

# **Annual Groundwater Monitoring and Corrective Action Report**

Indiana Michigan Power Company

Rockport Plant

Bottom Ash Pond CCR Units

Rockport, Indiana

**January 31, 2025**

Prepared by:

American Electric Power Service Corporation

1 Riverside Plaza

Columbus, Ohio 43215



An **AEP** Company

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**Abbreviations:**

ASD - Alternate Source Demonstration  
CCR – Coal Combustion Residual  
GWPS - Groundwater protection standards  
SSI - Statistically Significant Increase  
SSL - Statistically Significant Level

## **I      Overview**

This *Annual Groundwater Monitoring and Corrective Action Report* (Report) has been prepared to report the status of activities for the preceding year at the bottom ash pond (BAP) CCR unit at Indiana Michigan Power Company's (I&M) Rockport Plant. The Indiana Michigan Power Company is wholly owned subsidiary of American Electric Power Company (AEP). The USEPA's CCR rules require that the Annual Groundwater Monitoring and Corrective Action Report covering the previous year's groundwater monitoring activities be posted to the operating record no later than January 31, 2025.

In general, the following activities were completed:

- At the start of the current annual reporting period, the BAP was operating under the assessment monitoring program.
- At the end of the current annual reporting period, the BAP was operating under the assessment monitoring program.
- The BAP initiated assessment monitoring on April 15, 2018.
- Data and statistical analysis that was not available for the previous reporting period indicates that during the November 2023 semi-annual sampling event :
  - The following Appendix III parameters exceeded background concentrations:
    - Boron at wells MW-1002, MW-1603S, MW-1604S, and MW-1605S
    - Calcium at well MW-1603D
    - Chloride at well MW-1602D
    - Fluoride at wells MW-1002, MW-1603S, and MW-1604S
    - pH at well MW-1605D
    - Sulfate at wells MW-1002, MW-1603S, MW-1604S, MW-1605I, and MW-1605S
    - TDS at wells MW-1002, MW-1602D, MW-1603I, MW-1604S, and MW-1605S
  - There were no exceedances of Appendix IV parameters
  - Statistical analysis for the November 2023 sampling event was completed in March 2024
- During the May 2024 semi-annual sampling event:
  - The following Appendix III parameters exceeded background concentrations:
    - Boron at wells MW-1002, MW-1603S, MW-1604I, MW-1604S, and MW-1605S
    - Calcium at wells MW-1602D, MW-1604S, and MW-1605D

- Chloride at well MW-1602I
  - Fluoride at wells MW-1002, MW-1603S, and MW-1604S
  - Sulfate at wells MW-1002, MW-1602D, MW-1603S, MW-1604I, MW-1604S, MW-1605I, and MW-1605S
  - TDS at wells MW-1002, MW-1602D, MW-1604I, MW-1604S, MW-1605I, and MW-1605S
- There were no exceedances of Appendix IV parameters
  - Statistical analysis of the May 2024 sampling event was completed in September 2024
- The November 2024 semi-annual sampling event data are still undergoing statistical analysis.
- Because either there were no Appendix IV SSLs or because an alternate source for the Appendix IV SSL(s) was identified, but no alternative source for the Appendix III SSI(s) was identified, the BAP remained in assessment monitoring.

The major components of this annual report, to the extent applicable at this time, are presented in sections that follow:

- A map/aerial photograph showing the BAP CCR management units, all CCR groundwater monitoring wells, and monitoring well identification numbers (Attached in **Appendix 1**);
- All of the monitoring data collected, including the rate and direction of groundwater flow, plus a summary showing the number of samples collected per monitoring well, the dates the samples were collected, and whether the sample was collected as part of background, detection monitoring, or assessment monitoring programs (Attached in **Appendix 1**);
- Statistical comparison of monitoring data to determine if there have been significant increase over background concentrations (Attached in **Appendix 2**, where applicable);
- A discussion of whether any alternate source demonstrations were performed, and the conclusions (Attached in **Appendix 3**, where applicable);
- A summary of any transition between monitoring programs, or an alternate monitoring frequency, for example the date and circumstances for transitioning from detection monitoring to assessment monitoring, in addition to identifying the constituents detected at a statistically significant increase over background concentrations (Notices Attached in **Appendix 4**, where applicable);
- Identification of any monitoring wells that were installed, or decommissioned during the preceding year, along with a statement as to why that happened (Attached in **Appendix 5**, where applicable); and
- Other information required to be included in the annual report such as alternate source demonstration or assessment of corrective measures, if applicable.

In addition, this report summarizes key actions completed, and where applicable, describes any problems encountered and actions taken to resolve those problems. The report includes a projection of key activities for the upcoming year.

## **II. Groundwater Monitoring Well Locations and Identification Numbers**

The CCR monitoring wells are listed as follows (S=shallow, I=intermediate, and D=deep):

- Twelve Upgradient Wells: MW-1600(S, I, D); MW-1601(S, I, D); MW-1701(S, I, D); and MW-1702(S, I, D).
- Fifteen Downgradient Wells: MW-1002, MW-1602(I, D); MW-1603(S, I, D); MW-1604(S, I, D); MW-1605(S, I, D); and MW-1606(S, I, D).

Rather than separate groundwater monitoring systems for the East and West bottom ash ponds, the groundwater network monitors both of the bottom ash ponds as a single unit as allowed by 40 CFR 257.91(d). A figure that depicts the PE-certified groundwater monitoring network, the monitoring well locations, and their corresponding identification numbers is provided in **Appendix 1**.

## **III. Monitoring Wells Installed or Decommissioned**

There were no new groundwater monitoring wells installed or decommissioned during 2024. The network design, as summarized in the *Groundwater Monitoring Network Design Report* (2019) and as posted at the CCR website for Rockport Plant's Bottom Ash Ponds, did not change. That design report, viewable on the AEP CCR web site, discusses the facility location, the hydrogeological setting, the hydrostratigraphic units, the uppermost aquifer, downgradient monitoring well locations and the upgradient monitoring well locations.

## **IV. Groundwater Quality Data and Static Water Elevation Data, With Flow Rates and Flow Directions**

**Appendix 1** contains tables showing the groundwater quality data collected during the establishment of background quality, detection and assessment monitoring. Static water elevation data from each monitoring event also are shown in **Appendix 1**, along with the groundwater velocity calculations, groundwater flow direction and potentiometric maps developed after each sampling event.

The sampling event conducted in March 2024 satisfies the requirement of 257.95(b).

## **V. Groundwater Quality Data Statistical Analysis**

- **Appendix 2** contains the statistical analysis reports. Data and statistical analysis that was not available for the previous reporting period indicates that during the November 2023 semi-annual sampling event:
  - The following Appendix III parameters exceeded background concentrations:
    - Boron at wells MW-1002, MW-1603S, MW-1604S, and MW-1605S
    - Calcium at well MW-1603D
    - Chloride at well MW-1602D

- Fluoride at wells MW-1002, MW-1603S, and MW-1604S
  - pH at well MW-1605D
  - Sulfate at wells MW-1002, MW-1603S, MW-1604S, MW-1605I, and MW-1605S
  - TDS at wells MW-1002, MW-1602D, MW-1603I, MW-1604S, and MW-1605S
    - There were no exceedances of Appendix IV parameters
    - Statistical analysis for the November 2023 sampling event was completed in March 2024 and is included in **Appendix 2**.
- During the May 2024 semi-annual sampling event:
  - The following Appendix III parameters exceeded background concentrations:
    - Boron at wells MW-1002, MW-1603S, MW-1604I, MW-1604S, and MW-1605S
    - Calcium at wells MW-1602D, MW-1604S, and MW-1605D
    - Chloride at well MW-1602I
    - Fluoride at wells MW-1002, MW-1603S, and MW-1604S
    - Sulfate at wells MW-1002, MW-1602D, MW-1603S, MW-1604I, MW-1604S, MW-1605I, and MW-1605S
    - TDS at wells MW-1002, MW-1602D, MW-1604I, MW-1604S, MW-1605I, and MW-1605S
      - There were no exceedances of Appendix IV parameters
      - Statistical analysis of the May 2024 sampling event was completed in September 2024

The statistical analysis of the second semi-annual sampling event will be completed within 90 days of finishing the sampling and analysis, which took place in November 2024.

## **VI. Alternate Source Demonstrations**

An alternate source demonstration (ASD) investigation relative to past Appendix III SSIs was completed in April 2018. That demonstration concluded that the groundwater quality and Appendix III indicator parameter SSIs identified in the statistical evaluations were potentially influenced by a release from the BAP to the groundwater. An alternate source could not be identified. Therefore, an alternate source demonstration investigation was not undertaken for the exceedances of Appendix III parameters for neither the second semi-annual event of 2023, nor the first semi-annual event of 2024.

Because either there were no SSLs or because an alternate source for the SSL(s) was identified, but no alternate source for the SSI(s) was identified, the BAP remained in assessment monitoring.

## **VII. Discussion About Transition Between Monitoring Requirements or Alternate Monitoring Frequency**

Because an alternate source for the Appendix III SSIs could not be identified, an assessment monitoring program was established at Rockport's BAP complex on April 15, 2018. Assessment monitoring continued through the 2024 calendar year.

The BAP will remain in assessment monitoring unless all Appendix III and IV parameters are below background values for two consecutive monitoring events (return to detection monitoring) as prescribed by 40 CFR 257.95(e). If an Appendix IV parameter exceeds its respective GWPS due to a release from the BAP, an assessment of corrective measures will be undertaken as required by 40 CFR 257.96.

Regarding defining an alternate monitoring frequency, the groundwater velocity and monitoring well production are high enough at this facility that no modification to the semiannual assessment monitoring frequency is needed.

## **VIII. Other Information Required**

The BAP progressed from detection monitoring to its current status in assessment monitoring in 2018. As required by the CCR assessment monitoring rules in 40 CFR 257.95 (b) and (d)(1), sampling all CCR wells for the required Appendix III and IV parameters was completed in 2024.

## **IX. Description of Any Problems Encountered and Actions Taken**

No significant problems were encountered. The low flow sampling effort went smoothly, and the schedule was met to support the annual groundwater report preparation covering the year 2024 groundwater monitoring activities.

## **X. A Projection of Key Activities for the Upcoming Year**

Key activities for 2025 include:

- Complete the statistical analysis of the second semi-annual sampling event that took place in November 2024.
- Conduct the annual groundwater sampling event for all constituents listed in Appendix III and IV as required by 40 CFR 257.95(b).
- Perform statistical analysis on the sampling results for the Appendix III and detected Appendix IV parameters as required by 40 CFR 257.95(d)(1).
- Determine applicable GWPSs for the Appendix IV parameters and compare the results of Appendix IV concentrations in downgradient wells to the GWPSs.
- If no GWPSs are exceeded, the BAP will remain in assessment monitoring.
- If a GWPS is exceeded in a downgradient well the following activities will be undertaken:
  - Characterize the nature and extent of a release by installing additional GW wells as necessary, estimate the quantity of material released and the concentrations

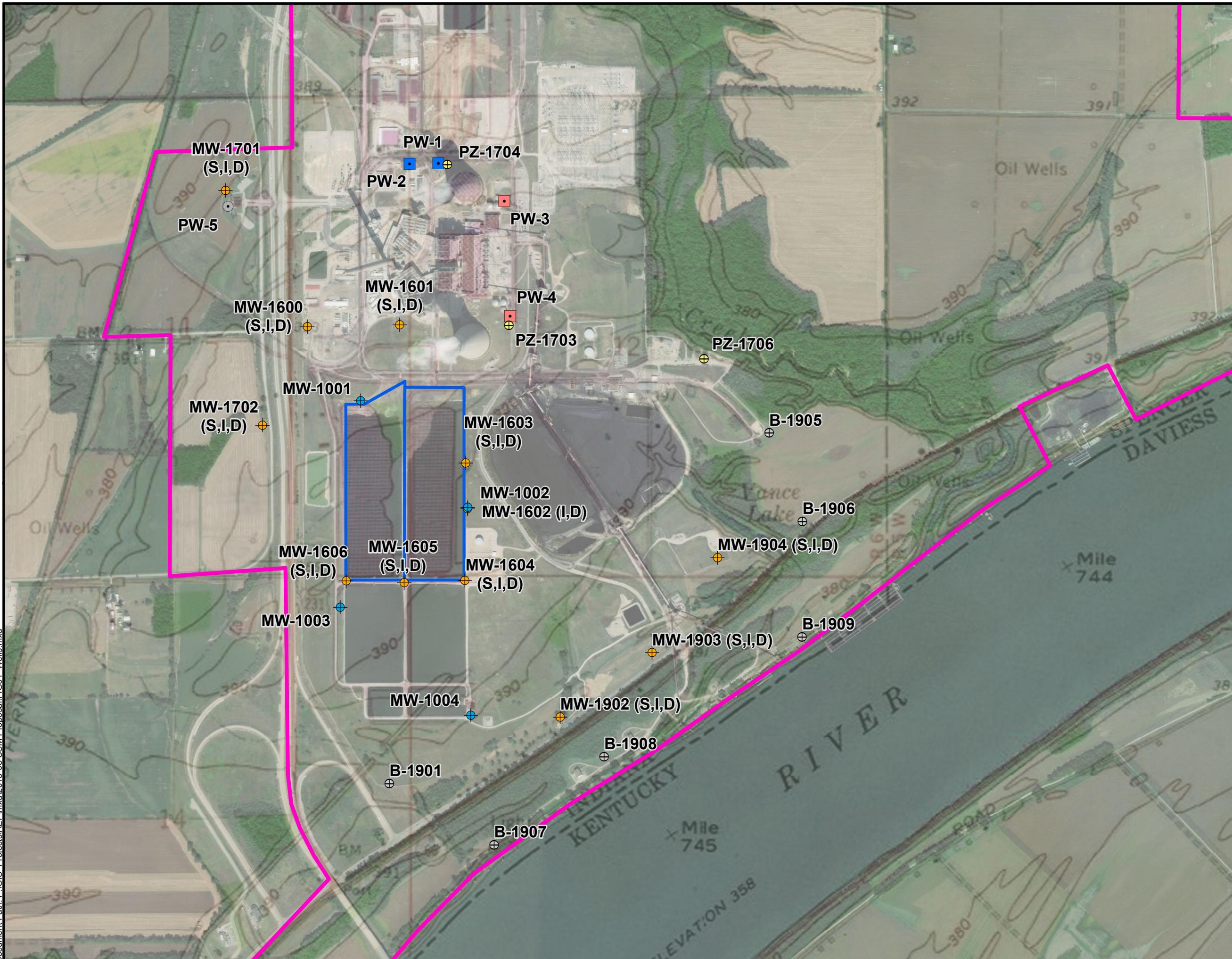
of Appendix IV parameters that are in the material, and sample all wells to characterize the nature and extent of the release.

- If contaminants have migrated off-site, notify all persons who own land that directly overlies any part of the plume of contamination.
- Perform an alternate source demonstration (ASD) investigating whether the exceedance was caused by a source other than the BAP or was a result of an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.
- If a successful ASD cannot be made, initiate an assessment of corrective measures and follow all of those requirements.
- Respond to any new data received in light of what the CCR rule requires.
- Prepare the next annual groundwater report.

## **APPENDIX 1 – Groundwater Data Tables and Figures**

Figures and Tables follow, showing the groundwater monitoring network, data collected and the rate and direction of groundwater flow. The dates that the samples were collected, and it also is shown whether the data were collected under background, detection, or assessment monitoring.

## **Groundwater Monitoring Network Figure**

**Legend**

- Piezometer
- BAP - USWAG Monitoring Well
- BAP - CCR Monitoring Well
- Landfill - Monitoring Well
- Landfill - CCR Monitoring Well
- Landfill - Augmentation Water Supply Well
- Landfill - Dust Control Water Supply Well
- Plant - Potable Water Supply Well
- Plant - Fire Water Supply Well
- Groundwater Screening Location (Abandoned)
- Inactive Water Supply Well
- Property Boundary
- Bottom Ash Ponds (BAP)

**Data Sources**

Date of Photography: 2016  
Source of Photography: U.S. Department of Agriculture, National Agriculture Imagery Program (NAIP)

USGS Rockport and Lewisport (IN/KY) Topographic Quadrangle Maps

0 500 1,000  
SCALE IN FEET



## WELL LOCATIONS

AEP - ROCKPORT, IN

PROJECT NUMBER: 7362182624

SCALE	1" = 1,600'
DATE	2/6/2019
DRAWN BY	TMR
APPROVED BY	ALD

**FIG.  
1**

**wood.**

2456 Fortune Drive, Suite 100  
Lexington, Kentucky 40509  
Phone: (859) 255-3308

## **Groundwater Data Tables**

**Table 1. Groundwater Data Summary: MW-1002**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	1.77	33.2	58.9	1.05	7.0	149	390
7/18/2016	Background	1.70	32.3	57.8	1.03	7.1	154	385
9/20/2016	Background	1.57	40.1	54.0	0.98	6.8	164	399
11/15/2016	Background	1.67	49.4	53.0	0.87	6.5	178	405
1/9/2017	Background	1.57	55.6	59.0	0.74	6.3	190	440
3/7/2017	Background	1.32	76.3	81.1	0.73	6.5	228	503
5/8/2017	Background	1.04	78.1	75.5	0.73	6.7	215	498
7/17/2017	Background	1.28	50.0	59.9	0.73	6.7	184	430
10/3/2017	Detection	1.63	36.4	54.4	0.80	7.1	166	403
12/12/2017	Detection	--	--	52.5	0.97	7.3	177	--
1/11/2018	Detection	1.71	--	53.2	0.91	7.0	183	--
6/5/2018	Assessment	1.66	40.8	51.4	1.02	8.1	165	425
8/15/2018	Assessment	1.88	41.3	57.4	1.02	7.2	182	453
5/24/2019	Assessment	1.61	32.9	55.9	1.13	7.4	169	435
6/27/2019	Assessment	1.82	36.0	57.1	1.10	7.1	173	425
9/12/2019	Assessment	1.78	33.5	54.7	1.03	6.7	178	418
3/11/2020	Assessment	--	--	--	0.84	6.5	--	--
5/20/2020	Assessment	0.778	42.0	35.9	0.85	5.9	97.5	295
11/16/2020	Assessment	1.43	66.7	99.4	0.84	6.2	217	551
2/2/2021	Assessment	1.56	63.3	81.7	0.97	6.8	250	560
5/26/2021	Assessment	1.11	37.3	50.1	1.01	7.1	149	370
11/9/2021	Assessment	1.70	42.2	59.4	0.96	6.8	169	450
2/15/2022	Assessment	1.81	52.2	66.9	0.95	7.4	176	490
5/10/2022	Assessment	1.74	47.4	61.3	0.96	7.4	173	470 L1
10/31/2022	Assessment	2.46	58.4	40.9	0.93	5.6	323	650
2/8/2023	Assessment	1.63	62.4	32.1	1.08	7.9	194	560
5/31/2023	Assessment	1.63	49.8	30.1	1.21	7.3	205	560
11/1/2023	Assessment	1.72	51.5	31.6	1.38	6.8	214	570
3/6/2024	Assessment	--	--	--	1.13	7.4	--	--
5/13/2024	Assessment	1.45	72.5	27.4	0.93	7.1	239	590
11/14/2024	Assessment	1.47	49	22.7	1.35	7.2	130	450

**Table 1. Groundwater Data Summary: MW-1002****Rockport - BAP****Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.05	0.32	12.3	< 0.005 U1	0.02	0.3	0.830	0.1116	1.05	0.034	0.002	< 0.002 U1	1.92	0.08 J1	0.02 J1
7/18/2016	Background	0.05	0.29	14.2	< 0.005 U1	0.03	0.7	0.931	0.741	1.03	0.026	0.016	< 0.002 U1	2.54	0.1 J1	0.03 J1
9/20/2016	Background	0.04 J1	0.24	18.5	< 0.005 U1	0.03	0.1	0.699	1.377	0.98	0.01 J1	0.004	< 0.002 U1	3.38	0.1 J1	0.02 J1
11/15/2016	Background	0.06	0.24	23.5	0.006 J1	0.15	0.075	0.664	0.686	0.87	0.031	0.010	< 0.002 U1	2.47	0.08 J1	0.04 J1
1/9/2017	Background	0.05 J1	0.25	26.9	< 0.005 U1	0.04	0.078	0.692	1.052	0.74	0.022	0.006	< 0.002 U1	3.16	0.06 J1	0.03 J1
3/7/2017	Background	0.05	0.20	35.6	< 0.005 U1	0.07	0.331	0.568	0.483	0.73	0.163	0.003	< 0.002 U1	2.69	0.1 J1	0.04 J1
5/8/2017	Background	0.05	0.24	26.8	0.020	0.05	0.177	0.526	0.2337	0.73	0.037	0.009	0.005	2.69	0.1	0.050
7/17/2017	Background	0.04 J1	0.21	21.4	< 0.004 U1	0.03	0.107	0.665	3.029	0.73	0.02 J1	0.009	< 0.002 U1	3.05	0.07 J1	0.04 J1
6/5/2018	Assessment	0.07	0.44	12.7	0.004	0.03	0.04	0.768	0.569	1.02	0.031	0.011	< 0.002 U1	6.19	0.06	0.03
8/15/2018	Assessment	0.05 J1	0.28	13.8	< 0.004 U1	0.03	0.281	0.820	--	1.02	0.02 J1	< 0.0002 U1	--	7.86	0.07 J1	0.03 J1
5/24/2019	Assessment	0.05 J1	0.23	13.3	< 0.02 U1	0.03 J1	0.09 J1	0.754	0.1886	1.13	< 0.02 U1	< 0.009 U1	< 0.002 U1	8.67	0.05 J1	< 0.1 U1
6/27/2019	Assessment	0.05 J1	0.24	14.8	< 0.02 U1	0.03 J1	0.07 J1	0.805	0.682	1.10	0.03 J1	< 0.009 U1	< 0.002 U1	10.4	0.08 J1	< 0.1 U1
9/12/2019	Assessment	0.05 J1	0.22	15.8	< 0.02 U1	0.02 J1	0.469	0.635	0.384	1.03	< 0.05 U1	0.00438	< 0.002 U1	10.2	0.06 J1	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	0.21	15.9	< 0.02 U1	0.02 J1	< 0.04 U1	0.608	1.9572	0.84	< 0.05 U1	0.00425	< 0.002 U1	8.51	0.1 J1	< 0.1 U1
5/20/2020	Assessment	0.04 J1	0.19	16.0	< 0.02 U1	0.04 J1	0.09 J1	0.342	0.999	0.85	< 0.05 U1	0.00316	< 0.002 U1	9.65	0.07 J1	< 0.1 U1
11/16/2020	Assessment	0.04 J1	0.25	17.9	< 0.02 U1	0.02 J1	0.212	0.480	1.892	0.84	< 0.05 U1	0.00562	< 0.002 U1	4.95	0.09 J1	< 0.1 U1
2/2/2021	Assessment	0.05 J1	0.27	15.9	< 0.02 U1	0.02 J1	0.05 J1	0.533	0.22	0.97	< 0.05 U1	0.00548	< 0.002 U1	6.42	0.07 J1	< 0.1 U1
5/26/2021	Assessment	0.04 J1	0.25	12.4	< 0.007 U1	0.019 J1	0.21	0.308	0.75	1.01	< 0.05 U1	0.00379	< 0.002 U1	5.3	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.04 J1	0.26	12.5	< 0.007 U1	0.020	0.20	0.500	3.01	0.96	< 0.05 U1	0.00502	< 0.002 U1	6.7	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	0.04 J1	0.27	13.9	< 0.007 U1	0.020	0.33	0.531	0.43	0.95	< 0.05 U1	0.00554	< 0.002 U1	7.7	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	0.04 J1	0.27	14.0	< 0.007 U1	0.019 J1	0.24	0.537	1.25	0.96	< 0.05 U1	0.00538	< 0.002 U1	7.1	< 0.09 U1	< 0.04 U1
10/31/2022	Assessment	0.04 J1	0.23	18.2	< 0.007 U1	0.028	0.16 J1	0.777	0.51	0.93	< 0.05 U1	0.00571	< 0.002 U1	12.6	< 0.09 U1	< 0.04 U1
2/8/2023	Assessment	0.05 J1	0.23	18.0	0.007 J1	0.023	0.27	0.482	1.02	1.08	< 0.05 U1	0.00653	< 0.002 U1	18.0	0.70	< 0.04 U1
5/31/2023	Assessment	0.051 J1	0.27	15.3	< 0.007 U1	0.028	0.26 J1	0.576	0.59	1.21	0.06 J1	0.00482	< 0.002 U1	21.5	0.12 J1	< 0.02 U1
11/1/2023	Assessment	0.053 J1	0.27	13.6	< 0.007 U1	0.022	0.33	0.686	0.49	1.38	0.06 J1	0.00521	< 0.002 U1	17.1	0.06 J1	< 0.02 U1
3/6/2024	Assessment	0.050 J1	0.22	15.7	< 0.007 U1	0.027	0.14 J1	0.520	1.33	1.13	< 0.05 U1	0.00585	< 0.002 U1	13.4	0.07 J1	0.02 J1
5/13/2024	Assessment	0.046 J1	0.20	15.8	< 0.007 U1	0.021	0.30	0.515	2.53	0.93	< 0.05 U1	0.00632	< 0.002 U1	13.9	0.08 J1	0.02 J1
11/14/2024	Assessment	0.044 J1	0.22	12.5	< 0.007 U1	0.018 J1	0.17 J1	0.437	2.76	1.35	< 0.05 U1	0.00500	< 0.002 U1	12.2	0.09 J1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1600D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/8/2016	Background	0.016	83.5	31.5	0.20	7.6	43.9	444
7/19/2016	Background	0.015	74.9	32.2	0.22	7.2	44.9	413
9/19/2016	Background	< 0.002 U1	85.6	30.9	0.20	7.1	38.7	385
11/16/2016	Background	0.024	83.1	30.9	0.17	7.2	35.9	415
1/10/2017	Background	0.014	87.8	31.0	0.22	7.1	42.5	384
3/7/2017	Background	0.036	84.9	31.6	0.19	7.0	39.2	374
5/8/2017	Background	0.037	89.1	32.6	0.21	6.5	38.4	402
7/17/2017	Background	0.038	73.6	31.6	0.17	6.5	40.1	389
10/3/2017	Detection	0.040	78.3	31.5	0.20	7.3	40.8	398
12/12/2017	Detection	--	--	31.5	0.20	7.1	42.5	--
6/4/2018	Assessment	0.079	83.5	32.8	0.23	7.3	39.2	397
8/14/2018	Assessment	0.085	86.6	31.5	0.24	7.1	41.0	400
5/20/2019	Assessment	< 0.02 U1	76.5	31.4	0.21	7.2	43.0	394
6/25/2019	Assessment	0.03 J1	84.2	31.0	0.22	7.1	37.7	407
9/10/2019	Assessment	< 0.02 U1	90.1	31.1	0.23	7.2	41.3	404
3/11/2020	Assessment	--	--	--	0.21	6.9	--	--
5/21/2020	Assessment	< 0.02 U1	91.1	31.0	0.24	7.6	43.3	396
11/12/2020	Assessment	< 0.02 U1	81.5	30.3	0.25	6.6	42.4	398
2/3/2021	Assessment	< 0.02 U1	78.9	30.2	0.25	6.8	41.3	390
5/27/2021	Assessment	0.017 J1	93.2	29.6	0.25	7.6	41.6	400
11/10/2021	Assessment	0.016 J1	79.3	28.7	0.23	6.6	40.0	380
2/16/2022	Assessment	0.019 J1	82.2	30.5	0.23	6.7	42.7	400
5/10/2022	Assessment	0.016 J1	94.0	30.0	0.22	7.0	44.6	390 L1
11/1/2022	Assessment	0.017 J1	77.2	29.4	0.22	6.5	43.3	370
2/7/2023	Assessment	0.017 J1	78.4	29.0	0.21	7.6	42.4	380
5/31/2023	Assessment	0.016 J1	74.8	28.5	0.20	7.0	42.2	390
10/31/2023	Assessment	0.019 J1	86.0	28.5	0.23	6.6	43.1	390
3/6/2024	Assessment	--	--	--	--	6.9	--	--
3/7/2024	Assessment	--	--	--	0.21	--	--	--
5/15/2024	Assessment	0.018 J1	77.5	28.9	0.10	7.0	44.0	370
11/13/2024	Assessment	0.016 J1	80	28.9	0.26	6.9	43.1	390

**Table 1. Groundwater Data Summary: MW-1600D**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/8/2016	Background	0.01 J1	15.4	940	0.006 J1	< 0.004 U1	0.2	0.109	2.148	0.20	0.095	< 0.0002 U1	< 0.002 U1	1.94	< 0.03 U1	0.01 J1
7/19/2016	Background	0.02 J1	17.2	946	0.005 J1	< 0.004 U1	0.2	0.094	1.615	0.22	0.021	0.020	< 0.002 U1	2.19	0.05 J1	0.054
9/19/2016	Background	0.01 J1	15.1	910	< 0.005 U1	< 0.004 U1	0.9	0.071	1.636	0.20	0.020	0.011	< 0.002 U1	1.75	< 0.03 U1	0.01 J1
11/16/2016	Background	< 0.01 U1	15.8	997	< 0.005 U1	< 0.004 U1	0.128	0.085	1.402	0.17	0.064	0.008	< 0.002 U1	1.79	0.04 J1	< 0.01 U1
1/10/2017	Background	< 0.01 U1	15.2	877	< 0.005 U1	< 0.004 U1	0.115	0.100	2.265	0.22	0.053	0.009	< 0.002 U1	1.65	< 0.03 U1	< 0.01 U1
3/7/2017	Background	< 0.01 U1	16.2	986	< 0.005 U1	< 0.004 U1	0.427	0.081	1.322	0.19	0.038	0.008	< 0.002 U1	1.78	0.05 J1	< 0.01 U1
5/8/2017	Background	0.05	15.9	914	0.020	0.02	0.170	0.096	1.104	0.21	0.073	0.006	0.005	1.64	0.1	0.050
7/17/2017	Background	0.03 J1	15.0	817	0.004 J1	< 0.005 U1	0.180	0.112	2.223	0.17	0.076	0.009	< 0.002 U1	1.56	0.04 J1	< 0.01 U1
6/4/2018	Assessment	0.02 J1	13.8	766	0.01 J1	0.02 J1	0.112	0.297	0.833	0.23	0.102	0.009	< 0.002 U1	1.62	< 0.03 U1	0.02 J1
8/14/2018	Assessment	< 0.01 U1	15.1	840	< 0.004 U1	< 0.005 U1	0.073	0.079	2.858	0.24	0.023	0.004	--	1.62	< 0.03 U1	< 0.01 U1
5/20/2019	Assessment	< 0.02 U1	20.3	873	< 0.02 U1	0.08	0.274	0.176	1.948	0.21	0.238	< 0.009 U1	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
6/25/2019	Assessment	< 0.02 U1	16.6	867	< 0.02 U1	< 0.01 U1	0.1 J1	0.146	1.121	0.22	0.135	0.01 J1	< 0.002 U1	2 J1	0.05 J1	< 0.1 U1
9/10/2019	Assessment	< 0.02 U1	16.1	884	< 0.02 U1	< 0.01 U1	0.2 J1	0.132	1.621	0.23	0.1 J1	0.00627	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	15.3	880	< 0.02 U1	< 0.01 U1	0.2 J1	0.081	2.377	0.21	< 0.05 U1	0.00573	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
5/21/2020	Assessment	< 0.02 U1	25.3	882	< 0.02 U1	< 0.01 U1	0.1 J1	0.090	1.462	0.24	0.06 J1	0.00535	< 0.002 U1	2 J1	0.06 J1	< 0.1 U1
11/12/2020	Assessment	< 0.02 U1	15.8	828	< 0.02 U1	< 0.01 U1	0.2 J1	0.072	1.593	0.25	< 0.05 U1	0.00570	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
2/3/2021	Assessment	< 0.02 U1	16.0	869	< 0.02 U1	< 0.01 U1	0.264	0.070	2.96	0.25	< 0.05 U1	0.00548	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
5/27/2021	Assessment	0.05 J1	19.2	851	0.067	0.043	2.05	0.756	1.18	0.25	1.34	0.00669	< 0.002 U1	1.9	0.17 J1	< 0.04 U1
11/10/2021	Assessment	< 0.02 U1	17.8	788	< 0.007 U1	< 0.004 U1	0.27	0.092	1.21	0.23	0.07 J1	0.00545	< 0.002 U1	3.1	< 0.09 U1	< 0.04 U1
2/16/2022	Assessment	< 0.02 U1	16.2	843	< 0.007 U1	< 0.004 U1	0.38	0.062	1.40	0.23	< 0.05 U1	0.00528	< 0.002 U1	1.7	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	0.04 J1	18.7	889	< 0.007 U1	0.028	0.33	0.096	1.32	0.22	0.06 J1	0.00509	< 0.002 U1	1.8	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	< 0.02 U1	16.0	782	< 0.007 U1	< 0.004 U1	0.24	0.044	1.82	0.22	< 0.05 U1	0.00543	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
2/7/2023	Assessment	< 0.02 U1	16.8	810	0.008 J1	< 0.004 U1	0.35	0.076	1.74	0.21	< 0.05 U1	0.00570	< 0.002 U1	3.5	< 0.09 U1	< 0.04 U1
5/31/2023	Assessment	< 0.008 U1	15.3	774	< 0.007 U1	< 0.004 U1	0.27 J1	0.081	2.20	0.20	0.05 J1	0.00498	< 0.002 U1	2.1	< 0.04 U1	< 0.02 U1
10/31/2023	Assessment	0.009 J1	16.7	1,200	< 0.007 U1	< 0.004 U1	0.35	0.066	2.06	0.23	< 0.05 U1	0.00529	< 0.002 U1	1.9	< 0.04 U1	< 0.02 U1
3/7/2024	Assessment	0.011 J1	15.9	807	< 0.007 U1	< 0.004 U1	0.20 J1	0.064	1.72	0.21	< 0.05 U1	0.00563	< 0.002 U1	1.9	< 0.04 U1	< 0.02 U1
5/15/2024	Assessment	0.009 J1	15.6	806	< 0.007 U1	0.025	0.24 J1	0.050	1.94	0.10	< 0.05 U1	0.00513	< 0.002 U1	1.8	0.04 J1	0.03 J1
11/13/2024	Assessment	< 0.008 U1	14.8	769	< 0.007 U1	0.005 J1	0.31	0.049	2.85	0.26	< 0.05 U1	0.00490	< 0.002 U1	1.7	< 0.04 U1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1600I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/8/2016	Background	0.019	79.2	33.5	0.23	--	52.2	442
7/19/2016	Background	0.019	76.0	26.7	0.23	7.3	55.3	423
9/19/2016	Background	0.004 J1	77.6	24.9	0.21	7.2	48.4	404
11/16/2016	Background	0.031	76.0	24.5	0.17	7.2	44.5	408
1/10/2017	Background	0.016	76.5	23.7	0.19	7.1	45.8	394
3/7/2017	Background	0.049	75.5	26.4	0.20	7.2	49.2	392
5/8/2017	Background	0.033	80.2	25.0	0.22	6.8	48.5	406
7/17/2017	Background	0.046	71.5	24.4	0.17	9.3	48.0	398
10/3/2017	Detection	0.051	71.1	24.4	0.21	7.3	50.7	400
12/12/2017	Detection	--	--	24.7	0.21	7.2	52.4	--
6/4/2018	Assessment	0.046	72.8	25.4	0.24	7.5	50.0	396
8/14/2018	Assessment	0.057	78.6	25.6	0.25	7.1	50.3	426
5/21/2019	Assessment	0.03 J1	71.0	25.4	0.22	7.3	52.8	411
6/25/2019	Assessment	0.02 J1	76.0	25.0	0.23	7.1	46.7	401
9/10/2019	Assessment	0.02 J1	81.1	25.6	0.24	7.2	50.8	404
3/11/2020	Assessment	--	--	--	0.22	6.9	--	--
5/21/2020	Assessment	0.02 J1	82.5	25.7	0.25	7.1	51.8	406
11/12/2020	Assessment	< 0.02 U1	72.7	24.6	0.26	6.7	49.9	392
2/3/2021	Assessment	< 0.02 U1	72.9	25.1	0.26	6.7	49.8	397
5/27/2021	Assessment	0.04 J1	73.2	25.4	0.26	7.7	50.4	410
11/10/2021	Assessment	0.019 J1	70.0	25.7	0.24	7.2	49.0	380
2/17/2022	Assessment	0.019 J1	78.6	26.6	0.24	7.0	52.9	420 P2
5/10/2022	Assessment	0.021 J1	88.3 M1, P3	27.2	0.23	6.8	54.6	410 L1
11/1/2022	Assessment	0.021 J1	72.9	25.8	0.24	6.3	52.2	410
2/7/2023	Assessment	0.021 J1	72.0	25.4	0.24	7.5	51.3	410
5/31/2023	Assessment	0.011 J1	65.5	24.4	0.22	7.3	50.6	430
10/31/2023	Assessment	0.022 J1	71.5	24.9	0.24	6.6	50.9	420
3/6/2024	Assessment	--	--	--	0.22	7.0	--	--
5/15/2024	Assessment	0.018 J1	67.2 M1	25.2	0.12	7.0	52.8	390
11/14/2024	Assessment	0.022 J1	69 M1	24.6	0.28	6.9	51.3	400

**Table 1. Groundwater Data Summary: MW-1600I**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/8/2016	Background	0.05 J1	15.9	832	< 0.005 U1	0.005 J1	0.4	1.27	7.25	0.23	0.107	0.003	< 0.002 U1	1.68	< 0.03 U1	0.02 J1
7/19/2016	Background	0.03 J1	17.9	805	< 0.005 U1	< 0.004 U1	0.3	1.38	1.902	0.23	0.099	0.010	< 0.002 U1	1.83	0.03 J1	< 0.01 U1
9/19/2016	Background	0.03 J1	16.0	778	< 0.005 U1	0.01 J1	0.2	1.13	1.55	0.21	0.037	0.010	< 0.002 U1	1.89	0.06 J1	0.065
11/16/2016	Background	0.03 J1	16.3	801	< 0.005 U1	0.01 J1	0.081	1.14	2.47	0.17	0.01 J1	0.013	< 0.002 U1	1.63	< 0.03 U1	0.02 J1
1/10/2017	Background	0.02 J1	16.7	736	< 0.005 U1	< 0.004 U1	0.158	1.20	0.9137	0.19	0.006 J1	0.005	< 0.002 U1	1.64	< 0.03 U1	0.02 J1
3/7/2017	Background	0.02 J1	16.8	696	< 0.005 U1	0.02 J1	0.270	1.13	1.624	0.20	0.054	0.005	< 0.002 U1	1.67	0.04 J1	0.03 J1
5/8/2017	Background	0.05	17.0	762	0.020	0.02	0.095	1.26	1.75	0.22	0.020	0.011	0.005	1.54	0.1	0.050
7/17/2017	Background	0.02 J1	16.8	710	< 0.004 U1	< 0.005 U1	0.397	1.27	2.009	0.17	0.108	0.010	< 0.002 U1	1.53	< 0.03 U1	0.02 J1
6/4/2018	Assessment	0.04 J1	20.6	820	< 0.004 U1	< 0.005 U1	0.061	1.48	2.59	0.24	0.02 J1	0.012	< 0.002 U1	1.98	< 0.03 U1	0.03 J1
8/14/2018	Assessment	0.02 J1	17.5	726	< 0.004 U1	< 0.005 U1	0.087	1.29	1.797	0.25	0.025	0.007	--	1.64	< 0.03 U1	0.03 J1
5/21/2019	Assessment	< 0.02 U1	17.7	737	< 0.02 U1	< 0.01 U1	0.1 J1	1.24	1.988	0.22	< 0.02 U1	< 0.009 U1	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
6/25/2019	Assessment	< 0.02 U1	17.2	740	< 0.02 U1	< 0.01 U1	< 0.04 U1	1.23	2.301	0.23	< 0.02 U1	0.009 J1	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
9/10/2019	Assessment	< 0.02 U1	16.9	722	< 0.02 U1	< 0.01 U1	0.1 J1	1.29	1.22	0.24	< 0.05 U1	0.00720	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	16.8	715	< 0.02 U1	0.01 J1	0.2 J1	1.22	2.22	0.22	0.1 J1	0.00677	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
5/21/2020	Assessment	0.03 J1	17.9	707	< 0.02 U1	0.08	0.205	1.32	2.90	0.25	0.201	0.00643	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
11/12/2020	Assessment	< 0.02 U1	18.9	698	< 0.02 U1	< 0.01 U1	0.216	1.26	1.734	0.26	< 0.05 U1	0.00656	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
2/3/2021	Assessment	< 0.02 U1	18.4	689	< 0.02 U1	< 0.01 U1	0.1 J1	1.20	2.599	0.26	< 0.05 U1	0.00626	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
5/27/2021	Assessment	0.08 J1	24.8	755	0.031 J1	0.075	1.21	2.32	1.81	0.26	1.3	0.00672	< 0.002 U1	2.2	0.15 J1	0.05 J1
11/10/2021	Assessment	0.02 J1	19.6	658	< 0.007 U1	0.005 J1	0.23	1.14	2.41	0.24	0.08 J1	0.00643	< 0.002 U1	1.5	< 0.09 U1	< 0.04 U1
2/17/2022	Assessment	0.02 J1	20.2	770	< 0.007 U1	0.013 J1	0.11 J1	1.17	3.18	0.24	0.07 J1	0.00645	< 0.002 U1	1.6	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	0.02 J1	19.5	729 M1, P3	< 0.007 U1	< 0.004 U1	0.25	1.22	2.13	0.23	< 0.05 U1	0.00603	< 0.002 U1	1.7	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	0.04 J1	22.0	679	< 0.007 U1	0.008 J1	0.33	1.25	1.40	0.24	0.20	0.00690	< 0.002 U1	1.6	< 0.09 U1	< 0.04 U1
2/7/2023	Assessment	0.02 J1	17.8	662	< 0.007 U1	< 0.004 U1	0.26	1.18	2.73	0.24	0.06 J1	0.00707	< 0.002 U1	1.7	< 0.09 U1	< 0.04 U1
5/31/2023	Assessment	0.030 J1	18.0	593	< 0.007 U1	< 0.004 U1	0.21 J1	1.09	1.84	0.22	0.12 J1	0.00573	< 0.002 U1	1.6	< 0.04 U1	< 0.02 U1
10/31/2023	Assessment	0.155	57.4	1,010 M1	0.011 J1	0.026	0.38	1.50	2.65	0.24	0.70	0.00636	< 0.002 U1	1.7	0.12 J1	0.03 J1
3/6/2024	Assessment	0.024 J1	17.2	646	< 0.007 U1	0.007 J1	0.20 J1	1.09	2.66	0.22	< 0.05 U1	0.00649	< 0.002 U1	1.6	< 0.04 U1	< 0.02 U1
5/15/2024	Assessment	0.044 J1	20.7	628 M1	< 0.007 U1	0.035	0.23 J1	1.07	2.95	0.12	0.17 J1	0.00622	< 0.002 U1	1.5	< 0.04 U1	< 0.02 U1
11/14/2024	Assessment	0.055 J1	21.4	623 M1	< 0.007 U1	0.01 J1	0.37	1.27 B1	3.11	0.28	0.27	0.00646	< 0.002 U1	1.7	0.05 J1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1600S**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/8/2016	Background	0.045	69.8	32.0	0.33	6.6	75.8	491
7/19/2016	Background	0.045	67.0	29.9	0.34	6.8	76.0	448
9/19/2016	Background	0.026	63.2	21.3	0.32	6.4	60.8	408
11/16/2016	Background	0.061	63.5	27.1	0.28	6.8	54.4	426
1/10/2017	Background	0.034	68.5	23.7	0.32	6.5	53.1	433
3/7/2017	Background	0.129	63.2	25.0	0.37	6.8	58.5	402
5/8/2017	Background	0.039	69.0	26.0	0.40	6.6	54.6	427
7/17/2017	Background	0.068	58.0	18.0	0.36	9.5	41.0	393
10/3/2017	Detection	0.049	61.4	27.8	0.37	6.8	54.9	430
12/13/2017	Detection	--	--	36.1	0.36	6.7	68.0	--
6/4/2018	Assessment	0.076	60.9	36.5	0.56	7.3	41.3	412
8/15/2018	Assessment	0.088	63.7	44.9	0.51	7.0	42.3	416
5/21/2019	Assessment	0.05 J1	57.4	27.9	0.44	6.9	57.4	423
6/25/2019	Assessment	0.05 J1	62.7	21.4	0.47	6.8	40.9	398
9/10/2019	Assessment	0.04 J1	64.8	23.9	0.46	6.9	45.0	383
3/11/2020	Assessment	--	--	--	0.42	6.5	--	--
5/21/2020	Assessment	0.04 J1	66.6	30.7	0.45	7.2	53.8	412
11/12/2020	Assessment	0.04 J1	59.6	24.6	0.40	6.5	60.4	397
2/3/2021	Assessment	0.04 J1	60.3	26.7	0.44	6.1	52.0	379
5/27/2021	Assessment	0.041 J1	70.2	32.6	0.51	7.3	40.4	420
11/10/2021	Assessment	0.038 J1	56.4	43.0	0.42	6.3	42.7	380
2/17/2022	Assessment	0.038 J1	61.7	35.8	0.46	6.4	43.3	380 P2
5/10/2022	Assessment	0.025 J1	63.5	27.0	0.55	6.7	39.6	380 L1
11/1/2022	Assessment	0.043 J1	57.2	35.7	0.37	6.7	53.3	380
2/7/2023	Assessment	0.037 J1	53.6	22.4	0.54	7.1	34.1	370
6/1/2023	Assessment	0.027 J1	51.3	30.8	0.54	5.3	41.6	390
10/31/2023	Assessment	0.040 J1	56.2	27.7	0.53	6.3	34.4	380
3/6/2024	Assessment	--	--	--	0.50	6.7	--	--
5/15/2024	Assessment	0.17 J1	292	34.3	0.46	6.9	33.3	380
11/13/2024	Assessment	0.039 J1	59	37.1	0.46	6.7	44.7	400

**Table 1. Groundwater Data Summary: MW-1600S**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/8/2016	Background	0.02 J1	0.67	36.1	< 0.005 U1	0.02 J1	0.2	0.243	0.149	0.33	0.118	0.003	0.002 J1	0.61	0.5	< 0.01 U1
7/19/2016	Background	0.02 J1	0.67	37.9	< 0.005 U1	0.02 J1	0.4	0.099	0.52826	0.34	0.048	0.038	< 0.002 U1	0.56	0.3	0.01 J1
9/19/2016	Background	0.02 J1	0.58	30.9	< 0.005 U1	0.01 J1	0.2	0.129	0.0715	0.32	0.087	0.019	< 0.002 U1	0.56	0.3	0.02 J1
11/16/2016	Background	0.04 J1	0.75	32.9	0.008 J1	0.03	0.284	0.690	0.505	0.28	0.360	0.024	< 0.002 U1	0.64	0.4	0.04 J1
1/10/2017	Background	0.02 J1	0.65	29.3	0.006 J1	0.01 J1	0.892	0.306	1.8182	0.32	0.151	0.016	< 0.002 U1	0.60	0.4	0.01 J1
3/7/2017	Background	0.03 J1	0.70	30.5	0.008 J1	0.02 J1	0.459	0.587	1.697	0.37	0.319	0.013	< 0.002 U1	0.66	0.5	0.01 J1
5/8/2017	Background	0.05	0.65	26.9	0.020	0.02	0.163	0.398	0.305	0.40	0.195	0.019	0.005	0.56	0.5	0.050
7/17/2017	Background	0.02 J1	0.61	26.1	0.006 J1	0.02 J1	0.302	0.441	0.117	0.36	0.233	0.019	< 0.002 U1	0.74	0.5	0.02 J1
6/4/2018	Assessment	0.03 J1	0.49	22.7	0.005 J1	0.01 J1	0.109	0.128	1.573	0.56	0.069	0.019	< 0.002 U1	0.72	0.5	0.02 J1
8/15/2018	Assessment	0.02 J1	0.45	23.7	< 0.004 U1	0.01 J1	0.277	0.105	0.646	0.51	0.053	0.014	--	0.65	0.4	0.02 J1
5/21/2019	Assessment	0.03 J1	0.50	26.7	< 0.02 U1	0.01 J1	1.34	0.127	0.6234	0.44	0.07 J1	0.01 J1	< 0.002 U1	0.7 J1	0.6	< 0.1 U1
6/25/2019	Assessment	< 0.02 U1	0.48	22.0	< 0.02 U1	0.01 J1	0.08 J1	0.193	0.528	0.47	0.09 J1	0.03 J1	< 0.002 U1	0.5 J1	0.4	< 0.1 U1
9/10/2019	Assessment	< 0.02 U1	0.46	21.9	< 0.02 U1	0.01 J1	0.2 J1	0.149	0.2093	0.46	0.08 J1	0.0126	< 0.002 U1	0.6 J1	0.5	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	0.40	22.1	< 0.02 U1	< 0.01 U1	0.1 J1	0.04 J1	0.2165	0.42	< 0.05 U1	0.0126	< 0.002 U1	0.5 J1	0.4	< 0.1 U1
5/21/2020	Assessment	0.02 J1	0.40	23.2	< 0.02 U1	0.09	0.2 J1	0.05 J1	0.662	0.45	< 0.05 U1	0.0135	< 0.002 U1	0.4 J1	0.4	< 0.1 U1
11/12/2020	Assessment	0.04 J1	0.40	23.2	< 0.02 U1	0.01 J1	0.342	0.03 J1	0.9926	0.40	< 0.05 U1	0.0144	< 0.002 U1	< 0.4 U1	0.7	< 0.1 U1
2/3/2021	Assessment	< 0.02 U1	0.41	22.9	< 0.02 U1	< 0.01 U1	0.319	0.05 J1	1.11	0.44	< 0.05 U1	0.0130	< 0.002 U1	0.5 J1	0.3	< 0.1 U1
5/27/2021	Assessment	0.15	4.39	57.9	0.106	0.191	1.92	9.95	0.88	0.51	4.97	0.0111	0.004 J1	0.9	0.73	0.05 J1
11/10/2021	Assessment	0.03 J1	0.66	26.8	0.014 J1	0.041	0.51	1.12	0.45	0.42	0.63	0.0123	< 0.002 U1	0.2 J1	0.41 J1	< 0.04 U1
2/17/2022	Assessment	< 0.02 U1	0.39	21.0	< 0.007 U1	0.011 J1	0.32	0.074	1.27	0.46	< 0.05 U1	0.0116	< 0.002 U1	0.6	0.51	< 0.04 U1
5/10/2022	Assessment	0.02 J1	0.43	19.5	< 0.007 U1	0.011 J1	0.28	0.122	2.69	0.55	0.06 J1	0.0106	< 0.002 U1	0.7	0.63	< 0.04 U1
11/1/2022	Assessment	0.03 J1	0.35	22.9	< 0.007 U1	0.014 J1	0.26	0.030	0.72	0.37	< 0.05 U1	0.0154	< 0.002 U1	0.4 J1	1.13	< 0.04 U1
2/7/2023	Assessment	0.02 J1	0.38	18.1	< 0.007 U1	0.011 J1	0.35	0.119	1.17	0.54	0.06 J1	0.0115	< 0.002 U1	0.6	0.50	< 0.04 U1
6/1/2023	Assessment	0.017 J1	0.31	18.3	< 0.007 U1	0.006 J1	0.27 J1	0.062	0.42	0.54	< 0.05 U1	0.0104	< 0.002 U1	0.5	0.52	< 0.02 U1
10/31/2023	Assessment	0.025 J1	0.41	20.6	< 0.007 U1	0.012 J1	0.43	0.106	0.89	0.53	0.05 J1	0.0101	< 0.002 U1	0.7	0.74	0.04 J1
3/6/2024	Assessment	0.018 J1	0.34	20.4	< 0.007 U1	0.011 J1	0.19 J1	0.039	1.13	0.50	< 0.05 U1	0.0103	< 0.002 U1	0.6	0.62	0.03 J1
5/15/2024	Assessment	0.10 J1	1.7	91.8	< 0.04 U1	0.06 J1	1.3 J1	0.27	0.99	0.46	< 0.3 U1	0.0479	< 0.002 U1	3.2	2.6	< 0.1 U1
11/13/2024	Assessment	0.035 J1	0.34	21.2	< 0.007 U1	0.017 J1	0.29 J1	0.036	0.96	0.46	0.05 J1	0.013 J1	< 0.002 U1	0.5	0.75	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1601D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/27/2016	Background	0.038	79.7	21.8	0.22	7.5	21.9	460
7/19/2016	Background	0.035	89.0	18.9	0.22	7.4	18.9	412
9/20/2016	Background	0.026	87.0	22.6	0.17	7.2	20.4	410
11/16/2016	Background	0.035	89.5	21.8	0.15	7.4	18.0	413
1/10/2017	Background	0.029	90.7	19.5	0.19	6.8	20.3	407
3/7/2017	Background	0.055	85.2	28.7	0.17	7.1	25.4	392
5/9/2017	Background	0.038	90.8	22.5	0.17	6.7	21.3	399
7/17/2017	Background	0.090	77.7	21.3	0.17	6.8	21.4	393
10/4/2017	Detection	0.044	86.8	17.9	0.16	7.3	18.8	390
12/12/2017	Detection	--	--	18.8	0.16	7.2	20.2	--
6/5/2018	Assessment	0.075	87.6	23.8	0.19	6.4	25.0	393
8/15/2018	Assessment	0.122	86.5	19.4	0.17	7.3	19.6	418
5/24/2019	Assessment	0.03 J1	85.4	23.6	0.19	7.1	24.9	414
6/26/2019	Assessment	0.04 J1	85.9	18.7	0.16	7.2	22.9	409
9/9/2019	Assessment	0.03 J1	84.4	19.9	0.18	7.2	18.2	404
3/11/2020	Assessment	--	--	--	0.17	6.9	--	--
5/21/2020	Assessment	0.02 J1	88.5	32.4	0.20	7.1	41.3	409
11/16/2020	Assessment	0.03 J1	85.0	18.6	0.18	6.2	19.1	409
2/3/2021	Assessment	0.03 J1	90.6	19.4	0.20	7.0	20.0	396
5/26/2021	Assessment	0.029 J1	87.6	18.9	0.20	9.4	18.9	410
11/10/2021	Assessment	0.029 J1	86.3	19.1	0.18	6.6	17.4	390
2/16/2022	Assessment	0.028 J1	86.9	20.0	0.18	6.7	21.3	430
5/10/2022	Assessment	0.027 J1	101	23.2	0.17	6.8	25.7	410 L1
11/1/2022	Assessment	0.031 J1	85.5	18.8	0.18	6.8	17.8	400
2/8/2023	Assessment	0.029 J1	84.6	20.4	0.17	7.5	20.4	410
6/1/2023	Assessment	0.022 J1	73.5	--	--	5.6	--	--
6/6/2023	Assessment	--	--	23.9	0.17	7.4	26.4	410
11/1/2023	Assessment	0.027 J1	75.6	19.0	0.18	6.6	18.3	410
3/6/2024	Assessment	--	--	--	0.16	6.9	--	--
5/16/2024	Assessment	0.026 J1	75.5	20.8	0.21	7.1	22.4	380
11/15/2024	Assessment	0.024 J1	76	20.8	0.17	6.8	19.8	410

**Table 1. Groundwater Data Summary: MW-1601D**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/27/2016	Background	0.03 J1	6.04	491	0.024	0.12	0.8	1.36	1.116	0.22	1.05	0.003	< 0.002 U1	2.54	0.1	0.01 J1
7/19/2016	Background	0.02 J1	8.20	540	< 0.005 U1	0.01 J1	0.4	0.502	2.248	0.22	0.031	0.005	< 0.002 U1	3.96	0.07 J1	0.055
9/20/2016	Background	0.01 J1	8.59	602	< 0.005 U1	< 0.004 U1	0.2	0.224	1.732	0.17	0.01 J1	< 0.0002 U1	< 0.002 U1	3.08	< 0.03 U1	< 0.01 U1
11/16/2016	Background	0.02 J1	9.20	616	< 0.005 U1	0.01 J1	0.089	0.174	0.946	0.15	0.022	0.015	< 0.002 U1	3.14	< 0.03 U1	0.04 J1
1/10/2017	Background	< 0.01 U1	8.95	527	< 0.005 U1	< 0.004 U1	0.293	0.197	1.929	0.19	0.006 J1	0.004	< 0.002 U1	3.10	< 0.03 U1	< 0.01 U1
3/7/2017	Background	< 0.01 U1	9.32	582	< 0.005 U1	< 0.004 U1	0.417	0.148	0.868	0.17	0.021	0.004	< 0.002 U1	2.66	< 0.03 U1	< 0.01 U1
5/9/2017	Background	0.05	9.47	583	0.020	0.02	0.121	0.152	0.983	0.17	0.026	0.008	0.005	2.84	0.1	0.050
7/17/2017	Background	< 0.01 U1	9.38	532	< 0.004 U1	0.006 J1	0.129	0.103	3.139	0.17	0.031	0.006	< 0.002 U1	2.67	< 0.03 U1	< 0.01 U1
6/5/2018	Assessment	0.03 J1	11.4	552	< 0.004 U1	< 0.005 U1	0.055	0.149	2.095	0.19	0.022	0.007	< 0.002 U1	3.34	< 0.03 U1	< 0.01 U1
8/15/2018	Assessment	0.02 J1	10.3	540	< 0.004 U1	0.01 J1	0.387	0.120	--	0.17	0.084	< 0.0002 U1	--	3.11	< 0.03 U1	0.02 J1
5/24/2019	Assessment	< 0.02 U1	10.3	638	< 0.02 U1	< 0.01 U1	0.06 J1	0.090	0.977	0.19	< 0.02 U1	0.01 J1	< 0.002 U1	2.63	0.03 J1	< 0.1 U1
6/26/2019	Assessment	< 0.02 U1	9.80	542	< 0.02 U1	< 0.01 U1	0.07 J1	0.075	0.986	0.16	0.02 J1	0.02 J1	< 0.002 U1	2.94	< 0.03 U1	< 0.1 U1
9/9/2019	Assessment	< 0.02 U1	11.0	575	< 0.02 U1	< 0.01 U1	0.08 J1	0.054	0.702	0.18	< 0.05 U1	0.00170	< 0.002 U1	3.15	< 0.03 U1	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	10.7	575	< 0.02 U1	< 0.01 U1	0.1 J1	0.059	0.789	0.17	< 0.05 U1	0.00170	< 0.002 U1	2.77	0.04 J1	< 0.1 U1
5/21/2020	Assessment	< 0.02 U1	10.9	670	< 0.02 U1	0.05 J1	0.1 J1	0.077	1.672	0.20	< 0.05 U1	0.00265	< 0.002 U1	2.12	< 0.03 U1	< 0.1 U1
11/16/2020	Assessment	< 0.02 U1	11.0	524	< 0.02 U1	< 0.01 U1	0.2 J1	0.05 J1	1.489	0.18	< 0.05 U1	0.00163	< 0.002 U1	2.89	< 0.03 U1	< 0.1 U1
2/3/2021	Assessment	< 0.02 U1	12.4	567	< 0.02 U1	0.01 J1	0.241	0.052	2.714	0.20	< 0.05 U1	0.00147	< 0.002 U1	3.23	< 0.03 U1	< 0.1 U1
5/26/2021	Assessment	0.09 J1	11.4	536	< 0.007 U1	0.015 J1	0.13 J1	0.05	1.41	0.20	< 0.05 U1	0.0014	< 0.002 U1	3.1	< 0.09 U1	< 0.04 U1
11/10/2021	Assessment	< 0.02 U1	11.5	509	< 0.007 U1	< 0.004 U1	0.21	0.051	0.77	0.18	< 0.05 U1	0.00133	< 0.002 U1	3.1	< 0.09 U1	< 0.04 U1
2/16/2022	Assessment	< 0.02 U1	11.3	522	< 0.007 U1	0.007 J1	0.16 J1	0.054	1.66	0.18	< 0.05 U1	0.00136	< 0.002 U1	3.0	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	0.02 J1	11.5	594	< 0.007 U1	0.025	0.37	0.102	1.77	0.17	0.06 J1	0.00156	< 0.002 U1	2.9	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	< 0.02 U1	11.5	515	< 0.007 U1	0.004 J1	0.21	0.033	1.28	0.18	< 0.05 U1	0.00129	< 0.002 U1	3.2	< 0.09 U1	< 0.04 U1
2/8/2023	Assessment	< 0.02 U1	11.7	530	< 0.007 U1	< 0.004 U1	0.34	0.048	2.09	0.17	< 0.05 U1	0.00150	< 0.002 U1	3.1	< 0.09 U1	< 0.04 U1
6/1/2023	Assessment	0.018 J1	9.79	494	< 0.007 U1	< 0.004 U1	0.18 J1	0.055	0.88	--	< 0.05 U1	0.00160	< 0.002 U1	2.5	< 0.04 U1	< 0.02 U1
6/6/2023	Assessment	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	
11/1/2023	Assessment	0.01 J1	10.6	443	< 0.007 U1	< 0.004 U1	0.25 J1	0.045	1.88	0.18	< 0.05 U1	0.00106	< 0.002 U1	3.2	< 0.04 U1	< 0.02 U1
3/6/2024	Assessment	0.013 J1	11.1	529 M1	< 0.007 U1	0.008 J1	0.20 J1	0.053	1.49	0.16	< 0.05 U1	0.00159	< 0.002 U1	2.9	< 0.04 U1	< 0.02 U1
5/16/2024	Assessment	0.012 J1	9.65	470	< 0.007 U1	0.019 J1	0.28 J1	0.059	1.29	0.21	< 0.05 U1	0.00139	< 0.002 U1	2.9	< 0.04 U1	< 0.02 U1
11/15/2024	Assessment	< 0.008 U1	10.3	451	< 0.007 U1	< 0.004 U1	0.33	0.052 B1	1.30	0.17	< 0.05 U1	0.00108	< 0.002 U1	2.8	< 0.04 U1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1601I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/8/2016	Background	0.024	84.9	26.3	0.21	7.4	54.0	419
7/19/2016	Background	0.023	84.1	33.3	0.25	7.2	54.0	430
9/20/2016	Background	0.043	85.2	32.3	0.22	7.1	49.1	432
11/16/2016	Background	0.026	91.6	31.7	0.19	7.2	46.7	434
1/10/2017	Background	0.018	92.6	31.3	0.19	6.7	47.7	429
3/7/2017	Background	0.029	84.0	32.5	0.22	7.1	48.5	427
5/9/2017	Background	0.079	90.0	33.1	0.21	6.8	49.1	422
7/17/2017	Background	0.039	82.0	32.0	0.19	9.5	49.9	418
10/4/2017	Detection	0.088	77.5	31.6	0.20	6.8	51.8	428
12/12/2017	Detection	--	--	30.5	0.21	7.1	52.8	--
6/5/2018	Assessment	0.052	87.8	31.4	0.24	7.6	50.0	424
8/15/2018	Assessment	0.054	91.7	31.3	0.25	7.3	49.9	429
6/26/2019	Assessment	0.03 J1	85.0	31.2	0.21	7.2	50.8	439
9/9/2019	Assessment	0.02 J1	85.1	30.8	0.22	7.1	42.7	426
3/11/2020	Assessment	--	--	--	0.23	6.9	--	--
5/21/2020	Assessment	0.02 J1	87.8	31.5	0.26	6.8	52.1	435
11/16/2020	Assessment	0.02 J1	80.2	29.8	0.24	6.2	49.5	418
2/3/2021	Assessment	0.02 J1	85.7	29.8	0.26	6.8	50.4	414
5/26/2021	Assessment	0.023 J1	95.8	30.0	0.27	9.4	50.2	420
11/10/2021	Assessment	0.025 J1	85.8	29.4	0.25	6.6	48.3	420
2/16/2022	Assessment	0.023 J1	86.6	29.9	0.24	6.6	51.0	430
5/10/2022	Assessment	0.022 J1	94.9	31.0	0.24	6.7	51.5	420 L1
11/1/2022	Assessment	0.025 J1	81.1	29.8	0.24	7.0	49.9	420
2/8/2023	Assessment	0.027 J1	79.7	29.2	0.24	7.2	48.7	420
6/1/2023	Assessment	0.023 J1	76.7	28.6	0.23	5.6	48.8	420
11/1/2023	Assessment	0.023 J1	72.4	28.5	0.25	6.5	48.5	410
3/6/2024	Assessment	--	--	--	--	6.9	--	--
3/7/2024	Assessment	--	--	--	0.23	--	--	--
5/16/2024	Assessment	0.021 J1	72.9	29.0	0.28	7.0	49.9	410
11/15/2024	Assessment	0.021 J1	74.0	28.4	0.24	6.9	47.6	430

**Table 1. Groundwater Data Summary: MW-1601I**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/8/2016	Background	0.02 J1	11.4	612	< 0.005 U1	< 0.004 U1	0.1	1.84	1.432	0.21	0.042	0.003	< 0.002 U1	2.80	< 0.03 U1	< 0.01 U1
7/19/2016	Background	0.02 J1	14.6	620	< 0.005 U1	< 0.004 U1	0.9	1.98	1.036	0.25	0.045	0.004	< 0.002 U1	2.81	< 0.03 U1	< 0.01 U1
9/20/2016	Background	0.02 J1	14.9	681	< 0.005 U1	< 0.004 U1	0.2	1.68	2.329	0.22	0.02 J1	0.008	< 0.002 U1	2.53	< 0.03 U1	0.01 J1
11/16/2016	Background	0.02 J1	16.2	689	< 0.005 U1	0.007 J1	0.110	1.68	1.451	0.19	0.030	0.002	< 0.002 U1	2.36	< 0.03 U1	0.02 J1
1/10/2017	Background	0.01 J1	16.2	605	< 0.005 U1	< 0.004 U1	0.387	1.58	0.993	0.19	0.02 J1	0.007	< 0.002 U1	2.24	< 0.03 U1	0.02 J1
3/7/2017	Background	0.03 J1	16.9	650	< 0.005 U1	< 0.004 U1	0.267	1.59	0.986	0.22	0.070	0.010	< 0.002 U1	2.74	0.06 J1	0.03 J1
5/9/2017	Background	0.05	17.9	634	0.020	0.02	0.156	1.69	1.064	0.21	0.052	0.014	0.005	2.23	0.1	0.050
7/17/2017	Background	0.02 J1	18.0	613	< 0.004 U1	< 0.005 U1	0.160	1.74	1.276	0.19	0.042	0.011	< 0.002 U1	2.13	< 0.03 U1	0.02 J1
6/5/2018	Assessment	0.02 J1	18.6	631	0.008 J1	0.01 J1	0.21	1.73	1.538	0.24	0.201	0.013	< 0.002 U1	2.48	0.05 J1	0.04 J1
8/15/2018	Assessment	0.02 J1	19.1	626	< 0.004 U1	0.009 J1	0.074	1.63	2.274	0.25	0.067	0.009	--	2.21	< 0.03 U1	0.02 J1
6/26/2019	Assessment	< 0.02 U1	18.0	619	< 0.02 U1	< 0.01 U1	0.06 J1	1.50	1.862	0.21	0.04 J1	0.02 J1	< 0.002 U1	2.28	< 0.03 U1	< 0.1 U1
9/9/2019	Assessment	0.04 J1	39.5	670	< 0.02 U1	0.07	0.250	1.63	1.522	0.22	0.251	0.00672	< 0.002 U1	2.26	0.04 J1	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	17.4	621	< 0.02 U1	< 0.01 U1	0.1 J1	1.23	1.202	0.23	< 0.05 U1	0.00646	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
5/21/2020	Assessment	< 0.02 U1	17.2	608	< 0.02 U1	< 0.01 U1	0.1 J1	1.26	0.90	0.26	< 0.05 U1	0.00621	< 0.002 U1	2.10	< 0.03 U1	< 0.1 U1
11/16/2020	Assessment	< 0.02 U1	17.8	586	< 0.02 U1	< 0.01 U1	0.2 J1	1.22	2.329	0.24	< 0.05 U1	0.00688	< 0.002 U1	2.02	< 0.03 U1	< 0.1 U1
2/3/2021	Assessment	< 0.02 U1	19.8	634	< 0.02 U1	< 0.01 U1	0.207	1.33	1.949	0.26	0.09 J1	0.00616	< 0.002 U1	2.24	< 0.03 U1	< 0.1 U1
5/26/2021	Assessment	< 0.02 U1	18.3	589 M1, P3	< 0.007 U1	0.039	0.05 J1	1.21	1.50	0.27	< 0.05 U1	0.00624	< 0.002 U1	2.0	< 0.09 U1	< 0.04 U1
11/10/2021	Assessment	< 0.02 U1	19.0	625	< 0.007 U1	< 0.004 U1	0.22	1.19	2.11	0.25	< 0.05 U1	0.00632	< 0.002 U1	2.2	< 0.09 U1	0.04 J1
2/16/2022	Assessment	< 0.02 U1	19.1	643	< 0.007 U1	< 0.004 U1	0.40	1.30	1.49	0.24	< 0.05 U1	0.00627	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	< 0.02 U1	19.5	627	< 0.007 U1	0.011 J1	0.24	1.24	1.97	0.24	< 0.05 U1	0.00590	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	< 0.02 U1	18.5	593	< 0.007 U1	< 0.004 U1	0.25	1.19	1.16	0.24	< 0.05 U1	0.00682	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
2/8/2023	Assessment	< 0.02 U1	18.6	594	< 0.007 U1	< 0.004 U1	0.30	1.22	1.99	0.24	< 0.05 U1	0.00696	< 0.002 U1	2.3	< 0.09 U1	0.05 J1
6/1/2023	Assessment	0.031 J1	17.3	568	< 0.007 U1	< 0.004 U1	0.29 J1	1.11	2.00	0.23	< 0.05 U1	0.00620	< 0.002 U1	2.2	< 0.04 U1	< 0.02 U1
11/1/2023	Assessment	0.012 J1	17.7	562	< 0.007 U1	< 0.004 U1	0.20 J1	1.16	0.95	0.25	< 0.05 U1	0.00648	< 0.002 U1	2.2	< 0.04 U1	0.02 J1
3/7/2024	Assessment	0.018 J1	18.7	611	< 0.007 U1	0.005 J1	0.22 J1	1.19	1.85	0.23	< 0.05 U1	0.00674	< 0.002 U1	2.2	< 0.04 U1	0.03 J1
5/16/2024	Assessment	0.014 J1	16.7	544	< 0.007 U1	0.007 J1	0.20 J1	1.05	1.69	0.28	< 0.05 U1	0.00618	< 0.002 U1	2.1	< 0.04 U1	< 0.02 U1
11/15/2024	Assessment	0.011 J1	16.0	530	< 0.007 U1	0.005 J1	0.23 J1	1.16 B1	1.00	0.24	< 0.05 U1	0.00573	< 0.002 U1	2.0	< 0.04 U1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1601S**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/8/2016	Background	0.108	76.9	45.9	0.34	7.6	39.2	440
7/19/2016	Background	0.106	71.8	46.4	0.36	7.2	40.1	415
9/20/2016	Background	0.094	74.2	43.5	0.33	7.2	37.6	442
11/16/2016	Background	0.100	78.2	42.3	0.26	7.2	36.4	442
1/10/2017	Background	0.113	78.5	42.0	0.28	6.8	35.9	424
3/7/2017	Background	0.098	79.2	41.1	0.30	7.2	42.5	413
5/8/2017	Background	0.092	86.7	41.9	0.31	6.8	44.0	389
7/17/2017	Background	0.077	76.8	41.7	0.25	6.6	40.5	443
10/4/2017	Detection	0.113	73.5	40.9	0.29	7.3	41.6	441
12/12/2017	Detection	--	--	36.9	0.33	7.2	43.0	--
6/5/2018	Assessment	0.142	66.5	34.8	0.41	7.4	26.5	366
8/15/2018	Assessment	0.208	70.8	33.7	0.42	7.2	31.3	374
5/24/2019	Assessment	0.06 J1	77.2	38.5	0.36	7.2	41.8	451
6/25/2019	Assessment	0.07 J1	75.9	35.3	0.31	7.3	51.4	456
9/9/2019	Assessment	0.068	79.6	37.6	0.31	7.2	52.9	445
3/11/2020	Assessment	--	--	--	0.34	7.1	--	--
5/21/2020	Assessment	0.076	82.3	40.6	0.37	7.1	58.3	462
11/16/2020	Assessment	0.092	74.0	40.1	0.35	6.4	53.0	432
2/3/2021	Assessment	0.125	74.0	39.7	0.40	7.1	60.6	432
5/26/2021	Assessment	0.095	77.7	37.6	0.43	9.4	57.2	400
11/10/2021	Assessment	0.113	68.6	36.7	0.42	6.9	60.3	400
2/16/2022	Assessment	0.121	64.3	33.1	0.42	6.9	55.0	380
5/10/2022	Assessment	0.109	66.7	36.1	0.40	7.0	54.3	380 L1
11/1/2022	Assessment	0.140	68.3	33.7	0.38	7.1	62.2	390
2/8/2023	Assessment	0.144	65.8 M1	35.2	0.39	7.9	54.4	370
6/1/2023	Assessment	0.116	63.0	36.5	0.36	5.8	52.8	390
10/31/2023	Assessment	0.142	60.1	36.2	0.39	6.8	50.0	370
3/5/2024	Assessment	--	--	--	--	7.2	--	--
3/6/2024	Assessment	--	--	--	0.36	--	--	--
5/16/2024	Assessment	0.113	61.1	38.5	0.43	7.1	48.7	370
11/15/2024	Assessment	0.103	61	36.2	0.36	7.3	51.9	270

**Table 1. Groundwater Data Summary: MW-1601S****Rockport - BAP****Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/8/2016	Background	0.02 J1	1.90	49.4	0.006 J1	0.01 J1	0.2	0.957	0.788	0.34	0.220	< 0.0002 U1	< 0.002 U1	2.17	1.3	0.05 J1
7/19/2016	Background	0.02 J1	2.12	47.7	< 0.005 U1	0.007 J1	0.6	0.478	1.26	0.36	0.114	0.024	< 0.002 U1	1.91	1.3	< 0.01 U1
9/20/2016	Background	0.02 J1	1.99	41.6	< 0.005 U1	0.006 J1	0.2	0.381	0.4671	0.33	0.127	0.005	< 0.002 U1	1.40	1.3	0.03 J1
11/16/2016	Background	0.03 J1	2.00	39.0	< 0.005 U1	0.01 J1	0.123	0.274	0.1634	0.26	0.084	0.009	< 0.002 U1	2.17	1.3	0.03 J1
1/10/2017	Background	0.05 J1	2.00	43.5	< 0.005 U1	0.03	0.279	0.520	0.717	0.28	0.247	0.006	< 0.002 U1	1.61	1.4	0.104
3/7/2017	Background	0.02 J1	2.25	50.7	< 0.005 U1	0.01 J1	1.52	0.980	0.1969	0.30	0.348	0.010	< 0.002 U1	1.49	1.4	0.01 J1
5/8/2017	Background	0.05	2.02	42.6	0.020	0.02	0.192	0.411	0.3203	0.31	0.119	0.010	0.005	1.24	1.7	0.050
7/17/2017	Background	0.05	2.70	70.0	0.01 J1	0.03	1.05	2.67	1.812	0.25	0.807	0.012	0.003 J1	1.46	1.8	0.04 J1
6/5/2018	Assessment	0.04 J1	2.45	44.0	0.02 J1	0.24	0.579	0.615	0.261	0.41	0.349	0.012	< 0.002 U1	1.79	0.5	< 0.01 U1
8/15/2018	Assessment	0.03 J1	2.28	38.0	0.005 J1	0.009 J1	0.114	0.557	0.398	0.42	0.141	0.004	--	1.81	1.1	0.05 J1
5/24/2019	Assessment	< 0.02 U1	2.05	37.2	< 0.02 U1	< 0.01 U1	0.08 J1	0.02 J1	0.0711	0.36	0.03 J1	0.01 J1	< 0.002 U1	1 J1	1.7	< 0.1 U1
6/25/2019	Assessment	< 0.02 U1	2.06	44.2	< 0.02 U1	< 0.01 U1	0.1 J1	0.649	0.248	0.31	0.165	0.01 J1	< 0.002 U1	1 J1	1.4	< 0.1 U1
9/9/2019	Assessment	0.02 J1	2.30	51.4	< 0.02 U1	0.02 J1	0.452	1.14	0.914	0.31	0.325	0.00691	< 0.002 U1	1 J1	1.2	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	1.95	37.9	< 0.02 U1	< 0.01 U1	0.2 J1	0.203	1.649	0.34	0.05 J1	0.00618	< 0.002 U1	1 J1	0.9	< 0.1 U1
5/21/2020	Assessment	< 0.02 U1	1.94	36.2	< 0.02 U1	< 0.01 U1	0.227	0.053	0.084	0.37	< 0.05 U1	0.00632	< 0.002 U1	1 J1	1.5	< 0.1 U1
11/16/2020	Assessment	< 0.02 U1	1.97	34.9	< 0.02 U1	< 0.01 U1	0.347	0.077	0.0911	0.35	< 0.05 U1	0.00609	< 0.002 U1	1 J1	1.6	< 0.1 U1
2/3/2021	Assessment	< 0.02 U1	2.10	32.8	< 0.02 U1	< 0.01 U1	0.640	0.070	0.7085	0.40	< 0.05 U1	0.00563	< 0.002 U1	2 J1	1.2	< 0.1 U1
5/26/2021	Assessment	0.07 J1	2.01	30.2	< 0.007 U1	0.005 J1	0.77	0.05	0.87	0.43	0.24	0.00507	< 0.002 U1	1.8	0.66	< 0.04 U1
11/10/2021	Assessment	< 0.02 U1	2.23	30.2	< 0.007 U1	< 0.004 U1	0.75	0.074	0.72	0.42	< 0.05 U1	0.00489	< 0.002 U1	1.9	0.67	< 0.04 U1
2/16/2022	Assessment	< 0.02 U1	2.32	30.3	< 0.007 U1	0.044	0.72	0.257	1.58	0.42	0.07 J1	0.00464	< 0.002 U1	2.2	0.76	< 0.04 U1
5/10/2022	Assessment	< 0.02 U1	2.47	31.4	< 0.007 U1	0.006 J1	0.34	0.452	0.41	0.40	0.12 J1	0.00458	< 0.002 U1	2.1	0.76	< 0.04 U1
11/1/2022	Assessment	< 0.02 U1	2.17	30.4	< 0.007 U1	< 0.004 U1	0.25	0.049	1.09	0.38	< 0.05 U1	0.00537	< 0.002 U1	1.9	1.0	< 0.04 U1
2/8/2023	Assessment	< 0.02 U1	2.28	28.9	< 0.007 U1	< 0.004 U1	0.36	0.051	0.38	0.39	< 0.05 U1	0.00538	< 0.002 U1	1.9	0.75	< 0.04 U1
6/1/2023	Assessment	0.016 J1	2.02	28.0	< 0.007 U1	0.005 J1	0.27 J1	0.049	0.54	0.36	< 0.05 U1	0.00536	< 0.002 U1	1.8	1.01	< 0.02 U1
10/31/2023	Assessment	0.019 J1	2.12	29.9	< 0.007 U1	< 0.004 U1	0.44	0.119	0.96	0.39	< 0.05 U1	0.00547	< 0.002 U1	2.0	0.87	0.03 J1
3/6/2024	Assessment	0.015 J1	2.14	31.8	< 0.007 U1	0.089	0.27 J1	0.139	0.58	0.36	< 0.05 U1	0.00545	< 0.002 U1	1.9	1.04	0.03 J1
5/16/2024	Assessment	0.014 J1	1.96	28.6	< 0.007 U1	0.010 J1	0.24 J1	0.118	0.19	0.43	< 0.05 U1	0.00542	< 0.002 U1	1.8	0.91	< 0.02 U1
11/15/2024	Assessment	0.011 J1	1.86	27.0	< 0.007 U1	0.009 J1	0.50	0.039 B1	0.21	0.36	< 0.05 U1	0.00448	< 0.002 U1	1.5	1.10	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1602D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.058	69.7	138	0.36	5.1	20.5	528
7/18/2016	Background	0.065	77.6	166	0.34	8.2	18.5	574
9/20/2016	Background	0.047	71.7	172	0.30	7.8	12.9	580
11/15/2016	Background	0.078	78.0	177	0.33	7.1	17.4	601
1/9/2017	Background	0.084	75.3	178	0.34	7.3	11.4	594
3/7/2017	Background	0.076	66.8	158	0.31	7.3	14.5	586
5/8/2017	Background	0.073	71.9	124	0.31	7.0	16.1	520
7/17/2017	Background	0.091	64.6	112	0.26	7.0	17.5	472
10/3/2017	Detection	0.064	68.3	135	0.29	7.4	16.0	518
12/12/2017	Detection	--	--	141	0.30	7.4	16.9	--
1/3/2018	Detection	--	--	146	--	7.8	--	574
6/5/2018	Assessment	0.070	66.0	92.8	0.35	7.8	21.6	440
8/13/2018	Assessment	0.098	73.0	131	0.31	7.2	18.0	521
5/24/2019	Assessment	0.04 J1	67.9	68.3	0.33	7.4	20.5	418
6/27/2019	Assessment	0.06 J1	69.8	68.7	0.33	7.3	20.3	429
9/12/2019	Assessment	0.059	57.8	65.1	0.28	7.1	20.2	440
3/11/2020	Assessment	--	--	--	0.33	7.1	--	--
5/20/2020	Assessment	0.04 J1	74.2	62.8	0.35	6.8	23.8	416
11/17/2020	Assessment	0.05 J1	64.0	87.1	0.33	6.9	20.5	452
2/2/2021	Assessment	0.052	66.2	83.8	0.36	6.9	21.3	472
5/26/2021	Assessment	0.045 J1	64.0	76.9	0.35	7.4	22.0	450
11/9/2021	Assessment	0.051	67.6 M1, P3	86.9	0.35	7.4	19.3	460
2/15/2022	Assessment	0.057	68.2	80.7	0.34	7.3	20.2	440
5/11/2022	Assessment	0.048 J1	76.0	66.5	0.34	7.5	24.7	430 L1
11/1/2022	Assessment	0.053	65.5	--	--	7.0	--	--
11/3/2022	Assessment	--	--	77.5	0.32	6.3	21.8	430
2/9/2023	Assessment	0.048 J1	62.9	77.6	0.32	7.9	21.9	440
5/31/2023	Assessment	0.046 J1	62.0	66.7	0.31	7.3	22.3	450
11/1/2023	Assessment	0.053	63.2	85.2	0.33	6.7	20.7	450
3/6/2024	Assessment	--	--	--	0.31	7.3	--	--
5/14/2024	Assessment	0.058	92.6	26.0	0.26	7.1	196	600
11/14/2024	Assessment	0.05	68	74.5	0.36	7.1	22.2	440

**Table 1. Groundwater Data Summary: MW-1602D****Rockport - BAP****Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.02 J1	7.35	380	< 0.005 U1	< 0.004 U1	0.3	0.227	1.147	0.36	0.061	0.001	< 0.002 U1	4.69	0.03 J1	< 0.01 U1
7/18/2016	Background	0.01 J1	8.54	507	< 0.005 U1	< 0.004 U1	0.5	0.166	2.43	0.34	0.02 J1	0.022	< 0.002 U1	3.89	< 0.03 U1	< 0.01 U1
9/20/2016	Background	0.02 J1	8.24	487	< 0.005 U1	< 0.004 U1	0.2	0.116	1.128	0.30	0.022	0.007	< 0.002 U1	3.31	0.03 J1	< 0.01 U1
11/15/2016	Background	0.03 J1	8.32	585	0.01 J1	0.02	0.338	0.248	4.204	0.33	0.195	0.012	< 0.002 U1	3.31	0.05 J1	0.066
1/9/2017	Background	0.01 J1	7.92	503	< 0.005 U1	< 0.004 U1	0.187	0.112	0.976	0.34	0.01 J1	0.005	< 0.002 U1	3.36	< 0.03 U1	0.02 J1
3/7/2017	Background	0.01 J1	8.04	458	< 0.005 U1	< 0.004 U1	0.395	0.106	0.705	0.31	0.029	0.004	< 0.002 U1	3.88	0.05 J1	0.02 J1
5/8/2017	Background	0.05	9.08	436	0.020	0.07	0.232	0.115	0.5884	0.31	0.056	0.007	0.005	3.93	0.1	0.050
7/17/2017	Background	0.01 J1	8.51	419	0.005 J1	< 0.005 U1	0.268	0.110	1.349	0.26	0.036	0.003	< 0.002 U1	3.60	< 0.03 U1	< 0.01 U1
6/5/2018	Assessment	0.02 J1	10.0	442	0.006 J1	0.01 J1	0.210	0.157	1.861	0.35	0.103	0.008	< 0.002 U1	3.93	< 0.03 U1	< 0.01 U1
8/13/2018	Assessment	0.01 J1	9.28	459	0.008 J1	< 0.005 U1	0.201	0.173	1.021	0.31	0.113	0.002	--	3.18	0.05 J1	< 0.01 U1
5/24/2019	Assessment	< 0.02 U1	9.29	405	< 0.02 U1	< 0.01 U1	0.05 J1	0.065	0.71	0.33	< 0.02 U1	0.01 J1	< 0.002 U1	3.23	0.03 J1	< 0.1 U1
6/27/2019	Assessment	< 0.02 U1	9.05	386	< 0.02 U1	< 0.01 U1	0.06 J1	0.066	0.688	0.33	0.02 J1	< 0.009 U1	< 0.002 U1	3.12	0.03 J1	< 0.1 U1
9/12/2019	Assessment	0.17	10.3	433	0.02 J1	0.03 J1	0.763	0.373	1.130	0.28	0.437	0.00286	< 0.002 U1	3.64	0.09 J1	< 0.1 U1
3/11/2020	Assessment	0.03 J1	9.56	439	0.05 J1	0.01 J1	1.32	0.850	2.253	0.33	0.864	0.00291	0.003 J1	3.13	0.2 J1	< 0.1 U1
5/20/2020	Assessment	< 0.02 U1	9.46	412	< 0.02 U1	< 0.01 U1	0.354	0.066	0.872	0.35	< 0.05 U1	0.00212	< 0.002 U1	3.38	0.07 J1	< 0.1 U1
11/17/2020	Assessment	< 0.02 U1	8.82	431	< 0.02 U1	< 0.01 U1	0.276	0.055	2.518	0.33	< 0.05 U1	0.00275	< 0.002 U1	3.04	< 0.03 U1	< 0.1 U1
2/2/2021	Assessment	< 0.02 U1	9.29	445	< 0.02 U1	< 0.01 U1	0.247	0.057	1.727	0.36	< 0.05 U1	0.00247	< 0.002 U1	3.51	< 0.03 U1	< 0.1 U1
5/26/2021	Assessment	< 0.02 U1	10.2	452	< 0.007 U1	< 0.004 U1	0.26	0.052	0.99	0.35	< 0.05 U1	0.00234	< 0.002 U1	3.5	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	< 0.02 U1	9.51	449 M1	< 0.007 U1	0.028	0.18 J1	0.049	1.32	0.35	< 0.05 U1	0.00239	< 0.002 U1	3.2	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	0.02 J1	9.69	445	< 0.007 U1	< 0.004 U1	0.48	0.080	1.85	0.34	< 0.05 U1	0.00241	< 0.002 U1	3.4	< 0.09 U1	< 0.04 U1
5/11/2022	Assessment	< 0.02 U1	10.1	444	< 0.007 U1	< 0.004 U1	0.24	0.067	1.29	0.34	< 0.05 U1	0.00215	< 0.002 U1	3.6	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	< 0.02 U1	10.1	451	< 0.007 U1	< 0.004 U1	0.27	0.027	2.20	--	< 0.05 U1	0.00241	< 0.002 U1	3.3	< 0.09 U1	< 0.04 U1
11/3/2022	Assessment	--	--	--	--	--	--	--	--	0.32	--	--	--	--	--	
2/9/2023	Assessment	< 0.02 U1	8.89	411	0.007 J1	< 0.004 U1	0.18 J1	0.042	1.35	0.32	< 0.05 U1	0.00239	< 0.002 U1	3.2	< 0.09 U1	< 0.04 U1
5/31/2023	Assessment	0.013 J1	9.17	408	< 0.007 U1	< 0.004 U1	0.24 J1	0.045	2.42	0.31	< 0.05 U1	0.00213	< 0.002 U1	3.2	< 0.04 U1	< 0.02 U1
11/1/2023	Assessment	0.012 J1	9.47	455	< 0.007 U1	< 0.004 U1	0.26 J1	0.059	5.66	0.33	< 0.05 U1	0.00250	< 0.002 U1	3.2	< 0.04 U1	< 0.02 U1
3/6/2024	Assessment	0.010 J1	9.53	457	< 0.007 U1	< 0.004 U1	0.25 J1	0.049	1.50	0.31	< 0.05 U1	0.00227	< 0.002 U1	3.1	< 0.04 U1	0.03 J1
5/14/2024	Assessment	0.033 J1	27.1	111	< 0.007 U1	0.006 J1	0.29 J1	1.41	2.65	0.26	< 0.05 U1	0.00566	< 0.002 U1	2.2	0.04 J1	0.02 J1
11/14/2024	Assessment	0.027 J1	9.62	577	0.008 J1	< 0.004 U1	0.40	0.118 B1	2.30	0.36	0.09 J1	0.00236	< 0.002 U1	3.1	0.05 J1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1602I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.047	78.6	33.0	0.32	7.1	84.1	424
7/18/2016	Background	0.043	81.1	32.3	0.30	7.4	89.4	452
9/20/2016	Background	0.037	79.9	30.2	0.28	7.3	77.7	412
11/15/2016	Background	0.057	87.6	28.7	0.29	7.1	85.3	457
1/9/2017	Background	0.039	80.6	27.8	0.26	7.4	77.6	420
3/7/2017	Background	0.061	71.1	27.5	0.27	7.3	77.8	388
5/8/2017	Background	0.108	79.7	27.6	0.28	6.9	78.4	430
7/17/2017	Background	0.052	68.8	27.1	0.23	6.9	76.3	421
10/3/2017	Detection	0.065	69.2	27.5	0.26	7.3	80.8	414
12/12/2017	Detection	--	--	28.3	0.26	7.3	82.8	--
1/3/2018	Detection	--	--	--	--	7.7	82.3	--
6/5/2018	Assessment	0.060	71.3	29.8	0.31	7.8	77.6	410
8/13/2018	Assessment	0.109	76.0	28.5	0.28	7.4	75.0	405
5/24/2019	Assessment	0.05 J1	74.6	29.0	0.30	7.4	65.9	410
6/27/2019	Assessment	0.06 J1	76.2	29.2	0.30	7.3	67.4	405
9/12/2019	Assessment	0.051	83.1	28.7	0.30	7.3	70.7	404
3/11/2020	Assessment	--	--	--	0.29	7.0	--	--
5/20/2020	Assessment	0.114	113	79.0	0.30	7.7	177	627
11/17/2020	Assessment	0.121	85.0	54.5	0.30	7.0	135	537
2/3/2021	Assessment	0.088	76.1	35.6	0.33	6.7	86.0	428
5/26/2021	Assessment	0.067	73.7	31.2	0.32	7.5	76.6	420
11/9/2021	Assessment	0.048 J1	68.4	23.0	0.31	6.9	57.0	370
2/15/2022	Assessment	0.046 J1	68.5	23.0	0.30	7.1	57.8	380
5/11/2022	Assessment	0.043 J1	81.0	24.0	0.29	7.5	58.7	380 L1
10/31/2022	Assessment	0.041 J1	68.4	--	--	6.6	--	--
11/3/2022	Assessment	--	--	22.5	0.29	7.2	60.2	360
2/8/2023	Assessment	0.041 J1	77.3	23.6	0.27	7.8	105	430 S7
5/31/2023	Assessment	0.040 J1	102	24.1	0.24	7.3	235	620
11/1/2023	Assessment	0.050	58.9	22.2	0.31	6.8	62.2	380
3/7/2024	Assessment	--	--	--	0.27	7.4	--	--
5/14/2024	Assessment	0.052	62.6	69.5	0.31	7.0	20.7	430
11/14/2024	Assessment	0.055	117	26.2	0.30	7.1	329	790

**Table 1. Groundwater Data Summary: MW-1602I**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.02 J1	16.5	135	< 0.005 U1	0.005 J1	0.2	1.35	0.983	0.32	0.096	0.003	< 0.002 U1	2.61	< 0.03 U1	< 0.01 U1
7/18/2016	Background	0.02 J1	18.7	145	< 0.005 U1	0.006 J1	0.2	1.70	1.526	0.30	0.074	0.006	< 0.002 U1	2.68	0.03 J1	0.01 J1
9/20/2016	Background	0.02 J1	15.5	123	< 0.005 U1	< 0.004 U1	0.2	1.34	1.421	0.28	0.045	0.006	< 0.002 U1	2.31	0.05 J1	0.01 J1
11/15/2016	Background	0.03 J1	18.2	136	< 0.005 U1	0.006 J1	0.075	1.44	1.19	0.29	0.02 J1	0.015	< 0.002 U1	2.13	0.04 J1	0.03 J1
1/9/2017	Background	0.02 J1	18.3	126	< 0.005 U1	< 0.004 U1	0.161	1.38	0.7655	0.26	0.045	0.003	< 0.002 U1	2.23	< 0.03 U1	0.02 J1
3/7/2017	Background	0.03 J1	20.0	122	0.005 J1	< 0.004 U1	0.484	1.43	0.845	0.27	0.178	0.009	< 0.002 U1	2.21	0.06 J1	0.02 J1
5/8/2017	Background	0.14	25.5	123	0.020	0.02	0.459	1.69	1.024	0.28	0.292	0.009	0.005	2.08	0.1	0.050
7/17/2017	Background	0.05	27.3	127	0.006 J1	0.006 J1	0.193	1.52	0.8024	0.23	0.167	0.010	< 0.002 U1	2.01	< 0.03 U1	0.04 J1
6/5/2018	Assessment	0.10	38.6	128	0.01 J1	0.01 J1	0.338	1.80	0.968	0.31	0.374	0.013	< 0.002 U1	2.42	0.07 J1	0.03 J1
8/13/2018	Assessment	0.05 J1	26.9	111	0.006 J1	0.007 J1	0.086	1.31	0.90	0.28	0.092	0.001	--	2.10	< 0.03 U1	0.03 J1
5/24/2019	Assessment	0.08 J1	29.6	121	< 0.02 U1	0.03 J1	0.305	1.75	0.819	0.30	0.354	0.009 J1	< 0.002 U1	2.03	0.04 J1	< 0.1 U1
6/27/2019	Assessment	0.03 J1	22.4	115	< 0.02 U1	< 0.01 U1	0.2 J1	1.39	0.733	0.30	0.06 J1	< 0.009 U1	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
9/12/2019	Assessment	0.04 J1	30.0	120	< 0.02 U1	< 0.01 U1	0.1 J1	1.32	1.312	0.30	0.1 J1	0.00572	< 0.002 U1	2.11	0.03 J1	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	22.7	118	< 0.02 U1	< 0.01 U1	< 0.04 U1	1.36	0.6159	0.29	< 0.05 U1	0.00566	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
5/20/2020	Assessment	0.03 J1	24.6	142	< 0.02 U1	< 0.01 U1	0.09 J1	1.83	0.665	0.30	< 0.05 U1	0.00620	< 0.002 U1	2 J1	0.1 J1	< 0.1 U1
11/17/2020	Assessment	0.06 J1	33.9	127	< 0.02 U1	< 0.01 U1	0.2 J1	1.43	2.14	0.30	0.06 J1	0.00580	< 0.002 U1	2.02	0.08 J1	< 0.1 U1
2/3/2021	Assessment	0.03 J1	27.8	107	< 0.02 U1	< 0.01 U1	0.226	1.21	1.668	0.33	< 0.05 U1	0.00531	< 0.002 U1	2.09	< 0.03 U1	< 0.1 U1
5/26/2021	Assessment	0.06 J1	24.9	108	0.009 J1	< 0.004 U1	0.26	1.18	1.17	0.32	< 0.05 U1	0.00524	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.04 J1	27.7	97.2	< 0.007 U1	< 0.004 U1	0.22	1.10	1.31	0.31	< 0.05 U1	0.00505	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	0.02 J1	24.4	95.0	< 0.007 U1	< 0.004 U1	0.36	1.06	0.90	0.30	< 0.05 U1	0.00487	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
5/11/2022	Assessment	0.12	42.9	99.2	< 0.007 U1	0.005 J1	0.33	1.21	1.04	0.29	0.09 J1	0.00455	< 0.002 U1	2.3	< 0.09 U1	< 0.04 U1
10/31/2022	Assessment	0.02 J1	21.5	98.2	< 0.007 U1	< 0.004 U1	0.21	1.05	0.86	--	< 0.05 U1	0.00509	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
11/3/2022	Assessment	--	--	--	--	--	--	--	--	0.29	--	--	--	--	--	
2/8/2023	Assessment	0.15	72.4	123	0.012 J1	0.005 J1	0.31	1.46	1.73	0.27	0.20	0.00555	< 0.002 U1	2.1	< 0.09 U1	< 0.04 U1
5/31/2023	Assessment	0.032 J1	24.5	120	< 0.007 U1	< 0.004 U1	0.22 J1	1.49	1.86	0.24	< 0.05 U1	0.00561	< 0.002 U1	2.0	0.05 J1	0.03 J1
11/1/2023	Assessment	0.033 J1	20.1	85.6	< 0.007 U1	< 0.004 U1	0.21 J1	1.02	1.28	0.31	< 0.05 U1	0.00521	< 0.002 U1	2.7	< 0.04 U1	0.03 J1
3/7/2024	Assessment	0.030 J1	23.2	107	< 0.007 U1	< 0.004 U1	0.69	1.26	1.38	0.27	< 0.05 U1	0.00557	< 0.002 U1	2.3	< 0.04 U1	0.02 J1
5/14/2024	Assessment	< 0.008 U1	8.84	425	< 0.007 U1	< 0.004 U1	0.23 J1	0.044	1.70	0.31	< 0.05 U1	0.00208	< 0.002 U1	3.1	< 0.04 U1	< 0.02 U1
11/14/2024	Assessment	0.025 J1	21.3	92.5	< 0.007 U1	< 0.004 U1	0.43	1.77 B1	1.77	0.30	< 0.05 U1	0.00635	< 0.002 U1	2.3	0.06 J1	0.03 J1

**Table 1. Groundwater Data Summary: MW-1603D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/8/2016	Background	0.073	70.8	26.7	0.31	7.1	59.0	433
7/18/2016	Background	0.074	79.6	26.7	0.33	6.9	55.3	430
10/10/2016	Background	0.065	81.2	26.0	0.32	7.3	47.2	406
11/15/2016	Background	0.062	90.5	25.5	0.30	7.1	50.6	399
1/9/2017	Background	0.055	91.9	25.1	0.26	7.3	49.7	401
3/7/2017	Background	0.061	86.8	26.1	0.29	7.2	47.7	392
5/8/2017	Background	0.082	91.1	26.3	0.27	7.2	47.1	417
7/17/2017	Background	0.080	80.4	25.9	0.24	6.7	45.9	400
10/3/2017	Detection	0.054	79.4	26.2	0.26	7.1	44.6	393
12/12/2017	Detection	--	--	27.0	0.27	7.0	42.3	--
6/5/2018	Assessment	0.081	80.6	30.1	0.30	7.2	40.9	412
8/13/2018	Assessment	0.147	87.9	25.4	0.27	7.1	39.1	385
5/21/2019	Assessment	0.04 J1	71.6	25.3	0.28	7.2	38.5	397
6/27/2019	Assessment	0.06 J1	77.9	25.0	0.30	7.6	32.8	388
9/11/2019	Assessment	0.04 J1	82.8	26.1	0.30	7.2	36.4	407
3/10/2020	Assessment	--	--	--	0.28	6.7	--	--
5/21/2020	Assessment	0.04 J1	82.2	25.6	0.31	7.4	34.0	400
11/13/2020	Assessment	0.04 J1	79.4	24.6	0.29	6.8	31.5	380
2/2/2021	Assessment	0.04 J1	79.4	25.6	0.31	6.3	33.7	381
5/26/2021	Assessment	0.031 J1	80.6	26.8	0.31	7.7	33.8	390
11/9/2021	Assessment	0.031 J1	81.1	26.3	0.30	6.8	31.5	380
2/15/2022	Assessment	0.035 J1	86.6	27.3	0.28	7.1	34.9	390
5/10/2022	Assessment	0.021 J1	88.9 M1, P3	29.1	0.28	7.2	36.2	390 L1
11/2/2022	Assessment	0.032 J1	83.8 M1, P3	29.7	0.28	11.0	39.8	380
2/9/2023	Assessment	0.034 J1	81.9	28.0	0.27	7.9	36.3	320
5/31/2023	Assessment	0.027 J1	80.4 M1	--	--	5.8	--	--
6/6/2023	Assessment	--	--	28.4	0.27	6.8	37.2	370
11/1/2023	Assessment	0.034 J1	101	29.6	0.28	6.6	39.5	390
3/6/2024	Assessment	--	--	--	0.25	7.1	--	--
5/14/2024	Assessment	0.035 J1	85.8 M1	29.9	0.26	7.0	43.2	390
11/13/2024	Assessment	0.03 J1	97 M1	36.1	0.31	7.0	109	510

**Table 1. Groundwater Data Summary: MW-1603D****Rockport - BAP****Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/8/2016	Background	0.01 J1	10.2	112	< 0.005 U1	< 0.004 U1	0.2	1.34	1.206	0.31	0.02 J1	0.003	< 0.002 U1	6.70	< 0.03 U1	< 0.01 U1
7/18/2016	Background	0.02 J1	11.0	120	< 0.005 U1	0.007 J1	0.3	1.30	0.66	0.33	0.01 J1	0.008	< 0.002 U1	6.39	0.04 J1	0.068
10/10/2016	Background	0.09	9.91	122	0.049	0.03	23.8	2.01	0.954	0.32	1.38	0.007	< 0.002 U1	6.82	0.3	0.04 J1
11/15/2016	Background	0.03 J1	11.3	113	< 0.01 U1	0.01 J1	0.08 J1	0.703	1.275	0.30	0.02 J1	0.011	< 0.002 U1	5.02	< 0.06 U1	< 0.02 U1
1/9/2017	Background	0.01 J1	11.3	111	< 0.005 U1	0.009 J1	0.143	0.584	0.343	0.26	0.029	0.012	< 0.002 U1	4.98	< 0.03 U1	< 0.01 U1
3/7/2017	Background	0.01 J1	11.3	108	< 0.005 U1	< 0.004 U1	0.220	0.553	0.838	0.29	0.024	0.007	< 0.002 U1	5.11	0.04 J1	0.02 J1
5/8/2017	Background	0.05	11.3	103	0.020	0.02	0.238	0.586	0.982	0.27	0.068	0.006	0.005	4.78	0.1	0.050
7/17/2017	Background	0.02 J1	12.1	114	< 0.004 U1	< 0.005 U1	0.112	0.525	1.696	0.24	0.006 J1	0.008	< 0.002 U1	4.68	< 0.03 U1	< 0.01 U1
6/5/2018	Assessment	0.02 J1	12.3	109	0.009 J1	< 0.005 U1	0.251	0.441	1.607	0.30	0.207	0.008	< 0.002 U1	4.09	0.09 J1	0.03 J1
8/13/2018	Assessment	0.02 J1	12.5	105	< 0.004 U1	< 0.005 U1	0.097	0.409	0.84	0.27	0.040	0.005	--	4.38	< 0.03 U1	0.02 J1
5/21/2019	Assessment	< 0.02 U1	12.6	111	< 0.02 U1	< 0.01 U1	0.05 J1	0.354	0.73	0.28	0.04 J1	< 0.009 U1	< 0.002 U1	4.56	< 0.03 U1	< 0.1 U1
6/27/2019	Assessment	< 0.02 U1	13.2	111	< 0.02 U1	< 0.01 U1	0.06 J1	0.327	0.766	0.30	< 0.02 U1	< 0.009 U1	< 0.002 U1	3.98	< 0.03 U1	< 0.1 U1
9/11/2019	Assessment	< 0.02 U1	13.2	112	< 0.02 U1	< 0.01 U1	0.2 J1	0.327	0.957	0.30	0.08 J1	0.00380	< 0.002 U1	4.10	0.03 J1	< 0.1 U1
3/10/2020	Assessment	< 0.02 U1	12.8	120	< 0.02 U1	< 0.01 U1	0.07 J1	0.291	1.167	0.28	< 0.05 U1	0.00380	< 0.002 U1	4.00	0.03 J1	< 0.1 U1
5/21/2020	Assessment	< 0.02 U1	13.8	120	< 0.02 U1	< 0.01 U1	0.275	0.280	0.721	0.31	< 0.05 U1	0.00323	< 0.002 U1	3.62	0.04 J1	< 0.1 U1
11/13/2020	Assessment	< 0.02 U1	13.5	119	< 0.02 U1	< 0.01 U1	0.2 J1	0.281	1.91	0.29	< 0.05 U1	0.00326	< 0.002 U1	3.64	< 0.03 U1	< 0.1 U1
2/2/2021	Assessment	< 0.02 U1	14.6	121	< 0.02 U1	< 0.01 U1	0.2 J1	0.281	2.834	0.31	< 0.05 U1	0.00315	< 0.002 U1	3.66	0.04 J1	< 0.1 U1
5/26/2021	Assessment	< 0.02 U1	14.7	125	< 0.007 U1	< 0.004 U1	0.25	0.288	0.47	0.31	< 0.05 U1	0.00331	< 0.002 U1	3.6	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.03 J1	14.1	121	< 0.007 U1	< 0.004 U1	0.21	0.247	1.78	0.30	< 0.05 U1	0.00321	< 0.002 U1	3.3	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	0.02 J1	14.6	128	< 0.007 U1	0.035	0.41	0.326	1.88	0.28	0.48	0.00329	< 0.002 U1	3.7	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	< 0.02 U1	14.6	122	< 0.007 U1	< 0.004 U1	0.30	0.286	1.59	0.28	< 0.05 U1	0.00320	< 0.002 U1	3.7	< 0.09 U1	< 0.04 U1
11/2/2022	Assessment	< 0.02 U1	14.2	128 P3	< 0.007 U1	< 0.004 U1	0.28	0.237	1.48	0.28	< 0.05 U1	0.00347	< 0.002 U1	3.3	< 0.09 U1	< 0.04 U1
2/9/2023	Assessment	< 0.02 U1	14.5	129	0.011 J1	< 0.004 U1	0.25	0.272	0.97	0.27	< 0.05 U1	0.00347	< 0.002 U1	3.5	< 0.09 U1	< 0.04 U1
5/31/2023	Assessment	0.036 J1	13.4	122	< 0.007 U1	0.016 J1	0.25 J1	0.275	1.01	--	0.17 J1	0.00331	< 0.002 U1	3.4	< 0.04 U1	0.06 J1
6/6/2023	Assessment	--	--	--	--	--	--	--	--	0.27	--	--	--	--	--	
11/1/2023	Assessment	0.012 J1	14.4	137	< 0.007 U1	< 0.004 U1	0.28 J1	0.279	0.51	0.28	< 0.05 U1	0.00323	< 0.002 U1	3.7	< 0.04 U1	< 0.02 U1
3/6/2024	Assessment	0.022 J1	13.7	130	< 0.007 U1	< 0.004 U1	0.22 J1	0.244	1.90	0.25	< 0.05 U1	0.00323	< 0.002 U1	3.6	< 0.04 U1	< 0.02 U1
5/14/2024	Assessment	0.012 J1	13.4	130 M1	< 0.007 U1	< 0.004 U1	0.27 J1	0.263	1.21	0.26	< 0.05 U1	0.00318	< 0.002 U1	3.7	< 0.04 U1	< 0.02 U1
11/13/2024	Assessment	0.012 J1	13.8	190 M1	< 0.007 U1	0.027	0.31	0.314 B1	2.11	0.31	< 0.05 U1	0.00354	< 0.002 U1	3.2	< 0.04 U1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1603I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/8/2016	Background	0.151	89.2	37.7	0.39	7.6	71.9	465
7/18/2016	Background	0.157	93.9	38.8	0.43	7.2	83.8	502
9/20/2016	Background	0.153	99.8	40.1	0.39	7.3	111	500
11/15/2016	Background	0.173	101	37.4	0.42	7.2	88.5	481
1/9/2017	Background	0.147	94.7	34.6	0.38	7.2	75.3	478
3/7/2017	Background	0.187	85.0	34.7	0.40	7.3	73.2	460
5/8/2017	Background	0.187	87.2	36.8	0.40	7.3	71.0	452
7/17/2017	Background	0.196	79.3	35.1	0.35	9.8	74.9	449
10/3/2017	Detection	0.134	80.9	35.6	0.39	7.2	74.1	442
12/12/2017	Detection	--	--	57.4	0.52	6.8	201	--
1/3/2018	Detection	0.166	--	--	--	7.9	65.1	--
6/5/2018	Assessment	0.131	77.7	37.3	0.46	7.3	62.0	424
8/13/2018	Assessment	0.130	85.9	31.5	0.43	7.4	66.2	434
5/21/2019	Assessment	0.06 J1	81.4	39.4	0.45	7.3	74.6	467
6/27/2019	Assessment	0.07 J1	78.6	37.7	0.47	8.1	66.9	560
9/11/2019	Assessment	0.087	80.1	38.7	0.46	7.3	58.2	443
3/10/2020	Assessment	--	--	--	0.45	7.1	--	--
5/21/2020	Assessment	0.04 J1	82.4	37.9	0.46	7.7	51.0	428
11/13/2020	Assessment	0.04 J1	76.1	35.4	0.42	7.2	60.0	440
2/2/2021	Assessment	0.04 J1	78.4	35.5	0.45	6.8	56.9	424
5/26/2021	Assessment	0.035 J1	86.9	34.4	0.45	7.8	51.4	420
11/9/2021	Assessment	0.043 J1	77.3	33.3	0.41	6.7	58.8	390
2/15/2022	Assessment	0.048 J1	74.8	32.3	0.42	7.2	66.7	430
5/10/2022	Assessment	0.032 J1	80.8	33.4	0.42	7.3	66.3	440 L1
11/2/2022	Assessment	0.131	86.7	31.4	0.40	7.2	134	530
2/9/2023	Assessment	0.076	75.8	31.9	0.41	7.3	83.2	460
5/31/2023	Assessment	0.041 J1	60.8	31.6	0.39	5.8	75.2	460
11/1/2023	Assessment	0.060	77.4	31.7	0.42	6.8	73.8	450
3/6/2024	Assessment	--	--	--	0.37	7.3	--	--
5/17/2024	Assessment	0.062	87.8	37.5	0.46	7.2	73.1	430
11/13/2024	Assessment	0.085	92	41.8	0.39	7.1	83.1	480

**Table 1. Groundwater Data Summary: MW-1603I**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/8/2016	Background	0.05 J1	13.0	81.1	< 0.005 U1	0.004 J1	0.3	1.36	0.593	0.39	0.117	< 0.0002 U1	< 0.002 U1	8.86	< 0.03 U1	0.03 J1
7/18/2016	Background	0.03 J1	12.8	83.1	< 0.005 U1	< 0.004 U1	0.8	1.30	1.821	0.43	0.053	0.013	< 0.002 U1	9.76	< 0.03 U1	0.02 J1
9/20/2016	Background	0.03 J1	12.2	94.2	< 0.005 U1	< 0.004 U1	0.1	1.41	0.904	0.39	0.008 J1	0.009	< 0.002 U1	9.85	0.04 J1	0.04 J1
11/15/2016	Background	0.04 J1	12.2	86.6	< 0.005 U1	0.007 J1	0.074	1.17	1.583	0.42	0.021	0.015	< 0.002 U1	9.21	< 0.03 U1	0.03 J1
1/9/2017	Background	0.03 J1	12.9	84.6	< 0.005 U1	< 0.004 U1	0.232	1.26	1.417	0.38	0.066	0.008	< 0.002 U1	9.47	< 0.03 U1	0.03 J1
3/7/2017	Background	0.03 J1	12.5	82.5	< 0.005 U1	< 0.004 U1	0.743	1.10	1.076	0.40	0.057	0.009	< 0.002 U1	8.79	0.05 J1	0.05 J1
5/8/2017	Background	0.05	13.0	76.8	0.020	0.02	0.145	1.24	0.824	0.40	0.174	0.009	0.005	8.86	0.1	0.050
7/17/2017	Background	0.03 J1	12.5	85.3	< 0.004 U1	< 0.005 U1	0.109	1.30	2.746	0.35	0.02 J1	0.013	< 0.002 U1	8.27	< 0.03 U1	0.05 J1
6/5/2018	Assessment	0.10	12.7	88.4	0.01 J1	0.02 J1	1.11	1.40	2.348	0.46	0.374	0.012	< 0.002 U1	7.31	0.07 J1	0.03 J1
8/13/2018	Assessment	0.03 J1	12.4	80.0	< 0.004 U1	< 0.005 U1	0.081	1.27	1.152	0.43	0.030	0.002	--	7.67	< 0.03 U1	0.04 J1
5/21/2019	Assessment	0.02 J1	12.9	81.6	< 0.02 U1	< 0.01 U1	0.08 J1	1.39	0.832	0.45	< 0.02 U1	< 0.009 U1	< 0.002 U1	6.45	< 0.03 U1	< 0.1 U1
6/27/2019	Assessment	0.07 J1	12.7	84.3	< 0.02 U1	0.01 J1	0.678	1.58	0.966	0.47	0.312	< 0.009 U1	< 0.002 U1	6.29	0.07 J1	< 0.1 U1
9/11/2019	Assessment	0.08 J1	13.2	83.0	< 0.02 U1	< 0.01 U1	0.355	1.36	1.41	0.46	0.2 J1	0.00711	< 0.002 U1	7.48	< 0.03 U1	< 0.1 U1
3/10/2020	Assessment	< 0.02 U1	12.1	80.3	< 0.02 U1	< 0.01 U1	0.1 J1	1.23	1.056	0.45	< 0.05 U1	0.00720	< 0.002 U1	5.52	< 0.03 U1	< 0.1 U1
5/21/2020	Assessment	0.03 J1	15.5	89.5	< 0.02 U1	< 0.01 U1	0.09 J1	1.22	1.004	0.46	< 0.05 U1	0.00697	< 0.002 U1	5.08	< 0.03 U1	< 0.1 U1
11/13/2020	Assessment	0.32	53.0	107	0.03 J1	< 0.01 U1	0.286	1.19	1.959	0.42	0.564	0.00667	< 0.002 U1	5.29	0.07 J1	< 0.1 U1
2/2/2021	Assessment	0.03 J1	15.1	97.0	< 0.02 U1	< 0.01 U1	0.270	1.12	2.058	0.45	0.05 J1	0.00667	< 0.002 U1	5.01	< 0.03 U1	< 0.1 U1
5/26/2021	Assessment	0.03 J1	14.0	89.2	< 0.007 U1	< 0.004 U1	0.13 J1	1.03	0.88	0.45	< 0.05 U1	0.00623	< 0.002 U1	4.7	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.99	220	147	0.077	0.006 J1	0.47	3.49	1.27	0.41	1.54	0.00598	< 0.002 U1	6.2	0.28 J1	< 0.04 U1
2/15/2022	Assessment	0.20	37.9	97.7	0.016 J1	0.016 J1	0.46	1.16	2.26	0.42	0.29	0.00643	< 0.002 U1	5.7	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	0.04 J1	17.1	94.0	< 0.007 U1	< 0.004 U1	0.27	1.16	0.93	0.42	0.07 J1	0.00628	< 0.002 U1	5.3	< 0.09 U1	< 0.04 U1
11/2/2022	Assessment	< 0.02 U1	12.8	79.8	< 0.007 U1	< 0.004 U1	0.21	1.24	1.39	0.40	< 0.05 U1	0.00798	< 0.002 U1	6.5	< 0.09 U1	< 0.04 U1
2/9/2023	Assessment	0.05 J1	15.8	78.5	< 0.007 U1	< 0.004 U1	0.36	1.19	1.73	0.41	0.21	0.00713	< 0.002 U1	6.5	< 0.09 U1	< 0.04 U1
5/31/2023	Assessment	0.031 J1	11.6	64.0	< 0.007 U1	< 0.004 U1	0.24 J1	0.915	0.82	0.39	0.06 J1	0.00528	< 0.002 U1	5.5	< 0.04 U1	< 0.02 U1
11/1/2023	Assessment	0.070 J1	16.5	87.0	< 0.007 U1	0.006 J1	0.49	1.42	0.64	0.42	0.15 J1	0.00702	< 0.002 U1	7.7	0.05 J1	0.03 J1
3/6/2024	Assessment	0.024 J1	12.6	80.7	< 0.007 U1	< 0.004 U1	0.24 J1	1.01	1.64	0.37	< 0.05 U1	0.00670	< 0.002 U1	7.0	< 0.04 U1	< 0.02 U1
5/17/2024	Assessment	0.184	9.80	181	0.020 J1	0.063	0.79	1.35	1.18	0.46	0.85	0.00657	< 0.002 U1	8.9	0.14 J1	0.03 J1
11/13/2024	Assessment	0.049 J1	14.8	91.9	0.03 J1	0.026	1.12	1.21	0.63	0.39	1.23	0.00441	< 0.002 U1	4.5	0.24 J1	0.02 J1

**Table 1. Groundwater Data Summary: MW-1603S**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/8/2016	Background	1.77	49.6	60.3	0.44	7.6	197	480
7/18/2016	Background	1.77	46.4	53.6	0.50	7.2	171	445
9/20/2016	Background	1.83	59.3	57.6	0.39	7.0	197	479
11/15/2016	Background	2.19	71.9	50.9	0.43	6.9	208	469
1/9/2017	Background	2.22	74.8	55.6	0.40	6.5	220	483
3/7/2017	Background	1.72	99.4	67.6	0.33	6.7	261	581
5/8/2017	Background	1.25	81.7	55.1	0.36	6.9	203	466
7/17/2017	Background	1.94	68.1	52.9	0.27	9.6	222	482
10/3/2017	Detection	1.84	51.5	20.8	0.17	6.9	75.1	481
12/12/2017	Detection	--	--	33.9	0.41	7.1	65.8	--
1/3/2018	Detection	1.67	--	--	--	7.5	218	514
6/5/2018	Assessment	1.40	42.2	54.3	0.63	7.0	178	504
8/13/2018	Assessment	1.70	52.0	69.7	0.56	7.0	243	558
5/21/2019	Assessment	1.47	62.6	56.0	0.55	6.6	187	506
6/27/2019	Assessment	1.65	67.2	57.8	0.59	7.3	205	530
9/11/2019	Assessment	2.16	55.1	51.1	0.69	7.1	224	482
3/10/2020	Assessment	--	--	--	0.71	6.5	--	--
5/21/2020	Assessment	0.826	47.5	31.1	0.77	7.4	88.3	276
11/13/2020	Assessment	2.35	39.1	37.6	0.92	7.0	131	365
2/2/2021	Assessment	2.49	40.4	41.9	0.91	6.6	137	406
5/25/2021	Assessment	2.06	33.4	23.0	1.02	7.0	82.8	250
11/9/2021	Assessment	1.87	42.0	43.9	0.94	6.4	145	410
2/15/2022	Assessment	1.85	42.4	59.1	0.98	6.9	197	500
5/10/2022	Assessment	1.59	81.9	36.9	0.81	7.1	296	600 L1
11/2/2022	Assessment	1.56	43.9	55.8	1.16	6.8	187	510
2/9/2023	Assessment	1.28	39.4	38.0	1.08	7.0	177	460
5/31/2023	Assessment	1.20	32.6	37.7	1.37	5.4	176	450
11/1/2023	Assessment	1.40	24.7	34.6	1.42	6.5	161	370
3/5/2024	Assessment	--	--	--	1.26	6.9	--	--
5/14/2024	Assessment	1.45	42.4	25.5	0.93	7.0	85.9	310
11/14/2024	Assessment	1.44	43	27.8	1.32	6.7	95.3	340

**Table 1. Groundwater Data Summary: MW-1603S****Rockport - BAP****Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/8/2016	Background	0.04 J1	0.36	13.0	< 0.005 U1	0.02	0.2	0.648	0.485	0.44	0.171	< 0.0002 U1	< 0.002 U1	1.36	0.04 J1	0.02 J1
7/18/2016	Background	0.05 J1	0.27	12.5	< 0.005 U1	0.02	0.2	0.656	1.123	0.50	0.130	0.013	< 0.002 U1	0.74	< 0.03 U1	0.02 J1
9/20/2016	Background	0.04 J1	0.21	16.7	< 0.005 U1	0.02 J1	0.3	0.310	1.373	0.39	0.025	0.007	< 0.002 U1	0.50	0.7	0.04 J1
11/15/2016	Background	0.06	0.19	18.4	0.008 J1	0.03	0.104	0.233	0.508	0.43	0.072	0.013	< 0.002 U1	0.39	0.2	0.091
1/9/2017	Background	0.04 J1	0.20	16.2	< 0.005 U1	0.02 J1	0.653	0.176	0.391	0.40	0.023	0.002	< 0.002 U1	0.47	0.06 J1	0.02 J1
3/7/2017	Background	0.06	0.18	22.3	< 0.005 U1	0.06	0.530	0.092	0.2002	0.33	0.037	0.005	< 0.002 U1	0.23	0.2	0.02 J1
5/8/2017	Background	0.05	0.23	16.3	0.020	0.02	0.325	0.219	0.4136	0.36	0.116	0.006	0.005	0.15	0.2	0.050
7/17/2017	Background	0.04 J1	0.19	16.2	< 0.004 U1	0.03	0.154	0.349	2.9307	0.27	0.042	0.007	< 0.002 U1	0.20	0.06 J1	0.02 J1
6/5/2018	Assessment	0.06	0.36	12.4	0.01 J1	0.03	0.261	0.881	2.059	0.63	0.339	0.012	< 0.002 U1	2.74	0.1	0.03 J1
8/13/2018	Assessment	0.04 J1	0.20	10.5	0.01 J1	0.02	0.058	0.506	0.762	0.56	0.047	0.002	--	1.78	0.04 J1	0.054
5/21/2019	Assessment	0.03 J1	0.17	14.0	< 0.02 U1	0.02 J1	0.09 J1	0.417	0.5289	0.55	< 0.02 U1	< 0.009 U1	< 0.002 U1	< 0.4 U1	0.08 J1	< 0.1 U1
6/27/2019	Assessment	0.03 J1	0.17	13.7	< 0.02 U1	0.03 J1	0.06 J1	0.383	0.555	0.59	< 0.02 U1	< 0.009 U1	< 0.002 U1	0.5 J1	1.5	< 0.1 U1
9/11/2019	Assessment	0.04 J1	0.22	12.0	< 0.02 U1	0.02 J1	0.04 J1	0.266	0.172	0.69	< 0.05 U1	0.00414	< 0.002 U1	0.6 J1	0.3	< 0.1 U1
3/10/2020	Assessment	< 0.02 U1	0.13	10.4	< 0.02 U1	< 0.01 U1	0.335	0.055	0.4889	0.71	< 0.05 U1	0.00225	< 0.002 U1	< 0.4 U1	0.2 J1	< 0.1 U1
5/21/2020	Assessment	0.03 J1	0.11	7.53	< 0.02 U1	0.01 J1	0.325	0.04 J1	0.579	0.77	< 0.05 U1	0.00179	< 0.002 U1	< 0.4 U1	0.1 J1	< 0.1 U1
11/13/2020	Assessment	0.04 J1	0.17	9.07	< 0.02 U1	0.01 J1	0.208	0.297	0.6734	0.92	< 0.05 U1	0.00320	< 0.002 U1	< 0.4 U1	0.08 J1	< 0.1 U1
2/2/2021	Assessment	0.05 J1	0.20	11.8	< 0.02 U1	0.02 J1	0.230	0.324	0.5735	0.91	< 0.05 U1	0.00350	< 0.002 U1	0.4 J1	0.1 J1	< 0.1 U1
5/25/2021	Assessment	0.05 J1	0.13	4.82	< 0.007 U1	0.005 J1	0.18 J1	0.129	0.93	1.02	< 0.05 U1	0.00152	< 0.002 U1	0.2 J1	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.04 J1	0.19	10.7	< 0.007 U1	0.022	0.21	0.439	0.67	0.94	< 0.05 U1	0.00381	< 0.002 U1	0.4 J1	0.12 J1	< 0.04 U1
2/15/2022	Assessment	0.04 J1	0.19	10.6	< 0.007 U1	0.540	0.32	0.547	1.06	0.98	< 0.05 U1	0.00396	< 0.002 U1	0.7	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	0.04 J1	0.20	19.0	< 0.007 U1	0.037	0.29	0.389	1.13	0.81	< 0.05 U1	0.00499	< 0.002 U1	0.5	0.15 J1	< 0.04 U1
11/2/2022	Assessment	0.04 J1	0.18	8.82	< 0.007 U1	0.021	0.36	0.506	1.22	1.16	< 0.05 U1	0.00337	< 0.002 U1	0.3 J1	0.20 J1	< 0.04 U1
2/9/2023	Assessment	0.04 J1	0.20	8.27	< 0.007 U1	0.028	0.29	0.480	1.91	1.08	0.06 J1	0.00414	< 0.002 U1	0.7	0.74	< 0.04 U1
5/31/2023	Assessment	0.042 J1	0.18	6.78	< 0.007 U1	0.018 J1	0.20 J1	0.434	0.85	1.37	< 0.05 U1	0.00281	< 0.002 U1	0.5	0.52	< 0.02 U1
11/1/2023	Assessment	0.048 J1	0.15	4.48	< 0.007 U1	0.014 J1	0.31	0.384	0.12	1.42	< 0.05 U1	0.00201	< 0.002 U1	0.5	0.13 J1	< 0.02 U1
3/5/2024	Assessment	0.040 J1	0.18	4.95	< 0.007 U1	0.017 J1	0.25 J1	0.270	0.72	1.26	< 0.05 U1	0.00297	< 0.002 U1	1.4	0.16 J1	< 0.02 U1
5/14/2024	Assessment	0.037 J1	0.17	7.08	< 0.007 U1	0.019 J1	0.32	0.271	0.79	0.93	< 0.05 U1	0.00356	< 0.002 U1	1.6	0.16 J1	0.03 J1
11/14/2024	Assessment	0.103	0.16	8.12	< 0.007 U1	0.054	0.53	0.467 B1	2.00	1.32	0.13 J1	0.00351	< 0.002 U1	1.2	0.17 J1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1604D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.032	70.8	19.6	0.30	7.1	39.1	292
7/18/2016	Background	0.022	67.8	19.3	0.28	6.9	38.6	332
9/19/2016	Background	0.010	69.8	17.8	0.26	7.3	31.9	280
11/15/2016	Background	0.025	74.9	18.0	0.27	7.1	35.0	320
1/9/2017	Background	0.016	72.9	17.1	0.24	7.2	29.6	326
3/7/2017	Background	0.075	67.2	17.4	0.24	7.3	30.4	290
5/8/2017	Background	0.050	71.8	17.3	0.26	7.2	29.2	318
7/18/2017	Background	0.095	63.7	16.9	0.21	7.2	28.7	304
10/3/2017	Detection	0.075	62.7	16.5	0.24	7.3	28.7	318
12/13/2017	Detection	--	--	16.3	0.24	7.3	29.3	--
6/6/2018	Assessment	0.037	67.6	16.1	0.28	7.3	26.3	308
8/14/2018	Assessment	0.052	70.5	16.4	0.26	7.1	26.2	311
5/21/2019	Assessment	0.03 J1	69.3	16.1	0.27	7.2	27.4	309
6/26/2019	Assessment	0.03 J1	69.5	15.8	0.28	7.3	23.2	326
9/10/2019	Assessment	0.02 J1	74.7	15.9	0.28	7.3	24.7	326
3/11/2020	Assessment	--	--	--	0.26	7.1	--	--
5/21/2020	Assessment	0.02 J1	73.9	15.9	0.30	6.8	24.4	329
11/13/2020	Assessment	0.02 J1	68.4	15.1	0.27	6.4	20.9	306
2/3/2021	Assessment	< 0.02 U1	70.0	15.3	0.30	6.7	21.2	310
5/25/2021	Assessment	0.022 J1	71.5	15.2	0.30	7.6	20.6	310
11/9/2021	Assessment	0.021 J1	69.3	15.3	0.29	7.3	18.6	320
2/15/2022	Assessment	0.021 J1	67.8	15.2	0.27	6.7	19.8	310
5/11/2022	Assessment	0.013 J1	71.7	15.1	0.27	7.4	19.8	320
10/31/2022	Assessment	0.023 J1	69.4	15.4	0.26	7.0	19.0	310
2/9/2023	Assessment	0.021 J1	64.5	15.3	0.27	7.2	19.0	320
5/31/2023	Assessment	0.01 J1	59.1 M1	15.2	0.25	7.2	18.4	330
11/1/2023	Assessment	0.022 J1	68.6 M1	15.1	0.28	7.1	18.2	310
3/7/2024	Assessment	--	--	--	0.25	7.0	--	--
5/15/2024	Assessment	0.019 J1	65.1 M1	15.1	0.16	7.0	18.4	290
11/14/2024	Assessment	0.02 J1	71 M1	15.6	0.31	7.3	18.6	320

**Table 1. Groundwater Data Summary: MW-1604D**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.02 J1	14.6	216	< 0.005 U1	< 0.004 U1	0.2	0.119	0.374	0.30	0.098	0.002	< 0.002 U1	3.96	< 0.03 U1	< 0.01 U1
7/18/2016	Background	0.01 J1	17.9	239	< 0.005 U1	< 0.004 U1	0.2	0.086	0.8422	0.28	0.022	0.010	< 0.002 U1	3.33	0.04 J1	< 0.01 U1
9/19/2016	Background	0.01 J1	16.2	234	< 0.005 U1	< 0.004 U1	0.1	0.052	0.377	0.26	0.02 J1	0.004	< 0.002 U1	2.82	< 0.03 U1	< 0.01 U1
11/15/2016	Background	0.03 J1	16.7	247	< 0.005 U1	0.008 J1	0.117	0.047	0.454	0.27	0.02 J1	0.009	< 0.002 U1	2.80	< 0.03 U1	0.02 J1
1/9/2017	Background	0.02 J1	16.9	243	< 0.005 U1	0.007 J1	0.158	0.057	2.235	0.24	0.01 J1	< 0.0002 U1	< 0.002 U1	3.04	0.03 J1	0.095
3/7/2017	Background	0.02 J1	18.4	267	< 0.005 U1	< 0.004 U1	0.267	0.070	0.868	0.24	0.061	0.003	0.002 J1	3.20	0.06 J1	< 0.01 U1
5/8/2017	Background	0.05	18.1	226	0.020	0.02	0.128	0.091	0.744	0.26	0.043	0.004	0.005	2.90	0.1	0.050
7/18/2017	Background	0.02 J1	16.8	249	< 0.004 U1	< 0.005 U1	0.165	0.072	1.079	0.21	0.02 J1	0.002	< 0.002 U1	2.61	< 0.03 U1	< 0.01 U1
6/6/2018	Assessment	0.04 J1	22.1	266	0.004 J1	< 0.005 U1	0.057	0.117	0.942	0.28	0.034	0.007	< 0.002 U1	3.56	< 0.03 U1	< 0.01 U1
8/14/2018	Assessment	0.01 J1	16.6	237	< 0.004 U1	< 0.005 U1	0.04 J1	0.059	0.617	0.26	0.005 J1	< 0.0002 U1	--	2.50	< 0.03 U1	0.01 J1
5/21/2019	Assessment	< 0.02 U1	18.3	235	< 0.02 U1	< 0.01 U1	0.04 J1	0.051	0.771	0.27	0.06 J1	< 0.009 U1	< 0.002 U1	2.52	< 0.03 U1	< 0.1 U1
6/26/2019	Assessment	< 0.02 U1	18.2	263	< 0.02 U1	< 0.01 U1	0.06 J1	0.067	1.164	0.28	0.04 J1	< 0.009 U1	< 0.002 U1	2.58	< 0.03 U1	< 0.1 U1
9/10/2019	Assessment	< 0.02 U1	18.0	257	< 0.02 U1	< 0.01 U1	0.09 J1	0.052	0.859	0.28	< 0.05 U1	0.00157	< 0.002 U1	2.70	< 0.03 U1	< 0.1 U1
3/11/2020	Assessment	< 0.02 U1	17.8	228	< 0.02 U1	< 0.01 U1	0.09 J1	0.052	1.017	0.26	< 0.05 U1	0.00139	< 0.002 U1	2.22	< 0.03 U1	< 0.1 U1
5/21/2020	Assessment	< 0.02 U1	17.9	242	< 0.02 U1	< 0.01 U1	0.2 J1	0.05 J1	1.070	0.30	< 0.05 U1	0.00140	< 0.002 U1	2.35	< 0.03 U1	< 0.1 U1
11/13/2020	Assessment	< 0.02 U1	18.2	250	< 0.02 U1	< 0.01 U1	0.1 J1	0.05 J1	1.853	0.27	< 0.05 U1	0.00154	< 0.002 U1	2.54	< 0.03 U1	< 0.1 U1
2/3/2021	Assessment	< 0.02 U1	18.5	257	< 0.02 U1	< 0.01 U1	0.2 J1	0.055	1.899	0.30	< 0.05 U1	0.00138	< 0.002 U1	2.55	< 0.03 U1	< 0.1 U1
5/25/2021	Assessment	< 0.02 U1	18.5	269 M1, P3	< 0.007 U1	< 0.004 U1	0.05 J1	0.046	1.11	0.30	< 0.05 U1	0.00131	< 0.002 U1	2.5	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	< 0.02 U1	18.3	267	< 0.007 U1	< 0.004 U1	0.20	0.049	1.43	0.29	< 0.05 U1	0.00148	< 0.002 U1	2.5	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	< 0.02 U1	17.8	254	< 0.007 U1	< 0.004 U1	0.25	0.051	0.92	0.27	< 0.05 U1	0.00136	< 0.002 U1	2.5	< 0.09 U1	< 0.04 U1
5/11/2022	Assessment	< 0.02 U1	18.6	259	< 0.007 U1	< 0.004 U1	0.30	0.057	1.31	0.27	< 0.05 U1	0.00138	< 0.002 U1	2.6	< 0.09 U1	< 0.04 U1
10/31/2022	Assessment	< 0.02 U1	18.2	273	< 0.007 U1	< 0.004 U1	0.26	0.071	1.20	0.26	0.12 J1	0.00154	< 0.002 U1	2.5	< 0.09 U1	< 0.04 U1
2/9/2023	Assessment	< 0.02 U1	16.9	257	< 0.007 U1	0.008 J1	0.28	0.058	1.19	0.27	< 0.05 U1	0.00156	< 0.002 U1	2.5	< 0.09 U1	< 0.04 U1
5/31/2023	Assessment	< 0.008 U1	15.8	231 M1	< 0.007 U1	< 0.004 U1	0.17 J1	0.048	0.67	0.25	< 0.05 U1	0.00126	< 0.002 U1	2.4	< 0.04 U1	< 0.02 U1
11/1/2023	Assessment	0.018 J1	17.8	285 M1	< 0.007 U1	0.013 J1	0.25 J1	0.064	0.57	0.28	0.05 J1	0.00144	< 0.002 U1	2.7	< 0.04 U1	< 0.02 U1
3/7/2024	Assessment	0.008 J1	17.7	270	< 0.007 U1	< 0.004 U1	0.29 J1	0.050	1.34	0.25	< 0.05 U1	0.00149	< 0.002 U1	2.4	< 0.04 U1	< 0.02 U1
5/15/2024	Assessment	< 0.008 U1	16.9	223 M1	< 0.007 U1	< 0.004 U1	0.24 J1	0.046	1.43	0.16	< 0.05 U1	0.00129	< 0.002 U1	2.2	< 0.04 U1	< 0.02 U1
11/14/2024	Assessment	< 0.008 U1	16.3	254 M1	< 0.007 M1, U1	< 0.004 U1	0.33	0.056	2.09	0.31	< 0.05 U1	0.00143 M1	< 0.002 U1	2.5	< 0.04 U1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1604I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.111	76.5	50.4	0.34	7.1	138	530
7/18/2016	Background	0.185	79.7	53.6	0.33	7.4	152	548
9/19/2016	Background	0.320	73.1	46.5	0.29	7.5	120	504
11/15/2016	Background	0.368	78.7	46.2	0.32	7.3	130	521
1/9/2017	Background	0.241	72.4	39.5	0.31	7.5	99.8	456
3/7/2017	Background	0.252	68.7	41.6	0.31	7.4	104	448
5/9/2017	Background	0.363	81.3	53.4	0.34	7.5	139	546
7/18/2017	Background	0.379	73.5	49.3	0.27	7.3	139	522
10/3/2017	Detection	0.442	69.5	45.2	0.30	7.5	129	502
12/12/2017	Detection	--	--	45.6	0.32	7.5	132	--
1/4/2018	Detection	0.385	--	--	--	7.9	119	504
6/6/2018	Assessment	0.188	62.9	39.4	0.37	7.6	95.4	442
8/14/2018	Assessment	0.193	73.8	43.7	0.33	7.4	112	487
5/21/2019	Assessment	0.254	78.2	70.1	0.34	7.3	181	618
6/27/2019	Assessment	0.278	75.2	63.5	0.38	7.5	167	622
9/11/2019	Assessment	0.269	71.5	43.6	0.35	7.4	127	515
3/10/2020	Assessment	--	--	--	0.35	7.2	--	--
5/21/2020	Assessment	0.324	68.1	43.9	0.40	7.8	118	496
11/13/2020	Assessment	0.298	66.3	38.0	0.35	6.4	94.4	439
2/3/2021	Assessment	0.145	56.6	29.6	0.39	6.9	52.0	351
5/25/2021	Assessment	0.108	59.4	32.4	0.40	7.3	68.6	380
11/9/2021	Assessment	0.079	56.9	35.7	0.40	7.5	77.2	400
2/15/2022	Assessment	0.118	60.5	37.8	0.37	7.1	86.6	420
5/11/2022	Assessment	0.092	64.0	39.2	0.38	7.5	81.8	400
11/1/2022	Assessment	0.066	63.4	39.4	0.36	7.3	94.4	420
2/9/2023	Assessment	0.065	57.2	34.7	0.38	7.3	70.2	380
5/31/2023	Assessment	0.102	56.7	--	--	7.3	--	--
6/6/2023	Assessment	--	--	38.4	0.35	7.2	95.7	420
10/31/2023	Assessment	0.065	55.1	33.0	0.36	7.2	66.2	380
3/7/2024	Assessment	--	--	--	0.35	7.3	--	--
5/15/2024	Assessment	0.505	80.9	44.2	0.28	7.1	188	610
11/14/2024	Assessment	0.565	79	38.4	0.41	7.4	189	580

**Table 1. Groundwater Data Summary: MW-1604I**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.02 J1	19.5	124	< 0.005 U1	0.12	0.1	0.893	1.118	0.34	0.02 J1	0.004	< 0.002 U1	2.59	0.03 J1	0.01 J1
7/18/2016	Background	0.02 J1	19.1	132	< 0.005 U1	< 0.004 U1	0.4	0.875	1.299	0.33	0.02 J1	0.011	< 0.002 U1	2.48	< 0.03 U1	0.01 J1
9/19/2016	Background	0.03 J1	20.4	123	< 0.005 U1	< 0.004 U1	0.4	0.742	0.624	0.29	0.02 J1	0.008	< 0.002 U1	2.87	0.07 J1	0.078
11/15/2016	Background	0.04 J1	19.4	123	< 0.005 U1	0.009 J1	0.153	0.704	1.664	0.32	0.045	0.015	< 0.002 U1	2.49	< 0.03 U1	0.02 J1
1/9/2017	Background	0.02 J1	20.2	114	< 0.005 U1	< 0.004 U1	0.114	0.696	1.455	0.31	0.01 J1	0.003	< 0.002 U1	2.84	< 0.03 U1	0.02 J1
3/7/2017	Background	0.02 J1	20.0	117	< 0.005 U1	< 0.004 U1	0.573	0.743	0.671	0.31	0.024	0.009	< 0.002 U1	3.08	0.05 J1	0.02 J1
5/9/2017	Background	0.06	26.4	125	0.020	0.02	0.112	1.03	0.844	0.34	0.043	0.013	0.005	3.02	0.1	0.050
7/18/2017	Background	0.24	19.0	130	< 0.004 U1	0.005 J1	0.208	0.877	1.059	0.27	0.093	0.009	< 0.002 U1	2.75	< 0.03 U1	0.02 J1
6/6/2018	Assessment	0.03 J1	18.7	107	0.004 J1	< 0.005 U1	0.05 J1	0.792	1.089	0.37	0.01 J1	0.012	< 0.002 U1	3.00	0.03 J1	0.02 J1
8/14/2018	Assessment	0.03 J1	18.5	110	< 0.004 U1	< 0.005 U1	0.075	0.737	0.183	0.33	0.007 J1	0.004	--	2.50	< 0.03 U1	0.052
5/21/2019	Assessment	0.02 J1	21.2	151	< 0.02 U1	< 0.01 U1	0.05 J1	1.03	1.458	0.34	< 0.02 U1	0.01 J1	< 0.002 U1	2.54	0.1 J1	< 0.1 U1
6/27/2019	Assessment	0.02 J1	18.5	135	< 0.02 U1	< 0.01 U1	0.09 J1	0.979	0.888	0.38	< 0.02 U1	< 0.009 U1	< 0.002 U1	2.51	0.1 J1	< 0.1 U1
9/11/2019	Assessment	0.03 J1	20.7	119	< 0.02 U1	< 0.01 U1	0.1 J1	0.735	0.819	0.35	< 0.05 U1	0.00772	< 0.002 U1	2.26	0.05 J1	< 0.1 U1
3/10/2020	Assessment	< 0.02 U1	17.5	96.7	< 0.02 U1	< 0.01 U1	0.09 J1	0.831	1.000	0.35	< 0.05 U1	0.00775	< 0.002 U1	2.10	< 0.03 U1	< 0.1 U1
5/21/2020	Assessment	0.02 J1	18.7	102	< 0.02 U1	< 0.01 U1	0.09 J1	0.763	1.32	0.40	< 0.05 U1	0.00714	< 0.002 U1	2.19	0.07 J1	< 0.1 U1
11/13/2020	Assessment	0.02 J1	27.9	101	< 0.02 U1	< 0.01 U1	0.2 J1	0.630	1.186	0.35	< 0.05 U1	0.00674	< 0.002 U1	2.19	< 0.03 U1	< 0.1 U1
2/3/2021	Assessment	0.02 J1	24.4	83.3	< 0.02 U1	< 0.01 U1	0.235	0.460	1.423	0.39	< 0.05 U1	0.00555	< 0.002 U1	2.34	< 0.03 U1	< 0.1 U1
5/25/2021	Assessment	0.09 J1	22.1	88.9	< 0.007 U1	< 0.004 U1	0.08 J1	0.497	0.90	0.40	< 0.05 U1	0.00568	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.17	56.7	102	0.025 J1	0.005 J1	0.53	0.478	2.41	0.40	0.17 J1	0.00539	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	< 0.02 U1	19.5	88.8	< 0.007 U1	< 0.004 U1	0.27	0.600	2.12	0.37	< 0.05 U1	0.00626	< 0.002 U1	2.1	< 0.09 U1	< 0.04 U1
5/11/2022	Assessment	0.05 J1	28.3	92.4	< 0.007 U1	0.004 J1	0.42	0.674	3.74	0.38	0.06 J1	0.00547	< 0.002 U1	2.2	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	0.02 J1	19.7	94.2	< 0.007 U1	< 0.004 U1	0.25	0.597	1.36	0.36	0.07 J1	0.00613	< 0.002 U1	2.0	< 0.09 U1	< 0.04 U1
2/9/2023	Assessment	0.02 J1	18.9	83.6	< 0.007 U1	< 0.004 U1	0.30	0.528	0.82	0.38	< 0.05 U1	0.00571	< 0.002 U1	2.1	< 0.09 U1	< 0.04 U1
5/31/2023	Assessment	0.031 J1	16.7	90.9	< 0.007 U1	0.007 J1	0.19 J1	0.509	2.04	--	< 0.05 U1	0.00552	< 0.002 U1	1.8	< 0.04 U1	< 0.02 U1
6/6/2023	Assessment	--	--	--	--	--	--	--	--	0.35	--	--	--	--	--	
10/31/2023	Assessment	0.043 J1	19.3	83.1	< 0.007 U1	0.013 J1	0.43	0.522	1.47	0.36	0.06 J1	0.00506	< 0.002 U1	2.0	< 0.04 U1	< 0.02 U1
3/7/2024	Assessment	0.020 J1	17.6	101	< 0.007 U1	0.005 J1	0.28 J1	0.625	1.39	0.35	< 0.05 U1	0.00582	< 0.002 U1	1.9	< 0.04 U1	< 0.02 U1
5/15/2024	Assessment	0.020 J1	16.1	127	< 0.007 U1	< 0.004 U1	0.31	1.08	2.01	0.28	< 0.05 U1	0.00771	< 0.002 U1	1.7	< 0.04 U1	< 0.02 U1
11/14/2024	Assessment	0.02 J1	17.3	139	< 0.007 U1	< 0.004 U1	0.28 J1	0.932 B1	1.80	0.41	< 0.05 U1	0.00792	< 0.002 U1	1.7	< 0.04 U1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1604S**  
**Rockport - BAP**  
**Appendix III Constituents**

Geosyntec Consultants, Inc.

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.653	84.5	62.6	0.89	7.2	187	532
7/20/2016	Background	0.530	79.8	60.8	0.88	7.3	186	526
9/19/2016	Background	0.650	68.1	50.3	0.92	7.5	141	456
11/15/2016	Background	0.736	82.9	58.3	0.83	--	165	533
1/9/2017	Background	0.721	83.9	63.5	0.91	7.4	173	535
3/7/2017	Background	0.725	79.1	64.1	0.94	7.5	170	528
5/8/2017	Background	0.554	111	88.0	0.81	7.5	251	672
5/18/2017	Background	--	--	--	--	7.3	--	--
7/17/2017	Background	0.473	98.6	76.0	0.76	7.3	234	657
10/3/2017	Detection	0.562	67.8	55.3	0.87	7.7	123	462
12/12/2017	Detection	--	--	53.9	0.97	7.7	112	--
1/4/2018	Detection	0.778	--	54.5	1.02	8.0	104	--
6/6/2018	Assessment	0.521	72.5	53.7	1.04	7.7	134	474
8/14/2018	Assessment	0.582	92.6	73.0	0.90	7.4	187	583
5/20/2019	Assessment	0.451	80.4	57.2	0.99	7.5	179	572
6/26/2019	Assessment	0.667	75.8	81.4	0.91	7.5	246	718
9/10/2019	Assessment	0.802	53.1	57.6	1.63	7.5	134	506
3/10/2020	Assessment	--	--	--	1.05	7.4	--	--
5/21/2020	Assessment	0.544	50.2	40.2	1.26	8.1	99.7	405
11/13/2020	Assessment	0.559	59.5	58.6	1.03	6.5	93.8	428
2/3/2021	Assessment	0.639	66.0	63.6	1.04	7.1	93.8	445
5/25/2021	Assessment	0.526	52.1	47.9	1.07	9.1	83.6	380
11/9/2021	Assessment	0.564	65.9	70.0	0.92	6.9	92.7	470
2/15/2022	Assessment	0.738	81.4	89.1	0.90	7.3	128	570
5/11/2022	Assessment	0.665	81.6	76.3	0.90	7.5	131	520
10/31/2022	Assessment	0.773	87.5	81.1	0.82	7.2	148	590
2/8/2023	Assessment	0.782	80.3	62.7	0.88	7.5	136	540
5/31/2023	Assessment	0.672	76.1	--	--	7.4	--	--
6/6/2023	Assessment	--	--	55.7	0.90	7.4	128	520
10/31/2023	Assessment	0.679	72.6	41.5	0.84	7.3	125	490
3/6/2024	Assessment	--	--	--	0.80	7.3	--	--
5/15/2024	Assessment	3.12	349	39.0	0.75	7.2	126	460
11/14/2024	Assessment	0.673	75	34.7	0.94	7.5	199	560

**Table 1. Groundwater Data Summary: MW-1604S**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.06	0.41	19.2	0.007 J1	0.02	0.2	0.548	0.3437	0.89	0.315	0.011	< 0.002 U1	2.57	0.07 J1	0.02 J1
7/20/2016	Background	0.13	0.76	21.7	0.059	0.09	0.6	0.955	0.9695	0.88	0.911	0.006	< 0.002 U1	2.33	0.2	0.057
9/19/2016	Background	0.06	0.24	13.3	< 0.005 U1	0.01 J1	0.5	0.325	1.126	0.92	0.060	0.008	< 0.002 U1	2.51	0.07 J1	0.05 J1
11/15/2016	Background	0.07	0.24	18.5	0.005 J1	0.03	0.081	0.326	0.377	0.83	0.045	0.014	< 0.002 U1	4.79	0.05 J1	0.096
1/9/2017	Background	0.06	0.31	17.3	< 0.005 U1	0.02 J1	0.701	0.338	1.629	0.91	0.02 J1	0.013	< 0.002 U1	2.59	0.06 J1	0.04 J1
3/7/2017	Background	0.05	0.20	16.0	< 0.005 U1	0.01 J1	0.326	0.321	0.151	0.94	0.027	0.013	< 0.002 U1	2.61	0.07 J1	0.03 J1
5/8/2017	Background	0.07	0.30	18.8	0.020	0.02	0.079	0.355	0.579	0.81	0.050	0.018	0.005	2.16	0.1	0.050
7/17/2017	Background	0.07	0.24	20.7	< 0.004 U1	0.02 J1	0.136	0.285	0.731	0.76	0.064	0.014	< 0.002 U1	1.88	0.03 J1	0.02 J1
6/6/2018	Assessment	0.06	0.20	14.1	< 0.004 U1	0.02 J1	0.056	0.407	1.058	1.04	0.04	0.014	< 0.002 U1	2.50	0.05 J1	0.02 J1
8/14/2018	Assessment	0.05 J1	0.20	16.3	< 0.004 U1	0.02 J1	0.088	0.365	0.444	0.90	0.009 J1	0.009	--	2.21	0.2	0.03 J1
5/20/2019	Assessment	0.06 J1	0.18	18.8	< 0.02 U1	0.03 J1	0.219	0.352	0.677	0.99	0.03 J1	< 0.009 U1	< 0.002 U1	2.29	0.07 J1	< 0.1 U1
6/26/2019	Assessment	0.04 J1	0.47	46.1	< 0.02 U1	0.02 J1	0.1 J1	1.13	0.565	0.91	0.122	0.01 J1	< 0.002 U1	1 J1	0.2	< 0.1 U1
9/10/2019	Assessment	0.06 J1	0.26	12.0	< 0.02 U1	0.02 J1	0.202	0.207	0.115	1.63	< 0.05 U1	0.00913	< 0.002 U1	4.72	0.1 J1	< 0.1 U1
3/10/2020	Assessment	0.02 J1	0.18	13.0	< 0.02 U1	0.02 J1	0.1 J1	0.384	0.941	1.05	< 0.05 U1	0.00972	< 0.002 U1	2.90	0.07 J1	< 0.1 U1
5/21/2020	Assessment	0.06 J1	0.20	12.9	< 0.02 U1	0.02 J1	0.1 J1	0.297	0.996	1.26	< 0.05 U1	0.00689	< 0.002 U1	3.09	0.1 J1	< 0.1 U1
11/13/2020	Assessment	0.08 J1	0.17	10.5	< 0.02 U1	0.03 J1	0.2 J1	0.285	0.2723	1.03	< 0.05 U1	0.00868	< 0.002 U1	2.94	0.09 J1	< 0.1 U1
2/3/2021	Assessment	0.06 J1	0.18	11.5	< 0.02 U1	0.03 J1	0.1 J1	0.355	2.752	1.04	< 0.05 U1	0.00902	< 0.002 U1	3.10	0.07 J1	< 0.1 U1
5/25/2021	Assessment	0.07 J1	0.17	10.1	< 0.007 U1	0.031	0.14 J1	0.27	0.35	1.07	< 0.05 U1	0.00777	< 0.002 U1	3.1	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.05 J1	0.20	11.7	< 0.007 U1	0.018 J1	0.24	0.271	1.12	0.92	< 0.05 U1	0.00870	< 0.002 U1	2.9	0.13 J1	< 0.04 U1
2/15/2022	Assessment	0.05 J1	0.19	13.9	< 0.007 U1	0.023	0.39	0.342	0.19	0.90	< 0.05 U1	0.0100	< 0.002 U1	3.0	0.18 J1	< 0.04 U1
5/11/2022	Assessment	0.05 J1	0.17	13.2	< 0.007 U1	0.024	0.32	0.327	0.62	0.90	< 0.05 U1	0.0102	< 0.002 U1	3.1	0.13 J1	< 0.04 U1
10/31/2022	Assessment	0.05 J1	0.17	17.2	< 0.007 U1	0.033	0.19 J1	0.295	0.46	0.82	< 0.05 U1	0.0110	< 0.002 U1	3.1	0.16 J1	< 0.04 U1
2/8/2023	Assessment	0.05 J1	0.16	16.5	< 0.007 U1	0.021	0.25	0.272	0.79	0.88	< 0.05 U1	0.0118	< 0.002 U1	3.6	0.09 J1	< 0.04 U1
5/31/2023	Assessment	0.051 J1	0.15	15.1	< 0.007 U1	0.024	0.19 J1	0.269	0.39	--	< 0.05 U1	0.0110	< 0.002 U1	3.3	0.11 J1	0.02 J1
6/6/2023	Assessment	--	--	--	--	--	--	--	--	0.90	--	--	--	--	--	
10/31/2023	Assessment	0.051 J1	0.15	14.7	< 0.007 U1	0.026	0.25 J1	0.222	1.44	0.84	< 0.05 U1	0.0112	< 0.002 U1	3.5	0.06 J1	< 0.02 U1
3/6/2024	Assessment	0.045 J1	0.13	12.9	< 0.007 U1	0.029	0.27 J1	0.177	0.66	0.80	< 0.05 U1	0.0115	< 0.002 U1	3.1	< 0.04 U1	< 0.02 U1
5/15/2024	Assessment	0.21 J1	0.7	60.3	< 0.04 U1	0.11	1.0 J1	1.25	0.73	0.75	< 0.3 U1	0.0556	< 0.002 U1	13.4	< 0.2 U1	0.1 J1
11/14/2024	Assessment	0.050 J1	0.14	14.8	< 0.007 U1	0.025	0.40	0.315	1.74	0.94	< 0.05 U1	0.013 J1	< 0.002 U1	3.5	< 0.04 U1	0.03 J1

**Table 1. Groundwater Data Summary: MW-1605D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.027	81.7	31.9	0.25	7.1	59.7	406
7/18/2016	Background	0.021	85.7	31.5	0.22	7.2	61.6	408
9/19/2016	Background	0.002 J1	84.2	29.8	0.19	7.1	54.1	370
11/16/2016	Background	0.021	93.9	28.8	0.21	7.1	56.2	400
1/10/2017	Background	0.014	89.9	27.4	0.21	7.3	55.1	794
1/11/2017	Background	--	--	--	--	7.2	--	--
3/7/2017	Background	0.045	88.5	29.4	0.19	7.2	58.4	386
5/9/2017	Background	0.021	90.1	29.2	0.19	6.9	58.5	400
7/18/2017	Background	0.025	84.6	28.6	0.17	9.5	59.1	416
10/3/2017	Detection	0.022	83.1	26.4	0.18	7.1	56.8	390
12/11/2017	Detection	--	--	25.8	0.19	7.2	56.4	--
6/6/2018	Assessment	0.03	81.5	24.2	0.16	7.3	49.2	388
8/15/2018	Assessment	0.024	88.6	23.8	0.23	7.1	48.7	379
5/24/2019	Assessment	0.02 J1	75.7	22.1	0.24	6.9	38.9	364
6/25/2019	Assessment	< 0.02 U1	82.1	22.1	0.21	7.3	40.3	379
9/12/2019	Assessment	< 0.02 U1	84.0	23.7	0.22	7.0	45.1	388
3/9/2020	Assessment	--	--	--	0.20	7.0	--	--
5/20/2020	Assessment	< 0.02 U1	85.0	25.1	0.23	6.9	45.9	382
11/13/2020	Assessment	< 0.02 U1	76.6	24.4	0.21	7.0	43.2	367
2/4/2021	Assessment	< 0.02 U1	79.0	25.0	0.24	6.8	43.1	369
5/25/2021	Assessment	0.017 J1	76.8	23.8	0.23	8.9	41.0	360
11/10/2021	Assessment	0.014 J1	76.0	23.3	0.22	7.4	37.8	370
2/15/2022	Assessment	0.016 J1	75.9	23.5	0.21	7.1	39.1	350
5/11/2022	Assessment	< 0.009 U1	78.6 M1, P3	23.2	0.21	7.3	39.4	350
11/1/2022	Assessment	0.017 J1	75.6	24.1	0.20	7.2	38.3	350
2/8/2023	Assessment	0.014 J1	72.8	25.3	0.20	7.2	41.1	350
5/30/2023	Assessment	0.016 J1	69.5	24.5	0.20	6.8	40.6	350
10/31/2023	Assessment	0.016 J1	70.2	24.5	0.20	6.6	39.7	360
3/7/2024	Assessment	--	--	--	0.20	7.3	--	--
5/15/2024	Assessment	0.07 J1	363	25.5	0.08	7.0	45.2	350
11/14/2024	Assessment	0.015 J1	77	26.5	0.24	7.3	47.9	380 S7

**Table 1. Groundwater Data Summary: MW-1605D**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.02 J1	17.5	400	< 0.005 U1	< 0.004 U1	0.2	0.284	1.094	0.25	0.051	0.004	< 0.002 U1	7.65	0.03 J1	< 0.01 U1
7/18/2016	Background	0.01 J1	17.4	434	< 0.005 U1	< 0.004 U1	0.3	0.170	1.666	0.22	0.051	0.005	< 0.002 U1	3.19	< 0.03 U1	< 0.01 U1
9/19/2016	Background	0.01 J1	18.1	488	< 0.005 U1	< 0.004 U1	0.3	0.118	0.873	0.19	0.009 J1	0.006	< 0.002 U1	2.72	< 0.03 U1	< 0.01 U1
11/16/2016	Background	0.01 J1	18.6	453	< 0.005 U1	< 0.004 U1	0.259	0.097	1.371	0.21	0.008 J1	0.006	< 0.002 U1	2.21	< 0.03 U1	0.01 J1
1/10/2017	Background	0.01 J1	19.0	430	< 0.005 U1	< 0.004 U1	0.128	0.086	1.589	0.21	< 0.004 U1	0.004	< 0.002 U1	2.21	< 0.03 U1	< 0.01 U1
3/7/2017	Background	0.02 J1	19.1	490	< 0.005 U1	0.006 J1	0.322	0.107	1.104	0.19	0.045	0.006	< 0.002 U1	2.44	0.03 J1	< 0.01 U1
5/9/2017	Background	0.05	18.3	420	0.020	0.02	0.131	0.108	0.4527	0.19	0.037	0.003	0.005	2.08	0.1	0.050
7/18/2017	Background	0.02 J1	17.9	457	< 0.004 U1	< 0.005 U1	0.119	0.111	1.657	0.17	0.009 J1	0.005	< 0.002 U1	1.98	< 0.03 U1	0.03 J1
6/6/2018	Assessment	0.02 J1	18.2	382	0.01 J1	< 0.005 U1	0.272	0.188	1.978	0.16	0.273	0.007	< 0.002 U1	1.97	0.04 J1	< 0.01 U1
8/15/2018	Assessment	0.01 J1	20.3	443	< 0.004 U1	< 0.005 U1	0.077	0.079	0.605	0.23	0.035	0.003	--	1.94	< 0.03 U1	< 0.01 U1
5/24/2019	Assessment	0.05 J1	13.9	385	< 0.02 U1	< 0.01 U1	0.06 J1	0.255	1.116	0.24	< 0.02 U1	< 0.009 U1	< 0.002 U1	2.60	< 0.03 U1	< 0.1 U1
6/25/2019	Assessment	< 0.02 U1	18.3	365	< 0.02 U1	< 0.01 U1	0.2 J1	0.104	0.655	0.21	0.05 J1	< 0.009 U1	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
9/12/2019	Assessment	< 0.02 U1	21.2	471	< 0.02 U1	< 0.01 U1	0.652	0.084	0.896	0.22	< 0.05 U1	0.00176	< 0.002 U1	2.08	< 0.03 U1	< 0.1 U1
3/9/2020	Assessment	< 0.02 U1	19.9	448	< 0.02 U1	< 0.01 U1	0.1 J1	0.069	1.802	0.20	< 0.05 U1	0.00178	< 0.002 U1	2 J1	0.04 J1	< 0.1 U1
5/20/2020	Assessment	< 0.02 U1	20.7	436	< 0.02 U1	< 0.01 U1	0.1 J1	0.074	2.158	0.23	< 0.05 U1	0.00180	< 0.002 U1	2.05	0.05 J1	< 0.1 U1
11/13/2020	Assessment	< 0.02 U1	21.1	445	< 0.02 U1	< 0.01 U1	0.2 J1	0.060	1.119	0.21	< 0.05 U1	0.00156	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
2/4/2021	Assessment	< 0.02 U1	21.5	457	< 0.02 U1	< 0.01 U1	0.226	0.054	1.102	0.24	< 0.05 U1	0.00161	< 0.002 U1	2 J1	0.04 J1	< 0.1 U1
5/25/2021	Assessment	0.04 J1	20.9	445	< 0.007 U1	0.006 J1	0.08 J1	0.053	1.03	0.23	< 0.05 U1	0.00153	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
11/10/2021	Assessment	< 0.02 U1	21.3	450	< 0.007 U1	< 0.004 U1	0.27	0.057	1.17	0.22	< 0.05 U1	0.00154	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	< 0.02 U1	22.3	440	< 0.007 U1	< 0.004 U1	0.34	0.052	0.90	0.21	< 0.05 U1	0.00156	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
5/11/2022	Assessment	< 0.02 U1	23.3	460 M1, P3	< 0.007 U1	< 0.004 U1	0.20	0.060	0.81	0.21	< 0.05 U1	0.00149	< 0.002 U1	2.0	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	< 0.02 U1	21.8	453	< 0.007 U1	< 0.004 U1	0.19 J1	0.029	2.10	0.20	< 0.05 U1	0.00153	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
2/8/2023	Assessment	< 0.02 U1	20.6	439	0.043 J1	0.005 J1	0.23	0.065	1.18	0.20	< 0.05 U1	0.00156	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
5/30/2023	Assessment	0.016 J1	18.6	402	< 0.007 U1	< 0.004 U1	0.18 J1	0.046	1.37	0.20	< 0.05 U1	0.00152	< 0.002 U1	1.8	< 0.04 U1	< 0.02 U1
10/31/2023	Assessment	0.016 J1	19.3	431	< 0.007 U1	< 0.004 U1	0.29 J1	0.056	1.94	0.20	0.05 J1	0.00141	< 0.002 U1	1.8	< 0.04 U1	< 0.02 U1
3/7/2024	Assessment	0.009 J1	20.4	462	< 0.007 U1	0.006 J1	0.19 J1	0.052	1.70	0.20	< 0.05 U1	0.00150	< 0.002 U1	1.9	< 0.04 U1	< 0.02 U1
5/15/2024	Assessment	0.04 J1	93.9	2,080	< 0.04 U1	< 0.02 U1	1.5	0.29	1.06	0.08	< 0.3 U1	0.0069	< 0.002 U1	9.0	< 0.2 U1	< 0.1 U1
11/14/2024	Assessment	0.028 J1	20.5	448	< 0.007 U1	< 0.004 U1	0.23 J1	0.046 B1	1.47	0.24	< 0.05 U1	0.00148	< 0.002 U1	1.9	< 0.04 U1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1605I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.027	89.5	45.6	0.21	7.0	130	522
7/19/2016	Background	0.027	92.5	46.8	0.22	7.3	135	544
9/19/2016	Background	0.020	97.9	45.6	0.18	7.3	140	548
11/16/2016	Background	0.034	103	44.4	0.19	7.1	140	567
1/10/2017	Background	0.020	91.3	43.5	0.19	7.2	119	534
3/7/2017	Background	0.046	81.9	44.7	0.17	7.3	115	474
5/9/2017	Background	0.043	93.5	41.8	0.19	7.0	115	508
7/18/2017	Background	0.036	79.9	39.7	0.1 J1	7.0	116	488
10/3/2017	Detection	0.041	82.5	40.7	0.19	7.2	120	494
12/11/2017	Detection	--	--	41.3	0.18	7.3	135	--
1/4/2018	Detection	--	--	--	--	7.6	144	536
6/6/2018	Assessment	0.129	79.2	39.1	0.16	7.3	120	500
8/15/2018	Assessment	0.158	83.4	38.0	0.23	7.3	114	483
5/24/2019	Assessment	0.08 J1	73.8	36.8	0.23	7.3	89.2	443
6/25/2019	Assessment	0.126	83.4	38.3	0.21	7.4	104	471
9/12/2019	Assessment	0.199	89.4	41.7	0.20	7.4	128	524
3/10/2020	Assessment	--	--	--	0.21	7.1	--	--
5/20/2020	Assessment	0.097	90.1	37.8	0.23	6.9	109	476
11/13/2020	Assessment	0.060	73.3	32.8	0.21	7.1	86.2	429
2/4/2021	Assessment	0.04 J1	74.2	32.9	0.24	6.9	85.1	424
5/26/2021	Assessment	0.039 J1	80.4	35.6	0.24	9.5	97.2	450
11/10/2021	Assessment	0.040 J1	81.1	36.3	0.21	7.5	106	470
2/15/2022	Assessment	0.060	77.4	36.2	0.21	7.2	108	440
5/11/2022	Assessment	0.056	76.5	37.1	0.22	7.4	106	450
11/1/2022	Assessment	0.059	76.0	35.7	0.21	7.2	104	470
2/8/2023	Assessment	0.046 J1	76.0	35.0	0.21	7.3	109	450
5/30/2023	Assessment	0.069	60.6	32.4	0.20	6.6	102	450
10/31/2023	Assessment	0.063	69.2	30.4	0.21	7.2	89.1	430
3/7/2024	Assessment	--	--	--	0.20	7.3	--	--
5/14/2024	Assessment	0.059	76.3	34.1	0.20	7.1	115	470
11/14/2024	Assessment	0.082	86	39.1	0.24	7.3	165	540

**Table 1. Groundwater Data Summary: MW-1605I****Rockport - BAP****Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.02 J1	17.3	151	< 0.005 U1	< 0.004 U1	0.2	1.67	1.219	0.21	0.122	0.004	< 0.002 U1	1.42	0.03 J1	0.02 J1
7/19/2016	Background	0.03 J1	20.1	178	< 0.005 U1	< 0.004 U1	1.2	1.79	2.288	0.22	0.032	0.005	< 0.002 U1	1.39	0.07 J1	0.02 J1
9/19/2016	Background	0.04 J1	19.5	180	< 0.005 U1	0.005 J1	0.2	1.66	2.171	0.18	0.160	0.008	< 0.002 U1	1.23	< 0.03 U1	0.03 J1
11/16/2016	Background	0.04 J1	18.0	168	< 0.005 U1	0.008 J1	0.091	1.58	1.912	0.19	0.079	0.017	< 0.002 U1	1.07	< 0.03 U1	0.03 J1
1/10/2017	Background	0.03 J1	18.5	161	< 0.005 U1	< 0.004 U1	0.110	1.52	1.823	0.19	0.02 J1	0.004	< 0.002 U1	1.43	0.04 J1	0.183
3/7/2017	Background	0.03 J1	18.6	156	< 0.005 U1	0.008 J1	0.214	1.48	1.721	0.17	0.063	0.007	< 0.002 U1	1.33	0.04 J1	0.03 J1
5/9/2017	Background	0.05	20.1	148	0.020	0.02	0.137	1.56	1.139	0.19	0.037	0.010	0.005	1.18	0.1	0.050
7/18/2017	Background	0.05 J1	26.2	153	< 0.004 U1	< 0.005 U1	0.104	1.49	2.173	0.1 J1	0.137	0.010	< 0.002 U1	1.16	< 0.03 U1	0.03 J1
6/6/2018	Assessment	0.03 J1	17.0	135	0.004 J1	< 0.005 U1	0.04 J1	1.47	2.27	0.16	0.184	0.011	< 0.002 U1	1.06	< 0.03 U1	0.04 J1
8/15/2018	Assessment	0.03 J1	18.8	149	0.004 J1	< 0.005 U1	0.116	1.45	1.167	0.23	0.095	0.005	--	1.12	< 0.03 U1	0.04 J1
5/24/2019	Assessment	0.04 J1	25.3	157	< 0.02 U1	< 0.01 U1	0.07 J1	1.12	1.054	0.23	0.04 J1	0.01 J1	< 0.002 U1	1 J1	0.04 J1	< 0.1 U1
6/25/2019	Assessment	< 0.1 U1	17.8	134	< 0.1 U1	< 0.05 U1	< 0.2 U1	1.29	2.118	0.21	< 0.1 U1	0.01 J1	< 0.002 U1	< 2 U1	< 0.2 U1	< 0.5 U1
9/12/2019	Assessment	0.05 J1	22.3	154	< 0.02 U1	< 0.01 U1	0.1 J1	1.42	1.679	0.20	0.1 J1	0.00628	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
3/10/2020	Assessment	< 0.02 U1	25.7	149	< 0.02 U1	< 0.01 U1	0.1 J1	1.12	1.641	0.21	< 0.05 U1	0.00517	< 0.002 U1	1 J1	0.04 J1	< 0.1 U1
5/20/2020	Assessment	0.16	54.2	139	< 0.02 U1	< 0.01 U1	0.227	1.26	1.169	0.23	0.2 J1	0.00520	< 0.002 U1	1 J1	0.06 J1	< 0.1 U1
11/13/2020	Assessment	0.09 J1	28.1	126	< 0.02 U1	< 0.01 U1	0.232	1.24	1.672	0.21	0.2 J1	0.00513	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
2/4/2021	Assessment	0.04 J1	20.0	127	< 0.02 U1	< 0.01 U1	0.2 J1	1.12	1.611	0.24	0.06 J1	0.00497	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
5/26/2021	Assessment	0.06 J1	20.1	136	< 0.007 U1	< 0.004 U1	0.12 J1	1.13	1.36	0.24	< 0.05 U1	0.00482	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
11/10/2021	Assessment	0.03 J1	17.5	120	< 0.007 U1	0.023	0.27	1.32	2.54	0.21	0.26	0.00518	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	0.03 J1	18.5	120	< 0.007 U1	0.004 J1	0.29	1.27	3.18	0.21	0.06 J1	0.00479	< 0.002 U1	1.4	< 0.09 U1	< 0.04 U1
5/11/2022	Assessment	0.03 J1	19.2	121	< 0.007 U1	0.005 J1	0.31	1.24	1.37	0.22	0.06 J1	0.00471	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	0.06 J1	21.2	128	< 0.007 U1	0.006 J1	0.22	1.18	1.17	0.21	0.14 J1	0.00507	< 0.002 U1	1.3	< 0.09 U1	0.04 J1
2/8/2023	Assessment	0.05 J1	19.0	127	< 0.007 U1	0.006 J1	0.27	1.28	1.86	0.21	0.13 J1	0.00528	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
5/30/2023	Assessment	0.024 J1	14.0	105	< 0.007 U1	< 0.004 U1	0.16 J1	0.908	1.99	0.20	< 0.05 U1	0.00463	< 0.002 U1	1.1	< 0.04 U1	0.02 J1
10/31/2023	Assessment	0.157	28.4	131	0.010 J1	0.012 J1	0.42	1.21	1.97	0.21	1.24	0.00459	< 0.002 U1	1.4	0.07 J1	0.03 J1
3/7/2024	Assessment	0.031 J1	17.3	127	< 0.007 U1	0.508	0.34	1.21	2.30	0.20	0.17 J1	0.00557	< 0.002 U1	1.3	< 0.04 U1	0.03 J1
5/14/2024	Assessment	0.028 J1	18.8	143	< 0.007 U1	< 0.004 U1	0.25 J1	1.10	1.78	0.20	0.06 J1	0.00425	< 0.002 U1	1.4	< 0.04 U1	0.03 J1
11/14/2024	Assessment	0.024 J1	15.8	135	< 0.007 U1	< 0.004 U1	0.19 J1	1.32	1.63	0.24	< 0.05 U1	0.00465	< 0.002 U1	1.3	0.05 J1	0.03 J1

**Table 1. Groundwater Data Summary: MW-1605S**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.48	76.6	51.0	0.55	7.1	167	576
7/19/2016	Background	0.438	72.6	53.1	0.55	7.2	174	586
9/19/2016	Background	0.482	79.1	54.0	0.51	7.3	179	594
11/16/2016	Background	0.584	84.0	49.7	0.53	7.1	186	599
1/10/2017	Background	0.533	78.5	48.2	0.43	7.2	170	584
3/7/2017	Background	0.608	71.2	52.0	0.55	7.2	180	564
5/9/2017	Background	0.470	79.9	50.1	0.50	7.2	181	606
7/17/2017	Background	0.490	68.6	47.5	0.43	7.1	177	582
10/3/2017	Detection	0.539	71.6	44.1	0.46	7.1	175	578
12/11/2017	Detection	--	--	42.5	0.53	7.2	164	--
1/4/2018	Detection	0.616	--	--	0.48	7.7	168	614
6/5/2018	Assessment	0.461	71	46.5	0.58	7.6	154	592
8/15/2018	Assessment	0.029	45.8	46.5	0.59	7.1	153	573
5/24/2019	Assessment	0.415	76.0	46.1	0.61	7.3	147	586
6/27/2019	Assessment	0.438	72.0	46.3	0.63	7.2	150	595
9/12/2019	Assessment	0.431	77.0	49.4	0.54	7.0	162	593
3/10/2020	Assessment	--	--	--	0.56	6.9	--	--
5/21/2020	Assessment	0.501	84.7	55.5	0.60	6.9	195	656
11/13/2020	Assessment	0.555	72.7	48.4	0.54	6.9	167	609
2/4/2021	Assessment	0.481	71.8	50.9	0.58	6.7	174	610
5/26/2021	Assessment	0.500	74.9	52.7	0.57	9.5	178	610
11/10/2021	Assessment	0.476	71.3	50.7	0.54	7.0	173	590
2/15/2022	Assessment	0.538	77.2	51.8	0.49	7.0	181	600
5/11/2022	Assessment	0.598	87.3	50.5	0.55	7.2	178	600
11/1/2022	Assessment	0.574	72.6 M1, P3	50.5	0.50	7.1	183	580
2/9/2023	Assessment	0.595	68.3	50.5	0.57	7.1	174	580
5/30/2023	Assessment	0.499	53.5	47.1	0.56	6.5	163	560
10/31/2023	Assessment	0.633	64.0	43.1	0.60	7.0	152	--
12/20/2023	Assessment	--	--	--	--	--	--	550
3/7/2024	Assessment	--	--	--	0.54	7.0	--	--
5/14/2024	Assessment	0.556	64.9	45.6	0.59	7.0	156	550
11/14/2024	Assessment	0.517	72	47.6	0.68	7.1	160	570

**Table 1. Groundwater Data Summary: MW-1605S****Rockport - BAP****Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.04 J1	0.52	8.07	< 0.005 U1	0.03	0.2	0.471	0.2307	0.55	0.116	0.13	< 0.002 U1	2.52	1.3	0.02 J1
7/19/2016	Background	0.10	0.60	8.65	< 0.005 U1	0.04	0.4	0.856	0.39	0.55	0.223	0.017	< 0.002 U1	2.20	1.0	0.02 J1
9/19/2016	Background	0.04 J1	0.42	7.61	< 0.005 U1	0.03	0.9	0.443	0.15	0.51	0.049	0.015	< 0.002 U1	1.83	1.0	0.03 J1
11/16/2016	Background	0.05	0.36	7.76	< 0.005 U1	0.04	0.108	0.355	0.964	0.53	0.021	0.021	< 0.002 U1	1.79	1.1	0.03 J1
1/10/2017	Background	0.06	0.50	8.33	< 0.005 U1	0.04	0.135	0.401	1.6248	0.43	0.02 J1	0.016	< 0.002 U1	2.01	1.1	0.060
3/7/2017	Background	0.04 J1	0.39	8.72	< 0.005 U1	0.03	0.279	0.307	0.339	0.55	0.033	0.015	< 0.002 U1	1.85	0.5	0.03 J1
5/9/2017	Background	0.05	0.45	8.41	0.020	0.03	0.247	0.370	0.255	0.50	0.020	0.013	0.005	1.81	0.9	0.050
7/17/2017	Background	0.04 J1	0.42	8.55	< 0.004 U1	0.03	0.113	0.336	1.254	0.43	0.026	0.015	< 0.002 U1	1.73	1.2	0.03 J1
6/5/2018	Assessment	0.04 J1	0.42	8.63	0.004 J1	0.03	0.093	0.321	0.705	0.58	0.042	0.016	< 0.002 U1	1.75	0.6	0.05 J1
8/15/2018	Assessment	0.04 J1	0.20	10.9	< 0.004 U1	0.03	0.078	0.087	0.1783	0.59	0.041	0.007	--	1.13	5.4	0.02 J1
5/24/2019	Assessment	0.15	2.84	15.4	0.04 J1	0.11	0.636	3.91	0.2689	0.61	1.96	0.02 J1	< 0.002 U1	2 J1	0.3	< 0.1 U1
6/27/2019	Assessment	0.11	2.44	12.5	0.04 J1	0.07	0.536	2.46	0.245	0.63	1.52	< 0.009 U1	< 0.002 U1	2 J1	0.5	0.1 J1
9/12/2019	Assessment	0.04 J1	0.61	6.72	< 0.02 U1	0.04 J1	0.09 J1	0.469	0.00129	0.54	0.1 J1	0.0108	< 0.002 U1	2.07	2.0	< 0.1 U1
3/10/2020	Assessment	0.04 J1	1.57	11.9	0.02 J1	0.05 J1	1.13	2.11	1.8805	0.56	0.920	0.0119	< 0.002 U1	2 J1	0.3	< 0.1 U1
5/21/2020	Assessment	0.05 J1	0.59	8.92	< 0.02 U1	0.04 J1	0.2 J1	0.575	1.007	0.60	0.2 J1	0.0113	< 0.002 U1	1 J1	0.4	< 0.1 U1
11/13/2020	Assessment	0.03 J1	0.47	6.32	< 0.02 U1	0.04 J1	1.12	0.377	2.5781	0.54	< 0.05 U1	0.0105	< 0.002 U1	2.21	0.8	< 0.1 U1
2/4/2021	Assessment	0.03 J1	0.47	6.04	< 0.02 U1	0.04 J1	0.928	0.361	0.544	0.58	< 0.05 U1	0.0104	< 0.002 U1	2 J1	0.6	< 0.1 U1
5/26/2021	Assessment	0.03 J1	0.45	6.85	< 0.007 U1	0.038	0.52	0.343	0.94	0.57	< 0.05 U1	0.0105	< 0.002 U1	1.8	0.71	< 0.04 U1
11/10/2021	Assessment	0.05 J1	0.46	6.29	< 0.007 U1	0.041	1.39	0.378	1.19	0.54	< 0.05 U1	0.0100	< 0.002 U1	1.8	0.27 J1	< 0.04 U1
2/15/2022	Assessment	0.04 J1	0.52	5.79	< 0.007 U1	0.045	0.62	0.470	0.70	0.49	< 0.05 U1	0.00954	< 0.002 U1	1.9	0.31 J1	< 0.04 U1
5/11/2022	Assessment	0.03 J1	0.55	6.47	< 0.007 U1	0.042	0.56	0.418	0.66	0.55	< 0.05 U1	0.00964	< 0.002 U1	1.8	0.73	0.05 J1
11/1/2022	Assessment	0.03 J1	0.54	5.70	< 0.007 U1	0.042	0.52	0.472	1.24	0.50	< 0.05 U1	0.0106	< 0.002 U1	1.8	0.09 J1	< 0.04 U1
2/9/2023	Assessment	0.05 J1	0.84	6.86	0.052	0.038	0.46	1.09	1.24	0.57	0.36	0.0109	< 0.002 U1	1.8	< 0.09 U1	0.06 J1
5/30/2023	Assessment	0.033 J1	0.48	4.88	< 0.007 U1	0.036	0.56	0.458	1.43	0.56	0.13 J1	0.00920	< 0.002 U1	1.5	0.07 J1	0.03 J1
10/31/2023	Assessment	0.046 J1	0.69	6.04	< 0.007 U1	0.039	0.71	0.643	1.34	0.60	0.17 J1	0.00944	< 0.002 U1	1.9	0.15 J1	0.07 J1
3/7/2024	Assessment	0.036 J1	0.54	5.28	< 0.007 U1	0.036	0.46	0.443	0.27	0.54	0.06 J1	0.00938	< 0.002 U1	1.8	0.08 J1	0.03 J1
5/14/2024	Assessment	0.033 J1	0.55	5.13	< 0.007 U1	0.031	0.38	0.298	0.66	0.59	< 0.05 U1	0.0102	< 0.002 U1	1.9	0.08 J1	0.03 J1
11/14/2024	Assessment	0.04 J1	0.51	6.4	< 0.007 U1	0.039	0.52	0.411	0.69	0.68	0.06 J1	0.0097	< 0.002 U1	1.8	0.09 J1	0.03 J1

**Table 1. Groundwater Data Summary: MW-1606D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.020	67.5	21.3	0.23	7.1	13.9	290
7/19/2016	Background	0.018	69.9	20.8	0.20	5.9	12.8	298
9/19/2016	Background	0.020	72.3	21.7	0.19	7.3	13.2	290
11/16/2016	Background	0.017	77.1	22.0	0.19	7.2	16.4	301
1/10/2017	Background	0.012	75.5	21.6	0.16	7.2	12.8	284
3/6/2017	Background	0.073	69.9	22.3	0.18	7.2	8.7	325
5/9/2017	Background	0.034	78.1	22.3	0.17	6.9	14.4	308
7/18/2017	Background	0.028	69.3	21.6	0.15	8.4	13.5	307
10/3/2017	Detection	0.022	74.4	22.3	0.16	7.0	17.1	308
12/11/2017	Detection	--	--	22.6	0.17	7.1	19.4	--
6/6/2018	Assessment	0.044	72.0	23.1	0.19	8.0	19.9	331
8/15/2018	Assessment	0.028	80.5	23.9	0.20	7.3	21.5	329
5/24/2019	Assessment	0.02 J1	75.7	25.0	0.20	7.2	19.6	330
6/24/2019	Assessment	0.02 J1	80.8	25.2	0.19	7.3	21.0	329
9/12/2019	Assessment	< 0.02 U1	76.7	26.9	0.18	7.3	25.6	361
3/9/2020	Assessment	--	--	--	0.17	6.9	--	--
5/20/2020	Assessment	0.03 J1	89.7	29.9	0.20	6.9	30.7	354
11/16/2020	Assessment	< 0.02 U1	81.1	28.9	0.18	7.3	30.8	371
2/4/2021	Assessment	< 0.02 U1	82.6	29.0	0.20	7.4	32.8	348
5/25/2021	Assessment	0.019 J1	81.6	28.4	0.20	8.9	33.4	350
11/10/2021	Assessment	0.017 J1	84.6	27.5	0.19	7.1	31.0	360
2/15/2022	Assessment	0.017 J1	82.1	27.7	0.18	6.8	34.3	380
5/10/2022	Assessment	0.016 J1	85.4	28.4	0.18	7.2	35.2	360 L1
11/1/2022	Assessment	0.017 J1	83.3	27.3	0.18	6.4	35.8	360
2/8/2023	Assessment	0.016 J1	79.7	27.1	0.17	7.1	37.9	390
5/30/2023	Assessment	0.017 J1	77.4	26.3	0.17	7.1	40.1	370
10/31/2023	Assessment	0.016 J1	76.8	25.6	0.18	6.7	39.1	390
3/7/2024	Assessment	--	--	--	0.16	7.1	--	--
5/14/2024	Assessment	0.017 J1	74.7	24.6	0.17	6.9	30.9	350
11/14/2024	Assessment	0.019 J1	83	24.1	0.20	7.0	29.0	350

**Table 1. Groundwater Data Summary: MW-1606D**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.03 J1	11.5	327	0.01 J1	< 0.004 U1	0.5	0.508	0.551	0.23	0.214	0.003	< 0.002 U1	3.82	0.06 J1	< 0.01 U1
7/19/2016	Background	0.02 J1	13.7	372	< 0.005 U1	< 0.004 U1	0.3	0.178	0.464	0.20	0.086	0.009	< 0.002 U1	2.10	0.05 J1	< 0.01 U1
9/19/2016	Background	0.01 J1	13.4	378	< 0.005 U1	< 0.004 U1	0.1	0.113	1.152	0.19	< 0.004 U1	0.002	< 0.002 U1	2.00	< 0.03 U1	< 0.01 U1
11/16/2016	Background	0.01 J1	14.4	419	< 0.005 U1	< 0.004 U1	0.138	0.102	0.333	0.19	< 0.004 U1	0.002	< 0.002 U1	2.21	< 0.03 U1	< 0.01 U1
1/10/2017	Background	0.03 J1	13.9	383	0.034	0.02 J1	0.160	0.109	1.612	0.16	0.023	< 0.0002 U1	< 0.002 U1	2.46	0.04 J1	0.124
3/6/2017	Background	0.01 J1	13.5	374	< 0.005 U1	< 0.004 U1	0.667	0.098	0.924	0.18	0.02 J1	0.007	< 0.002 U1	2.00	< 0.03 U1	< 0.01 U1
5/9/2017	Background	0.05	14.3	370	0.020	0.02	0.153	0.086	2.300	0.17	0.020	0.004	0.005	2.07	0.1	0.050
7/18/2017	Background	0.02 J1	14.8	401	< 0.004 U1	< 0.005 U1	0.131	0.084	1.584	0.15	0.01 J1	0.006	< 0.002 U1	1.85	< 0.03 U1	< 0.01 U1
6/6/2018	Assessment	< 0.01 U1	14.7	392	0.004 J1	< 0.005 U1	0.04 J1	0.07	1.5971	0.19	0.008 J1	0.005	< 0.002 U1	1.77	< 0.03 U1	0.03 J1
8/15/2018	Assessment	0.04 J1	16.9	431	0.006 J1	0.007 J1	0.148	0.117	0.56	0.20	0.141	0.002	--	1.77	< 0.03 U1	0.02 J1
5/24/2019	Assessment	< 0.02 U1	17.4	447	< 0.02 U1	< 0.01 U1	0.1 J1	0.066	0.946	0.20	< 0.02 U1	< 0.009 U1	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
6/24/2019	Assessment	< 0.02 U1	17.5	431	< 0.02 U1	< 0.01 U1	0.1 J1	0.068	0.809	0.19	0.02 J1	< 0.009 U1	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
9/12/2019	Assessment	< 0.02 U1	17.4	458	< 0.02 U1	< 0.01 U1	0.09 J1	0.085	0.593	0.18	< 0.05 U1	0.000651	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
3/9/2020	Assessment	< 0.02 U1	17.2	470	0.02 J1	< 0.01 U1	0.05 J1	0.053	0.98	0.17	0.05 J1	0.000659	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
5/20/2020	Assessment	< 0.02 U1	17.9	472	< 0.02 U1	< 0.01 U1	0.07 J1	0.063	0.939	0.20	0.2 J1	0.000622	< 0.002 U1	2.13	0.09 J1	< 0.1 U1
11/16/2020	Assessment	< 0.02 U1	17.7	467	< 0.02 U1	< 0.01 U1	0.287	0.052	0.924	0.18	< 0.05 U1	0.000564	< 0.002 U1	2 J1	0.04 J1	< 0.1 U1
2/4/2021	Assessment	< 0.02 U1	18.2	470	< 0.02 U1	< 0.01 U1	0.208	0.052	0.567	0.20	< 0.05 U1	0.000505	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
5/25/2021	Assessment	< 0.02 U1	18.3	494	< 0.007 U1	< 0.004 U1	< 0.04 U1	0.50	0.70	0.20	< 0.05 U1	0.0005	< 0.002 U1	1.7	< 0.09 U1	< 0.04 U1
11/10/2021	Assessment	< 0.02 U1	18.1	488	< 0.007 U1	< 0.004 U1	0.24	0.043	1.76	0.19	< 0.05 U1	0.00049	< 0.002 U1	1.7	< 0.09 U1	< 0.04 U1
2/15/2022	Assessment	< 0.02 U1	17.8	493	< 0.007 U1	< 0.004 U1	0.34	0.048	2.33	0.18	< 0.05 U1	0.00048	< 0.002 U1	1.7	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	< 0.02 U1	17.8	472	< 0.007 U1	< 0.004 U1	0.36	0.049	0.81	0.18	< 0.05 U1	0.00047	< 0.002 U1	1.7	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	< 0.02 U1	18.5	500	< 0.007 U1	< 0.004 U1	0.29	0.039	1.09	0.18	< 0.05 U1	0.00051	< 0.002 U1	1.8	< 0.09 U1	< 0.04 U1
2/8/2023	Assessment	< 0.02 U1	17.8	484	< 0.007 U1	< 0.004 U1	0.32	0.067	1.58	0.17	< 0.05 U1	0.00055	< 0.002 U1	1.7	< 0.09 U1	< 0.04 U1
5/30/2023	Assessment	0.017 J1	16.3	457	< 0.007 U1	< 0.004 U1	0.28 J1	0.065	1.04	0.17	< 0.05 U1	0.00055	< 0.002 U1	1.7	< 0.04 U1	< 0.02 U1
10/31/2023	Assessment	0.013 J1	17.2	480	< 0.007 U1	< 0.004 U1	0.48	0.056	0.94	0.18	0.07 J1	0.00048	< 0.002 U1	1.8	< 0.04 U1	< 0.02 U1
3/7/2024	Assessment	0.008 J1	17.6	494	< 0.007 U1	< 0.004 U1	0.19 J1	0.046	0.91	0.16	< 0.05 U1	0.00046	< 0.002 U1	1.7	< 0.04 U1	< 0.02 U1
5/14/2024	Assessment	< 0.008 U1	16.1	466	< 0.007 U1	< 0.004 U1	0.26 J1	0.042	0.87	0.17	< 0.05 U1	0.00061	< 0.002 U1	1.7	< 0.04 U1	< 0.02 U1
11/14/2024	Assessment	< 0.008 U1	17.4	491	< 0.007 U1	< 0.004 U1	0.28 J1	0.046 B1	1.33	0.20	< 0.05 U1	0.00047	< 0.002 U1	1.8	< 0.04 U1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1606I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.011	66.6	23.9	0.22	7.0	42.3	300
7/19/2016	Background	0.013	62.0	25.1	0.21	5.0	42.9	350
9/19/2016	Background	< 0.002 U1	62.8	24.2	0.19	7.2	36.7	314
11/16/2016	Background	0.014	70.7	25.0	0.21	7.3	42.6	325
1/10/2017	Background	0.007	68.0	24.5	0.17	7.4	39.3	326
3/6/2017	Background	0.025	64.1	23.8	0.19	7.4	37.8	317
5/9/2017	Background	0.070	67.8	23.0	0.19	7.4	36.8	318
7/18/2017	Background	0.023	55.5	22.6	0.17	6.7	37.1	304
10/3/2017	Detection	0.021	57.8	23.0	0.18	7.1	38.4	304
12/11/2017	Detection	--	--	23.0	0.19	7.1	37.9	--
6/6/2018	Assessment	0.053	78.2	31.5	0.20	8.1	52.4	392
8/15/2018	Assessment	0.031	86.3	25.4	0.21	7.3	50.3	387
5/21/2019	Assessment	0.02 J1	79.5	29.8	0.16	8.6	55.5	407
6/25/2019	Assessment	< 0.02 U1	86.8	31.5	0.18	7.2	51.0	406
9/12/2019	Assessment	< 0.02 U1	72.8	20.1	0.18	7.4	47.9	367
3/9/2020	Assessment	--	--	--	0.19	7.0	--	--
5/20/2020	Assessment	< 0.02 U1	74.7	19.2	0.21	6.9	43.8	340
11/16/2020	Assessment	< 0.02 U1	60.9	19.9	0.21	7.4	39.1	309
2/5/2021	Assessment	< 0.02 U1	63.8	21.0	0.24	7.5	40.7	316
5/25/2021	Assessment	0.013 J1	65.4	20.6	0.24	8.9	40.4	320
11/10/2021	Assessment	0.012 J1	62.5	19.3	0.23	7.6	39.2	310
2/14/2022	Assessment	0.013 J1	63.4	19.0	0.21	7.7	40.9	320
5/10/2022	Assessment	0.016 J1	66.8	19.5	0.22	7.4	43.6	310 L1
11/1/2022	Assessment	0.013 J1	58.5	17.2	0.21	7.0	43.1	300
2/8/2023	Assessment	0.012 J1	61.8	17.3	0.21	7.3	41.8	310
5/30/2023	Assessment	0.013 J1	55.9	17.4	0.20	7.2	44.3	310
10/31/2023	Assessment	0.012 J1	56.9	16.4	0.22	6.8	42.4	310
3/6/2024	Assessment	--	--	--	0.19	7.2	--	--
5/14/2024	Assessment	0.013 J1	54.5	17.1	0.19	7.1	39.3	290
11/14/2024	Assessment	0.012 J1	66	16.8	0.23	7.3	40.4	300

**Table 1. Groundwater Data Summary: MW-1606I**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.03 J1	3.00	49.4	< 0.005 U1	0.004 J1	0.2	0.929	1.347	0.22	0.166	0.004	< 0.002 U1	1.64	0.05 J1	0.03 J1
7/19/2016	Background	0.03 J1	3.99	54.0	< 0.005 U1	< 0.004 U1	0.4	0.823	1.286	0.21	0.037	0.013	< 0.002 U1	1.57	< 0.03 U1	0.03 J1
9/19/2016	Background	0.02 J1	4.99	46.7	< 0.005 U1	< 0.004 U1	0.1	0.733	1.104	0.19	0.02 J1	0.009	< 0.002 U1	1.50	< 0.03 U1	0.03 J1
11/16/2016	Background	0.02 J1	4.59	48.1	< 0.005 U1	< 0.004 U1	0.070	0.700	0.951	0.21	< 0.004 U1	0.008	< 0.002 U1	1.83	< 0.03 U1	0.04 J1
1/10/2017	Background	0.02 J1	5.11	53.6	0.007 J1	0.01 J1	0.138	0.921	4.283	0.17	0.022	0.005	< 0.002 U1	2.12	< 0.03 U1	0.05 J1
3/6/2017	Background	0.02 J1	5.07	54.7	< 0.005 U1	< 0.004 U1	0.524	0.950	0.934	0.19	0.032	0.007	< 0.002 U1	1.78	0.03 J1	0.04 J1
5/9/2017	Background	0.05	4.81	49.9	0.020	0.02	0.179	1.26	0.677	0.19	0.071	0.008	0.005	1.27	0.1	0.050
7/18/2017	Background	0.02 J1	4.72	51.1	< 0.004 U1	< 0.005 U1	0.097	1.06	0.813	0.17	0.043	0.008	< 0.002 U1	1.11	< 0.03 U1	0.04 J1
6/6/2018	Assessment	0.03 J1	5.69	67.3	< 0.004 U1	< 0.005 U1	0.083	1.49	1.252	0.20	0.026	0.007	< 0.002 U1	0.98	< 0.03 U1	0.05 J1
8/15/2018	Assessment	0.03 J1	9.11	85.2	< 0.004 U1	0.005 J1	0.061	1.95	0.3912	0.21	0.034	0.006	--	1.34	< 0.03 U1	0.083
5/21/2019	Assessment	< 0.02 U1	7.69	74.5	< 0.02 U1	< 0.01 U1	< 0.04 U1	1.56	0.562	0.16	< 0.02 U1	< 0.009 U1	< 0.002 U1	0.8 J1	< 0.03 U1	< 0.1 U1
6/25/2019	Assessment	< 0.1 U1	7.96	78.1	< 0.1 U1	< 0.05 U1	< 0.2 U1	1.80	1.214	0.18	< 0.1 U1	0.01 J1	< 0.002 U1	< 2 U1	< 0.2 U1	< 0.5 U1
9/12/2019	Assessment	0.02 J1	11.2	76.7	< 0.02 U1	< 0.01 U1	0.1 J1	1.58	0.947	0.18	< 0.05 U1	0.00405	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
3/9/2020	Assessment	< 0.02 U1	8.69	65.2	< 0.02 U1	< 0.01 U1	0.05 J1	1.23	0.993	0.19	< 0.05 U1	0.00348	< 0.002 U1	1 J1	0.05 J1	< 0.1 U1
5/20/2020	Assessment	< 0.02 U1	8.40	61.8	< 0.02 U1	< 0.01 U1	0.1 J1	1.28	0.663	0.21	0.2 J1	0.00326	< 0.002 U1	1 J1	0.03 J1	< 0.1 U1
11/16/2020	Assessment	< 0.02 U1	9.37	60.8	< 0.02 U1	< 0.01 U1	0.2 J1	1.26	0.968	0.21	< 0.05 U1	0.00361	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
2/5/2021	Assessment	< 0.02 U1	9.73	59.1	< 0.02 U1	< 0.01 U1	0.238	1.30	1.711	0.24	< 0.05 U1	0.00319	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
5/25/2021	Assessment	< 0.02 U1	10.6	58.0	< 0.007 U1	0.020	0.19 J1	1.14	0.69	0.24	< 0.05 U1	0.00320	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
11/10/2021	Assessment	< 0.02 U1	12.2	55.6	< 0.007 U1	< 0.004 U1	0.29	1.04	1.80	0.23	< 0.05 U1	0.00313	< 0.002 U1	1.2	< 0.09 U1	< 0.04 U1
2/14/2022	Assessment	0.02 J1	14.0	56.9	< 0.007 U1	0.004 J1	0.36	1.24	0.92	0.21	< 0.05 U1	0.00323	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	< 0.02 U1	9.79	51.2	< 0.007 U1	< 0.004 U1	0.34	1.18	1.03	0.22	< 0.05 U1	0.00277	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
11/1/2022	Assessment	< 0.02 U1	11.2	54.1	< 0.007 U1	< 0.004 U1	0.19 J1	1.04	1.69	0.21	< 0.05 U1	0.00314	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
2/8/2023	Assessment	0.04 J1	20.3	57.2	< 0.007 U1	0.005 J1	0.27	1.26	1.94	0.21	0.06 J1	0.00313	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
5/30/2023	Assessment	0.027 J1	12.2	46.7	< 0.007 U1	< 0.004 U1	0.20 J1	0.947	1.53	0.20	< 0.05 U1	0.00310	< 0.002 U1	1.1	< 0.04 U1	0.03 J1
10/31/2023	Assessment	0.015 J1	11.1	54.2	< 0.007 U1	0.005 J1	1.30	1.09	1.61	0.22	< 0.05 U1	0.00313	< 0.002 U1	1.3	< 0.04 U1	0.02 J1
3/6/2024	Assessment	0.017 J1	12.0	48.8	< 0.007 U1	0.004 J1	0.16 J1	0.986	1.04	0.19	< 0.05 U1	0.00316	< 0.002 U1	1.1	< 0.04 U1	0.03 J1
5/14/2024	Assessment	0.013 J1	9.50	46.2	< 0.007 U1	0.016 J1	0.46	1.01	1.10	0.19	< 0.05 U1	0.00322	< 0.002 U1	1.1	< 0.04 U1	0.02 J1
11/14/2024	Assessment	0.015 J1	13.7	50.3	< 0.007 U1	0.005 J1	0.83	1.07	1.42	0.23	< 0.05 U1	0.00285	< 0.002 U1	1.0	< 0.04 U1	0.03 J1

**Table 1. Groundwater Data Summary: MW-1606S**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
6/7/2016	Background	0.024	55.8	30.6	0.46	6.9	47.6	410
7/19/2016	Background	0.019	46.0	24.0	0.43	7.1	38.1	386
9/19/2016	Background	< 0.002 U1	44.4	18.7	0.40	7.1	31.8	316
11/16/2016	Background	0.020	54.1	26.6	0.40	6.9	40.0	358
1/10/2017	Background	0.014	48.5	22.1	0.31	6.7	30.5	351
3/7/2017	Background	0.054	47.2	23.9	0.41	7.1	33.2	331
5/9/2017	Background	0.020	52.7	24.7	0.38	7.0	37.5	377
7/18/2017	Background	0.090	44.7	22.8	0.37	6.9	36.8	367
10/3/2017	Detection	0.026	43.4	24.1	0.41	6.6	35.6	363
12/11/2017	Detection	--	--	24.0	0.41	6.6	36.8	--
1/4/2018	Detection	--	--	--	0.42	7.4	--	--
6/6/2018	Assessment	0.029	50.9	25.5	0.46	7.8	52.6	398
8/15/2018	Assessment	0.563	76.1	20.7	0.47	6.9	34.9	316
5/21/2019	Assessment	0.05 J1	48.9	26.6	0.47	7.9	64.5	416
6/25/2019	Assessment	0.03 J1	49.8	25.0	0.45	7.0	41.7	380
9/12/2019	Assessment	0.02 J1	44.4	24.4	0.54	7.0	41.9	376
3/9/2020	Assessment	--	--	--	0.58	6.8	--	--
5/20/2020	Assessment	0.05 J1	48.4	25.1	0.63	6.9	46.9	375
11/16/2020	Assessment	< 0.02 U1	40.5	21.7	0.56	6.8	32.7	337
2/5/2021	Assessment	< 0.02 U1	42.0	29.0	0.52	7.1	31.1	374
5/25/2021	Assessment	0.016 J1	45.4	29.6	0.48	8.6	36.0	400
11/10/2021	Assessment	0.021 J1	51.1	32.5	0.52	7.2	42.4	440
2/14/2022	Assessment	0.019 J1	49.3	32.6	0.50	6.9	44.3	440
5/10/2022	Assessment	0.030 J1	47.7	33.2	0.47	6.9	42.7	420 L1
11/1/2022	Assessment	0.024 J1	63.3	16.6	0.20	6.1	43.2	300
2/8/2023	Assessment	0.019 J1	45.0	28.2	0.50	7.1	38.4	380
5/30/2023	Assessment	0.020 J1	39.6	22.5	0.53	6.9	32.6	350
11/1/2023	Assessment	0.017 J1	37.0	21.9	0.50	6.5	28.5	340
3/6/2024	Assessment	--	--	--	0.54	6.9	--	--
5/14/2024	Assessment	0.018 J1	43.2	23.8	0.52	6.9	33.8	350
11/14/2024	Assessment	0.017 J1	51	29.2	0.53	6.9	33.4	360

**Table 1. Groundwater Data Summary: MW-1606S**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
6/7/2016	Background	0.08	0.26	12.5	< 0.005 U1	0.02	0.1	0.090	0.7867	0.46	0.145	0.012	< 0.002 U1	1.91	3.3	0.02 J1
7/19/2016	Background	0.06	0.23	11.5	< 0.005 U1	0.02 J1	0.5	0.052	0.94	0.43	0.034	0.017	< 0.002 U1	1.56	4.0	< 0.01 U1
9/19/2016	Background	0.05 J1	0.22	9.34	< 0.005 U1	0.01 J1	0.2	0.038	0.75	0.40	0.020	0.010	< 0.002 U1	1.32	5.7	0.01 J1
11/16/2016	Background	0.05 J1	0.20	11.1	< 0.005 U1	0.02 J1	0.148	0.038	0.574	0.40	0.004 J1	0.013	< 0.002 U1	1.02	3.1	0.01 J1
1/10/2017	Background	0.04 J1	0.24	10.7	0.01 J1	0.02 J1	1.29	0.141	2.025	0.31	0.097	0.006	< 0.002 U1	1.11	4.2	0.02 J1
3/7/2017	Background	0.07	0.60	16.7	0.024	0.06	1.25	0.883	1.822	0.41	1.33	0.011	< 0.002 U1	1.22	4.5	0.03 J1
5/9/2017	Background	0.05	0.29	12.0	0.020	0.03	0.277	0.371	0.193	0.38	0.355	0.010	0.005	0.90	6.0	0.050
7/18/2017	Background	0.05	0.32	12.6	0.01 J1	0.03	0.259	0.363	0.268	0.37	0.386	0.010	< 0.002 U1	1.08	4.7	0.02 J1
6/6/2018	Assessment	0.05 J1	0.20	13.6	0.005 J1	0.03	0.108	0.092	0.496	0.46	0.032	0.012	< 0.002 U1	1.19	2.7	0.03 J1
8/15/2018	Assessment	0.04 J1	0.44	8.22	0.004 J1	0.04	0.251	0.338	1.146	0.47	0.028	0.013	--	1.89	1.6	0.078
5/21/2019	Assessment	0.14	0.19	16.7	< 0.02 U1	0.05 J1	0.1 J1	0.094	0.668	0.47	< 0.02 U1	< 0.009 U1	< 0.002 U1	0.9 J1	3.3	< 0.1 U1
6/25/2019	Assessment	< 0.1 U1	0.2 J1	14.4	< 0.1 U1	0.06 J1	< 0.2 U1	< 0.1 U1	0.0646	0.45	< 0.1 U1	0.01 J1	< 0.002 U1	< 2 U1	2.9	< 0.5 U1
9/12/2019	Assessment	0.03 J1	0.17	11.8	< 0.02 U1	0.03 J1	0.08 J1	0.051	0.1052	0.54	< 0.05 U1	0.00814	< 0.002 U1	1 J1	2.8	< 0.1 U1
3/9/2020	Assessment	< 0.02 U1	0.17	10.7	< 0.02 U1	0.02 J1	0.2 J1	0.05 J1	0.00206	0.58	< 0.05 U1	0.00787	< 0.002 U1	1 J1	4.4	< 0.1 U1
5/20/2020	Assessment	0.04 J1	0.20	13.6	< 0.02 U1	0.03 J1	0.294	0.081	0.4706	0.63	< 0.05 U1	0.00858	< 0.002 U1	1 J1	3.2	< 0.1 U1
11/16/2020	Assessment	0.03 J1	0.17	11.5	< 0.02 U1	0.03 J1	0.286	0.05 J1	1.328	0.56	< 0.05 U1	0.00846	< 0.002 U1	1 J1	4.7	< 0.1 U1
2/5/2021	Assessment	0.03 J1	0.17	13.0	< 0.02 U1	0.03 J1	0.241	0.05 J1	0.827	0.52	< 0.05 U1	0.00830	< 0.002 U1	1 J1	3.2	< 0.1 U1
5/25/2021	Assessment	0.03 J1	0.18	11.8	< 0.007 U1	0.031	0.28	0.080	0.56	0.48	0.05 J1	0.00864	< 0.002 U1	1.1	2.23	< 0.04 U1
11/10/2021	Assessment	0.03 J1	0.18	13.6	< 0.007 U1	0.034	0.52	0.054	0.72	0.52	0.09 J1	0.00839	< 0.002 U1	1.3	1.36	< 0.04 U1
2/14/2022	Assessment	0.04 J1	0.18	13.9	< 0.007 U1	0.031	0.34	0.073	0.72	0.50	< 0.05 U1	0.00880	< 0.002 U1	1.2	2.71	< 0.04 U1
5/10/2022	Assessment	0.04 J1	0.18	18.4	< 0.007 U1	0.032	0.34	0.112	0.77	0.47	0.09 J1	0.00763	< 0.002 U1	1.1	2.48	< 0.04 U1
11/1/2022	Assessment	0.20	84.0	64.1	0.017 J1	0.007 J1	0.28	1.43	0.90	0.20	0.32	0.00311	< 0.002 U1	1.5	0.11 J1	< 0.04 U1
2/8/2023	Assessment	0.05 J1	0.22	14.4	0.011 J1	0.127	0.59	1.12	1.98	0.50	0.19 J1	0.00884	< 0.002 U1	1.4	1.53	< 0.04 U1
5/30/2023	Assessment	0.035 J1	0.14	9.77	< 0.007 U1	0.024	0.31	0.108	1.06	0.53	< 0.05 U1	0.00785	< 0.002 U1	1.4	2.37	< 0.02 U1
11/1/2023	Assessment	0.030 J1	0.14	8.66	< 0.007 U1	0.029	0.38	0.077	1.10	0.50	< 0.05 U1	0.00675	< 0.002 U1	1.3	3.55	< 0.02 U1
3/6/2024	Assessment	0.031 J1	0.15	12.7	< 0.007 U1	0.031	0.20 J1	0.068	1.04	0.54	< 0.05 U1	0.00733	< 0.002 U1	1.2	3.41	< 0.02 U1
5/14/2024	Assessment	0.034 J1	0.16	10.9	< 0.007 U1	0.023	0.25 J1	0.060	1.05	0.52	< 0.05 U1	0.00769	< 0.002 U1	1.7	2.95	< 0.02 U1
11/14/2024	Assessment	0.032 J1	0.14	12.1	< 0.007 U1	0.026	0.24 J1	0.062 B1	0.78	0.53	< 0.05 U1	0.00779	< 0.002 U1	1.5	4.07	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1701D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
12/12/2017	Detection	0.054	71.8	20.1	0.28	7.3	44	378
2/8/2018	Assessment	0.066	70.8	19.9	0.3	7.5	45.3	402
6/5/2018	Assessment	0.041	68.1	13.7	0.34	7.3	36.8	700
8/14/2018	Assessment	0.060	77.0	14.1	0.36	7.2	39.8	369
9/24/2018	Assessment	0.047	71.6	15.2	0.33	7.5	40.0	366
10/29/2018	Assessment	0.125	76.5	15.4	0.32	7.8	40.7	362
11/12/2018	Assessment	0.114	76.7	15.7	0.35	7.1	40	358
5/20/2019	Assessment	0.02 J1	66.8	14.0	0.32	7.2	43.5	371
6/25/2019	Assessment	0.02 J1	70.8	14.9	0.32	7.1	39.0	387
9/9/2019	Assessment	0.02 J1	70.5	16.0	0.31	7.0	36.6	376
3/10/2020	Assessment	--	--	--	0.33	7.0	--	--
5/21/2020	Assessment	0.02 J1	72.8	14.7	0.36	7.5	43.4	368
11/17/2020	Assessment	0.02 J1	71.1	16.8	0.33	7.0	40.3	379
2/2/2021	Assessment	0.03 J1	68.9	14.2	0.35	6.9	40.5	366
5/26/2021	Assessment	0.021 J1	68.7	14.8	0.36	9.3	39.8	350
11/9/2021	Assessment	0.023 J1	69.1	15.1	0.34	6.8	38.7	360
2/16/2022	Assessment	0.023 J1	68.6	14.0	0.34	7.1	39.4	360
5/11/2022	Assessment	0.018 J1	77.8	13.4	0.35	7.1	38.9	350 L1
11/2/2022	Assessment	0.023 J1	67.4	15.2	0.34	7.0	40.3	350
2/7/2023	Assessment	0.022 J1	66.5	14.6	0.33	7.7	39.5	350
6/1/2023	Assessment	0.013 J1	62.1	14.2	0.32	7.1	38.3	350
10/31/2023	Assessment	0.027 J1	66.1	15.2	0.35	6.7	38.9	380
3/6/2024	Assessment	--	--	--	0.30	7.0	--	--
5/16/2024	Assessment	0.019 J1	61.0 M1	15.3	0.38	7.0	39.8	350
11/14/2024	Assessment	0.024 J1	67	16.9	0.39	6.9	39.4	350

**Table 1. Groundwater Data Summary: MW-1701D**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
2/8/2018	Assessment	0.03 J1	9.3	65	< 0.004 U1	0.009 J1	0.104	1.75	1.33	0.30	0.065	0.01	< 0.002 U1	1.37	0.04 J1	0.03 J1
6/5/2018	Assessment	0.02 J1	10.6	63.7	0.005 J1	0.02 J1	0.103	1.56	2.346	0.34	0.096	0.012	< 0.002 U1	1.38	< 0.03 U1	0.03 J1
8/14/2018	Assessment	0.01 J1	10.2	65.2	< 0.004 U1	< 0.005 U1	0.060	1.68	0.929	0.36	0.021	0.008	--	1.38	< 0.03 U1	0.03 J1
9/24/2018	Assessment	< 0.01 U1	10.1	64.0	< 0.004 U1	0.005 J1	0.076	1.71	0.564	0.33	0.074	< 0.0002 U1	--	1.33	< 0.03 U1	0.02 J1
10/29/2018	Assessment	< 0.02 U1	9.79	65.9	< 0.02 U1	< 0.01 U1	0.1 J1	1.66	0.417	0.32	0.04 J1	< 0.009 U1	--	1 J1	< 0.03 U1	< 0.1 U1
11/12/2018	Assessment	< 0.02 U1	9.10	62.2	< 0.02 U1	< 0.01 U1	0.1 J1	1.6	0.972	0.35	0.04 J1	< 0.009 U1	--	1 J1	< 0.03 U1	< 0.1 U1
5/20/2019	Assessment	< 0.02 U1	9.55	65.1	< 0.02 U1	< 0.01 U1	0.2 J1	1.59	0.702	0.32	< 0.02 U1	< 0.009 U1	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
6/25/2019	Assessment	< 0.1 U1	9.58	64.6	< 0.1 U1	< 0.05 U1	< 0.2 U1	1.62	2.63	0.32	< 0.1 U1	0.01 J1	< 0.002 U1	< 2 U1	0.2 J1	< 0.5 U1
9/9/2019	Assessment	< 0.02 U1	9.37	65.0	< 0.02 U1	< 0.01 U1	0.2 J1	1.53	0.341	0.31	< 0.05 U1	0.00691	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
3/10/2020	Assessment	< 0.02 U1	9.31	61.4	< 0.02 U1	< 0.01 U1	0.06 J1	1.48	0.546	0.33	< 0.05 U1	0.00654	< 0.002 U1	1 J1	0.03 J1	< 0.1 U1
5/21/2020	Assessment	< 0.02 U1	9.40	62.4	< 0.02 U1	< 0.01 U1	0.1 J1	1.48	1.095	0.36	< 0.05 U1	0.00636	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
11/17/2020	Assessment	< 0.02 U1	9.58	64.4	< 0.02 U1	< 0.01 U1	0.209	1.59	1.585	0.33	< 0.05 U1	0.00659	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
2/2/2021	Assessment	< 0.02 U1	10.2	64.6	< 0.02 U1	< 0.01 U1	0.299	1.63	0.815	0.35	< 0.05 U1	0.00625	< 0.002 U1	1 J1	0.04 J1	< 0.1 U1
5/26/2021	Assessment	< 0.02 U1	9.57	61.6	< 0.007 U1	< 0.004 U1	0.1 J1	1.46	0.65	0.36	< 0.05 U1	0.00631	< 0.002 U1	1.2	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	< 0.02 U1	9.55	59.6	< 0.007 U1	< 0.004 U1	0.28	1.52	1.89	0.34	0.06 J1	0.00608	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
2/16/2022	Assessment	< 0.02 U1	9.82	61.9	< 0.007 U1	0.021	0.12 J1	1.56	0.92	0.34	< 0.05 U1	0.00604	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
5/11/2022	Assessment	< 0.02 U1	9.57	57.9	< 0.007 U1	< 0.004 U1	0.25	1.43	0.58	0.35	< 0.05 U1	0.00566	< 0.002 U1	1.4	< 0.09 U1	< 0.04 U1
11/2/2022	Assessment	0.05 J1	9.35	59.5	< 0.007 U1	< 0.004 U1	0.26	1.45	0.73	0.34	0.57	0.00683	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
2/7/2023	Assessment	< 0.02 U1	9.53	61.6	< 0.007 U1	< 0.004 U1	0.23	1.50	1.34	0.33	0.09 J1	0.00682	< 0.002 U1	1.3	< 0.09 U1	< 0.04 U1
6/1/2023	Assessment	0.014 J1	8.84	55.9	< 0.007 U1	< 0.004 U1	0.18 J1	1.44	0.45	0.32	< 0.05 U1	0.00579	< 0.002 U1	1.3	< 0.04 U1	< 0.02 U1
10/31/2023	Assessment	0.009 J1	8.96	62.6	< 0.007 U1	< 0.004 U1	0.25 J1	1.45	4.28	0.35	< 0.05 U1	0.00646	< 0.002 U1	1.3	< 0.04 U1	0.02 J1
3/6/2024	Assessment	0.013 J1	9.09	60.8	< 0.007 U1	0.005 J1	0.60	1.47	1.50	0.30	< 0.05 U1	0.00631	< 0.002 U1	1.3	< 0.04 U1	0.03 J1
5/16/2024	Assessment	< 0.008 U1	8.33 M1	58.5 M1	< 0.007 U1	< 0.004 U1	0.20 M1, J1	1.33 M1	0.35	0.38	< 0.05 U1	0.00629	< 0.002 U1	1.2	< 0.04 U1	0.02 J1
11/14/2024	Assessment	0.011 J1	9.42	62.1	< 0.007 U1	< 0.004 U1	0.51	1.53 B1	0.90	0.39	< 0.05 U1	0.00639	< 0.002 U1	1.3	< 0.04 U1	0.02 J1

**Table 1. Groundwater Data Summary: MW-1701I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
12/12/2017	Detection	0.066	65.4	13.5	0.33	7.3	40.7	338
2/8/2018	Assessment	0.095	63.7	14.5	0.38	7.7	43.1	363
6/5/2018	Assessment	0.044	65.5	14.1	0.44	7.4	36.5	328
8/14/2018	Assessment	0.052	67.9	14.5	0.39	7.2	34.8	352
9/24/2018	Assessment	0.038	68.9	14.9	0.41	7.6	35.0	346
10/31/2018	Assessment	0.104	62.4	14.8	0.40	7.9	34.8	338
11/12/2018	Assessment	0.166	71.7	14.5	0.42	7.3	35.0	322
5/20/2019	Assessment	0.02 J1	59.6	12.8	0.40	7.3	39.8	345
6/25/2019	Assessment	0.02 J1	69.4	12.8	0.41	7.7	36.3	388
9/9/2019	Assessment	< 0.02 U1	65.1	12.9	0.38	7.3	34.5	339
3/10/2020	Assessment	--	--	--	0.41	6.8	--	--
5/21/2020	Assessment	< 0.02 U1	73.3	13.0	0.43	7.2	39.8	349
11/17/2020	Assessment	< 0.02 U1	68.4	13.1	0.43	6.9	36.5	341
2/2/2021	Assessment	0.02 J1	65.9	13.2	0.45	7.0	36.1	362
5/26/2021	Assessment	0.017 J1	75.9	13.1	0.46	7.9	35.6	350
11/9/2021	Assessment	0.018 J1	64.3	13.4	0.43	6.4	32.1	310
2/16/2022	Assessment	0.017 J1	64.4	14.2	0.44	7.2	34.7	340
5/11/2022	Assessment	0.016 J1	65.2	14.8	0.43	7.2	34.8	330 L1
11/2/2022	Assessment	0.020 J1	63.4	14.7	0.42	7.3	33.6	330
2/8/2023	Assessment	0.018 J1	64.8	14.6	0.43	7.7	33.6	320
6/1/2023	Assessment	0.016 J1	61.1 M1	--	--	7.2	--	--
6/5/2023	Assessment	--	--	14.6	0.43	7.1	34.0	330
10/31/2023	Assessment	0.030 J1	62.2	14.6	0.45	6.7	33.3	340
3/7/2024	Assessment	--	--	--	0.41	7.2	--	--
5/16/2024	Assessment	0.015 J1	58.9	14.5	0.48	7.2	33.7	320
11/14/2024	Assessment	0.018 J1	64	14.8	0.49	7.1	33.7	330

**Table 1. Groundwater Data Summary: MW-1701I**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
2/8/2018	Assessment	0.07	9.17	46.8	< 0.004 U1	0.01 J1	0.184	1.34	1.06	0.38	0.26	0.007	< 0.002 U1	2.52	0.07 J1	0.03 J1
6/5/2018	Assessment	0.05	8.07	42.7	0.021	0.02 J1	0.446	1.87	0.658	0.44	0.564	0.01	< 0.002 U1	1.15	0.2	0.05 J1
8/14/2018	Assessment	0.04 J1	6.42	38.3	0.004 J1	0.01 J1	0.085	1.10	0.3144	0.39	0.108	0.002	--	1.01	< 0.03 U1	0.02 J1
9/24/2018	Assessment	0.23	9.38	41.2	0.008 J1	0.02 J1	0.371	1.62	0.335	0.41	0.497	0.002	--	1.67	0.1	0.01 J1
10/31/2018	Assessment	0.25	6.69	40.7	< 0.02 U1	0.03 J1	0.337	1.12	0.304	0.40	0.403	0.02 J1	--	1 J1	0.07 J1	< 0.1 U1
11/12/2018	Assessment	0.10	6.77	40.3	< 0.02 U1	< 0.01 U1	0.2 J1	1.19	0.579	0.42	0.09 J1	< 0.009 U1	--	1 J1	< 0.03 U1	< 0.1 U1
5/20/2019	Assessment	0.14	12.8	41.5	< 0.02 U1	0.02 J1	0.09 J1	1.16	0.628	0.40	0.09 J1	< 0.009 U1	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
6/25/2019	Assessment	< 0.1 U1	9.47	41.9	< 0.1 U1	< 0.05 U1	< 0.2 U1	1.16	0.116	0.41	< 0.1 U1	0.01 J1	< 0.002 U1	< 2 U1	< 0.2 U1	< 0.5 U1
9/9/2019	Assessment	0.21	7.92	40.6	< 0.02 U1	< 0.01 U1	0.08 J1	0.843	0.781	0.38	0.08 J1	0.00561	< 0.002 U1	1 J1	< 0.03 U1	< 0.1 U1
3/10/2020	Assessment	0.20	14.3	46.8	< 0.02 U1	0.02 J1	0.256	1.42	1.233	0.41	0.384	0.00594	< 0.002 U1	1 J1	0.1 J1	< 0.1 U1
5/21/2020	Assessment	0.13	11.9	41.9	< 0.02 U1	0.01 J1	0.2 J1	1.32	0.943	0.43	0.276	0.00549	< 0.002 U1	1 J1	0.06 J1	< 0.1 U1
11/17/2020	Assessment	0.06 J1	9.93	41.4	< 0.02 U1	< 0.01 U1	0.231	1.17	1.337	0.43	0.07 J1	0.00553	< 0.002 U1	1 J1	0.04 J1	< 0.1 U1
2/2/2021	Assessment	0.05 J1	9.36	41.0	< 0.02 U1	< 0.01 U1	0.2 J1	1.18	0.675	0.45	< 0.05 U1	0.00539	< 0.002 U1	1 J1	0.06 J1	< 0.1 U1
5/26/2021	Assessment	0.17	21.6	43.5	0.012 J1	0.067	0.44	2.06	0.63	0.46	0.67	0.00533	< 0.002 U1	1.1	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.02 J1	7.42	39.7	< 0.007 U1	< 0.004 U1	0.30	0.872	1.09	0.43	0.09 J1	0.00579	< 0.002 U1	1.0	< 0.09 U1	< 0.04 U1
2/16/2022	Assessment	0.02 J1	7.51	37.3	< 0.007 U1	< 0.004 U1	0.21	0.845	0.70	0.44	< 0.05 U1	0.00536	< 0.002 U1	1.1	< 0.09 U1	< 0.04 U1
5/11/2022	Assessment	0.05 J1	9.66	35.2	< 0.007 U1	0.009 J1	0.27	0.981	0.99	0.43	0.07 J1	0.00494	< 0.002 U1	1.1	< 0.09 U1	< 0.04 U1
11/2/2022	Assessment	0.03 J1	6.22	37.2	< 0.007 U1	< 0.004 U1	0.18 J1	0.727	1.09	0.42	< 0.05 U1	0.00596	< 0.002 U1	1.1	< 0.09 U1	< 0.04 U1
2/8/2023	Assessment	0.05 J1	11.5	38.7	< 0.007 U1	0.009 J1	0.25	1.07	0.67	0.43	0.15 J1	0.00582	< 0.002 U1	1.1	< 0.09 U1	< 0.04 U1
6/1/2023	Assessment	0.031 J1	9.26	36.5	< 0.007 U1	0.005 J1	0.25 J1	0.980	0.92	--	0.07 J1	0.00544	< 0.002 U1	1.1	< 0.04 U1	< 0.02 U1
6/5/2023	Assessment	--	--	--	--	--	--	--	--	0.43	--	--	--	--	--	
10/31/2023	Assessment	0.095 J1	29.3	44.5	< 0.007 U1	0.022	0.27 J1	2.00	0.94	0.45	0.35	0.00533	< 0.002 U1	1.1	0.09 J1	< 0.02 U1
3/7/2024	Assessment	0.077 J1	14.1	40.1	< 0.007 U1	0.010 J1	0.44	1.06	1.35	0.41	0.17 J1	0.00564	< 0.002 U1	1.1	< 0.04 U1	< 0.02 U1
5/16/2024	Assessment	0.106	37.4	39.8	0.010 J1	0.018 J1	0.24 J1	1.32	0.77	0.48	0.32	0.00548	< 0.002 U1	1.2	0.06 J1	< 0.02 U1
11/14/2024	Assessment	0.168	29.9	41.5	< 0.007 U1	0.023	0.24 J1	1.65	2.09	0.49	0.39	0.00509	< 0.002 U1	1.2	0.1 J1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1701S**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
12/12/2017	Detection	0.051	58.1	18.6	0.35	7.5	21.1	288
2/8/2018	Assessment	0.025	56.6	19.0	0.36	7.8	21.6	334
6/4/2018	Assessment	0.032	59.2	19.4	0.38	7.4	21.3	368
8/14/2018	Assessment	0.056	64.1	19.6	0.36	7.3	20.4	329
9/25/2018	Assessment	0.035	60.7	19.6	0.37	6.6	20.3	316
10/29/2018	Assessment	0.129	63.7	19.1	0.38	7.2	18.8	312
11/12/2018	Assessment	0.139	63.6	19.1	0.39	7.5	18.9	318
5/20/2019	Assessment	< 0.02 U1	56.5	19.7	0.42	7.2	20.0	320
6/25/2019	Assessment	0.02 J1	63.5	19.6	0.37	7.3	20.7	353
9/9/2019	Assessment	< 0.02 U1	57.0	20.0	0.37	7.2	17.8	332
3/10/2020	Assessment	--	--	--	0.39	7.1	--	--
5/21/2020	Assessment	< 0.02 U1	67.8	21.6	0.41	7.3	19.6	348
11/17/2020	Assessment	< 0.02 U1	61.3	21.1	0.40	6.9	17.1	322
2/2/2021	Assessment	< 0.02 U1	57.2	20.6	0.41	7.0	16.7	319
5/26/2021	Assessment	0.015 J1	70.0	20.6	0.42	7.9	16.9	310
11/9/2021	Assessment	0.016 J1	58.6	19.4	0.39	6.5	15.6	300
2/16/2022	Assessment	0.015 J1	56.4	20.3	0.40	7.3	18.0	350
5/11/2022	Assessment	0.014 J1	60.0	22.1	0.40	7.3	17.3	320 L1
11/2/2022	Assessment	0.017 J1	56.3	21.0	0.38	6.7	16.4	310
2/8/2023	Assessment	0.015 J1	57.6	20.9	0.37	7.8	15.6	330
6/1/2023	Assessment	0.013 J1	53.9	--	--	7.2	--	--
8/16/2023	Assessment	--	--	22.4	0.36	7.2	16.6	330
10/31/2023	Assessment	0.014 J1	53.2	21.4	0.39	6.7	15.4	320
3/6/2024	Assessment	--	--	--	0.35	7.2	--	--
5/15/2024	Assessment	0.07 J1	275	22.2	0.27	7.2	17.9	320
11/14/2024	Assessment	0.013 J1	57	21.6	0.44	7.2	15.5	310

**Table 1. Groundwater Data Summary: MW-1701S**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
2/8/2018	Assessment	0.14	0.39	9.51	< 0.004 U1	0.03	0.256	0.198	0.356	0.36	0.176	0.007	< 0.002 U1	0.85	0.4	0.03 J1
6/4/2018	Assessment	0.07	0.38	5.20	< 0.004 U1	0.009 J1	0.05 J1	0.087	1.053	0.38	0.023	0.009	< 0.002 U1	0.68	0.6	0.01 J1
8/14/2018	Assessment	0.04 J1	0.37	9.34	< 0.004 U1	0.008 J1	0.065	0.092	0.3729	0.36	0.028	0.002	--	0.69	0.4	0.02 J1
9/25/2018	Assessment	0.12	0.38	8.55	< 0.004 U1	0.008 J1	0.03 J1	0.096	1.02	0.37	0.021	0.002	--	0.69	0.4	< 0.01 U1
10/29/2018	Assessment	0.07 J1	0.39	13.2	< 0.02 U1	0.02 J1	0.1 J1	0.091	0.1291	0.38	0.06 J1	< 0.009 U1	--	0.7 J1	0.4	< 0.1 U1
11/12/2018	Assessment	0.08 J1	0.37	8.20	< 0.02 U1	0.01 J1	0.2 J1	0.092	0.2239	0.39	0.05 J1	< 0.009 U1	--	0.7 J1	0.4	< 0.1 U1
5/20/2019	Assessment	0.06 J1	0.41	18.7	< 0.02 U1	0.04 J1	0.2 J1	0.053	0.0249	0.42	0.06 J1	< 0.009 U1	< 0.002 U1	0.7 J1	0.3	< 0.1 U1
6/25/2019	Assessment	< 0.1 U1	0.4 J1	8.08	< 0.1 U1	< 0.05 U1	< 0.2 U1	0.2 J1	0.931	0.37	< 0.1 U1	0.01 J1	< 0.002 U1	< 2 U1	0.5 J1	< 0.5 U1
9/9/2019	Assessment	0.16	0.38	16.8	< 0.02 U1	< 0.01 U1	0.1 J1	0.073	0.327	0.37	< 0.05 U1	0.00556	< 0.002 U1	0.7 J1	0.3	< 0.1 U1
3/10/2020	Assessment	0.03 J1	0.41	11.4	< 0.02 U1	0.02 J1	0.2 J1	0.087	0.597	0.39	< 0.05 U1	0.00537	< 0.002 U1	0.7 J1	0.3	< 0.1 U1
5/21/2020	Assessment	0.05 J1	0.39	10.4	< 0.02 U1	0.01 J1	0.1 J1	0.075	0.472	0.41	< 0.05 U1	0.00499	< 0.002 U1	0.6 J1	0.3	< 0.1 U1
11/17/2020	Assessment	0.04 J1	0.41	12.3	< 0.02 U1	0.01 J1	0.504	0.080	1.675	0.40	< 0.05 U1	0.00508	< 0.002 U1	0.7 J1	0.3	< 0.1 U1
2/2/2021	Assessment	0.05 J1	0.42	8.12	< 0.02 U1	0.01 J1	0.310	0.087	0.447	0.41	< 0.05 U1	0.00490	< 0.002 U1	0.7 J1	0.3	< 0.1 U1
5/26/2021	Assessment	0.15	0.40	13.1	< 0.007 U1	0.04	0.09 J1	0.229	0.98	0.42	0.06 J1	0.00499	< 0.002 U1	0.7	0.48 J1	< 0.04 U1
11/9/2021	Assessment	0.03 J1	0.38	11.7	< 0.007 U1	0.011 J1	0.23	0.111	0.62	0.39	< 0.05 U1	0.00507	< 0.002 U1	0.7	0.40 J1	< 0.04 U1
2/16/2022	Assessment	0.06 J1	0.40	10.0	< 0.007 U1	0.012 J1	0.59	0.085	0.77	0.40	< 0.05 U1	0.00446	< 0.002 U1	0.7	0.47 J1	< 0.04 U1
5/11/2022	Assessment	0.08 J1	0.45	12.1	< 0.007 U1	0.012 J1	0.28	0.056	1.23	0.40	< 0.05 U1	0.00456	< 0.002 U1	0.7	0.52	< 0.04 U1
11/2/2022	Assessment	0.02 J1	0.36	10.9	< 0.007 U1	0.009 J1	0.24	0.049	0.71	0.38	< 0.05 U1	0.00517	< 0.002 U1	0.7	0.56	< 0.04 U1
2/8/2023	Assessment	0.02 J1	0.39	8.17	< 0.007 U1	0.011 J1	0.25	0.074	0.75	0.37	0.25	0.00517	< 0.002 U1	0.7	0.46 J1	< 0.04 U1
6/1/2023	Assessment	0.051 J1	0.35	11.3	< 0.007 U1	0.008 J1	0.20 J1	0.089	0.48	--	< 0.05 U1	0.00481	< 0.002 U1	0.7	0.38 J1	< 0.02 U1
8/16/2023	Assessment	--	--	--	--	--	--	--	--	0.36	--	--	--	--	--	
10/31/2023	Assessment	0.034 J1	0.35	10.5	< 0.007 U1	0.025	0.29 J1	0.130	0.63	0.39	< 0.05 U1	0.00489	< 0.002 U1	0.7	0.41 J1	< 0.02 U1
3/6/2024	Assessment	0.041 J1	0.35	8.72	< 0.007 U1	0.015 J1	0.36	0.075	0.91	0.35	< 0.05 U1	0.00475	< 0.002 U1	0.7	0.42 J1	< 0.02 U1
5/15/2024	Assessment	0.11 J1	1.7	44.4	< 0.04 U1	0.04 J1	1.6	0.36	0.57	0.27	< 0.3 U1	0.0211	< 0.002 U1	3.4	2.3 J1	< 0.1 U1
11/14/2024	Assessment	0.073 J1	0.33	8.44	< 0.007 U1	0.04	0.36	0.082	1.29	0.44	< 0.05 U1	0.0047	< 0.002 U1	0.7	0.41 J1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1702D**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
12/12/2017	Detection	0.105	74.3	30.3	0.19	7.2	39.9	362
2/9/2018	Assessment	0.042	76.1	30.5	0.19	8.0	41.3	386
6/4/2018	Assessment	0.024	78.5	31.6	0.24	7.1	39.9	372
8/14/2018	Assessment	0.071	80.7	30.7	0.20	6.8	38.1	379
9/26/2018	Assessment	0.096	80.0	31.2	0.20	7.1	37.8	392
10/30/2018	Assessment	0.06 J1	87.2	30.9	0.200	8.2	37.3	394
11/12/2018	Assessment	0.06 J1	89.8	31.5	0.21	7.4	37.3	374
5/20/2019	Assessment	0.02 J1	78.7	30.5	0.18	7.0	38.9	402
6/26/2019	Assessment	0.02 J1	80.0	30.4	0.17	7.6	39.0	388
9/10/2019	Assessment	< 0.02 U1	86.6	30.6	0.20	7.1	37.9	384
3/9/2020	Assessment	--	--	--	0.19	7.0	--	--
5/21/2020	Assessment	< 0.02 U1	88.2	31.5	0.22	7.1	39.2	393
11/17/2020	Assessment	< 0.02 U1	86.5	30.6	0.20	6.8	37.0	384
2/2/2021	Assessment	< 0.02 U1	79.2	30.5	0.22	6.8	37.4	396
5/27/2021	Assessment	0.017 J1	83.3	30.8	0.22	7.7	37.6	400
11/9/2021	Assessment	0.015 J1	79.1	30.3	0.20	6.7	35.0	390
2/16/2022	Assessment	0.017 J1	80.7	30.8	0.19	6.9	38.0	390
5/10/2022	Assessment	0.019 J1	84.1	31.6	0.19	7.1	39.8	390 L1
11/3/2022	Assessment	0.050	76.8	31.1	0.19	7.1	39.1	370
2/7/2023	Assessment	0.017 J1	72.0	30.9	0.19	7.4	38.3	390
6/1/2023	Assessment	0.017 J1	71.4	--	--	5.7	--	--
6/5/2023	Assessment	--	--	30.3	0.18	7.3	45.9	400
10/31/2023	Assessment	0.022 J1	74.5	30.8	0.20	6.6	40.9	390
3/7/2024	Assessment	--	--	--	0.19	7.0	--	--
5/16/2024	Assessment	0.015 J1	73.0 M1	31.2	0.23	6.8	41.8	380
11/14/2024	Assessment	0.017 J1	79	31.0	0.23	6.9	40.3	390

**Table 1. Groundwater Data Summary: MW-1702D**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
2/9/2018	Assessment	0.25	22.5	212	< 0.004 U1	0.02 J1	0.389	0.877	0.977	0.19	0.27	0.007	< 0.002 U1	5.91	0.09 J1	0.03 J1
6/4/2018	Assessment	0.18	25.2	208	0.005 J1	0.02	0.105	0.698	1.345	0.24	0.052	0.009	< 0.002 U1	4.18	< 0.03 U1	0.02 J1
8/14/2018	Assessment	0.15	21.3	191	< 0.004 U1	0.02 J1	0.091	0.590	0.949	0.20	0.026	0.002	--	3.68	< 0.03 U1	0.03 J1
9/26/2018	Assessment	0.18	22.0	211	< 0.004 U1	0.01 J1	0.069	0.564	1.084	0.20	0.230	0.008	--	3.38	< 0.03 U1	0.02 J1
10/30/2018	Assessment	0.1	22.5	204	< 0.02 U1	0.01 J1	0.08 J1	0.581	0.784	0.200	0.02 J1	< 0.009 U1	--	2.77	0.03 J1	< 0.1 U1
11/12/2018	Assessment	0.08 J1	20.2	199	< 0.02 U1	0.02 J1	0.1 J1	0.498	1.167	0.21	0.03 J1	< 0.009 U1	--	2.53	< 0.03 U1	< 0.1 U1
5/20/2019	Assessment	0.08 J1	25.6	223	< 0.02 U1	0.02 J1	0.1 J1	0.686	1.207	0.18	0.04 J1	< 0.009 U1	< 0.002 U1	2.43	< 0.03 U1	< 0.1 U1
6/26/2019	Assessment	0.07 J1	24.4	209	< 0.02 U1	0.02 J1	0.08 J1	0.601	0.689	0.17	0.07 J1	0.02 J1	< 0.002 U1	2.15	0.03 J1	< 0.1 U1
9/10/2019	Assessment	0.04 J1	22.1	203	< 0.02 U1	< 0.01 U1	0.1 J1	0.536	0.639	0.20	< 0.05 U1	0.00456	< 0.002 U1	2.16	< 0.03 U1	< 0.1 U1
3/9/2020	Assessment	0.02 J1	21.2	207	< 0.02 U1	0.02 J1	0.07 J1	0.534	1.102	0.19	< 0.05 U1	0.00430	< 0.002 U1	2 J1	0.04 J1	< 0.1 U1
5/21/2020	Assessment	0.08 J1	20.3	199	< 0.02 U1	0.04 J1	0.2 J1	0.517	1.047	0.22	< 0.05 U1	0.00398	< 0.002 U1	2 J1	0.07 J1	< 0.1 U1
11/17/2020	Assessment	0.05 J1	21.0	206	< 0.02 U1	< 0.01 U1	0.2 J1	0.519	1.100	0.20	< 0.05 U1	0.00416	< 0.002 U1	2 J1	0.03 J1	< 0.1 U1
2/2/2021	Assessment	0.08 J1	25.6	202	< 0.02 U1	0.02 J1	0.2 J1	0.574	1.0318	0.22	0.06 J1	0.00409	< 0.002 U1	2.00	0.05 J1	< 0.1 U1
5/27/2021	Assessment	0.08 J1	29.8	209 P3	< 0.007 U1	0.016 J1	0.36	0.607	1.45	0.22	0.07 J1	0.00407	< 0.002 U1	2.1	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.03 J1	35.9	204	< 0.007 U1	0.007 J1	0.29	0.534	2.42	0.20	0.09 J1	0.00417	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
2/16/2022	Assessment	0.13	22.9	195	< 0.007 U1	0.047	0.40	0.551	1.02	0.19	0.06 J1	0.00396	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	0.07 J1	26.6	188	< 0.007 U1	0.014 J1	0.24	0.537	1.09	0.19	0.12 J1	0.00366	< 0.002 U1	2.0	< 0.09 U1	< 0.04 U1
11/3/2022	Assessment	0.10	36.2	209	0.050	0.082	0.28	0.642	0.45	0.19	0.22	0.00441	0.005	1.9	0.50	0.20
2/7/2023	Assessment	0.05 J1	36.9	197	< 0.007 U1	0.023	0.29	0.671	0.97	0.19	0.22	0.00443	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
6/1/2023	Assessment	0.077 J1	26.2	187	0.011 J1	0.074	0.32	0.587	0.93	--	0.28	0.00414	< 0.002 U1	1.9	0.14 J1	< 0.02 U1
6/5/2023	Assessment	--	--	--	--	--	--	--	--	0.18	--	--	--	--	--	
10/31/2023	Assessment	0.090 J1	43.1	206	0.014 J1	0.019 J1	0.33	0.832	2.12	0.20	0.50	0.00423	< 0.002 U1	1.8	0.16 J1	0.02 J1
3/7/2024	Assessment	0.126	63.2	230	0.020 J1	0.045	0.39	1.75	1.41	0.19	0.66	0.00440	< 0.002 U1	2.1	0.10 J1	0.03 J1
5/16/2024	Assessment	0.114	33.8	196	0.009 J1	0.169	0.73	0.720	1.12	0.23	0.31	0.00405	< 0.002 U1	2.1	0.07 J1	< 0.02 U1
11/14/2024	Assessment	0.100	25.0	200	0.011 J1	0.02	0.37	0.505	3.12	0.23	0.86	0.00365	< 0.002 U1	1.9	0.13 J1	< 0.02 U1

**Table 1. Groundwater Data Summary: MW-1702I**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
12/12/2017	Detection	0.037	76.2	27.1	0.20	7.2	45.4	376
2/9/2018	Assessment	0.045	72.7	27.6	0.22	7.8	46.6	377
6/4/2018	Assessment	0.081	76.2	28.7	0.24	7.1	43.4	760
8/13/2018	Assessment	0.051	81.1	29.0	0.22	6.6	41.5	382
9/25/2018	Assessment	0.056	78.9	29.8	0.23	6.8	41.9	398
10/30/2018	Assessment	0.07 J1	81.7	29.2	0.23	7.8	41.9	392
11/12/2018	Assessment	0.07 J1	82.7	29.9	0.24	6.8	41.9	364
5/20/2019	Assessment	0.02 J1	73.2	28.8	0.21	6.9	44.5	376
6/25/2019	Assessment	0.02 J1	74.7	28.5	0.20	7.3	44.7	376
9/10/2019	Assessment	< 0.02 U1	80.2	28.9	0.24	7.1	43.6	384
3/9/2020	Assessment	--	--	--	--	7.1	--	--
3/11/2020	Assessment	--	--	--	0.22	--	--	--
5/21/2020	Assessment	< 0.02 U1	83.3	29.7	0.25	7.1	44.1	376
11/17/2020	Assessment	< 0.02 U1	76.5	29.0	0.23	6.8	41.6	394
2/2/2021	Assessment	< 0.02 U1	74.2	28.7	0.25	6.7	41.8	389
5/27/2021	Assessment	0.014 J1	78.5	28.2	0.25	7.8	41.8	380
11/9/2021	Assessment	0.014 J1	72.7	28.9	0.24	6.6	40.0	380
2/16/2022	Assessment	0.015 J1	76.4	28.7	0.23	7.1	42.9	390
5/10/2022	Assessment	0.016 J1	87.1	28.6	0.23	7.1	44.9	390 L1
11/3/2022	Assessment	0.050	69.2 M1	28.9	0.23	7.3	44.2	370
2/7/2023	Assessment	0.017 J1	66.7	27.5	0.23	7.5	42.9	390
6/1/2023	Assessment	0.014 J1	67.0	--	--	7.2	--	--
6/6/2023	Assessment	--	--	28.6	0.23	6.8	43.0	360
10/31/2023	Assessment	0.019 J1	68.2	29.5	0.24	6.6	41.6	400
3/7/2024	Assessment	--	--	--	0.22	7.0	--	--
5/16/2024	Assessment	0.015 J1	68.2	30.3	0.28	7.0	42.9	370
11/15/2024	Assessment	0.014 J1	70	30.6	0.22	6.9	39.1	340

**Table 1. Groundwater Data Summary: MW-1702I**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
2/9/2018	Assessment	0.05 J1	42.3	109	0.007 J1	0.01 J1	1.49	2.15	1.324	0.22	0.337	0.004	< 0.002 U1	7.9	0.1	0.04 J1
6/4/2018	Assessment	0.07	28.1	109	0.007 J1	0.06	0.129	1.29	1.969	0.24	0.247	0.009	< 0.002 U1	1.91	0.08 J1	0.054
8/13/2018	Assessment	0.10	28.9	102	0.004 J1	0.02 J1	0.146	1.35	1.243	0.22	0.074	0.002	--	1.89	0.05 J1	0.102
9/25/2018	Assessment	0.44	39.6	114	< 0.004 U1	0.01 J1	0.050	1.70	0.3854	0.23	0.087	0.003	--	2.04	0.04 J1	0.05 J1
10/30/2018	Assessment	0.14	43.0	113	< 0.02 U1	0.22	0.1 J1	1.57	1.364	0.23	0.129	< 0.009 U1	--	2 J1	0.05 J1	< 0.1 U1
11/12/2018	Assessment	0.18	37.3	109	< 0.02 U1	0.05	0.1 J1	1.52	0.746	0.24	0.09 J1	< 0.009 U1	--	2 J1	0.04 J1	< 0.1 U1
5/20/2019	Assessment	0.07 J1	49.5	115	< 0.02 U1	0.01 J1	0.05 J1	1.43	1.519	0.21	0.05 J1	< 0.009 U1	< 0.002 U1	2 J1	0.05 J1	< 0.1 U1
6/25/2019	Assessment	0.07 J1	54.1	114	< 0.02 U1	0.02 J1	0.07 J1	1.78	0.467	0.20	0.1 J1	0.02 J1	< 0.002 U1	2 J1	0.07 J1	< 0.1 U1
9/10/2019	Assessment	0.08 J1	55.8	112	< 0.02 U1	< 0.01 U1	0.1 J1	1.60	0.584	0.24	0.06 J1	0.00469	< 0.002 U1	2.03	< 0.03 U1	< 0.1 U1
3/9/2020	Assessment	0.12	67.5	121	< 0.02 U1	0.13	0.852	3.15	1.081	--	0.678	0.00453	< 0.002 U1	2 J1	0.1 J1	< 0.1 U1
3/11/2020	Assessment	--	--	--	--	--	--	--	0.22	--	--	--	--	--	--	--
5/21/2020	Assessment	0.08 J1	38.7	108	< 0.02 U1	0.02 J1	0.2 J1	1.53	1.589	0.25	0.1 J1	0.00415	< 0.002 U1	2 J1	0.06 J1	< 0.1 U1
11/17/2020	Assessment	0.12	65.4	113	< 0.02 U1	0.05	0.204	1.66	1.671	0.23	0.1 J1	0.00429	< 0.002 U1	2 J1	< 0.03 U1	< 0.1 U1
2/2/2021	Assessment	0.13	72.7	115	< 0.02 U1	0.02 J1	0.205	1.60	1.535	0.25	0.05 J1	0.00425	< 0.002 U1	2 J1	0.05 J1	< 0.1 U1
5/27/2021	Assessment	0.08 J1	50.4	110	< 0.007 U1	0.008 J1	0.13 J1	1.42	0.88	0.25	< 0.05 U1	0.00422	< 0.002 U1	1.8	< 0.09 U1	< 0.04 U1
11/9/2021	Assessment	0.06 J1	54.4	110	< 0.007 U1	0.006 J1	0.22	1.54	1.35	0.24	< 0.05 U1	0.00426	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
2/16/2022	Assessment	0.10	75.4	116	< 0.007 U1	0.014 J1	0.33	1.70	1.64	0.23	0.05 J1	0.00412	< 0.002 U1	2.0	< 0.09 U1	< 0.04 U1
5/10/2022	Assessment	0.12	57.1	110	< 0.007 U1	0.013 J1	0.26	1.26	1.56	0.23	0.07 J1	0.00390	< 0.002 U1	2.0	< 0.09 U1	< 0.04 U1
11/3/2022	Assessment	0.10	79.1	114	0.050	0.020	0.36	1.75	1.36	0.23	0.20	0.00449	0.005	1.8	0.50	0.20
2/7/2023	Assessment	0.07 J1	61.0	108	< 0.007 U1	0.021	0.28	1.84	1.36	0.23	< 0.05 U1	0.00451	< 0.002 U1	1.9	< 0.09 U1	< 0.04 U1
6/1/2023	Assessment	0.089 J1	76.1	106	< 0.007 U1	0.013 J1	0.19 J1	1.52	1.22	--	0.08 J1	0.00412	< 0.002 U1	1.9	0.06 J1	0.03 J1
6/6/2023	Assessment	--	--	--	--	--	--	--	0.23	--	--	--	--	--	--	
10/31/2023	Assessment	0.075 J1	66.0	110	< 0.007 U1	0.015 J1	0.25 J1	1.95	1.72	0.24	0.07 J1	0.00424	< 0.002 U1	1.9	0.06 J1	0.04 J1
3/7/2024	Assessment	0.171	73.3	114	< 0.007 U1	0.018 J1	0.23 J1	1.64	1.25	0.22	0.06 J1	0.00446	< 0.002 U1	2.0	< 0.04 U1	0.03 J1
5/16/2024	Assessment	0.067 J1	41.0	106	< 0.007 U1	0.065	0.47	1.35	1.12	0.28	< 0.05 U1	0.00435	< 0.002 U1	2.0	< 0.04 U1	0.03 J1
11/15/2024	Assessment	0.058 J1	52.8	106	< 0.007 U1	0.013 J1	0.33	1.31 B1	1.18	0.22	0.05 J1	0.00391	< 0.002 U1	1.9	< 0.04 U1	0.03 J1

**Table 1. Groundwater Data Summary: MW-1702S**  
**Rockport - BAP**  
**Appendix III Constituents**

*Geosyntec Consultants, Inc.*

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
12/12/2017	Detection	0.051	33.6	13.4	0.49	7.3	22.7	254
2/9/2018	Assessment	0.042	29.7	14	0.62	7.9	22.2	281
6/4/2018	Assessment	0.059	38.4	14.4	0.57	7.0	26.7	276
8/13/2018	Assessment	0.057	36.9	13.6	0.55	6.3	22.0	272
9/25/2018	Assessment	0.041	36.2	14.1	0.54	6.6	20.7	266
10/30/2018	Assessment	0.09 J1	34.9	14.1	0.61	7.5	17.1	256
11/12/2018	Assessment	0.1 J1	41.5	14.5	0.56	6.8	21.5	246
5/20/2019	Assessment	0.03 J1	27.1	14.7	0.70	6.8	20.8	272
6/25/2019	Assessment	0.04 J1	36.7	14.6	0.59	7.2	22.3	284
9/10/2019	Assessment	0.04 J1	35.6	16.5	0.63	6.7	19.2	284
3/9/2020	Assessment	--	--	--	--	7.2	--	--
3/11/2020	Assessment	--	--	--	0.63	--	--	--
5/21/2020	Assessment	0.03 J1	37.2	14.3	0.67	7.0	23.0	276
11/17/2020	Assessment	0.04 J1	32.7	13.9	0.64	6.5	17.6	259
2/4/2021	Assessment	0.03 J1	33.7	13.5	0.70	7.5	18.1	259
5/27/2021	Assessment	0.032 J1	34.9	13.5	0.64	7.8	18.7	270
11/9/2021	Assessment	0.029 J1	34.6	13.4	0.59	7.1	17.0	260
2/16/2022	Assessment	0.028 J1	34.4	14.2	0.62	7.2	20.6	270
5/10/2022	Assessment	0.017 J1	28.6	13.7	0.68	7.1	19.1	260 L1
11/3/2022	Assessment	0.050	34.9	13.4	0.57	7.1	18.7	250
2/8/2023	Assessment	0.031 J1	34.6	14.5	0.59	7.5	20.7	270
6/1/2023	Assessment	0.023 J1	35.6 M1	14.7	0.54	7.3	20.7	280
10/31/2023	Assessment	0.035 J1	36.5	15.1	0.58	6.7	18.4	290
3/7/2024	Assessment	--	--	--	0.56	7.2	--	--
5/16/2024	Assessment	0.032 J1	37.2	14.8	0.64	7.1	20.0	260
11/15/2024	Assessment	0.034 J1	37	14.3	0.54	6.9	16.5	290

**Table 1. Groundwater Data Summary: MW-1702S**  
**Rockport - BAP**  
**Appendix IV Constituents**

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
2/9/2018	Assessment	0.05 J1	0.72	9.81	< 0.004 U1	0.006 J1	0.212	0.258	0.00483	0.62	0.223	< 0.0002 U1	< 0.002 U1	1.09	1.1	0.01 J1
6/4/2018	Assessment	0.05 J1	0.45	7.67	< 0.004 U1	0.04	0.124	0.07	1.231	0.57	0.077	0.006	< 0.002 U1	1.42	3.8	0.01 J1
8/13/2018	Assessment	0.13	0.47	7.14	0.005 J1	0.05	0.175	0.173	0.1628	0.55	0.188	< 0.0002 U1	--	1.15	1.8	0.03 J1
9/25/2018	Assessment	0.08	0.44	5.97	< 0.004 U1	0.008 J1	0.130	0.104	0.421	0.54	0.079	< 0.0002 U1	--	1.20	1.2	< 0.01 U1
10/30/2018	Assessment	0.05 J1	0.48	5.5	< 0.02 U1	0.11	0.2 J1	0.05 J1	0.0859	0.61	0.08 J1	< 0.009 U1	--	1 J1	1.0	< 0.1 U1
11/12/2018	Assessment	0.04 J1	0.42	6.27	< 0.02 U1	0.03 J1	0.2 J1	0.272	0.107	0.56	0.229	< 0.009 U1	--	1 J1	1.5	< 0.1 U1
5/20/2019	Assessment	0.09 J1	0.45	5.92	< 0.02 U1	0.28	0.475	0.058	0.56253	0.70	0.373	< 0.009 U1	< 0.002 U1	1 J1	1.5	< 0.1 U1
6/25/2019	Assessment	< 0.1 U1	0.4 J1	5.71	< 0.1 U1	< 0.05 U1	0.2 J1	< 0.1 U1	0.357	0.59	< 0.1 U1	< 0.009 U1	< 0.002 U1	< 2 U1	2.4	< 0.5 U1
9/10/2019	Assessment	0.08 J1	0.43	4.87	< 0.02 U1	0.01 J1	0.215	0.096	0.2432	0.63	0.1 J1	0.00127	< 0.002 U1	1 J1	1.3	< 0.1 U1
3/9/2020	Assessment	0.04 J1	0.42	4.46	< 0.02 U1	0.01 J1	0.335	0.03 J1	1.1358	--	< 0.05 U1	0.00128	< 0.002 U1	1 J1	1.8	< 0.1 U1
3/11/2020	Assessment	--	--	--	--	--	--	--	0.63	--	--	--	--	--	--	
5/21/2020	Assessment	0.03 J1	0.37	4.79	< 0.02 U1	< 0.01 U1	0.208	< 0.02 U1	1.14	0.67	< 0.05 U1	0.00106	< 0.002 U1	1 J1	1.8	< 0.1 U1
11/17/2020	Assessment	0.07 J1	0.37	4.22	< 0.02 U1	0.05 J1	0.278	0.03 J1	1.17	0.64	< 0.05 U1	0.00116	< 0.002 U1	1 J1	1.3	< 0.1 U1
2/4/2021	Assessment	0.07 J1	0.48	5.59	< 0.02 U1	0.05	0.430	0.348	0.392	0.70	0.350	0.00136	< 0.002 U1	1 J1	2.0	< 0.1 U1
5/27/2021	Assessment	0.07 J1	0.30	4.51	< 0.007 U1	0.019 J1	0.20	0.028	0.55	0.64	< 0.05 U1	0.00142	< 0.002 U1	1.4	2.23	< 0.04 U1
11/9/2021	Assessment	0.02 J1	0.30	4.15	< 0.007 U1	0.017 J1	0.51	0.026	0.62	0.59	< 0.05 U1	0.00152	< 0.002 U1	1.4	1.74	< 0.04 U1
2/16/2022	Assessment	0.04 J1	0.35	3.94	< 0.007 U1	0.118	0.52	0.026	1.47	0.62	< 0.05 U1	0.00152	< 0.002 U1	1.5	2.65	< 0.04 U1
5/10/2022	Assessment	0.09 J1	0.44	4.13	< 0.007 U1	0.014 J1	0.40	0.021	0.71	0.68	< 0.05 U1	0.00099	< 0.002 U1	1.0	1.92	< 0.04 U1
11/3/2022	Assessment	0.10	0.29	3.81	0.050	0.020	0.30	0.020	0.66	0.57	0.20	0.00163	0.005	1.4	2.79	0.20
2/8/2023	Assessment	0.03 J1	0.28	3.97	< 0.007 U1	0.021	0.32	0.028	0.78	0.59	< 0.05 U1	0.00175	< 0.002 U1	1.5	4.37	< 0.04 U1
6/1/2023	Assessment	0.023 J1	0.26	3.89	< 0.007 U1	0.020	0.25 J1	0.020	0.26	0.54	< 0.05 U1	0.00152	< 0.002 U1	1.5	3.87	< 0.02 U1
10/31/2023	Assessment	0.026 J1	0.24	3.93	< 0.007 U1	0.021	0.38	0.022	1.62	0.58	< 0.05 U1	0.00174	< 0.002 U1	1.4	3.00	< 0.02 U1
3/7/2024	Assessment	0.085 J1	0.30	4.28	< 0.007 U1	0.072	0.29 J1	0.034	0.79	0.56	0.07 J1	0.00174	< 0.002 U1	1.4	3.80	< 0.02 U1
5/16/2024	Assessment	0.049 J1	0.26	4.06	< 0.007 U1	0.020	0.36	0.016 J1	1.48	0.64	< 0.05 U1	0.00165	< 0.002 U1	1.5	3.52	0.03 J1
11/15/2024	Assessment	0.090 J1	0.26	4.60	< 0.007 U1	0.047	0.41	0.027 B1	0.52	0.54	< 0.05 U1	0.00153	< 0.002 U1	1.4	1.66	< 0.02 U1

**Table 1. Groundwater Data Summary  
Rockport - Bottom Ash Pond**

*Geosyntec Consultants, Inc.*

Notes:

Combined radium values were calculated from the sum of the reported radium-226 and radium-228 results.

Radium data quality flags were not included. Reported negative radium-226 or radium-228 results were replaced with zero.

--: Not analyzed

<: Non-detect value. Analytes which were not detected are shown as less than the method detection limit (MDL) followed by a 'U1' flag.

In analytical data prior to 5/18/2021, U1 flags were reported as U in the analytical report.

B1: Analyte detected in method blank (MB) at or above the method criteria.

J1: Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.

In analytical data prior to 5/18/2021, J1 flags were reported as J in the analytical report.

L1: The associated laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) recovery was outside acceptance limits.

M1: The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.

mg/L: milligrams per liter

P2: The precision on the laboratory control sample duplicate (LCSD) was above acceptance limits.

P3: The precision on the matrix spike duplicate (MSD) was above acceptance limits.

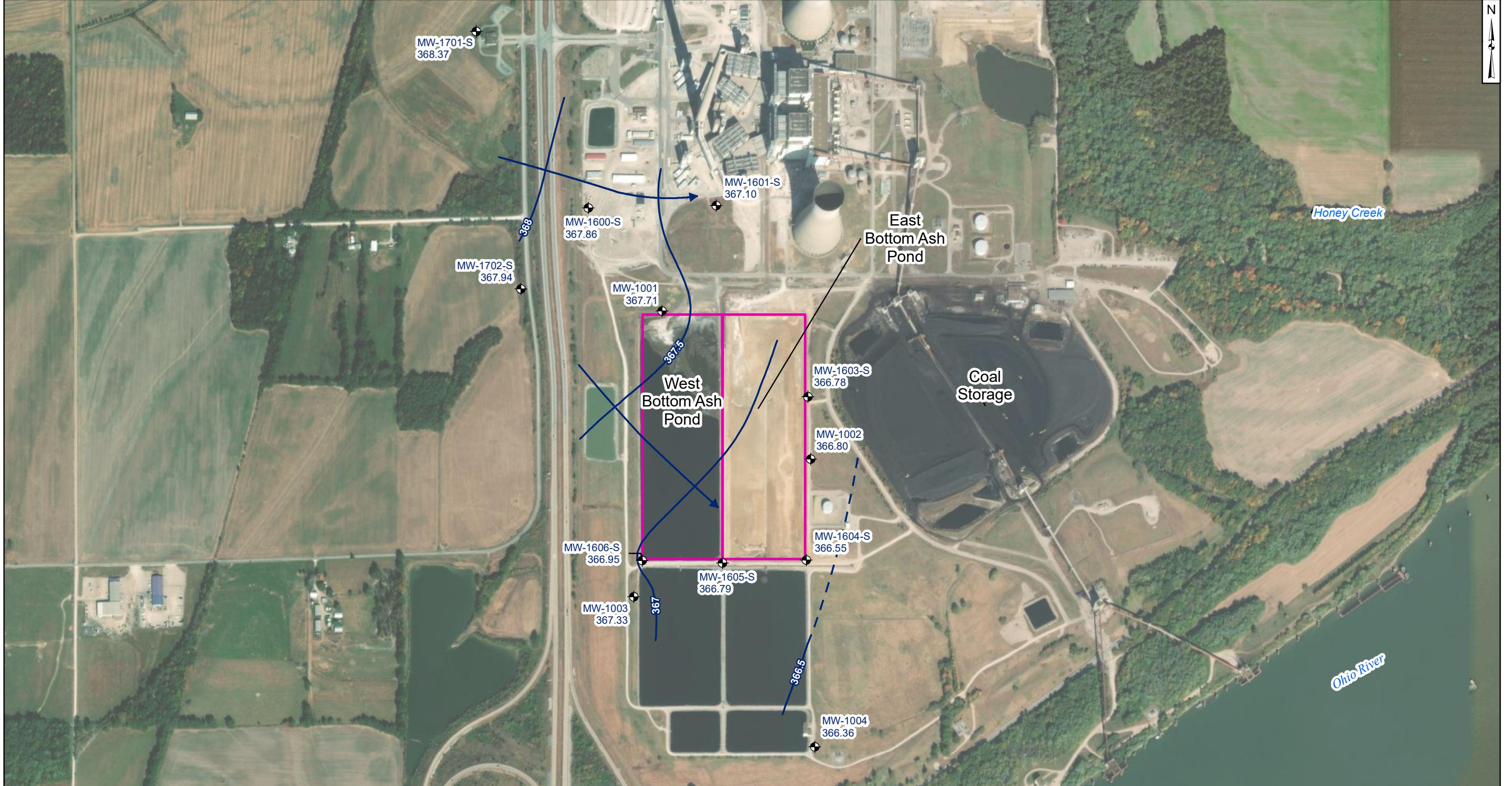
pCi/L: picocuries per liter

S7: Sample did not achieve constant weight.

SU: standard unit

µg/L: micrograms per liter

## **Groundwater Flow Direction Maps**



**Legend**

- Groundwater Monitoring Well
- Approximate Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Bottom Ash Ponds

**Notes:**

1. Monitoring well coordinates and water level data (collected on March 5, 2023) provided by AEP.
2. Site features based on information available in the Groundwater Monitoring Network Evaluation (AMEC 2016) provided by AEP.
3. Only shallow screened wells were used for generating groundwater contours.
4. Groundwater elevation units are feet above mean sea level (ft amsl).
5. Aerial imagery provided by ESRI (dated July 2024).

1,000      500      0      1,000  
Feet

**Potentiometric Surface Map - Uppermost Aquifer**  
**March 2024**

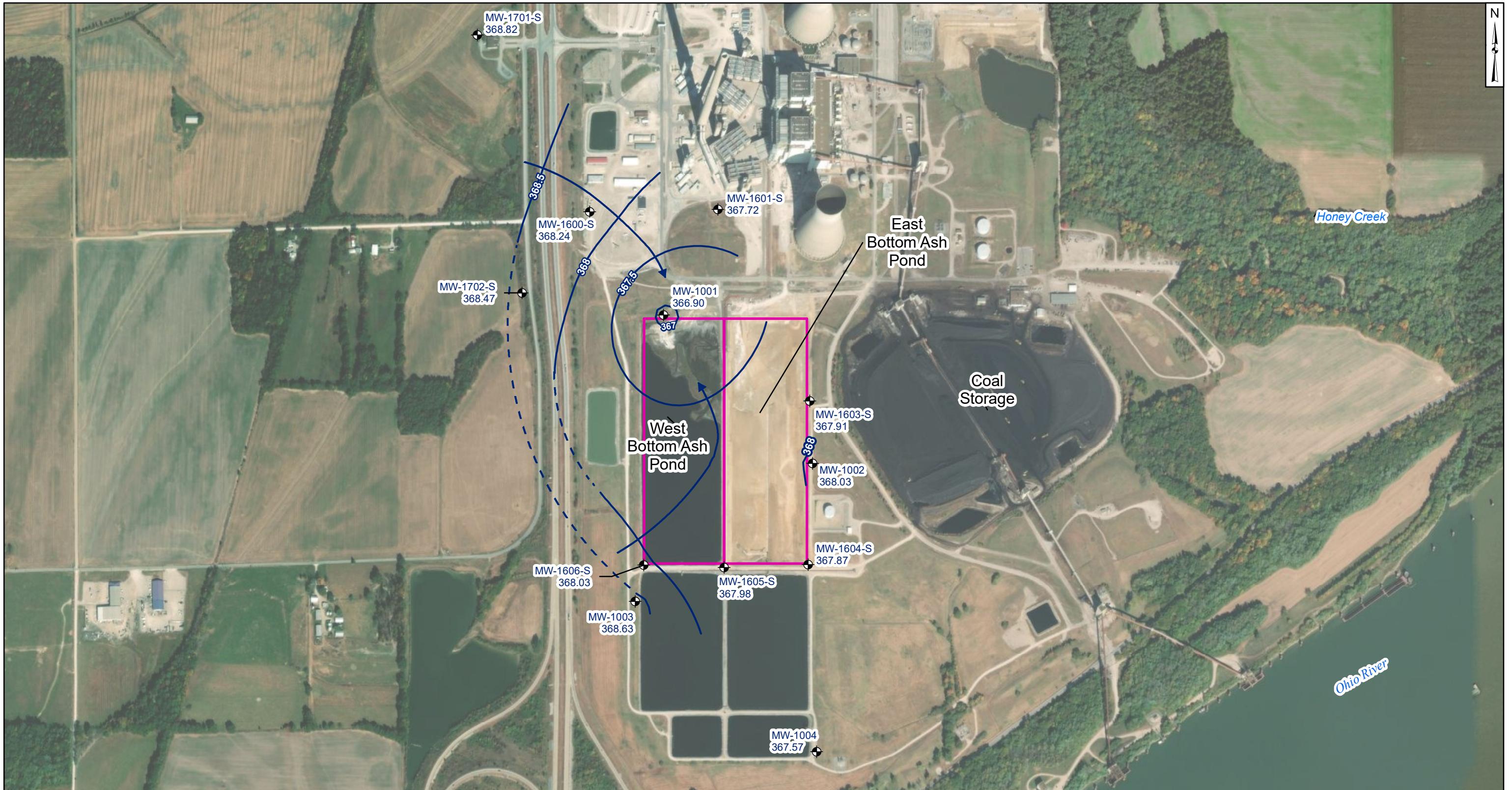
AEP-Rockport Power Plant - Bottom Ash Ponds  
Rockport, Indiana

**Geosyntec**  
consultants

**Figure**

**X**

Columbus, Ohio      2024/08/05



**Legend**

- Groundwater Monitoring Well
- Approximate Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Bottom Ash Ponds

**Notes:**

1. Monitoring well coordinates and water level data (collected on May 13, 2024) provided by AEP.
2. Site features based on information available in the Groundwater Monitoring Network Evaluation (AMEC 2016) provided by AEP.
3. Only shallow screened wells were used for generating groundwater contours.
4. Groundwater elevation units are feet above mean sea level (ft amsl).
5. Aerial imagery provided by ESRI (dated July 2024).

1,000      500      0      1,000  
Feet

**Potentiometric Surface Map - Uppermost Aquifer**  
**May 2024**

AEP-Rockport Power Plant - Bottom Ash Ponds  
Rockport, Indiana

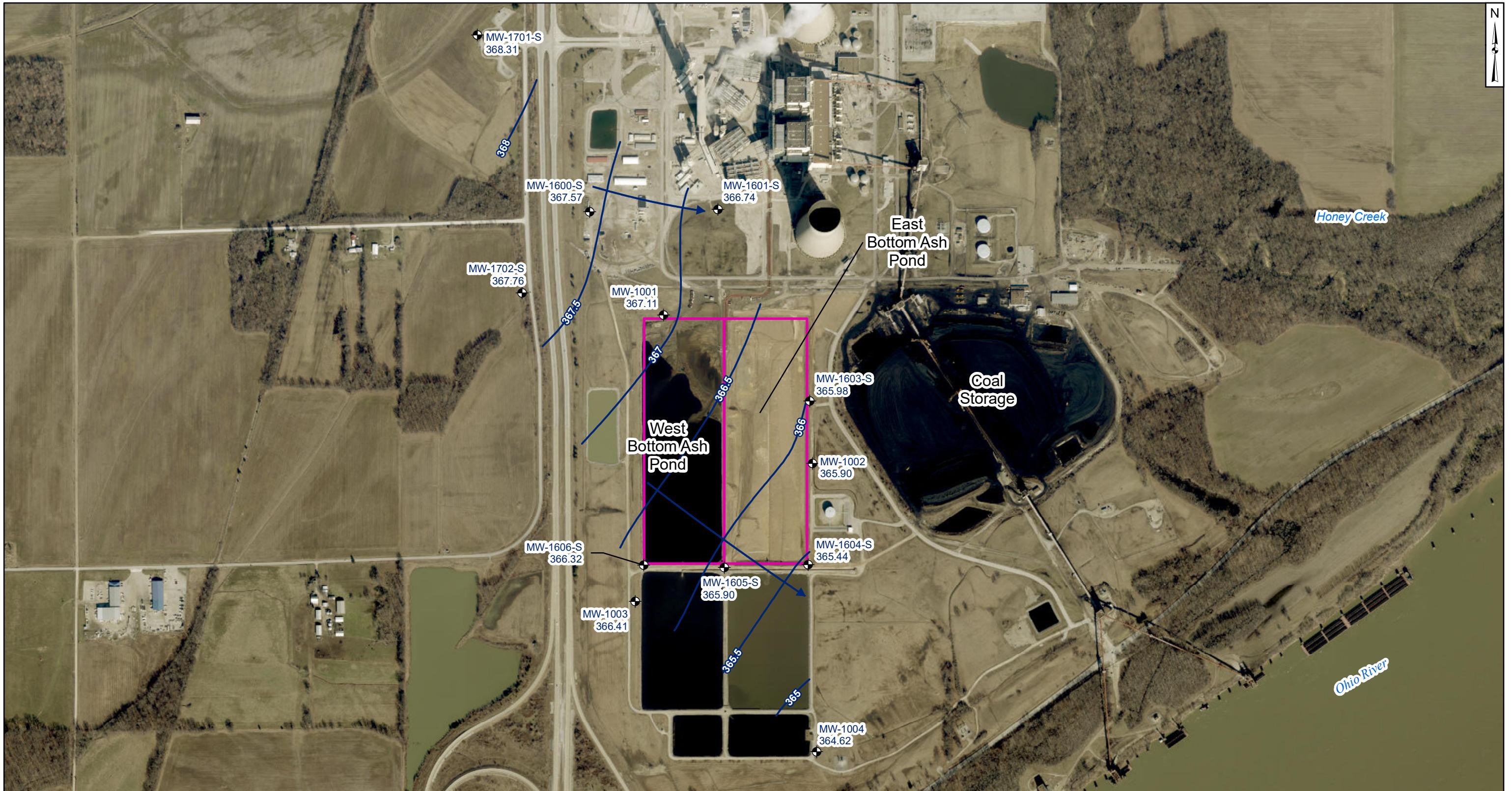
**Geosyntec**  
consultants

**Figure**

**X**

Columbus, Ohio

2024/08/05



**Legend**

- Groundwater Monitoring Well
- Approximate Groundwater Flow Direction
- Groundwater Elevation Contour
- Bottom Ash Ponds

**Notes:**

1. Monitoring well coordinates and water level data (collected on November 11, 2024) provided by AEP.
2. Site features based on information available in the Groundwater Monitoring Network Evaluation (AMEC 2016) provided by AEP.
3. Only shallow screened wells were used for generating groundwater contours.
4. Groundwater elevation units are feet above mean sea level (ft amsl).
5. Aerial imagery provided by ESRI (dated February 2023).

1,000      500      0      1,000  
Feet

**Potentiometric Surface Map - Uppermost Aquifer**  
**November 2024**

AEP-Rockport Power Plant - Bottom Ash Ponds  
Rockport, Indiana

**Geosyntec**  
consultants

**Figure**

**X**

Columbus, Ohio

2025/01/08

## **Groundwater Flow Velocity Calculations**

**Table 1: Residence Time Calculation Summary  
Rockport - Bottom Ash Ponds**

*Geosyntec Consultants, Inc.*

CCR Management Unit	Monitoring Well	Well Diameter (inches)	2024-03		2024-05		2024-11	
			Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)
Bottom Ash Ponds	MW-1600D <sup>[1]</sup>	2.0	106	0.57	234	0.26	319	0.19
	MW-1600I <sup>[1]</sup>	2.0	181	0.34	234	0.26	401	0.15
	MW-1600S <sup>[1]</sup>	2.0	383	0.16	701	0.09	467	0.13
	MW-1601D <sup>[1]</sup>	2.0	270	0.23	177	0.34	300	0.20
	MW-1601I <sup>[1]</sup>	2.0	428	0.14	240	0.25	380	0.16
	MW-1601S <sup>[1]</sup>	2.0	385	0.16	329	0.18	506	0.12
	MW-1002 <sup>[2]</sup>	2.0	199	0.31	343	0.18	395	0.15
	MW-1602D <sup>[2]</sup>	2.0	398	0.15	181	0.34	566	0.11
	MW-1602I <sup>[2]</sup>	2.0	369	0.17	1,380	0.04	507	0.12
	MW-1603D <sup>[2]</sup>	2.0	481	0.13	338	0.18	673	0.09
	MW-1603I <sup>[2]</sup>	2.0	295	0.21	379	0.16	482	0.13
	MW-1603S <sup>[2]</sup>	2.0	264	0.23	420	0.14	473	0.13
	MW-1604D <sup>[2]</sup>	2.0	300	0.20	300	0.20	966	0.06
	MW-1604I <sup>[2]</sup>	2.0	271	0.22	295	0.21	527	0.12
	MW-1604S <sup>[2]</sup>	2.0	254	0.24	286	0.21	527	0.12
	MW-1605D <sup>[2]</sup>	2.0	182	0.33	194	0.31	433	0.14
	MW-1605I <sup>[2]</sup>	2.0	309	0.20	502	0.12	867	0.07
	MW-1605S <sup>[2]</sup>	2.0	281	0.22	458	0.13	482	0.13
	MW-1606D <sup>[2]</sup>	2.0	211	0.29	272	0.22	336	0.18
	MW-1606I <sup>[2]</sup>	2.0	203	0.30	267	0.23	336	0.18
	MW-1606S <sup>[2]</sup>	2.0	183	0.33	244	0.25	465	0.13

Notes:

[1] - Upgradient Well

[2] - Downgradient Well

## **APPENDIX 2 – Statistical Analyses**

The memorandums summarizing the statistical evaluation follow.



engineers | scientists | innovators



# STATISTICAL ANALYSIS SUMMARY, EAST AND WEST BOTTOM ASH PONDS

**Rockport Plant  
Rockport, Indiana**

*Prepared for*

**American Electric Power**  
1 Riverside Plaza  
Columbus, Ohio 43215-2372

*Prepared by*

Geosyntec Consultants, Inc.  
500 West Wilson Bridge Road, Suite 250  
Worthington, Ohio 43085

Project Number: CHA8500B

March 14, 2024

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## LIST OF ATTACHMENTS

Attachment A:	Certification by Qualified Professional Engineer
Attachment B:	Statistical Analysis Output

## ACRONYMS AND ABBREVIATIONS

BAP	Bottom Ash Pond
CCR	coal combustion residuals
CFR	code of federal regulations
GWPS	groundwater protection standard
LPL	lower prediction limit
MCL	maximum contaminant level
mg/L	milligrams per liter
QA/QC	quality assurance/quality control
SSI	statistically significant increase
SSL	statistically significant level
SU	standard units
TDS	total dissolved solids
UPL	upper prediction limit

## 1. INTRODUCTION

In accordance with United States Environmental Protection Agency regulations regarding the disposal of coal combustion residuals (CCR) in landfills and surface impoundments (Code of Federal Regulations [CFR] Title 40, Section 257, Subpart D), groundwater monitoring has been conducted at the East and West Bottom Ash Ponds (BAP), an existing CCR unit at the Rockport Power Plant in Rockport, Indiana. Recent groundwater monitoring results were used to identify concentrations of Appendix IV constituents that are above the groundwater protection standards (GWPSs).

Based on detection monitoring conducted in 2017 and 2018, statistically significant increases (SSIs) over background were concluded for boron, chloride, fluoride, sulfate, and total dissolved solids (TDS) at the BAP. An alternative source was not identified at the time; thus, the BAP has been in assessment monitoring since 2018. During the previous assessment monitoring event, conducted in February and May 2023, Appendix III detections of boron, calcium, chloride, fluoride, pH, sulfate, and TDS were observed above or, in the case of pH, below background levels and the unit remained in assessment monitoring (Geosyntec 2023).

A semiannual sampling event for Appendix III parameters and Appendix IV parameters, as required by 40 CFR 257.95(d)(1), was completed in October and November 2023. The results of the October/November 2023 assessment sampling event are documented in this report.

Before the statistical analyses were conducted, the groundwater data underwent several validation tests, including those for completeness, sample tracking accuracy, transcription errors, and consistent use of measurement units. No data quality issues that would impact data usability were identified.

The monitoring data were submitted to Groundwater Stats Consulting, LLC for statistical analysis. GWPSs were reestablished for the Appendix IV parameters following calculation of site-specific background values. Confidence intervals were calculated from the Appendix IV parameter data at the compliance wells to assess whether any were present at statistically significant levels (SSLs) above the corresponding GWPS. No SSLs were identified; however, concentrations of Appendix III parameters remained above background. Therefore, the unit will remain in assessment monitoring. Certification of the selected statistical methods by a qualified professional engineer is documented in Attachment A.

## 2. BOTTOM ASH POND EVALUATION

### 2.1 Data Validation and QA/QC

One set of samples was collected for analysis from each upgradient and downgradient well to meet the requirements of 40 CFR 257.95(d)(1) in October and November 2023 as part of the assessment monitoring program. Samples from the October/November 2023 sample event were analyzed for all Appendix III and Appendix IV parameters. Downgradient well MW-1605S was resampled in December 2023 for TDS due to sampling error during the October/November event. A summary of data collected during this assessment monitoring event is presented in Table 1.

Chemical analysis was completed by a National Environmental Laboratory Accreditation Program-certified analytical laboratory. The laboratory completed analysis of quality assurance and quality control (QA/QC) samples such as laboratory reagent blanks, continuing calibration verification samples, and laboratory fortified blanks.

The analytical data were imported into a Microsoft Access database, where checks were completed to assess the accuracy of sample location identification and analyte identification. Where necessary, unit conversions were applied to standardize reported units across all sampling events. Exported data files were created for use with the Sanitas™ v.10.0.15 statistics software. The export file was checked against the analytical data for transcription errors and completeness. No QA/QC issues that would impact data usability were noted.

### 2.2 Statistical Analysis

Statistical analyses for the BAP were conducted in accordance with the October 2020 *Statistical Analysis Plan* (Geosyntec 2020). Time series plots and results for all completed statistical tests are provided in Attachment B.

The data obtained in October/November 2023 were screened for potential outliers. Outliers were identified at the following background wells:

- MW-1600I, MW-1701I, MW-1702D, and MW-1702I for arsenic;
- MW-1600D and MW-1600I for barium;
- MW-1601S for boron;
- MW-1600I, MW-1701D, and MW-1702D for combined radium; and
- MW-1600S and MW-1702S for fluoride.

The identified values were with similar to upgradient concentrations or below their respective maximum contaminant level (MCL); therefore, no additional outliers were flagged for this event. Additional outliers for the October/November 2023 sampling event were identified for calcium at downgradient well MW-1601D and pH at downgradient wells MW-1601S, MW-1603I, and MW-1603S. However, pH and calcium are analyzed via introwell statistics and the dataset only included results through August 2023 (see Section 2.2.3). These values were not flagged as outliers and removed from the database at this time; they may be evaluated during future introwell prediction limit background updates.

### **2.2.1 Establishment of GWPSs**

A GWPS was established for each Appendix IV parameter in accordance with 40 CFR 257.95(h) and the Statistical Analysis Plan (Geosyntec 2020). The established GWPS was determined to be the greater value of the background concentration and either the MCL or risk-based level specified in 40 CFR 257.95(h)(2) for each Appendix IV parameter. To determine background concentrations, an upper tolerance limit was calculated using pooled data from the background wells collected during the background monitoring and assessment monitoring events.

Tolerance limits were calculated parametrically with 95% coverage and 95% confidence for combined radium. Nonparametric tolerance limits were calculated for antimony, arsenic, barium, cadmium, chromium, cobalt, fluoride, lithium, molybdenum, and selenium due to apparent non-normal distributions. Nonparametric tolerance limits were calculated for beryllium, mercury, and thallium because greater than 50% of the data was composed of nondetect results. Upper tolerance limits and the final GWPSs are summarized in Table 2.

### **2.2.2 Evaluation of Potential Appendix IV SSLs**

A confidence interval was constructed for each Appendix IV parameter at each compliance well. Confidence limits were generally calculated parametrically ( $\alpha = 0.01$ ); however, nonparametric confidence limits were calculated in some cases (e.g., when the data were not normally distributed or when the nondetect frequency was too high). An SSL was concluded if the lower confidence limit exceeded the GWPS (i.e., if the entire confidence interval exceeded the GWPS). The calculated confidence limits (Attachment B) were compared to the GWPSs provided in Table 2.

No SSLs were identified at the Rockport BAP.

### **2.2.3 Updating Appendix III Prediction Limits**

Upper prediction limits (UPLs) were originally established for all Appendix III parameters following the background monitoring period. Intrawell tests were used to evaluate potential SSIs for calcium and pH, whereas interwell tests were used to evaluate potential SSIs for boron, chloride, fluoride, sulfate, and TDS. Prediction limits have been updated periodically during the assessment monitoring period as sufficient data became available.

Mann-Whitney (Wilcoxon rank-sum) tests were performed to determine whether the newer data are affected by a release from the Landfill. Because the interwell Appendix III limits and the Appendix IV GWPSs are based on data from upgradient wells which we would not expect to have been impacted by a release, these tests were used for intrawell Appendix III tests only. Mann-Whitney tests were used to compare the medians of historical data (June 2016 – May 2021) to the new compliance samples (November 2021 – August 2023) for calcium and pH. Previously, the background dataset for calcium at downgradient well MW-1603S was truncated; however, recent calcium concentrations were more similar to historic concentrations. Therefore, all available calcium data at MW-1603S were used for this analysis. Results were evaluated to determine if the medians of the two groups were statistically different at the 99% confidence level. Where no statistically significant difference was found, the new compliance data were added to the background dataset. Where a statistically significant difference was found between the medians of the two groups, the data were reviewed to evaluate the cause of the difference and to determine if adding newer data to the background dataset, truncating historical data and using only the newer

data, or continuing to use the existing background dataset was most appropriate. If the differences appeared to have been caused by a release, then the previous background dataset would have continued to be used.

The complete Mann-Whitney test results and a summary of the significant findings can be found in Attachment B.

Prediction limits for the interwell tests were recalculated using data collected during the 2023 assessment monitoring events. New upgradient well data were tested for outliers prior to being added to the background dataset. Upgradient well data were also evaluated for statistically significant trends using the Sen's Slope/Mann-Kendall trend test, and the results are included in Attachment B. The revised interwell prediction limits were used to evaluate potential SSIs for boron, chloride, fluoride, sulfate, and TDS.

After the revised background set was established, a parametric or nonparametric analysis was selected based on the distribution of the data and the frequency of nondetect data. Estimated results less than the reporting limit (practical quantitation limit, [PQL]) but above the method detection limit – i.e., “J-flagged” data – were considered detections and the estimated results were used in the statistical analyses. Nonparametric analyses were selected for datasets with at least 50% nondetect data or datasets that could not be normalized by transformation. Parametric analyses were selected for datasets (either transformed or untransformed) that passed the Shapiro-Wilk / Shapiro-Francía test for normality. The Kaplan-Meier nondetect adjustment was applied to datasets with between 15% and 50% nondetect data. For datasets with fewer than 15% nondetect data, nondetect data were replaced with one half of the PQL. The selected analysis (i.e., parametric or nonparametric) and transformation (where applicable) for each background dataset are shown in Attachment B.

The updated interwell prediction limits for boron, chloride, fluoride, sulfate, and TDS and intrawell prediction limits for calcium and pH are summarized in Table 3. The UPLs were calculated for a one-of-two retesting procedure; i.e., if at least one sample in a series of two does not exceed the UPL, or in the case of pH, is neither less than the lower prediction limit (LPL) nor greater than the UPL, then it can be concluded that an SSI has not occurred. In practice, where the initial result does not exceed the UPL, or in the case of pH, is neither less than the LPL nor greater than the UPL, a second sample will not be collected. The retesting procedures allow achieving an acceptably high statistical power to detect changes at downgradient wells for constituents evaluated using intrawell prediction limits.

#### **2.2.4 Evaluation of Potential Appendix III SSIs**

The Appendix III results were analyzed to assess whether concentrations of Appendix III parameters at the compliance wells were above background concentrations. Data collected during the October/November 2023 assessment monitoring event from each compliance well were compared to updated prediction limits to assess whether the results were statistically above background values. The results from these events and the prediction limits are summarized in Table 3. The following exceedances of the UPLs were noted:

- Boron concentrations were above the interwell UPL of 0.208 milligrams per liter (mg/L) at MW-1002 (1.72 mg/L), MW-1603S (1.40 mg/L), MW-1604S (0.679 mg/L), and MW-1605S (0.633 mg/L).
- Calcium concentrations were above the intrawell UPL of 95.3 mg/L at MW-1603D (101 mg/L).
- Chloride concentrations were above the interwell UPL of 46.4 mg/L at MW-1602D (85.2 mg/L).
- Fluoride concentrations were above the interwell UPL of 0.700 mg/L at MW-1002 (1.38 mg/L), MW-1603S (1.42 mg/L), and MW-1604S (0.84 mg/L).
- pH values were below the intrawell LPL of 6.7 standard units (SU) at MW-1605D (6.6 SU).
- Sulfate concentrations were above the interwell UPL of 76.0 mg/L at MW-1002 (214 mg/L), MW-1603S (161 mg/L), MW-1604S (125 mg/L), MW-1605I (89.1 mg/L), and MW-1605S (152 mg/L).
- TDS concentrations were above the interwell UPL of 448 mg/L at MW-1002 (570 mg/L), MW-1602D (450 mg/L), MW-1603I (450 mg/L), MW-1604S (490 mg/L), and MW-1605S (550 mg/L).

While the prediction limits were calculated for a one-of-two retesting procedure, SSIs were conservatively assumed if the October/November 2023 sample was above the UPL or, in the case of pH, below the LPL. Based on this evaluation, concentrations of Appendix III constituents appear to be above background concentrations and the unit will remain in assessment monitoring.

## 2.3 Conclusions

A semiannual assessment monitoring event was conducted in accordance with the CCR Rule. The laboratory and field data were reviewed prior to statistical analysis, with no QA/QC issues identified that prevented data usage. A review of outliers identified potential outliers in the October 2023 data for arsenic, barium, boron, combined radium, and fluoride; however, the identified values were not removed from the dataset due to their similarity to other background locations or their relative concentration below their respective MCL. GWPSs were reestablished for the Appendix IV parameters. A confidence interval was constructed at each compliance well for each Appendix IV parameter; SSLs were concluded if the entire confidence interval was above the GWPSs. No SSLs were identified. Appendix III parameters were compared to updated prediction limits; concentrations of boron, calcium, chloride, fluoride, sulfate, and TDS were identified above the prediction limits and pH values were identified below the LPL.

Based on this evaluation, the Rockport BAP CCR unit will remain in assessment monitoring.

### **3. REFERENCES**

Geosyntec. 2020. Statistical Analysis Plan – Rockport Plant. Geosyntec Consultants, Inc. October.

Geosyntec. 2023. Statistical Analysis Summary – Bottom Ash Pond, Rockport Plant, Rockport, Indiana. Geosyntec Consultants, Inc. November.

## TABLES

**Table 1. Groundwater Data Summary**  
**Statistical Analysis Summary**  
**Rockport Plant – Bottom Ash Pond**

<b>Parameter</b>	<b>Unit</b>	<b>MW-1002</b>	<b>MW-1600D</b>	<b>MW-1600I</b>	<b>MW-1600S</b>	<b>MW-1601D</b>	<b>MW-1601I</b>	<b>MW-1601S</b>	<b>MW-1602D</b>	<b>MW-1602I</b>	<b>MW-1603D</b>
		<b>11/1/2023</b>	<b>10/31/2023</b>	<b>10/31/2023</b>	<b>10/31/2023</b>	<b>11/1/2023</b>	<b>11/1/2023</b>	<b>10/31/2023</b>	<b>11/1/2023</b>	<b>11/1/2023</b>	<b>11/1/2023</b>
Antimony	µg/L	0.053 J1	0.009 J1	0.155	0.025 J1	0.01 J1	0.012 J1	0.019 J1	0.012 J1	0.033 J1	0.012 J1
Arsenic	µg/L	0.27	16.7	57.4	0.41	10.6	17.7	2.12	9.47	20.1	14.4
Barium	µg/L	13.6	1,200	1,010 M1	20.6	443	562	29.9	455	85.6	137
Beryllium	µg/L	0.05 U1	0.05 U1	0.011 J1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1
Boron	mg/L	1.72	0.019 J1	0.022 J1	0.040 J1	0.027 J1	0.023 J1	0.142	0.053	0.050	0.034 J1
Cadmium	µg/L	0.022	0.02 U1	0.026	0.012 J1	0.02 U1	0.02 U1	0.02 U1	0.02 U1	0.02 U1	0.02 U1
Calcium	mg/L	51.5	86.0	71.5	56.2	75.6	72.4	60.1	63.2	58.9	101
Chloride	mg/L	31.6	28.5	24.9	27.7	19.0	28.5	36.2	85.2	22.2	29.6
Chromium	µg/L	0.33	0.35	0.38	0.43	0.25 J1	0.20 J1	0.44	0.26 J1	0.21 J1	0.28 J1
Cobalt	µg/L	0.686	0.066	1.50	0.106	0.045	1.16	0.119	0.059	1.02	0.279
Combined Radium	pCi/L	0.49	2.06	2.65	0.89	1.88	0.95	0.96	5.66	1.28	0.51
Fluoride	mg/L	1.38	0.23	0.24	0.53	0.18	0.25	0.39	0.33	0.31	0.28
Lead	µg/L	0.06 J1	0.2 U1	0.70	0.05 J1	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1
Lithium	mg/L	0.00521	0.00529	0.00636	0.0101	0.00106	0.00648	0.00547	0.00250	0.00521	0.00323
Mercury	µg/L	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1
Molybdenum	µg/L	17.1	1.9	1.7	0.7	3.2	2.2	2.0	3.2	2.7	3.7
Selenium	µg/L	0.06 J1	0.5 U1	0.12 J1	0.74	0.5 U1	0.5 U1	0.87	0.5 U1	0.5 U1	0.5 U1
Sulfate	mg/L	214	43.1	50.9	34.4	18.3	48.5	50.0	20.7	62.2	39.5
Thallium	µg/L	0.2 U1	0.2 U1	0.03 J1	0.04 J1	0.2 U1	0.02 J1	0.03 J1	0.2 U1	0.03 J1	0.2 U1
Total Dissolved Solids	mg/L	570	390	420	380	410	410	370	450	380	390
pH	SU	6.8	6.6	6.6	6.3	6.6	6.5	6.8	6.7	6.8	6.6

Notes:

--: not measured

\*: MW-1605S was resampled for total dissolved solids due to Q5 qualifier on the initial result.

J1: Estimated value. Parameter was detected in concentrations below the reporting limit.

M1: The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.

mg/L: milligrams per liter

pCi/L: picocuries per liter

Q5: Sample was received with improper chemical preservation.

SU: standard unit

U1: Non-detect value. For statistical analysis, parameters which were not detected were replaced with the reporting limit.

µg/L: micrograms per liter

**Table 1. Groundwater Data Summary**  
**Statistical Analysis Summary**  
**Rockport Plant – Bottom Ash Pond**

Parameter	Unit	MW-1603I	MW-1603S	MW-1604D	MW-1604I	MW-1604S	MW-1605D	MW-1605I	MW-1605S		MW-1606D
		11/1/2023	11/1/2023	11/1/2023	10/31/2023	10/31/2023	10/31/2023	10/31/2023	12/20/2023	10/31/2023	10/31/2023
Antimony	µg/L	0.070 J1	0.048 J1	0.018 J1	0.043 J1	0.051 J1	0.016 J1	0.157	0.046 J1	--	0.013 J1
Arsenic	µg/L	16.5	0.15	17.8	19.3	0.15	19.3	28.4	0.69	--	17.2
Barium	µg/L	87.0	4.48	285 M1	83.1	14.7	431	131	6.04	--	480
Beryllium	µg/L	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.010 J1	0.05 U1	--	0.05 U1
Boron	mg/L	0.060	1.40	0.022 J1	0.065	0.679	0.016 J1	0.063	0.633	--	0.016 J1
Cadmium	µg/L	0.0006 J1	0.014 J1	0.013 J1	0.013 J1	0.026	0.02 U1	0.012 J1	0.039	--	0.02 U1
Calcium	mg/L	77.4	24.7	68.6 M1	55.1	72.6	70.2	69.2	64.0	--	76.8
Chloride	mg/L	31.7	34.6	15.1	33.0	41.5	24.5	30.4	43.1	--	25.6
Chromium	µg/L	0.49	0.31	0.25 J1	0.43	0.25 J1	0.29 J1	0.42	0.71	--	0.48
Cobalt	µg/L	1.42	0.384	0.064	0.522	0.222	0.056	1.21	0.643	--	0.056
Combined Radium	pCi/L	0.64	0.12	0.57	1.47	1.44	1.94	1.97	1.34	--	0.94
Fluoride	mg/L	0.42	1.42	0.28	0.36	0.84	0.20	0.21	0.60	--	0.18
Lead	µg/L	0.15 J1	0.2 U1	0.05 J1	0.06 J1	0.2 U1	0.05 J1	1.24	0.17 J1	--	0.07 J1
Lithium	mg/L	0.00702	0.00201	0.00144	0.00506	0.0112	0.00141	0.00459	0.00944	--	0.00048
Mercury	µg/L	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	--	0.005 U1
Molybdenum	µg/L	7.7	0.5	2.7	2.0	3.5	1.8	1.4	1.9	--	1.8
Selenium	µg/L	0.05 J1	0.13 J1	0.5 U1	0.5 U1	0.06 J1	0.5 U1	0.07 J1	0.15 J1	--	0.5 U1
Sulfate	mg/L	73.8	161	18.2	66.2	125	39.7	89.1	152	--	39.1
Thallium	µg/L	0.03 J1	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.03 J1	0.07 J1	--	0.2 U1
Total Dissolved Solids	mg/L	450	370	310	380	490	360	430	*	550	390
pH	SU	6.8	6.5	7.1	7.2	7.3	6.6	7.2	7.0	--	6.7

Notes:

--: not measured

\*: MW-1605S was resampled for total dissolved solids due to Q5 qualifier on the initial result.

J1: Estimated value. Parameter was detected in concentrations below the reporting limit.

M1: The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.

mg/L: milligrams per liter

pCi/L: picocuries per liter

Q5: Sample was received with improper chemical preservation.

SU: standard unit

U1: Non-detect value. For statistical analysis, parameters which were not detected were replaced with the reporting limit.

µg/L: micrograms per liter

**Table 1. Groundwater Data Summary**  
**Statistical Analysis Summary**  
**Rockport Plant – Bottom Ash Pond**

<b>Parameter</b>	<b>Unit</b>	<b>MW-1606I</b>	<b>MW-1606S</b>	<b>MW-1701D</b>	<b>MW-1701I</b>	<b>MW-1701S</b>	<b>MW-1702D</b>	<b>MW-1702I</b>	<b>MW-1702S</b>
		<b>10/31/2023</b>	<b>11/1/2023</b>	<b>10/31/2023</b>	<b>10/31/2023</b>	<b>10/31/2023</b>	<b>10/31/2023</b>	<b>10/31/2023</b>	<b>10/31/2023</b>
Antimony	µg/L	0.015 J1	0.030 J1	0.009 J1	0.095 J1	0.034 J1	0.090 J1	0.075 J1	0.026 J1
Arsenic	µg/L	11.1	0.14	8.96	29.3	0.35	43.1	66.0	0.24
Barium	µg/L	54.2	8.66	62.6	44.5	10.5	206	110	3.93
Beryllium	µg/L	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.014 J1	0.05 U1	0.05 U1
Boron	mg/L	0.012 J1	0.017 J1	0.027 J1	0.030 J1	0.014 J1	0.022 J1	0.019 J1	0.035 J1
Cadmium	µg/L	0.005 J1	0.029	0.02 U1	0.022	0.025	0.019 J1	0.015 J1	0.021
Calcium	mg/L	56.9	37.0	66.1	62.2	53.2	74.5	68.2	36.5
Chloride	mg/L	16.4	21.9	15.2	14.6	21.4	30.8	29.5	15.1
Chromium	µg/L	1.30	0.38	0.25 J1	0.27 J1	0.29 J1	0.33	0.25 J1	0.38
Cobalt	µg/L	1.09	0.077	1.45	2.00	0.130	0.832	1.95	0.022
Combined Radium	pCi/L	1.61	1.1	4.28	0.94	0.63	2.12	1.72	1.62
Fluoride	mg/L	0.22	0.50	0.35	0.45	0.39	0.20	0.24	0.58
Lead	µg/L	0.2 U1	0.2 U1	0.2 U1	0.35	0.2 U1	0.50	0.07 J1	0.2 U1
Lithium	mg/L	0.00313	0.00675	0.00646	0.00533	0.00489	0.00423	0.00424	0.00174
Mercury	µg/L	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1
Molybdenum	µg/L	1.3	1.3	1.3	1.1	0.7	1.8	1.9	1.4
Selenium	µg/L	0.5 U1	3.55	0.5 U1	0.09 J1	0.41 J1	0.16 J1	0.06 J1	3.00
Sulfate	mg/L	42.4	28.5	38.9	33.3	15.4	40.9	41.6	18.4
Thallium	µg/L	0.02 J1	0.2 U1	0.02 J1	0.2 U1	0.2 U1	0.02 J1	0.04 J1	0.2 U1
Total Dissolved Solids	mg/L	310	340	380	340	320	390	400	290
pH	SU	6.8	6.5	6.7	6.7	6.7	6.6	6.6	6.7

Notes:

--: not measured

\*: MW-1605S was resampled for total dissolved solids due to Q5 qualifier on the initial result.

J1: Estimated value. Parameter was detected in concentrations below the reporting limit.

M1: The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.

mg/L: milligrams per liter

pCi/L: picocuries per liter

Q5: Sample was received with improper chemical preservation.

SU: standard unit

U1: Non-detect value. For statistical analysis, parameters which were not detected were replaced with the reporting limit.

µg/L: micrograms per liter

**Table 2. Appendix IV Groundwater Protection Standards**  
**Statistical Analysis Summary**  
**Rockport Plant - East and West Bottom Ash Ponds**

*Geosyntec Consultants, Inc.*

Constituent Name	MCL	CCR Rule-Specified	Calculated UTL	GWPS
Antimony, Total (mg/L)	0.00600		0.000440	0.00600
Arsenic, Total (mg/L)	0.0100		0.0791	0.0791
Barium, Total (mg/L)	2.00		1.20	2.00
Beryllium, Total (mg/L)	0.00400		0.000106	0.00400
Cadmium, Total (mg/L)	0.00500		0.000280	0.00500
Chromium, Total (mg/L)	0.100		0.00205	0.100
Cobalt, Total (mg/L)	n/a	0.00600	0.00334	0.00600
Combined Radium, Total (pCi/L)	5.00		2.50	5.00
Fluoride, Total (mg/L)	4.00		0.700	4.00
Lead, Total (mg/L)	n/a	0.0150	0.00497	0.0150
Lithium, Total (mg/L)	n/a	0.0400	0.0380	0.0400
Mercury, Total (mg/L)	0.00200		0.00000500	0.00200
Molybdenum, Total (mg/L)	n/a	0.100	0.00867	0.100
Selenium, Total (mg/L)	0.0500		0.00437	0.0500
Thallium, Total (mg/L)	0.00200		0.000200	0.00200

Notes:

1. Calculated UTL (upper tolerance limit) represents site-specific background values.
2. Grey cells indicate the GWPS is based on the calculated UTL, which is higher than the MCL or CCR Rule-specified value.

CCR: coal combustion residuals

GWPS: groundwater protection standard

MCL: maximum contaminant level

mg/L: milligrams per liter

**Table 3. Appendix III Data Summary**  
**Statistical Analysis Summary**  
**Rockport – Bottom Ash Pond**

Analyte	Unit	Description	MW-1002	MW-1602D	MW-1602I	MW-1603D	MW-1603I	MW-1603S	MW-1604D	MW-1604I	MW-1604S
			11/1/2023	11/1/2023	11/1/2023	11/1/2023	11/1/2023	11/1/2023	11/1/2023	10/31/2023	10/31/2023
Boron	mg/L	Interwell Background Value (UPL)					0.208				
		Analytical Result	<b>1.72</b>	0.053	0.050	0.034	0.060	<b>1.40</b>	0.022	0.065	<b>0.679</b>
Calcium	mg/L	Intrawell Background Value (UPL)	80.7	81.2	96.1	95.3	104.1	89.5	77.9	87.6	111
		Analytical Result	51.5	63.2	58.9	<b>101</b>	77.4	24.7	68.6	55.1	72.6
Chloride	mg/L	Interwell Background Value (UPL)					46.4				
		Analytical Result	31.6	<b>85.2</b>	22.2	29.6	31.7	34.6	15.1	33.0	41.5
Fluoride	mg/L	Interwell Background Value (UPL)					0.700				
		Analytical Result	<b>1.38</b>	0.33	0.31	0.28	0.42	<b>1.42</b>	0.28	0.36	<b>0.84</b>
pH	SU	Intrawell Background Value (UPL)	8.2	8.1	7.9	8.1	8.1	7.8	7.7	7.9	8.0
		Intrawell Background Value (LPL)	5.5	6.5	6.5	6.0	5.8	5.8	6.5	6.7	6.7
		Analytical Result	6.8	6.7	6.8	6.6	6.8	6.5	7.1	7.2	7.3
		Interwell Background Value (UPL)					76.0				
Sulfate	mg/L	Analytical Result	<b>214</b>	20.7	62.2	39.5	73.8	<b>161</b>	18.2	66.2	<b>125</b>
		Interwell Background Value (UPL)					448				
Total Dissolved Solids	mg/L	Analytical Result	<b>570</b>	<b>450</b>	380	390	<b>450</b>	370	310	380	<b>490</b>

Analyte	Unit	Description	MW-1605D	MW-1605I	MW-1605S		MW-1606D	MW-1606I	MW-1606S
			10/31/2023	10/31/2023	10/31/2023	12/20/2023	10/31/2023	10/31/2023	11/1/2023
Boron	mg/L	Interwell Background Value (UPL)			0.208				
		Analytical Result	0.016	0.063	<b>0.633</b>	--	0.016	0.012	0.017
Calcium	mg/L	Intrawell Background Value (UPL)	96.3	105	91.3		91.6	87.9	68.3
		Analytical Result	70.2	69.2	64.0	--	76.8	56.9	37.0
Chloride	mg/L	Interwell Background Value (UPL)			46.4				
		Analytical Result	24.5	30.4	43.1	--	25.6	16.4	21.9
Fluoride	mg/L	Interwell Background Value (UPL)			0.700				
		Analytical Result	0.20	0.21	0.60	--	0.18	0.22	0.50
pH	SU	Intrawell Background Value (UPL)	7.5	7.7	7.6		8.4	8.3	7.9
		Intrawell Background Value (LPL)	6.7	6.7	6.6		6.4	6.5	6.1
		Analytical Result	<b>6.6</b>	7.2	7.0	--	6.7	6.8	6.5
		Interwell Background Value (UPL)			76.0				
Sulfate	mg/L	Analytical Result	39.7	<b>89.1</b>	<b>152</b>	--	39.1	42.4	28.5
		Interwell Background Value (UPL)			448				
Total Dissolved Solids	mg/L	Analytical Result	360	430	*	<b>550</b>	390	310	340

Notes:

1. Bold values exceed the background value.

2. Background values are shaded gray.

\*: MW-1605S was resampled for total dissolved solids due to Q5 qualifier on the initial result.

LPL: lower prediction limit

mg/L: milligrams per liter

Q5: Sample was received with improper chemical preservation.

SU: standard units

UPL: upper prediction limit

## **ATTACHMENT A**

### Certification by Qualified Professional Engineer

## Certification by Qualified Professional Engineer

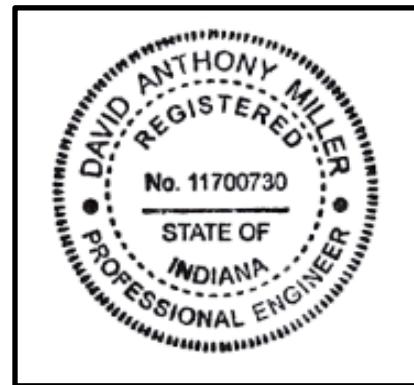
I certify that selected and above described statistical method is appropriate for evaluating the groundwater monitoring data for the Rockport Bottom Ash Pond CCR management area and that the requirements of 40 CFR 257.93(f) have been met.

David Anthony Miller

Printed Name of Licensed Professional Engineer

*David Anthony Miller*

Signature



11700730

License Number

Indiana

Licensing State

03.14.2024

Date

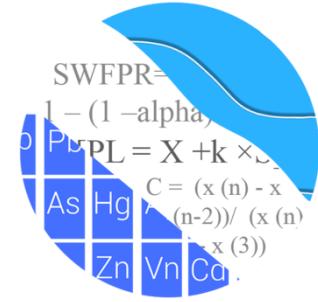
## **ATTACHMENT B**

### Statistical Analysis Output

GROUNDWATER STATS  
CONSULTING

January 24, 2023

Geosyntec Consultants  
Attn: Ms. Allison Kreinberg  
500 W. Wilson Bridge Road, Suite 250  
Worthington, OH 43085



Re: Rockport Bottom Ash Pond  
Background Update & November 2023 Assessment Monitoring Analysis

Dear Ms. Kreinberg,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide statistical analysis and background update of interwell statistical limits through 2023 for American Electric Power Inc.'s Rockport Bottom Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at the site for the CCR program in 2016. The monitoring well network, as provided by Geosyntec Consultants, consists of the following:

- **Upgradient wells:** MW-1600D, MW-1600I, MW-1600S, MW-1601D, MW-1601I, MW-1601S; MW-1701S, MW-1702D, MW-1702I, MW-1702S, MW-1701D, and MW-1701I
- **Downgradient wells:** MW-1002, MW-1602D, MW-1602I, MW-1603D, MW-1603I, MW-1603S, MW-1604D, MW-1604I, MW-1604S, MW-1605D, MW-1605I, MW-1605S, MW-1606D, MW-1606I, and MW-1606S

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting. The statistical analysis was conducted according to the January 2018 screening evaluation prepared by GSC and approved by Dr. Kirk Cameron.

The CCR program consists of the following constituents listed below. The terms "constituent" and "parameter" are interchangeable.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Time series plots and box plots for Appendix III and IV parameters are provided for all wells (Figures A and B, respectively). Values which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the time series plots. A summary of flagged values follows this letter (Figure C). The time series plots are used to evaluate concentrations over time and between wells, to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between wells.

Due to varying detection limits in background data sets due to improved laboratory practices, a substitution of the most recent reporting limit is used for all non-detects. In some cases, the reporting limit provided by the laboratory contains varying limits for a given parameter; therefore, the substitution may differ from well to well. This generally gives the most conservative limit in each case.

For regulatory comparison of current observations against statistical limits for Appendix III constituents, the annual site-wide false positive rate is based on the USEPA Unified Guidance (2009) recommendation of 10% (5% for each semi-annual sample event). Power curves were included with previous reports and demonstrated that the selected statistical methods provide sufficient power to detect a change at any of the downgradient wells which complies with the USEPA Unified Guidance recommendation. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves were based on the following:

#### Semi-Annual Sampling

Intrawell Prediction Limits = 1-of-2 resample plan

Interwell Prediction Limits = 1-of-2 resample plan

# Constituents, c=7

# Downgradient wells, w=15

## **Summary of Statistical Methods:**

- 1) Intrawell prediction limits, combined with a 1-of-2 resample plan for calcium and pH
- 2) Interwell prediction limits combined with a 1-of-2 resample plan for boron, chloride, fluoride, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits. Non-detects are handled as follows.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the background statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Note that values shown on data pages reflect raw data as reported by the laboratory. When non-detects have been substituted in the statistical analysis with one-half of the most reporting limit due to data sets containing <15% non-detects as described above, values are displayed as the original reporting limit.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. In some cases,

deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

### **January 2018 – Initial Background Screening**

All proposed background data were screened for outliers and trends during the background screening and the findings of those reports were submitted with that analysis. At the time of the screening, a 1-of-3 verification strategy was recommended, but power curves have since demonstrated that the increased number of samples in background provides sufficient power using the 1-of-2 resample plan. Interwell prediction limits combined with a 1-of-2 verification strategy are used for boron, chloride, fluoride, sulfate and TDS; and intrawell prediction limits combined with a 1-of-2 verification strategy are used for calcium and pH. As recommended in the EPA Unified Guidance (2009), the background data sets are evaluated for the purpose of updating statistical limits, as described below, using the Mann-Whitney test when at least four additional measurements are available.

### **January 2024 – Background Update Summary**

#### Outlier Analysis

Prior to updating background data, Tukey's outlier test and visual screening were used to re-evaluate data through August 2023 at all wells for parameters using intrawell prediction limits (calcium and pH) and through November 2023 at all upgradient wells for parameters utilizing interwell prediction limits (boron, chloride, fluoride, sulfate, and TDS).

For calcium and pH, Tukey's outlier test on all wells identified one value for calcium at upgradient well MW-1601D and several values for pH. The highest value for pH at MW-1603D was flagged during this event and all values that were previously flagged remain flagged as outliers in order to maintain statistical limits that are conservative from a regulatory perspective. Any values identified by Tukey's test but not flagged appeared to be similar to and not drastically different than concentrations within their respective wells. Although not identified by Tukey's test, a high value for calcium at MW-1603S was also flagged in order to maintain statistical limits that are conservative. No changes to previously flagged outliers were made.

For parameters which use interwell prediction limits, Tukey's outlier test identified values for boron, chloride, fluoride, sulfate, and TDS. Since the majority of these values were similar to remaining observations within each respective record, they were not flagged in the database. No new values were flagged as outliers and no changes were made to previously flagged outliers for Appendix III parameters using interwell statistical methods as previously flagged values were confirmed by Tukey's outlier test and visual screening. A list of flagged values follows this report along with the results of Tukey's outlier tests (Figure C).

#### Intrawell - Mann-Whitney Evaluation

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through May 2021 to the new compliance samples through May/June 2023 at each well to evaluate whether the groups are statistically different at the 99% confidence level (Figure D). The record for pH at upgradient well MW-1701S contained data through August 2023 and, therefore, was evaluated through that period of time. During the previous update, the record for calcium at MW-1603S was truncated to use concentrations that were representative of groundwater quality conditions at that time; however, more recent concentrations resemble those earlier in the record. Therefore, during this analysis, the record for calcium MW-1603S uses all available data for the Mann-Whitney test.

When no statistically significant difference is found, background data may be updated with compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

Increase:

- None

Decrease:

- Calcium: MW-1600S (upgradient), MW-1601S (upgradient), MW-1604I, and MW-1605D

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data, unless it can be reasonably justified that the change in concentrations reflects a shift unrelated to practices at the site. In studies, which at least one of the segments being compared is of short duration, the comparison is complicated

by the fact that normal short-term variation may be mistaken for long-term change in medians.

Regarding well/constituent pairs with statistically significant decreases in medians, the background datasets were updated through August 2023 in order to construct statistical limits that are conservative from a regulatory perspective.

All records for calcium and pH will be re-evaluated during the next background update. A list of well/constituent pairs using a truncated portion of their data follows this letter.

#### Interwell – Trend Test Evaluation

For parameters which are tested using interwell prediction limits, the Sen's Slope/Mann-Kendall trend test was used to test data in upgradient wells to determine whether concentrations are statistically increasing, decreasing or stable at the 99% confidence level (Figure E). Statistically significant trends were identified for the following well/constituent pairs:

##### Increasing

- Chloride: MW-1701S
- Fluoride: MW-1600S, MW-1601S, and MW-1701I
- Sulfate: MW-1601S

##### Decreasing

- Boron: MW-1701I, MW-1701S, MW-1702D, and MW-1702S
- Chloride: MW-1600D, MW-1601I, and MW-1601S
- Sulfate: MW-1600S, MW-1701I, and MW-1701S
- TDS: MW-1600S

Since the magnitudes of the trends identified for above mentioned well/constituent were marginal relative to the concentrations and resulting statistical limits are representative of present-day groundwater quality conditions, no adjustments were required for these well/constituent pairs at this time. As more data are collected, all upgradient well data will be re-evaluated for possible deselection of earlier portion of the record if the measurements no longer represent present-day groundwater quality conditions.

#### Prediction Limits

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data

population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking spatial variation for a release from the facility. Intrawell prediction limits are updated when a minimum of 4 compliance samples are available. Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for calcium and pH using screened background data through May/June 2023 at each well (and through August 2023 for pH at upgradient well MW-1701S) (Figure F). No comparison of the November 2023 compliance data was compared to statistical limits in this analysis.

Interwell prediction limits, which pool upgradient well data to establish a background limit for an individual constituent, were updated during this analysis after visual screening for new outliers. Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all pooled upgradient well data through November 2023 for boron, chloride, fluoride, sulfate, and TDS (Figure G). Time series plots were included with the interwell prediction limit graphs to display concentrations at upgradient wells that were used to construct the statistical limits. No comparison of the November 2023 data was made in this analysis.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary.

#### **Evaluation of Appendix IV Parameters – November 2023 Sample Event**

Prior to evaluating Appendix IV parameters, upgradient well data are screened through both visual screening and Tukey's outlier test for potential outliers and extreme trending patterns that would lead to artificially elevated statistical limits. Tukey's test and visual screening with time series graphs confirmed previously flagged outliers. All flagged values may be seen on the Outlier Summary following this letter (Figure C).

For the current analysis, Tukey's outlier test on pooled upgradient well data through November 2023 identified outliers for arsenic, barium, combined radium 226 + 228, fluoride, and lithium. The values identified by Tukey's test, with the exception of one high combined radium 226 + 228 value of 7.25 pCi/L which was previously flagged, were either

similar to concentrations upgradient of the facility or were lower than the respective Maximum Contaminant Level (MCL); therefore, none of these values were flagged as outliers. No additional outliers for Appendix IV parameters among upgradient wells were flagged during this analysis. Previously flagged values were confirmed by Tukey's outlier test or visual screening.

Additionally, downgradient well data through November 2023 were screened through visual screening using time series graphs. Since the downgradient well data are used to construct confidence intervals, a regulatory conservative approach is taken in that values that are marginally high relative to the rest of the data are retained unless there is particular justification for excluding them. No new outliers for Appendix IV parameters among downgradient wells were flagged during this analysis.

#### Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data through November 2023 for Appendix IV parameters (Figure H). These limits are updated on an annual basis and will be updated again during the Fall 2024 sample event. Parametric tolerance limits are used when data follow a normal or transformed-normal distribution and use a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

#### Groundwater Protection Standards

These background limits were compared to the Maximum Contaminant Levels (MCLs) as shown in the Groundwater Protection Standard (GWPS) table following this letter to determine the highest limit for use as the GWPS in the confidence interval comparisons (Figure I).

#### Confidence Intervals

Confidence intervals were then constructed using all available data through November 2023 on downgradient wells for each of the Appendix IV parameters using the highest limit of the MCL, CCR-Rule specified, or background limit as the GWPS, as discussed above (Figure J). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence

intervals were used for Appendix IV parameters. Nonparametric confidence intervals were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. No confidence interval exceedances were found for any of the downgradient wells. A summary of the confidence interval results follows this letter.

### Trend Test Evaluation

When confidence interval exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 95% confidence level. Utilizing the 95% confidence level for trend tests readily identifies significant trends and is more sensitive than the 99% confidence level without drastically increasing the false negative rate. Upgradient wells are included in the trend analyses for all parameters found to exceed their confidence interval in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of variability in groundwater which may be unrelated to practices at the site. Since no exceedances were identified, no trend tests were required.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for the Rockport Bottom Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Abdul Diane  
Groundwater Analyst

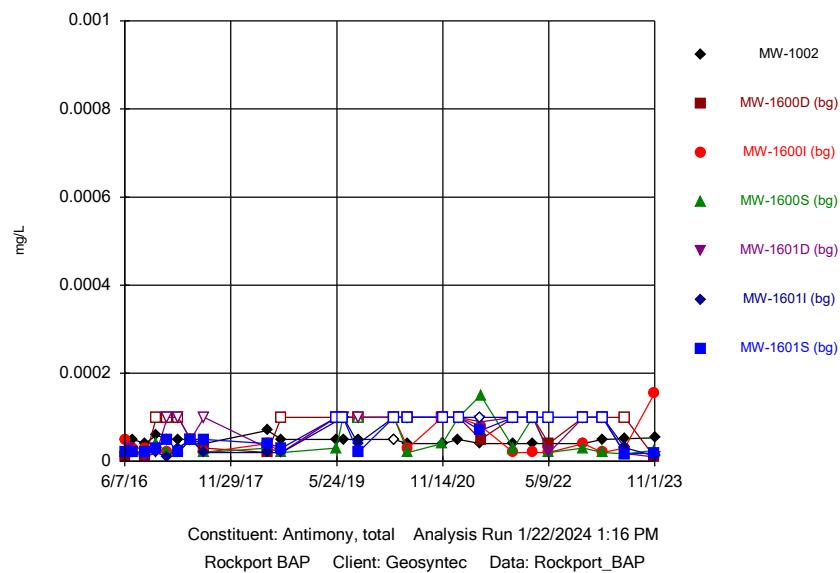


Andrew T. Collins  
Project Manager

**FIGURE A**  
**Time Series**

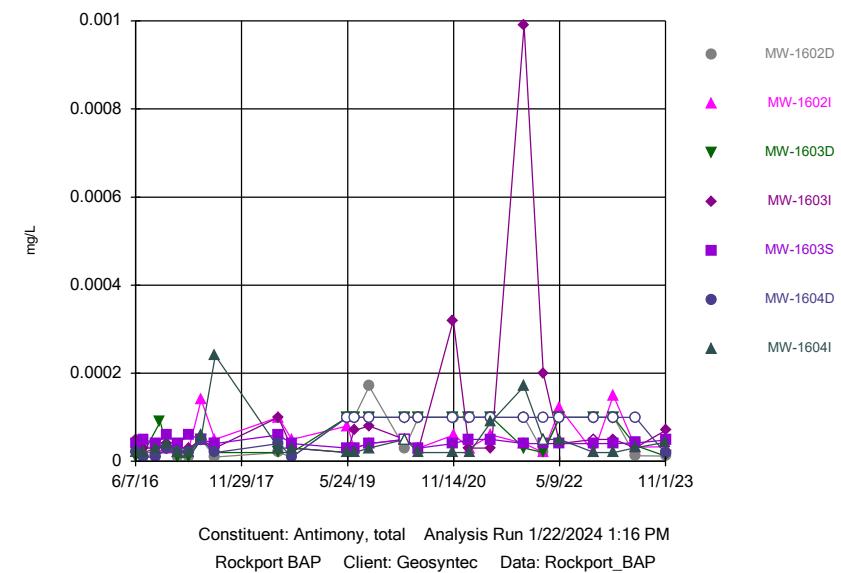
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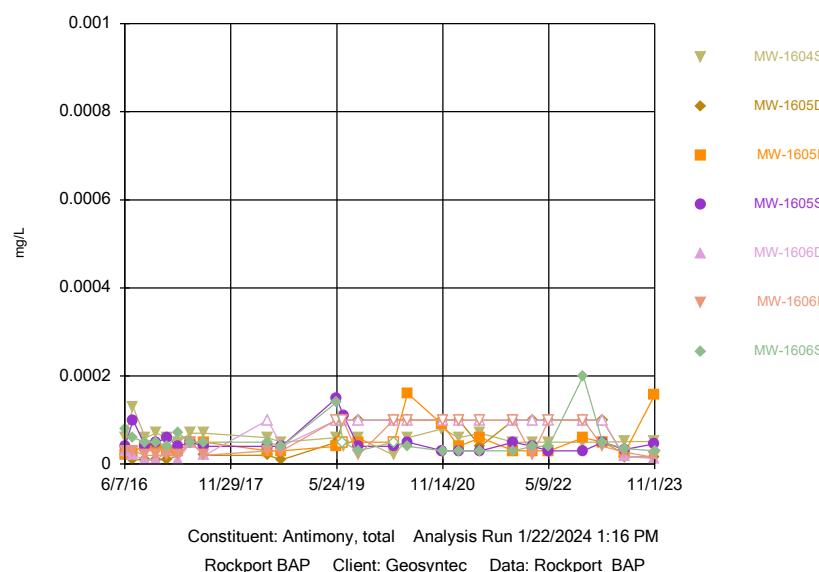
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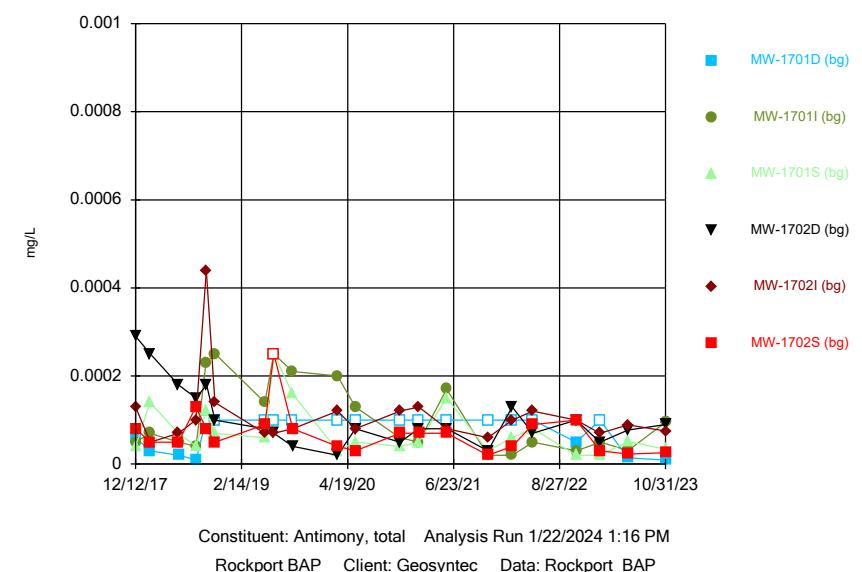
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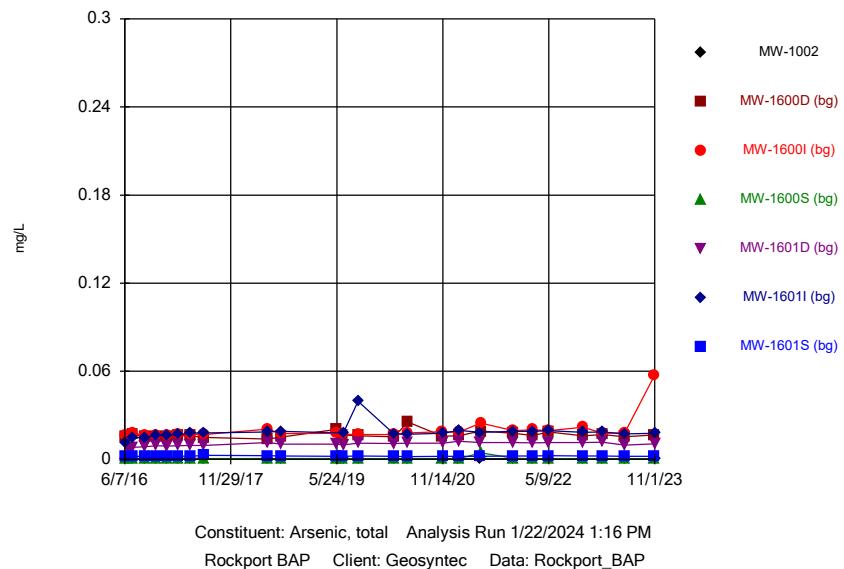


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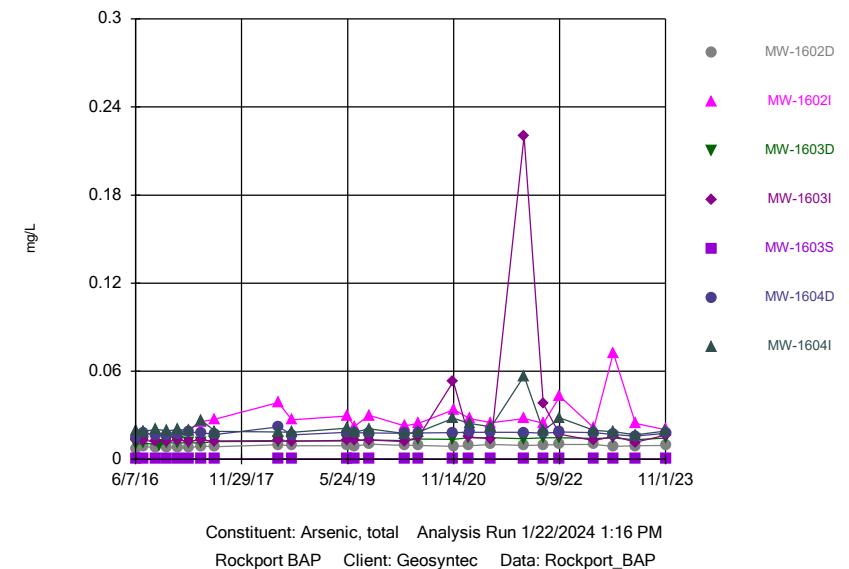
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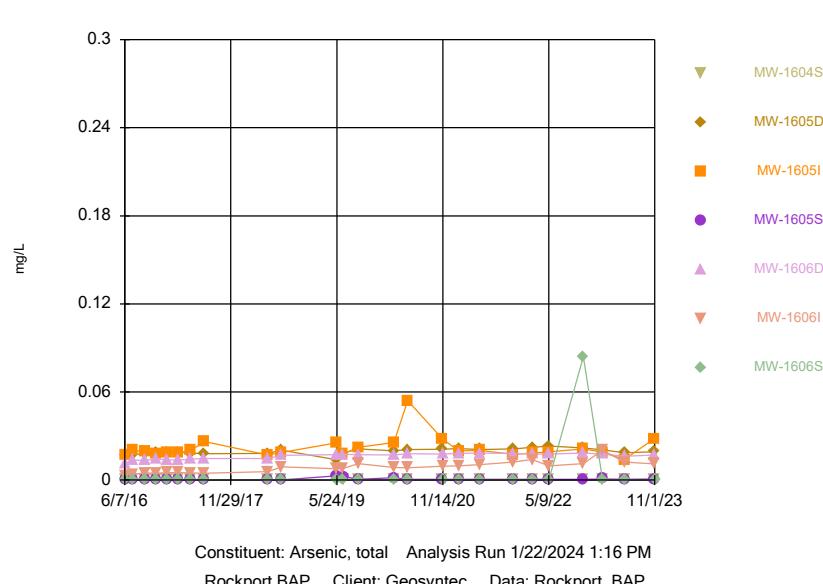
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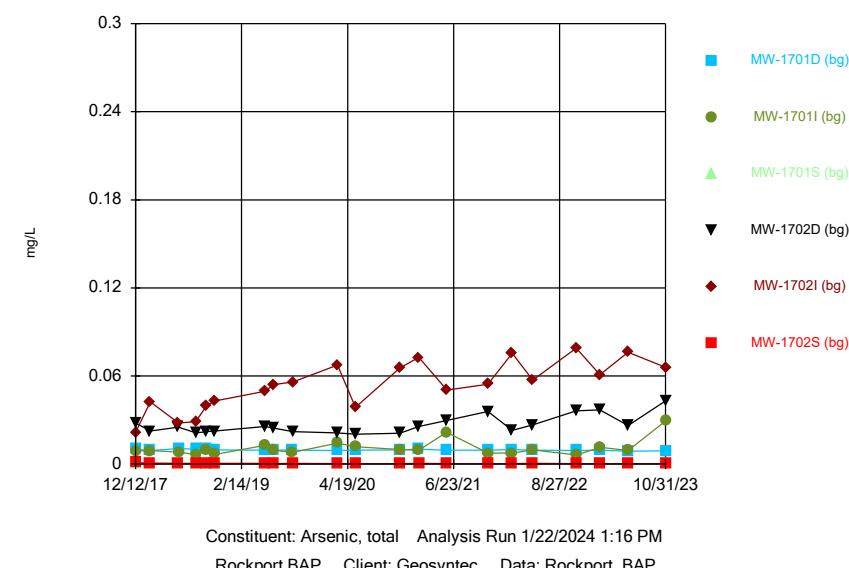
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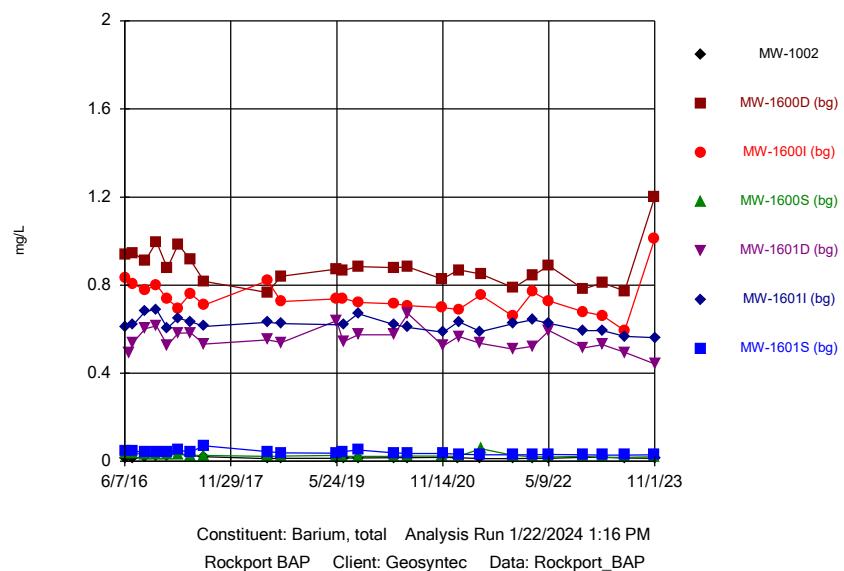
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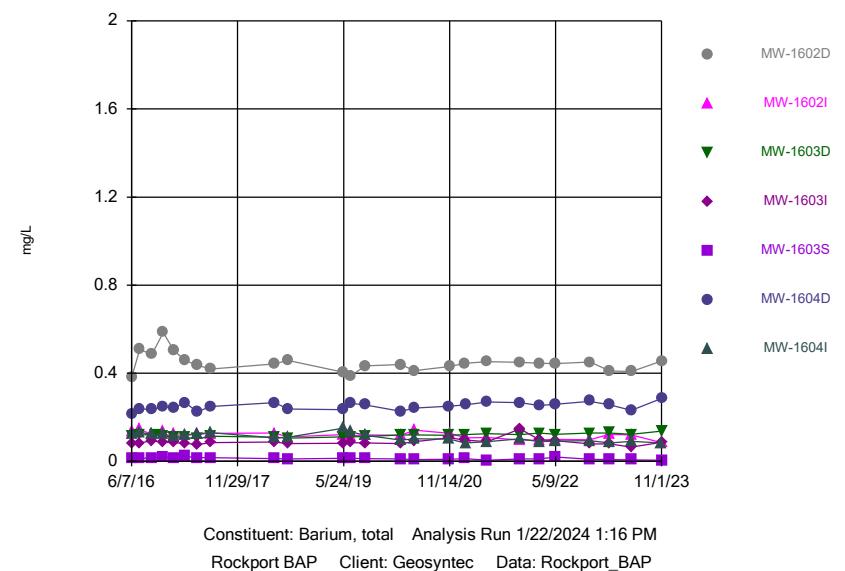
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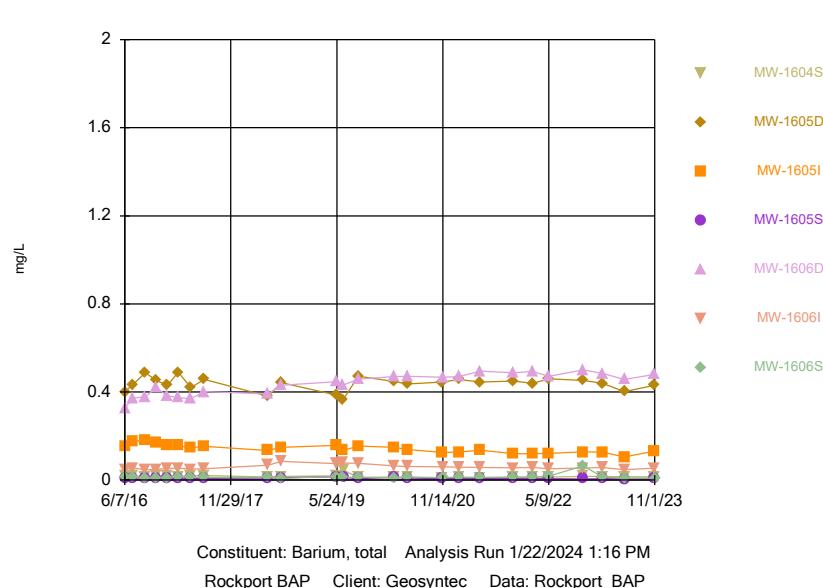
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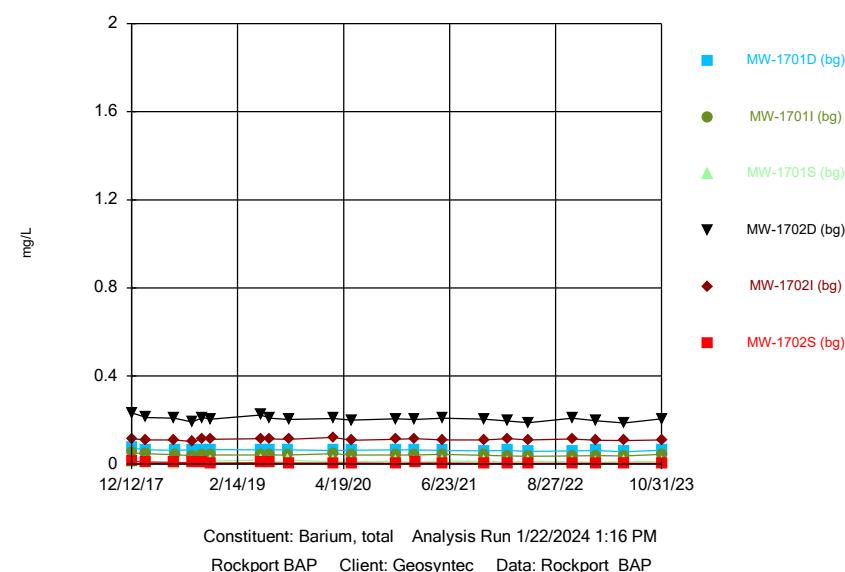
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## Time Series

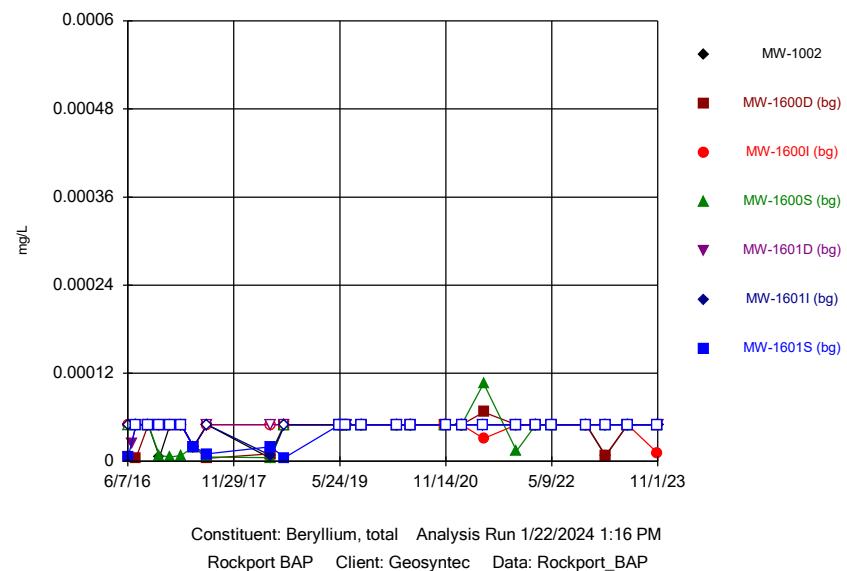


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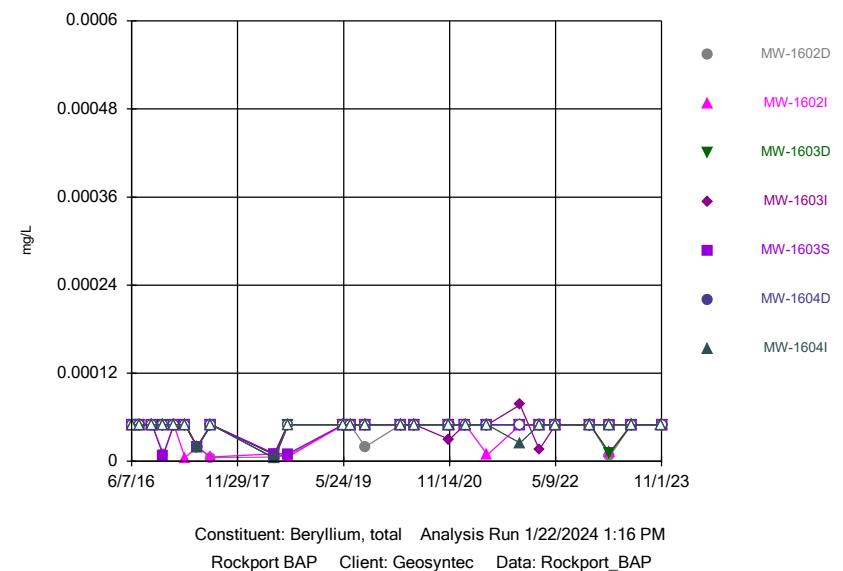
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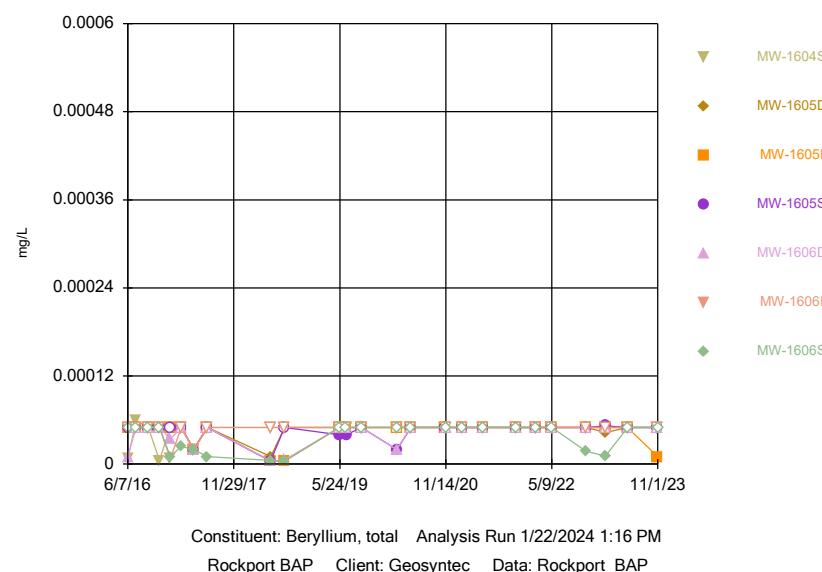
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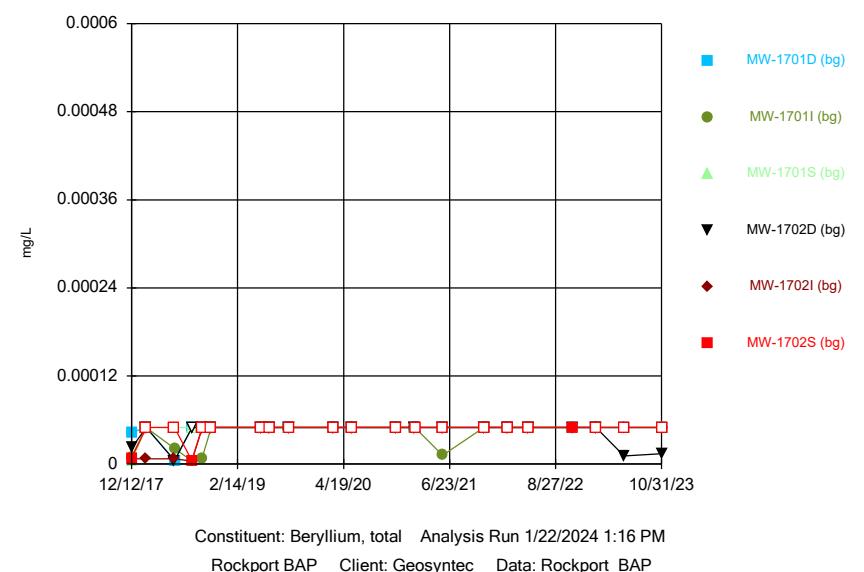
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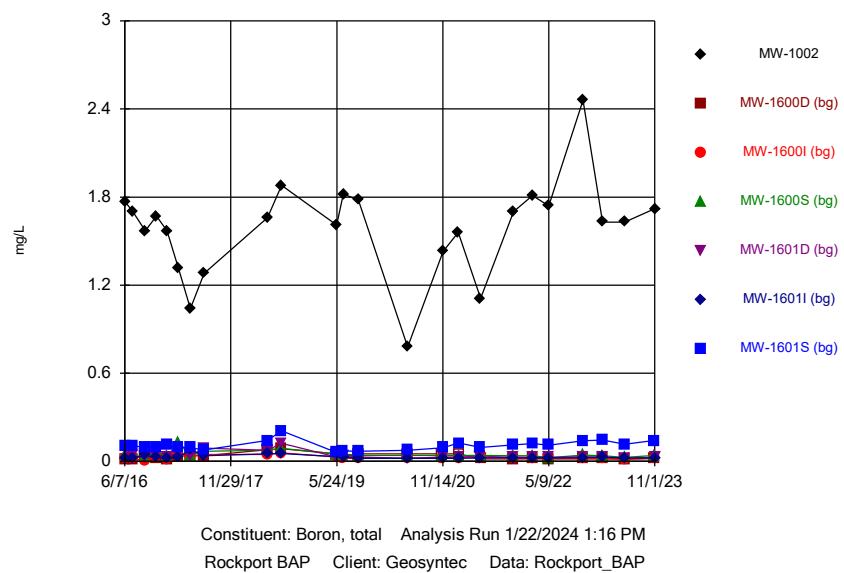
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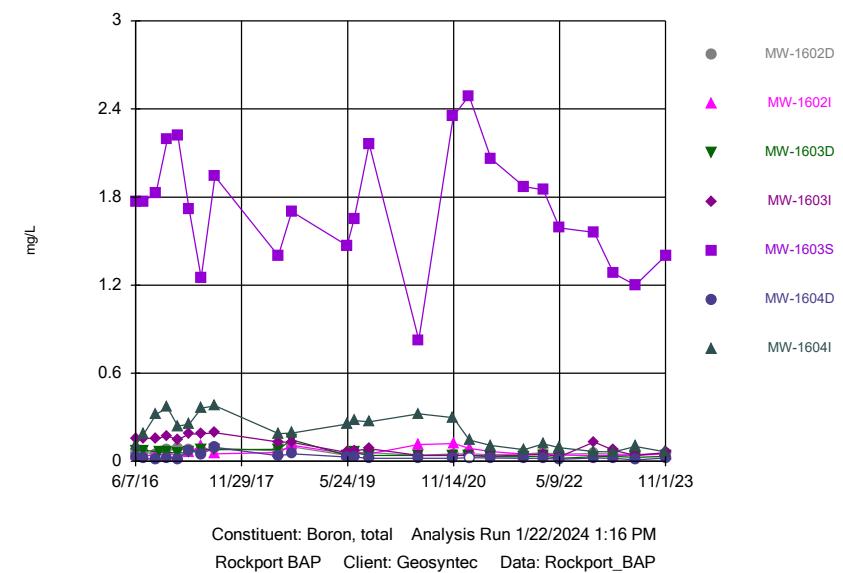
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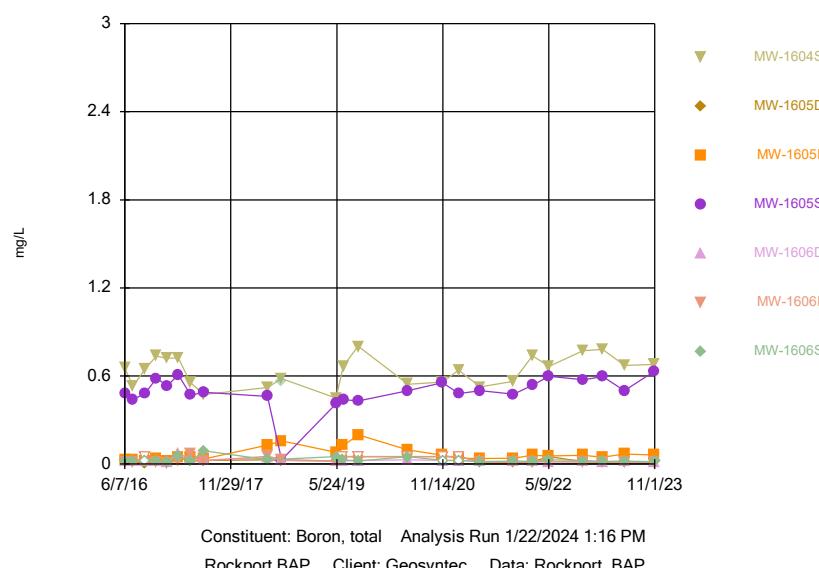
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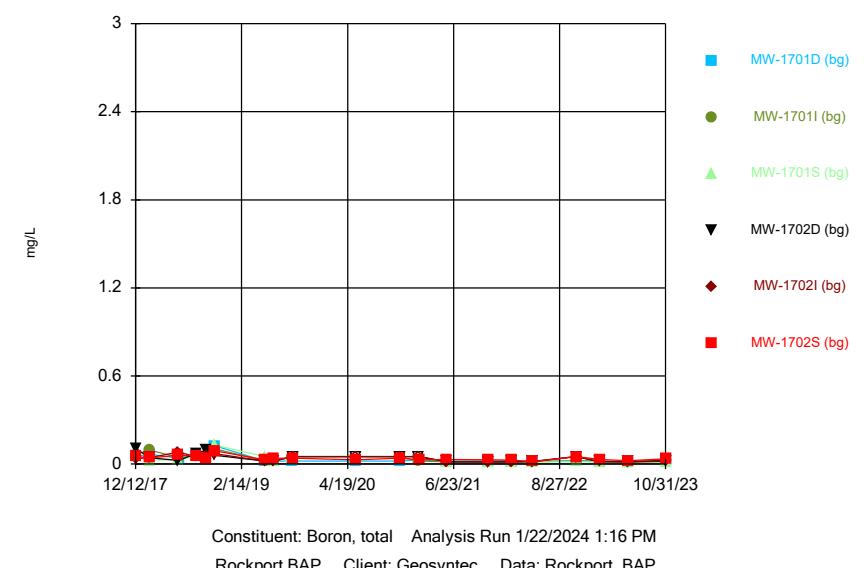
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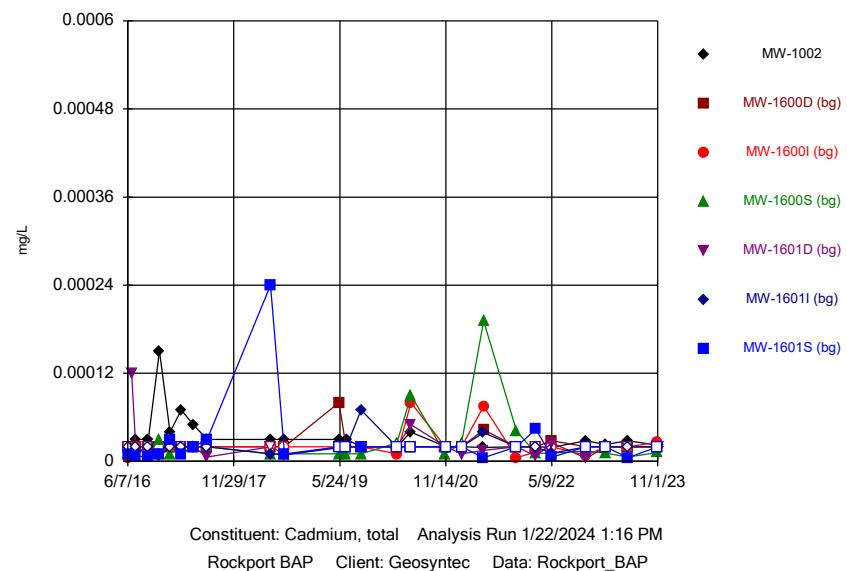
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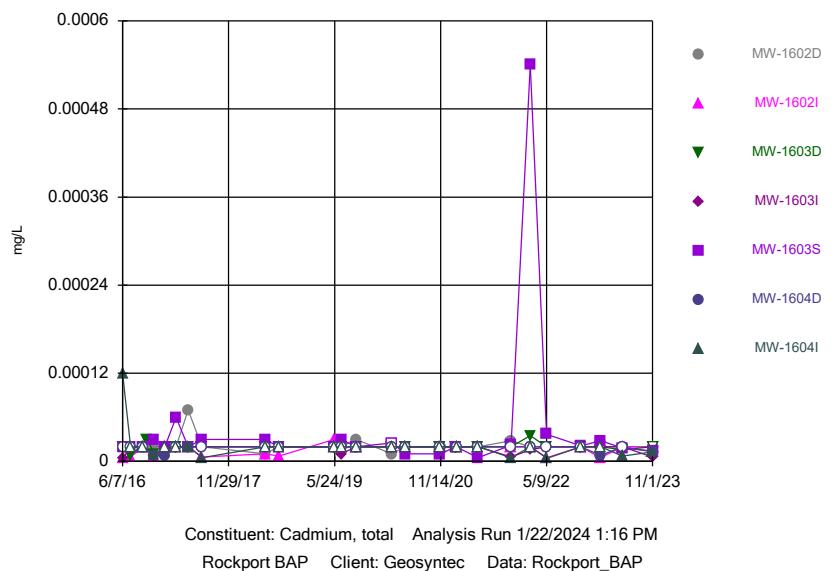
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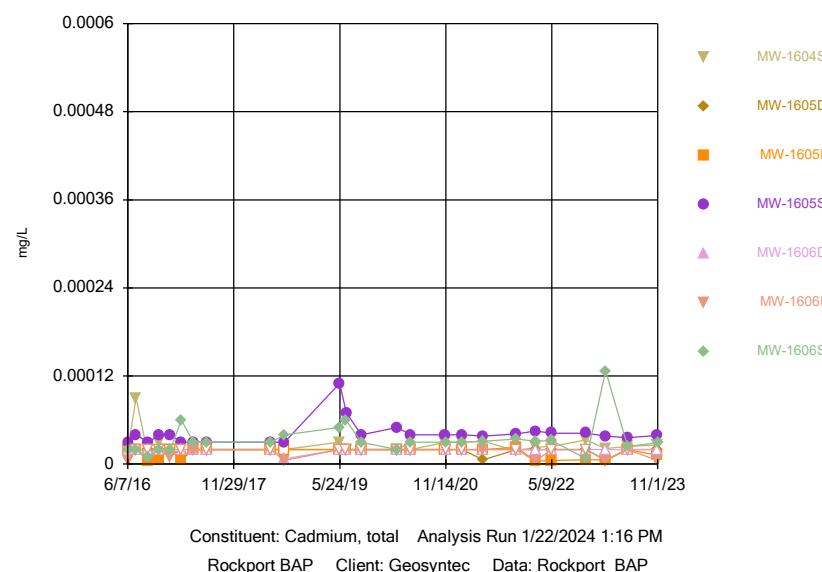
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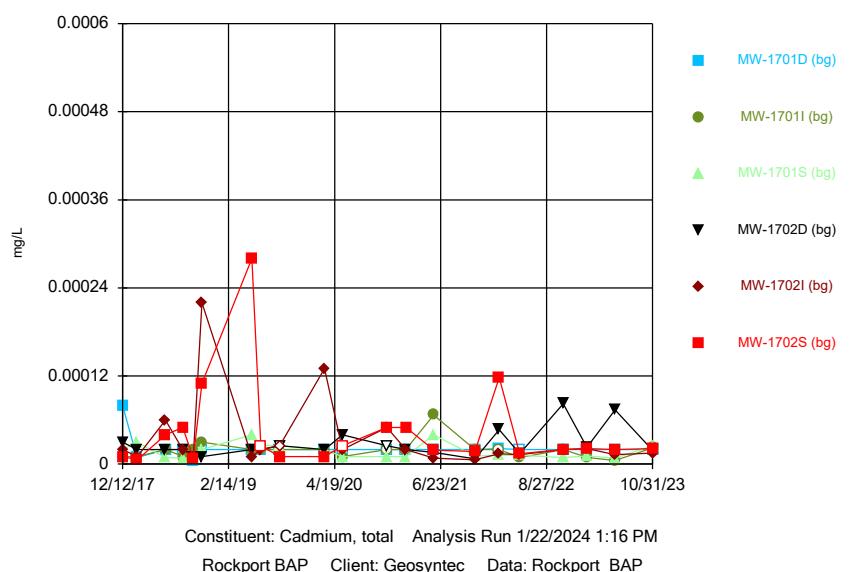
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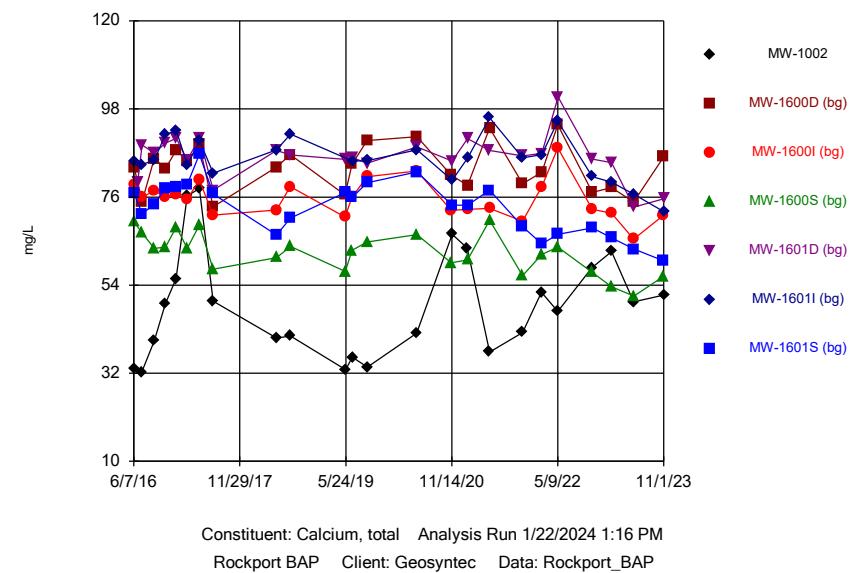


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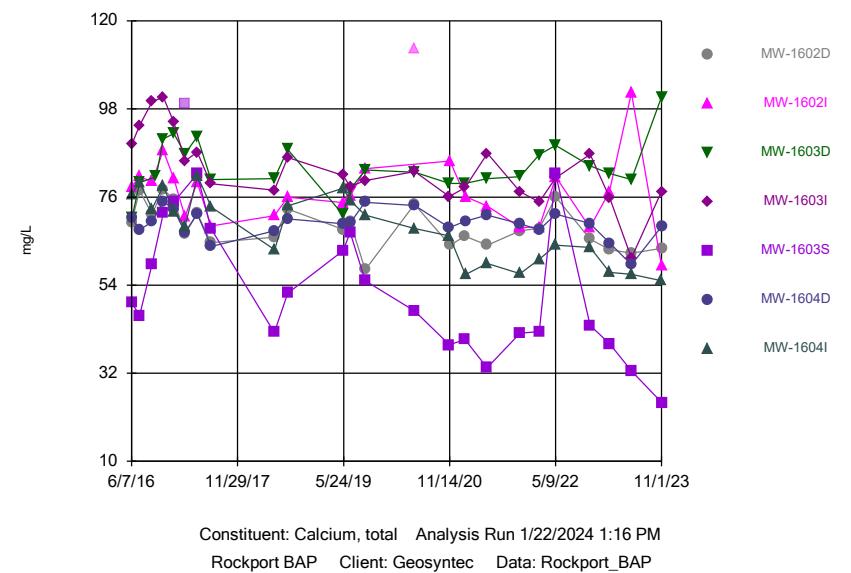
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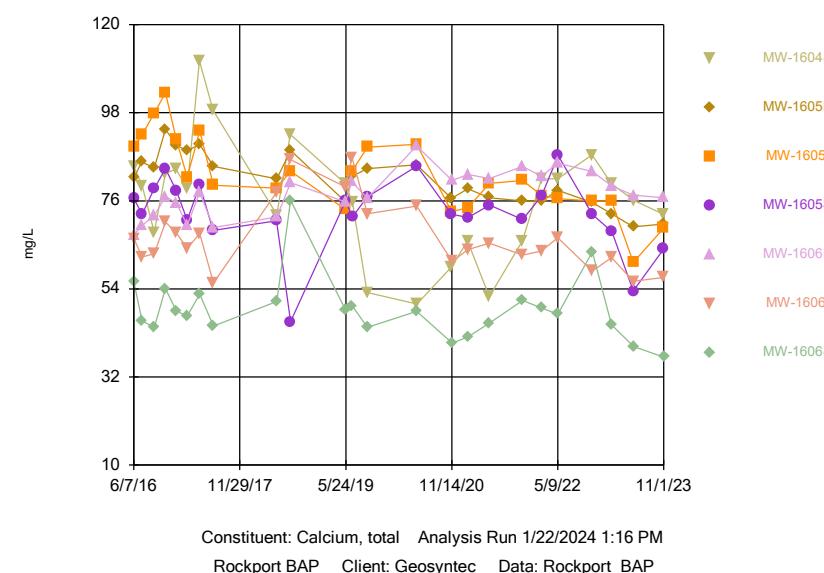
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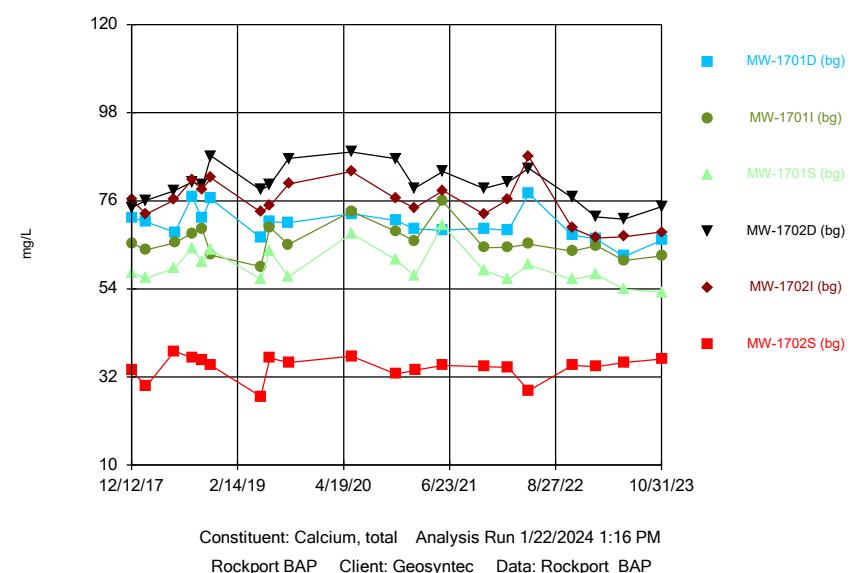
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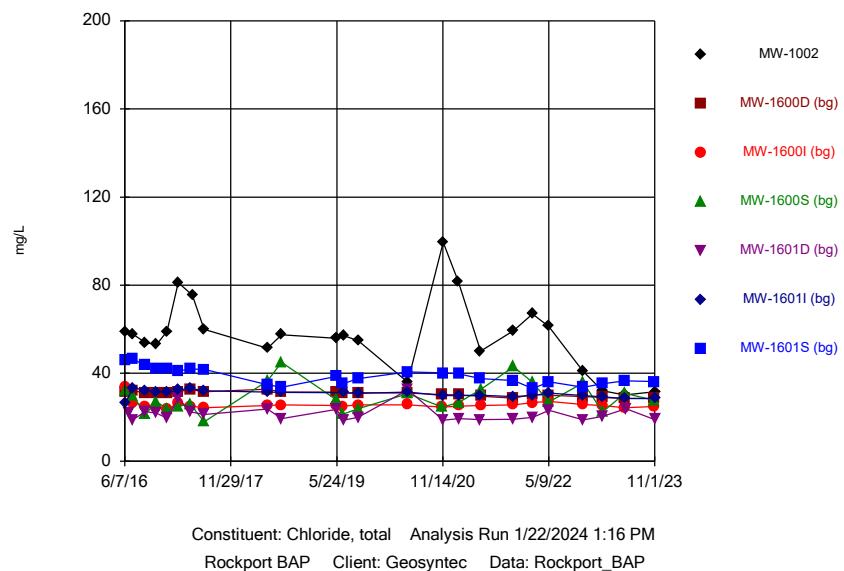
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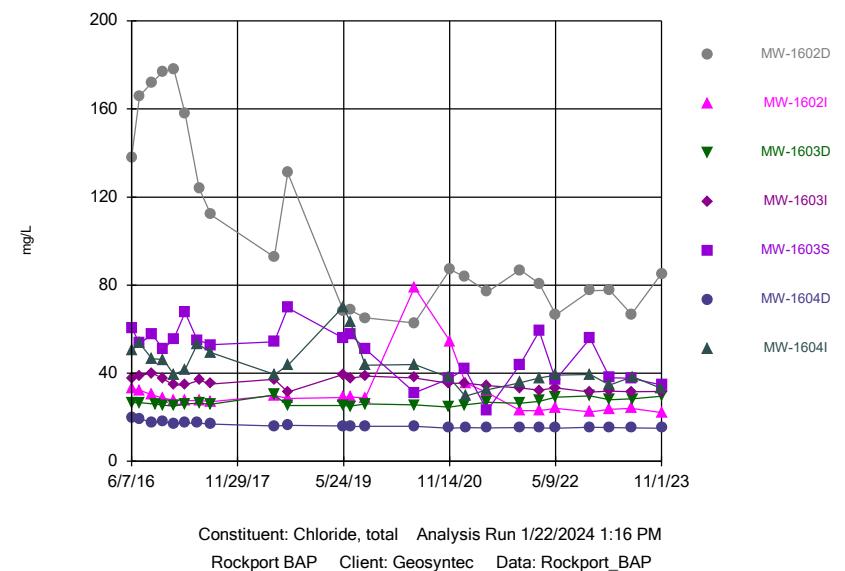
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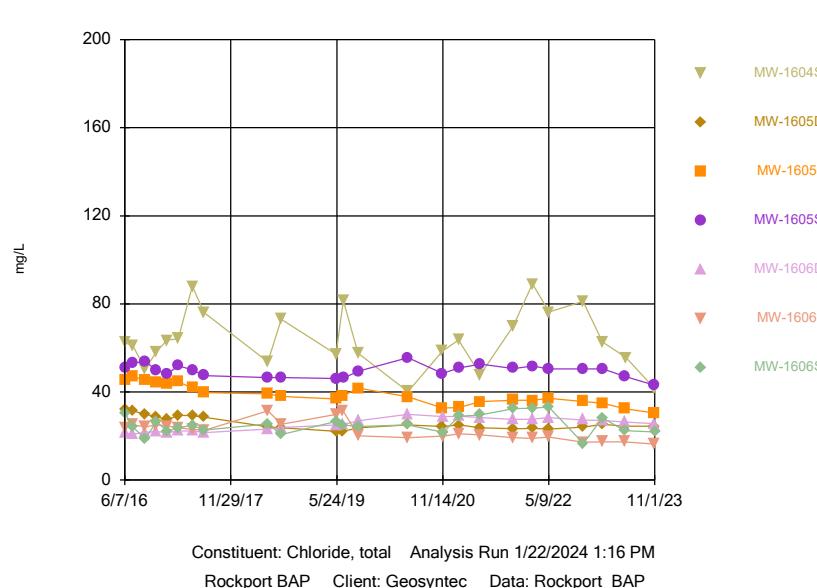
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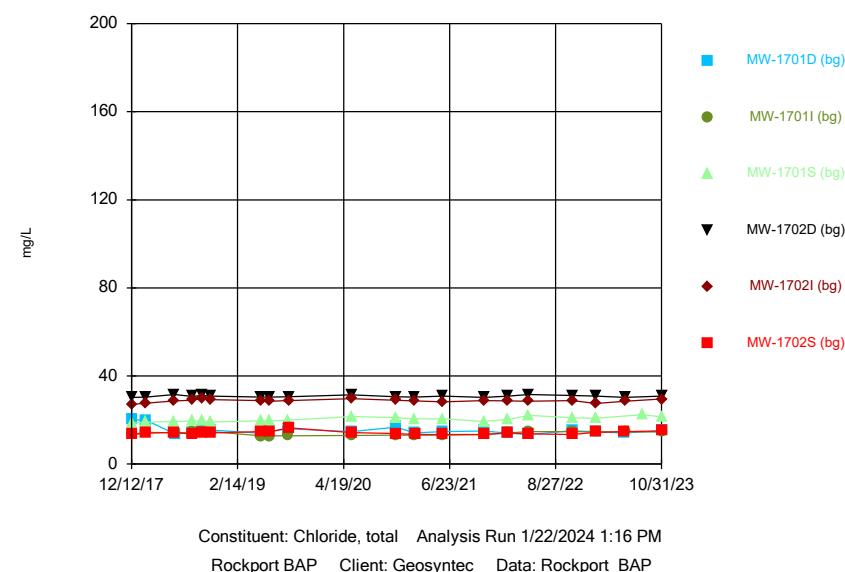
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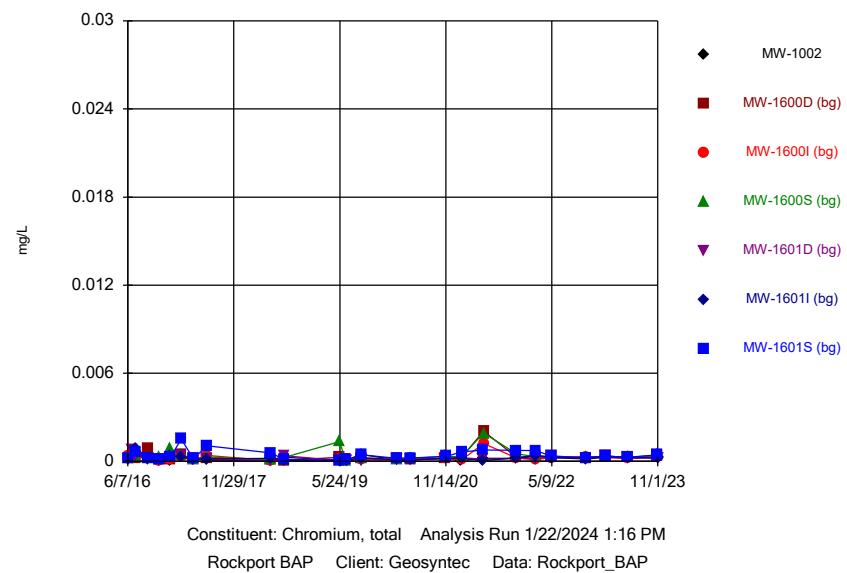


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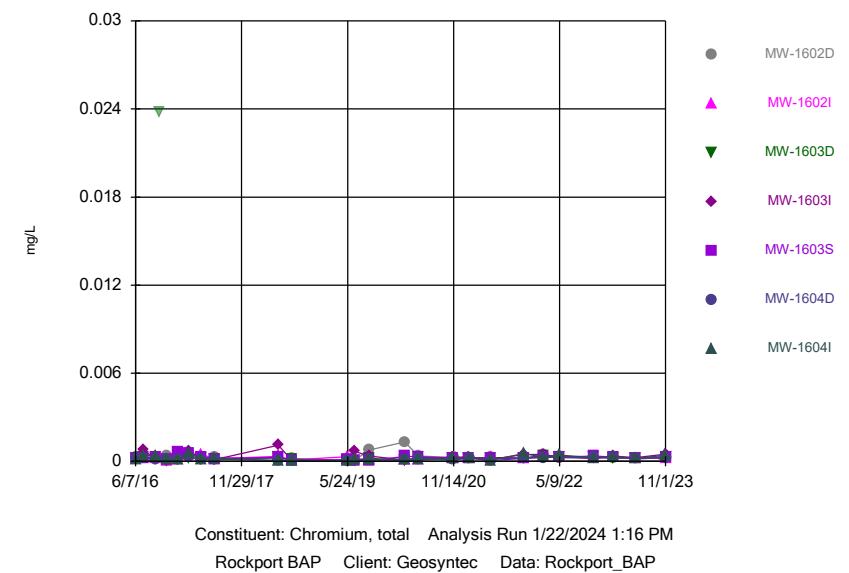
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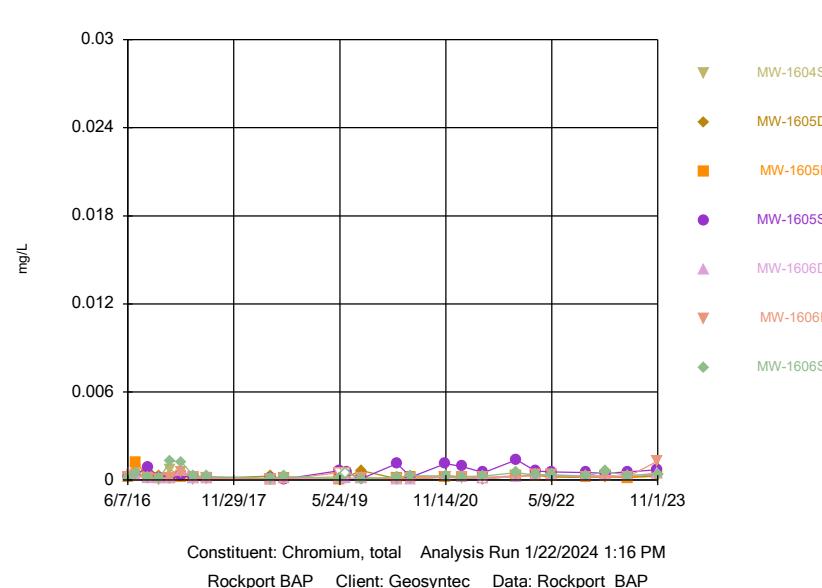
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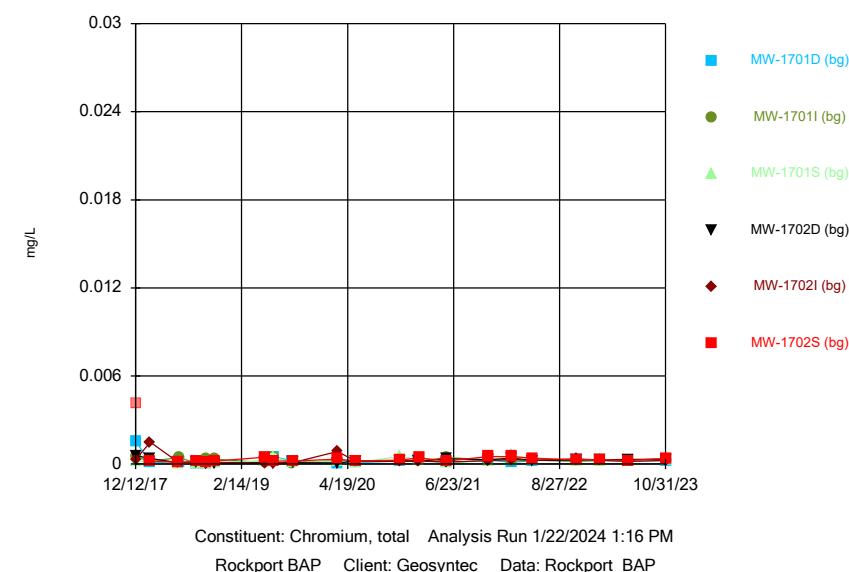
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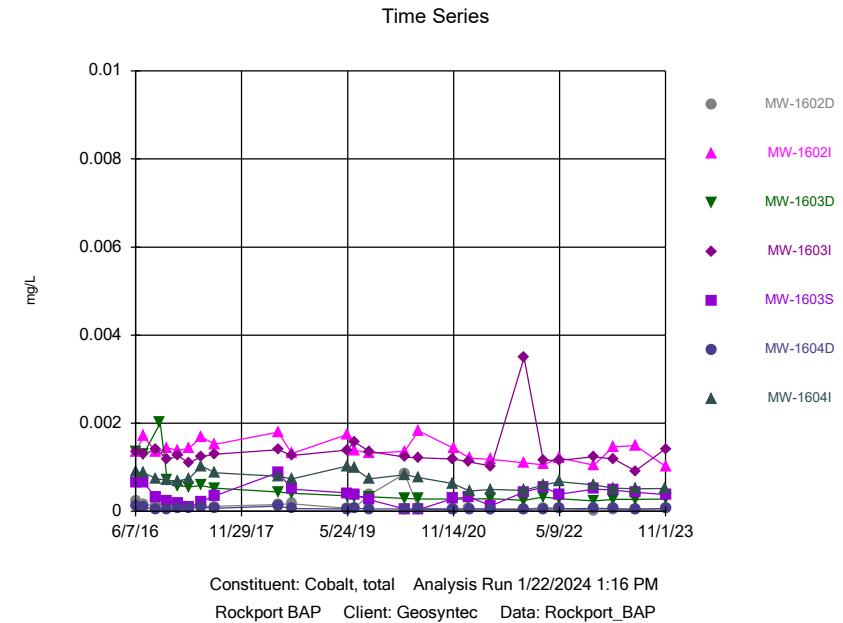
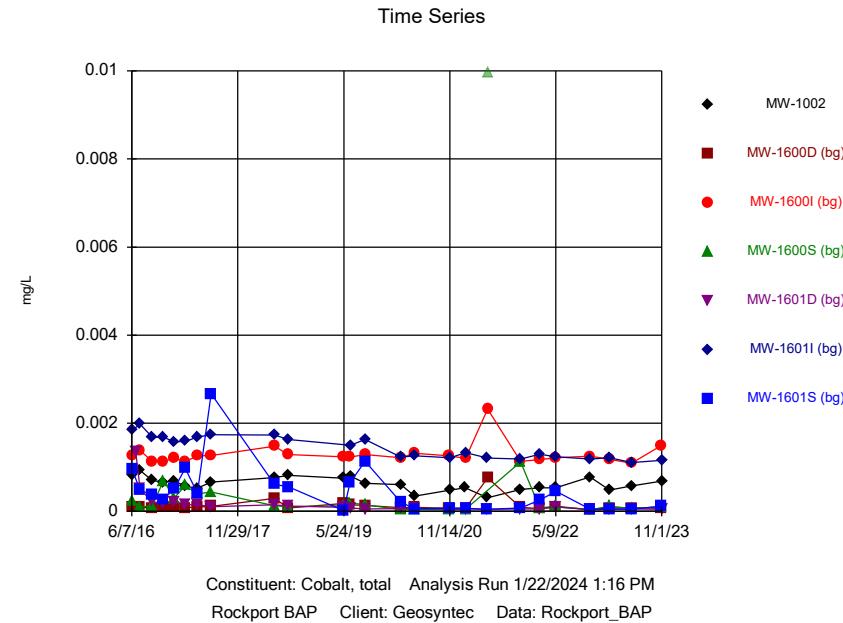
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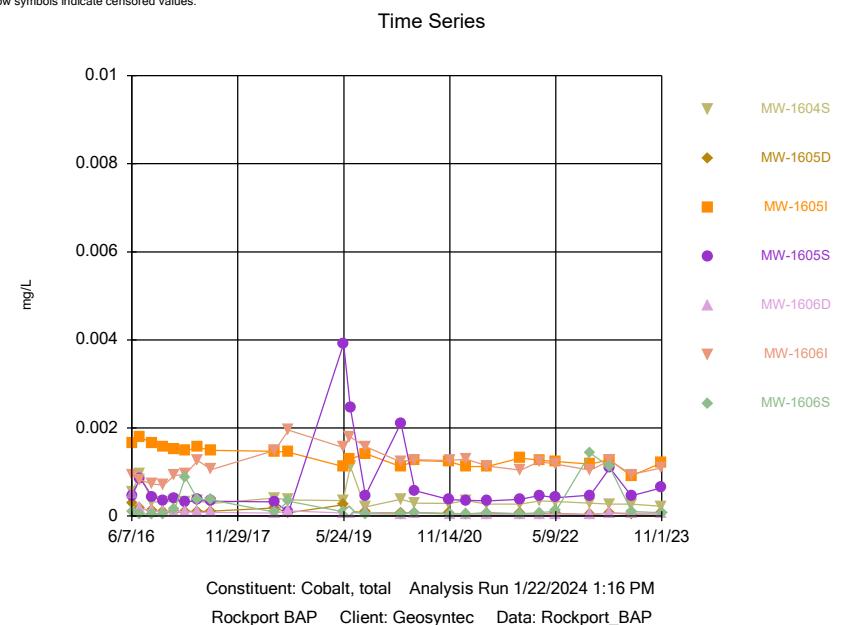
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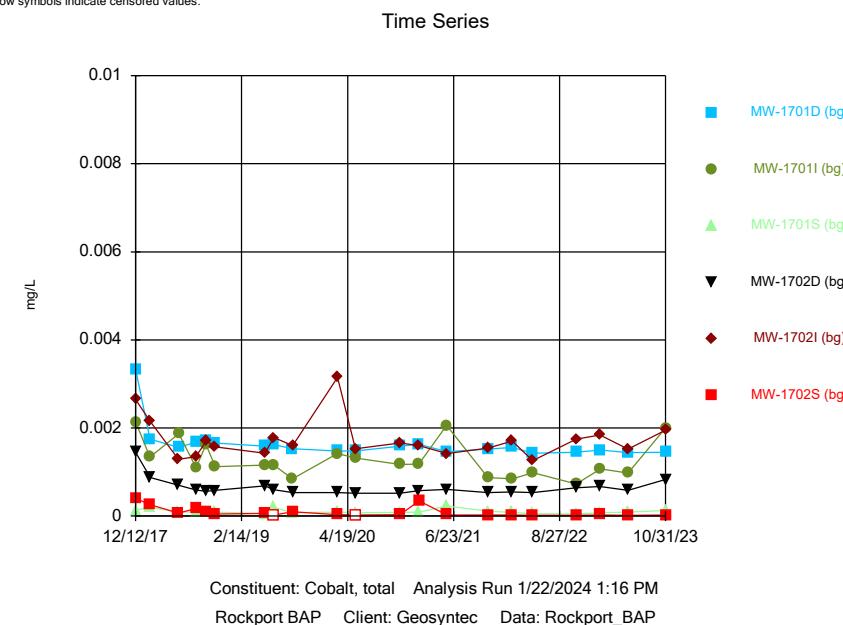


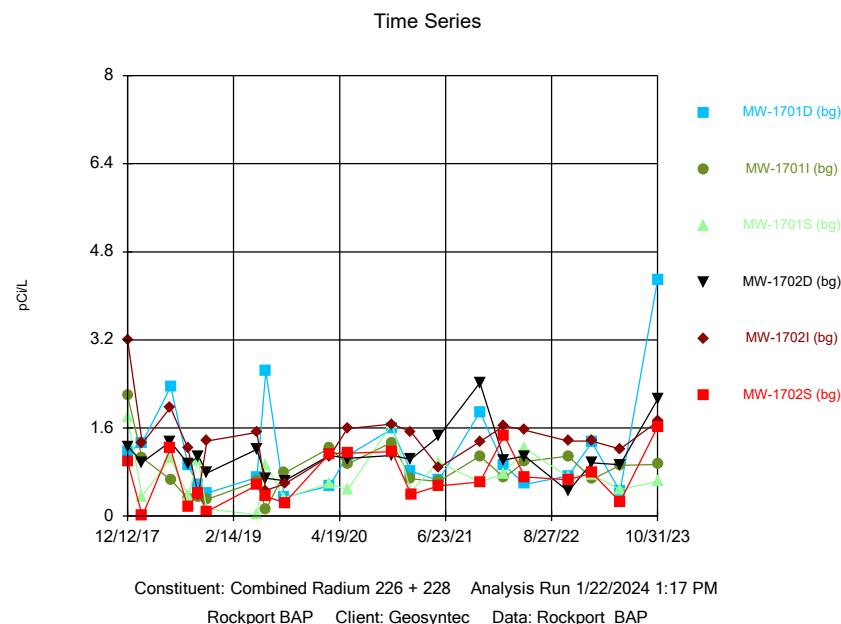
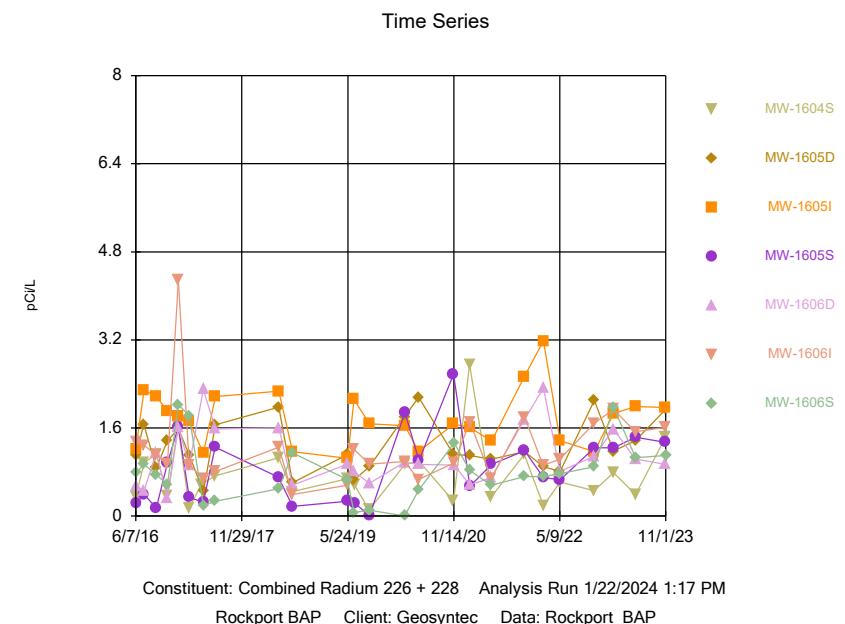
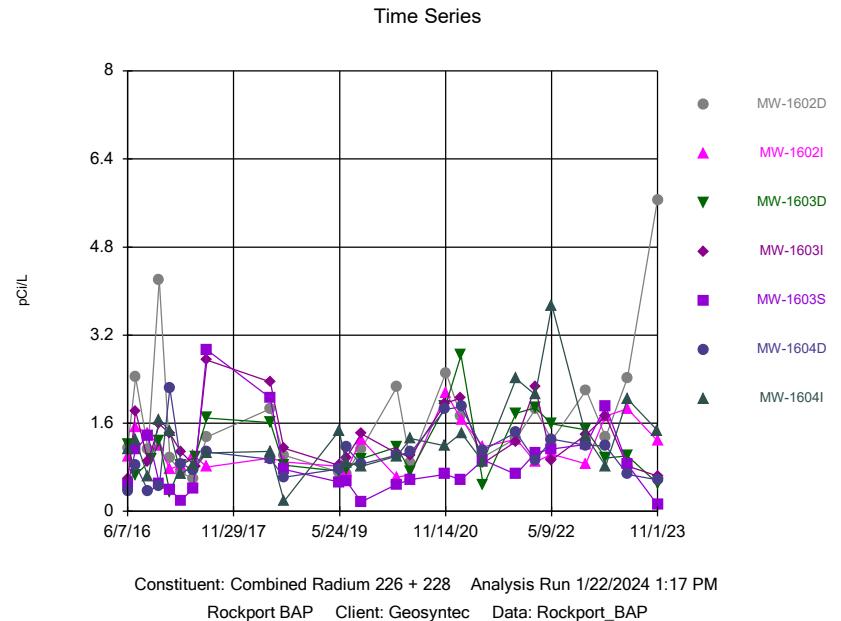
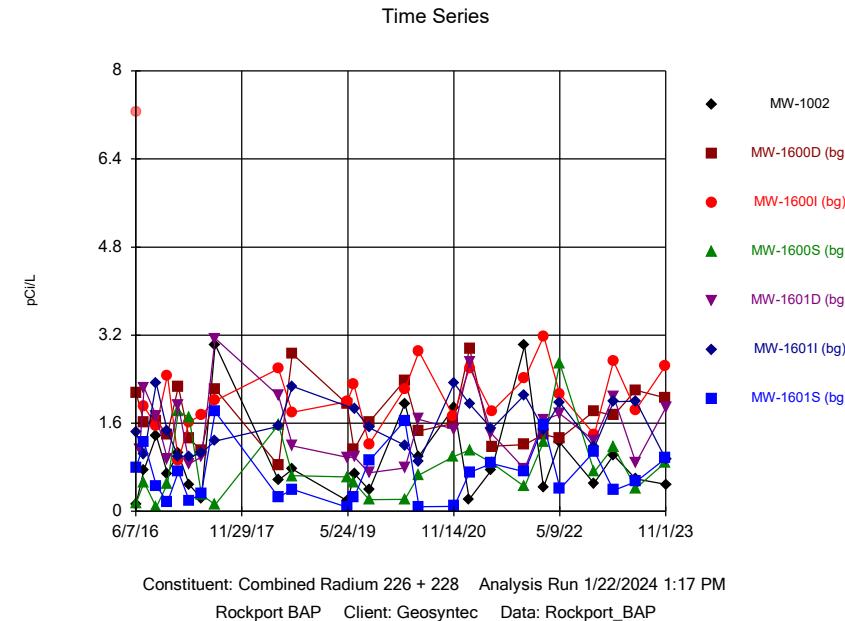


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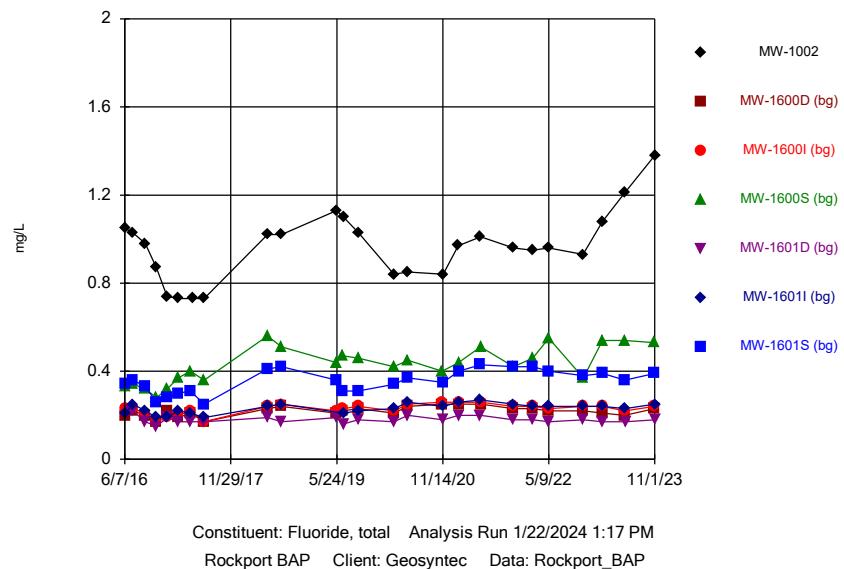


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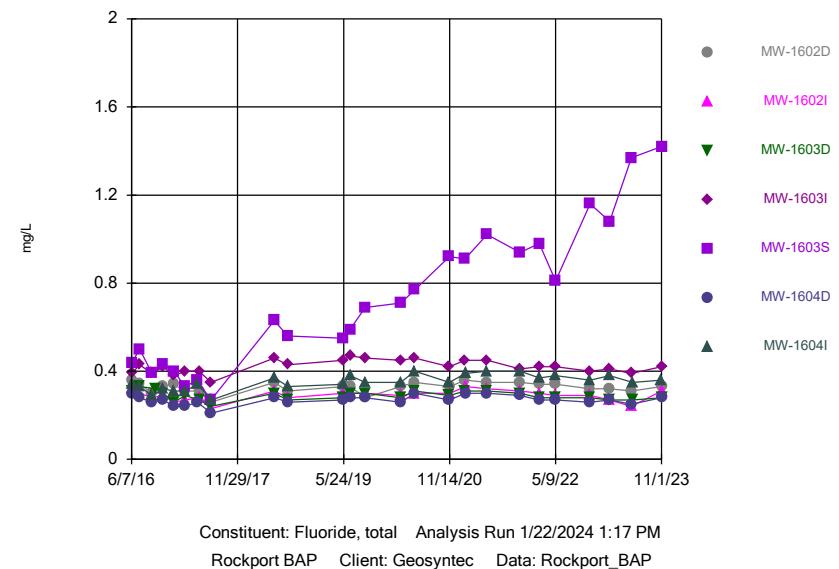


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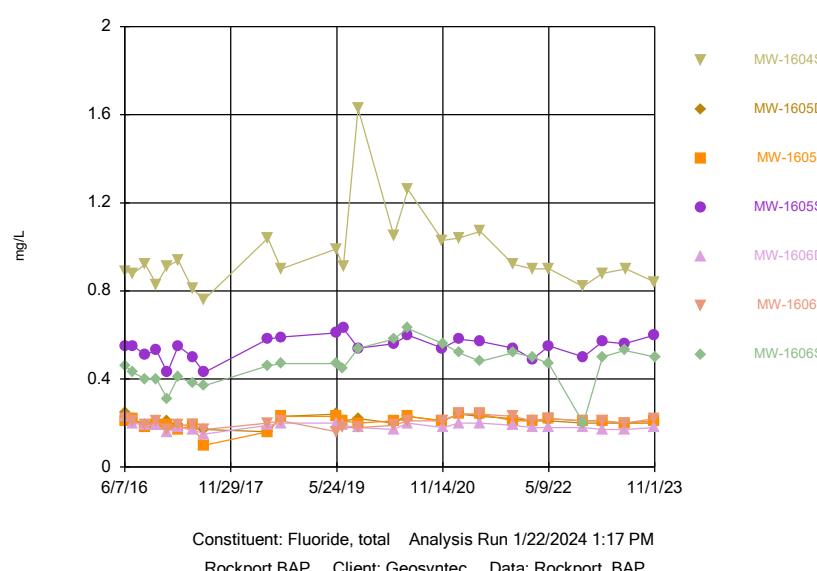
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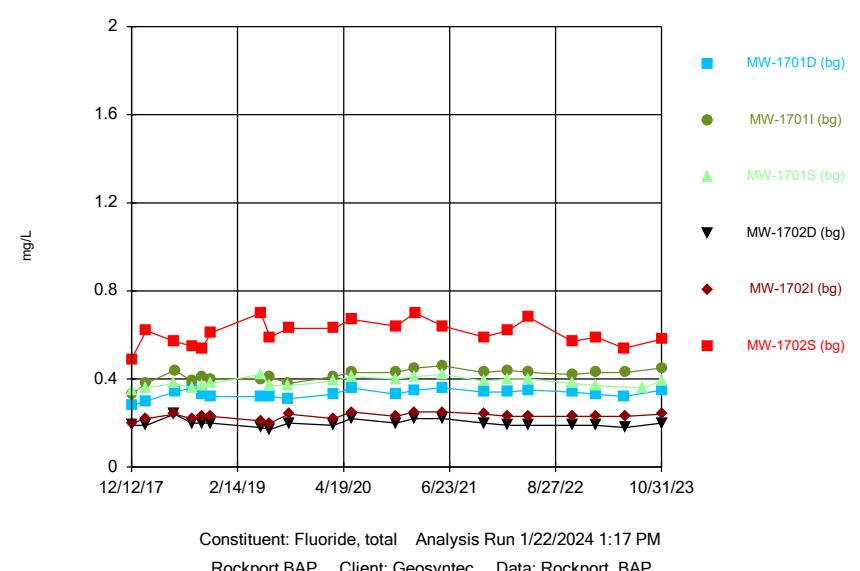
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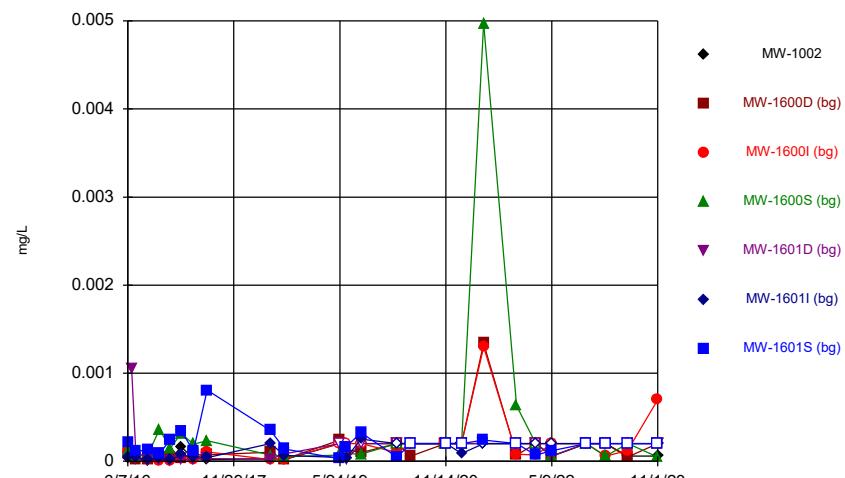
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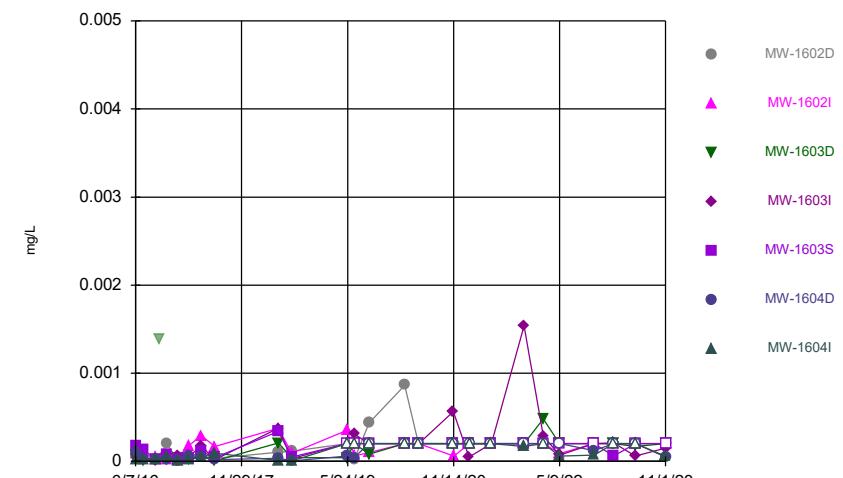
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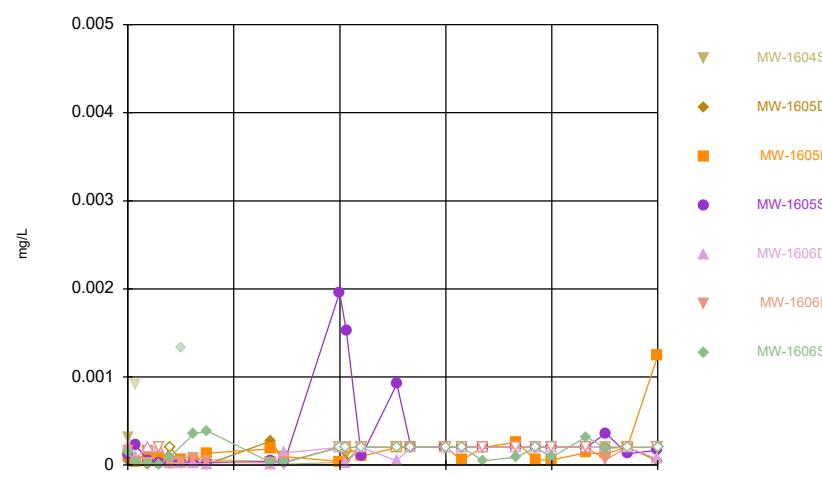
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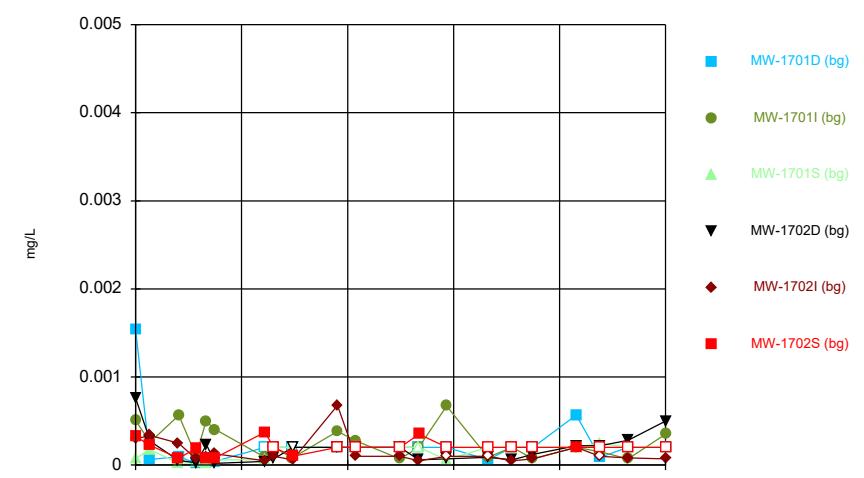
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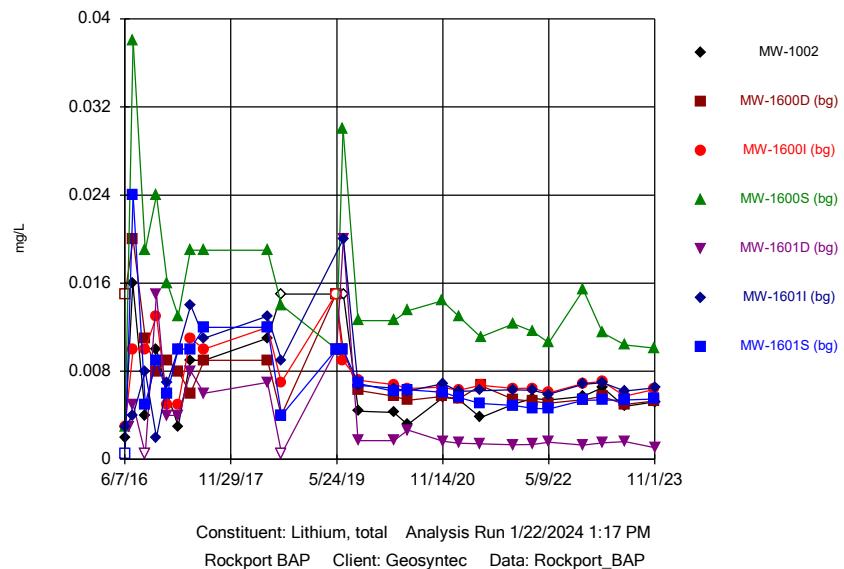
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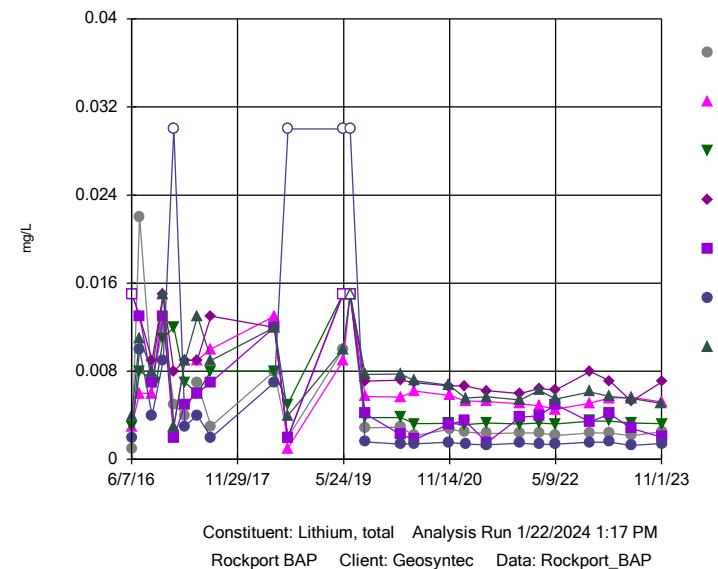
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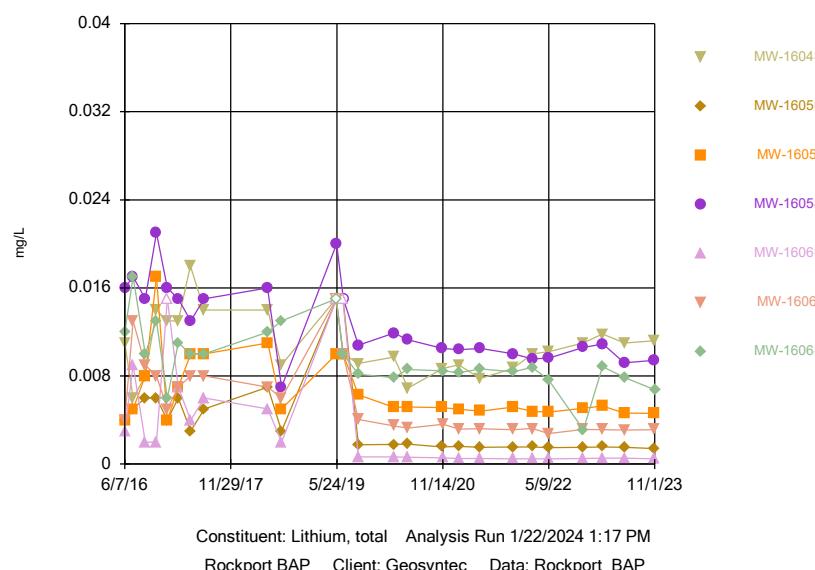
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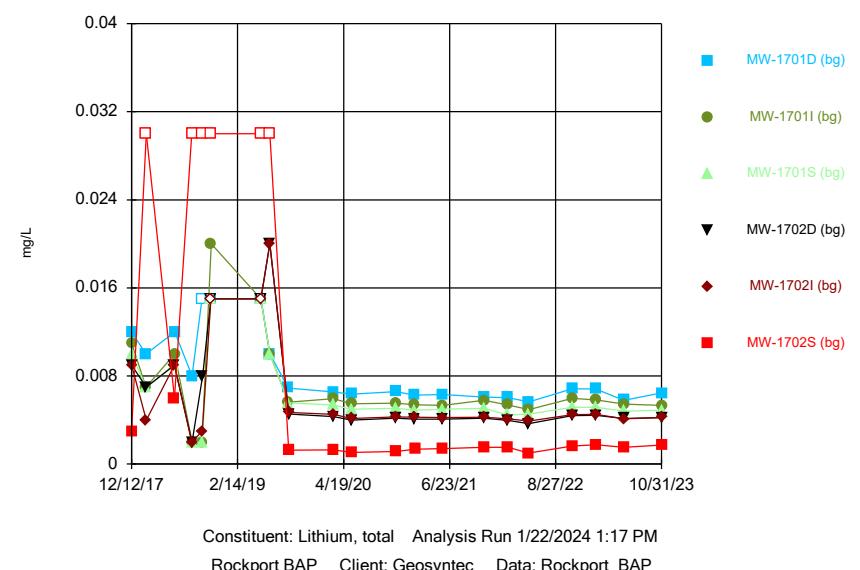
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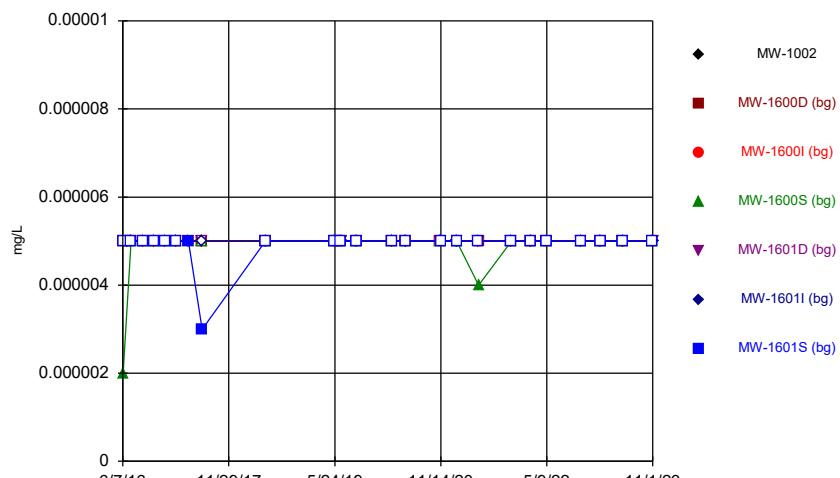
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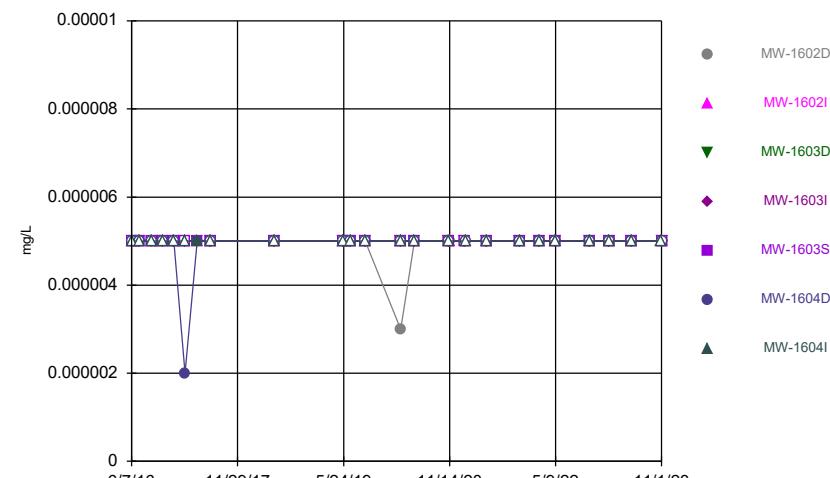
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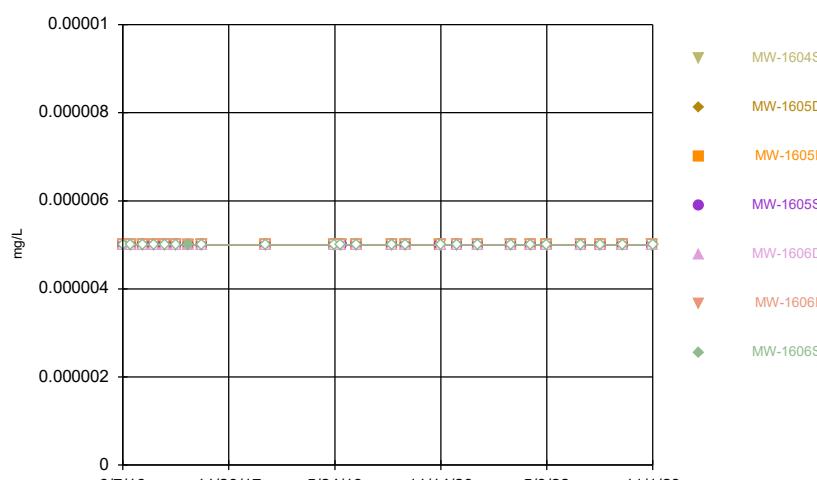
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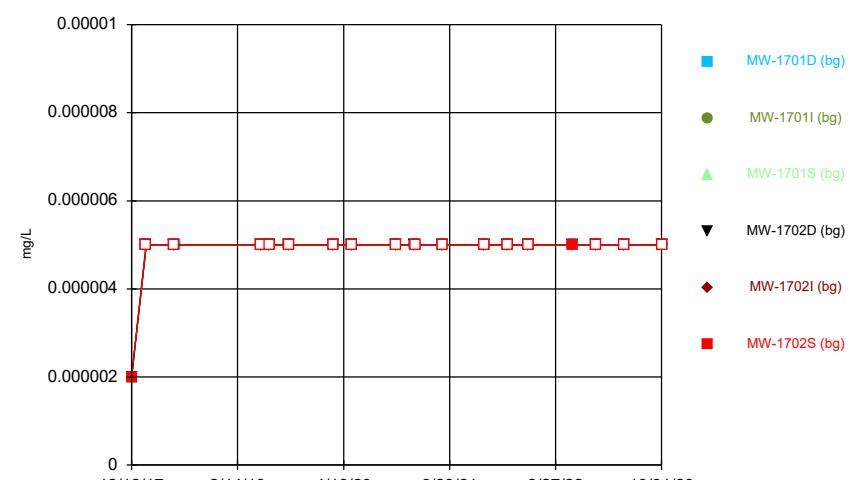
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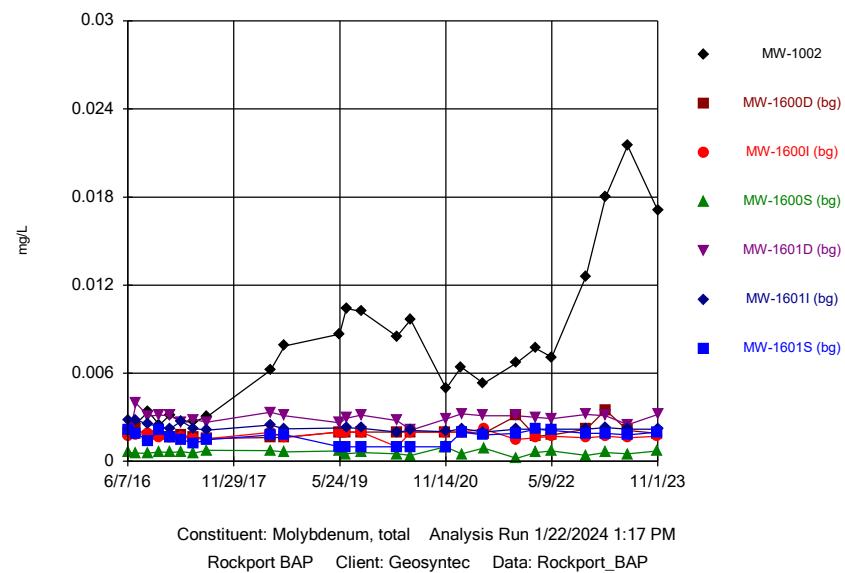
### Time Series



Constituent: Mercury, total Analysis Run 1/22/2024 1:17 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

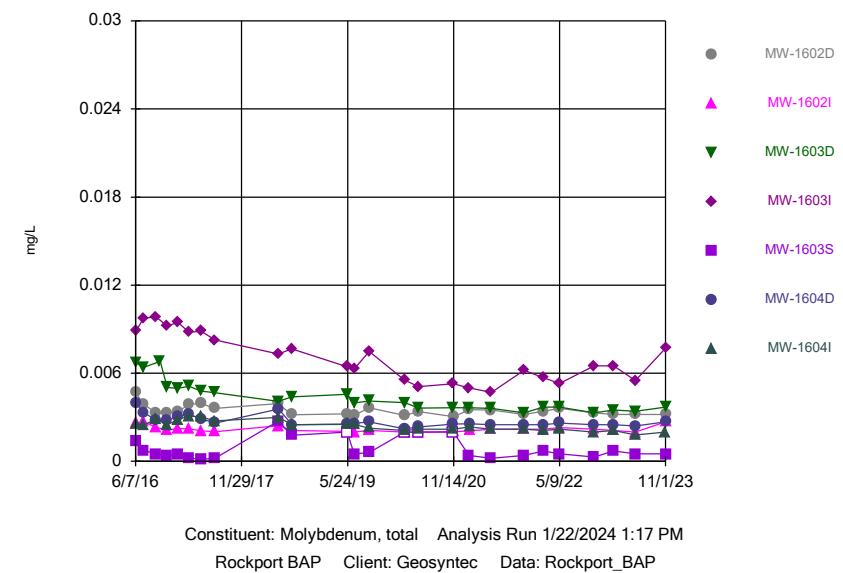
Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

### Time Series



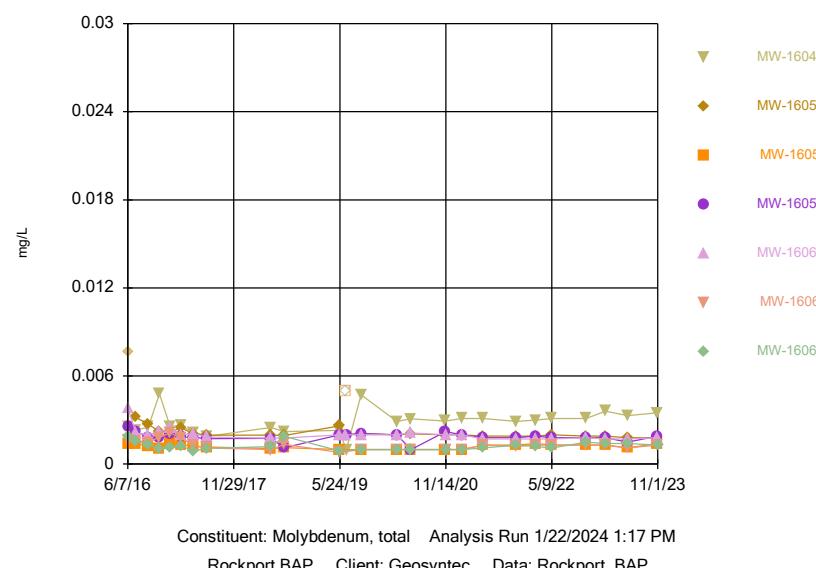
Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

### Time Series



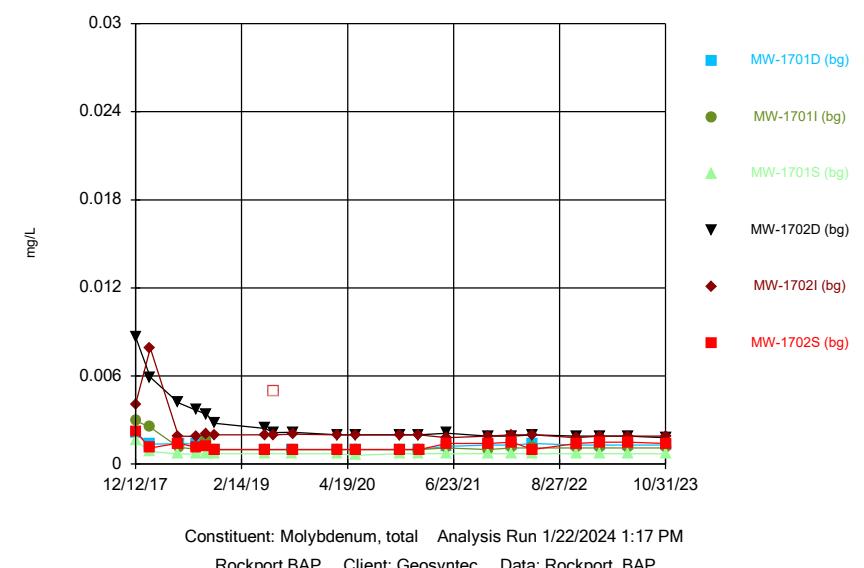
Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

### Time Series

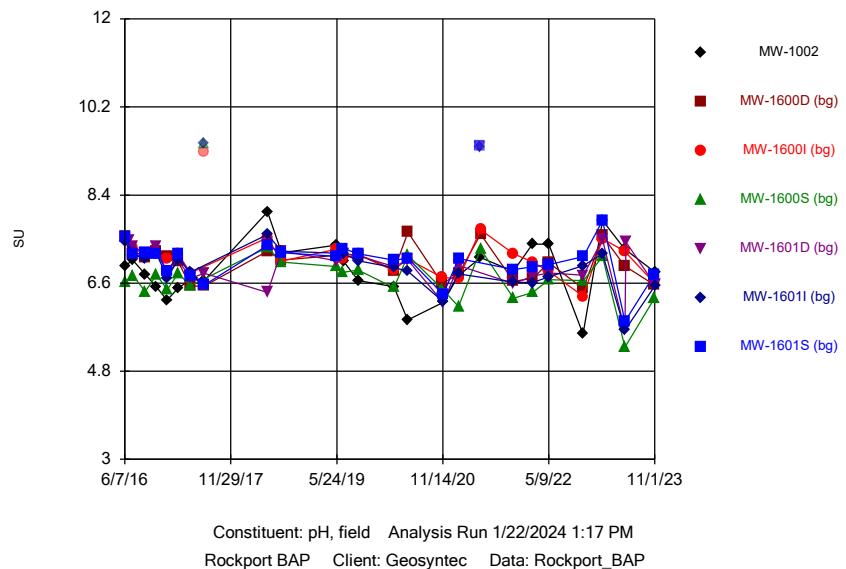


Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

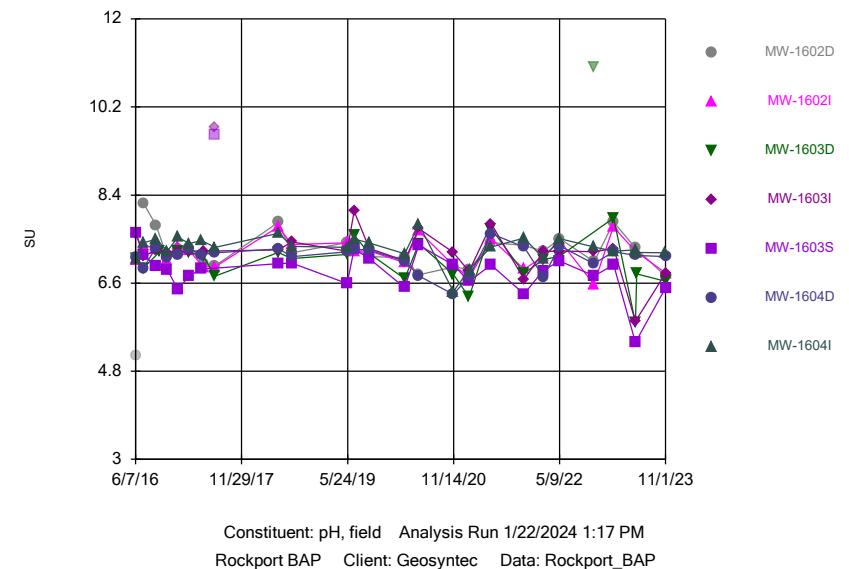
### Time Series



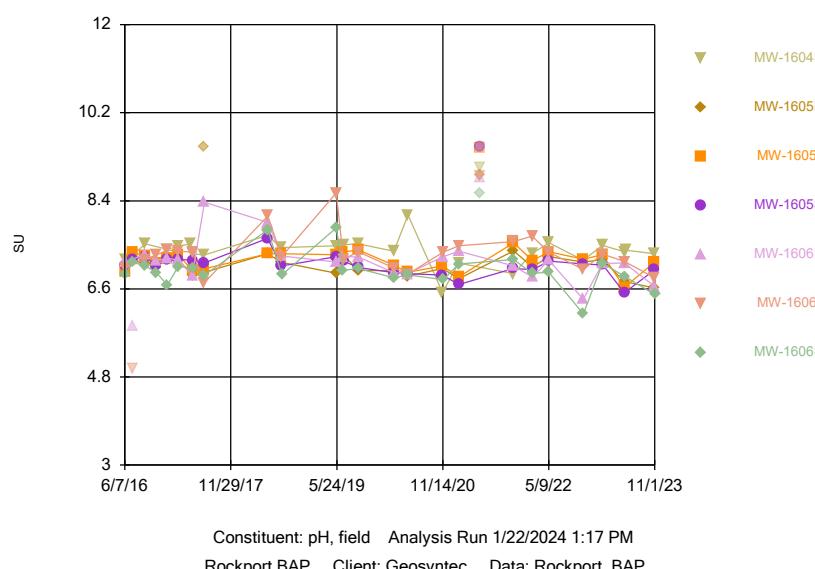
## Time Series



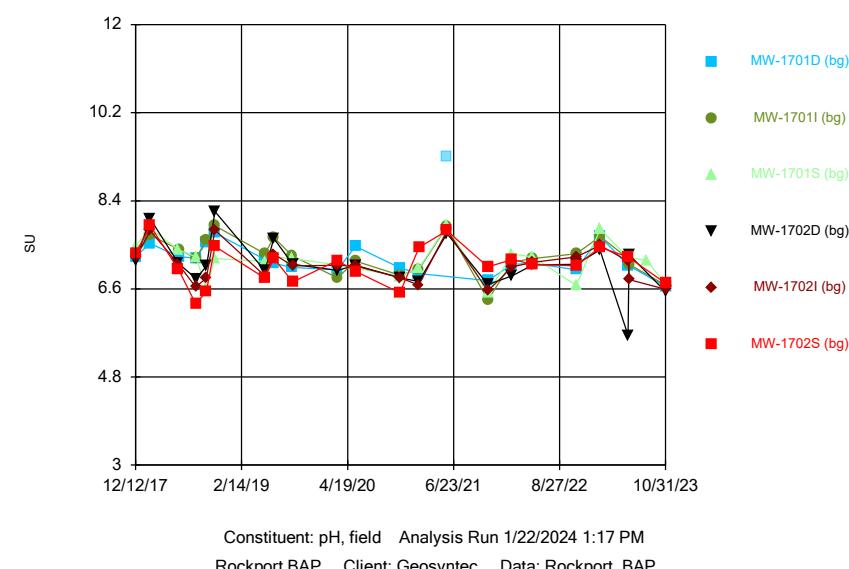
## Time Series



## Time Series

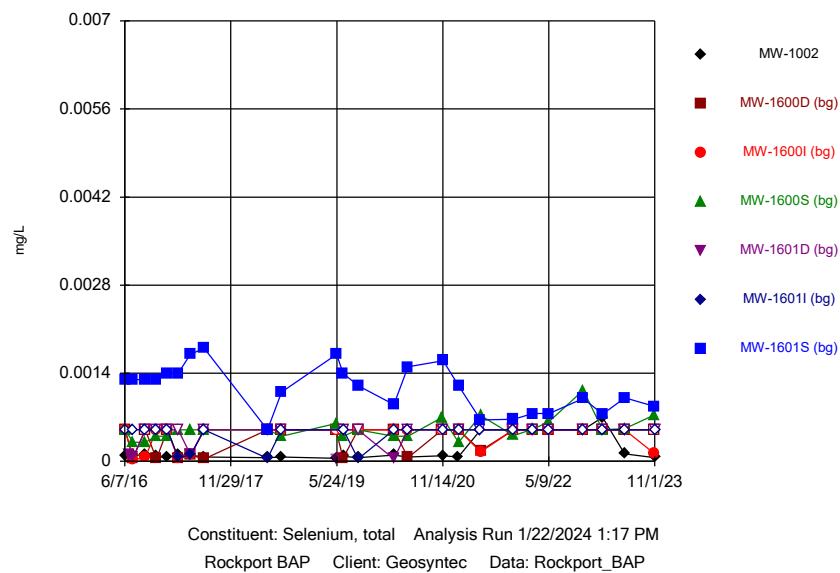


## Time Series



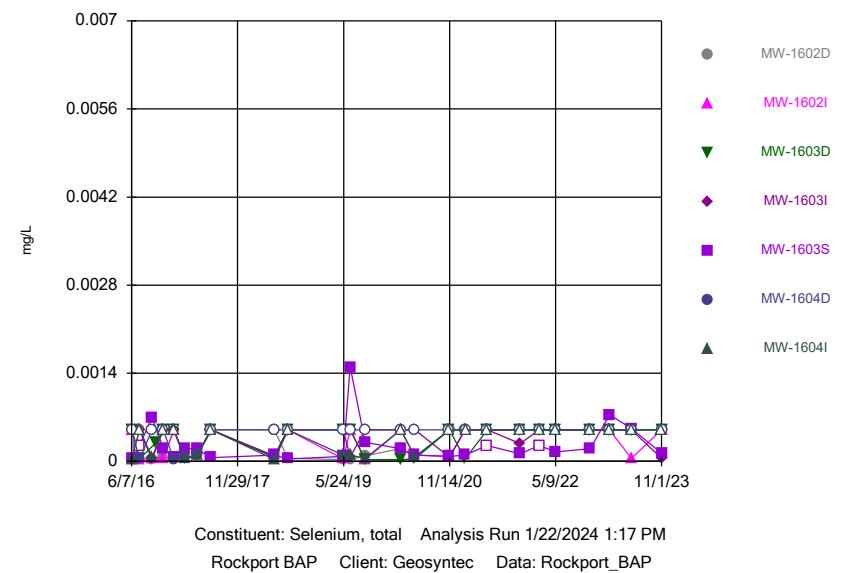
Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

### Time Series



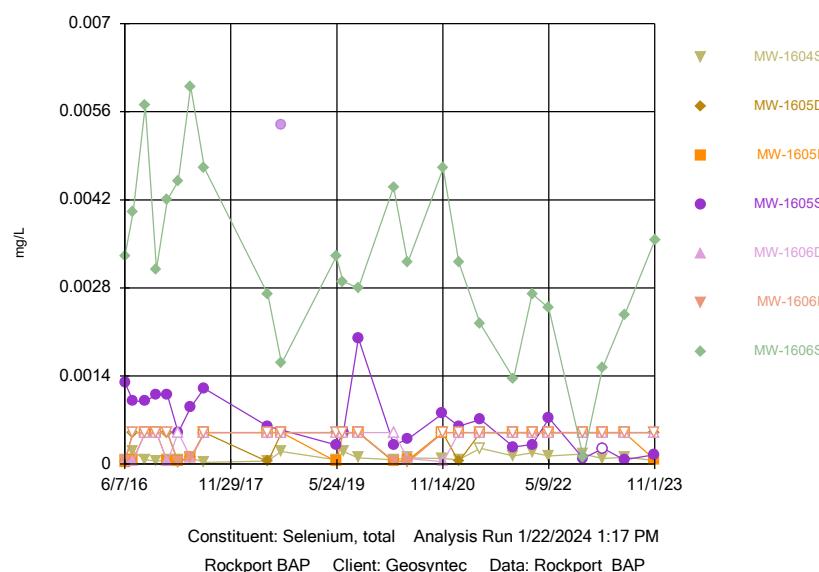
Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

### Time Series



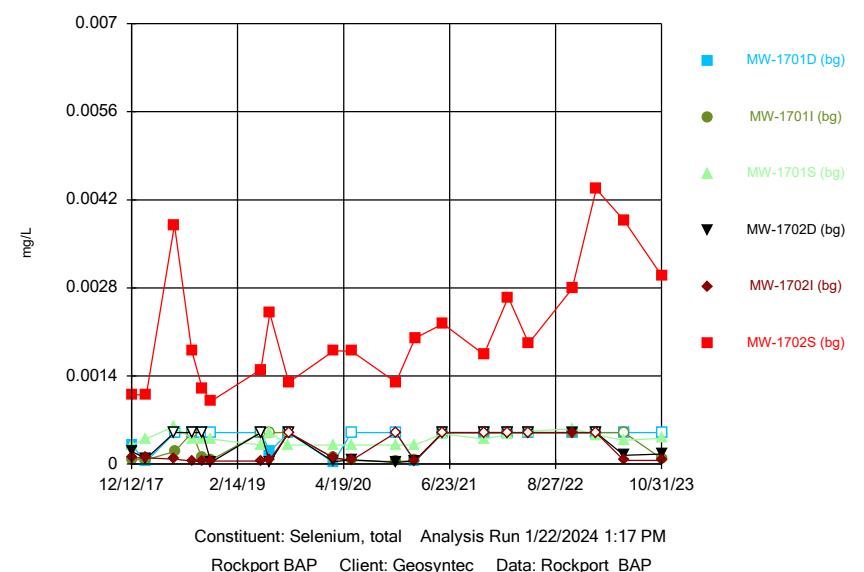
Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

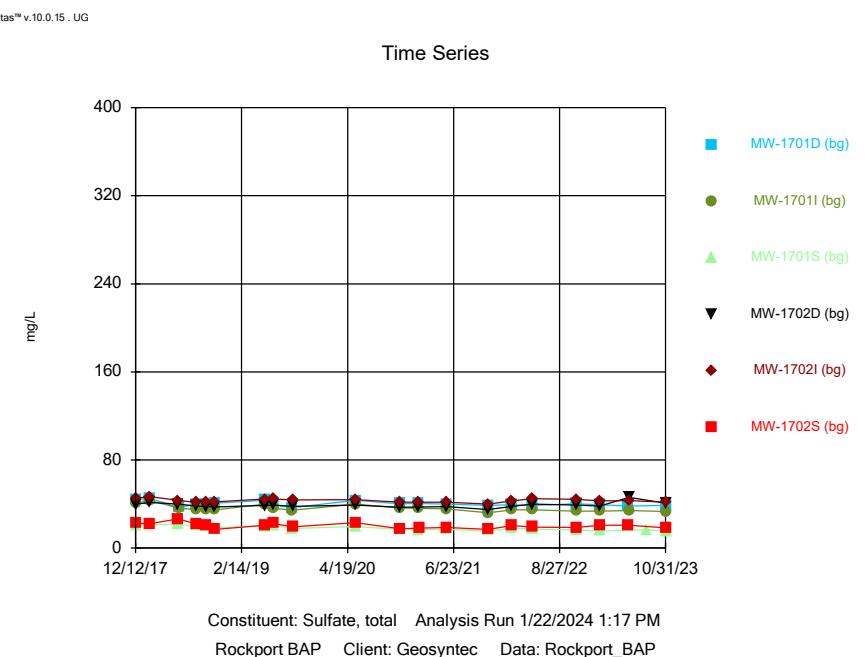
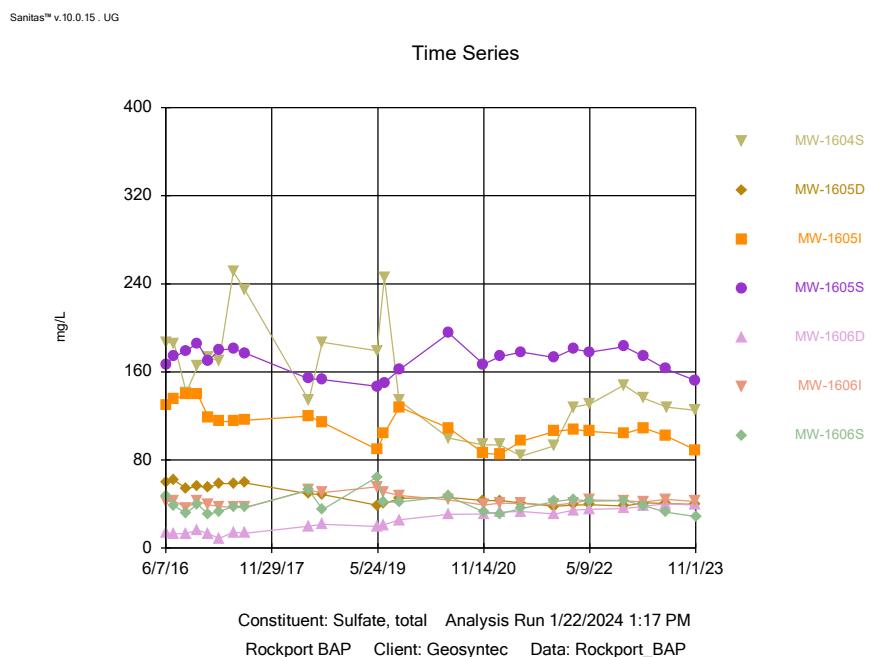
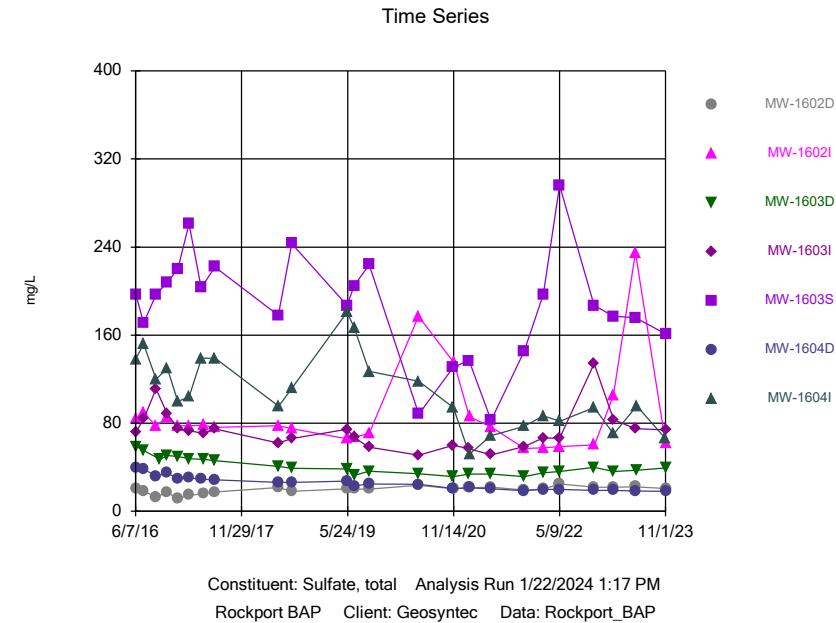
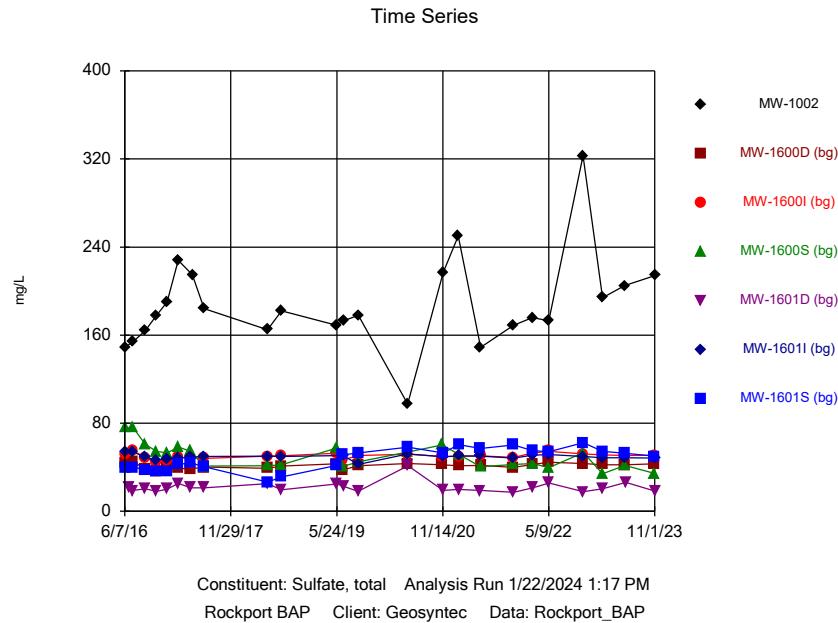
### Time Series



Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

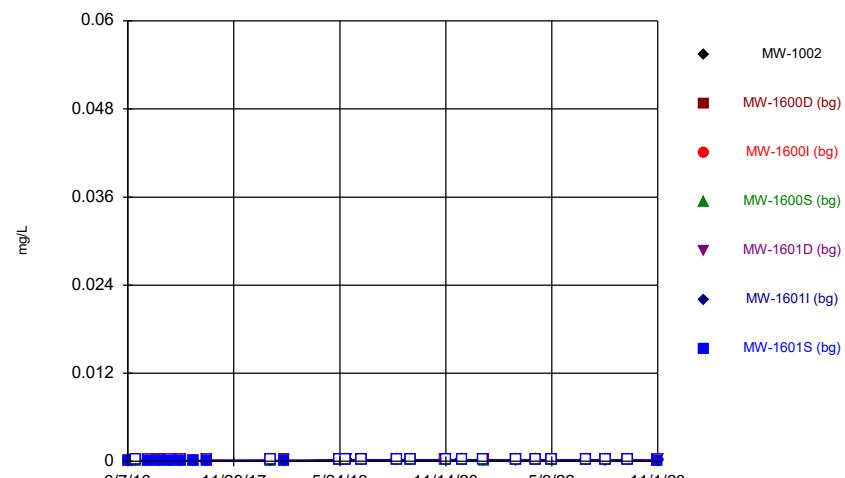
### Time Series





Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

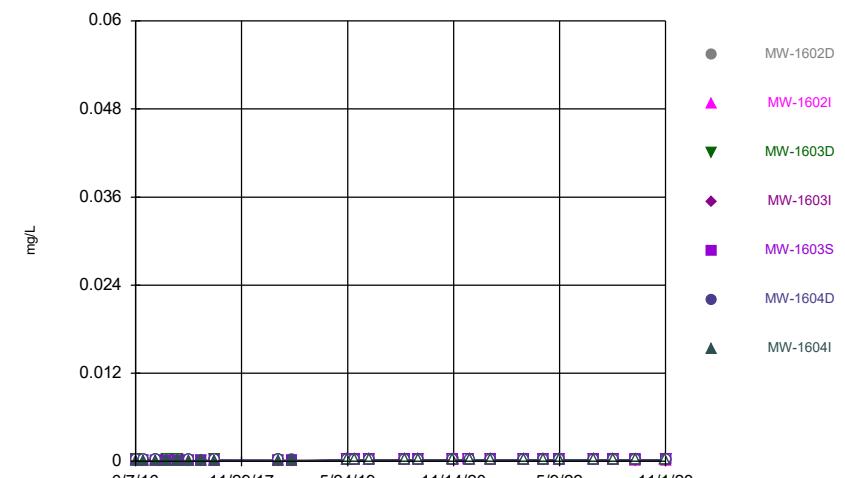
Time Series



Constituent: Thallium, total Analysis Run 1/22/2024 1:17 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

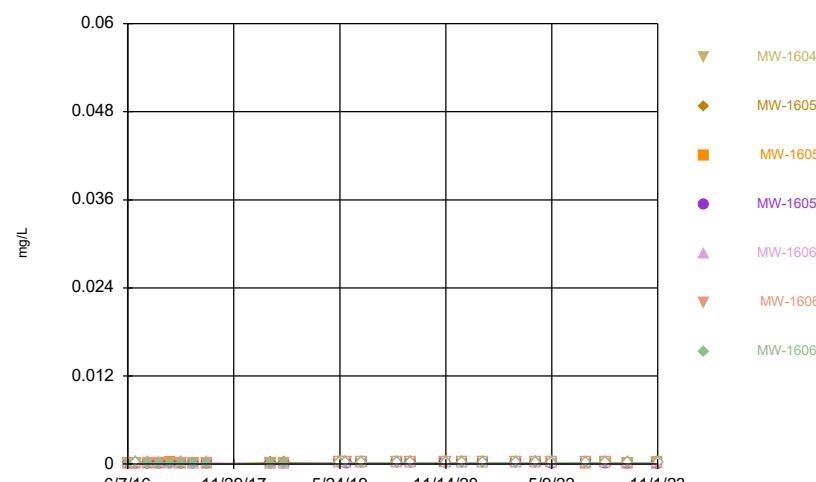
Time Series



Constituent: Thallium, total Analysis Run 1/22/2024 1:17 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

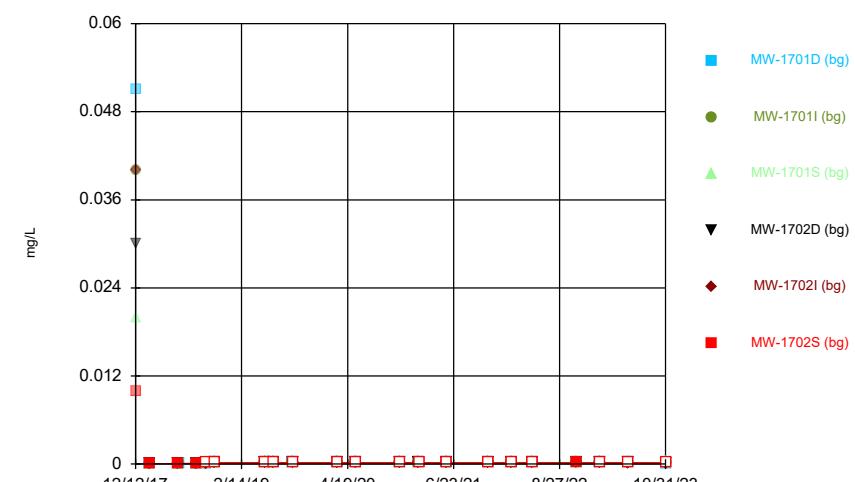
Time Series



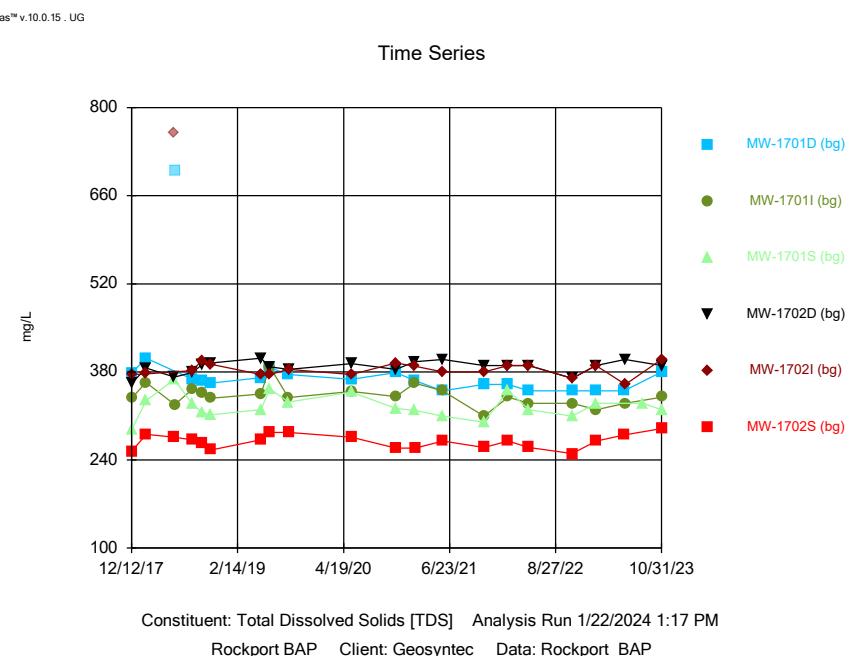
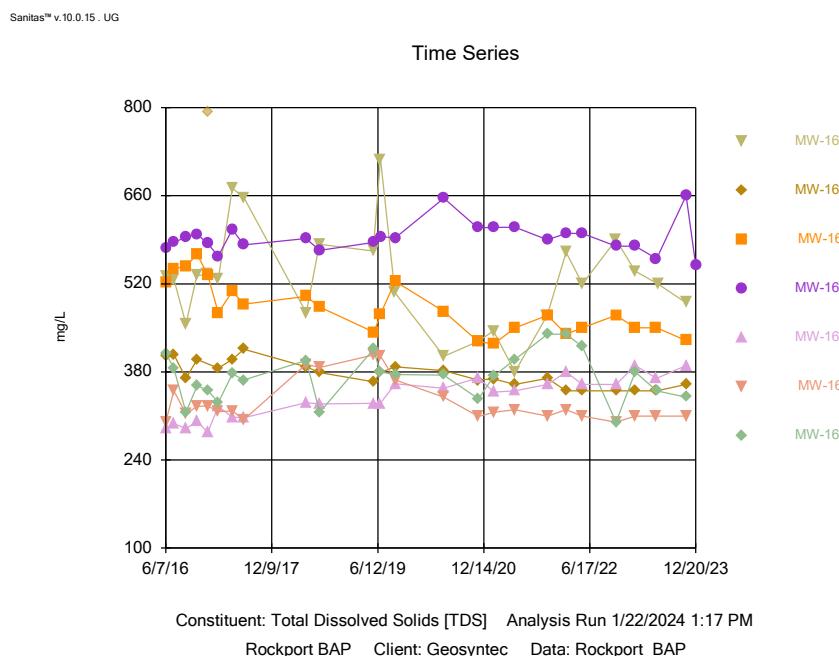
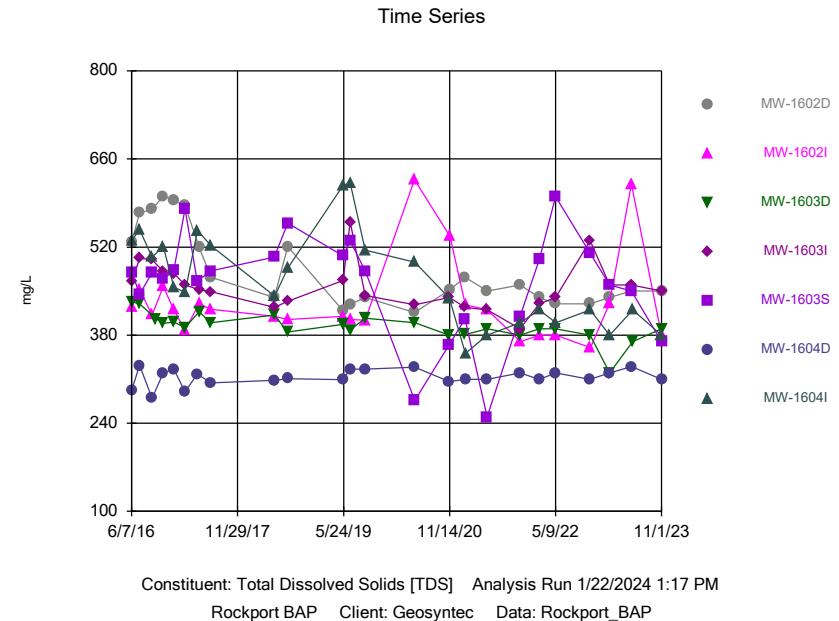
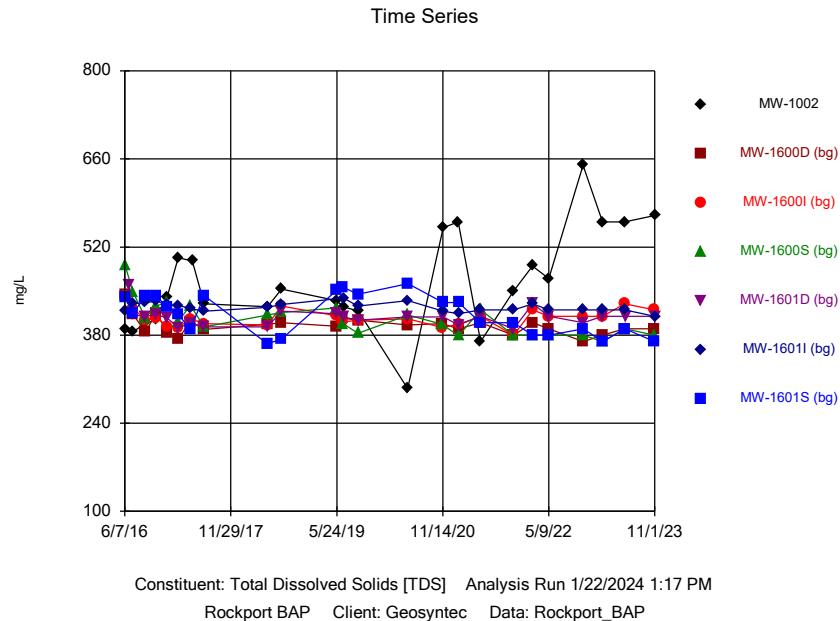
Constituent: Thallium, total Analysis Run 1/22/2024 1:17 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Sanitas™ v.10.0.15 . UG  
Hollow symbols indicate censored values.

Time Series

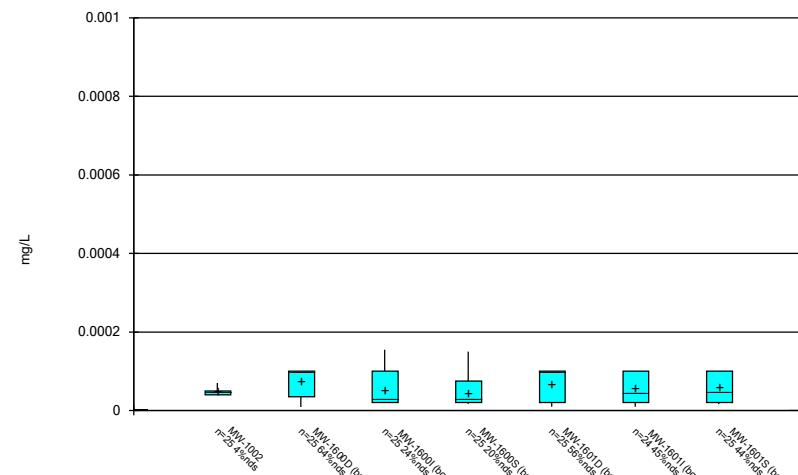


Constituent: Thallium, total Analysis Run 1/22/2024 1:17 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

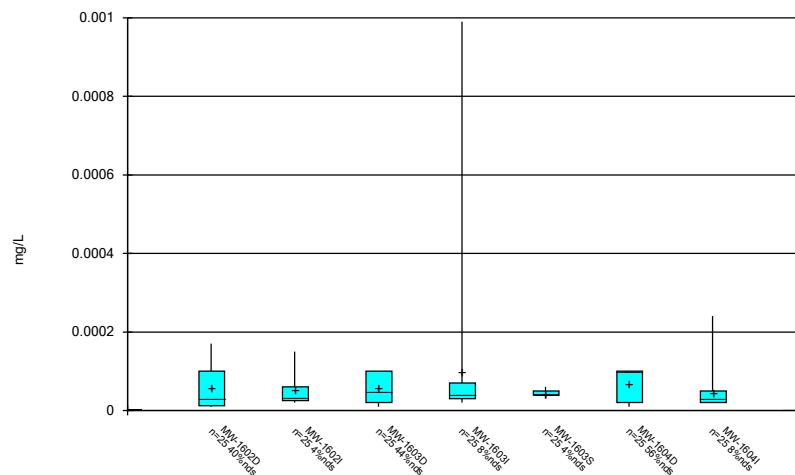


**FIGURE B**  
**Box Plots**

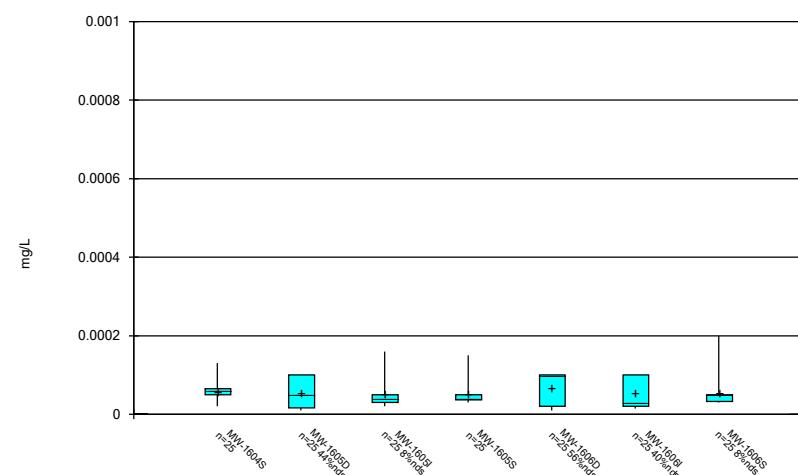
## Box &amp; Whiskers Plot



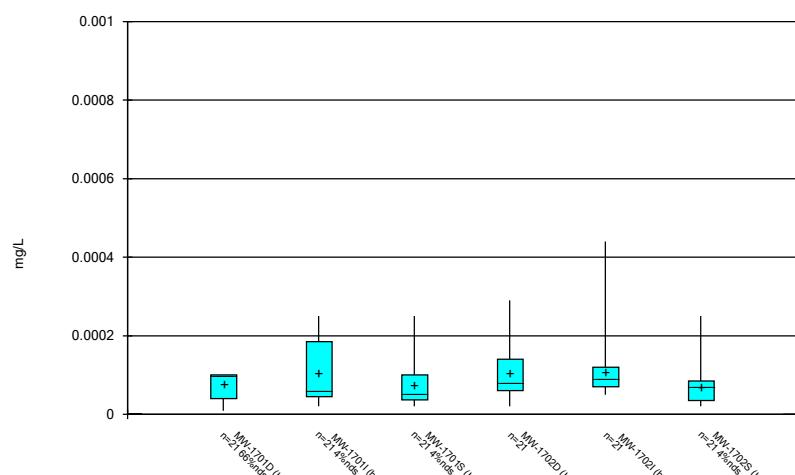
## Box &amp; Whiskers Plot

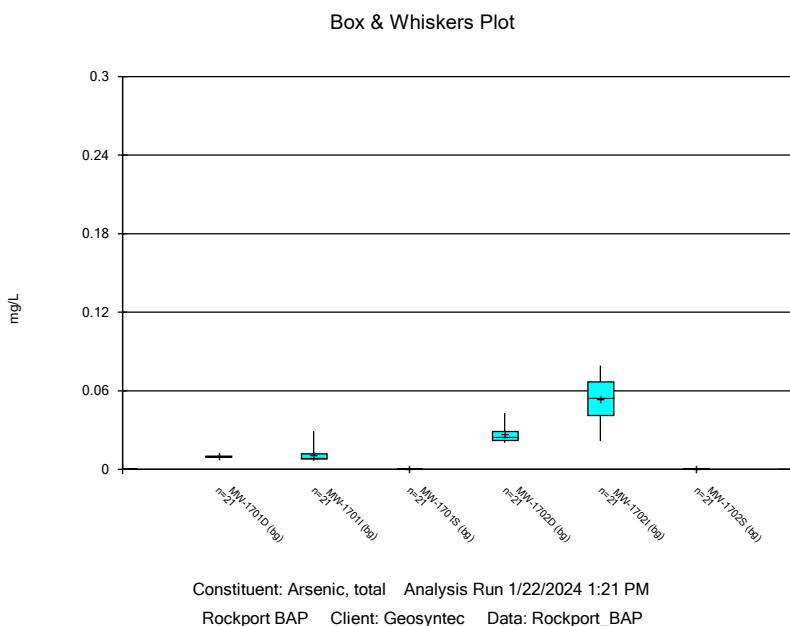
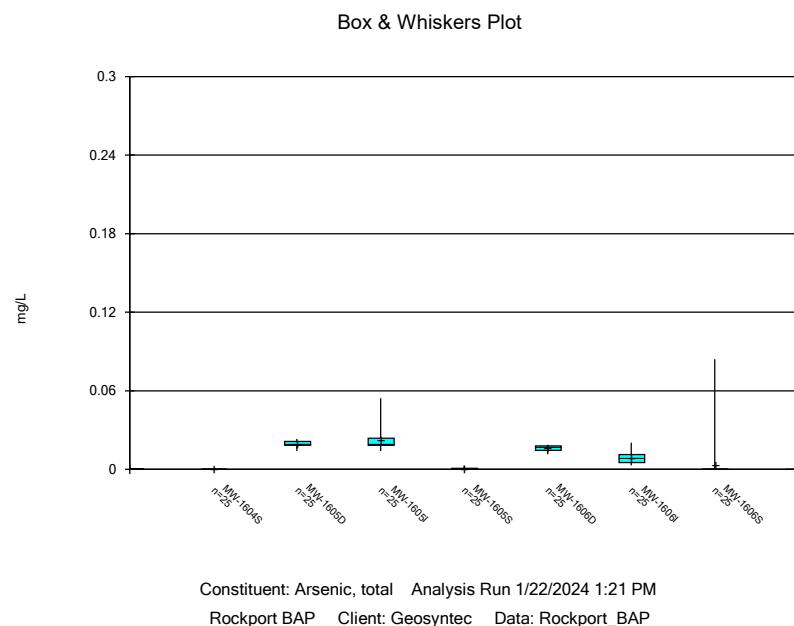
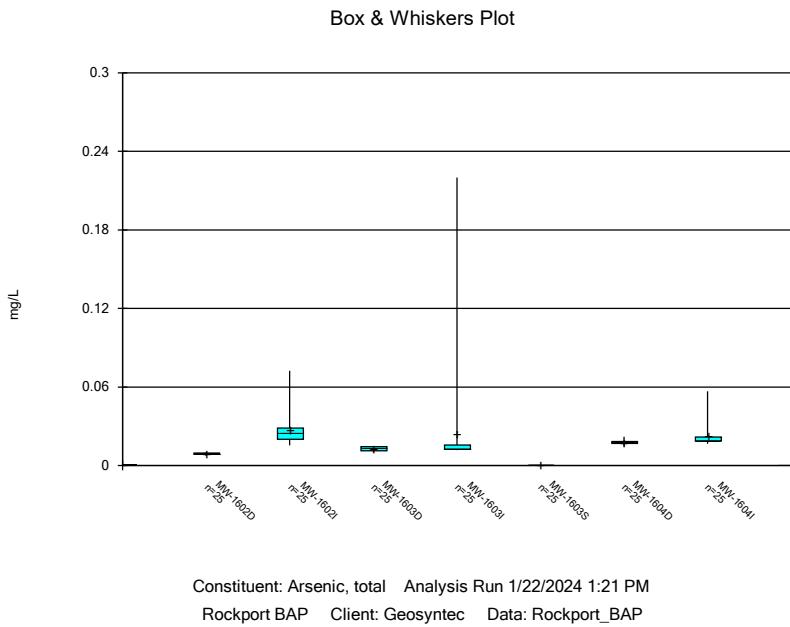
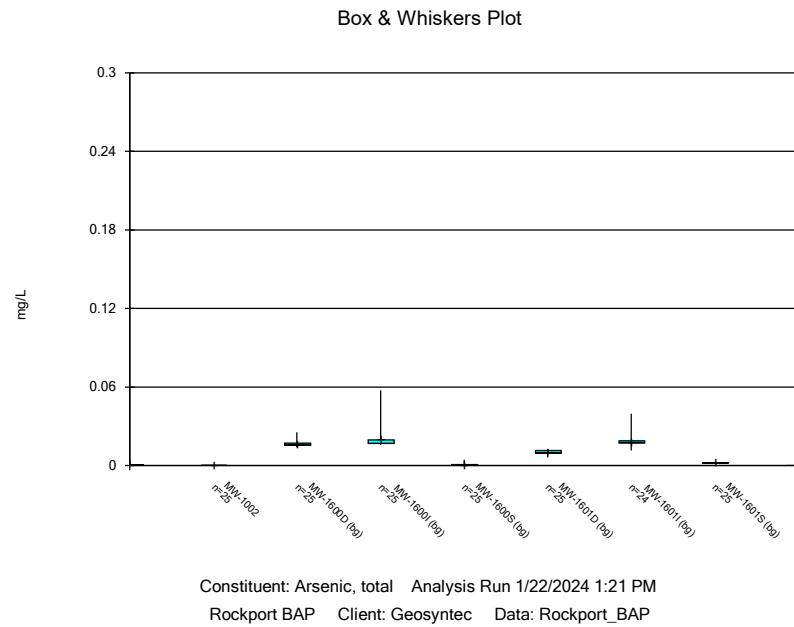


## Box &amp; Whiskers Plot

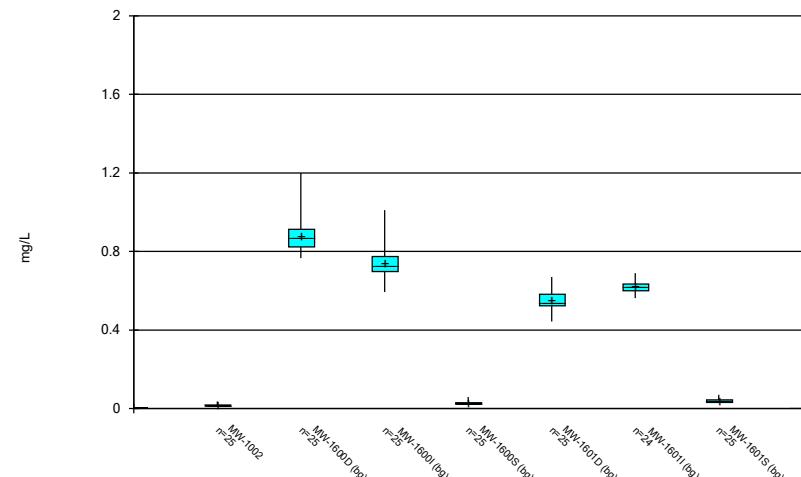


## Box &amp; Whiskers Plot



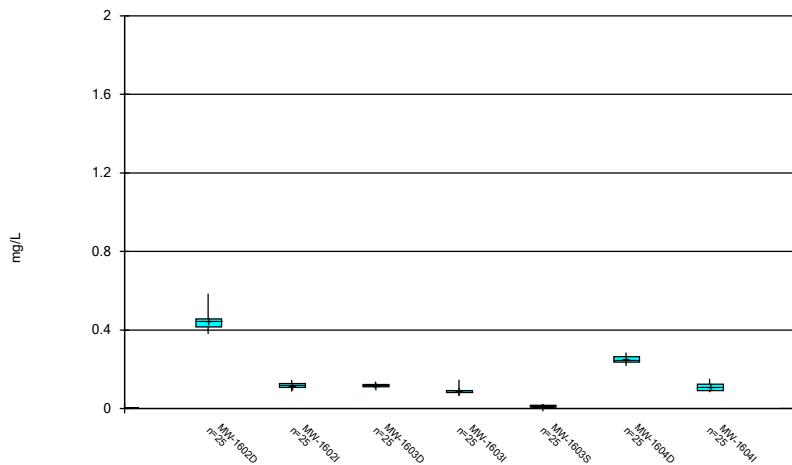


### Box & Whiskers Plot



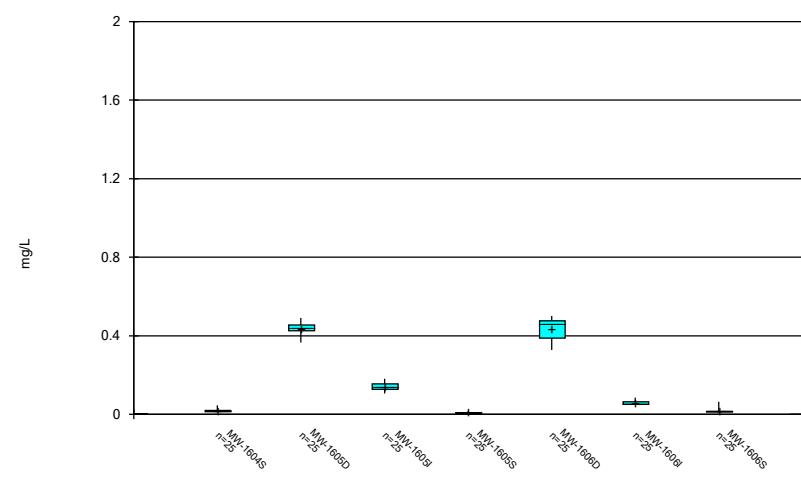
Constituent: Barium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



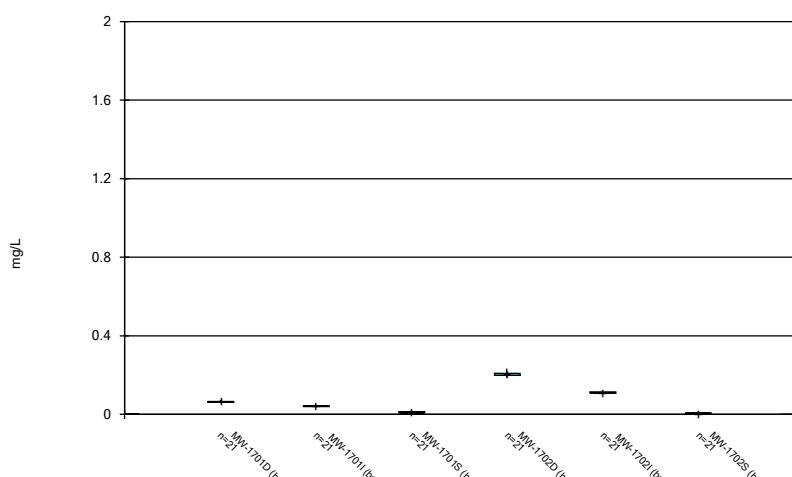
Constituent: Barium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



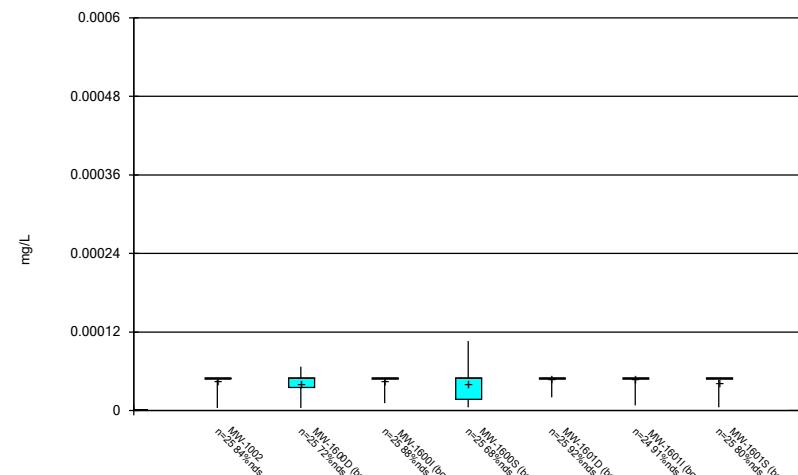
Constituent: Barium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot

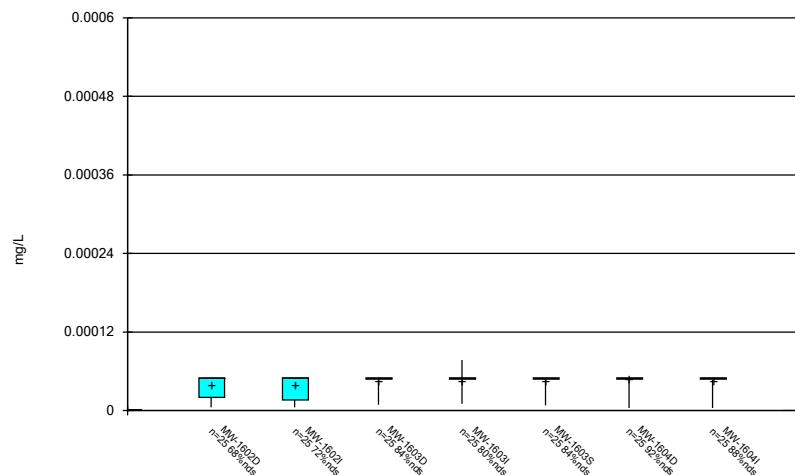


Constituent: Barium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

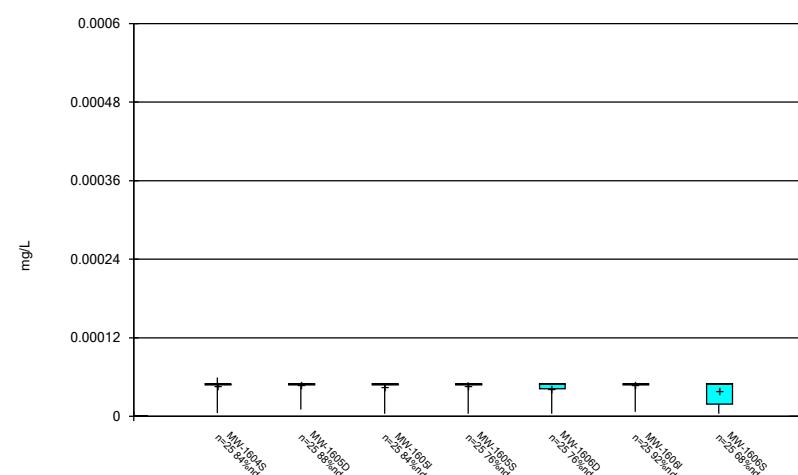
## Box &amp; Whiskers Plot



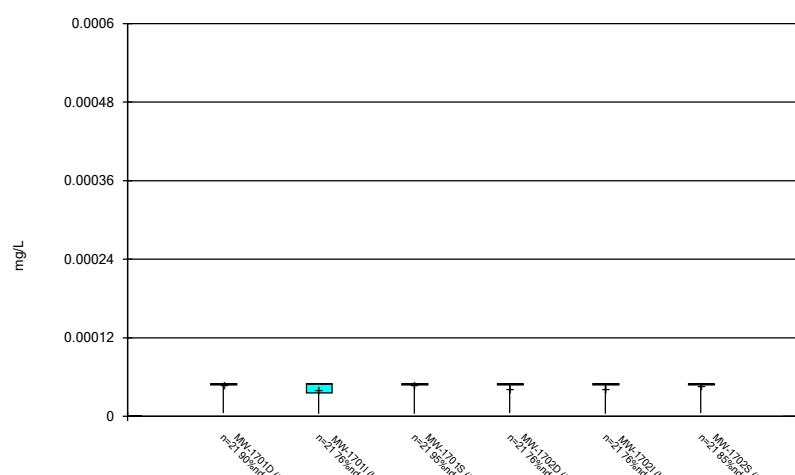
## Box &amp; Whiskers Plot



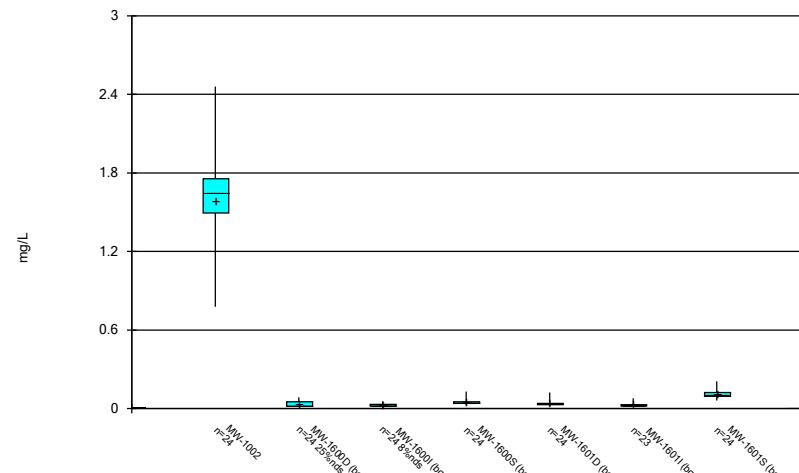
## Box &amp; Whiskers Plot



## Box &amp; Whiskers Plot

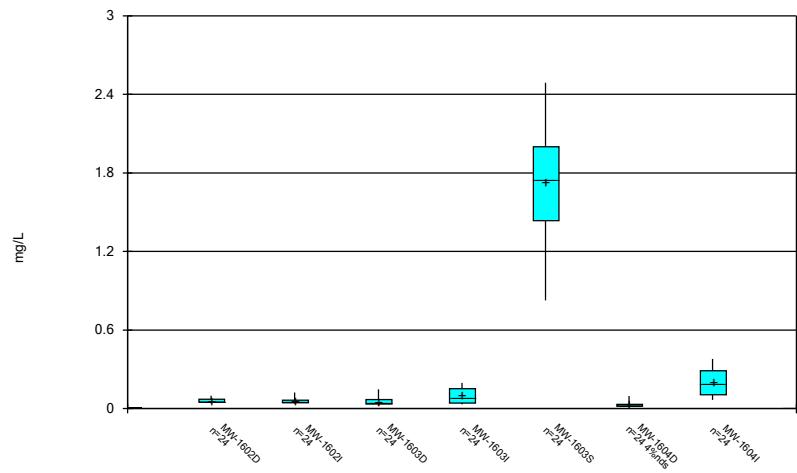


## Box &amp; Whiskers Plot



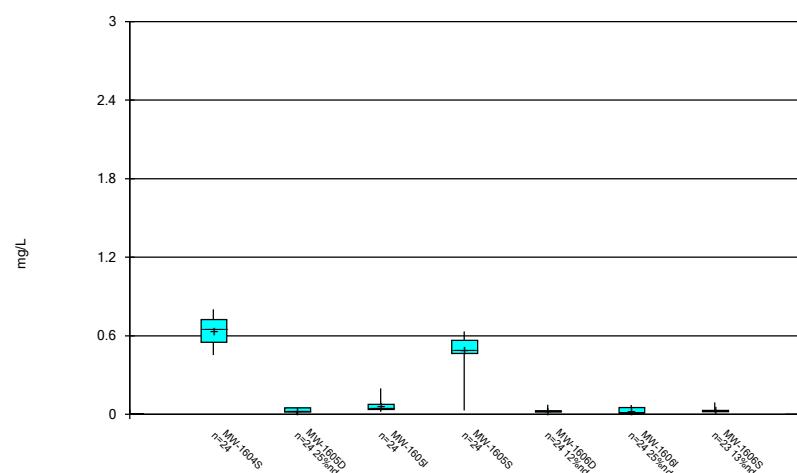
Constituent: Boron, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



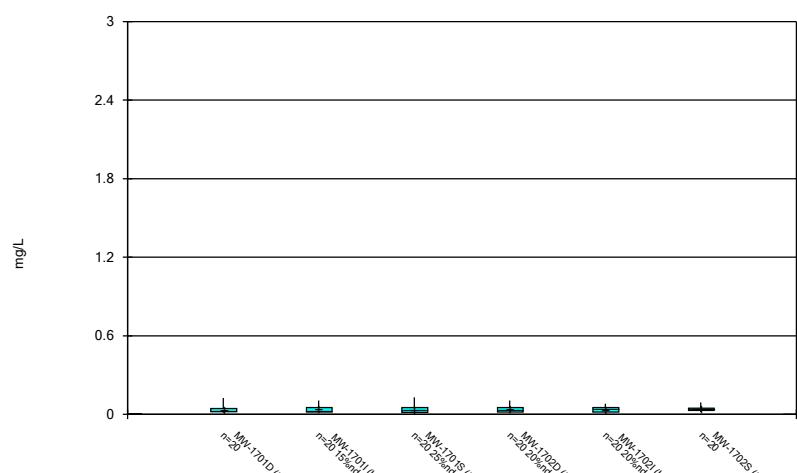
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



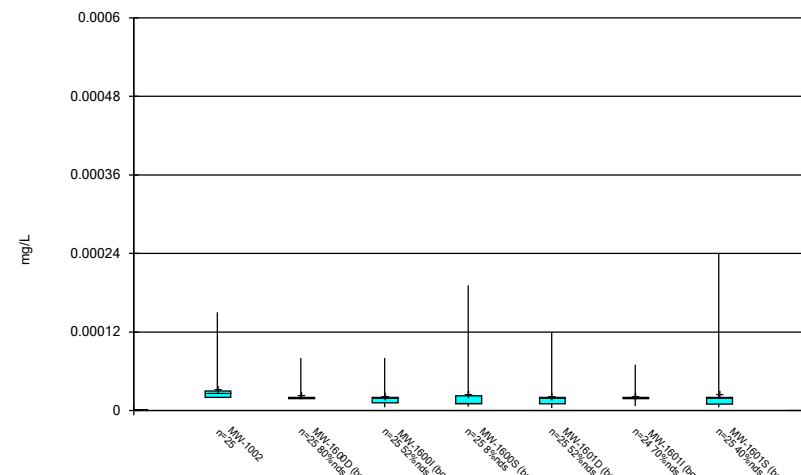
Constituent: Boron, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



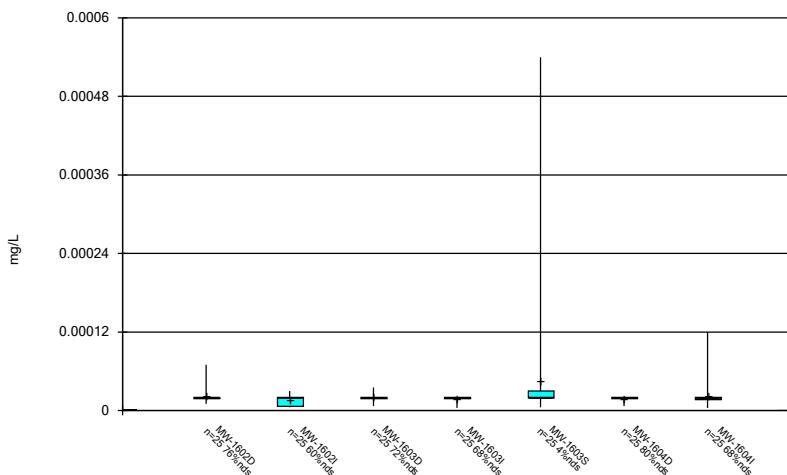
Constituent: Boron, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



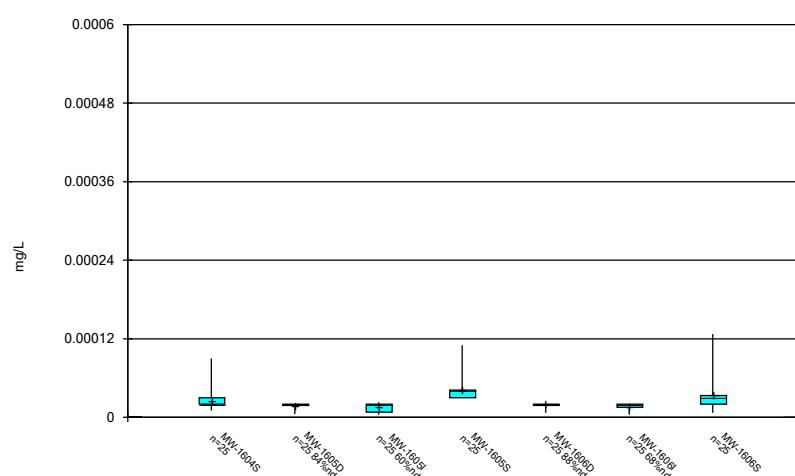
Constituent: Cadmium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



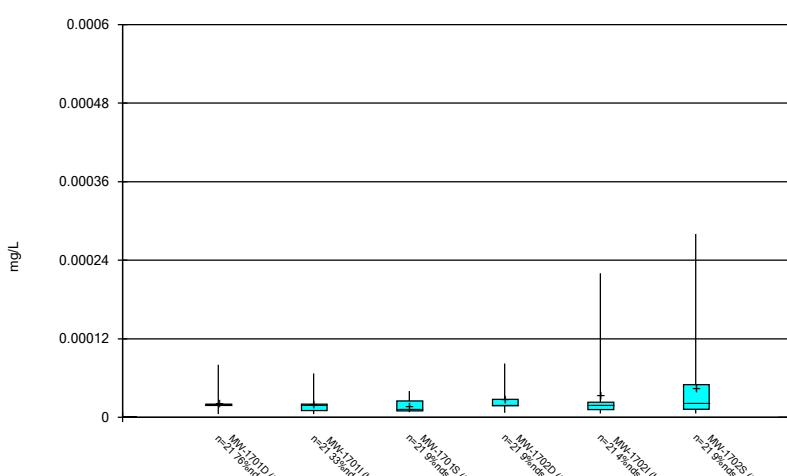
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



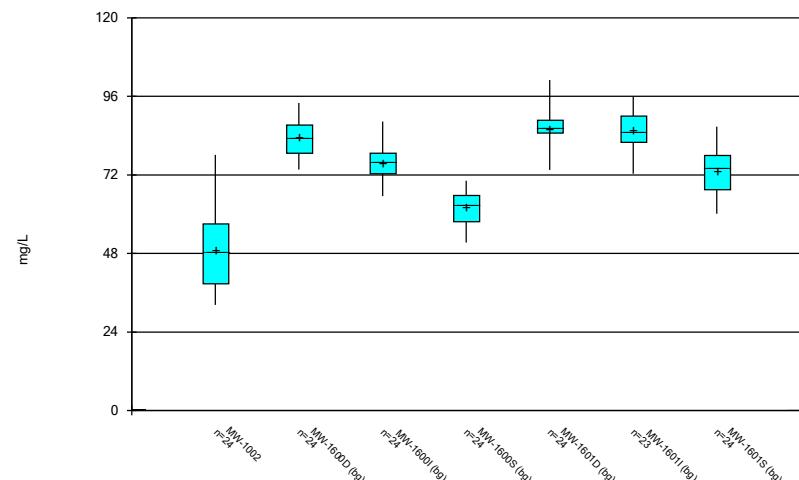
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



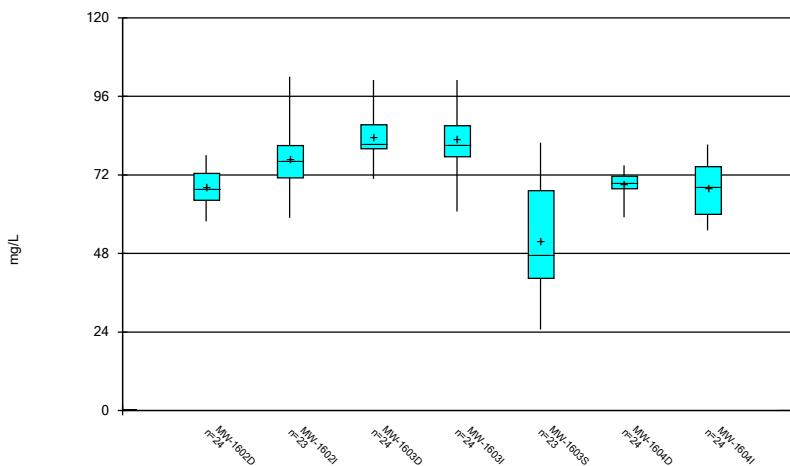
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



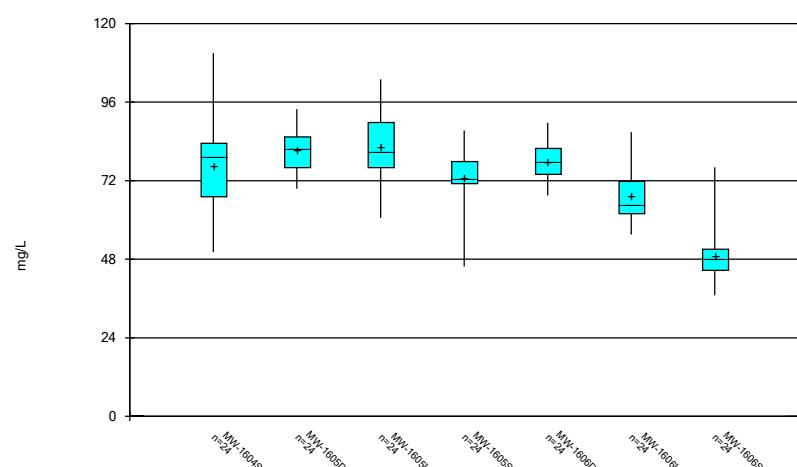
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



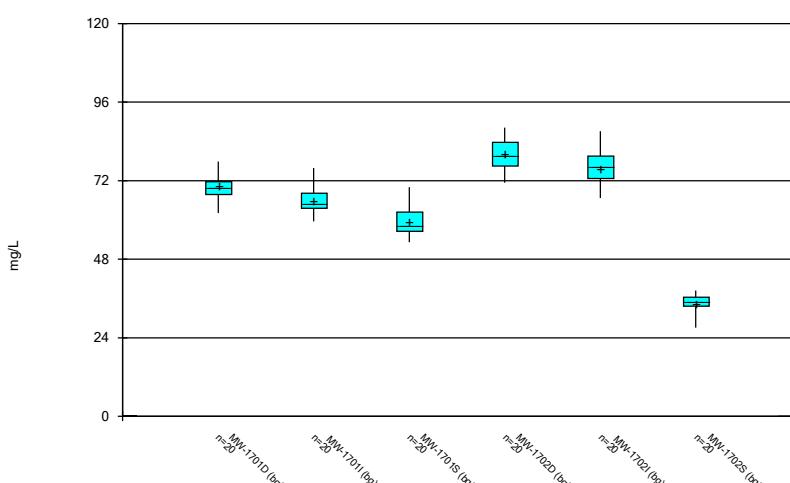
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



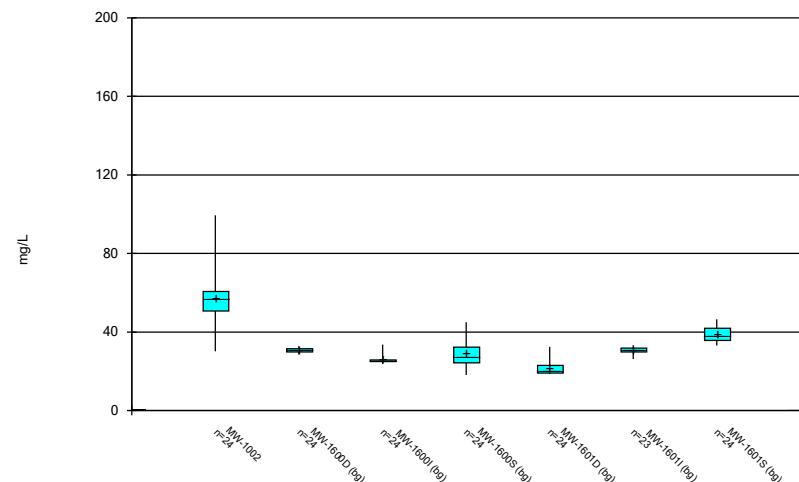
Constituent: Calcium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



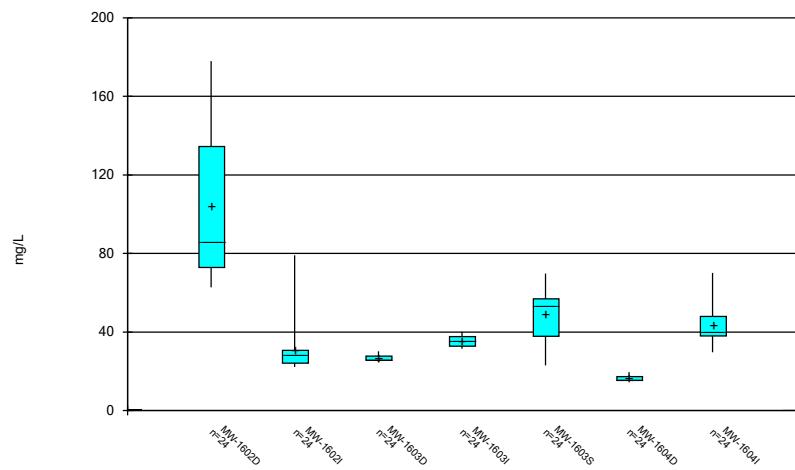
Constituent: Calcium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



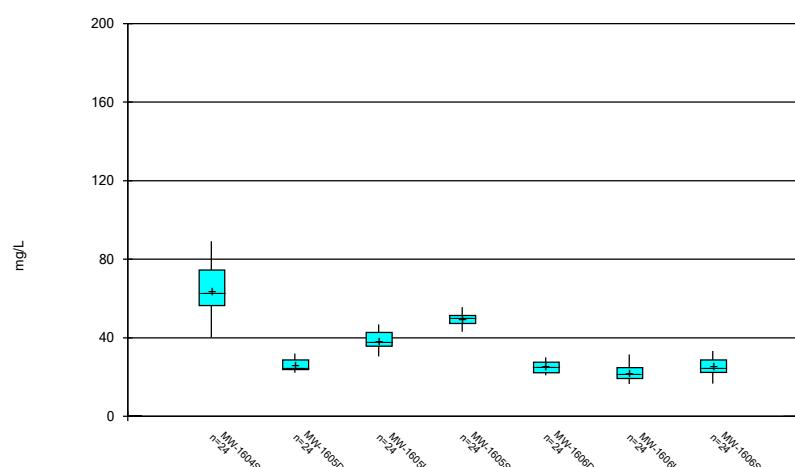
Constituent: Chloride, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



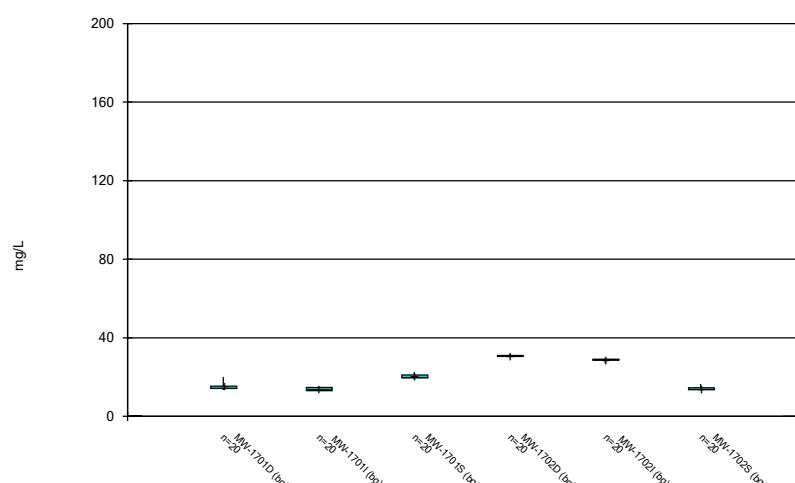
Constituent: Chloride, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



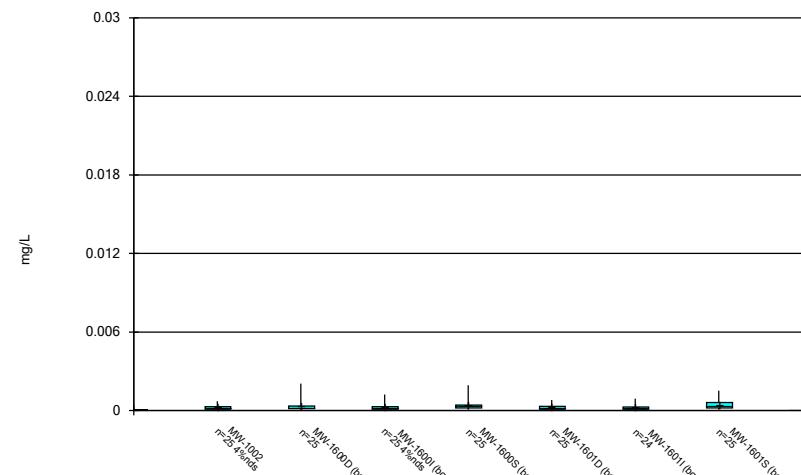
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



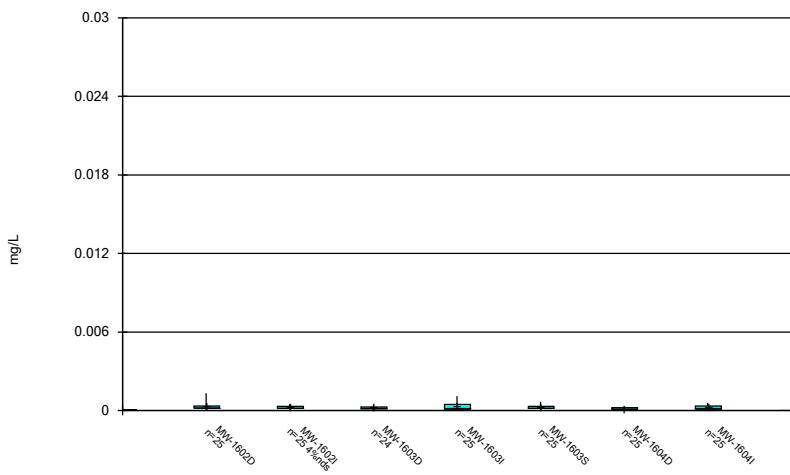
Constituent: Chloride, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



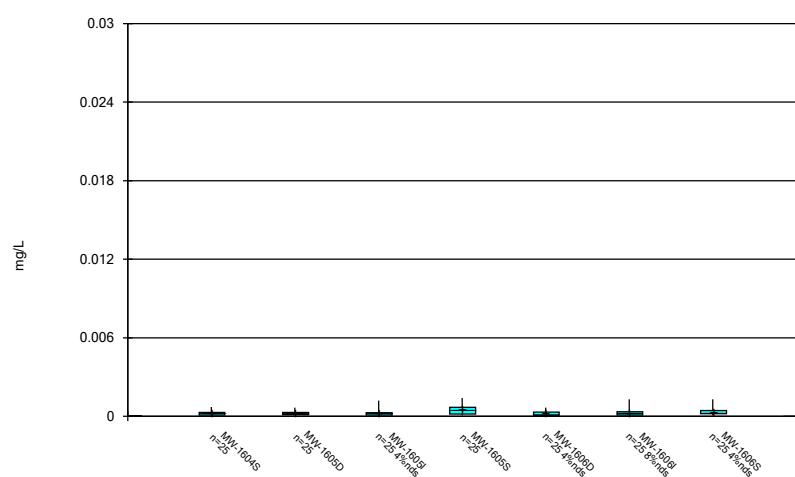
Constituent: Chromium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



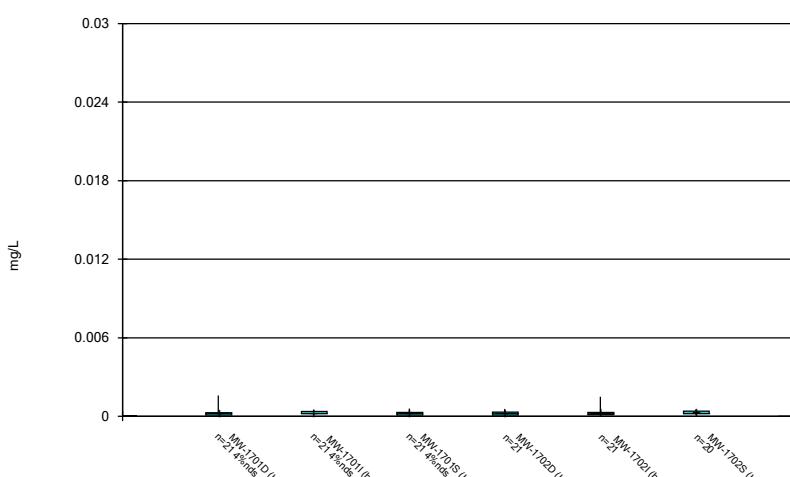
Constituent: Chromium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



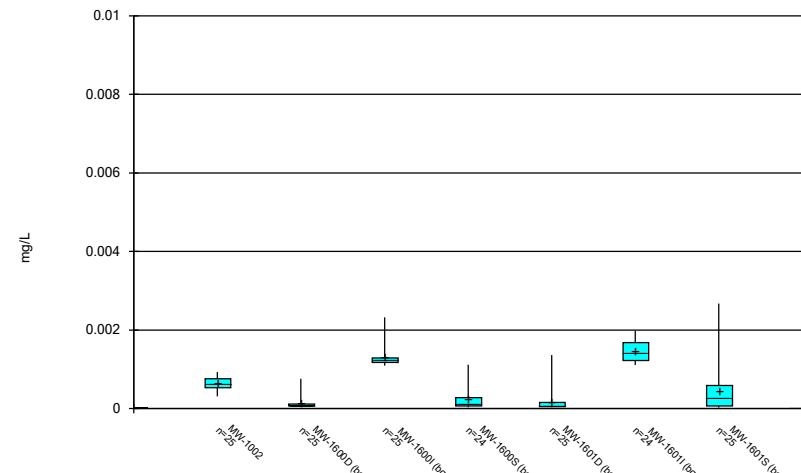
Constituent: Chromium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot

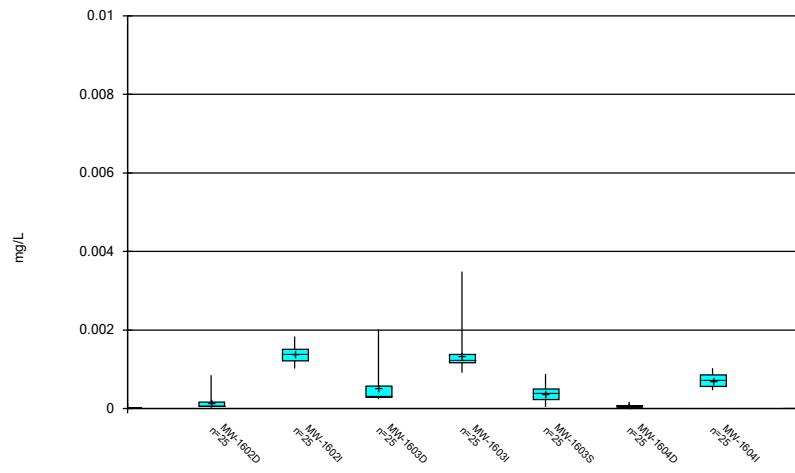


Constituent: Chromium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

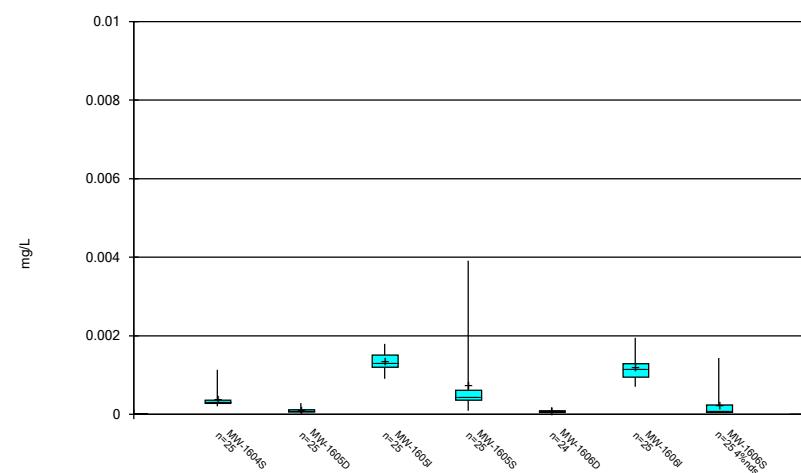
### Box & Whiskers Plot



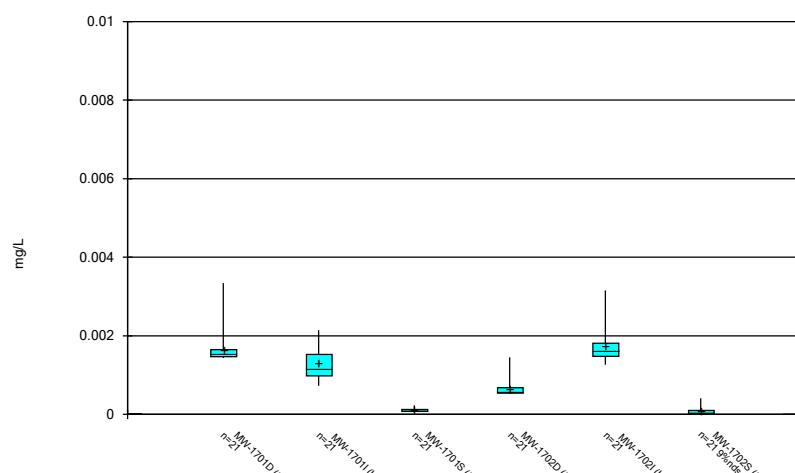
### Box & Whiskers Plot



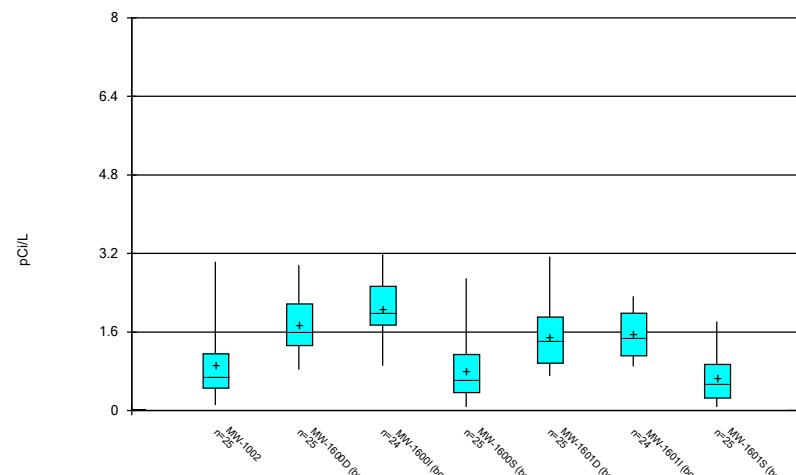
### Box & Whiskers Plot



### Box & Whiskers Plot

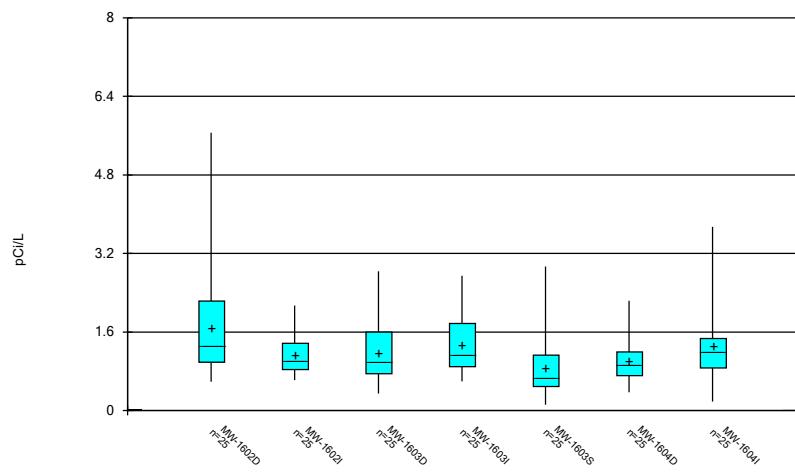


## Box &amp; Whiskers Plot



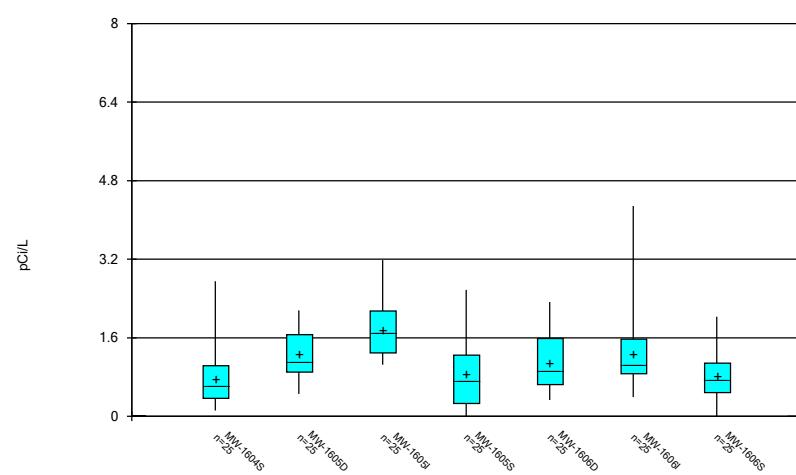
Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



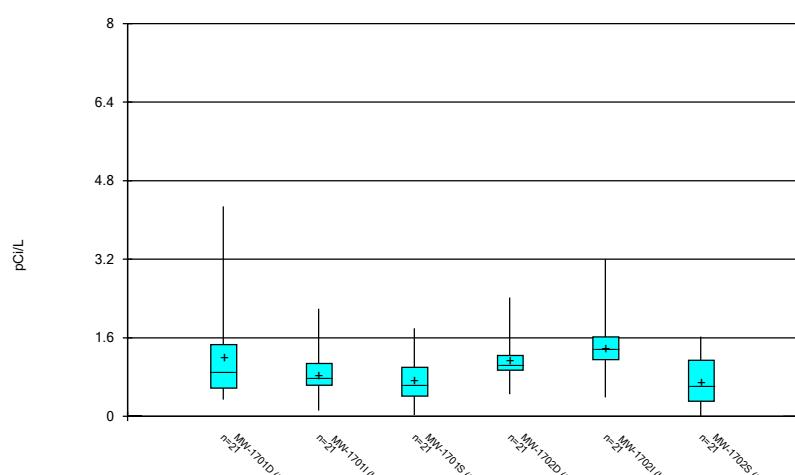
Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



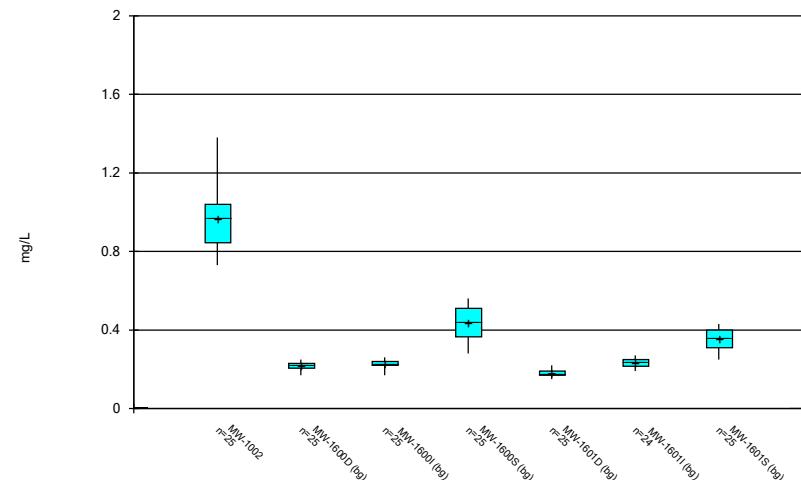
Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



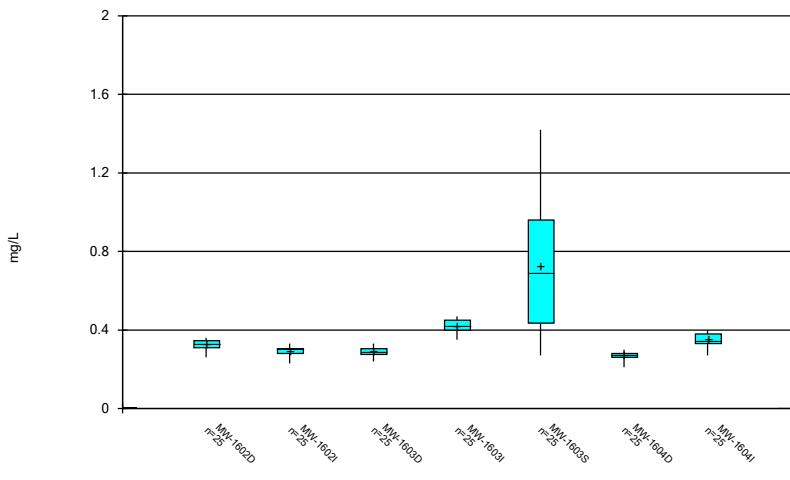
Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



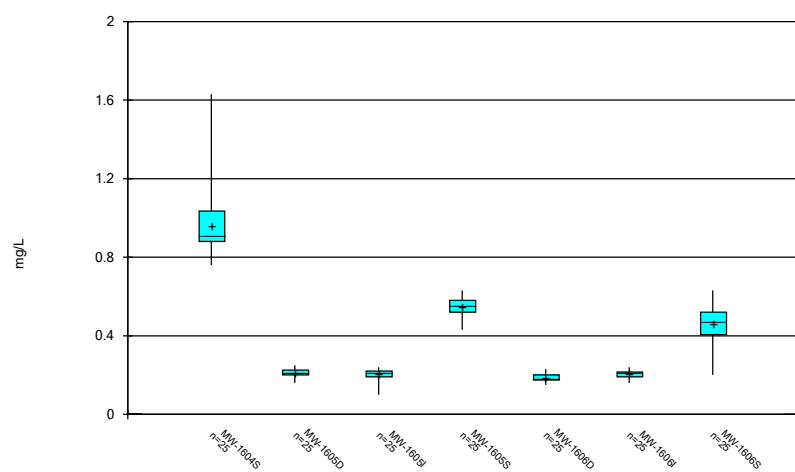
Constituent: Fluoride, total Analysis Run 1/22/2024 1:21 PM  
 Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



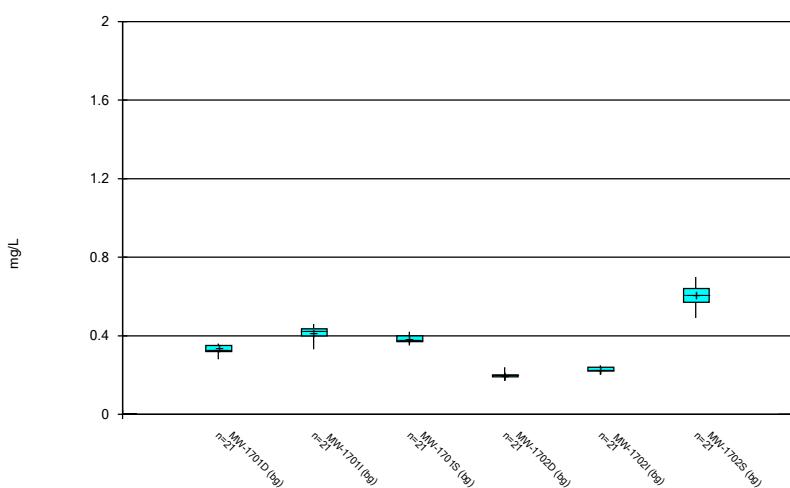
Constituent: Fluoride, total Analysis Run 1/22/2024 1:21 PM  
 Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



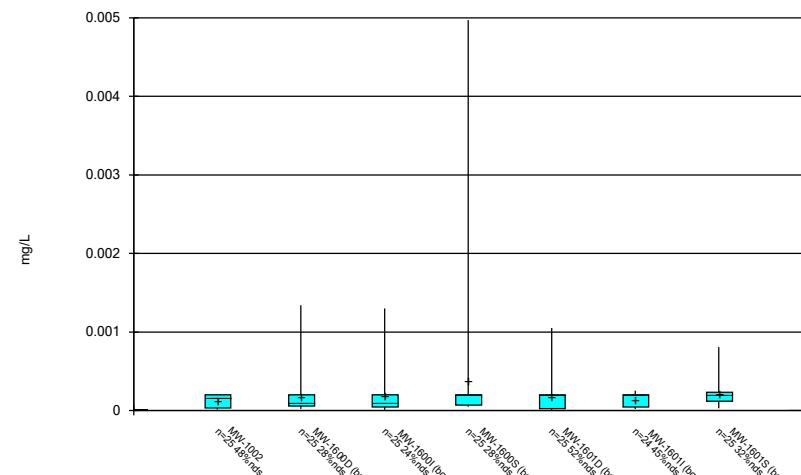
Constituent: Fluoride, total Analysis Run 1/22/2024 1:21 PM  
 Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



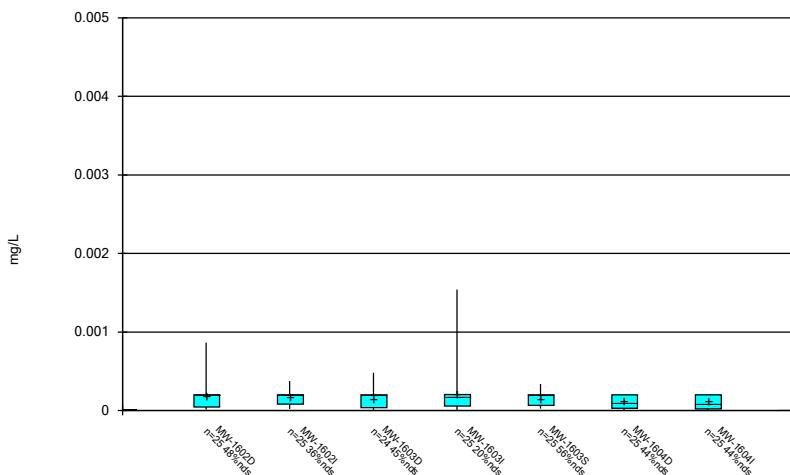
Constituent: Fluoride, total Analysis Run 1/22/2024 1:21 PM  
 Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



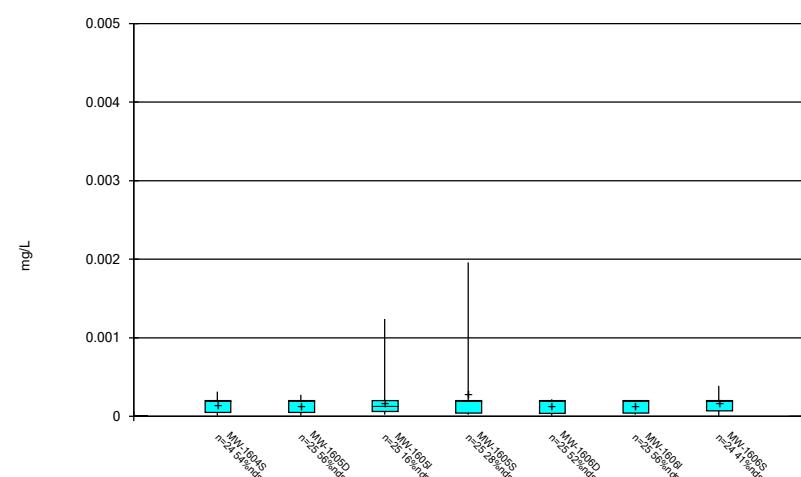
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



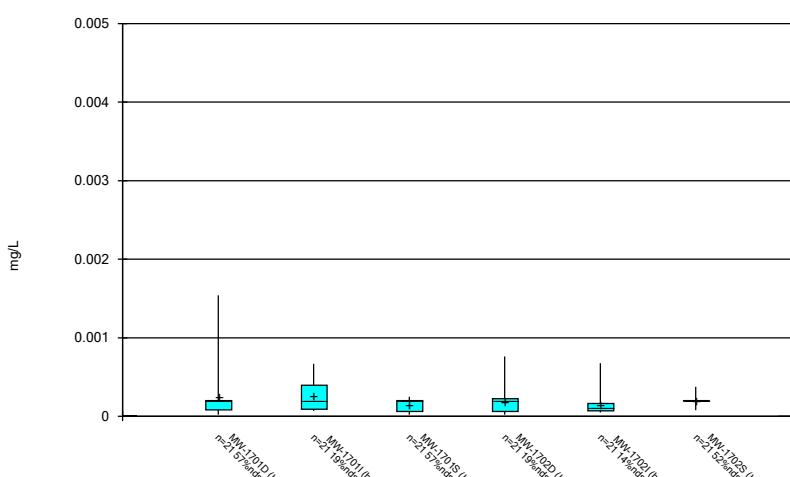
Constituent: Lead, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



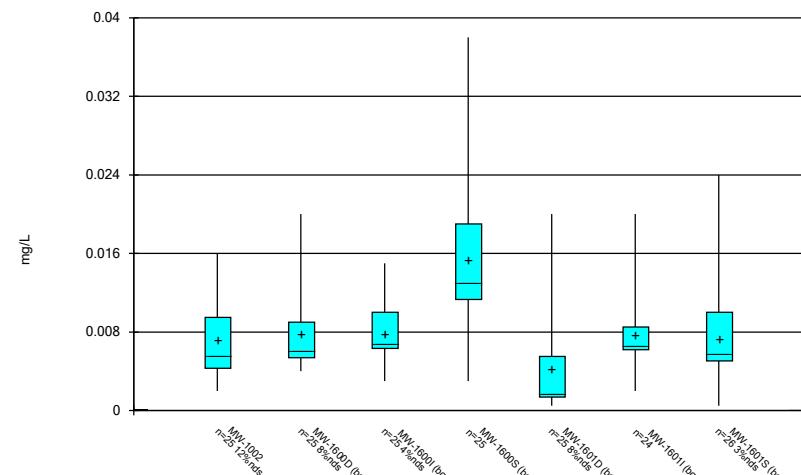
Constituent: Lead, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



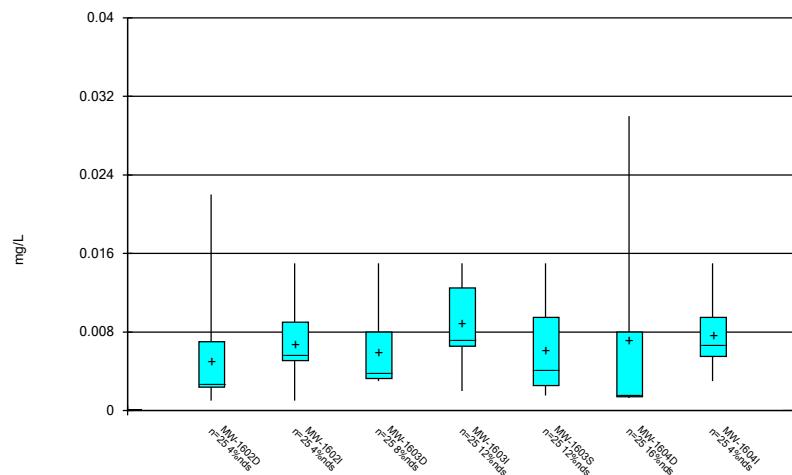
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



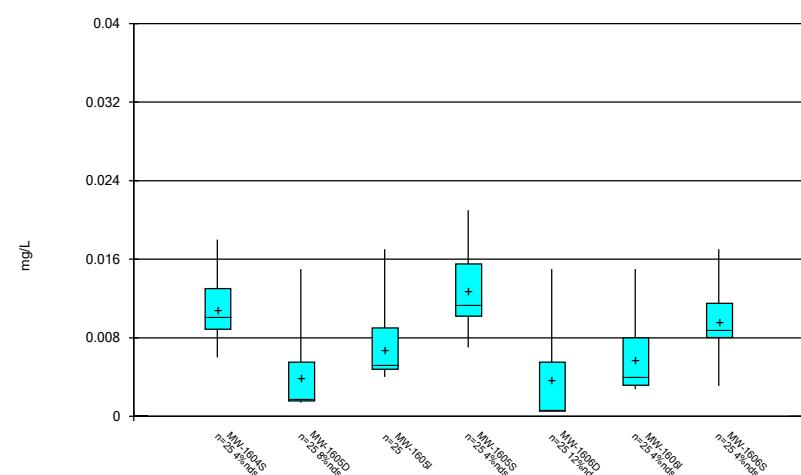
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



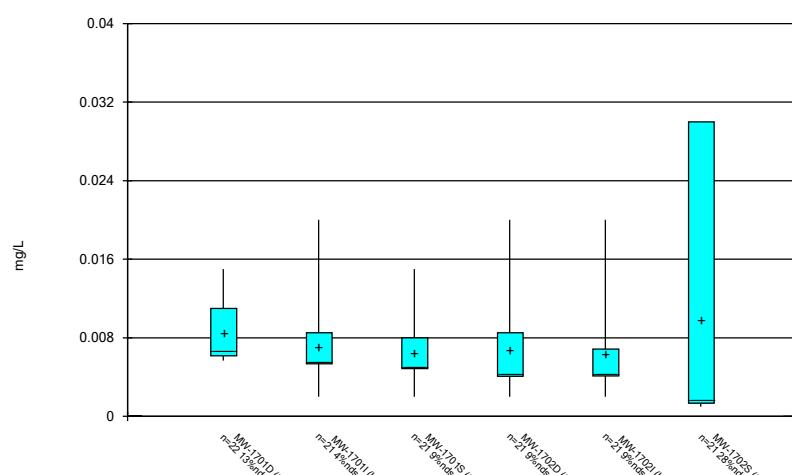
Constituent: Lithium, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



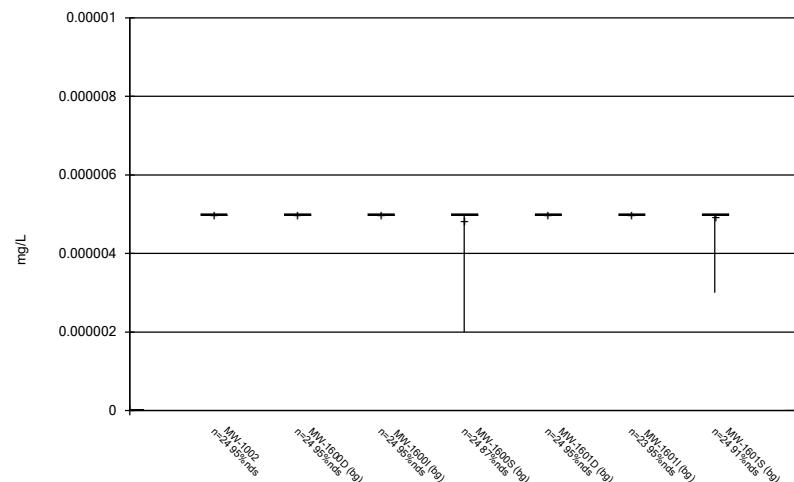
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



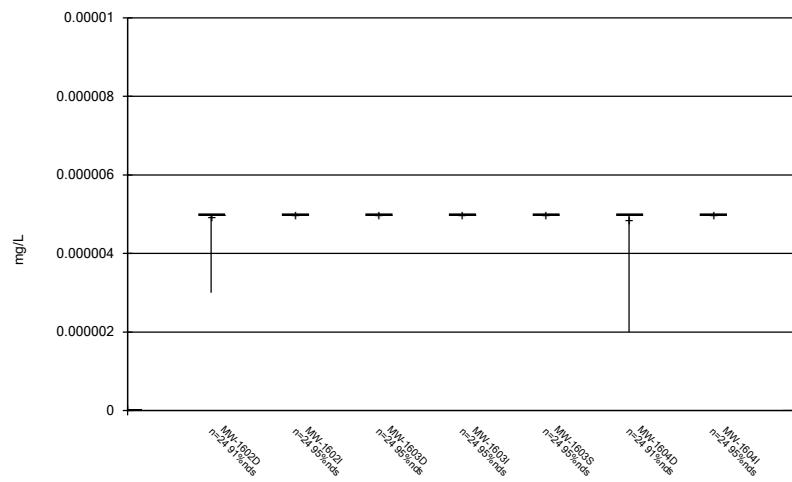
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



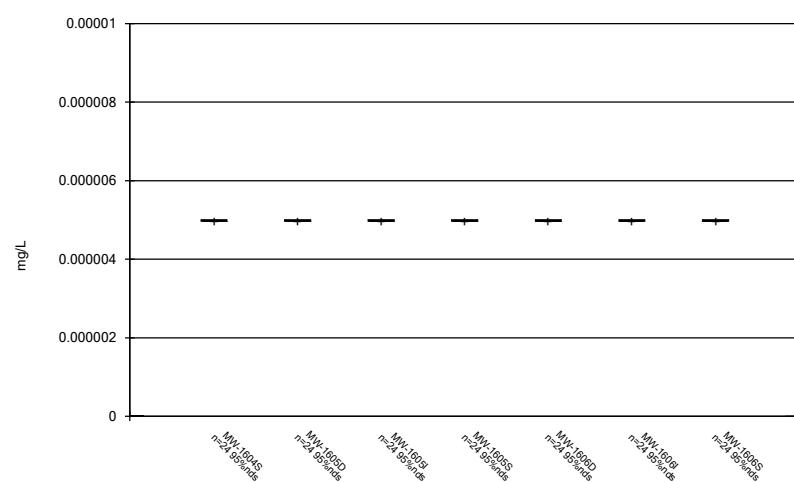
Constituent: Mercury, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



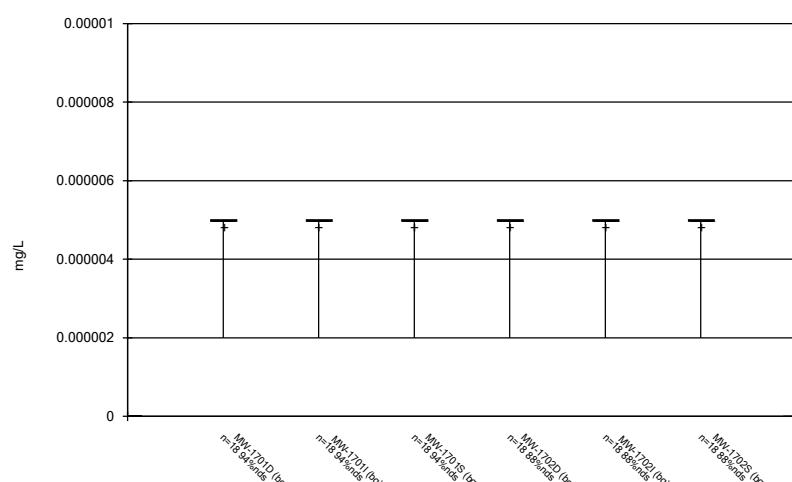
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



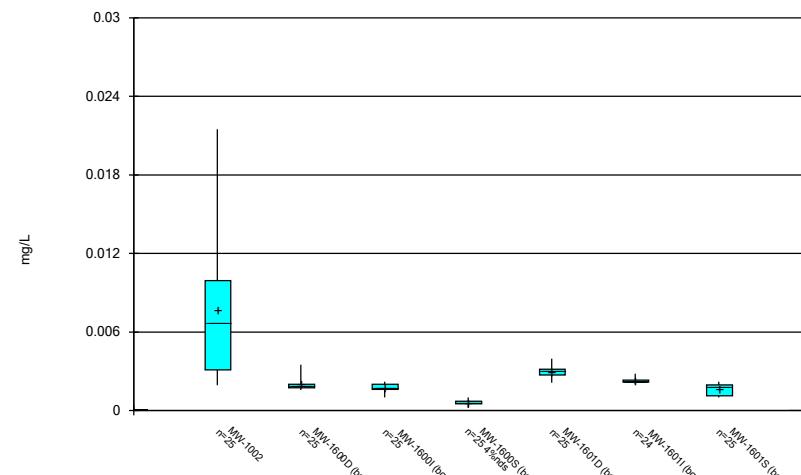
Constituent: Mercury, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot

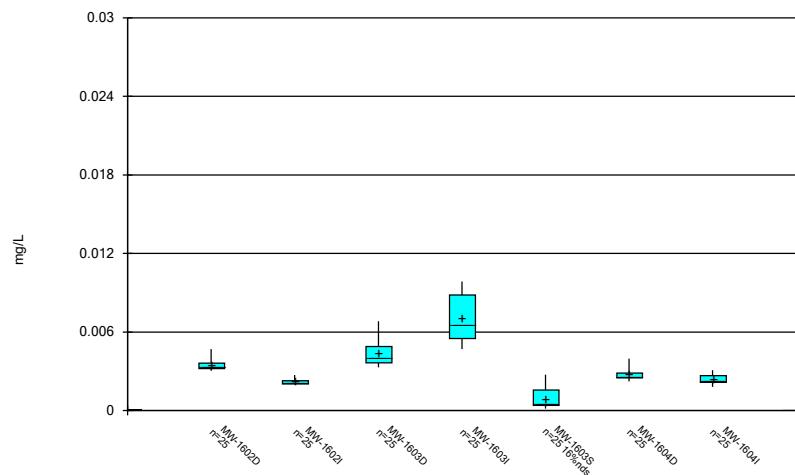


Constituent: Mercury, total Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

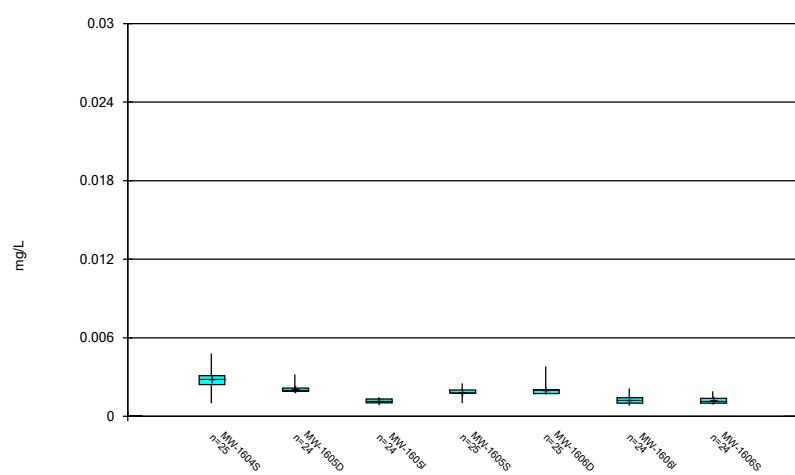
## Box &amp; Whiskers Plot



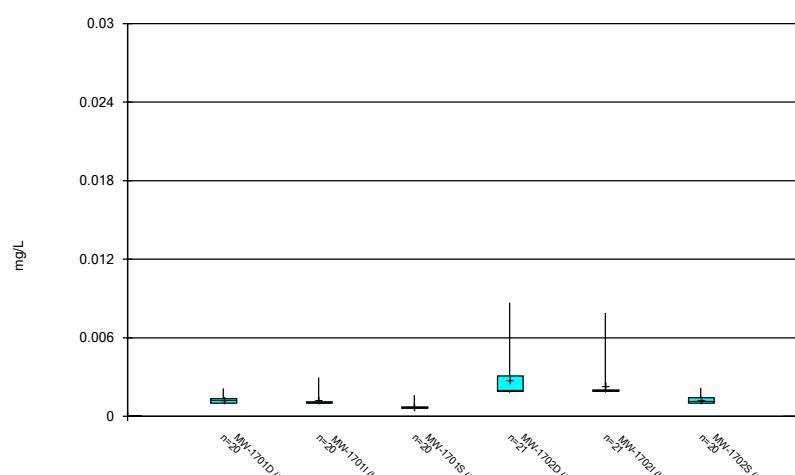
## Box &amp; Whiskers Plot



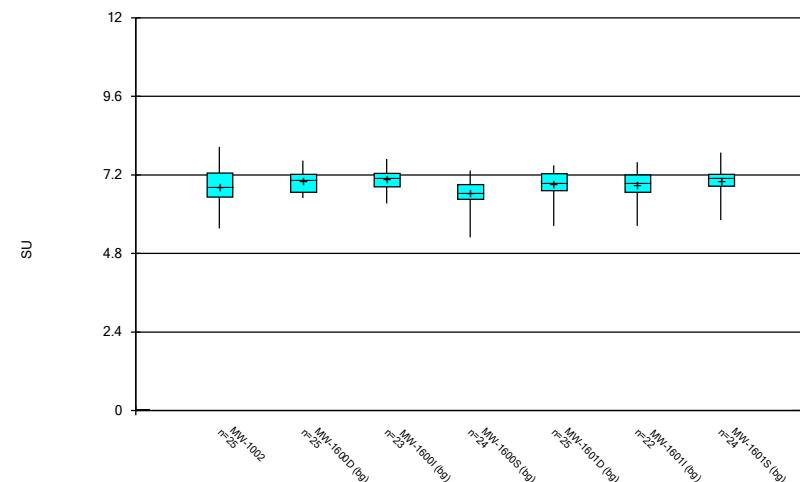
## Box &amp; Whiskers Plot



## Box &amp; Whiskers Plot

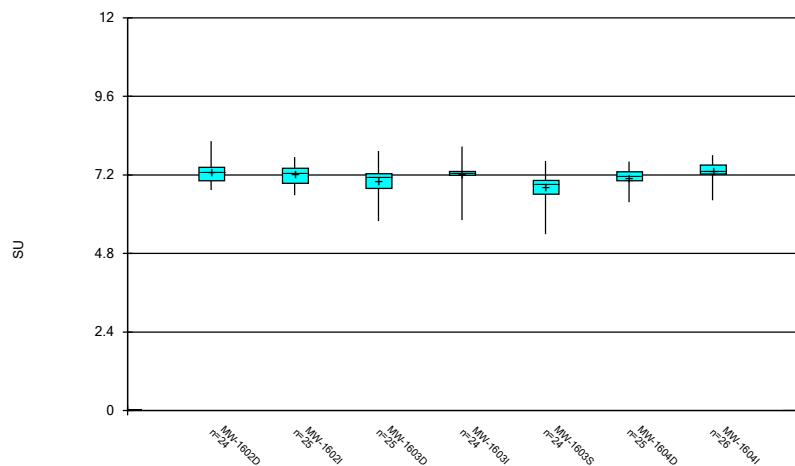


## Box &amp; Whiskers Plot



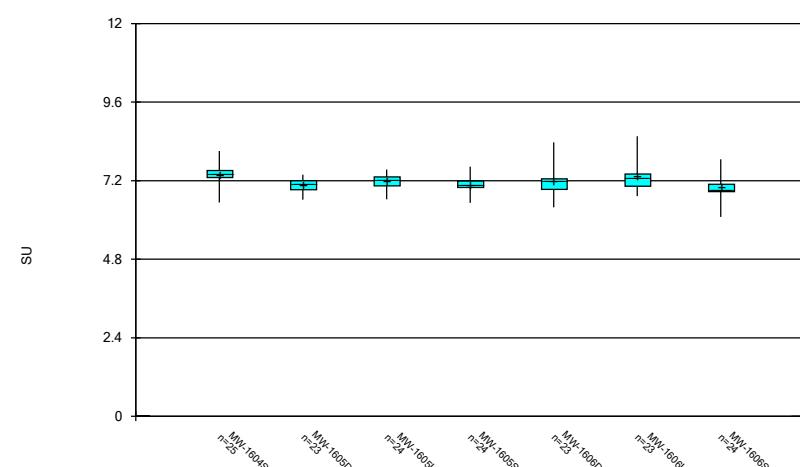
Constituent: pH, field Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



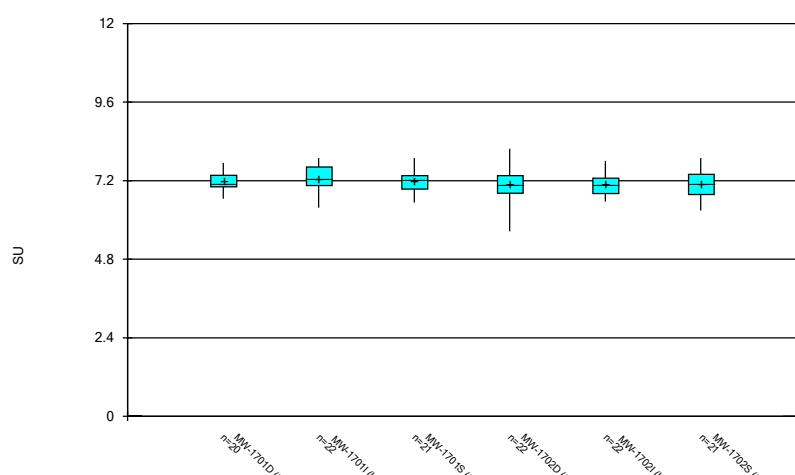
Constituent: pH, field Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



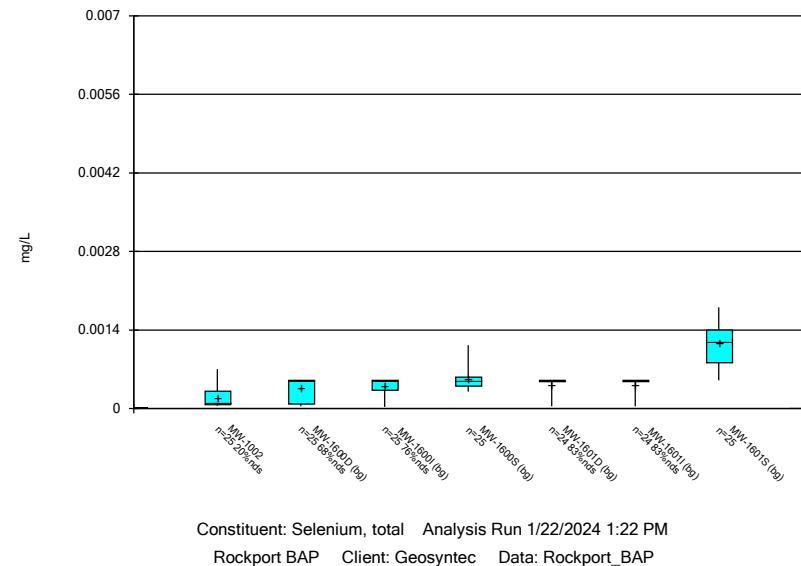
Constituent: pH, field Analysis Run 1/22/2024 1:21 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot

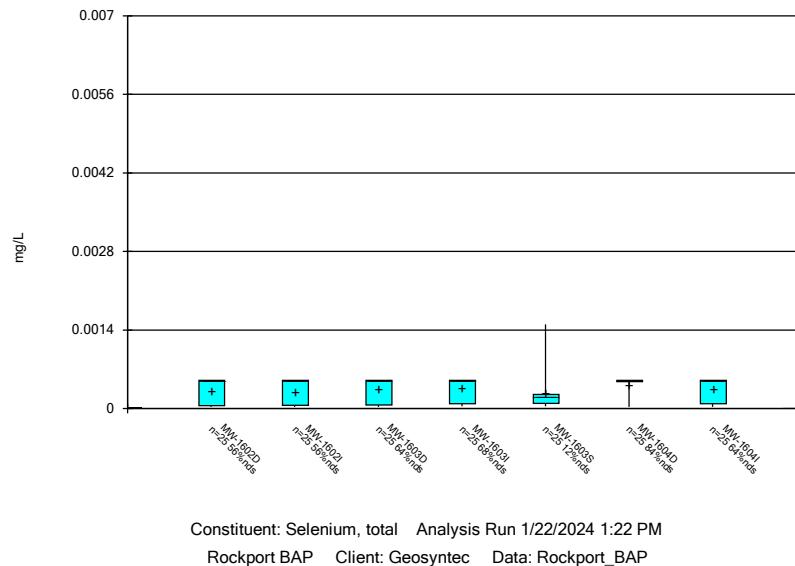


Constituent: pH, field Analysis Run 1/22/2024 1:22 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

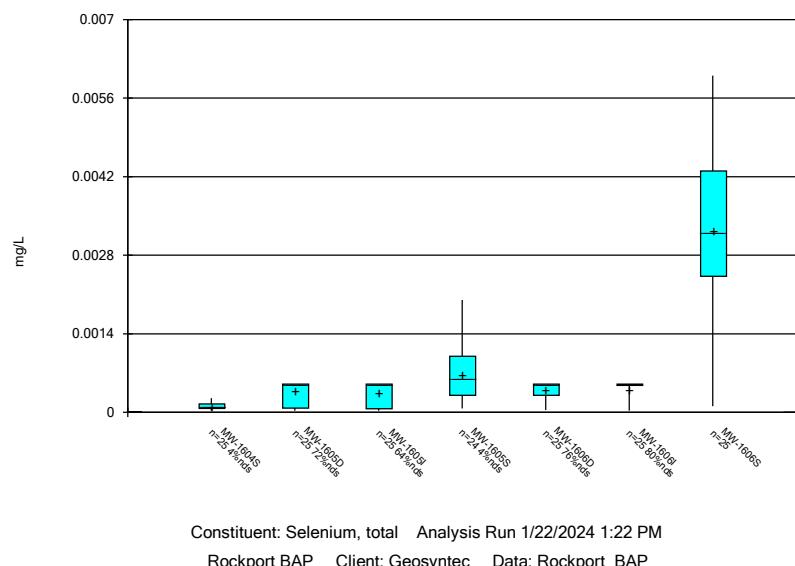
### Box & Whiskers Plot



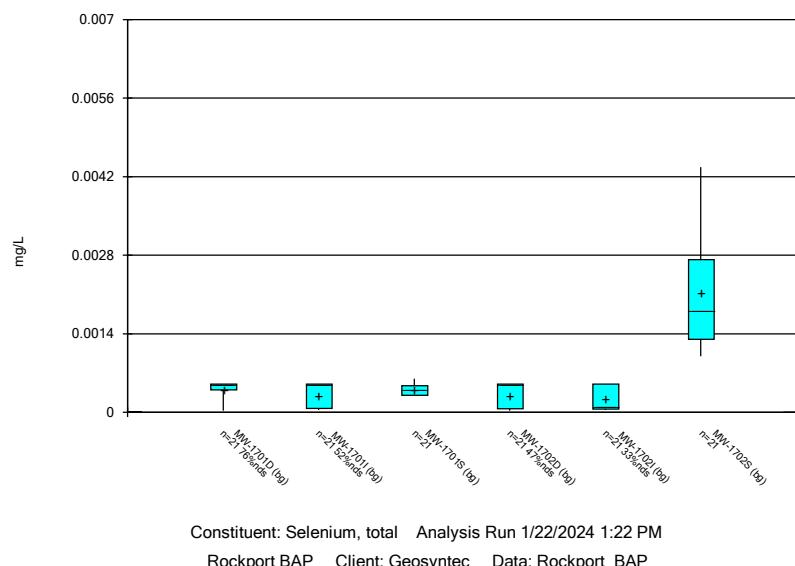
### Box & Whiskers Plot



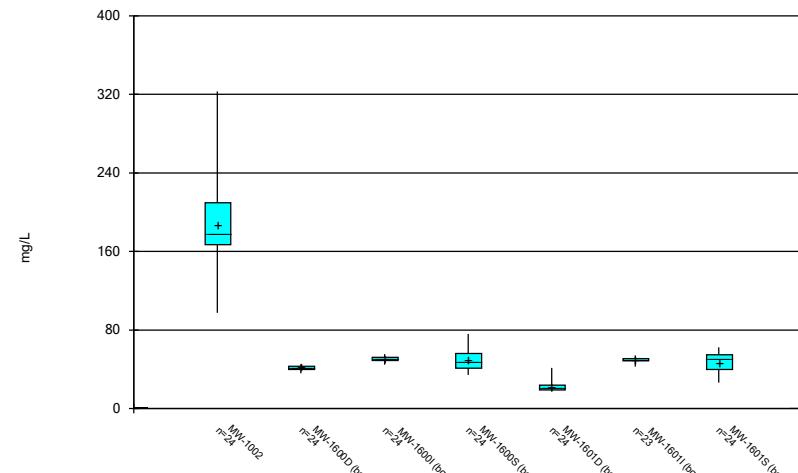
### Box & Whiskers Plot



### Box & Whiskers Plot

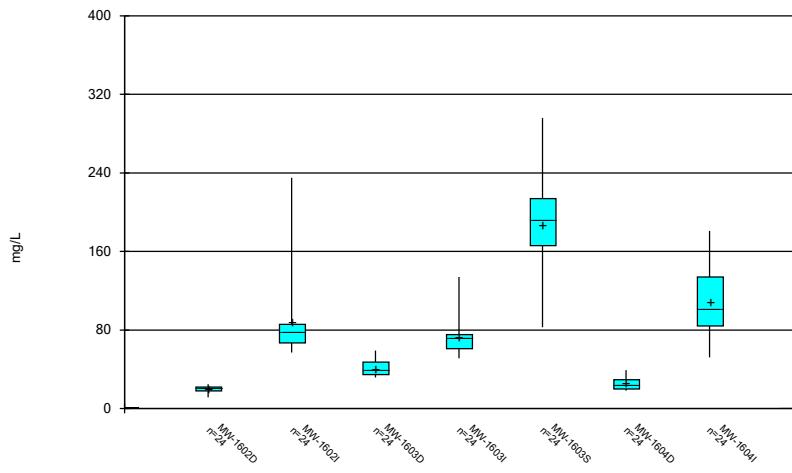


### Box & Whiskers Plot



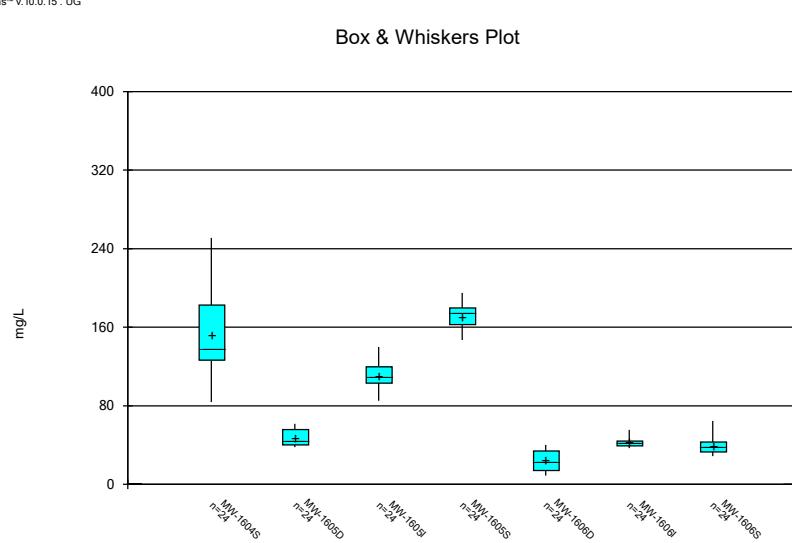
Constituent: Sulfate, total Analysis Run 1/22/2024 1:22 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



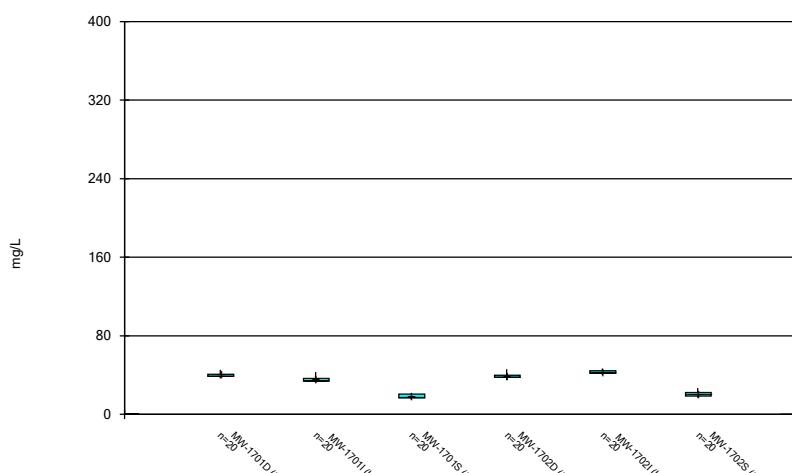
Constituent: Sulfate, total Analysis Run 1/22/2024 1:22 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot

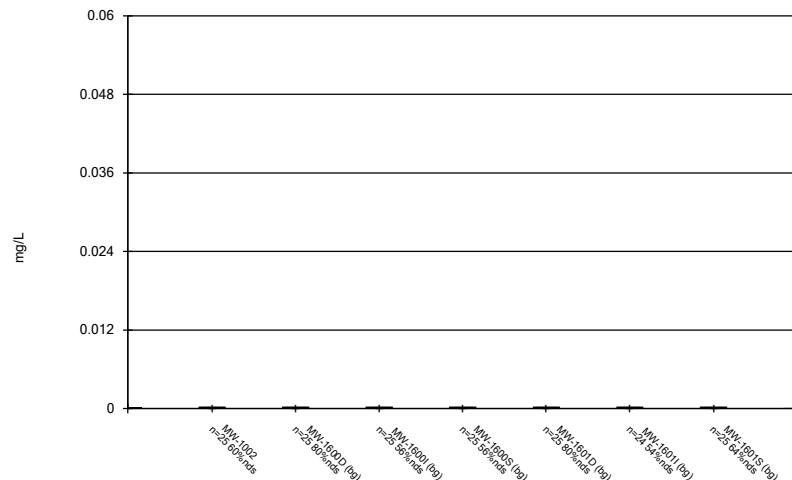


Constituent: Sulfate, total Analysis Run 1/22/2024 1:22 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

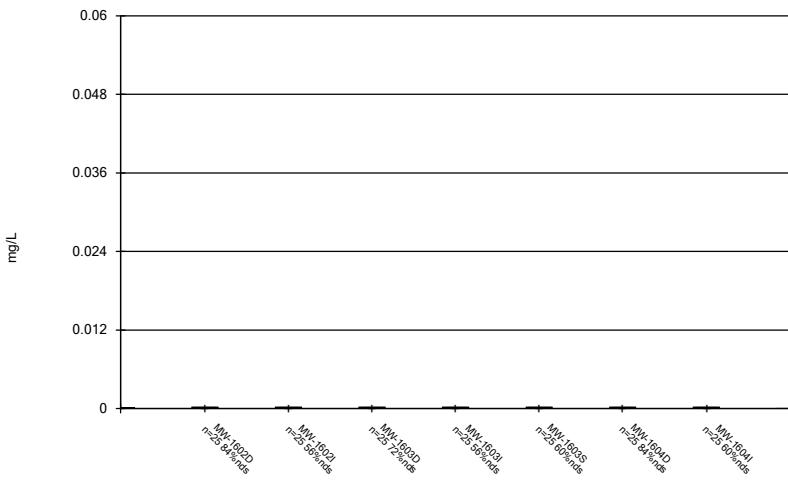
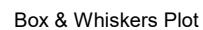
### Box & Whiskers Plot



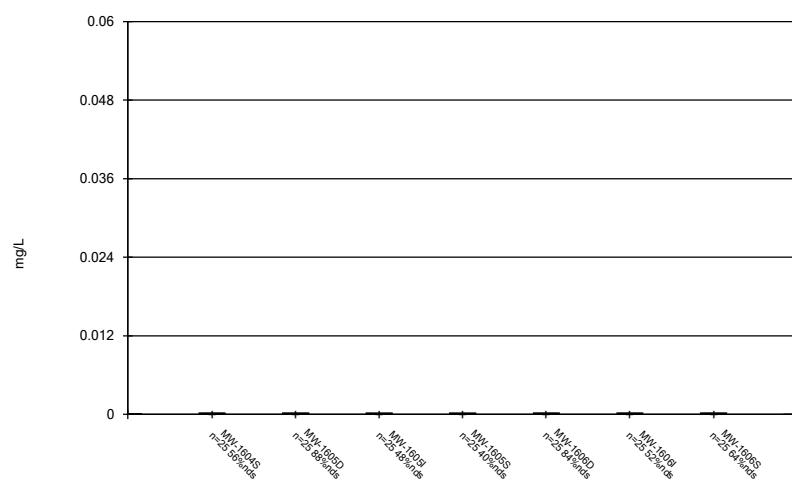
Constituent: Sulfate, total Analysis Run 1/22/2024 1:22 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



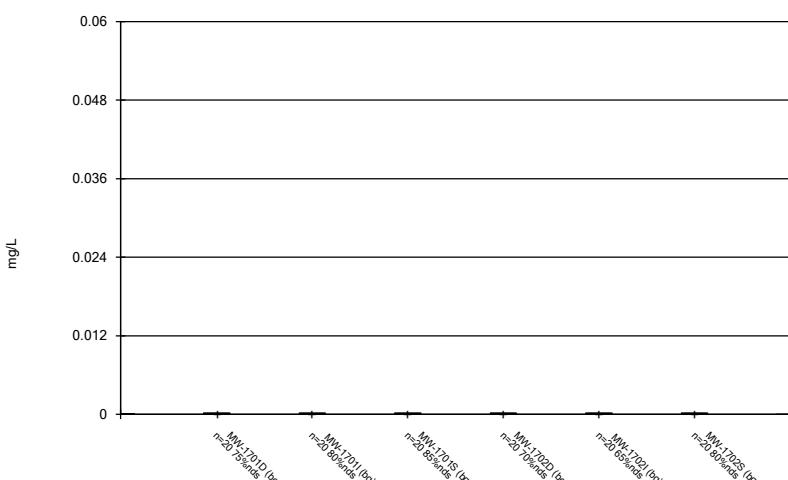
Constituent: Thallium, total Analysis Run 1/22/2024 1:22 PM



Constituent: Thallium, total Analysis Run 1/22/2024 1:22 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

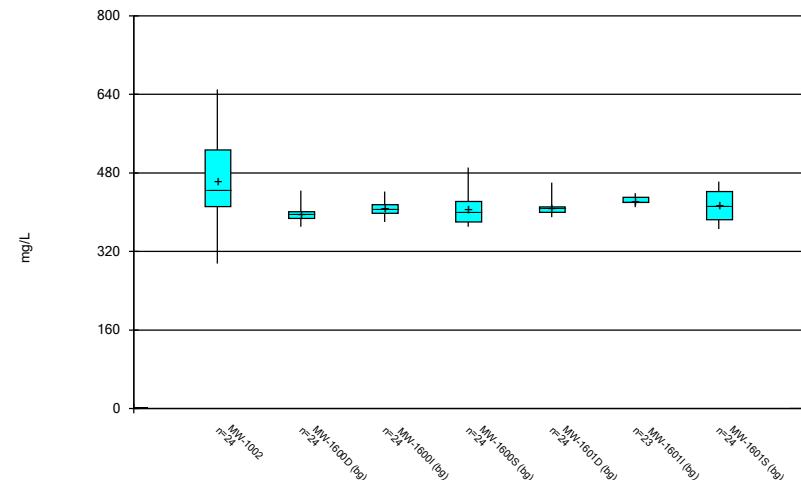


Constituent: Thallium, total Analysis Run 1/22/2024 1:22 PM



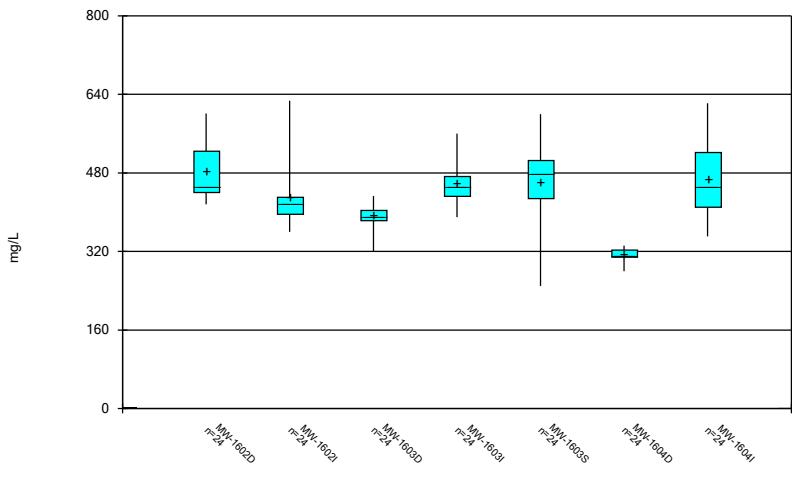
Constituent: Thallium, total Analysis Run 1/22/2024 1:22 PM

### Box & Whiskers Plot



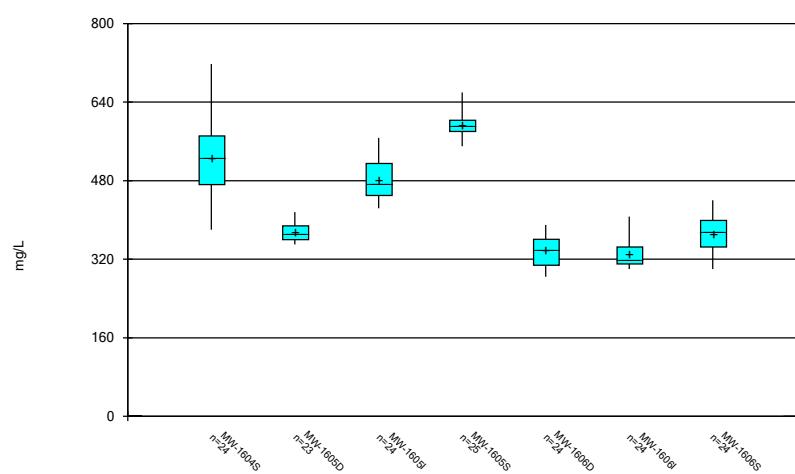
Constituent: Total Dissolved Solids [TDS] Analysis Run 1/22/2024 1:22 PM  
 Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



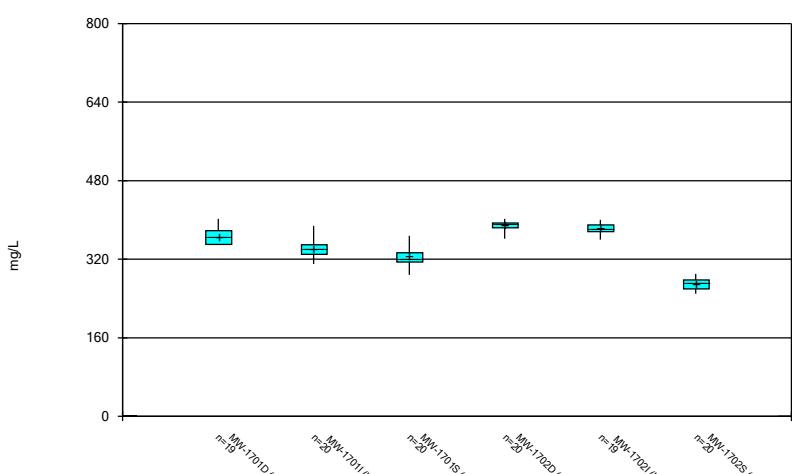
Constituent: Total Dissolved Solids [TDS] Analysis Run 1/22/2024 1:22 PM  
 Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 1/22/2024 1:22 PM  
 Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 1/22/2024 1:22 PM  
 Rockport BAP Client: Geosyntec Data: Rockport\_BAP

FIGURE C  
Outlier Summary and Tukey's Outlier Test

# Outlier Summary

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/18/2024, 5:52 PM

MW-1606S Boron, total (mg/L) MW-1602I Calcium, total (mg/L) MW-1603S Calcium, total (mg/L) MW-1603D Chromium, total (mg/L) MW-1702S Chromium, total (mg/L) MW-1600S Cobalt, total (mg/L) MW-1606D Cobalt, total (mg/L) MW-1600I Combined Radium 226 + 228 (pCi/L) MW-1603D Lead, total (mg/L) MW-1604S Lead, total (mg/L)

6/7/2016		0.000508 (o)
6/8/2016		7.25 (o)
7/19/2016		
7/20/2016		0.000911 (o)
10/10/2016	0.0238 (o)	0.00138 (o)
1/10/2017		
3/7/2017	99.4 (o)	
7/17/2017		
7/18/2017		
12/12/2017		0.00413 (o)
6/4/2018		
6/5/2018		
8/15/2018	0.563 (o)	
5/24/2019		
6/25/2019		
5/20/2020	113 (o)	
5/25/2021		
5/26/2021		
5/27/2021		0.00995 (o)
11/2/2022		

## Outlier Summary

Rockport BAP Client: Geosyntec Data: Rockport BAP Printed 1/18/2024, 5:52 PM

# Outlier Summary

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/18/2024, 5:52 PM

MW-1600S pH, field (SU) MW-1601D pH, field (SU) MW-1601I pH, field (SU) MW-1601S pH, field (SU) MW-1602D pH, field (SU) MW-1603D pH, field (SU) MW-1603I pH, field (SU) MW-1603S pH, field (SU) MW-1604S pH, field (SU) MW-1605D pH, field (SU)

6/7/2016		5.12 (o)								
6/8/2016										
7/19/2016										
7/20/2016										
10/10/2016										
1/10/2017										
3/7/2017										
7/17/2017	9.46 (o)		9.45 (o)		9.78 (o)	9.63 (o)				
7/18/2017							9.51 (o)			
12/12/2017										
6/4/2018										
6/5/2018										
8/15/2018										
5/24/2019										
6/25/2019										
5/20/2020							9.09 (o)	8.92 (o)		
5/25/2021										
5/26/2021	9.39 (o)		9.38 (o)		9.41 (o)					
5/27/2021										
11/2/2022				11 (o)						

# Outlier Summary

Page 4

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/18/2024, 5:52 PM

MW-1605I pH, field (SU) MW-1605S pH, field (SU) MW-1606D pH, field (SU) MW-1606I pH, field (SU) MW-1606S pH, field (SU) MW-1701D pH, field (SU) MW-1601D Selenium, total (mg/L) MW-1605S Selenium, total (mg/L) MW-1701D Thallium, total (mg/L) MW-1701I Thallium, total (mg/L)

6/7/2016

6/8/2016

7/19/2016

5.85 (o) 4.98 (o)

7/20/2016

10/10/2016

1/10/2017

3/7/2017

7/17/2017

7/18/2017

12/12/2017

0.051 (o) 0.04 (o)

6/4/2018

6/5/2018

8/15/2018

0.0054 (o)

5/24/2019

3E-05 (Jo)

6/25/2019

5/20/2020

5/25/2021

8.88 (o) 8.91 (o) 8.55 (o)

5/26/2021

9.48 (o) 9.51 (o) 9.3 (o)

5/27/2021

11/2/2022

# Outlier Summary

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/18/2024, 5:52 PM

MW-1701S Thallium, total (mg/L) MW-1702D Thallium, total (mg/L) MW-1702I Thallium, total (mg/L) MW-1702S Thallium, total (mg/L) MW-1605D Total Dissolved Solids [TDS] (mg/L) MW-1701D Total Dissolved Solids [TDS] (mg/L) MW-1702I Total Dissolved Solids [TDS] (mg/L)

6/7/2016

6/8/2016

7/19/2016

7/20/2016

10/10/2016

1/10/2017

794 (o)

3/7/2017

7/17/2017

7/18/2017

12/12/2017

0.02 (o) 0.03 (o) 0.04 (o) 0.01 (o)

760 (o)

6/4/2018

700 (o)

6/5/2018

8/15/2018

5/24/2019

6/25/2019

5/20/2020

5/25/2021

5/26/2021

5/27/2021

11/2/2022

## Tukey's Outlier Test - Significant Results

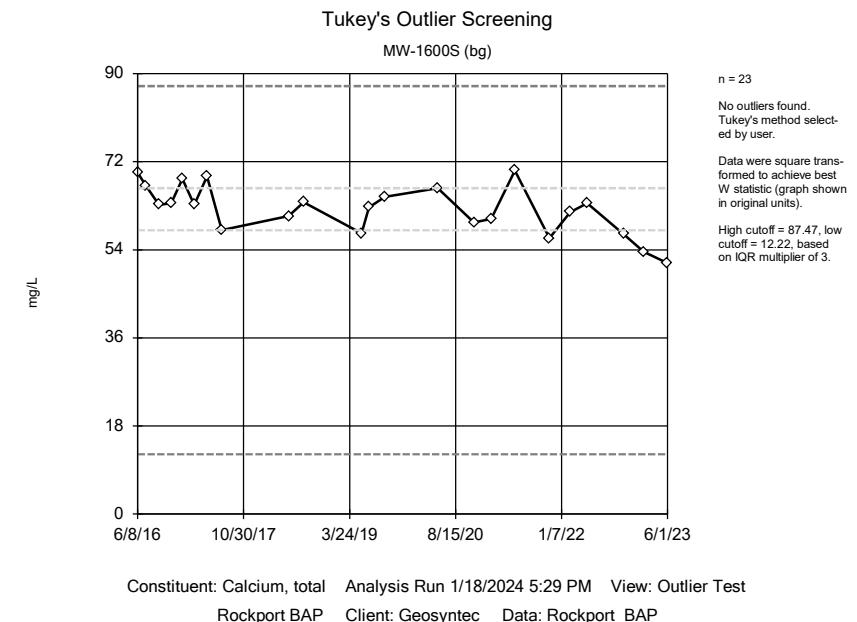
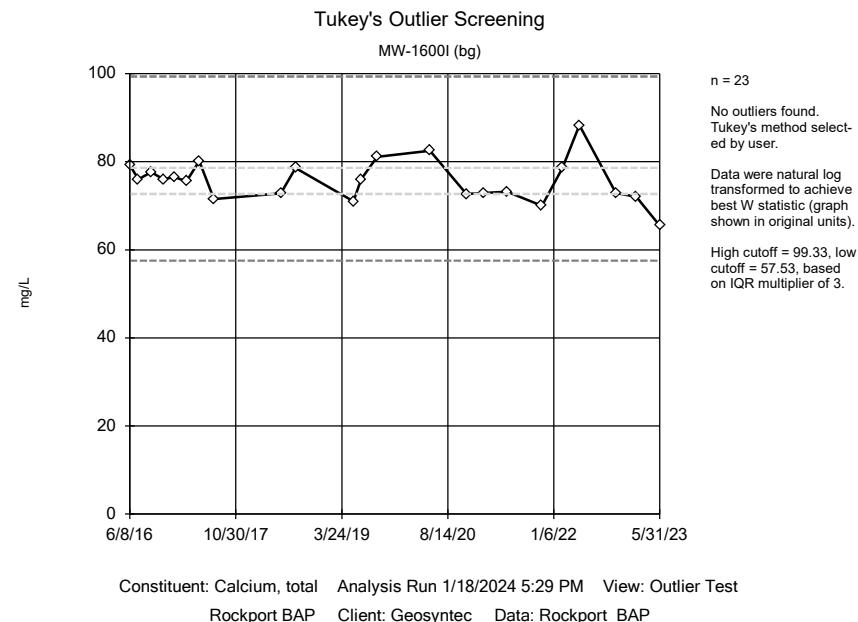
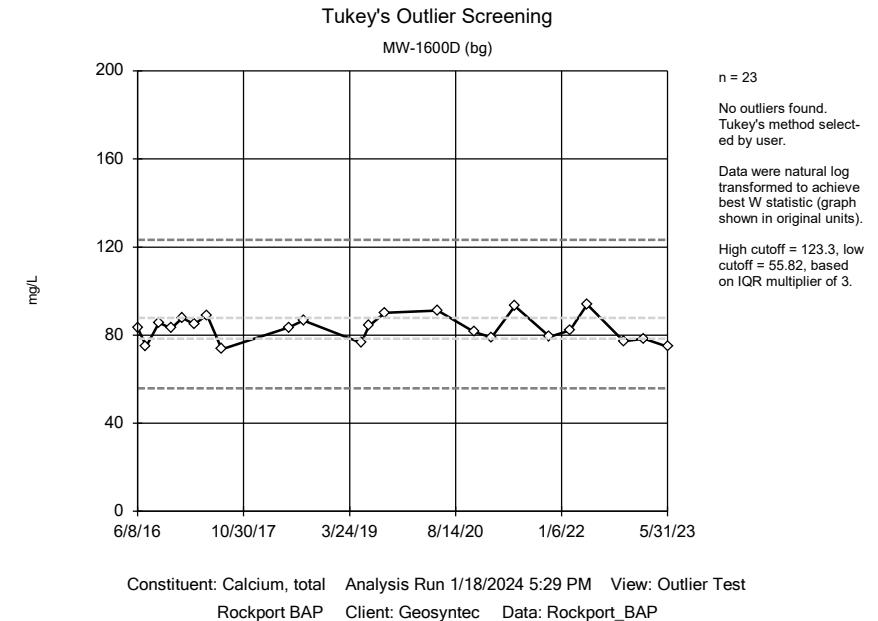
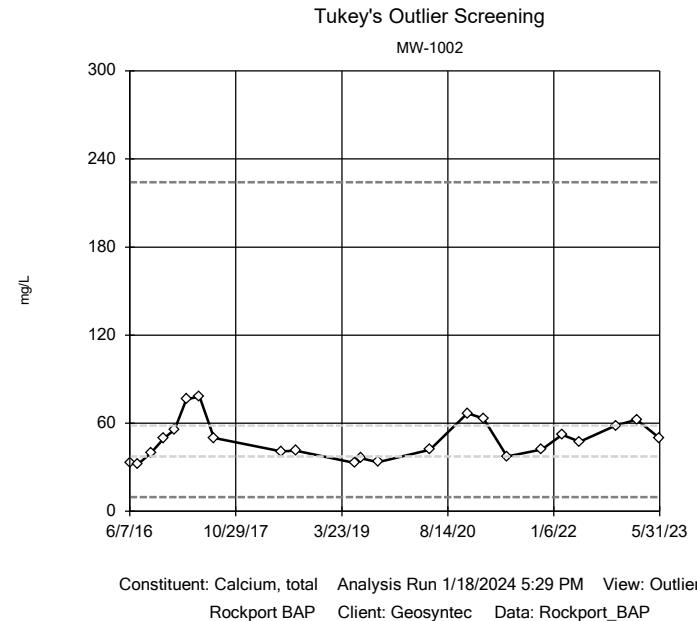
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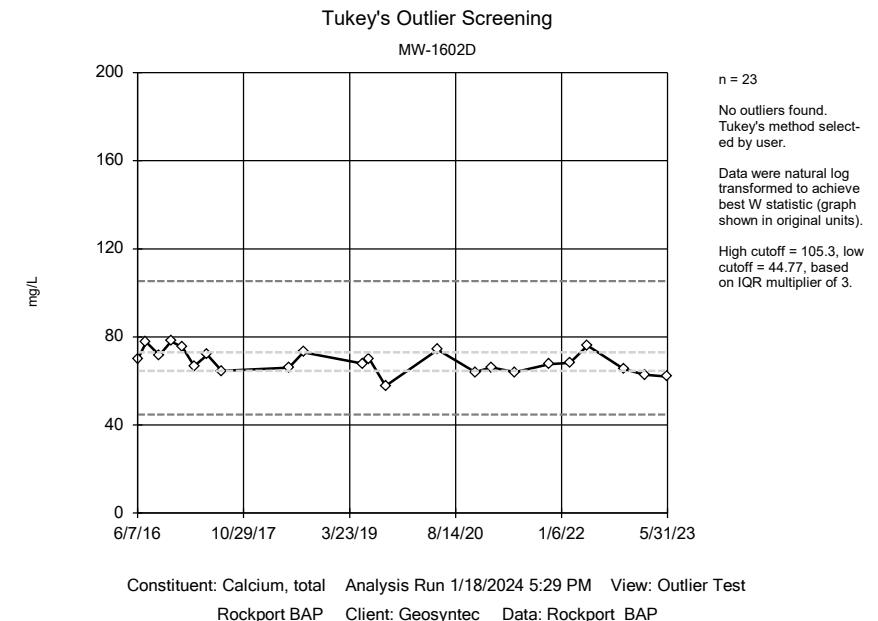
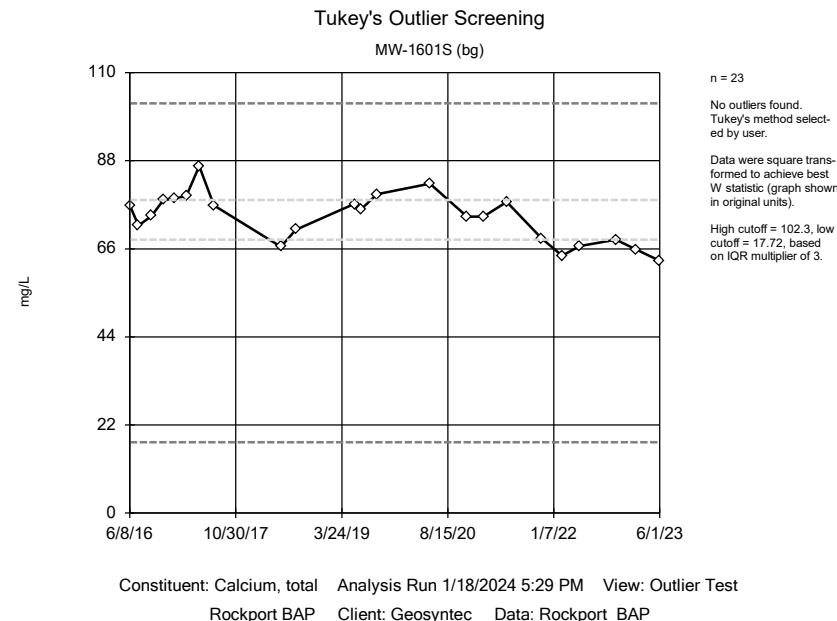
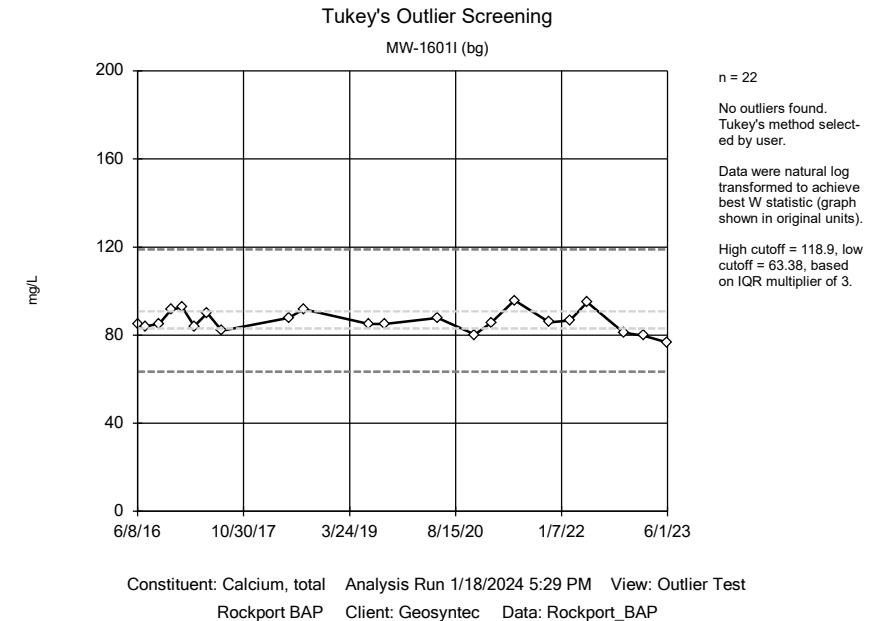
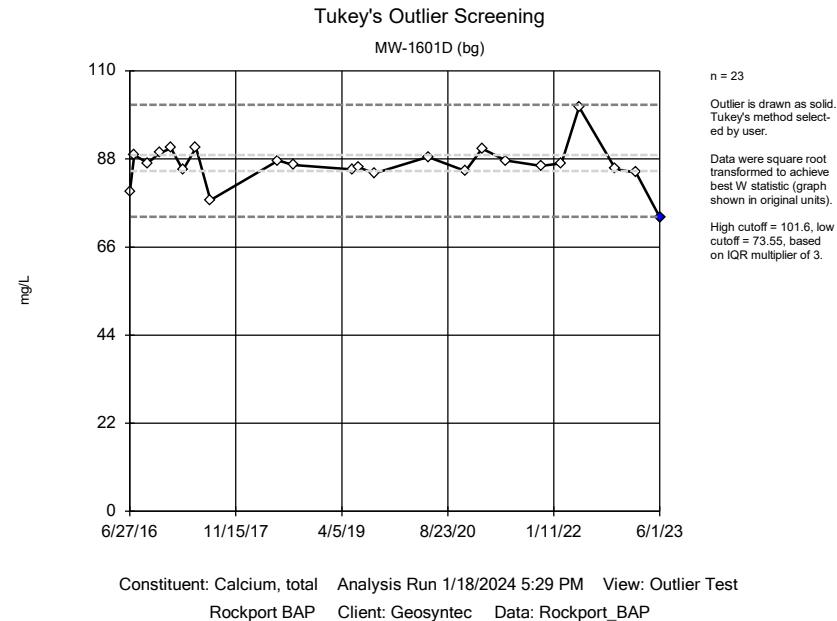
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Calcium, total (mg/L)	MW-1601D (bg)	Yes	73.5	NP	NaN	23	86.47	5.19	sqrt(x)	ShapiroWilk
pH, field (SU)	MW-1600I (bg)	Yes	9.29	NP	NaN	23	7.196	0.546	In(x)	ShapiroWilk
pH, field (SU)	MW-1600S (bg)	Yes	9.46	NP	NaN	24	6.786	0.7116	In(x)	ShapiroWilk
pH, field (SU)	MW-1601D (bg)	Yes	9.39	NP	NaN	25	7.034	0.6496	In(x)	ShapiroWilk
pH, field (SU)	MW-1601I (bg)	Yes	9.45,9.38	NP	NaN	23	7.131	0.8277	In(x)	ShapiroWilk
pH, field (SU)	MW-1601S (bg)	Yes	9.41,5.82	NP	NaN	24	7.144	0.6268	In(x)	ShapiroWilk
pH, field (SU)	MW-1603D	Yes	11	NP	NaN	25	7.22	0.8968	In(x)	ShapiroWilk
pH, field (SU)	MW-1603I	Yes	9.78,8.07,6.68,5.82	NP	NaN	24	7.347	0.6641	In(x)	ShapiroWilk
pH, field (SU)	MW-1603S	Yes	9.63,5.39	NP	NaN	24	6.968	0.7084	In(x)	ShapiroWilk
pH, field (SU)	MW-1604S	Yes	6.53,9.09	NP	NaN	25	7.444	0.4421	In(x)	ShapiroWilk
pH, field (SU)	MW-1605D	Yes	9.51,8.92	NP	NaN	24	7.265	0.6291	In(x)	ShapiroWilk
pH, field (SU)	MW-1605I	Yes	9.48	NP	NaN	24	7.273	0.5131	In(x)	ShapiroWilk
pH, field (SU)	MW-1605S	Yes	9.51	NP	NaN	24	7.18	0.5389	In(x)	ShapiroWilk
pH, field (SU)	MW-1606D	Yes	5.85,8.37,8.88	NP	NaN	24	7.214	0.5795	In(x)	ShapiroWilk
pH, field (SU)	MW-1606I	Yes	4.98,8.56,8.91	NP	NaN	24	7.315	0.6984	x^2	ShapiroWilk
pH, field (SU)	MW-1606S	Yes	8.55,6.09	NP	NaN	24	7.064	0.4599	In(x)	ShapiroWilk
pH, field (SU)	MW-1701D (bg)	Yes	9.3	NP	NaN	20	7.318	0.5336	In(x)	ShapiroWilk

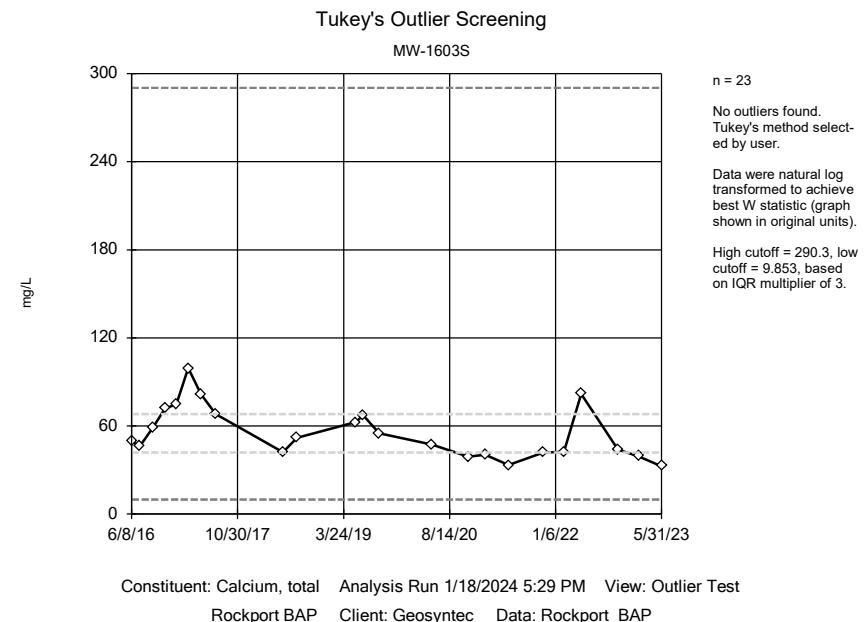
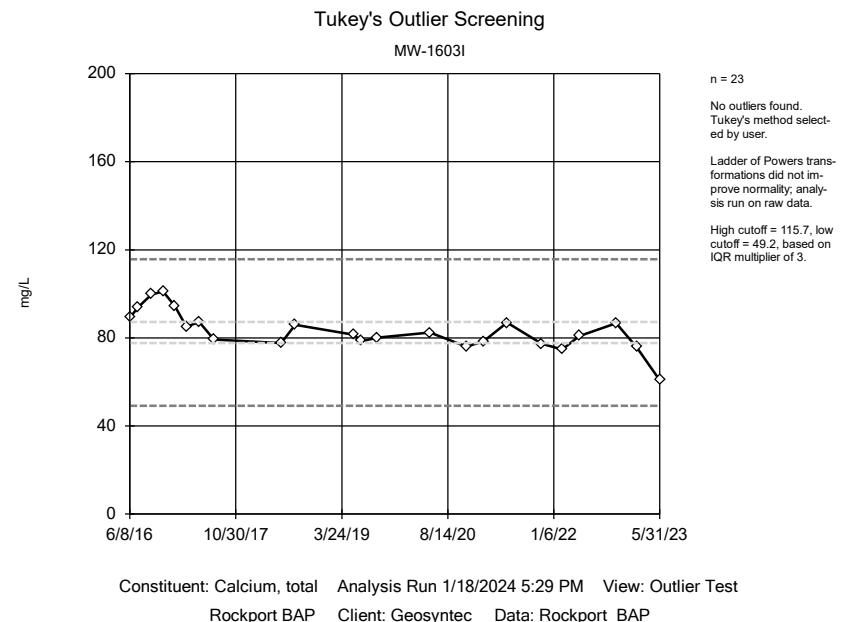
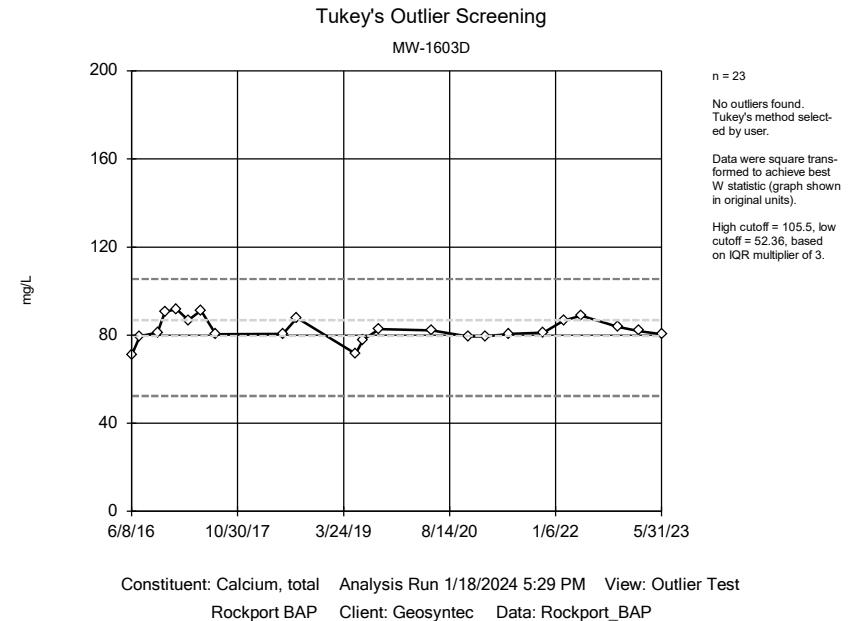
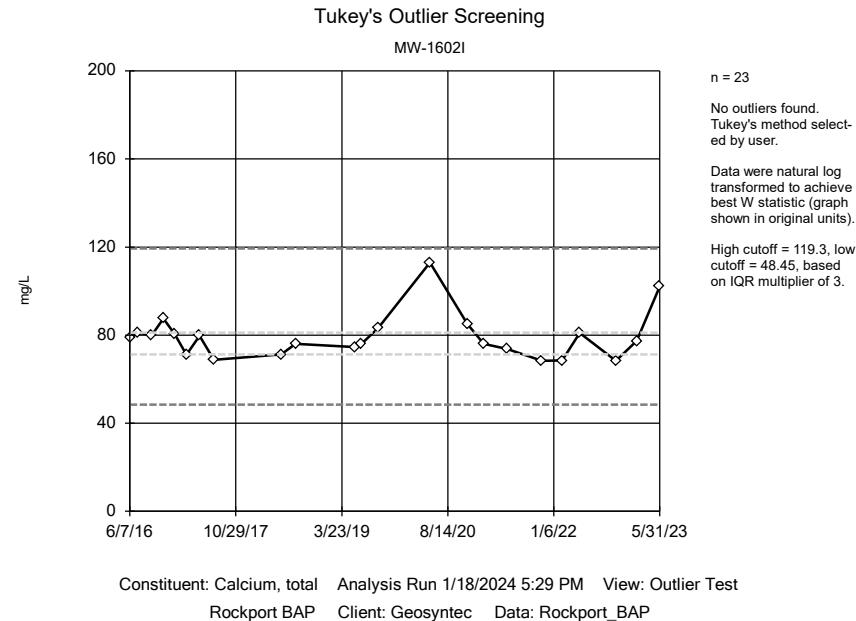
# Tukey's Outlier Test - All Results

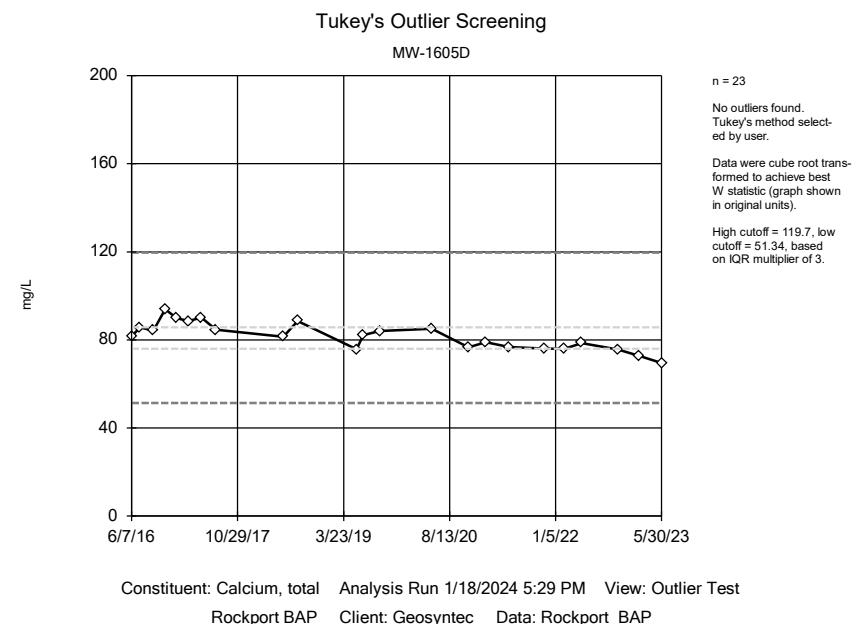
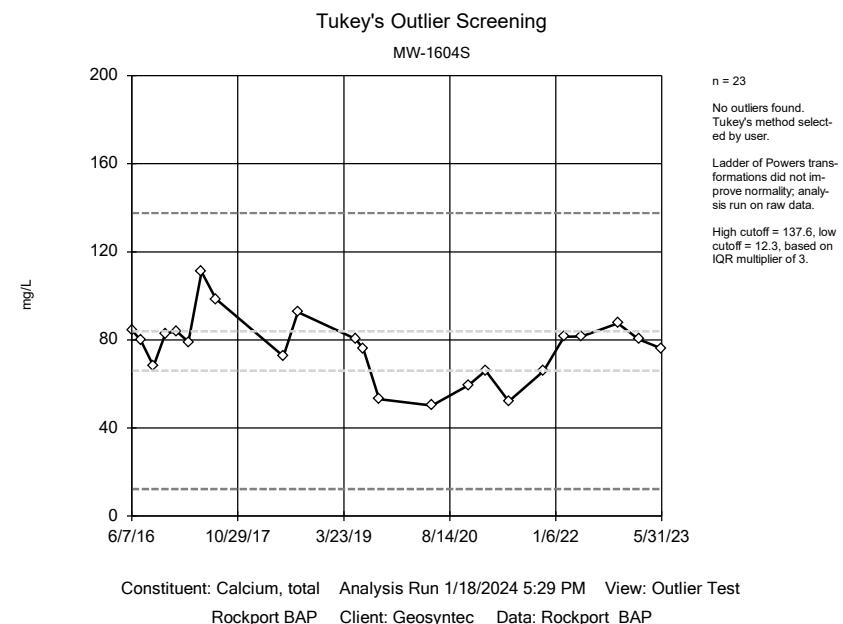
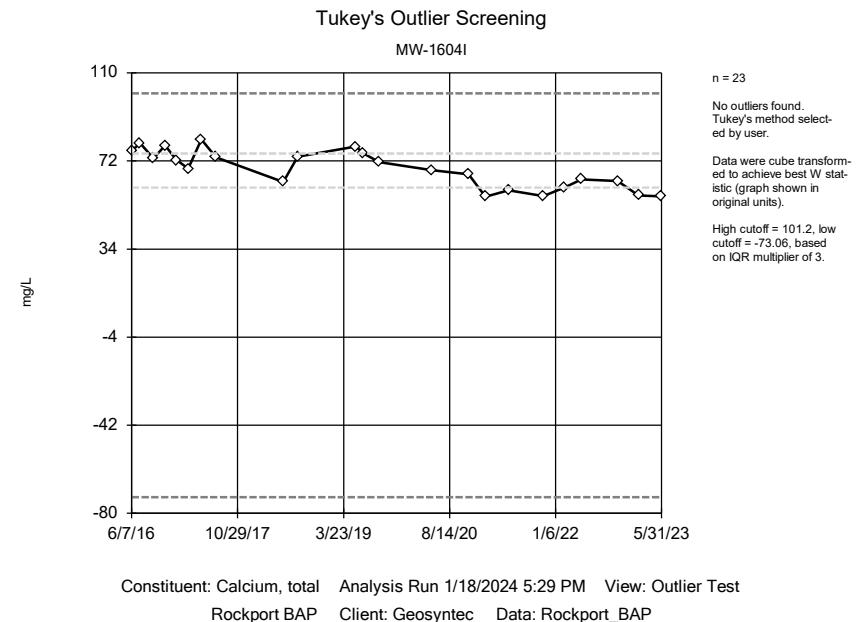
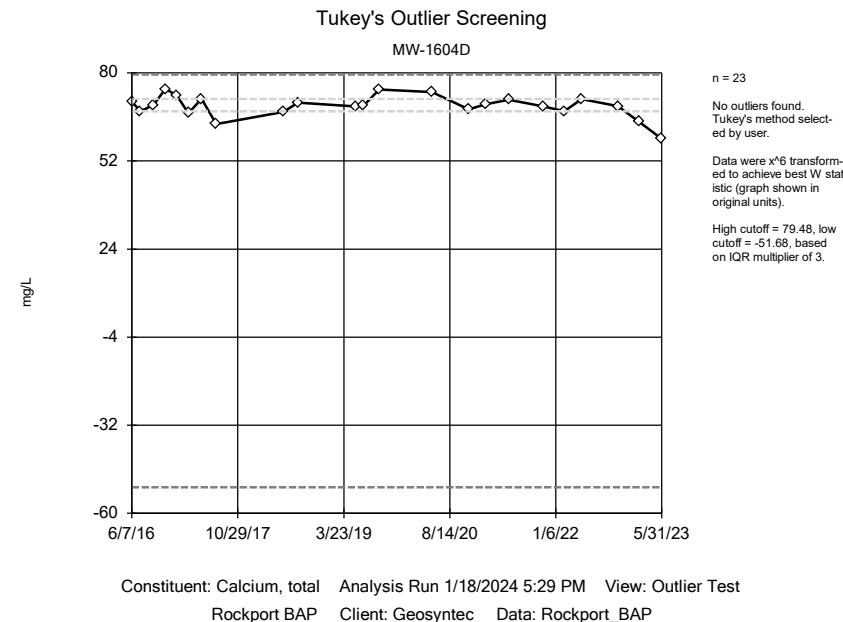
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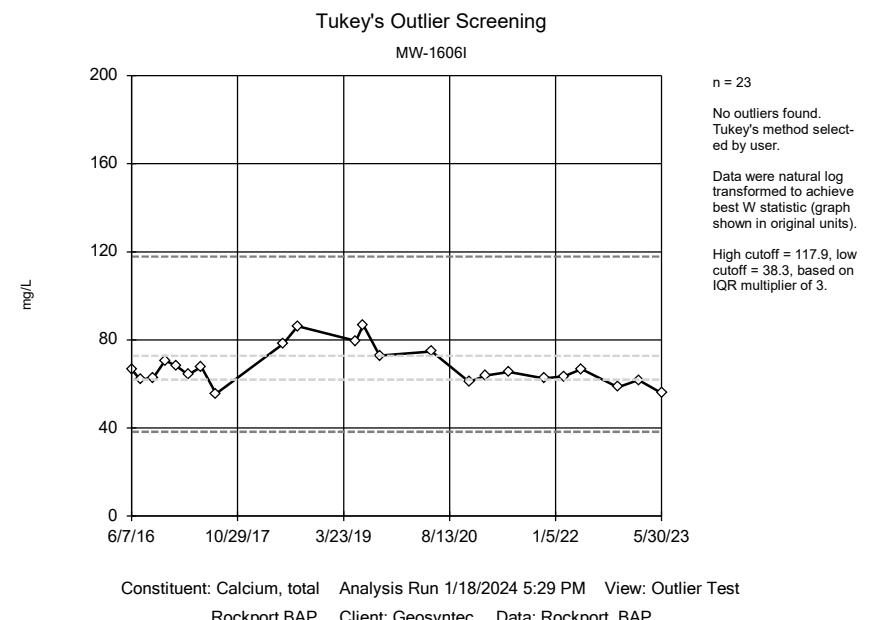
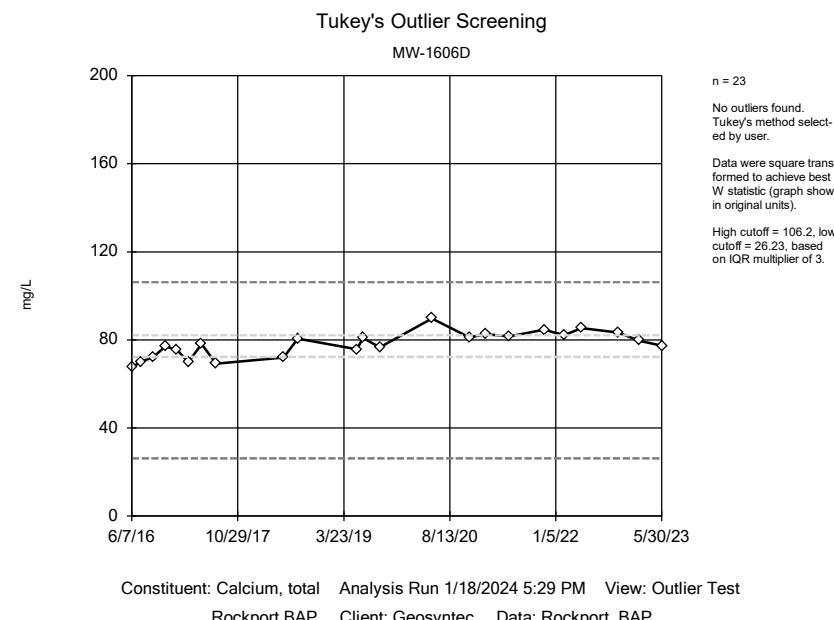
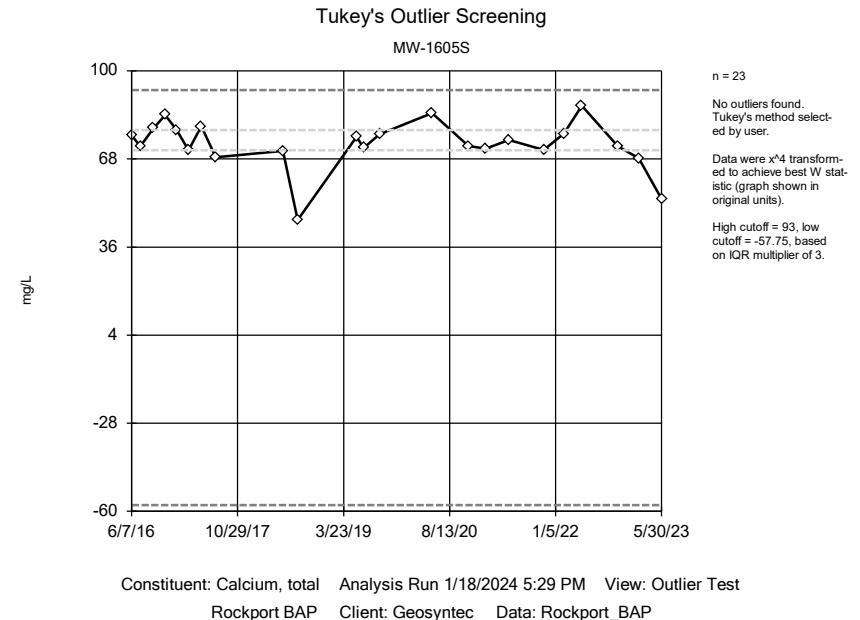
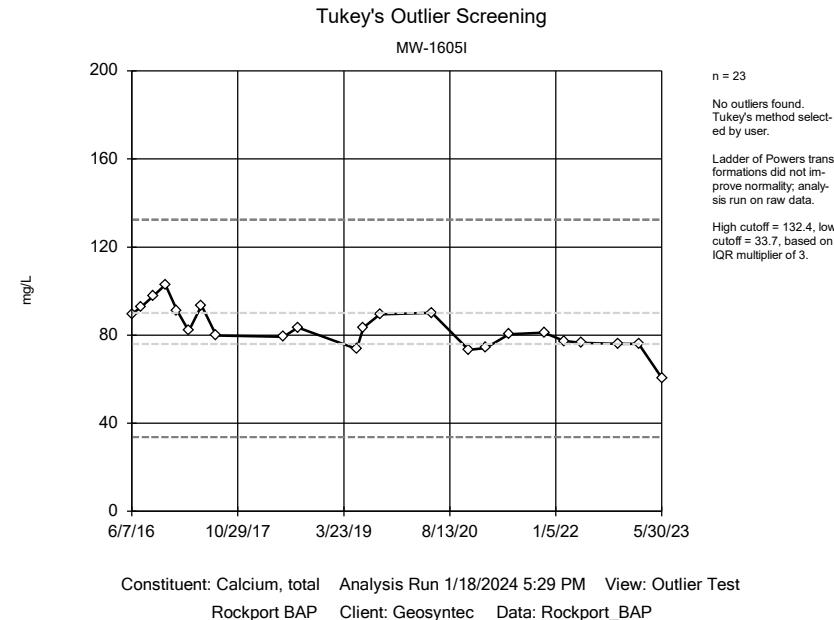
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Calcium, total (mg/L)	MW-1002	No	n/a	NP	NaN	23	48.75	13.6	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1600D (bg)	No	n/a	NP	NaN	23	83.22	5.943	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1600I (bg)	No	n/a	NP	NaN	23	75.68	4.849	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1600S (bg)	No	n/a	NP	NaN	23	62.27	5.086	x^2	ShapiroWilk
<b>Calcium, total (mg/L)</b>	<b>MW-1601D (bg)</b>	<b>Yes</b>	<b>73.5</b>	<b>NP</b>	<b>NaN</b>	<b>23</b>	<b>86.47</b>	<b>5.19</b>	<b>sqrt(x)</b>	<b>ShapiroWilk</b>
Calcium, total (mg/L)	MW-1601I (bg)	No	n/a	NP	NaN	22	86.29	4.952	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1601S (bg)	No	n/a	NP	NaN	23	73.78	6.171	x^2	ShapiroWilk
Calcium, total (mg/L)	MW-1602D	No	n/a	NP	NaN	23	68.73	5.311	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1602I	No	n/a	NP	NaN	23	79.22	10.57	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1603D	No	n/a	NP	NaN	23	82.5	5.47	x^2	ShapiroWilk
Calcium, total (mg/L)	MW-1603I	No	n/a	NP	NaN	23	83.21	8.916	normal	ShapiroWilk
Calcium, total (mg/L)	MW-1603S	No	n/a	NP	NaN	23	55.34	17.76	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1604D	No	n/a	NP	NaN	23	69.4	3.611	x^6	ShapiroWilk
Calcium, total (mg/L)	MW-1604I	No	n/a	NP	NaN	23	68.46	8.167	x^3	ShapiroWilk
Calcium, total (mg/L)	MW-1604S	No	n/a	NP	NaN	23	76.65	14.69	normal	ShapiroWilk
Calcium, total (mg/L)	MW-1605D	No	n/a	NP	NaN	23	81.58	6.258	x^(1/3)	ShapiroWilk
Calcium, total (mg/L)	MW-1605I	No	n/a	NP	NaN	23	82.8	9.51	normal	ShapiroWilk
Calcium, total (mg/L)	MW-1605S	No	n/a	NP	NaN	23	73.33	9.067	x^4	ShapiroWilk
Calcium, total (mg/L)	MW-1606D	No	n/a	NP	NaN	23	77.95	5.803	x^2	ShapiroWilk
Calcium, total (mg/L)	MW-1606I	No	n/a	NP	NaN	23	67.6	8.622	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1606S	No	n/a	NP	NaN	23	49.38	7.817	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1701D (bg)	No	n/a	NP	NaN	19	70.36	3.851	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1701I (bg)	No	n/a	NP	NaN	19	66.03	3.941	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1701S (bg)	No	n/a	NP	NaN	19	59.92	4.23	ln(x)	ShapiroWilk
Calcium, total (mg/L)	MW-1702D (bg)	No	n/a	NP	NaN	19	80.18	4.912	normal	ShapiroWilk
Calcium, total (mg/L)	MW-1702I (bg)	No	n/a	NP	NaN	19	76.13	5.353	normal	ShapiroWilk
Calcium, total (mg/L)	MW-1702S (bg)	No	n/a	NP	NaN	19	34.23	2.933	x^6	ShapiroWilk
pH, field (SU)	MW-1002	No	n/a	NP	NaN	24	6.859	0.5825	normal	ShapiroWilk
pH, field (SU)	MW-1600D (bg)	No	n/a	NP	NaN	24	7.043	0.3475	x^(1/3)	ShapiroWilk
<b>pH, field (SU)</b>	<b>MW-1600I (bg)</b>	<b>Yes</b>	<b>9.29</b>	<b>NP</b>	<b>NaN</b>	<b>23</b>	<b>7.196</b>	<b>0.546</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1600S (bg)</b>	<b>Yes</b>	<b>9.46</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>6.786</b>	<b>0.7116</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1601D (bg)</b>	<b>Yes</b>	<b>9.39</b>	<b>NP</b>	<b>NaN</b>	<b>25</b>	<b>7.034</b>	<b>0.6496</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1601I (bg)</b>	<b>Yes</b>	<b>9.45,9.38</b>	<b>NP</b>	<b>NaN</b>	<b>23</b>	<b>7.131</b>	<b>0.8277</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1601S (bg)</b>	<b>Yes</b>	<b>9.41,5.82</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>7.144</b>	<b>0.6268</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
pH, field (SU)	MW-1602D	No	n/a	NP	NaN	24	7.22	0.5649	x^5	ShapiroWilk
pH, field (SU)	MW-1602I	No	n/a	NP	NaN	24	7.222	0.3043	x^2	ShapiroWilk
<b>pH, field (SU)</b>	<b>MW-1603D</b>	<b>Yes</b>	<b>11</b>	<b>NP</b>	<b>NaN</b>	<b>25</b>	<b>7.22</b>	<b>0.8968</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1603I</b>	<b>Yes</b>	<b>9.78,8.07,6.68,5.82</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>7.347</b>	<b>0.6641</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1603S</b>	<b>Yes</b>	<b>9.63,5.39</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>6.968</b>	<b>0.7084</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
pH, field (SU)	MW-1604D	No	n/a	NP	NaN	24	7.124	0.2651	x^6	ShapiroWilk
pH, field (SU)	MW-1604I	No	n/a	NP	NaN	25	7.325	0.2644	x^6	ShapiroWilk
<b>pH, field (SU)</b>	<b>MW-1604S</b>	<b>Yes</b>	<b>6.53,9.09</b>	<b>NP</b>	<b>NaN</b>	<b>25</b>	<b>7.444</b>	<b>0.4421</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1605D</b>	<b>Yes</b>	<b>9.51,8.92</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>7.265</b>	<b>0.6291</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1605I</b>	<b>Yes</b>	<b>9.48</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>7.273</b>	<b>0.5131</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1605S</b>	<b>Yes</b>	<b>9.51</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>7.18</b>	<b>0.5389</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1606D</b>	<b>Yes</b>	<b>5.85,8.37,8.88</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>7.214</b>	<b>0.5795</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1606I</b>	<b>Yes</b>	<b>4.98,8.56,8.91</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>7.315</b>	<b>0.6984</b>	<b>x^2</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1606S</b>	<b>Yes</b>	<b>8.55,6.09</b>	<b>NP</b>	<b>NaN</b>	<b>24</b>	<b>7.064</b>	<b>0.4599</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
<b>pH, field (SU)</b>	<b>MW-1701D (bg)</b>	<b>Yes</b>	<b>9.3</b>	<b>NP</b>	<b>NaN</b>	<b>20</b>	<b>7.318</b>	<b>0.5336</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
pH, field (SU)	MW-1701I (bg)	No	n/a	NP	NaN	21	7.292	0.362	x^3	ShapiroWilk
pH, field (SU)	MW-1701S (bg)	No	n/a	NP	NaN	20	7.213	0.3746	sqrt(x)	ShapiroWilk
pH, field (SU)	MW-1702D (bg)	No	n/a	NP	NaN	21	7.122	0.523	x^2	ShapiroWilk
pH, field (SU)	MW-1702I (bg)	No	n/a	NP	NaN	21	7.121	0.3649	ln(x)	ShapiroWilk
pH, field (SU)	MW-1702S (bg)	No	n/a	NP	NaN	20	7.117	0.4053	x^2	ShapiroWilk

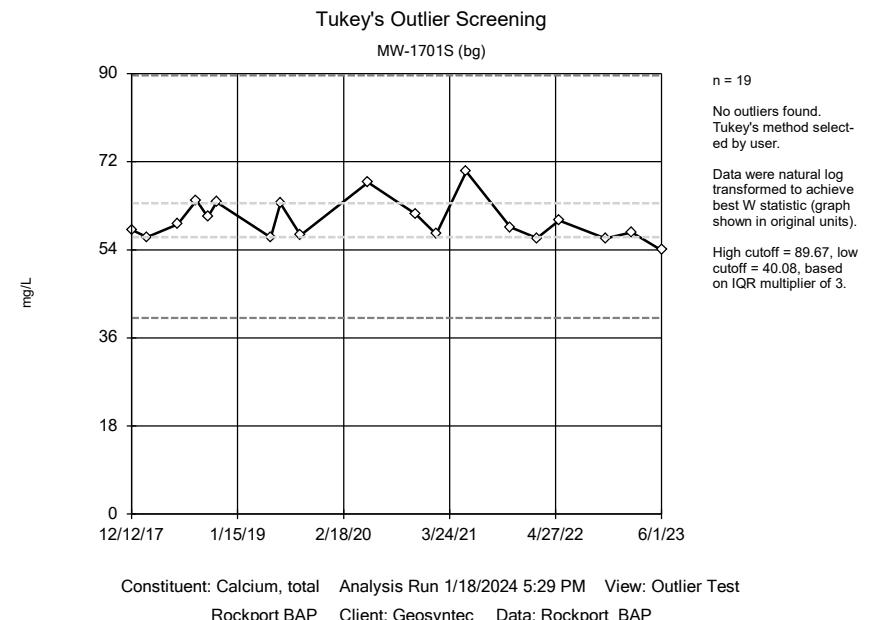
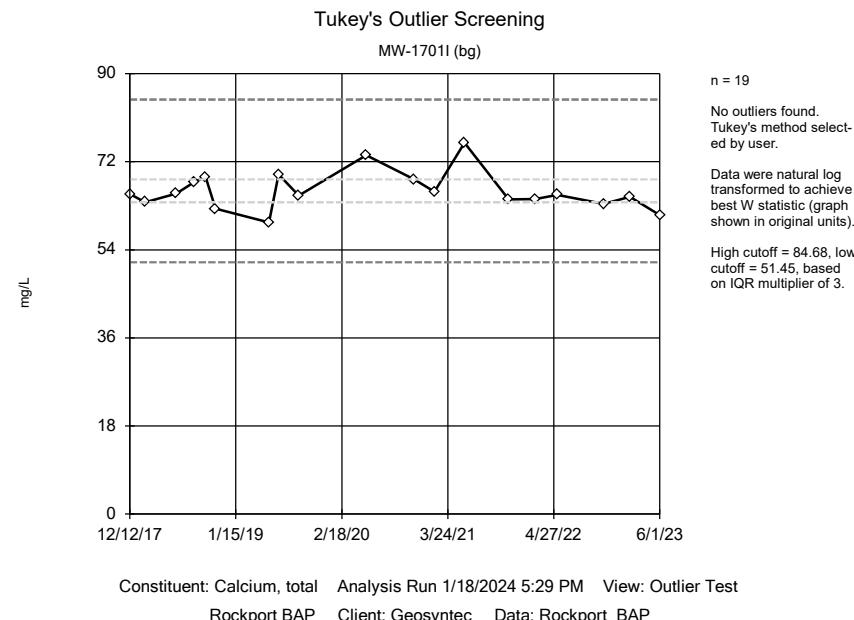
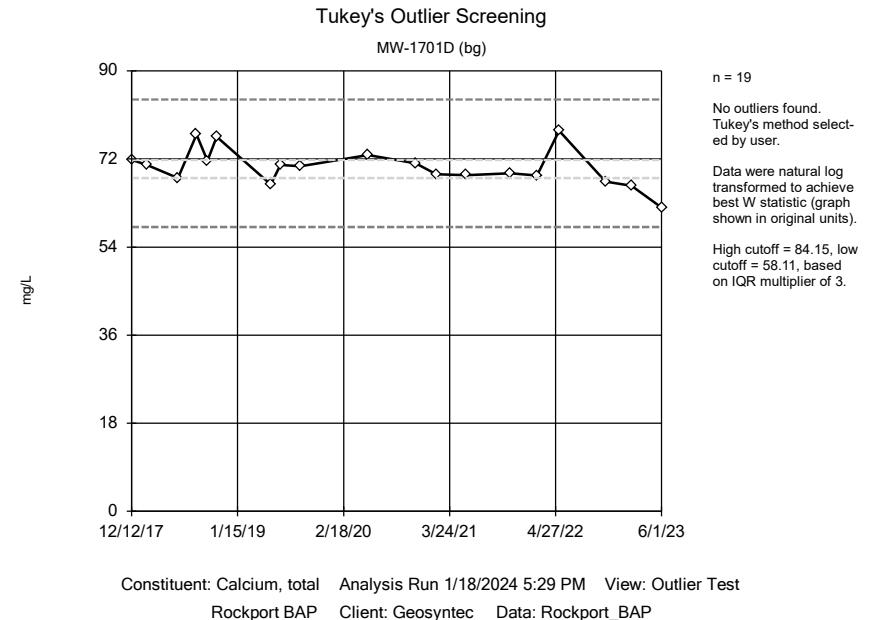
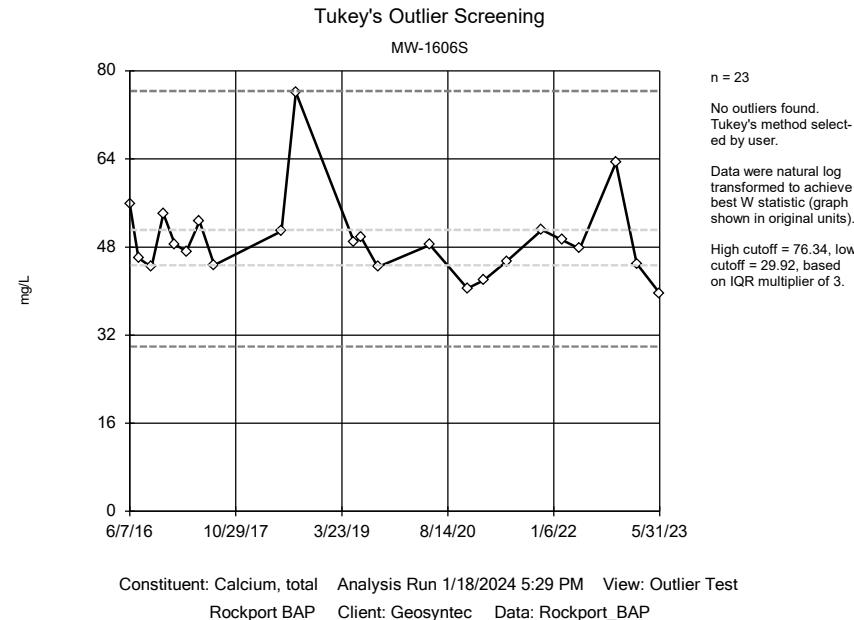


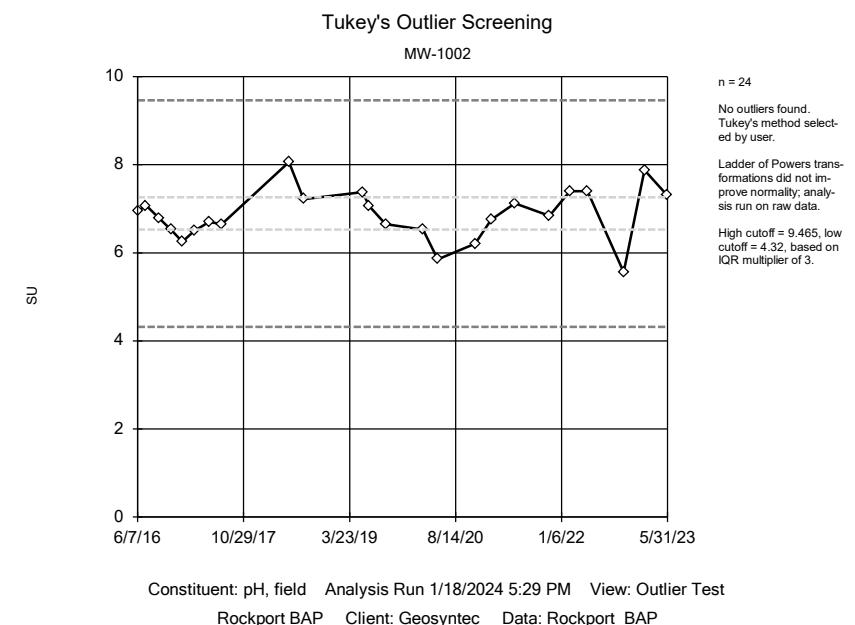
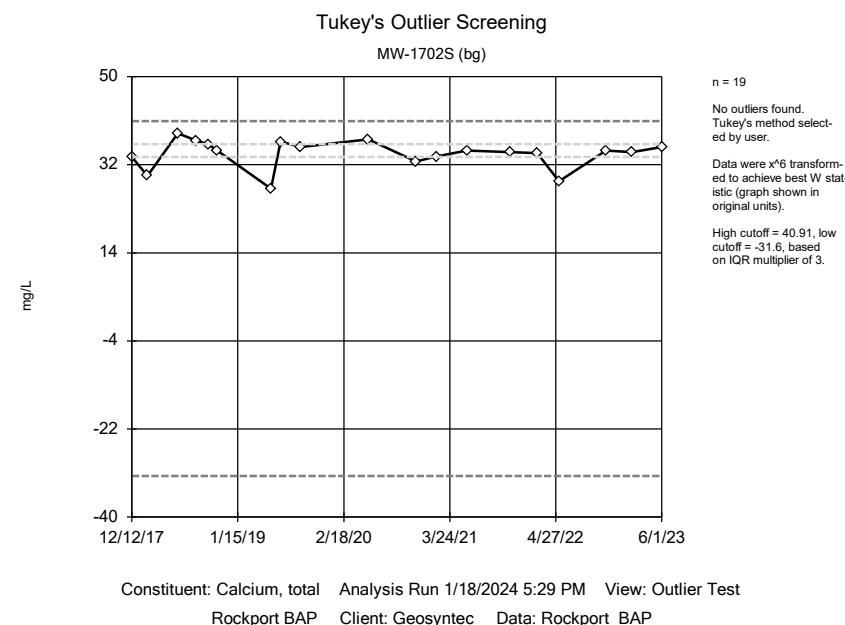
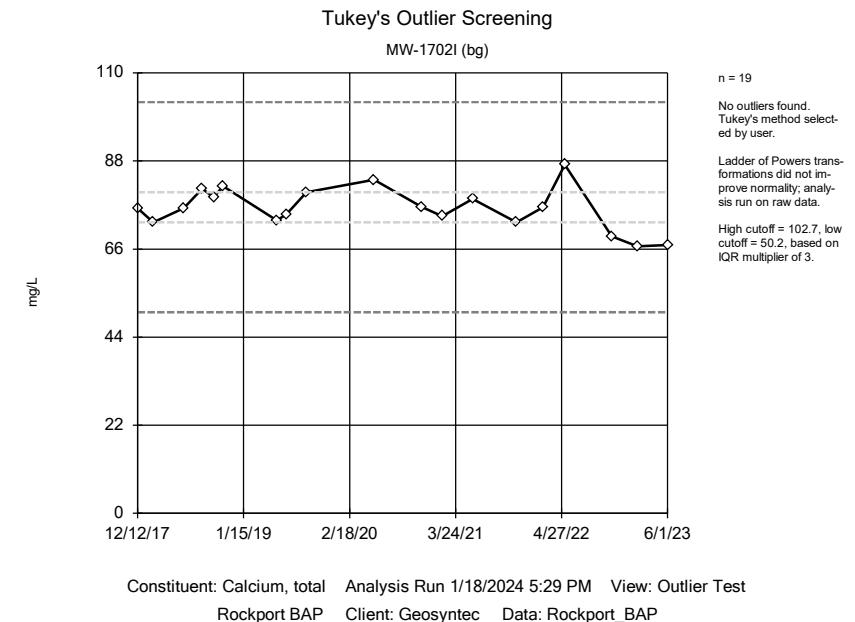
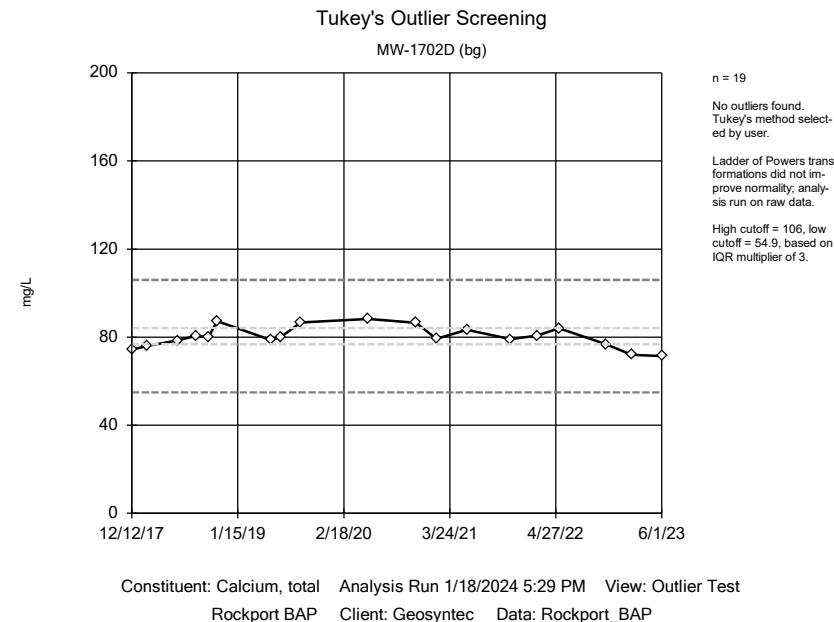


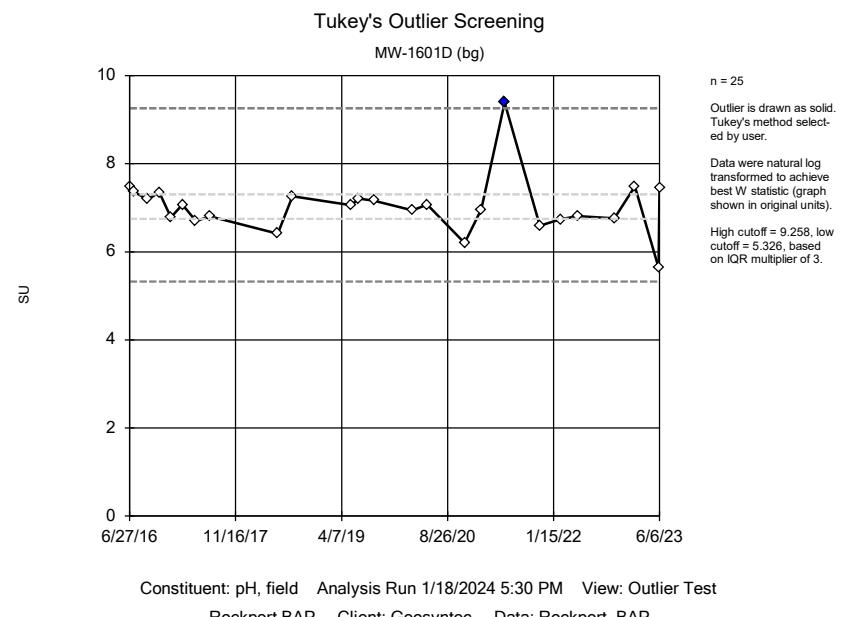
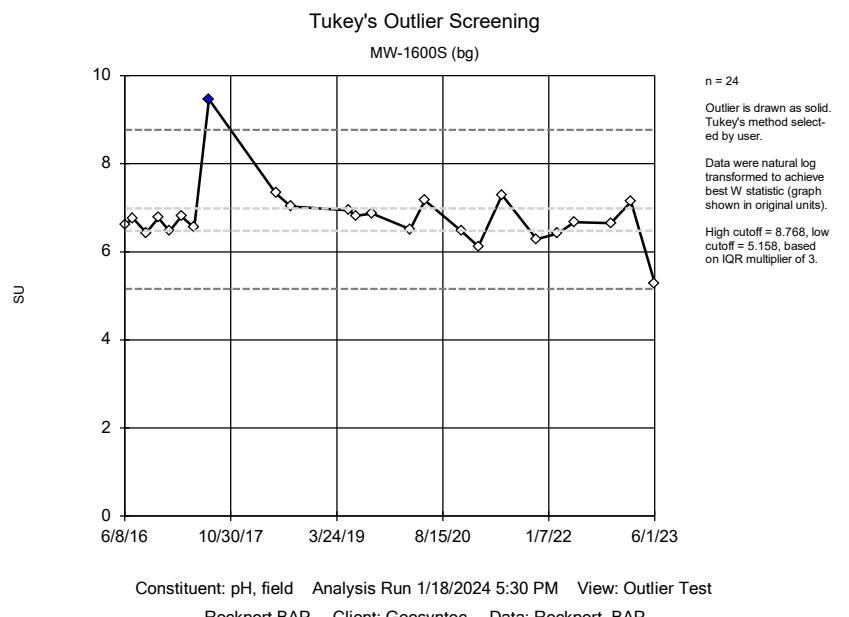
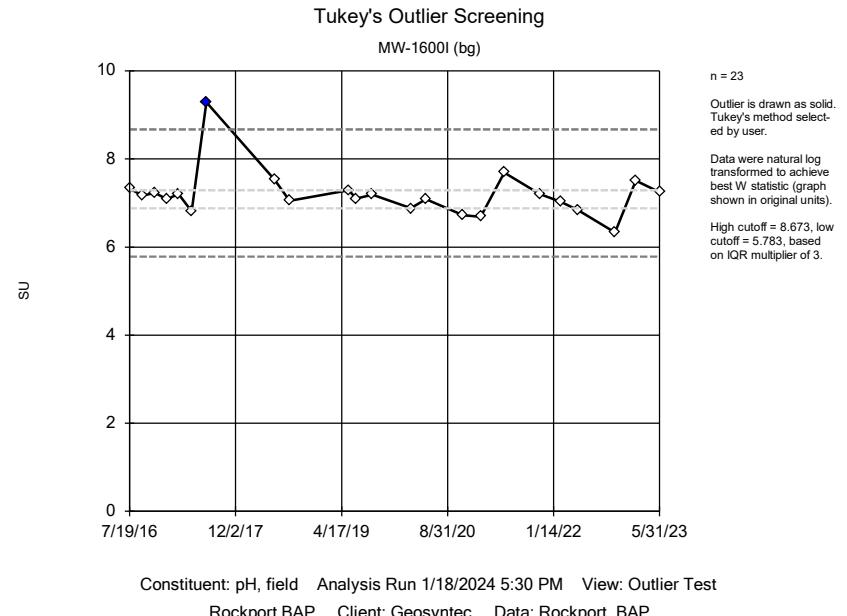
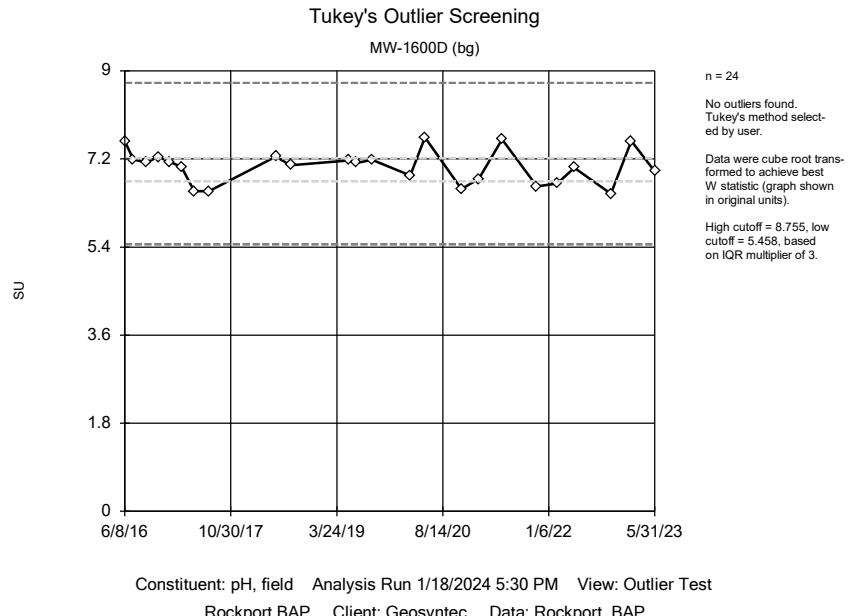


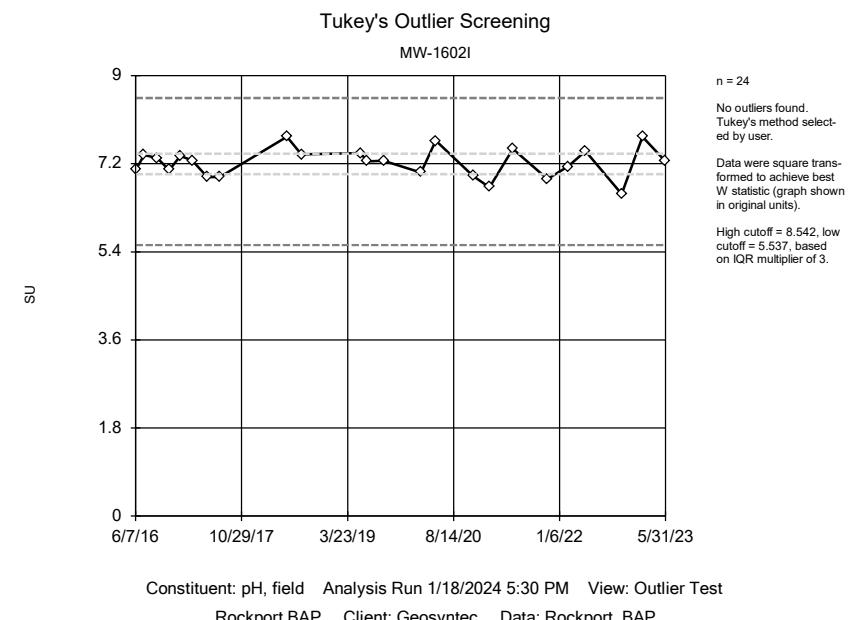
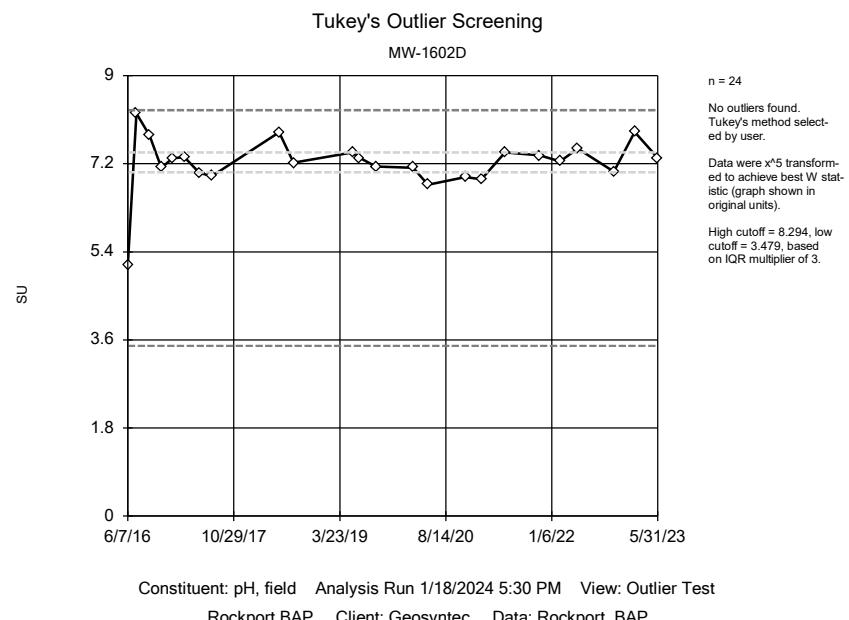
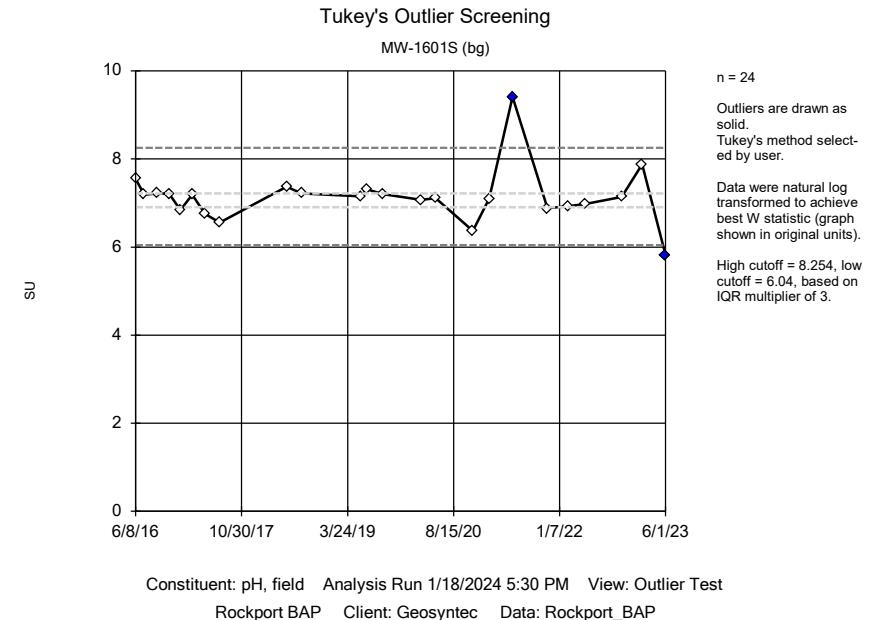
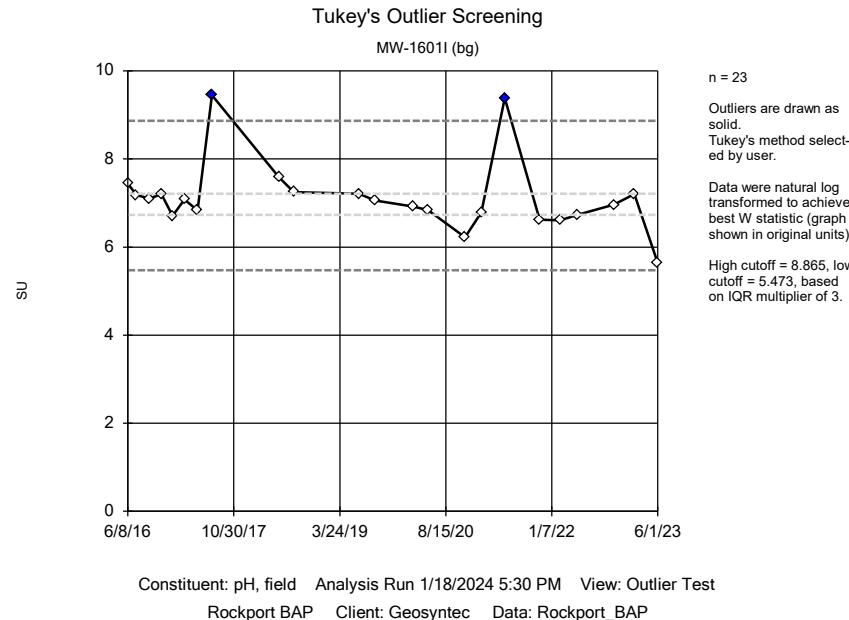


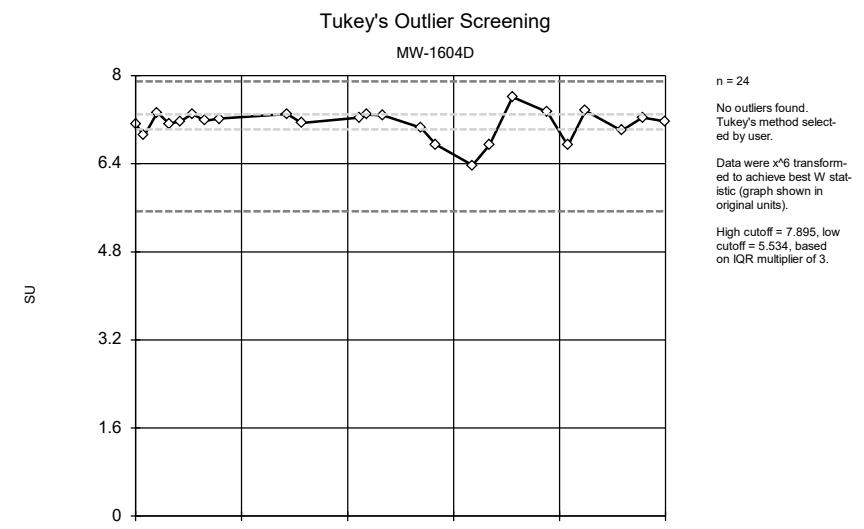
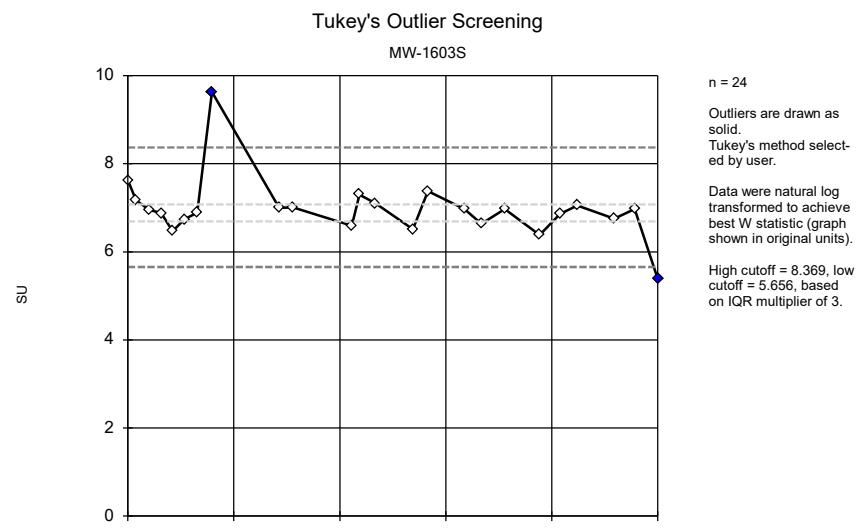
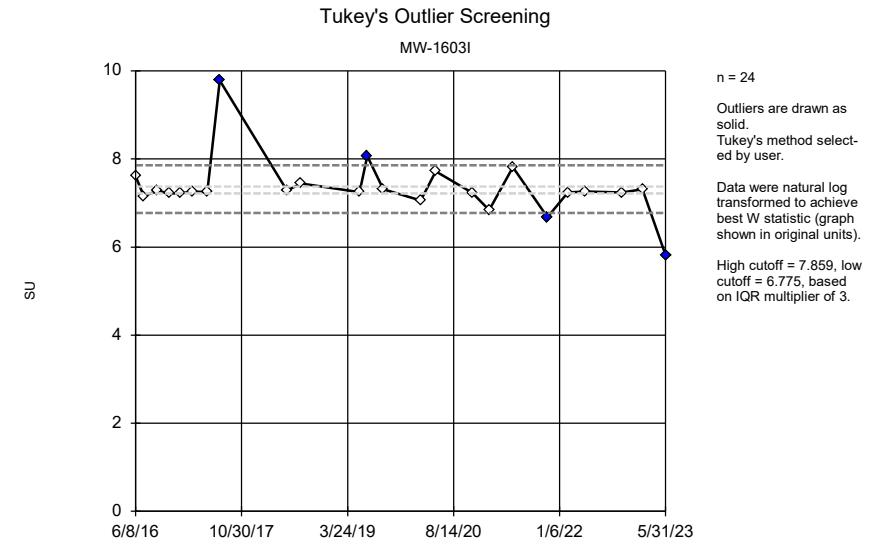
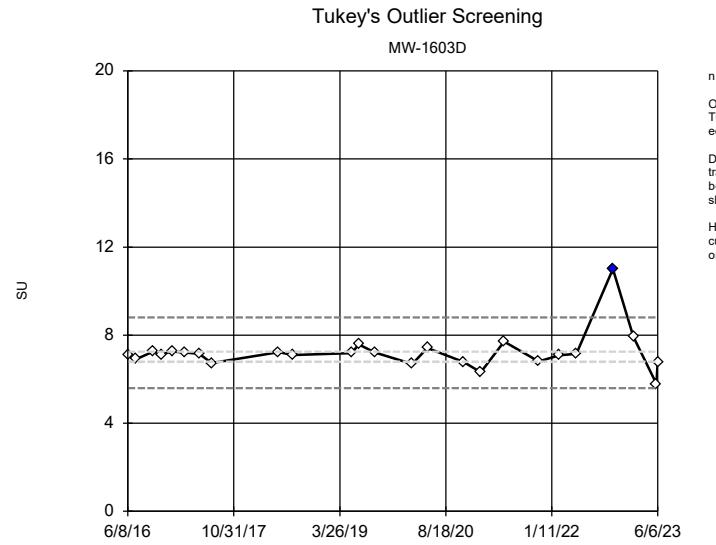


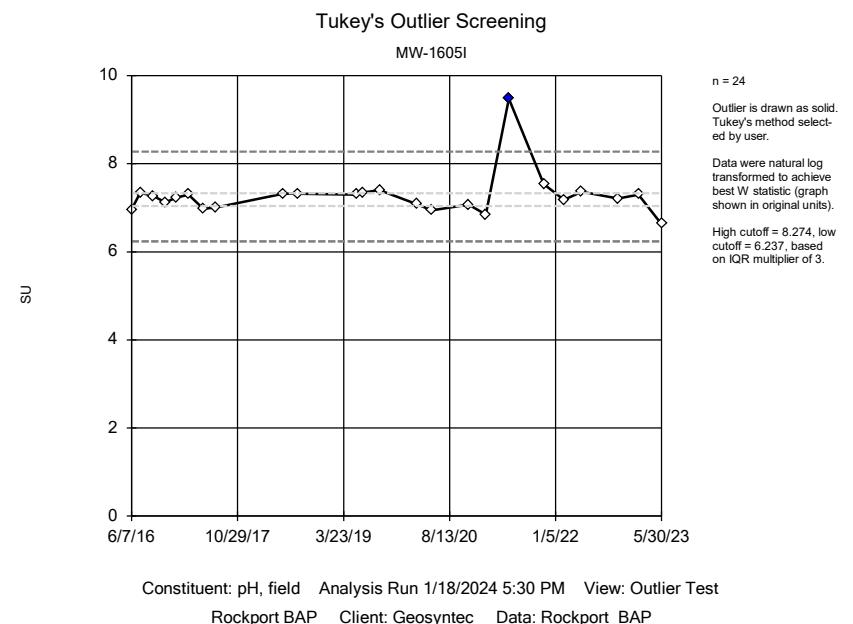
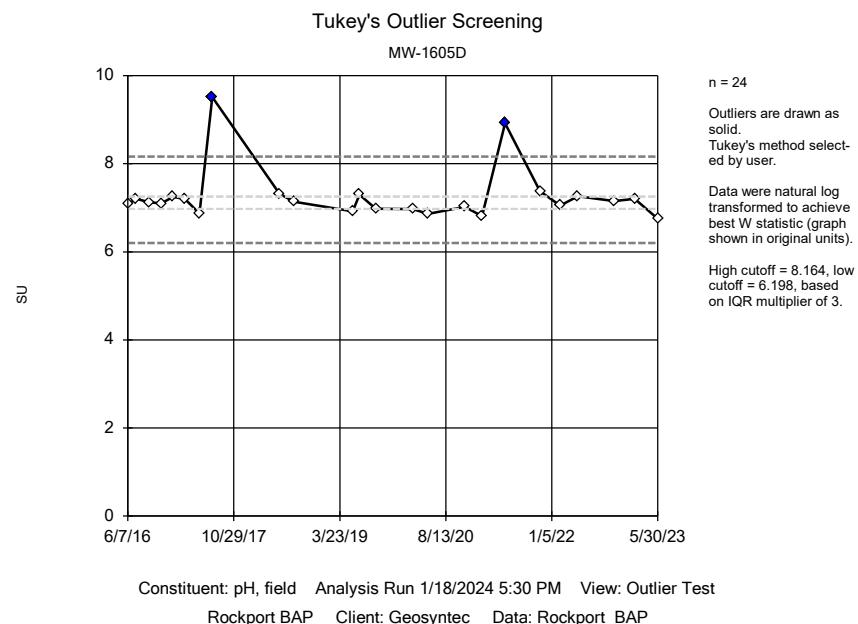
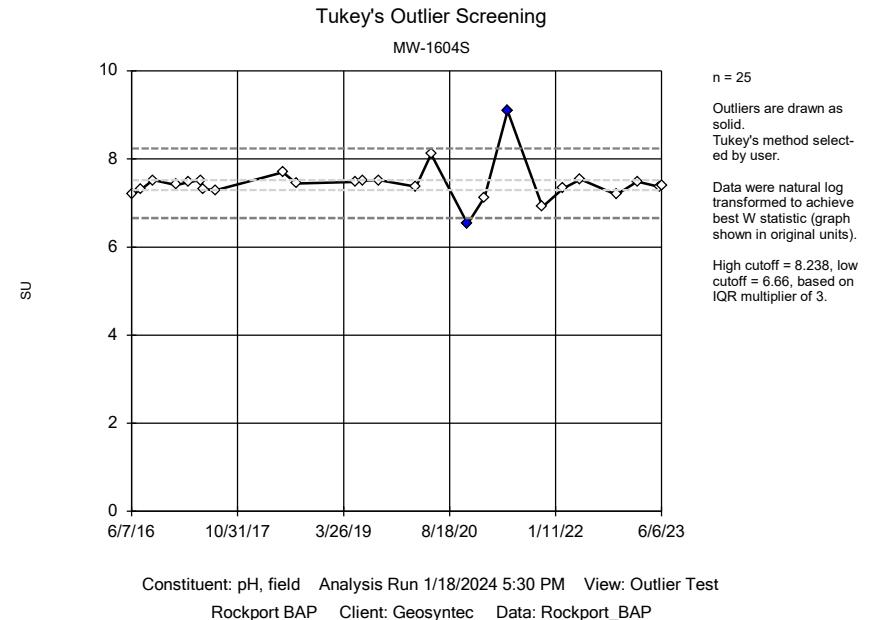
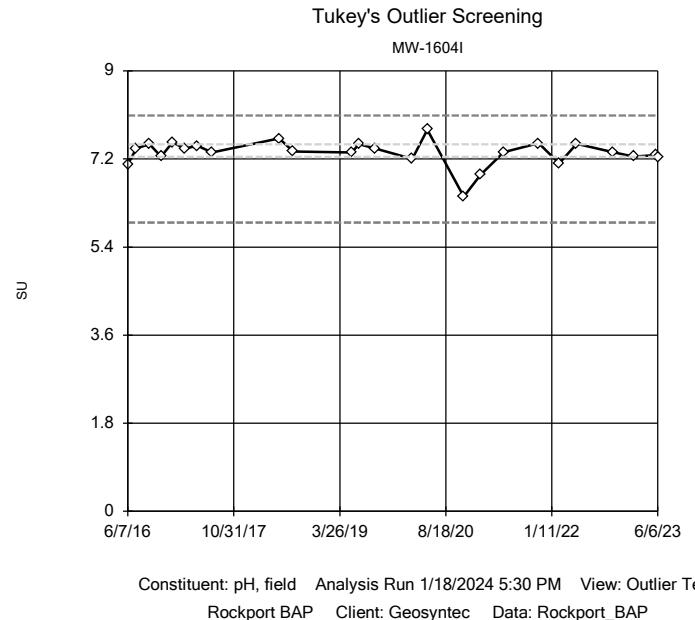


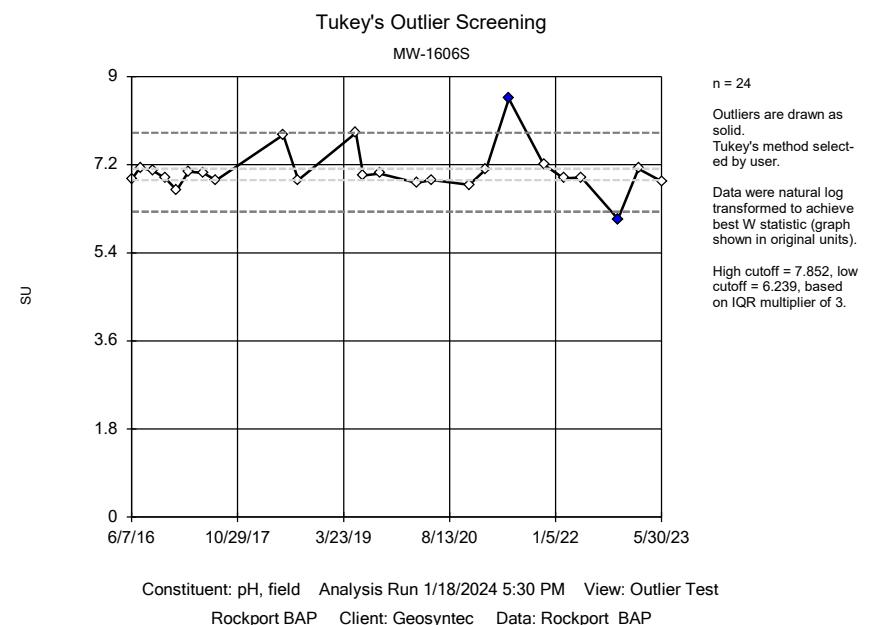
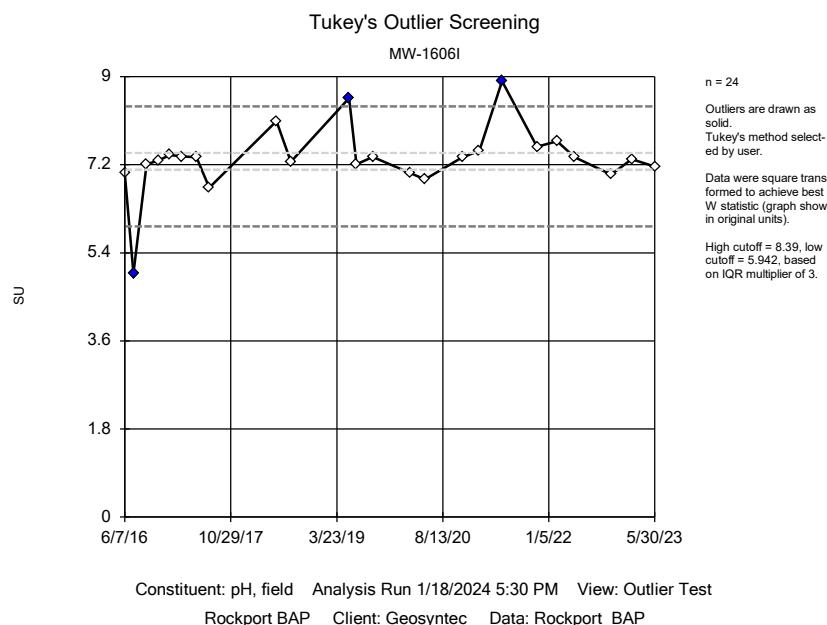
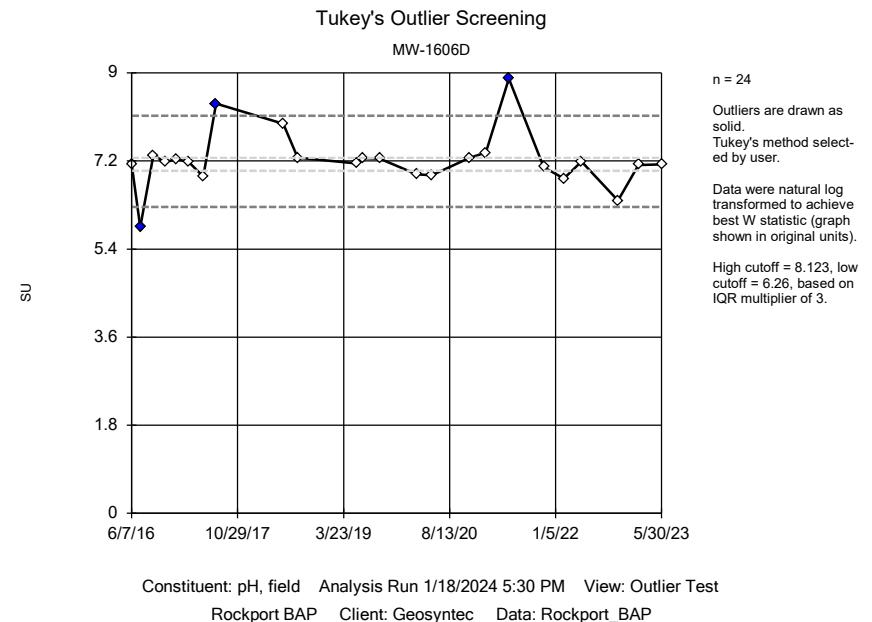
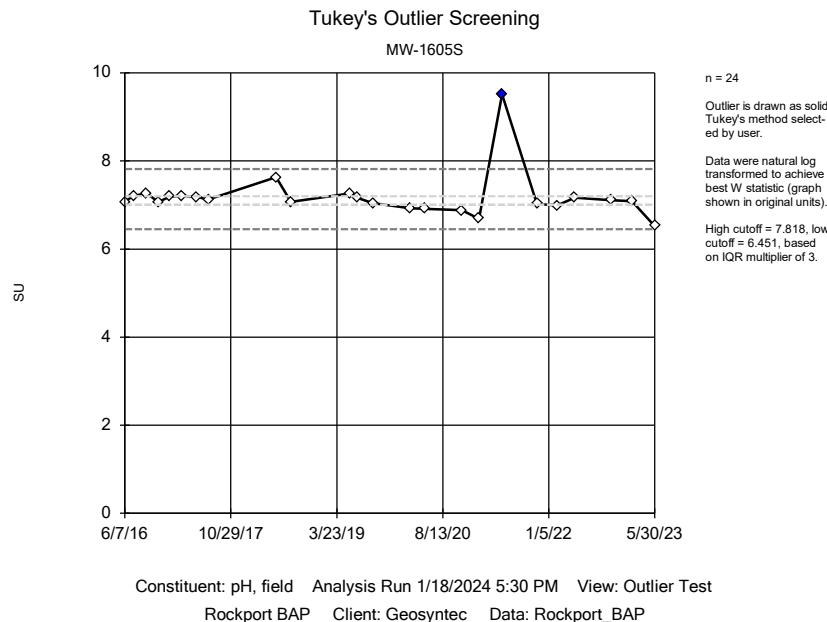


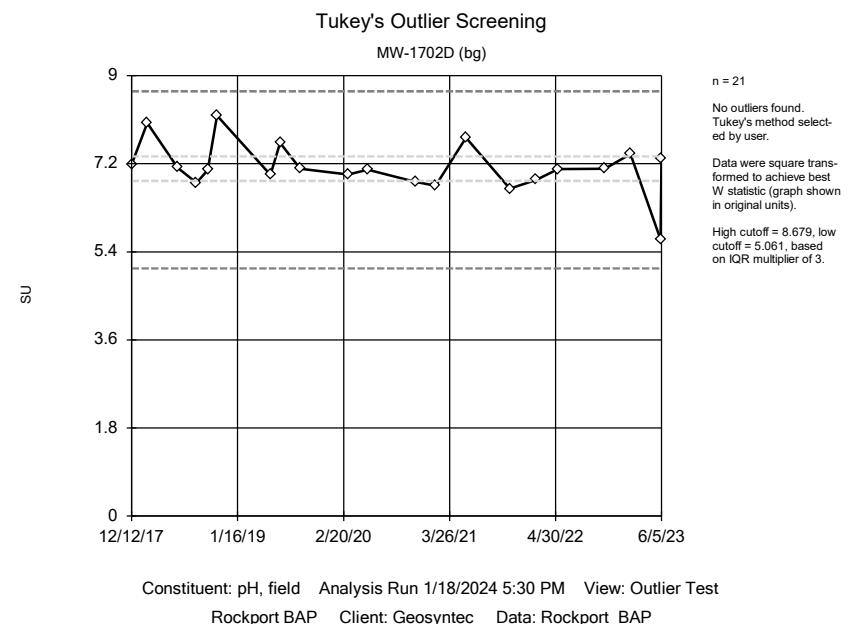
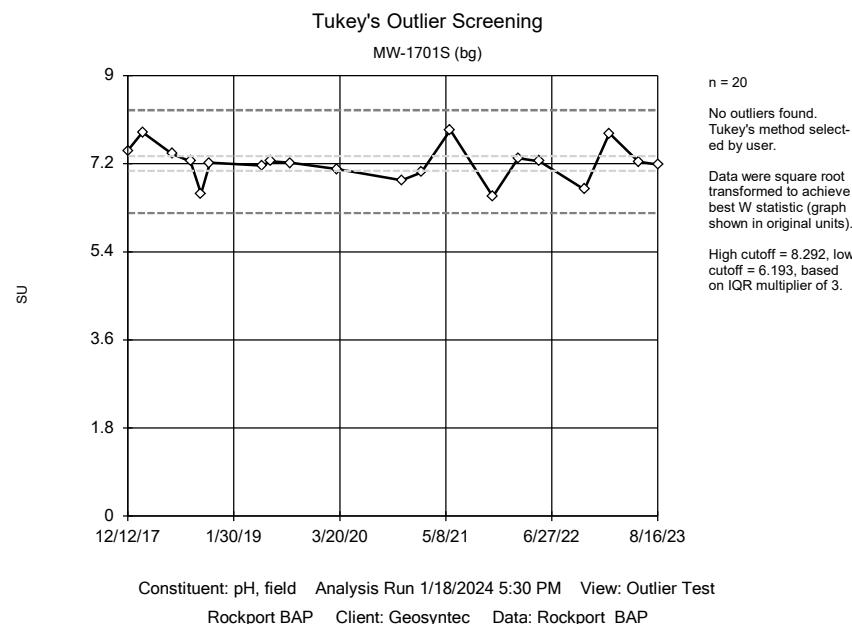
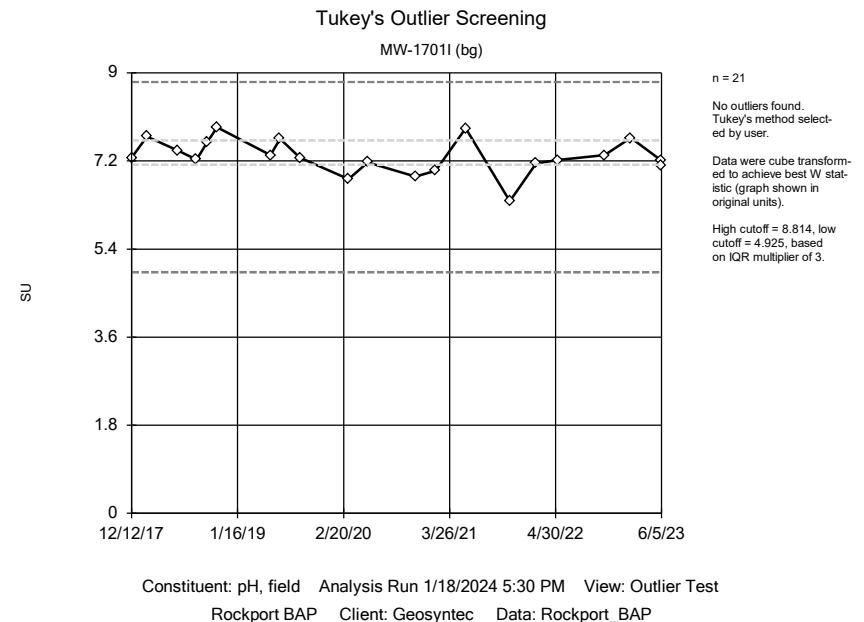
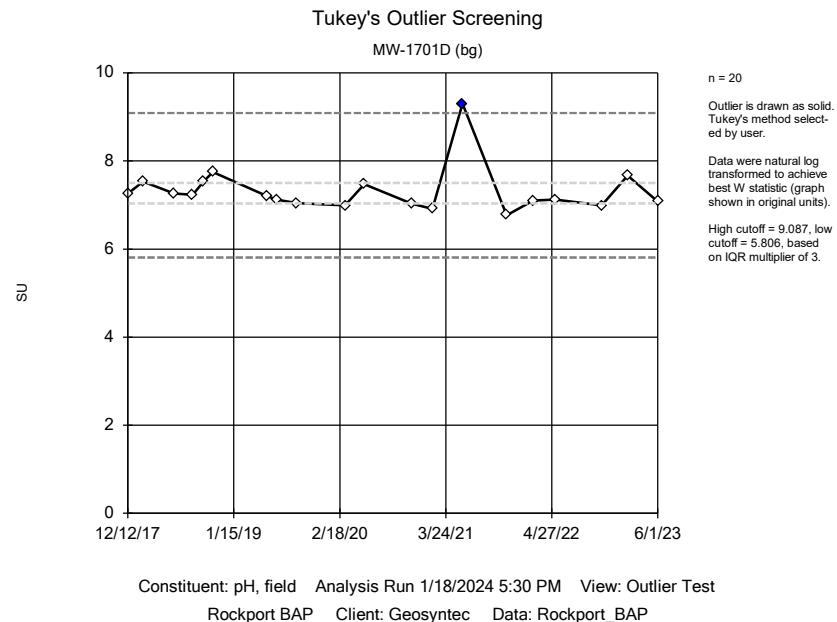


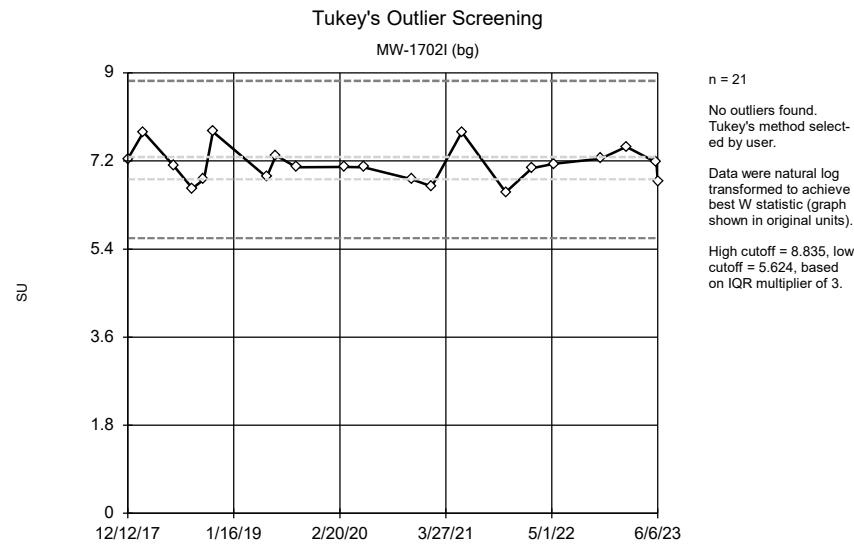




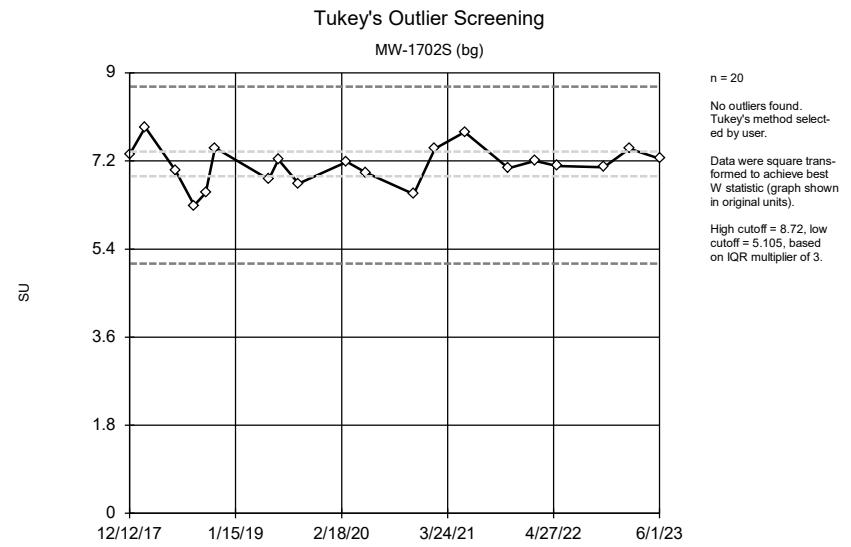








Constituent: pH, field Analysis Run 1/18/2024 5:30 PM View: Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: pH, field Analysis Run 1/18/2024 5:30 PM View: Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

# Tukey's Outlier Test - Upgradient Wells - Significant Results

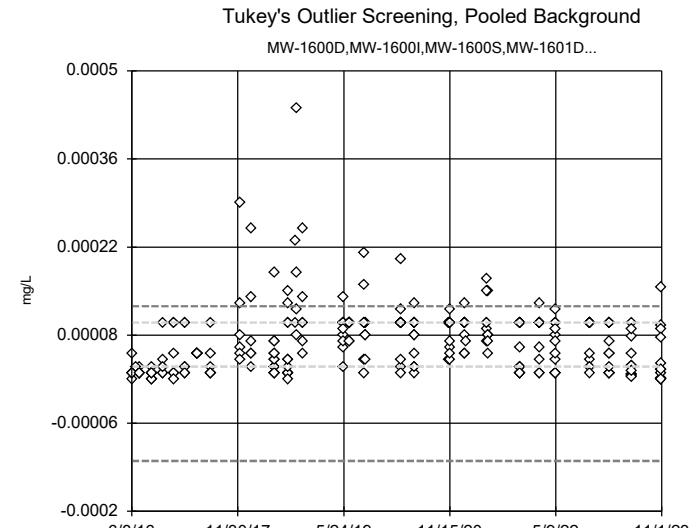
Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/22/2024, 1:29 PM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Arsenic, total (mg/L)	MW-1600D,MW-1600I...	Yes	0.0253,0.0248,0.0574,0.0395,0.0293,0.028,0.0252,0	NP	NaN	275	0.01386	0.01525	x^6	ChiSquared
Barium, total (mg/L)	MW-1600D,MW-1600I...	Yes	0.94,0.946,0.91,0.997,0.877,0.986,0.914,0.817,0.8	NP	NaN	275	0.2912	0.3221	x^6	ChiSquared
Boron, total (mg/L)	MW-1600D,MW-1600I...	Yes	0.079,0.079,0.085,0.129,0.129,0.068,0.068,0.076,0	NP	NaN	263	0.04112	0.03152	x^6	ChiSquared
Chloride, total (mg/L)	MW-1600D,MW-1600I...	Yes	44.9,43,45.9,46.4,43.5	NP	NaN	263	25.33	7.979	x^4	ChiSquared
Combined Radium 226 + 228 (pCi/L)	MW-1600D,MW-1600I...	Yes	2.148,2.265,2.223,2.86,2.377,2.96,2.2,7.25,2.47,2	NP	NaN	275	1.227	0.8039	x^6	ChiSquared
Fluoride, total (mg/L)	MW-1600D,MW-1600I...	Yes	0.56,0.51,0.51,0.55,0.55,0.54,0.54,0.54,0.53,0.62	NP	NaN	275	0.3144	0.1261	x^6	ChiSquared
Lithium, total (mg/L)	MW-1600D,MW-1600I...	Yes	0.015,0.015,0.015,0.015,0.015,0.015,0.015,0.015,0.015,0	NP	NaN	277	0.007777	0.005225	x^6	ChiSquared
Sulfate, total (mg/L)	MW-1600D,MW-1600I...	Yes	75.8,76,60.8,60.4,60.6,60.3,62.2	NP	NaN	263	38.54	12.38	x^6	ChiSquared
Total Dissolved Solids [TDS] (mg/L)	MW-1600D,MW-1600I...	Yes	491,700,760	NP	NaN	263	382.8	54.92	x^6	ChiSquared

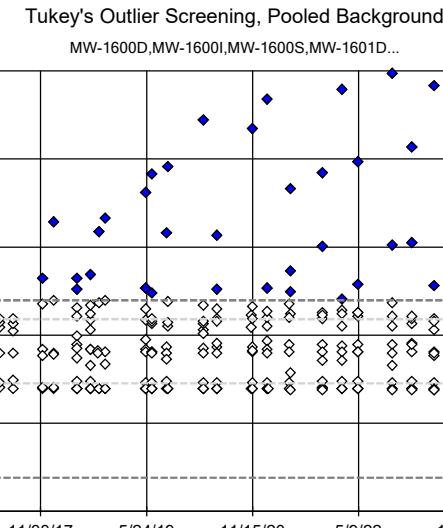
# Tukey's Outlier Test - Upgradient Wells - All Results

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/22/2024, 1:29 PM

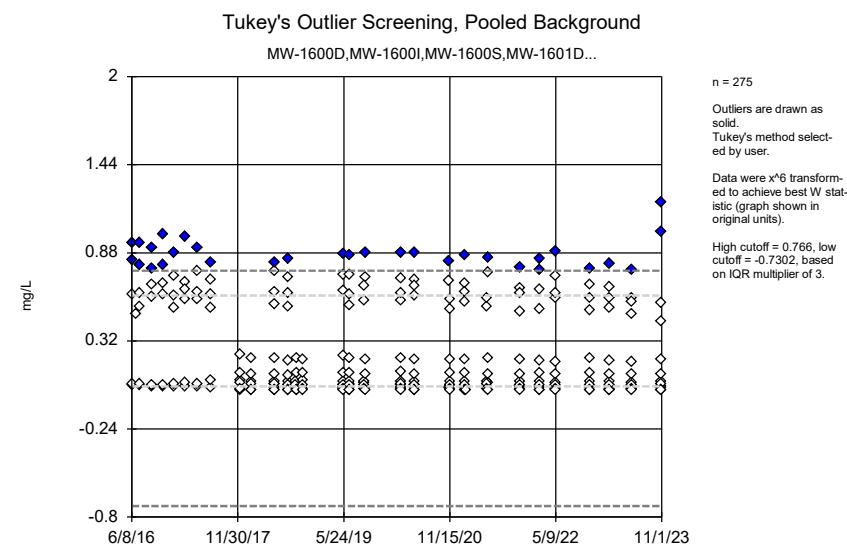
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Antimony, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.00007224	0.00005145	unknown	ChiSquared
Arsenic, total (mg/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>0.0253,0.0248,0.0574,0.0395,0.0293,0.028,0.0252,0</b>	NP	NaN	275	0.01386	0.01525	x^6	ChiSquared
Barium, total (mg/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>0.94,0.946,0.91,0.997,0.877,0.986,0.914,0.817,0.8</b>	NP	NaN	275	0.2912	0.3221	x^6	ChiSquared
Beryllium, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.00004431	0.00001479	unknown	ChiSquared
Boron, total (mg/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>0.079,0.079,0.085,0.129,0.129,0.068,0.068,0.076,0</b>	NP	NaN	263	0.04112	0.03152	x^6	ChiSquared
Cadmium, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.00002499	0.00003134	unknown	ChiSquared
Chloride, total (mg/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>44.9,43.45.9,46.4,43.5</b>	NP	NaN	263	25.33	7.979	x^4	ChiSquared
Chromium, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.0003015	0.0003566	unknown	ChiSquared
Cobalt, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.0007868	0.0008923	unknown	ChiSquared
Combined Radium 226 + 228 (pCi/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>2.148,2.265,2.223,2.86,2.377,2.96,2.2,7.25,2.47,2</b>	NP	NaN	275	1.227	0.8039	x^6	ChiSquared
Fluoride, total (mg/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>0.56,0.51,0.51,0.55,0.55,0.54,0.54,0.54,0.53,0.62</b>	NP	NaN	275	0.3144	0.1261	x^6	ChiSquared
Lead, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.0001996	0.0003448	unknown	ChiSquared
Lithium, total (mg/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>0.015,0.015,0.015,0.015,0.015,0.015,0.015,0.015,0</b>	NP	NaN	277	0.007777	0.005225	x^6	ChiSquared
Mercury, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	251	0.0000049045.51e-7	unknown	ChiSquared	
Molybdenum, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.001746	0.0009829	unknown	ChiSquared
Selenium, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.0005848	0.0006006	unknown	ChiSquared
Sulfate, total (mg/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>75.8,76,60.8,60.4,60.6,60.3,62.2</b>	NP	NaN	263	38.54	12.38	x^6	ChiSquared
Thallium, total (mg/L)	MW-1600D,MW-1600I...	n/a	n/a	NP	NaN	275	0.0008425	0.005059	unknown	ChiSquared
Total Dissolved Solids [TDS] (mg/L)	<b>MW-1600D,MW-1600I...</b>	<b>Yes</b>	<b>491,700,760</b>	NP	NaN	263	382.8	54.92	x^6	ChiSquared



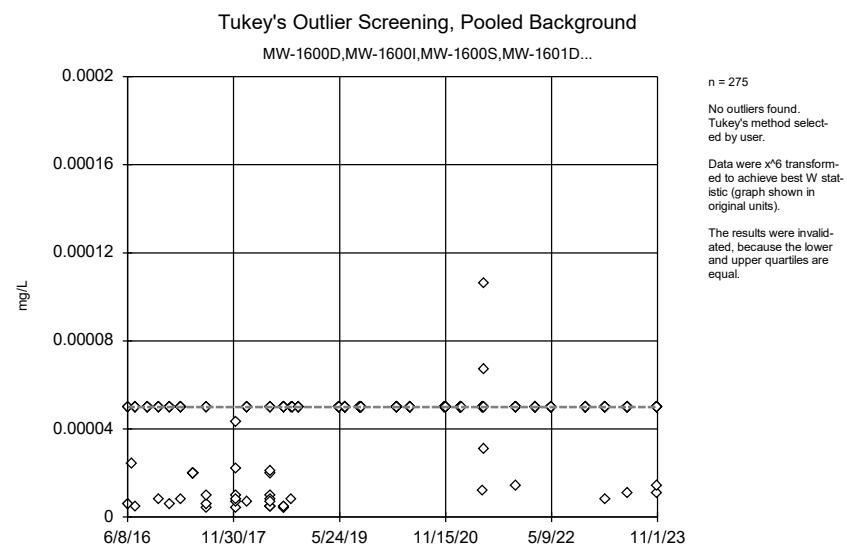
Constituent: Antimony, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: Arsenic, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



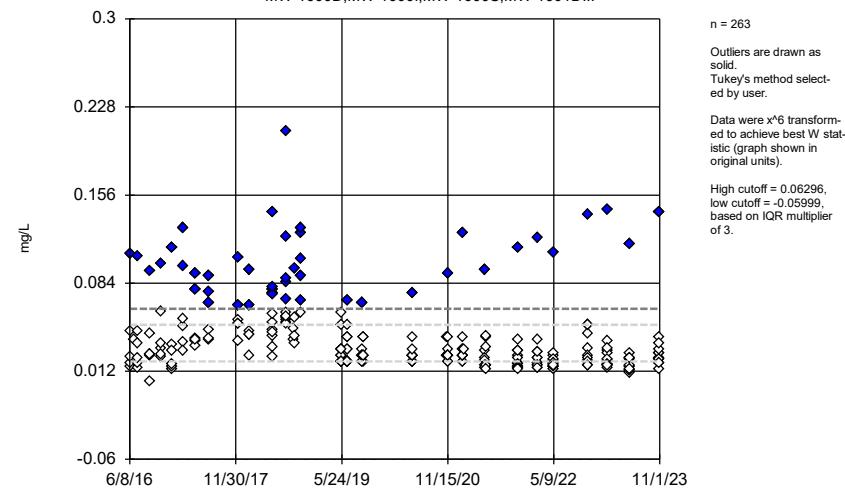
Constituent: Barium, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: Beryllium, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Tukey's Outlier Screening, Pooled Background

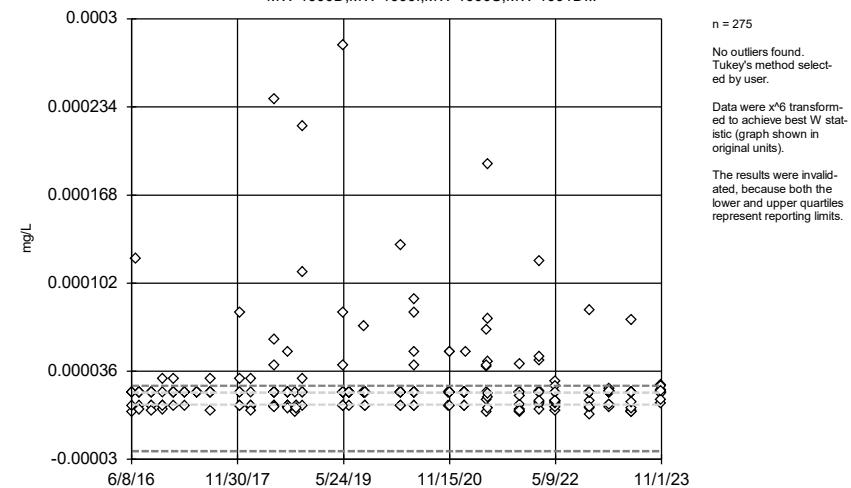
MW-1600D,MW-1600I,MW-1600S,MW-1601D...



Constituent: Boron, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Tukey's Outlier Screening, Pooled Background

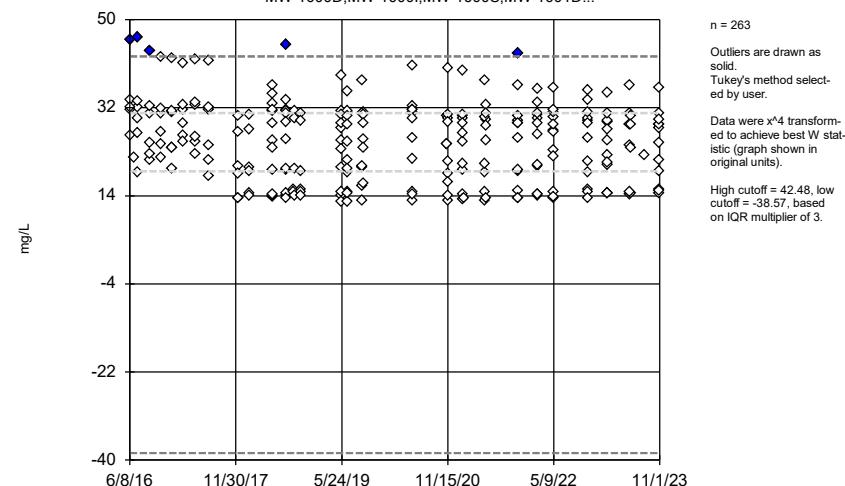
MW-1600D,MW-1600I,MW-1600S,MW-1601D...



Constituent: Cadmium, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Tukey's Outlier Screening, Pooled Background

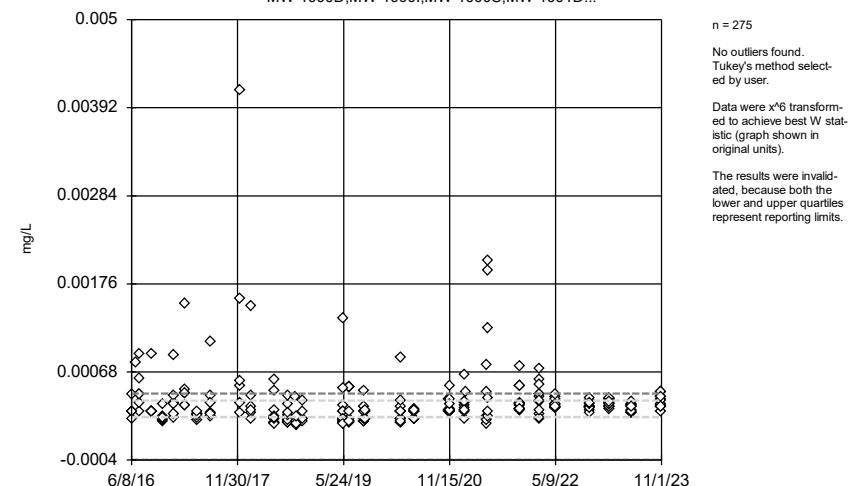
MW-1600D,MW-1600I,MW-1600S,MW-1601D...



Constituent: Chloride, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Tukey's Outlier Screening, Pooled Background

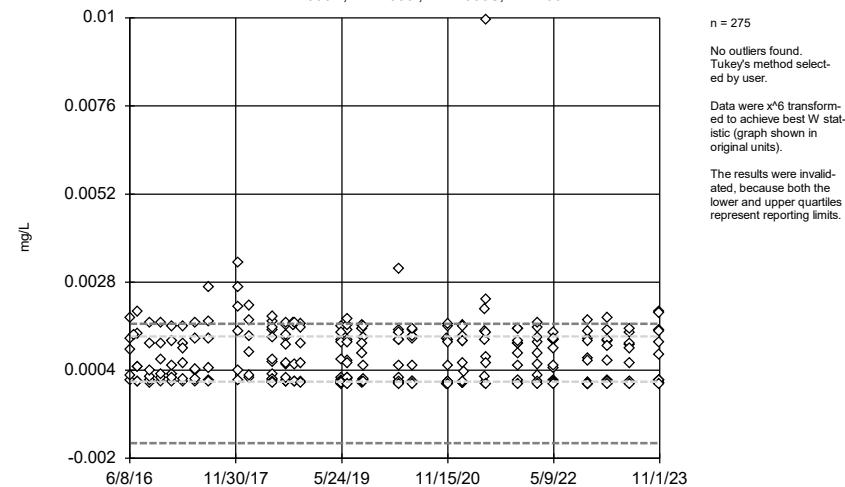
MW-1600D,MW-1600I,MW-1600S,MW-1601D...



Constituent: Chromium, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Tukey's Outlier Screening, Pooled Background

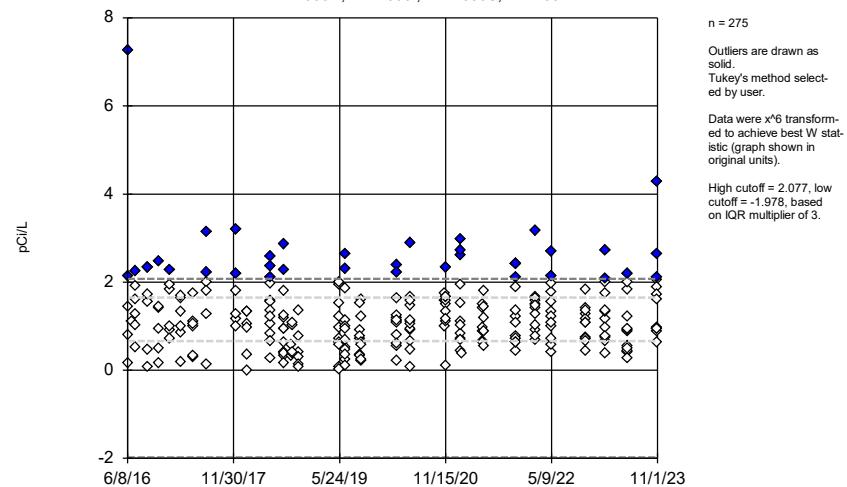
MW-1600D,MW-1600I,MW-1600S,MW-1601D...



Constituent: Cobalt, total Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Tukey's Outlier Screening, Pooled Background

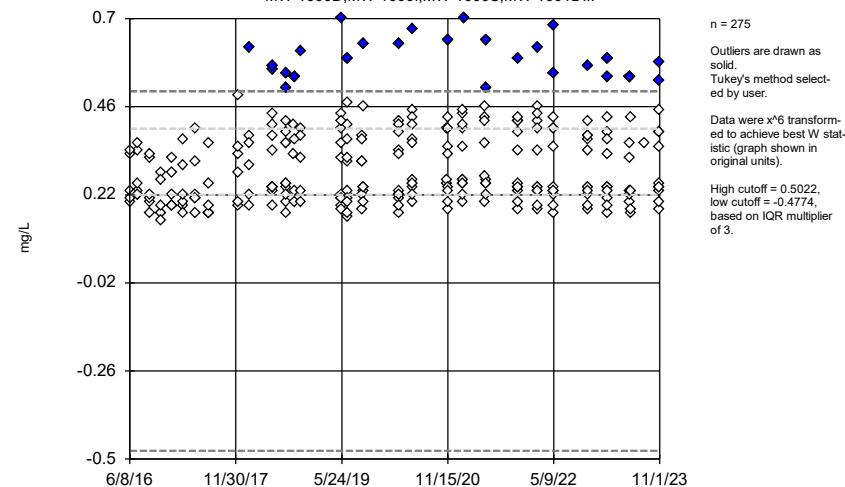
MW-1600D,MW-1600I,MW-1600S,MW-1601D...



Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 1:26 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Tukey's Outlier Screening, Pooled Background

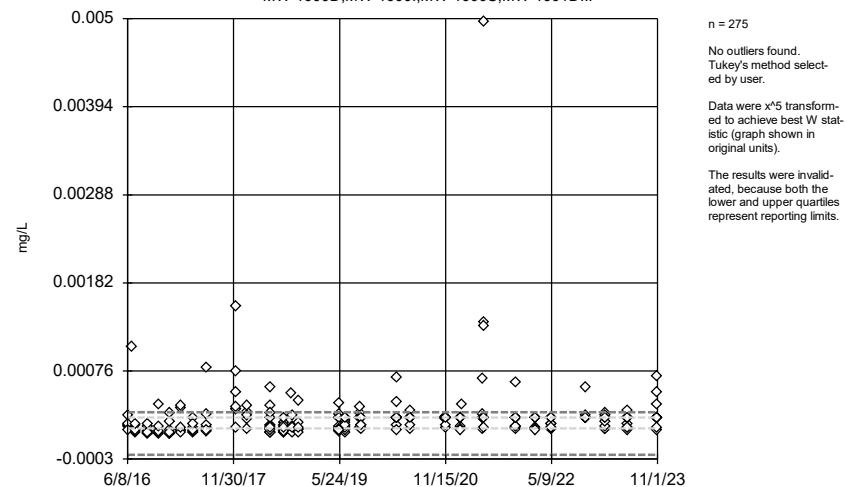
MW-1600D,MW-1600I,MW-1600S,MW-1601D...



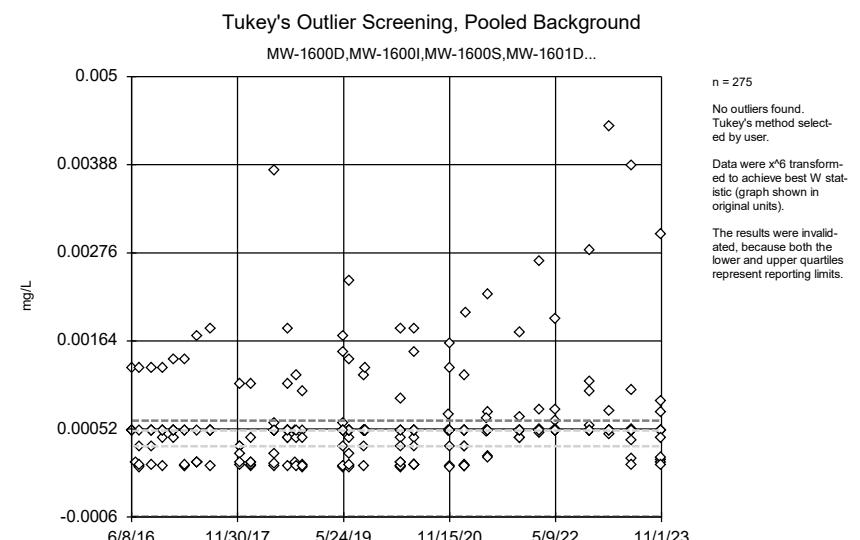
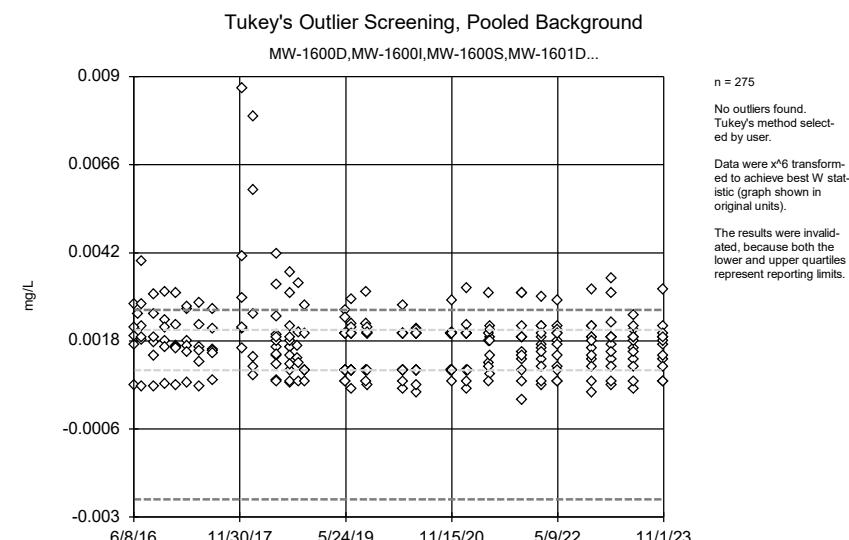
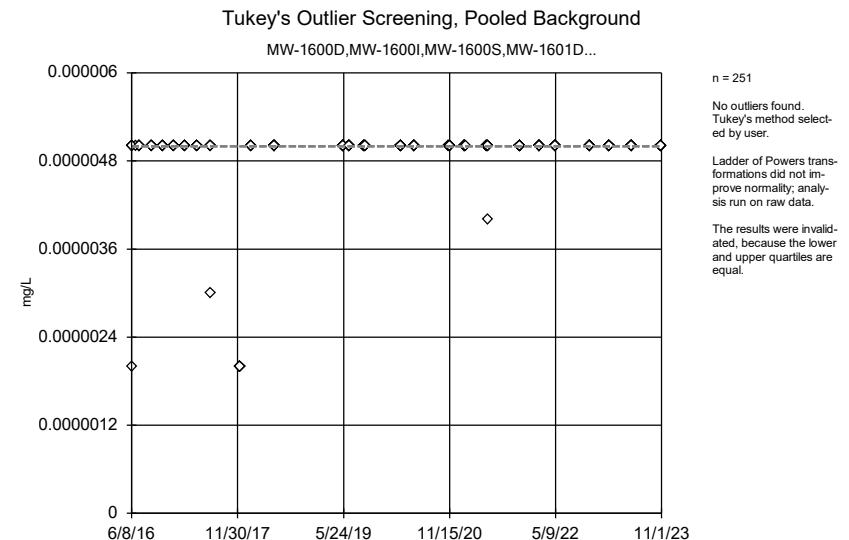
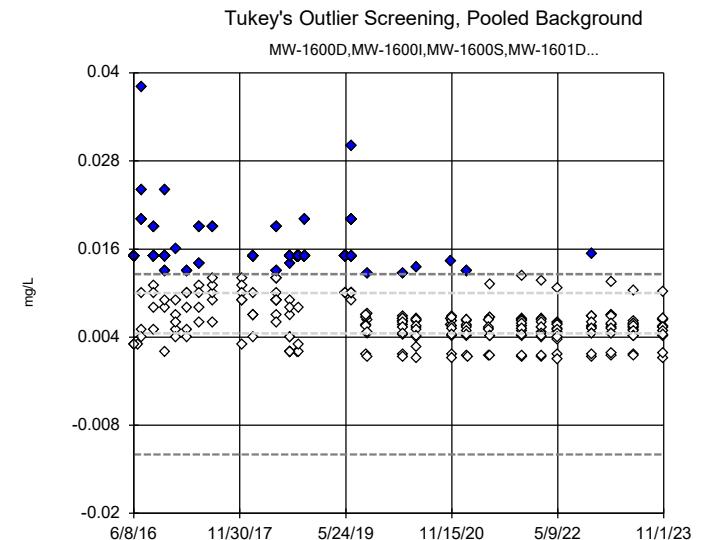
Constituent: Fluoride, total Analysis Run 1/22/2024 1:27 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Tukey's Outlier Screening, Pooled Background

MW-1600D,MW-1600I,MW-1600S,MW-1601D...



Constituent: Lead, total Analysis Run 1/22/2024 1:27 PM View: Upgradient Outlier Test  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



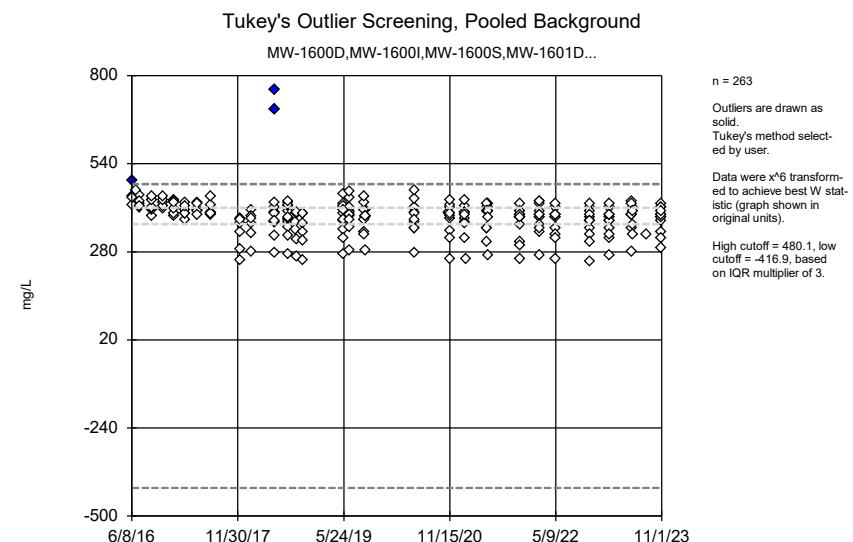
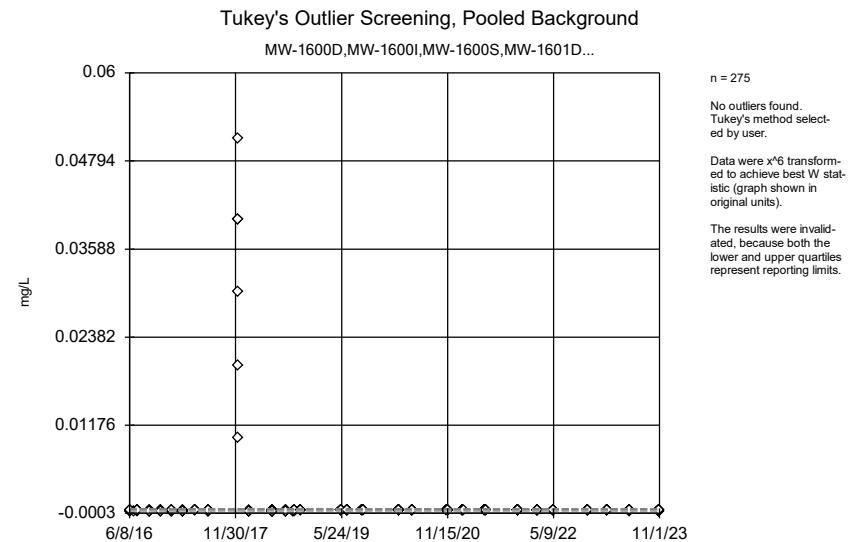
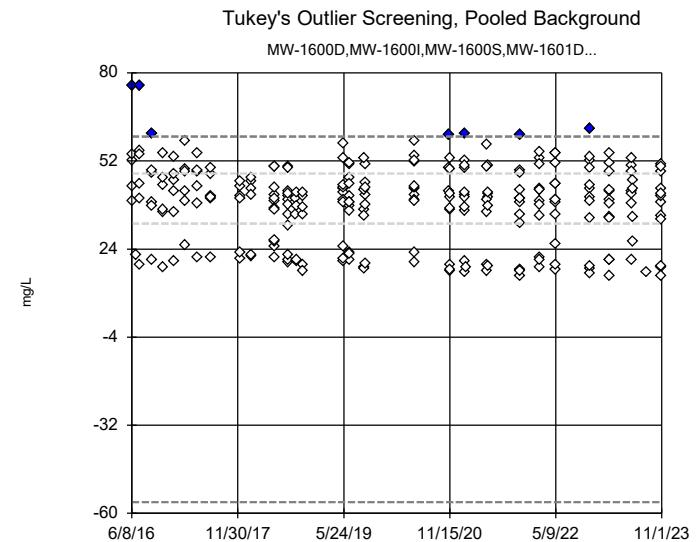


FIGURE D  
Mann-Whitney

## Welch's t-test/Mann-Whitney - Significant Results

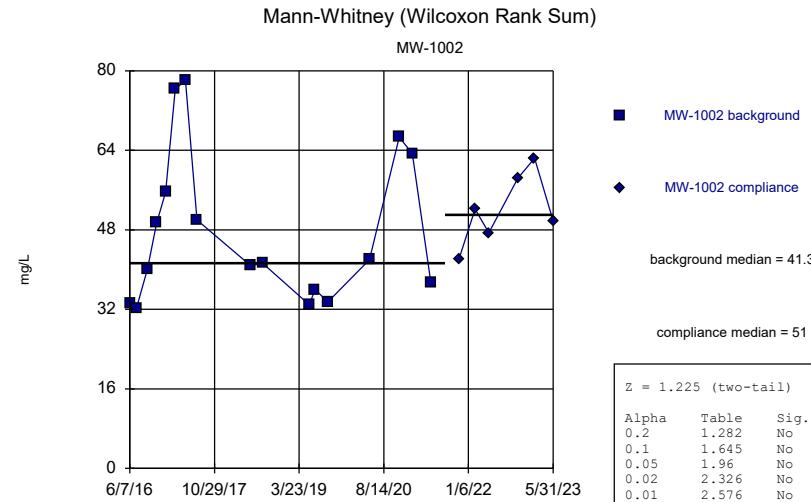
Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/18/2024, 6:00 PM

<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Alpha</u>	<u>Method</u>
Calcium, total (mg/L)	MW-1600S (bg)	-2.662	Yes	0.01	Mann-W
Calcium, total (mg/L)	MW-1601S (bg)	-3.397	Yes	0.01	Mann-W
Calcium, total (mg/L)	MW-1604I	-2.836	Yes	0.01	Mann-W
Calcium, total (mg/L)	MW-1605D	-3.256	Yes	0.01	Mann-W

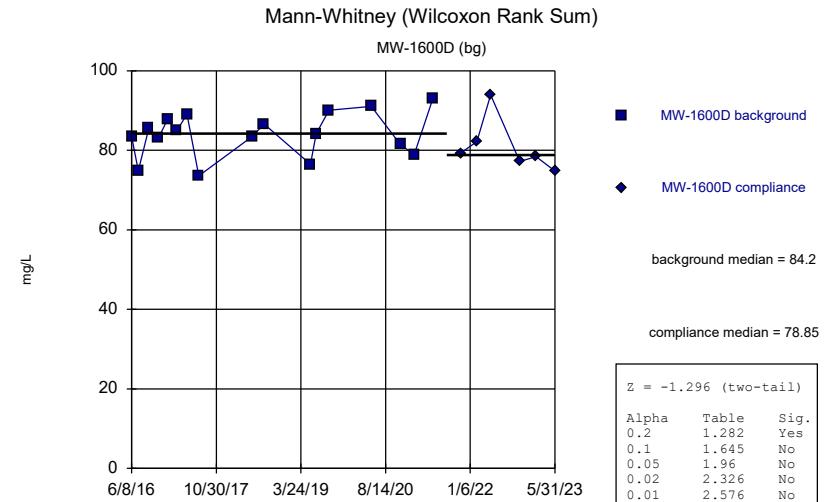
# Welch's t-test/Mann-Whitney - All Results

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/18/2024, 6:00 PM

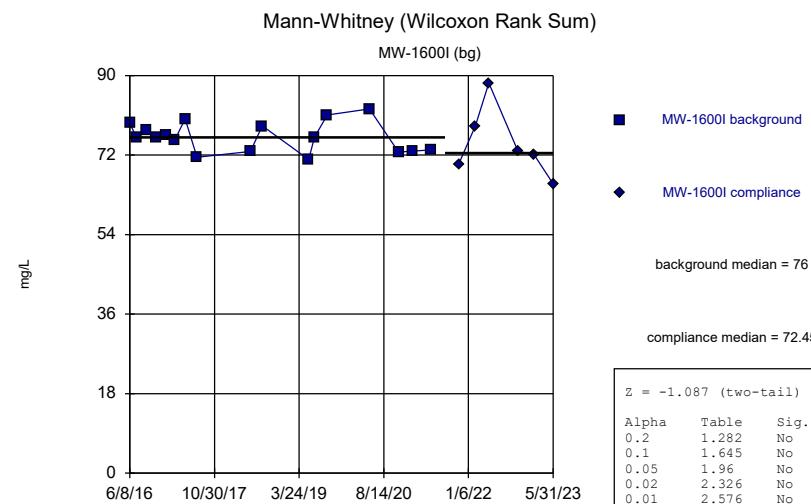
<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Alpha</u>	<u>Method</u>
Calcium, total (mg/L)	MW-1002	1.225	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1600D (bg)	-1.296	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1600I (bg)	-1.087	No	0.01	Mann-W
<b>Calcium, total (mg/L)</b>	<b>MW-1600S (bg)</b>	<b>-2.662</b>	<b>Yes</b>	<b>0.01</b>	<b>Mann-W</b>
Calcium, total (mg/L)	MW-1601D (bg)	-0.7353	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1601I (bg)	-1.069	No	0.01	Mann-W
<b>Calcium, total (mg/L)</b>	<b>MW-1601S (bg)</b>	<b>-3.397</b>	<b>Yes</b>	<b>0.01</b>	<b>Mann-W</b>
Calcium, total (mg/L)	MW-1602D	-1.085	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1602I	-0.9218	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1603D	0.8408	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1603I	-2.415	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1603S	-1.438	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1604D	-1.646	No	0.01	Mann-W
<b>Calcium, total (mg/L)</b>	<b>MW-1604I</b>	<b>-2.836</b>	<b>Yes</b>	<b>0.01</b>	<b>Mann-W</b>
Calcium, total (mg/L)	MW-1604S	0.4551	No	0.01	Mann-W
<b>Calcium, total (mg/L)</b>	<b>MW-1605D</b>	<b>-3.256</b>	<b>Yes</b>	<b>0.01</b>	<b>Mann-W</b>
Calcium, total (mg/L)	MW-1605I	-2.347	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1605S	-0.7003	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1606D	2.276	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1606I	-2.275	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1606S	0.105	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1701D (bg)	-1.711	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1701I (bg)	-2.061	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1701S (bg)	-2.149	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1702D (bg)	-1.492	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1702I (bg)	-1.756	No	0.01	Mann-W
Calcium, total (mg/L)	MW-1702S (bg)	-0.8794	No	0.01	Mann-W
pH, field (SU)	MW-1002	1.567	No	0.01	Mann-W
pH, field (SU)	MW-1600D (bg)	-1.5	No	0.01	Mann-W
pH, field (SU)	MW-1600I (bg)	-0.3688	No	0.01	Mann-W
pH, field (SU)	MW-1600S (bg)	-1.505	No	0.01	Mann-W
pH, field (SU)	MW-1601D (bg)	-0.8893	No	0.01	Mann-W
pH, field (SU)	MW-1601I (bg)	-1.947	No	0.01	Mann-W
pH, field (SU)	MW-1601S (bg)	-1.086	No	0.01	Mann-W
pH, field (SU)	MW-1602D	1.051	No	0.01	Mann-W
pH, field (SU)	MW-1602I	-0.4337	No	0.01	Mann-W
pH, field (SU)	MW-1603D	-1.034	No	0.01	Mann-W
pH, field (SU)	MW-1603I	-1.367	No	0.01	Mann-W
pH, field (SU)	MW-1603S	-1.437	No	0.01	Mann-W
pH, field (SU)	MW-1604D	0.3002	No	0.01	Mann-W
pH, field (SU)	MW-1604I	-0.5755	No	0.01	Mann-W
pH, field (SU)	MW-1604S	-0.7312	No	0.01	Mann-W
pH, field (SU)	MW-1605D	0.8488	No	0.01	Mann-W
pH, field (SU)	MW-1605I	0.5959	No	0.01	Mann-W
pH, field (SU)	MW-1605S	-1.262	No	0.01	Mann-W
pH, field (SU)	MW-1606D	-2.434	No	0.01	Mann-W
pH, field (SU)	MW-1606I	0.1846	No	0.01	Mann-W
pH, field (SU)	MW-1606S	-0.3151	No	0.01	Mann-W
pH, field (SU)	MW-1701D (bg)	-1.186	No	0.01	Mann-W
pH, field (SU)	MW-1701I (bg)	-1.27	No	0.01	Mann-W
pH, field (SU)	MW-1701S (bg)	-0.397	No	0.01	Mann-W
pH, field (SU)	MW-1702D (bg)	-0.8955	No	0.01	Mann-W
pH, field (SU)	MW-1702I (bg)	-0.2613	No	0.01	Mann-W
pH, field (SU)	MW-1702S (bg)	0.4951	No	0.01	Mann-W



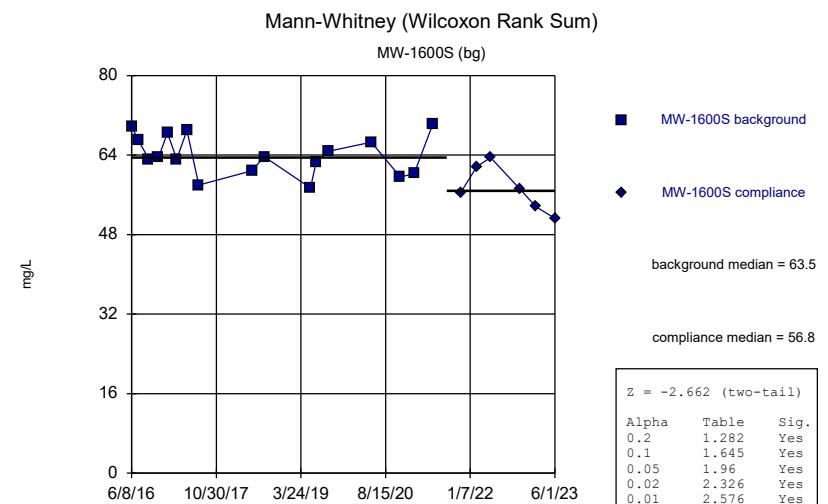
Constituent: Calcium, total Analysis Run 1/18/2024 5:57 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



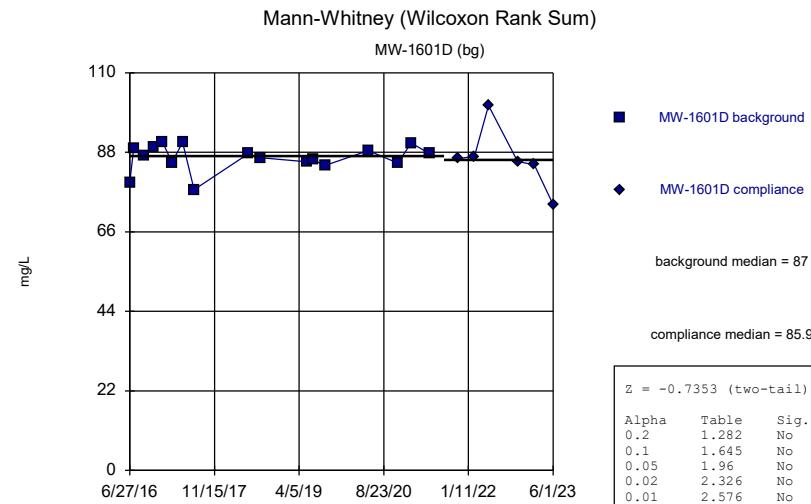
Constituent: Calcium, total Analysis Run 1/18/2024 5:57 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



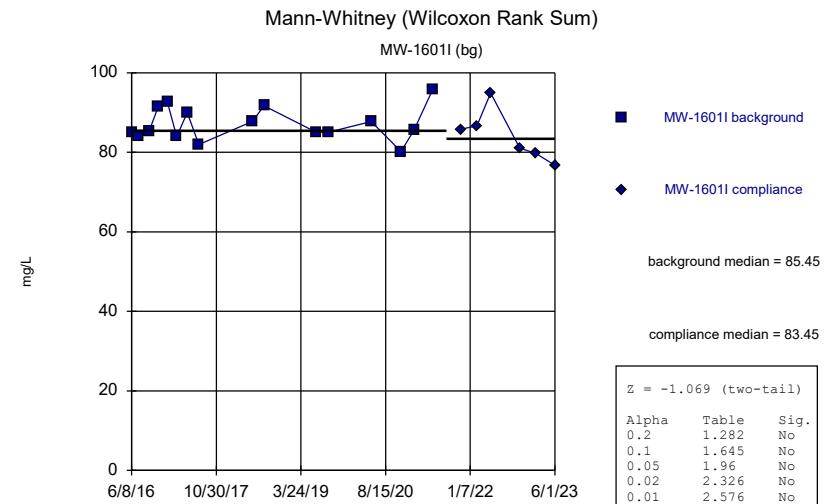
Constituent: Calcium, total Analysis Run 1/18/2024 5:57 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



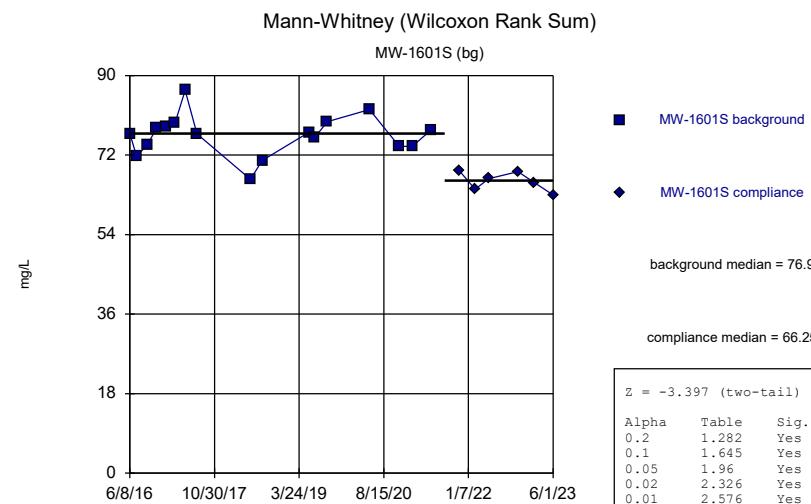
Constituent: Calcium, total Analysis Run 1/18/2024 5:57 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



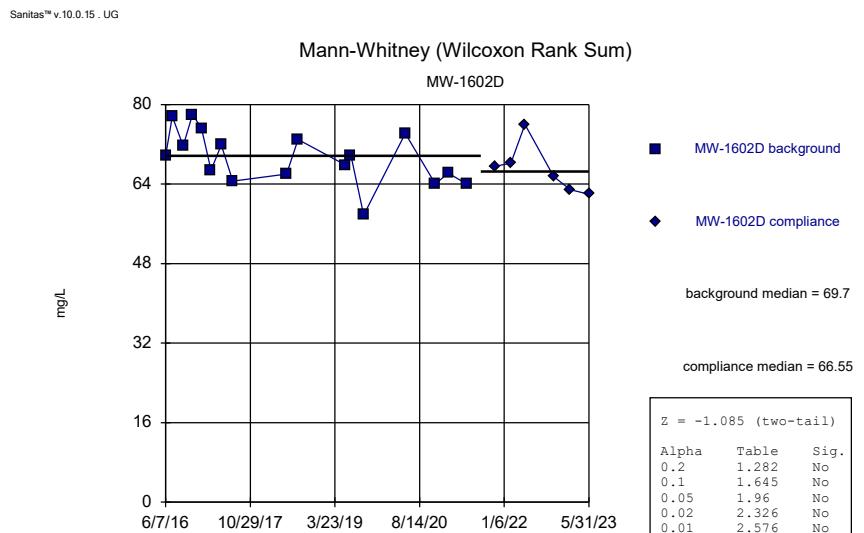
Constituent: Calcium, total Analysis Run 1/18/2024 5:57 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



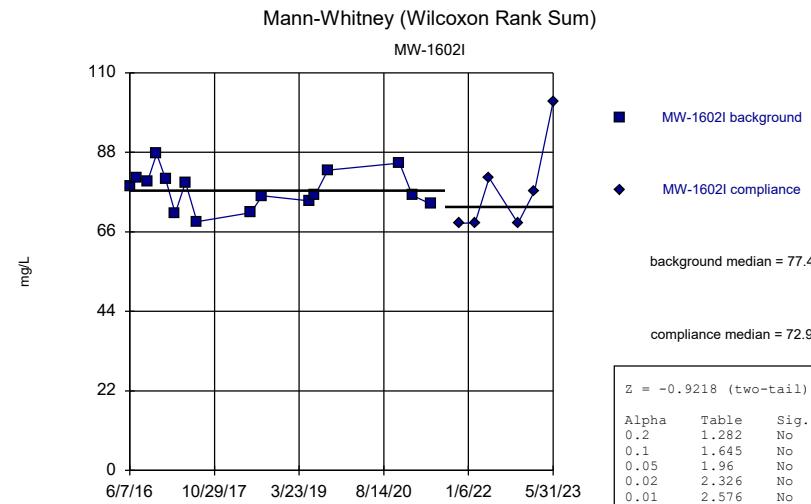
Constituent: Calcium, total Analysis Run 1/18/2024 5:57 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



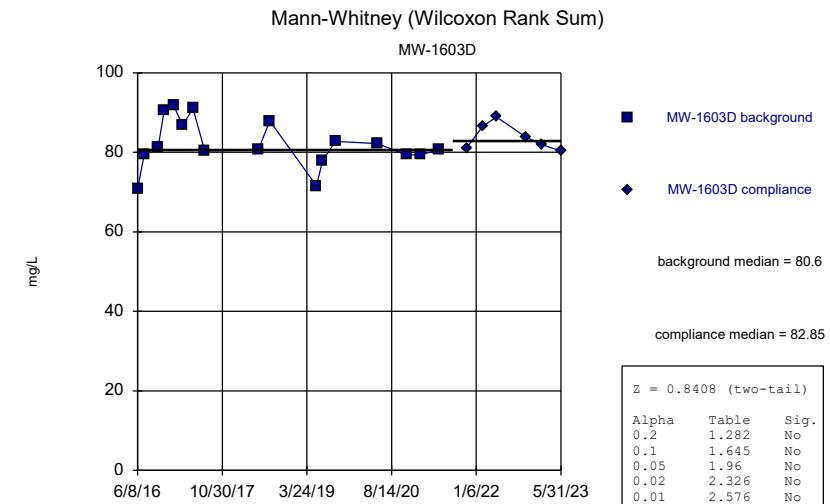
Constituent: Calcium, total Analysis Run 1/18/2024 5:57 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



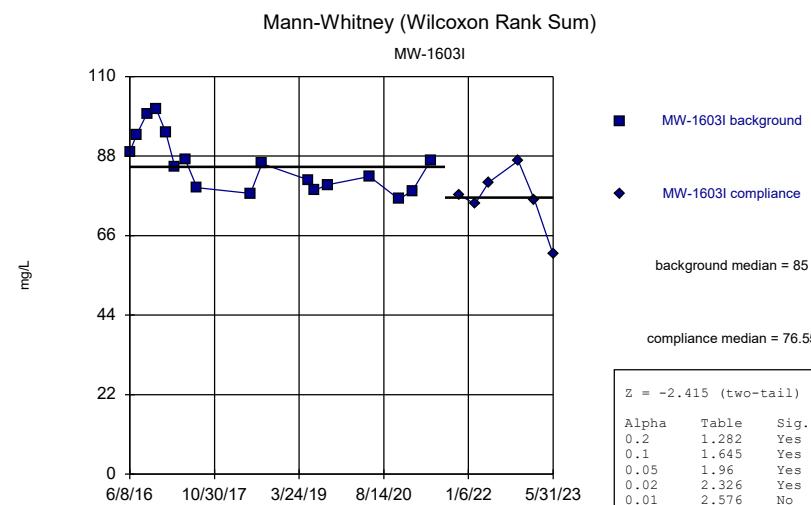
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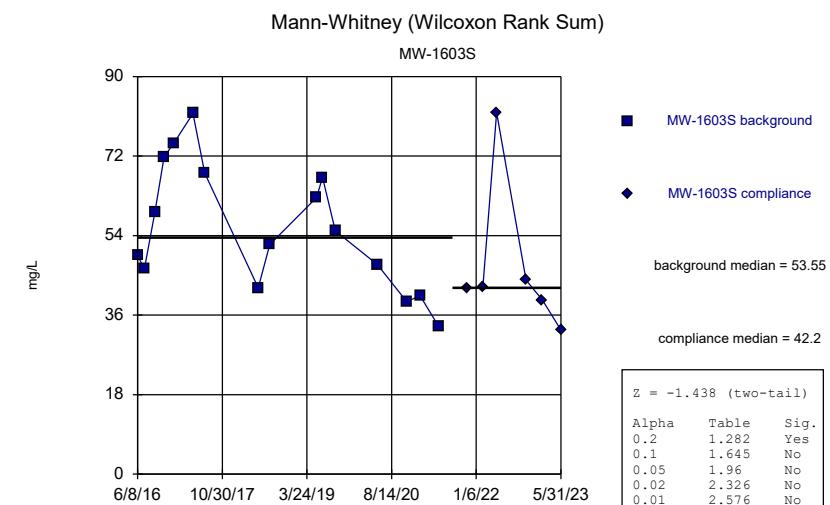
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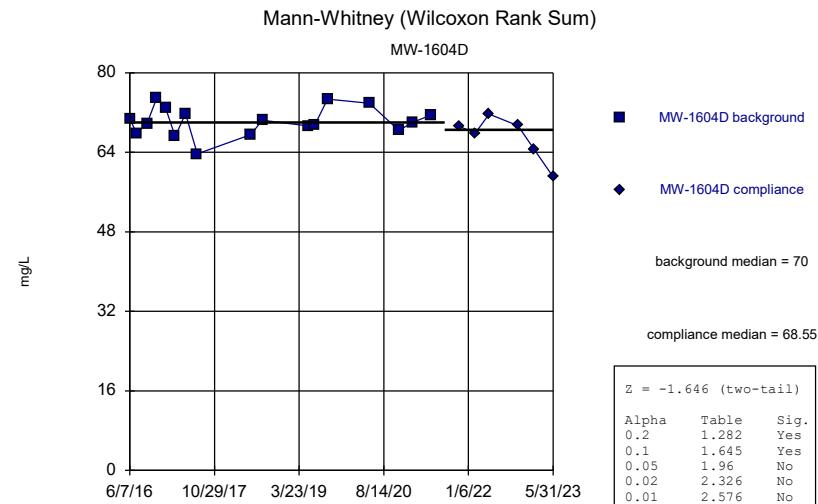
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP



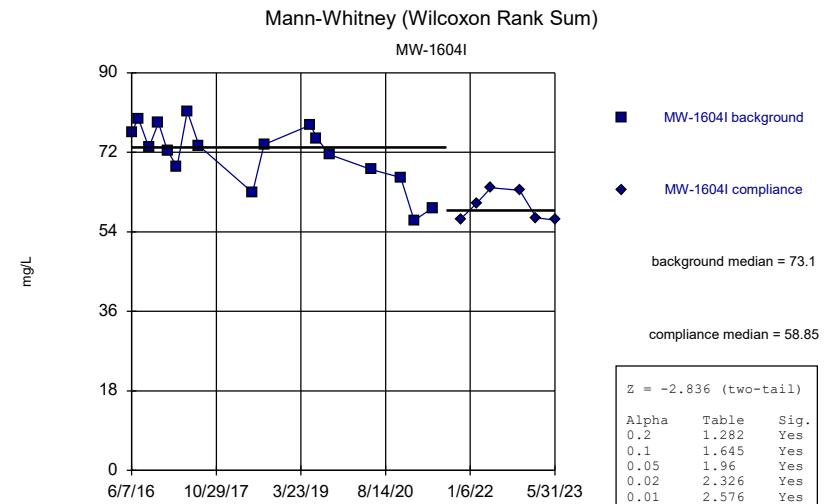
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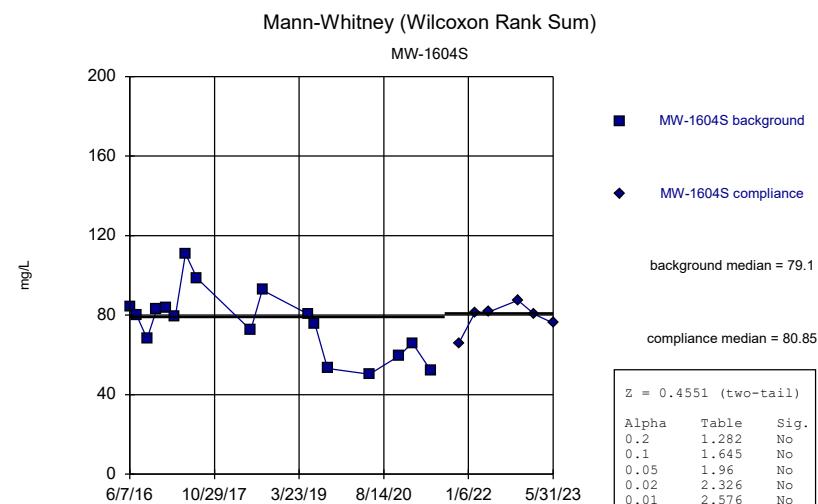
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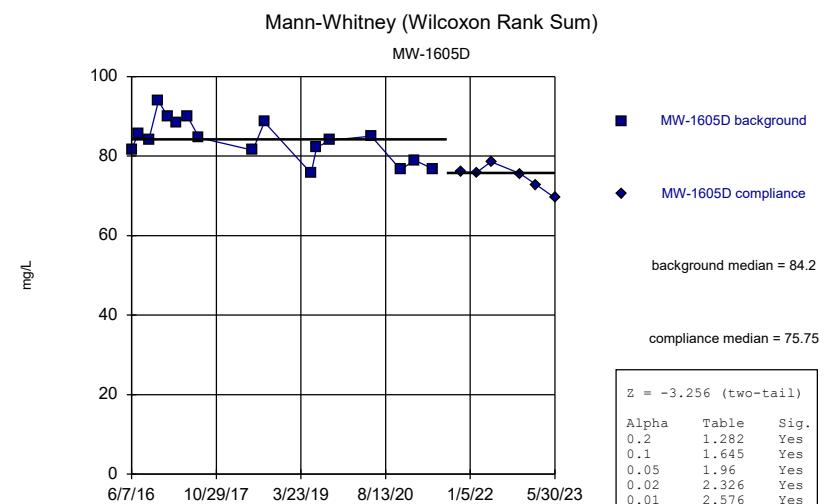
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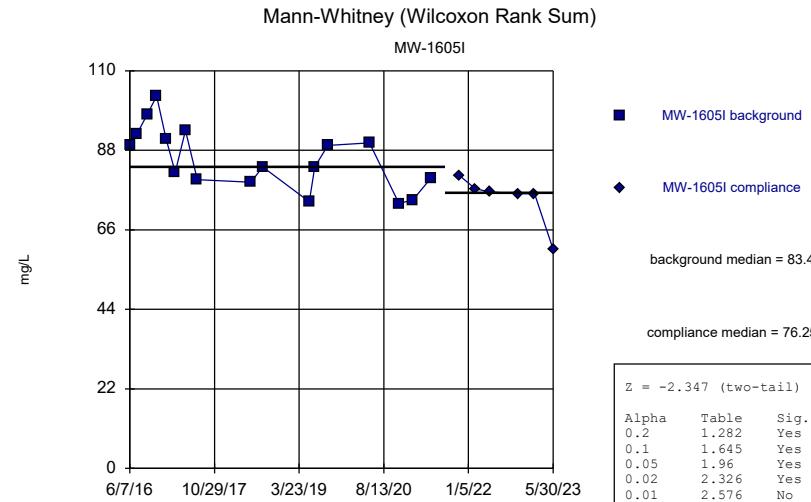
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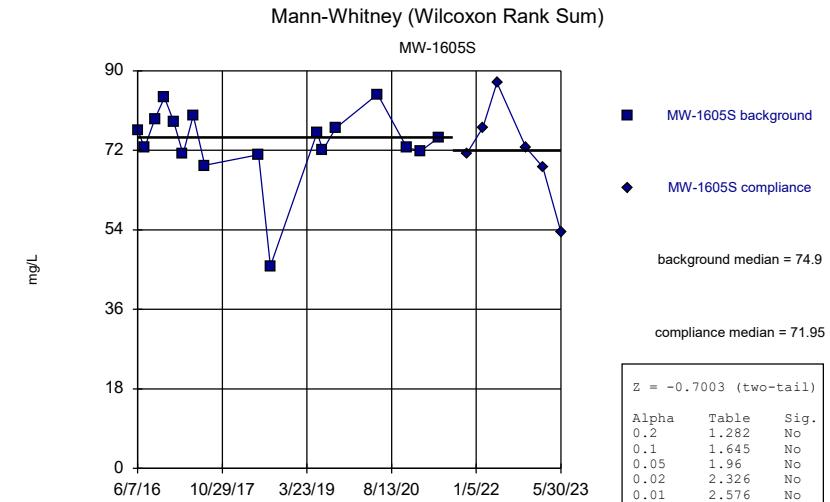
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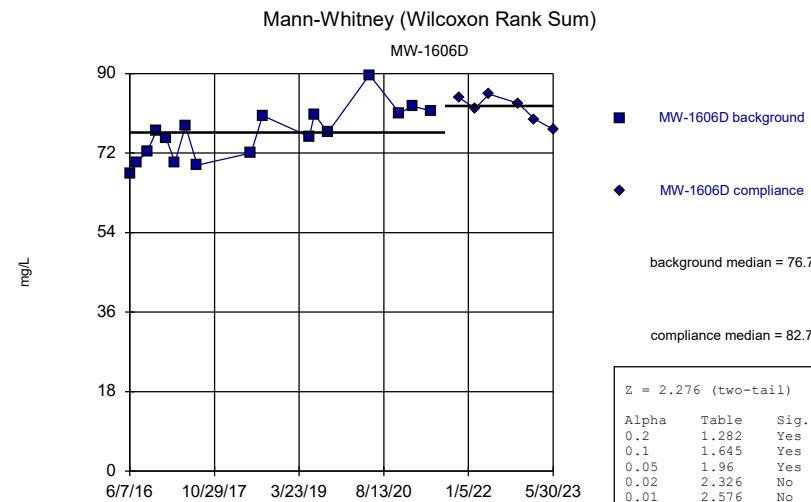
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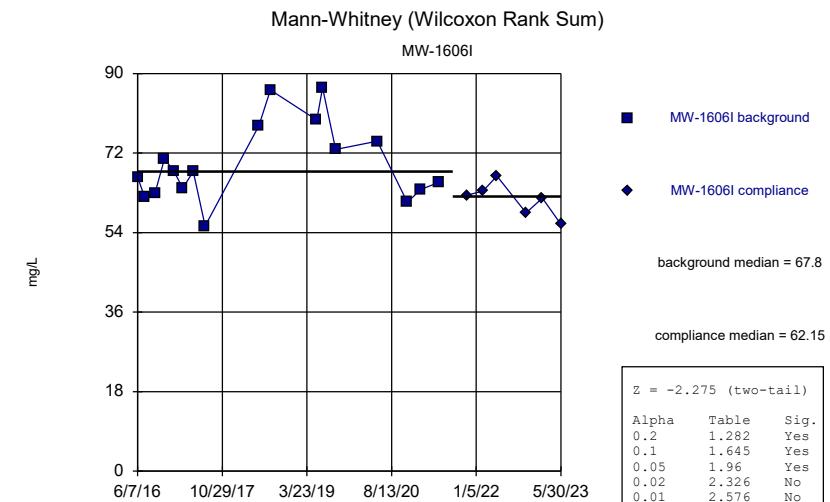
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP



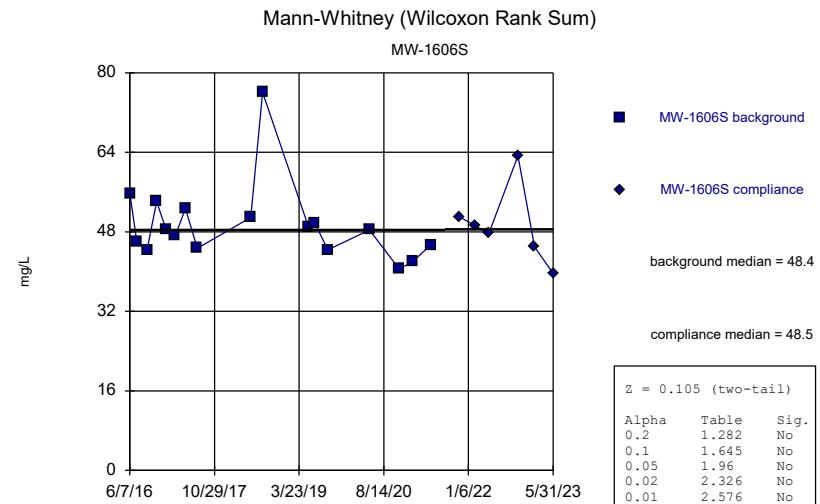
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP



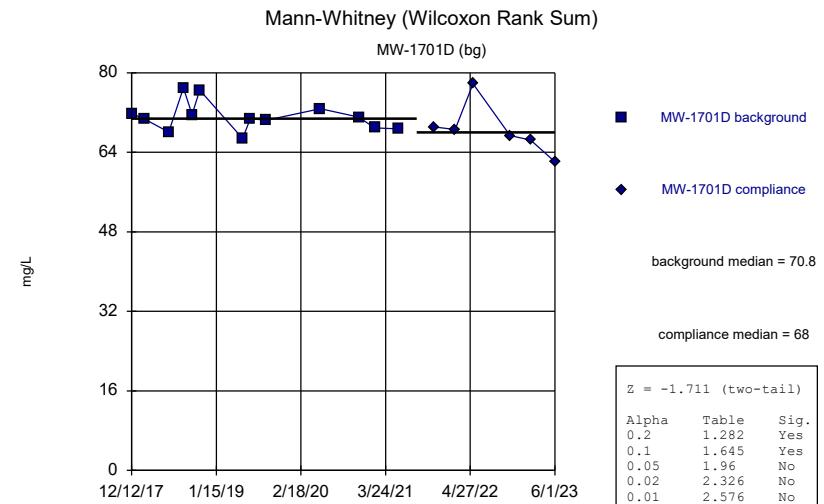
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP



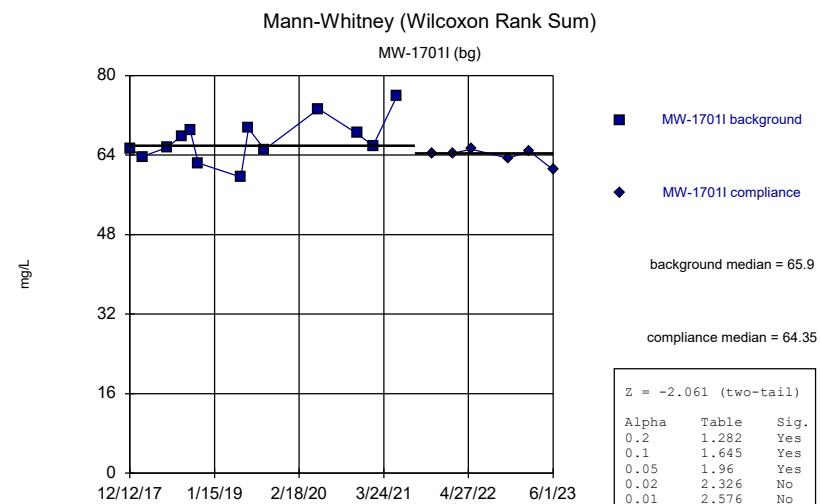
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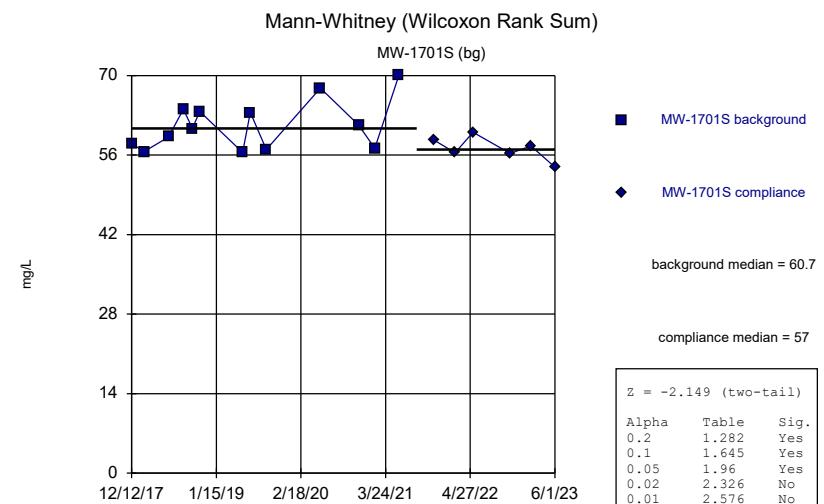
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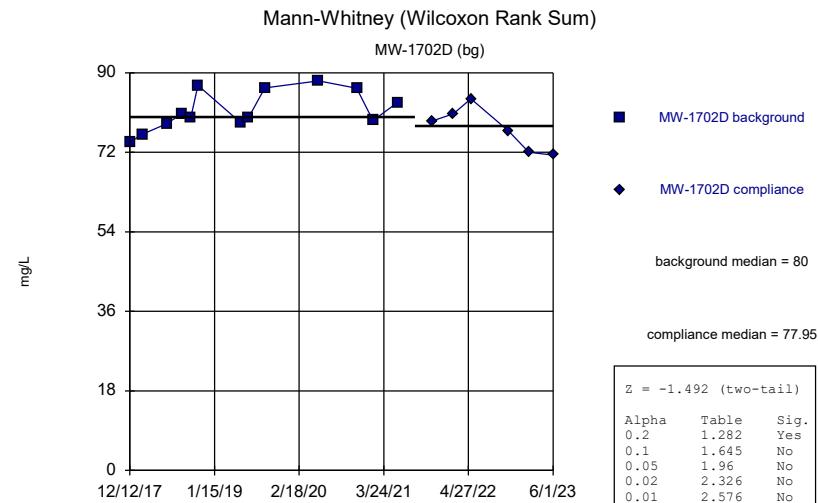
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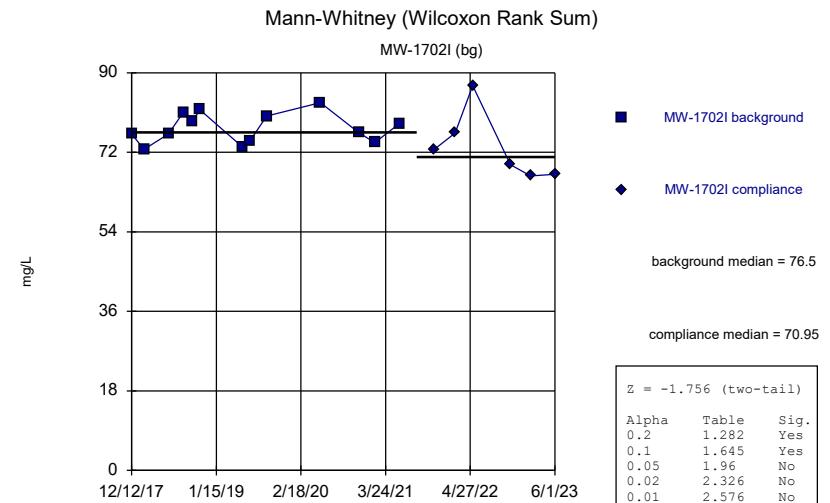
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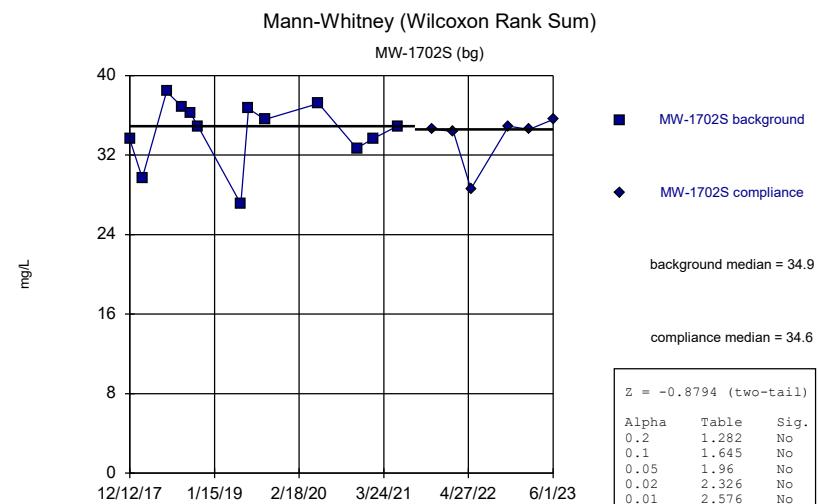
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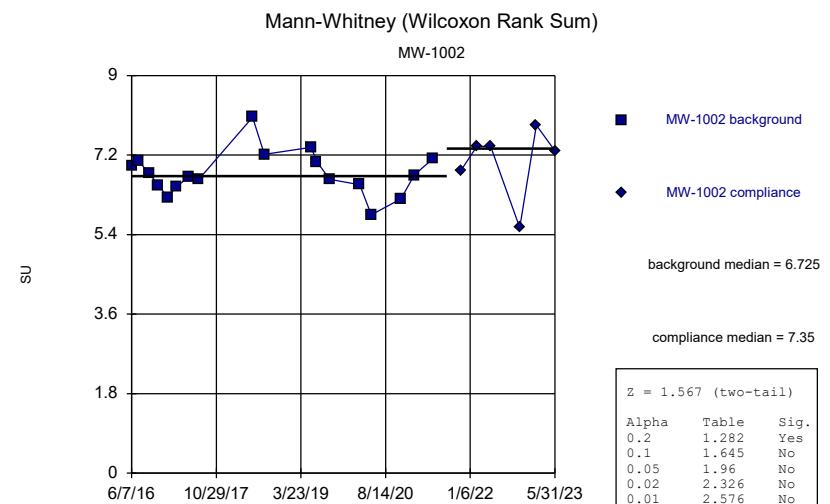
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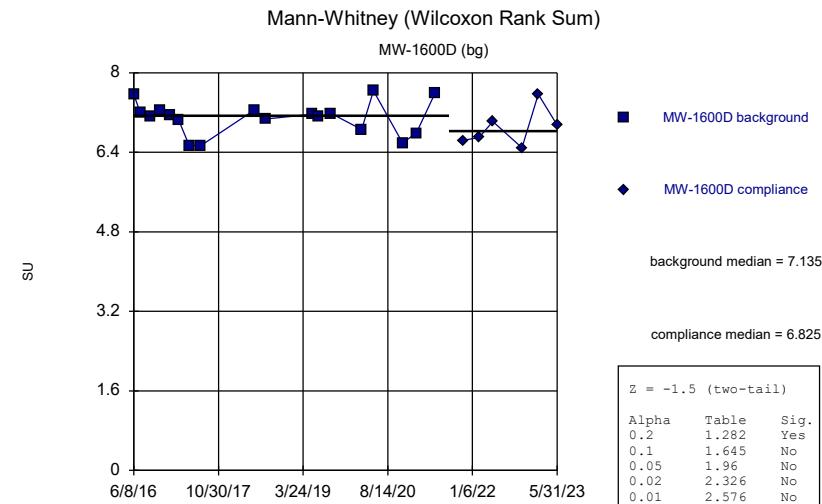
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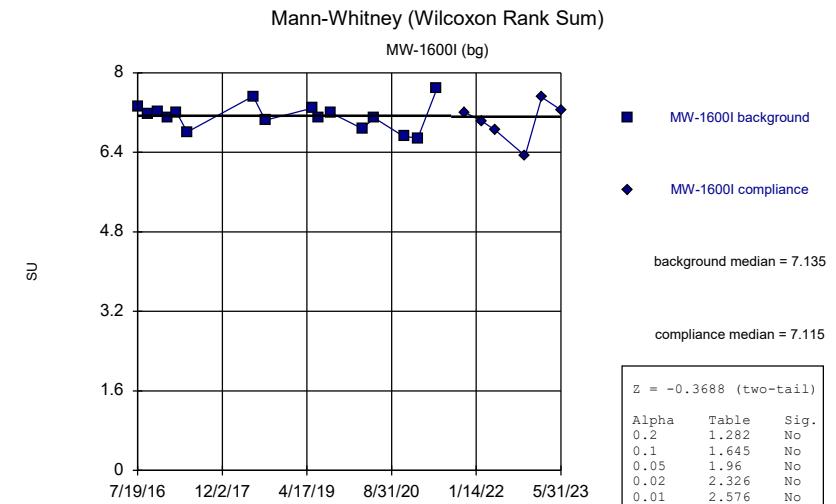
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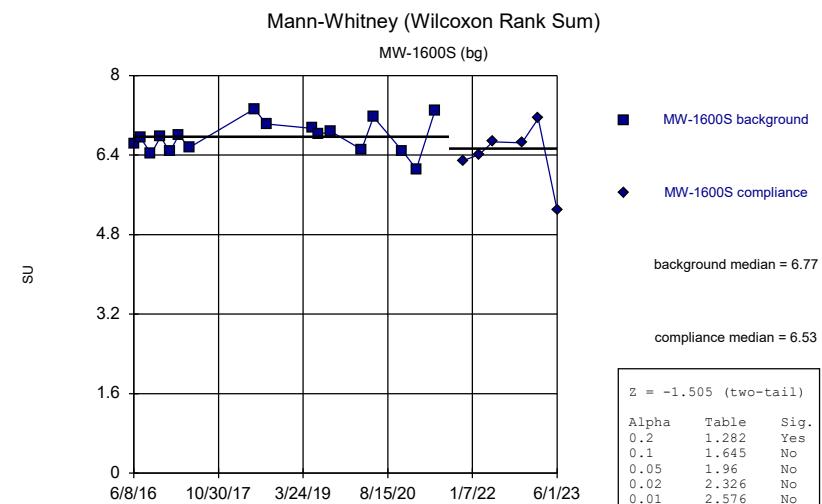
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP



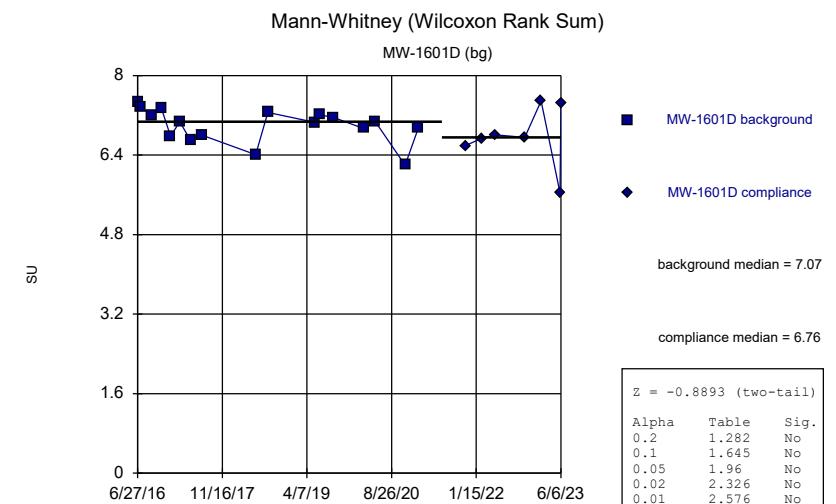
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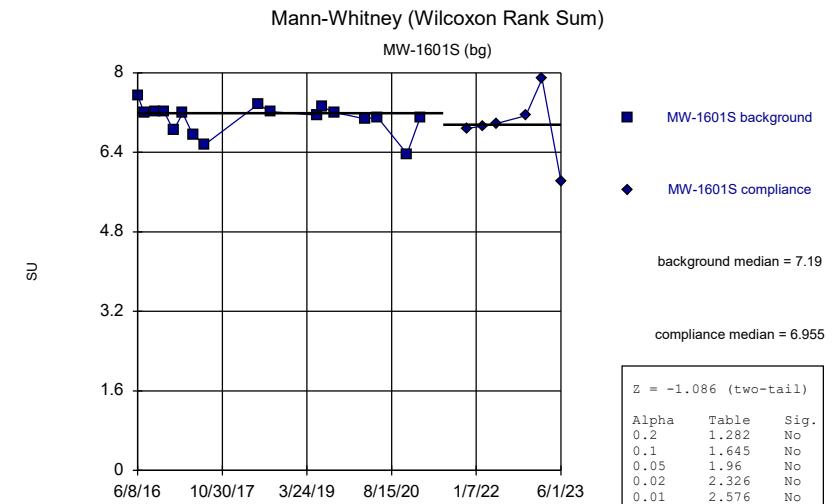
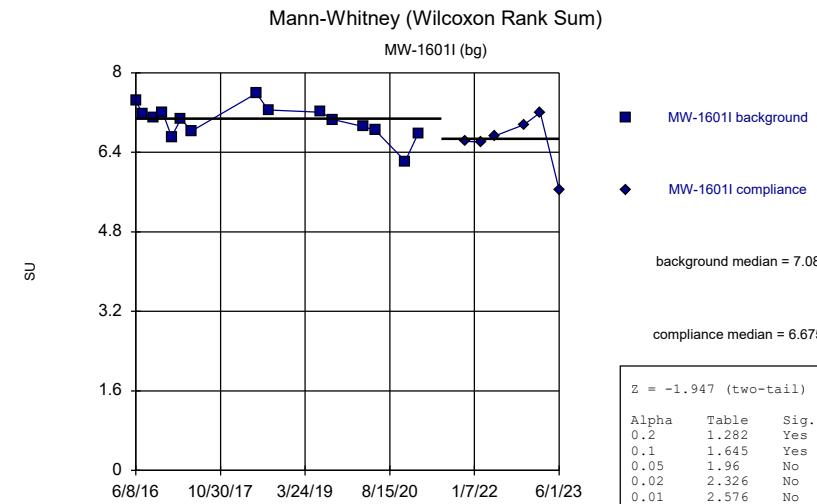
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: pH, field Analysis Run 1/18/2024 5:58 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

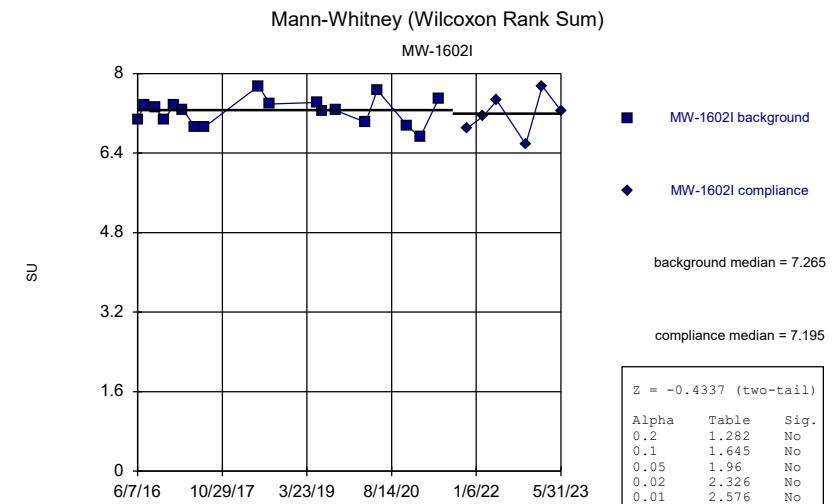
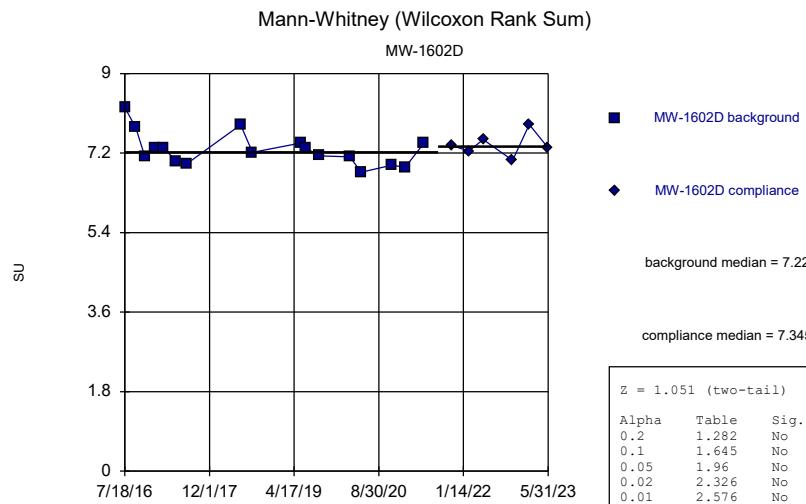


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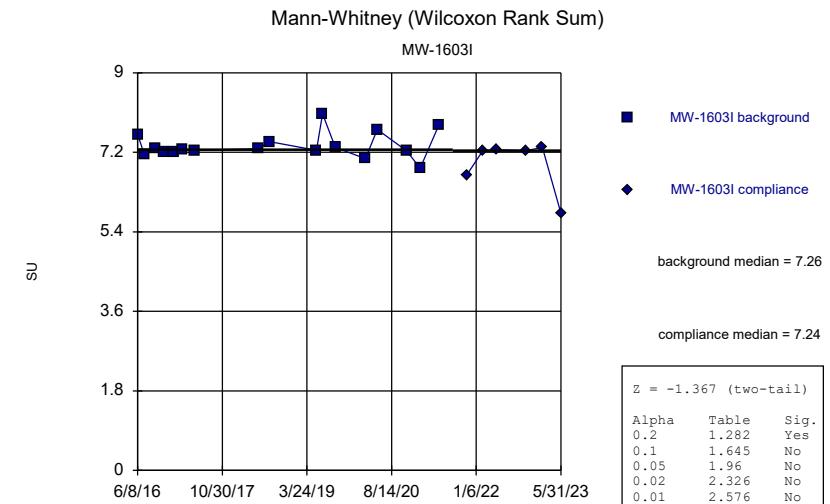
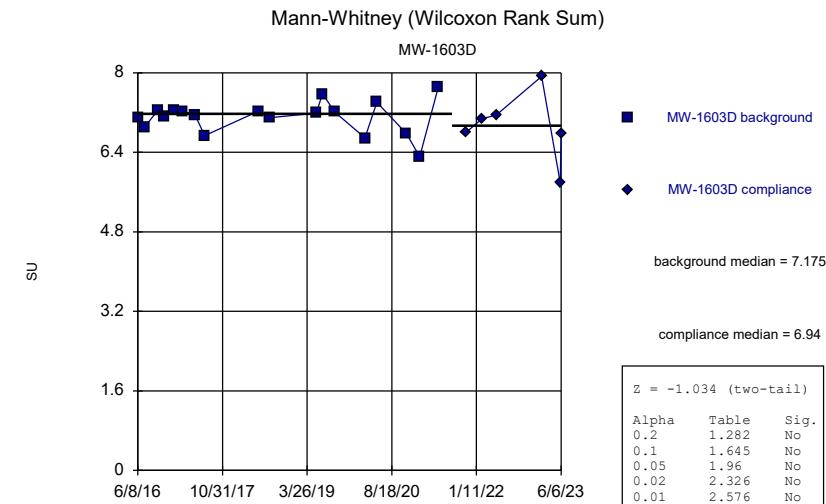
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

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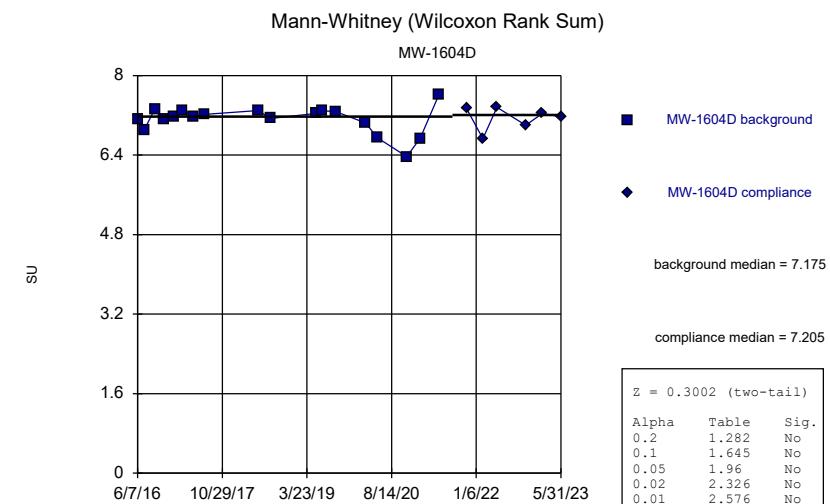
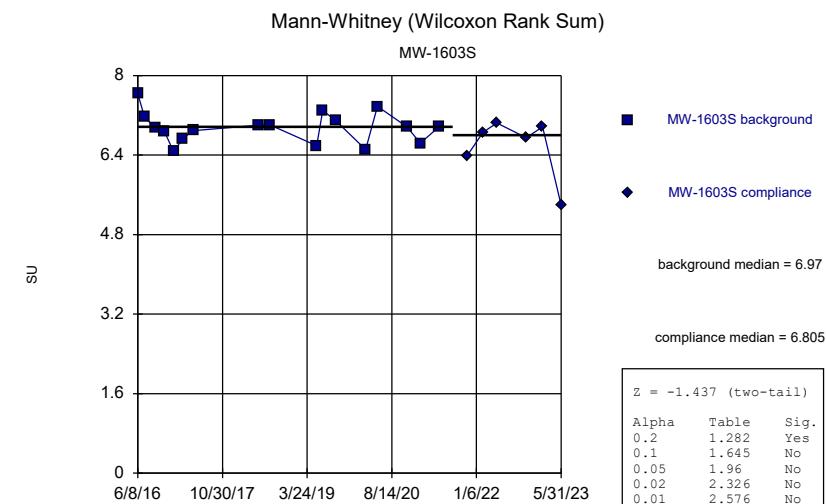
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

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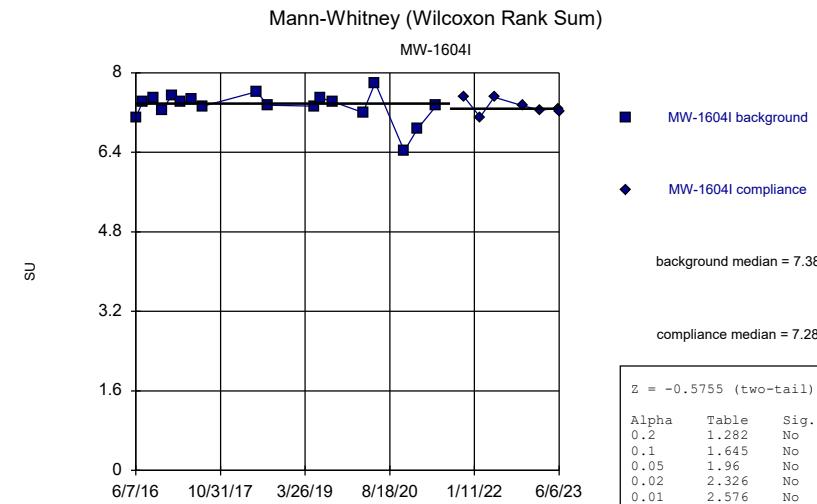
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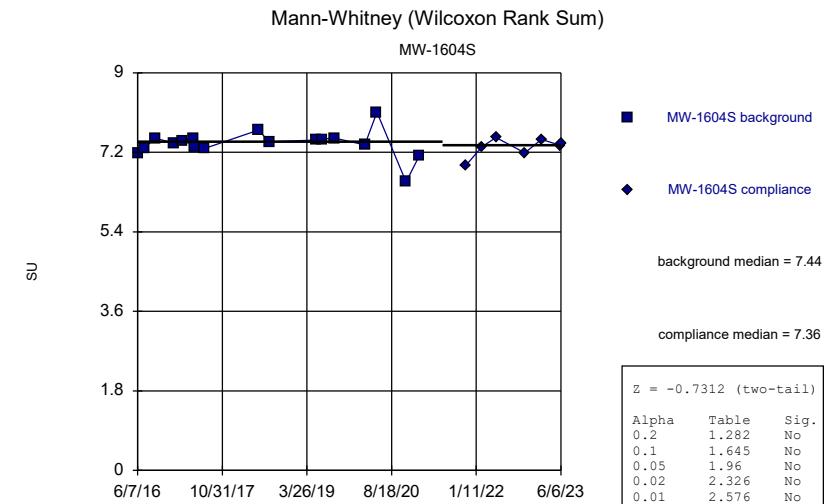


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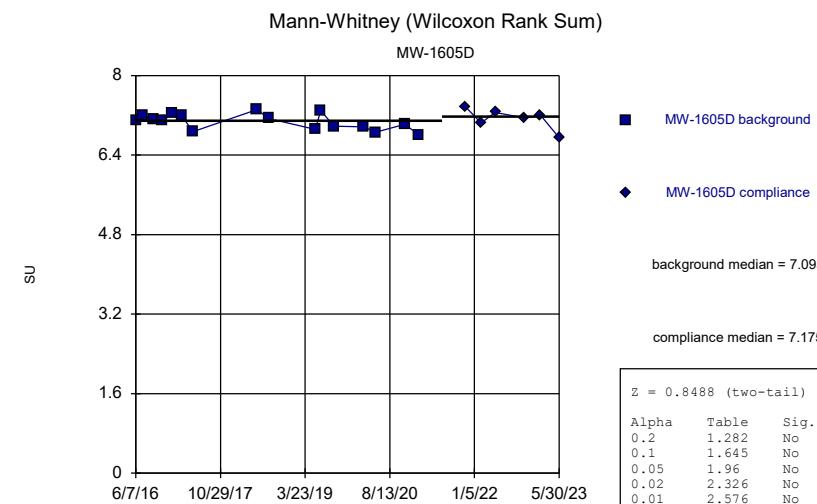
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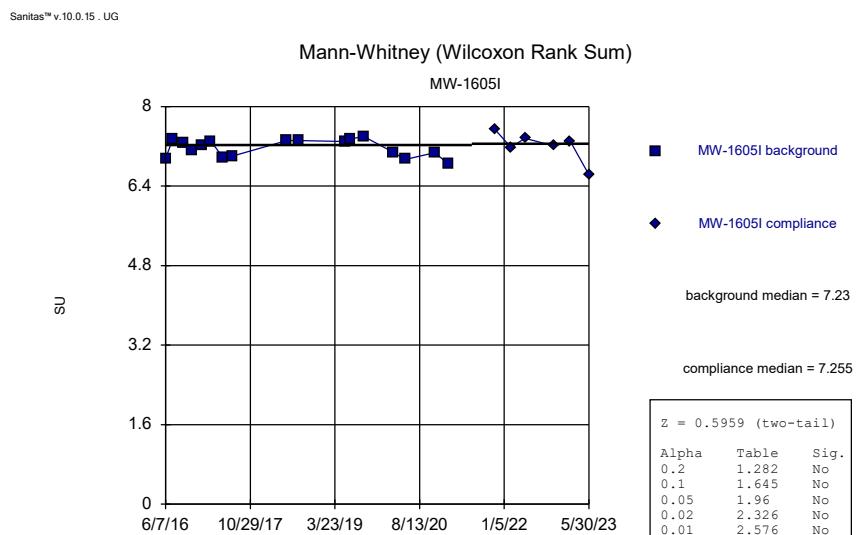
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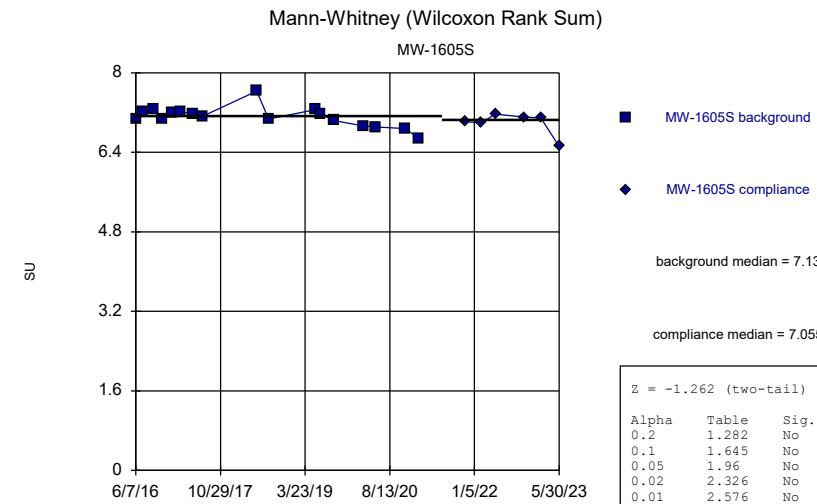
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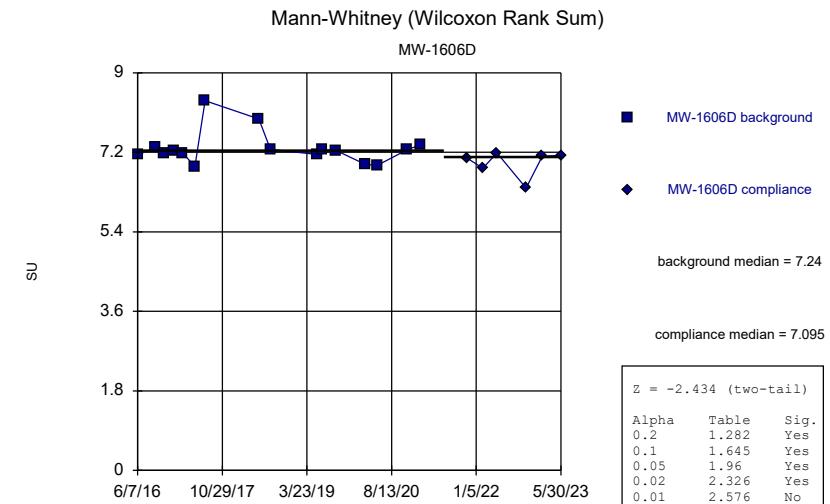
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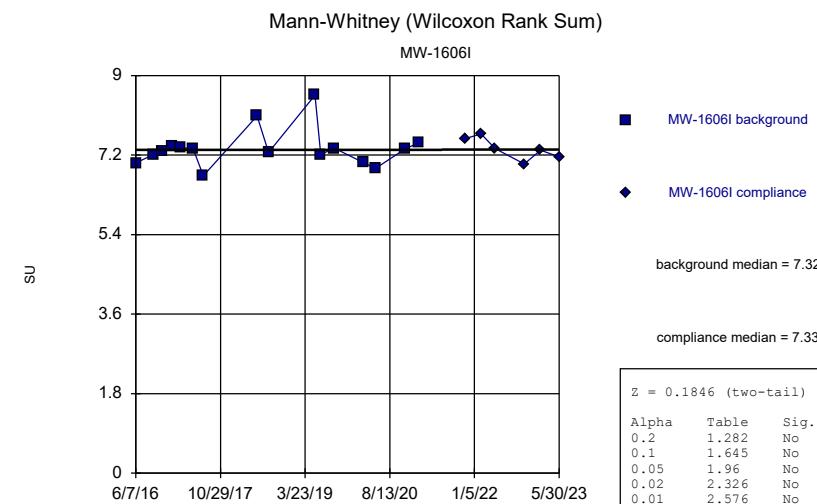
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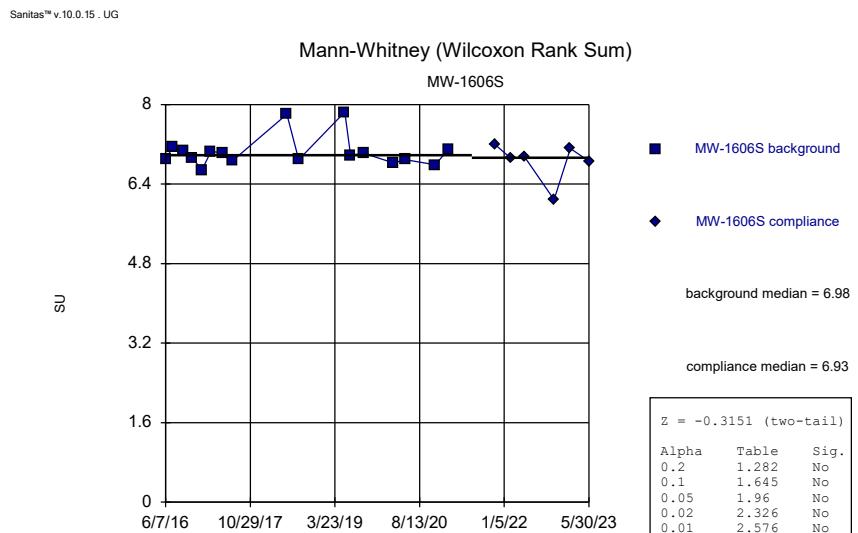
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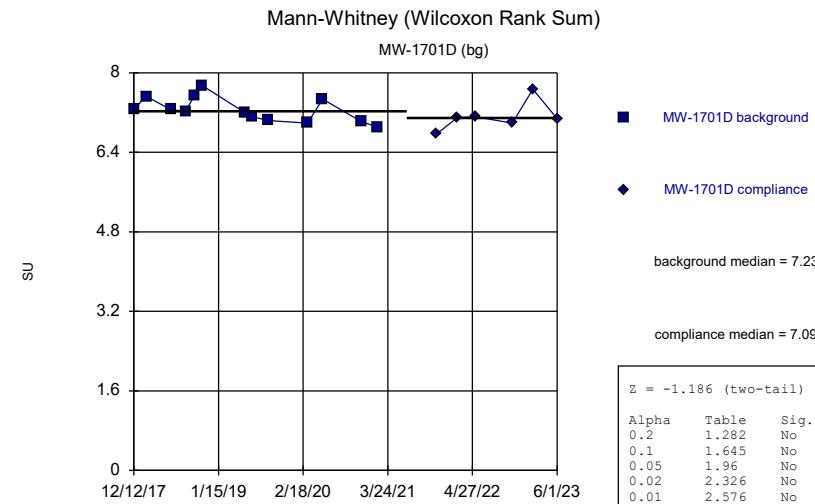
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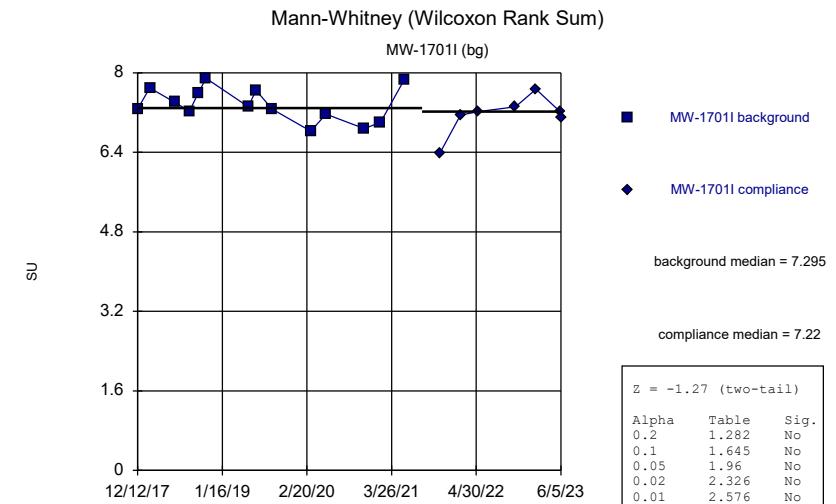
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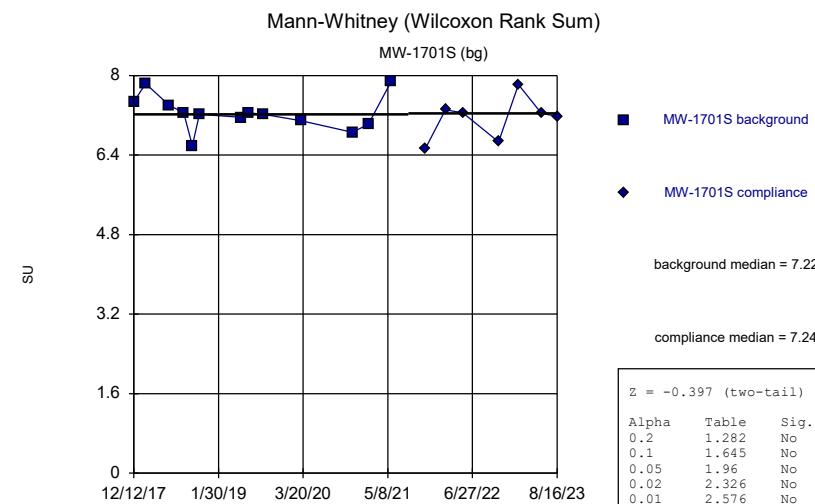
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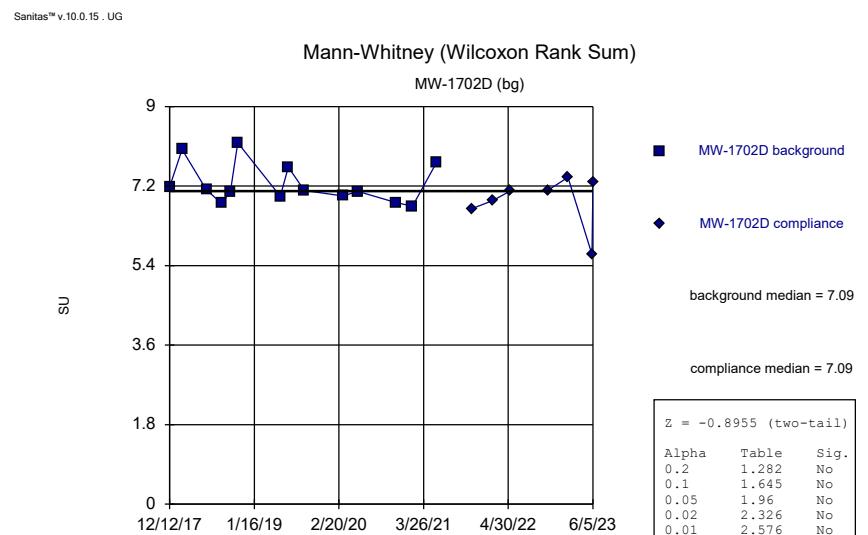
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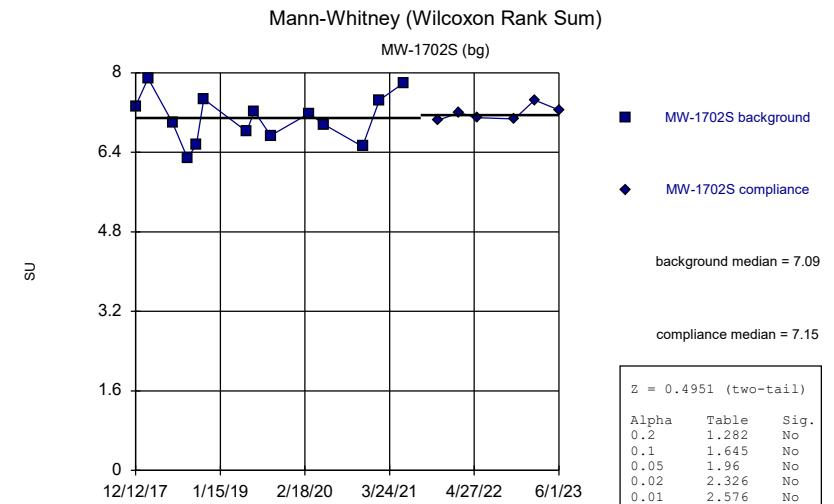
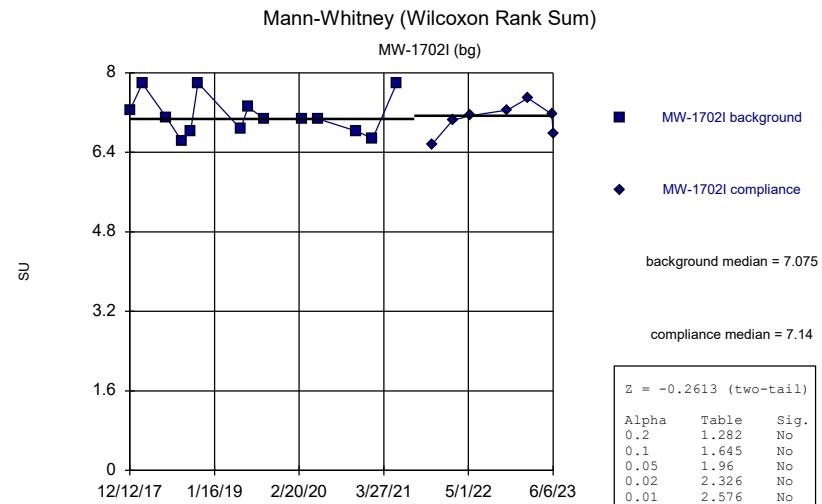
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: pH, field Analysis Run 1/18/2024 5:58 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: pH, field Analysis Run 1/18/2024 5:58 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: pH, field Analysis Run 1/18/2024 5:58 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 5:58 PM View: Mann-Whitney  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

FIGURE E  
Upgradient Trend Tests

## Appendix III - Upgradient Wells Trend Test - Significant Results

Rockport BAP Data: Rockport\_BAP Printed 1/9/2024, 3:14 PM

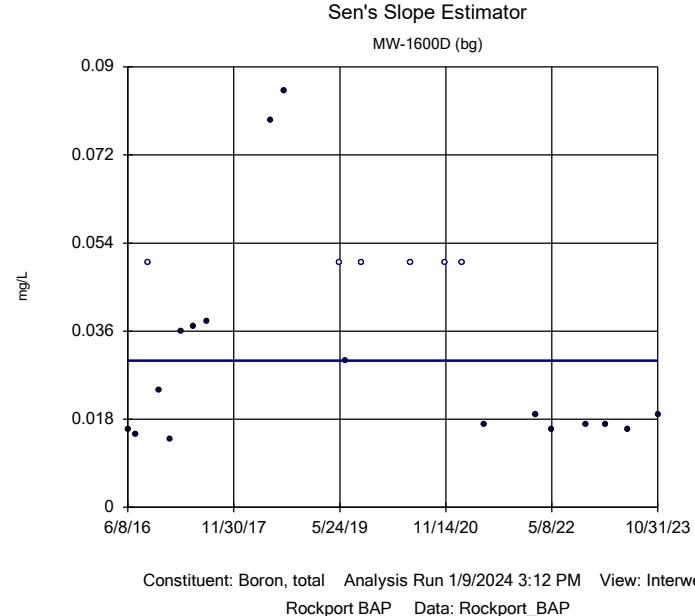
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron, total (mg/L)	MW-1701I (bg)	-0.007117	-92	-74	Yes	19	15.79	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1701S (bg)	-0.004345	-87	-74	Yes	19	26.32	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1702D (bg)	-0.006415	-76	-74	Yes	19	21.05	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1702S (bg)	-0.00416	-83	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1600D (bg)	-0.394	-160	-98	Yes	23	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1601I (bg)	-0.4699	-137	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1601S (bg)	-1.273	-149	-98	Yes	23	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1701S (bg)	0.4457	121	74	Yes	19	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1600S (bg)	0.02719	139	105	Yes	24	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1601S (bg)	0.01273	106	105	Yes	24	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1701I (bg)	0.01038	97	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1600S (bg)	-3.115	-129	-98	Yes	23	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1601S (bg)	2.978	125	98	Yes	23	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1701I (bg)	-0.8038	-99	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1701S (bg)	-0.9496	-133	-74	Yes	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1600S (bg)	-8.183	-152	-98	Yes	23	0	n/a	n/a	0.01	NP

### Appendix III - Upgradient Wells Trend Test - All Results

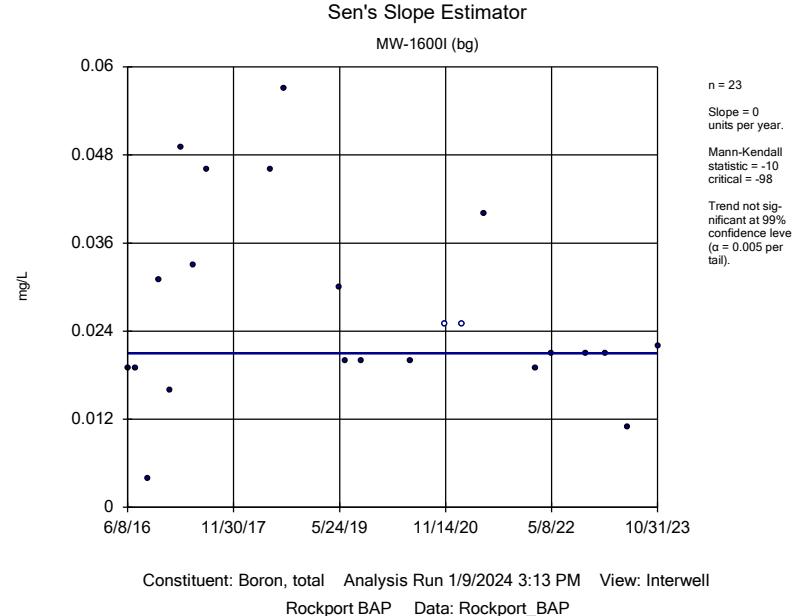
Rockport BAP Data: Rockport\_BAP Printed 1/9/2024, 3:14 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron, total (mg/L)	MW-1600D (bg)	0	-19	-98	No	23	26.09	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1600I (bg)	0	-10	-98	No	23	8.696	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1600S (bg)	-0.00158	-71	-98	No	23	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1601D (bg)	-0.001376	-91	-98	No	23	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1601I (bg)	-0.0003377	-31	-92	No	22	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1601S (bg)	0.00426	51	98	No	23	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	MW-1701D (bg)	-0.004859	-60	-74	No	19	0	n/a	n/a	0.01	NP
<b>Boron, total (mg/L)</b>	<b>MW-1701I (bg)</b>	<b>-0.007117</b>	<b>-92</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>15.79</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron, total (mg/L)</b>	<b>MW-1701S (bg)</b>	<b>-0.004345</b>	<b>-87</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>26.32</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron, total (mg/L)</b>	<b>MW-1702D (bg)</b>	<b>-0.006415</b>	<b>-76</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>21.05</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron, total (mg/L)	MW-1702I (bg)	-0.004761	-67	-74	No	19	21.05	n/a	n/a	0.01	NP
<b>Boron, total (mg/L)</b>	<b>MW-1702S (bg)</b>	<b>-0.00416</b>	<b>-83</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, total (mg/L)	MW-1600D (bg)	-0.394	-160	-98	Yes	23	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1600I (bg)	0	3	98	No	23	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1600S (bg)	0.3862	33	98	No	23	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1601D (bg)	-0.1423	-28	-98	No	23	0	n/a	n/a	0.01	NP
<b>Chloride, total (mg/L)</b>	<b>MW-1601I (bg)</b>	<b>-0.4699</b>	<b>-137</b>	<b>-92</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride, total (mg/L)</b>	<b>MW-1601S (bg)</b>	<b>-1.273</b>	<b>-149</b>	<b>-98</b>	<b>Yes</b>	<b>23</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, total (mg/L)	MW-1701D (bg)	-0.1869	-32	-74	No	19	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1701I (bg)	0.09995	34	74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride, total (mg/L)</b>	<b>MW-1701S (bg)</b>	<b>0.4457</b>	<b>121</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, total (mg/L)	MW-1702D (bg)	0.04457	19	74	No	19	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1702I (bg)	0	-1	-74	No	19	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	MW-1702S (bg)	0.07351	25	74	No	19	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1600D (bg)	0.00367	76	105	No	24	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1600I (bg)	0.004694	96	105	No	24	0	n/a	n/a	0.01	NP
<b>Fluoride, total (mg/L)</b>	<b>MW-1600S (bg)</b>	<b>0.02719</b>	<b>139</b>	<b>105</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride, total (mg/L)	MW-1601D (bg)	0	-9	-105	No	24	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1601I (bg)	0.005084	94	98	No	23	0	n/a	n/a	0.01	NP
<b>Fluoride, total (mg/L)</b>	<b>MW-1601S (bg)</b>	<b>0.01273</b>	<b>106</b>	<b>105</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride, total (mg/L)	MW-1701D (bg)	0.00513	51	81	No	20	0	n/a	n/a	0.01	NP
<b>Fluoride, total (mg/L)</b>	<b>MW-1701I (bg)</b>	<b>0.01038</b>	<b>97</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride, total (mg/L)	MW-1701S (bg)	0.004952	48	81	No	20	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1702D (bg)	0	-16	-81	No	20	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1702I (bg)	0.002359	54	81	No	20	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-1702S (bg)	0.006192	25	81	No	20	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1600D (bg)	0.4702	67	98	No	23	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1600I (bg)	0.4267	76	98	No	23	0	n/a	n/a	0.01	NP
<b>Sulfate, total (mg/L)</b>	<b>MW-1600S (bg)</b>	<b>-3.115</b>	<b>-129</b>	<b>-98</b>	<b>Yes</b>	<b>23</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate, total (mg/L)	MW-1601D (bg)	0	-2	-98	No	23	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1601I (bg)	0	-1	-92	No	22	0	n/a	n/a	0.01	NP
<b>Sulfate, total (mg/L)</b>	<b>MW-1601S (bg)</b>	<b>2.978</b>	<b>125</b>	<b>98</b>	<b>Yes</b>	<b>23</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate, total (mg/L)	MW-1701D (bg)	-0.3627	-58	-74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate, total (mg/L)</b>	<b>MW-1701I (bg)</b>	<b>-0.8038</b>	<b>-99</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate, total (mg/L)</b>	<b>MW-1701S (bg)</b>	<b>-0.9496</b>	<b>-133</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate, total (mg/L)	MW-1702D (bg)	0.04457	8	74	No	19	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1702I (bg)	-0.1349	-29	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	MW-1702S (bg)	-0.502	-57	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1600D (bg)	-2.336	-66	-98	No	23	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1600I (bg)	1.064	41	98	No	23	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>MW-1600S (bg)</b>	<b>-8.183</b>	<b>-152</b>	<b>-98</b>	<b>Yes</b>	<b>23</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	MW-1601D (bg)	0	4	98	No	23	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1601I (bg)	-1.459	-72	-92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1601S (bg)	-6.784	-70	-98	No	23	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1701D (bg)	-4.591	-64	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1701I (bg)	-2.325	-42	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1701S (bg)	-0.5849	-10	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1702D (bg)	1.758	43	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1702I (bg)	0.79	14	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	MW-1702S (bg)	0	4	74	No	19	0	n/a	n/a	0.01	NP

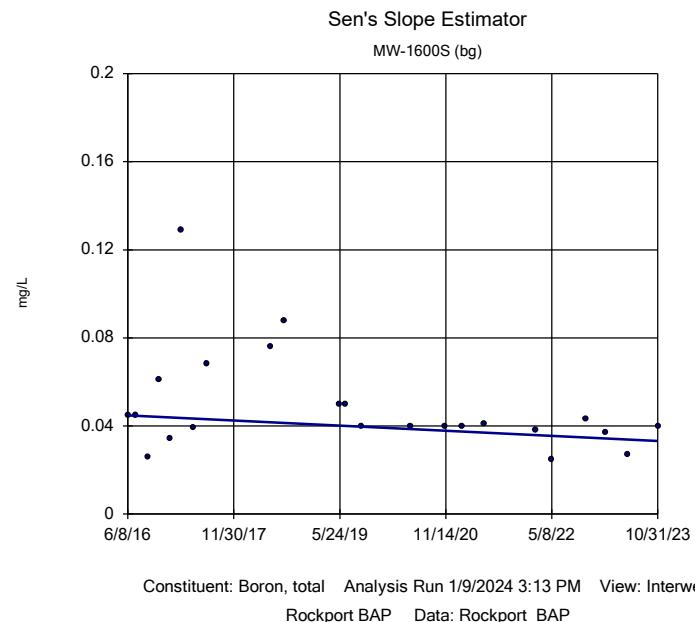
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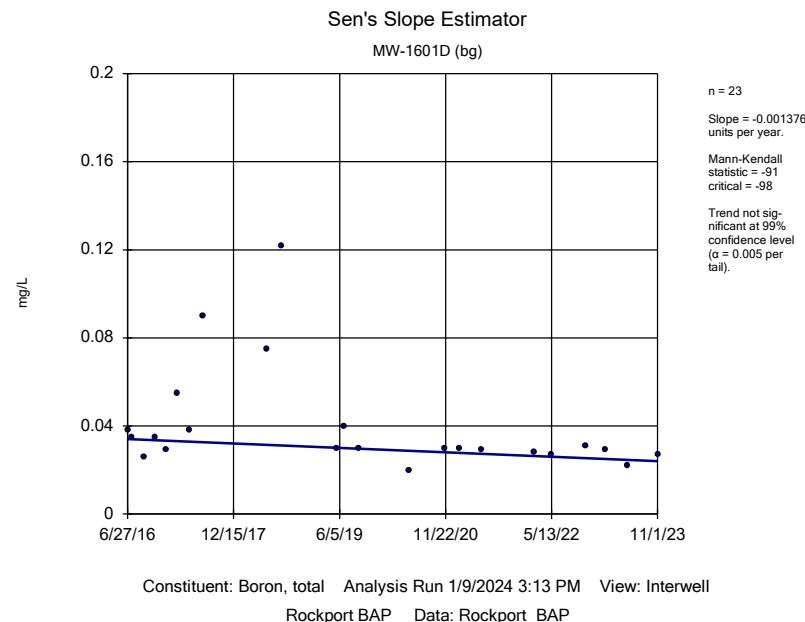
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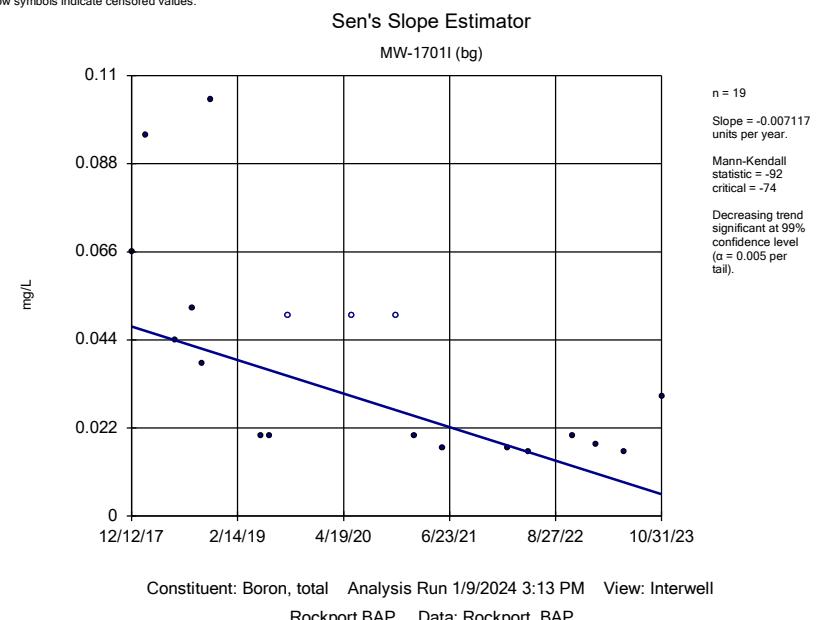
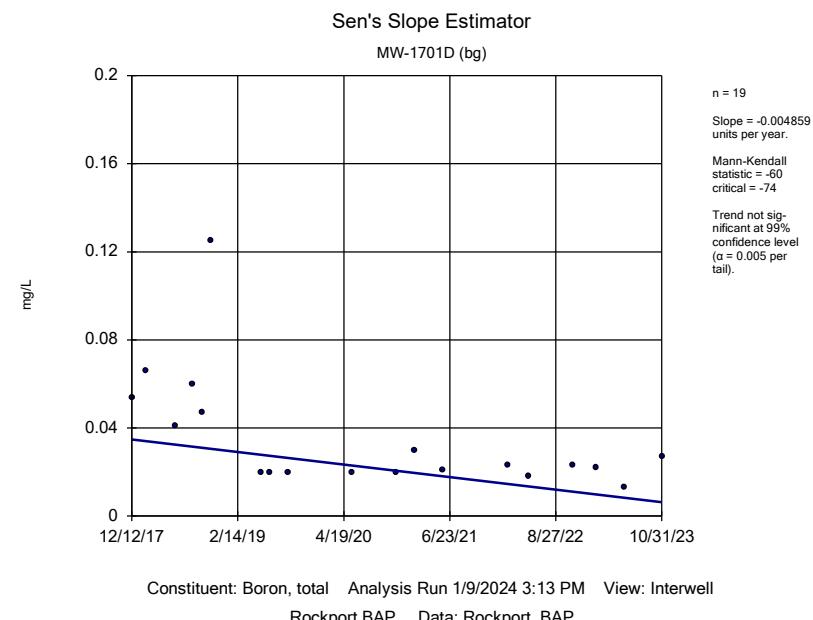
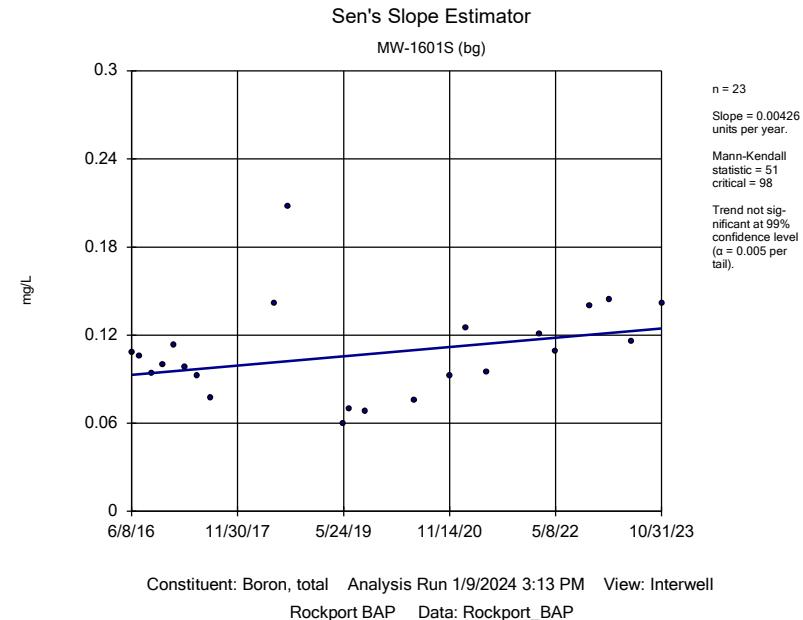
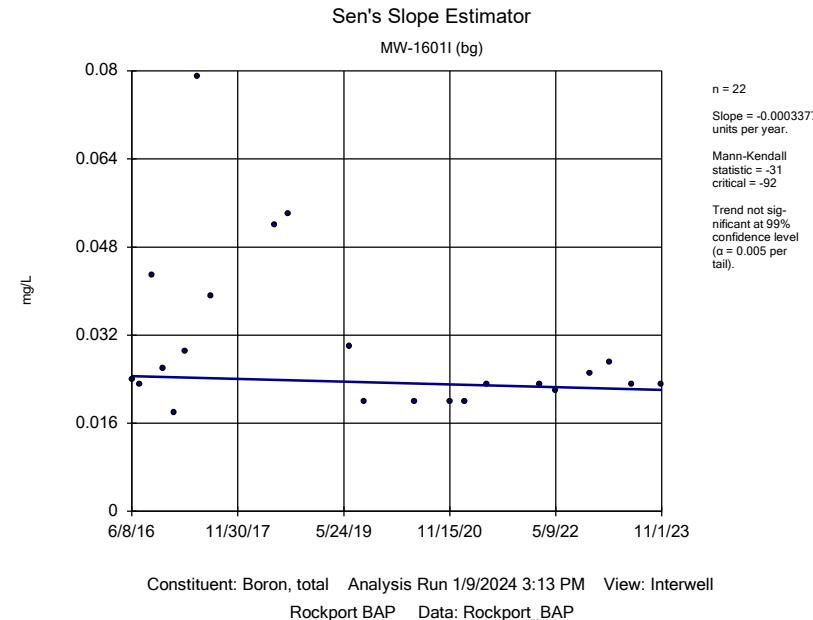


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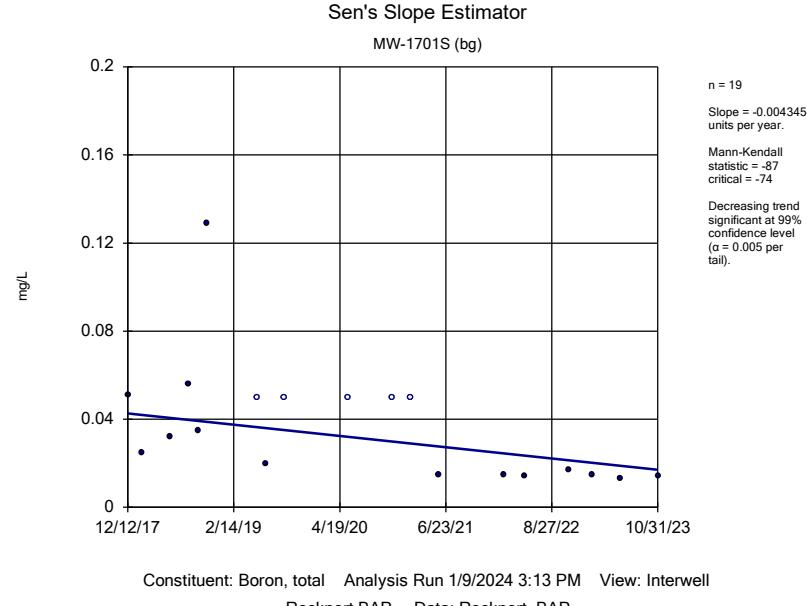


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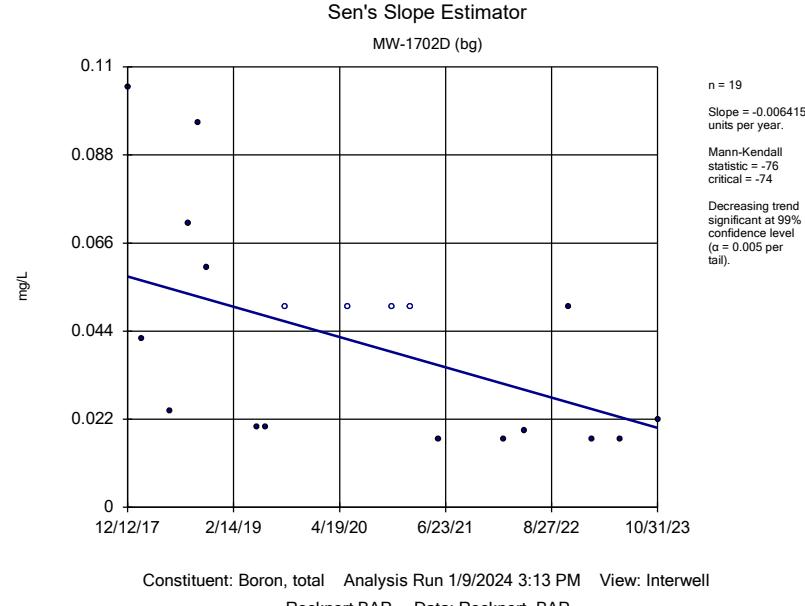




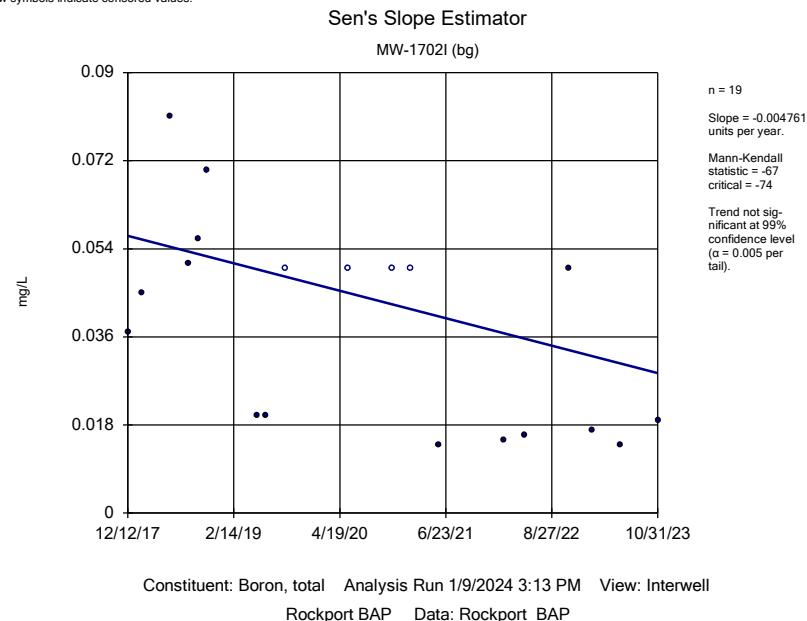
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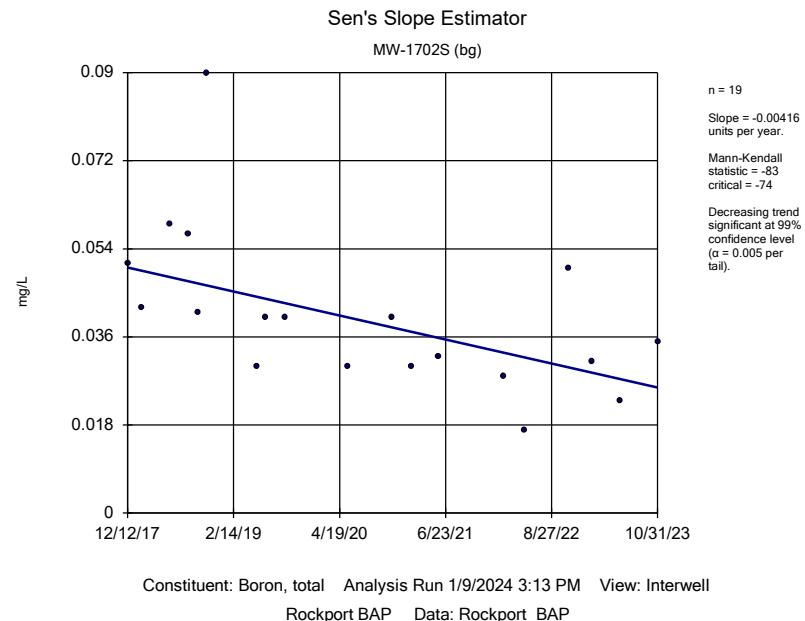
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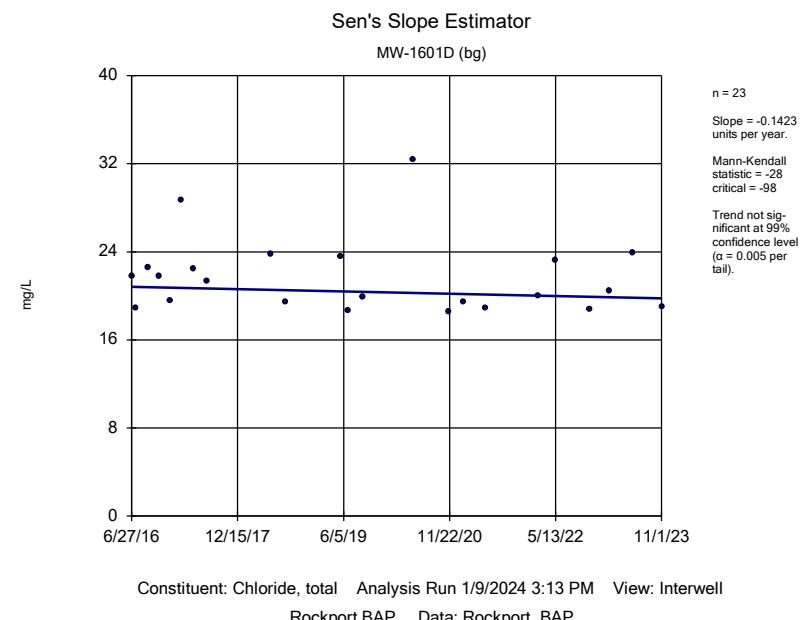
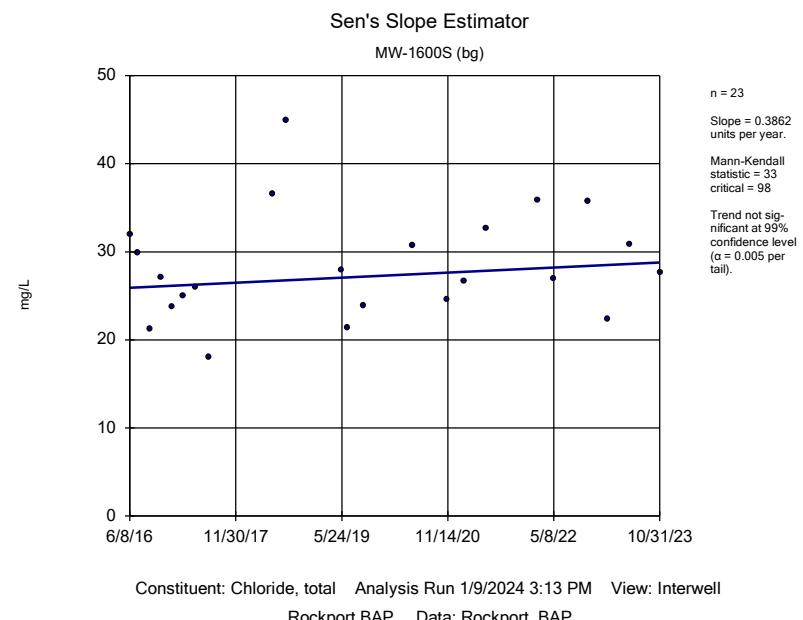
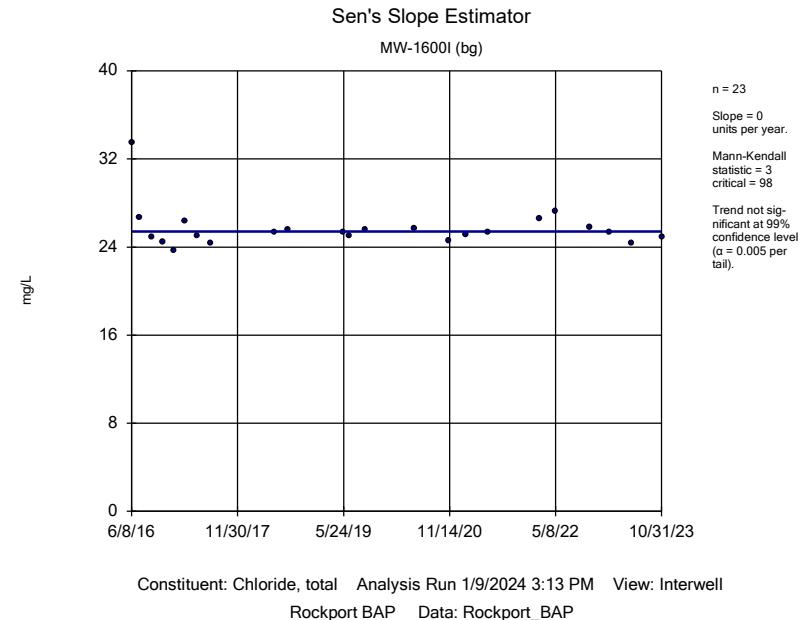
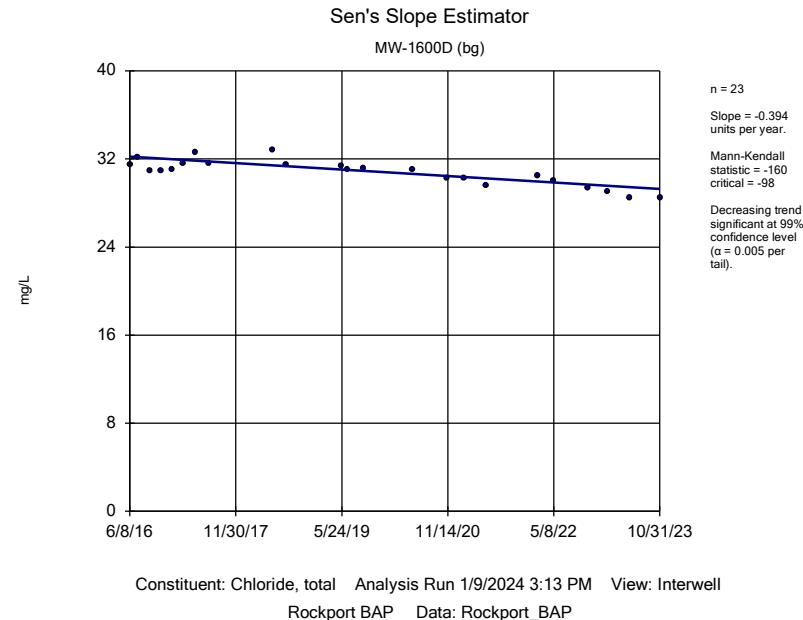


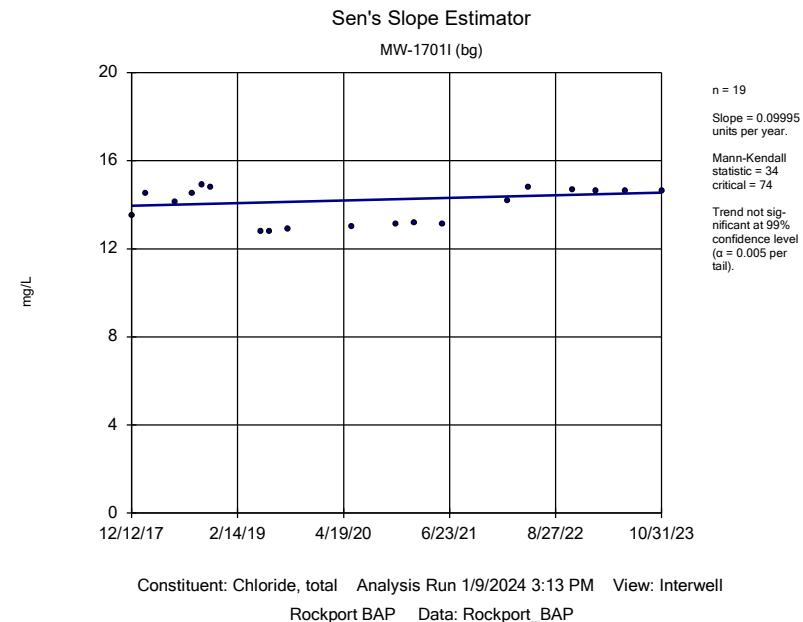
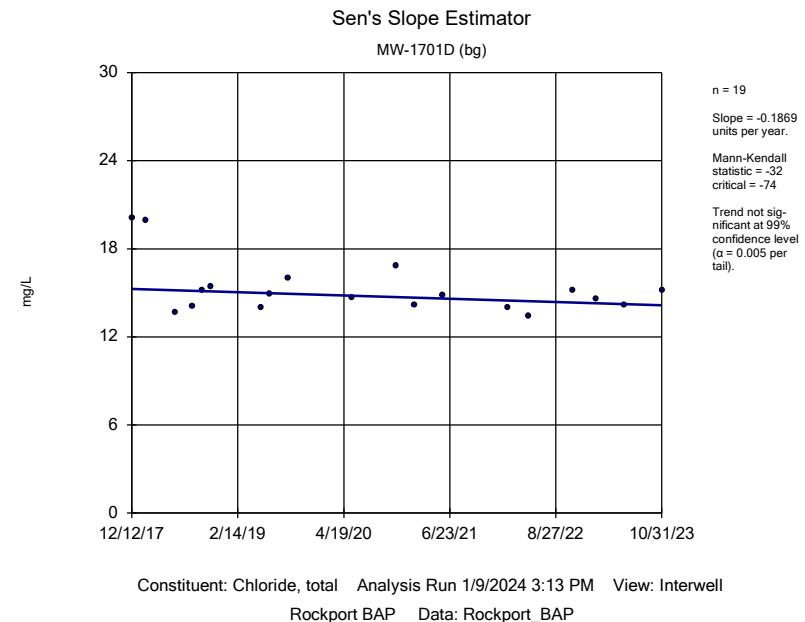
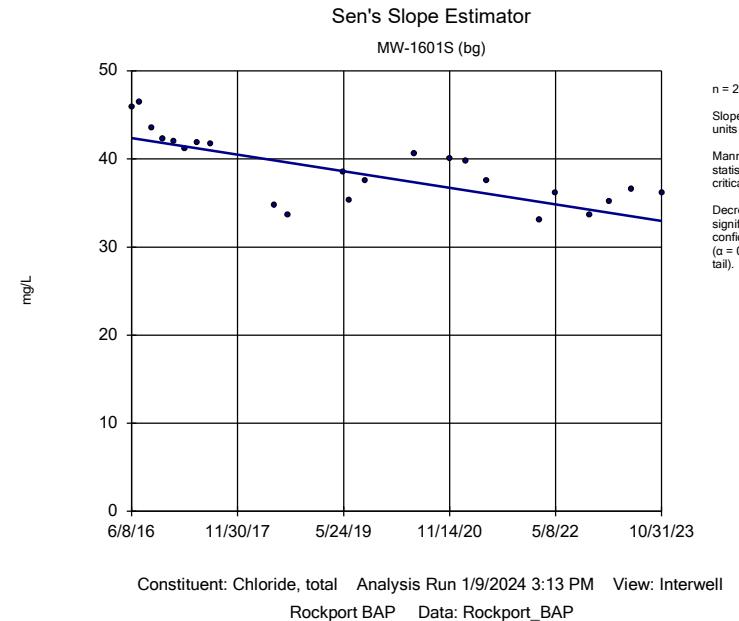
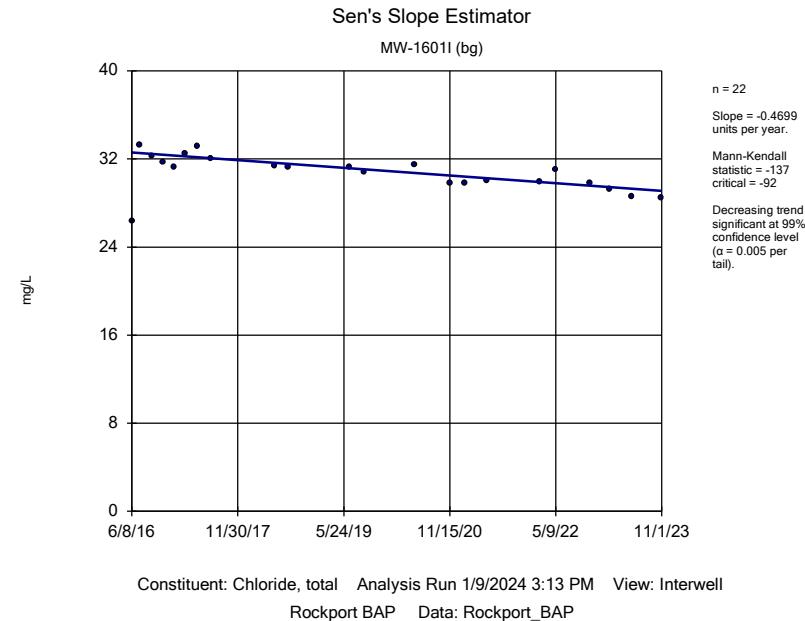
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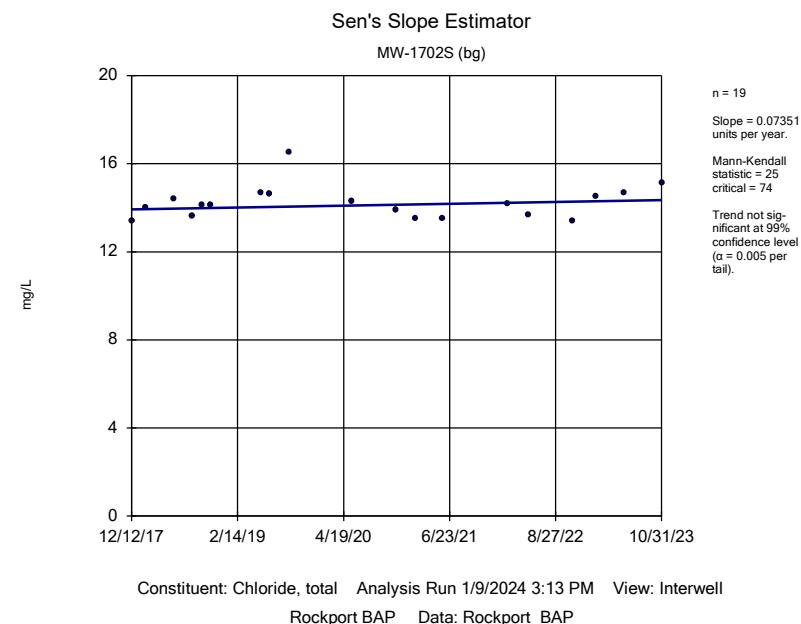
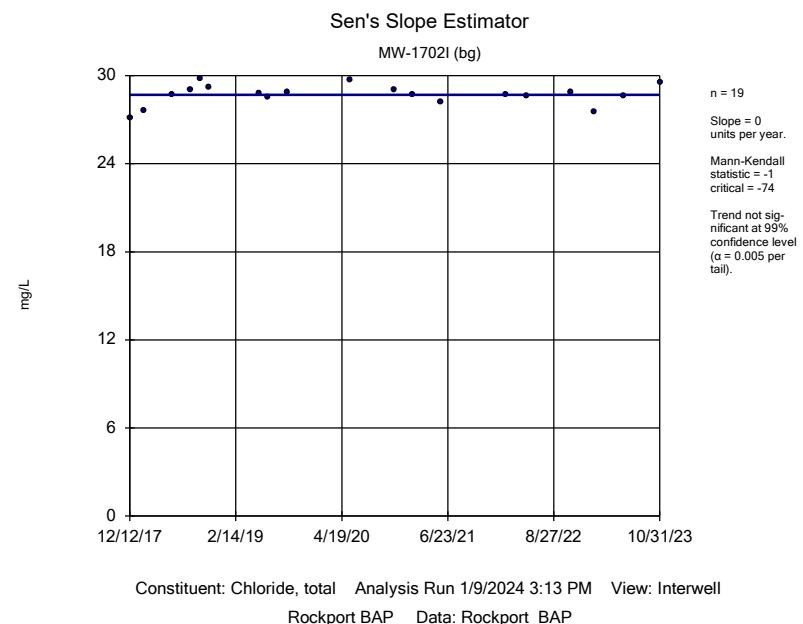
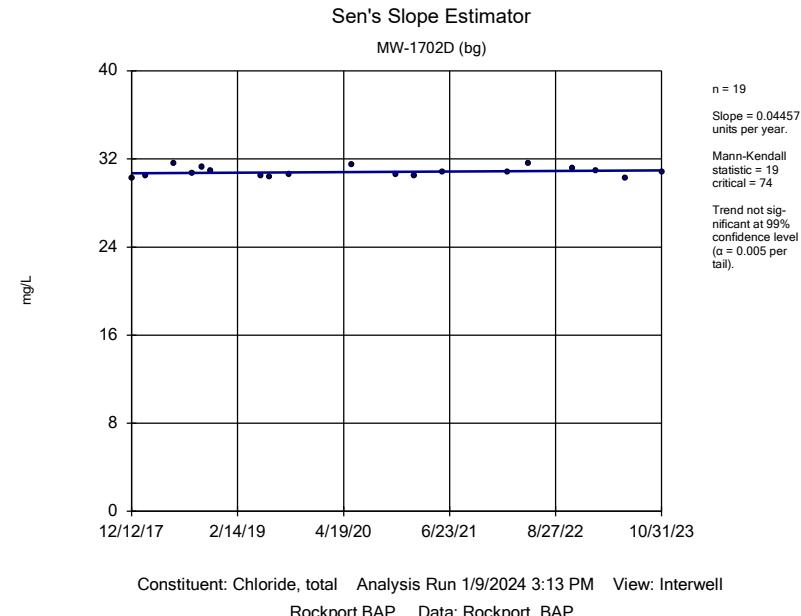
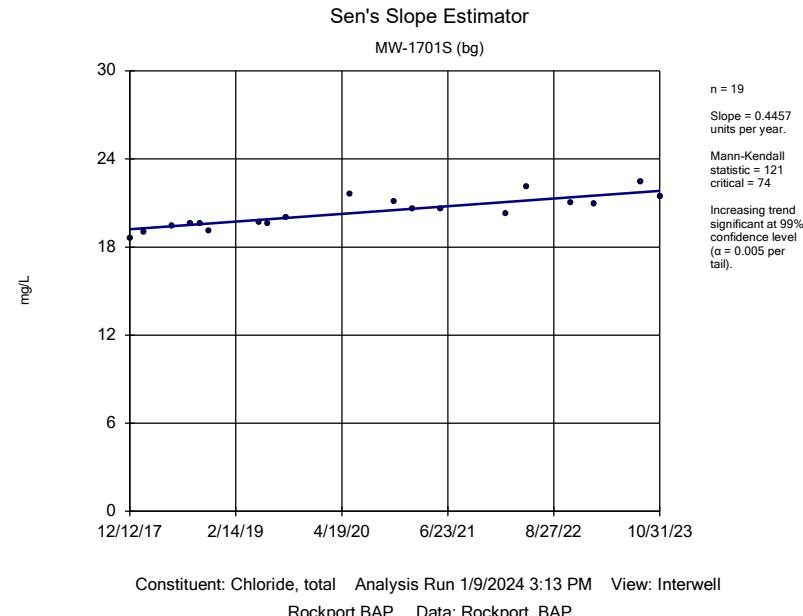


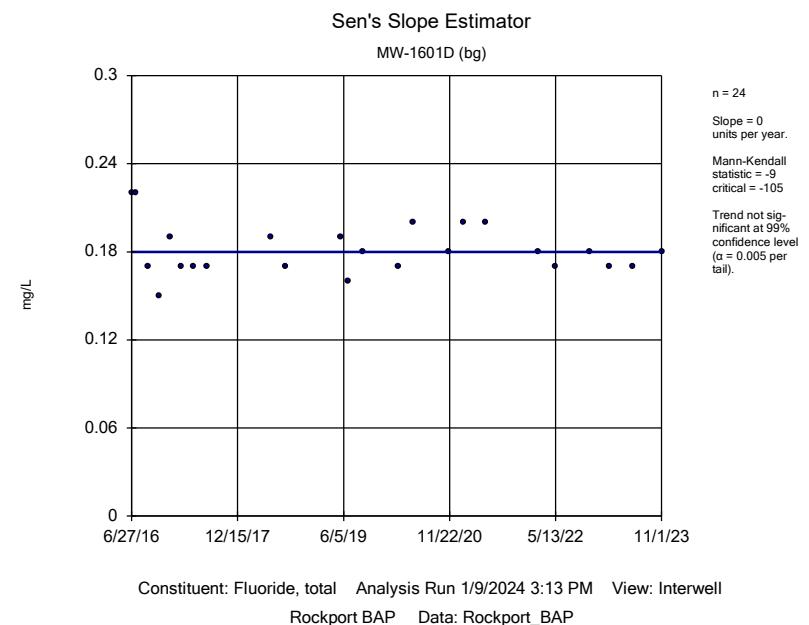
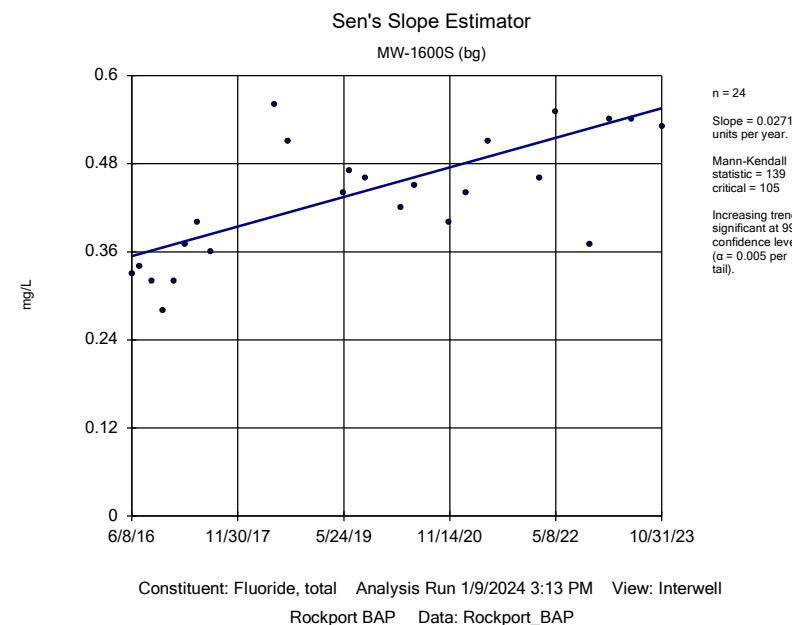
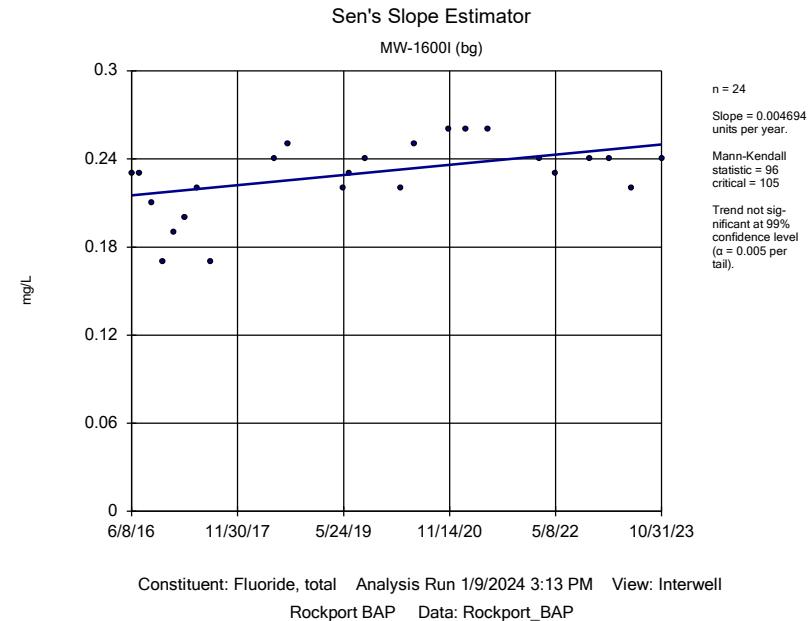
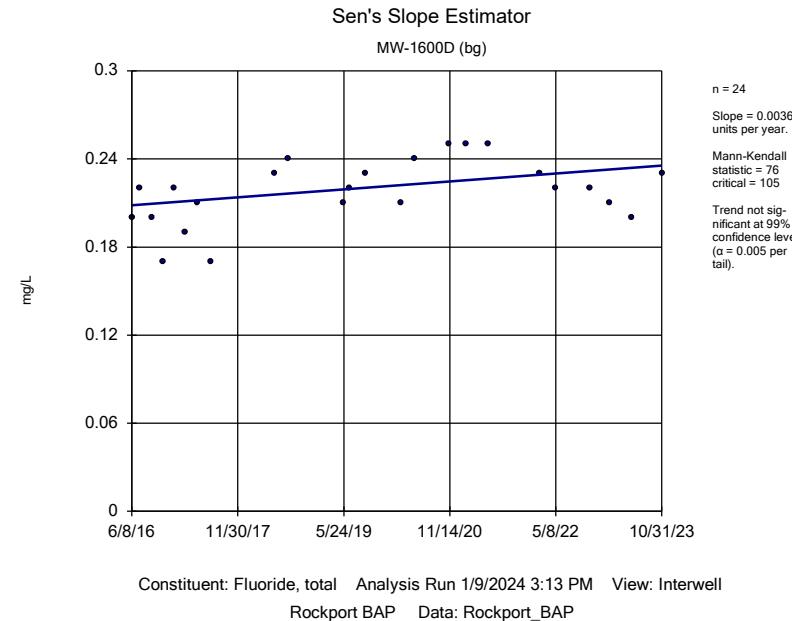
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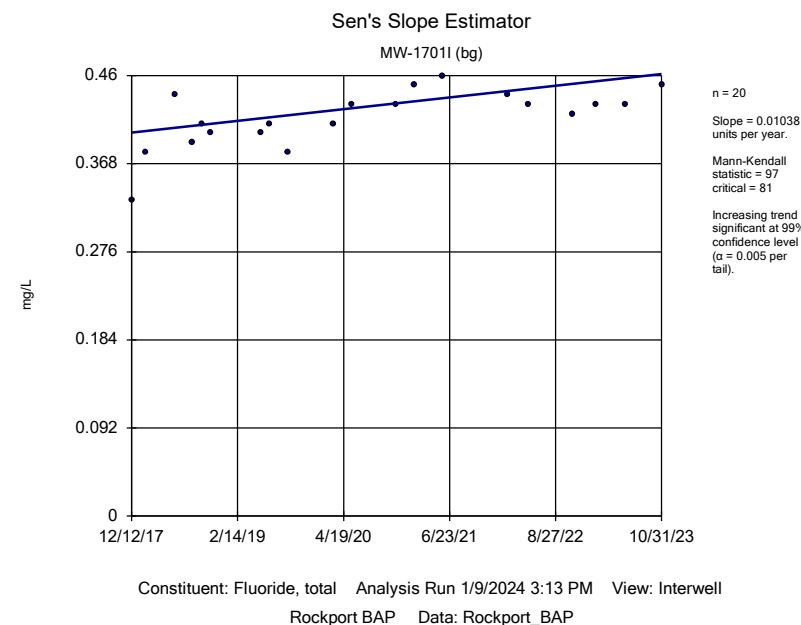
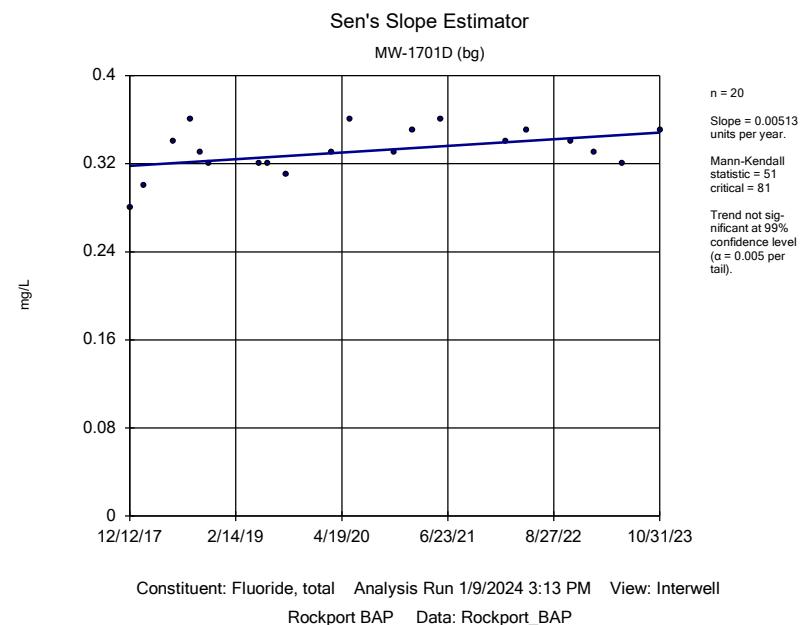
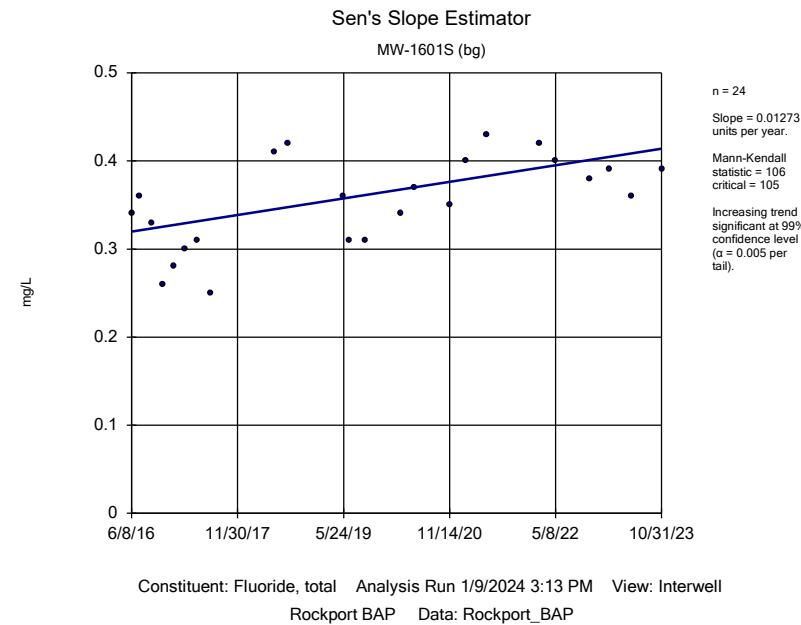
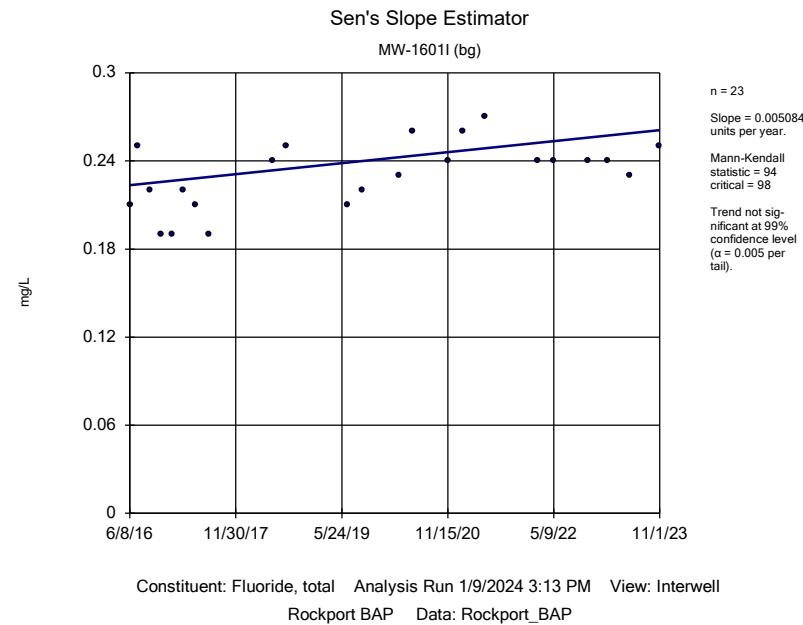


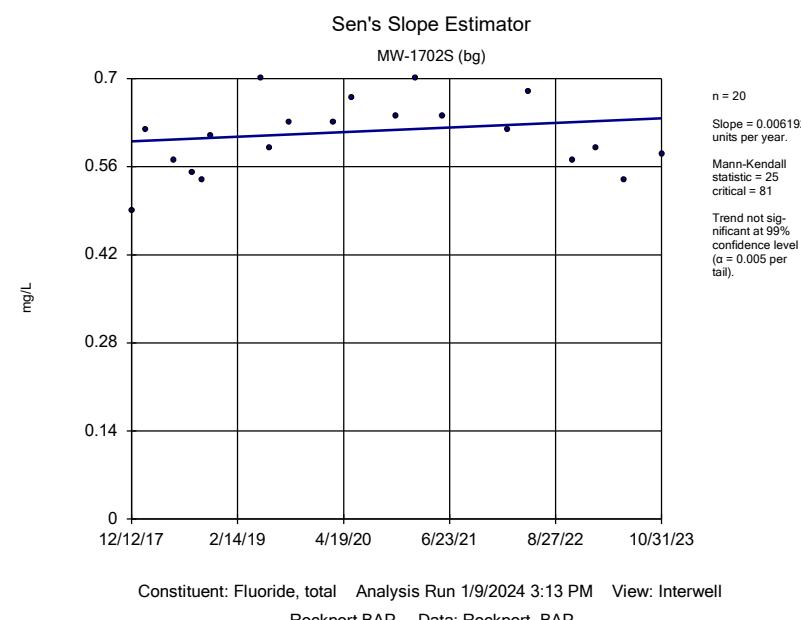
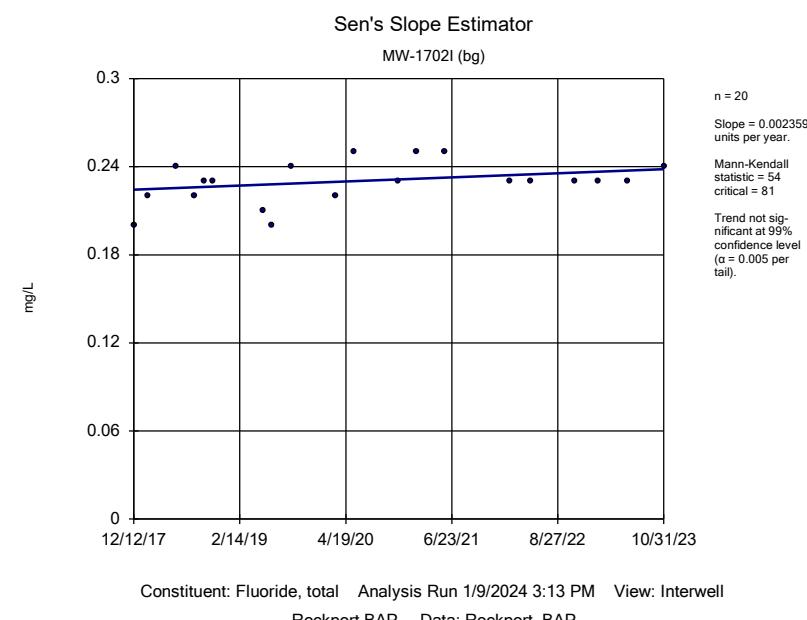
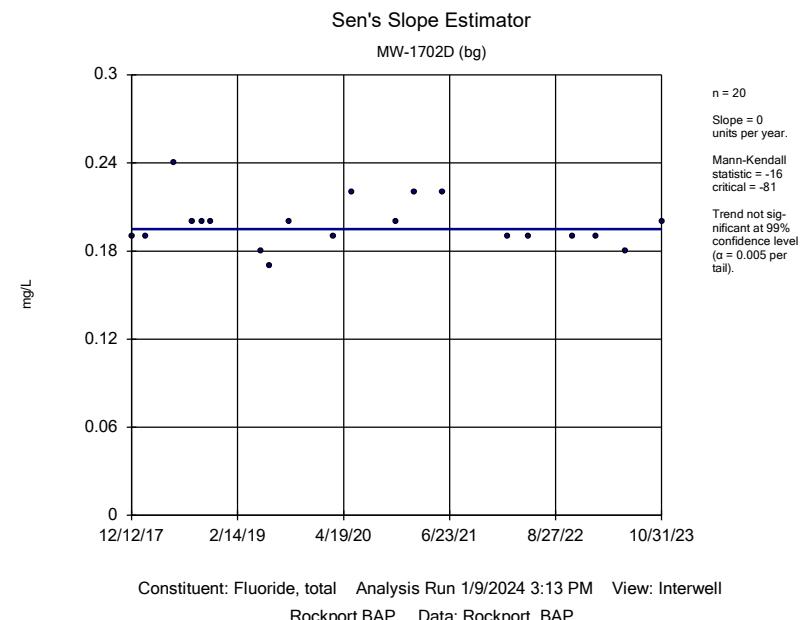
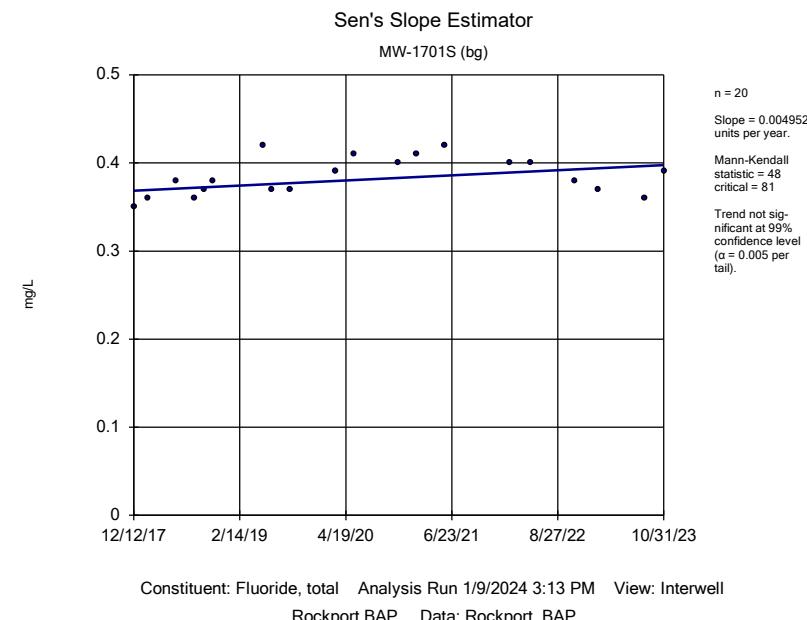


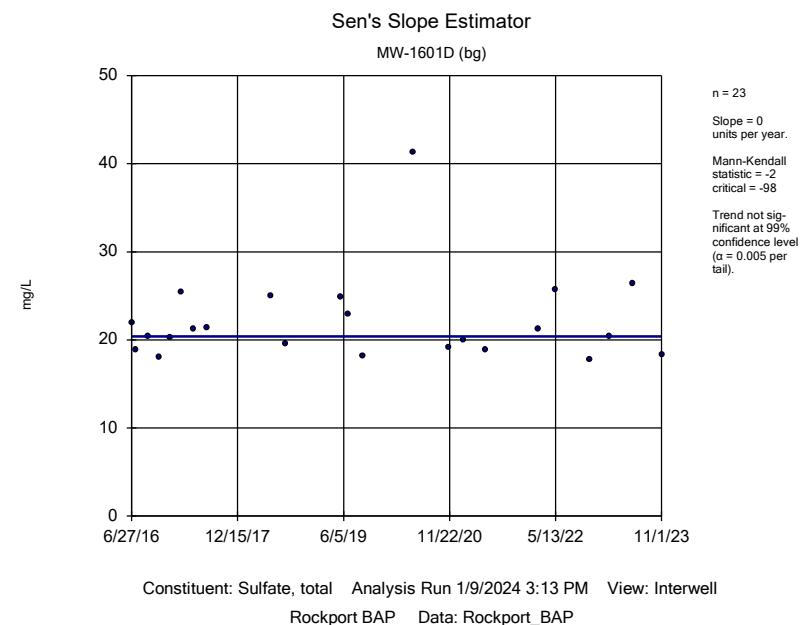
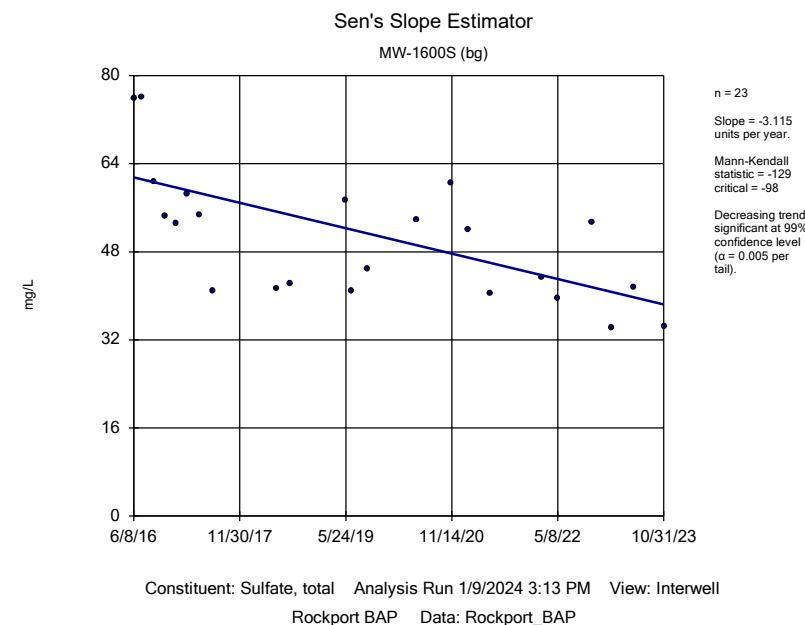
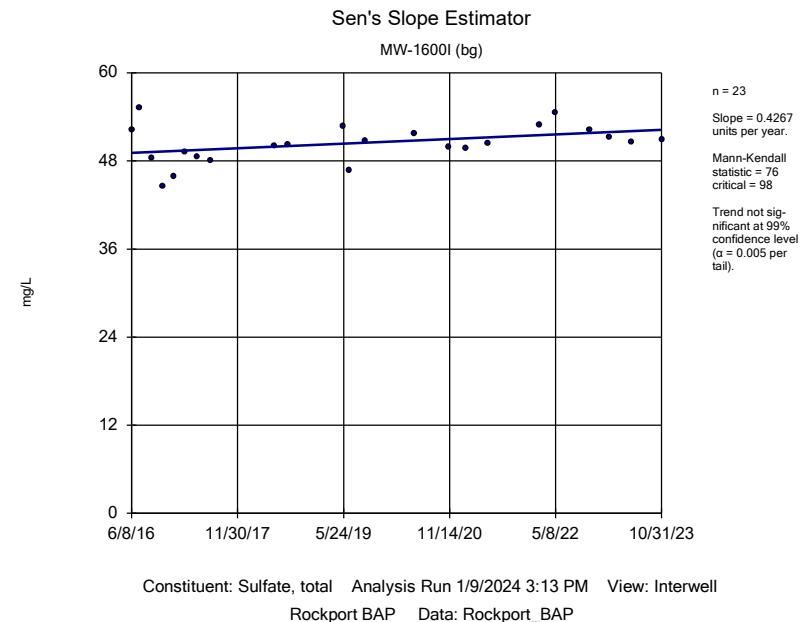
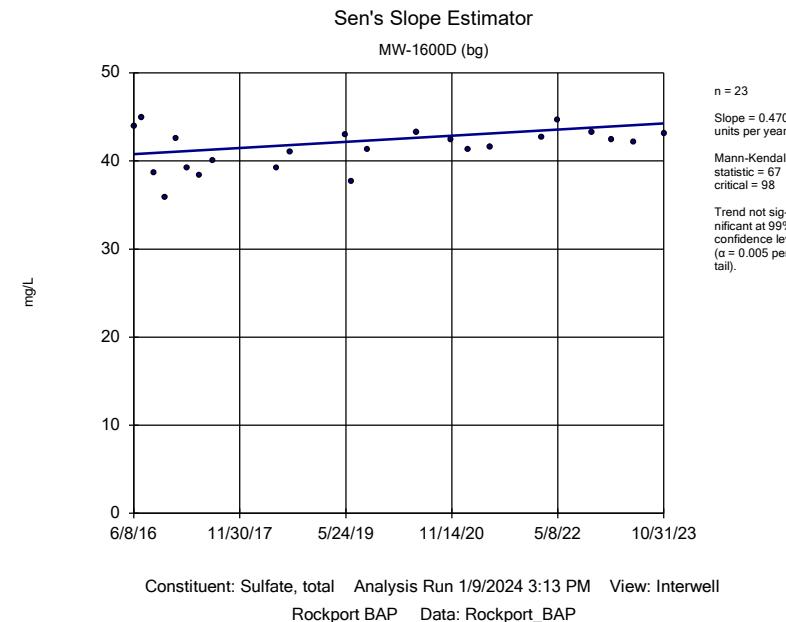


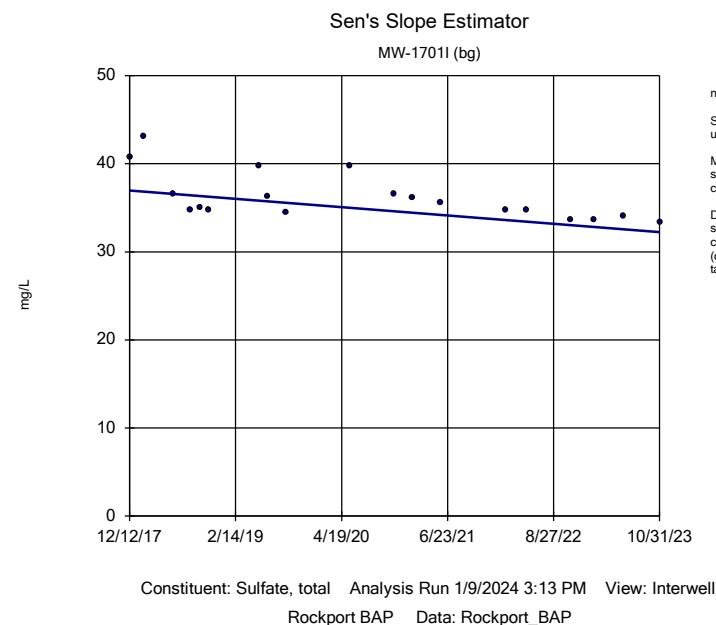
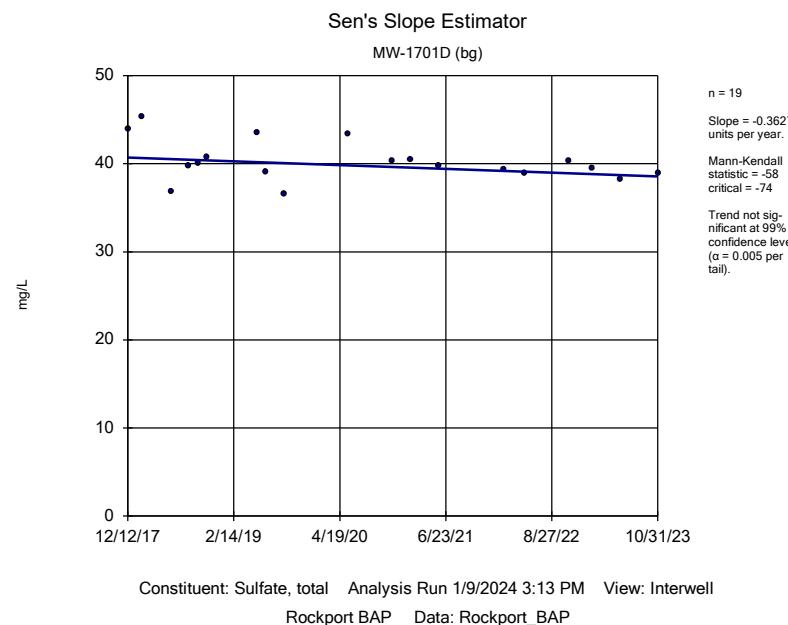
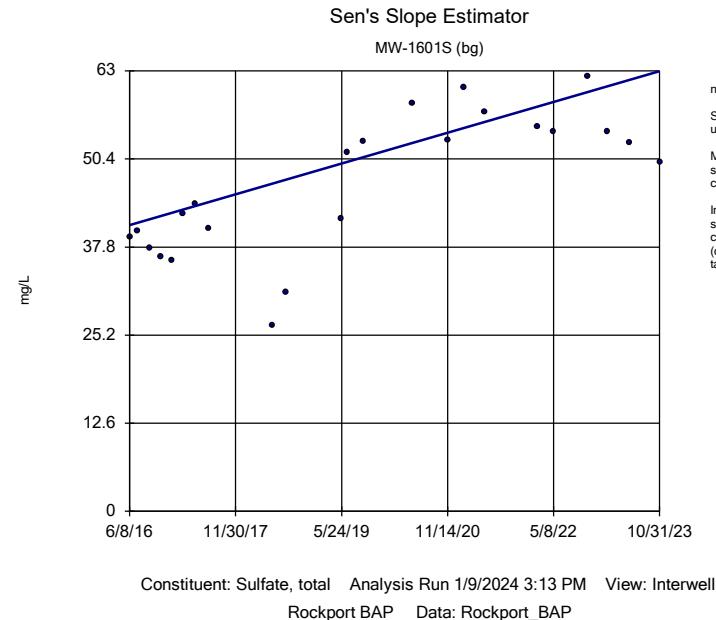
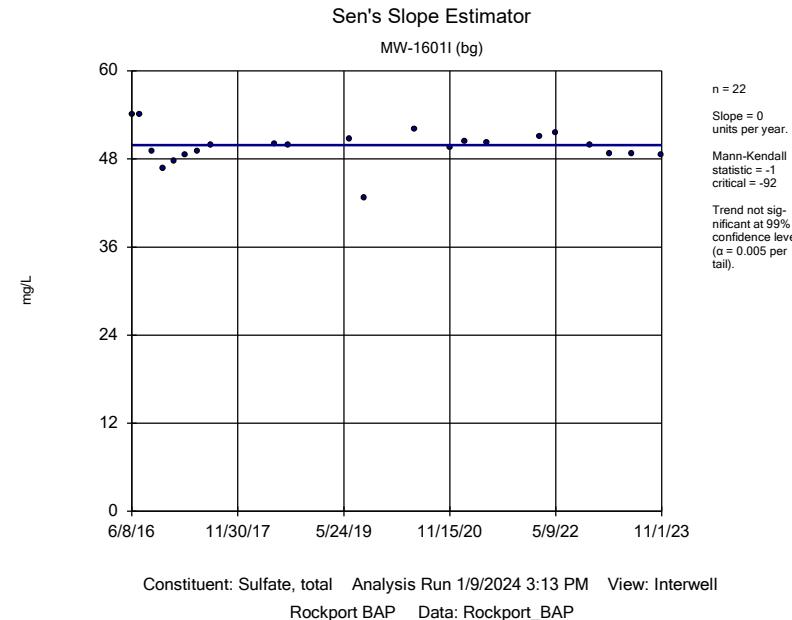


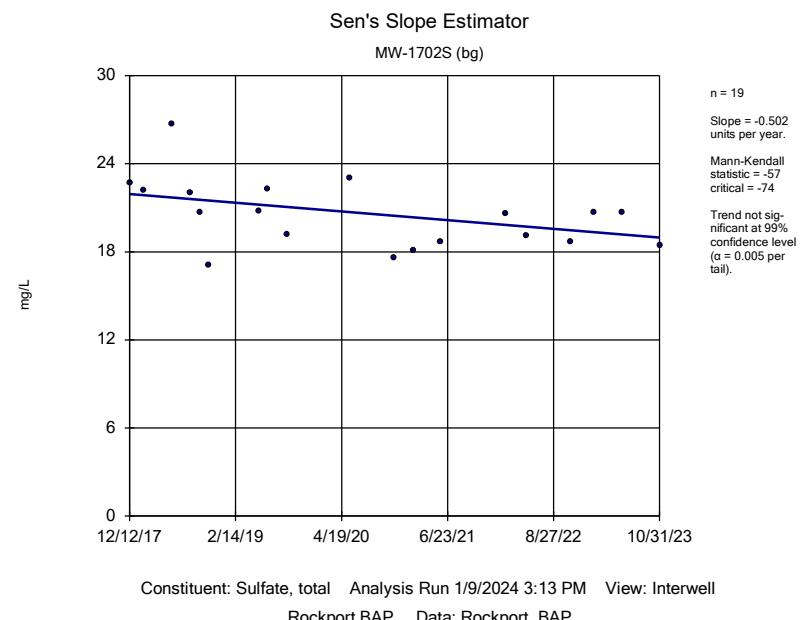
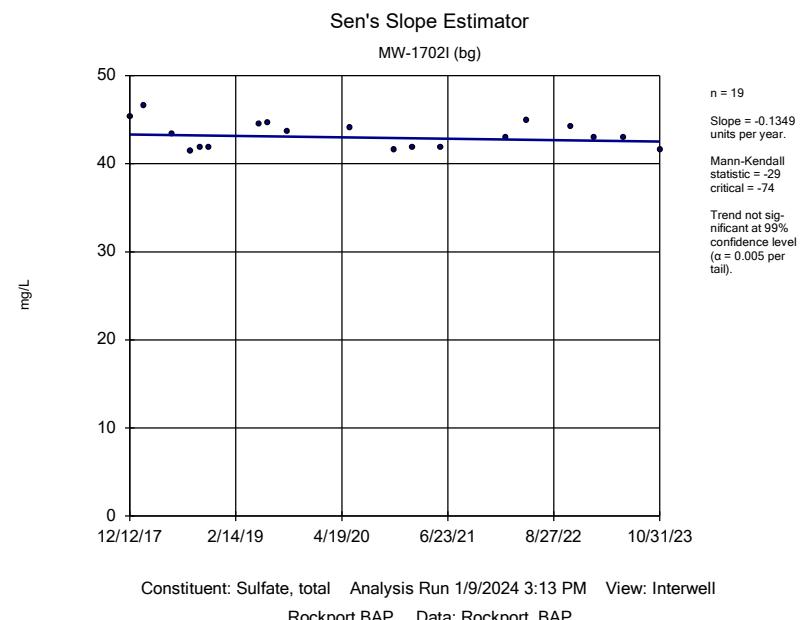
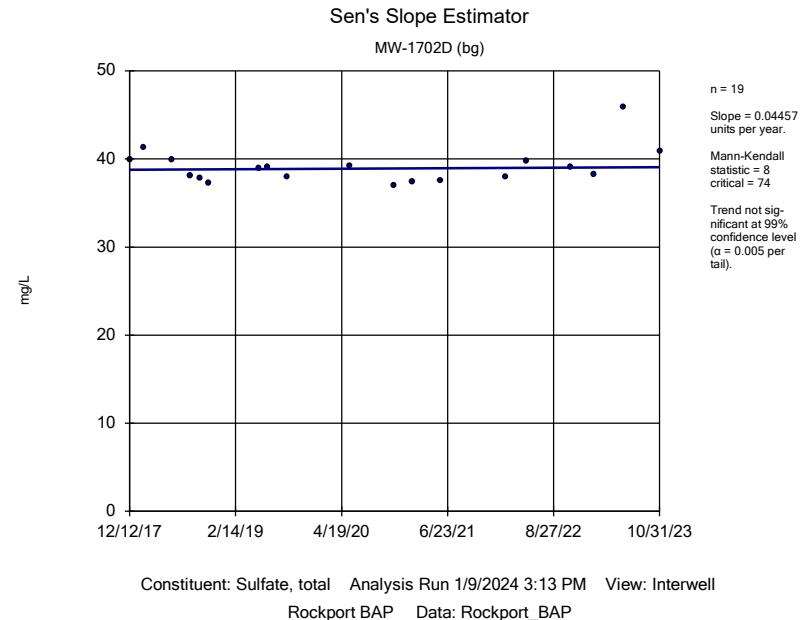
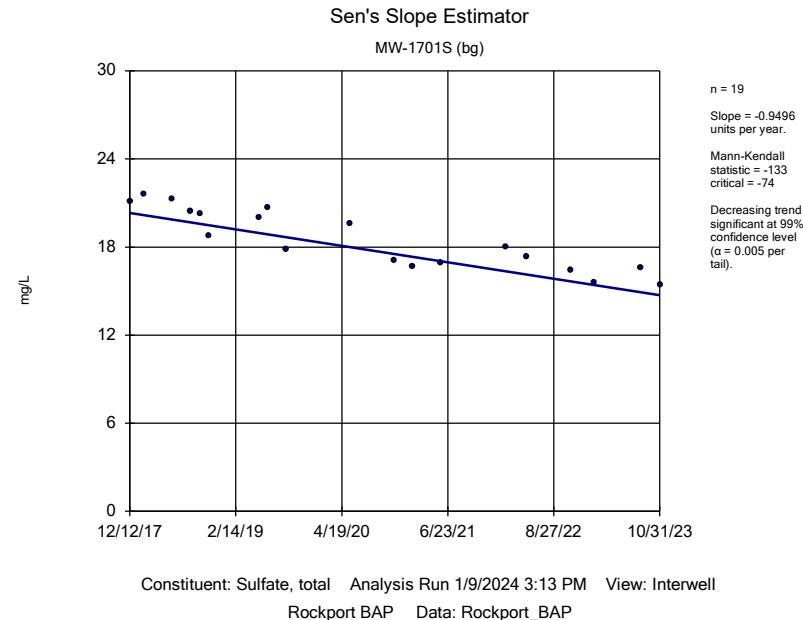


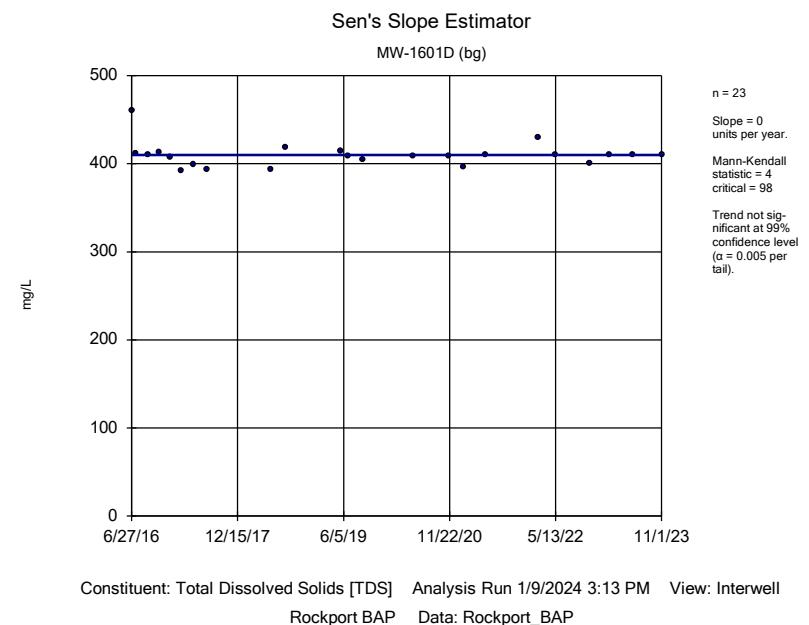
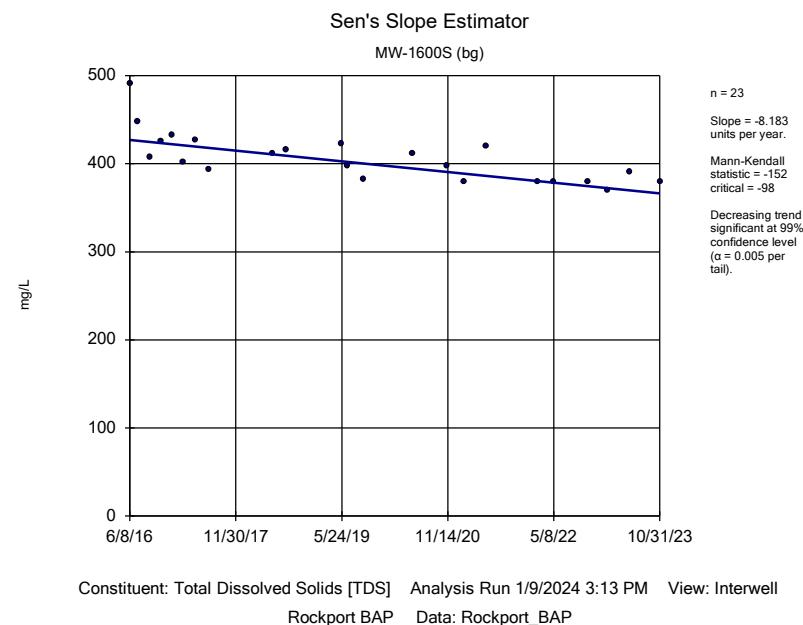
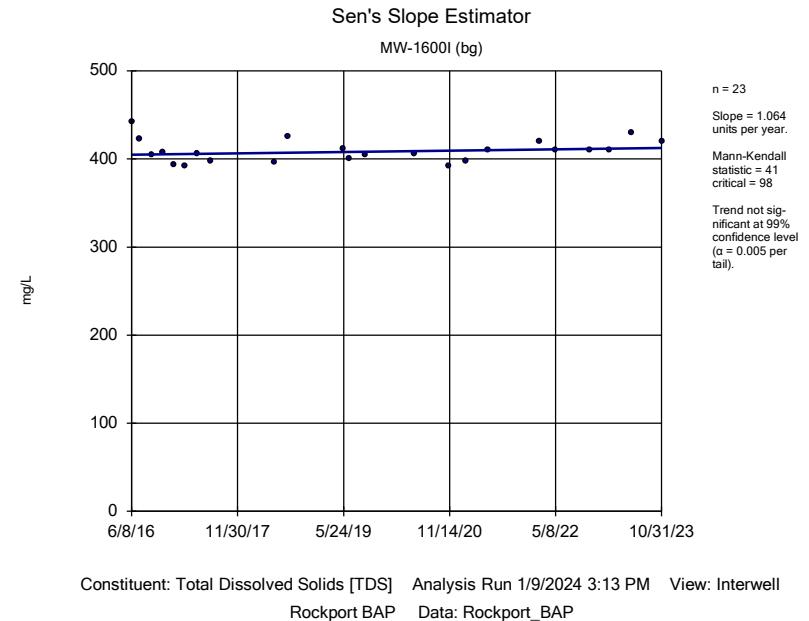
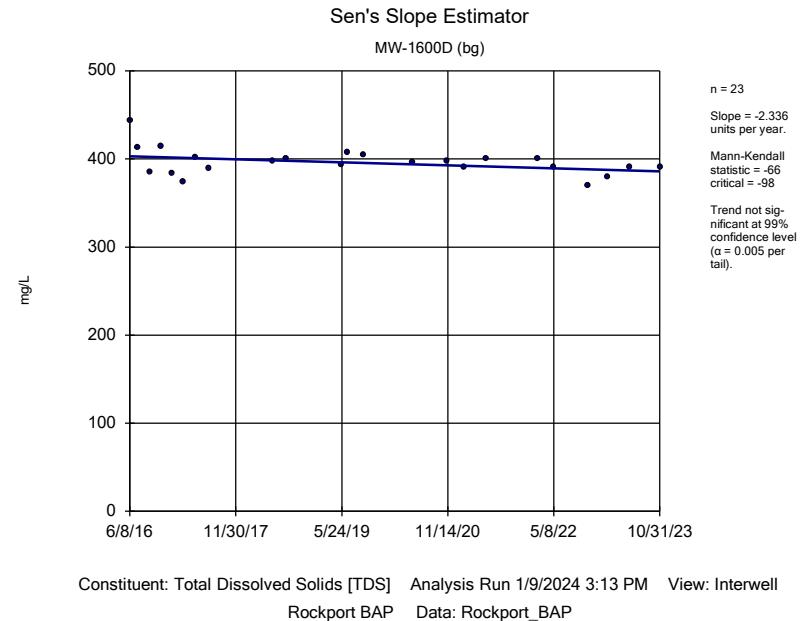


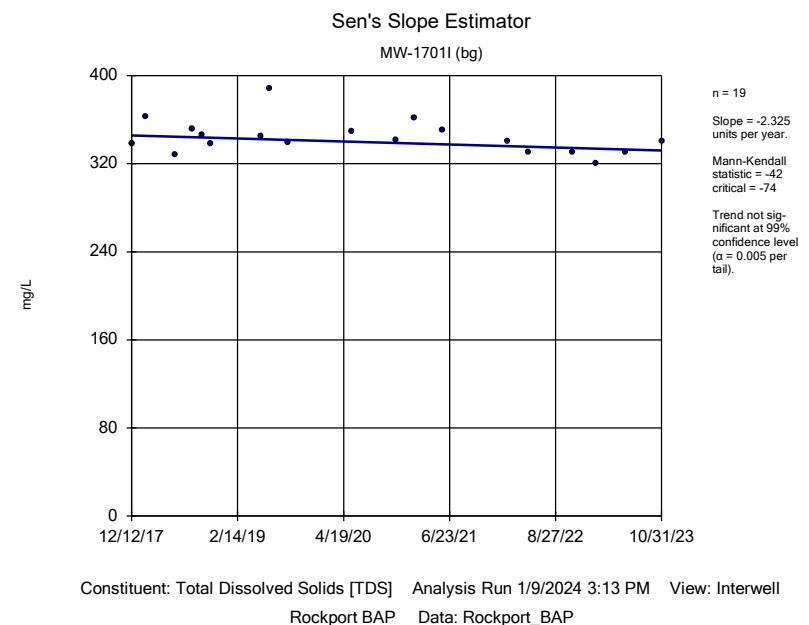
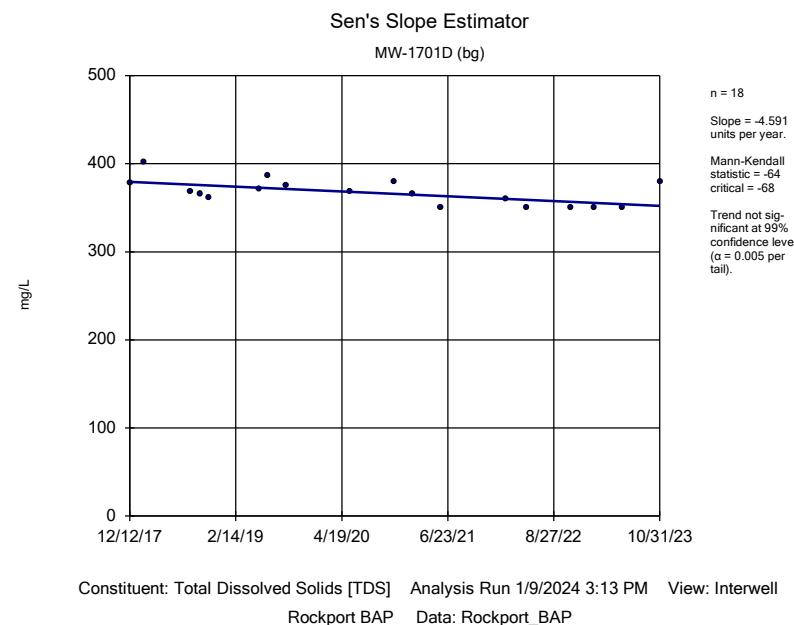
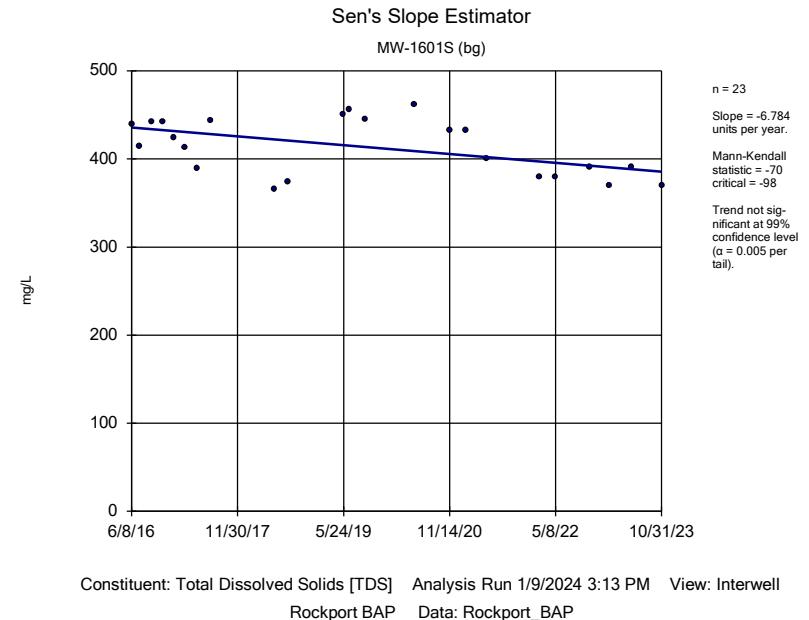
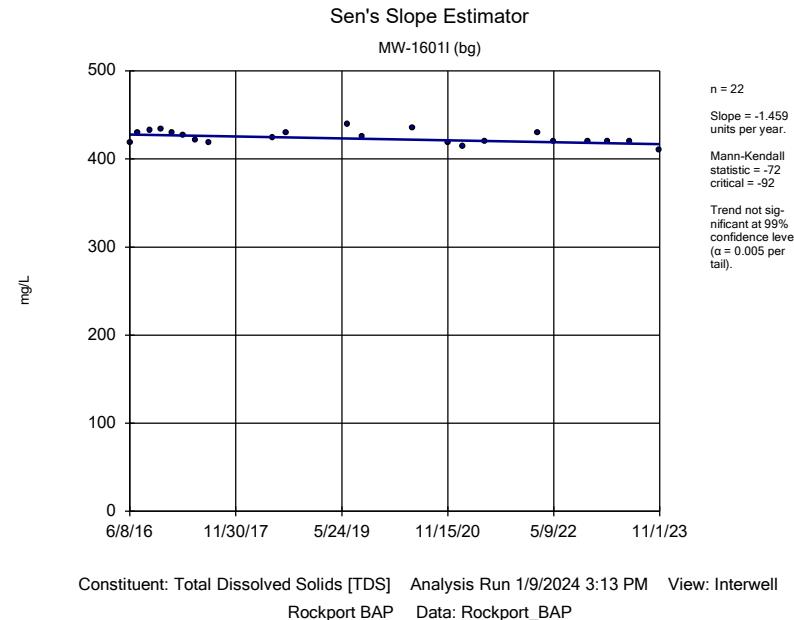


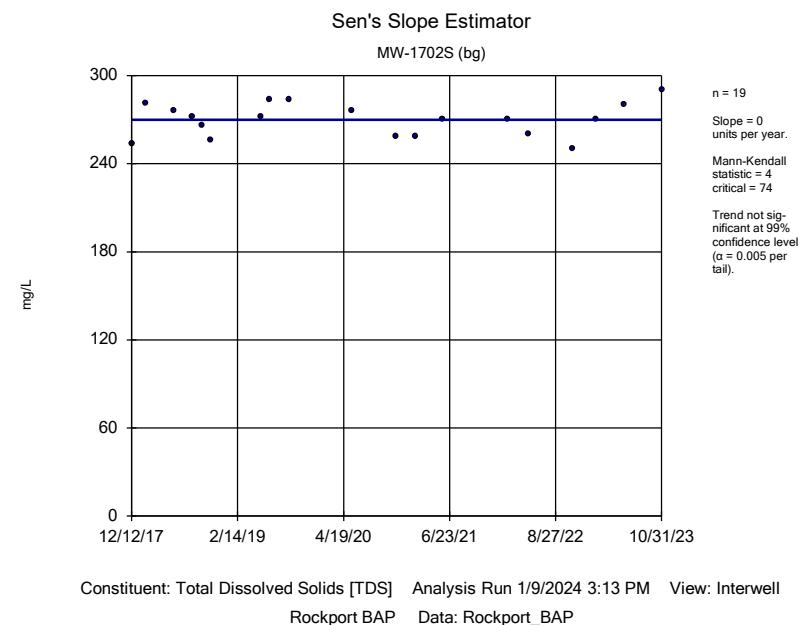
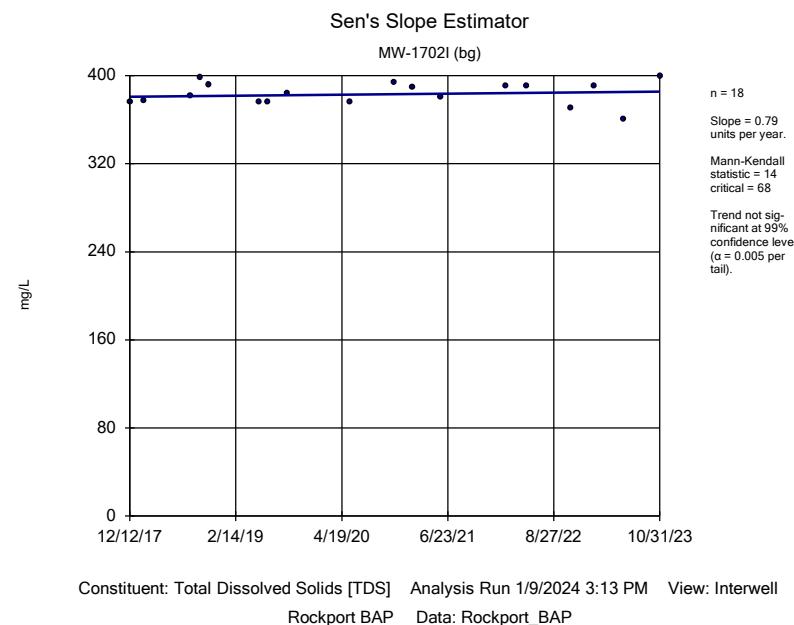
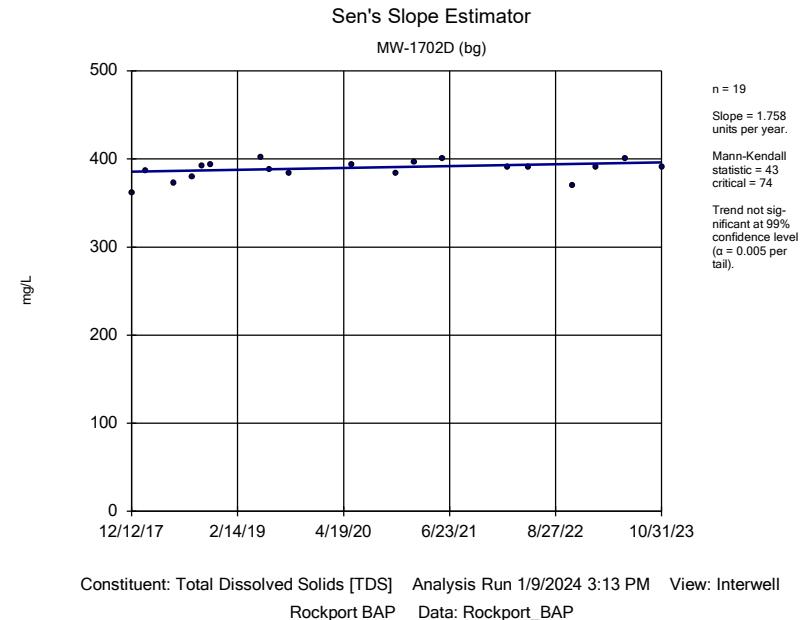
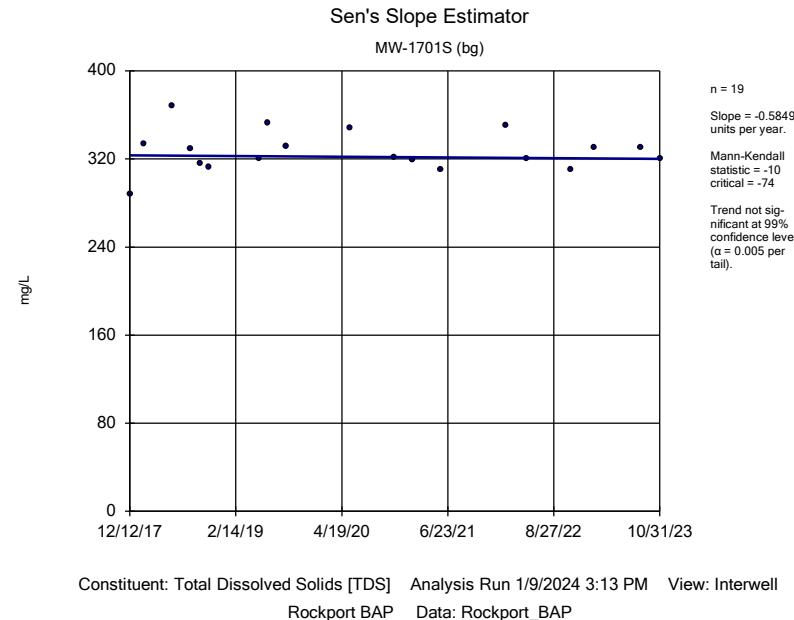










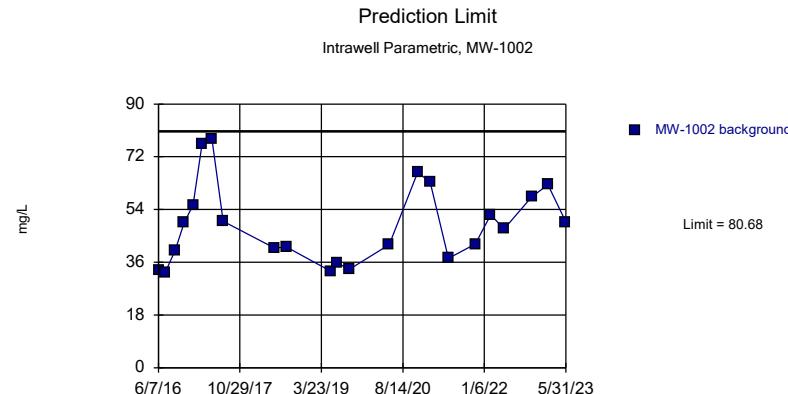


**FIGURE F**  
**Intrawell PLs**

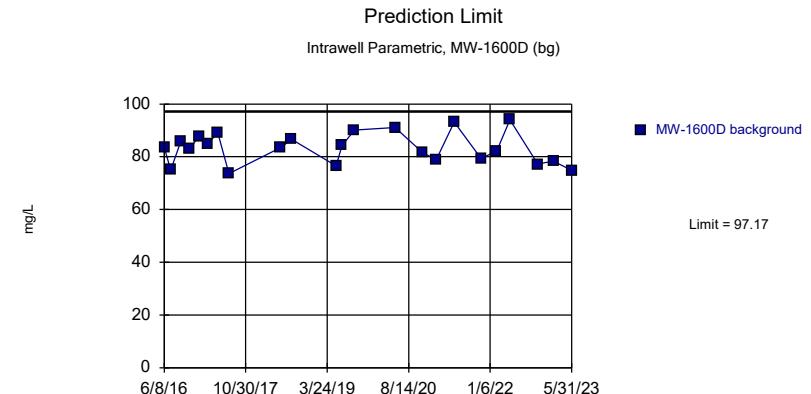
### Appendix III - Intrawell Prediction Limits - All Results

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/18/2024, 6:07 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium, total (mg/L)	MW-1002	80.68	n/a	n/a	1 future	n/a	23	48.75	13.6	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1600D	97.17	n/a	n/a	1 future	n/a	23	83.22	5.943	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1600I	87.07	n/a	n/a	1 future	n/a	23	75.68	4.849	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1600S	74.21	n/a	n/a	1 future	n/a	23	62.27	5.086	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1601D	98.66	n/a	n/a	1 future	n/a	23	86.47	5.19	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1601I	98.01	n/a	n/a	1 future	n/a	22	86.29	4.952	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1601S	88.27	n/a	n/a	1 future	n/a	23	73.78	6.171	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1602D	81.2	n/a	n/a	1 future	n/a	23	68.73	5.311	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1602I	96.06	n/a	n/a	1 future	n/a	22	77.68	7.765	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1603D	95.34	n/a	n/a	1 future	n/a	23	82.5	5.47	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1603I	104.1	n/a	n/a	1 future	n/a	23	83.21	8.916	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1603S	89.54	n/a	n/a	1 future	n/a	22	53.34	15.29	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1604D	77.87	n/a	n/a	1 future	n/a	23	69.4	3.611	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1604I	87.64	n/a	n/a	1 future	n/a	23	68.46	8.167	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1604S	111.1	n/a	n/a	1 future	n/a	23	76.65	14.69	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1605D	96.27	n/a	n/a	1 future	n/a	23	81.58	6.258	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1605I	105.1	n/a	n/a	1 future	n/a	23	82.8	9.51	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1605S	91.25	n/a	n/a	1 future	n/a	23	54.56	1223	0	None	x^2	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1606D	91.57	n/a	n/a	1 future	n/a	23	77.95	5.803	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1606I	87.85	n/a	n/a	1 future	n/a	23	67.6	8.622	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1606S	68.31	n/a	n/a	1 future	n/a	23	3.889	0.1426	0	None	In(x)	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1701D	79.75	n/a	n/a	1 future	n/a	19	70.36	3.851	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1701I	75.64	n/a	n/a	1 future	n/a	19	66.03	3.941	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1701S	70.23	n/a	n/a	1 future	n/a	19	59.92	4.23	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1702D	92.15	n/a	n/a	1 future	n/a	19	80.18	4.912	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1702I	89.18	n/a	n/a	1 future	n/a	19	76.13	5.353	0	None	No	0.0005016	Param Intra 1 of 2
Calcium, total (mg/L)	MW-1702S	40.58	n/a	n/a	1 future	n/a	19	1180	191.7	0	None	x^2	0.0005016	Param Intra 1 of 2
pH, field (SU)	MW-1002	8.216	5.502	n/a	1 future	n/a	24	6.859	0.5825	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1600D	7.852	6.233	n/a	1 future	n/a	24	7.043	0.3475	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1600I	7.827	6.375	n/a	1 future	n/a	22	7.101	0.3067	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1600S	7.694	5.645	n/a	1 future	n/a	23	6.67	0.4361	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1601D	7.948	5.923	n/a	1 future	n/a	24	6.936	0.4347	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1601I	7.932	5.895	n/a	1 future	n/a	21	6.913	0.4267	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1601S	8.005	6.085	n/a	1 future	n/a	23	7.045	0.4088	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1602D	8.139	6.482	n/a	1 future	n/a	23	7.311	0.3528	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1602I	7.93	6.513	n/a	1 future	n/a	24	7.222	0.3043	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1603D	8.084	6.042	n/a	1 future	n/a	24	7.063	0.4384	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1603I	8.07	5.82	n/a	1 future	n/a	23	n/a	n/a	0	n/a	n/a	0.006831	NP Intra (normality) 1 of 2
pH, field (SU)	MW-1603S	7.778	5.811	n/a	1 future	n/a	23	47.13	5.691	0	None	x^2	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1604D	7.741	6.506	n/a	1 future	n/a	24	7.124	0.2651	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1604I	7.902	6.709	n/a	1 future	n/a	25	53.72	3.772	0	None	x^2	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1604S	8.039	6.712	n/a	1 future	n/a	24	7.375	0.285	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1605D	7.5	6.676	n/a	1 future	n/a	22	7.088	0.174	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1605I	7.67	6.683	n/a	1 future	n/a	23	7.177	0.21	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1605S	7.582	6.574	n/a	1 future	n/a	23	7.078	0.2146	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1606D	8.37	6.39	n/a	1 future	n/a	22	n/a	n/a	0	n/a	n/a	0.007415	NP Intra (normality) 1 of 2
pH, field (SU)	MW-1606I	8.283	6.476	n/a	1 future	n/a	22	1.944	0.03365	0	None	x^(1/3)	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1606S	7.85	6.09	n/a	1 future	n/a	23	n/a	n/a	0	n/a	n/a	0.006831	NP Intra (normality) 1 of 2
pH, field (SU)	MW-1701D	7.862	6.565	n/a	1 future	n/a	19	7.214	0.2661	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1701I	8.156	6.429	n/a	1 future	n/a	21	7.292	0.362	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1701S	8.114	6.312	n/a	1 future	n/a	20	7.213	0.3746	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1702D	8.37	5.874	n/a	1 future	n/a	21	7.122	0.523	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1702I	7.992	6.25	n/a	1 future	n/a	21	7.121	0.3649	0	None	No	0.0002508	Param Intra 1 of 2
pH, field (SU)	MW-1702S	8.092	6.142	n/a	1 future	n/a	20	7.117	0.4053	0	None	No	0.0002508	Param Intra 1 of 2



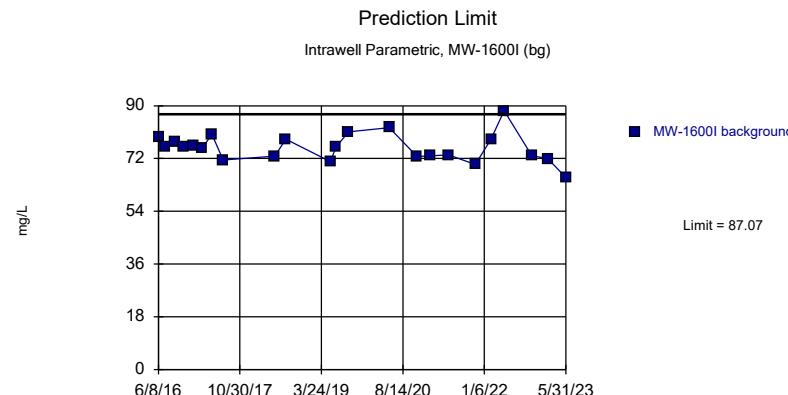
Background Data Summary: Mean=48.75, Std. Dev.=13.6, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9214, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



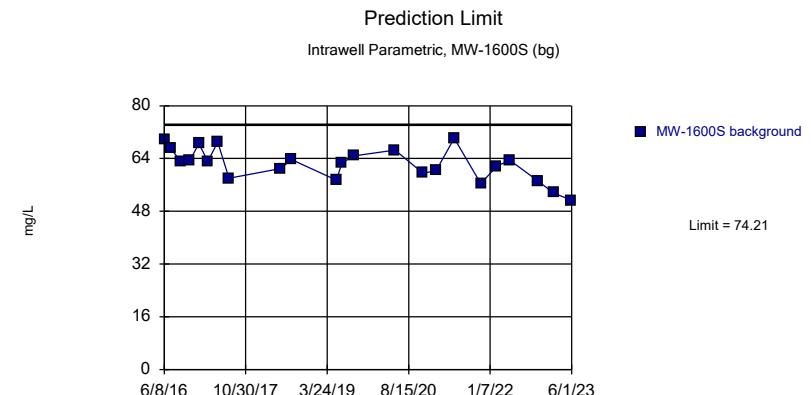
Background Data Summary: Mean=83.22, Std. Dev.=5.943, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9697, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



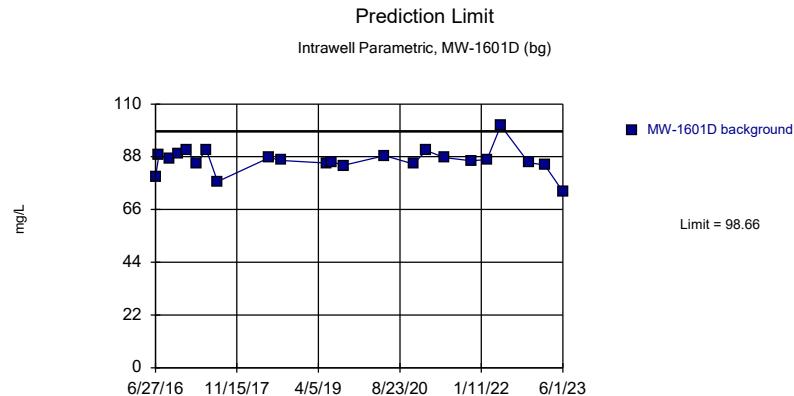
Background Data Summary: Mean=75.68, Std. Dev.=4.849, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9701, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



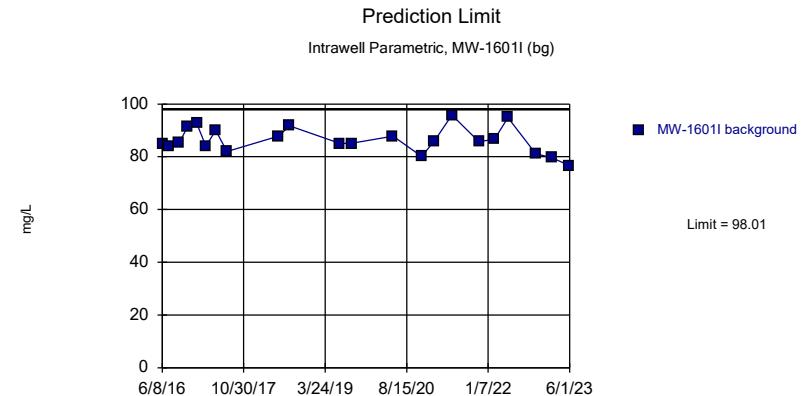
Background Data Summary: Mean=62.27, Std. Dev.=5.086, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9707, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



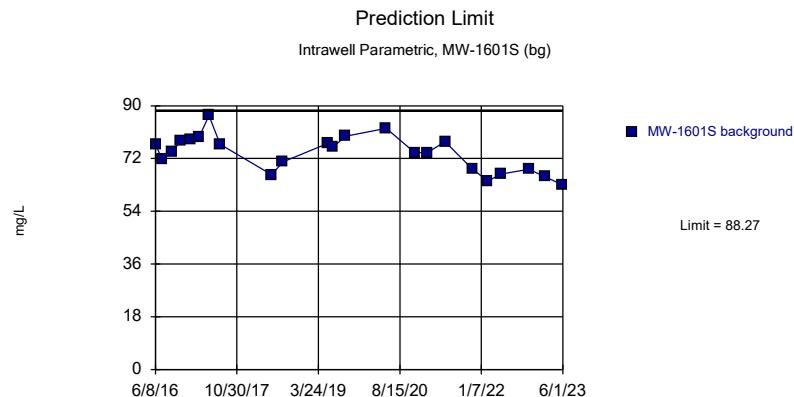
Background Data Summary: Mean=86.47, Std. Dev.=5.19, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8938, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



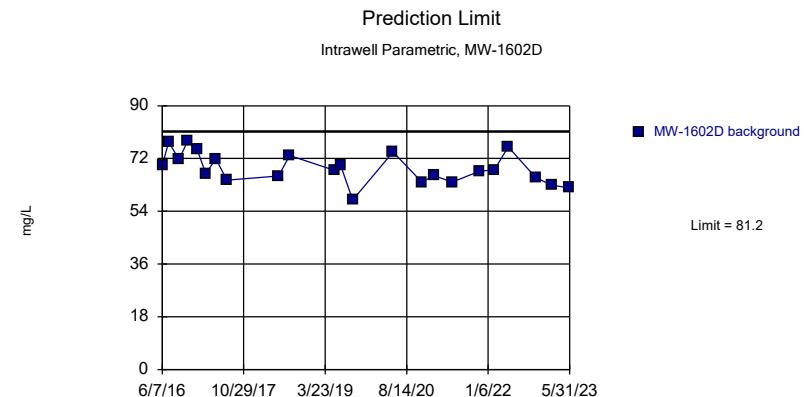
Background Data Summary: Mean=86.29, Std. Dev.=4.952, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9728, critical = 0.878. Kappa = 2.367 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



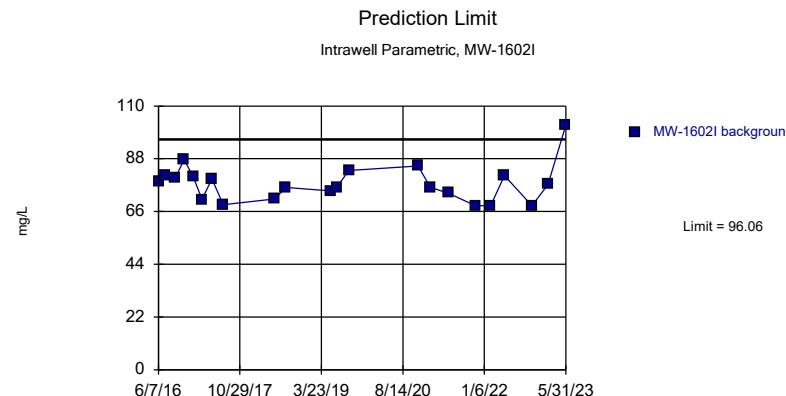
Background Data Summary: Mean=73.78, Std. Dev.=6.171, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9655, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



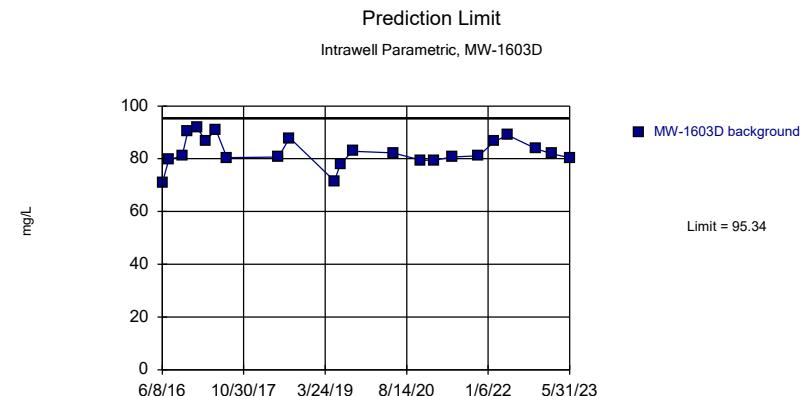
Background Data Summary: Mean=68.73, Std. Dev.=5.311, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9748, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



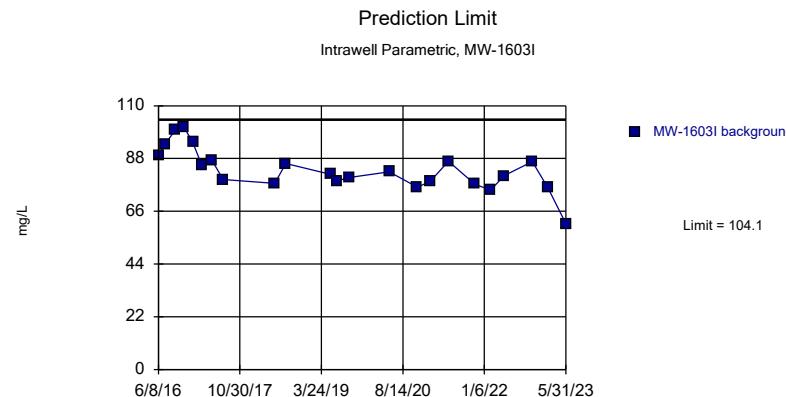
Background Data Summary: Mean=77.68, Std. Dev.=7.765, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8877, critical = 0.878. Kappa = 2.367 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



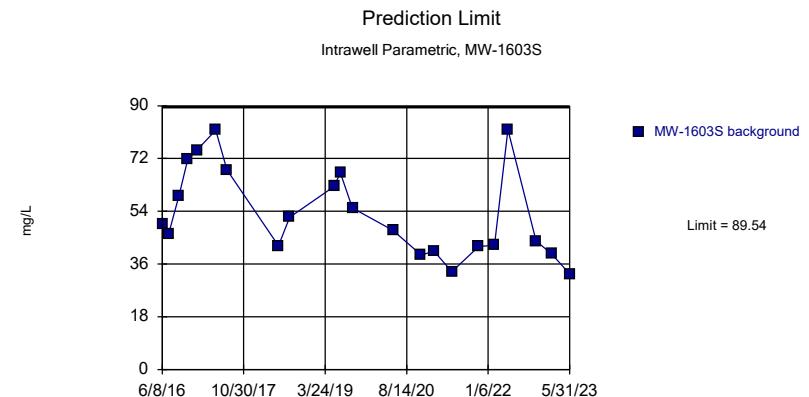
Background Data Summary: Mean=82.5, Std. Dev.=5.47, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9371, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



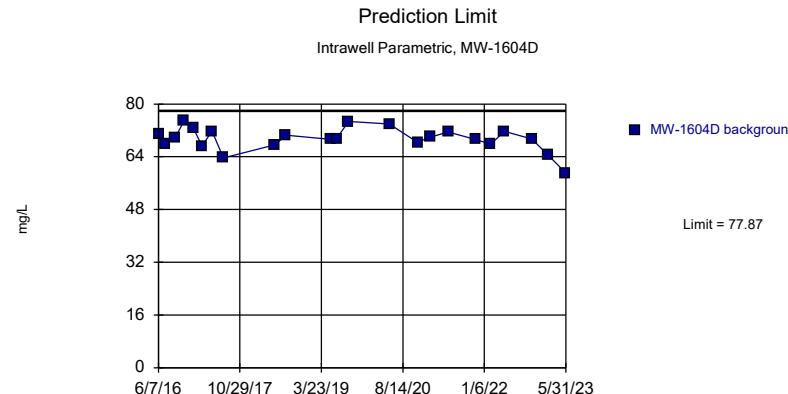
Background Data Summary: Mean=83.21, Std. Dev.=8.916, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



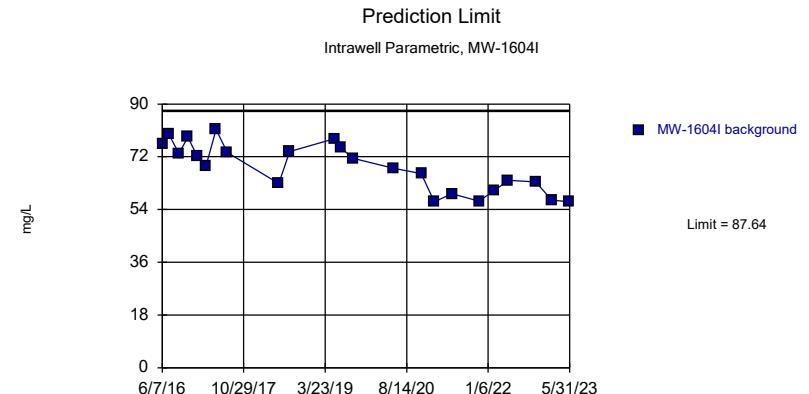
Background Data Summary: Mean=53.34, Std. Dev.=15.29, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.921, critical = 0.878. Kappa = 2.367 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



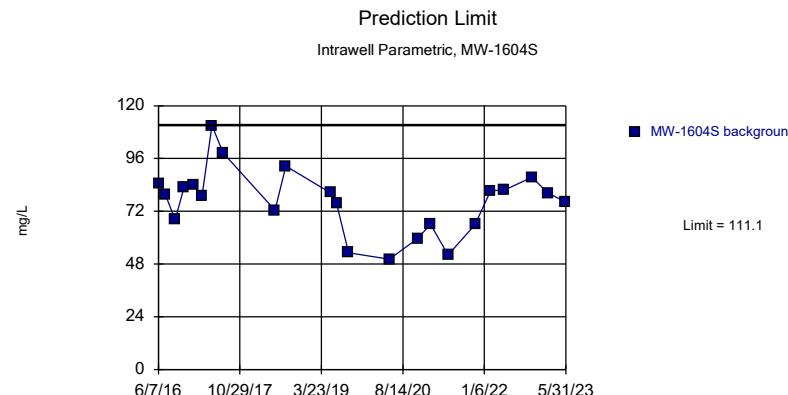
Background Data Summary: Mean=69.4, Std. Dev.=3.611, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9339, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



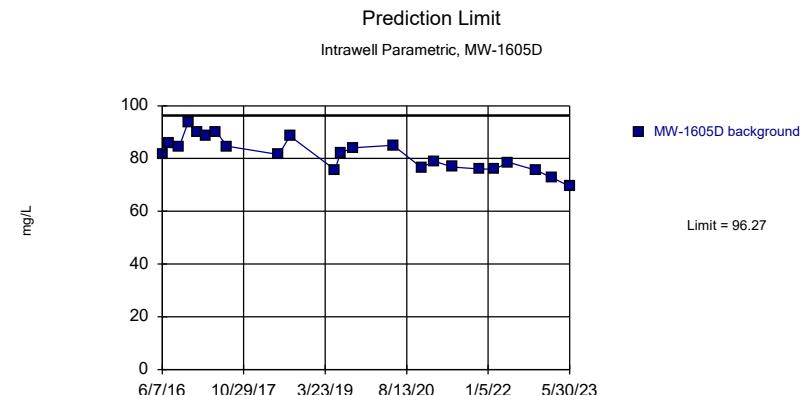
Background Data Summary: Mean=68.46, Std. Dev.=8.167, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9315, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



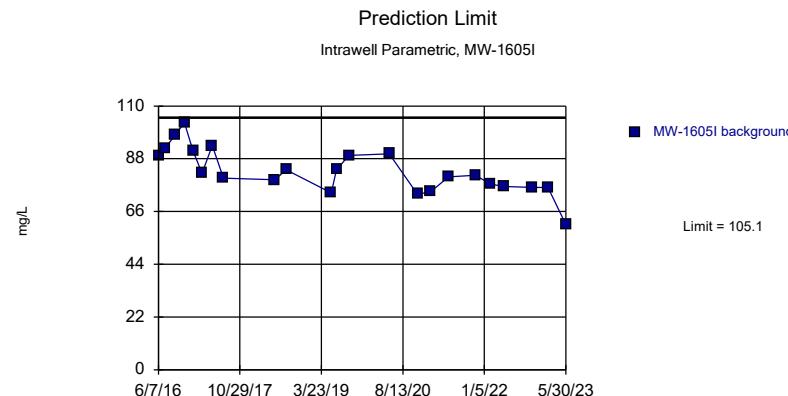
Background Data Summary: Mean=76.65, Std. Dev.=14.69, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.959, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



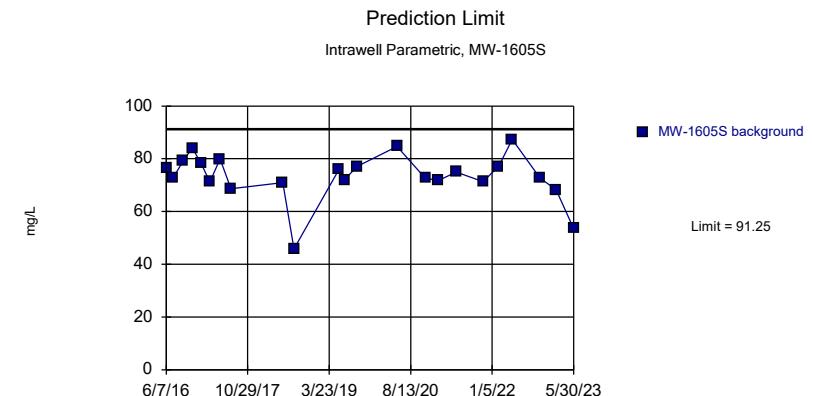
Background Data Summary: Mean=81.58, Std. Dev.=6.258, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9747, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



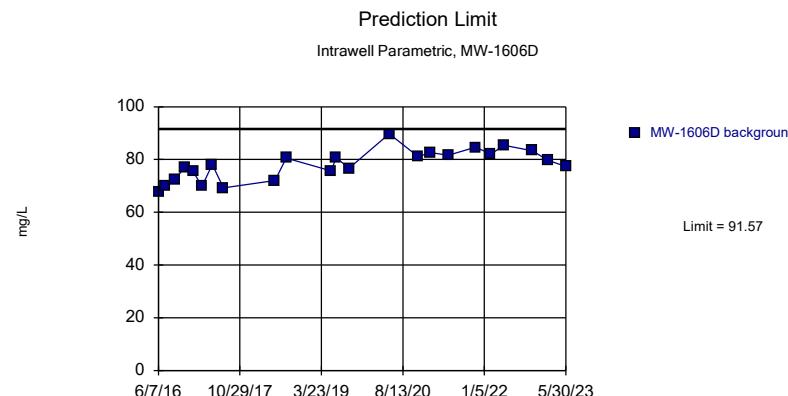
Background Data Summary: Mean=82.8, Std. Dev =9.51, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9691, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



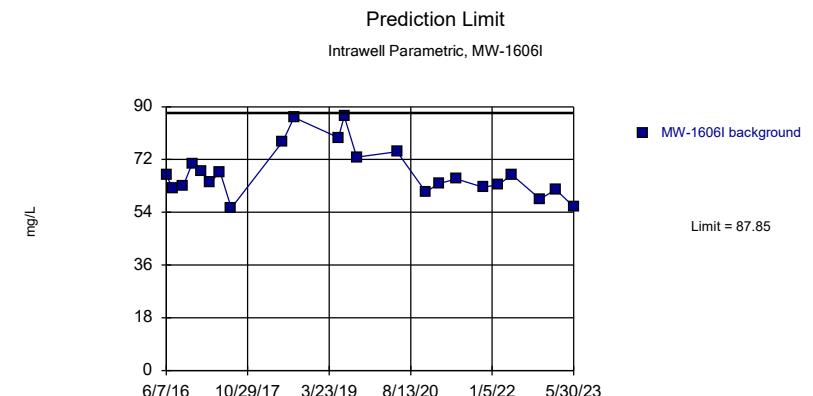
Background Data Summary (based on square transformation): Mean=5456, Std. Dev =1223, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9077, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



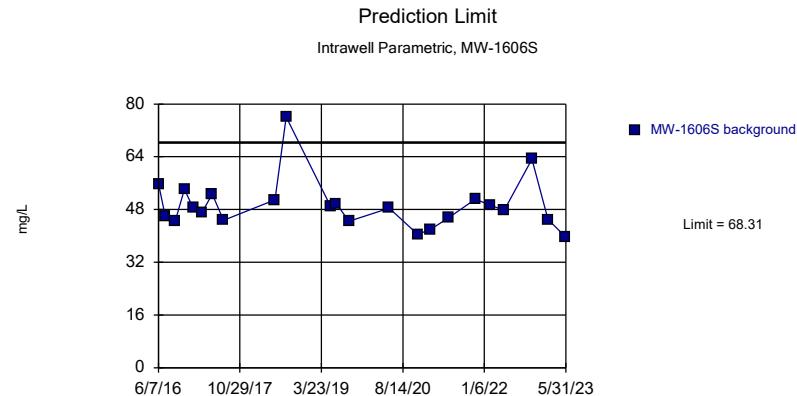
Background Data Summary: Mean=77.95, Std. Dev.=5.803, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9716, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



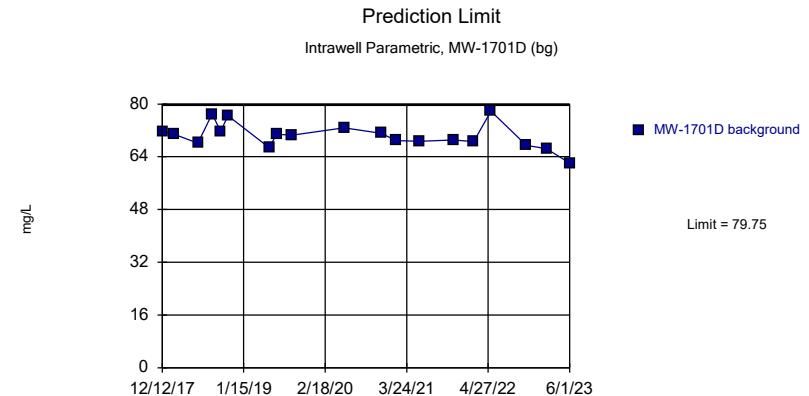
Background Data Summary: Mean=67.6, Std. Dev.=8.622, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9149, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



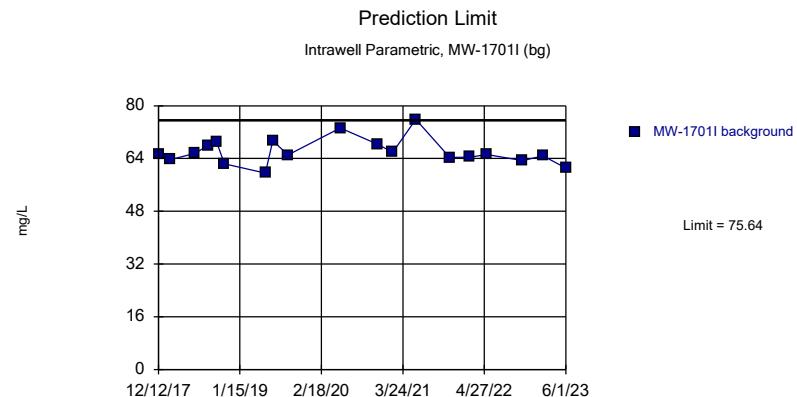
Background Data Summary (based on natural log transformation): Mean=3.889, Std. Dev.=0.1426, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.893, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



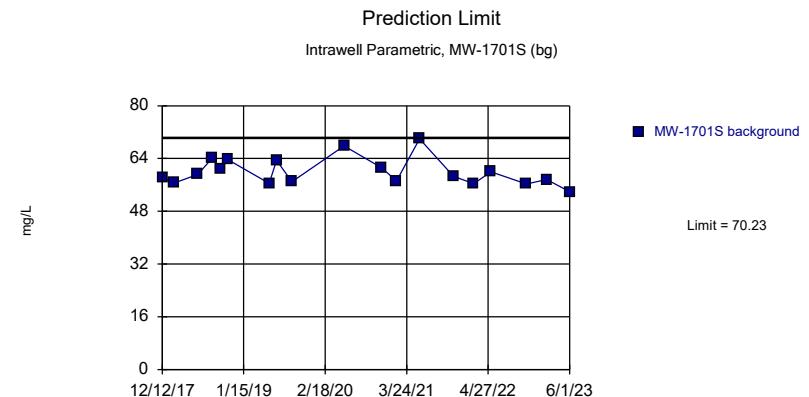
Background Data Summary: Mean=70.36, Std. Dev.=3.851, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9494, critical = 0.901. Kappa = 2.437 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



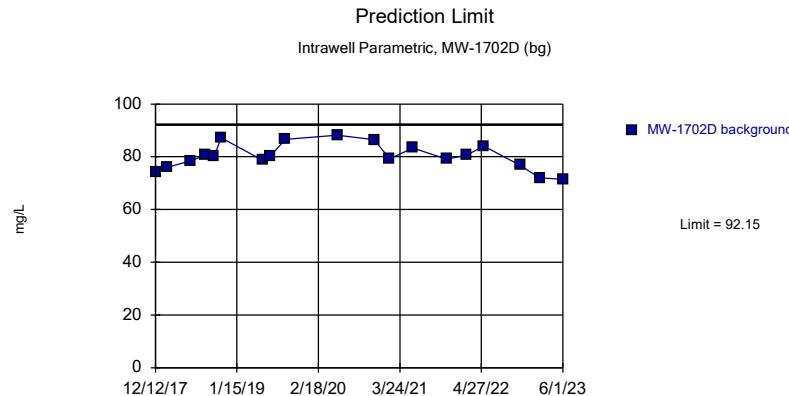
Background Data Summary: Mean=66.03, Std. Dev.=3.941, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9302, critical = 0.901. Kappa = 2.437 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



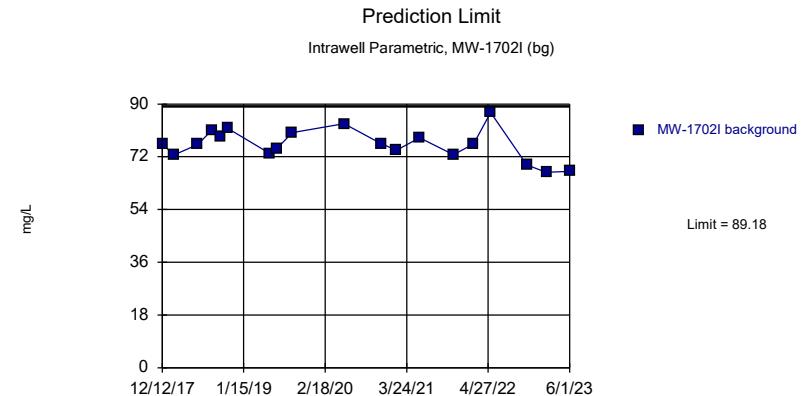
Background Data Summary: Mean=59.92, Std. Dev.=4.23, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9075, critical = 0.901. Kappa = 2.437 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



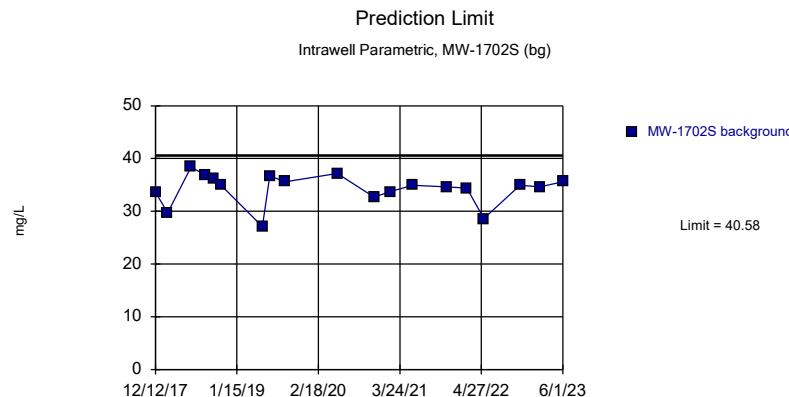
Background Data Summary: Mean=80.18, Std. Dev.=4.912, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9582, critical = 0.901. Kappa = 2.437 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



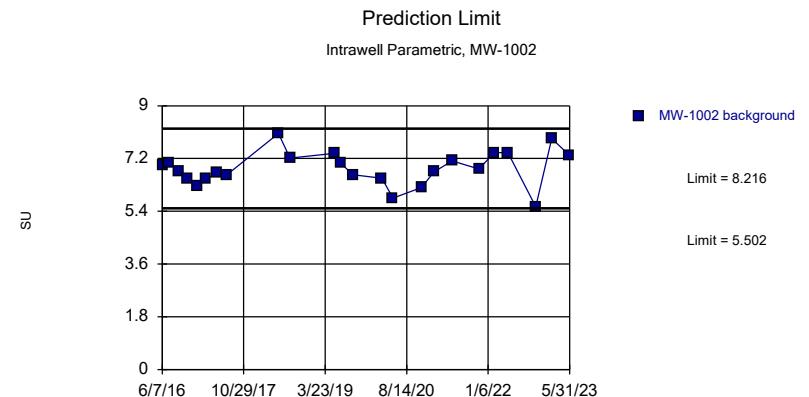
Background Data Summary: Mean=76.13, Std. Dev.=5.353, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9798, critical = 0.901. Kappa = 2.437 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



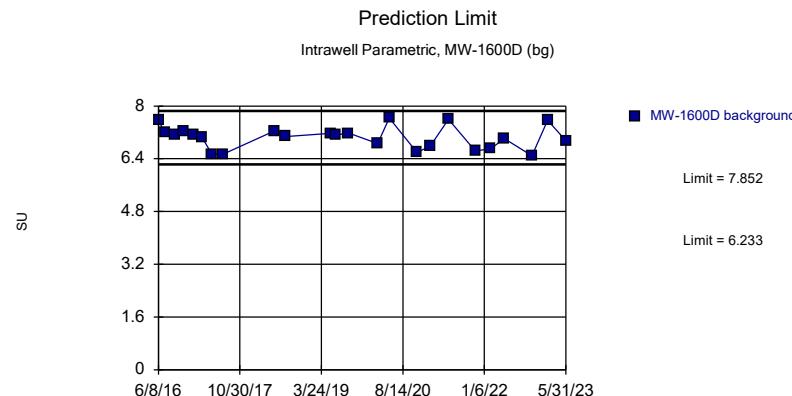
Background Data Summary (based on square transformation): Mean=1180, Std. Dev.=191.7, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9078, critical = 0.901. Kappa = 2.437 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



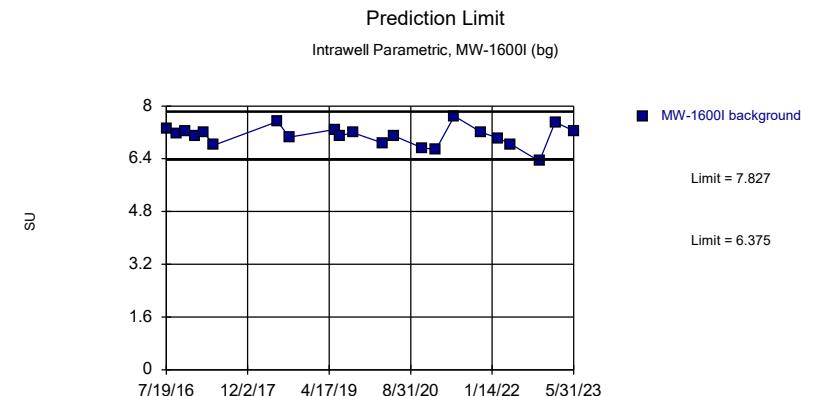
Background Data Summary: Mean=6.859, Std. Dev.=0.5825, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9835, critical = 0.884. Kappa = 2.329 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



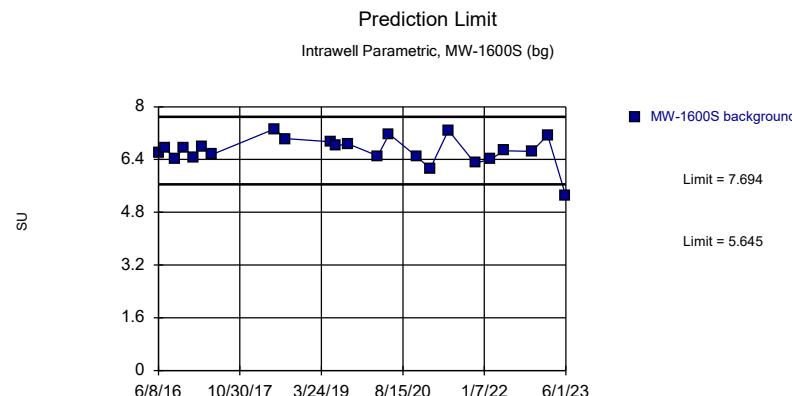
Background Data Summary: Mean=7.043, Std. Dev.=0.3475, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9409, critical = 0.884. Kappa = 2.329 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



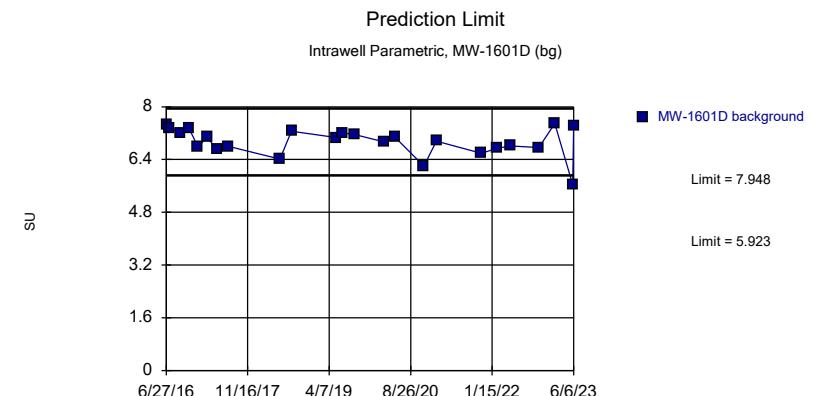
Background Data Summary: Mean=7.101, Std. Dev.=0.3067, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9689, critical = 0.878. Kappa = 2.367 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Background Data Summary: Mean=6.67, Std. Dev.=0.4361, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9118, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

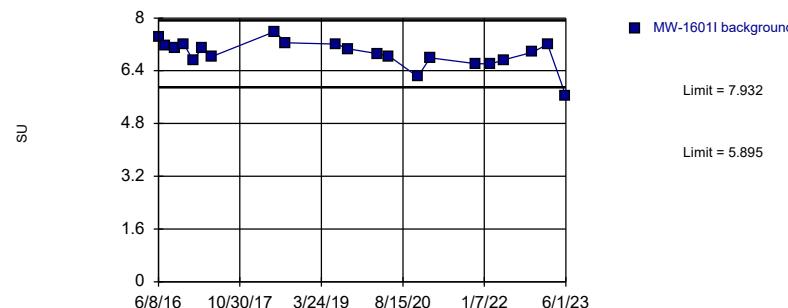


Background Data Summary: Mean=6.936, Std. Dev.=0.4347, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9137, critical = 0.884. Kappa = 2.329 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

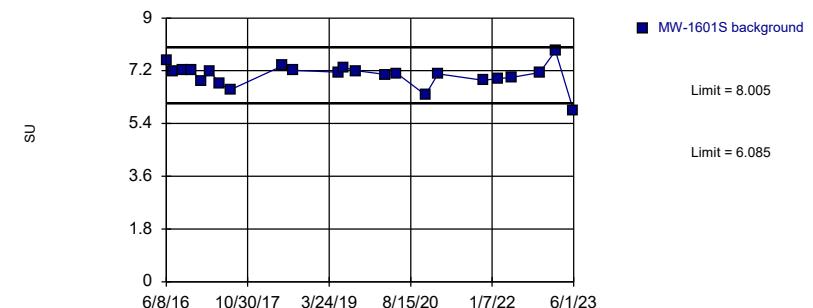
Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Prediction Limit  
Intrawell Parametric, MW-1601I (bg)



Background Data Summary: Mean=6.913, Std. Dev.=0.4267, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9052, critical = 0.873. Kappa = 2.386 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Prediction Limit  
Intrawell Parametric, MW-1601S (bg)

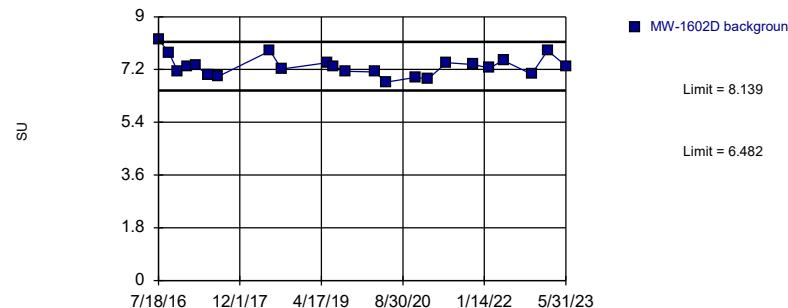


Background Data Summary: Mean=7.045, Std. Dev.=0.4088, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.899, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

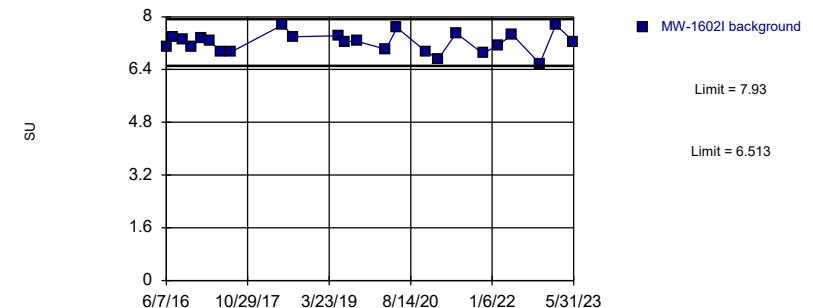
Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Prediction Limit  
Intrawell Parametric, MW-1602D



Background Data Summary: Mean=7.311, Std. Dev.=0.3528, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9398, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Prediction Limit  
Intrawell Parametric, MW-1602I

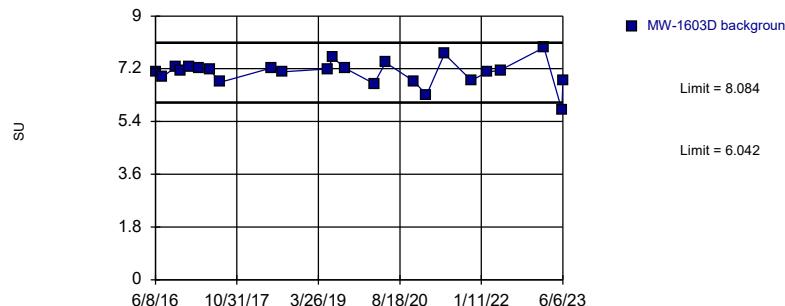


Background Data Summary: Mean=7.222, Std. Dev.=0.3043, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9767, critical = 0.884. Kappa = 2.329 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

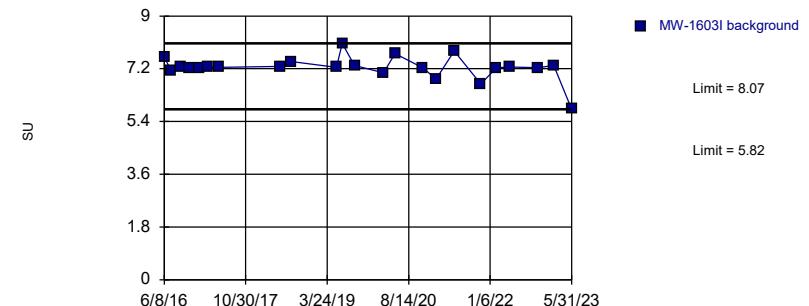
Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Prediction Limit  
Intrawell Parametric, MW-1603D



Background Data Summary: Mean=7.063, Std. Dev.=0.4384, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.884. Kappa = 2.329 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Prediction Limit  
Intrawell Non-parametric, MW-1603I

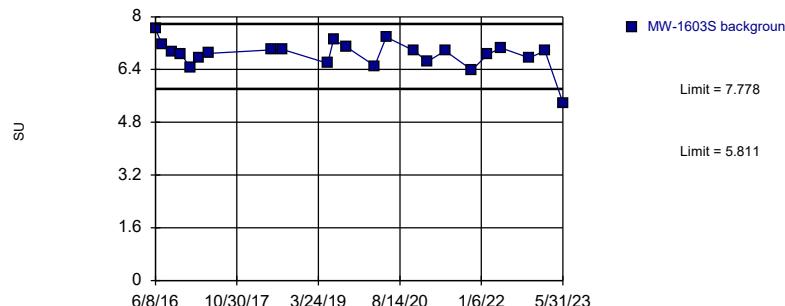


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 23 background values. Well-constituent pair annual alpha = 0.01364. Individual comparison alpha = 0.006831 (1 of 2). Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

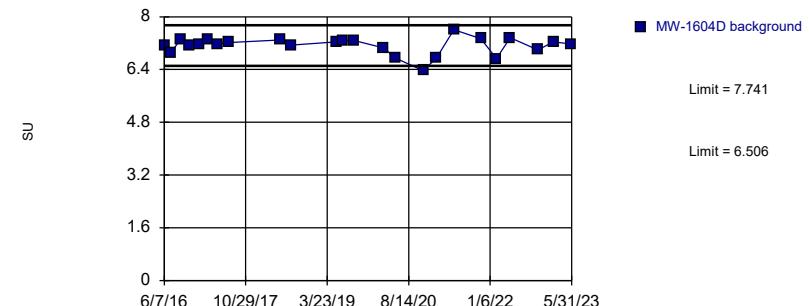
Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Prediction Limit  
Intrawell Parametric, MW-1603S



Background Data Summary (based on square transformation): Mean=47.13, Std. Dev.=5.691, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9087, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Prediction Limit  
Intrawell Parametric, MW-1604D

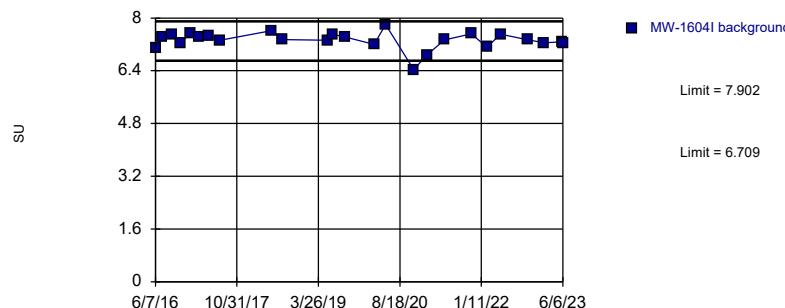


Background Data Summary: Mean=7.124, Std. Dev.=0.2651, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9015, critical = 0.884. Kappa = 2.329 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Prediction Limit  
Intrawell Parametric, MW-1604I



Background Data Summary (based on square transformation): Mean=53.72, Std. Dev.=3.772, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8953, critical = 0.888. Kappa = 2.31 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Prediction Limit  
Intrawell Parametric, MW-1604S

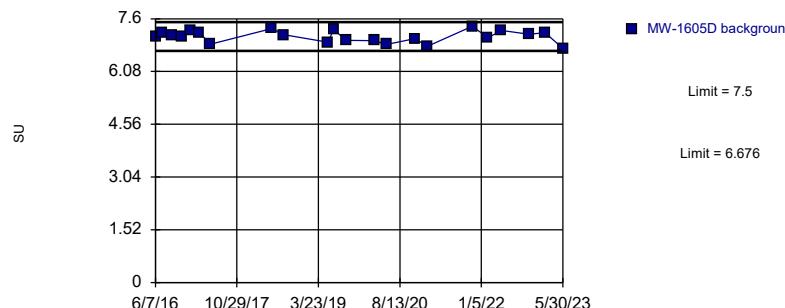


Background Data Summary: Mean=7.375, Std. Dev.=0.285, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8859, critical = 0.884. Kappa = 2.329 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

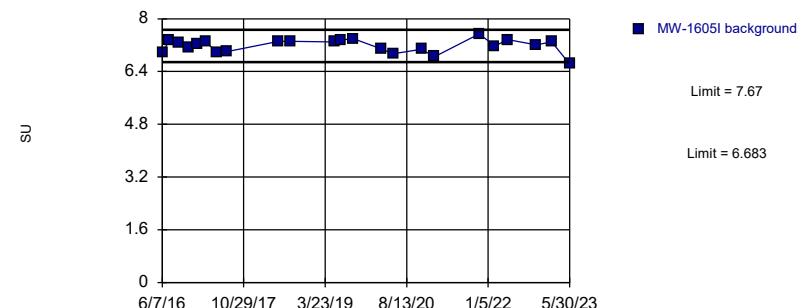
Constituent: pH, field Analysis Run 1/18/2024 6:05 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Prediction Limit  
Intrawell Parametric, MW-1605D



Background Data Summary: Mean=7.088, Std. Dev.=0.174, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.974, critical = 0.878. Kappa = 2.367 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

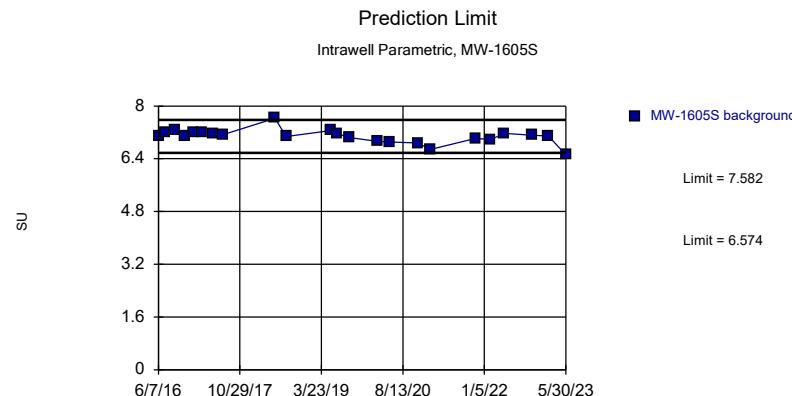
Prediction Limit  
Intrawell Parametric, MW-1605I



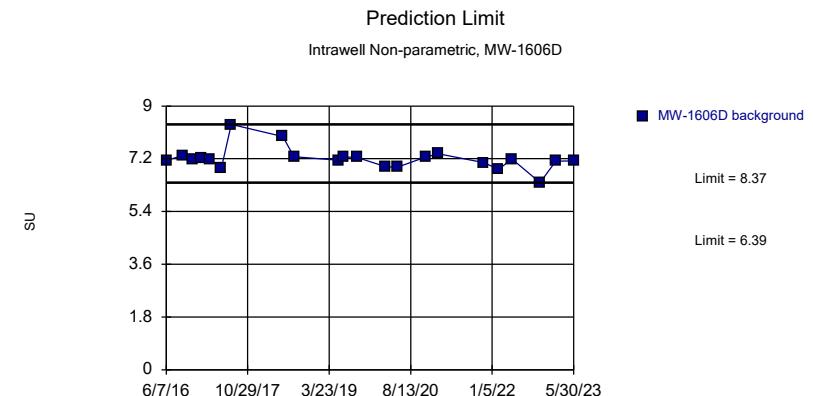
Background Data Summary: Mean=7.177, Std. Dev.=0.21, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.943, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



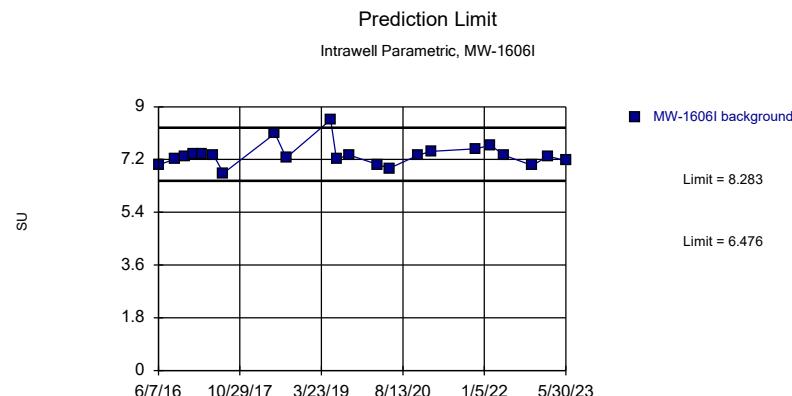
Background Data Summary: Mean=7.078, Std. Dev.=0.2146, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.92, critical = 0.881. Kappa = 2.348 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



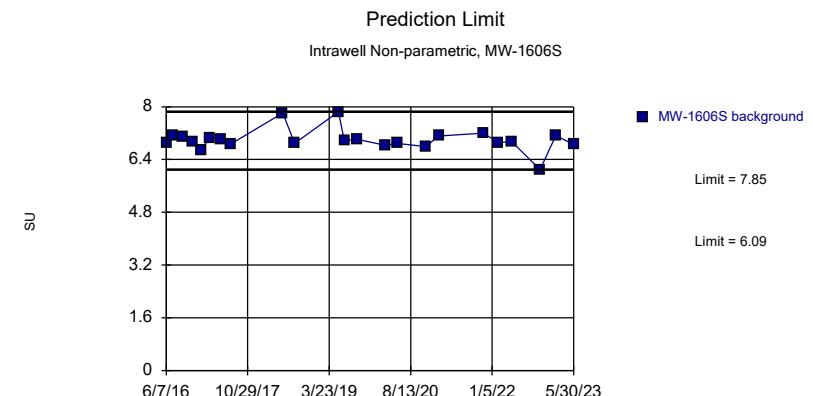
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 22 background values. Well-constituent pair annual alpha = 0.0148. Individual comparison alpha = 0.007415 (1 of 2). Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



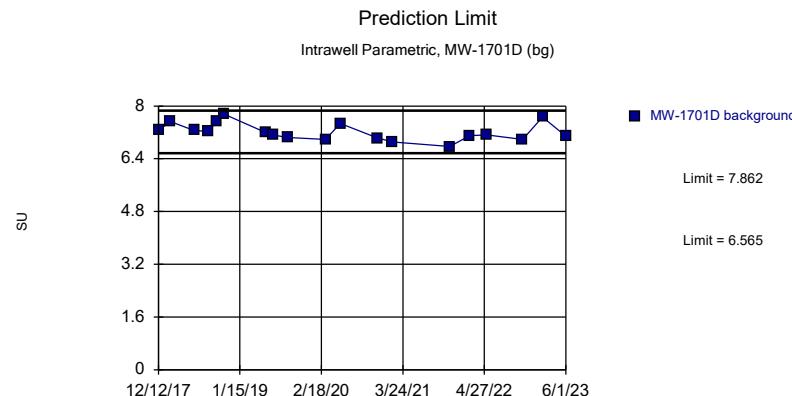
Background Data Summary (based on cube root transformation): Mean=1.944, Std. Dev.=0.03365, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8789, critical = 0.878. Kappa = 2.367 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



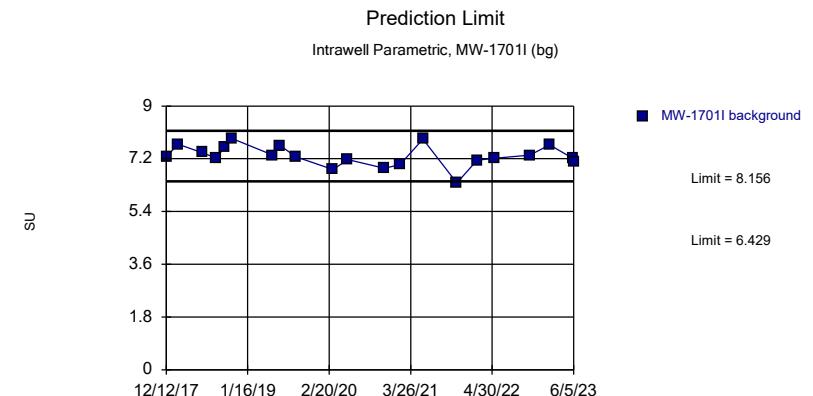
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 23 background values. Well-constituent pair annual alpha = 0.01364. Individual comparison alpha = 0.006831 (1 of 2). Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



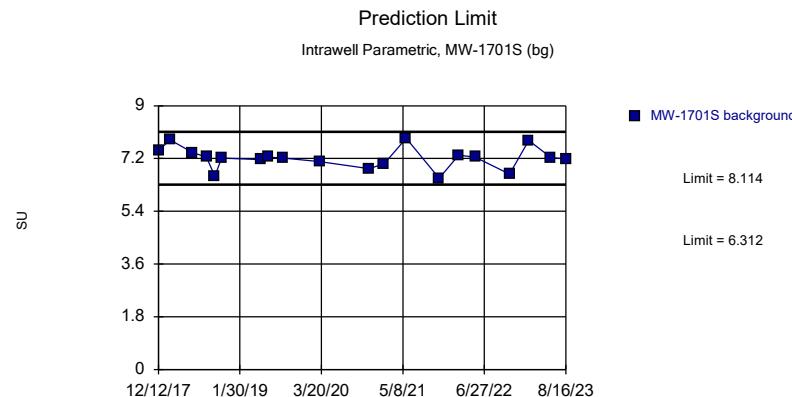
Background Data Summary: Mean=7.214, Std. Dev.=0.2661, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.943, critical = 0.901. Kappa = 2.437 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



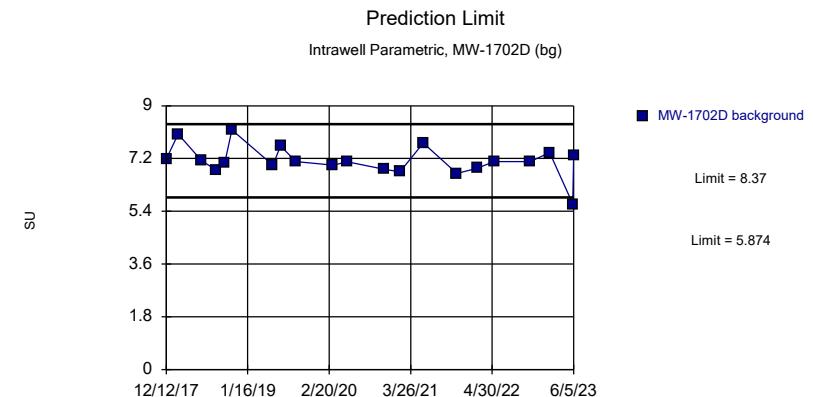
Background Data Summary: Mean=7.292, Std. Dev.=0.362, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9566, critical = 0.873. Kappa = 2.386 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



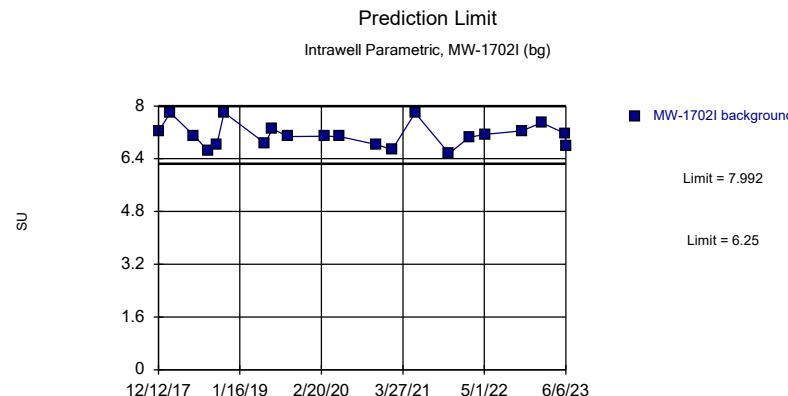
Background Data Summary: Mean=7.213, Std. Dev.=0.3746, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9323, critical = 0.868. Kappa = 2.406 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



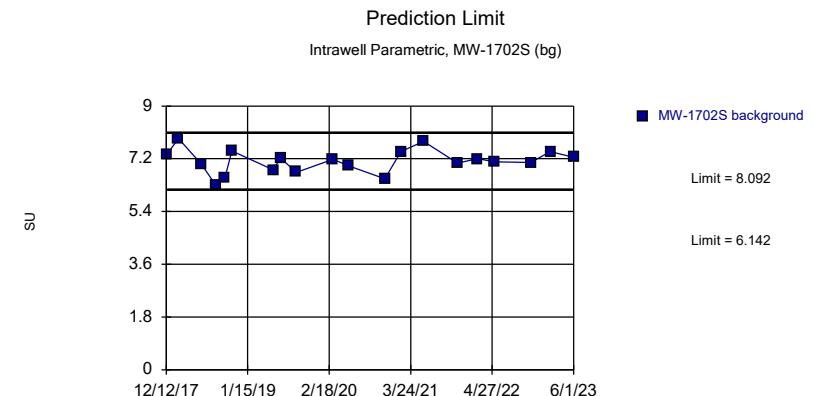
Background Data Summary: Mean=7.122, Std. Dev.=0.523, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9034, critical = 0.873. Kappa = 2.386 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Background Data Summary: Mean=7.121, Std. Dev.=0.3649, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9316, critical = 0.873. Kappa = 2.386 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.



Background Data Summary: Mean=7.117, Std. Dev.=0.4053, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9808, critical = 0.868. Kappa = 2.406 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016. Assumes 1 future value.

Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

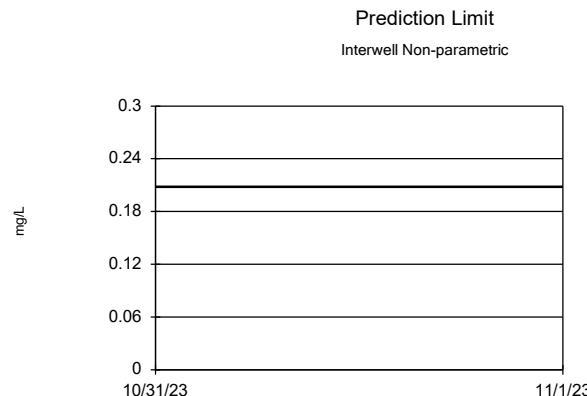
Constituent: pH, field Analysis Run 1/18/2024 6:06 PM View: Intrawell  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

**FIGURE G**  
**Interwell PLs**

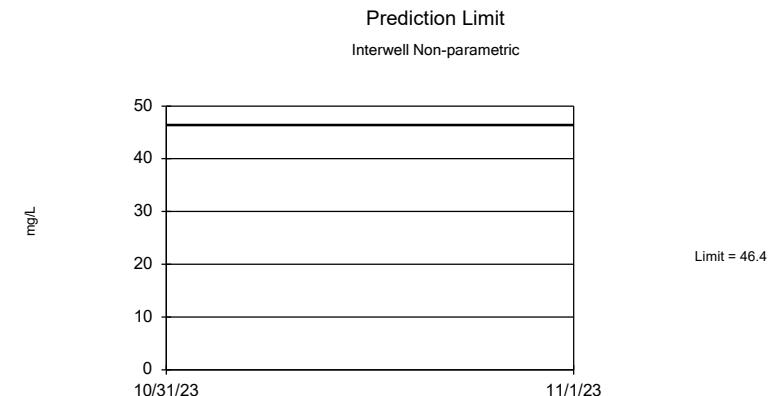
## Appendix III - Interwell Prediction Limits - All Results

Rockport BAP Data: Rockport\_BAP Printed 1/9/2024, 3:32 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron, total (mg/L)	n/a	0.208	n/a	n/a	15 future	n/a	251	n/a	n/a	9.562	n/a	n/a	0.0000491	NP Inter (normality) 1 of 2
Chloride, total (mg/L)	n/a	46.4	n/a	n/a	15 future	n/a	251	n/a	n/a	0	n/a	n/a	0.0000491	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	n/a	0.7	n/a	n/a	15 future	n/a	263	n/a	n/a	0	n/a	n/a	0.0000491	NP Inter (normality) 1 of 2
Sulfate, total (mg/L)	n/a	76	n/a	n/a	15 future	n/a	251	n/a	n/a	0	n/a	n/a	0.0000491	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	n/a	447.7	n/a	n/a	15 future	n/a	249	9.1e12	4.4e12	0	None	x^5	0.0005016	Param Inter 1 of 2



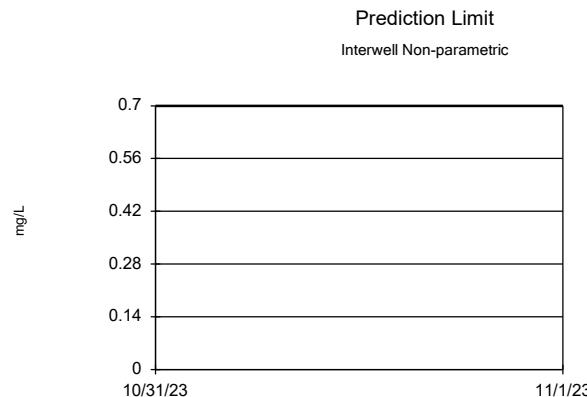
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 251 background values. 9.562% NDs. Annual per-constituent alpha = 0.001472. Individual comparison alpha = 0.0000491 (1 of 2). Assumes 15 future values.



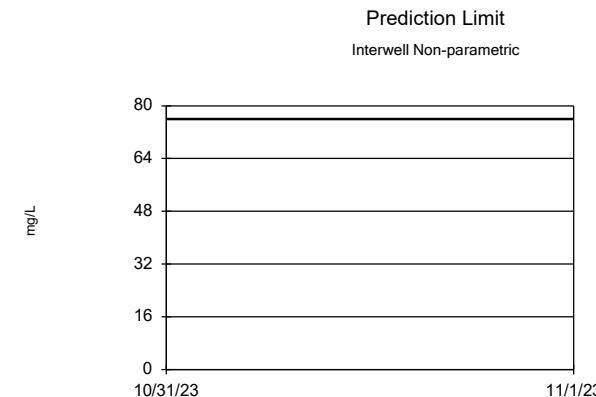
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 251 background values. Annual per-constituent alpha = 0.001472. Individual comparison alpha = 0.0000491 (1 of 2). Assumes 15 future values.

Constituent: Boron, total Analysis Run 1/9/2024 3:31 PM View: Interwell  
Rockport BAP Data: Rockport\_BAP

Constituent: Chloride, total Analysis Run 1/9/2024 3:31 PM View: Interwell  
Rockport BAP Data: Rockport\_BAP



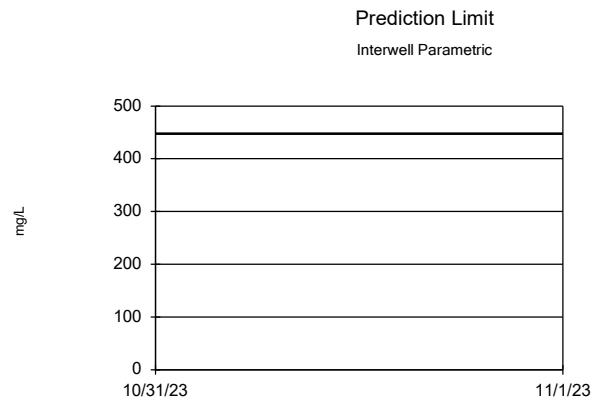
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 263 background values. Annual per-constituent alpha = 0.001472. Individual comparison alpha = 0.0000491 (1 of 2). Assumes 15 future values.



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 251 background values. Annual per-constituent alpha = 0.001472. Individual comparison alpha = 0.0000491 (1 of 2). Assumes 15 future values.

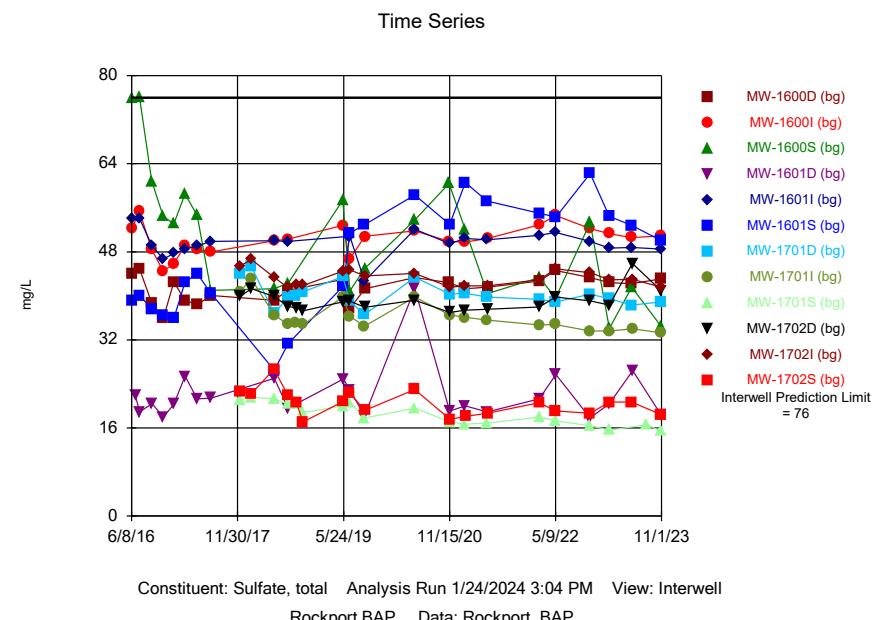
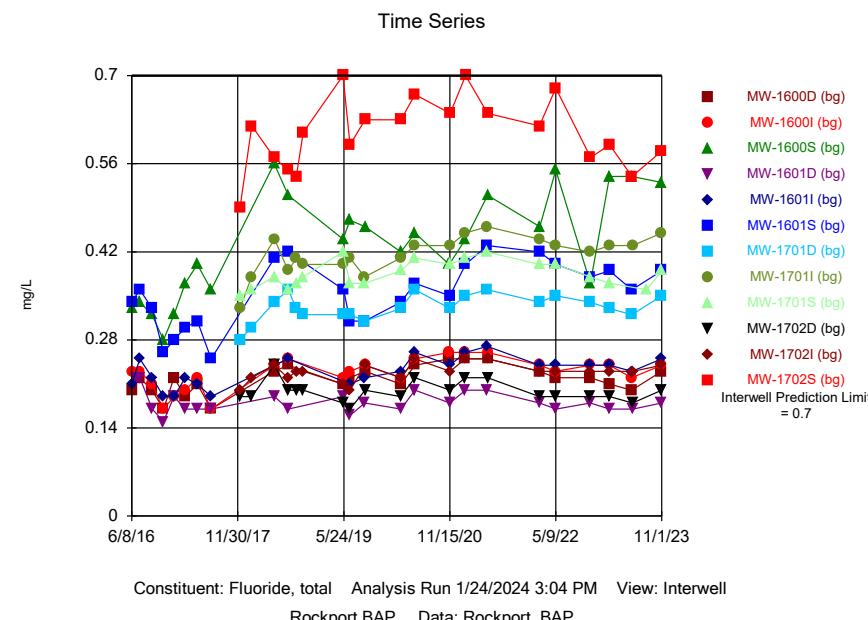
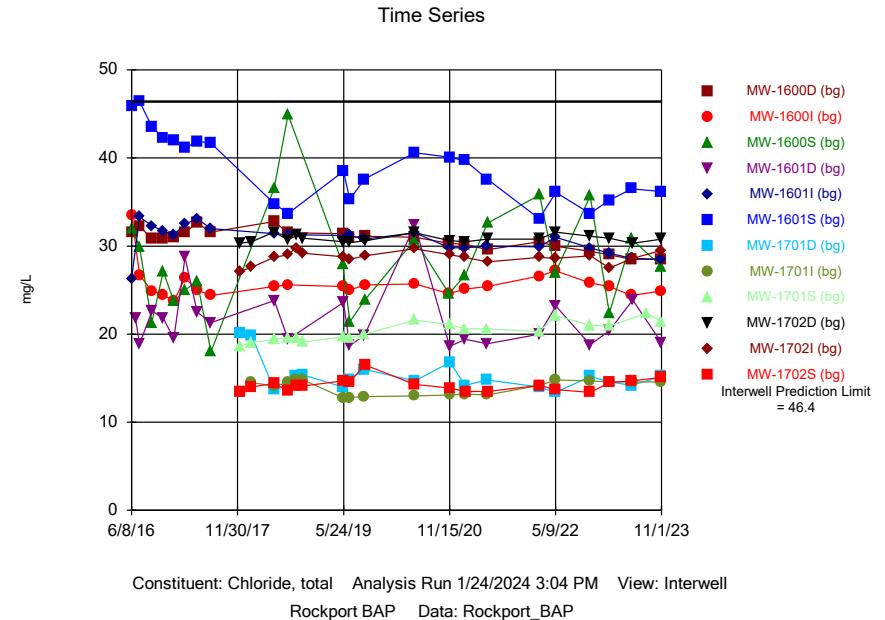
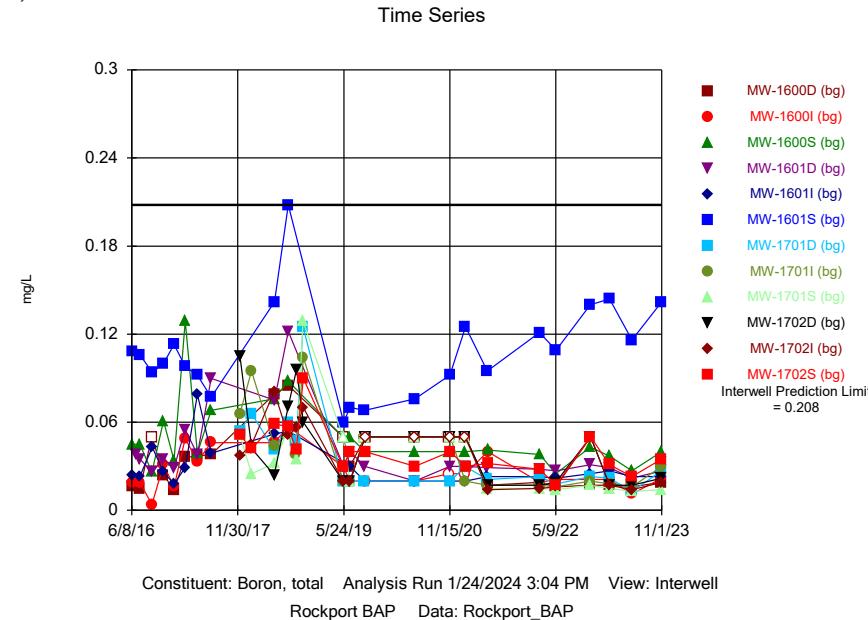
Constituent: Fluoride, total Analysis Run 1/9/2024 3:31 PM View: Interwell  
Rockport BAP Data: Rockport\_BAP

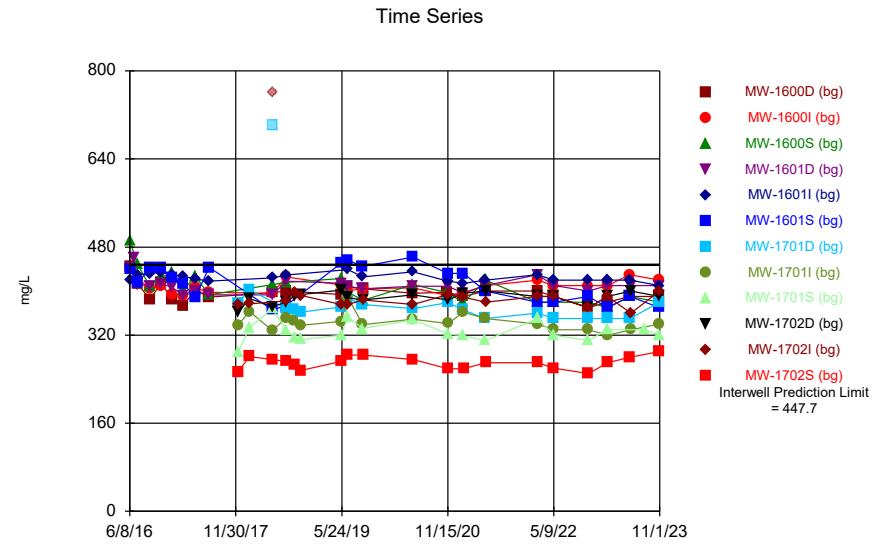
Constituent: Sulfate, total Analysis Run 1/9/2024 3:31 PM View: Interwell  
Rockport BAP Data: Rockport\_BAP



Background Data Summary (based on  $x^5$  transformation): Mean=9.1e12, Std. Dev.=4.4e12, n=249. Normality test:  
Chi Squared @alpha = 0.01, calculated = 8.47, critical = 14.07. Kappa = 2.038 (c=7, w=15, 1 of 2, event alpha =  
0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha =  
0.0005016. Assumes 15 future values.

Constituent: Total Dissolved Solids [TDS] Analysis Run 1/9/2024 3:31 PM View: Interwell  
Rockport BAP Data: Rockport\_BAP





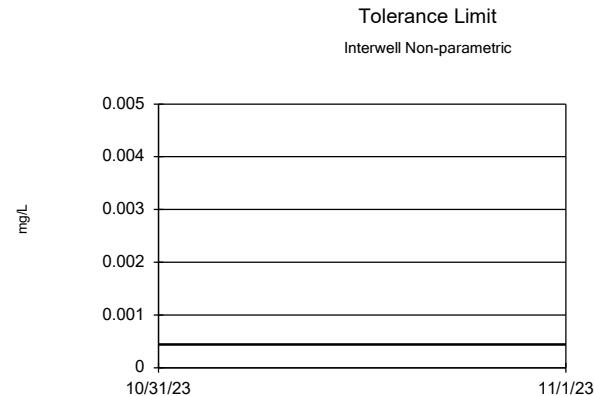
Constituent: Total Dissolved Solids [TDS] Analysis Run 1/24/2024 3:04 PM View: Interwell  
Rockport BAP Data: Rockport\_BAP

**FIGURE H**  
**UTLs**

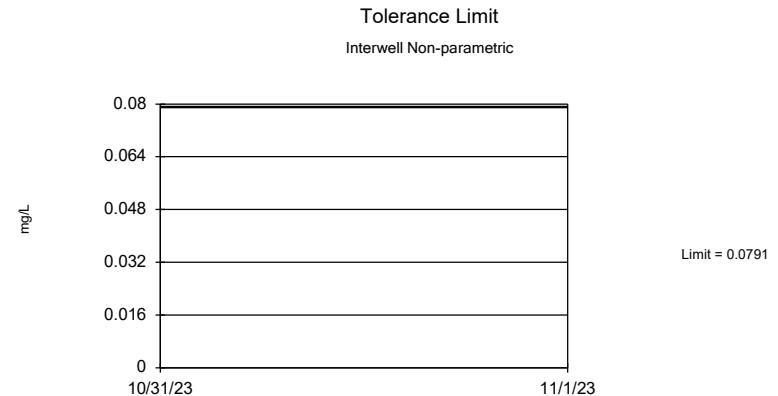
## Upper Tolerance Limits Summary Table

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/22/2024, 5:54 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony, total (mg/L)	0.00044	n/a	n/a	n/a	n/a	275	29.09	n/a	NaN	NP Inter(normality)
Arsenic, total (mg/L)	0.0791	n/a	n/a	n/a	n/a	275	0	n/a	NaN	NP Inter(normality)
Barium, total (mg/L)	1.2	n/a	n/a	n/a	n/a	275	0	n/a	NaN	NP Inter(normality)
Beryllium, total (mg/L)	0.000106	n/a	n/a	n/a	n/a	275	82.55	n/a	NaN	NP Inter(NDs)
Cadmium, total (mg/L)	0.00028	n/a	n/a	n/a	n/a	275	38.18	n/a	NaN	NP Inter(normality)
Chromium, total (mg/L)	0.00205	n/a	n/a	n/a	n/a	274	1.46	n/a	NaN	NP Inter(normality)
Cobalt, total (mg/L)	0.00334	n/a	n/a	n/a	n/a	274	0.7299	n/a	NaN	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	2.502	n/a	n/a	n/a	n/a	274	0	No	0.05	Inter
Fluoride, total (mg/L)	0.7	n/a	n/a	n/a	n/a	275	0	n/a	NaN	NP Inter(normality)
Lead, total (mg/L)	0.00497	n/a	n/a	n/a	n/a	275	35.64	n/a	NaN	NP Inter(normality)
Lithium, total (mg/L)	0.038	n/a	n/a	n/a	n/a	277	7.942	n/a	NaN	NP Inter(normality)
Mercury, total (mg/L)	0.000005	n/a	n/a	n/a	n/a	251	92.83	n/a	NaN	NP Inter(NDs)
Molybdenum, total (mg/L)	0.00867	n/a	n/a	n/a	n/a	271	0.369	n/a	NaN	NP Inter(normality)
Selenium, total (mg/L)	0.00437	n/a	n/a	n/a	n/a	274	43.8	n/a	NaN	NP Inter(normality)
Thallium, total (mg/L)	0.0002	n/a	n/a	n/a	n/a	269	69.89	n/a	NaN	NP Inter(NDs)



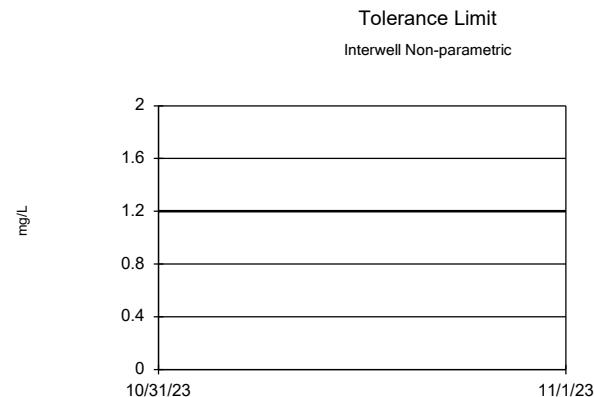
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 29.09% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



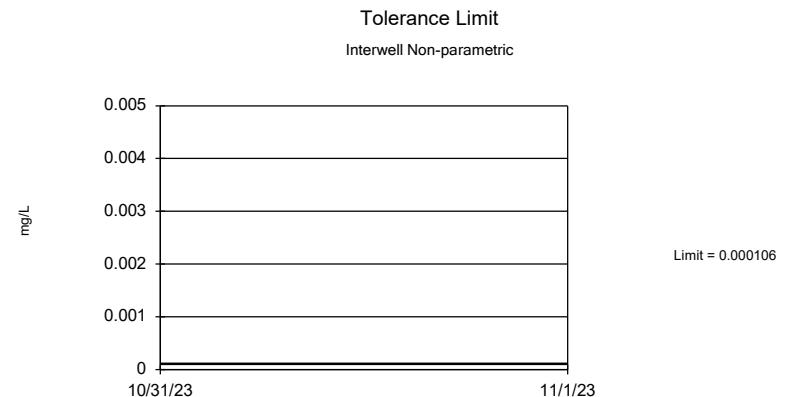
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Antimony, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Arsenic, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



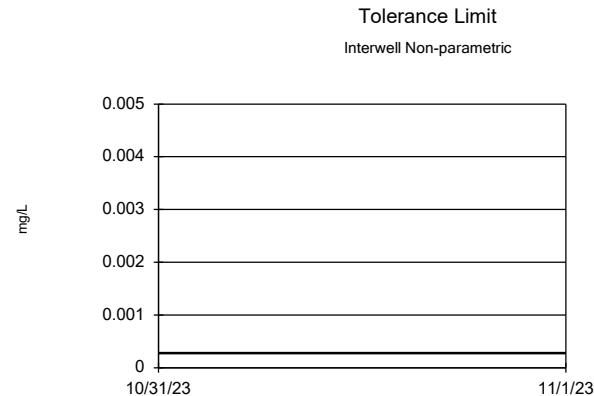
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



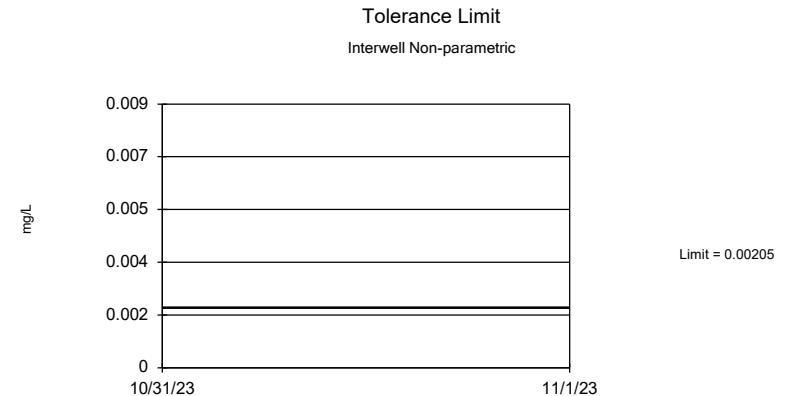
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 275 background values. 82.55% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Barium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Beryllium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



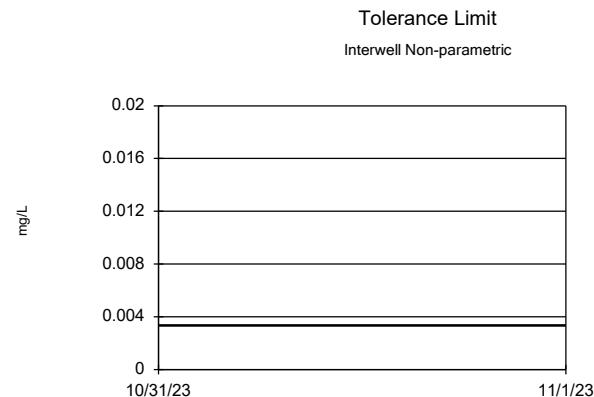
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 38.18% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



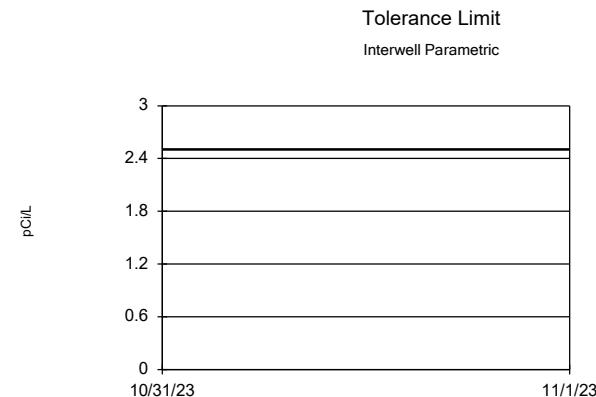
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 274 background values. 1.46% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Cadmium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Chromium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



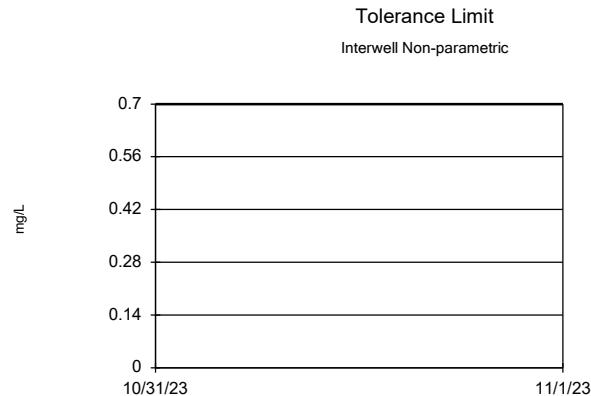
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 274 background values. 0.7299% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



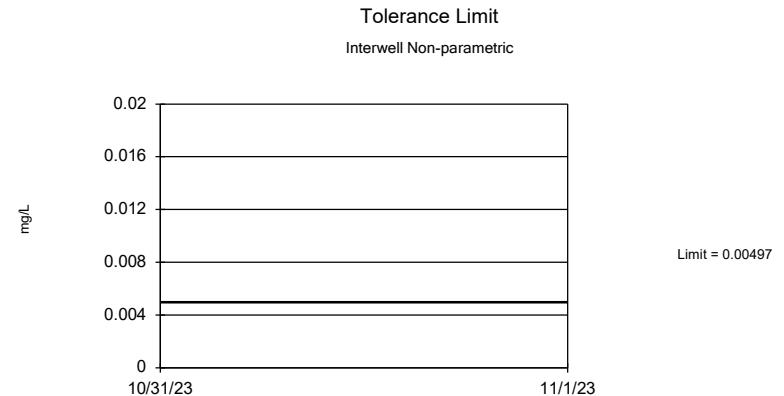
95% coverage. Background Data Summary: Mean=1.205, Std. Dev.=0.7179, n=274. Normality test: Chi Squared @alpha = 0.01, calculated = 13.15, critical = 14.07. Report alpha = 0.05.

Constituent: Cobalt, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



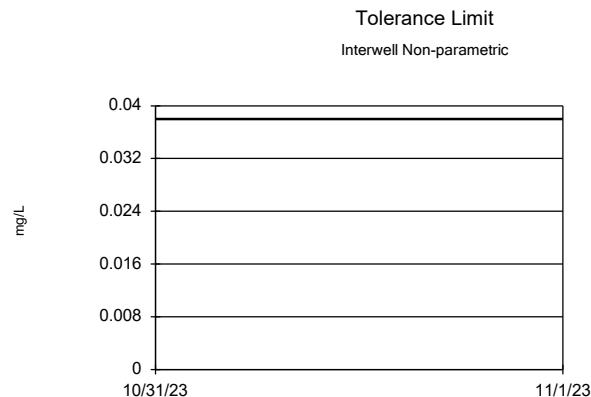
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



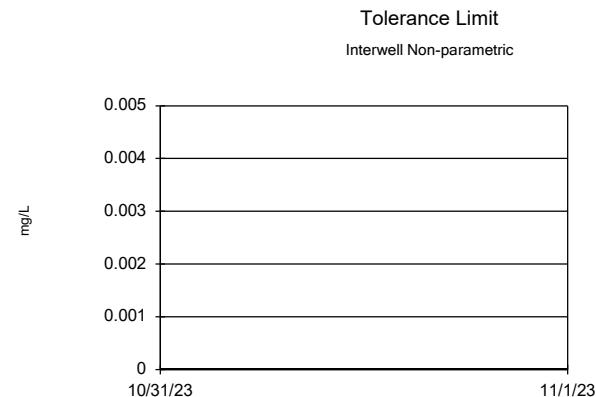
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 35.64% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Fluoride, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Lead, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



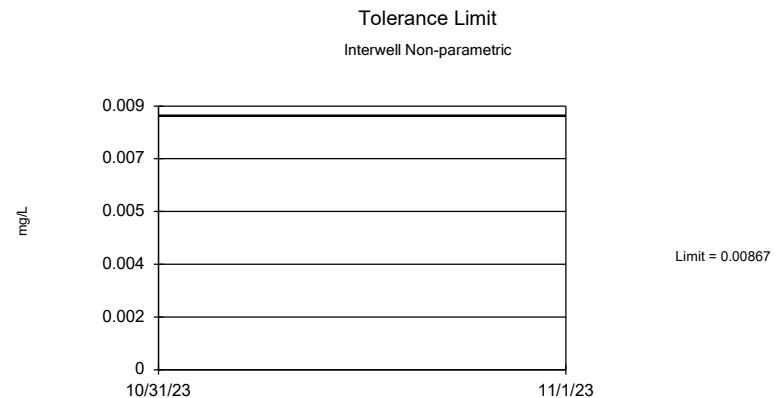
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 277 background values. 7.942% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



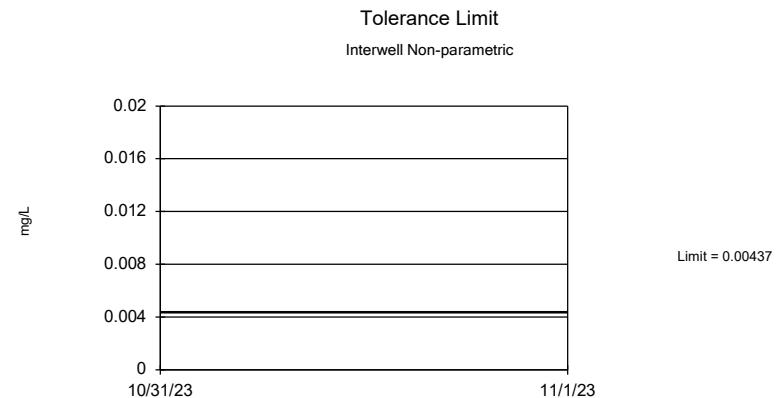
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 251 background values. 92.83% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Lithium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Mercury, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



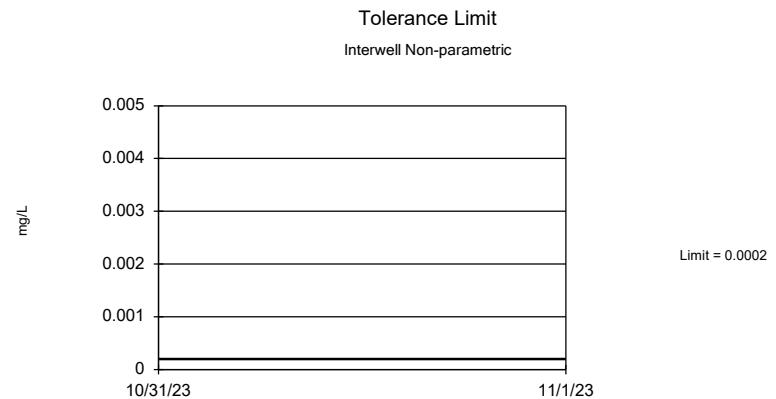
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 271 background values. 0.369% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 274 background values. 43.8% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Molybdenum, total Analysis Run 1/22/2024 5:52 PM View: UTLs  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Selenium, total Analysis Run 1/22/2024 5:52 PM View: UTLs  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 269 background values. 69.89% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Thallium, total Analysis Run 1/22/2024 5:52 PM View: UTLs  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

**FIGURE I**  
**GWPS**

ROCKPORT BAP GWPS				
Constituent Name	MCL	CCR Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.00044	0.006
Arsenic, Total (mg/L)	0.01		0.079	0.079
Barium, Total (mg/L)	2		1.2	2
Beryllium, Total (mg/L)	0.004		0.00011	0.004
Cadmium, Total (mg/L)	0.005		0.00028	0.005
Chromium, Total (mg/L)	0.1		0.0021	0.1
Cobalt, Total (mg/L)		0.006	0.0033	0.006
Combined Radium, Total (pCi/L)	5		2.5	5
Fluoride, Total (mg/L)	4		0.7	4
Lead, Total (mg/L)	0.015		0.005	0.015
Lithium, Total (mg/L)		0.04	0.038	0.04
Mercury, Total (mg/L)	0.002		0.000005	0.002
Molybdenum, Total (mg/L)		0.1	0.0087	0.1
Selenium, Total (mg/L)	0.05		0.0038	0.05
Thallium, Total (mg/L)	0.002		0.0002	0.002

\*Grey cell indicates background is higher than MCL or CCR Rule Specified Level

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residual

\*GWPS = Groundwater Protection Standard

FIGURE J  
Confidence Intervals

## Appendix IV - Confidence Intervals - All Results

Rockport BAP Data: Rockport\_BAP Printed 1/9/2024, 6:16 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony, total (mg/L)	MW-1002	0.000051	0.00004	0.006	No	25	0.000007316	4	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1602D	0.0001	0.000013	0.006	No	25	0.0000471	40	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1602I	0.00005657	0.00003003	0.006	No	25	0.00003807	4	None	In(x)	0.01	Param.
Antimony, total (mg/L)	MW-1603D	0.0001	0.00002	0.006	No	25	0.00004019	44	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1603I	0.00007	0.00003	0.006	No	25	0.0001966	8	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1603S	0.00005	0.00004	0.006	No	25	0.000008524	4	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1604D	0.0001	0.00002	0.006	No	25	0.00004041	56	None	No	0.01	NP (NDs)
Antimony, total (mg/L)	MW-1604I	0.00005	0.00002	0.006	No	25	0.00005161	8	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1604S	0.00007	0.00005	0.006	No	25	0.00001887	0	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1605D	0.0001	0.000016	0.006	No	25	0.00004112	44	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1605I	0.00005	0.00003	0.006	No	25	0.00003565	8	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1605S	0.00005	0.000033	0.006	No	25	0.00002843	0	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1606D	0.0001	0.00002	0.006	No	25	0.00004008	56	None	No	0.01	NP (NDs)
Antimony, total (mg/L)	MW-1606I	0.0001	0.00002	0.006	No	25	0.00003761	40	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1606S	0.00006	0.000035	0.006	No	25	0.00003797	8	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1002	0.000273	0.000231	0.079	No	25	0.00004866	0	None	In(x)	0.01	Param.
Arsenic, total (mg/L)	MW-1602D	0.009511	0.008743	0.079	No	25	0.0007708	0	None	No	0.01	Param.
Arsenic, total (mg/L)	MW-1602I	0.02996	0.02155	0.079	No	25	0.01149	0	None	In(x)	0.01	Param.
Arsenic, total (mg/L)	MW-1603D	0.0136	0.01212	0.079	No	25	0.001482	0	None	No	0.01	Param.
Arsenic, total (mg/L)	MW-1603I	0.0155	0.0125	0.079	No	25	0.04181	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1603S	0.0002195	0.0001683	0.079	No	25	0.00005852	0	None	In(x)	0.01	Param.
Arsenic, total (mg/L)	MW-1604D	0.0183	0.0168	0.079	No	25	0.001347	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1604I	0.0212	0.0189	0.079	No	25	0.007824	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1604S	0.00026	0.00017	0.079	No	25	0.0001329	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1605D	0.02056	0.01856	0.079	No	25	0.002005	0	None	No	0.01	Param.
Arsenic, total (mg/L)	MW-1605I	0.0223	0.018	0.079	No	25	0.007655	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1605S	0.0006	0.00045	0.079	No	25	0.0006324	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1606D	0.01744	0.01588	0.079	No	25	0.00201	0	None	x^6	0.01	Param.
Arsenic, total (mg/L)	MW-1606I	0.01056	0.006677	0.079	No	25	0.003899	0	None	No	0.01	Param.
Arsenic, total (mg/L)	MW-1606S	0.00024	0.00018	0.079	No	25	0.01675	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1002	0.0182	0.0138	2	No	25	0.005631	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1602D	0.4656	0.4244	2	No	25	0.04242	0	None	sqr(x)	0.01	Param.
Barium, total (mg/L)	MW-1602I	0.1256	0.1106	2	No	25	0.01498	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1603D	0.1218	0.1136	2	No	25	0.008274	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1603I	0.0895	0.0811	2	No	25	0.01483	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1603S	0.01448	0.01004	2	No	25	0.004449	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1604D	0.2585	0.2416	2	No	25	0.01687	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1604I	0.118	0.09935	2	No	25	0.01871	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1604S	0.0185	0.013	2	No	25	0.006932	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1605D	0.4523	0.4216	2	No	25	0.0308	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1605I	0.1516	0.1327	2	No	25	0.01897	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1605S	0.009104	0.006852	2	No	25	0.002427	0	None	sqr(x)	0.01	Param.
Barium, total (mg/L)	MW-1606D	0.4618	0.4126	2	No	25	0.04932	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1606I	0.06347	0.05353	2	No	25	0.01037	0	None	sqr(x)	0.01	Param.
Barium, total (mg/L)	MW-1606S	0.0139	0.0111	2	No	25	0.01061	0	None	No	0.01	NP (normality)
Beryllium, total (mg/L)	MW-1002	0.00005	0.00002	0.004	No	25	0.00001546	84	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1602D	0.00005	0.00002	0.004	No	25	0.00001822	68	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1602I	0.00005	0.00002	0.004	No	25	0.00001864	72	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1603D	0.00005	0.000049	0.004	No	25	0.00001226	84	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1603I	0.00005	0.00003	0.004	No	25	0.00001355	80	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1603S	0.00005	0.00002	0.004	No	25	0.00001435	84	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1604D	0.00005	0.00002	0.004	No	25	0.00001077	92	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1604I	0.00005	0.000025	0.004	No	25	0.00001161	88	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1604S	0.00005	0.00002	0.004	No	25	0.00001351	84	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1605D	0.00005	0.000043	0.004	No	25	0.000009815	88	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1605I	0.00005	0.00002	0.004	No	25	0.00001539	84	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1605S	0.00005	0.00004	0.004	No	25	0.00001208	76	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1606D	0.00005	0.000034	0.004	No	25	0.00001583	76	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1606I	0.00005	0.00002	0.004	No	25	0.00001028	92	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1606S	0.00005	0.00002	0.004	No	25	0.0000182	68	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1002	0.00004	0.00002	0.005	No	25	0.00002688	0	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	MW-1602D	0.00002	0.00001	0.005	No	25	0.00001075	76	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1602I	0.00002	0.000007	0.005	No	25	0.000007165	60	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1603D	0.00002	0.000016	0.005	No	25	0.000005493	72	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1603I	0.00002	0.000016	0.005	No	25	0.00000552	68	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1603S	0.00003	0.000018	0.005	No	25	0.0001039	4	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	MW-1604D	0.00002	0.000013	0.005	No	25	0.000004226	80	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1604I	0.00002	0.000013	0.005	No	25	0.00002143	68	None	No	0.01	NP (NDs)

## Appendix IV - Confidence Intervals - All Results

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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium, total (mg/L)	MW-1604S	0.00003	0.00002	0.005	No 25	0.00001471	0	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	MW-1605D	0.00002	0.000006	0.005	No 25	0.000004757	84	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1605I	0.00002	0.000008	0.005	No 25	0.000006566	60	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1605S	0.000041	0.000036	0.005	No 25	0.00001657	0	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	MW-1606D	0.00002	0.000007	0.005	No 25	0.0000026	88	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1606I	0.00002	0.00001	0.005	No 25	0.000006404	68	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1606S	0.0000382	0.00002183	0.005	No 25	0.00002313	0	None	In(x)	0.01	Param.
Chromium, total (mg/L)	MW-1002	0.0002607	0.0001266	0.1	No 25	0.0001511	4	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1602D	0.000361	0.0001871	0.1	No 25	0.0002533	0	None	In(x)	0.01	Param.
Chromium, total (mg/L)	MW-1602I	0.0002831	0.0001758	0.1	No 25	0.0001077	4	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1603D	0.0002515	0.000159	0.1	No 24	0.00009063	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1603I	0.0004086	0.0001796	0.1	No 25	0.0002664	0	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1603S	0.0003194	0.0001792	0.1	No 25	0.0001407	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1604D	0.0001997	0.000118	0.1	No 25	0.00008194	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1604I	0.0002731	0.0001303	0.1	No 25	0.0001563	0	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1604S	0.000284	0.0001413	0.1	No 25	0.000166	0	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1605D	0.0002615	0.0001509	0.1	No 25	0.0001226	0	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1605I	0.0002797	0.0001319	0.1	No 25	0.0002281	4	None	x^(1/3)	0.01	Param.
Chromium, total (mg/L)	MW-1605S	0.0006849	0.0003177	0.1	No 25	0.0003683	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1606D	0.0003046	0.0001476	0.1	No 25	0.0001575	4	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1606I	0.0003176	0.0001392	0.1	No 25	0.0002581	8	None	x^(1/3)	0.01	Param.
Chromium, total (mg/L)	MW-1606S	0.0004348	0.0002102	0.1	No 25	0.0003039	4	None	x^(1/3)	0.01	Param.
Cobalt, total (mg/L)	MW-1002	0.0007049	0.0005525	0.006	No 25	0.0001529	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1602D	0.0001431	0.00006622	0.006	No 25	0.000168	0	None	In(x)	0.01	Param.
Cobalt, total (mg/L)	MW-1602I	0.001508	0.001277	0.006	No 25	0.0002314	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1603D	0.000553	0.00028	0.006	No 25	0.0004266	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1603I	0.00139	0.00117	0.006	No 25	0.0004691	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1603S	0.0004659	0.0002669	0.006	No 25	0.0001997	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1604D	0.00007	0.000051	0.006	No 25	0.0000201	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1604I	0.0008017	0.000632	0.006	No 25	0.0001702	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1604S	0.000365	0.000272	0.006	No 25	0.0002116	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1605D	0.0001166	0.00006583	0.006	No 25	0.00006337	0	None	x^(1/3)	0.01	Param.
Cobalt, total (mg/L)	MW-1605I	0.001457	0.001245	0.006	No 25	0.0002124	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1605S	0.000575	0.000361	0.006	No 25	0.0008548	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1606D	0.00008825	0.00005886	0.006	No 24	0.00003179	0	None	sqr(x)	0.01	Param.
Cobalt, total (mg/L)	MW-1606I	0.001344	0.001037	0.006	No 25	0.0003084	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1606S	0.000141	0.000052	0.006	No 25	0.0003637	4	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-1002	1.17	0.5116	5	No 25	0.7861	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1602D	2.007	1.105	5	No 25	1.158	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1602I	1.34	0.9418	5	No 25	0.3998	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1603D	1.451	0.8832	5	No 25	0.5696	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1603I	1.635	1.058	5	No 25	0.5793	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1603S	1.076	0.5148	5	No 25	0.6497	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1604D	1.254	0.7914	5	No 25	0.4639	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1604I	1.581	0.9366	5	No 25	0.7061	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1604S	0.9463	0.4505	5	No 25	0.575	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1605D	1.508	1.031	5	No 25	0.478	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1605I	2.027	1.514	5	No 25	0.5146	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1605S	1.169	0.5389	5	No 25	0.6325	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1606D	1.352	0.8149	5	No 25	0.539	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1606I	1.467	0.8847	5	No 25	0.7527	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1606S	1.084	0.5386	5	No 25	0.5469	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1002	1.043	0.8877	4	No 25	0.1563	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1602D	0.3391	0.3153	4	No 25	0.0239	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1602I	0.3026	0.279	4	No 25	0.02361	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1603D	0.2995	0.2789	4	No 25	0.0206	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1603I	0.4362	0.4062	4	No 25	0.03004	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1603S	0.8905	0.5679	4	No 25	0.3236	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1604D	0.2806	0.2594	4	No 25	0.02121	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1604I	0.3678	0.3338	4	No 25	0.03415	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1604S	1.03	0.88	4	No 25	0.1746	0	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	MW-1605D	0.2201	0.1991	4	No 25	0.02111	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1605I	0.2176	0.1921	4	No 25	0.02926	0	None	x^2	0.01	Param.
Fluoride, total (mg/L)	MW-1605S	0.5711	0.5217	4	No 25	0.04949	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1606D	0.1934	0.177	4	No 25	0.01636	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1606I	0.2132	0.1924	4	No 25	0.02092	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1606S	0.5062	0.417	4	No 25	0.08957	0	None	No	0.01	Param.
Lead, total (mg/L)	MW-1002	0.0002	0.00003	0.015	No 25	0.00008527	48	None	No	0.01	NP (normality)

## Appendix IV - Confidence Intervals - All Results

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Constituent	Well	Rockport BAP	Data: Rockport_BAP	Printed 1/9/2024, 6:16 PM									
		Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method	
Lead, total (mg/L)	MW-1602D	0.0002	0.000056	0.015	No	25	0.000174	48	None	No	0.01	NP (normality)	
Lead, total (mg/L)	MW-1602I	0.0001655	0.00006797	0.015	No	25	0.00009305	36	Kaplan-Meier	No	0.01	Param.	
Lead, total (mg/L)	MW-1603D	0.0002	0.000029	0.015	No	24	0.0001101	45.83	None	No	0.01	NP (normality)	
Lead, total (mg/L)	MW-1603I	0.0001952	0.00005161	0.015	No	25	0.000305	20	Kaplan-Meier	$x^{(1/3)}$	0.01	Param.	
Lead, total (mg/L)	MW-1603S	0.0002	0.000072	0.015	No	25	0.00007989	56	Kaplan-Meier	No	0.01	NP (NDs)	
Lead, total (mg/L)	MW-1604D	0.0002	0.000034	0.015	No	25	0.00008316	44	None	No	0.01	NP (normality)	
Lead, total (mg/L)	MW-1604I	0.0002	0.000024	0.015	No	25	0.00008421	44	None	No	0.01	NP (normality)	
Lead, total (mg/L)	MW-1604S	0.0002	0.000045	0.015	No	24	0.00008684	54.17	None	No	0.01	NP (NDs)	
Lead, total (mg/L)	MW-1605D	0.0002	0.000045	0.015	No	25	0.00008715	56	None	No	0.01	NP (NDs)	
Lead, total (mg/L)	MW-1605I	0.0001292	0.00005306	0.015	No	25	0.0002334	16	Kaplan-Meier	$\ln(x)$	0.01	Param.	
Lead, total (mg/L)	MW-1605S	0.0001616	0.00004279	0.015	No	25	0.000475	28	Kaplan-Meier	$\ln(x)$	0.01	Param.	
Lead, total (mg/L)	MW-1606D	0.0002	0.00005	0.015	No	25	0.0000824	52	Kaplan-Meier	No	0.01	NP (NDs)	
Lead, total (mg/L)	MW-1606I	0.0002	0.000043	0.015	No	25	0.00007908	56	Kaplan-Meier	No	0.01	NP (NDs)	
Lead, total (mg/L)	MW-1606S	0.0001571	0.00004556	0.015	No	24	0.0001045	41.67	Kaplan-Meier	No	0.01	Param.	
Lithium, total (mg/L)	MW-1002	0.0087	0.004929	0.04	No	25	0.004175	12	None	$\sqrt{x}$	0.01	Param.	
Lithium, total (mg/L)	MW-1602D	0.007	0.00234	0.04	No	25	0.00498	4	None	No	0.01	NP (normality)	
Lithium, total (mg/L)	MW-1602I	0.008087	0.00482	0.04	No	25	0.003477	4	None	$\sqrt{x}$	0.01	Param.	
Lithium, total (mg/L)	MW-1603D	0.008	0.00326	0.04	No	25	0.003752	8	None	No	0.01	NP (normality)	
Lithium, total (mg/L)	MW-1603I	0.01038	0.006849	0.04	No	25	0.003591	12	None	$\sqrt{x}$	0.01	Param.	
Lithium, total (mg/L)	MW-1603S	0.006803	0.003264	0.04	No	25	0.004688	12	None	$\ln(x)$	0.01	Param.	
Lithium, total (mg/L)	MW-1604D	0.007	0.0014	0.04	No	25	0.01044	16	None	No	0.01	NP (normality)	
Lithium, total (mg/L)	MW-1604I	0.009374	0.006076	0.04	No	25	0.003309	4	None	No	0.01	Param.	
Lithium, total (mg/L)	MW-1604S	0.0122	0.009412	0.04	No	25	0.002794	4	None	No	0.01	Param.	
Lithium, total (mg/L)	MW-1605D	0.005	0.00154	0.04	No	25	0.003779	8	None	No	0.01	NP (normality)	
Lithium, total (mg/L)	MW-1605I	0.008	0.00482	0.04	No	25	0.003078	0	None	No	0.01	NP (normality)	
Lithium, total (mg/L)	MW-1605S	0.01461	0.01105	0.04	No	25	0.003565	4	None	No	0.01	Param.	
Lithium, total (mg/L)	MW-1606D	0.005	0.00051	0.04	No	25	0.004865	12	None	No	0.01	NP (normality)	
Lithium, total (mg/L)	MW-1606I	0.008	0.00319	0.04	No	25	0.003355	4	None	No	0.01	NP (normality)	
Lithium, total (mg/L)	MW-1606S	0.01107	0.008161	0.04	No	25	0.002916	4	None	No	0.01	Param.	
Mercury, total (mg/L)	MW-1002	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1602D	0.000005	0.000003	0.002	No	24	4.1e-7	91.67	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1602I	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1603D	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1603I	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1603S	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1604D	0.000005	0.000002	0.002	No	24	6.1e-7	91.67	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1604I	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1604S	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1605D	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1605I	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1605S	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1606D	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1606I	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Mercury, total (mg/L)	MW-1606S	0.000005	0.000005	0.002	No	24	2.6e-14	95.83	None	No	0.01	NP (NDs)	
Molybdenum, total (mg/L)	MW-1002	0.009392	0.004741	0.1	No	25	0.005183	0	None	$\sqrt{x}$	0.01	Param.	
Molybdenum, total (mg/L)	MW-1602D	0.00364	0.0032	0.1	No	25	0.0003698	0	None	No	0.01	NP (normality)	
Molybdenum, total (mg/L)	MW-1602I	0.00223	0.00203	0.1	No	25	0.0002078	0	None	No	0.01	NP (normality)	
Molybdenum, total (mg/L)	MW-1603D	0.00478	0.00364	0.1	No	25	0.001023	0	None	No	0.01	NP (normality)	
Molybdenum, total (mg/L)	MW-1603I	0.00792	0.006262	0.1	No	25	0.001663	0	None	No	0.01	Param.	
Molybdenum, total (mg/L)	MW-1603S	0.0006694	0.0002812	0.1	No	25	0.0007496	16	Kaplan-Meier	$x^{(1/3)}$	0.01	Param.	
Molybdenum, total (mg/L)	MW-1604D	0.00282	0.0025	0.1	No	25	0.0004041	0	None	No	0.01	NP (normality)	
Molybdenum, total (mg/L)	MW-1604I	0.002591	0.002237	0.1	No	25	0.0003543	0	None	No	0.01	Param.	
Molybdenum, total (mg/L)	MW-1604S	0.003266	0.002477	0.1	No	25	0.000792	0	None	No	0.01	Param.	
Molybdenum, total (mg/L)	MW-1605D	0.00221	0.0019	0.1	No	24	0.0003265	0	None	No	0.01	NP (normality)	
Molybdenum, total (mg/L)	MW-1605I	0.00133	0.00106	0.1	No	24	0.0001588	0	None	No	0.01	NP (normality)	
Molybdenum, total (mg/L)	MW-1605S	0.00201	0.001724	0.1	No	25	0.0003079	0	None	$x^2$	0.01	Param.	
Molybdenum, total (mg/L)	MW-1606D	0.00207	0.00177	0.1	No	25	0.0004256	0	None	No	0.01	NP (normality)	
Molybdenum, total (mg/L)	MW-1606I	0.001455	0.001132	0.1	No	24	0.0003164	0	None	No	0.01	Param.	
Molybdenum, total (mg/L)	MW-1606S	0.001349	0.001081	0.1	No	24	0.0002762	0	None	$\sqrt{x}$	0.01	Param.	
Selenium, total (mg/L)	MW-1002	0.00012	0.00007	0.05	No	25	0.0002018	20	None	No	0.01	NP (normality)	
Selenium, total (mg/L)	MW-1602D	0.0005	0.00005	0.05	No	25	0.0002221	56	None	No	0.01	NP (NDs)	
Selenium, total (mg/L)	MW-1602I	0.0005	0.00006	0.05	No	25	0.000224	56	None	No	0.01	NP (NDs)	
Selenium, total (mg/L)	MW-1603D	0.0005	0.00009	0.05	No	25	0.0002123	64	None	No	0.01	NP (NDs)	
Selenium, total (mg/L)	MW-1603I	0.0005	0.0001	0.05	No	25	0.0001992	68	None	No	0.01	NP (NDs)	
Selenium, total (mg/L)	MW-1603S	0.0002657	0.0001079	0.05	No	25	0.0003173	12	None	$\ln(x)$	0.01	Param.	
Selenium, total (mg/L)	MW-1604D	0.0005	0.0001	0.05	No	25	0.0001659	84	None	No	0.01	NP (NDs)	
Selenium, total (mg/L)	MW-1604I	0.0005	0.00007	0.05	No	25	0.0002129	64	None	No	0.01	NP (NDs)	
Selenium, total (mg/L)	MW-1604S	0.0001302	0.00007638	0.05	No	25	0.00005822	4	None	$\sqrt{x}$	0.01	Param.	

## Appendix IV - Confidence Intervals - All Results

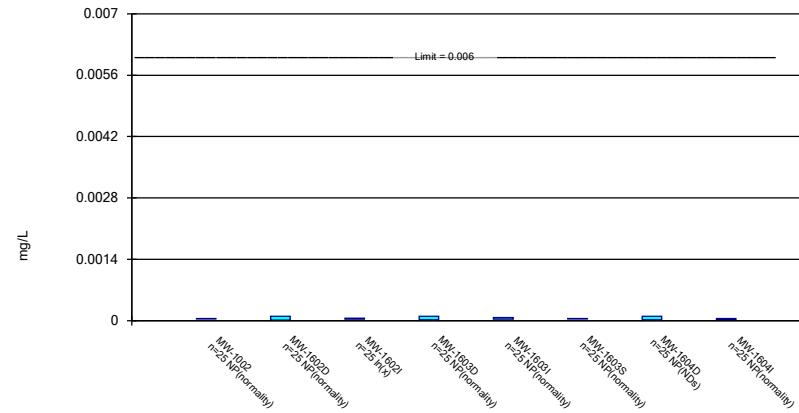
Page 4

Rockport BAP Data: Rockport\_BAP Printed 1/9/2024, 6:16 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig. N</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Selenium, total (mg/L)	MW-1605D	0.0005	0.0001	0.05	No 25	0.0002079	72	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1605I	0.0005	0.00006	0.05	No 25	0.0002187	64	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1605S	0.000911	0.0004373	0.05	No 24	0.0004642	4.167	None	No	0.01	Param.
Selenium, total (mg/L)	MW-1606D	0.0005	0.0001	0.05	No 25	0.0001907	76	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1606I	0.0005	0.0001	0.05	No 25	0.0001833	80	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1606S	0.003906	0.002546	0.05	No 25	0.001364	0	None	No	0.01	Param.
Thallium, total (mg/L)	MW-1002	0.0002	0.00004	0.002	No 25	0.0000837	60	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1602D	0.0002	0.000066	0.002	No 25	0.00006078	84	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1602I	0.0002	0.00003	0.002	No 25	0.00008784	56	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1603D	0.0002	0.000068	0.002	No 25	0.00007342	72	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1603I	0.0002	0.00004	0.002	No 25	0.00008317	56	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1603S	0.0002	0.00004	0.002	No 25	0.00008298	60	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1604D	0.0002	0.000095	0.002	No 25	0.00006	84	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1604I	0.0002	0.00005	0.002	No 25	0.00008609	60	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1604S	0.0002	0.00004	0.002	No 25	0.00008276	56	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1605D	0.0002	0.00005	0.002	No 25	0.00005668	88	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1605I	0.0002	0.00003	0.002	No 25	0.00008547	48	None	No	0.01	NP (normality)
Thallium, total (mg/L)	MW-1605S	0.0002	0.00003	0.002	No 25	0.00008021	40	None	No	0.01	NP (normality)
Thallium, total (mg/L)	MW-1606D	0.0002	0.000124	0.002	No 25	0.00005639	84	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1606I	0.0002	0.00004	0.002	No 25	0.00008178	52	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1606S	0.0002	0.00003	0.002	No 25	0.00008434	64	None	No	0.01	NP (NDs)

### Parametric and Non-Parametric (NP) Confidence Interval

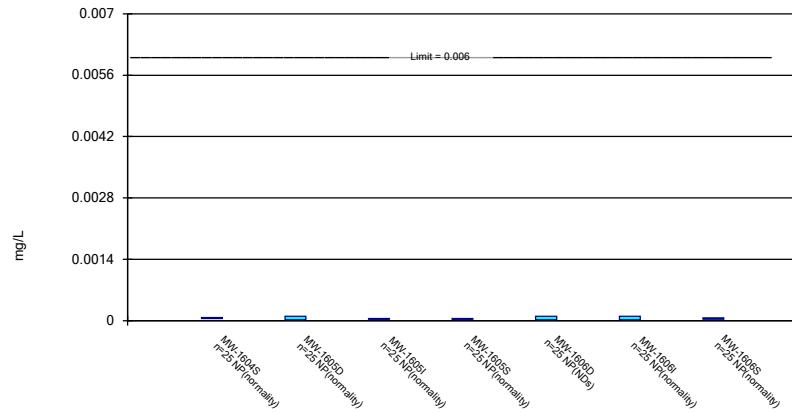
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Antimony, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Non-Parametric Confidence Interval

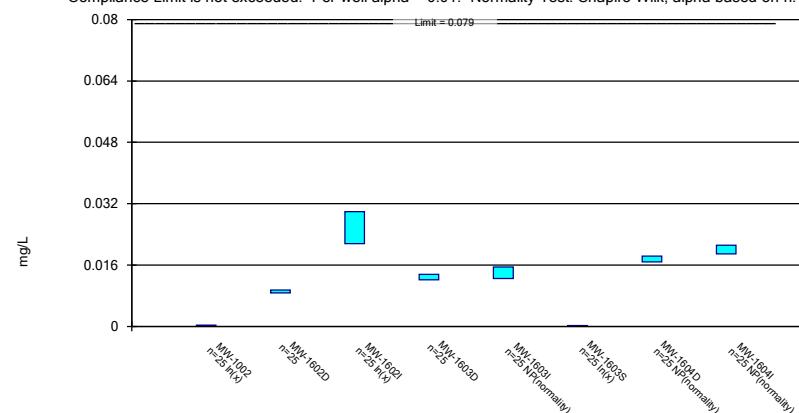
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

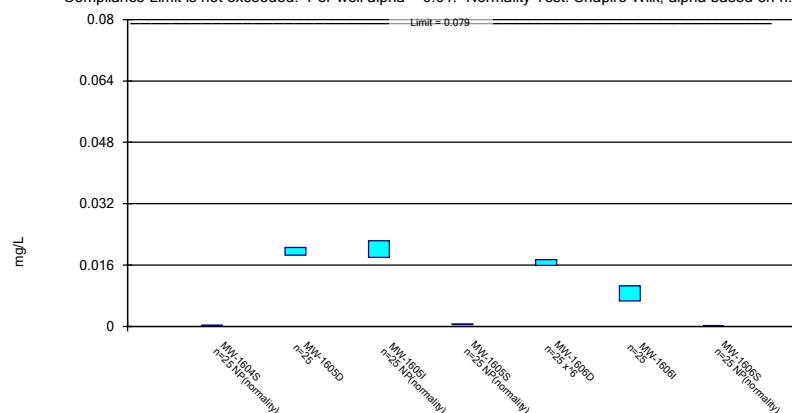
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Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

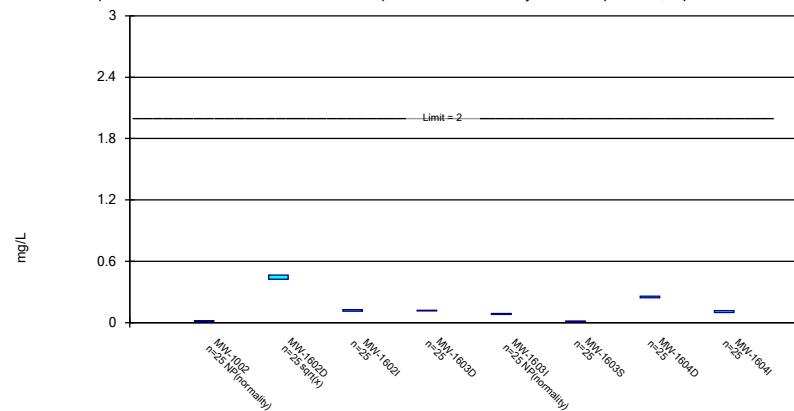
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Constituent: Arsenic, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

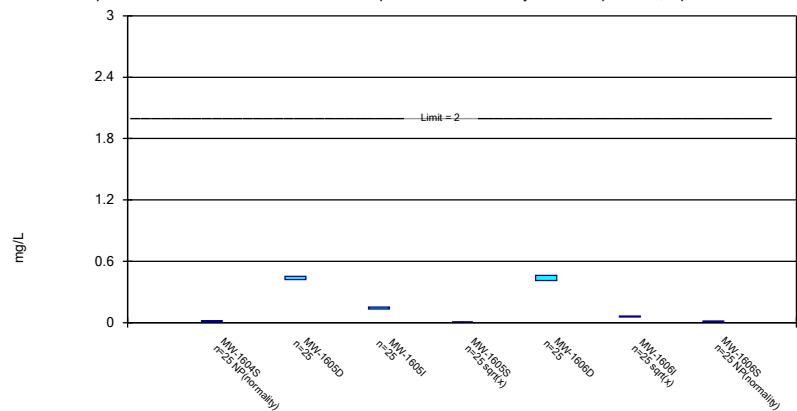
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

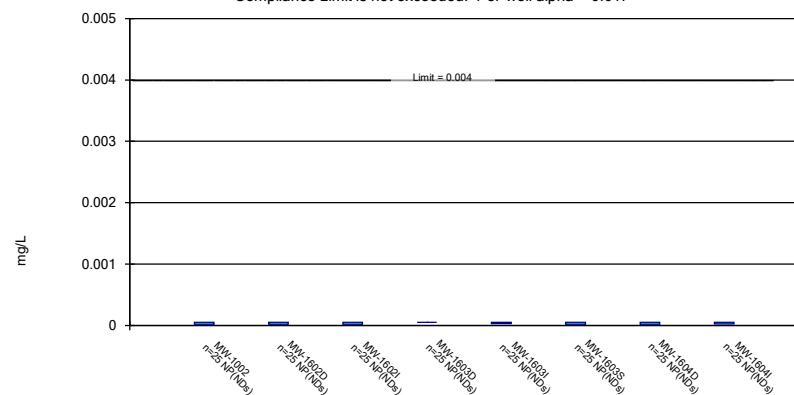
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Constituent: Barium, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Non-Parametric Confidence Interval

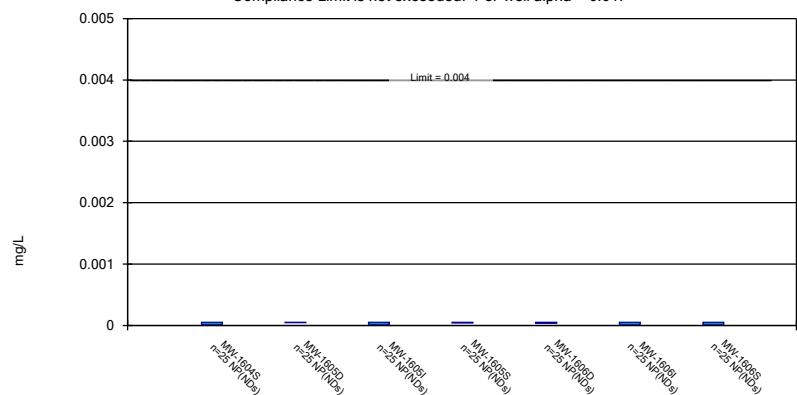
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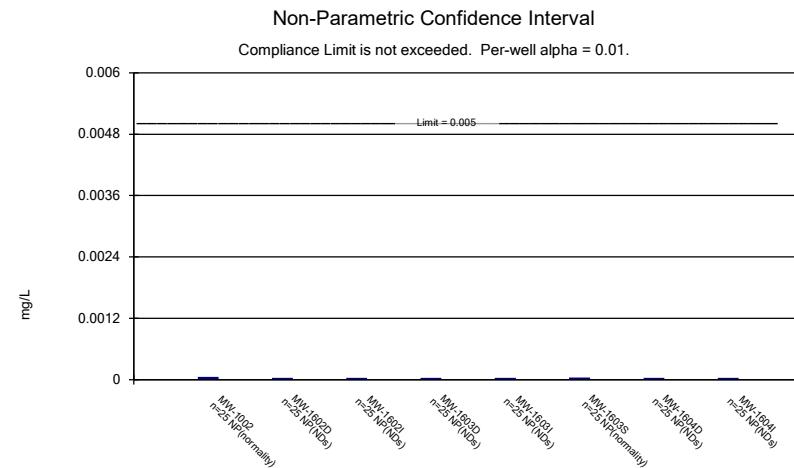
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Rockport BAP Data: Rockport\_BAP

### Non-Parametric Confidence Interval

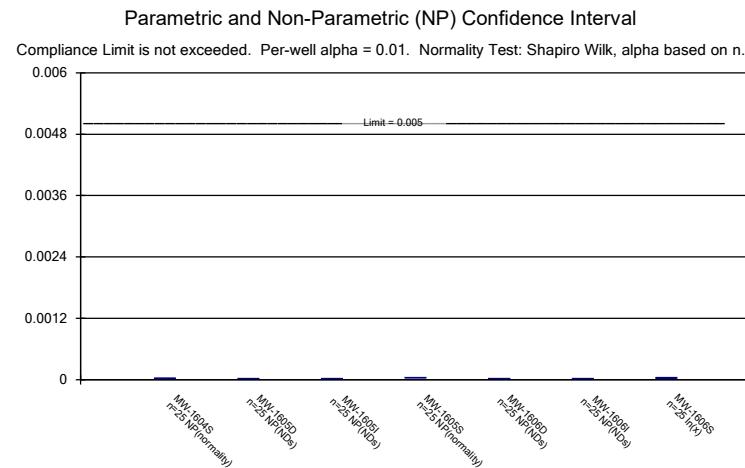
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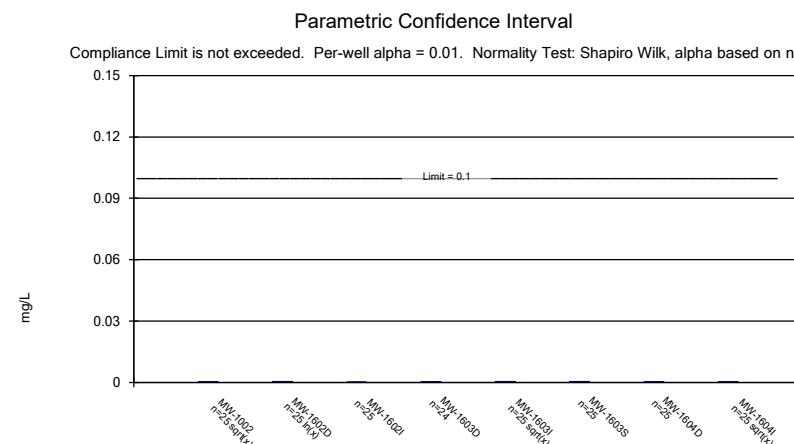
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Rockport BAP Data: Rockport\_BAP



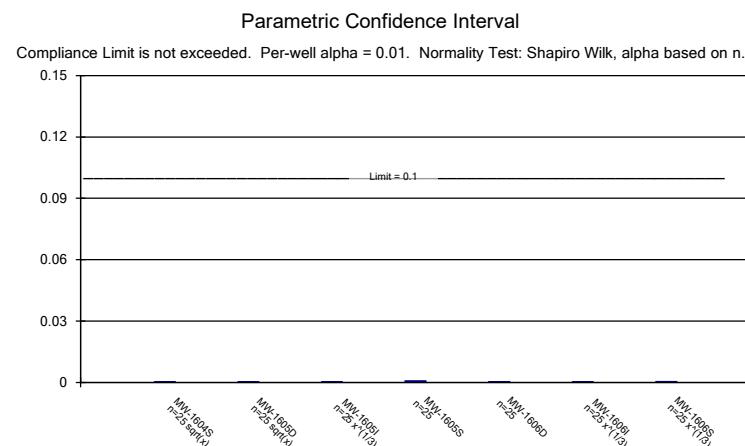
Constituent: Cadmium, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP



Constituent: Cadmium, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP



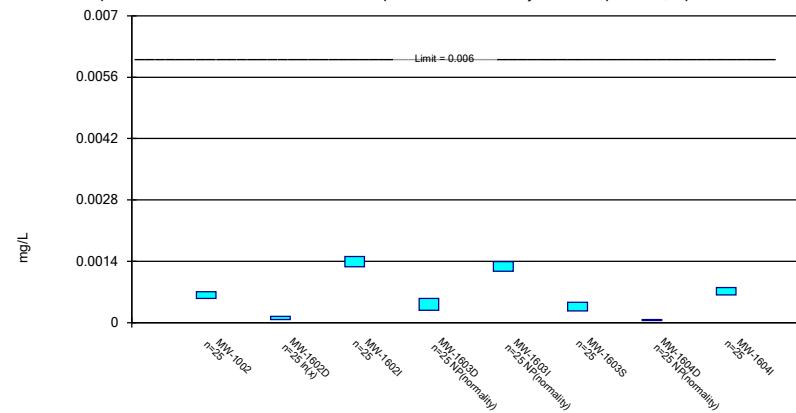
Constituent: Chromium, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP



Constituent: Chromium, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

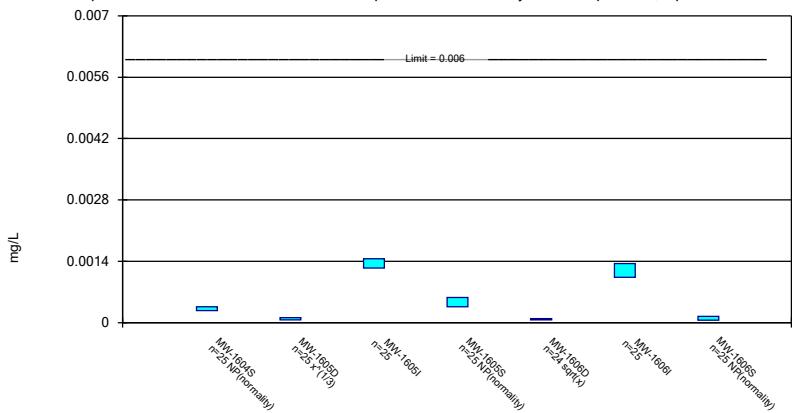
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt, total Analysis Run 1/9/2024 6:14 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

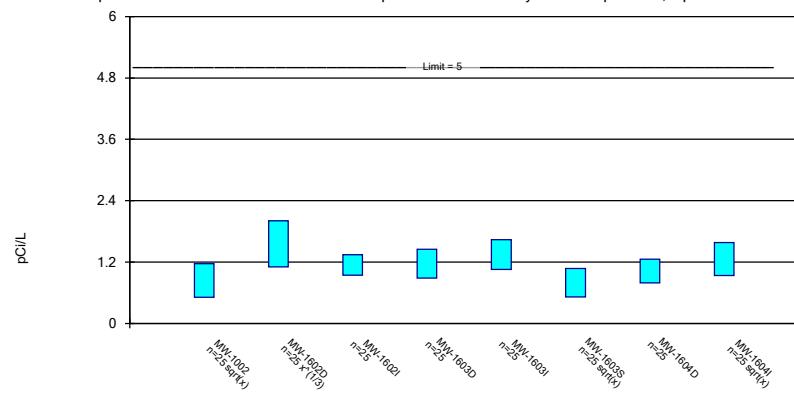
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric Confidence Interval

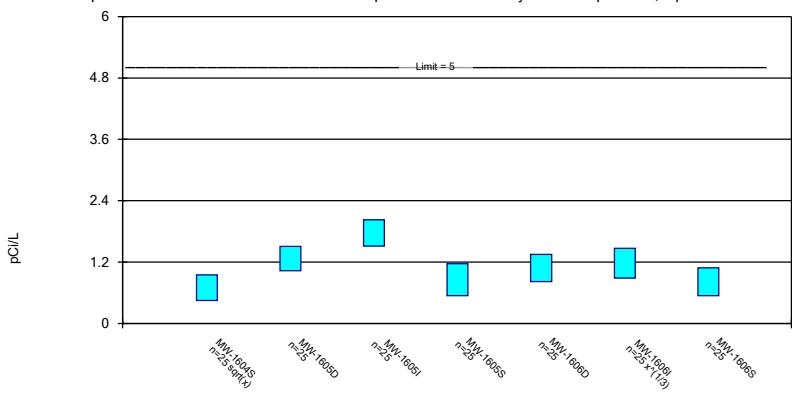
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric Confidence Interval

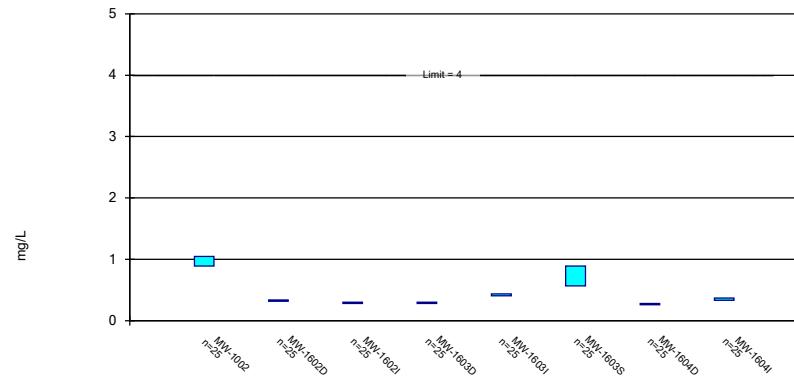
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric Confidence Interval

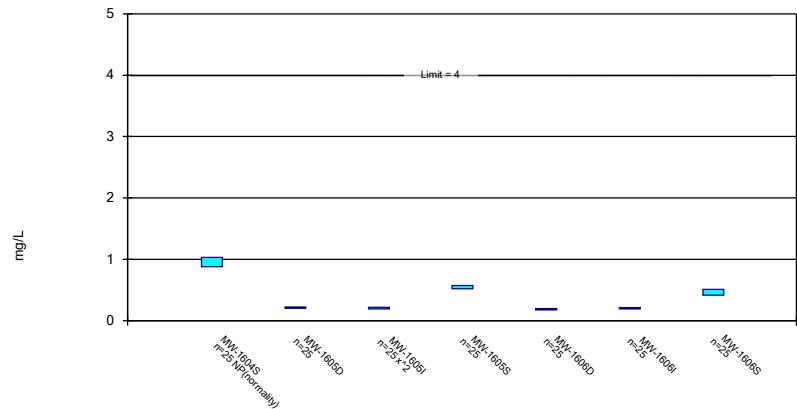
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

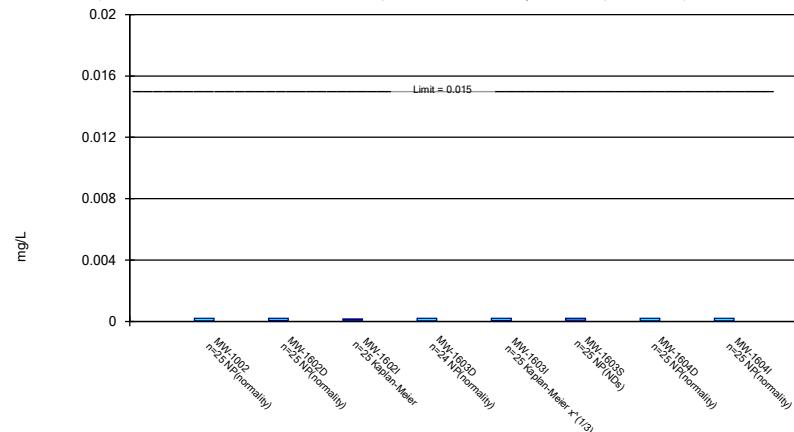
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

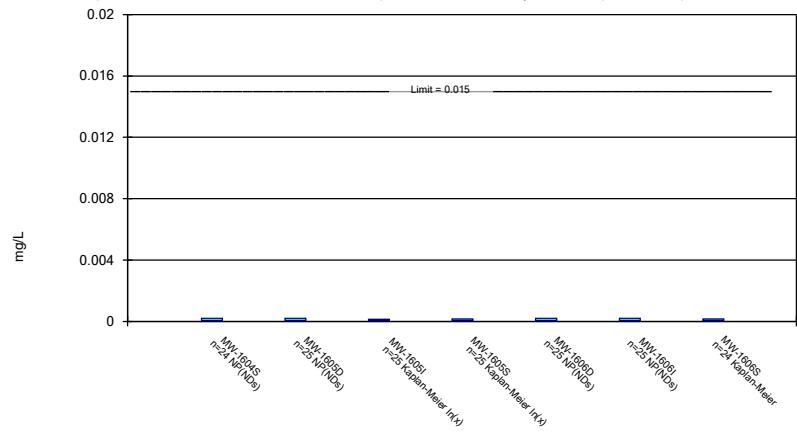
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Constituent: Lead, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

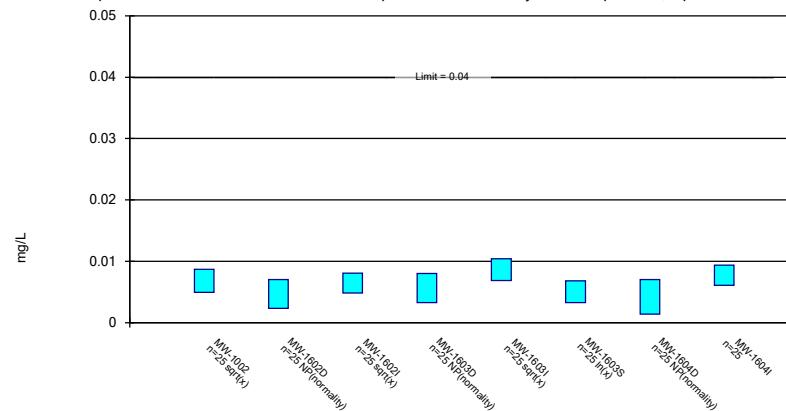
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

Parametric and Non-Parametric (NP) Confidence Interval

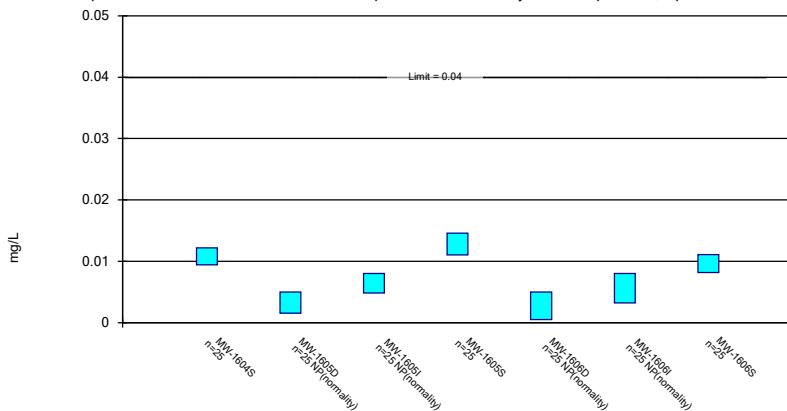
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

## Parametric and Non-Parametric (NP) Confidence Interval

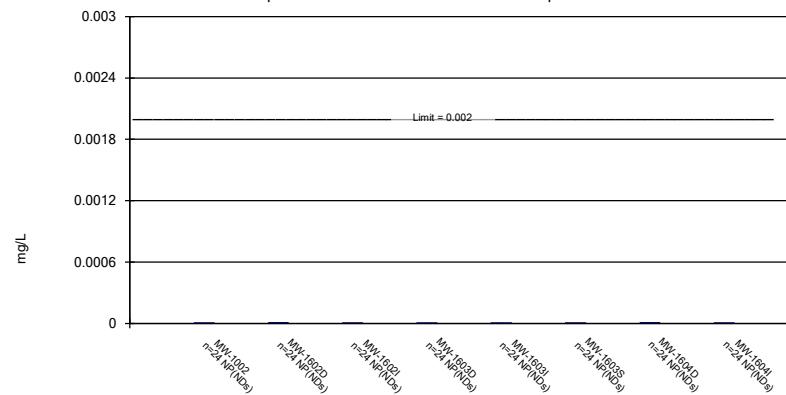
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Constituent: Lithium, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport BAP

Non-Parametric Confidence Interval

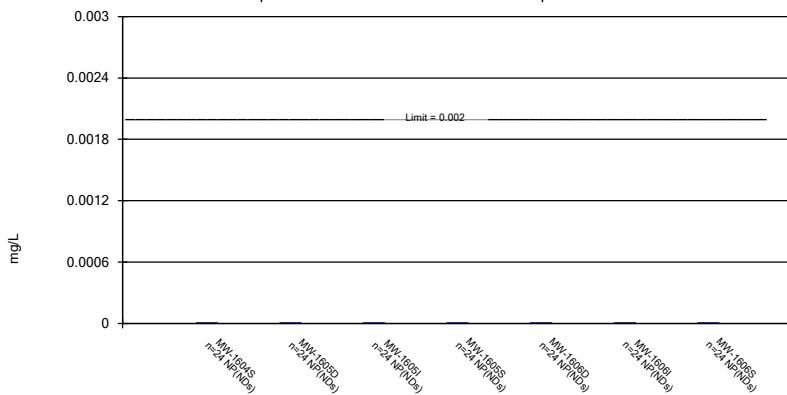
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

Non-Parametric Confidence Interval

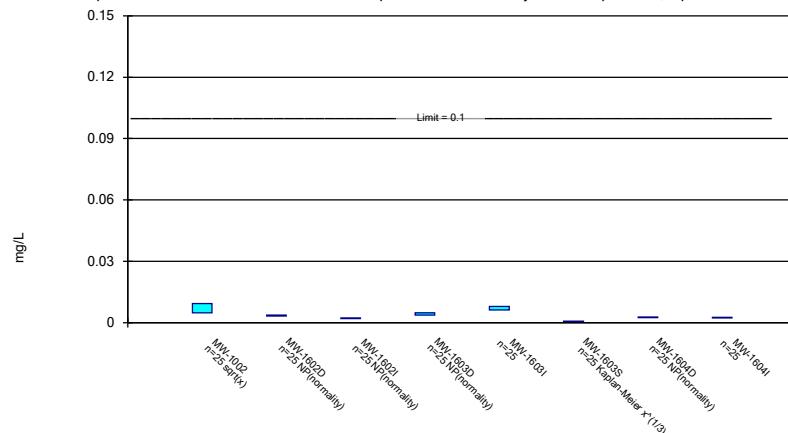
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Constituent: Mercury, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport BAP

Parametric and Non-Parametric (NP) Confidence Interval

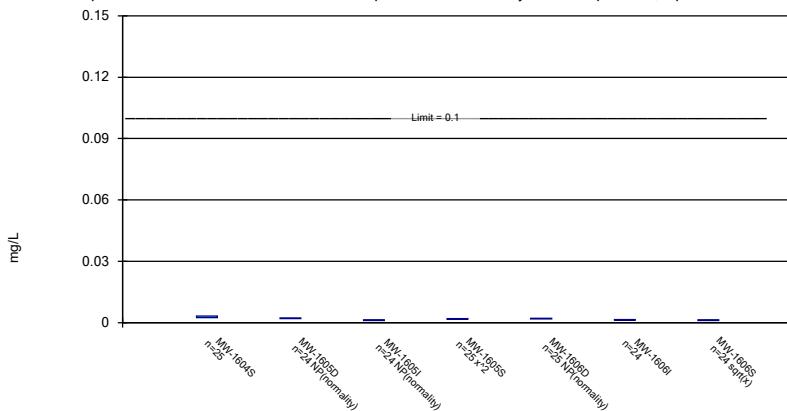
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport BAP

Parametric and Non-Parametric (NP) Confidence Interval

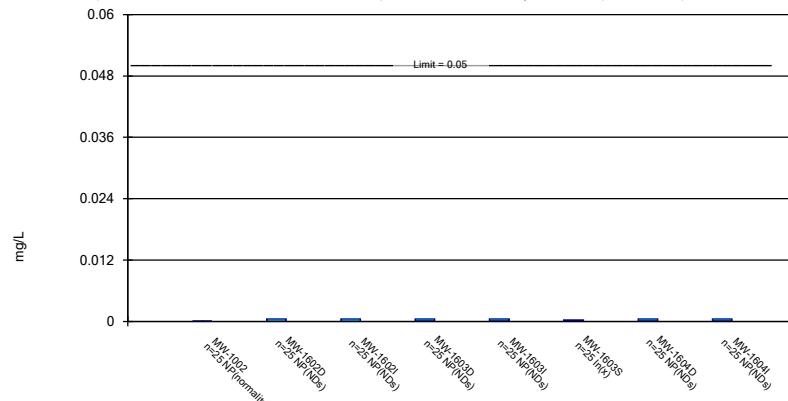
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport BAP

Parametric and Non-Parametric (NP) Confidence Interval

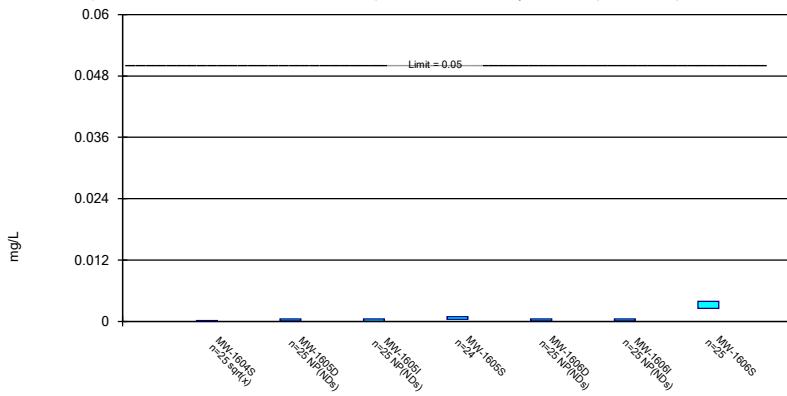
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



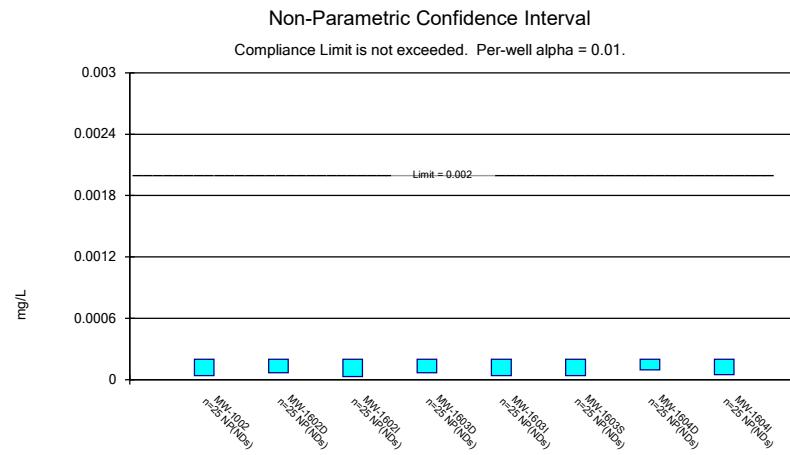
Constituent: Selenium, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP

Parametric and Non-Parametric (NP) Confidence Interval

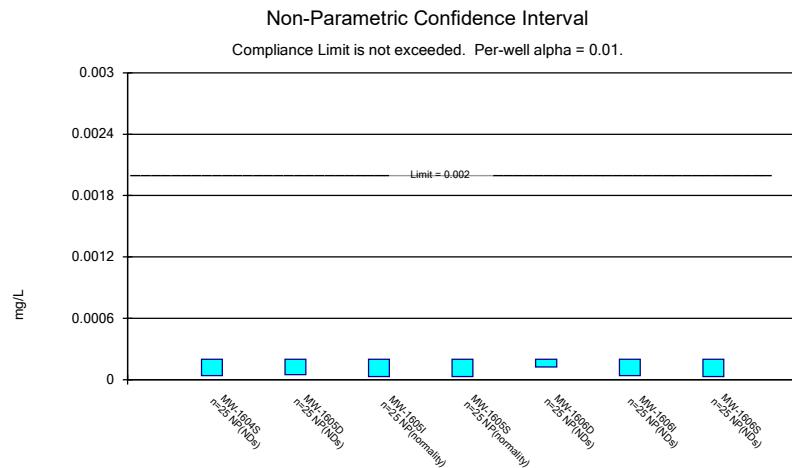
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport BAP



Constituent: Thallium, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP



Constituent: Thallium, total Analysis Run 1/9/2024 6:15 PM View: Confidence Intervals  
Rockport BAP Data: Rockport\_BAP



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# **STATISTICAL ANALYSIS SUMMARY 2024 1<sup>ST</sup> SEMIANNUAL EVENT EAST AND WEST BOTTOM ASH PONDS**

**Rockport Plant  
Rockport, Indiana**

*Prepared for*

**American Electric Power**  
1 Riverside Plaza  
Columbus, Ohio 43215-2372

*Prepared by*

Geosyntec Consultants, Inc.  
500 West Wilson Bridge Road, Suite 250  
Worthington, Ohio 43085

Project Number: CHA8500B

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Attachment A:	Certification by Qualified Professional Engineer
Attachment B:	Statistical Analysis Output

## ACRONYMS AND ABBREVIATIONS

BAP	Bottom Ash Pond
CCR	coal combustion residuals
CFR	code of federal regulations
GWPS	groundwater protection standard
LPL	lower prediction limits
mg/L	milligrams per liter
QA/QC	quality assurance and quality control
SSI	statistically significant increase
SSL	statistically significant level
TDS	total dissolved solids
UPL	upper prediction limit

## 1. INTRODUCTION

In accordance with United States Environmental Protection Agency regulations regarding the disposal of coal combustion residuals (CCR) in landfills and surface impoundments (Code of Federal Regulations [CFR] Title 40, Section 257, Subpart D), groundwater monitoring has been conducted at the East and West Bottom Ash Ponds (BAP), an existing CCR unit at the Rockport Power Plant in Rockport, Indiana. Recent groundwater monitoring results were used to identify concentrations of Appendix IV constituents that are above site-specific groundwater protection standards (GWPSs).

Based on detection monitoring conducted in 2017 and 2018, statistically significant increases (SSIs) over background were concluded for boron, chloride, fluoride, sulfate, and total dissolved solids (TDS) at the BAP. An alternative source was not identified at the time; thus, the BAP has been in assessment monitoring since 2018. During the previous assessment monitoring event, conducted in October and November 2023, Appendix III detections of boron, calcium, chloride, fluoride, sulfate, and TDS were observed above background levels, pH values were observed below background levels, and the unit remained in assessment monitoring (Geosyntec 2024).

An annual sampling event at the BAP for the Appendix IV parameters, as required by 40 CFR 257.95(b), was completed in March 2024, and a semiannual sampling event for the Appendix III and Appendix IV parameters, as required by 40 CFR 257.95(d)(1), was completed in May 2024. The results of these annual and semiannual assessment monitoring events are documented in this report.

Before the statistical analyses were conducted, the groundwater data underwent several validation tests, including those for completeness, sample tracking accuracy, transcription errors, and consistent use of measurement units. No data quality issues that would impact data usability were identified.

The monitoring data were submitted to Groundwater Stats Consulting, LLC for statistical analysis. Confidence intervals were calculated from the Appendix IV parameter data at the compliance wells to assess whether any were present at statistically significant levels (SSLs) above the previously established GWPS. No SSLs were identified; however, concentrations of Appendix III parameters remained above background. Therefore, the unit will remain in assessment monitoring. Certification of the selected statistical methods by a qualified professional engineer is documented in Attachment A.

## 2. BOTTOM ASH POND EVALUATION

### 2.1 Data Validation and QA/QC

Samples were collected for analysis from each upgradient and downgradient well to meet the requirements of 40 CFR 257.95(b) in March 2024 and 40 CFR 257.95(d)(1) in May 2024 as part of the assessment monitoring program. Samples from the May 2024 sampling event were analyzed for all Appendix III and Appendix IV parameters, whereas samples from the March 2024 event were analyzed for Appendix IV parameters only. A summary of data collected during these assessment monitoring events may be found in Table 1.

Chemical analysis was completed by a National Environmental Laboratory Accreditation Program–certified analytical laboratory. The laboratory completed analysis of quality assurance and quality control (QA/QC) samples such as laboratory reagent blanks, continuing calibration verification samples, and laboratory fortified blanks.

The analytical data were imported into a Microsoft Access database, where checks were completed to assess the accuracy of sample location identification and analyte identification. Where necessary, unit conversions were applied to standardize reported units across all sampling events. Exported data files were created for use with the Sanitas™ v.10.0.19h statistics software. The export file was checked against the analytical data for transcription errors and completeness. No QA/QC issues that would impact data usability were noted.

### 2.2 Statistical Analysis

Statistical analyses for the BAP were conducted in accordance with the October 2020 *Statistical Analysis Plan* (Geosyntec 2020). Time series plots and results for all completed statistical tests are provided in Attachment B. The data obtained in March and May 2024 were screened for potential outliers. No outliers were identified for these events.

#### 2.2.1 Evaluation of Potential Appendix IV SSLs

A confidence interval was constructed for each Appendix IV parameter at each compliance well. Confidence limits were generally calculated parametrically ( $\alpha = 0.01$ ); however, nonparametric confidence limits were calculated in some cases (e.g., when the data were not normally distributed or when the nondetect frequency was too high). An SSL was concluded if the lower confidence limit was above the GWPS (i.e., if the entire confidence interval was above the GWPS). The calculated confidence limits (Attachment B) were compared to the GWPSs provided in Table 2. The GWPSs were established during a previous statistical analysis as either (a) the background concentration or (b) the maximum contaminant level and risk-based levels specified in 40 CFR 257.95(h)(2), whichever was greater (Geosyntec 2024).

No SSLs were identified at the Rockport BAP.

#### 2.2.2 Evaluation of Potential Appendix III SSIs

The Appendix III results were analyzed to assess whether concentrations of Appendix III parameters at the compliance wells were above background concentrations. Data collected during the May 2024 assessment monitoring event from each compliance well were compared to

previously established prediction limits to assess whether the results were statistically above background values (Table 3). The SSIs above the upper prediction limits (UPLs) as noted:

- Boron concentrations were above the interwell UPL of 0.208 milligrams per liter (mg/L) at MW-1002 (1.45 mg/L), MW-1603S (1.45 mg/L), MW-1604I (0.505 mg/L), MW-1604S (3.12 mg/L), and MW-1605S (0.556 mg/L).
- Calcium concentrations were above the introwell UPL of 81.2 mg/L at MW-1602D, the introwell UPL of 111 mg/L at MW-1604S (349 mg/L), and the introwell UPL of 96.3 mg/L at MW-1605D (363 mg/L).
- The chloride concentration was above the interwell UPL of 46.4 mg/L at MW-1602I (69.5 mg/L).
- Fluoride concentrations exceeded the interwell UPL of 0.700 mg/L at MW-1002 (0.93 mg/L), MW-1603S (0.93 mg/L), and MW-1604S (0.75 mg/L).
- Sulfate concentrations exceeded the interwell UPL of 76.0 mg/L at MW-1002 (239 mg/L), MW-1602D (196 mg/L), MW-1603S (85.9 mg/L), MW-1604I (188 mg/L), MW-1604S (126 mg/L), MW-1605I (115 mg/L) and at MW-1605S (156 mg/L).
- TDS concentrations exceeded the interwell UPL of 448 mg/L at MW-1002 (590 mg/L), MW-1602D (600 mg/L), MW-1604I (610 mg/L), MW-1604S (460 mg/L), MW-1605I (470 mg/L), and MW-1605S (550 mg/L).

While the prediction limits were calculated for a one-of-two retesting procedure, SSIs were conservatively assumed if the May 2024 sample was above the UPL or, in the case of pH, below the lower prediction limit. Based on this evaluation, concentrations of Appendix III constituents appear to be above background concentrations and the unit will remain in assessment monitoring.

## 2.3 Conclusions

Annual and semiannual assessment monitoring events were conducted in accordance with the CCR Rule. The laboratory and field data were reviewed prior to statistical analysis, with no QA/QC issues identified that prevented data usage. A review of outliers identified no potential outliers in the March and May 2024 data. A confidence interval was constructed at each compliance well for each Appendix IV parameter; SSLs were concluded if the entire confidence interval was above the GWPS. No SSLs were identified. Appendix III parameters were compared to prediction limits; concentrations of boron, calcium, chloride, fluoride, sulfate, and TDS were identified above the prediction limits.

Based on this evaluation, the Rockport BAP CCR unit will remain in assessment monitoring.

### **3. REFERENCES**

Geosyntec. 2020. *Statistical Analysis Plan – Rockport Plant*. Geosyntec Consultants, Inc. October.

Geosyntec. 2024. *Statistical Analysis Summary – Bottom Ash Pond, Rockport Plant, Rockport, Indiana*. Geosyntec Consultants, Inc. March.

## TABLES

**Table 1. Groundwater Data Summary**  
**Statistical Analysis Summary**  
**Rockport Plant – East and West Bottom Ash Ponds**

Parameter	Unit	MW-1002		MW-1600D			MW-1600I		MW-1600S		MW-1601D	
		3/6/2024	5/13/2024	3/6/2024	3/7/2024	5/15/2024	3/6/2024	5/15/2024	3/6/2024	5/15/2024	3/6/2024	5/16/2024
Antimony	µg/L	0.050 J1	0.046 J1	--	0.011 J1	0.009 J1	0.024 J1	0.044 J1	0.018 J1	0.10 J1	0.013 J1	0.012 J1
Arsenic	µg/L	0.22	0.20	--	15.9	15.6	17.2	20.7	0.34	1.7	11.1	9.65
Barium	µg/L	15.7	15.8	--	807	806	646	628 M1	20.4	91.8	529 M1	470
Beryllium	µg/L	0.05 U1	0.05 U1	--	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.25 U1	0.05 U1	0.05 U1
Boron	mg/L	--	1.45	--	--	0.018 J1	--	0.018 J1	--	0.17 J1	--	0.026 J1
Cadmium	µg/L	0.027	0.021	--	0.02 U1	0.025	0.007 J1	0.035	0.011 J1	0.06 J1	0.008 J1	0.019 J1
Calcium	mg/L	--	72.5	--	--	77.5	--	67.2 M1	--	292	--	75.5
Chloride	mg/L	--	27.4	--	--	28.9	--	25.2	--	34.3	--	20.8
Chromium	µg/L	0.14 J1	0.30	--	0.20 J1	0.24 J1	0.20 J1	0.23 J1	0.19 J1	1.3 J1	0.20 J1	0.28 J1
Cobalt	µg/L	0.520	0.515	--	0.064	0.050	1.09	1.07	0.039	0.27	0.053	0.059
Combined Radium	pCi/L	1.33	2.53	--	1.72	1.94	2.66	2.95	1.13	0.99	1.49	1.29
Fluoride	mg/L	1.13	0.93	--	0.21	0.10	0.22	0.12	0.50	0.46	0.16	0.21
Lead	µg/L	0.2 U1	0.2 U1	--	0.2 U1	0.2 U1	0.2 U1	0.17 J1	0.2 U1	1 U1	0.2 U1	0.2 U1
Lithium	mg/L	0.00585	0.00632	--	0.00563	0.00513	0.00649	0.00622	0.0103	0.0479	0.00159	0.00139
Mercury	µg/L	0.005 U1	0.005 U1	--	0.005 U1	0.005 U1						
Molybdenum	µg/L	13.4	13.9	--	1.9	1.8	1.6	1.5	0.6	3.2	2.9	2.9
Selenium	µg/L	0.07 J1	0.08 J1	--	0.5 U1	0.04 J1	0.5 U1	0.5 U1	0.62	2.6	0.5 U1	0.5 U1
Sulfate	mg/L	--	239	--	--	44.0	--	52.8	--	33.3	--	22.4
Thallium	µg/L	0.02 J1	0.02 J1	--	0.2 U1	0.03 J1	0.2 U1	0.2 U1	0.03 J1	1 U1	0.2 U1	0.2 U1
Total Dissolved Solids	mg/L	--	590	--	--	370	--	390	--	380	--	380
pH	SU	7.4	7.1	6.9	--	7.0	7.0	7.0	6.7	6.9	6.9	7.1

Parameter	Unit	MW-1601I			MW-1601S			MW-1602D		MW-1602I	
		3/6/2024	3/7/2024	5/16/2024	3/5/2024	3/6/2024	5/16/2024	3/6/2024	5/14/2024	3/7/2024	5/14/2024
Antimony	µg/L	--	0.018 J1	0.014 J1	--	0.015 J1	0.014 J1	0.010 J1	0.033 J1	0.030 J1	0.1 U1
Arsenic	µg/L	--	18.7	16.7	--	2.14	1.96	9.53	27.1	23.2	8.84
Barium	µg/L	--	611	544	--	31.8	28.6	457	111	107	425
Beryllium	µg/L	--	0.05 U1	0.05 U1	--	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1
Boron	mg/L	--	--	0.021 J1	--	--	0.113	--	0.058	--	0.052
Cadmium	µg/L	--	0.005 J1	0.007 J1	--	0.089	0.010 J1	0.02 U1	0.006 J1	0.02 U1	0.02 U1
Calcium	mg/L	--	--	72.9	--	--	61.1	--	92.6	--	62.6
Chloride	mg/L	--	--	29.0	--	--	38.5	--	26.0	--	69.5
Chromium	µg/L	--	0.22 J1	0.20 J1	--	0.27 J1	0.24 J1	0.25 J1	0.29 J1	0.69	0.23 J1
Cobalt	µg/L	--	1.19	1.05	--	0.139	0.118	0.049	1.41	1.26	0.044
Combined Radium	pCi/L	--	1.85	1.69	--	0.58	0.19	1.5	2.65	1.38	1.7
Fluoride	mg/L	--	0.23	0.28	--	0.36	0.43	0.31	0.26	0.27	0.31
Lead	µg/L	--	0.2 U1	0.2 U1	--	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1
Lithium	mg/L	--	0.00674	0.00618	--	0.00545	0.00542	0.00227	0.00566	0.00557	0.00208
Mercury	µg/L	--	0.005 U1	0.005 U1	--	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1
Molybdenum	µg/L	--	2.2	2.1	--	1.9	1.8	3.1	2.2	2.3	3.1
Selenium	µg/L	--	0.5 U1	0.5 U1	--	1.04	0.91	0.5 U1	0.04 J1	0.5 U1	0.5 U1
Sulfate	mg/L	--	--	49.9	--	--	48.7	--	196	--	20.7
Thallium	µg/L	--	0.03 J1	0.2 U1	--	0.03 J1	0.2 U1	0.03 J1	0.02 J1	0.02 J1	0.2 U1
Total Dissolved Solids	mg/L	--	--	410	--	--	370	--	600	--	430
pH	SU	6.9	--	7.0	7.2	7.2	7.1	7.3	7.1	7.4	7.0

**Table 1. Groundwater Data Summary**  
**Statistical Analysis Summary**  
**Rockport Plant – East and West Bottom Ash Ponds**

Parameter	Unit	MW-1603D		MW-1603I		MW-1603S		MW-1604D		MW-1604I	
		3/6/2024	5/14/2024	3/6/2024	5/17/2024	3/5/2024	5/14/2024	3/7/2024	5/15/2024	3/7/2024	5/15/2024
Antimony	µg/L	0.022 J1	0.012 J1	0.024 J1	0.184	0.040 J1	0.037 J1	0.008 J1	0.1 U1	0.020 J1	0.020 J1
Arsenic	µg/L	13.7	13.4	12.6	9.80	0.18	0.17	17.7	16.9	17.6	16.1
Barium	µg/L	130	130 M1	80.7	181	4.95	7.08	270	223 M1	101	127
Beryllium	µg/L	0.05 U1	0.05 U1	0.05 U1	0.020 J1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1
Boron	mg/L	--	0.035 J1	--	0.062	--	1.45	--	0.019 J1	--	0.505
Cadmium	µg/L	0.02 U1	0.02 U1	0.02 U1	0.063	0.017 J1	0.019 J1	0.02 U1	0.02 U1	0.005 J1	0.02 U1
Calcium	mg/L	--	85.8 M1	--	87.8	--	42.4	--	65.1 M1	--	80.9
Chloride	mg/L	--	29.9	--	37.5	--	25.5	--	15.1	--	44.2
Chromium	µg/L	0.22 J1	0.27 J1	0.24 J1	0.79	0.25 J1	0.32	0.29 J1	0.24 J1	0.28 J1	0.31
Cobalt	µg/L	0.244	0.263	1.01	1.35	0.270	0.271	0.050	0.046	0.625	1.08
Combined Radium	pCi/L	1.9	1.21	1.64	1.18	0.72	0.79	1.34	1.43	1.39	2.01
Fluoride	mg/L	0.25	0.26	0.37	0.46	1.26	0.93	0.25	0.16	0.35	0.28
Lead	µg/L	0.2 U1	0.2 U1	0.2 U1	0.85	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1
Lithium	mg/L	0.00323	0.00318	0.00670	0.00657	0.00297	0.00356	0.00149	0.00129	0.00582	0.00771
Mercury	µg/L	0.005 U1	0.005 U1								
Molybdenum	µg/L	3.6	3.7	7.0	8.9	1.4	1.6	2.4	2.2	1.9	1.7
Selenium	µg/L	0.5 U1	0.5 U1	0.5 U1	0.14 J1	0.16 J1	0.16 J1	0.5 U1	0.5 U1	0.5 U1	0.5 U1
Sulfate	mg/L	--	43.2	--	73.1	--	85.9	--	18.4	--	188
Thallium	µg/L	0.2 U1	0.2 U1	0.2 U1	0.03 J1	0.2 U1	0.03 J1	0.2 U1	0.2 U1	0.2 U1	0.2 U1
Total Dissolved Solids	mg/L	--	390	--	430	--	310	--	290	--	610
pH	SU	7.1	7.0	7.3	7.2	6.9	7.0	7.0	7.0	7.3	7.1

Parameter	Unit	MW-1604S		MW-1605D		MW-1605I		MW-1605S		MW-1606D	
		3/6/2024	5/15/2024	3/7/2024	5/15/2024	3/7/2024	5/14/2024	3/7/2024	5/14/2024	3/7/2024	5/14/2024
Antimony	µg/L	0.045 J1	0.21 J1	0.009 J1	0.04 J1	0.031 J1	0.028 J1	0.036 J1	0.033 J1	0.008 J1	0.1 U1
Arsenic	µg/L	0.13	0.7	20.4	93.9	17.3	18.8	0.54	0.55	17.6	16.1
Barium	µg/L	12.9	60.3	462	2,080	127	143	5.28	5.13	494	466
Beryllium	µg/L	0.05 U1	0.25 U1	0.05 U1	0.25 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1
Boron	mg/L	--	3.12	--	0.07 J1	--	0.059	--	0.556	--	0.017 J1
Cadmium	µg/L	0.029	0.11	0.006 J1	0.1 U1	0.508	0.02 U1	0.036	0.031	0.02 U1	0.02 U1
Calcium	mg/L	--	349	--	363	--	76.3	--	64.9	--	74.7
Chloride	mg/L	--	39.0	--	25.5	--	34.1	--	45.6	--	24.6
Chromium	µg/L	0.27 J1	1.0 J1	0.19 J1	1.5	0.34	0.25 J1	0.46	0.38	0.19 J1	0.26 J1
Cobalt	µg/L	0.177	1.25	0.052	0.29	1.21	1.10	0.443	0.298	0.046	0.042
Combined Radium	pCi/L	0.66	0.73	1.7	1.06	2.3	1.78	0.27	0.66	0.91	0.87
Fluoride	mg/L	0.80	0.75	0.20	0.08	0.20	0.20	0.54	0.59	0.16	0.17
Lead	µg/L	0.2 U1	1 U1	0.2 U1	1 U1	0.17 J1	0.06 J1	0.06 J1	0.2 U1	0.2 U1	0.2 U1
Lithium	mg/L	0.0115	0.0556	0.00150	0.0069	0.00557	0.00425	0.00938	0.0102	0.00046	0.00061
Mercury	µg/L	0.005 U1	0.005 U1								
Molybdenum	µg/L	3.1	13.4	1.9	9.0	1.3	1.4	1.8	1.9	1.7	1.7
Selenium	µg/L	0.5 U1	2.5 U1	0.5 U1	2.5 U1	0.5 U1	0.5 U1	0.08 J1	0.08 J1	0.5 U1	0.5 U1
Sulfate	mg/L	--	126	--	45.2	--	115	--	156	--	30.9
Thallium	µg/L	0.2 U1	0.1 J1	0.2 U1	1 U1	0.03 J1	0.03 J1	0.03 J1	0.2 U1	0.2 U1	0.2 U1
Total Dissolved Solids	mg/L	--	460	--	350	--	470	--	550	--	350
pH	SU	7.3	7.2	7.3	7.0	7.3	7.1	7.0	7.0	7.1	6.9

**Table 1. Groundwater Data Summary**  
**Statistical Analysis Summary**  
**Rockport Plant – East and West Bottom Ash Ponds**

Parameter	Unit	MW-1606I		MW-1606S		MW-1701D		MW-1701I		MW-1701S	
		3/6/2024	5/14/2024	3/6/2024	5/14/2024	3/6/2024	5/16/2024	3/7/2024	5/16/2024	3/6/2024	5/15/2024
Antimony	µg/L	0.017 J1	0.013 J1	0.031 J1	0.034 J1	0.013 J1	0.1 U1	0.077 J1	0.106	0.041 J1	0.11 J1
Arsenic	µg/L	12.0	9.50	0.15	0.16	9.09	8.33 M1	14.1	37.4	0.35	1.7
Barium	µg/L	48.8	46.2	12.7	10.9	60.8	58.5 M1	40.1	39.8	8.72	44.4
Beryllium	µg/L	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.05 U1	0.010 J1	0.05 U1	0.25 U1
Boron	mg/L	--	0.013 J1	--	0.018 J1	--	0.019 J1	--	0.015 J1	--	0.07 J1
Cadmium	µg/L	0.004 J1	0.016 J1	0.031	0.023	0.005 J1	0.02 U1	0.010 J1	0.018 J1	0.015 J1	0.04 J1
Calcium	mg/L	--	54.5	--	43.2	--	61.0 M1	--	58.9	--	275
Chloride	mg/L	--	17.1	--	23.8	--	15.3	--	14.5	--	22.2
Chromium	µg/L	0.16 J1	0.46	0.20 J1	0.25 J1	0.60	0.20 M1, J1	0.44	0.24 J1	0.36	1.6
Cobalt	µg/L	0.986	1.01	0.068	0.060	1.47	1.33 M1	1.06	1.32	0.075	0.36
Combined Radium	pCi/L	1.04	1.1	1.04	1.05	1.5	0.35	1.35	0.77	0.91	0.57
Fluoride	mg/L	0.19	0.19	0.54	0.52	0.30	0.38	0.41	0.48	0.35	0.27
Lead	µg/L	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.2 U1	0.17 J1	0.32	0.2 U1	1 U1
Lithium	mg/L	0.00316	0.00322	0.00733	0.00769	0.00631	0.00629	0.00564	0.00548	0.00475	0.0211
Mercury	µg/L	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1
Molybdenum	µg/L	1.1	1.1	1.2	1.7	1.3	1.2	1.1	1.2	0.7	3.4
Selenium	µg/L	0.5 U1	0.5 U1	3.41	2.95	0.5 U1	0.5 U1	0.5 U1	0.06 J1	0.42 J1	2.3 J1
Sulfate	mg/L	--	39.3	--	33.8	--	39.8	--	33.7	--	17.9
Thallium	µg/L	0.03 J1	0.02 J1	0.2 U1	0.2 U1	0.03 J1	0.02 J1	0.2 U1	0.2 U1	0.2 U1	1 U1
Total Dissolved Solids	mg/L	--	290	--	350	--	350	--	320	--	320
pH	SU	7.2	7.1	6.9	6.9	7.0	7.0	7.2	7.2	7.2	7.2

Parameter	Unit	MW-1702D		MW-1702I		MW-1702S	
		3/7/2024	5/16/2024	3/7/2024	5/16/2024	3/7/2024	5/16/2024
Antimony	µg/L	0.126	0.114	0.171	0.067 J1	0.085 J1	0.049 J1
Arsenic	µg/L	63.2	33.8	73.3	41.0	0.30	0.26
Barium	µg/L	230	196	114	106	4.28	4.06
Beryllium	µg/L	0.020 J1	0.009 J1	0.05 U1	0.05 U1	0.05 U1	0.05 U1
Boron	mg/L	--	0.015 J1	--	0.015 J1	--	0.032 J1
Cadmium	µg/L	0.045	0.169	0.018 J1	0.065	0.072	0.020
Calcium	mg/L	--	73.0 M1	--	68.2	--	37.2
Chloride	mg/L	--	31.2	--	30.3	--	14.8
Chromium	µg/L	0.39	0.73	0.23 J1	0.47	0.29 J1	0.36
Cobalt	µg/L	1.75	0.720	1.64	1.35	0.034	0.016 J1
Combined Radium	pCi/L	1.41	1.12	1.25	1.12	0.79	1.48
Fluoride	mg/L	0.19	0.23	0.22	0.28	0.56	0.64
Lead	µg/L	0.66	0.31	0.06 J1	0.2 U1	0.07 J1	0.2 U1
Lithium	mg/L	0.00440	0.00405	0.00446	0.00435	0.00174	0.00165
Mercury	µg/L	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1
Molybdenum	µg/L	2.1	2.1	2.0	2.0	1.4	1.5
Selenium	µg/L	0.10 J1	0.07 J1	0.5 U1	0.5 U1	3.80	3.52
Sulfate	mg/L	--	41.8	--	42.9	--	20.0
Thallium	µg/L	0.03 J1	0.2 U1	0.03 J1	0.03 J1	0.2 U1	0.03 J1
Total Dissolved Solids	mg/L	--	380	--	370	--	260
pH	SU	7.0	6.8	7.0	7.0	7.2	7.1

**Table 1. Groundwater Data Summary**  
**Statistical Analysis Summary**  
**Rockport Plant – East and West Bottom Ash Ponds**

*Geosyntec Consultants, Inc.*

Notes:

--: not measured

J1: Estimated value. Parameter was detected in concentrations below the reporting limit.

M1: The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.

mg/L: milligrams per liter

pCi/L: picocuries per liter

S7: Sample did not achieve constant weight.

SU: standard unit

U1: Non-detect value. For statistical analysis, parameters which were not detected were replaced with the reporting limit.

µg/L: micrograms per liter

**Table 2. Appendix IV Groundwater Protection Standards**  
**Statistical Analysis Summary**  
**Rockport Plant – East and West Bottom Ash Ponds**

*Geosyntec Consultants, Inc.*

Constituent Name	MCL	CCR Rule-Specified	Calculated UTL	GWPS
Antimony, Total (mg/L)	0.00600		0.000440	0.00600
Arsenic, Total (mg/L)	0.0100		0.0791	0.0791
Barium, Total (mg/L)	2.00		1.20	2.00
Beryllium, Total (mg/L)	0.00400		0.000106	0.00400
Cadmium, Total (mg/L)	0.00500		0.000280	0.00500
Chromium, Total (mg/L)	0.100		0.00205	0.100
Cobalt, Total (mg/L)	n/a	0.00600	0.00334	0.00600
Combined Radium, Total (pCi/L)	5.00		2.50	5.00
Fluoride, Total (mg/L)	4.00		0.700	4.00
Lead, Total (mg/L)	n/a	0.0150	0.00497	0.0150
Lithium, Total (mg/L)	n/a	0.0400	0.0380	0.0400
Mercury, Total (mg/L)	0.00200		0.00000500	0.00200
Molybdenum, Total (mg/L)	n/a	0.100	0.00867	0.100
Selenium, Total (mg/L)	0.0500		0.00437	0.0500
Thallium, Total (mg/L)	0.00200		0.000200	0.00200

Notes:

1. Calculated UTL (upper tolerance limit) represents site-specific background values.
2. Grey cells indicate the GWPS is based on the calculated UTL, which is higher than the MCL or CCR Rule-specified value.

CCR: coal combustion residuals

GWPS: groundwater protection standard

MCL: maximum contaminant level

mg/L: milligrams per liter

n/a: not applicable

pCi/L: picocuries per liter

**Table 3. Appendix III Data Summary**  
**Statistical Analysis Summary**  
**Rockport Plant – East and West Bottom Ash Ponds**

Analyte	Unit	Description	MW-1002	MW-1602D	MW-1602I	MW-1603D	MW-1603I	MW-1603S	MW-1604D	MW-1604I	MW-1604S
			5/13/2024	5/14/2024	5/14/2024	5/14/2024	5/17/2024	5/14/2024	5/15/2024	5/15/2024	5/15/2024
Boron	mg/L	Interwell Background Value (UPL)					0.208				
		Analytical Result	<b>1.45</b>	0.058	0.052	0.035	0.062	<b>1.45</b>	0.019	<b>0.505</b>	<b>3.12</b>
Calcium	mg/L	Intrawell Background Value (UPL)	80.7	81.2	96.1	95.3	104	89.5	77.9	87.6	111
		Analytical Result	72.5	<b>92.6</b>	62.6	85.8	87.8	42.4	65.1	80.9	<b>349</b>
Chloride	mg/L	Interwell Background Value (UPL)					46.4				
		Analytical Result	27.4	26.0	<b>69.5</b>	29.9	37.5	25.5	15.1	44.2	39.0
Fluoride	mg/L	Interwell Background Value (UPL)					0.700				
		Analytical Result	<b>0.93</b>	0.26	0.31	0.26	0.46	<b>0.93</b>	0.16	0.28	<b>0.75</b>
pH	SU	Intrawell Background Value (UPL)	8.2	8.1	7.9	8.1	8.1	7.8	7.7	7.9	8.0
		Intrawell Background Value (LPL)	5.5	6.5	6.5	6.0	5.8	5.8	6.5	6.7	6.7
Sulfate	mg/L	Analytical Result	7.1	7.1	7.0	7.0	7.2	7.0	7.0	7.1	7.2
		Interwell Background Value (UPL)					76.0				
Total Dissolved Solids	mg/L	Analytical Result	<b>239</b>	<b>196</b>	20.7	43.2	73.1	<b>85.9</b>	18.4	<b>188</b>	<b>126</b>
		Interwell Background Value (UPL)					448				
Total Dissolved Solids	mg/L	Analytical Result	<b>590</b>	<b>600</b>	430	390	430	310	290	<b>610</b>	<b>460</b>

Analyte	Unit	Description	MW-1605D	MW-1605I	MW-1605S	MW-1606D	MW-1606I	MW-1606S
			5/15/2024	5/14/2024	5/14/2024	5/14/2024	5/14/2024	5/14/2024
Boron	mg/L	Interwell Background Value (UPL)			0.208			
		Analytical Result	0.07	0.059	<b>0.556</b>	0.017	0.013	0.018
Calcium	mg/L	Intrawell Background Value (UPL)	96.3	105	91.3	91.6	87.9	68.3
		Analytical Result	<b>363</b>	76.3	64.9	74.7	54.5	43.2
Chloride	mg/L	Interwell Background Value (UPL)			46.4			
		Analytical Result	25.5	34.1	45.6	24.6	17.1	23.8
Fluoride	mg/L	Interwell Background Value (UPL)			0.700			
		Analytical Result	0.08	0.20	0.59	0.17	0.19	0.52
pH	SU	Intrawell Background Value (UPL)	7.5	7.7	7.6	8.4	8.3	7.9
		Intrawell Background Value (LPL)	6.7	6.7	6.6	6.4	6.5	6.1
Sulfate	mg/L	Analytical Result	7.0	7.1	7.0	6.9	7.1	6.9
		Interwell Background Value (UPL)			76.0			
Total Dissolved Solids	mg/L	Analytical Result	45.2	<b>115</b>	<b>156</b>	30.9	39.3	33.8
		Interwell Background Value (UPL)			448			
Total Dissolved Solids	mg/L	Analytical Result	350	<b>470</b>	<b>550</b>	350	290	350

Notes:

1. **Bold values exceed the background value.**

2. Background values are shaded gray.

LPL: lower prediction limit

mg/L: milligrams per liter

SU: standard units

UPL: upper prediction limit

## **ATTACHMENT A**

### Certification by Qualified Professional Engineer

### Certification by Qualified Professional Engineer

I certify that selected and above described statistical method is appropriate for evaluating the groundwater monitoring data for the Rockport East and West Bottom Ash Ponds CCR management area and that the requirements of 40 CFR 257.93(f) have been met.

David Anthony Miller

Printed Name of Licensed Professional Engineer

*David Anthony Miller*

Signature



11700730

Indiana

09.26.2024

License Number

Licensing State

Date

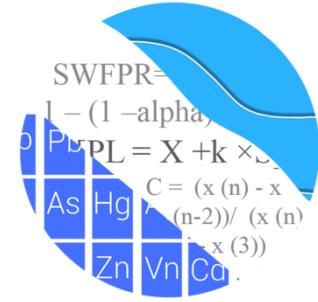
## **ATTACHMENT B**

### Statistical Analysis Output

GROUNDWATER STATS  
CONSULTING

August 8, 2024

Geosyntec Consultants  
Attn: Ms. Allison Kreinberg  
500 W. Wilson Bridge, Ste. #250  
Worthington, OH 43085



Re: Rockport Bottom Ash Pond  
March & May 2024 Assessment Monitoring Analysis

Dear Ms. Kreinberg,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical evaluation of groundwater data for the March and May 2024 Assessment Monitoring events at American Electric Power Inc.'s Rockport Bottom Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at the site for the Coal Combustion Residuals (CCR) program in 2016. The monitoring well network, as provided by Geosyntec Consultants, consists of the following:

- **Upgradient wells:** MW-1600D, MW-1600I, MW-1600S, MW-1601D, MW-1601I, MW-1601S; MW-1701S, MW-1702D, MW-1702I, MW-1702S, MW-1701D, and MW-1701I
- **Downgradient wells:** MW-1002, MW-1602D, MW-1602I, MW-1603D, MW-1603I, MW-1603S, MW-1604D, MW-1604I, MW-1604S, MW-1605D, MW-1605I, MW-1605S, MW-1606D, MW-1606I, and MW-1606S

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of GSC. The statistical analysis was conducted according to the January 2018 screening evaluation prepared by GSC and approved by Dr. Kirk Cameron.

The CCR program consists of the following constituents:

- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Time series plots for all well/constituent pairs are provided and are particularly useful for screening parameters detected in downgradient wells which require statistical analyses (Figure A). Additionally, a separate section of box plots is included for all constituents at both upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs.

Due to varying detection limits in background data sets resulting from improved laboratory practices, a substitution of the most recent reporting limit is used for all non-detects. In some cases, the reporting limit provided by the laboratory contained varying limits for a given parameter; therefore, the substitution may differ from well to well. This generally gives the most conservative limit in each case.

### **Summary of Background Update – Conducted in January 2024**

Proposed background data from upgradient wells were screened as described below prior to construction of upper tolerance limits for Appendix IV constituents for the November 2023 analysis. These limits are compared to the Maximum Contaminant Levels (MCLs) for the purpose of establishing Groundwater Protection Standards (GWPS) which are updated annually.

#### Outlier Analysis

Prior to evaluating Appendix IV parameters, upgradient well data are screened through both visual screening and Tukey's outlier test for potential outliers and extreme trending patterns that would lead to artificially elevated statistical limits. Tukey's test and visual screening with time series graphs confirmed previously flagged outliers. All flagged values may be seen on the Outlier Summary following this letter (Figure C).

Tukey's outlier test on pooled upgradient well data through November 2023 identified outliers for arsenic, barium, combined radium 226 + 228, fluoride, and lithium. The values identified by Tukey's test, with the exception of one high combined radium 226 + 228

value of 7.25 pCi/L which was previously flagged, were either similar to concentrations upgradient of the facility or were lower than the respective Maximum Contaminant Level (MCL); therefore, none of the identified values were flagged as outliers. No additional outliers for Appendix IV parameters among upgradient wells were flagged during the update and previously flagged values were confirmed by Tukey's outlier test or visual screening.

Additionally, downgradient well data through November 2023 were screened through visual screening using time series graphs. Since the downgradient well data are used to construct confidence intervals, a regulatory conservative approach is taken in that values that are marginally high relative to the rest of the data are retained unless there is particular justification for excluding them. No new outliers for Appendix IV parameters among downgradient wells were flagged during the update.

#### Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data through November 2023 for Appendix IV parameters (Figure D). These limits are updated on an annual basis and will be updated again during the Fall 2024 sample event. Parametric tolerance limits are used when data follow a normal or transformed-normal distribution and use a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

#### Groundwater Protection Standards

These background limits were compared to the MCLs as shown in the GWPS table following this letter to determine the highest limit for use as the GWPS in the confidence interval comparisons (Figure E). GWPS will be updated after data from the Fall 2024 sample event are available.

#### **Evaluation of Appendix IV Parameters – March & May 2024**

Time series plots were used to visually identify potential outliers in downgradient wells through the March and May 2024 sample events. When suspected outliers are identified, Tukey's outlier test may be used to formally test whether measurements are statistically significant. As mentioned above, high outliers are 'cautiously' flagged in the downgradient wells when measurements are clearly much different from remaining data within a given

well. This is intended to be a regulatory conservative approach in that it will reduce the variance and thus reduce the width of parametric confidence intervals; although it will also reduce the mean and thus lower the entire interval. The intent is to better represent the actual downgradient mean. No additional suspected outliers were identified.

### Confidence Intervals

Confidence intervals were then constructed with data through May 2024 on downgradient wells for each of the Appendix IV parameters using the highest limit of the MCL, CCR-Rule specified levels, or background limit as the GWPS as discussed above (Figure F). When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the largest and smallest order statistics depending on the sample size as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available. No confidence interval exceedances were identified.

### Trend Test Evaluation

When confidence interval exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 95% confidence level. Utilizing the 95% confidence level for trend tests readily identifies significant trends and is more sensitive than the 99% confidence level without drastically increasing the false negative rate. Upgradient wells are included in the trend analyses for all parameters found to exceed their confidence interval in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of variability in groundwater which may be unrelated to practices at the site. Since no exceedances were identified, no trend tests were required.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for the Rockport Bottom Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



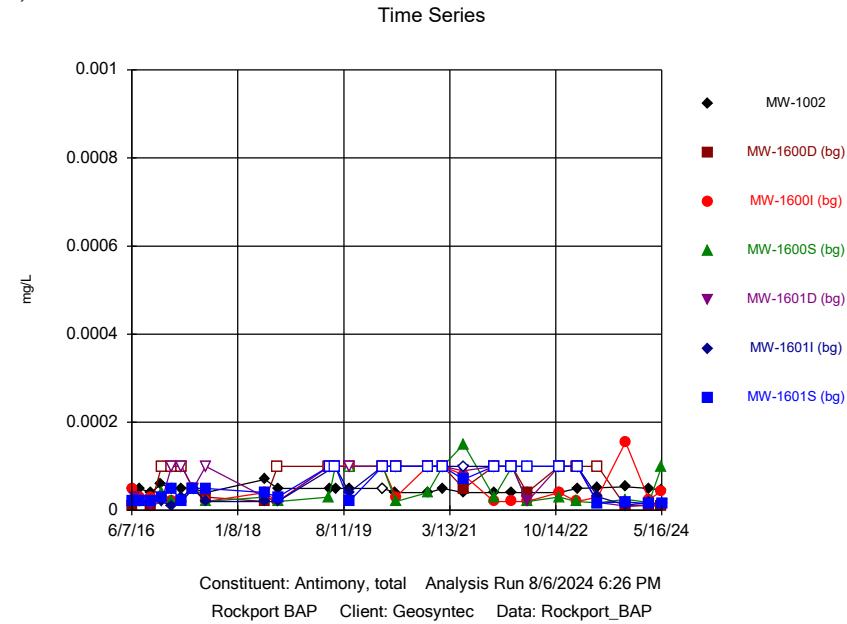
Tristan Clark  
Groundwater Analyst



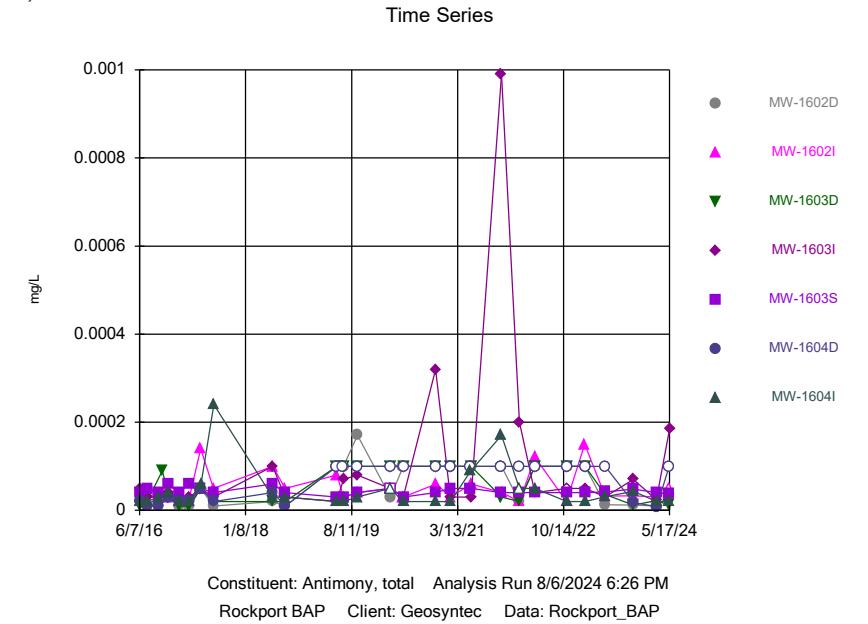
Andrew Collins  
Project Manager

**FIGURE A**  
**Time Series**

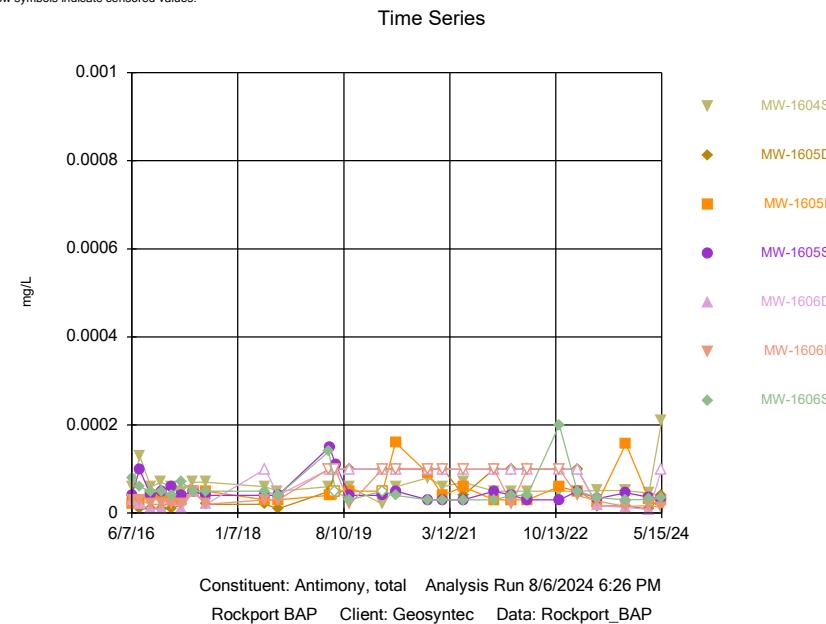
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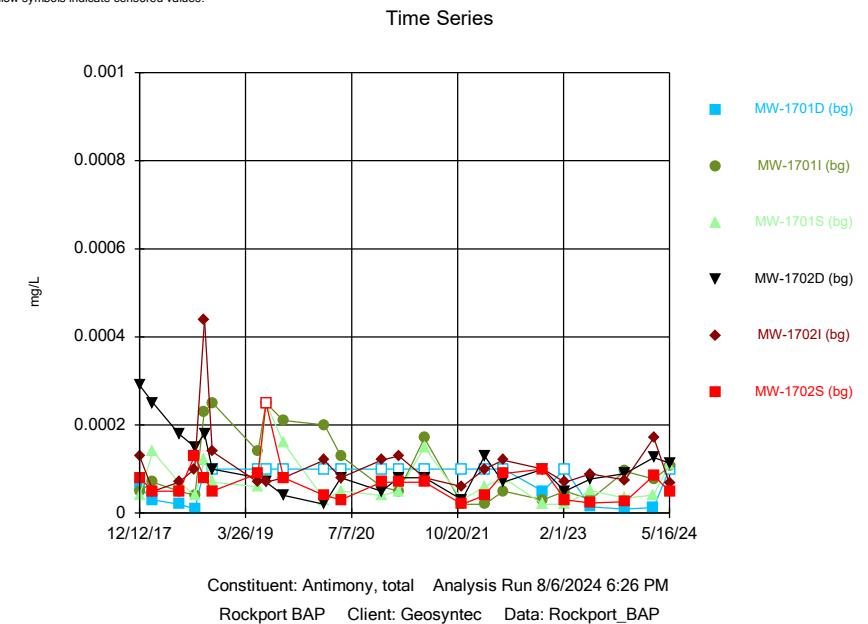
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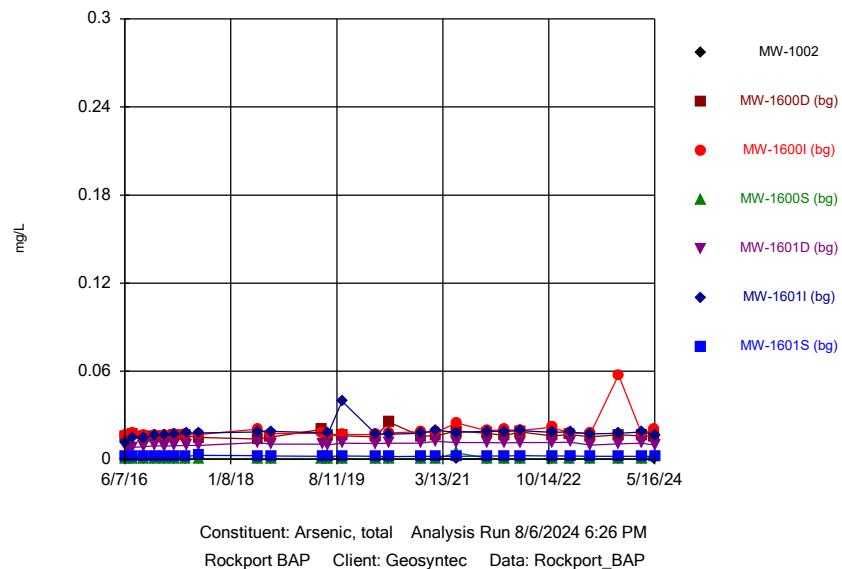
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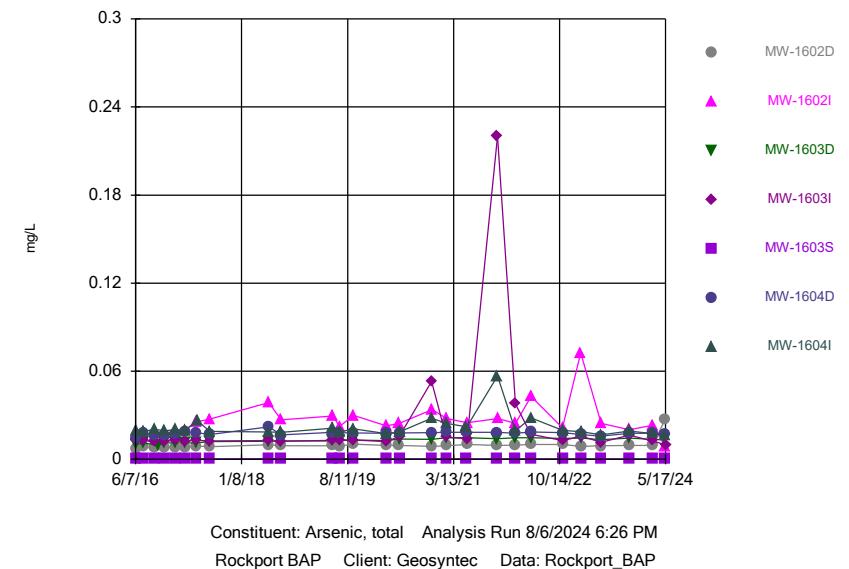
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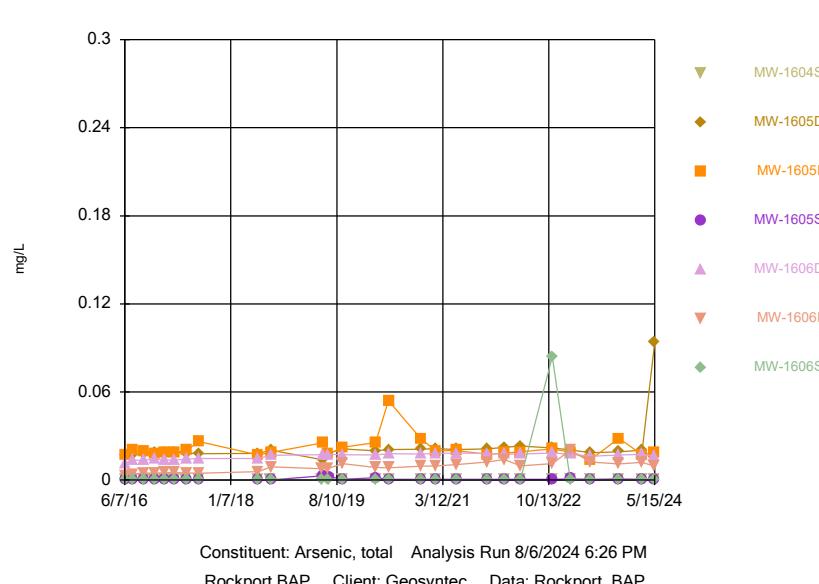
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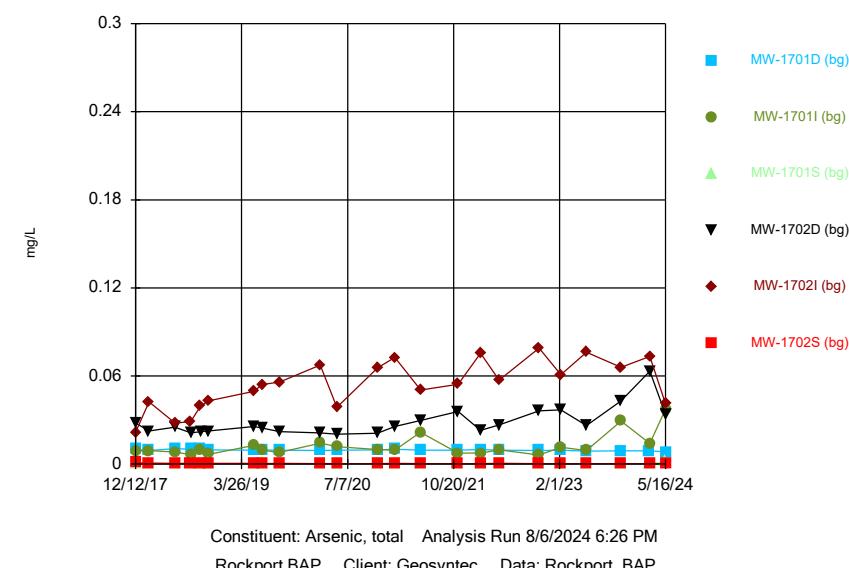
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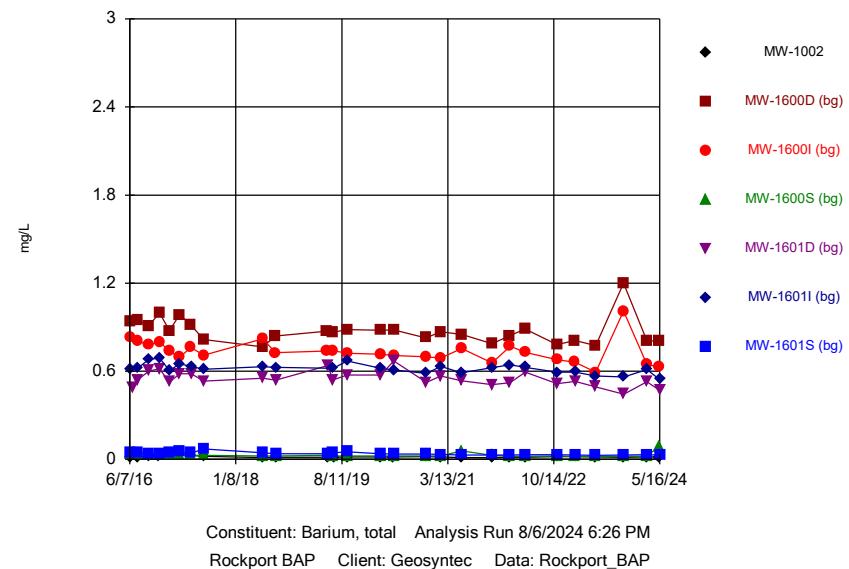
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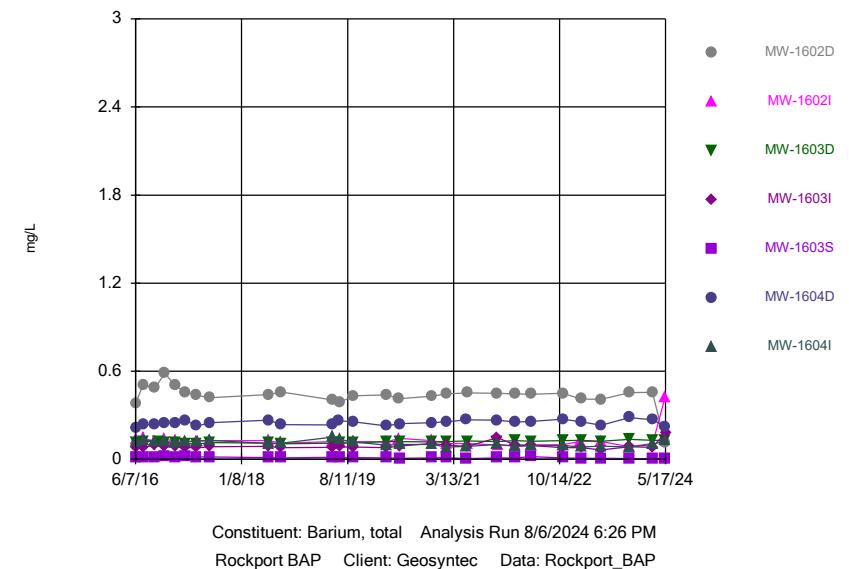
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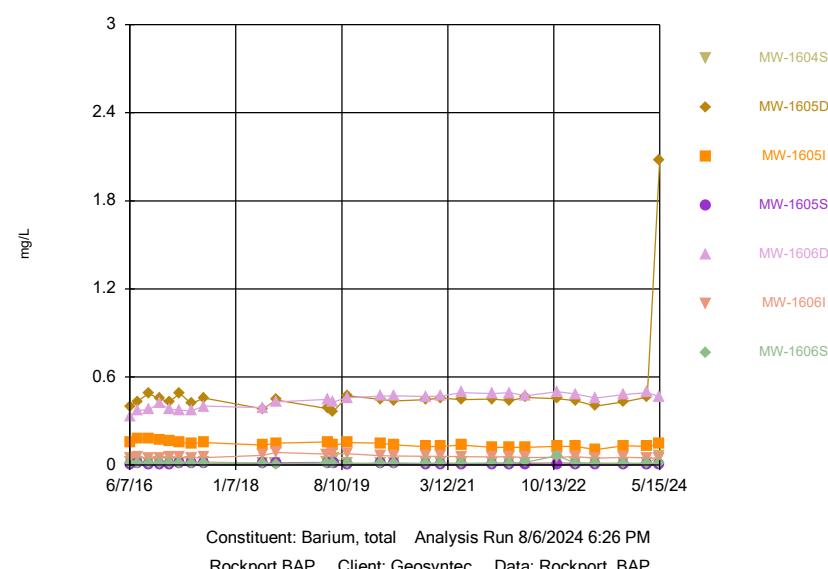
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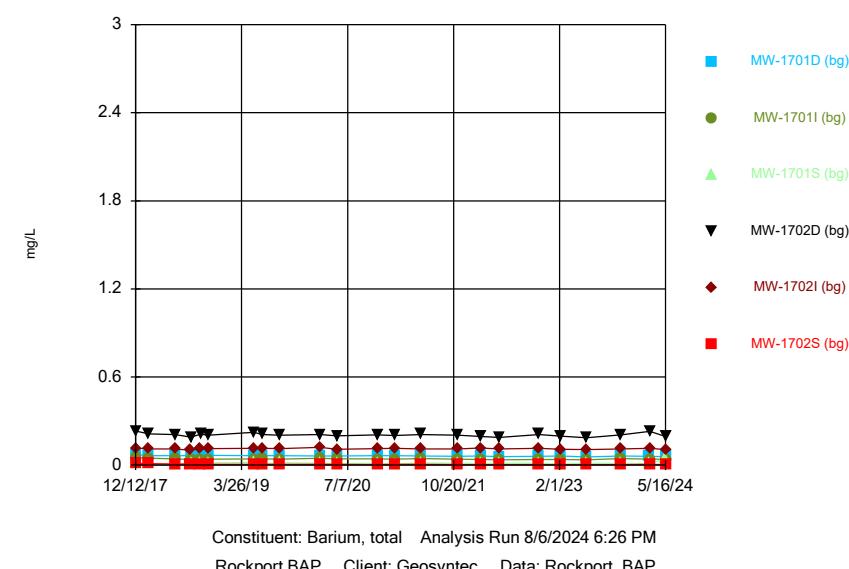
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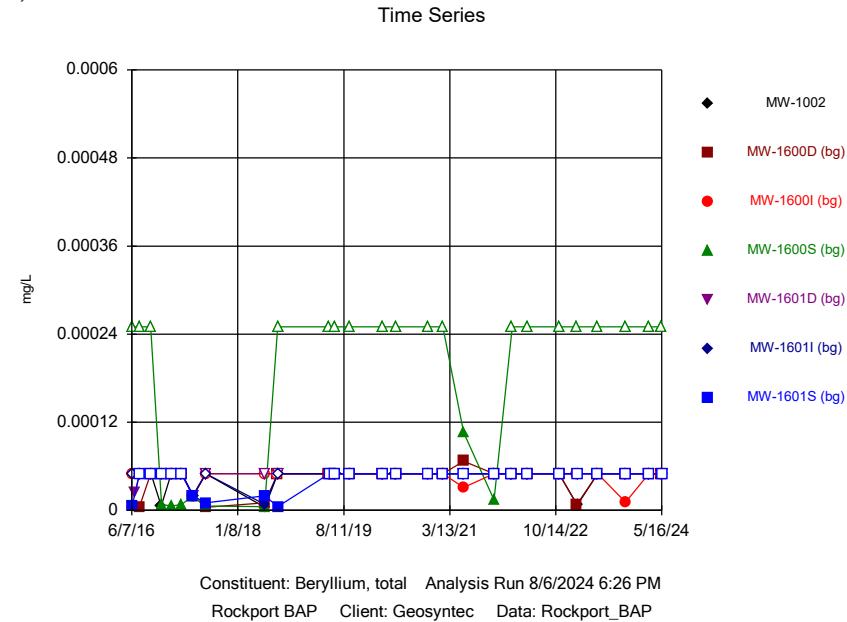
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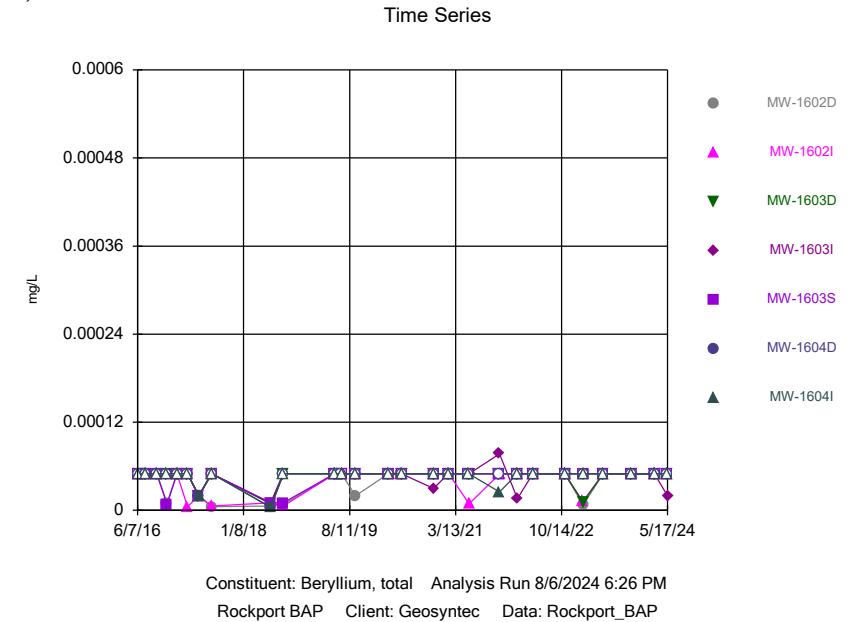
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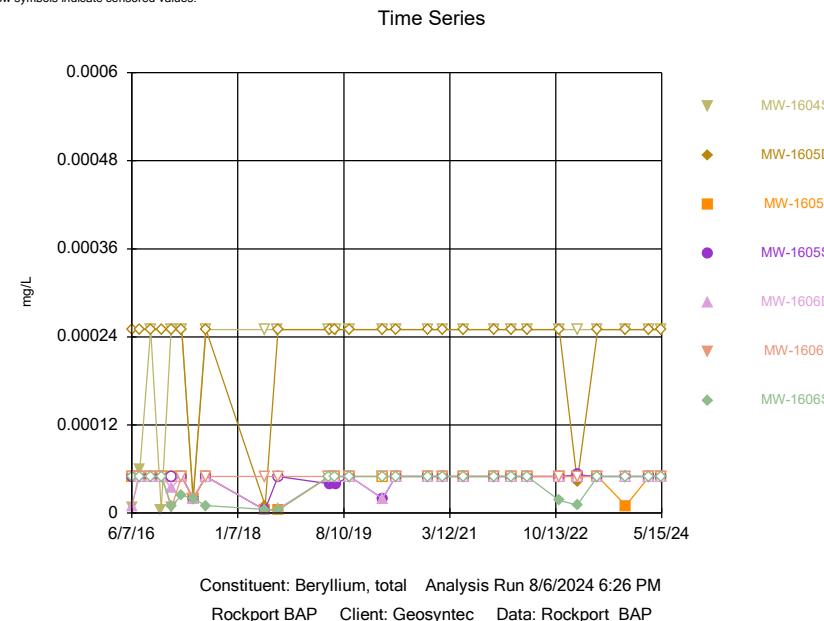
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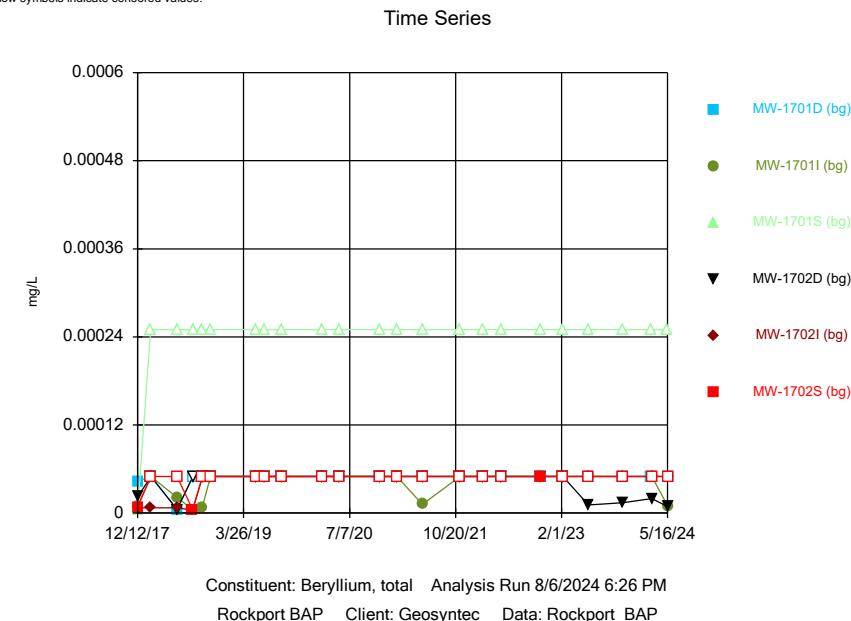
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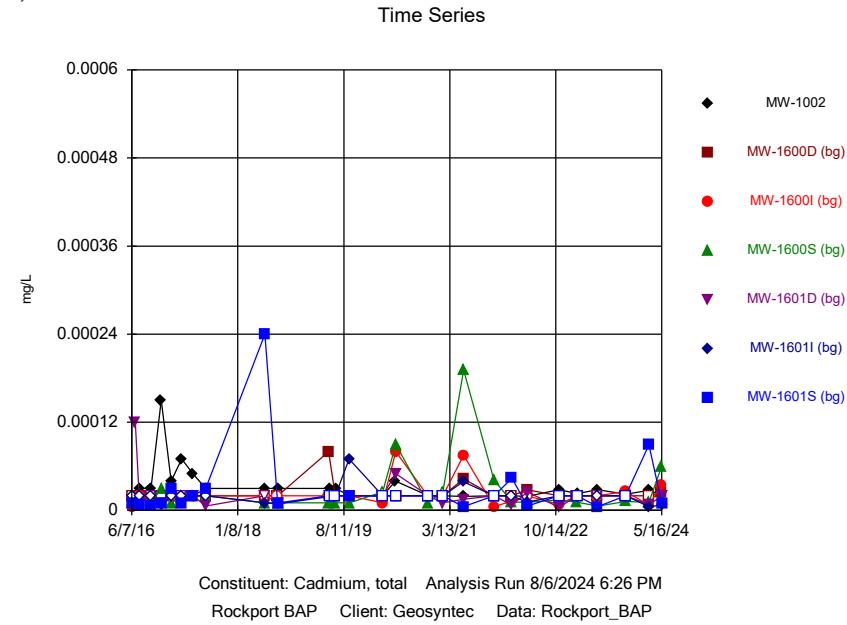
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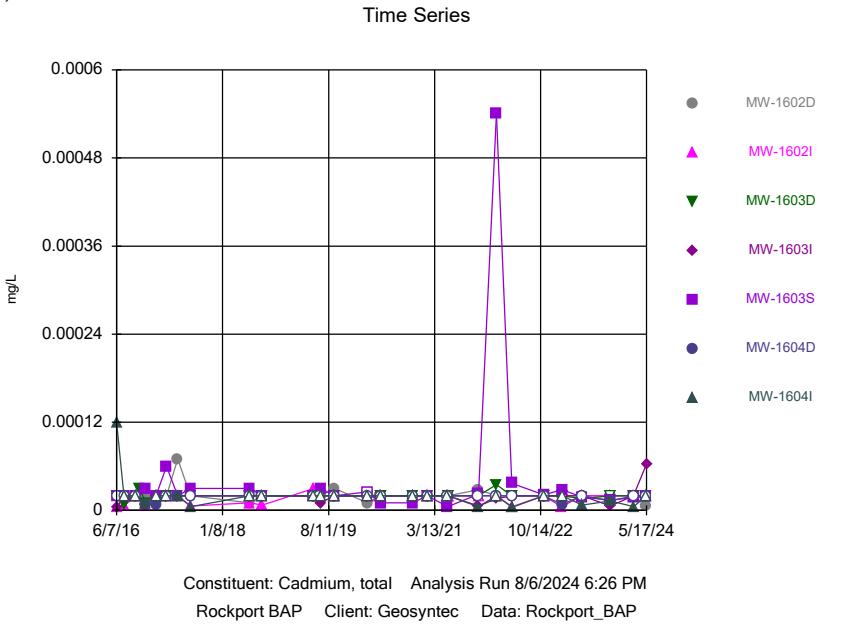
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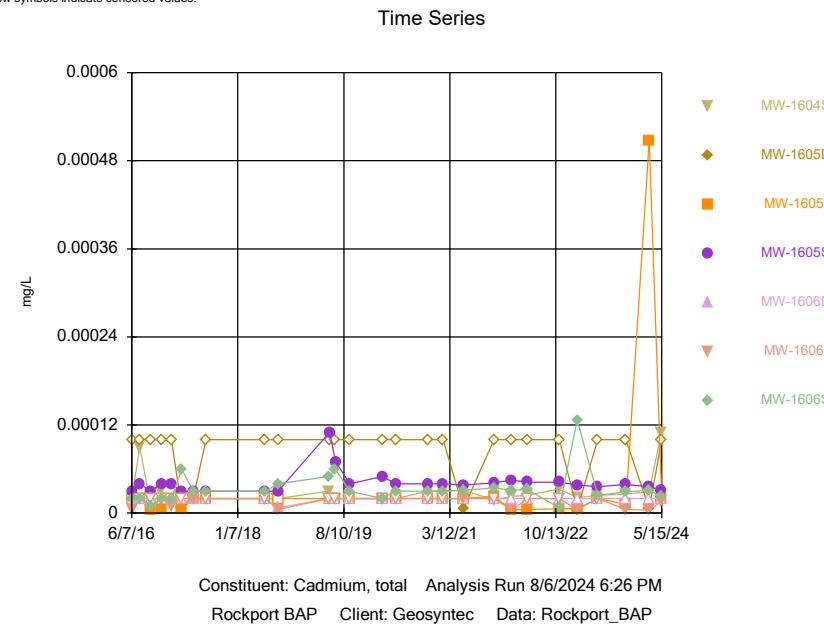
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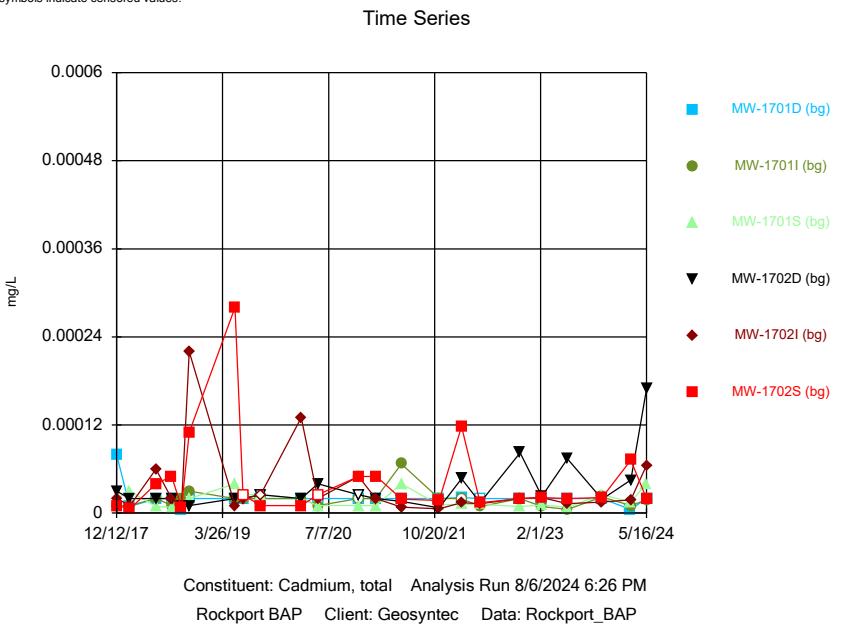
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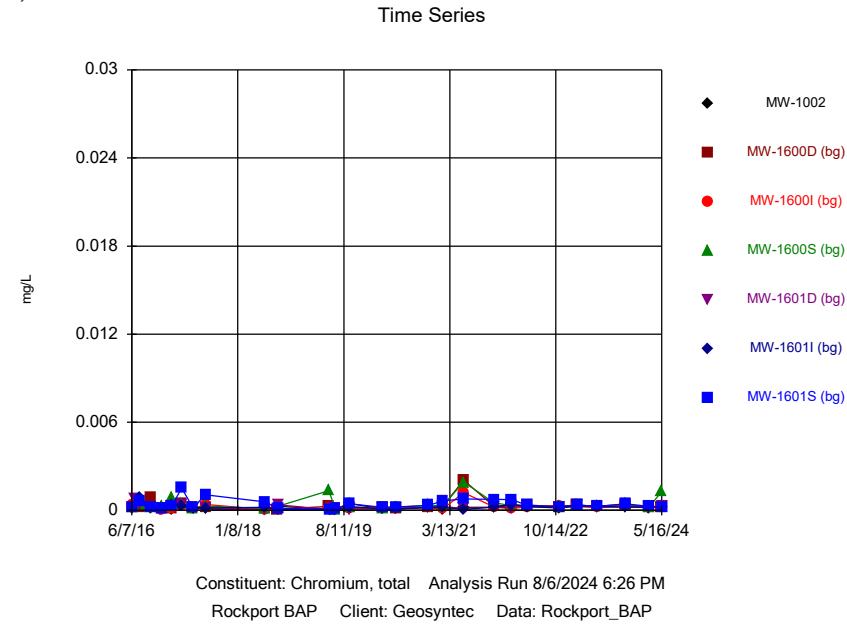
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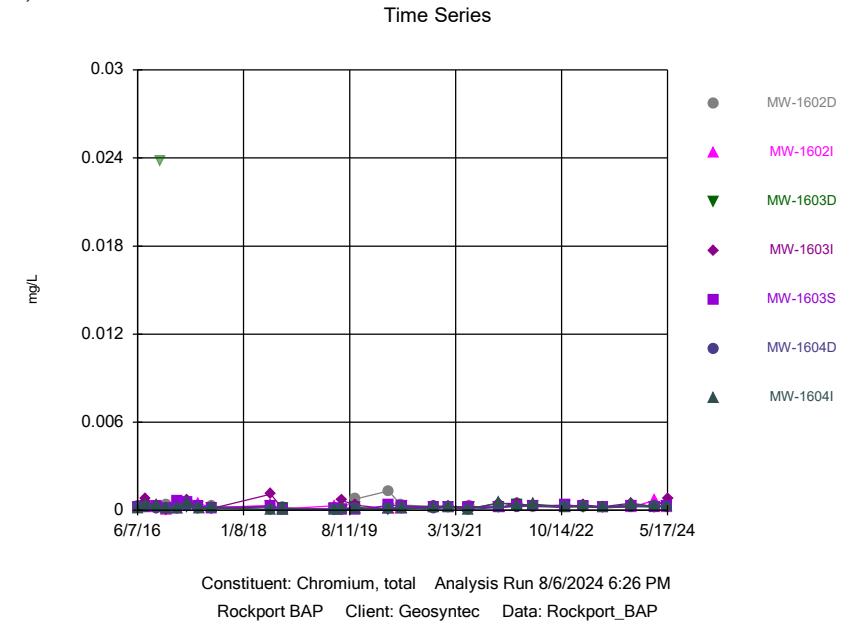
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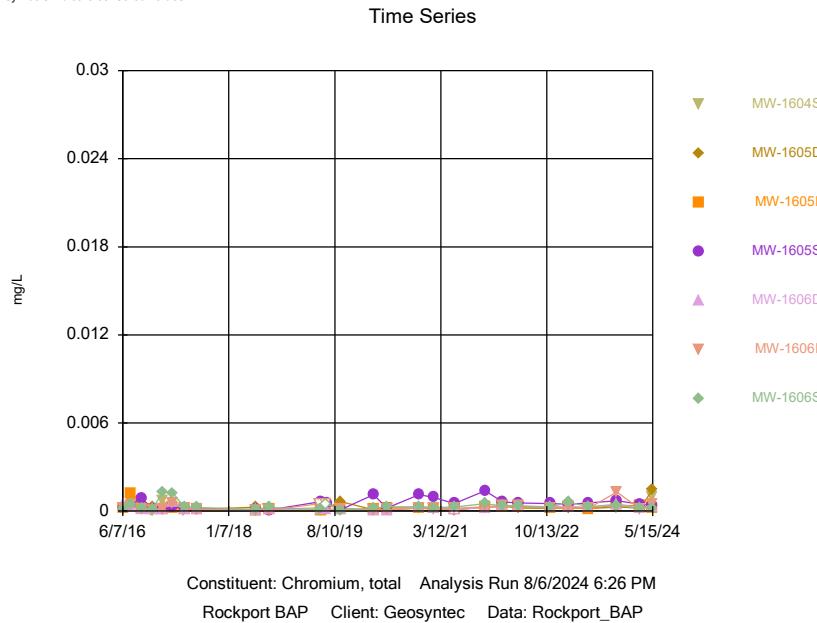
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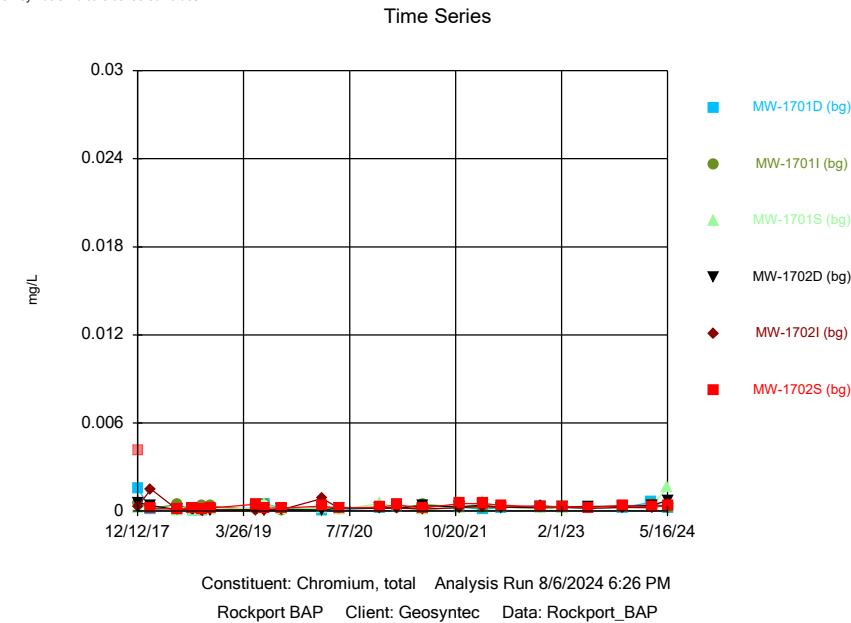
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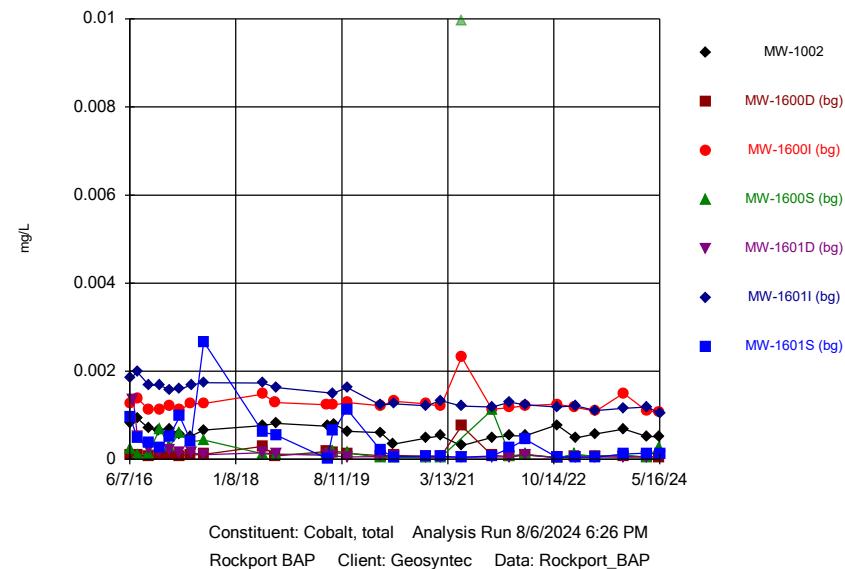
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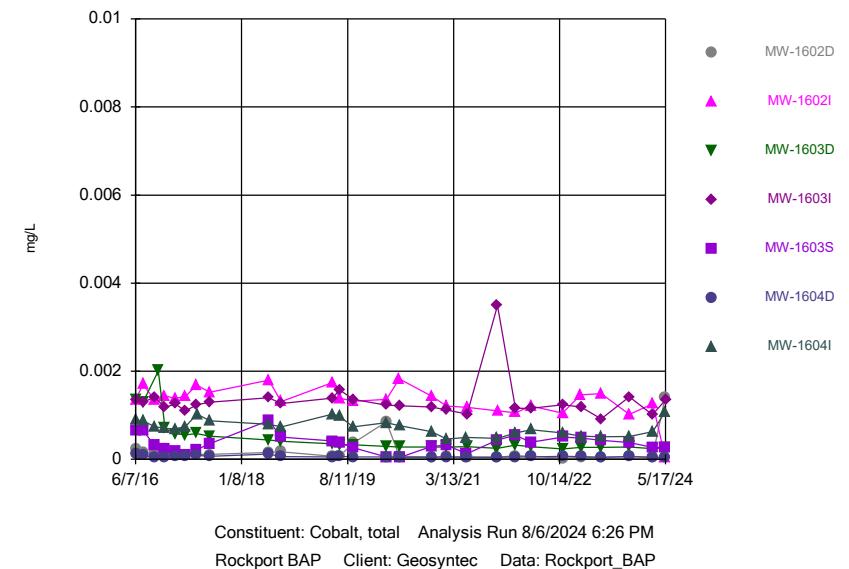
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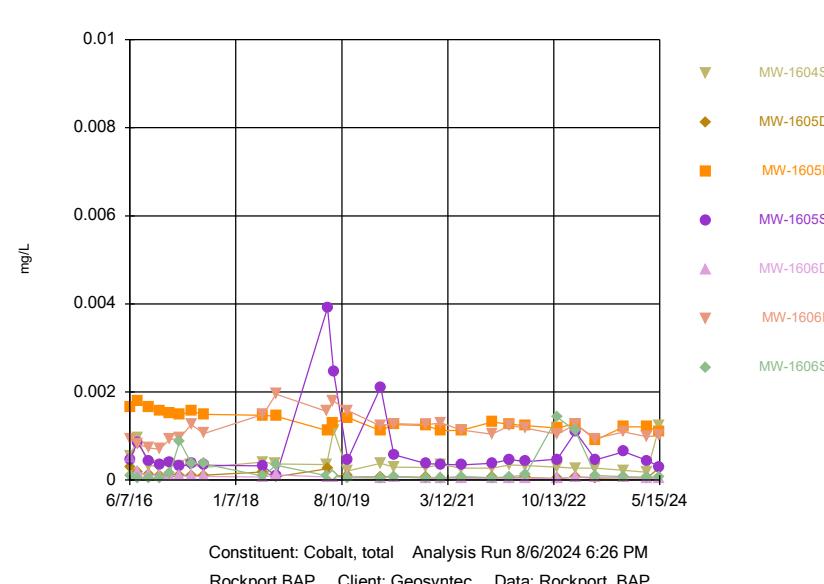
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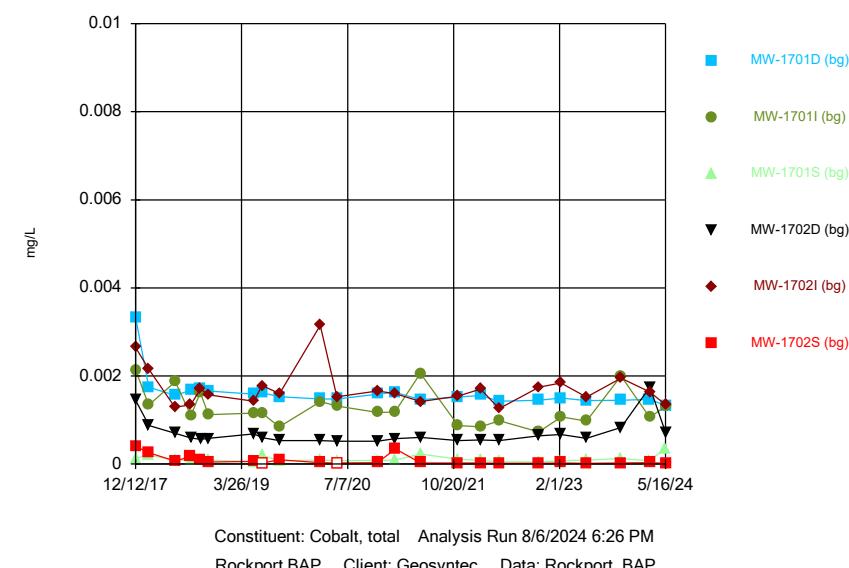
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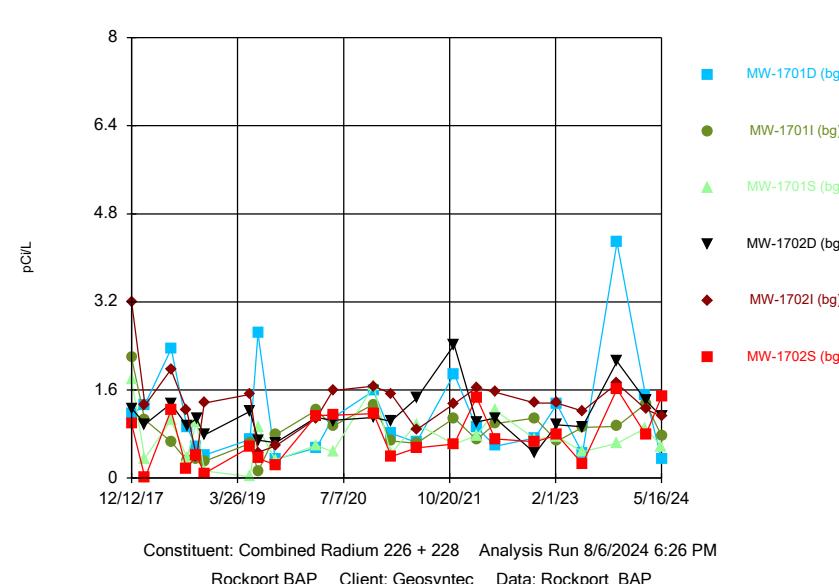
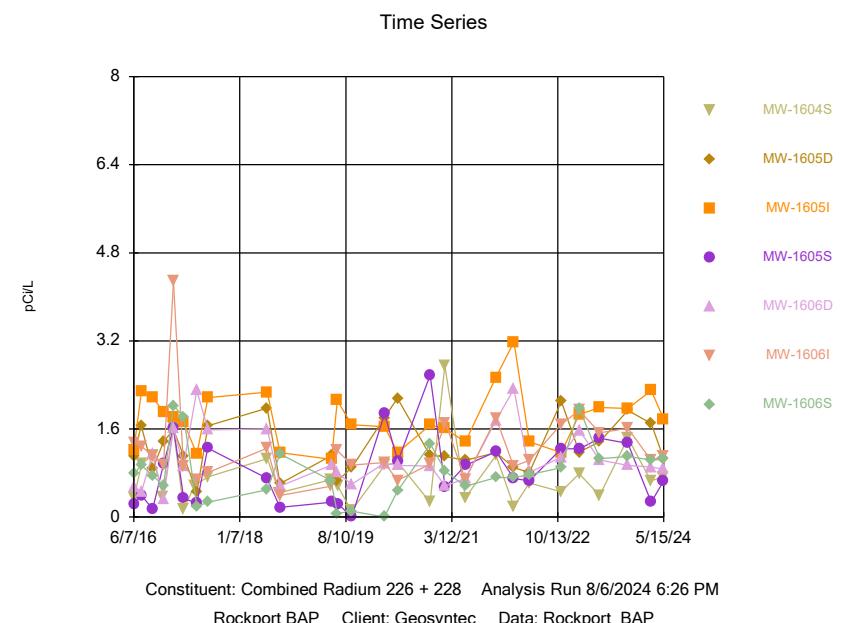
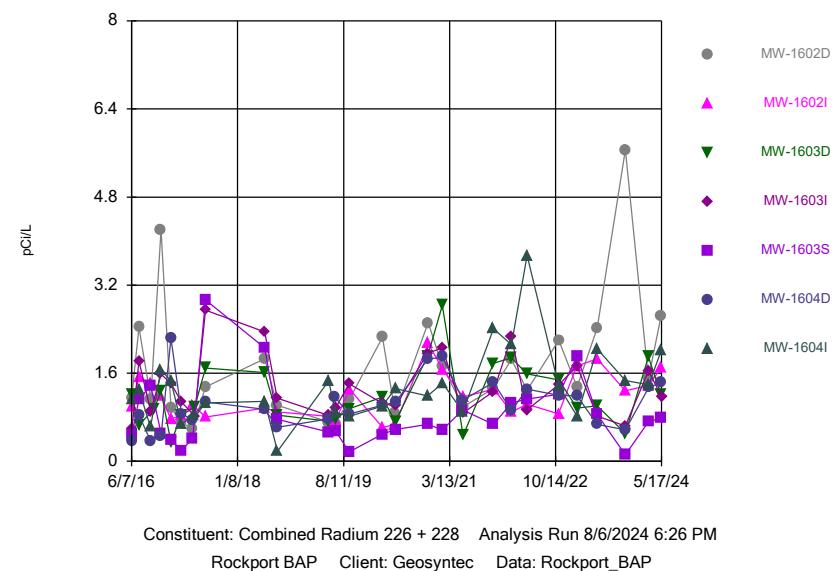
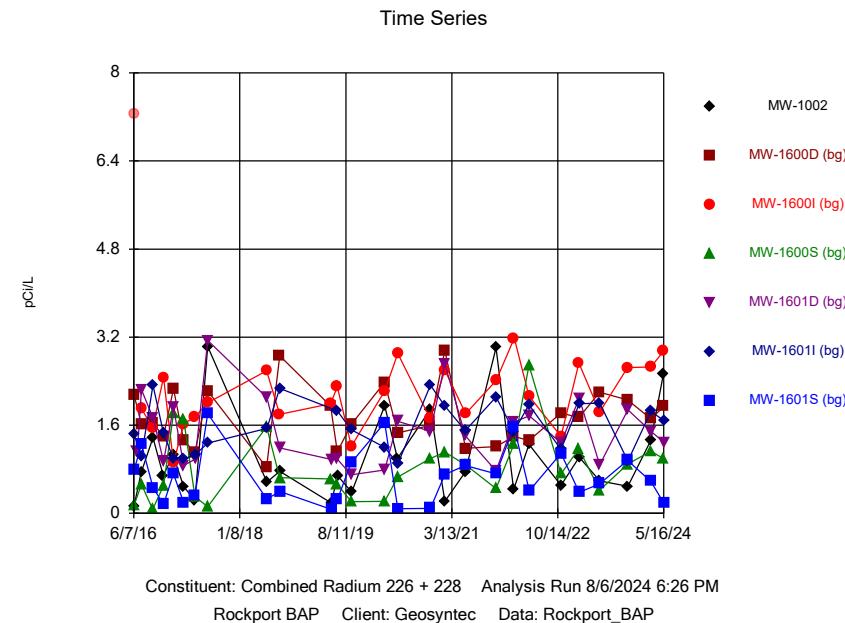


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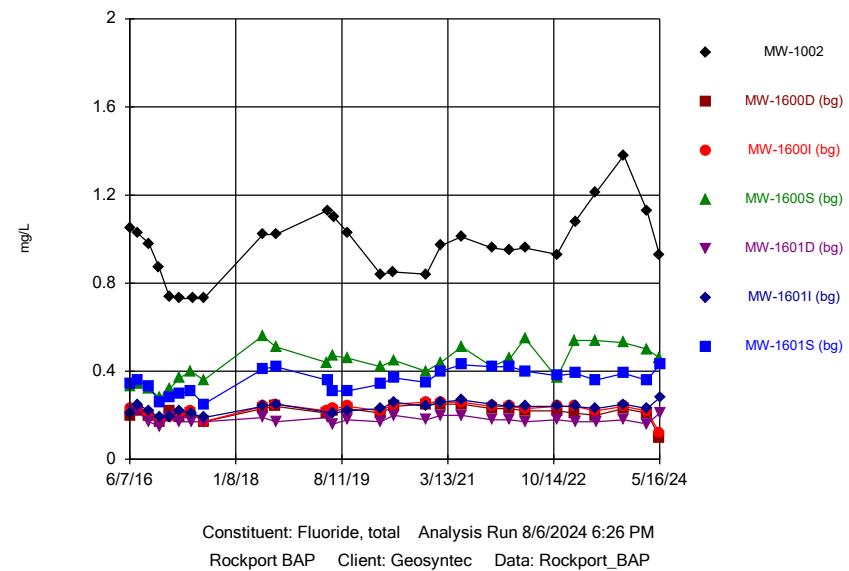


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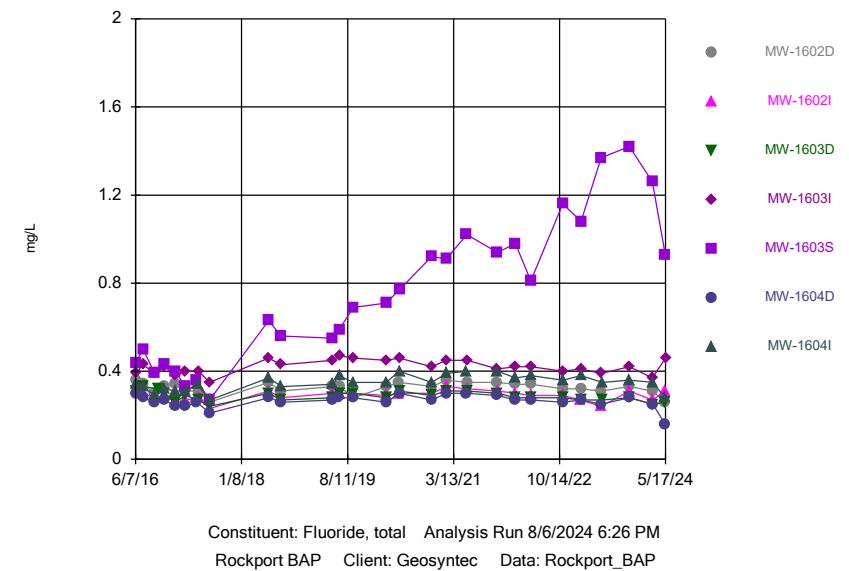




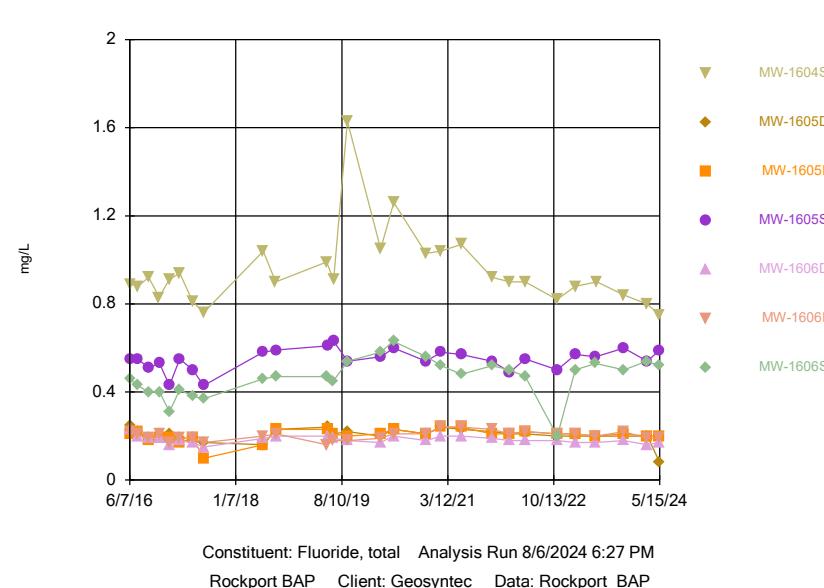
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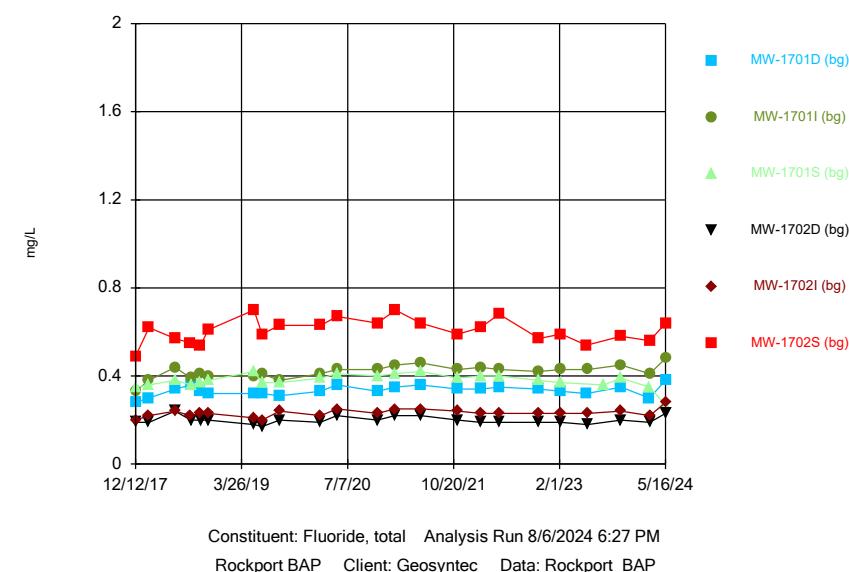
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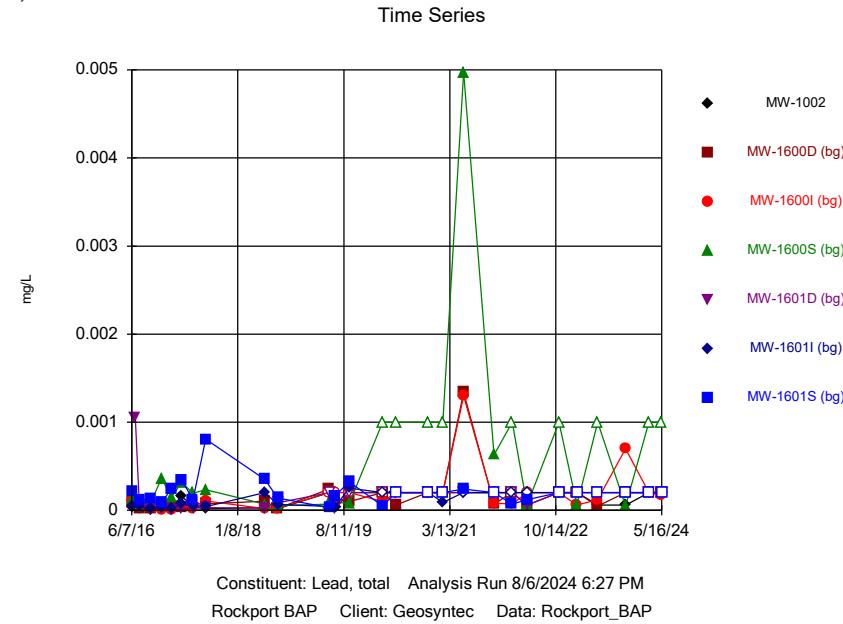
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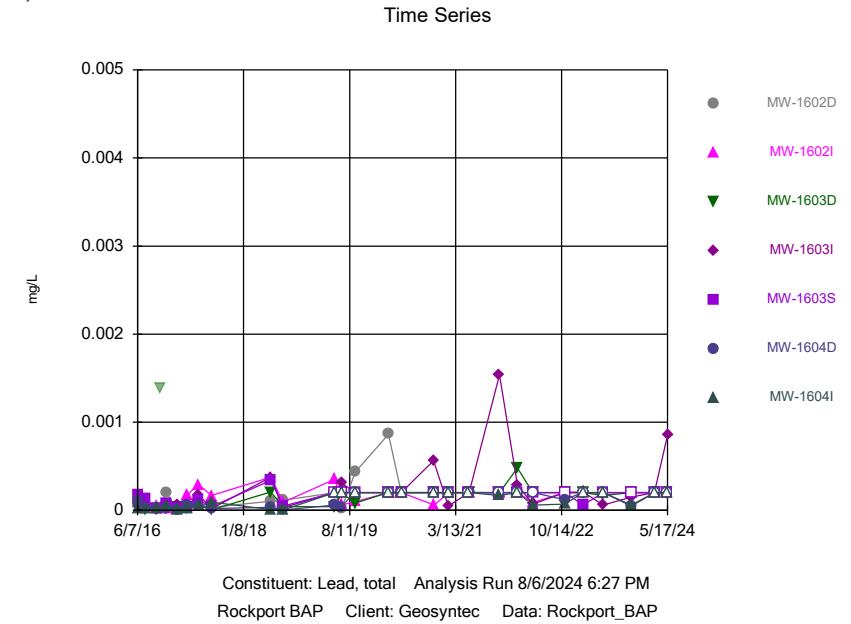
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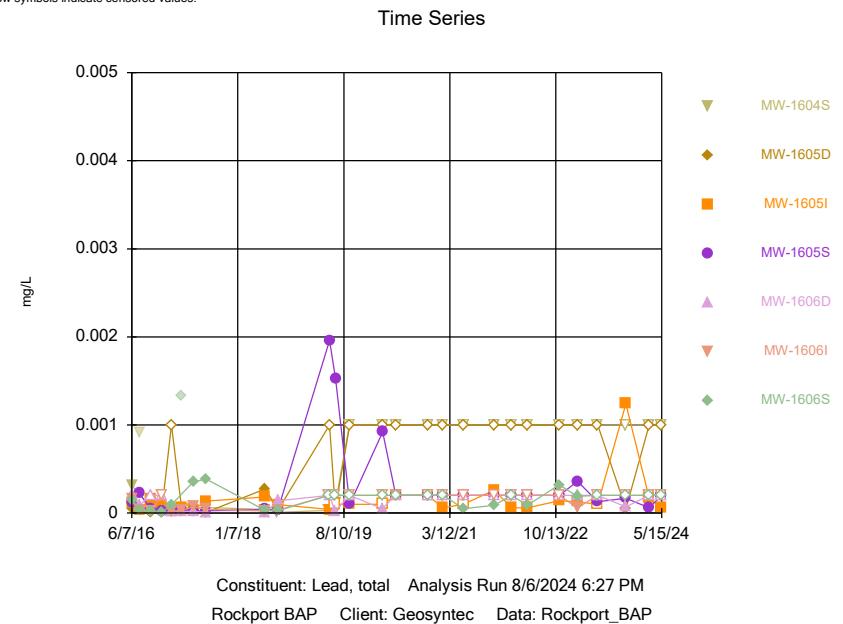
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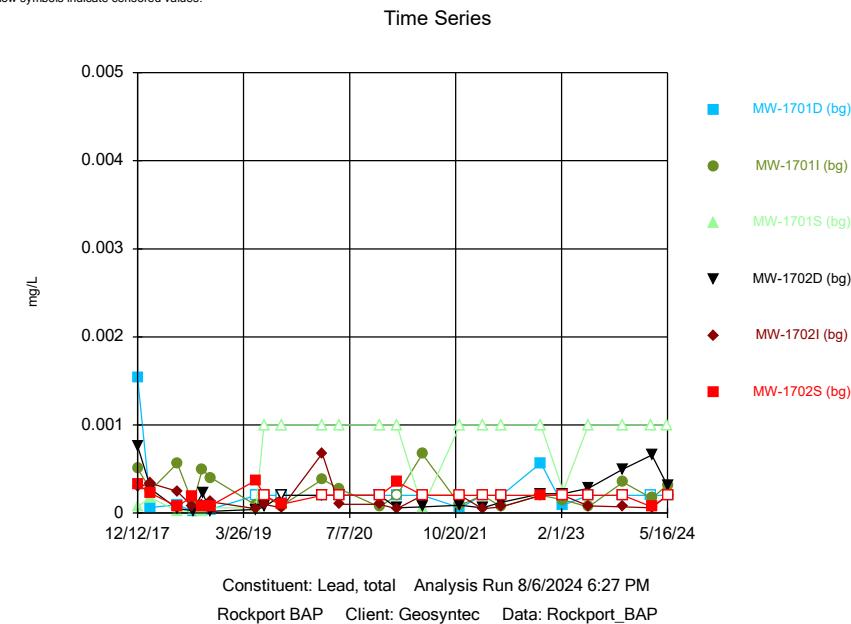
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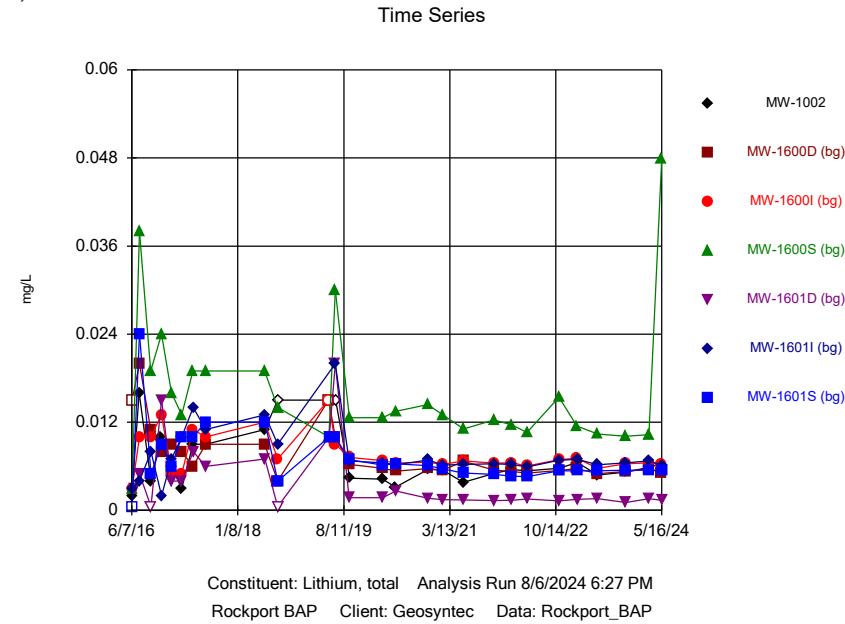
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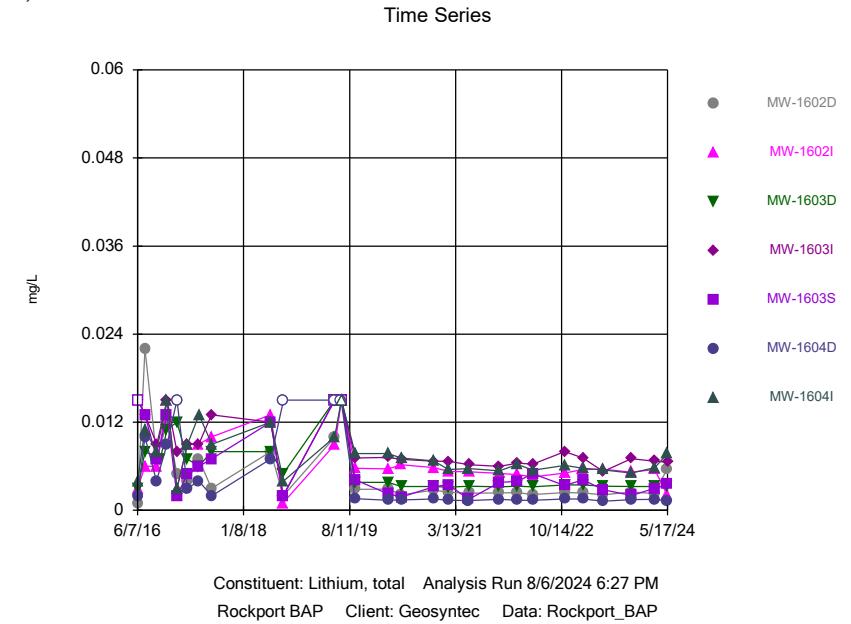
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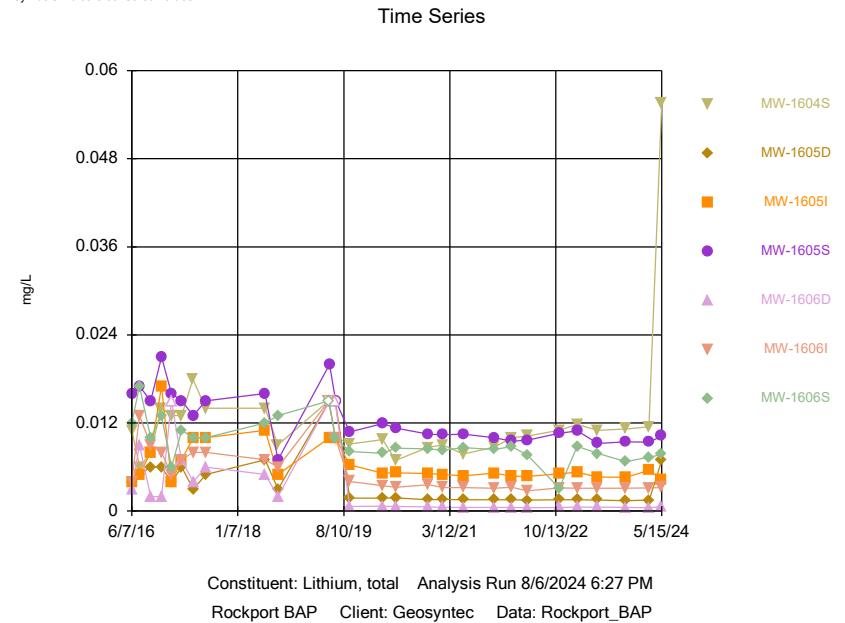
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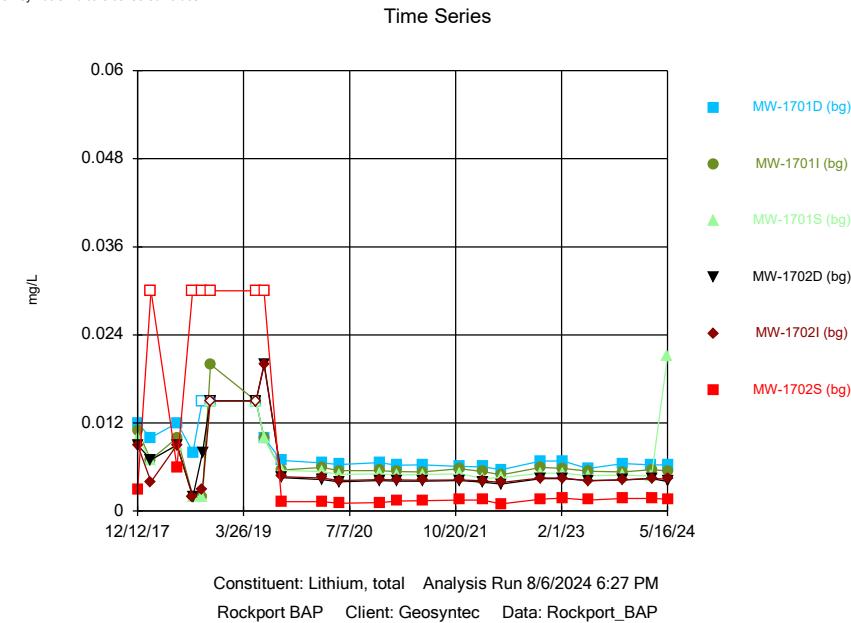
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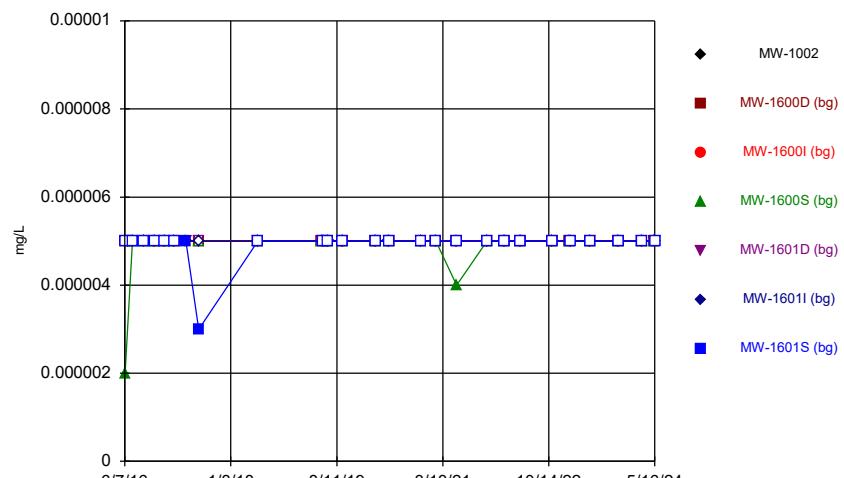


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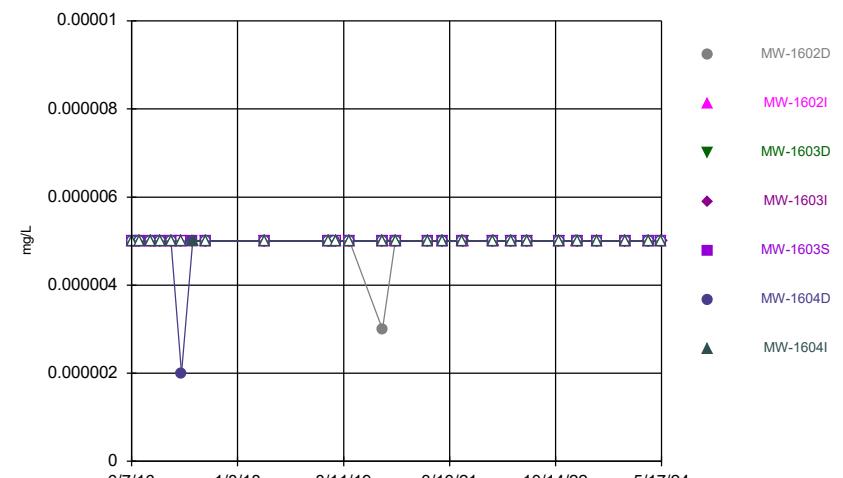
Time Series



Constituent: Mercury, total Analysis Run 8/6/2024 6:27 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Sanitas™ v.10.0.19h Software licensed to Groundwater Stats Consulting, UG  
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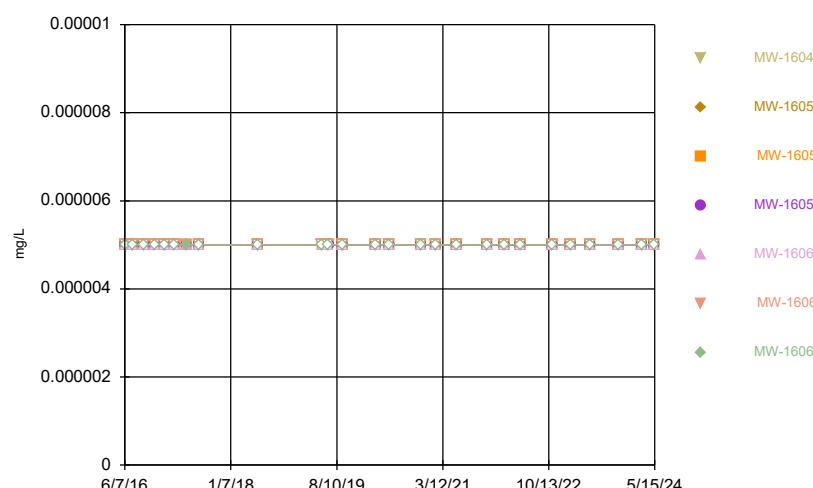
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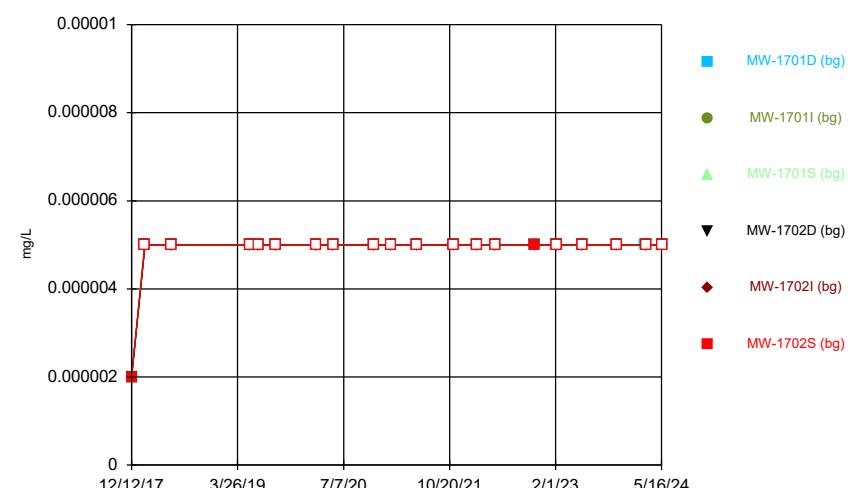
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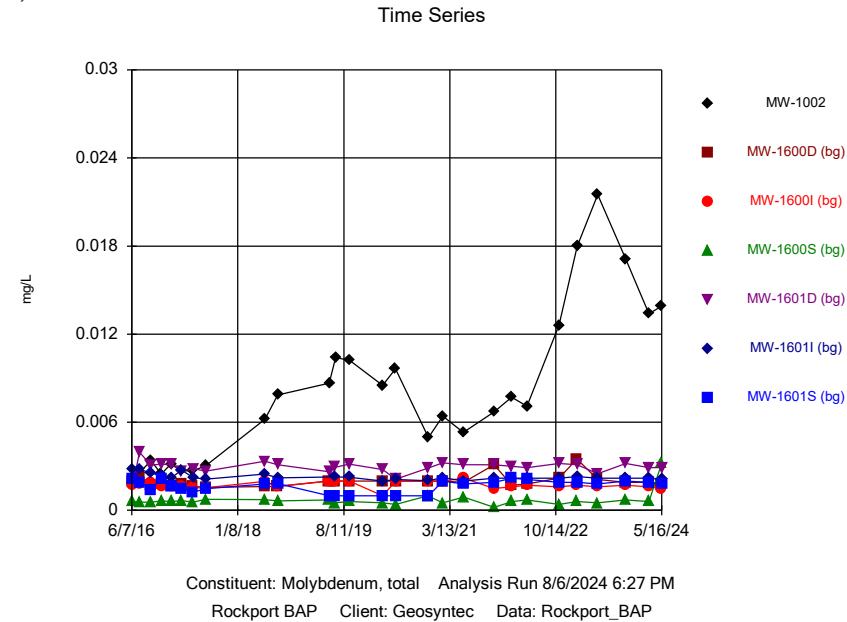
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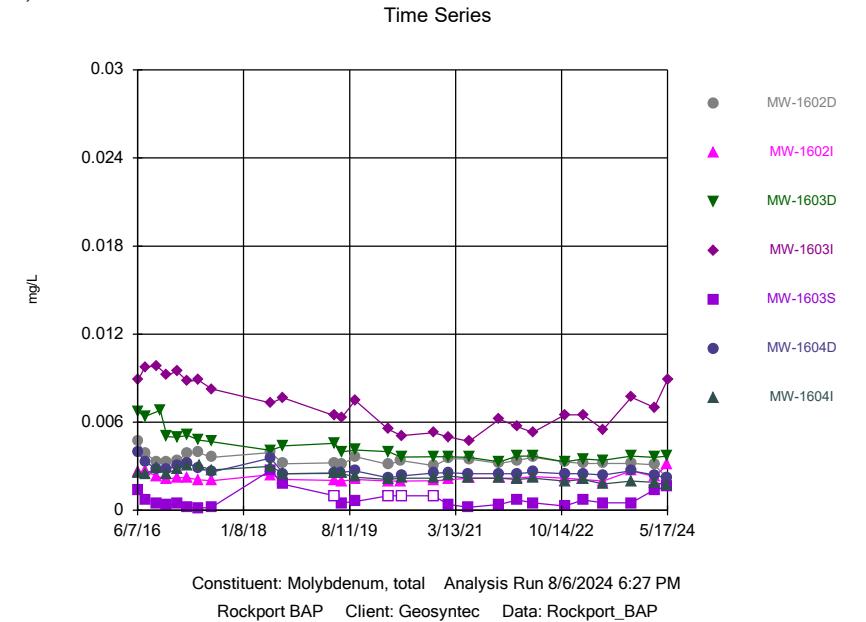


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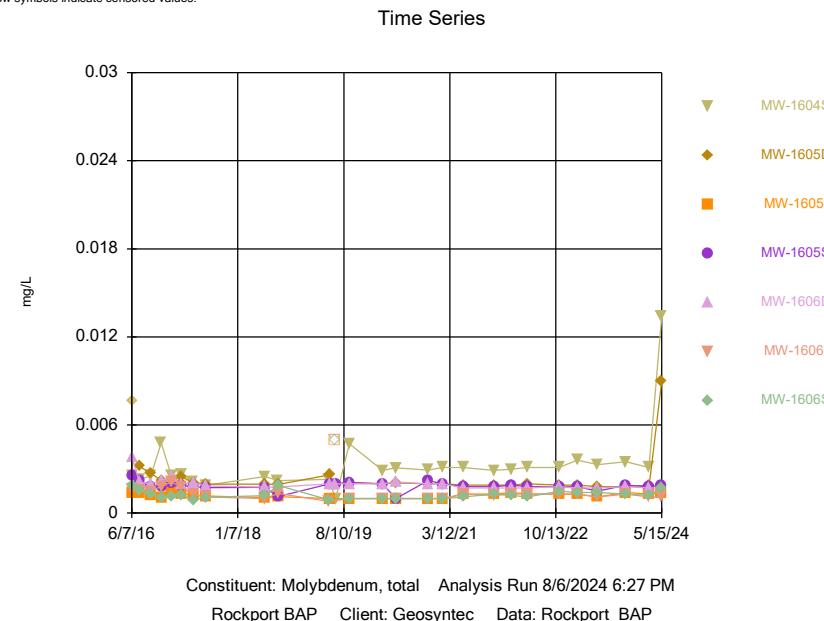
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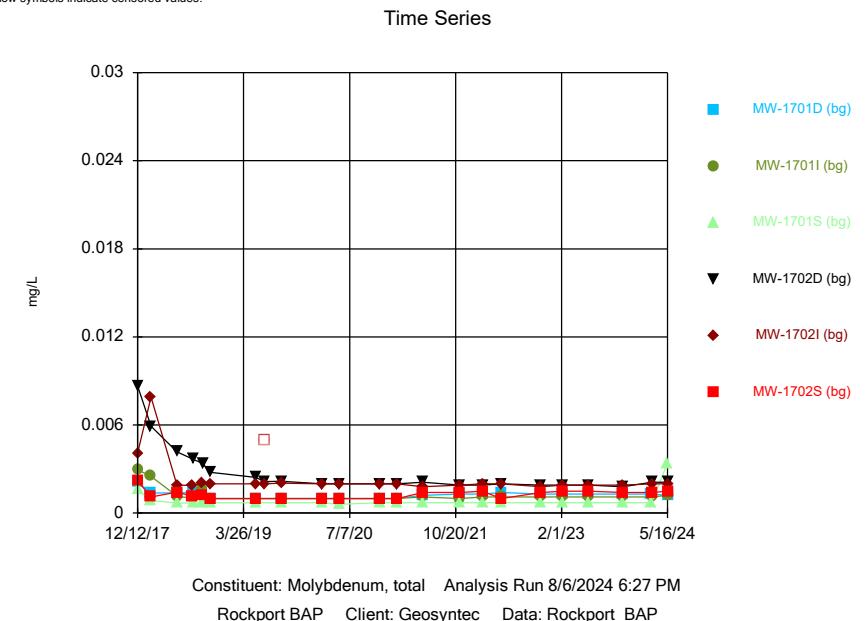
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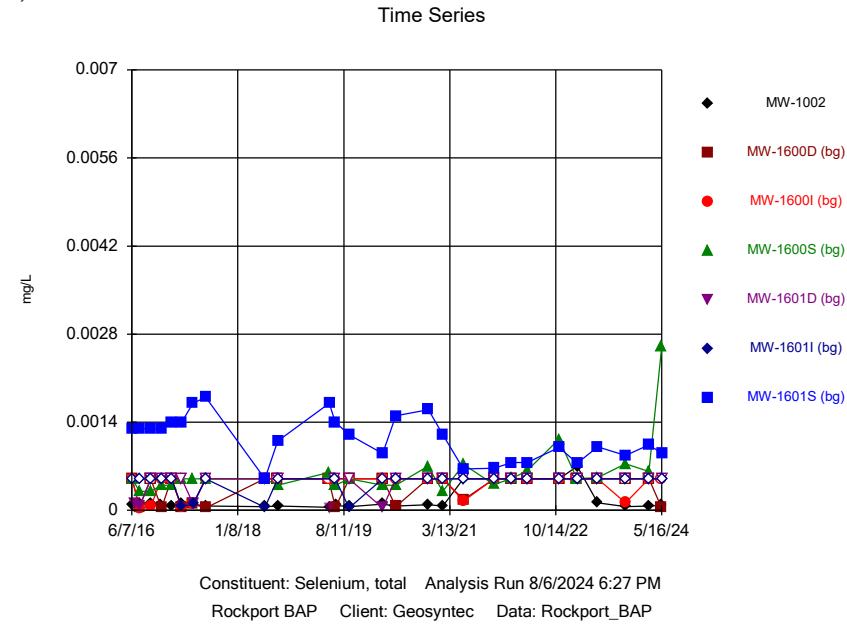
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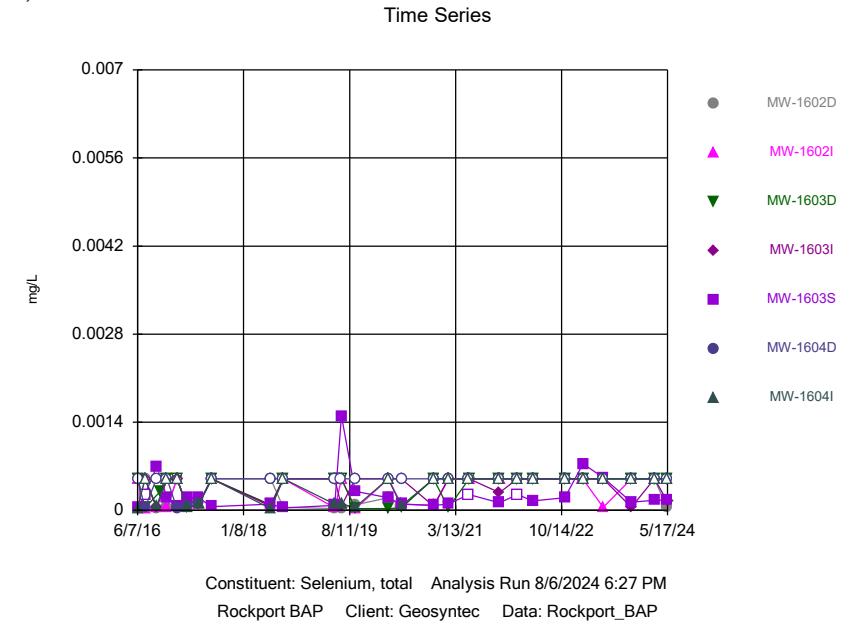
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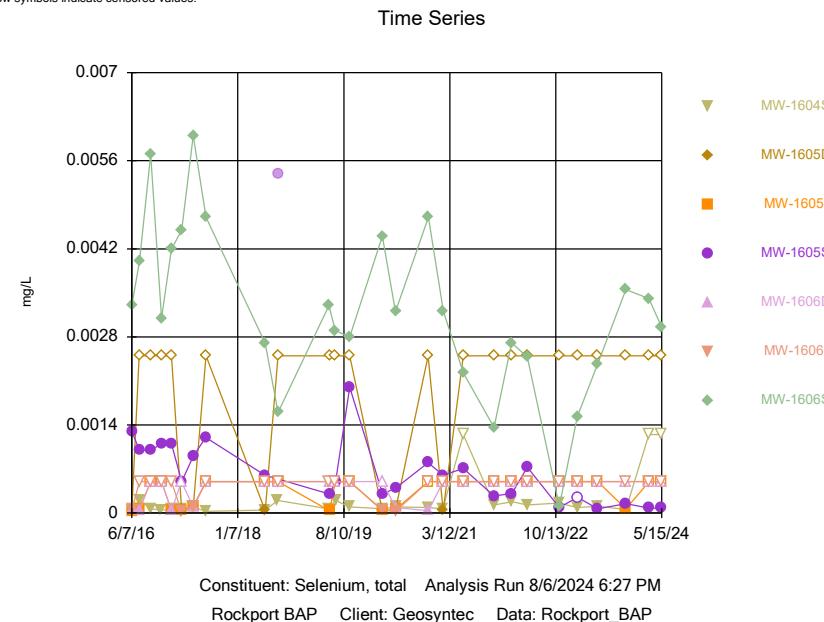
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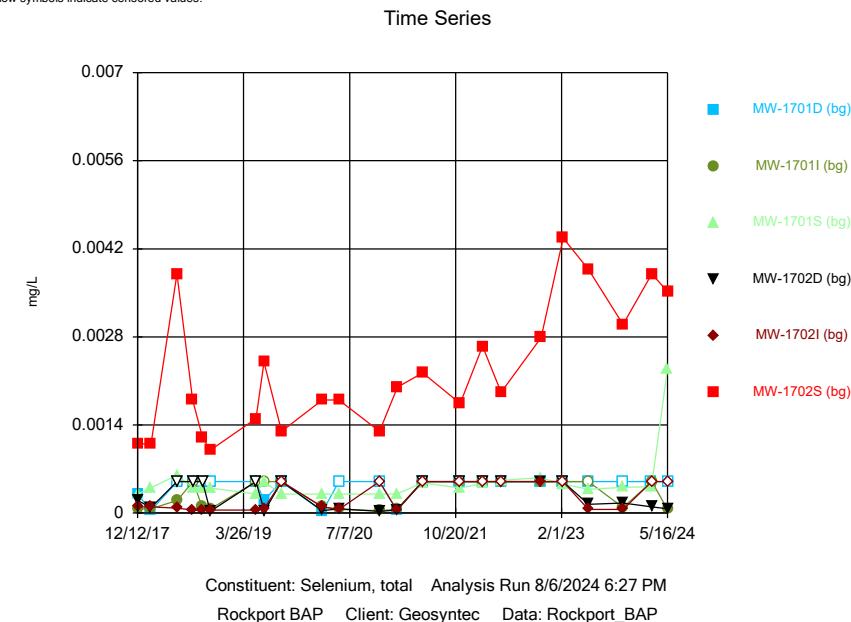
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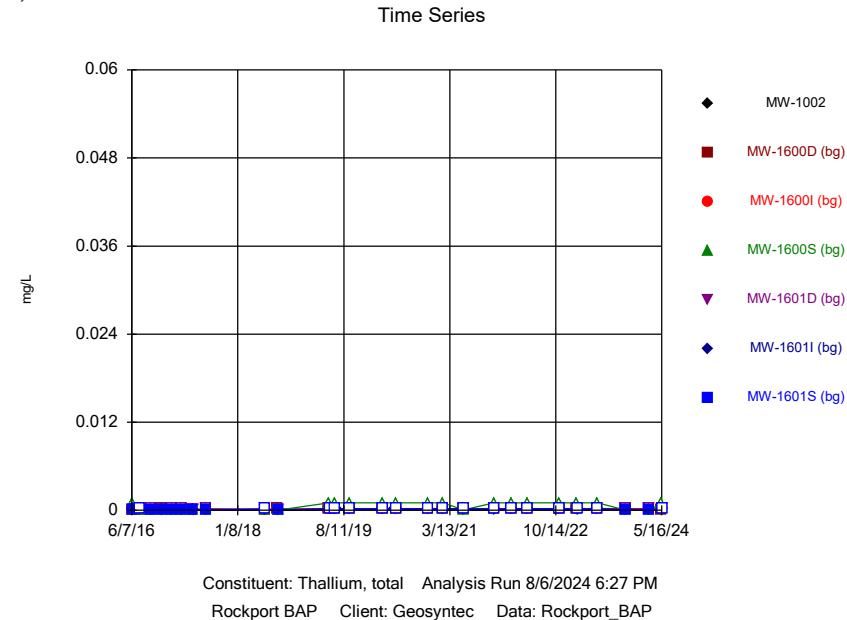
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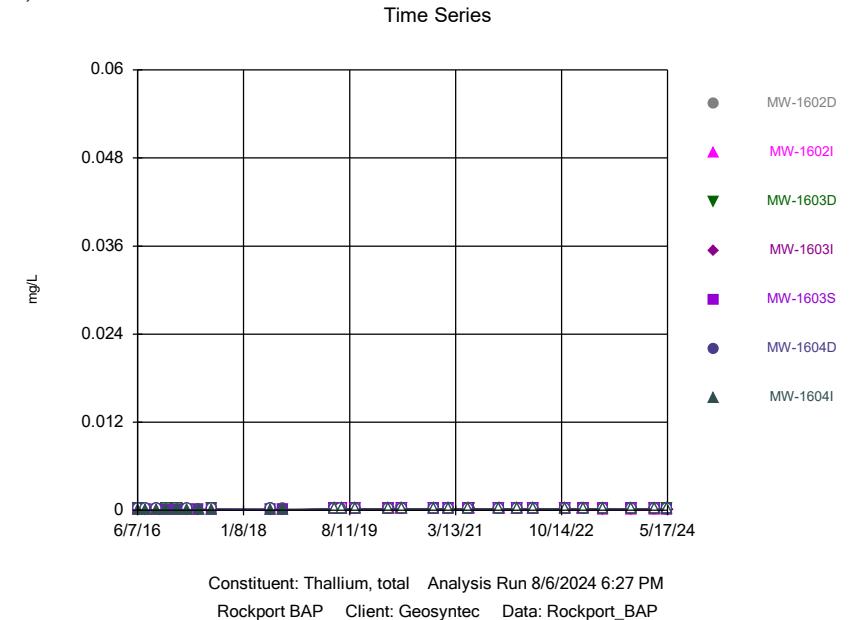
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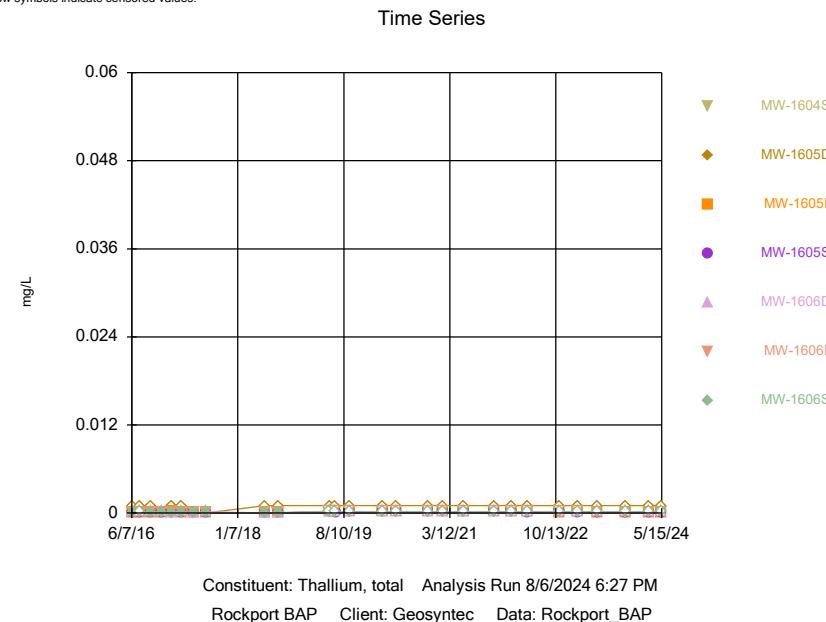
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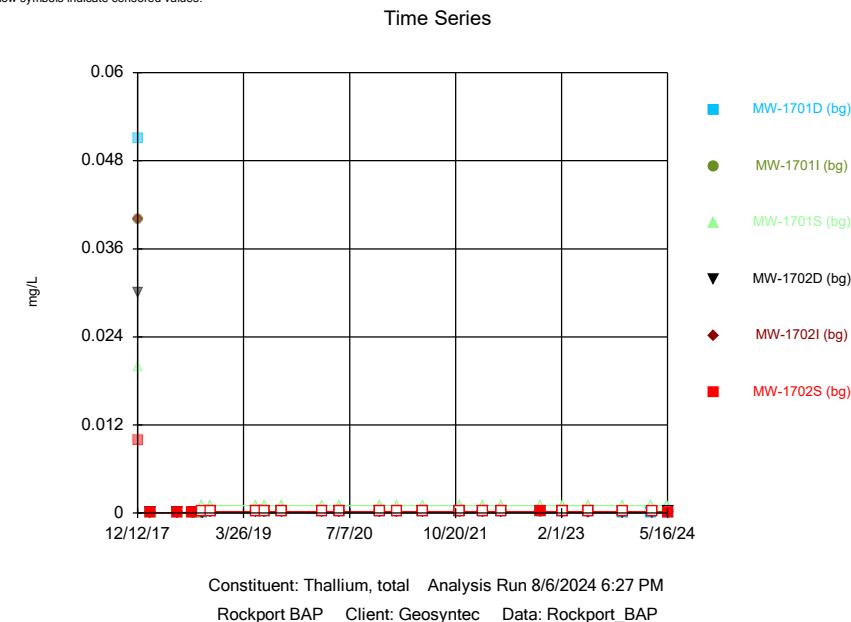
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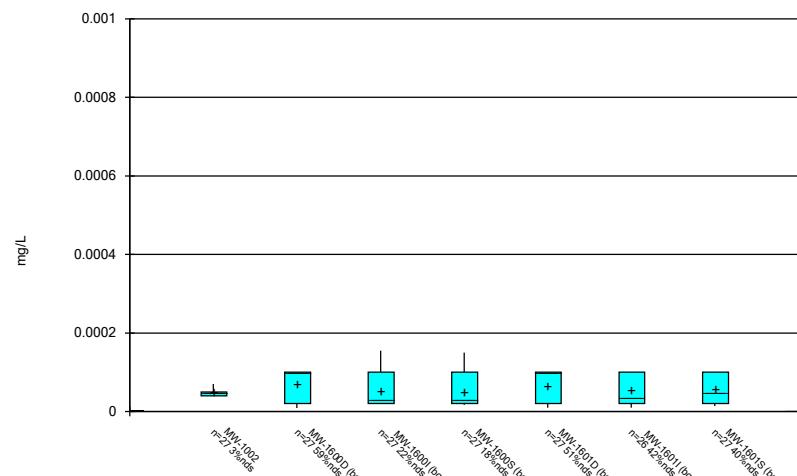


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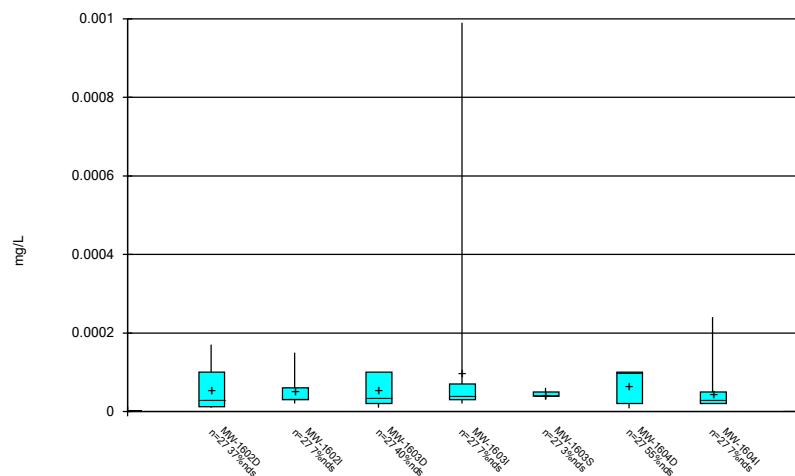


**FIGURE B**  
**Box Plots**

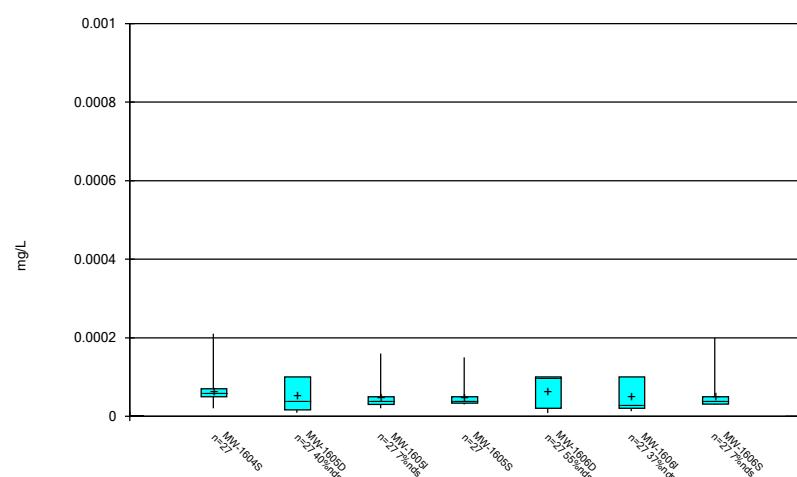
## Box &amp; Whiskers Plot



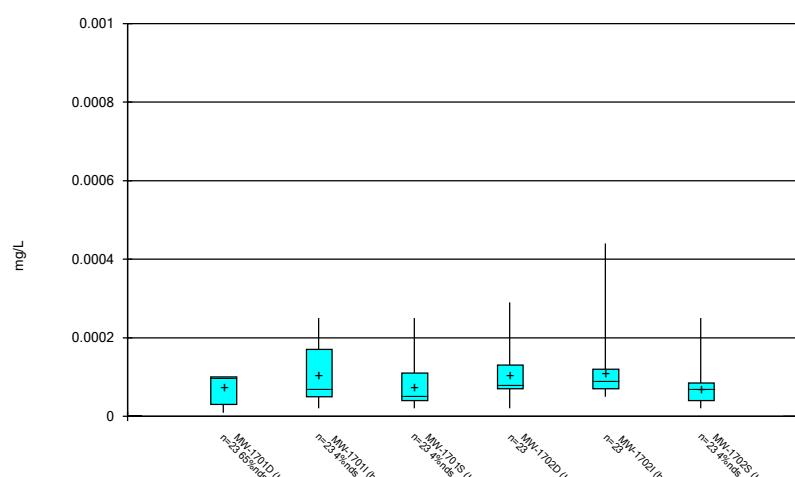
## Box &amp; Whiskers Plot



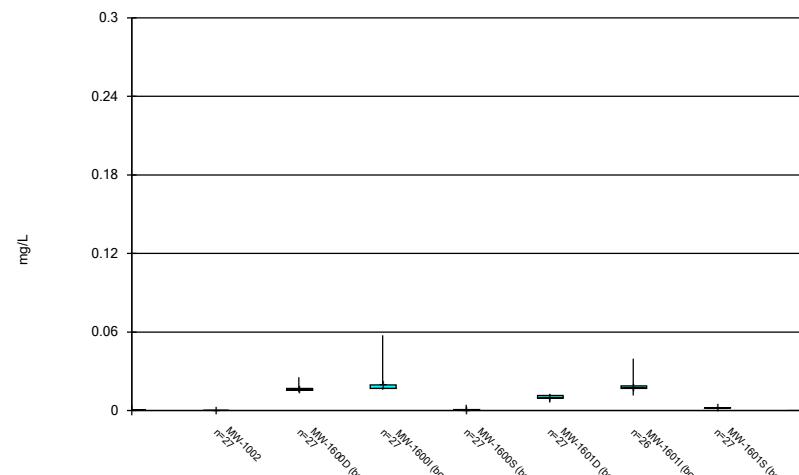
## Box &amp; Whiskers Plot



## Box &amp; Whiskers Plot

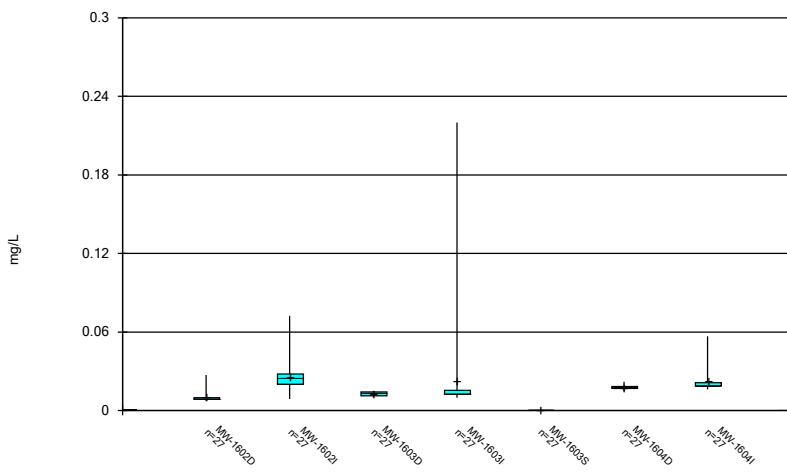


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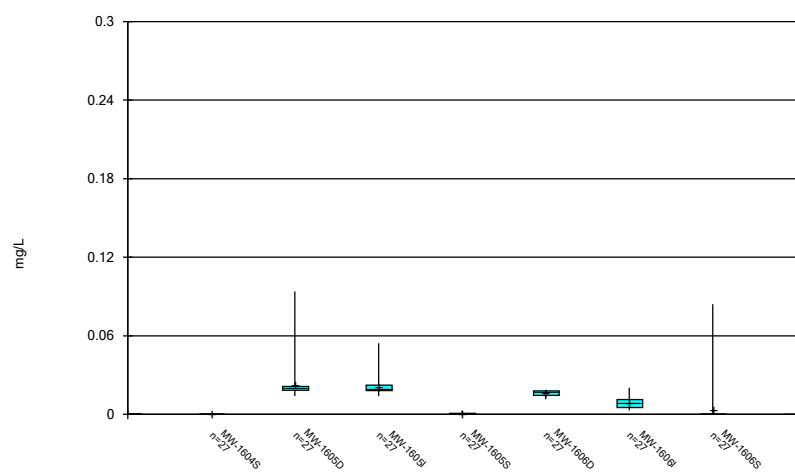
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



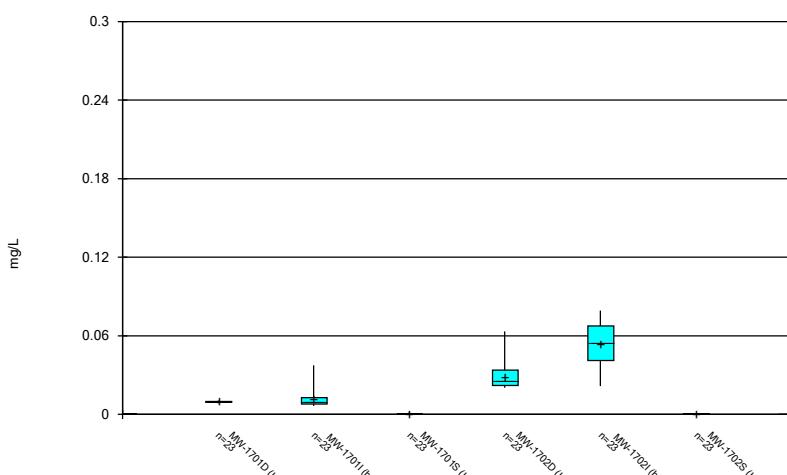
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## Box &amp; Whiskers Plot



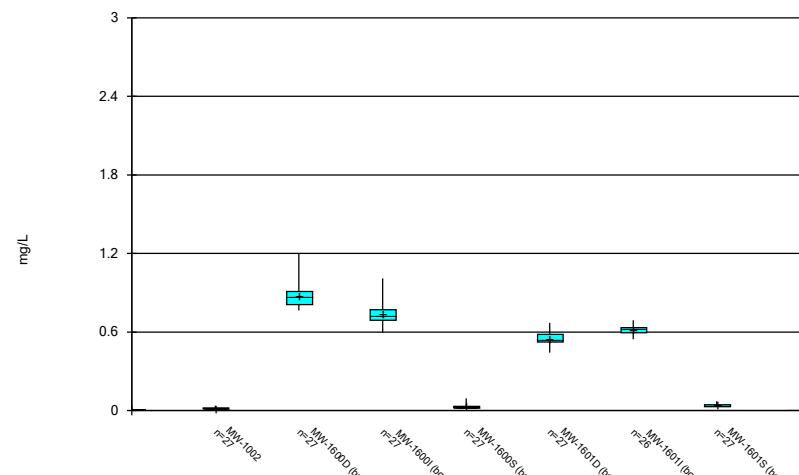
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## Box &amp; Whiskers Plot



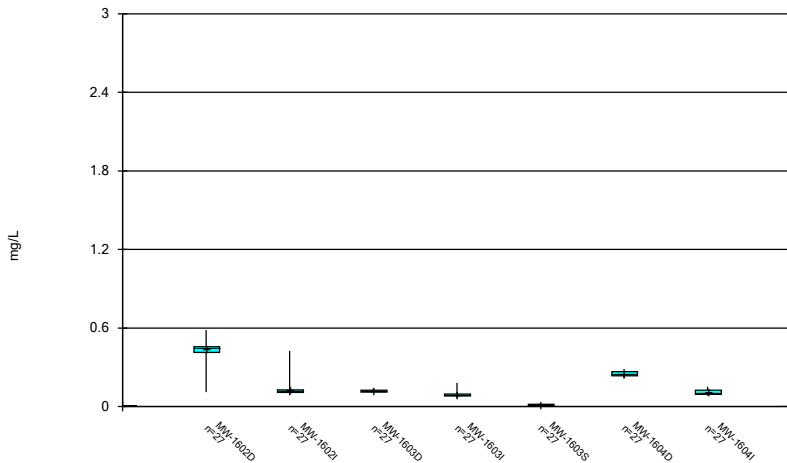
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## Box &amp; Whiskers Plot



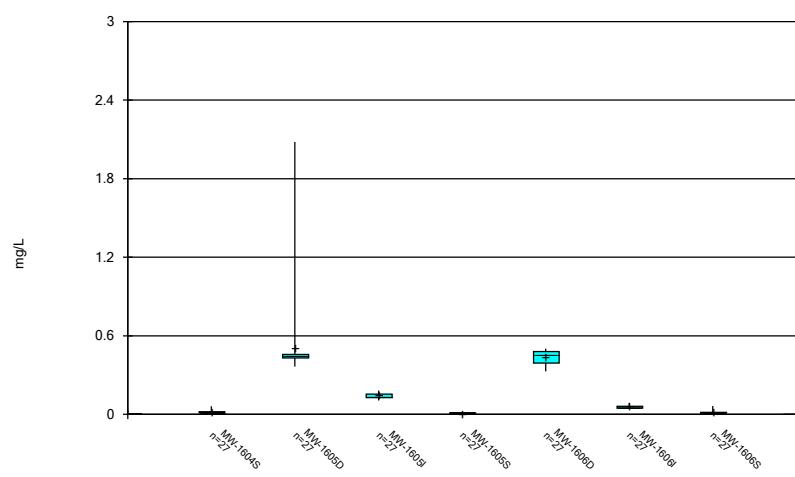
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## Box &amp; Whiskers Plot



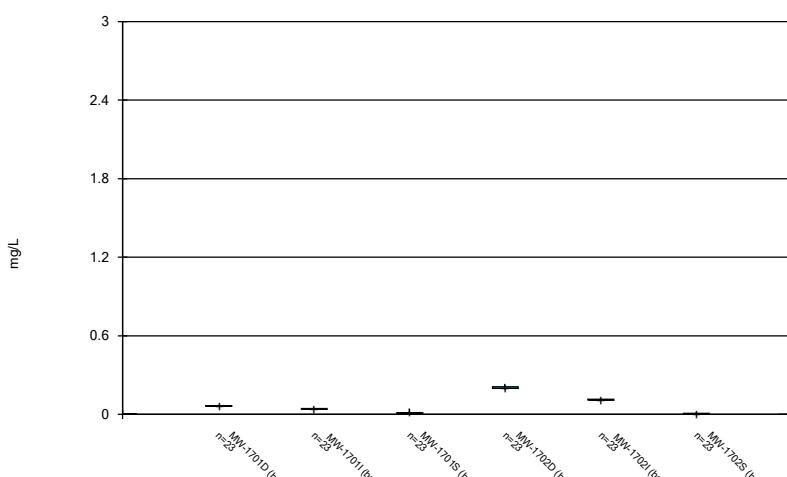
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## Box &amp; Whiskers Plot



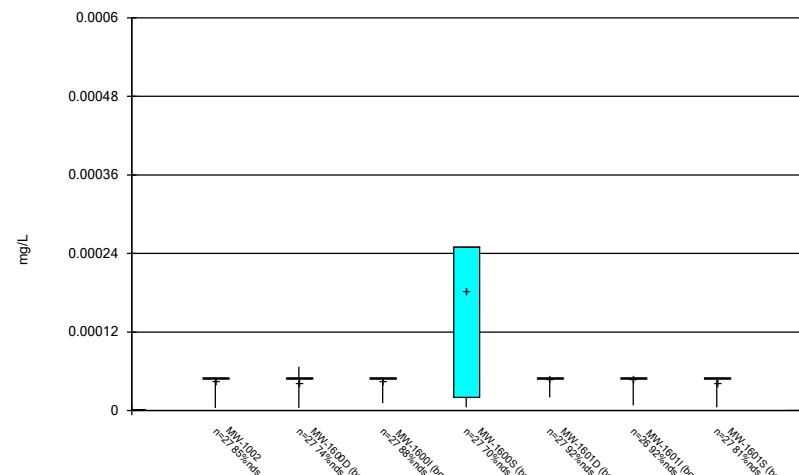
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## Box &amp; Whiskers Plot

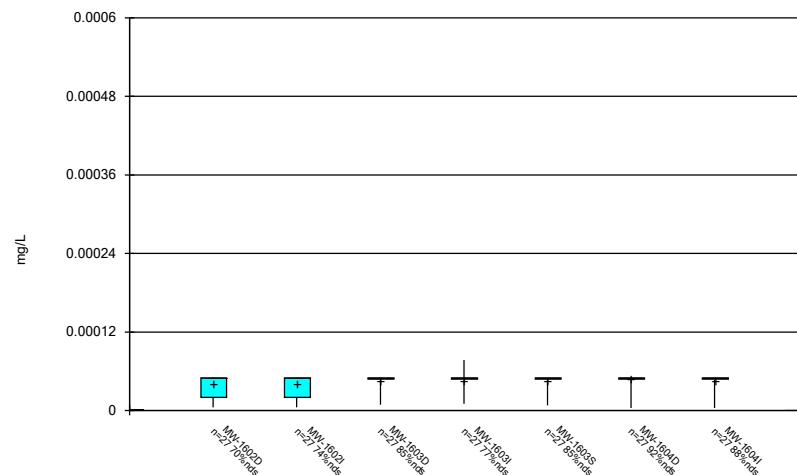


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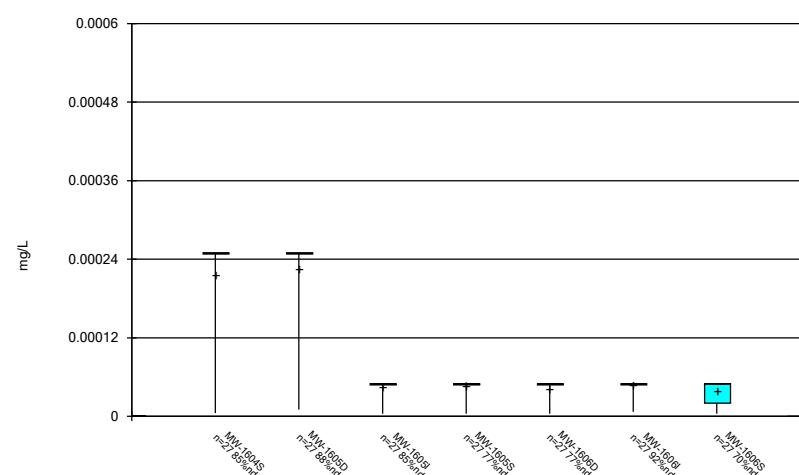
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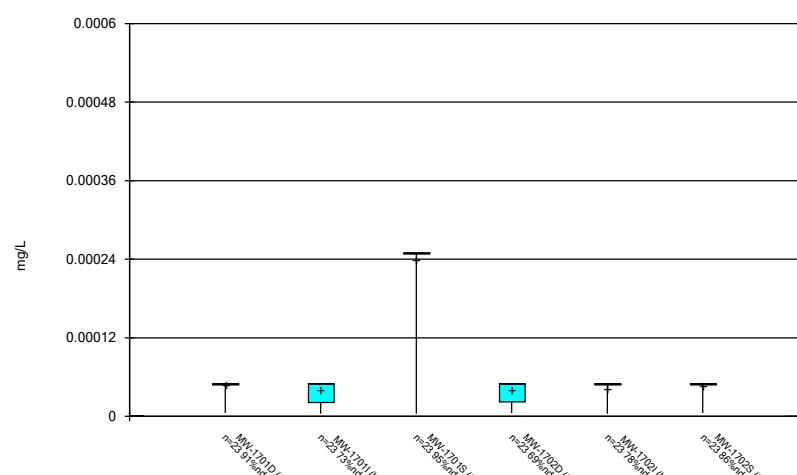
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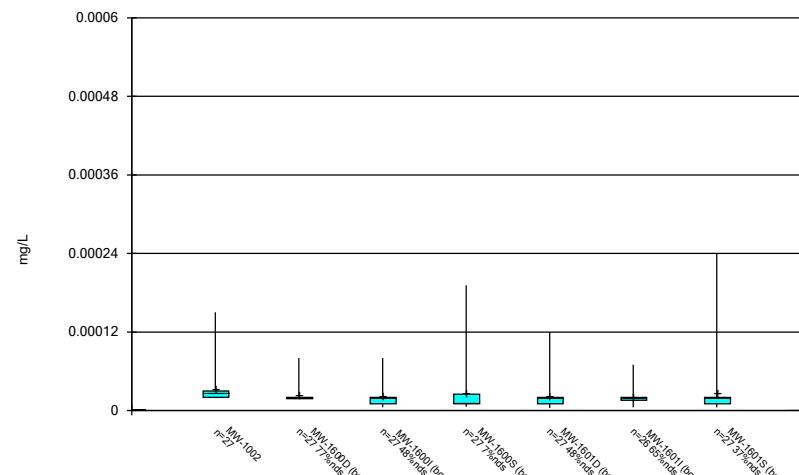
## Box &amp; Whiskers Plot



## Box &amp; Whiskers Plot

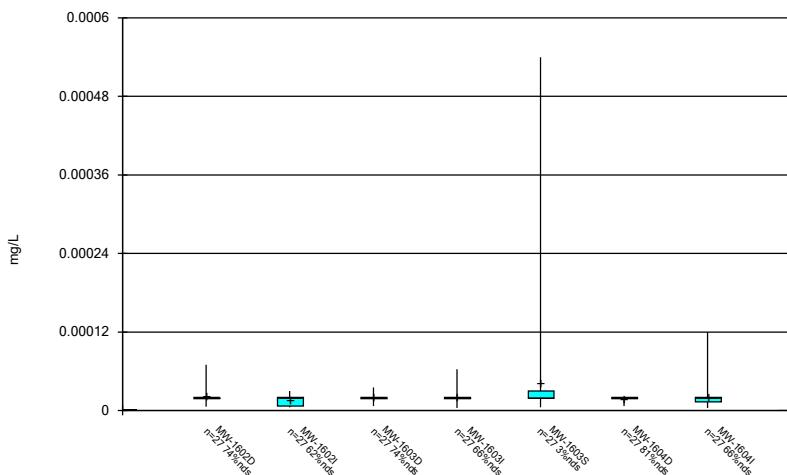


## Box &amp; Whiskers Plot



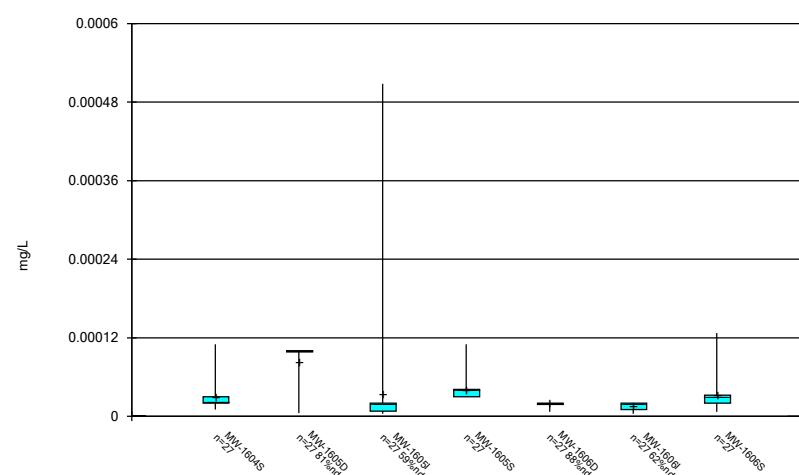
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## Box &amp; Whiskers Plot



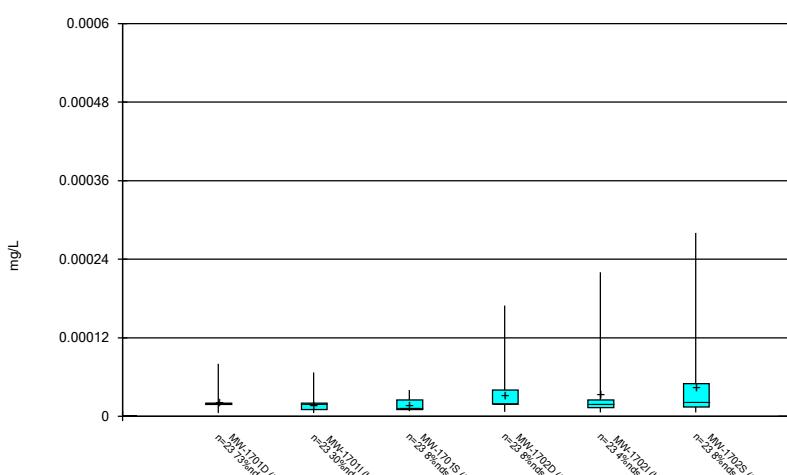
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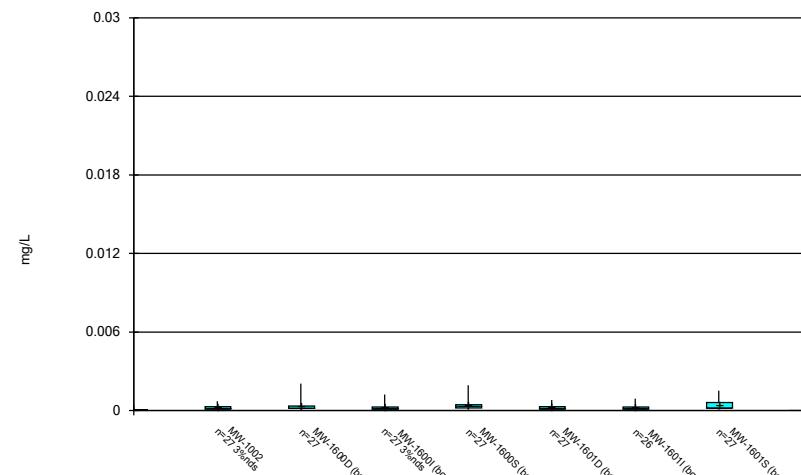


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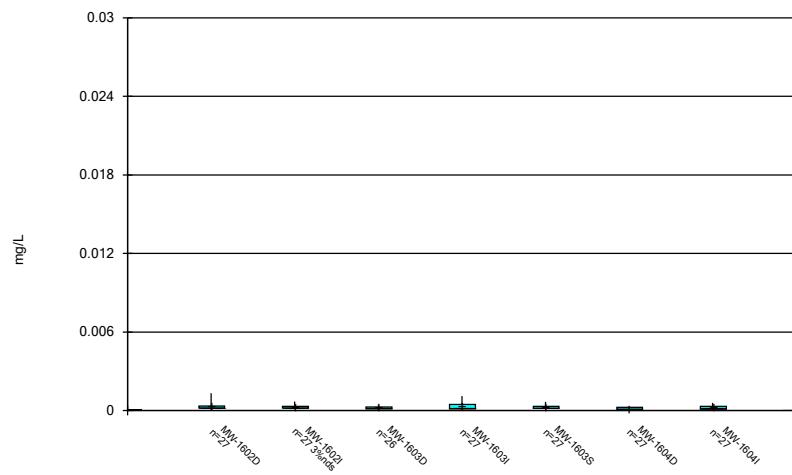
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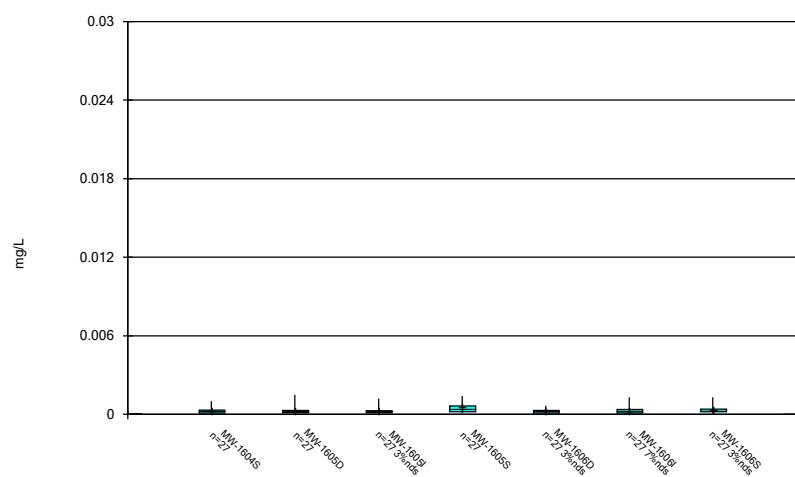
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**Box & Whiskers Plot**

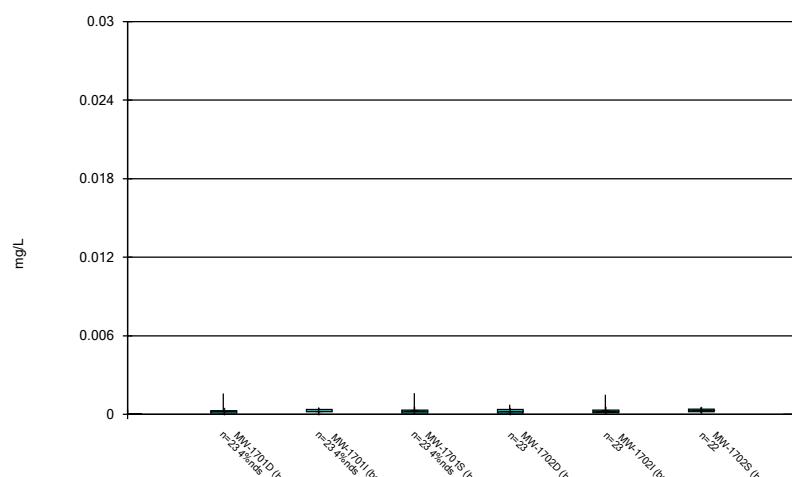
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP

**Box & Whiskers Plot**

Constituent: Chromium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

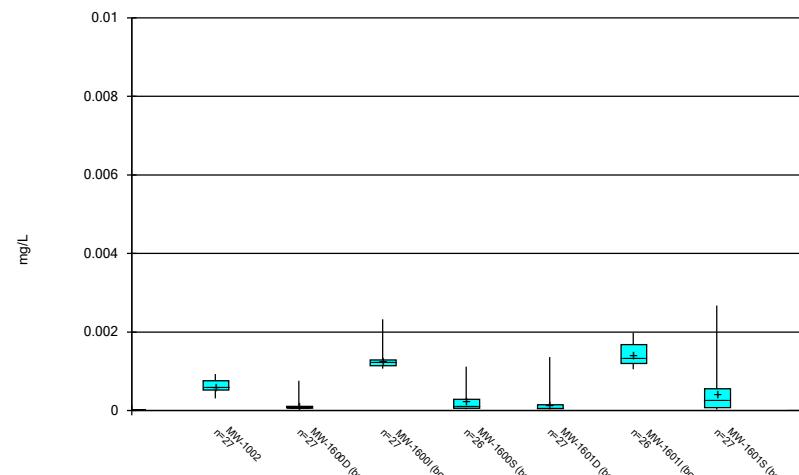
**Box & Whiskers Plot**

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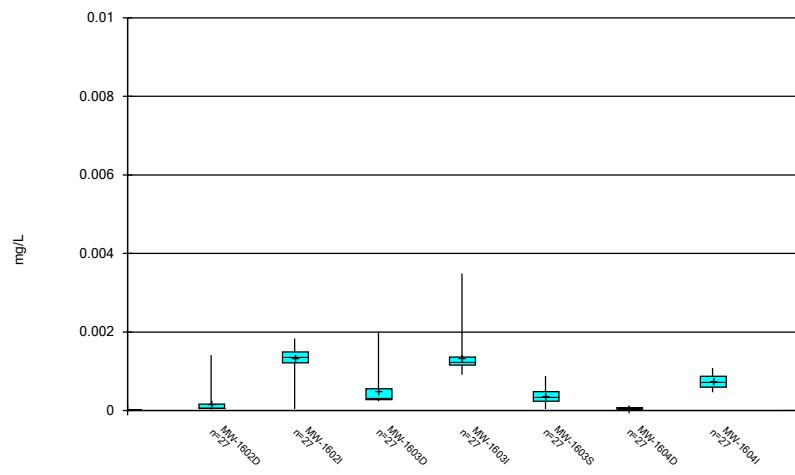
**Box & Whiskers Plot**

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Box &amp; Whiskers Plot

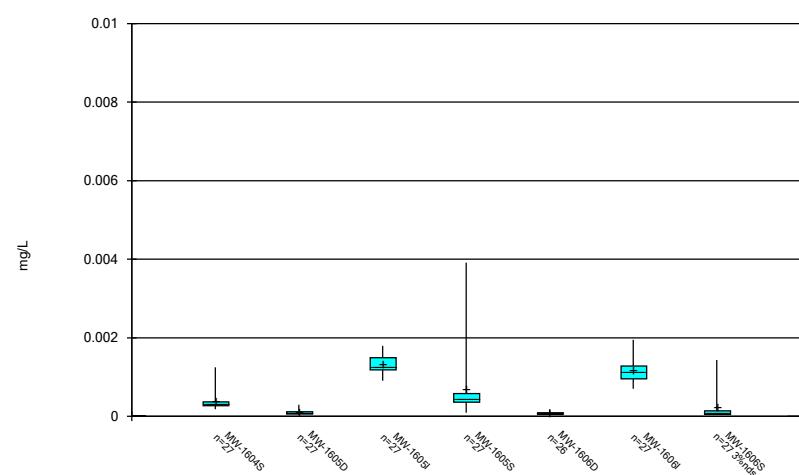


Constituent: Cobalt, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

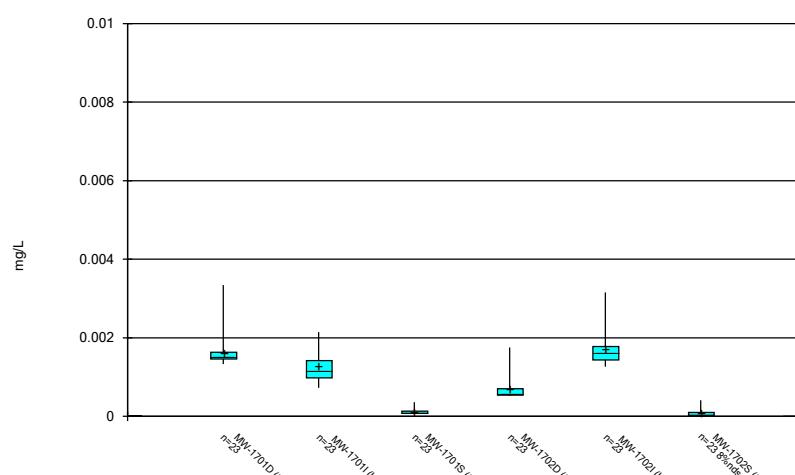


Constituent: Cobalt, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Box &amp; Whiskers Plot

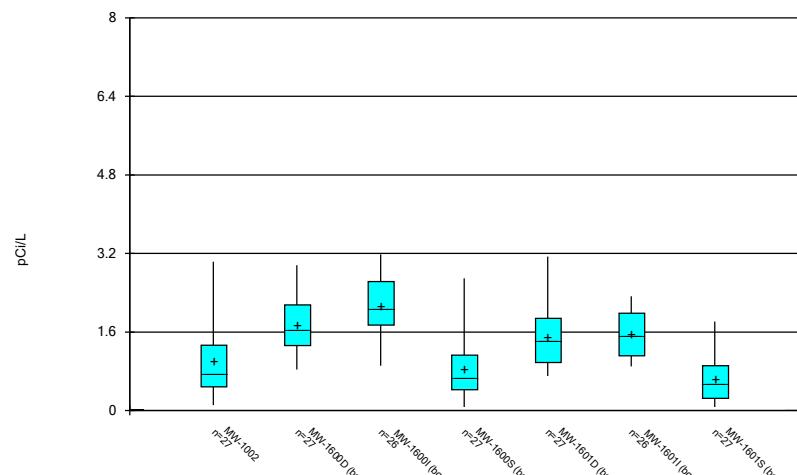


Constituent: Cobalt, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



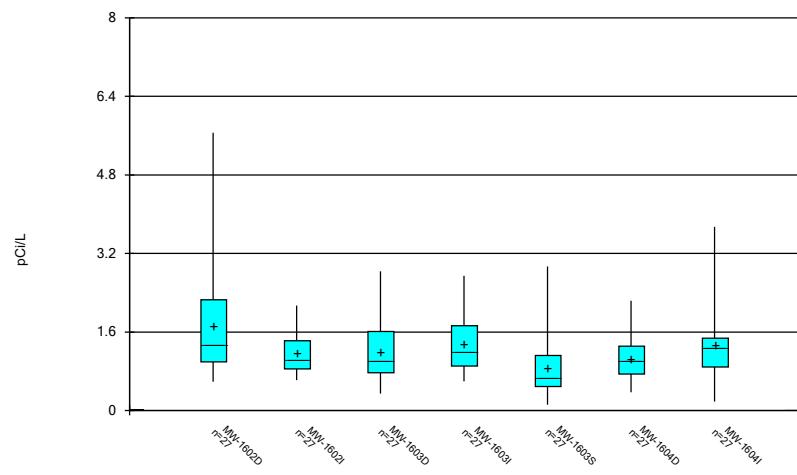
Constituent: Cobalt, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Box &amp; Whiskers Plot



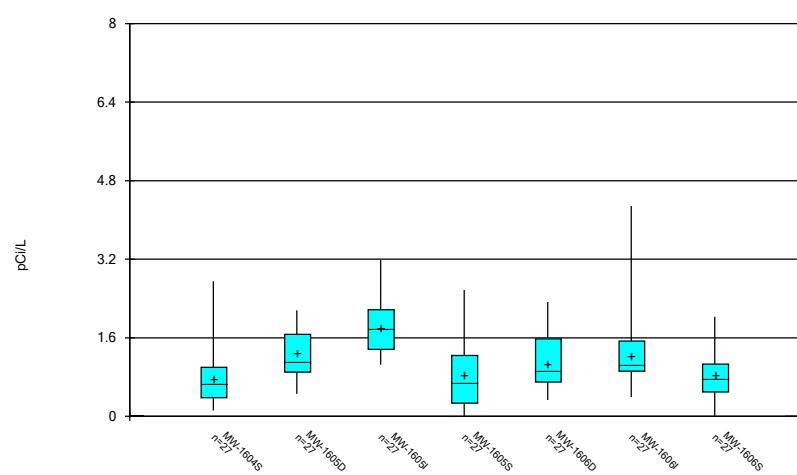
Constituent: Combined Radium 226 + 228 Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Box &amp; Whiskers Plot



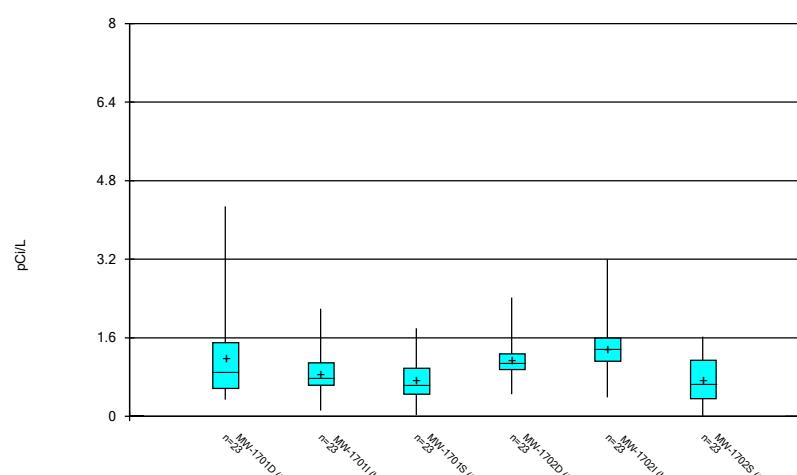
Constituent: Combined Radium 226 + 228 Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Box &amp; Whiskers Plot



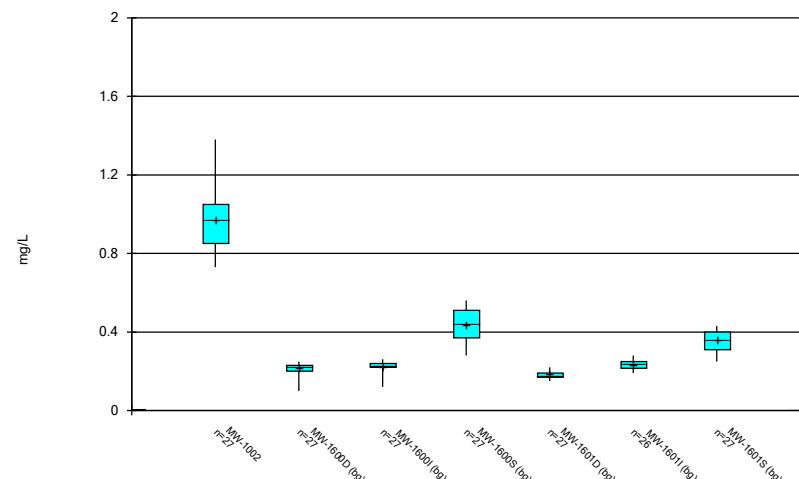
Constituent: Combined Radium 226 + 228 Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Box &amp; Whiskers Plot



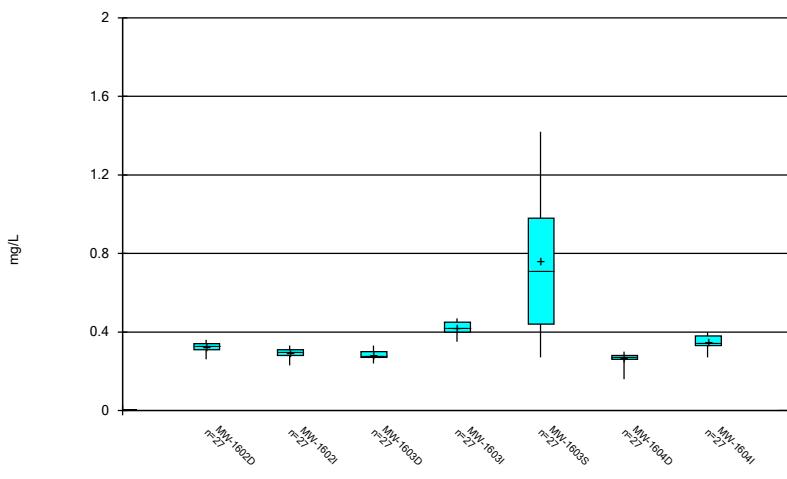
Constituent: Combined Radium 226 + 228 Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



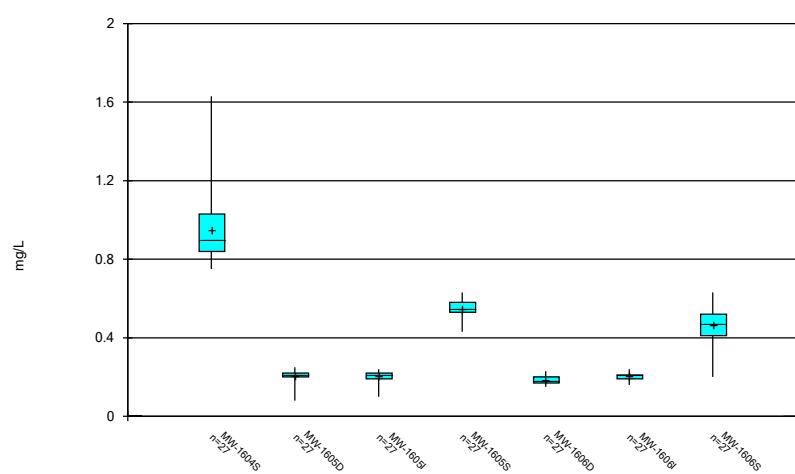
Constituent: Fluoride, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



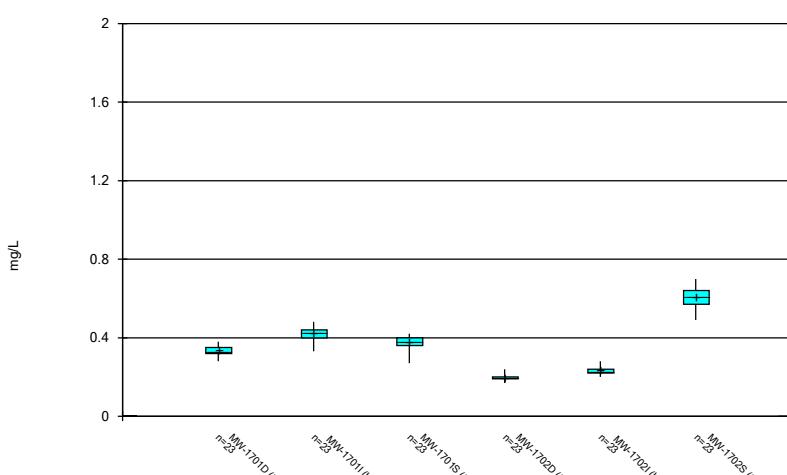
Constituent: Fluoride, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



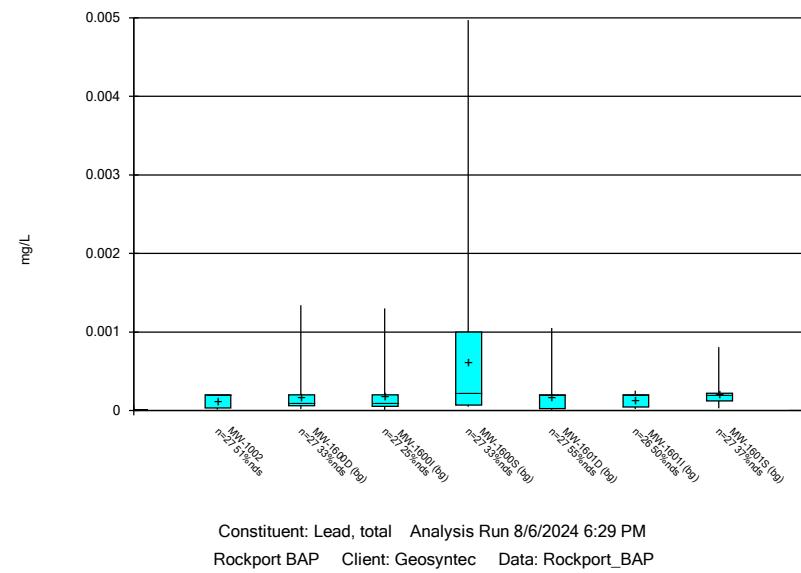
Constituent: Fluoride, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot

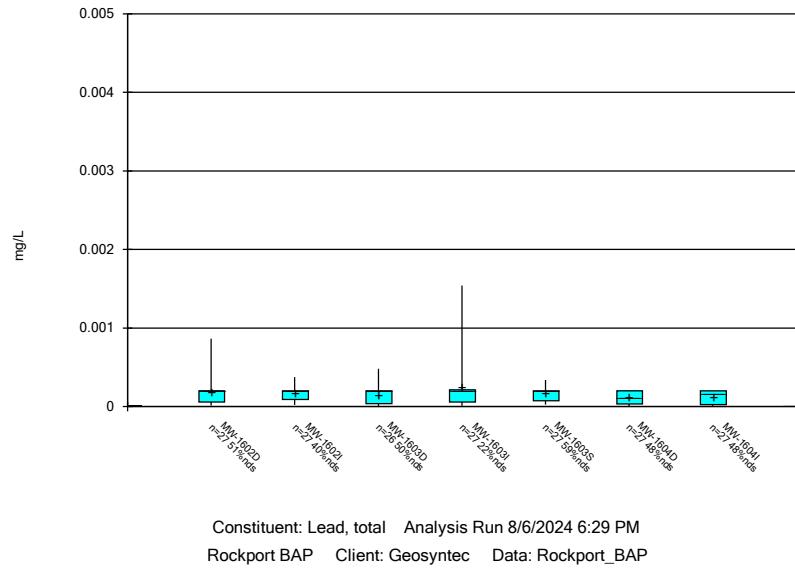


Constituent: Fluoride, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

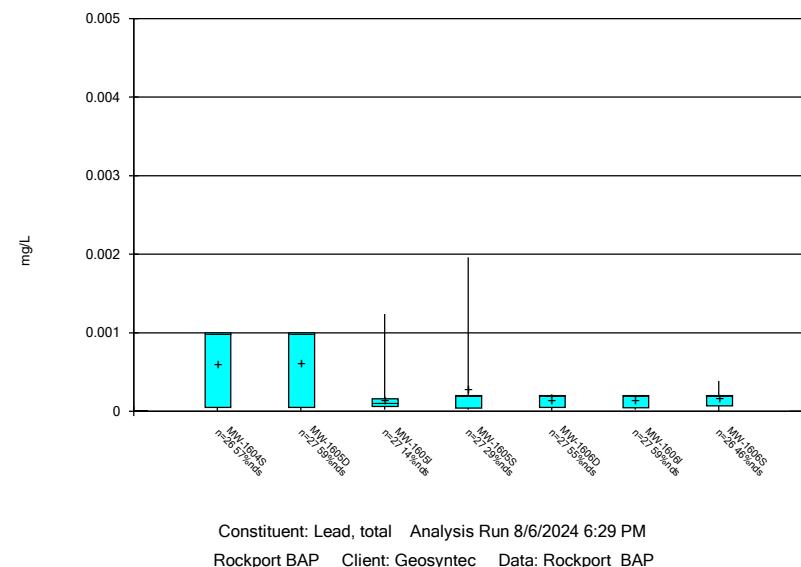
## Box &amp; Whiskers Plot



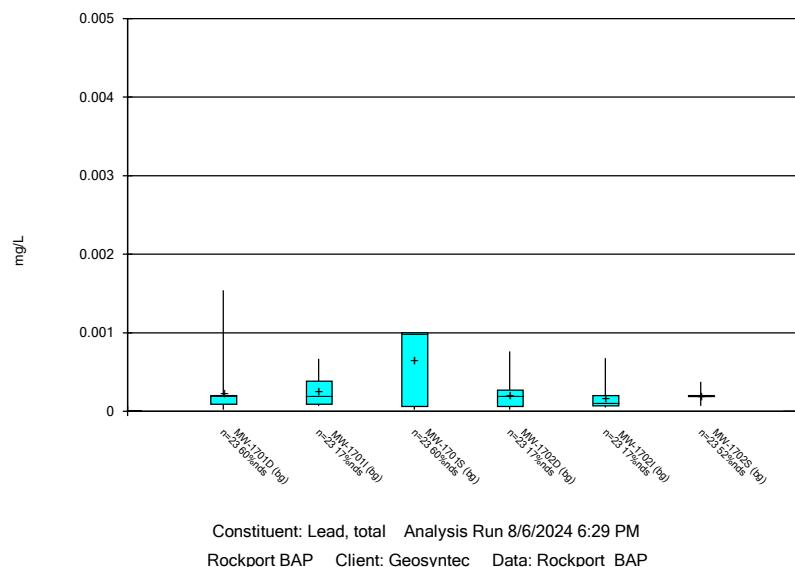
## Box &amp; Whiskers Plot



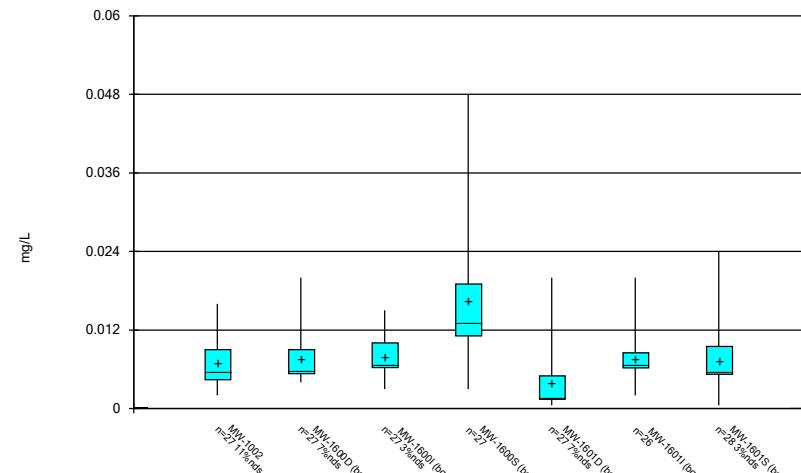
## Box &amp; Whiskers Plot



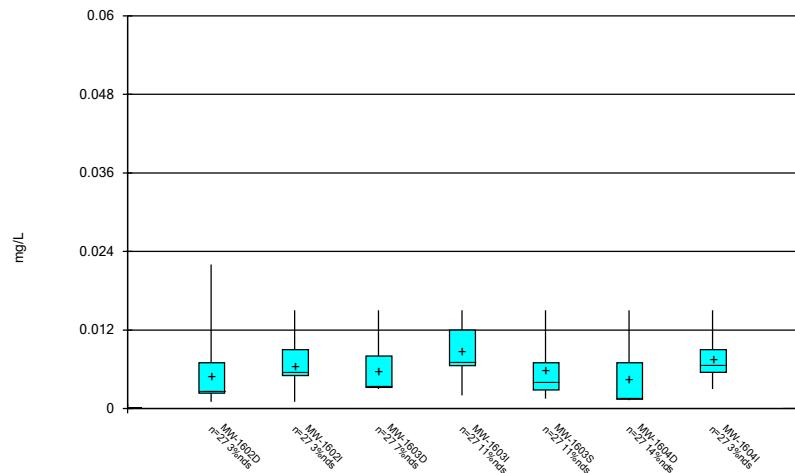
## Box &amp; Whiskers Plot



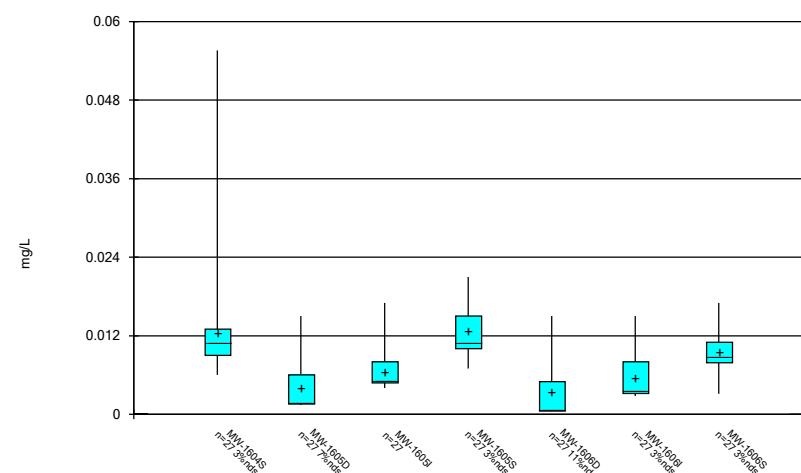
## Box &amp; Whiskers Plot



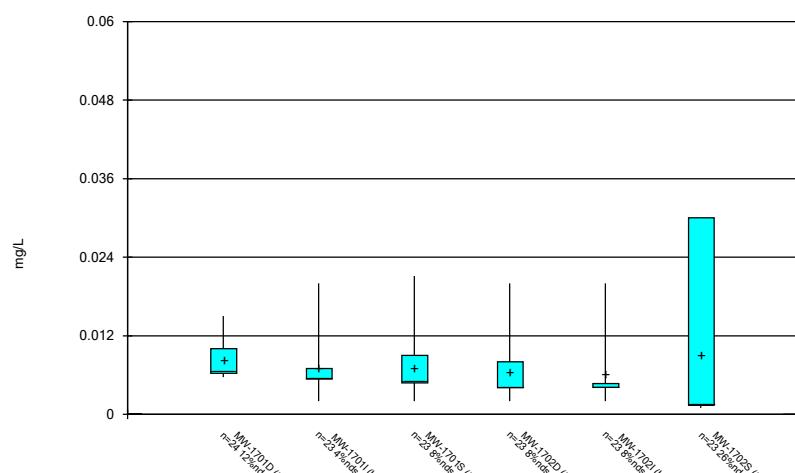
## Box &amp; Whiskers Plot



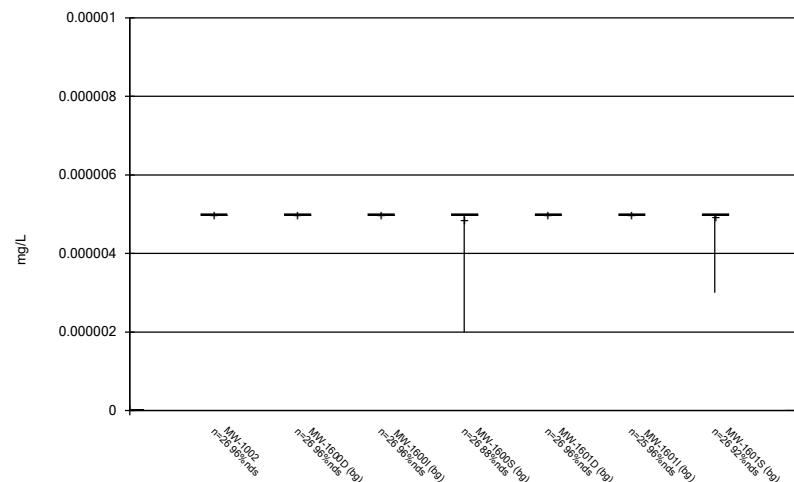
## Box &amp; Whiskers Plot



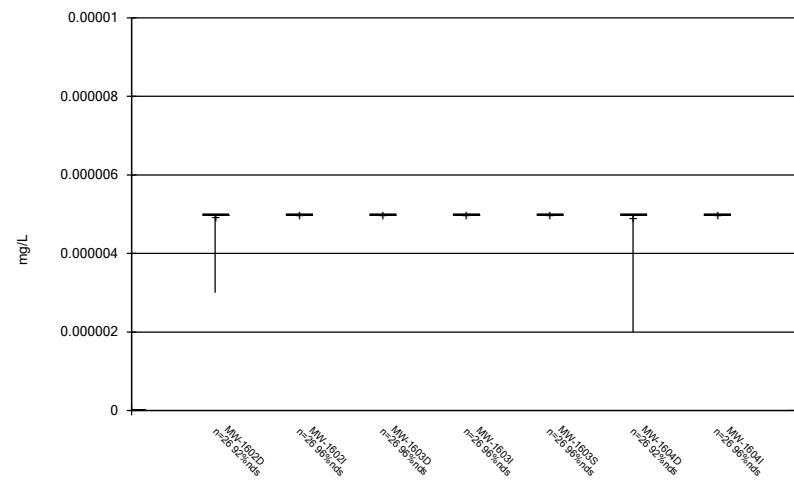
## Box &amp; Whiskers Plot



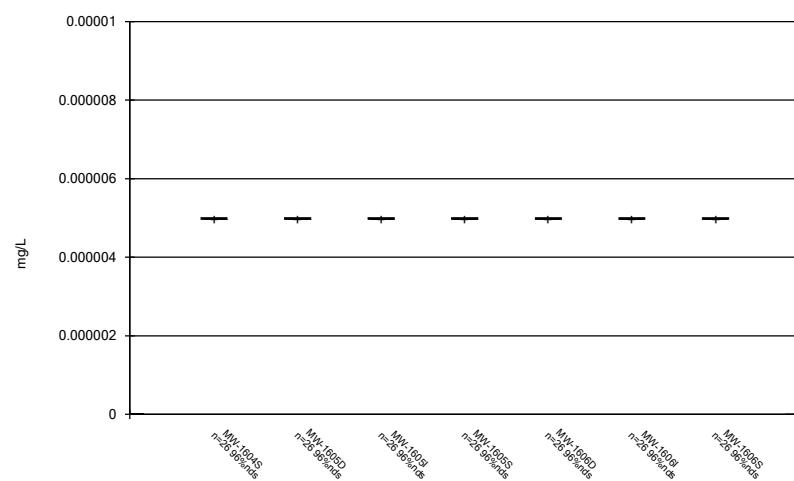
## Box &amp; Whiskers Plot



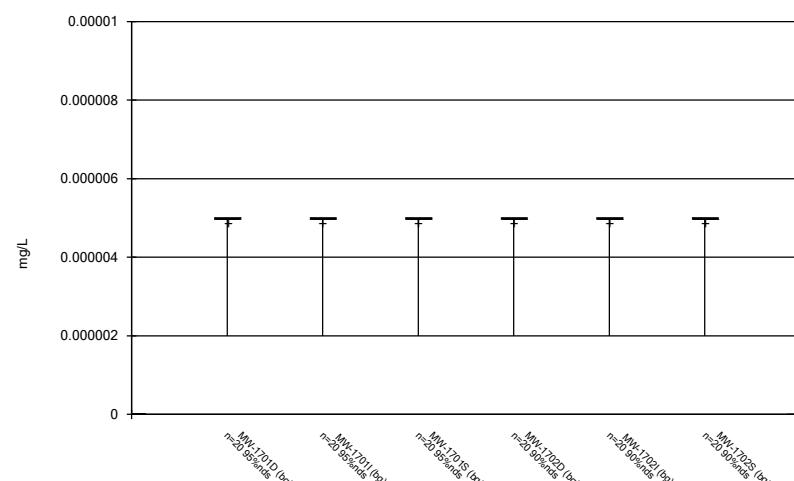
## Box &amp; Whiskers Plot



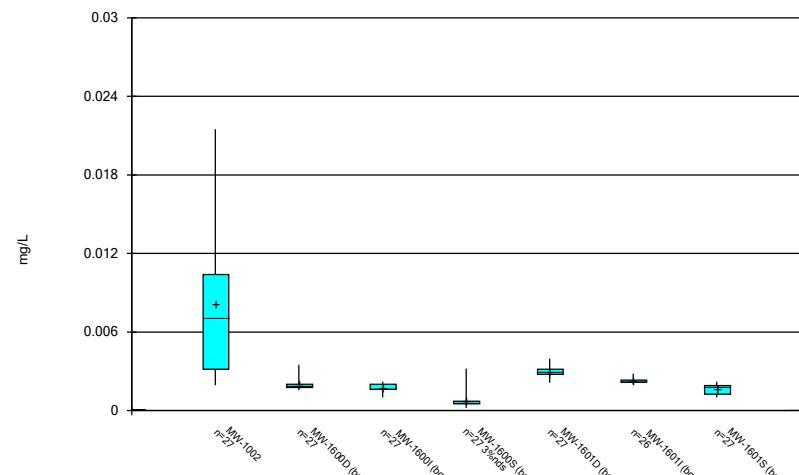
## Box &amp; Whiskers Plot



## Box &amp; Whiskers Plot

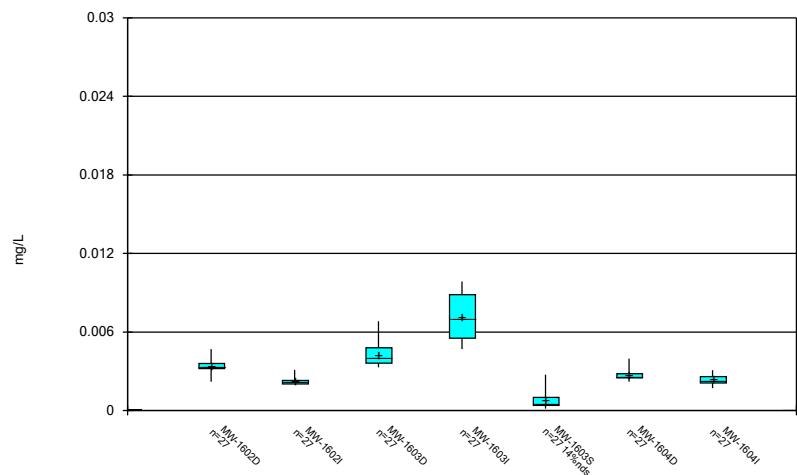


## Box &amp; Whiskers Plot



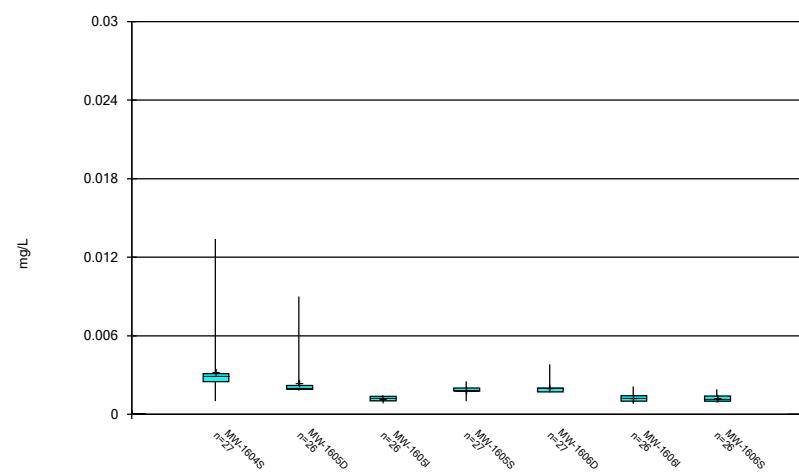
Constituent: Molybdenum, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



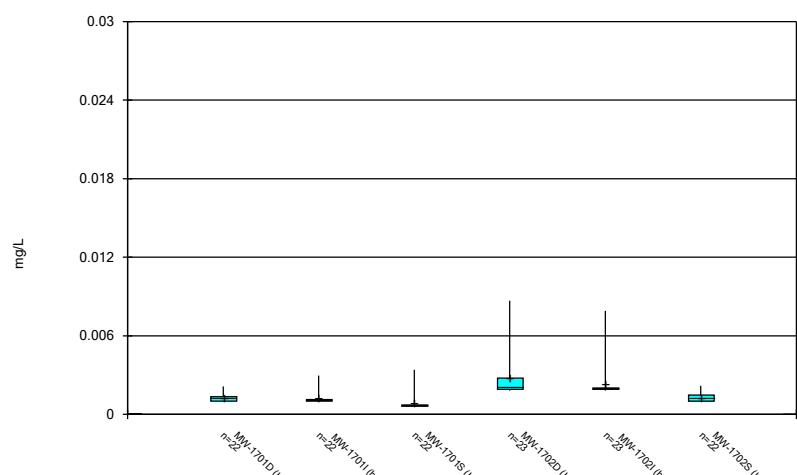
Constituent: Molybdenum, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



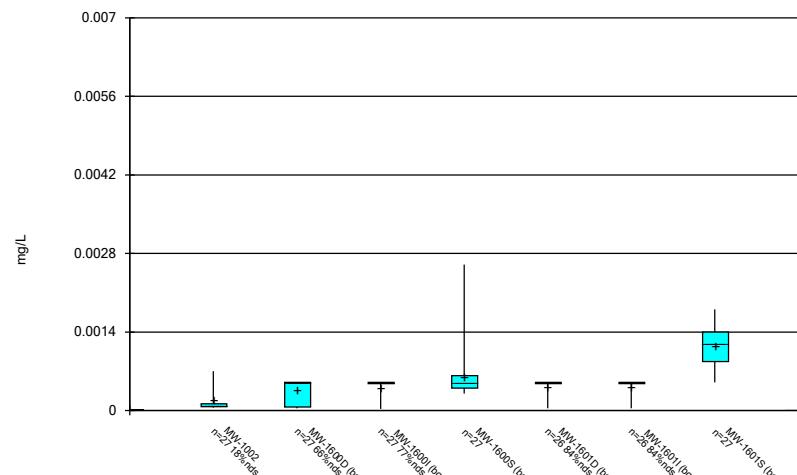
Constituent: Molybdenum, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



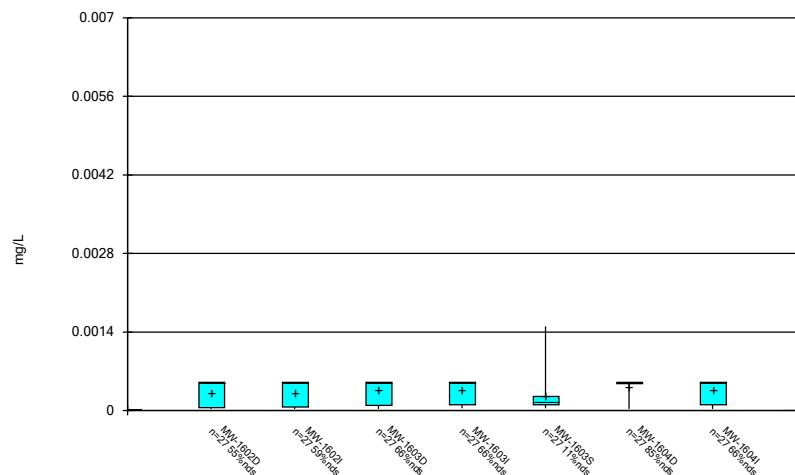
Constituent: Molybdenum, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



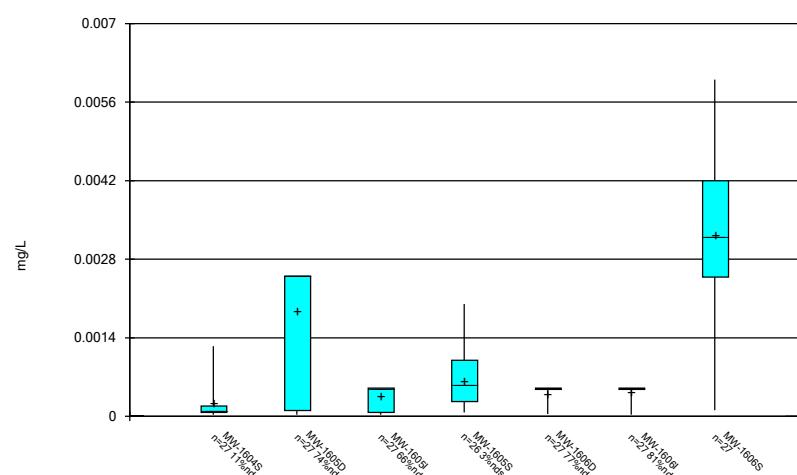
Constituent: Selenium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



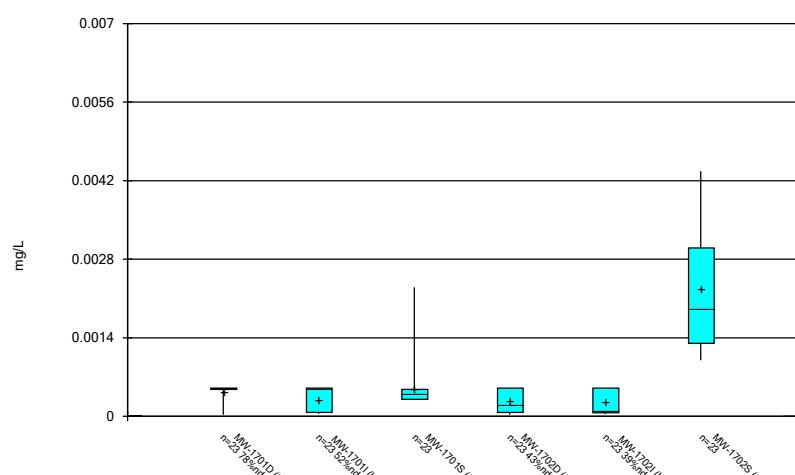
Constituent: Selenium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



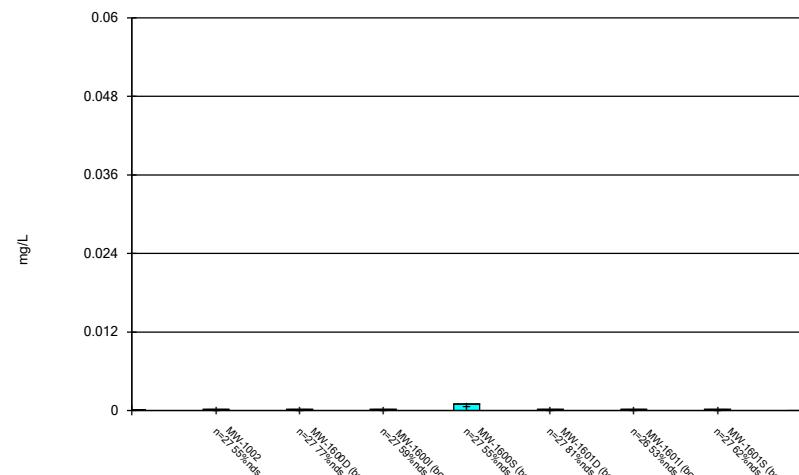
Constituent: Selenium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



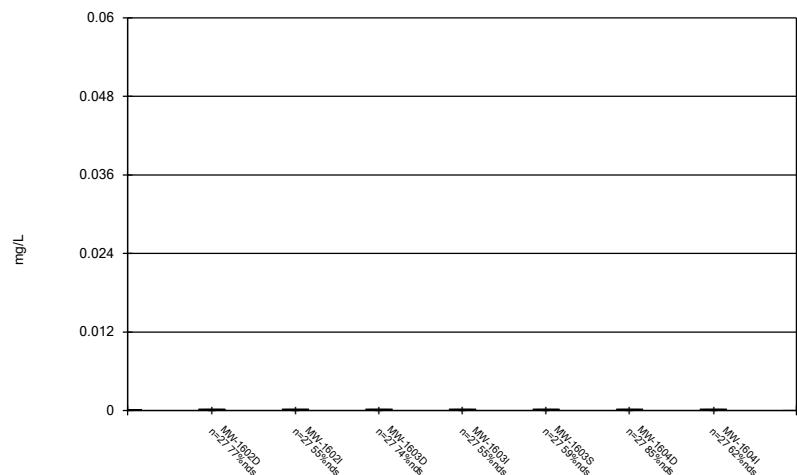
Constituent: Selenium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



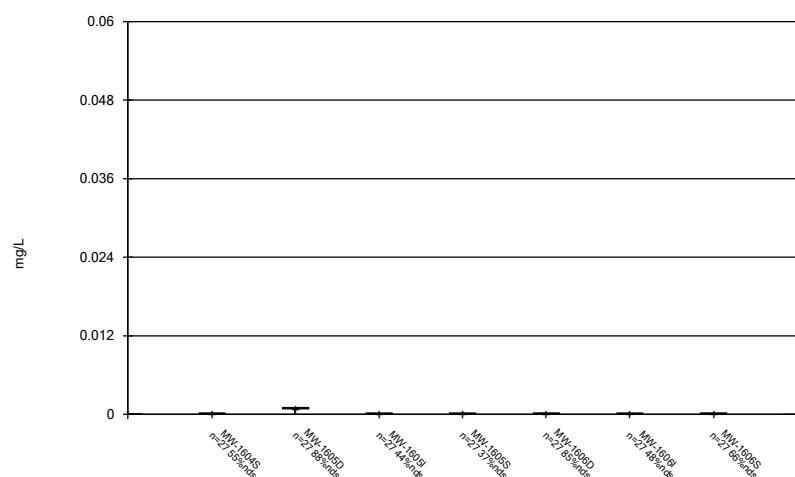
Constituent: Thallium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



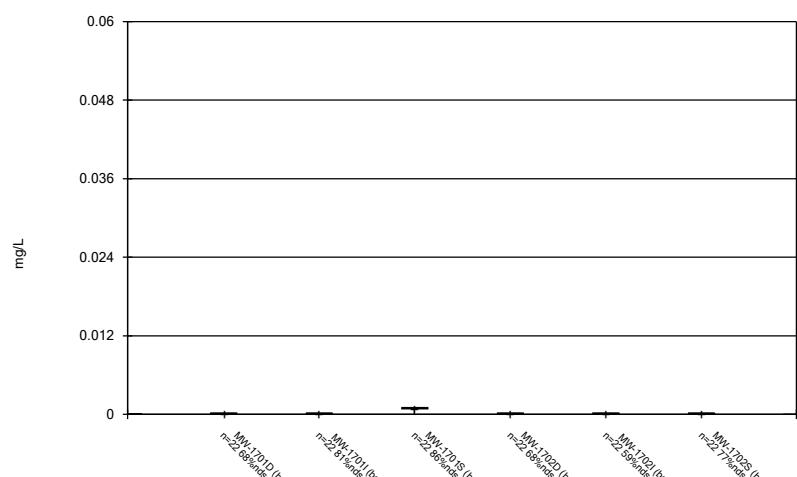
Constituent: Thallium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



Constituent: Thallium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Box &amp; Whiskers Plot



Constituent: Thallium, total Analysis Run 8/6/2024 6:29 PM  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

FIGURE C  
Outlier Summary

# Outlier Summary

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 8/1/2024, 3:24 PM

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	MW-1603D Chromium, total (mg/L)	MW-1702S Chromium, total (mg/L)	MW-1600S Cobalt, total (mg/L)	MW-1606D Cobalt, total (mg/L)	MW-1600I Combined Radium 226 + 228 (pCi/L)	MW-1603D Lead, total (mg/L)	MW-1604S Lead, total (mg/L)	MW-1606S Lead, total (mg/L)	MW-1605D Molybdenum, total (mg/L)	MW-1605I Molybdenum, total (mg/L)
6/7/2016					0.000508 (o)				0.00765 (o)	
6/8/2016					7.25 (o)					
7/20/2016						0.000911 (o)				
10/10/2016	0.0238 (o)				0.00138 (o)					
3/7/2017						0.00133 (o)				
12/12/2017		0.00413 (o)								
8/15/2018										
5/24/2019										
6/25/2019							<0.01 (o)			
5/27/2021		0.00995 (o)								

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	MW-1606I Molybdenum, total (mg/L)	MW-1606S Molybdenum, total (mg/L)	MW-1701D Molybdenum, total (mg/L)	MW-1701I Molybdenum, total (mg/L)	MW-1701S Molybdenum, total (mg/L)	MW-1702S Molybdenum, total (mg/L)	MW-1601D Selenium, total (mg/L)	MW-1605S Selenium, total (mg/L)	MW-1701D Thallium, total (mg/L)	MW-1701I Thallium, total (mg/L)
6/7/2016										
6/8/2016										
7/20/2016										
10/10/2016										
3/7/2017										
12/12/2017							0.051 (o)	0.04 (o)		
8/15/2018						0.0054 (o)				
5/24/2019						3E-05 (Jo)				
6/25/2019	<0.01 (o)									
5/27/2021										

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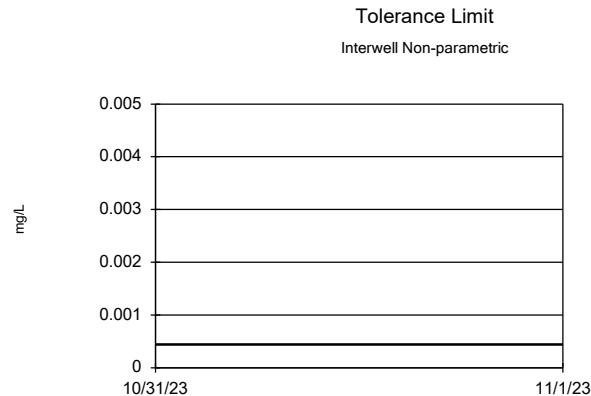
	MW-1701S Thallium, total (mg/L)	MW-1702D Thallium, total (mg/L)	MW-1702I Thallium, total (mg/L)	MW-1702S Thallium, total (mg/L)
6/7/2016				
6/8/2016				
7/20/2016				
10/10/2016				
3/7/2017				
12/12/2017	0.02 (o)	0.03 (o)	0.04 (o)	0.01 (o)
8/15/2018				
5/24/2019				
6/25/2019				
5/27/2021				

**FIGURE D**  
**UTLs**

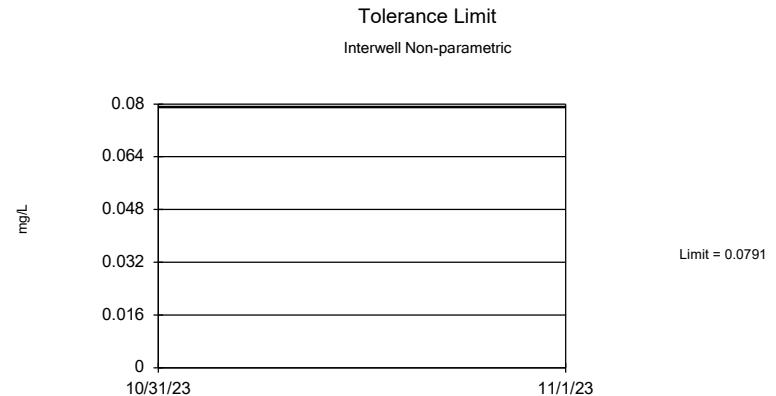
## Upper Tolerance Limits Summary Table

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 1/22/2024, 5:54 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony, total (mg/L)	0.00044	n/a	n/a	n/a	n/a	275	29.09	n/a	NaN	NP Inter(normality)
Arsenic, total (mg/L)	0.0791	n/a	n/a	n/a	n/a	275	0	n/a	NaN	NP Inter(normality)
Barium, total (mg/L)	1.2	n/a	n/a	n/a	n/a	275	0	n/a	NaN	NP Inter(normality)
Beryllium, total (mg/L)	0.000106	n/a	n/a	n/a	n/a	275	82.55	n/a	NaN	NP Inter(NDs)
Cadmium, total (mg/L)	0.00028	n/a	n/a	n/a	n/a	275	38.18	n/a	NaN	NP Inter(normality)
Chromium, total (mg/L)	0.00205	n/a	n/a	n/a	n/a	274	1.46	n/a	NaN	NP Inter(normality)
Cobalt, total (mg/L)	0.00334	n/a	n/a	n/a	n/a	274	0.7299	n/a	NaN	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	2.502	n/a	n/a	n/a	n/a	274	0	No	0.05	Inter
Fluoride, total (mg/L)	0.7	n/a	n/a	n/a	n/a	275	0	n/a	NaN	NP Inter(normality)
Lead, total (mg/L)	0.00497	n/a	n/a	n/a	n/a	275	35.64	n/a	NaN	NP Inter(normality)
Lithium, total (mg/L)	0.038	n/a	n/a	n/a	n/a	277	7.942	n/a	NaN	NP Inter(normality)
Mercury, total (mg/L)	0.000005	n/a	n/a	n/a	n/a	251	92.83	n/a	NaN	NP Inter(NDs)
Molybdenum, total (mg/L)	0.00867	n/a	n/a	n/a	n/a	271	0.369	n/a	NaN	NP Inter(normality)
Selenium, total (mg/L)	0.00437	n/a	n/a	n/a	n/a	274	43.8	n/a	NaN	NP Inter(normality)
Thallium, total (mg/L)	0.0002	n/a	n/a	n/a	n/a	269	69.89	n/a	NaN	NP Inter(NDs)



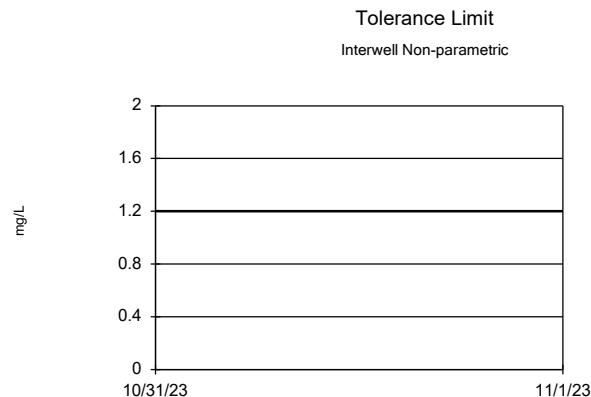
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 29.09% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



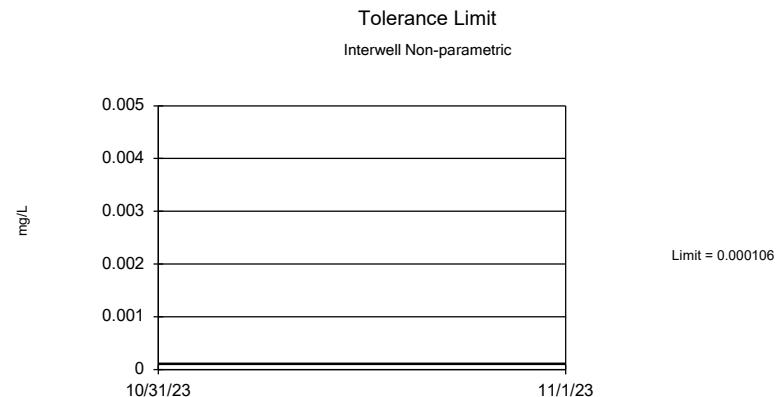
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Antimony, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Arsenic, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



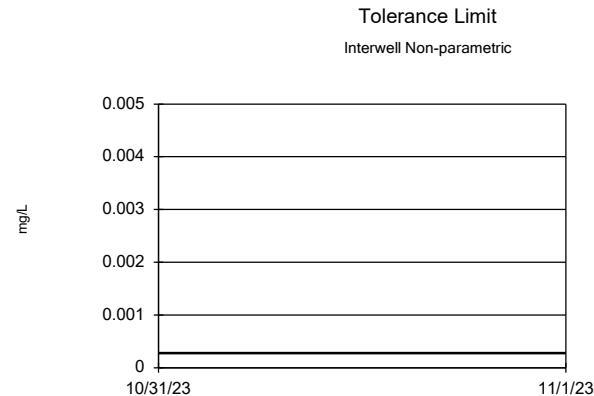
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 275 background values. 82.55% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

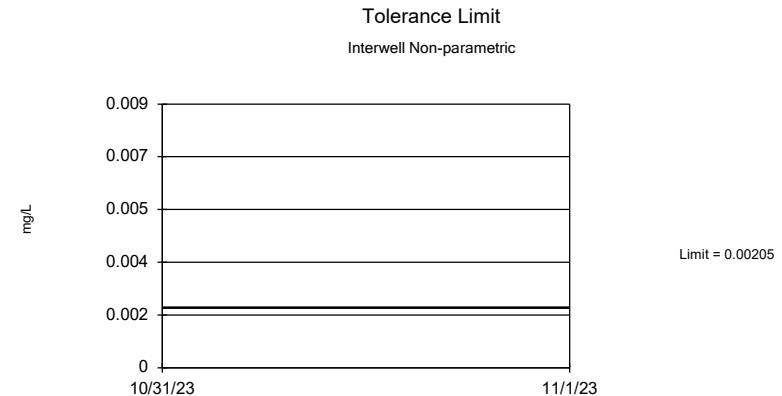
Constituent: Barium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Beryllium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



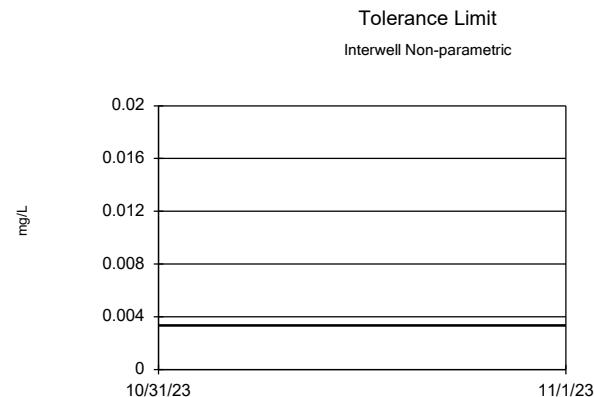
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 38.18% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Cadmium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



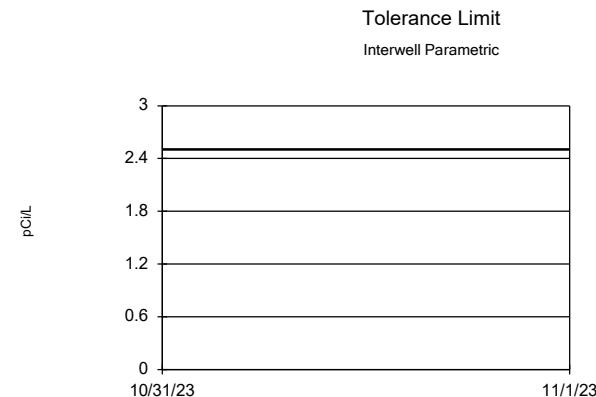
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 274 background values. 1.46% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Chromium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



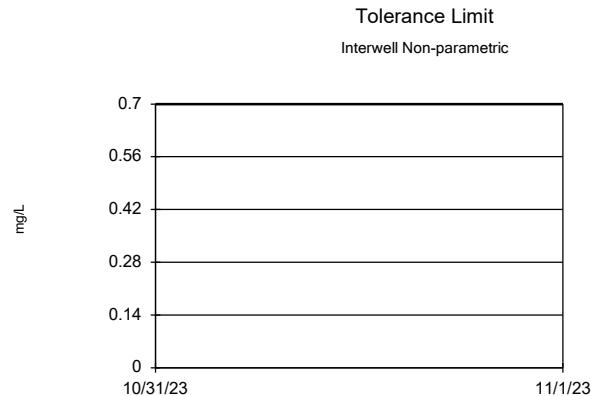
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 274 background values. 0.7299% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Cobalt, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

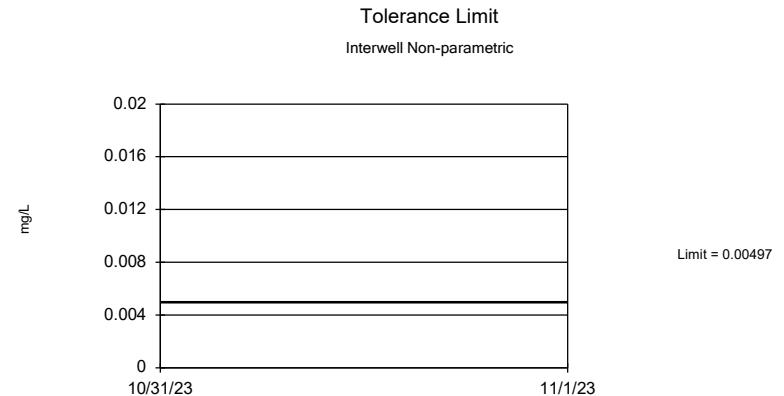


95% coverage. Background Data Summary: Mean=1.205, Std. Dev.=0.7179, n=274. Normality test: Chi Squared @alpha = 0.01, calculated = 13.15, critical = 14.07. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



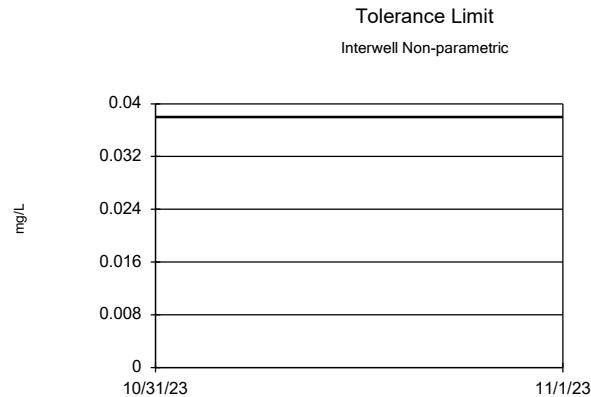
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



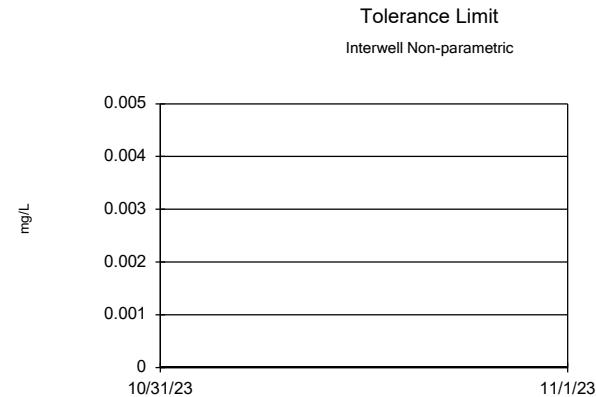
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 275 background values. 35.64% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Fluoride, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Lead, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



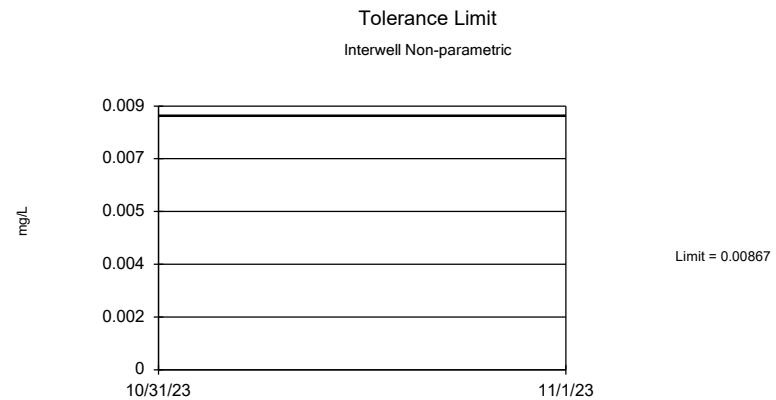
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 277 background values. 7.942% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



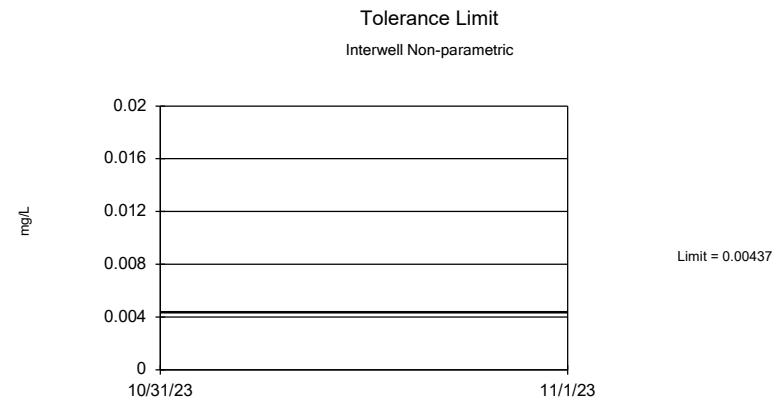
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 251 background values. 92.83% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Lithium, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Mercury, total Analysis Run 1/22/2024 5:52 PM View: UTLS  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



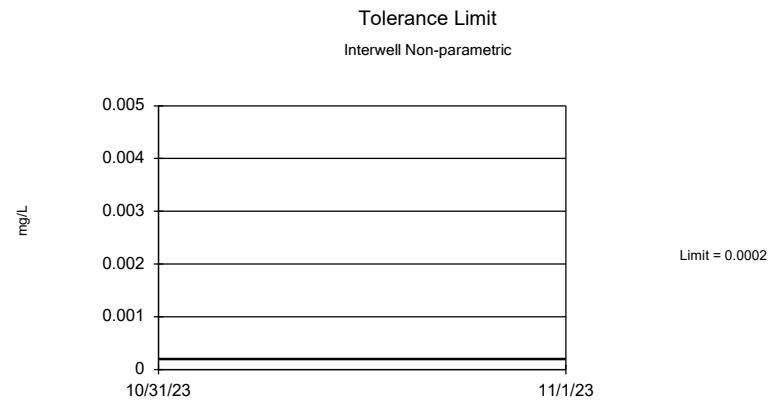
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 271 background values. 0.369% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.



Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 274 background values. 43.8% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Molybdenum, total Analysis Run 1/22/2024 5:52 PM View: UTLs  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Constituent: Selenium, total Analysis Run 1/22/2024 5:52 PM View: UTLs  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 269 background values. 69.89% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Thallium, total Analysis Run 1/22/2024 5:52 PM View: UTLs  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

**FIGURE E**  
**GWPS**

ROCKPORT BAP GWPS				
Constituent Name	MCL	CCR Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.00044	0.006
Arsenic, Total (mg/L)	0.01		0.079	0.079
Barium, Total (mg/L)	2		1.2	2
Beryllium, Total (mg/L)	0.004		0.00011	0.004
Cadmium, Total (mg/L)	0.005		0.00028	0.005
Chromium, Total (mg/L)	0.1		0.0021	0.1
Cobalt, Total (mg/L)		0.006	0.0033	0.006
Combined Radium, Total (pCi/L)	5		2.5	5
Fluoride, Total (mg/L)	4		0.7	4
Lead, Total (mg/L)	0.015		0.005	0.015
Lithium, Total (mg/L)		0.04	0.038	0.04
Mercury, Total (mg/L)	0.002		0.000005	0.002
Molybdenum, Total (mg/L)		0.1	0.0087	0.1
Selenium, Total (mg/L)	0.05		0.0044	0.05
Thallium, Total (mg/L)	0.002		0.0002	0.002

\*Grey cell indicates background is higher than MCL or CCR Rule Specified Level

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residual

\*GWPS = Groundwater Protection Standard

FIGURE F  
Confidence Intervals

# Confidence Interval - All Results (No Significant)

Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 8/1/2024, 3:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony, total (mg/L)	MW-1002	0.00005	0.00004	0.006	No	27	0.00004778	0.000007051	3.704	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1602D	0.00001	0.000012	0.006	No	27	0.00005474	0.00004637	37.04	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1602I	0.00005501	0.0000306	0.006	No	27	0.00005019	0.0000368	7.407	None	In(x)	0.01	Param.
Antimony, total (mg/L)	MW-1603D	0.00001	0.00002	0.006	No	27	0.000056	0.00004024	40.74	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1603I	0.00007	0.00003	0.006	No	27	0.00009959	0.0001902	7.407	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1603S	0.00005	0.000037	0.006	No	27	0.00004322	0.000008313	3.704	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1604D	0.00001	0.00002	0.006	No	27	0.00006504	0.00004071	55.56	None	No	0.01	NP (NDs)
Antimony, total (mg/L)	MW-1604I	0.000043	0.00002	0.006	No	27	0.00004459	0.00005008	7.407	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1604S	0.00007	0.00005	0.006	No	27	0.00006433	0.00003441	0	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1605D	0.00001	0.000016	0.006	No	27	0.00005374	0.00004063	40.74	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1605I	0.00005	0.00003	0.006	No	27	0.00004926	0.00003473	7.407	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1605S	0.00005	0.000036	0.006	No	27	0.00004919	0.00002765	0	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1606D	0.00001	0.00002	0.006	No	27	0.00006511	0.00004069	55.56	None	No	0.01	NP (NDs)
Antimony, total (mg/L)	MW-1606I	0.00001	0.00002	0.006	No	27	0.00005267	0.00003773	37.04	None	No	0.01	NP (normality)
Antimony, total (mg/L)	MW-1606S	0.00005	0.000031	0.006	No	27	0.00005296	0.00003695	7.407	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1002	0.0002686	0.0002286	0.079	No	27	0.0002515	0.00004833	0	None	In(x)	0.01	Param.
Arsenic, total (mg/L)	MW-1602D	0.00969	0.00854	0.079	No	27	0.009808	0.003535	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1602I	0.02983	0.02058	0.079	No	27	0.02618	0.0116	0	None	x^(1/3)	0.01	Param.
Arsenic, total (mg/L)	MW-1603D	0.01359	0.01222	0.079	No	27	0.01291	0.001437	0	None	No	0.01	Param.
Arsenic, total (mg/L)	MW-1603I	0.0155	0.0125	0.079	No	27	0.02329	0.04032	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1603S	0.0002158	0.0001688	0.079	No	27	0.0001974	0.00005661	0	None	In(x)	0.01	Param.
Arsenic, total (mg/L)	MW-1604D	0.0183	0.0169	0.079	No	27	0.01769	0.001304	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1604I	0.0212	0.0187	0.079	No	27	0.02167	0.007647	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1604S	0.00026	0.00017	0.079	No	27	0.0002567	0.000157	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1605D	0.0212	0.0183	0.079	No	27	0.02235	0.01443	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1605I	0.0223	0.018	0.079	No	27	0.02154	0.007426	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1605S	0.0006	0.00045	0.079	No	27	0.0006996	0.0006092	0	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	MW-1606D	0.01738	0.01586	0.079	No	27	0.01629	0.001949	0	None	x^5	0.01	Param.
Arsenic, total (mg/L)	MW-1606I	0.01059	0.006963	0.079	No	27	0.008778	0.003805	0	None	No	0.01	Param.
Arsenic, total (mg/L)	MW-1606S	0.00024	0.00017	0.079	No	27	0.003326	0.01612	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1002	0.0182	0.0138	2	No	27	0.01721	0.005426	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1602D	0.457	0.412	2	No	27	0.4337	0.07632	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1602I	0.127	0.108	2	No	27	0.129	0.06091	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1603D	0.1227	0.1145	2	No	27	0.1186	0.008599	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1603I	0.094	0.0807	2	No	27	0.09127	0.02295	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1603S	0.01399	0.009603	2	No	27	0.0118	0.004597	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1604D	0.2581	0.2414	2	No	27	0.2498	0.0175	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1604I	0.1178	0.1003	2	No	27	0.1091	0.01839	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1604S	0.0185	0.013	2	No	27	0.01801	0.01078	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1605D	0.457	0.43	2	No	27	0.4987	0.3174	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	MW-1605I	0.1504	0.1328	2	No	27	0.1416	0.01846	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1605S	0.008843	0.006666	2	No	27	0.007879	0.002456	0	None	sqr(x)	0.01	Param.
Barium, total (mg/L)	MW-1606D	0.4637	0.417	2	No	27	0.4404	0.0489	0	None	No	0.01	Param.
Barium, total (mg/L)	MW-1606I	0.06241	0.05288	2	No	27	0.05797	0.01042	0	None	sqr(x)	0.01	Param.
Barium, total (mg/L)	MW-1606S	0.0139	0.0109	2	No	27	0.01438	0.01022	0	None	No	0.01	NP (normality)
Beryllium, total (mg/L)	MW-1002	0.00005	0.00002	0.004	No	27	0.00004396	0.00001496	85.19	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1602D	0.00005	0.00002	0.004	No	27	0.00003985	0.00001775	70.37	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1602I	0.00005	0.00002	0.004	No	27	0.00003956	0.00001816	74.07	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1603D	0.00005	0.000049	0.004	No	27	0.00004589	0.00001184	85.19	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1603I	0.00005	0.00003	0.004	No	27	0.0000453	0.00001399	77.78	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1603S	0.00005	0.00002	0.004	No	27	0.00004437	0.00001388	85.19	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1604D	0.00005	0.00002	0.004	No	27	0.00004719	0.00001038	92.59	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1604I	0.00005	0.000025	0.004	No	27	0.00004626	0.0000112	88.89	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1604S	0.000025	0.000059	0.004	No	27	0.0002163	0.00008271	85.19	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1605D	0.000025	0.000043	0.004	No	27	0.0002249	0.00007242	88.89	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1605I	0.00005	0.00002	0.004	No	27	0.000044	0.00001488	85.19	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1605S	0.00005	0.00004	0.004	No	27	0.00004541	0.00001169	77.78	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1606D	0.00005	0.000034	0.004	No	27	0.00004237	0.00001536	77.78	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1606I	0.00005	0.00002	0.004	No	27	0.0000473	0.000009907	92.59	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	MW-1606S	0.00005	0.00002	0.004	No	27	0.00003893	0.00001778	70.37	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1002	0.00003	0.00002	0.005	No	27	0.00003285	0.00002597	0	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	MW-1602D	0.00002	0.00001	0.005	No	27	0.00002126	0.00001077	74.07	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1602I	0.00002	0.000007	0.005	No	27	0.0000163	0.000006966	62.96	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1603D	0.00002	0.000016	0.005	No	27	0.00001952	0.00000528	74.07	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1603I	0.00002	0.000016	0.005	No	27	0.00001896	0.00001029	66.67	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1603S	0.000028	0.000019	0.005	No	27	0.0000417	0.00001001	3.704	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	MW-1604D	0.00002	0.000013	0.005	No	27	0.00001837	0.000004087	81.48	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1604I	0.00002	0.000013	0.005	No	27	0.0000203	0.000002082	66.67	None	No	0.01	NP (NDs)

# Confidence Interval - All Results (No Significant)

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Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 8/1/2024, 3:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium, total (mg/L)	MW-1604S	0.00003	0.00002	0.005	No	27	0.00002848	0.00002158	0	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	MW-1605D	0.00001	0.00002	0.005	No	27	0.00008307	0.00003627	81.48	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1605I	0.00002	0.000012	0.005	No	27	0.00003426	0.00009489	59.26	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1605S	0.000041	0.000031	0.005	No	27	0.00004104	0.00001609	0	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	MW-1606D	0.00002	0.00002	0.005	No	27	0.00001952	0.000002502	88.89	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1606I	0.00002	0.00001	0.005	No	27	0.00001604	0.000006607	62.96	None	No	0.01	NP (NDs)
Cadmium, total (mg/L)	MW-1606S	0.00003717	0.00002217	0.005	No	27	0.0000333	0.00002232	0	None	In(x)	0.01	Param.
Chromium, total (mg/L)	MW-1002	0.0002575	0.0001319	0.1	No	27	0.0002115	0.0001469	3.704	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1602D	0.000338	0.000201	0.1	No	27	0.0003167	0.0002438	0	None	No	0.01	NP (normality)
Chromium, total (mg/L)	MW-1602I	0.0002934	0.0001753	0.1	No	27	0.0002466	0.0001362	3.704	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1603D	0.0002511	0.0001655	0.1	No	26	0.0002083	0.00008788	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1603I	0.0004194	0.0001925	0.1	No	27	0.0003412	0.0002717	0	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1603S	0.0003168	0.0001872	0.1	No	27	0.000252	0.0001359	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1604D	0.0002068	0.0001267	0.1	No	27	0.0001667	0.00008395	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1604I	0.0002982	0.0001536	0.1	No	27	0.0002259	0.0001515	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1604S	0.0003192	0.0001514	0.1	No	27	0.0002603	0.0002176	0	None	sqr(x)	0.01	Param.
Chromium, total (mg/L)	MW-1605D	0.0002795	0.000148	0.1	No	27	0.0002636	0.0002738	0	None	In(x)	0.01	Param.
Chromium, total (mg/L)	MW-1605I	0.0002813	0.0001406	0.1	No	27	0.0002404	0.0002201	3.704	None	x^(1/3)	0.01	Param.
Chromium, total (mg/L)	MW-1605S	0.0006645	0.0003261	0.1	No	27	0.0004953	0.0003547	0	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1606D	0.0002983	0.0001537	0.1	No	27	0.000226	0.0001516	3.704	None	No	0.01	Param.
Chromium, total (mg/L)	MW-1606I	0.0003168	0.0001465	0.1	No	27	0.0002704	0.0002517	7.407	None	x^(1/3)	0.01	Param.
Chromium, total (mg/L)	MW-1606S	0.000416	0.0002112	0.1	No	27	0.0003546	0.0002945	3.704	None	x^(1/3)	0.01	Param.
Cobalt, total (mg/L)	MW-1002	0.0006919	0.0005489	0.006	No	27	0.0006204	0.0001499	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1602D	0.000166	0.000055	0.006	No	27	0.000183	0.0002941	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1602I	0.001503	0.001244	0.006	No	27	0.001338	0.000342	0	None	x^2	0.01	Param.
Cobalt, total (mg/L)	MW-1603D	0.000553	0.000279	0.006	No	27	0.0004929	0.0004156	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1603I	0.00136	0.00117	0.006	No	27	0.001328	0.0004551	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1603S	0.0004516	0.000267	0.006	No	27	0.0003593	0.0001936	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1604D	0.000007	0.00005	0.006	No	27	0.00006248	0.00001977	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1604I	0.0008123	0.0006415	0.006	No	27	0.0007269	0.000179	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1604S	0.000365	0.000272	0.006	No	27	0.0004048	0.0002672	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1605D	0.0001147	0.00006592	0.006	No	27	0.000104	0.0000719	0	None	In(x)	0.01	Param.
Cobalt, total (mg/L)	MW-1605I	0.001437	0.001236	0.006	No	27	0.001337	0.0002112	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1605S	0.0000575	0.000355	0.006	No	27	0.0007119	0.0008274	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	MW-1606D	0.00008492	0.00005713	0.006	No	26	0.00007312	0.00003168	0	None	sqr(x)	0.01	Param.
Cobalt, total (mg/L)	MW-1606I	0.00132	0.001033	0.006	No	27	0.001176	0.0003008	0	None	No	0.01	Param.
Cobalt, total (mg/L)	MW-1606S	0.000141	0.000052	0.006	No	27	0.0002246	0.0003525	3.704	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-1002	1.243	0.5659	5	No	27	1.01	0.8175	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1602D	2.072	1.167	5	No	27	1.724	1.129	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1602I	1.362	0.9793	5	No	27	1.171	0.4011	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1603D	1.465	0.9263	5	No	27	1.196	0.5652	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1603I	1.619	1.084	5	No	27	1.351	0.5604	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1603S	1.048	0.5325	5	No	27	0.8599	0.625	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1604D	1.267	0.8318	5	No	27	1.049	0.4562	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1604I	1.593	0.9805	5	No	27	1.347	0.6913	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1604S	0.9245	0.4681	5	No	27	0.7585	0.5528	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1605D	1.501	1.054	5	No	27	1.278	0.4687	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1605I	2.031	1.55	5	No	27	1.791	0.5048	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1605S	1.121	0.5302	5	No	27	0.8254	0.6189	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1606D	1.258	0.7944	5	No	27	1.069	0.5204	0	None	sqr(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1606I	1.433	0.899	5	No	27	1.239	0.7249	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-1606S	1.081	0.5761	5	No	27	0.8285	0.5291	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1002	1.044	0.8971	4	No	27	0.9704	0.1537	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1602D	0.3367	0.3114	4	No	27	0.3241	0.0265	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1602I	0.3019	0.2796	4	No	27	0.2907	0.02336	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1603D	0.2971	0.2762	4	No	27	0.2867	0.02184	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1603I	0.4358	0.4057	4	No	27	0.4207	0.03149	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1603S	0.9133	0.5993	4	No	27	0.7563	0.3291	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1604D	0.2794	0.2558	4	No	27	0.2652	0.02953	0	None	x^3	0.01	Param.
Fluoride, total (mg/L)	MW-1604I	0.3651	0.3312	4	No	27	0.3481	0.03552	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1604S	1.03	0.84	4	No	27	0.947	0.1751	0	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	MW-1605D	0.2193	0.1936	4	No	27	0.2044	0.03215	0	None	x^2	0.01	Param.
Fluoride, total (mg/L)	MW-1605I	0.2162	0.1927	4	No	27	0.203	0.02812	0	None	x^2	0.01	Param.
Fluoride, total (mg/L)	MW-1605S	0.5708	0.5247	4	No	27	0.5478	0.0483	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1606D	0.1917	0.1757	4	No	27	0.1837	0.01668	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1606I	0.2116	0.1921	4	No	27	0.2019	0.02039	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-1606S	0.5086	0.4247	4	No	27	0.4667	0.08801	0	None	No	0.01	Param.
Lead, total (mg/L)	MW-1002	0.0002	0.000031	0.015	No	27	0.0001239	0.00008481	51.85	None	No	0.01	NP (NDs)

# Confidence Interval - All Results (No Significant)

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Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 8/1/2024, 3:30 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lead, total (mg/L)	MW-1602D	0.0002	0.000056	0.015	No	27	0.0001765	0.0001673	51.85	None	No	0.01	NP (NDs)
Lead, total (mg/L)	MW-1602I	0.0001344	0.00005874	0.015	No	27	0.0001647	0.00008998	40.74	Kapla...	sqr(x)	0.01	Param.
Lead, total (mg/L)	MW-1603D	0.0002	0.00004	0.015	No	26	0.0001459	0.0001068	50	None	No	0.01	NP (normality)
Lead, total (mg/L)	MW-1603I	0.0002114	0.00005691	0.015	No	27	0.0002376	0.0003176	22.22	Kapla...	x^(1/3)	0.01	Param.
Lead, total (mg/L)	MW-1603S	0.0002	0.000072	0.015	No	27	0.0001579	0.00007772	59.26	Kapla...	No	0.01	NP (NDs)
Lead, total (mg/L)	MW-1604D	0.0002	0.000034	0.015	No	27	0.0001186	0.00008327	48.15	None	No	0.01	NP (normality)
Lead, total (mg/L)	MW-1604I	0.0002	0.000024	0.015	No	27	0.0001204	0.00008409	48.15	None	No	0.01	NP (normality)
Lead, total (mg/L)	MW-1604S	0.001	0.00005	0.015	No	26	0.000607	0.0004712	57.69	None	No	0.01	NP (NDs)
Lead, total (mg/L)	MW-1605D	0.001	0.00005	0.015	No	27	0.0006155	0.0004748	59.26	None	No	0.01	NP (NDs)
Lead, total (mg/L)	MW-1605I	0.0001468	0.00006877	0.015	No	27	0.00015	0.0002257	14.81	None	In(x)	0.01	Param.
Lead, total (mg/L)	MW-1605S	0.0001497	0.00004378	0.015	No	27	0.0002819	0.0004588	29.63	Kapla...	In(x)	0.01	Param.
Lead, total (mg/L)	MW-1606D	0.0002	0.00005	0.015	No	27	0.000143	0.00008085	55.56	Kapla...	No	0.01	NP (NDs)
Lead, total (mg/L)	MW-1606I	0.0002	0.000043	0.015	No	27	0.0001449	0.00007762	59.26	Kapla...	No	0.01	NP (NDs)
Lead, total (mg/L)	MW-1606S	0.0002	0.00009	0.015	No	26	0.0001631	0.0001008	46.15	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1002	0.008479	0.005019	0.04	No	27	0.007113	0.004022	11.11	None	sqr(x)	0.01	Param.
Lithium, total (mg/L)	MW-1602D	0.00566	0.00234	0.04	No	27	0.005028	0.004817	3.704	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1602I	0.007773	0.004664	0.04	No	27	0.006537	0.003465	3.704	None	sqr(x)	0.01	Param.
Lithium, total (mg/L)	MW-1603D	0.007	0.00323	0.04	No	27	0.005746	0.003678	7.407	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1603I	0.012	0.00657	0.04	No	27	0.008712	0.003502	11.11	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1603S	0.006448	0.00326	0.04	No	27	0.005927	0.004569	11.11	None	In(x)	0.01	Param.
Lithium, total (mg/L)	MW-1604D	0.007	0.00139	0.04	No	27	0.004533	0.005019	14.81	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1604I	0.00918	0.006127	0.04	No	27	0.007654	0.0032	3.704	None	No	0.01	Param.
Lithium, total (mg/L)	MW-1604S	0.013	0.009	0.04	No	27	0.01249	0.009025	3.704	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1605D	0.005	0.00154	0.04	No	27	0.004002	0.003708	7.407	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1605I	0.008	0.00479	0.04	No	27	0.006542	0.003	0	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1605S	0.01428	0.01092	0.04	No	27	0.0126	0.003522	3.704	None	No	0.01	Param.
Lithium, total (mg/L)	MW-1606D	0.005	0.000505	0.04	No	27	0.003448	0.004749	11.11	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1606I	0.007	0.00316	0.04	No	27	0.005511	0.003293	3.704	None	No	0.01	NP (normality)
Lithium, total (mg/L)	MW-1606S	0.01082	0.008095	0.04	No	27	0.009459	0.002858	3.704	None	No	0.01	Param.
Mercury, total (mg/L)	MW-1002	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1602D	0.000005	0.000003	0.002	No	26	0.000004923	3.9e-7	92.31	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1602I	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1603D	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1603S	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1604D	0.000005	0.000002	0.002	No	26	0.000004885	5.9e-7	92.31	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1604I	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1604S	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1605D	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1605I	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1605S	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1606D	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1606I	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	MW-1606S	0.000005	0.000005	0.002	No	26	0.000005	2.5e-14	96.15	None	No	0.01	NP (NDs)
Molybdenum, total (mg/L)	MW-1002	0.01057	0.00558	0.1	No	27	0.008076	0.005233	0	None	No	0.01	Param.
Molybdenum, total (mg/L)	MW-1602D	0.003616	0.003201	0.1	No	27	0.003409	0.004355	0	None	No	0.01	Param.
Molybdenum, total (mg/L)	MW-1602I	0.0023	0.00203	0.1	No	27	0.002234	0.0002649	0	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	MW-1603D	0.00478	0.00362	0.1	No	27	0.004297	0.001	0	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	MW-1603I	0.007934	0.006374	0.1	No	27	0.007154	0.001635	0	None	No	0.01	Param.
Molybdenum, total (mg/L)	MW-1603S	0.009442	0.004658	0.1	No	27	0.0007726	0.0005885	14.81	None	sqr(x)	0.01	Param.
Molybdenum, total (mg/L)	MW-1604D	0.00282	0.0025	0.1	No	27	0.002703	0.004062	0	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	MW-1604I	0.002549	0.002188	0.1	No	27	0.002369	0.0003788	0	None	No	0.01	Param.
Molybdenum, total (mg/L)	MW-1604S	0.0033	0.0025	0.1	No	27	0.00327	0.002163	0	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	MW-1605D	0.00221	0.0019	0.1	No	26	0.002364	0.00139	0	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	MW-1605I	0.00133	0.00106	0.1	No	26	0.001211	0.0001583	0	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	MW-1605S	0.001998	0.001735	0.1	No	27	0.001848	0.0002962	0	None	x^2	0.01	Param.
Molybdenum, total (mg/L)	MW-1606D	0.00207	0.00177	0.1	No	27	0.001977	0.0004167	0	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	MW-1606I	0.001429	0.001128	0.1	No	26	0.001278	0.000308	0	None	No	0.01	Param.
Molybdenum, total (mg/L)	MW-1606S	0.001363	0.001101	0.1	No	26	0.001242	0.0002809	0	None	sqr(x)	0.01	Param.
Selenium, total (mg/L)	MW-1002	0.00012	0.00007	0.05	No	27	0.0001804	0.0001962	18.52	None	No	0.01	NP (normality)
Selenium, total (mg/L)	MW-1602D	0.0005	0.00005	0.05	No	27	0.0003063	0.000223	55.56	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1602I	0.0005	0.00006	0.05	No	27	0.0003204	0.0002213	59.26	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1603D	0.0005	0.00009	0.05	No	27	0.0003596	0.0002079	66.67	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1603I	0.0005	0.0001	0.05	No	27	0.0003656	0.0001982	66.67	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1603S	0.0002552	0.0001114	0.05	No	27	0.0002552	0.0003061	11.11	None	In(x)	0.01	Param.
Selenium, total (mg/L)	MW-1604D	0.0005	0.0001	0.05	No	27	0.0004344	0.0001605	85.19	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1604I	0.0005	0.0001	0.05	No	27	0.0003556	0.0002088	66.67	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1604S	0.00018	0.00007	0.05	No	27	0.00023	0.0003706	11.11	None	No	0.01	NP (normality)

# Confidence Interval - All Results (No Significant)

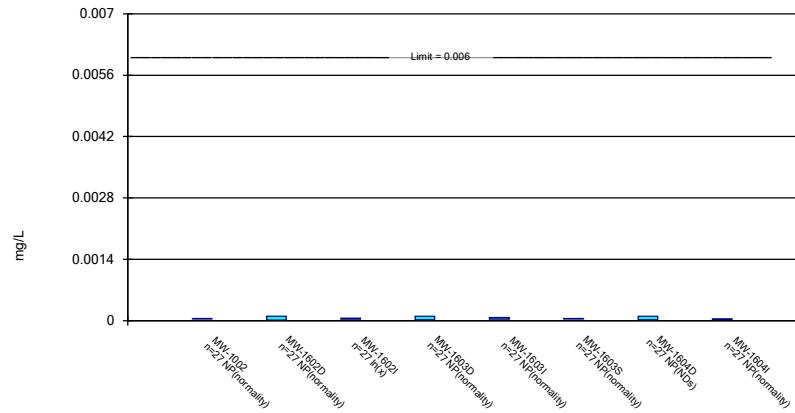
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Rockport BAP Client: Geosyntec Data: Rockport\_BAP Printed 8/1/2024, 3:30 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Selenium, total (mg/L)	MW-1605D	0.0025	0.0001	0.05	No	27	0.001864	0.001095	74.07	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1605I	0.0005	0.00007	0.05	No	27	0.0003515	0.0002144	66.67	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1605S	0.0008593	0.0003976	0.05	No	26	0.0006285	0.0004736	3.846	None	No	0.01	Param.
Selenium, total (mg/L)	MW-1606D	0.0005	0.0001	0.05	No	27	0.000403	0.0001853	77.78	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1606I	0.0005	0.0001	0.05	No	27	0.000417	0.0001777	81.48	None	No	0.01	NP (NDs)
Selenium, total (mg/L)	MW-1606S	0.003848	0.002596	0.05	No	27	0.003222	0.001312	0	None	No	0.01	Param.
Thallium, total (mg/L)	MW-1002	0.0002	0.00003	0.002	No	27	0.0001248	0.00008591	55.56	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1602D	0.0002	0.000066	0.002	No	27	0.0001632	0.0000707	77.78	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1602I	0.0002	0.00003	0.002	No	27	0.000123	0.00008809	55.56	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1603D	0.0002	0.000068	0.002	No	27	0.0001588	0.00007153	74.07	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1603I	0.0002	0.00004	0.002	No	27	0.000127	0.00008338	55.56	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1603S	0.0002	0.00004	0.002	No	27	0.0001331	0.0000833	59.26	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1604D	0.0002	0.000095	0.002	No	27	0.0001769	0.00005803	85.19	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1604I	0.0002	0.00005	0.002	No	27	0.000137	0.00008468	62.96	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1604S	0.0002	0.00004	0.002	No	27	0.0001309	0.0000809	55.56	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1605D	0.001	0.00005	0.002	No	27	0.0008922	0.0003107	88.89	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1605I	0.0002	0.00003	0.002	No	27	0.000112	0.00008545	44.44	None	No	0.01	NP (normality)
Thallium, total (mg/L)	MW-1605S	0.0002	0.00003	0.002	No	27	0.0001004	0.00007969	37.04	None	No	0.01	NP (normality)
Thallium, total (mg/L)	MW-1606D	0.0002	0.000124	0.002	No	27	0.0001787	0.00005452	85.19	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	MW-1606I	0.0002	0.00004	0.002	No	27	0.0001164	0.00008289	48.15	None	No	0.01	NP (normality)
Thallium, total (mg/L)	MW-1606S	0.0002	0.00005	0.002	No	27	0.0001433	0.00008266	66.67	None	No	0.01	NP (NDs)

## Parametric and Non-Parametric (NP) Confidence Interval

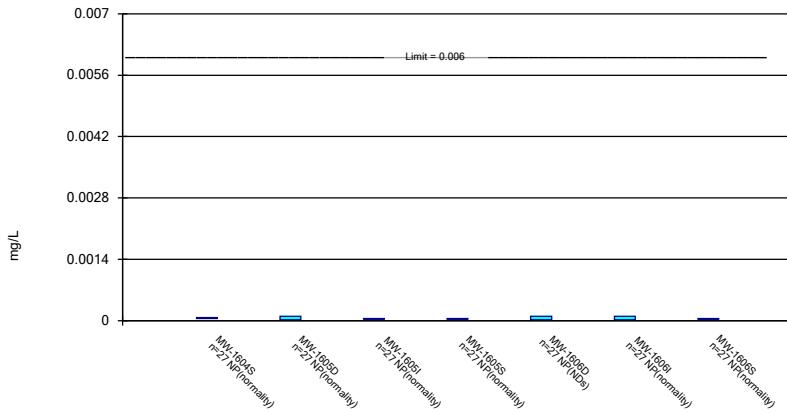
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Antimony, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

Non-Parametric Confidence Interval

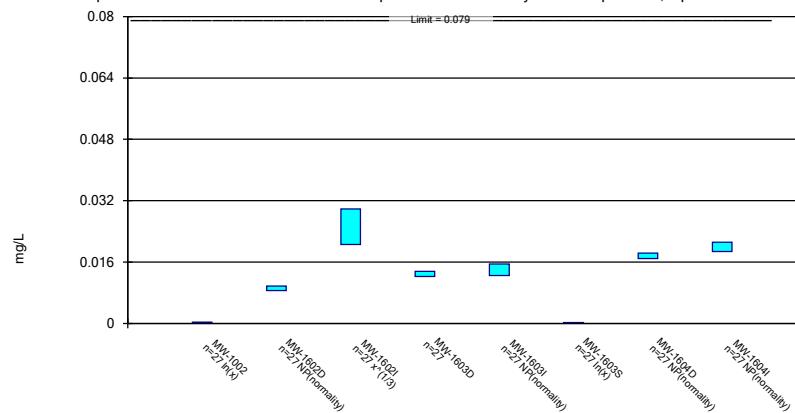
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

## Parametric and Non-Parametric (NP) Confidence Interval

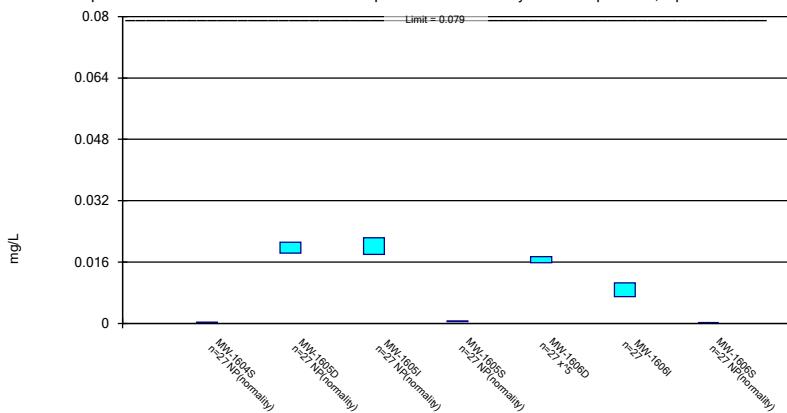
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport BAP

Parametric and Non-Parametric (NP) Confidence Interval

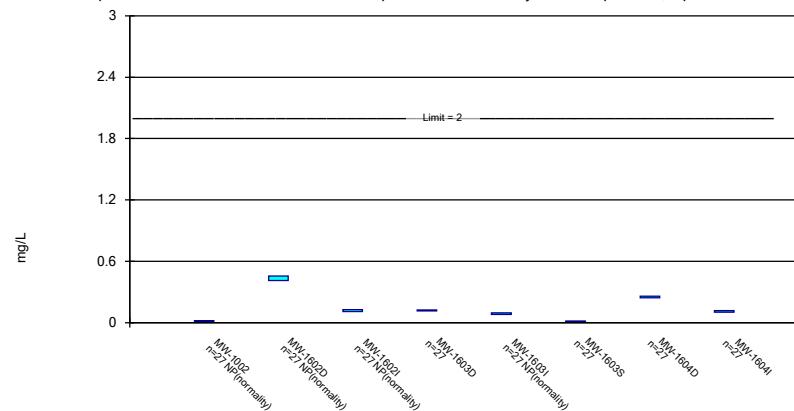
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport BAP

### Parametric and Non-Parametric (NP) Confidence Interval

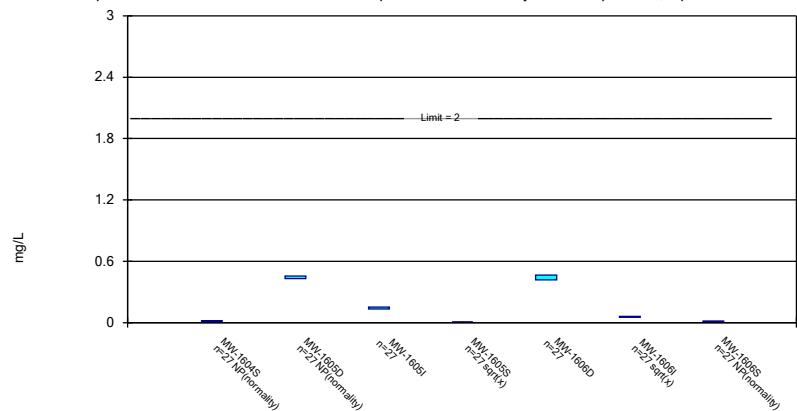
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

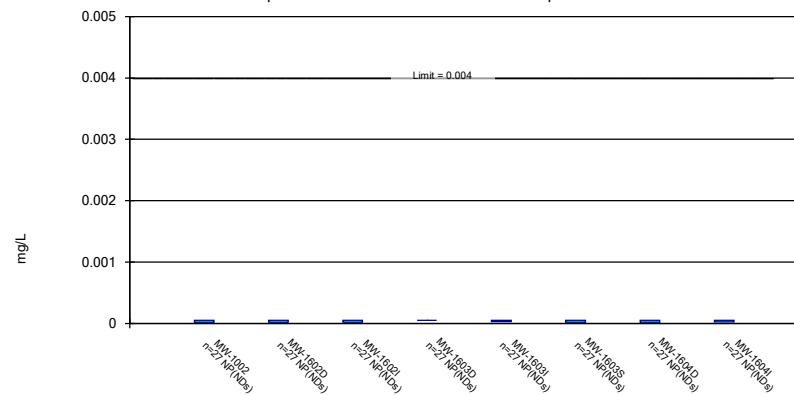
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Non-Parametric Confidence Interval

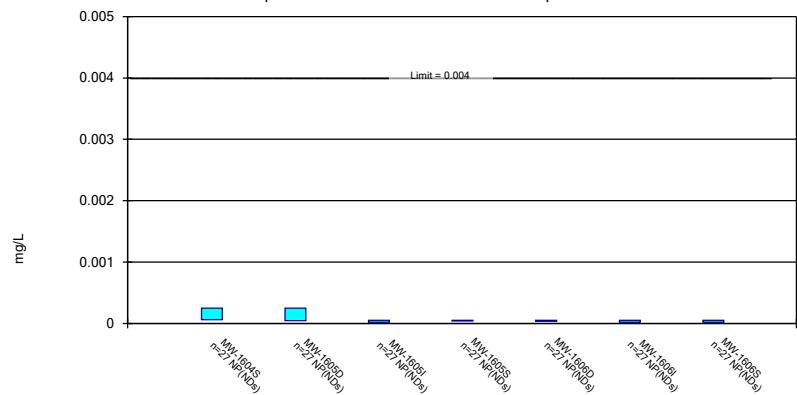
Compliance Limit is not exceeded. Per-well alpha = 0.01.



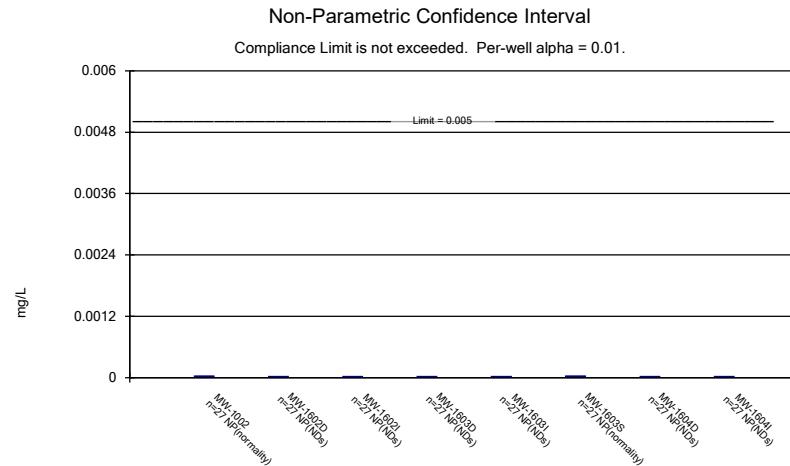
Constituent: Beryllium, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Non-Parametric Confidence Interval

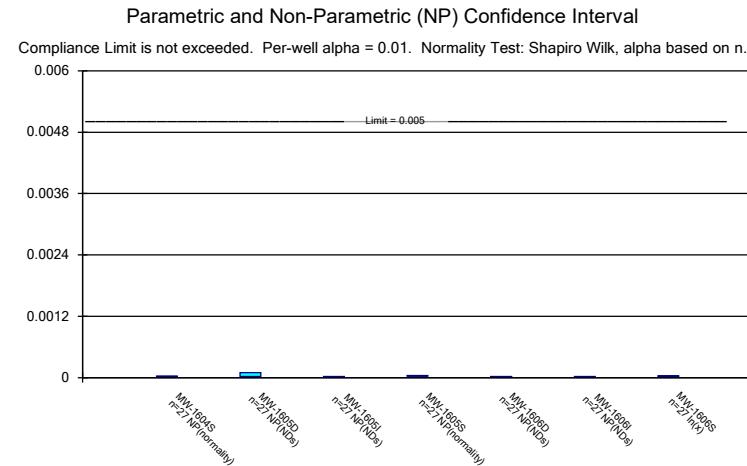
Compliance Limit is not exceeded. Per-well alpha = 0.01.



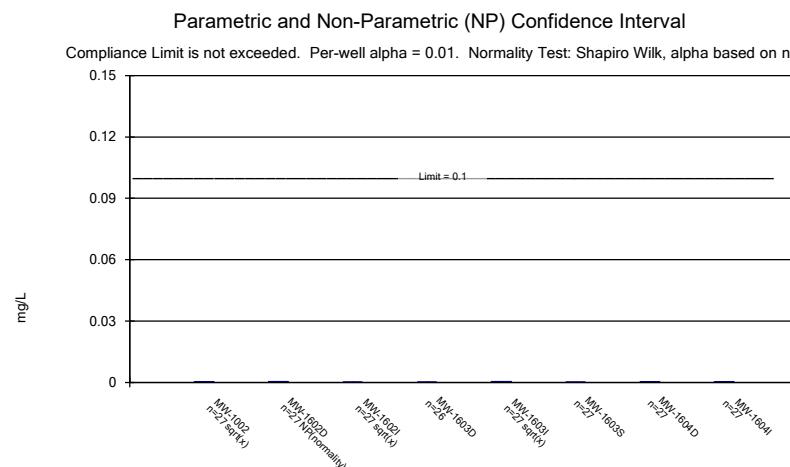
Constituent: Beryllium, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



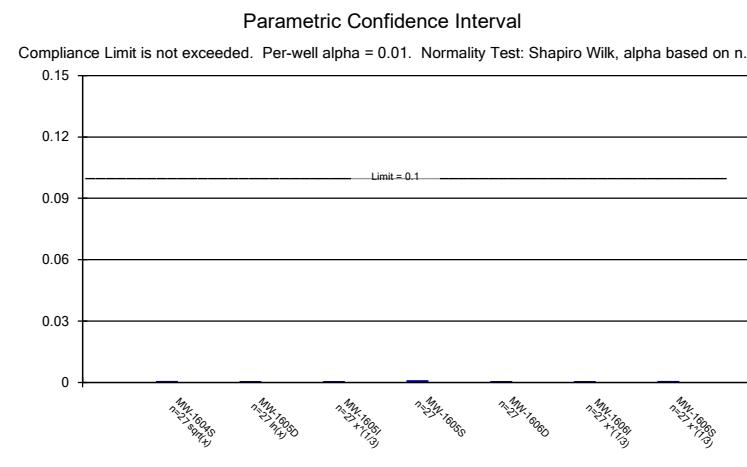
Constituent: Cadmium, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: Cadmium, total Analysis Run 8/1/2024 3:26 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



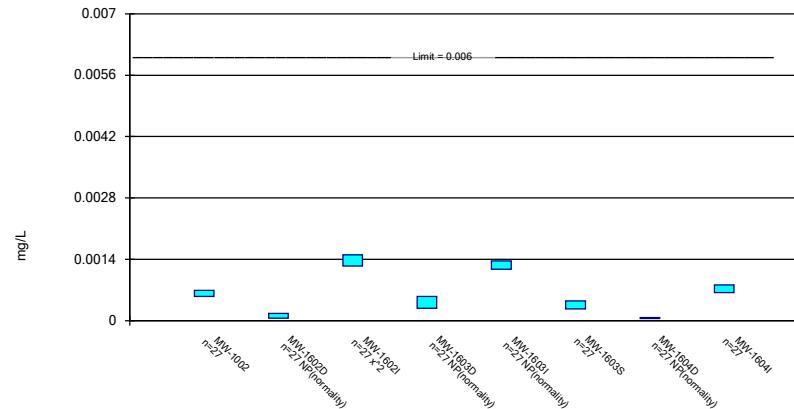
Constituent: Chromium, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: Chromium, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

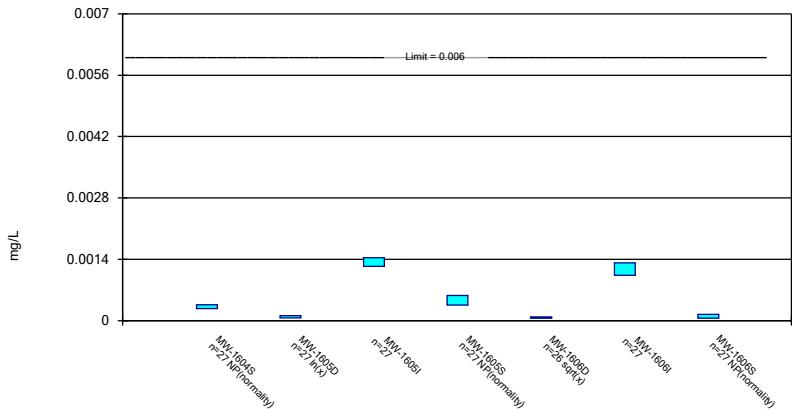
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

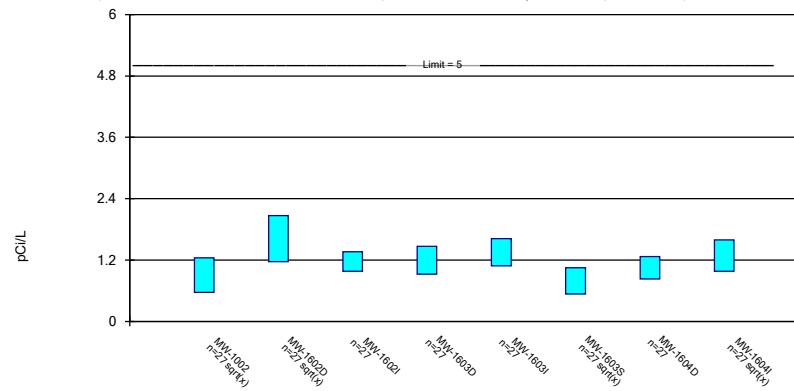
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric Confidence Interval

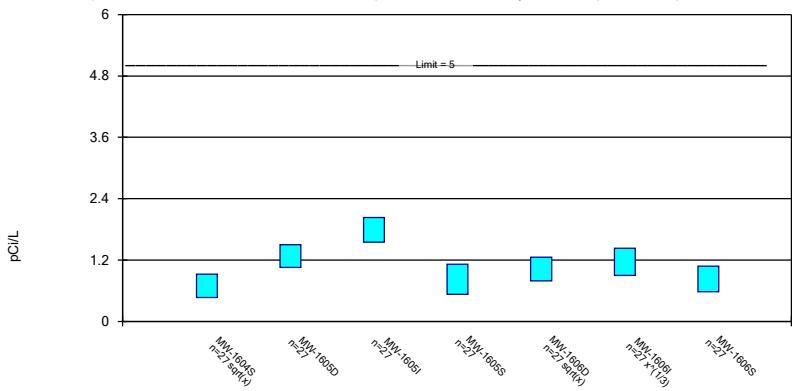
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric Confidence Interval

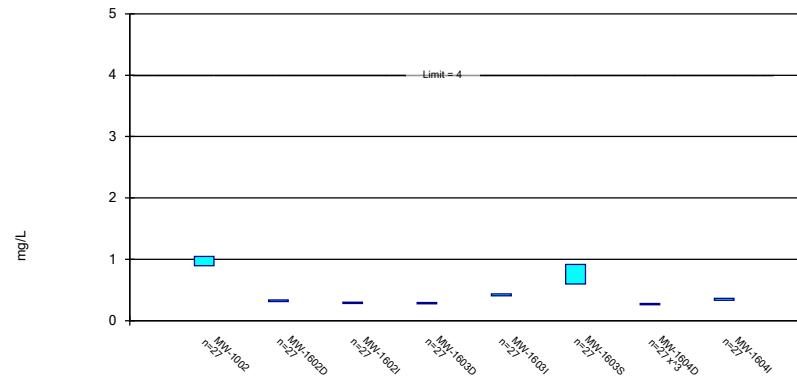
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

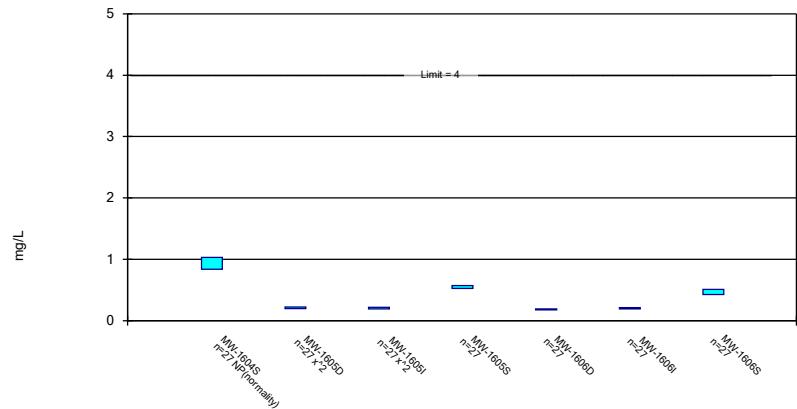
### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



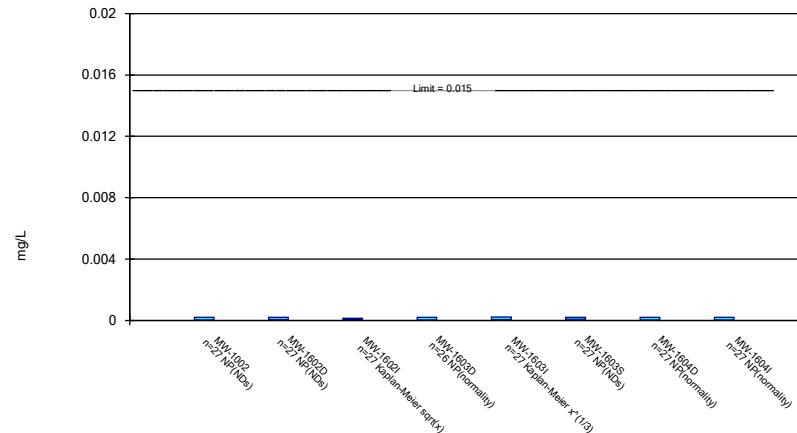
### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



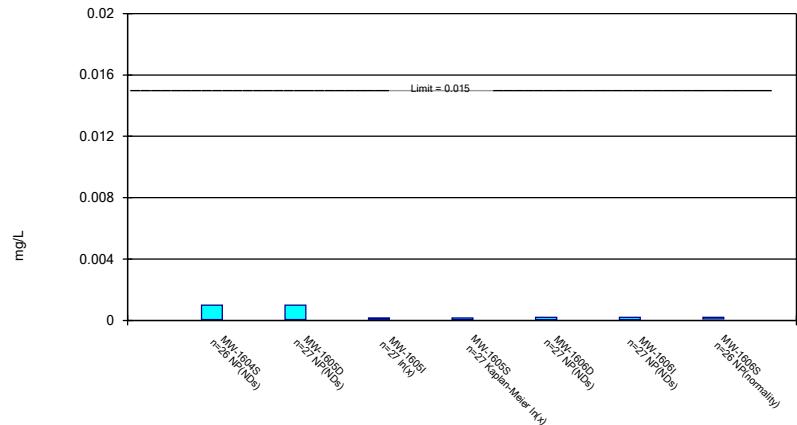
### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



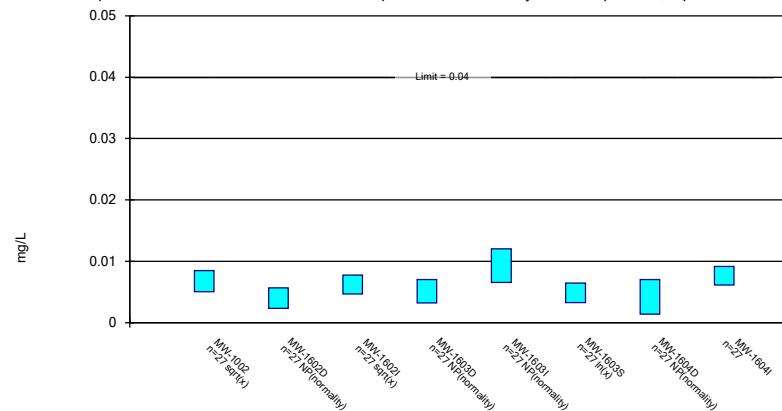
### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



### Parametric and Non-Parametric (NP) Confidence Interval

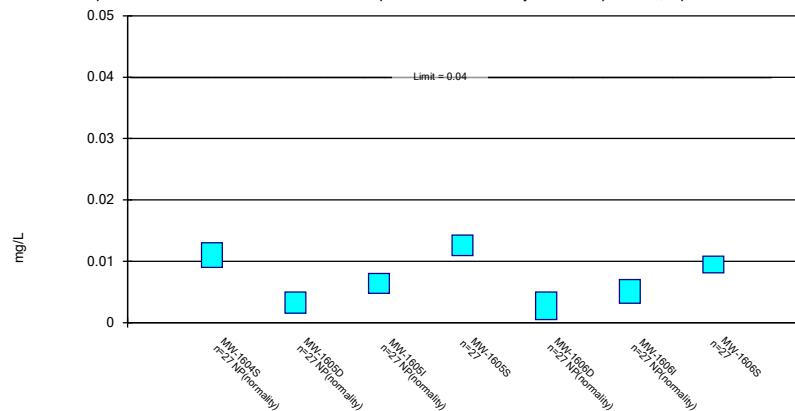
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

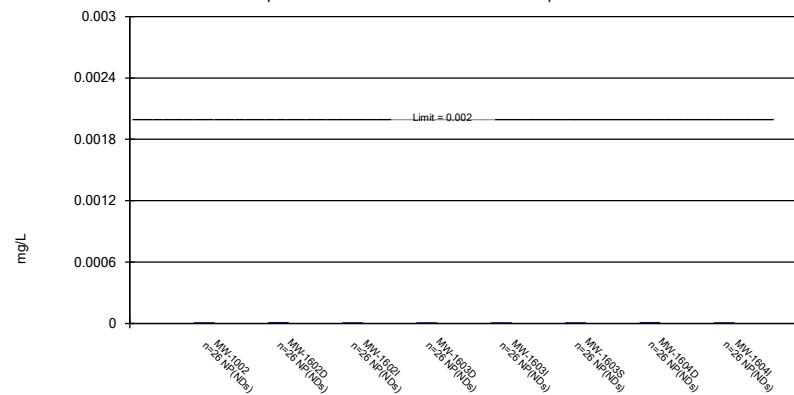
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Non-Parametric Confidence Interval

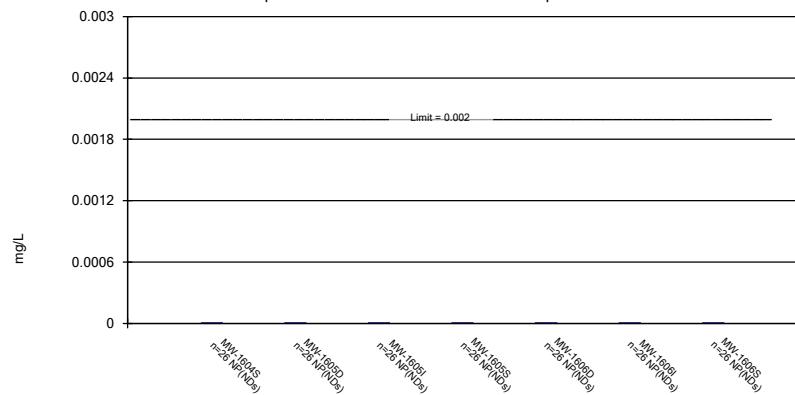
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Non-Parametric Confidence Interval

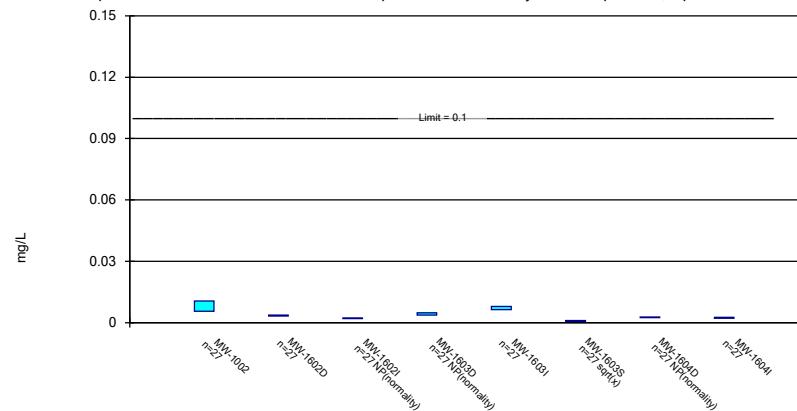
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

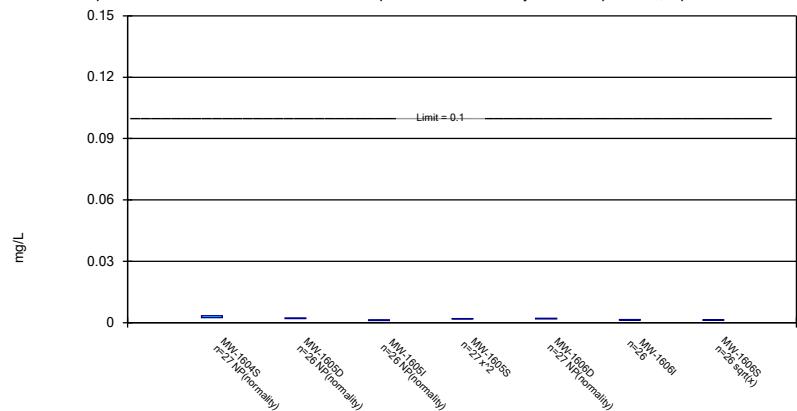
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

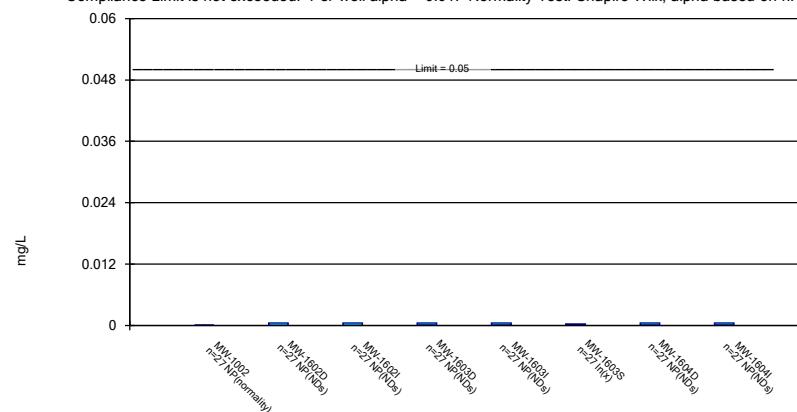
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

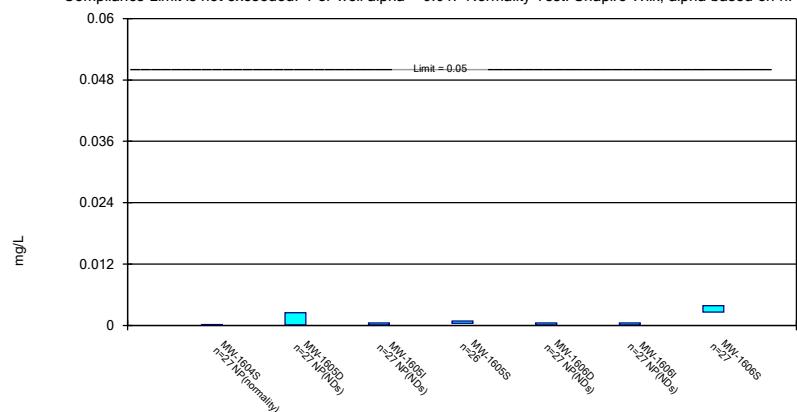
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



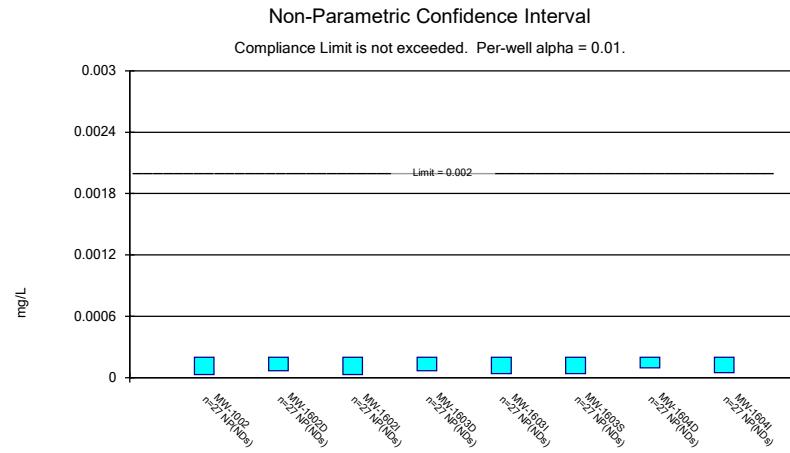
Constituent: Selenium, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### Parametric and Non-Parametric (NP) Confidence Interval

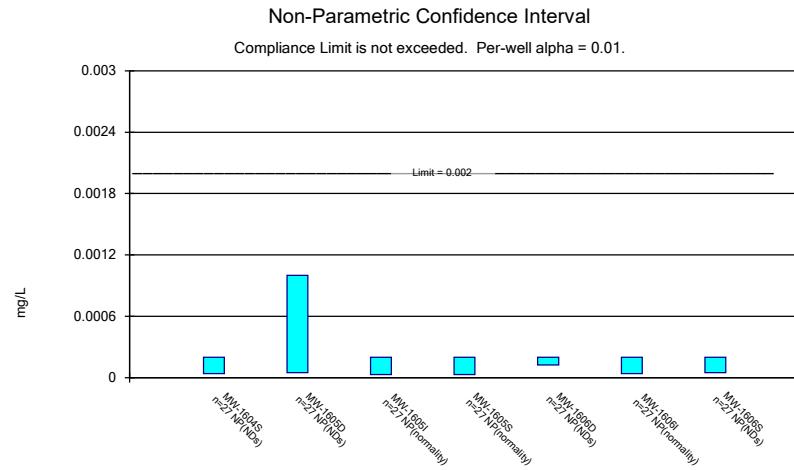
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: Thallium, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP



Constituent: Thallium, total Analysis Run 8/1/2024 3:27 PM View: Confidence Intervals  
Rockport BAP Client: Geosyntec Data: Rockport\_BAP

### **APPENDIX 3 – Alternate Source Demonstrations**

No new alternate source demonstrations have been completed as of January 31, 2025.

#### **APPENDIX 4 – Notices for Monitoring Program Transitions**

The notification that an assessment monitoring program was initiated follows.

## **Rockport Plant Bottom Ash Pond**

### **Notice of Assessment Monitoring Initiation**

On January 15, 2018, it was determined that the Rockport Plant's Bottom Ash Pond Complex had statistically significant increases over background for the Appendix III parameters of boron, chloride, fluoride, pH, TDS, and sulfate. An alternative source demonstration was not successful within the 90 day period as allowed for in 257.94(e)(2). Therefore, an assessment monitoring program was established at Rockport's bottom ash pond complex on April 15, 2018 and this notice is being placed in Rockport's operating record in accordance with the requirement in 257.94 (e)(3).

## **APPENDIX 5 – Well Installation/Decommissioning Logs**

There were no wells installed or decommissioned during the reporting period.