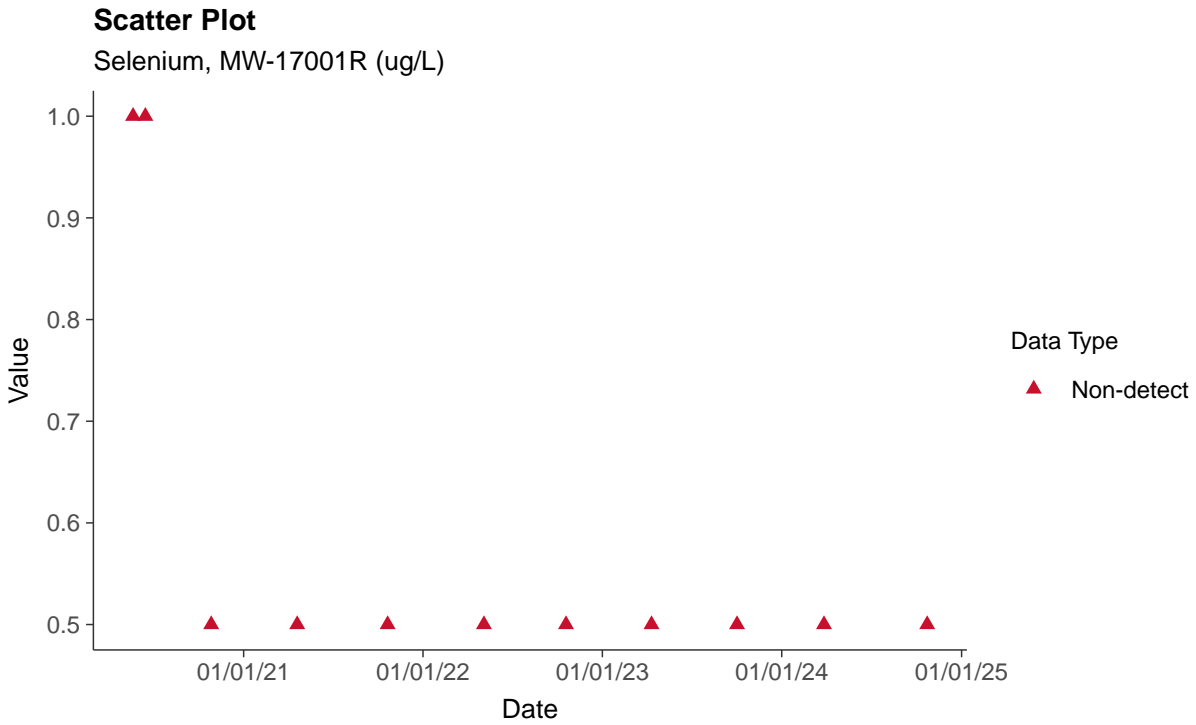
Radium-226+228, MW-17001R (pCi/L)





Appendix IV: Selenium, MW-17001R

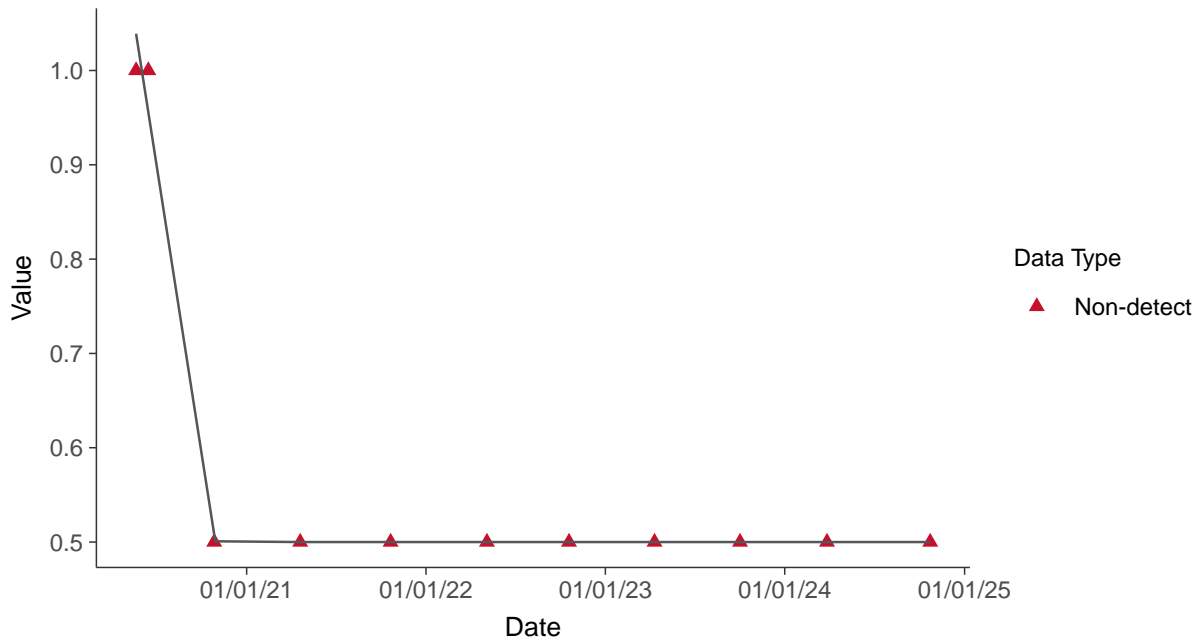
ID: 14_2_127





Trend Regression: Piecewise Linear-Linear

Selenium, MW-17001R (ug/L)



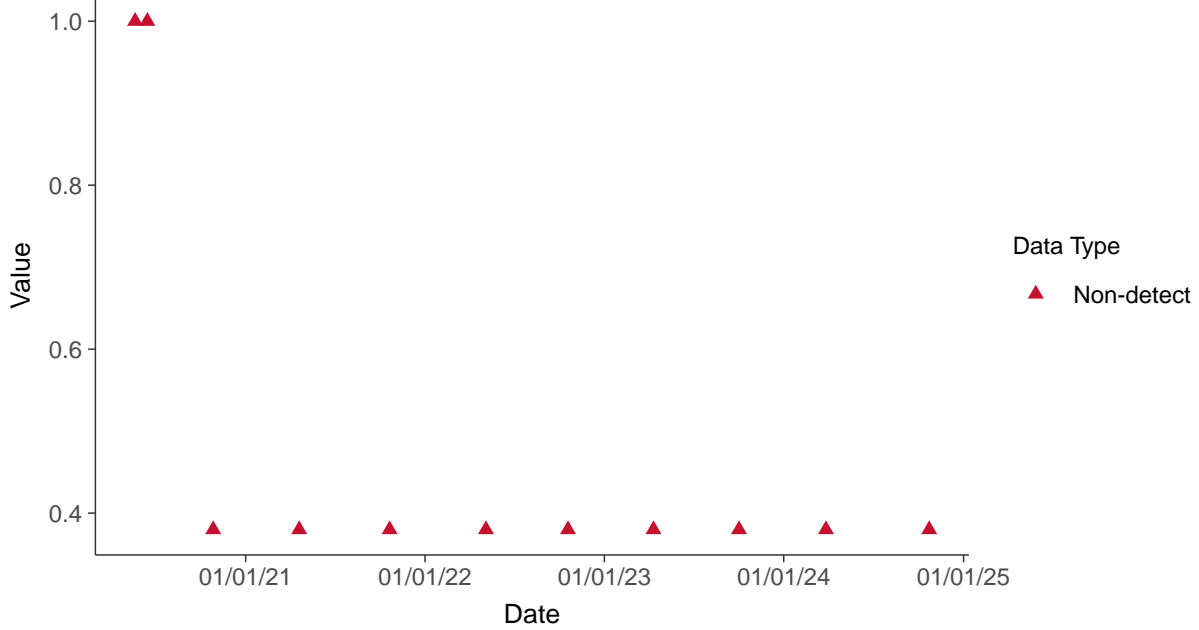


Appendix IV: Thallium, MW-17001R

ID: 14_2_131

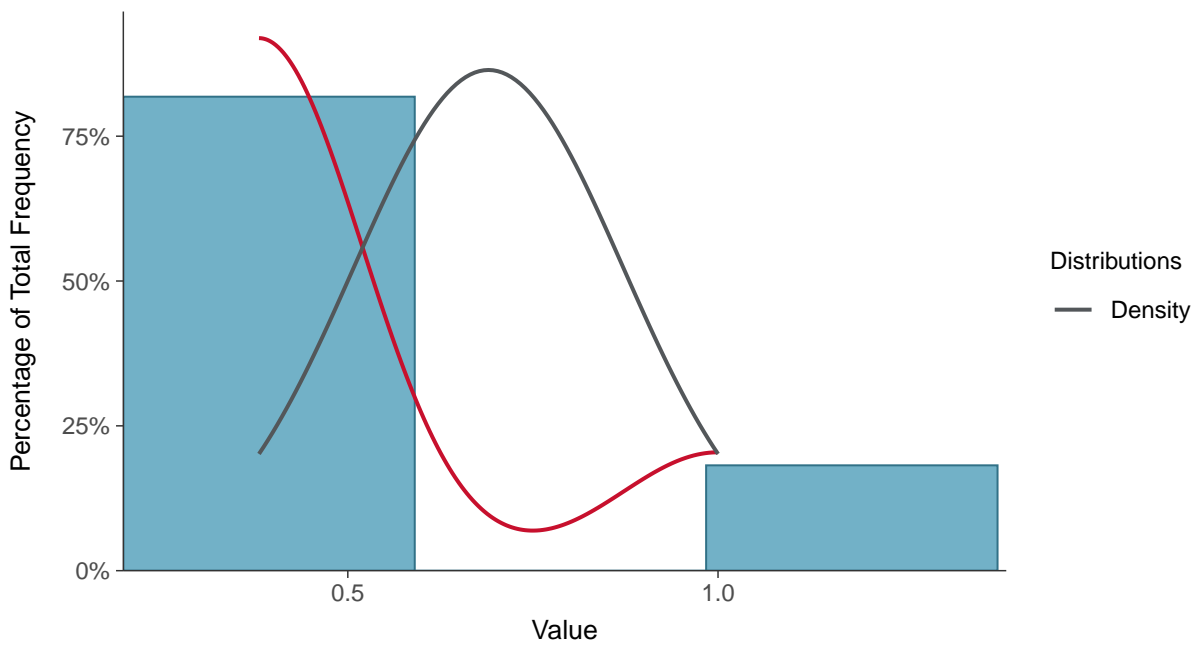
Scatter Plot

Thallium, MW-17001R (ug/L)



Histogram

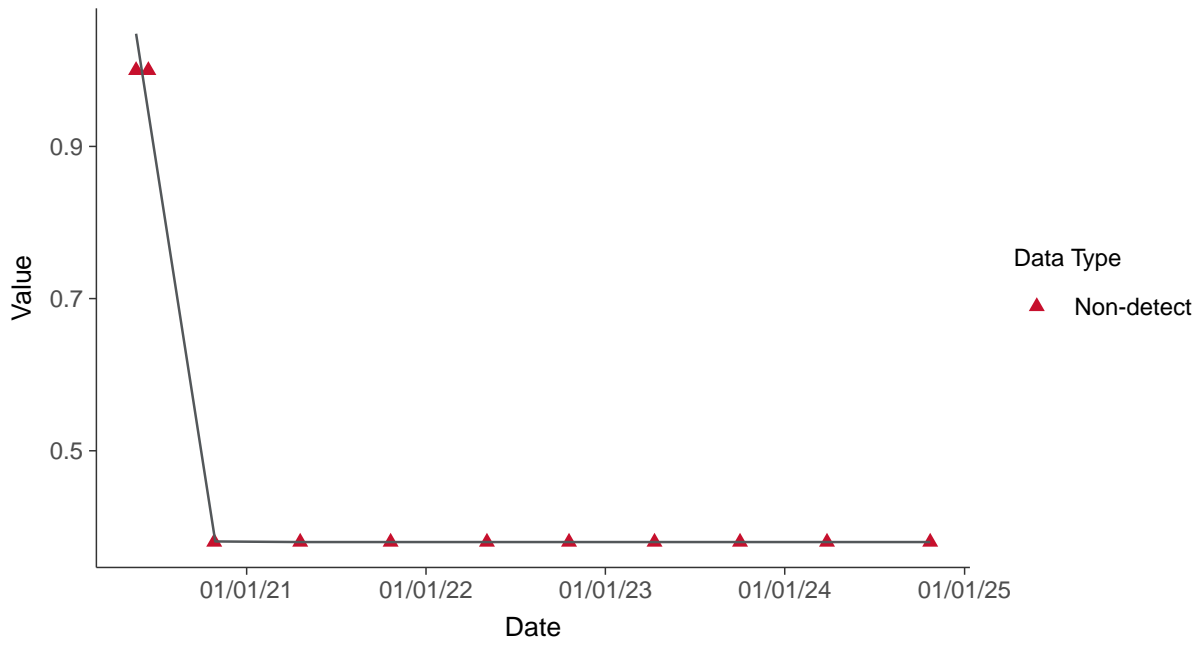
Thallium, MW-17001R (ug/L)





Trend Regression: Piecewise Linear-Linear

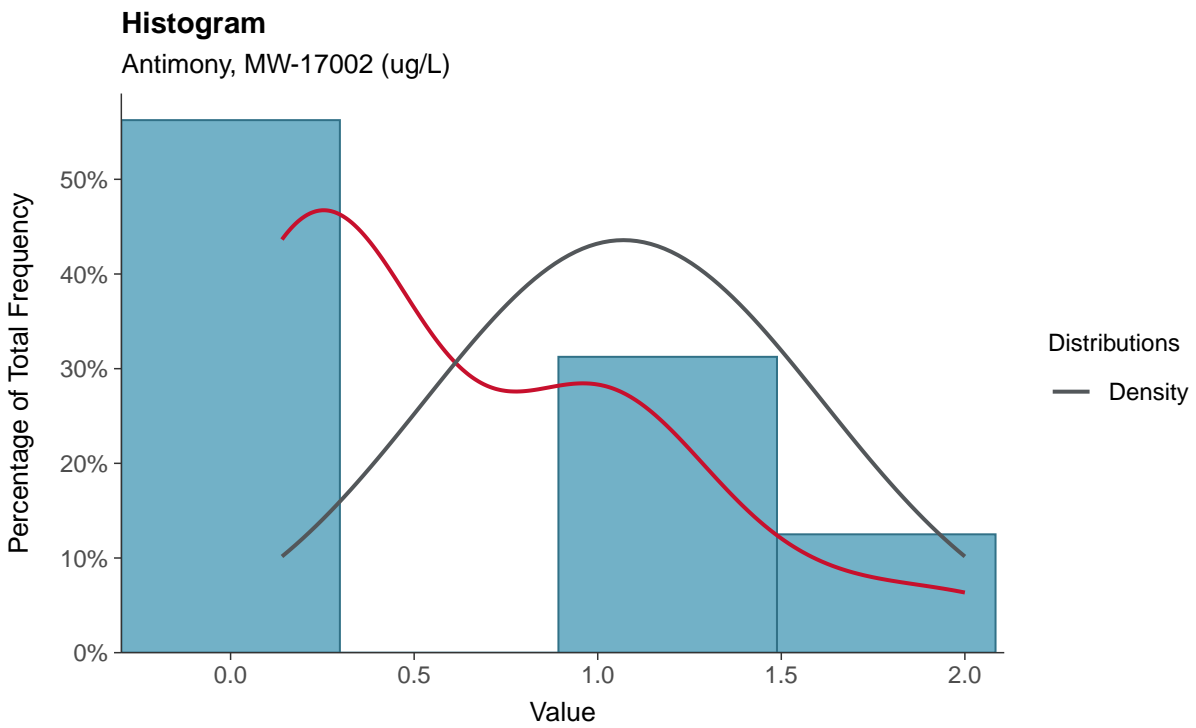
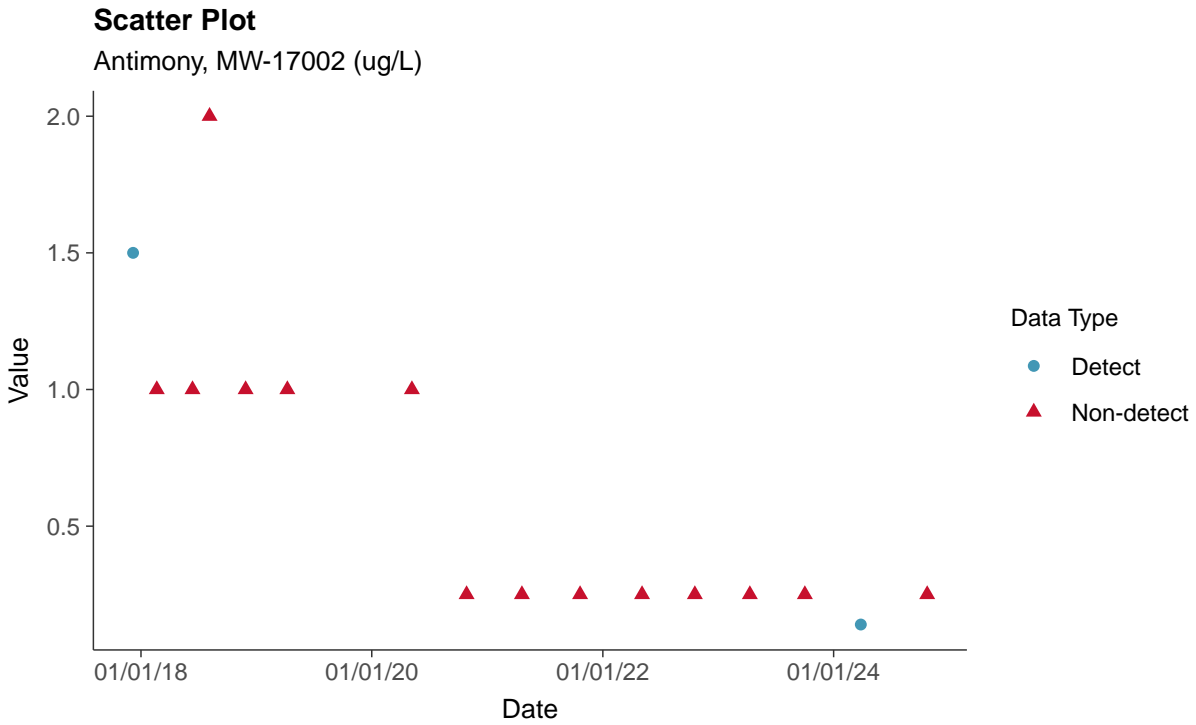
Thallium, MW-17001R (ug/L)





Appendix IV: Antimony, MW-17002

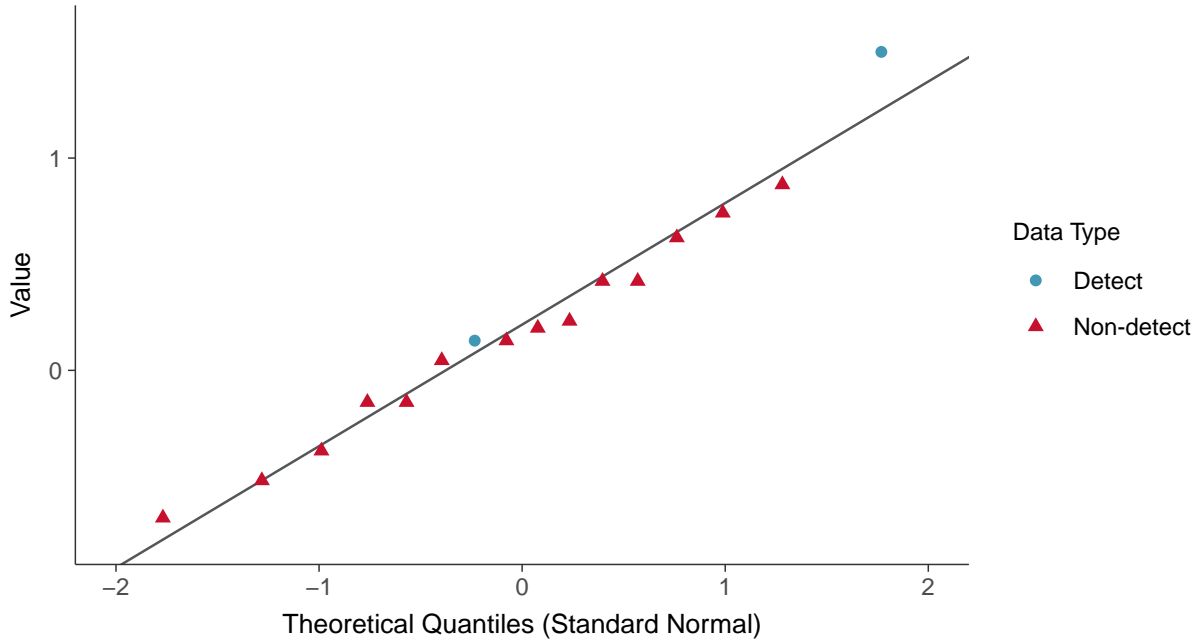
ID: 15_2_101





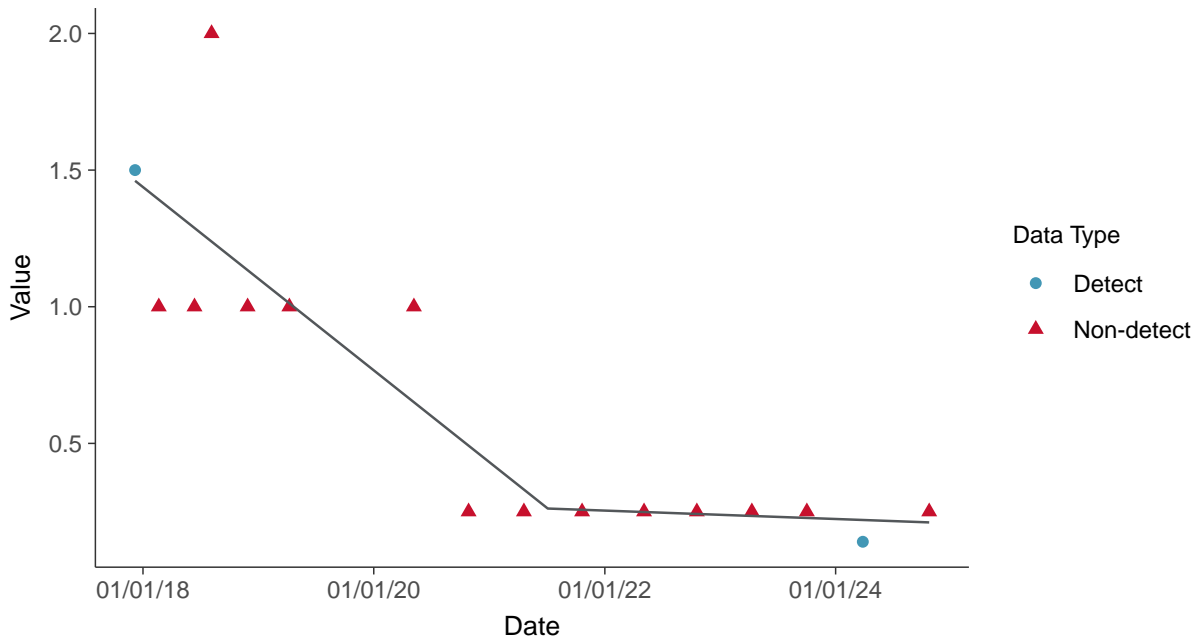
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

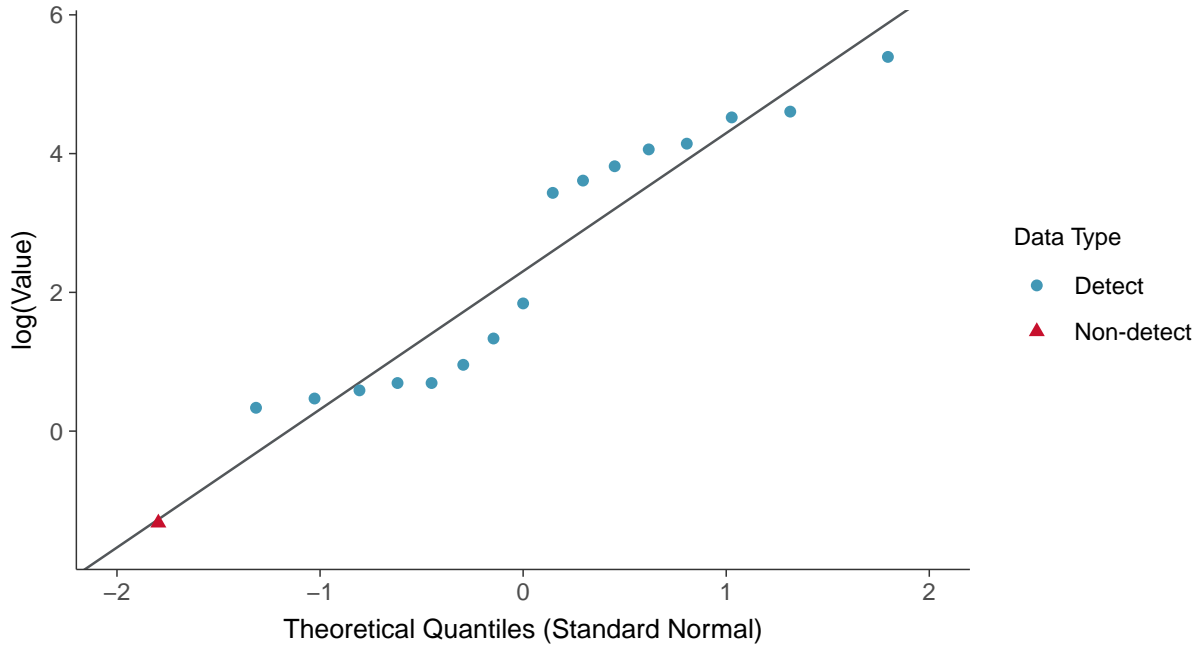
Antimony, MW-17002 (ug/L)





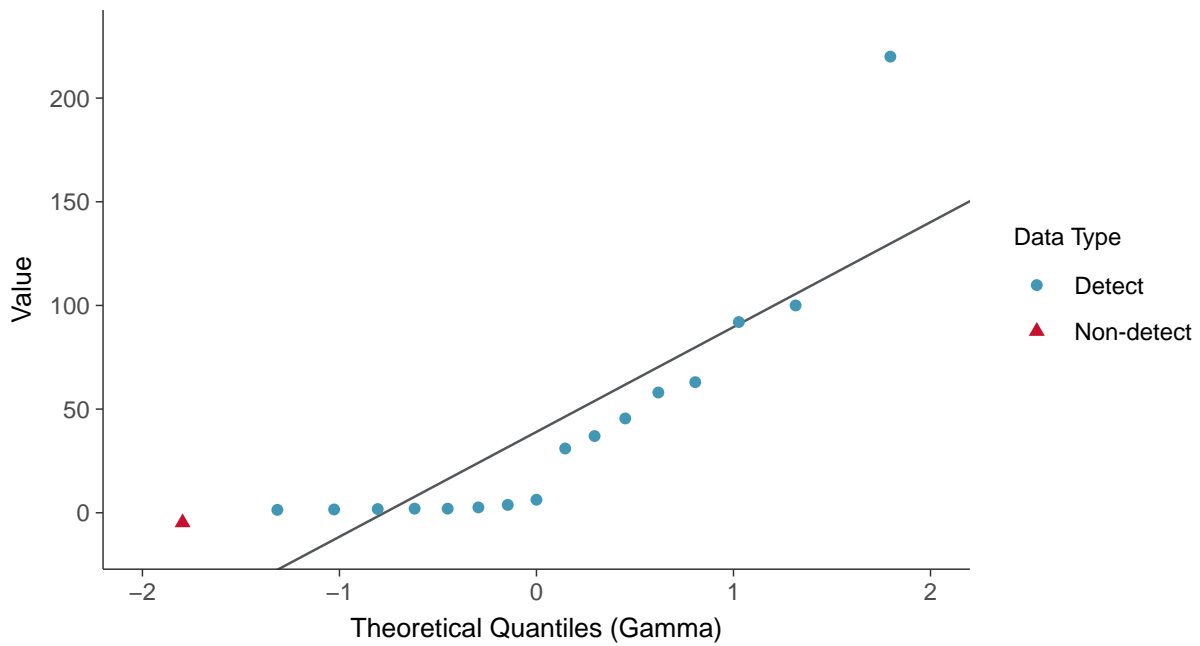
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17002 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

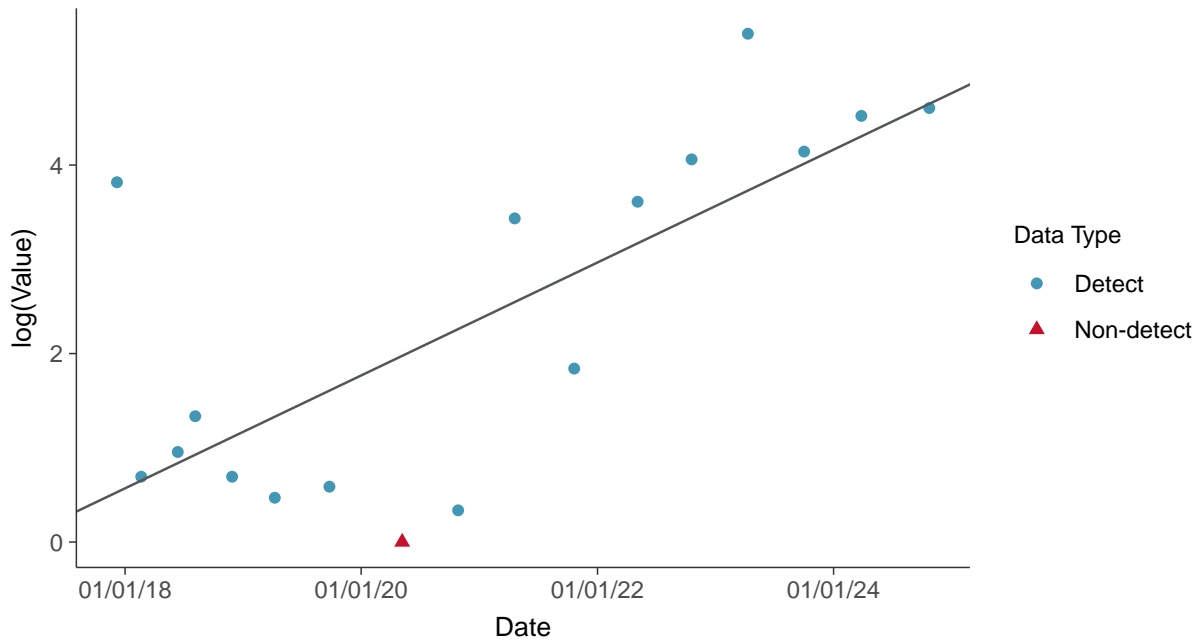
Arsenic, MW-17002 (ug/L)





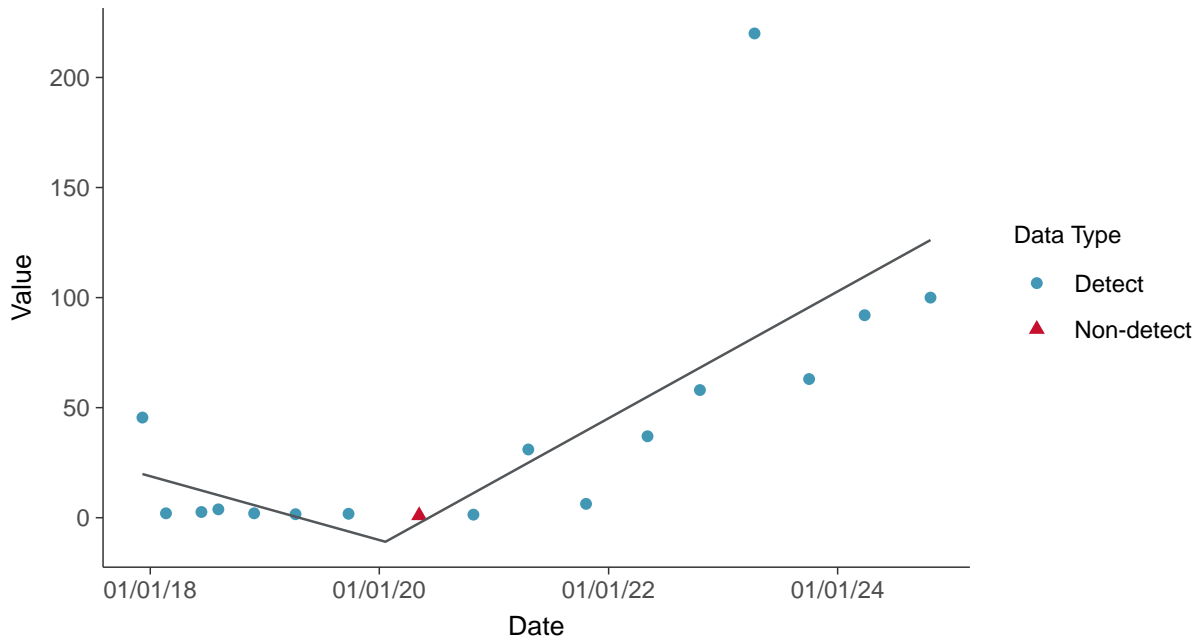
Trend Regression: Lognormal MLE

Arsenic, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

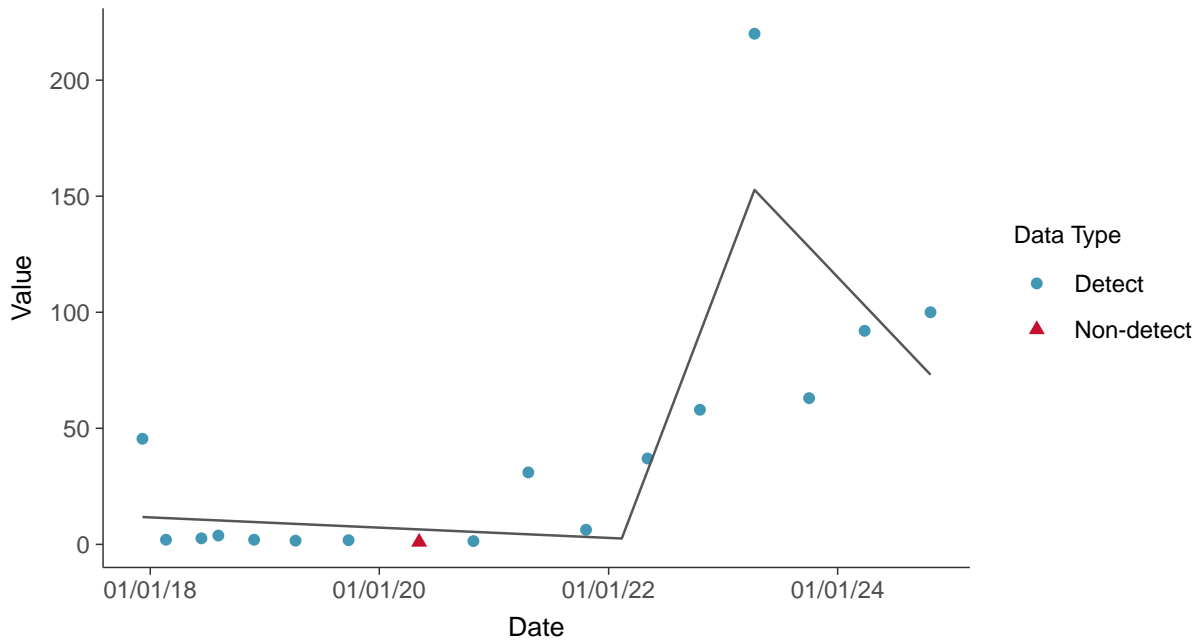
Arsenic, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-17002 (ug/L)



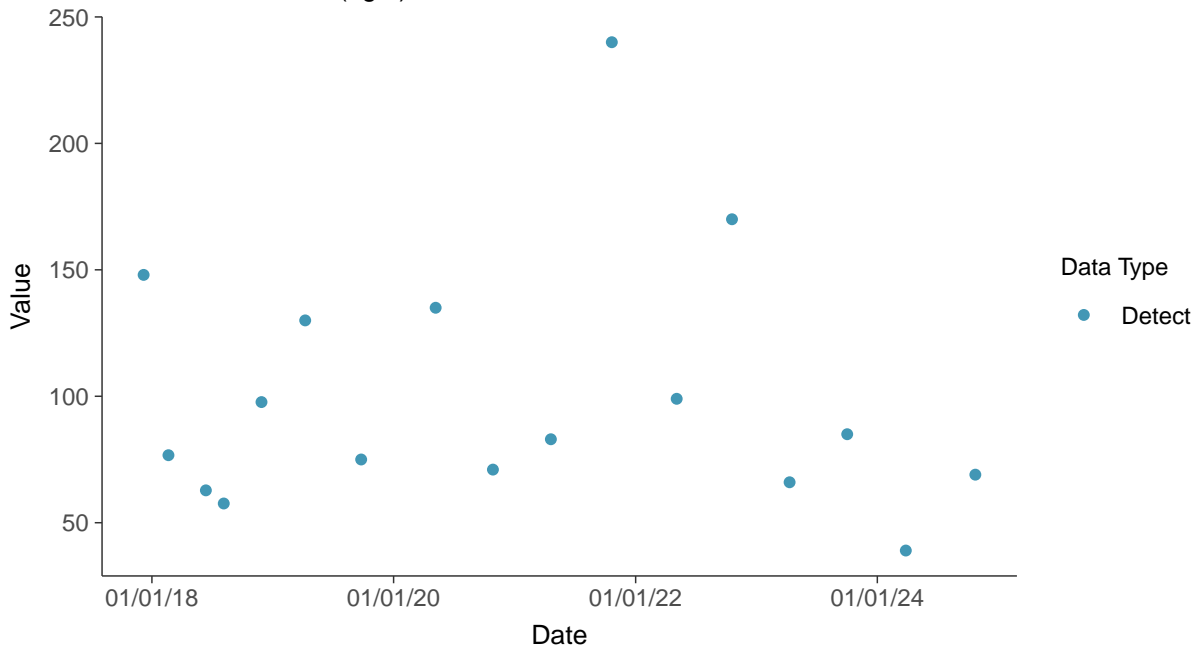


Appendix IV: Barium, MW-17002

ID: 15_2_103

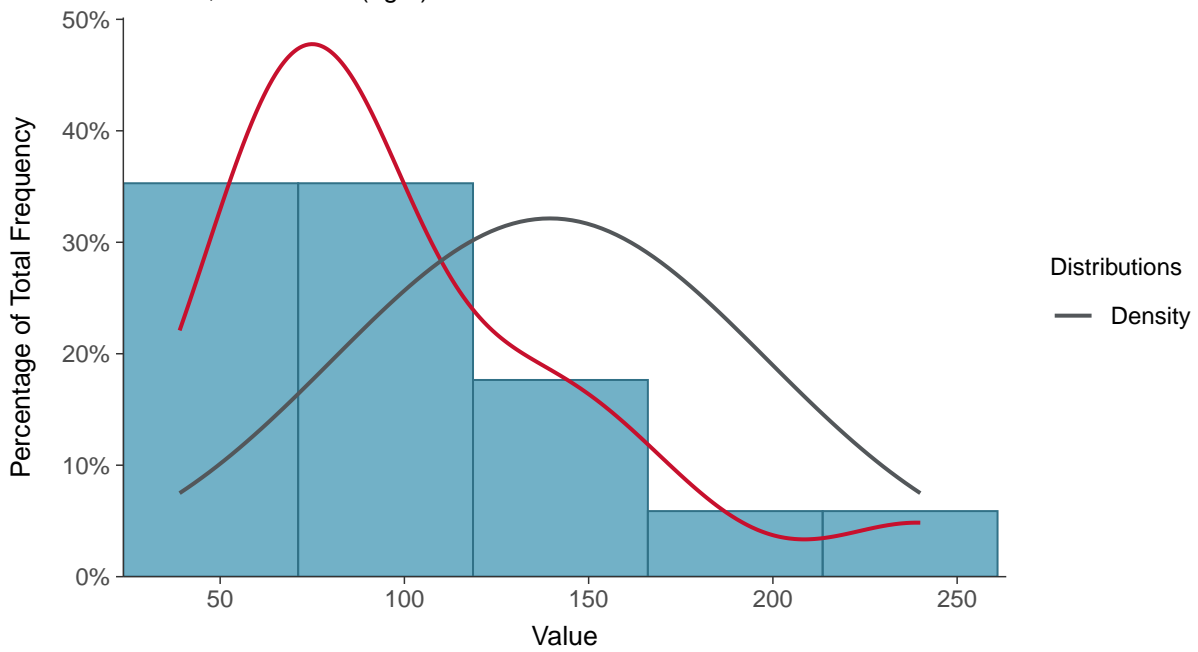
Scatter Plot

Barium, MW-17002 (ug/L)



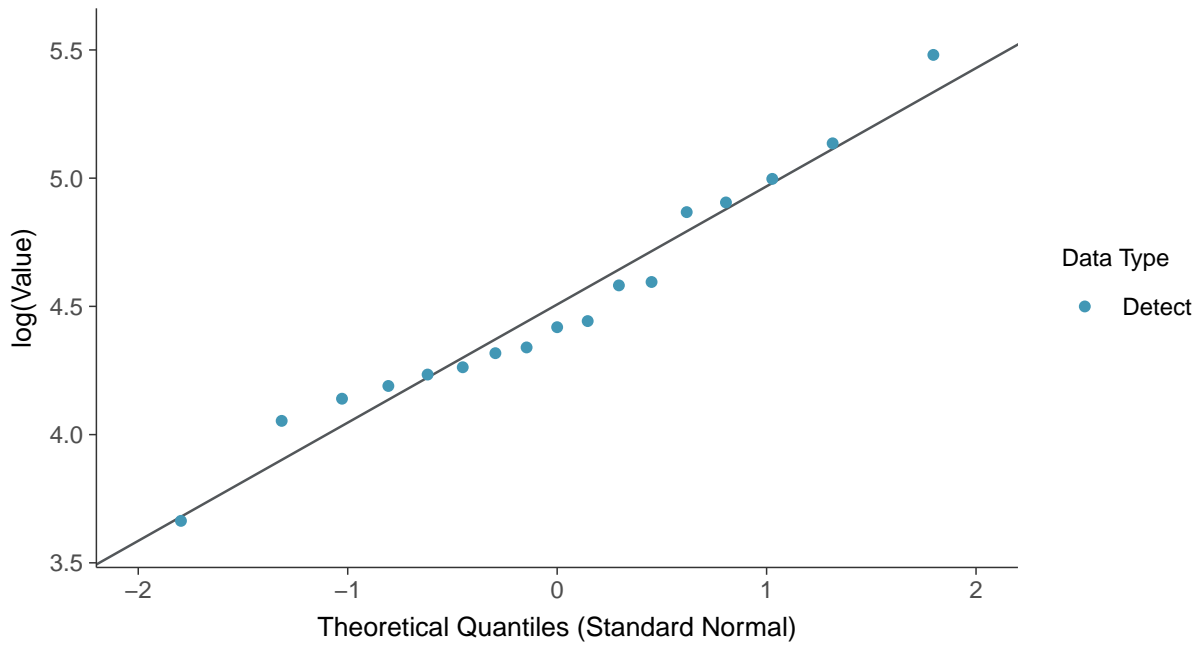
Histogram

Barium, MW-17002 (ug/L)

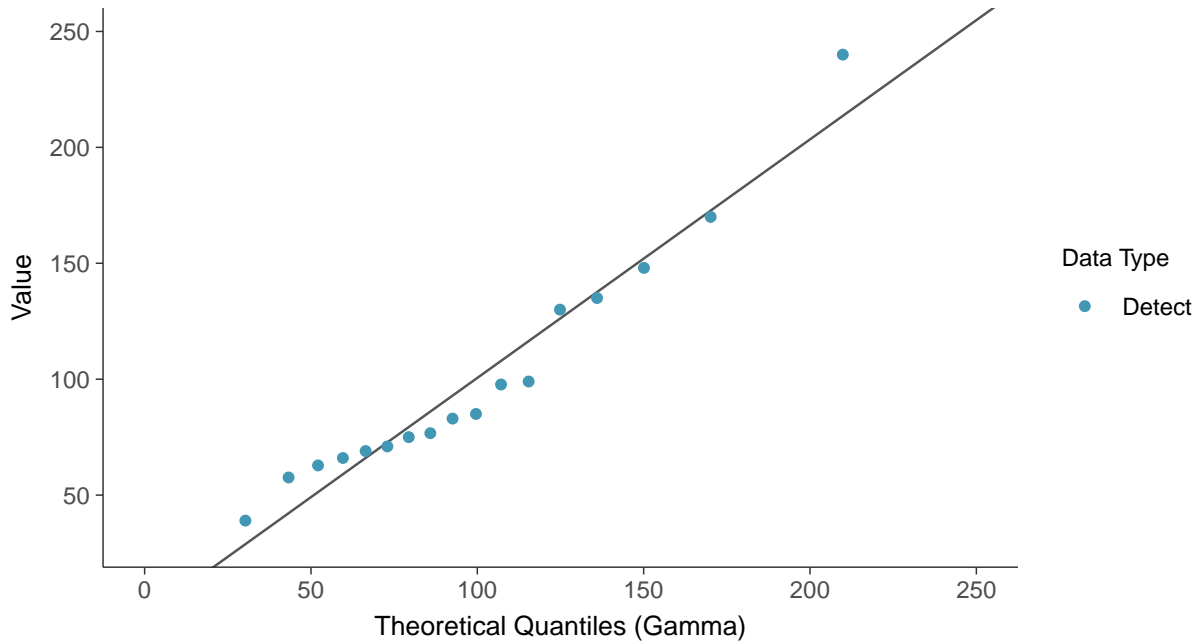




Lognormal Q-Q plot
Barium, MW-17002 (ug/L)



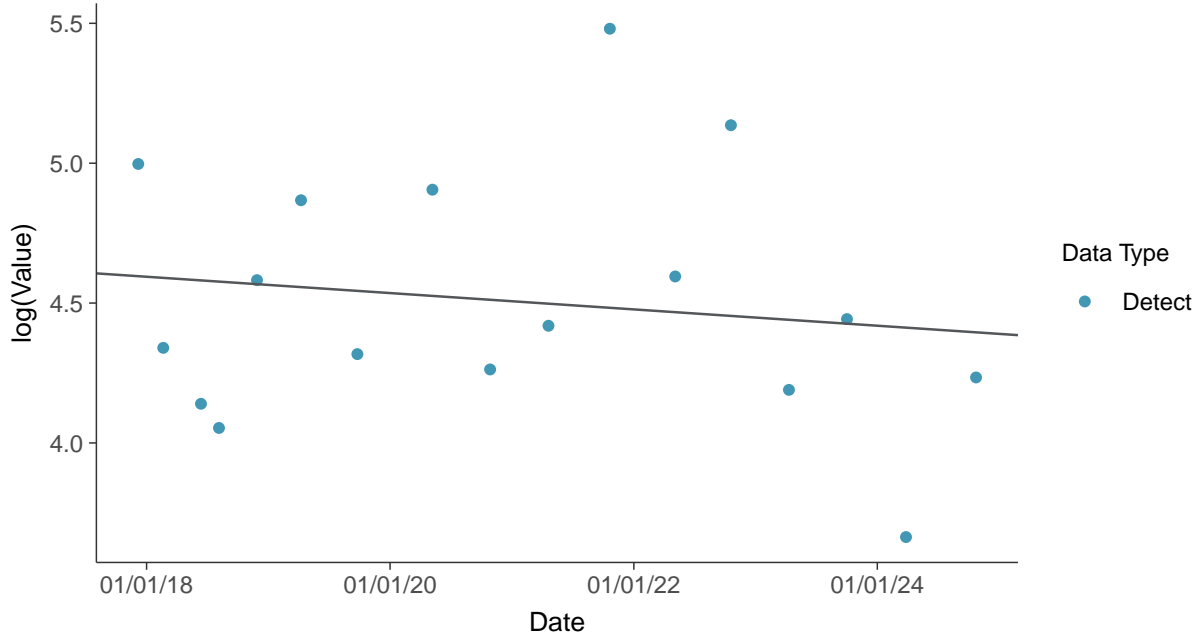
Gamma Q-Q plot
Barium, MW-17002 (ug/L)





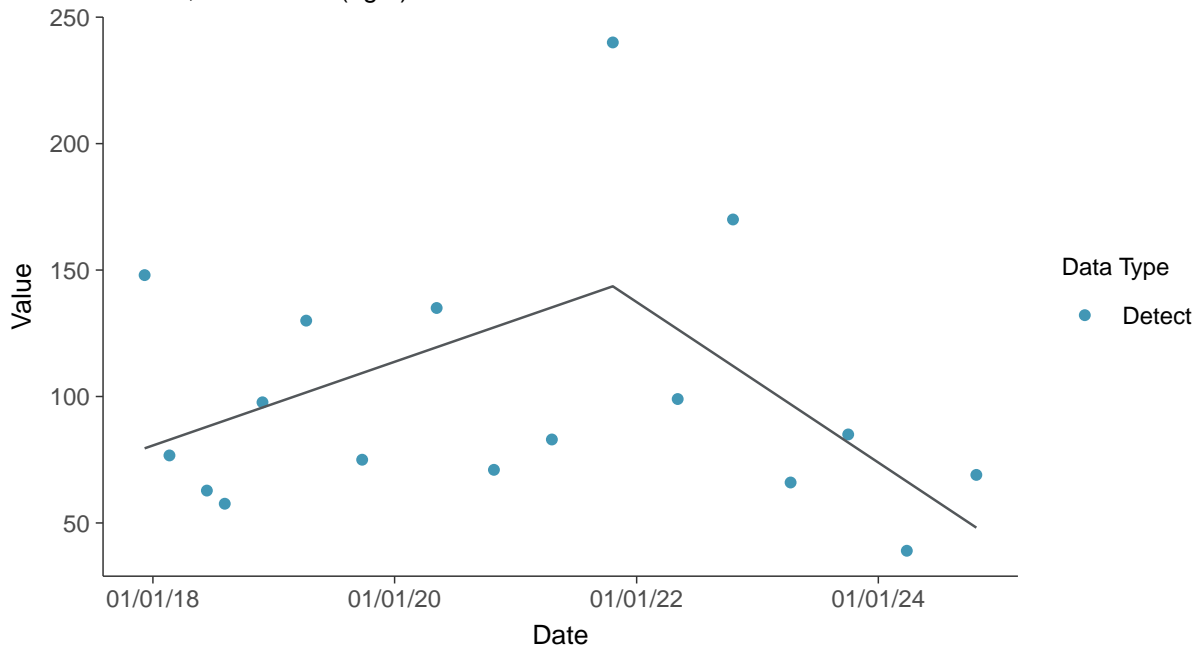
Trend Regression: Lognormal MLE

Barium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

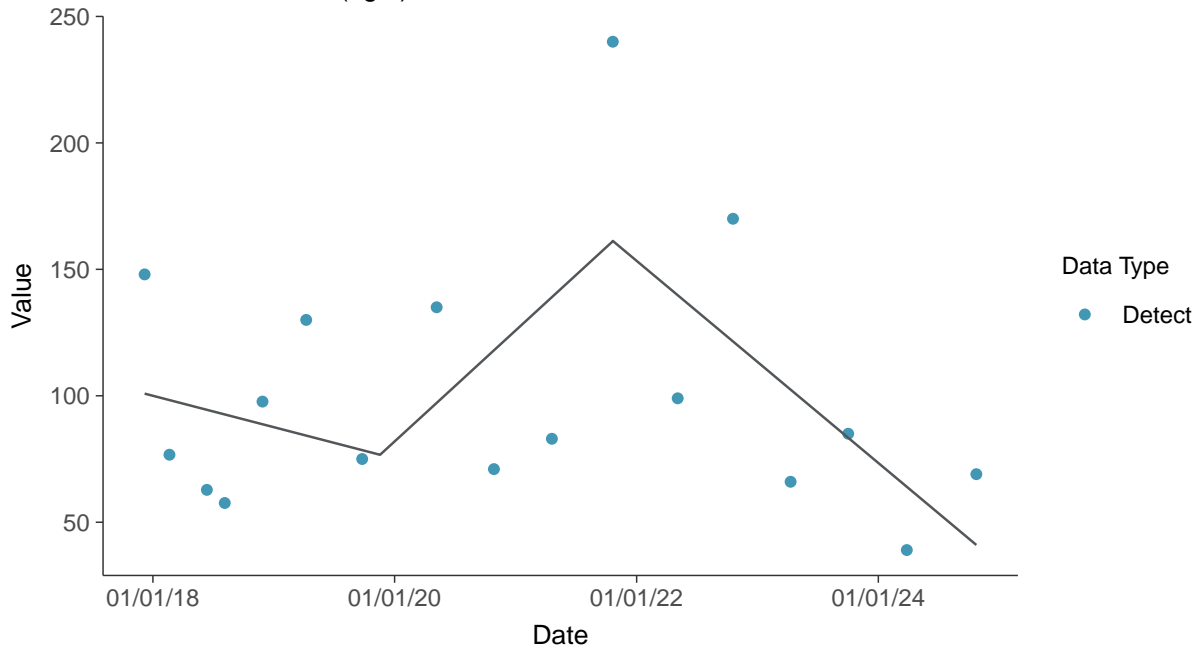
Barium, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

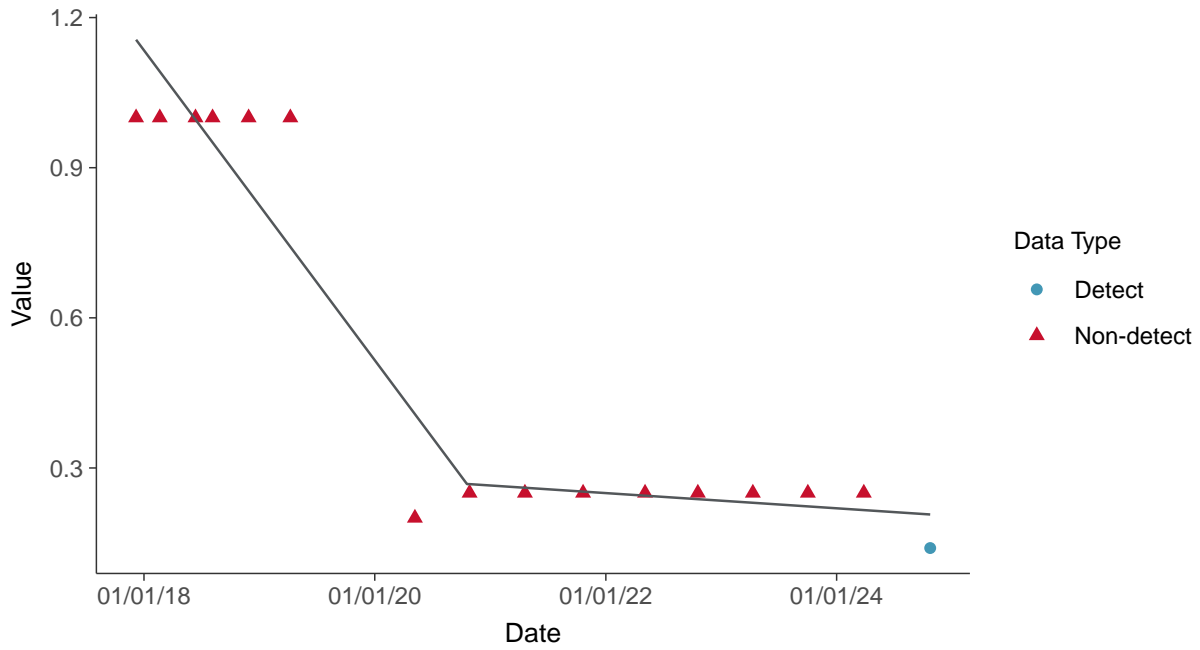
Barium, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear

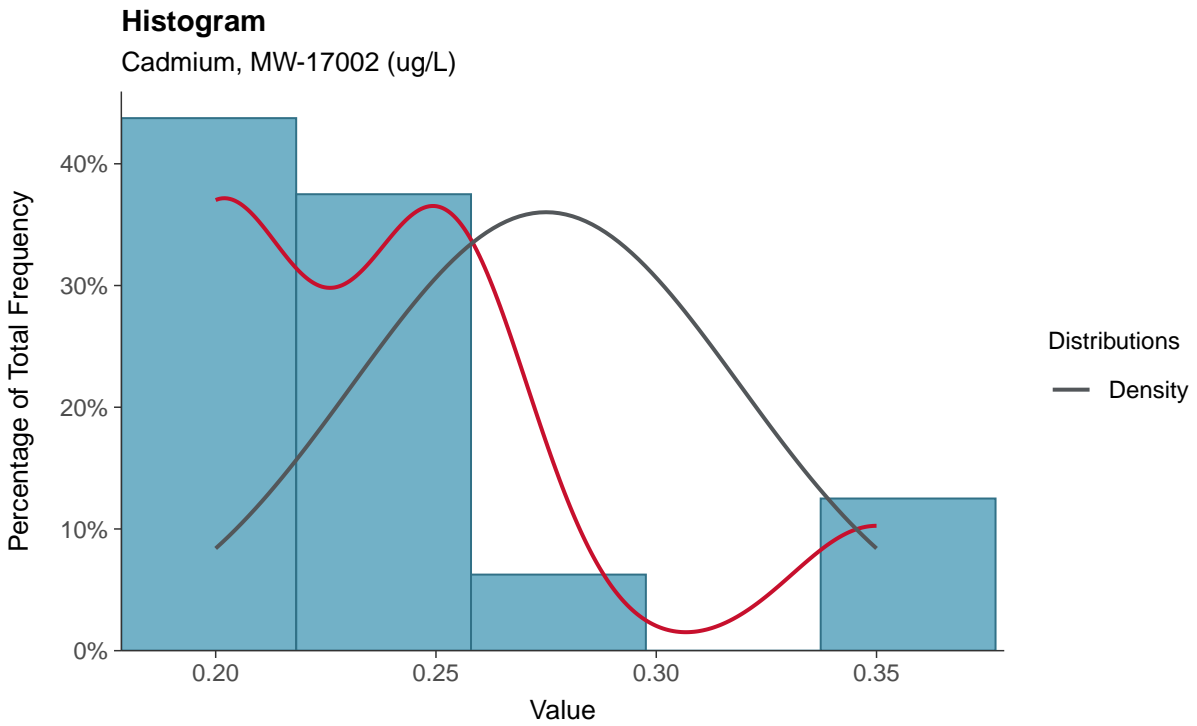
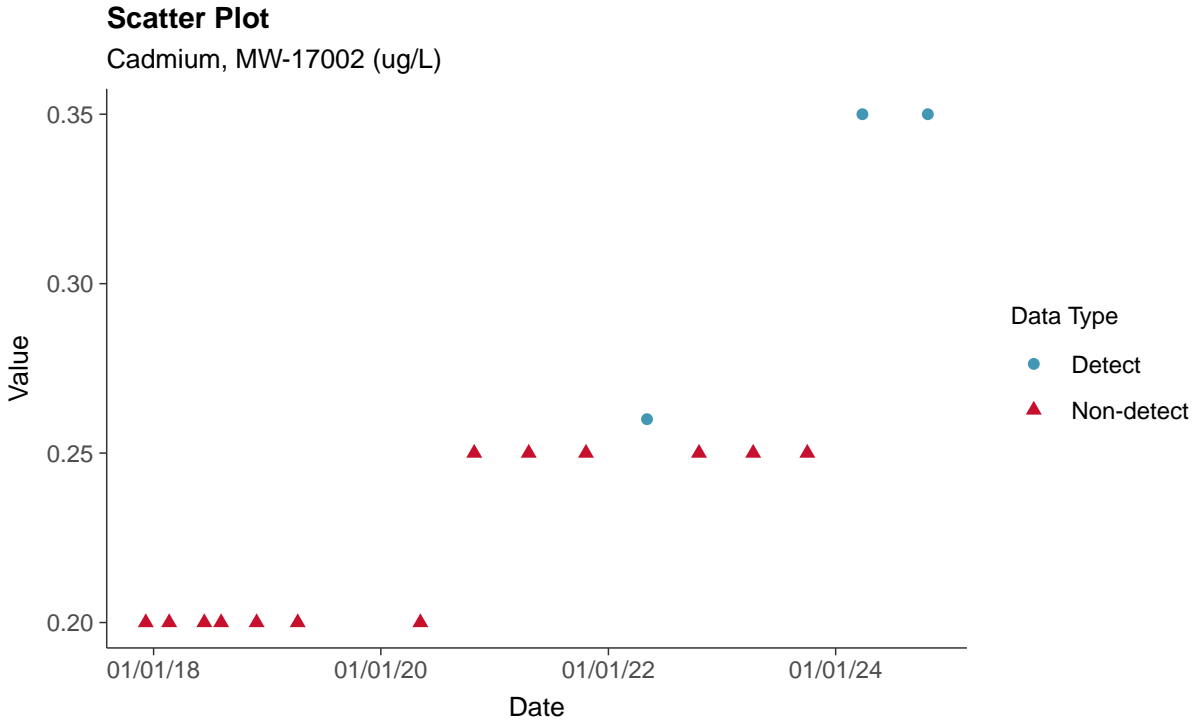
Beryllium, MW-17002 (ug/L)





Appendix IV: Cadmium, MW-17002

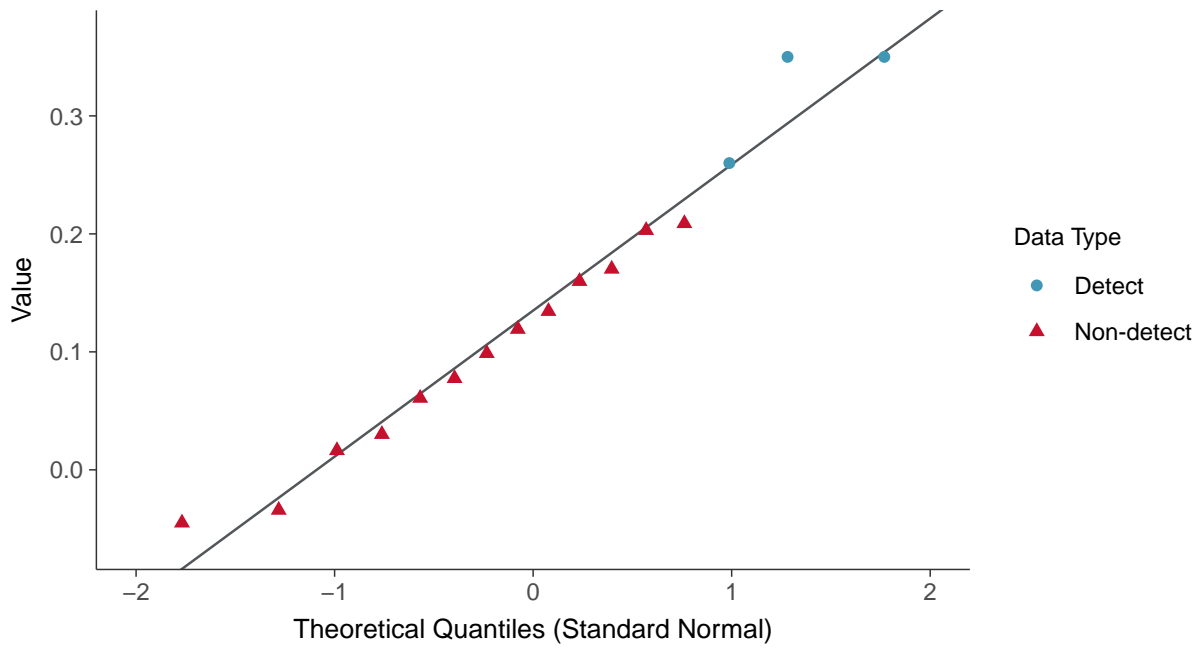
ID: 15_2_106





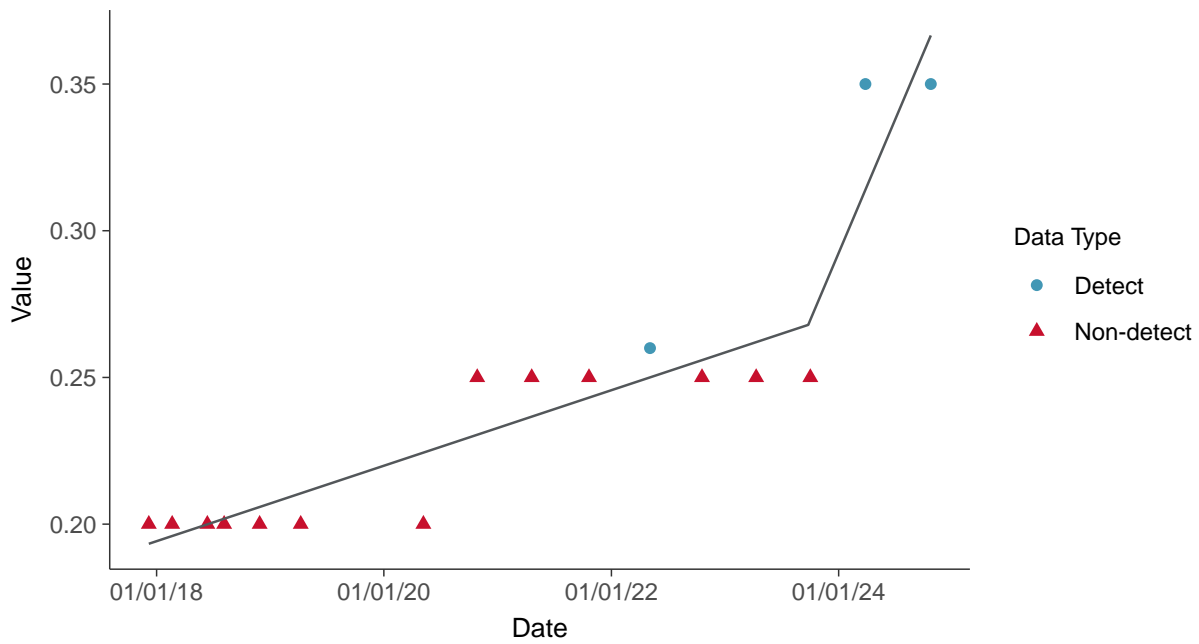
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

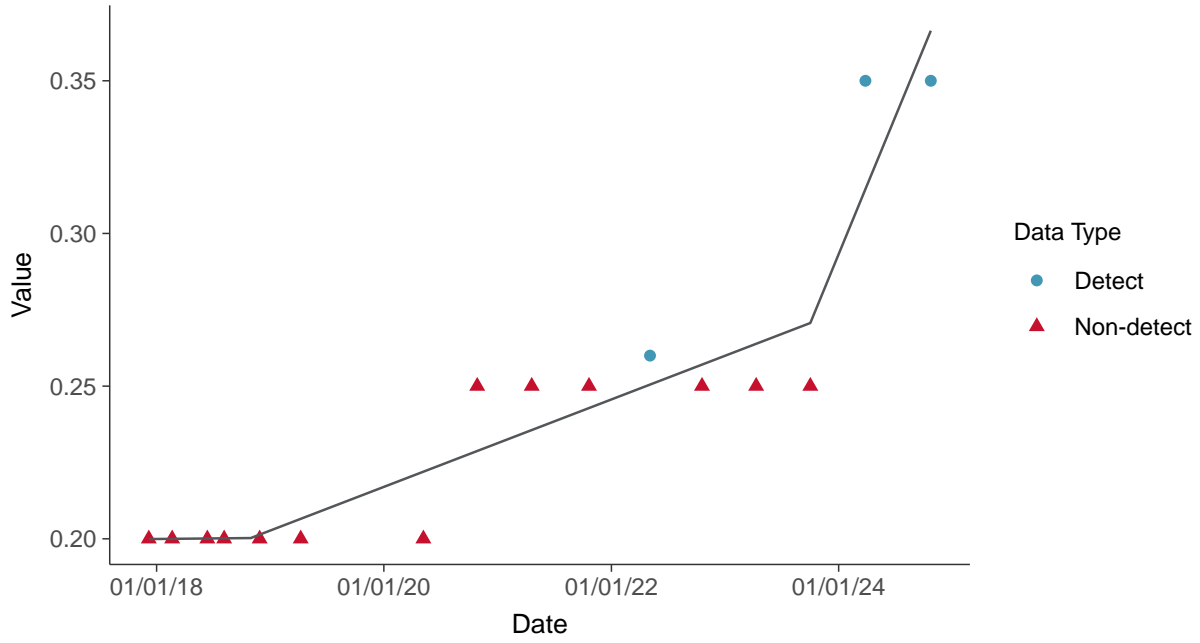
Cadmium, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

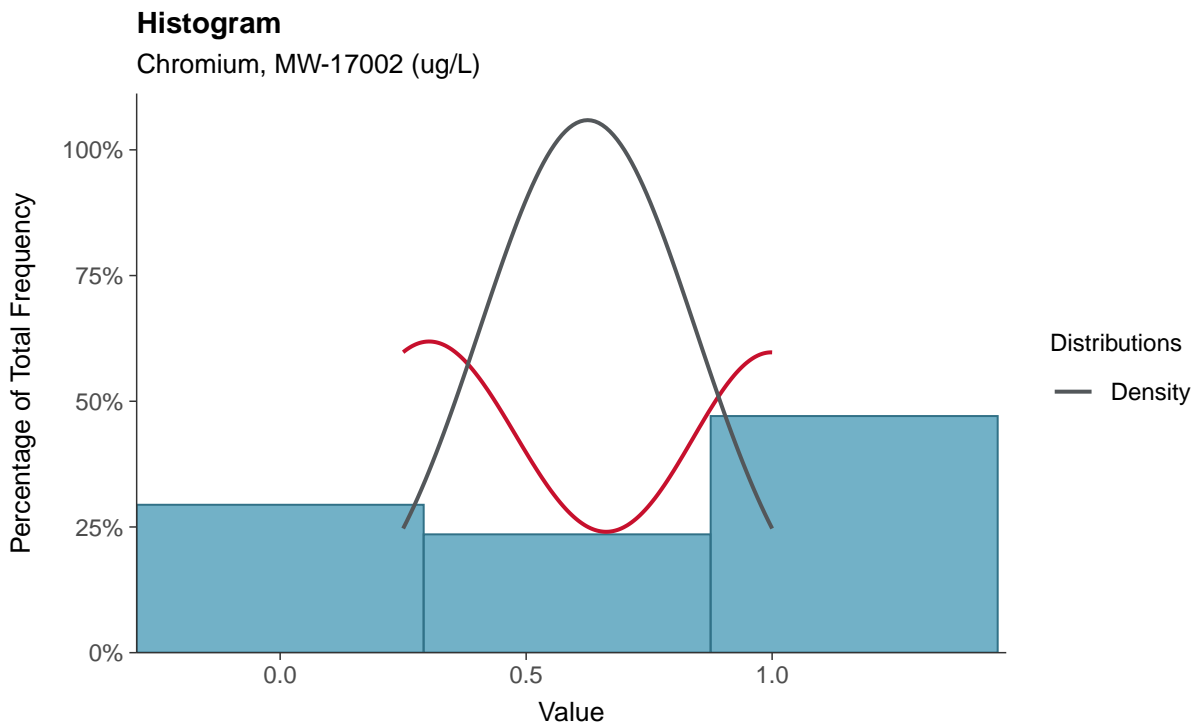
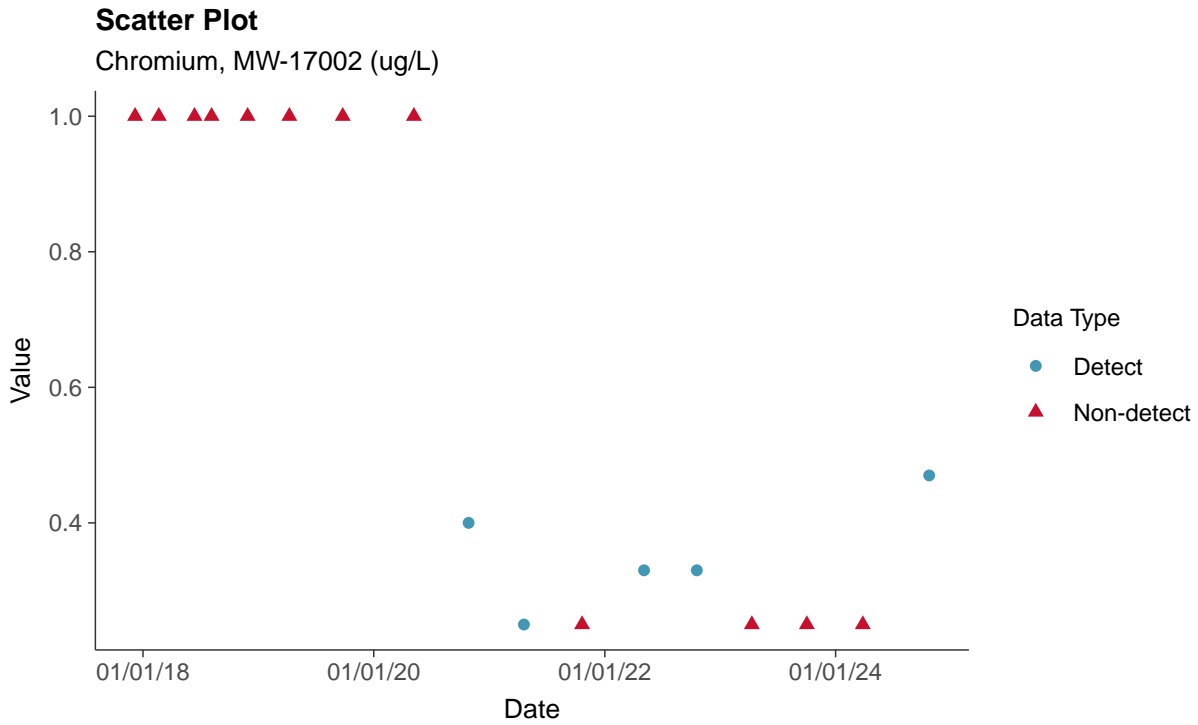
Cadmium, MW-17002 (ug/L)





Appendix IV: Chromium, MW-17002

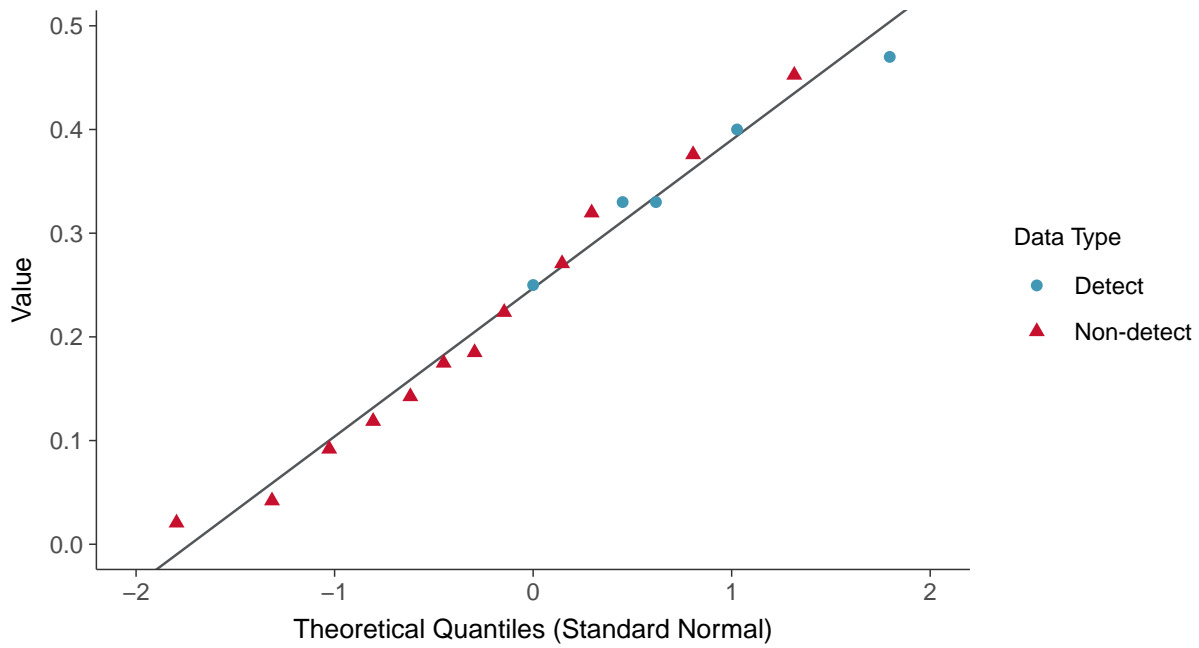
ID: 15_2_109





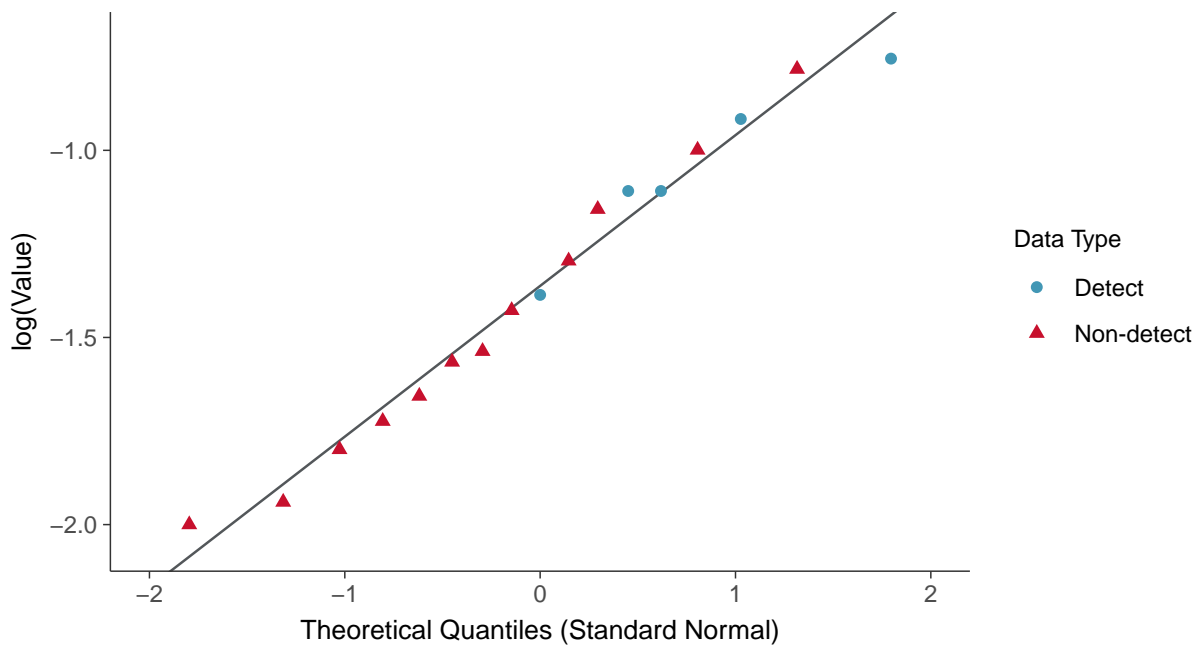
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17002 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

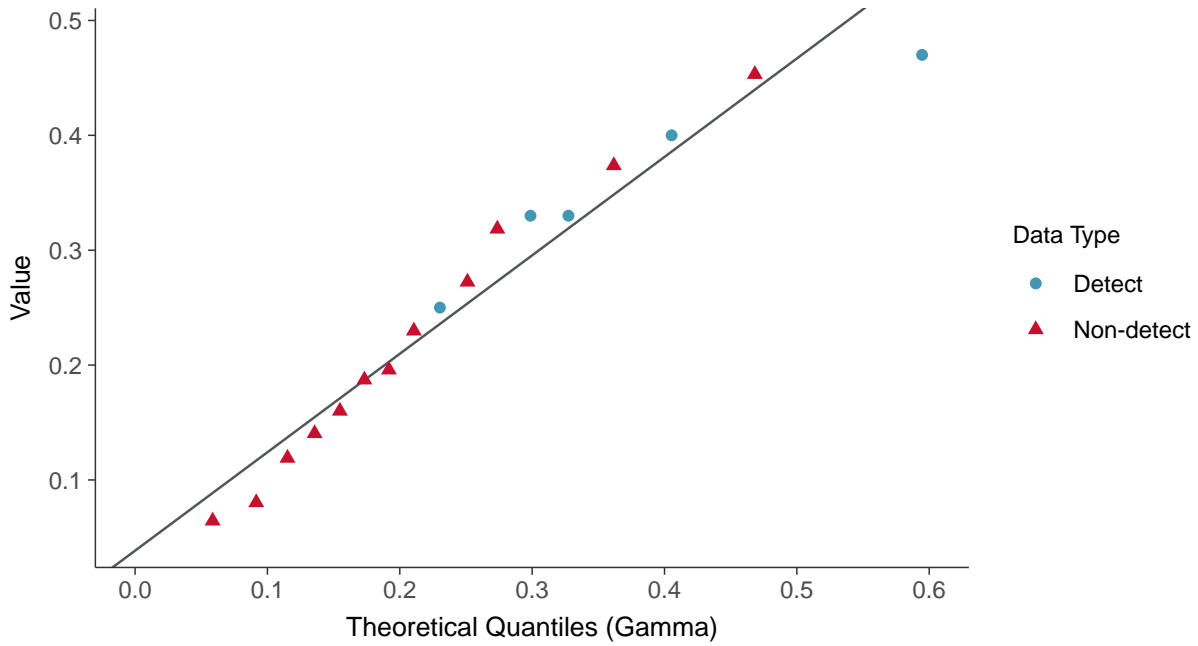
Chromium, MW-17002 (ug/L)





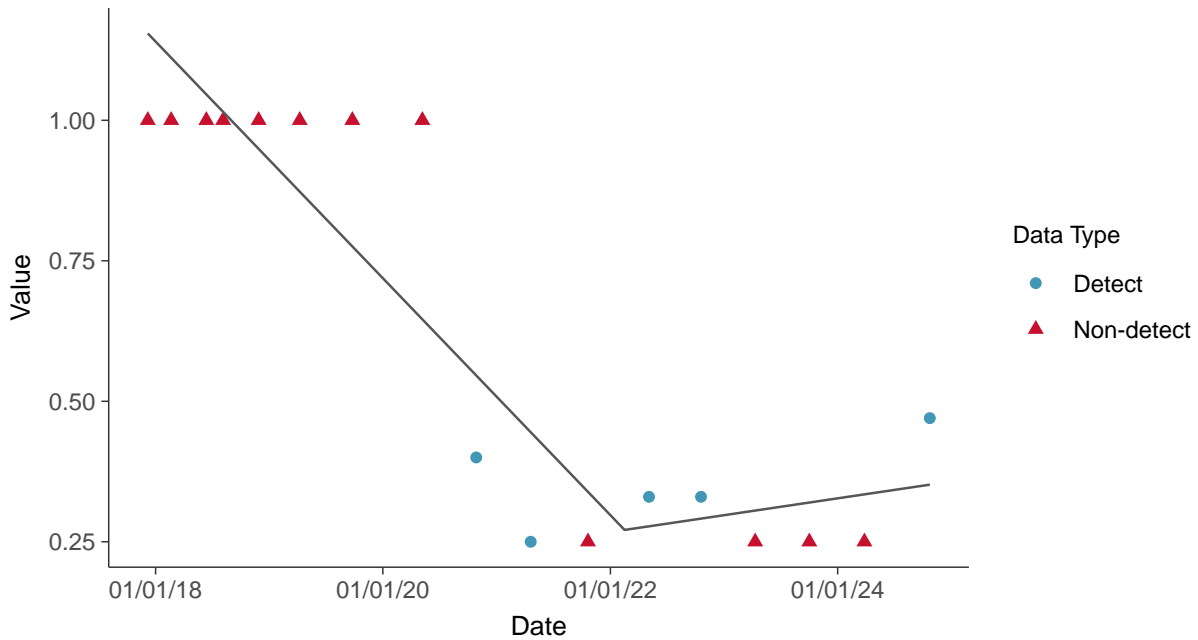
Gamma Q-Q plot using ROS Imputed Estimates

Chromium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

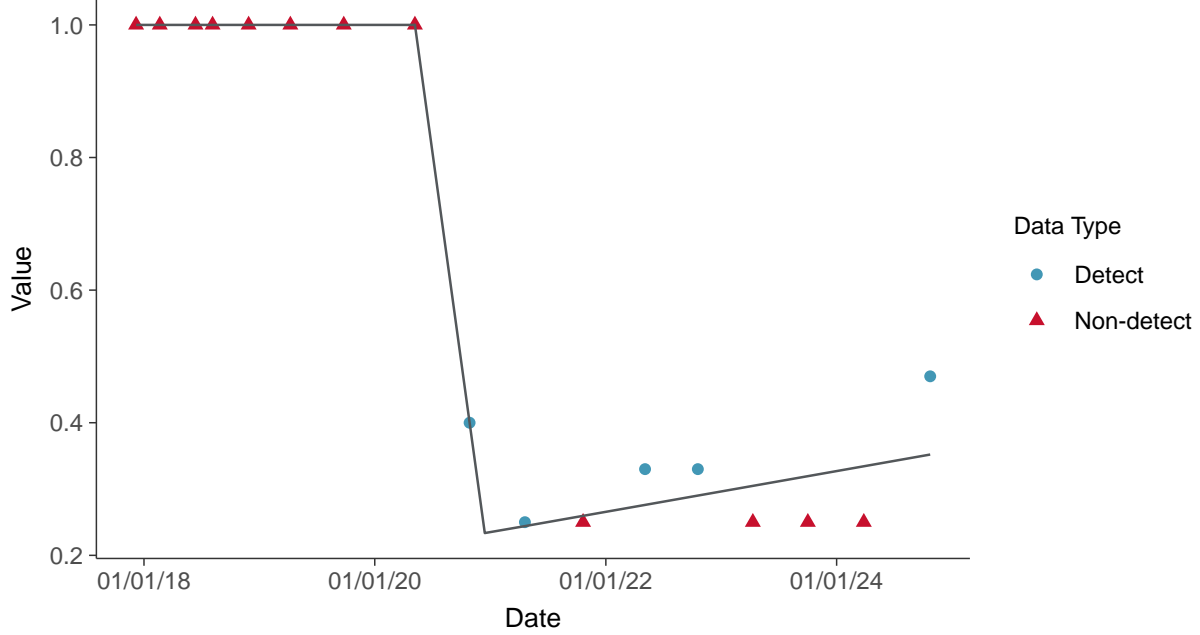
Chromium, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

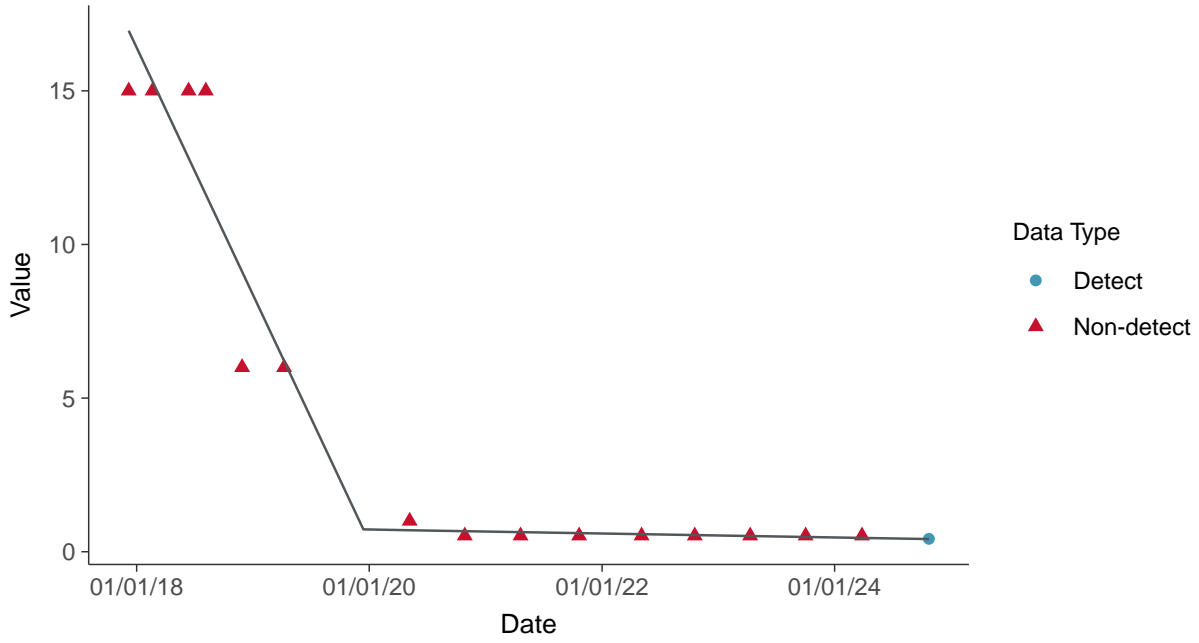
Chromium, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear

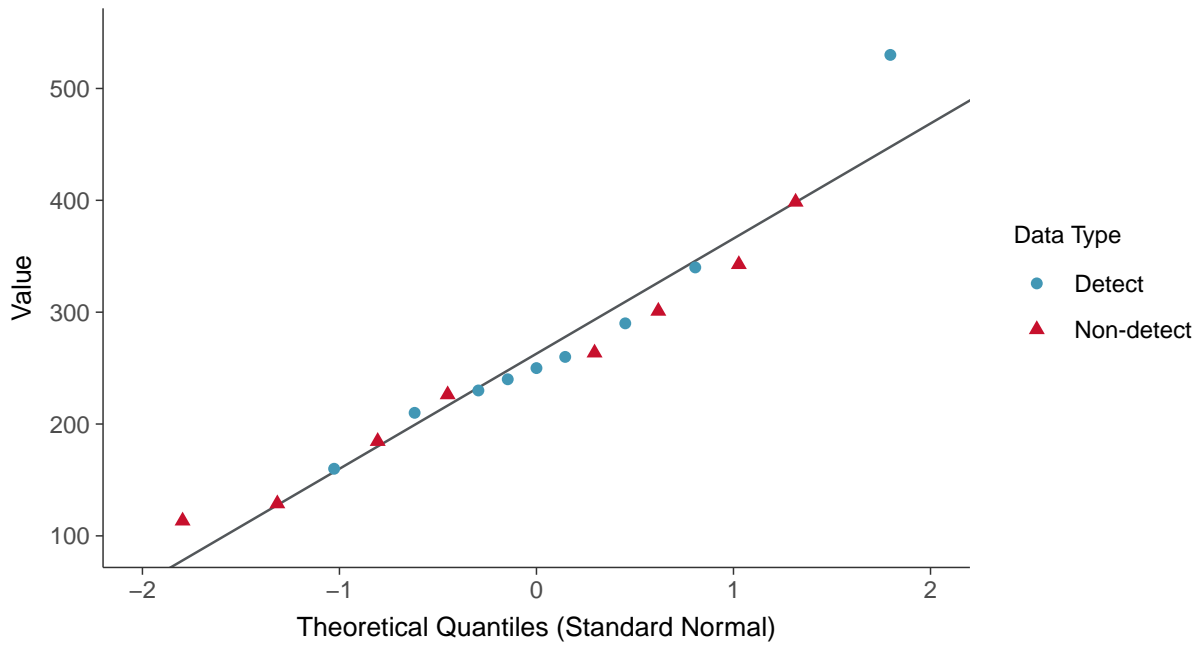
Cobalt, MW-17002 (ug/L)





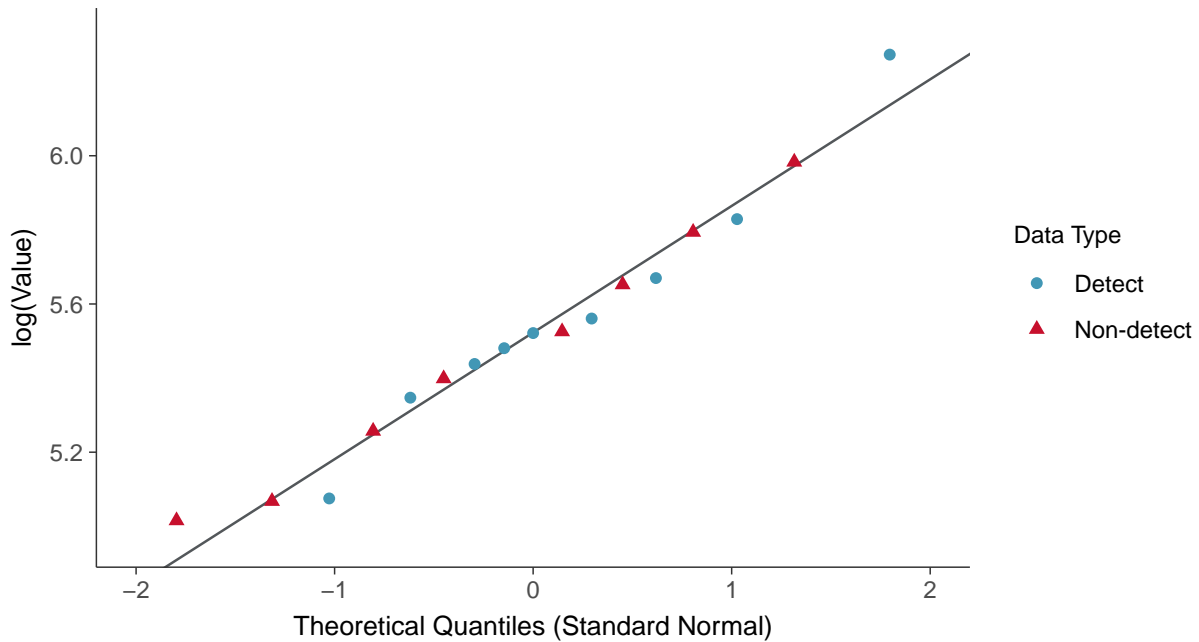
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17002 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

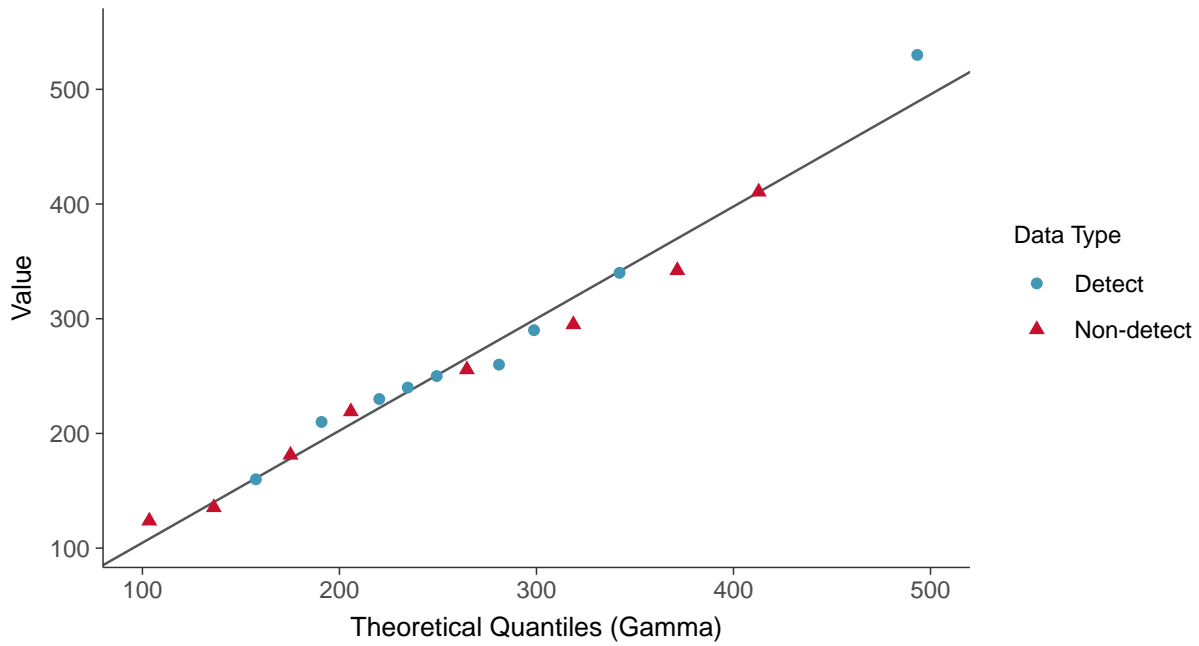
Fluoride, MW-17002 (ug/L)





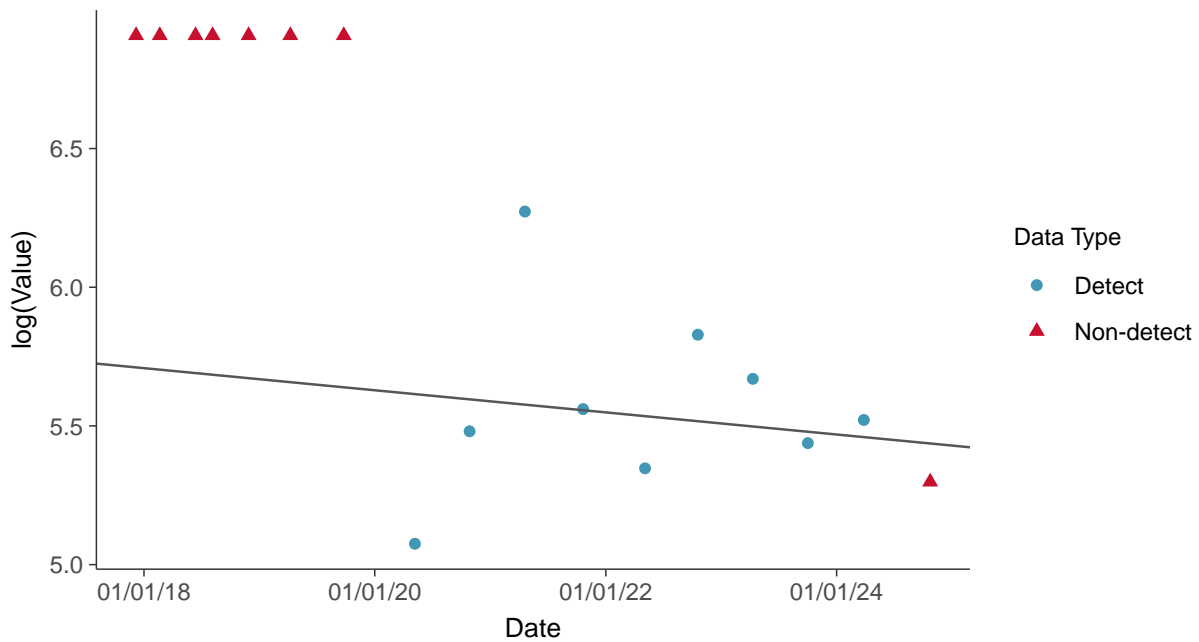
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17002 (ug/L)



Trend Regression: Lognormal MLE

Fluoride, MW-17002 (ug/L)



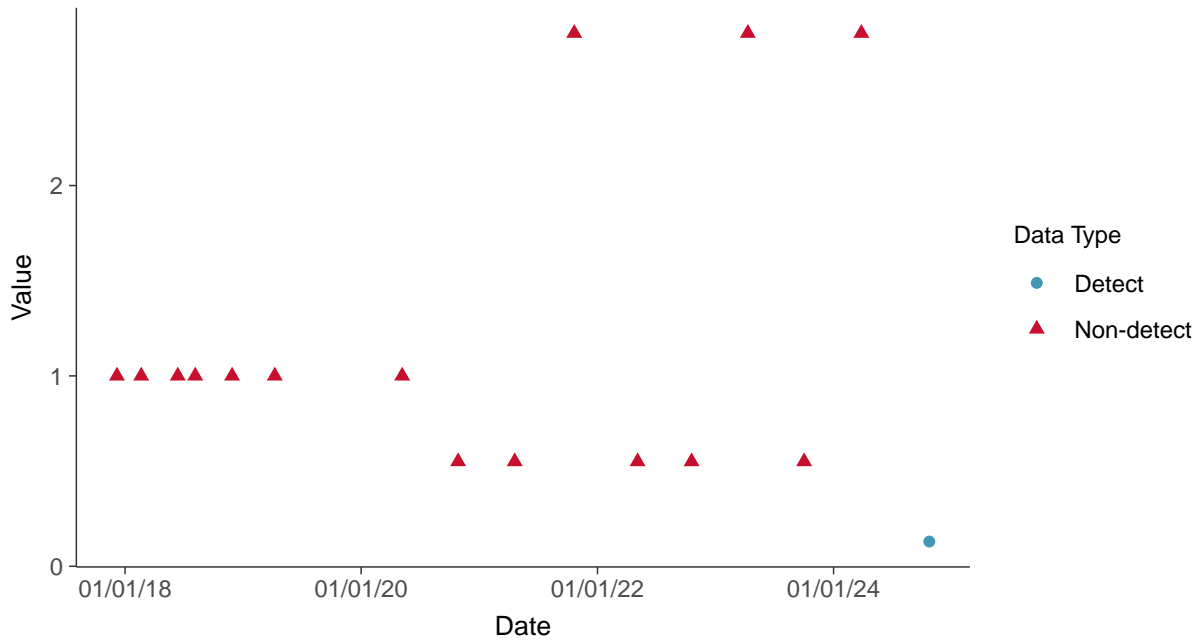


Appendix IV: Lead, MW-17002

ID: 15_2_116

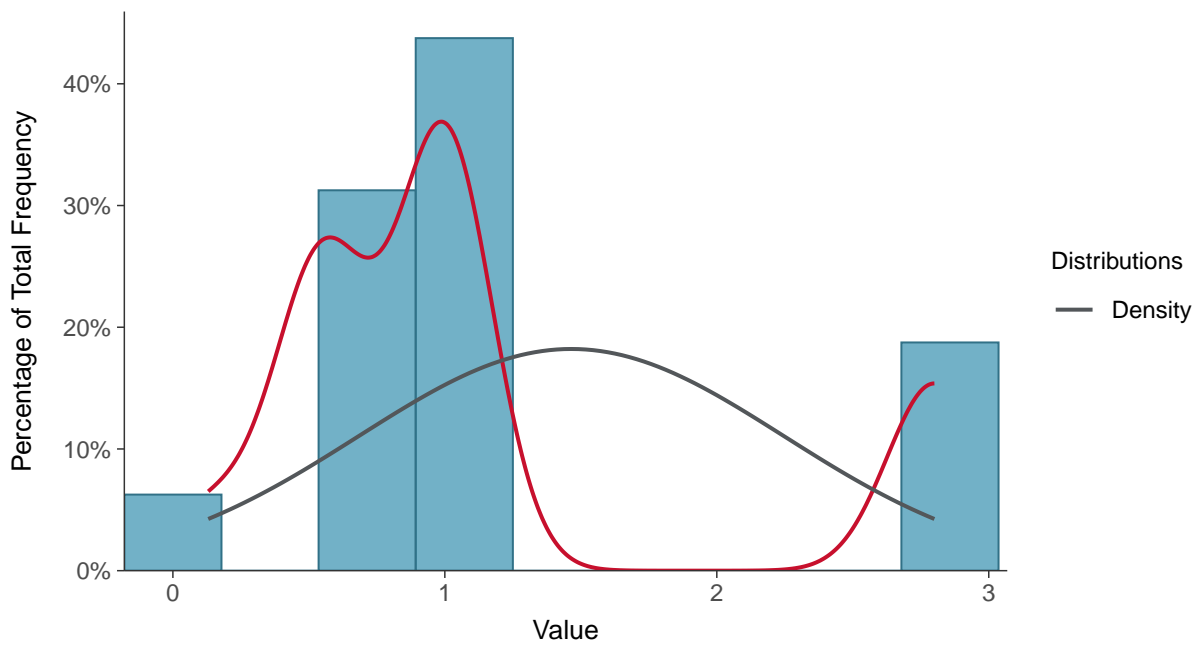
Scatter Plot

Lead, MW-17002 (ug/L)



Histogram

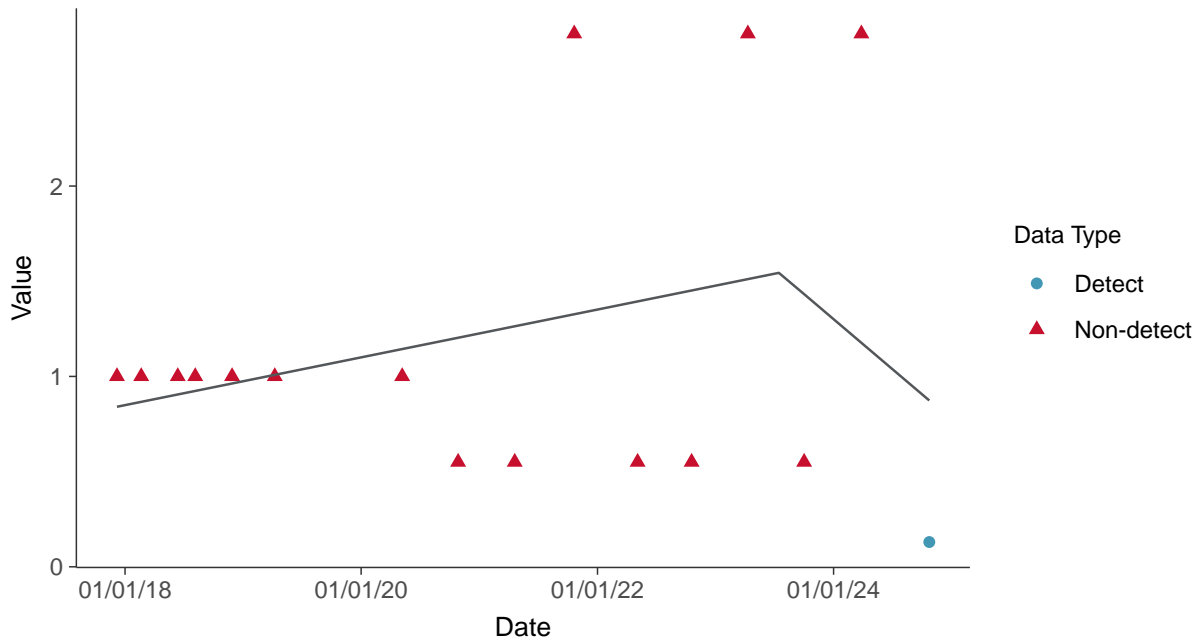
Lead, MW-17002 (ug/L)





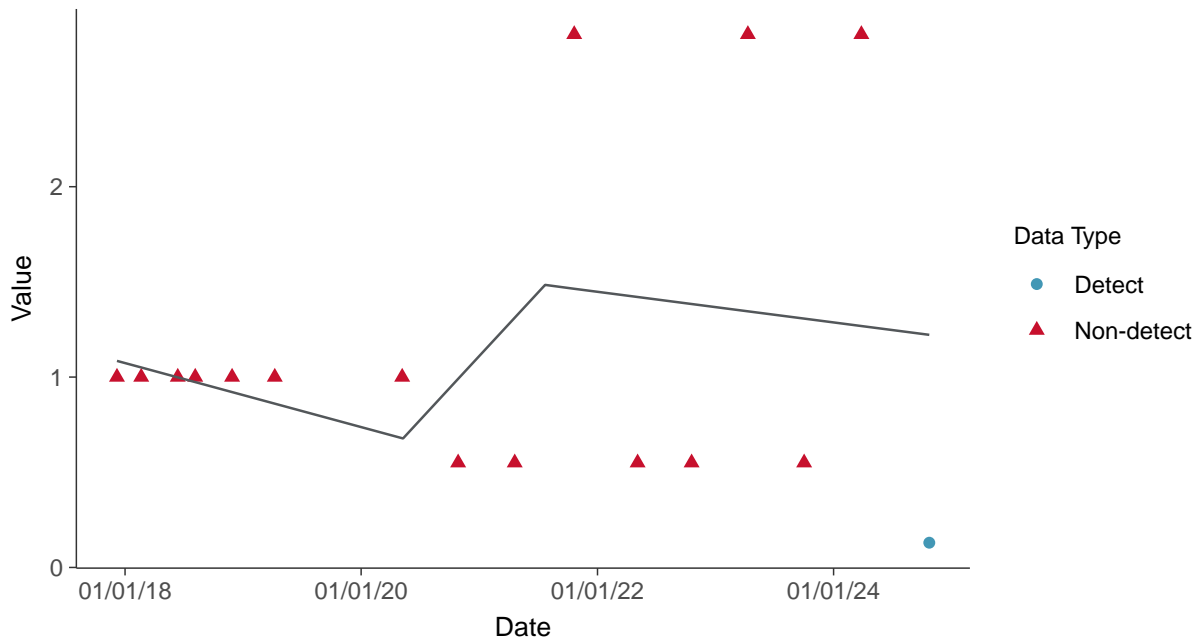
Trend Regression: Piecewise Linear-Linear

Lead, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Lead, MW-17002 (ug/L)



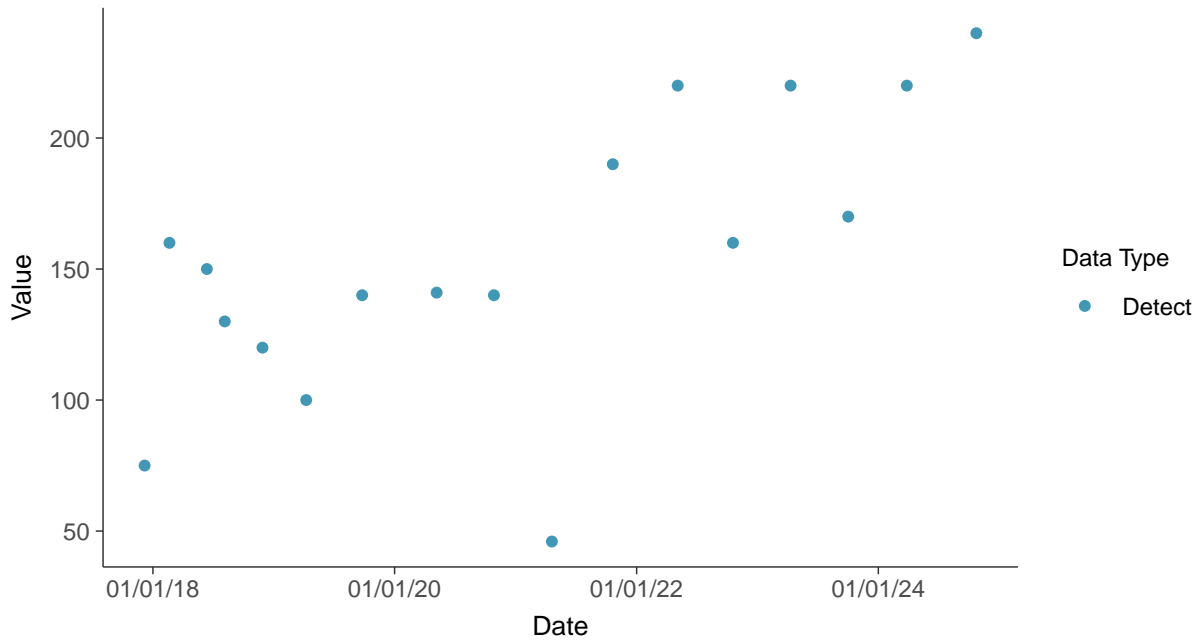


Appendix IV: Lithium, MW-17002

ID: 15_2_117

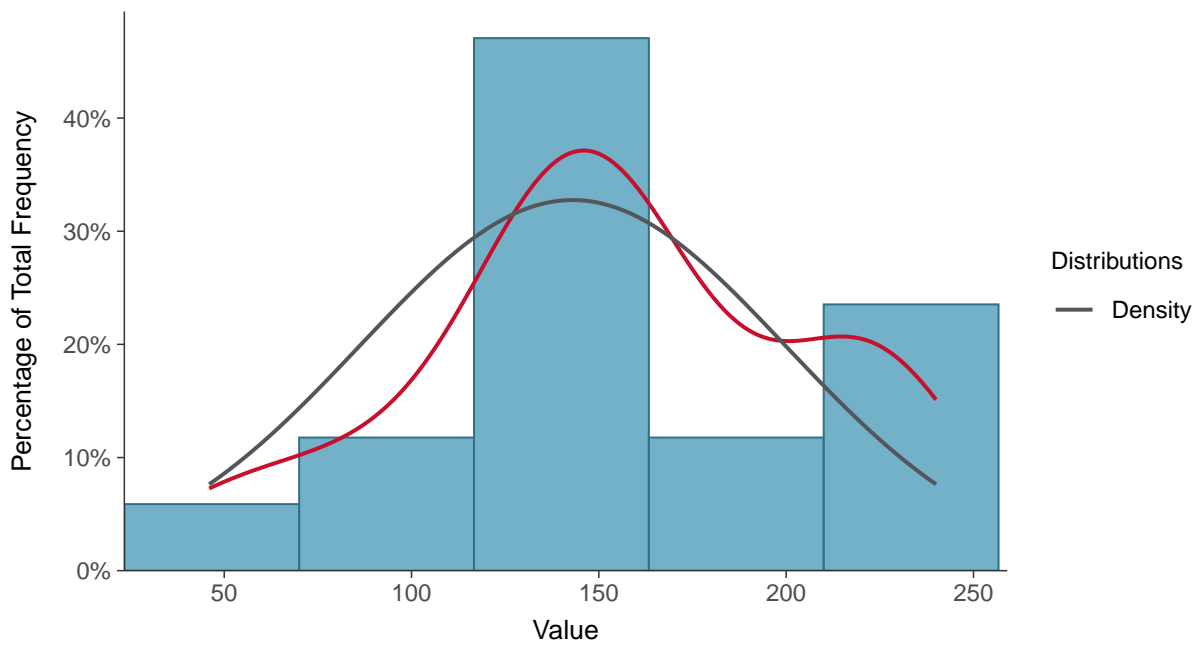
Scatter Plot

Lithium, MW-17002 (ug/L)



Histogram

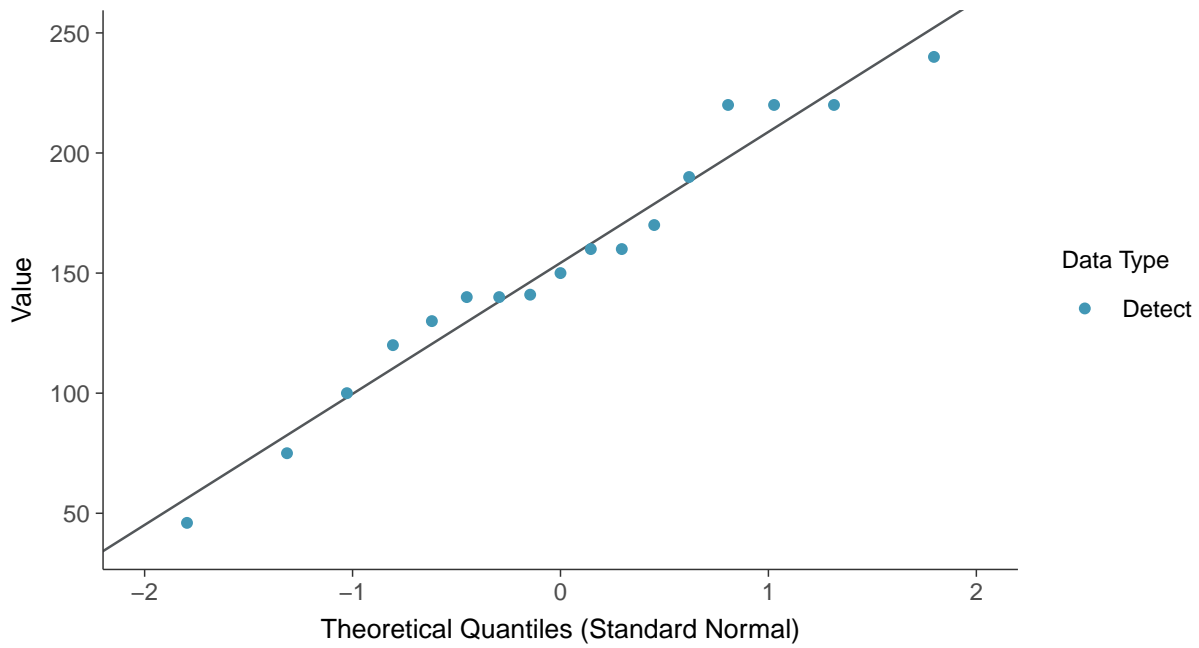
Lithium, MW-17002 (ug/L)





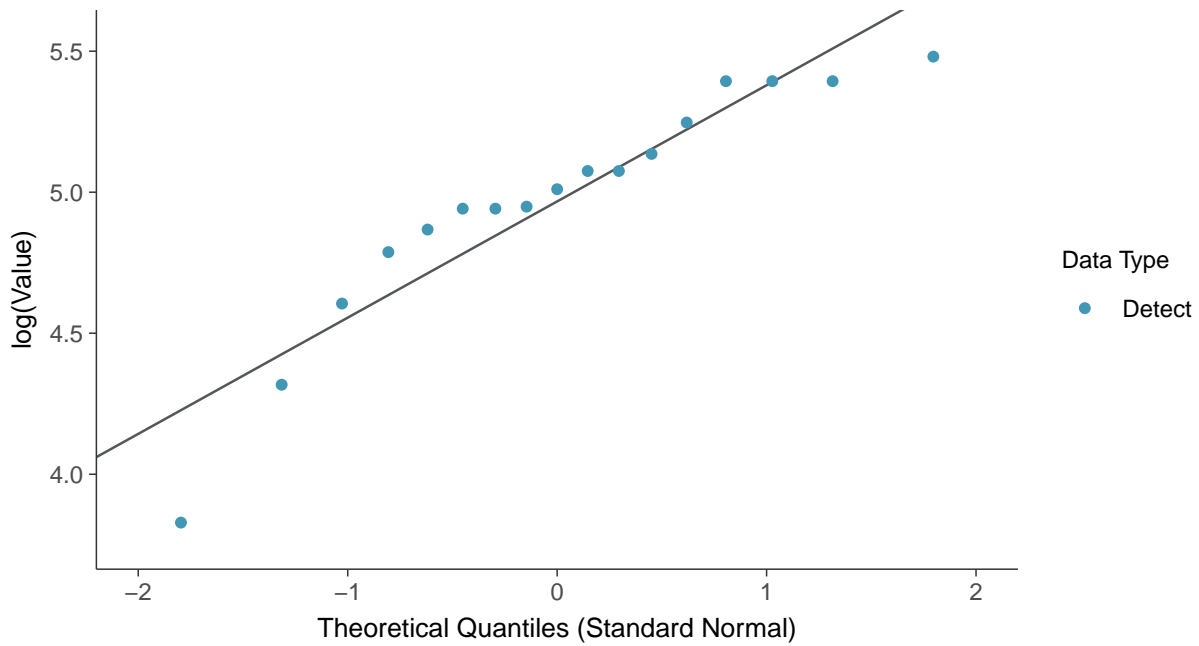
Normal Q-Q plot

Lithium, MW-17002 (ug/L)



Lognormal Q-Q plot

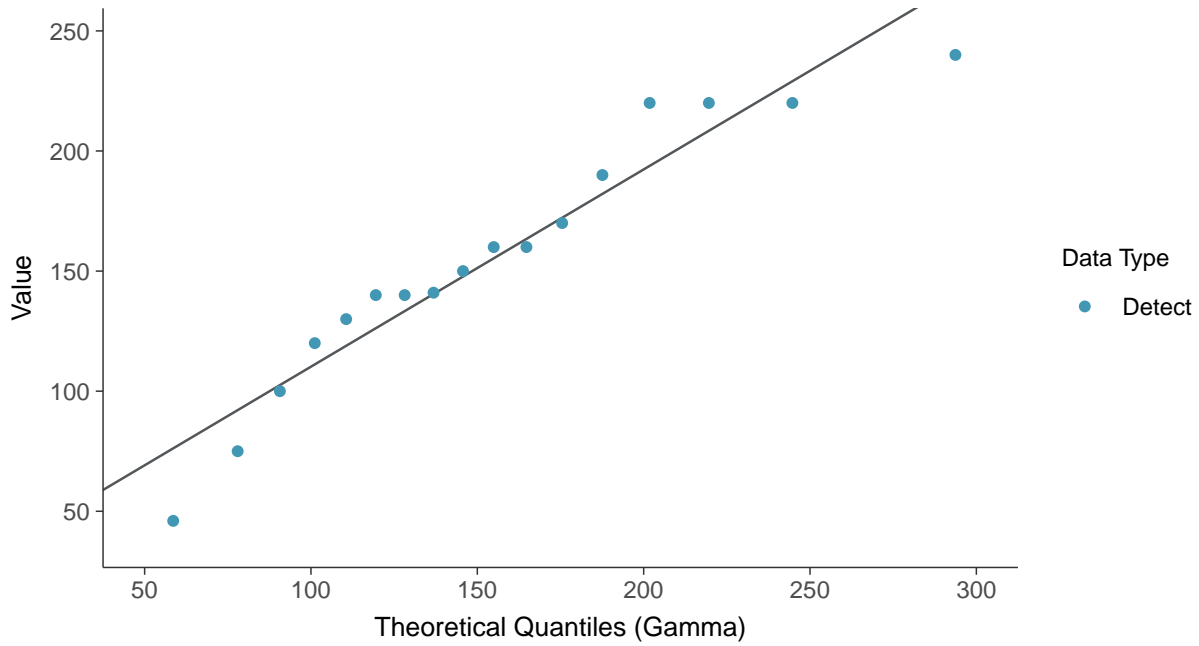
Lithium, MW-17002 (ug/L)





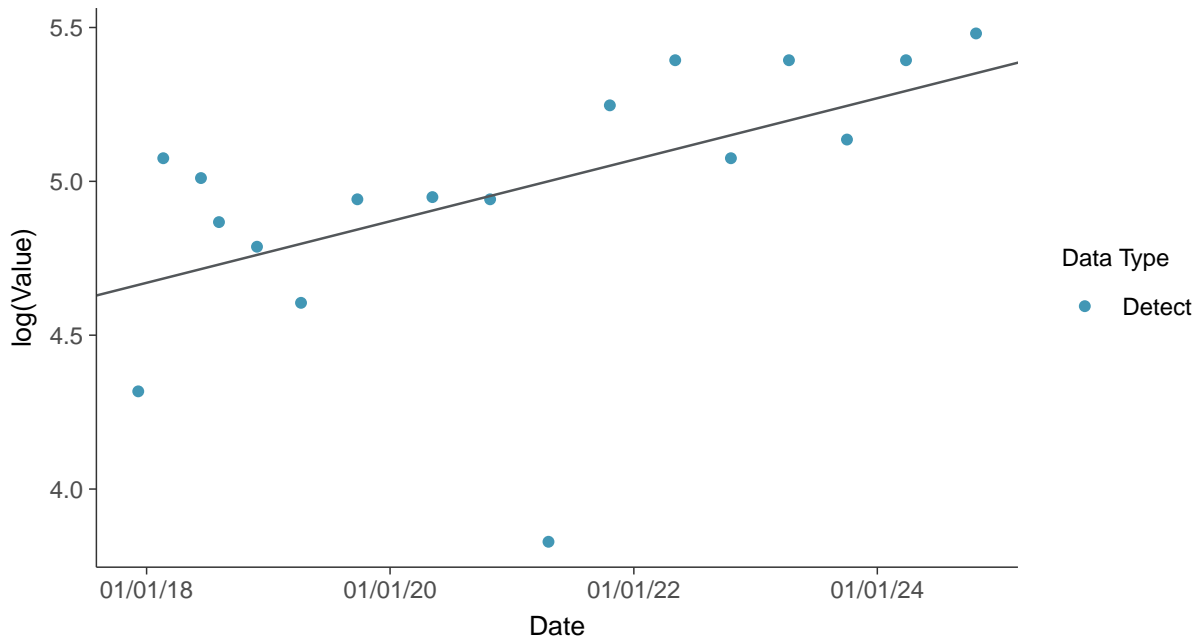
Gamma Q-Q plot

Lithium, MW-17002 (ug/L)



Trend Regression: Lognormal MLE

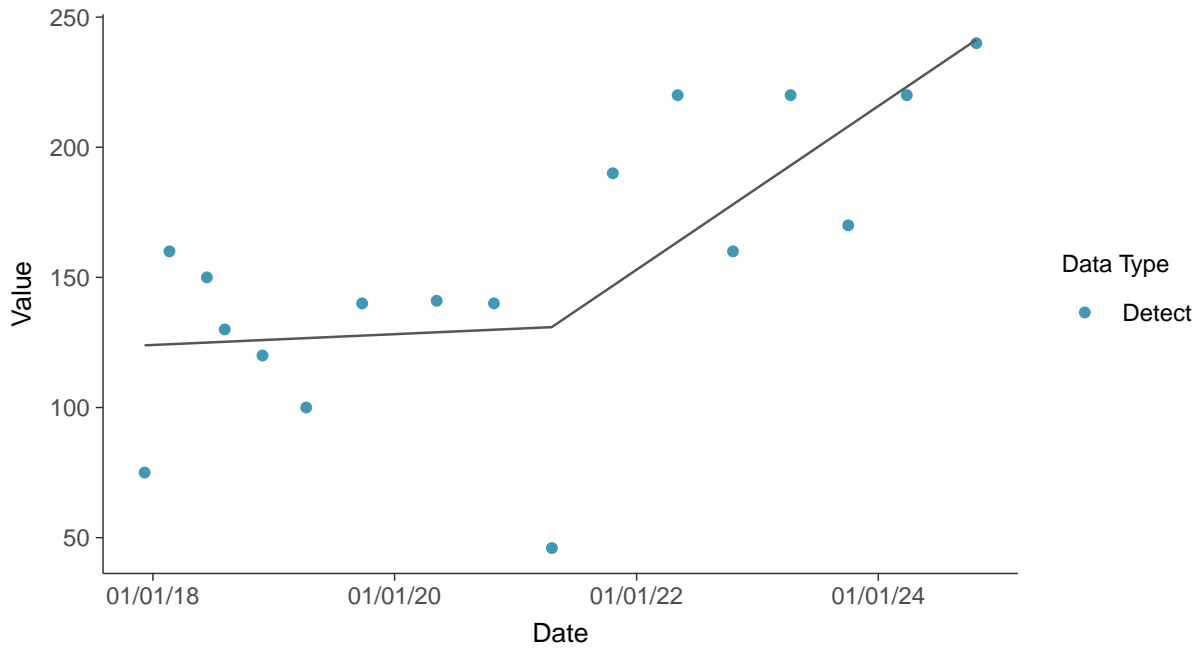
Lithium, MW-17002 (ug/L)





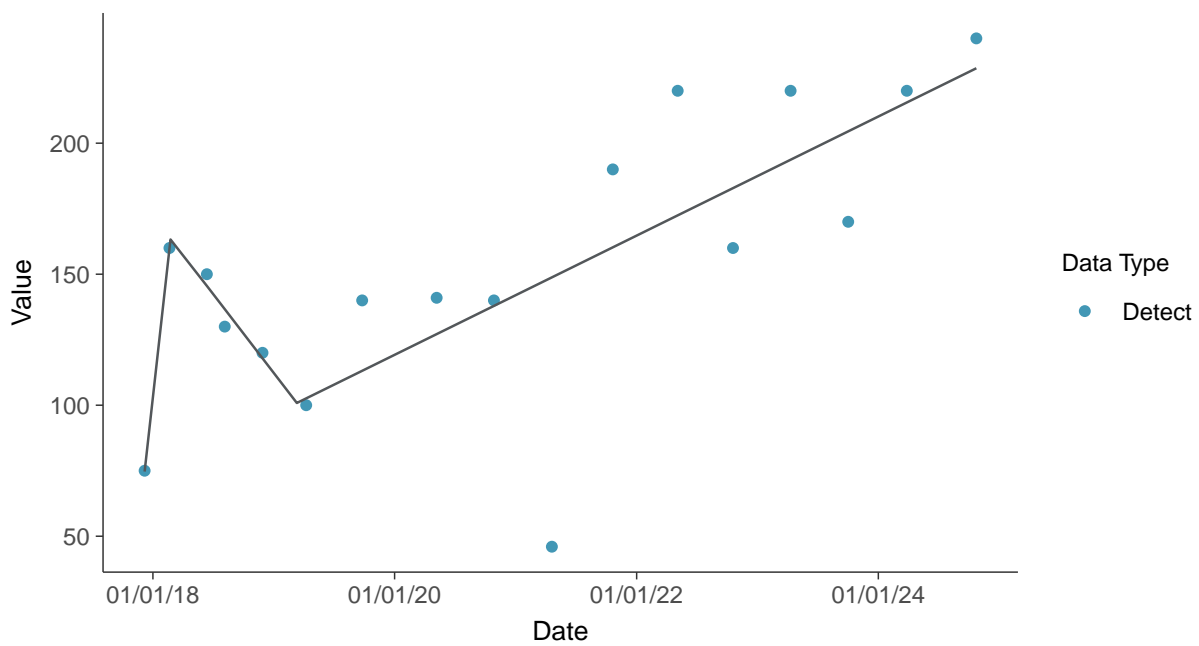
Trend Regression: Piecewise Linear-Linear

Lithium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

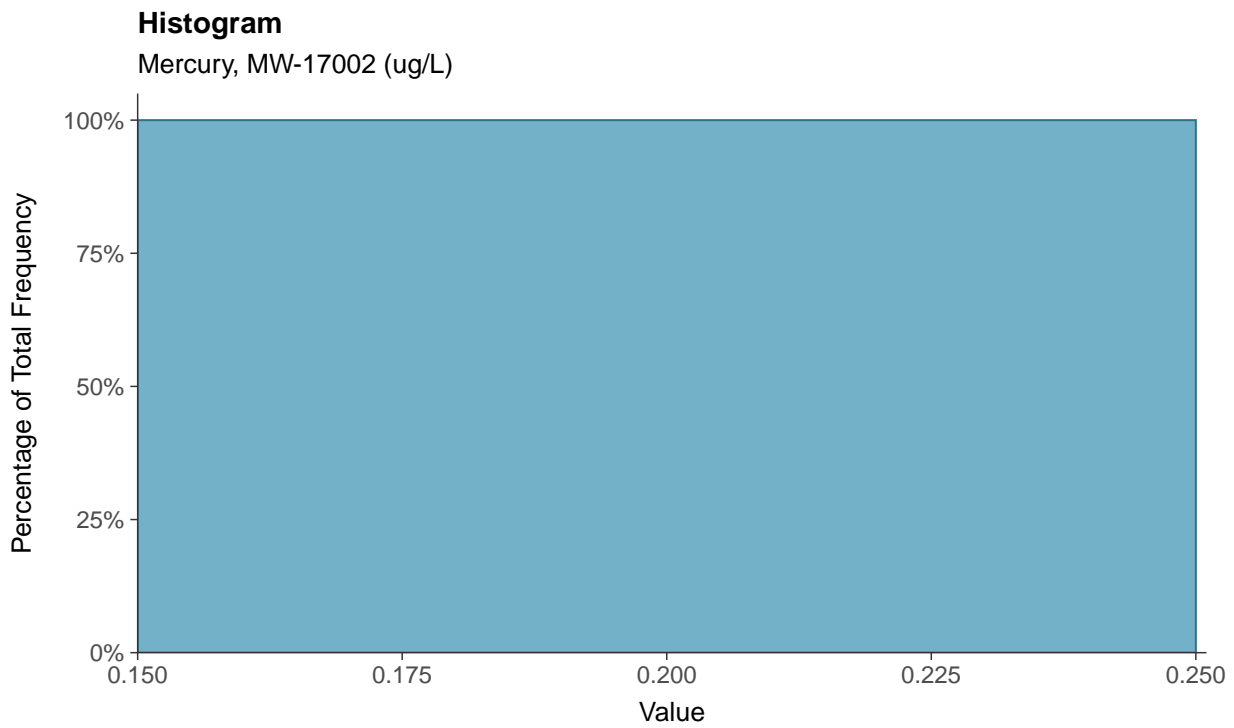
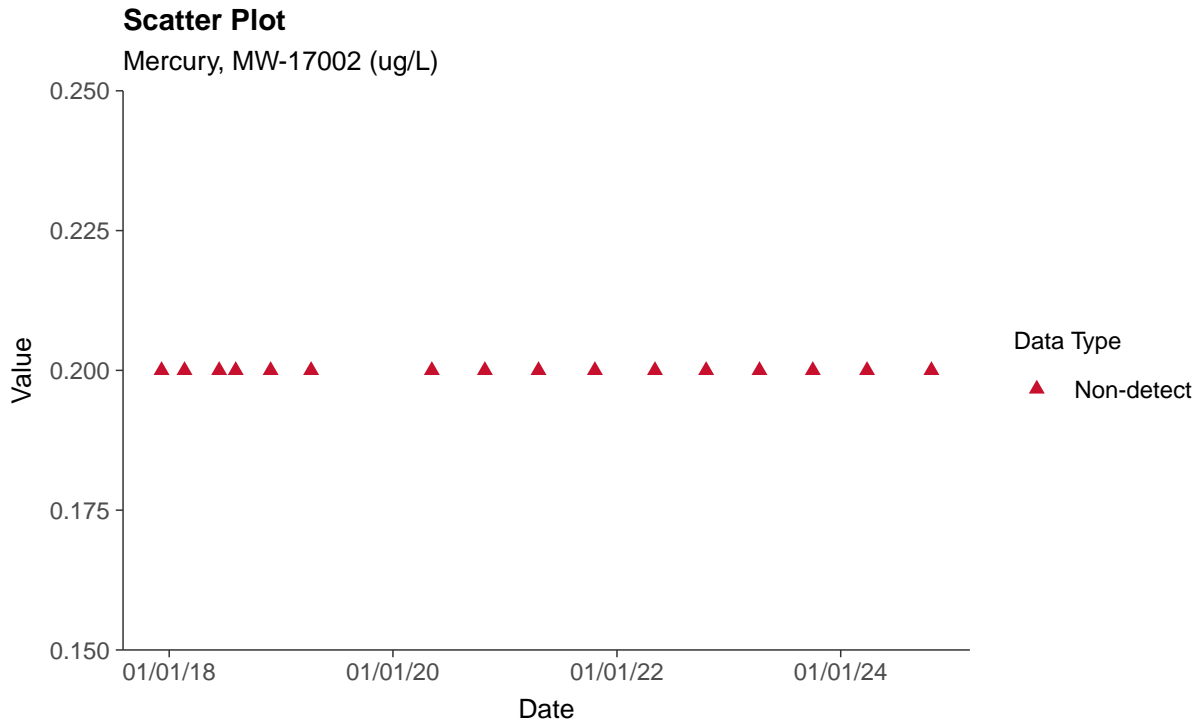
Lithium, MW-17002 (ug/L)





Appendix IV: Mercury, MW-17002

ID: 15_2_118



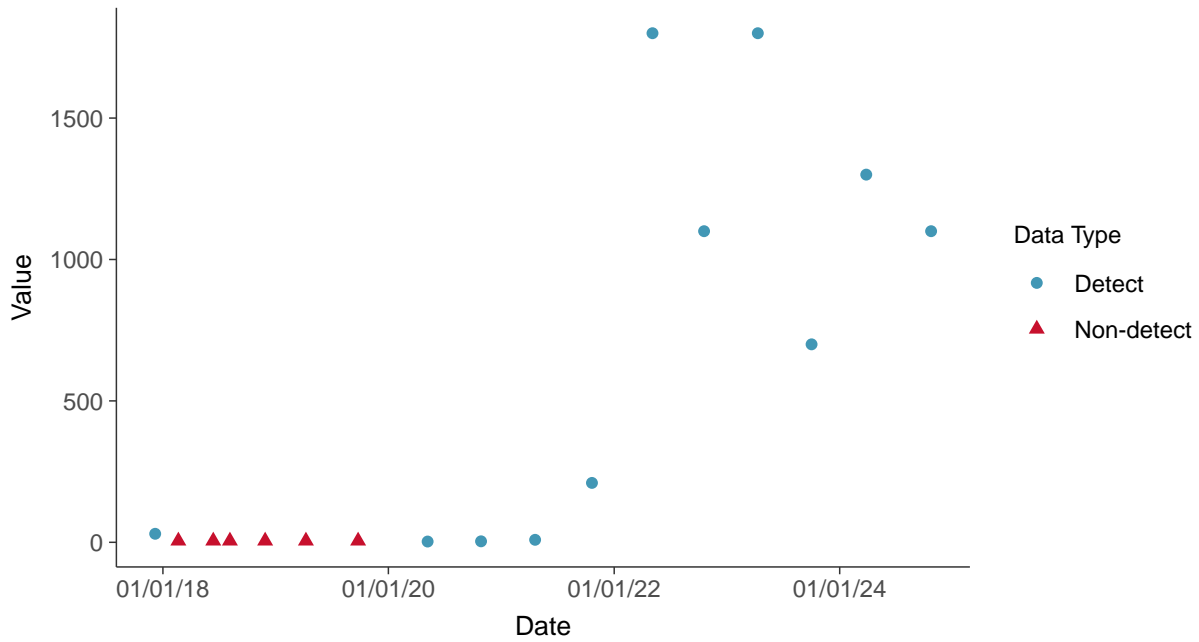


Appendix IV: Molybdenum, MW-17002

ID: 15_2_119

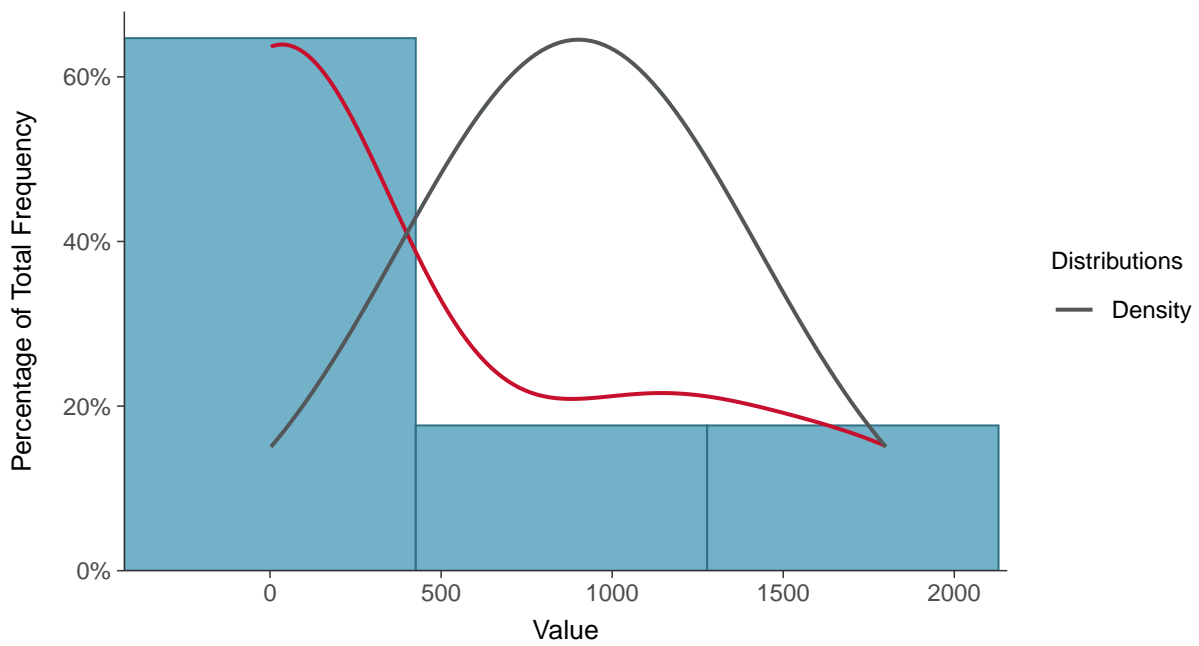
Scatter Plot

Molybdenum, MW-17002 (ug/L)



Histogram

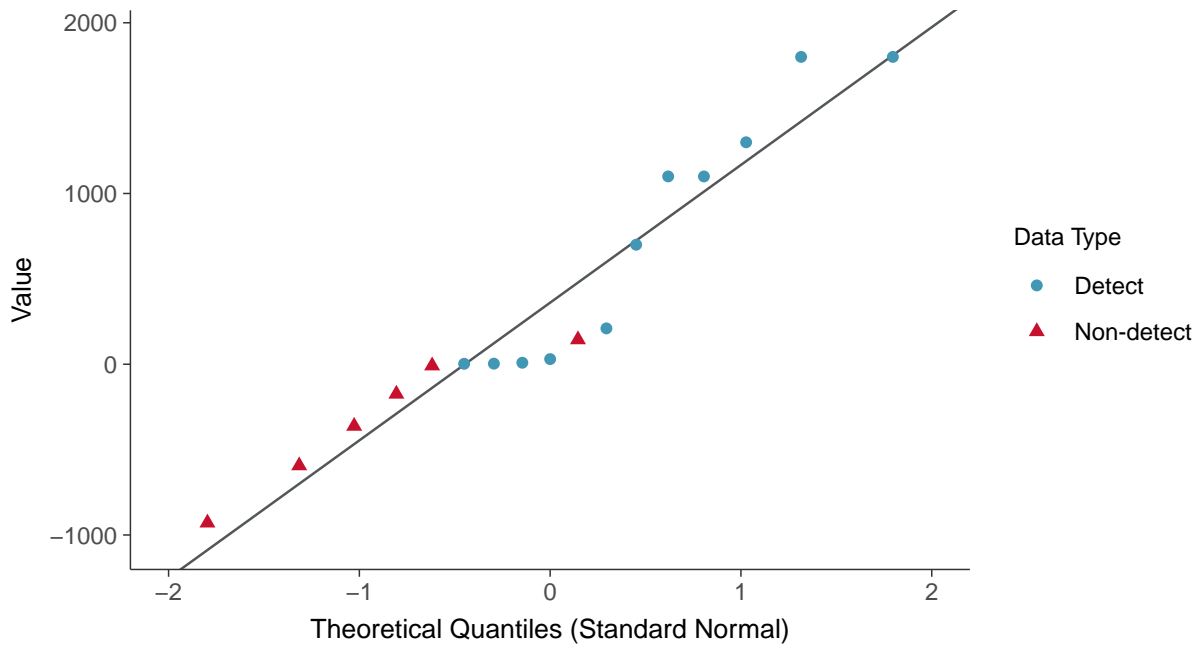
Molybdenum, MW-17002 (ug/L)





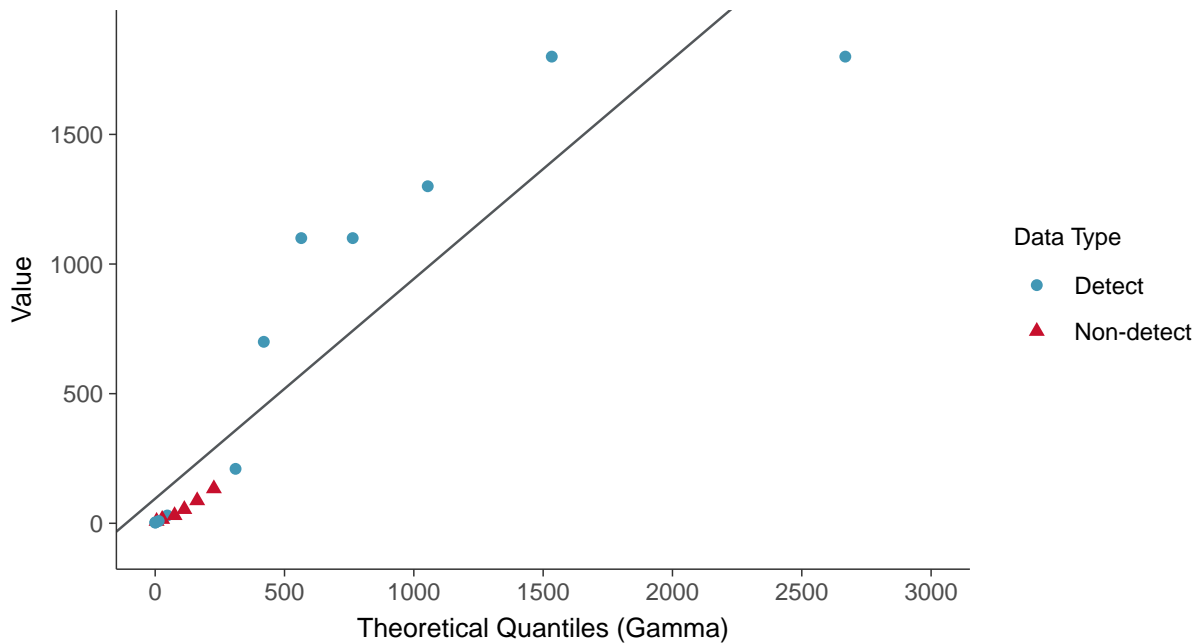
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17002 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

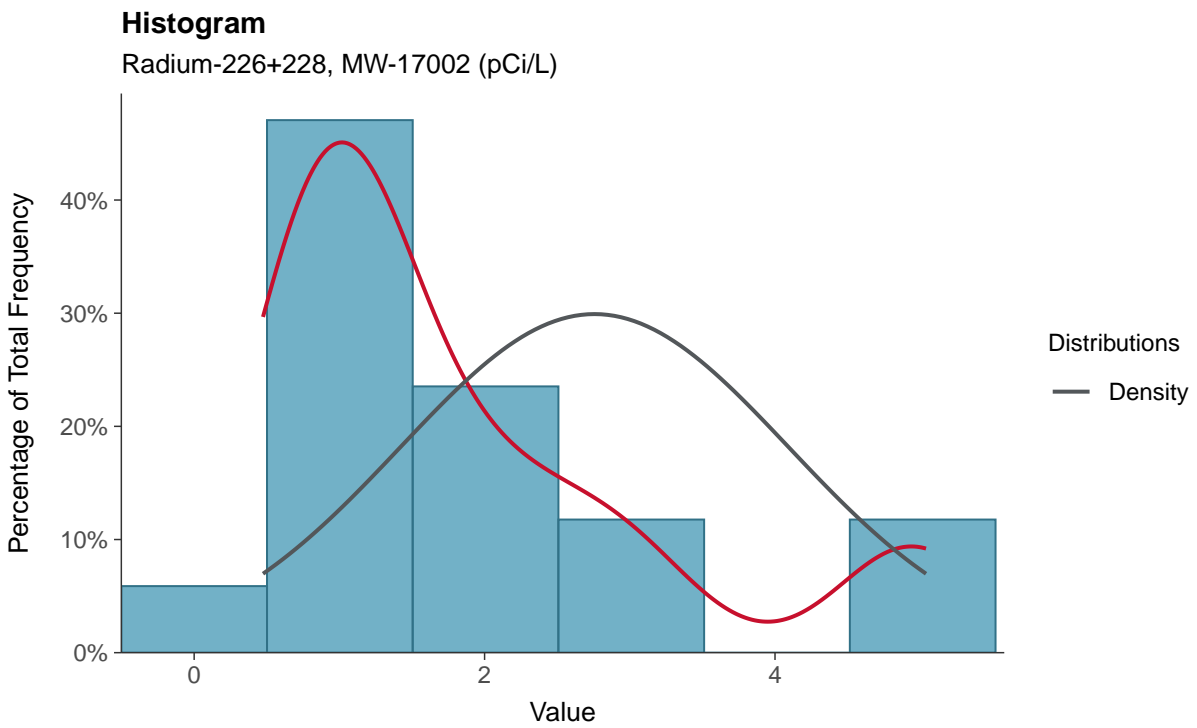
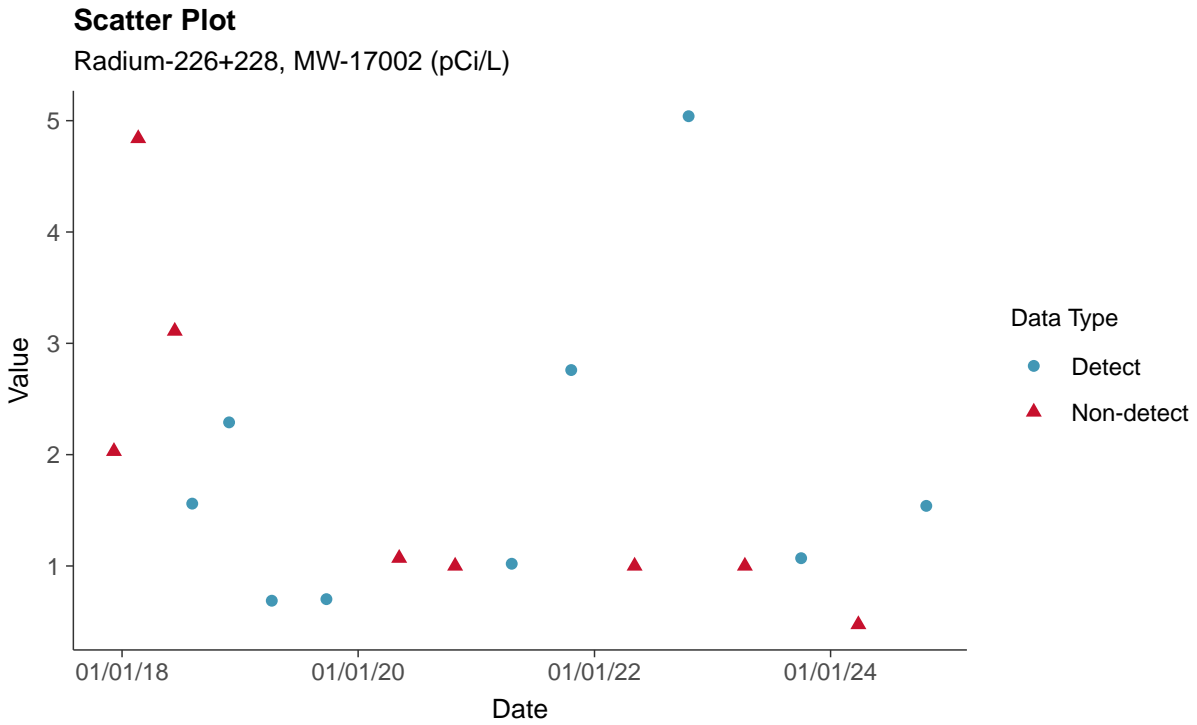
Molybdenum, MW-17002 (ug/L)





Appendix IV: Radium-226+228, MW-17002

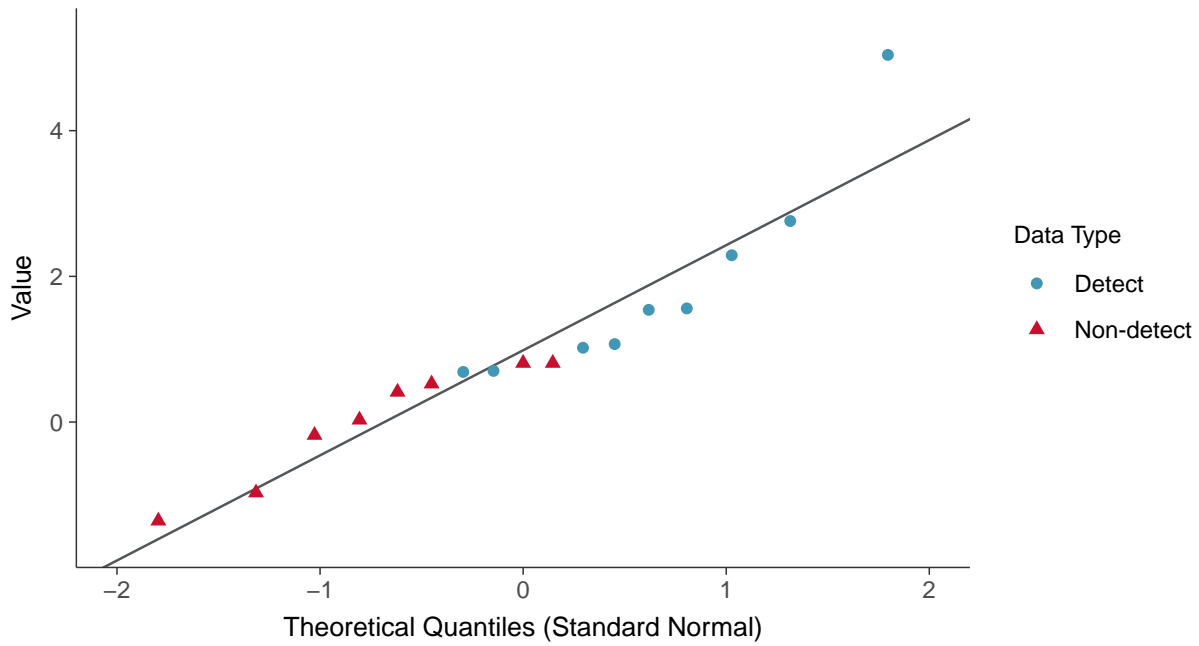
ID: 15_2_125





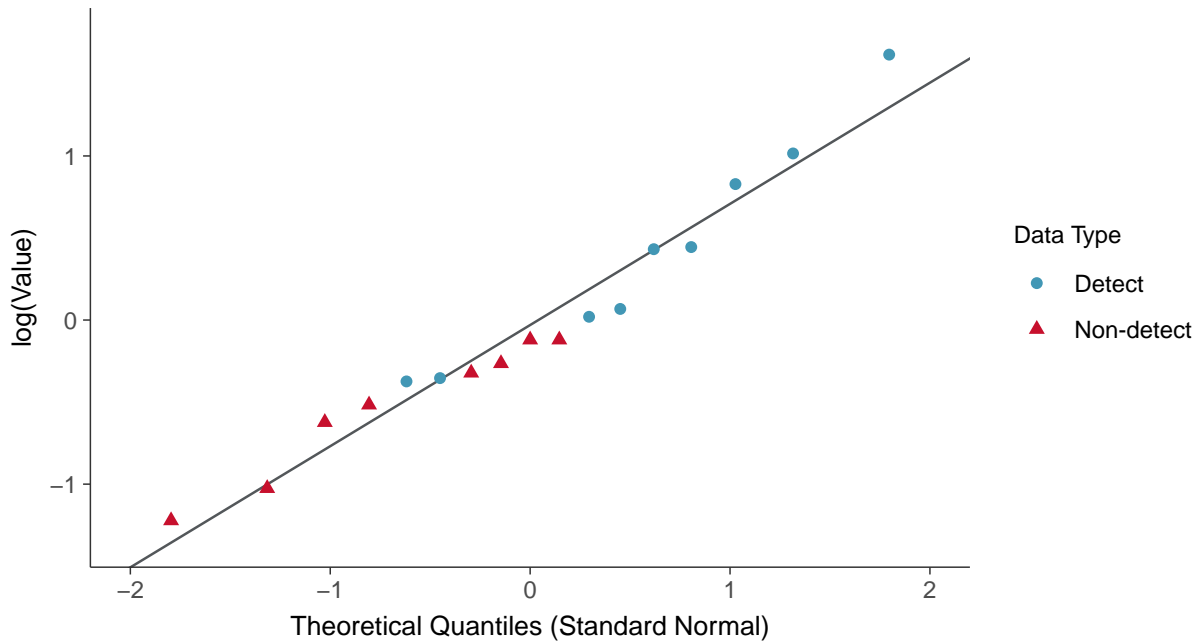
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17002 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

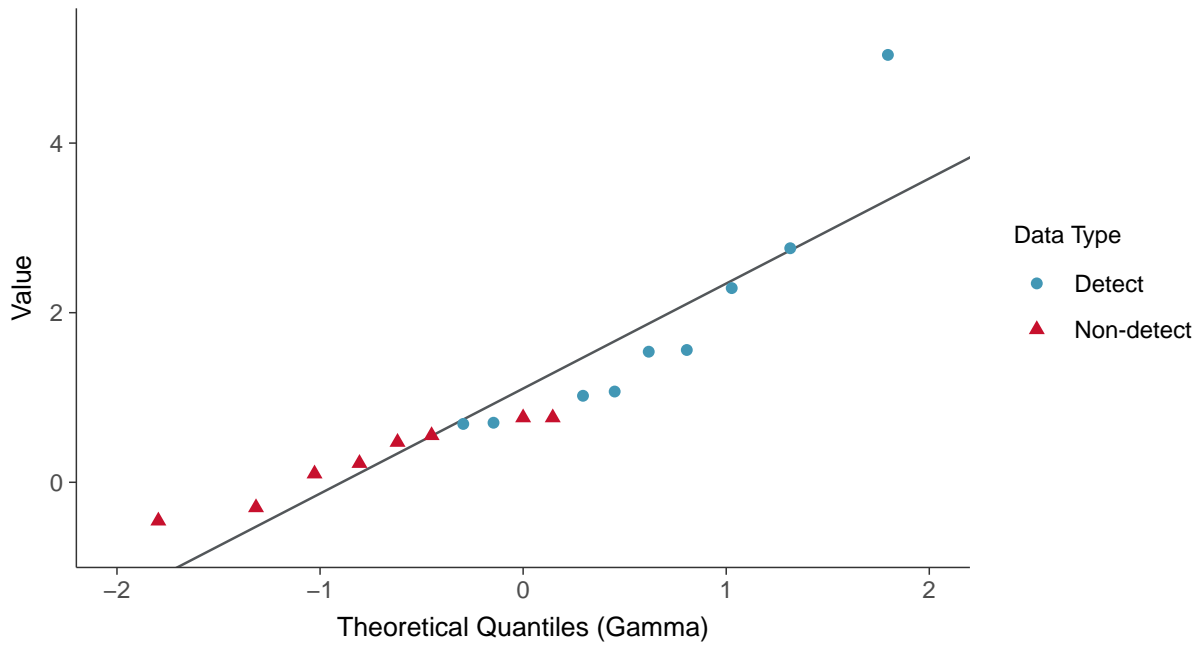
Radium-226+228, MW-17002 (pCi/L)





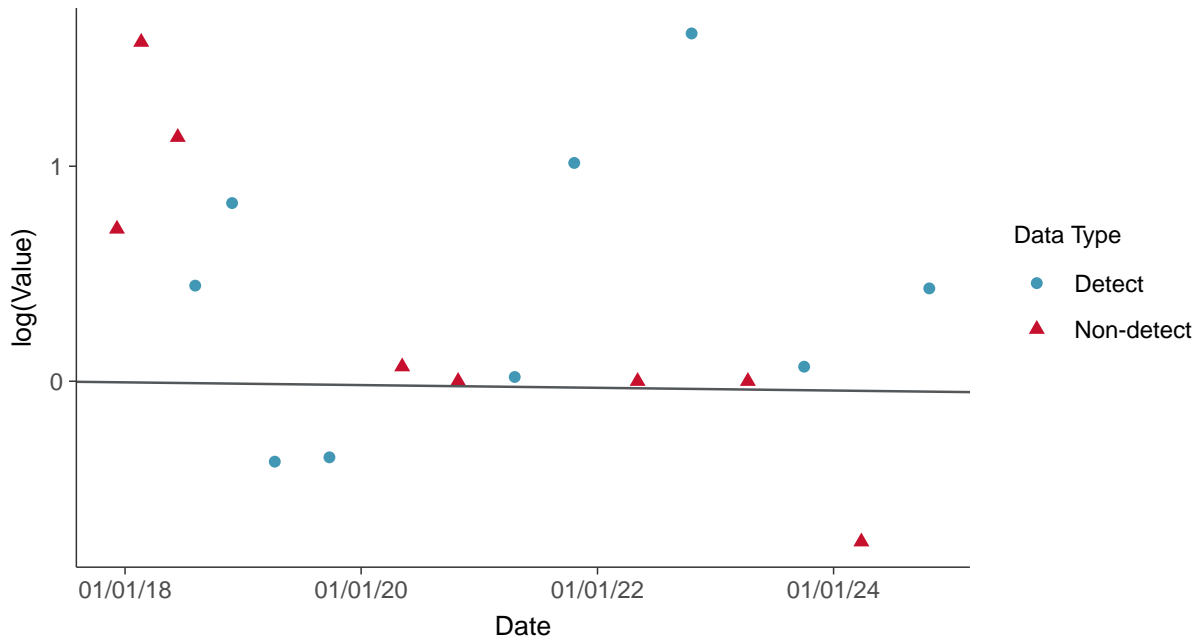
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17002 (pCi/L)



Trend Regression: Lognormal MLE

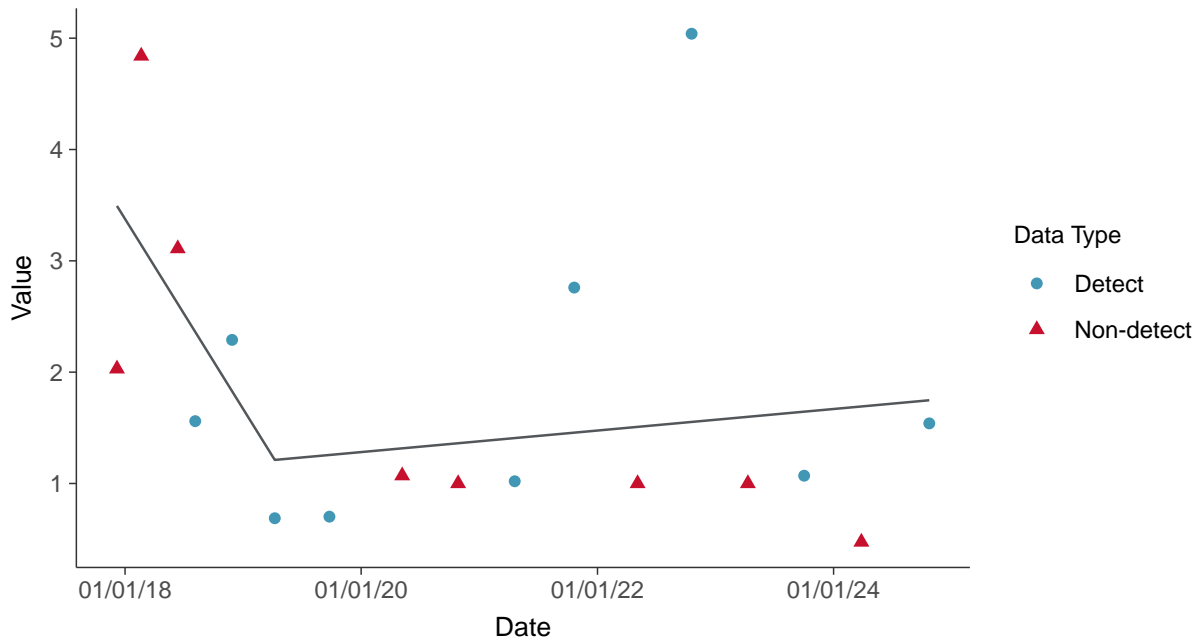
Radium-226+228, MW-17002 (pCi/L)





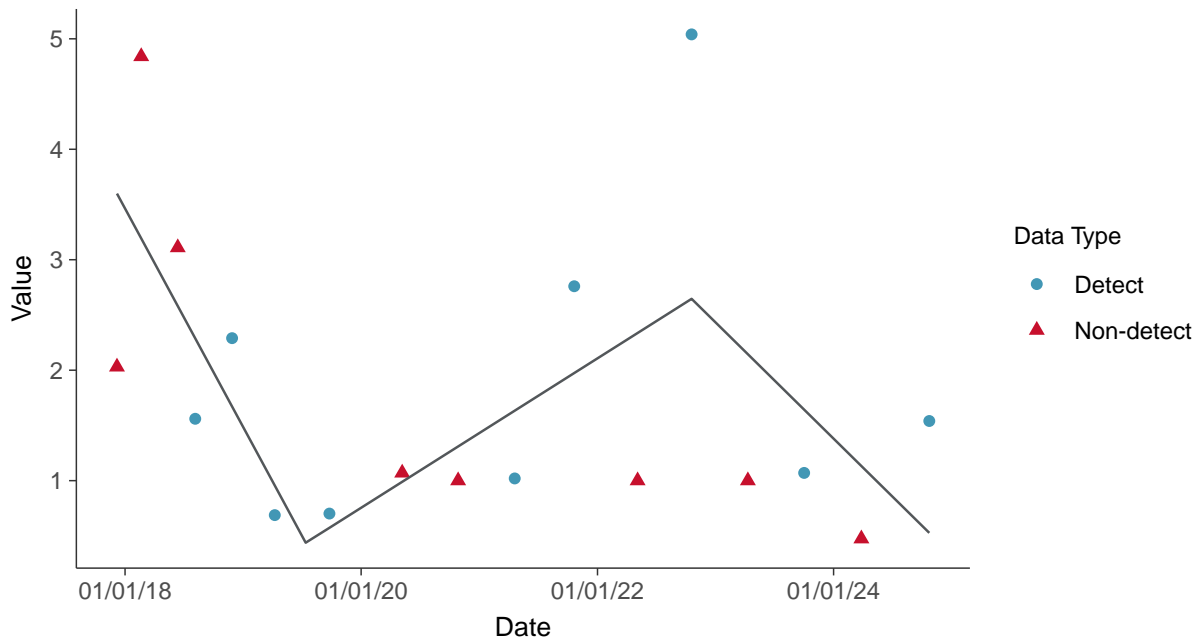
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-17002 (pCi/L)



Trend Regression: Piecewise Linear-Linear-Linear

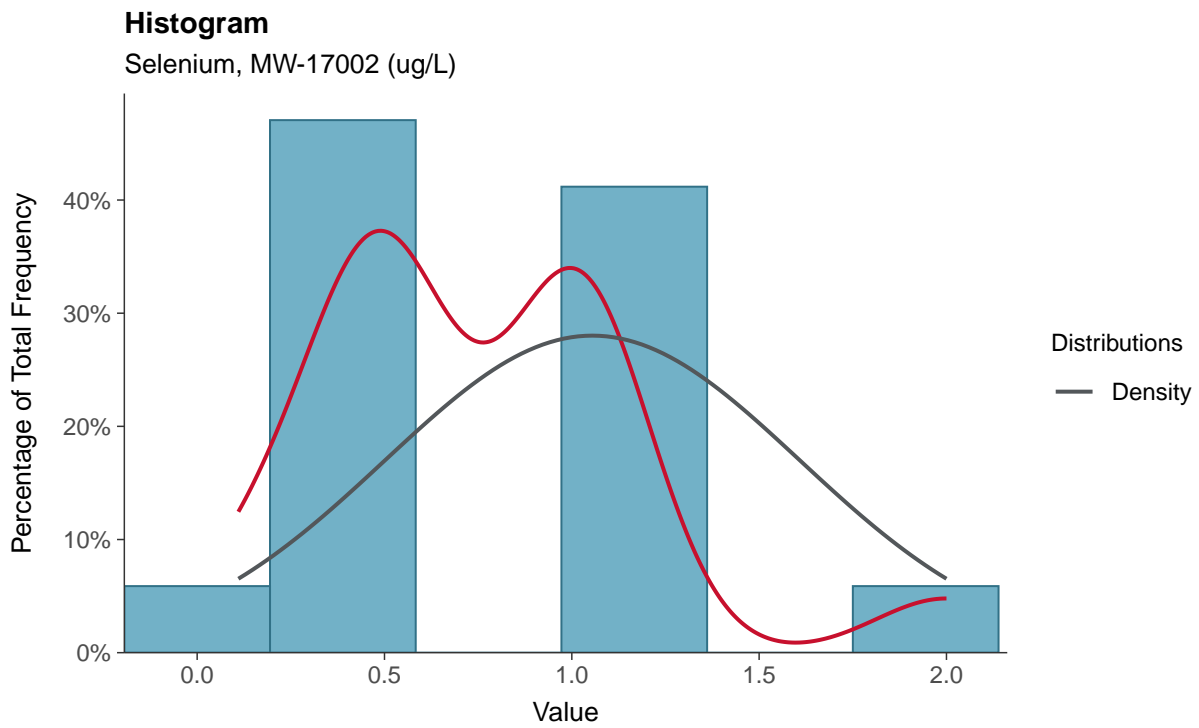
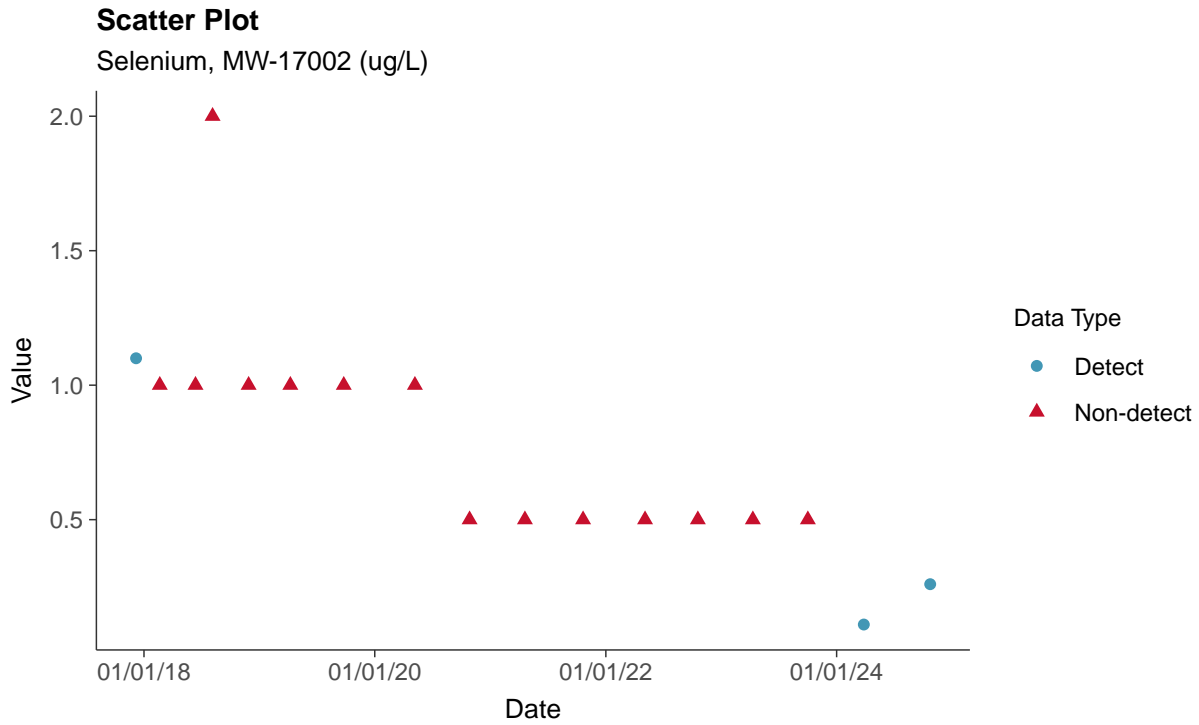
Radium-226+228, MW-17002 (pCi/L)





Appendix IV: Selenium, MW-17002

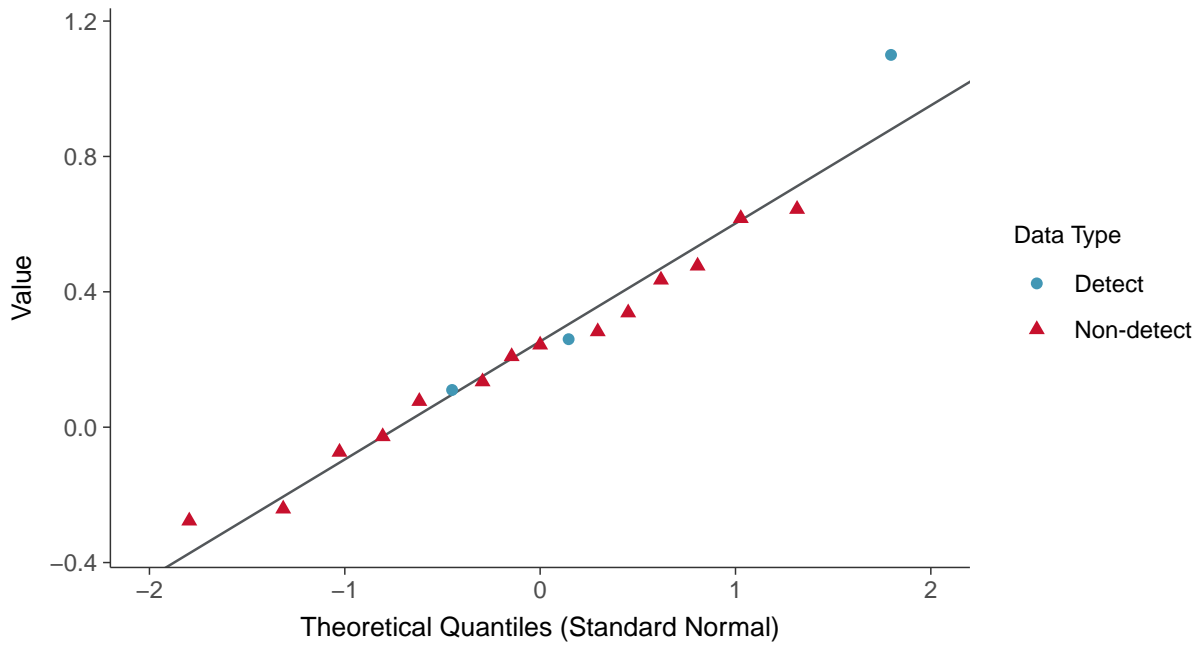
ID: 15_2_127





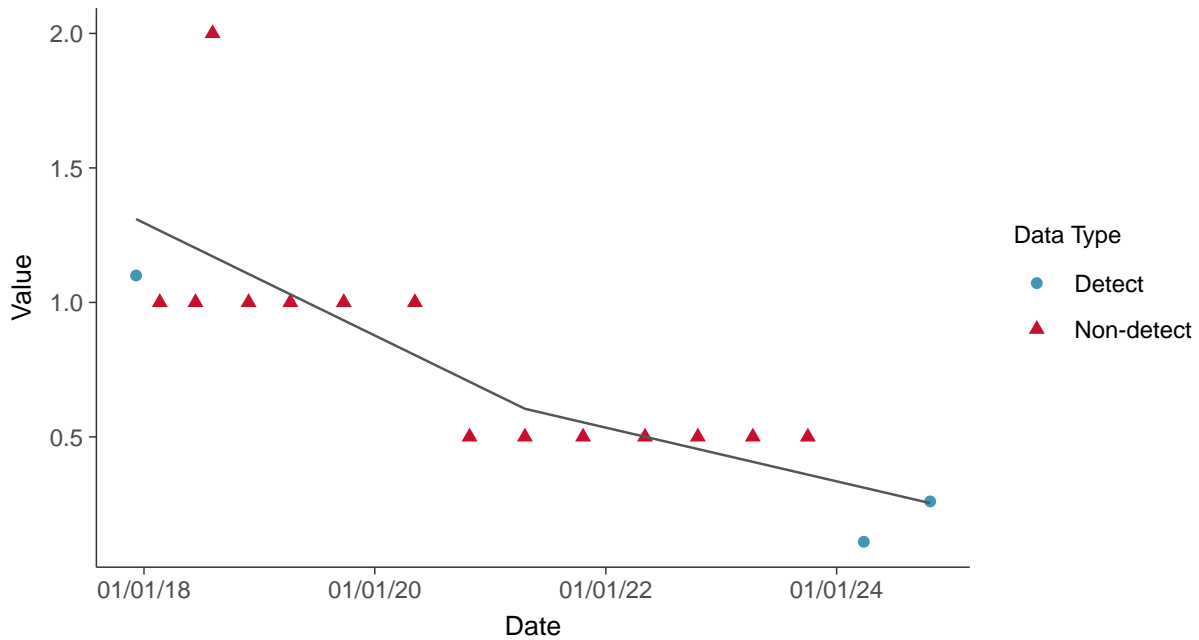
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-17002 (ug/L)



Trend Regression: Piecewise Linear-Linear

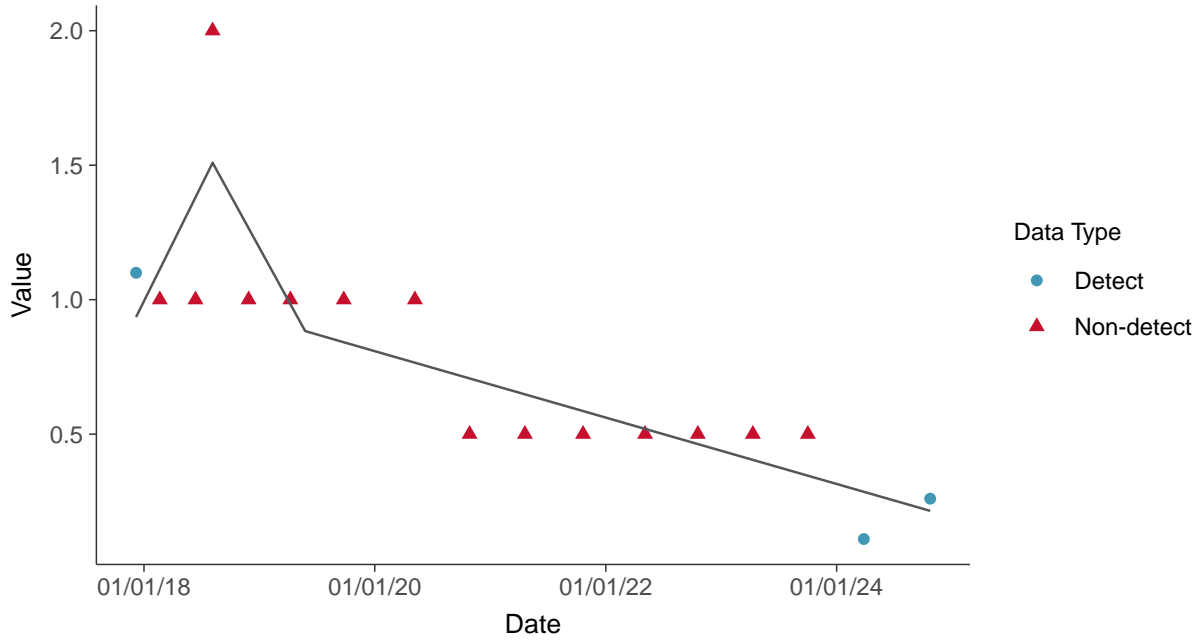
Selenium, MW-17002 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

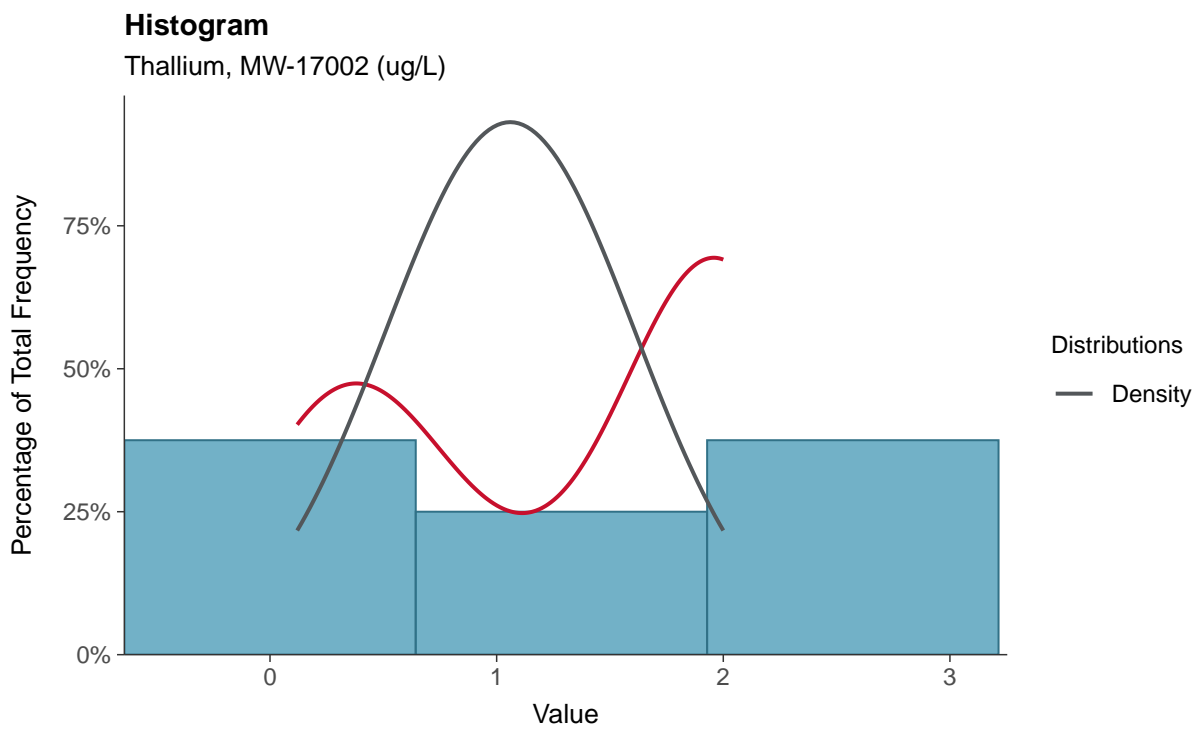
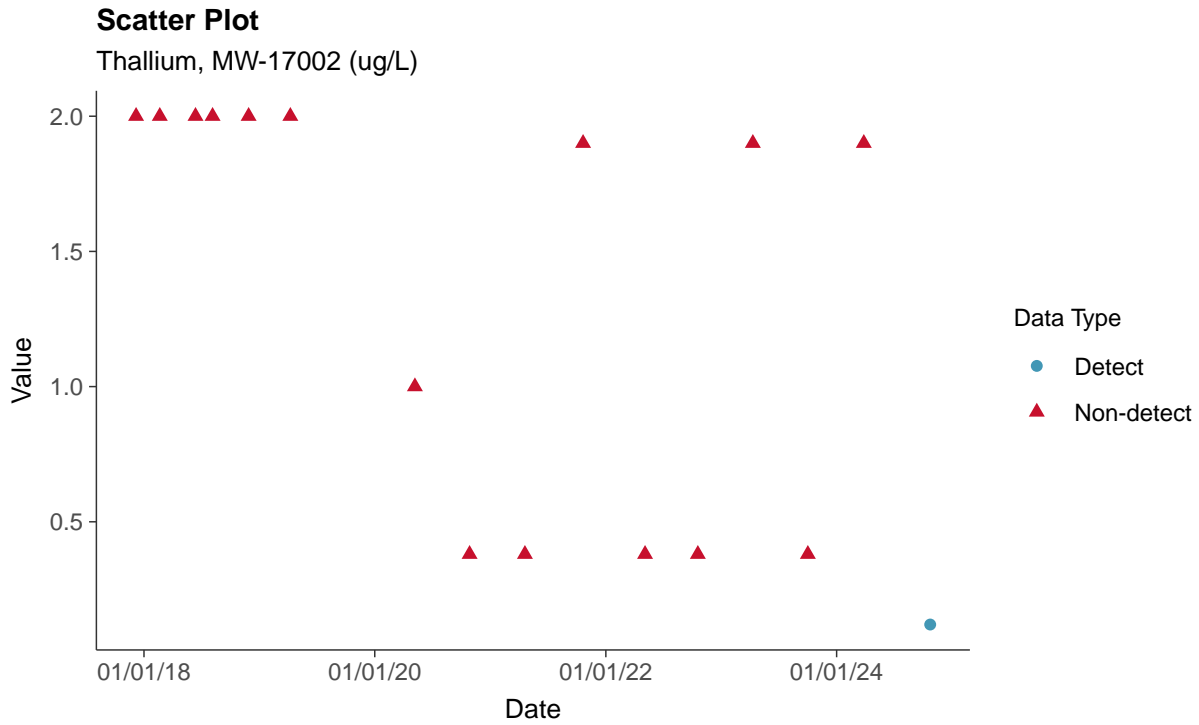
Selenium, MW-17002 (ug/L)





Appendix IV: Thallium, MW-17002

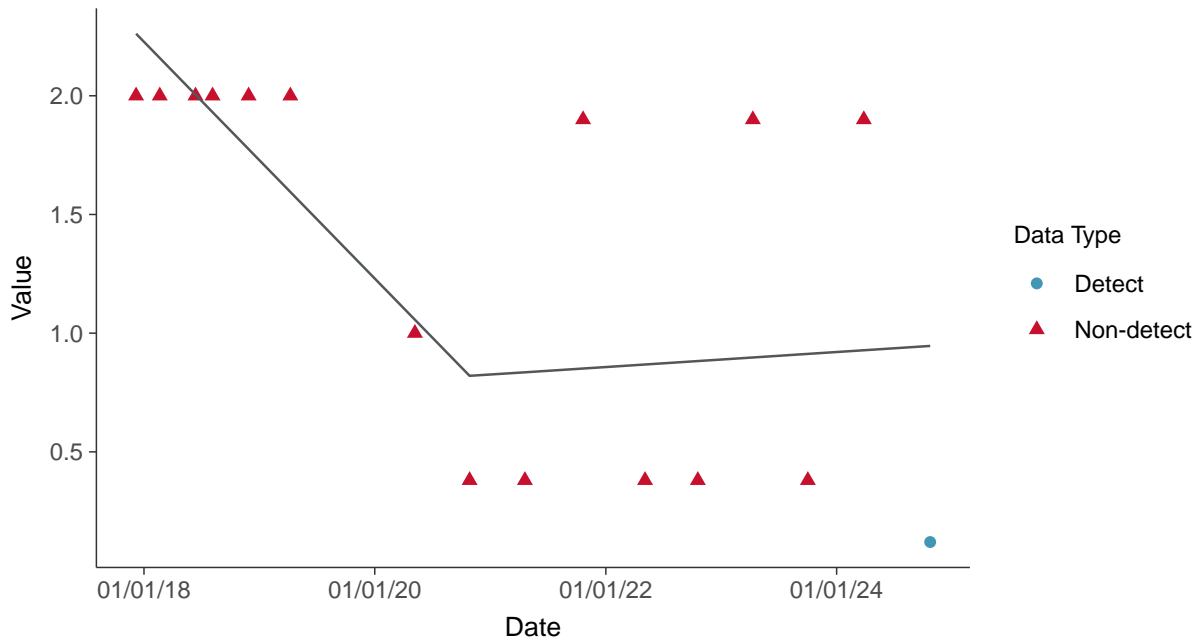
ID: 15_2_131





Trend Regression: Piecewise Linear-Linear

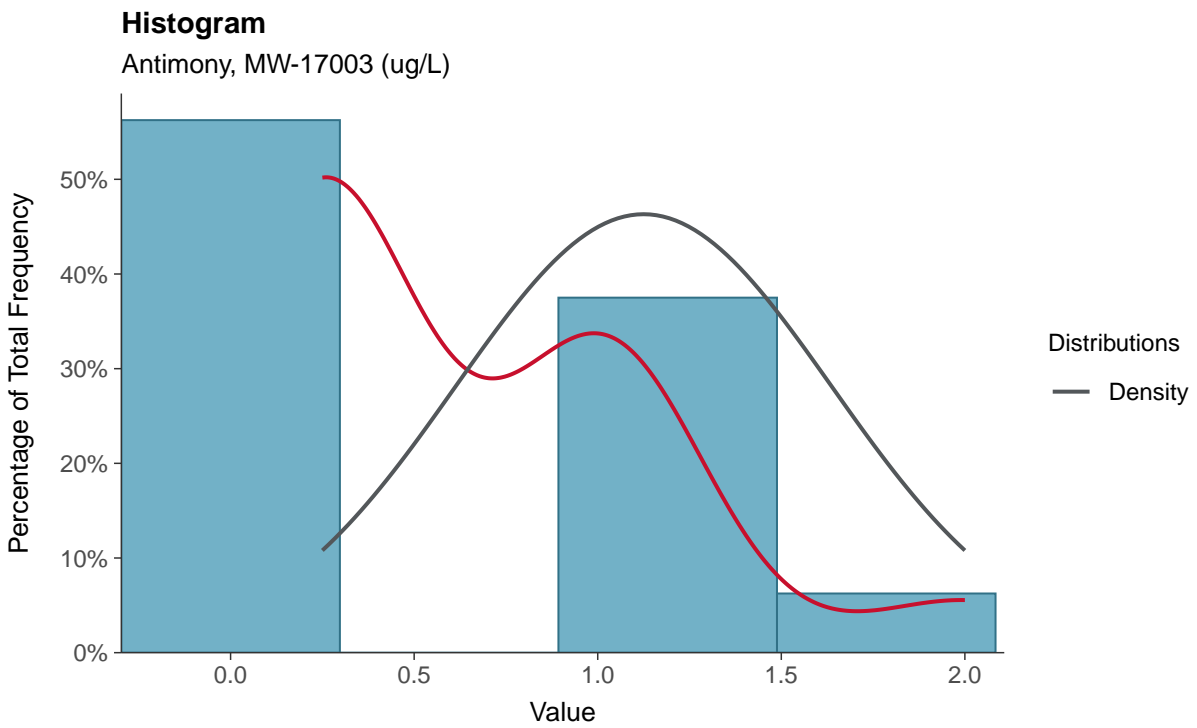
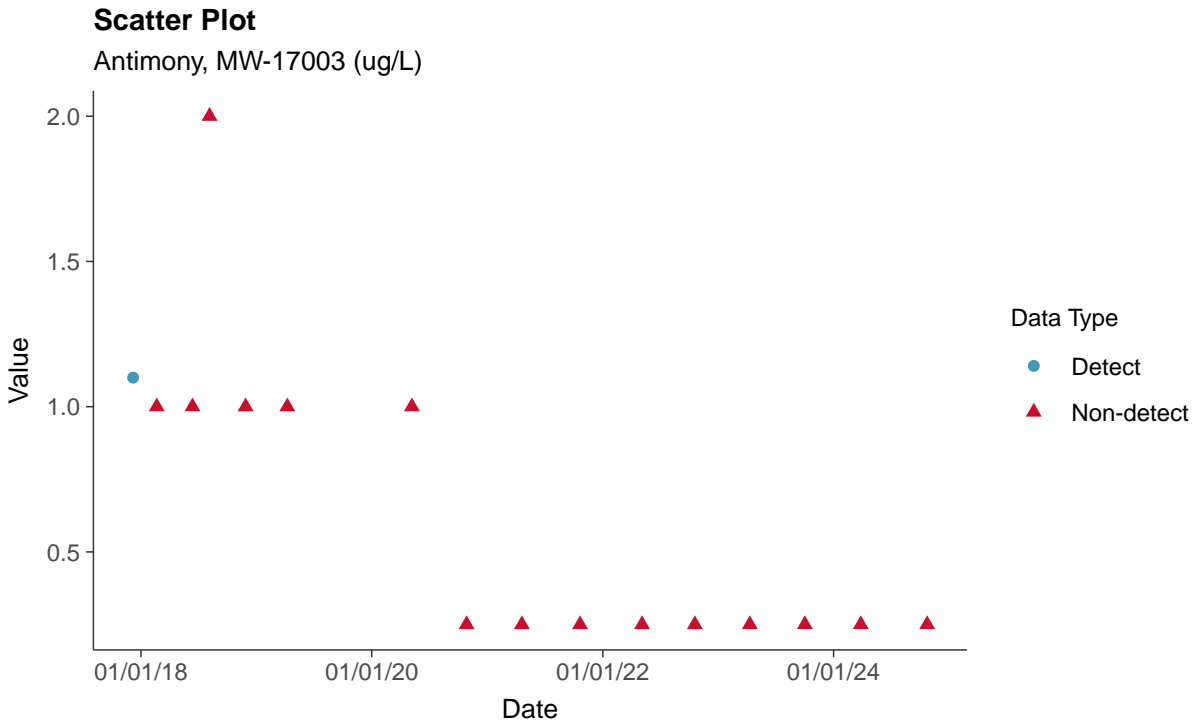
Thallium, MW-17002 (ug/L)





Appendix IV: Antimony, MW-17003

ID: 16_2_101



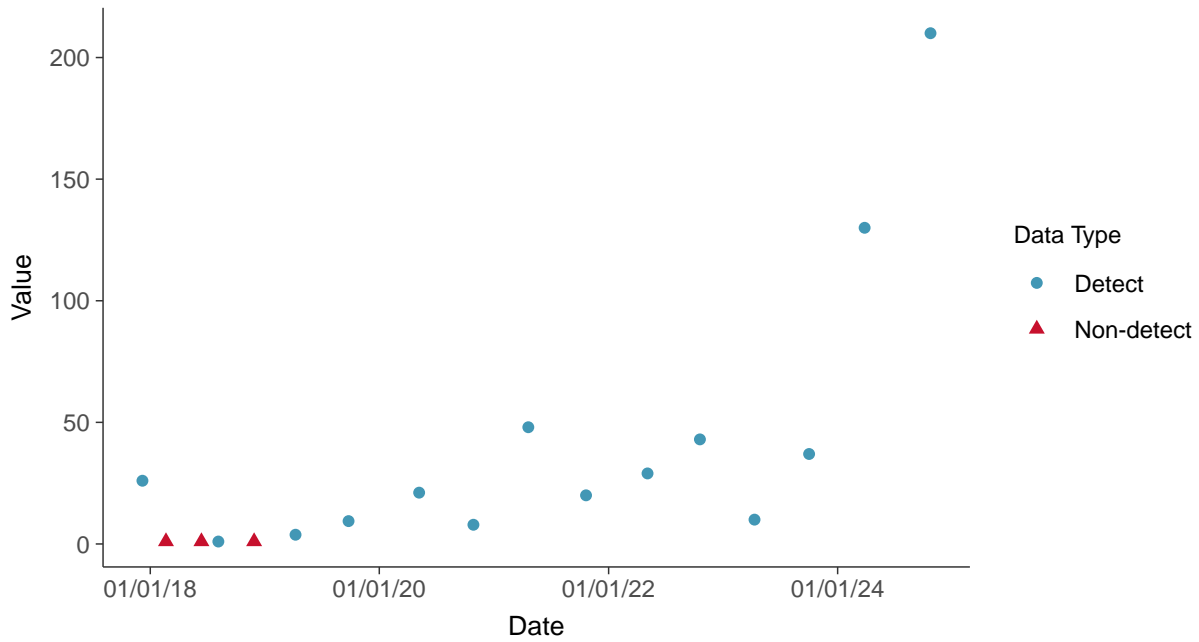


Appendix IV: Arsenic, MW-17003

ID: 16_2_102

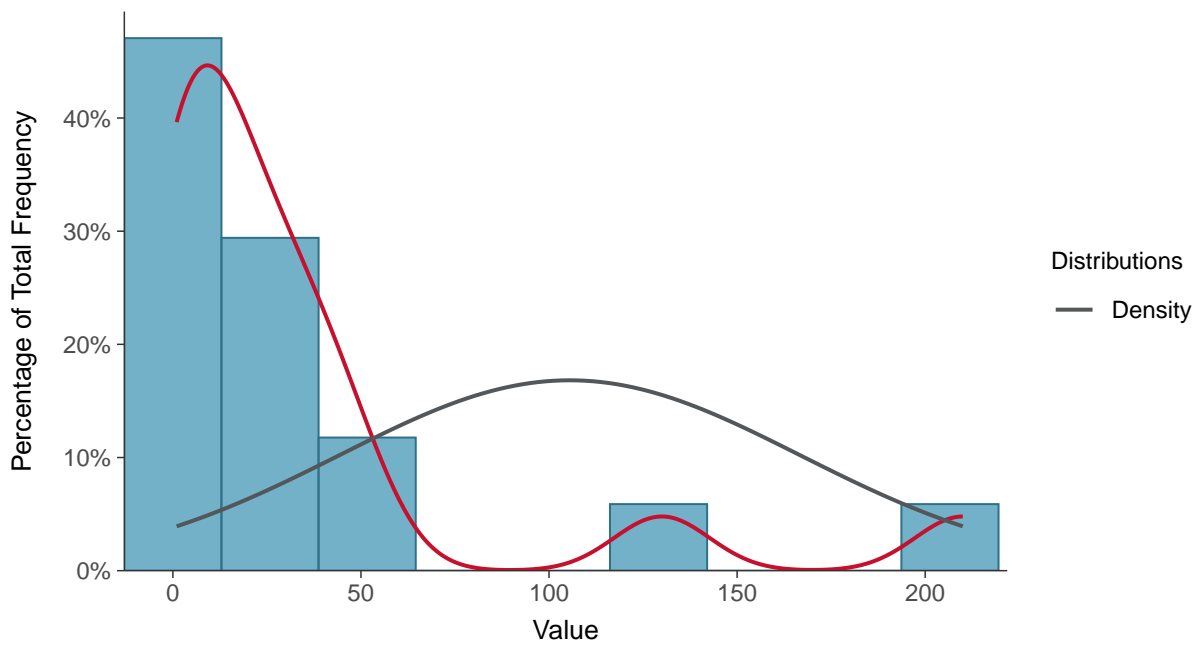
Scatter Plot

Arsenic, MW-17003 (ug/L)



Histogram

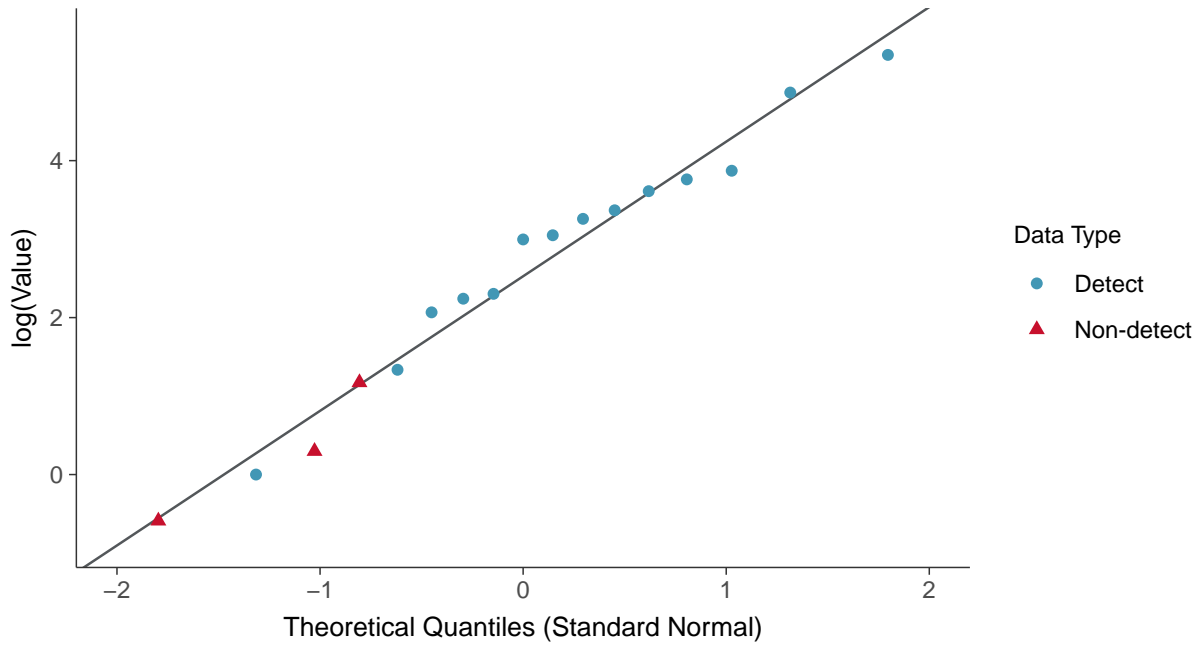
Arsenic, MW-17003 (ug/L)





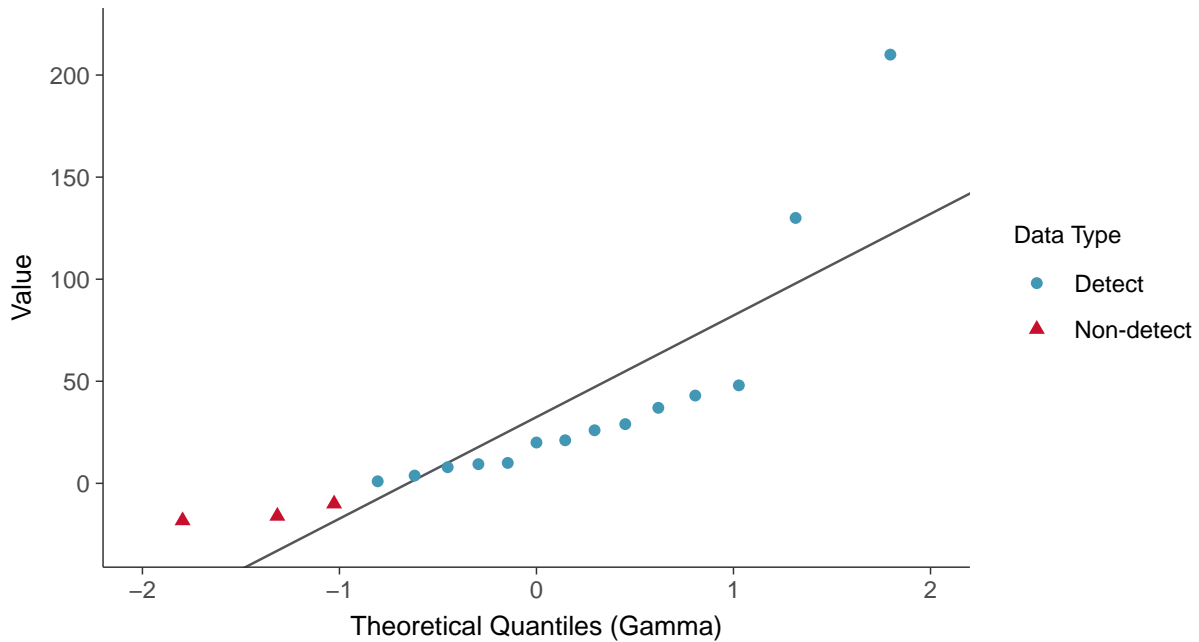
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17003 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

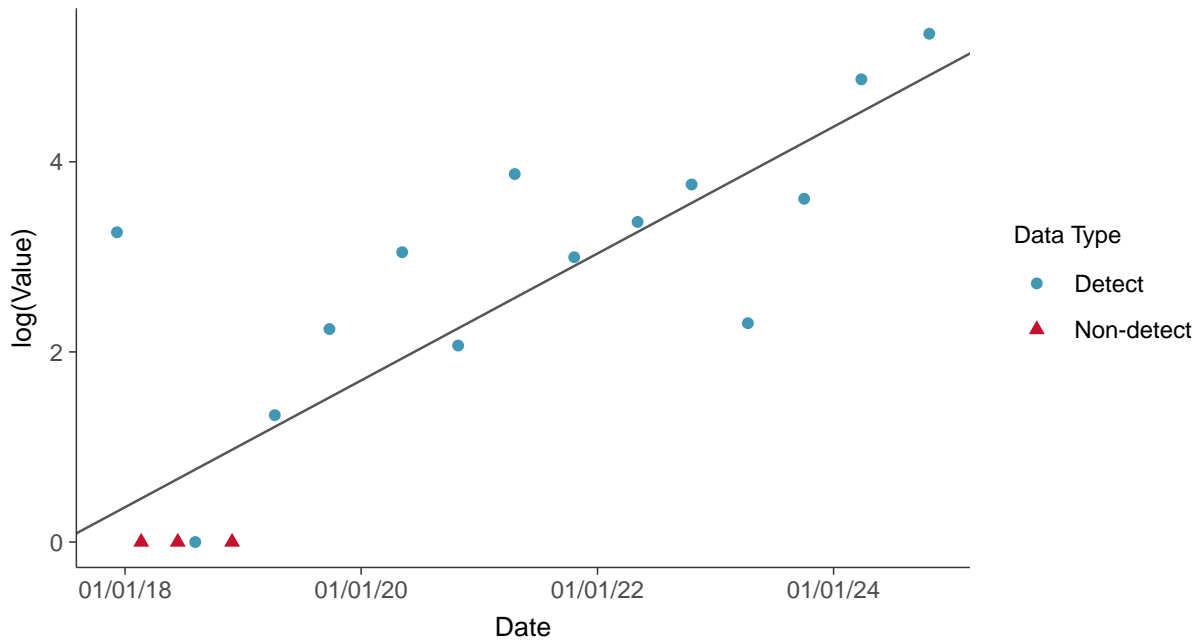
Arsenic, MW-17003 (ug/L)





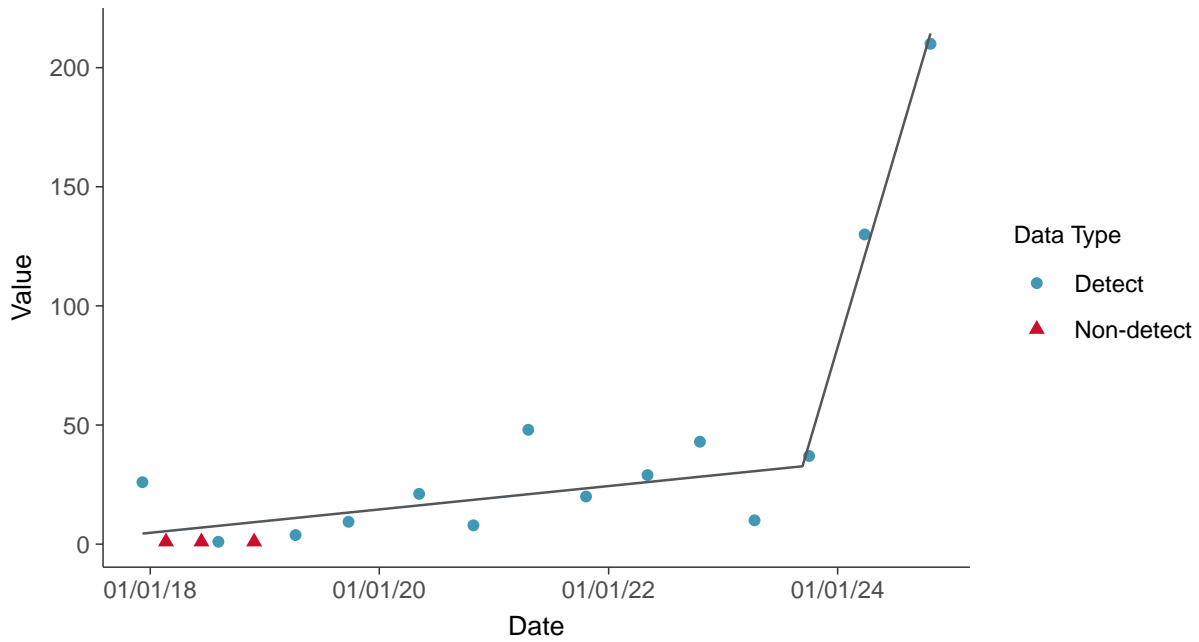
Trend Regression: Lognormal MLE

Arsenic, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

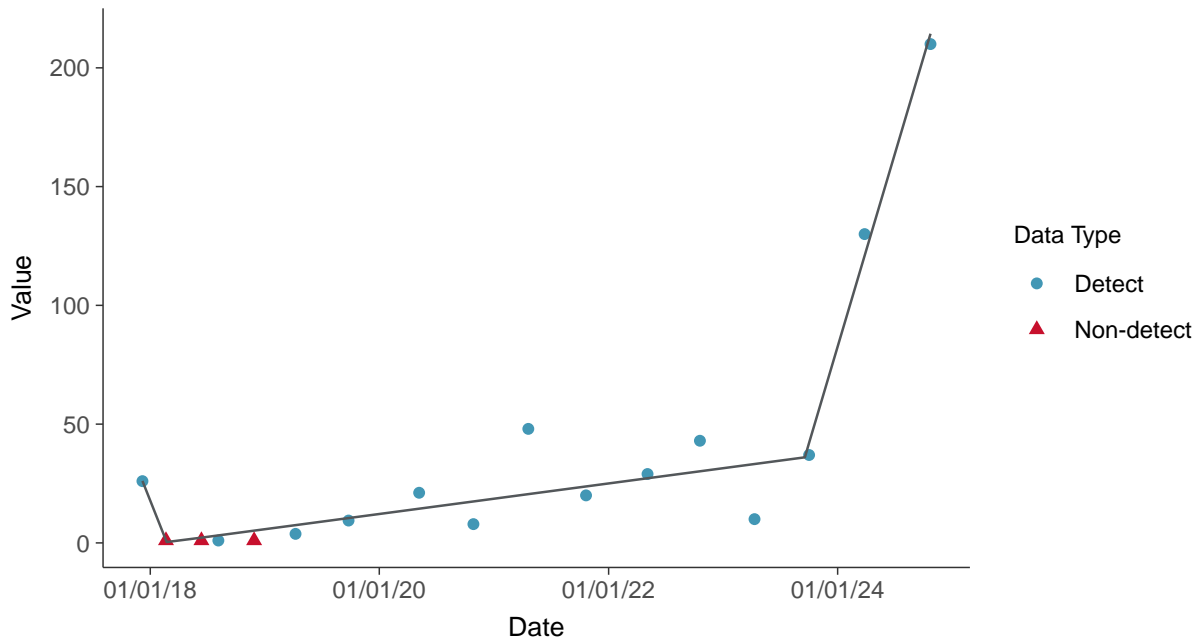
Arsenic, MW-17003 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-17003 (ug/L)



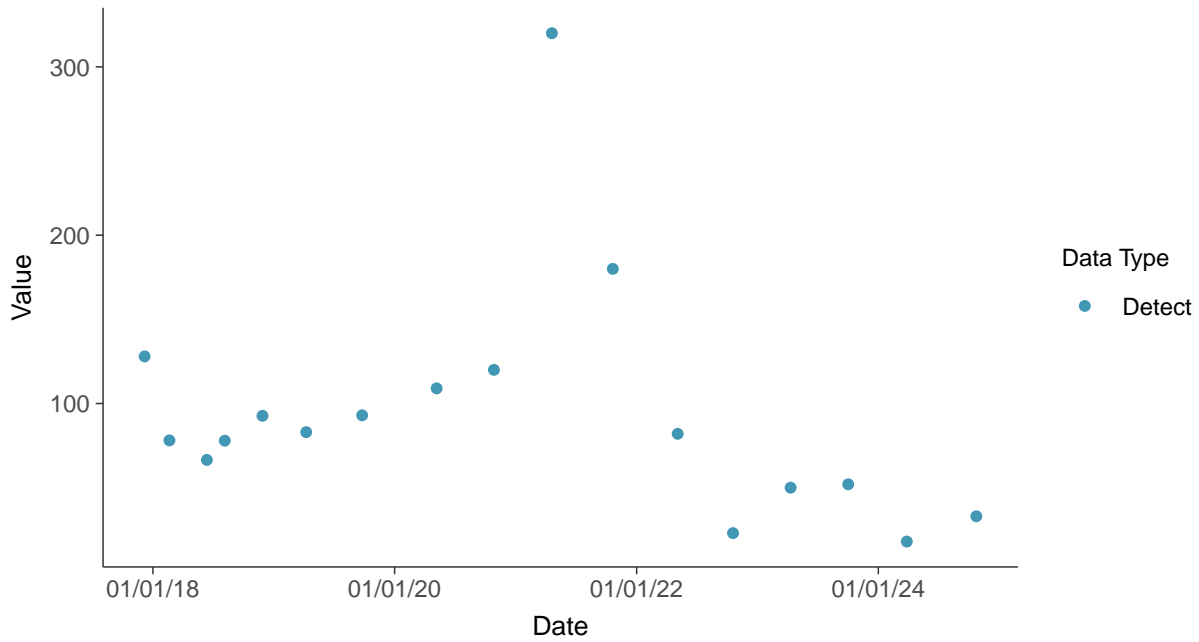


Appendix IV: Barium, MW-17003

ID: 16_2_103

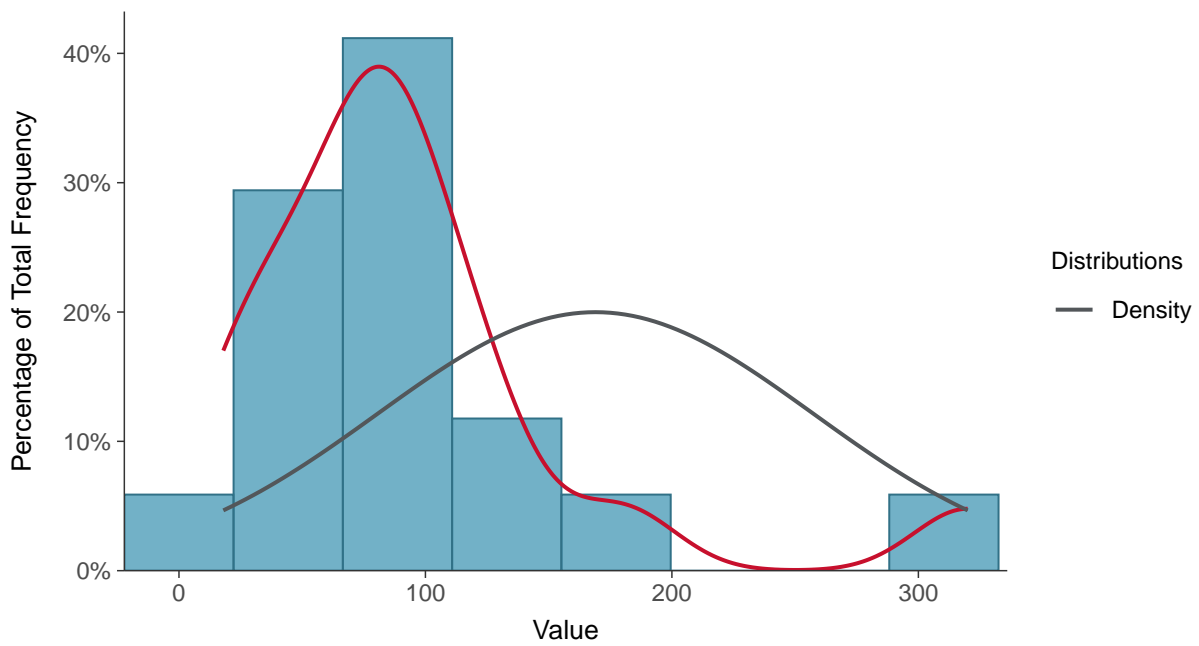
Scatter Plot

Barium, MW-17003 (ug/L)



Histogram

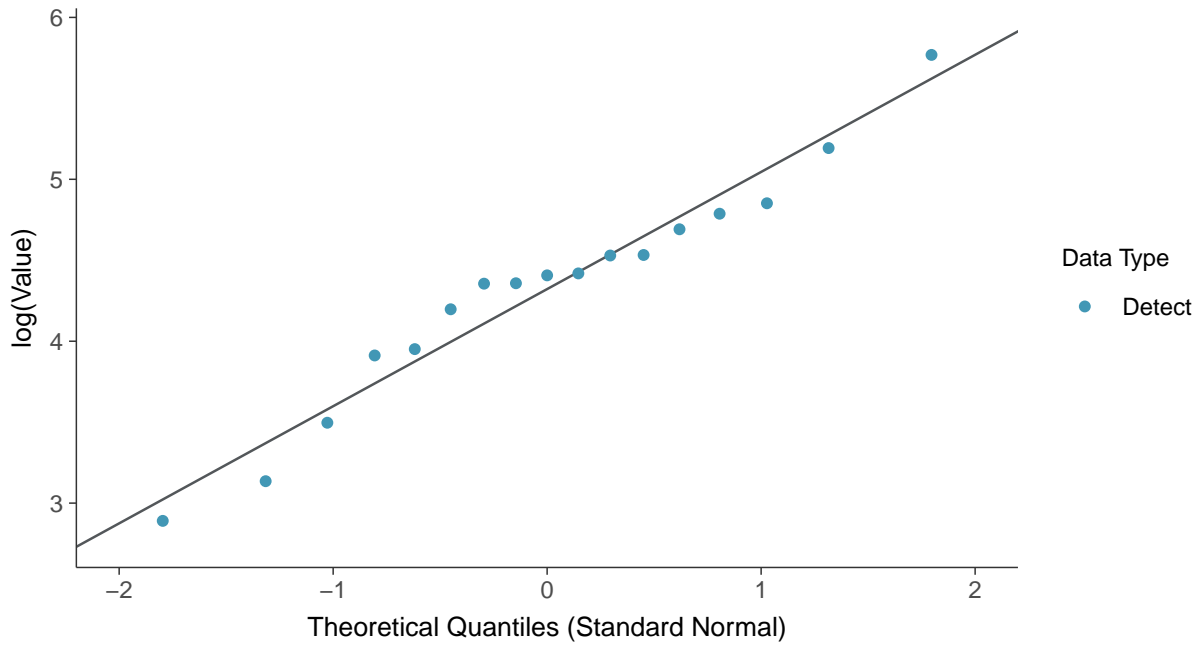
Barium, MW-17003 (ug/L)





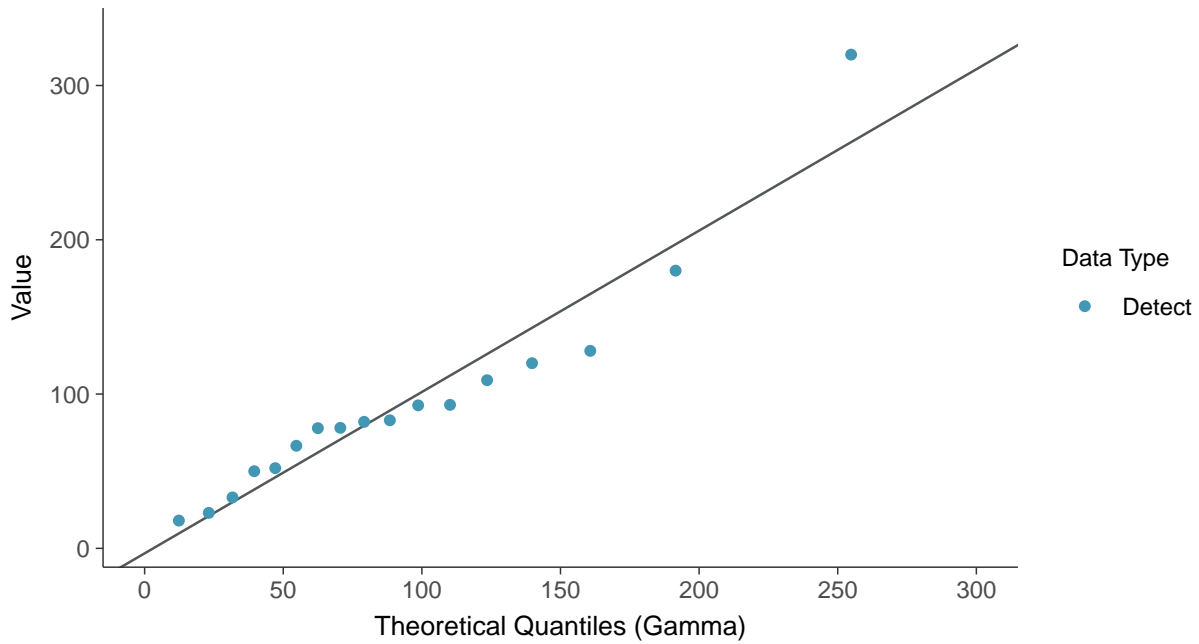
Lognormal Q-Q plot

Barium, MW-17003 (ug/L)



Gamma Q-Q plot

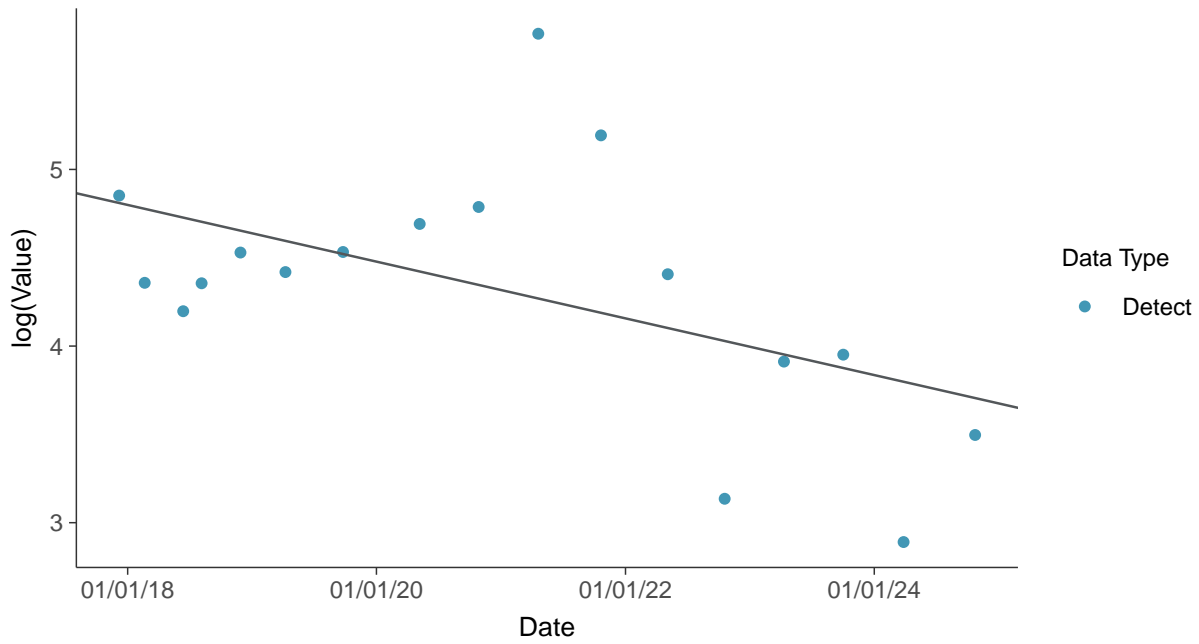
Barium, MW-17003 (ug/L)





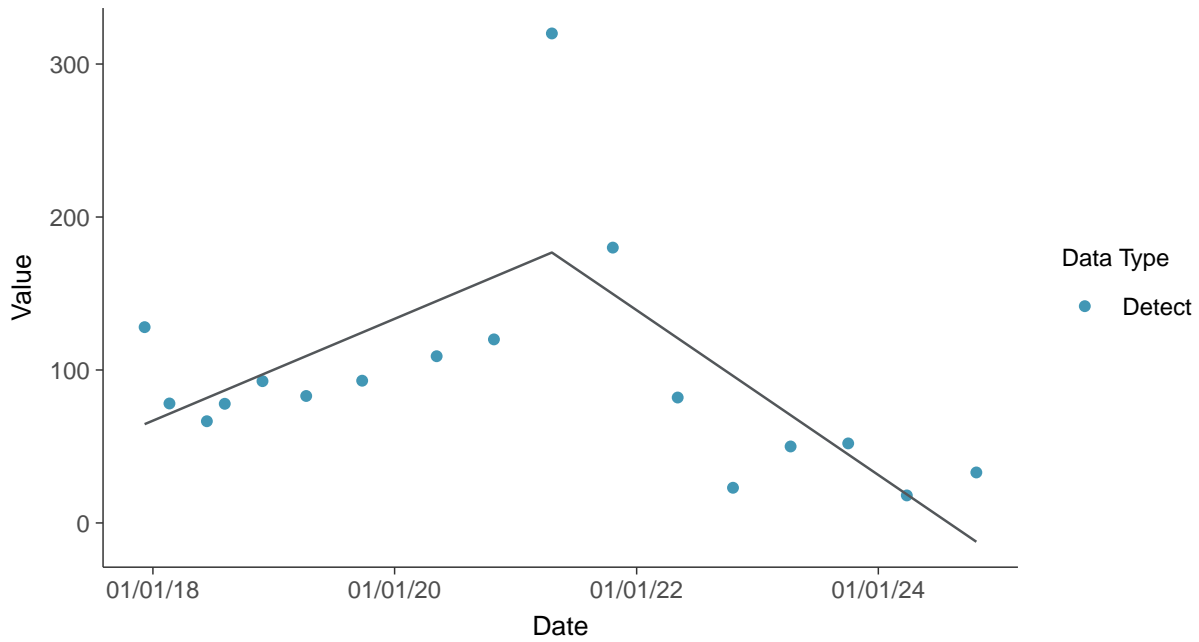
Trend Regression: Lognormal MLE

Barium, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

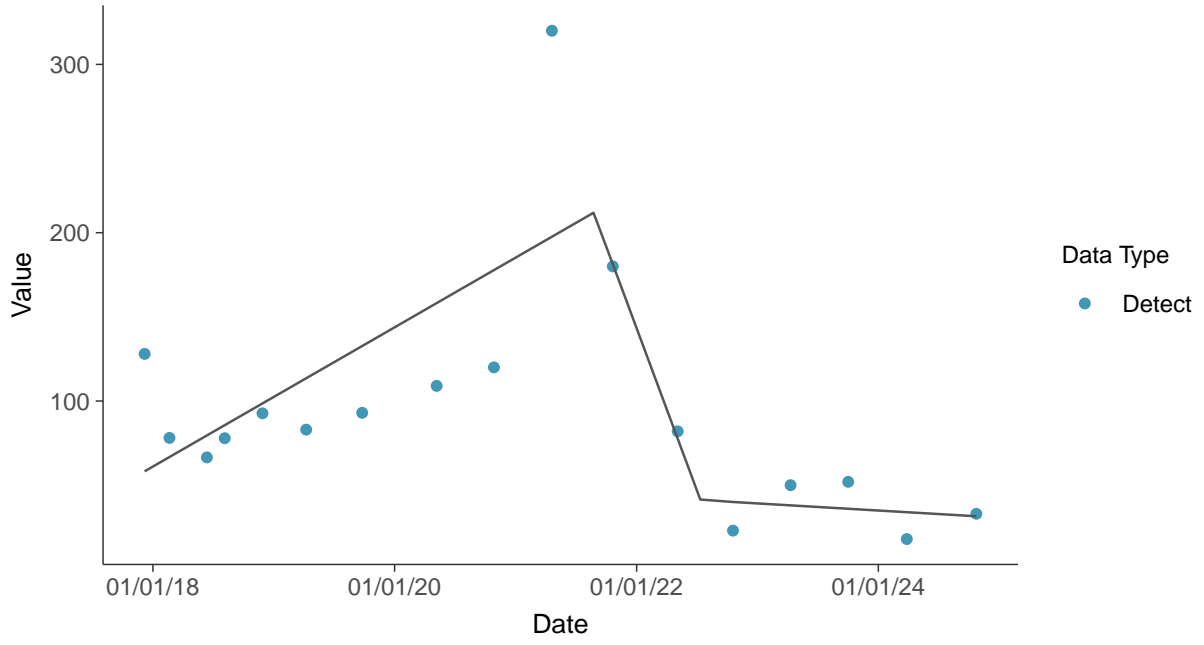
Barium, MW-17003 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

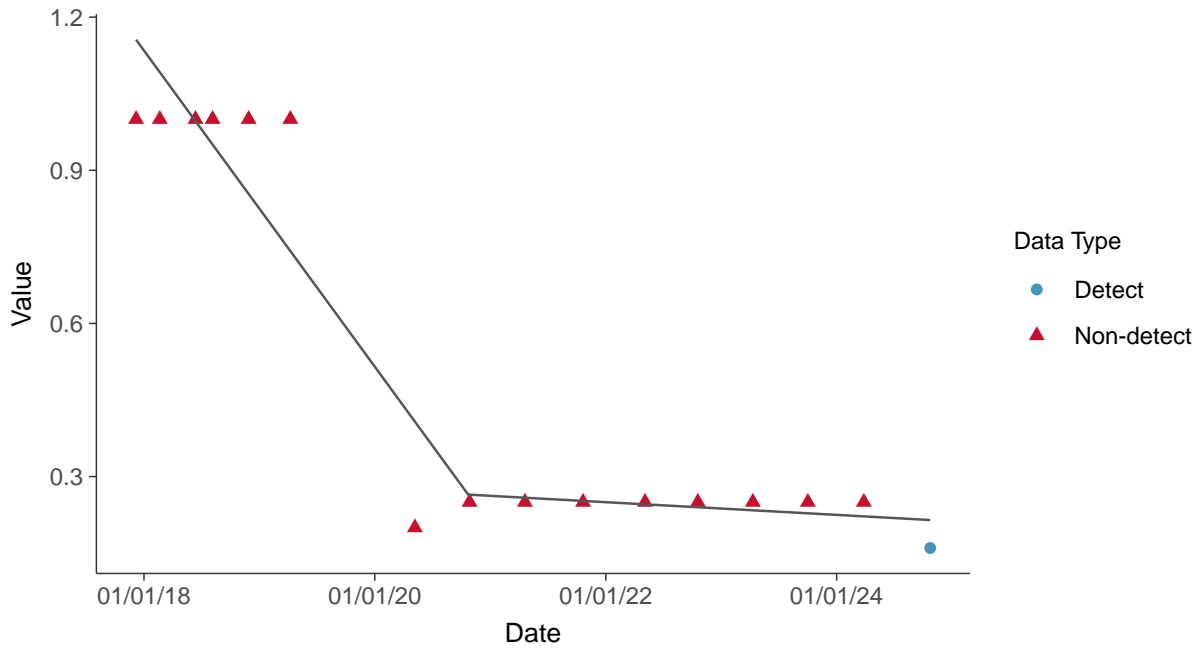
Barium, MW-17003 (ug/L)





Trend Regression: Piecewise Linear-Linear

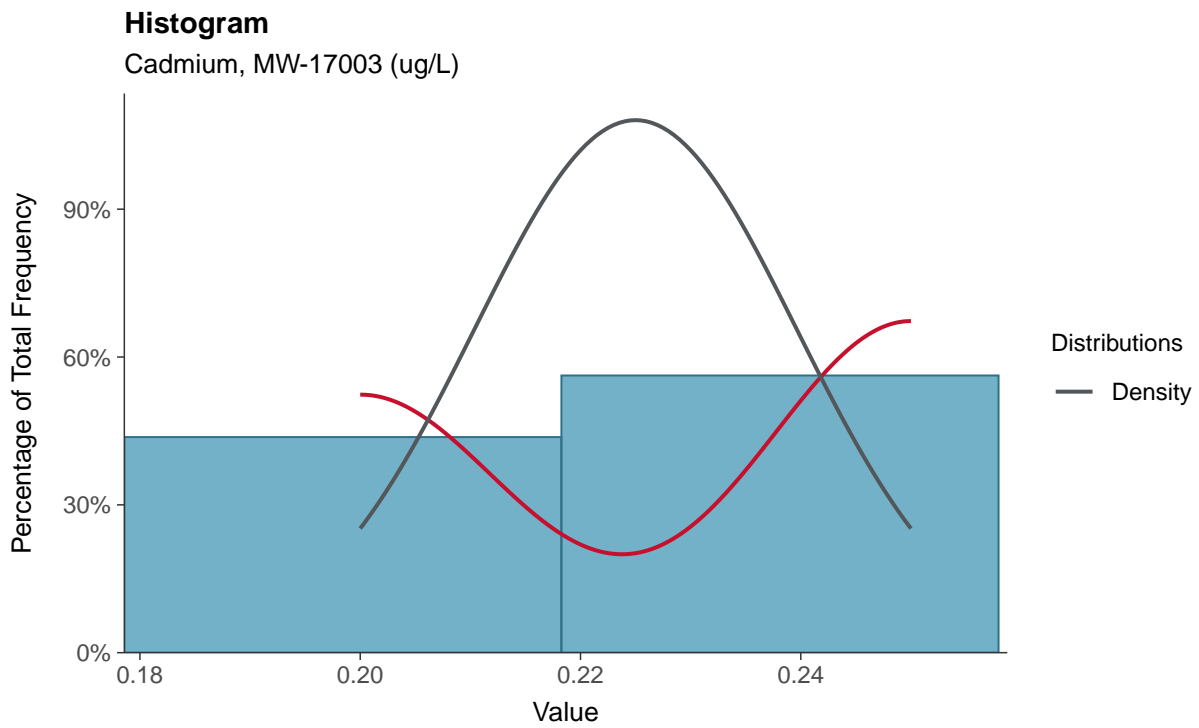
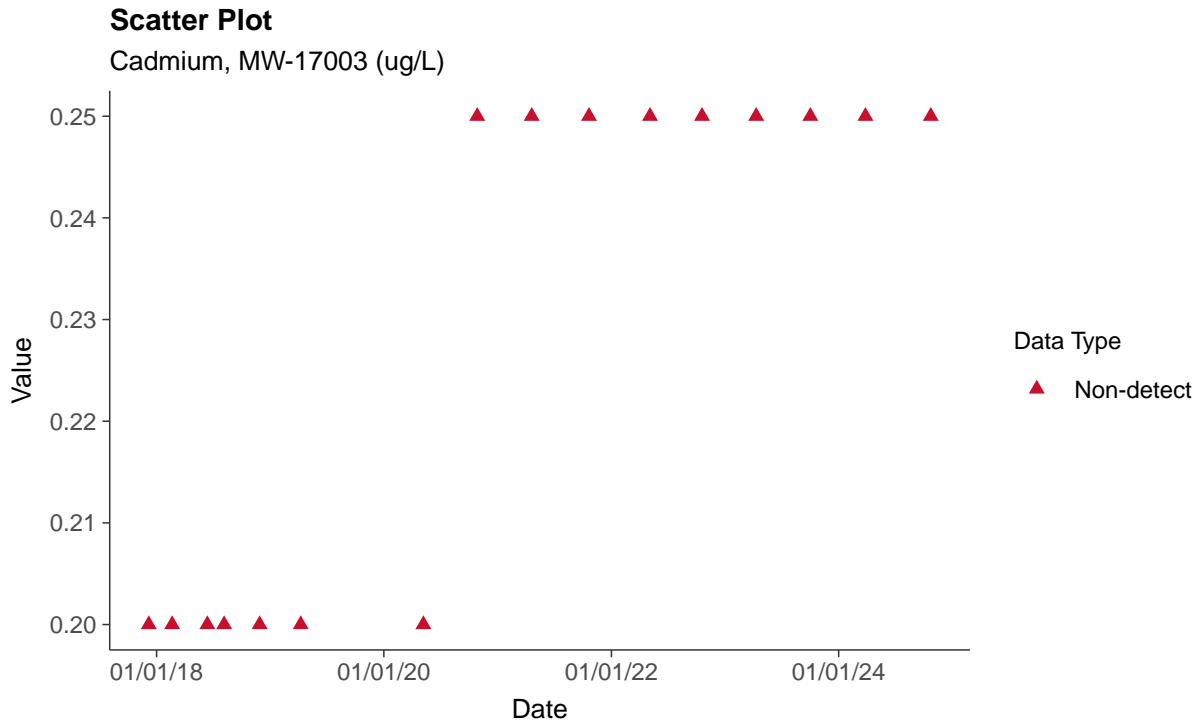
Beryllium, MW-17003 (ug/L)





Appendix IV: Cadmium, MW-17003

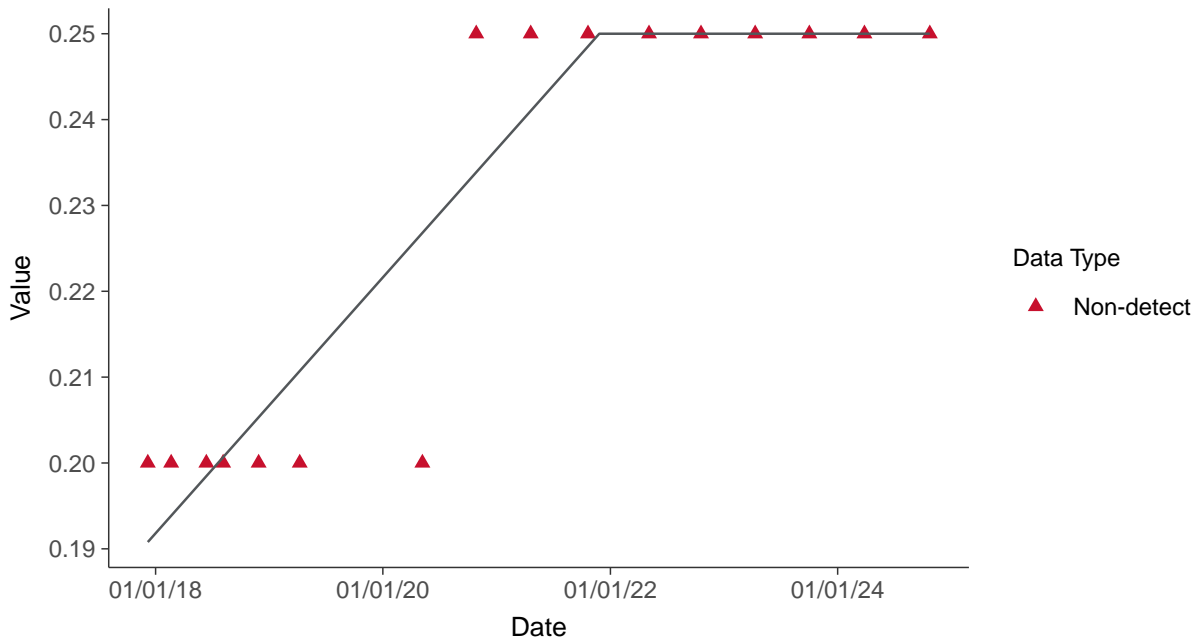
ID: 16_2_106





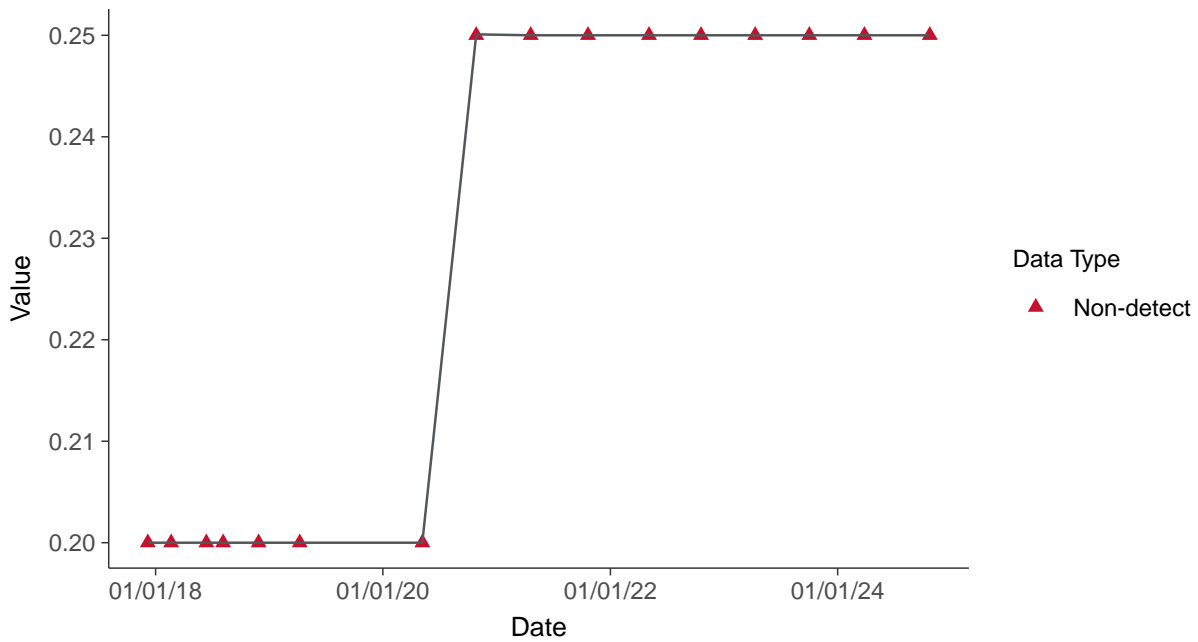
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

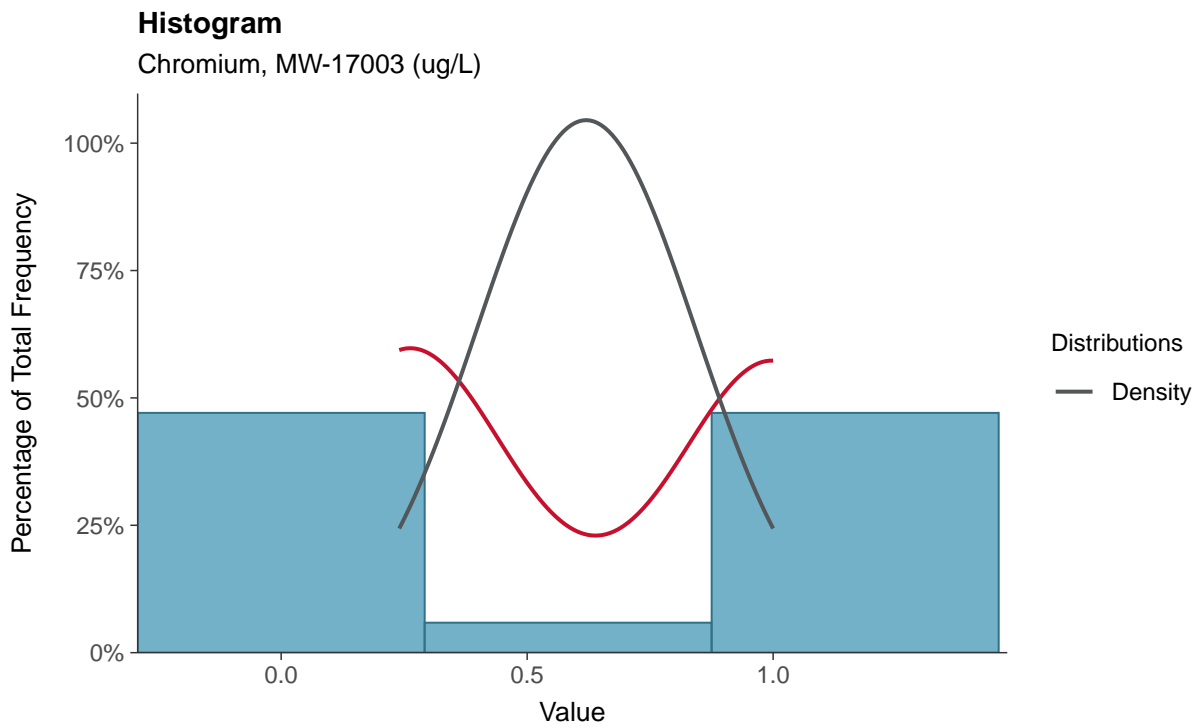
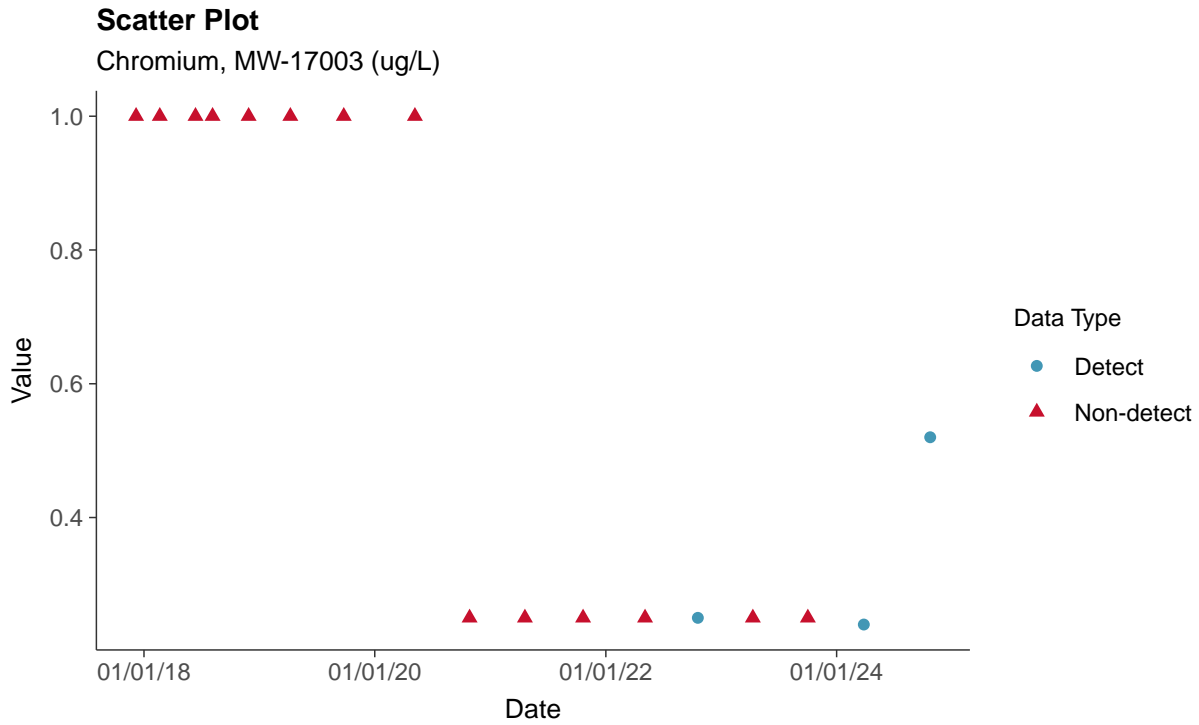
Cadmium, MW-17003 (ug/L)





Appendix IV: Chromium, MW-17003

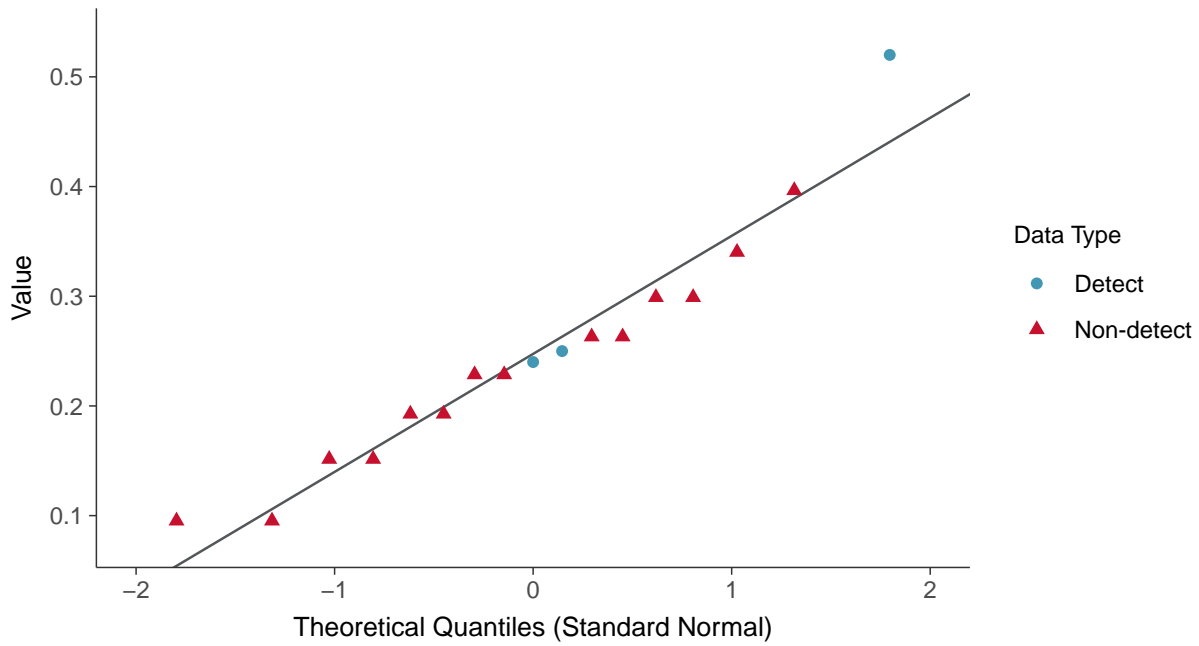
ID: 16_2_109





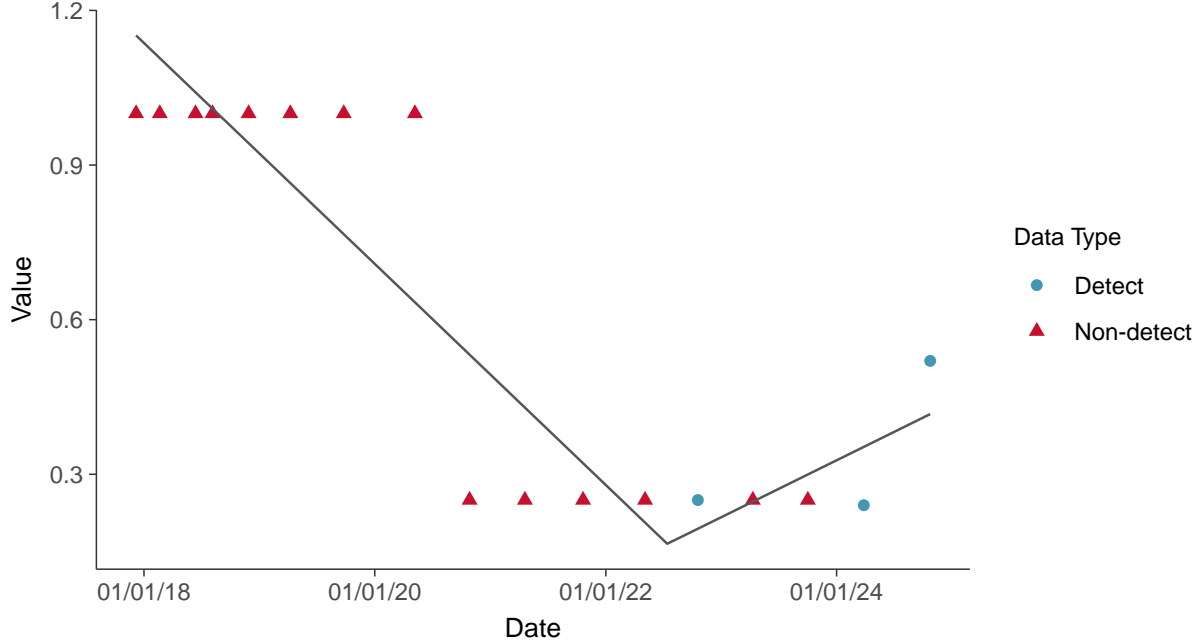
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

Chromium, MW-17003 (ug/L)



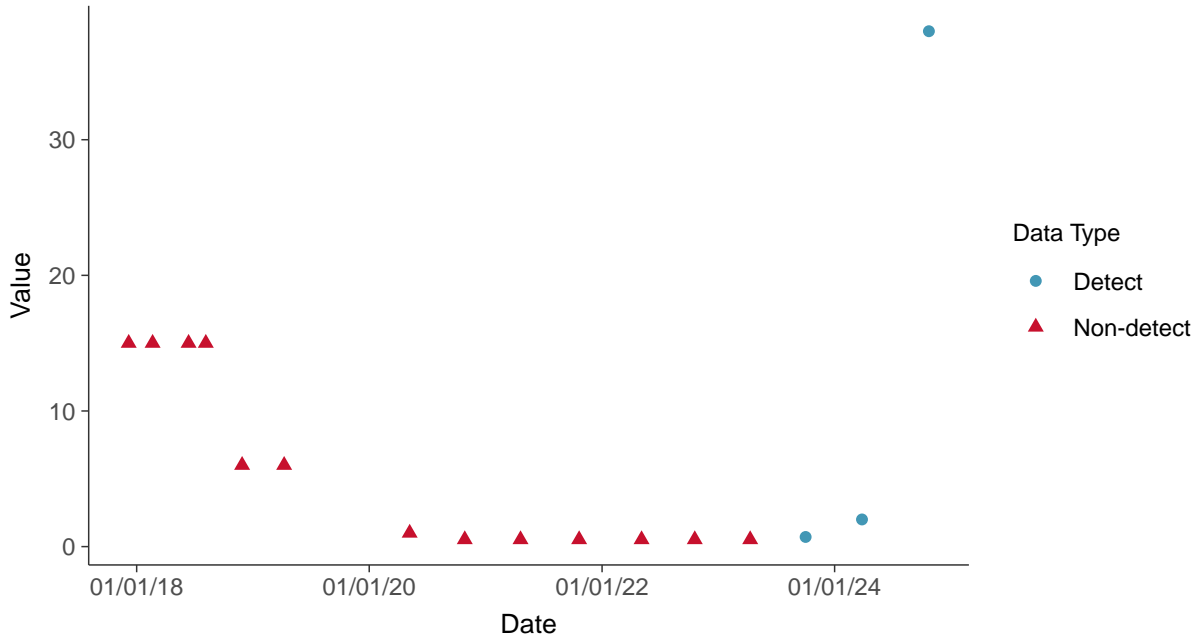


Appendix IV: Cobalt, MW-17003

ID: 16_2_110

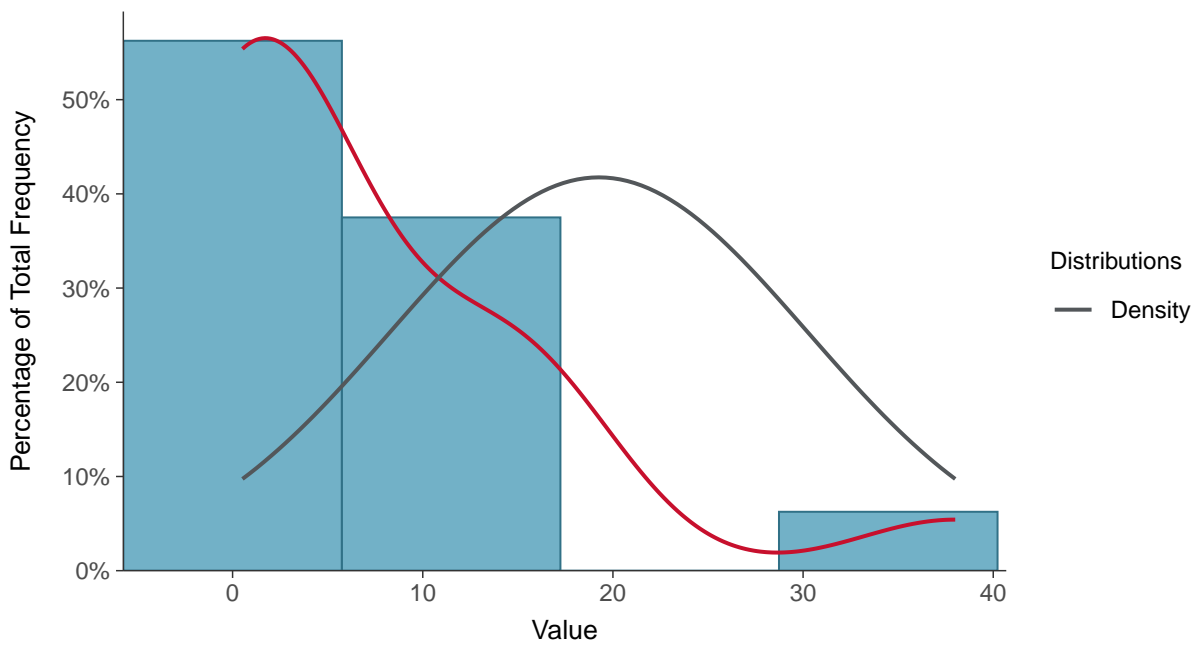
Scatter Plot

Cobalt, MW-17003 (ug/L)



Histogram

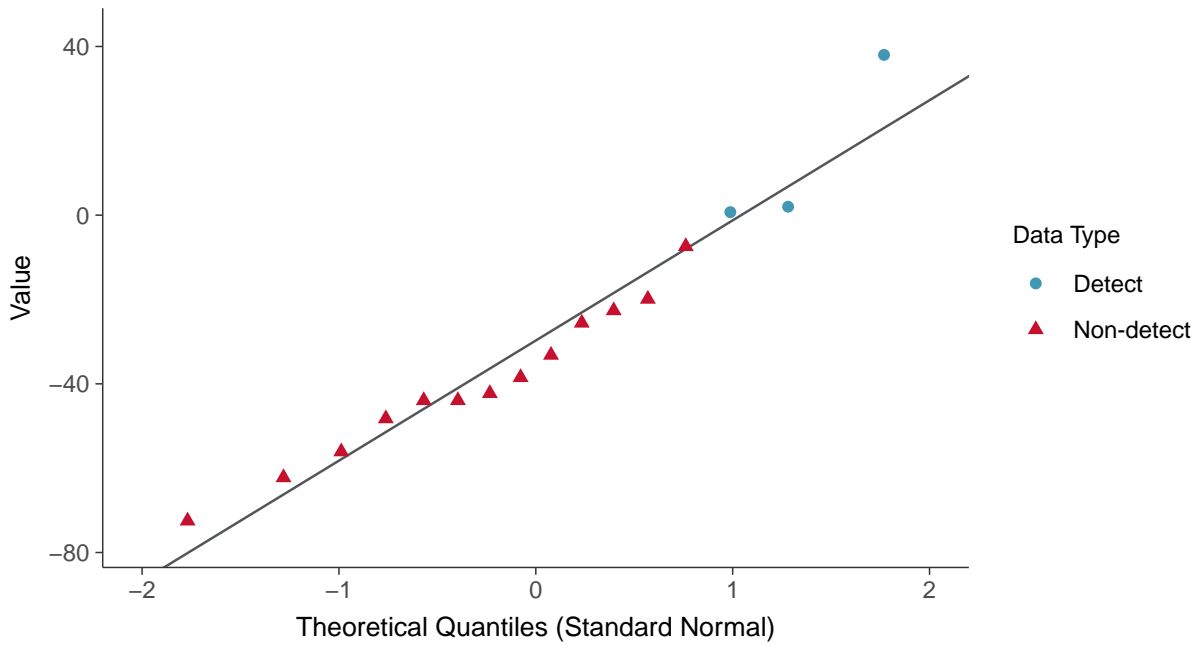
Cobalt, MW-17003 (ug/L)





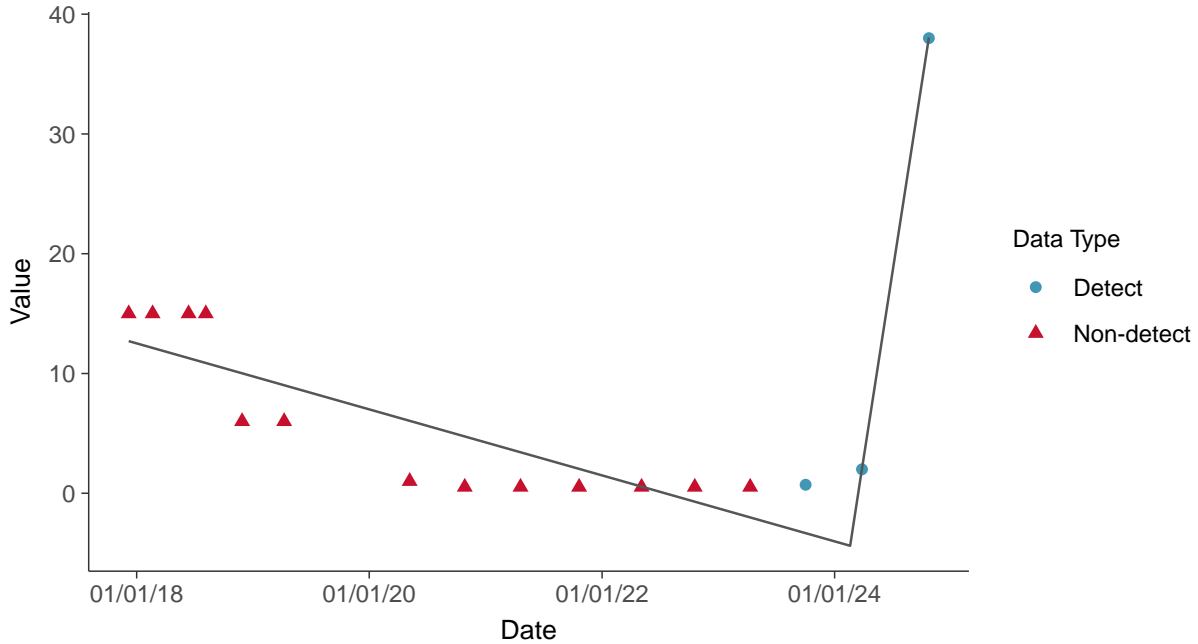
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

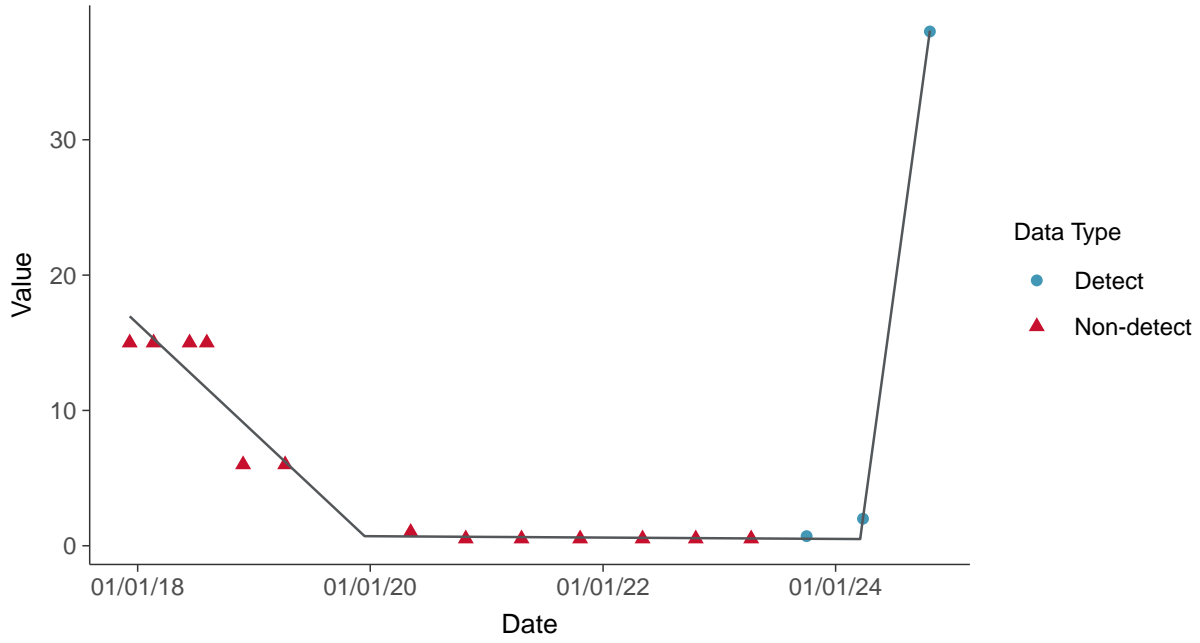
Cobalt, MW-17003 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

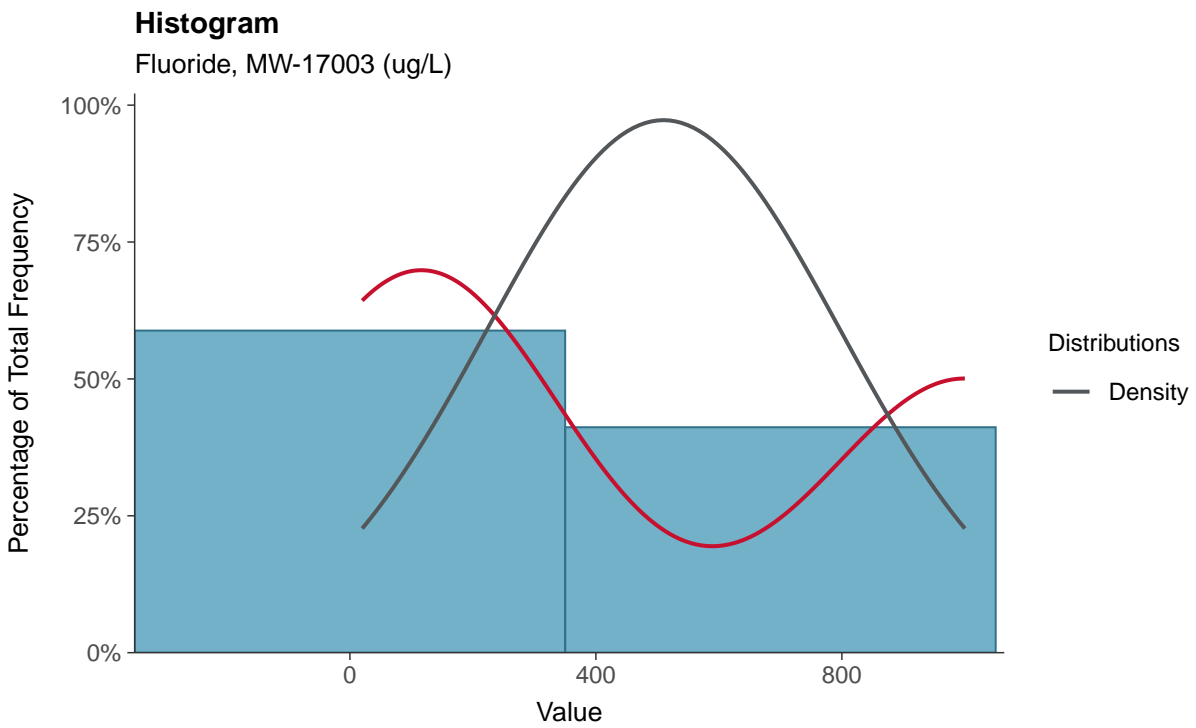
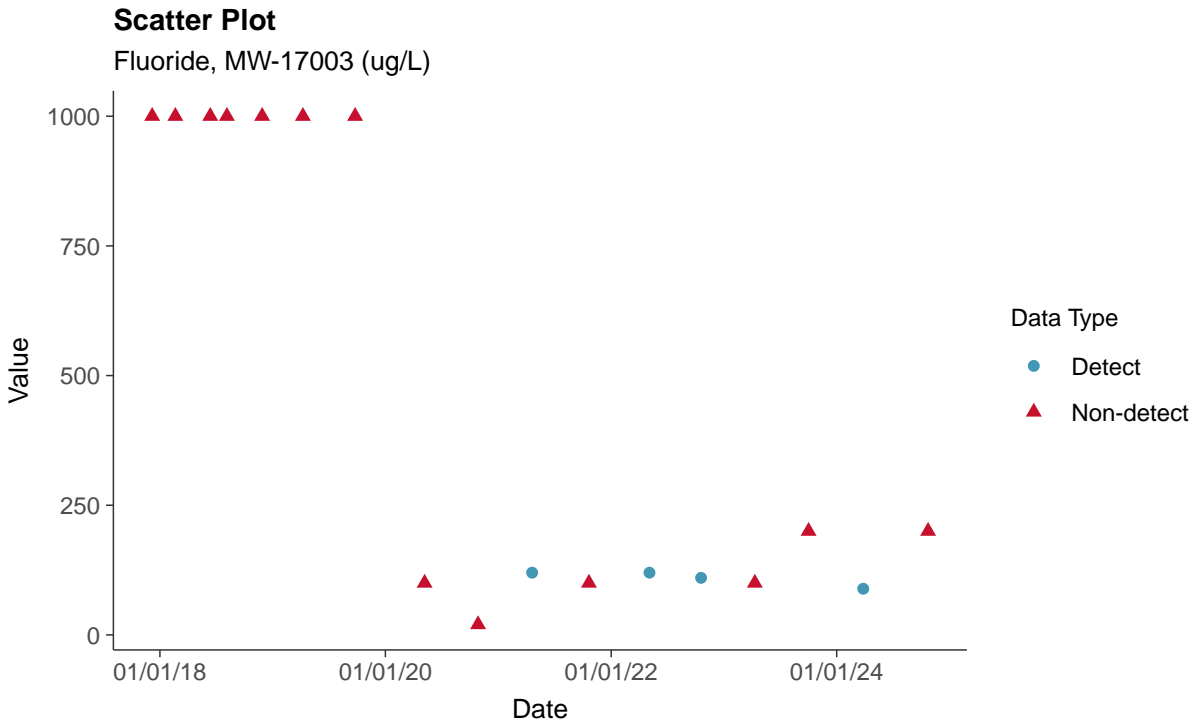
Cobalt, MW-17003 (ug/L)





Appendix IV: Fluoride, MW-17003

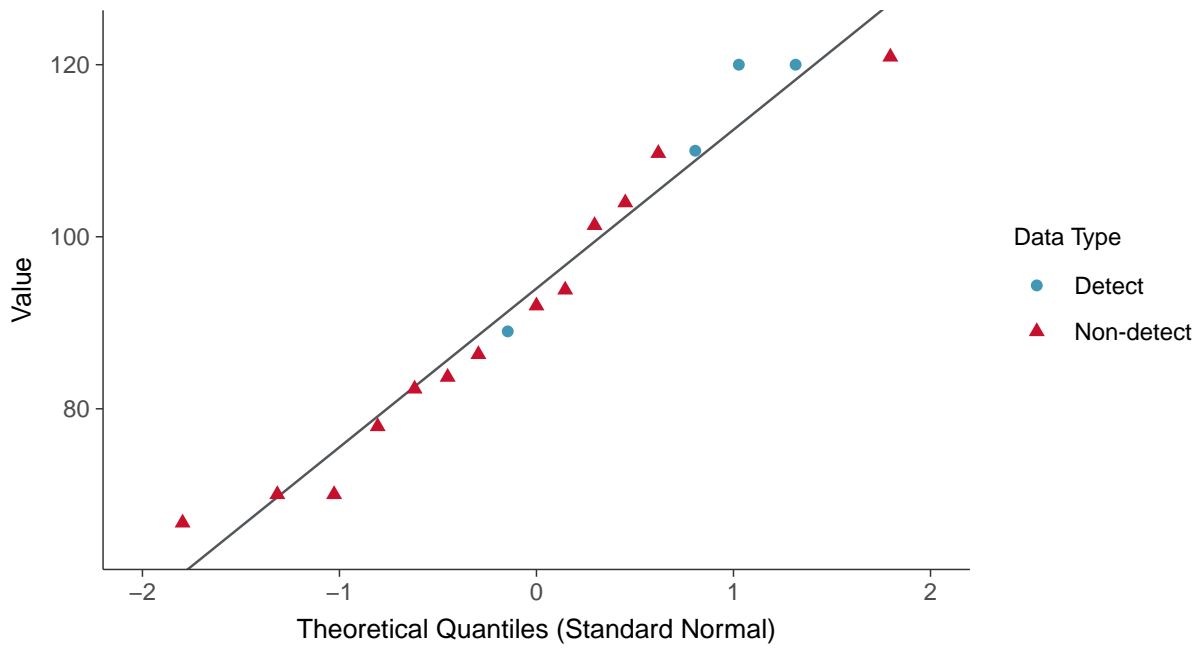
ID: 16_2_114





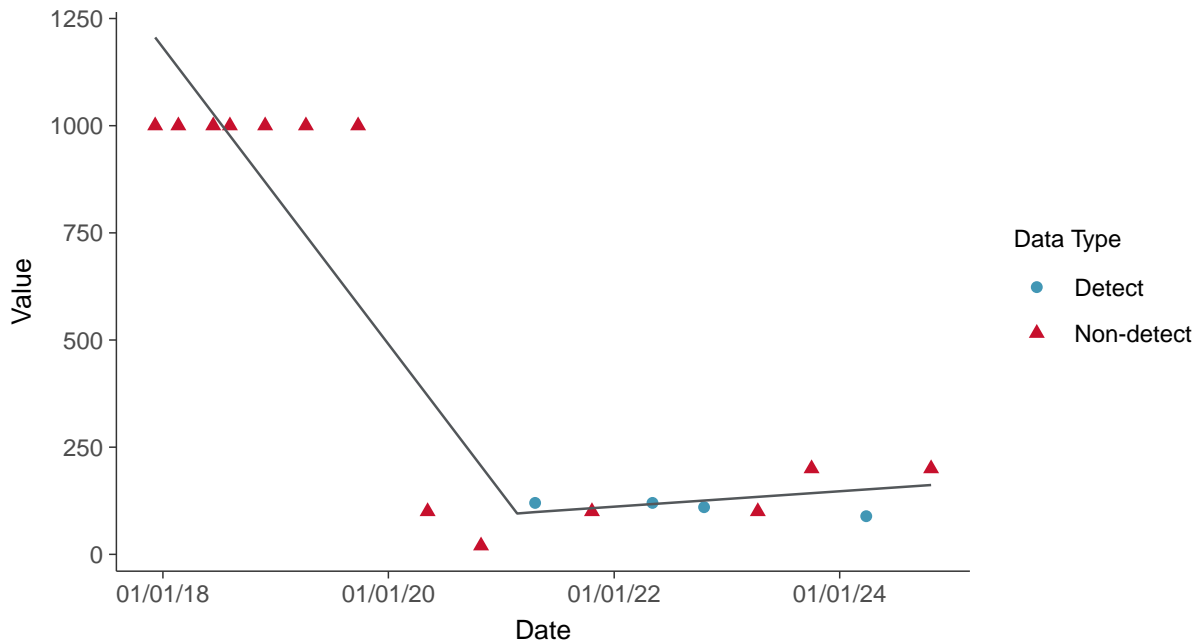
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-17003 (ug/L)



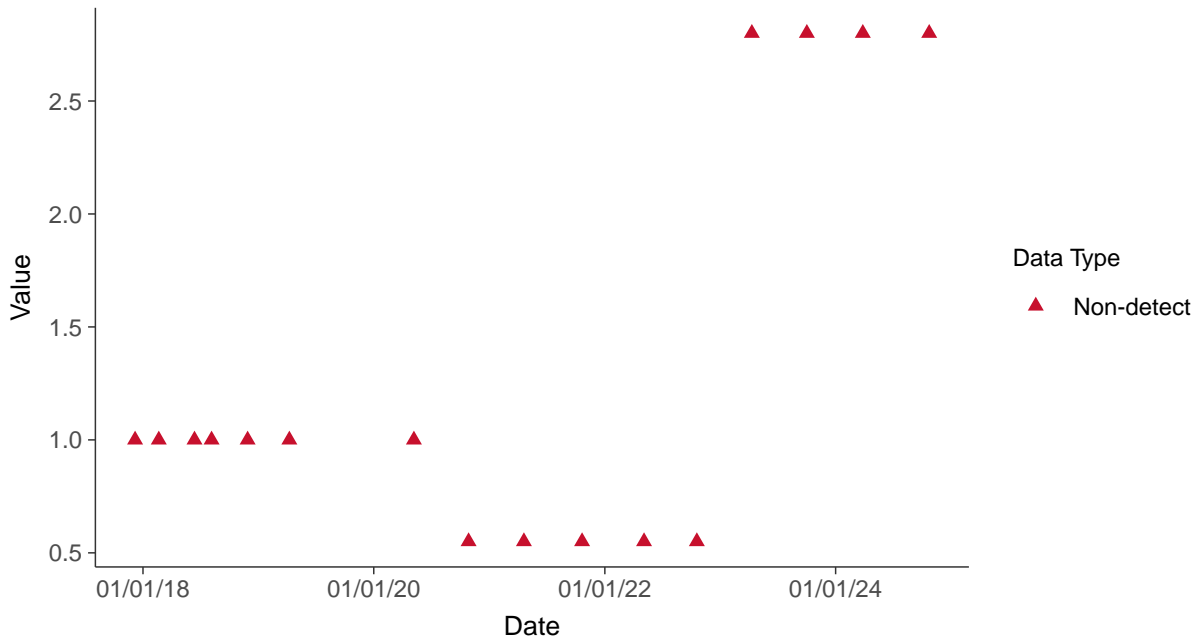


Appendix IV: Lead, MW-17003

ID: 16_2_116

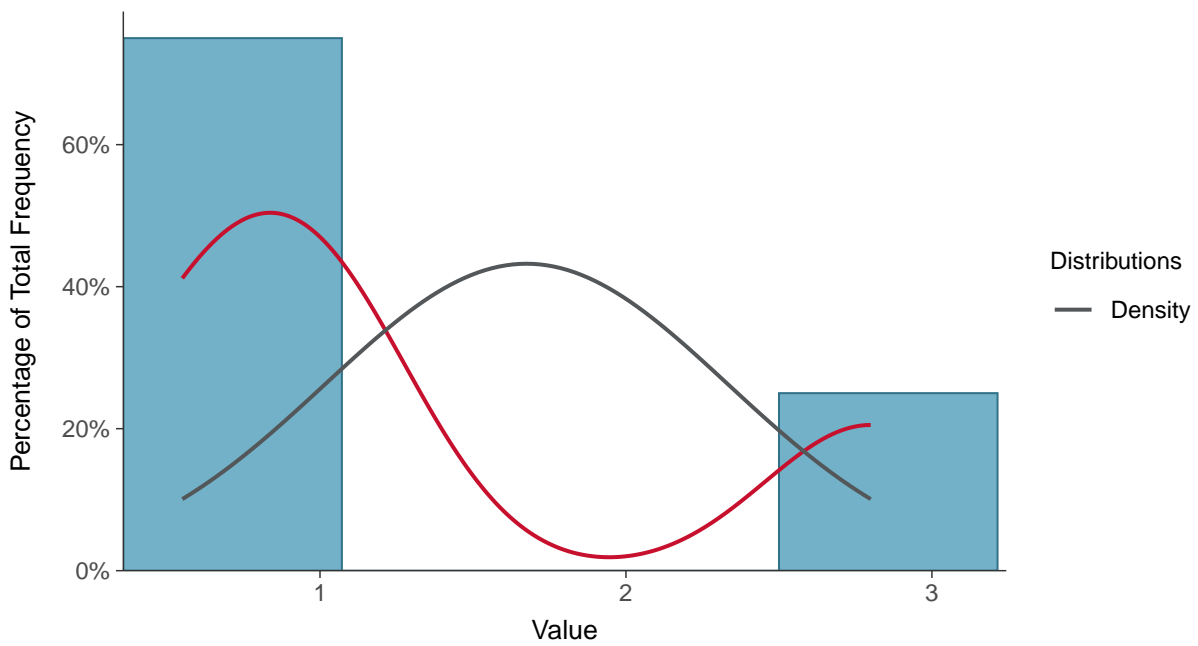
Scatter Plot

Lead, MW-17003 (ug/L)



Histogram

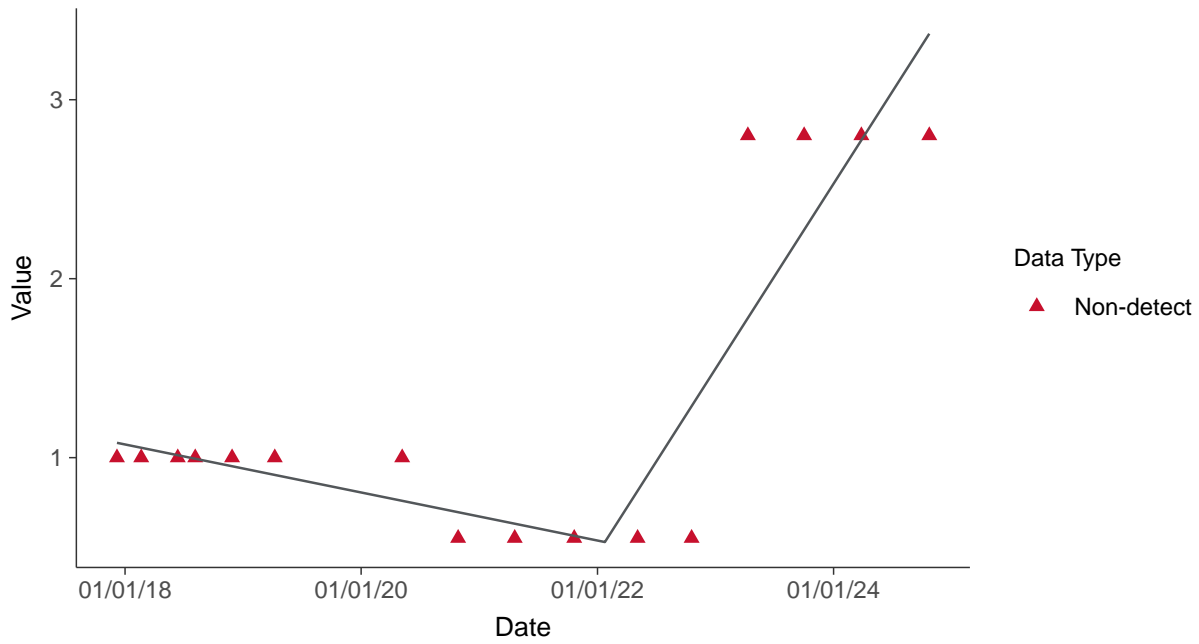
Lead, MW-17003 (ug/L)





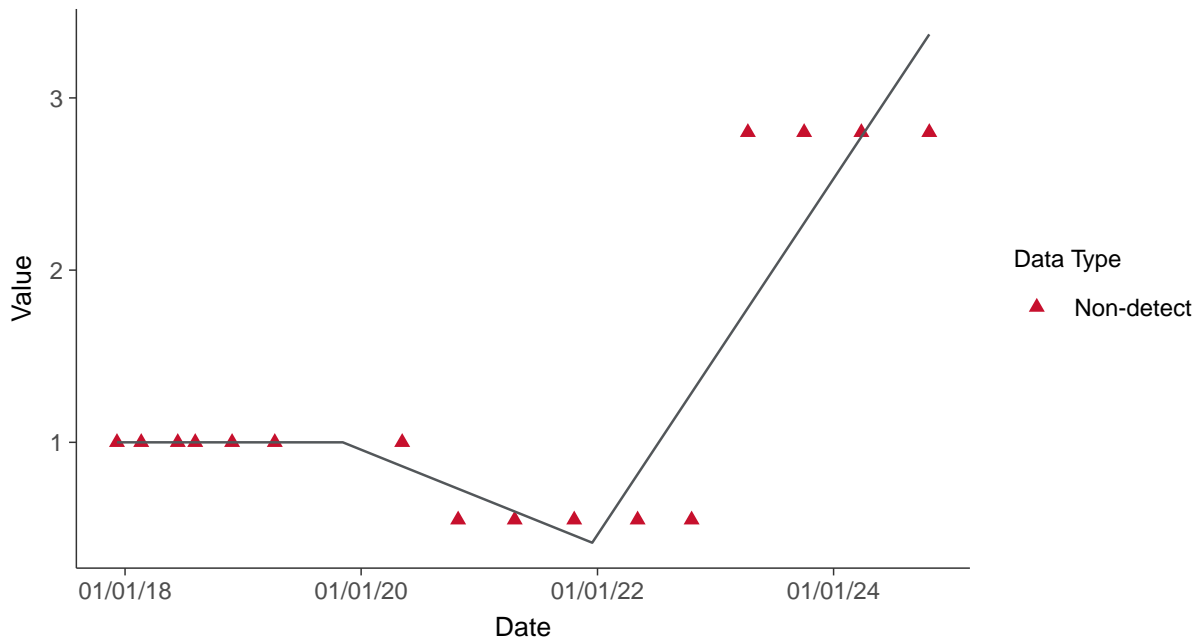
Trend Regression: Piecewise Linear-Linear

Lead, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

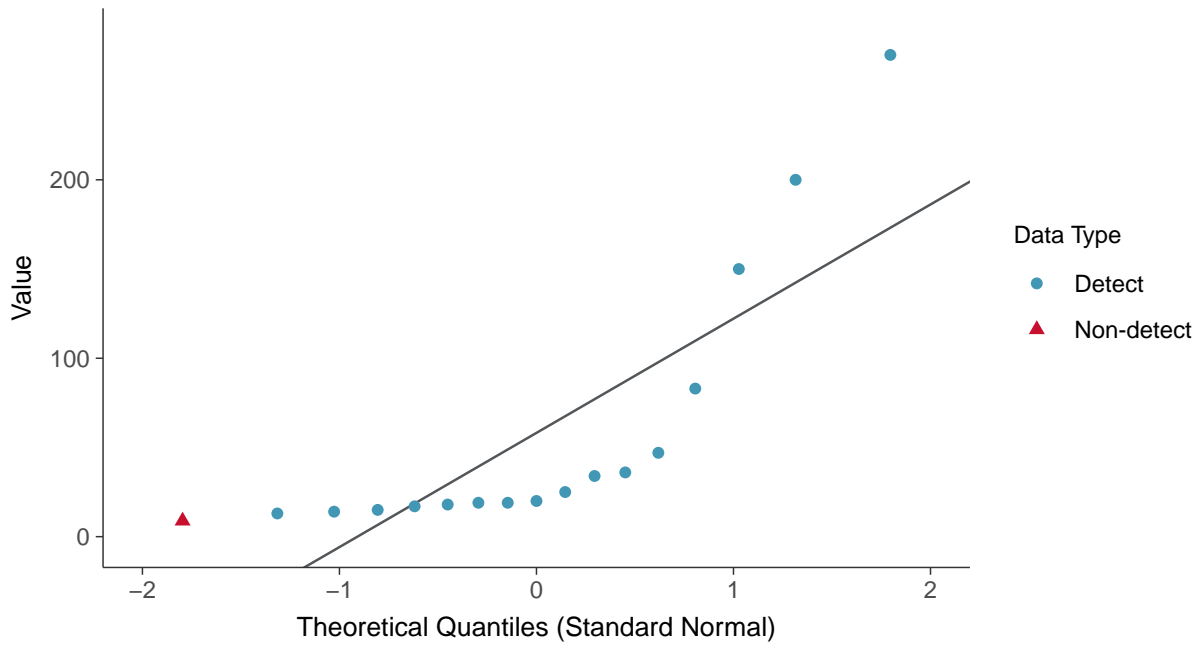
Lead, MW-17003 (ug/L)





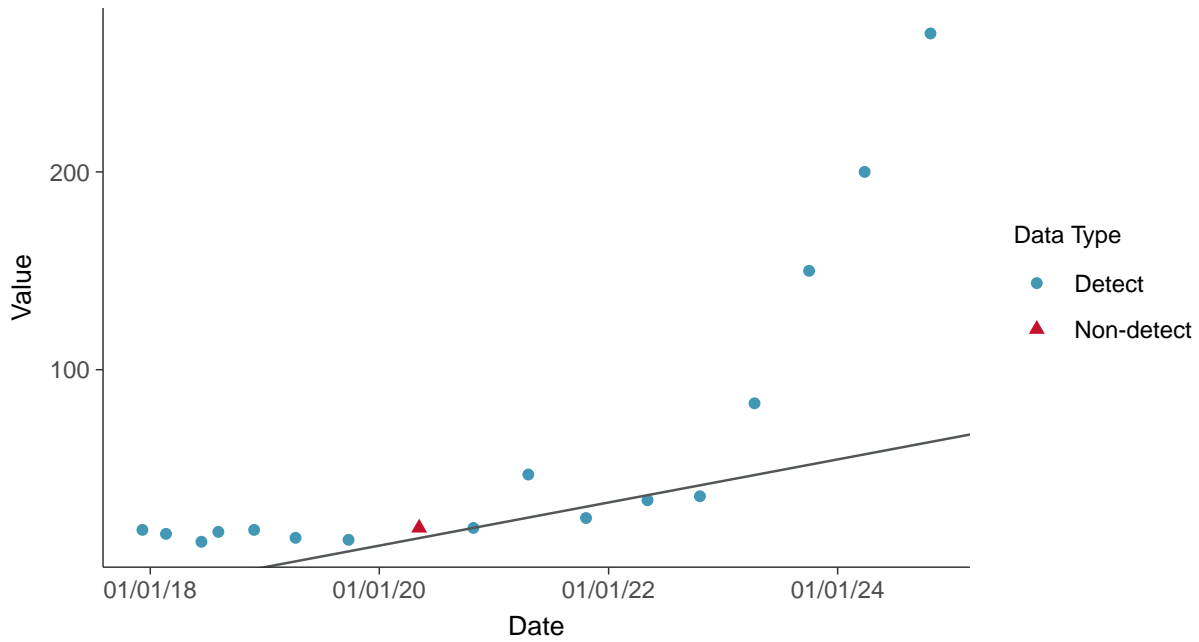
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-17003 (ug/L)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

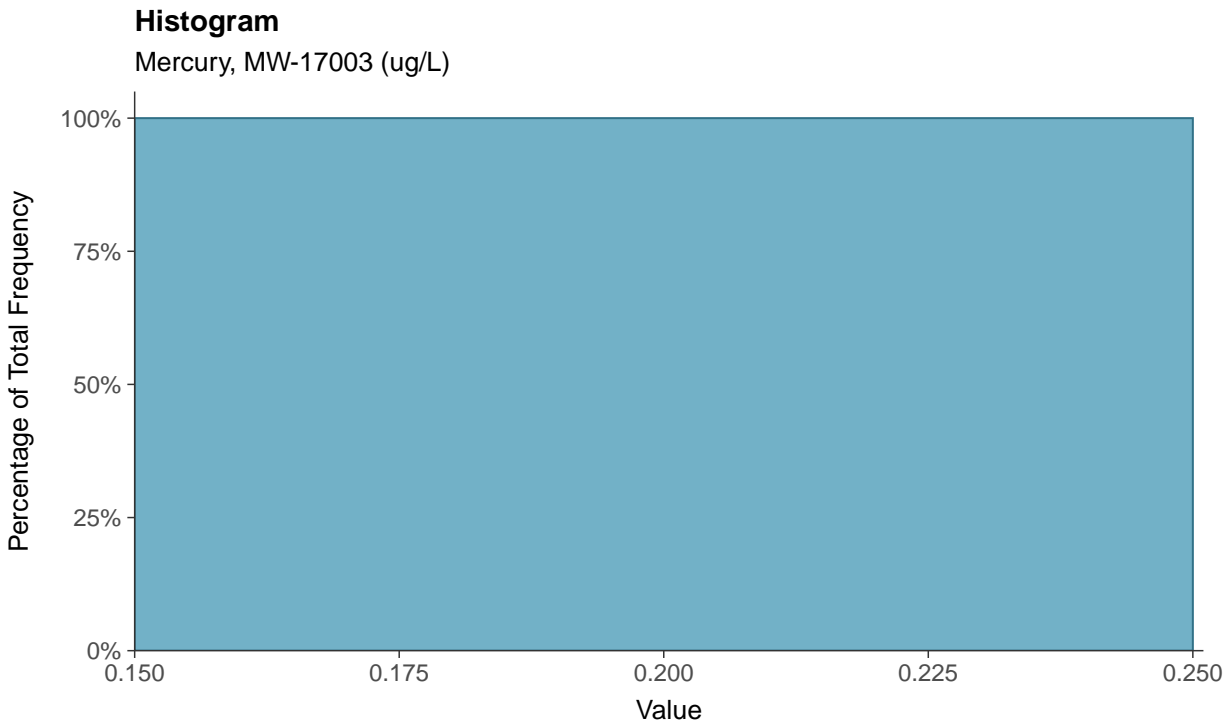
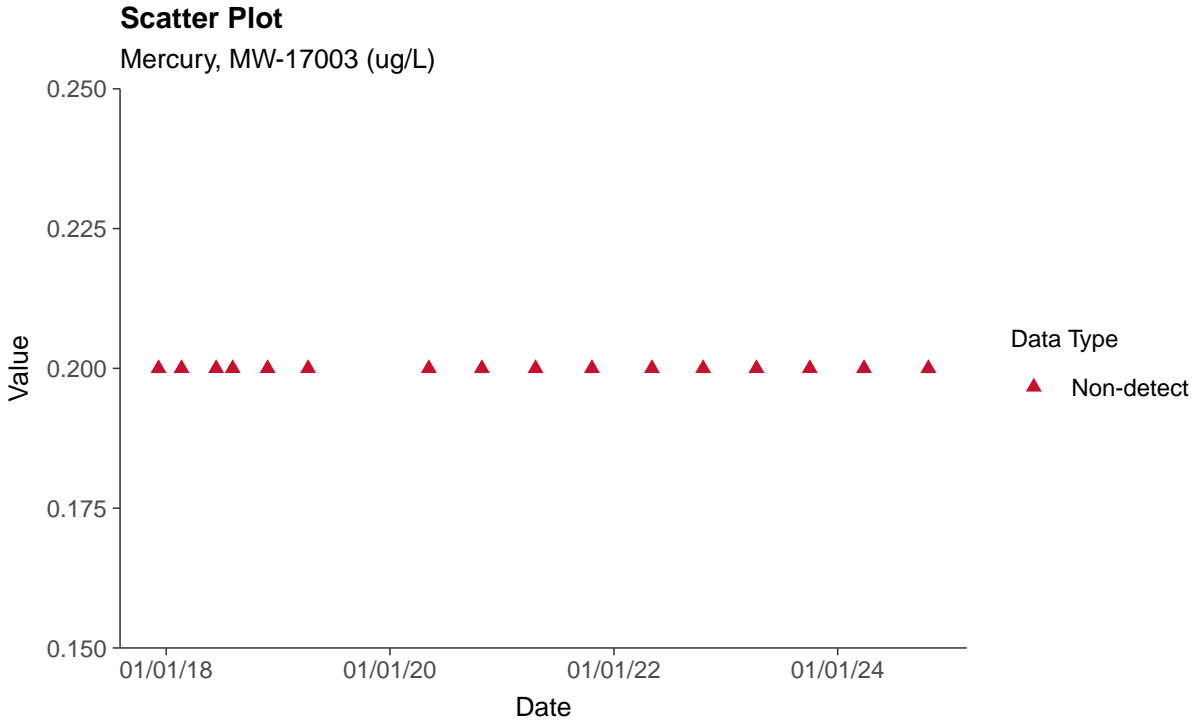
Lithium, MW-17003 (ug/L)





Appendix IV: Mercury, MW-17003

ID: 16_2_118



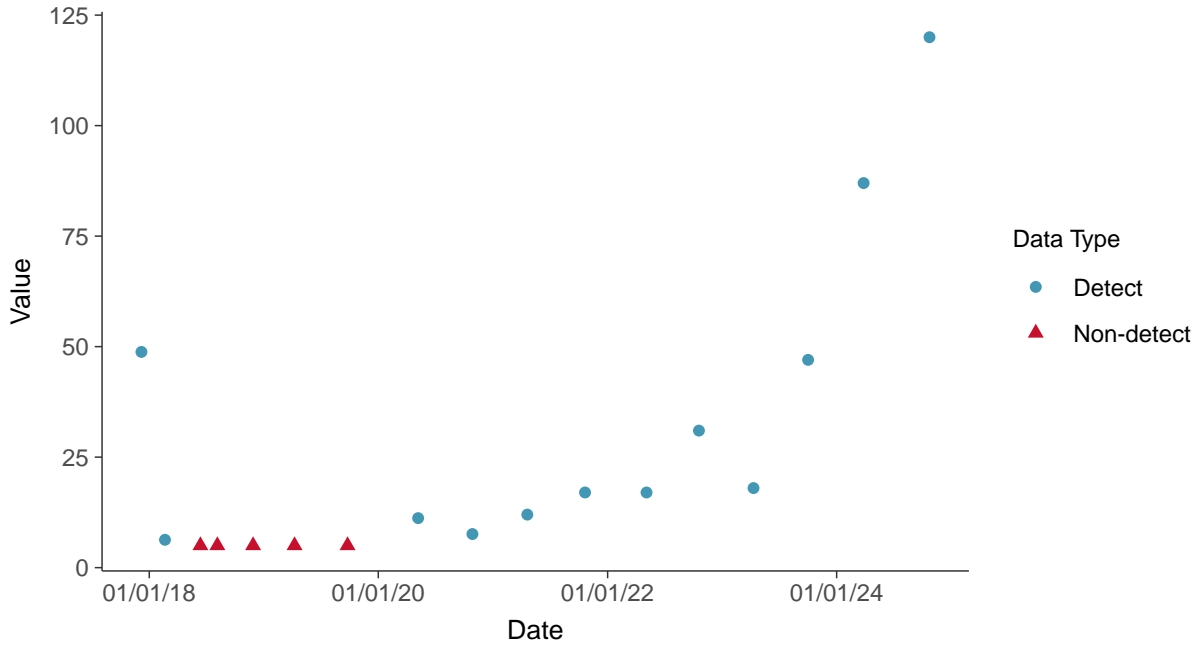


Appendix IV: Molybdenum, MW-17003

ID: 16_2_119

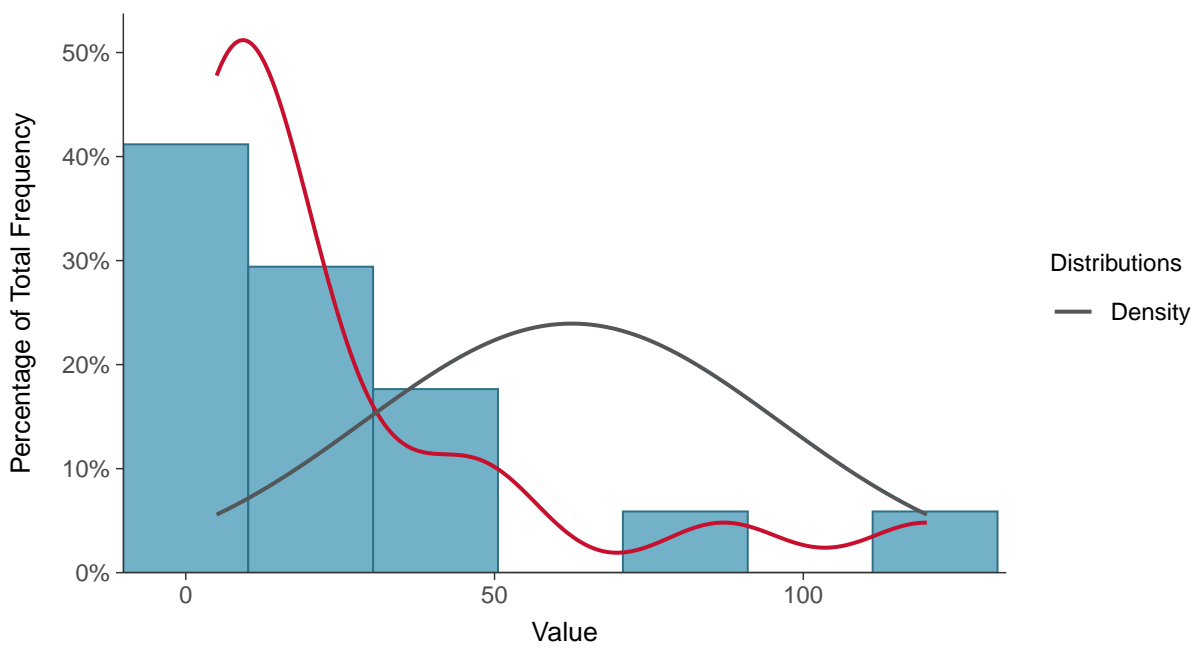
Scatter Plot

Molybdenum, MW-17003 (ug/L)



Histogram

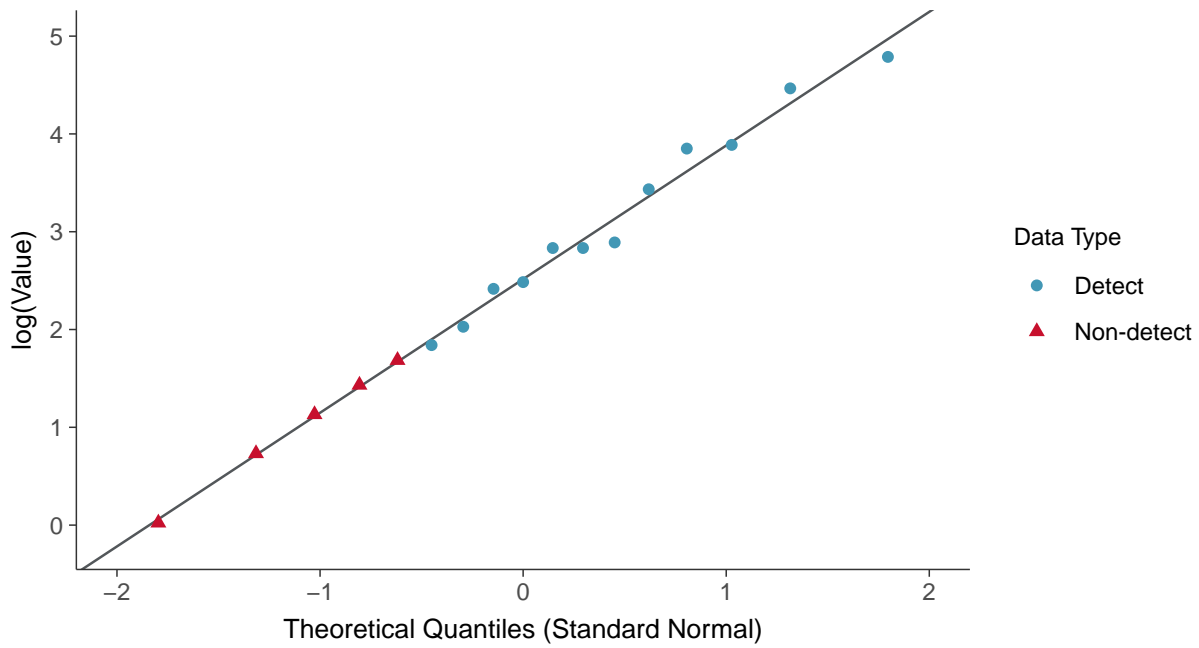
Molybdenum, MW-17003 (ug/L)





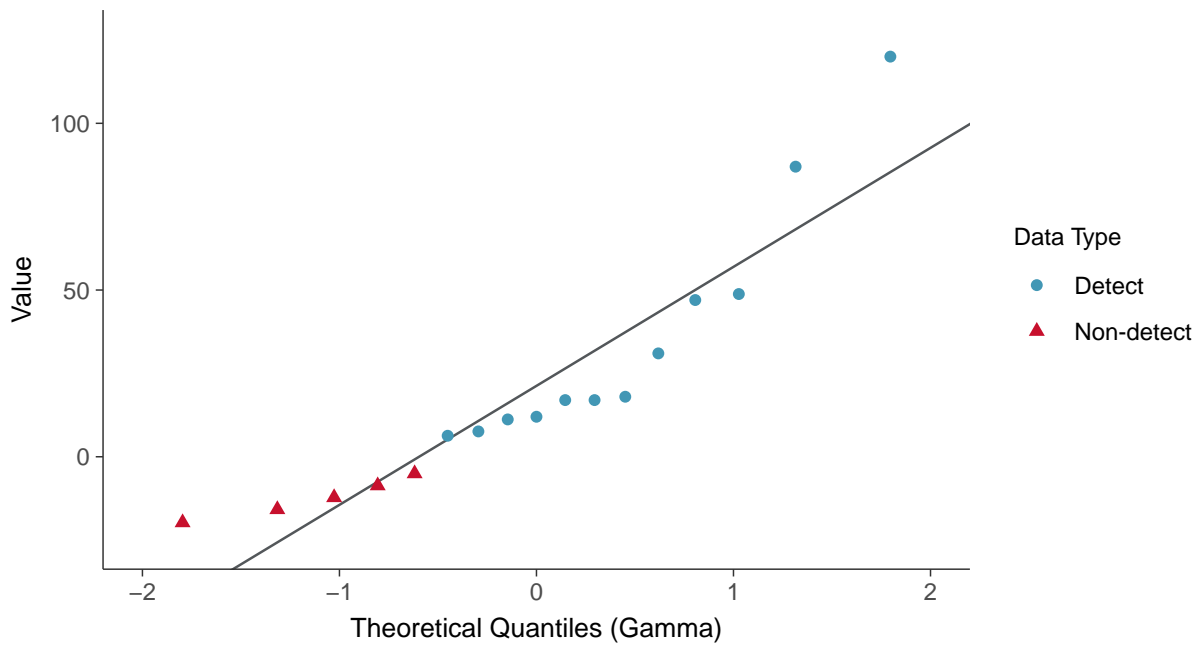
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17003 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

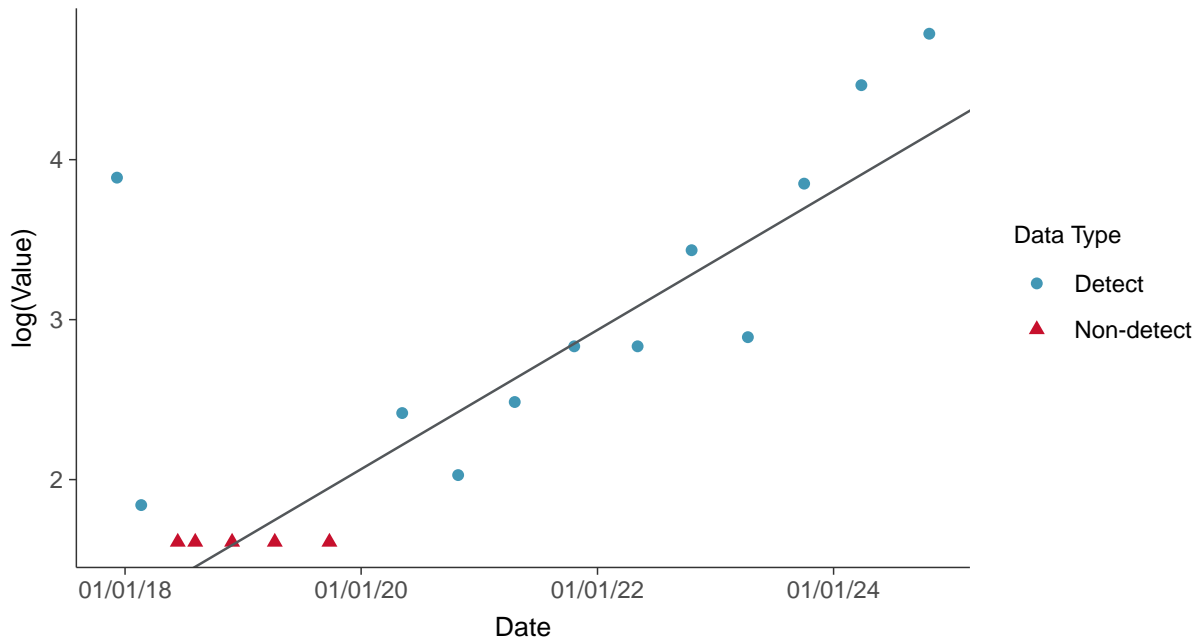
Molybdenum, MW-17003 (ug/L)





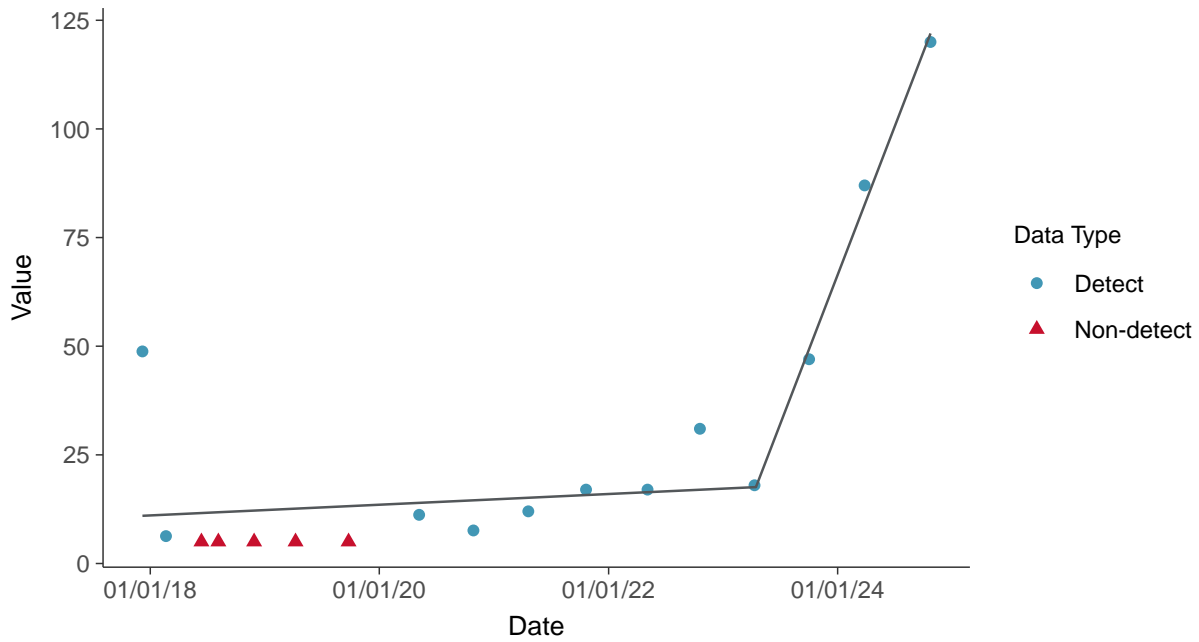
Trend Regression: Lognormal MLE

Molybdenum, MW-17003 (ug/L)



Trend Regression: Piecewise Linear-Linear

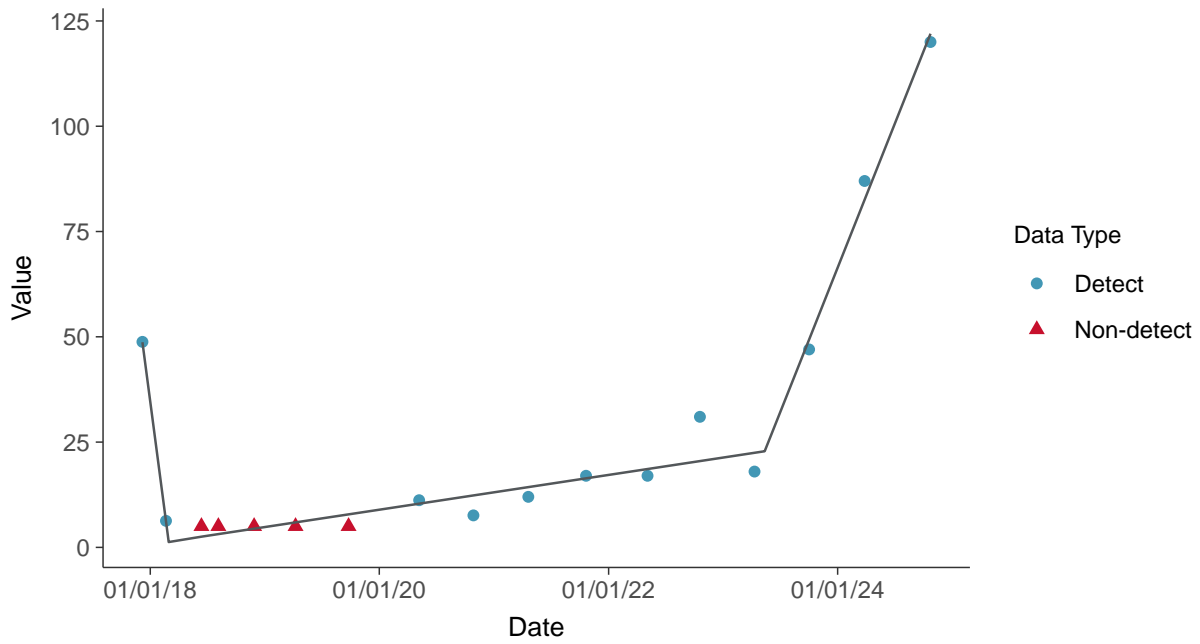
Molybdenum, MW-17003 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

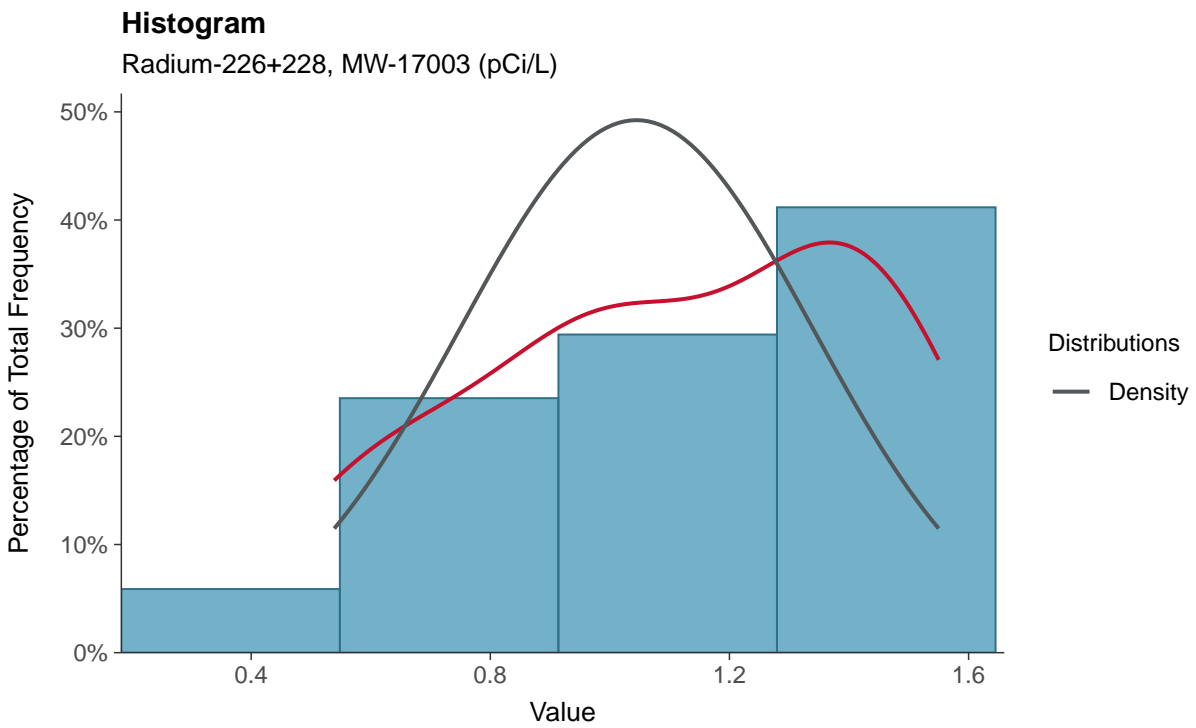
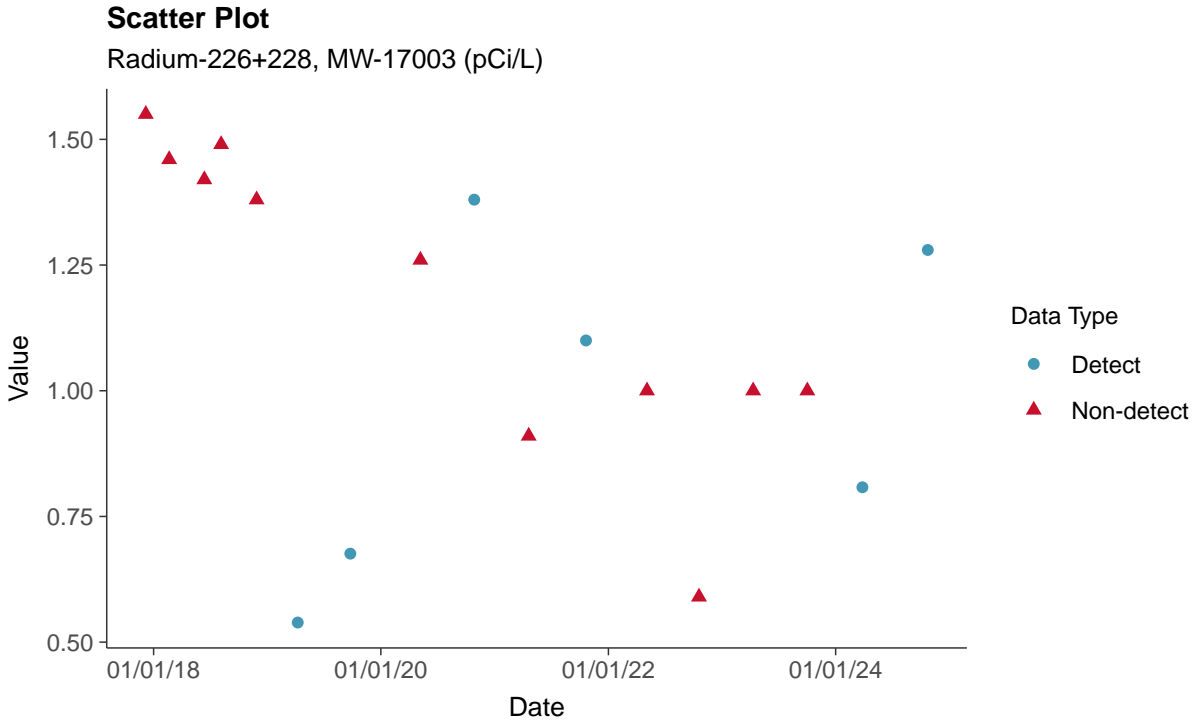
Molybdenum, MW-17003 (ug/L)





Appendix IV: Radium-226+228, MW-17003

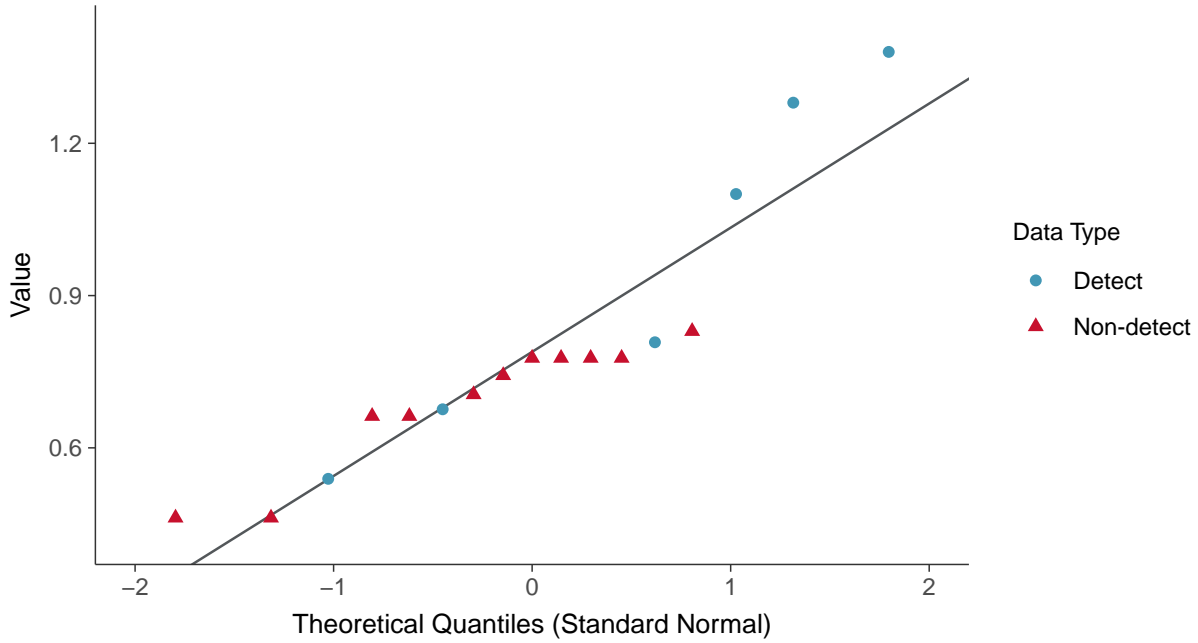
ID: 16_2_125





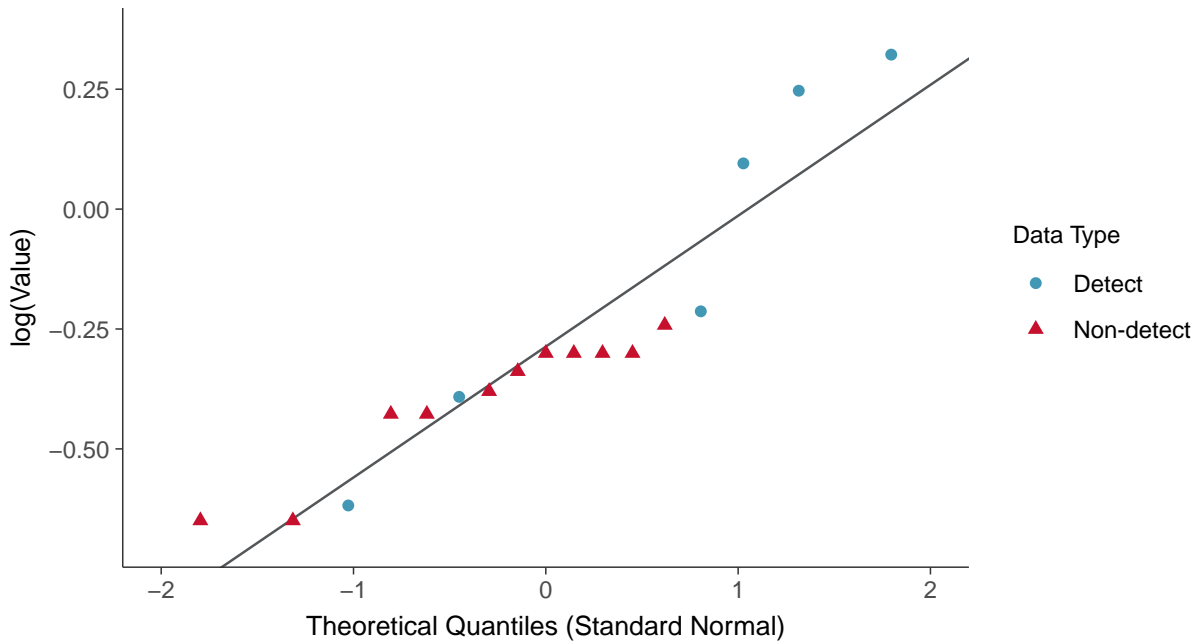
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17003 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

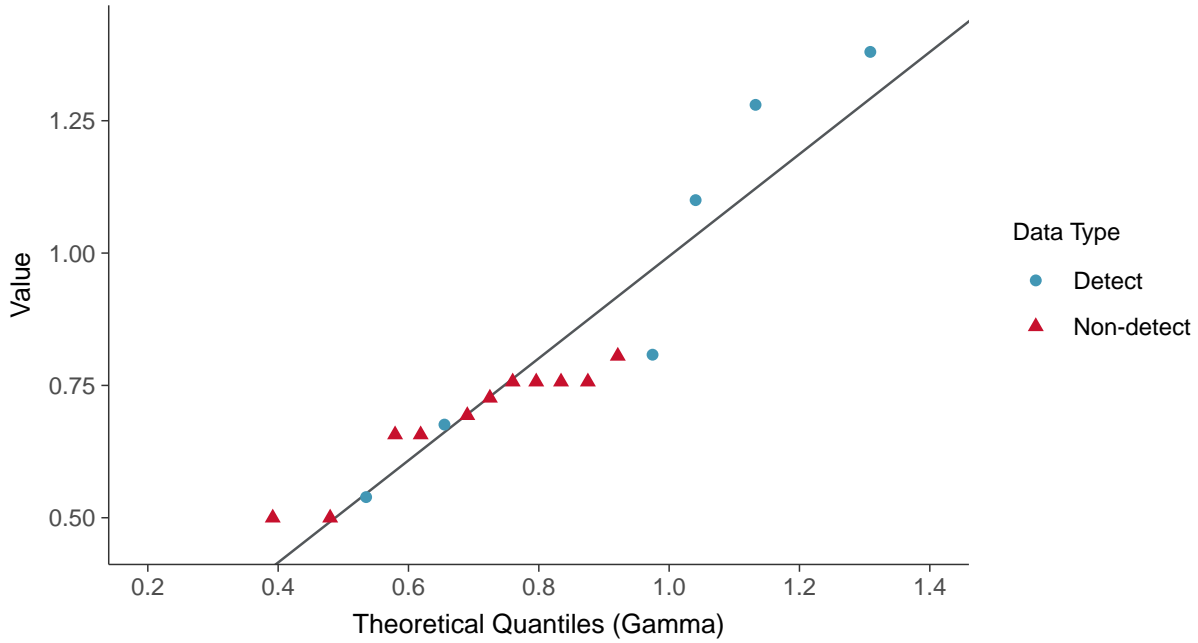
Radium-226+228, MW-17003 (pCi/L)





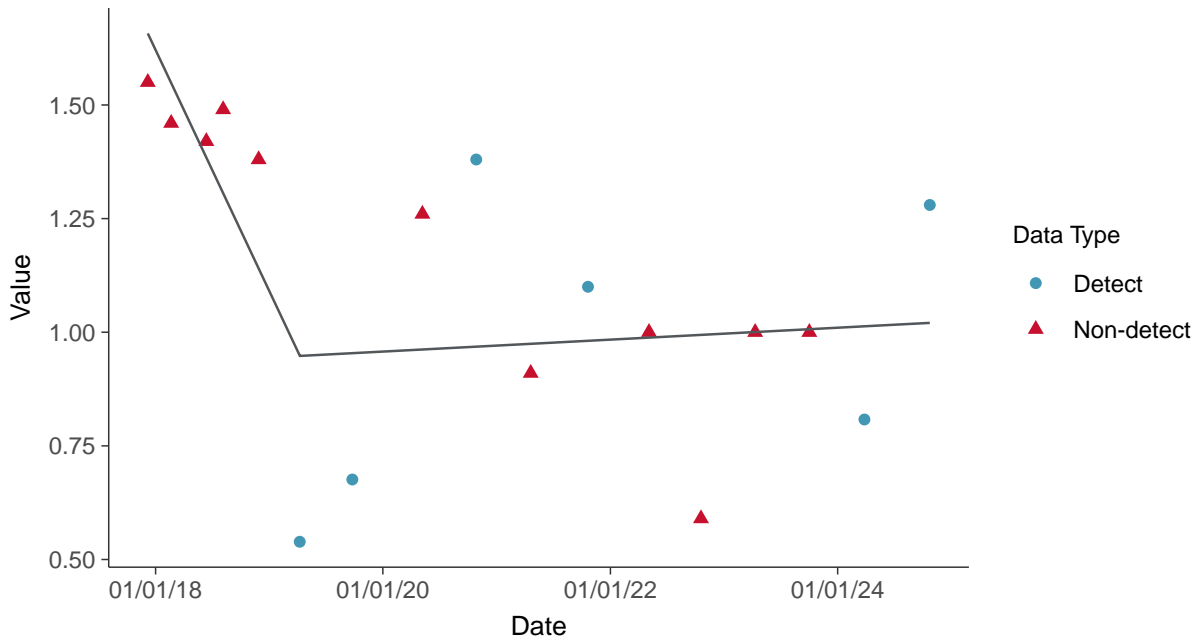
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17003 (pCi/L)



Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-17003 (pCi/L)



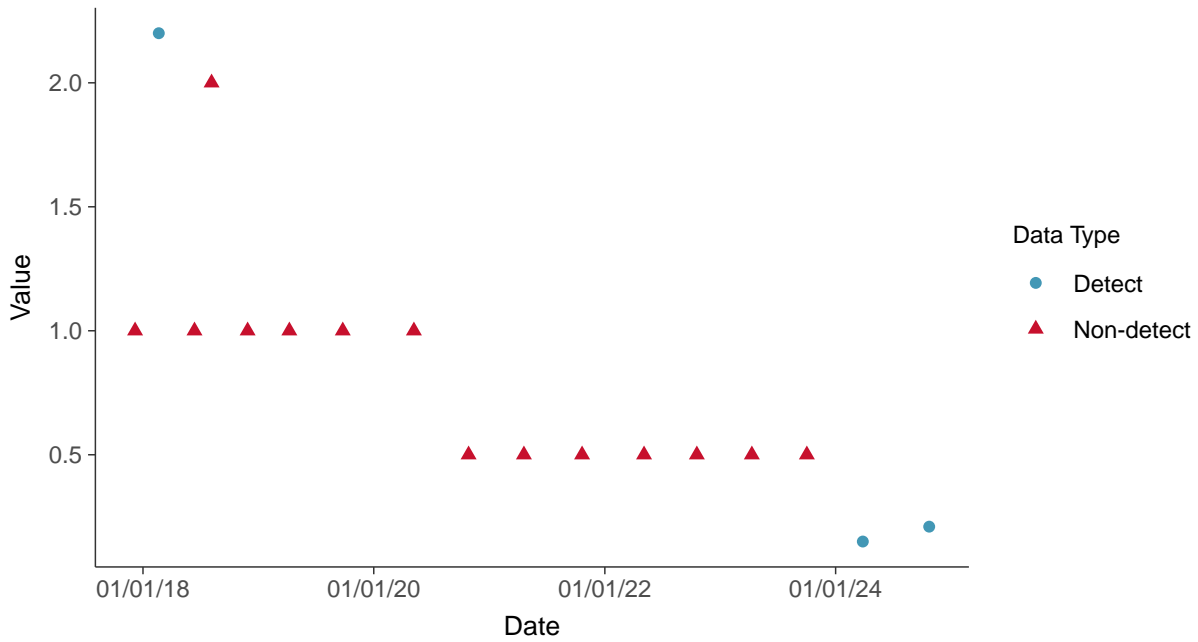


Appendix IV: Selenium, MW-17003

ID: 16_2_127

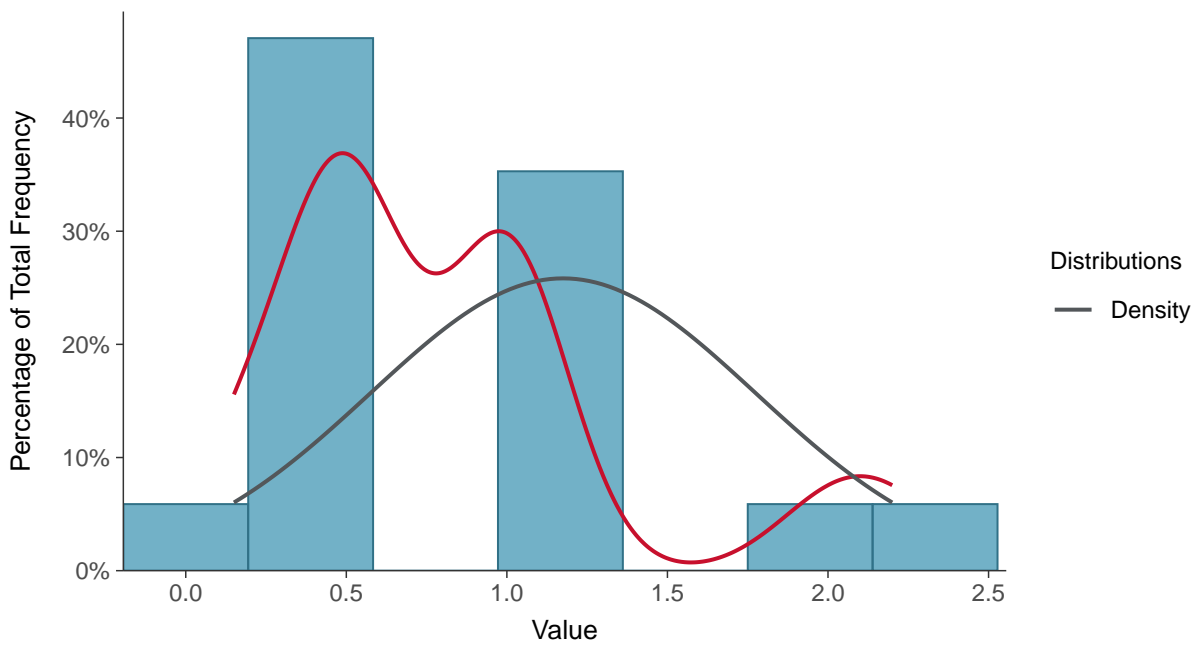
Scatter Plot

Selenium, MW-17003 (ug/L)



Histogram

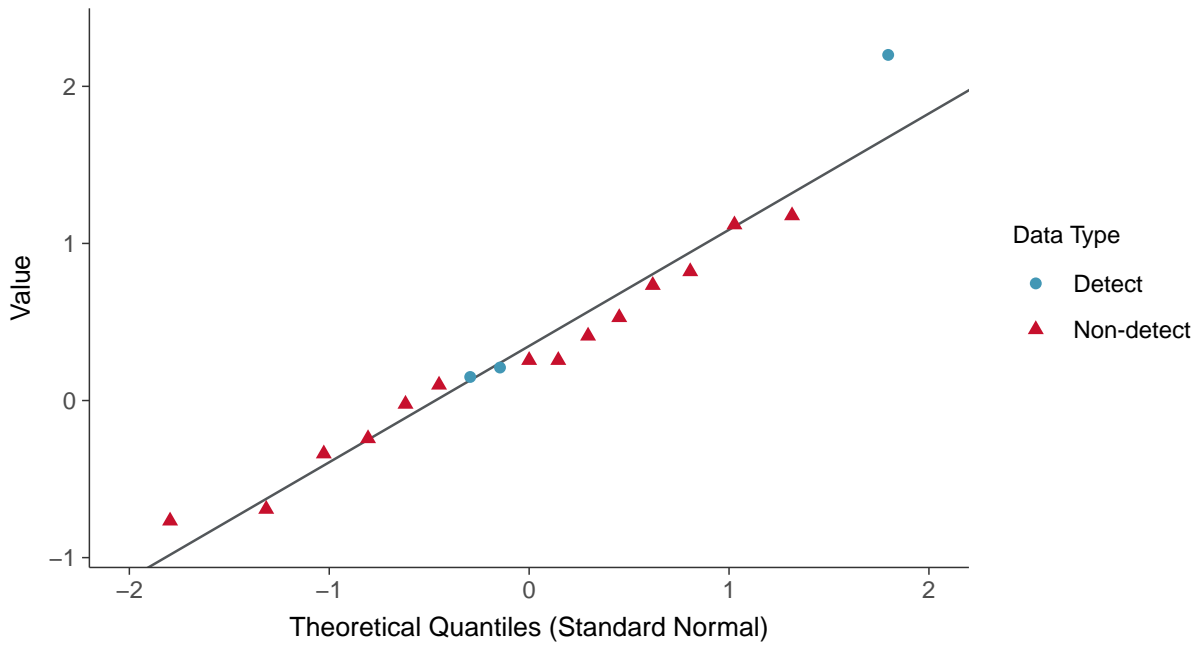
Selenium, MW-17003 (ug/L)





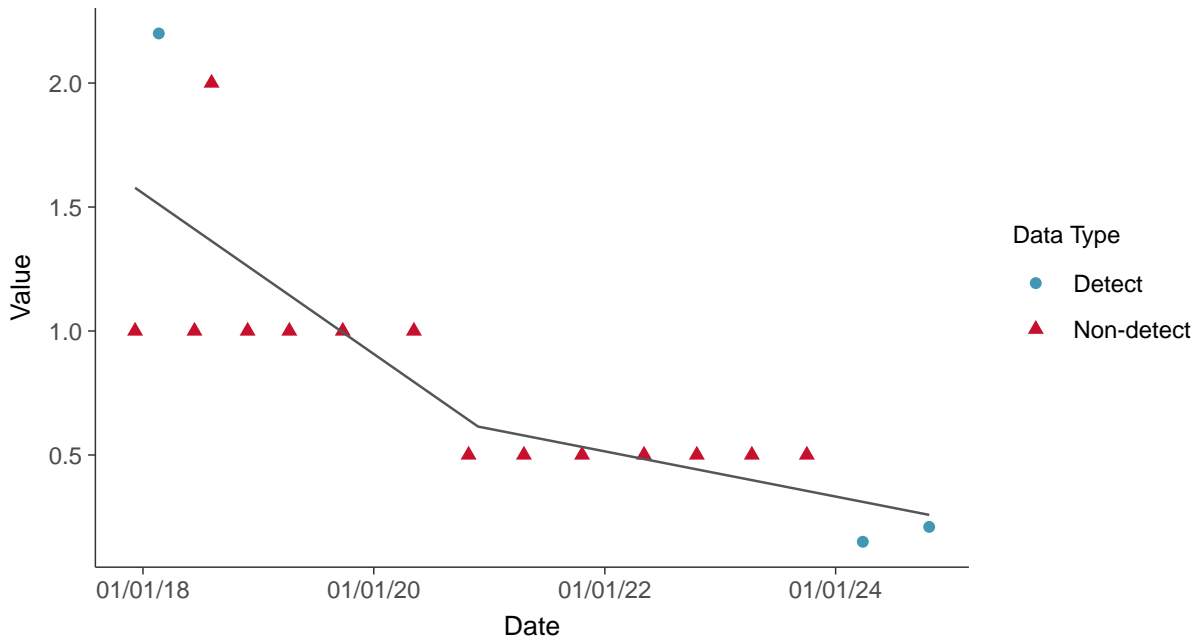
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-17003 (ug/L)



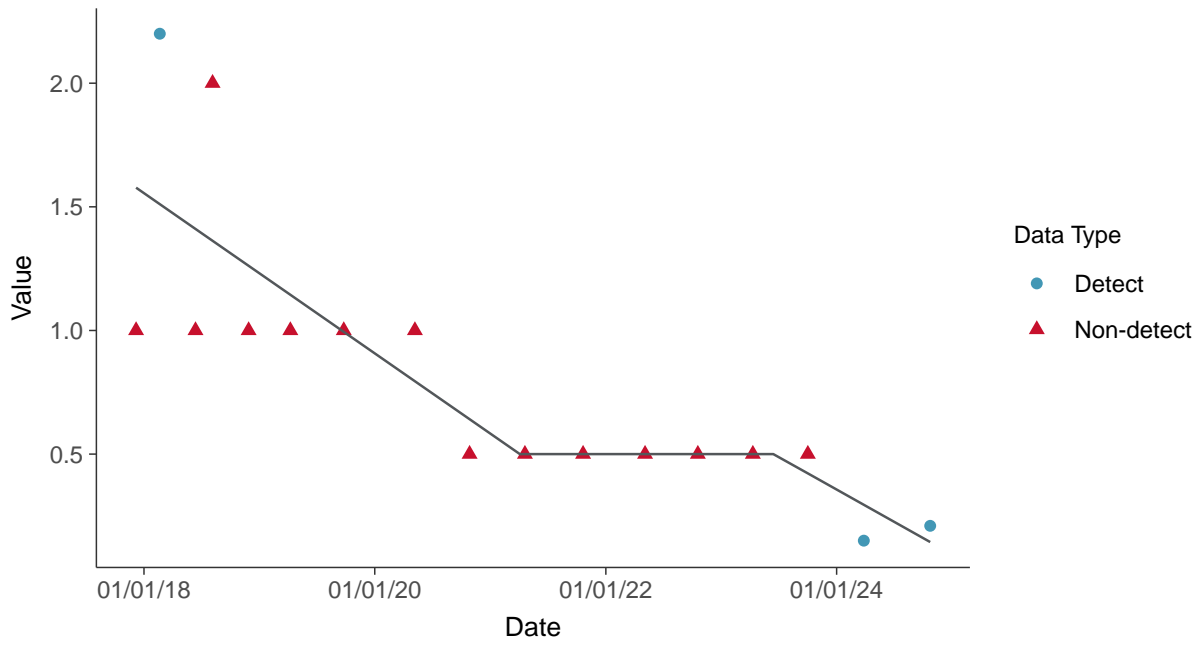
Trend Regression: Piecewise Linear-Linear

Selenium, MW-17003 (ug/L)





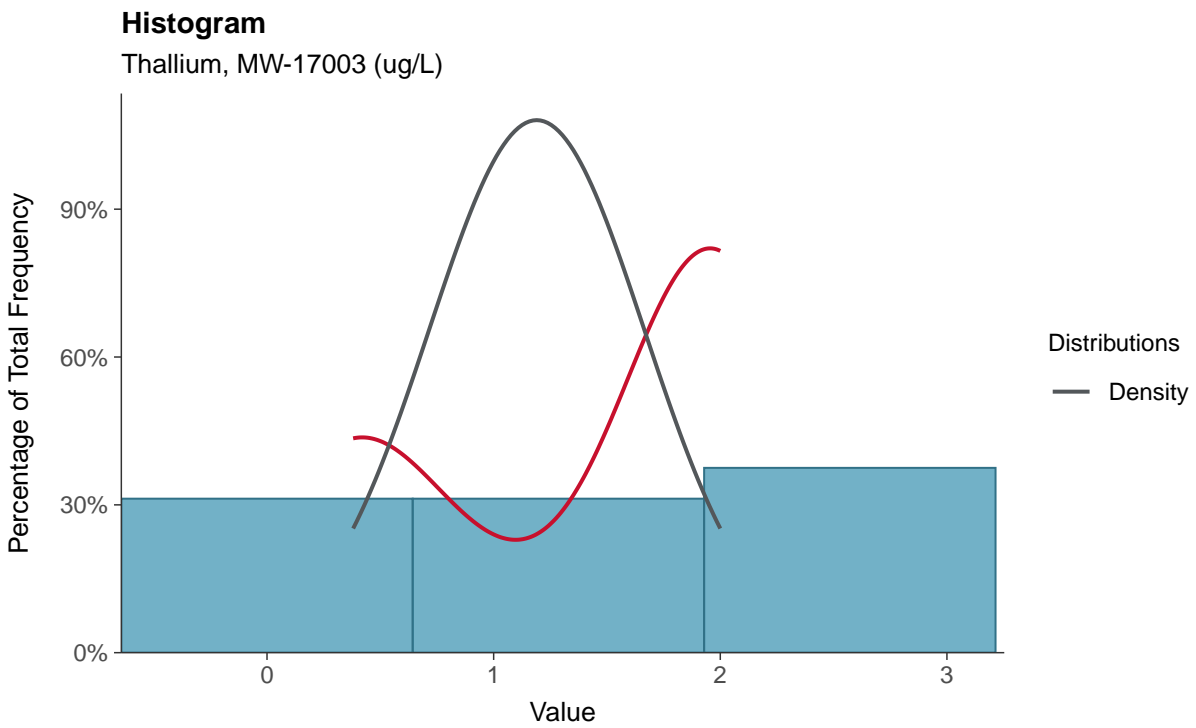
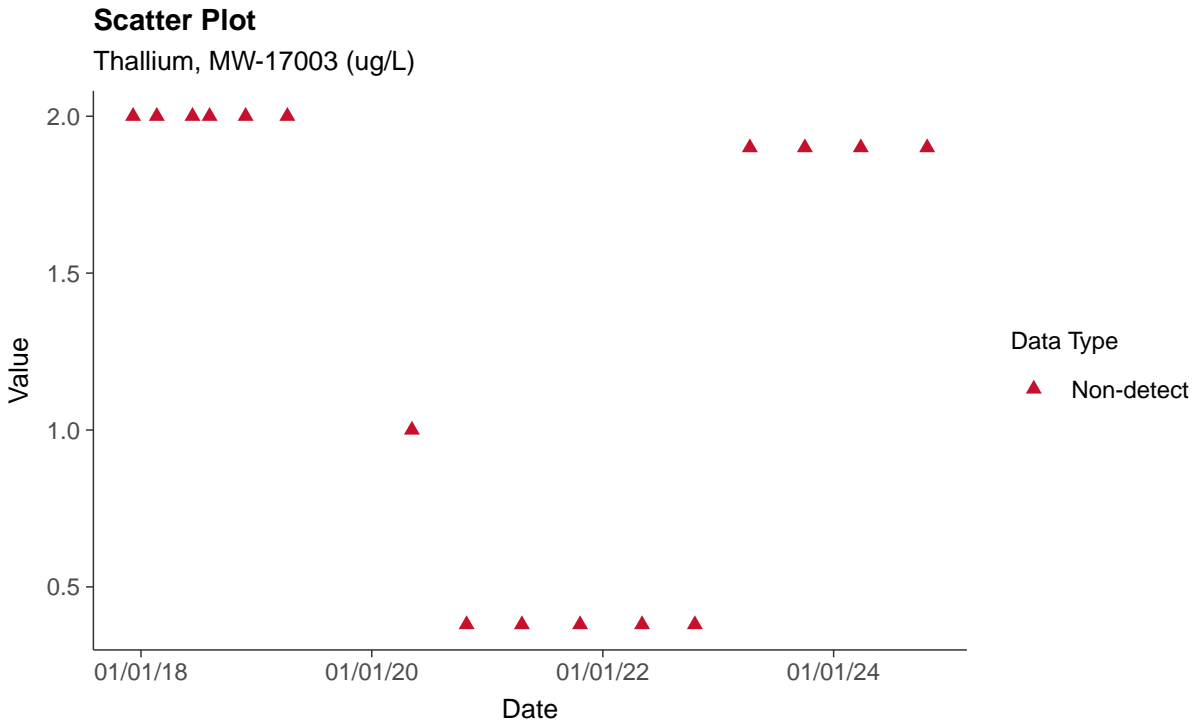
Trend Regression: Piecewise Linear-Linear-Linear Selenium, MW-17003 (ug/L)





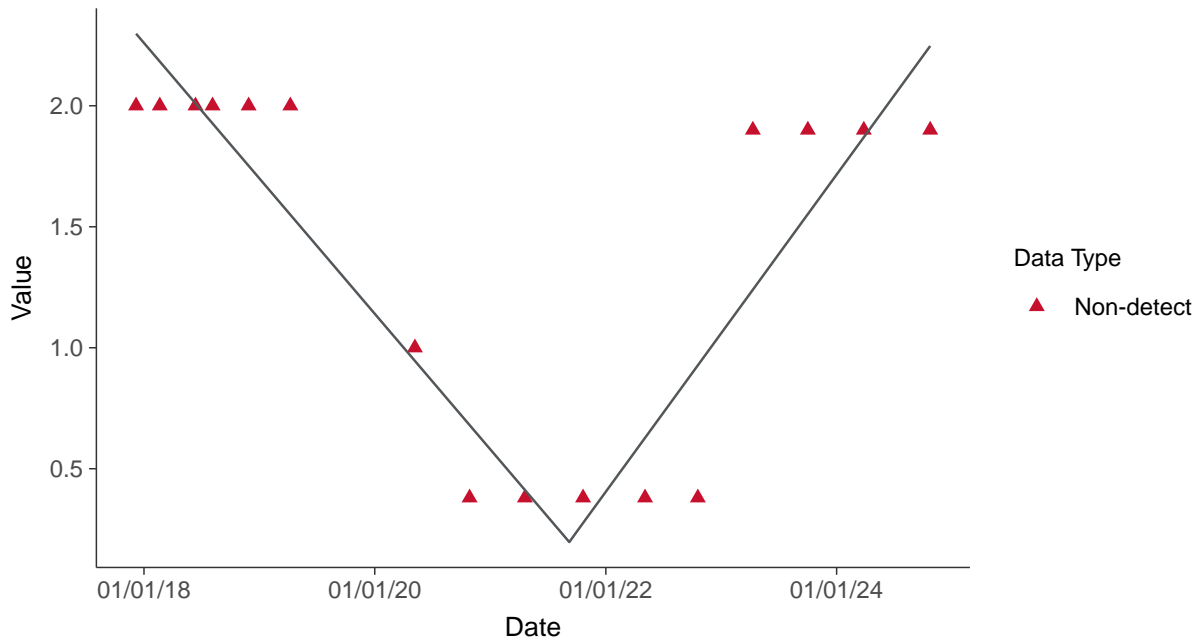
Appendix IV: Thallium, MW-17003

ID: 16_2_131

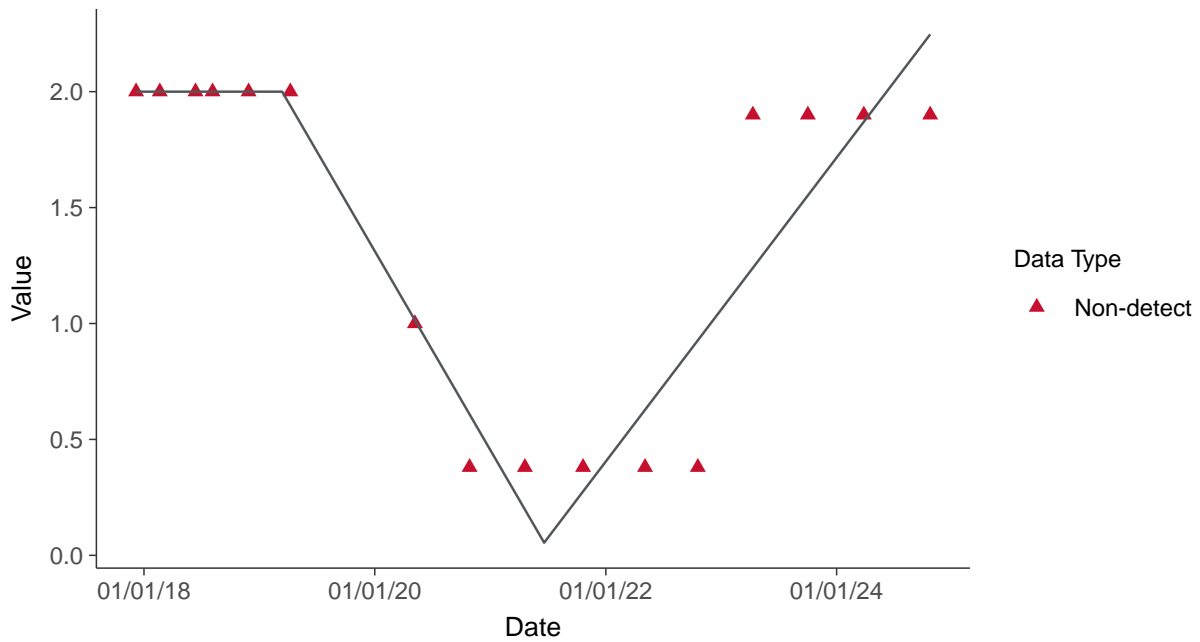




Trend Regression: Piecewise Linear-Linear
Thallium, MW-17003 (ug/L)



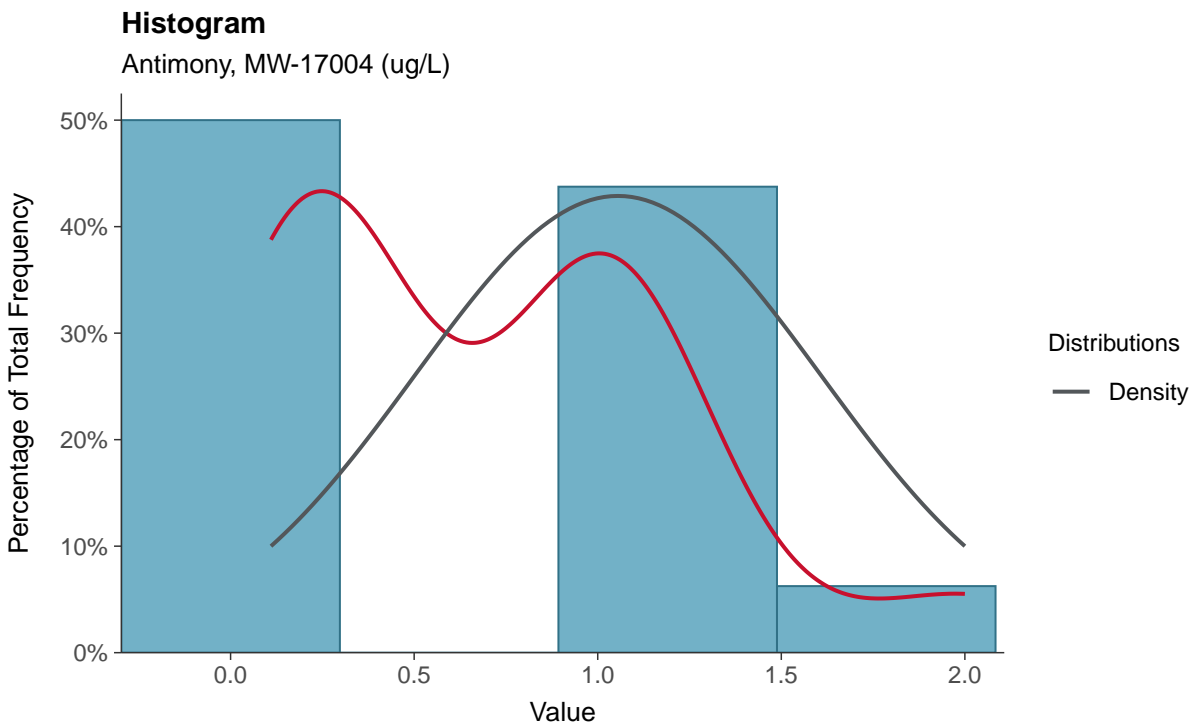
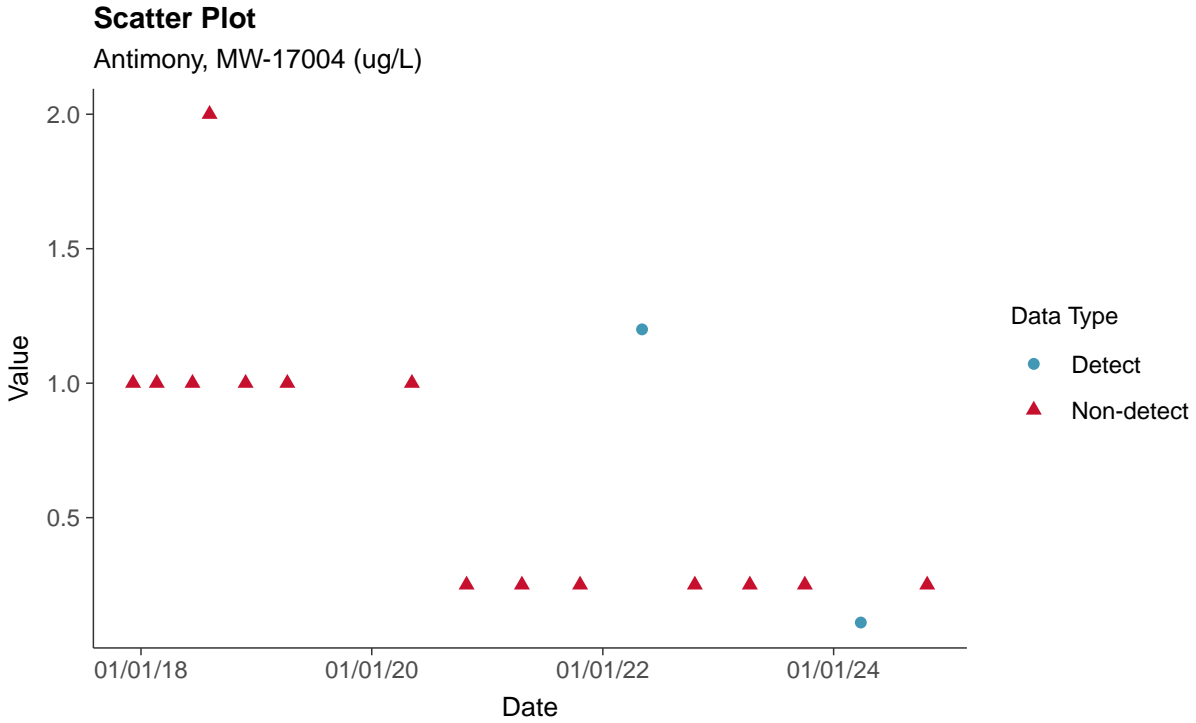
Trend Regression: Piecewise Linear-Linear-Linear
Thallium, MW-17003 (ug/L)





Appendix IV: Antimony, MW-17004

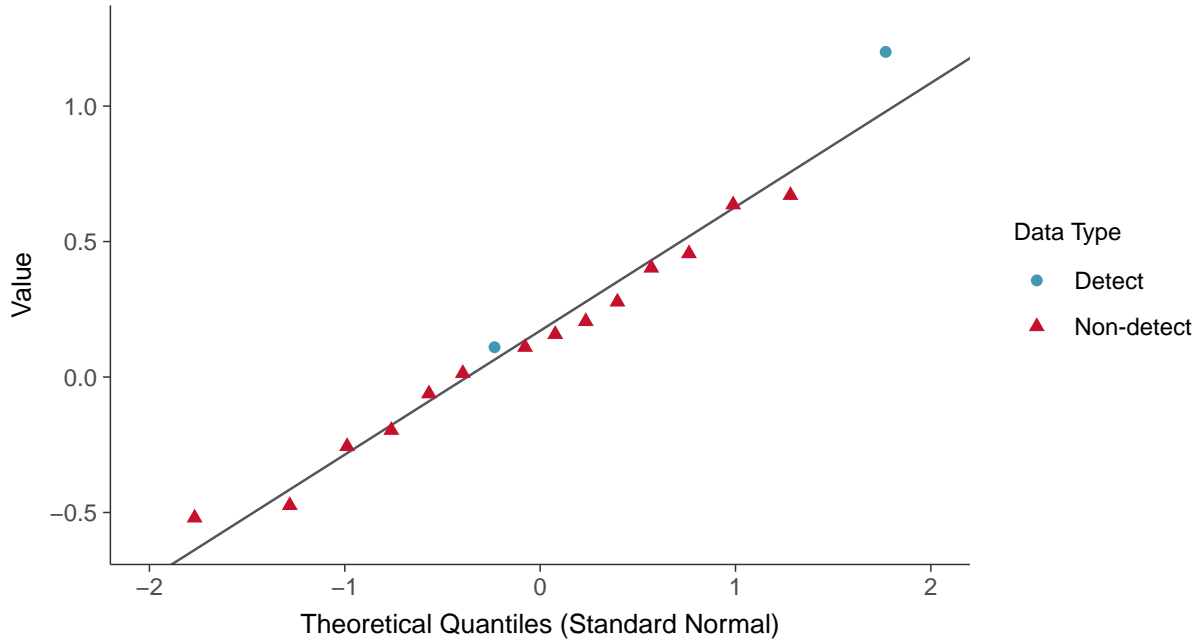
ID: 17_2_101





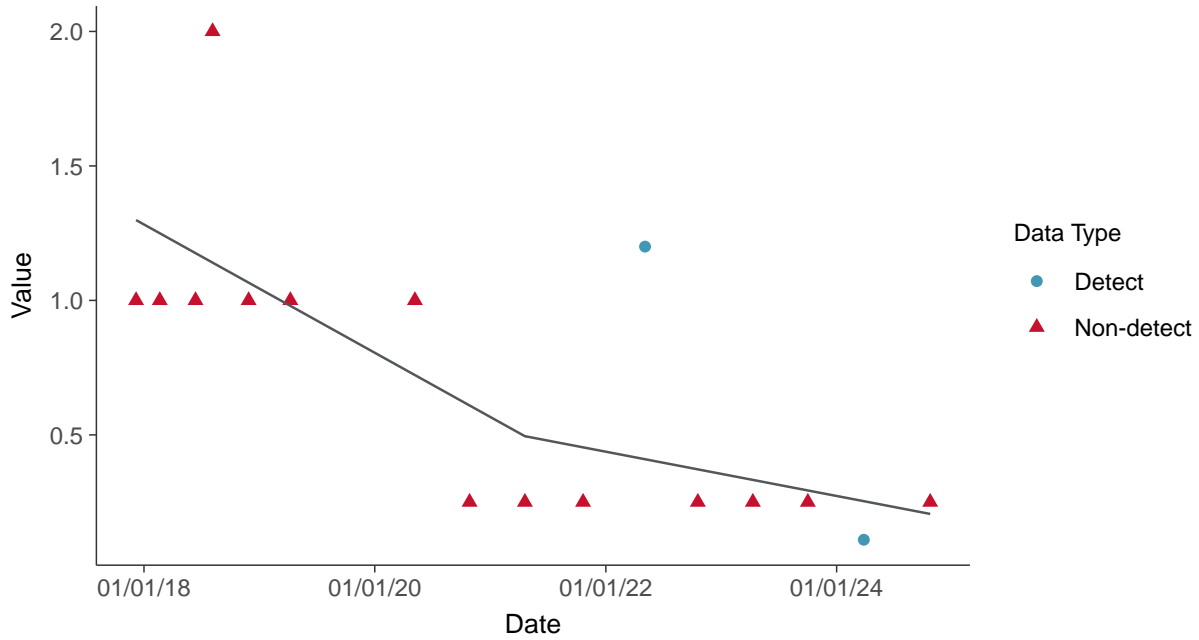
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

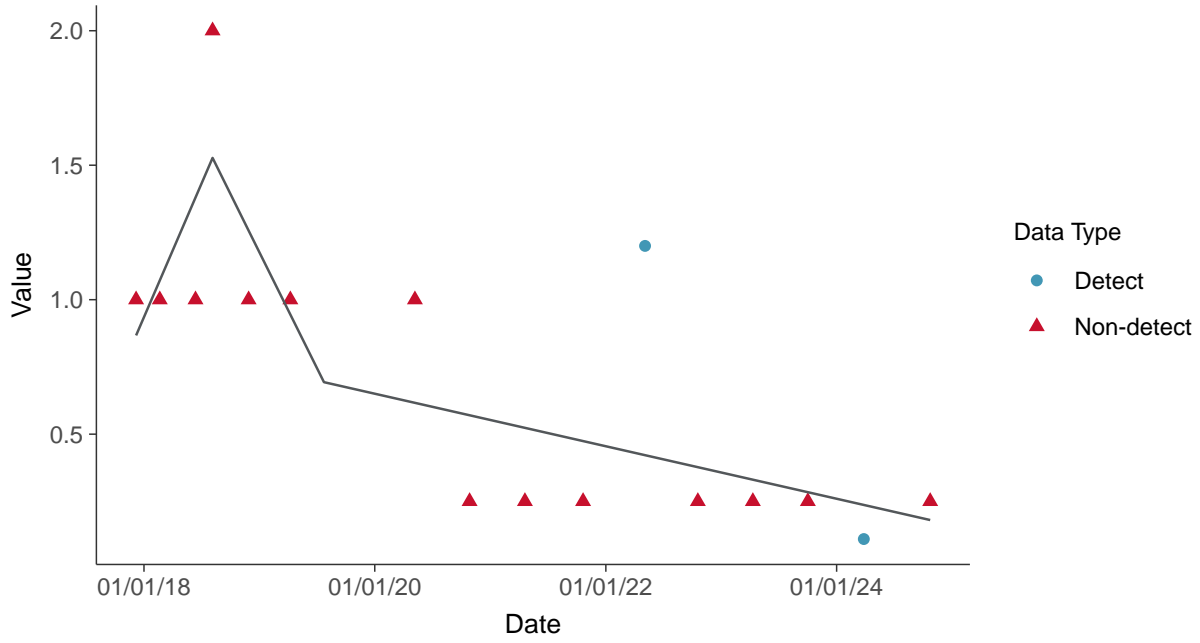
Antimony, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-17004 (ug/L)



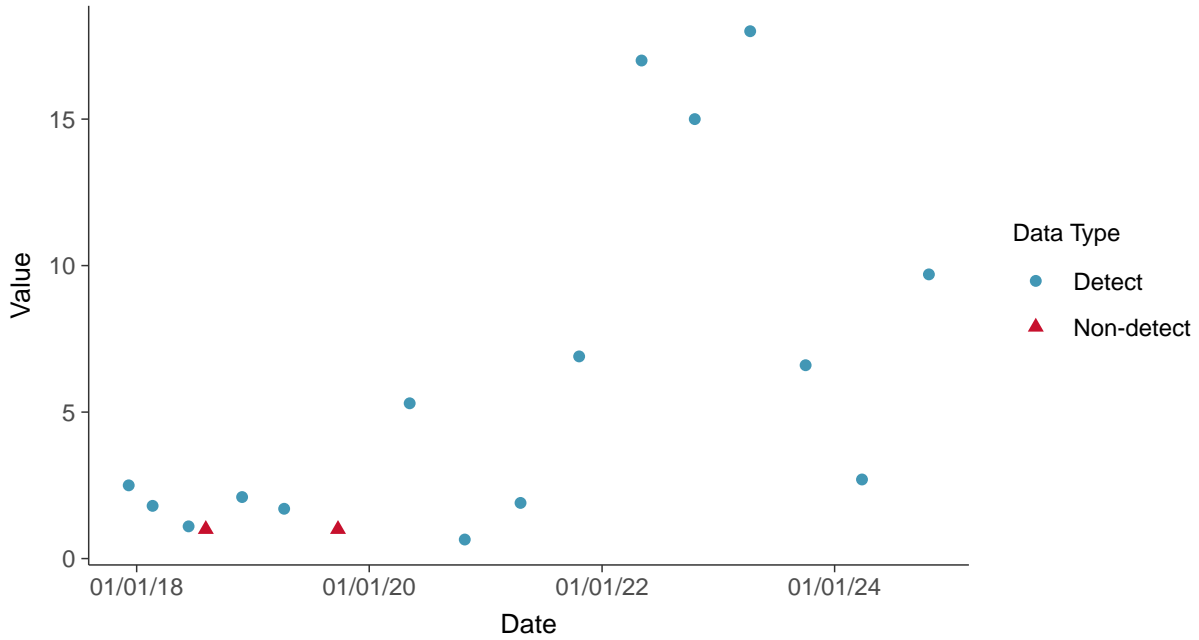


Appendix IV: Arsenic, MW-17004

ID: 17_2_102

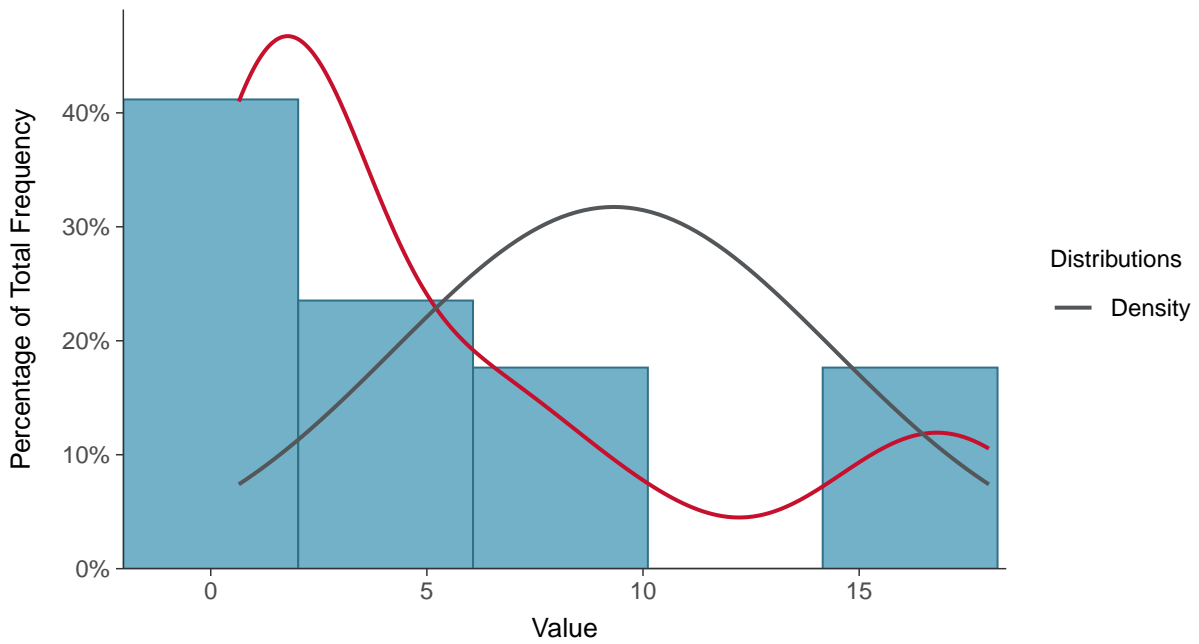
Scatter Plot

Arsenic, MW-17004 (ug/L)



Histogram

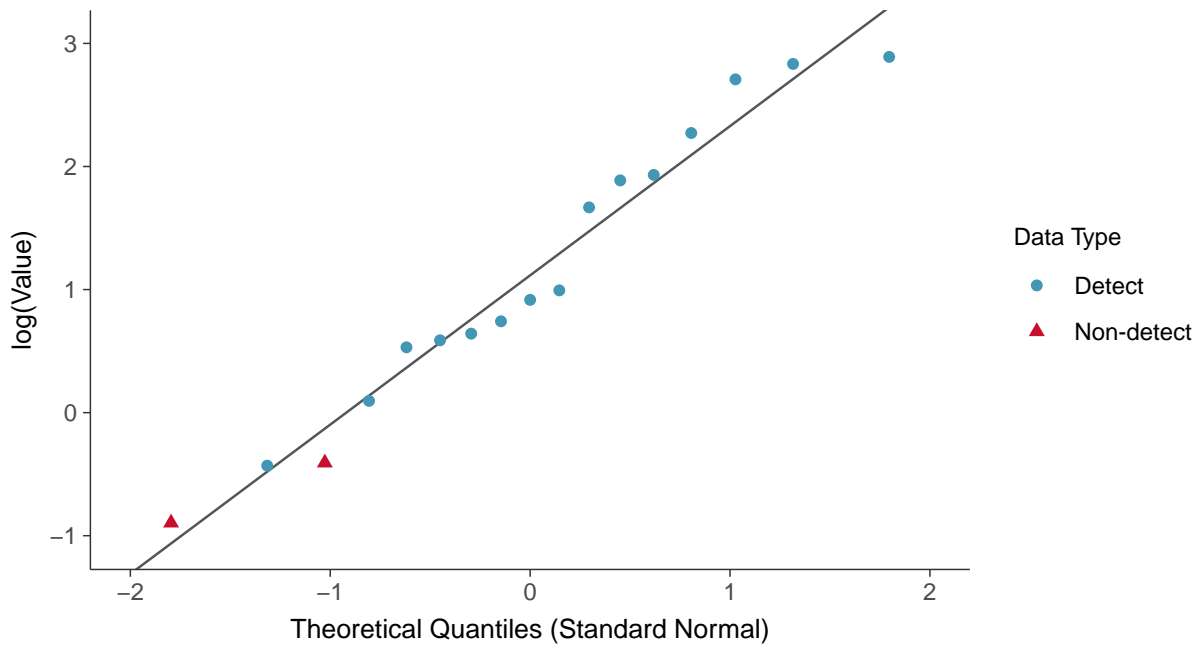
Arsenic, MW-17004 (ug/L)





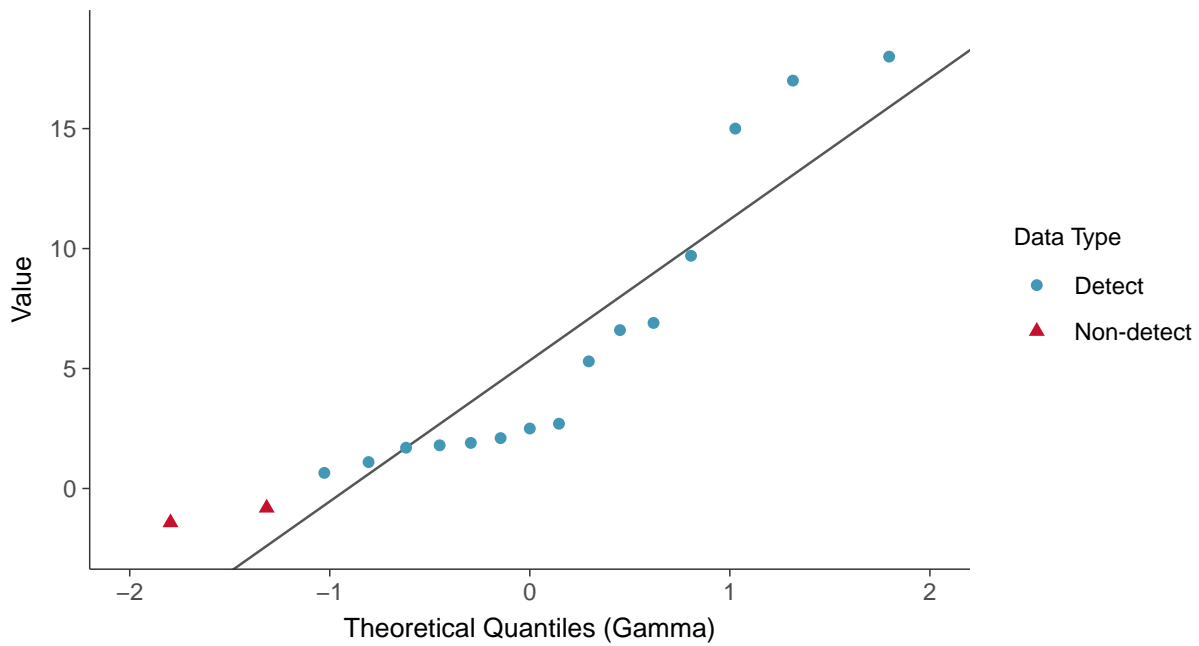
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17004 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

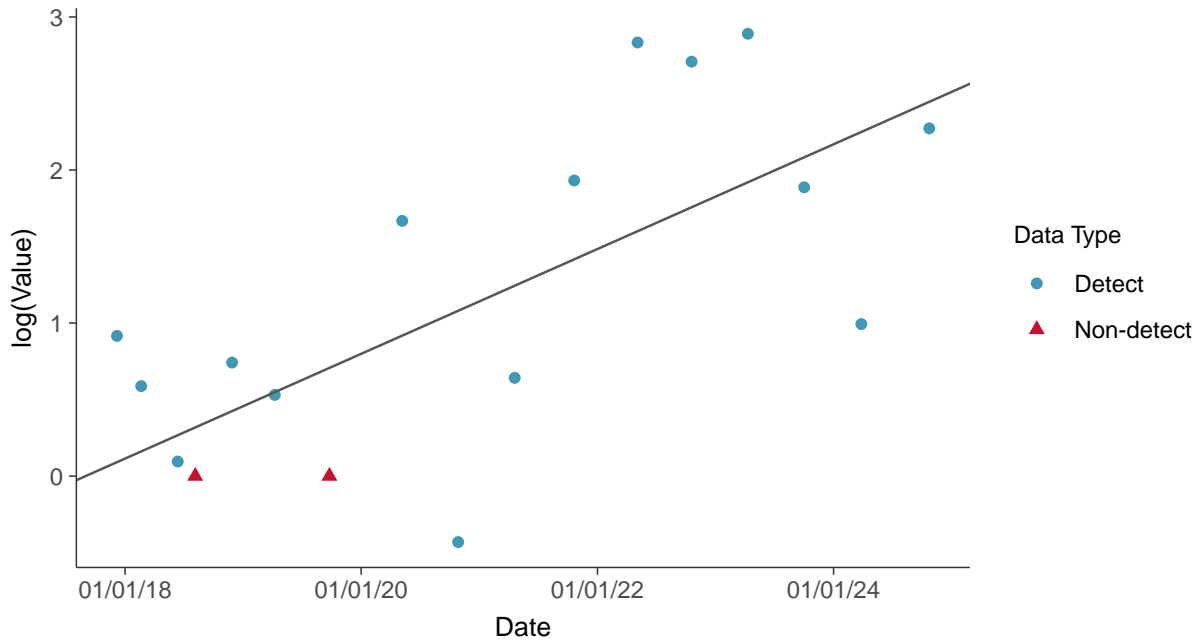
Arsenic, MW-17004 (ug/L)





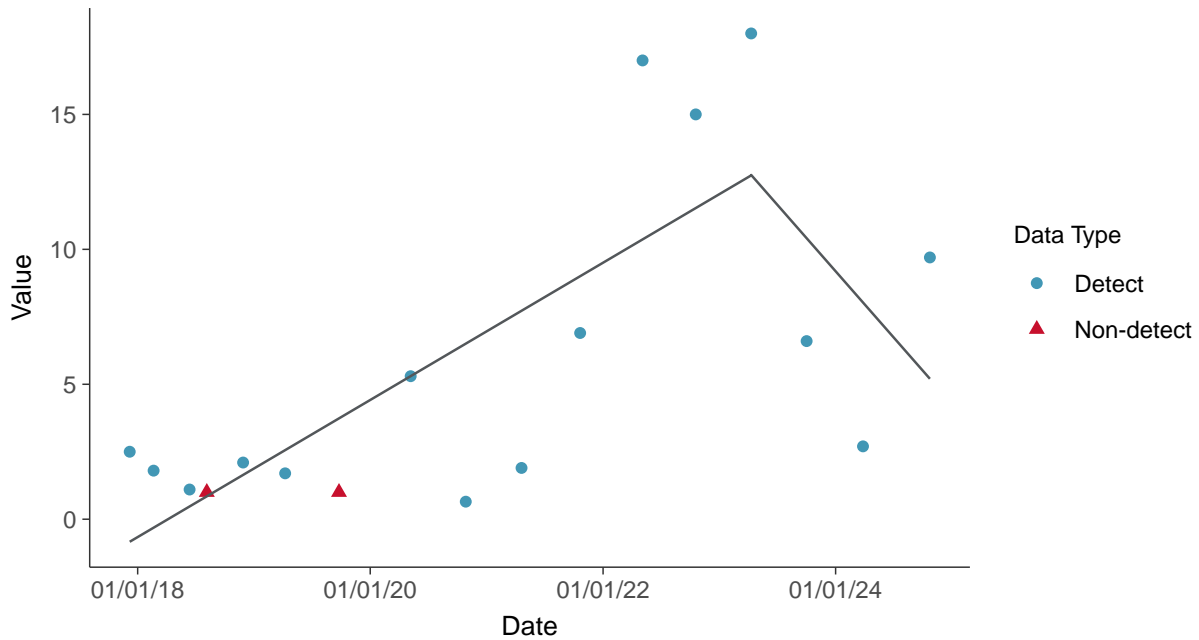
Trend Regression: Lognormal MLE

Arsenic, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

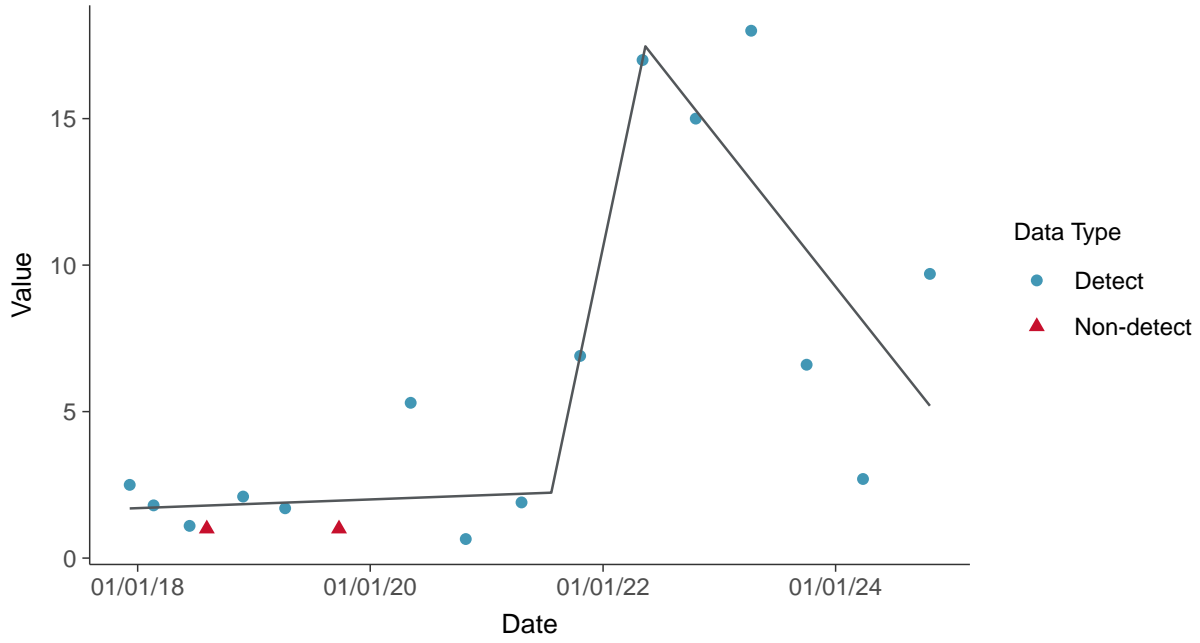
Arsenic, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-17004 (ug/L)



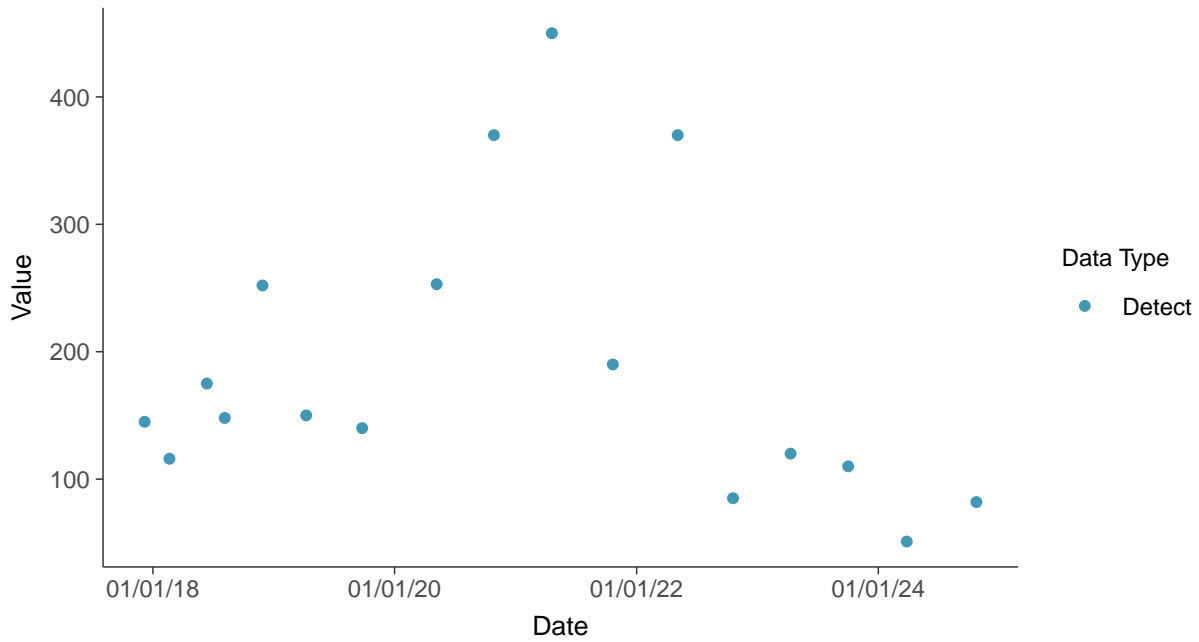


Appendix IV: Barium, MW-17004

ID: 17_2_103

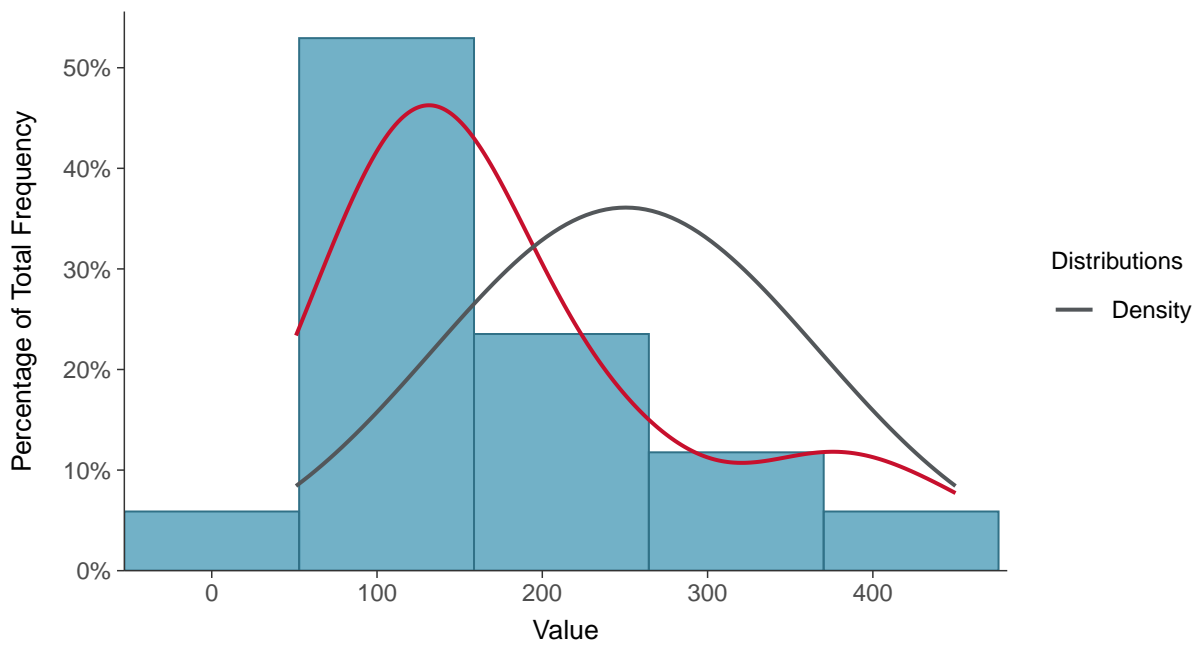
Scatter Plot

Barium, MW-17004 (ug/L)



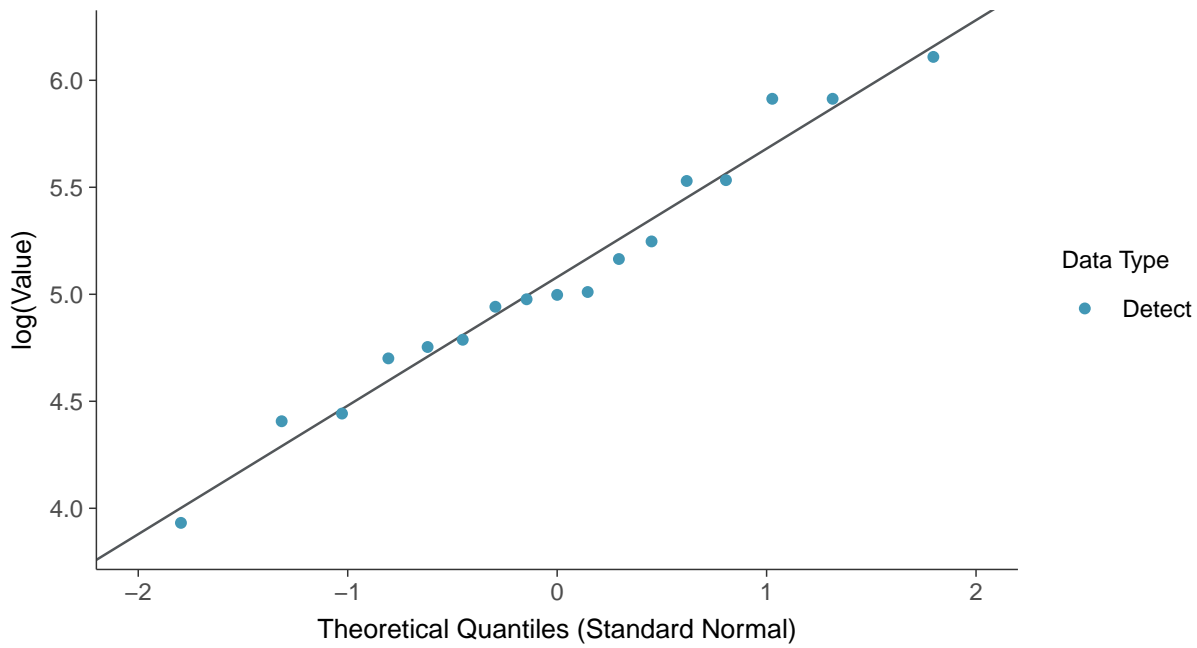
Histogram

Barium, MW-17004 (ug/L)

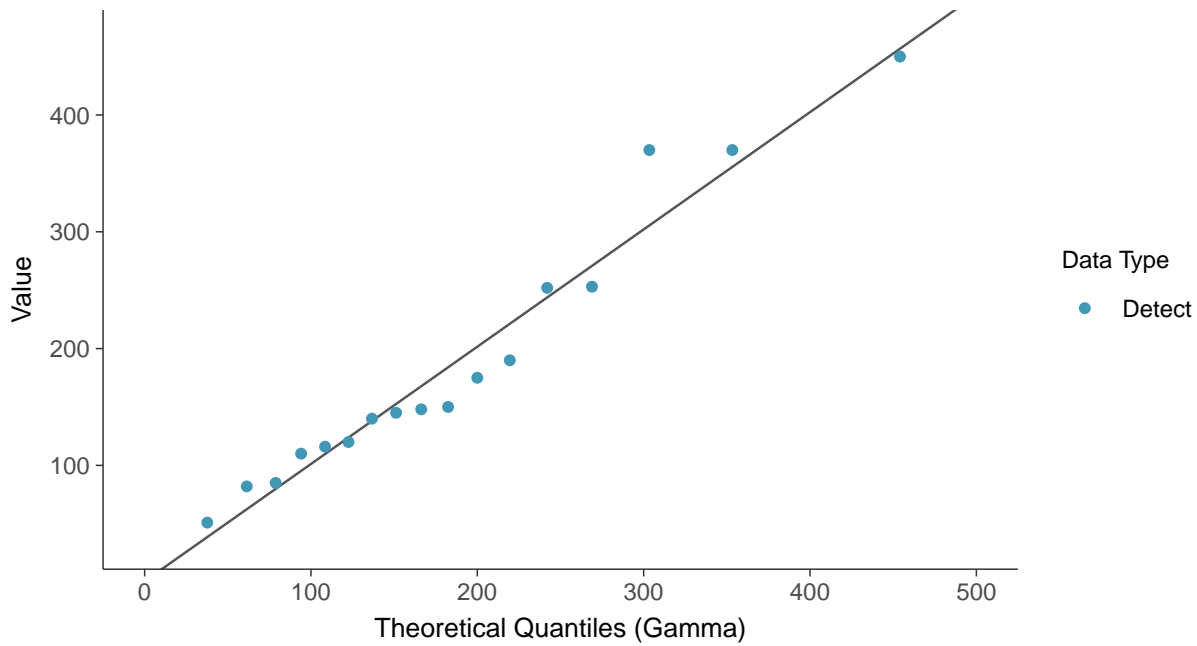




Lognormal Q-Q plot
Barium, MW-17004 (ug/L)



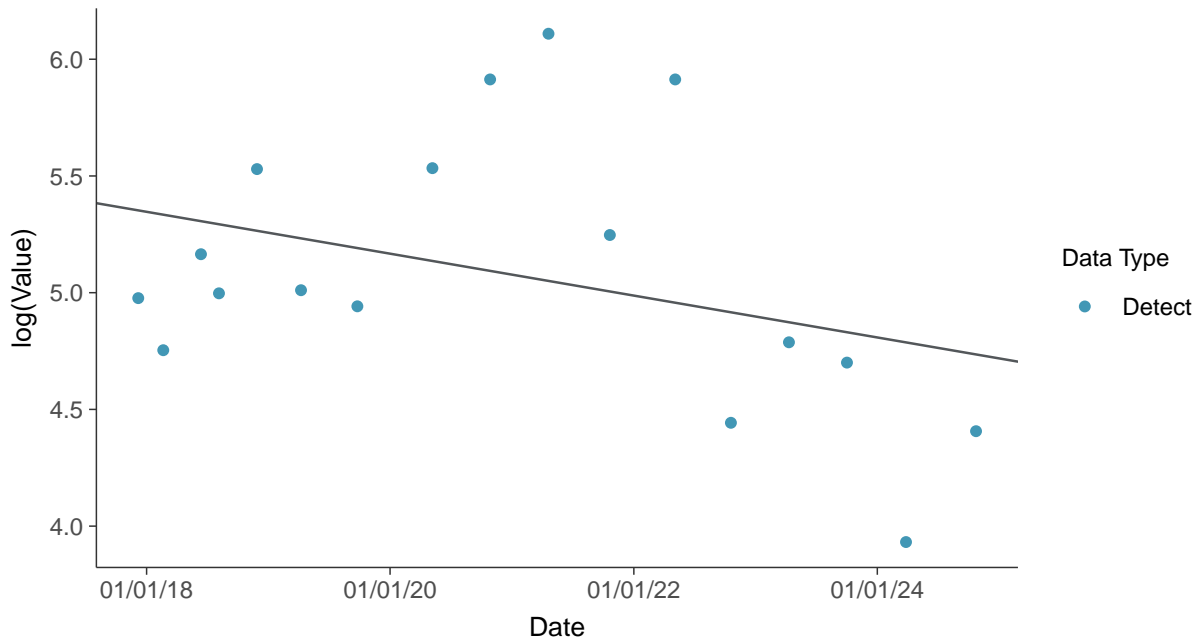
Gamma Q-Q plot
Barium, MW-17004 (ug/L)





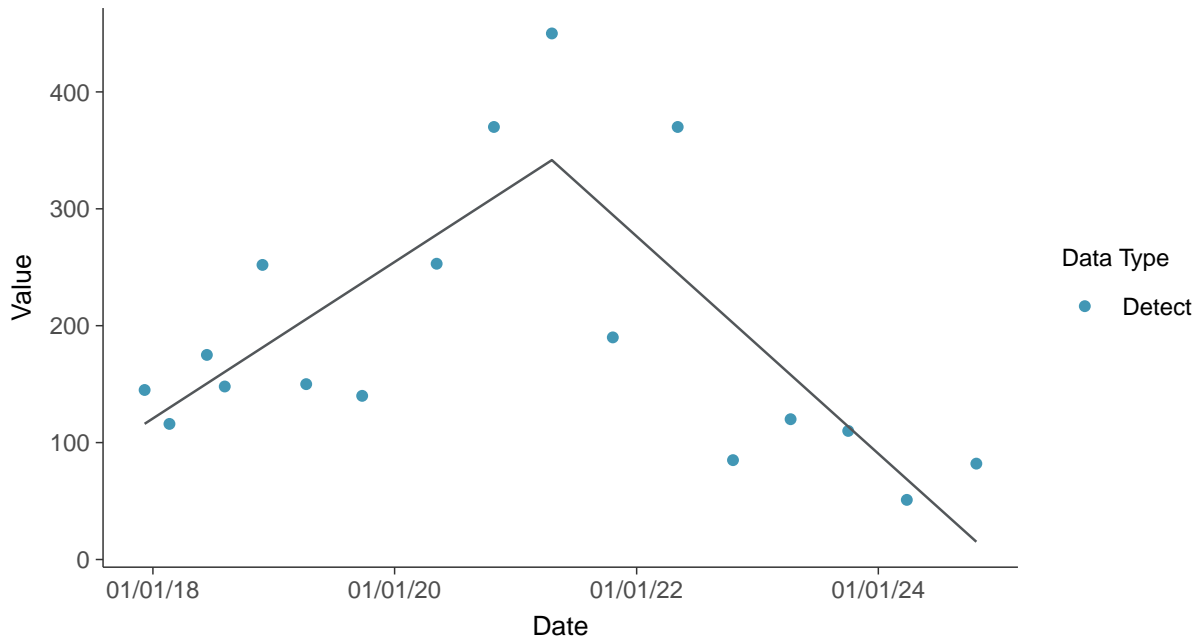
Trend Regression: Lognormal MLE

Barium, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

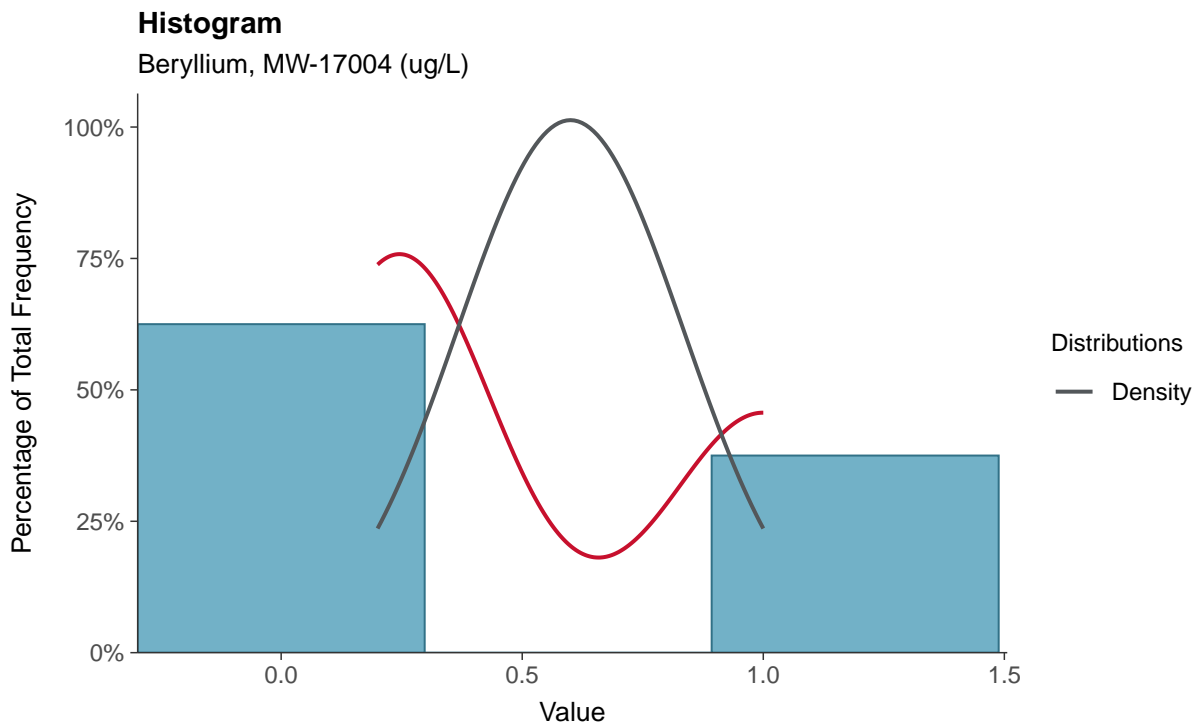
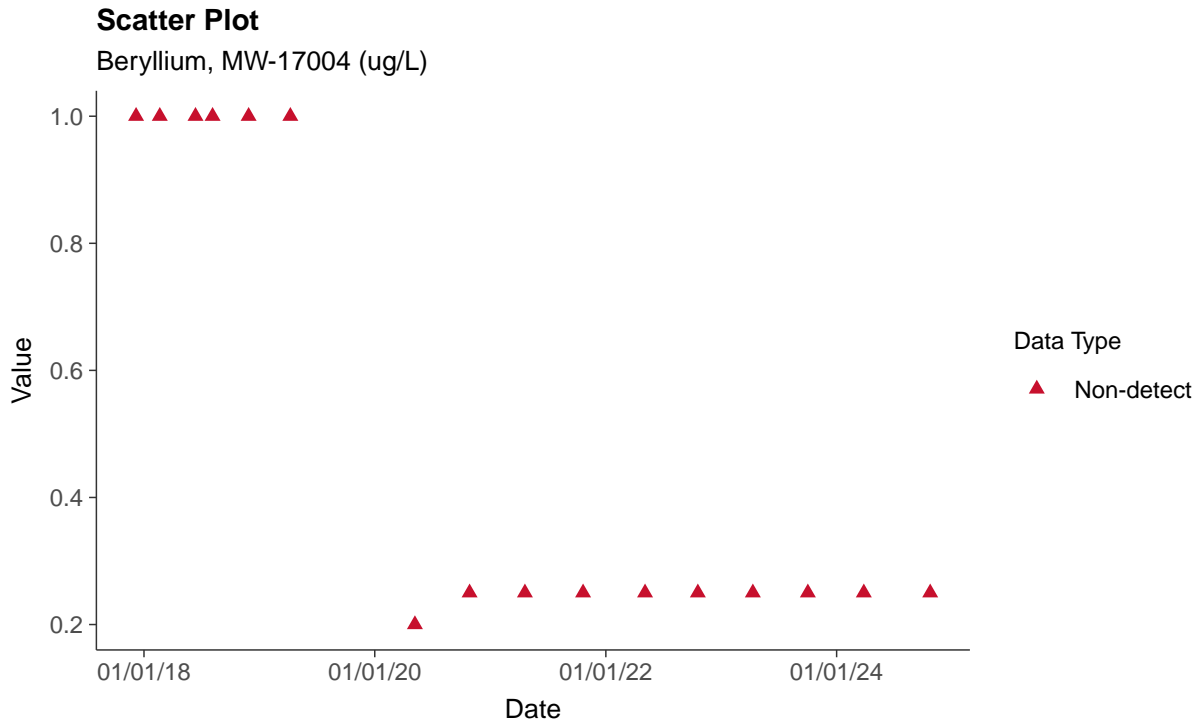
Barium, MW-17004 (ug/L)





Appendix IV: Beryllium, MW-17004

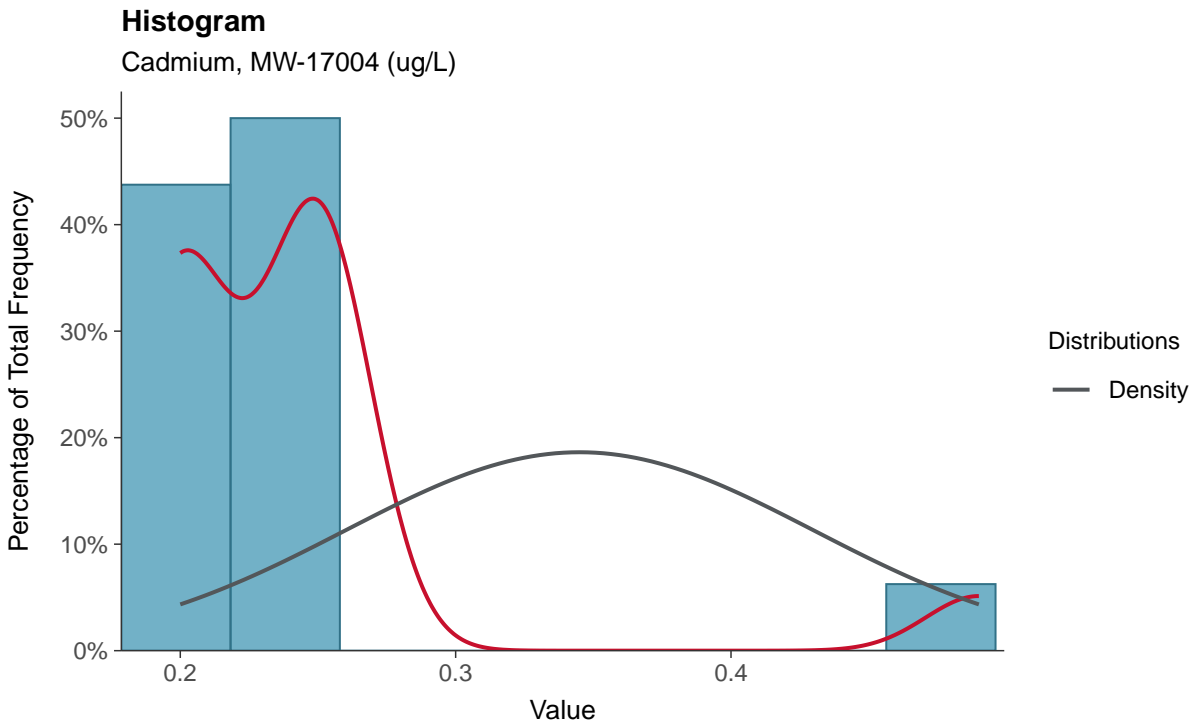
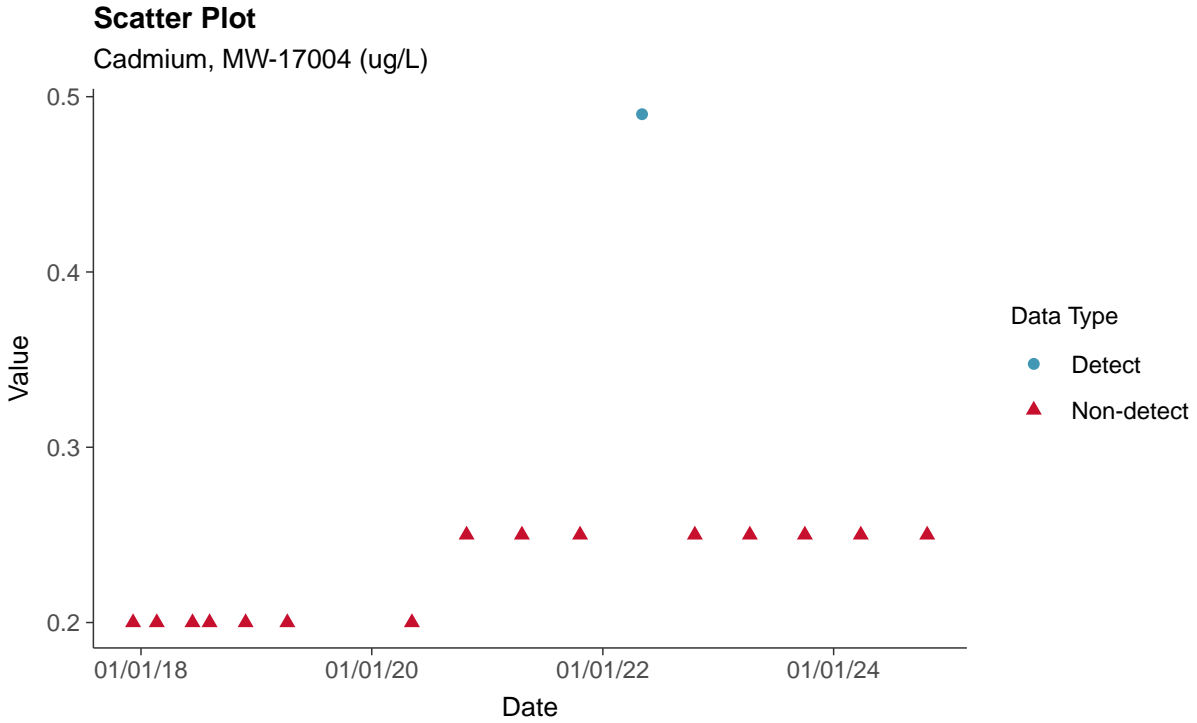
ID: 17_2_104





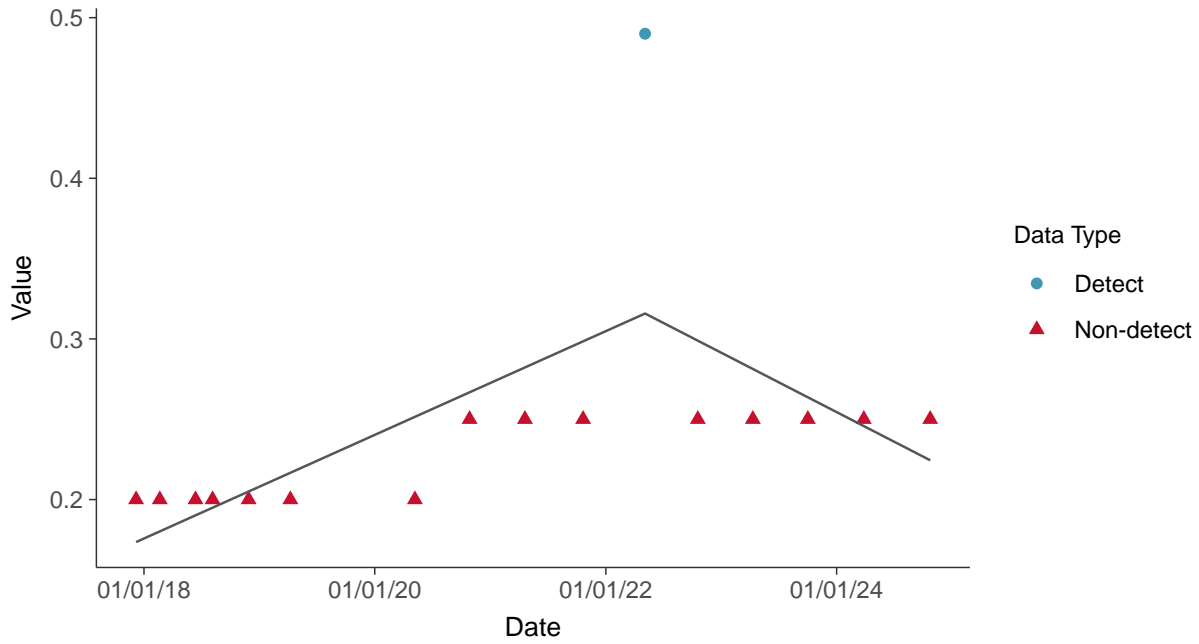
Appendix IV: Cadmium, MW-17004

ID: 17_2_106

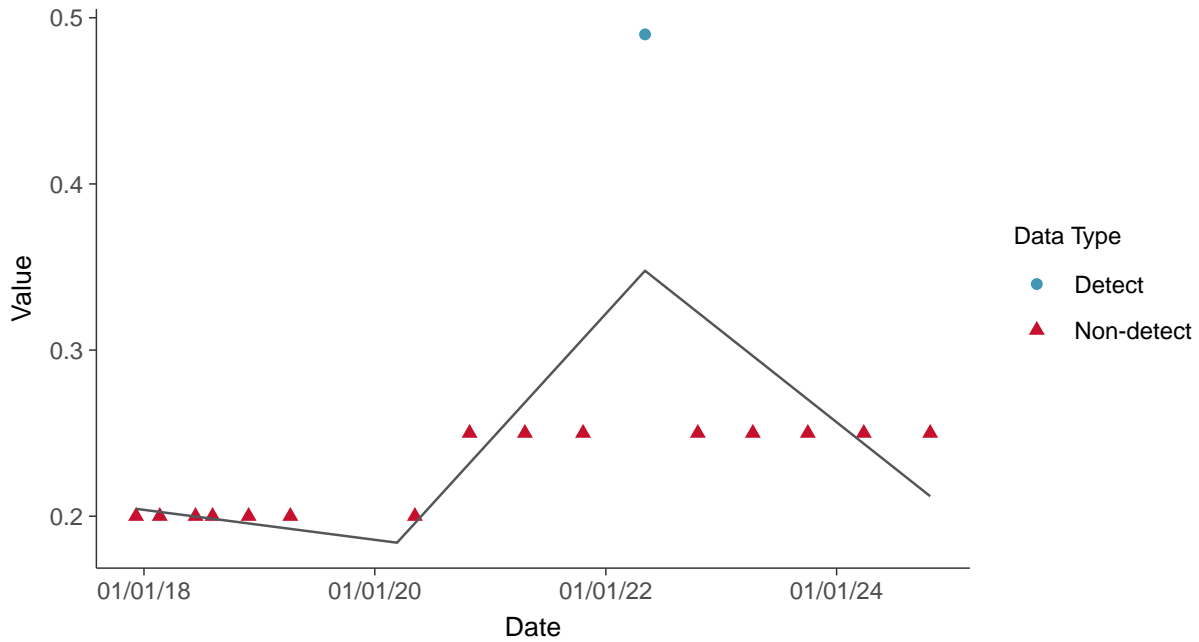




Trend Regression: Piecewise Linear-Linear
Cadmium, MW-17004 (ug/L)



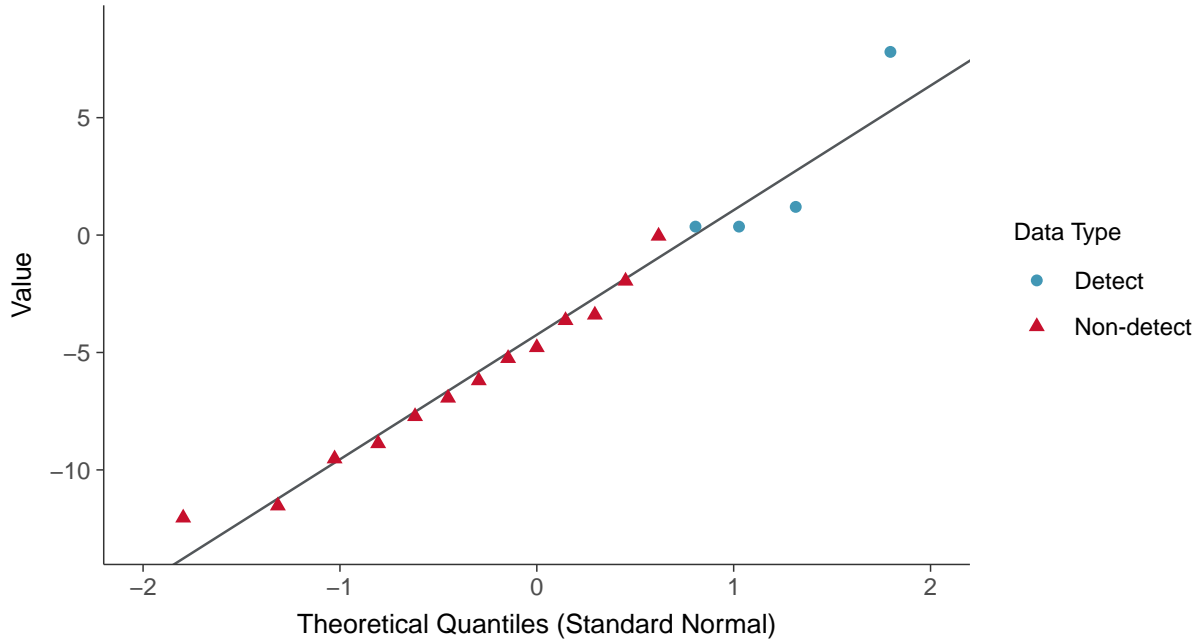
Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-17004 (ug/L)





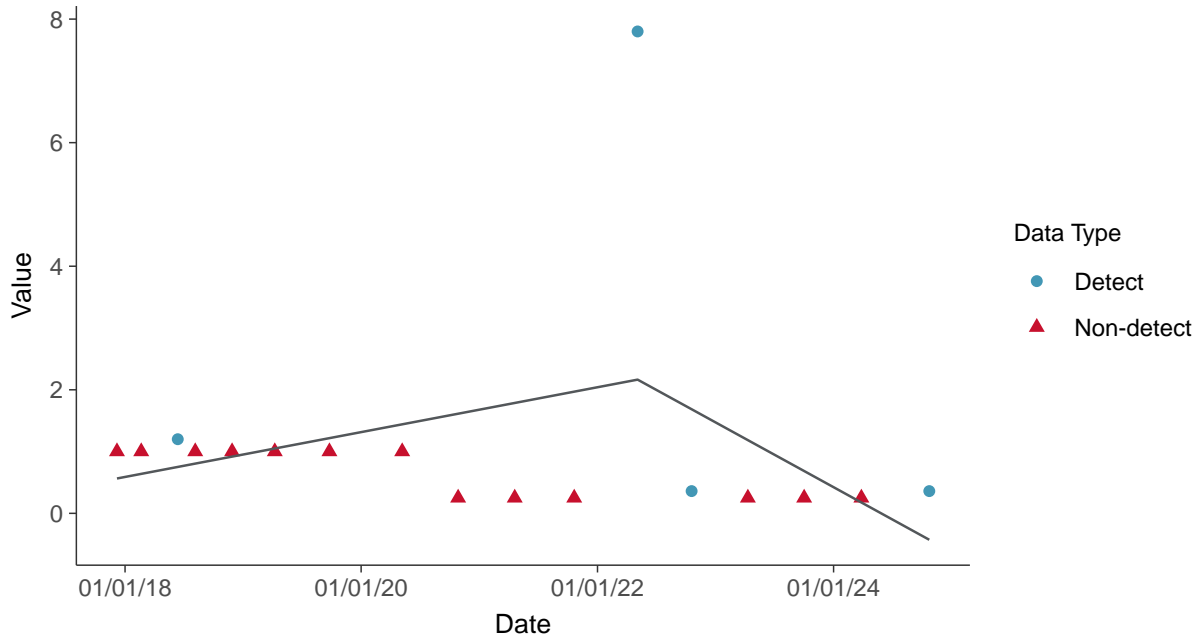
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17004 (ug/L)



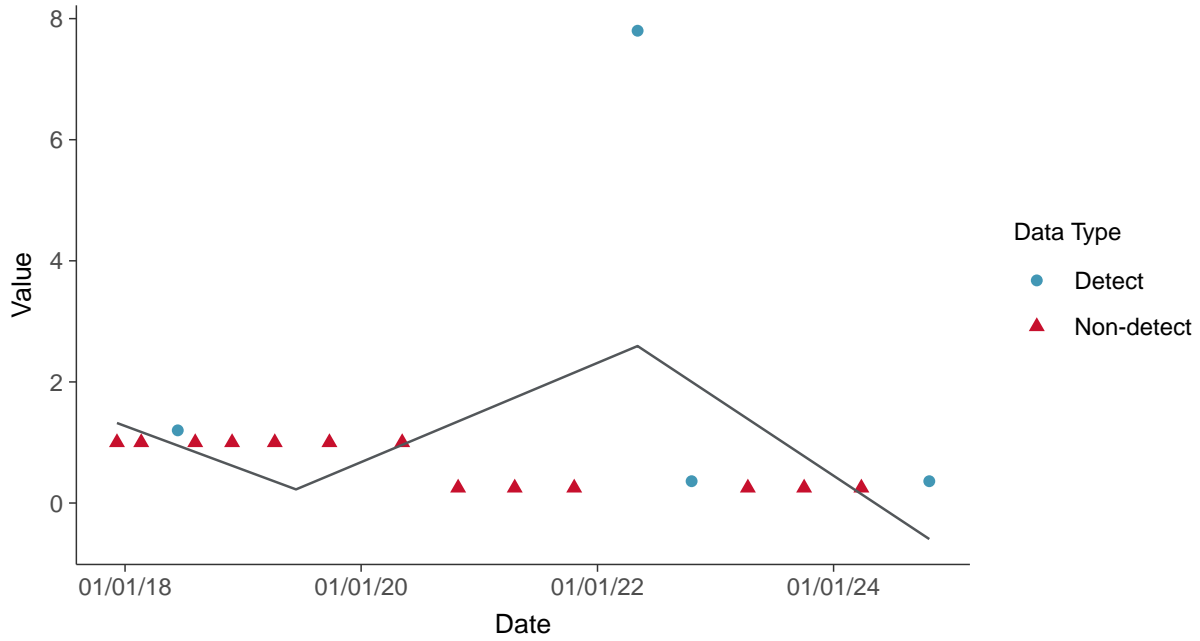
Trend Regression: Piecewise Linear-Linear

Chromium, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear
Chromium, MW-17004 (ug/L)



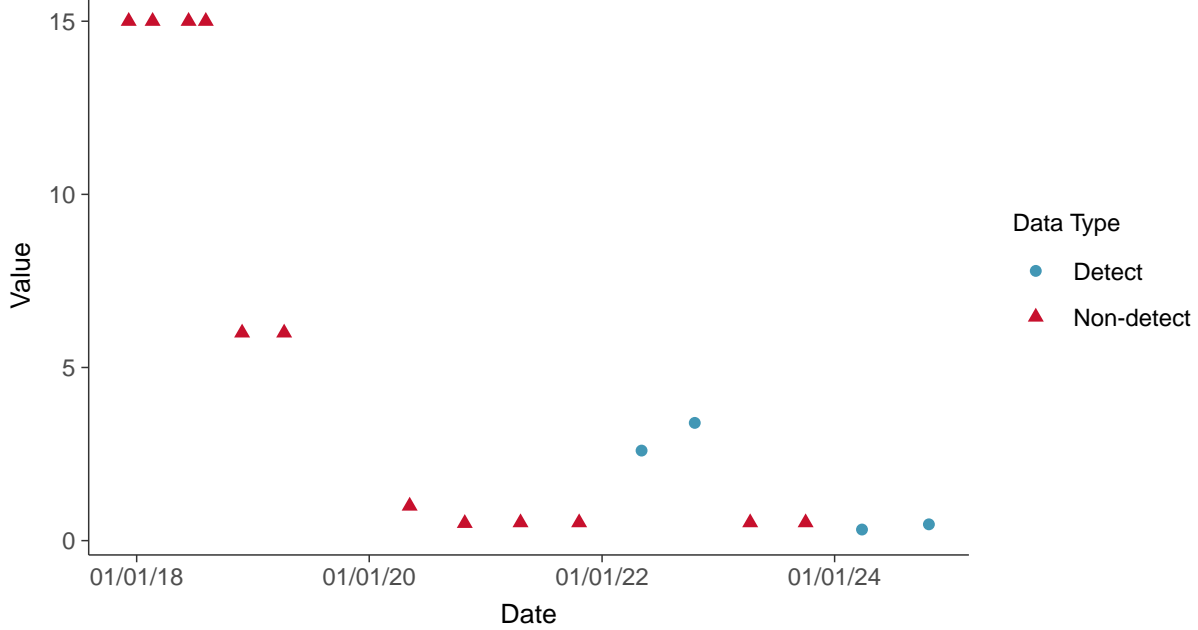


Appendix IV: Cobalt, MW-17004

ID: 17_2_110

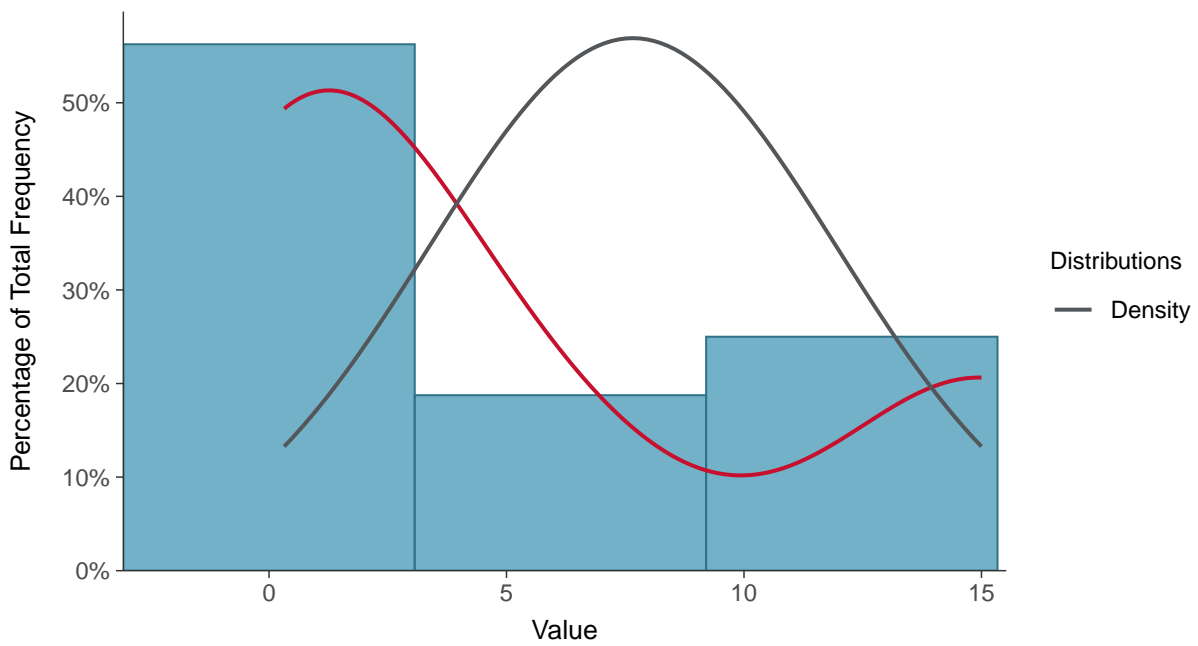
Scatter Plot

Cobalt, MW-17004 (ug/L)



Histogram

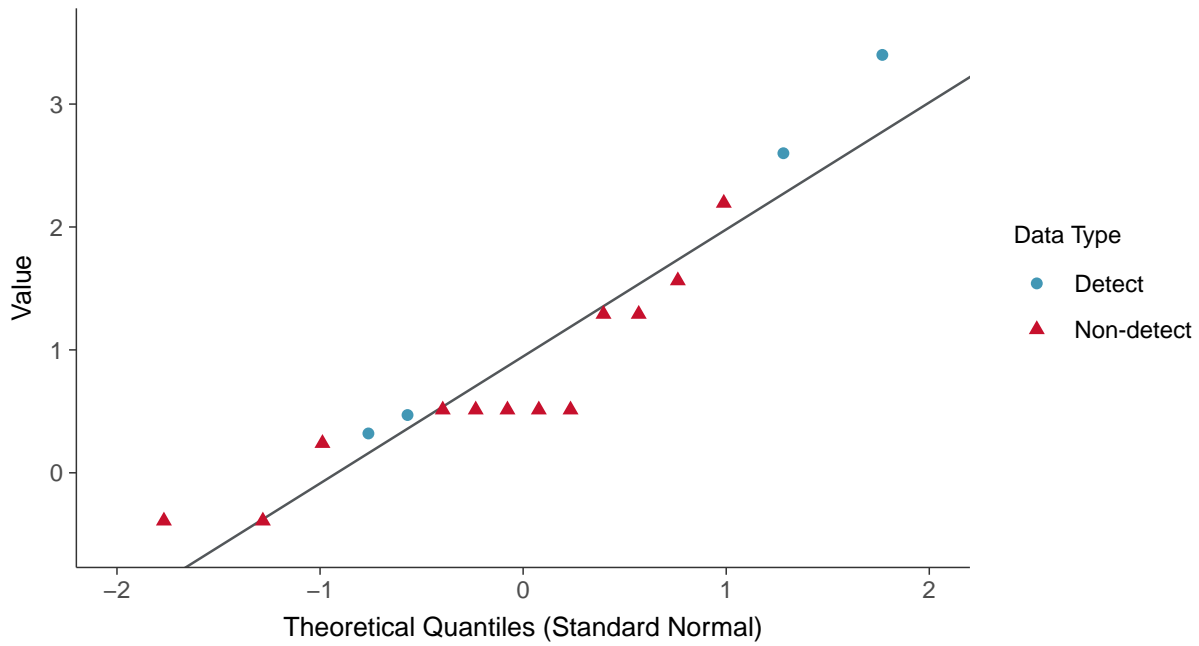
Cobalt, MW-17004 (ug/L)





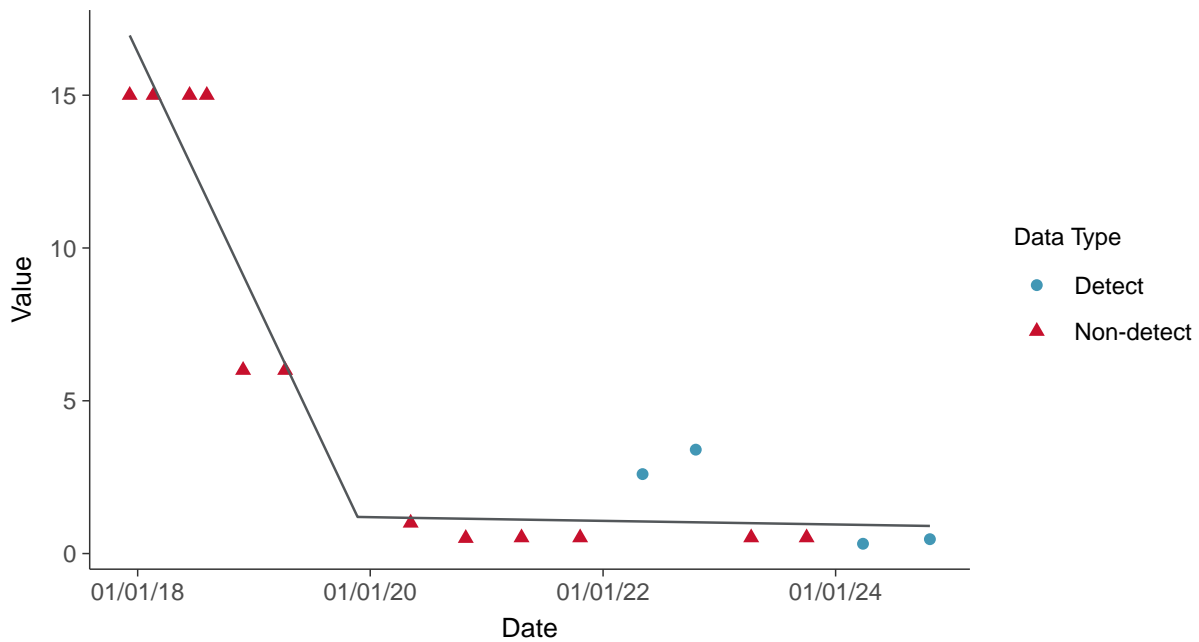
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

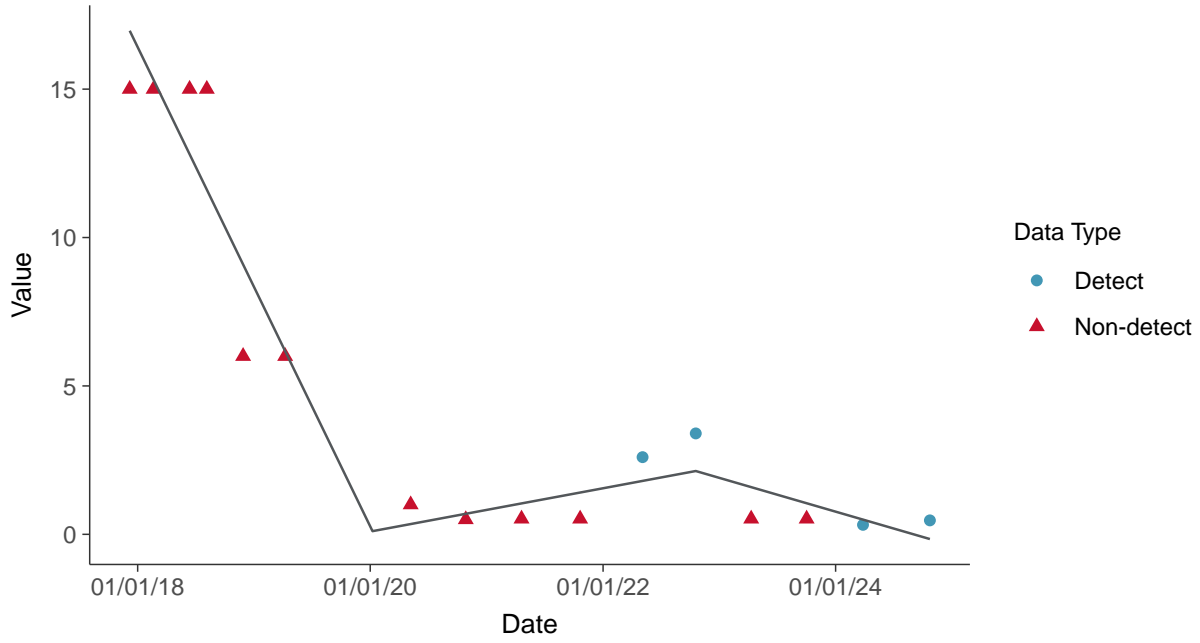
Cobalt, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear

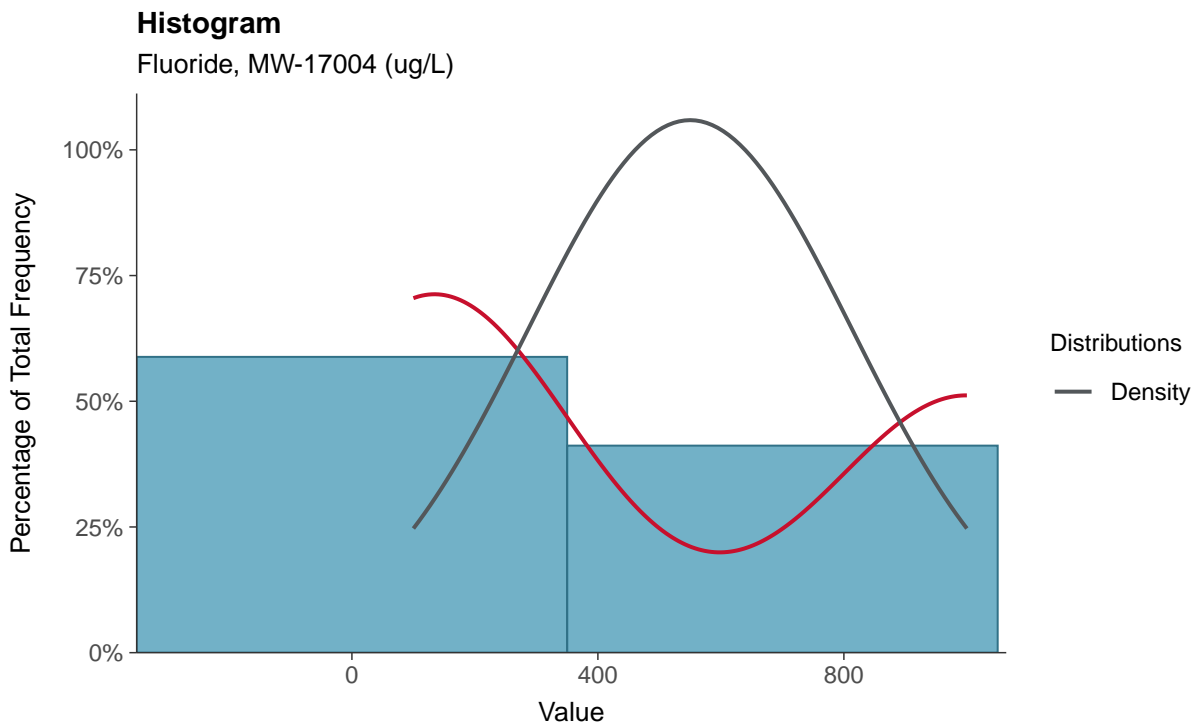
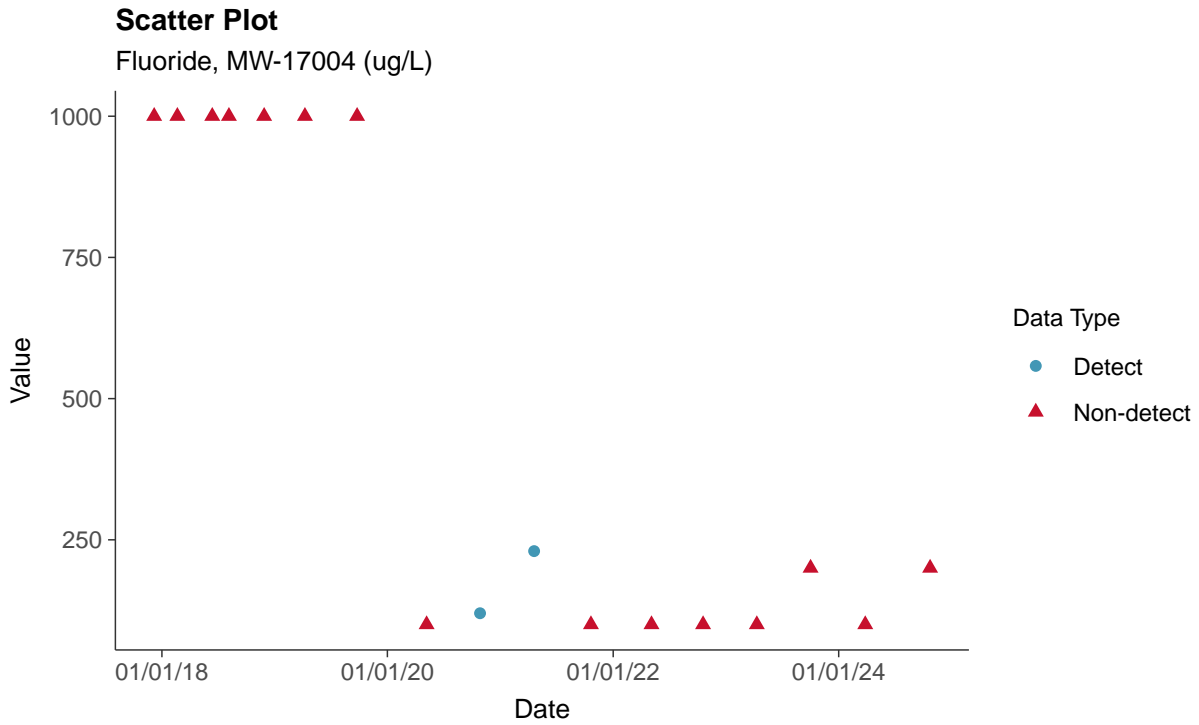
Cobalt, MW-17004 (ug/L)





Appendix IV: Fluoride, MW-17004

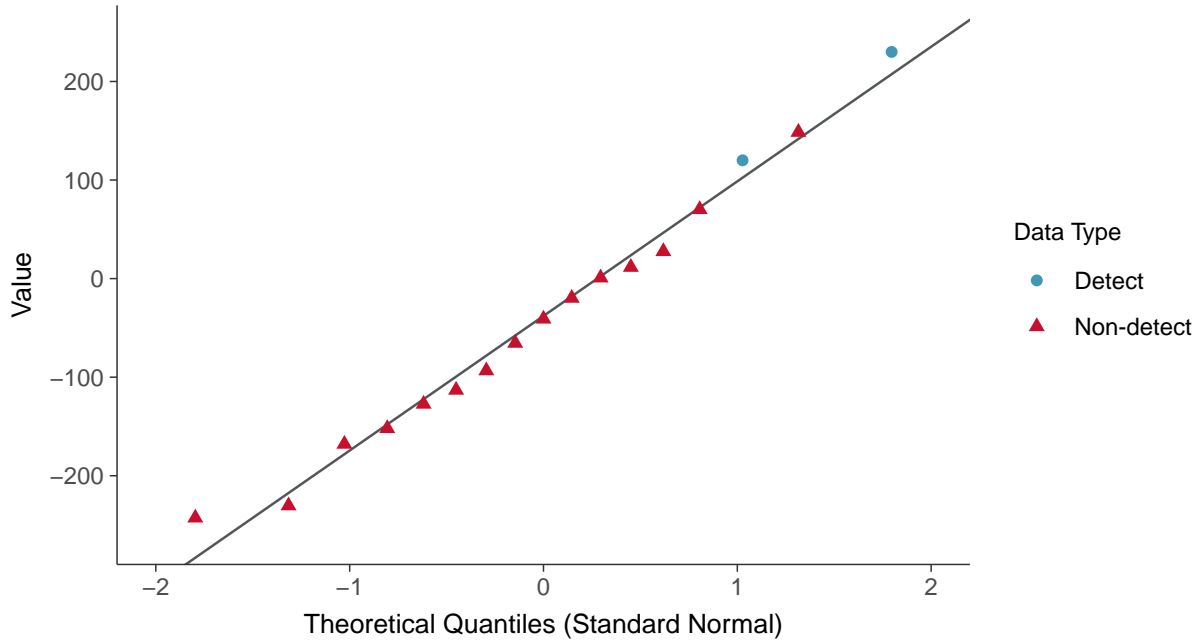
ID: 17_2_114





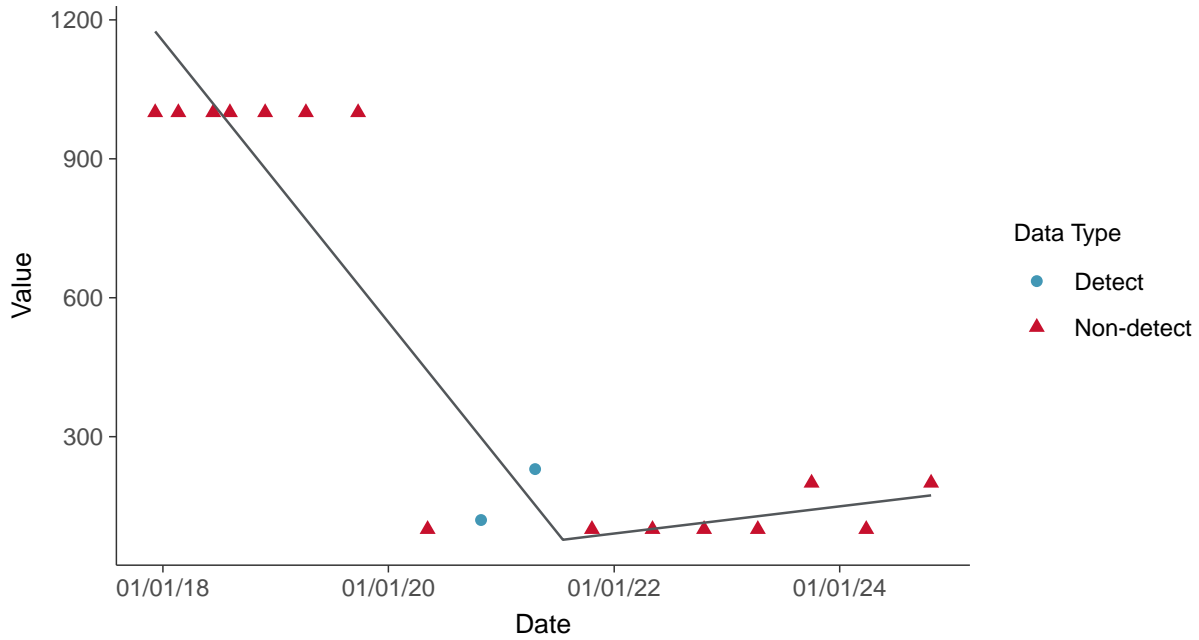
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

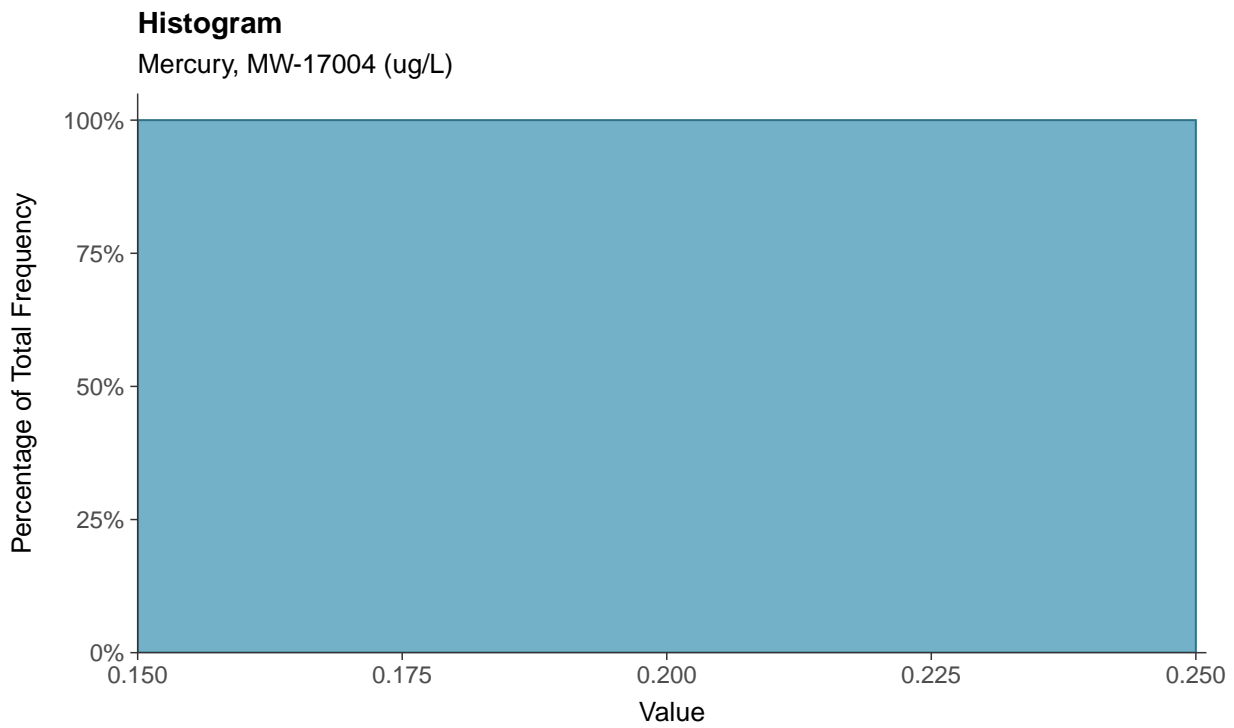
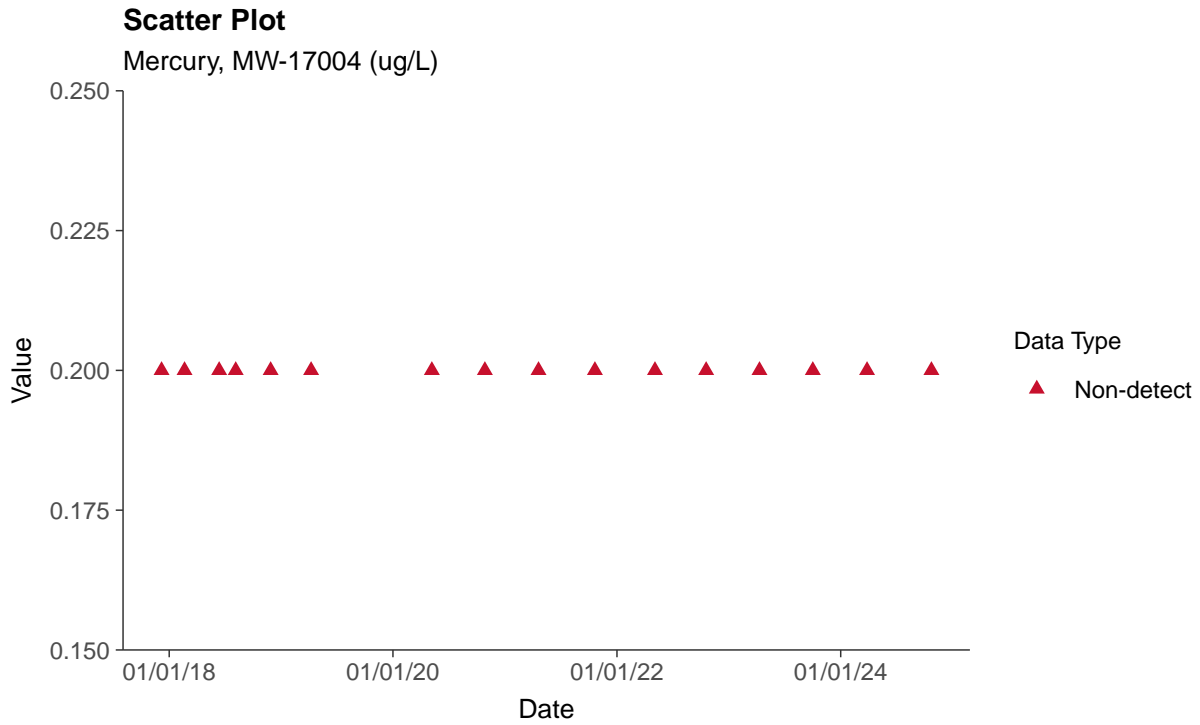
Fluoride, MW-17004 (ug/L)





Appendix IV: Mercury, MW-17004

ID: 17_2_118



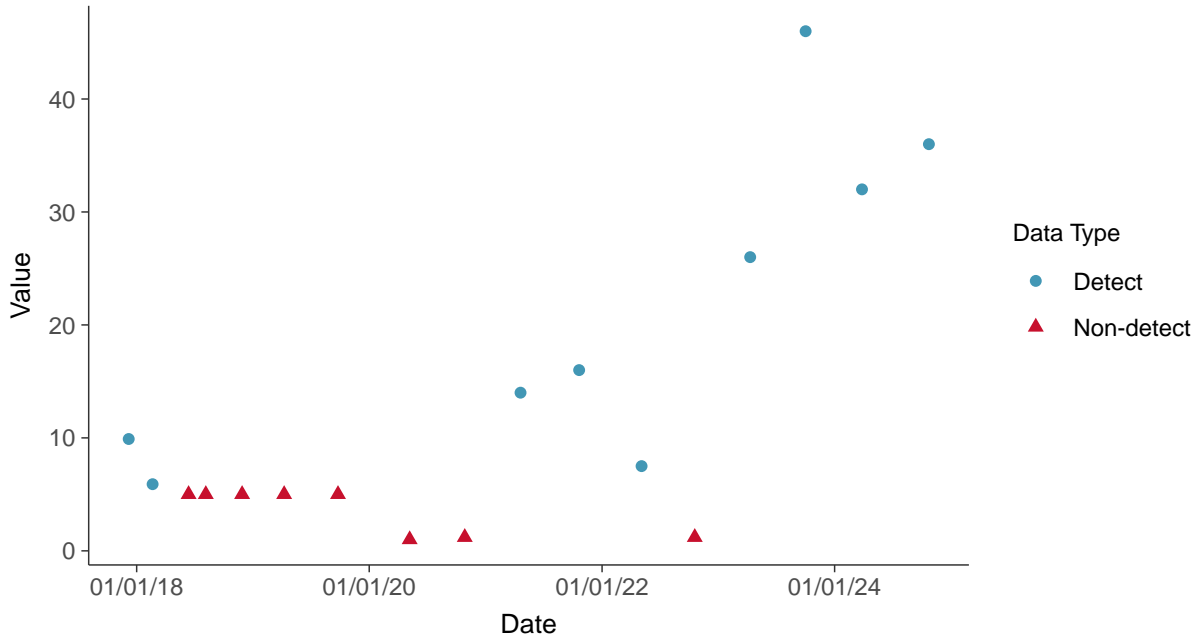


Appendix IV: Molybdenum, MW-17004

ID: 17_2_119

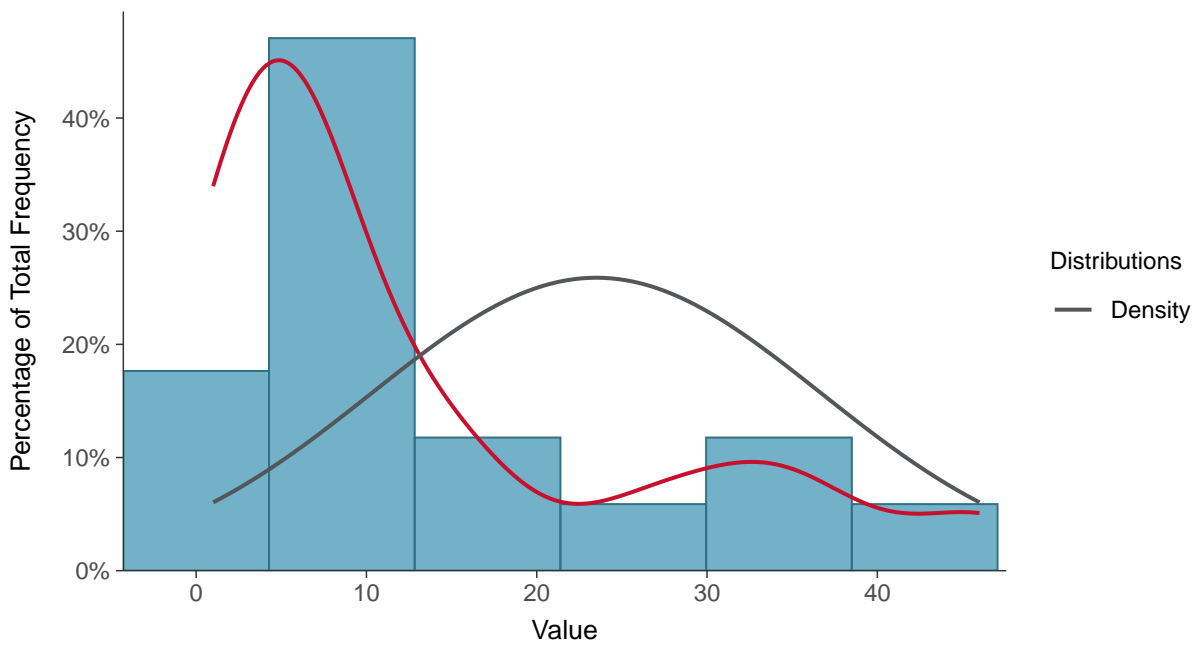
Scatter Plot

Molybdenum, MW-17004 (ug/L)



Histogram

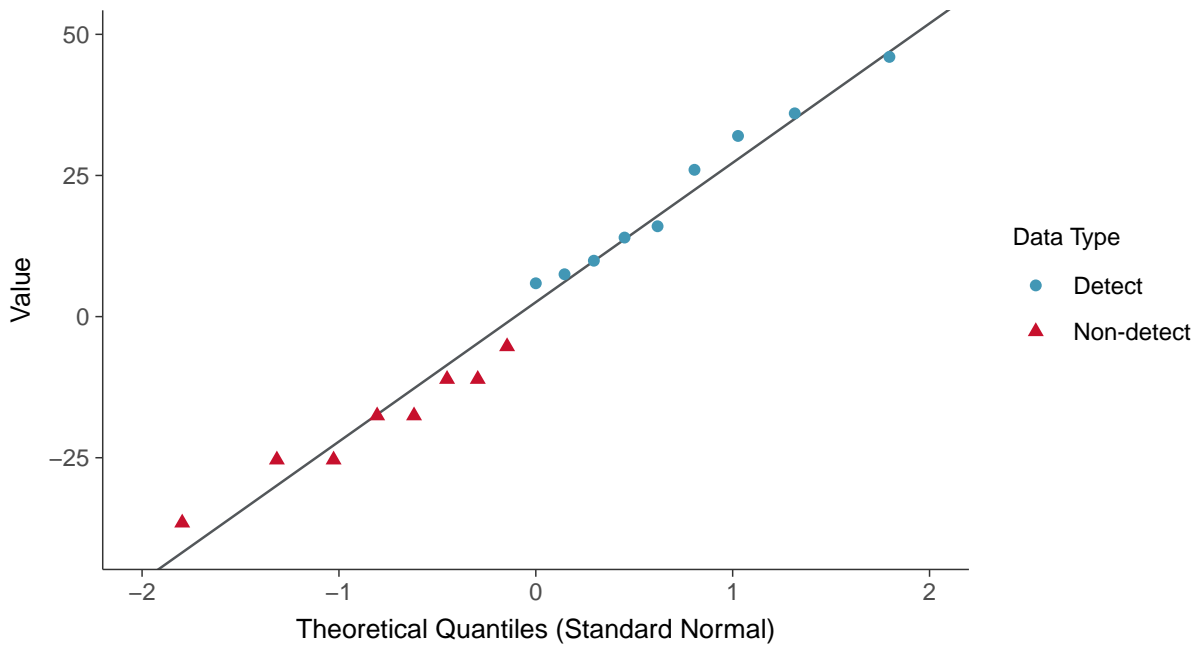
Molybdenum, MW-17004 (ug/L)





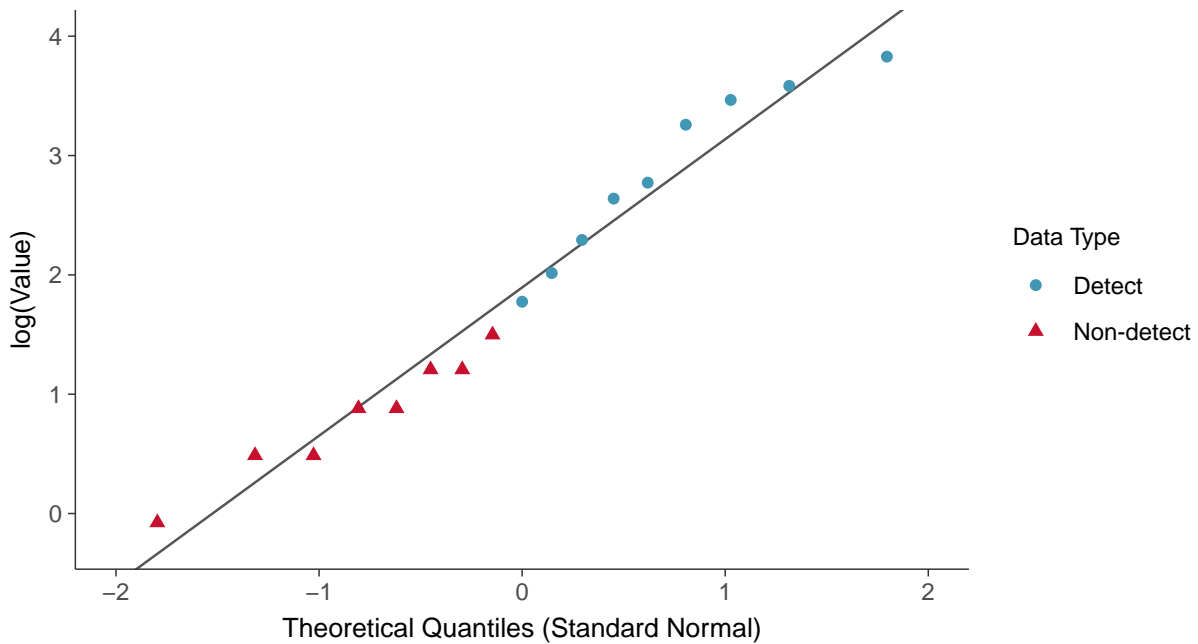
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17004 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

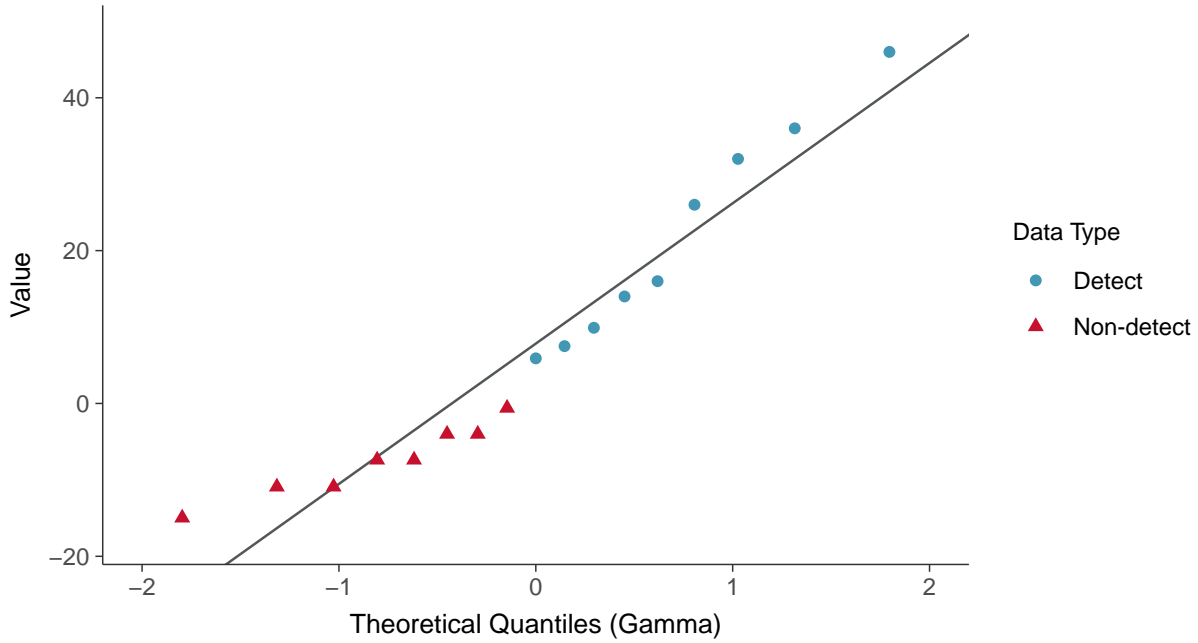
Molybdenum, MW-17004 (ug/L)





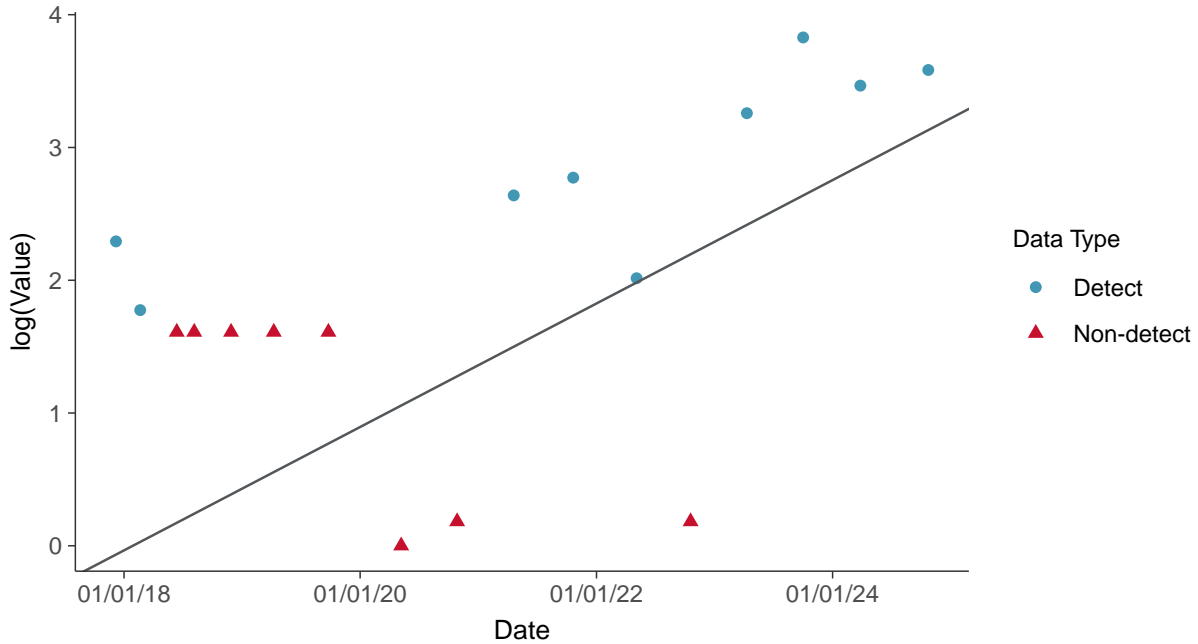
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17004 (ug/L)



Trend Regression: Lognormal MLE

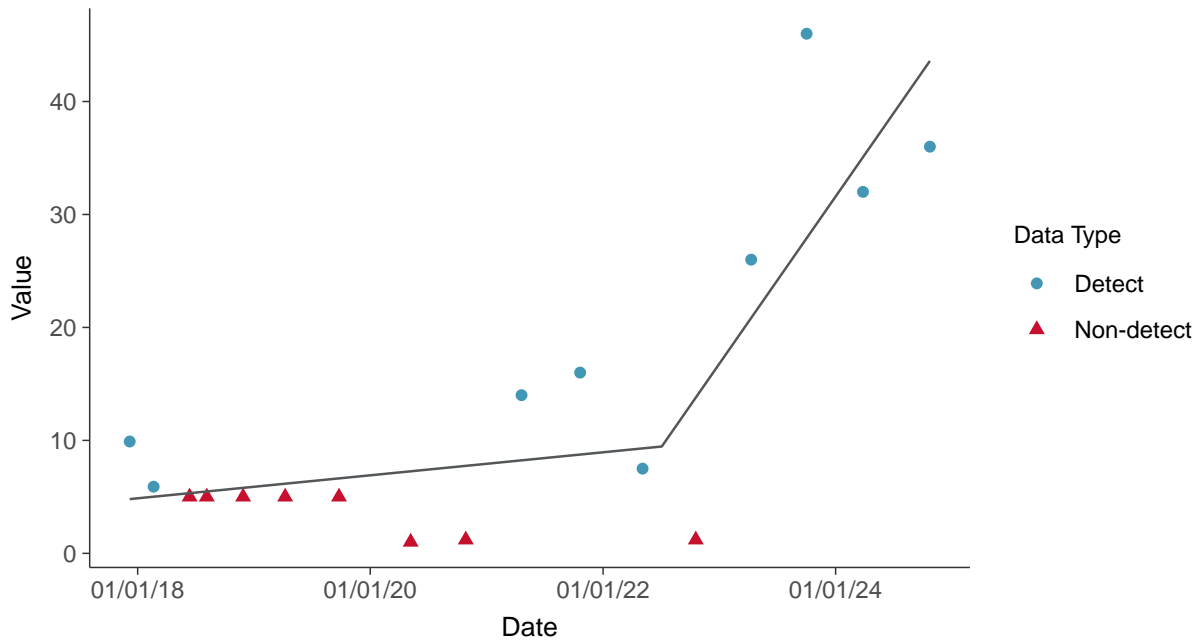
Molybdenum, MW-17004 (ug/L)





Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-17004 (ug/L)



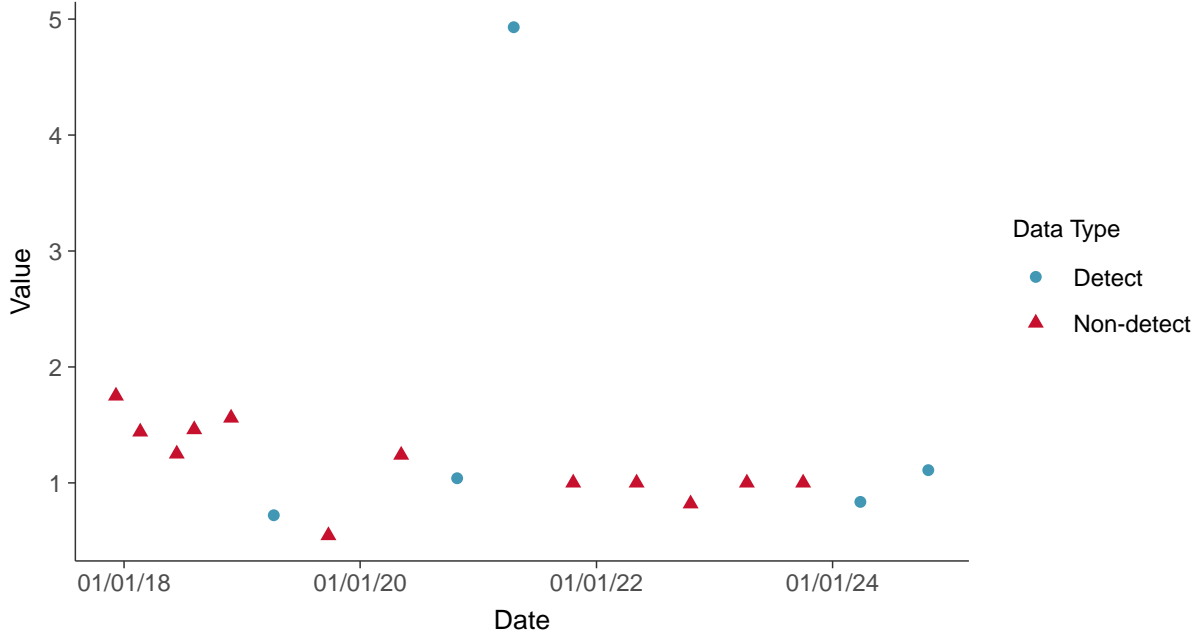


Appendix IV: Radium-226+228, MW-17004

ID: 17_2_125

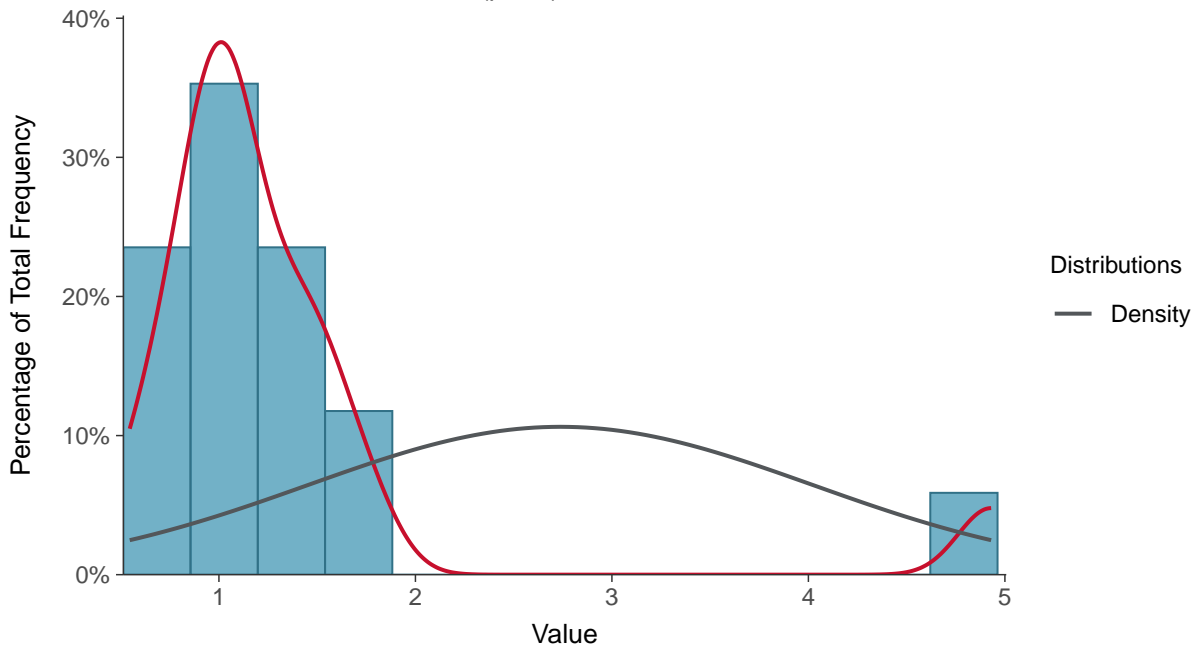
Scatter Plot

Radium-226+228, MW-17004 (pCi/L)



Histogram

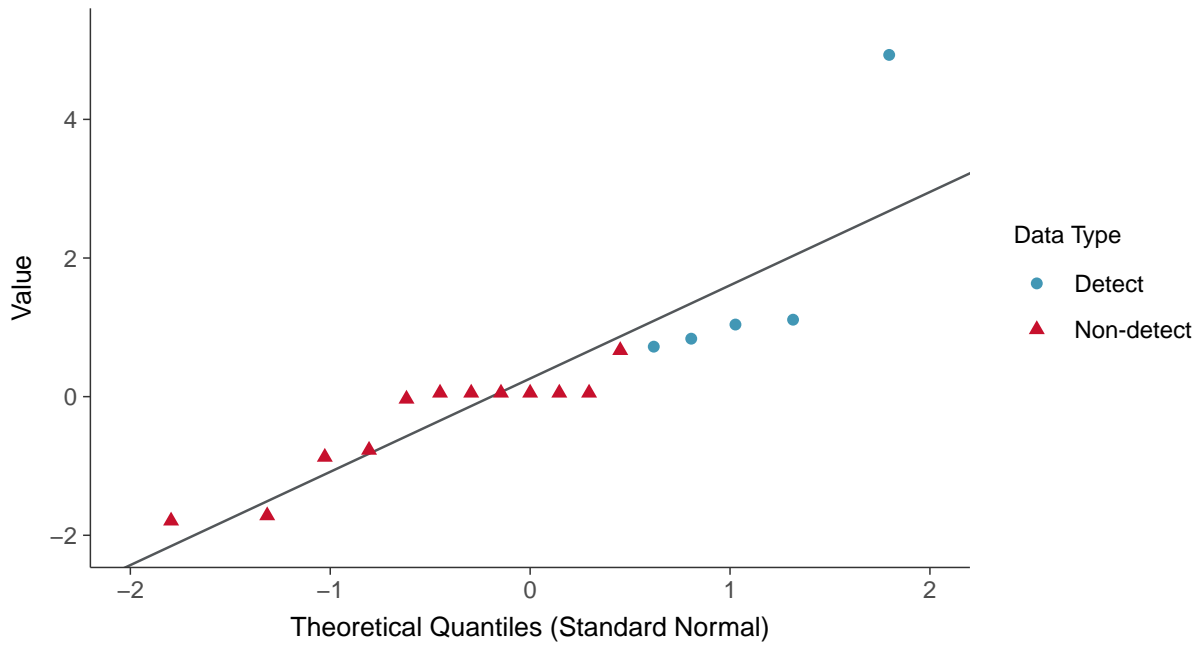
Radium-226+228, MW-17004 (pCi/L)





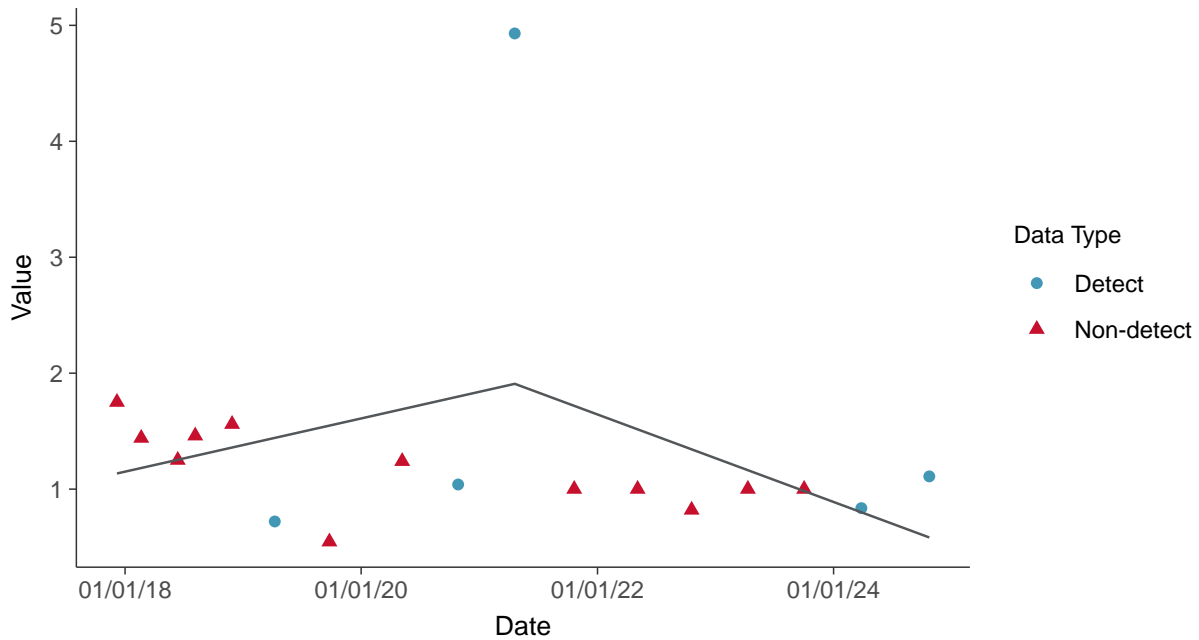
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17004 (pCi/L)



Trend Regression: Piecewise Linear-Linear

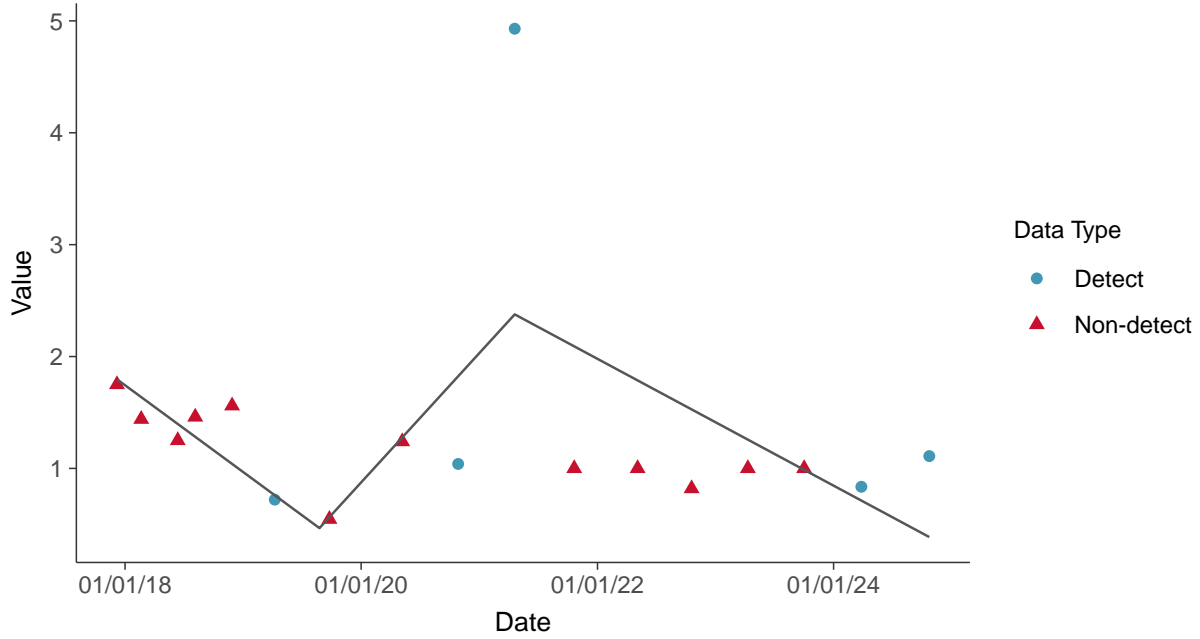
Radium-226+228, MW-17004 (pCi/L)





Trend Regression: Piecewise Linear-Linear-Linear

Radium-226+228, MW-17004 (pCi/L)



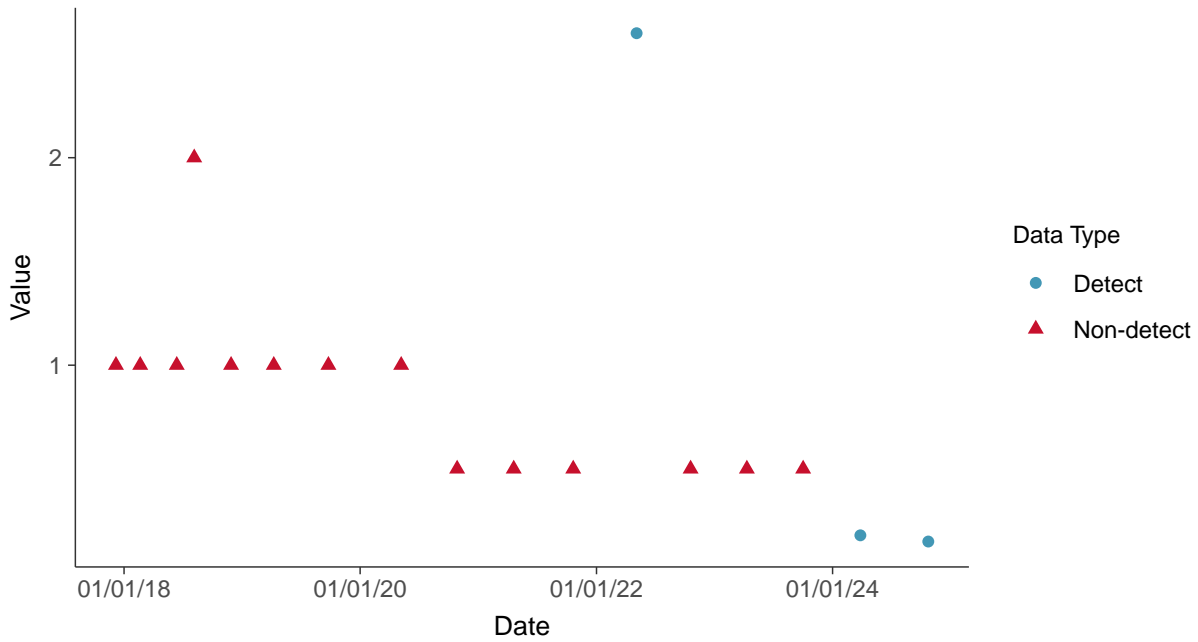


Appendix IV: Selenium, MW-17004

ID: 17_2_127

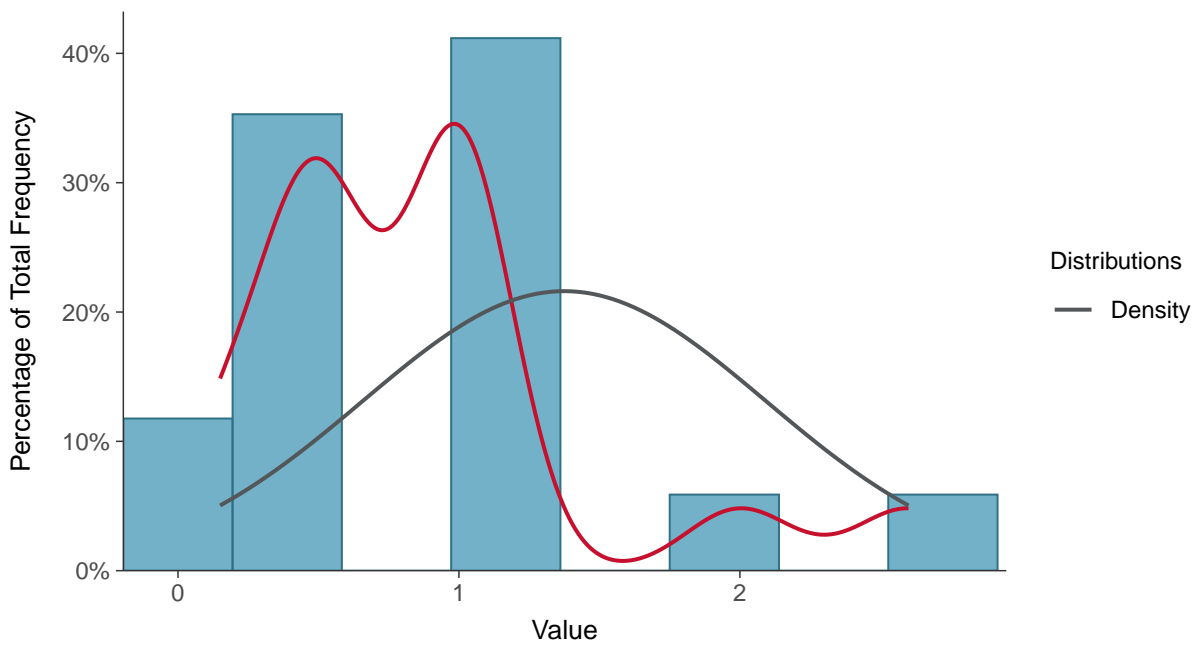
Scatter Plot

Selenium, MW-17004 (ug/L)



Histogram

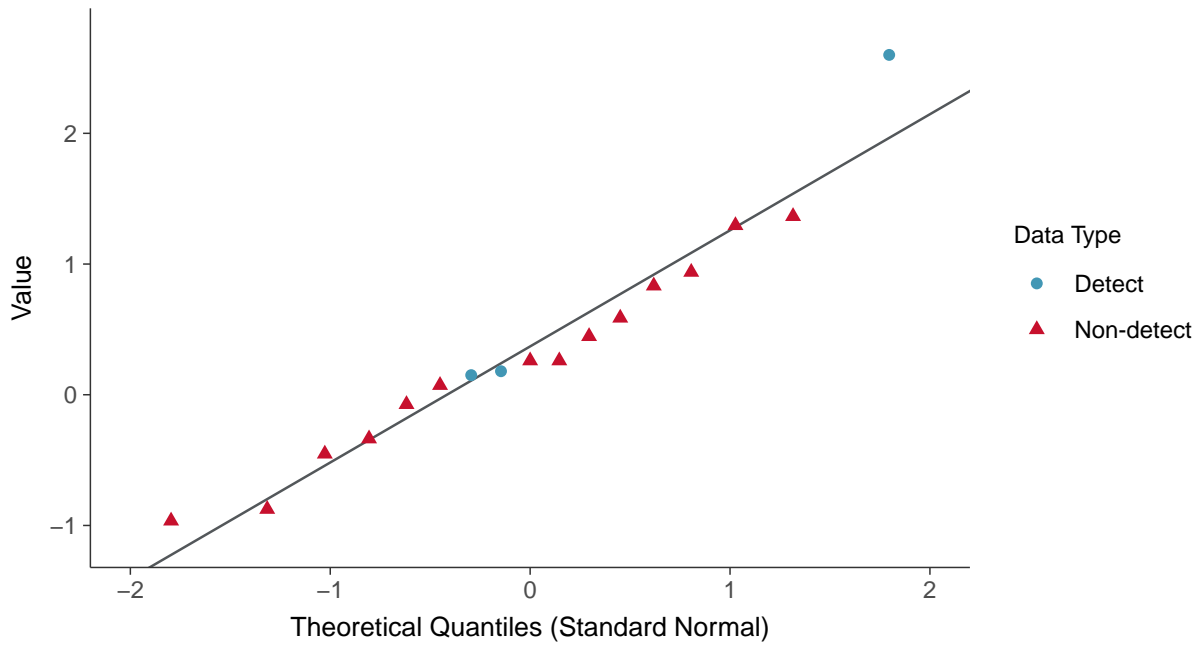
Selenium, MW-17004 (ug/L)





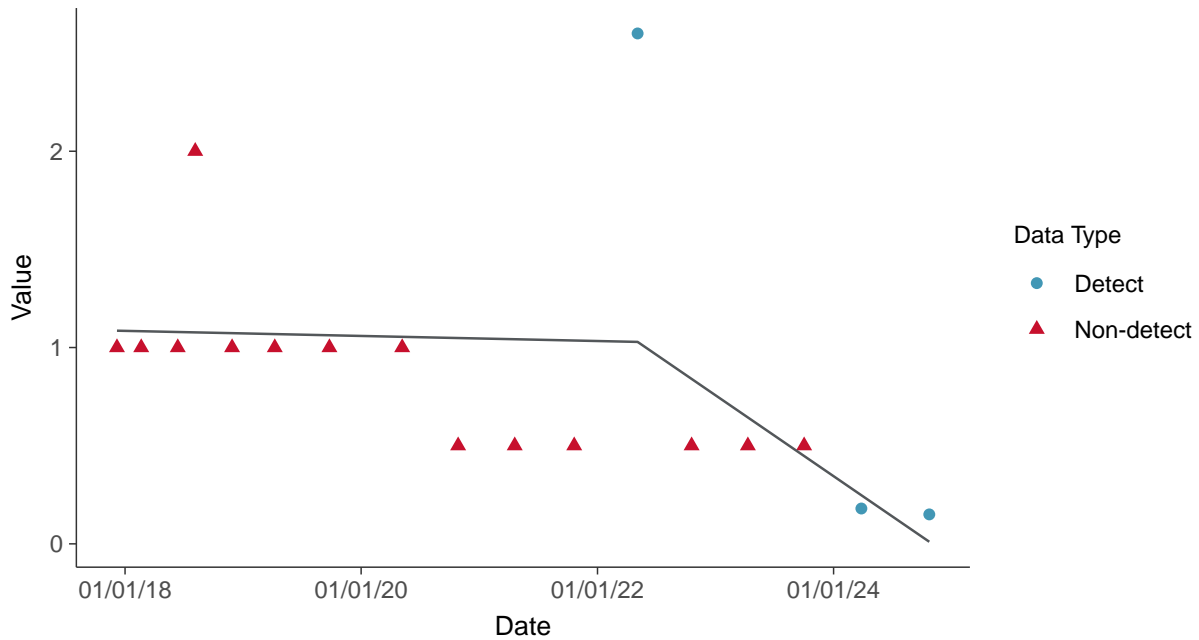
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

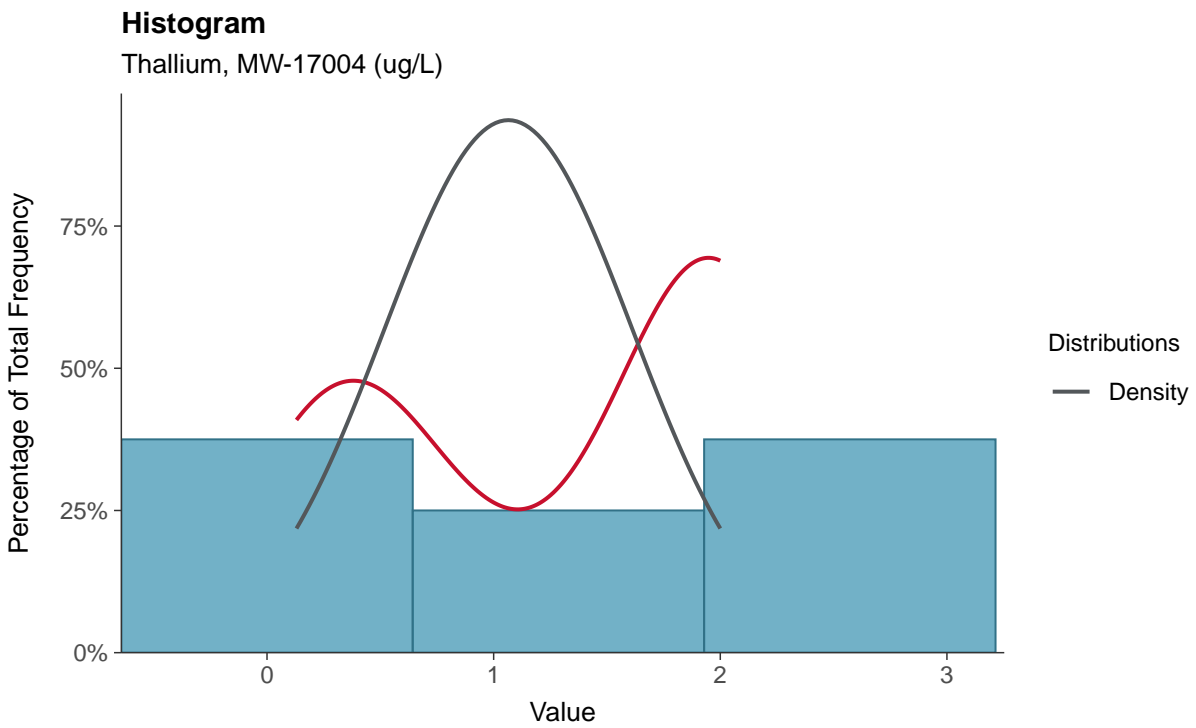
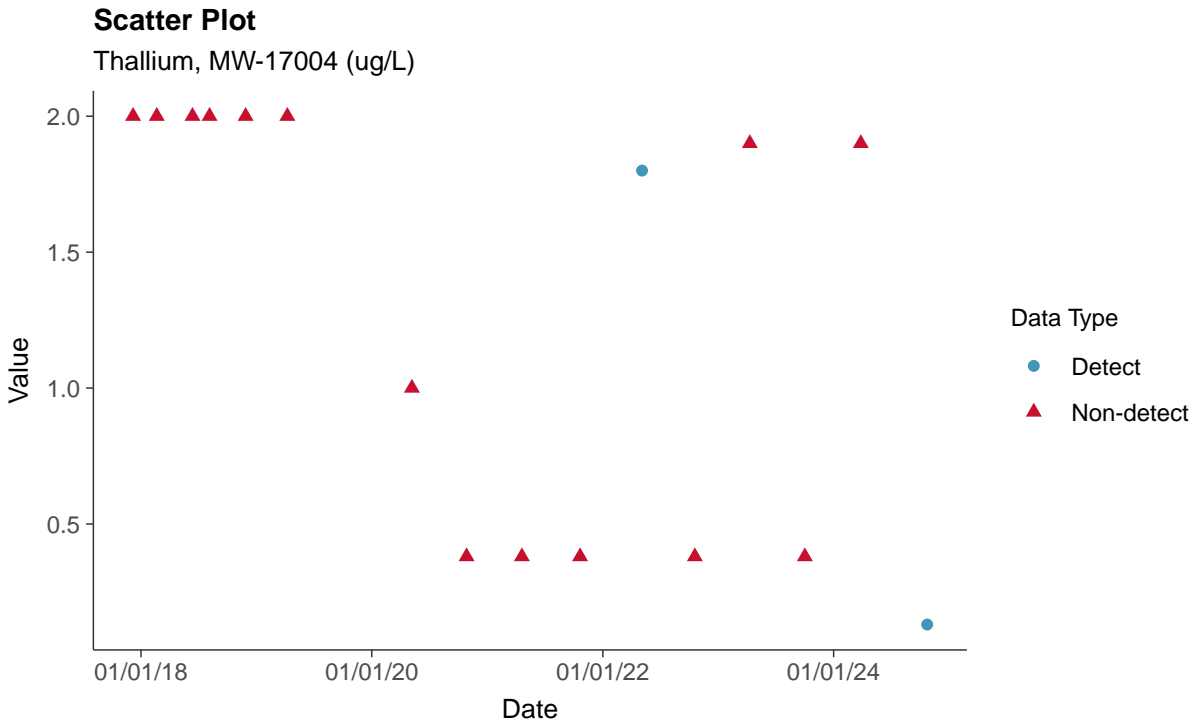
Selenium, MW-17004 (ug/L)





Appendix IV: Thallium, MW-17004

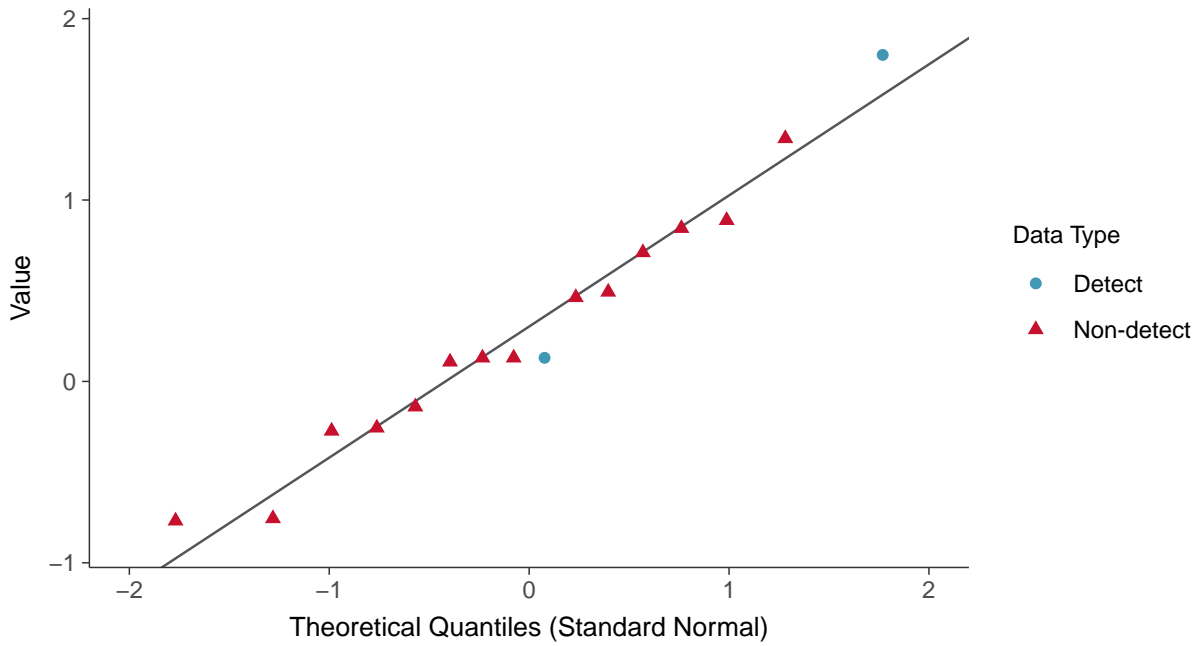
ID: 17_2_131





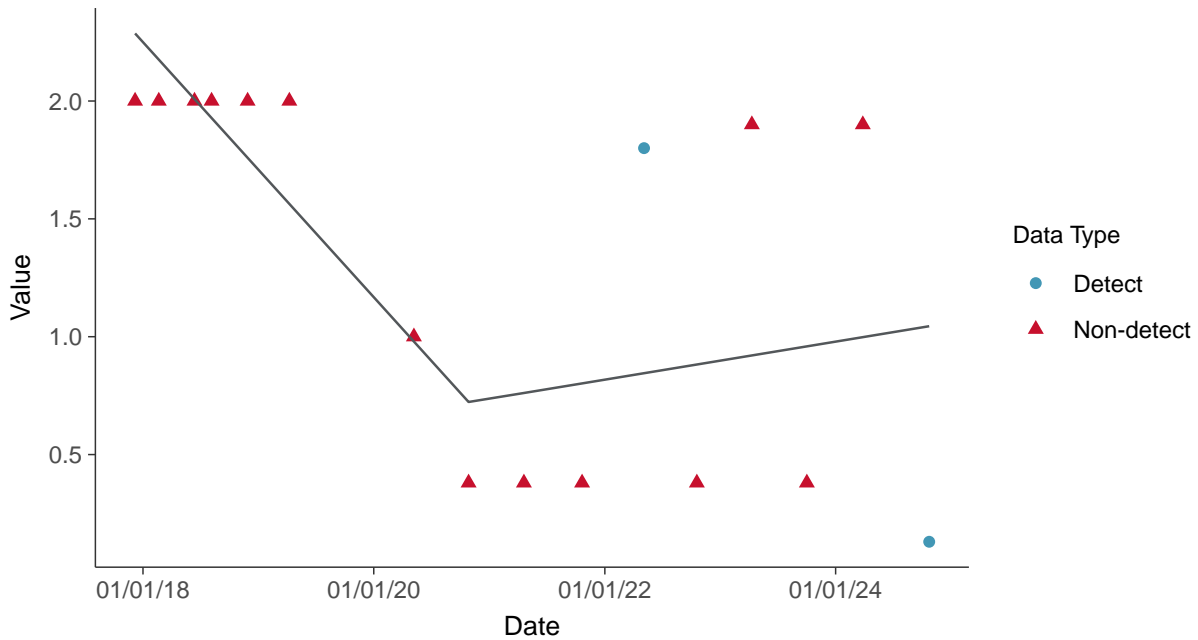
Normal Q-Q plot using ROS Imputed Estimates

Thallium, MW-17004 (ug/L)



Trend Regression: Piecewise Linear-Linear

Thallium, MW-17004 (ug/L)



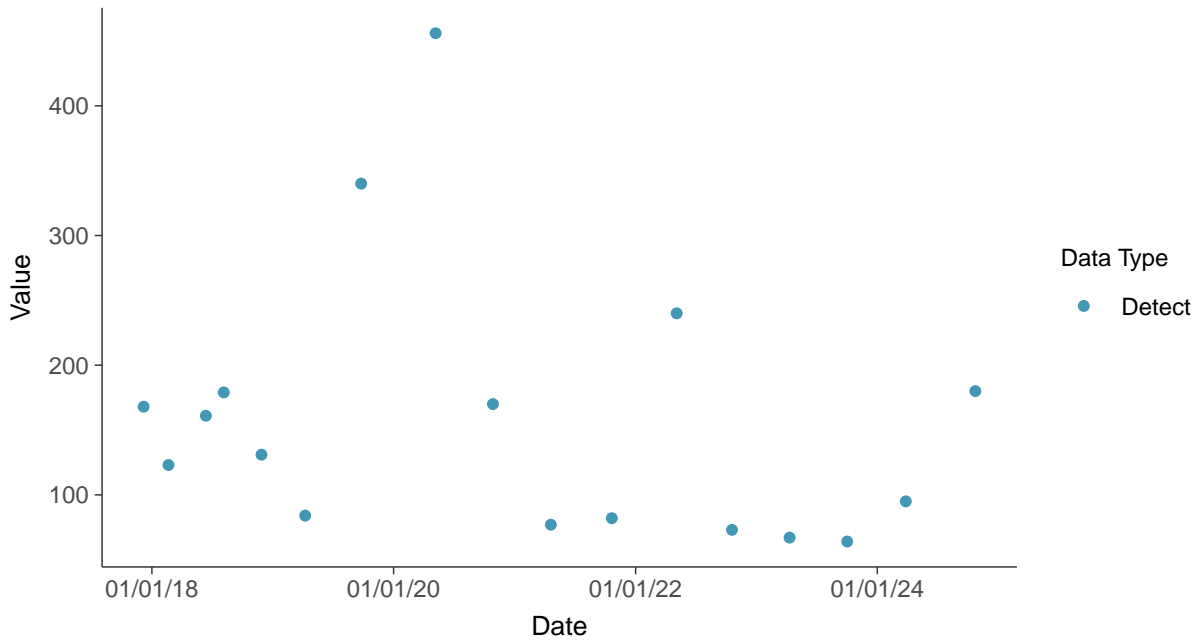


Appendix IV: Barium, MW-17005

ID: 18_2_103

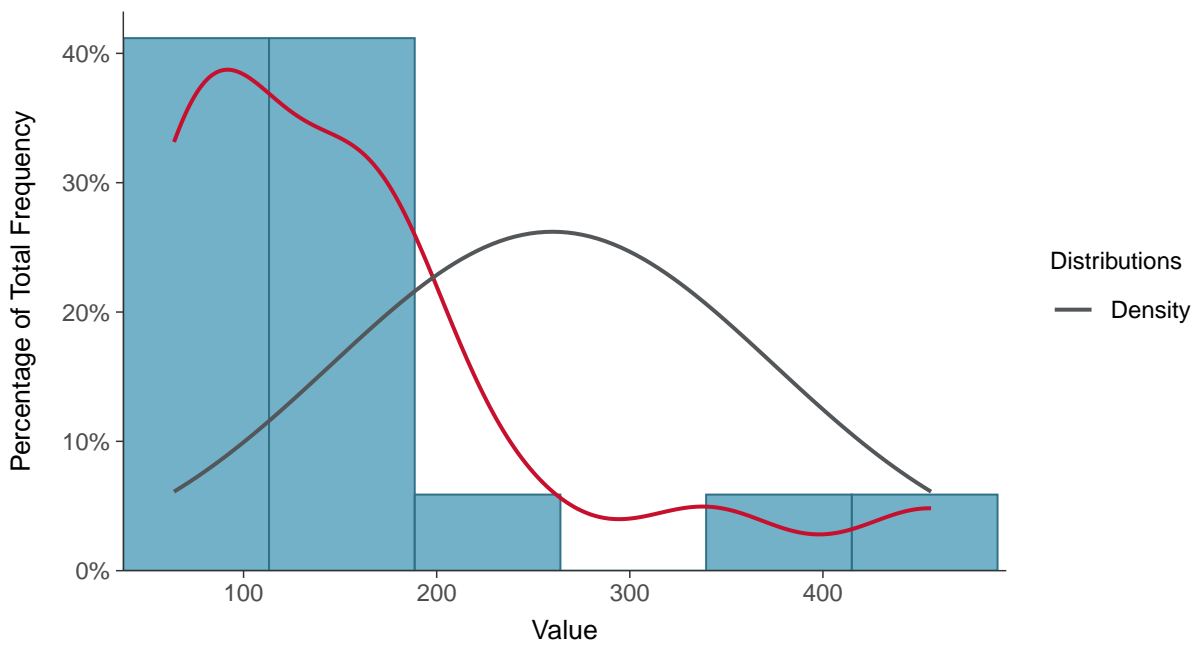
Scatter Plot

Barium, MW-17005 (ug/L)



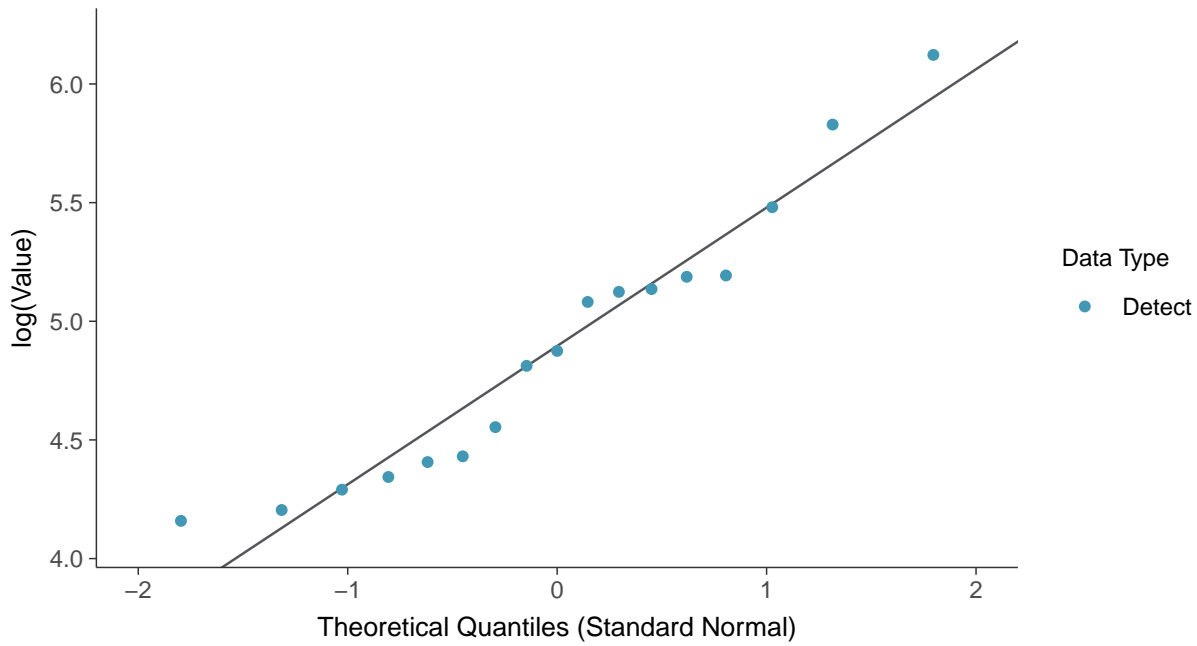
Histogram

Barium, MW-17005 (ug/L)

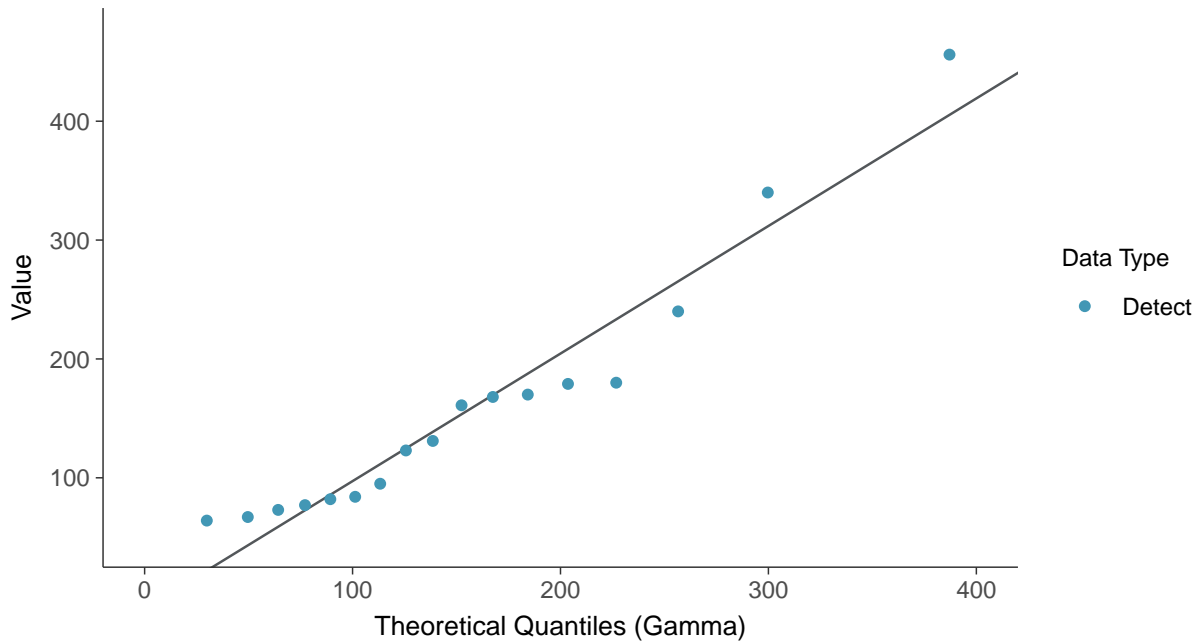




Lognormal Q-Q plot
Barium, MW-17005 (ug/L)



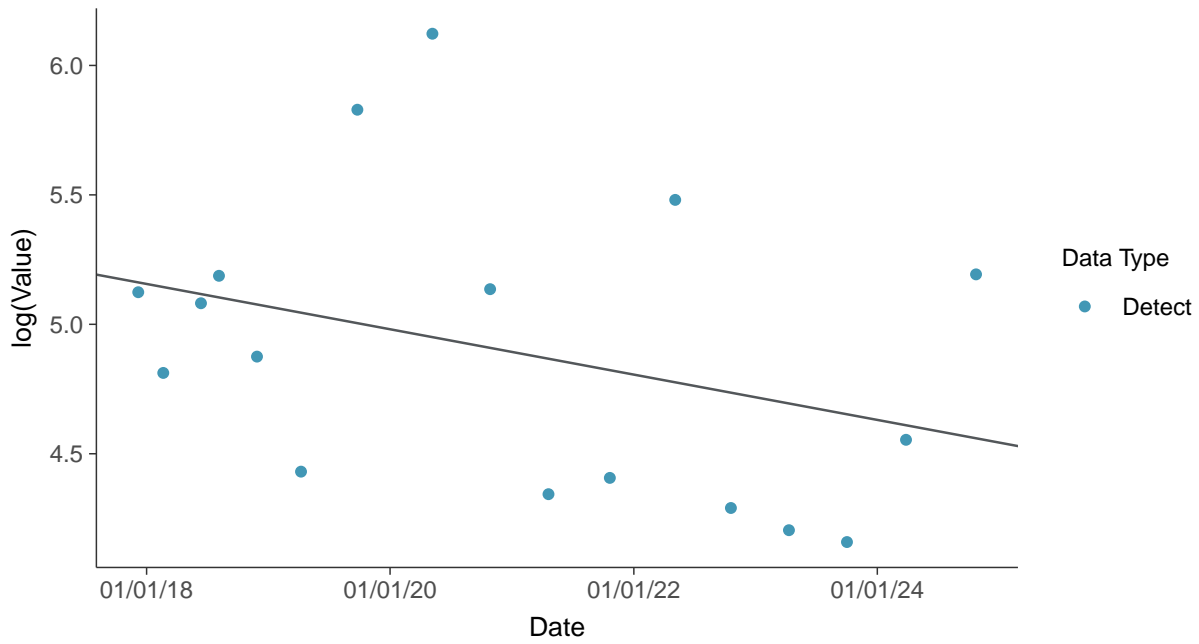
Gamma Q-Q plot
Barium, MW-17005 (ug/L)





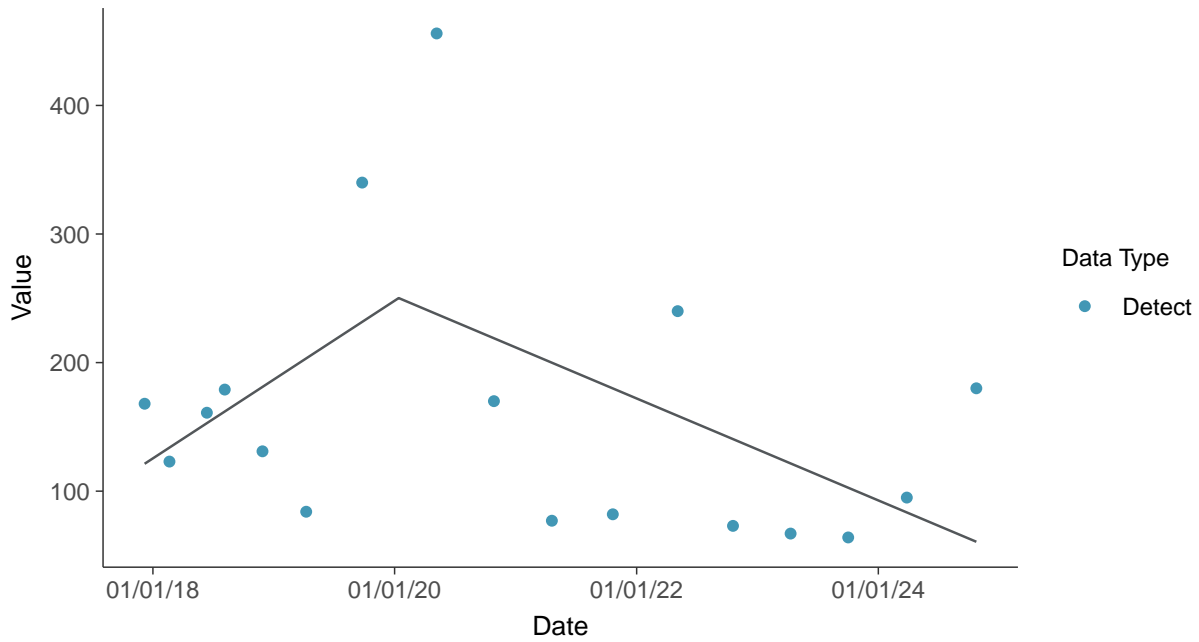
Trend Regression: Lognormal MLE

Barium, MW-17005 (ug/L)



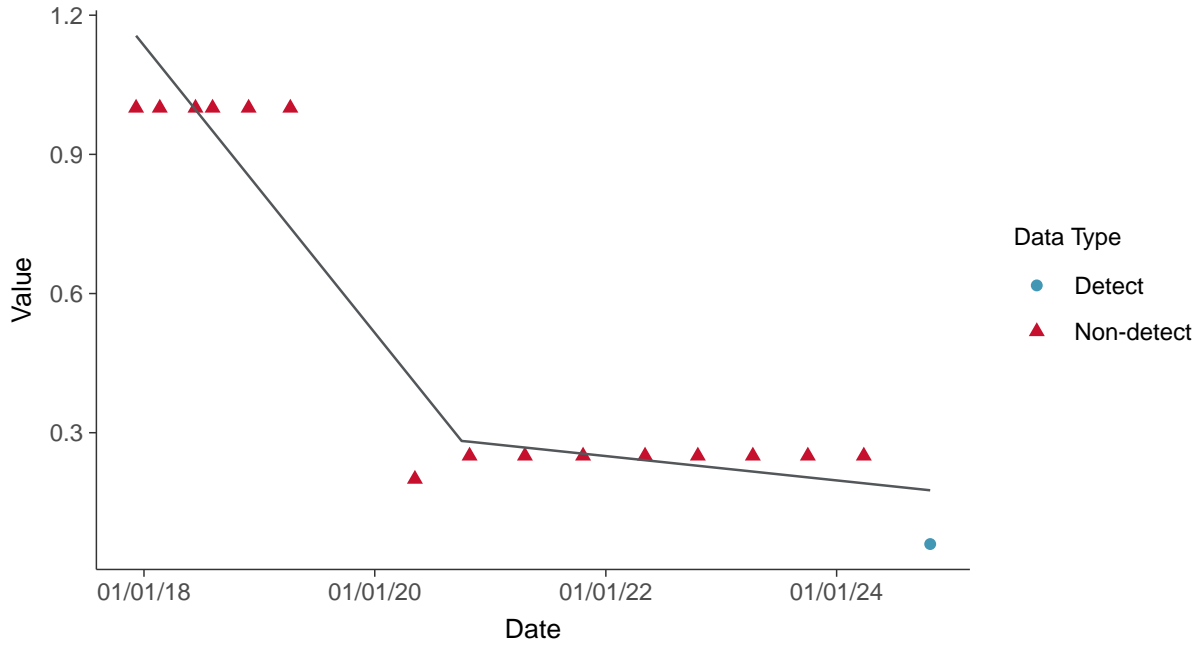
Trend Regression: Piecewise Linear-Linear

Barium, MW-17005 (ug/L)





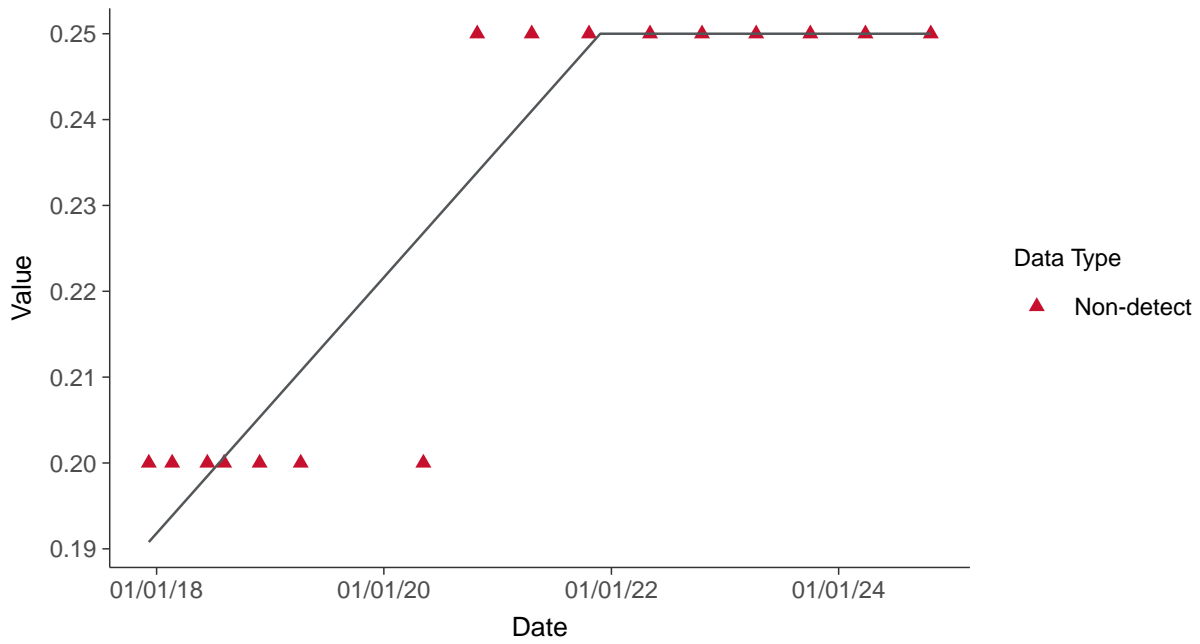
Trend Regression: Piecewise Linear-Linear
Beryllium, MW-17005 (ug/L)





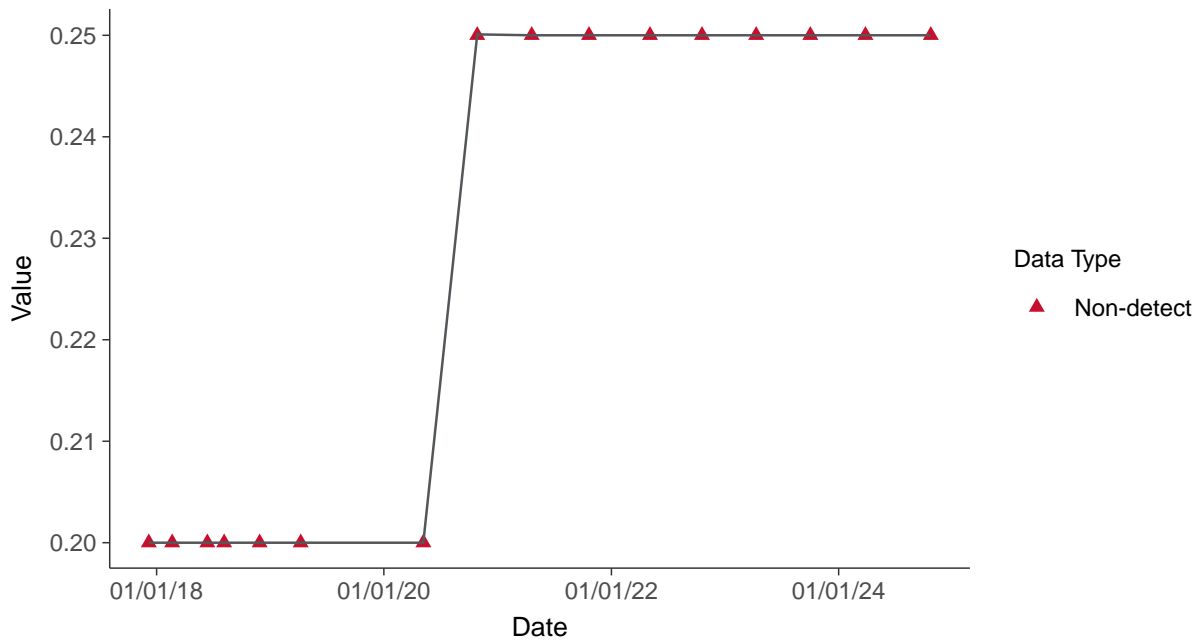
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-17005 (ug/L)



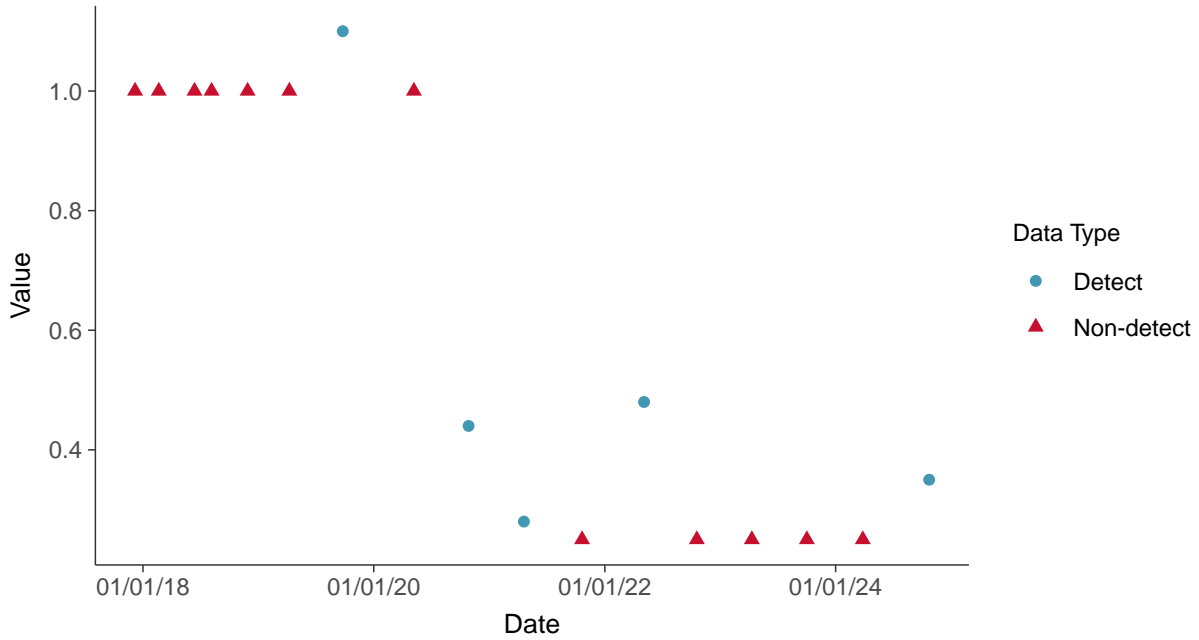


Appendix IV: Chromium, MW-17005

ID: 18_2_109

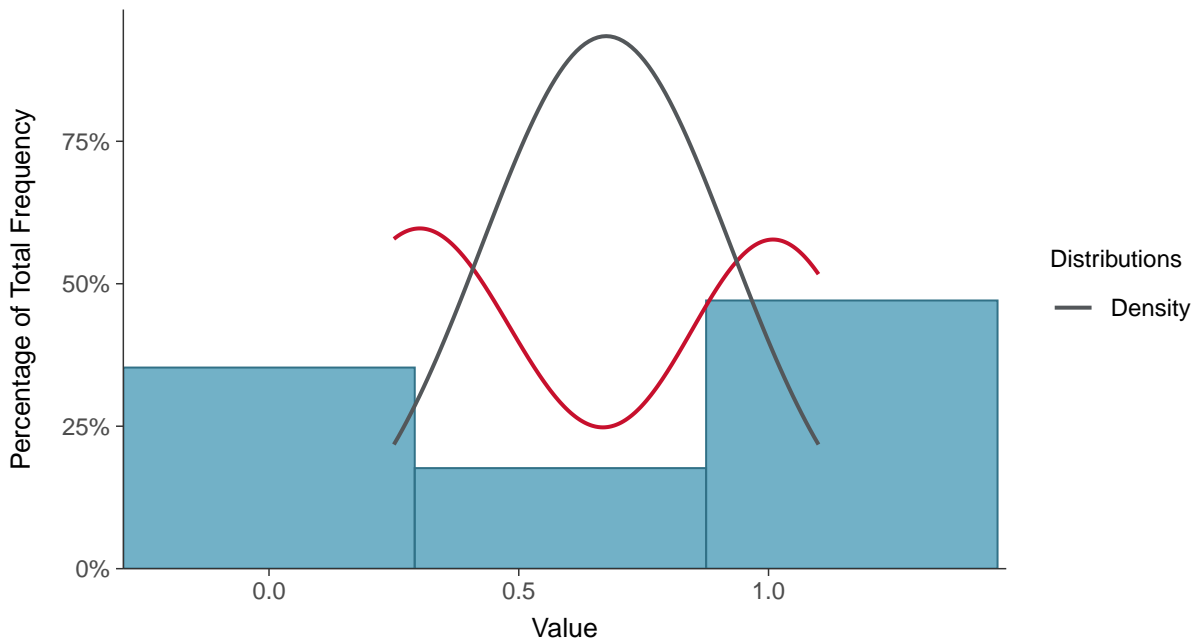
Scatter Plot

Chromium, MW-17005 (ug/L)



Histogram

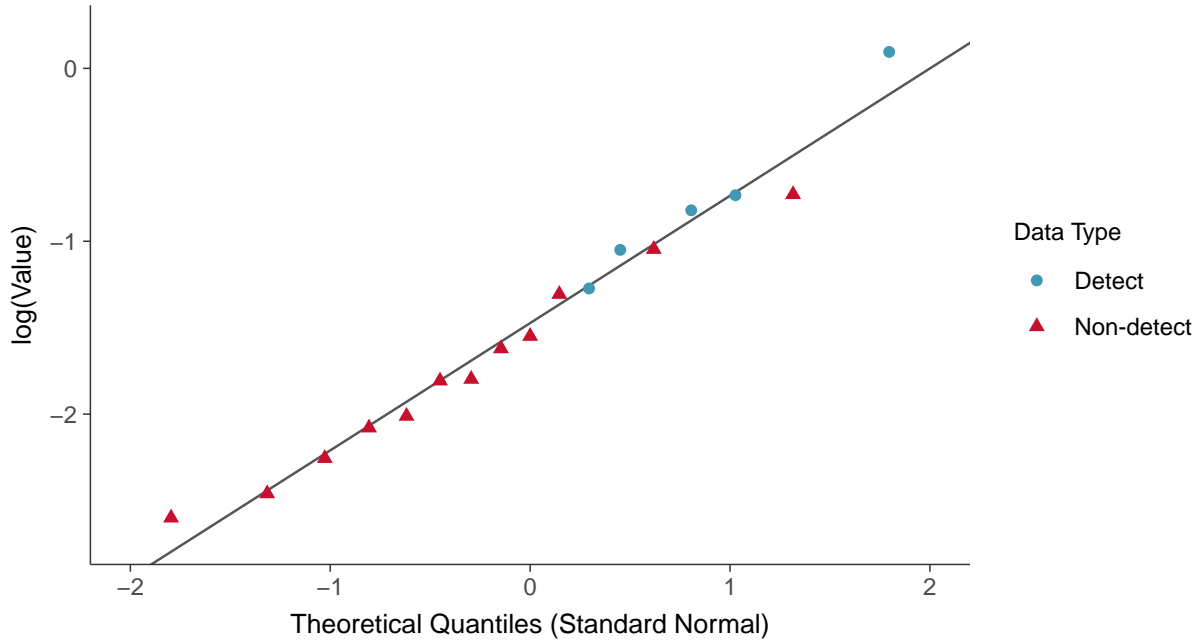
Chromium, MW-17005 (ug/L)





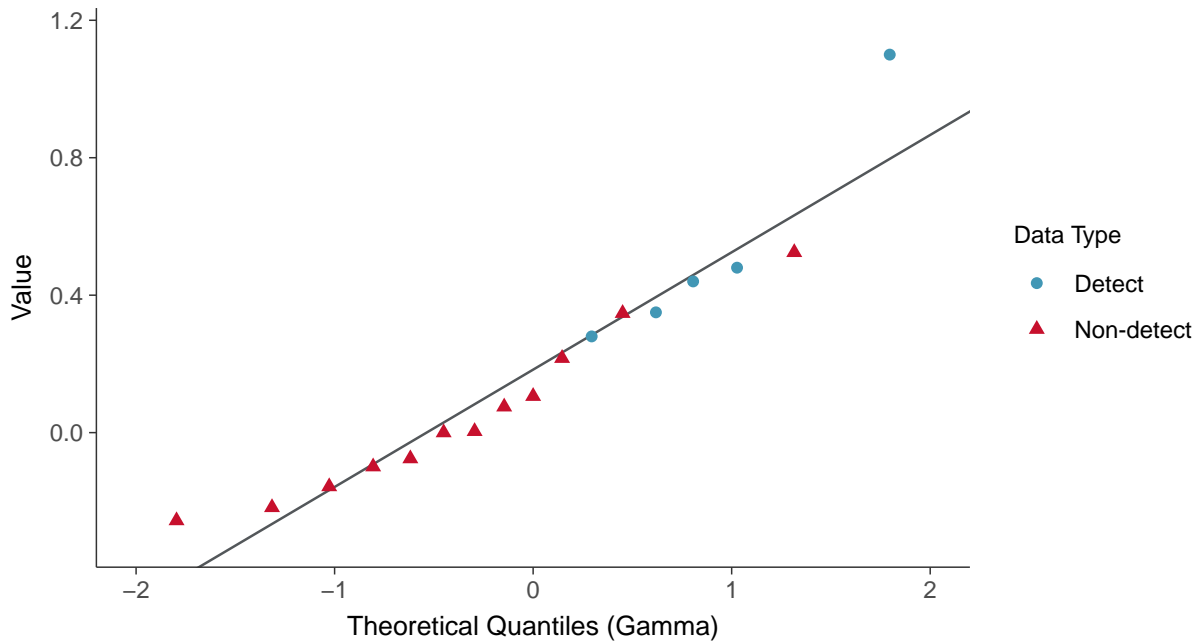
Lognormal Q-Q plot using ROS Imputed Estimates

Chromium, MW-17005 (ug/L)



Gamma Q-Q plot using ROS Imputed Estimates

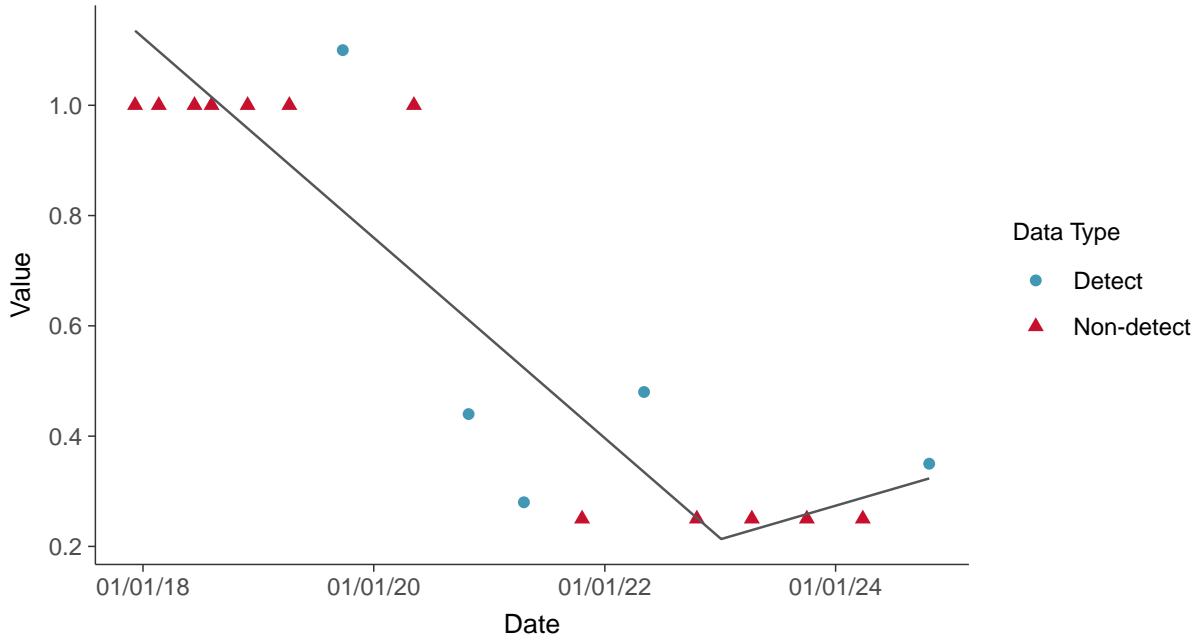
Chromium, MW-17005 (ug/L)





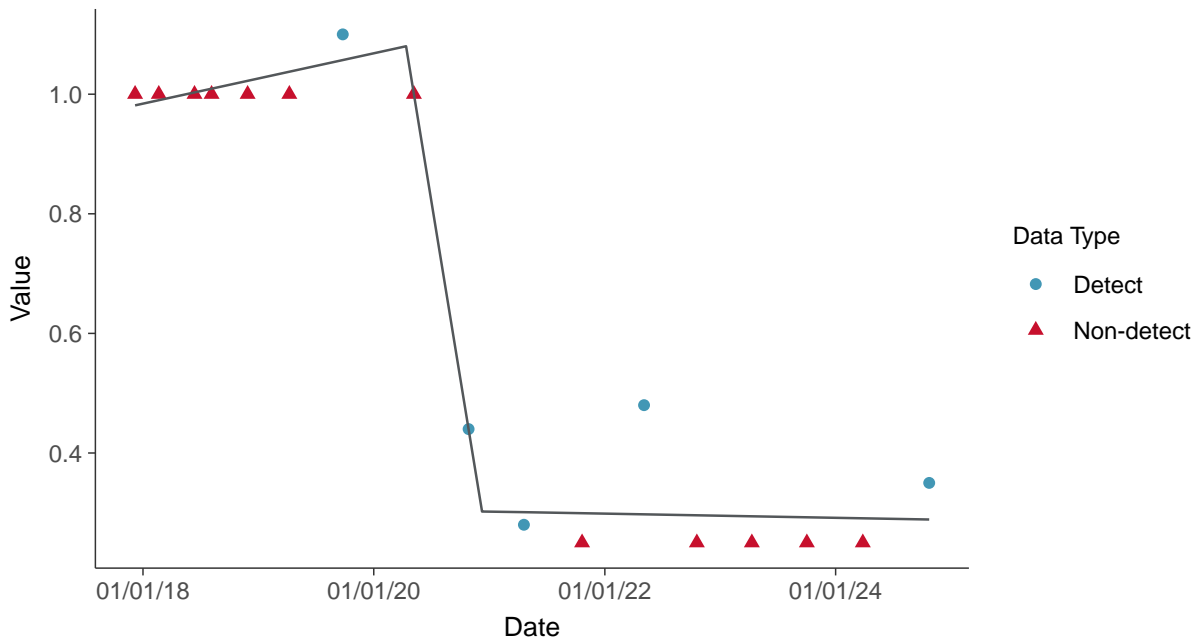
Trend Regression: Piecewise Linear-Linear

Chromium, MW-17005 (ug/L)



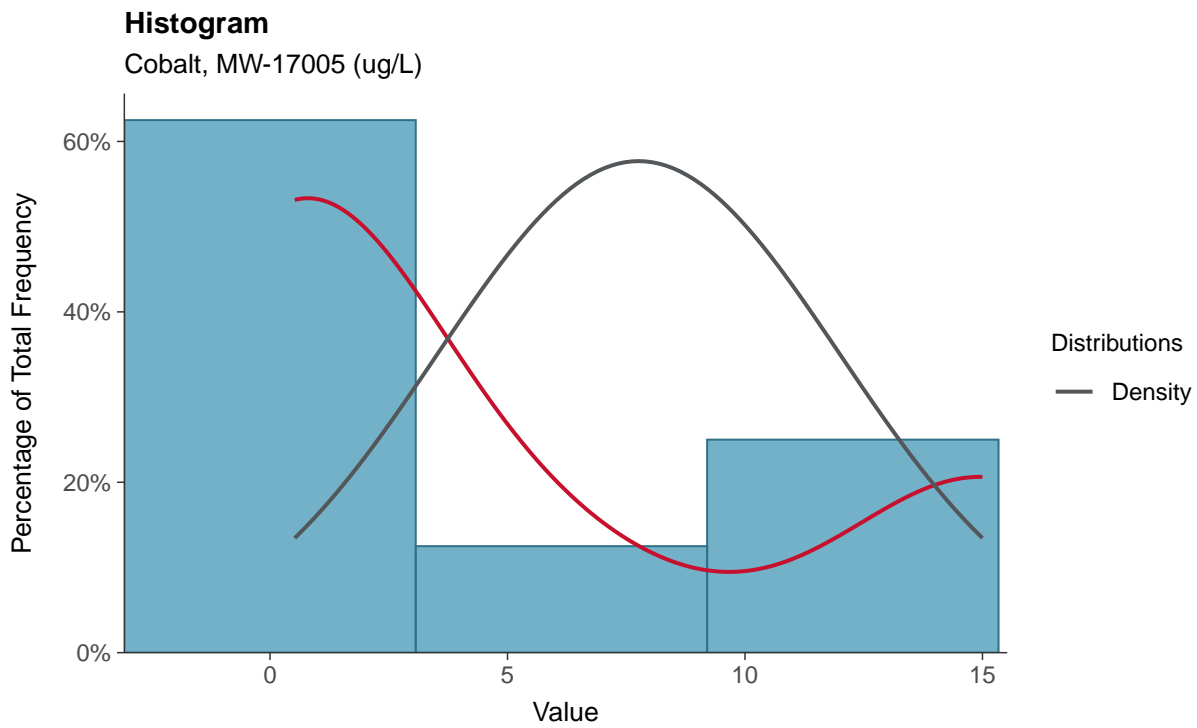
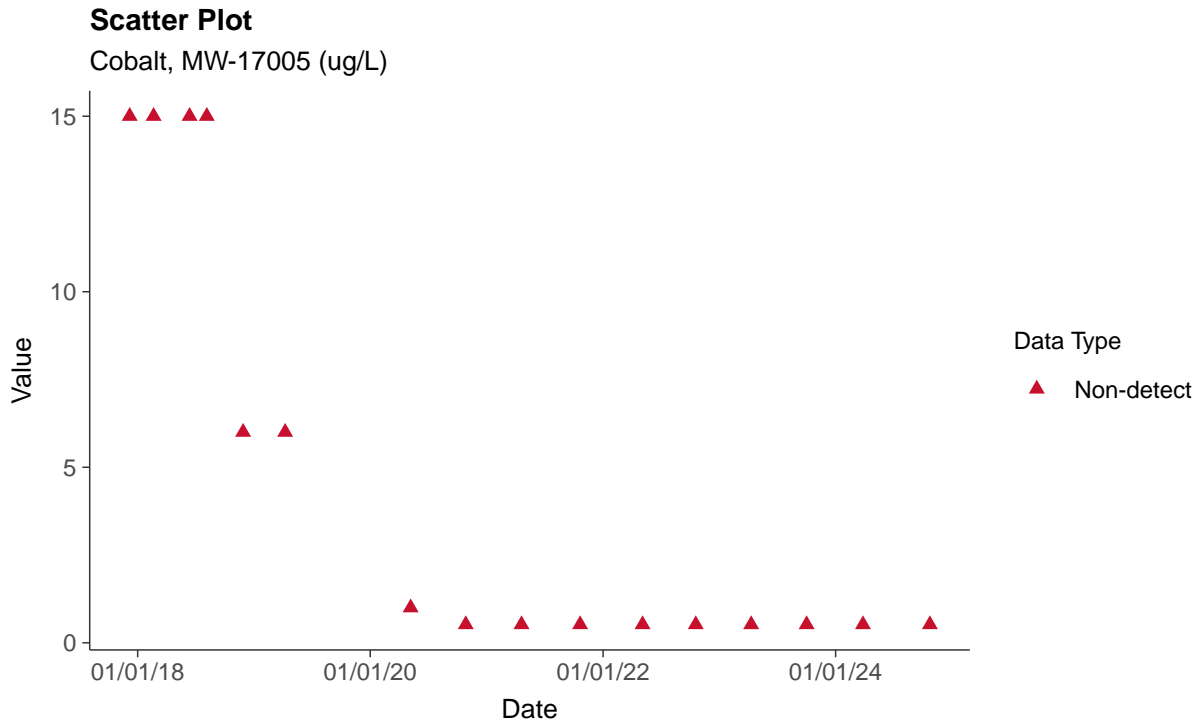
Trend Regression: Piecewise Linear-Linear-Linear

Chromium, MW-17005 (ug/L)



Appendix IV: Cobalt, MW-17005

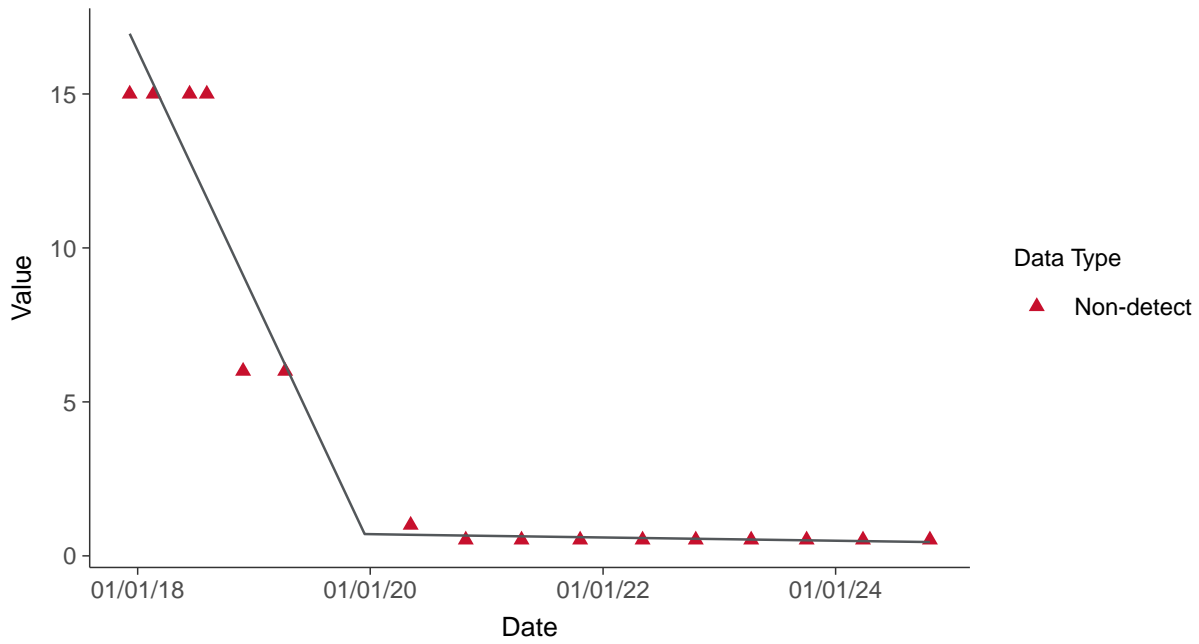
ID: 18_2_110





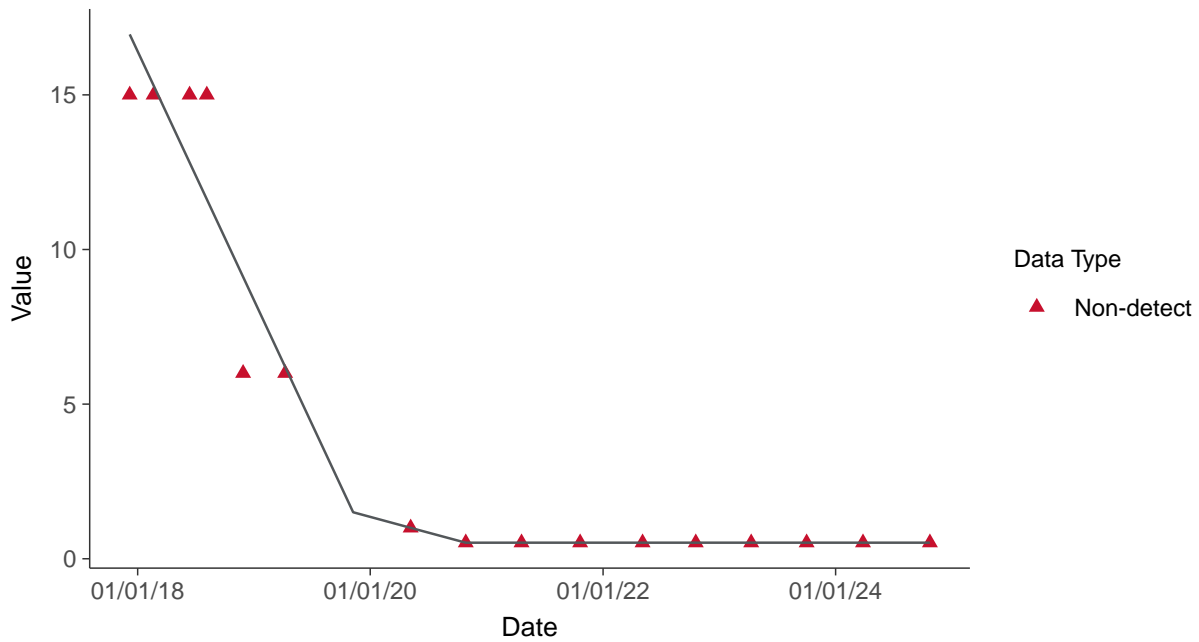
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

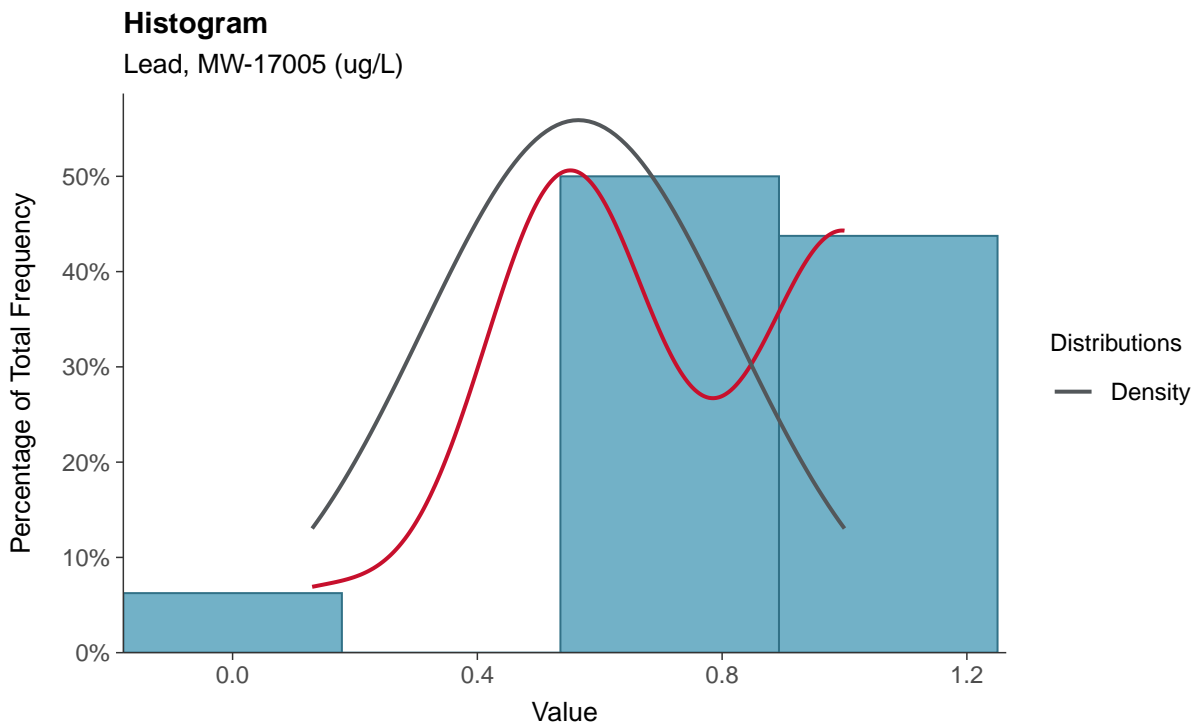
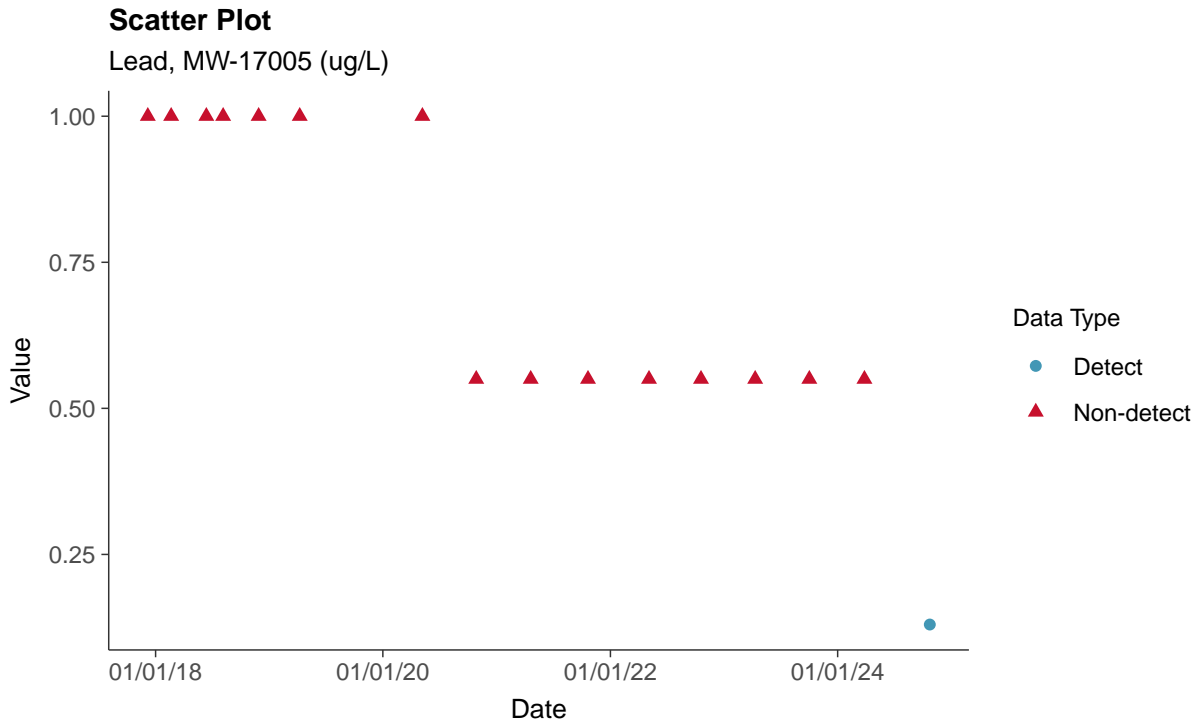
Cobalt, MW-17005 (ug/L)





Appendix IV: Lead, MW-17005

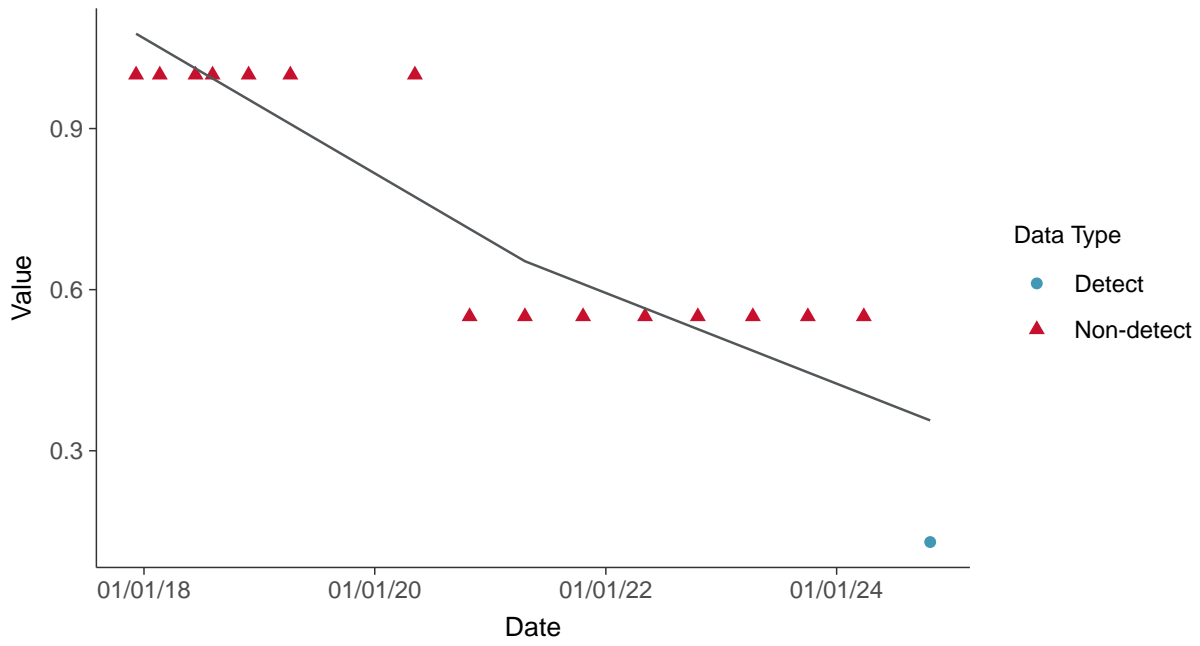
ID: 18_2_116





Trend Regression: Piecewise Linear-Linear

Lead, MW-17005 (ug/L)



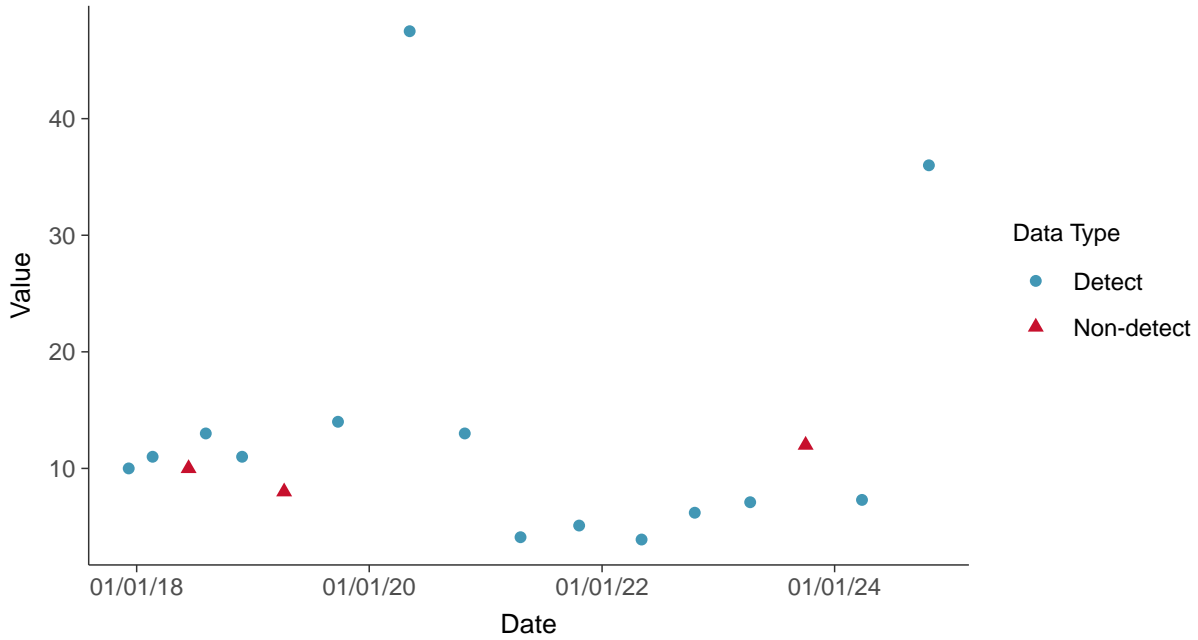


Appendix IV: Lithium, MW-17005

ID: 18_2_117

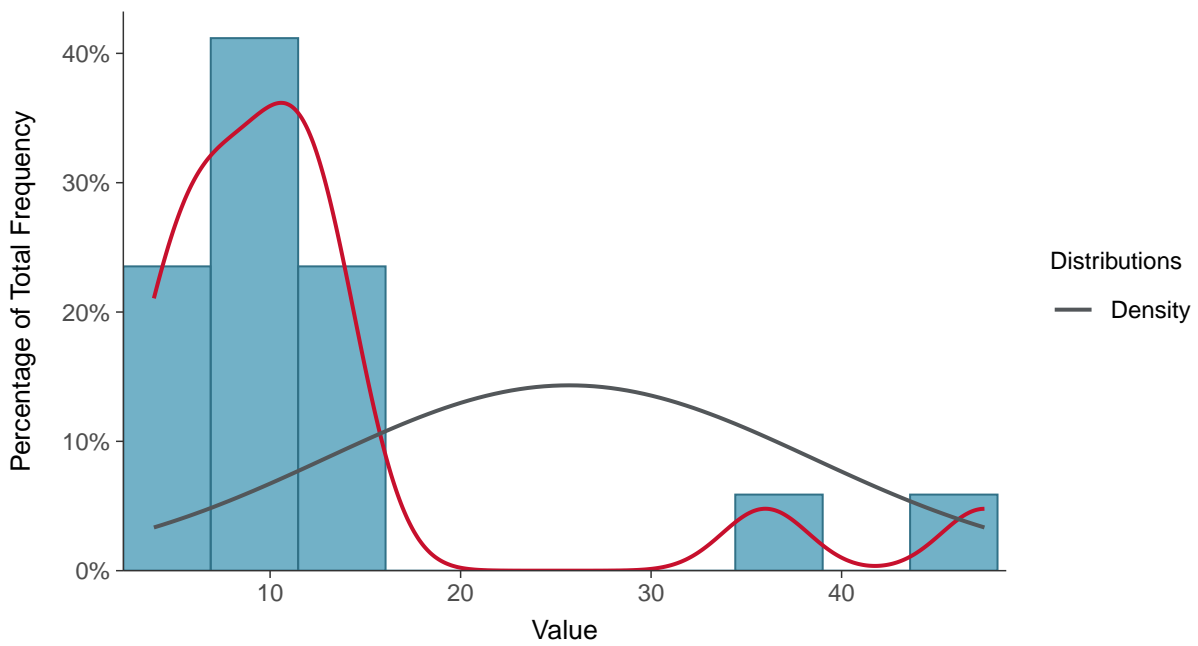
Scatter Plot

Lithium, MW-17005 (ug/L)



Histogram

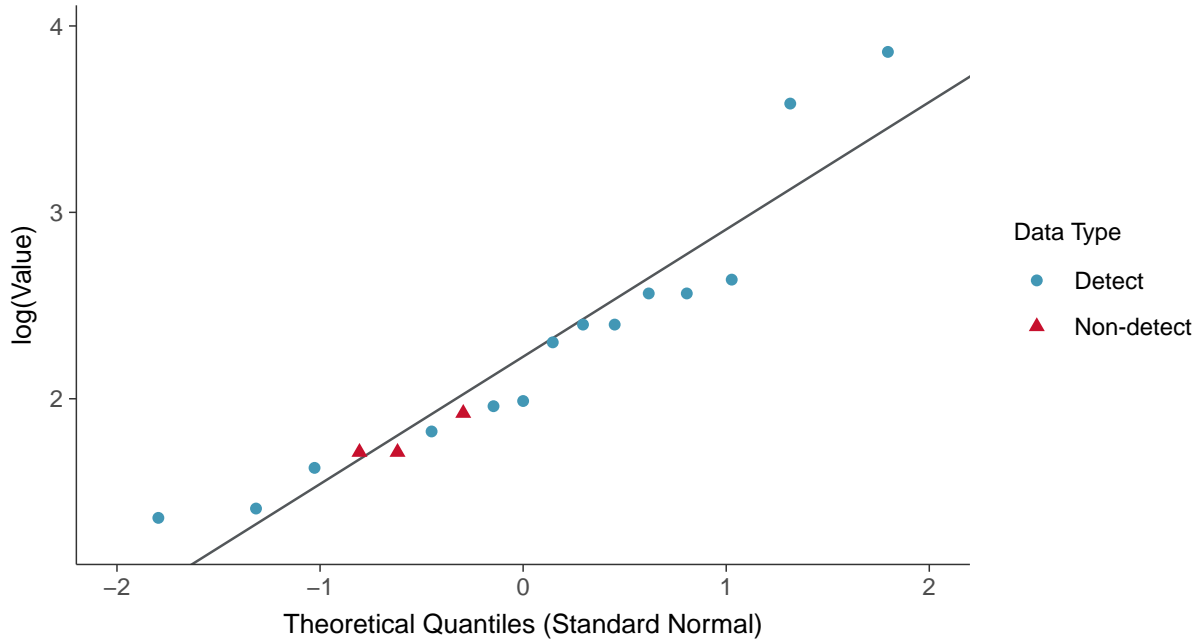
Lithium, MW-17005 (ug/L)





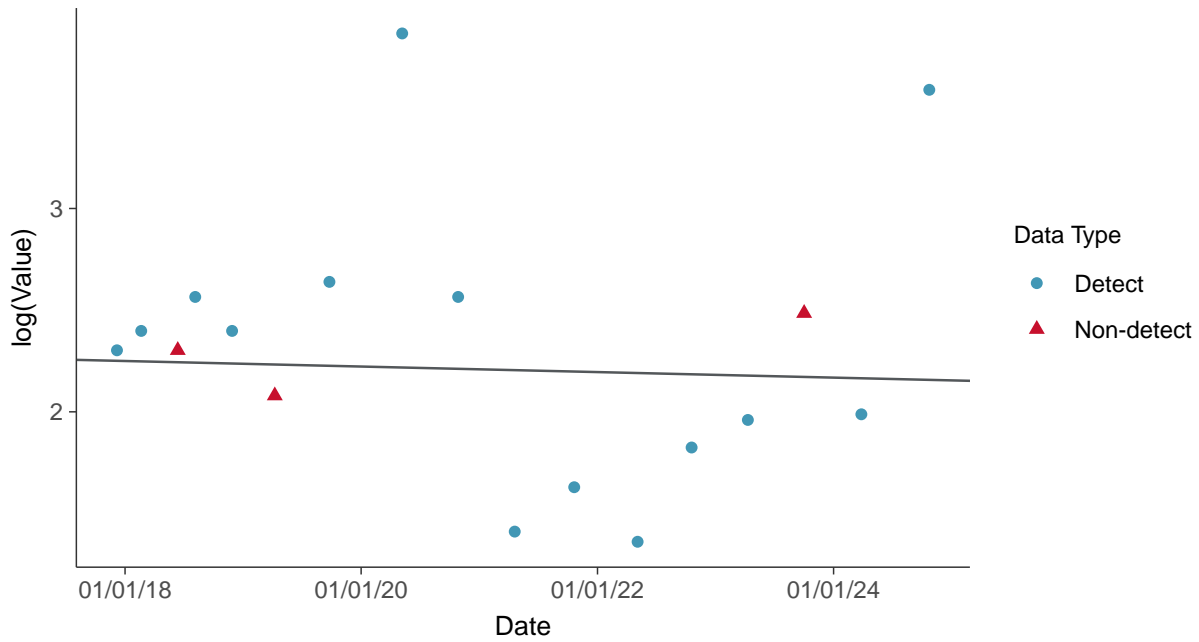
Lognormal Q-Q plot using ROS Imputed Estimates

Lithium, MW-17005 (ug/L)



Trend Regression: Lognormal MLE

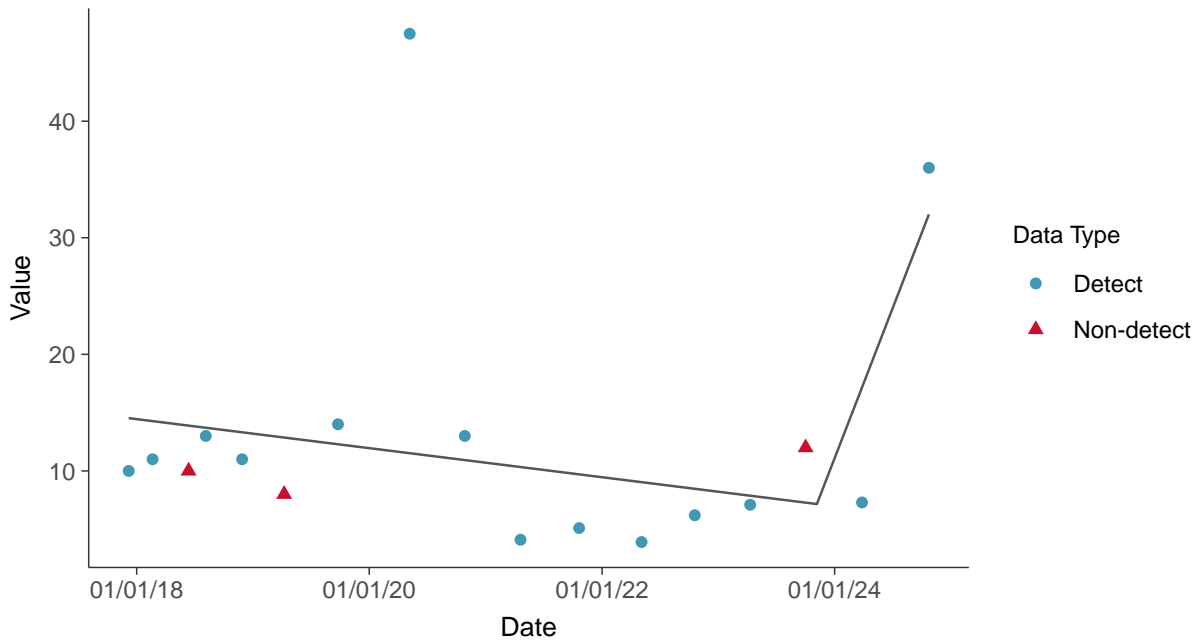
Lithium, MW-17005 (ug/L)





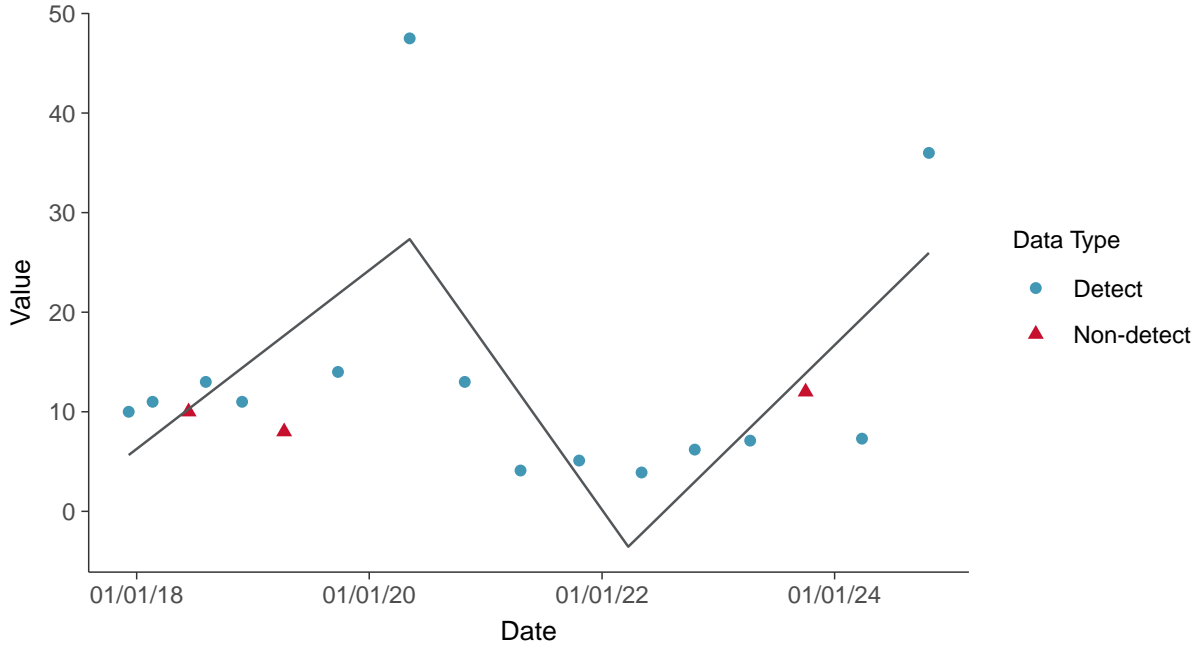
Trend Regression: Piecewise Linear-Linear

Lithium, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

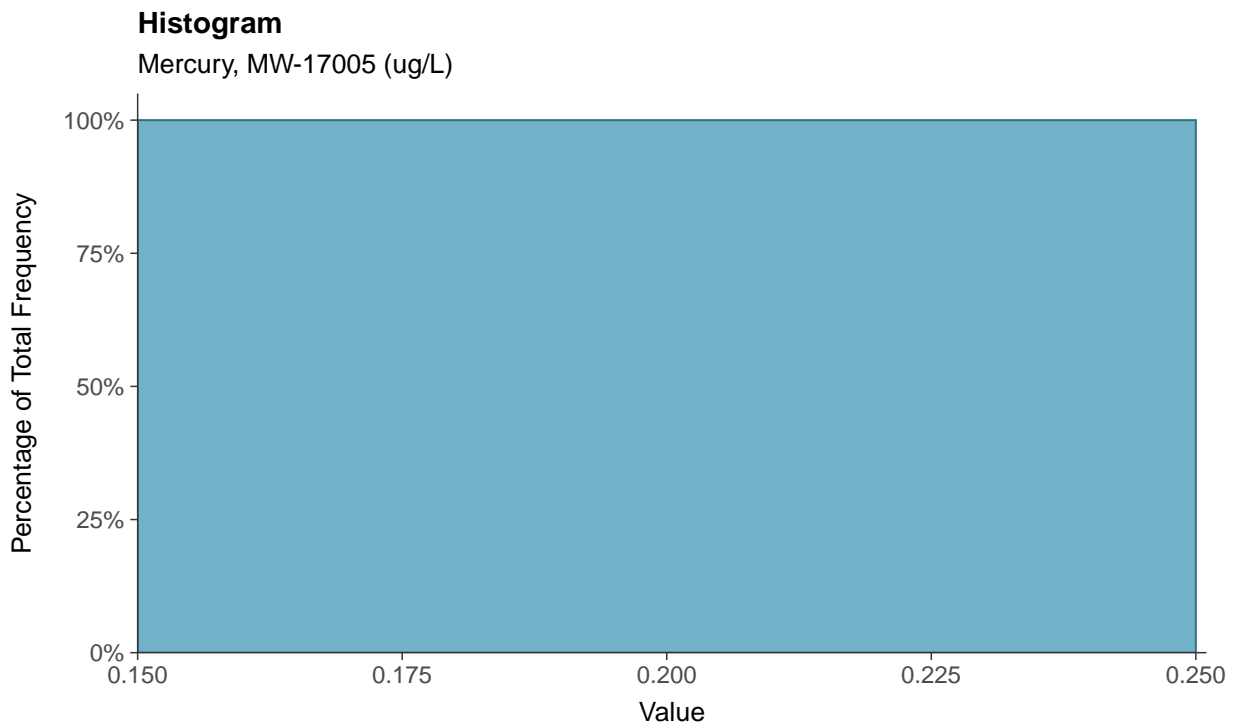
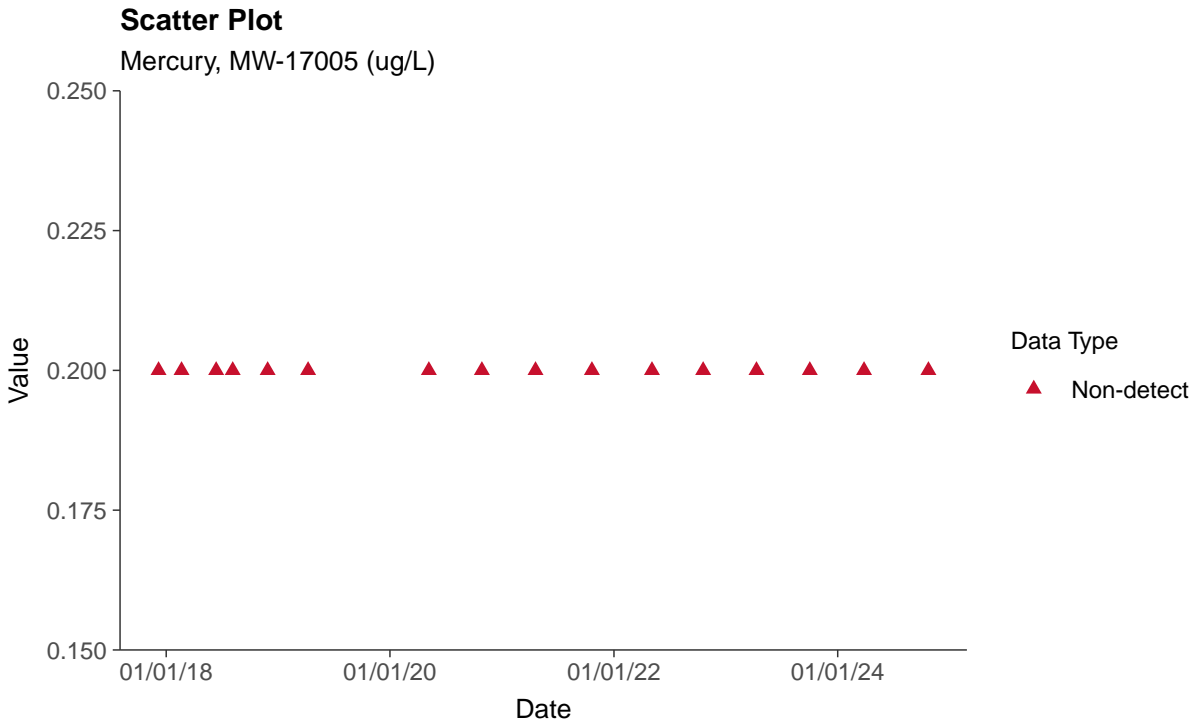
Lithium, MW-17005 (ug/L)





Appendix IV: Mercury, MW-17005

ID: 18_2_118



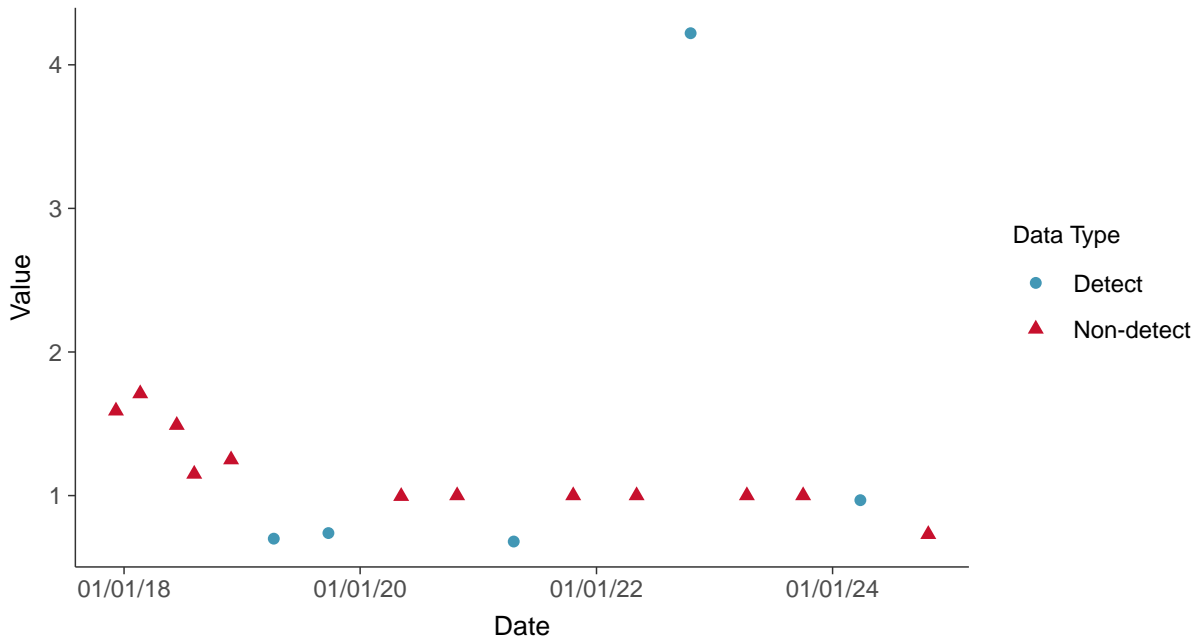


Appendix IV: Radium-226+228, MW-17005

ID: 18_2_125

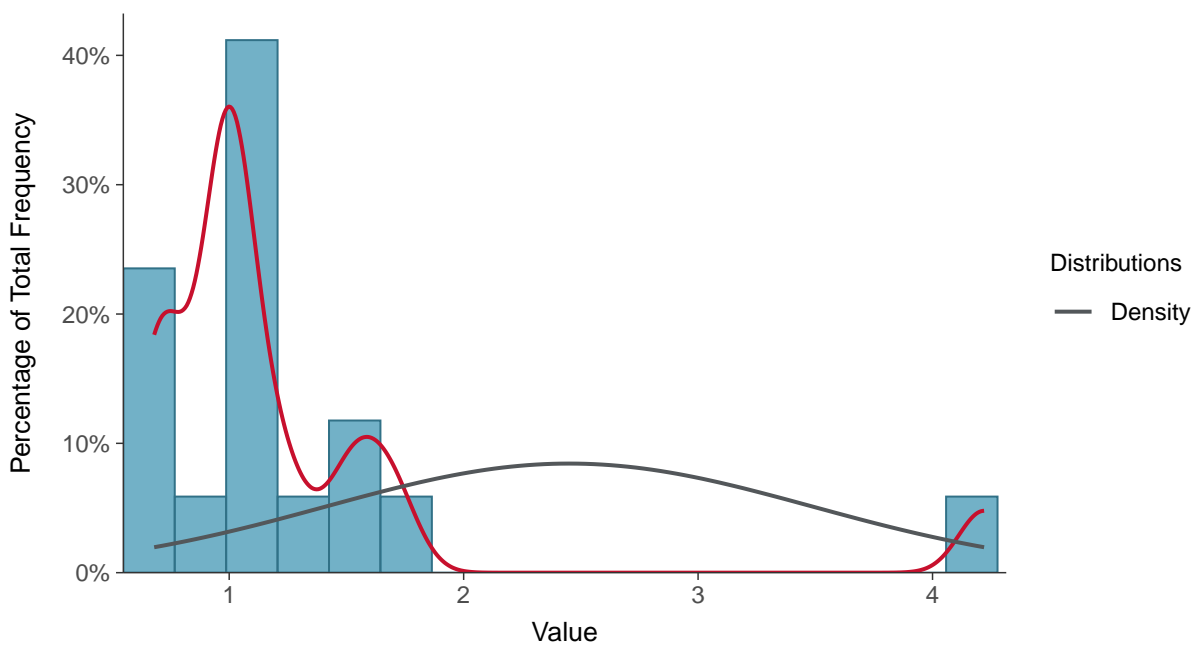
Scatter Plot

Radium-226+228, MW-17005 (pCi/L)



Histogram

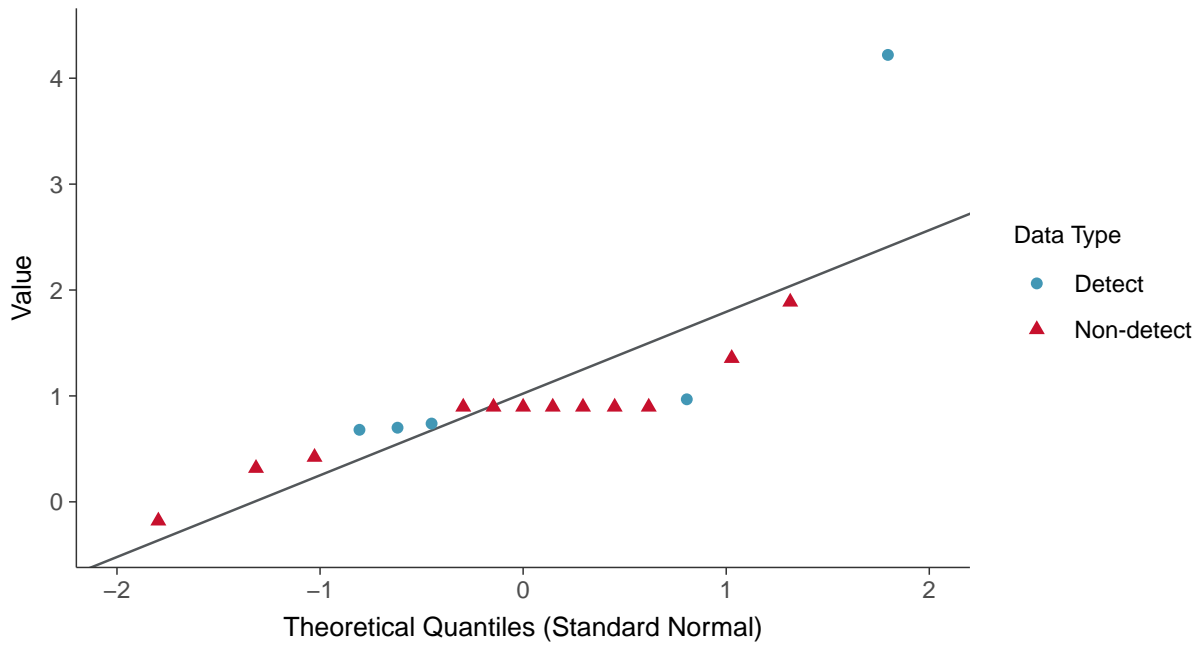
Radium-226+228, MW-17005 (pCi/L)





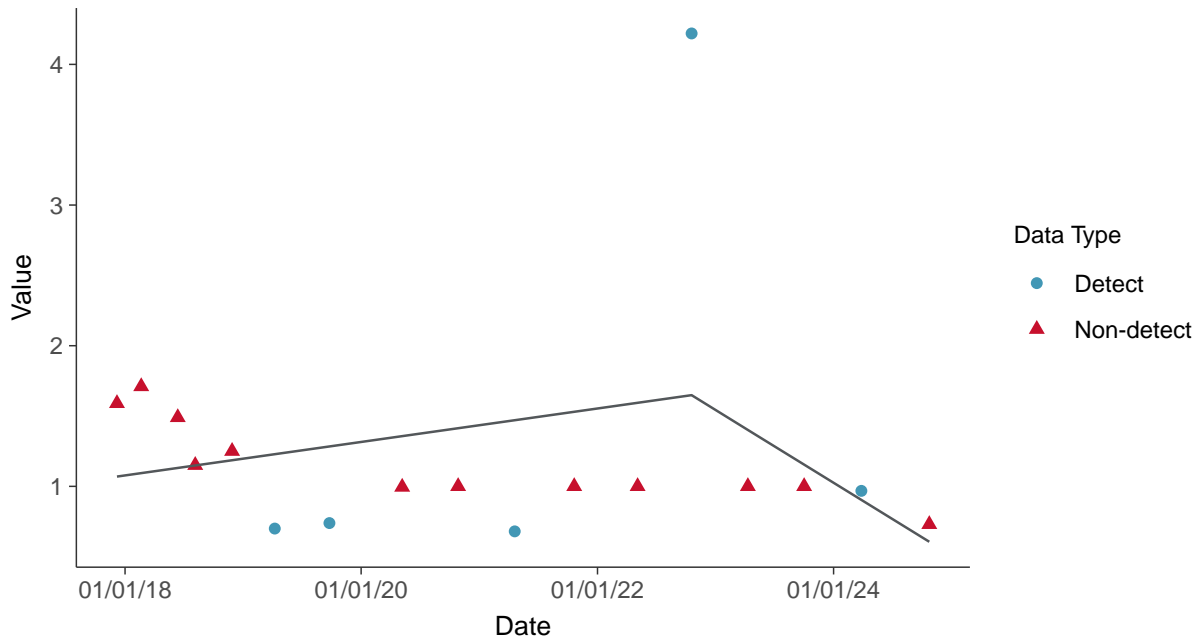
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17005 (pCi/L)



Trend Regression: Piecewise Linear-Linear

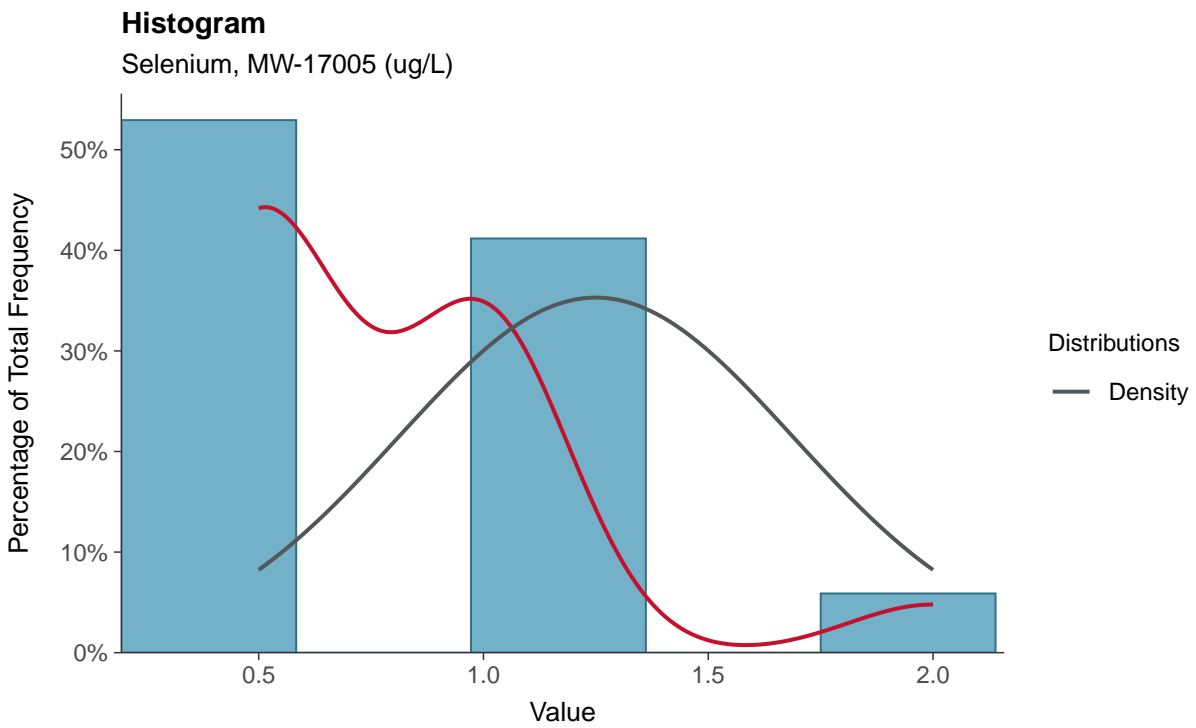
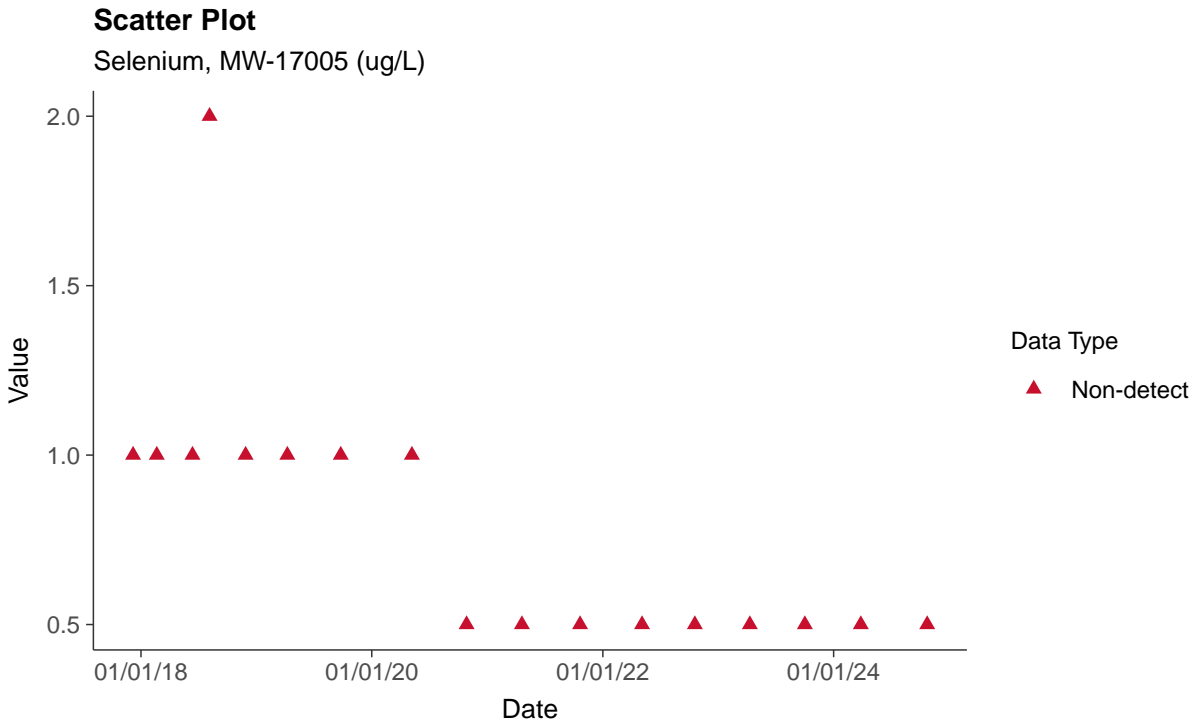
Radium-226+228, MW-17005 (pCi/L)





Appendix IV: Selenium, MW-17005

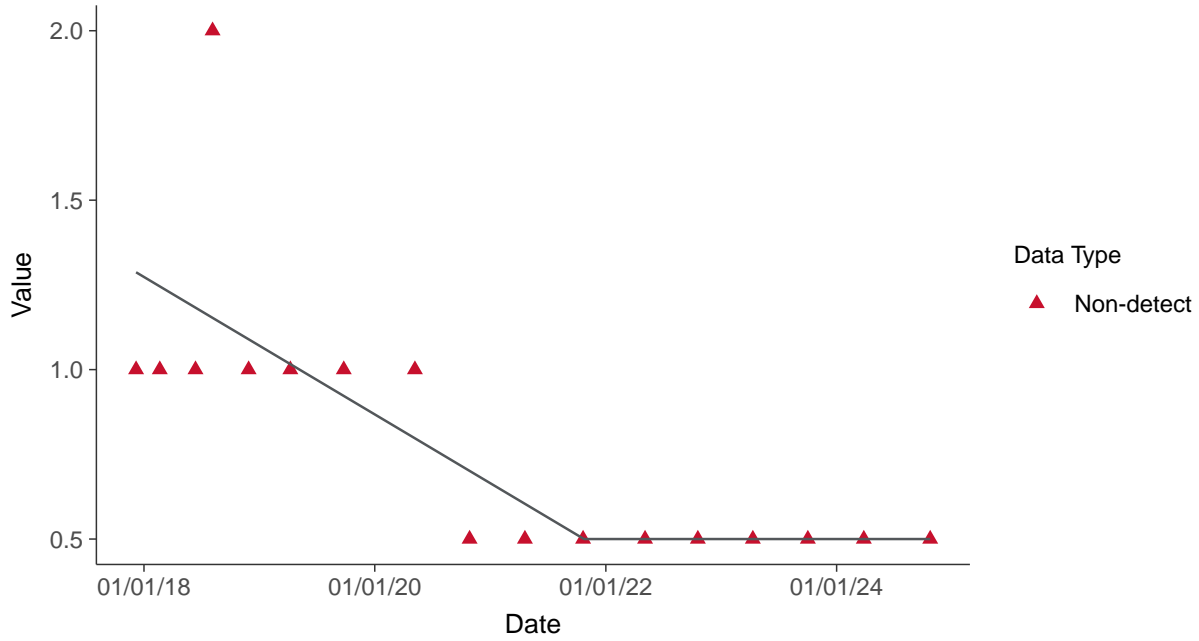
ID: 18_2_127





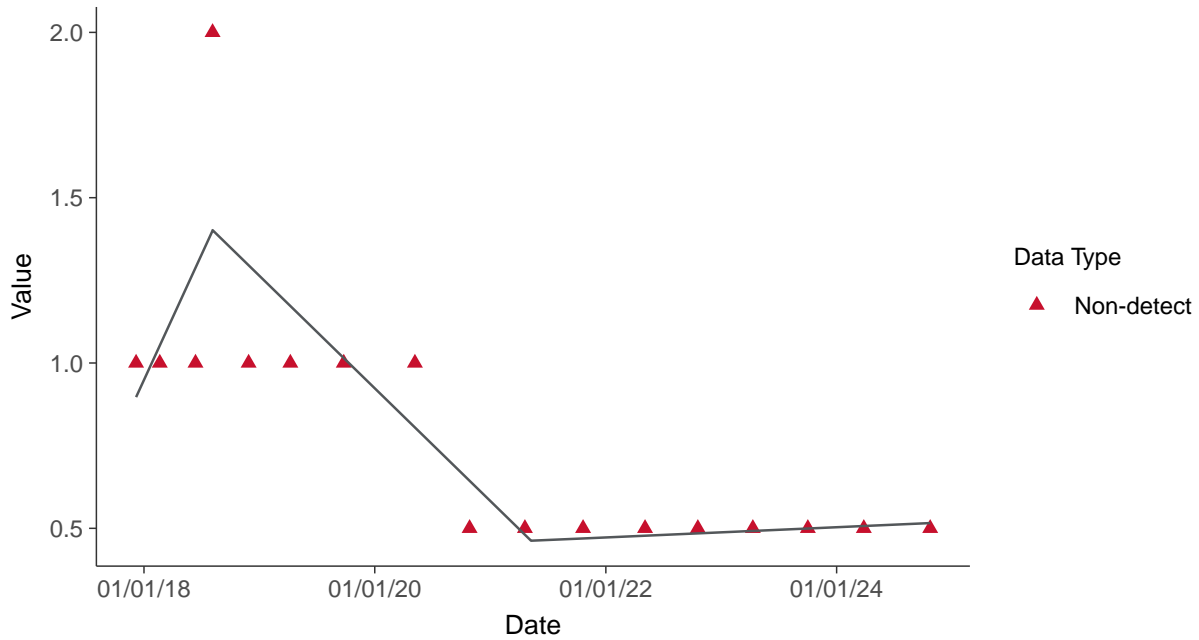
Trend Regression: Piecewise Linear-Linear

Selenium, MW-17005 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

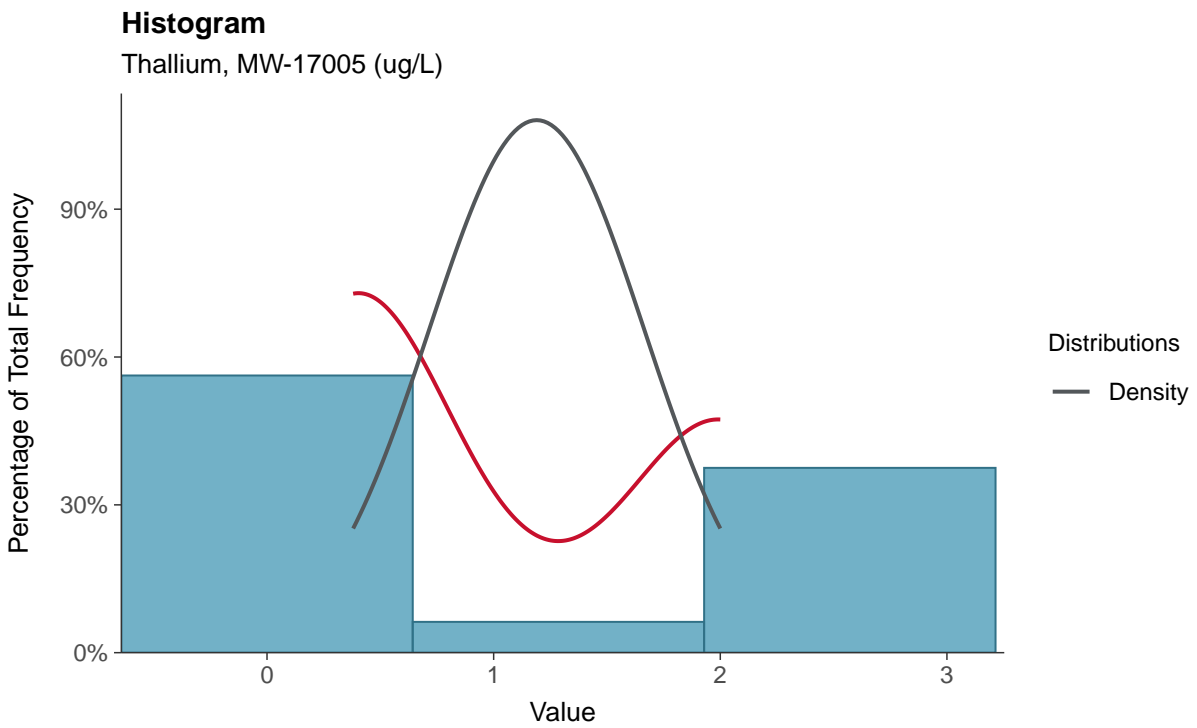
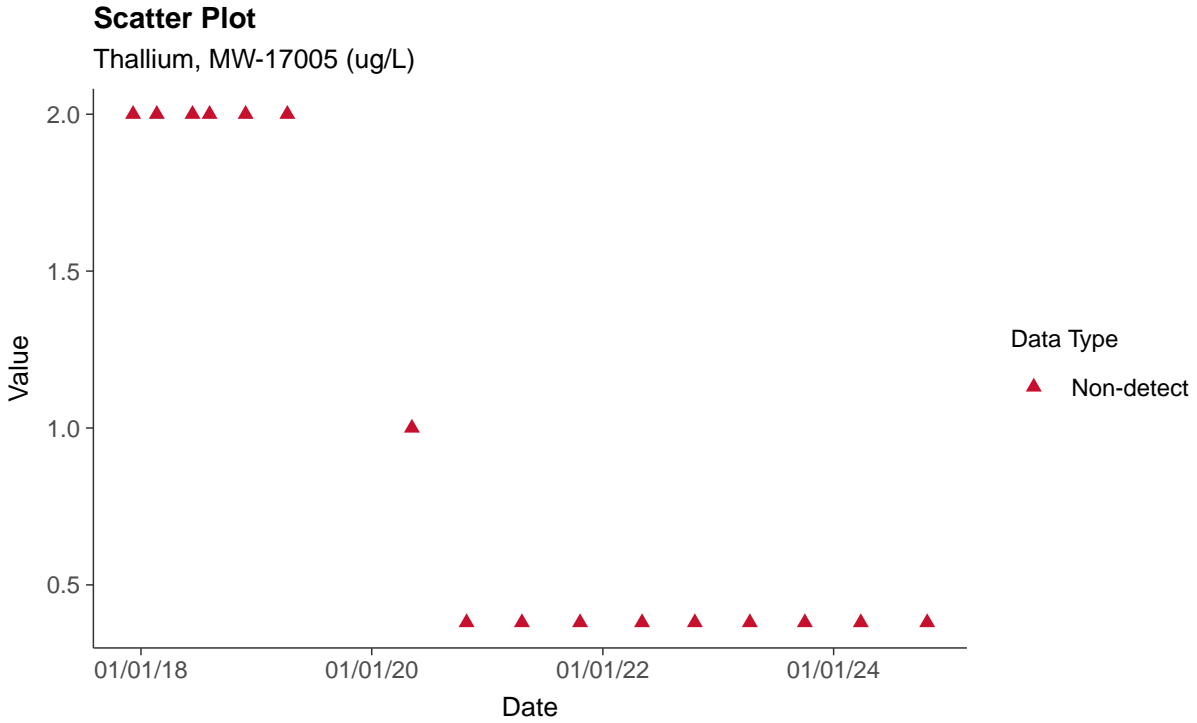
Selenium, MW-17005 (ug/L)





Appendix IV: Thallium, MW-17005

ID: 18_2_131



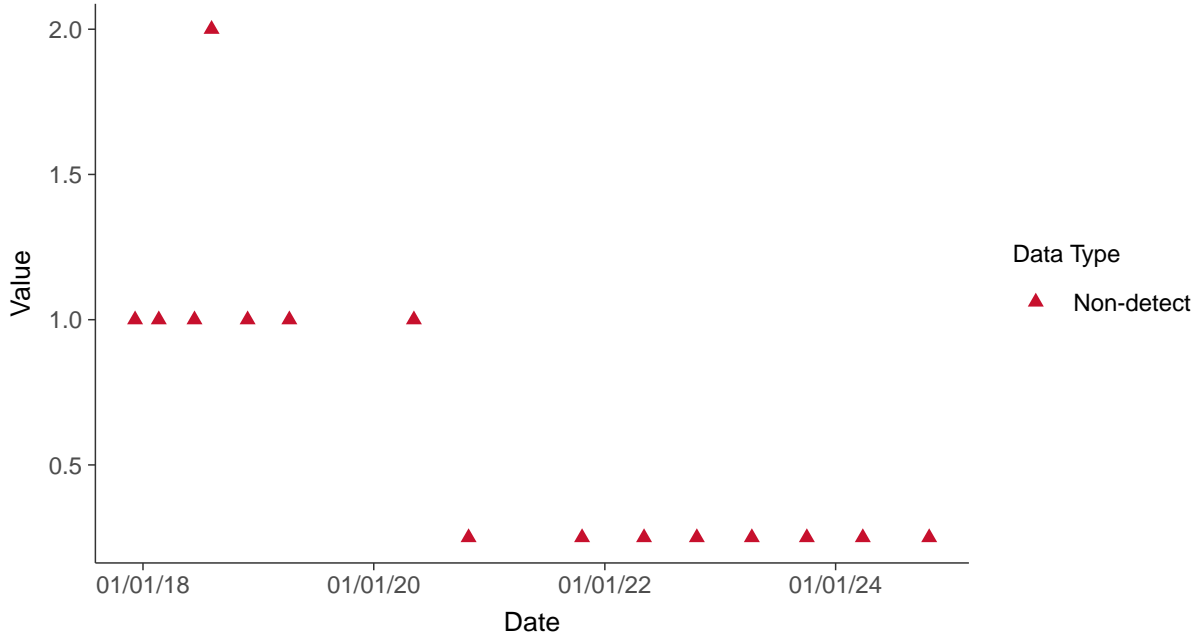


Appendix IV: Antimony, MW-17006

ID: 19_2_101

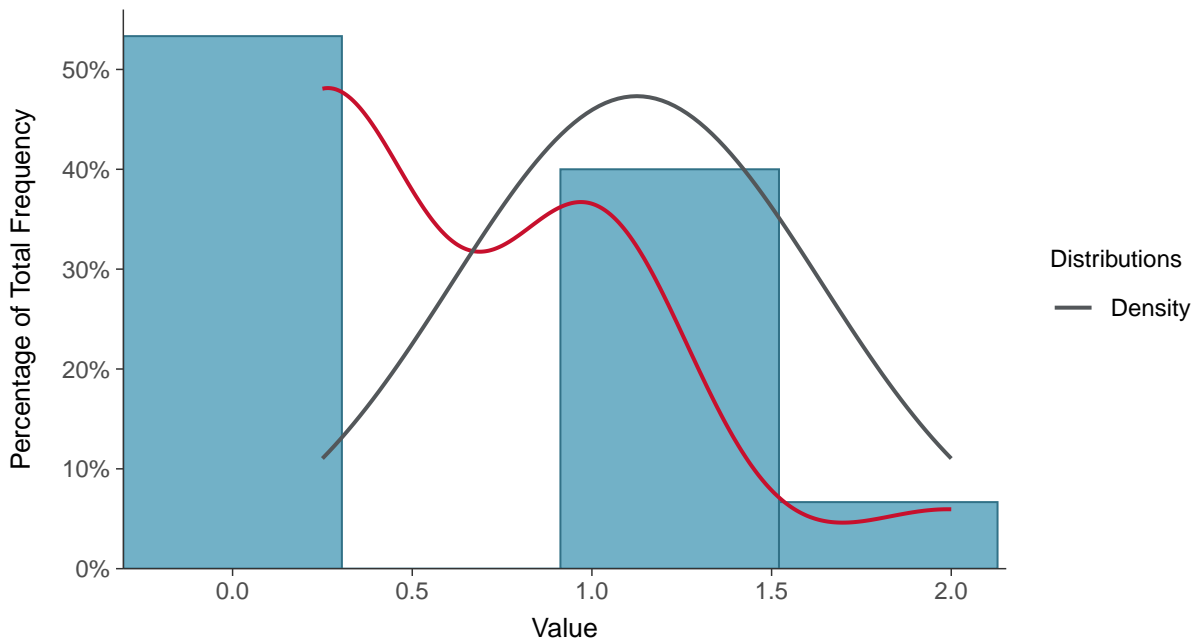
Scatter Plot

Antimony, MW-17006 (ug/L)



Histogram

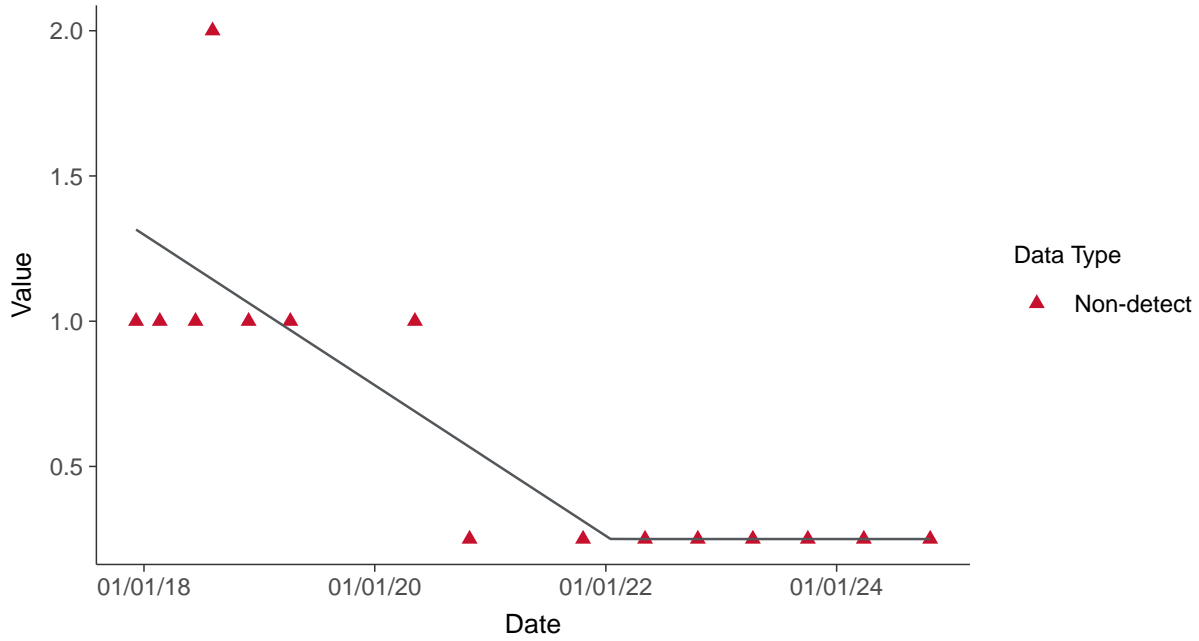
Antimony, MW-17006 (ug/L)





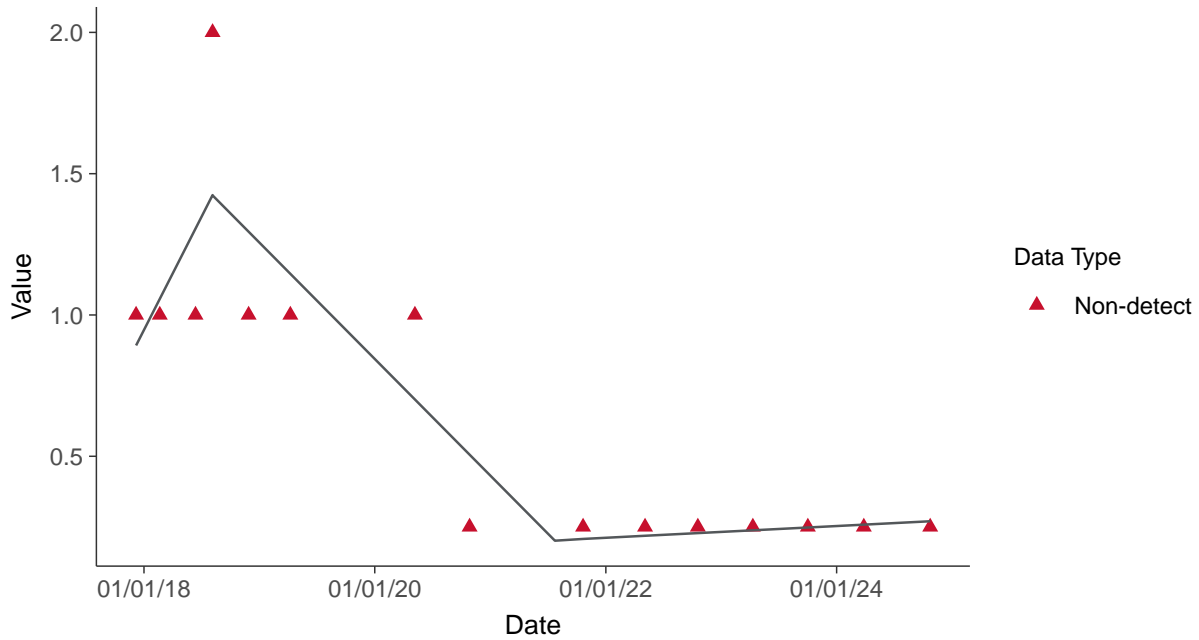
Trend Regression: Piecewise Linear-Linear

Antimony, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

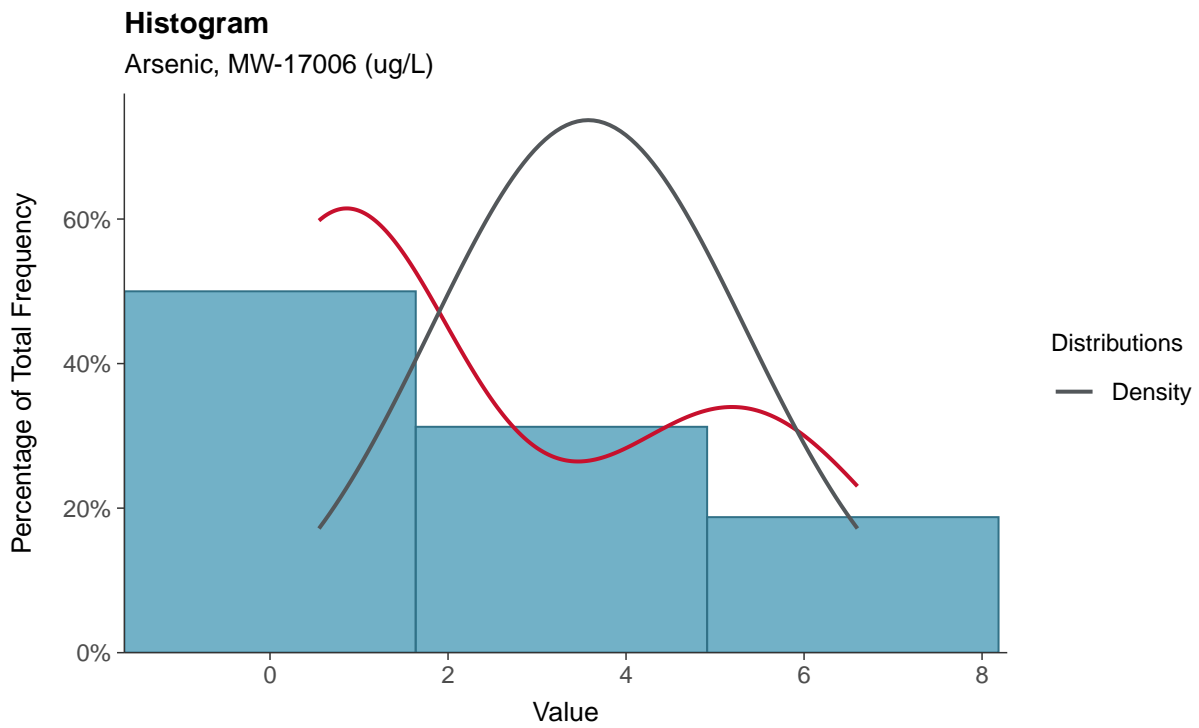
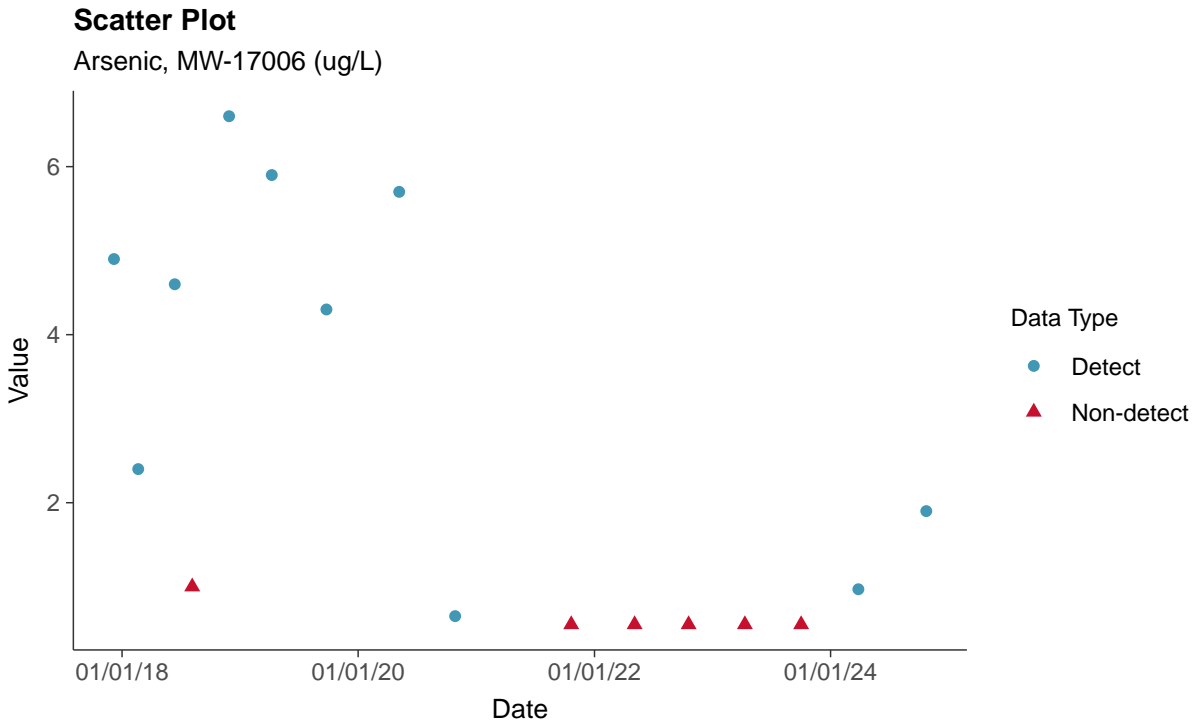
Antimony, MW-17006 (ug/L)





Appendix IV: Arsenic, MW-17006

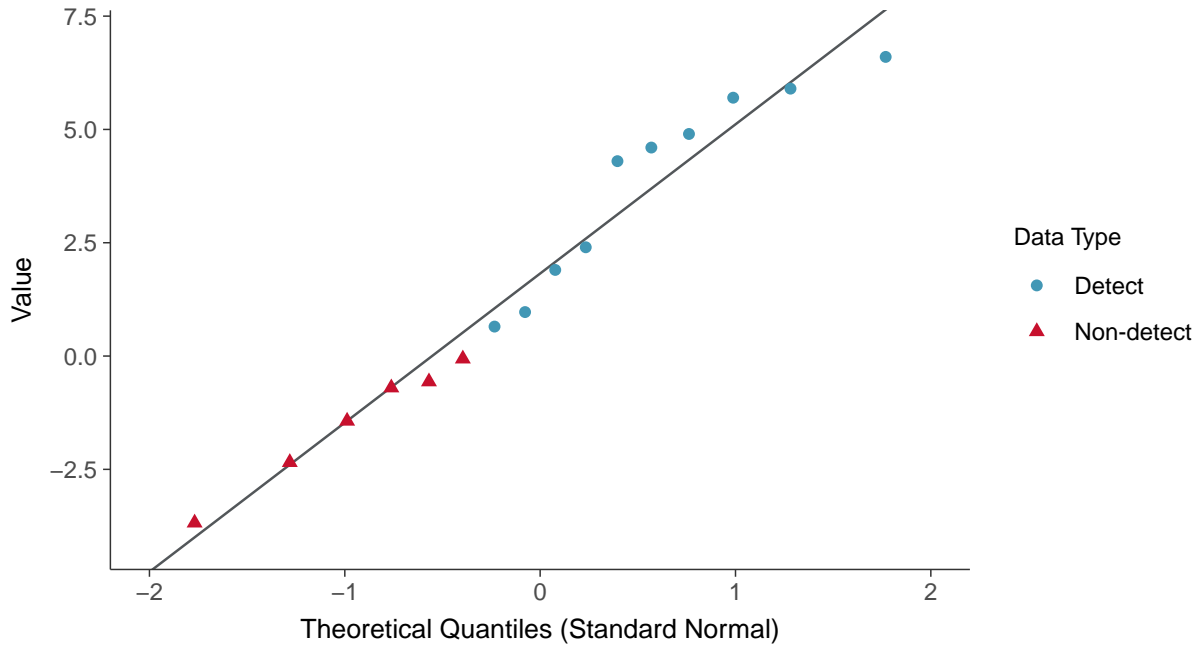
ID: 19_2_102





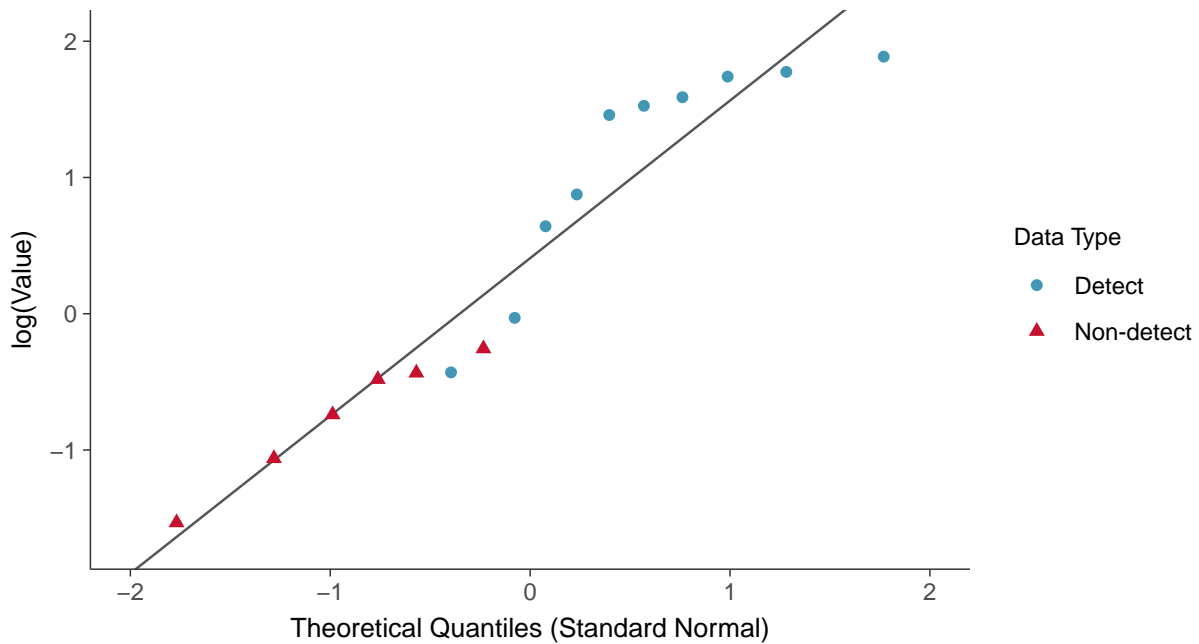
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17006 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

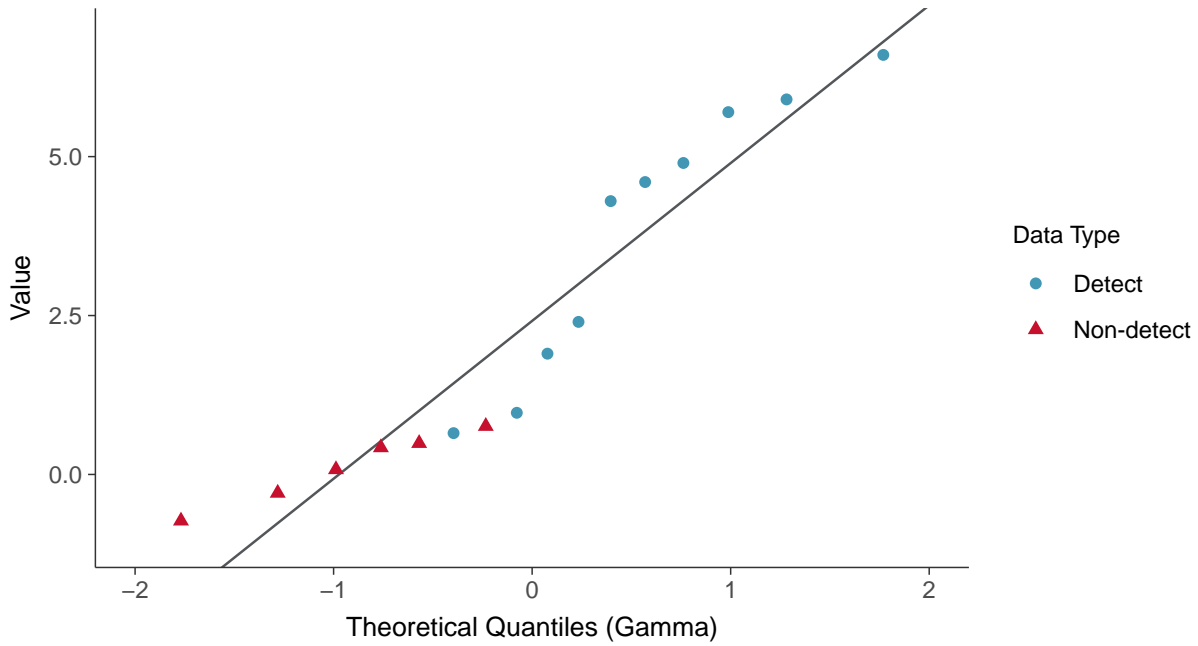
Arsenic, MW-17006 (ug/L)





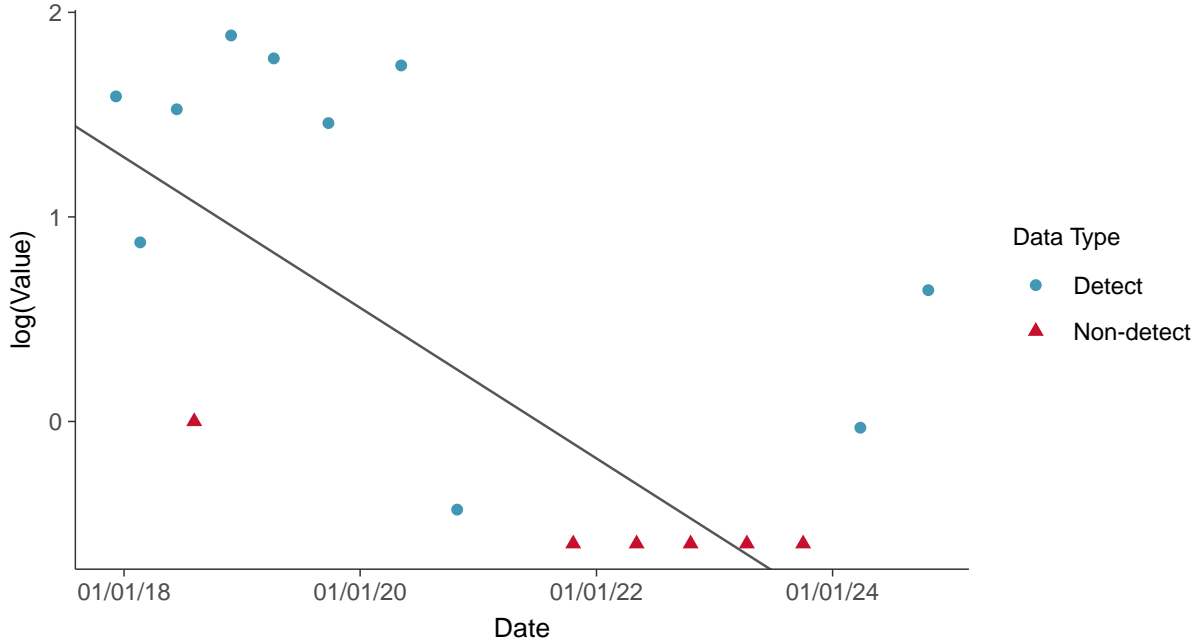
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17006 (ug/L)



Trend Regression: Lognormal MLE

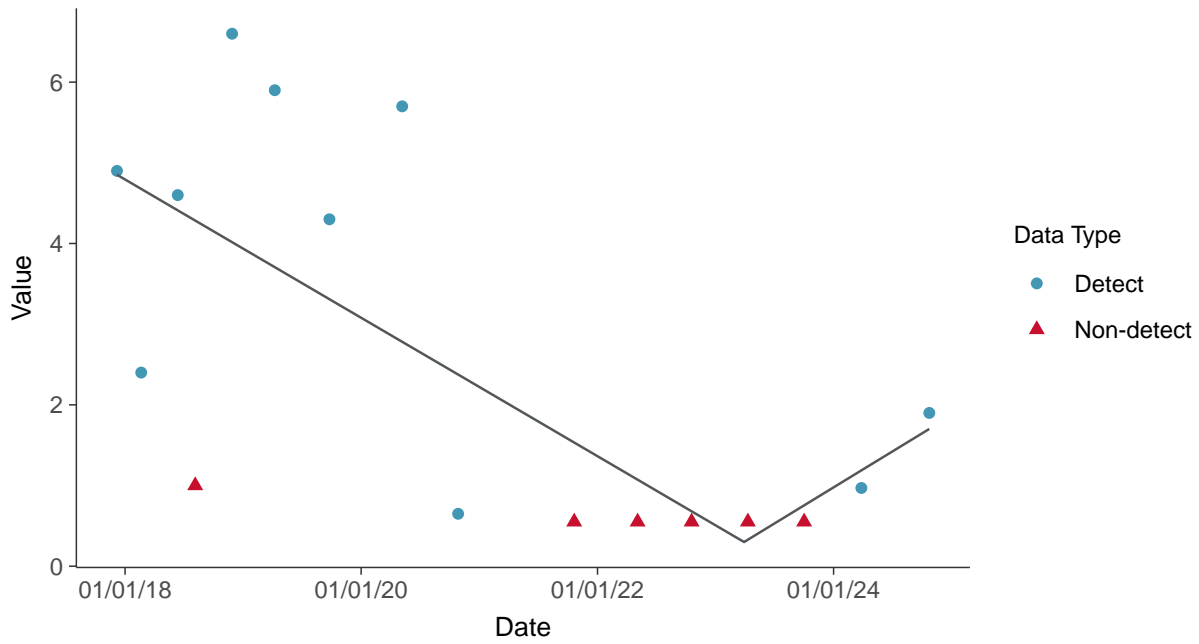
Arsenic, MW-17006 (ug/L)





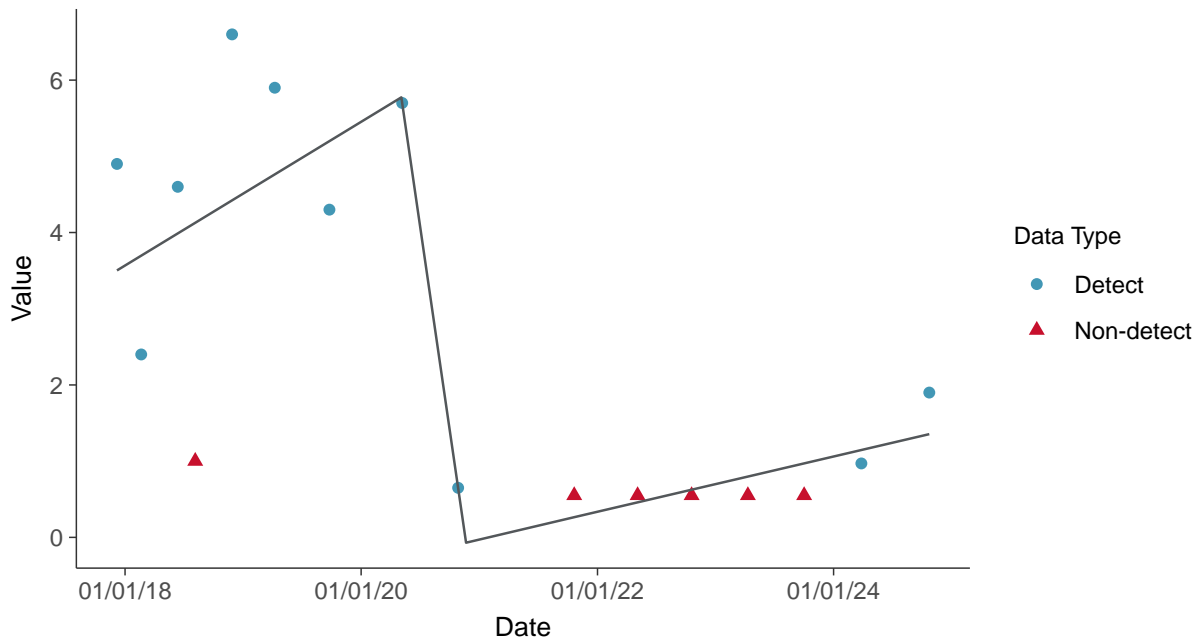
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

Arsenic, MW-17006 (ug/L)



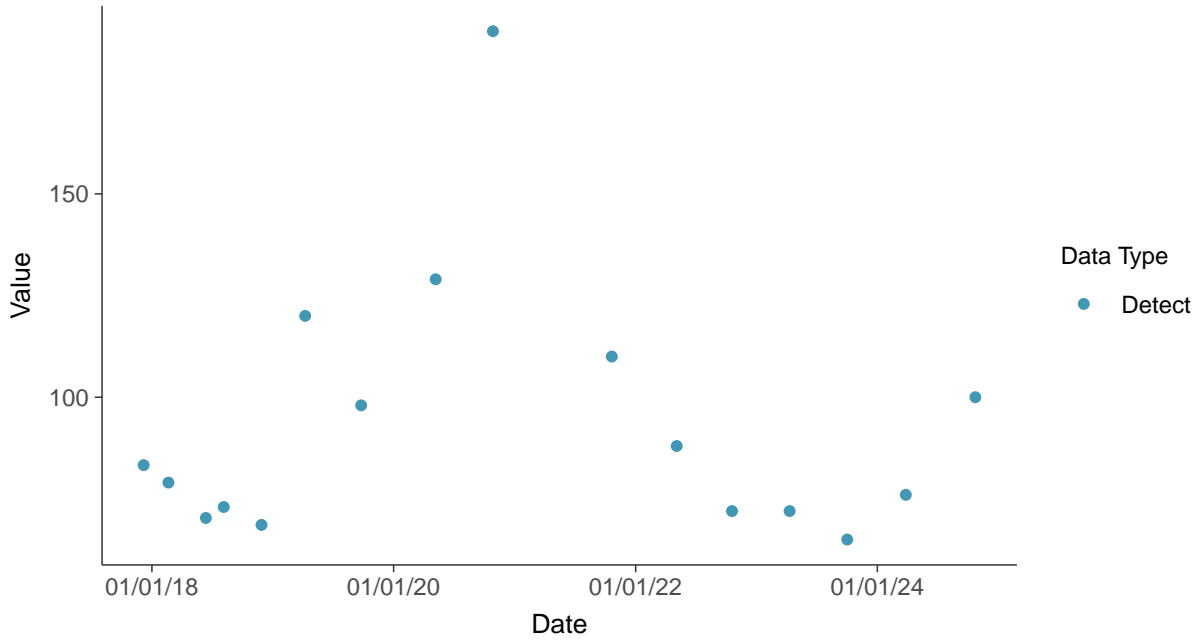


Appendix IV: Barium, MW-17006

ID: 19_2_103

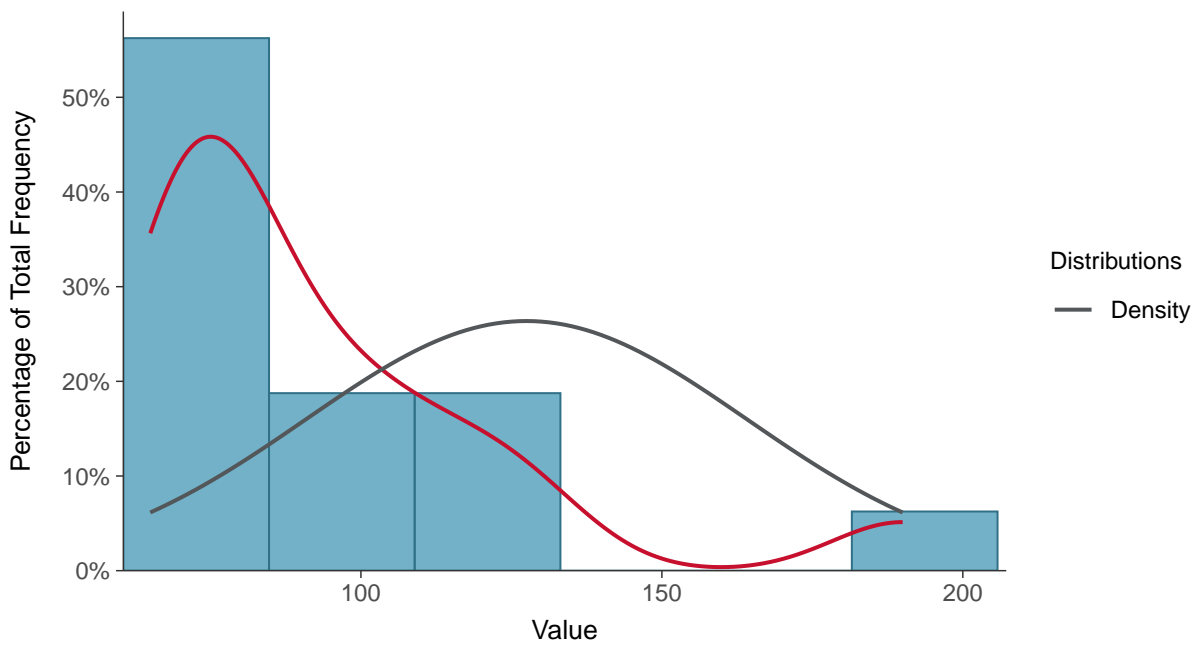
Scatter Plot

Barium, MW-17006 (ug/L)



Histogram

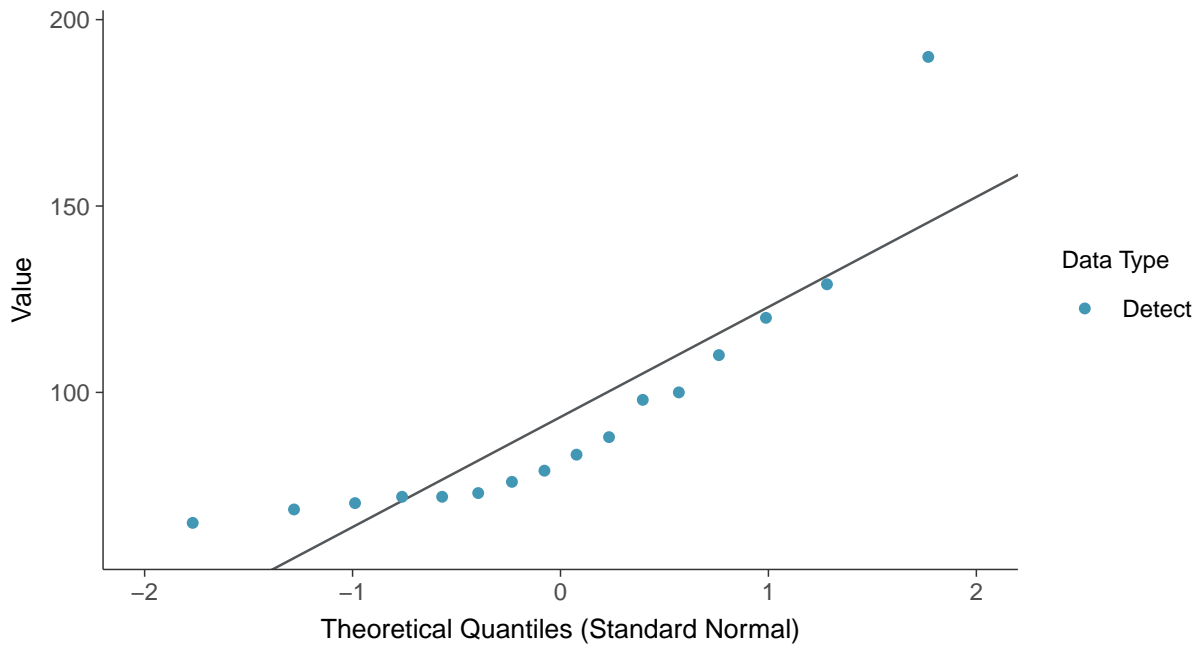
Barium, MW-17006 (ug/L)





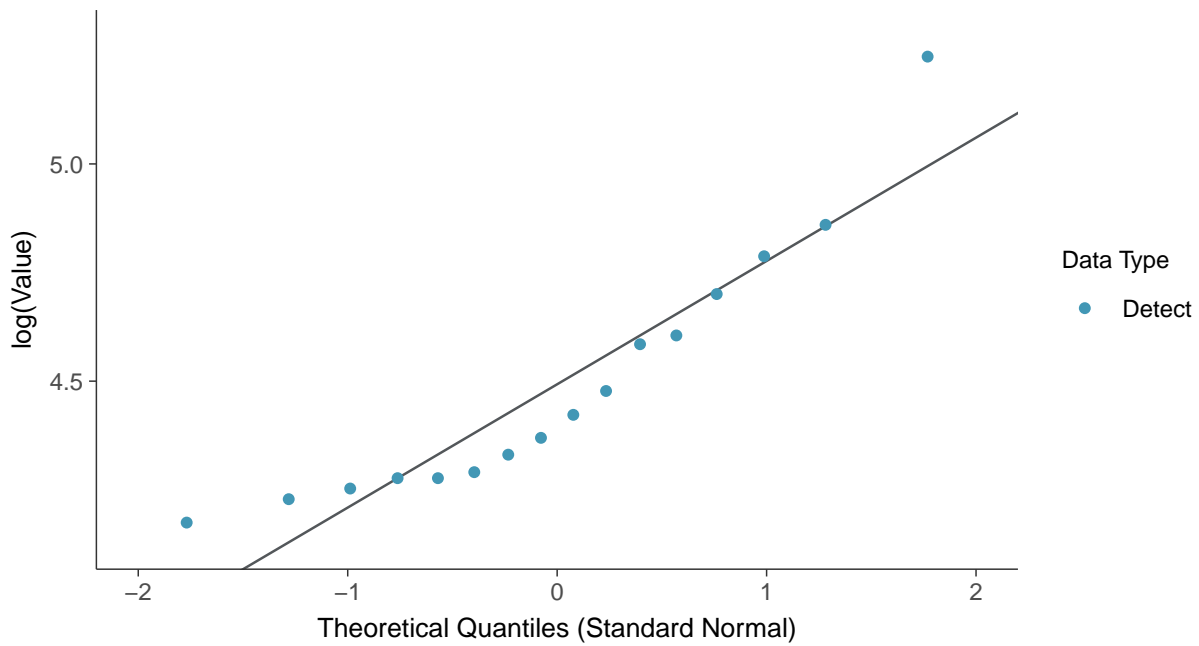
Normal Q-Q plot

Barium, MW-17006 (ug/L)



Lognormal Q-Q plot

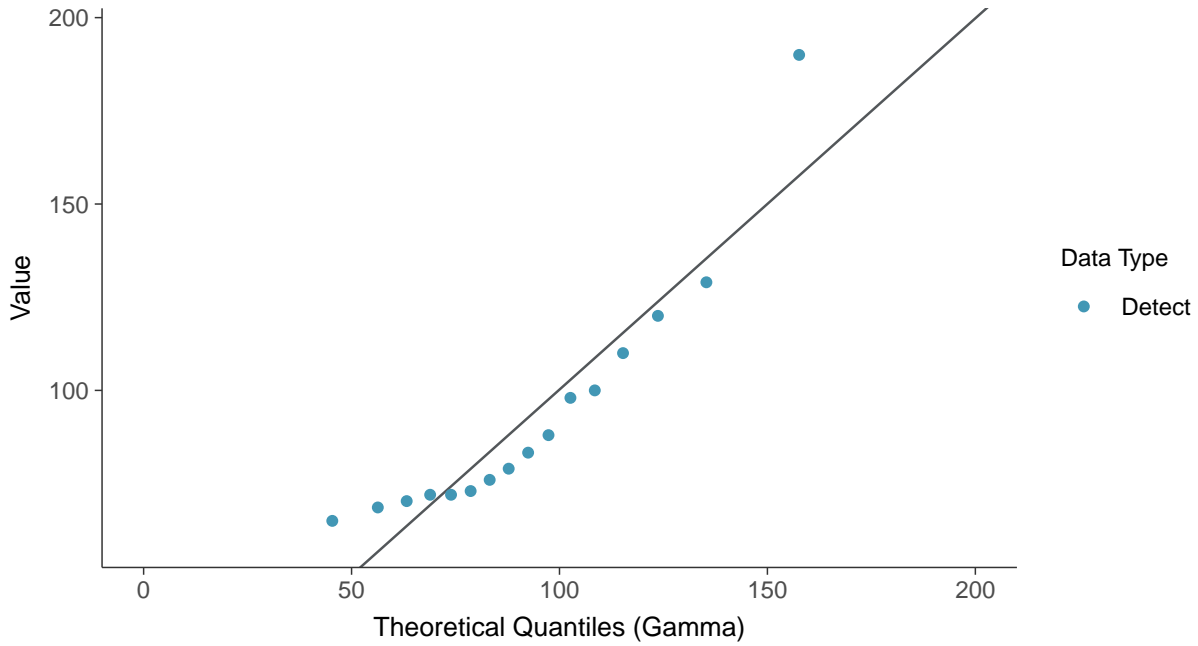
Barium, MW-17006 (ug/L)





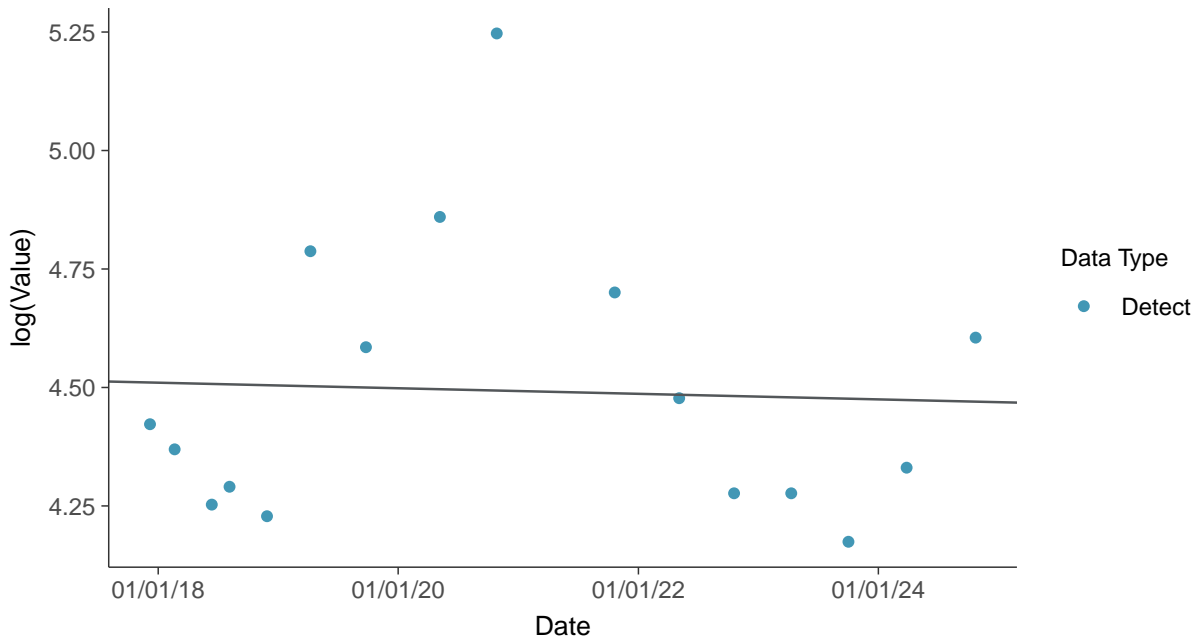
Gamma Q-Q plot

Barium, MW-17006 (ug/L)



Trend Regression: Lognormal MLE

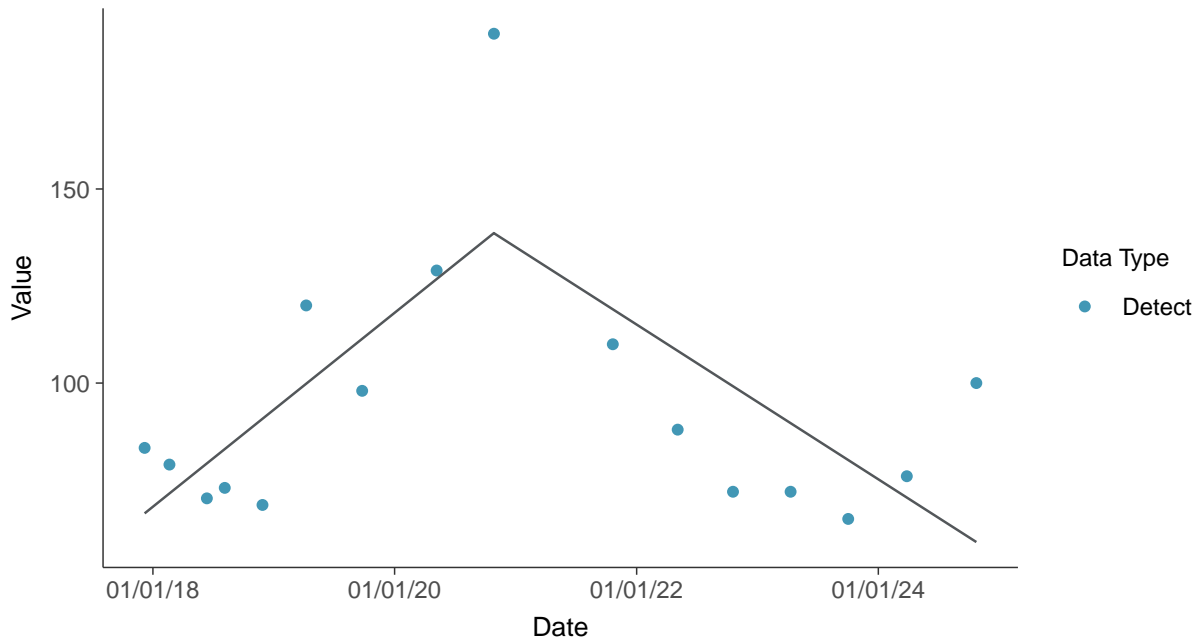
Barium, MW-17006 (ug/L)





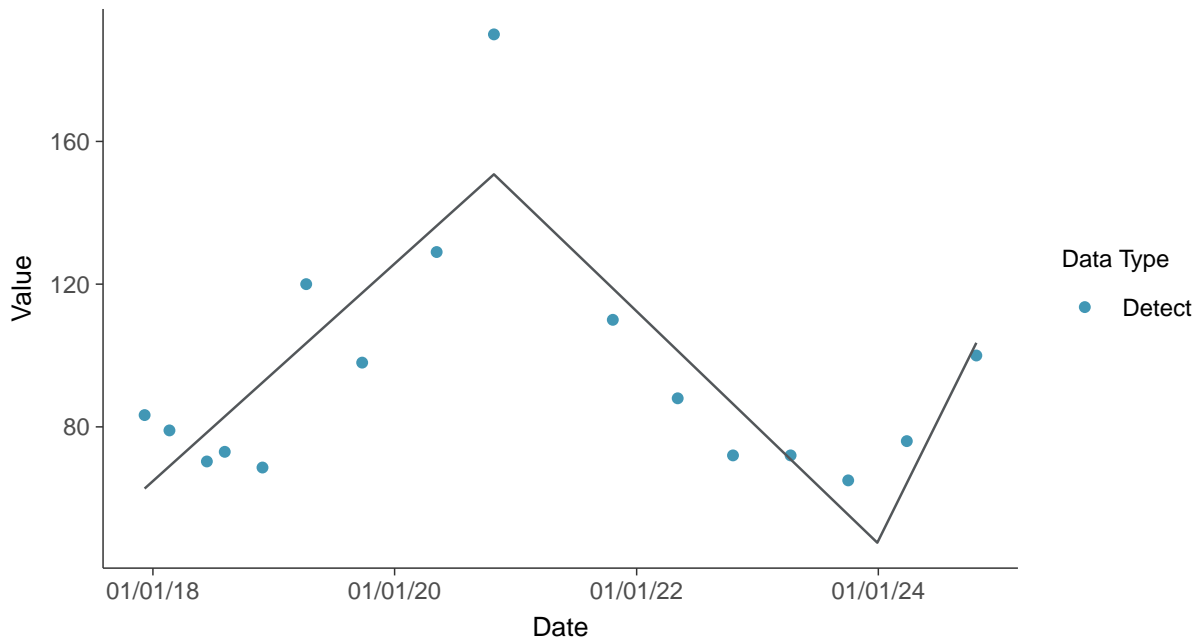
Trend Regression: Piecewise Linear-Linear

Barium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

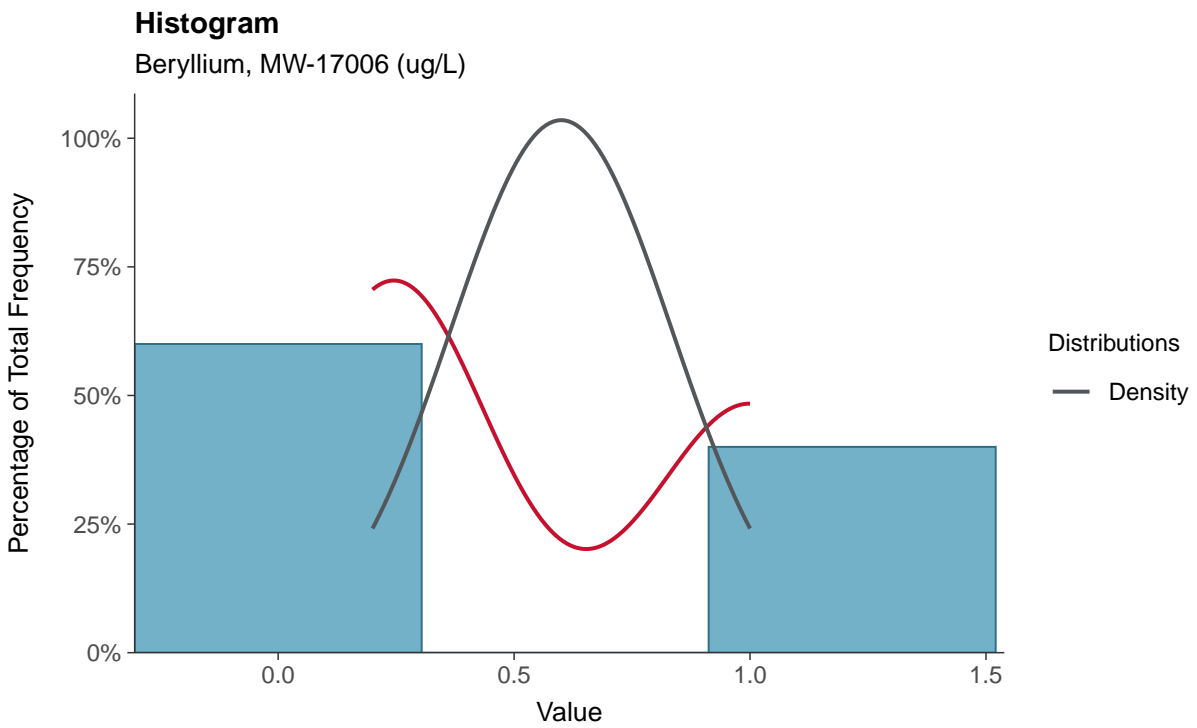
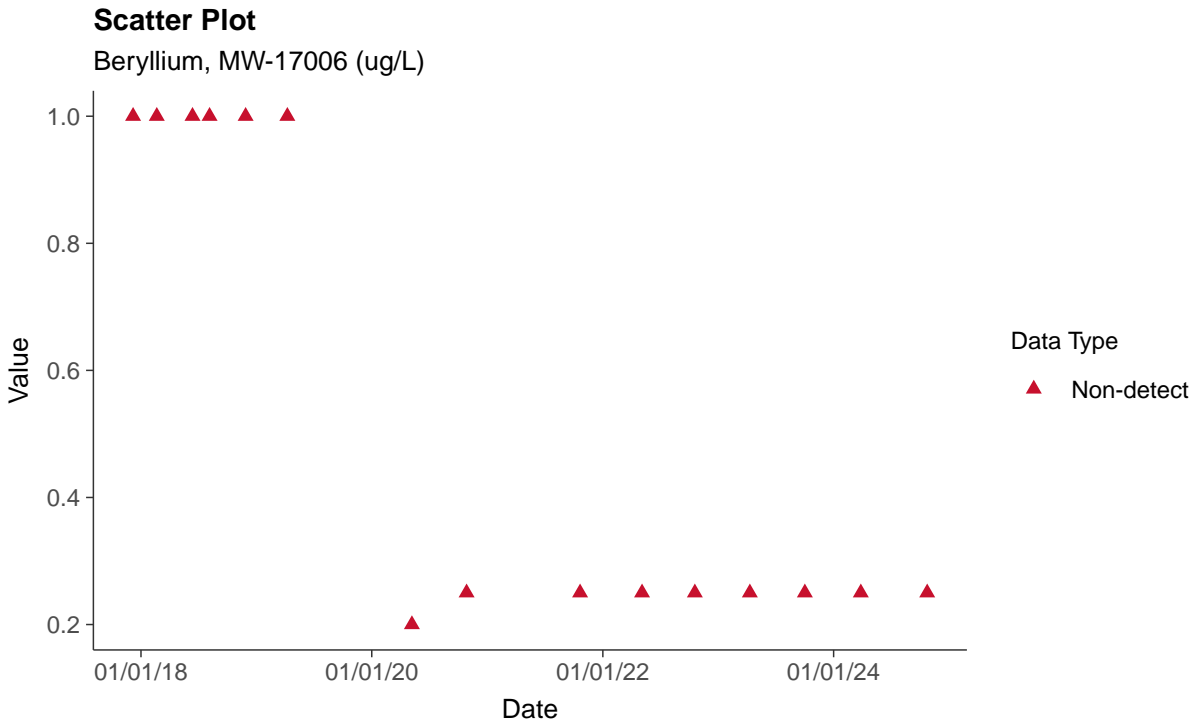
Barium, MW-17006 (ug/L)





Appendix IV: Beryllium, MW-17006

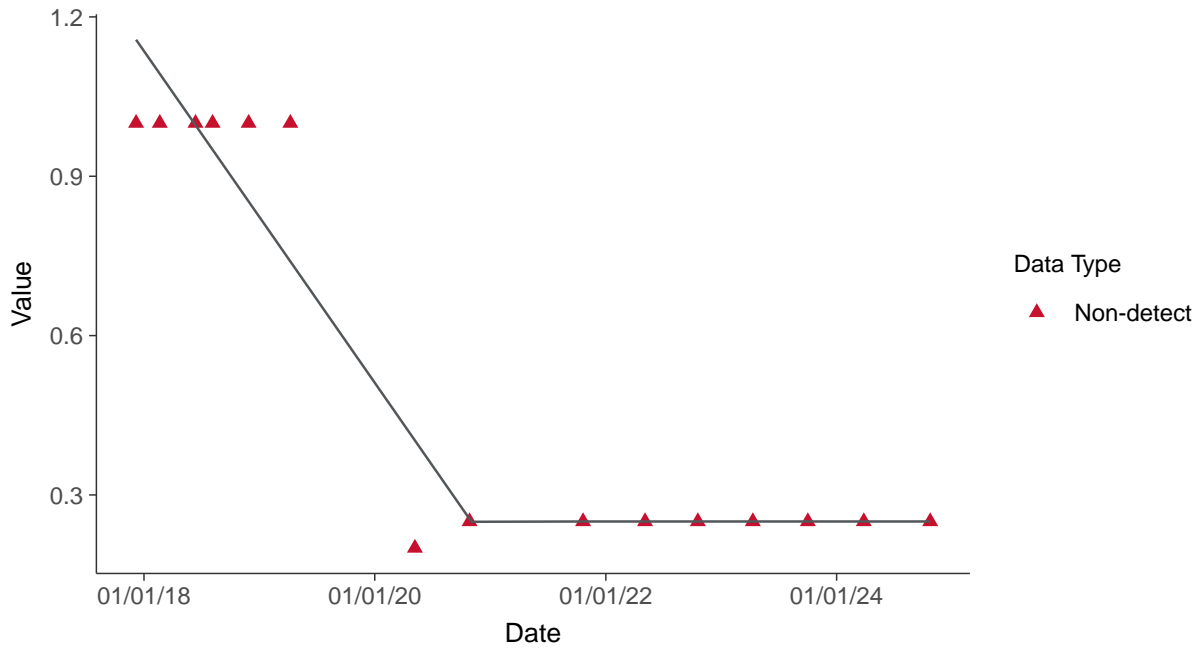
ID: 19_2_104





Trend Regression: Piecewise Linear-Linear

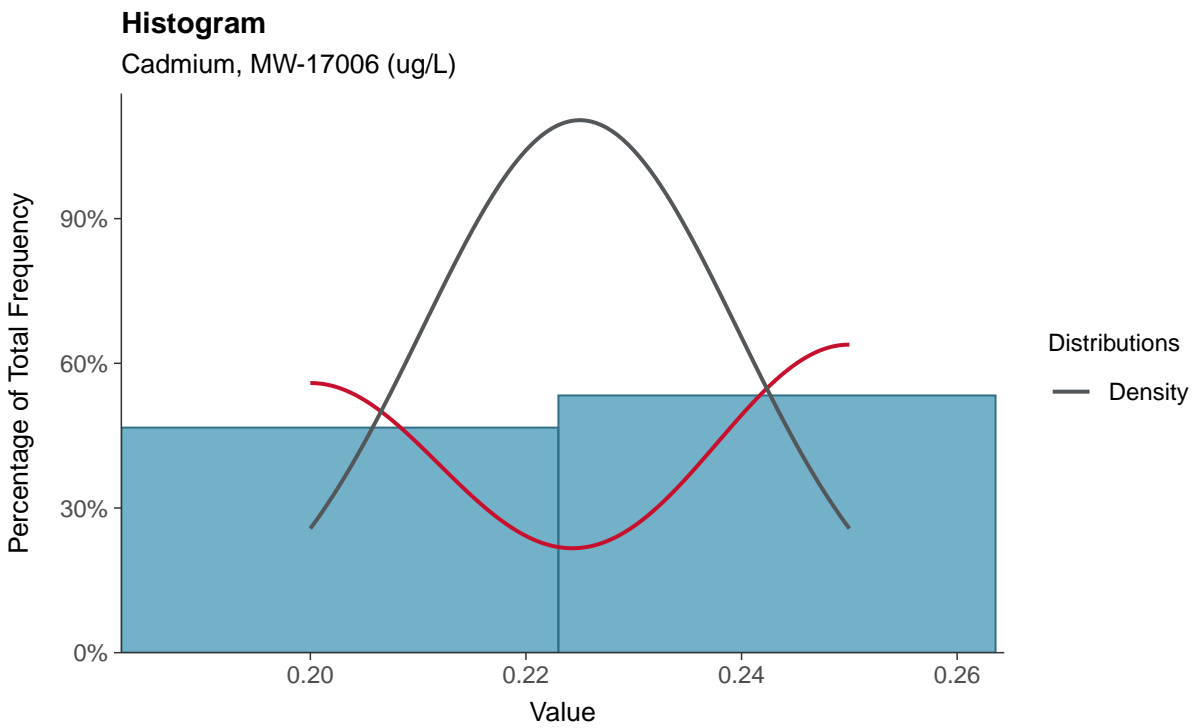
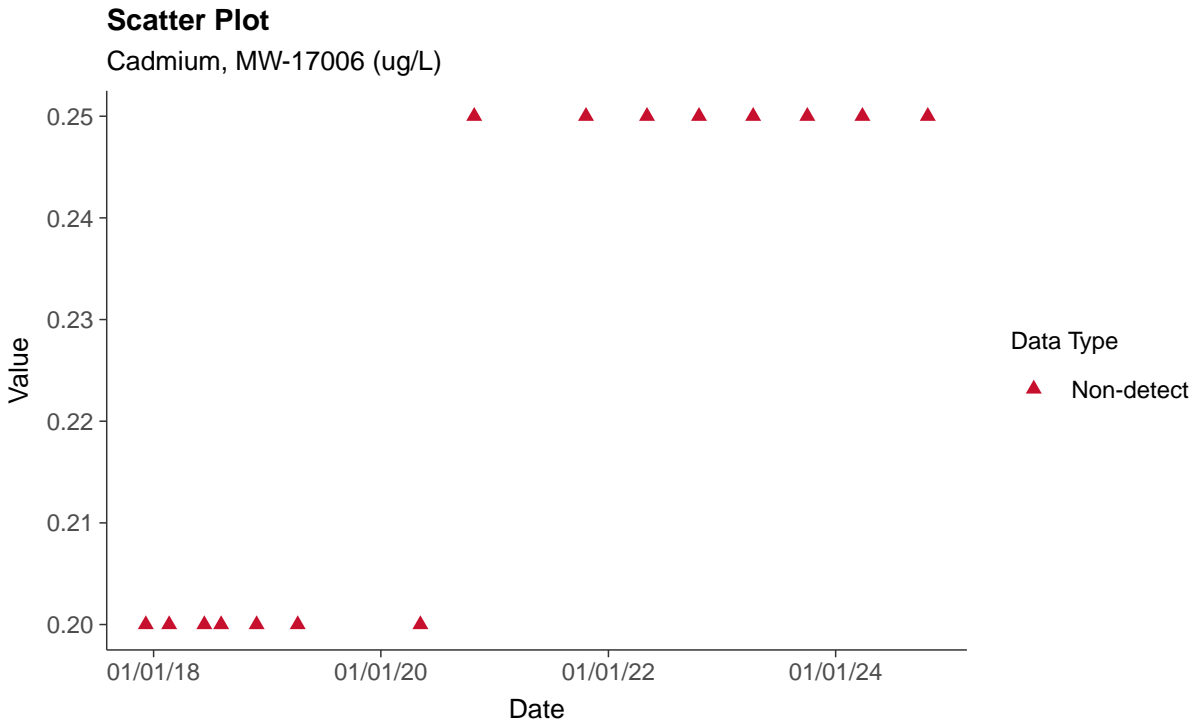
Beryllium, MW-17006 (ug/L)





Appendix IV: Cadmium, MW-17006

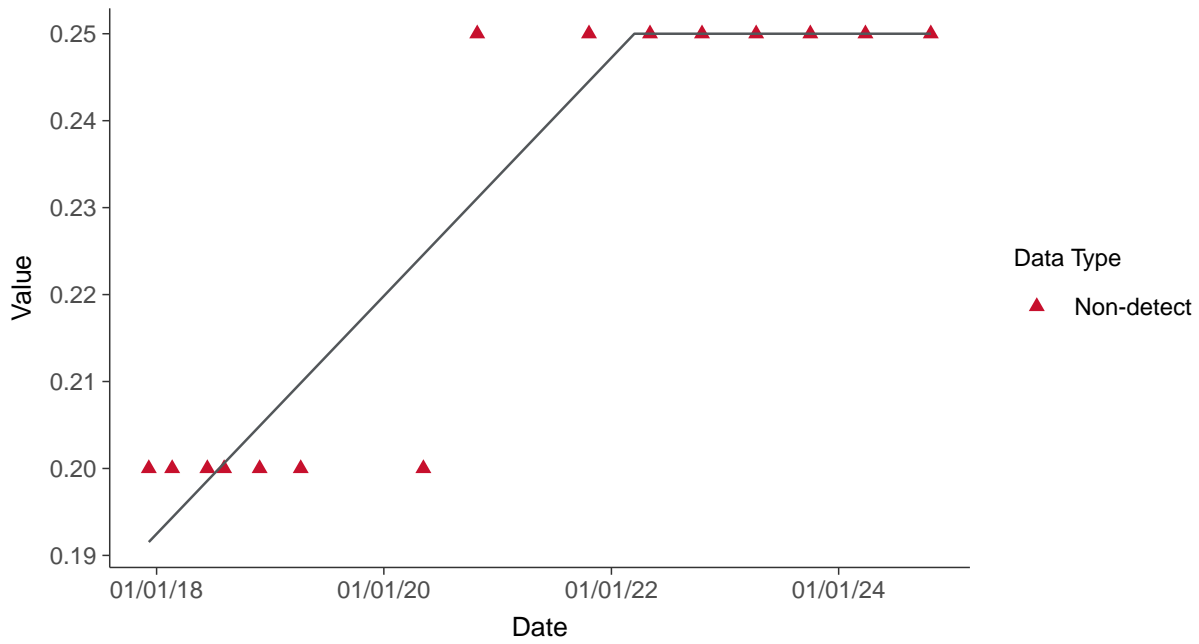
ID: 19_2_106





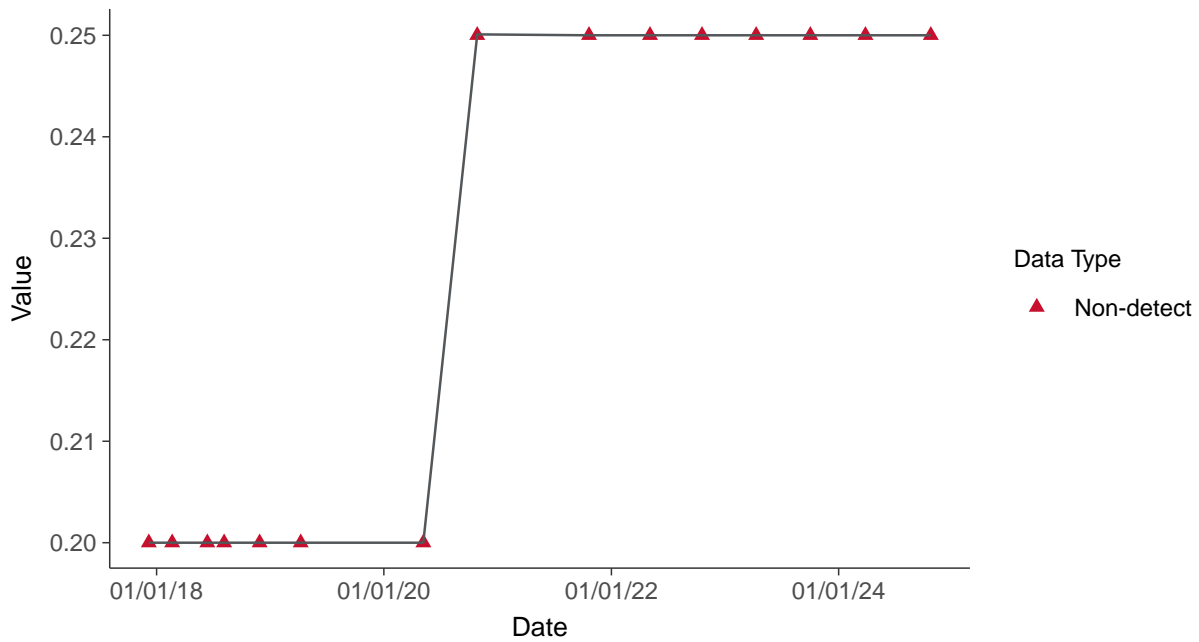
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

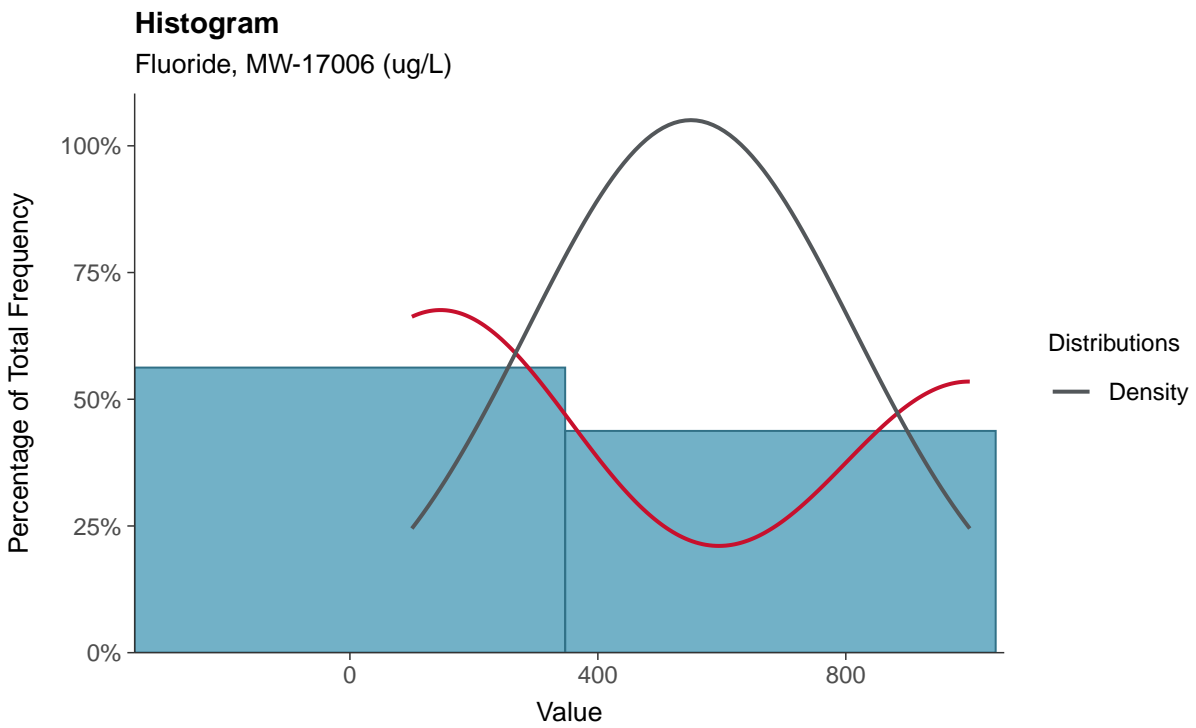
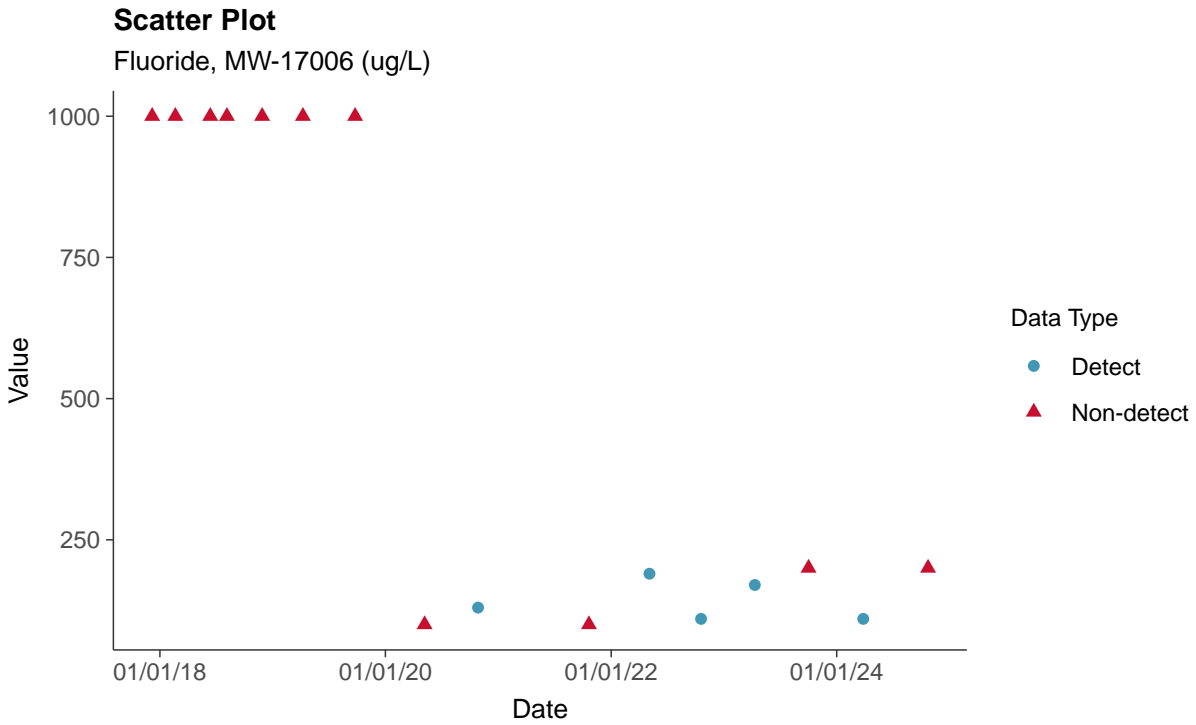
Cadmium, MW-17006 (ug/L)





Appendix IV: Fluoride, MW-17006

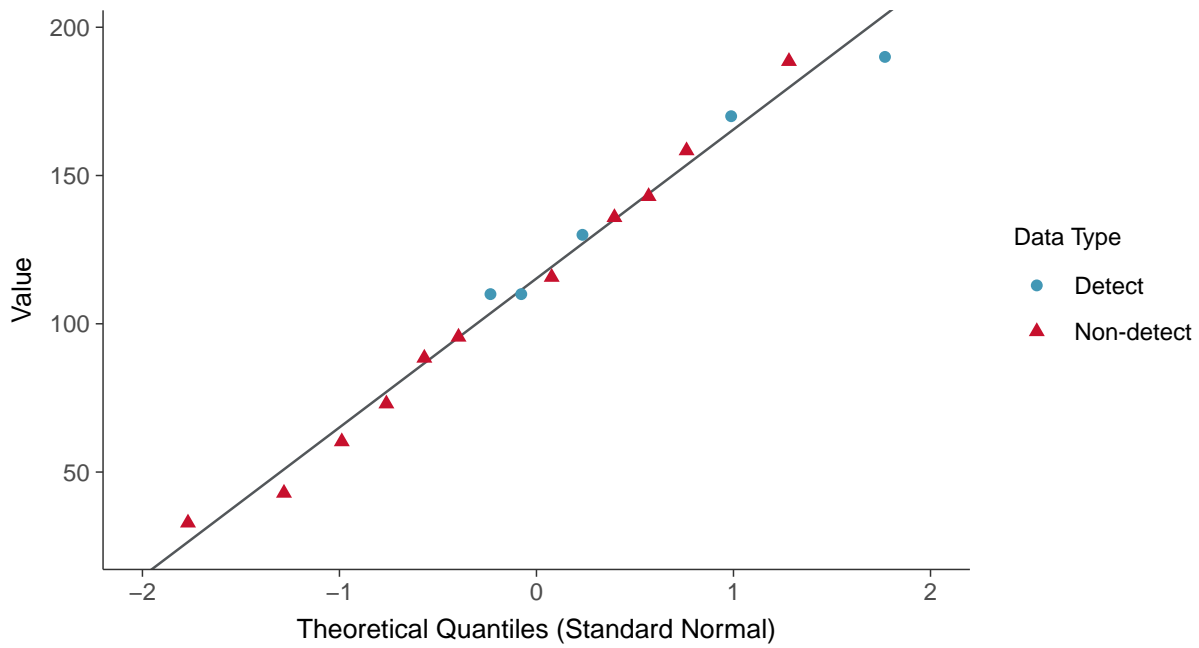
ID: 19_2_114





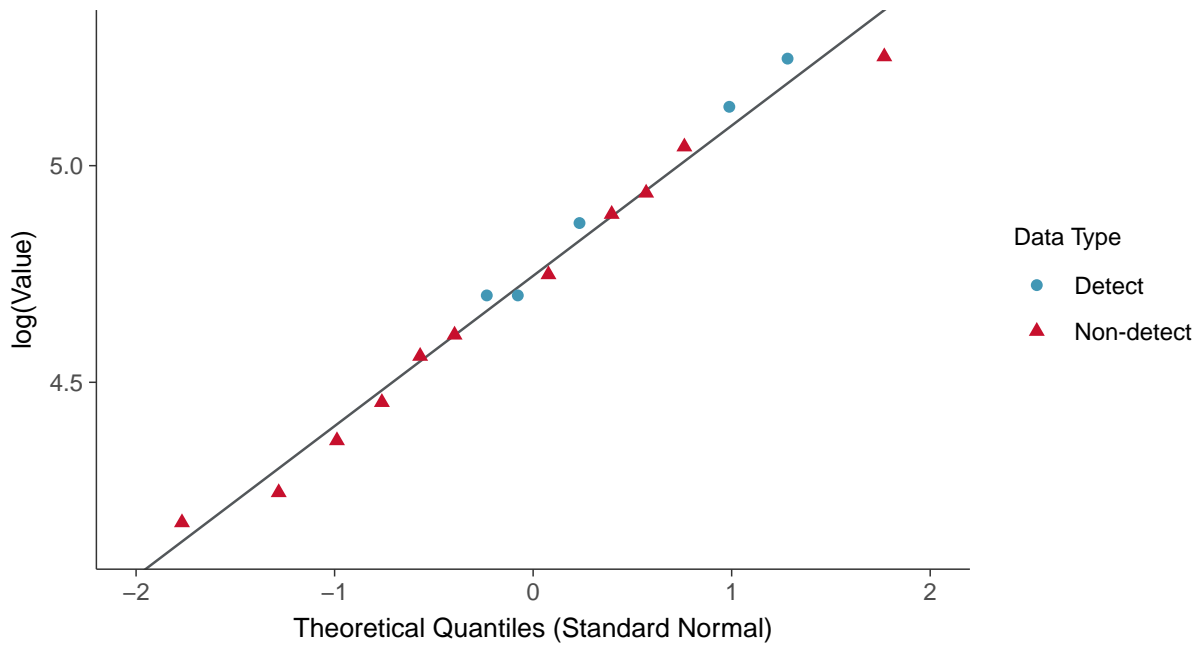
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17006 (ug/L)



Lognormal Q-Q plot using ROS Imputed Estimates

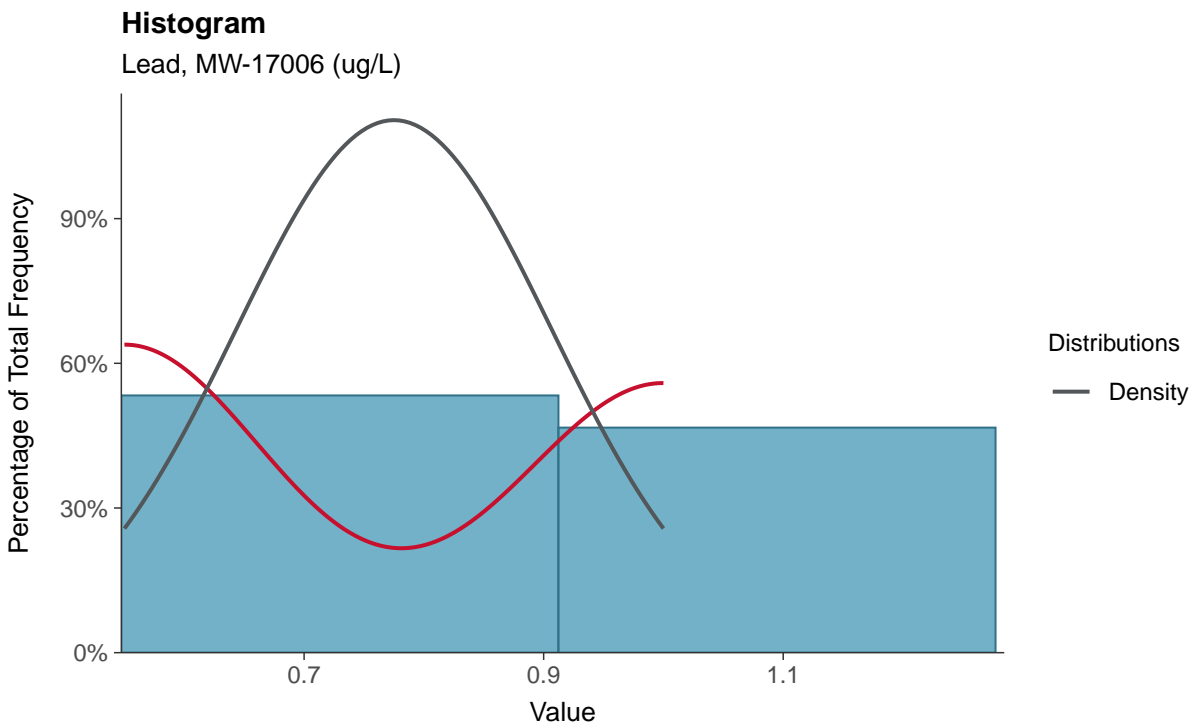
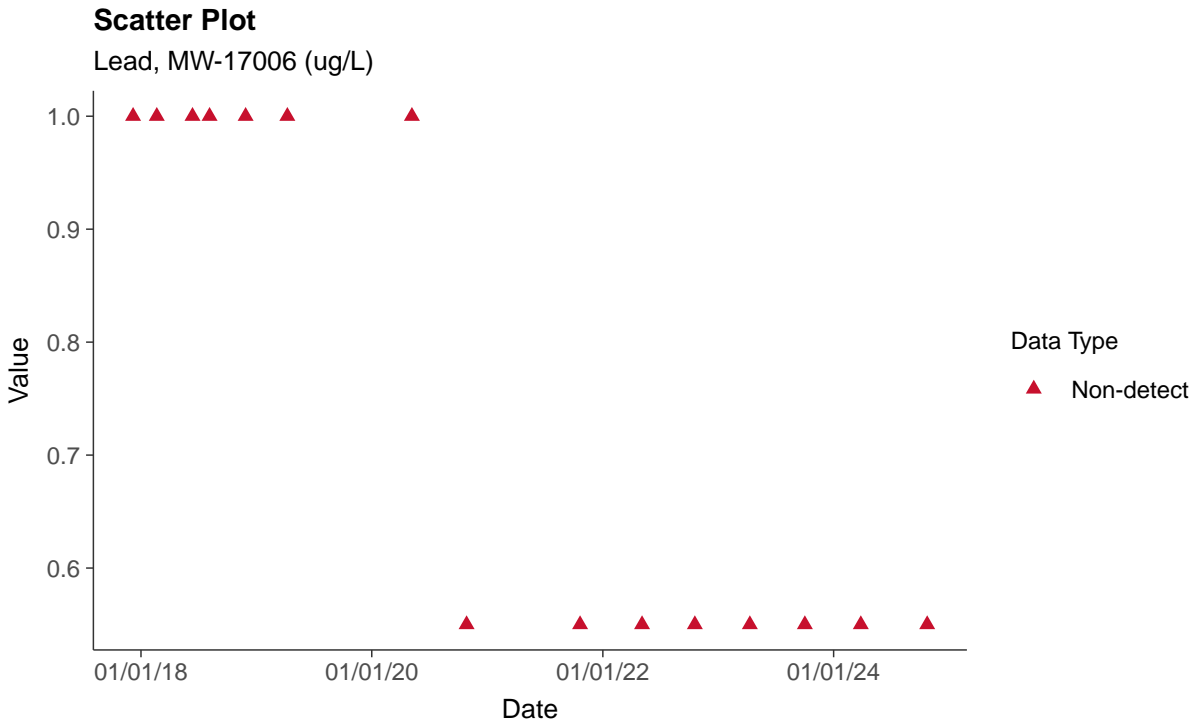
Fluoride, MW-17006 (ug/L)





Appendix IV: Lead, MW-17006

ID: 19_2_116



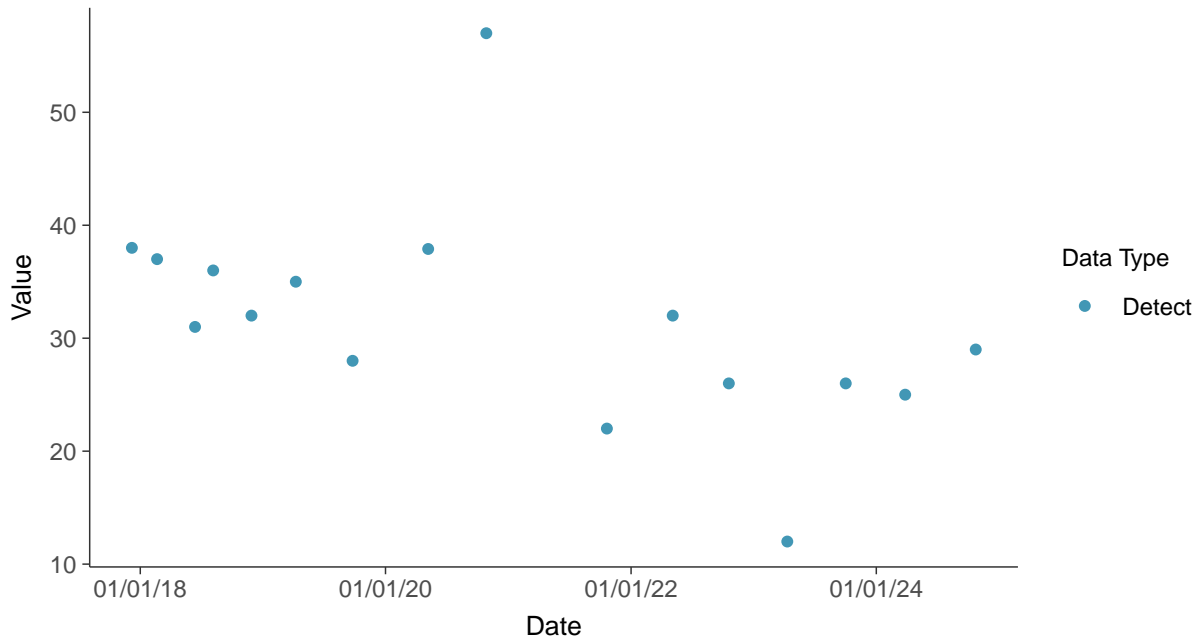


Appendix IV: Lithium, MW-17006

ID: 19_2_117

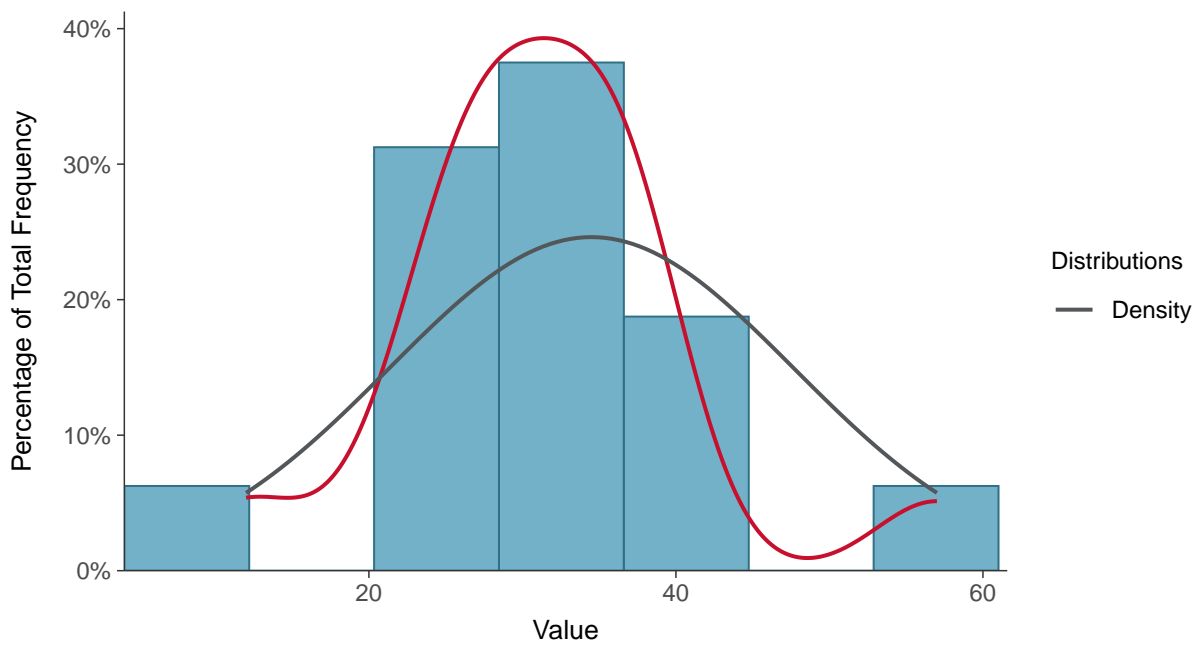
Scatter Plot

Lithium, MW-17006 (ug/L)



Histogram

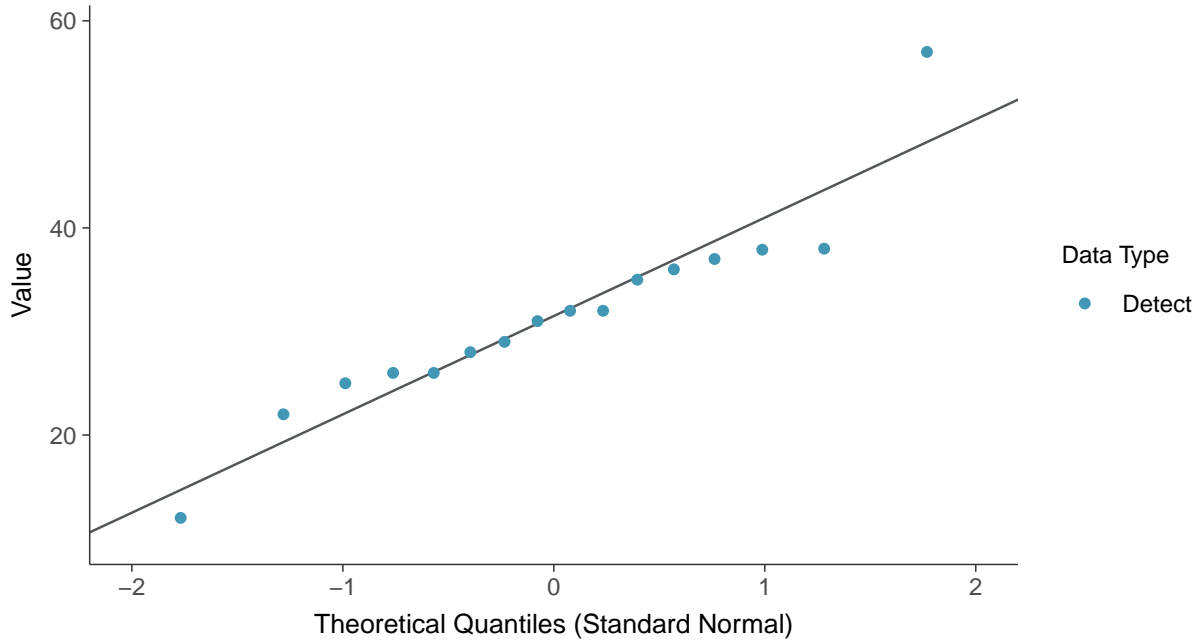
Lithium, MW-17006 (ug/L)





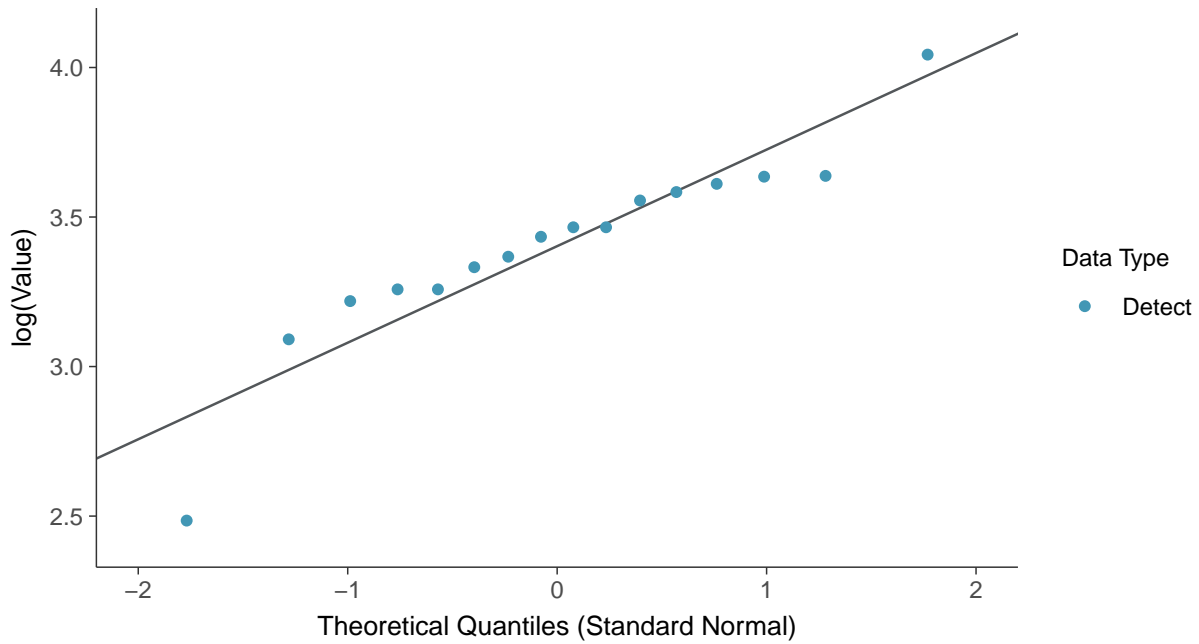
Normal Q-Q plot

Lithium, MW-17006 (ug/L)



Lognormal Q-Q plot

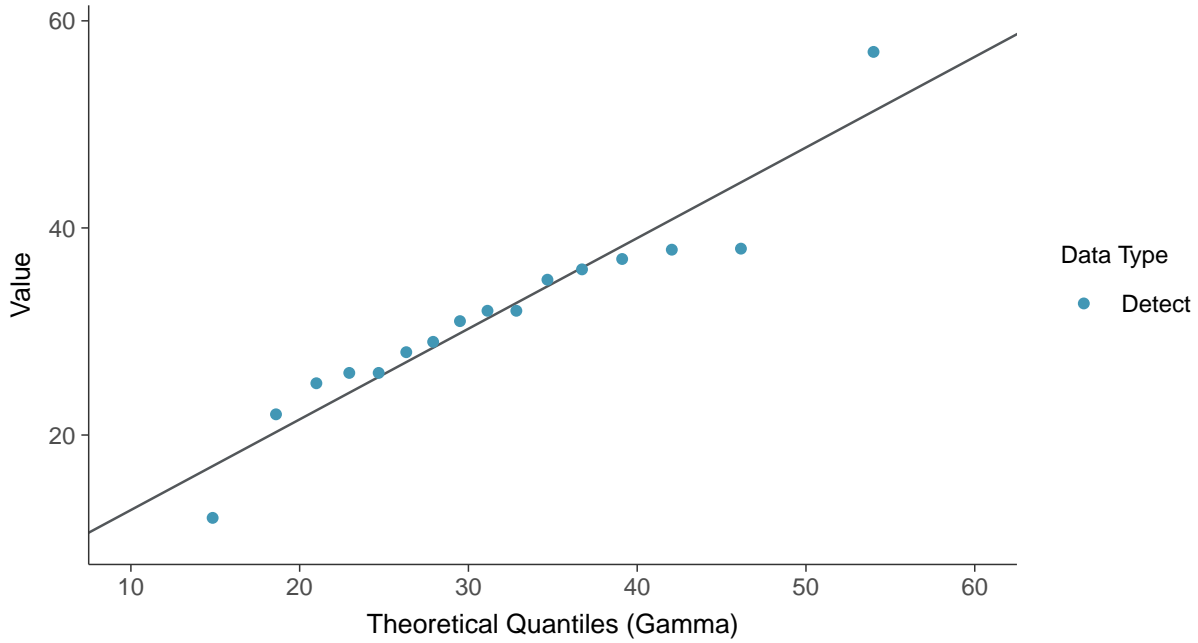
Lithium, MW-17006 (ug/L)





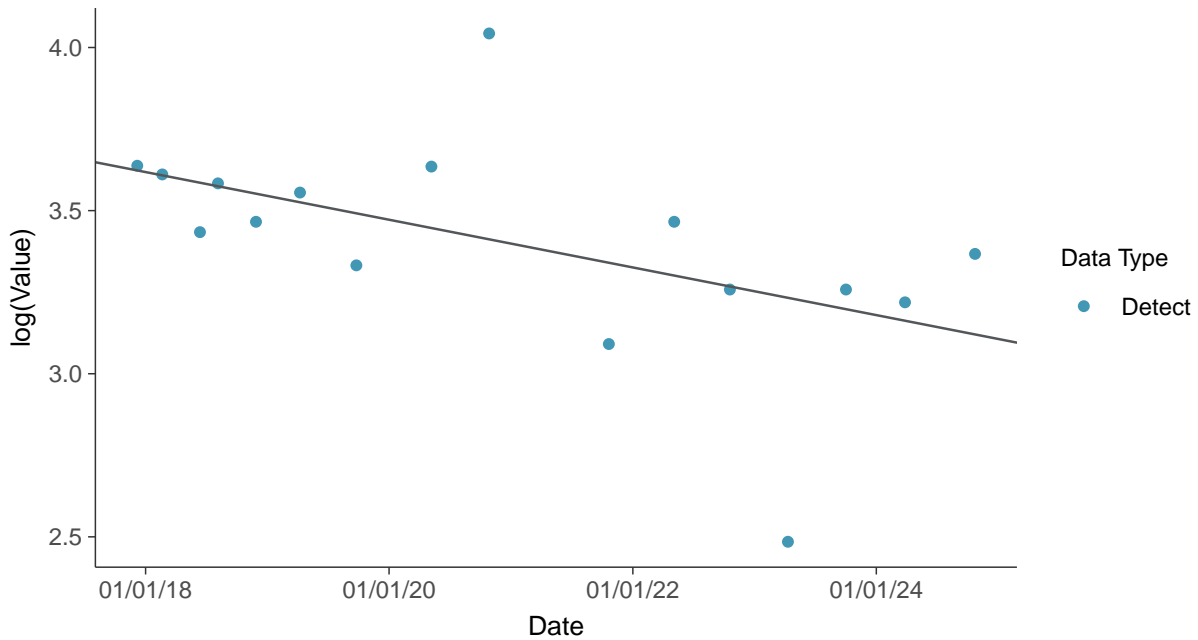
Gamma Q-Q plot

Lithium, MW-17006 (ug/L)



Trend Regression: Lognormal MLE

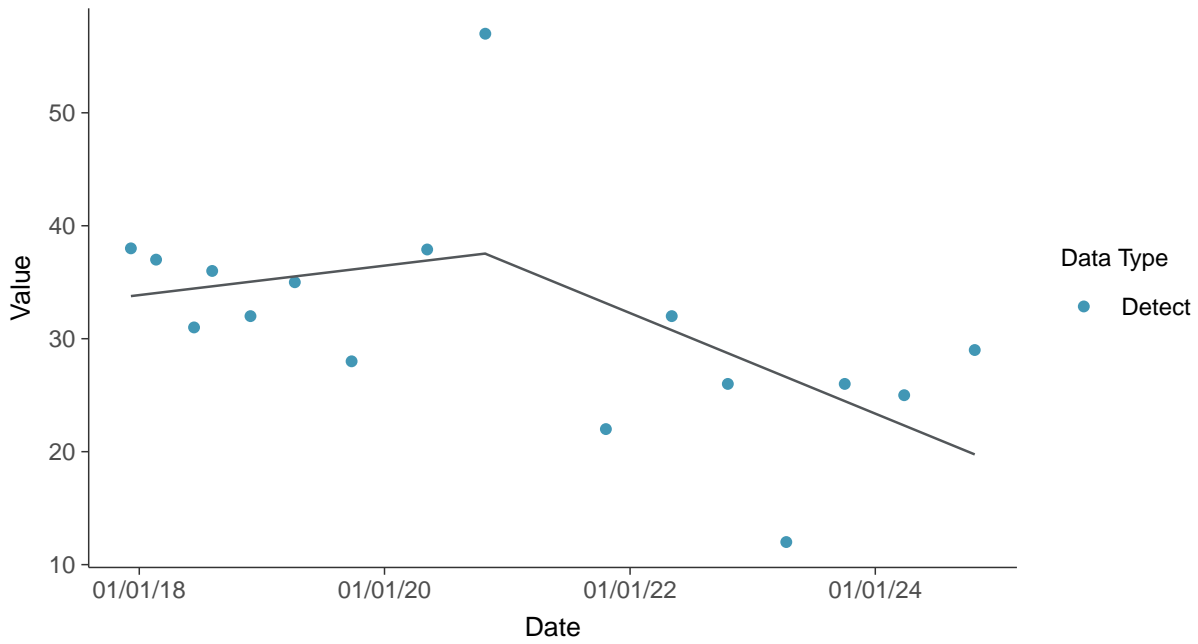
Lithium, MW-17006 (ug/L)





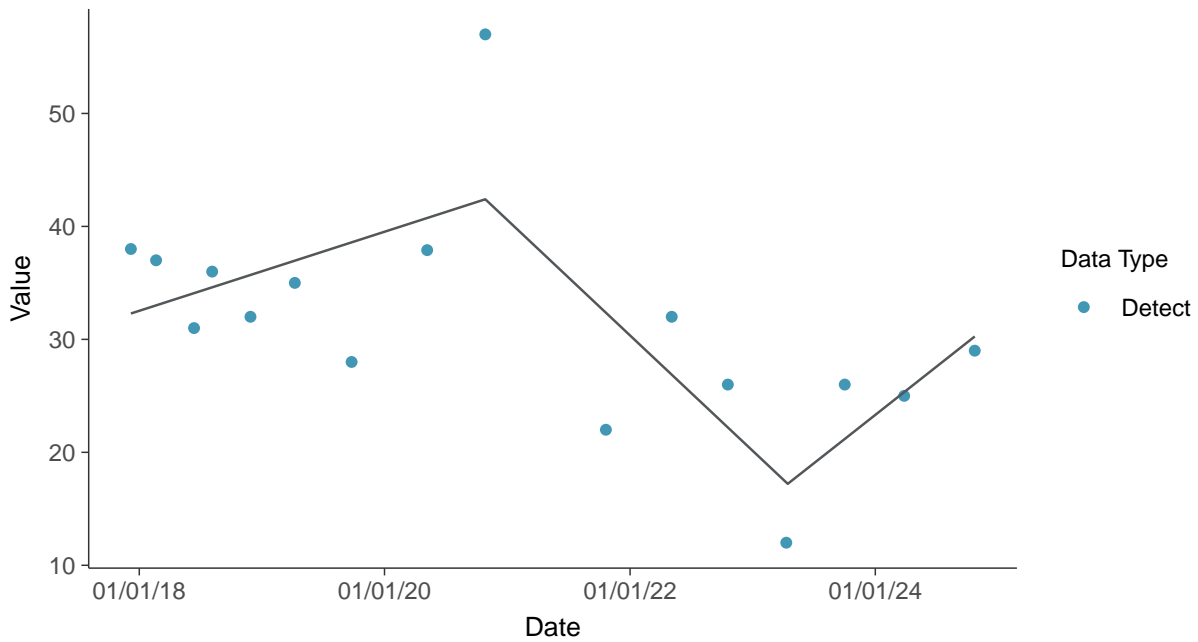
Trend Regression: Piecewise Linear-Linear

Lithium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

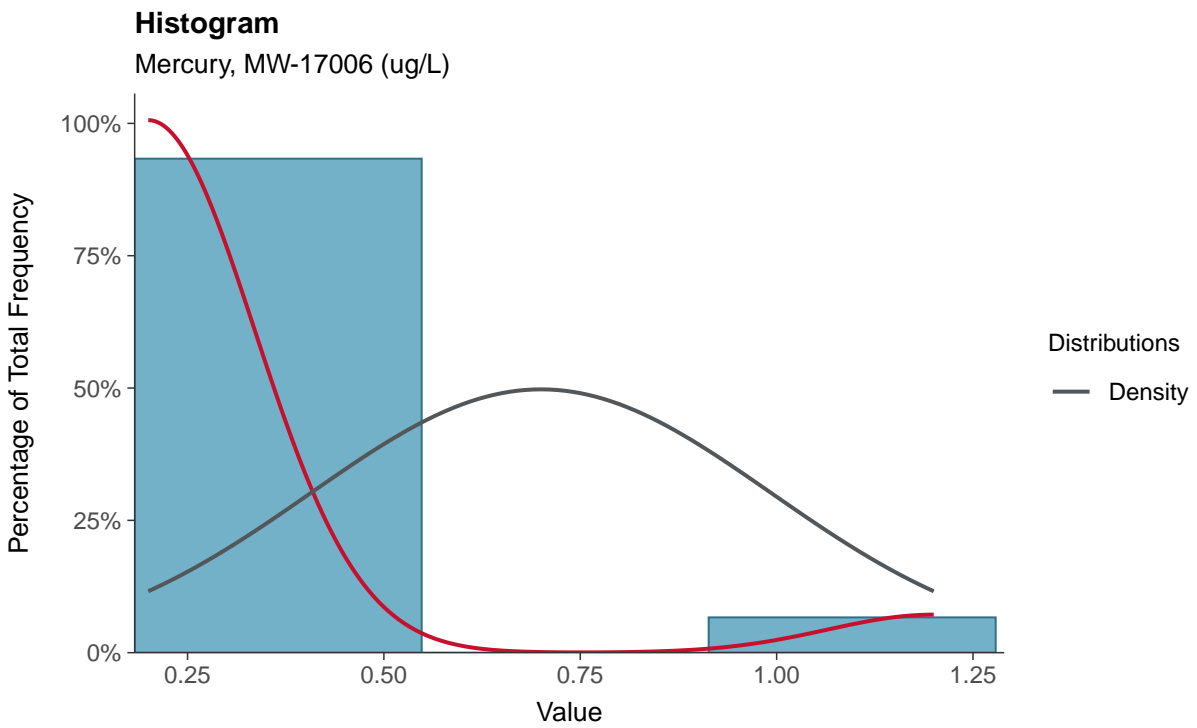
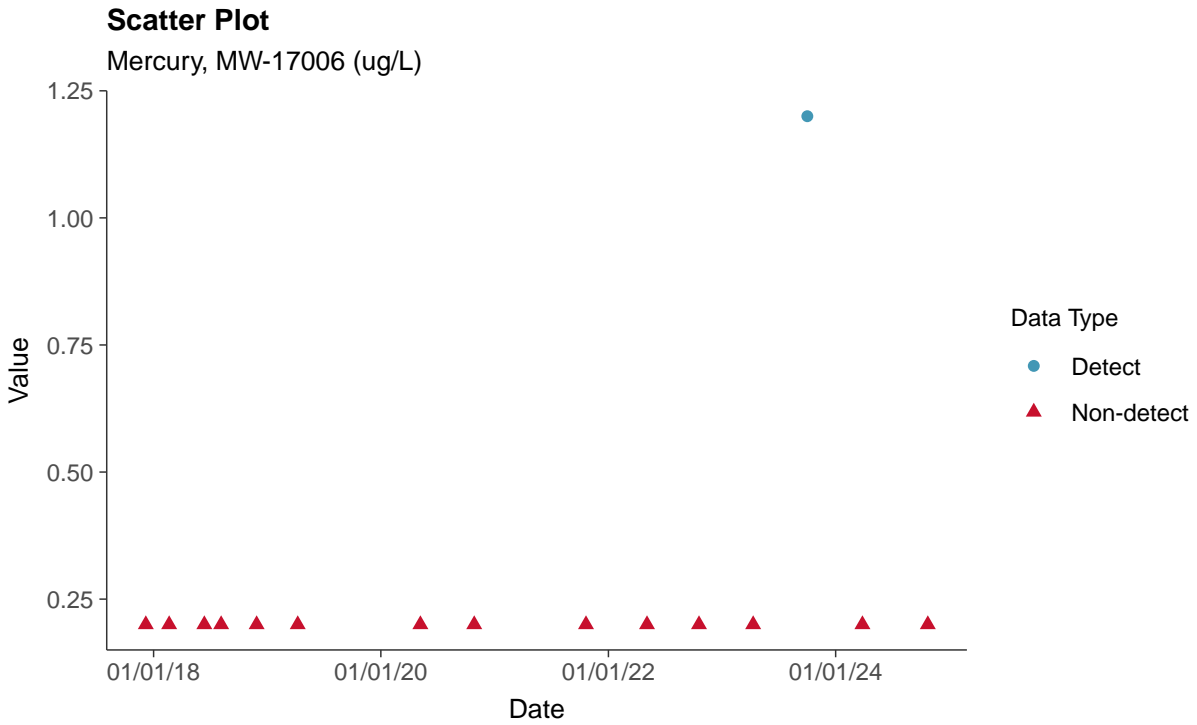
Lithium, MW-17006 (ug/L)





Appendix IV: Mercury, MW-17006

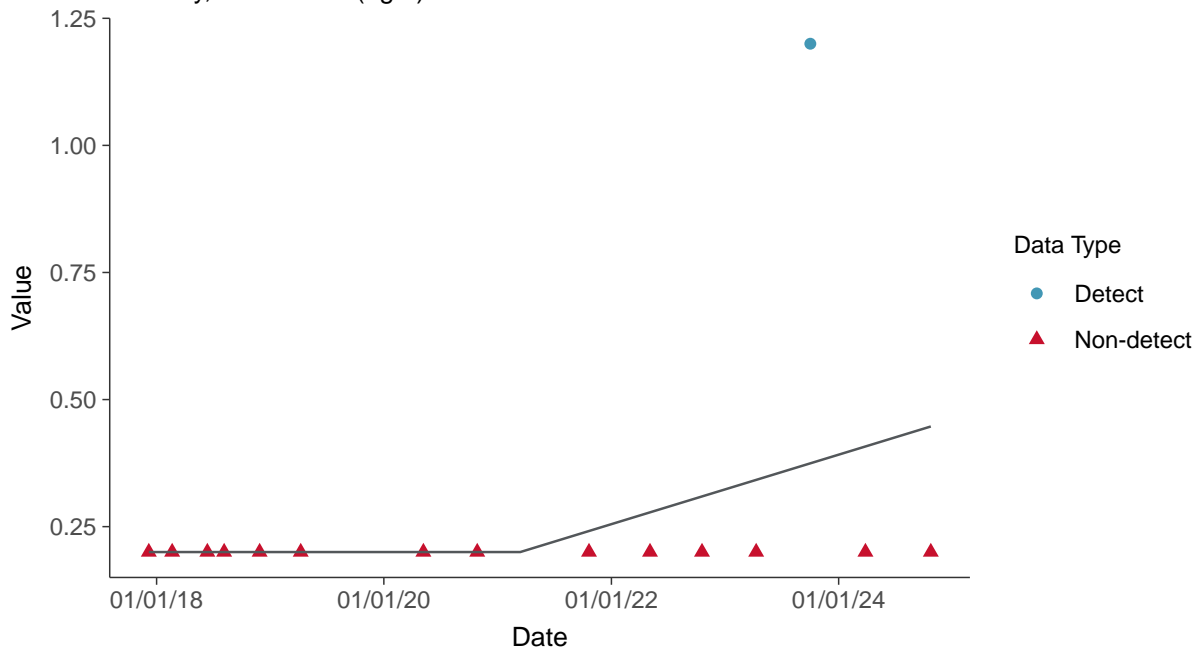
ID: 19_2_118





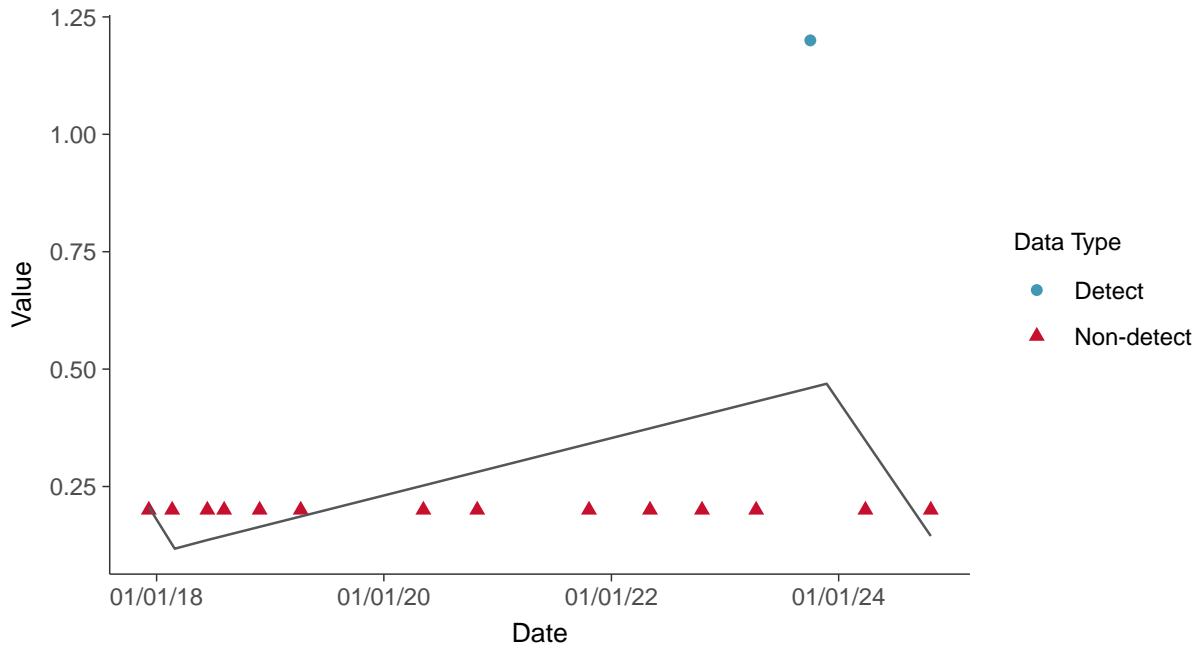
Trend Regression: Piecewise Linear-Linear

Mercury, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

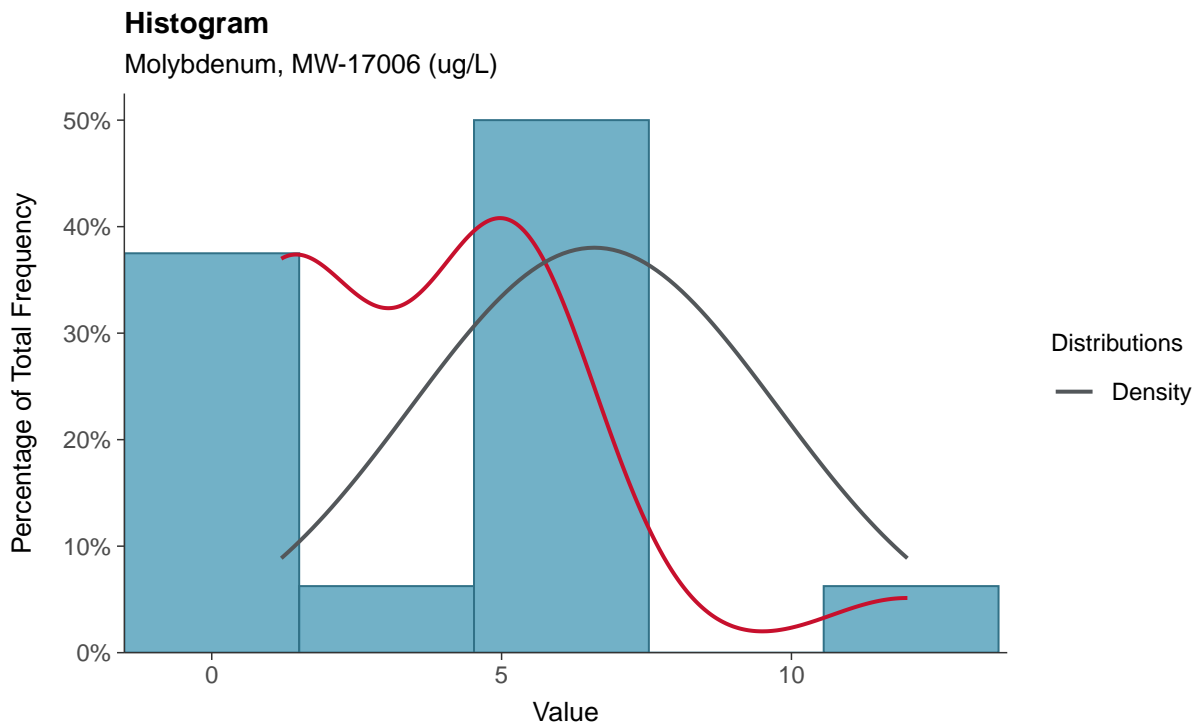
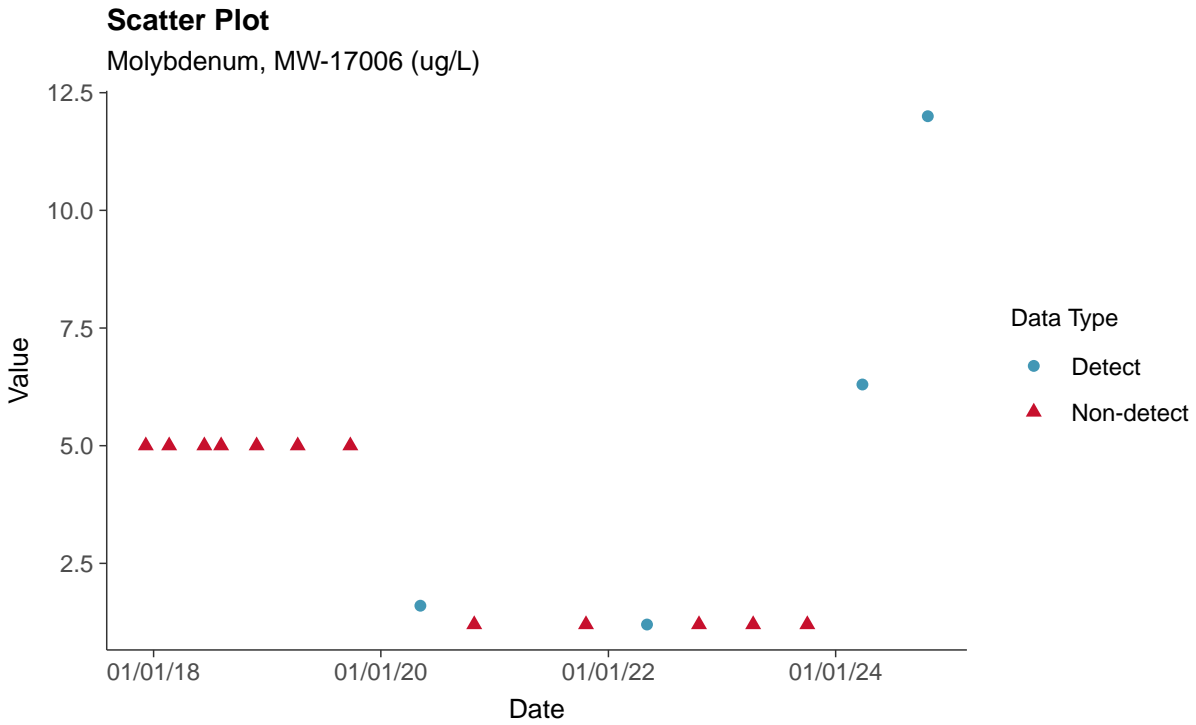
Mercury, MW-17006 (ug/L)





Appendix IV: Molybdenum, MW-17006

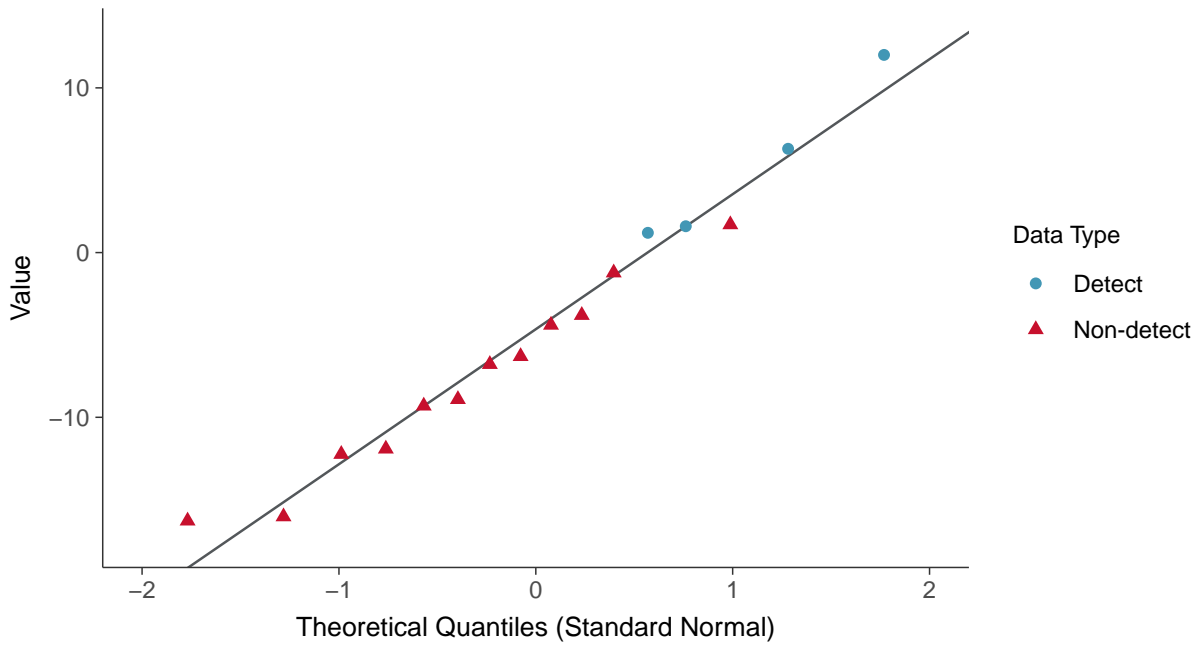
ID: 19_2_119





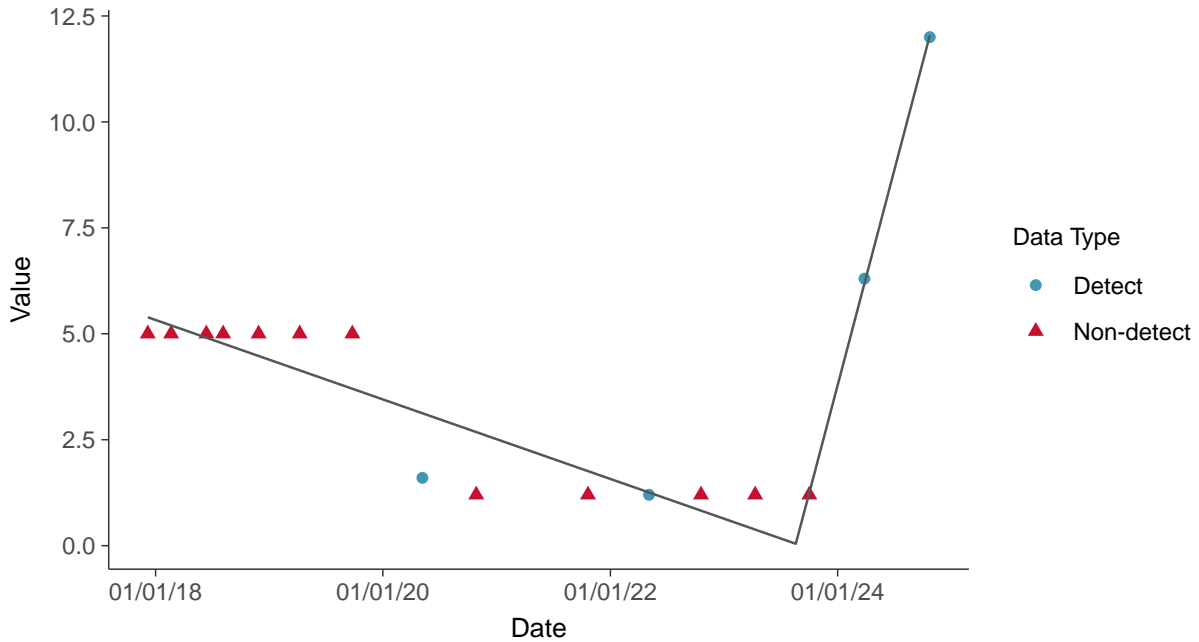
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-17006 (ug/L)



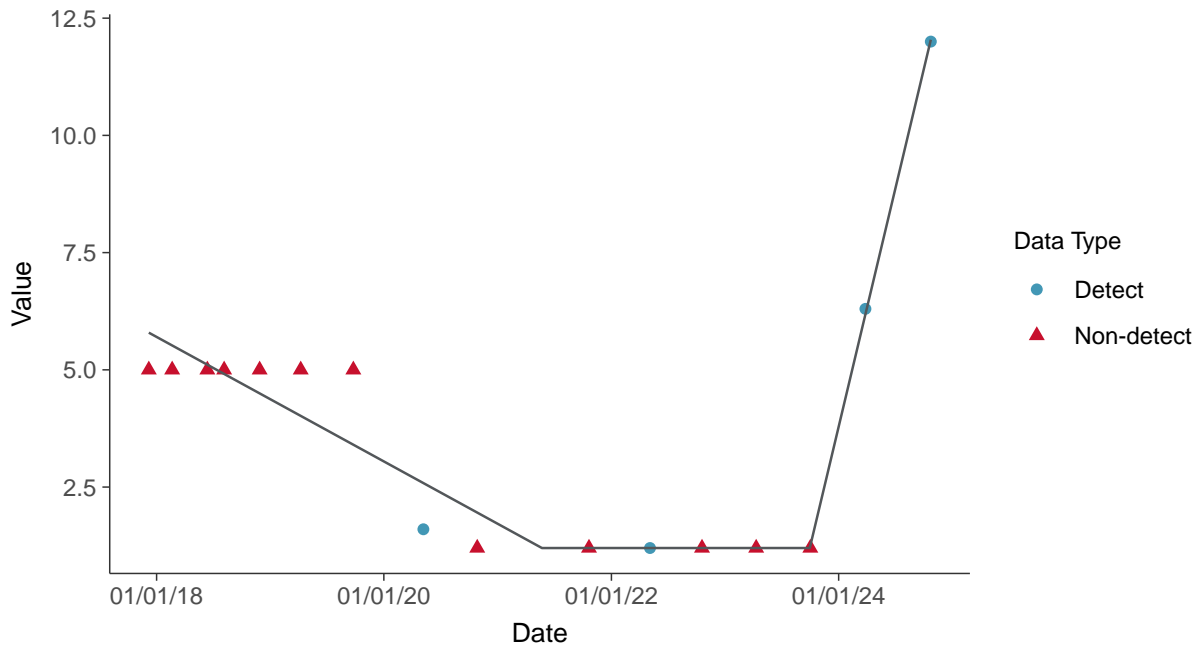
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-17006 (ug/L)





Trend Regression: Piecewise Linear-Linear-Linear Molybdenum, MW-17006 (ug/L)



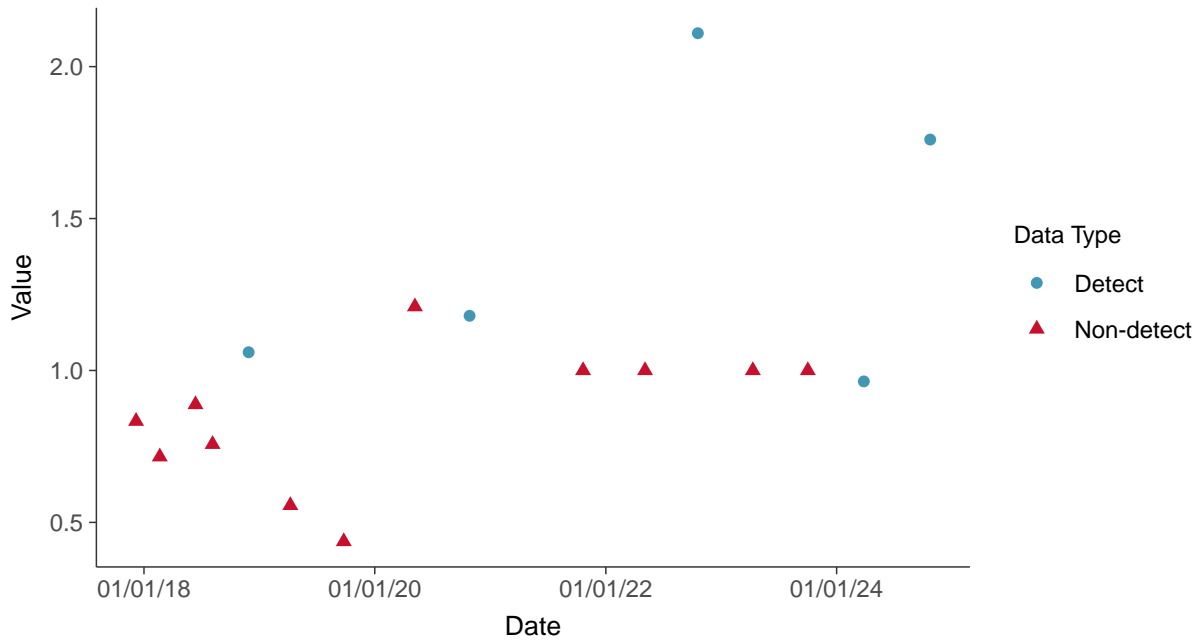


Appendix IV: Radium-226+228, MW-17006

ID: 19_2_125

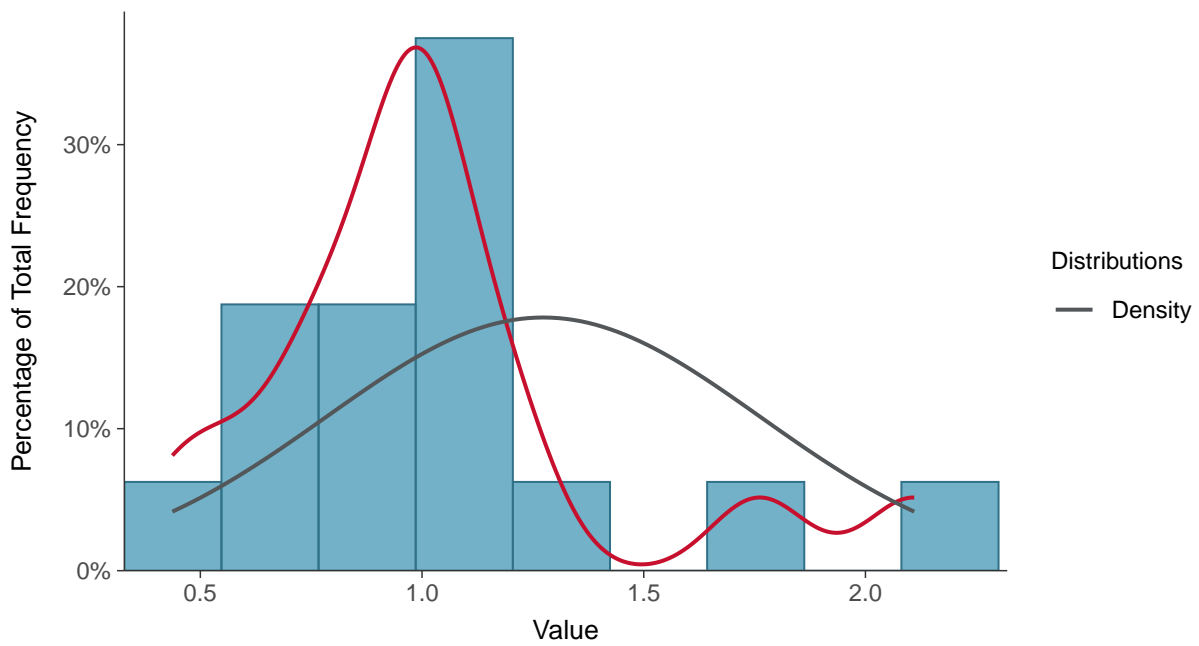
Scatter Plot

Radium-226+228, MW-17006 (pCi/L)



Histogram

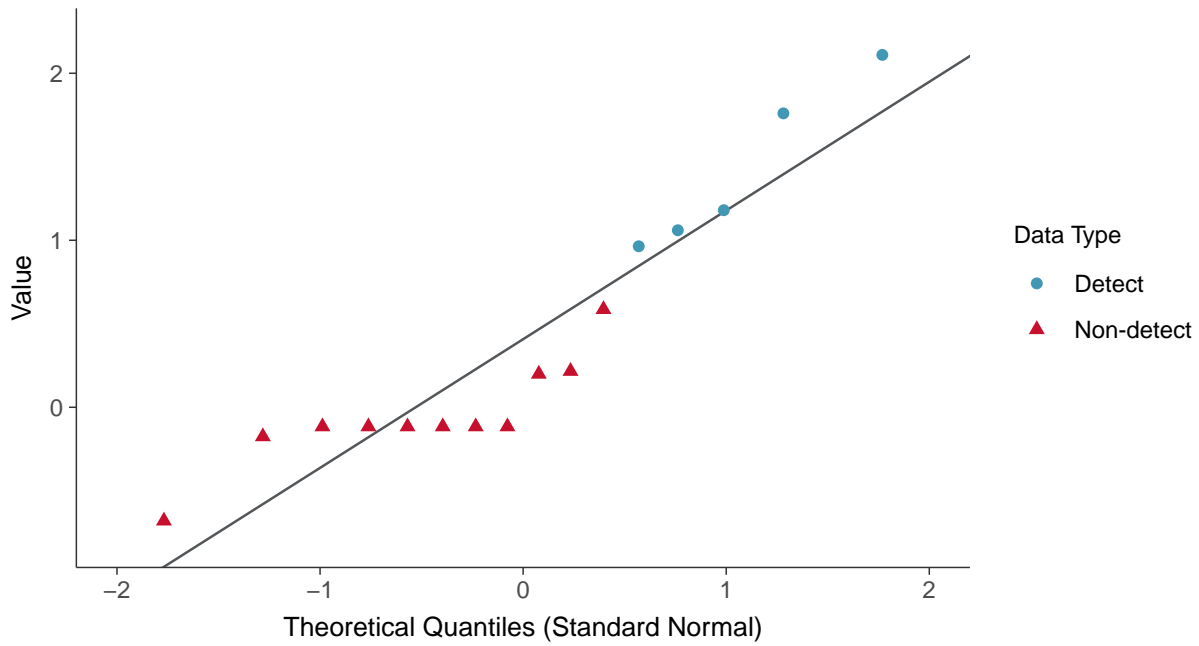
Radium-226+228, MW-17006 (pCi/L)





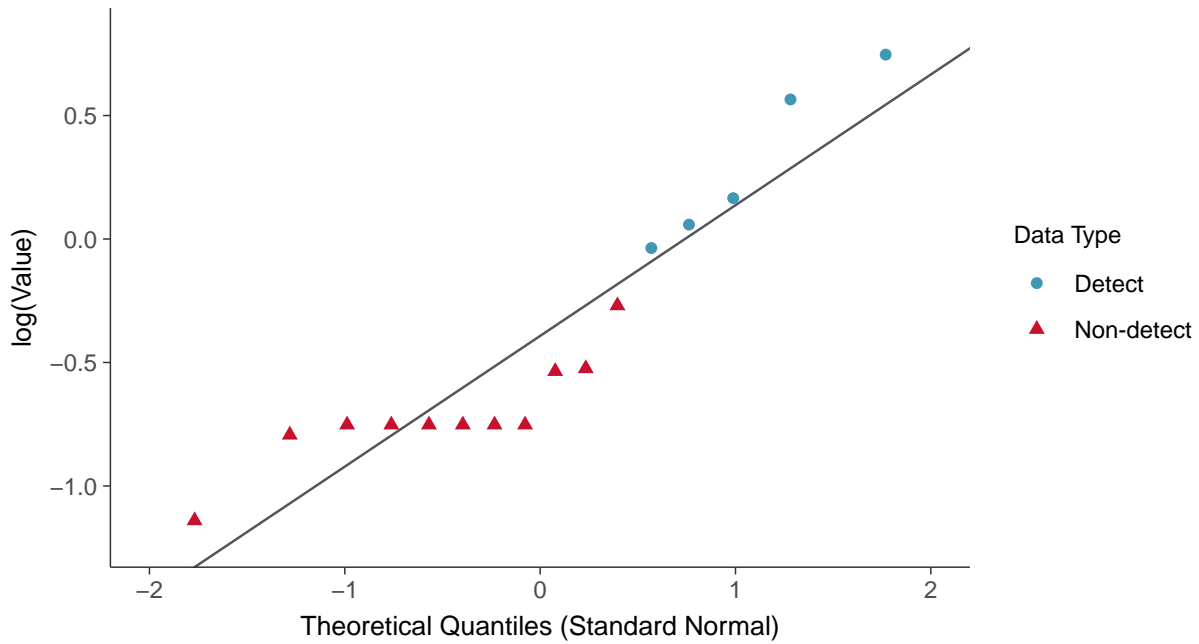
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17006 (pCi/L)



Lognormal Q-Q plot using ROS Imputed Estimates

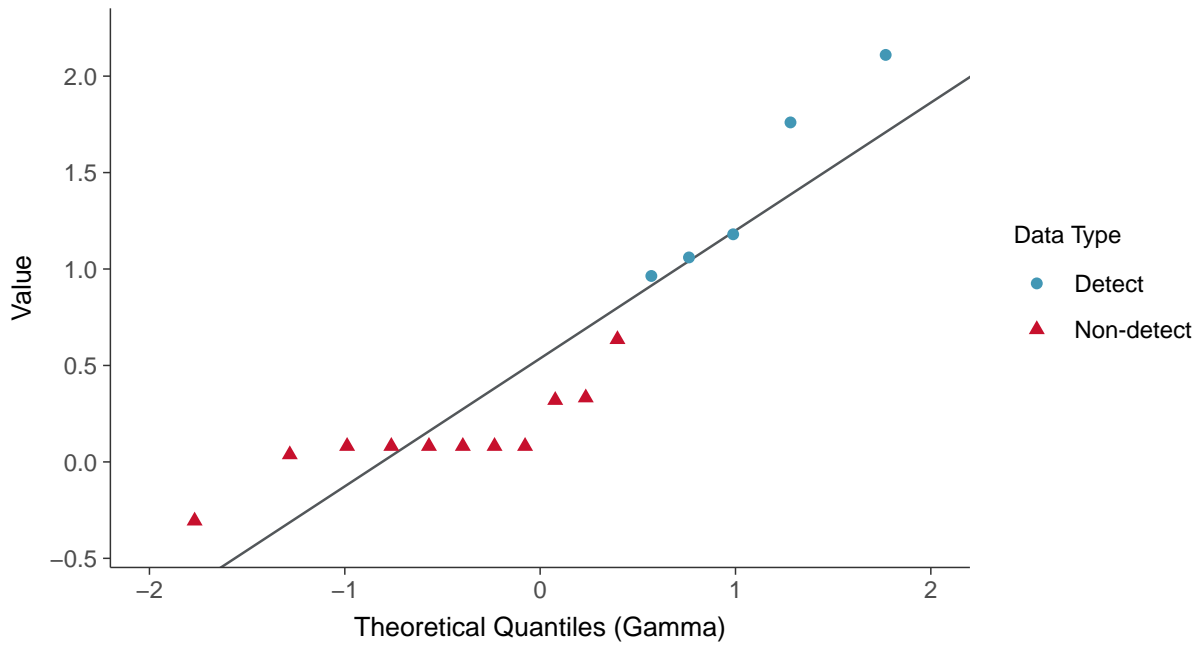
Radium-226+228, MW-17006 (pCi/L)





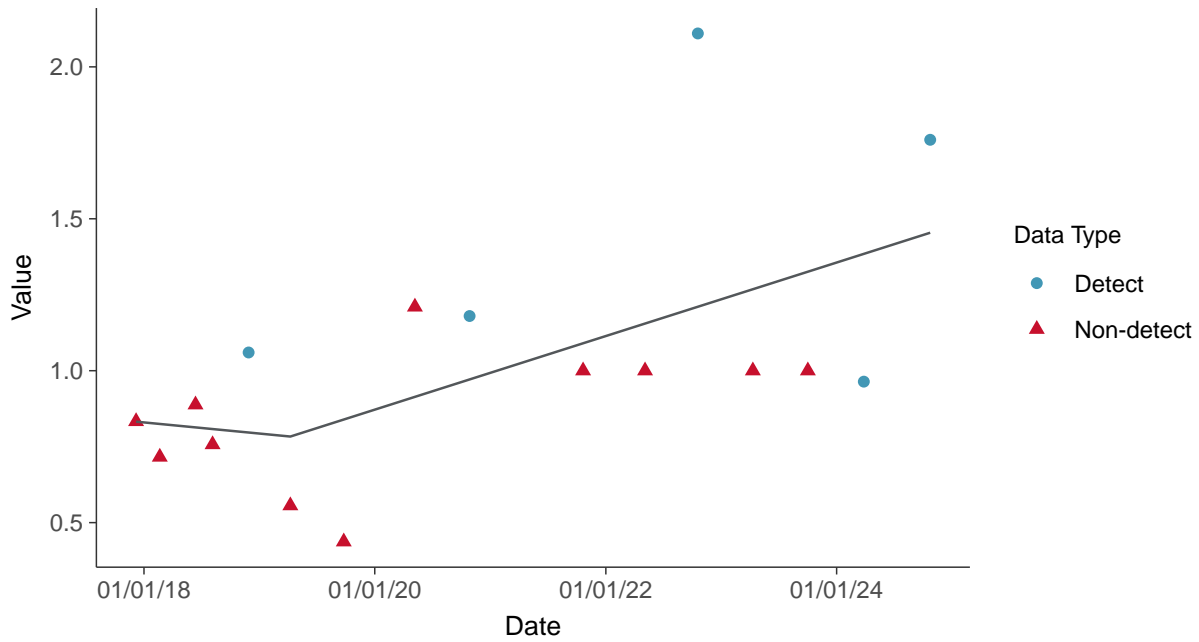
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17006 (pCi/L)



Trend Regression: Piecewise Linear-Linear

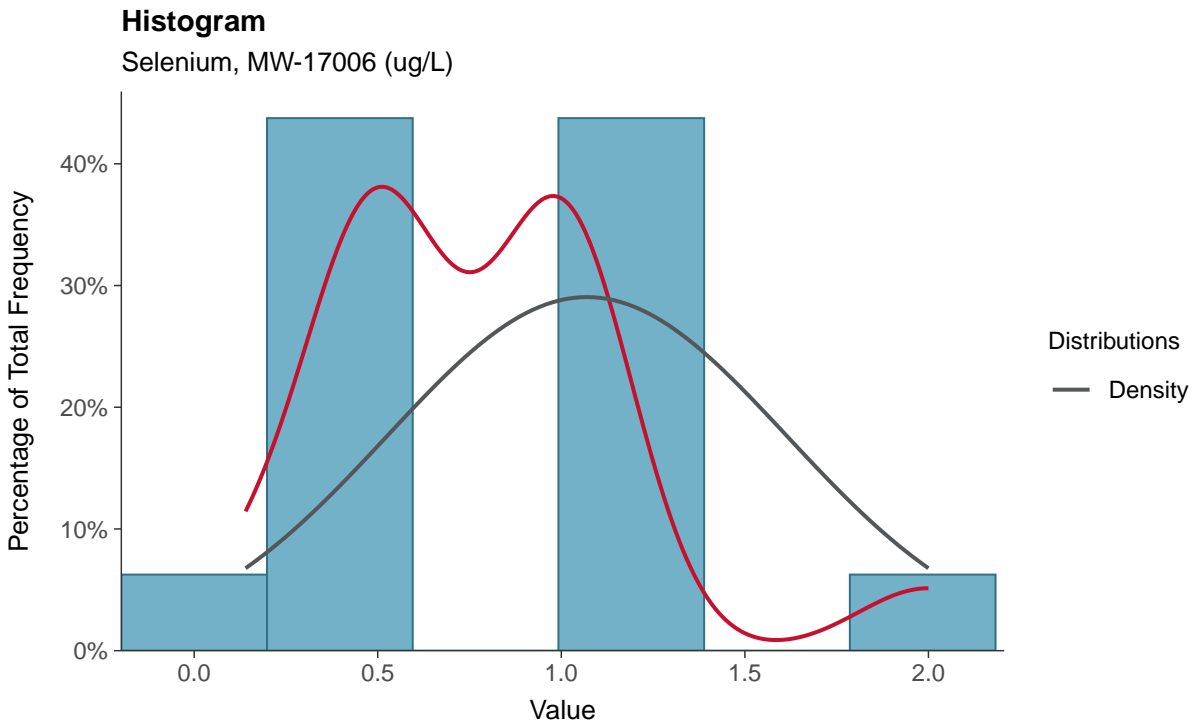
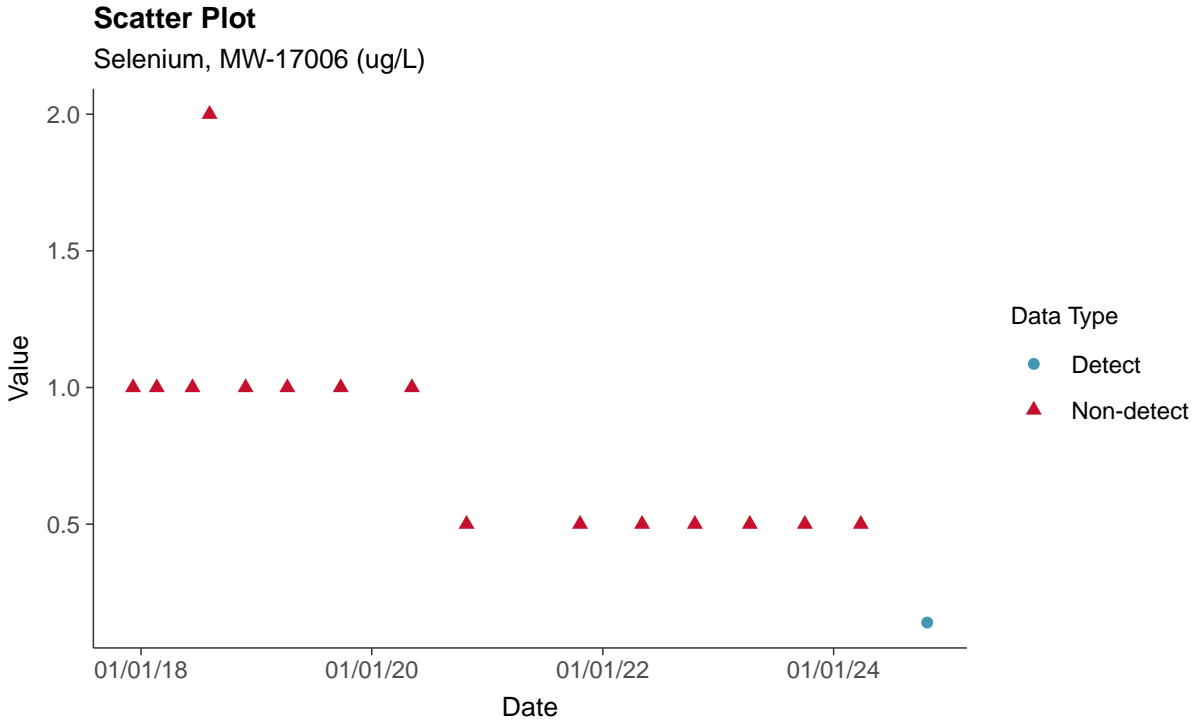
Radium-226+228, MW-17006 (pCi/L)





Appendix IV: Selenium, MW-17006

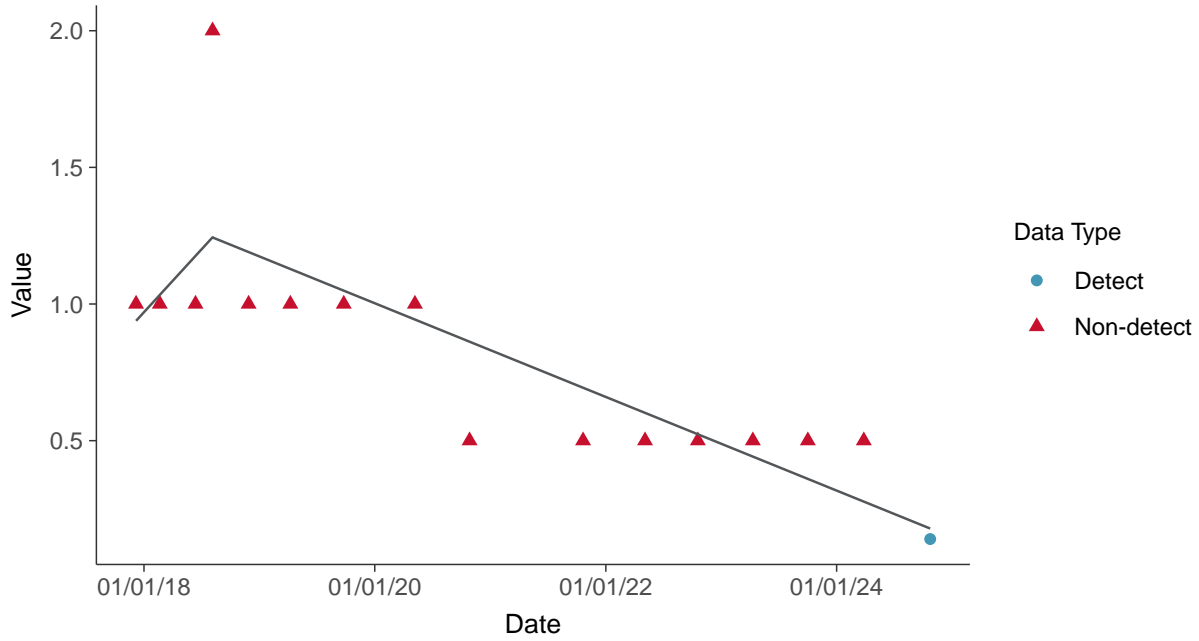
ID: 19_2_127





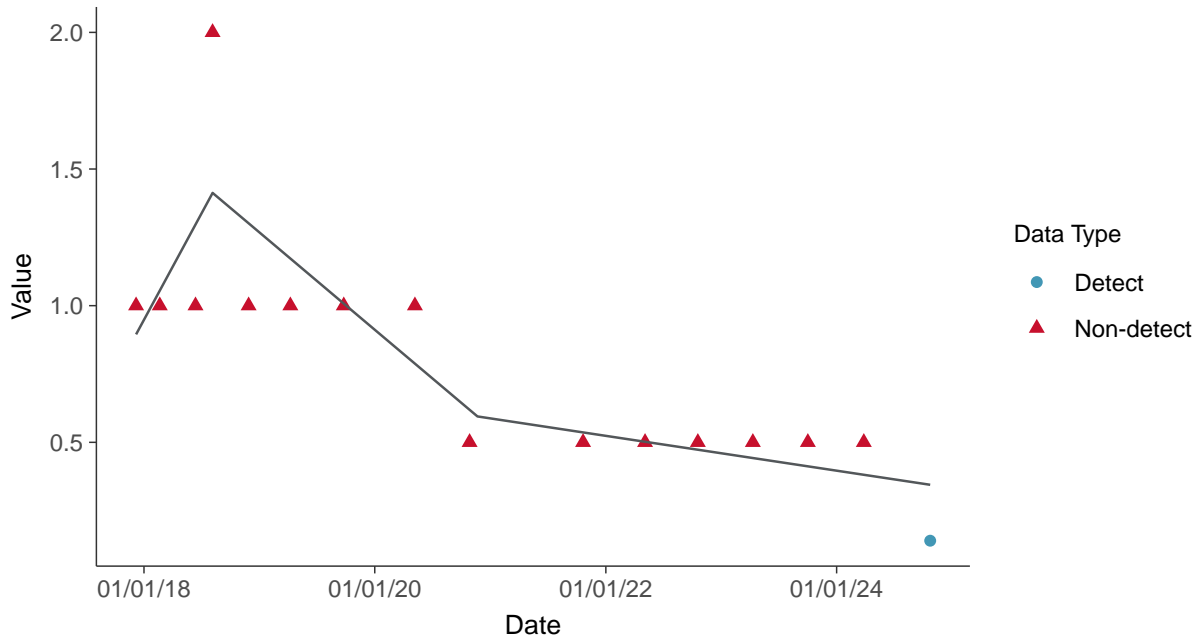
Trend Regression: Piecewise Linear-Linear

Selenium, MW-17006 (ug/L)



Trend Regression: Piecewise Linear-Linear-Linear

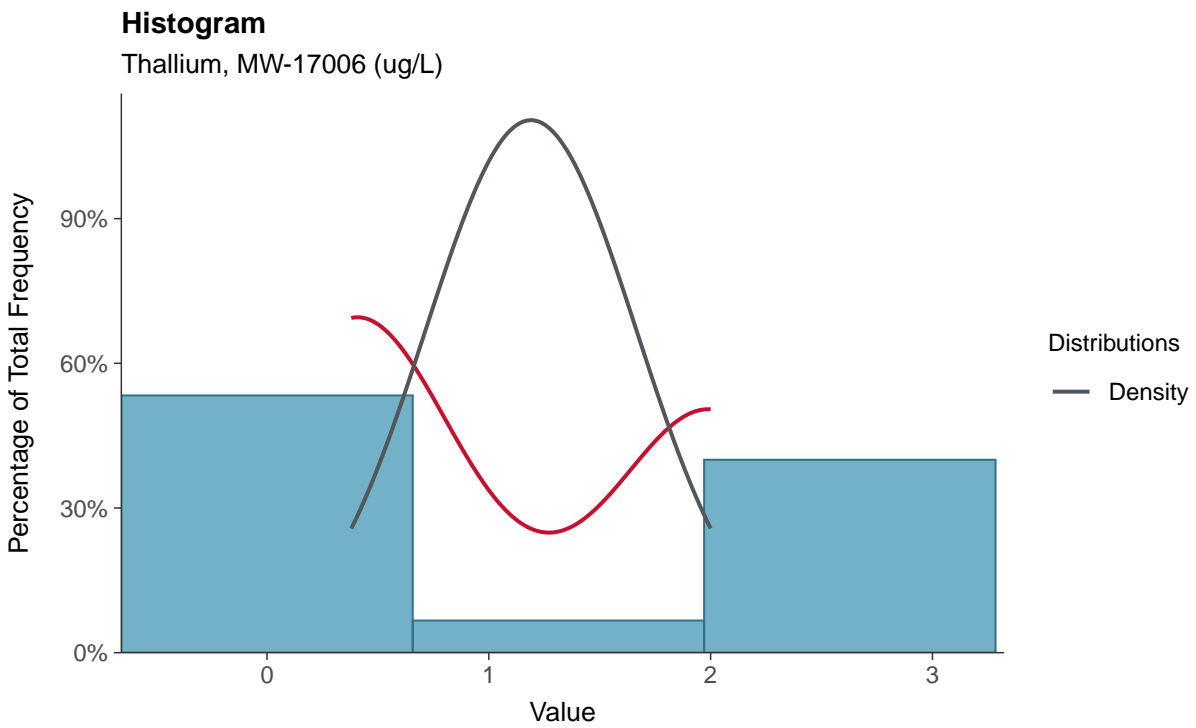
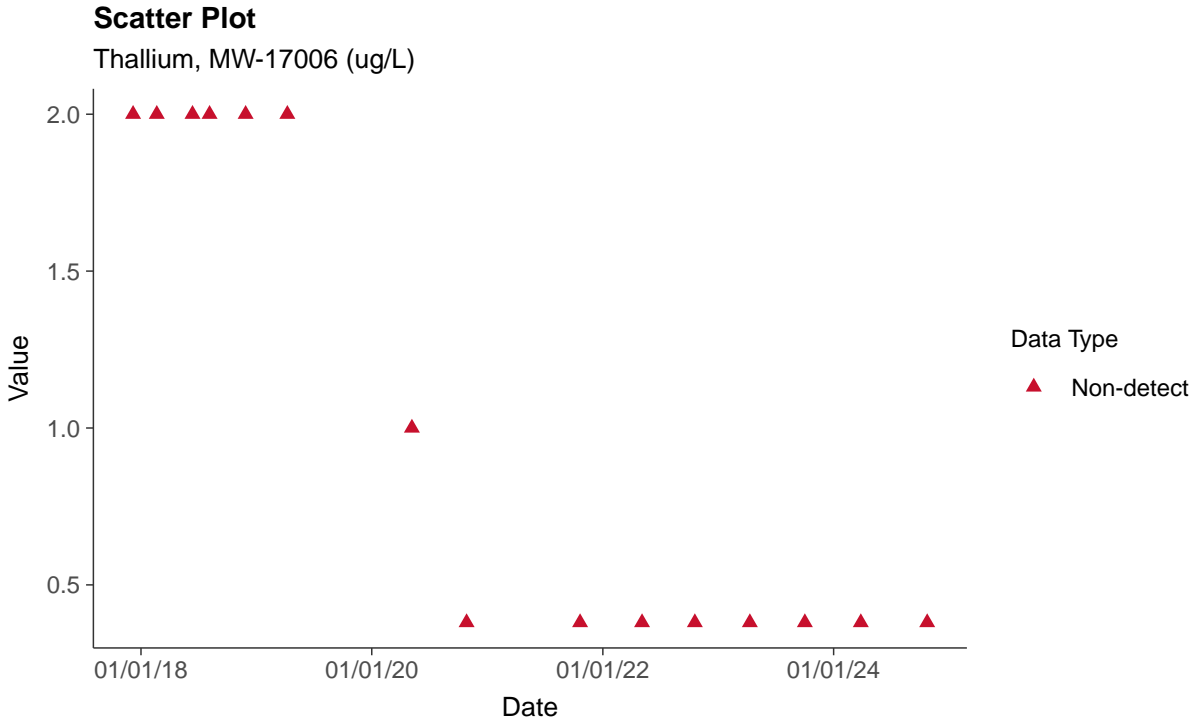
Selenium, MW-17006 (ug/L)





Appendix IV: Thallium, MW-17006

ID: 19_2_131



Charah Cobb, Downgradient Wells
95% Lower Confidence Limits

ID	Well	Constituent Type	Constituent	Unit	n	% NDs	LCL	Method
01_2_101	MW-15009	Appendix IV	Antimony	ug/L	22	95%	0.25	Nonparametric LCL around the Median
01_2_102	MW-15009	Appendix IV	Arsenic	ug/L	23	4%	8.0	Gamma MLE Normal Approx. LCL
01_2_103	MW-15009	Appendix IV	Barium	ug/L	23	0%	13	Nonparametric LCL around the Median
01_2_104	MW-15009	Appendix IV	Beryllium	ug/L	22	100%	0.25	Nonparametric LCL around the Median
01_2_106	MW-15009	Appendix IV	Cadmium	ug/L	22	100%	0.20	Nonparametric LCL around the Median
01_2_109	MW-15009	Appendix IV	Chromium	ug/L	23	87%	1.0	Nonparametric LCL around the Median
01_2_110	MW-15009	Appendix IV	Cobalt	ug/L	22	95%	0.52	Nonparametric LCL around the Median
01_2_114	MW-15009	Appendix IV	Fluoride	ug/L	24	88%	100	Nonparametric LCL around the Median
01_2_116	MW-15009	Appendix IV	Lead	ug/L	22	100%	0.55	Nonparametric LCL around the Median
01_2_117	MW-15009	Appendix IV	Lithium	ug/L	23	0%	20	Normal LCL
01_2_118	MW-15009	Appendix IV	Mercury	ug/L	22	100%	0.20	Nonparametric LCL around the Median
01_2_119	MW-15009	Appendix IV	Molybdenum	ug/L	23	39%	5.0	Nonparametric LCL around the Median
01_2_125	MW-15009	Appendix IV	Radium-226+228	pCi/L	19	84%	0.50	Nonparametric LCL around the Median
01_2_127	MW-15009	Appendix IV	Selenium	ug/L	23	96%	1.0	Nonparametric LCL around the Median
01_2_131	MW-15009	Appendix IV	Thallium	ug/L	22	100%	0.38	Nonparametric LCL around the Median
02_2_101	MW-15010	Appendix IV	Antimony	ug/L	23	100%	0.25	Nonparametric LCL around the Median
02_2_102	MW-15010	Appendix IV	Arsenic	ug/L	24	92%	0.55	Nonparametric LCL around the Median
02_2_103	MW-15010	Appendix IV	Barium	ug/L	24	0%	63	Adjusted Gamma LCL
02_2_104	MW-15010	Appendix IV	Beryllium	ug/L	23	96%	0.25	Nonparametric LCL around the Median
02_2_106	MW-15010	Appendix IV	Cadmium	ug/L	23	100%	0.20	Nonparametric LCL around the Median
02_2_109	MW-15010	Appendix IV	Chromium	ug/L	24	67%	0.36	Nonparametric LCL around the Median
02_2_110	MW-15010	Appendix IV	Cobalt	ug/L	23	87%	0.56	Nonparametric LCL around the Median
02_2_114	MW-15010	Appendix IV	Fluoride	ug/L	25	60%	360	Nonparametric LCL around the Median
02_2_116	MW-15010	Appendix IV	Lead	ug/L	23	100%	0.55	Nonparametric LCL around the Median
02_2_117	MW-15010	Appendix IV	Lithium	ug/L	24	0%	26	Adjusted Gamma LCL
02_2_118	MW-15010	Appendix IV	Mercury	ug/L	23	100%	0.20	Nonparametric LCL around the Median
02_2_119	MW-15010	Appendix IV	Molybdenum	ug/L	24	46%	3.5	Gamma MLE Normal Approx. LCL
02_2_125	MW-15010	Appendix IV	Radium-226+228	pCi/L	23	57%	0.82	Nonparametric LCL around the Median
02_2_127	MW-15010	Appendix IV	Selenium	ug/L	24	92%	0.50	Nonparametric LCL around the Median
02_2_131	MW-15010	Appendix IV	Thallium	ug/L	23	100%	0.38	Nonparametric LCL around the Median
03_2_101	MW-15013	Appendix IV	Antimony	ug/L	22	100%	0.25	Nonparametric LCL around the Median
03_2_102	MW-15013	Appendix IV	Arsenic	ug/L	23	83%	1.0	Nonparametric LCL around the Median
03_2_103	MW-15013	Appendix IV	Barium	ug/L	23	0%	47	Nonparametric LCL around the Median
03_2_104	MW-15013	Appendix IV	Beryllium	ug/L	22	100%	0.25	Nonparametric LCL around the Median
03_2_106	MW-15013	Appendix IV	Cadmium	ug/L	22	100%	0.20	Nonparametric LCL around the Median
03_2_109	MW-15013	Appendix IV	Chromium	ug/L	23	87%	1.0	Nonparametric LCL around the Median
03_2_110	MW-15013	Appendix IV	Cobalt	ug/L	22	91%	0.52	Nonparametric LCL around the Median
03_2_114	MW-15013	Appendix IV	Fluoride	ug/L	24	79%	270	Nonparametric LCL around the Median
03_2_116	MW-15013	Appendix IV	Lead	ug/L	22	100%	0.55	Nonparametric LCL around the Median
03_2_117	MW-15013	Appendix IV	Lithium	ug/L	23	4%	21	Gamma MLE Normal Approx. LCL
03_2_118	MW-15013	Appendix IV	Mercury	ug/L	22	100%	0.20	Nonparametric LCL around the Median
03_2_119	MW-15013	Appendix IV	Molybdenum	ug/L	22	23%	6.1	Gamma MLE Normal Approx. LCL
03_2_125	MW-15013	Appendix IV	Radium-226+228	pCi/L	20	65%	0.60	Nonparametric LCL around the Median
03_2_127	MW-15013	Appendix IV	Selenium	ug/L	23	96%	1.0	Nonparametric LCL around the Median
03_2_131	MW-15013	Appendix IV	Thallium	ug/L	22	100%	0.38	Nonparametric LCL around the Median
04_2_101	MW-15014R	Appendix IV	Antimony	ug/L	8	100%	0.25	Nonparametric LCL around the Median
04_2_102	MW-15014R	Appendix IV	Arsenic	ug/L	8	62%	0.28	Nonparametric LCL around the Median
04_2_103	MW-15014R	Appendix IV	Barium	ug/L	8	0%	170	Normal LCL
04_2_104	MW-15014R	Appendix IV	Beryllium	ug/L	8	88%	0.25	Nonparametric LCL around the Median
04_2_106	MW-15014R	Appendix IV	Cadmium	ug/L	8	100%	0.25	Nonparametric LCL around the Median
04_2_109	MW-15014R	Appendix IV	Chromium	ug/L	8	100%	0.25	Nonparametric LCL around the Median
04_2_110	MW-15014R	Appendix IV	Cobalt	ug/L	8	88%	0.52	Nonparametric LCL around the Median
04_2_114	MW-15014R	Appendix IV	Fluoride	ug/L	8	12%	210	Normal MLE LCL
04_2_116	MW-15014R	Appendix IV	Lead	ug/L	8	100%	0.55	Nonparametric LCL around the Median
04_2_117	MW-15014R	Appendix IV	Lithium	ug/L	8	0%	38	Normal LCL
04_2_118	MW-15014R	Appendix IV	Mercury	ug/L	8	100%	0.20	Nonparametric LCL around the Median
04_2_119	MW-15014R	Appendix IV	Molybdenum	ug/L	7	29%	1.1	Nonparametric LCL around the Median
04_2_125	MW-15014R	Appendix IV	Radium-226+228	pCi/L	5	20%	0.67	Nonparametric LCL around the Median
04_2_127	MW-15014R	Appendix IV	Selenium	ug/L	8	88%	0.50	Nonparametric LCL around the Median
04_2_131	MW-15014R	Appendix IV	Thallium	ug/L	8	100%	0.38	Nonparametric LCL around the Median
05_2_101	MW-15015R	Appendix IV	Antimony	ug/L	10	60%	0.25	Nonparametric LCL around the Median
05_2_102	MW-15015R	Appendix IV	Arsenic	ug/L	11	0%	13	Normal LCL
05_2_103	MW-15015R	Appendix IV	Barium	ug/L	11	0%	99	Normal LCL
05_2_104	MW-15015R	Appendix IV	Beryllium	ug/L	11	91%	0.20	Nonparametric LCL around the Median
05_2_106	MW-15015R	Appendix IV	Cadmium	ug/L	11	100%	0.25	Nonparametric LCL around the Median
05_2_109	MW-15015R	Appendix IV	Chromium	ug/L	11	82%	0.25	Nonparametric LCL around the Median
05_2_110	MW-15015R	Appendix IV	Cobalt	ug/L	11	64%	0.31	Nonparametric LCL around the Median
05_2_114	MW-15015R	Appendix IV	Fluoride	ug/L	11	45%	43	Normal MLE LCL
05_2_116	MW-15015R	Appendix IV	Lead	ug/L	11	100%	0.55	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	% NDs	LCL	Method
05_2_117	MW-15015R	Appendix IV	Lithium	ug/L	11	0%	30	Normal LCL
05_2_118	MW-15015R	Appendix IV	Mercury	ug/L	11	100%	0.20	Nonparametric LCL around the Median
05_2_119	MW-15015R	Appendix IV	Molybdenum	ug/L	11	0%	66	Adjusted Gamma LCL
05_2_125	MW-15015R	Appendix IV	Radium-226+228	pCi/L	7	57%	0.47	Nonparametric LCL around the Median
05_2_127	MW-15015R	Appendix IV	Selenium	ug/L	11	64%	0.50	Nonparametric LCL around the Median
05_2_131	MW-15015R	Appendix IV	Thallium	ug/L	11	100%	0.38	Nonparametric LCL around the Median
06_2_101	MW-15016R	Appendix IV	Antimony	ug/L	11	82%	0.25	Nonparametric LCL around the Median
06_2_102	MW-15016R	Appendix IV	Arsenic	ug/L	11	18%	1.6	Nonparametric LCL around the Median
06_2_103	MW-15016R	Appendix IV	Barium	ug/L	11	0%	920	Normal LCL
06_2_104	MW-15016R	Appendix IV	Beryllium	ug/L	11	91%	0.20	Nonparametric LCL around the Median
06_2_106	MW-15016R	Appendix IV	Cadmium	ug/L	11	100%	0.25	Nonparametric LCL around the Median
06_2_109	MW-15016R	Appendix IV	Chromium	ug/L	11	18%	0.73	Normal MLE LCL
06_2_110	MW-15016R	Appendix IV	Cobalt	ug/L	11	18%	0.91	Normal MLE LCL
06_2_114	MW-15016R	Appendix IV	Fluoride	ug/L	11	82%	100	Nonparametric LCL around the Median
06_2_116	MW-15016R	Appendix IV	Lead	ug/L	11	82%	0.55	Nonparametric LCL around the Median
06_2_117	MW-15016R	Appendix IV	Lithium	ug/L	11	27%	5.0	Nonparametric LCL around the Median
06_2_118	MW-15016R	Appendix IV	Mercury	ug/L	11	100%	0.20	Nonparametric LCL around the Median
06_2_119	MW-15016R	Appendix IV	Molybdenum	ug/L	11	73%	1.2	Nonparametric LCL around the Median
06_2_125	MW-15016R	Appendix IV	Radium-226+228	pCi/L	11	0%	3.4	Normal LCL
06_2_127	MW-15016R	Appendix IV	Selenium	ug/L	11	73%	0.50	Nonparametric LCL around the Median
06_2_131	MW-15016R	Appendix IV	Thallium	ug/L	11	100%	0.38	Nonparametric LCL around the Median
07_2_101	MW-15017	Appendix IV	Antimony	ug/L	22	100%	0.25	Nonparametric LCL around the Median
07_2_102	MW-15017	Appendix IV	Arsenic	ug/L	23	9%	2.0	Nonparametric LCL around the Median
07_2_103	MW-15017	Appendix IV	Barium	ug/L	23	0%	940	Normal LCL
07_2_104	MW-15017	Appendix IV	Beryllium	ug/L	22	95%	0.25	Nonparametric LCL around the Median
07_2_106	MW-15017	Appendix IV	Cadmium	ug/L	22	100%	0.20	Nonparametric LCL around the Median
07_2_109	MW-15017	Appendix IV	Chromium	ug/L	23	4%	2.3	Normal MLE LCL
07_2_110	MW-15017	Appendix IV	Cobalt	ug/L	22	64%	1.2	Nonparametric LCL around the Median
07_2_114	MW-15017	Appendix IV	Fluoride	ug/L	23	100%	100	Nonparametric LCL around the Median
07_2_116	MW-15017	Appendix IV	Lead	ug/L	22	100%	1.0	Nonparametric LCL around the Median
07_2_117	MW-15017	Appendix IV	Lithium	ug/L	23	74%	10	Nonparametric LCL around the Median
07_2_118	MW-15017	Appendix IV	Mercury	ug/L	22	100%	0.20	Nonparametric LCL around the Median
07_2_119	MW-15017	Appendix IV	Molybdenum	ug/L	23	91%	1.5	Nonparametric LCL around the Median
07_2_125	MW-15017	Appendix IV	Radium-226+228	pCi/L	23	0%	4.5	Normal LCL
07_2_127	MW-15017	Appendix IV	Selenium	ug/L	23	52%	1.0	Nonparametric LCL around the Median
07_2_131	MW-15017	Appendix IV	Thallium	ug/L	22	100%	1.0	Nonparametric LCL around the Median
08_2_101	MW-15018	Appendix IV	Antimony	ug/L	22	100%	0.25	Nonparametric LCL around the Median
08_2_102	MW-15018	Appendix IV	Arsenic	ug/L	23	70%	1.0	Nonparametric LCL around the Median
08_2_103	MW-15018	Appendix IV	Barium	ug/L	23	0%	130	Nonparametric LCL around the Median
08_2_104	MW-15018	Appendix IV	Beryllium	ug/L	22	95%	0.25	Nonparametric LCL around the Median
08_2_106	MW-15018	Appendix IV	Cadmium	ug/L	22	100%	0.20	Nonparametric LCL around the Median
08_2_109	MW-15018	Appendix IV	Chromium	ug/L	23	48%	0.51	Normal MLE LCL
08_2_110	MW-15018	Appendix IV	Cobalt	ug/L	22	91%	0.56	Nonparametric LCL around the Median
08_2_114	MW-15018	Appendix IV	Fluoride	ug/L	24	62%	230	Nonparametric LCL around the Median
08_2_116	MW-15018	Appendix IV	Lead	ug/L	22	77%	1.0	Nonparametric LCL around the Median
08_2_117	MW-15018	Appendix IV	Lithium	ug/L	23	0%	19	Normal LCL
08_2_118	MW-15018	Appendix IV	Mercury	ug/L	22	100%	0.20	Nonparametric LCL around the Median
08_2_119	MW-15018	Appendix IV	Molybdenum	ug/L	23	91%	1.2	Nonparametric LCL around the Median
08_2_125	MW-15018	Appendix IV	Radium-226+228	pCi/L	20	25%	1.1	Normal MLE LCL
08_2_127	MW-15018	Appendix IV	Selenium	ug/L	23	87%	1.0	Nonparametric LCL around the Median
08_2_131	MW-15018	Appendix IV	Thallium	ug/L	22	95%	0.38	Nonparametric LCL around the Median
09_2_101	MW-15019	Appendix IV	Antimony	ug/L	22	100%	0.25	Nonparametric LCL around the Median
09_2_102	MW-15019	Appendix IV	Arsenic	ug/L	23	70%	1.0	Nonparametric LCL around the Median
09_2_103	MW-15019	Appendix IV	Barium	ug/L	23	0%	96	Nonparametric LCL around the Median
09_2_104	MW-15019	Appendix IV	Beryllium	ug/L	22	95%	0.25	Nonparametric LCL around the Median
09_2_106	MW-15019	Appendix IV	Cadmium	ug/L	22	95%	0.20	Nonparametric LCL around the Median
09_2_109	MW-15019	Appendix IV	Chromium	ug/L	23	61%	0.91	Nonparametric LCL around the Median
09_2_110	MW-15019	Appendix IV	Cobalt	ug/L	22	64%	1.4	Nonparametric LCL around the Median
09_2_114	MW-15019	Appendix IV	Fluoride	ug/L	24	96%	100	Nonparametric LCL around the Median
09_2_116	MW-15019	Appendix IV	Lead	ug/L	22	86%	0.93	Nonparametric LCL around the Median
09_2_117	MW-15019	Appendix IV	Lithium	ug/L	23	13%	12	Nonparametric LCL around the Median
09_2_118	MW-15019	Appendix IV	Mercury	ug/L	22	100%	0.20	Nonparametric LCL around the Median
09_2_119	MW-15019	Appendix IV	Molybdenum	ug/L	22	86%	5.0	Nonparametric LCL around the Median
09_2_125	MW-15019	Appendix IV	Radium-226+228	pCi/L	23	22%	0.99	Normal MLE LCL
09_2_127	MW-15019	Appendix IV	Selenium	ug/L	23	78%	0.50	Nonparametric LCL around the Median
09_2_131	MW-15019	Appendix IV	Thallium	ug/L	21	90%	1.9	Nonparametric LCL around the Median
10_2_101	MW-15020	Appendix IV	Antimony	ug/L	22	100%	0.25	Nonparametric LCL around the Median
10_2_102	MW-15020	Appendix IV	Arsenic	ug/L	23	83%	1.0	Nonparametric LCL around the Median
10_2_103	MW-15020	Appendix IV	Barium	ug/L	23	0%	60	Nonparametric LCL around the Median
10_2_104	MW-15020	Appendix IV	Beryllium	ug/L	22	100%	0.25	Nonparametric LCL around the Median
10_2_106	MW-15020	Appendix IV	Cadmium	ug/L	22	100%	0.20	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	% NDs	LCL	Method
10_2_109	MW-15020	Appendix IV	Chromium	ug/L	23	61%	1.0	Nonparametric LCL around the Median
10_2_110	MW-15020	Appendix IV	Cobalt	ug/L	22	91%	0.52	Nonparametric LCL around the Median
10_2_114	MW-15020	Appendix IV	Fluoride	ug/L	24	96%	100	Nonparametric LCL around the Median
10_2_116	MW-15020	Appendix IV	Lead	ug/L	22	95%	0.71	Nonparametric LCL around the Median
10_2_117	MW-15020	Appendix IV	Lithium	ug/L	23	22%	10	Nonparametric LCL around the Median
10_2_118	MW-15020	Appendix IV	Mercury	ug/L	22	100%	0.20	Nonparametric LCL around the Median
10_2_119	MW-15020	Appendix IV	Molybdenum	ug/L	23	96%	1.2	Nonparametric LCL around the Median
10_2_125	MW-15020	Appendix IV	Radium-226+228	pCi/L	23	26%	0.90	Normal MLE LCL
10_2_127	MW-15020	Appendix IV	Selenium	ug/L	23	87%	1.0	Nonparametric LCL around the Median
10_2_131	MW-15020	Appendix IV	Thallium	ug/L	22	100%	0.38	Nonparametric LCL around the Median
11_2_101	MW-15021	Appendix IV	Antimony	ug/L	21	100%	1.0	Nonparametric LCL around the Median
11_2_102	MW-15021	Appendix IV	Arsenic	ug/L	23	35%	0.84	Normal MLE LCL
11_2_103	MW-15021	Appendix IV	Barium	ug/L	23	0%	240	Nonparametric LCL around the Median
11_2_104	MW-15021	Appendix IV	Beryllium	ug/L	22	100%	0.25	Nonparametric LCL around the Median
11_2_106	MW-15021	Appendix IV	Cadmium	ug/L	22	100%	0.20	Nonparametric LCL around the Median
11_2_109	MW-15021	Appendix IV	Chromium	ug/L	23	30%	1.0	Nonparametric LCL around the Median
11_2_110	MW-15021	Appendix IV	Cobalt	ug/L	22	73%	1.0	Nonparametric LCL around the Median
11_2_114	MW-15021	Appendix IV	Fluoride	ug/L	24	100%	100	Nonparametric LCL around the Median
11_2_116	MW-15021	Appendix IV	Lead	ug/L	22	100%	0.55	Nonparametric LCL around the Median
11_2_117	MW-15021	Appendix IV	Lithium	ug/L	23	78%	8.0	Nonparametric LCL around the Median
11_2_118	MW-15021	Appendix IV	Mercury	ug/L	22	95%	0.20	Nonparametric LCL around the Median
11_2_119	MW-15021	Appendix IV	Molybdenum	ug/L	23	100%	1.2	Nonparametric LCL around the Median
11_2_125	MW-15021	Appendix IV	Radium-226+228	pCi/L	22	23%	1.3	Normal MLE LCL
11_2_127	MW-15021	Appendix IV	Selenium	ug/L	23	65%	1.0	Nonparametric LCL around the Median
11_2_131	MW-15021	Appendix IV	Thallium	ug/L	22	100%	0.38	Nonparametric LCL around the Median
12_2_101	MW-15022	Appendix IV	Antimony	ug/L	23	96%	0.25	Nonparametric LCL around the Median
12_2_102	MW-15022	Appendix IV	Arsenic	ug/L	24	46%	0.55	Nonparametric LCL around the Median
12_2_103	MW-15022	Appendix IV	Barium	ug/L	24	0%	150	Lognormal H-LCL
12_2_104	MW-15022	Appendix IV	Beryllium	ug/L	23	100%	0.25	Nonparametric LCL around the Median
12_2_106	MW-15022	Appendix IV	Cadmium	ug/L	23	100%	0.20	Nonparametric LCL around the Median
12_2_109	MW-15022	Appendix IV	Chromium	ug/L	24	75%	0.39	Nonparametric LCL around the Median
12_2_110	MW-15022	Appendix IV	Cobalt	ug/L	23	91%	0.52	Nonparametric LCL around the Median
12_2_114	MW-15022	Appendix IV	Fluoride	ug/L	25	80%	200	Nonparametric LCL around the Median
12_2_116	MW-15022	Appendix IV	Lead	ug/L	23	100%	0.55	Nonparametric LCL around the Median
12_2_117	MW-15022	Appendix IV	Lithium	ug/L	24	33%	15	Gamma MLE Normal Approx. LCL
12_2_118	MW-15022	Appendix IV	Mercury	ug/L	23	96%	0.20	Nonparametric LCL around the Median
12_2_119	MW-15022	Appendix IV	Molybdenum	ug/L	23	52%	3.6	Nonparametric LCL around the Median
12_2_125	MW-15022	Appendix IV	Radium-226+228	pCi/L	22	64%	0.81	Nonparametric LCL around the Median
12_2_127	MW-15022	Appendix IV	Selenium	ug/L	24	96%	0.50	Nonparametric LCL around the Median
12_2_131	MW-15022	Appendix IV	Thallium	ug/L	23	100%	0.38	Nonparametric LCL around the Median
13_2_101	MW-15023	Appendix IV	Antimony	ug/L	22	100%	0.25	Nonparametric LCL around the Median
13_2_102	MW-15023	Appendix IV	Arsenic	ug/L	23	43%	1.0	Nonparametric LCL around the Median
13_2_103	MW-15023	Appendix IV	Barium	ug/L	23	0%	58	Normal LCL
13_2_104	MW-15023	Appendix IV	Beryllium	ug/L	22	100%	0.25	Nonparametric LCL around the Median
13_2_106	MW-15023	Appendix IV	Cadmium	ug/L	22	100%	0.20	Nonparametric LCL around the Median
13_2_109	MW-15023	Appendix IV	Chromium	ug/L	23	78%	1.0	Nonparametric LCL around the Median
13_2_110	MW-15023	Appendix IV	Cobalt	ug/L	22	95%	0.52	Nonparametric LCL around the Median
13_2_114	MW-15023	Appendix IV	Fluoride	ug/L	24	71%	200	Nonparametric LCL around the Median
13_2_116	MW-15023	Appendix IV	Lead	ug/L	22	100%	0.55	Nonparametric LCL around the Median
13_2_117	MW-15023	Appendix IV	Lithium	ug/L	23	30%	9.6	Normal MLE LCL
13_2_118	MW-15023	Appendix IV	Mercury	ug/L	22	95%	0.20	Nonparametric LCL around the Median
13_2_119	MW-15023	Appendix IV	Molybdenum	ug/L	23	17%	6.0	Nonparametric LCL around the Median
13_2_125	MW-15023	Appendix IV	Radium-226+228	pCi/L	20	55%	0.53	Nonparametric LCL around the Median
13_2_127	MW-15023	Appendix IV	Selenium	ug/L	23	91%	1.0	Nonparametric LCL around the Median
13_2_131	MW-15023	Appendix IV	Thallium	ug/L	22	100%	0.38	Nonparametric LCL around the Median
14_2_101	MW-17001R	Appendix IV	Antimony	ug/L	11	91%	0.25	Nonparametric LCL around the Median
14_2_102	MW-17001R	Appendix IV	Arsenic	ug/L	11	45%	0.31	Gamma MLE Normal Approx. LCL
14_2_103	MW-17001R	Appendix IV	Barium	ug/L	11	0%	130	Normal LCL
14_2_104	MW-17001R	Appendix IV	Beryllium	ug/L	11	100%	0.25	Nonparametric LCL around the Median
14_2_106	MW-17001R	Appendix IV	Cadmium	ug/L	11	100%	0.25	Nonparametric LCL around the Median
14_2_109	MW-17001R	Appendix IV	Chromium	ug/L	10	50%	0.18	Nonparametric LCL around the Median
14_2_110	MW-17001R	Appendix IV	Cobalt	ug/L	11	64%	0.29	Nonparametric LCL around the Median
14_2_114	MW-17001R	Appendix IV	Fluoride	ug/L	10	30%	100	Normal MLE LCL
14_2_116	MW-17001R	Appendix IV	Lead	ug/L	11	100%	0.55	Nonparametric LCL around the Median
14_2_117	MW-17001R	Appendix IV	Lithium	ug/L	11	0%	53	Normal LCL
14_2_118	MW-17001R	Appendix IV	Mercury	ug/L	11	100%	0.20	Nonparametric LCL around the Median
14_2_119	MW-17001R	Appendix IV	Molybdenum	ug/L	10	50%	0.48	Nonparametric LCL around the Median
14_2_125	MW-17001R	Appendix IV	Radium-226+228	pCi/L	11	27%	0.72	Normal MLE LCL
14_2_127	MW-17001R	Appendix IV	Selenium	ug/L	11	100%	0.50	Nonparametric LCL around the Median
14_2_131	MW-17001R	Appendix IV	Thallium	ug/L	11	100%	0.38	Nonparametric LCL around the Median
15_2_101	MW-17002	Appendix IV	Antimony	ug/L	15	93%	0.25	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	% NDs	LCL	Method
15_2_102	MW-17002	Appendix IV	Arsenic	ug/L	17	6%	16	Gamma MLE Normal Approx. LCL
15_2_103	MW-17002	Appendix IV	Barium	ug/L	17	0%	82	Adjusted Gamma LCL
15_2_104	MW-17002	Appendix IV	Beryllium	ug/L	16	94%	0.25	Nonparametric LCL around the Median
15_2_106	MW-17002	Appendix IV	Cadmium	ug/L	16	81%	0.20	Nonparametric LCL around the Median
15_2_109	MW-17002	Appendix IV	Chromium	ug/L	16	75%	0.40	Nonparametric LCL around the Median
15_2_110	MW-17002	Appendix IV	Cobalt	ug/L	16	94%	0.52	Nonparametric LCL around the Median
15_2_114	MW-17002	Appendix IV	Fluoride	ug/L	17	47%	200	Normal MLE LCL
15_2_116	MW-17002	Appendix IV	Lead	ug/L	15	93%	0.55	Nonparametric LCL around the Median
15_2_117	MW-17002	Appendix IV	Lithium	ug/L	17	0%	130	Normal LCL
15_2_118	MW-17002	Appendix IV	Mercury	ug/L	16	100%	0.20	Nonparametric LCL around the Median
15_2_119	MW-17002	Appendix IV	Molybdenum	ug/L	17	35%	5.0	Nonparametric LCL around the Median
15_2_125	MW-17002	Appendix IV	Radium-226+228	pCi/L	15	40%	0.46	Normal MLE LCL
15_2_127	MW-17002	Appendix IV	Selenium	ug/L	17	82%	0.50	Nonparametric LCL around the Median
15_2_131	MW-17002	Appendix IV	Thallium	ug/L	16	94%	0.38	Nonparametric LCL around the Median
16_2_101	MW-17003	Appendix IV	Antimony	ug/L	16	94%	0.25	Nonparametric LCL around the Median
16_2_102	MW-17003	Appendix IV	Arsenic	ug/L	17	18%	14	Gamma MLE Normal Approx. LCL
16_2_103	MW-17003	Appendix IV	Barium	ug/L	17	0%	71	Adjusted Gamma LCL
16_2_104	MW-17003	Appendix IV	Beryllium	ug/L	16	94%	0.25	Nonparametric LCL around the Median
16_2_106	MW-17003	Appendix IV	Cadmium	ug/L	16	100%	0.20	Nonparametric LCL around the Median
16_2_109	MW-17003	Appendix IV	Chromium	ug/L	17	82%	0.25	Nonparametric LCL around the Median
16_2_110	MW-17003	Appendix IV	Cobalt	ug/L	16	88%	0.52	Nonparametric LCL around the Median
16_2_114	MW-17003	Appendix IV	Fluoride	ug/L	17	76%	100	Nonparametric LCL around the Median
16_2_116	MW-17003	Appendix IV	Lead	ug/L	16	100%	0.55	Nonparametric LCL around the Median
16_2_117	MW-17003	Appendix IV	Lithium	ug/L	17	6%	18	Nonparametric LCL around the Median
16_2_118	MW-17003	Appendix IV	Mercury	ug/L	16	100%	0.20	Nonparametric LCL around the Median
16_2_119	MW-17003	Appendix IV	Molybdenum	ug/L	16	31%	9.8	Gamma MLE Normal Approx. LCL
16_2_125	MW-17003	Appendix IV	Radium-226+228	pCi/L	14	64%	0.91	Nonparametric LCL around the Median
16_2_127	MW-17003	Appendix IV	Selenium	ug/L	17	82%	0.50	Nonparametric LCL around the Median
16_2_131	MW-17003	Appendix IV	Thallium	ug/L	16	100%	0.38	Nonparametric LCL around the Median
17_2_101	MW-17004	Appendix IV	Antimony	ug/L	15	93%	0.25	Nonparametric LCL around the Median
17_2_102	MW-17004	Appendix IV	Arsenic	ug/L	17	12%	3.2	Gamma MLE Normal Approx. LCL
17_2_103	MW-17004	Appendix IV	Barium	ug/L	17	0%	150	Adjusted Gamma LCL
17_2_104	MW-17004	Appendix IV	Beryllium	ug/L	16	100%	0.25	Nonparametric LCL around the Median
17_2_106	MW-17004	Appendix IV	Cadmium	ug/L	16	94%	0.20	Nonparametric LCL around the Median
17_2_109	MW-17004	Appendix IV	Chromium	ug/L	17	76%	0.36	Nonparametric LCL around the Median
17_2_110	MW-17004	Appendix IV	Cobalt	ug/L	16	75%	0.52	Nonparametric LCL around the Median
17_2_114	MW-17004	Appendix IV	Fluoride	ug/L	17	88%	100	Nonparametric LCL around the Median
17_2_116	MW-17004	Appendix IV	Lead	ug/L	16	88%	0.55	Nonparametric LCL around the Median
17_2_117	MW-17004	Appendix IV	Lithium	ug/L	17	41%	10	Nonparametric LCL around the Median
17_2_118	MW-17004	Appendix IV	Mercury	ug/L	16	100%	0.20	Nonparametric LCL around the Median
17_2_119	MW-17004	Appendix IV	Molybdenum	ug/L	17	47%	-8.3	Normal MLE LCL
17_2_125	MW-17004	Appendix IV	Radium-226+228	pCi/L	16	69%	1.0	Nonparametric LCL around the Median
17_2_127	MW-17004	Appendix IV	Selenium	ug/L	17	82%	0.50	Nonparametric LCL around the Median
17_2_131	MW-17004	Appendix IV	Thallium	ug/L	16	88%	0.38	Nonparametric LCL around the Median
18_2_101	MW-17005	Appendix IV	Antimony	ug/L	16	100%	0.25	Nonparametric LCL around the Median
18_2_102	MW-17005	Appendix IV	Arsenic	ug/L	17	82%	0.55	Nonparametric LCL around the Median
18_2_103	MW-17005	Appendix IV	Barium	ug/L	17	0%	120	Adjusted Gamma LCL
18_2_104	MW-17005	Appendix IV	Beryllium	ug/L	16	94%	0.25	Nonparametric LCL around the Median
18_2_106	MW-17005	Appendix IV	Cadmium	ug/L	16	100%	0.20	Nonparametric LCL around the Median
18_2_109	MW-17005	Appendix IV	Chromium	ug/L	17	71%	0.35	Nonparametric LCL around the Median
18_2_110	MW-17005	Appendix IV	Cobalt	ug/L	16	100%	0.52	Nonparametric LCL around the Median
18_2_114	MW-17005	Appendix IV	Fluoride	ug/L	17	94%	100	Nonparametric LCL around the Median
18_2_116	MW-17005	Appendix IV	Lead	ug/L	16	94%	0.55	Nonparametric LCL around the Median
18_2_117	MW-17005	Appendix IV	Lithium	ug/L	17	18%	8.7	Lognormal MLE Likelihood Profile LCL
18_2_118	MW-17005	Appendix IV	Mercury	ug/L	16	100%	0.20	Nonparametric LCL around the Median
18_2_119	MW-17005	Appendix IV	Molybdenum	ug/L	17	94%	1.2	Nonparametric LCL around the Median
18_2_125	MW-17005	Appendix IV	Radium-226+228	pCi/L	14	64%	0.97	Nonparametric LCL around the Median
18_2_127	MW-17005	Appendix IV	Selenium	ug/L	17	100%	0.50	Nonparametric LCL around the Median
18_2_131	MW-17005	Appendix IV	Thallium	ug/L	16	100%	0.38	Nonparametric LCL around the Median
19_2_101	MW-17006	Appendix IV	Antimony	ug/L	15	100%	0.25	Nonparametric LCL around the Median
19_2_102	MW-17006	Appendix IV	Arsenic	ug/L	16	38%	0.44	Normal MLE LCL
19_2_103	MW-17006	Appendix IV	Barium	ug/L	16	0%	79	Normal LCL
19_2_104	MW-17006	Appendix IV	Beryllium	ug/L	15	100%	0.25	Nonparametric LCL around the Median
19_2_106	MW-17006	Appendix IV	Cadmium	ug/L	15	100%	0.20	Nonparametric LCL around the Median
19_2_109	MW-17006	Appendix IV	Chromium	ug/L	16	88%	0.25	Nonparametric LCL around the Median
19_2_110	MW-17006	Appendix IV	Cobalt	ug/L	15	100%	0.52	Nonparametric LCL around the Median
19_2_114	MW-17006	Appendix IV	Fluoride	ug/L	16	62%	130	Nonparametric LCL around the Median
19_2_116	MW-17006	Appendix IV	Lead	ug/L	15	100%	0.55	Nonparametric LCL around the Median
19_2_117	MW-17006	Appendix IV	Lithium	ug/L	16	0%	27	Normal LCL
19_2_118	MW-17006	Appendix IV	Mercury	ug/L	15	93%	0.20	Nonparametric LCL around the Median
19_2_119	MW-17006	Appendix IV	Molybdenum	ug/L	16	75%	1.6	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	% NDs	LCL	Method
19_2_125	MW-17006	Appendix IV	Radium-226+228	pCi/L	16	69%	0.83	Nonparametric LCL around the Median
19_2_127	MW-17006	Appendix IV	Selenium	ug/L	16	94%	0.50	Nonparametric LCL around the Median
19_2_131	MW-17006	Appendix IV	Thallium	ug/L	15	100%	0.38	Nonparametric LCL around the Median