

Annual Groundwater Monitoring Report

Southwestern Electric Power Company

Flint Creek Power Plant

Landfill CCR Unit

Gentry, Arkansas

January 31, 2026

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An **AEP** Company

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I. Overview

This *Annual Groundwater Monitoring Report* (Report) has been prepared to report the status of activities for the preceding year for an existing Landfill (LF) CCR unit at Southwestern Electric Power Company's, a wholly owned subsidiary of American Electric Power Company (AEP), Flint Creek Power Plant. The USEPA's CCR rules require that the Annual Groundwater Monitoring Report be posted to the operating record for the preceding year no later than January 31.

In general, the following activities were completed:

- The LF CCR unit was in Assessment monitoring at the beginning and at the end of 2025.
- The LF CCR unit initiated an Assessment monitoring program on April 3, 2018.
- Groundwater samples were collected on March 17-18, 2025 in accordance with 40 CFR 257.95(b) and analyzed for all Appendix IV constituents. Groundwater samples were collected on June 17-18, 2025 in accordance with 40 CFR 257.95(d)(1) and analyzed for all Appendix III constituents and those Appendix IV constituents that were detected during the previous sampling (in March 2025) in accordance with 40 CFR 257.95(b). Groundwater samples were collected on September 15-16, 2025 in accordance with 40 CFR 257.95(d)(1), and analyzed for all Appendix III constituents and those Appendix IV constituents that were detected during the March 2025 sampling in accordance with 40 CFR 257.95(b). All sampling was performed in accordance with 40 CFR 257.95 *et seq.*, and AEP's *Groundwater Sampling and Analysis Plan (2018)*.
- Groundwater data underwent various validation tests, including tests for completeness, valid values, transcription errors, and consistent units.
- Statistical analysis of assessment monitoring samples collected in June 2025 was completed on October, 13, 2025. Statistical analysis of assessment monitoring samples collected in September 2025 was completed on January 9, 2026.
- Statistical analysis of the assessment monitoring events of June 2025 and September 2025 determined that no statistically significant levels (SSLs) above groundwater protection standards (GWPSs) were detected. Statistical analysis of data conducted to determine whether or not one or more Appendix III constituents were detected at statistically significant increases (SSIs) above background was also performed.
- The statistical evaluation of data collected during the June 2025 sampling event concluded that:
 - Boron concentrations were above the interwell upper prediction limit (UPL) of 0.107 milligrams per liter (mg/L) at B-2 (0.391 mg/L) and at B-11 (0.456 mg/L).
 - The calcium concentration was above the intrawell UPL of 19.8 mg/L at B-11 (30.1 mg/L)

- The chloride concentration was above the intrawell UPL of 9.82 mg/L at B-11 (35.4 mg/L).
- The sulfate concentration was above the intrawell UPL of 44.5 mg/L at B-9 (60.0 mg/L).
- Total dissolved solids (TDS) concentrations were above the intrawell UPL of 315 mg/L at B-9 (320 mg/L) and the intrawell UPL of 190 mg/L at B-11 (230 mg/L).
- The statistical evaluation of data collected during the September 2025 sampling event concluded that:
 - Boron concentrations were above the interwell UPL of 0.107 milligrams per liter (mg/L) at B-2 (0.297 mg/L) and at B-11 (0.323 mg/L).
 - The chloride concentration was above the intrawell UPL of 9.82 mg/L at B-11 (24.6 mg/L).
 - The sulfate concentration was above the intrawell UPL of 44.5 mg/L at B-9 (52.9 mg/L).
- GWPSs and UPLs were updated in 2025 in accordance with the most recent Statistical Analysis Plan and described in the 2025 2nd Semi-Annual Event Statistical Analysis Report.
- No alternative source demonstrations (ASDs) were conducted.
- Based on the results of statistical analysis of data from the June and September 2025 sampling events, data concentrations of some of the Appendix III constituents appeared to be above background levels and the unit 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 or a drawing showing the LF CCR unit, all groundwater monitoring wells and monitoring well identification numbers;
- 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 detection monitoring or assessment monitoring programs is included in **Appendix 1**;
- Statistical comparison of monitoring data to determine if there have been SSLs above the groundwater protection standards (attached as **Appendix 2**, where applicable);
- A discussion of whether any alternate source demonstrations were performed, and the conclusions (attached as **Appendix 3**, where applicable);

- A summary of any transition between monitoring programs, for example the date and circumstances for transitioning from detection monitoring to assessment monitoring (notices attached as **Appendix 4**, where applicable);
- Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a statement regarding the rationale for the installation/decommission (attached as **Appendix 5**, where applicable); and
- Other information required to be included in the annual report such as an alternate monitoring frequency 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 figure that follows depicts the PE-certified groundwater monitoring network, the monitoring well locations and their corresponding identification numbers.



Landfill Monitoring Wells	
Upgradient	Downgradient
B-1B	B-2
B-4	B-6
B-5	B-9
B-7A	B-10
B-12	B-11
B-13	

III. Monitoring Wells Installed or Decommissioned

There were no monitoring wells installed or decommissioned in 2025. The network design, as summarized in the *Groundwater Monitoring Network Design Report* (2017) posted at the CCR web site for the Flint Creek Plant, 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 Rate and Direction and Discussion

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

V. Groundwater Quality Data Statistical Analysis

Statistical analysis of assessment monitoring samples collected in June 2025 was completed on October 13, 2025. Statistical analysis of samples collected during the September 2025 sampling event was completed on January 9, 2026. No SSLs above the groundwater protection standards were identified during the October 2025 or January 2026 statistical analyses. Statistical analysis was performed during December 2025 to evaluate and recalculate prediction limits, as appropriate, for Appendix III parameters using recent compliance samples. GWPSs were reestablished for the Appendix IV parameters.

Statistical analysis of data to determine whether one or more Appendix III constituents were detected at SSIs above background was also performed. Several SSIs were concluded for Appendix III parameters as detailed in the overview section of this report.

The results of these statistical analyses are documented in the corresponding statistical analysis summary report, provided in Appendix 2.

VI. Alternate Source Demonstration

ASDs relative to Appendix IV SSLs above the groundwater protection standard were not necessary because no SSLs were identified from the completed sampling events required by 40 CFR 257.95(d)(1).

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

Because an alternate source for the SSIs could not be identified, an assessment monitoring program was established at the LF CCR unit on April 3, 2018. No transition between monitoring requirements occurred in 2025; the LF CCR unit was in assessment monitoring at the beginning and at the end of 2025.

Regarding defining an alternate monitoring frequency, the groundwater velocity and monitoring well production is high enough at this facility that no modification of the assessment monitoring schedule is necessary.

VIII. Other Information Required

The Flint Creek landfill has progressed from detection monitoring to its current status in assessment monitoring. All required information has been included in this annual groundwater monitoring report. 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 2025.

IX. Description of Any Problems Encountered in 2025 and Actions Taken

No significant problems were encountered. Through the use of low-flow purging and sampling methodology, samples representative of uppermost aquifer groundwater were obtained and the schedule was met to support the annual groundwater report preparation covering the year 2025 groundwater monitoring activities.

X. A Projection of Key Activities for the Upcoming Year

Key activities for 2026 include:

- Assessment monitoring on a semiannual schedule;
- Statistical evaluation of the assessment monitoring results to determine any statistically significant increases (or decreases with respect to pH) over background or an established groundwater protection standard, or whether the concentrations have returned below background concentrations;
- Responding to any new data received in light of CCR rule requirements;
- Preparation of the next annual groundwater report.

APPENDIX 1 - Groundwater Data Tables and Figures

Tables follow showing the groundwater monitoring data collected, the rate of groundwater flow each time groundwater was sampled, the number of samples collected per monitoring well, dates that the samples were collected, and whether each sample was collected as part of a detection monitoring or an assessment monitoring program. Figures follow showing the PE-certified groundwater monitoring network with the corresponding well identifications along with static water elevation data and groundwater flow directions each time groundwater was sampled in the form of annotated satellite images.

Table 1. Groundwater Data Summary: B-1B
FlintCreek - LF
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	S.U.	mg/L	mg/L
5/24/2016	Background	0.02	90.8	3	0.5955 J1	8.1	22	296
7/19/2016	Background	0.02	92.4	4	0.4424 J1	7.1	25	281
9/14/2016	Background	0.02	96.3	3	0.4087 J1	7.0	24	296
10/05/2016	Background	0.02	89.3	5	0.4557 J1	7.5	25	294
11/07/2016	Background	0.02	86.5	4	< 0.083 U1	7.2	24	270
1/24/2017	Background	0.02	85.9	2	< 0.083 U1	7.7	22	276
3/06/2017	Background	0.02	88.7	2	< 0.083 U1	7.4	23	272
4/25/2017	Background	0.02041	88.1	4	0.53 J1	6.5	23	268
5/15/2017	Background	0.01982	85.5	3	0.4551 J1	6.8	20	240
6/12/2017	Background	0.02962	85.1	4	< 0.083 U1	6.3	21	276
8/29/2017	Detection	0.0579	83.3	3	0.416 J1	7.9	20	264
3/26/2018	Assessment	0.01493	89.6	2	0.098 J1	7.5	22	268
8/28/2018	Assessment	0.026	87.6	--	--	7.3	--	288
10/23/2018	Assessment	--	--	5.53	0.489 J1	--	14.8	--
3/12/2019	Assessment	0.02 J1	93.1	2.31	0.41	7.6	17.5	228
6/10/2019	Assessment	0.05 J1	92.4	2.31	0.49	6.6	20.7	266
8/27/2019	Assessment	< 0.02 U1	86.5	2	0.275 J1	7.4	20	312
3/23/2020	Assessment	--	--	--	--	7.1	--	--
3/24/2020	Assessment	--	--	2.39	0.40	--	21.8	258
6/23/2020	Assessment	--	--	--	--	7.4	--	--
6/24/2020	Assessment	< 0.02 U1	87.0	2.22	0.36	--	23.7	272
10/19/2020	Assessment	--	--	--	--	7.7	--	--
10/20/2020	Assessment	0.03 J1	85.5	2.23	0.37	--	24.5	293
3/01/2021	Assessment	--	--	--	--	7.0	--	--
3/02/2021	Assessment	--	--	--	0.42	--	--	--
6/21/2021	Assessment	0.014 J1	84.8	2.20	0.39	7.2	18.7	290
9/20/2021	Assessment	--	--	--	--	7.7	--	--
9/21/2021	Assessment	0.010 J1	86.1	2.23	0.37	--	19.2	290
3/14/2022	Assessment	--	--	--	--	7.1	--	--
3/15/2022	Assessment	--	--	--	0.39	--	--	--
6/13/2022	Assessment	--	--	--	--	7.0	--	--
6/14/2022	Assessment	< 0.009 U1	73.4 M1, P3	2.10	0.38	--	15.4	310
9/20/2022	Assessment	--	--	--	--	7.0	--	--
9/21/2022	Assessment	0.011 J1	80.3 M1, P3	2.18	0.37	--	15.5	280
3/06/2023	Assessment	--	--	--	--	7.1	--	--
3/07/2023	Assessment	--	--	--	0.35	--	--	--
6/19/2023	Assessment	--	--	--	--	7.1	--	--
6/20/2023	Assessment	0.012 J1	82.4	2.58	0.36	--	20.2	290
9/18/2023	Assessment	--	--	--	--	7.4	--	--
9/19/2023	Assessment	0.012 J1	84.2	2.18	0.34	--	21.1	280
3/04/2024	Assessment	--	--	--	--	7.1	--	--
3/05/2024	Assessment	--	--	--	0.35	--	--	--
4/15/2024	Assessment	--	--	--	--	7.2	--	--
4/16/2024	Assessment	0.011 J1	81.7	2.17	0.24	--	10.7	290
8/19/2024	Assessment	--	--	--	--	7.3	--	--
8/20/2024	Assessment	0.013 J1	84.8	2.07	0.33	--	9.7	270
3/17/2025	Assessment	--	--	--	--	7.2	--	--
3/18/2025	Assessment	--	--	--	0.40	--	--	--
6/17/2025	Assessment	--	--	--	--	7.5	--	--
6/18/2025	Assessment	0.012 J1	87.1	2.22	0.40	--	14.4	280 S7
9/15/2025	Assessment	--	--	--	--	7.6	--	--
9/16/2025	Assessment	0.031 J1	83.6	2.33	0.41	--	13.8	300

Table 1. Groundwater Data Summary: B-1B
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	112	0.0480724 J1	< 0.07 U1	0.801049 J1	0.441945 J1	3.583	0.5955 J1	< 0.68 U1	0.028	0.02301 J1	2.01197 J1	< 0.99 U1	< 0.86 U1
7/19/2016	Background	< 0.93 U1	< 1.05 U1	118	0.0361035 J1	< 0.07 U1	0.611765 J1	0.527203 J1	--	0.4424 J1	1.03545 J1	0.028	0.01793 J1	0.869973 J1	< 0.99 U1	< 0.86 U1
9/14/2016	Background	< 0.93 U1	< 1.05 U1	125	< 0.02 U1	< 0.07 U1	1	0.454131 J1	8.375	0.4087 J1	0.999779 J1	0.028	< 0.005 U1	0.612698 J1	< 0.99 U1	< 0.86 U1
10/05/2016	Background	< 0.93 U1	< 1.05 U1	122	0.0372394 J1	< 0.07 U1	0.984649 J1	0.750457 J1	8.79	0.4557 J1	1.03454 J1	0.041	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
11/07/2016	Background	< 0.93 U1	< 1.05 U1	131	0.033331 J1	0.0774505 J1	2	0.917319 J1	4.63	< 0.083 U1	1.03555 J1	0.027	0.00589 J1	0.297867 J1	< 0.99 U1	< 0.86 U1
1/24/2017	Background	< 0.93 U1	1.26762 J1	97	0.0223085 J1	< 0.07 U1	1	0.385362 J1	3.178	< 0.083 U1	< 0.68 U1	0.026	0.00757 J1	0.6452 J1	< 0.99 U1	< 0.86 U1
3/06/2017	Background	< 0.93 U1	< 1.05 U1	123	< 0.02 U1	< 0.07 U1	< 0.23 U1	0.325089 J1	3.604	< 0.083 U1	< 0.68 U1	0.034	< 0.005 U1	0.561767 J1	< 0.99 U1	< 0.86 U1
4/25/2017	Background	1.27 J1	< 1.05 U1	112	0.04 J1	< 0.07 U1	0.85 J1	0.49 J1	3.841	0.53 J1	< 0.68 U1	0.02658	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
5/15/2017	Background	< 0.93 U1	< 1.05 U1	118	0.03 J1	< 0.07 U1	0.3 J1	0.49 J1	1.448	0.4551 J1	< 0.68 U1	0.02701	0.009 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
6/12/2017	Background	< 0.93 U1	1.43 J1	123	< 0.02 U1	< 0.07 U1	0.33 J1	0.47 J1	5.15	< 0.083 U1	< 0.68 U1	0.02717	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/26/2018	Assessment	< 0.93 U1	< 1.05 U1	108	< 0.02 U1	< 0.07 U1	1.22	0.21 J1	4.485	0.098 J1	0.8 J1	0.0266	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
8/28/2018	Assessment	0.08	0.33	112	0.02 J1	0.07	0.263	0.102	6.51	--	0.247	0.0278	< 0.005 U1	1.17	0.04 J1	0.01 J1
10/23/2018	Assessment	--	--	--	--	--	--	--	--	0.489 J1	--	--	--	--	--	--
3/12/2019	Assessment	< 0.1 U1	0.4 J1	112	< 0.1 U1	< 0.05 U1	< 0.2 U1	< 0.1 U1	3.924	0.41	1.25	0.0264	< 0.005 U1	< 2 U1	< 0.2 U1	< 0.5 U1
6/10/2019	Assessment	0.03 J1	0.62	112	0.02 J1	0.02 J1	0.368	0.051	5.96	0.49	0.530	< 0.02 U1	< 0.005 U1	0.8 J1	< 0.03 U1	< 0.1 U1
8/27/2019	Assessment	0.11	0.57	114	< 0.02 U1	0.06	0.278	0.05 J1	4.73	0.275 J1	0.395	0.0231	< 0.005 U1	1 J1	< 0.03 U1	< 0.1 U1
3/24/2020	Assessment	0.12	0.34	116	< 0.02 U1	0.04 J1	0.07 J1	0.02 J1	5.38	0.40	0.06 J1	0.0242	< 0.002 U1	1 J1	0.08 J1	< 0.1 U1
6/24/2020	Assessment	0.03 J1	0.77	113	< 0.02 U1	0.02 J1	0.273	0.05 J1	4.558	0.36	0.07 J1	0.0243	< 0.002 U1	1 J1	0.04 J1	< 0.1 U1
10/20/2020	Assessment	0.04 J1	0.63	108	< 0.02 U1	0.01 J1	< 0.04 U1	0.072	5.16	0.37	0.07 J1	0.0229	< 0.002 U1	2.29	0.05 J1	0.1 J1
3/02/2021	Assessment	0.02 J1	0.67	102	0.03 J1	< 0.01 U1	0.1 J1	0.04 J1	4.629	0.42	< 0.05 U1	0.0247	< 0.002 U1	< 0.4 U1	< 0.03 U1	< 0.1 U1
6/21/2021	Assessment	< 0.02 U1	0.23	102	0.013 J1	0.007 J1	0.43	0.057	3.94	0.39	0.06 J1	0.0231	< 0.002 U1	0.3 J1	< 0.09 U1	< 0.04 U1
9/21/2021	Assessment	< 0.02 U1	0.28	111	0.008 P2, J1	< 0.004 U1	0.22	0.015 J1	5.07	0.37	< 0.05 U1	0.0243 P2	< 0.002 U1	1.0	< 0.09 U1	< 0.04 U1
3/15/2022	Assessment	0.02 J1	0.41	113	0.022 J1	0.019 J1	0.35	0.044	7.14	0.39	0.42	0.0254	< 0.002 U1	0.9	< 0.09 U1	< 0.04 U1
6/14/2022	Assessment	< 0.02 U1	0.13	109 M1, P3	0.015 J1	< 0.004 U1	0.38	0.018 J1	4.41	0.38	0.05 J1	0.0247	< 0.002 U1	0.2 J1	< 0.09 U1	< 0.04 U1
9/21/2022	Assessment	< 0.02 U1	0.17	108 P3	0.016 J1	0.007 J1	0.28	0.015 B1, J1	7.95	0.37	< 0.05 U1	0.0241	< 0.002 U1	0.5	< 0.09 U1	< 0.04 U1
3/07/2023	Assessment	< 0.02 U1	0.22	108	0.042 J1	0.012 J1	0.30	0.021	3.32	0.35	0.11 J1	0.0249	< 0.002 U1	0.9	< 0.09 U1	< 0.04 U1
6/20/2023	Assessment	0.034 J1	0.42	108	0.028 J1	0.016 J1	0.42	0.165	7.83	0.36	0.35	0.0246	< 0.002 U1	1.3	< 0.04 U1	< 0.02 U1
9/19/2023	Assessment	0.013 J1	0.26	101	0.019 J1	0.015 J1	0.35	0.040	6.82	0.34	0.07 J1	0.0244	< 0.002 U1	0.7	< 0.04 U1	< 0.02 U1
3/05/2024	Assessment	< 0.008 U1	0.13	105	0.016 J1	< 0.004 U1	0.35	0.299	5.34	0.35	< 0.05 U1	0.0255	< 0.002 U1	0.5	< 0.04 U1	< 0.02 U1
4/16/2024	Assessment	0.013 J1	0.09 J1	106	0.021 J1	0.006 J1	0.35	0.016 J1	6.25	0.24	0.06 J1	0.0244	< 0.002 U1	0.2 J1	< 0.04 U1	< 0.02 U1
8/20/2024	Assessment	< 0.008 U1	0.09 J1	114	0.016 J1	< 0.004 U1	0.21 J1	0.010 J1	5.73	0.33	0.38	0.0244	< 0.002 U1	0.3 J1	< 0.04 U1	< 0.02 U1
3/18/2025	Assessment	0.020 J1	0.29	111	0.018 J1	0.035	0.32	0.030	1.93	0.40	0.21	0.0261	< 0.002 U1	1.5	< 0.04 U1	< 0.02 U1
6/18/2025	Assessment	0.013 J1	0.05 J1	117	0.019 J1	0.010 J1	0.36	0.019 J1	5.10	0.40	0.10 J1	0.0253	< 0.004 U1	< 0.1 U1	< 0.04 U1	< 0.02 U1
9/16/2025	Assessment	0.02 J1	0.07 J1	117	0.02 J1	0.023	0.65	0.05	3.87	0.41	0.26	0.0236	< 0.002 U1	0.25 J1	< 0.04 U1	< 0.02 U1

Table 1. Groundwater Data Summary: B-2
FlintCreek - LF
Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/24/2016	Background	1.13	91.9	6	< 0.083 U1	7.0	619	1212
7/19/2016	Background	1.33	59.9	7	0.3361 J1	6.7	464	936
9/14/2016	Background	1.19	62.6	7	< 0.083 U1	6.6	560	1124
10/05/2016	Background	1.32	45.3	7	< 0.083 U1	5.9	339	741
11/08/2016	Background	1.82	27.5	6	< 0.083 U1	6.0	145	365
1/23/2017	Background	1.56	24	5	< 0.083 U1	5.8	119	296
3/07/2017	Background	1.04	32.1	5	< 0.083 U1	5.9	105	260
4/25/2017	Background	1.44	23.1	6	< 0.083 U1	6.3	179	400
5/15/2017	Background	1.33	20.7	6	< 0.083 U1	5.5	153	328
6/12/2017	Background	0.936	39.6	6	< 0.083 U1	5.9	109	278
8/29/2017	Detection	1.07	18	6	< 0.083 U1	6.0	116	270
12/21/2017	Detection	0.7	--	--	--	5.9	--	--
3/26/2018	Assessment	0.851	15.3	4	< 0.083 U1	6.7	138	324
8/27/2018	Assessment	0.702	56.3	--	--	6.7	--	532
10/23/2018	Assessment	--	--	10.8	< 0.083 U1	--	198	--
3/12/2019	Assessment	0.634	34.5	5.88	0.1 J1	6.9	129	376
6/11/2019	Assessment	0.697	14.2	4.16	0.06 J1	6.4	80.9	246
8/27/2019	Assessment	0.735	15.4	3	< 0.083 U1	5.9	65	230
12/09/2019	Assessment	--	--	--	--	6.6	--	--
3/24/2020	Assessment	--	--	2.81	0.07	5.7	68.1	168
6/24/2020	Assessment	0.355	30.7	5.36	0.09	6.2	84.9	252
10/19/2020	Assessment	0.504	33.9	4.10	0.07	5.5	110	304
3/01/2021	Assessment	--	--	--	0.11	6.1	--	--
6/21/2021	Assessment	0.480	23.0	3.68	0.11	5.7	60.9	230 P1
9/20/2021	Assessment	0.488	32.8	3.11	0.11	5.5	70.5	240
3/14/2022	Assessment	--	--	--	0.08	5.8	--	--
6/13/2022	Assessment	0.390	22.9	2.80	0.09	5.6	49.4	220
9/20/2022	Assessment	0.419	29.3	3.57	0.10	6.0	67.9	220
3/06/2023	Assessment	--	--	--	0.08	5.7	--	--
6/19/2023	Assessment	0.205	32.7	5.88	0.06	5.4	292	560
9/18/2023	Assessment	0.292	26.8	3.21	0.07	5.6	45.3	190
3/04/2024	Assessment	--	--	--	0.08	5.6	--	--
4/15/2024	Assessment	0.406	25.3	4.22	0.08	5.4	70.7	190
8/19/2024	Assessment	0.349	40.3	4.11	0.09	5.5	75.9	270
3/17/2025	Assessment	--	--	--	0.12	5.6	--	--
6/17/2025	Assessment	0.391	26.8	4.15	0.09	5.7	56.4	200
9/15/2025	Assessment	0.297	19.9	4.20	0.07	5.7	59.3	190

Table 1. Groundwater Data Summary: B-2
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	94	0.131152 J1	< 0.07 U1	4	0.952324 J1	1.06	< 0.083 U1	< 0.68 U1	0.009	0.02106 J1	6	82	< 0.86 U1
7/19/2016	Background	< 0.93 U1	< 1.05 U1	114	0.297284 J1	< 0.07 U1	6	2.18888 J1	--	0.3361 J1	1.98005 J1	0.005	0.00946 J1	2.74335 J1	50	< 0.86 U1
9/14/2016	Background	1.81571 J1	8	226	1	0.348046 J1	26	15	1.752	< 0.083 U1	13	0.021	0.027	2.59675 J1	49	0.98925 J1
10/05/2016	Background	< 0.93 U1	< 1.05 U1	73	0.168987 J1	< 0.07 U1	5	1.57645 J1	4.10	< 0.083 U1	1.52736 J1	0.016	< 0.005 U1	0.783837 J1	35	< 0.86 U1
11/08/2016	Background	1.15186 J1	17	543	3	0.870406 J1	37	31	3.87	< 0.083 U1	26	0.027	0.05	2.69221 J1	13	< 0.86 U1
1/23/2017	Background	1.32054 J1	2.57288 J1	214	0.763757 J1	< 0.07 U1	10	6	1.408	< 0.083 U1	4.36086 J1	0.007	0.01252 J1	0.832511 J1	9	< 0.86 U1
3/07/2017	Background	6	< 1.05 U1	70	0.157872 J1	< 0.07 U1	2	0.632449 J1	1.372	< 0.083 U1	< 0.68 U1	0.005	< 0.005 U1	0.478127 J1	20	< 0.86 U1
4/25/2017	Background	< 0.93 U1	1.39 J1	97.47	0.22 J1	0.08 J1	3.44	1.24 J1	1.881	< 0.083 U1	1.32 J1	0.00242	< 0.005 U1	0.77 J1	9.94	< 0.86 U1
5/15/2017	Background	1.17 J1	1.77 J1	51.22	0.17 J1	< 0.07 U1	2.49	0.47 J1	1.429	< 0.083 U1	0.8 J1	0.00161	< 0.005 U1	0.34 J1	9.52	< 0.86 U1
6/12/2017	Background	< 0.93 U1	1.08 J1	79.45	0.17 J1	0.09 J1	3.76	1.67 J1	1.839	< 0.083 U1	0.8 J1	0.00287	< 0.005 U1	2.1 J1	20.57	< 0.86 U1
3/26/2018	Assessment	1.6 J1	1.44 J1	62.23	0.15 J1	< 0.07 U1	2.15	0.62 J1	2.018	< 0.083 U1	< 0.68 U1	0.0023	< 0.005 U1	< 0.29 U1	8.63	0.88 J1
8/27/2018	Assessment	0.02 J1	0.67	62.7	0.062	0.05	2.17	0.371	2.403	--	0.332	0.00172	0.005 J1	4.42	27.3	0.066
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/12/2019	Assessment	< 0.1 U1	0.4 J1	63.9	0.1 J1	0.06 J1	2.83	0.2 J1	1.93	0.1 J1	0.2 J1	0.00188	< 0.005 U1	< 2 U1	14.3	< 0.5 U1
6/11/2019	Assessment	< 0.02 U1	0.18	38.5	0.208	0.04 J1	1.57	0.069	0.959	0.06 J1	< 0.05 U1	< 0.02 U1	< 0.005 U1	0.4 J1	6.7	< 0.1 U1
8/27/2019	Assessment	< 0.02 U1	0.22	41.3	0.149	0.03 J1	1.75	0.105	0.888	< 0.083 U1	0.08 J1	0.00128	< 0.005 U1	0.5 J1	6.8	< 0.1 U1
3/24/2020	Assessment	0.02 J1	0.16	36.0	0.130	0.03 J1	1.37	0.053	1.077	0.07	< 0.05 U1	0.00109	< 0.002 U1	0.8 J1	5.2	< 0.1 U1
6/24/2020	Assessment	< 0.02 U1	0.21	71.6	0.07 J1	0.03 J1	1.74	0.055	1.974	0.09	< 0.05 U1	0.00132	< 0.002 U1	2 J1	8.4	< 0.1 U1
10/19/2020	Assessment	0.02 J1	0.26	73.0	0.08 J1	0.04 J1	1.56	0.131	1.715	0.07	0.1 J1	0.00126	< 0.002 U1	1 J1	12.3	< 0.1 U1
3/01/2021	Assessment	0.04 J1	0.24	46.6	0.08 J1	0.02 J1	1.35	0.136	1.498	0.11	0.1 J1	0.000946	< 0.002 U1	1 J1	5.7	< 0.1 U1
6/21/2021	Assessment	0.02 J1	0.17	51.0	0.090	0.022	1.35	0.092	0.57	0.11	0.08 J1	0.0010	< 0.002 U1	1.2	5.81	0.04 J1
9/20/2021	Assessment	0.02 J1	0.23	61.1	0.052 P2	0.014 J1	1.45	0.108	1.37	0.11	0.07 J1	0.00090 P2	< 0.002 U1	1.9	8.37	< 0.04 U1
3/14/2022	Assessment	0.02 J1	0.22	45.4	0.083	0.019 J1	1.38	0.095	1.83	0.08	0.06 J1	0.00095	< 0.002 U1	1.1	5.88	< 0.04 U1
6/13/2022	Assessment	< 0.02 U1	0.20	49.3	0.069	0.019 J1	1.31	0.074	0.60	0.09	< 0.05 U1	0.00090	< 0.002 U1	1.3	5.20	0.05 J1
9/20/2022	Assessment	< 0.02 U1	0.23	58.6	0.059	0.024	1.57	0.079 B1	2.53	0.10	< 0.05 U1	0.00102	< 0.002 U1	1.5	7.32	0.05 J1
3/06/2023	Assessment	0.05 J1	0.28	46.9	0.106	0.029	1.54	0.295	1.60	0.08	0.29	0.00103	< 0.002 U1	1.4	4.20	< 0.04 U1
6/19/2023	Assessment	0.028 J1	0.42	208	0.155	0.046	1.52	0.291	1.59	0.06	0.33	0.00208	0.002 J1	0.6	11.3	0.03 J1
9/18/2023	Assessment	0.018 J1	0.15	63.7	0.057	0.021	1.47	0.082	2.09	0.07	0.08 J1	0.00132	< 0.002 U1	0.6	3.60	0.02 J1
3/04/2024	Assessment	0.048 J1	0.47	57.8	0.133	0.037	2.00	0.420	3.03	0.08	0.51	0.00142	< 0.002 U1	0.7	6.34	0.06 J1
4/15/2024	Assessment	0.029 J1	0.35	51.1	0.099	0.029	1.49	0.224	0.68	0.08	0.23	0.00102	< 0.002 U1	0.7	5.87	0.04 J1
8/19/2024	Assessment	0.014 J1	0.25	69.8	0.045 J1	0.028	1.61	0.063	1.51	0.09	< 0.05 U1	0.00105	--	1.4	7.42	0.05 J1
8/26/2024	Assessment	--	--	--	--	--	--	--	--	--	--	--	< 0.002 U1	--	--	--
3/17/2025	Assessment	0.019 J1	0.17	53.4	0.051	0.019 J1	1.55	0.050	1.88	0.12	< 0.05 U1	0.00104	< 0.002 U1	1.3	5.87	0.04 J1
6/17/2025	Assessment	0.023 J1	0.15	50.7	0.096	0.020	1.53	0.072	1.08	0.09	0.05 J1	0.00114	< 0.002 U1	1.0	4.99	0.06 J1
9/15/2025	Assessment	0.02 J1	0.15	41.2	0.07	0.018 J1	1.11	0.04	0.60	0.07	< 0.05 U1	0.00089	< 0.002 U1	0.53	5.07	< 0.02 U1

Table 1. Groundwater Data Summary: B-4

FlintCreek - LF

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	S.U.	mg/L	mg/L
5/24/2016	Background	0.03	8.23	8	< 0.083 U1	7.0	14	92
7/19/2016	Background	0.03	8.86	9	< 0.083 U1	6.7	12	75
9/14/2016	Background	0.03	19.4	8	< 0.083 U1	6.8	8	128
10/05/2016	Background	0.02	8.22	10	< 0.083 U1	6.2	13	78
11/07/2016	Background	0.04	13.3	9	< 0.083 U1	6.7	10	72
1/24/2017	Background	0.04	23.6	8	< 0.083 U1	6.8	5	84
3/07/2017	Background	0.02	22.8	8	< 0.083 U1	7.1	5	52
4/25/2017	Background	0.0382	32.4	9	< 0.083 U1	6.9	8	86
5/15/2017	Background	0.03844	15.5	8	< 0.083 U1	7.2	10	88
6/13/2017	Background	0.0588	7.13	9	< 0.083 U1	7.4	11	76
8/29/2017	Detection	0.04762	5.5	8	< 0.083 U1	7.2	8	60
3/26/2018	Assessment	0.03141	6.06	5	< 0.083 U1	7.4	10	72
8/28/2018	Assessment	0.030	8.23	--	--	7.6	--	44
10/23/2018	Assessment	--	--	9.61	< 0.083 U1	--	13.6	--
3/12/2019	Assessment	0.036	3.37	4.58	0.02 J1	7.5	12.1	68
6/11/2019	Assessment	0.07 J1	3.50	3.74	0.02 J1	7.5	13.4	60
8/28/2019	Assessment	0.056	2.92	3	< 0.083 U1	6.0	11	66
3/23/2020	Assessment	--	--	2.14	0.02 J1	6.7	15.4	58
6/24/2020	Assessment	0.107	2.93	1.92	0.02 J1	6.6	15.3	57
10/19/2020	Assessment	0.070	2.61	2.33	0.02 J1	6.2	11.2	64
3/01/2021	Assessment	--	--	--	0.03 J1	6.0	--	--
6/22/2021	Assessment	0.10	3.2	2.38	0.02 J1	5.6	12.4	70
9/20/2021	Assessment	0.030 J1	49.8	4.50	0.03 J1	6.3	5.88	110
3/14/2022	Assessment	--	--	--	0.02 J1	6.5	--	--
6/13/2022	Assessment	0.092	5.81	2.42	0.02 J1	6.1	11.3	80
9/20/2022	Assessment	0.078	15.1	3.05	0.02 J1	6.2	9.48	80
3/06/2023	Assessment	--	--	--	< 0.02 U1	6.4	--	--
6/19/2023	Assessment	0.019 J1	38.1	5.29	< 0.02 U1	6.2	5.0	140
9/18/2023	Assessment	0.030 J1	29.9	4.79	0.03 J1	6.2	4.4	120
3/05/2024	Assessment	--	--	--	0.03 J1	6.7	--	--
4/15/2024	Assessment	0.042 J1	24.4	4.52	0.03 J1	6.3	5.8	100
8/19/2024	Assessment	0.032 J1	24.6	4.88	< 0.02 U1	6.8	4.7	110
3/18/2025	Assessment	--	--	--	0.02 J1	6.8	--	--
6/17/2025	Assessment	0.095	9.73	3.08	< 0.02 U1	6.9	7.9	90
9/15/2025	Assessment	0.055	23.0	4.43	< 0.02 U1	6.4	6.62	120

Table 1. Groundwater Data Summary: B-4
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	49	0.205178 J1	< 0.07 U1	1	0.36974 J1	0.734	< 0.083 U1	< 0.68 U1	< 0.00013 U1	0.01529 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
7/19/2016	Background	< 0.93 U1	< 1.05 U1	49	0.211526 J1	< 0.07 U1	1	0.15016 J1	--	< 0.083 U1	< 0.68 U1	0.002	0.00738 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
9/14/2016	Background	< 0.93 U1	< 1.05 U1	65	0.037683 J1	< 0.07 U1	2	0.4142 J1	8.344	< 0.083 U1	1.16564 J1	0.001	< 0.005 U1	< 0.29 U1	< 0.99 U1	0.918935 J1
10/05/2016	Background	< 0.93 U1	< 1.05 U1	71	0.439546 J1	< 0.07 U1	5	2.34157 J1	3.969	< 0.083 U1	1.65693 J1	0.009	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
11/07/2016	Background	< 0.93 U1	1.75787 J1	62	0.382027 J1	0.130549 J1	4	1.2283 J1	0.351	< 0.083 U1	0.943091 J1	0.003	0.00809 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/24/2017	Background	2.63622 J1	< 1.05 U1	60	0.210311 J1	< 0.07 U1	2	0.749001 J1	0.945	< 0.083 U1	< 0.68 U1	0.001	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/07/2017	Background	1.09461 J1	< 1.05 U1	51	0.24192 J1	< 0.07 U1	1	0.605358 J1	1.588	< 0.083 U1	< 0.68 U1	0.003	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
4/25/2017	Background	< 0.93 U1	< 1.05 U1	63.66	0.08 J1	< 0.07 U1	0.91 J1	0.28 J1	0.679	< 0.083 U1	0.87 J1	0.00083 J1	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
5/15/2017	Background	< 0.93 U1	< 1.05 U1	70.02	0.09 J1	< 0.07 U1	0.99 J1	< 0.14 U1	2.89	< 0.083 U1	< 0.68 U1	0.00077 J1	0.005 J1	< 0.29 U1	1.11 J1	< 0.86 U1
6/13/2017	Background	4.52 J1	1.18 J1	49.29	0.22 J1	0.08 J1	0.82 J1	0.19 J1	3.373	< 0.083 U1	< 0.68 U1	0.00119	< 0.005 U1	< 0.29 U1	< 0.99 U1	0.9 J1
3/26/2018	Assessment	2.1 J1	< 1.05 U1	46.33	0.09 J1	< 0.07 U1	0.99 J1	0.18 J1	2.309	< 0.083 U1	< 0.68 U1	0.00114	< 0.005 U1	< 0.29 U1	1.94 J1	< 0.86 U1
8/28/2018	Assessment	0.01 J1	0.17	40.5	0.208	0.13	1.03	0.184	0.3669	--	0.184	0.00110	< 0.005 U1	0.07 J1	0.8	0.03 J1
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/12/2019	Assessment	< 0.1 U1	< 0.2 U1	34.3	0.2 J1	0.1 J1	1.26	< 0.1 U1	0.2946	0.02 J1	< 0.1 U1	0.00123	< 0.005 U1	< 2 U1	0.6 J1	< 0.5 U1
6/11/2019	Assessment	< 0.02 U1	0.06 J1	31.2	0.215	0.05 J1	1.03	0.04 J1	0.68	0.02 J1	< 0.05 U1	< 0.02 U1	< 0.005 U1	< 0.4 U1	0.7	< 0.1 U1
8/28/2019	Assessment	< 0.02 U1	0.06 J1	31.1	0.204	0.04 J1	1.11	0.084	1.053	< 0.083 U1	< 0.05 U1	0.000925	< 0.005 U1	< 0.4 U1	0.8	< 0.1 U1
3/23/2020	Assessment	0.03 J1	0.25	35.7	0.198	0.14	0.724	0.133	0.404	0.02 J1	0.396	0.000877	< 0.002 U1	< 0.4 U1	0.5	< 0.1 U1
6/24/2020	Assessment	< 0.02 U1	0.06 J1	38.7	0.169	0.04 J1	0.805	0.059	0.646	0.02 J1	< 0.05 U1	0.000964	0.002 J1	< 0.4 U1	0.5	< 0.1 U1
10/19/2020	Assessment	< 0.02 U1	0.05 J1	28.7	0.204	0.03 J1	0.847	0.04 J1	1.898	0.02 J1	< 0.05 U1	0.000934	< 0.002 U1	< 0.4 U1	0.5	< 0.1 U1
3/01/2021	Assessment	< 0.02 U1	0.09 J1	43.9	0.101	0.03 J1	0.744	0.04 J1	0.887	0.03 J1	< 0.05 U1	0.000761	< 0.002 U1	< 0.4 U1	0.4	< 0.1 U1
6/22/2021	Assessment	< 0.02 U1	0.09 J1	37.2	0.176	0.038	1.03	0.094	1.05	0.02 J1	0.23	0.00083	< 0.002 U1	< 0.1 U1	0.53	< 0.04 U1
9/20/2021	Assessment	0.61	0.14	42.2	0.074 P2	0.052	1.14	0.091	0.67	0.03 J1	3.89	0.00056 P2	< 0.002 U1	< 0.1 U1	0.40 J1	< 0.04 U1
3/14/2022	Assessment	< 0.02 U1	0.08 J1	51.5	0.113	0.030	0.96	0.043	1.02	0.02 J1	< 0.05 U1	0.00076	< 0.002 U1	< 0.1 U1	0.40 J1	< 0.04 U1
6/13/2022	Assessment	< 0.02 U1	0.04 J1	50.8	0.176	0.036	0.84	0.044	0.81	0.02 J1	< 0.05 U1	0.00084	< 0.002 U1	2.8	0.37 J1	< 0.04 U1
9/20/2022	Assessment	< 0.02 U1	0.07 J1	56.3	0.172	0.032	0.82	0.048 B1	1.23	0.02 J1	< 0.05 U1	0.00089	< 0.002 U1	< 0.1 U1	0.38 J1	< 0.04 U1
3/06/2023	Assessment	< 0.02 U1	0.03 J1	41.1	0.246	0.030	1.0	0.041	1.85	< 0.02 U1	< 0.05 U1	0.00106	< 0.002 U1	< 0.1 U1	0.40 J1	< 0.04 U1
6/19/2023	Assessment	0.013 J1	0.12	49.8	0.081	0.028	0.91	0.10	0.75	< 0.02 U1	0.14 J1	0.00070	< 0.002 U1	< 0.1 U1	0.50	0.02 J1
9/18/2023	Assessment	0.010 J1	0.06 J1	45.2	0.107	0.022	0.86	0.040	0.87	0.03 J1	< 0.05 U1	0.00084	< 0.002 U1	< 0.1 U1	0.32 J1	< 0.02 U1
3/05/2024	Assessment	< 0.008 U1	0.07 J1	48.5	0.128	0.032	0.98	0.043	1.65	0.03 J1	< 0.05 U1	0.00091	< 0.002 U1	< 0.1 U1	0.27 J1	0.02 J1
4/15/2024	Assessment	< 0.008 U1	0.06 J1	46.7	0.138	0.031	0.93	0.037	1.17	0.03 J1	< 0.05 U1	0.00085	< 0.002 U1	< 0.1 U1	0.30 J1	< 0.02 U1
8/19/2024	Assessment	< 0.008 U1	0.05 J1	50.2	0.114	0.034	0.83	0.024	0.60	< 0.02 U1	< 0.05 U1	0.00086	< 0.002 U1	< 0.1 U1	0.32 J1	< 0.02 U1
3/18/2025	Assessment	0.009 J1	0.07 J1	48.7	0.166	0.053	1.67	0.069	4.21	0.02 J1	0.05 J1	0.00098	< 0.002 U1	< 0.1 U1	0.28 J1	0.02 J1
6/17/2025	Assessment	< 0.008 U1	0.04 J1	54.7	0.235	0.029	1.07	0.043	1.03	< 0.02 U1	< 0.05 U1	0.00123	< 0.002 U1	< 0.1 U1	0.36 J1	0.03 J1
9/15/2025	Assessment	< 0.02 U1	0.05 J1	48.6	0.16	0.029	0.83	0.02 J1	0.38	< 0.02 U1	< 0.05 U1	0.00089	< 0.002 U1	< 0.05 U1	0.36 J1	< 0.02 U1

Table 1. Groundwater Data Summary: B-5

Geosyntec Consultants, Inc.

FlintCreek - LF

Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/24/2016	Background	0.01	17.4	6	< 0.083 U1	5.1	189	424
7/19/2016	Background	0.01	16.2	7	< 0.083 U1	5.2	205	424
9/14/2016	Background	0.01	17.6	7	< 0.083 U1	6.4	187	372
10/04/2016	Background	0.01	18.7	12	0.2728 J1	6.5	197	404
11/08/2016	Background	0.02	15.9	9	< 0.083 U1	6.6	160	352.94
1/23/2017	Background	0.02	18	6	< 0.083 U1	5.6	212	404
3/07/2017	Background	0.02	16.9	6	< 0.083 U1	5.1	200	392
4/25/2017	Background	0.02255	17.6	7	< 0.083 U1	5.9	226	422
5/16/2017	Background	0.01833	18.3	7	< 0.083 U1	4.9	229	416
6/13/2017	Background	0.03663	17	8	< 0.083 U1	5.0	206	410
8/29/2017	Detection	0.03455	16.4	8	< 0.083 U1	5.4	199	376
3/28/2018	Assessment	0.01591	15.5	6	< 0.083 U1	5.4	169	372
8/28/2018	Assessment	0.014	16.5	--	--	5.5	--	396
10/23/2018	Assessment	--	--	10	< 0.083 U1	--	216	--
3/12/2019	Assessment	0.01 J1	16.2	8.30	0.07 J1	5.3	205	372
6/11/2019	Assessment	< 0.04 U1	17.9	7.02	0.08	5.7	271	438
8/28/2019	Assessment	< 0.02 U1	15.9	6	< 0.083 U1	5.0	219	402
3/23/2020	Assessment	--	--	7.75	0.07	4.7	255	418
6/24/2020	Assessment	< 0.02 U1	16.1	8.12	0.05 J1	5.5	249	406
10/19/2020	Assessment	< 0.02 U1	17.3	8.00	0.06	4.6	258	445
3/02/2021	Assessment	--	--	--	0.08	4.8	--	--
6/22/2021	Assessment	< 0.009 U1	15.6	9.16	0.07	4.9	248	410
9/21/2021	Assessment	< 0.009 U1	15.8	9.07	0.07	5.5	254	420
3/15/2022	Assessment	--	--	--	0.06	5.1	--	--
6/13/2022	Assessment	< 0.009 U1	15.5	9.65	0.07	5.4	248	430
9/21/2022	Assessment	< 0.009 U1	15.1	9.93	0.07	5.8	255	410
3/07/2023	Assessment	--	--	--	0.05 J1	5.7	--	--
6/20/2023	Assessment	0.007 J1	15.2	9.66	0.05 J1	5.3	257	430
9/19/2023	Assessment	0.009 J1	14.2	9.40	0.06	5.6	250	430
3/05/2024	Assessment	--	--	--	0.06	5.0	--	--
4/16/2024	Assessment	0.010 J1	13.5	9.08	0.06	5.0	241	390
8/20/2024	Assessment	0.011 J1	14.6	9.04	0.05 J1	5.2	239	400
3/18/2025	Assessment	--	--	--	0.06	5.1	--	--
6/18/2025	Assessment	0.023 J1	11.2	7.72	0.05 J1	5.1	214	370
9/16/2025	Assessment	0.018 J1	12.4	8.30	0.05 J1	5.0	229	380

Table 1. Groundwater Data Summary: B-5
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	49	0.538281 J1	0.130546 J1	3	0.63546 J1	0.70	< 0.083 U1	< 0.68 U1	0.0003225069333 J1	0.035	< 0.29 U1	36	1.07783 J1
7/19/2016	Background	< 0.93 U1	1.09501 J1	53	0.578371 J1	< 0.07 U1	2	0.670288 J1	--	< 0.083 U1	0.951208 J1	0.003	0.01341 J1	< 0.29 U1	37	< 0.86 U1
9/14/2016	Background	< 0.93 U1	< 1.05 U1	59	0.421905 J1	0.107531 J1	3	0.632453 J1	0.7219	< 0.083 U1	< 0.68 U1	0.003	0.01083 J1	< 0.29 U1	37	< 0.86 U1
10/04/2016	Background	< 0.93 U1	< 1.05 U1	70	0.70802 J1	0.0937694 J1	6	2.24689 J1	4.38	0.2728 J1	2.22182 J1	0.014	0.049	< 0.29 U1	39	< 0.86 U1
11/08/2016	Background	< 0.93 U1	< 1.05 U1	64	0.556725 J1	1	4	0.96226 J1	0.673	< 0.083 U1	< 0.68 U1	0.003	0.02149 J1	< 0.29 U1	33	< 0.86 U1
1/23/2017	Background	< 0.93 U1	< 1.05 U1	60	0.634776 J1	0.136621 J1	5	1.12636 J1	1.222	< 0.083 U1	< 0.68 U1	0.003	0.053	< 0.29 U1	38	1.02071 J1
3/07/2017	Background	< 0.93 U1	< 1.05 U1	42	0.548248 J1	< 0.07 U1	3	0.601941 J1	0.557	< 0.083 U1	< 0.68 U1	0.002	0.0138 J1	< 0.29 U1	36	< 0.86 U1
4/25/2017	Background	1.24 J1	1.87 J1	36.3	0.56 J1	0.15 J1	3.27	0.92 J1	0.698	< 0.083 U1	< 0.68 U1	0.003	0.013 J1	< 0.29 U1	37.33	< 0.86 U1
5/16/2017	Background	< 0.93 U1	1.16 J1	38.38	0.65 J1	0.08 J1	3.63	0.84 J1	4.934	< 0.083 U1	< 0.68 U1	0.00348	0.013 J1	< 0.29 U1	39.1	< 0.86 U1
6/13/2017	Background	< 0.93 U1	< 1.05 U1	37.52	0.6 J1	0.07 J1	3.33	0.63 J1	8.709	< 0.083 U1	< 0.68 U1	0.00323	0.008 J1	< 0.29 U1	36.88	< 0.86 U1
3/28/2018	Assessment	4.41 J1	< 1.05 U1	42.4	0.46 J1	0.27 J1	2.38	0.63 J1	0.721	< 0.083 U1	0.74 J1	0.00263	0.015 J1	< 0.29 U1	35.97	1.16 J1
8/28/2018	Assessment	0.04 J1	0.88	45.0	0.525	0.19	3.01	0.414	1.501	--	0.482	0.00223	0.096	0.06 J1	38.7	0.070
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/12/2019	Assessment	0.2 J1	0.62	80.5	0.638	0.56	2.89	0.477	0.969	0.07 J1	0.833	0.00274	0.028	< 2 U1	39.2	< 0.5 U1
6/11/2019	Assessment	< 0.02 U1	0.67	26.0	0.376	0.18	3.00	0.349	1.27	0.08	0.203	< 0.02 U1	0.007 J1	< 0.4 U1	39.0	< 0.1 U1
8/28/2019	Assessment	< 0.02 U1	0.44	33.7	0.487	0.18	2.40	0.331	0.717	< 0.083 U1	0.1 J1	0.00215	0.006 J1	< 0.4 U1	37.5	< 0.1 U1
3/23/2020	Assessment	< 0.02 U1	0.33	22.4	0.491	0.16	2.35	0.271	0.6329	0.07	0.1 J1	0.00235	0.003 J1	< 0.4 U1	35.0	< 0.1 U1
6/24/2020	Assessment	< 0.02 U1	0.38	20.1	0.473	0.15	2.42	0.259	0.821	0.05 J1	0.1 J1	0.00232	0.004 J1	< 0.4 U1	35.0	< 0.1 U1
10/19/2020	Assessment	0.02 J1	0.43	19.1	0.502	0.16	2.41	0.291	2.622	0.06	0.2 J1	0.00226	0.005	< 0.4 U1	37.4	< 0.1 U1
3/02/2021	Assessment	< 0.02 U1	0.43	18.3	0.477	0.16	2.50	0.284	0.714	0.08	0.2 J1	0.00227	0.004 J1	< 0.4 U1	36.2	< 0.1 U1
6/22/2021	Assessment	< 0.02 U1	0.33	20.0	0.482	0.174	2.45	0.259	1.10	0.07	0.20	0.00232	0.004 J1	< 0.1 U1	38.6	< 0.04 U1
9/21/2021	Assessment	< 0.02 U1	0.40	18.7	0.480 P2	0.149	2.53	0.260	0.88	0.07	0.18 J1	0.00226 P2	0.006	< 0.1 U1	36.4	< 0.04 U1
3/15/2022	Assessment	0.04 J1	0.54	23.2	0.485	0.171	2.75	0.280	2.62	0.06	0.18 J1	0.00230	0.008	< 0.1 U1	37.1	< 0.04 U1
6/13/2022	Assessment	0.05 J1	0.72	42.6	0.467	0.169	2.99	0.390	1.46	0.07	0.57	0.00242	0.080	1.1	36.0	0.04 J1
9/21/2022	Assessment	< 0.02 U1	0.47	18.6	0.478	0.159	2.61	0.247 B1	2.33	0.07	0.11 J1	0.00227	0.004 J1	< 0.1 U1	36.3	< 0.04 U1
3/07/2023	Assessment	< 0.02 U1	0.26	17.6	0.434	0.162	2.41	0.220	1.38	0.05 J1	0.52	0.00214	0.004 J1	< 0.1 U1	34.6	< 0.04 U1
6/20/2023	Assessment	0.059 J1	0.36	21.4	0.514	0.223	2.38	0.244	5.48	0.05 J1	0.20	0.00224	0.013	< 0.1 U1	35.0	0.03 J1
9/19/2023	Assessment	0.014 J1	0.38	18.0	0.469	0.152	2.44	0.216	0.56	0.06	0.17 J1	0.00226	0.006	< 0.1 U1	33.0	0.04 J1
3/05/2024	Assessment	0.008 J1	0.34	17.8	0.457	0.146	2.58	0.207	1.36	0.06	0.17 J1	0.00234	0.005	< 0.1 U1	34.7	0.04 J1
4/16/2024	Assessment	0.009 J1	0.42	21.1	0.427	0.145	2.40	0.209	1.12	0.06	0.15 J1	0.00217	0.006	< 0.1 U1	31.4	0.03 J1
8/20/2024	Assessment	0.009 J1	0.43	18.9	0.439	0.153	2.46	0.222	2.33	0.05 J1	0.14 J1	0.00227	0.004 J1	< 0.1 U1	34.1	0.04 J1
3/18/2025	Assessment	0.008 J1	0.29	16.3	0.411	0.133	2.62	0.188	1.84	0.06	0.11 J1	0.00229	0.003 J1	< 0.1 U1	30.3	0.03 J1
6/18/2025	Assessment	0.015 J1	0.14	17.2	0.416	0.117	2.16	0.158	0.51	0.05 J1	0.12 J1	0.00269	< 0.002 U1	< 0.1 U1	28.1	0.03 J1
9/16/2025	Assessment	< 0.02 U1	0.38	16.1	0.37	0.130	2.15	0.18	0.73	0.05 J1	0.08 J1	0.00209	0.004 J1	< 0.05 U1	31.0	0.02 J1

Table 1. Groundwater Data Summary: B-6
FlintCreek - LF
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	S.U.	mg/L	mg/L
5/24/2016	Background	0.05	36.9	6	< 0.083 U1	6.7	19	180
7/19/2016	Background	0.06	49.5	8	< 0.083 U1	7.2	24	208
9/14/2016	Background	0.06	52.3	8	< 0.083 U1	6.6	38	232
10/05/2016	Background	0.06	44.7	8	< 0.083 U1	7.0	29	220
11/08/2016	Background	0.06	40	7	< 0.083 U1	6.9	29	208
1/24/2017	Background	0.08	51.9	7	< 0.083 U1	7.0	34	244
3/06/2017	Background	0.06	43	6	< 0.083 U1	7.0	24	178
4/25/2017	Background	0.05207	56.5	8	< 0.083 U1	6.2	37	238
5/15/2017	Background	0.04277	48.6	7	< 0.083 U1	6.5	24	206
6/12/2017	Background	0.05859	53.8	8	< 0.083 U1	6.6	26	252
8/28/2017	Detection	0.06251	37	8	0.2066 J1	7.0	16	162
12/21/2017	Detection	0.06498	--	--	--	7.0	--	--
3/26/2018	Assessment	0.04773	34	6	< 0.083 U1	6.4	13	156
8/28/2018	Assessment	0.050	34.6	--	--	6.4	--	144
10/23/2018	Assessment	--	--	12.2	< 0.083 U1	--	24.6	--
3/12/2019	Assessment	0.037	41.9	8.16	< 0.04 U1	6.9	17.1	100
6/10/2019	Assessment	0.05 J1	49.7	7.78	0.03 J1	6.8	21.7	188
8/27/2019	Assessment	0.03 J1	44.8	6	< 0.083 U1	6.6	36	250
3/24/2020	Assessment	--	--	7.31	0.02 J1	6.6	16.9	202
6/23/2020	Assessment	0.02 J1	37.8	7.25	0.02 J1	6.8	10.8	140
10/19/2020	Assessment	0.03 J1	43.8	7.52	0.02 J1	6.3	16.5	201
3/01/2021	Assessment	--	--	--	0.03 J1	6.6	--	--
6/21/2021	Assessment	0.029 J1	34.0	6.95	0.03 J1	6.1	9.93	150
9/20/2021	Assessment	0.027 J1	37.2	6.55	0.02 J1	5.8	13.3	160
3/14/2022	Assessment	--	--	--	< 0.02 U1	6.3	--	--
6/13/2022	Assessment	0.019 J1	41.8	7.23	0.02 J1	6.2	14.9	180 S7
9/20/2022	Assessment	0.024 J1	36.7 M1, P3	6.66	0.02 J1	6.1	15.1	170
3/06/2023	Assessment	--	--	--	< 0.02 U1	6.3	--	--
6/19/2023	Assessment	0.034 J1	56.2	6.23	< 0.02 U1	6.2	47.5	230
9/18/2023	Assessment	0.044 J1	50.5	7.83	0.03 J1	6.1	25.1	230
3/04/2024	Assessment	--	--	--	0.03 J1	6.4	--	--
4/15/2024	Assessment	0.027 J1	42.5	6.45	0.03 J1	6.0	18.9	210
8/19/2024	Assessment	0.026 J1	34.1	6.38	< 0.02 U1	6.1	11.8	160
3/17/2025	Assessment	--	--	--	0.02 J1	6.1	--	--
6/17/2025	Assessment	0.028 J1	46.1	7.14	0.03 J1	6.2	17.1	190
9/15/2025	Assessment	0.025 J1	33.3	7.03	< 0.02 U1	6.1	15.3	170

Table 1. Groundwater Data Summary: B-6
FlintCreek - LF
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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	42	0.0329713 J1	< 0.07 U1	2	0.5336 J1	0.625	< 0.083 U1	< 0.68 U1	0.000846322 J1	0.0121 J1	< 0.29 U1	1.38371 J1	< 0.86 U1
7/19/2016	Background	< 0.93 U1	< 1.05 U1	60	0.169224 J1	< 0.07 U1	3	1.23508 J1	--	< 0.083 U1	0.848543 J1	0.002	0.00953 J1	0.863908 J1	3.30254 J1	< 0.86 U1
9/14/2016	Background	< 0.93 U1	< 1.05 U1	65	< 0.02 U1	< 0.07 U1	4	1.26649 J1	1.556	< 0.083 U1	1.53065 J1	0.002	< 0.005 U1	< 0.29 U1	3.35098 J1	< 0.86 U1
10/05/2016	Background	< 0.93 U1	3.63583 J1	87	0.559451 J1	0.268209 J1	11	4.75063 J1	7.58	< 0.083 U1	4.70003 J1	0.016	0.01261 J1	0.732328 J1	3.04012 J1	< 0.86 U1
11/08/2016	Background	< 0.93 U1	< 1.05 U1	58	0.134729 J1	0.116659 J1	5	1.68272 J1	0.846	< 0.083 U1	1.07347 J1	0.002	0.01235 J1	< 0.29 U1	2.02161 J1	< 0.86 U1
1/24/2017	Background	< 0.93 U1	< 1.05 U1	76	0.216535 J1	< 0.07 U1	6	2.57434 J1	1.415	< 0.083 U1	1.31013 J1	0.003	0.00759 J1	0.868445 J1	1.16358 J1	< 0.86 U1
3/06/2017	Background	< 0.93 U1	< 1.05 U1	55	0.140509 J1	< 0.07 U1	4	1.95733 J1	0.705	< 0.083 U1	2.18218 J1	0.004	0.00738 J1	0.328653 J1	1.0391 J1	< 0.86 U1
4/25/2017	Background	< 0.93 U1	1.89 J1	75.05	0.26 J1	0.16 J1	6.35	2.74 J1	0.671	< 0.083 U1	2.44 J1	0.0038	0.008 J1	0.62 J1	4.5 J1	< 0.86 U1
5/15/2017	Background	< 0.93 U1	1.49 J1	59.86	0.12 J1	< 0.07 U1	3.12	1.16 J1	13.943	< 0.083 U1	1.16 J1	0.00182	< 0.005 U1	0.43 J1	1.04 J1	< 0.86 U1
6/12/2017	Background	< 0.93 U1	1.5 J1	65.93	0.16 J1	< 0.07 U1	4.2	1.58 J1	1.14	< 0.083 U1	1.03 J1	0.00238	< 0.005 U1	0.5 J1	< 0.99 U1	1.16 J1
3/26/2018	Assessment	1.45 J1	1.46 J1	56.88	0.1 J1	0.27 J1	4.42	1.8 J1	1.055	< 0.083 U1	2.42 J1	0.00281	0.005 J1	0.58 J1	2.87 J1	1.32 J1
8/28/2018	Assessment	0.01 J1	0.14	41.3	0.007 J1	0.02 J1	1.73	0.022	0.567	--	0.005 J1	0.000415	0.007 J1	0.54	1.7	0.03 J1
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/12/2019	Assessment	< 0.1 U1	0.61	48.3	< 0.1 U1	< 0.05 U1	2.32	0.597	0.571	< 0.04 U1	0.748	0.0009 J1	< 0.005 U1	< 2 U1	2.2	< 0.5 U1
6/10/2019	Assessment	0.08 J1	0.51	49.8	0.08 J1	0.08 J1	2.18	0.537	0.8101	0.03 J1	0.697	< 0.02 U1	< 0.005 U1	< 0.8 U1	2.4	< 0.2 U1
8/27/2019	Assessment	0.05 J1	0.36	48.6	0.04 J1	0.04 J1	1.96	0.387	0.347	< 0.083 U1	0.509	0.000518	< 0.005 U1	< 0.4 U1	2.4	< 0.1 U1
3/24/2020	Assessment	0.03 J1	0.37	47.3	0.04 J1	0.02 J1	1.53	0.291	3.448	0.02 J1	0.403	0.000636	0.002 J1	< 0.4 U1	1.6	< 0.1 U1
6/23/2020	Assessment	< 0.02 U1	0.15	41.6	< 0.02 U1	0.01 J1	1.19	0.053	0.457	0.02 J1	0.06 J1	0.000456	< 0.002 U1	< 0.4 U1	0.9	< 0.1 U1
10/19/2020	Assessment	< 0.02 U1	0.16	45.4	< 0.02 U1	0.01 J1	1.60	0.054	1.203	0.02 J1	0.06 J1	0.000407	< 0.002 U1	< 0.4 U1	1.6	< 0.1 U1
3/01/2021	Assessment	< 0.02 U1	0.20	41.6	< 0.02 U1	0.01 J1	1.66	0.123	0.147	0.03 J1	0.1 J1	0.000390	< 0.002 U1	< 0.4 U1	1.5	< 0.1 U1
6/21/2021	Assessment	< 0.02 U1	0.19	40.7	0.022 J1	0.018 J1	1.52	0.125	0.63	0.03 J1	0.15 J1	0.00055	< 0.002 U1	0.2 J1	1.07	< 0.04 U1
9/20/2021	Assessment	< 0.02 U1	0.17	37.9	0.009 P2, J1	< 0.004 U1	1.91	0.079	0.81	0.02 J1	0.07 J1	0.00037 P2	< 0.002 U1	0.2 J1	1.51	< 0.04 U1
3/14/2022	Assessment	< 0.02 U1	0.25	40.5	0.016 J1	0.011 J1	2.22	0.155	1.81	< 0.02 U1	0.14 J1	0.00038	< 0.002 U1	0.2 J1	1.94	< 0.04 U1
6/13/2022	Assessment	< 0.02 U1	0.18	42.7	0.010 J1	0.01 J1	1.48	0.081	1.08	0.02 J1	0.08 J1	0.00037	< 0.002 U1	0.2 J1	1.29	< 0.04 U1
9/20/2022	Assessment	< 0.02 U1	0.16	37.8 P3	0.010 J1	0.011 J1	1.95	0.081 B1	1.05	0.02 J1	0.06 J1	0.00034	< 0.002 U1	0.2 J1	1.53	< 0.04 U1
3/06/2023	Assessment	0.04 J1	0.19	48.4	0.042 J1	0.011 J1	1.66	0.114	1.30	< 0.02 U1	0.28	0.00032	< 0.002 U1	0.2 J1	3.39	< 0.04 U1
6/19/2023	Assessment	0.022 J1	0.29	50.4	0.038 J1	0.019 J1	2.17	0.253	1.16	< 0.02 U1	0.31	0.00044	< 0.002 U1	0.2 J1	4.39	< 0.02 U1
9/18/2023	Assessment	0.021 J1	0.25	59.3	0.030 J1	0.015 J1	1.63	0.195	0.47	0.03 J1	0.25	0.00063	< 0.002 U1	0.4 J1	2.04	< 0.02 U1
3/04/2024	Assessment	0.020 J1	0.29	45.4	0.032 J1	0.014 J1	2.36	0.217	1.36	0.03 J1	0.32	0.00059	< 0.002 U1	0.2 J1	1.77	< 0.02 U1
4/15/2024	Assessment	0.037 J1	0.60	45.3	0.088	0.021	3.23	0.606	0.95	0.03 J1	0.86	0.00076	0.004 J1	0.2 J1	2.19	0.02 J1
8/19/2024	Assessment	0.015 J1	0.19	38.3	0.018 J1	0.011 J1	2.06	0.129	2.36	< 0.02 U1	0.17 J1	0.00045	< 0.002 U1	0.2 J1	1.14	< 0.02 U1
3/17/2025	Assessment	0.013 J1	0.19	37.8	0.011 J1	0.008 J1	2.20	0.077	0.41	0.02 J1	0.09 J1	0.00031	< 0.002 U1	0.1 J1	1.46	< 0.02 U1
6/17/2025	Assessment	0.019 J1	0.22	49.0	0.027 J1	0.012 J1	1.84	0.176	1.78	0.03 J1	0.18 J1	0.00044	< 0.002 U1	0.3 J1	1.17	< 0.02 U1
9/15/2025	Assessment	< 0.02 U1	0.19	34.4	< 0.02 U1	0.011 J1	1.83	0.11	0.51	< 0.02 U1	0.15 J1	0.00042	< 0.002 U1	0.15 J1	1.47	< 0.02 U1

Table 1. Groundwater Data Summary: B-7A

Geosyntec Consultants, Inc.

FlintCreek - LF

Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/24/2016	Background	0.02	95.1	3	< 0.083 U1	6.7	29	320
7/19/2016	Background	0.02	98.1	4	0.3892 J1	7.2	34	314
9/14/2016	Background	0.02	100	4	< 0.083 U1	7.2	33	304
10/05/2016	Background	0.02	97.1	5	0.3235 J1	7.6	33	312
11/08/2016	Background	0.02	100	4	< 0.083 U1	7.5	32	332
1/24/2017	Background	0.02	102	3	< 0.083 U1	7.3	34	314
3/06/2017	Background	0.02	105	3	< 0.083 U1	7.1	33	296
4/25/2017	Background	0.01786	101	5	< 0.083 U1	7.0	34	298
5/15/2017	Background	0.01605	107	4	< 0.083 U1	6.9	35	306
6/12/2017	Background	0.03032	106	5	< 0.083 U1	6.8	35	320
8/28/2017	Detection	0.03116	102	5	0.274 J1	--	33	304
3/26/2018	Assessment	0.01576	100	3	< 0.083 U1	7.1	33	300
8/28/2018	Assessment	0.018	105	--	--	7.7	--	314
10/23/2018	Assessment	--	--	7.28	< 0.083 U1	--	35.6	--
3/11/2019	Assessment	0.02 J1	99.6	3.43	0.24	7.5	30.7	336
6/10/2019	Assessment	< 0.04 U1	105	3.12	0.24	7.1	35.4	312
8/27/2019	Assessment	< 0.02 U1	102	2	0.144 J1	8.3	36	378
3/24/2020	Assessment	--	--	3.17	0.22	8.4	34.8	304
6/23/2020	Assessment	< 0.02 U1	93.4	3.13	0.19	8.2	35.5	286
10/19/2020	Assessment	< 0.02 U1	97.0	3.03	0.21	8.5	33.9	320
3/01/2021	Assessment	--	--	--	0.25	7.3	--	--
6/21/2021	Assessment	0.015 J1	93.0	3.23	0.25	7.4	33.5	320
9/21/2021	Assessment	0.011 J1	100	3.02	0.20	7.8	33.0	300
3/14/2022	Assessment	--	--	--	0.20	7.4	--	--
6/13/2022	Assessment	< 0.009 U1	78.7 M1	3.09	0.21	7.5	33.8	320
9/20/2022	Assessment	0.013 J1	88.0	3.12	0.19	7.2	34.8	300
3/06/2023	Assessment	--	--	--	0.17	7.1	--	--
6/19/2023	Assessment	0.011 J1	85.3 M1	3.18	0.18	7.4	33.2	310
9/19/2023	Assessment	0.014 J1	92.4	2.98	0.17	7.4	33.1	300
3/05/2024	Assessment	--	--	--	0.17	7.2	--	--
4/15/2024	Assessment	0.011 J1	90.9	3.11	0.18	7.4	32.1	310
8/19/2024	Assessment	0.012 J1	99.2	2.90	0.15	7.5	31.9	310
3/18/2025	Assessment	--	--	--	0.19	7.3	--	--
6/17/2025	Assessment	0.014 J1	105	3.12	0.21	7.3	30.0	310
9/15/2025	Assessment	0.012 J1	95.0 M1	3.32	0.19	7.6	35.8	330

Table 1. Groundwater Data Summary: B-7A
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	60	< 0.02 U1	< 0.07 U1	< 0.23 U1	0.648714 J1	2.556	< 0.083 U1	< 0.68 U1	0.021	0.033	0.838425 J1	< 0.99 U1	< 0.86 U1
7/19/2016	Background	< 0.93 U1	1.33211 J1	60	0.0763658 J1	< 0.07 U1	0.240969 J1	0.345176 J1	--	0.3892 J1	0.791157 J1	0.022	0.034	0.619545 J1	< 0.99 U1	1.98498 J1
9/14/2016	Background	< 0.93 U1	< 1.05 U1	69	< 0.02 U1	< 0.07 U1	0.354374 J1	0.39525 J1	3.54	< 0.083 U1	< 0.68 U1	0.021	0.00796 J1	0.476503 J1	< 0.99 U1	< 0.86 U1
10/05/2016	Background	< 0.93 U1	< 1.05 U1	66	< 0.02 U1	< 0.07 U1	< 0.23 U1	0.842911 J1	7.97	0.3235 J1	< 0.68 U1	0.034	< 0.005 U1	0.68021 J1	< 0.99 U1	< 0.86 U1
11/08/2016	Background	< 0.93 U1	1.1401 J1	65	< 0.02 U1	< 0.07 U1	0.28162 J1	0.667484 J1	2.247	< 0.083 U1	< 0.68 U1	0.017	0.00705 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/24/2017	Background	< 0.93 U1	< 1.05 U1	65	< 0.02 U1	< 0.07 U1	< 0.23 U1	0.352624 J1	2.311	< 0.083 U1	< 0.68 U1	0.015	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/06/2017	Background	< 0.93 U1	< 1.05 U1	62	< 0.02 U1	< 0.07 U1	0.432618 J1	0.458003 J1	3.154	< 0.083 U1	< 0.68 U1	0.022	0.00621 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
4/25/2017	Background	< 0.93 U1	< 1.05 U1	68.64	< 0.02 U1	< 0.07 U1	< 0.23 U1	0.64 J1	1.934	< 0.083 U1	< 0.68 U1	0.01501	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
5/15/2017	Background	< 0.93 U1	1.25 J1	59.92	< 0.02 U1	< 0.07 U1	0.24 J1	0.56 J1	2.714	< 0.083 U1	< 0.68 U1	0.01509	0.008 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
6/12/2017	Background	< 0.93 U1	< 1.05 U1	56.32	< 0.02 U1	< 0.07 U1	< 0.23 U1	0.43 J1	3.072	< 0.083 U1	1.74 J1	0.01452	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/26/2018	Assessment	1.28 J1	1.85 J1	51.94	< 0.02 U1	< 0.07 U1	< 0.23 U1	0.24 J1	3.93	< 0.083 U1	< 0.68 U1	0.0191	< 0.005 U1	0.29 J1	< 0.99 U1	< 0.86 U1
8/28/2018	Assessment	0.02 J1	1.59	52.4	0.01 J1	0.03	0.071	0.400	2.861	--	0.156	0.0158	< 0.005 U1	0.63	0.04 J1	0.03 J1
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/11/2019	Assessment	< 0.1 U1	3.15	74.8	< 0.1 U1	0.05 J1	1.95	0.351	1.962	0.24	0.2 J1	0.0200	< 0.005 U1	< 2 U1	< 0.2 U1	< 0.5 U1
6/10/2019	Assessment	0.06 J1	2.35	42.9	< 0.02 U1	0.02 J1	< 0.04 U1	0.074	2.561	0.24	0.1 J1	< 0.02 U1	< 0.005 U1	0.5 J1	< 0.03 U1	< 0.1 U1
8/27/2019	Assessment	0.15	2.93	49.0	< 0.02 U1	0.03 J1	0.2 J1	0.134	1.853	0.144 J1	0.1 J1	0.0164	< 0.005 U1	0.6 J1	0.04 J1	< 0.1 U1
3/24/2020	Assessment	0.07 J1	2.13	50.1	< 0.02 U1	0.17	0.09 J1	0.237	2.876	0.22	0.1 J1	0.0181	< 0.002 U1	0.7 J1	0.1 J1	< 0.1 U1
6/23/2020	Assessment	0.09 J1	3.75	48.5	< 0.02 U1	0.03 J1	0.1 J1	0.057	1.706	0.19	< 0.05 U1	0.0186	0.013	0.7 J1	0.07 J1	< 0.1 U1
10/19/2020	Assessment	0.08 J1	3.45	48.4	< 0.02 U1	0.05	0.1 J1	0.445	3.281	0.21	0.426	0.0180	0.004 J1	0.6 J1	< 0.03 U1	< 0.1 U1
3/01/2021	Assessment	0.05 J1	3.28	48.7	< 0.02 U1	0.02 J1	< 0.04 U1	< 0.02 U1	2.15	0.25	< 0.05 U1	0.0188	< 0.002 U1	0.5 J1	< 0.03 U1	< 0.1 U1
6/21/2021	Assessment	0.03 J1	4.95	49.0	0.010 J1	0.015 J1	0.37	1.34	2.67	0.25	0.14 J1	0.0178 P3	0.003 J1	0.5	< 0.09 U1	< 0.04 U1
9/21/2021	Assessment	0.04 J1	5.28	51.0	0.009 P2, J1	0.018 J1	0.23	0.951	2.26	0.20	0.23	0.0152 P2	< 0.002 U1	0.3 J1	< 0.09 U1	< 0.04 U1
3/14/2022	Assessment	0.03 J1	4.80	50.8	< 0.007 U1	0.152	0.20	0.01 J1	4.77	0.20	< 0.05 U1	0.0174	< 0.002 U1	0.3 J1	< 0.09 U1	< 0.04 U1
6/13/2022	Assessment	0.03 J1	5.56	50.0	0.009 J1	0.011 J1	0.41	1.46	2.85	0.21	0.15 J1	0.0169	0.002 J1	0.2 J1	< 0.09 U1	< 0.04 U1
9/20/2022	Assessment	0.02 J1	5.21	62.4	0.016 J1	0.014 J1	0.40	0.863 B1	2.60	0.19	0.24	0.0174	0.004 J1	0.2 J1	< 0.09 U1	< 0.04 U1
3/06/2023	Assessment	< 0.02 U1	9.74	48.6	0.038 J1	0.017 J1	0.31	0.944	3.57	0.17	0.17 J1	0.0178	0.003 J1	0.3 J1	< 0.09 U1	< 0.04 U1
6/19/2023	Assessment	0.021 J1	9.44	51.6	0.012 J1	0.005 J1	0.38	0.704	2.72	0.18	0.07 J1	0.0171	0.002 J1	0.2 J1	< 0.04 U1	< 0.02 U1
9/19/2023	Assessment	0.027 J1	9.83	29.2	0.011 J1	0.007 J1	0.36	0.245	1.74	0.17	0.07 J1	0.0179	0.004 J1	0.1 J1	< 0.04 U1	< 0.02 U1
3/05/2024	Assessment	0.011 J1	8.83	64.7	0.011 J1	0.014 J1	0.26 J1	0.115	3.36	0.17	0.31	0.0180	0.003 J1	0.1 J1	< 0.04 U1	0.04 J1
4/15/2024	Assessment	< 0.008 U1	5.93	50.2	0.012 J1	0.014 J1	0.40	0.431	4.01	0.18	0.13 J1	0.0156	< 0.002 U1	0.6	< 0.04 U1	< 0.02 U1
8/19/2024	Assessment	0.012 J1	8.01	54.3	0.010 J1	0.007 J1	0.37	0.405	4.21	0.15	0.08 J1	0.0137	0.002 J1	0.4 J1	< 0.04 U1	< 0.02 U1
3/18/2025	Assessment	0.020 J1	8.18	46.6	0.014 J1	0.044	0.68	0.644	0.94	0.19	0.30	0.0143	< 0.002 U1	0.4 J1	< 0.04 U1	< 0.02 U1
6/17/2025	Assessment	0.021 J1	8.61	44.3	0.010 J1	0.015 J1	0.34	0.115	2.37	0.21	1.66	0.0140	0.003 J1	0.1 J1	< 0.04 U1	< 0.02 U1
9/15/2025	Assessment	0.04 J1	5.83	42.1	< 0.02 U1	0.008 J1	0.30	0.66	2.41	0.19	0.18 J1	0.0155	< 0.002 U1	0.41 J1	< 0.04 U1	0.06 J1

Table 1. Groundwater Data Summary: B-9

Geosyntec Consultants, Inc.

FlintCreek - LF

Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/24/2016	Background	0.01	81	5	< 0.083 U1	7.2	14	234
7/19/2016	Background	0.00947041 J1	83	5	0.3556 J1	7.4	14	204
9/14/2016	Background	0.00711941 J1	99.6	7	< 0.083 U1	7.6	18	239
10/04/2016	Background	0.00768136 J1	98.6	8	0.1884 J1	7.4	21	246
11/07/2016	Background	0.01	94.3	6	< 0.083 U1	7.9	25	240
1/23/2017	Background	0.02	99.8	5	< 0.083 U1	6.6	19	234
3/07/2017	Background	0.01	88.5	6	< 0.083 U1	6.4	21	228
4/26/2017	Background	0.01036	87.7	6	0.31 J1	6.8	19	224
5/16/2017	Background	0.009500 J1	98.5	6	< 0.083 U1	7.5	21	198
6/12/2017	Background	0.02369	124	6	< 0.083 U1	7.0	22	270
8/28/2017	Detection	0.02463	106	6	0.2389 J1	7.2	25	224
3/28/2018	Assessment	0.00998 J1	86.1	6	< 0.083 U1	7.9	28	260
8/27/2018	Assessment	0.010	144	--	--	7.7	--	272
10/23/2018	Assessment	--	--	7.22	< 0.083 U1	--	36.7	--
3/12/2019	Assessment	0.01 J1	97.3	3.68	0.1 J1	8.1	34.3	278
6/11/2019	Assessment	< 0.04 U1	99.7	3.69	0.13	7.7	37.6	248
8/27/2019	Assessment	< 0.02 U1	128	3	< 0.083 U1	7.2	37	310
3/24/2020	Assessment	--	--	3.70	0.09	6.9	29.8	264
6/24/2020	Assessment	< 0.02 U1	91.0	4.04	0.07	7.6	30.7	274
10/20/2020	Assessment	< 0.02 U1	88.7	5.39	0.07	6.9	26.2	279
3/02/2021	Assessment	--	--	--	0.09	7.0	--	--
6/21/2021	Assessment	0.01 J1	80.9	4.23	0.09	6.7	28.6	270
9/21/2021	Assessment	< 0.009 U1	86.4	5.20	0.07	6.6	25.7	260
3/15/2022	Assessment	--	--	--	0.07	7.5	--	--
6/13/2022	Assessment	< 0.009 U1	78.6	4.04	0.09	7.2	36.0	290
9/21/2022	Assessment	0.012 J1	83.7	5.37	0.07	6.7	34.2	290
3/07/2023	Assessment	--	--	--	0.07	6.7	--	--
6/20/2023	Assessment	0.013 J1	80.0	5.71	0.06	7.0	42.7	300
9/19/2023	Assessment	0.012 J1	91.2	6.85	0.07	7.0	38.5	280
3/05/2024	Assessment	--	--	--	0.07	7.4	--	--
4/16/2024	Assessment	0.014 J1	84.2	6.37	0.06	6.9	46.8	300
8/20/2024	Assessment	0.017 J1	88.2	8.44	0.06	6.9	41.8	300
3/18/2025	Assessment	--	--	--	0.07	7.0	--	--
6/18/2025	Assessment	0.024 J1	95.9	6.91	0.08	6.7	60.0	320
9/16/2025	Assessment	0.025 J1	89.6	7.80	0.06	6.7	52.9	320

Table 1. Groundwater Data Summary: B-9
FlintCreek - LF
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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	128	0.0475927 J1	< 0.07 U1	2	0.648715 J1	0.25	< 0.083 U1	< 0.68 U1	0.005	0.01472 J1	0.871853 J1	< 0.99 U1	1.51586 J1
7/19/2016	Background	< 0.93 U1	< 1.05 U1	139	0.0706417 J1	< 0.07 U1	2	0.520418 J1	--	0.3556 J1	0.756023 J1	0.003	0.01407 J1	< 0.29 U1	< 0.99 U1	1.04447 J1
9/14/2016	Background	< 0.93 U1	< 1.05 U1	143	< 0.02 U1	< 0.07 U1	3	1.03431 J1	3.039	< 0.083 U1	< 0.68 U1	0.002	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
10/04/2016	Background	< 0.93 U1	< 1.05 U1	135	< 0.02 U1	< 0.07 U1	4	1.7825 J1	0.893	0.1884 J1	0.693028 J1	0.016	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
11/07/2016	Background	< 0.93 U1	< 1.05 U1	136	0.0202009 J1	< 0.07 U1	3	1.48231 J1	0.569	< 0.083 U1	< 0.68 U1	0.003	0.00774 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/23/2017	Background	< 0.93 U1	< 1.05 U1	154	0.03324 J1	< 0.07 U1	3	1.21896 J1	0.618	< 0.083 U1	< 0.68 U1	0.003	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/07/2017	Background	1.39106 J1	< 1.05 U1	142	< 0.02 U1	< 0.07 U1	2	0.886686 J1	2.009	< 0.083 U1	< 0.68 U1	0.009	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
4/26/2017	Background	< 0.93 U1	1.13 J1	144	< 0.02 U1	< 0.07 U1	2.52	0.93 J1	0.989	0.31 J1	0.79 J1	0.00316	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
5/16/2017	Background	< 0.93 U1	1.68 J1	142	0.03 J1	< 0.07 U1	2.56	0.83 J1	9.472	< 0.083 U1	< 0.68 U1	0.00311	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
6/12/2017	Background	< 0.93 U1	1.11 J1	150	0.04 J1	< 0.07 U1	4.01	1.32 J1	1.795	< 0.083 U1	< 0.68 U1	0.00343	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/28/2018	Assessment	< 0.93 U1	< 1.05 U1	177	< 0.02 U1	< 0.07 U1	0.91 J1	0.36 J1	2.06	< 0.083 U1	< 0.68 U1	0.0041	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
8/27/2018	Assessment	0.11	1.29	139	0.034	0.06	1.74	2.33	1.12	--	1.08	0.00241	< 0.005 U1	0.54	0.8	0.04 J1
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/12/2019	Assessment	< 0.1 U1	0.85	175	< 0.1 U1	< 0.05 U1	0.6 J1	0.2 J1	0.629	0.1 J1	0.2 J1	0.00528	< 0.005 U1	< 2 U1	< 0.2 U1	< 0.5 U1
6/11/2019	Assessment	< 0.1 U1	0.90	166	< 0.1 U1	< 0.05 U1	1.11	0.2 J1	0.1572	0.13	< 0.2 U1	< 0.02 U1	< 0.005 U1	36.1	0.4 J1	< 0.5 U1
8/27/2019	Assessment	0.09 J1	1.67	188	0.02 J1	0.08	1.61	0.827	1.258	< 0.083 U1	0.509	0.00409	< 0.005 U1	0.4 J1	0.5	< 0.1 U1
3/24/2020	Assessment	0.03 J1	0.77	151	< 0.02 U1	0.01 J1	0.932	0.411	1.696	0.09	0.08 J1	0.00356	< 0.002 U1	< 0.4 U1	0.4	< 0.1 U1
6/24/2020	Assessment	0.05 J1	1.04	147	< 0.02 U1	0.01 J1	1.35	0.362	0.843	0.07	0.242	0.00264	< 0.002 U1	< 0.4 U1	0.5	< 0.1 U1
10/20/2020	Assessment	0.03 J1	0.56	154	< 0.02 U1	< 0.01 U1	0.436	0.133	1.204	0.07	0.06 J1	0.00257	< 0.002 U1	< 0.4 U1	0.4	< 0.1 U1
3/02/2021	Assessment	0.02 J1	0.50	157	< 0.02 U1	< 0.01 U1	0.539	0.074	0.703	0.09	< 0.05 U1	0.00280	< 0.002 U1	< 0.4 U1	0.3	< 0.1 U1
6/21/2021	Assessment	0.02 J1	0.46	148	< 0.007 U1	0.009 J1	0.71	0.123	1.24	0.09	< 0.05 U1	0.00272	< 0.002 U1	0.3 J1	0.34 J1	< 0.04 U1
9/21/2021	Assessment	0.03 J1	0.52	158 M1, P3	< 0.007 P2, U1	< 0.004 U1	0.66	0.100	0.96	0.07	< 0.05 U1	0.00264 P2	< 0.002 U1	0.3 J1	0.36 J1	< 0.04 U1
3/15/2022	Assessment	0.02 J1	0.47	166	< 0.007 U1	0.011 J1	0.77	0.122	2.96	0.07	< 0.05 U1	0.00315	< 0.002 U1	0.2 J1	0.38 J1	< 0.04 U1
6/13/2022	Assessment	0.04 J1	0.65	154	0.008 J1	0.025	1.02	0.580	0.99	0.09	0.22	0.00354	< 0.002 U1	3.8	0.40 J1	< 0.04 U1
9/21/2022	Assessment	0.03 J1	0.53	164	< 0.007 U1	0.008 J1	0.90	0.161 B1	0.50	0.07	0.08 J1	0.00279	< 0.002 U1	0.3 J1	0.39 J1	< 0.04 U1
3/07/2023	Assessment	0.03 J1	0.44	158	0.026 J1	0.009 J1	1.02	0.133	1.18	0.07	0.13 J1	0.00386	< 0.002 U1	0.2 J1	0.40 J1	< 0.04 U1
6/20/2023	Assessment	0.026 J1	0.43	154	0.020 J1	0.008 J1	0.95	0.086	0.77	0.06	0.11 J1	0.00285	< 0.002 U1	0.3 J1	0.49 J1	0.02 J1
9/19/2023	Assessment	0.035 J1	0.49	169	< 0.007 U1	0.009 J1	0.87	0.407	0.79	0.07	0.12 J1	0.00299	< 0.002 U1	0.3 J1	0.48 J1	< 0.02 U1
3/05/2024	Assessment	0.025 J1	0.39	192	< 0.007 U1	0.005 J1	0.61	0.045	1.49	0.07	< 0.05 U1	0.00326	< 0.002 U1	0.3 J1	0.55	0.02 J1
4/16/2024	Assessment	0.031 J1	0.44	171	< 0.007 U1	0.008 J1	0.68	0.183	1.09	0.06	0.09 J1	0.00283	< 0.002 U1	0.3 J1	0.40 J1	< 0.02 U1
8/20/2024	Assessment	0.024 J1	0.37	185	< 0.007 U1	< 0.004 U1	0.58	0.037	3.77	0.06	< 0.05 U1	0.00285	< 0.002 U1	0.3 J1	0.45 J1	< 0.02 U1
3/18/2025	Assessment	0.023 J1	0.36	199	< 0.007 U1	< 0.004 U1	0.59	0.043	1.31	0.07	< 0.05 U1	0.00346	< 0.002 U1	0.2 J1	0.56	< 0.02 U1
6/18/2025	Assessment	0.028 J1	0.40	183	< 0.007 U1	0.005 J1	1.04	0.042	0.60	0.08	< 0.05 U1	0.00361	< 0.002 U1	0.2 J1	0.56	< 0.02 U1
9/16/2025	Assessment	0.03 J1	0.38	187	< 0.02 U1	0.004 J1	0.61	0.03	0.65	0.06	< 0.05 U1	0.00337	< 0.002 U1	0.26 J1	0.52	0.03 J1

Table 1. Groundwater Data Summary: B-10
FlintCreek - LF
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	S.U.	mg/L	mg/L
5/24/2016	Background	0.02	77.6	7	< 0.083 U1	8.4	30	275
7/19/2016	Background	0.01	82.5	8	< 0.083 U1	7.4	30	252
9/14/2016	Background	0.02	104	8	< 0.083 U1	7.3	31	275
10/04/2016	Background	0.02	82.9	9	0.2319 J1	7.0	39	308
11/07/2016	Background	0.03	116	8	< 0.083 U1	8.0	30	268
1/23/2017	Background	0.03	77.1	7	< 0.083 U1	7.1	33	276
3/07/2017	Background	0.02	84.8	6	< 0.083 U1	6.6	29	268
4/25/2017	Background	0.01728	77.4	8	0.3 J1	6.6	26	266
5/15/2017	Background	0.03169	80.6	8	< 0.083 U1	6.8	35	284
6/12/2017	Background	0.04007	75.6	9	< 0.083 U1	6.5	31	296
8/28/2017	Detection	0.0448	72.8	9	0.3304 J1	7.4	28	256
3/26/2018	Assessment	0.00862 J1	76.6	6	< 0.083 U1	8.0	25	244
8/27/2018	Assessment	0.028	64.4	--	--	7.6	--	254
10/23/2018	Assessment	--	--	11.7	< 0.083 U1	--	26.4	--
3/12/2019	Assessment	0.028	72.4	9.68	0.1 J1	8.4	21.4	226
6/10/2019	Assessment	< 0.04 U1	80.4	9.24	0.11	7.4	26.1	260
8/27/2019	Assessment	< 0.02 U1	70.8	7	< 0.083 U1	7.3	26	268
3/24/2020	Assessment	--	--	9.41	0.10	7.2	26.1	252
6/23/2020	Assessment	--	--	--	--	7.8	--	--
6/24/2020	Assessment	< 0.02 U1	76.5	10.1	0.08	--	27.8	234
10/20/2020	Assessment	< 0.02 U1	86.0	10.3	0.08	6.6	26.8	257
3/02/2021	Assessment	--	--	--	0.09	7.1	--	--
6/22/2021	Assessment	< 0.009 U1	78.1	10.7	0.09	6.9	27.0	260
9/20/2021	Assessment	--	--	--	--	6.6	--	--
9/21/2021	Assessment	< 0.009 U1	80.5	10.4	0.1	--	28.9	250
3/14/2022	Assessment	--	--	--	--	6.7	--	--
3/15/2022	Assessment	--	--	--	0.07	--	--	--
6/13/2022	Assessment	--	--	--	--	6.7	--	--
6/14/2022	Assessment	< 0.009 U1	71.6	10.9	0.09	--	28.6	270
9/20/2022	Assessment	--	--	--	--	6.8	--	--
9/21/2022	Assessment	0.013 J1	75.1	11.4	0.11	--	28.5	270
3/06/2023	Assessment	--	--	--	--	6.7	--	--
3/07/2023	Assessment	--	--	--	0.07	--	--	--
6/19/2023	Assessment	--	--	--	--	6.7	--	--
6/20/2023	Assessment	0.016 J1	72.8	11.4	0.19	--	27.7	280
9/18/2023	Assessment	--	--	--	--	6.9	--	--
9/19/2023	Assessment	0.014 J1	81.2	11.3	0.15	--	33.7	290
3/04/2024	Assessment	--	--	--	--	6.5	--	--
3/05/2024	Assessment	--	--	--	0.09	--	--	--
4/15/2024	Assessment	--	--	--	--	6.7	--	--
4/16/2024	Assessment	0.008 J1	73.9	10.4	0.12	--	41.2	300
8/19/2024	Assessment	--	--	--	--	6.4	--	--
8/20/2024	Assessment	< 0.007 U1	76.1	10.9	0.08	--	27.0	270
3/17/2025	Assessment	--	--	--	--	6.5	--	--
3/18/2025	Assessment	--	--	--	0.14	--	--	--
6/17/2025	Assessment	--	--	--	--	6.6	--	--
6/18/2025	Assessment	0.008 J1	83.9	11.6	0.10	--	26.7	270
9/15/2025	Assessment	--	--	--	--	6.7	--	--
9/16/2025	Assessment	0.008 J1	76.7	11.8	0.09	--	27.5	260

Table 1. Groundwater Data Summary: B-10
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	77	0.0283721 J1	< 0.07 U1	2	0.567956 J1	0.3279	< 0.083 U1	< 0.68 U1	0.004	0.01767 J1	1.07659 J1	< 0.99 U1	< 0.86 U1
7/19/2016	Background	< 0.93 U1	< 1.05 U1	78	0.0513816 J1	< 0.07 U1	2	0.487304 J1	--	< 0.083 U1	< 0.68 U1	0.002	0.02255 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
9/14/2016	Background	< 0.93 U1	1.73638 J1	102	< 0.02 U1	< 0.07 U1	16	1.45899 J1	0.625	< 0.083 U1	1.5658 J1	0.003	< 0.005 U1	0.405665 J1	< 0.99 U1	< 0.86 U1
10/04/2016	Background	< 0.93 U1	< 1.05 U1	76	< 0.02 U1	< 0.07 U1	1	0.616894 J1	1.305	0.2319 J1	< 0.68 U1	0.016	< 0.005 U1	0.98229 J1	< 0.99 U1	< 0.86 U1
11/07/2016	Background	< 0.93 U1	6	103	0.350438 J1	0.413058 J1	37	5	1.066	< 0.083 U1	2.57815 J1	0.005	0.01543 J1	1.18188 J1	< 0.99 U1	< 0.86 U1
1/23/2017	Background	< 0.93 U1	< 1.05 U1	82	0.049146 J1	< 0.07 U1	1	1.02071 J1	0.618	< 0.083 U1	< 0.68 U1	0.003	< 0.005 U1	1.261 J1	< 0.99 U1	< 0.86 U1
3/07/2017	Background	< 0.93 U1	< 1.05 U1	77	< 0.02 U1	< 0.07 U1	2	0.814652 J1	1.119	< 0.083 U1	< 0.68 U1	0.01	< 0.005 U1	1.02218 J1	< 0.99 U1	< 0.86 U1
4/25/2017	Background	< 0.93 U1	1.5 J1	69.33	< 0.02 U1	< 0.07 U1	0.26 J1	0.65 J1	0.668	0.3 J1	< 0.68 U1	0.00287	< 0.005 U1	0.92 J1	< 0.99 U1	< 0.86 U1
5/15/2017	Background	< 0.93 U1	< 1.05 U1	82.92	< 0.02 U1	< 0.07 U1	0.59 J1	0.76 J1	1.294	< 0.083 U1	< 0.68 U1	0.00357	< 0.005 U1	1.55 J1	< 0.99 U1	< 0.86 U1
6/12/2017	Background	< 0.93 U1	< 1.05 U1	76.25	< 0.02 U1	< 0.07 U1	0.39 J1	1.17 J1	2.477	< 0.083 U1	< 0.68 U1	0.00358	< 0.005 U1	1.28 J1	< 0.99 U1	< 0.86 U1
3/26/2018	Assessment	< 0.93 U1	< 1.05 U1	81.96	< 0.02 U1	< 0.07 U1	1.37	0.44 J1	1.869	< 0.083 U1	1.12 J1	0.00156	< 0.005 U1	0.78 J1	< 0.99 U1	1.36 J1
8/27/2018	Assessment	0.10	2.80	74.8	0.02 J1	0.03	0.889	1.60	0.887	--	0.189	0.00308	0.005 J1	3.52	0.3	0.03 J1
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/12/2019	Assessment	0.1 J1	0.67	79.1	< 0.1 U1	0.05 J1	0.9 J1	0.299	0.86	0.1 J1	0.3 J1	0.00167	< 0.005 U1	< 2 U1	0.3 J1	< 0.5 U1
6/10/2019	Assessment	0.2 J1	0.3 J1	78.3	< 0.1 U1	< 0.05 U1	0.3 J1	< 0.1 U1	1.128	0.11	< 0.2 U1	< 0.02 U1	< 0.005 U1	10 J1	0.5 J1	< 0.5 U1
8/27/2019	Assessment	0.11	0.46	79.1	< 0.02 U1	0.02 J1	0.385	0.128	1.344	< 0.083 U1	0.05 J1	0.00169	0.016 J1	1 J1	0.4	< 0.1 U1
3/24/2020	Assessment	0.05 J1	0.37	83.5	< 0.02 U1	0.02 J1	0.429	0.03 J1	1.05	0.10	< 0.05 U1	0.00133	< 0.002 U1	0.6 J1	0.4	< 0.1 U1
6/24/2020	Assessment	0.10	0.38	78.8	< 0.02 U1	0.02 J1	0.781	0.102	1.355	0.08	0.08 J1	0.00144	< 0.002 U1	0.8 J1	0.5	< 0.1 U1
10/20/2020	Assessment	0.18	0.80	82.2	0.04 J1	0.04 J1	2.07	1.18	1.748	0.08	0.641	0.00140	0.002 J1	0.7 J1	0.6	< 0.1 U1
3/02/2021	Assessment	0.08 J1	0.36	81.7	< 0.02 U1	0.03 J1	0.649	0.095	0.953	0.09	0.09 J1	0.00127	< 0.002 U1	0.5 J1	0.4	< 0.1 U1
6/22/2021	Assessment	0.11	0.31	82.3	< 0.007 U1	0.030	0.76	0.086	1.09	0.09	0.14 J1	0.00124	< 0.002 U1	0.5	0.44 J1	< 0.04 U1
9/21/2021	Assessment	0.18	0.57	79.8	0.021 P2, J1	0.024	2.30	0.654	1.68	0.1	0.32	0.00132 P2	< 0.002 U1	0.5	0.55	< 0.04 U1
3/15/2022	Assessment	0.16	0.45	87.1	< 0.007 U1	0.026	0.63	0.156	2.12	0.07	0.07 J1	0.00137	< 0.002 U1	1	0.44 J1	< 0.04 U1
6/14/2022	Assessment	0.17	0.26	83.1	< 0.007 U1	0.020	0.59	0.041	1.34	0.09	< 0.05 U1	0.00132	< 0.002 U1	0.9	0.41 J1	< 0.04 U1
9/21/2022	Assessment	0.18	0.92	90.1	0.039 J1	0.046	4.53	1.11 B1	2.24	0.11	0.60	0.00190	< 0.002 U1	1.8	0.54	< 0.04 U1
3/07/2023	Assessment	0.09 J1	0.30	86.2	0.018 J1	0.027	0.70	0.077	1.21	0.07	0.12 J1	0.00149	< 0.002 U1	0.7	0.41 J1	< 0.04 U1
6/20/2023	Assessment	0.108	6.81	85.1	0.047 J1	0.024	1.71	0.381	0.78	0.19	0.27	0.00219	< 0.002 U1	2.0	0.27 J1	0.02 J1
9/19/2023	Assessment	0.259	0.83	85.1	0.049 J1	0.052	3.44	1.51	0.68	0.15	0.73	0.00225	0.003 J1	1.8	0.61	0.04 J1
3/05/2024	Assessment	0.196	0.33	87.6	< 0.007 U1	0.031	0.79	0.132	1.69	0.09	0.16 J1	0.00158	< 0.002 U1	0.7	0.44 J1	< 0.02 U1
4/16/2024	Assessment	0.344	0.49	75.7	0.018 J1	0.030	1.18	0.500	0.97	0.12	0.25	0.00159	< 0.002 U1	1.5	0.50	0.02 J1
8/20/2024	Assessment	0.213	0.37	88.2	0.010 J1	0.030	1.29	0.284	1.91	0.08	0.27	0.00143	< 0.002 U1	0.7	0.57	< 0.02 U1
3/18/2025	Assessment	0.239	0.51	90.3	0.021 J1	0.043	3.03	0.762	1.67	0.14	0.37	0.00187	< 0.002 U1	1.0	0.49 J1	< 0.02 U1
6/18/2025	Assessment	0.246	0.28	94.8	< 0.007 U1	0.014 J1	0.61	0.040	1.42	0.10	0.06 J1	0.00173	< 0.002 U1	0.8	0.34 J1	< 0.02 U1
9/16/2025	Assessment	0.46	0.33	90.0	< 0.02 U1	0.017 J1	1.05	0.17	0.96	0.09	0.14 J1	0.00183	< 0.002 U1	0.67	0.45 J1	0.03 J1

Table 1. Groundwater Data Summary: B-11

FlintCreek - LF

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	S.U.	mg/L	mg/L
5/24/2016	Background	0.171	10.5	4	< 0.083 U1	5.7	26	182
7/19/2016	Background	0.238	13.3	5	< 0.083 U1	6.2	41	144
9/14/2016	Background	0.207	14.7	6	< 0.083 U1	6.6	33	120
10/04/2016	Background	0.19	13	6	< 0.083 U1	6.4	36	156
11/07/2016	Background	0.188	11.3	5	< 0.083 U1	6.5	36	106
1/23/2017	Background	0.214	18.2	4	< 0.083 U1	6.1	39	128
3/07/2017	Background	0.199	12.6	3	< 0.083 U1	5.5	37	112
4/26/2017	Background	0.253	16.2	6	< 0.083 U1	5.9	45	130
5/16/2017	Background	0.453	13.6	6	< 0.083 U1	5.3	62	142
6/13/2017	Background	0.508	14.9	6	< 0.083 U1	5.4	60	184
8/28/2017	Detection	0.266	9.65	6	< 0.083 U1	5.3	43	108
12/21/2017	Detection	0.227	--	--	--	6.7	--	--
3/28/2018	Assessment	0.465	12.2	4	< 0.083 U1	5.4	53	136
8/27/2018	Assessment	0.281	10.8	--	--	5.9	--	100
10/23/2018	Assessment	--	--	6.93	< 0.083 U1	--	47.7	--
3/12/2019	Assessment	0.409	11.6	4.03	0.04 J1	5.8	44.9	104
6/10/2019	Assessment	0.548	17.0	3.73	0.04 J1	5.9	54.7	82
8/27/2019	Assessment	0.605	15.4	3	< 0.083 U1	5.8	59	138
3/24/2020	Assessment	--	--	3.27	0.04 J1	6.4	47.6	144
6/23/2020	Assessment	0.255	12.3	4.33	0.02 J1	6.0	32.7	104
10/20/2020	Assessment	0.327	14.1	3.39	0.03 J1	5.3	37.4	143
3/02/2021	Assessment	--	--	--	0.03 J1	5.3	--	--
6/21/2021	Assessment	0.277	11.4	7.00	0.03 J1	5.9	35.1	130
9/21/2021	Assessment	0.375	12.2	6.82	0.03 J1	5.1	41.6	120
3/15/2022	Assessment	--	--	--	< 0.02 U1	6.3	--	--
6/13/2022	Assessment	0.437	23.1	12.2	0.05 J1	6.8	47.8	200
9/21/2022	Assessment	0.337	11.9	8.38	< 0.02 U1	6.4	42.3	130
3/07/2023	Assessment	--	--	--	0.04 J1	6.3	--	--
9/19/2023	Assessment	0.364	22.4	19.5	0.04 J1	6.3	42.7	170
3/05/2024	Assessment	--	--	--	0.03 J1	5.4	--	--
4/16/2024	Assessment	0.334	14.6	16.3	0.03 J1	5.6	40.2	150
8/20/2024	Assessment	0.331	16.1	20.0	0.02 J1	5.6	38.3	130
3/18/2025	Assessment	--	--	--	0.03 J1	5.5	--	--
6/17/2025	Assessment	0.456	30.1	35.4	0.06	5.6	44.6	230
9/16/2025	Assessment	0.323	15.0	24.6	0.02 J1	5.7	40.0	150

Table 1. Groundwater Data Summary: B-11
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	139	0.899874 J1	1	13	3.28467 J1	1.311	< 0.083 U1	4.23401 J1	0.006	0.02458 J1	0.362121 J1	< 0.99 U1	< 0.86 U1
7/19/2016	Background	< 0.93 U1	7	187	2	2	22	6	--	< 0.083 U1	9	0.018	0.02442 J1	0.590003 J1	1.89587 J1	< 0.86 U1
9/14/2016	Background	< 0.93 U1	32	494	6	4	108	25	8.05	< 0.083 U1	49	0.079	0.097	3.32649 J1	< 0.99 U1	1.00112 J1
10/04/2016	Background	< 0.93 U1	3.13751 J1	163	1	1	16	4.44532 J1	2.161	< 0.083 U1	6	0.02	< 0.005 U1	0.370625 J1	1.95476 J1	< 0.86 U1
11/07/2016	Background	< 0.93 U1	< 1.05 U1	99	0.259911 J1	0.649573 J1	2	0.824023 J1	0.874	< 0.083 U1	< 0.68 U1	0.004	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/23/2017	Background	< 0.93 U1	< 1.05 U1	121	0.136215 J1	0.418062 J1	2	0.286943 J1	1	< 0.083 U1	< 0.68 U1	0.003	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/07/2017	Background	< 0.93 U1	< 1.05 U1	97	0.249082 J1	0.477646 J1	2	0.554259 J1	12.993	< 0.083 U1	< 0.68 U1	0.003	< 0.005 U1	< 0.29 U1	2.72028 J1	< 0.86 U1
4/26/2017	Background	< 0.93 U1	< 1.05 U1	138	0.38 J1	0.56 J1	5.16	1.24 J1	0.512	< 0.083 U1	0.83 J1	0.00566	< 0.005 U1	< 0.29 U1	1.52 J1	< 0.86 U1
5/16/2017	Background	< 0.93 U1	1.16 J1	129	0.39 J1	0.15 J1	3.27	0.97 J1	0.911	< 0.083 U1	< 0.68 U1	0.00329	< 0.005 U1	< 0.29 U1	2.68 J1	< 0.86 U1
6/13/2017	Background	< 0.93 U1	< 1.05 U1	127	0.41 J1	0.13 J1	3.67	1.08 J1	2.655	< 0.083 U1	1.23 J1	0.00334	< 0.005 U1	< 0.29 U1	1.15 J1	< 0.86 U1
3/28/2018	Assessment	4.89 J1	< 1.05 U1	124	0.34 J1	0.16 J1	0.99 J1	0.48 J1	1.183	< 0.083 U1	1 J1	0.00181	< 0.005 U1	< 0.29 U1	4.37 J1	< 0.86 U1
8/27/2018	Assessment	0.01 J1	0.25	94.9	0.365	0.15	1.36	0.159	1.551	--	0.097	0.00255	< 0.005 U1	0.08 J1	2.4	0.03 J1
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/12/2019	Assessment	< 0.1 U1	0.90	119	0.622	0.1 J1	1.95	0.372	0.451	0.04 J1	0.935	0.00221	< 0.005 U1	< 2 U1	3.5	< 0.5 U1
6/10/2019	Assessment	< 0.04 U1	0.36	111	0.316	0.08 J1	0.884	0.162	1.121	0.04 J1	0.2 J1	0.03 J1	< 0.005 U1	< 0.8 U1	3.1	< 0.2 U1
8/27/2019	Assessment	< 0.02 U1	0.55	131	0.317	0.10	1.36	0.256	0.455	< 0.083 U1	0.416	0.00130	< 0.005 U1	< 0.4 U1	4.1	< 0.1 U1
3/24/2020	Assessment	< 0.02 U1	0.20	101	0.162	0.07	0.542	0.094	1.437	0.04 J1	< 0.05 U1	0.000878	< 0.002 U1	< 0.4 U1	3.0	< 0.1 U1
6/23/2020	Assessment	< 0.02 U1	0.13	91.1	0.275	0.07	0.763	0.084	0.835	0.02 J1	< 0.05 U1	0.00128	< 0.002 U1	< 0.4 U1	2.0	< 0.1 U1
10/20/2020	Assessment	< 0.02 U1	0.14	84.9	0.219	0.05	0.919	0.085	2.095	0.03 J1	< 0.05 U1	0.00151	< 0.002 U1	< 0.4 U1	2.3	< 0.1 U1
3/02/2021	Assessment	< 0.02 U1	0.14	103	0.333	0.09	1.08	0.121	0.968	0.03 J1	< 0.05 U1	0.00192	< 0.002 U1	< 0.4 U1	2.1	< 0.1 U1
6/21/2021	Assessment	< 0.02 U1	0.13	101	0.301	0.102	0.99	0.098	0.72	0.03 J1	0.05 J1	0.00112	< 0.002 U1	< 0.1 U1	2.00	< 0.04 U1
9/21/2021	Assessment	< 0.02 U1	0.13	90.5	0.270 P2	0.058	0.92	0.098	1.22	0.03 J1	< 0.05 U1	0.00168 P2	< 0.002 U1	< 0.1 U1	2.38	< 0.04 U1
3/15/2022	Assessment	< 0.02 U1	0.21	113	0.490	0.188	1.27	0.184	1.67	< 0.02 U1	0.07 J1	0.00297	< 0.002 U1	< 0.1 U1	2.48	< 0.04 U1
6/13/2022	Assessment	< 0.02 U1	0.25	99.4	0.075	0.029	0.66	0.096	0.76	0.05 J1	< 0.05 U1	0.00060	< 0.002 U1	1.8	3.33	< 0.04 U1
9/21/2022	Assessment	< 0.02 U1	0.17	96.0	0.287	0.076	1.15	0.115 B1	1.09	< 0.02 U1	< 0.05 U1	0.00161	< 0.002 U1	< 0.1 U1	2.37	< 0.04 U1
3/07/2023	Assessment	< 0.02 U1	0.17	135	0.110	0.042	0.67	0.094	0.95	0.04 J1	0.08 J1	0.00068	< 0.002 U1	< 0.1 U1	2.33	< 0.04 U1
9/19/2023	Assessment	0.019 J1	0.24	107	0.166	0.062	1.34	0.125	0.99	0.04 J1	0.16 J1	0.00141	< 0.002 U1	< 0.1 U1	2.35	0.02 J1
3/05/2024	Assessment	< 0.008 U1	0.14	123	0.301	0.100	1.27	0.107	1.27	0.03 J1	< 0.05 U1	0.00232	< 0.002 U1	< 0.1 U1	2.45	0.03 J1
4/16/2024	Assessment	0.028 J1	0.54	118	0.338	0.151	1.51	0.306	1.43	0.03 J1	0.59	0.00217	0.004 J1	< 0.1 U1	2.90	0.03 J1
8/20/2024	Assessment	< 0.008 U1	0.17	106	0.247	0.089	0.92	0.094	1.04	0.02 J1	0.06 J1	0.00169	--	< 0.1 U1	2.24	0.02 J1
8/26/2024	Assessment	--	--	--	--	--	--	--	--	--	--	--	< 0.002 U1	--	--	--
3/18/2025	Assessment	0.009 J1	0.13	125	0.218	0.113	1.40	0.106	1.30	0.03 J1	< 0.05 U1	0.00236	< 0.002 U1	< 0.1 U1	2.12	< 0.02 U1
6/17/2025	Assessment	0.015 J1	0.19	131	0.094	0.052	0.78	0.098	0.96	0.06	0.11 J1	0.00060	< 0.002 U1	< 0.1 U1	3.22	0.03 J1
9/16/2025	Assessment	0.02 J1	0.19	114	0.22	0.069	0.89	0.08	0.45	0.02 J1	< 0.05 U1	0.00122	< 0.002 U1	< 0.05 U1	2.59	0.03 J1

Table 1. Groundwater Data Summary: B-12

Geosyntec Consultants, Inc.

FlintCreek - LF

Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/24/2016	Background	0.02	63	10	< 0.083 U1	8.2	19	280
7/19/2016	Background	0.02	61.1	10	< 0.083 U1	7.6	15	216
9/14/2016	Background	0.02	70.5	11	< 0.083 U1	7.1	14	236
10/05/2016	Background	0.02	69.2	12	0.1908 J1	7.0	12	271
11/08/2016	Background	0.03	66.7	12	< 0.083 U1	6.9	14	308
1/24/2017	Background	0.02	67.1	9	< 0.083 U1	6.7	9	268
3/07/2017	Background	0.02	68.1	9	< 0.083 U1	6.3	11	248
4/25/2017	Background	0.02379	59.4	9	< 0.083 U1	6.4	10	282
5/15/2017	Background	0.023	61.5	10	< 0.083 U1	6.4	10	236
6/13/2017	Background	0.0347	59.4	10	< 0.083 U1	6.6	9	252
8/29/2017	Detection	0.03061	72	10	< 0.083 U1	7.2	12	248
3/26/2018	Assessment	0.02876	56.2	7	< 0.083 U1	7.8	6	176
8/28/2018	Assessment	0.016	56.4	--	--	7.9	--	258
10/23/2018	Assessment	--	--	13.2	< 0.083 U1	--	9.16	--
3/11/2019	Assessment	0.02 J1	58.0	11.0	0.06 J1	8.5	5.0	254
6/10/2019	Assessment	0.04 J1	60.9	10.6	0.06 J1	7.2	7.0	244
8/27/2019	Assessment	< 0.02 U1	59.6	8	< 0.083 U1	6.9	9	252
3/23/2020	Assessment	--	--	8.53	0.03 J1	6.7	6.1	210
6/23/2020	Assessment	< 0.02 U1	57.0	11.2	0.03 J1	7.3	6.2	238
10/19/2020	Assessment	< 0.02 U1	70.3	11.0	0.05 J1	6.6	9.5	266
3/01/2021	Assessment	--	--	--	0.05 J1	7.0	--	--
6/21/2021	Assessment	0.014 J1	53.0	9.33	0.04 J1	6.5	4.91	220
9/20/2021	Assessment	0.012 J1	58.2	8.75	0.05 J1	6.4	9.05	220
3/14/2022	Assessment	--	--	--	0.03 J1	6.5	--	--
6/13/2022	Assessment	0.009 J1	48.3	8.90	0.03 J1	6.5	6.20	220 P1
9/20/2022	Assessment	0.014 J1	49.3	6.97	0.04 J1	6.5	7.52	180
3/06/2023	Assessment	--	--	--	0.02 J1	6.5	--	--
6/19/2023	Assessment	0.013 J1	54.5	8.25	0.05 J1	6.6	15.7	240
9/18/2023	Assessment	0.017 J1	57.9	7.06	0.04 J1	6.4	10.5	230
3/04/2024	Assessment	--	--	--	0.04 J1	6.2	--	--
4/15/2024	Assessment	0.013 J1	55.8	8.18	0.05 J1	6.4	10.4	230
8/19/2024	Assessment	0.014 J1	61.4	8.72	0.04 J1	6.8	7.3	200
3/17/2025	Assessment	--	--	--	0.05 J1	6.2	--	--
6/17/2025	Assessment	0.018 J1	53.8	7.39	0.03 J1	6.2	7.0	210 S7
9/15/2025	Assessment	0.018 J1	41.8	5.61	0.03 J1	6.1	7.18	160

Table 1. Groundwater Data Summary: B-12
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/24/2016	Background	< 0.93 U1	< 1.05 U1	62	0.020013 J1	< 0.07 U1	0.98147 J1	3.36185 J1	0.28188	< 0.083 U1	0.779741 J1	0.000759267 J1	0.01713 J1	2.94917 J1	< 0.99 U1	< 0.86 U1
7/19/2016	Background	< 0.93 U1	< 1.05 U1	61	0.0839166 J1	< 0.07 U1	2	2.84565 J1	--	< 0.083 U1	1.17408 J1	0.001	0.0216 J1	3.86821 J1	< 0.99 U1	< 0.86 U1
9/14/2016	Background	< 0.93 U1	< 1.05 U1	70	< 0.02 U1	< 0.07 U1	2	2.53407 J1	1.953	< 0.083 U1	0.716221 J1	0.000874536 J1	< 0.005 U1	3.27157 J1	< 0.99 U1	< 0.86 U1
10/05/2016	Background	< 0.93 U1	< 1.05 U1	67	< 0.02 U1	< 0.07 U1	0.86698 J1	2.31495 J1	1.666	0.1908 J1	< 0.68 U1	0.014	< 0.005 U1	2.00891 J1	< 0.99 U1	< 0.86 U1
11/08/2016	Background	< 0.93 U1	8	123	1	0.465087 J1	22	23	1.743	< 0.083 U1	15	0.011	0.039	4.65502 J1	< 0.99 U1	< 0.86 U1
1/24/2017	Background	< 0.93 U1	< 1.05 U1	63	< 0.02 U1	< 0.07 U1	0.446889 J1	1.76121 J1	1.357	< 0.083 U1	< 0.68 U1	0.000559654 J1	< 0.005 U1	1.1441 J1	< 0.99 U1	< 0.86 U1
3/07/2017	Background	< 0.93 U1	< 1.05 U1	59	< 0.02 U1	< 0.07 U1	1	1.61975 J1	2.97	< 0.083 U1	0.903447 J1	0.006	< 0.005 U1	2.06812 J1	< 0.99 U1	< 0.86 U1
4/25/2017	Background	1.92 J1	1.23 J1	53.73	0.02 J1	< 0.07 U1	0.65 J1	1.34 J1	0.908	< 0.083 U1	< 0.68 U1	0.00106	0.006 J1	0.69 J1	< 0.99 U1	< 0.86 U1
5/15/2017	Background	< 0.93 U1	1.65 J1	59.7	0.07 J1	< 0.07 U1	1.57	1.95 J1	0.6398	< 0.083 U1	0.77 J1	0.00132	< 0.005 U1	0.58 J1	< 0.99 U1	< 0.86 U1
6/13/2017	Background	< 0.93 U1	< 1.05 U1	56.66	< 0.02 U1	< 0.07 U1	0.63 J1	1.3 J1	2.635	< 0.083 U1	< 0.68 U1	0.00085 J1	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/26/2018	Assessment	1.15 J1	< 1.05 U1	50.7	< 0.02 U1	< 0.07 U1	1.06	1.85 J1	0.867	< 0.083 U1	< 0.68 U1	0.00069 J1	< 0.005 U1	1.13 J1	< 0.99 U1	0.96 J1
8/28/2018	Assessment	0.15	0.43	48.8	0.042	0.03	0.993	2.51	0.891	--	0.535	0.000702	< 0.005 U1	1.11	0.4	0.03 J1
10/23/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/11/2019	Assessment	< 0.1 U1	0.3 J1	51.6	< 0.1 U1	< 0.05 U1	1.09	3.35	0.777	0.06 J1	0.5 J1	0.0008 J1	< 0.005 U1	< 2 U1	0.3 J1	< 0.5 U1
6/10/2019	Assessment	0.1 J1	0.29	54.2	< 0.04 U1	0.03 J1	0.585	2.49	0.5134	0.06 J1	0.3	< 0.02 U1	< 0.005 U1	< 0.8 U1	0.2 J1	< 0.2 U1
8/27/2019	Assessment	0.24	1.20	60.8	0.150	0.08	2.04	11.2	1.111	< 0.083 U1	2.65	0.00176	0.006 J1	0.4 J1	1.4	< 0.1 U1
3/23/2020	Assessment	0.05 J1	0.14	52.6	< 0.02 U1	0.02 J1	0.321	2.62	1.722	0.03 J1	0.07 J1	0.000768	< 0.002 U1	0.6 J1	0.1 J1	< 0.1 U1
6/23/2020	Assessment	0.07 J1	0.11	59.7	< 0.02 U1	0.02 J1	0.481	1.82	0.421	0.03 J1	< 0.05 U1	0.000828	< 0.002 U1	0.5 J1	0.1 J1	< 0.1 U1
10/19/2020	Assessment	0.16	0.14	62.9	< 0.02 U1	0.03 J1	0.601	2.26	1.611	0.05 J1	0.1 J1	0.00114	< 0.002 U1	0.7 J1	0.2	< 0.1 U1
3/01/2021	Assessment	0.07 J1	0.12	44.7	< 0.02 U1	0.02 J1	0.501	2.52	0.4501	0.05 J1	0.05 J1	0.000751	< 0.002 U1	0.5 J1	0.09 J1	< 0.1 U1
6/21/2021	Assessment	0.06 J1	0.1	54.6	0.009 J1	0.018 J1	0.68	2.81	4.62	0.04 J1	0.06 J1	0.00086	< 0.002 U1	0.4 J1	0.12 J1	< 0.04 U1
9/20/2021	Assessment	0.16	0.13	52.4	< 0.007 P2, U1	0.008 J1	0.75	2.39	0.74	0.05 J1	0.08 J1	0.00115 P2	< 0.002 U1	0.7	0.17 J1	< 0.04 U1
3/14/2022	Assessment	0.05 J1	0.11	54.2	< 0.007 U1	0.023	0.96	3.50	2.35	0.03 J1	< 0.05 U1	0.00103	< 0.002 U1	0.3 J1	0.20 J1	< 0.04 U1
6/13/2022	Assessment	0.08 J1	0.09 J1	50.5	< 0.007 U1	0.016 J1	0.64	2.83	1.04	0.03 J1	0.08 J1	0.00092	< 0.2 U1	0.4 J1	0.13 J1	< 0.04 U1
9/20/2022	Assessment	0.14	0.13	45.8	0.008 J1	0.021	0.87	2.75 B1	0.74	0.04 J1	0.09 J1	0.00105	< 0.2 U1	0.6	0.10 J1	< 0.04 U1
3/06/2023	Assessment	0.03 J1	0.12	58.0	0.031 J1	0.023	0.59	3.03	0.71	0.02 J1	0.07 J1	0.00108	< 0.002 U1	0.2 J1	0.16 J1	< 0.04 U1
6/19/2023	Assessment	0.179	0.17	50.9	0.034 J1	0.022	1.17	0.666	2.00	0.05 J1	0.23	0.00119	< 0.002 U1	0.7	0.14 J1	0.02 J1
9/18/2023	Assessment	0.126	0.1	54.9	0.009 J1	0.024	0.92	2.54	0.96	0.04 J1	0.08 J1	0.00146	< 0.002 U1	0.4 J1	0.22 J1	0.02 J1
3/04/2024	Assessment	0.049 J1	0.11	55.1	< 0.007 U1	0.021	0.98	3.05	1.44	0.04 J1	0.05 J1	0.00104	< 0.002 U1	0.3 J1	0.20 J1	0.02 J1
4/15/2024	Assessment	0.103	0.12	54.1	0.008 J1	0.022	0.96	3.14	0.93	0.05 J1	0.07 J1	0.00115	< 0.002 U1	0.4 J1	0.16 J1	0.02 J1
8/19/2024	Assessment	0.042 J1	0.09 J1	58.7	< 0.007 U1	0.017 J1	0.99	3.34	0.75	0.04 J1	< 0.05 U1	0.00079	< 0.002 U1	0.4 J1	0.17 J1	< 0.02 U1
3/17/2025	Assessment	0.082 J1	0.07 J1	52.8	< 0.007 U1	0.016 J1	1.25	3.53	0.65	0.05 J1	< 0.05 U1	0.00095	< 0.002 U1	0.4 J1	0.27 J1	0.02 J1
6/17/2025	Assessment	0.047 J1	0.08 J1	60.3	0.009 J1	0.025	0.75	4.34	0.56	0.03 J1	< 0.05 U1	0.00090	< 0.002 U1	0.2 J1	0.13 J1	0.02 J1
9/15/2025	Assessment	0.07 J1	0.09 J1	42.9	< 0.02 U1	0.016 J1	0.88	2.56	1.26	0.03 J1	< 0.05 U1	0.00087	< 0.002 U1	0.28 J1	0.16 J1	0.03 J1

Table 1. Groundwater Data Summary: B-13

Geosyntec Consultants, Inc.

FlintCreek - LF

Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/23/2016	Background	0.02	15.1	4	< 0.083 U1	6.9	20	108
7/19/2016	Background	0.03	14.7	3	< 0.083 U1	5.9	23	88
9/13/2016	Background	0.02	13	4	< 0.083 U1	5.1	18	68
10/05/2016	Background	0.02	13.6	5	< 0.083 U1	5.2	20	80
11/08/2016	Background	0.01	4.07	4	0.2121 J1	5.4	7	52
1/23/2017	Background	0.01	4.26	3	< 0.083 U1	6.2	7	44
3/07/2017	Background	0.02	10.1	3	< 0.083 U1	4.8	16	64
4/26/2017	Background	0.02539	15	4	< 0.083 U1	5.3	27	82
5/16/2017	Background	0.03198	20.1	4	< 0.083 U1	5.7	33	60
6/13/2017	Background	0.04236	20.2	5	< 0.083 U1	5.2	31	114
8/28/2017	Detection	0.02674	12.7	4	< 0.083 U1	5.0	22	72
3/28/2018	Assessment	0.02271	14.8	2	< 0.083 U1	7.5	23	80
8/27/2018	Assessment	0.016	12.4	--	--	5.1	--	58
10/22/2018	Assessment	--	--	3.6	< 0.083 U1	--	21.1	--
3/12/2019	Assessment	0.02 J1	13.5	1.92	0.02 J1	7.1	21.3	82
6/10/2019	Assessment	< 0.04 U1	19.7	3.05	0.02 J1	6.9	20.7	98
8/28/2019	Assessment	< 0.02 U1	10.2	1	< 0.083 U1	5.4	18	64
3/23/2020	Assessment	--	--	1.82	0.02 J1	6.4	19.0	81
6/24/2020	Assessment	< 0.02 U1	16.3	1.93	0.01 J1	6.2	18.7	86
10/20/2020	Assessment	< 0.02 U1	13.0	1.63	0.02 J1	6.2	17.7	77
3/02/2021	Assessment	--	--	--	0.02 J1	5.8	--	--
6/21/2021	Assessment	0.015 J1	16.7	2.16	0.03 J1	6.4	18.2	90
9/21/2021	Assessment	0.012 J1	13.0	1.52	0.02 J1	5.6	16.4	60
3/15/2022	Assessment	--	--	--	< 0.02 U1	5.6	--	--
6/13/2022	Assessment	0.027 J1	16.4	2.64	0.02 J1	6.1	17.1	70 L1
9/21/2022	Assessment	0.013 J1	13.0	2.11	0.02 J1	6.3	15.7	60
3/07/2023	Assessment	--	--	--	< 0.02 U1	5.5	--	--
6/20/2023	Assessment	0.009 J1	10.9	1.57	< 0.02 U1	6.2	17.7	80
9/19/2023	Assessment	0.028 J1	18.9	3.58	0.03 J1	5.7	14.1	81
3/05/2024	Assessment	--	--	--	0.03 J1	5.6	--	--
4/16/2024	Assessment	0.012 J1	12.8	2.02	0.03 J1	5.7	15.4	90
8/20/2024	Assessment	0.018 J1	15.6	3.13	< 0.02 U1	5.5	14.2	80
3/18/2025	Assessment	--	--	--	< 0.02 U1	5.7	--	--
6/18/2025	Assessment	0.017 J1	17.5 M1	3.36	0.02 J1	5.5	14.8	80
9/15/2025	Assessment	0.014 J1	13.9	2.74	< 0.02 U1	5.8	14.6	70

Table 1. Groundwater Data Summary: B-13
FlintCreek - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

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
5/23/2016	Background	< 0.93 U1	< 1.05 U1	53	0.122524 J1	0.107623 J1	2	1.81817 J1	0.4473	< 0.083 U1	< 0.68 U1	< 0.00013 U1	0.02179 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
7/19/2016	Background	< 0.93 U1	< 1.05 U1	60	0.224239 J1	< 0.07 U1	4	1.60103 J1	--	< 0.083 U1	1.35024 J1	0.002	0.01382 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
9/13/2016	Background	< 0.93 U1	< 1.05 U1	54	< 0.02 U1	< 0.07 U1	3	1.45223 J1	1.939	< 0.083 U1	< 0.68 U1	0.002	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
10/05/2016	Background	< 0.93 U1	< 1.05 U1	61	0.237762 J1	< 0.07 U1	5	2.78529 J1	0.829	< 0.083 U1	1.81371 J1	0.011	< 0.005 U1	0.539075 J1	< 0.99 U1	< 0.86 U1
11/08/2016	Background	< 0.93 U1	< 1.05 U1	32	0.28466 J1	0.256467 J1	4	1.50224 J1	0.3576	0.2121 J1	1.58806 J1	0.002	0.00767 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/23/2017	Background	< 0.93 U1	< 1.05 U1	36	0.29327 J1	< 0.07 U1	3	1.48125 J1	0.733	< 0.083 U1	< 0.68 U1	0.002	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/07/2017	Background	< 0.93 U1	< 1.05 U1	44	0.142049 J1	< 0.07 U1	2	0.769644 J1	0.841	< 0.083 U1	< 0.68 U1	0.002	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
4/26/2017	Background	< 0.93 U1	1.92 J1	66.22	0.22 J1	0.1 J1	4.05	1.94 J1	0.844	< 0.083 U1	1.02 J1	0.00252	0.021 J1	< 0.29 U1	1.68 J1	< 0.86 U1
5/16/2017	Background	< 0.93 U1	< 1.05 U1	71.99	0.13 J1	< 0.07 U1	2.26	0.99 J1	0.918	< 0.083 U1	< 0.68 U1	0.00133	< 0.005 U1	< 0.29 U1	1.38 J1	< 0.86 U1
6/13/2017	Background	< 0.93 U1	< 1.05 U1	72.45	0.12 J1	< 0.07 U1	2.61	1.26 J1	2.577	< 0.083 U1	< 0.68 U1	0.00151	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/28/2018	Assessment	< 0.93 U1	< 1.05 U1	56.76	< 0.02 U1	< 0.07 U1	1.45	0.53 J1	0.92	< 0.083 U1	< 0.68 U1	0.00101	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
8/27/2018	Assessment	0.02 J1	0.13	48.3	0.113	0.05	0.611	0.210	0.530	--	0.149	0.000775	< 0.005 U1	0.08 J1	0.5	0.02 J1
10/22/2018	Assessment	--	--	--	--	--	--	--	--	< 0.083 U1	--	--	--	--	--	--
3/12/2019	Assessment	< 0.1 U1	0.62	55.4	0.2 J1	0.08 J1	1.76	1.08	0.882	0.02 J1	1.51	0.00115	< 0.005 U1	< 2 U1	0.8 J1	< 0.5 U1
6/10/2019	Assessment	< 0.02 U1	0.07 J1	55.1	0.05 J1	0.04 J1	0.379	0.03 J1	0.461	0.02 J1	< 0.05 U1	< 0.02 U1	< 0.005 U1	< 0.4 U1	0.5	< 0.1 U1
8/28/2019	Assessment	< 0.02 U1	0.17	47.1	0.151	0.05 J1	0.818	0.272	0.862	< 0.083 U1	0.221	0.000814	< 0.005 U1	< 0.4 U1	0.4	< 0.1 U1
3/23/2020	Assessment	< 0.02 U1	0.06 J1	49.0	0.06 J1	0.04 J1	0.459	0.03 J1	1.475	0.02 J1	< 0.05 U1	0.000578	< 0.002 U1	< 0.4 U1	0.4	< 0.1 U1
6/24/2020	Assessment	< 0.02 U1	0.08 J1	52.3	0.05 J1	0.07	0.460	0.051	0.4377	0.01 J1	0.07 J1	0.000504	< 0.002 U1	< 0.4 U1	0.5	< 0.1 U1
10/20/2020	Assessment	< 0.02 U1	0.06 J1	45.3	0.08 J1	0.05 J1	0.345	0.060	0.276	0.02 J1	0.05 J1	0.000604	< 0.002 U1	< 0.4 U1	0.4	< 0.1 U1
3/02/2021	Assessment	< 0.02 U1	0.1 J1	46.3	0.06 J1	0.03 J1	0.464	0.116	0.179	0.02 J1	0.1 J1	0.000582	< 0.002 U1	< 0.4 U1	0.5	< 0.1 U1
6/21/2021	Assessment	< 0.02 U1	0.18	54.1	0.065	0.036	0.99	0.245	0.51	0.03 J1	0.29	0.00056	< 0.002 U1	0.1 J1	0.49 J1	< 0.04 U1
9/21/2021	Assessment	< 0.02 U1	0.04 J1	46.1	0.064	0.035	0.55	0.029	0.60	0.02 J1	0.11 J1	0.00057	< 0.002 U1	< 0.1 U1	0.43 J1	< 0.04 U1
3/15/2022	Assessment	< 0.02 U1	0.09 J1	49.5	0.060	0.037	0.63	0.068	1.99	< 0.02 U1	< 0.05 U1	0.00058	< 0.004 U1	< 0.1 U1	0.40 J1	< 0.04 U1
6/13/2022	Assessment	< 0.02 U1	0.07 J1	51.7	0.044 J1	0.031	0.55	0.040	0.89	0.02 J1	< 0.05 U1	0.00045	< 0.200 U1	0.1 J1	0.36 J1	< 0.04 U1
9/21/2022	Assessment	< 0.02 U1	0.08 J1	46.7	0.066	0.032	0.81	0.072 B1	1.37	0.02 J1	0.06 J1	0.00056	< 0.200 U1	< 0.1 U1	0.37 J1	< 0.04 U1
3/07/2023	Assessment	< 0.02 U1	0.06 J1	53.8	0.046 J1	0.028	0.64	0.046	0.69	< 0.02 U1	0.08 J1	0.00050	< 0.002 U1	0.1 J1	0.31 J1	< 0.04 U1
6/20/2023	Assessment	0.014 J1	0.08 J1	42.3	0.085	0.034	0.63	0.106	0.81	< 0.02 U1	0.10 J1	0.00063	< 0.002 U1	< 0.1 U1	0.30 J1	< 0.02 U1
9/19/2023	Assessment	0.032 J1	0.1	57.5	0.042 J1	0.041	0.76	0.051	0.61	0.03 J1	< 0.05 U1	0.00047	< 0.002 U1	0.4 J1	0.48 J1	0.04 J1
3/05/2024	Assessment	0.010 J1	0.06 J1	49.6	0.052	0.033	0.61	0.055	1.40	0.03 J1	0.09 J1	0.00046	< 0.002 U1	< 0.1 U1	0.41 J1	< 0.02 U1
4/16/2024	Assessment	0.016 J1	0.07 J1	45.5	0.069	0.032	0.67	0.092	1.35	0.03 J1	0.08 J1	0.00058	< 0.002 U1	< 0.1 U1	0.33 J1	< 0.02 U1
8/20/2024	Assessment	0.010 J1	0.07 J1	48.9	0.053	0.032	0.70	0.074	1.20	< 0.02 U1	0.08 J1	0.00062	< 0.002 U1	0.1 J1	0.41 J1	< 0.02 U1
3/18/2025	Assessment	0.010 J1	0.05 J1	43.7	0.086	0.033	0.90	0.043	0.62	< 0.02 U1	< 0.05 U1	0.00072	< 0.002 U1	< 0.1 U1	0.31 J1	0.03 J1
6/18/2025	Assessment	0.013 J1	0.06 J1	54.1	0.041 J1	0.105	0.57	0.034	0.84	0.02 J1	0.07 J1	0.00050	< 0.002 U1	0.1 J1	0.39 J1	< 0.02 U1
9/15/2025	Assessment	< 0.02 U1	0.05 J1	49.1	0.06	0.036	0.66	0.03	0.93	< 0.02 U1	< 0.05 U1	0.00057	< 0.002 U1	0.07 J1	0.40 J1	< 0.02 U1

**Table 1. Groundwater Data Summary
Flint Creek - Landfill**

Geosyntec Consultants, Inc.

Notes:

1. 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

P1: The precision between duplicate results was above acceptance limits.

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

**Table 1: Residence Time Calculation Summary
Flint Creek Landfill**

Geosyntec Consultants, Inc.

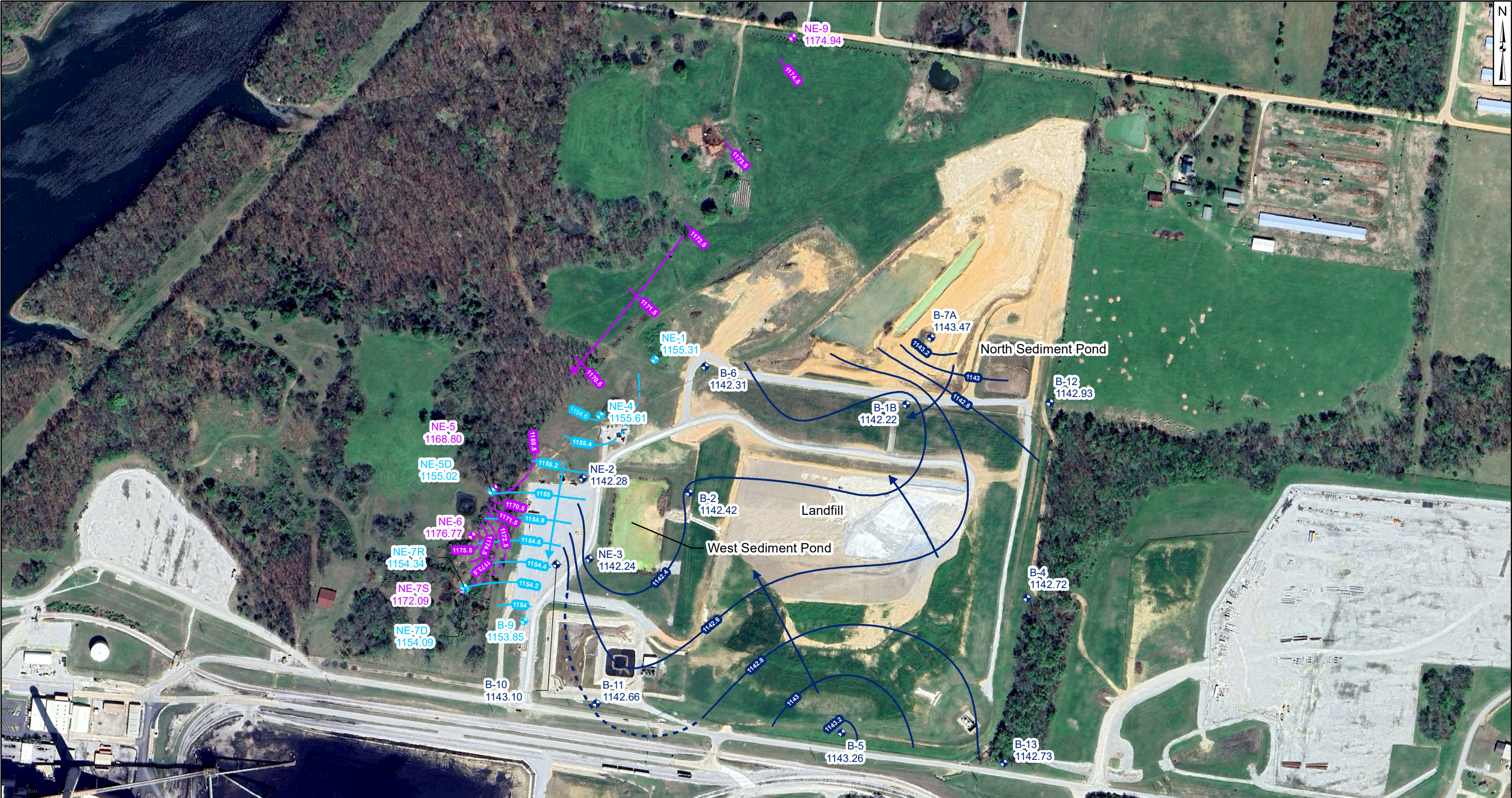
CCR Management Unit	Monitoring Well	Well Diameter (inches)	2025-03		2025-06		2025-09	
			Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)
Landfill	B-1B ^[3]	2.0	121	0.5	89	0.7	166	0.4
	B-2 ^[2]	2.0	12	5.0	32	1.9	57	1.1
	B-4 ^[1]	2.0	12	5.0	9	6.6	20	3.1
	B-5 ^[3]	2.0	41	1.5	106	0.6	26	2.4
	B-6 ^[2]	2.0	30	2.0	96	0.6	55	1.1
	B-7A ^[3]	2.0	145	0.4	241	0.3	180	0.3
	B-9 ^[2]	2.0	75	0.8	115	0.5	75	0.8
	B-10 ^[2]	2.0	212	0.3	58	1.1	152	0.4
	B-11 ^[2]	2.0	18	3.3	49	1.2	17	3.6
	B-12 ^[1]	2.0	29	2.1	244	0.2	25	2.4
	B-13 ^[1]	2.0	23	2.6	99	0.6	32	1.9

Notes:

[1] - Background Well

[2] - Downgradient Well

[3] - Crossgradient Well



- Monitoring Wells

Shallow

Intermediate

Deep

Groundwater Elevation Contour

Shallow

Shallow, Inferred

Shallow Flow Direction

Intermediate

Intermediate, Inferred

Intermediate Flow Direction

Deep

Deep, Inferred

Deep Flow Direction

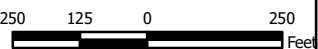
- Notes
1. Monitoring well coordinates and water level data were collected March 17 and 18, 2025, provided by AEP.

2. Site features are based on information available in the Groundwater Monitoring Well Network Evaluation (Terracon, 2017) provided by AEP.

3. Groundwater elevation units are feet above mean sea level (ft amsl).

4. Well locations resurveyed on February 2 and 3, 2023 (Datum: AR SP North NAD27, NGVD29).

5. Aerial basemap downloaded from Google Earth Pro (April 2024).



Potentiometric Surface Map

March 2025

AEP Flint Creek Plant - Landfill

Gentry, Arkansas

Geosyntec

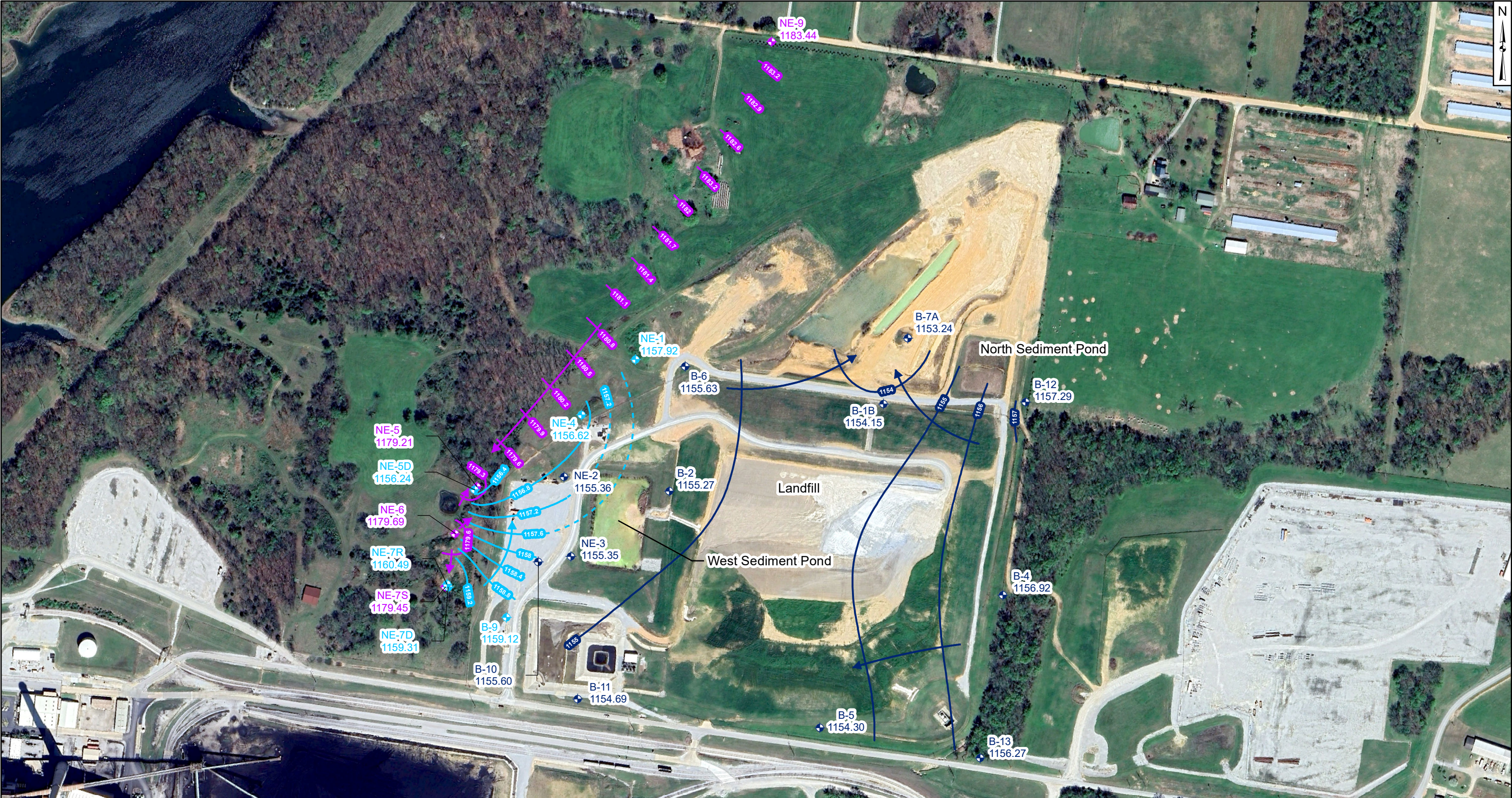
consultants

Columbus, Ohio

2026/01/09

Figure

1



- Monitoring Wells

 - Shallow
 - Intermediate
 - Deep
- Groundwater Elevation Contour

 - Shallow
 - Shallow Flow Direction
 - Intermediate
 - Intermediate, Inferred
 - Intermediate Flow Direction
 - Deep
 - Deep Flow Direction

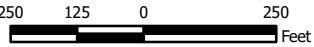
- Notes
1. Monitoring well coordinates and water level data were collected June 17 and 18, 2025, provided by AEP.

2. Site features are based on information available in the Groundwater Monitoring Well Network Evaluation (Terracon, 2017) provided by AEP.

3. Groundwater elevation units are feet above mean sea level (ft amsl).

4. Well locations resurveyed on February 2 and 3, 2023 (Datum: AR SP North NAD27, NGVD29).

5. Aerial basemap downloaded from Google Earth Pro (April 2024).



Potentiometric Surface Map
June 2025

AEP Flint Creek Plant - Landfill
Gentry, Arkansas

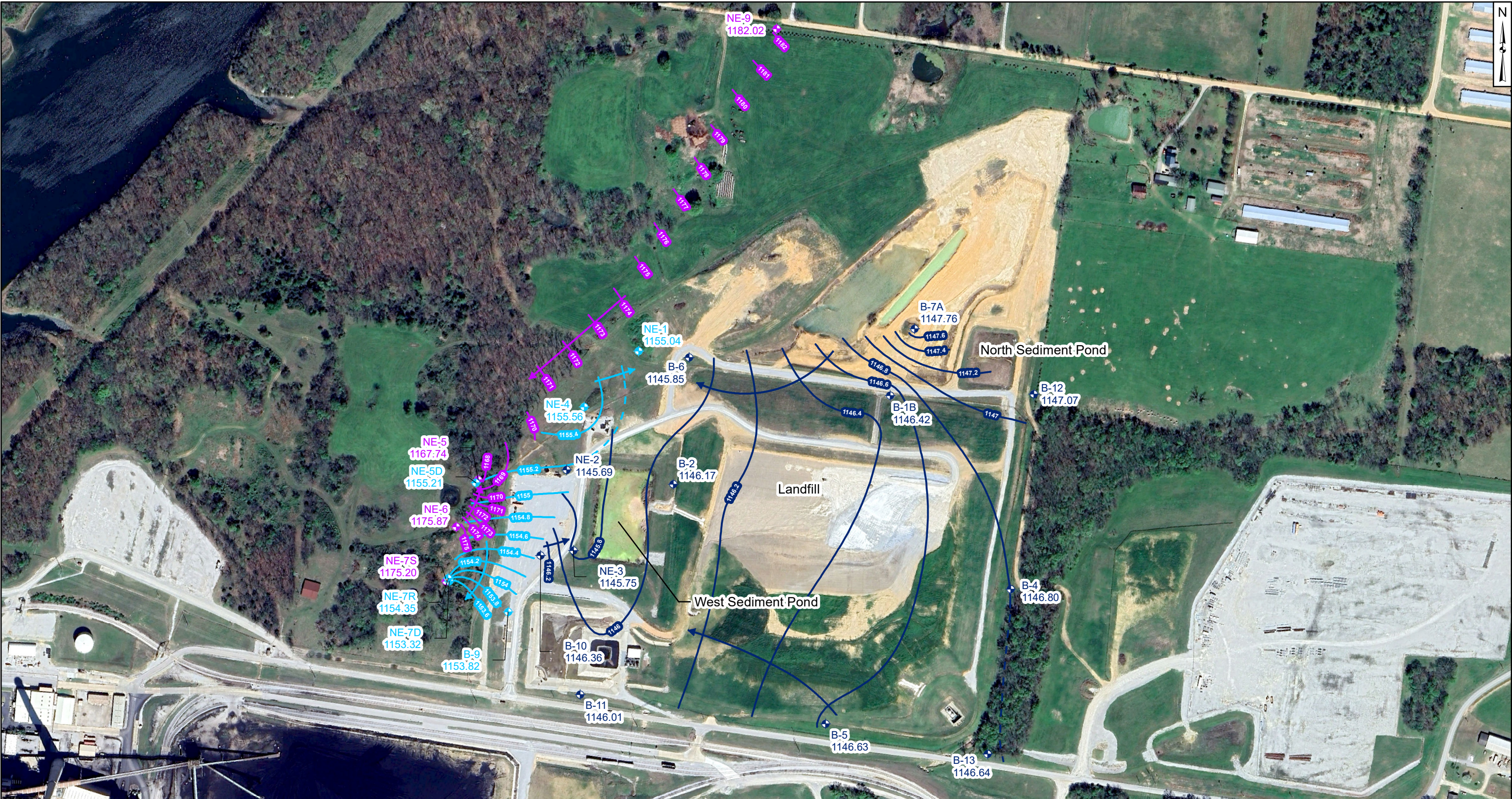
Geosyntec
consultants

Columbus, Ohio

2026/01/12

Figure

1



Monitoring Wells

◆ Shallow

◆ Intermediate

◆ Deep

Groundwater Elevation Contour

— Shallow

— Shallow Flow Direction

— Intermediate

— Intermediate, Inferred

— Intermediate Flow Direction

— Deep

— Deep, Inferred

— Deep Flow Direction

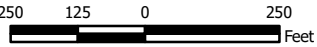
- Notes
1. Monitoring well coordinates and water level data were collected September 15 and 16, 2025, provided by AEP.

2. Site features are based on information available in the Groundwater Monitoring Well Network Evaluation (Terracon, 2017) provided by AEP.

3. Groundwater elevation units are feet above mean sea level (ft amsl).

4. Well locations resurveyed on February 2 and 3, 2023 (Datum: AR SP North NAD27, NGVD29).

5. Aerial basemap downloaded from Google Earth Pro (April 2024).



Potentiometric Surface Map

September 2025

AEP Flint Creek Plant - Landfill

Gentry, Arkansas

Geosyntec

consultants

Figure

1

Columbus, Ohio

2025/12/12

APPENDIX 2 - Statistical Analyses

The October 2025 and January 2026 statistical analysis summaries follow.

STATISTICAL ANALYSIS SUMMARY, 2025 1ST SEMIANNUAL EVENT

LANDFILL

**Flint Creek Plant
Gentry, Arkansas**

Prepared for

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Columbus, Ohio 43215-2372

Prepared by

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Project Number: CHA1147E

October 2025

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Table 2:	Appendix IV Groundwater Protection Standards
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LIST OF ATTACHMENTS

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

ACRONYMS AND ABBREVIATIONS

CCR	coal combustion residuals
CFR	Code of Federal Regulations
GWPS	groundwater protection standard
mg/L	milligrams per liter
QA/QC	quality assurance and quality control
SSI	statistically significant increase
SSL	statistically significant level
UPL	upper prediction limit
TDS	total dissolved solids

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 Landfill, an existing CCR unit at the Flint Creek Power Plant in Gentry, Arkansas. Recent groundwater monitoring results were used to identify concentrations of Appendix IV constituents that may be 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 at the Landfill (Geosyntec 2018). An alternative source was not identified following the detection monitoring event, so the Landfill has been in assessment monitoring since 2018. An annual sampling event for Appendix IV parameters required by 40 CFR 257.95(b) was completed in March 2025, and a semiannual sampling event for Appendix III parameters and Appendix IV parameters, as required by 40 CFR 257.95(d)(1), was completed in June 2025. The results of the March and June 2025 assessment sampling 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 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. LANDFILL EVALUATION

2.1 Data Validation and QA/QC

Two sets of samples were collected for analysis from each upgradient and downgradient well to meet the requirements of 40 CFR 257.95(b) (March 2025) and 257.95(d)(1) (June 2025) as part of the assessment monitoring program. Samples from March 2025 were analyzed for all Appendix IV parameters, whereas samples from the June 2025 sample event were analyzed for all Appendix IV and Appendix III parameters. A summary of data collected during these assessment monitoring events 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.10.0.27 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 Landfill were conducted in accordance with the January 2021 *Statistical Analysis Plan* (Geosyntec 2021). Time series plots and results for all completed statistical tests are provided in Attachment B.

The data obtained in March and June 2025 were screened for potential outliers. No outliers were identified in the data (Attachment B).

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 Landfill.

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 June 2025 assessment monitoring event from each compliance well were compared to previously established prediction limits to assess whether the results were statistically above background limits. The results from these events and the prediction limits are summarized in Table 3. The following exceedances of the upper prediction limits (UPLs) were noted:

- Boron concentrations were above the interwell UPL of 0.107 milligrams per liter (mg/L) at B-2 (0.391 mg/L) and at B-11 (0.456 mg/L).
- The calcium concentration was above the intrawell UPL of 19.8 mg/L at B-11 (30.1 mg/L).
- The chloride concentration was above the intrawell UPL of 9.82 mg/L at B-11 (35.4 mg/L).
- The sulfate concentration was above the intrawell UPL of 44.5 mg/L at B-9 (60.0 mg/L).
- Total dissolved solids (TDS) concentrations were above the intrawell UPL of 315 mg/L at B-9 (320 mg/L) and the intrawell UPL of 190 mg/L at B-11 (230 mg/L).

While the prediction limits were calculated for a one-of-two retesting procedure, SSIs were conservatively assumed if the June 2025 sample was above the UPL or, in the case of pH, below the lower prediction limit.

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, and no QA/QC issues identified that prevented data usage. A review of outliers identified no potential outliers in the March and June 2025 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 GWPSs. No SSLs were identified. Appendix III parameters were compared to prediction limits; concentrations of boron, calcium, chloride, sulfate, and TDS were identified above the prediction limits.

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

3. REFERENCES

- Geosyntec. 2018. Statistical Analysis Summary – Landfill, Flint Creek Plant, Gentry, Arkansas. Geosyntec Consultants, Inc. January.
- Geosyntec. 2021. Statistical Analysis Plan – Flint Creek Plant. Revision 1. Geosyntec Consultants, Inc. January.
- Geosyntec. 2024. Statistical Analysis Summary, 2024 2nd Semiannual Event – Landfill, Flint Creek Plant, Gentry, Arkansas. Geosyntec Consultants, Inc. December.

TABLES

Table 1. Groundwater Data Summary
Statistical Analysis Summary
Flint Creek Plant – Landfill

Geosyntec Consultants

Parameter	Unit	B-1B				B-2		B-4		B-5		B-6		B-7A	
		3/17/2025	3/18/2025	6/17/2025	6/18/2025	3/17/2025	6/17/2025	3/18/2025	6/17/2025	3/18/2025	6/18/2025	3/17/2025	6/17/2025	3/18/2025	6/17/2025
Antimony	µg/L	--	0.020 J1	--	0.013 J1	0.019 J1	0.023 J1	0.009 J1	0.1 U1	0.008 J1	0.015 J1	0.013 J1	0.019 J1	0.020 J1	0.021 J1
Arsenic	µg/L	--	0.29	--	0.05 J1	0.17	0.15	0.07 J1	0.04 J1	0.29	0.14	0.19	0.22	8.18	8.61
Barium	µg/L	--	111	--	117	53.4	50.7	48.7	54.7	16.3	17.2	37.8	49.0	46.6	44.3
Beryllium	µg/L	--	0.018 J1	--	0.019 J1	0.051	0.096	0.166	0.235	0.411	0.416	0.011 J1	0.027 J1	0.014 J1	0.010 J1
Boron	mg/L	--	--	--	0.012 J1	--	0.391	--	0.095	--	0.023 J1	--	0.028 J1	--	0.014 J1
Cadmium	µg/L	--	0.035	--	0.010 J1	0.019 J1	0.020	0.053	0.029	0.133	0.117	0.008 J1	0.012 J1	0.044	0.015 J1
Calcium	mg/L	--	--	--	87.1	--	26.8	--	9.73	--	11.2	--	46.1	--	105
Chloride	mg/L	--	--	--	2.22	--	4.15	--	3.08	--	7.72	--	7.14	--	3.12
Chromium	µg/L	--	0.32	--	0.36	1.55	1.53	1.67	1.07	2.62	2.16	2.20	1.84	0.68	0.34
Cobalt	µg/L	--	0.030	--	0.019 J1	0.050	0.072	0.069	0.043	0.188	0.158	0.077	0.176	0.644	0.115
Combined Radium	pCi/L	--	1.93	--	5.1	1.88	1.08	4.21	1.03	1.84	0.51	0.41	1.78	0.94	2.37
Fluoride	mg/L	--	0.40	--	0.40	0.12	0.09	0.02 J1	0.06 U1	0.06	0.05 J1	0.02 J1	0.03 J1	0.19	0.21
Lead	µg/L	--	0.21	--	0.10 J1	0.2 U1	0.05 J1	0.05 J1	0.2 U1	0.11 J1	0.12 J1	0.09 J1	0.18 J1	0.30	1.66
Lithium	mg/L	--	0.0261	--	0.0253	0.00104	0.00114	0.00098	0.00123	0.00229	0.00269	0.00031	0.00044	0.0143	0.0140
Mercury	µg/L	--	0.005 U1	--	0.01 U1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.003 J1	0.005 U1	0.005 U1	0.005 U1	0.005 U1	0.003 J1
Molybdenum	µg/L	--	1.5	--	0.5 U1	1.3	1.0	0.5 U1	0.5 U1	0.5 U1	0.5 U1	0.1 J1	0.3 J1	0.4 J1	0.1 J1
Selenium	µg/L	--	0.5 U1	--	0.5 U1	5.87	4.99	0.28 J1	0.36 J1	30.3	28.1	1.46	1.17	0.5 U1	0.5 U1
Sulfate	mg/L	--	--	--	14.4	--	56.4	--	7.9	--	214	--	17.1	--	30.0
Thallium	µg/L	--	0.2 U1	--	0.2 U1	0.04 J1	0.06 J1	0.02 J1	0.03 J1	0.03 J1	0.03 J1	0.2 U1	0.2 U1	0.2 U1	0.2 U1
Total Dissolved Solids	mg/L	--	--	--	280 S7	--	200	--	90	--	370	--	190	--	310
pH	SU	7.2	--	7.5	--	5.6	5.7	6.8	6.9	5.1	5.1	6.1	6.2	7.3	7.3

Notes:
--: not sampled
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 1. Groundwater Data Summary
Statistical Analysis Summary
Flint Creek Plant – Landfill

Parameter	Unit	B-9		B-10				B-11		B-12		B-13	
		3/18/2025	6/18/2025	3/17/2025	3/18/2025	6/17/2025	6/18/2025	3/18/2025	6/17/2025	3/17/2025	6/17/2025	3/18/2025	6/18/2025
Antimony	µg/L	0.023 J1	0.028 J1	--	0.239	--	0.246	0.009 J1	0.015 J1	0.082 J1	0.047 J1	0.010 J1	0.013 J1
Arsenic	µg/L	0.36	0.40	--	0.51	--	0.28	0.13	0.19	0.07 J1	0.08 J1	0.05 J1	0.06 J1
Barium	µg/L	199	183	--	90.3	--	94.8	125	131	52.8	60.3	43.7	54.1
Beryllium	µg/L	0.05 U1	0.05 U1	--	0.021 J1	--	0.05 U1	0.218	0.094	0.05 U1	0.009 J1	0.086	0.041 J1
Boron	mg/L	--	0.024 J1	--	--	--	0.008 J1	--	0.456	--	0.018 J1	--	0.017 J1
Cadmium	µg/L	0.02 U1	0.005 J1	--	0.043	--	0.014 J1	0.113	0.052	0.016 J1	0.025	0.033	0.105
Calcium	mg/L	--	95.9	--	--	--	83.9	--	30.1	--	53.8	--	17.5 M1
Chloride	mg/L	--	6.91	--	--	--	11.6	--	35.4	--	7.39	--	3.36
Chromium	µg/L	0.59	1.04	--	3.03	--	0.61	1.40	0.78	1.25	0.75	0.90	0.57
Cobalt	µg/L	0.043	0.042	--	0.762	--	0.040	0.106	0.098	3.53	4.34	0.043	0.034
Combined Radium	pCi/L	1.31	0.6	--	1.67	--	1.42	1.3	0.96	0.65	0.56	0.62	0.84
Fluoride	mg/L	0.07	0.08	--	0.14	--	0.10	0.03 J1	0.06	0.05 J1	0.03 J1	0.06 U1	0.02 J1
Lead	µg/L	0.2 U1	0.2 U1	--	0.37	--	0.06 J1	0.2 U1	0.11 J1	0.2 U1	0.2 U1	0.2 U1	0.07 J1
Lithium	mg/L	0.00346	0.00361	--	0.00187	--	0.00173	0.00236	0.00060	0.00095	0.00090	0.00072	0.00050
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	0.2 J1	0.2 J1	--	1.0	--	0.8	0.5 U1	0.5 U1	0.4 J1	0.2 J1	0.5 U1	0.1 J1
Selenium	µg/L	0.56	0.56	--	0.49 J1	--	0.34 J1	2.12	3.22	0.27 J1	0.13 J1	0.31 J1	0.39 J1
Sulfate	mg/L	--	60.0	--	--	--	26.7	--	44.6	--	7.0	--	14.8
Thallium	µg/L	0.2 U1	0.2 U1	--	0.2 U1	--	0.2 U1	0.2 U1	0.03 J1	0.02 J1	0.02 J1	0.03 J1	0.2 U1
Total Dissolved Solids	mg/L	--	320	--	--	--	270	--	230	--	210 S7	--	80
pH	SU	7.0	6.7	6.5	--	6.6	--	5.5	5.6	6.2	6.2	5.7	5.5

Notes:
--: not sampled
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
Flint Creek Plant – Landfill**

Constituent Name	MCL	CCR Rule-Specified	Calculated UTL	GWPS
Antimony, Total (mg/L)	0.00600		0.00452	0.00600
Arsenic, Total (mg/L)	0.0100		0.00983	0.0100
Barium, Total (mg/L)	2.00		0.131	2.00
Beryllium, Total (mg/L)	0.00400		0.00100	0.00400
Cadmium, Total (mg/L)	0.00500		0.00100	0.00500
Chromium, Total (mg/L)	0.100		0.00600	0.100
Cobalt, Total (mg/L)	n/a	0.00600	0.00350	0.00600
Combined Radium, Total (pCi/L)	5.00		8.79	8.79
Fluoride, Total (mg/L)	4.00		0.596	4.00
Lead, Total (mg/L)	n/a	0.0150	0.00389	0.0150
Lithium, Total (mg/L)	n/a	0.0400	0.0410	0.0410
Mercury, Total (mg/L)	0.00200		0.0000960	0.00200
Molybdenum, Total (mg/L)	n/a	0.100	0.00466	0.100
Selenium, Total (mg/L)	0.0500		0.0392	0.0500
Thallium, Total (mg/L)	0.00200		0.00199	0.00200

Notes:

1. Calculated UTL (upper tolerance limit) represents site-specific background values.
2. Gray cells indicate the GWPS is based upon 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
Flint Creek Plant – Landfill

Geosyntec Consultants, Inc.

Analyte	Unit	Description	B-2	B-6	B-9	B-10*	B-11
			6/17/2025	6/17/2025	6/18/2025	6/18/2025	6/17/2025
Boron	mg/L	Interwell Background Value (UPL)	0.107				
		Analytical Result	0.391	0.028	0.024	0.008	0.456
Calcium	mg/L	Intrawell Background Value (UPL)	50.4	58.5	130	116	19.8
		Analytical Result	26.8	46.1	95.9	83.9	30.1
Chloride	mg/L	Intrawell Background Value (UPL)	8.88	8.70	7.78	12.4	9.82
		Analytical Result	4.15	7.14	6.91	11.6	35.4
Fluoride	mg/L	Intrawell Background Value (UPL)	0.200	0.207	0.356	0.330	0.200
		Analytical Result	0.09	0.03	0.08	0.10	0.06
pH	SU	Intrawell Background Value (UPL)	6.9	7.3	8.1	8.3	6.9
		Intrawell Background Value (LPL)	5.1	5.9	6.3	6.1	5.0
		Analytical Result	5.7	6.2	6.7	6.6	5.6
Sulfate	mg/L	Intrawell Background Value (UPL)	195	42.9	44.5	35.8	62.6
		Analytical Result	56.4	17.1	60.0	26.7	44.6
Total Dissolved Solids	mg/L	Intrawell Background Value (UPL)	522	271	315	301	190
		Analytical Result	200	190	320	270	230

Notes:

1. Bold values exceed the background value.

2. Background values are shaded gray.

*: pH measured on 6/17/2025. Well purged dry and sampled the following day.

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 Flint Creek Landfill 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



15296

Arkansas

10.13.2025

License Number

Licensing State

Date

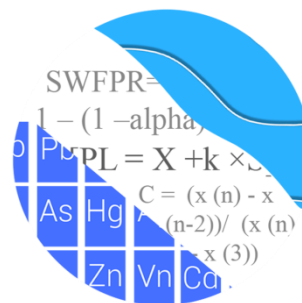
ATTACHMENT B

Statistical Analysis Output

GROUNDWATER STATS CONSULTING

September 8, 2025

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



Re: Flint Creek Landfill
Assessment Monitoring Summary – March & June 2025

Dear Ms. Kreinberg,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the Assessment Monitoring statistical analysis of groundwater data through June 2025 at American Electric Power Company's Flint Creek Landfill. 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:** B-1B, B-4, B-5, B-7A, B-12, and B-13
- **Downgradient wells:** B-2, B-6, B-9, B-10, and B-11

Data were sent electronically, and the statistical analysis was conducted according to the Statistical Analysis Plan and original screening evaluation prepared by GSC and approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to GSC. The statistical analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to Groundwater Stats Consulting.

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

- **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 and box plots for Appendix IV parameters are provided for all wells and constituents; and are used to evaluate concentrations over the entire record (Figures A and B, respectively). Values in background which have previously been flagged as outliers may be seen in a lighter font and disconnected symbol on the graphs. Additionally, a summary of flagged values follows this letter (Figure C).

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. 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. Reporting limit changes may occur depending on laboratory capabilities. In the case of fluoride, elevated historic reporting limits were replaced by the most recent laboratory reporting limits of 0.06 mg/L which were substituted across all non-detects for all wells. The computed statistical limits, both background and compliance limits, were not adversely affected by these substitutions.

Well/constituent pairs containing 100% non-detects do not require statistics and are deselected prior to construction of confidence intervals; however, all downgradient well/constituent pairs contained at least one detection or trace value.

Summary of Statistical Methods – Appendix IV Parameters

Assessment monitoring for Appendix IV parameters involves the comparison of a confidence interval for each parameter at downgradient wells against the corresponding Groundwater Protection Standard (GWPS). The GWPS is determined for each parameter as the highest limit of the Maximum Contaminant Levels (MCLs) or background limits determined from tolerance limits constructed from pooled upgradient well data.

Prior to computing tolerance limits on upgradient well data or confidence intervals on downgradient well data, 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 tolerance limits and confidence intervals as appropriate, based on the following criteria.

- 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 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. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric tolerance limits and confidence intervals are used on data containing greater than 50% non-detects or data sets which do not follow a normal or transformed-normal distribution.

Background Update Summary – Conducted in Fall 2024

Background (upgradient) data sets are periodically re-evaluated for Appendix IV constituents for the purpose of updating statistical limits. This step was most recently performed in November 2024 through visual screening and Tukey's outlier test for potential outliers as well as extreme trending patterns that would lead to artificially elevated statistical limits.

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. All flagged values may be seen on the Outlier Summary following this letter (Figure C).

Tukey's outlier test identified outliers for barium, chromium, cobalt, combined radium 226 + 228, fluoride, lithium, and selenium when pooled upgradient well data were evaluated; however, many of these values were of similar concentration to one another and thus, were not flagged as outliers. The highest detected value for chromium in well B-12, the two highest detected values for cobalt in well B-12, and the high non-detects for lithium, at the reporting limit of 0.1 mg/L, at several wells during the June 2019 event remain flagged in the database as outliers as they did not appear to represent the population at these wells and do not represent current conditions. No additional values were flagged during the update.

Downgradient well data through August 2024 were screened through visual screening using time series graphs. Since the downgradient well data are used to construct confidence intervals, values that are marginally high relative to the rest of the data are retained unless there is particular justification for excluding them. No additional outliers were flagged during the update, and no previously flagged outliers were unflagged. Several outliers were flagged during previous analyses for reasons listed below.

Several metals had higher reported concentrations in multiple wells during the September and November 2016 events which appear to be either a laboratory or sampling issue. Therefore, these values were flagged as outliers since they do not represent the population within these wells. Additionally, several reporting limits for the metals are significantly lower beginning in March 2019 than those reported historically. As discussed previously, the reporting limit for lithium during the June 2019 event increased from a historical limit of 0.001 mg/L to 0.1 mg/L. Therefore, the high reporting limit was flagged as an outlier in all applicable wells as it is higher than any reported concentrations for lithium.

Interwell Upper Tolerance Limits

Upper tolerance limits were used to calculate background limits from pooled upgradient well data through August 2024 for Appendix IV parameters (Figure D). These limits are updated on an annual basis and will be updated again during the Fall 2025 sample event. Parametric tolerance limits are calculated, with a target of 95% confidence and 95% coverage, when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were constructed using the highest background measurement. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples.

Groundwater Protection Standards

These background limits were compared to the MCLs and CCR Rule-Specified levels 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). The GWPS are unchanged from the Fall 2024 report.

Evaluation of Appendix IV Parameters – March & June 2025

Time series plots were used to visually identify potential outliers through the June 2025 sample events. When suspected outliers are identified, Tukey's outlier test is 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. Although flagging high values will also reduce the mean and thus lower the entire interval, the intent is to reduce the variance and thus reduce the width of parametric confidence intervals to better represent the actual downgradient mean. No additional suspected outliers were identified.

Confidence Intervals

Confidence intervals were then constructed with data through June 2025 on downgradient wells for each of the Appendix IV parameters and compared to the GWPS (i.e., the highest limit of the MCL or background limit as discussed above). When data followed a normal or transformed-normal distribution, parametric confidence intervals were constructed for Appendix IV parameters. Nonparametric confidence intervals, which use the appropriate large and small 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.

Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. No exceedances were noted for any of the well/constituent pairs. A summary of the confidence interval results follows this letter (Figure F).

Trend Test Evaluation – Appendix IV

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. The 95% confidence level rapidly identifies statistically significant trends and is recommended in cases with limited sample sizes as well as new downgradient wells. 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 Flint Creek Landfill. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

A handwritten signature in dark ink that reads "Tristan Clark". The script is cursive and fluid.

Tristan Clark
Groundwater Analyst

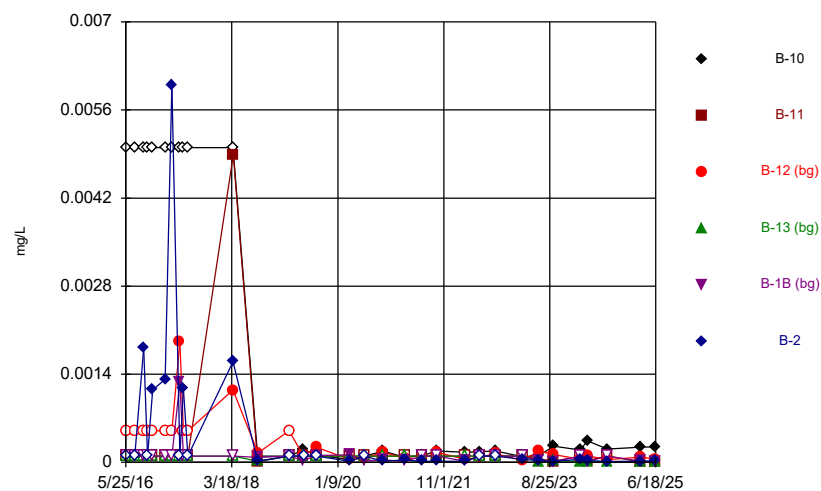
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Andrew T. Collins
Project Manager

FIGURE A

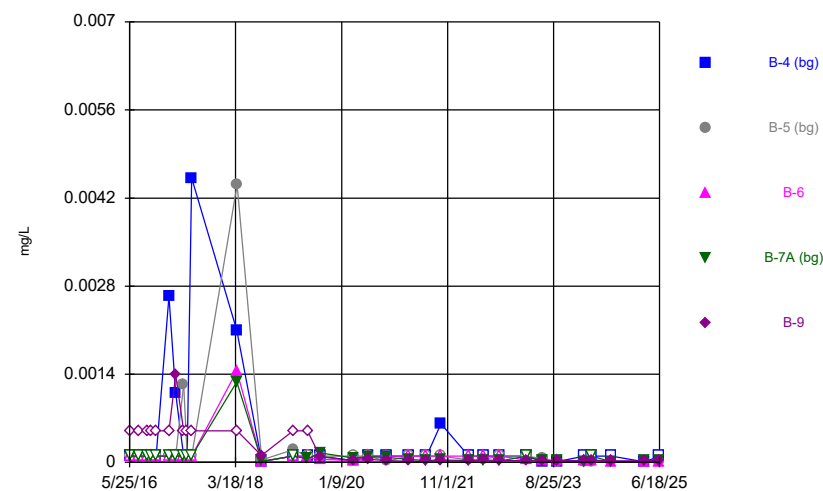
Time Series

Time Series



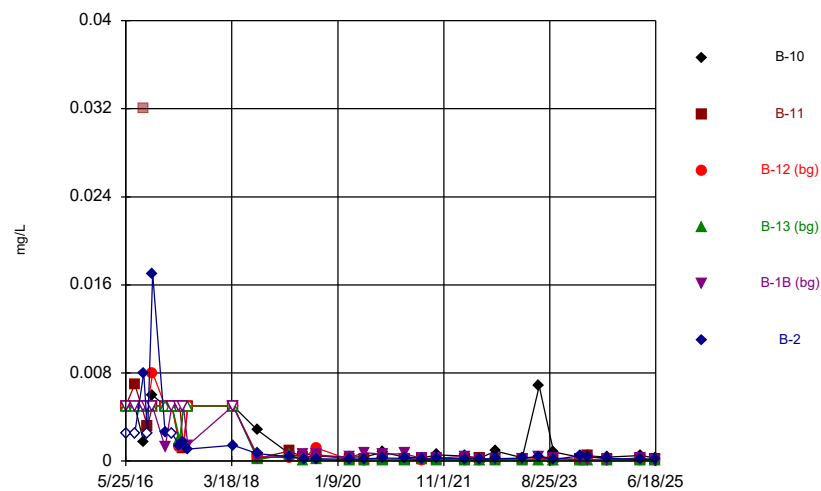
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



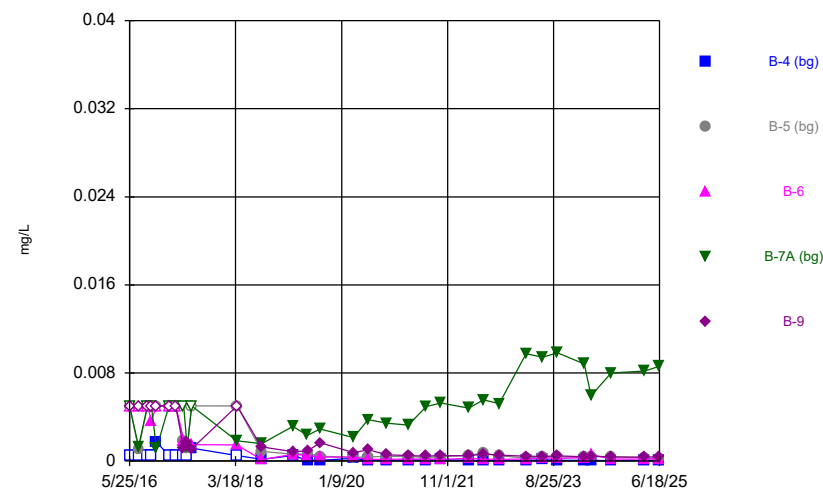
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Time Series



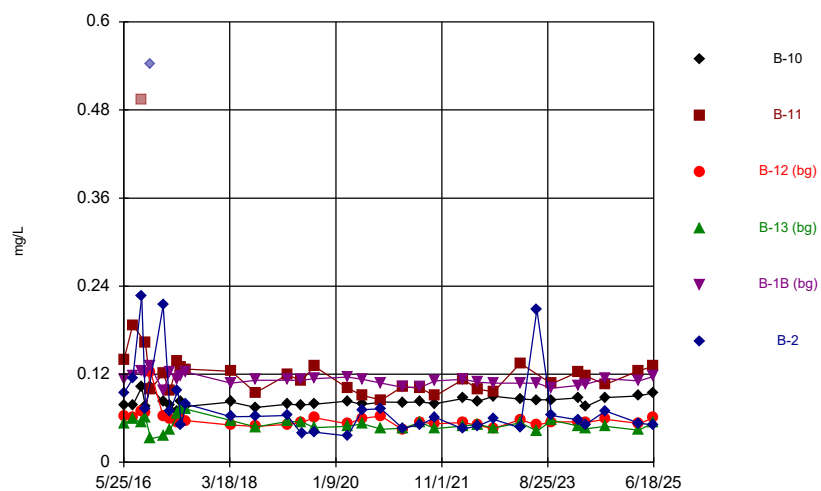
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Time Series



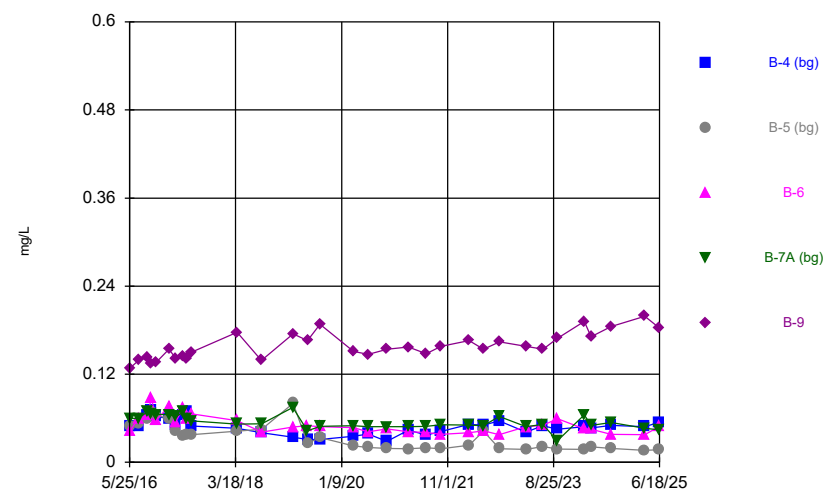
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Time Series



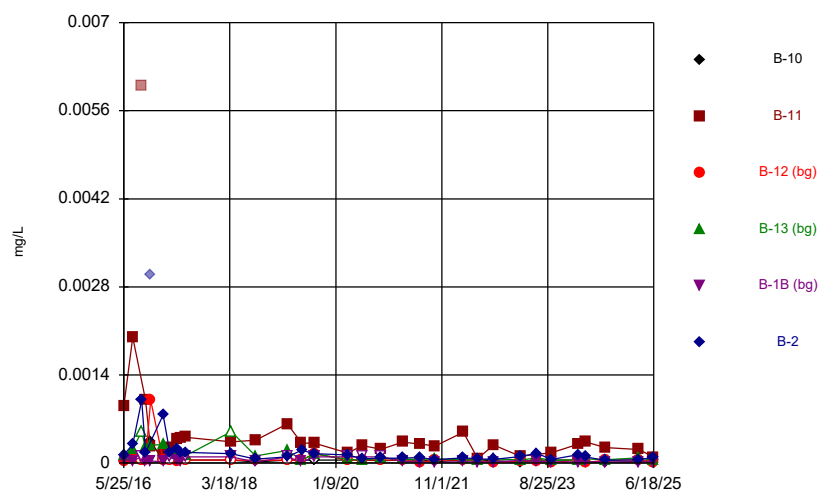
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Time Series



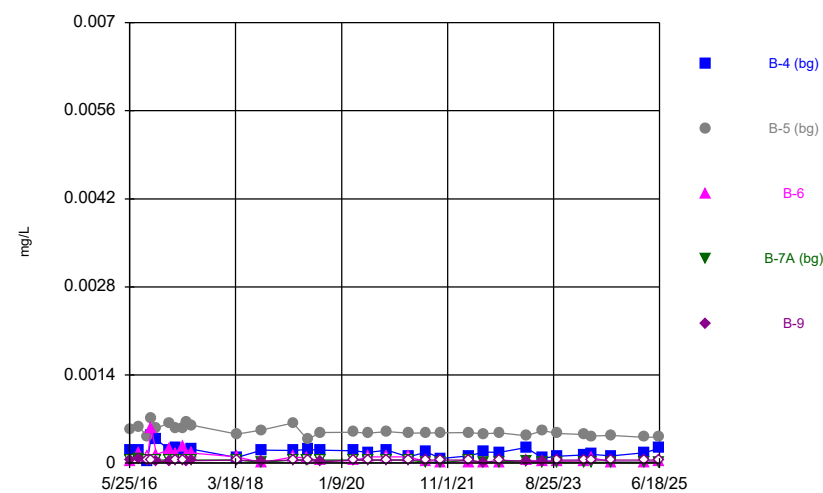
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Time Series



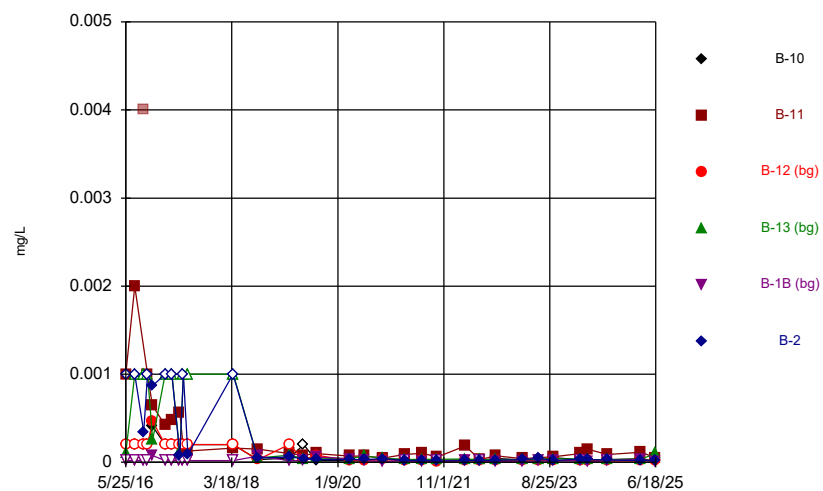
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Time Series

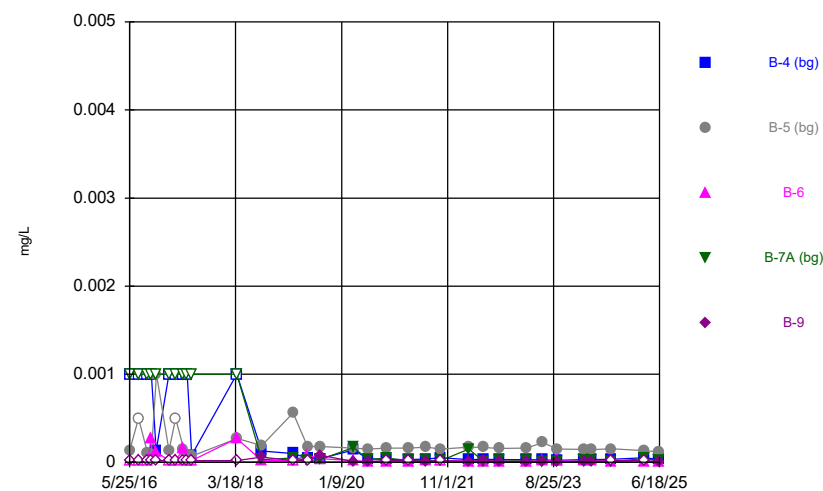


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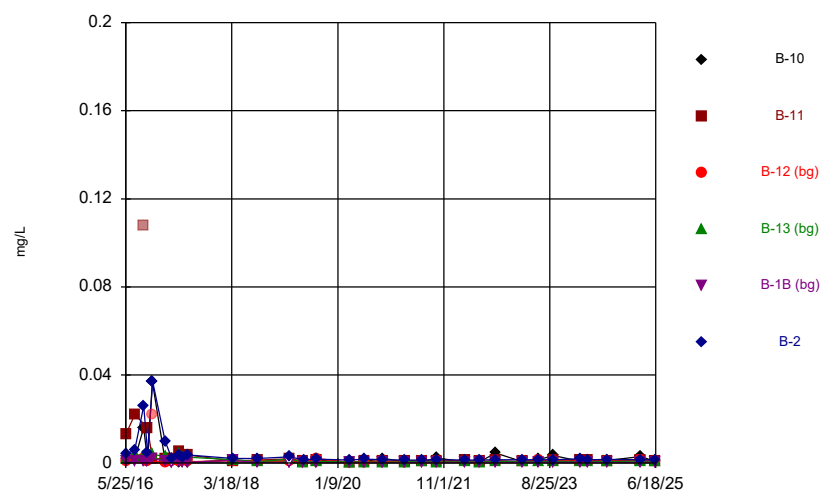
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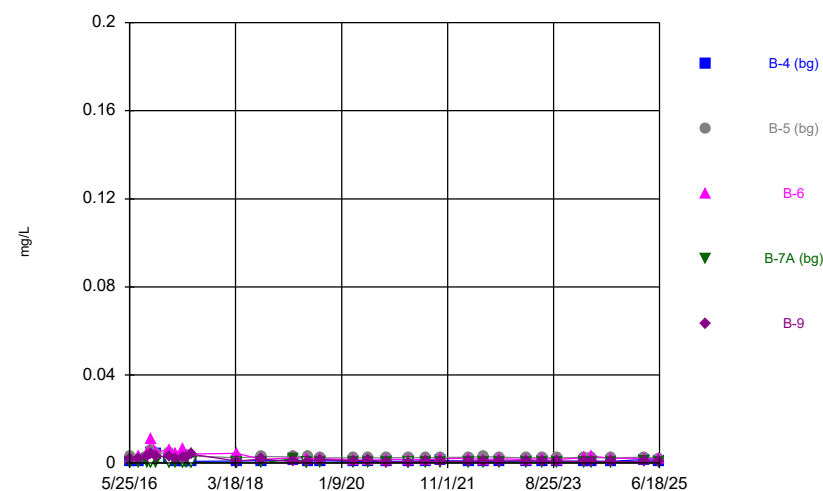
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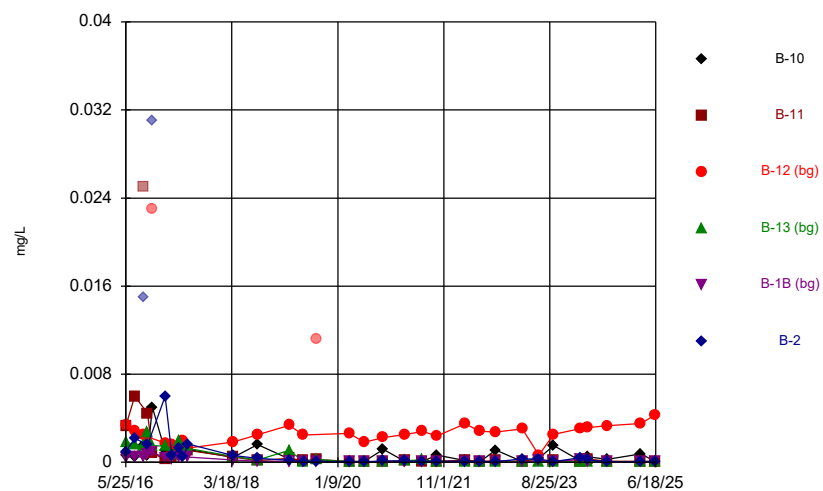
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Time Series

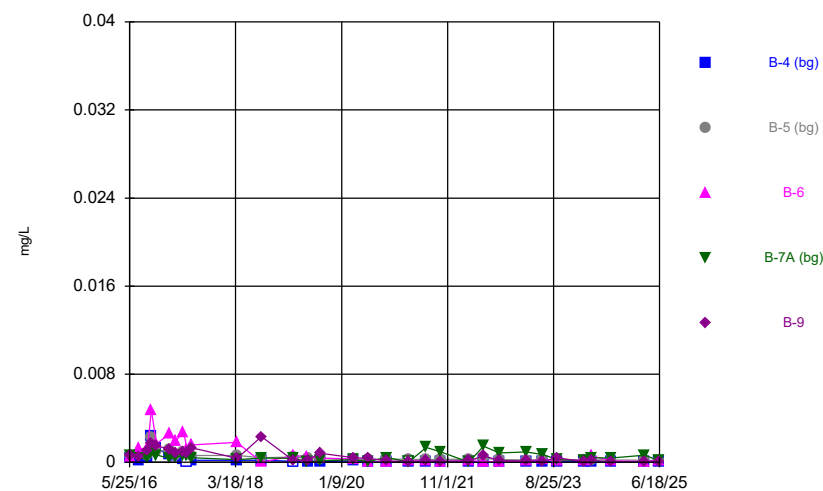


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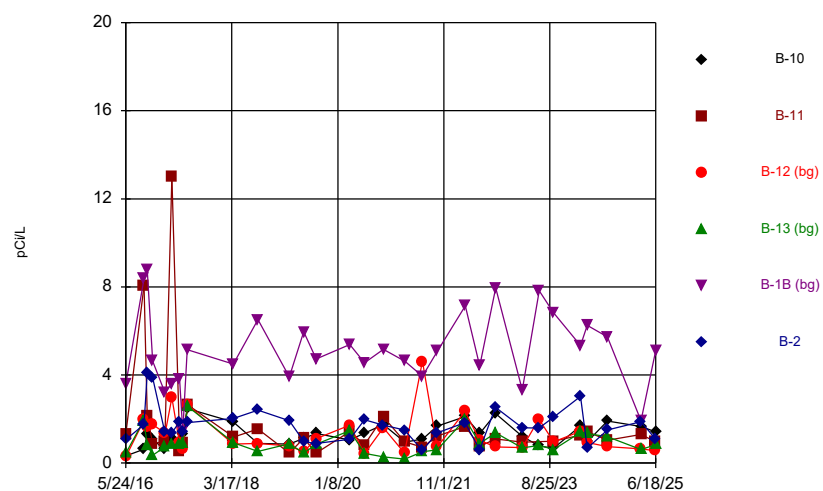
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Time Series



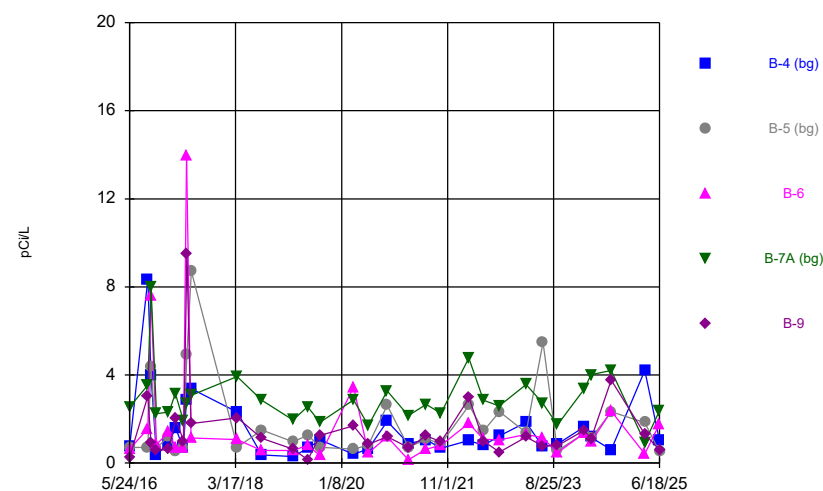
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



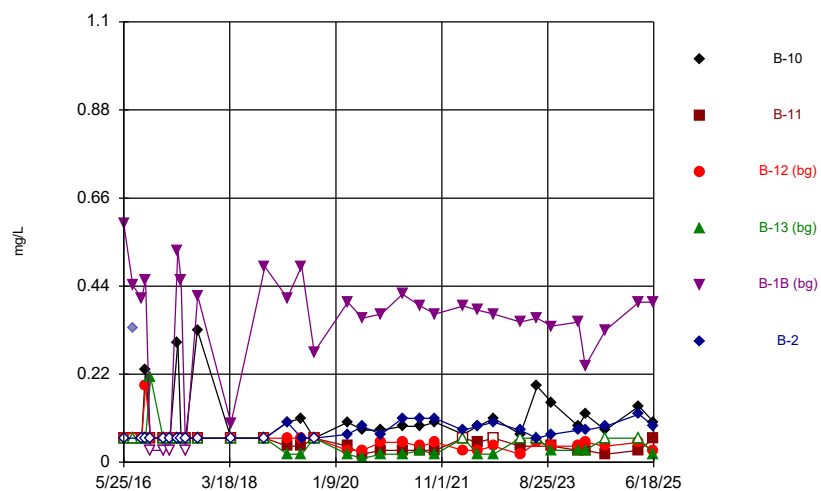
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



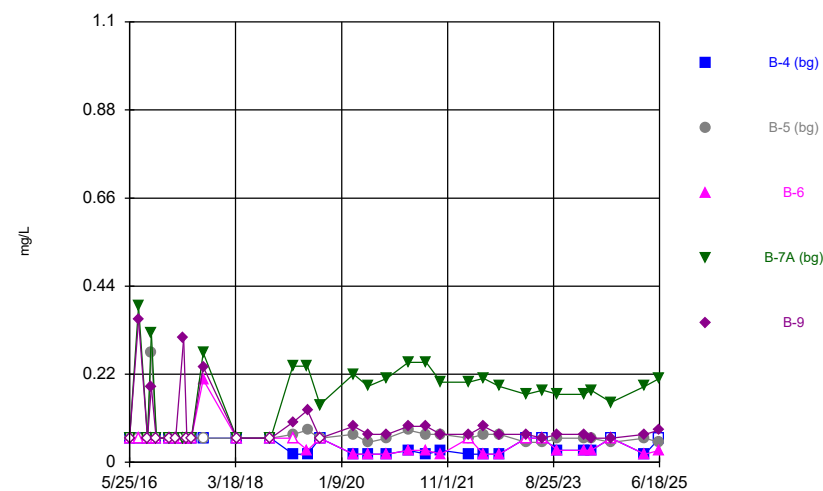
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



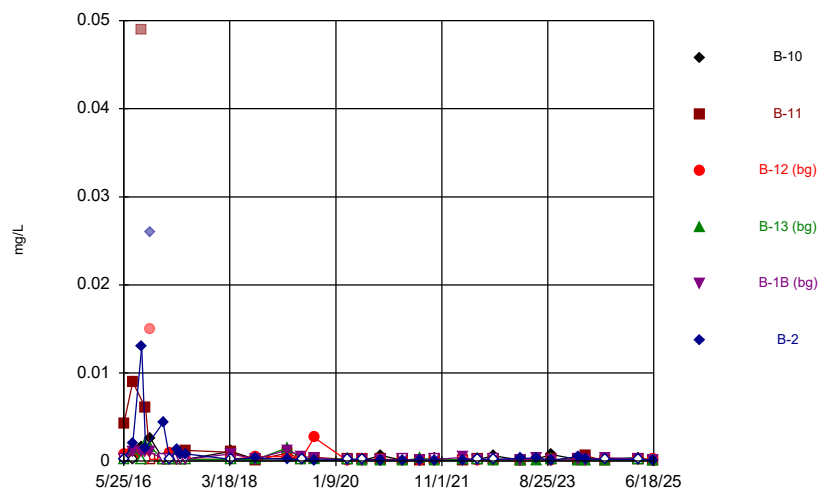
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Time Series



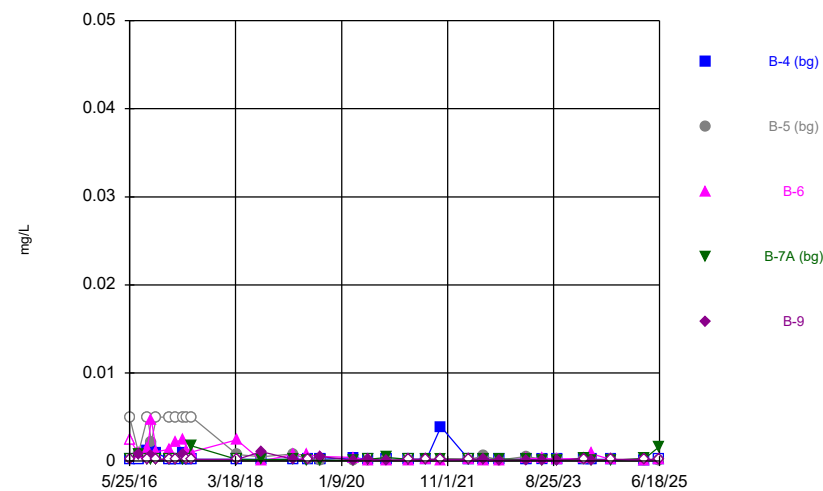
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Time Series



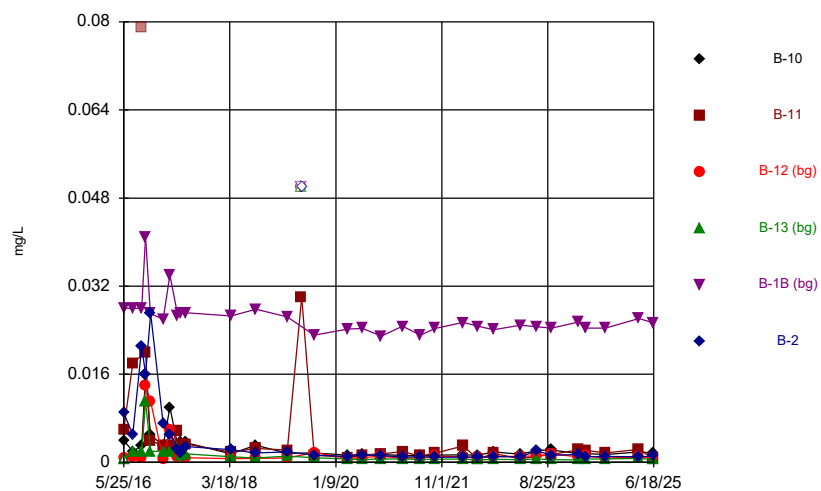
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Time Series



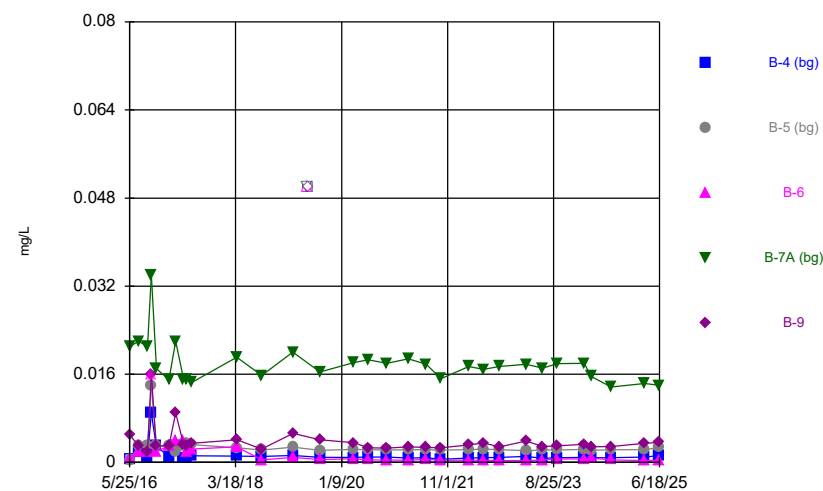
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Time Series



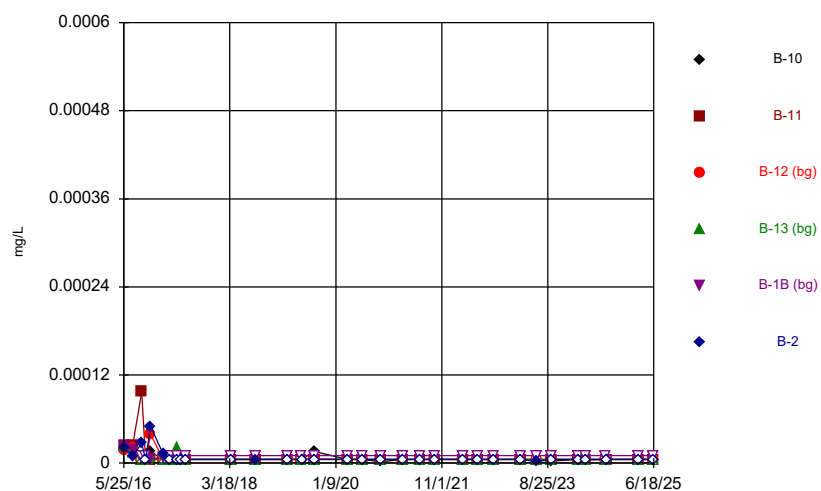
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Time Series



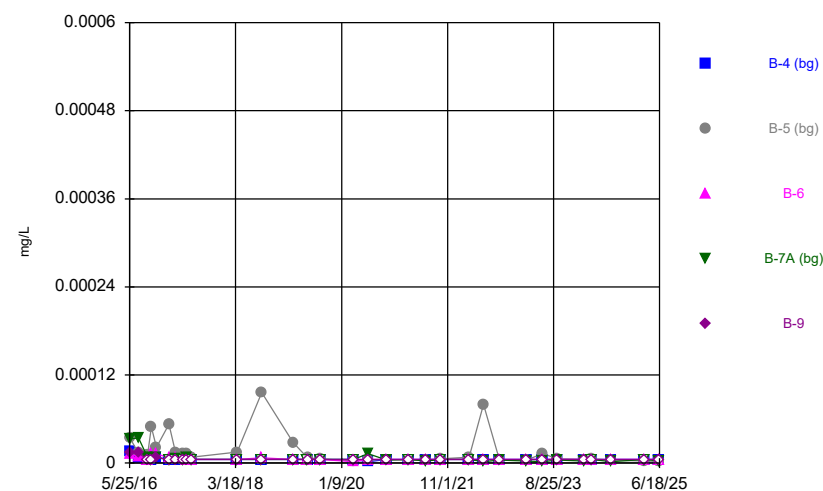
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Time Series



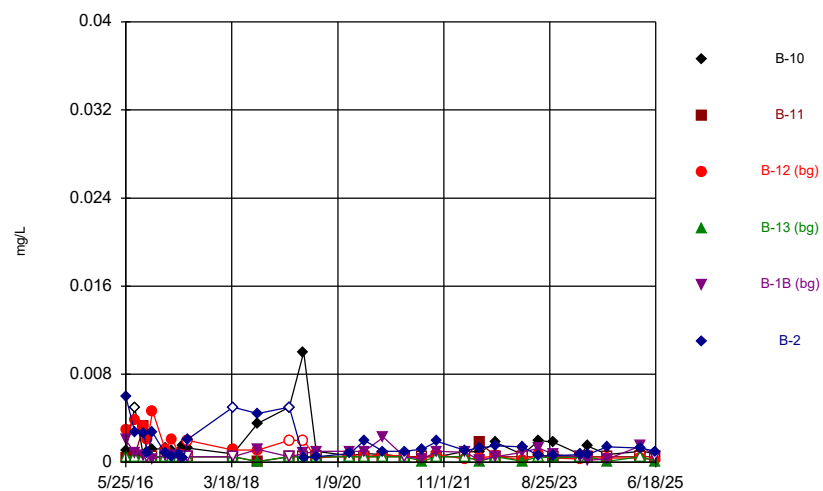
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Time Series

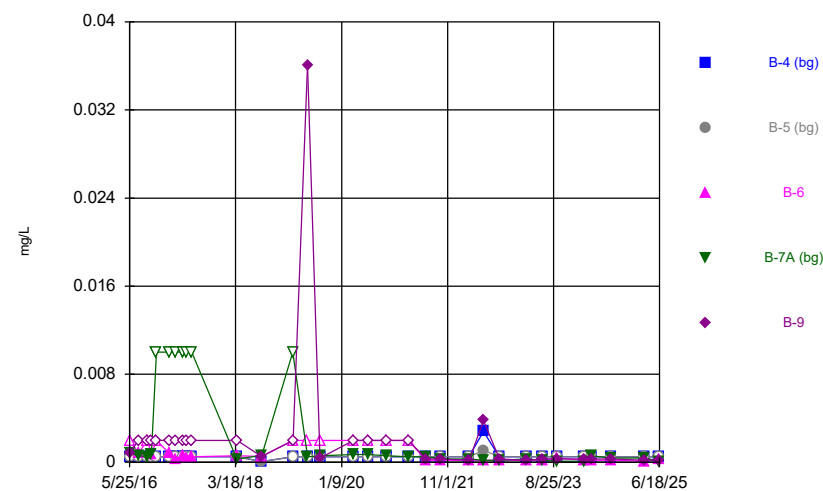


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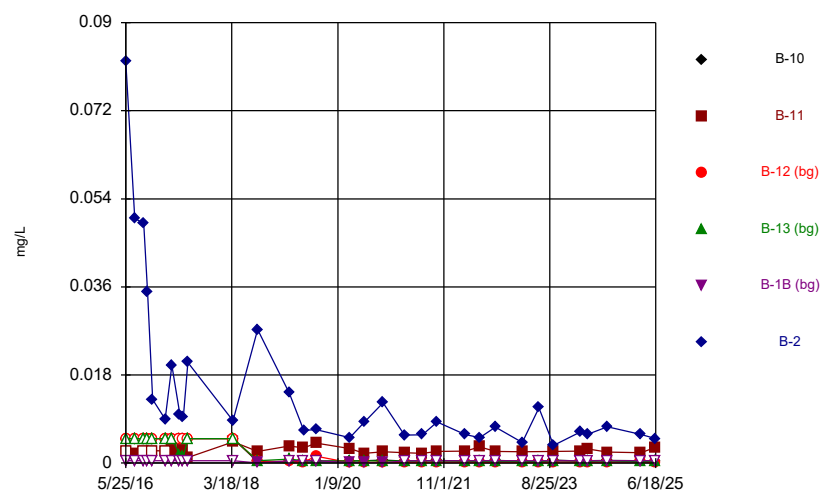
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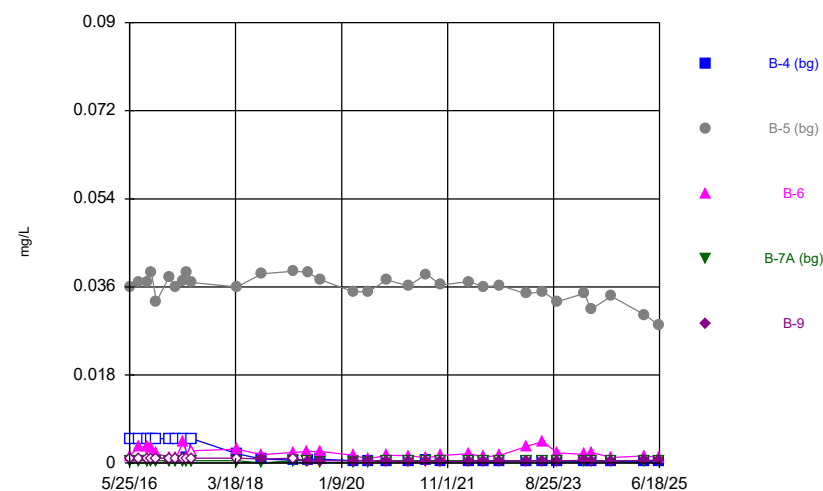
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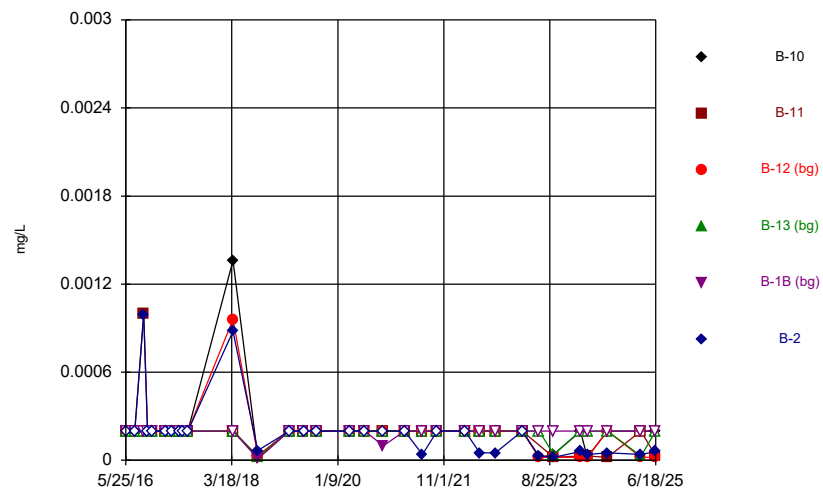
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Time Series

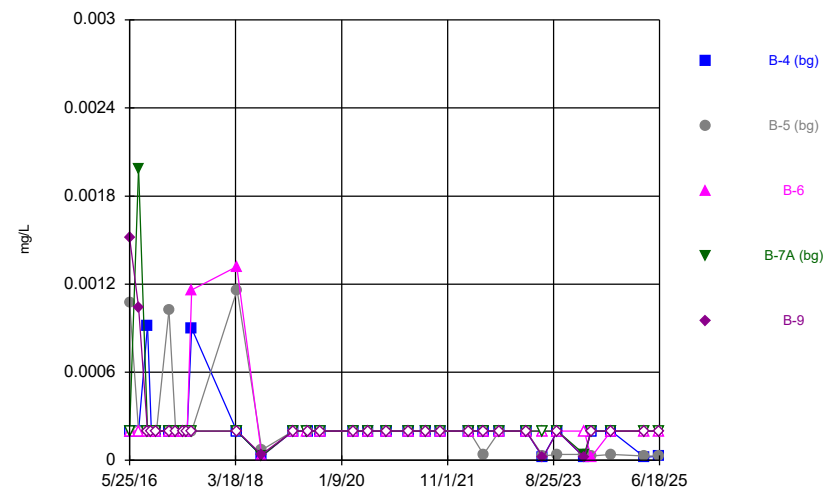


Time Series



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Time Series

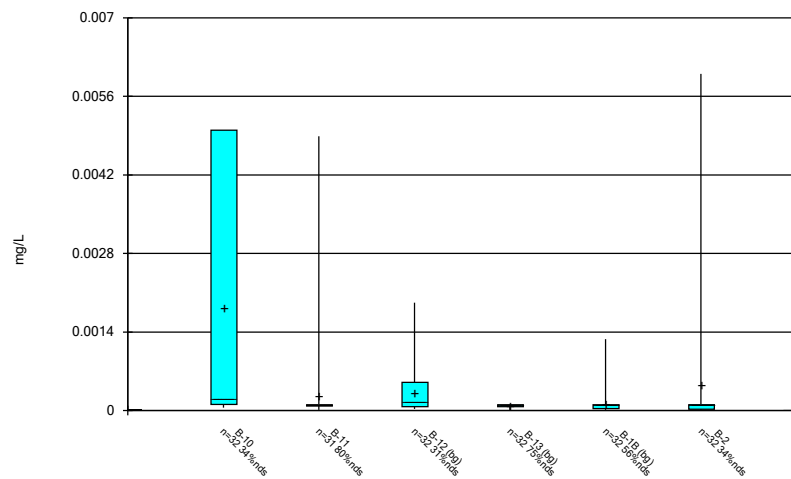


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FIGURE B

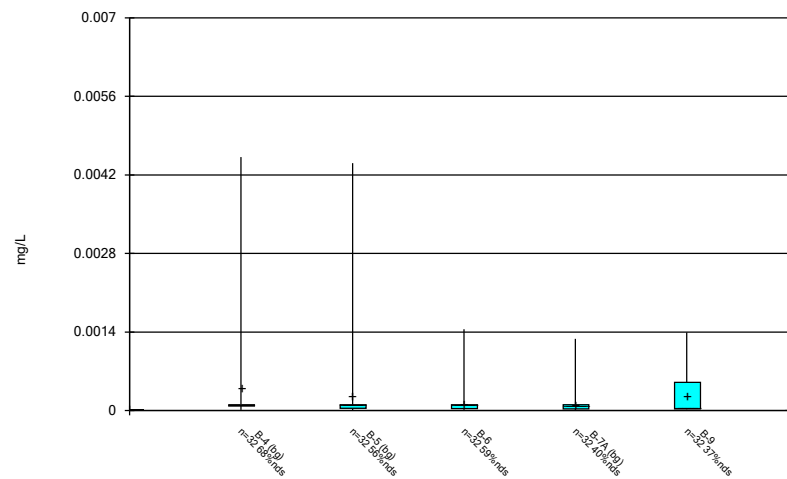
Box Plots

Box & Whiskers Plot



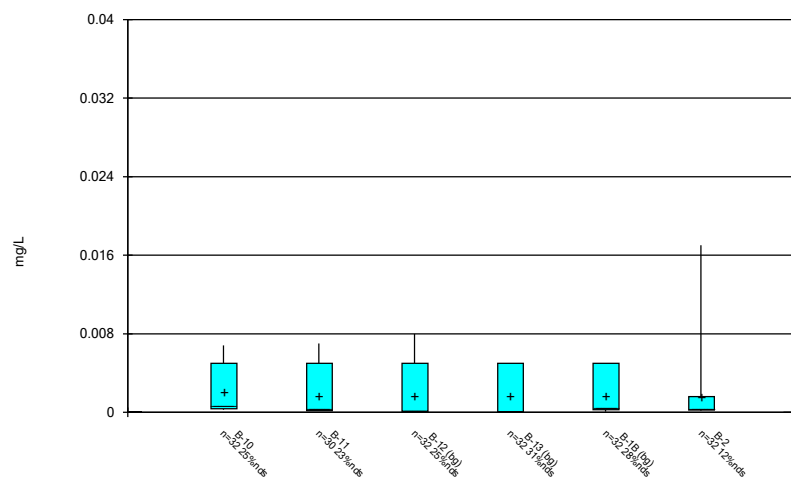
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Box & Whiskers Plot



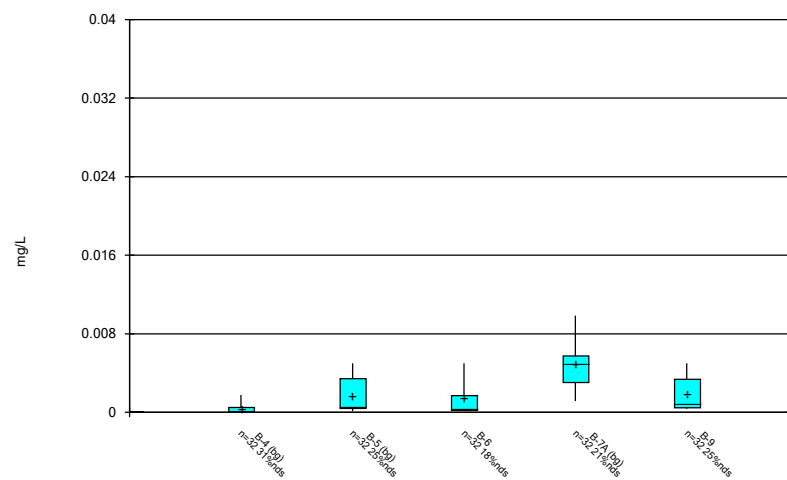
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Box & Whiskers Plot



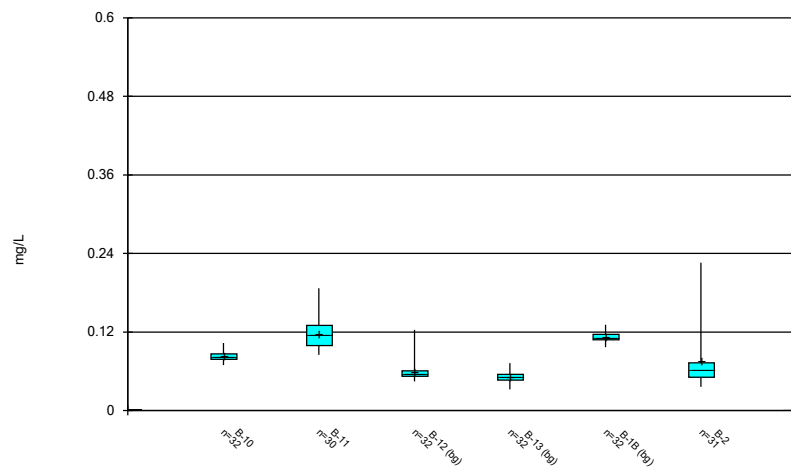
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Box & Whiskers Plot



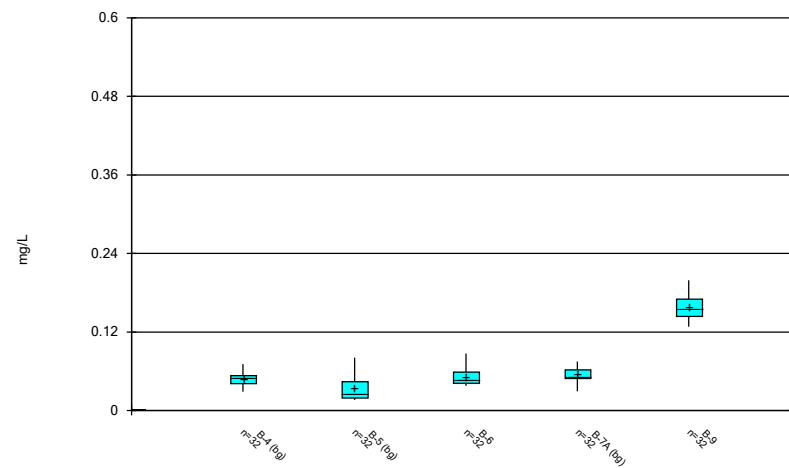
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



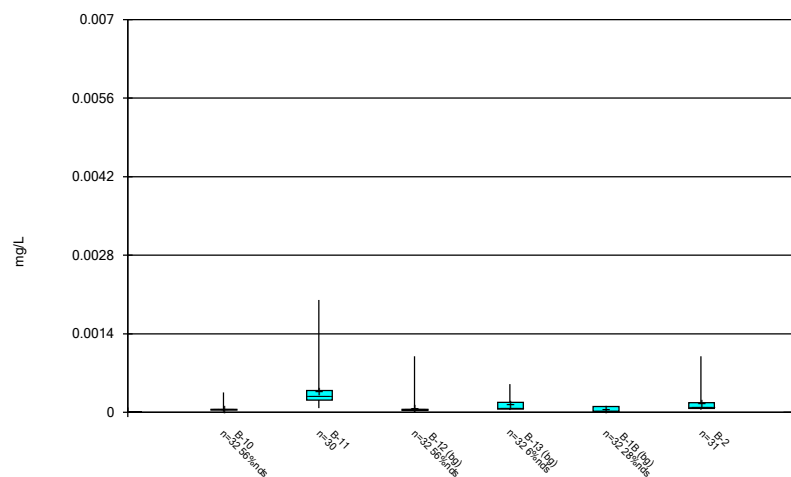
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Box & Whiskers Plot



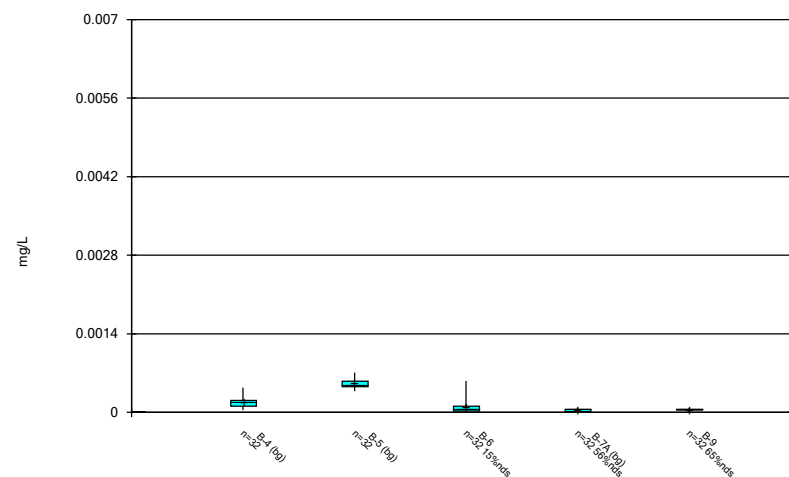
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



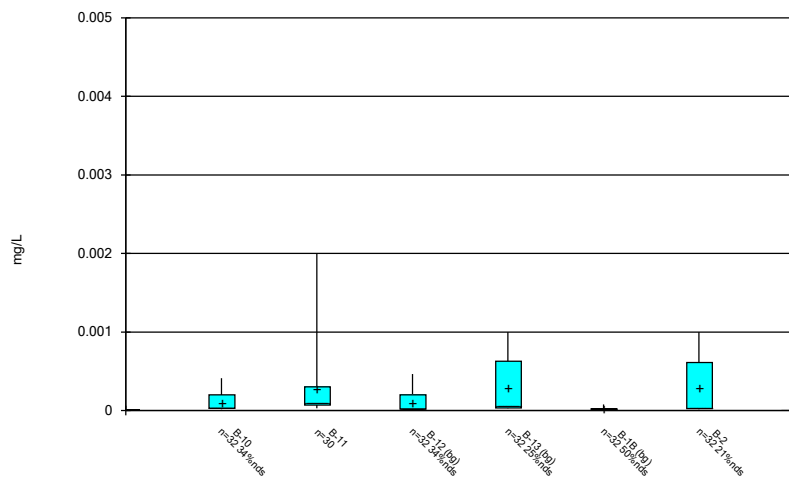
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



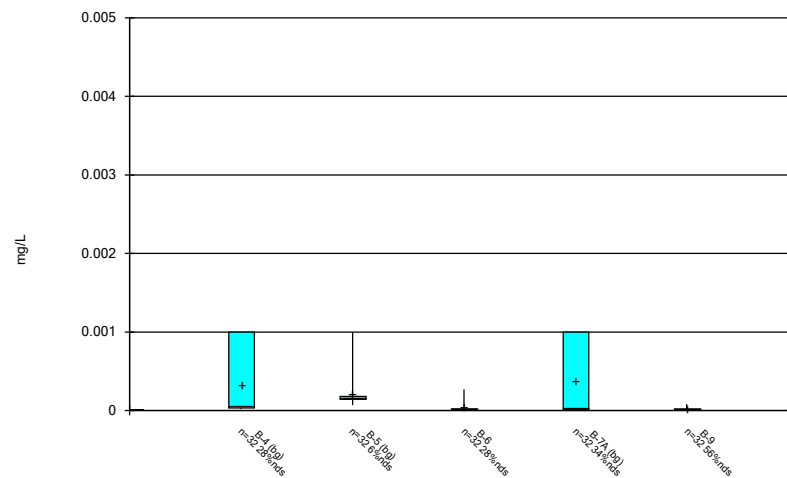
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



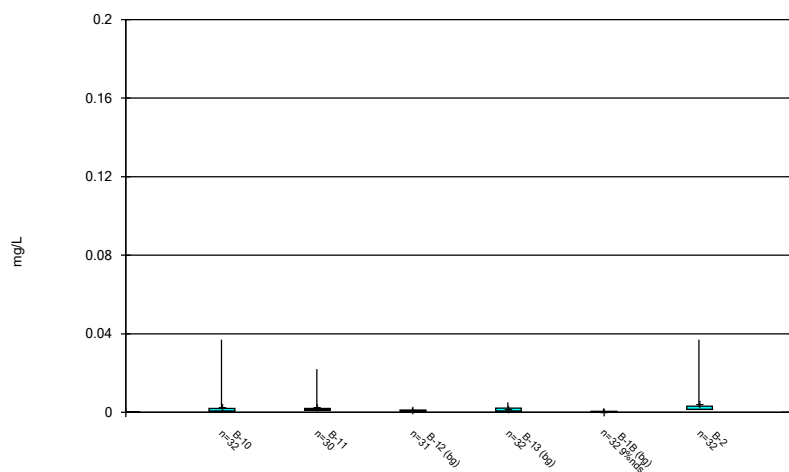
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



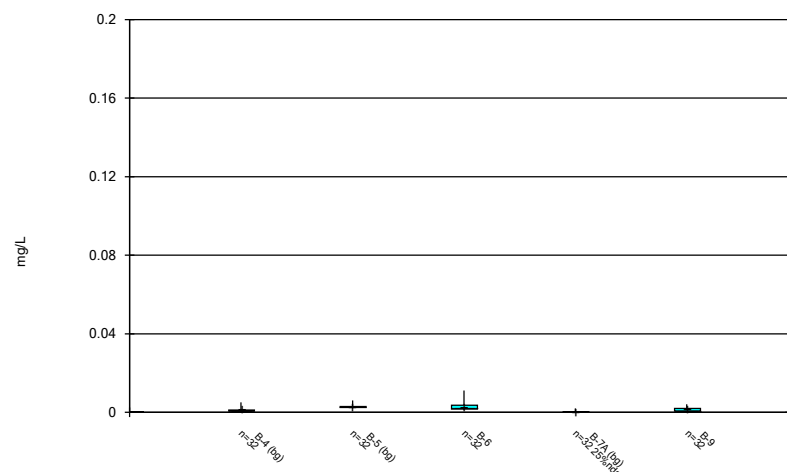
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Box & Whiskers Plot



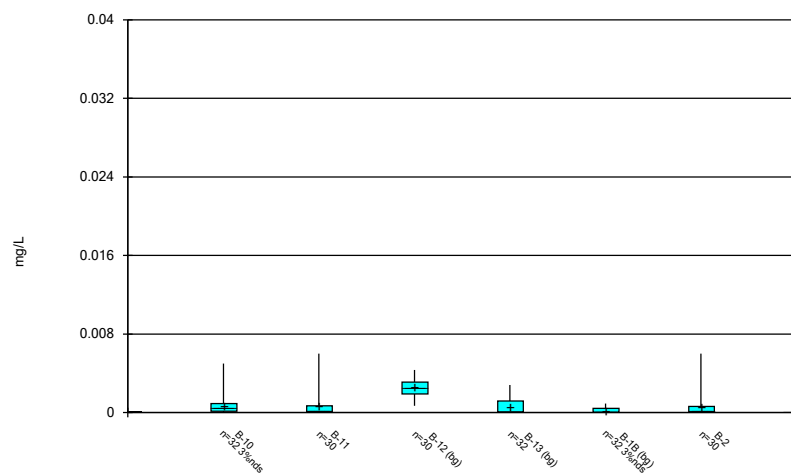
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Box & Whiskers Plot



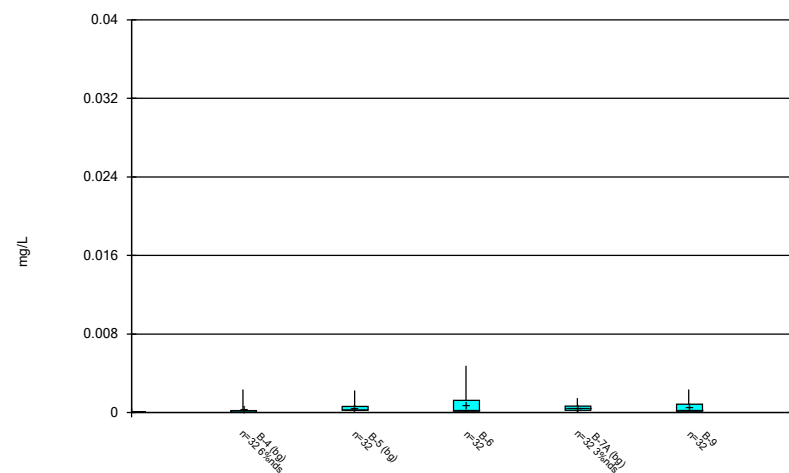
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Box & Whiskers Plot



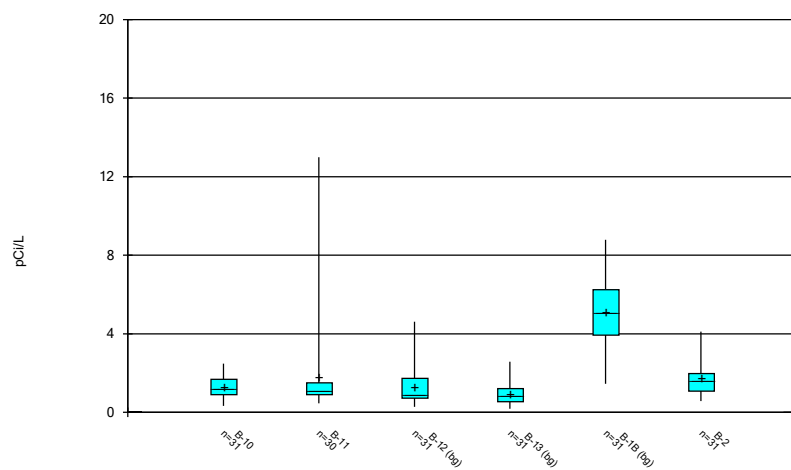
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



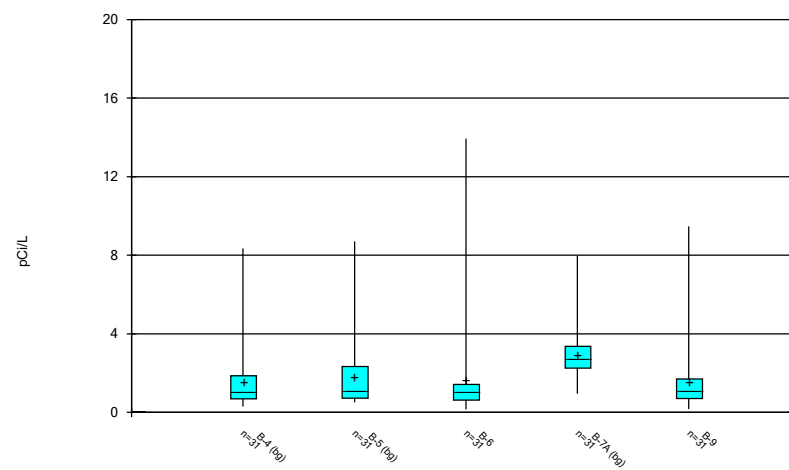
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



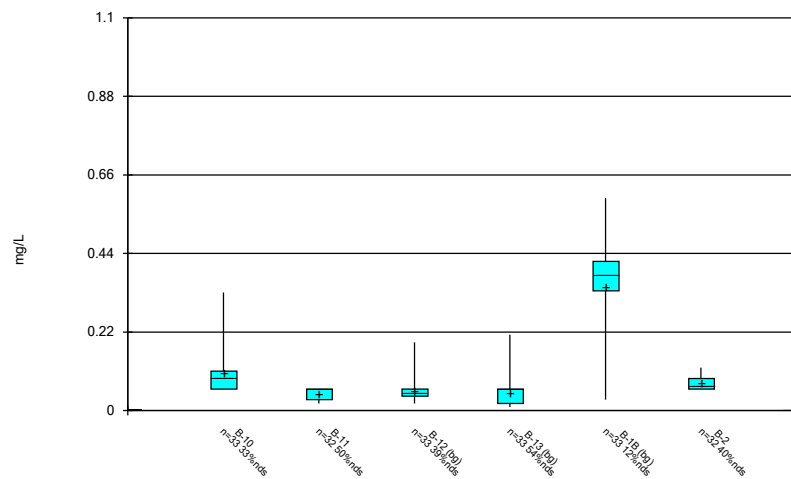
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



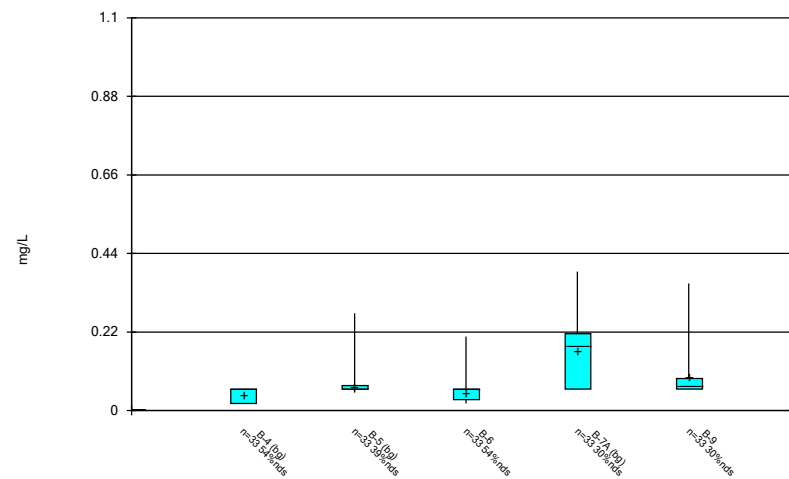
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



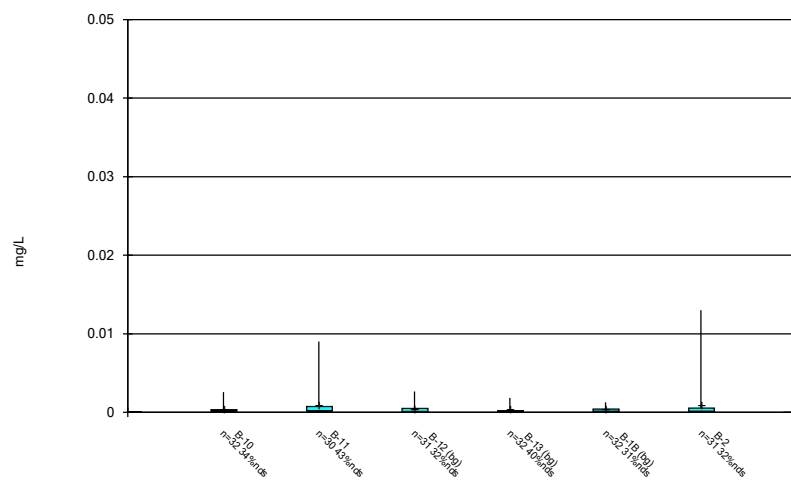
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Box & Whiskers Plot



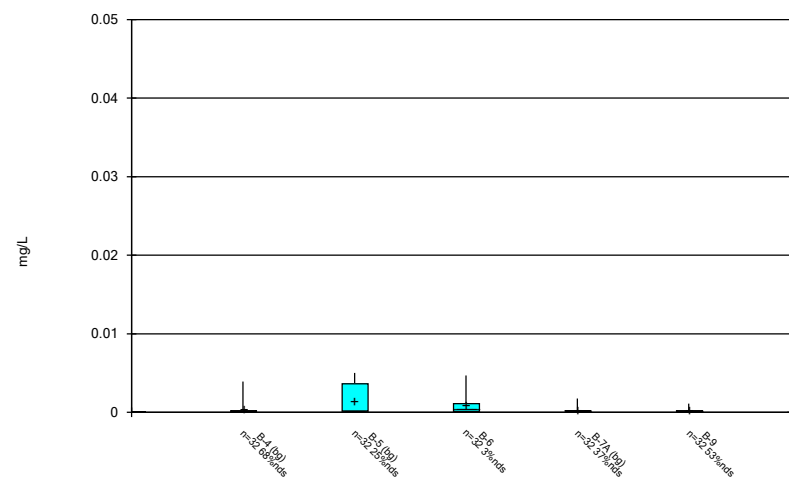
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Box & Whiskers Plot



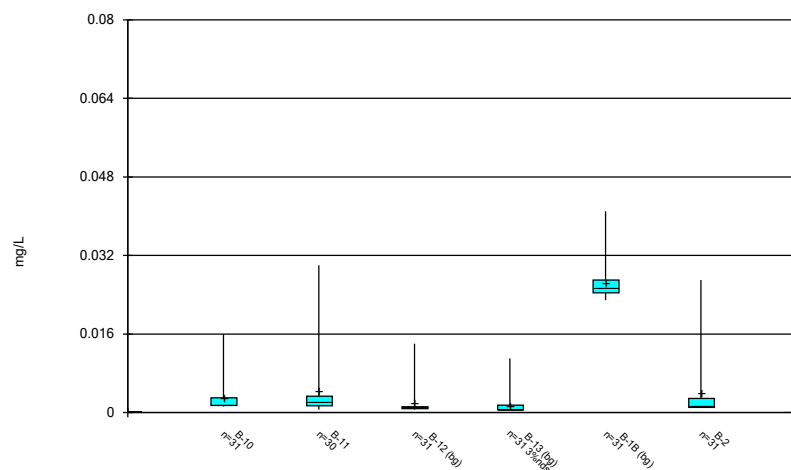
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Box & Whiskers Plot



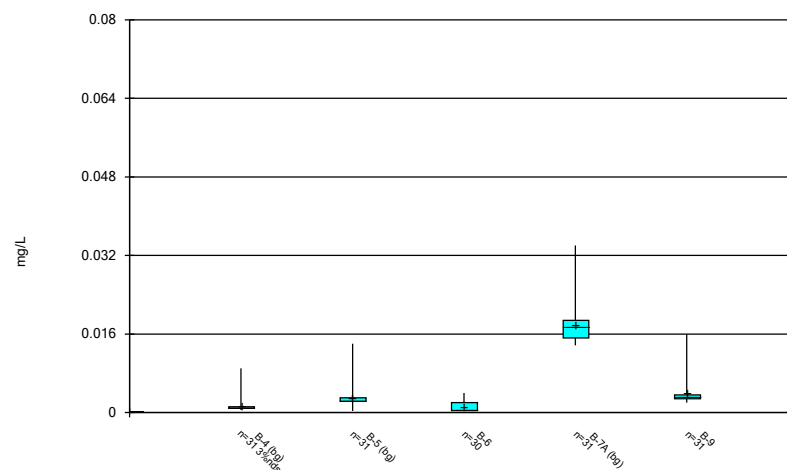
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



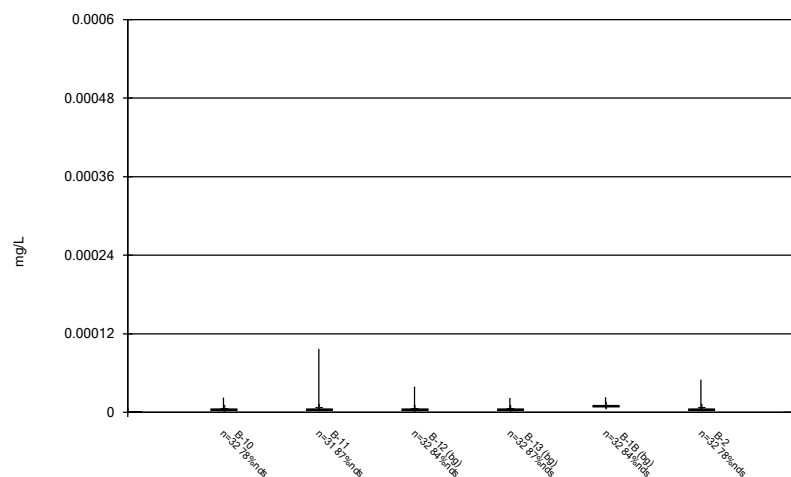
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



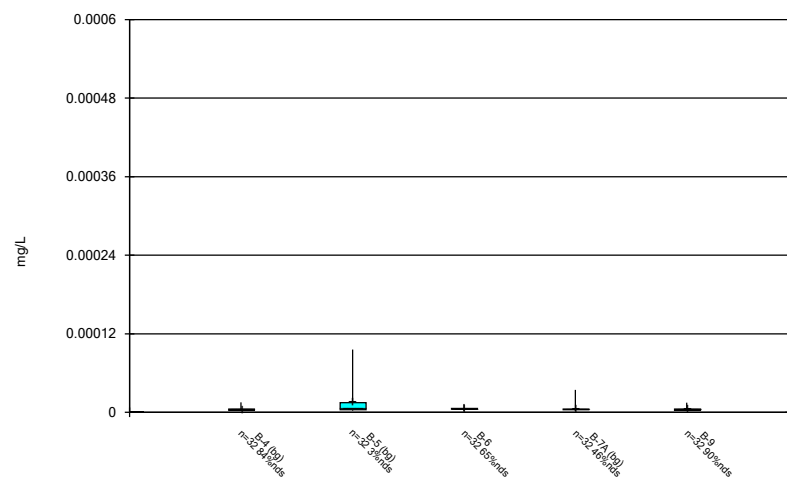
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



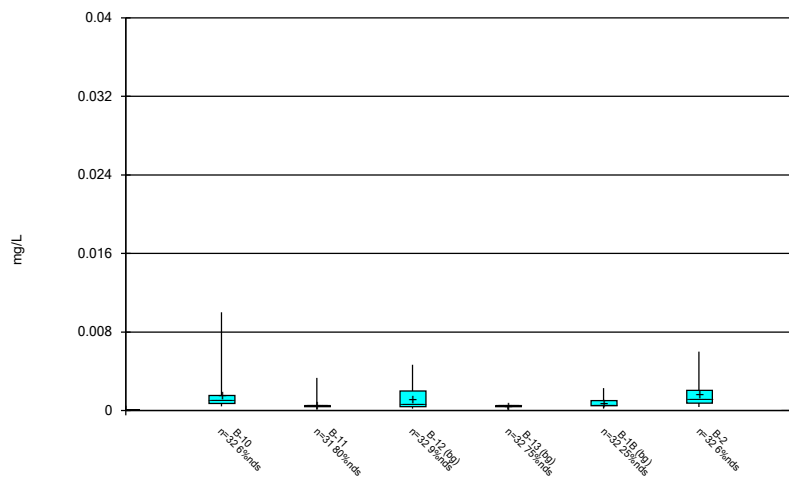
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot

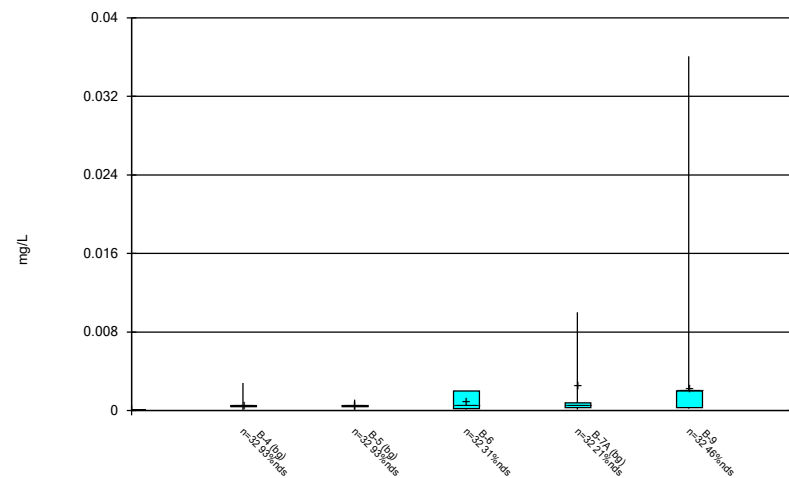


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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

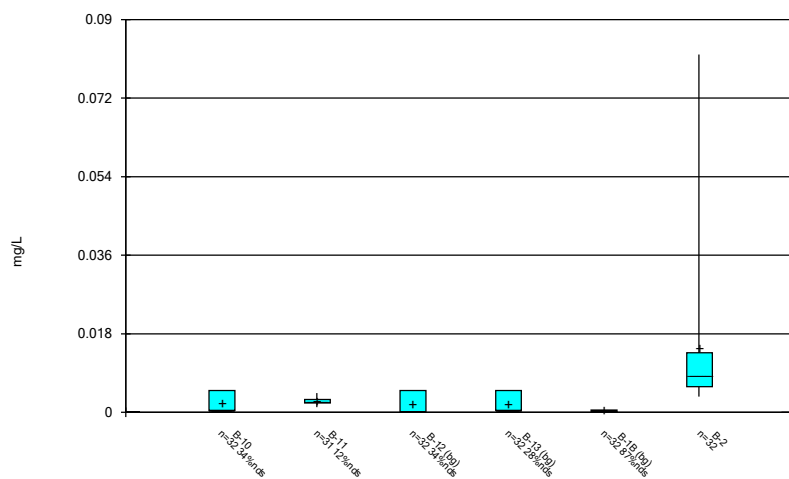
Box & Whiskers Plot



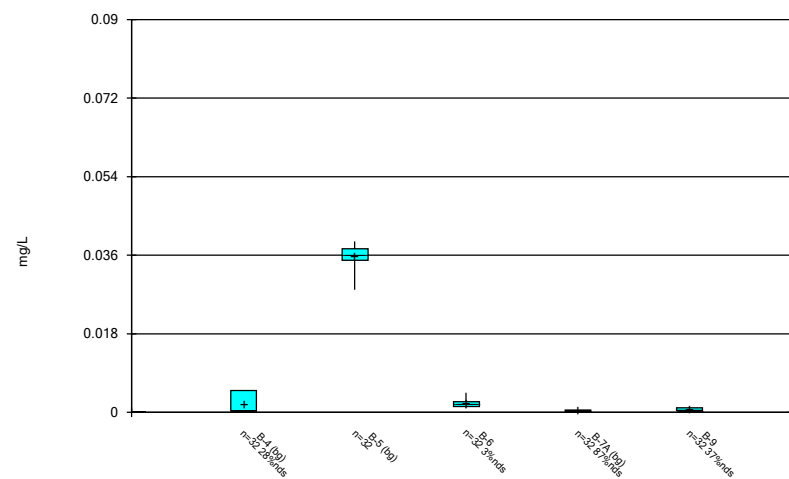
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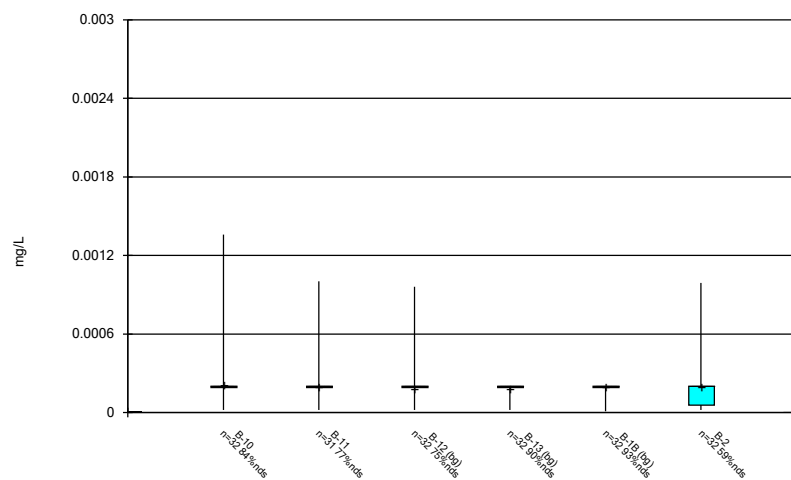
Box & Whiskers Plot



Box & Whiskers Plot

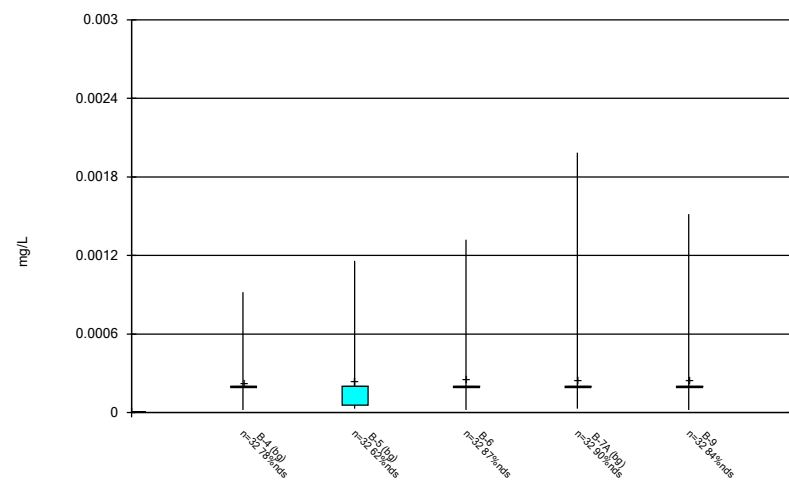


Box & Whiskers Plot



Constituent: Thallium, total Analysis Run 9/2/2025 5:04 PM View: Appendix IV
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



Constituent: Thallium, total Analysis Run 9/2/2025 5:04 PM View: Appendix IV
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

FIGURE C

Outlier Summary

Outlier Summary

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 9/2/2025, 5:05 PM

	B-11 Arsenic, total (mg/L)	B-11 Barium, total (mg/L)	B-2 Barium, total (mg/L)	B-11 Beryllium, total (mg/L)	B-2 Beryllium, total (mg/L)	B-11 Cadmium, total (mg/L)	B-11 Chromium, total (mg/L)	B-12 Chromium, total (mg/L)	B-11 Cobalt, total (mg/L)	B-12 Cobalt, total (mg/L)
7/19/2016										
9/14/2016	0.032 (o)	0.494 (o)		0.006 (o)		0.004 (o)	0.108 (o)		0.025 (o)	
10/7/2016										
11/8/2016			0.543 (o)		0.003 (o)			0.022 (o)		0.023 (o)
6/10/2019										
6/11/2019										
8/27/2019										0.0112 (o)

	B-2 Cobalt, total (mg/L)	B-2 Fluoride, total (mg/L)	B-11 Lead, total (mg/L)	B-12 Lead, total (mg/L)	B-2 Lead, total (mg/L)	B-10 Lithium, total (mg/L)	B-11 Lithium, total (mg/L)	B-12 Lithium, total (mg/L)	B-13 Lithium, total (mg/L)	B-1B Lithium, total (mg/L)
7/19/2016		0.3361 (J,o)								
9/14/2016	0.015 (o)		0.049 (o)				0.079 (o)			
10/7/2016										
11/8/2016	0.031 (o)			0.015 (o)	0.026 (o)					
6/10/2019						<0.1 (o)		<0.1 (o)	<0.1 (o)	<0.1 (o)
6/11/2019										
8/27/2019										

	B-2 Lithium, total (mg/L)	B-4 Lithium, total (mg/L)	B-5 Lithium, total (mg/L)	B-6 Lithium, total (mg/L)	B-7A Lithium, total (mg/L)	B-9 Lithium, total (mg/L)
7/19/2016						
9/14/2016						
10/7/2016				0.016 (o)		
11/8/2016						
6/10/2019				<0.1 (o)	<0.1 (o)	
6/11/2019	<0.1 (o)	<0.1 (o)	<0.1 (o)			<0.1 (o)
8/27/2019						

FIGURE D

UTLs

Upper Tolerance Limits Summary Table

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 10/29/2024, 1:38 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)	0.00452	n/a	n/a	n/a	n/a	180	57.78	n/a	NaN	NP Inter(NDs)
Arsenic, total (mg/L)	0.00983	n/a	n/a	n/a	n/a	180	28.89	n/a	NaN	NP Inter(normality)
Barium, total (mg/L)	0.131	n/a	n/a	n/a	n/a	180	0	n/a	NaN	NP Inter(normality)
Beryllium, total (mg/L)	0.001	n/a	n/a	n/a	n/a	180	25.56	n/a	NaN	NP Inter(normality)
Cadmium, total (mg/L)	0.001	n/a	n/a	n/a	n/a	180	31.67	n/a	NaN	NP Inter(normality)
Chromium, total (mg/L)	0.006	n/a	n/a	n/a	n/a	179	6.145	n/a	NaN	NP Inter(normality)
Cobalt, total (mg/L)	0.0035	n/a	n/a	n/a	n/a	178	2.247	n/a	NaN	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	8.79	n/a	n/a	n/a	n/a	174	0	n/a	NaN	NP Inter(normality)
Fluoride, total (mg/L)	0.5955	n/a	n/a	n/a	n/a	186	39.78	n/a	NaN	NP Inter(normality)
Lead, total (mg/L)	0.00389	n/a	n/a	n/a	n/a	179	39.66	n/a	NaN	NP Inter(normality)
Lithium, total (mg/L)	0.041	n/a	n/a	n/a	n/a	174	1.149	n/a	NaN	NP Inter(normality)
Mercury, total (mg/L)	0.000096	n/a	n/a	n/a	n/a	180	63.89	n/a	NaN	NP Inter(NDs)
Molybdenum, total (mg/L)	0.004655	n/a	n/a	n/a	n/a	180	53.33	n/a	NaN	NP Inter(NDs)
Selenium, total (mg/L)	0.0392	n/a	n/a	n/a	n/a	180	45	n/a	NaN	NP Inter(normality)
Thallium, total (mg/L)	0.001985	n/a	n/a	n/a	n/a	180	84.44	n/a	NaN	NP Inter(NDs)

FIGURE E
GWPS

FLINT CREEK LANDFILL GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.0045	0.006
Arsenic, Total (mg/L)	0.01		0.0098	0.01
Barium, Total (mg/L)	2		0.131	2
Beryllium, Total (mg/L)	0.004		0.001	0.004
Cadmium, Total (mg/L)	0.005		0.001	0.005
Chromium, Total (mg/L)	0.1		0.006	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0035	0.006
Combined Radium, Total (pCi/L)	5		8.79	8.79
Fluoride, Total (mg/L)	4		0.6	4
Lead, Total (mg/L)	n/a	0.015	0.0039	0.015
Lithium, Total (mg/L)	n/a	0.04	0.041	0.041
Mercury, Total (mg/L)	0.002		0.000096	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.0047	0.1
Selenium, Total (mg/L)	0.05		0.0392	0.05
Thallium, Total (mg/L)	0.002		0.002	0.002

**Grey cell indicates background limit is higher than MCL or CCR-Rule Specified level*

**GWPS = Groundwater Protection Standard*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

FIGURE F

Confidence Intervals

Confidence Intervals Summary Table - All Results (No Significant)

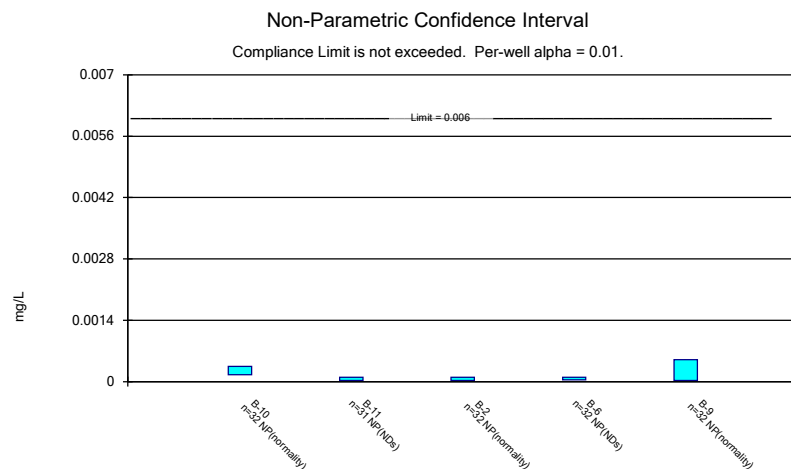
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 9/3/2025, 8:08 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method	
Antimony, total (mg/L)	B-10	0.000344	0.00016	0.006	No	32	0.001825	0.002335	34.38	None	No	0.01	NP (normality)
Antimony, total (mg/L)	B-11	0.0001	0.000028	0.006	No	31	0.000241	0.0008634	80.65	None	No	0.01	NP (NDs)
Antimony, total (mg/L)	B-2	0.0001	0.000023	0.006	No	32	0.0004546	0.001133	34.38	None	No	0.01	NP (normality)
Antimony, total (mg/L)	B-6	0.0001	0.000037	0.006	No	32	0.0001158	0.0002461	59.38	None	No	0.01	NP (NDs)
Antimony, total (mg/L)	B-9	0.0005	0.000028	0.006	No	32	0.0002526	0.0003074	37.5	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-10	0.0028	0.00038	0.01	No	32	0.002119	0.002249	25	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-11	0.003138	0.00017	0.01	No	30	0.001715	0.002267	23.33	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-2	0.00144	0.00022	0.01	No	32	0.001528	0.003213	12.5	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-6	0.0015	0.00019	0.01	No	32	0.001426	0.001886	18.75	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-9	0.00168	0.00047	0.01	No	32	0.001795	0.001911	25	None	No	0.01	NP (normality)
Barium, total (mg/L)	B-10	0.08626	0.07989	2	No	32	0.08308	0.007345	0	None	No	0.01	Param.
Barium, total (mg/L)	B-11	0.1268	0.1068	2	No	30	0.1168	0.0223	0	None	No	0.01	Param.
Barium, total (mg/L)	B-2	0.073	0.051	2	No	31	0.07683	0.04946	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	B-6	0.05572	0.04561	2	No	32	0.05119	0.01231	0	None	sqrt(x)	0.01	Param.
Barium, total (mg/L)	B-9	0.1662	0.1505	2	No	32	0.1584	0.0181	0	None	No	0.01	Param.
Beryllium, total (mg/L)	B-10	0.00005	0.00004	0.004	No	32	0.00005195	0.00005596	56.25	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	B-11	0.0004059	0.0002209	0.004	No	30	0.0003857	0.0003672	0	None	ln(x)	0.01	Param.
Beryllium, total (mg/L)	B-2	0.0001579	0.00008	0.004	No	31	0.0001678	0.0002015	0	None	No	0.01	NP (normality)
Beryllium, total (mg/L)	B-6	0.00008133	0.00002692	0.004	No	32	0.00009105	0.0001069	15.63	Kaplan-Meier	x^(1/3)	0.01	Param.
Beryllium, total (mg/L)	B-9	0.00005	0.00004	0.004	No	32	0.00004374	0.000013	65.63	Kaplan-Meier	No	0.01	NP (NDs)
Cadmium, total (mg/L)	B-10	0.0002	0.000027	0.005	No	32	0.0001006	0.00009954	34.38	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	B-11	0.0002311	0.00009013	0.005	No	30	0.0002772	0.0004187	0	None	ln(x)	0.01	Param.
Cadmium, total (mg/L)	B-2	0.000348	0.000024	0.005	No	32	0.0002817	0.0004164	21.88	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	B-6	0.00002	0.000012	0.005	No	32	0.00004206	0.00006779	28.13	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	B-9	0.00002	0.00001	0.005	No	32	0.00001928	0.00001474	56.25	None	No	0.01	NP (NDs)
Chromium, total (mg/L)	B-10	0.002	0.00063	0.1	No	32	0.002862	0.006821	0	None	No	0.01	NP (normality)
Chromium, total (mg/L)	B-11	0.002	0.00092	0.1	No	30	0.003061	0.004974	0	None	No	0.01	NP (normality)
Chromium, total (mg/L)	B-2	0.00283	0.00152	0.1	No	32	0.004248	0.007498	0	None	No	0.01	NP (normality)
Chromium, total (mg/L)	B-6	0.003142	0.002016	0.1	No	32	0.002922	0.001989	0	None	ln(x)	0.01	Param.
Chromium, total (mg/L)	B-9	0.001709	0.0009573	0.1	No	32	0.001491	0.001027	0	None	x^(1/3)	0.01	Param.
Cobalt, total (mg/L)	B-10	0.0007447	0.0002576	0.006	No	32	0.0006954	0.0009159	3.125	None	x^(1/3)	0.01	Param.
Cobalt, total (mg/L)	B-11	0.00048	0.000098	0.006	No	30	0.000734	0.001388	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	B-2	0.0004259	0.0001319	0.006	No	30	0.0006138	0.001158	0	None	ln(x)	0.01	Param.
Cobalt, total (mg/L)	B-6	0.0008159	0.0002357	0.006	No	32	0.000801	0.001061	0	None	x^(1/3)	0.01	Param.
Cobalt, total (mg/L)	B-9	0.000651	0.0002368	0.006	No	32	0.0005504	0.0005761	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-10	1.502	1.046	8.79	No	31	1.274	0.517	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-11	1.43	0.95	8.79	No	30	1.799	2.507	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	B-2	1.996	1.32	8.79	No	31	1.727	0.8221	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-6	1.521	0.7049	8.79	No	31	1.686	2.64	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-9	1.544	0.7771	8.79	No	31	1.515	1.687	0	None	ln(x)	0.01	Param.
Fluoride, total (mg/L)	B-10	0.11	0.07	4	No	33	0.1055	0.06691	33.33	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	B-11	0.06	0.04	4	No	32	0.0475	0.01459	50	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	B-2	0.09	0.06	4	No	32	0.07625	0.01913	40.63	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	B-6	0.06	0.03	4	No	33	0.04959	0.03327	54.55	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	B-9	0.08	0.06	4	No	33	0.09615	0.07217	30.3	None	No	0.01	NP (normality)
Lead, total (mg/L)	B-10	0.000356	0.0001365	0.015	No	32	0.0003804	0.0005119	34.38	Kaplan-Meier	ln(x)	0.01	Param.
Lead, total (mg/L)	B-11	0.000416	0.00016	0.015	No	30	0.0009221	0.001988	43.33	None	No	0.01	NP (normality)
Lead, total (mg/L)	B-2	0.000332	0.0001	0.015	No	31	0.0009129	0.002398	32.26	None	No	0.01	NP (normality)
Lead, total (mg/L)	B-6	0.0009708	0.000296	0.015	No	32	0.0008355	0.001041	3.125	None	sqrt(x)	0.01	Param.
Lead, total (mg/L)	B-9	0.0002	0.00013	0.015	No	32	0.0002675	0.0002346	53.13	None	No	0.01	NP (NDs)
Lithium, total (mg/L)	B-10	0.003	0.00144	0.041	No	31	0.00283	0.002975	0	None	No	0.01	NP (normality)
Lithium, total (mg/L)	B-11	0.003725	0.001591	0.041	No	30	0.004299	0.00658	0	None	ln(x)	0.01	Param.
Lithium, total (mg/L)	B-2	0.00242	0.00104	0.041	No	31	0.003986	0.006238	0	None	No	0.01	NP (normality)
Lithium, total (mg/L)	B-6	0.00182	0.000415	0.041	No	30	0.001144	0.001097	0	None	No	0.01	NP (normality)
Lithium, total (mg/L)	B-9	0.00356	0.00283	0.041	No	31	0.003829	0.002579	0	None	No	0.01	NP (normality)
Mercury, total (mg/L)	B-10	0.000005	0.000005	0.002	No	32	0.000006458	0.000004555	78.13	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	B-11	0.00002442	0.000005	0.002	No	31	0.000009194	0.00001701	87.1	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	B-2	0.000005	0.000005	0.002	No	32	0.000007876	0.000009136	78.13	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	B-6	0.000005	0.000005	0.002	No	32	0.000006017	0.000002444	65.63	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	B-9	0.00000774	0.000005	0.002	No	32	0.000005673	0.00000234	90.63	None	No	0.01	NP (NDs)
Molybdenum, total (mg/L)	B-10	0.0015	0.00078	0.1	No	32	0.001609	0.001903	6.25	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	B-11	0.00059	0.0003706	0.1	No	31	0.0006138	0.0005627	80.65	None	No	0.01	NP (NDs)
Molybdenum, total (mg/L)	B-2	0.001922	0.0009573	0.1	No	32	0.001692	0.001477	6.25	None	x^(1/3)	0.01	Param.
Molybdenum, total (mg/L)	B-6	0.0008684	0.0003	0.1	No	32	0.0008832	0.0007888	31.25	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	B-9	0.002	0.0003	0.1	No	32	0.002341	0.006233	46.88	None	No	0.01	NP (normality)
Selenium, total (mg/L)	B-10	0.00061	0.00041	0.05	No	32	0.002013	0.002198	34.38	None	No	0.01	NP (normality)
Selenium, total (mg/L)	B-11	0.002843	0.002251	0.05	No	31	0.002547	0.0006708	12.9	None	No	0.01	Param.
Selenium, total (mg/L)	B-2	0.013	0.00588	0.05	No	32	0.01486	0.01705	0	None	No	0.01	NP (normality)

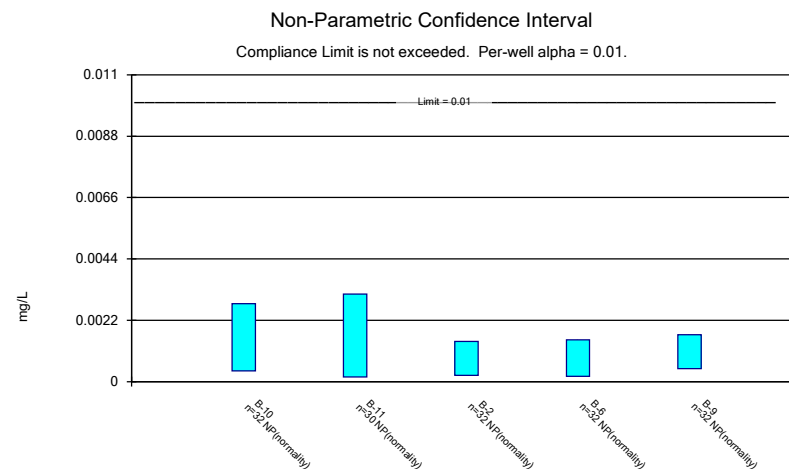
Confidence Intervals Summary Table - All Results (No Significant) ^{Page 2}

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 9/3/2025, 8:08 PM

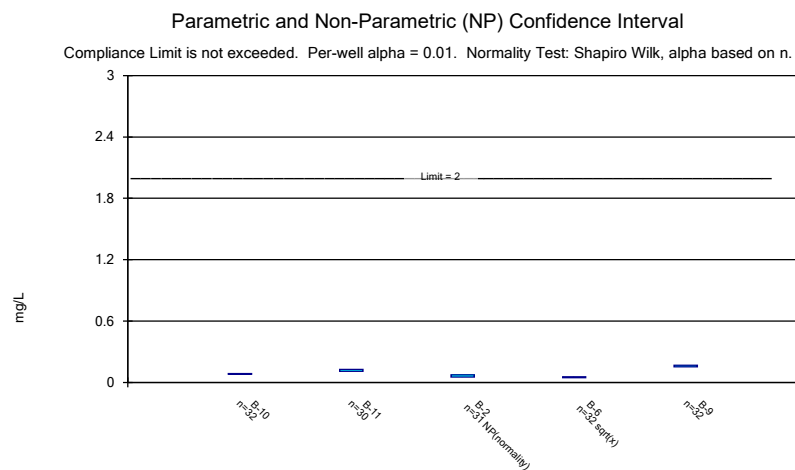
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Selenium, total (mg/L)	B-6	0.002348	0.001584	0.05	No	32	0.002044	0.0009545	3.125	None	sqrt(x)	0.01	Param.
Selenium, total (mg/L)	B-9	0.001	0.0004	0.05	No	32	0.0006581	0.0002825	37.5	None	No	0.01	NP (normality)
Thallium, total (mg/L)	B-10	0.0002	0.00004	0.002	No	32	0.0002147	0.0002169	84.38	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	B-11	0.0002	0.00003	0.002	No	31	0.0001923	0.0001654	77.42	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	B-2	0.0002	0.00006	0.002	No	32	0.000193	0.0002084	59.38	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	B-6	0.0002	0.0002	0.002	No	32	0.0002541	0.000263	87.5	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	B-9	0.0002	0.00004	0.002	No	32	0.0002513	0.0002812	84.38	None	No	0.01	NP (NDs)



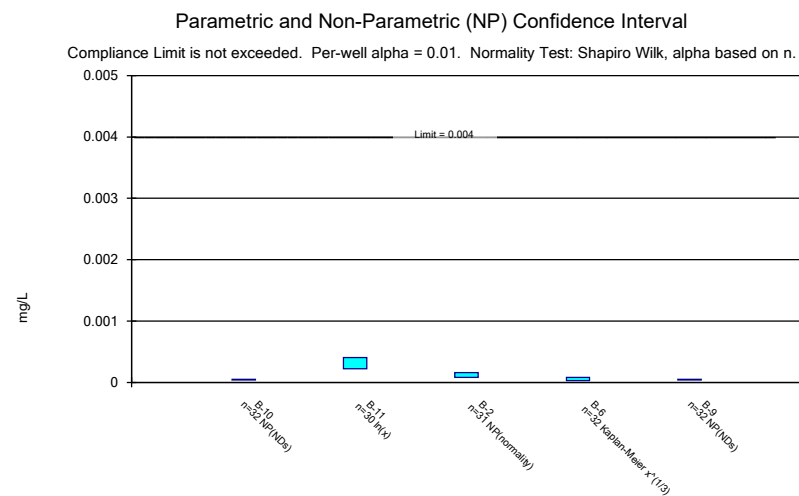
Constituent: Antimony, total Analysis Run 9/3/2025 8:06 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Arsenic, total Analysis Run 9/3/2025 8:06 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



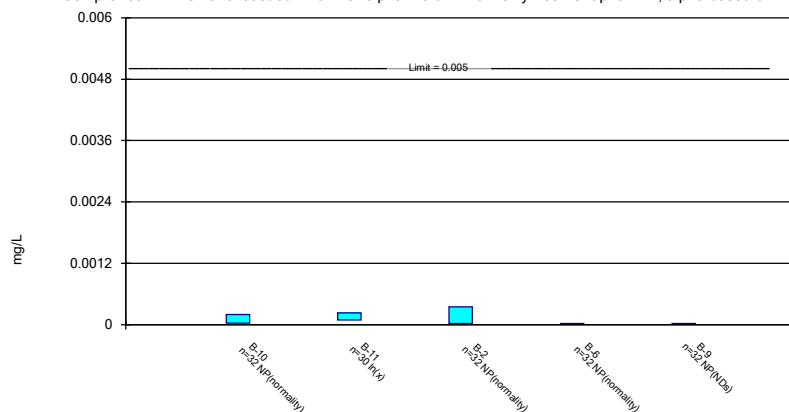
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Beryllium, total Analysis Run 9/3/2025 8:06 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

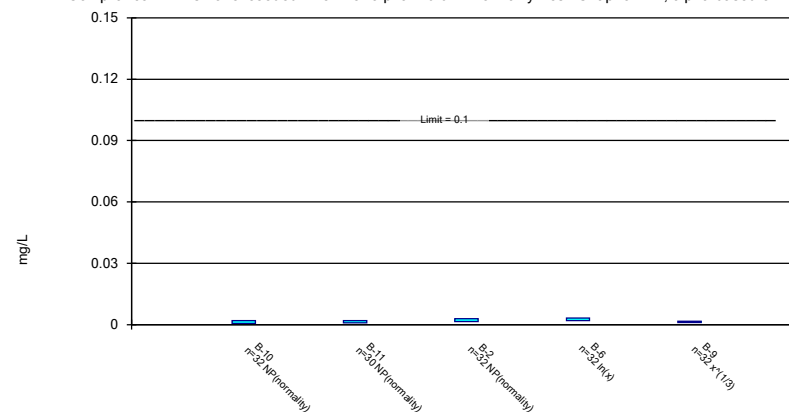
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

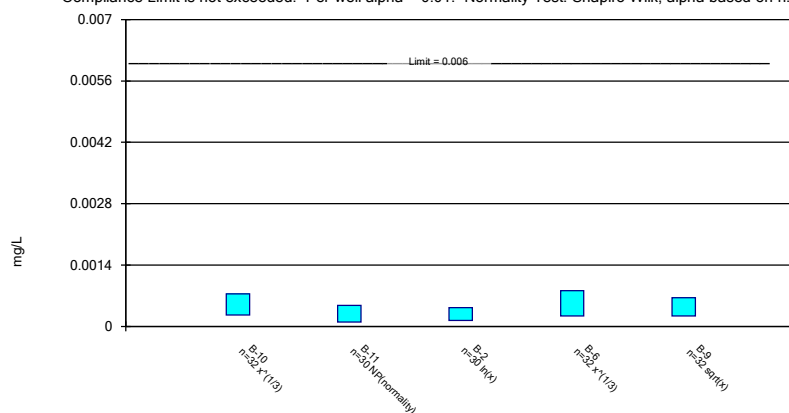
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

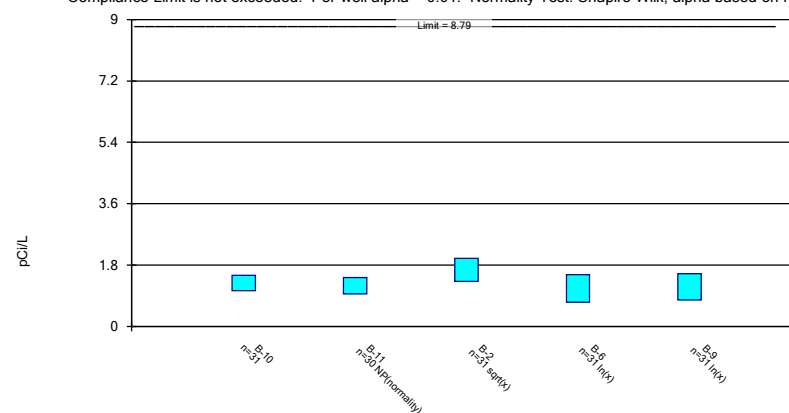
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



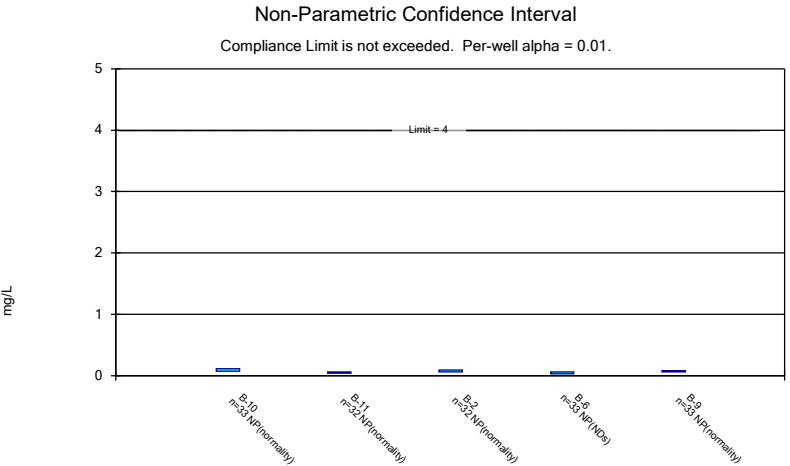
Constituent: Cobalt, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

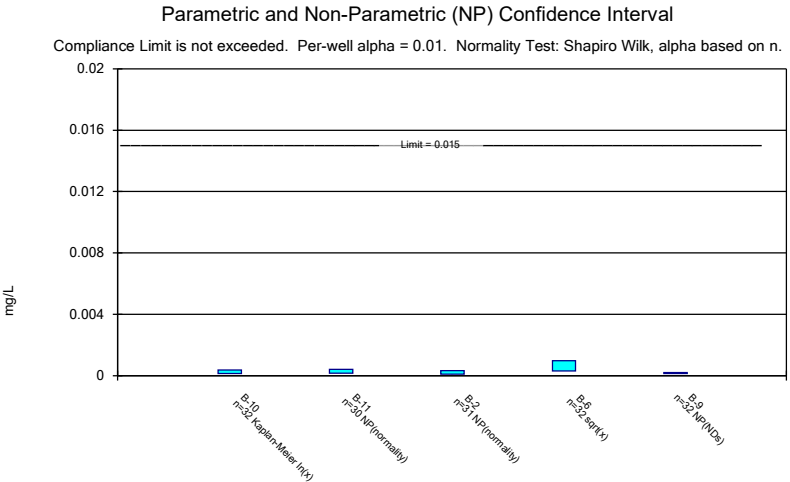
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



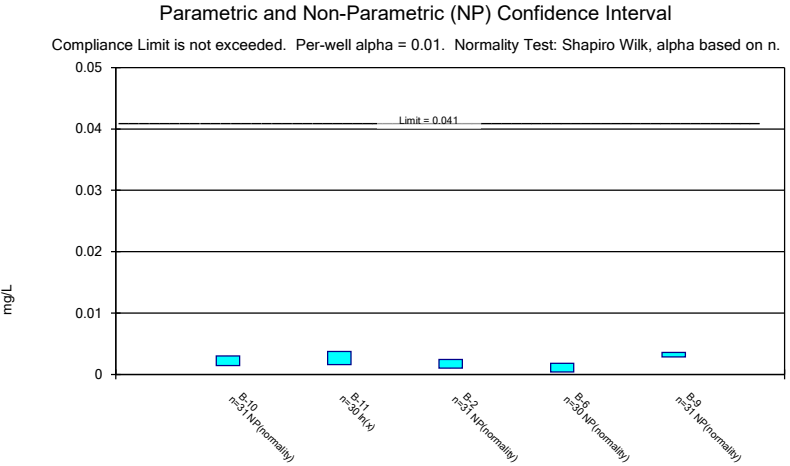
Constituent: Combined Radium 226 + 228 Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



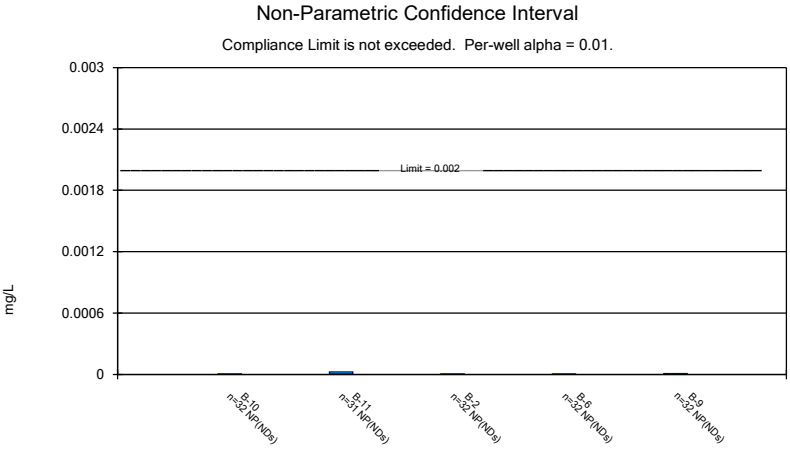
Constituent: Fluoride, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Lead, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



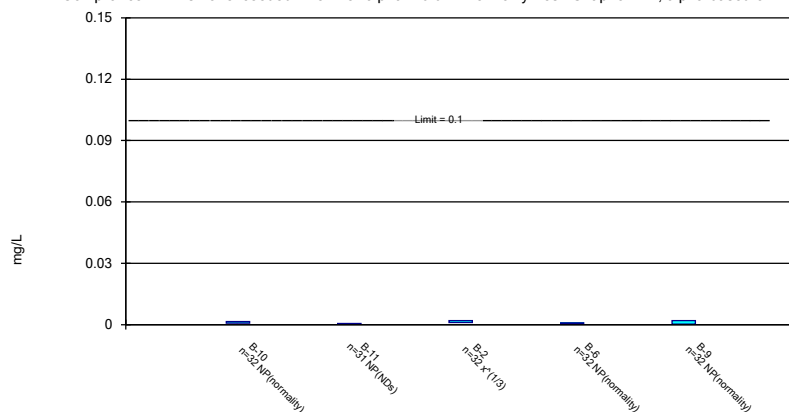
Constituent: Lithium, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Mercury, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

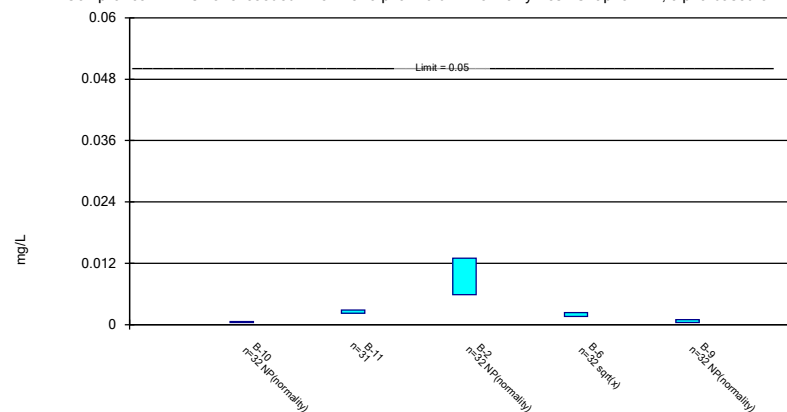
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

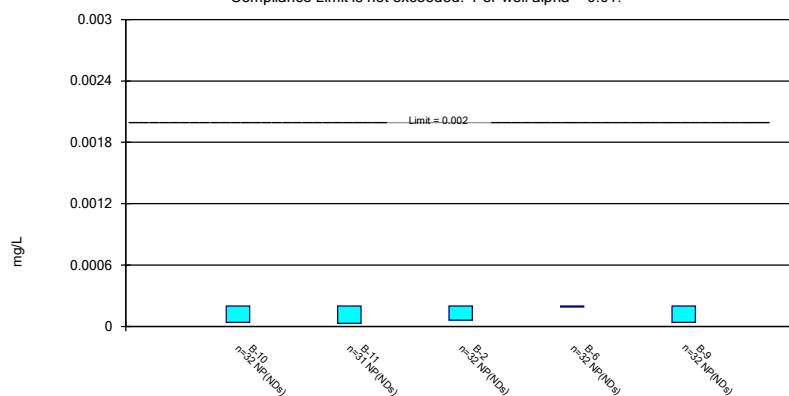
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Non-Parametric Confidence Interval

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



Constituent: Thallium, total Analysis Run 9/3/2025 8:07 PM View: Confidence Intervals
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

STATISTICAL ANALYSIS SUMMARY, 2025 2ND SEMIANNUAL EVENT LANDFILL

Flint Creek Plant Gentry, Arkansas

Prepared for

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

Prepared by

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500 West Wilson Bridge Road, Suite 250
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Project Number: CHA1147E

January 7, 2026

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ACRONYMS AND ABBREVIATIONS

CCR	coal combustion residuals
CFR	Code of Federal Regulations
GWPS	groundwater protection standard
LPL	lower prediction limit
mg/L	milligrams per liter
PQL	practical quantitation limit
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 Landfill, an existing CCR unit at the Flint Creek Power Plant in Gentry, Arkansas. Recent groundwater monitoring results were used to identify concentrations of Appendix IV constituents that may be 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 at the Landfill (Geosyntec 2018). An alternative source was not identified following the detection monitoring event, so the Landfill has been in assessment monitoring since 2018. A semiannual sampling event for Appendix III parameters and Appendix IV parameters, as required by 40 CFR 257.95(d)(1), was completed in September 2025. The results of the September 2025 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. LANDFILL 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 September 2025 as part of the assessment monitoring program. Samples from the September 2025 sampling event were analyzed for all Appendix IV and Appendix III parameters. 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.10.1.02 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 Landfill were conducted in accordance with the January 2021 *Statistical Analysis Plan* (Geosyntec 2021). Time series plots and results for all completed statistical tests are provided in Attachment B.

The data obtained in September 2025 were screened for potential outliers. Potential outliers were identified for barium, boron, fluoride, lithium, and selenium; however, the values were similar to historical concentrations. Therefore, no outliers were flagged and removed during this event (Attachment B).

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 2021). The established GWPS was set to whichever was greater of the background concentration and the maximum contaminant level for each Appendix IV parameter. To determine background concentrations, an upper tolerance limit was calculated using data that were pooled from the background wells collected during the background monitoring and assessment monitoring events. Nonparametric tolerance limits were calculated for arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium, fluoride, lead, lithium, and selenium due to apparent nonnormal distributions, and for antimony, mercury, molybdenum, and thallium due to a high nondetect frequency. 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 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.

No SSLs were identified at the Landfill.

2.2.3 Updated Appendix III Prediction Limits

Upper prediction limits (UPLs) were originally established for all Appendix III parameters following the background monitoring period (Geosyntec 2018). Intrawell tests were used to evaluate potential SSIs for calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS), whereas an interwell test was used to evaluate potential SSIs for boron. 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 background 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 (May 2016 – June 2023) to the new compliance samples (September 2023 – June 2025) for calcium, chloride, fluoride, pH, sulfate, and TDS. 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 findings can be found in Attachment C. The datasets for all wells were updated to include both the historical and more recent results except for chloride at downgradient well B-11 and sulfate at downgradient well B-9.

Prediction limits for the interwell tests were recalculated using data collected through the September 2025 assessment monitoring event. New upgradient well data were tested for outliers before 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.

After the revised boron 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 under the reporting limit (i.e., 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-Francia 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 limit for boron and intrawell prediction limits for calcium, chloride, fluoride, pH, sulfate, and TDS 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 September 2025 assessment monitoring event from each compliance well were compared to updated prediction limits to assess whether the results were statistically above background limits. 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 0.107 milligrams per liter (mg/L) at B-2 (0.297 mg/L) and at B-11 (0.323 mg/L).
- The chloride concentration was above the intrawell UPL of 9.82 mg/L at B-11 (24.6 mg/L).
- The sulfate concentration was above the intrawell UPL of 44.5 mg/L at B-9 (52.9 mg/L).

While the prediction limits were calculated for a one-of-two retesting procedure, SSIs were conservatively assumed if the September 2025 sample was above the UPL or, in the case of pH, below the LPL.

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 September 2025 data; however, all data were retained for the statistical evaluation. 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, chloride, and sulfate were identified above the prediction limits.

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

3. REFERENCES

Geosyntec. 2018. *Statistical Analysis Summary – Landfill, Flint Creek Plant, Gentry, Arkansas*. Geosyntec Consultants, Inc. January.

Geosyntec. 2021. *Statistical Analysis Plan – Flint Creek Plant*. Geosyntec Consultants, Inc. January.

TABLES

Table 1. Groundwater Data Summary
Statistical Analysis Summary
Flint Creek Plant – Landfill

Parameter	Unit	B-1B		B-2	B-4	B-5	B-6	B-7A	B-9	B-10		B-11	B-12	B-13
		9/15/2025	9/16/2025	9/15/2025	9/15/2025	9/16/2025	9/15/2025	9/15/2025	9/16/2025	9/15/2025	9/16/2025	9/16/2025	9/15/2025	9/15/2025
Antimony	µg/L	--	0.02 J1	0.02 J1	0.1 U1	0.1 U1	0.1 U1	0.04 J1	0.03 J1	--	0.46	0.02 J1	0.07 J1	0.1 U1
Arsenic	µg/L	--	0.07 J1	0.15	0.05 J1	0.38	0.19	5.83	0.38	--	0.33	0.19	0.09 J1	0.05 J1
Barium	µg/L	--	117	41.2	48.6	16.1	34.4	42.1	187	--	90	114	42.9	49.1
Beryllium	µg/L	--	0.02 J1	0.07	0.16	0.37	0.05 U1	0.05 U1	0.05 U1	--	0.05 U1	0.22	0.05 U1	0.06
Boron	mg/L	--	0.031 J1	0.297	0.055	0.018 J1	0.025 J1	0.012 J1	0.025 J1	--	0.008 J1	0.323	0.018 J1	0.014 J1
Cadmium	µg/L	--	0.023	0.018 J1	0.029	0.13	0.011 J1	0.008 J1	0.004 J1	--	0.017 J1	0.069	0.016 J1	0.036
Calcium	mg/L	--	83.6	19.9	23	12.4	33.3	95 M1	89.6	--	76.7	15	41.8	13.9
Chloride	mg/L	--	2.33	4.2	4.43	8.3	7.03	3.32	7.8	--	11.8	24.6	5.61	2.74
Chromium	µg/L	--	0.65	1.11	0.83	2.15	1.83	0.3	0.61	--	1.05	0.89	0.88	0.66
Cobalt	µg/L	--	0.05	0.04	0.02 J1	0.18	0.11	0.66	0.03	--	0.17	0.08	2.56	0.03
Combined Radium	pCi/L	--	3.87 L1, P2, J1	0.60 L1, P2, J1	0.38 L1, P2, J1	0.73 L1, P2, J1	0.51 L1, P2, J1	2.41 L1, P2, J1	0.65 L1, P2, J1, P1	--	0.96 L1, P2, J1	0.45 L1, P2, J1, O3	1.26 L1, P2, J1, O3	0.93 L1, P2, J1, O3
Fluoride	mg/L	--	0.41	0.07	0.06 U1	0.05 J1	0.06 U1	0.19	0.06	--	0.09	0.02 J1	0.03 J1	0.06 U1
Lead	µg/L	--	0.26	0.2 U1	0.2 U1	0.08 J1	0.15 J1	0.18 J1	0.2 U1	--	0.14 J1	0.2 U1	0.2 U1	0.2 U1
Lithium	mg/L	--	0.0236	0.00089	0.00089	0.00209	0.00042	0.0155	0.00337	--	0.00183	0.00122	0.00087	0.00057
Mercury	µg/L	--	0.005 U1	0.005 U1	0.005 U1	0.004 J1	0.005 U1	0.005 U1	0.005 U1	--	0.005 U1	0.005 U1	0.005 U1	0.005 U1
Molybdenum	µg/L	--	0.25 J1	0.53	0.5 U1	0.5 U1	0.15 J1	0.41 J1	0.26 J1	--	0.67	0.5 U1	0.28 J1	0.07 J1
Selenium	µg/L	--	0.5 U1	5.07	0.36 J1	31	1.47	0.5 U1	0.52	--	0.45 J1	2.59	0.16 J1	0.4 J1
Sulfate	mg/L	--	13.8	59.3	6.62	229	15.3	35.8	52.9	--	27.5	40	7.18	14.6
Thallium	µg/L	--	0.2 U1	0.2 U1	0.2 U1	0.02 J1	0.2 U1	0.06 J1	0.03 J1	--	0.03 J1	0.03 J1	0.03 J1	0.2 U1
Total Dissolved Solids	mg/L	--	300	190	120	380	170	330	320	--	260	150	160	70
pH	SU	7.6	--	5.7	6.4	5.0	6.1	7.6	6.7	6.7	--	5.7	6.1	5.8

Notes:

--: not sampled

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

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

O3: Client did not provide additional bottles; therefore, the duplicate is missing in this batch.

P1: The precision between duplicate results was above acceptance limits.

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

pCi/L: picocuries per liter

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
Flint Creek Plant – Landfill**

Constituent Name	MCL	CCR Rule-Specified	Calculated UTL	GWPS
Antimony, Total (mg/L)	0.00600		0.00452	0.00600
Arsenic, Total (mg/L)	0.0100		0.00983	0.0100
Barium, Total (mg/L)	2.00		0.131	2.00
Beryllium, Total (mg/L)	0.00400		0.00100	0.00400
Cadmium, Total (mg/L)	0.00500		0.00100	0.00500
Chromium, Total (mg/L)	0.100		0.00600	0.100
Cobalt, Total (mg/L)	n/a	0.00600	0.00434	0.00600
Combined Radium, Total (pCi/L)	5.00		8.79	8.79
Fluoride, Total (mg/L)	4.00		0.596	4.00
Lead, Total (mg/L)	n/a	0.0150	0.00389	0.0150
Lithium, Total (mg/L)	n/a	0.0400	0.0410	0.0410
Mercury, Total (mg/L)	0.00200		0.0000960	0.00200
Molybdenum, Total (mg/L)	n/a	0.100	0.00466	0.100
Selenium, Total (mg/L)	0.0500		0.0392	0.0500
Thallium, Total (mg/L)	0.00200		0.00199	0.00200

Notes:

1. Calculated UTL (upper tolerance limit) represents site-specific background values.
2. Gray cells indicate the GWPS is based upon 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
Flint Creek Plant – Landfill

Geosyntec Consultants, Inc.

Analyte	Unit	Description	B-2	B-6	B-9	B-10	B-11
			9/15/2025	9/15/2025	9/16/2025	*9/16/2025	9/16/2025
Boron	mg/L	Interwell Background Value (UPL)	0.107				
		Analytical Result	0.297	0.025	0.025	0.008	0.323
Calcium	mg/L	Intrawell Background Value (UPL)	48.7	57.7	144	116	23.9
		Analytical Result	19.9	33.3	89.6	76.7	15.0
Chloride	mg/L	Intrawell Background Value (UPL)	8.71	8.59	8.22	12.7	9.82
		Analytical Result	4.20	7.03	7.80	11.8	24.6
Fluoride	mg/L	Intrawell Background Value (UPL)	0.120	0.207	0.356	0.330	0.0600
		Analytical Result	0.07	< 0.02	0.06	0.09	0.02
pH	SU	Intrawell Background Value (UPL)	7.0	7.2	8.0	8.4	6.8
		Intrawell Background Value (LPL)	5.4	5.8	6.3	6.4	5.0
		Analytical Result	5.7	6.1	6.7	6.7	5.7
Sulfate	mg/L	Intrawell Background Value (UPL)	185	41.0	44.5	37.5	60.5
		Analytical Result	59.3	15.3	52.9	27.5	40.0
Total Dissolved Solids	mg/L	Intrawell Background Value (UPL)	495	267	325	304	203
		Analytical Result	190	170	320	260	150

Notes:

1. Bold values exceed the background value.

2. Background values are shaded gray.

3. Nondetect values are shown as less than (<) the method detection limit.

*: pH measured on 9/15/2025. Well purged dry and sampled the following day.

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 Flint Creek Landfill 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



15296

License Number

Arkansas

Licensing State

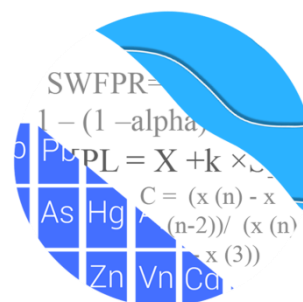
01.09.2026

Date

ATTACHMENT B

Statistical Analysis Output

GROUNDWATER STATS CONSULTING



January 8, 2026

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

Re: Flint Creek Landfill – Background Update & Assessment Monitoring 2025

Dear Ms. Kreinberg,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the background update and statistical analysis of September 2025 groundwater data for American Electric Power Inc.'s Flint Creek Landfill. 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:** B-1B, B-4, B-5, B-7A, B-12, and B-13
- **Downgradient wells:** B-2, B-6, B-9, B-10, and B-11

Data were sent electronically, and the analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to Groundwater Stats Consulting. The statistical analysis was conducted according to the Statistical Analysis Plan and screening evaluation prepared by GSC and approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to GSC.

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, a substitution of the most recent reporting limit is used for all non-detects. For interwell prediction and tolerance limits, a single reporting limit substitution is used across upgradient wells for a given parameter. In some cases, the most recent reporting limit provided by the laboratory may contain varying limits for a given parameter; therefore, the substitution may differ from well to well. Reporting limit changes may occur depending on laboratory capabilities. In the case of fluoride, elevated historic reporting limits were replaced by the most recent laboratory reporting limit of 0.06 mg/L, which was substituted across all non-detects for all wells. The computed statistical limits, both background and compliance limits, were not adversely affected by these substitutions.

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 the previous screening report and demonstrated that the selected statistical method provides 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

1-of-2 resample plan

Constituents, $c=7$

Downgradient wells, $w=5$

Summary of Statistical Methods:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for calcium, chloride, fluoride, pH, sulfate, and TDS
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron
- Confidence intervals compared to Ground Water Protection Standards (GWPS) for all Appendix IV constituents

Parametric prediction limits, tolerance limits, and confidence intervals 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. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. 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 as appropriate. 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 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. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits, tolerance limits, and confidence intervals are used on data containing greater than 50% non-detects.

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 will be necessary to accommodate these types of changes. In the interwell case, statistical limits may be updated with all upgradient well data after careful screening for new outliers. In the intrawell case, data for all wells and constituents are 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 some cases, the earlier portion of data are deselected prior to construction of limits in order to provide sensitive limits that will rapidly detect 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.

For Appendix III detection monitoring parameters, compliance is determined by comparing the most recent observation to a background prediction limit. The corresponding trend tests for screening and evaluating prediction limit exceedances of Appendix III parameters are performed at the 99% confidence level to provide a high level of confidence against false positives. For Appendix IV assessment monitoring parameters, however, compliance is assessed by comparing a full (or truncated) period of record to a GWPS using a confidence interval. The corresponding trend tests for screening and evaluating confidence interval exceedances of Appendix IV constituents are performed at the 95% confidence level to provide greater capability of identifying potential trends than the 99% confidence level.

Summary of Background Screening Conducted in November 2017

Interwell prediction limits combined with a 1-of-2 verification strategy were recommended for boron; and intrawell prediction limits combined with a 1-of-2 verification strategy were recommended for calcium, chloride, fluoride, pH, sulfate, and TDS. All proposed background data were screened for outliers and trends during the background screening. The findings of those reports were submitted with that analysis. Interwell prediction limits utilize pooled upgradient well data for construction of statistical limits. During each sample event, upgradient well data are screened for any newly suspected outliers or obvious trending patterns using time series plots. Intrawell prediction limits utilize historical data within a given well for comparison of compliance data from the same well. As recommended in the EPA Unified Guidance (2009), the background data sets are periodically evaluated for the purpose of updating statistical limits, as described below.

Appendix III Background Update Summary Conducted in December 2025

Outlier Analysis

Prior to updating interwell prediction limits for the Fall 2025 analysis, data were evaluated using Tukey's outlier test and visual screening on pooled upgradient well data through September 2025 for boron. Results of the outlier tests follow this report (Figure C). While Tukey's outlier test on pooled upgradient well data identified outliers for boron, all observations appeared to be representative of remaining measurements among upgradient wells and were not dramatically higher than the remaining observations; therefore, no measurements were flagged as outliers.

For parameters which use intrawell prediction limits (calcium, chloride, fluoride, pH, sulfate, and TDS), data through June 2025 were evaluated using Tukey's outlier test and visual screening on all wells to evaluate potential new outliers as well as existing outliers. Tukey's outlier test identified potential outliers for calcium and fluoride. All previously flagged values were confirmed with Tukey's test and visual screening. No additional values were flagged as outliers for Appendix III parameters. Any values identified by Tukey's test, but not flagged in the database, appeared to be representative of variation or would not greatly reduce variation within the record. Visual screening identified an outlier in more recent data for sulfate at downgradient well B-2. Because this measurement was similar to higher concentrations observed early in the record, earlier data were truncated, and the June 2023 measurement remains flagged as an outlier. The resulting intrawell prediction limit represents stable measurements. Tukey's outlier test results for all Appendix III parameters are shown in Figure C, and a list of flagged outliers follows this report.

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 June 2023 to the new compliance samples through June 2025 at each well to evaluate whether the groups are statistically different at the 99% confidence level (Figure D). For records that were truncated during previous updates, only the data that were retained after truncation due to earlier concentrations not representing current groundwater quality were used in the Mann-Whitney test. Discussions of the truncated records were included in previous background update reports.

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:

- Chloride: B-11
- Sulfate: B-9
- TDS: B-9

Decrease:

- Calcium: B-5 (upgradient)
- pH: B-12 (upgradient), B-2, B-6, and B-10
- Sulfate: B-4 and B-13 (both upgradient)

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 naturally occurring shift unrelated to practices at the site. In studies such as the current one, in 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 increases in medians, for chloride in downgradient well B-11 and sulfate at downgradient well B-9, more recent reported concentrations are above remaining concentrations within the record and are increasing; therefore, background data were not updated for these well/constituent pairs. For the record of TDS at downgradient well B-9, background data were updated through June 2025 since compliance measurements were within the range of background concentrations.

For well/constituent pairs with statistically significant decreases in medians, more recent reported concentrations were similarly within the range of historic observations. Therefore, background datasets were updated through June 2025 for all well/constituent pairs evaluated with intrawell prediction pairs, except for chloride at B-11 and sulfate at B-9.

Interwell – Trend Test Evaluation

For boron, which is tested using interwell prediction limits, the Sen's Slope/Mann-Kendall trend test was used to test data through September 2025 in upgradient wells to determine whether concentrations are statistically increasing, decreasing or stable at the 99% confidence level (Figure E). No statistically significant trends were identified; therefore, all data from upgradient wells were used to construct interwell prediction limits for boron. As more data are collected, all upgradient well data will be re-evaluated for possible deselection of the earlier portion of the record if the measurements no longer represent current background groundwater quality conditions. A summary table of the trend test follows this report.

Appendix III Statistical Limits – September 2025

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. 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 for calcium, chloride, fluoride, pH, sulfate, and TDS currently use all historical data through June 2025, unless otherwise noted above, and a summary table of the limits follows this report (Figure F). No comparison of the September 2025 compliance data to statistical limits was performed 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 screening for additional outliers and trends. The interwell prediction limit for boron, combined with a 1-of-2 resample plan, was constructed using all pooled upgradient data through September 2025. The summary table follows this letter (Figure G). No comparison of the September 2025 compliance data to statistical limits was performed 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.

Appendix IV Parameters Background Update – Conducted in December 2025

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. All flagged values may be seen on the Outlier Summary following this letter (Figure C).

Tukey's outlier test identified outliers for barium, combined radium 226 + 228, fluoride, lithium, and selenium when pooled upgradient well data were evaluated; however, many of these values were of similar concentration to one another and thus, were not flagged as outliers. The highest detected value for chromium in well B-12, the two highest detected values for cobalt in well B-12, and the high non-detects for lithium, at the reporting limit of 0.1 mg/L, at several wells during the June 2019 event remain flagged in the database as outliers as they did not appear to represent the population at these wells and do not represent current conditions. No additional values were flagged during this analysis.

For the current analysis, downgradient well data through September 2025 were screened through visual screening using time series graphs. Since the downgradient well data are used to construct confidence intervals, values that are marginally high relative to the rest of the data are retained unless there is particular justification for excluding them. No additional outliers were flagged during this analysis, and no previously flagged outliers were unflagged. Several outliers were flagged during previous analyses for reasons listed below.

Several metals had higher reported concentrations in multiple wells during the September and November 2016 events which appear to be either a laboratory or sampling issue. Therefore, these values were flagged as outliers since they do not represent the population within these wells. Additionally, several reporting limits for the metals are significantly lower beginning in March 2019 than those reported historically. As discussed previously, the reporting limit for lithium during the June 2019 event increased from a historical limit of 0.001 mg/L to 0.1 mg/L. Therefore, the high reporting limit was flagged as an outlier in all applicable wells as it is higher than any reported concentrations for lithium.

Trend Analysis – Upgradient Wells

Appendix IV data were also screened at upgradient wells using the Sen's Slope/Mann-Kendall trend test to formally evaluate whether statistically significant trends are present at the 95% confidence level (Figure H). When extreme trending patterns are present among upgradient wells, truncation of the records may be required for construction of interwell tolerance limits to represent current groundwater quality conditions. The following statistically significant trends were identified among upgradient wells:

Increasing:

- Arsenic: B-7A
- Cobalt: B-12

Decreasing:

- Antimony: B-1B, B-5, B-7A, B-12, and B-13
- Arsenic: B-1B, B-4, B-5, B-12, and B-13
- Barium: B-1B, B-5, B-7A, and B-12
- Beryllium: B-1B, B-5, B-7A, B-12, and B-13
- Cadmium: B-4, B-7A, B-12, and B-13
- Chromium: B-5 and B-13
- Cobalt: B-1B, B-4, B-5, and B-13
- Fluoride: B-12
- Lead: B-1B, B-5, B-12, and B-13
- Lithium: B-1B, B-5, B-7A, and B-13
- Mercury: B-5 and B-7A
- Molybdenum: B-7A, B-12, and B-13
- Selenium: B-4, B-5, B-12, and B-13
- Thallium: B-5 and B-12

While identifying these upgradient trends is useful for understanding and characterization of upgradient background groundwater quality, truncation of the records to remove the trend may be appropriate when the trend would result in statistical limits that are not representative of upgradient groundwater quality and/or not able to detect downgradient changes that result from the facility. Deselecting data at upgradient wells is done with caution as similar observations may be observed at one or more downgradient wells depending on transport times.

Several statistically significant trends were identified. In all cases, the significant trends did not adversely affect GWPS as all concentrations were below established Maximum Contaminant Level (MCLs) or CCR-Rule Specified Levels, or overall concentrations for an

individual well were well below remaining pooled upgradient well data from other upgradient wells. Other statistically significant trends were a byproduct of several non-detects early in the record followed by years of trace values and not based on values detected above the reporting limit. Therefore, no adjustments were required for these well/constituent pairs at this time, and all available data from upgradient wells were used to construct interwell tolerance limits.

Note that the trend tests identified statistically significant decreasing trends for both antimony and molybdenum at B-13 and both beryllium and thallium at B-12, the slope, which represents the median slope of all the possible pairwise slopes, is displayed on the graph and summary table as zero. All data will be re-evaluated during the next background update to determine whether more recent measurements are increasing, decreasing, or remaining stable.

Interwell Upper Tolerance Limits

Upper tolerance limits were used to calculate background limits from pooled upgradient well data through September 2025 for Appendix IV parameters (Figure I). For parametric limits a target of 95% confidence and 95% coverage is used. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples.

Groundwater Protection Standards

These background limits were compared to the MCLs and CCR Rule-Specified levels 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 J).

Evaluation of Appendix IV Parameters – September 2025

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using all data through September 2025 for each of the Appendix IV parameters (Figure K). The Sanitas software was used to calculate the confidence intervals, either parametric or nonparametric, as appropriate. 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. Complete

graphical results of the confidence interval analysis follow this letter. No exceedances were identified.

Trend Test Evaluation – Appendix IV

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. 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 Flint Creek Landfill. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Andrew T. Collins
Project Manager



Kristina L. Rayner
Senior Statistician

Date Ranges

Date: 12/17/2025 8:09 AM

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Calcium, total (mg/L)

B-2 background:10/7/2016-6/17/2025

Chloride, total (mg/L)

B-11 background:5/25/2016-9/21/2022

B-4 background:3/12/2019-6/17/2025

Sulfate, total (mg/L)

B-2 background:11/8/2016-6/17/2025

B-5 background:4/27/2017-6/18/2025

B-9 background:4/27/2017-6/20/2023

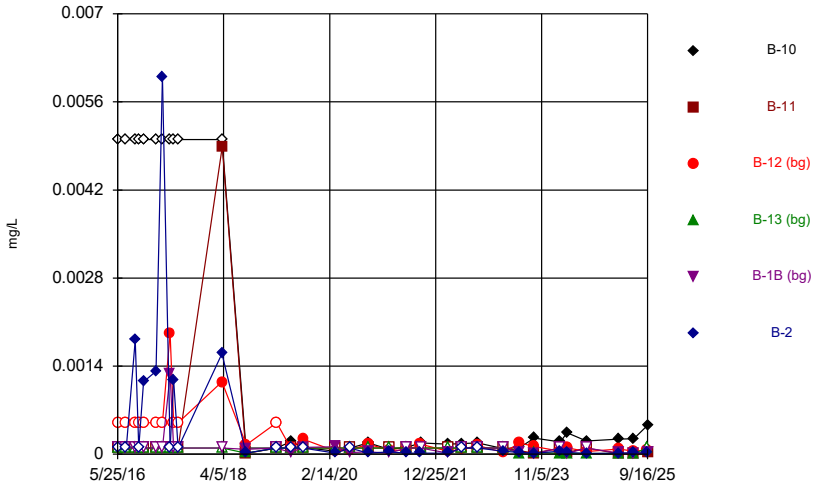
Total Dissolved Solids [TDS] (mg/L)

B-2 background:11/8/2016-6/17/2025

FIGURE A

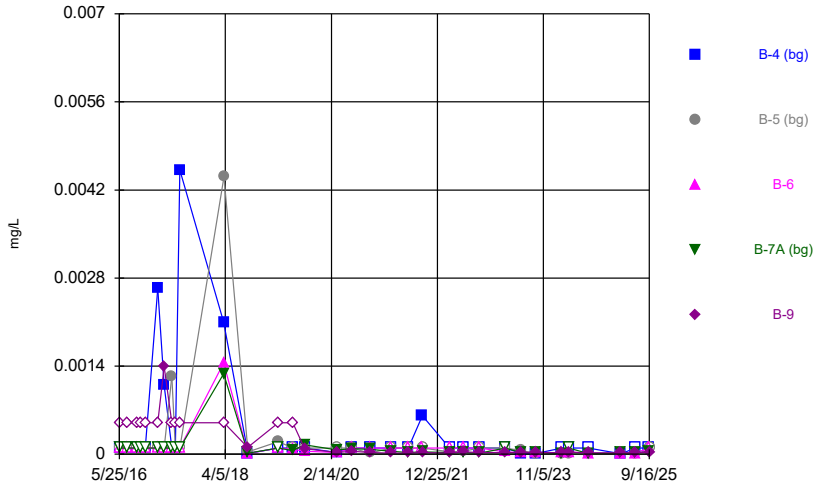
Time Series

Time Series



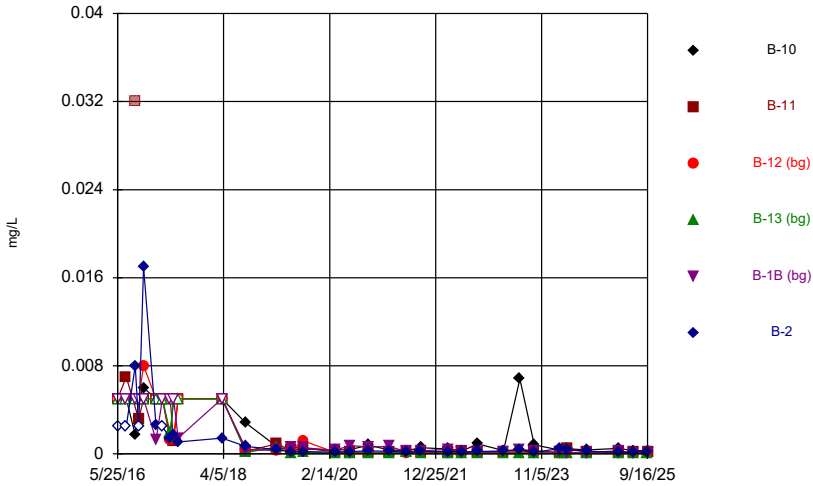
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



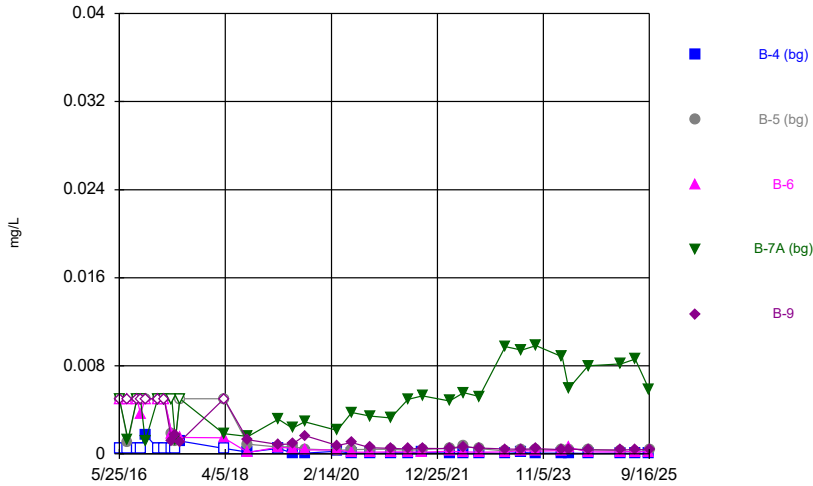
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



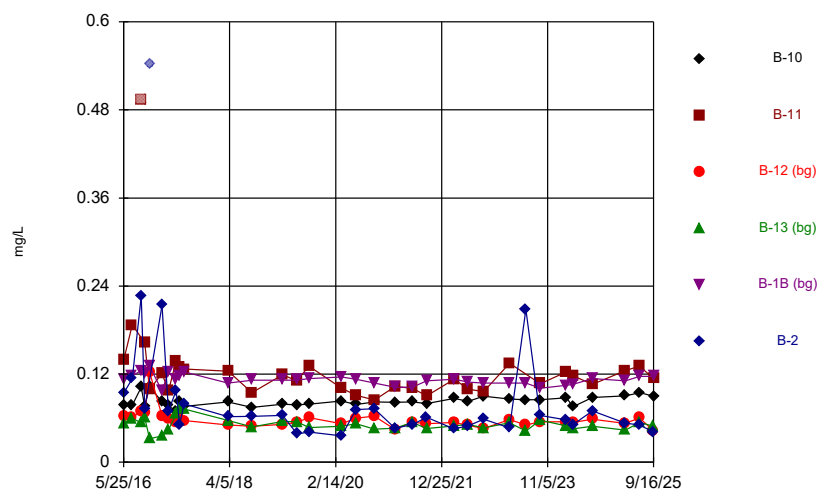
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series

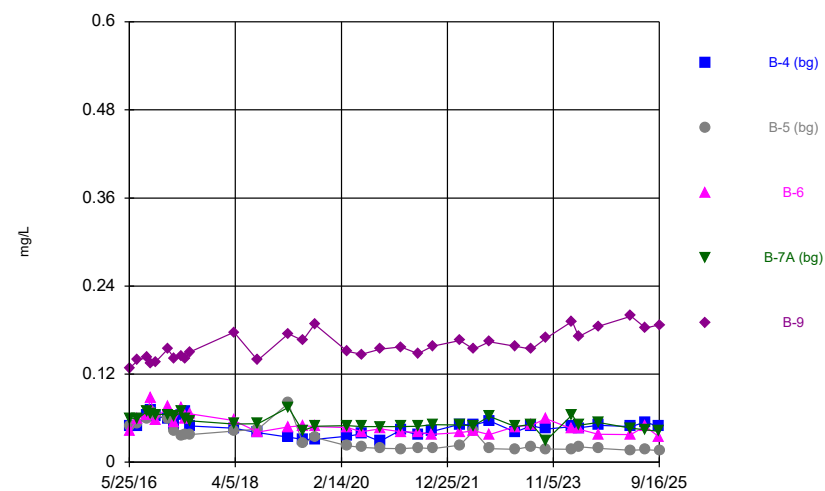


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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

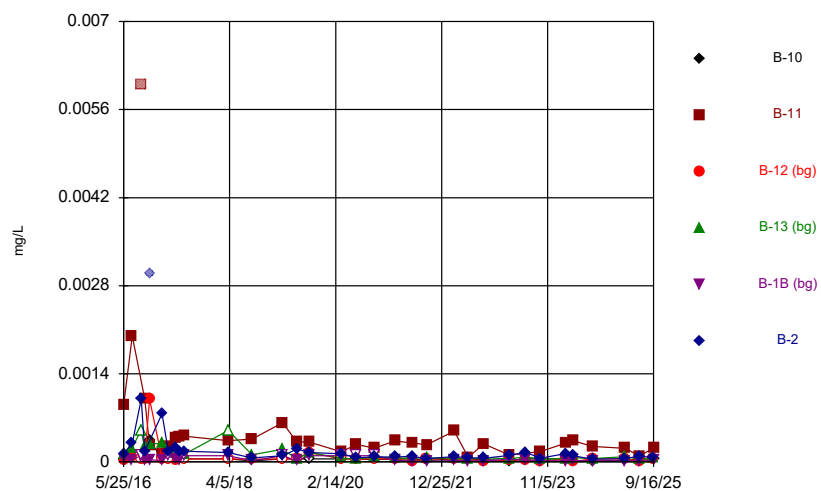
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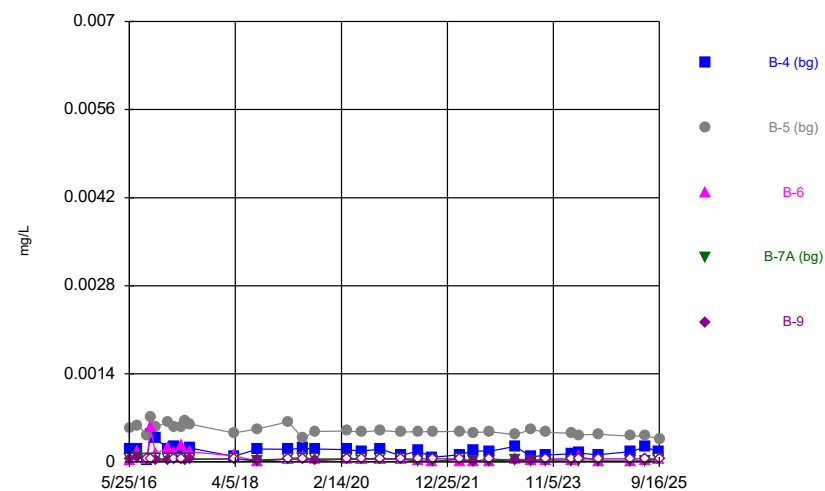
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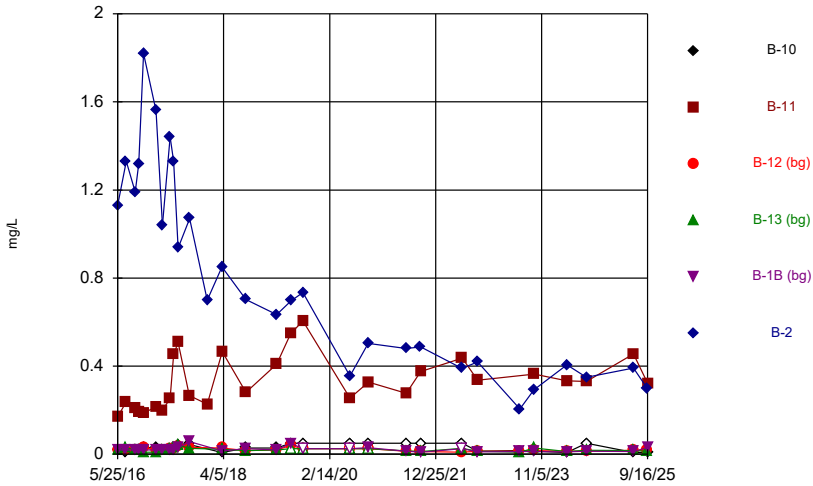
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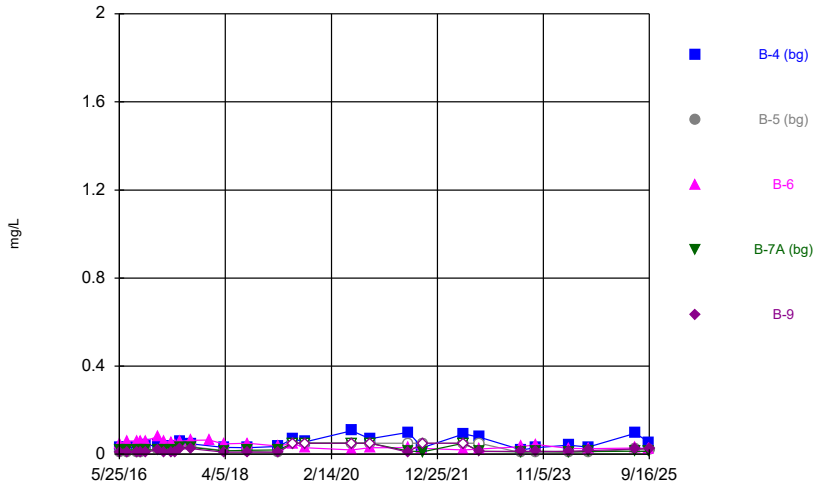


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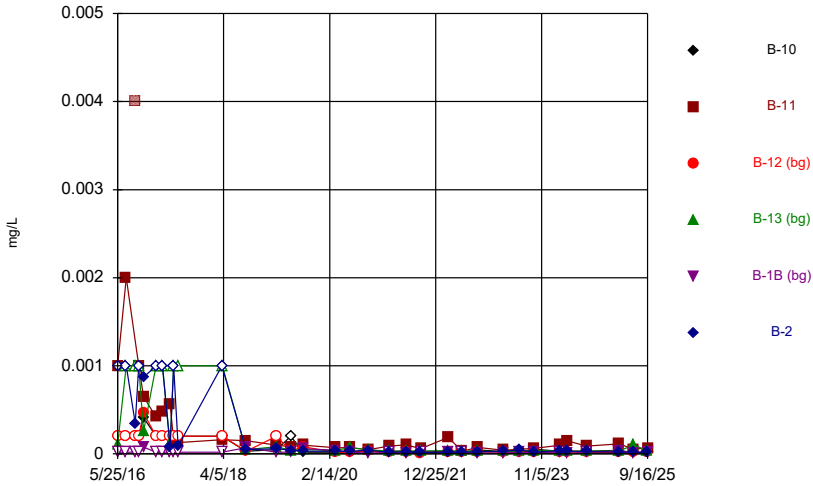
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Time Series



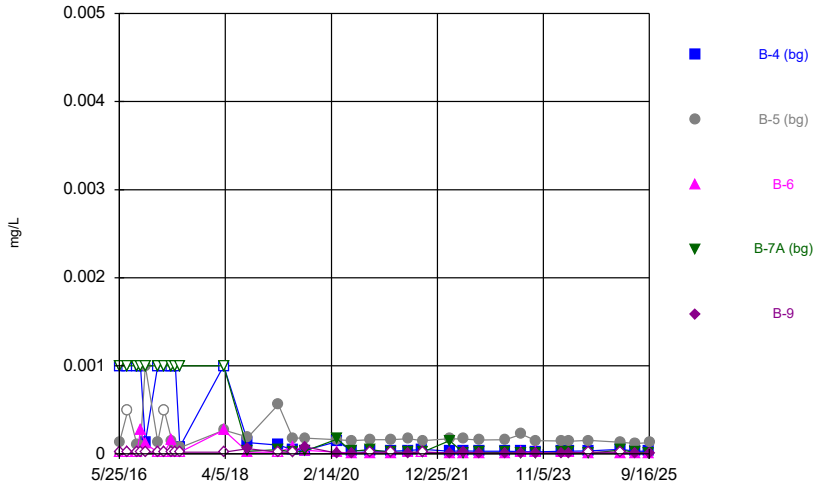
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



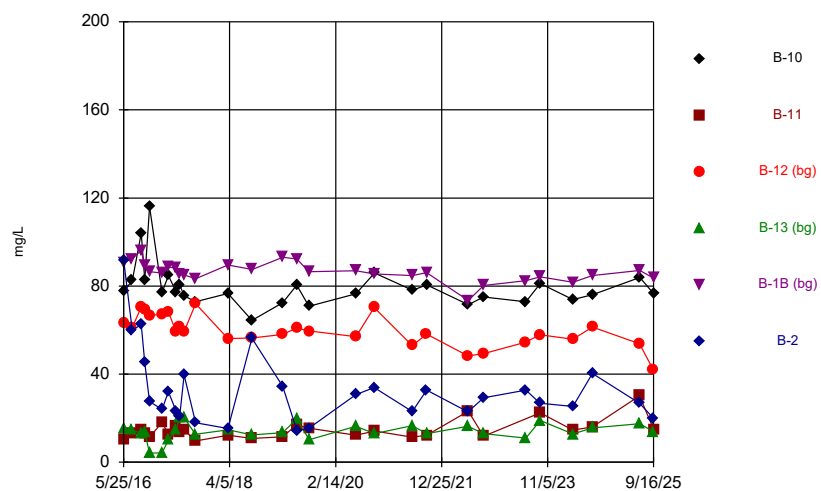
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



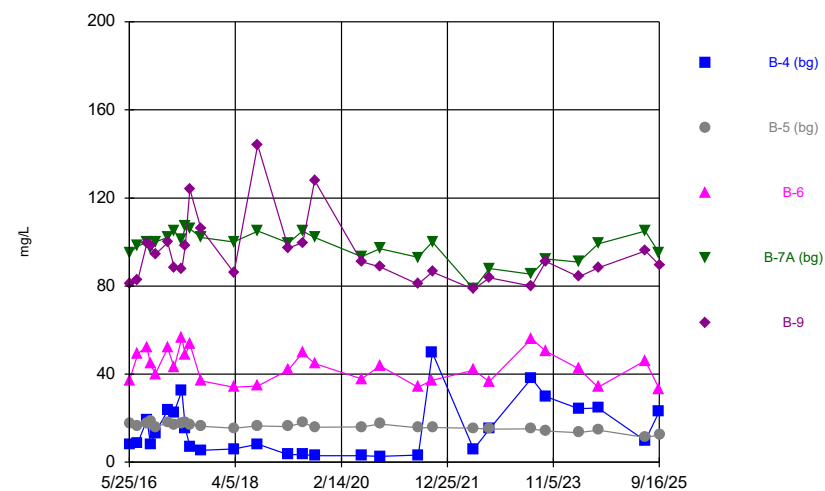
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



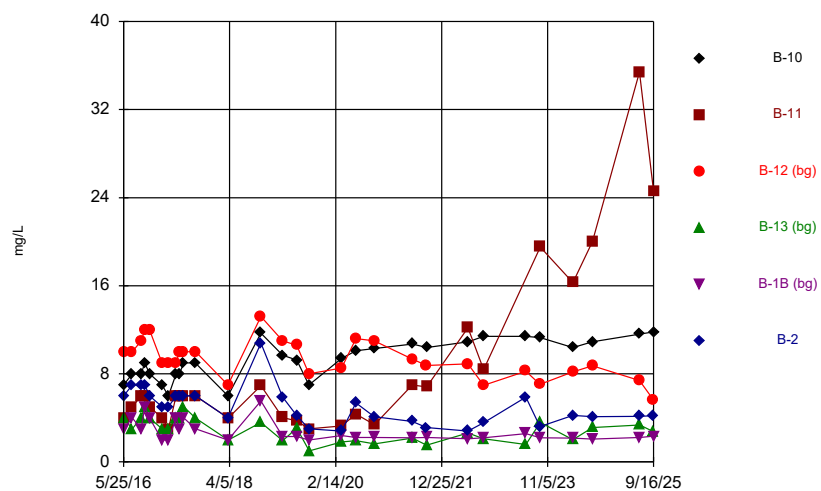
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



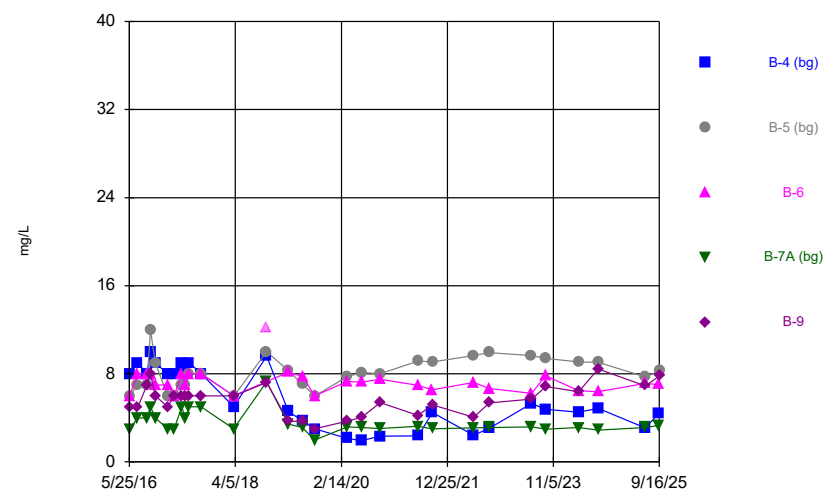
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



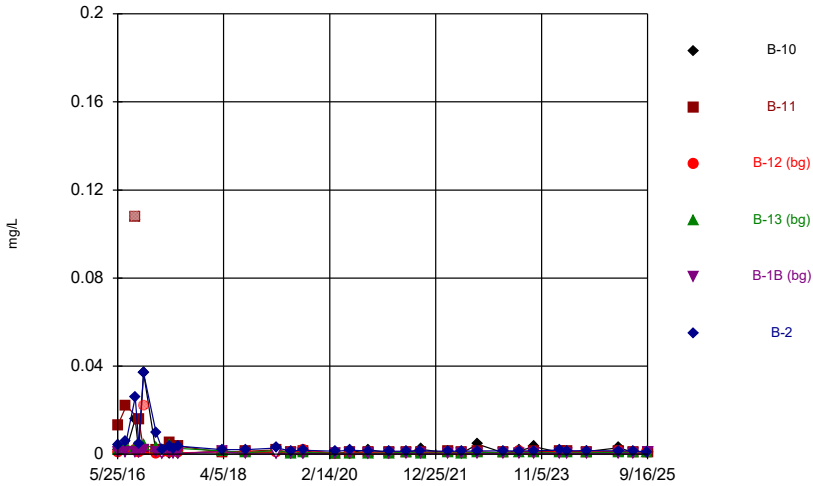
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



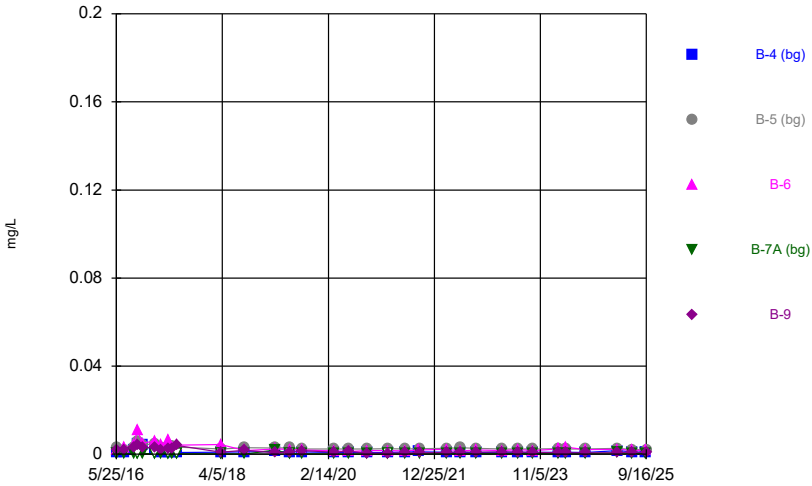
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Time Series



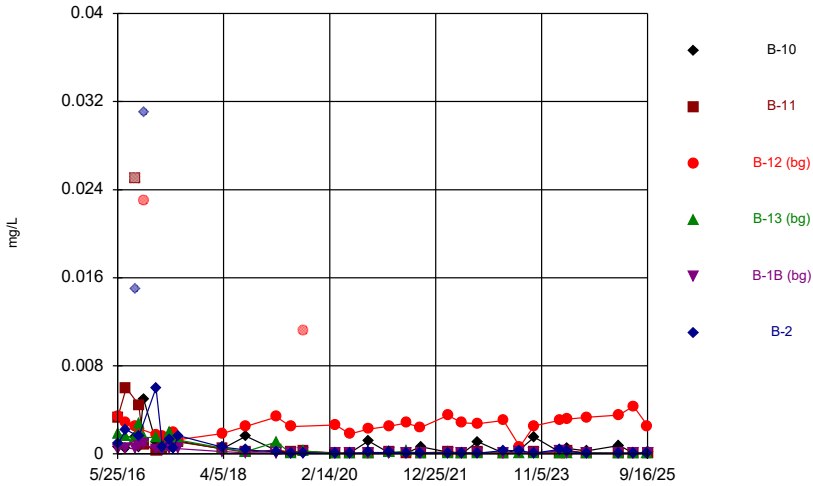
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



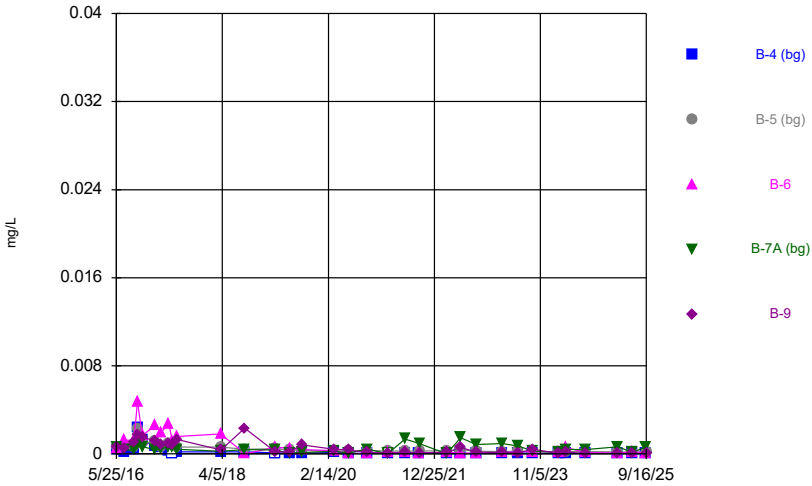
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Time Series



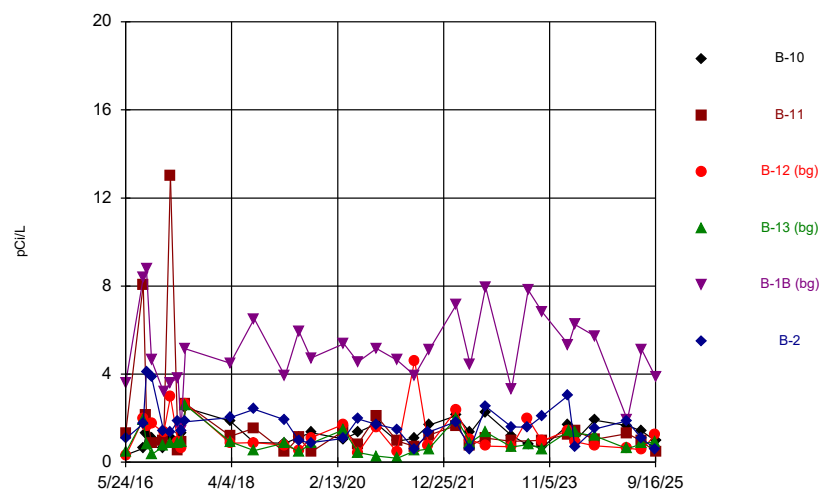
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



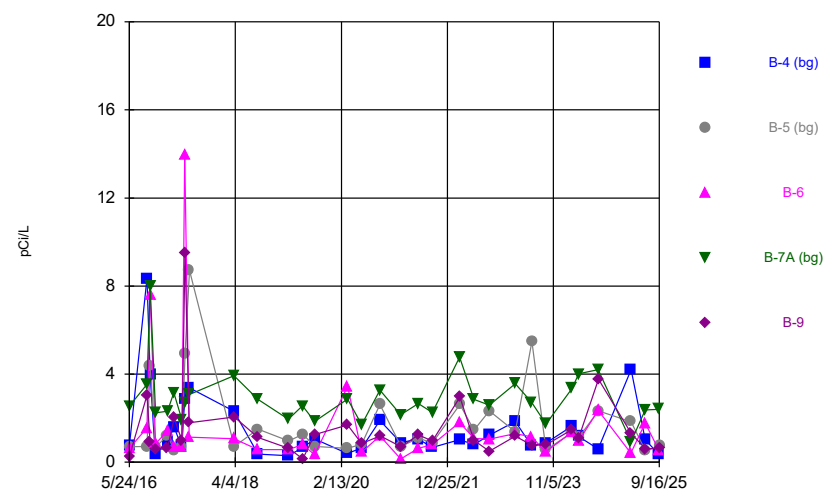
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



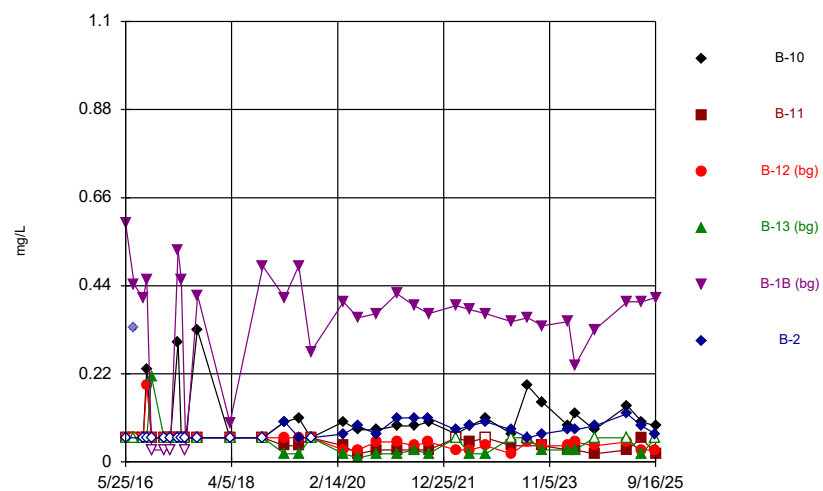
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



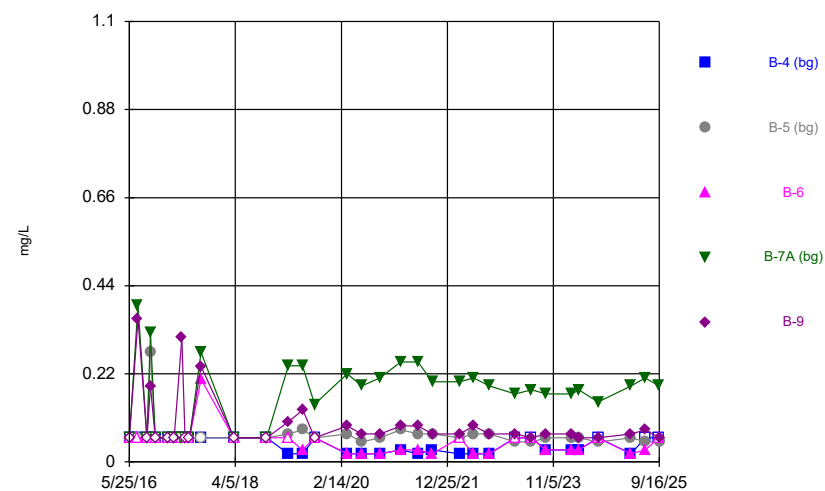
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



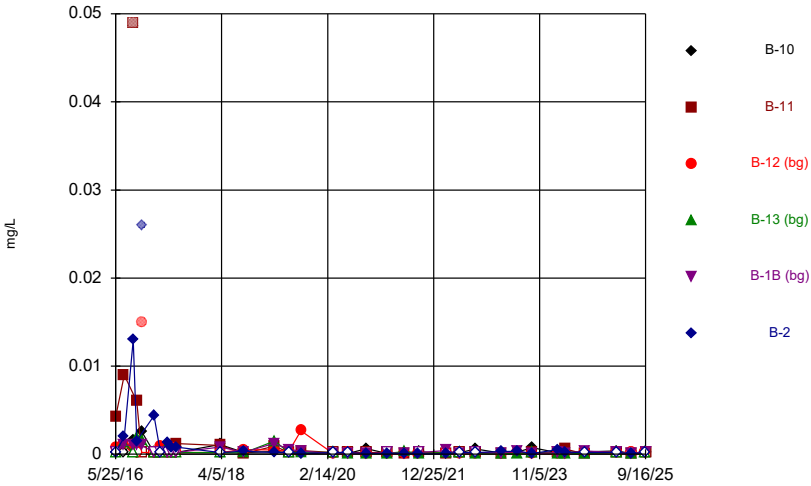
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Time Series

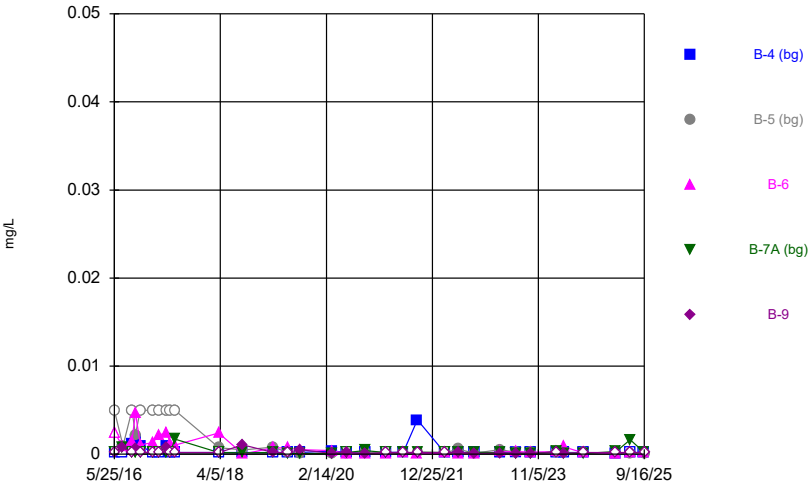


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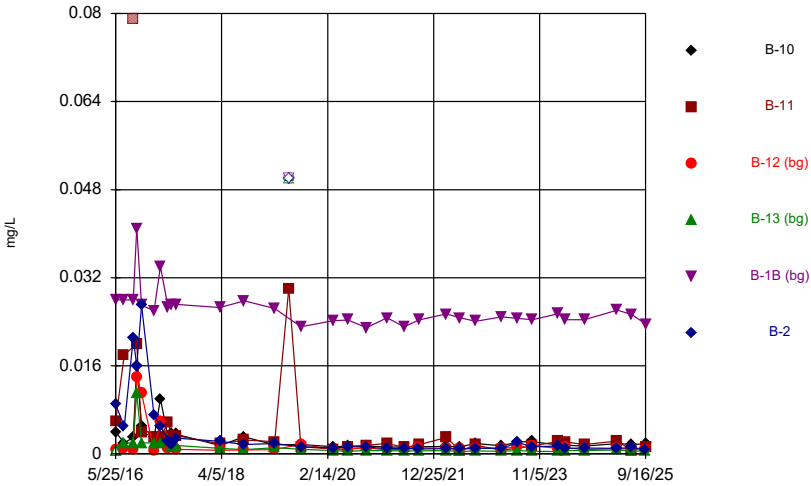
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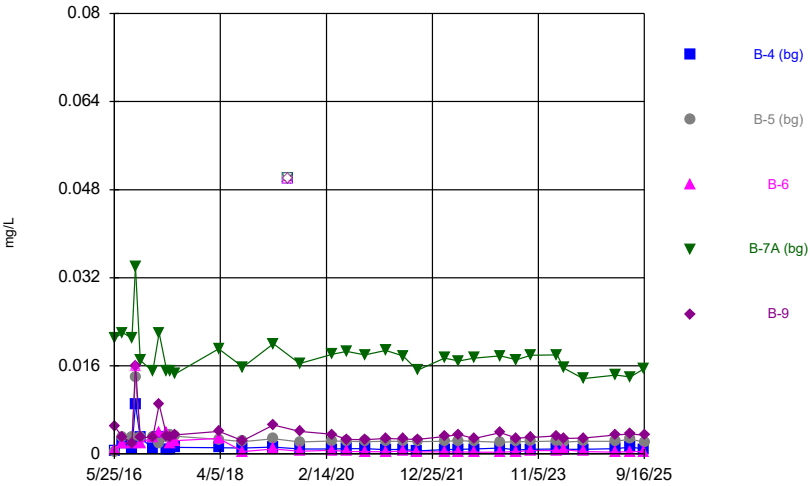
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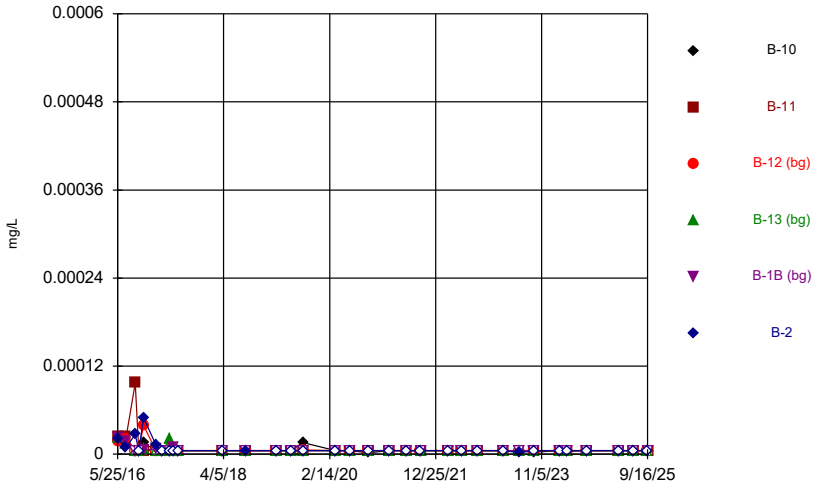
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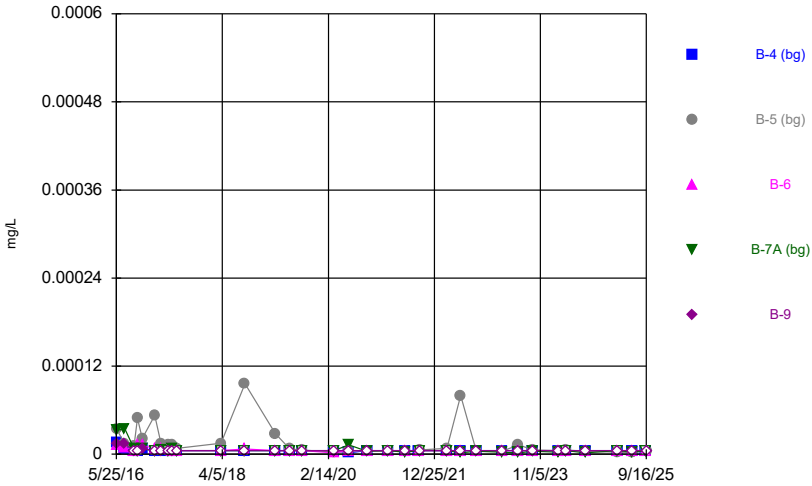


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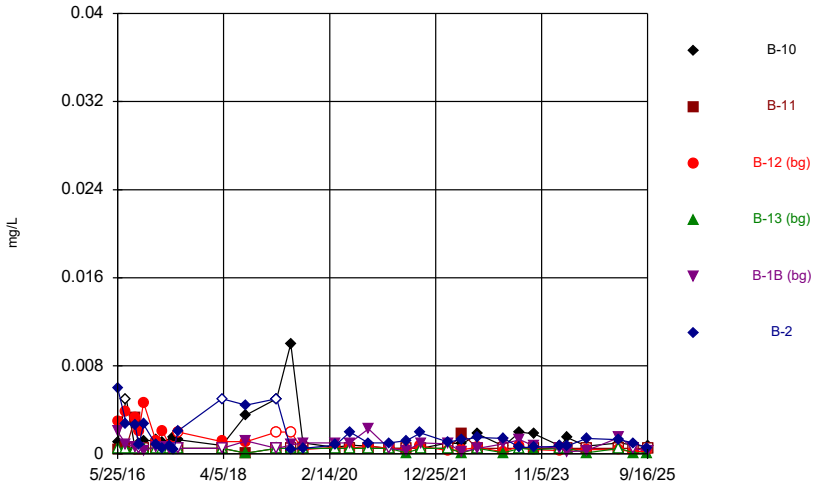
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



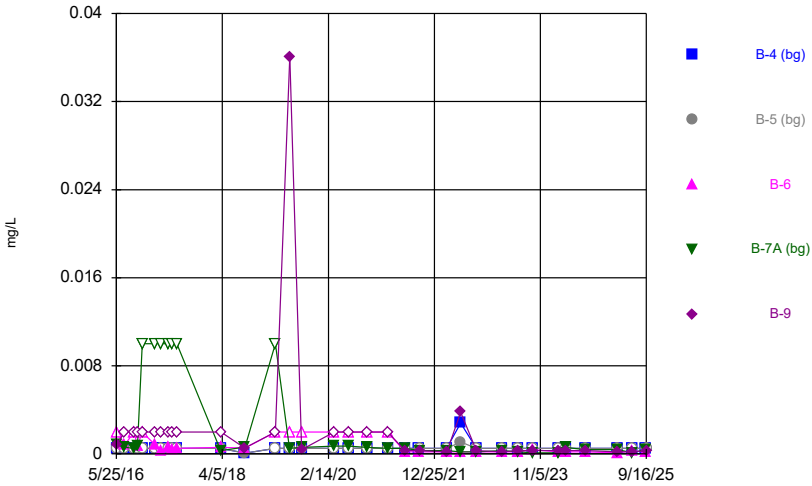
Constituent: Mercury, total Analysis Run 12/16/2025 8:44 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



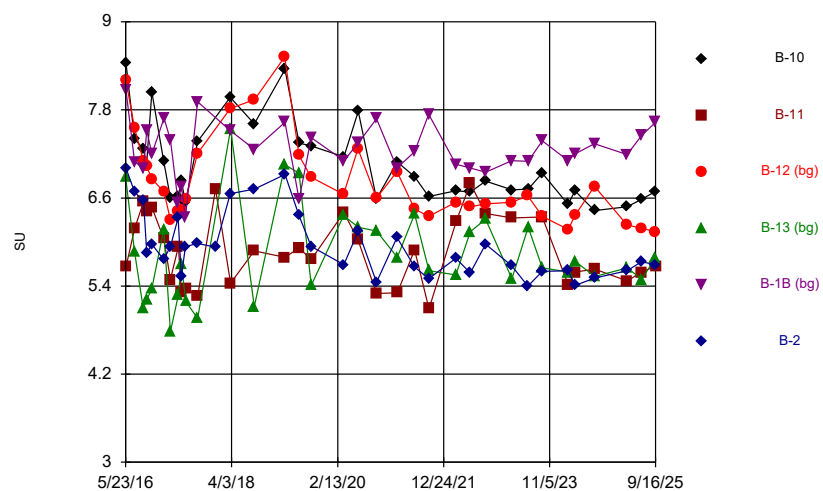
Constituent: Molybdenum, total Analysis Run 12/16/2025 8:44 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series

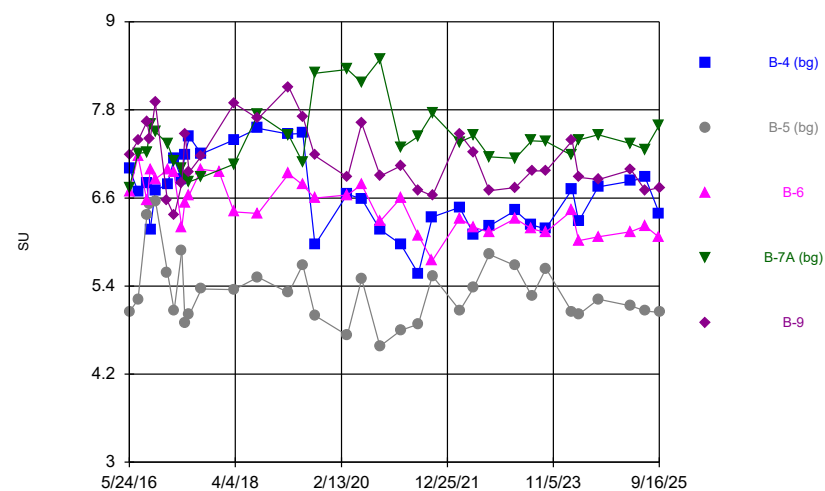


Constituent: Molybdenum, total Analysis Run 12/16/2025 8:44 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

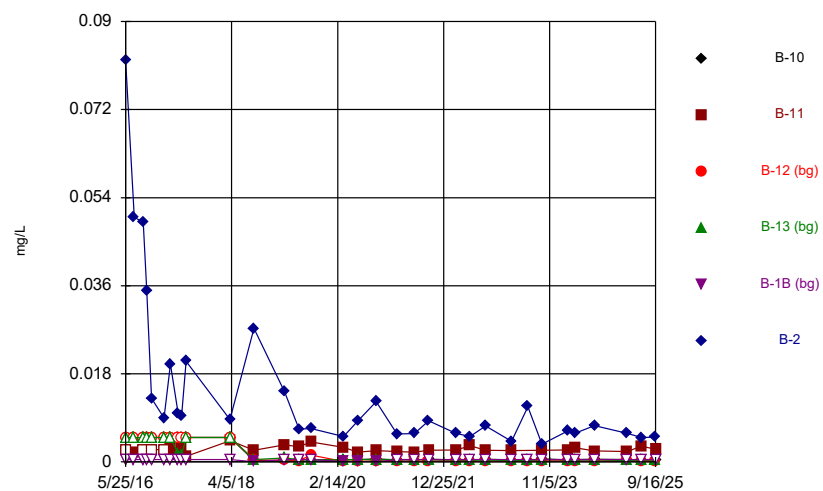
Time Series



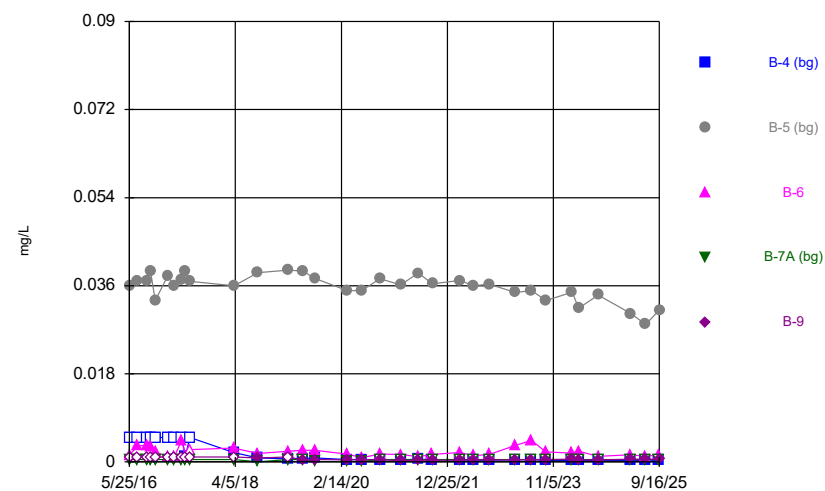
Time Series



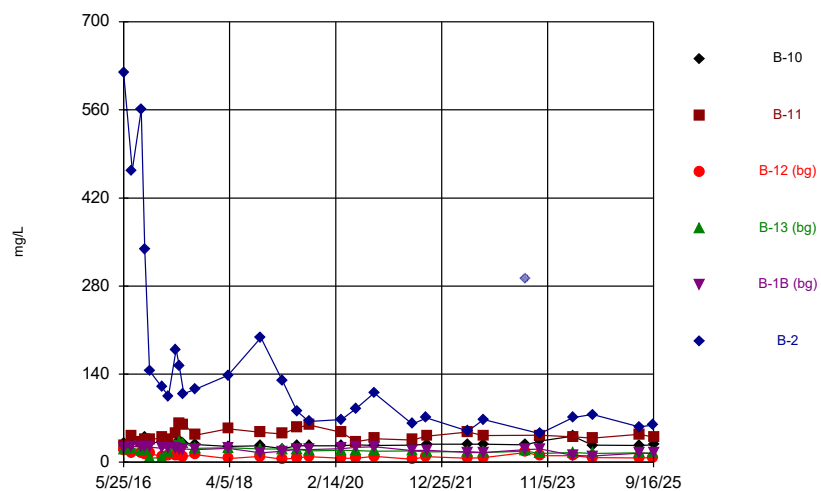
Time Series



Time Series

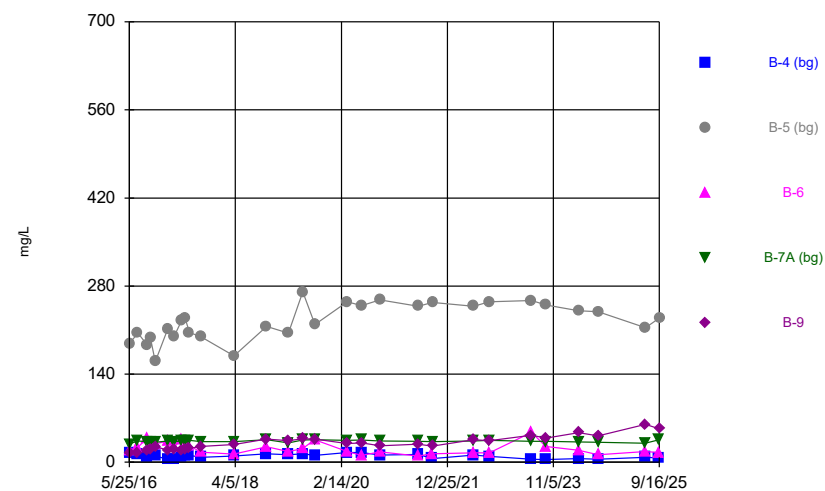


Time Series



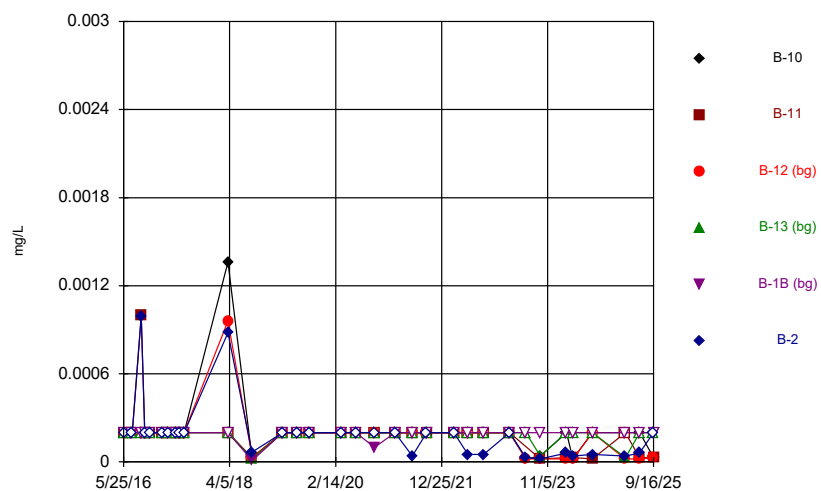
Constituent: Sulfate, total Analysis Run 12/16/2025 8:45 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



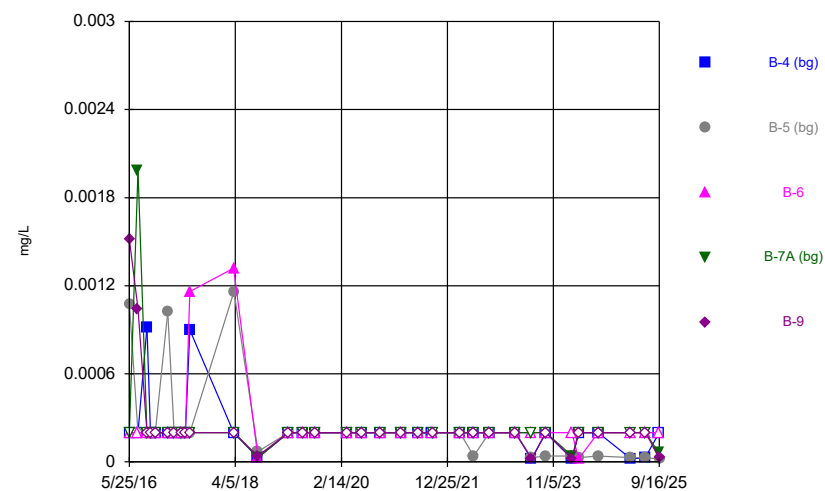
Constituent: Sulfate, total Analysis Run 12/16/2025 8:45 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



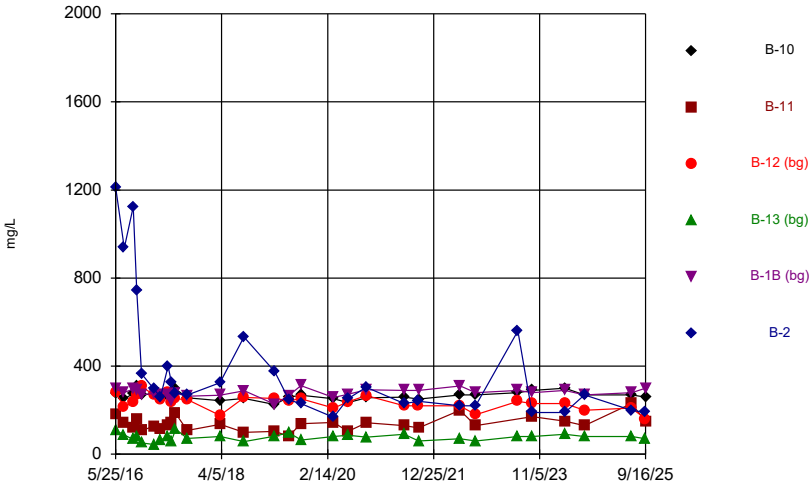
Constituent: Thallium, total Analysis Run 12/16/2025 8:45 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



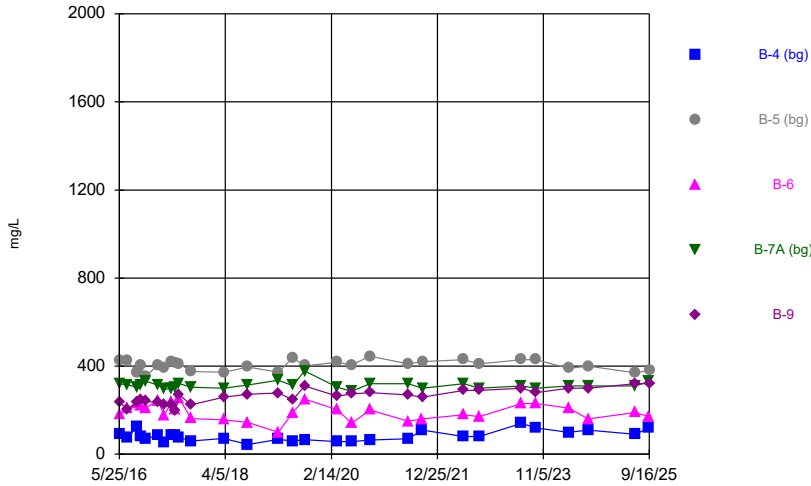
Constituent: Thallium, total Analysis Run 12/16/2025 8:45 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:45 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Time Series

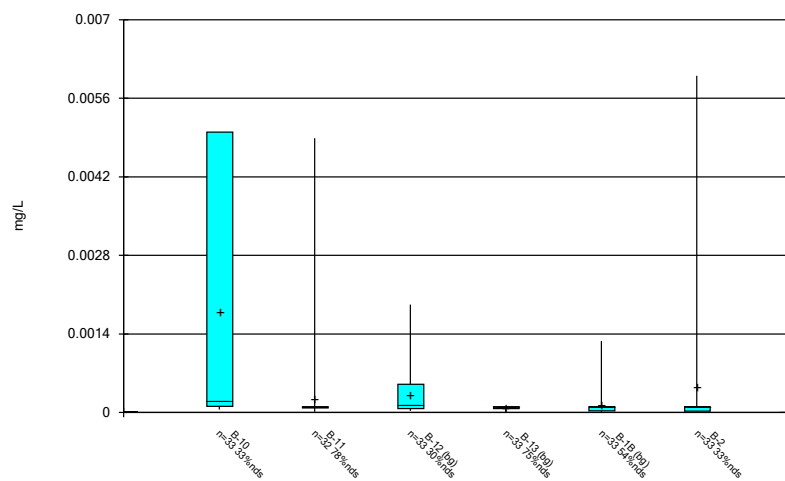


Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:45 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

FIGURE B

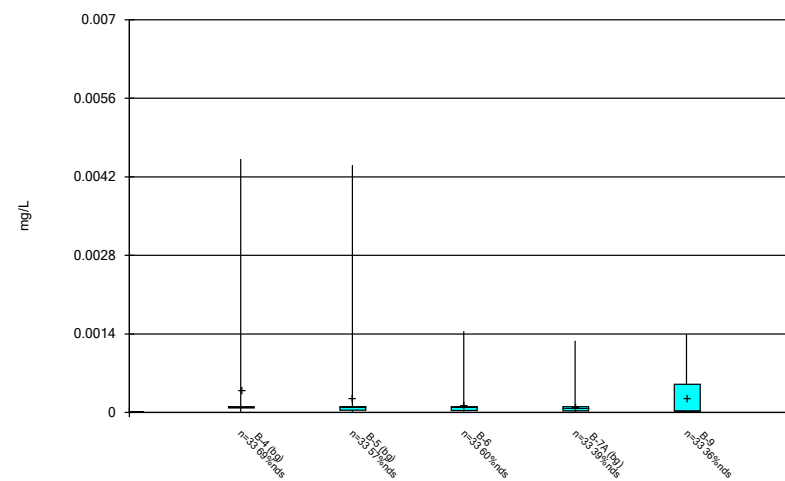
Box Plots

Box & Whiskers Plot



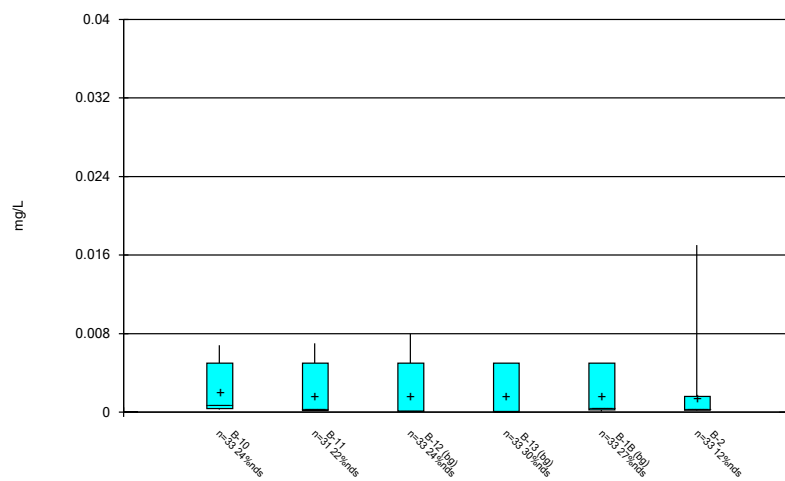
Constituent: Antimony, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



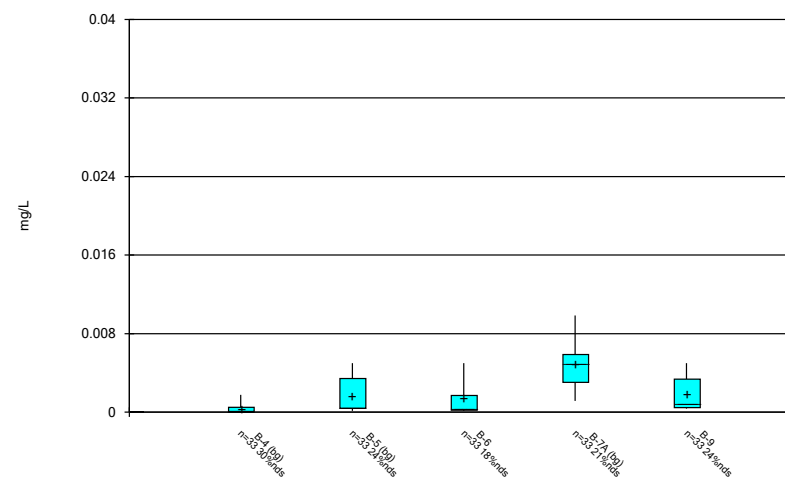
Constituent: Antimony, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



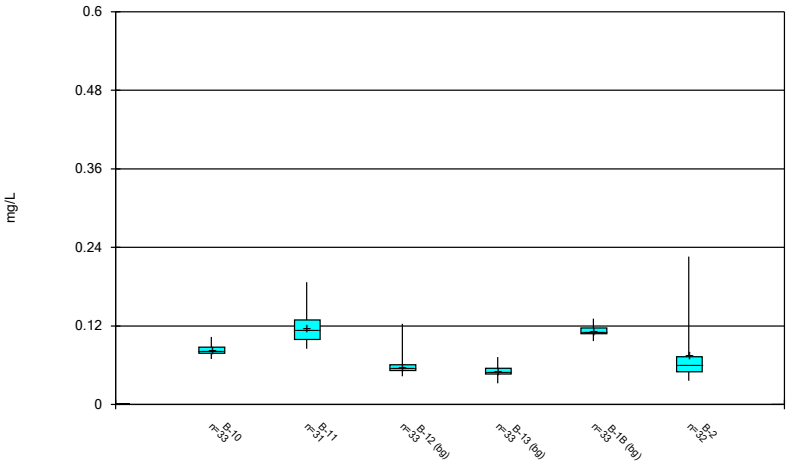
Constituent: Arsenic, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



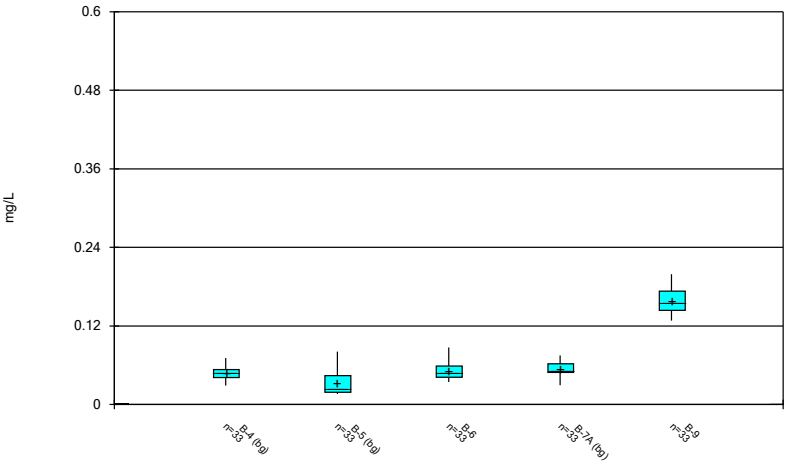
Constituent: Arsenic, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



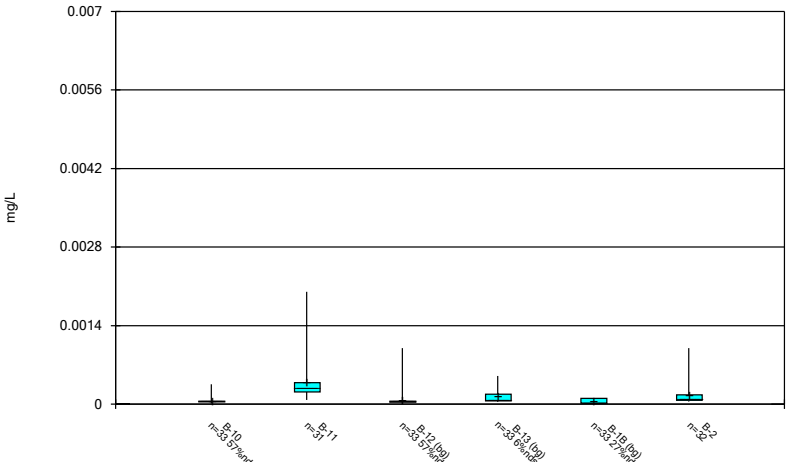
Constituent: Barium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



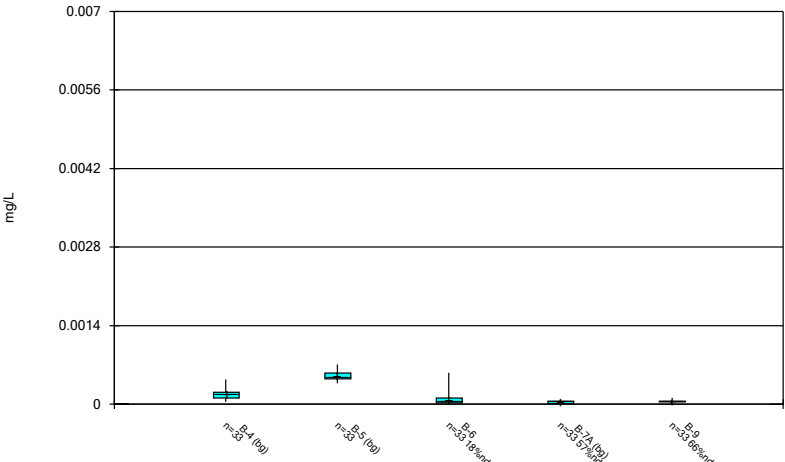
Constituent: Barium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



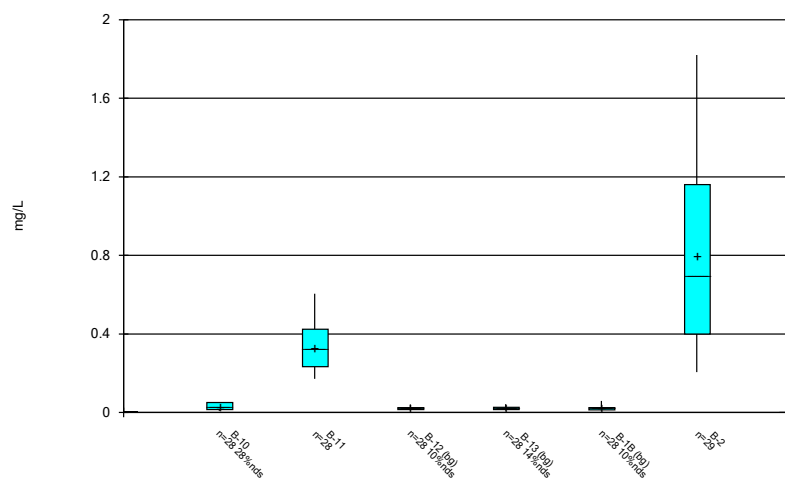
Constituent: Beryllium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



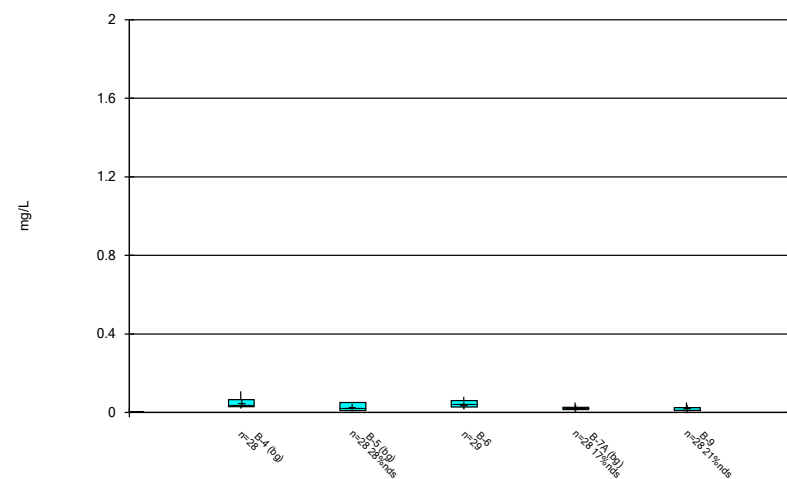
Constituent: Beryllium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



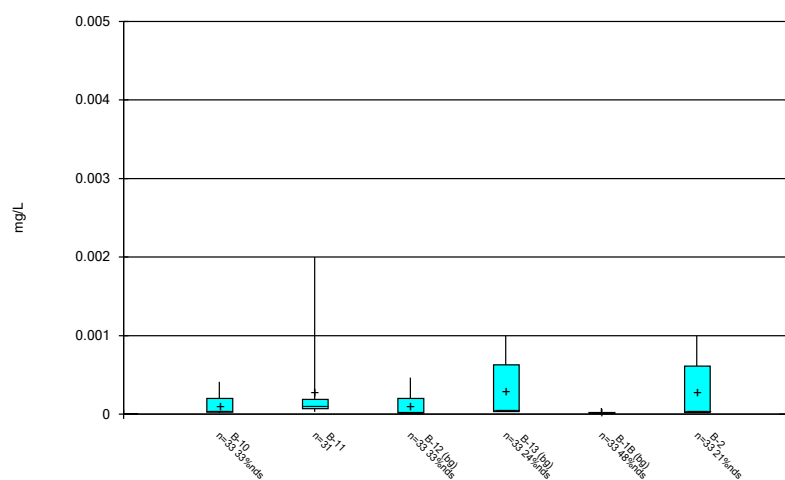
Constituent: Boron, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



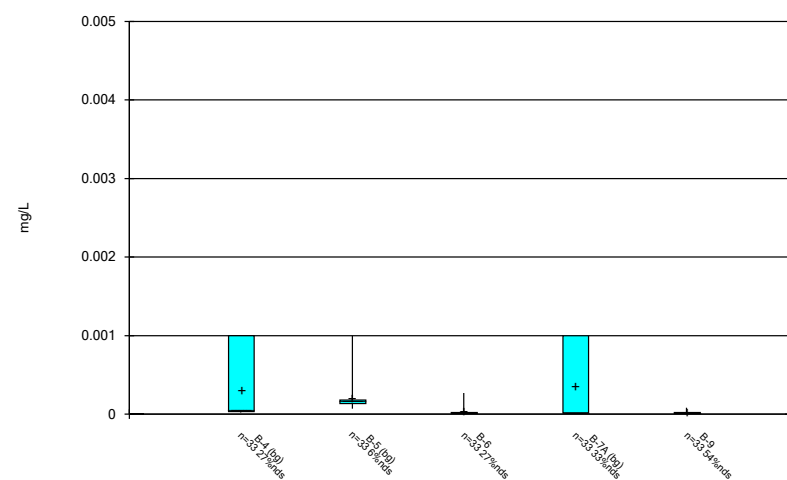
Constituent: Boron, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



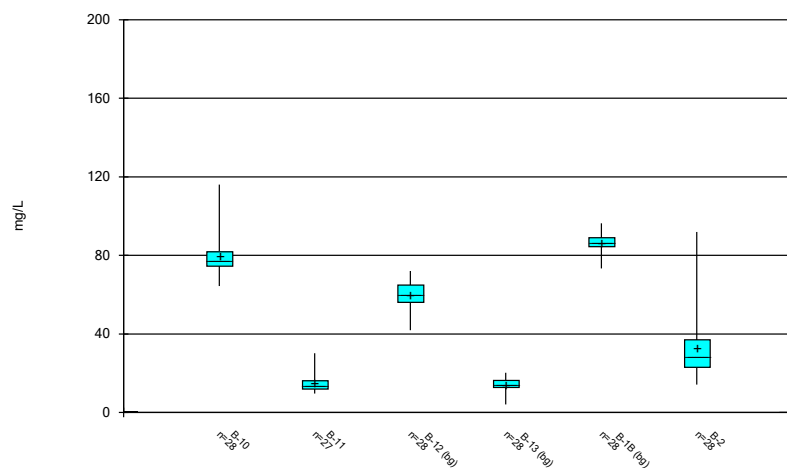
Constituent: Cadmium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



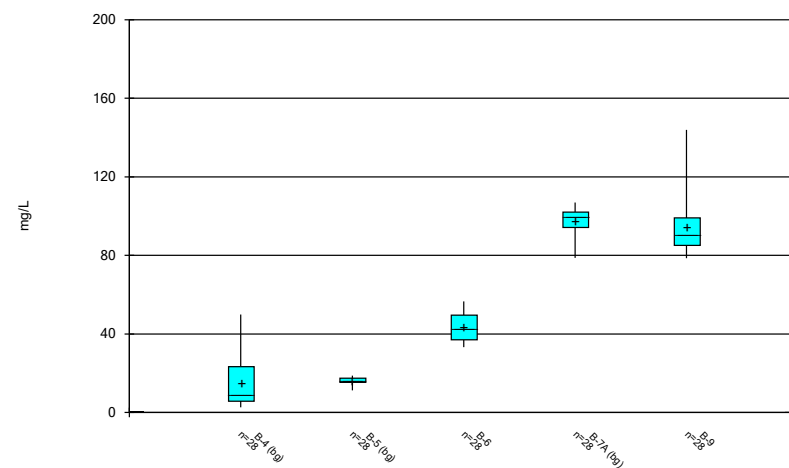
Constituent: Cadmium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



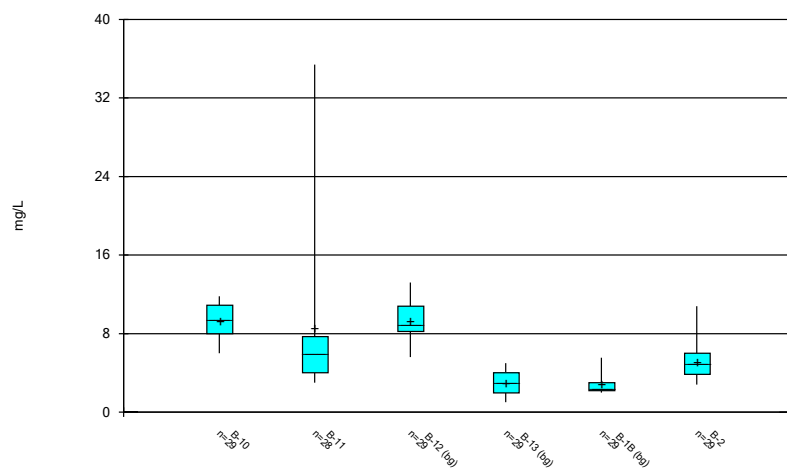
Constituent: Calcium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



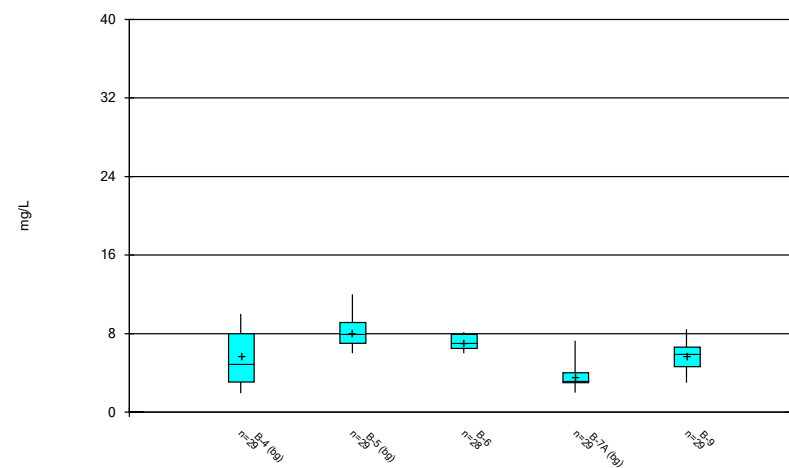
Constituent: Calcium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



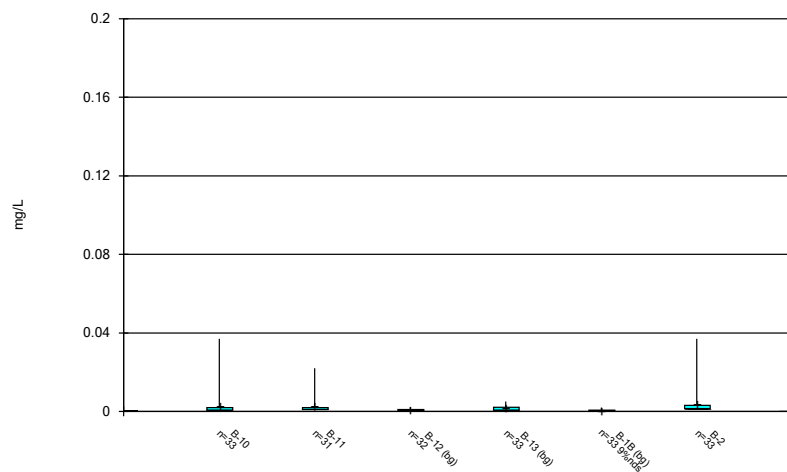
Constituent: Chloride, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



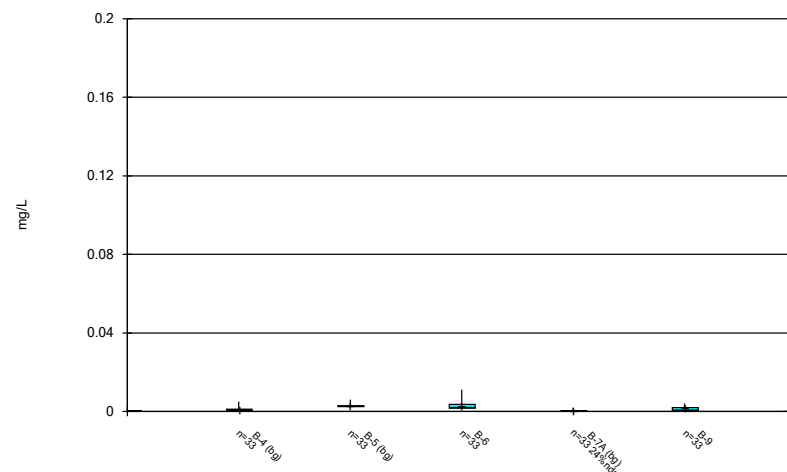
Constituent: Chloride, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



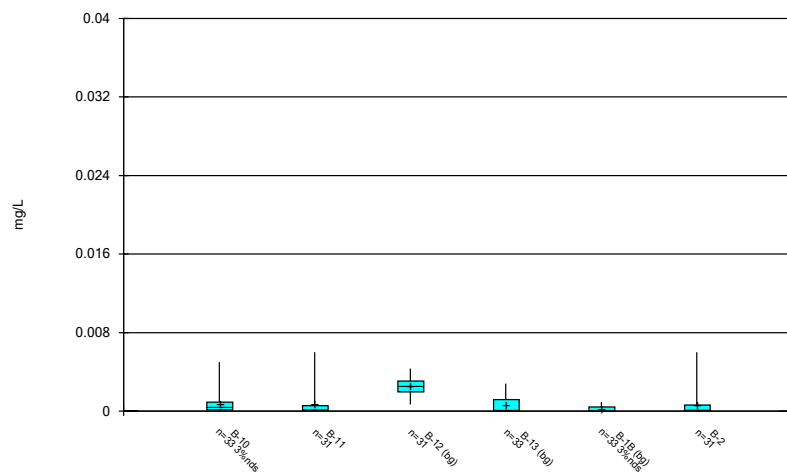
Constituent: Chromium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



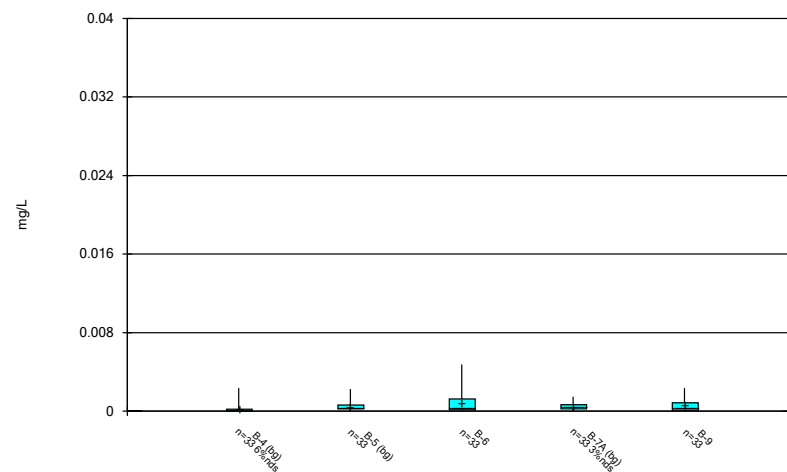
Constituent: Chromium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



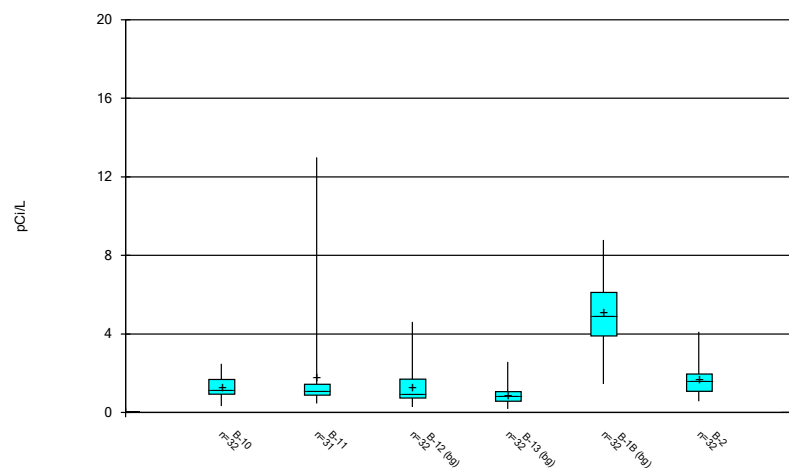
Constituent: Cobalt, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



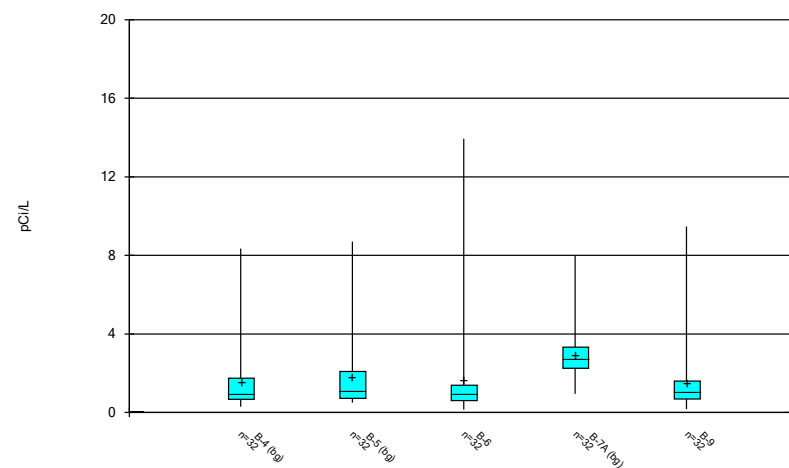
Constituent: Cobalt, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



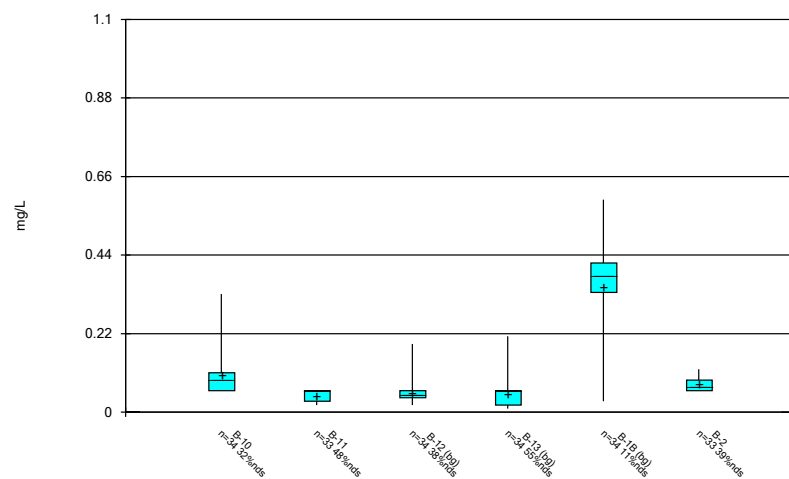
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



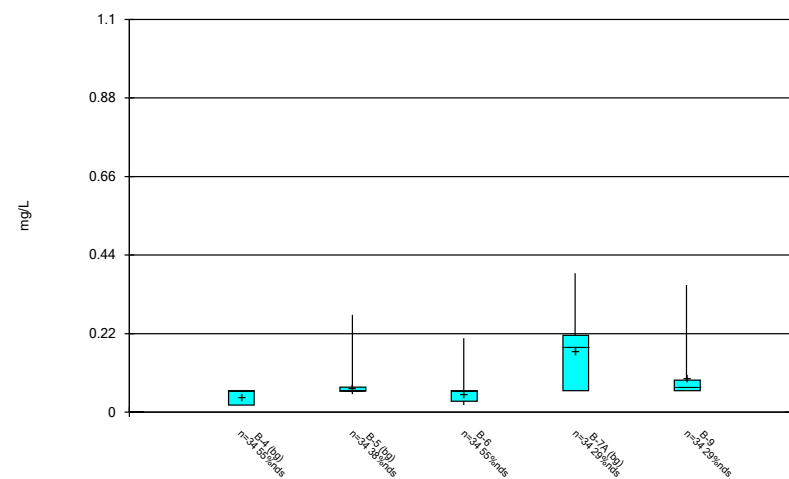
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



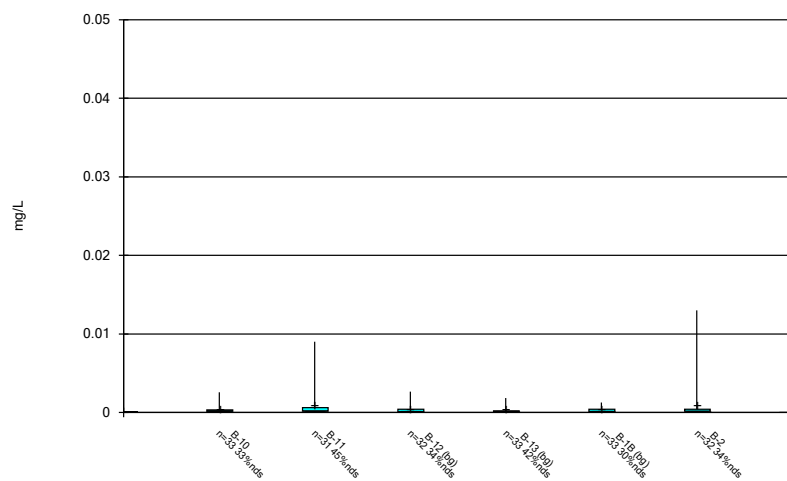
Constituent: Fluoride, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



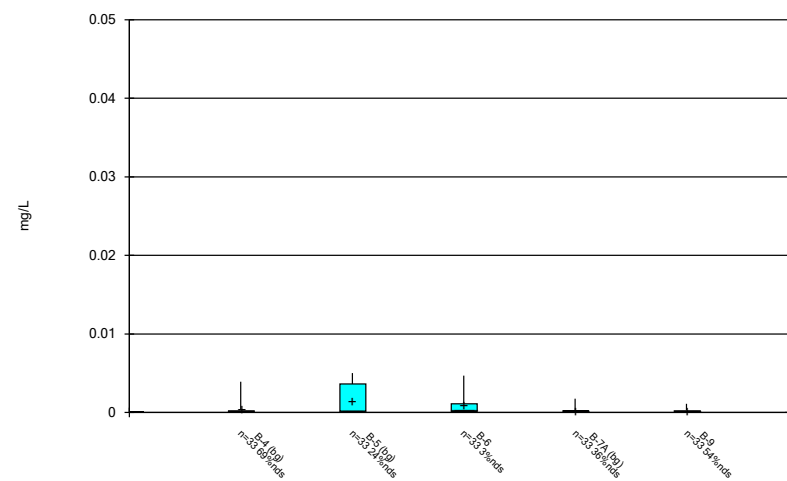
Constituent: Fluoride, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



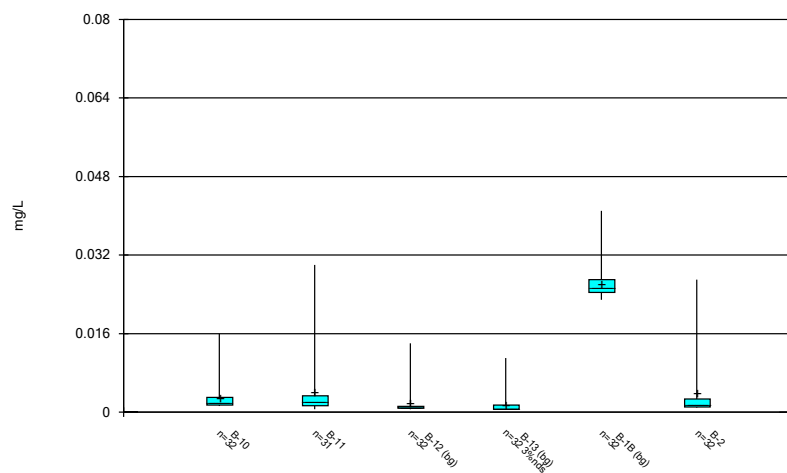
Constituent: Lead, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



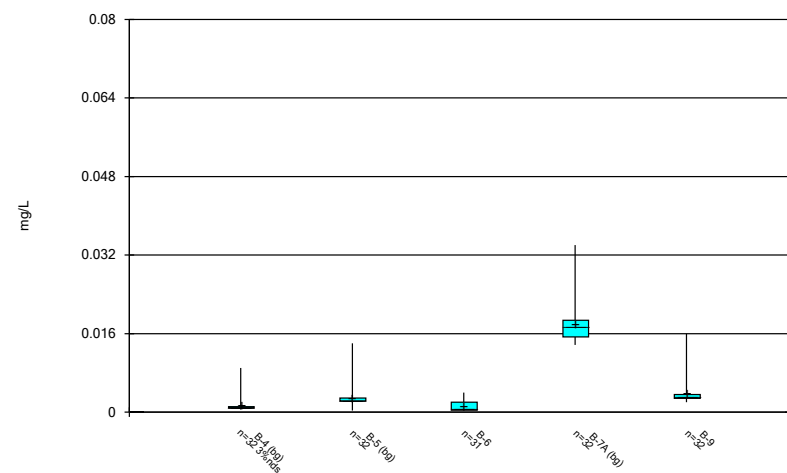
Constituent: Lead, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



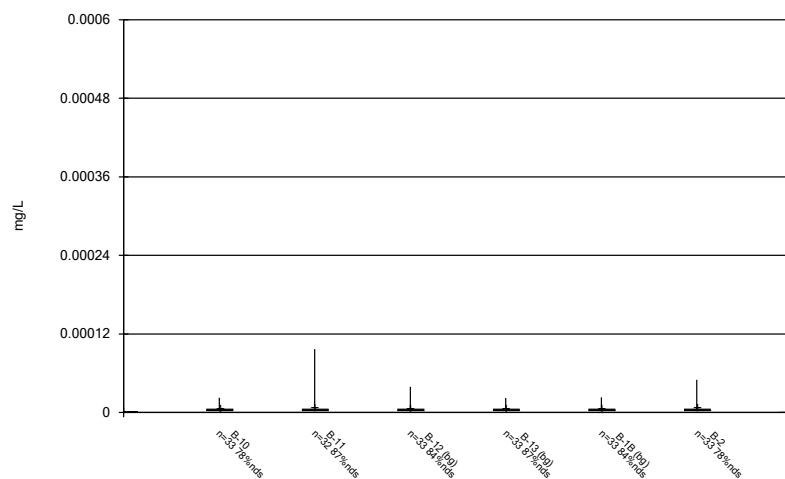
Constituent: Lithium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



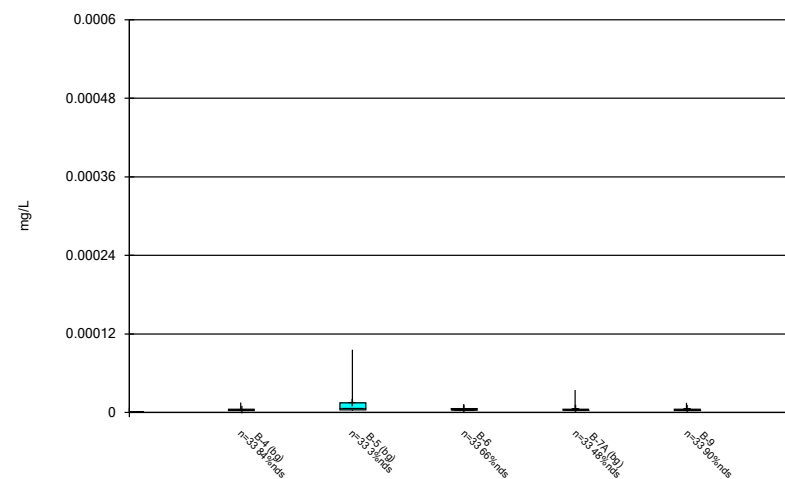
Constituent: Lithium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



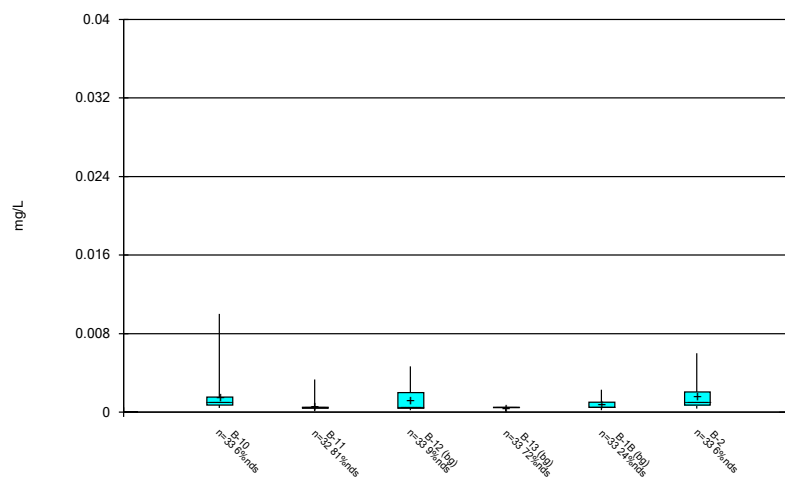
Constituent: Mercury, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



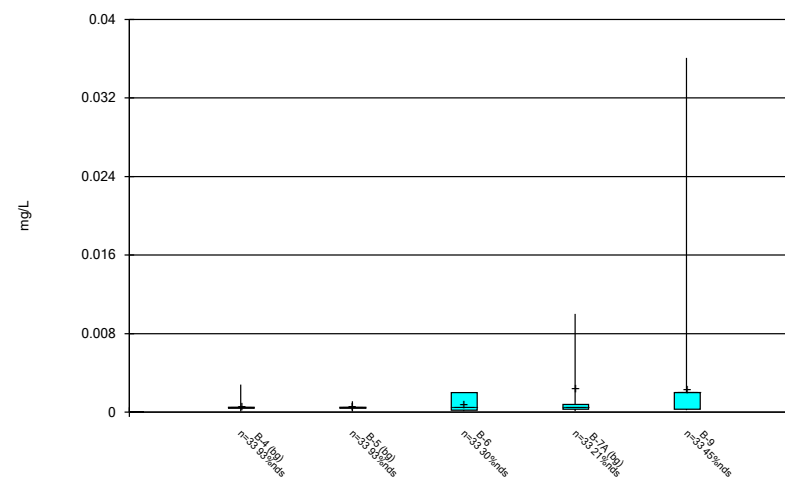
Constituent: Mercury, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



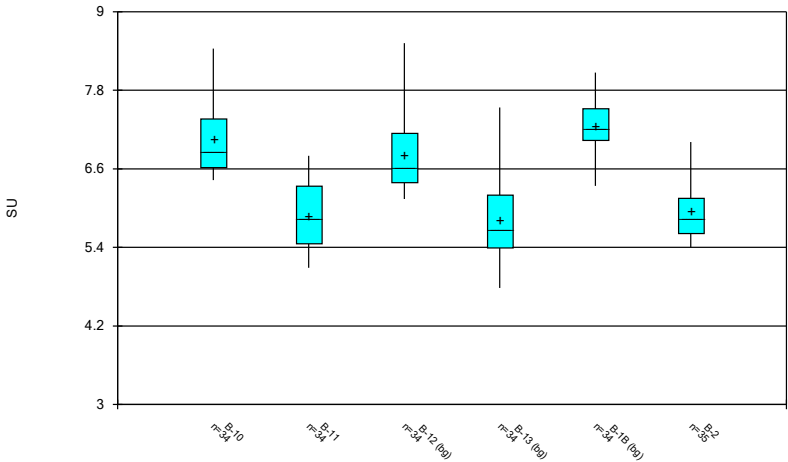
Constituent: Molybdenum, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



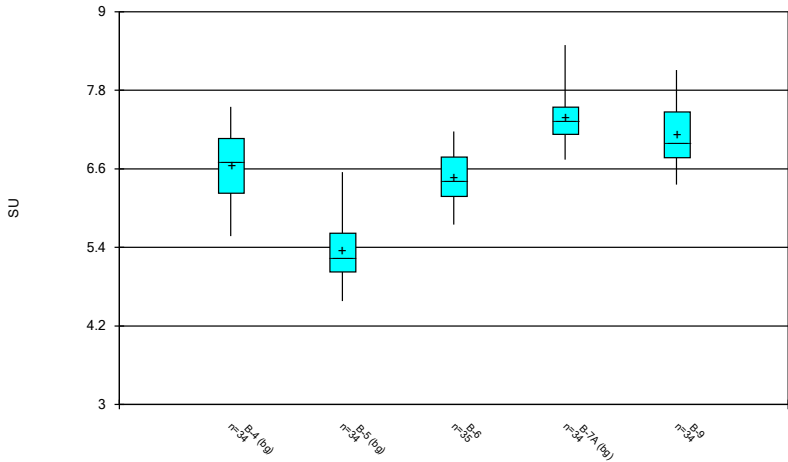
Constituent: Molybdenum, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



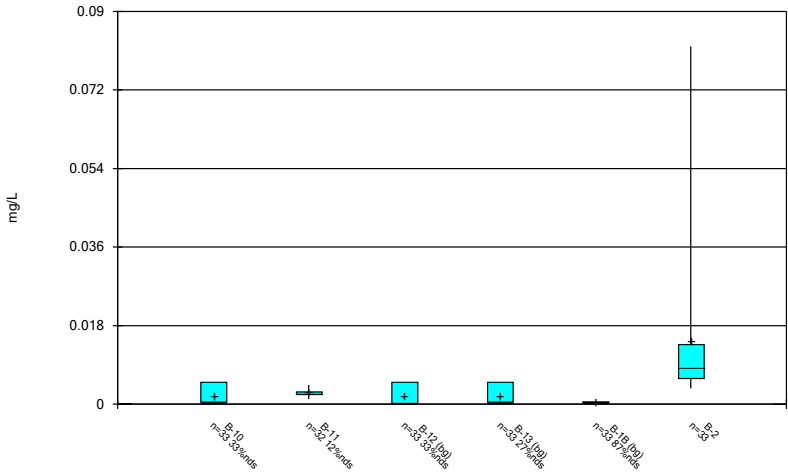
Constituent: pH, field Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



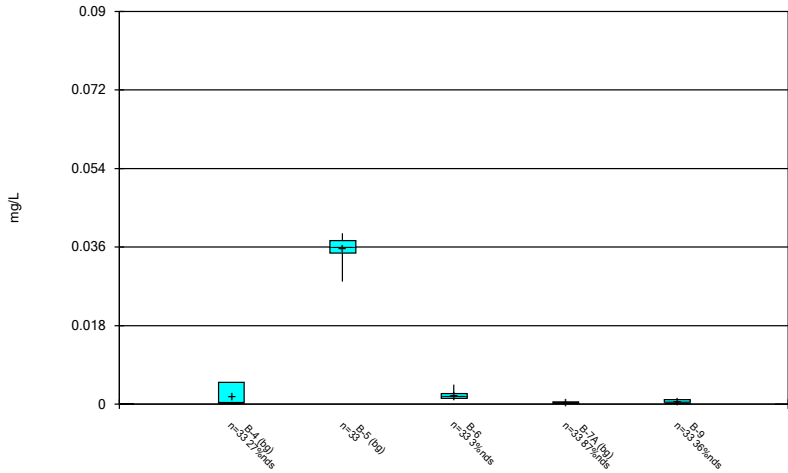
Constituent: pH, field Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



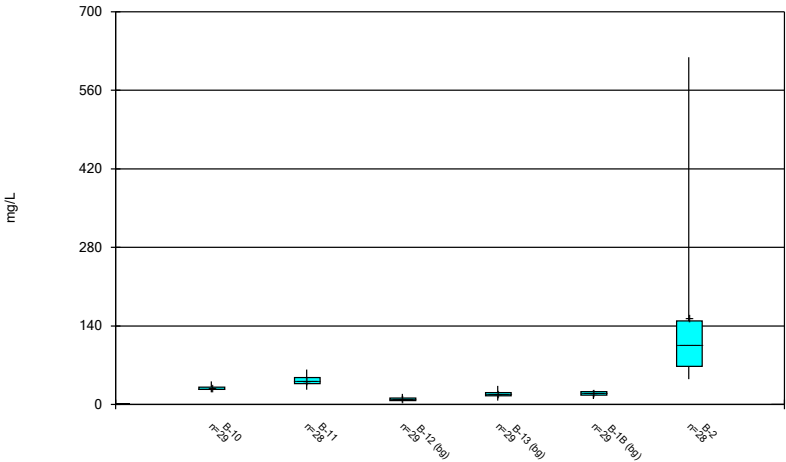
Constituent: Selenium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



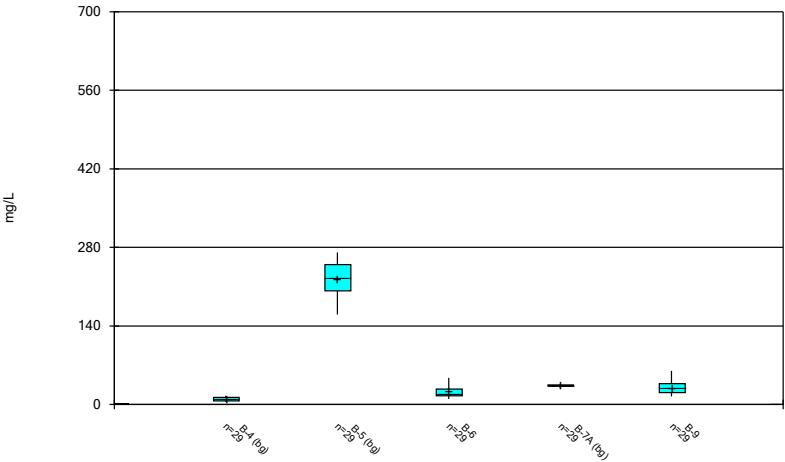
Constituent: Selenium, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



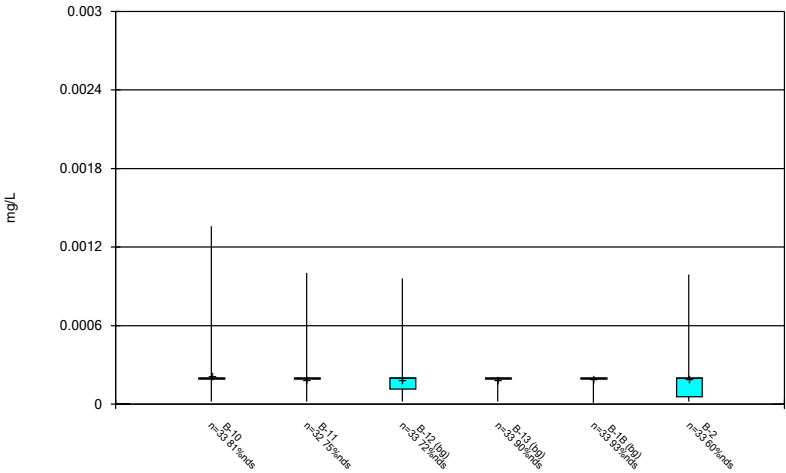
Constituent: Sulfate, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



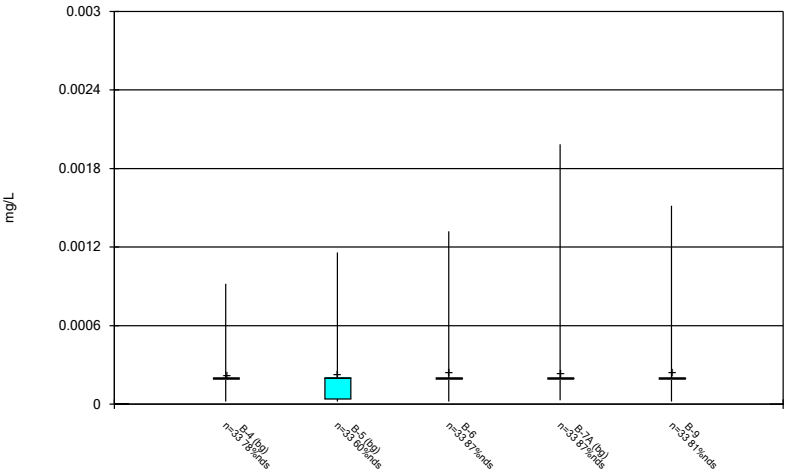
Constituent: Sulfate, total Analysis Run 12/16/2025 11:36 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



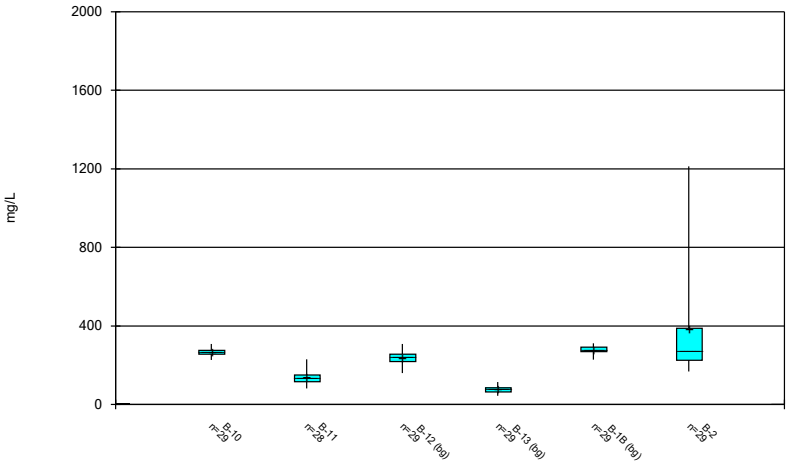
Constituent: Thallium, total Analysis Run 12/16/2025 11:37 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



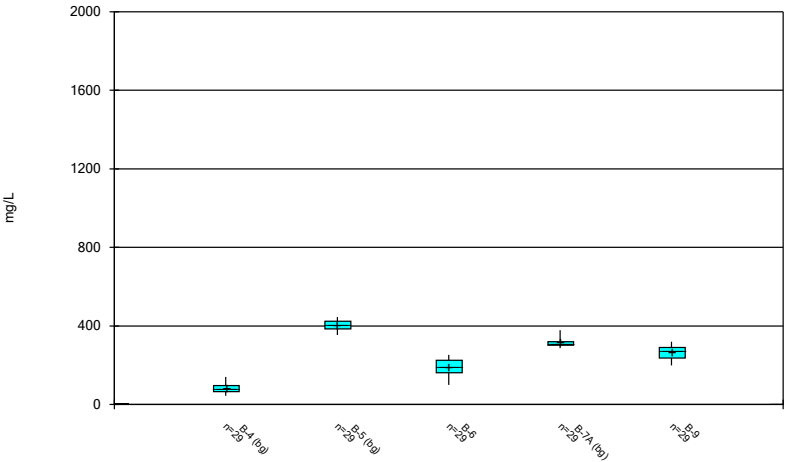
Constituent: Thallium, total Analysis Run 12/16/2025 11:37 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 11:37 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 11:37 AM
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

FIGURE C

Outlier Summary and Tukey's Outlier Test

Outlier Summary

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 8:54 AM

	B-11 Arsenic, total (mg/L)	B-11 Barium, total (mg/L)	B-2 Barium, total (mg/L)	B-11 Beryllium, total (mg/L)	B-2 Beryllium, total (mg/L)	B-11 Cadmium, total (mg/L)	B-6 Chloride, total (mg/L)	B-11 Chromium, total (mg/L)	B-12 Chromium, total (mg/L)	B-11 Cobalt, total (mg/L)
7/19/2016										
9/14/2016	0.032 (o)	0.494 (o)		0.006 (o)		0.004 (o)		0.108 (o)		0.025 (o)
10/7/2016										
11/8/2016			0.543 (o)		0.003 (o)				0.022 (o)	
10/23/2018							12.2 (o)			
6/10/2019										
6/11/2019										
8/27/2019										
6/19/2023										

	B-12 Cobalt, total (mg/L)	B-2 Cobalt, total (mg/L)	B-2 Fluoride, total (mg/L)	B-11 Lead, total (mg/L)	B-12 Lead, total (mg/L)	B-2 Lead, total (mg/L)	B-10 Lithium, total (mg/L)	B-11 Lithium, total (mg/L)	B-12 Lithium, total (mg/L)	B-13 Lithium, total (mg/L)
7/19/2016			0.3361 (J,o)							
9/14/2016		0.015 (o)		0.049 (o)				0.079 (o)		
10/7/2016										
11/8/2016	0.023 (o)	0.031 (o)			0.015 (o)	0.026 (o)				
10/23/2018										
6/10/2019							<0.1 (o)		<0.1 (o)	<0.1 (o)
6/11/2019										
8/27/2019	0.0112 (o)									
6/19/2023										

	B-1B Lithium, total (mg/L)	B-2 Lithium, total (mg/L)	B-4 Lithium, total (mg/L)	B-5 Lithium, total (mg/L)	B-6 Lithium, total (mg/L)	B-7A Lithium, total (mg/L)	B-9 Lithium, total (mg/L)	B-2 Sulfate, total (mg/L)
7/19/2016								
9/14/2016								
10/7/2016					0.016 (o)			
11/8/2016								
10/23/2018								
6/10/2019	<0.1 (o)				<0.1 (o)	<0.1 (o)		
6/11/2019		<0.1 (o)	<0.1 (o)	<0.1 (o)			<0.1 (o)	
8/27/2019								
6/19/2023								292 (o)

Tukey's Outlier Test - Significant Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 8:49 AM

<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)	B-10	Yes	116	NP	NaN	27	79.69	10.12	In(x)	ShapiroWilk
Fluoride, total (mg/L)	B-2	Yes	0.3361	NP	NaN	33	0.08412	0.049	In(x)	ShapiroWilk
Fluoride, total (mg/L)	B-5 (bg)	Yes	0.2728	NP	NaN	33	0.06796	0.03754	In(x)	ShapiroWilk
Fluoride, total (mg/L)	B-9	Yes	0.3556,0.31	NP	NaN	33	0.09615	0.07217	In(x)	ShapiroWilk

Tukey's Outlier Test - All Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 8:49 AM

Constituent	Well	Outlier	Value(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Calcium, total (mg/L)	B-10	Yes	116	NP	NaN	27	79.69	10.12	ln(x)	ShapiroWilk
Calcium, total (mg/L)	B-11	No	n/a	NP	NaN	26	14.74	4.546	ln(x)	ShapiroWilk
Calcium, total (mg/L)	B-12 (bg)	No	n/a	NP	NaN	27	60.32	6.367	ln(x)	ShapiroWilk
Calcium, total (mg/L)	B-13 (bg)	No	n/a	NP	NaN	27	13.98	3.978	x^2	ShapiroWilk
Calcium, total (mg/L)	B-1B (bg)	No	n/a	NP	NaN	27	86.61	4.514	x^3	ShapiroWilk
Calcium, total (mg/L)	B-2	No	n/a	NP	NaN	27	33.51	17.29	ln(x)	ShapiroWilk
Calcium, total (mg/L)	B-4 (bg)	No	n/a	NP	NaN	27	14.64	12.37	ln(x)	ShapiroWilk
Calcium, total (mg/L)	B-5 (bg)	No	n/a	NP	NaN	27	16.15	1.609	x^4	ShapiroWilk
Calcium, total (mg/L)	B-6	No	n/a	NP	NaN	27	43.7	7.109	x^(1/3)	ShapiroWilk
Calcium, total (mg/L)	B-7A (bg)	No	n/a	NP	NaN	27	98.07	6.765	x^6	ShapiroWilk
Calcium, total (mg/L)	B-9	No	n/a	NP	NaN	27	95	15.43	ln(x)	ShapiroWilk
Chloride, total (mg/L)	B-10	No	n/a	NP	NaN	28	9.265	1.737	x^2	ShapiroWilk
Chloride, total (mg/L)	B-11	No	n/a	NP	NaN	27	7.973	7.201	ln(x)	ShapiroWilk
Chloride, total (mg/L)	B-12 (bg)	No	n/a	NP	NaN	28	9.503	1.612	x^(1/3)	ShapiroWilk
Chloride, total (mg/L)	B-13 (bg)	No	n/a	NP	NaN	28	2.93	1.091	sqrt(x)	ShapiroWilk
Chloride, total (mg/L)	B-1B (bg)	No	n/a	NP	NaN	28	2.783	0.9686	ln(x)	ShapiroWilk
Chloride, total (mg/L)	B-2	No	n/a	NP	NaN	28	5.066	1.743	ln(x)	ShapiroWilk
Chloride, total (mg/L)	B-4 (bg)	No	n/a	NP	NaN	28	5.758	2.724	x^(1/3)	ShapiroWilk
Chloride, total (mg/L)	B-5 (bg)	No	n/a	NP	NaN	28	8.104	1.513	sqrt(x)	ShapiroWilk
Chloride, total (mg/L)	B-6	No	n/a	NP	NaN	28	7.309	1.204	ln(x)	ShapiroWilk
Chloride, total (mg/L)	B-7A (bg)	No	n/a	NP	NaN	28	3.604	1.045	ln(x)	ShapiroWilk
Chloride, total (mg/L)	B-9	No	n/a	NP	NaN	28	5.566	1.349	normal	ShapiroWilk
Fluoride, total (mg/L)	B-10	No	n/a	NP	NaN	33	0.1055	0.06691	ln(x)	ShapiroWilk
Fluoride, total (mg/L)	B-11	No	n/a	NP	NaN	32	0.0475	0.01459	x^(1/3)	ShapiroWilk
Fluoride, total (mg/L)	B-12 (bg)	No	n/a	NP	NaN	33	0.05336	0.02759	ln(x)	ShapiroWilk
Fluoride, total (mg/L)	B-13 (bg)	No	n/a	NP	NaN	33	0.04855	0.03505	ln(x)	ShapiroWilk
Fluoride, total (mg/L)	B-1B (bg)	No	n/a	NP	NaN	33	0.3456	0.146	x^2	ShapiroWilk
Fluoride, total (mg/L)	B-2	Yes	0.3361	NP	NaN	33	0.08412	0.049	ln(x)	ShapiroWilk
Fluoride, total (mg/L)	B-4 (bg)	No	n/a	NP	NaN	33	0.04333	0.01882	ln(x)	ShapiroWilk
Fluoride, total (mg/L)	B-5 (bg)	Yes	0.2728	NP	NaN	33	0.06796	0.03754	ln(x)	ShapiroWilk
Fluoride, total (mg/L)	B-6	No	n/a	NP	NaN	33	0.04959	0.03327	ln(x)	ShapiroWilk
Fluoride, total (mg/L)	B-7A (bg)	No	n/a	NP	NaN	33	0.1682	0.08615	normal	ShapiroWilk
Fluoride, total (mg/L)	B-9	Yes	0.3556,0.31	NP	NaN	33	0.09615	0.07217	ln(x)	ShapiroWilk
pH, field (SU)	B-10	No	n/a	NP	NaN	33	7.068	0.5516	ln(x)	ShapiroWilk
pH, field (SU)	B-11	No	n/a	NP	NaN	33	5.881	0.4738	ln(x)	ShapiroWilk
pH, field (SU)	B-12 (bg)	No	n/a	NP	NaN	33	6.842	0.5938	ln(x)	ShapiroWilk
pH, field (SU)	B-13 (bg)	No	n/a	NP	NaN	33	5.83	0.6403	ln(x)	ShapiroWilk
pH, field (SU)	B-1B (bg)	No	n/a	NP	NaN	33	7.241	0.3781	x^2	ShapiroWilk
pH, field (SU)	B-2	No	n/a	NP	NaN	34	5.955	0.4502	ln(x)	ShapiroWilk
pH, field (SU)	B-4 (bg)	No	n/a	NP	NaN	33	6.672	0.507	x^(1/3)	ShapiroWilk
pH, field (SU)	B-5 (bg)	No	n/a	NP	NaN	33	5.355	0.4802	ln(x)	ShapiroWilk
pH, field (SU)	B-6	No	n/a	NP	NaN	34	6.497	0.3559	ln(x)	ShapiroWilk
pH, field (SU)	B-7A (bg)	No	n/a	NP	NaN	33	7.392	0.4274	ln(x)	ShapiroWilk
pH, field (SU)	B-9	No	n/a	NP	NaN	33	7.152	0.4346	ln(x)	ShapiroWilk
Sulfate, total (mg/L)	B-10	No	n/a	NP	NaN	28	29.18	4.177	ln(x)	ShapiroWilk
Sulfate, total (mg/L)	B-11	No	n/a	NP	NaN	27	43.24	8.755	ln(x)	ShapiroWilk
Sulfate, total (mg/L)	B-12 (bg)	No	n/a	NP	NaN	28	9.698	3.468	ln(x)	ShapiroWilk
Sulfate, total (mg/L)	B-13 (bg)	No	n/a	NP	NaN	28	18.83	5.646	normal	ShapiroWilk
Sulfate, total (mg/L)	B-1B (bg)	No	n/a	NP	NaN	28	19.96	4.095	x^3	ShapiroWilk
Sulfate, total (mg/L)	B-2	No	n/a	NP	NaN	28	163.2	153.3	ln(x)	ShapiroWilk
Sulfate, total (mg/L)	B-4 (bg)	No	n/a	NP	NaN	28	9.745	3.388	normal	ShapiroWilk
Sulfate, total (mg/L)	B-5 (bg)	No	n/a	NP	NaN	28	223.5	29.37	x^2	ShapiroWilk
Sulfate, total (mg/L)	B-6	No	n/a	NP	NaN	28	22.51	9.419	ln(x)	ShapiroWilk
Sulfate, total (mg/L)	B-7A (bg)	No	n/a	NP	NaN	28	33.4	1.675	x^6	ShapiroWilk
Sulfate, total (mg/L)	B-9	No	n/a	NP	NaN	28	29.77	10.67	x^(1/3)	ShapiroWilk

Tukey's Outlier Test - All Results

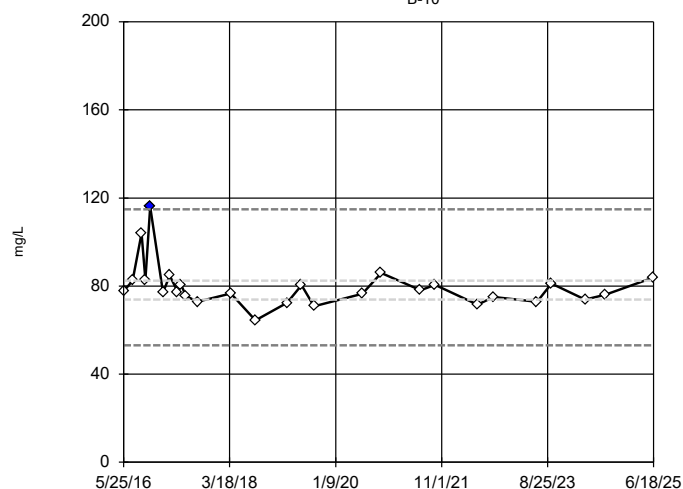
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 8:49 AM

<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>
Total Dissolved Solids [TDS] (mg/L)	B-10	No	n/a	NP	NaN	28	267.1	18.63	sqrt(x)	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-11	No	n/a	NP	NaN	27	137.9	33.09	ln(x)	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-12 (bg)	No	n/a	NP	NaN	28	239	30.09	normal	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-13 (bg)	No	n/a	NP	NaN	28	76.75	15.95	sqrt(x)	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-1B (bg)	No	n/a	NP	NaN	28	278.5	18.35	x^4	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-2	No	n/a	NP	NaN	28	391.5	279.2	ln(x)	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-4 (bg)	No	n/a	NP	NaN	28	81.43	23.39	ln(x)	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-5 (bg)	No	n/a	NP	NaN	28	404.9	23.35	x^5	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-6	No	n/a	NP	NaN	28	192.5	37.87	normal	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-7A (bg)	No	n/a	NP	NaN	28	312.5	16.78	ln(x)	ShapiroWilk
Total Dissolved Solids [TDS] (mg/L)	B-9	No	n/a	NP	NaN	28	262	31.83	x^2	ShapiroWilk

Tukey's Outlier Screening

B-10



n = 27

Outlier is drawn as solid.
Tukey's method selected by user.

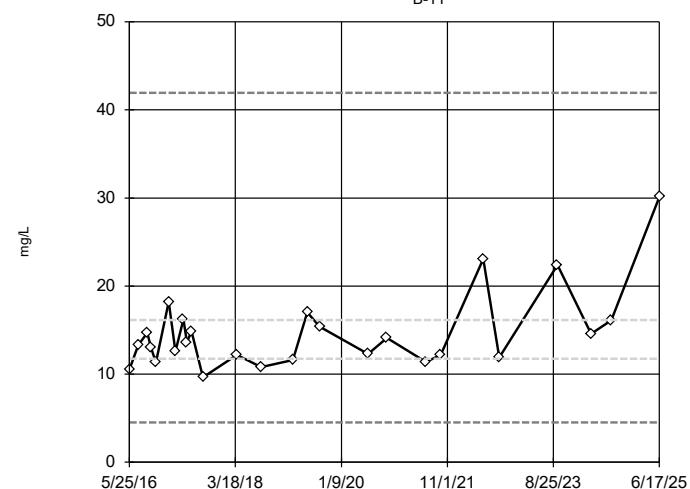
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 114.8, low cutoff = 53.11, based on IQR multiplier of 3.

Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-11



n = 26

No outliers found.
Tukey's method selected by user.

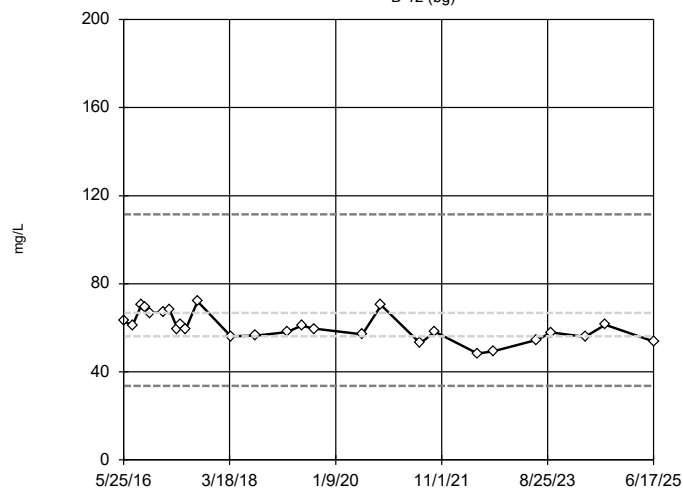
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 41.94, low cutoff = 4.524, based on IQR multiplier of 3.

Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-12 (bg)



n = 27

No outliers found.
Tukey's method selected by user.

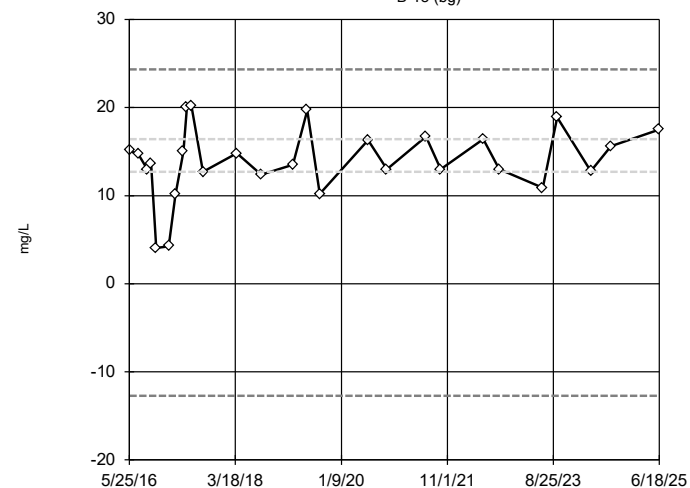
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 111.5, low cutoff = 33.62, based on IQR multiplier of 3.

Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-13 (bg)



n = 27

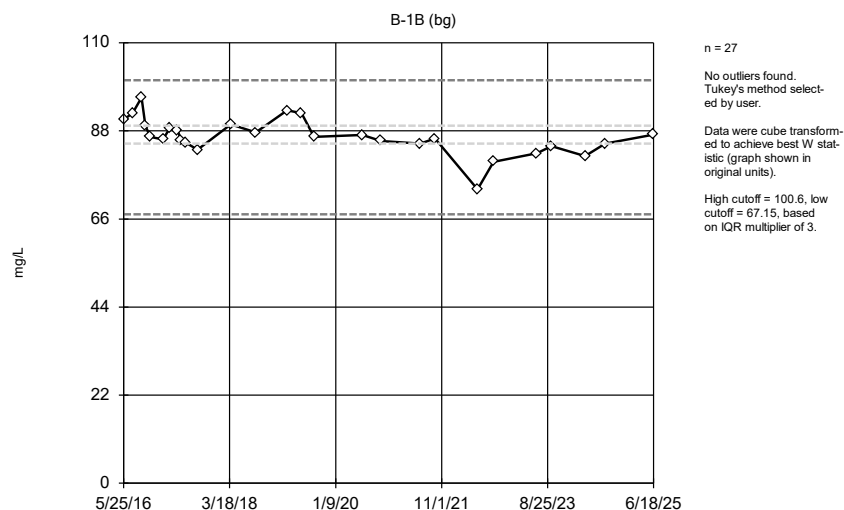
No outliers found.
Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 24.33, low cutoff = -12.72, based on IQR multiplier of 3.

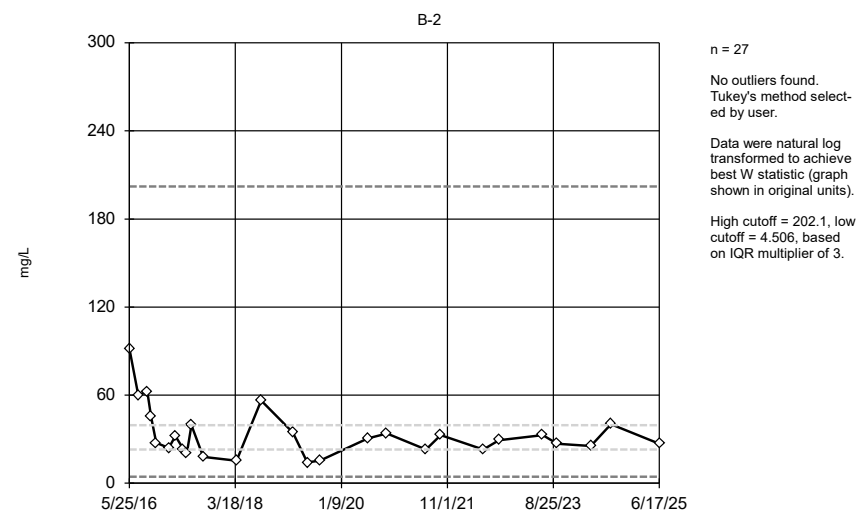
Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



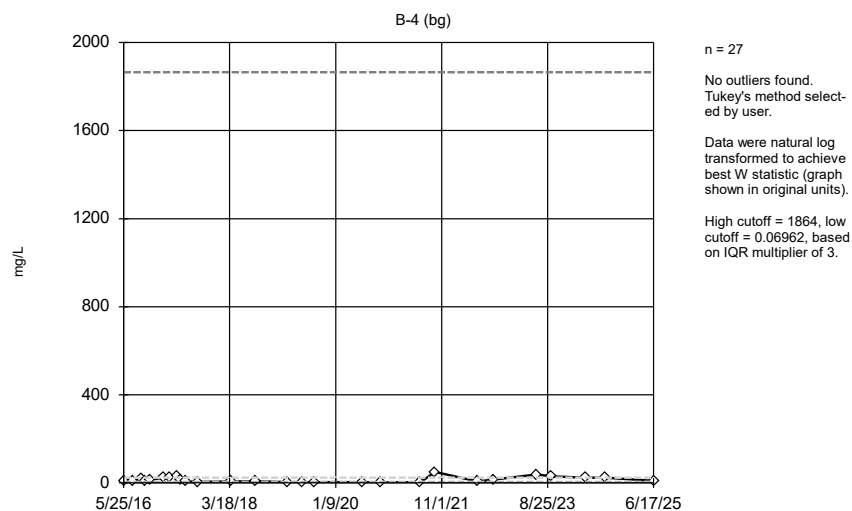
Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



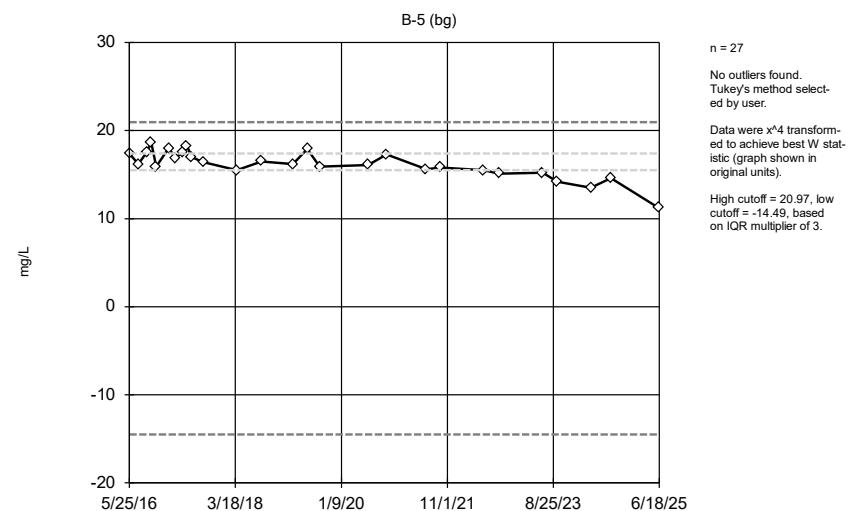
Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

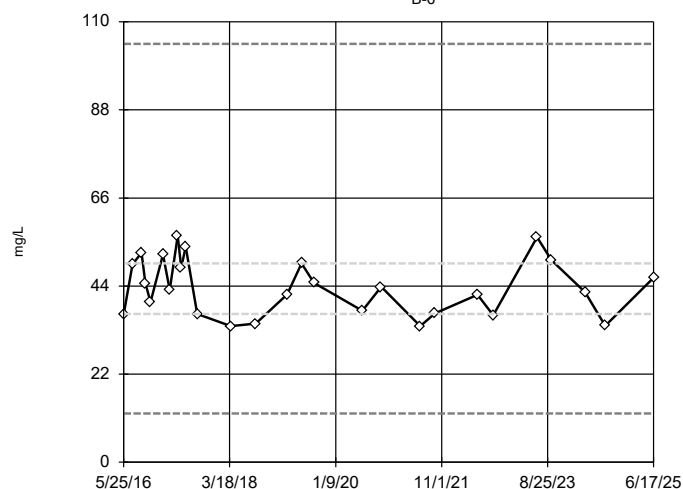
Tukey's Outlier Screening



Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-6



n = 27

No outliers found.
Tukey's method selected by user.

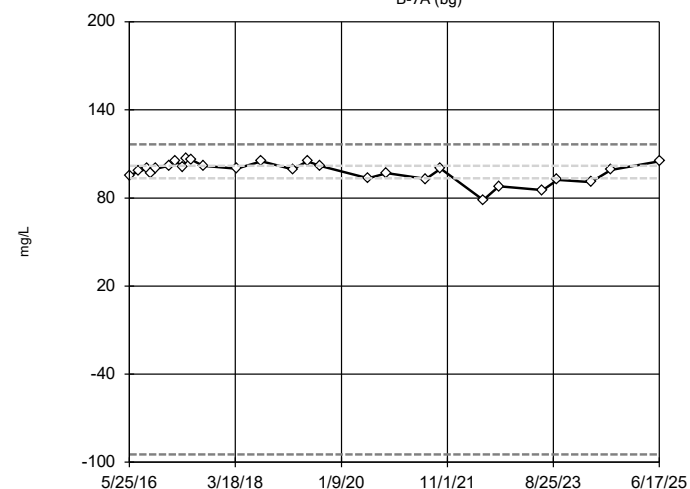
Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 104.5, low cutoff = 12.15, based on IQR multiplier of 3.

Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-7A (bg)



n = 27

No outliers found.
Tukey's method selected by user.

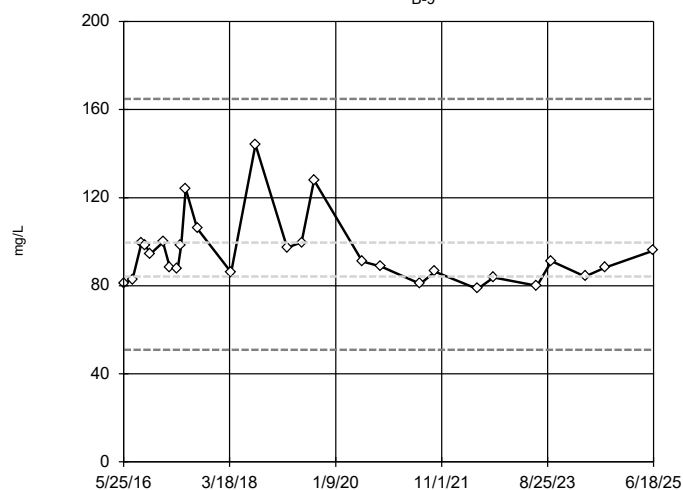
Data were x*6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 116.6, low cutoff = -94.74, based on IQR multiplier of 3.

Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-9



n = 27

No outliers found.
Tukey's method selected by user.

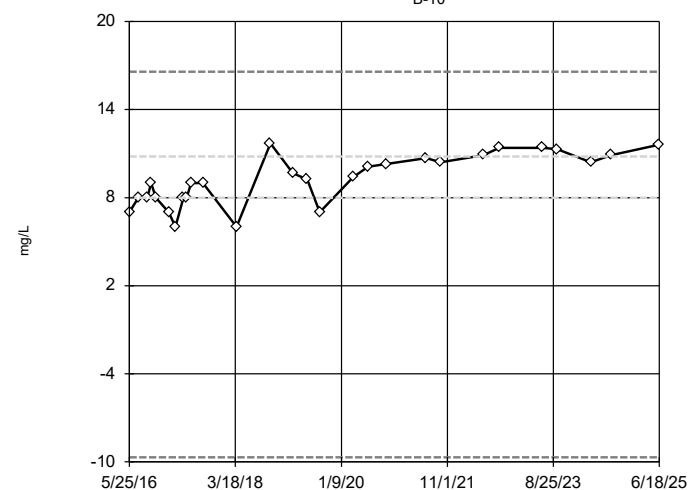
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 164.9, low cutoff = 50.87, based on IQR multiplier of 3.

Constituent: Calcium, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-10



n = 28

No outliers found.
Tukey's method selected by user.

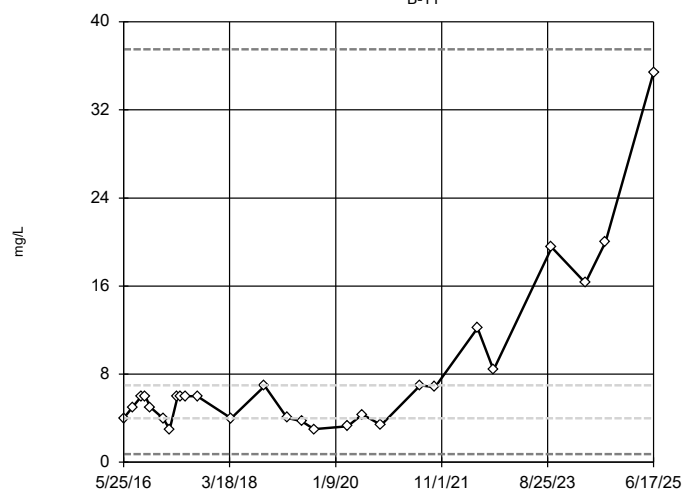
Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 16.57, low cutoff = -9.693, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-11



n = 27

No outliers found.
Tukey's method selected by user.

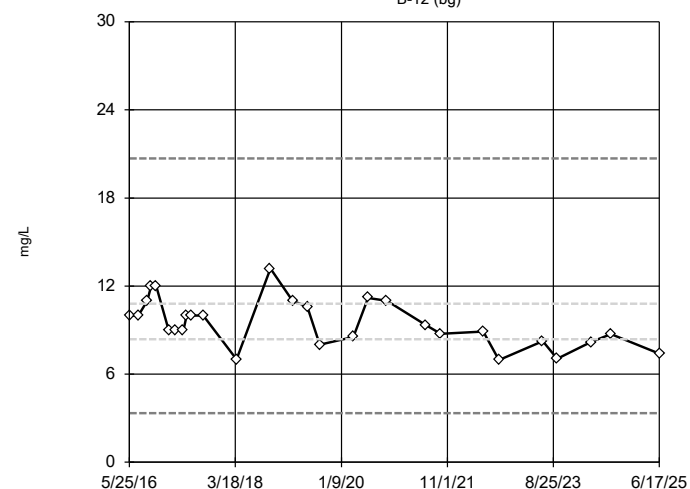
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 37.52, low cutoff = 0.7464, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-12 (bg)



n = 28

No outliers found.
Tukey's method selected by user.

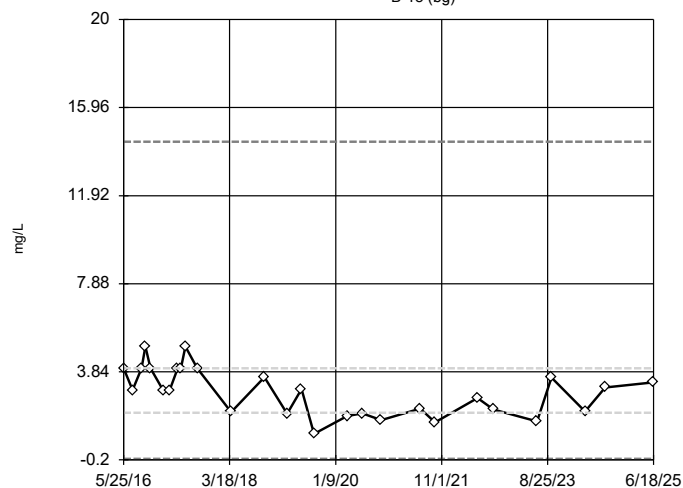
Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 20.7, low cutoff = 3.353, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-13 (bg)



n = 28

No outliers found.
Tukey's method selected by user.

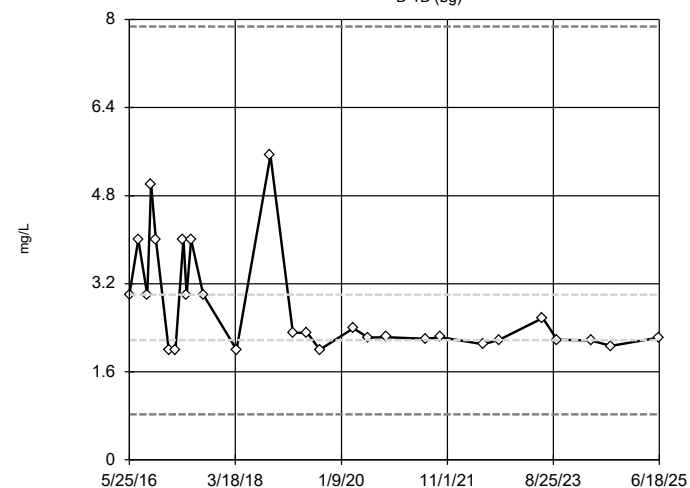
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 14.4, low cutoff = -0.1545, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-1B (bg)



n = 28

No outliers found.
Tukey's method selected by user.

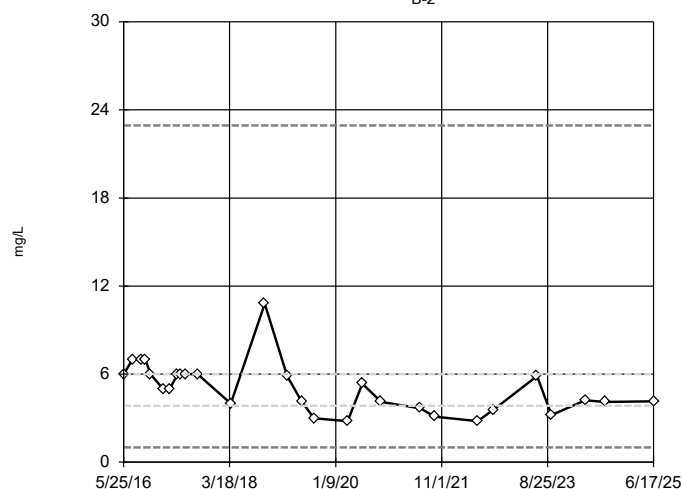
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 7.872, low cutoff = 0.8288, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-2



n = 28

No outliers found.
Tukey's method selected by user.

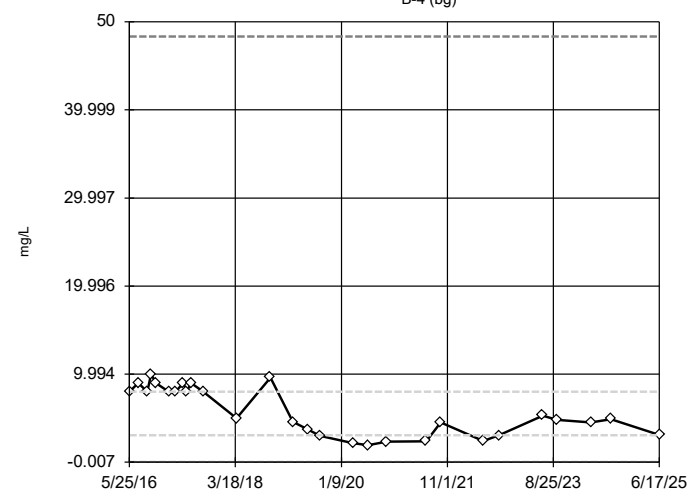
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 22.95, low cutoff = 1.003, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-4 (bg)



n = 28

No outliers found.
Tukey's method selected by user.

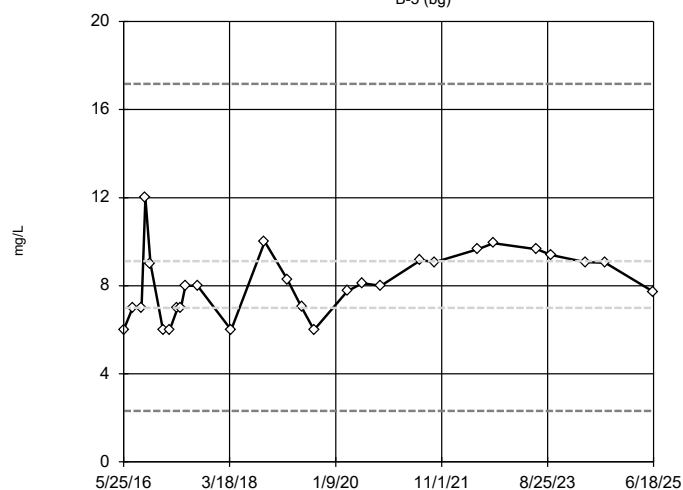
Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 48.32, low cutoff = -0.006821, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-5 (bg)



n = 28

No outliers found.
Tukey's method selected by user.

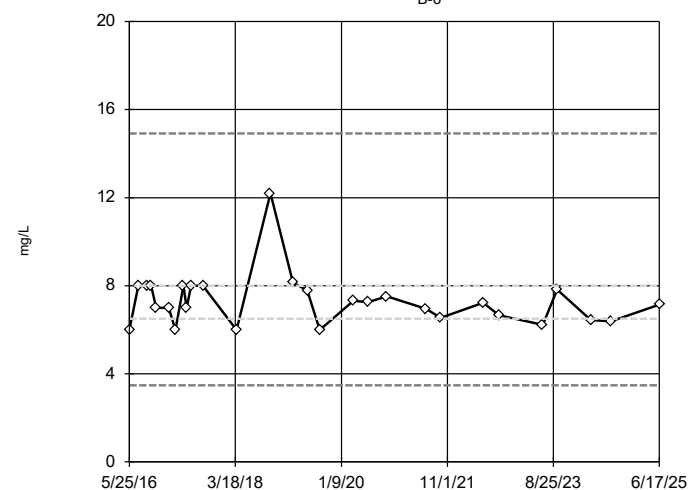
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 17.16, low cutoff = 2.32, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-6



n = 28

No outliers found.
Tukey's method selected by user.

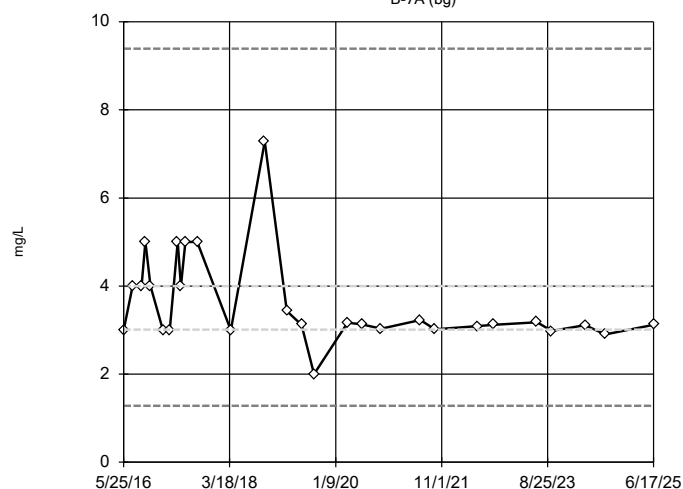
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 14.92, low cutoff = 3.486, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-7A (bg)



n = 28

No outliers found.
Tukey's method selected by user.

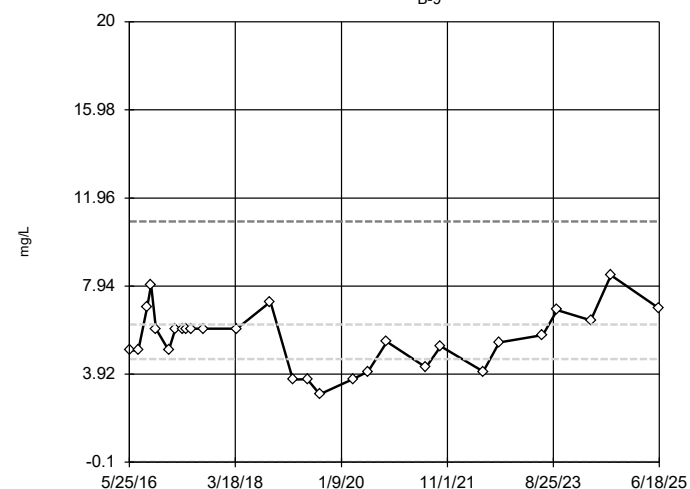
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 9.387, low cutoff = 1.283, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-9



n = 28

No outliers found.
Tukey's method selected by user.

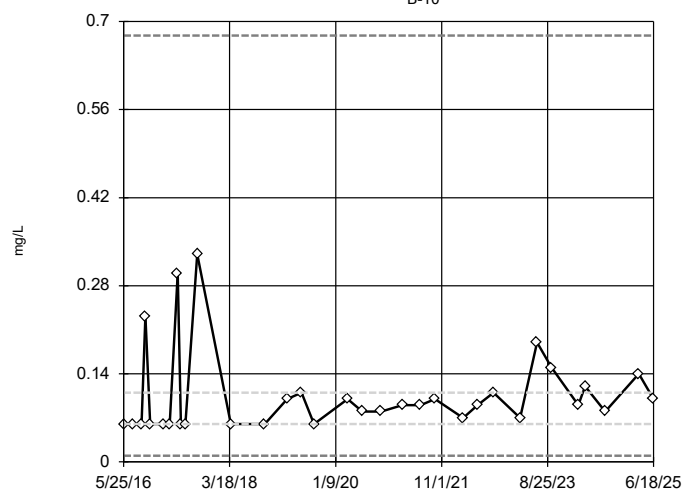
Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 10.9, low cutoff = -0.095, based on IQR multiplier of 3.

Constituent: Chloride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-10



n = 33

No outliers found.
Tukey's method selected by user.

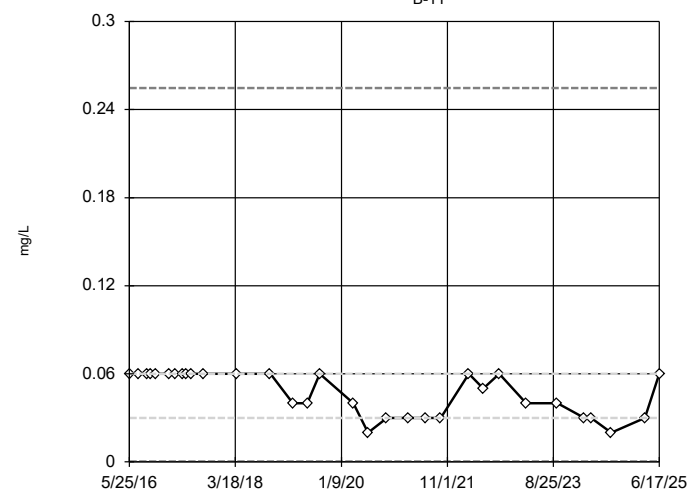
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.6778, low cutoff = 0.009737, based on IQR multiplier of 3.

Constituent: Fluoride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-11



n = 32

No outliers found.
Tukey's method selected by user.

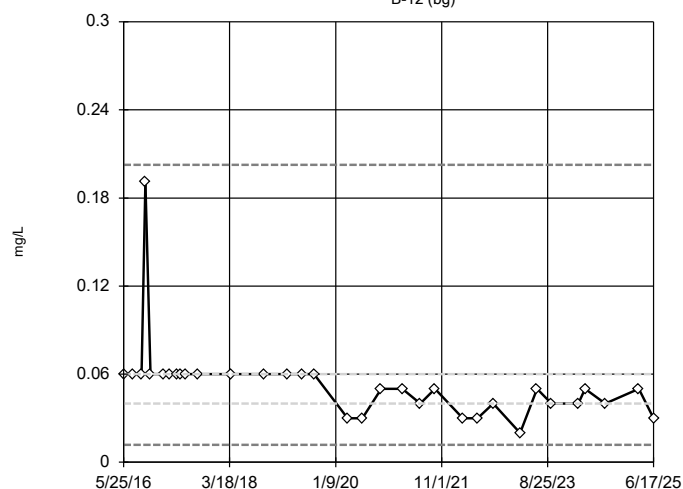
Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2546, low cutoff = 0.0003205, based on IQR multiplier of 3.

Constituent: Fluoride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-12 (bg)



n = 33

No outliers found.
Tukey's method selected by user.

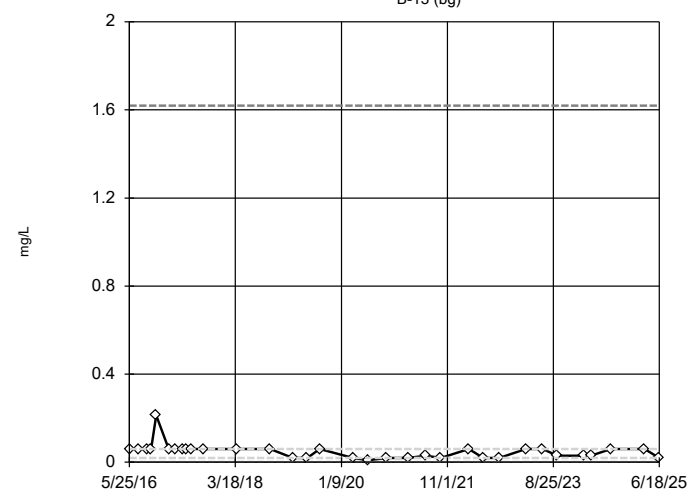
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2025,
low cutoff = 0.01185,
based on IQR multiplier of 3.

Constituent: Fluoride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-13 (bg)



n = 33

No outliers found.
Tukey's method selected by user.

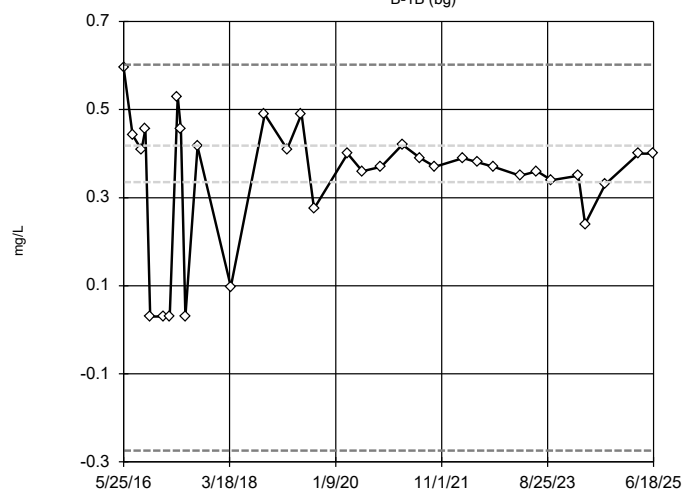
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1.62, low cutoff = 0.0007407, based on IQR multiplier of 3.

Constituent: Fluoride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-1B (bg)



n = 33

No outliers found.
Tukey's method selected by user.

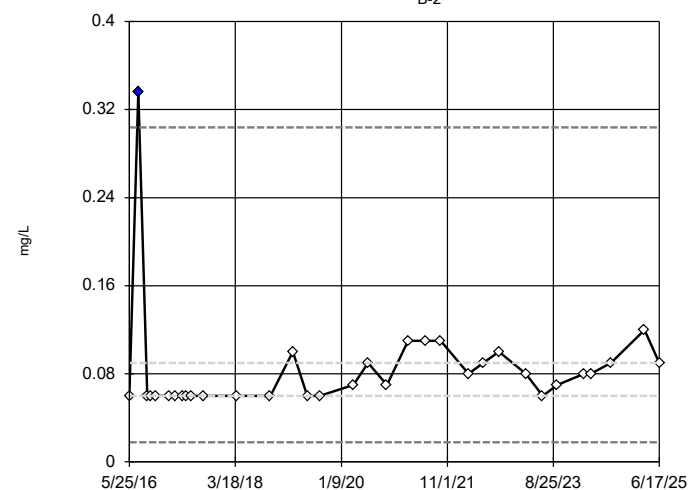
Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.6018,
low cutoff = -0.2742,
based on IQR multiplier of 3.

Constituent: Fluoride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-2



n = 33

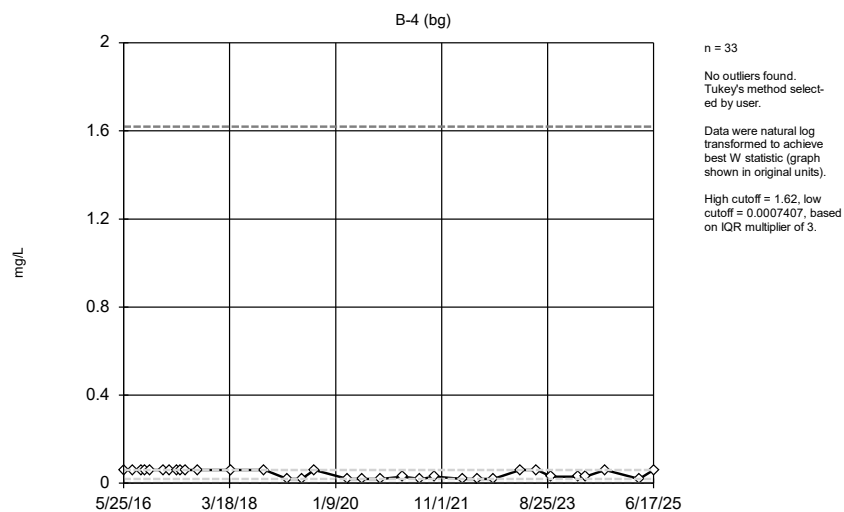
Outlier is drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3038,
low cutoff = 0.01778,
based on IQR multiplier of 3.

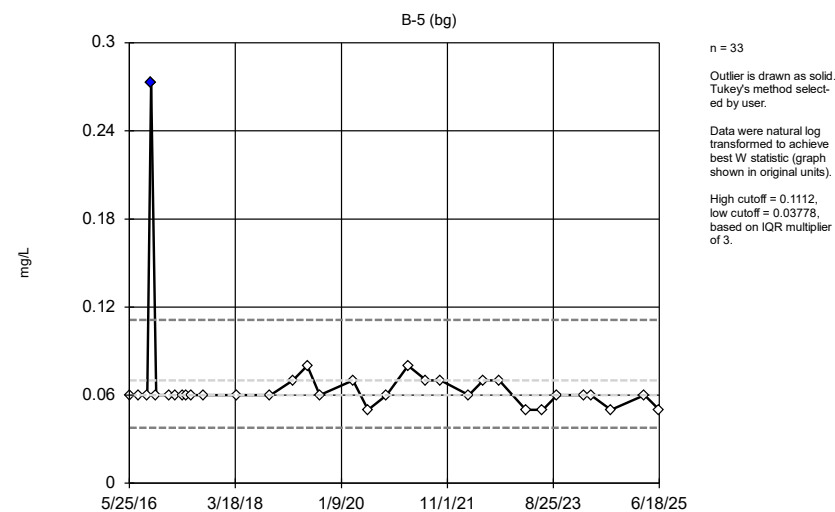
Constituent: Fluoride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



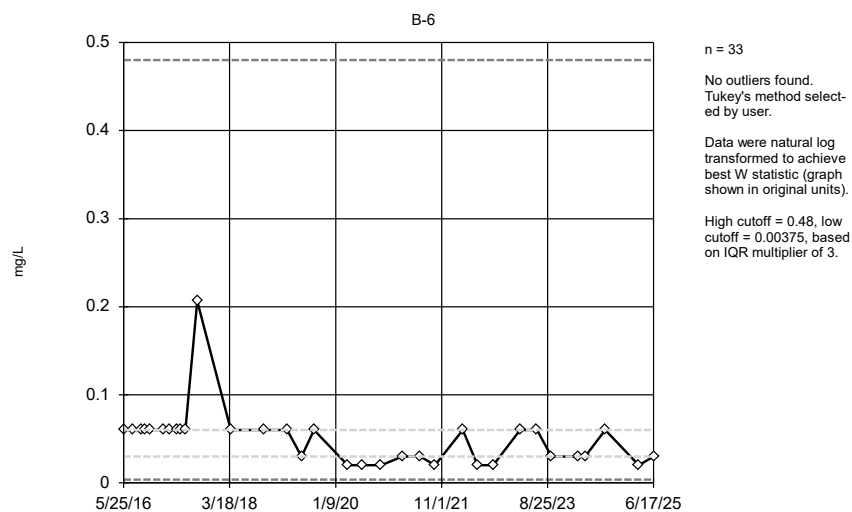
Constituent: Fluoride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



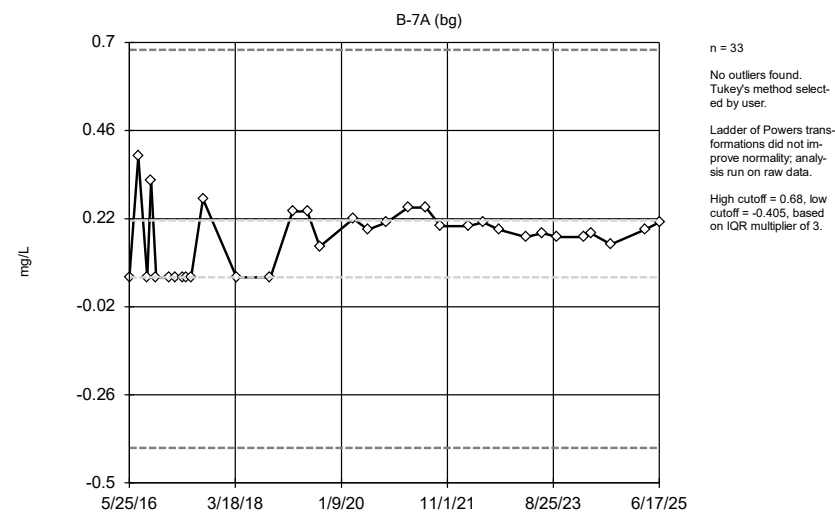
Constituent: Fluoride, total Analysis Run 12/16/2025 8:47 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



Constituent: Fluoride, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

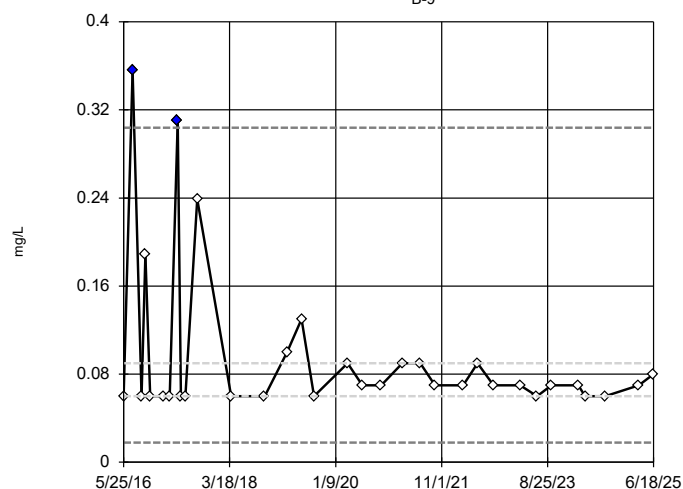
Tukey's Outlier Screening



Constituent: Fluoride, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-9



n = 33

Outliers are drawn as solid.
Tukey's method selected by user.

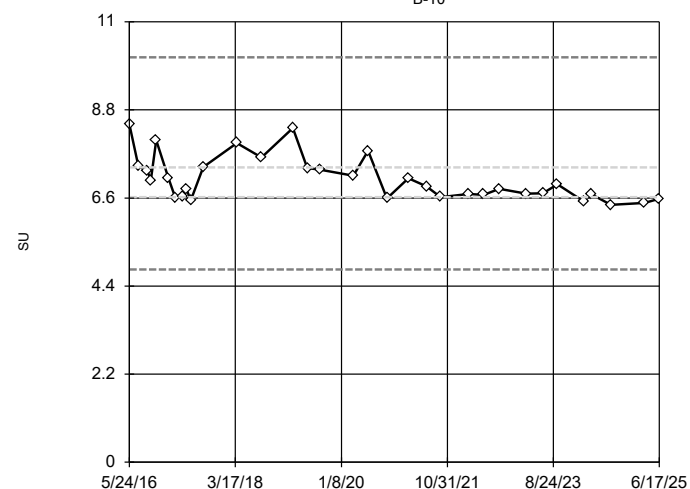
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3038,
low cutoff = 0.01778,
based on IQR multiplier of 3.

Constituent: Fluoride, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-10



n = 33

No outliers found.
Tukey's method selected by user.

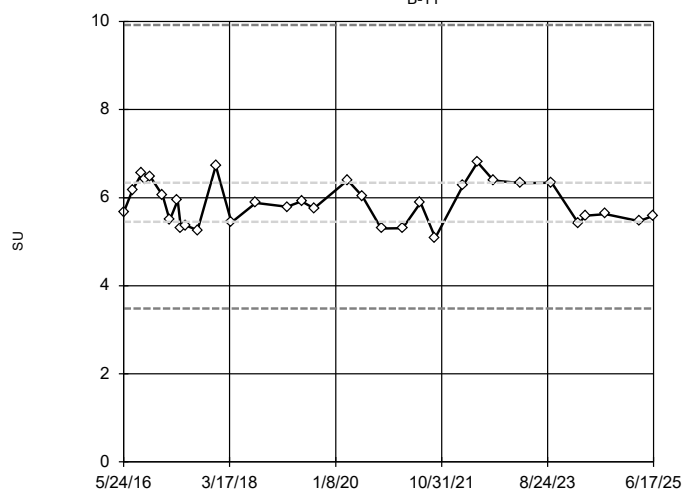
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 10.11, low cutoff = 4.817, based on IQR multiplier of 3.

Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-11



n = 33

No outliers found.
Tukey's method selected by user.

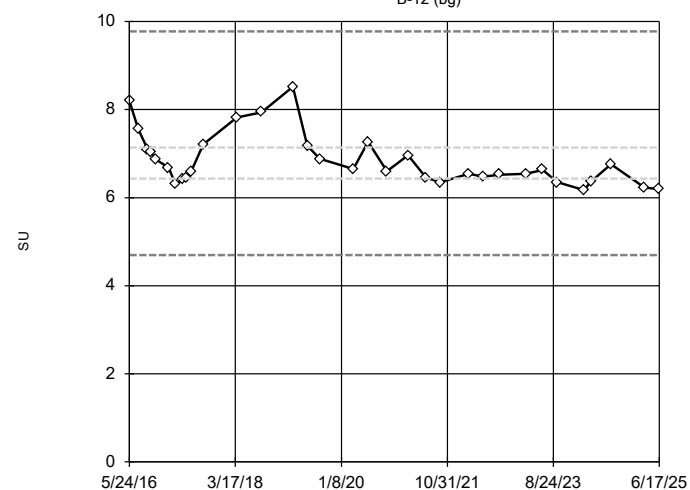
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 9.922, low cutoff = 3.483, based on IQR multiplier of 3.

Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-12 (bg)



n = 33

No outliers found.
Tukey's method selected by user.

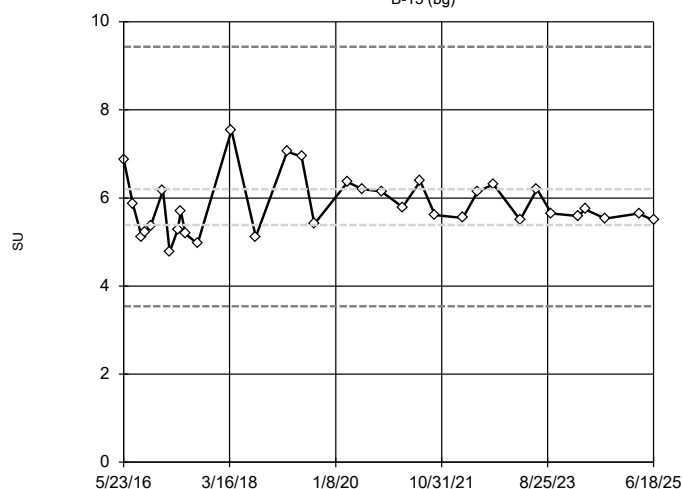
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 9.775, low cutoff = 4.696, based on IQR multiplier of 3.

Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

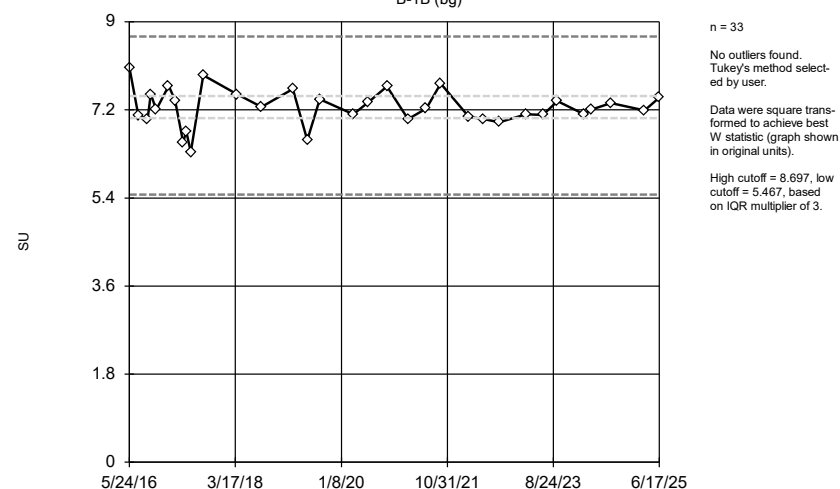
B-13 (bg)



Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

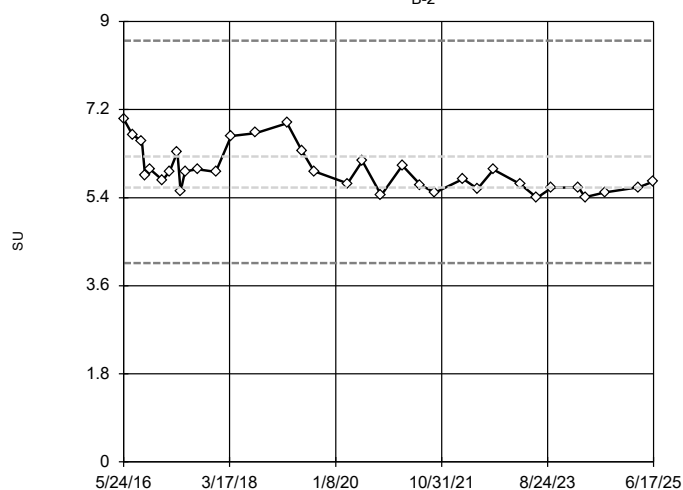
B-1B (bg)



Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

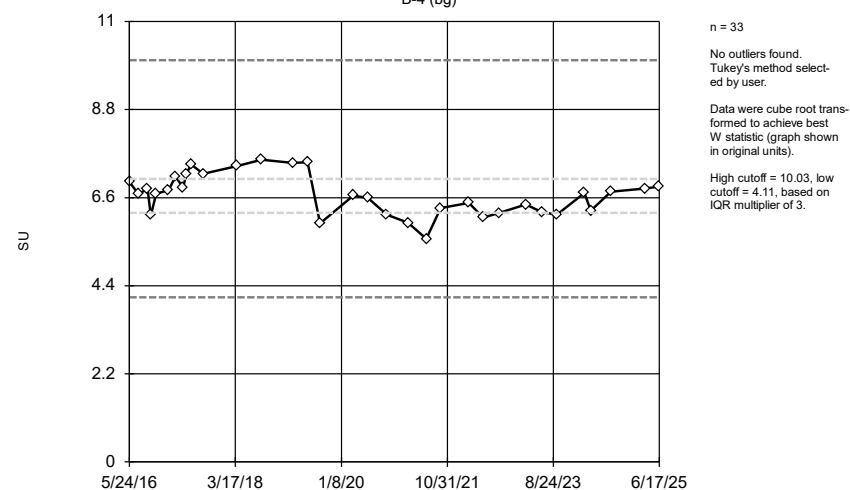
B-2



Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

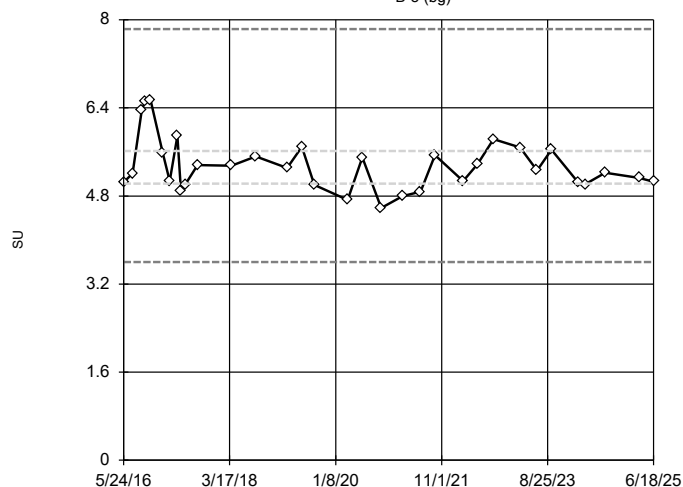
B-4 (bg)



Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

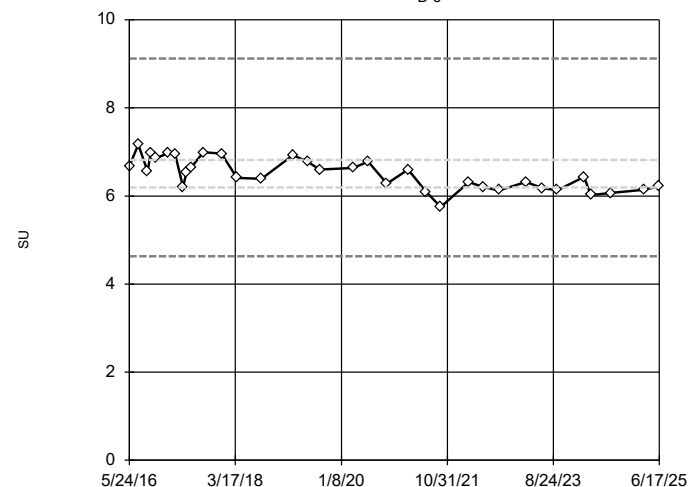
B-5 (bg)



Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

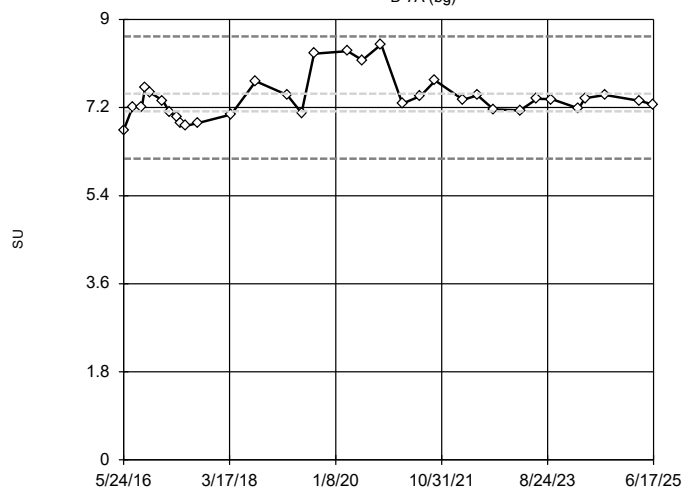
B-6



Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

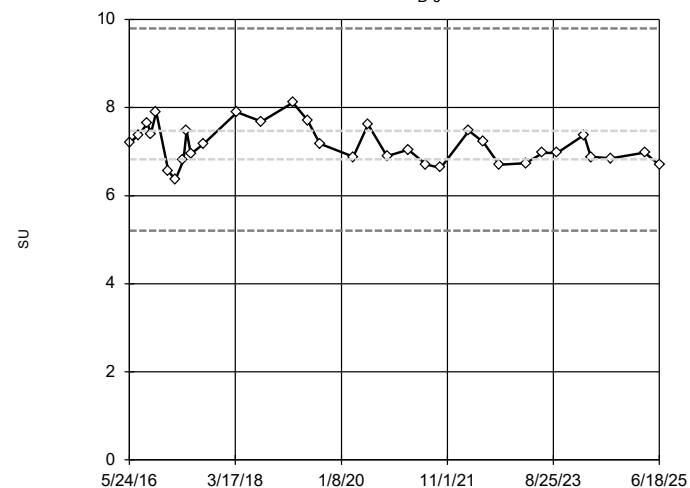
B-7A (bg)



Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

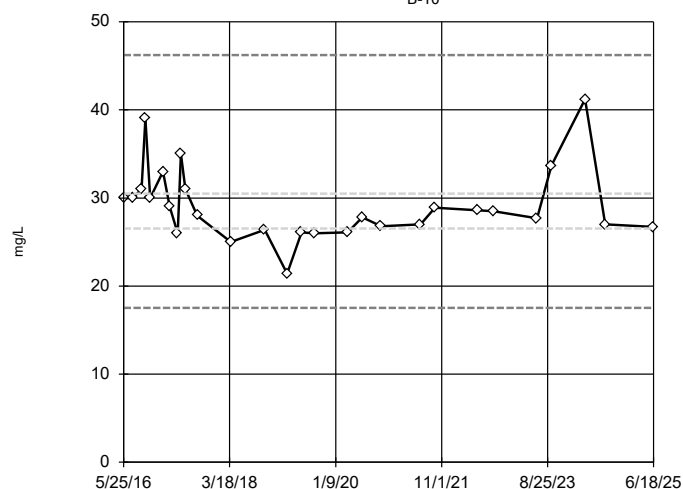
B-9



Constituent: pH, field Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-10



n = 28

No outliers found.
Tukey's method selected by user.

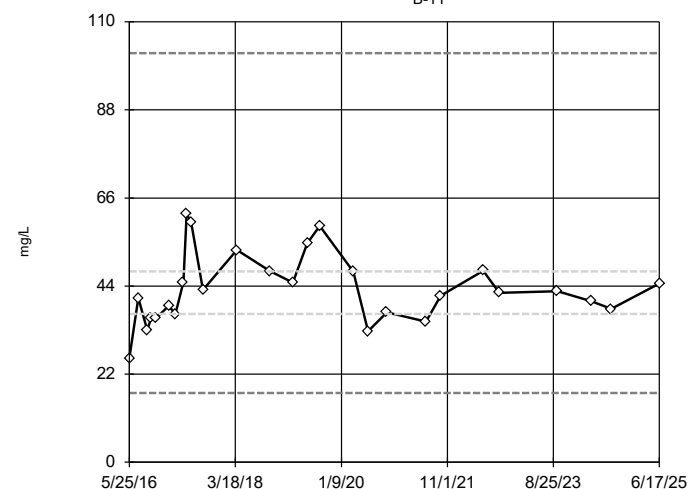
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 46.22, low cutoff = 17.52, based on IQR multiplier of 3.

Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-11



n = 27

No outliers found.
Tukey's method selected by user.

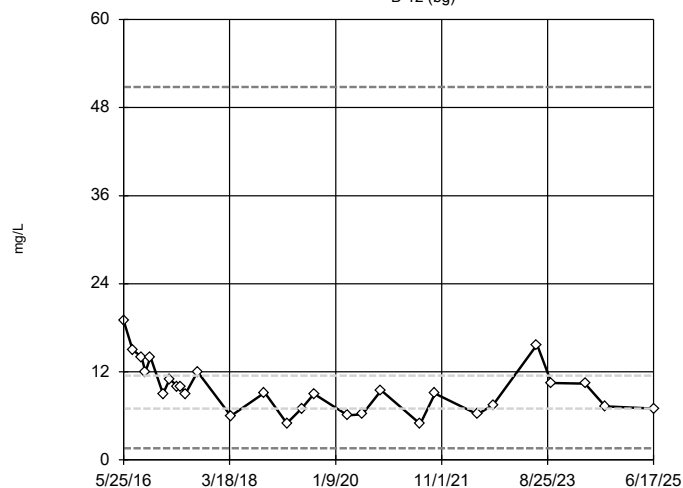
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 102.2, low cutoff = 17.27, based on IQR multiplier of 3.

Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-12 (bg)



n = 28

No outliers found.
Tukey's method selected by user.

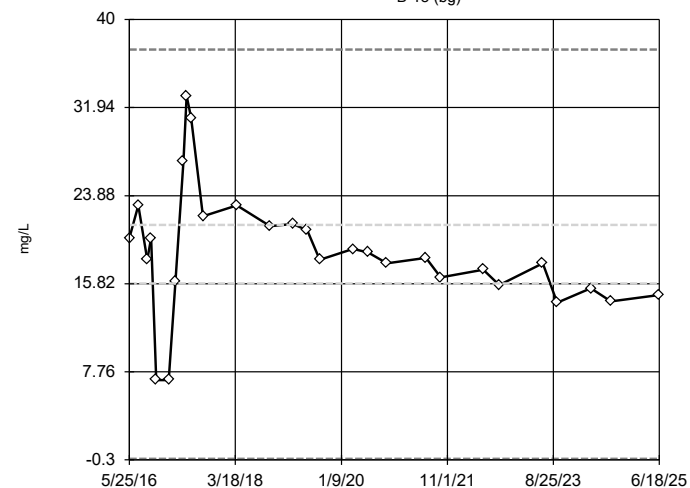
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 50.8, low cutoff = 1.583, based on IQR multiplier of 3.

Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-13 (bg)



n = 28

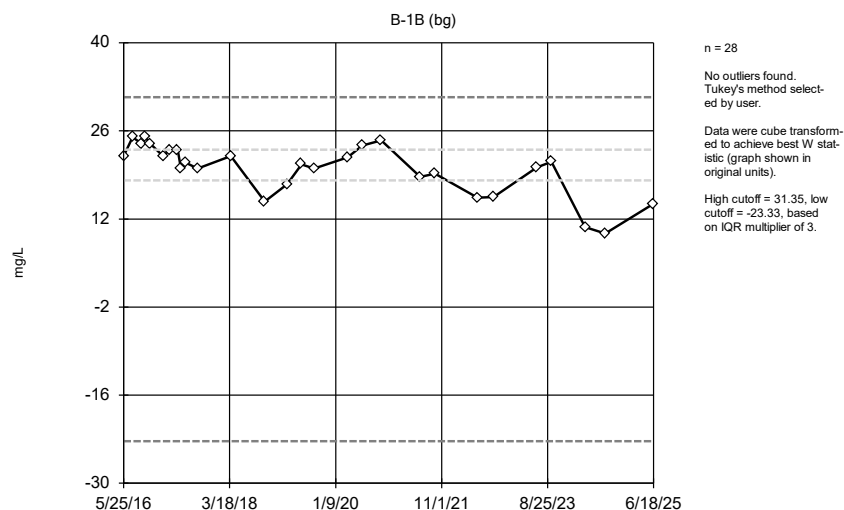
No outliers found.
Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 37.25, low cutoff = -0.2, based on IQR multiplier of 3.

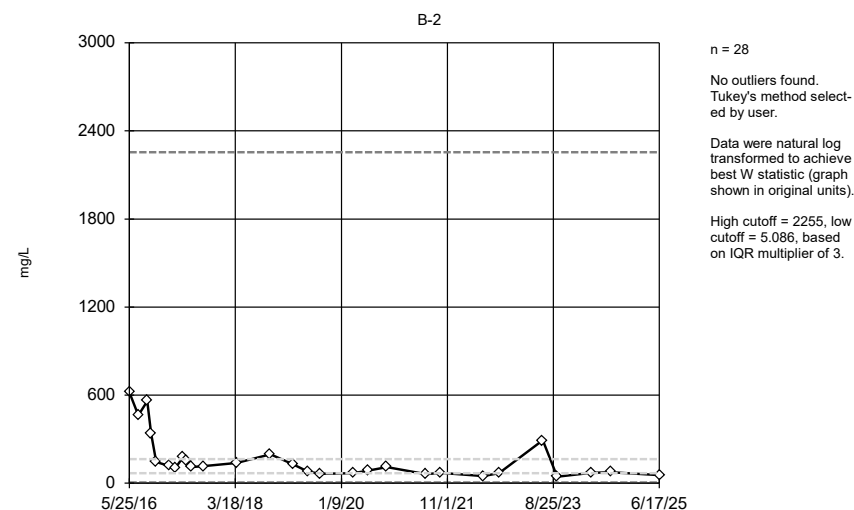
Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



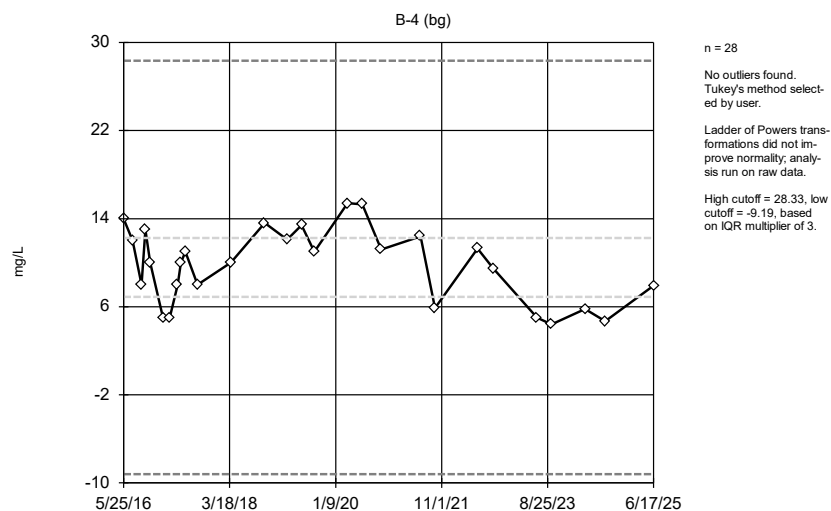
Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



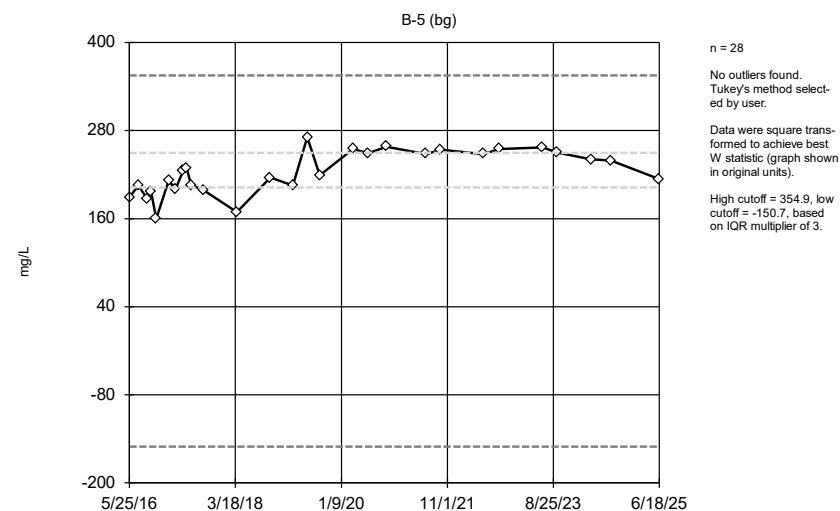
Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening



Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

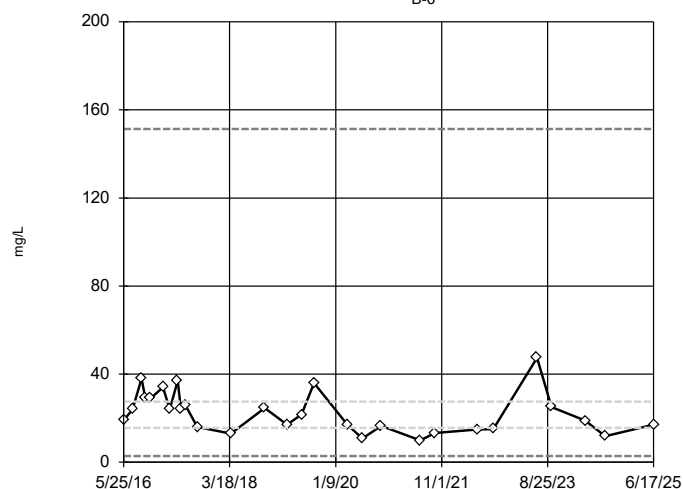
Tukey's Outlier Screening



Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-6



n = 28

No outliers found.
Tukey's method select-
ed by user.

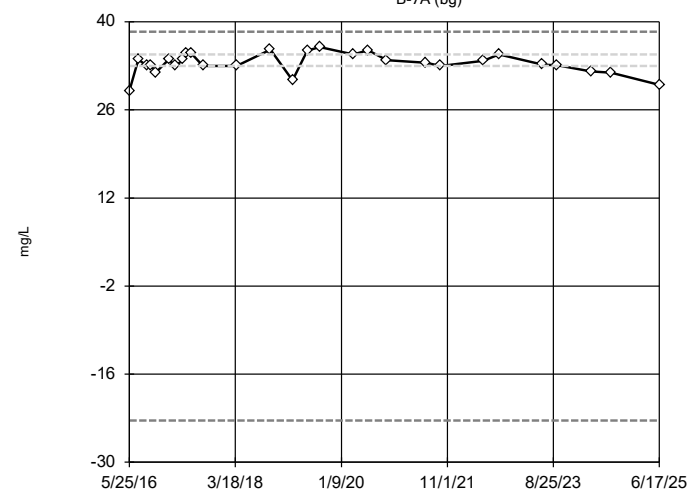
Data were natural log
transformed to achieve
best W statistic (graph
shown in original units).

High cutoff = 151.4, low
cutoff = 2.819, based
on IQR multiplier of 3.

Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-7A (bg)



n = 28

No outliers found.
Tukey's method select-
ed by user.

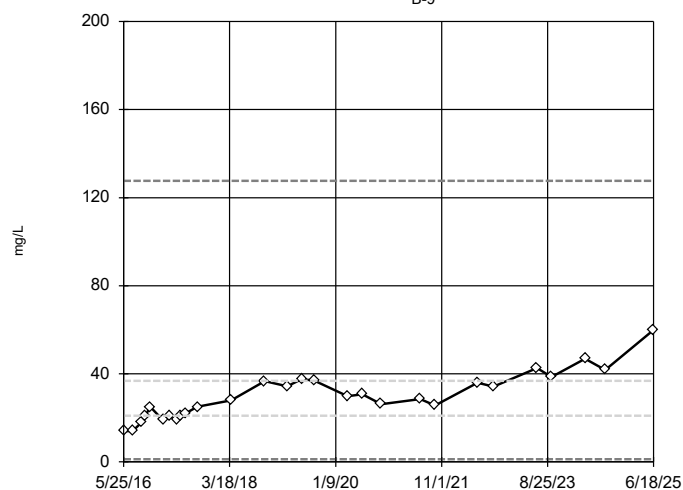
Data were x*6 transform-
ed to achieve best W stat-
istic (graph shown in
original units).

High cutoff = 38.45, low
cutoff = -23.36, based
on IQR multiplier of 3.

Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-9



n = 28

No outliers found.
Tukey's method select-
ed by user.

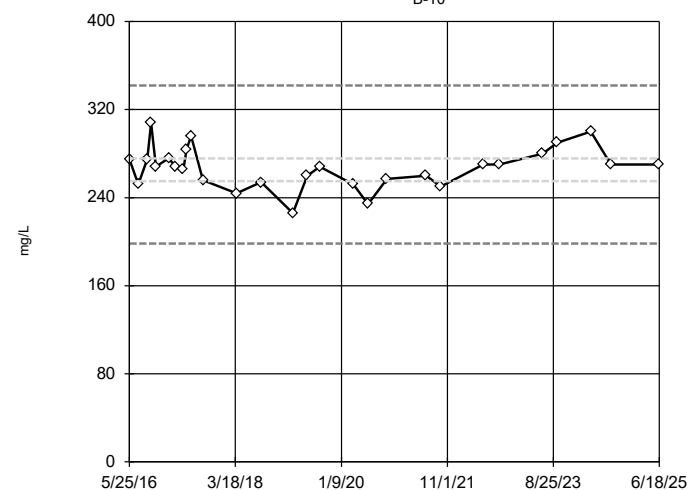
Data were cube root trans-
formed to achieve best
W statistic (graph shown
in original units).

High cutoff = 127.6, low
cutoff = 1.166, based
on IQR multiplier of 3.

Constituent: Sulfate, total Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-10



n = 28

No outliers found.
Tukey's method select-
ed by user.

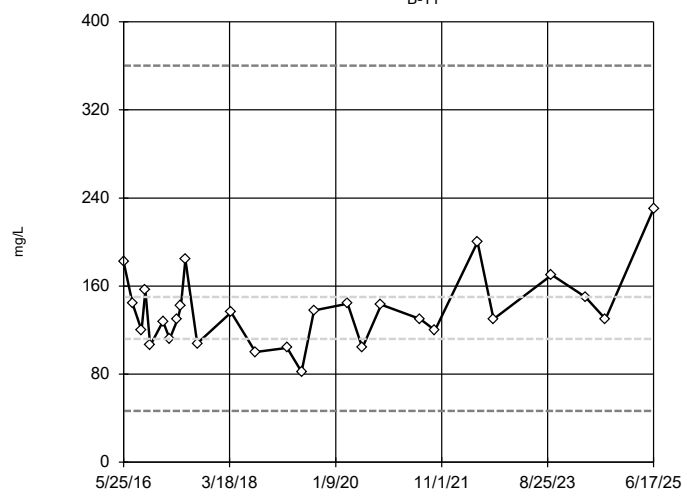
Data were square root
transformed to achieve
best W statistic (graph
shown in original units).

High cutoff = 341.8, low
cutoff = 198.3, based
on IQR multiplier of 3.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-11



n = 27

No outliers found.
Tukey's method selected by user.

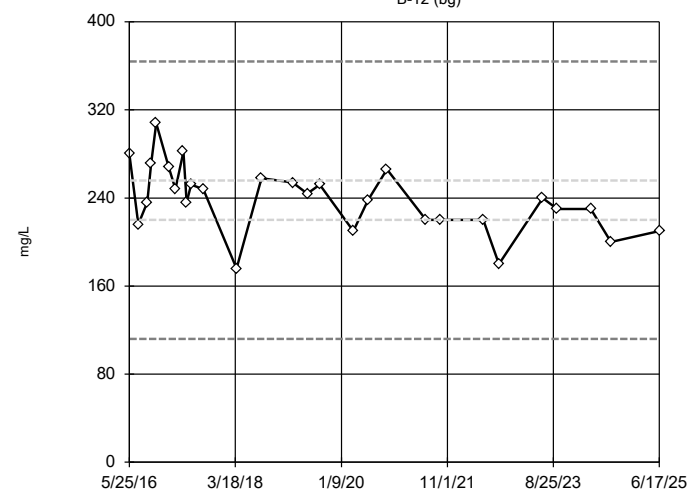
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 360.3, low cutoff = 46.62, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-12 (bg)



n = 28

No outliers found.
Tukey's method selected by user.

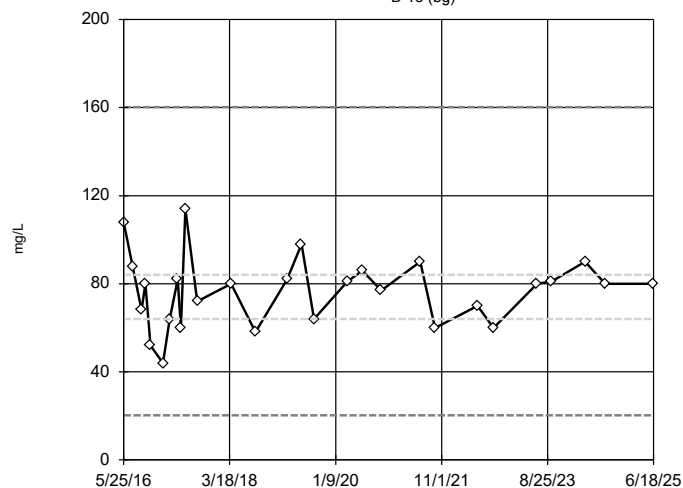
Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 364, low cutoff = 112, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-13 (bg)



n = 28

No outliers found.
Tukey's method selected by user.

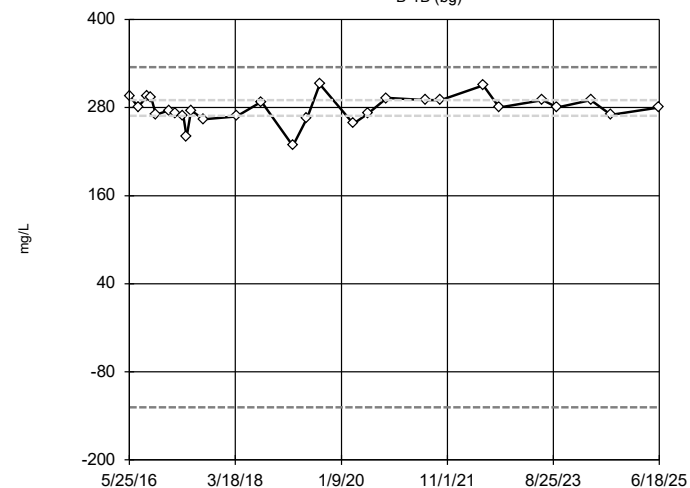
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 160.2, low cutoff = 20.31, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Screening

B-1B (bg)



n = 28

No outliers found.
Tukey's method selected by user.

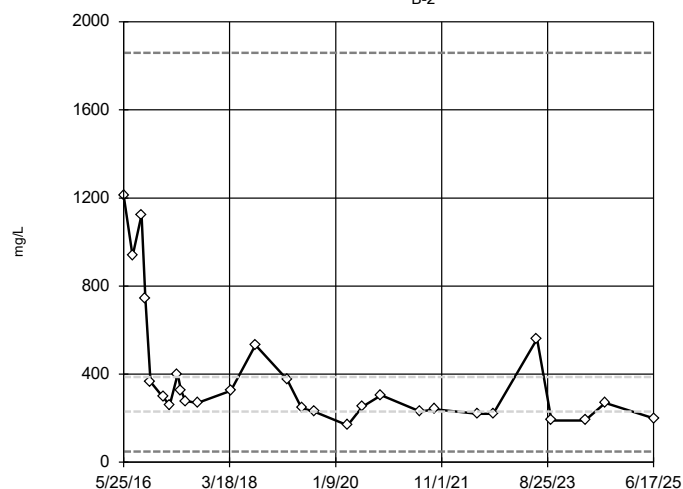
Data were x^4 transformed to achieve best W statistic (graph shown in original units).

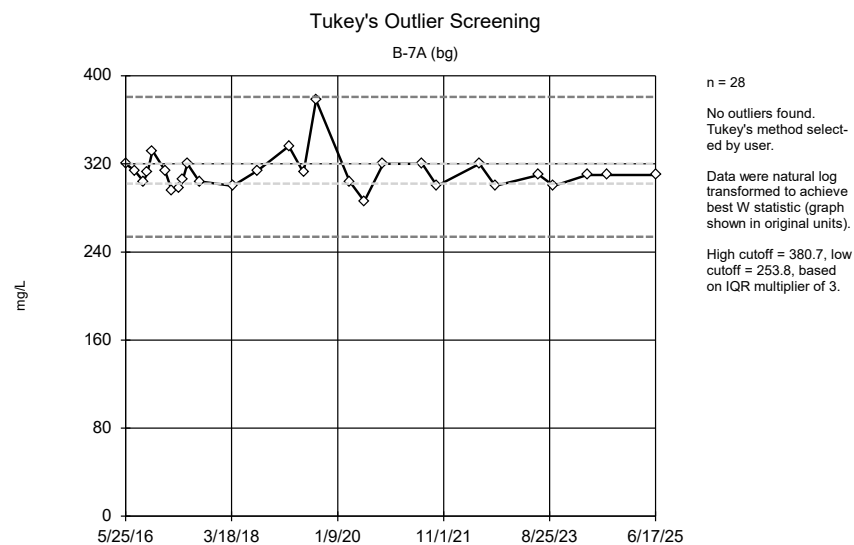
High cutoff = 334.9, low cutoff = -128.5, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:48 AM View: Outliers
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

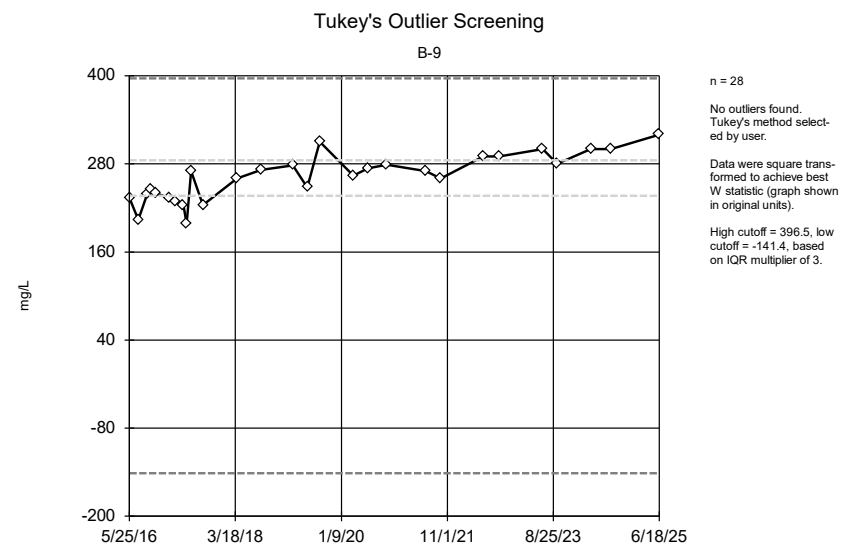
Tukey's Outlier Screening

B-2





Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:48 AM View: Outliers
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 8:48 AM View: Outliers
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tukey's Outlier Test - Upgradient Wells - Significant Results

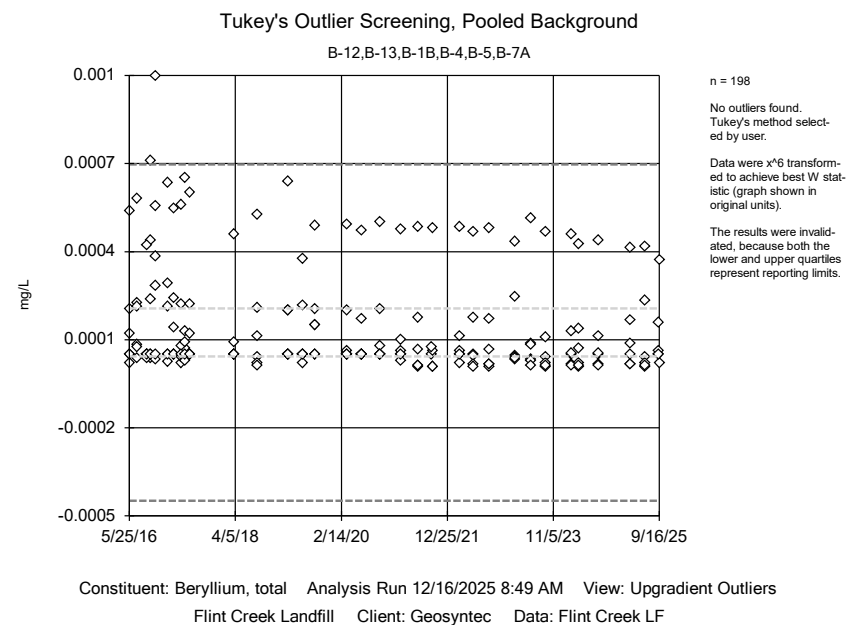
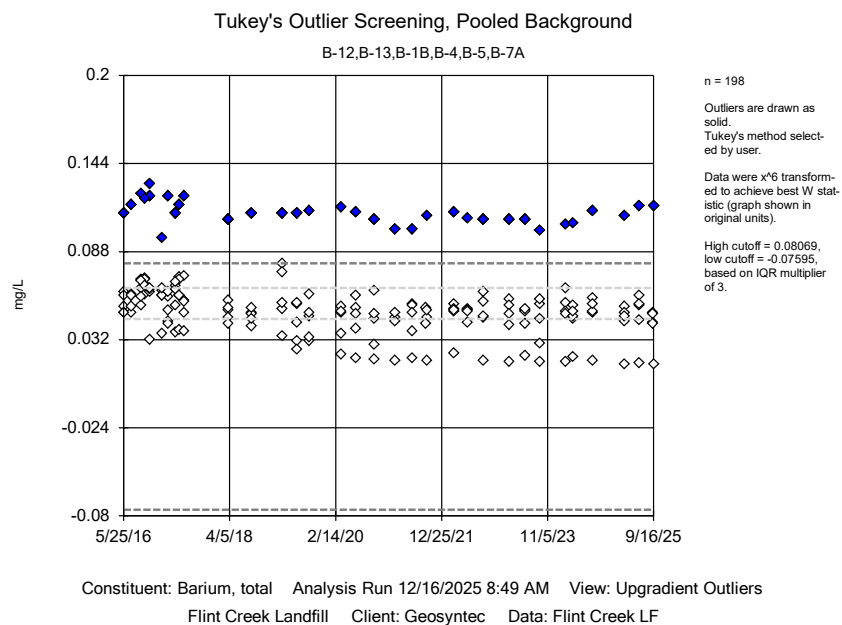
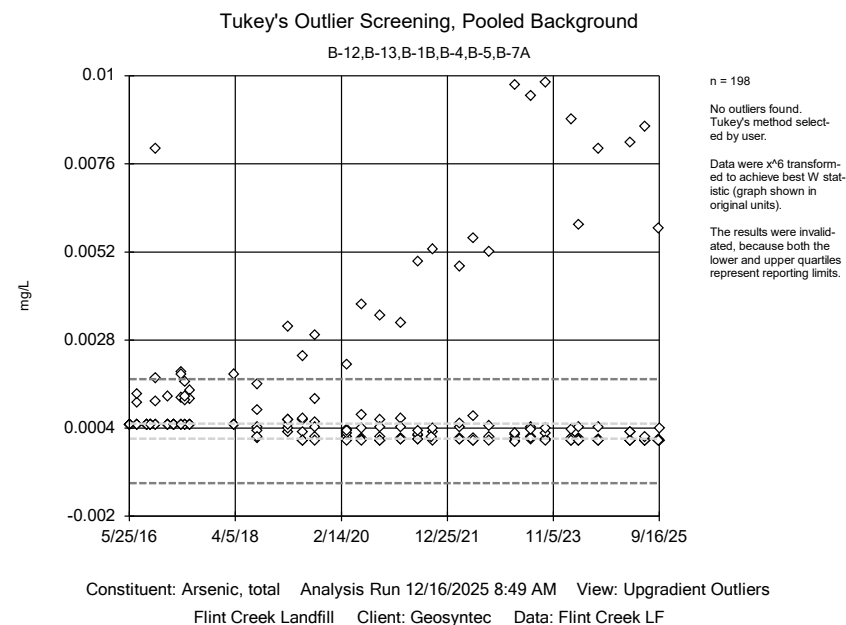
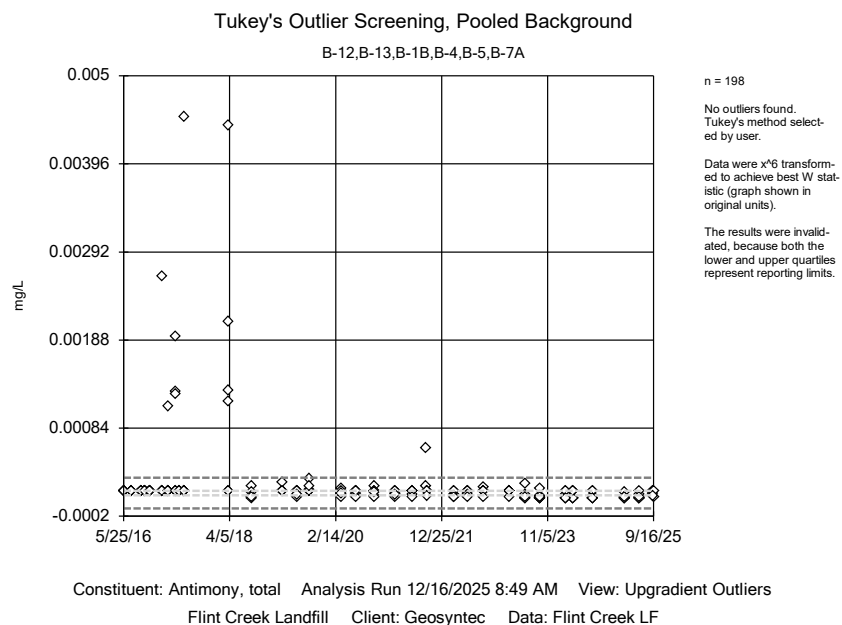
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 8:50 AM

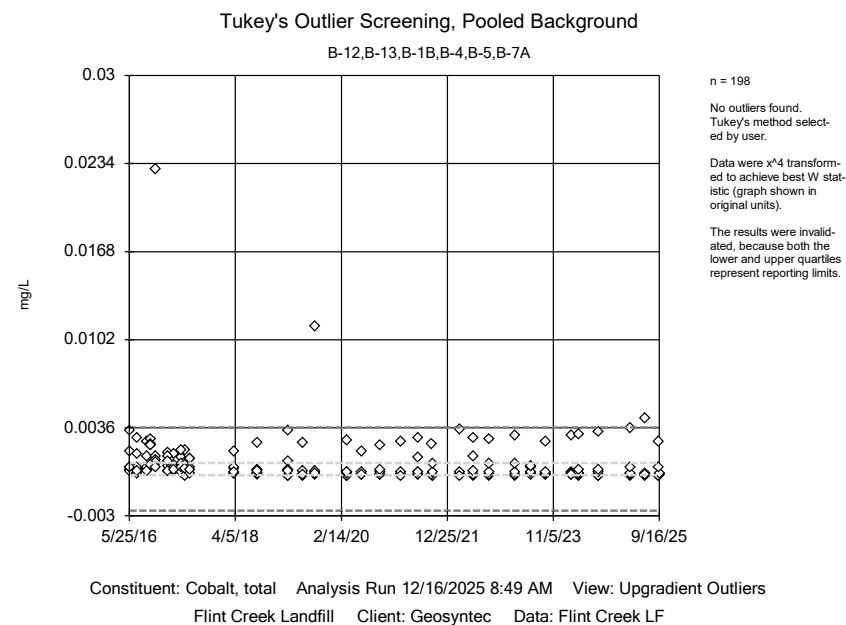
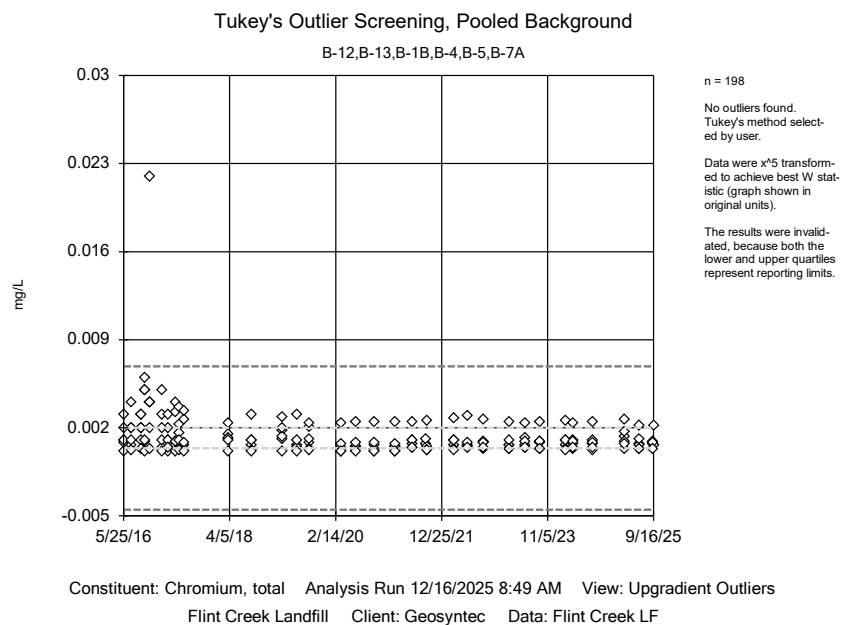
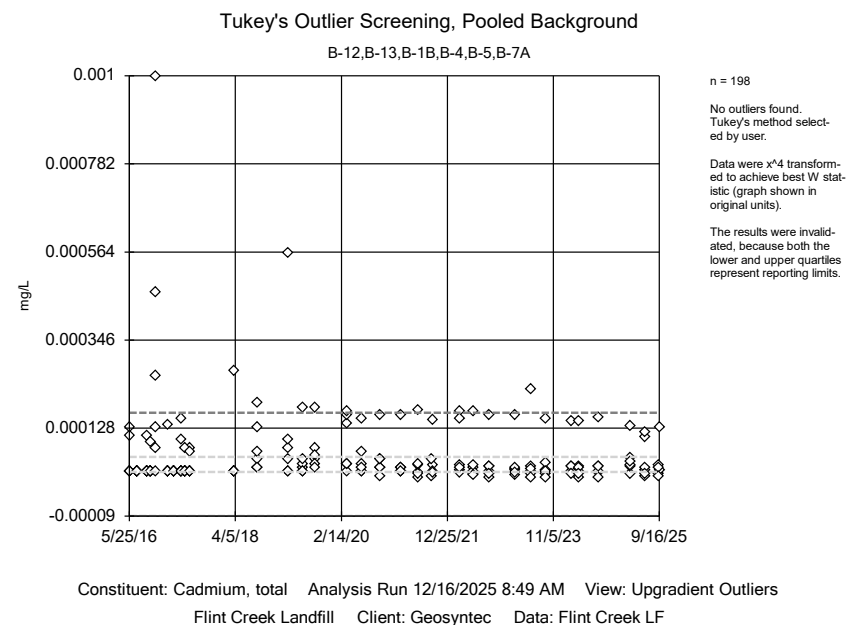
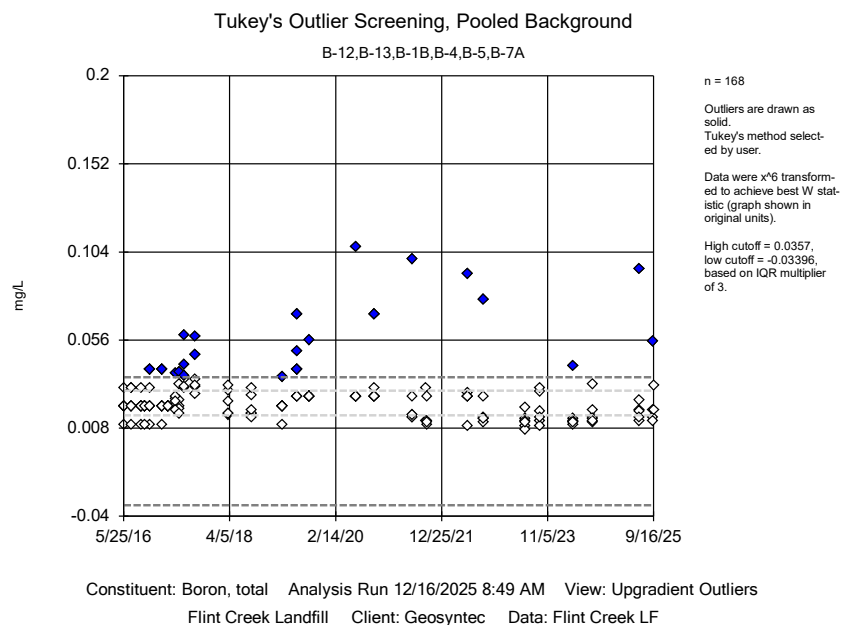
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Barium, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.123,0.123,0.123,0.112,0.112,0.112,0.112,0.112,0	NP	NaN	198	0.05961	0.02747	x^6	ChiSquared
Boron, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.04,0.04,0.04,0.04236,0.0579,0.0382,0.03844,0.05	NP	NaN	168	0.02498	0.01657	x^6	ChiSquared
Combined Radium 226 + 228 (pCi/L)	B-12,B-13,B-1B,B-...	Yes	4.62,8.375,8.79,4.63,5.15,4.49,6.51,5.96,4.73,5.3	NP	NaN	192	2.246	1.964	x^6	ChiSquared
Fluoride, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.5955,0.4424,0.4087,0.4557,0.53,0.4551,0.416,0.4	NP	NaN	204	0.1221	0.131	x^6	ChiSquared
Lithium, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.05,0.05,0.05,0.028,0.028,0.028,0.041,0.027,0.02	NP	NaN	198	0.01029	0.01293	x^6	ChiSquared
Selenium, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.0014,0.00009,0.00168,0.00138,0.00004,0.00004,0.	NP	NaN	198	0.006336	0.01324	normal	ChiSquared

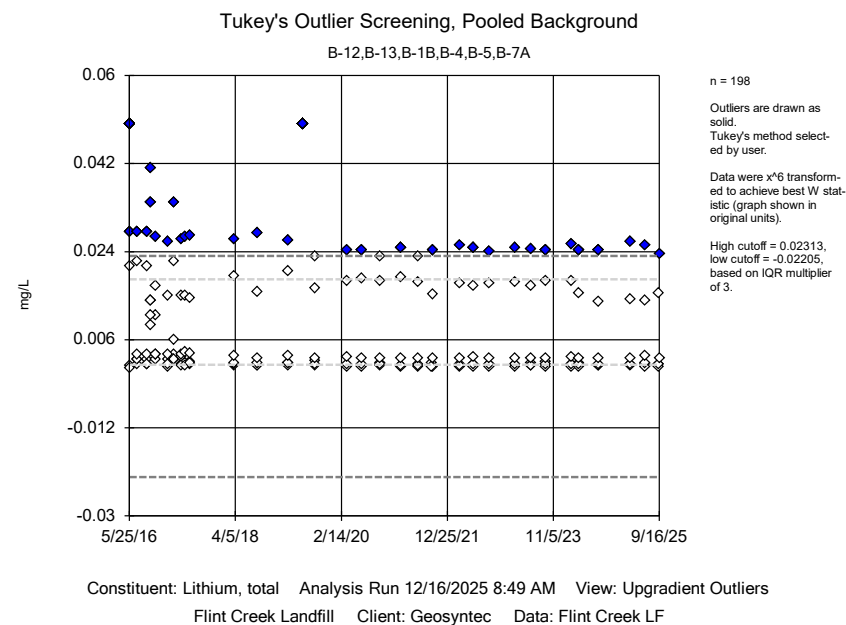
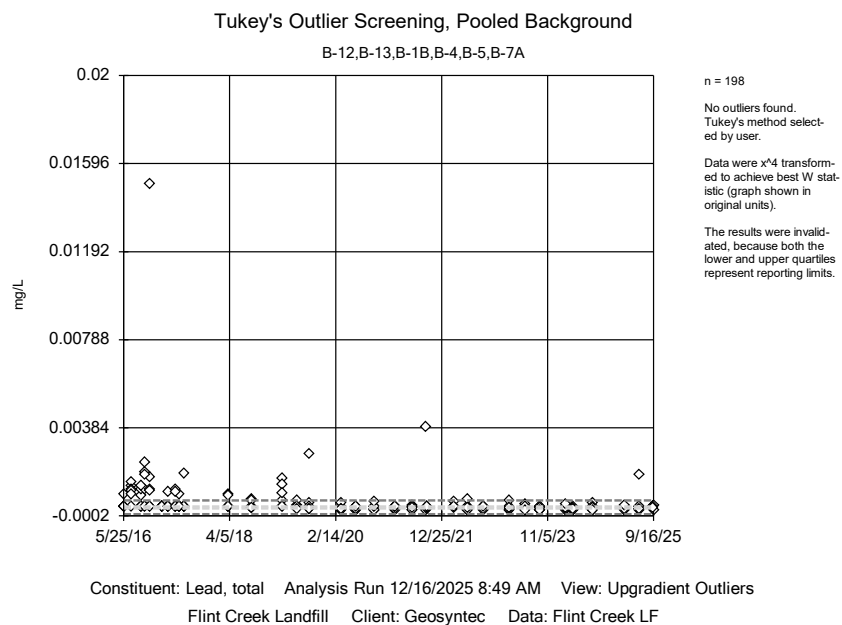
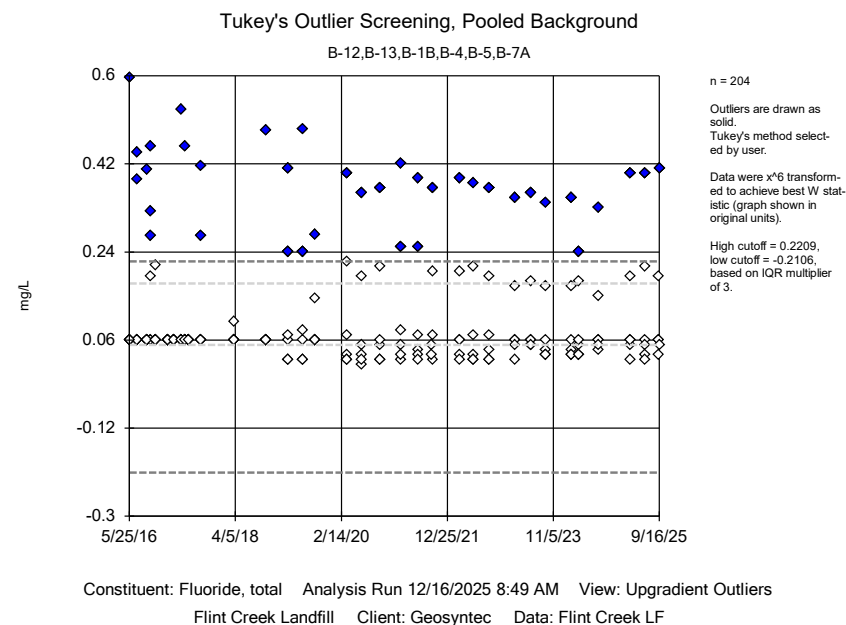
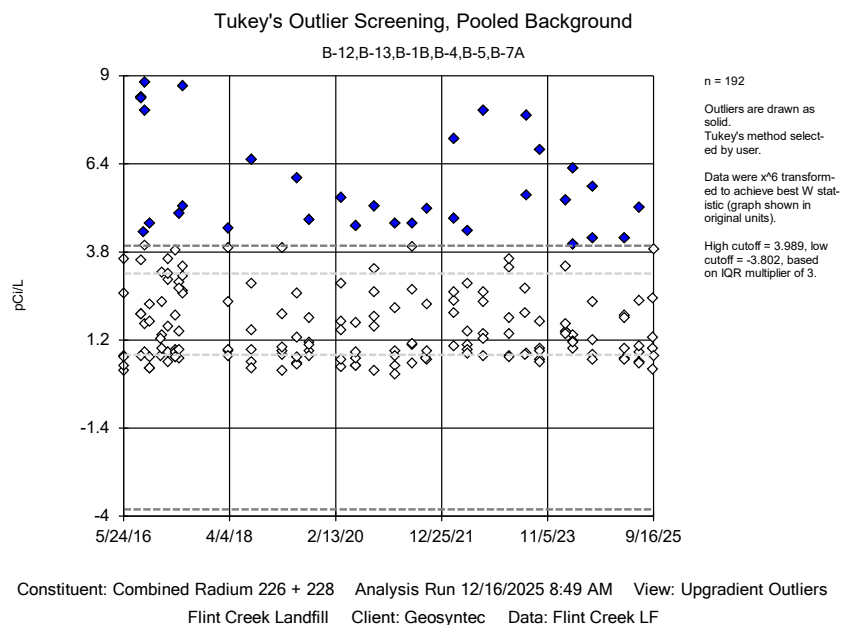
Tukey's Outlier Test - Upgradient Wells - All Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 8:50 AM

Constituent	Well	Outlier	Value(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.0001876	0.0005385	unknown	ChiSquared
Arsenic, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.001021	0.001946	unknown	ChiSquared
Barium, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.123,0.123,0.123,0.112,0.112,0.112,0.112,0.112,0	NP	NaN	198	0.05961	0.02747	x^6	ChiSquared
Beryllium, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.000154	0.0001854	unknown	ChiSquared
Boron, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.04,0.04,0.04,0.04236,0.0579,0.0382,0.03844,0.05	NP	NaN	168	0.02498	0.01657	x^6	ChiSquared
Cadmium, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.00006022	0.00009763	unknown	ChiSquared
Chromium, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.001322	0.001866	unknown	ChiSquared
Cobalt, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.0009024	0.001986	unknown	ChiSquared
Combined Radium 226 + 228 (pCi/L)	B-12,B-13,B-1B,B-...	Yes	4.62,8.375,8.79,4.63,5.15,4.49,6.51,5.96,4.73,5.3	NP	NaN	192	2.246	1.964	x^6	ChiSquared
Fluoride, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.5955,0.4424,0.4087,0.4557,0.53,0.4551,0.416,0.4	NP	NaN	204	0.1221	0.131	x^6	ChiSquared
Lead, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.0004257	0.001147	unknown	ChiSquared
Lithium, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.05,0.05,0.05,0.028,0.028,0.028,0.041,0.027,0.02	NP	NaN	198	0.01029	0.01293	x^6	ChiSquared
Mercury, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.00000803	0.00001084	unknown	ChiSquared
Molybdenum, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.0006138	0.0005709	unknown	ChiSquared
Selenium, total (mg/L)	B-12,B-13,B-1B,B-...	Yes	0.0014,0.00009,0.00168,0.00138,0.00004,0.00004,0.	NP	NaN	198	0.006336	0.01324	normal	ChiSquared
Thallium, total (mg/L)	B-12,B-13,B-1B,B-...	n/a	n/a	NP	NaN	198	0.0002072	0.0002016	unknown	ChiSquared







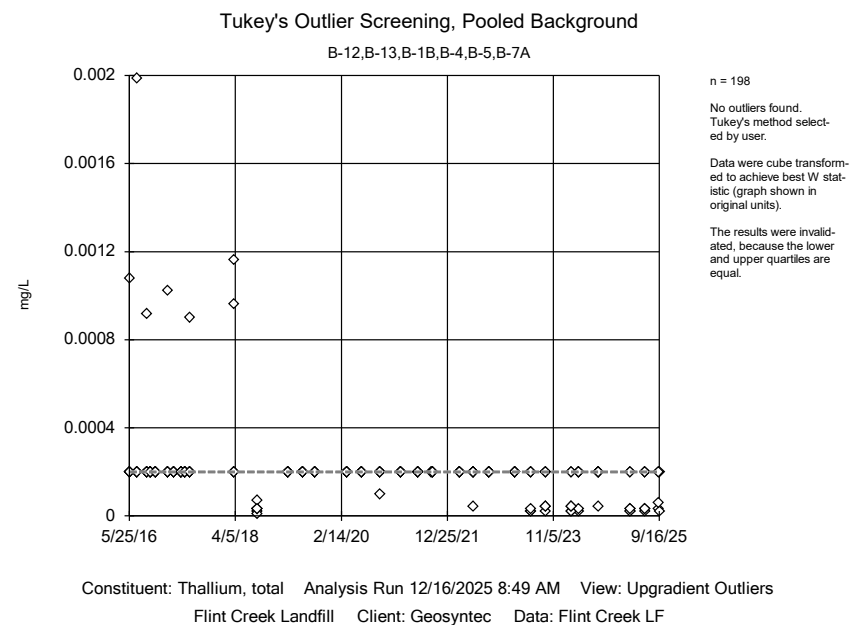
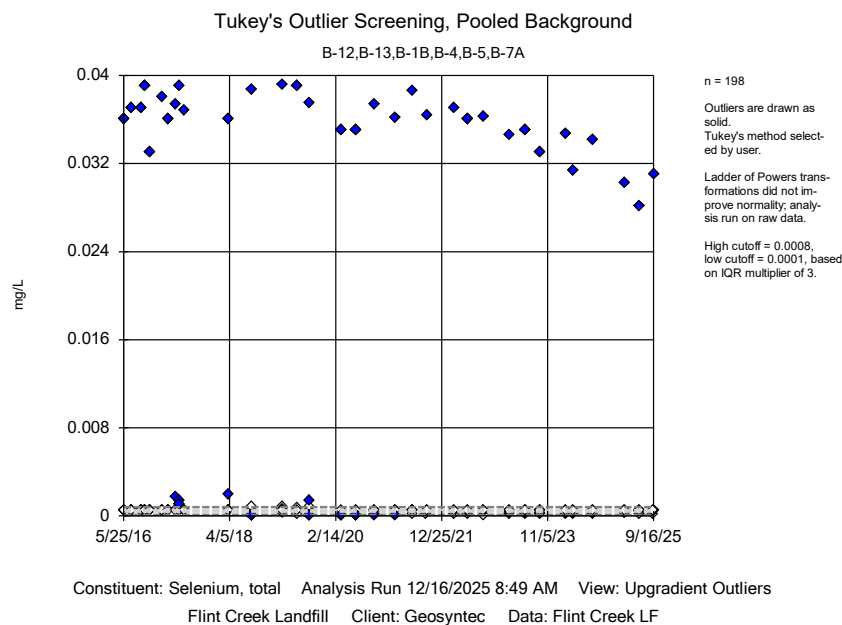
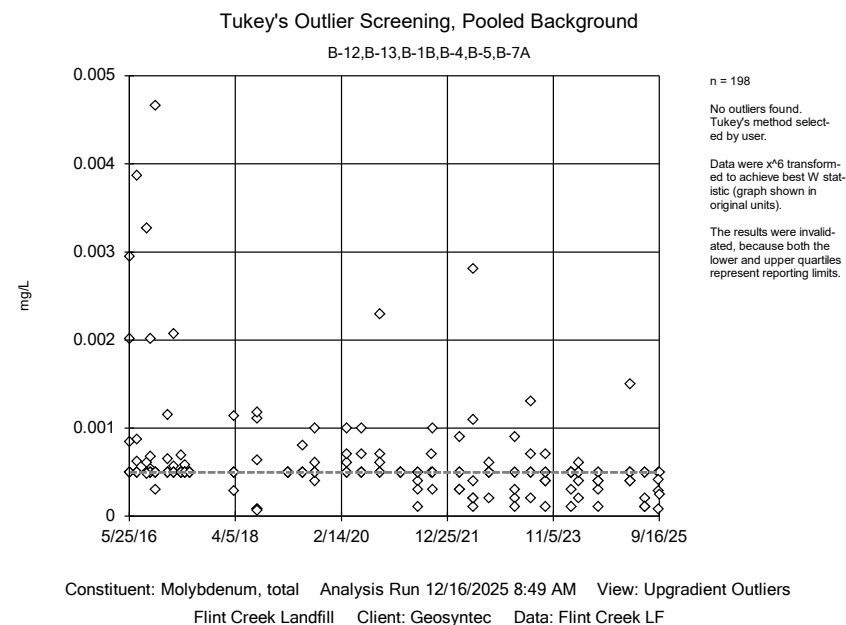
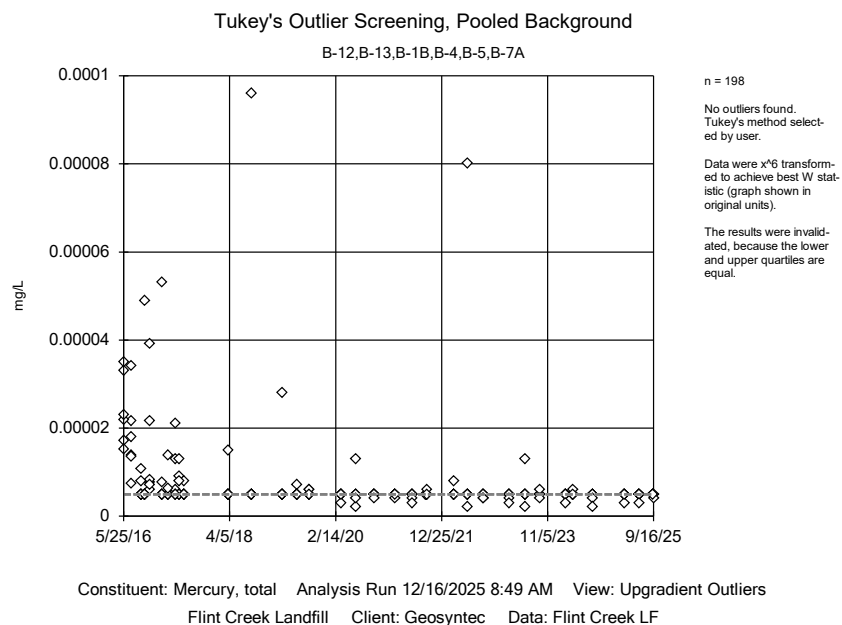


FIGURE D

Mann-Whitney

Mann-Whitney - Significant Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 9:12 AM

<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Alpha</u>	<u>Sig.</u>	<u>Method</u>
Calcium, total (mg/L)	B-5 (bg)	-3.176	Yes	0.01	Yes	Mann-W
Chloride, total (mg/L)	B-11	3.125	Yes	0.01	Yes	Mann-W
pH, field (SU)	B-10	-2.895	Yes	0.01	Yes	Mann-W
pH, field (SU)	B-12 (bg)	-2.988	Yes	0.01	Yes	Mann-W
pH, field (SU)	B-2	-2.599	Yes	0.01	Yes	Mann-W
pH, field (SU)	B-6	-2.712	Yes	0.01	Yes	Mann-W
Sulfate, total (mg/L)	B-13 (bg)	-2.661	Yes	0.01	Yes	Mann-W
Sulfate, total (mg/L)	B-4 (bg)	-2.729	Yes	0.01	Yes	Mann-W
Sulfate, total (mg/L)	B-9	2.821	Yes	0.01	Yes	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-9	2.662	Yes	0.01	Yes	Mann-W

Mann-Whitney - All Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 9:12 AM

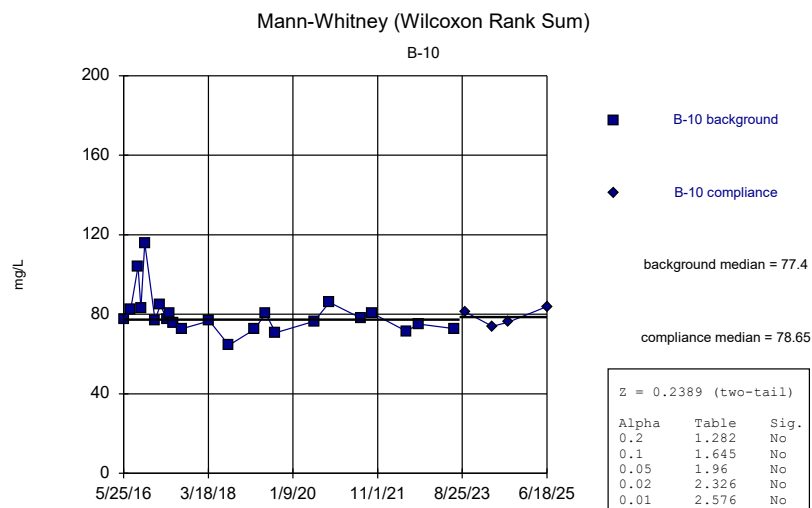
<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Alpha</u>	<u>Sig.</u>	<u>Method</u>
Calcium, total (mg/L)	B-10	0.2389	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-11	2.239	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-12 (bg)	-1.263	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-13 (bg)	1.196	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-1B (bg)	-1.571	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-2	0.3486	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-4 (bg)	1.877	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-5 (bg)	-3.176	Yes	0.01	Yes	Mann-W
Calcium, total (mg/L)	B-6	-0.03413	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-7A (bg)	-0.822	No	0.01	No	Mann-W
Calcium, total (mg/L)	B-9	-0.4436	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-10	2.275	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-11	3.125	Yes	0.01	Yes	Mann-W
Chloride, total (mg/L)	B-12 (bg)	-2.406	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-13 (bg)	0.2971	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-1B (bg)	-1.748	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-2	-1.287	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-4 (bg)	1.763	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-5 (bg)	1.022	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-6	-0.6533	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-7A (bg)	-1.946	No	0.01	No	Mann-W
Chloride, total (mg/L)	B-9	2.549	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-10	1.787	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-11	-1.873	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-12 (bg)	-2.061	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-13 (bg)	-0.6199	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-1B (bg)	-1.262	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-2	1.98	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-4 (bg)	-0.4676	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-5 (bg)	-0.5099	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-6	-1.599	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-7A (bg)	-0.1422	No	0.01	No	Mann-W
Fluoride, total (mg/L)	B-9	-0.07183	No	0.01	No	Mann-W
pH, field (SU)	B-10	-2.895	Yes	0.01	Yes	Mann-W
pH, field (SU)	B-11	-1.144	No	0.01	No	Mann-W
pH, field (SU)	B-12 (bg)	-2.988	Yes	0.01	Yes	Mann-W
pH, field (SU)	B-13 (bg)	-0.6769	No	0.01	No	Mann-W
pH, field (SU)	B-1B (bg)	0.4204	No	0.01	No	Mann-W
pH, field (SU)	B-2	-2.599	Yes	0.01	Yes	Mann-W
pH, field (SU)	B-4 (bg)	-0.1167	No	0.01	No	Mann-W
pH, field (SU)	B-5 (bg)	-0.887	No	0.01	No	Mann-W
pH, field (SU)	B-6	-2.712	Yes	0.01	Yes	Mann-W
pH, field (SU)	B-7A (bg)	0.1634	No	0.01	No	Mann-W
pH, field (SU)	B-9	-1.191	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-10	0.8544	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-11	-0.3072	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-12 (bg)	-0.1972	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-13 (bg)	-2.661	Yes	0.01	Yes	Mann-W
Sulfate, total (mg/L)	B-1B (bg)	-2.4	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-2	-2.068	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-4 (bg)	-2.729	Yes	0.01	Yes	Mann-W
Sulfate, total (mg/L)	B-5 (bg)	-0.3137	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-6	-0.7228	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-7A (bg)	-2.212	No	0.01	No	Mann-W
Sulfate, total (mg/L)	B-9	2.821	Yes	0.01	Yes	Mann-W

Mann-Whitney - All Results

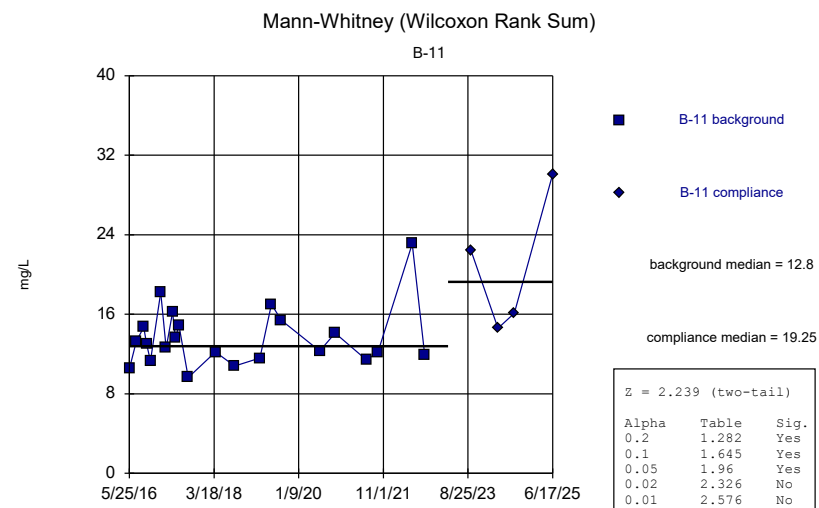
Page 2

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 9:12 AM

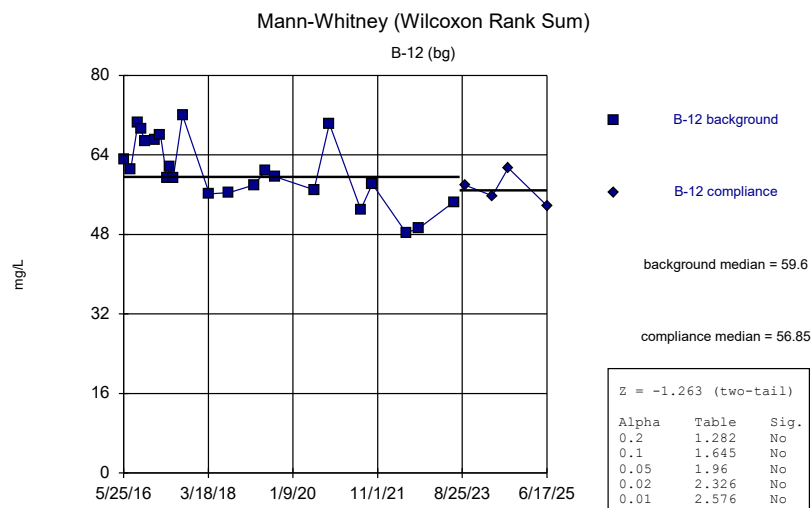
<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Alpha</u>	<u>Sig.</u>	<u>Method</u>
Total Dissolved Solids [TDS] (mg/L)	B-10	1.875	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-11	1.846	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-12 (bg)	-1.972	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-13 (bg)	0.9556	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-1B (bg)	0.03291	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-2	-2.171	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-4 (bg)	2.365	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-5 (bg)	-0.9538	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-6	0.2956	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-7A (bg)	-0.8262	No	0.01	No	Mann-W
Total Dissolved Solids [TDS] (mg/L)	B-9	2.662	Yes	0.01	Yes	Mann-W



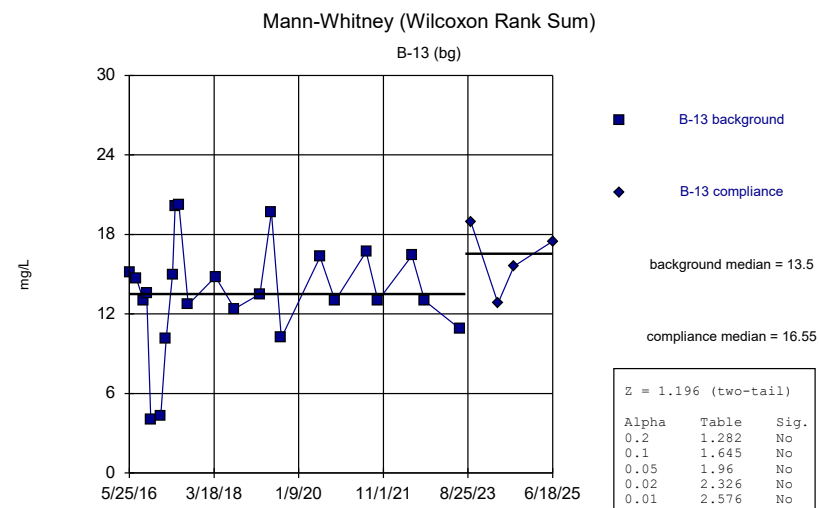
Constituent: Calcium, total Analysis Run 12/16/2025 9:09 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



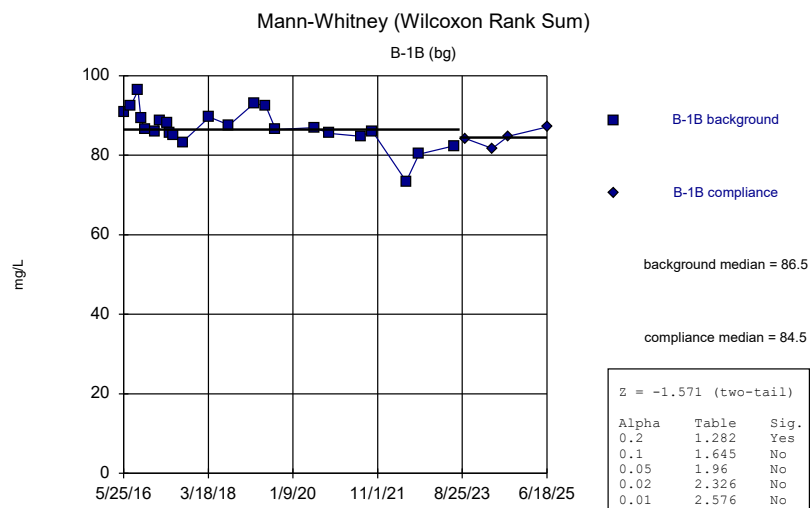
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



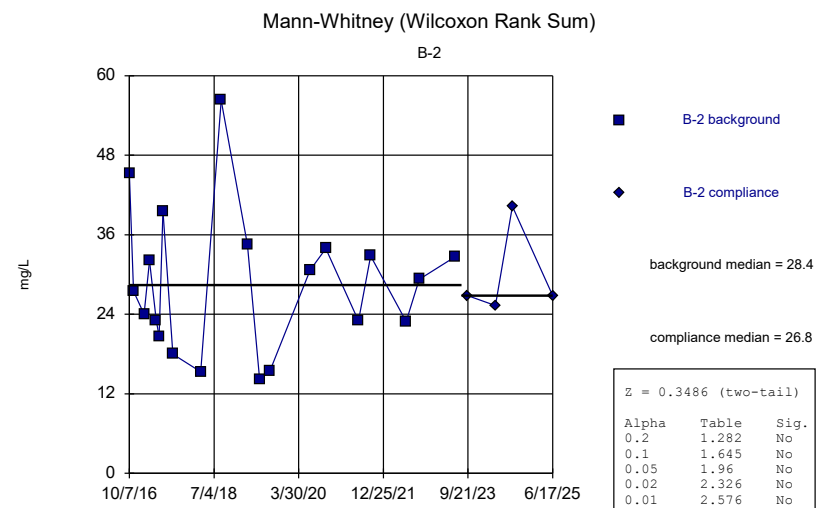
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



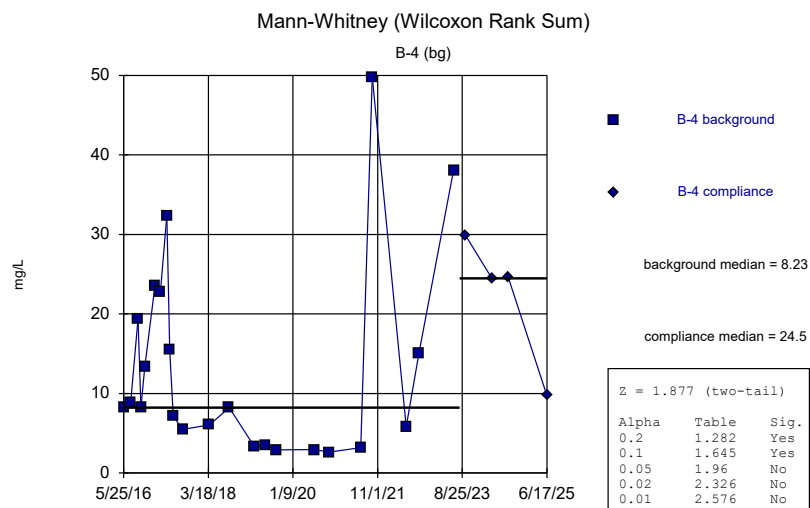
Constituent: Calcium, total Analysis Run 12/16/2025 9:09 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



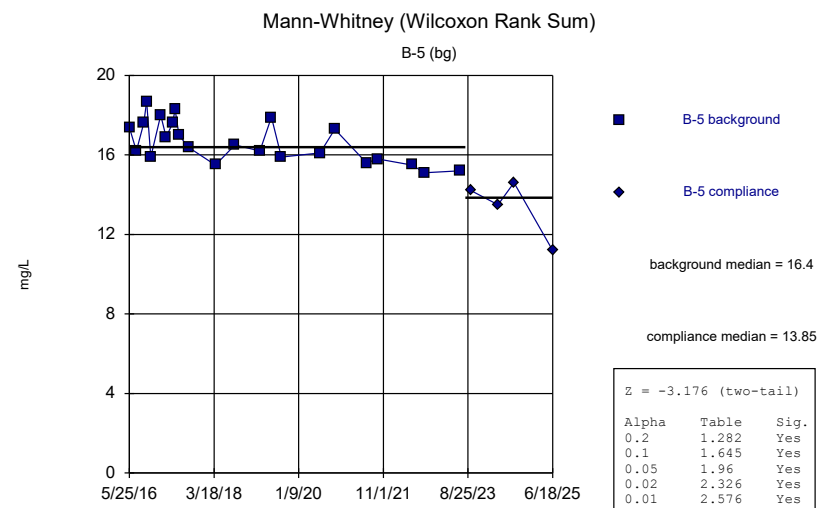
Constituent: Calcium, total Analysis Run 12/16/2025 9:09 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



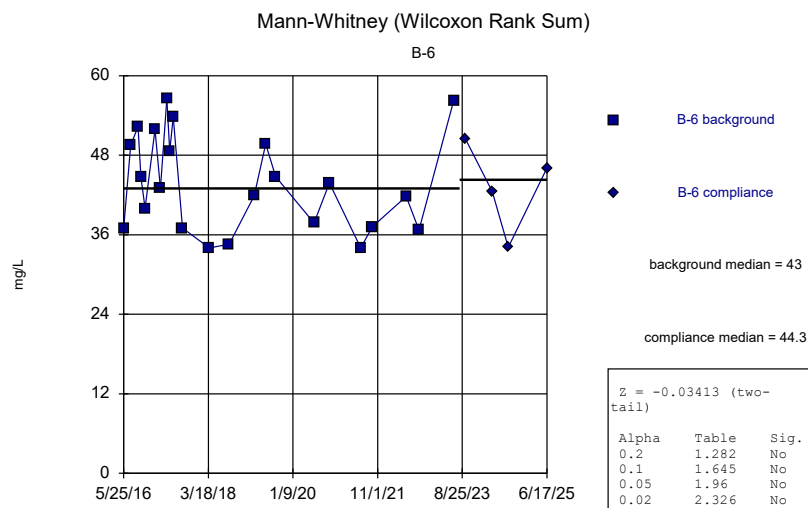
Constituent: Calcium, total Analysis Run 12/16/2025 9:09 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



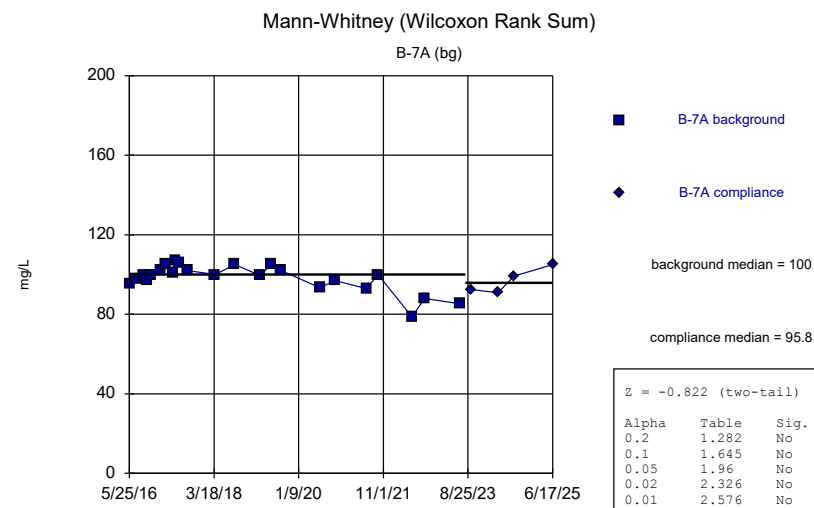
Constituent: Calcium, total Analysis Run 12/16/2025 9:09 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



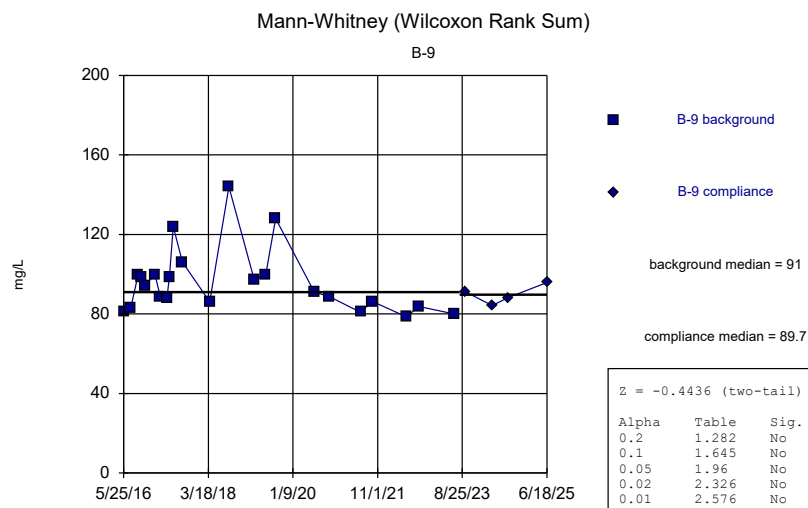
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



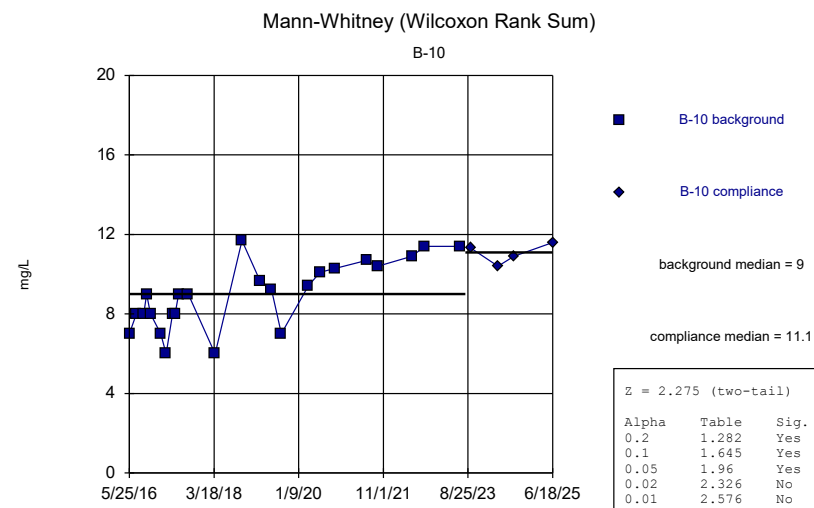
Constituent: Calcium, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



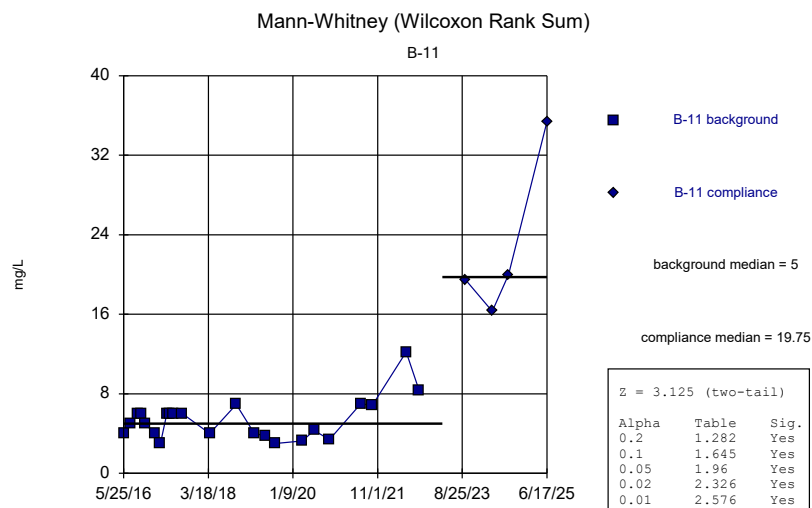
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



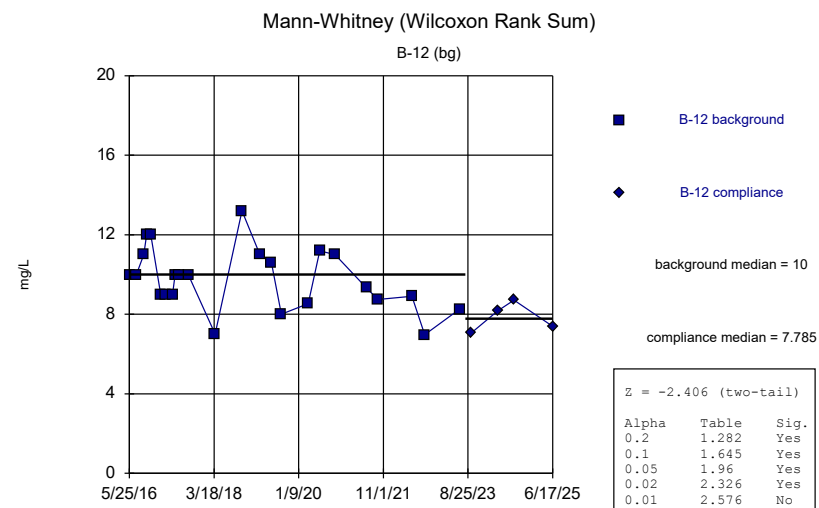
Constituent: Calcium, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



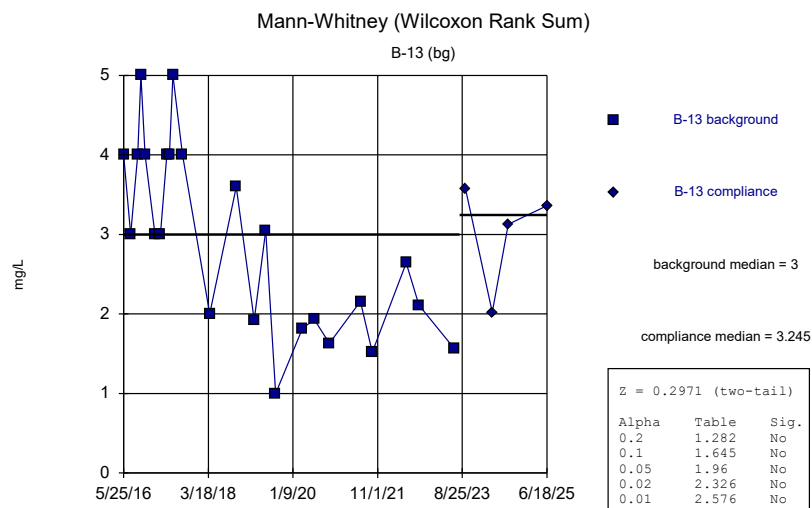
Constituent: Chloride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



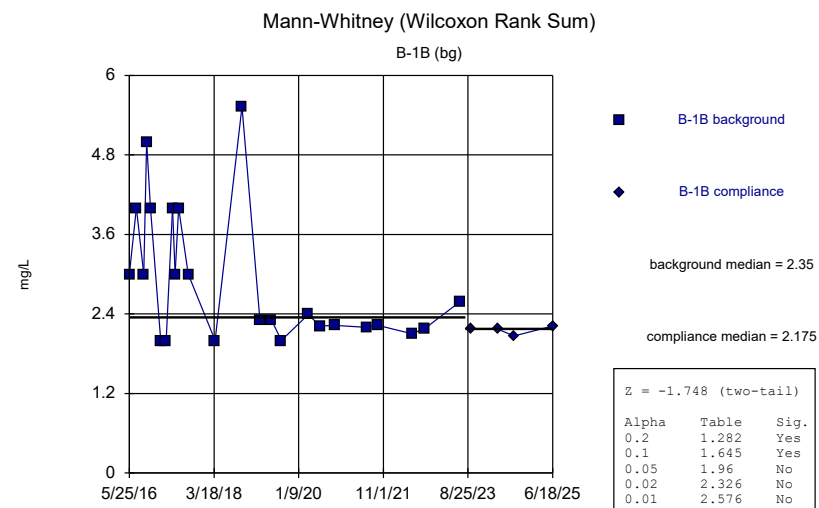
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



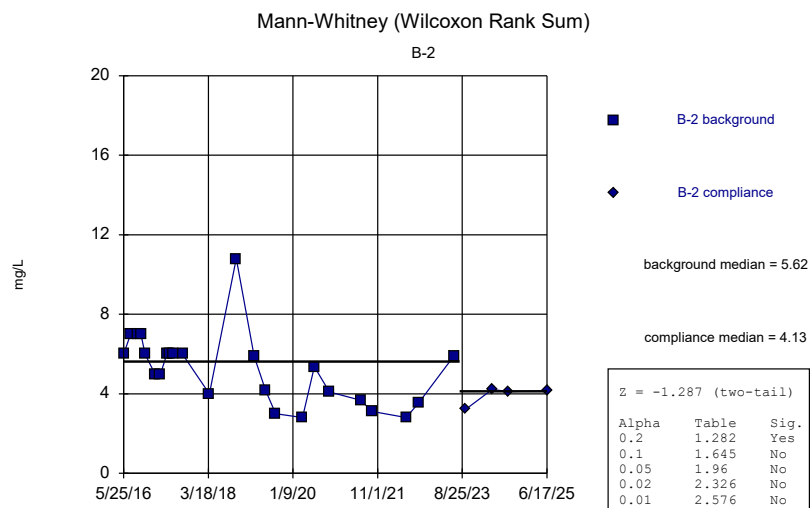
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



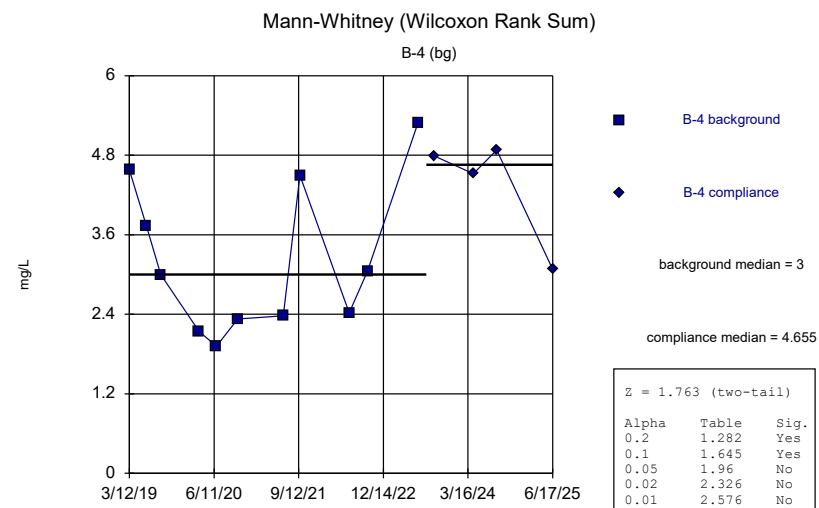
Constituent: Chloride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



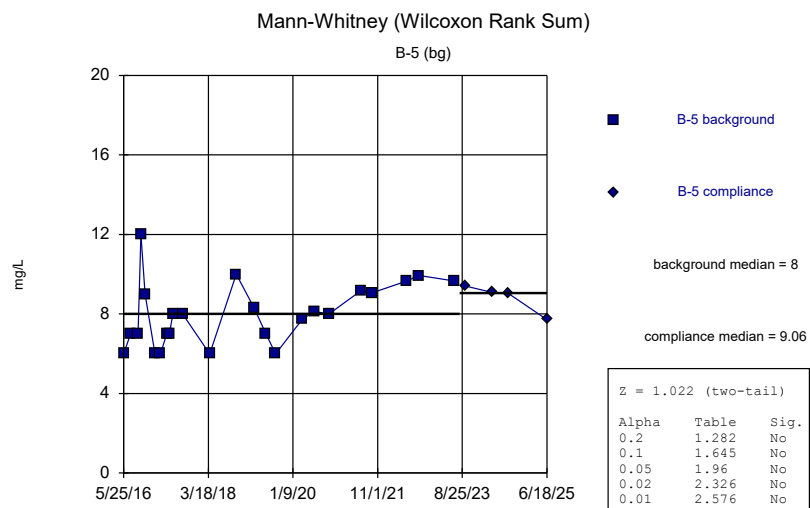
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



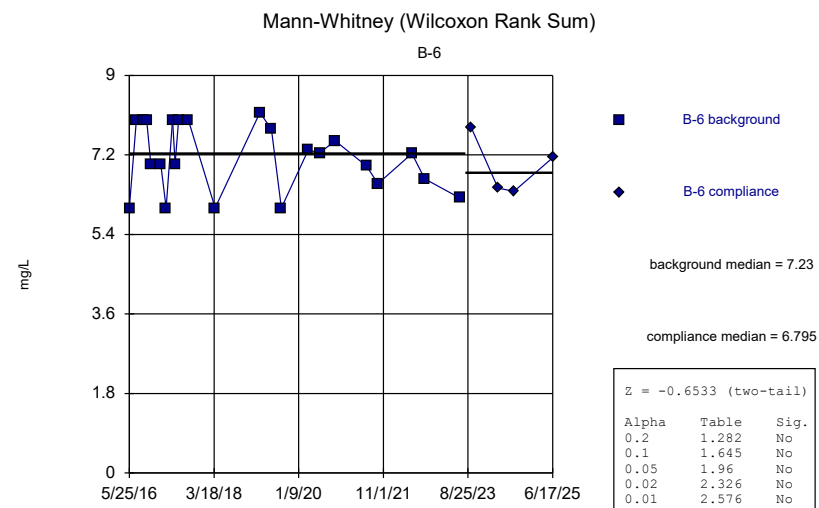
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



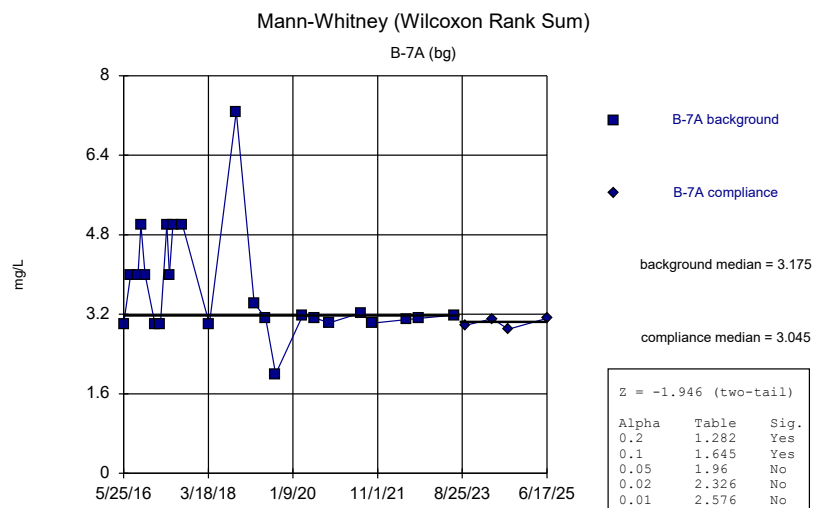
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



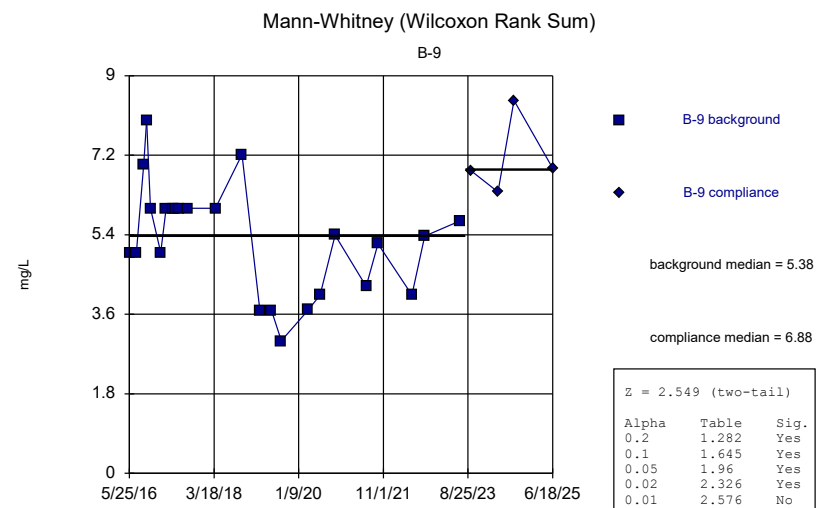
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



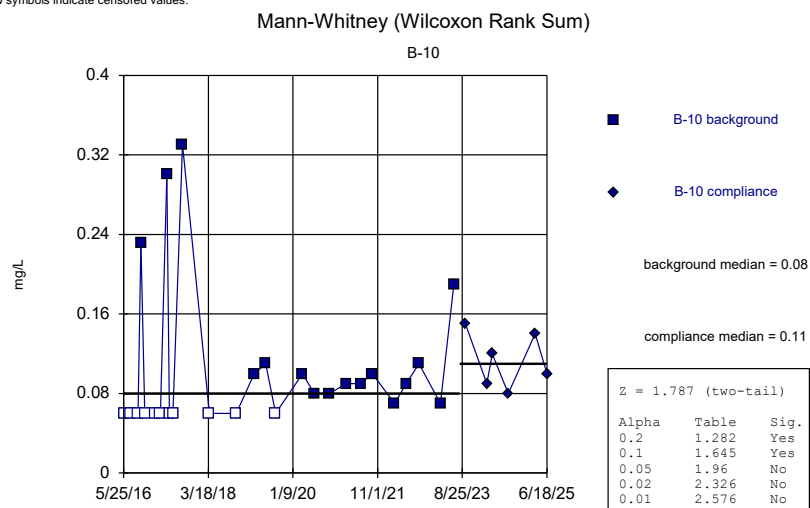
Constituent: Chloride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



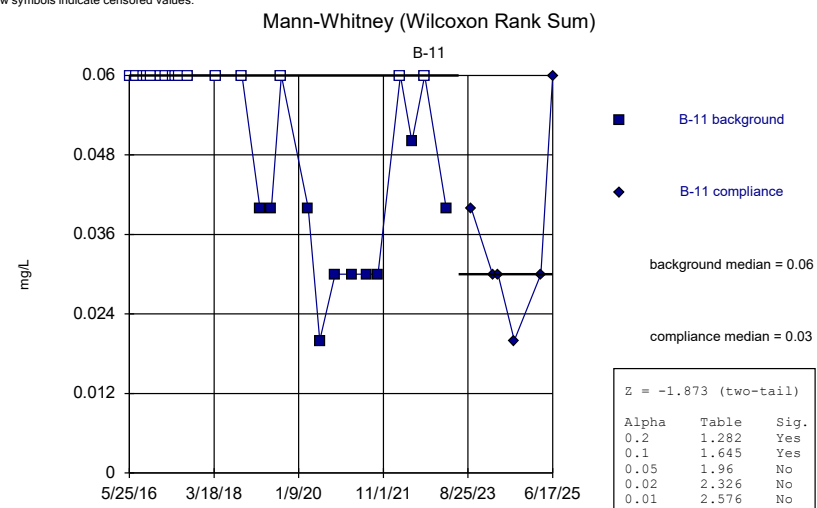
Constituent: Chloride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



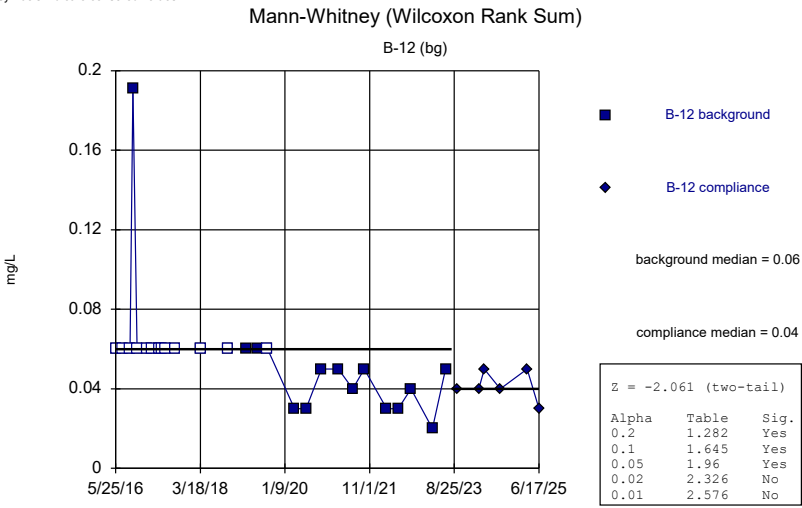
Constituent: Chloride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



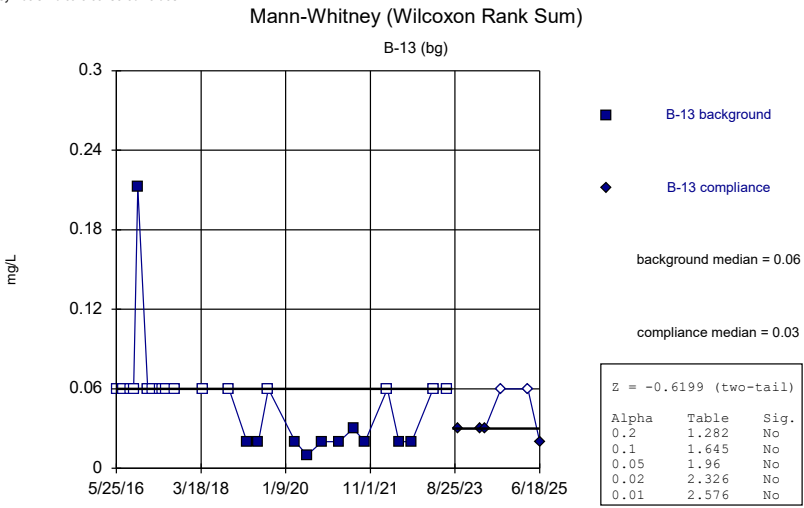
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



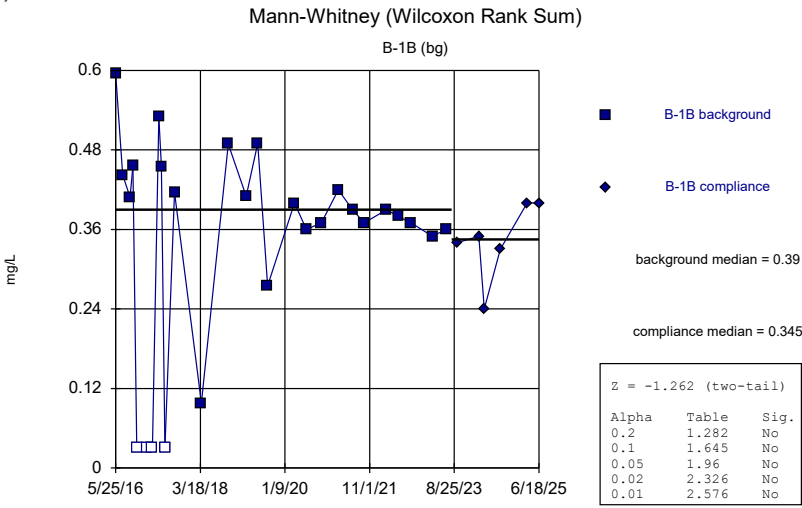
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



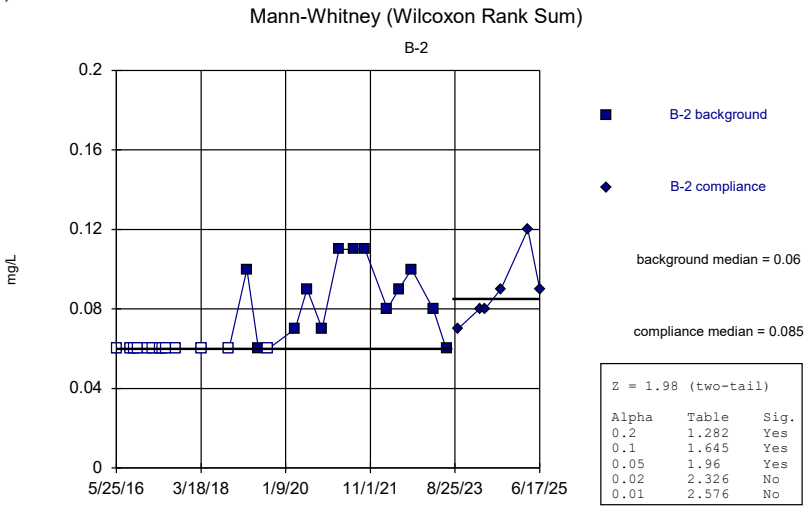
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



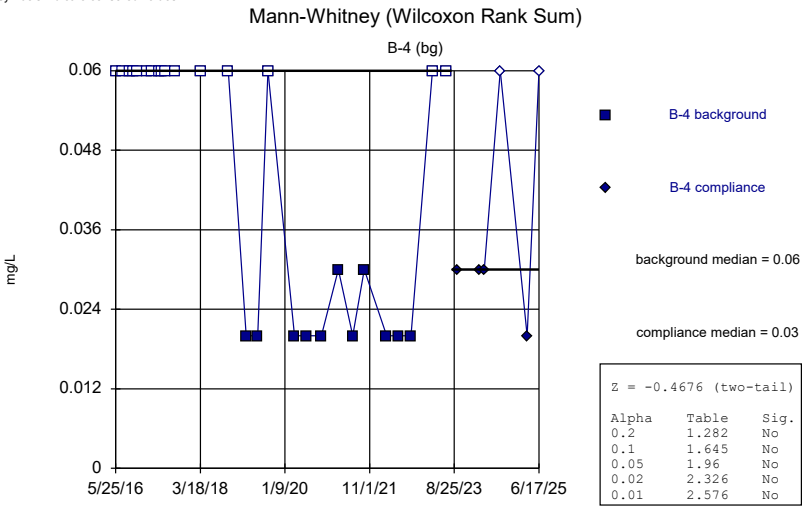
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



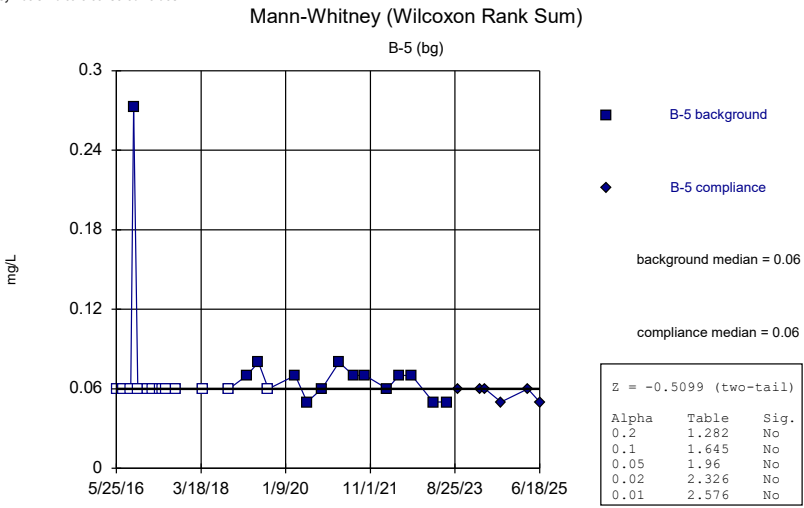
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



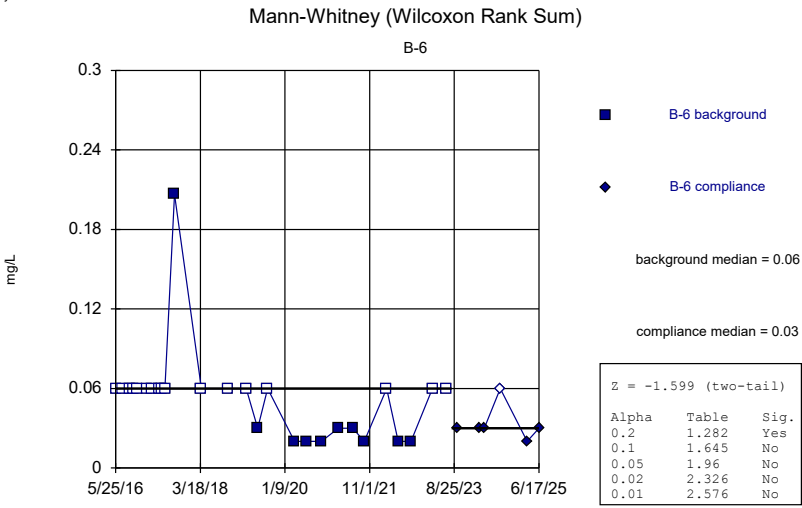
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



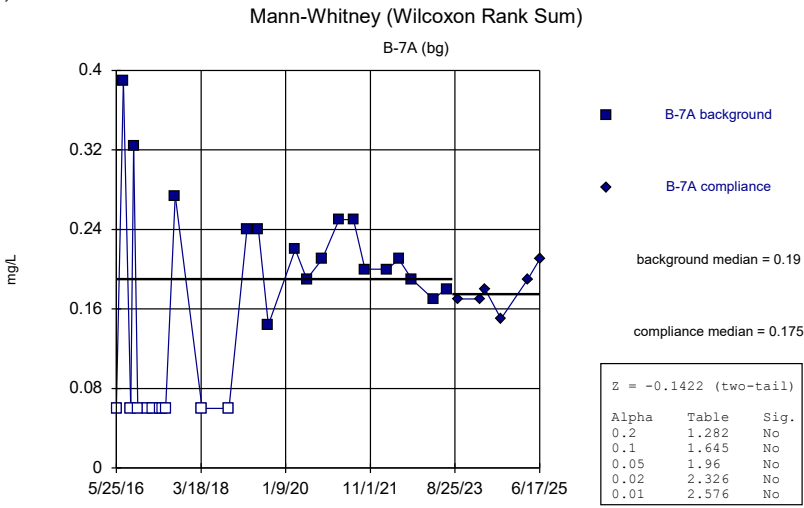
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



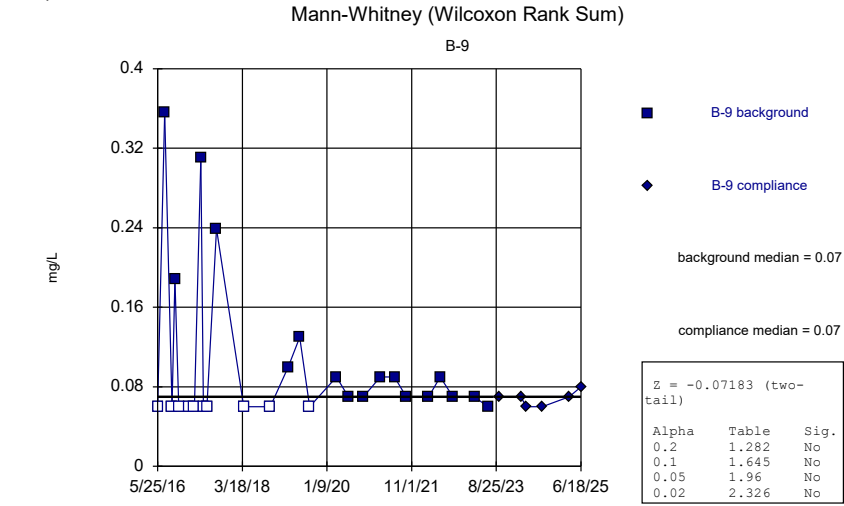
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



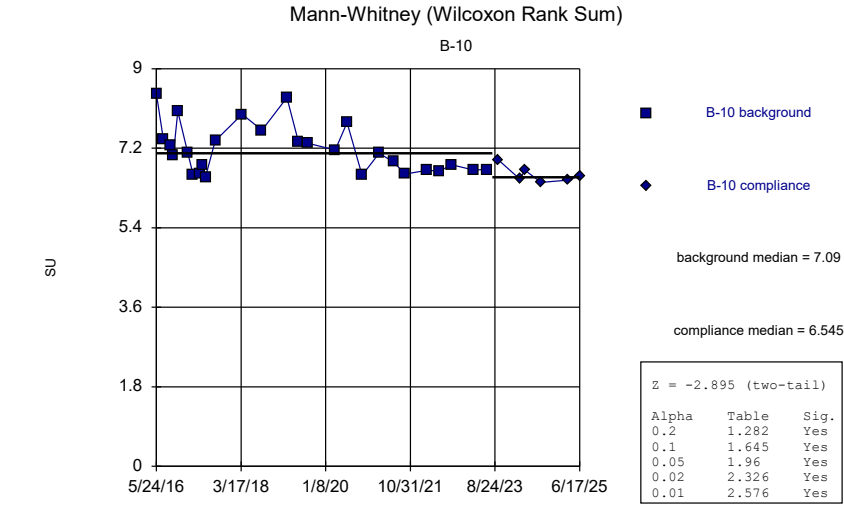
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



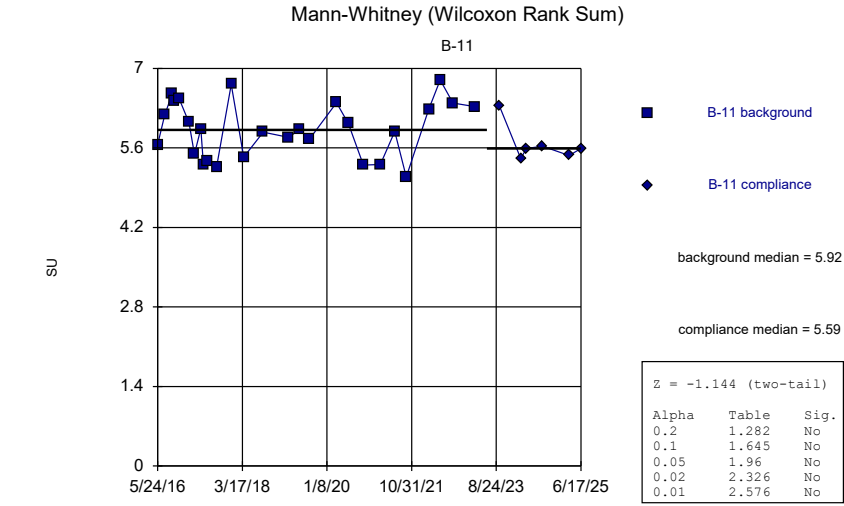
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



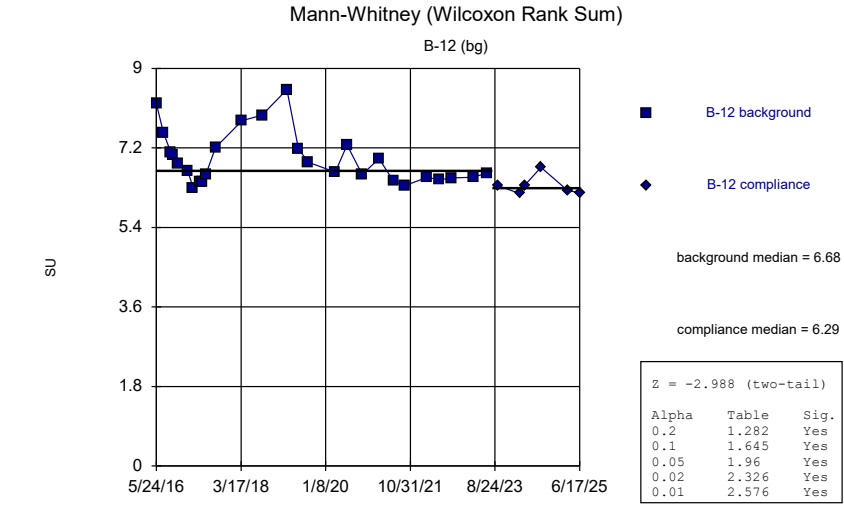
Constituent: Fluoride, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



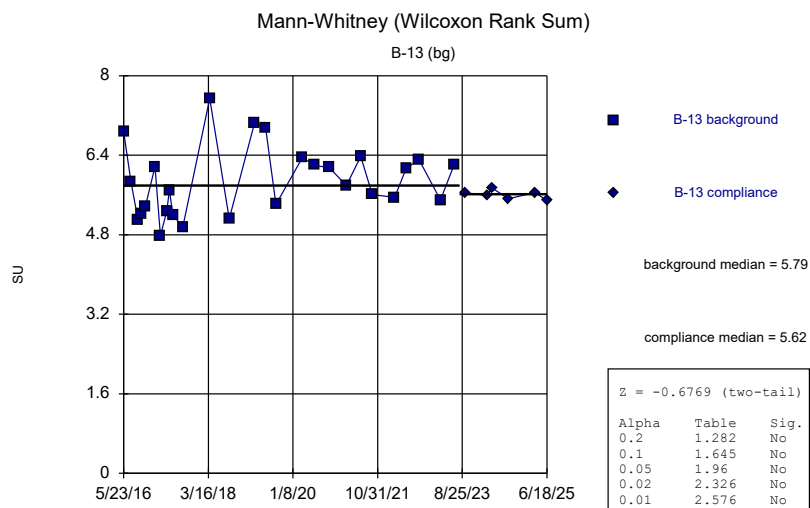
Constituent: pH, field Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



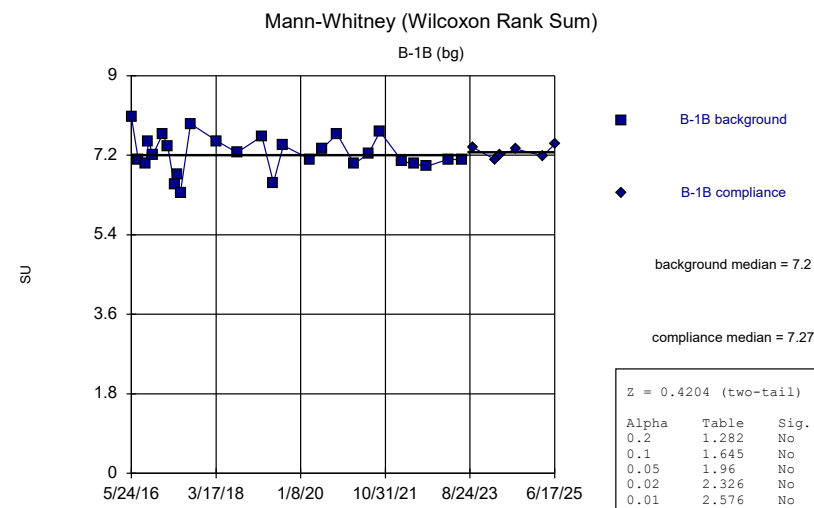
Constituent: pH, field Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



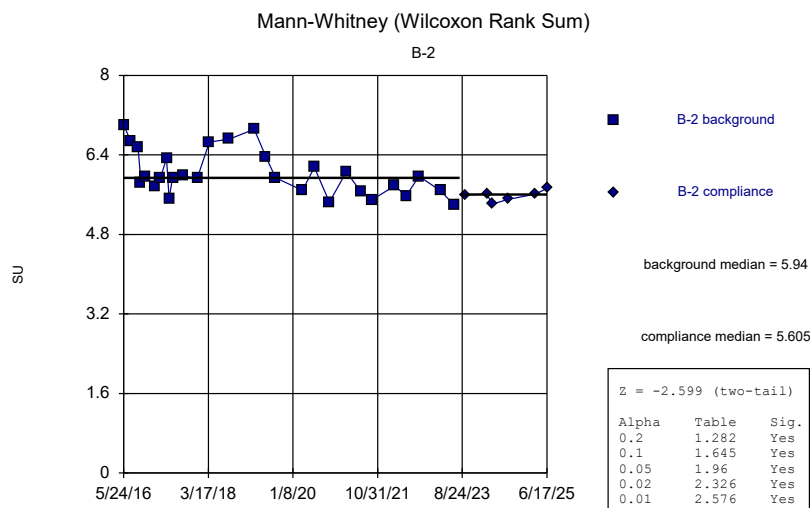
Constituent: pH, field Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



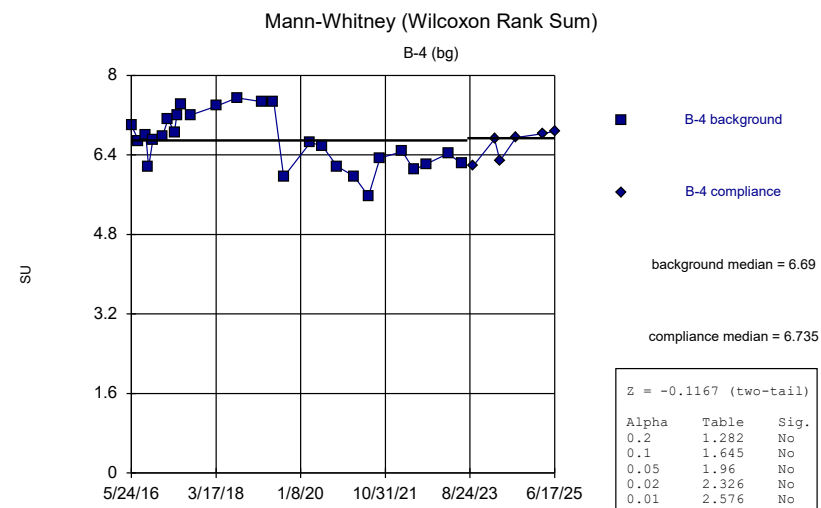
Constituent: pH, field Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



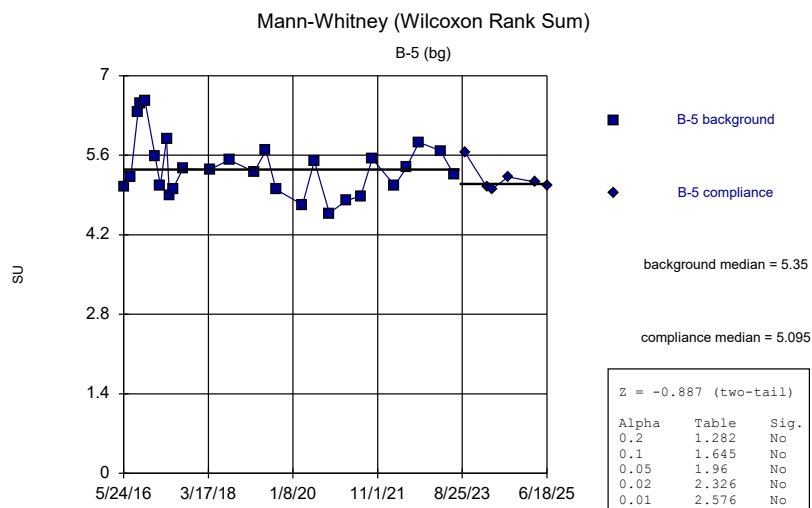
Constituent: pH, field Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



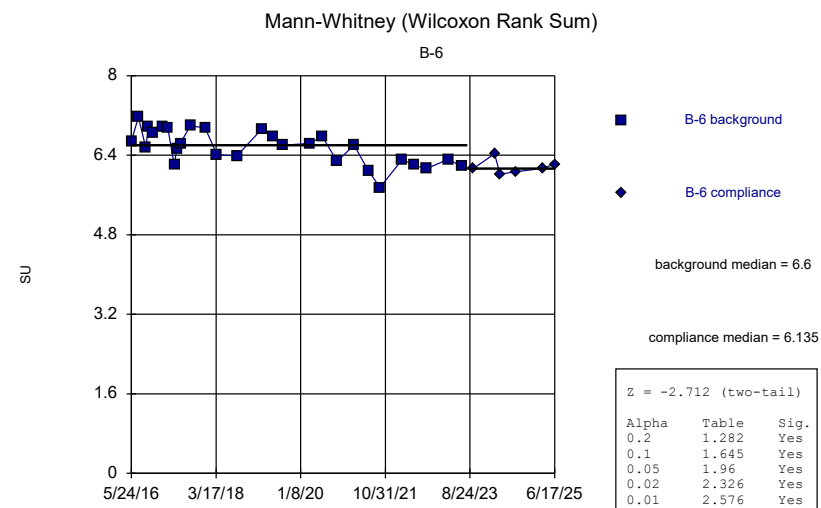
Constituent: pH, field Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



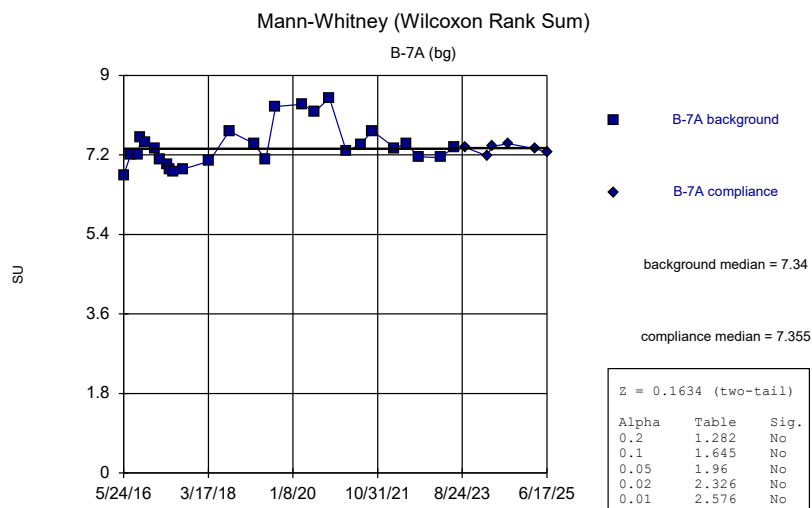
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



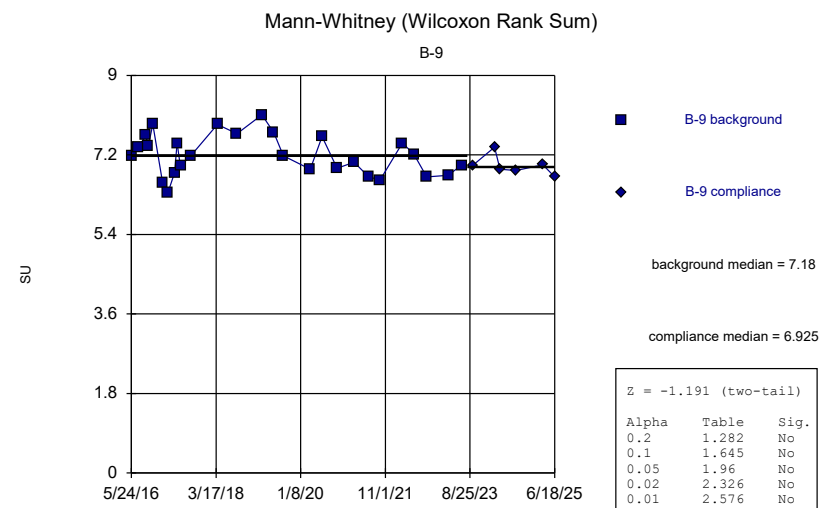
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



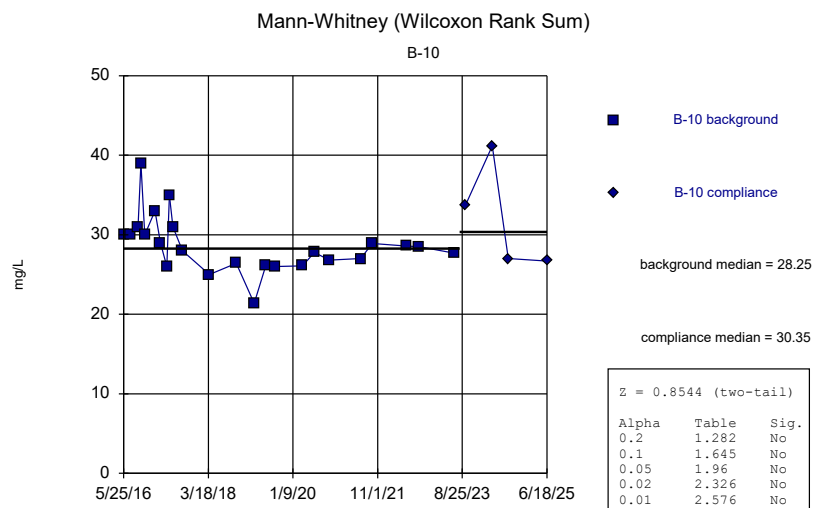
Constituent: pH, field Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



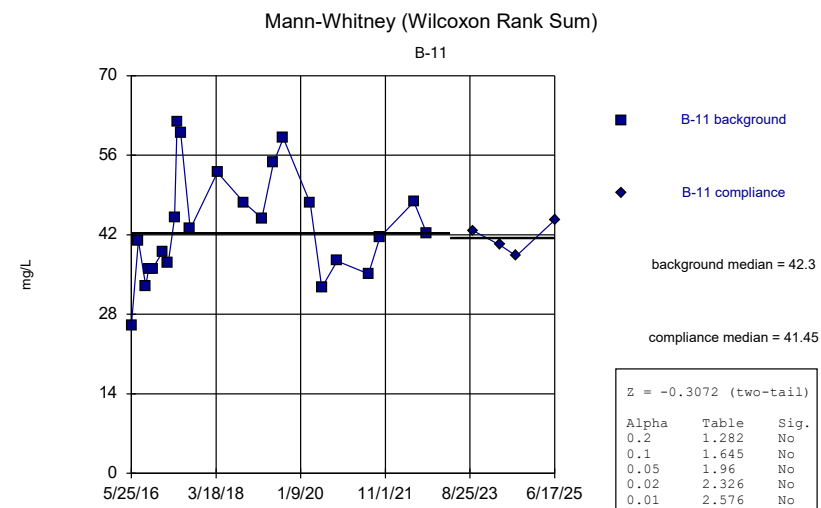
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



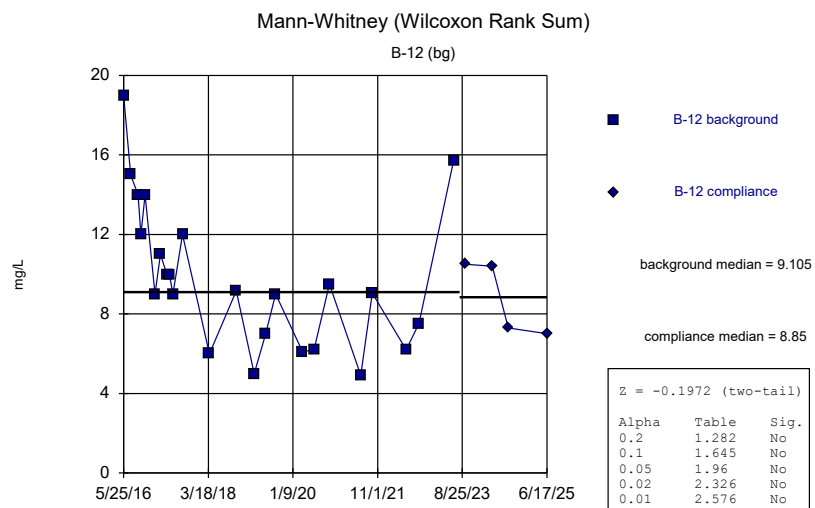
Constituent: pH, field Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



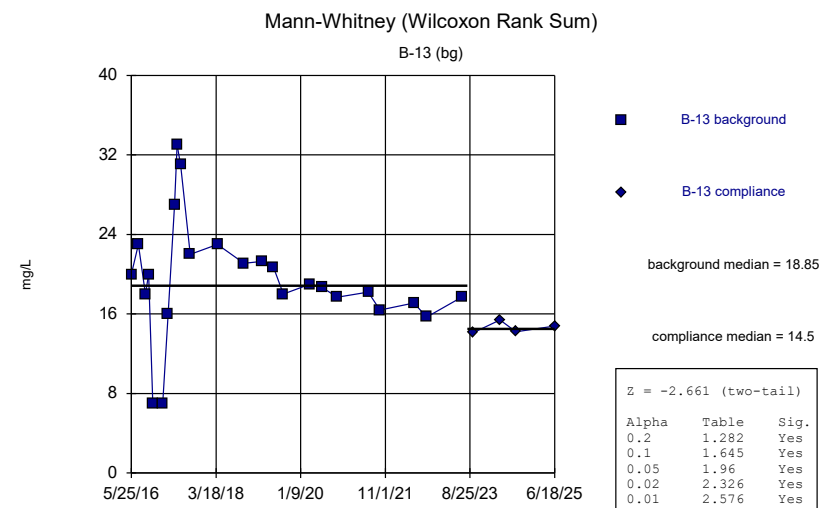
Constituent: Sulfate, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



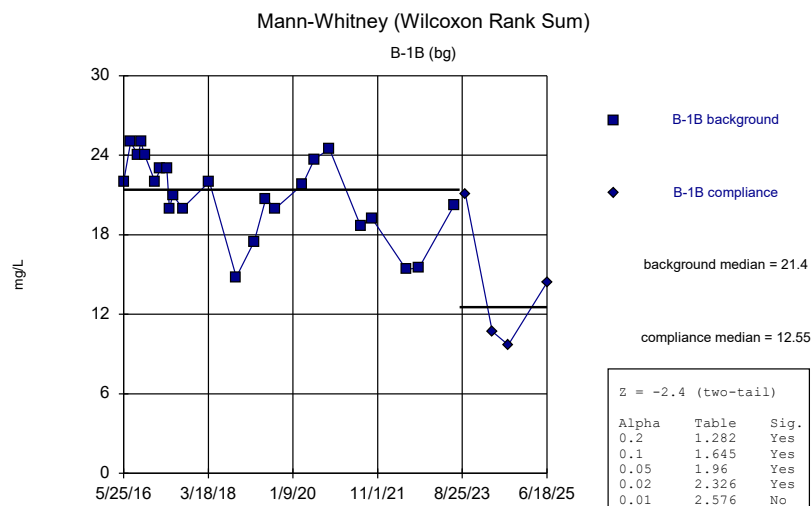
Constituent: Sulfate, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



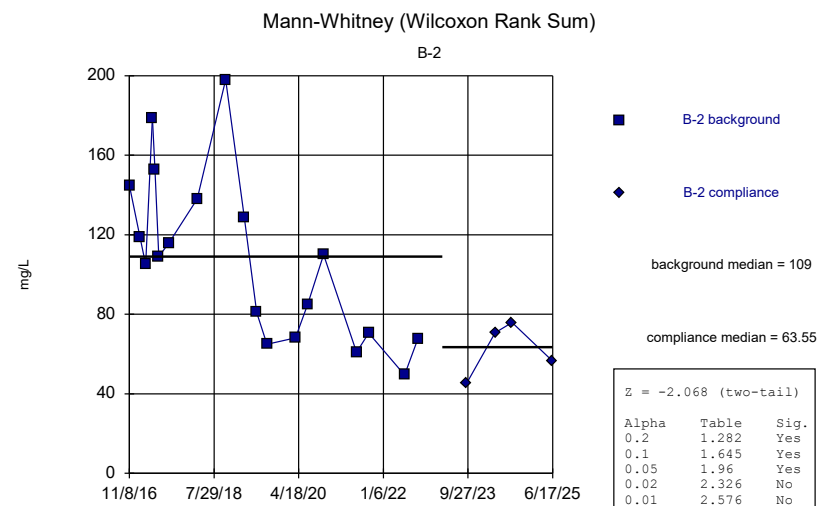
Constituent: Sulfate, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



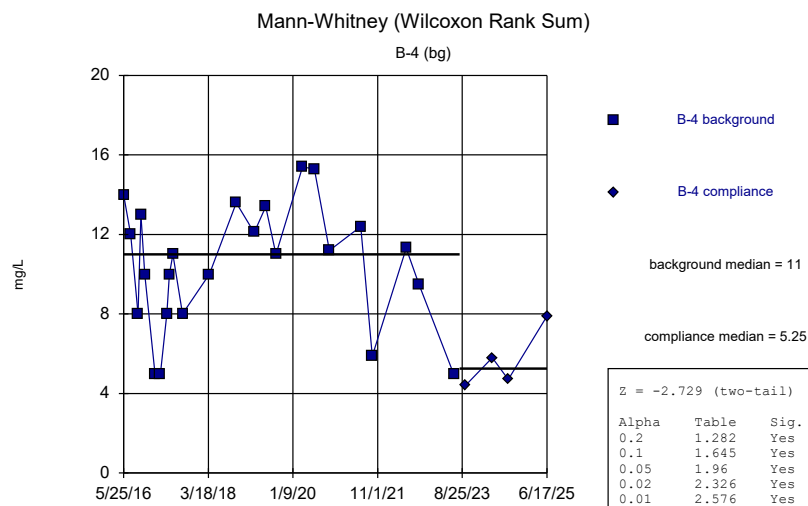
Constituent: Sulfate, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



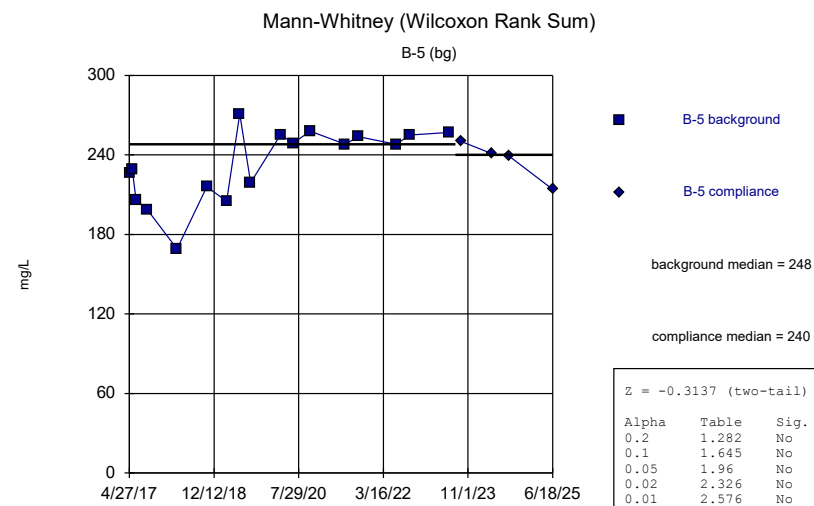
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



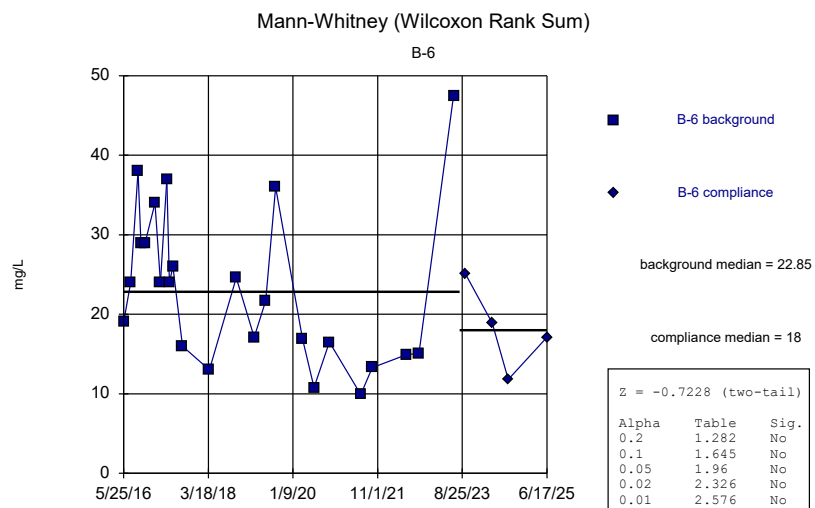
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



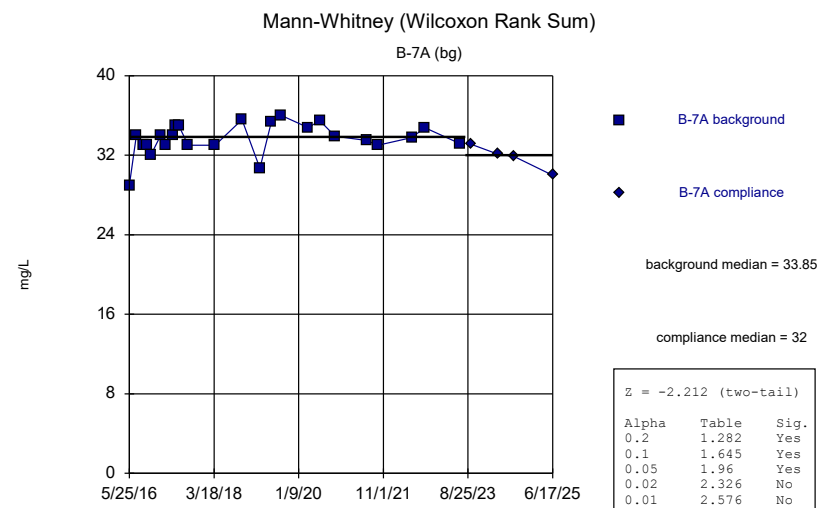
Constituent: Sulfate, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



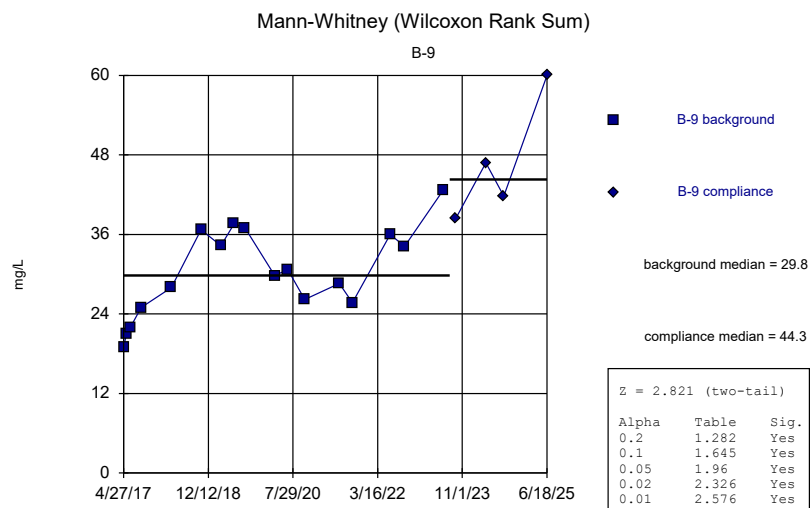
Constituent: Sulfate, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



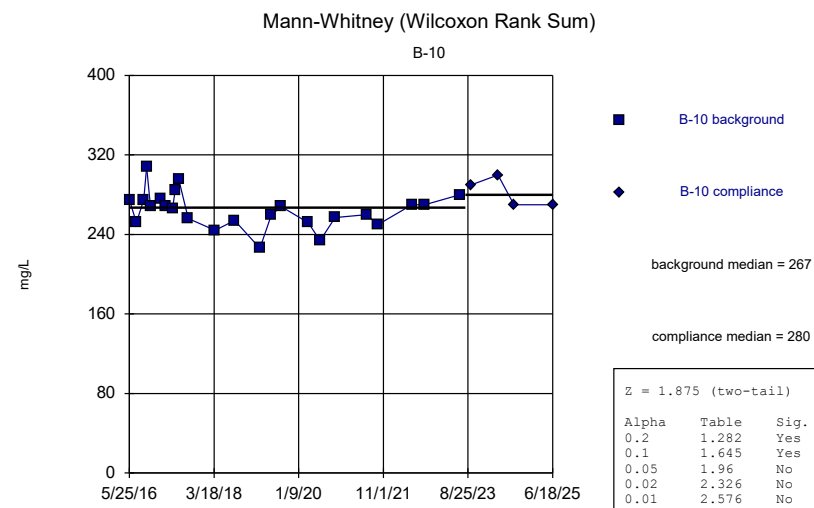
Constituent: Sulfate, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



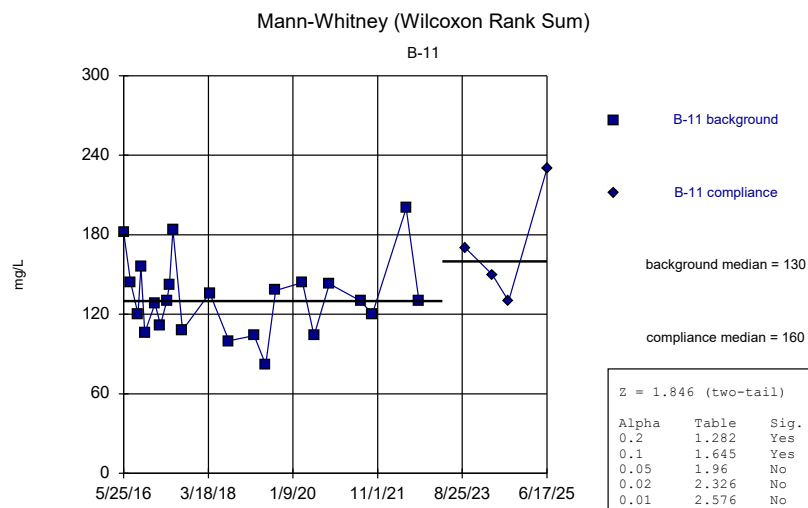
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



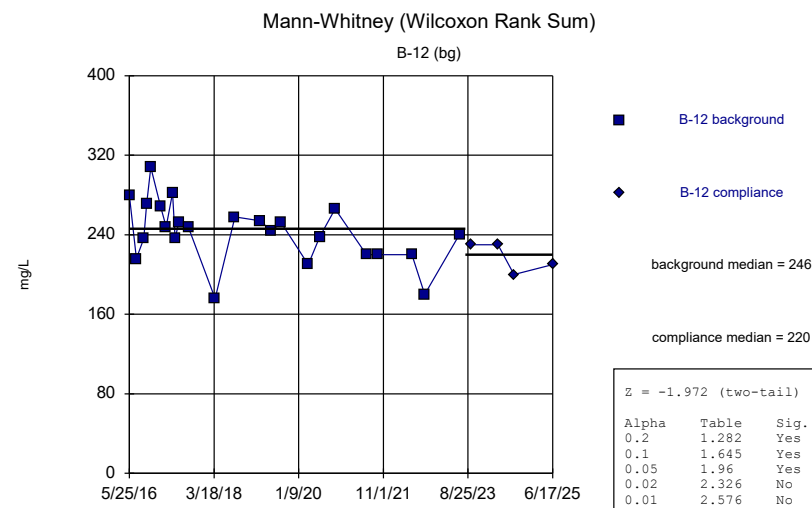
Constituent: Sulfate, total Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



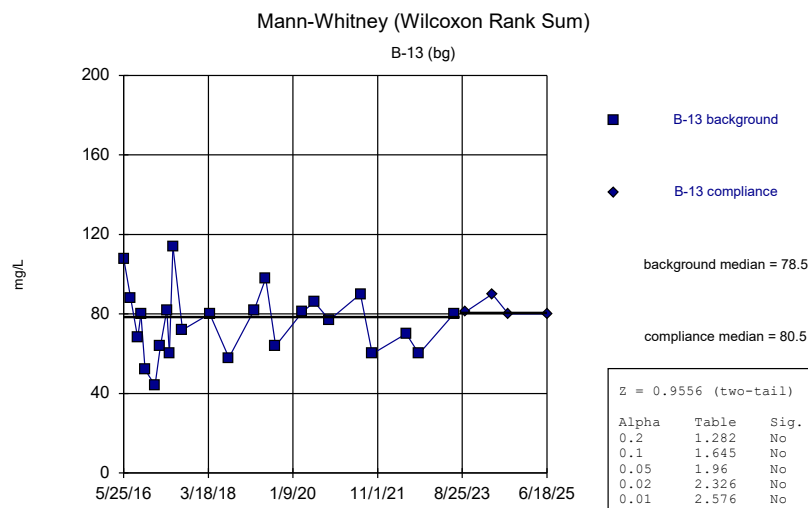
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



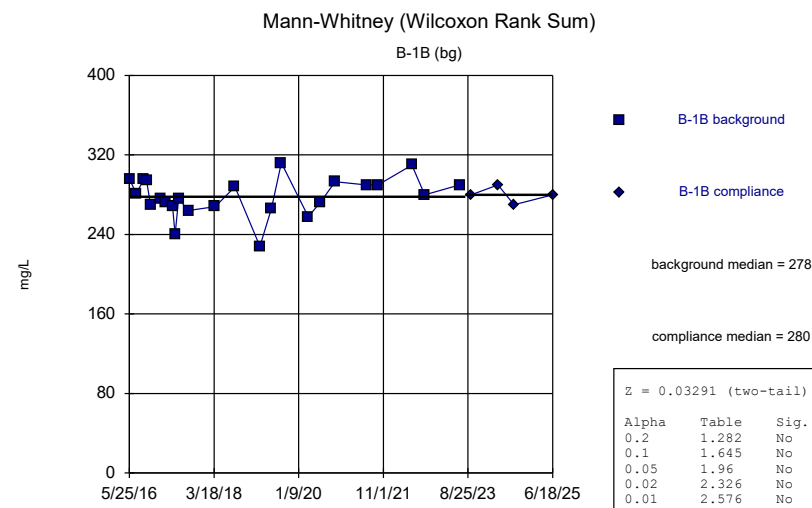
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



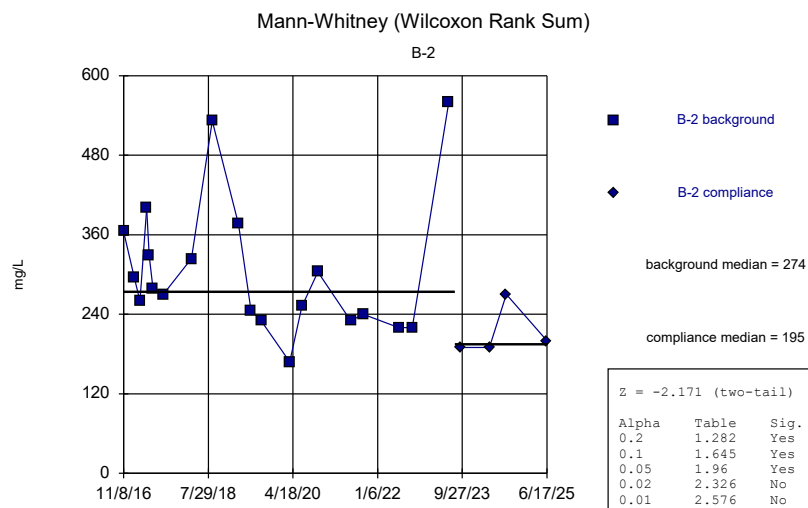
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



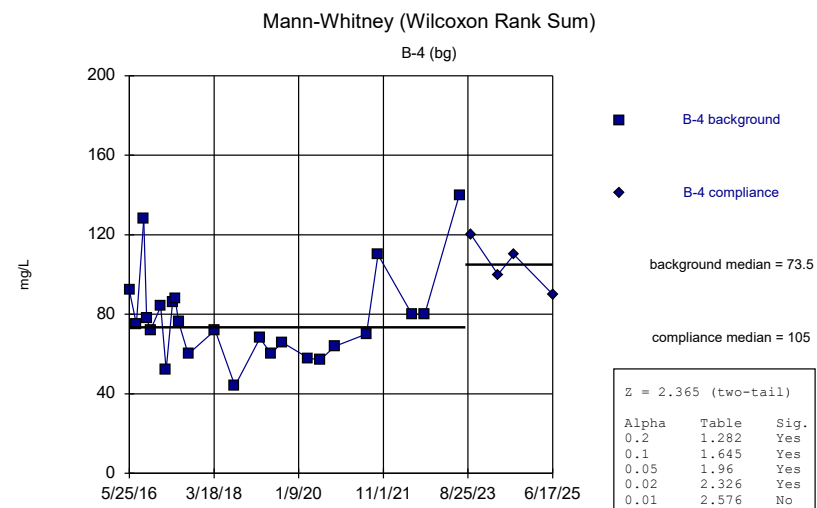
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



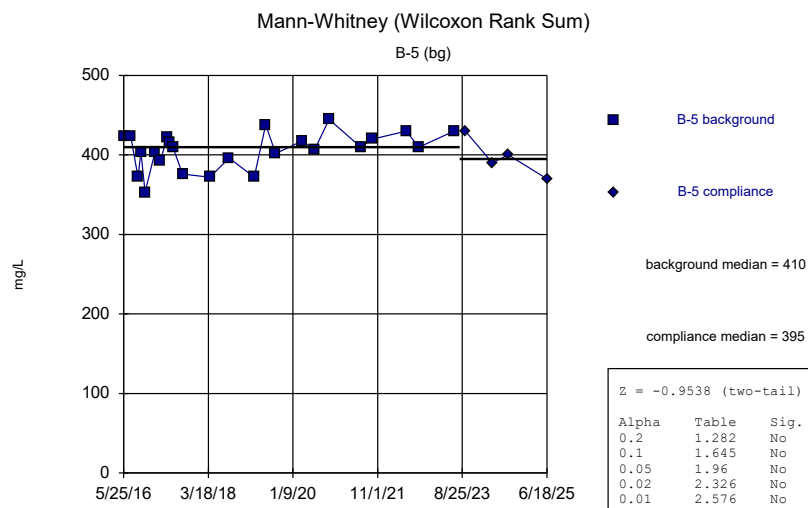
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



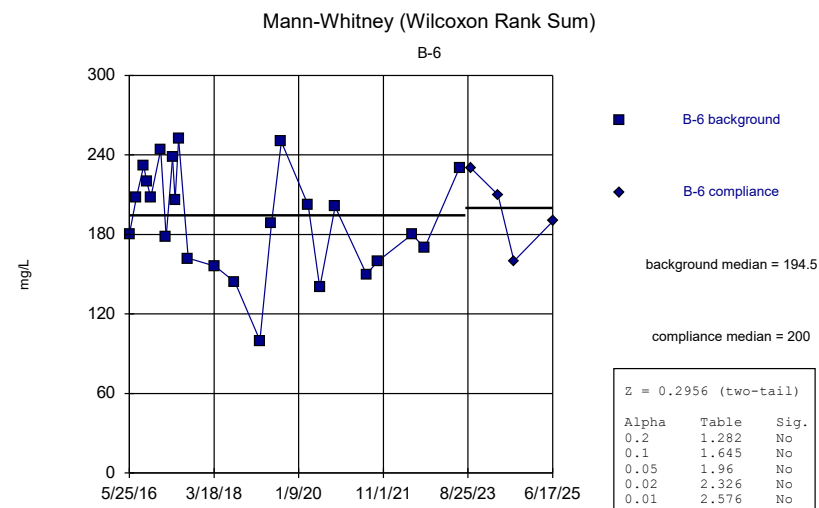
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



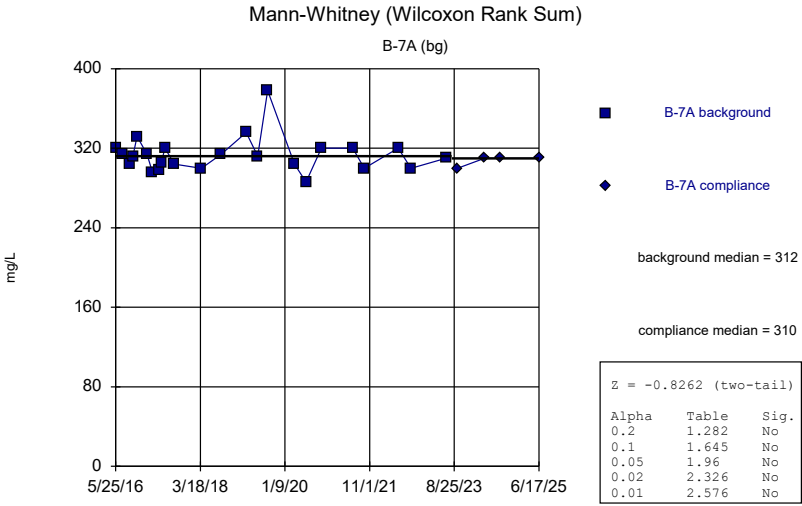
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



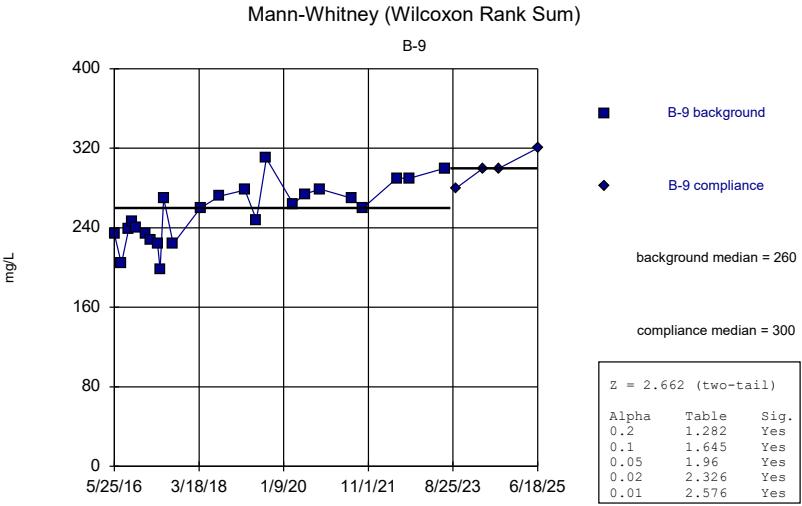
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:10 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:11 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2025 9:11 AM View: Mann-Whitney
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

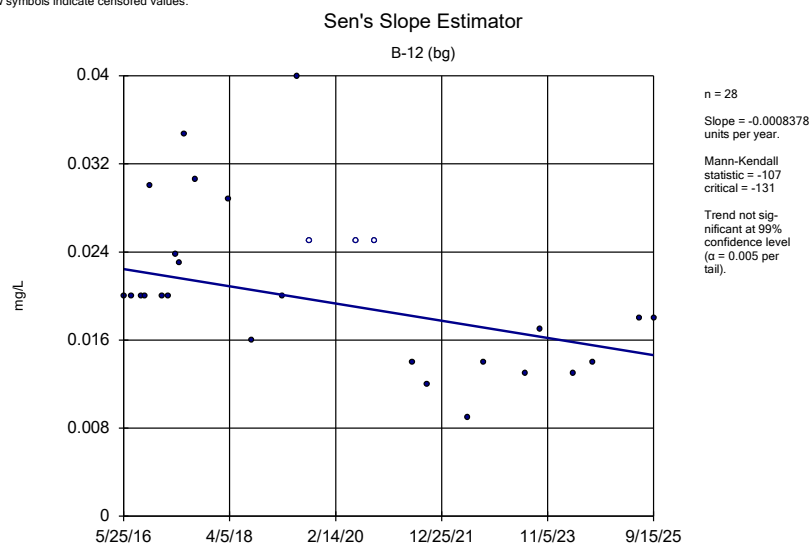
FIGURE E

Upgradient Trend Tests – Appendix III

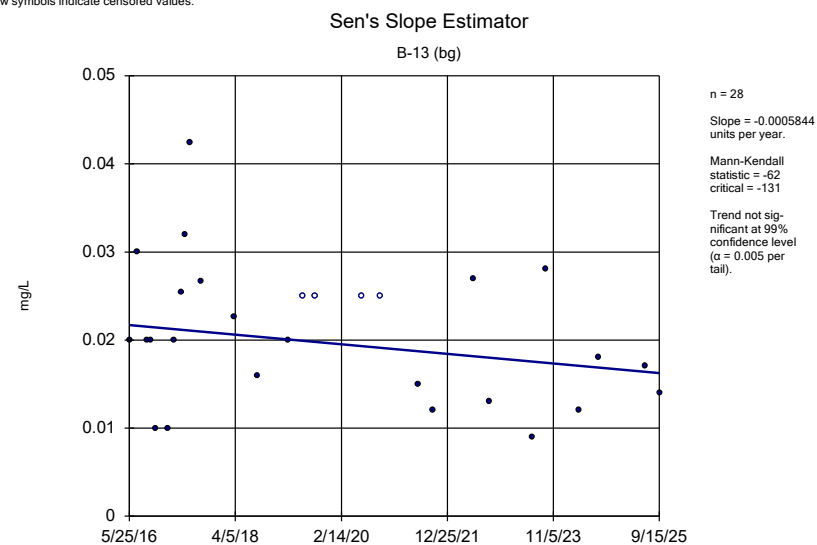
Appendix III Trend Tests - Upgradient Wells - All Results (No Significant)

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 9:25 AM

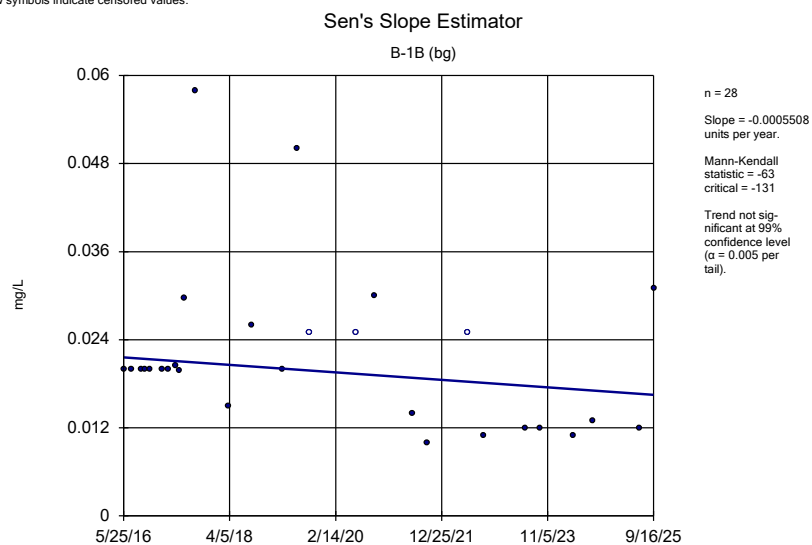
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Alpha</u>	<u>Method</u>
Boron, total (mg/L)	B-12 (bg)	-0.0008378	-107	-131	No	28	10.71	n/a	0.01	NP
Boron, total (mg/L)	B-13 (bg)	-0.0005844	-62	-131	No	28	14.29	n/a	0.01	NP
Boron, total (mg/L)	B-1B (bg)	-0.0005508	-63	-131	No	28	10.71	n/a	0.01	NP
Boron, total (mg/L)	B-4 (bg)	0.003595	108	131	No	28	0	n/a	0.01	NP
Boron, total (mg/L)	B-5 (bg)	0.0004644	66	131	No	28	28.57	n/a	0.01	NP
Boron, total (mg/L)	B-7A (bg)	-0.0007964	-109	-131	No	28	17.86	n/a	0.01	NP



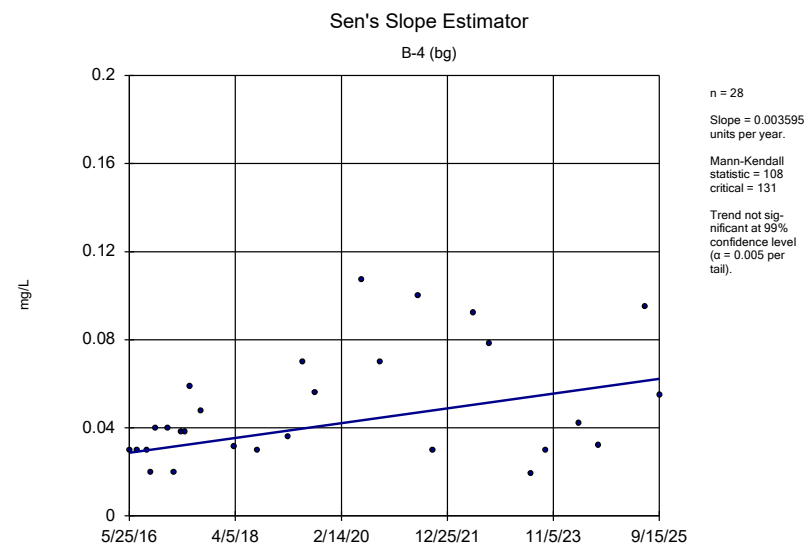
Constituent: Boron, total Analysis Run 12/16/2025 9:24 AM View: Appendix III - Trend Tests
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



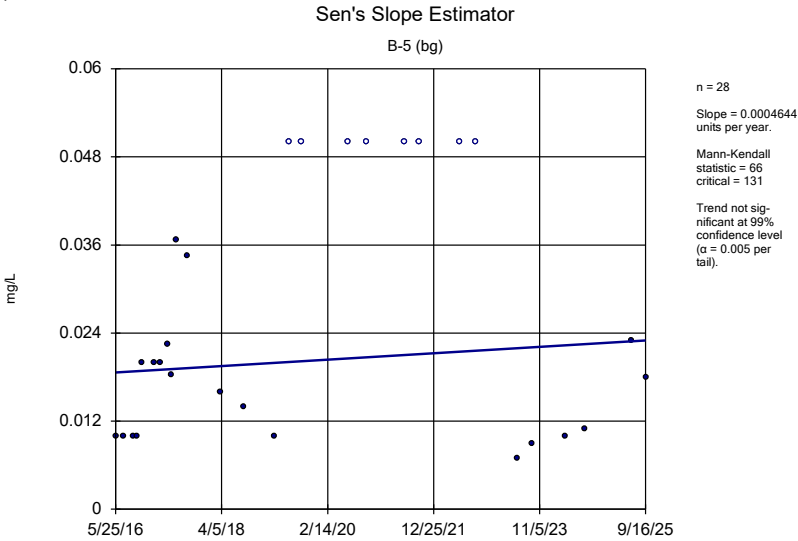
Constituent: Boron, total Analysis Run 12/16/2025 9:24 AM View: Appendix III - Trend Tests
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



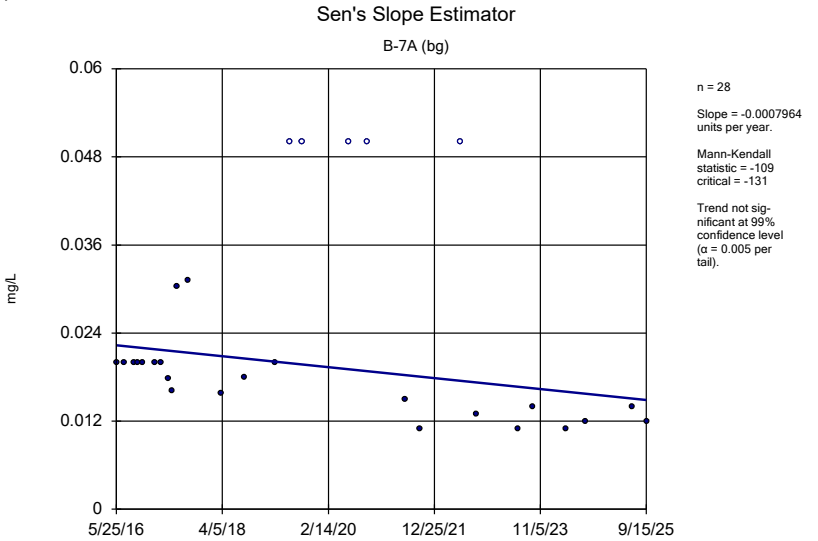
Constituent: Boron, total Analysis Run 12/16/2025 9:24 AM View: Appendix III - Trend Tests
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Boron, total Analysis Run 12/16/2025 9:24 AM View: Appendix III - Trend Tests
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Boron, total Analysis Run 12/16/2025 9:24 AM View: Appendix III - Trend Tests
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Boron, total Analysis Run 12/16/2025 9:24 AM View: Appendix III - Trend Tests
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

FIGURE F

Intrawell PLs

Appendix III Intrawell Prediction Limits - All Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/17/2025, 8:13 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	N Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium, total (mg/L)	B-10	116	n/a	n/a	1 future	n/a	27	n/a	n/a	n/a	0	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Calcium, total (mg/L)	B-11	23.92	n/a	n/a	1 future	n/a	26	2.654	0.263	0	None	ln(x)	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-12	72.88	n/a	n/a	1 future	n/a	27	60.32	6.367	0	None	No	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-13	21.83	n/a	n/a	1 future	n/a	27	13.98	3.978	0	None	No	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-1B	95.51	n/a	n/a	1 future	n/a	27	86.61	4.514	0	None	No	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-2	48.74	n/a	n/a	1 future	n/a	24	28.77	9.967	0	None	No	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-4	42.9	n/a	n/a	1 future	n/a	27	3.515	1.538	0	None	sqrt(x)	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-5	19.33	n/a	n/a	1 future	n/a	27	16.15	1.609	0	None	No	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-6	57.72	n/a	n/a	1 future	n/a	27	43.7	7.109	0	None	No	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-7A	111.4	n/a	n/a	1 future	n/a	27	98.07	6.765	0	None	No	0.001504	Param Intra 1 of 2	
Calcium, total (mg/L)	B-9	144	n/a	n/a	1 future	n/a	27	n/a	n/a	0	n/a	n/a	0.002502	NP Intra (normality) 1 of 2	
Chloride, total (mg/L)	B-10	12.68	n/a	n/a	1 future	n/a	28	9.265	1.737	0	None	No	0.001504	Param Intra 1 of 2	
Chloride, total (mg/L)	B-11	9.816	n/a	n/a	1 future	n/a	23	2.286	0.4199	0	None	sqrt(x)	0.001504	Param Intra 1 of 2	
Chloride, total (mg/L)	B-12	12.67	n/a	n/a	1 future	n/a	28	9.503	1.612	0	None	No	0.001504	Param Intra 1 of 2	
Chloride, total (mg/L)	B-13	5.071	n/a	n/a	1 future	n/a	28	2.93	1.091	0	None	No	0.001504	Param Intra 1 of 2	
Chloride, total (mg/L)	B-1B	5.53	n/a	n/a	1 future	n/a	28	n/a	n/a	0	n/a	n/a	0.002337	NP Intra (normality) 1 of 2	
Chloride, total (mg/L)	B-2	8.708	n/a	n/a	1 future	n/a	28	2.221	0.3718	0	None	sqrt(x)	0.001504	Param Intra 1 of 2	
Chloride, total (mg/L)	B-4	6.049	n/a	n/a	1 future	n/a	15	3.508	1.159	0	None	No	0.001504	Param Intra 1 of 2	
Chloride, total (mg/L)	B-5	11.07	n/a	n/a	1 future	n/a	28	8.104	1.513	0	None	No	0.001504	Param Intra 1 of 2	
Chloride, total (mg/L)	B-6	8.591	n/a	n/a	1 future	n/a	27	7.127	0.7418	0	None	No	0.001504	Param Intra 1 of 2	
Chloride, total (mg/L)	B-7A	7.28	n/a	n/a	1 future	n/a	28	n/a	n/a	0	n/a	n/a	0.002337	NP Intra (normality) 1 of 2	
Chloride, total (mg/L)	B-9	8.215	n/a	n/a	1 future	n/a	28	5.566	1.349	0	None	No	0.001504	Param Intra 1 of 2	
Fluoride, total (mg/L)	B-10	0.3304	n/a	n/a	1 future	n/a	33	n/a	n/a	33.33	n/a	n/a	0.001701	NP Intra (normality) 1 of 2	
Fluoride, total (mg/L)	B-11	0.06	n/a	n/a	1 future	n/a	32	n/a	n/a	50	n/a	n/a	0.001803	NP Intra (normality) 1 of 2	
Fluoride, total (mg/L)	B-12	0.1908	n/a	n/a	1 future	n/a	33	n/a	n/a	39.39	n/a	n/a	0.001701	NP Intra (normality) 1 of 2	
Fluoride, total (mg/L)	B-13	0.2121	n/a	n/a	1 future	n/a	33	n/a	n/a	54.55	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2	
Fluoride, total (mg/L)	B-1B	0.5447	n/a	n/a	1 future	n/a	33	0.1401	0.08123	12.12	None	x^2	0.001504	Param Intra 1 of 2	
Fluoride, total (mg/L)	B-2	0.12	n/a	n/a	1 future	n/a	32	n/a	n/a	40.63	n/a	n/a	0.001803	NP Intra (normality) 1 of 2	
Fluoride, total (mg/L)	B-4	0.06	n/a	n/a	1 future	n/a	33	n/a	n/a	54.55	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2	
Fluoride, total (mg/L)	B-5	0.2728	n/a	n/a	1 future	n/a	33	n/a	n/a	39.39	n/a	n/a	0.001701	NP Intra (normality) 1 of 2	
Fluoride, total (mg/L)	B-6	0.2066	n/a	n/a	1 future	n/a	33	n/a	n/a	54.55	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2	
Fluoride, total (mg/L)	B-7A	0.3892	n/a	n/a	1 future	n/a	33	n/a	n/a	30.3	n/a	n/a	0.001701	NP Intra (normality) 1 of 2	
Fluoride, total (mg/L)	B-9	0.3556	n/a	n/a	1 future	n/a	33	n/a	n/a	30.3	n/a	n/a	0.001701	NP Intra (normality) 1 of 2	
pH, field (SU)	B-10	8.44	6.43	n/a	1 future	n/a	33	n/a	n/a	0	n/a	n/a	0.003402	NP Intra (normality) 1 of 2	
pH, field (SU)	B-11	6.794	4.967	n/a	1 future	n/a	33	5.881	0.4738	0	None	No	0.000752	Param Intra 1 of 2	
pH, field (SU)	B-12	8.52	6.17	n/a	1 future	n/a	33	n/a	n/a	0	n/a	n/a	0.003402	NP Intra (normality) 1 of 2	
pH, field (SU)	B-13	7.065	4.596	n/a	1 future	n/a	33	5.83	0.6403	0	None	No	0.000752	Param Intra 1 of 2	
pH, field (SU)	B-1B	7.97	6.512	n/a	1 future	n/a	33	7.241	0.3781	0	None	No	0.000752	Param Intra 1 of 2	
pH, field (SU)	B-2	7.01	5.4	n/a	1 future	n/a	34	n/a	n/a	0	n/a	n/a	0.003198	NP Intra (normality) 1 of 2	
pH, field (SU)	B-4	7.65	5.695	n/a	1 future	n/a	33	6.672	0.507	0	None	No	0.000752	Param Intra 1 of 2	
pH, field (SU)	B-5	6.281	4.43	n/a	1 future	n/a	33	5.355	0.4802	0	None	No	0.000752	Param Intra 1 of 2	
pH, field (SU)	B-6	7.181	5.813	n/a	1 future	n/a	34	6.497	0.3559	0	None	No	0.000752	Param Intra 1 of 2	
pH, field (SU)	B-7A	8.223	6.604	n/a	1 future	n/a	33	1.947	0.03688	0	None	x^(1/3)	0.000752	Param Intra 1 of 2	
pH, field (SU)	B-9	7.99	6.315	n/a	1 future	n/a	33	7.152	0.4346	0	None	No	0.000752	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-10	37.51	n/a	n/a	1 future	n/a	28	5.389	0.3747	0	None	sqrt(x)	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-11	60.51	n/a	n/a	1 future	n/a	27	43.24	8.755	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-12	16.51	n/a	n/a	1 future	n/a	28	9.698	3.468	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-13	29.91	n/a	n/a	1 future	n/a	28	18.83	5.646	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-1B	28	n/a	n/a	1 future	n/a	28	19.96	4.095	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-2	184.7	n/a	n/a	1 future	n/a	23	99.87	42.07	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-4	16.4	n/a	n/a	1 future	n/a	28	9.745	3.388	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-5	285.5	n/a	n/a	1 future	n/a	21	233.7	25.31	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-6	41	n/a	n/a	1 future	n/a	28	22.51	9.419	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-7A	36.69	n/a	n/a	1 future	n/a	28	33.4	1.675	0	None	No	0.001504	Param Intra 1 of 2	
Sulfate, total (mg/L)	B-9	44.48	n/a	n/a	1 future	n/a	17	30.26	6.682	0	None	No	0.001504	Param Intra 1 of 2	

Appendix III Intrawell Prediction Limits - All Results

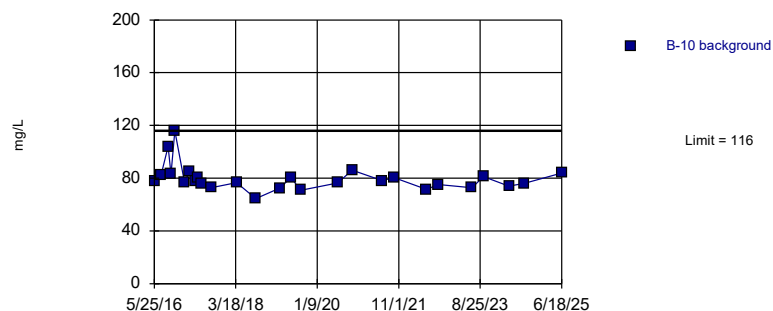
Page 2

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/17/2025, 8:13 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig. Bg</u>	<u>N Bg</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids [TDS] (mg/L)	B-10	303.7	n/a	n/a	1 future	n/a	28	267.1	18.63	0	None	No	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-11	203.2	n/a	n/a	1 future	n/a	27	137.9	33.09	0	None	No	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-12	298.1	n/a	n/a	1 future	n/a	28	239	30.09	0	None	No	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-13	108.1	n/a	n/a	1 future	n/a	28	76.75	15.95	0	None	No	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-1B	314.5	n/a	n/a	1 future	n/a	28	278.5	18.35	0	None	No	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-2	495.2	n/a	n/a	1 future	n/a	24	16.81	2.719	0	None	sqrt(x)	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-4	127.4	n/a	n/a	1 future	n/a	28	81.43	23.39	0	None	No	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-5	450.7	n/a	n/a	1 future	n/a	28	404.9	23.35	0	None	No	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-6	266.8	n/a	n/a	1 future	n/a	28	192.5	37.87	0	None	No	0.001504	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-7A	378	n/a	n/a	1 future	n/a	28	n/a	n/a	0	n/a	n/a	0.002337	NP Intra (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	B-9	324.5	n/a	n/a	1 future	n/a	28	262	31.83	0	None	No	0.001504	Param Intra 1 of 2

Prediction Limit

Intrawell Non-parametric, B-10

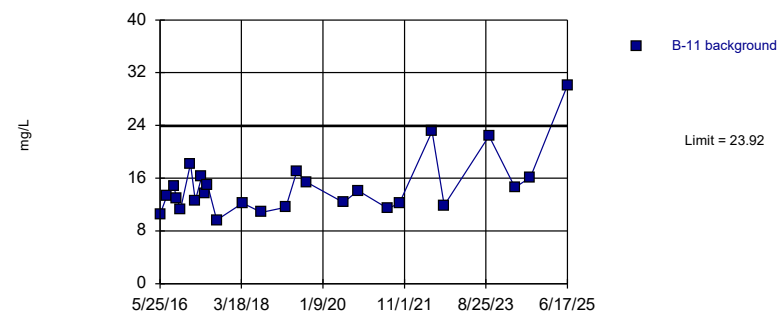


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2). Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-11

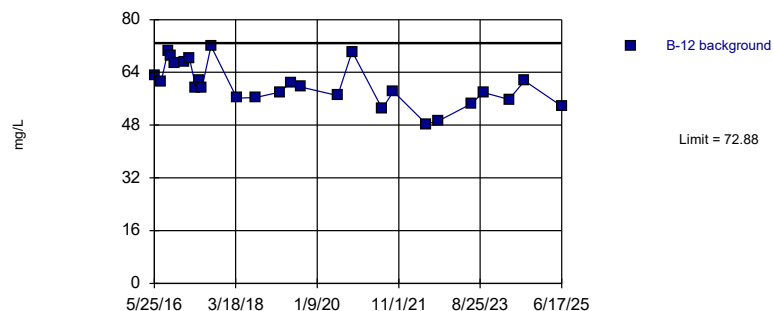


Background Data Summary (based on natural log transformation): Mean=2.654, Std. Dev.=0.263, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9153, critical = 0.891. Kappa = 1.981 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-12 (bg)

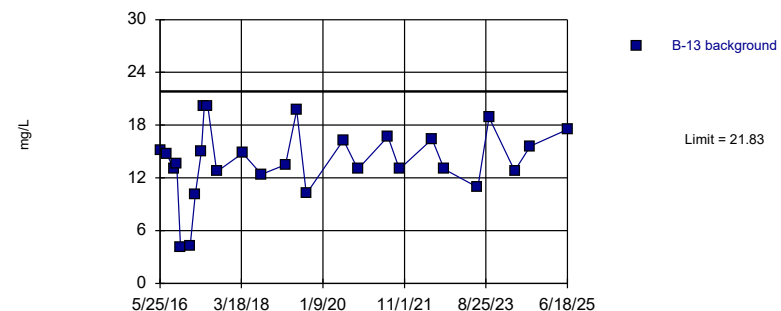


Background Data Summary: Mean=60.32, Std. Dev.=6.367, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9607, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-13 (bg)

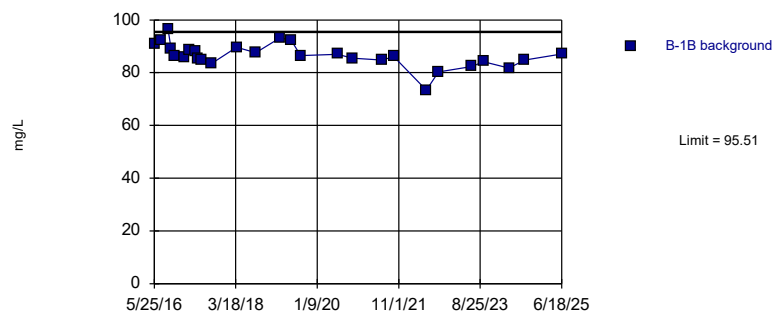


Background Data Summary: Mean=13.98, Std. Dev.=3.978, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9238, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-1B (bg)

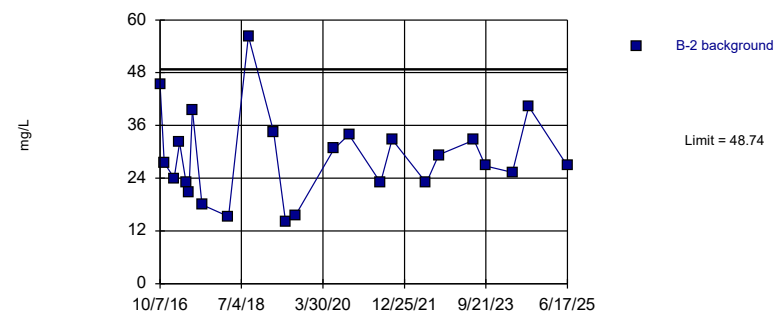


Background Data Summary: Mean=86.61, Std. Dev.=4.514, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9608, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-2

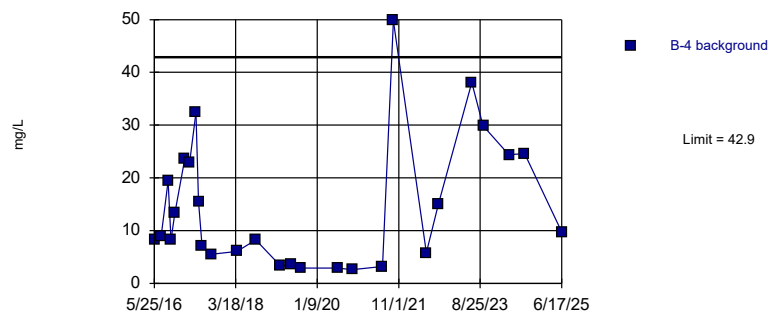


Background Data Summary: Mean=28.77, Std. Dev.=9.967, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9477, critical = 0.884. Kappa = 2.004 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-4 (bg)

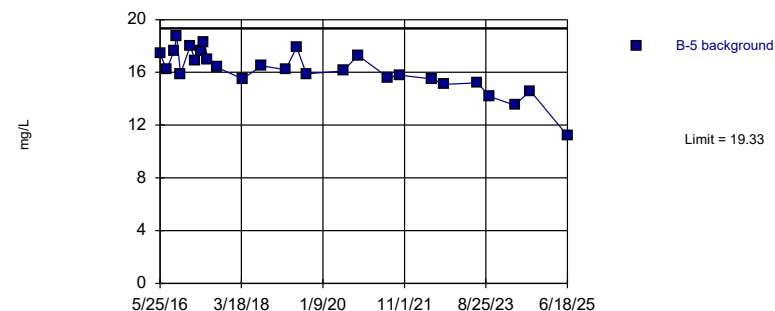


Background Data Summary (based on square root transformation): Mean=3.515, Std. Dev.=1.538, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9253, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

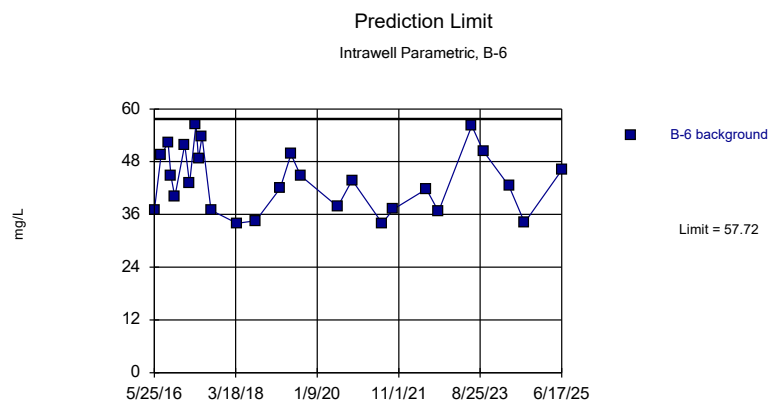
Prediction Limit

Intrawell Parametric, B-5 (bg)



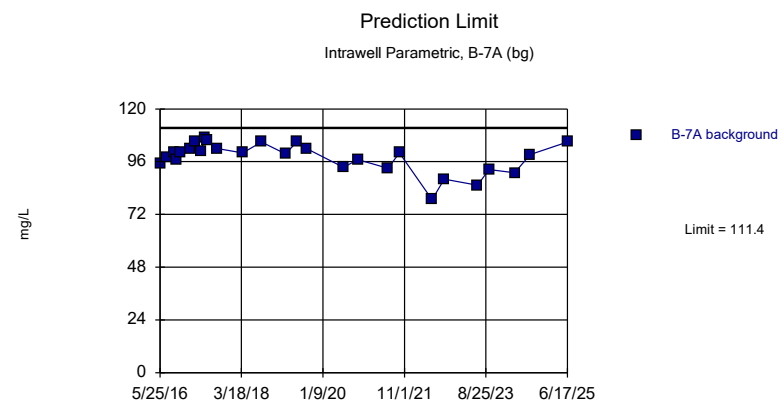
Background Data Summary: Mean=16.15, Std. Dev.=1.609, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.94, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



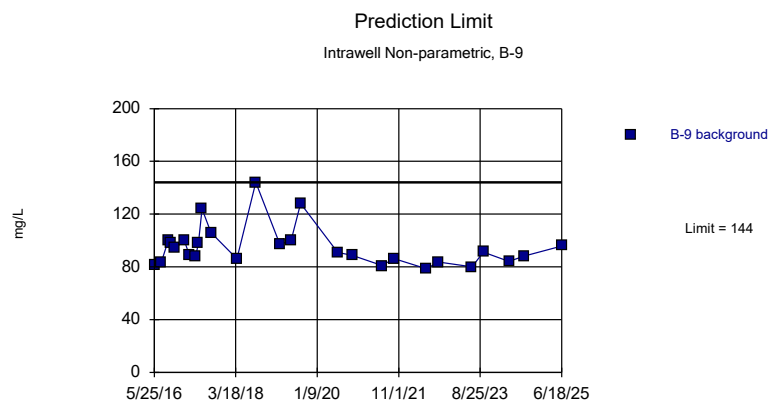
Background Data Summary: Mean=43.7, Std. Dev.=7.109, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9369, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



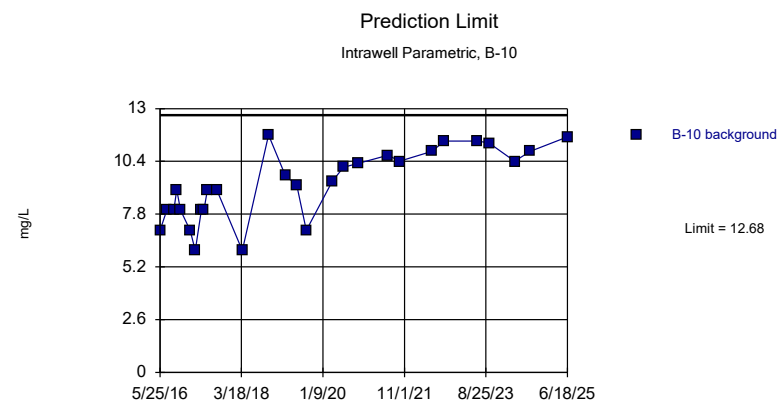
Background Data Summary: Mean=98.07, Std. Dev.=6.765, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9138, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



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. Limit is highest of 27 background values. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2). Assumes 1 future value.

Constituent: Calcium, total Analysis Run 12/17/2025 8:10 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

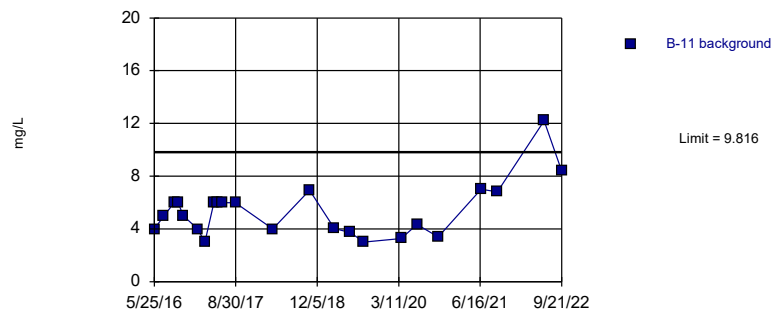


Background Data Summary: Mean=9.265, Std. Dev.=1.737, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9349, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-11

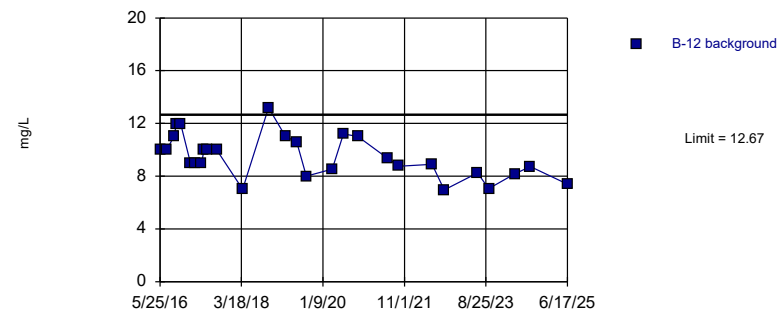


Background Data Summary (based on square root transformation): Mean=2.286, Std. Dev.=0.4199, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9152, critical = 0.881. Kappa = 2.017 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-12 (bg)

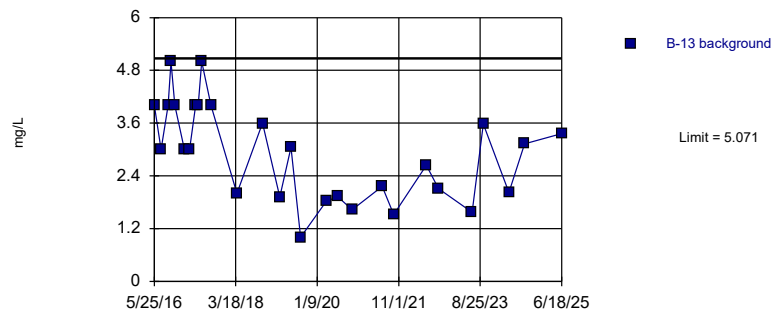


Background Data Summary: Mean=9.503, Std. Dev.=1.612, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9667, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-13 (bg)

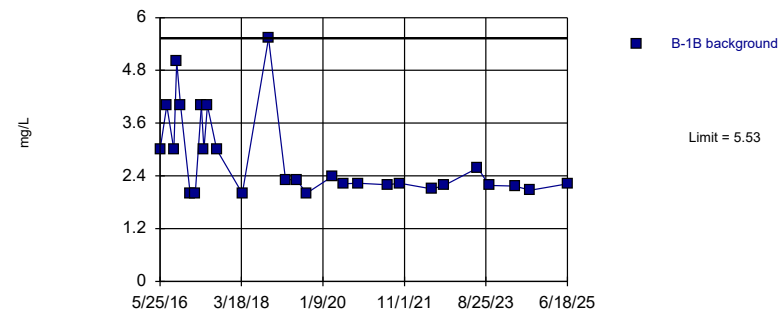


Background Data Summary: Mean=2.93, Std. Dev.=1.091, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9444, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Non-parametric, B-1B (bg)

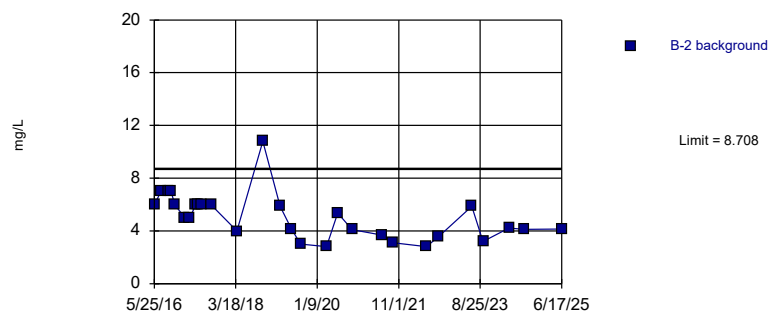


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 28 background values. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2). Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-2

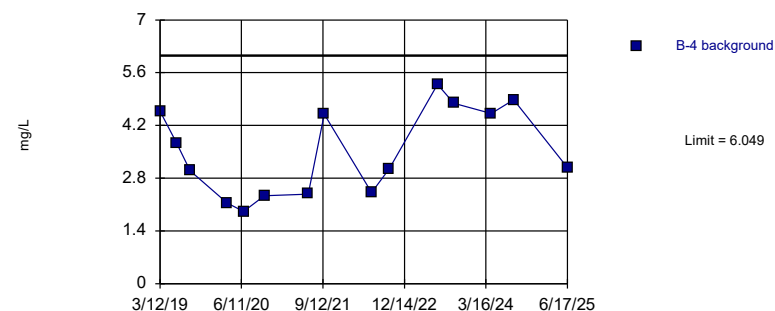


Background Data Summary (based on square root transformation): Mean=2.221, Std. Dev.=0.3718, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9311, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-4 (bg)

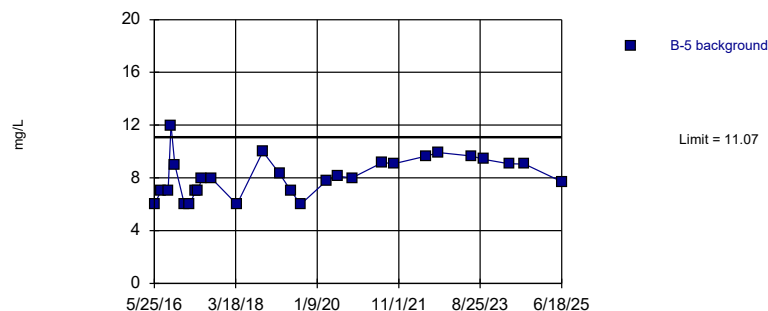


Background Data Summary: Mean=3.508, Std. Dev.=1.159, n=15. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9004, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-5 (bg)

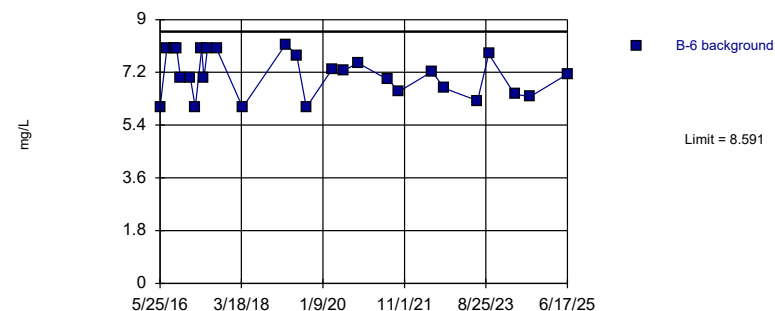


Background Data Summary: Mean=8.104, Std. Dev.=1.513, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9412, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-6

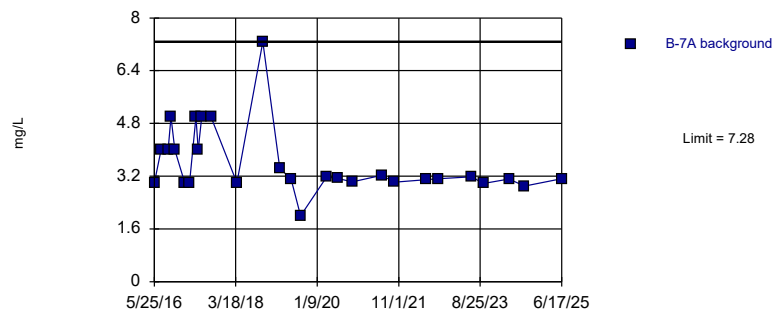


Background Data Summary: Mean=7.127, Std. Dev.=0.7418, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9023, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Non-parametric, B-7A (bg)

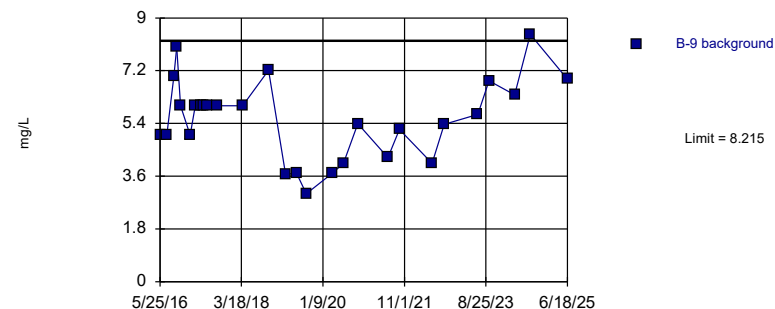


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 28 background values. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2). Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-9

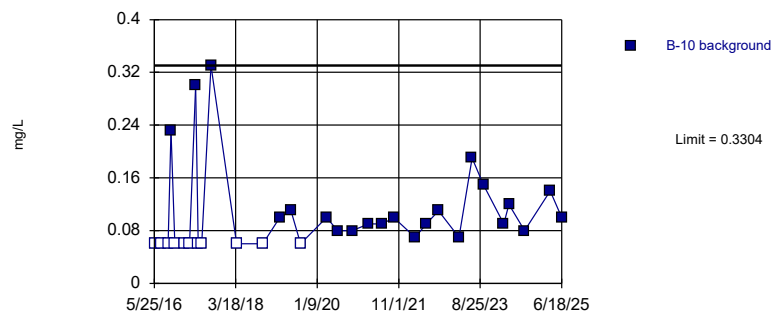


Background Data Summary: Mean=5.566, Std. Dev.=1.349, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.969, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Chloride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Non-parametric, B-10

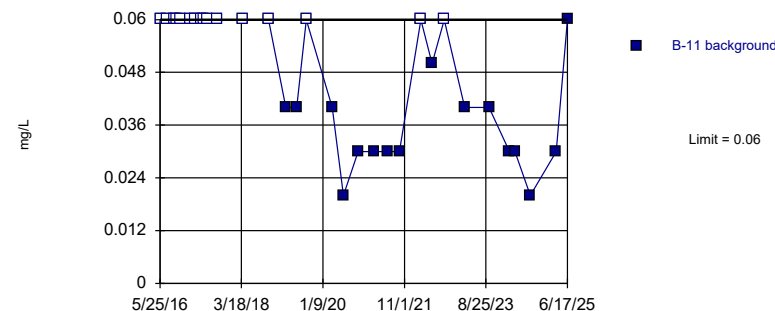


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 33 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

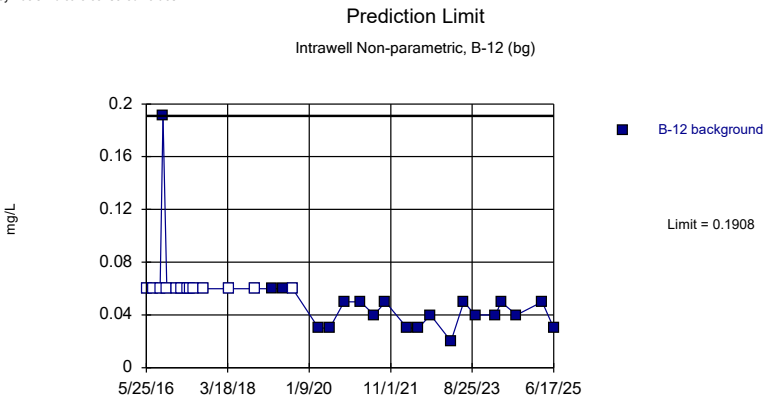
Prediction Limit

Intrawell Non-parametric, B-11



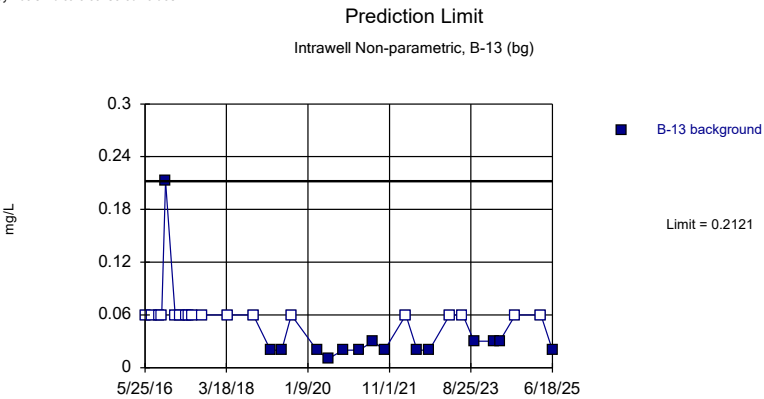
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 50% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



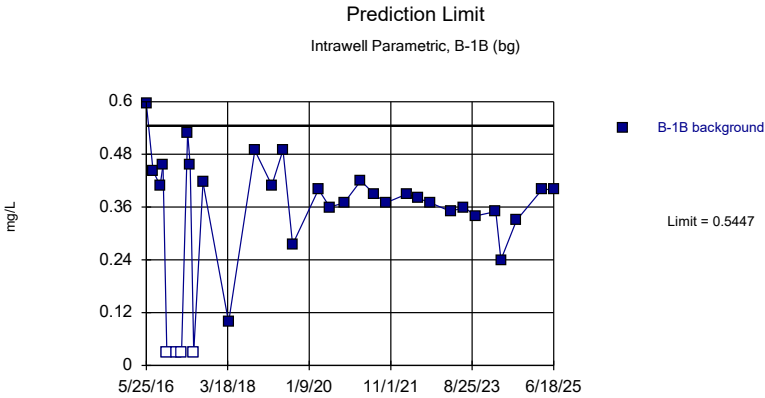
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 33 background values. 39.39% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



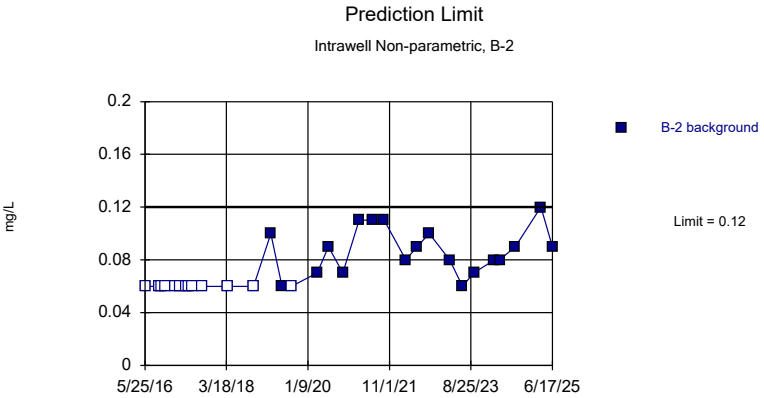
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



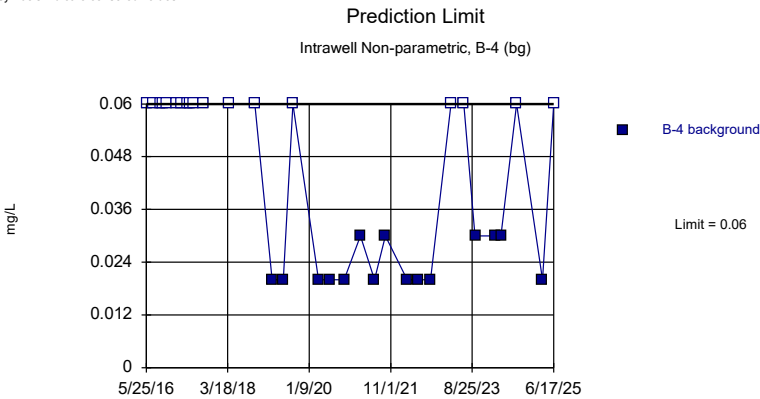
Background Data Summary (based on square transformation): Mean=0.1401, Std. Dev.=0.08123, n=33, 12.12% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9375, critical = 0.906. Kappa = 1.928 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



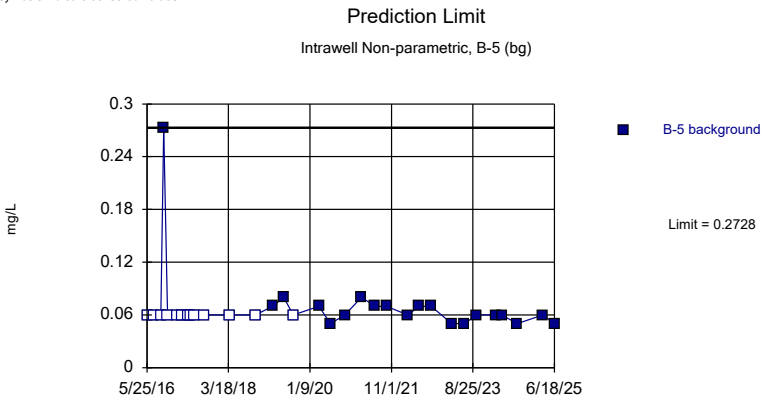
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 40.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



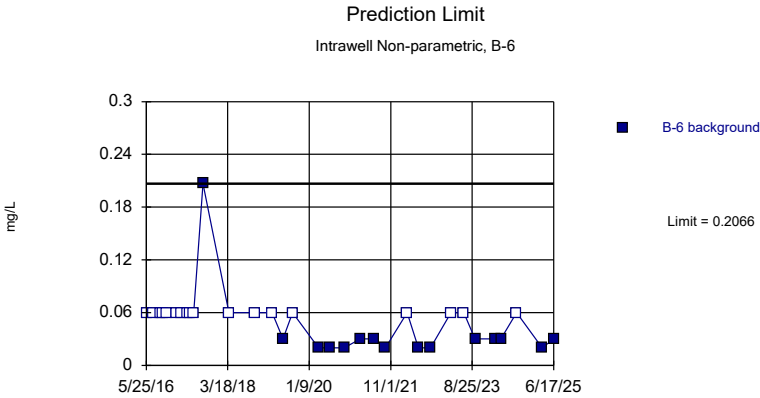
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



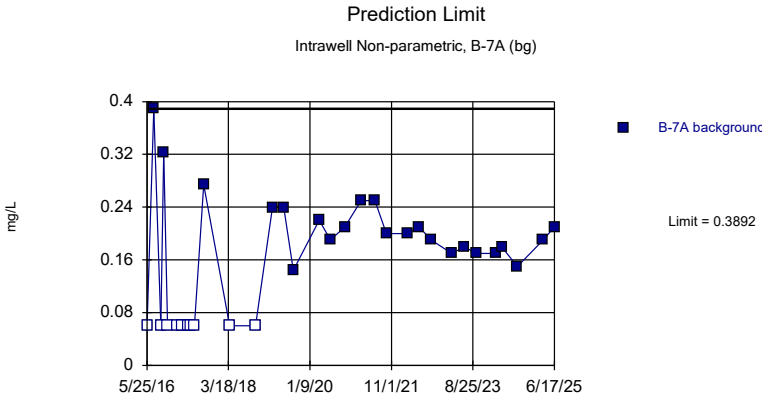
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 33 background values. 39.39% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). Assumes 1 future value.

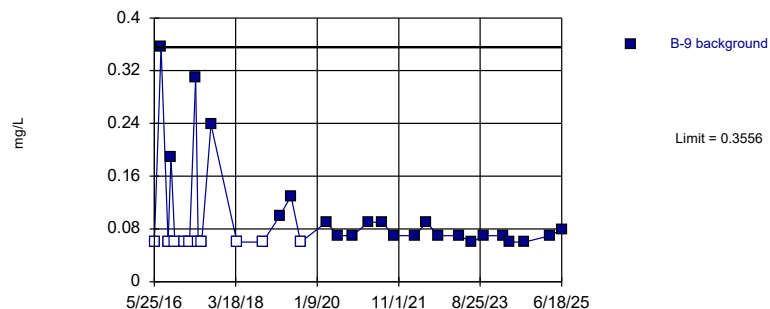
Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



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. Limit is highest of 33 background values. 30.3% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

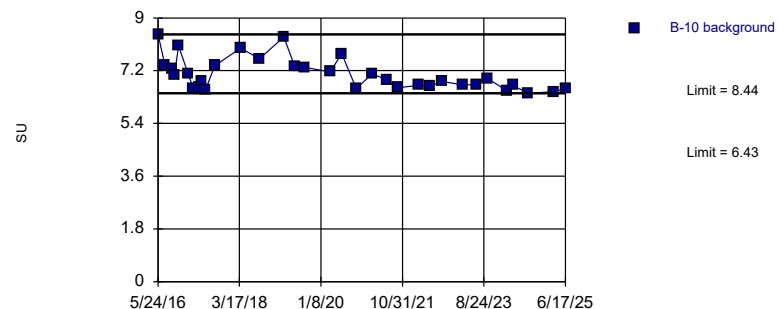
Prediction Limit Intrawell Non-parametric, B-9



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. Limit is highest of 33 background values. 30.3% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). Assumes 1 future value.

Constituent: Fluoride, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

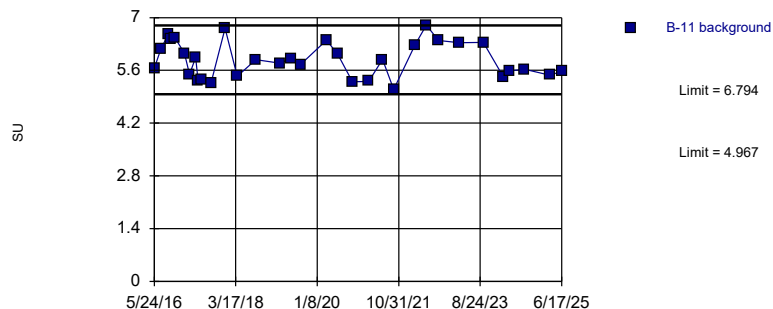
Prediction Limit Intrawell Non-parametric, B-10



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 33 background values. Well-constituent pair annual alpha = 0.006798. Individual comparison alpha = 0.003402 (1 of 2). Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

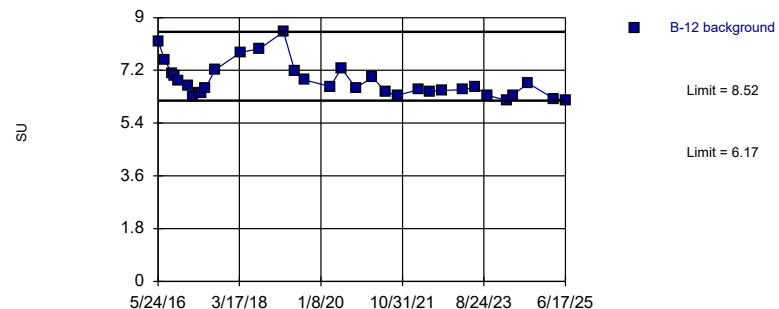
Prediction Limit Intrawell Parametric, B-11



Background Data Summary: Mean=5.881, Std. Dev.=0.4738, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9497, critical = 0.906. Kappa = 1.928 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit Intrawell Non-parametric, B-12 (bg)

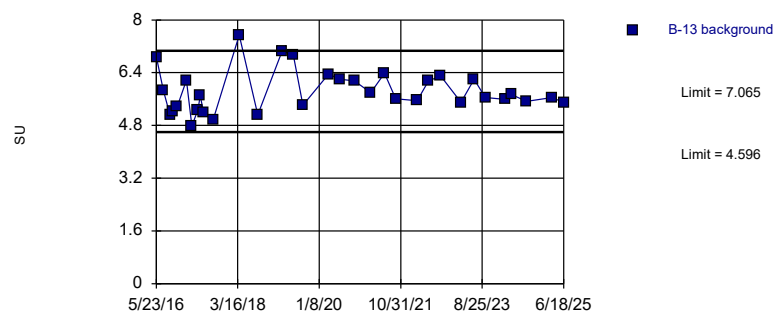


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 33 background values. Well-constituent pair annual alpha = 0.006798. Individual comparison alpha = 0.003402 (1 of 2). Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-13 (bg)

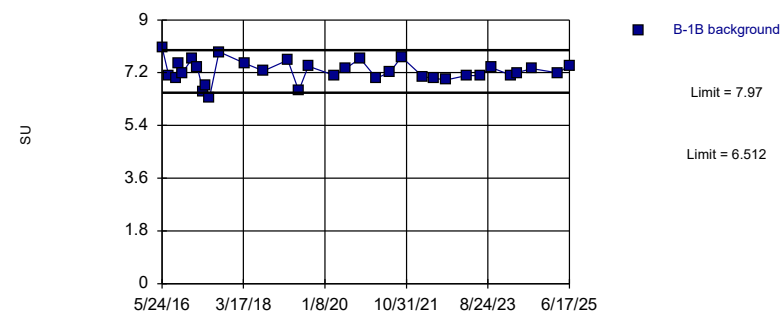


Background Data Summary: Mean=5.83, Std. Dev.=0.6403, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9457, critical = 0.906. Kappa = 1.928 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-1B (bg)

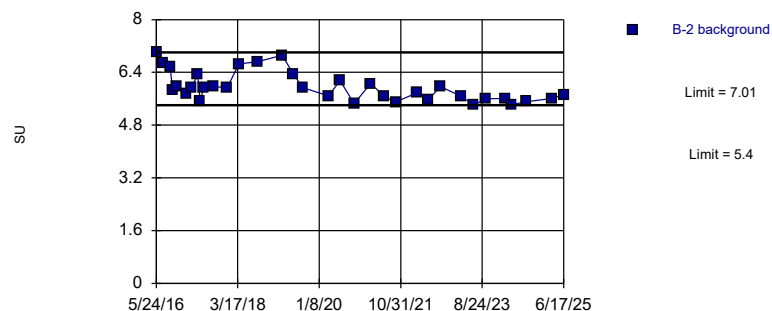


Background Data Summary: Mean=7.241, Std. Dev.=0.3781, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9801, critical = 0.906. Kappa = 1.928 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Non-parametric, B-2

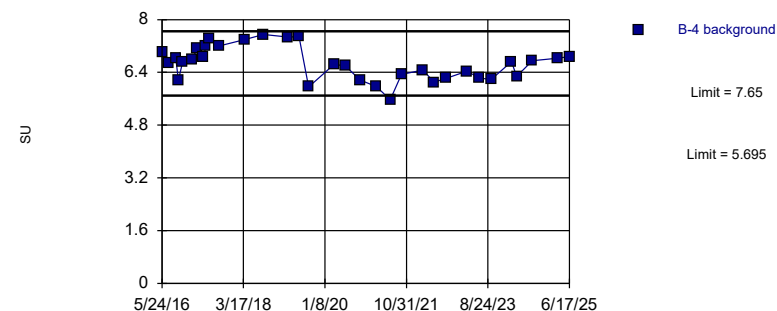


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 34 background values. Well-constituent pair annual alpha = 0.00639. Individual comparison alpha = 0.003198 (1 of 2). Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

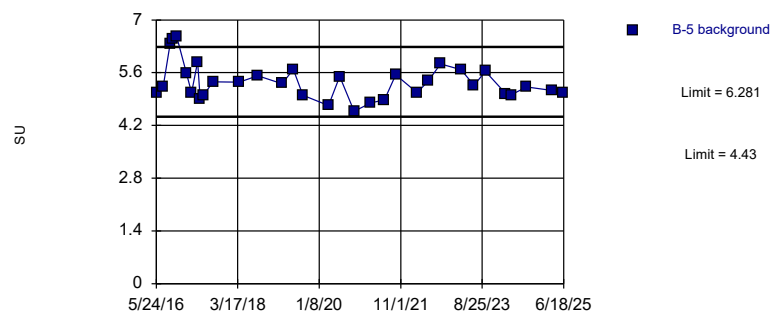
Intrawell Parametric, B-4 (bg)



Background Data Summary: Mean=6.672, Std. Dev.=0.507, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9665, critical = 0.906. Kappa = 1.928 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

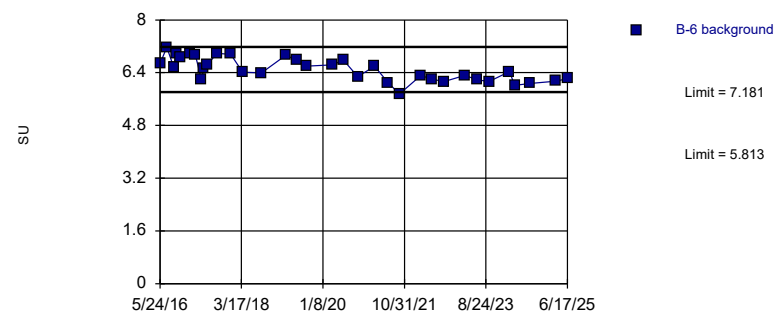
Prediction Limit
Intrawell Parametric, B-5 (bg)



Background Data Summary: Mean=5.355, Std. Dev.=0.4802, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9192, critical = 0.906. Kappa = 1.928 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

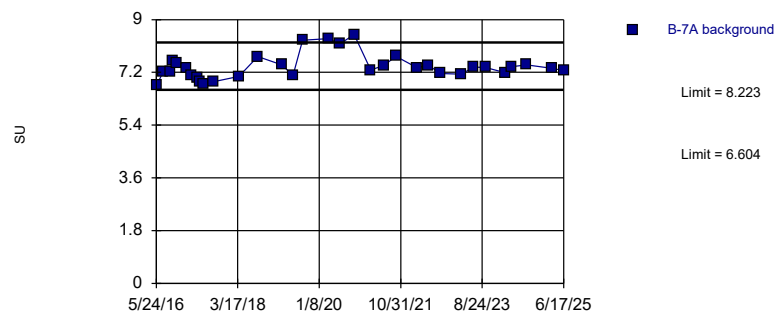
Prediction Limit
Intrawell Parametric, B-6



Background Data Summary: Mean=6.497, Std. Dev.=0.3559, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9578, critical = 0.908. Kappa = 1.922 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

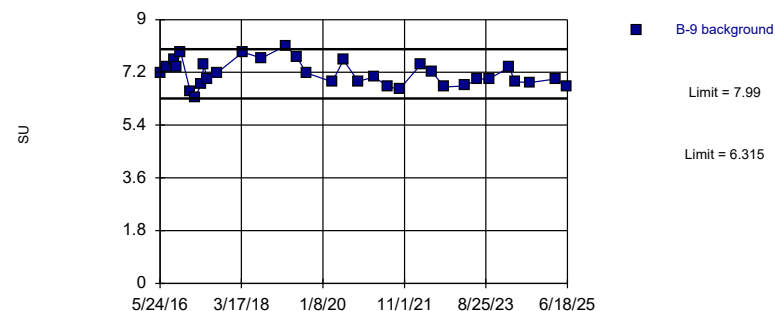
Prediction Limit
Intrawell Parametric, B-7A (bg)



Background Data Summary (based on cube root transformation): Mean=1.947, Std. Dev.=0.03688, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9071, critical = 0.906. Kappa = 1.928 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit
Intrawell Parametric, B-9

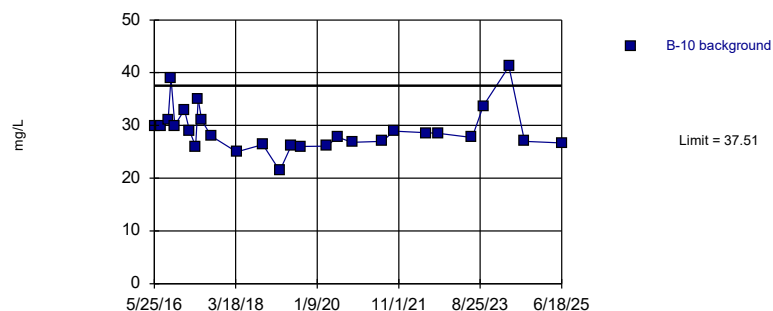


Background Data Summary: Mean=7.152, Std. Dev.=0.4346, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9639, critical = 0.906. Kappa = 1.928 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: pH, field Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-10

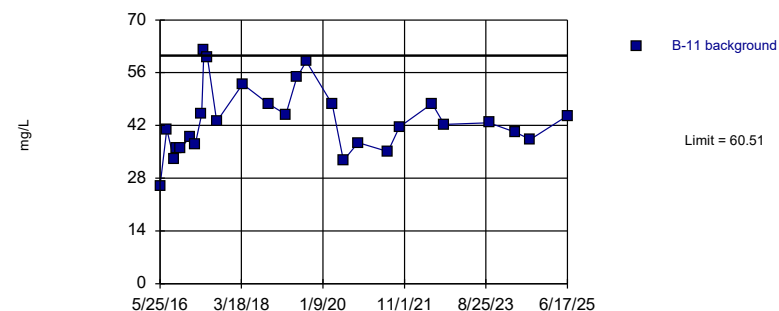


Background Data Summary (based on square root transformation): Mean=5.389, Std. Dev.=0.3747, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9136, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Sulfate, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-11

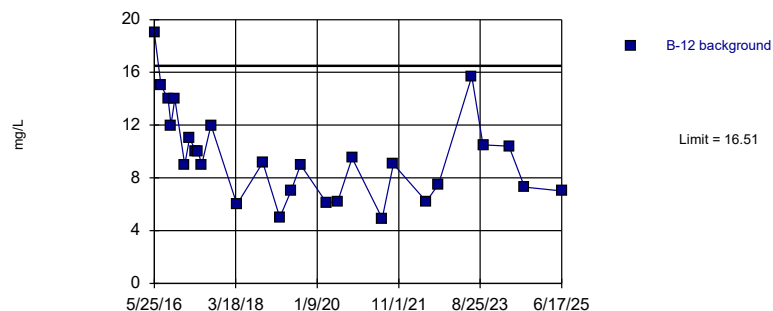


Background Data Summary: Mean=43.24, Std. Dev.=8.755, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9586, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Sulfate, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-12 (bg)

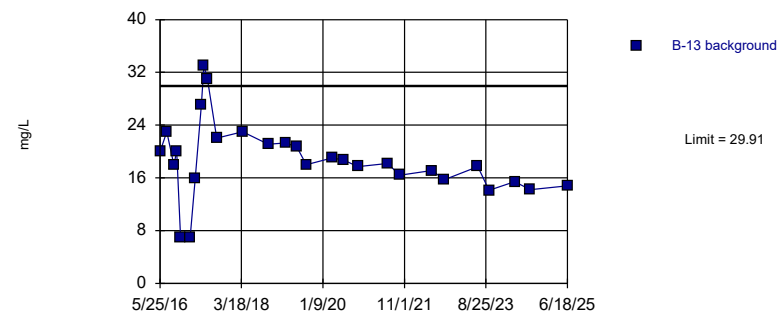


Background Data Summary: Mean=9.698, Std. Dev.=3.468, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9363, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Sulfate, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-13 (bg)

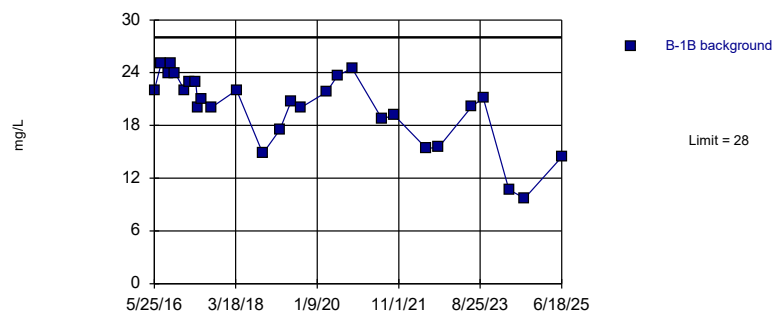


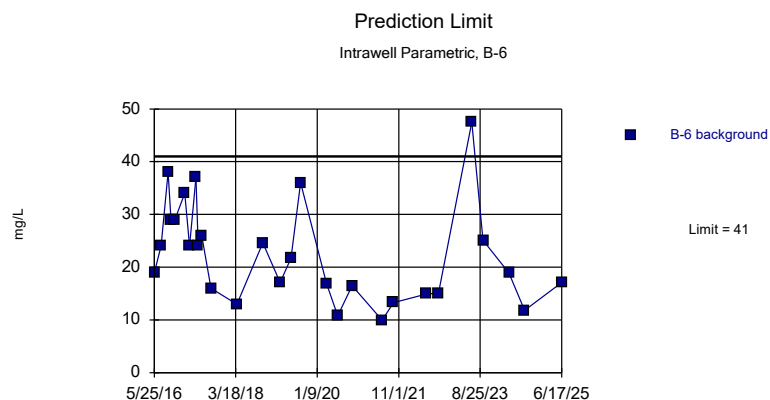
Background Data Summary: Mean=18.83, Std. Dev.=5.646, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9342, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Sulfate, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

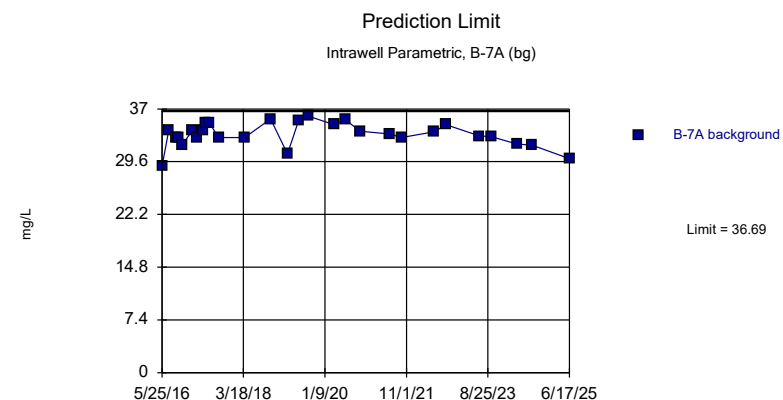
Intrawell Parametric, B-1B (bg)





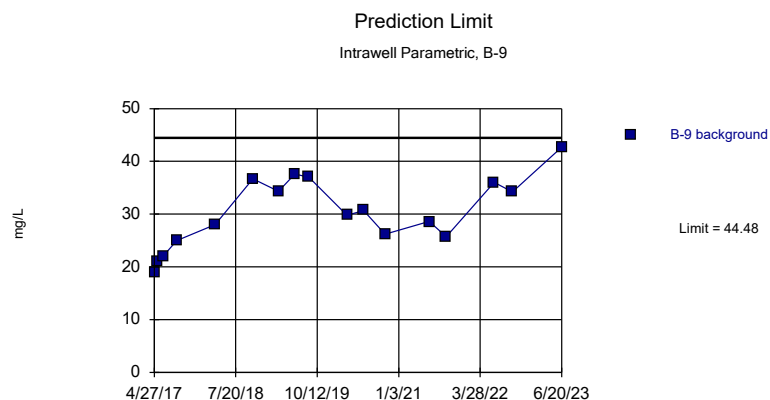
Background Data Summary: Mean=22.51, Std. Dev.=9.419, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9272, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Sulfate, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



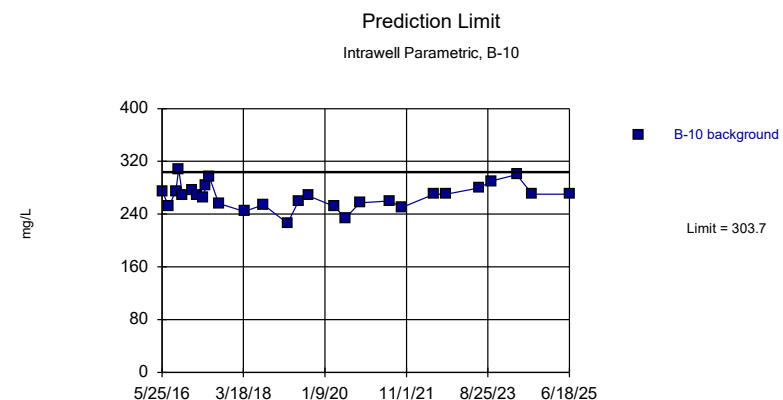
Background Data Summary: Mean=33.4, Std. Dev.=1.675, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9388, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Sulfate, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Background Data Summary: Mean=30.26, Std. Dev.=6.682, n=17. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.971, critical = 0.892. Kappa = 2.127 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Sulfate, total Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

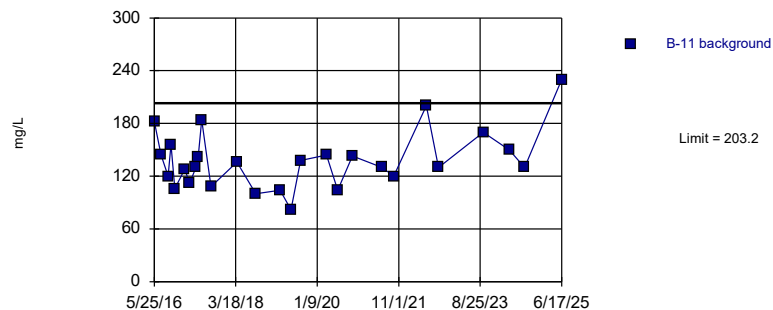


Background Data Summary: Mean=267.1, Std. Dev.=18.63, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9808, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-11

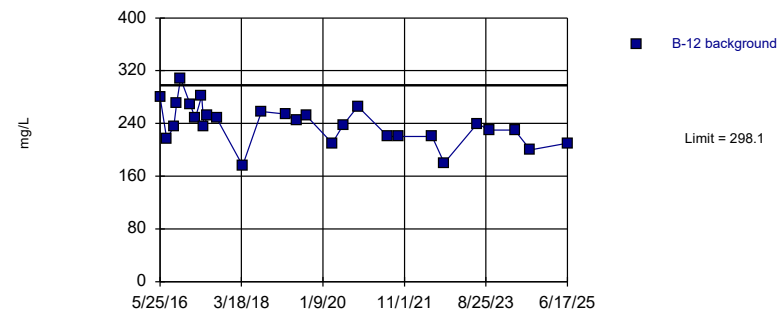


Background Data Summary: Mean=137.9, Std. Dev.=33.09, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9375, critical = 0.894. Kappa = 1.972 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-12 (bg)

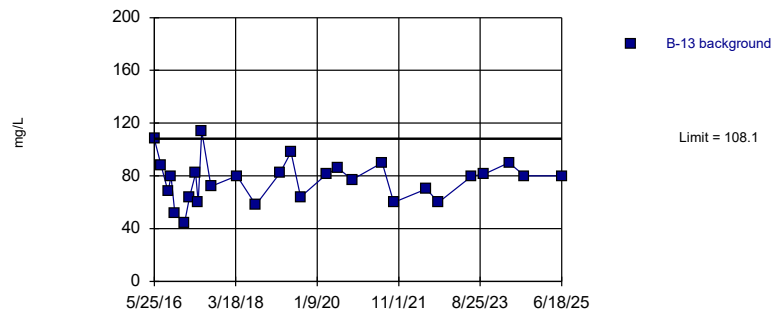


Background Data Summary: Mean=239, Std. Dev.=30.09, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9879, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-13 (bg)

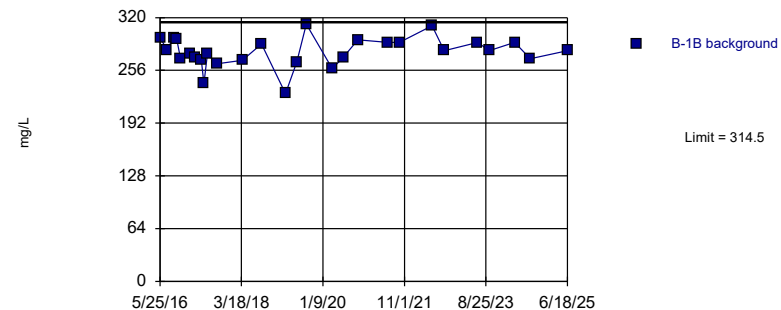


Background Data Summary: Mean=76.75, Std. Dev.=15.95, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9686, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-1B (bg)

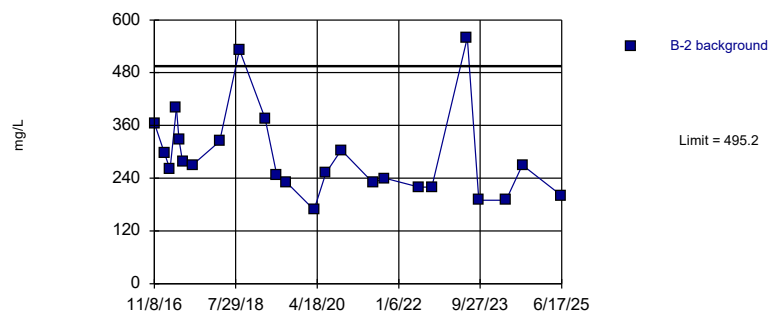


Background Data Summary: Mean=278.5, Std. Dev.=18.35, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9486, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-2

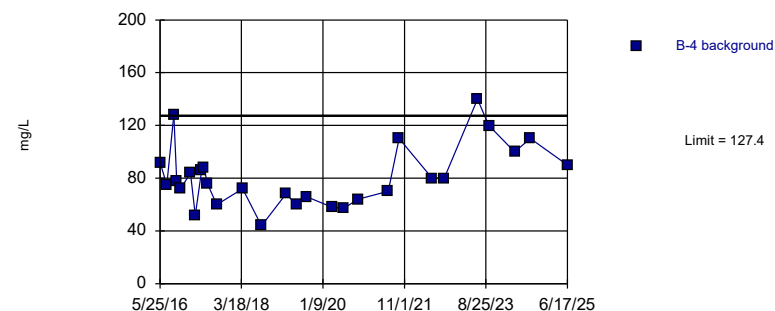


Background Data Summary (based on square root transformation): Mean=16.81, Std. Dev.=2.719, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9118, critical = 0.884. Kappa = 2.004 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-4 (bg)

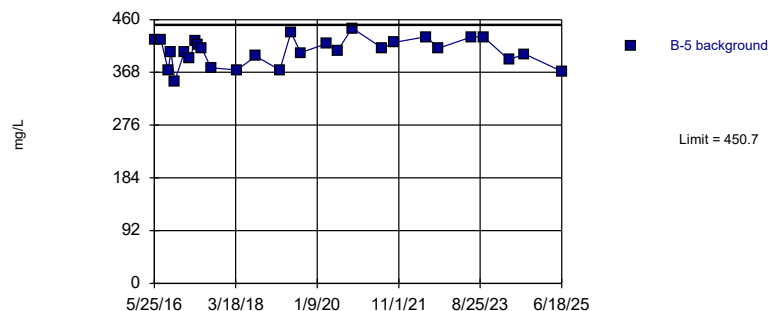


Background Data Summary: Mean=81.43, Std. Dev.=23.39, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9425, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-5 (bg)

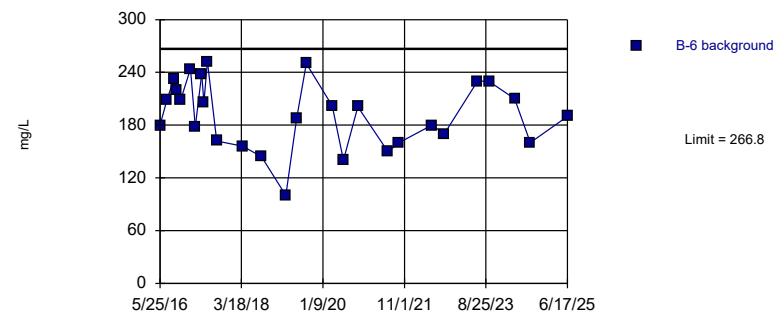


Background Data Summary: Mean=404.9, Std. Dev.=23.35, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9592, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-6

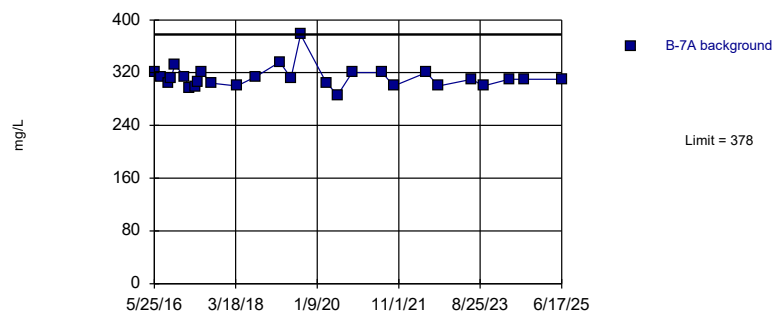


Background Data Summary: Mean=192.5, Std. Dev.=37.87, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9698, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Non-parametric, B-7A (bg)

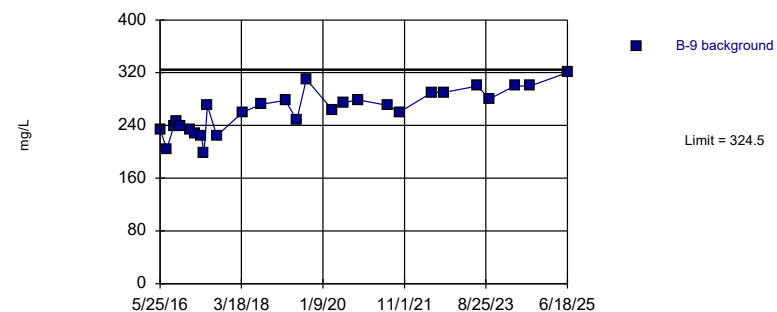


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 28 background values. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2). Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Prediction Limit

Intrawell Parametric, B-9



Background Data Summary: Mean=262, Std. Dev.=31.83, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9753, critical = 0.896. Kappa = 1.964 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2025 8:11 AM View: Appendix III - Intrawell
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

FIGURE G

Interwell PLs

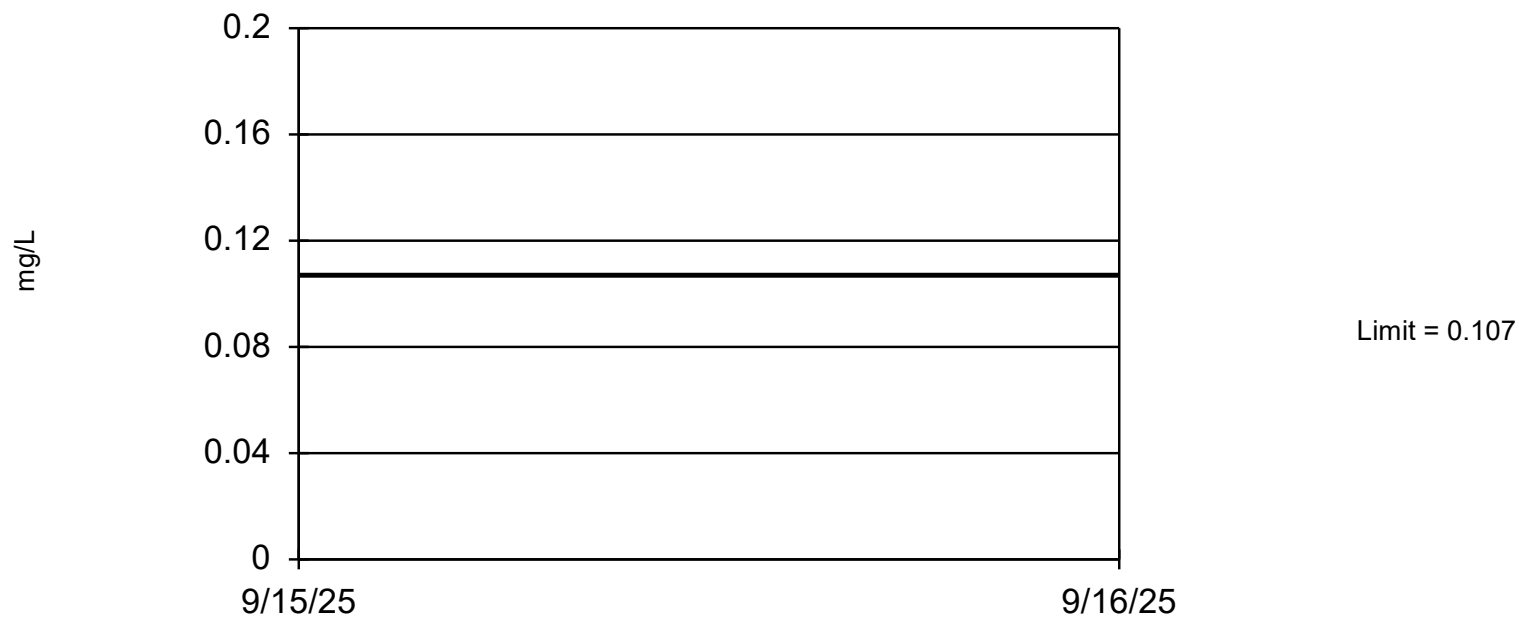
Appendix III Interwell Prediction Limits - All Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 9:27 AM

<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	0.107	n/a	n/a	5 future	n/a	168	n/a	n/a	13.69	n/a	n/a	0.00007019	NP Inter (normality) 1 of 2

Prediction Limit

Interwell Non-parametric



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 168 background values. 13.69% NDs. Annual per-constituent alpha = 0.0007017. Individual comparison alpha = 0.0007019 (1 of 2). Assumes 5 future values.

Constituent: Boron, total Analysis Run 12/16/2025 9:26 AM View: Appendix III - Interwell
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

FIGURE H

Upgradient Trend Tests – Appendix IV

Appendix IV Trend Tests - Upgradient Wells - Significant Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 10:07 AM

<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>Alpha</u>	<u>Method</u>
Antimony, total (mg/L)	B-12 (bg)	-0.00005122	-292	-128	Yes	33	30.3	n/a	0.05	NP
Antimony, total (mg/L)	B-13 (bg)	0	-169	-128	Yes	33	75.76	n/a	0.05	NP
Antimony, total (mg/L)	B-1B (bg)	-0.000002498	-183	-128	Yes	33	54.55	n/a	0.05	NP
Antimony, total (mg/L)	B-5 (bg)	-0.000006087	-212	-128	Yes	33	57.58	n/a	0.05	NP
Antimony, total (mg/L)	B-7A (bg)	-0.000009518	-266	-128	Yes	33	39.39	n/a	0.05	NP
Arsenic, total (mg/L)	B-12 (bg)	-0.0002025	-388	-128	Yes	33	24.24	n/a	0.05	NP
Arsenic, total (mg/L)	B-13 (bg)	-0.0001246	-334	-128	Yes	33	30.3	n/a	0.05	NP
Arsenic, total (mg/L)	B-1B (bg)	-0.0002042	-370	-128	Yes	33	27.27	n/a	0.05	NP
Arsenic, total (mg/L)	B-4 (bg)	-0.0000547	-311	-128	Yes	33	30.3	n/a	0.05	NP
Arsenic, total (mg/L)	B-5 (bg)	-0.000148	-331	-128	Yes	33	24.24	n/a	0.05	NP
Arsenic, total (mg/L)	B-7A (bg)	0.0005566	247	128	Yes	33	21.21	n/a	0.05	NP
Barium, total (mg/L)	B-12 (bg)	-0.001125	-172	-128	Yes	33	0	n/a	0.05	NP
Barium, total (mg/L)	B-1B (bg)	-0.001003	-151	-128	Yes	33	0	n/a	0.05	NP
Barium, total (mg/L)	B-5 (bg)	-0.004011	-358	-128	Yes	33	0	n/a	0.05	NP
Barium, total (mg/L)	B-7A (bg)	-0.001776	-237	-128	Yes	33	0	n/a	0.05	NP
Beryllium, total (mg/L)	B-12 (bg)	0	-129	-128	Yes	33	57.58	n/a	0.05	NP
Beryllium, total (mg/L)	B-13 (bg)	-0.00001572	-282	-128	Yes	33	6.061	n/a	0.05	NP
Beryllium, total (mg/L)	B-1B (bg)	-0.000002489	-194	-128	Yes	33	27.27	n/a	0.05	NP
Beryllium, total (mg/L)	B-5 (bg)	-0.00001653	-286	-128	Yes	33	0	n/a	0.05	NP
Beryllium, total (mg/L)	B-7A (bg)	-0.000002141	-220	-128	Yes	33	57.58	n/a	0.05	NP
Cadmium, total (mg/L)	B-12 (bg)	-0.00002071	-305	-128	Yes	33	33.33	n/a	0.05	NP
Cadmium, total (mg/L)	B-13 (bg)	-0.0000107	-303	-128	Yes	33	24.24	n/a	0.05	NP
Cadmium, total (mg/L)	B-4 (bg)	-0.00001913	-345	-128	Yes	33	27.27	n/a	0.05	NP
Cadmium, total (mg/L)	B-7A (bg)	-0.00004883	-347	-128	Yes	33	33.33	n/a	0.05	NP
Chromium, total (mg/L)	B-13 (bg)	-0.0002207	-203	-128	Yes	33	0	n/a	0.05	NP
Chromium, total (mg/L)	B-5 (bg)	-0.0000948	-207	-128	Yes	33	0	n/a	0.05	NP
Cobalt, total (mg/L)	B-12 (bg)	0.0001275	159	117	Yes	31	0	n/a	0.05	NP
Cobalt, total (mg/L)	B-13 (bg)	-0.0001614	-314	-128	Yes	33	0	n/a	0.05	NP
Cobalt, total (mg/L)	B-1B (bg)	-0.0000449	-318	-128	Yes	33	3.03	n/a	0.05	NP
Cobalt, total (mg/L)	B-4 (bg)	-0.00002668	-340	-128	Yes	33	6.061	n/a	0.05	NP
Cobalt, total (mg/L)	B-5 (bg)	-0.00005945	-430	-128	Yes	33	0	n/a	0.05	NP
Fluoride, total (mg/L)	B-12 (bg)	-0.002643	-298	-134	Yes	34	38.24	n/a	0.05	NP
Lead, total (mg/L)	B-12 (bg)	-0.00002603	-186	-123	Yes	32	34.38	n/a	0.05	NP
Lead, total (mg/L)	B-13 (bg)	-0.00001679	-208	-128	Yes	33	42.42	n/a	0.05	NP
Lead, total (mg/L)	B-1B (bg)	-0.00002049	-133	-128	Yes	33	30.3	n/a	0.05	NP
Lead, total (mg/L)	B-5 (bg)	-0.0001438	-318	-128	Yes	33	24.24	n/a	0.05	NP
Lithium, total (mg/L)	B-13 (bg)	-0.0001164	-258	-123	Yes	32	3.125	n/a	0.05	NP
Lithium, total (mg/L)	B-1B (bg)	-0.0003856	-213	-123	Yes	32	0	n/a	0.05	NP
Lithium, total (mg/L)	B-5 (bg)	-0.0000612	-155	-123	Yes	32	0	n/a	0.05	NP
Lithium, total (mg/L)	B-7A (bg)	-0.0004935	-165	-123	Yes	32	0	n/a	0.05	NP
Mercury, total (mg/L)	B-5 (bg)	-0.000001385	-259	-128	Yes	33	3.03	n/a	0.05	NP
Mercury, total (mg/L)	B-7A (bg)	-3.9e-7	-260	-128	Yes	33	48.48	n/a	0.05	NP
Molybdenum, total (mg/L)	B-12 (bg)	-0.0001897	-349	-128	Yes	33	9.091	n/a	0.05	NP
Molybdenum, total (mg/L)	B-13 (bg)	0	-150	-128	Yes	33	72.73	n/a	0.05	NP
Molybdenum, total (mg/L)	B-7A (bg)	-0.00008443	-272	-128	Yes	33	21.21	n/a	0.05	NP
Selenium, total (mg/L)	B-12 (bg)	-0.0002196	-259	-128	Yes	33	33.33	n/a	0.05	NP
Selenium, total (mg/L)	B-13 (bg)	-0.0001515	-356	-128	Yes	33	27.27	n/a	0.05	NP
Selenium, total (mg/L)	B-4 (bg)	-0.0001583	-413	-128	Yes	33	27.27	n/a	0.05	NP
Selenium, total (mg/L)	B-5 (bg)	-0.0005683	-240	-128	Yes	33	0	n/a	0.05	NP
Thallium, total (mg/L)	B-12 (bg)	0	-168	-128	Yes	33	72.73	n/a	0.05	NP
Thallium, total (mg/L)	B-5 (bg)	-0.00001962	-262	-128	Yes	33	60.61	n/a	0.05	NP

Appendix IV Trend Tests - Upgradient Wells - All Results

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 10:07 AM

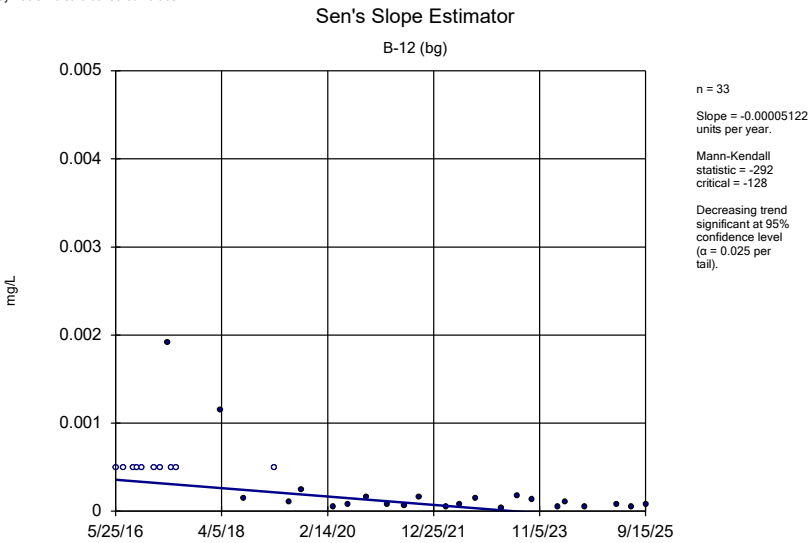
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Alpha</u>	<u>Method</u>
Antimony, total (mg/L)	B-12 (bg)	-0.00005122	-292	-128	Yes	33	30.3	n/a	0.05	NP
Antimony, total (mg/L)	B-13 (bg)	0	-169	-128	Yes	33	75.76	n/a	0.05	NP
Antimony, total (mg/L)	B-1B (bg)	-0.000002498	-183	-128	Yes	33	54.55	n/a	0.05	NP
Antimony, total (mg/L)	B-4 (bg)	0	-102	-128	No	33	69.7	n/a	0.05	NP
Antimony, total (mg/L)	B-5 (bg)	-0.000006087	-212	-128	Yes	33	57.58	n/a	0.05	NP
Antimony, total (mg/L)	B-7A (bg)	-0.000009518	-266	-128	Yes	33	39.39	n/a	0.05	NP
Arsenic, total (mg/L)	B-12 (bg)	-0.0002025	-388	-128	Yes	33	24.24	n/a	0.05	NP
Arsenic, total (mg/L)	B-13 (bg)	-0.0001246	-334	-128	Yes	33	30.3	n/a	0.05	NP
Arsenic, total (mg/L)	B-1B (bg)	-0.0002042	-370	-128	Yes	33	27.27	n/a	0.05	NP
Arsenic, total (mg/L)	B-4 (bg)	-0.0000547	-311	-128	Yes	33	30.3	n/a	0.05	NP
Arsenic, total (mg/L)	B-5 (bg)	-0.000148	-331	-128	Yes	33	24.24	n/a	0.05	NP
Arsenic, total (mg/L)	B-7A (bg)	0.0005566	247	128	Yes	33	21.21	n/a	0.05	NP
Barium, total (mg/L)	B-12 (bg)	-0.001125	-172	-128	Yes	33	0	n/a	0.05	NP
Barium, total (mg/L)	B-13 (bg)	-0.0007229	-95	-128	No	33	0	n/a	0.05	NP
Barium, total (mg/L)	B-1B (bg)	-0.001003	-151	-128	Yes	33	0	n/a	0.05	NP
Barium, total (mg/L)	B-4 (bg)	-0.0006647	-65	-128	No	33	0	n/a	0.05	NP
Barium, total (mg/L)	B-5 (bg)	-0.004011	-358	-128	Yes	33	0	n/a	0.05	NP
Barium, total (mg/L)	B-7A (bg)	-0.001776	-237	-128	Yes	33	0	n/a	0.05	NP
Beryllium, total (mg/L)	B-12 (bg)	0	-129	-128	Yes	33	57.58	n/a	0.05	NP
Beryllium, total (mg/L)	B-13 (bg)	-0.00001572	-282	-128	Yes	33	6.061	n/a	0.05	NP
Beryllium, total (mg/L)	B-1B (bg)	-0.000002489	-194	-128	Yes	33	27.27	n/a	0.05	NP
Beryllium, total (mg/L)	B-4 (bg)	-0.000006791	-113	-128	No	33	0	n/a	0.05	NP
Beryllium, total (mg/L)	B-5 (bg)	-0.00001653	-286	-128	Yes	33	0	n/a	0.05	NP
Beryllium, total (mg/L)	B-7A (bg)	-0.000002141	-220	-128	Yes	33	57.58	n/a	0.05	NP
Cadmium, total (mg/L)	B-12 (bg)	-0.00002071	-305	-128	Yes	33	33.33	n/a	0.05	NP
Cadmium, total (mg/L)	B-13 (bg)	-0.0000107	-303	-128	Yes	33	24.24	n/a	0.05	NP
Cadmium, total (mg/L)	B-1B (bg)	0	-117	-128	No	33	48.48	n/a	0.05	NP
Cadmium, total (mg/L)	B-4 (bg)	-0.00001913	-345	-128	Yes	33	27.27	n/a	0.05	NP
Cadmium, total (mg/L)	B-5 (bg)	-0.000004959	-94	-128	No	33	6.061	n/a	0.05	NP
Cadmium, total (mg/L)	B-7A (bg)	-0.00004883	-347	-128	Yes	33	33.33	n/a	0.05	NP
Chromium, total (mg/L)	B-12 (bg)	-0.000002152	-11	-123	No	32	0	n/a	0.05	NP
Chromium, total (mg/L)	B-13 (bg)	-0.0002207	-203	-128	Yes	33	0	n/a	0.05	NP
Chromium, total (mg/L)	B-1B (bg)	-0.0000227	-80	-128	No	33	9.091	n/a	0.05	NP
Chromium, total (mg/L)	B-4 (bg)	-0.00002024	-128	-128	No	33	0	n/a	0.05	NP
Chromium, total (mg/L)	B-5 (bg)	-0.0000948	-207	-128	Yes	33	0	n/a	0.05	NP
Chromium, total (mg/L)	B-7A (bg)	0.0000121	126	128	No	33	24.24	n/a	0.05	NP
Cobalt, total (mg/L)	B-12 (bg)	0.0001275	159	117	Yes	31	0	n/a	0.05	NP
Cobalt, total (mg/L)	B-13 (bg)	-0.0001614	-314	-128	Yes	33	0	n/a	0.05	NP
Cobalt, total (mg/L)	B-1B (bg)	-0.0000449	-318	-128	Yes	33	3.03	n/a	0.05	NP
Cobalt, total (mg/L)	B-4 (bg)	-0.00002668	-340	-128	Yes	33	6.061	n/a	0.05	NP
Cobalt, total (mg/L)	B-5 (bg)	-0.00005945	-430	-128	Yes	33	0	n/a	0.05	NP
Cobalt, total (mg/L)	B-7A (bg)	-0.000005961	-25	-128	No	33	3.03	n/a	0.05	NP
Combined Radium 226 + 228 (pCi/L)	B-12 (bg)	-0.03952	-69	-123	No	32	0	n/a	0.05	NP
Combined Radium 226 + 228 (pCi/L)	B-13 (bg)	0.01254	50	123	No	32	0	n/a	0.05	NP
Combined Radium 226 + 228 (pCi/L)	B-1B (bg)	0.08031	48	123	No	32	0	n/a	0.05	NP
Combined Radium 226 + 228 (pCi/L)	B-4 (bg)	-0.01249	-28	-123	No	32	0	n/a	0.05	NP
Combined Radium 226 + 228 (pCi/L)	B-5 (bg)	0.02491	45	123	No	32	0	n/a	0.05	NP
Combined Radium 226 + 228 (pCi/L)	B-7A (bg)	-0.01369	-8	-123	No	32	0	n/a	0.05	NP
Fluoride, total (mg/L)	B-12 (bg)	-0.002643	-298	-134	Yes	34	38.24	n/a	0.05	NP
Fluoride, total (mg/L)	B-13 (bg)	0	-122	-134	No	34	55.88	n/a	0.05	NP
Fluoride, total (mg/L)	B-1B (bg)	-0.007213	-95	-134	No	34	11.76	n/a	0.05	NP
Fluoride, total (mg/L)	B-4 (bg)	0	-123	-134	No	34	55.88	n/a	0.05	NP
Fluoride, total (mg/L)	B-5 (bg)	0	-89	-134	No	34	38.24	n/a	0.05	NP
Fluoride, total (mg/L)	B-7A (bg)	0.002674	64	134	No	34	29.41	n/a	0.05	NP
Lead, total (mg/L)	B-12 (bg)	-0.00002603	-186	-123	Yes	32	34.38	n/a	0.05	NP

Appendix IV Trend Tests - Upgradient Wells - All Results

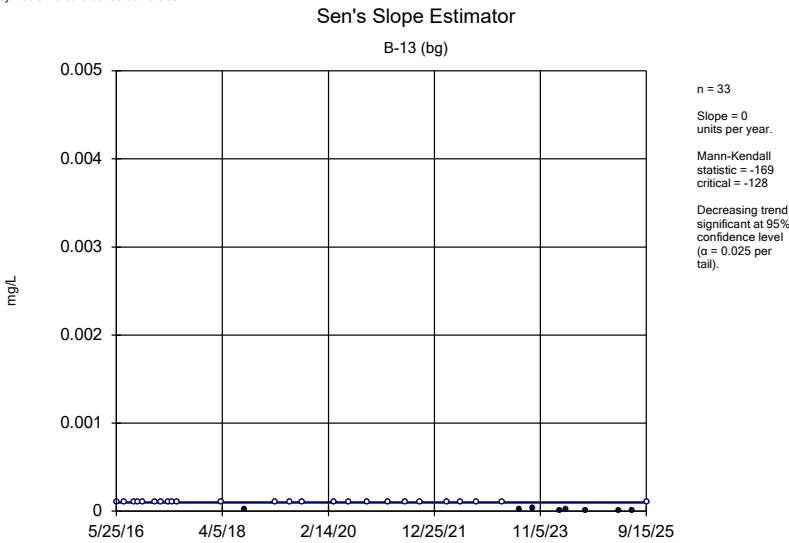
Page 2

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 10:07 AM

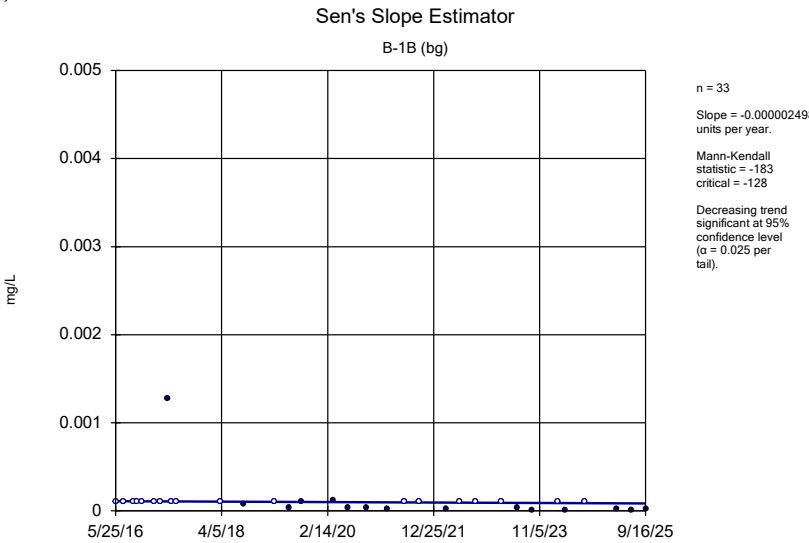
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Alpha</u>	<u>Method</u>
Lead, total (mg/L)	B-13 (bg)	-0.00001679	-208	-128	Yes	33	42.42	n/a	0.05	NP
Lead, total (mg/L)	B-1B (bg)	-0.00002049	-133	-128	Yes	33	30.3	n/a	0.05	NP
Lead, total (mg/L)	B-4 (bg)	0	-115	-128	No	33	69.7	n/a	0.05	NP
Lead, total (mg/L)	B-5 (bg)	-0.0001438	-318	-128	Yes	33	24.24	n/a	0.05	NP
Lead, total (mg/L)	B-7A (bg)	0	-72	-128	No	33	36.36	n/a	0.05	NP
Lithium, total (mg/L)	B-12 (bg)	0.000003571	15	123	No	32	0	n/a	0.05	NP
Lithium, total (mg/L)	B-13 (bg)	-0.0001164	-258	-123	Yes	32	3.125	n/a	0.05	NP
Lithium, total (mg/L)	B-1B (bg)	-0.0003856	-213	-123	Yes	32	0	n/a	0.05	NP
Lithium, total (mg/L)	B-4 (bg)	-0.00002544	-108	-123	No	32	3.125	n/a	0.05	NP
Lithium, total (mg/L)	B-5 (bg)	-0.0000612	-155	-123	Yes	32	0	n/a	0.05	NP
Lithium, total (mg/L)	B-7A (bg)	-0.0004935	-165	-123	Yes	32	0	n/a	0.05	NP
Mercury, total (mg/L)	B-12 (bg)	0	-111	-128	No	33	84.85	n/a	0.05	NP
Mercury, total (mg/L)	B-13 (bg)	0	-106	-128	No	33	87.88	n/a	0.05	NP
Mercury, total (mg/L)	B-1B (bg)	0	-128	-128	No	33	84.85	n/a	0.05	NP
Mercury, total (mg/L)	B-4 (bg)	0	-84	-128	No	33	84.85	n/a	0.05	NP
Mercury, total (mg/L)	B-5 (bg)	-0.000001385	-259	-128	Yes	33	3.03	n/a	0.05	NP
Mercury, total (mg/L)	B-7A (bg)	-3.9e-7	-260	-128	Yes	33	48.48	n/a	0.05	NP
Molybdenum, total (mg/L)	B-12 (bg)	-0.0001897	-349	-128	Yes	33	9.091	n/a	0.05	NP
Molybdenum, total (mg/L)	B-13 (bg)	0	-150	-128	Yes	33	72.73	n/a	0.05	NP
Molybdenum, total (mg/L)	B-1B (bg)	-0.0000027	-54	-128	No	33	24.24	n/a	0.05	NP
Molybdenum, total (mg/L)	B-4 (bg)	0	21	128	No	33	93.94	n/a	0.05	NP
Molybdenum, total (mg/L)	B-5 (bg)	0	21	128	No	33	93.94	n/a	0.05	NP
Molybdenum, total (mg/L)	B-7A (bg)	-0.00008443	-272	-128	Yes	33	21.21	n/a	0.05	NP
Selenium, total (mg/L)	B-12 (bg)	-0.0002196	-259	-128	Yes	33	33.33	n/a	0.05	NP
Selenium, total (mg/L)	B-13 (bg)	-0.0001515	-356	-128	Yes	33	27.27	n/a	0.05	NP
Selenium, total (mg/L)	B-1B (bg)	0	11	128	No	33	87.88	n/a	0.05	NP
Selenium, total (mg/L)	B-4 (bg)	-0.0001583	-413	-128	Yes	33	27.27	n/a	0.05	NP
Selenium, total (mg/L)	B-5 (bg)	-0.0005683	-240	-128	Yes	33	0	n/a	0.05	NP
Selenium, total (mg/L)	B-7A (bg)	0	19	128	No	33	87.88	n/a	0.05	NP
Thallium, total (mg/L)	B-12 (bg)	0	-168	-128	Yes	33	72.73	n/a	0.05	NP
Thallium, total (mg/L)	B-13 (bg)	0	-37	-128	No	33	90.91	n/a	0.05	NP
Thallium, total (mg/L)	B-1B (bg)	0	9	128	No	33	93.94	n/a	0.05	NP
Thallium, total (mg/L)	B-4 (bg)	0	-121	-128	No	33	78.79	n/a	0.05	NP
Thallium, total (mg/L)	B-5 (bg)	-0.00001962	-262	-128	Yes	33	60.61	n/a	0.05	NP
Thallium, total (mg/L)	B-7A (bg)	0	-68	-128	No	33	87.88	n/a	0.05	NP



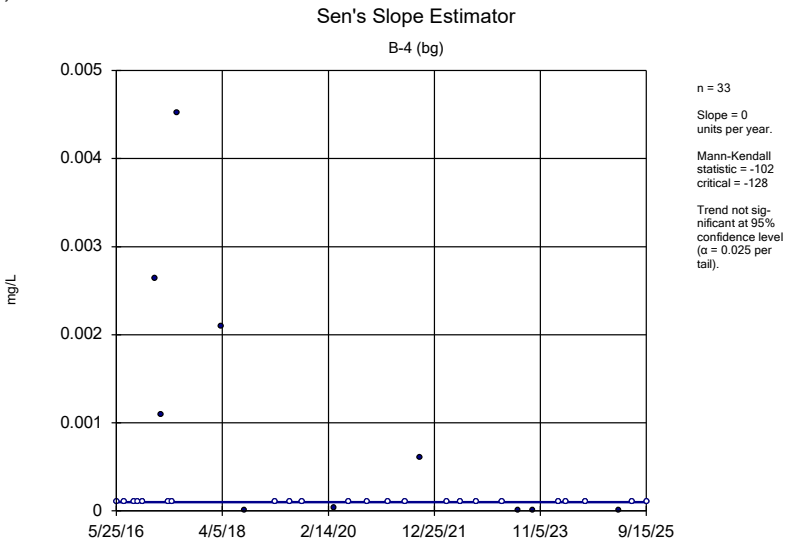
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



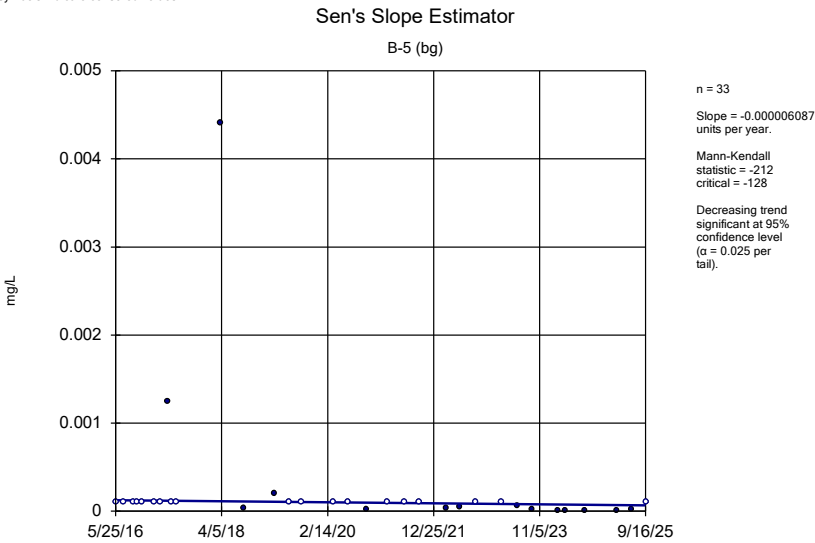
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



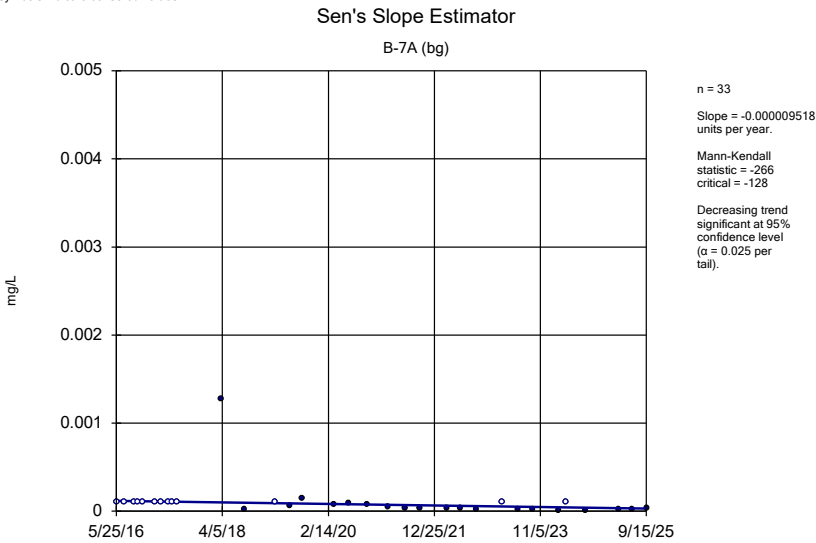
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



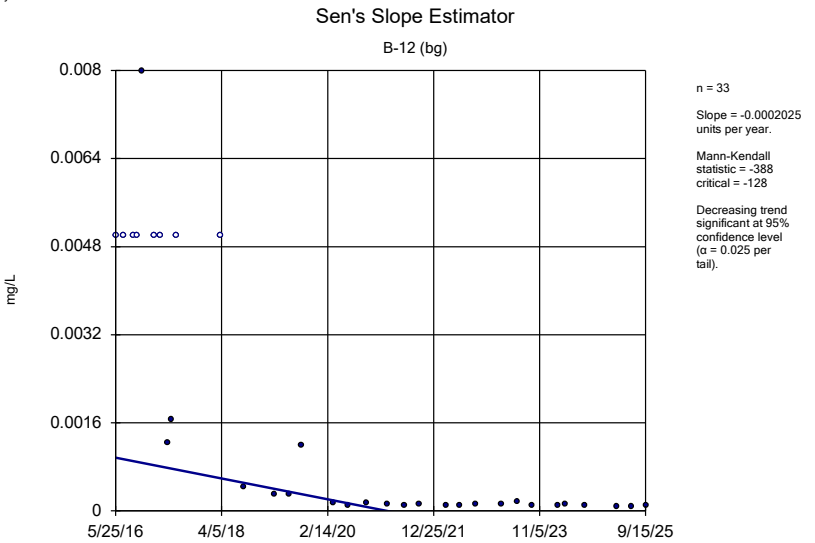
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



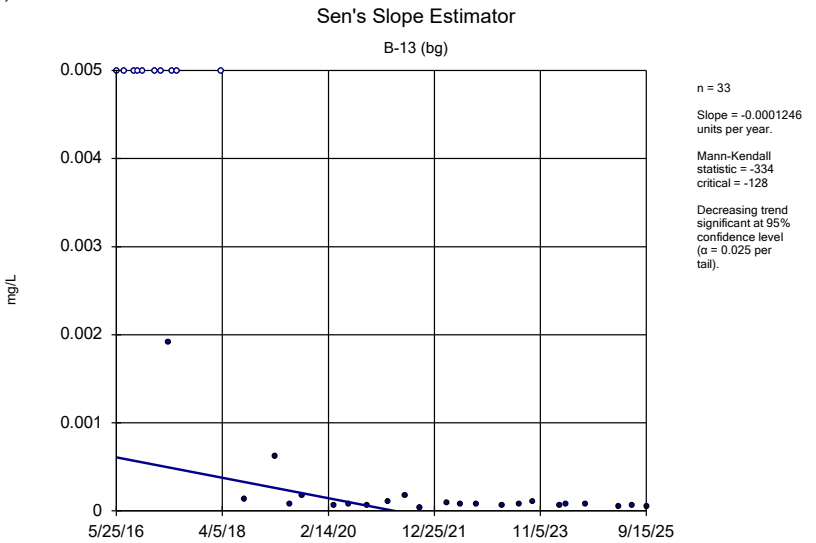
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



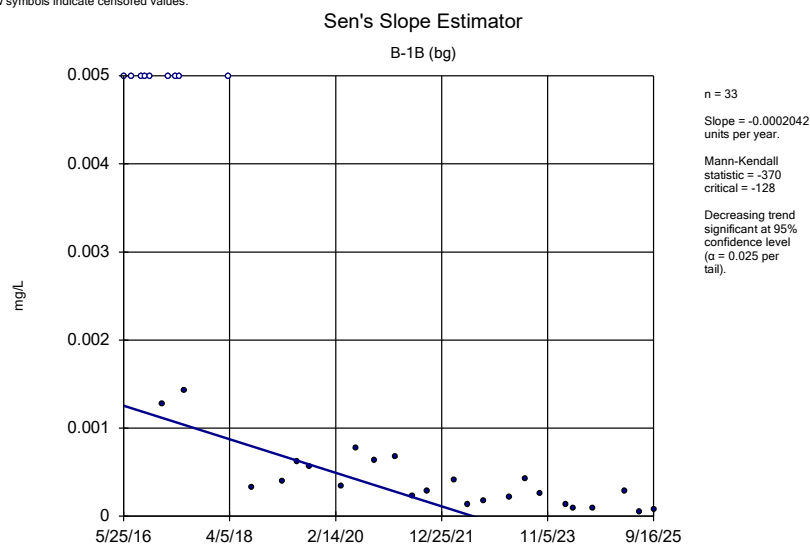
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



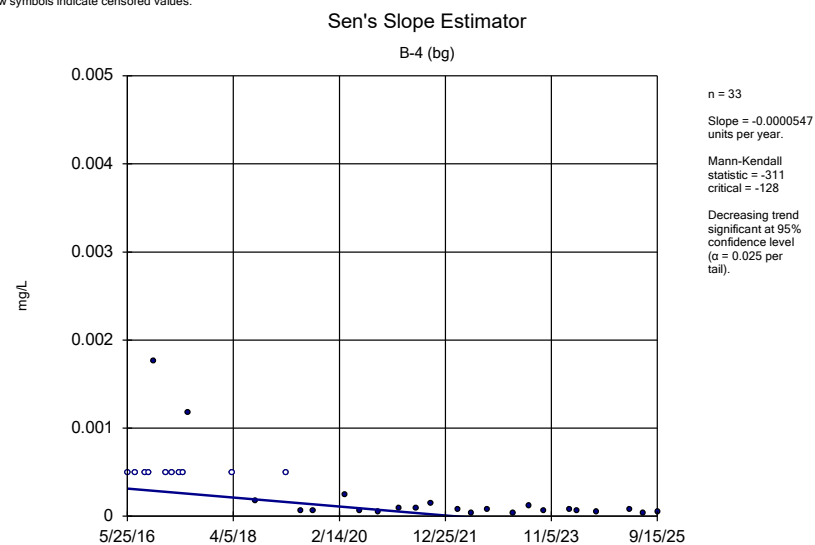
Constituent: Arsenic, total Analysis Run 12/16/2025 10:04 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



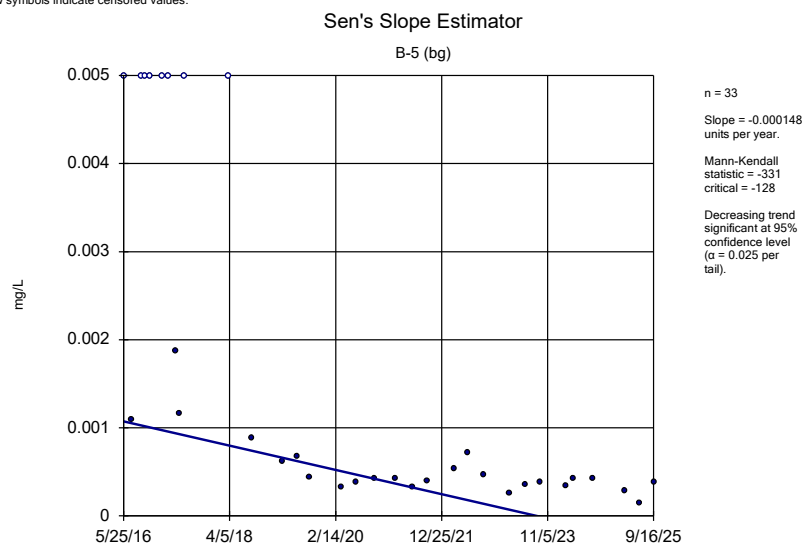
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



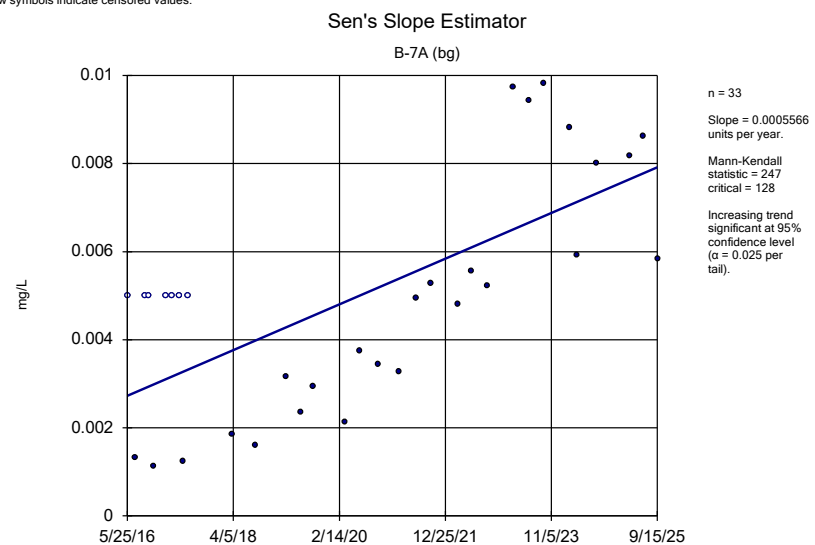
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



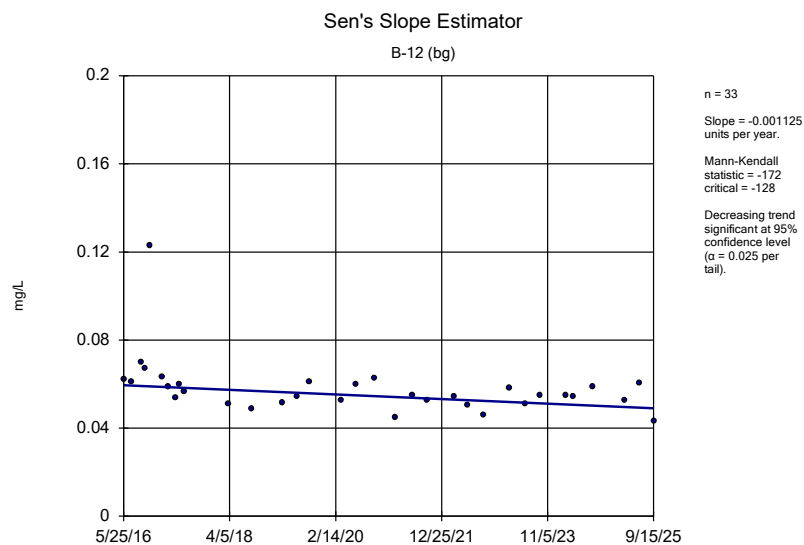
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



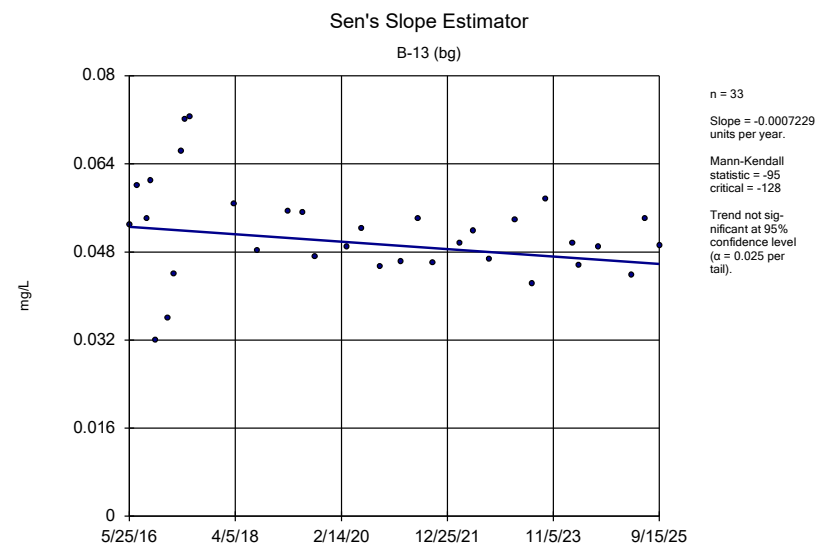
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



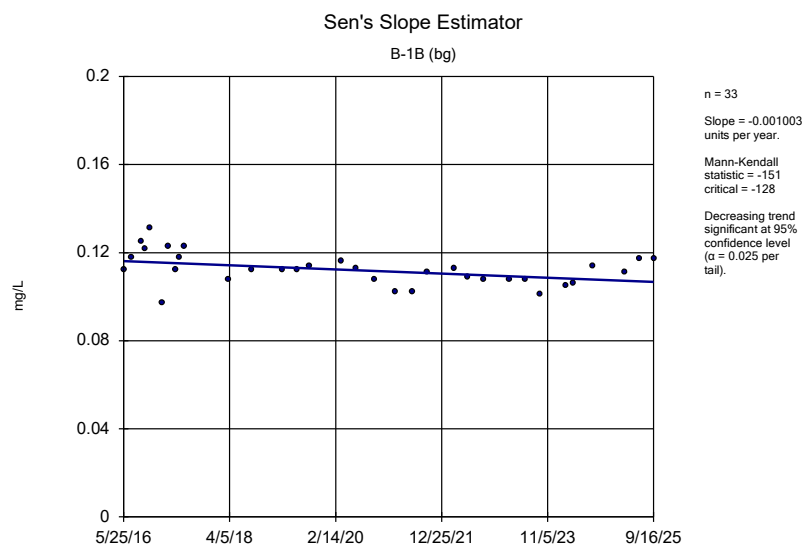
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



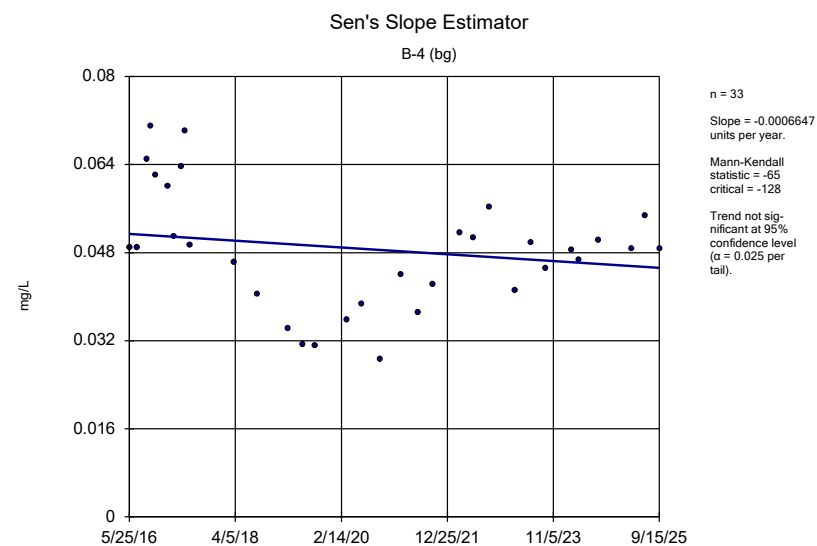
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



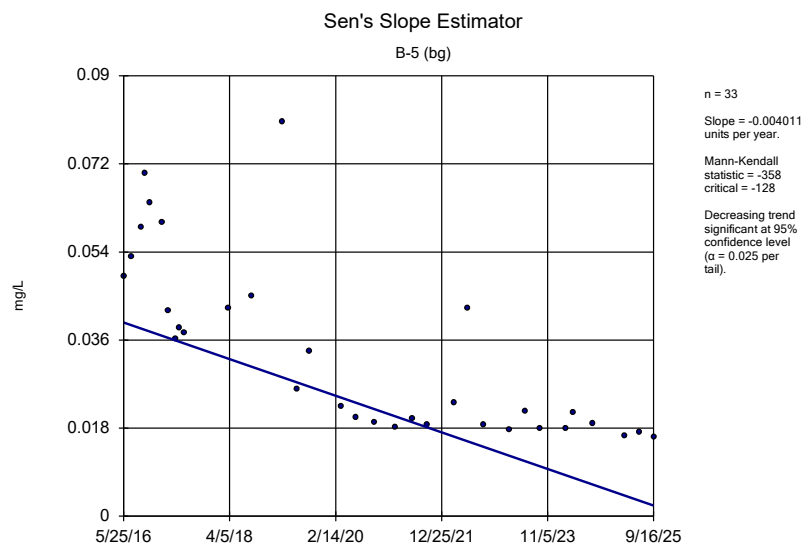
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



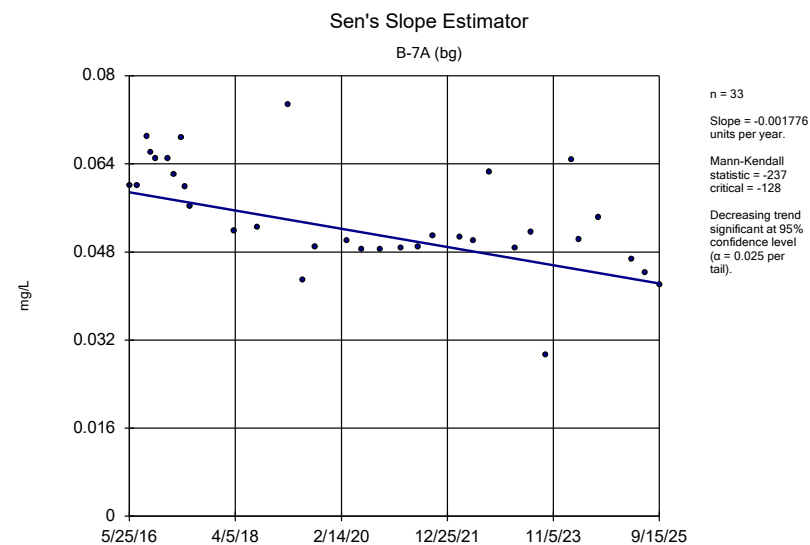
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



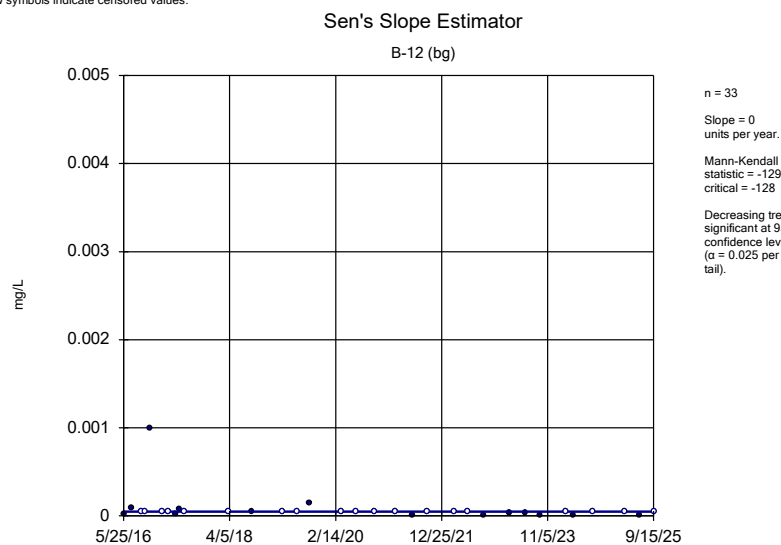
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



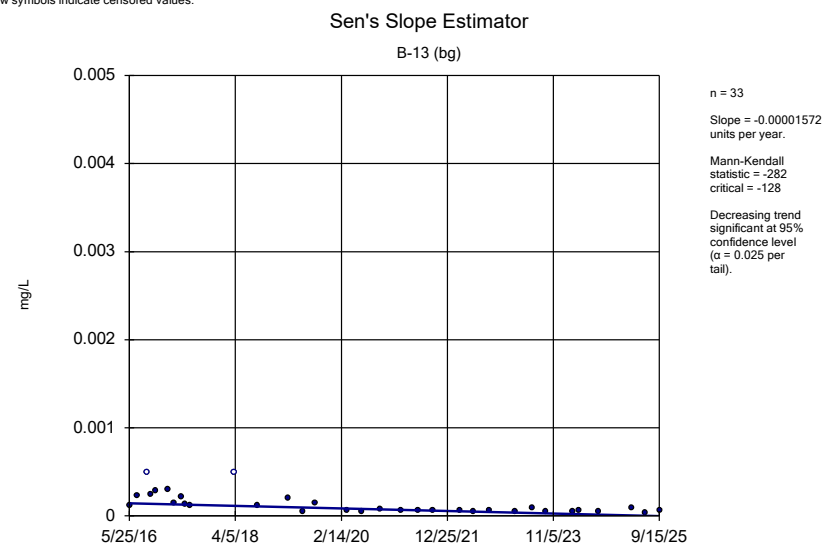
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



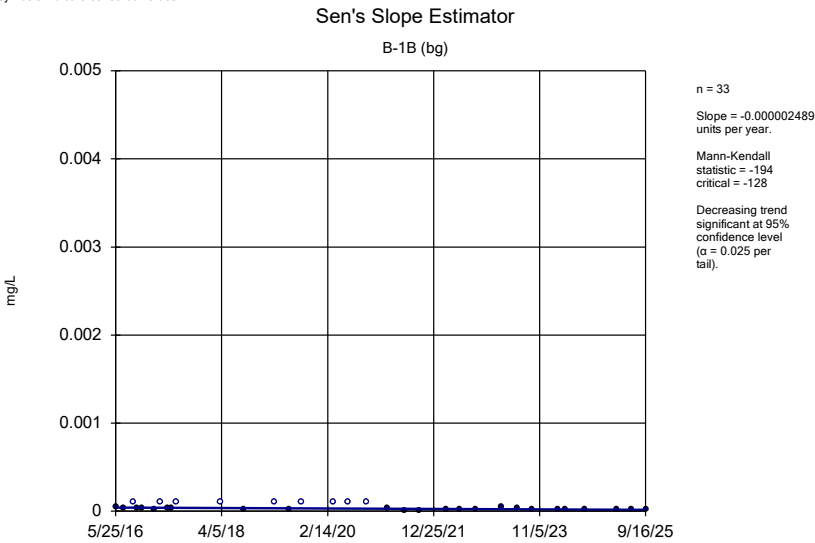
Constituent: Barium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



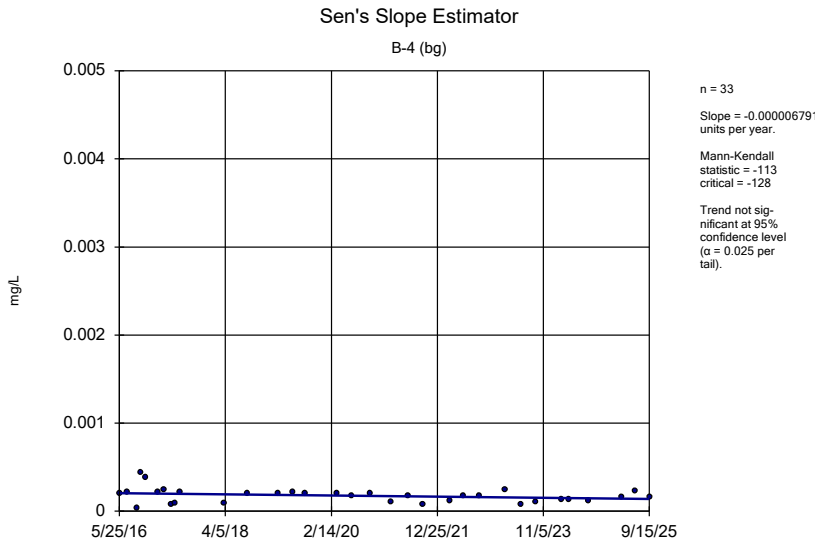
Constituent: Beryllium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradi
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



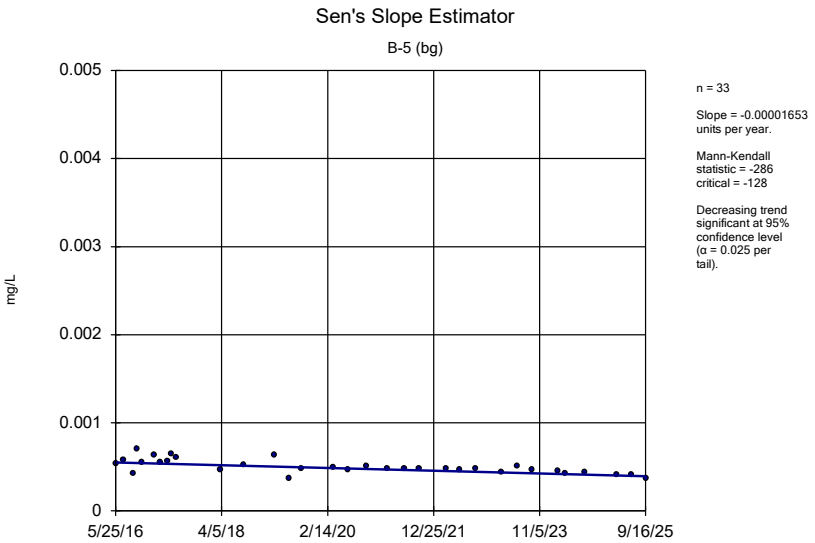
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



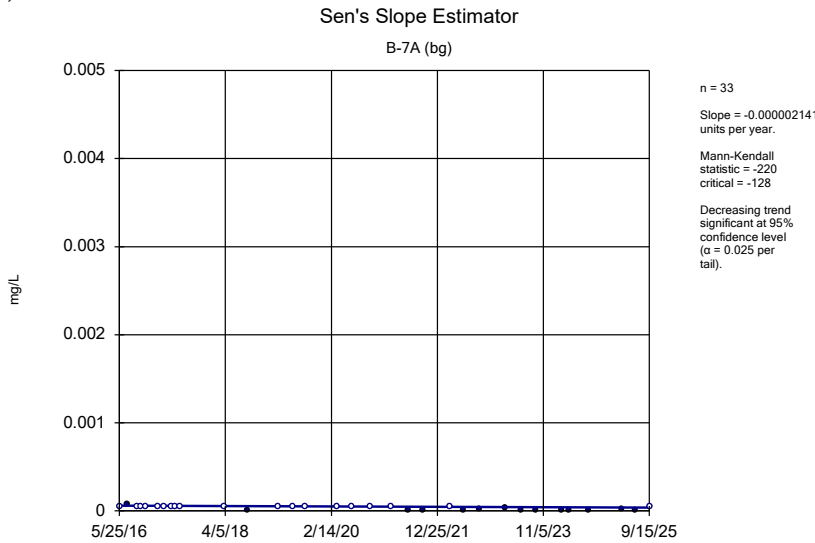
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



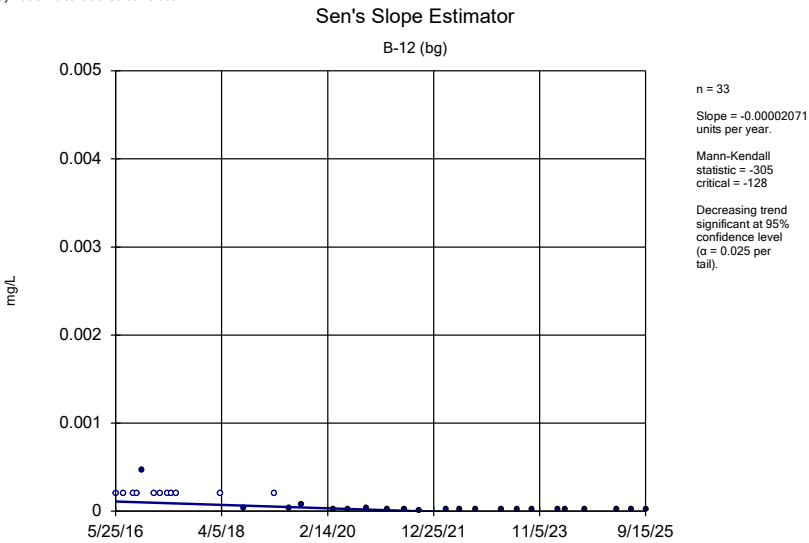
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



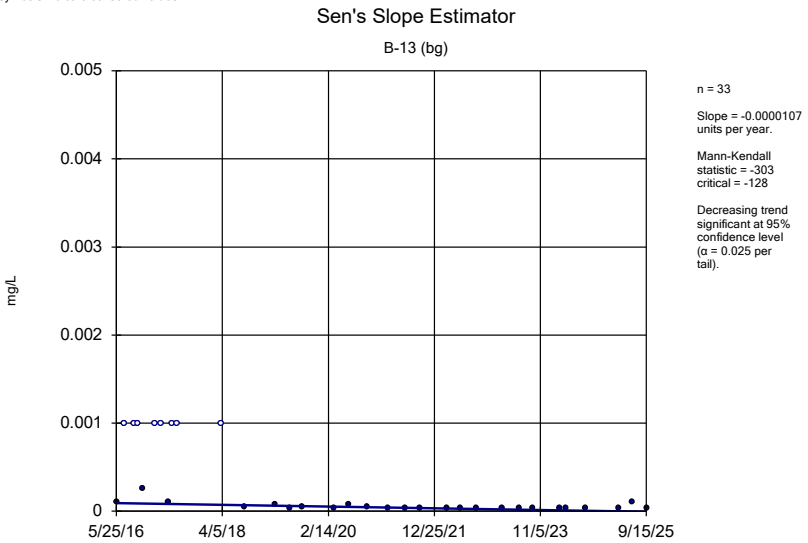
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



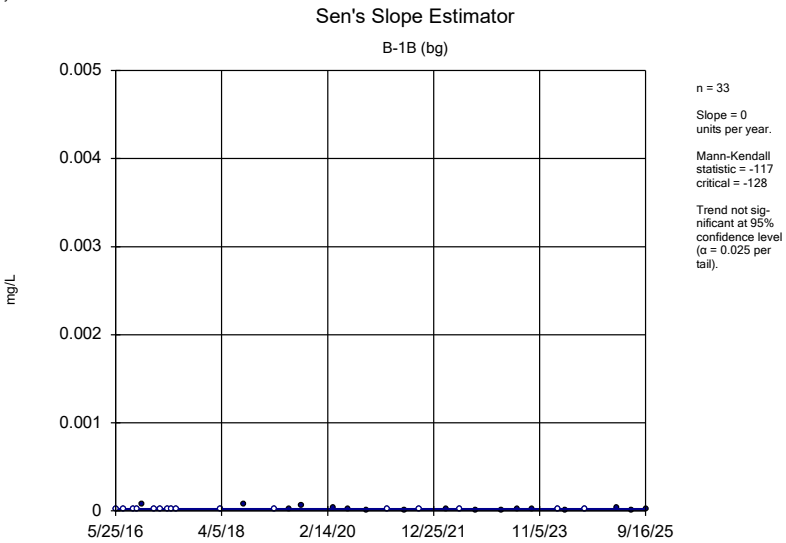
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



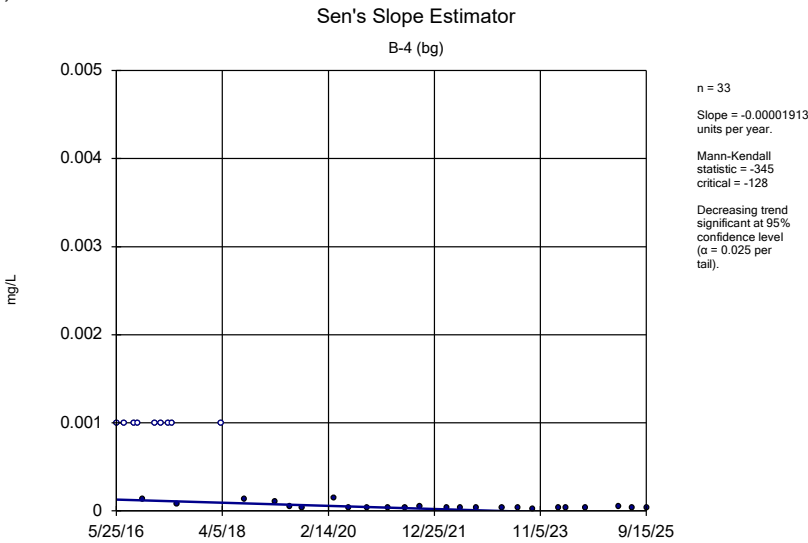
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



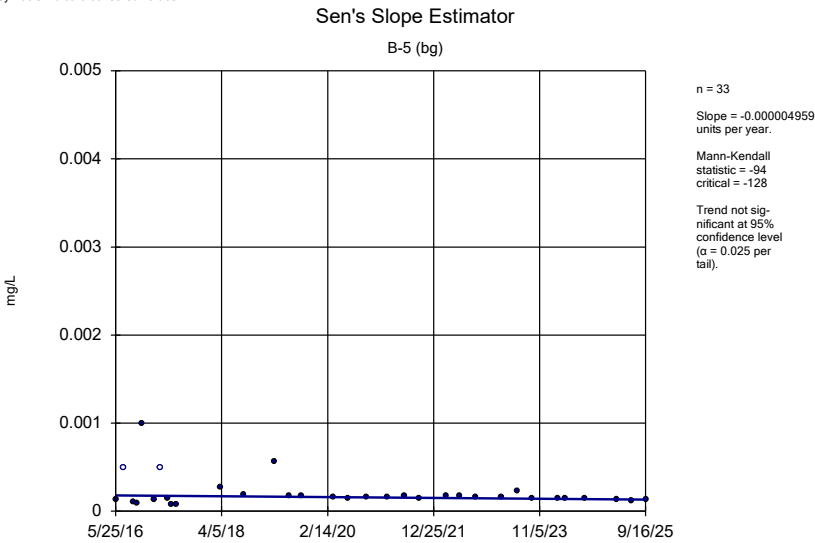
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



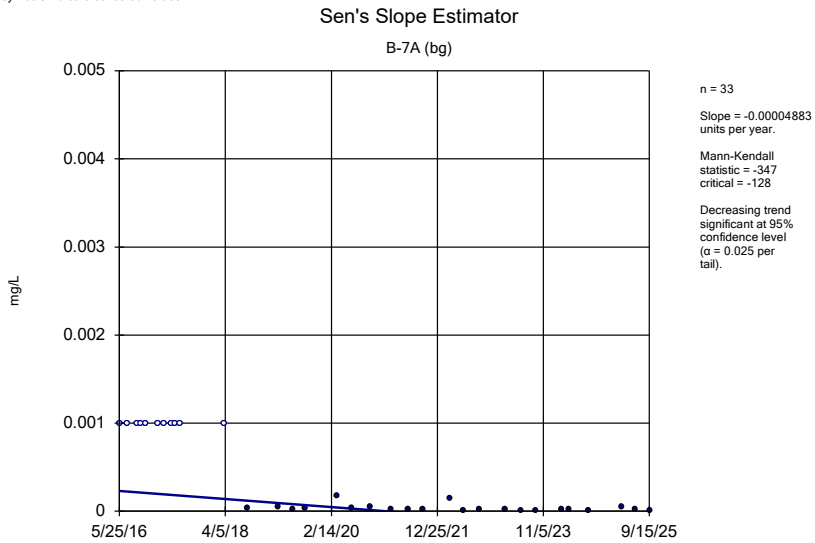
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



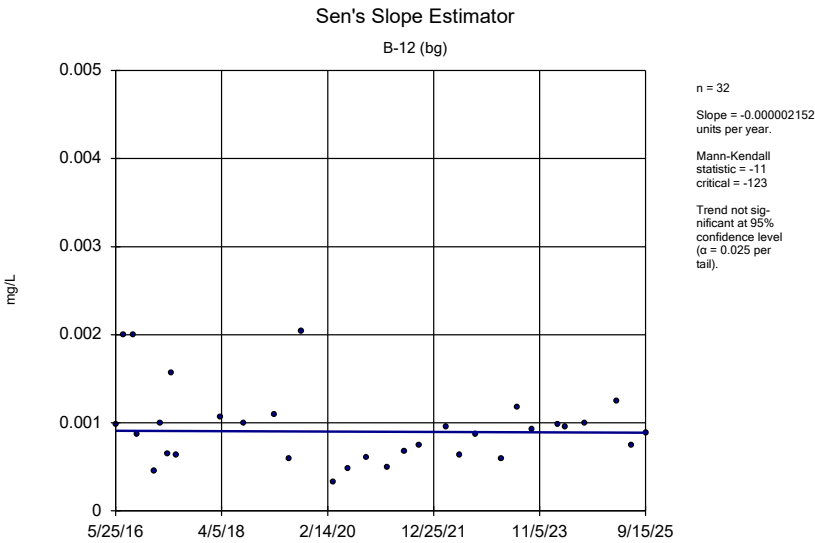
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



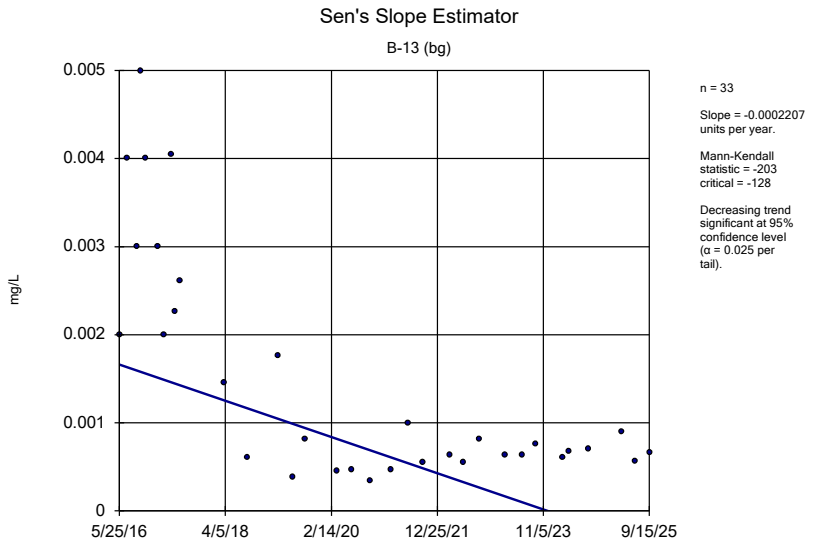
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



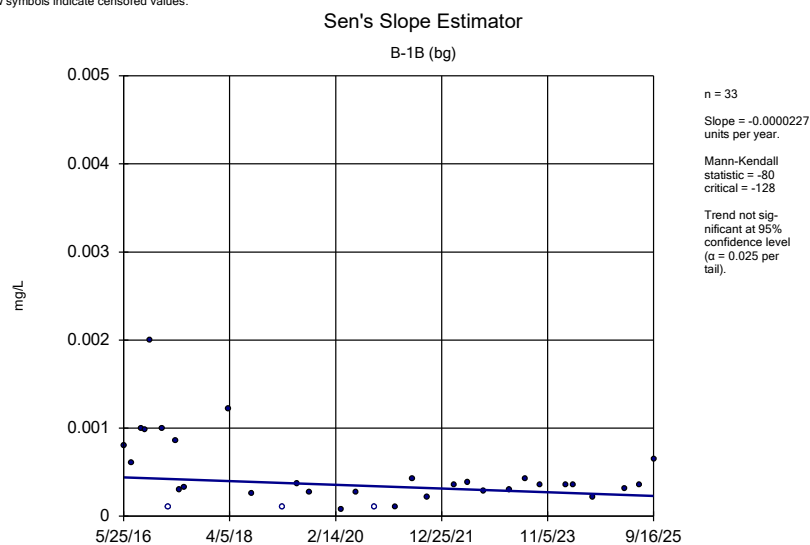
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



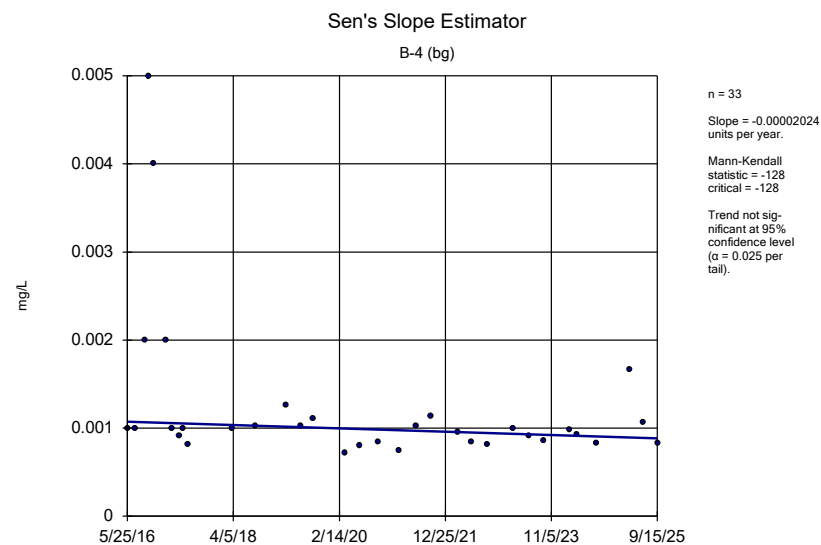
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



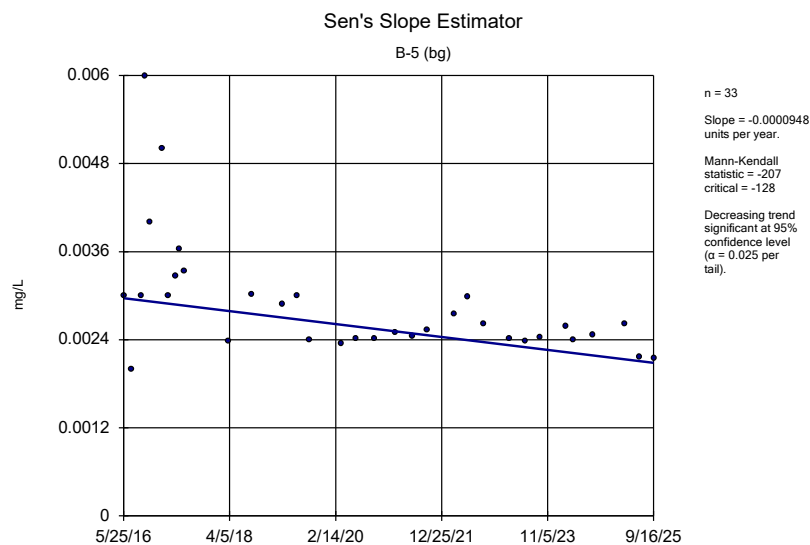
Constituent: Chromium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



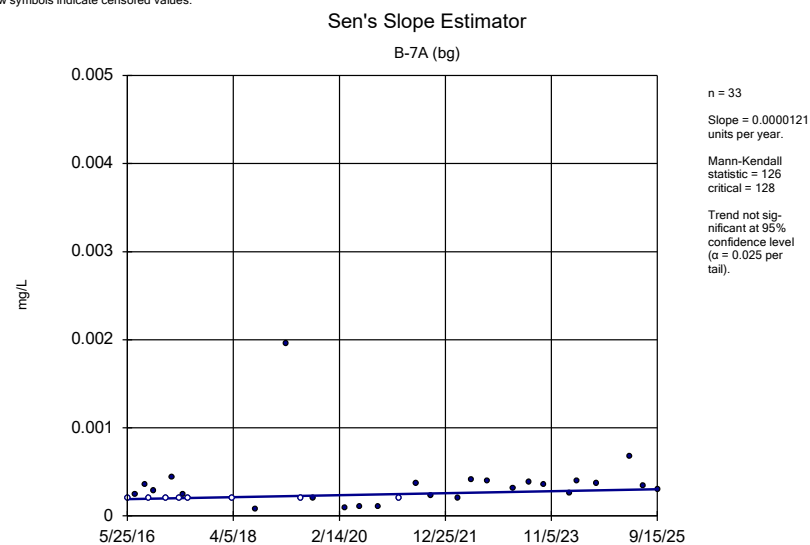
Constituent: Chromium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradi
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



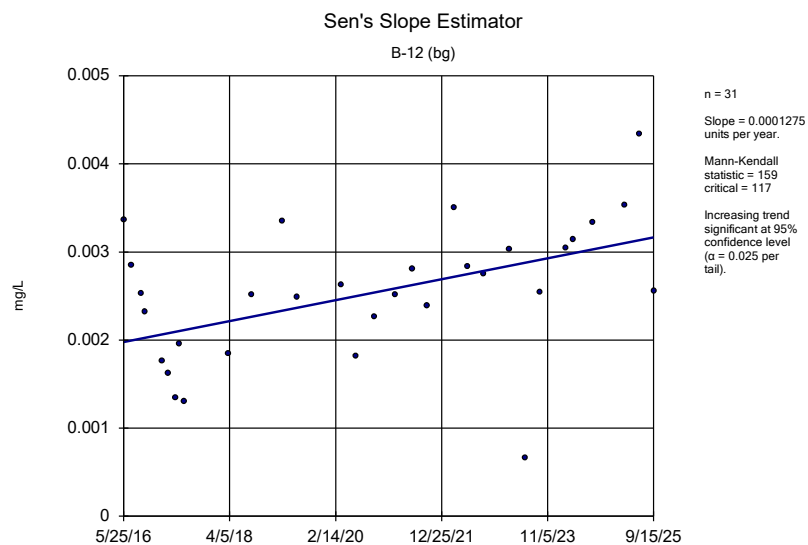
Constituent: Chromium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradi
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



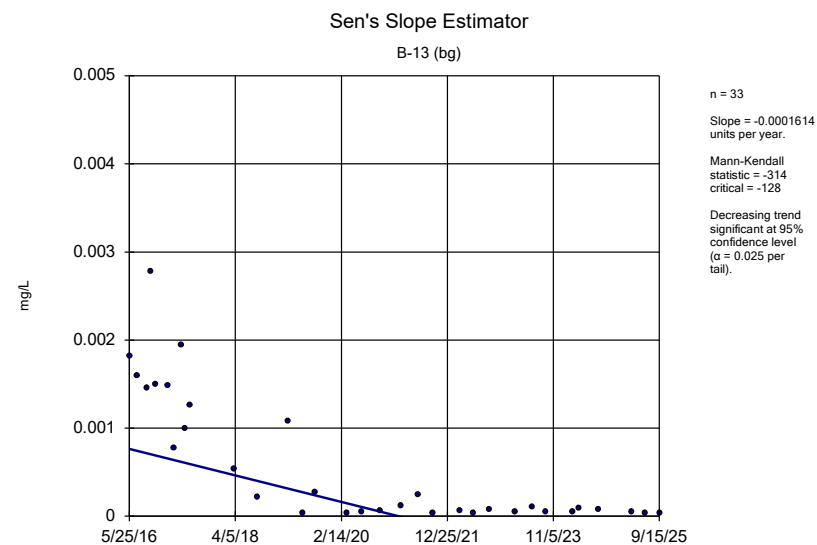
Constituent: Chromium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradi
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



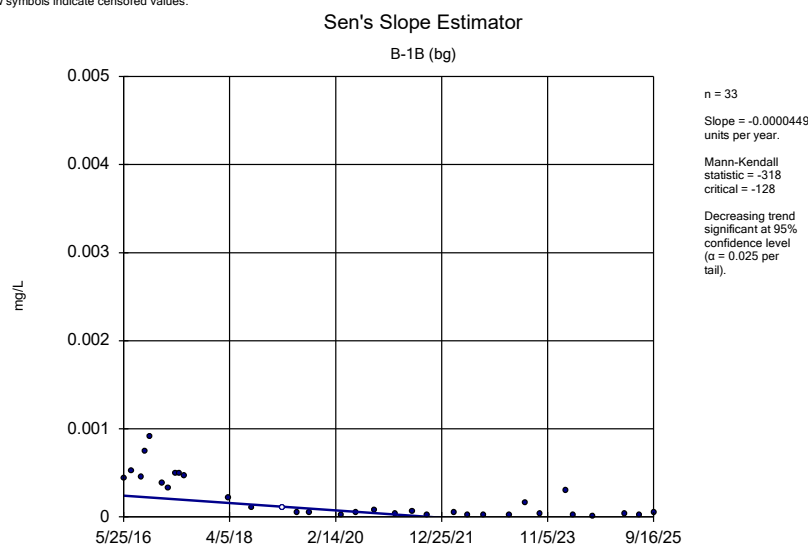
Constituent: Chromium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradi
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



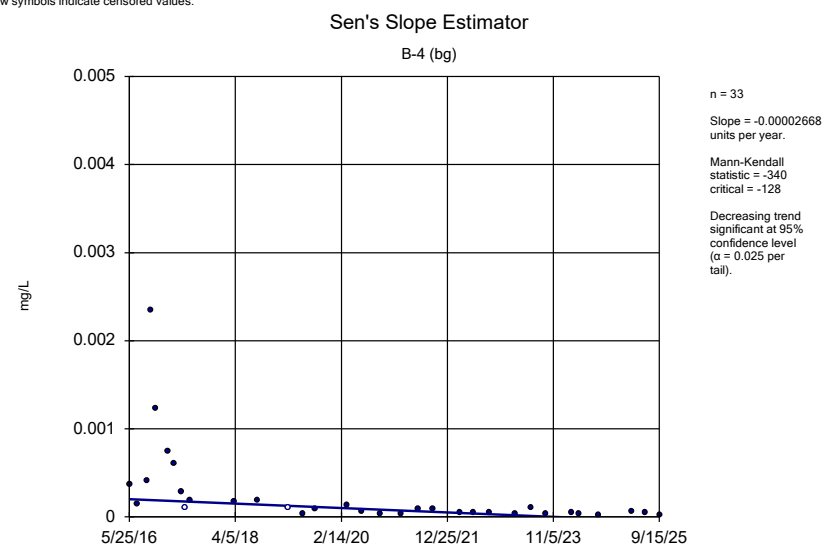
Constituent: Cobalt, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Cobalt, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



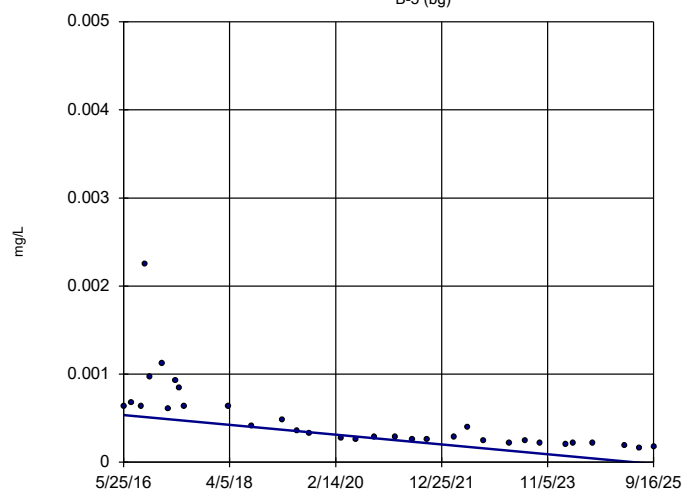
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Cobalt, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Sen's Slope Estimator

B-5 (bg)

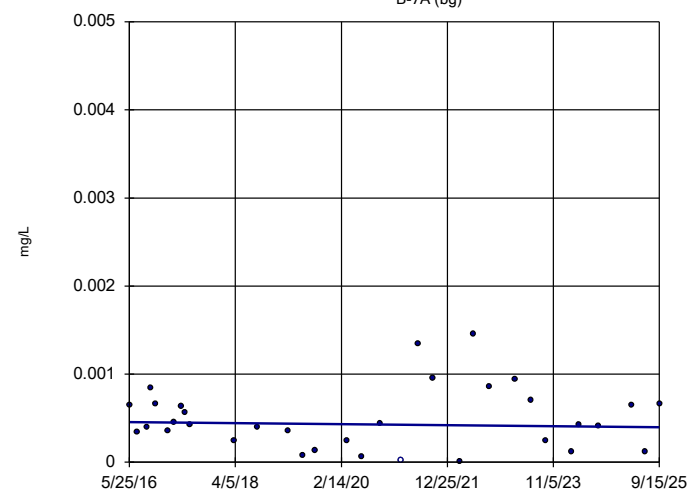


n = 33
 Slope = -0.00005945
 units per year.
 Mann-Kendall
 statistic = -430
 critical = -128
 Decreasing trend
 significant at 95%
 confidence level
 ($\alpha = 0.025$ per
 tail).

Constituent: Cobalt, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Sen's Slope Estimator

B-7A (bg)

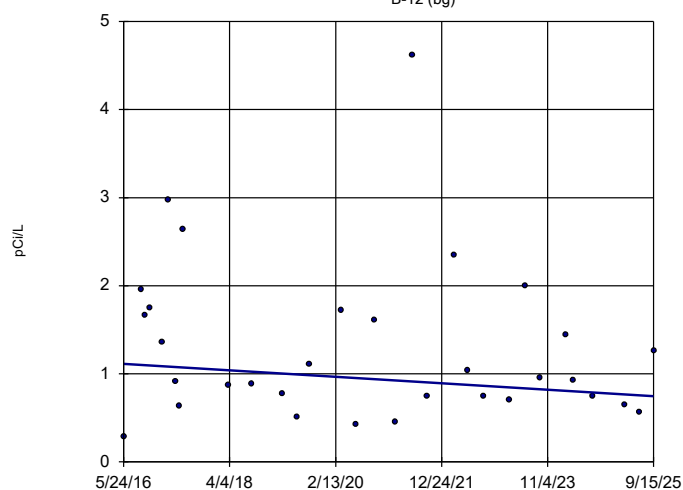


n = 33
 Slope = -0.000005961
 units per year.
 Mann-Kendall
 statistic = -25
 critical = -128
 Trend not sig-
 nificant at 95%
 confidence level
 ($\alpha = 0.025$ per
 tail).

Constituent: Cobalt, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Sen's Slope Estimator

B-12 (bg)

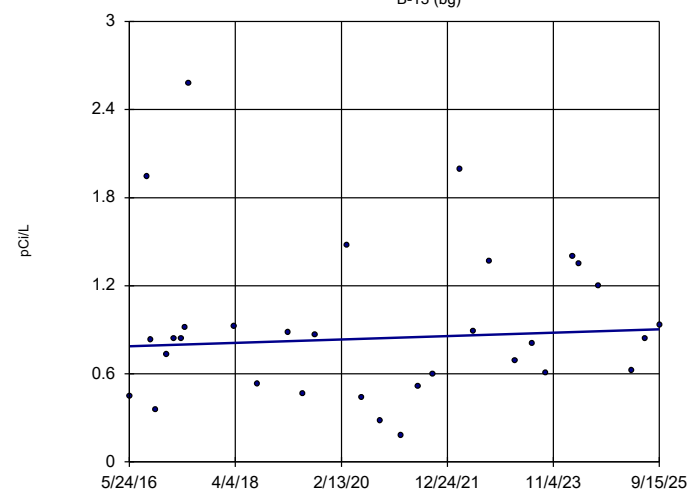


n = 32
 Slope = -0.03952
 units per year.
 Mann-Kendall
 statistic = -69
 critical = -123
 Trend not sig-
 nificant at 95%
 confidence level
 ($\alpha = 0.025$ per
 tail).

Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

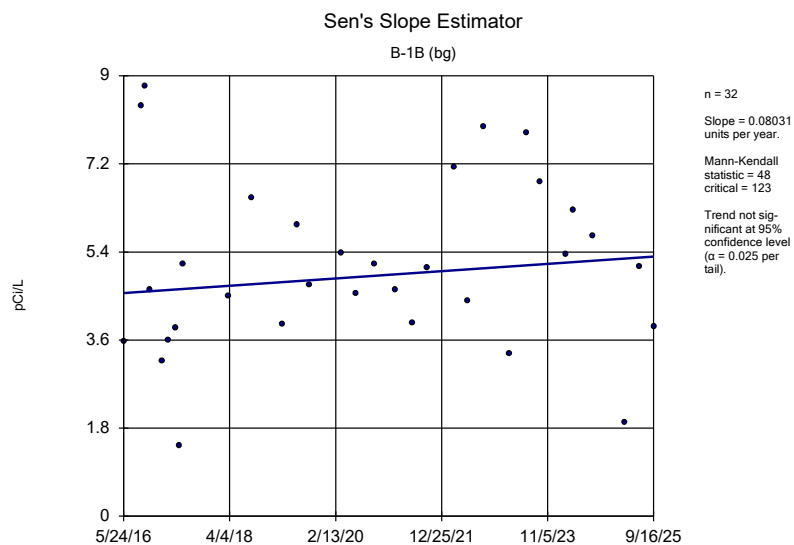
Sen's Slope Estimator

B-13 (bg)

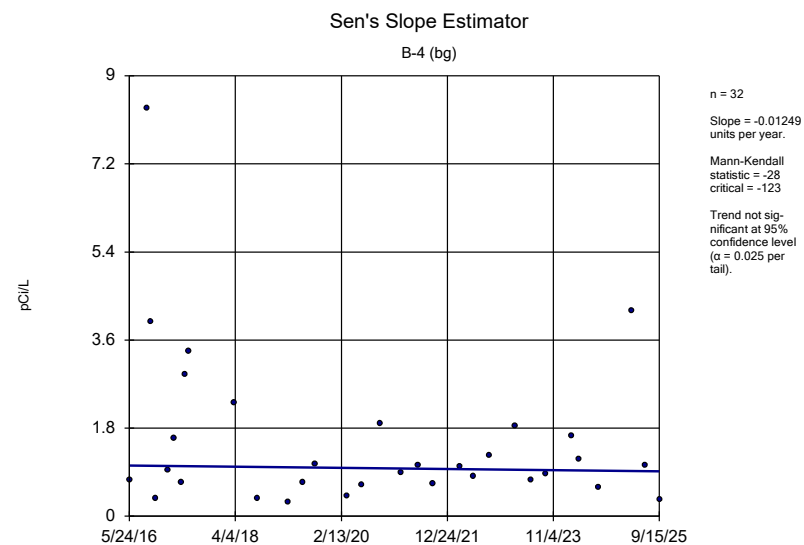


n = 32
 Slope = 0.01254
 units per year.
 Mann-Kendall
 statistic = 50
 critical = 123
 Trend not sig-
 nificant at 95%
 confidence level
 ($\alpha = 0.025$ per
 tail).

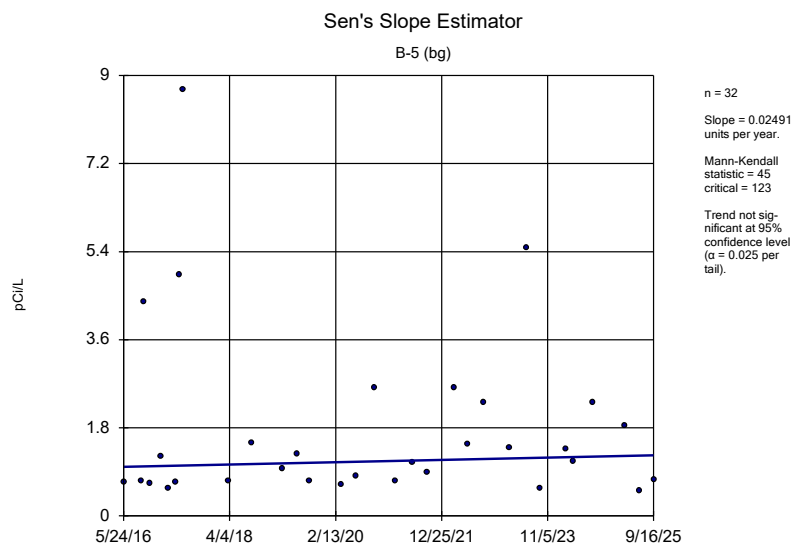
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend
 Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



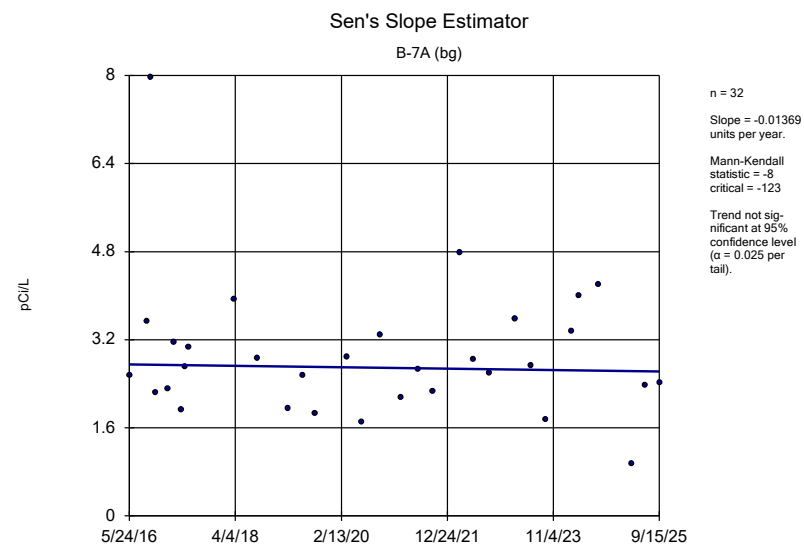
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



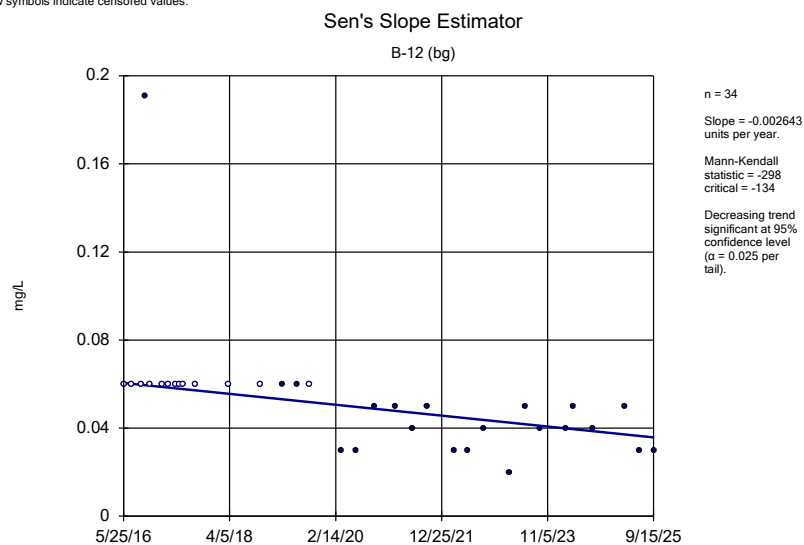
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



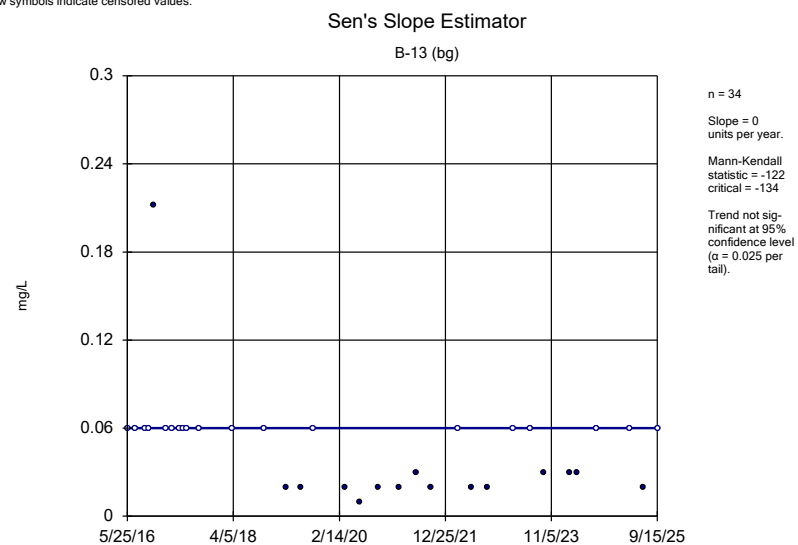
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



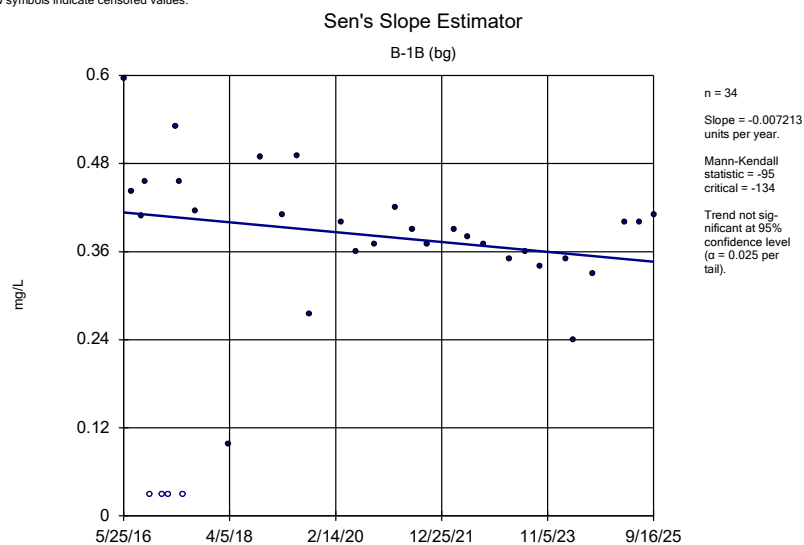
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



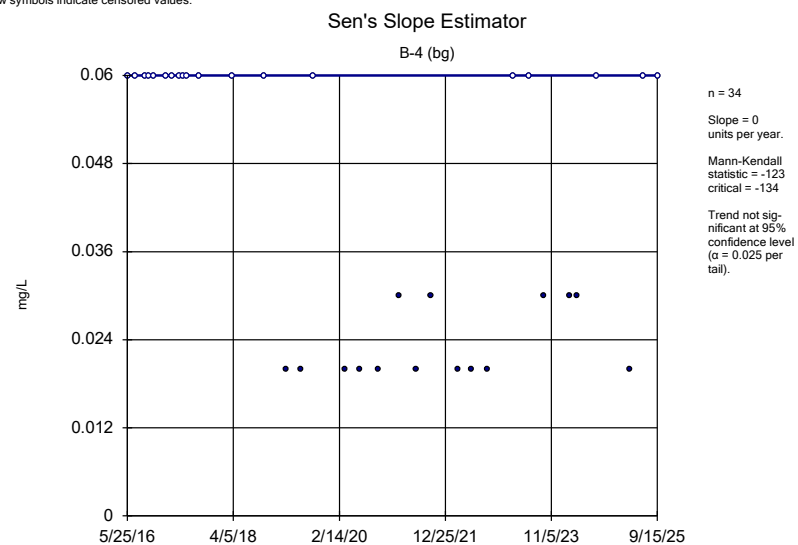
Constituent: Fluoride, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



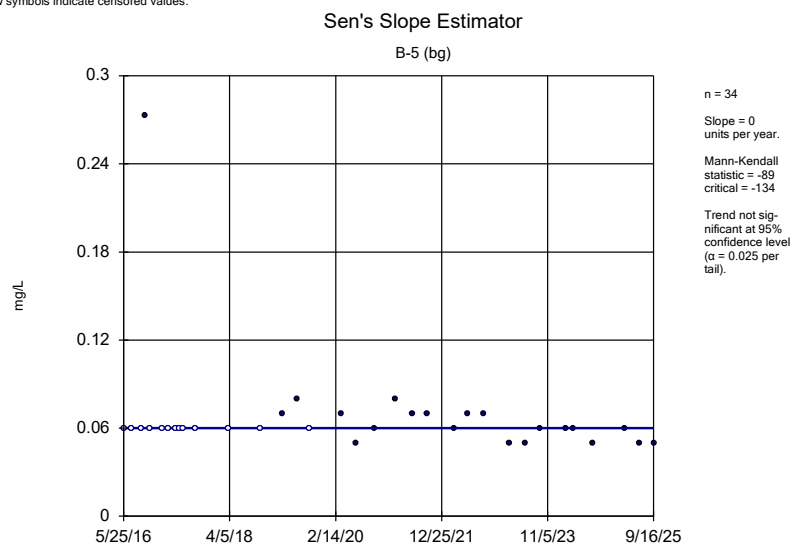
Constituent: Fluoride, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



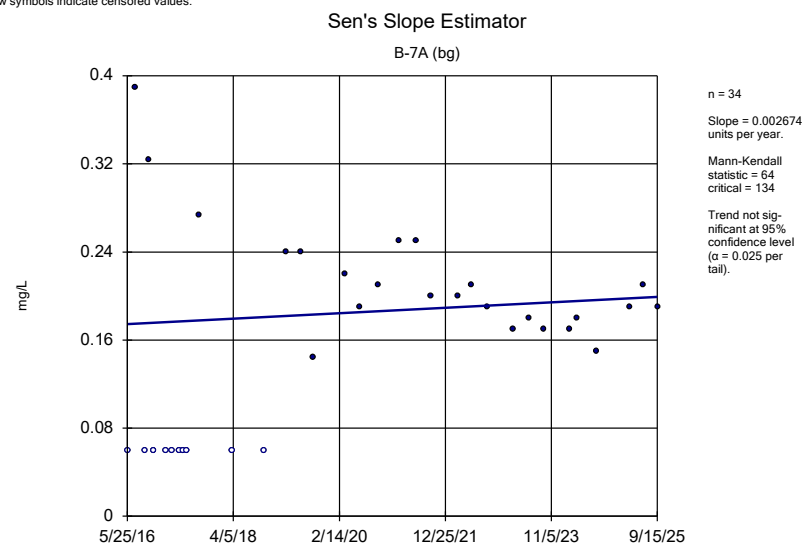
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



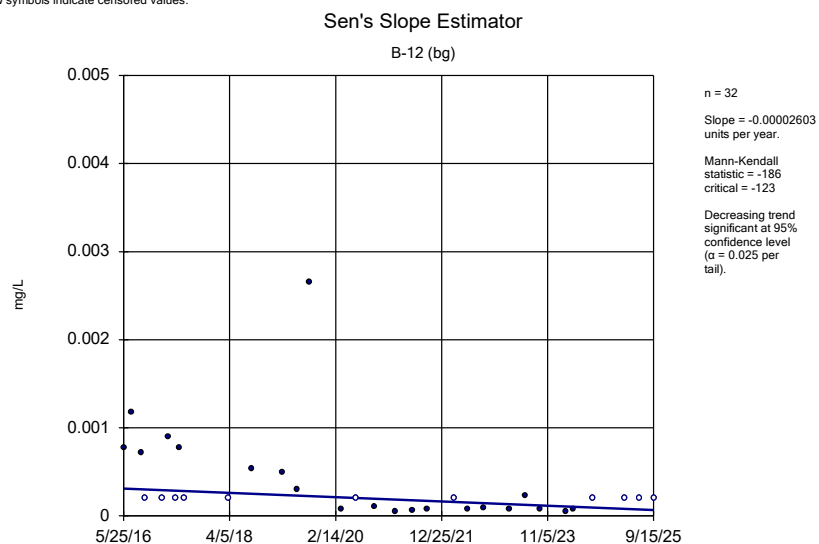
Constituent: Fluoride, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



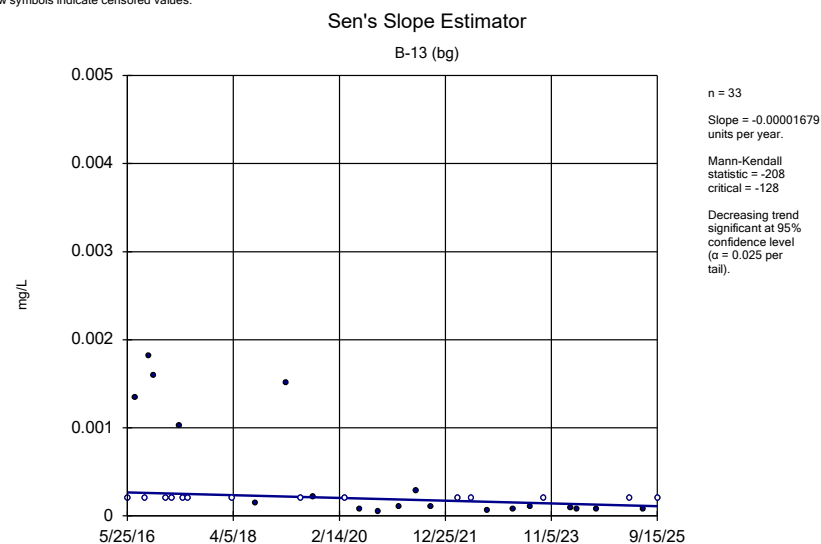
Constituent: Fluoride, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradie
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Fluoride, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradie
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



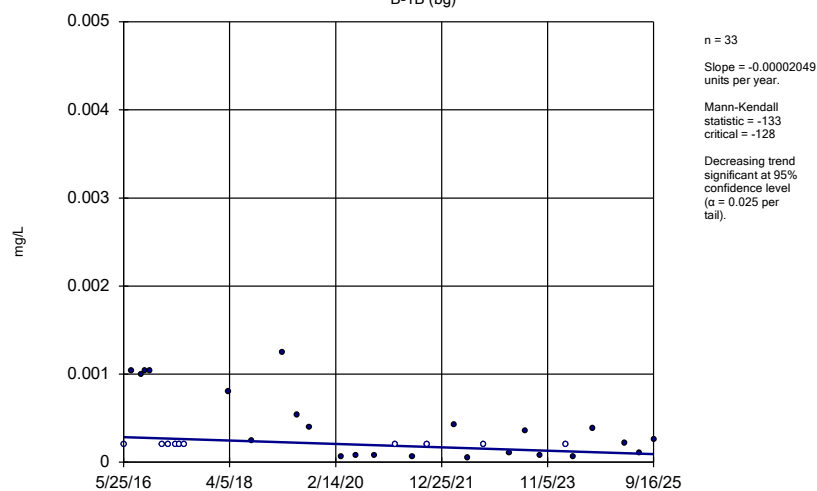
Constituent: Lead, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Lead, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Sen's Slope Estimator

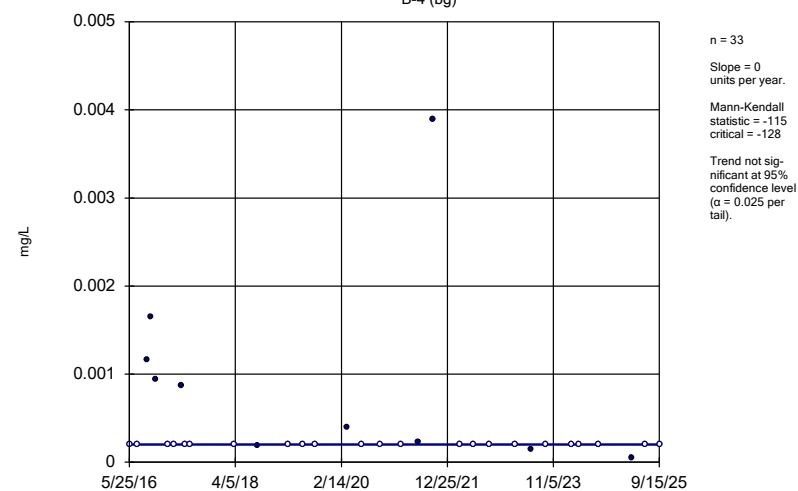
B-1B (bg)



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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Sen's Slope Estimator

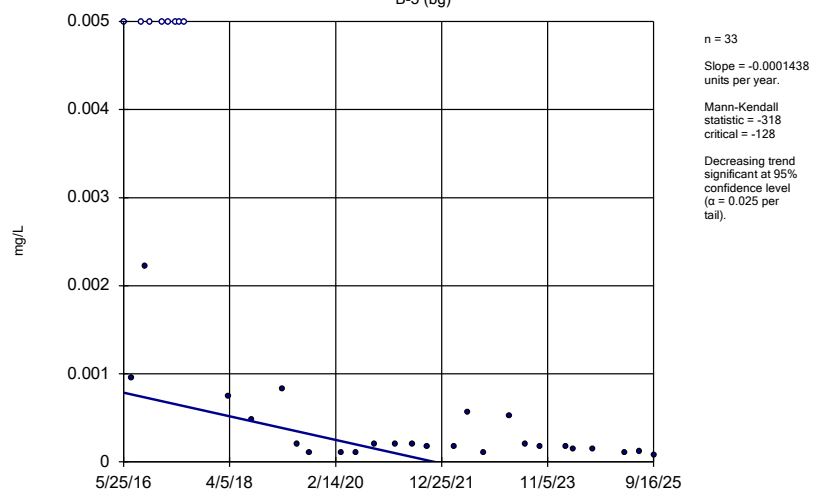
B-4 (bg)



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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Sen's Slope Estimator

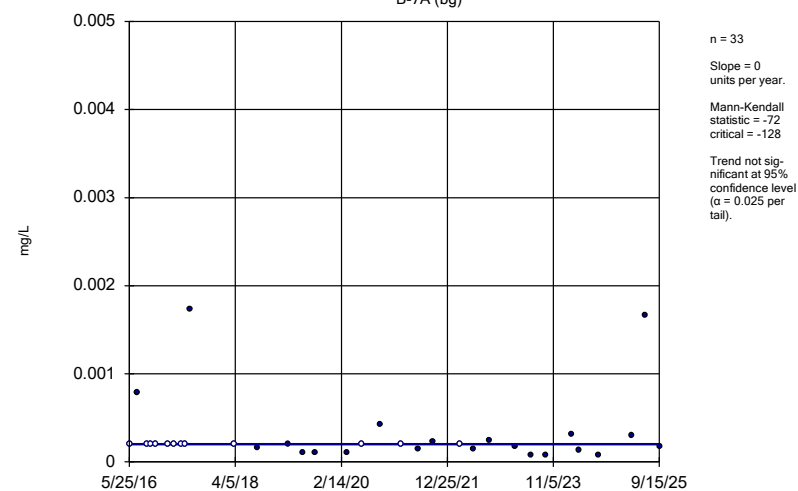
B-5 (bg)



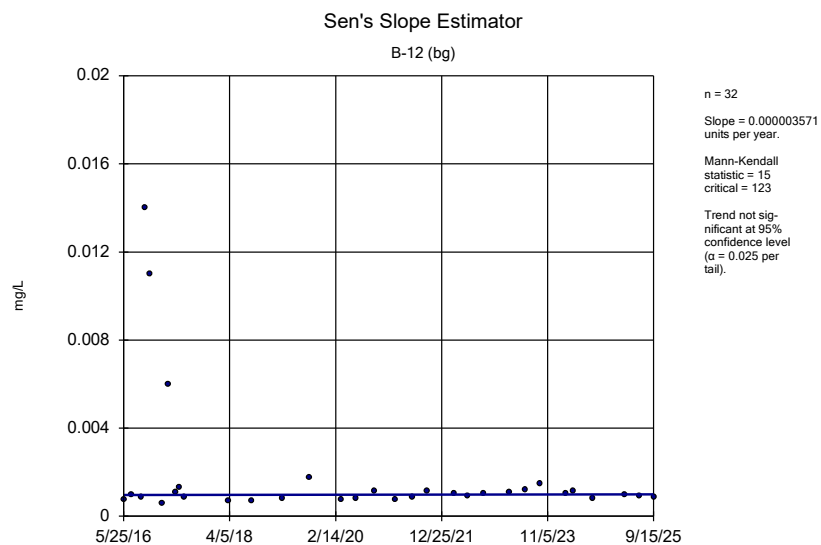
Constituent: Lead, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Sen's Slope Estimator

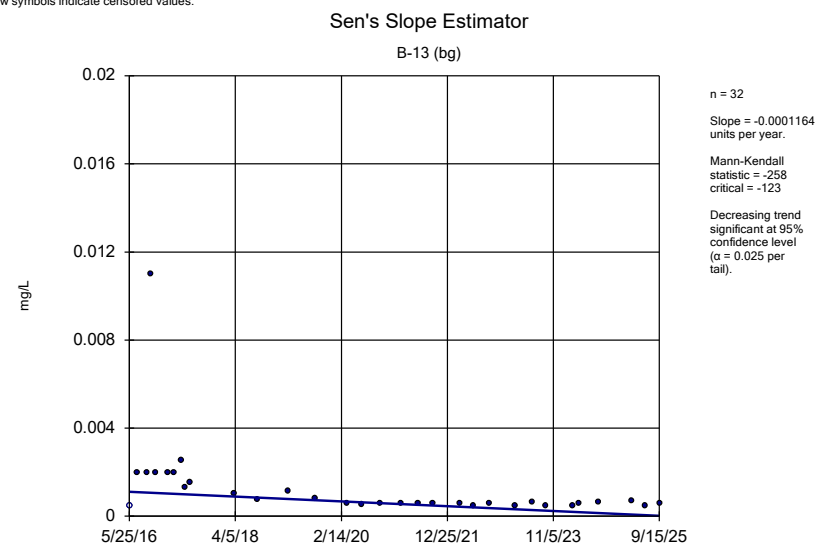
B-7A (bg)



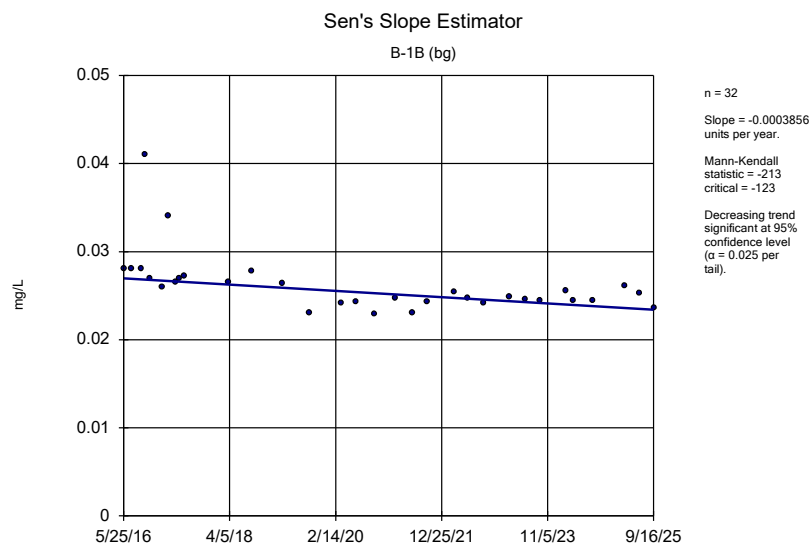
Constituent: Lead, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



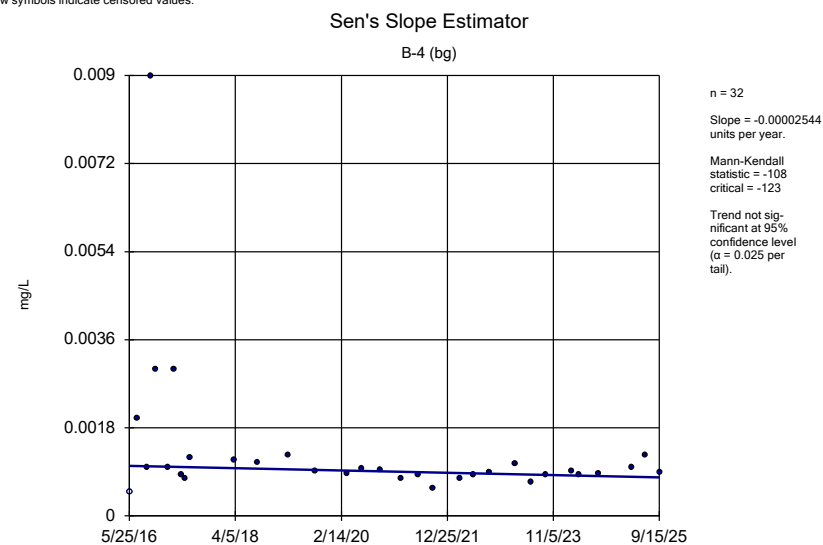
Constituent: Lithium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



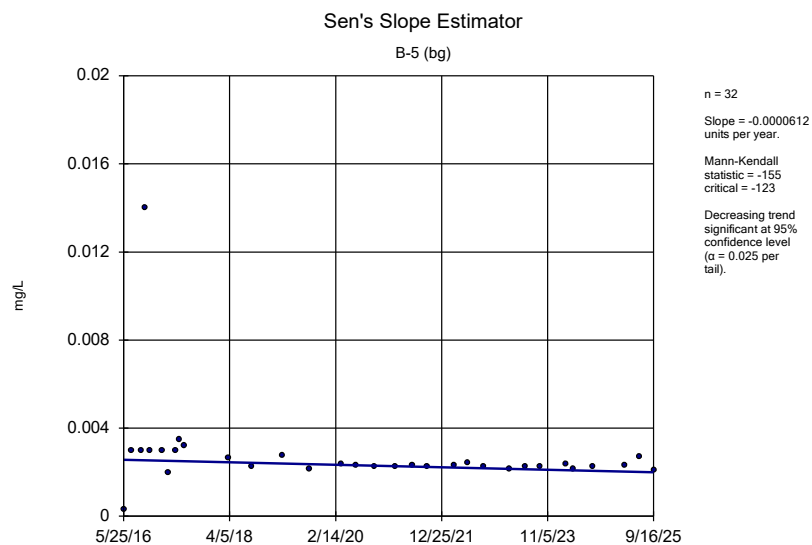
Constituent: Lithium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



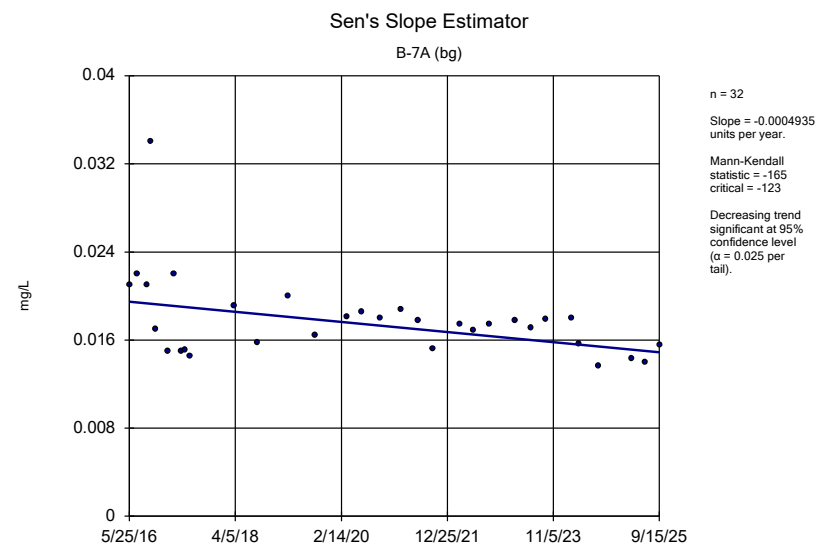
Constituent: Lithium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



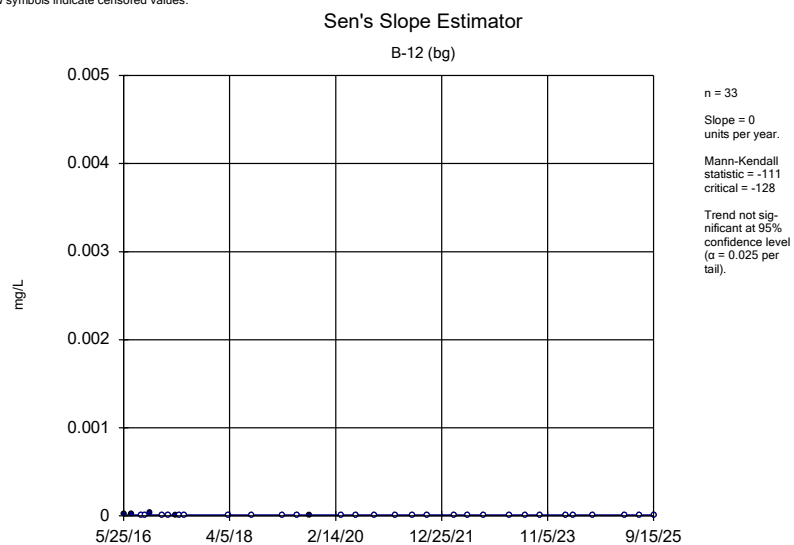
Constituent: Lithium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



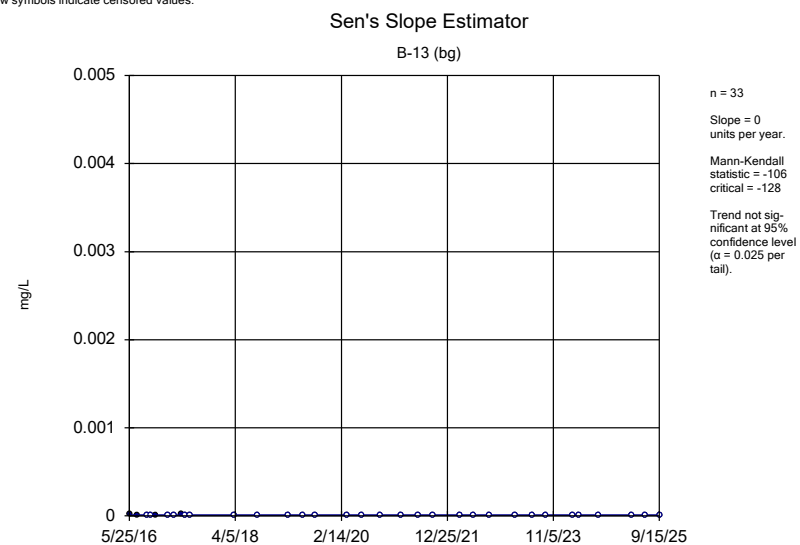
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



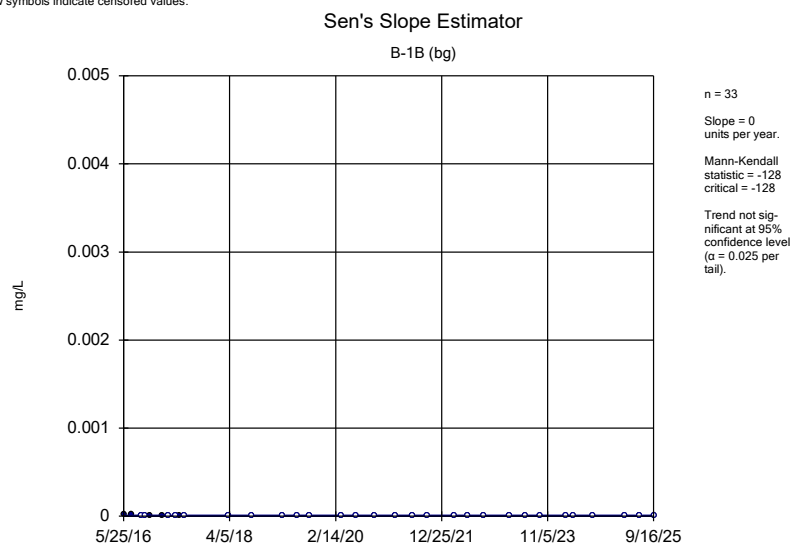
Constituent: Lithium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradient
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



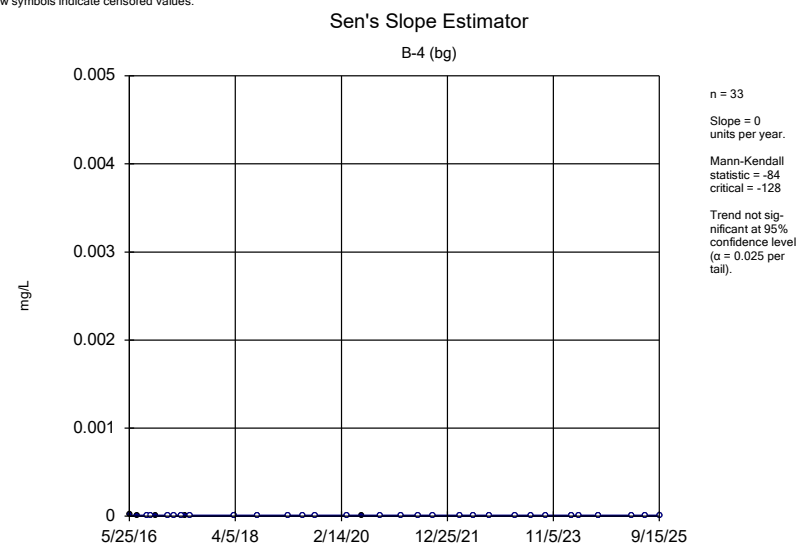
Constituent: Mercury, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradie
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



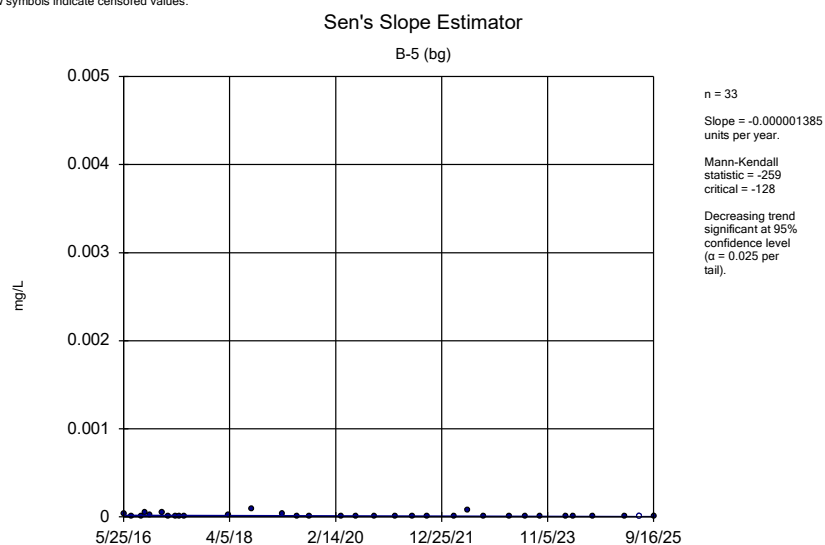
Constituent: Mercury, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradie
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



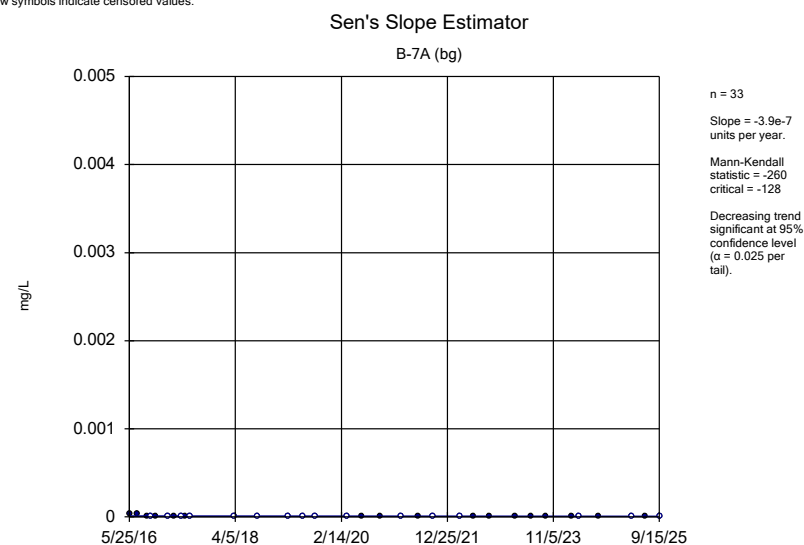
Constituent: Mercury, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



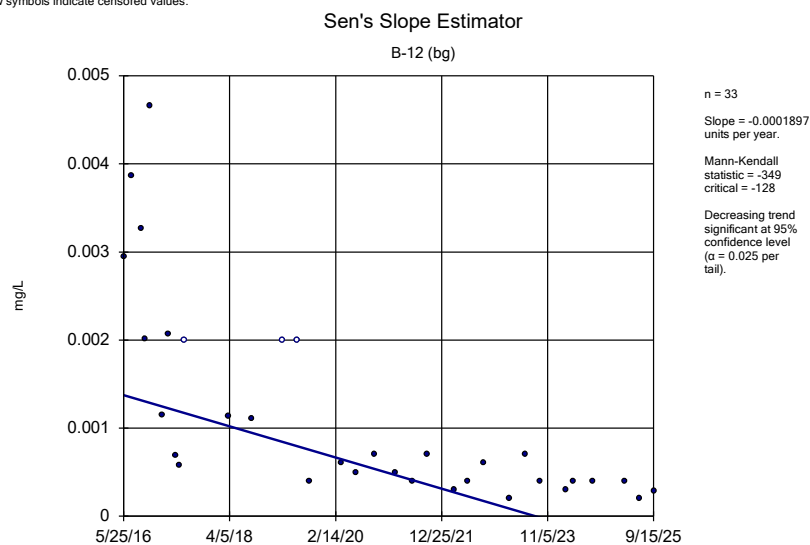
Constituent: Mercury, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



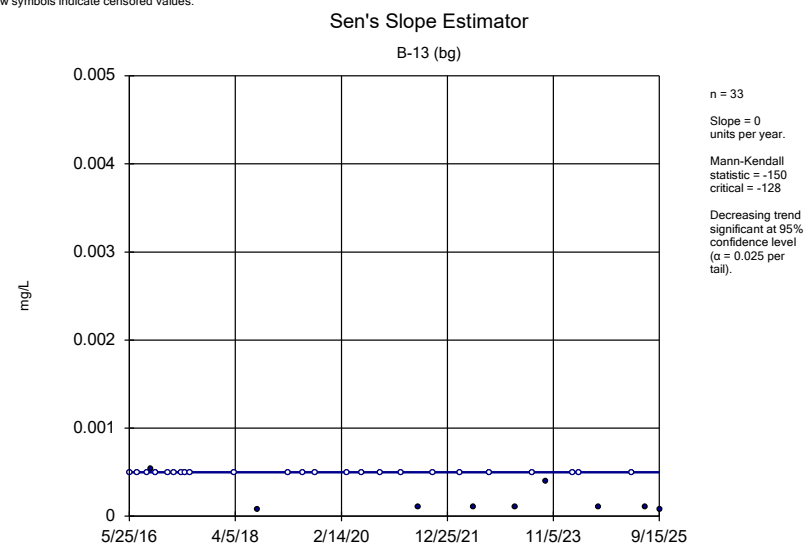
Constituent: Mercury, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



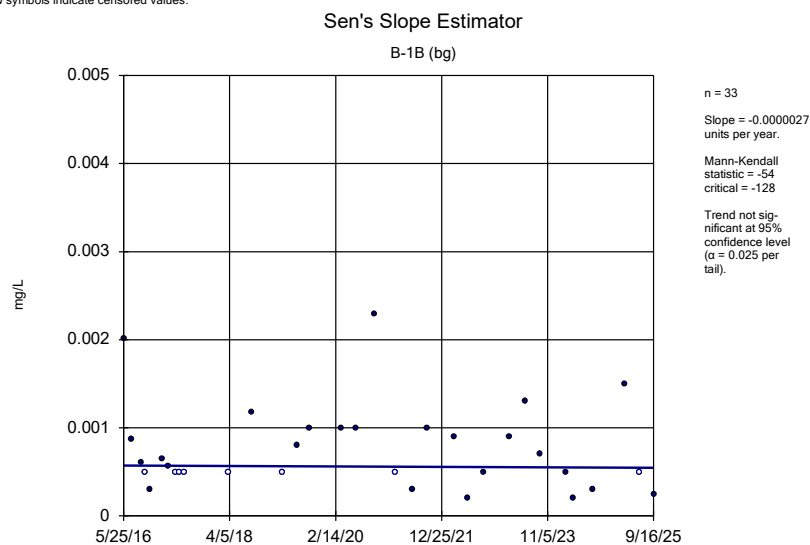
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



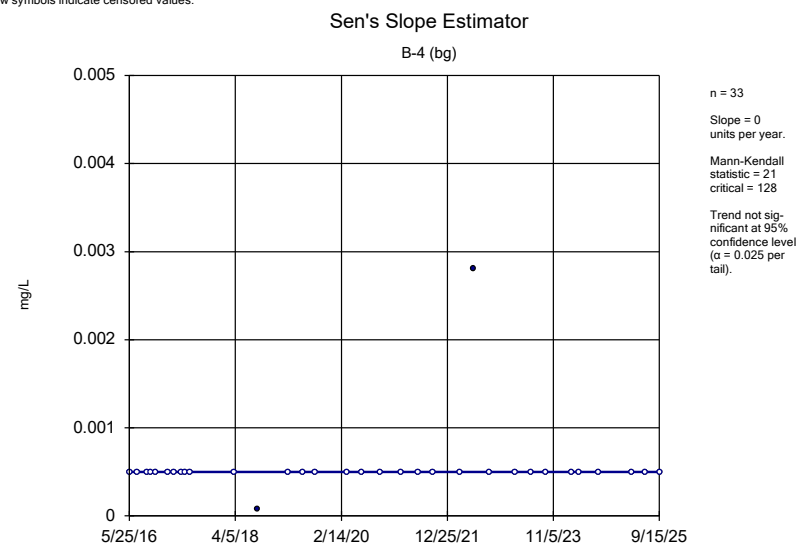
Constituent: Molybdenum, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgr
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



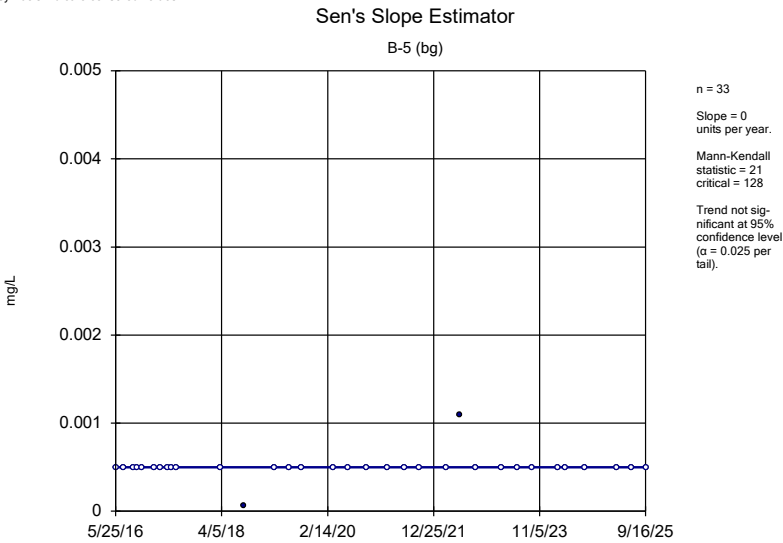
Constituent: Molybdenum, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgr
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



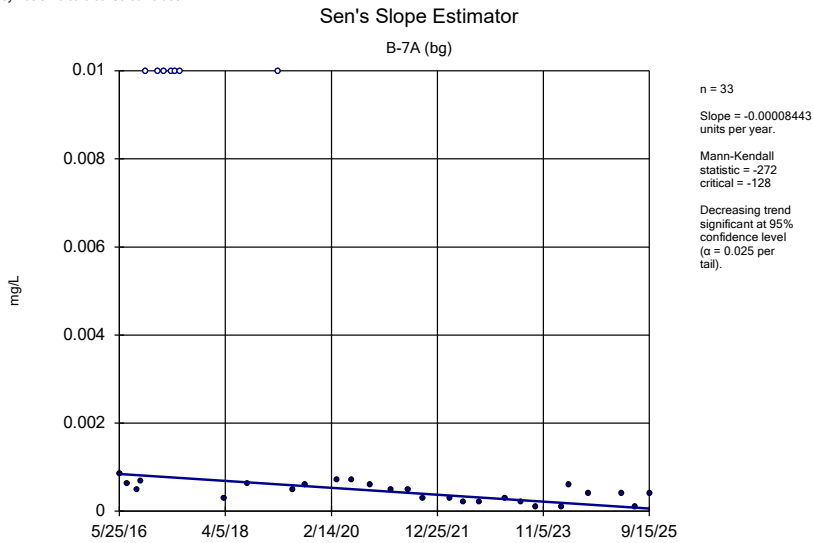
Constituent: Molybdenum, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgr
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



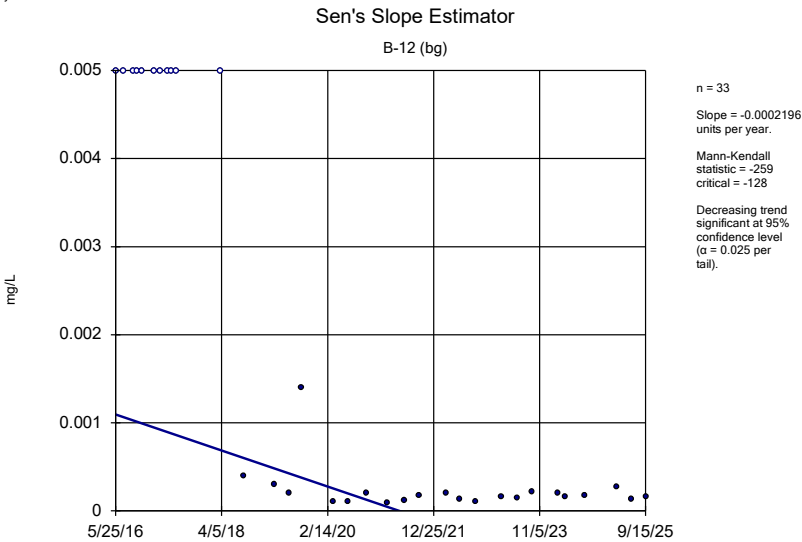
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



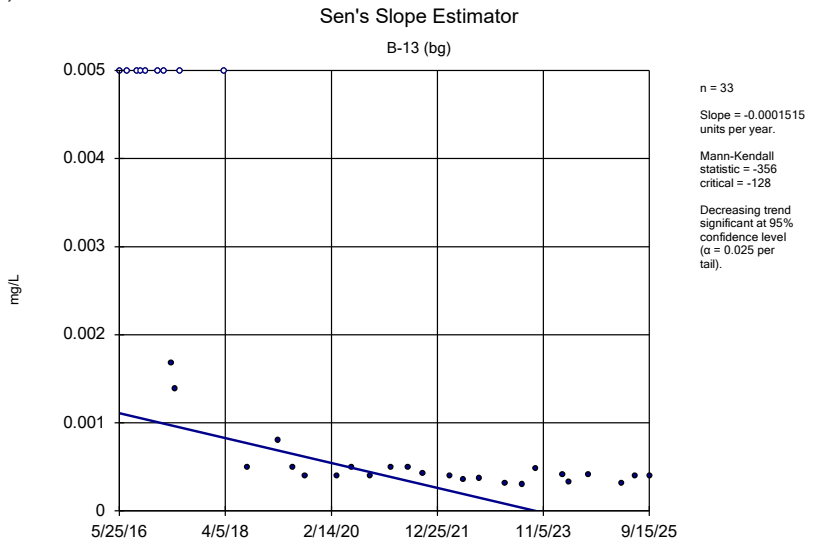
Constituent: Molybdenum, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgr
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



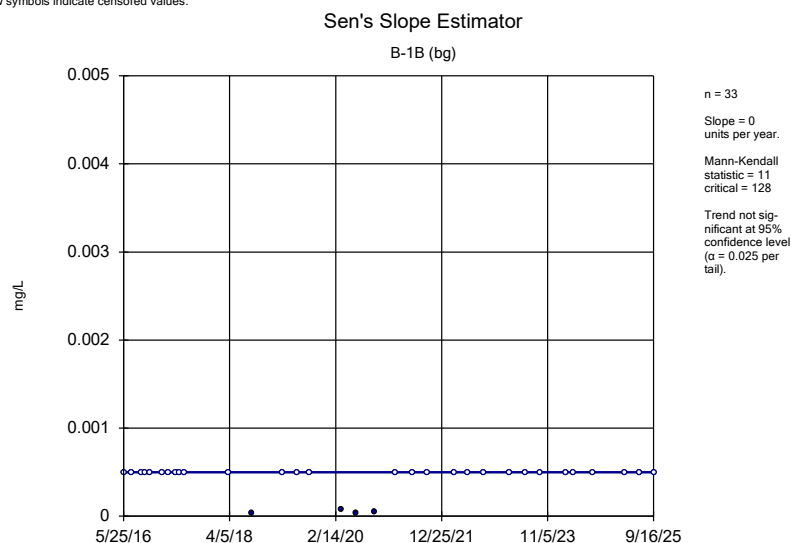
Constituent: Molybdenum, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgr
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



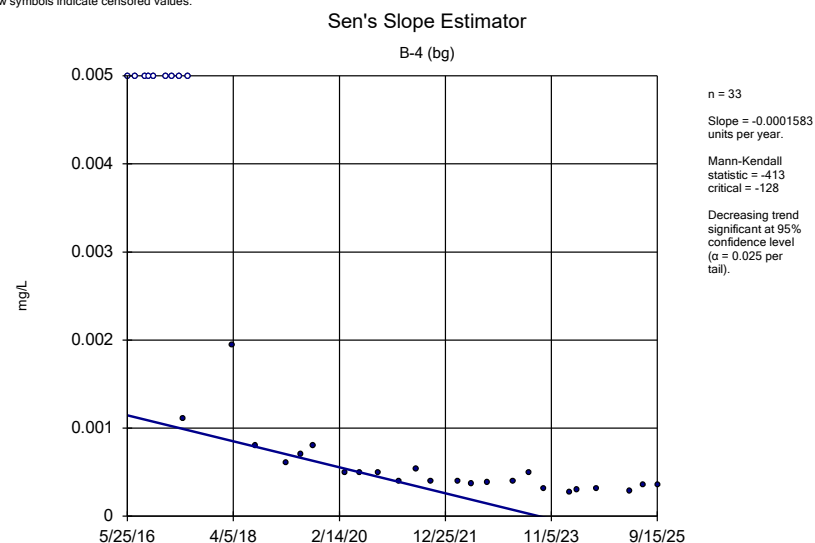
Constituent: Selenium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradi
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



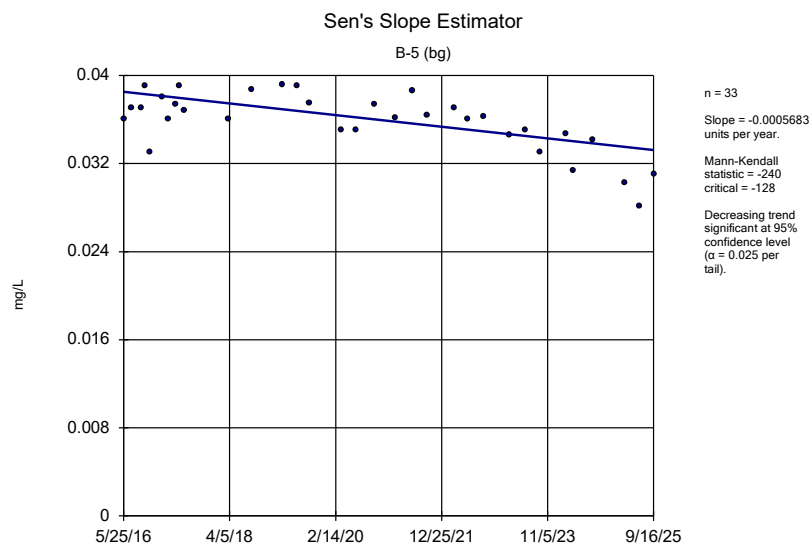
Constituent: Selenium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgradi
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



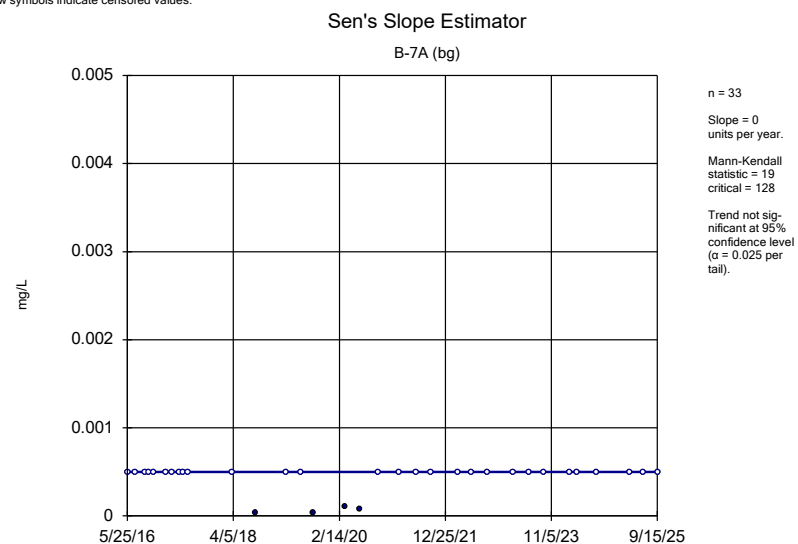
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



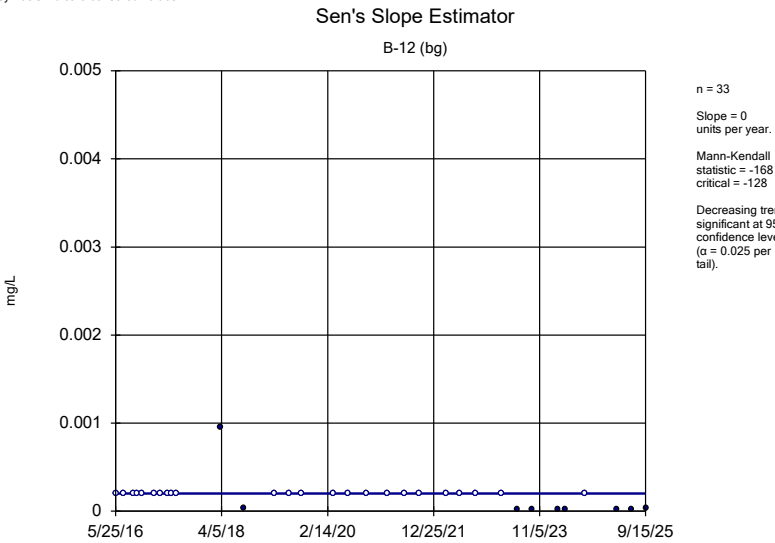
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



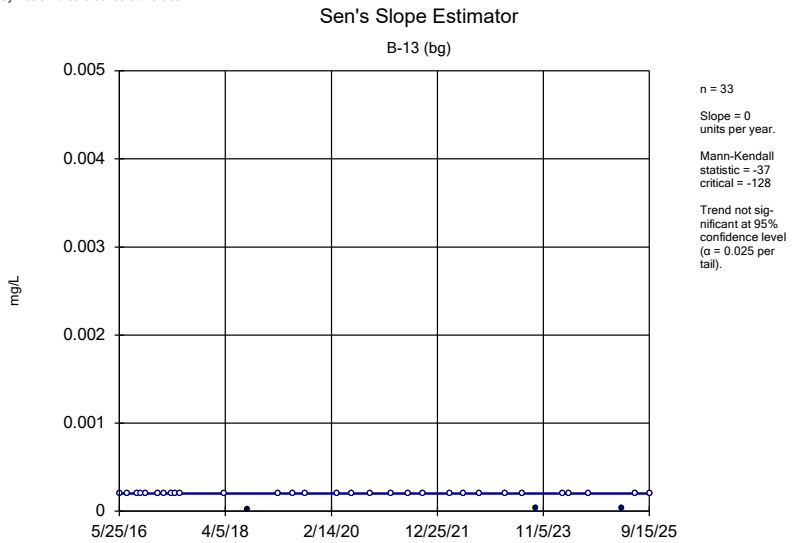
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Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



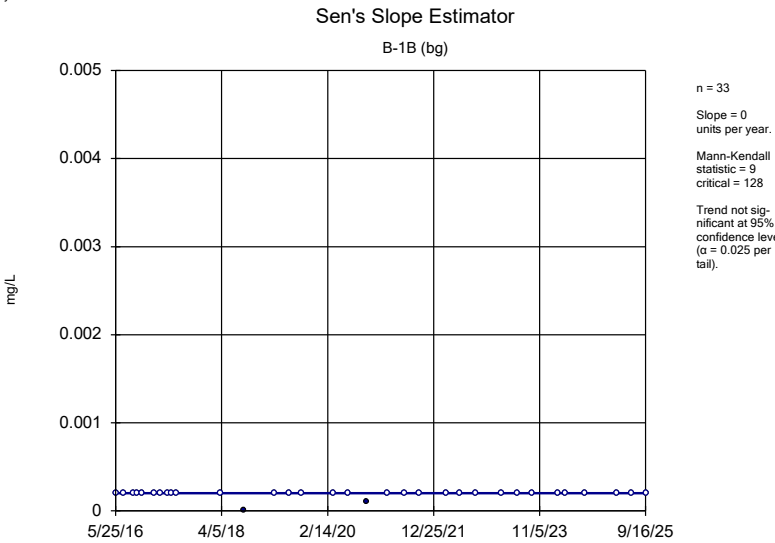
Constituent: Selenium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



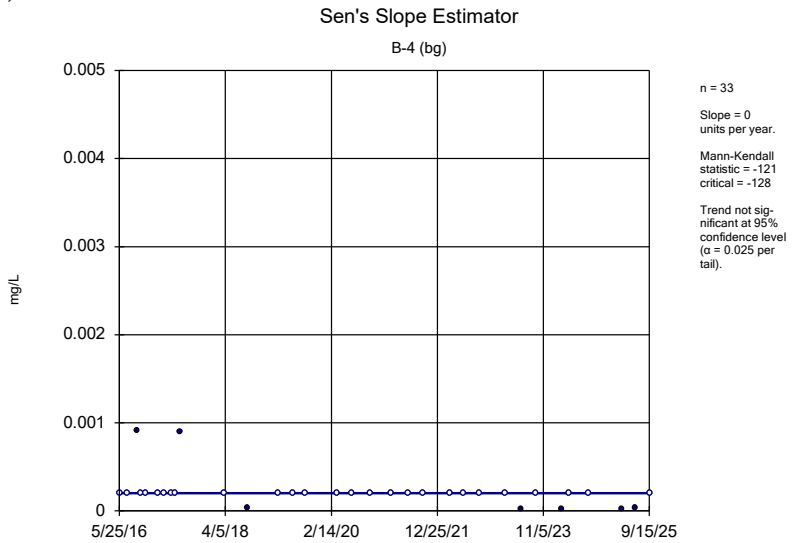
Constituent: Thallium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



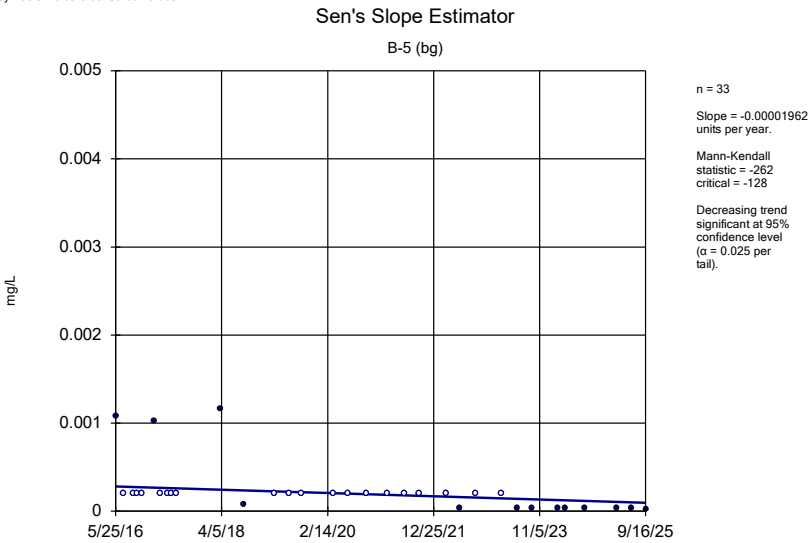
Constituent: Thallium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



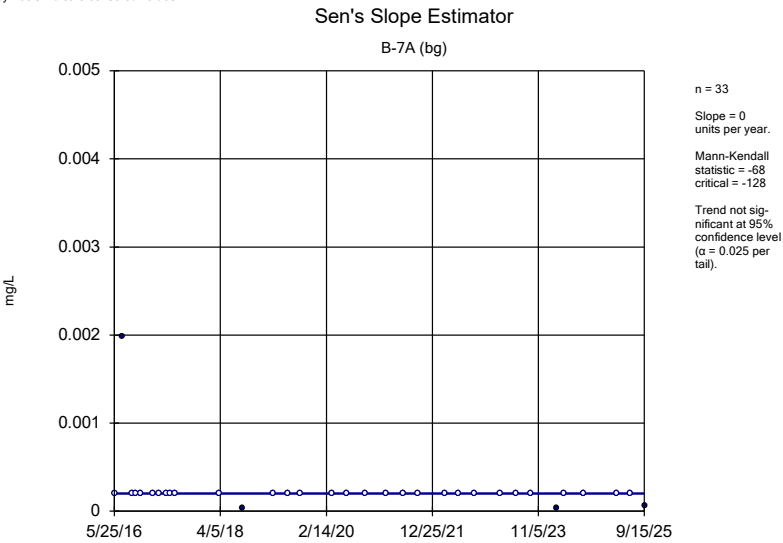
Constituent: Thallium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Thallium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Thallium, total Analysis Run 12/16/2025 10:05 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Thallium, total Analysis Run 12/16/2025 10:06 AM View: Appendix IV - Trend Tests Upgrade
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

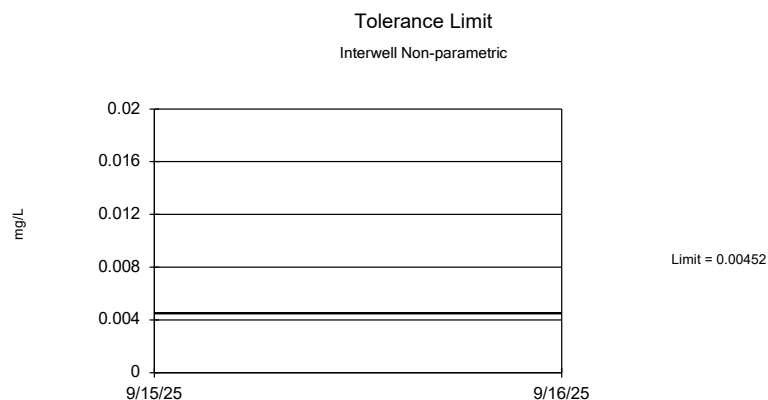
FIGURE I

UTLs

Upper Tolerance Limits Summary Table

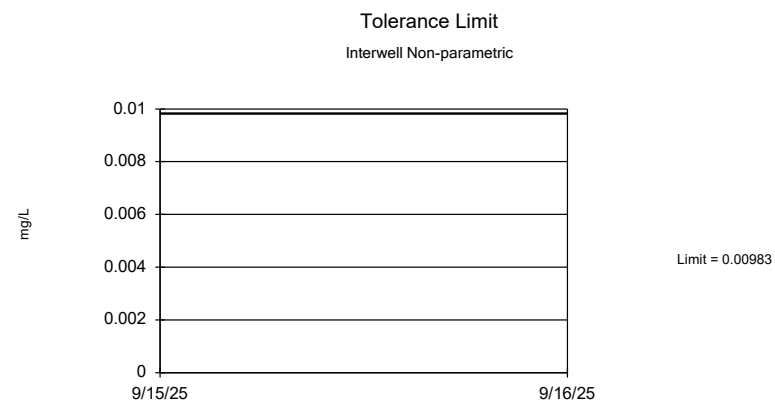
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 10:23 AM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Bq N</u>	<u>Bq Mean</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)	0.00452	n/a	198	n/a	n/a	54.55	n/a	n/a	NaN	NP Inter(NDs)
Arsenic, total (mg/L)	0.00983	n/a	198	n/a	n/a	26.26	n/a	n/a	NaN	NP Inter(normality)
Barium, total (mg/L)	0.131	n/a	198	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Beryllium, total (mg/L)	0.001	n/a	198	n/a	n/a	24.75	n/a	n/a	NaN	NP Inter(normality)
Cadmium, total (mg/L)	0.001	n/a	198	n/a	n/a	28.79	n/a	n/a	NaN	NP Inter(normality)
Chromium, total (mg/L)	0.006	n/a	197	n/a	n/a	5.584	n/a	n/a	NaN	NP Inter(normality)
Cobalt, total (mg/L)	0.00434	n/a	196	n/a	n/a	2.041	n/a	n/a	NaN	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	8.79	n/a	192	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride, total (mg/L)	0.5955	n/a	204	n/a	n/a	38.24	n/a	n/a	NaN	NP Inter(normality)
Lead, total (mg/L)	0.00389	n/a	197	n/a	n/a	39.59	n/a	n/a	NaN	NP Inter(normality)
Lithium, total (mg/L)	0.041	n/a	192	n/a	n/a	1.042	n/a	n/a	NaN	NP Inter(normality)
Mercury, total (mg/L)	0.000096	n/a	198	n/a	n/a	65.66	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum, total (mg/L)	0.004655	n/a	198	n/a	n/a	52.53	n/a	n/a	NaN	NP Inter(NDs)
Selenium, total (mg/L)	0.0392	n/a	198	n/a	n/a	43.94	n/a	n/a	NaN	NP Inter(normality)
Thallium, total (mg/L)	0.001985	n/a	198	n/a	n/a	80.81	n/a	n/a	NaN	NP Inter(NDs)



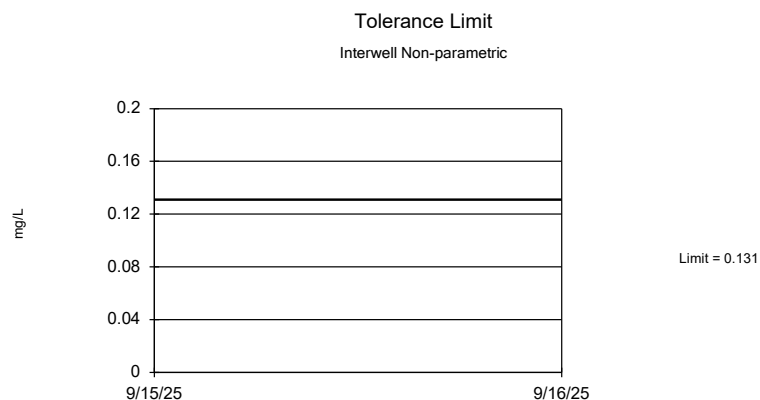
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 198 background values. 54.55% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Antimony, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



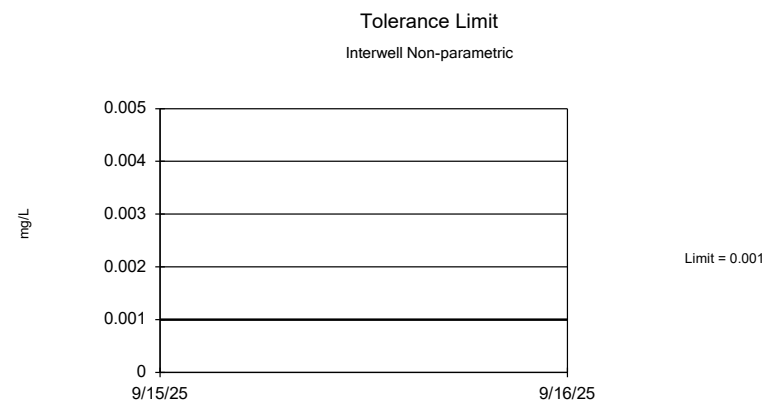
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 198 background values. 26.26% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Arsenic, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



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 198 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: Barium, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



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 198 background values. 24.75% 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: Beryllium, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tolerance Limit

Interwell Non-parametric



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 198 background values. 28.79% 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 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tolerance Limit

Interwell Non-parametric



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 197 background values. 5.584% 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 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tolerance Limit

Interwell Non-parametric



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 196 background values. 2.041% 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 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tolerance Limit

Interwell Non-parametric



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 192 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: Combined Radium 226 + 228 Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tolerance Limit

Interwell Non-parametric



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 204 background values. 38.24% 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 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tolerance Limit

Interwell Non-parametric



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 197 background values. 39.59% 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: Lead, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Tolerance Limit

Interwell Non-parametric

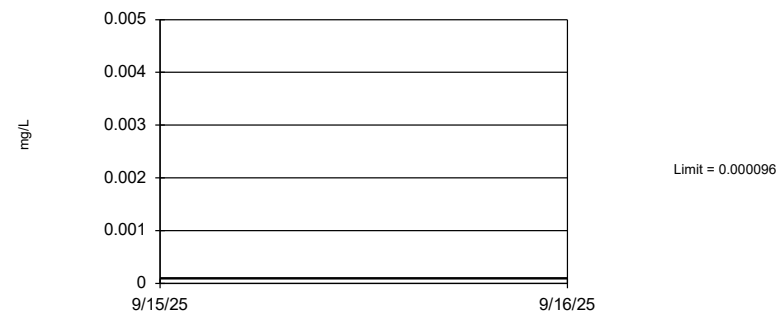


Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 192 background values. 1.042% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Lithium, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

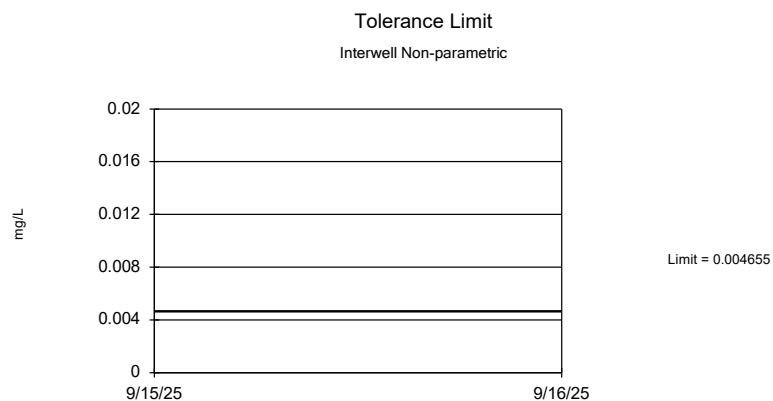
Tolerance Limit

Interwell Non-parametric



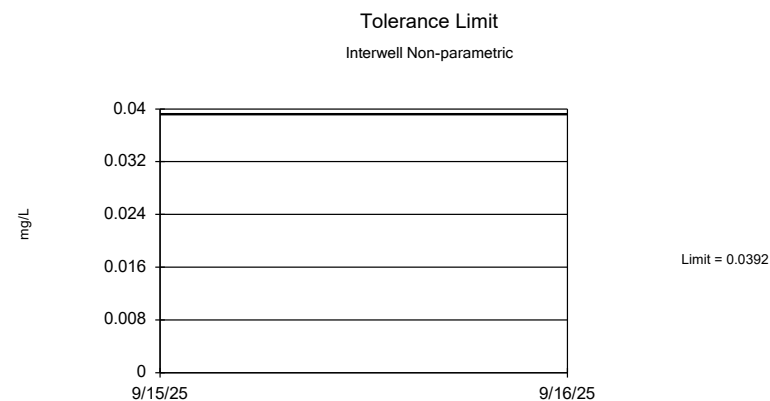
Non-parametric test used in lieu of parametric tolerance limit because the censored data exceeded 50%. Limit is highest of 198 background values. 65.66% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Mercury, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



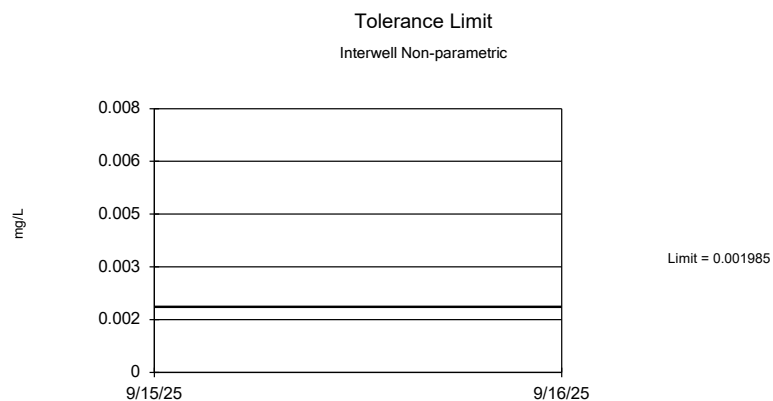
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 198 background values. 52.53% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Molybdenum, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



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 198 background values. 43.94% 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: Selenium, total Analysis Run 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 198 background values. 80.81% 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 12/16/2025 10:22 AM View: Appendix IV - UTLs
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

FIGURE J

GWPS

FLINT CREEK LANDFILL GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.0045	0.006
Arsenic, Total (mg/L)	0.01		0.0098	0.01
Barium, Total (mg/L)	2		0.13	2
Beryllium, Total (mg/L)	0.004		0.001	0.004
Cadmium, Total (mg/L)	0.005		0.001	0.005
Chromium, Total (mg/L)	0.1		0.006	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0043	0.006
Combined Radium, Total (pCi/L)	5		8.79	8.79
Fluoride, Total (mg/L)	4		0.6	4
Lead, Total (mg/L)	n/a	0.015	0.0039	0.015
Lithium, Total (mg/L)	n/a	0.04	0.041	0.041
Mercury, Total (mg/L)	0.002		0.000096	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.0047	0.1
Selenium, Total (mg/L)	0.05		0.039	0.05
Thallium, Total (mg/L)	0.002		0.002	0.002

**Gray cell indicates background limit is higher than MCL or CCR-Rule Specified level*

**GWPS = Groundwater Protection Standard*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

FIGURE K

Confidence Intervals

Confidence Intervals - All Results (No Significant)

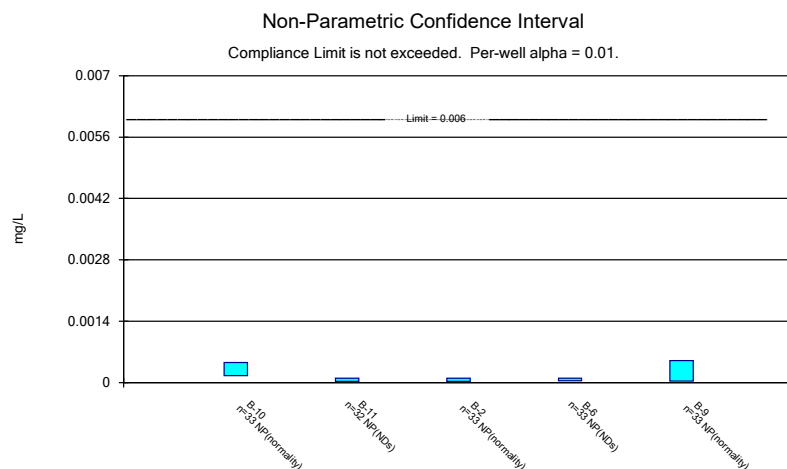
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 10:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony, total (mg/L)	B-10	0.00046	0.00016	0.006	No	33	0.001784	0.002311	33.33	None	No	0.01	NP (normality)
Antimony, total (mg/L)	B-11	0.0001	0.000028	0.006	No	32	0.0002341	0.0008502	78.13	None	No	0.01	NP (NDs)
Antimony, total (mg/L)	B-2	0.0001	0.000023	0.006	No	33	0.0004414	0.001118	33.33	None	No	0.01	NP (normality)
Antimony, total (mg/L)	B-6	0.0001	0.00004	0.006	No	33	0.0001154	0.0002423	60.61	None	No	0.01	NP (NDs)
Antimony, total (mg/L)	B-9	0.0005	0.00003	0.006	No	33	0.0002459	0.000305	36.36	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-10	0.0028	0.00037	0.01	No	33	0.002065	0.002235	24.24	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-11	0.003138	0.00017	0.01	No	31	0.001665	0.002246	22.58	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-2	0.00139	0.00022	0.01	No	33	0.001486	0.003172	12.12	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-6	0.00149	0.00019	0.01	No	33	0.001389	0.001868	18.18	None	No	0.01	NP (normality)
Arsenic, total (mg/L)	B-9	0.00167	0.00047	0.01	No	33	0.001752	0.001897	24.24	None	No	0.01	NP (normality)
Barium, total (mg/L)	B-10	0.08641	0.08016	2	No	33	0.08328	0.007329	0	None	No	0.01	Param.
Barium, total (mg/L)	B-11	0.1264	0.1071	2	No	31	0.1167	0.02193	0	None	No	0.01	Param.
Barium, total (mg/L)	B-2	0.0716	0.0507	2	No	32	0.07572	0.04907	0	None	No	0.01	NP (normality)
Barium, total (mg/L)	B-6	0.05517	0.04509	2	No	33	0.05068	0.01246	0	None	sqrt(x)	0.01	Param.
Barium, total (mg/L)	B-9	0.1671	0.1514	2	No	33	0.1592	0.0185	0	None	No	0.01	Param.
Beryllium, total (mg/L)	B-10	0.00005	0.000047	0.004	No	33	0.00005189	0.00005508	57.58	None	No	0.01	NP (NDs)
Beryllium, total (mg/L)	B-11	0.0003981	0.0002208	0.004	No	31	0.0003804	0.0003622	0	None	ln(x)	0.01	Param.
Beryllium, total (mg/L)	B-2	0.0001579	0.00007	0.004	No	32	0.0001648	0.0001989	0	None	No	0.01	NP (normality)
Beryllium, total (mg/L)	B-6	0.00007864	0.00002651	0.004	No	33	0.00008223	0.0001063	18.18	Kaplan-Meier	x^(1/3)	0.01	Param.
Beryllium, total (mg/L)	B-9	0.00005	0.0000476	0.004	No	33	0.00004393	0.00001284	66.67	Kaplan-Meier	No	0.01	NP (NDs)
Cadmium, total (mg/L)	B-10	0.0002	0.000027	0.005	No	33	0.00009809	0.00009905	33.33	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	B-11	0.00016	0.00007	0.005	No	31	0.0002705	0.0004134	0	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	B-2	0.00009	0.000024	0.005	No	33	0.0002737	0.0004124	21.21	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	B-6	0.00002	0.000012	0.005	No	33	0.00004112	0.00006695	27.27	None	No	0.01	NP (normality)
Cadmium, total (mg/L)	B-9	0.00002	0.00001	0.005	No	33	0.00001882	0.00001475	54.55	None	No	0.01	NP (NDs)
Chromium, total (mg/L)	B-10	0.002	0.000649	0.1	No	33	0.002807	0.006721	0	None	No	0.01	NP (normality)
Chromium, total (mg/L)	B-11	0.00195	0.00092	0.1	No	31	0.002991	0.004906	0	None	No	0.01	NP (normality)
Chromium, total (mg/L)	B-2	0.00249	0.00152	0.1	No	33	0.004153	0.007401	0	None	No	0.01	NP (normality)
Chromium, total (mg/L)	B-6	0.00312	0.00183	0.1	No	33	0.002888	0.001967	0	None	No	0.01	NP (normality)
Chromium, total (mg/L)	B-9	0.001561	0.0009016	0.1	No	33	0.001464	0.001023	0	None	ln(x)	0.01	Param.
Cobalt, total (mg/L)	B-10	0.0007204	0.0002537	0.006	No	33	0.0006795	0.0009061	3.03	None	x^(1/3)	0.01	Param.
Cobalt, total (mg/L)	B-11	0.00048	0.000098	0.006	No	31	0.0007129	0.00137	0	None	No	0.01	NP (normality)
Cobalt, total (mg/L)	B-2	0.0004009	0.0001249	0.006	No	31	0.0005953	0.001143	0	None	ln(x)	0.01	Param.
Cobalt, total (mg/L)	B-6	0.0005962	0.000182	0.006	No	33	0.0007801	0.001051	0	None	ln(x)	0.01	Param.
Cobalt, total (mg/L)	B-9	0.0006261	0.0002242	0.006	No	33	0.0005346	0.0005742	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-10	1.486	1.042	8.79	No	32	1.264	0.5116	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-11	1.43	0.911	8.79	No	31	1.755	2.476	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	B-2	1.955	1.281	8.79	No	32	1.692	0.8329	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-6	1.474	0.6957	8.79	No	32	1.649	2.606	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-9	1.505	0.7715	8.79	No	32	1.488	1.667	0	None	ln(x)	0.01	Param.
Fluoride, total (mg/L)	B-10	0.1	0.07	4	No	34	0.1051	0.06595	32.35	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	B-11	0.06	0.03	4	No	33	0.04667	0.01514	48.48	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	B-2	0.09	0.06	4	No	33	0.07606	0.01886	39.39	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	B-6	0.06	0.03	4	No	34	0.0499	0.03281	55.88	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	B-9	0.08	0.06	4	No	34	0.09509	0.07133	29.41	None	No	0.01	NP (normality)
Lead, total (mg/L)	B-10	0.0003367	0.0001308	0.015	No	33	0.0003731	0.0005056	33.33	Kaplan-Meier	ln(x)	0.01	Param.
Lead, total (mg/L)	B-11	0.000416	0.00016	0.015	No	31	0.0008988	0.001959	45.16	None	No	0.01	NP (normality)
Lead, total (mg/L)	B-2	0.000332	0.0001	0.015	No	32	0.0008906	0.002363	34.38	None	No	0.01	NP (normality)
Lead, total (mg/L)	B-6	0.0009381	0.0002894	0.015	No	33	0.0008148	0.001032	3.03	None	sqrt(x)	0.01	Param.
Lead, total (mg/L)	B-9	0.0002	0.00013	0.015	No	33	0.0002655	0.0002312	54.55	None	No	0.01	NP (NDs)
Lithium, total (mg/L)	B-10	0.00287	0.00144	0.041	No	32	0.002799	0.002932	0	None	No	0.01	NP (normality)
Lithium, total (mg/L)	B-11	0.003603	0.001573	0.041	No	31	0.004199	0.006493	0	None	ln(x)	0.01	Param.
Lithium, total (mg/L)	B-2	0.00242	0.00103	0.041	No	32	0.003889	0.00616	0	None	No	0.01	NP (normality)
Lithium, total (mg/L)	B-6	0.00182	0.000415	0.041	No	31	0.001121	0.001086	0	None	No	0.01	NP (normality)
Lithium, total (mg/L)	B-9	0.00356	0.00283	0.041	No	32	0.003815	0.002539	0	None	No	0.01	NP (normality)

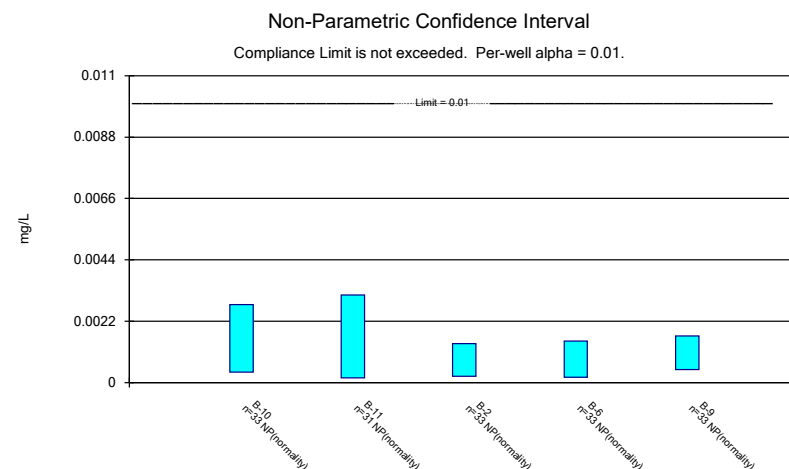
Confidence Intervals - All Results (No Significant)

Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF Printed 12/16/2025, 10:30 AM

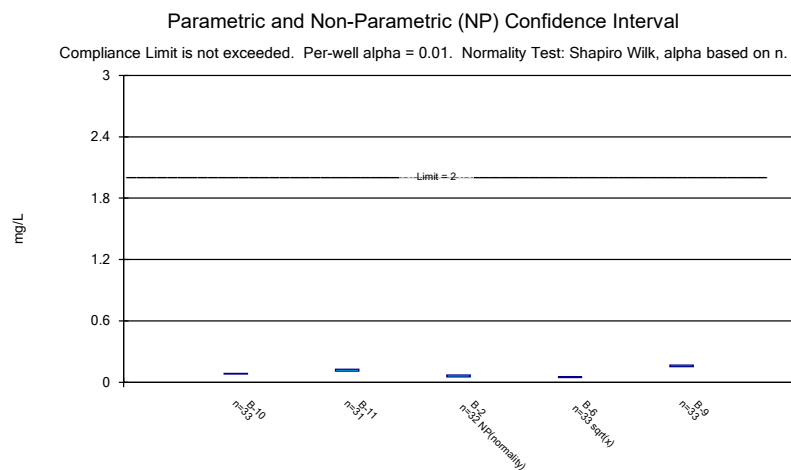
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury, total (mg/L)	B-10	0.000005	0.000005	0.002	No 33	0.000006414	0.000004491	78.79	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	B-11	0.00002442	0.000005	0.002	No 32	0.000009062	0.00001675	87.5	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	B-2	0.000005	0.000005	0.002	No 33	0.000007789	0.000009006	78.79	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	B-6	0.000005	0.000005	0.002	No 33	0.000005987	0.000002412	66.67	None	No	0.01	NP (NDs)
Mercury, total (mg/L)	B-9	0.00000774	0.000005	0.002	No 33	0.000005652	0.000002306	90.91	None	No	0.01	NP (NDs)
Molybdenum, total (mg/L)	B-10	0.00128	0.00078	0.1	No 33	0.00158	0.00188	6.061	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	B-11	0.00059	0.0003706	0.1	No 32	0.0006103	0.0005539	81.25	None	No	0.01	NP (NDs)
Molybdenum, total (mg/L)	B-2	0.00187	0.0009367	0.1	No 33	0.001657	0.001468	6.061	None	x^(1/3)	0.01	Param.
Molybdenum, total (mg/L)	B-6	0.0008684	0.0002	0.1	No 33	0.000861	0.0007868	30.3	None	No	0.01	NP (normality)
Molybdenum, total (mg/L)	B-9	0.002	0.0003	0.1	No 33	0.002278	0.006146	45.45	None	No	0.01	NP (normality)
Selenium, total (mg/L)	B-10	0.00061	0.00044	0.05	No 33	0.001965	0.00218	33.33	None	No	0.01	NP (normality)
Selenium, total (mg/L)	B-11	0.002835	0.002262	0.05	No 32	0.002548	0.0006599	12.5	None	No	0.01	Param.
Selenium, total (mg/L)	B-2	0.0123	0.00587	0.05	No 33	0.01456	0.01687	0	None	No	0.01	NP (normality)
Selenium, total (mg/L)	B-6	0.00232	0.001579	0.05	No 33	0.002026	0.0009448	3.03	None	sqrt(x)	0.01	Param.
Selenium, total (mg/L)	B-9	0.0008	0.0004	0.05	No 33	0.0006539	0.0002791	36.36	None	No	0.01	NP (normality)
Thallium, total (mg/L)	B-10	0.0002	0.00004	0.002	No 33	0.0002091	0.0002159	81.82	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	B-11	0.0002	0.00003	0.002	No 32	0.0001872	0.0001652	75	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	B-2	0.0002	0.00006	0.002	No 33	0.0001932	0.0002051	60.61	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	B-6	0.0002	0.0002	0.002	No 33	0.0002524	0.000259	87.88	None	No	0.01	NP (NDs)
Thallium, total (mg/L)	B-9	0.0002	0.00004	0.002	No 33	0.0002446	0.0002794	81.82	None	No	0.01	NP (NDs)



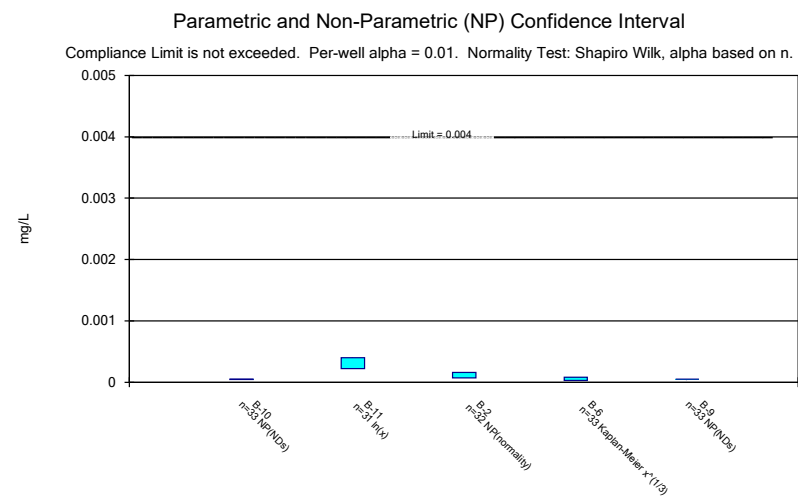
Constituent: Antimony, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Arsenic, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



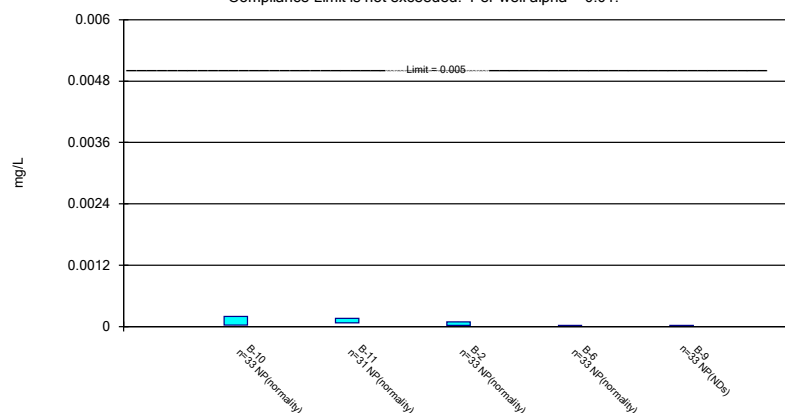
Constituent: Barium, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Beryllium, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Non-Parametric Confidence Interval

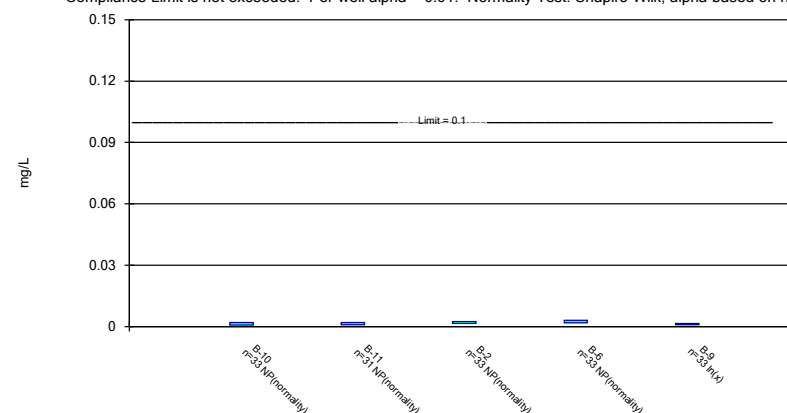
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

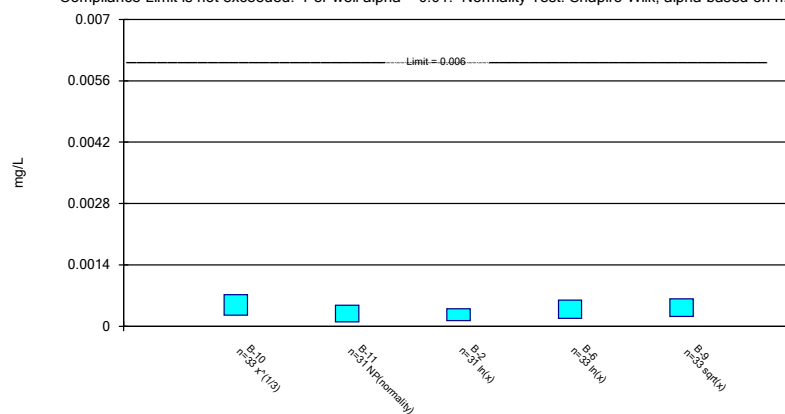
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

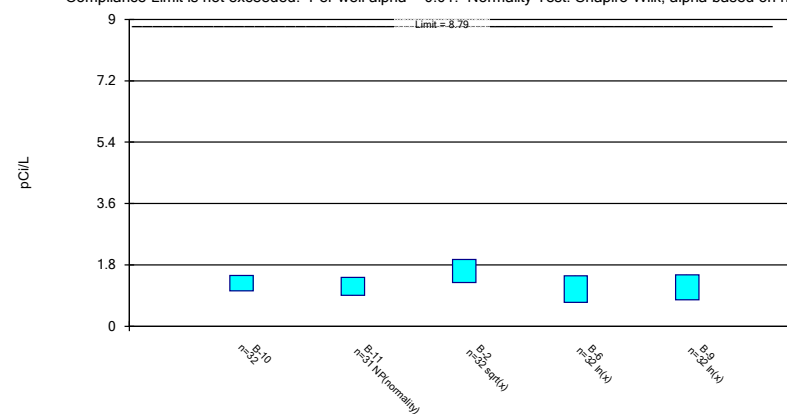
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



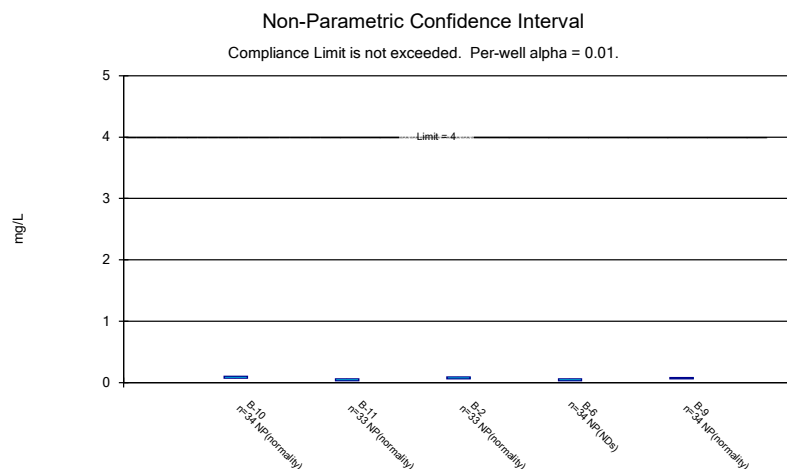
Constituent: Cobalt, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

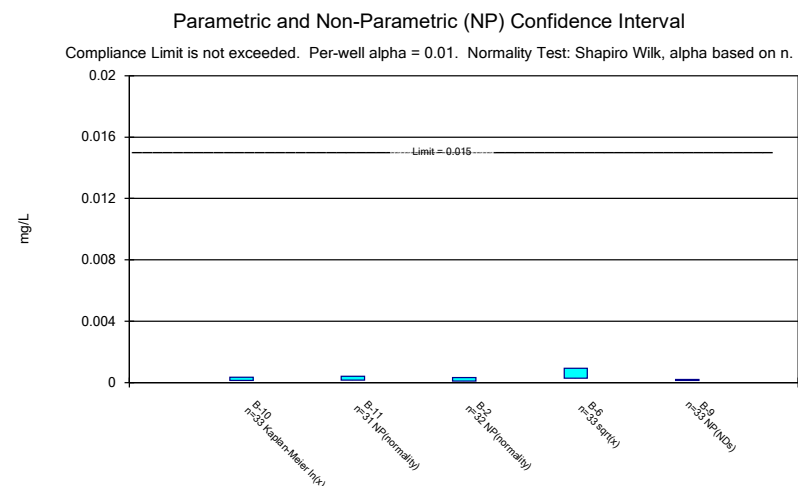
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



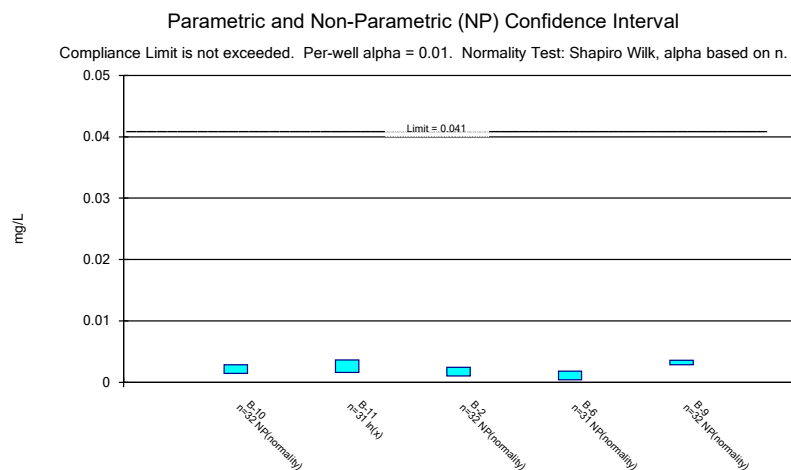
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



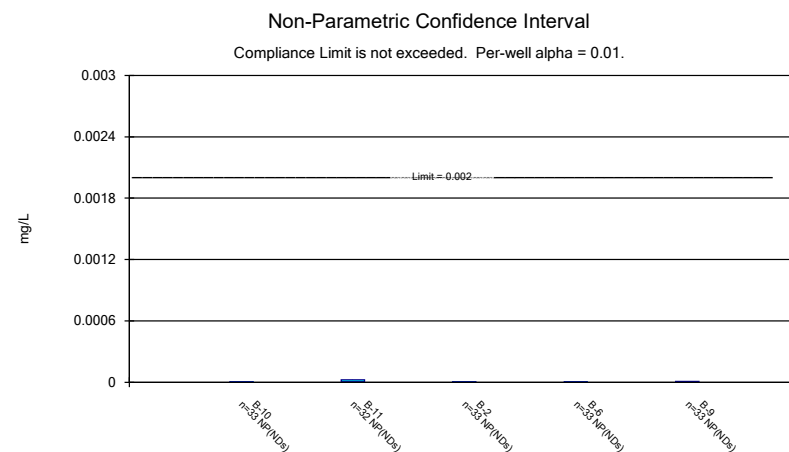
Constituent: Fluoride, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Lead, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



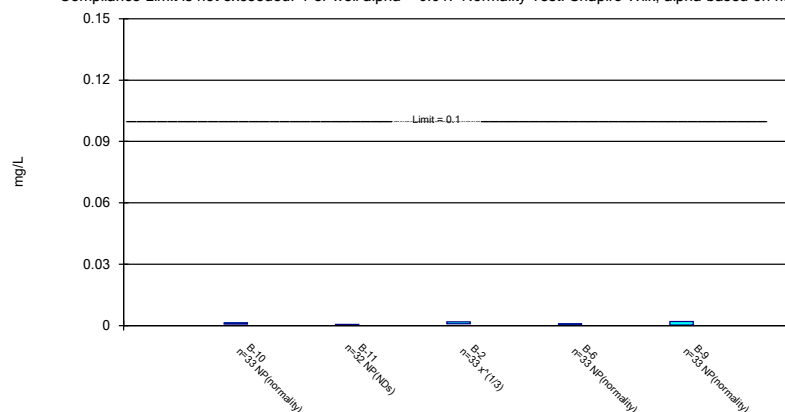
Constituent: Lithium, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF



Constituent: Mercury, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

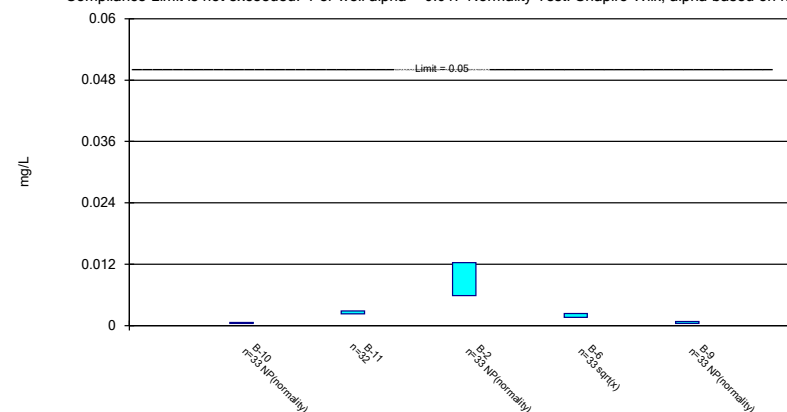
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Parametric and Non-Parametric (NP) Confidence Interval

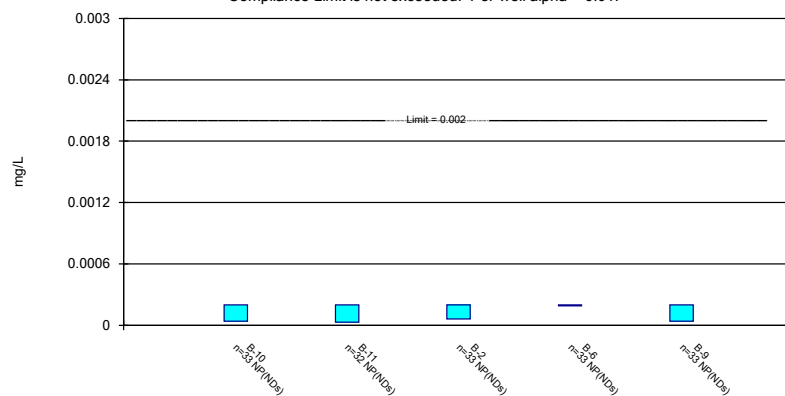
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

Non-Parametric Confidence Interval

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



Constituent: Thallium, total Analysis Run 12/16/2025 10:27 AM View: Appendix IV
Flint Creek Landfill Client: Geosyntec Data: Flint Creek LF

APPENDIX 3 – Alternative Source Demonstrations

Alternative source demonstrations relative to Appendix IV SSLs above the groundwater protection standard were not necessary because no SSLs above the groundwater protection standards were identified in 2025. Alternative source demonstrations are not applicable at this time.

APPENDIX 4 - Notices for Monitoring Program Transitions
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No transition between monitoring requirements occurred in 2025; the CCR unit was in assessment monitoring at the beginning and at the end of the year. Notices for monitoring program transitions are not applicable at this time.

APPENDIX 5 - Well Installation/Decommissioning Logs
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No wells were installed or decommissioned in 2025. Well installation/decommissioning logs are not applicable at this time.