November 2024
Monthly Compliance Report

Solid Waste Permit No. 588
Bristol Integrated Solid Waste Management Facility
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02218208.05-30 | December 10, 2024

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INTRODUCTION

On behalf of the City of Bristol, Virginia (City), SCS Engineers has prepared this report to the Virginia Department of Environmental Quality (VDEQ) in accordance with item 8.iii in Appendix A of the Consent Decree between the City and VDEQ. This report provides updates regarding the progress towards completion of the items outlined in Appendix A of the Consent Decree between the City and VDEQ. The following sections outline progress during the month of November 2024 related to Solid Waste Permit (SWP) No. 588.

1.0 GAS COLLECTION

The following sections describe the steps the City, in collaboration with its consultants and contractors, has taken to improve the operation, monitoring, and performance of the facility's landfill gas collection and control system (GCCS).

1.1 SURFACE AND LEACHATE COLLECTION EMISSIONS

1.1.1 Surface Emissions

1.1.1.1 Quarterly SEM

SCS performed the Third Quarter surface emissions monitoring event on September 23, 2024. The results of the Quarterly SEM were summarized in the September 2024 Compliance Report for the SWP No. 588 Landfill. A report outlining the results and exceedance locations will be included in the Semi-Annual Report to be submitted to VDEQ prior to March 1, 2025.

The Fourth Quarter 2024 SEM Event is scheduled to be completed by December 31, 2024.

1.1.1.2 Weekly SEM

In addition to the standard regulatory quarterly surface emissions monitoring, SCS performed additional surface emissions monitoring on November 5, 2024; November 12, 2024; November 19, 2024; and November 26, 2024. These weekly surface emissions monitoring (SEM) events were performed in accordance with item 1.i in Appendix A of the Consent Decree between the City and VDEQ.

The monitoring in November generally conformed to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The surface emission monitoring route included the entire waste footprint of the Permit No. 588 landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector (FID) at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all applicable surface cover penetrations within the waste footprint.

The Facility submitted letters to VDEQ describing the results of the November monitoring events on November 13, 2024; November 20, 2024; November 26, 2024; and December 4, 2024.

Table 1. Summary of November Surface Emissions Monitoring

Description	November 5, 2024	November 12, 2024	November 19, 2024	November 26, 2024
Number of Points Sampled	167	167	167	167
Number of Points in Serpentine Route	100	100	100	100
Number of Points at Surface Cover Penetrations	67	67	67	67
Number of Exceedances	7	3	4	7
Number of Serpentine Exceedances	0	0	0	0
Number of Pipe Penetration Exceedances	7	3	4	7

During the November monitoring events, no new exceedances were detected on the serpentine route. However, new exceedances were detected at six surface cover pipe penetrations (EW-54, EW-56, EW-75, EW-76, EW-86, and Temperature Probe 9 (TP-9). The new exceedance at EW-75 was likely caused by reducing the vacuum at the wellhead by the Facility as a cautionary action to avoid a SSO event in this vicinity of the landfill. The new exceedances at EW-54, EW-56, EW-76, EW-86, and TP-9 were likely a result of insufficient soil cover at the pipe penetrations.

On November 18, 2024, the City submitted an Alternate Remedy Request for corrective actions for nine exceedance locations where an exceedance was recorded on at least three separate monitoring events throughout the Third Quarter 2024. As of the November 26, 2024 monitoring event, adjustments to vacuum and well dewatering improvements have been successful at reducing methane concentrations below the regulatory threshold at seven of these nine locations. Corrective actions will continue in December 2024 for the two remaining exceedance locations.

The Facility is also taking proactive steps to limit fugitive surface emissions including dewatering activities, additional soil placement, and well tuning to increase gas extraction.

1.1.2 Leachate Collection Emissions

SCS Field Services (SCS-FS) visited the Bristol Landfill on November 25, 2024, and performed monitoring of the leachate, witness zone, northern cleanouts, and gradient control clean-outs at the southern end of the landfill. The results of that monitoring are included in Table 2. Table 2 also lists the cleanout pipe description based on site records and a review of correspondence.

During connection of the other leachate cleanouts to the LFGCCS in 2020, measurements of gas composition in LC07 indicated low levels of landfill gas in this cleanout. Thus, LC07 is not connected to the LFG collection system and is not included in Table 2.

Table 2. Leachate Cleanout Pipe Monitoring Results

Description	ID#	Record Date	CH4 (% by Vol)	CO2 (% by Vol)	O2 (% by Vol)	Balance Gas (% by Vol)	Initial Temp (°F)	Adj Temp (°F)	Initial Static Pressure (in H2O)	Adj Static Pressure (in H2O)	System Pressure (in H2O)
Southern Cleanouts Gradient West	LC01	11/25/2024 8:29:51 AM	51.9	43.6	0.0	4.5	54.6	54.4	-8.76	-8.67	-15.80
Southern Cleanouts Gradient East	LC02	11/25/2024 8:33:15 AM	42.5	44.7	0.0	12.8	54.9	55.0	-8.95	-9.03	-14.66
Southern Cleanouts Leachate Center	LC03	11/25/2024 8:35:57 AM	6.9	5.6	19.0	68.5	41.5	41.4	-11.98	-12.12	-15.74
Southern Cleanouts Witness East	LC04	11/25/2024 8:11:10 AM	10.0	10.7	16.5	62.9	36.4	36.0	-14.52	-14.81	-15.61
Southern Cleanouts Leachate West	LC05	11/25/2024 8:23:18 AM	47.1	43.6	0.0	9.2	65.0	64.9	-10.09	-10.10	-15.13
Southern Cleanouts Gradient Center West	LC06	11/25/2024 8:26:23 AM	26.5	19.0	11.3	43.2	40.3	40.0	-15.31	-15.30	-15.24
Southern Cleanouts Leachate East	LC08	11/25/2024 8:14:18 AM	39.4	46.0	0.0	14.6	52.0	52.0	-9.12	-9.03	-15.32
Southern Cleanouts Gradient Center East	LC09	11/25/2024 8:20:12 AM	9.7	5.2	18.4	66.7	37.1	37.1	-3.98	-3.97	-8.82
Southern Cleanouts Leachate West	LC10	11/25/2024 8:16:59 AM	0.1	0.8	21.8	77.3	40.4	39.9	-4.29	-4.27	-8.65
Northern Cleanouts Leachate East	NC01	11/25/2024 8:44:24 AM	0.1	0.2	21.9	77.9	39.5	39.5	-2.80	-2.68	0.01
Northern Cleanouts Leachate Center	NC02	11/25/2024 8:46:06 AM	0.1	0.1	21.9	77.9	39.6	39.6	-3.46	-3.40	0.01
Northern Cleanouts Leachate West	NC03	11/25/2024 8:47:42 AM	0.1	0.1	21.9	78.0	39.9	40.2	-3.25	-3.23	0.01
Northern Cleanouts Witness East	NC04	11/25/2024 8:50:17 AM	0.0	0.1	21.9	78.0	40.4	40.5	-6.02	-6.06	0.01
Northern Cleanouts Witness Center	NC05	11/25/2024 8:51:57 AM	0.0	0.1	21.9	78.0	40.7	40.6	-5.59	-5.72	0.01
Northern Cleanouts Witness West	NC06	11/25/2024 8:53:54 AM	0.0	0.0	22.0	78.0	40.2	40.1	-5.83	-5.72	0.01
Northern Cleanouts Gradient East	NC07	11/25/2024 8:55:40 AM	0.0	0.3	21.1	78.6	40.4	40.3	-8.68	-8.51	0.01
Northern Cleanouts Gradient Center East	NC08	11/25/2024 8:57:12 AM	0.1	0.2	21.4	78.3	40.2	40.2	-8.62	-8.71	0.01
Northern Cleanouts Gradient Center West	NC09	11/25/2024 8:59:34 AM	0.0	0.0	21.9	78.0	40.0	40.0	-5.72	-5.72	0.01
Northern Cleanouts Gradient West	NC10	11/25/2024 9:01:02 AM	0.0	0.0	21.9	78.0	40.1	40.2	-8.75	-8.75	0.01

1.2 EXISTING GAS EXTRACTION SYSTEM PERFORMANCE

SCS and SCS-FS have been coordinating with the City to improve the performance of the existing gas system. Specific actions taken to maintain and improve the system are detailed in the following sections of this report.

Additional actions taken by SCS-FS include the following:

- Adjustments to LFGCCS
- Maintenance of air lines and pressurized air infrastructure
- Maintenance of wellhead and other gas collection infrastructure

- Removal of liquids from landfill gas headers

1.3 REMOTE MONITORING SYSTEM

In the Fall of 2022, SCS Remote Monitoring & Control (SCS-RMC) installed 25 industrial internet of things (IIoT) temperature sensors in the landfill gas wellheads. The purpose of the sensors is to record and transmit well-head gas temperatures via a cellular connection to a database managed by SCS-RMC.

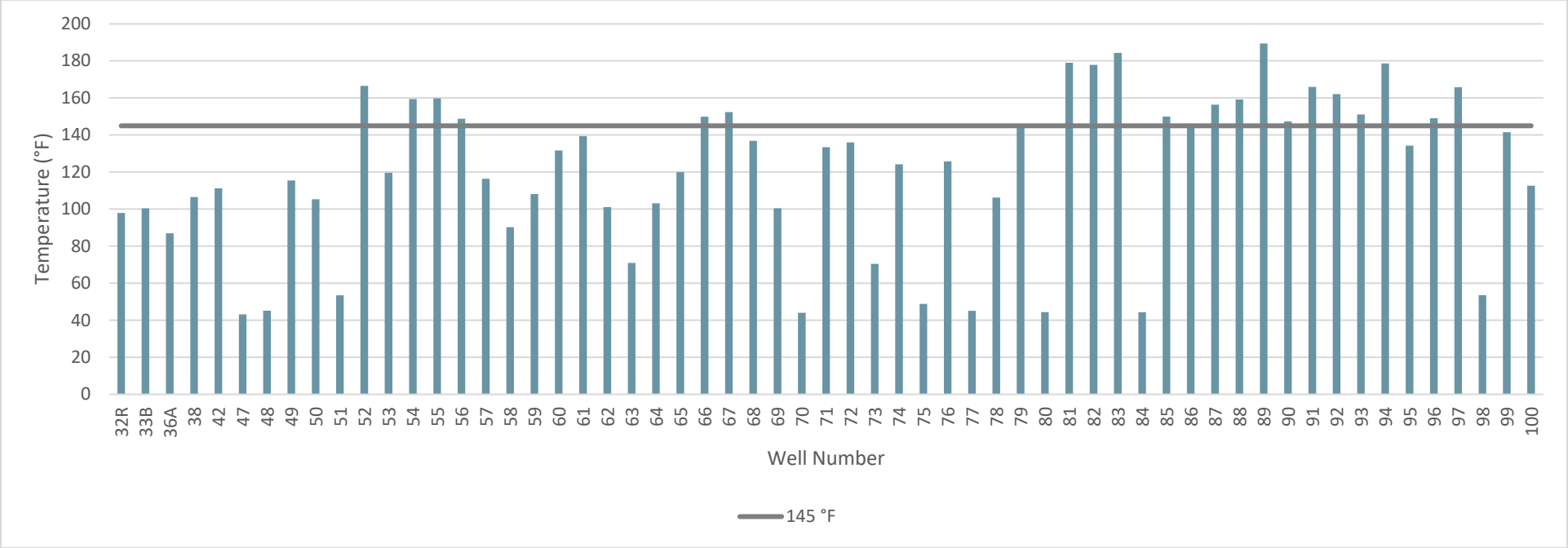
The City is providing average temperatures recorded by the sensors to VDEQ on a daily basis via email. Average daily temperatures recorded by the remote monitoring system during the month of November are included in Appendix C. In addition, SCS previously prepared semi-monthly status updates to satisfy the conditions of compliance provision no. 2 of the Environmental Protection Agency (EPA) Region III letter, Approval of Higher Operating Temperature Values for Landfill Gas Wells and Submission of Gas Treatment Alternatives at the Bristol Virginia Integrated Solid Waste Management Facility, dated August 23, 2021. On August 2, 2023, VDEQ requested that such updates be included in the monthly compliance reports going forward. Accordingly, this section is a summary of temperature monitoring activities during the monthly monitoring period of November 2024.

1.3.1 Automated Wellhead Temperature Measurements

SCS reviewed the automated hourly temperature measurements from November 2024, and observed the following:

- Newly installed temperature probes: In November 2024, 36 additional temperature probes were added to the automated temperature system, with data collection beginning in waves on 11/19, 11/20, 11/22, and 11/25.
- Temperatures over 145°F in existing probes: Average temperatures at EW-52, 54, 55, 56, 66, and 67 were above the NESHAP AAAA compliance threshold of145 °F most often throughout the monitoring period. Pumps were replaced in EW-54 and EW-55 in November, which often opens pathways for hotter gas to be collected and may explain the higher temperatures. However, wells EW-49, EW-65, and EW-68 also experienced temperatures greater than 145°F sporadically. The highest average temperature of existing temperature sensors, 166.4°F, was measured at EW-52 (see Figure 1).
- Temperatures over 145°F in new probes: Of the newly installed temperature sensors, EW-89 had the highest average temperature, 189.4°F. Average temperatures at 13 of the other new probes were also above the NESHAP AAAA compliance threshold of 145 °F.

Figure 1. Average Automated Wellhead Temperatures



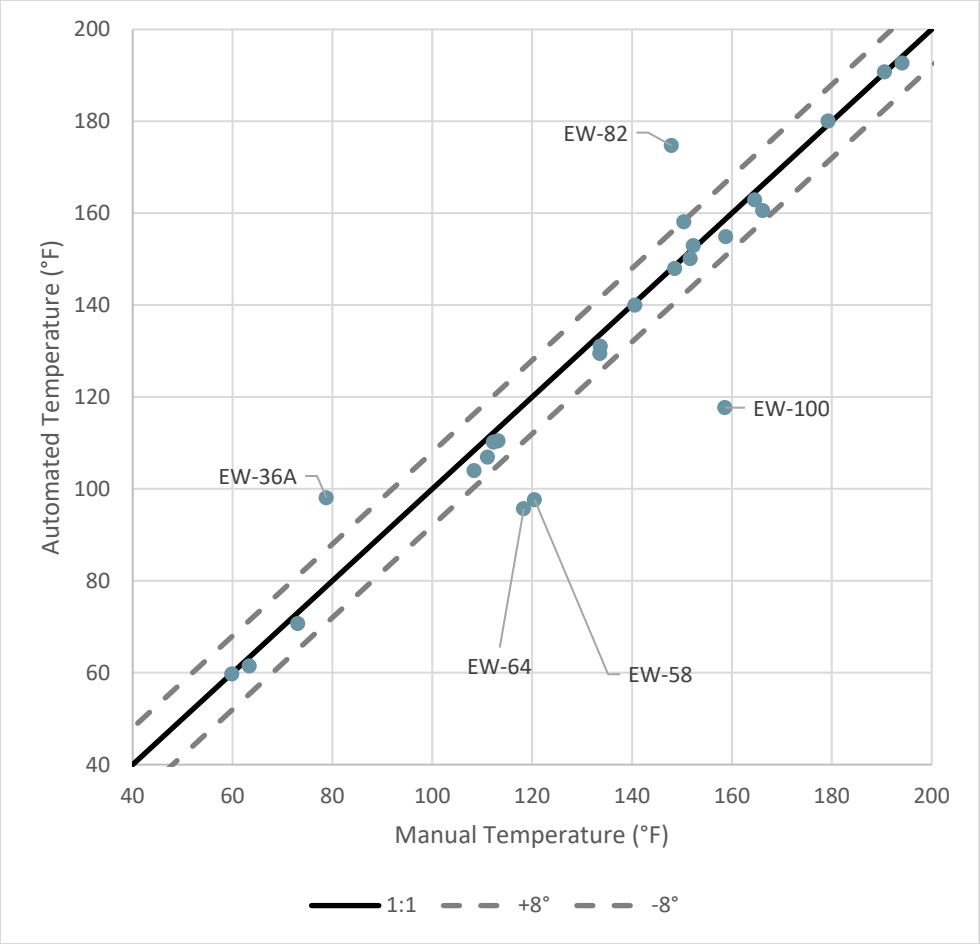
1.3.2 Comparison with Manual Temperature Measurements

Per the approval issued by VDEQ on August 2, 2023, the Facility ceased dedicated daily manual temperature measurements in the Permit No. 588 Landfill. In lieu of these measurements, the City has agreed to compare instantaneous hourly automated temperature measurements with temperatures measured at each wellhead with a handheld sensor during monthly compliance monitoring. These comparisons are shown in Figure 2, with the ±8°F deviation goals as prescribed in the VDEQ approval. Temperature comparisons for EW-57 and most newly installed temperature sensors are omitted as automated data was unavailable to compare to the manual readings due to offline periods and the recent installations.

Temperatures outside the ±8°F deviation lines were observed at EW-36A, 58, 64 and 100. This disparity has also been observed the past several Monthly Compliance Reports. The disparity between automated and manual temperature measurements at EW-58, 64, and 100 has persisted without evidence of low LFG flow rates, which can cause the automated temperature probes to record lower temperatures than manual measurements. The automated temperature measurement at EW-36A was again outside the ±8°F deviation goal this month with automated temperature measurement greater than the manual temperature measurement, unlike the other wells. This has also been observed in the past. The City, SCS, and SCS-RMC are coordinating a test to assess the functionality of all four existing sensors.

The EW-82 automated temperature measurement exceeded the ±8°F deviation target this month. The probe was newly installed in November, and SCS plans to reassess the temperature comparison after the December readings.

Figure 2. Automated vs. Manual Temperature Measurements



1.3.3 Monthly Regulatory Wellhead Temperature Measurements

Routine monthly temperature monitoring was conducted on November 4, 2024 to comply with 40 CFR 60.36f(a)(5). During this monitoring period, temperature exceedances were resolved at EW-52, EW-60, EW-68, and EW-81. Table 3 provides the status of all exceedances recorded during this monitoring period.

Table 3. November Temperature Exceedance Summary

Well ID	Initial Exceedance Date	Last date/temperature measured	Duration of Exceedance	Status as of 12/1/2024
EW-52	11/4/24	11/18/24 159.6°F	15 days	Resolved within 15-day timeline
EW-55	10/22/24	11/27/24 167.2°F	41 days	Ongoing, within 60-day timeline
EW-56	10/22/24	11/27/24 151.0°F	41 days	Ongoing, within 60-day timeline

Well ID	Initial Exceedance Date	Last date/temperature measured	Duration of Exceedance	Status as of 12/1/2024
EW-60	11/4/24	11/7/24 133.7°F	4 days	Resolved within 15-day timeline
EW-65	11/13/24	11/27/24 155.2°F	19 days	Ongoing, within 60-day timeline
EW-68	11/4/24	11/7/24 140.6°F	4 days	Resolved within 15-day timeline
EW-81	11/12/24	11/13/24 140.8°F	2 days	Resolved within 15-day timeline
EW-82	11/18/24	11/27/24 154.1°F	14 days	Ongoing, within 15-day timeline
EW-89	10/22/24	11/27/24 190.6°F	41 days	Ongoing, within 60-day timeline
EW-93	11/18/24	11/27/24 150.4°F	14 days	Ongoing, within 15-day timeline
EW-94	11/4/24	11/27/24 179.3°F	28 days	Ongoing, within 60-day timeline

1.3.4 LFG Sampling

SCS collected weekly LFG samples from wells with temperature exceedances lasting more than seven days using 1.5-L Summa canisters. The samples were sent to Enthalpy Analytical for lab analysis of carbon monoxide (CO) and hydrogen (H_2) content. As of December 1, 2024, the City is in possession of lab results for sampling on October 31, November 7, and November 13, 2024 to fulfill the requirement in 40 CFR 63.1961(a)(5). Lab results are summarized in Table 4.

Table 4. LFG Wellhead Sampling Summary

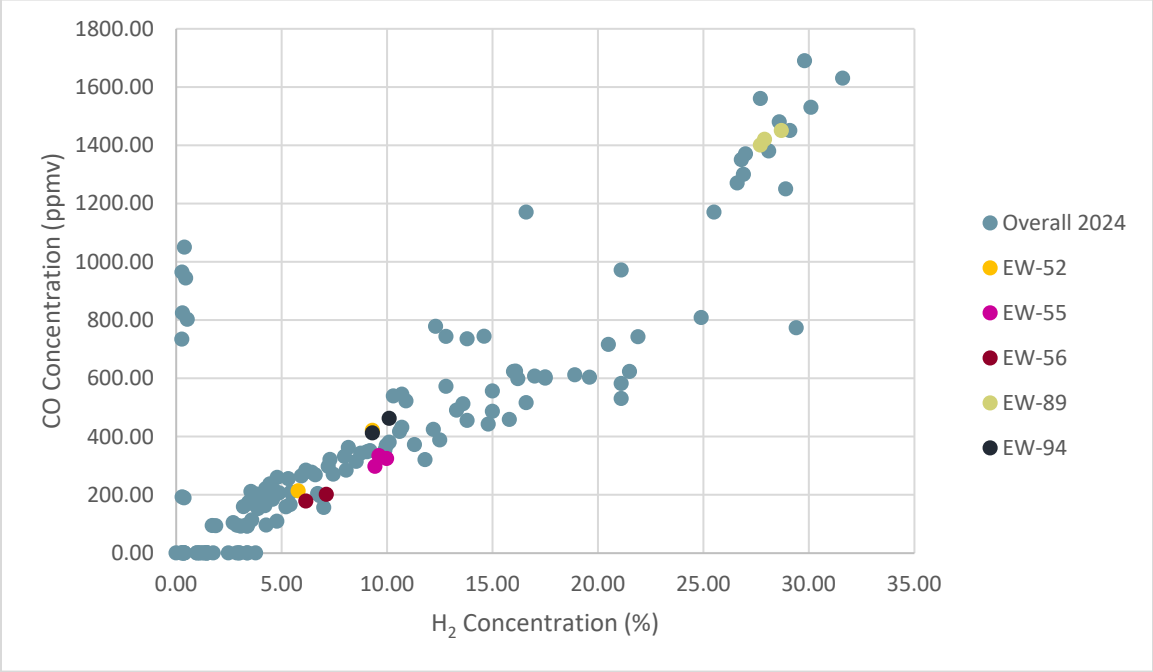
Sample Date		10/31/24	11/7/24	11/13/24
EW-52	CO (ppmv)		213	421
	H2 (Vol. %)		5.79	9.31
EW-55	CO (ppmv)	334	297	324
	H2 (Vol. %)	9.62	9.43	9.98
EW-56	CO (ppmv)		178	201
	H2 (Vol. %)		6.15	7.12
EW-89	CO (ppmv)	1400	1420	1450
	H2 (Vol. %)	27.7	27.9	28.7
EW-94	CO (ppmv)		412	462
	H2 (Vol. %)		9.31	10.1

The presence of hydrogen in the samples collected during this monitoring period indicates that combustion reactions are unlikely.

As shown in Figure 3, the majority of the carbon monoxide and hydrogen data during this period appear to be consistent with sampling data at other wells collected in 2024. The elevated CO and H_2

found at EW-89 is consistent with other data with greater than 25% hydrogen. This well has exhibited similar carbon monoxide and hydrogen composition in previous sampling events.

Figure 3. CO and H_2 Concentration Scatter Plot



1.4 LARGE-DIAMETER DUAL-PHASE EXTRACTION WELLS

SCS completed design work on an expansion of the existing GCCS during the month of December 2022. The expansion included at least 5 large diameter dual-phase extraction wells. The wells and supporting infrastructure were completed by October 12, 2023.

1.5 VDEQ CONCURRENCE ON WELLS

As described in previous monthly compliance reports, the City engaged with VDEQ in discussions about the proposed approach for landfill GCCS improvements and expansions. Upon completion of the landfill gas collection system, SCS will submit updated as-built drawings to VDEQ that depict the completed system.

2.0 SIDEWALL ODOR MITIGATION

The City has designed and constructed a system to control fugitive emissions emanating from the quarry sidewalls. Specific aspects of the proposed design features are described in the following sections.

2.1 PERIMETER GAS COLLECTION SYSTEM

SCS's design of the GCCS expansion described in Section 1.4 included perimeter LFG wells. These wells are closer to the sidewall to intercept landfill gas that potentially could migrate to the quarry

wall. These wells supplement the sidewall odor mitigation system described in Section 2.2. As described in the April 2023 Monthly Compliance Report for the SWP No. 588 Landfill, construction of the perimeter gas collection system was completed in April 2023.

2.2 SIDEWALL ODOR MITIGATION SYSTEM

On behalf of the City and in an effort to capture emissions from the quarry sidewall, SCS designed a sidewall odor mitigation system (SOMS) during the month of October 2022. The design of this system was prepared and submitted to VDEQ on November 1, 2022.

2.3 PILOT SYSTEM CONSTRUCTION

SCS-CONS completed substantial construction of Phase 1 of the SOMS during the month of February 2023, SCS-FS began monitoring Phase 1 connected Horizontal Collector (HC) wellheads during the month of March 2023, and SCS-FS continued weekly wellhead monitoring into the month of May 2023. Phase 1 is considered the pilot system portion of the SOMS. SCS submitted a design engineer certification to VDEQ on February 10, 2023 documenting substantial completion of Phase 1 of the SOMS. Details of Phase 1 construction progress and monitoring can be found in the monthly compliance reports for the SWP No. 588 landfill.

2.4 FULL SYSTEM CONSTRUCTION

SCS-CONS substantially completed construction of Phase 2 of the SOMS during the month of June 2023 as Phase 2 was connected to vacuum as of June 14, 2023. Cover soil placement continued into the month of October 2023, and ceased when the construction crew left site on October 12, 2023 upon project final completion.

During the month of November 2024, SCS-FS collected monitoring data at each wellhead under vacuum. A summary of those measurements is shown in Table 5.

Table 5. System Averages of Sidewall Wellhead Gas Quality

Record Date	Average CH_4 [%]	Average CO_2 [%]	Average O_2 [%]	Average Bal Gas [%]
11/12/2024	4.6	6.1	17.6	71.8
11/25/2024	2.6	3.9	19.4	74.2

The sidewall system average gas composition indicates lower methane content than typical landfill gas collection systems. The gas quality measurements indicate that the SOMS is functioning as designed because landfill gas is being withdrawn and oxygen intrusion is acceptable.

3.0 WASTE TEMPERATURE MONITORING

On behalf of the City, SCS designed a temperature monitoring system to collect temperature data throughout the waste mass. The steps taken by the City to implement this system are described in the following sections.

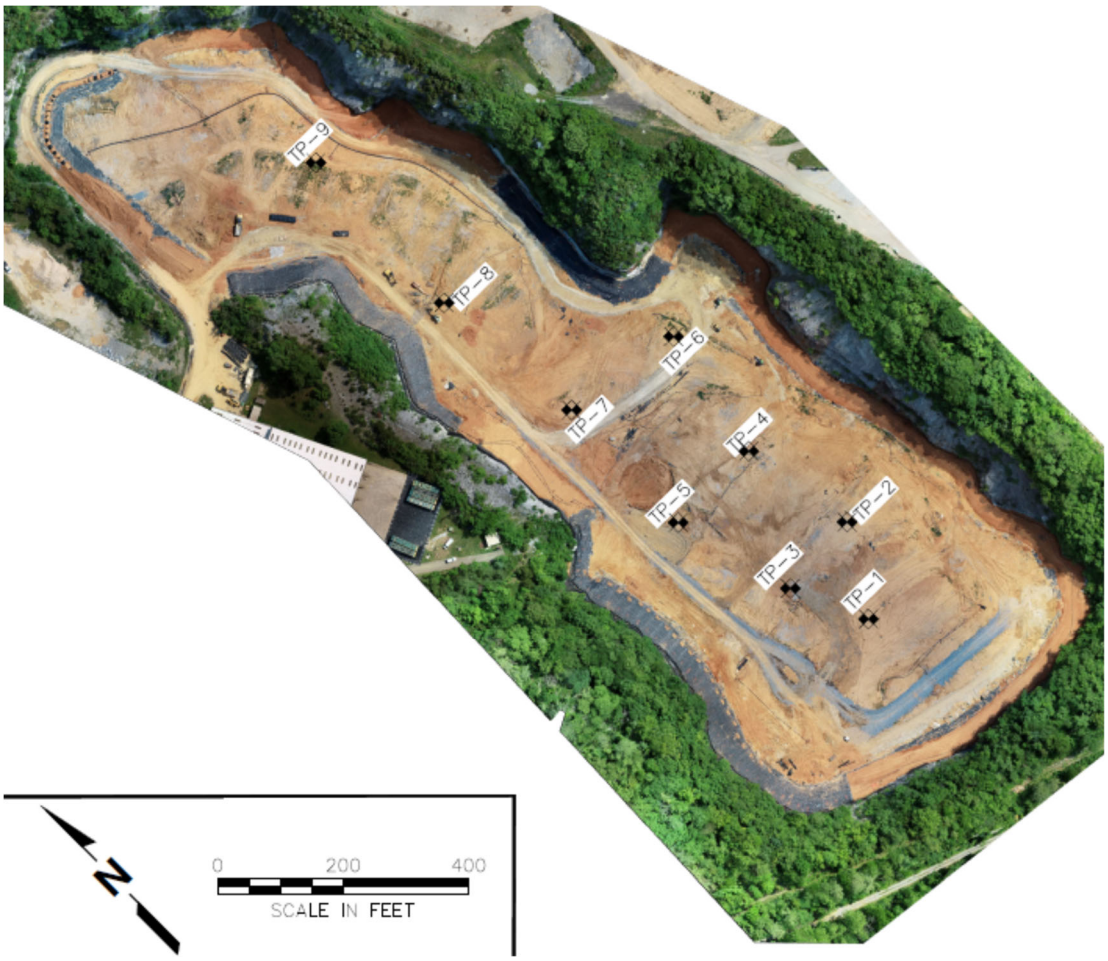
3.1 TEMPERATURE MONITORING SYSTEM DESIGN

The temperature monitoring system consists of nine boreholes drilled into the waste mass. A steel casing was placed in each borehole and the hole was backfilled around the casing with aggregate. A series of temperature sensors was placed inside the steel casing. At the top of each borehole, an IIoT transmitter collects the data from the sensors and transmits it to a cloud-based RMC system. The City submitted design of the temperature monitoring system to VDEQ on November 30, 2022.

3.2 TEMPERATURE MONITORING SYSTEM INSTALLATION

Installation of the in-situ Landfill Temperature Monitoring System began in October of 2022 and installation of replacement sensors was completed in February of 2023. Details of construction progress can be found in the monthly compliance reports for the SWP No. 588 Landfill. The locations of the temperature probes are shown in Figure 4.

Figure 4. Temperature Monitoring Probe Locations



SCS began collecting temperature data daily on February 15, 2023. The temperature sensors continued to transmit temperature data during the month of November 2024. Average daily temperatures recorded by the sensors for the month of November are included in Appendix D. Each

week the average temperatures from a select day of that week are downloaded and compared to temperatures recorded during the previous week. Average daily temperatures recorded on select days during the month of November are shown in Appendix B. The average temperatures recorded for select months between November 2023 through November 2024 are shown in Figures 5 through 13 on the following pages.

Figure 5 shows daily average temperatures recorded by Temperature Probe 1 (TP-1) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

TP-1 was originally drilled to a depth of 180 feet, but the contractor was unable to install the casing beyond a depth of 160 feet. TP-1 did not record temperatures between July 23, 2023 and July 30, 2023 due to a dead battery. The battery was replaced and TP-1 began recording temperatures again on July 31, 2023.

Figure 5. TP-1 Average Temperatures for the Months of November 2023, February 2024, May 2024, August 2024, and November 2024

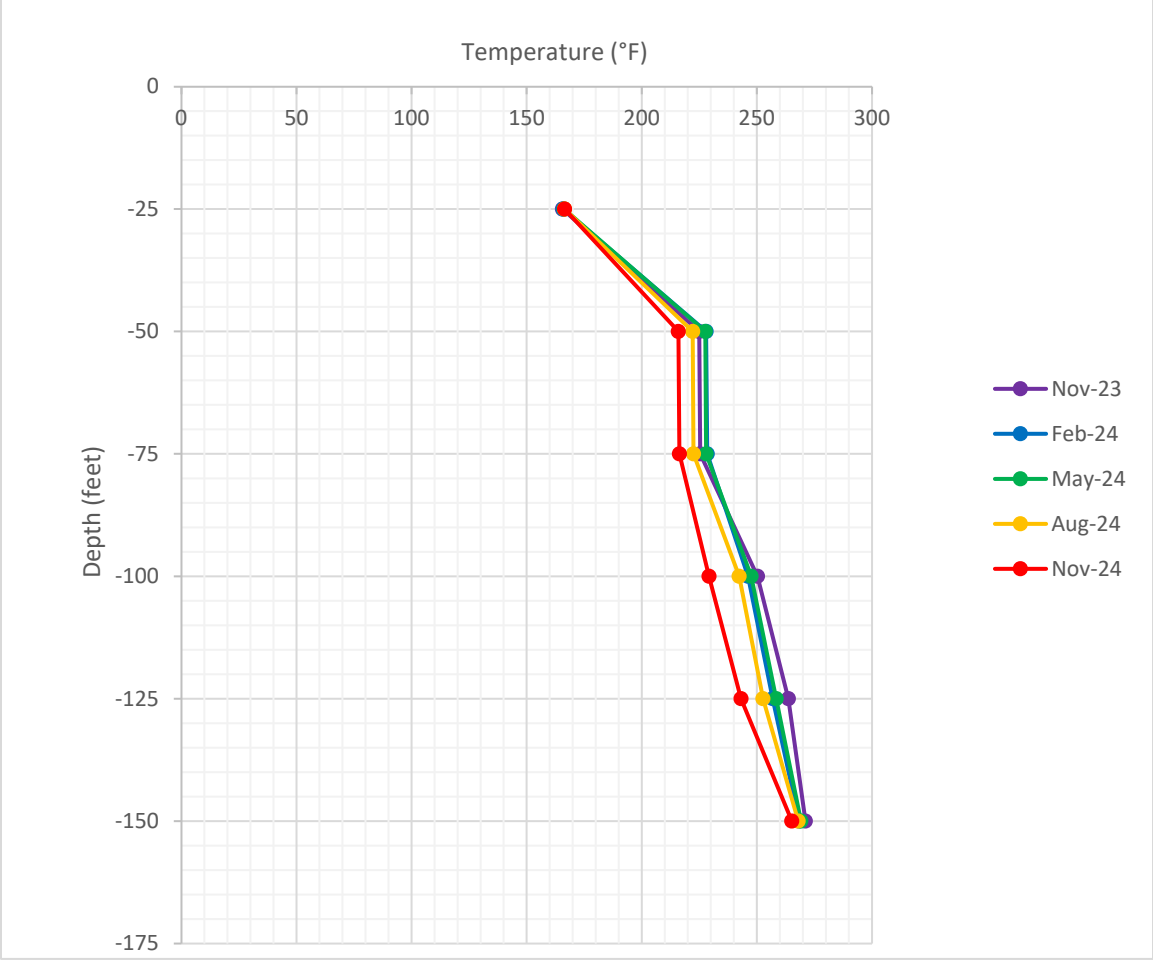


Figure 6 shows daily average temperatures in Temperature Probe 2 (TP-2) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

TP-2 was originally drilled to a depth of 160 feet. TP-2 did not record temperatures between August 15, 2023 and September 17, 2023 due to a dead battery. A replacement battery was installed in September of 2023 and TP-2 recording temperatures again on September 18, 2023.

Figure 6. TP-2 Average Temperatures for the Months of November 2023, February 2024, May 2024, August 2024, and November 2024

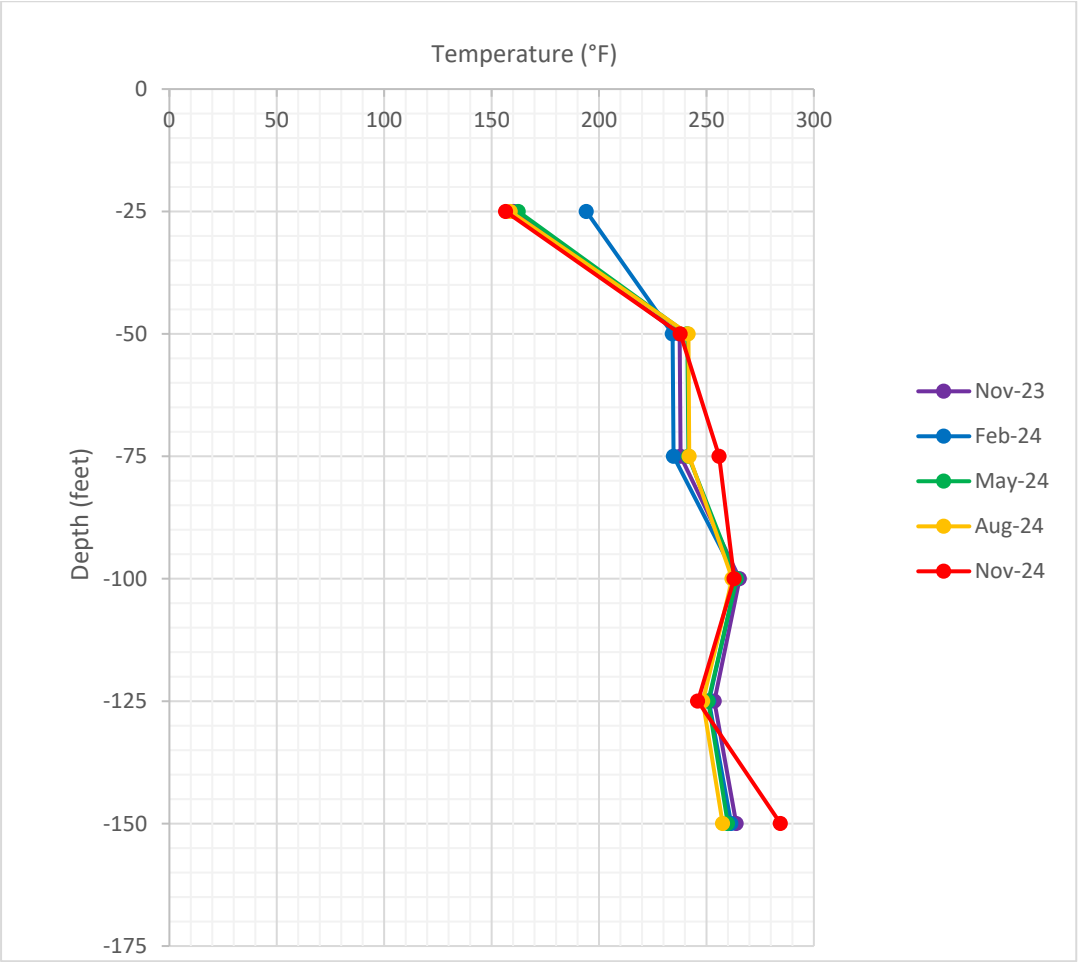


Figure 7 shows daily average temperatures in Temperature Probe 3 (TP-3) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

TP-3 began having sensor reading issues at the 150-foot depth at the end of October 2024 and continued through November 2024. Sensor reading issues also began at the 25-foot depth at the end of November. The cause is currently being investigated.

Figure 7. TP-3 Average Temperatures for the Months of November 2023, February 2024, May 2024, August 2024, and November 2024

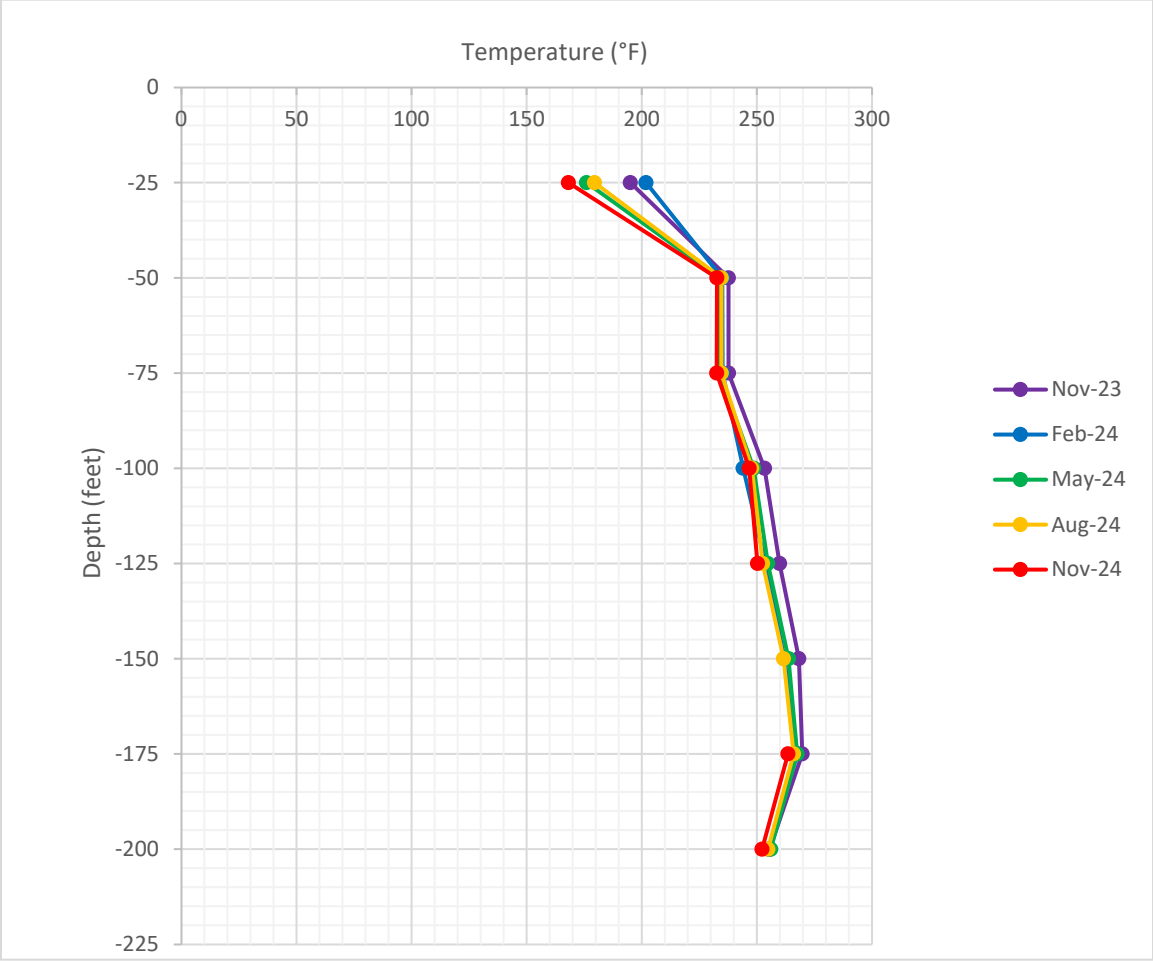


Figure 8 shows daily average temperatures in Temperature Probe 4 (TP-4) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

TP-4 stopped recording late on November 20, 2024 due to a sensor failure. SCS-RMC attempted to replace the sensors within the TP-4 steel casing. SCS-RMC's technician was unable to remove the failed sensors indicating an obstruction within the casing. With the old sensor still in place, there was insufficent room to install new sensors. SCS suspects that below grade differential settlement and movement within the waste mass damaged the casing. TP-4 cannot be used for in-waste temperature going forward.

Landfill gas was identified within the TP-4 casing. A wellhead was modified and adapted to extract gas from TP-4. TP-4 will be able to serve as a deep landfill gas extraction well.

Figure 8. TP-4 Average Temperatures for the Months November 2023, February 2024, May 2024, August 2024, and November 2024

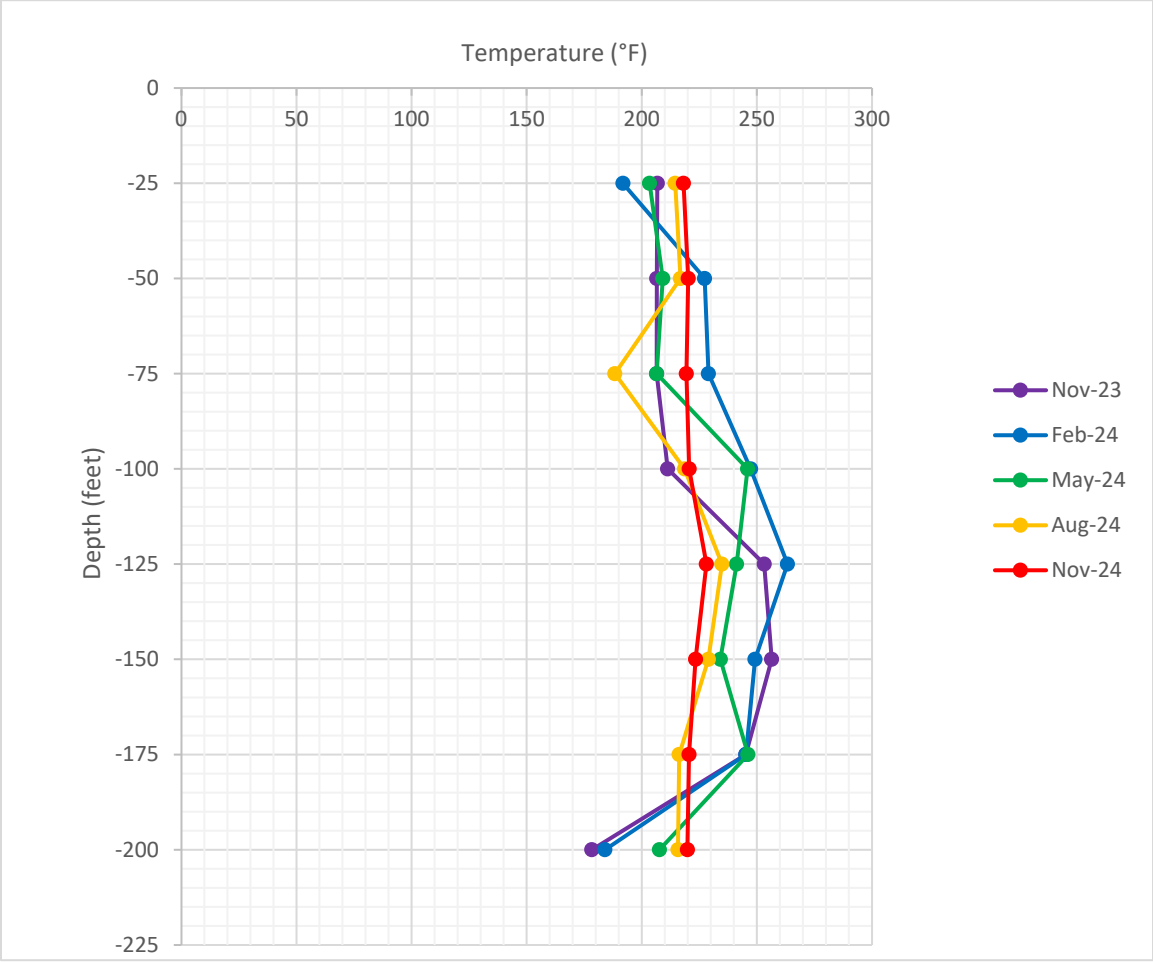


Figure 9 shows daily average temperatures in Temperature Probe 5 (TP-5) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

TP-5 was damaged in late October 2023 and the sensors at the 125-foot, 150-foot, 175-foot, and 200-foot depths stopped functioning. SCS completed troubleshooting during the month of November 2023 and the sensors returned to operation later that month. TP-5 appears to have stopped recording temperatures again during the latter half of February 2024 due to a dead battery. The battery for the temperature probe was replaced in early April 2024 and has been in operation since.

Figure 9. TP-5 Average Temperatures for the Months November 2023, February 2024, May 2024, August 2024, and November 2024

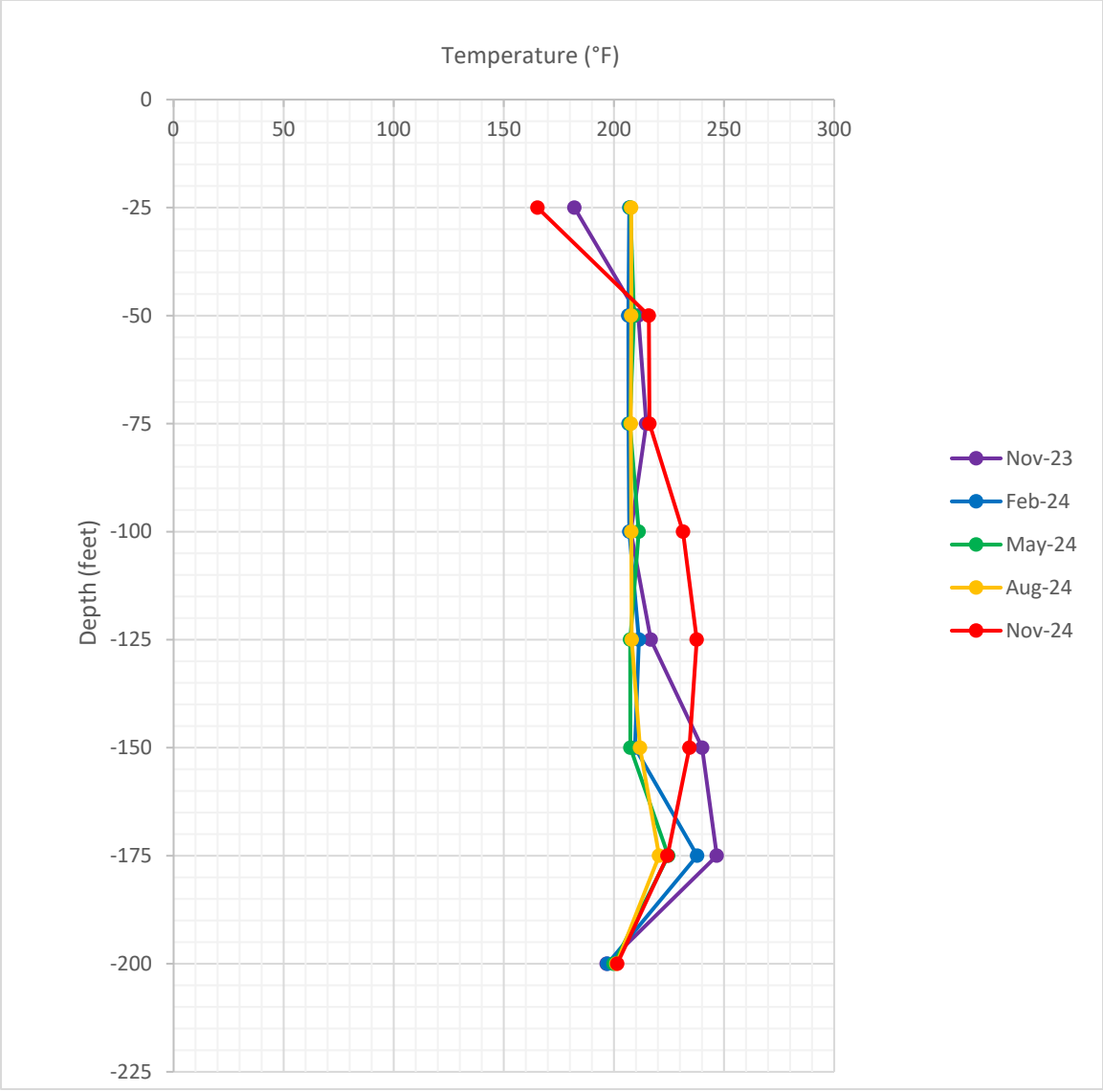


Figure 10 shows daily average temperatures in Temperature Probe 6 (TP-6) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

TP-6 was originally drilled to a depth of 208 feet and casing was installed to the full depth. During the installation of the installation of replacement sensors, a blockage within the casing prevented placement of sensors below the 125-foot depth. In June of 2024 the temperature sensor reported unrealistically high temperatures. These readings indicated that the sensor at the 125-foot depth had failed. The City is working with SCS-RMC to identify the cause of this failure and is considering replacement of the sensors. In September of 2024, temperatures returned to the typical operating range based on historical data.

Figure 10. TP-6 Average Temperatures for the Months of November 2023, February 2024, May 2024, August 2024, and November 2024

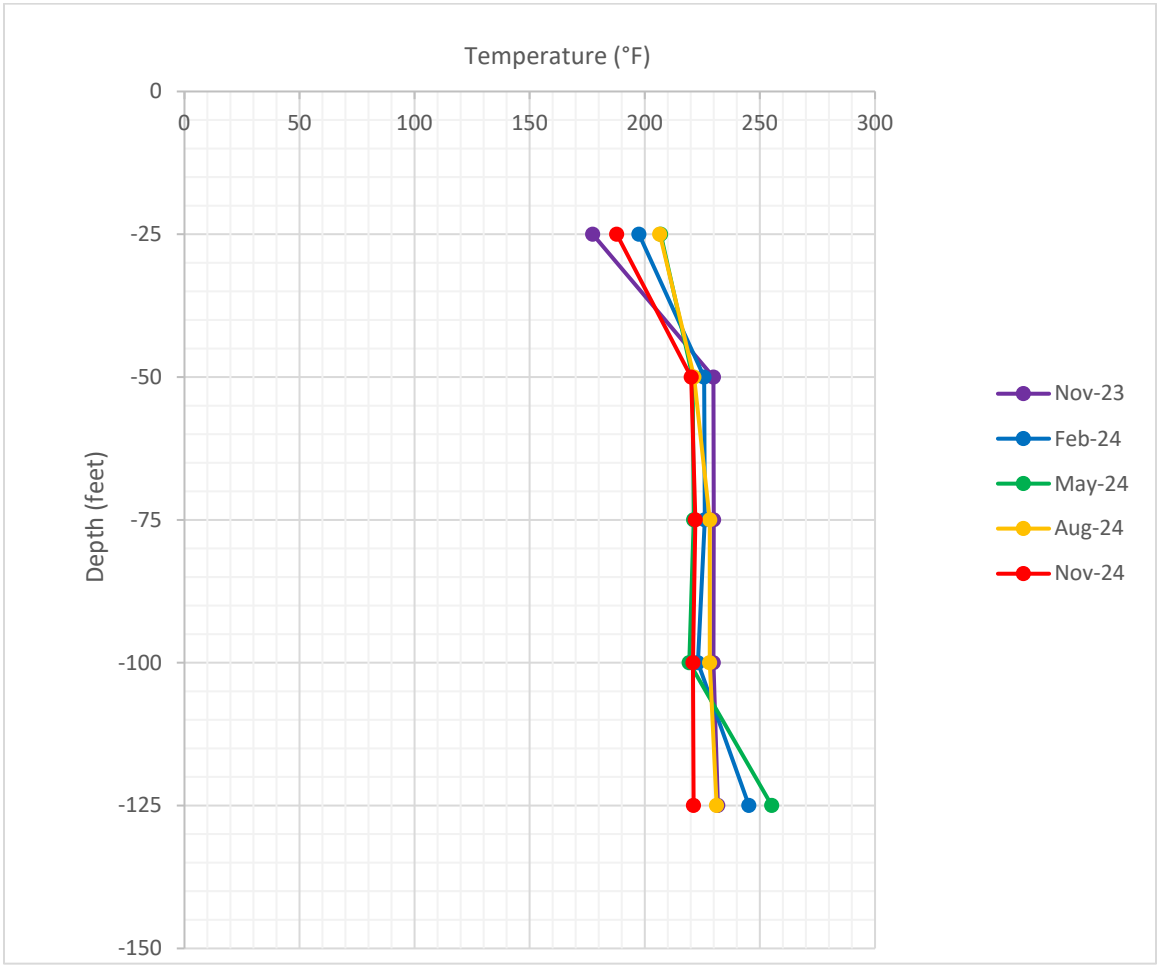


Figure 11 shows daily average temperatures in Temperature Probe 7 (TP-7) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

TP-7 did not record temperatures between August 15, 2023 and September 17, 2023 due to a dead battery. A replacement battery was installed in September of 2023 and TP-7 recording temperatures again on September 18, 2023.

Figure 11. TP-7 Average Temperatures for the Months of November 2023, February 2024, May 2024, August 2024, and November 2024

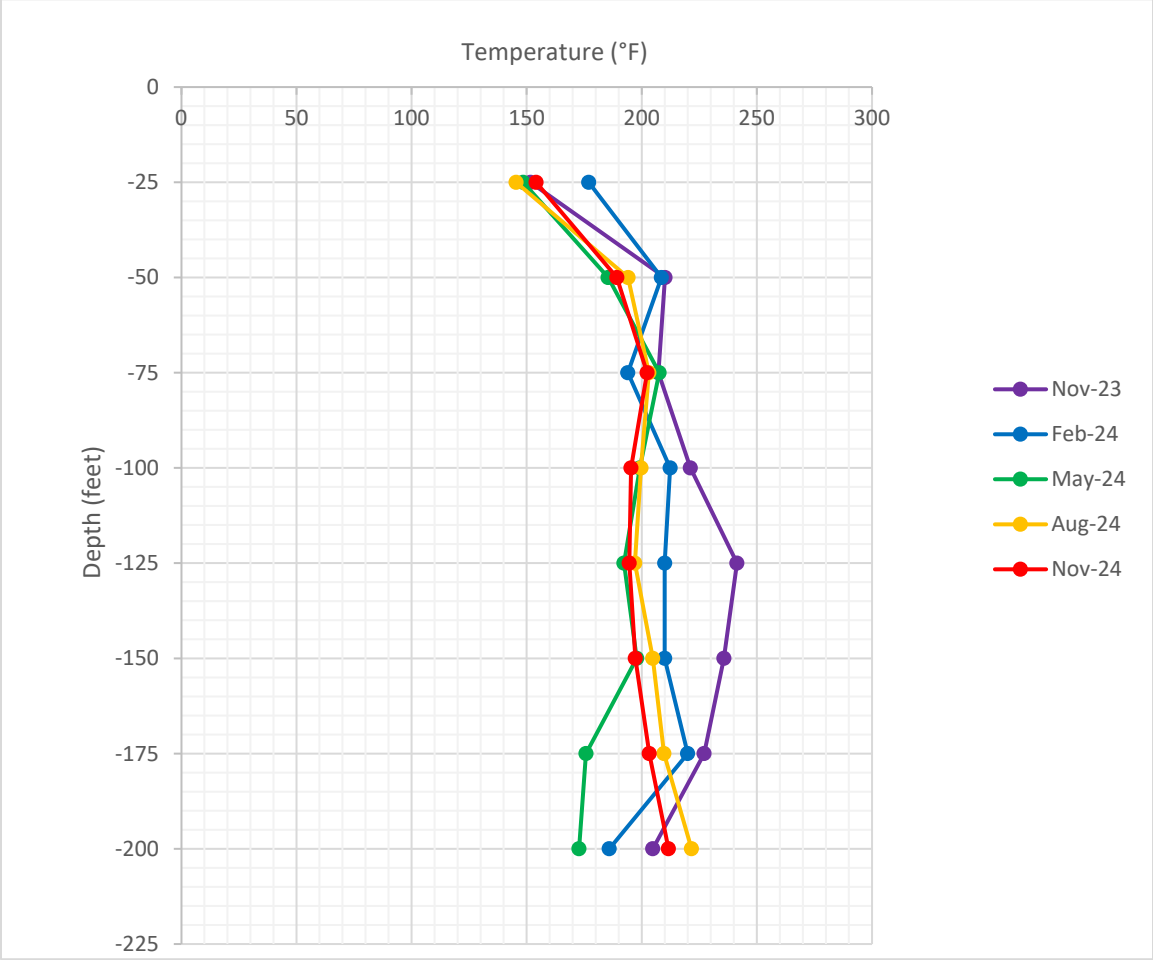


Figure 12 shows daily average temperatures in Temperature Probe 8 (TP-8) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

TP-8 did not record temperatures from November 8, 2023 to November 27, 2023 due to a faulty battery which was replaced on November 28, 2023. Recordings from August 30, 2024 to September 6, 2024 indicated sensor failure and sensor reported data again began indicating a sensor failure at the 50-foot depth at the end of October 2024. The sensor began reading again on November 22, 2024. The cause is currently being investigated.

Figure 12. TP-8 Average Temperatures for the Months of November 2023, February 2024, May 2024, August 2024, and November 2024

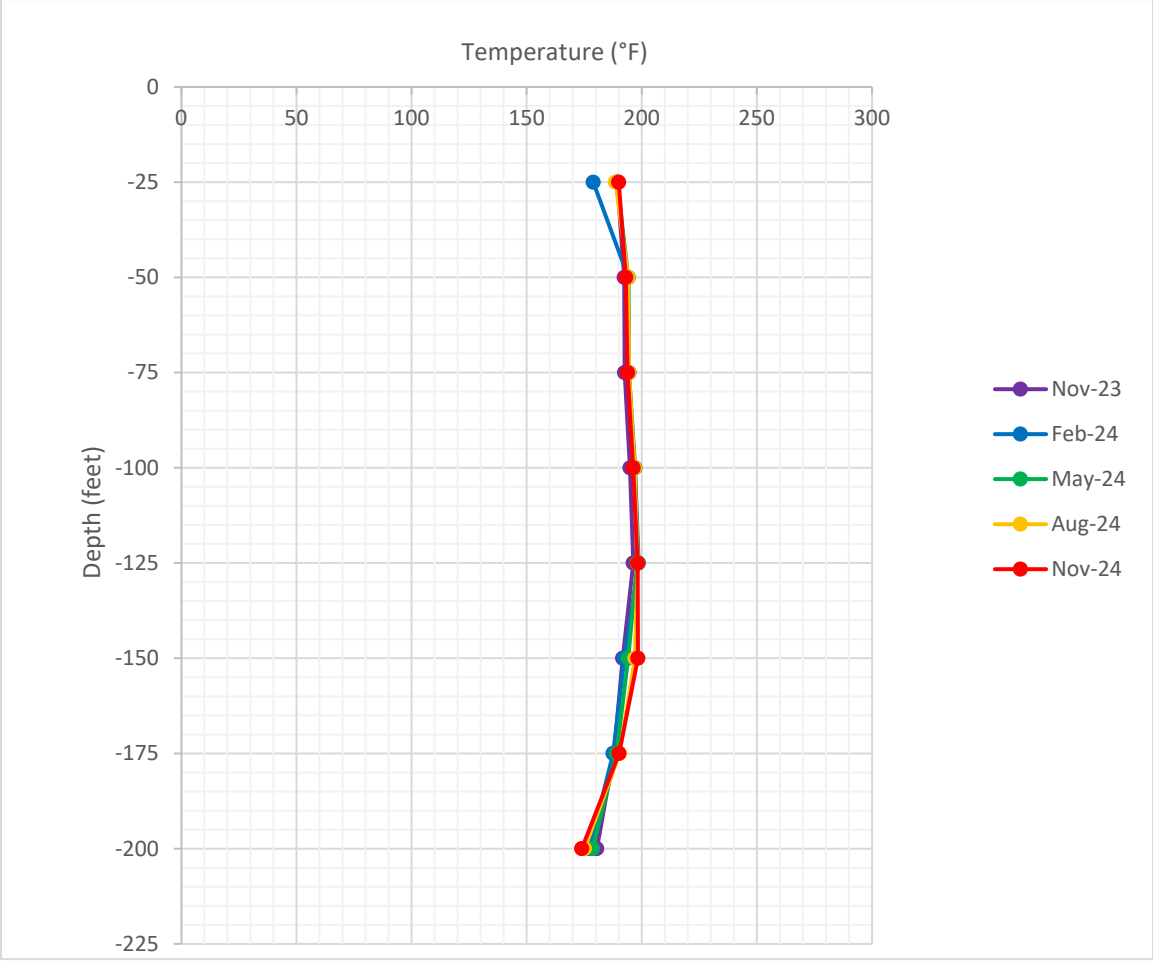
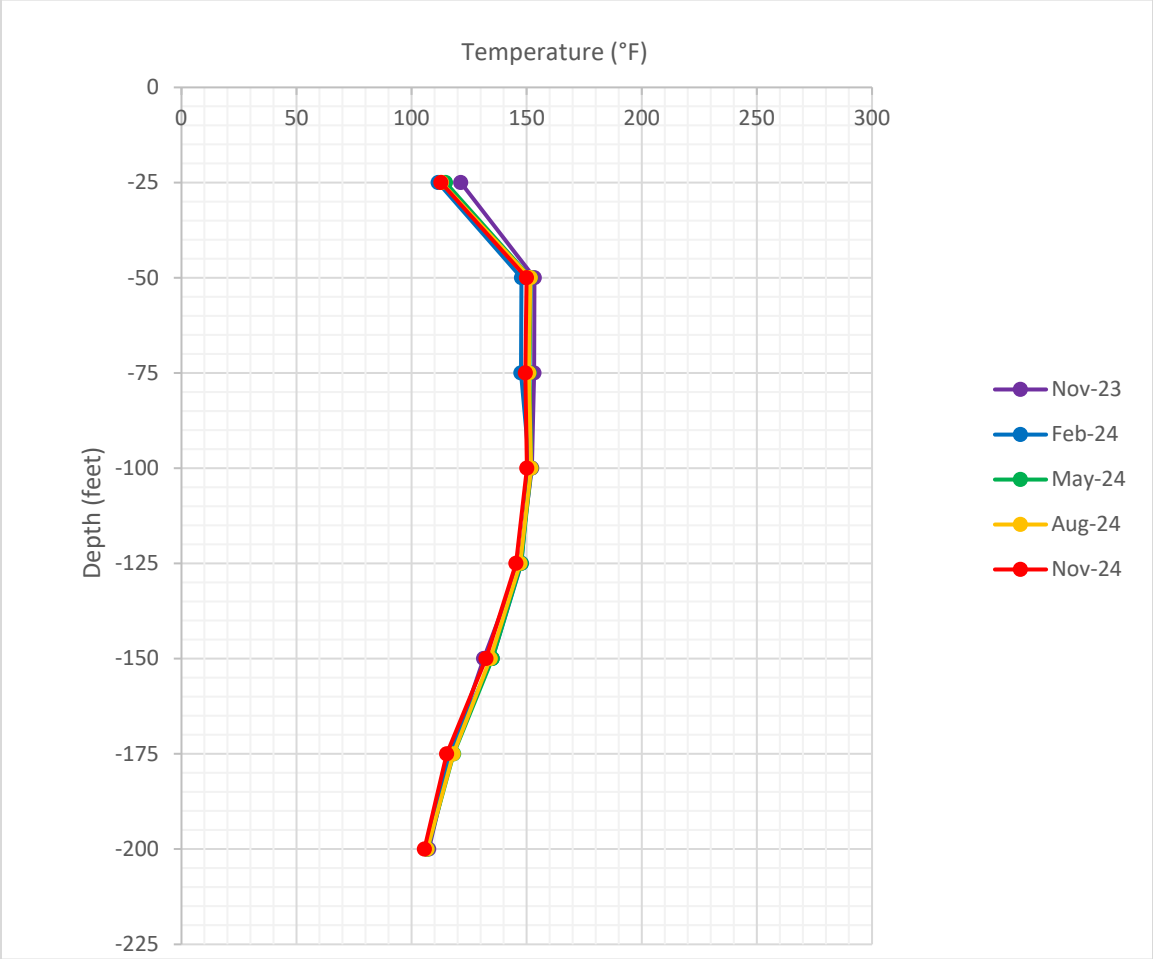


Figure 13 shows daily average temperatures in Temperature Probe 9 (TP-9) during the months of November 2023, February 2024, May 2024, August 2024, and November 2024.

Figure 13. TP-9 Average Temperatures for the Months of November 2023, February 2024, May 2024, August 2024, and November 2024



These data indicate that temperatures within the landfill are generally stable and are typical of those observed at elevated temperature landfills (ETLFs). During the months of May 2023 through September 2023, substantial construction occurred at the landfill including deep dual extraction wells that may have impacted temperatures within the waste mass adjacent to the probes. While quantifying the effect of the construction of addition wells is difficult, changes in wellhead temperature have been observed in existing wells adjacent to newly installed wells. The temperatures recorded are substantially lower than those associated with landfill fires or other combustion processes, which can exceed 1000°F. This further indicates that the elevated temperatures are due to sources other than combustion.

4.0 LEACHATE EXTRACTION AND MONITORING

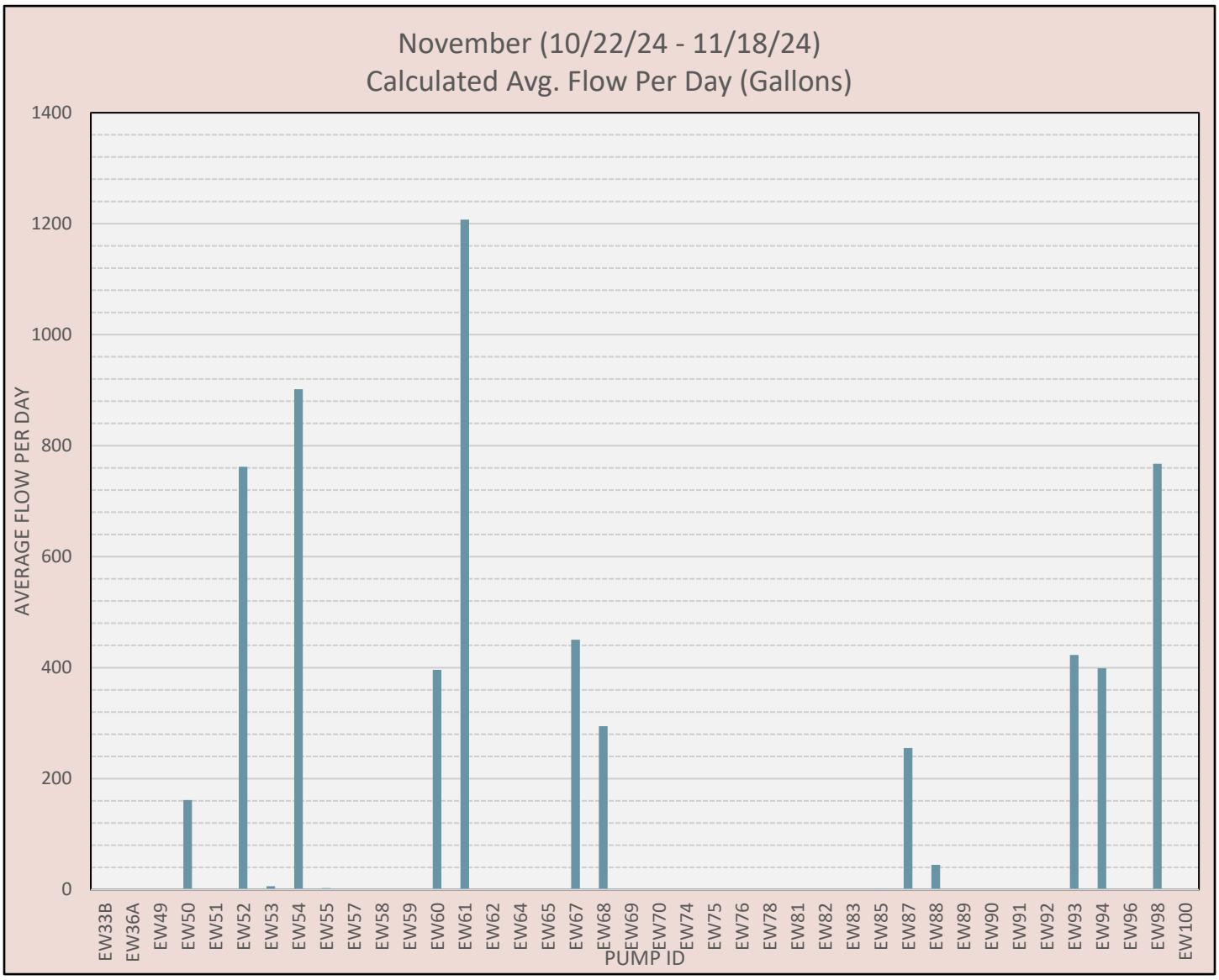
The City is taking steps to improve the extraction of leachate from the waste mass and collect analytical data on leachate characteristics. The following sections detail steps taken to achieve these goals.

4.1 EXISTING SYSTEM OPTIMIZATION

During the monthly liquid depth measurement event, SCS collected stroke counter data from the pumps installed in the GCCS extraction wells. These stroke counts were collected from 40 wells from October 22–November 18, 2024.

Based on this data, SCS can estimate the number of gallons of liquid pumped from each well. SCS assumed that each stroke from a float-style pneumatic pump correlates to approximately 0.3 gallons of liquid removed from the well. Blackhawk piston-style pumps remove approximately 0.11 gallons per stroke. Estimates of the quantities of liquids removed from each well during November are shown in Figure 14.

Figure 14. Estimated November Dewatering Liquid Removal by Well



SCS-FS continues to implement a routine maintenance schedule for landfill gas liquids removal pumps. The pumps at wells EW-52, EW-59, EW-68, EW-87, and EW-98 removed the most liquid in November, according to the stroke count data. Several of the pumps that are not stroking, i.e. wells with no calculated flow in Figure 14, are experiencing a buildup of solids that makes them inoperable, some of which are stuck in the well and SCS-FS is unable to clean and/or replace them. Many pumps have already been replaced and repaired due to experiencing significant wear and tear from ETLF conditions. Listed below are the documented repairs and replacements that occurred for landfill gas liquids removal pumps during the month of November. Most of the pumps with the highest liquids removal in November were those that were cleaned/replaced.

- **Week of November 4:** Pump pulled and swapped in EW-60 and EW-61; pump replaced in CS-2; pump cleaning, maintenance, and testing

- **Week of November 11:** Pump pulled and swapped in EW-55 and EW-93; pump cleaning, maintenance, and testing
- **Week of November 18:** Replaced pump in EW-54, replaced pump in EW-94, replaced tri-tubing and repaired pump head; attempted to pull pump in EW-53, pump stuck. Pump maintenance, cleaning, and testing.
- **Week of November 25:** Pulled and swapped pump in EW-93. Pump maintenance, cleaning and testing.

In some cases, low volumes of landfill liquids removed correlate to low measured liquid levels within the gas wells. This was true of well EW-69 in November 2024. When this condition is identified, pumps may be relocated to wells with consistently higher liquid levels.

The City and SCS understand that operations of dewatering pumps are critical to address issues related to heat, odors, and the efficient operation of the GCCS. The landfill conditions present a challenging environment for pump operations. Pumps require servicing after relatively short intervals. The SWP No. 588 Landfill's float-style pumps are bump-checked daily, and Blackhawk piston drive rods are cleaned routinely each week.

Daily pump checks and maintenance of spare pumps will continue in the coming month along with pump replacements as needed. The City, along with SCS-FS, has determined that the best pumps for the landfill's current conditions are QED pumps designed for high temperature operation. The City received eight additional QED pumps in October; some were installed in different wells and others to swap/replace others. The additional pumps will help with the rotation of field pumps needing maintenance and replacement going forward.

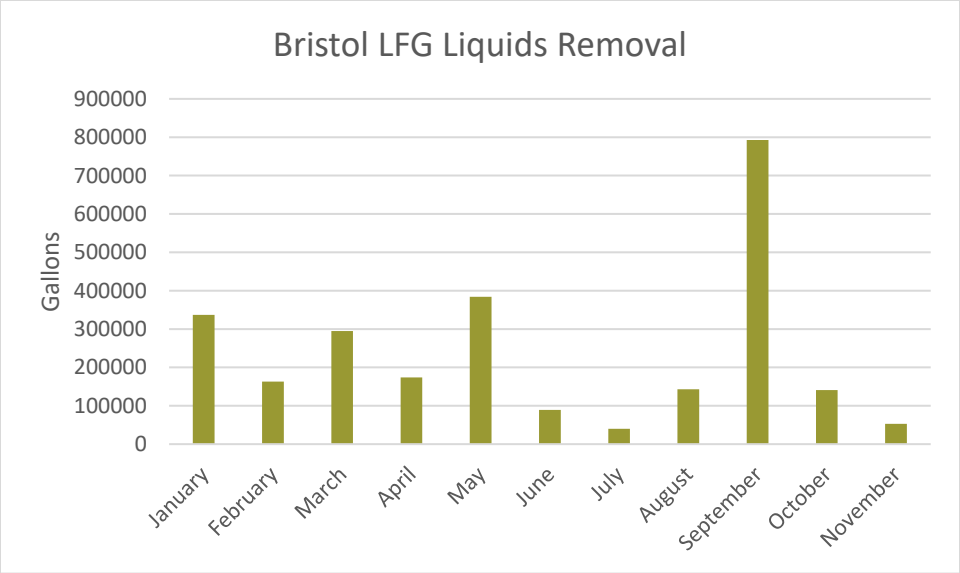
4.1.1 Total LFG Liquids Removal

To improve the accuracy of the total landfill gas liquids flow rate, two flow meters were installed on the landfill gas liquid forcemains in December 2023. One flow meter was installed on the SWP No. 588 primary landfill gas liquid forcemain. The other was installed on the SWP No. 588 alternate landfill gas liquids forcemain, which also serves as the conduit for condensate from the SWP No. 498 landfill gas liquids and the SWP No. 588 stormwater pump. Given the improved accuracy of the flowmeter data compared to flow estimates based on collected stroke counter data, SCS and the City will only use flow rates from the flowmeters to determine total liquids removed. Flow rates from individual pump performance data (e.g., stroke counts) will only be used to evaluate pump performance.

The progress in landfill gas liquids removal over the past eleven months is depicted in Figure 15. The data for September in Fig. 15 are anomalous, as this flow was biased high by stormwater that was used to flush the landfill gas liquids piping in September, resulting in the flow meter reporting a very high flow (i.e., flush water and actual landfill gas liquids).

In November, the total liquids flow recorded by the SWP No. 588 primary landfill gas liquids flowmeter was 53,000 gallons. Dewatering liquids removal were similar in August 2024 and October 2024, and decreased in November. SCS investigated potential causes for the decrease in November and found that the flowmeter did not record flow after November 18, 2024, whereas an analysis of pump stroke counter data suggested that pumps were collecting dewatering liquids. SCS is working with SCS-RMC and the City to discern whether the flowmeter is malfunctioning or if liquid flowrates were simply below the threshold of the flowmeter's totalizer (1,000 gallons per day).

Figure 15. Estimated Volume of Liquids Removed from Landfill Gas Wells



4.2 SAMPLING AND ANALYSIS PLAN

On November 1, 2022, SCS submitted to VDEQ the Dual Phase Landfill Gas Extraction Well Leachate Monitoring Plan for the Bristol Integrated Solid Waste Management Facility Solid Waste Permit No. 588 Landfill. The plan was subsequently revised on December 1, 2022. Refer to the November 2022 and December 2022 Compliance Reports for the SWP No. 588 Landfill for additional information.

4.2.1 Sample Collection

On November 7, 2024, SCS collected leachate samples from three Dual Phase LFG extraction wells (EW-36A and EW-50). At the time of sample collection dissolved oxygen, oxidation-reduction potential, pH, specific conductance, temperature, and turbidity were measured and recorded at the time of sample collection. The associated field logs are included in **Appendix F**. SCS' field staff were not able to collect samples from select wells as summarized in **Table 6**.

Table 6. Summary Wells Unable to be Sampled for Leachate

Wells With Pumps	Wells Without Pumps
• Pump was not running at the time of monitoring for the following wells: EW-51, EW-52, EW-53, EW-60, EW-61, EW-67, EW-68, EW-69, EW-70, EW-78, EW-82, EW-85, EW-89, EW-90, EW-91, EW-93, EW-96, and EW-98.	• There was no pump at the time of the monitoring for the following wells: EW-55, EW-57, EW-58, EW-66, EW-71, EW-72, EW-73, EW-74, EW-86, EW-95, EW-99, and EW-100.

Table 6. Summary Wells Unable to be Sampled for Leachate

Wells With Pumps	Wells Without Pumps
• Pump was not running at the time of monitoring for the following wells and the liquid level could not be gauged as well was under vacuum thus unsafe to open for water level: EW-33B, EW-49, EW-64, EW-65, EW-81, and EW-83. • Pump was disconnected or off at the time of monitoring for EW-54, EW-59, EW-62, and EW-87. • Pump was not running for EW-88 and the liquid depth was not measured at the time of monitoring as the well cap could not be removed. • Pump was not running for EW-92 and well was too tall to safely measure the liquid level. • Pump was not running, and the liquid depth was not measured at the time of monitoring for EW-94.	• There was no pump at the time of the monitoring for the following wells and the liquid level could not be gauged as well was under vacuum thus unsafe to open for water level: EW-63, EW-75, EW-77, EW-79, EW-80, and EW-84. • There is no pump and the well appeared dry at the time of monitoring for EW-56. • There was no pump at the time of the monitoring for EW-97 and well was too tall to safely measure the liquid level. • Pump was not running, and the liquid depth was not measured at the time of monitoring for EW-76.

The samples were delivered to Enthalpy Analytical (Enthalpy) in Richmond, Virginia for analysis. Enthalpy's Virginia Division of Consolidated Laboratory Services (VELAP) certification is provided on the certificate of analysis (COA) included in **Appendix F**. The samples were analyzed for the parameters utilizing the analytical methods described in the Dual Phase Landfill Gas Extraction Well Leachate Monitoring Plan.

At the time of preparation of this report, laboratory analytical results were not available for the November 2024 monitoring event. The November 2024 analytical results will be provided in the December 2024 Monthly Compliance Report.

4.2.1 Quality Assurance and Quality Control

Field quality control (QC) involved the collection and analysis of trip blanks to verify that the sample collection and handling processes did not impair the quality of the samples. Trip blanks were prepared for VOC analysis via Solid Waste (SW)-846 Method 8260D. In conjunction with the preparation of the groundwater sample collection bottle set, laboratory personnel filled each trip blank sample bottle with distilled/deionized water and transported them with the empty bottle kits to SCS. Field personnel handled the trip blanks like a sample; they remained un-opened, were transported in the sample cooler, and were returned to the laboratory for analyses. A trip blank is used to indicate potential contamination due to the potential migration of VOCs from the air at the site or in the sample shipping containers, through the septum or around the lid of the sampling vials and into the sample.

Laboratory quality assurance/quality control (QA/QC) involves the routine collection and analysis of method reagent blanks, matrix spike (MS) and matrix spike duplicate (MSD) samples, and laboratory control samples (LCS). A summary of each of these is presented below:

- **Method Blank** – The method blank is deionized water subjected to the same reagents and manipulations to which site samples are subjected. Positive results in the method blanks may indicate either contamination of the chemical reagents or the glassware and implements used to store or prepare the sample and resulting solutions.

- **MS/MSD** – A MS is an aliquot of a field sample with a known concentration of target parameter added to it. An MSD is an intra-laboratory split sample spiked with a known concentration of target parameter. Spiking for each occurs prior to sample analysis. MS/MSD samples are collected for every batch of twenty or fewer samples. Matrix spike recoveries are used to indicate what effect the sample matrix may have on the reported concentration and/or the performance of the sample preparation and analysis.

- **LCS** – These samples consist of distilled/deionized water injected with the parameters of interest for single parameter methods and selected parameters for multi-parameter methods according to the appropriate analytical method. LCS samples are prepared and analyzed for each batch containing twenty or fewer samples. LCS recoveries are used to monitor analytical accuracy.

Surrogate recoveries are also measured as a part of laboratory QA/QC. Surrogates are organic compounds that are like the parameters of interest in chemical composition, extraction, and chromatography, but are not normally found in environmental samples. These compounds are inserted into blank, standards, samples, and spiked samples prior to analysis for organic parameters only. Percent recoveries are calculated for each surrogate. Spike recoveries at or below acceptance criteria indicate whether analytical results can be considered biased high or biased low.

No trip or method blank detects were identified for the November 2024 monitoring event. The laboratory analysis report for the November 2024 monitoring event trip blank is included in **Appendix F**. The November 2024 monitoring event laboratory QA/QC report, including the method blank results, is included in the COA in **Appendix F**.

4.2.2 Data Validation

To identify analytical data that may not represent valid results, data from the monitoring events were validated by the Laboratory and SCS in accordance with United States Environmental Protection Agency (EPA) guidance[1]. Data flagged with a "J" qualifier indicates the quantitation of the parameter is less than the laboratory's limit of quantitation but greater than the laboratory's limit of detection (LOD); thus, the concentration is considered estimated. Samples with parameter detections less than five times that of the trip blank, field blank, and/or method blank detection but greater than the laboratory's LOD are flagged with a "B" qualifier. Samples with common laboratory contaminant parameter detections less than 10 times that of the trip blank, field blank, and/or

[1] United States Environmental Protection Agency. Guidance for Data Usability in Risk Assessment (Part A-14). April 1992.
United States Environmental Protection Agency. Office of Superfund Remediation and Technology Innovation. National Functional Guidelines for Inorganic Superfund Methods Data Review. November 2020.
United States Environmental Protection Agency. Office of Superfund Remediation and Technology Innovation. National Functional Guidelines for Organic Superfund Methods Data Review. November 2020.

method/laboratory blank detection but greater than the laboratory's LOD are flagged with a "B" qualifier. Data with a "B" qualifier are considered not validated as the detection may be anomalous due to cross-contamination during sampling, transportation of samples, or laboratory analysis.

No leachate results were flagged with a "B" qualifier for the November 2024 monitoring event as no detections were identified in the trip or method blanks. The November 2024 detections flagged with a "J" qualifier are shown on Table 7.

4.2.3 Laboratory Analytical Results

The analytical results for the November 2024 leachate samples collected from extraction wells EW-36A and EW-50 are summarized in Table 7. The associated COA is included in Appendix F. Parameter results from November 2024 and previous monitoring events (November 2022 – October 2024) are presented on a table in Appendix F. Time-series plots of each VOC for the wells that have historically been sampled are included in Appendix F.

Table 7. Monthly LFG-EW Leachate Monitoring Event Summary

Well ID	EW-36A	EW-50	LOD	LOQ
Parameter	**November 2024 Concentration**			
Ammonia as N (mg/L)	**934**	**1370**	146	200
Biological Oxygen Demand (mg/L)	**4760**	**7360**	0.2	2
Chemical Oxygen Demand (mg/L)	**9540**	---	1000	1000
	---	**8840**	2000	2000
Nitrate as N (mg/L)	ND	---	0.25	1.25
	---	ND	0.5	2.5
Nitrite as N (mg/L)	ND	---	0.25	1.25
	---	**1.35 J**	0.5	2.5
Total Kjeldahl Nitrogen (mg/L)	**1070**	**1610**	40	100
Total Recoverable Phenolics (mg/L)	**5.22**	---	0.3	0.5
	---	**10.1**	1.5	2.5
SEMI-VOLATILE ORGANIC COMPOUND (ug/L)				
Anthracene	ND	ND	50	100
TOTAL METALS (mg/L)				
Arsenic	**0.18**	**0.15**	0.005	0.01
Barium	**0.262**	**0.69**	0.01	0.05
Cadmium	ND	ND	0.001	0.01
Chromium	**0.0797**	**0.237**	0.004	0.01
Copper	**0.00569 J**	ND	0.003	0.01
Lead	ND	ND	0.01	0.01
Mercury	ND	ND	0.002	0.002
Nickel	**0.03879**	**0.09665**	0.01	0.01
Selenium	ND	ND	0.0085	0.01
Silver	ND	ND	0.0006	0.01
Zinc	**0.0325 J**	**0.0367 J**	0.025	0.05

Table 7. Monthly LFG-EW Leachate Monitoring Event Summary

Well ID	EW-36A	EW-50	LOD	LOQ
Parameter	November 2024 Concentration			
VOLATILE ORGANIC COMPOUNDS (ug/L)				
2-Butanone (MEK)	---	**4140**	60	200
	28800	---	750	2500
Acetone	---	**8680**	350	500
	44400	---	1750	2500
Benzene	**119**	**512**	8	20
Ethylbenzene	**14.4 J**	**135**	8	20
Tetrahydrofuran	**6620**	**452**	200	200
Toluene	**44.6**	**245**	10	20
Xylenes, Total	ND	**223**	20	60

--- = not applicable
J = Constituent was detected at a concentration above the laboratory's LOD but below the laboratory's LOQ. Concentration is estimated and not validated.
LOD = laboratory's Limit of Detection
LOQ = laboratory's Limit of Quantitation
mg/L = milligrams per liter
ND = Not Detected
ug/L = micrograms per liter

5.0 SETTLEMENT MONITORING AND MANAGEMENT

The City is taking steps to track and manage settlement occurring in the landfill. A summary of actions taken to quantify and manage settlement is included in the sections below.

5.1 SETTLEMENT MONITORING AND MANAGEMENT PLAN

On behalf of the City, SCS submitted a settlement monitoring and management plan to VDEQ on November 15, 2022. Refer to the 2022 November Monthly Compliance Report for the SWP No. 588 Landfill for additional information.

5.2 MONTHLY SURVEYS

5.2.1 Topographic Data Collection

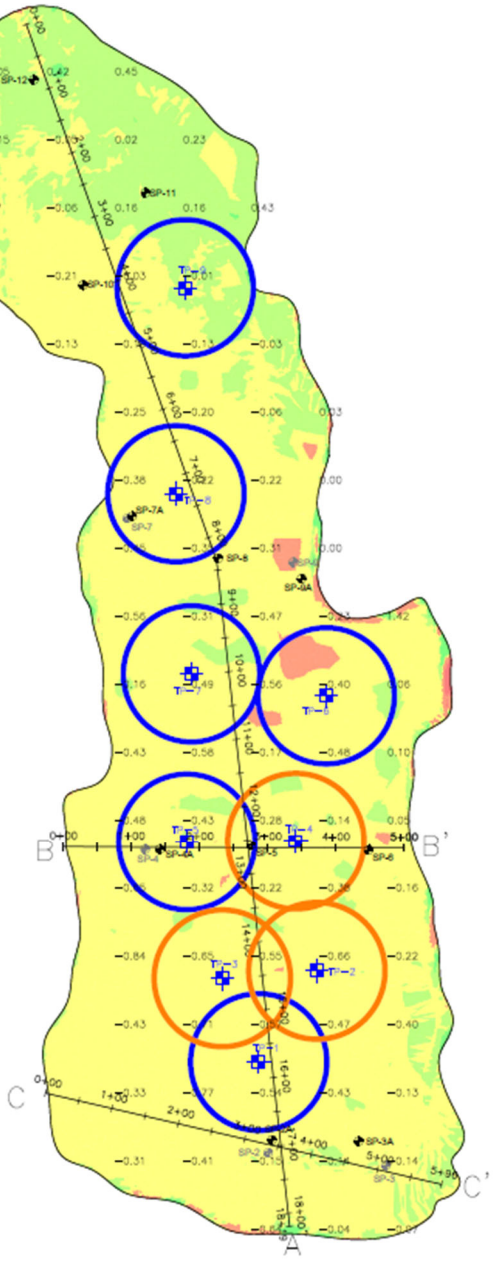
The City, through SCS, collected topographic data of the Solid Waste Permit No. 588 Landfill using photogrammetric methods via an unmanned aerial vehicle (UAV or drone). On November 12, 2024 the flight was completed and the topographic data collected. The topographic data collected is shown on Sheet 4 in Appendix E.

The topography within the landfill footprint was compared to topographic data collected by SCS using photogrammetric methods on October 16, 2024. A drawing depicting October 16, 2024 topography is included as Sheet 3 in Appendix E.

Based on a comparison of the topographic data collected on those two dates, the data shows a fill of 1,100 cubic yards throughout the entire site. Fill may have been placed on the site to address differential settlement, surface emissions, and to provide access to landfill gas collection vertical wells. During that same time period, calculations indicate a "cut" volume of approximately 8,500 cubic yards. Cut volumes are typically attributed to settlement. This resulted in a net volume decrease of approximately 7,400 cubic yards.

A visual depiction of settlement and filling at the landfill during this time is depicted in Figure 16. Areas in yellow, orange, and red indicate where elevations decreased and areas in green indicate areas where elevations have increased. Darker colors indicate greater changes in elevation. This drawing is also included as Sheet 5 in Appendix E.

Figure 16. 1-Month Elevation Change Map



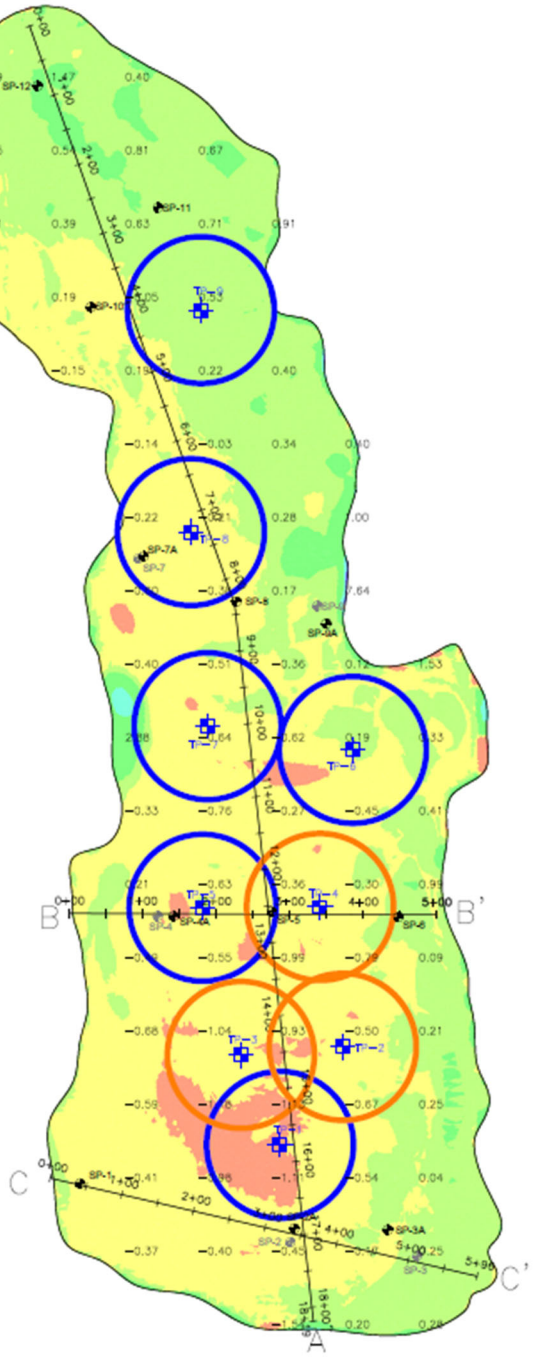
The locations of in-waste temperature monitoring probes are also shown on Figure 16, Figure 17, and Figure 18. The circles around the probes in each of these figures are indicative of the average borehole temperature. The circles shown are offset from the probes for clarity only and do not necessarily indicate temperatures measured at locations away from the probe. Probes with a blue circle around them typically have an average temperature less than 200°F across the full depth of the probe. Probes with an orange circle around them typically have an average temperature greater than 200°F and less than 250°F across the full depth of the probe. There were no probes measuring average temperatures greater than 250°F and less than 300°F during the month of November 2024.

SCS calculated the waste footprint for purposes of analysis to be 752,610 square feet. Based on that area and the net volume change, the average elevation decrease between the flyover dates was 0.3 feet.

SCS also compared the topographic data collected in September to the topographic data collected on August 14, 2024. Based on a comparison of the topographic data collected on those two dates, settlement occurred that reduced the volume of waste in the landfill by approximately 8,100 cubic yards. During that same time period calculations indicate approximately 6,800 cubic yards of fill were placed on the landfill, for a net decrease in waste volume of 1,300 cubic yards.

A visual depiction of settlement and filling at the landfill during this time is depicted in Figure 17. Areas in orange/yellow indicate where elevations decreased and areas in green indicate areas where elevations have increased. Darker colors indicate greater changes in elevation. This drawing is also included as Sheet 6 in Appendix E.

Figure 17. 3-Month Elevation Change Map



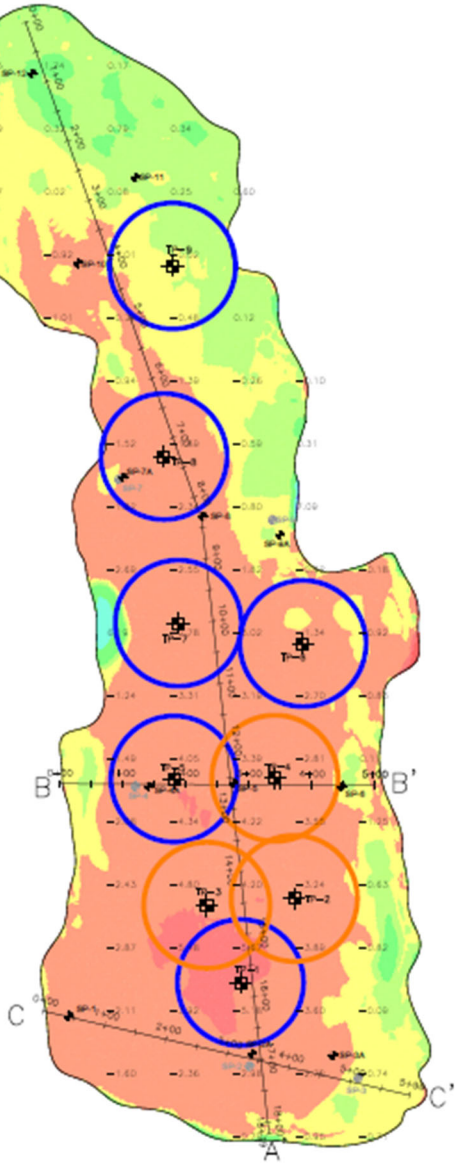
Based on the area of the landfill and the net volume change, the average elevation decrease was approximately 0.1 feet.

SCS also compared the topographic data collected in November 2024 to the drone topographic data collected on November 16, 2023 by SCS. Based on a comparison of the topographic data collected on those two dates, settlement occurred that reduced the volume of waste in the landfill by approximately 50,000 cubic yards. During that same time period approximately 4,000 cubic yards of

construction-related fill were placed on the landfill. This fill was primarily soil placed as part of the sidewall odor mitigation system construction and ongoing maintenance (i.e. filling to compensate for settlement). This resulted in a net volume decrease of approximately 46,000 cubic yards.

A visual depiction of settlement and filling at the landfill during this time is depicted in Figure 18. Areas in red indicate where elevations decreased and areas in green indicate areas where elevations have increased. Darker colors indicate greater changes in elevation. This drawing is also included as Sheet 7 in Appendix E.

Figure 18. 1-Year Elevation Change Map



The largest settlement occurred primarily in the southern end of the landfill where the waste settled by approximately 5 feet or more in some areas. These significant settlement values are typical of elevated temperature landfill conditions. The landfill perimeter exhibited an increase in elevation, likely due to soil placement associated with construction and/or ongoing maintenance of the Sidewall Odor Mitigation System. There were variations in elevation associated with soil stockpiling operations.

Based on the landfill area and the net volume change, the average elevation decrease was approximately 1.6 feet.

SCS will collect topographic data covering the landfill surface again in December using photogrammetric methods via UAV. This data will be compared to the data collected in December 2023, September 2024, and November 2024.

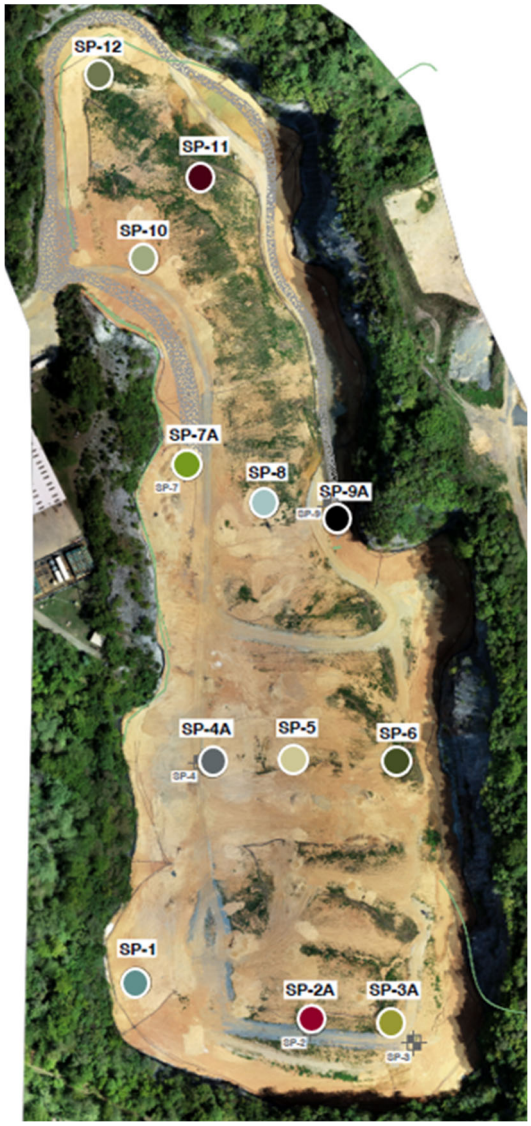
5.2.2 Settlement Plate Surveys

On November 7, 2022 SCS field services installed 12 settlement plates on the Solid Waste Permit No. 588 landfill. The construction and installation of the settlement plates generally conforms to the design outline in the Settlement Monitoring and Management Plan. The tops of the PVC pipes were painted orange to improve visibility.

Five new settlement plates (SP-2A, SP-3A, SP-4A, SP-7A, and SP-9A) installed during June 2024 are intended to replace non-operational settlement plates. SP-9A was installed due to the existing SP-9's location in a low area which is prone to flooding after rain. The first elevation survey of the new settlement plates was completed on 7/10/24. They have replaced the decommissioned plates in the readings.

The settlement plate locations are depicted in Figure 19 and on Sheet 1 in Appendix E.

Figure 19. Settlement Plate Locations



The locations of the settlement plates were surveyed on November 14, 2022. The settlement plates were surveyed again on December 13, 2022; January 3, 2023; February 6, 2023; March 8, 2023; April 3, 2023; May 11, 2023; June 5, 2023; July 10, 2023; August 17, 2023; September 11, 2023; October 11, 2023; November 6, 2023; December 12, 2023; January 11, 2024; February 6, 2024; March 13, 2024; April 9, 2024; May 8, 2024; June 4, 2024; July 10, 2024; July 31, 2024; September 10, 2024; October 28, 2024; and November 26, 2024. The surveyed coordinates[2] and elevation changes of the settlement plates are shown in Table 8.

[2] Settlement plate locations and coordinates are based on a local coordinate system.

Table 8. Elevation and Strain Data at Settlement Plate Locations

Settlement Plate	Northing	Easting	Elevation on Nov. 26, 2024	Elevation Change Since Oct. 28, 2024	Strain[3] Since Oct. 28, 2024	Elevation Change Since Installation	Strain/Year
SP-1	3,397,887.5	10,412,080.5	1,829.3	-0.11	-0.2%	-5.1	-2.02%
SP-2A	3,397,822.8	10,412,370.6	1,794.5	-0.21	-0.1%	-1.3	-1.75%
SP-3A	3,397,820.1	10,412,498.3	1,779.7	-0.10	-0.1%	-0.5	-1.26%
SP-4A	3,398,247.1	10,412,206.6	1,804.1	-0.24	-0.1%	-1.1	-1.77%
SP-5	3,398,255.8	10,412,339.5	1,789.9	-0.24	-0.1%	-10.9	-1.19%
SP-6	3,398,248.8	10,412,510.0	1,773.6	-0.14	-0.1%	-4.1	-1.27%
SP-7A	3,398,732.0	10,412,157.8	1,822.9	-0.07	-0.1%	-0.5	-0.67%
SP-8	3,398,678.3	10,412,290.9	1,800.6	-0.10	0.0%	-6.8	-0.51%
SP-9A	3,398,644.3	10,412,416.2	1,788.5	-0.08	-0.1%	-0.3	-1.03%
SP-10	3,399,080.2	10,412,093.2	1,837.4	-0.04	0.0%	-2.8	-0.17%
SP-11	3,399,216.4	10,412,183.9	1,814.8	-0.02	0.0%	-1.5	-0.10%
SP-12	3,399,381.8	10,412,019.6	1,809.9	-0.02	0.0%	-0.7	-0.20%

Prior to April 2024, the City's in-house surveyor read the settlement plate elevations. Starting April 2024, the settlement plate elevations were measured by FEI Civil Engineers and Land Surveyors.

Settlement Plate 1 demonstrated larger settlements than at other locations. Settlement Plate 1 is located in the southern end of the landfill. This area is the location of the gas wells and temperature probes exhibiting higher temperatures. These higher settlement values are typical of elevated temperature landfill conditions.

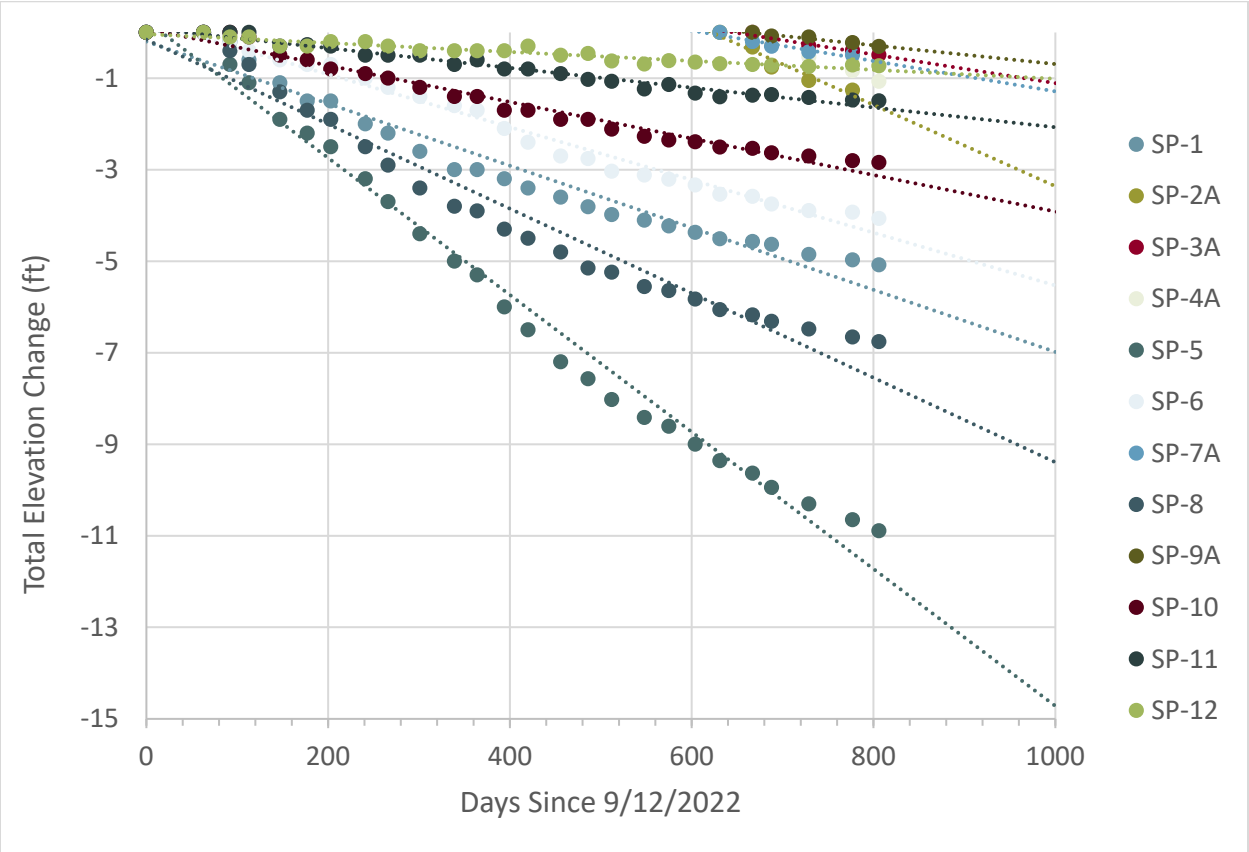
The change in elevation at Settlement Plates 8, 10, 11, and 12 was lower and more representative of typical settlement at municipal landfills with waste of similar depth.

The settlement observed at the rest of the settlement plates fell in between these two categories.

Figure 20 shows the changes in elevation of select settlement plates over time. Best-fit lines for these changes in elevation are also shown on the graph. For the purposes of recording data in this figure, times are measured in days since the landfill was required to stop accepting waste.

[3] Strain is defined as the change in elevation divided by the estimated waste depth.

Figure 20. Elevation Change of Select Settlement Plates Over Time



The settlement plates will be surveyed again during the month of December 2024. The elevations surveyed will be compared to the elevations surveyed the previous months.

6.0 INTERMEDIATE COVER AND EVOH COVER SYSTEM

The City has taken steps to provide intermediate and temporary cover of the wastes in the landfill. The sections below outline the steps taken by the City.

6.1 INTERMEDIATE COVER INSTALLATION

The City completed hauling and placement of a 12-inch-thick intermediate cover across the entire landfill prior to October 10, 2022. The cover was placed in accordance with 9VAC20-81-140(B)(1)(d). SCS coordinated with the City to dig a series of test holes to verify cover thickness in select locations. Details of these verifications were discussed in the October 2022 Monthly Compliance Report for the SWP No. 588 Landfill.

6.2 EVOH COVER SYSTEM DESIGN

On December 4, 2023, SCS submitted a revised stormwater management plan to submit to VDEQ, including revised drawings and calculations. The revised Stormwater Management Plan includes the three quarry basins, additional stormwater pumps, new stormwater force mains, and the preliminary layout of the new electrical infrastructure along the quarry rim.

On December 18, 2023 SCS and VDEQ met to discuss concerns about the impact of settlement on the proposed EVOH Cover System. The City discussed the appropriate schedule for EVOH deployment with VDEQ given the significant settlement the site is experiencing. An amendment to the Consent Decree was subsequently issued which requires the EVOH deployment no later than December 1, 2026. The amended Consent Decree also requires regular settlement assessments, and the EVOH deployment may occur earlier if settlement rates appear acceptable. The first of these assessments was submitted to VDEQ on April 11, 2024. The most recent assessment was completed on October 11, 2024. The next assessment will be submitted on or before January 13, 2025.

6.3 EVOH COVER SYSTEM PROCUREMENT

Drawings used for the purposes of bidding, procurement and construction of the EVOH cover system will generally conform to the layout and details in the drawings described in section 6.2. SCS also prepared and submitted to VDEQ a specification for the EVOH geomembrane on January 30, 2023 based upon industry standards and discussions with material manufacturers. This specification and drawing set represent the first steps in the procurement process. SCS and the City have coordinated with potential suppliers to specify a product that is not currently anticipated to have long lead times. SCS has received a pro-forma data sheet from one manufacturer which is preparing a customized EVOH product for the No. 588 landfill.

6.4 EVOH COVER SYSTEM INSTALLATION

SCS will prepare regular settlement assessments for VDEQ per the amended Consent Decree. EVOH deployment will commence, with VDEQ's concurrence, if the latest assessment shows acceptable settlement rates. The amended consent decree requires installation of the EVOH cover system by December 1, 2026.

7.0 STORMWATER MANAGEMENT

The City is taking steps to implement a stormwater management plan at the landfill. The sections below outline the steps taken by the City.

7.1 STORMWATER MANAGEMENT PLAN DEVELOPMENT

The initial stormwater management plan (SWMP) was submitted to VDEQ on April 28, 2023.

The revised SWMP was submitted to VDEQ on December 4, 2023. The plan proposes a stormwater pumping system to convey stormwater collected atop the EVOH cover system to an existing discharge point permitted under VPDES permit VAR050053. The proposed system includes the construction of three stormwater collection basins in the quarry and the installation of pairs of skid-mounted stormwater pumps. The stormwater will be conveyed by force main pipes to the existing stormwater basins located west of the quarry.

The plan proposes modifications to the existing stormwater basins west of the quarry to achieve discharge quantity targets. Modifications include increasing the basin depths and installing new outlet riser structures.

7.2 STORMWATER MANAGEMENT BASIN DESIGN AND CONSTRUCTION

The landfill surface will be regraded to form the SWM basins proposed in the stormwater management plan. The earthwork will be completed as the first stage of the interim EVOH cover system installation project. A revised landfill gas management plan is being prepared to facilitate the regrading of the landfill, which will affect existing landfill gas infrastructure. The landfill gas system will be modified to accommodate the earthwork.

Attention is being given to settlement concerns in the vicinity of the stormwater basin or basins. Calculations provided to VDEQ on June 23, 2023 demonstrate the weight of the ponded water should not cause excessive settlement relative to ongoing settlement observed within the quarry. Including additional stormwater basins within the quarry will distribute the weight of ponded water over a wider area relative to the single stormwater basin design.

7.3 STORMWATER MANAGEMENT PLAN IMPLEMENTATION

The stormwater management plan design drawings are being incorporated into the overall construction drawings for the interim EVOH cover system. The interim EVOH cover system installation and stormwater management features will be bid and constructed as one project to facilitate simultaneous progress and completion.

As an interim measure, the City is currently operating a temporary stormwater pump to remove stormwater from the landfill surface.

7.4 LONG-TERM STORMWATER CONTROL AND REMOVAL

The stormwater management plan is designed with resiliency and redundancy to promote long-term operation. Refer to previously submitted compliance reports for details of long-term stormwater control and removal.

7.5 STORMWATER MONITORING

Stormwater monitoring will commence upon initial discharge of stormwater from the quarry stormwater pumping system. As stated in the stormwater management plan drawings, the stormwater shall be monitored in accordance with the facility's VPDES general permit for discharge of stormwater associated with industrial activity. Additional requirements include collecting additional stormwater samples at the discharge pipes for the quarry stormwater pumping system. The stormwater from the quarry basins will be sampled on a monthly basis prior to discharge to the upper stormwater ponds. The Operations Manual will be revised to include these additional requirements.

If the stormwater becomes contaminated or sampling indicates contamination above discharge limits, the stormwater will be diverted to the sanitary sewer system. The diversion to the sanitary sewer system will continue until the source of contamination is identified and resolved. The stormwater discharge pipe alignment will pass adjacent to the existing sanitary sewer manhole. A tee

with isolation valves will be used to direct the stormwater to the upper basins or the sanitary sewer manhole.

Stormwater currently pumped from the surface of the landfill is discharged to the sanitary sewer and is sampled with other wastewater discharges in accordance with the facility's industrial wastewater discharge permit.

8.0 MISCELLANEOUS

8.1 CEASE WASTE ACCEPTANCE

The City ceased acceptance of offsite waste at the Solid Waste Permit No. 588 landfill prior to September 12, 2022.

8.2 LONG-TERM PLAN

SCS submitted the Monitoring, Maintenance, and Repair Plan to VDEQ for the SWP No. 588 landfill on December 30, 2022. Refer to the December 2022 Monthly Compliance Report for the SWP No. 588 Landfill for additional information. The City has taken steps to implement the plan that were detailed in the March 2023 Monthly Compliance Report for the SWP No. 588 Landfill.

8.3 MONTHLY COMPLIANCE REPORTS

As described in the introduction this report is intended to provide comprehensive updates regarding progress towards completion of each item described in Appendix A of the Consent Decree between the City and VDEQ.

8.4 COMMUNITY OUTREACH PROGRAM

- Ongoing basis: Four (4) posts on each the BristolVALandfill.org site and the existing City of Bristol Landfill Notifications and Information page covering important updates including:
    - Progress updates related to remediation efforts and normal maintenance activities at the Quarry Landfill
    - Updates included activities at the quarry landfill such as introduction of a new odor reporting form on each website, prioritized review and adjustments of system operations due to an increase in odor complaints, and voluntary purchase and installation of additional temperature sensors to expand data collected.

- Weekly updates on landing page on Bristolvalandfill.org titled "Air Sampling and Air Monitoring" that includes a summary of the air sampling and monitoring being conducted by Bristol, VA around the quarry landfill.
    - Website now includes weekly air monitoring reports starting with May 15th, 2023 and running through May 19th of 2024. More reports will be posted as the transition to a new air monitoring system is being implemented.

- E-mail communication sent to the list of members of the public signed up through the Bristol, VA website, the BristolVALandfill.org website, or at subsequent Open Houses to receive information via e-mail

- E-mails sent included weekly remediation progress update and links to website updates and latest news articles.

Appendix A

Surface Emissions Monitoring Summary Letters

November 13, 2024
File No. 02218208.04

Mr. Jonathan Chapman
Enforcement Specialist
Virginia Department of Environmental Quality
SW Regional Office
355-A Deadmore Street
Abingdon, VA 24210

Subject: Weekly Surface Emissions Monitoring Event – November 5, 2024
Bristol Integrated Solid Waste Facility – Bristol, Virginia

Dear Mr. Chapman:

On behalf of the City of Bristol (City), SCS Engineers (SCS), is pleased to submit the results of the Weekly Surface Emissions Monitoring event performed at the Bristol Integrated Solid Waste Facility located in Bristol, Virginia on November 5, 2024. This Weekly Surface Emissions Monitoring (SEM) Event was performed in accordance with Appendix A.1.i of the Consent Decree between the Commonwealth of Virginia and the City of Bristol.

The monitoring generally conforms to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The monitoring route includes the entire waste footprint of the Permit No. 588 Landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector (FID) at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint, including at the temperature probes and the newly installed and connected gas extraction wells. The approximate monitoring route and sampling locations are presented in the attached Drawing.

At the time of monitoring, all areas of the Permit No. 588 Landfill footprint are subject to regulatory monitoring based on the regulatory time schedule stipulated in 40 CFR 63.1960(b) and 40 CFR 60.36f(b). The Permit No. 588 Landfill has a surface area of approximately 17.3 acres. Therefore, the minimum number of sampling points to cover the appropriate portion of the landfill footprint, utilizing a 30-meter grid interval, is approximately 82 (4.75 points per acre). A summary of the results of the surface emissions monitoring is provided in Table 1.

Table 1. Summary of Surface Emissions Monitoring

Description	Quantity
Number of Points Sampled	167
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	67
Number of Exceedances	7
Number of Serpentine Exceedances	0
Number of Pipe Penetration Exceedances	7

REMONITORING OF ONGOING EXCEEDANCES

In accordance with 40 CFR 63.1960(c)(4)(ii) and 40 CFR 60.36f(c)(4)(ii), corrective actions and a remonitoring event are to be performed within 10 days of the initial exceedance. In accordance with 40 CFR 63.1960(c)(4)(iii) and 40 CFR 60.36f(c)(4)(iii) additional corrective actions and a second 10-day retest are to be performed if the initial 10-day retest indicates methane values greater than the regulatory threshold. The Facility performs corrective actions, as necessary, including wellhead vacuum adjustments, the installation of well-bore seals, and addition of soil cover prior to weekly monitoring events at locations that previously exhibited elevated methane concentrations.

In accordance with 40 CFR 63.1960(c)(4)(v) and 40 CFR 60.36f(c)(4)(v) a new well or collection device must be installed or an alternate remedy must be submitted within 120 days at locations that continue to exhibit methane concentrations above the regulatory threshold for two consecutive re-tests.

A summary of ongoing exceedance points is provided in Table 2.

Table 2. Ongoing Weekly SEM Exceedances

Point ID	Initial Exceedance Date	11/5/24 Event	11/5/24 Event Result	Comments
EW-79	7/22/24	N/A	Failed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-63	8/1/24	N/A	Failed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-64	8/1/24	N/A	Failed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-77	8/1/24	N/A	Failed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-33B	8/7/24	N/A	Failed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-65	8/21/24	N/A	Failed	Subject to 40 CFR 63.1960(c)(4)(v)
Tag 61	8/21/24	N/A	Passed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-67	9/9/24	N/A	Passed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-80	9/16/24	N/A	Passed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-82	10/16/24	N/A	Passed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-95	10/21/24	2nd 10-Day Recheck	Passed	Requires 1-Month Recheck

If you have questions or require additional information, please contact either of the undersigned.

Sincerely,

William J. Fabrie
Staff Professional
SCS Engineers

Lucas S. Nachman
Senior Project Professional
SCS Engineers

LSN/WJF

cc: Randall Eads, City of Bristol
Jonathan Hayes, City of Bristol
Laura Socia, City of Bristol
Susan “Tracey” Blalock, VDEQ

Encl. Surface Emissions Monitoring Results
Bristol SEM Route Drawing

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 5, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
1	5.9 PPM	OK			Start Serpentine Route
2	5.2 PPM	OK			
3	3.2 PPM	OK			
4	26.0 PPM	OK			
5	4.4 PPM	OK			
6	2.6 PPM	OK			
7	2.4 PPM	OK			
8	2.5 PPM	OK			
9	2.0 PPM	OK			
10	8.0 PPM	OK			
11	2.0 PPM	OK			
12	2.6 PPM	OK			
13	2.0 PPM	OK			
14	4.3 PPM	OK			
15	3.6 PPM	OK			
16	2.5 PPM	OK			
17	27.5 PPM	OK			
18	1.7 PPM	OK			
19	1.5 PPM	OK			
20	1.5 PPM	OK			
21	1.6 PPM	OK			
22	2.3 PPM	OK			
23	2.6 PPM	OK			
24	2.4 PPM	OK			
25	2.0 PPM	OK			
26	3.1 PPM	OK			
27	3.0 PPM	OK			
28	3.0 PPM	OK			
29	8.4 PPM	OK			
30	2.8 PPM	OK			
31	2.9 PPM	OK			
32	7.9 PPM	OK			
33	12.9 PPM	OK			
34	183.0 PPM	OK			
35	9.2 PPM	OK			
36	62.9 PPM	OK			
37	12.3 PPM	OK			
38	62.9 PPM	OK			
39	14.4 PPM	OK			
40	4.5 PPM	OK			
41	1.6 PPM	OK			
42	6.4 PPM	OK			
43	6.8 PPM	OK			
44	4.5 PPM	OK			
45	22.4 PPM	OK			
46	165.0 PPM	OK			
47	183.0 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 5, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
48	1.2 PPM	OK			
49	1.1 PPM	OK			
50	1.8 PPM	OK			
51	2.2 PPM	OK			
52	1.8 PPM	OK			
53	2.2 PPM	OK			
54	2.5 PPM	OK			
55	3.2 PPM	OK			
56	1.8 PPM	OK			
57	20.7 PPM	OK			
58	24.0 PPM	OK			
59	87.2 PPM	OK			
60	57.8 PPM	OK			
61	161.0 PPM	OK			
62	30.9 PPM	OK			
63	1.7 PPM	OK			
64	5.4 PPM	OK			
65	1.6 PPM	OK			
66	2.9 PPM	OK			
67	2.4 PPM	OK			
68	1.3 PPM	OK			
69	2.1 PPM	OK			
70	0.9 PPM	OK			
71	0.8 PPM	OK			
72	0.9 PPM	OK			
73	4.7 PPM	OK			
74	81.0 PPM	OK			
75	39.4 PPM	OK			
76	1.9 PPM	OK			
77	2.0 PPM	OK			
78	12.4 PPM	OK			
79	82.6 PPM	OK			
80	62.9 PPM	OK			
81	11.3 PPM	OK			
82	1.2 PPM	OK			
83	2.1 PPM	OK			
84	2.9 PPM	OK			
85	2.1 PPM	OK			
86	2.3 PPM	OK			
87	5.7 PPM	OK			
88	3.0 PPM	OK			
89	2.5 PPM	OK			
90	14.6 PPM	OK			
91	39.1 PPM	OK			
92	1.7 PPM	OK			
93	34.7 PPM	OK			
94	2.4 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 5, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
95	44.1 PPM	OK			
96	0.7 PPM	OK			
97	0.8 PPM	OK			
98	1.1 PPM	OK			
99	1.1 PPM	OK			
100	13.9 PPM	OK			End Serpentine Route
101	51.3 PPM	OK			EW-52
102	4.9 PPM	OK			TP-4
103	72.3 PPM	OK			EW-60
104	4.2 PPM	OK			EW-48
105	2.5 PPM	OK			TP-6
106	3.1 PPM	OK			EW-61
107	1.0 PPM	OK			EW-50
108	34.3 PPM	OK			EW-67
109	2.4 PPM	OK			EW-47
110	916.0 PPM	HIGH_ALRM	36.59866	-82.14742	EW-54
111	0.9 PPM	OK			EW-55
112	1.8 PPM	OK			EW-92
113	19.9 PPM	OK			EW-91
114	2.7 PPM	OK			EW-96
115	1.1 PPM	OK			TP-2
116	1.6 PPM	OK			EW-66
117	1.2 PPM	OK			EW-58
118	15.9 PPM	OK			EW-57
119	3.1 PPM	OK			TP-1
120	5.4 PPM	OK			EW-59
121	14.3 PPM	OK			EW-100
122	130.0 PPM	OK			EW-56
123	2.0 PPM	OK			EW-97
124	132.0 PPM	OK			EW-53
125	0.9 PPM	OK			TP-3
126	29.2 PPM	OK			EW-51
127	0.8 PPM	OK			TP-5
128	4.3 PPM	OK			EW-68
129	0.7 PPM	OK			EW-87
130	1.0 PPM	OK			EW-38
131	121.0 PPM	OK			TP-7
132	3.1 PPM	OK			EW-49
133	1.4 PPM	OK			EW-83
134	1379.0 PPM	HIGH_ALRM	36.60015	-82.14789	EW-65
135	130.0 PPM	OK			EW-81
136	5.1 PPM	OK			TP-8
137	1338.0 PPM	HIGH_ALRM	36.60056	-82.14796	EW-64
138	961.0 PPM	HIGH_ALRM	36.60092	-82.14812	EW-63
139	4.1 PPM	OK			EW-42
140	34.6 PPM	OK			EW-76

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 5, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
141	262.0 PPM	OK			TP-9
142	3.8 PPM	OK			EW-62
143	21.8 PPM	OK			EW-74
144	0.6 PPM	OK			EW-32R
145	0.9 PPM	OK			EW-69
146	1.2 PPM	OK			EW-71
147	0.4 PPM	OK			EW-72
148	2.0 PPM	OK			EW-73
149	6.4 PPM	OK			EW-78
150	2.2 PPM	OK			EW-82
151	1.7 PPM	OK			EW-36A
152	0.3 PPM	OK			EW-85
153	0.7 PPM	OK			EW-88
154	1.7 PPM	OK			EW-89
155	2.0 PPM	OK			EW-93
156	3.1 PPM	OK			EW-94
157	0.3 PPM	OK			EW-98
158	2.3 PPM	OK			EW-99
159	32.2 PPM	OK			EW-95
160	58.6 PPM	OK			EW-90
161	2.0 PPM	OK			EW-86
162	51.0 PPM	OK			EW-84
163	218.0 PPM	OK			EW-80
164	4666.0 PPM	HIGH_ALRM	36.60051	-82.14819	EW-79
165	25500.0 PPM	HIGH_ALRM	36.60072	-82.14819	EW-77
166	2800.0 PPM	HIGH_ALRM	36.60105	-82.14831	EW-33B
167	34.1 PPM	OK			EW-75

Number of locations sampled:	167
Number of exceedance locations:	7

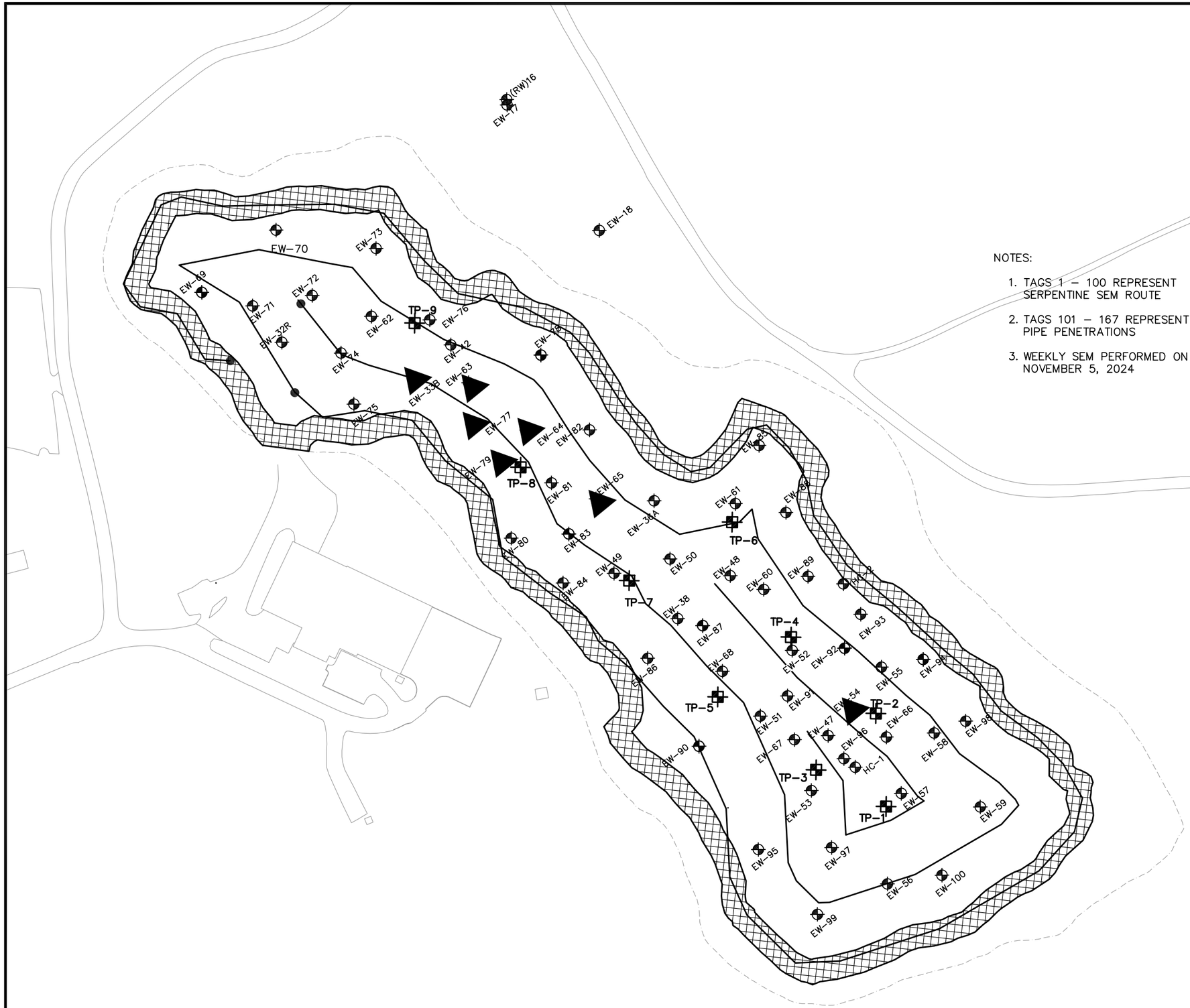
NOTES:
Points 1 through 100 represent serpentine SEM route.
Points 101 through 167 represent SEM at Pipe Penetrations
Weather Conditions: Sunny, 72°F Wind: 9 MPH N

Sampling Calibration: Methane - 500 ppm, Zero Air - 0.0 ppm

11/5/2024	10:51	ZERO	0.3	PPM
11/5/2024	10:53	SPAN	499.0	PPM

Background Reading:

11/5/2024	10:59	Upwind	2.5	PPM
11/5/2024	11:01	Downwind	2.7	PPM



NOTES:

1. TAGS 1 – 100 REPRESENT SERPENTINE SEM ROUTE
2. TAGS 101 – 167 REPRESENT SEM AT PIPE PENETRATIONS
3. WEEKLY SEM PERFORMED ON NOVEMBER 5, 2024

0 80 160 240
SCALE IN FEET

N

LEGEND

- SEM ROUTE
- GAS WELL
- TEMPERATURE PROBE
- 79 EXCEEDANCE LOCATION
- 75 MONITORING ROUTE ENDPOINT

NO.	REVISION	DATE

SHEET TITLE
SEM ROUTE WITH BUFFER AREA

PROJECT TITLE
SURFACE EMISSIONS MONITORING
SOLID WASTE PERMIT #588

CLIENT
CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7433

PROJ. NO. 02218208.04
DSN. BY:
DWN. BY:
CHK. BY:
QA/QC BY:
APP. BY:

FILE: 02218208.04
DATE: 11/5/24
SCALE: AS SHOWN
DRAWING NO. 1 of 1

November 20, 2024
File No. 02218208.04

Mr. Jonathan Chapman
Enforcement Specialist
Virginia Department of Environmental Quality
SW Regional Office
355-A Deadmore Street
Abingdon, VA 24210

Subject: Weekly Surface Emissions Monitoring Event – November 12, 2024
Bristol Integrated Solid Waste Facility – Bristol, Virginia

Dear Mr. Chapman:

On behalf of the City of Bristol (City), SCS Engineers (SCS), is pleased to submit the results of the Weekly Surface Emissions Monitoring event performed at the Bristol Integrated Solid Waste Facility located in Bristol, Virginia on November 12, 2024. This Weekly Surface Emissions Monitoring (SEM) Event was performed in accordance with Appendix A.1.i of the Consent Decree between the Commonwealth of Virginia and the City of Bristol.

The monitoring generally conforms to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The monitoring route includes the entire waste footprint of the Permit No. 588 Landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector (FID) at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint, including at the temperature probes and the newly installed and connected gas extraction wells. The approximate monitoring route and sampling locations are presented in the attached Drawing.

At the time of monitoring, all areas of the Permit No. 588 Landfill footprint are subject to regulatory monitoring based on the regulatory time schedule stipulated in 40 CFR 63.1960(b) and 40 CFR 60.36f(b). The Permit No. 588 Landfill has a surface area of approximately 17.3 acres. Therefore, the minimum number of sampling points to cover the appropriate portion of the landfill footprint, utilizing a 30-meter grid interval, is approximately 82 (4.75 points per acre). A summary of the results of the surface emissions monitoring is provided in Table 1.

Table 1. Summary of Surface Emissions Monitoring

Description	Quantity
Number of Points Sampled	167
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	67
Number of Exceedances	3
Number of Serpentine Exceedances	0
Number of Pipe Penetration Exceedances	3

REMONITORING OF ONGOING EXCEEDANCES

In accordance with 40 CFR 63.1960(c)(4)(ii) and 40 CFR 60.36f(c)(4)(ii), corrective actions and a remonitoring event are to be performed within 10 days of the initial exceedance. In accordance with 40 CFR 63.1960(c)(4)(iii) and 40 CFR 60.36f(c)(4)(iii) additional corrective actions and a second 10-day retest are to be performed if the initial 10-day retest indicates methane values greater than the regulatory threshold. The Facility performs corrective actions, as necessary, including wellhead vacuum adjustments, the installation of well-bore seals, and addition of soil cover prior to weekly monitoring events at locations that previously exhibited elevated methane concentrations.

In accordance with 40 CFR 63.1960(c)(4)(v) and 40 CFR 60.36f(c)(4)(v) a new well or collection device must be installed or an alternate remedy must be submitted within 120 days at locations that continue to exhibit methane concentrations above the regulatory threshold for two consecutive re-tests.

On November 18, 2024, the City submitted an Alternate Remedy Request for corrective actions for exceedances located at Serpentine Tag #61, and at the surface cover penetration of vertical extraction wells EW-33B, EW-63, EW-64, EW-65, EW-67, EW-77, EW-79, and EW-80. Details regarding the specific proposed corrective actions are outlined in the letter request. As of the monitoring conduced on November 12, 2024, these corrective actions have been successful at reducing methane concentration below the regulatory threshold at six of the nine locations.

A summary of ongoing exceedance points is provided in Table 2.

Table 2. Ongoing Weekly SEM Exceedances

Point ID	Initial Exceedance Date	11/12/24 Event	11/12/24 Event Result	Comments
EW-79	7/22/24	N/A	Passed	Alternate Remedy Requested – corrective actions have resolved exceedance
EW-63	8/1/24	N/A	Passed	Alternate Remedy Requested – corrective actions have resolved exceedance
EW-64	8/1/24	N/A	Passed	Alternate Remedy Requested – corrective actions have resolved exceedance
EW-77	8/1/24	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-33B	8/7/24	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-65	8/21/24	N/A	Passed	Alternate Remedy Requested – corrective actions have resolved exceedance
Tag 61	8/21/24	N/A	Passed	Alternate Remedy Requested – corrective actions have resolved exceedance
EW-67	9/9/24	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-80	9/16/24	N/A	Passed	Alternate Remedy Requested – corrective actions have resolved exceedance
EW-82	10/16/24	N/A	Passed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-95	10/21/24	N/A	Passed	Requires 1-Month Recheck
EW-54	11/5/24	10-Day Recheck	Passed	Requires 1-Month Recheck

If you have questions or require additional information, please contact either of the undersigned.

Sincerely,

William J. Fabrie

Lucas S. Nachman

William J. Fabrie
Staff Professional
SCS Engineers

Lucas S. Nachman
Senior Project Professional
SCS Engineers

LSN/WJF

cc: Randall Eads, City of Bristol
Jonathan Hayes, City of Bristol
Laura Socia, City of Bristol
Susan “Tracey” Blalock, VDEQ

Encl. Surface Emissions Monitoring Results
Bristol SEM Route Drawing

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 12, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
1	2.3 PPM	OK			Start Serpentine Route
2	10.2 PPM	OK			
3	19.6 PPM	OK			
4	9.8 PPM	OK			
5	11.3 PPM	OK			
6	3.9 PPM	OK			
7	4.2 PPM	OK			
8	2.9 PPM	OK			
9	4.5 PPM	OK			
10	2.6 PPM	OK			
11	2.1 PPM	OK			
12	2.3 PPM	OK			
13	2.3 PPM	OK			
14	2.2 PPM	OK			
15	2.3 PPM	OK			
16	2.9 PPM	OK			
17	16.6 PPM	OK			
18	4.9 PPM	OK			
19	3.2 PPM	OK			
20	2.6 PPM	OK			
21	2.4 PPM	OK			
22	5.1 PPM	OK			
23	2.4 PPM	OK			
24	2.4 PPM	OK			
25	30.1 PPM	OK			
26	2.2 PPM	OK			
27	2.1 PPM	OK			
28	2.1 PPM	OK			
29	2.0 PPM	OK			
30	2.2 PPM	OK			
31	180.0 PPM	OK			
32	54.4 PPM	OK			
33	40.8 PPM	OK			
34	98.2 PPM	OK			
35	308.0 PPM	OK			
36	346.0 PPM	OK			
37	60.8 PPM	OK			
38	18.5 PPM	OK			
39	45.3 PPM	OK			
40	3.6 PPM	OK			
41	16.4 PPM	OK			
42	2.1 PPM	OK			
43	5.6 PPM	OK			
44	70.9 PPM	OK			
45	11.6 PPM	OK			
46	40.7 PPM	OK			
47	41.4 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 12, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
48	4.8 PPM	OK			
49	1.9 PPM	OK			
50	1.8 PPM	OK			
51	1.8 PPM	OK			
52	1.7 PPM	OK			
53	1.9 PPM	OK			
54	2.9 PPM	OK			
55	3.0 PPM	OK			
56	3.9 PPM	OK			
57	5.3 PPM	OK			
58	3.3 PPM	OK			
59	2.4 PPM	OK			
60	5.0 PPM	OK			
61	2.5 PPM	OK			
62	2.2 PPM	OK			
63	2.0 PPM	OK			
64	2.9 PPM	OK			
65	1.7 PPM	OK			
66	1.7 PPM	OK			
67	8.2 PPM	OK			
68	5.2 PPM	OK			
69	1.8 PPM	OK			
70	1.7 PPM	OK			
71	4.1 PPM	OK			
72	4.7 PPM	OK			
73	3.1 PPM	OK			
74	1.9 PPM	OK			
75	1.7 PPM	OK			
76	56.8 PPM	OK			
77	2.9 PPM	OK			
78	12.9 PPM	OK			
79	26.1 PPM	OK			
80	130.0 PPM	OK			
81	115.0 PPM	OK			
82	72.0 PPM	OK			
83	2.7 PPM	OK			
84	2.2 PPM	OK			
85	1.7 PPM	OK			
86	3.1 PPM	OK			
87	1.7 PPM	OK			
88	3.1 PPM	OK			
89	1.6 PPM	OK			
90	1.9 PPM	OK			
91	1.6 PPM	OK			
92	14.1 PPM	OK			
93	7.3 PPM	OK			
94	29.4 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 12, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
95	34.0 PPM	OK			
96	2.9 PPM	OK			
97	1.8 PPM	OK			
98	2.0 PPM	OK			
99	9.8 PPM	OK			
100	4.2 PPM	OK			End Serpentine Route
101	154.0 PPM	OK			EW-52
102	22.7 PPM	OK			TP-4
103	23.7 PPM	OK			EW-60
104	3.4 PPM	OK			EW-48
105	1.7 PPM	OK			TP-6
106	1.7 PPM	OK			EW-61
107	1.5 PPM	OK			EW-50
108	657.0 PPM	HIGH_ALRM	36.59866	-82.14775	EW-67
109	2.3 PPM	OK			EW-47
110	150.0 PPM	OK			EW-54
111	3.3 PPM	OK			EW-55
112	2.4 PPM	OK			EW-92
113	21.8 PPM	OK			EW-91
114	2.4 PPM	OK			EW-96
115	2.4 PPM	OK			TP-2
116	1.5 PPM	OK			EW-66
117	1.7 PPM	OK			EW-58
118	12.3 PPM	OK			EW-57
119	3.0 PPM	OK			TP-1
120	21.1 PPM	OK			EW-59
121	19.3 PPM	OK			EW-100
122	25.4 PPM	OK			EW-56
123	1.5 PPM	OK			EW-97
124	5.2 PPM	OK			EW-53
125	5.6 PPM	OK			TP-3
126	2.9 PPM	OK			EW-51
127	1.5 PPM	OK			TP-5
128	5.8 PPM	OK			EW-68
129	1.5 PPM	OK			EW-87
130	5.9 PPM	OK			EW-38
131	175.0 PPM	OK			TP-7
132	12.1 PPM	OK			EW-49
133	1.6 PPM	OK			EW-83
134	151.0 PPM	OK			EW-65
135	6.9 PPM	OK			EW-81
136	4.7 PPM	OK			TP-8
137	224.0 PPM	OK			EW-64
138	203.0 PPM	OK			EW-63
139	5.8 PPM	OK			EW-42
140	17.0 PPM	OK			EW-76

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 12, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
141	6.8 PPM	OK			TP-9
142	3.0 PPM	OK			EW-62
143	4.6 PPM	OK			EW-74
144	5.4 PPM	OK			EW-32R
145	2.1 PPM	OK			EW-69
146	2.1 PPM	OK			EW-71
147	1.6 PPM	OK			EW-72
148	3.2 PPM	OK			EW-73
149	9.0 PPM	OK			EW-78
150	368.0 PPM	OK			EW-82
151	2.0 PPM	OK			EW-36A
152	1.2 PPM	OK			EW-85
153	3.3 PPM	OK			EW-88
154	1.5 PPM	OK			EW-89
155	1.0 PPM	OK			EW-93
156	11.1 PPM	OK			EW-94
157	0.9 PPM	OK			EW-98
158	2.5 PPM	OK			EW-99
159	213.0 PPM	OK			EW-95
160	23.3 PPM	OK			EW-90
161	3.5 PPM	OK			EW-86
162	166.0 PPM	OK			EW-84
163	401.0 PPM	OK			EW-80
164	8.1 PPM	OK			EW-79
165	2367.0 PPM	HIGH_ALRM	36.60072	-82.14819	EW-77
166	2939.0 PPM	HIGH_ALRM	36.60105	-82.14831	EW-33B
167	369.0 PPM	OK			EW-75

Number of locations sampled:	167
Number of exceedance locations:	3

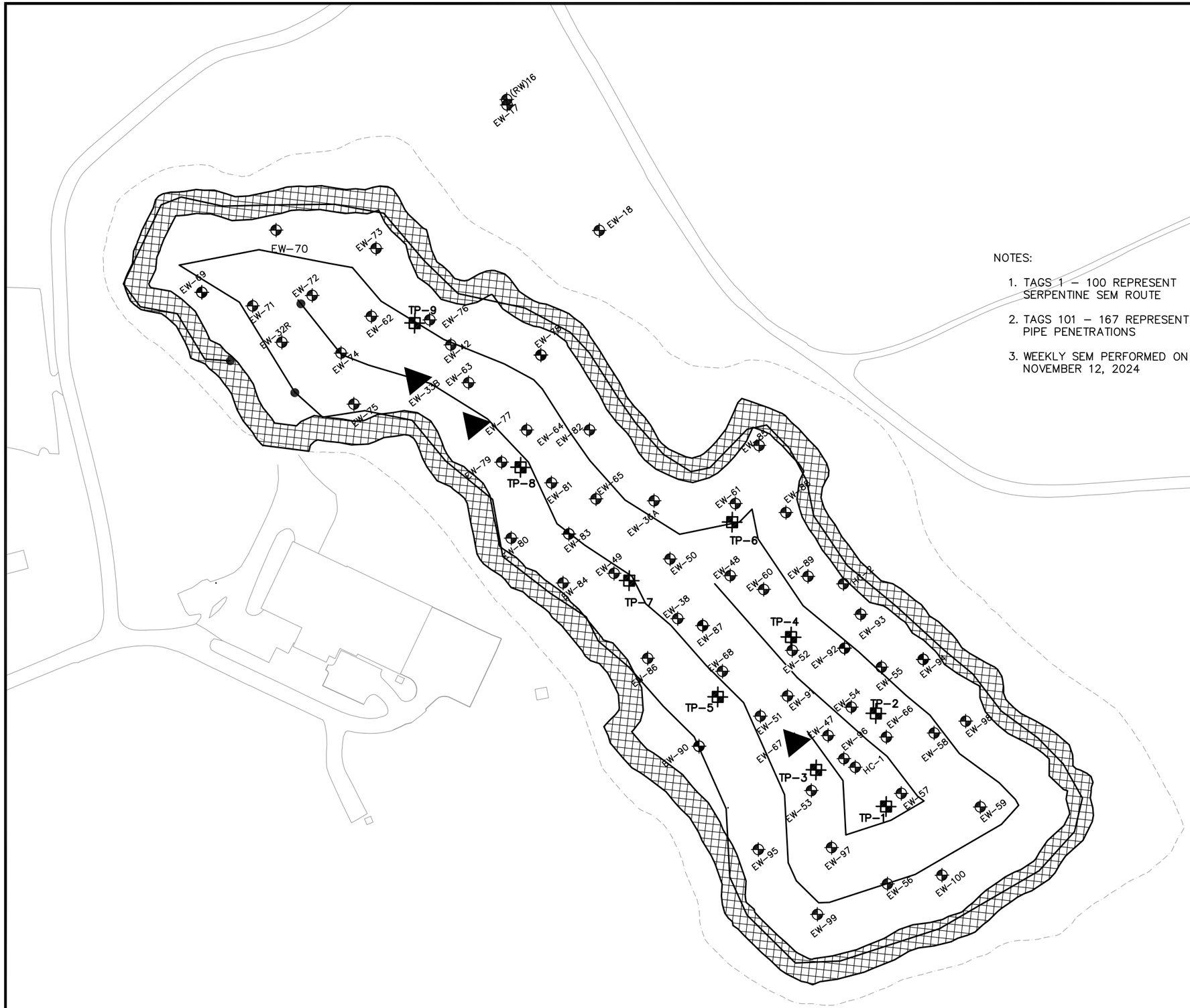
NOTES:
Points 1 through 100 represent serpentine SEM route.
Points 101 through 167 represent SEM at Pipe Penetrations
Weather Conditions: Sunny, 64°F Wind: 7 MPH NW

Sampling Calibration: Methane - 500 ppm, Zero Air - 0.0 ppm

11/12/2024	11:46	ZERO	0.4	PPM
11/12/2024	11:48	SPAN	502.0	PPM

Background Reading:

11/12/2024	11:51	Upwind	2.6	PPM
11/12/2024	11:56	Downwind	3.1	PPM



NOTES:

1. TAGS 1 – 100 REPRESENT SERPENTINE SEM ROUTE
2. TAGS 101 – 167 REPRESENT SEM AT PIPE PENETRATIONS
3. WEEKLY SEM PERFORMED ON NOVEMBER 12, 2024

0 80 160 240
SCALE IN FEET

N

LEGEND

- SEM ROUTE
- GAS WELL
- TEMPERATURE PROBE
- 79 EXCEEDANCE LOCATION
- 75 MONITORING ROUTE ENDPOINT

NO.	REVISION	DATE

SHEET TITLE
SEM ROUTE WITH BUFFER AREA

PROJECT TITLE
SURFACE EMISSIONS MONITORING
SOLID WASTE PERMIT #588

CLIENT
CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7433

PROJ. NO. 02218208.04
DSN. BY:
DWN. BY:
CHK. BY:
QA/QC BY:
APP. BY:

FILE: 02218208.04
DATE: 11/12/24
SCALE: AS SHOWN
DRAWING NO. 1 of 1

December 4, 2024
File No. 02218208.04

Mr. Jonathan Chapman
Enforcement Specialist
Virginia Department of Environmental Quality
SW Regional Office
355-A Deadmore Street
Abingdon, VA 24210

Subject: Weekly Surface Emissions Monitoring Event – November 26, 2024
Bristol Integrated Solid Waste Facility – Bristol, Virginia

Dear Mr. Chapman:

On behalf of the City of Bristol (City), SCS Engineers (SCS), is pleased to submit the results of the Weekly Surface Emissions Monitoring event performed at the Bristol Integrated Solid Waste Facility located in Bristol, Virginia on November 26, 2024. This Weekly Surface Emissions Monitoring (SEM) Event was performed in accordance with Appendix A.1.i of the Consent Decree between the Commonwealth of Virginia and the City of Bristol.

The monitoring generally conforms to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The monitoring route includes the entire waste footprint of the Permit No. 588 Landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector (FID) at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint, including at the temperature probes. The approximate monitoring route and sampling locations are presented in the attached Drawing.

At the time of monitoring, all areas of the Permit No. 588 Landfill footprint are subject to regulatory monitoring based on the regulatory time schedule stipulated in 40 CFR 63.1960(b) and 40 CFR 60.36f(b). The Permit No. 588 Landfill has a surface area of approximately 17.3 acres. Therefore, the minimum number of sampling points to cover the appropriate portion of the landfill footprint, utilizing a 30-meter grid interval, is approximately 82 (4.75 points per acre). A summary of the results of the surface emissions monitoring is provided in Table 1.

Table 1. Summary of Surface Emissions Monitoring

Description	Quantity
Number of Points Sampled	167
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	67
Number of Exceedances	7
Number of Serpentine Exceedances	0
Number of Pipe Penetration Exceedances	7

REMONITORING OF ONGOING EXCEEDANCES

In accordance with 40 CFR 63.1960(c)(4)(ii) and 40 CFR 60.36f(c)(4)(ii), corrective actions and a remonitoring event are to be performed within 10 days of the initial exceedance. In accordance with 40 CFR 63.1960(c)(4)(iii) and 40 CFR 60.36f(c)(4)(iii) additional corrective actions and a second 10-day retest are to be performed if the initial 10-day retest indicates methane values greater than the regulatory threshold. The Facility performs corrective actions, as necessary, including wellhead vacuum adjustments, the installation of well-bore seals, and addition of soil cover prior to weekly monitoring events at locations that previously exhibited elevated methane concentrations.

In accordance with 40 CFR 63.1960(c)(4)(v) and 40 CFR 60.36f(c)(4)(v) a new well or collection device must be installed or an alternate remedy must be submitted within 120 days at locations that continue to exhibit methane concentrations above the regulatory threshold for two consecutive re-tests.

On November 18, 2024, the City submitted an Alternate Remedy Request for corrective actions for exceedances at nine specific locations. Details regarding the specific proposed corrective actions for each location are outlined in the letter request.

A summary of ongoing exceedance points is provided in Table 2.

Table 2. Ongoing Weekly SEM Exceedances

Point ID	Initial Exceedance Date	11/26/24 Event	11/26/24 Event Result	Comments
EW-77	8/1/24	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-33B	8/7/24	N/A	Passed	Alternate Remedy Requested – corrective actions have resolved exceedance
EW-67	9/9/24	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-82	10/16/24	N/A	Passed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-95	10/21/24	N/A	Passed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-54	11/5/24	N/A	Passed	Requires 1-Month Recheck

If you have questions or require additional information, please contact either of the undersigned.

Sincerely,

Wylie Hicklin

Wylie R Hicklin
Associate Staff Professional
SCS Engineers

Lucas S. Nachman

Lucas S. Nachman
Senior Project Professional
SCS Engineers

LSN/WRH

cc: Randall Eads, City of Bristol
Jonathan Hayes, City of Bristol
Laura Socia, City of Bristol
Susan “Tracey” Blalock, VDEQ

Encl. Surface Emissions Monitoring Results
Bristol SEM Route Drawing

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 26, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
1	1.6 PPM	OK			Start Serpentine Route
2	1.0 PPM	OK			
3	1.0 PPM	OK			
4	1.0 PPM	OK			
5	0.8 PPM	OK			
6	0.8 PPM	OK			
7	5.0 PPM	OK			
8	0.7 PPM	OK			
9	0.7 PPM	OK			
10	0.7 PPM	OK			
11	231.0 PPM	OK			
12	1.7 PPM	OK			
13	3.4 PPM	OK			
14	0.8 PPM	OK			
15	0.8 PPM	OK			
16	0.6 PPM	OK			
17	0.7 PPM	OK			
18	0.6 PPM	OK			
19	1.3 PPM	OK			
20	0.6 PPM	OK			
21	0.5 PPM	OK			
22	4.6 PPM	OK			
23	1.2 PPM	OK			
24	0.8 PPM	OK			
25	0.8 PPM	OK			
26	0.8 PPM	OK			
27	2.9 PPM	OK			
28	1.8 PPM	OK			
29	2.3 PPM	OK			
30	117.0 PPM	OK			
31	115.0 PPM	OK			
32	71.6 PPM	OK			
33	134.0 PPM	OK			
34	1.5 PPM	OK			
35	1.9 PPM	OK			
36	0.3 PPM	OK			
37	14.0 PPM	OK			
38	2.6 PPM	OK			
39	3.8 PPM	OK			
40	19.3 PPM	OK			
41	5.6 PPM	OK			
42	0.3 PPM	OK			
43	0.3 PPM	OK			
44	0.1 PPM	OK			
45	0.1 PPM	OK			
46	0.0 PPM	OK			
47	0.0 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 26, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
48	0.1 PPM	OK			
49	0.0 PPM	OK			
50	0.0 PPM	OK			
51	0.2 PPM	OK			
52	0.1 PPM	OK			
53	0.0 PPM	OK			
54	0.2 PPM	OK			
55	0.5 PPM	OK			
56	12.5 PPM	OK			
57	1.4 PPM	OK			
58	6.0 PPM	OK			
59	1.2 PPM	OK			
60	0.7 PPM	OK			
61	3.7 PPM	OK			
62	0.8 PPM	OK			
63	0.5 PPM	OK			
64	0.3 PPM	OK			
65	0.2 PPM	OK			
66	0.9 PPM	OK			
67	2.9 PPM	OK			
68	10.7 PPM	OK			
69	24.0 PPM	OK			
70	19.7 PPM	OK			
71	109.0 PPM	OK			
72	163.0 PPM	OK			
73	172.0 PPM	OK			
74	10.7 PPM	OK			
75	2.4 PPM	OK			
76	1.8 PPM	OK			
77	0.4 PPM	OK			
78	1.1 PPM	OK			
79	0.8 PPM	OK			
80	2.2 PPM	OK			
81	5.1 PPM	OK			
82	0.4 PPM	OK			
83	2.6 PPM	OK			
84	1.7 PPM	OK			
85	2.0 PPM	OK			
86	1.5 PPM	OK			
87	0.9 PPM	OK			
88	1.2 PPM	OK			
89	0.0 PPM	OK			
90	0.0 PPM	OK			
91	12.2 PPM	OK			
92	18.8 PPM	OK			
93	2.0 PPM	OK			
94	0.2 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 26, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
95	2.2 PPM	OK			
96	14.9 PPM	OK			
97	0.3 PPM	OK			
98	7.4 PPM	OK			
99	0.0 PPM	OK			
100	0.0 PPM	OK			End Serpentine Route
101	0.0 PPM	OK			EW-69
102	0.0 PPM	OK			EW-71
103	0.0 PPM	OK			EW-72
104	0.0 PPM	OK			EW-62
105	0.0 PPM	OK			EW-74
106	0.0 PPM	OK			EW-32R
107	1960.0 PPM	HIGH_ALRM	36.60106	-82.14828	EW-75
108	0.4 PPM	OK			EW-33B
109	0.8 PPM	OK			EW-63
110	20500.0 PPM	HIGH_ALRM	36.60072	-82.14819	EW-77
111	6.0 PPM	OK			EW-64
112	3.4 PPM	OK			EW-79
113	4.2 PPM	OK			TP-8
114	2.1 PPM	OK			EW-81
115	50.8 PPM	OK			EW-80
116	56.0 PPM	OK			EW-83
117	5.8 PPM	OK			EW-65
118	305.0 PPM	OK			EW-84
119	3.9 PPM	OK			EW-49
120	2.4 PPM	OK			TP-7
121	2.0 PPM	OK			EW-50
122	1.1 PPM	OK			TP-6
123	1.0 PPM	OK			EW-61
124	0.7 PPM	OK			EW-85
125	1.7 PPM	OK			EW-88
126	2.9 PPM	OK			EW-89
127	0.8 PPM	OK			EW-60
128	0.2 PPM	OK			EW-48
129	4.0 PPM	OK			EW-87
130	3.1 PPM	OK			EW-38
131	1293.0 PPM	HIGH_ALRM	36.59937	-82.14819	EW-86
132	0.1 PPM	OK			TP-5
133	3.6 PPM	OK			EW-68
134	0.1 PPM	OK			EW-93
135	3.0 PPM	OK			EW-92
136	0.6 PPM	OK			EW-55
137	0.2 PPM	OK			EW-94
138	15.5 PPM	OK			EW-52
139	6.0 PPM	OK			TP-4
140	1.2 PPM	OK			EW-90

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 26, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
141	171.0 PPM	OK			EW-51
142	193.0 PPM	OK			EW-91
143	65.6 PPM	OK			EW-54
144	0.0 PPM	OK			TP-2
145	0.0 PPM	OK			EW-58
146	0.0 PPM	OK			EW-98
147	18.6 PPM	OK			EW-66
148	41.4 PPM	OK			EW-57
149	18.4 PPM	OK			TP-1
150	0.2 PPM	OK			EW-96
151	1.5 PPM	OK			EW-47
152	34000.0 PPM	HIGH_ALRM	36.59866	-82.14775	EW-67
153	3.8 PPM	OK			TP-3
154	40.5 PPM	OK			EW-53
155	44.8 PPM	OK			EW-95
156	7.7 PPM	OK			EW-97
157	11.2 PPM	OK			EW-99
158	2071.0 PPM	HIGH_ALRM	36.59787	-82.14786	EW-56
159	5.0 PPM	OK			EW-100
160	0.7 PPM	OK			EW-59
161	0.5 PPM	OK			EW-36A
162	41.6 PPM	OK			EW-82
163	1.2 PPM	OK			EW-78
164	3.1 PPM	OK			EW-42
165	5459.0 PPM	HIGH_ALRM	36.60124	-82.14803	EW-76
166	9434.0 PPM	HIGH_ALRM	36.60127	-82.14811	TP-9
167	0.5 PPM	OK			EW-73

Number of locations sampled:	167
Number of exceedance locations:	7

NOTES:
Points 1 through 100 represent serpentine SEM route.
Points 101 through 167 represent SEM at Pipe Penetrations
Weather Conditions: Partly Sunny, 53°F Wind: 5 MPH S

Sampling Calibration: Methane - 500 ppm, Zero Air - 0.0 ppm

11/26/2024	10:21	ZERO	0.0	PPM
11/26/2024	10:30	SPAN	502.0	PPM

Background Reading:

11/26/2024	10:31	Upwind	2.6	PPM
11/26/2024	10:37	Downwind	1.8	PPM

NOTES:

1. TAGS 1 – 100 REPRESENT SERPENTINE SEM ROUTE
2. TAGS 101 – 167 REPRESENT SEM AT PIPE PENETRATIONS
3. WEEKLY SEM PERFORMED ON NOVEMBER 26, 2024

0 80 160 240
SCALE IN FEET

LEGEND

- SEM ROUTE
- GAS WELL
- TEMPERATURE PROBE
- 79 EXCEEDANCE LOCATION
- 75 MONITORING ROUTE ENDPOINT

N

NO.	REVISION	DATE

SHEET TITLE
SEM ROUTE WITH BUFFER AREA

PROJECT TITLE
SURFACE EMISSIONS MONITORING
SOLID WASTE PERMIT #588

CLIENT
CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7433

PROJ. NO. 02218208.04
DSN. BY:
CHK. BY:
QA/QC BY:
APP. BY:

FILE: 02218208.04
DATE: 11/26/24
SCALE: AS SHOWN
DRAWING NO. 1 of 1

November 26, 2024
File No. 02218208.04

Mr. Jonathan Chapman
Enforcement Specialist
Virginia Department of Environmental Quality
SW Regional Office
355-A Deadmore Street
Abingdon, VA 24210

Subject: Weekly Surface Emissions Monitoring Event – November 19, 2024
Bristol Integrated Solid Waste Facility – Bristol, Virginia

Dear Mr. Chapman:

On behalf of the City of Bristol (City), SCS Engineers (SCS), is pleased to submit the results of the Weekly Surface Emissions Monitoring event performed at the Bristol Integrated Solid Waste Facility located in Bristol, Virginia on November 19, 2024. This Weekly Surface Emissions Monitoring (SEM) Event was performed in accordance with Appendix A.1.i of the Consent Decree between the Commonwealth of Virginia and the City of Bristol.

The monitoring generally conforms to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The monitoring route includes the entire waste footprint of the Permit No. 588 Landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector (FID) at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint, including at the temperature probes and the newly installed and connected gas extraction wells. The approximate monitoring route and sampling locations are presented in the attached Drawing.

At the time of monitoring, all areas of the Permit No. 588 Landfill footprint are subject to regulatory monitoring based on the regulatory time schedule stipulated in 40 CFR 63.1960(b) and 40 CFR 60.36f(b). The Permit No. 588 Landfill has a surface area of approximately 17.3 acres. Therefore, the minimum number of sampling points to cover the appropriate portion of the landfill footprint, utilizing a 30-meter grid interval, is approximately 82 (4.75 points per acre). A summary of the results of the surface emissions monitoring is provided in Table 1.

Table 1. Summary of Surface Emissions Monitoring

Description	Quantity
Number of Points Sampled	167
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	67
Number of Exceedances	4
Number of Serpentine Exceedances	0
Number of Pipe Penetration Exceedances	4

REMONITORING OF ONGOING EXCEEDANCES

In accordance with 40 CFR 63.1960(c)(4)(ii) and 40 CFR 60.36f(c)(4)(ii), corrective actions and a remonitoring event are to be performed within 10 days of the initial exceedance. In accordance with 40 CFR 63.1960(c)(4)(iii) and 40 CFR 60.36f(c)(4)(iii) additional corrective actions and a second 10-day retest are to be performed if the initial 10-day retest indicates methane values greater than the regulatory threshold. The Facility performs corrective actions, as necessary, including wellhead vacuum adjustments, the installation of well-bore seals, and addition of soil cover prior to weekly monitoring events at locations that previously exhibited elevated methane concentrations.

In accordance with 40 CFR 63.1960(c)(4)(v) and 40 CFR 60.36f(c)(4)(v) a new well or collection device must be installed or an alternate remedy must be submitted within 120 days at locations that continue to exhibit methane concentrations above the regulatory threshold for two consecutive re-tests.

On November 18, 2024, the City submitted an Alternate Remedy Request for corrective actions for exceedances at nine specific locations. Details regarding the specific proposed corrective actions for each location are outlined in the letter request.

A summary of ongoing exceedance points is provided in Table 2.

Table 2. Ongoing Weekly SEM Exceedances

Point ID	Initial Exceedance Date	11/19/24 Event	11/19/24 Event Result	Comments
EW-77	8/1/24	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-33B	8/7/24	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-67	9/9/24	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-82	10/16/24	N/A	Passed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-95	10/21/24	1-Month Recheck	Failed	Subject to 40 CFR 63.1960(c)(4)(v)
EW-54	11/5/24	N/A	Passed	Requires 1-Month Recheck

If you have questions or require additional information, please contact either of the undersigned.

Sincerely,

William J. Fabrie

Lucas S. Nachman

William J. Fabrie
Staff Professional
SCS Engineers

Lucas S. Nachman
Senior Project Professional
SCS Engineers

LSN/WJF

cc: Randall Eads, City of Bristol
Jonathan Hayes, City of Bristol
Laura Socia, City of Bristol
Susan “Tracey” Blalock, VDEQ

Encl. Surface Emissions Monitoring Results
Bristol SEM Route Drawing

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 19, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
1	2.6 PPM	OK			Start Serpentine Route
2	224.0 PPM	OK			
3	4.6 PPM	OK			
4	2.7 PPM	OK			
5	3.3 PPM	OK			
6	2.2 PPM	OK			
7	2.2 PPM	OK			
8	2.3 PPM	OK			
9	2.6 PPM	OK			
10	2.7 PPM	OK			
11	2.9 PPM	OK			
12	3.2 PPM	OK			
13	14.4 PPM	OK			
14	10.5 PPM	OK			
15	20.6 PPM	OK			
16	7.7 PPM	OK			
17	7.8 PPM	OK			
18	6.4 PPM	OK			
19	6.3 PPM	OK			
20	6.0 PPM	OK			
21	6.5 PPM	OK			
22	8.5 PPM	OK			
23	9.3 PPM	OK			
24	28.5 PPM	OK			
25	12.5 PPM	OK			
26	7.4 PPM	OK			
27	6.6 PPM	OK			
28	8.7 PPM	OK			
29	4.6 PPM	OK			
30	35.2 PPM	OK			
31	8.4 PPM	OK			
32	192.0 PPM	OK			
33	7.2 PPM	OK			
34	277.0 PPM	OK			
35	78.5 PPM	OK			
36	398.0 PPM	OK			
37	61.8 PPM	OK			
38	84.5 PPM	OK			
39	8.7 PPM	OK			
40	72.2 PPM	OK			
41	163.0 PPM	OK			
42	3.6 PPM	OK			
43	6.5 PPM	OK			
44	18.8 PPM	OK			
45	40.7 PPM	OK			
46	13.7 PPM	OK			
47	392.0 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 19, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
48	197.0 PPM	OK			
49	162.0 PPM	OK			
50	209.0 PPM	OK			
51	146.0 PPM	OK			
52	20.9 PPM	OK			
53	7.8 PPM	OK			
54	7.3 PPM	OK			
55	3.6 PPM	OK			
56	8.4 PPM	OK			
57	3.3 PPM	OK			
58	5.2 PPM	OK			
59	4.7 PPM	OK			
60	3.7 PPM	OK			
61	5.4 PPM	OK			
62	4.9 PPM	OK			
63	4.9 PPM	OK			
64	19.8 PPM	OK			
65	38.6 PPM	OK			
66	7.6 PPM	OK			
67	6.7 PPM	OK			
68	6.1 PPM	OK			
69	5.6 PPM	OK			
70	12.3 PPM	OK			
71	64.1 PPM	OK			
72	27.3 PPM	OK			
73	5.4 PPM	OK			
74	6.9 PPM	OK			
75	50.8 PPM	OK			
76	12.0 PPM	OK			
77	7.9 PPM	OK			
78	3.3 PPM	OK			
79	52.4 PPM	OK			
80	17.0 PPM	OK			
81	41.6 PPM	OK			
82	44.7 PPM	OK			
83	84.9 PPM	OK			
84	81.2 PPM	OK			
85	34.9 PPM	OK			
86	8.2 PPM	OK			
87	3.2 PPM	OK			
88	6.0 PPM	OK			
89	4.3 PPM	OK			
90	5.3 PPM	OK			
91	1.7 PPM	OK			
92	18.3 PPM	OK			
93	60.1 PPM	OK			
94	76.9 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 19, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
95	11.6 PPM	OK			
96	6.0 PPM	OK			
97	3.7 PPM	OK			
98	3.0 PPM	OK			
99	1.6 PPM	OK			
100	6.5 PPM	OK			End Serpentine Route
101	310.0 PPM	OK			EW-52
102	11.1 PPM	OK			TP-4
103	5.2 PPM	OK			EW-60
104	6.6 PPM	OK			EW-48
105	18.0 PPM	OK			TP-6
106	9.5 PPM	OK			EW-61
107	9.4 PPM	OK			EW-50
108	12200.0 PPM	HIGH_ALRM	36.59866	-82.14775	EW-67
109	10.4 PPM	OK			EW-47
110	13.2 PPM	OK			EW-54
111	7.8 PPM	OK			EW-55
112	5.2 PPM	OK			EW-92
113	23.4 PPM	OK			EW-91
114	4.7 PPM	OK			EW-96
115	3.4 PPM	OK			TP-2
116	11.3 PPM	OK			EW-66
117	3.9 PPM	OK			EW-58
118	105.0 PPM	OK			EW-57
119	17.6 PPM	OK			TP-1
120	14.6 PPM	OK			EW-59
121	44.1 PPM	OK			EW-100
122	73.4 PPM	OK			EW-56
123	89.7 PPM	OK			EW-97
124	446.0 PPM	OK			EW-53
125	39.8 PPM	OK			TP-3
126	216.0 PPM	OK			EW-51
127	1.9 PPM	OK			TP-5
128	16.9 PPM	OK			EW-68
129	2.8 PPM	OK			EW-87
130	2.4 PPM	OK			EW-38
131	188.0 PPM	OK			TP-7
132	3.4 PPM	OK			EW-49
133	6.1 PPM	OK			EW-83
134	6.8 PPM	OK			EW-65
135	8.1 PPM	OK			EW-81
136	34.2 PPM	OK			TP-8
137	8.6 PPM	OK			EW-64
138	6.6 PPM	OK			EW-63
139	10.8 PPM	OK			EW-42
140	464.0 PPM	OK			EW-76

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - NOVEMBER 19, 2024
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates Lat.	Long.	Comments
141	161.0 PPM	OK			TP-9
142	1.3 PPM	OK			EW-62
143	1.3 PPM	OK			EW-74
144	1.7 PPM	OK			EW-32R
145	1.1 PPM	OK			EW-69
146	1.2 PPM	OK			EW-71
147	1.1 PPM	OK			EW-72
148	15.5 PPM	OK			EW-73
149	14.7 PPM	OK			EW-78
150	5.9 PPM	OK			EW-82
151	2.5 PPM	OK			EW-36A
152	2.8 PPM	OK			EW-85
153	7.7 PPM	OK			EW-88
154	15.3 PPM	OK			EW-89
155	8.2 PPM	OK			EW-93
156	15.4 PPM	OK			EW-94
157	8.2 PPM	OK			EW-98
158	33.7 PPM	OK			EW-99
159	728.0 PPM	HIGH_ALRM	36.59837	-82.14835	EW-95
160	177.0 PPM	OK			EW-90
161	8.1 PPM	OK			EW-86
162	83.4 PPM	OK			EW-84
163	280.0 PPM	OK			EW-80
164	17.9 PPM	OK			EW-79
165	6544.0 PPM	HIGH_ALRM	36.60072	-82.14819	EW-77
166	1410.0 PPM	HIGH_ALRM	36.60105	-82.14831	EW-33B
167	159.0 PPM	OK			EW-75

Number of locations sampled:	167
Number of exceedance locations:	4

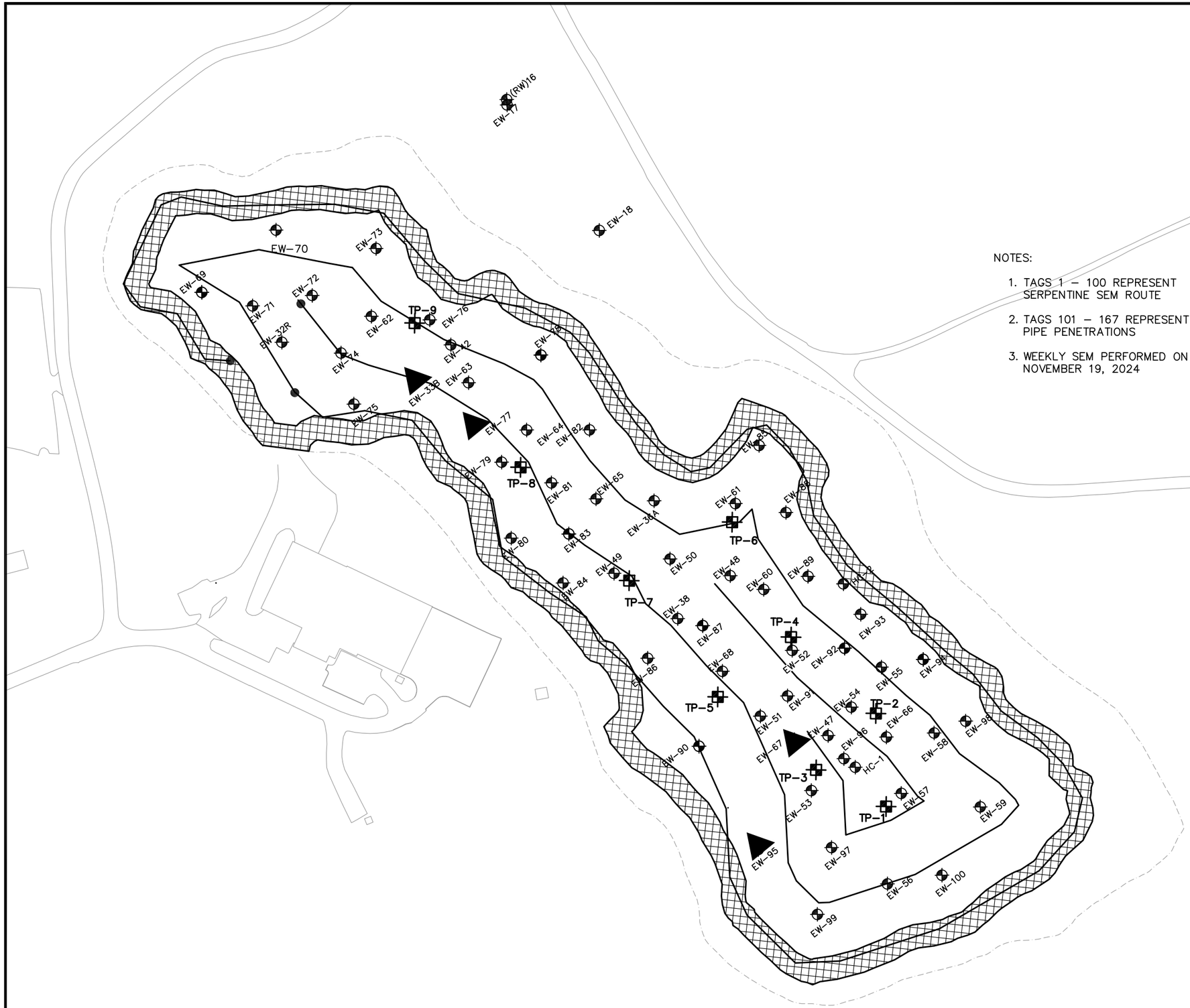
NOTES:
Points 1 through 100 represent serpentine SEM route.
Points 101 through 167 represent SEM at Pipe Penetrations
Weather Conditions: Sunny, 64°F Wind: 4 MPH NE

Sampling Calibration: Methane - 500 ppm, Zero Air - 0.0 ppm

11/19/2024	11:44	ZERO	0.3	PPM
11/19/2024	11:45	SPAN	501.0	PPM

Background Reading:

11/19/2024	11:48	Upwind	2.2	PPM
11/19/2024	11:52	Downwind	3.1	PPM



NOTES:

1. TAGS 1 – 100 REPRESENT SERPENTINE SEM ROUTE
2. TAGS 101 – 167 REPRESENT SEM AT PIPE PENETRATIONS
3. WEEKLY SEM PERFORMED ON NOVEMBER 19, 2024

0 80 160 240
SCALE IN FEET

N

LEGEND

- SEM ROUTE
- GAS WELL
- TEMPERATURE PROBE
- 79 EXCEEDANCE LOCATION
- 75 MONITORING ROUTE ENDPOINT

NO.	REVISION	DATE

SHEET TITLE
SEM ROUTE WITH BUFFER AREA

PROJECT TITLE
SURFACE EMISSIONS MONITORING
SOLID WASTE PERMIT #588

CLIENT
CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15821 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7433

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APP. BY:

FILE: 02218208.04
DATE: 11/19/24
SCALE: AS SHOWN
DRAWING NO. 1 of 1

Appendix B

In-Waste Temperatures on Select Days in November

Appendix B Figures

Figure B - 1 Average Temperatures Recorded by TP-1 on November 6, 2024

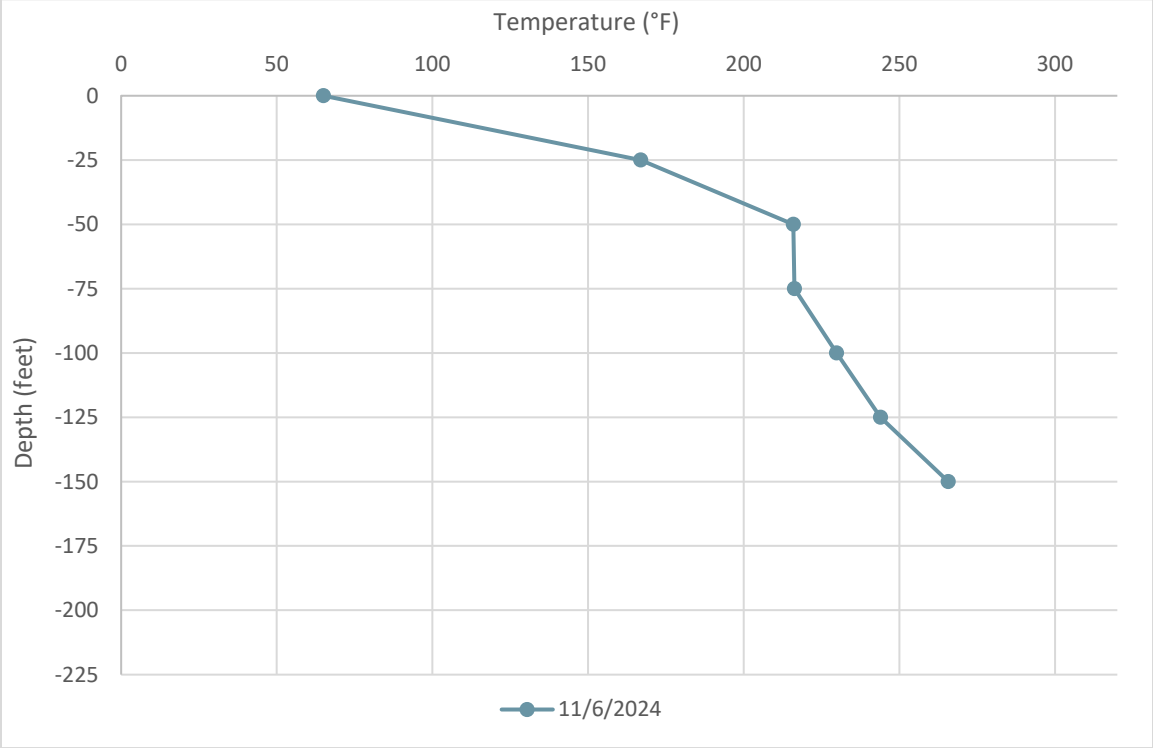


Figure B - 2 Average Temperatures Recorded by TP-1 on November 13, 2024

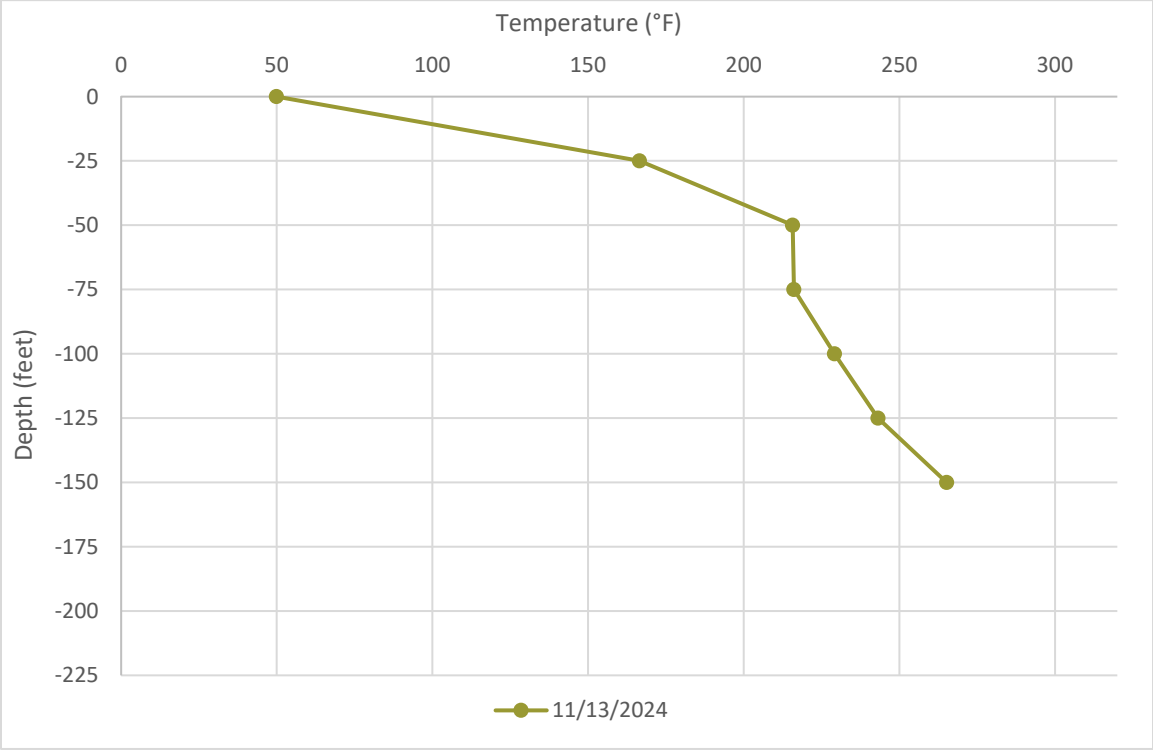


Figure B - 3 Average Temperatures Recorded by TP-1 on November 20, 2024

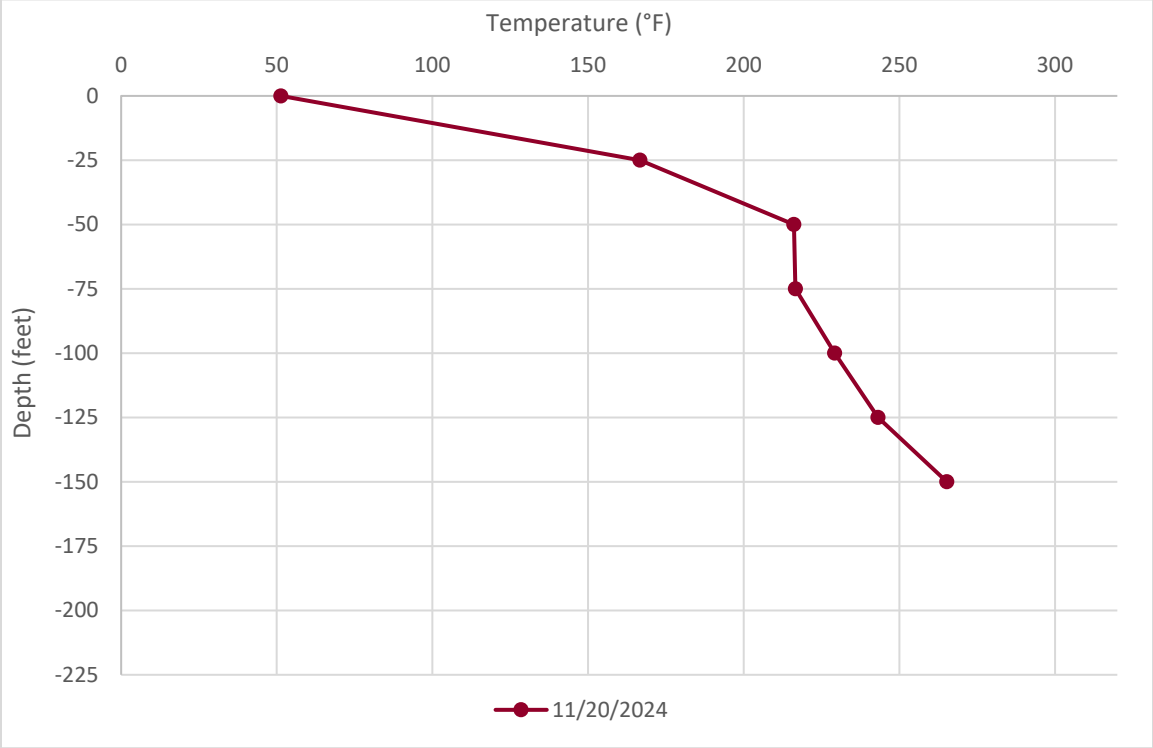


Figure B - 4 Average Temperatures Recorded by TP-1 on November 27, 2024

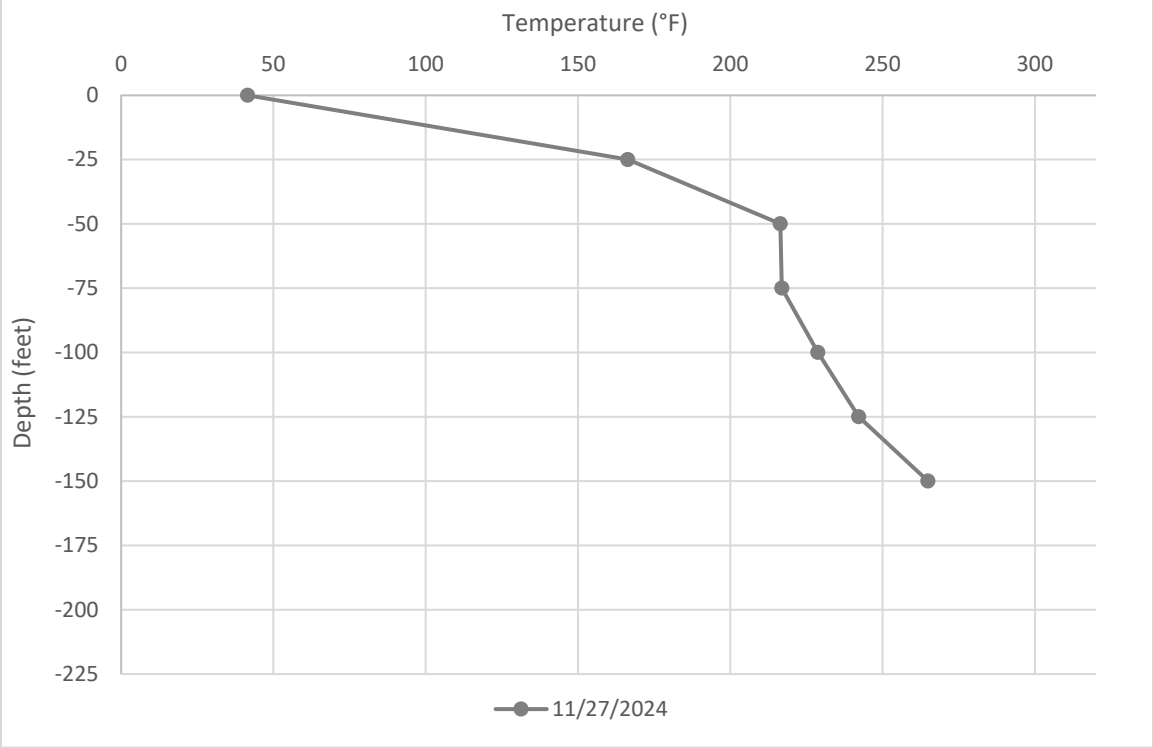


Figure B - 5 Average Temperatures Recorded by TP-2 on November 6, 2024

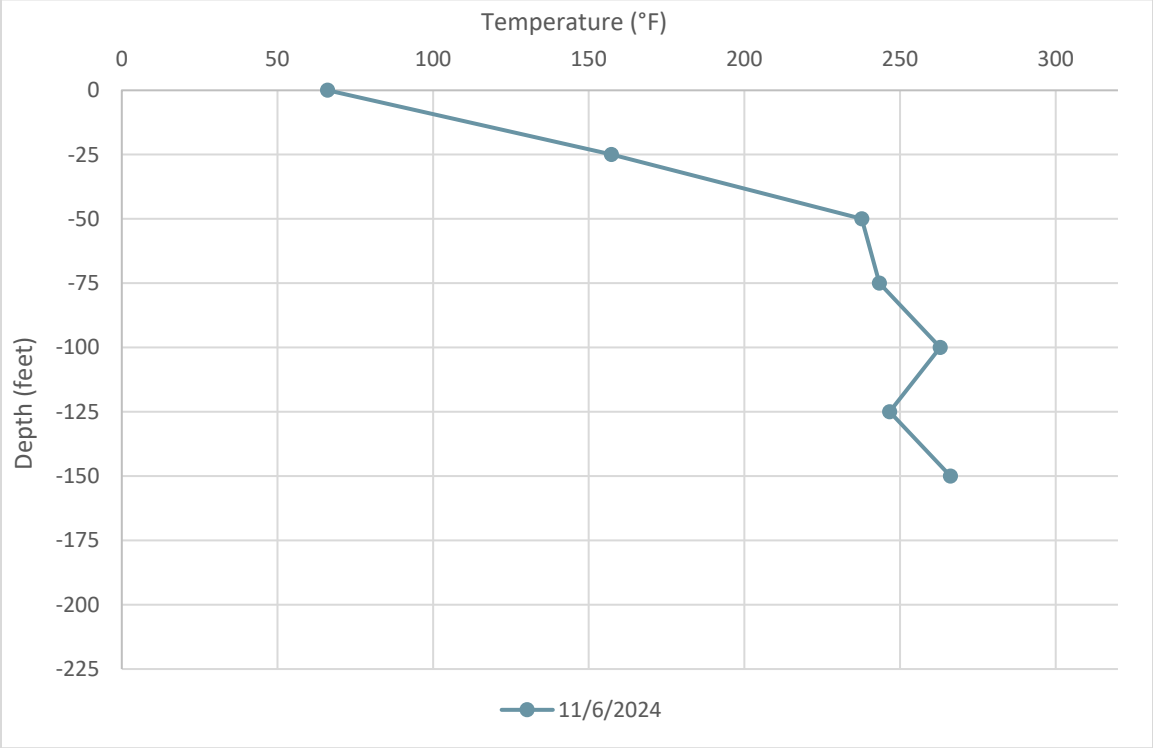


Figure B - 6 Average Temperatures Recorded by TP-2 on November 13, 2024

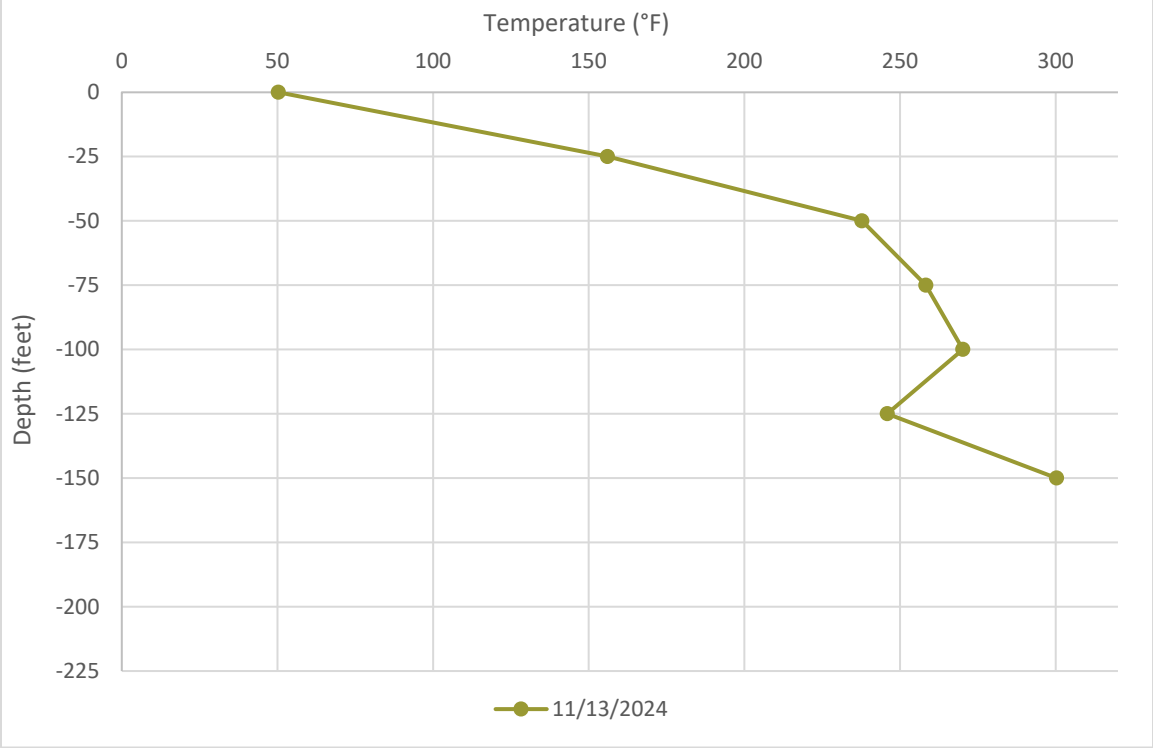


Figure B - 7 Average Temperatures Recorded by TP-2 on November 20, 2024

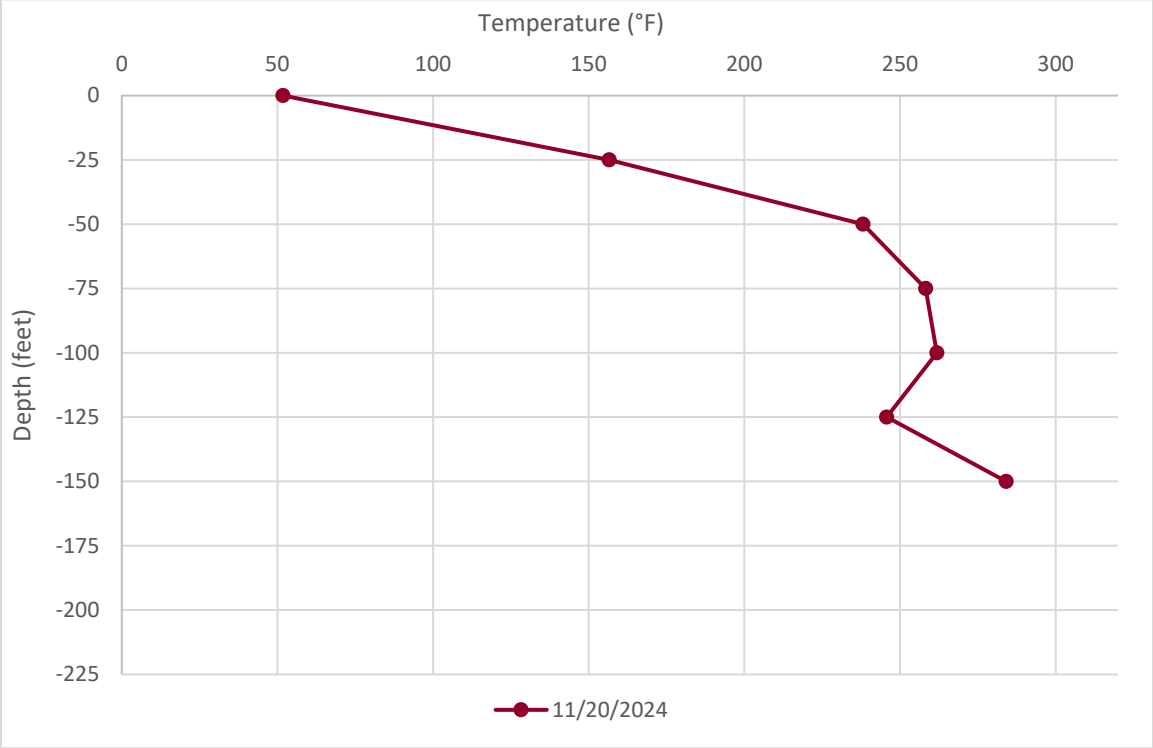


Figure B - 8 Average Temperatures Recorded by TP-2 on November 27, 2024

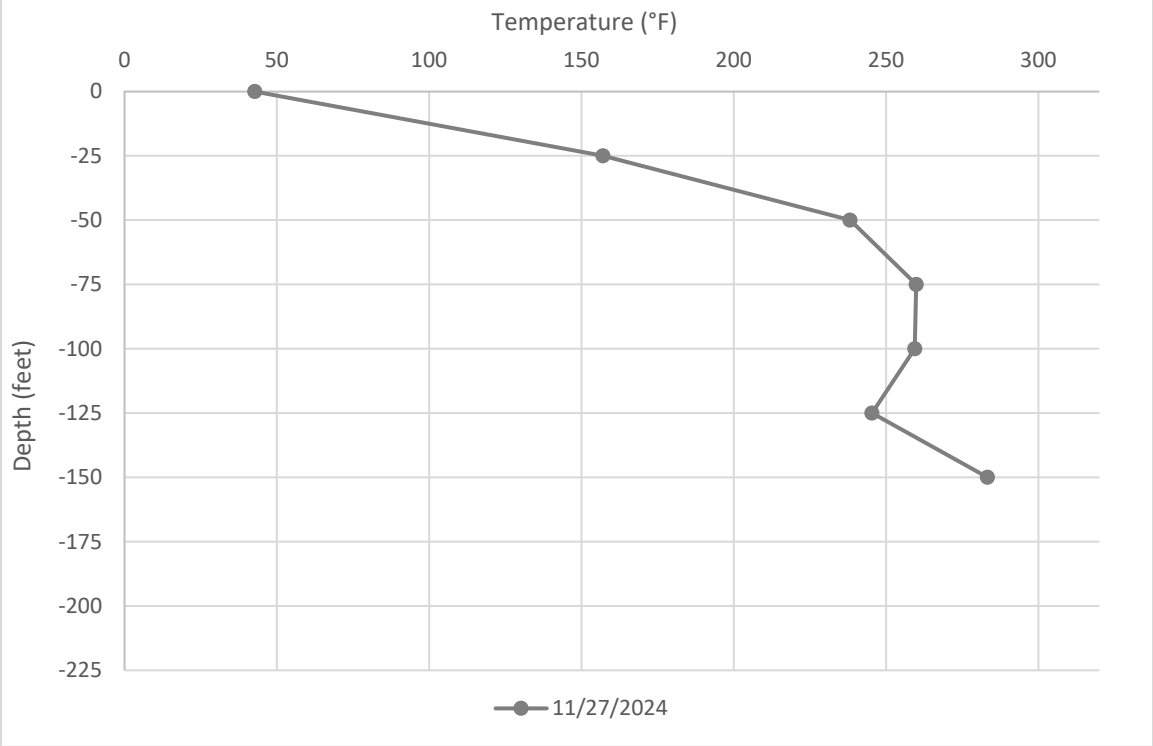


Figure B - 9 Average Temperatures Recorded by TP-3 on November 6, 2024

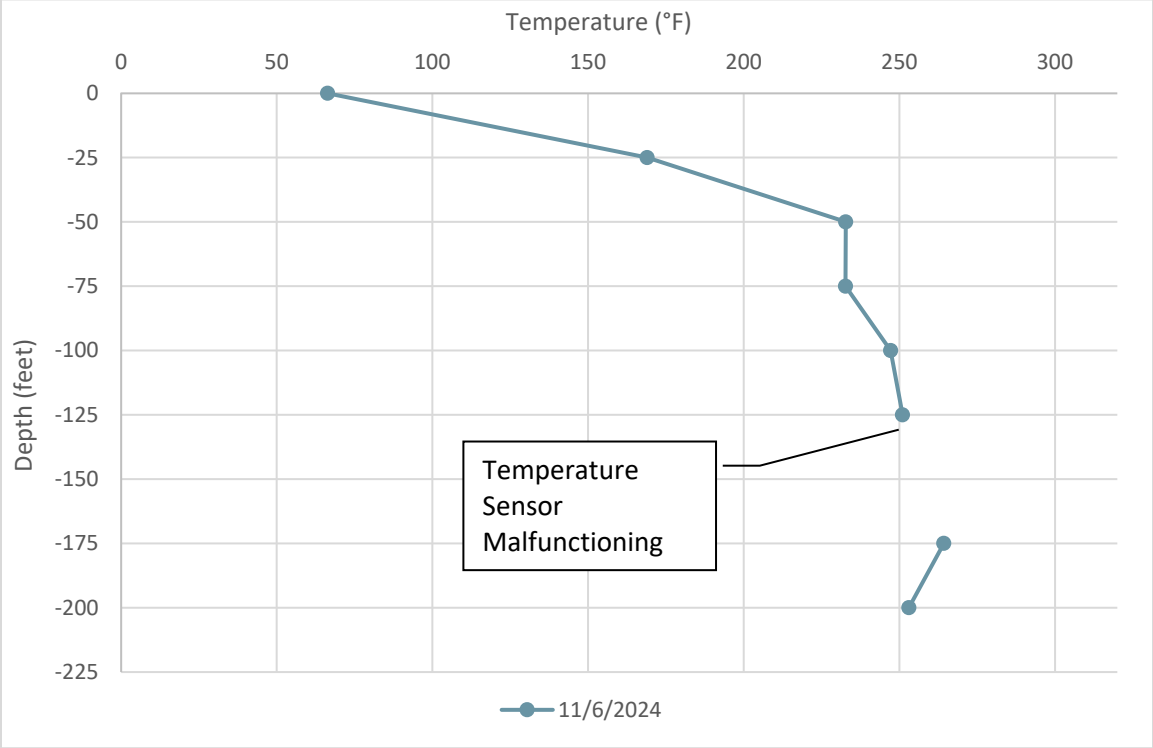


Figure B - 10 Average Temperatures Recorded by TP-3 on November 13, 2024

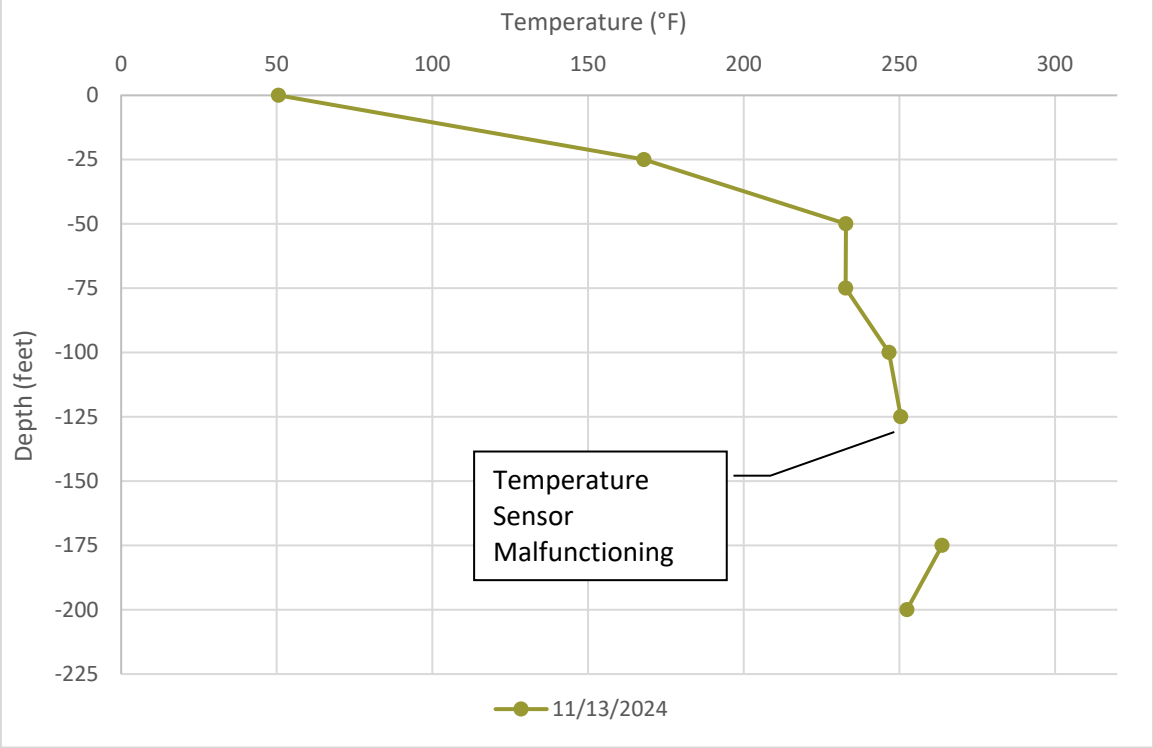


Figure B - 11 Average Temperatures Recorded by TP-3 on November 20, 2024

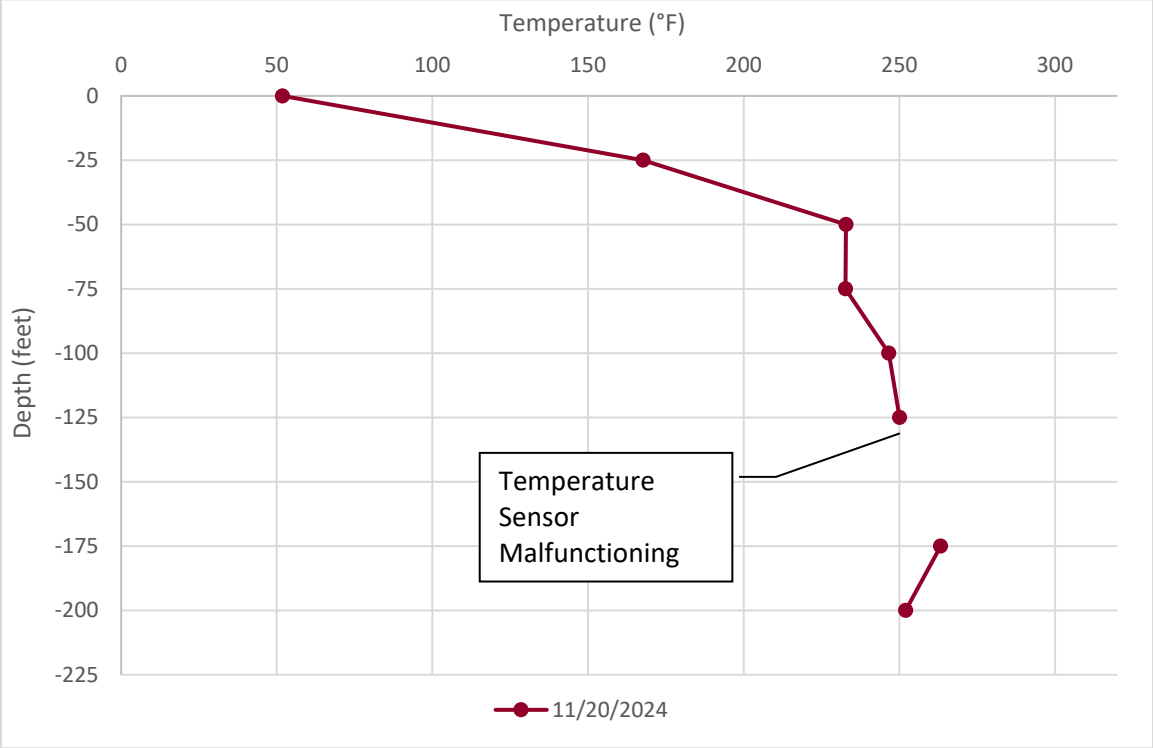


Figure B - 12 Average Temperatures Recorded by TP-3 on November 27, 2024

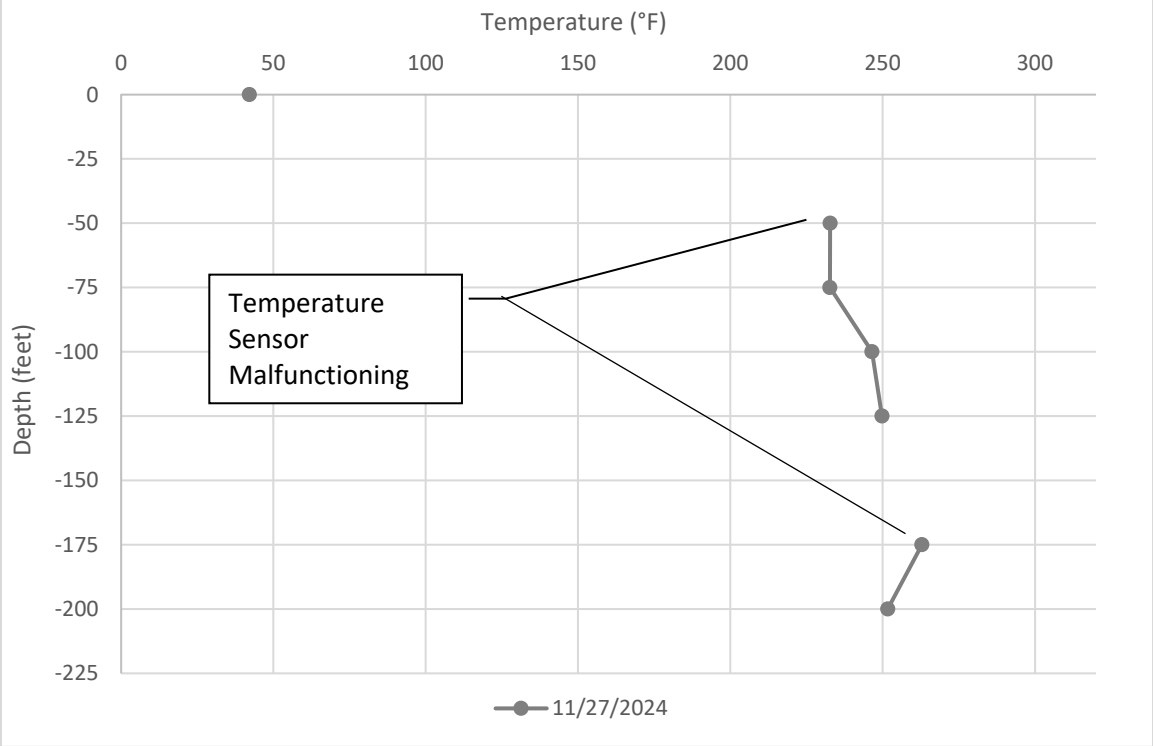


Figure B - 13 Average Temperatures Recorded by TP-4 on November 6, 2024

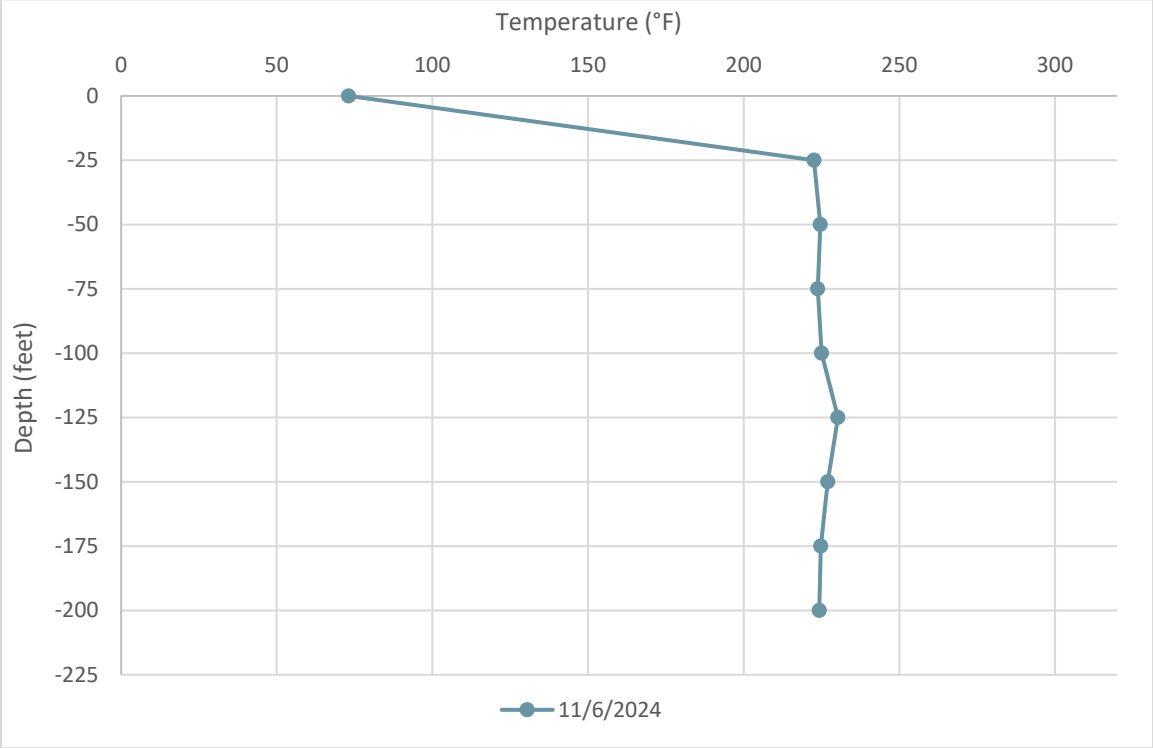


Figure B - 14 Average Temperatures Recorded by TP-4 on November 13, 2024

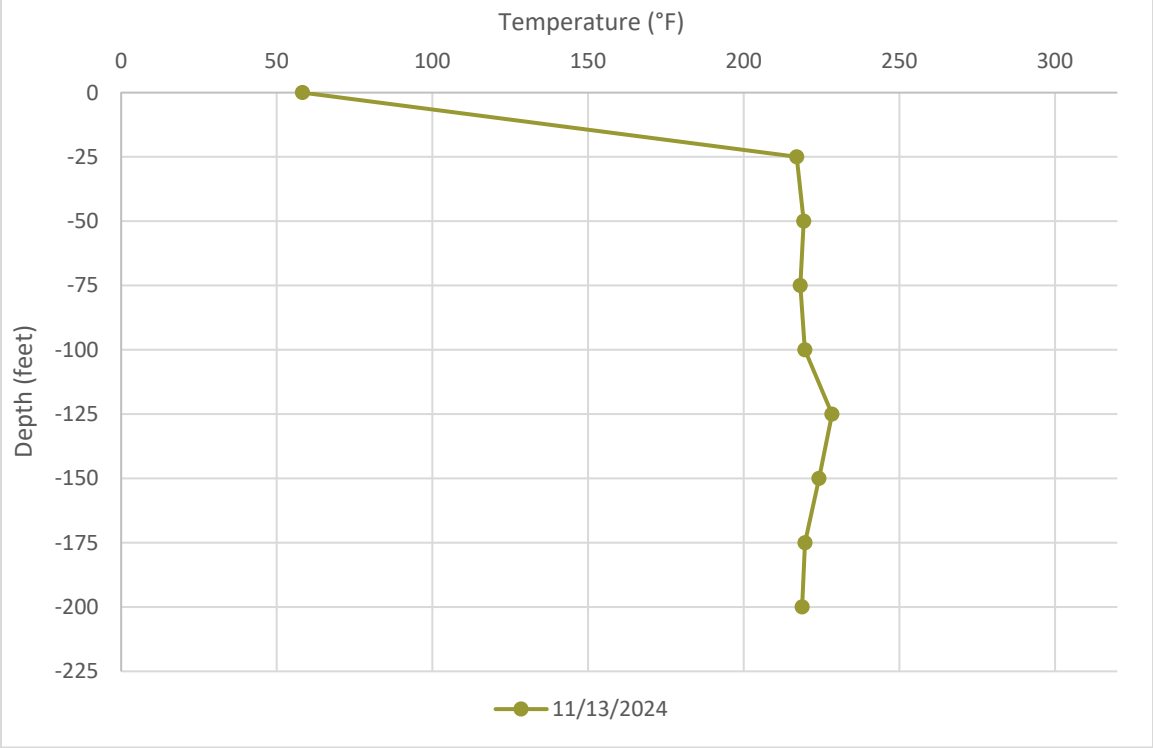


Figure B - 15 Average Temperatures Recorded by TP-4 on November 20, 2024

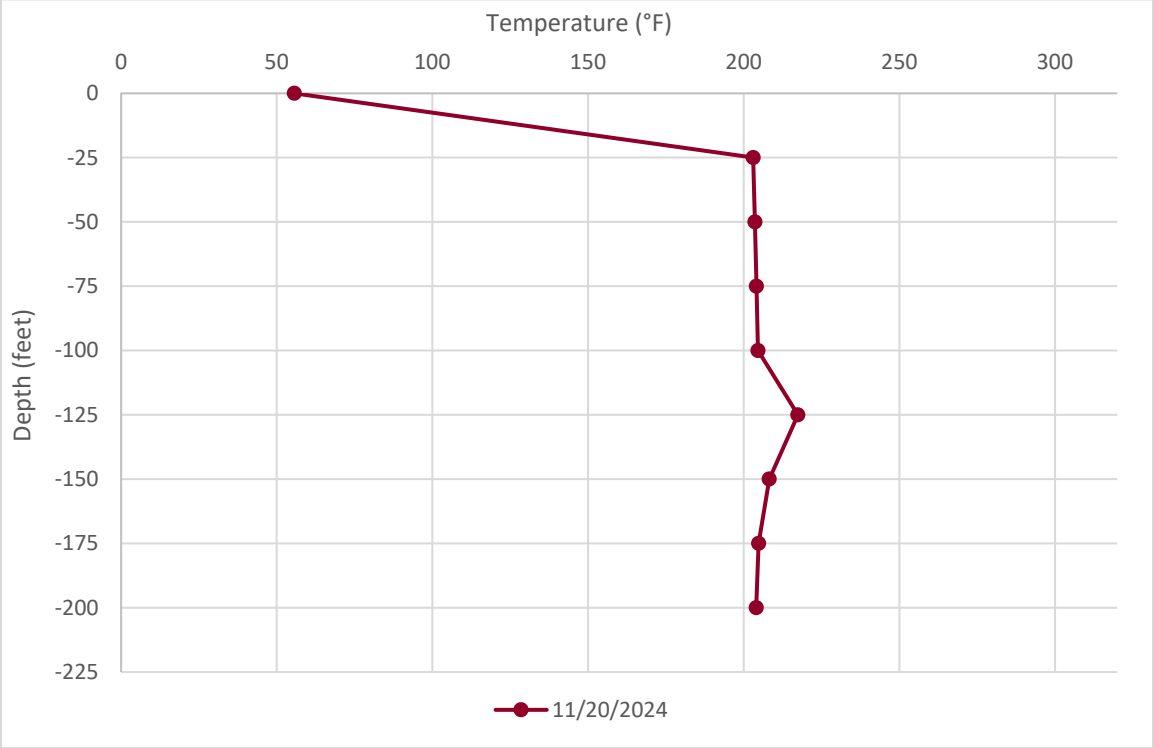


Figure B - 16 Average Temperatures Recorded by TP-5 on November 6, 2024

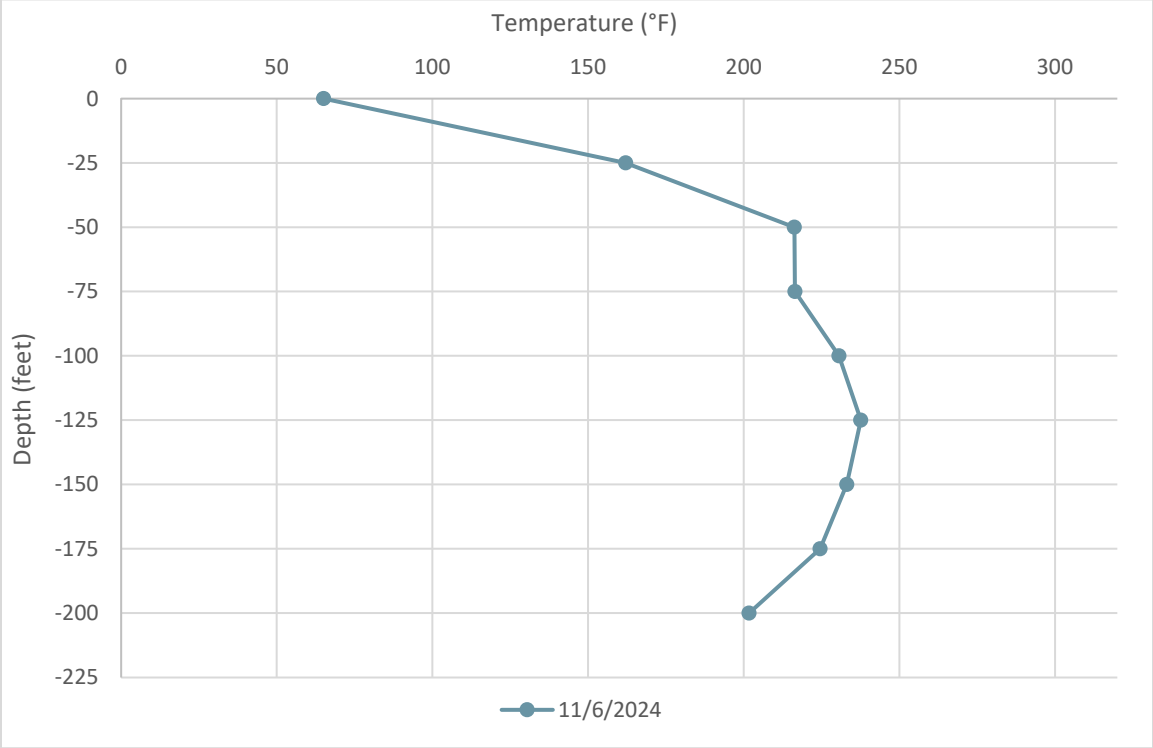


Figure B - 17 Average Temperatures Recorded by TP-5 on November 13, 2024

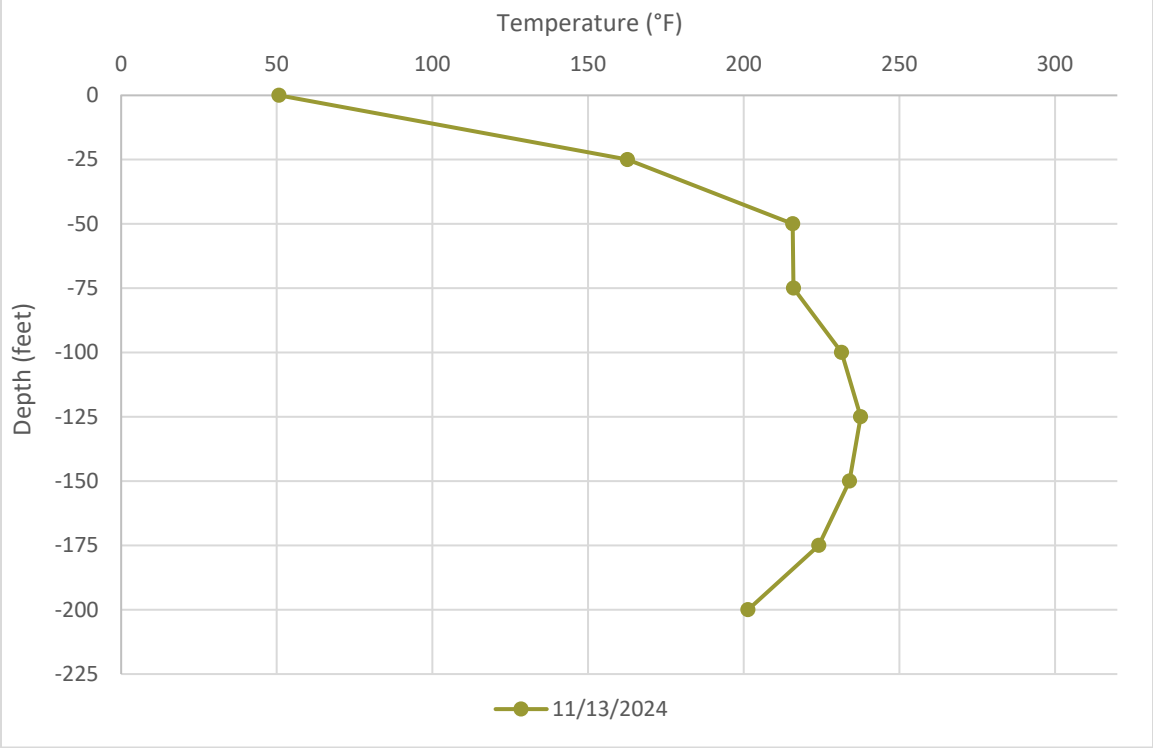


Figure B - 18 Average Temperatures Recorded by TP-5 on November 20, 2024

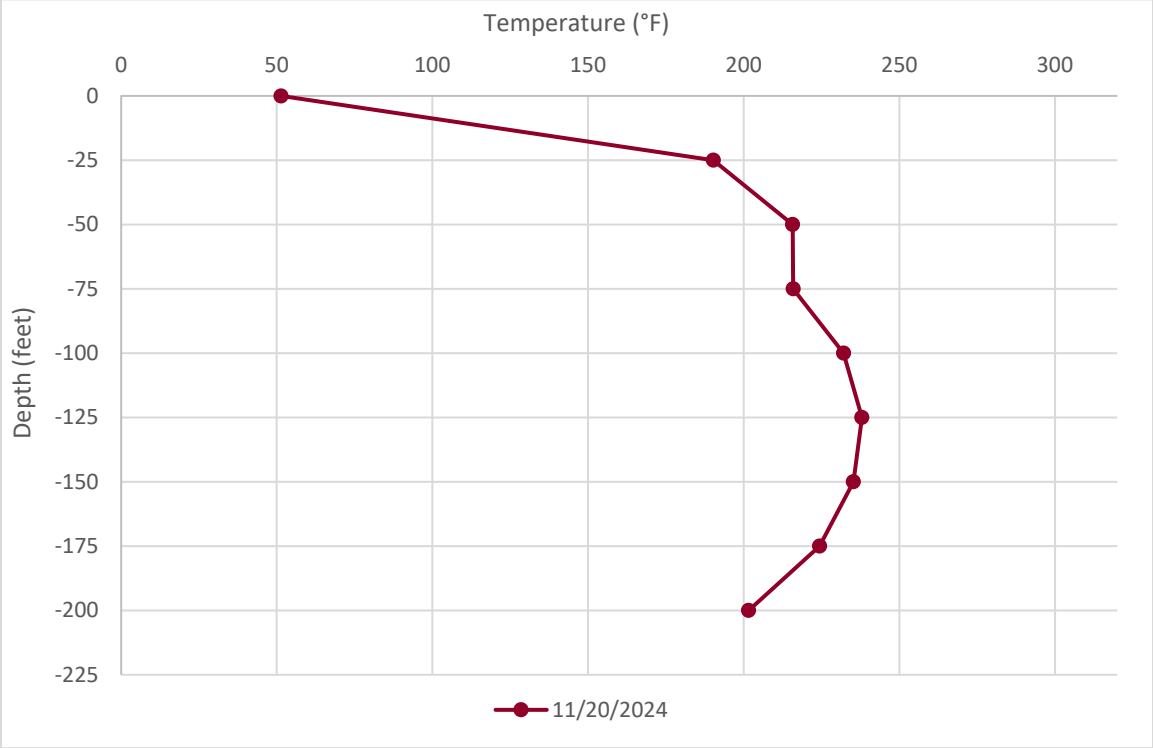


Figure B - 19 Average Temperatures Recorded by TP-5 on November 27, 2024

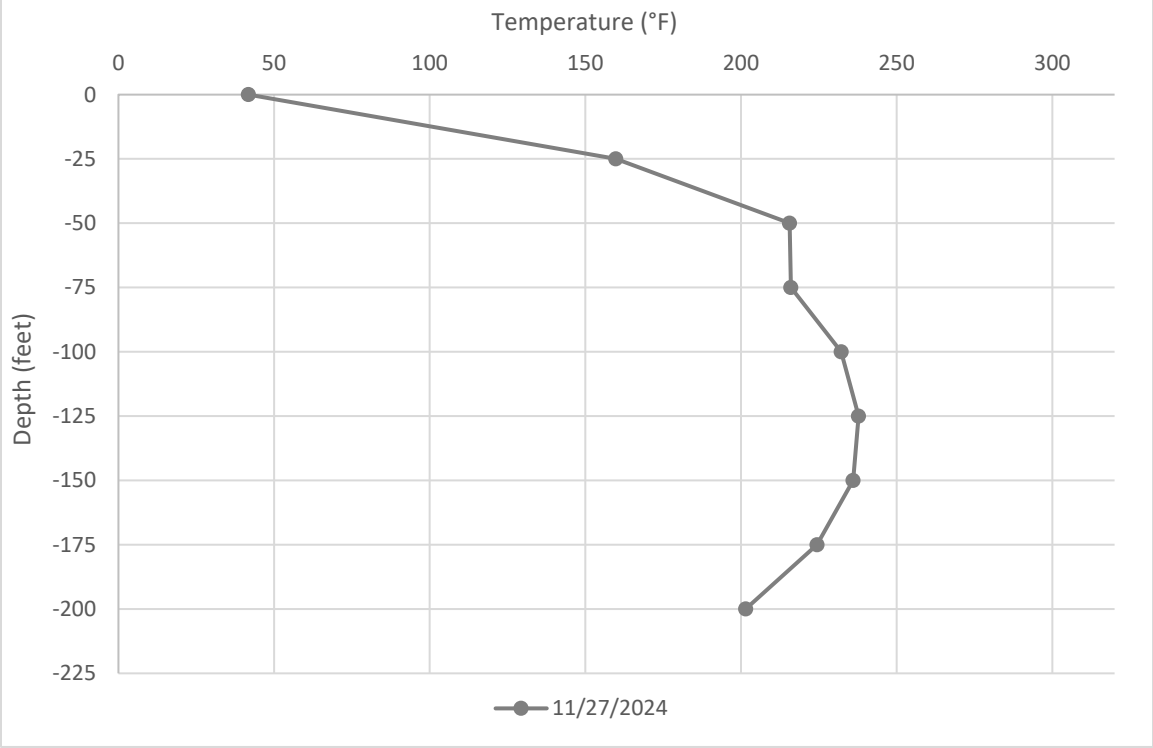


Figure B - 20 Average Temperatures Recorded by TP-6 on November 6, 2024

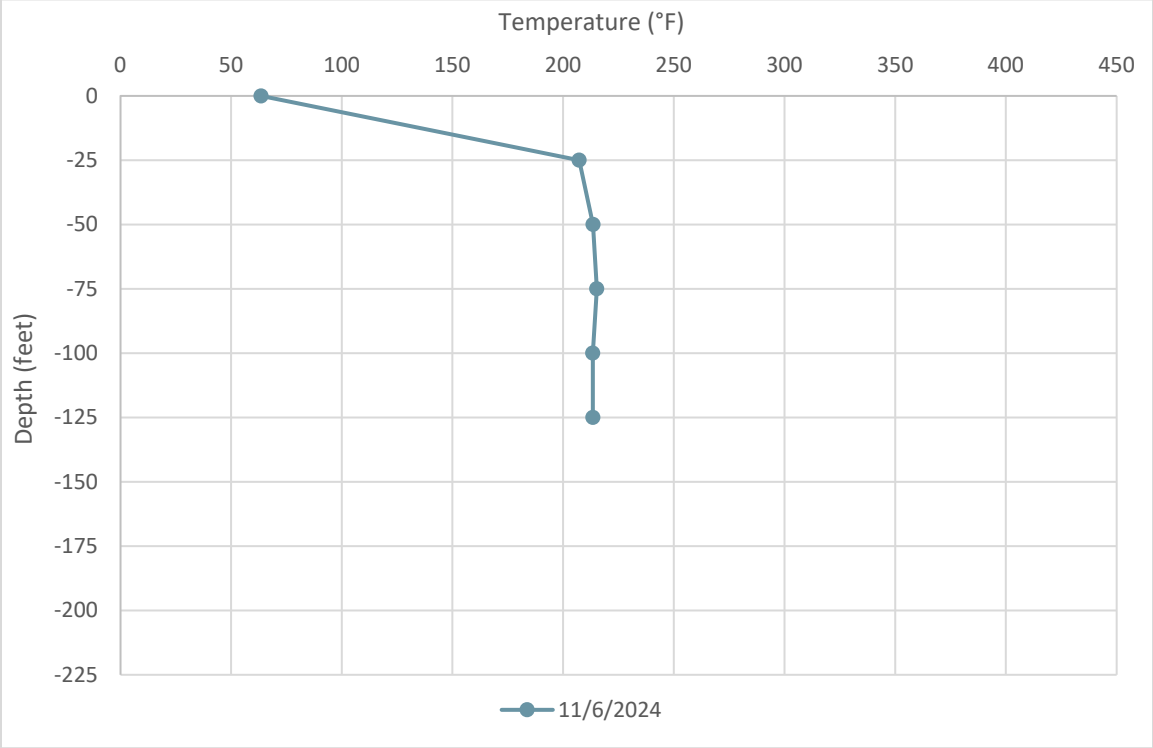


Figure B - 21 Average Temperatures Recorded by TP-6 on November 13, 2024

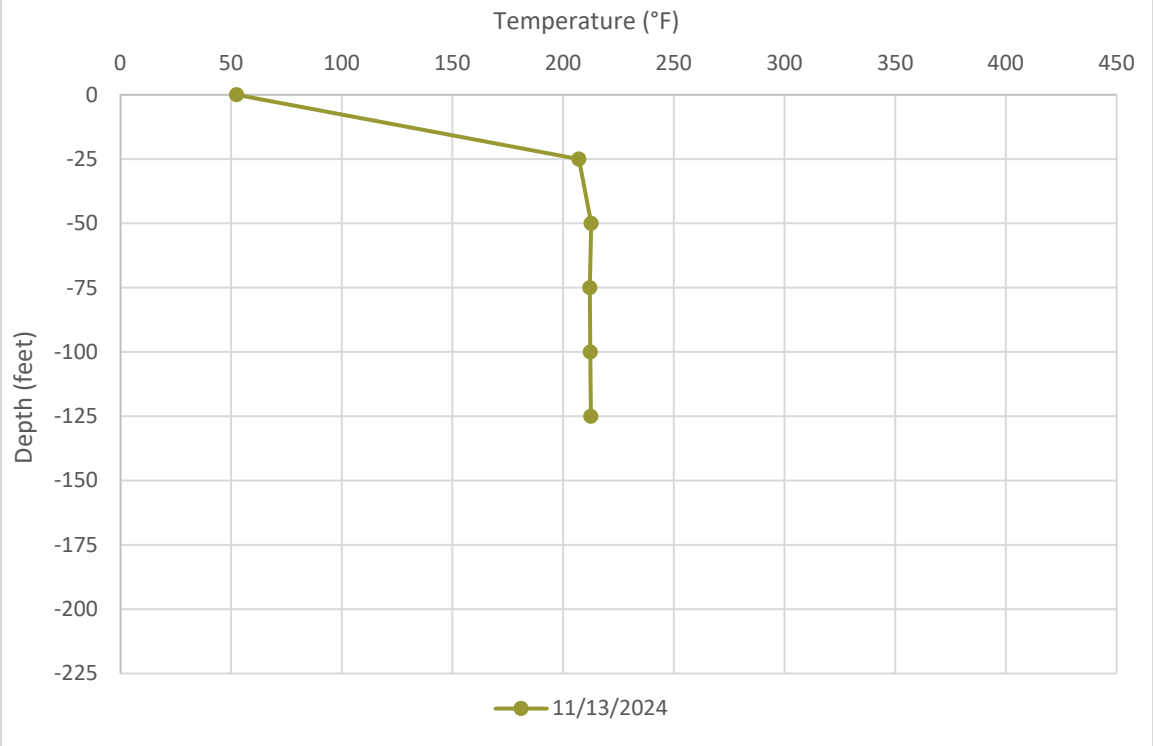


Figure B - 22 Average Temperatures Recorded by TP-6 on November 20, 2024

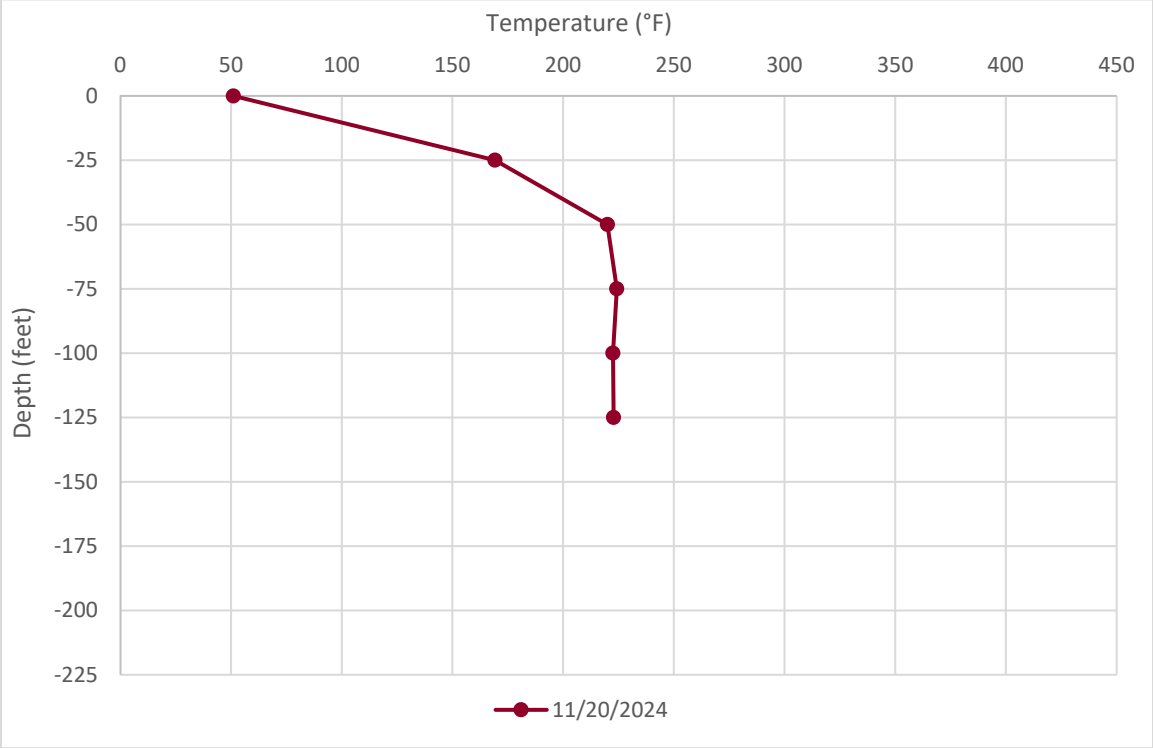


Figure B - 23 Average Temperatures Recorded by TP-6 on November 27, 2024

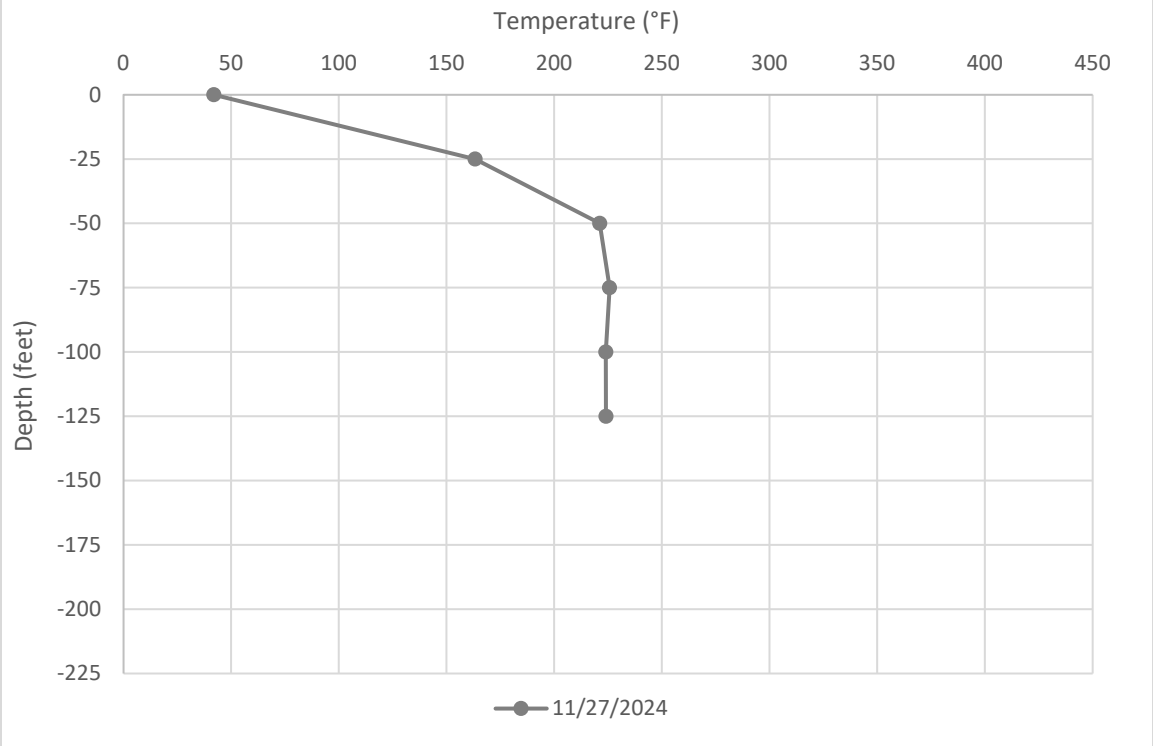


Figure B - 24 Average Temperatures Recorded by TP-7 on November 6, 2024

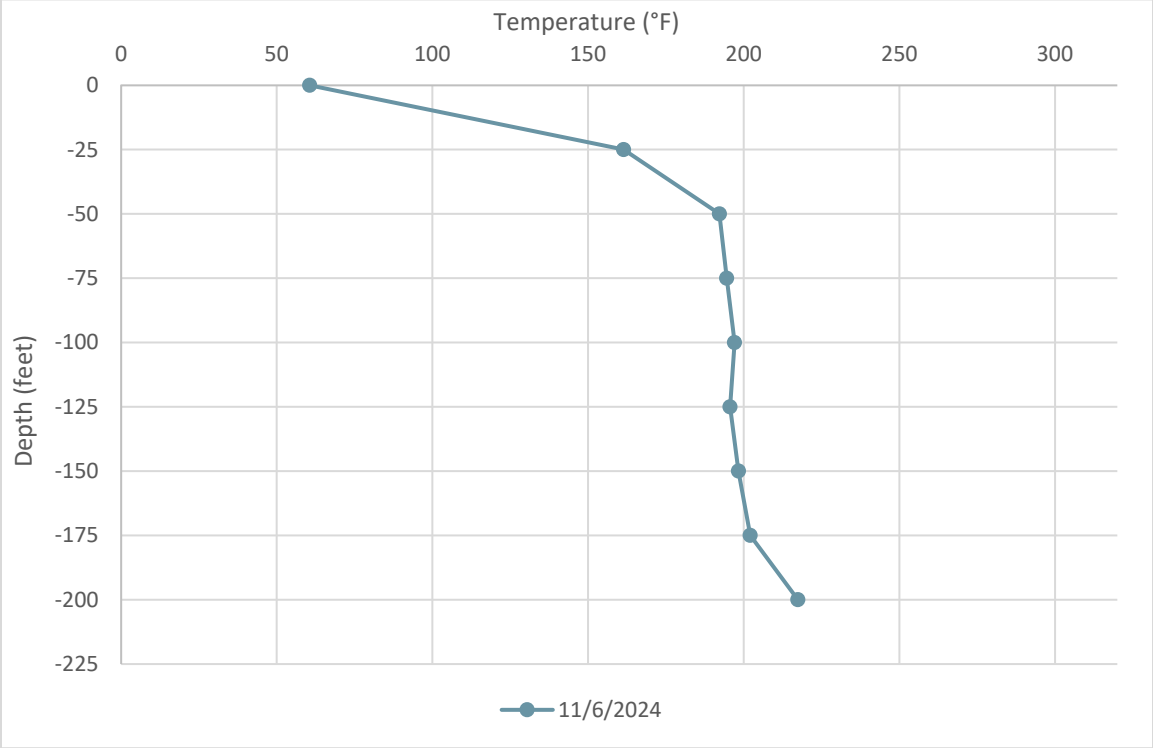


Figure B - 25 Average Temperatures Recorded by TP-7 on November 13, 2024

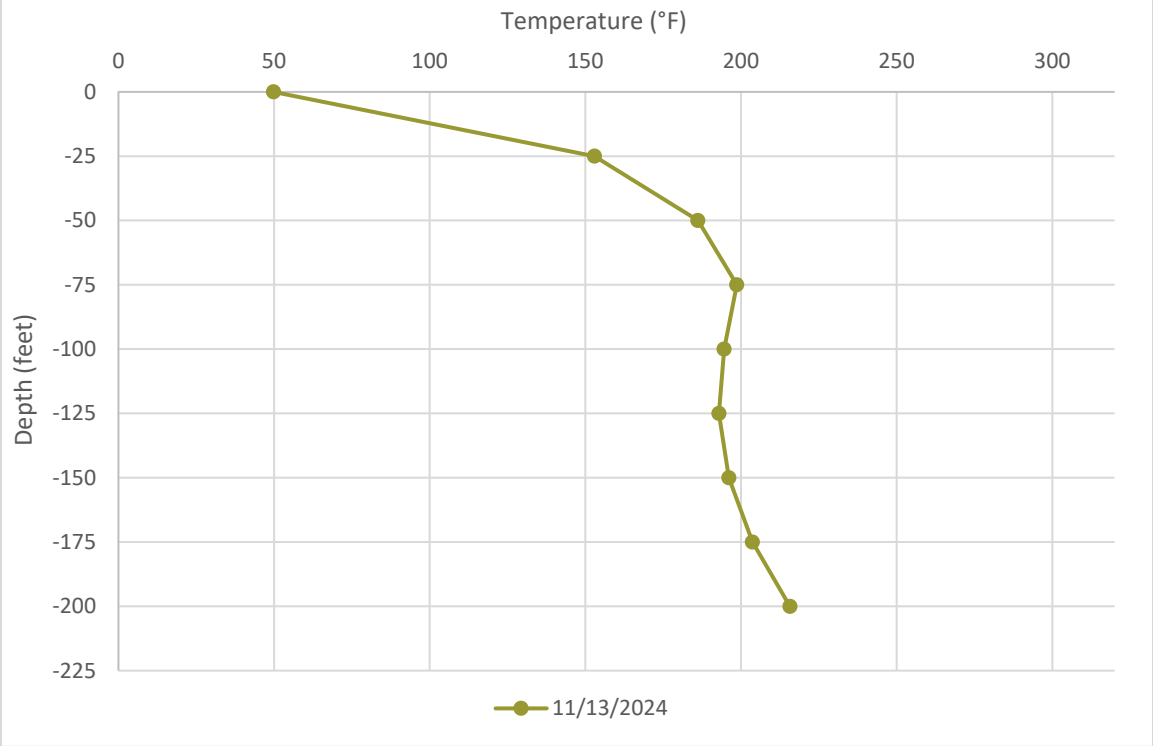


Figure B - 26 Average Temperatures Recorded by TP-7 on November 20, 2024

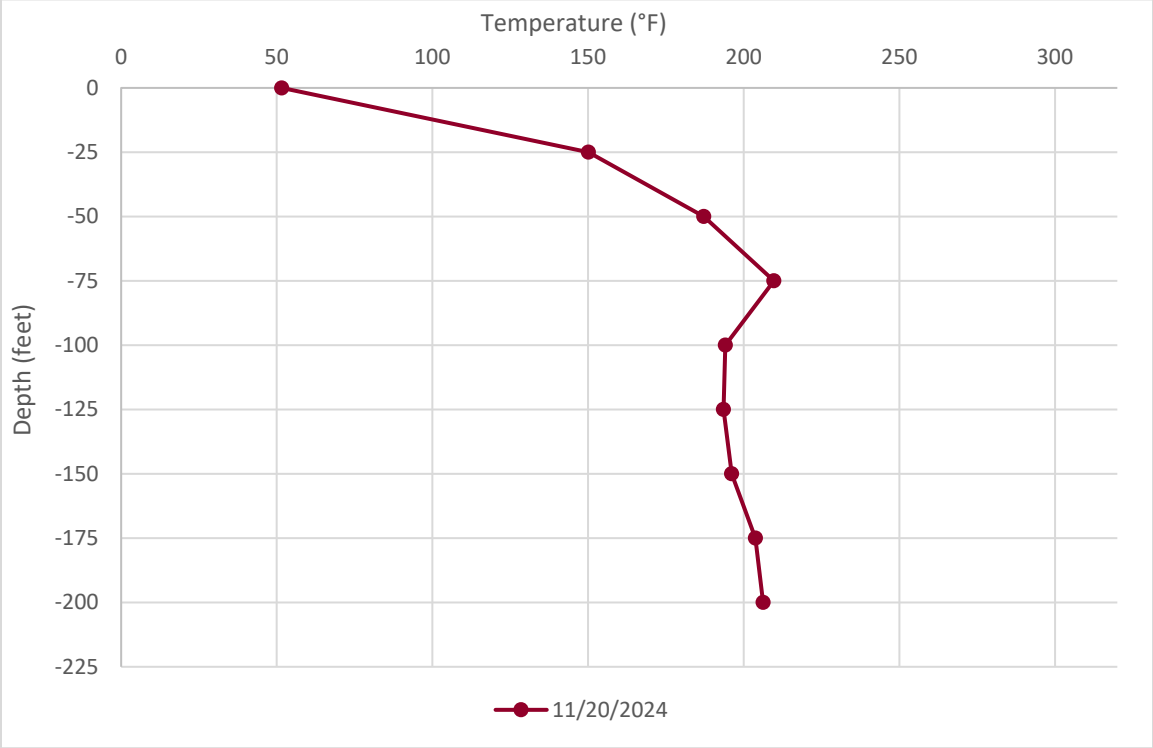


Figure B - 27 Average Temperatures Recorded by TP-7 on November 27, 2024

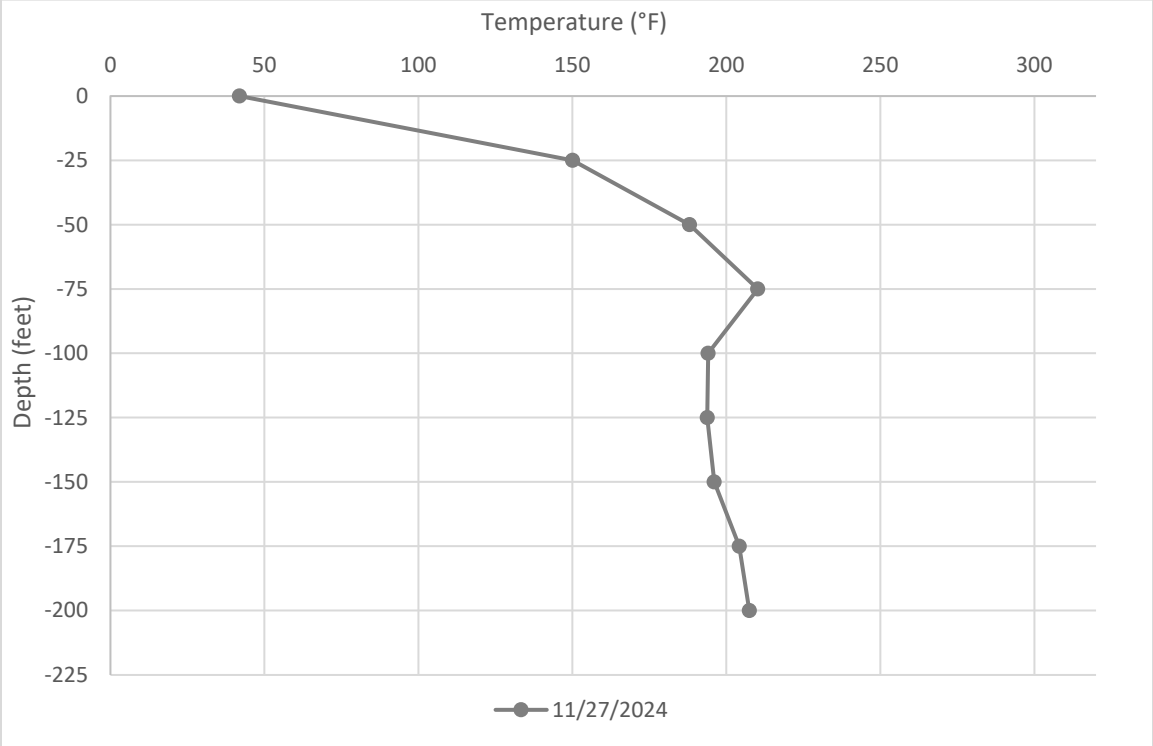


Figure B - 28 Average Temperatures Recorded by TP-8 on November 6, 2024

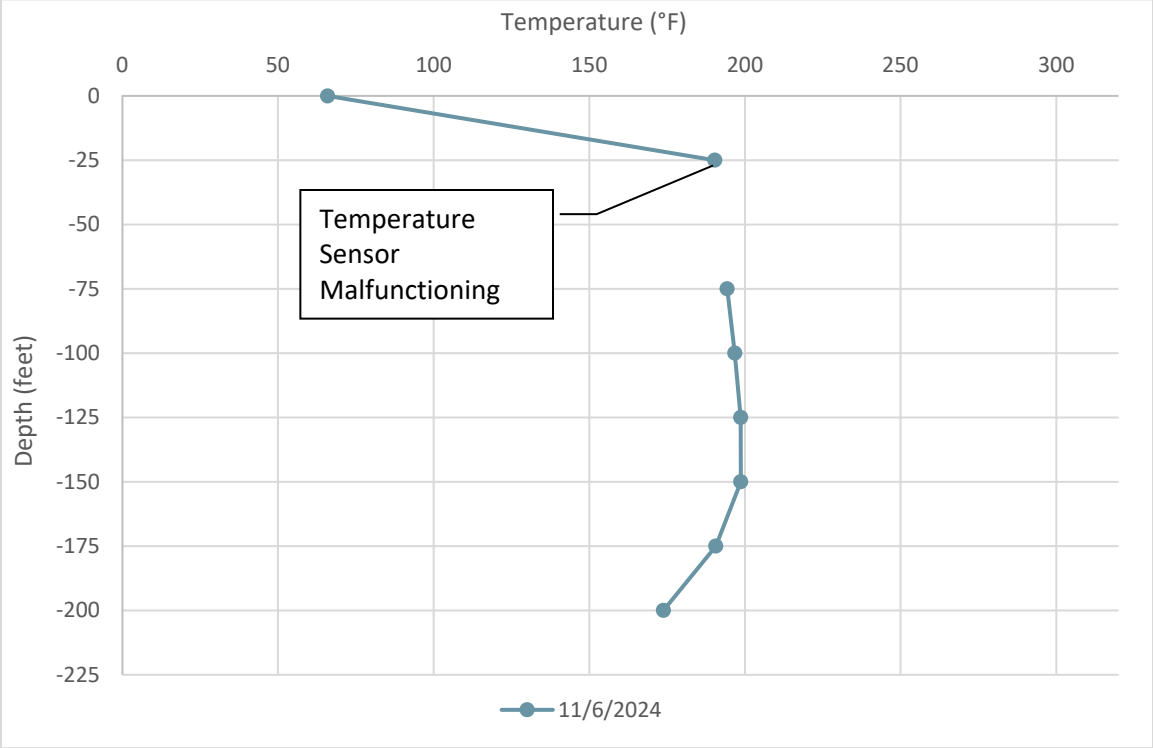


Figure B - 29 Average Temperatures Recorded by TP-8 on November 13, 2024

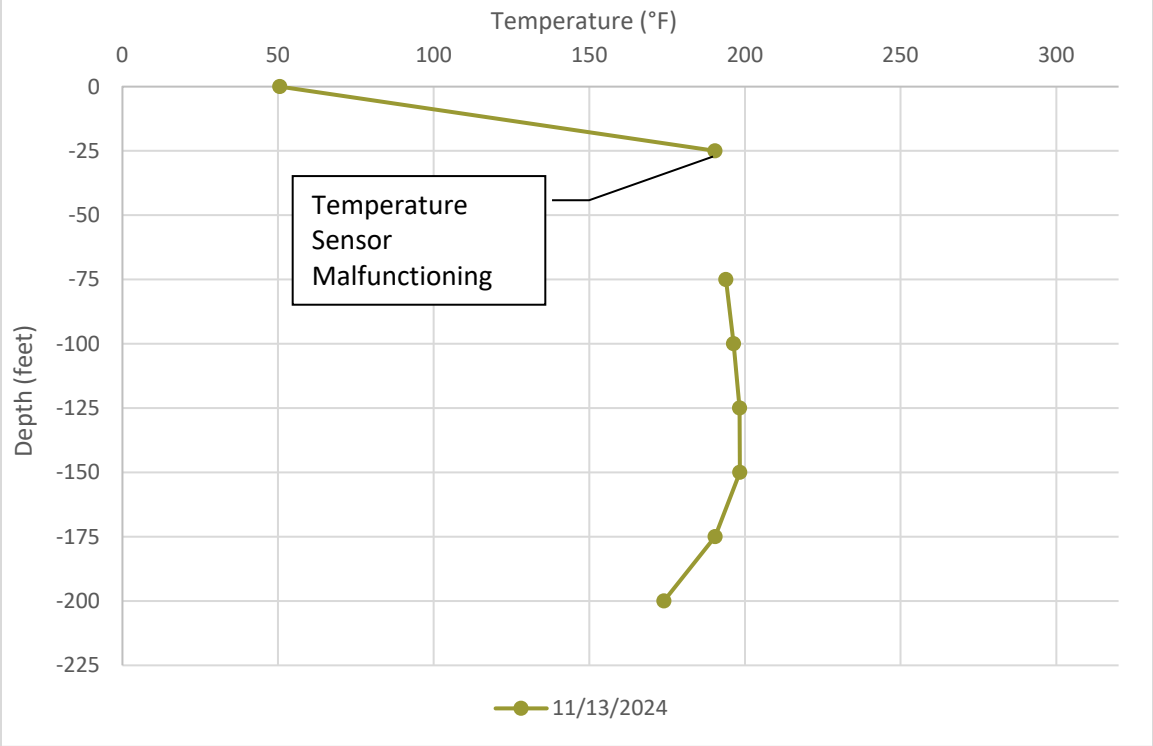


Figure B - 30 Average Temperatures Recorded by TP-8 on November 20, 2024

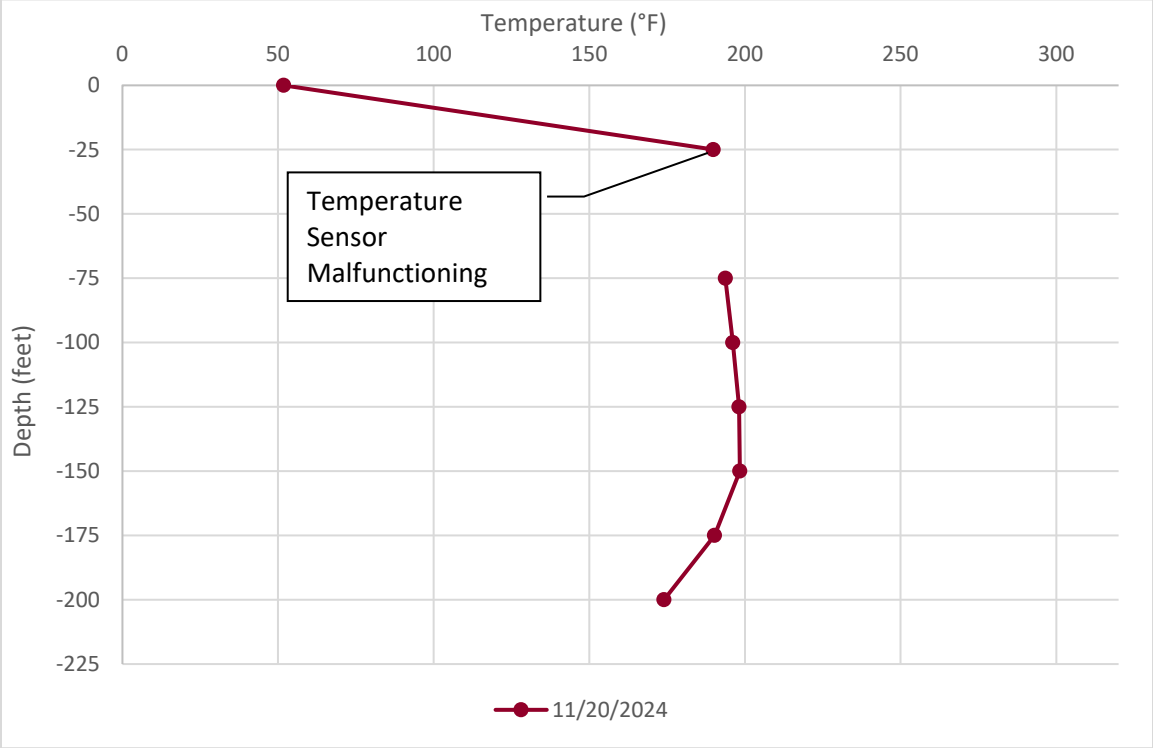


Figure B - 31 Average Temperatures Recorded by TP-8 on November 27, 2024

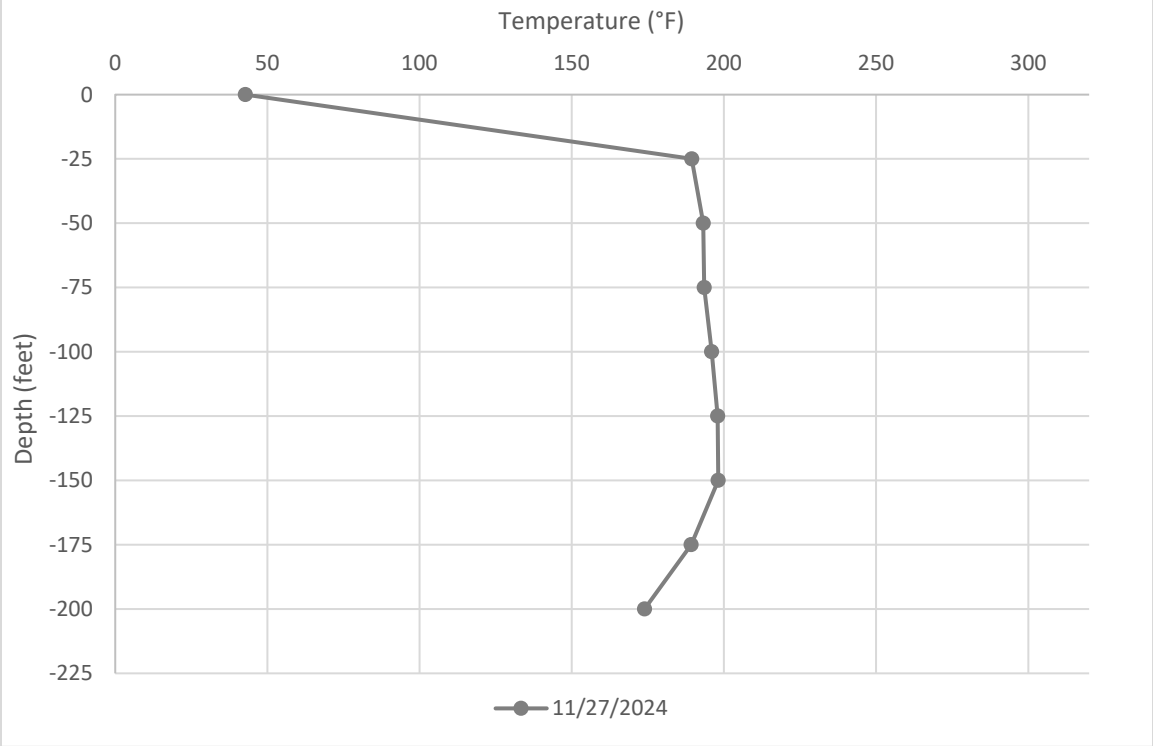


Figure B - 32 Average Temperatures Recorded by TP-9 on November 6, 2024

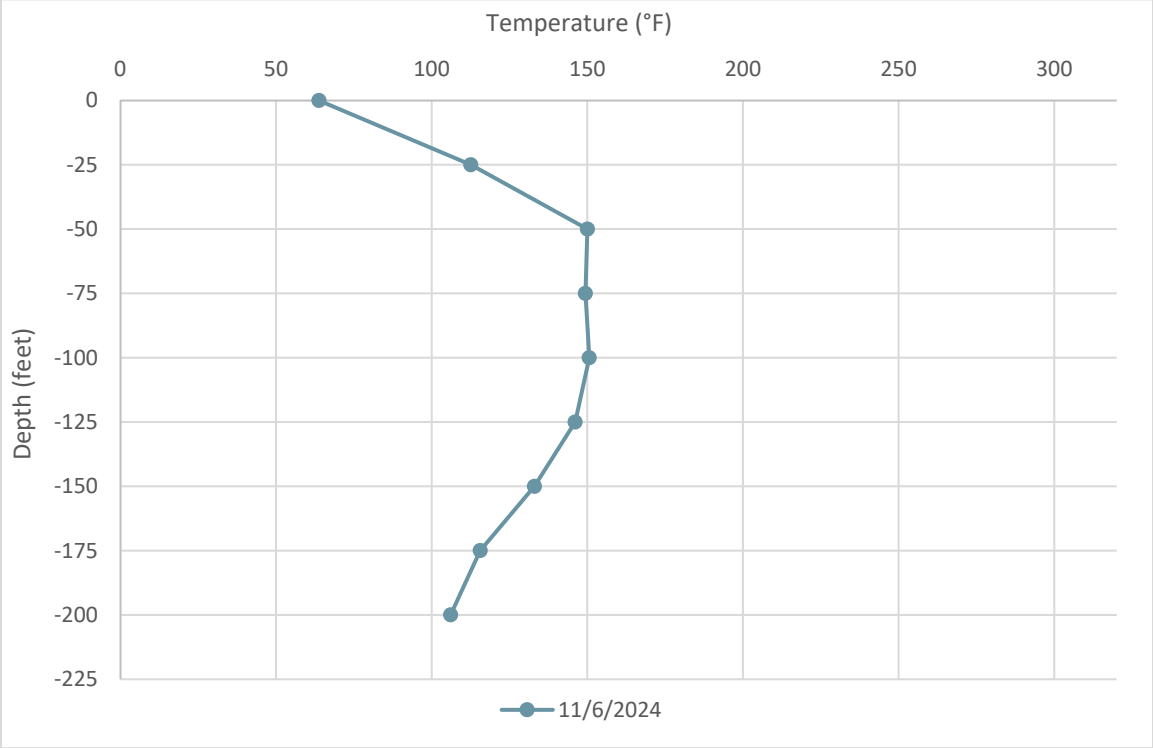


Figure B - 33 Average Temperatures Recorded by TP-9 on November 13, 2024

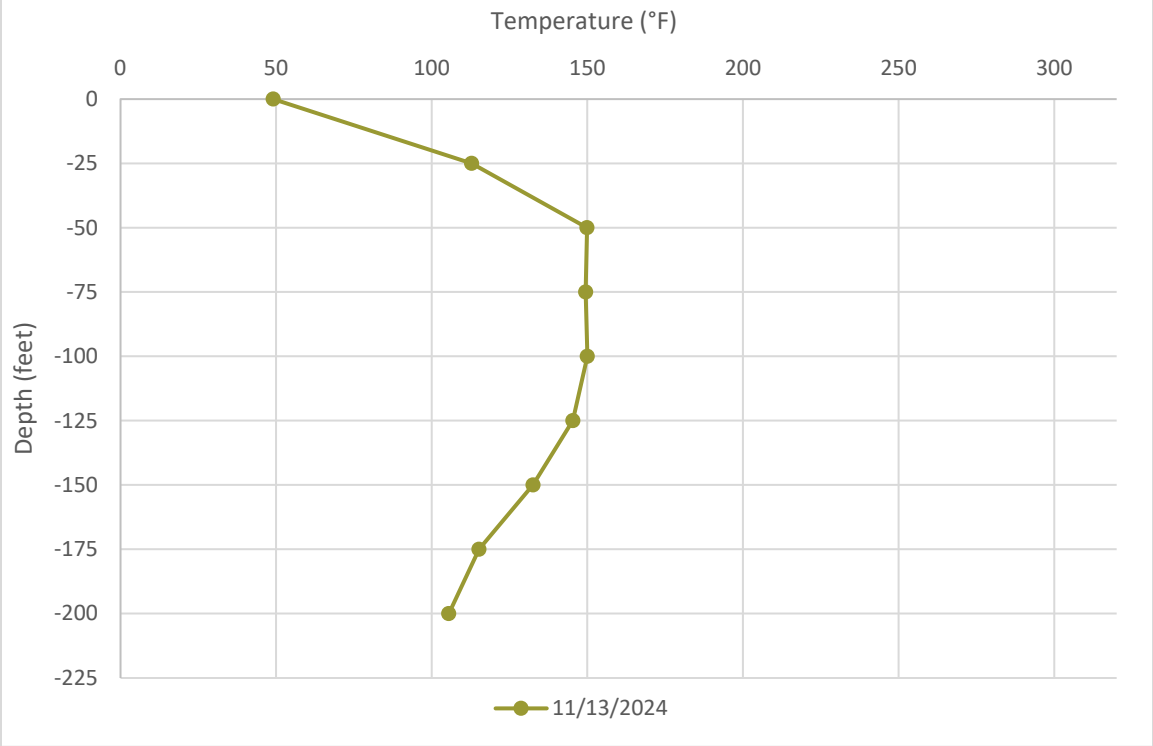


Figure B - 34 Average Temperatures Recorded by TP-9 on November 20, 2024

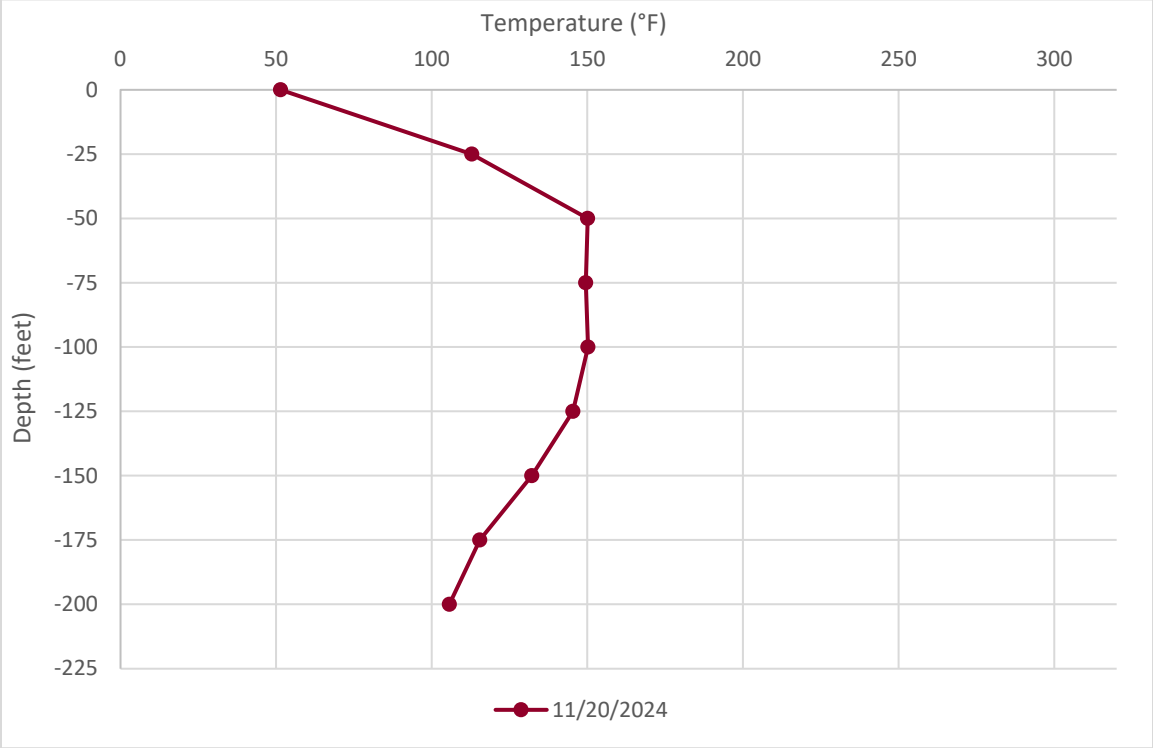
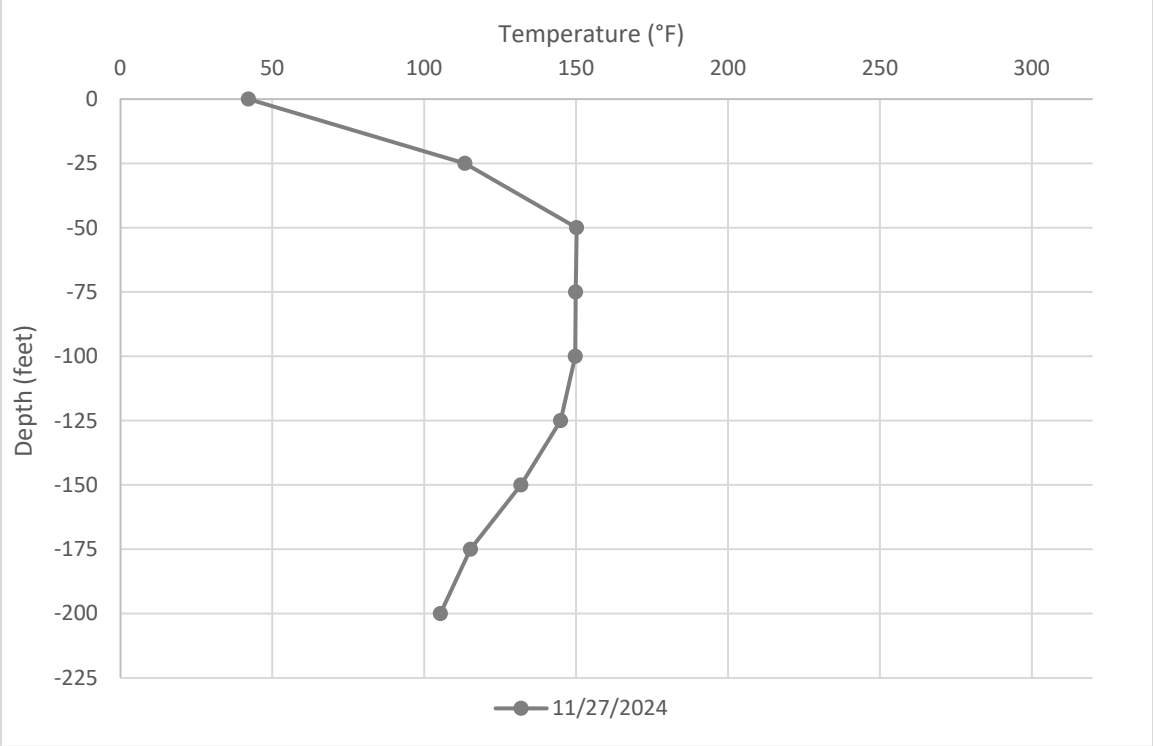


Figure B - 35 Average Temperatures Recorded by TP-9 on November 27, 2024



Appendix C

Daily Wellhead Temperature Averages

Solid Waste Permit 588 Daily Wellhead Temperature Averages

The data provided in this report represent initial readings provided by field instrumentation without Validation, analysis, quality assurance review, or context based on operating conditions. This report is subject to revision following quality assurance review and an analysis of operating conditions. SCS will continue to provide a supplemental report with additional information and further analysis on a monthly basis at a minimum.

SCS ENGINEERS

07222143.00 | December 2, 2024

274 Granite Run Drive
Lancaster, PA 17601
717-550-6330

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 32R

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	104.9	102.7	108.1
Nov 2	105.2	100.1	111.8
Nov 3	105.0	99.0	112.1
Nov 4	104.4	98.1	110.6
Nov 5	106.9	103.4	110.2
Nov 6	107.4	103.4	111.0
Nov 7	108.6	104.7	114.5
Nov 8	106.1	101.4	112.1
Nov 9	104.6	98.4	113.0
Nov 10	104.8	100.7	110.7
Nov 11	105.4	102.3	111.1
Nov 12	102.1	97.8	108.3
Nov 13	101.5	93.5	110.1
Nov 14	100.8	98.2	106.7
Nov 15	100.5	98.0	102.5
Nov 16	100.7	96.7	107.7
Nov 17	101.9	96.5	109.7
Nov 18	100.5	96.1	106.6
Nov 19	98.4	93.3	102.5
Nov 20	96.2	85.3	103.8
Nov 21	87.5	80.2	94.3
Nov 22	83.2	80.0	85.9
Nov 23	83.8	79.8	87.8
Nov 24	89.2	81.6	98.7
Nov 25	92.9	81.9	105.2
Nov 26	93.0	87.4	99.3
Nov 27	93.2	85.8	100.8
Nov 28	87.7	81.3	96.2
Nov 29	81.8	77.0	85.3
Summary	**98.6**	**81.8**	**108.6**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 33B

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	108.9	105.8	112.0
Nov 20	106.6	95.7	111.6
Nov 21	97.0	89.7	105.1
Nov 22	92.1	88.9	95.0
Nov 23	96.7	92.8	102.5
Nov 24	103.1	98.1	106.8
Nov 25	105.8	97.8	112.7
Nov 26	104.4	98.5	109.9
Nov 27	104.4	97.3	109.9
Nov 28	99.8	94.1	107.7
Nov 29	96.1	88.4	102.3
Summary	**38.4**	**0.0**	**108.9**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 36A

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	90.2	85.8	93.2
Nov 2	92.3	83.5	104.8
Nov 3	93.9	86.6	105.1
Nov 4	91.9	86.6	101.6
Nov 5	93.3	89.3	103.0
Nov 6	93.9	87.1	101.4
Nov 7	98.1	93.2	107.8
Nov 8	94.8	89.5	102.3
Nov 9	95.2	86.4	109.3
Nov 10	92.3	88.8	96.9
Nov 11	90.3	86.5	95.5
Nov 12	88.0	82.0	99.2
Nov 13	87.7	80.6	98.6
Nov 14	83.7	78.6	88.4
Nov 15	85.5	83.6	87.8
Nov 16	84.7	79.2	95.7
Nov 17	83.8	74.9	96.1
Nov 18	86.4	76.8	97.1
Nov 19	88.5	84.0	92.3
Nov 20	87.5	76.9	93.0
Nov 21	75.1	67.7	80.8
Nov 22	69.6	65.3	75.0
Nov 23	76.9	69.7	82.3
Nov 24	86.6	76.2	95.2
Nov 25	89.3	80.4	97.8
Nov 26	89.1	83.0	94.0
Nov 27	88.0	80.5	93.8
Nov 28	81.2	75.1	89.4
Nov 29	76.8	68.4	82.2
Summary	**87.4**	**69.6**	**98.1**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 38

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	108.4	106.0	110.3
Nov 26	107.3	105.2	108.8
Nov 27	106.7	103.9	108.9
Nov 28	106.4	105.4	108.2
Nov 29	105.5	104.0	106.7
Summary	**18.4**	**0.0**	**108.4**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 42

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	115.5	113.9	116.9
Nov 20	114.0	111.6	116.0
Nov 21	110.1	107.4	112.6
Nov 22	108.9	107.8	110.9
Nov 23	110.3	108.5	111.5
Nov 24	112.1	109.9	114.9
Nov 25	113.0	109.9	116.2
Nov 26	112.6	109.9	115.0
Nov 27	112.2	109.4	115.3
Nov 28	110.8	109.3	112.7
Nov 29	109.1	107.1	110.9
Summary	**42.4**	**0.0**	**115.5**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 47

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	17.0	17.4	17.4
Nov 2	17.9	18.4	18.4
Nov 3	19.0	19.5	19.5
Nov 4	20.0	20.5	20.5
Nov 5	21.0	21.5	21.5
Nov 6	22.0	22.5	22.5
Nov 7	23.0	23.5	23.5
Nov 8	24.0	24.4	24.4
Nov 9	24.9	25.4	25.4
Nov 10	25.9	26.4	26.4
Nov 11	26.9	27.4	27.4
Nov 12	27.9	28.4	28.4
Nov 13	28.9	29.4	29.4
Nov 14	29.9	30.4	30.4
Nov 15	30.9	31.4	31.4
Nov 16	31.9	32.4	32.4
Nov 17	32.9	33.4	33.4
Nov 18	33.9	34.4	34.4
Nov 19	34.9	35.4	35.4
Nov 20	35.9	36.4	36.4
Nov 21	36.9	37.4	37.4
Nov 22	38.1	37.3	40.3
Nov 23	41.7	36.1	48.2
Nov 24	42.7	30.7	61.4
Nov 25	49.3	32.0	72.7
Nov 26	52.5	36.0	62.5
Nov 27	45.9	32.4	60.3
Nov 28	45.8	38.3	50.0
Nov 29	36.6	29.9	41.2
Summary	**31.7**	**17.0**	**52.5**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 48

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	52.2	40.8	69.7
Nov 21	41.2	35.5	54.7
Nov 22	39.4	35.5	44.4
Nov 23	44.5	40.0	51.1
Nov 24	46.7	34.6	67.8
Nov 25	51.9	35.7	73.9
Nov 26	55.0	38.9	70.3
Nov 27	49.4	35.6	64.1
Nov 28	48.1	41.2	52.4
Nov 29	38.9	29.9	44.1
Summary	**16.1**	**0.0**	**55.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 49

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	61.5	57.7	64.3
Nov 2	61.9	48.4	82.6
Nov 3	62.5	52.0	83.2
Nov 4	61.3	49.9	75.3
Nov 5	65.8	57.6	79.3
Nov 6	67.0	52.8	83.2
Nov 7	71.2	61.3	91.3
Nov 8	64.9	52.4	79.4
Nov 9	61.9	45.6	83.1
Nov 10	60.0	53.1	66.2
Nov 11	60.2	51.0	71.8
Nov 12	77.6	42.8	111.2
Nov 13	121.0	86.8	144.9
Nov 14	146.5	135.1	153.6
Nov 15	150.1	144.1	154.4
Nov 16	149.9	146.6	153.6
Nov 17	152.3	148.0	155.7
Nov 18	154.2	149.3	157.5
Nov 19	155.0	152.9	157.2
Nov 20	153.6	144.6	157.1
Nov 21	147.6	140.7	153.8
Nov 22	145.2	141.1	148.8
Nov 23	149.1	146.1	153.7
Nov 24	152.9	150.2	155.3
Nov 25	154.1	150.2	157.1
Nov 26	152.7	148.1	156.5
Nov 27	153.6	149.4	156.2
Nov 28	150.2	144.3	155.9
Nov 29	147.4	141.5	153.1
Summary	**114.2**	**60.0**	**155.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 50

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	107.6	107.1	109.1
Nov 2	107.3	106.0	109.2
Nov 3	107.1	106.1	108.8
Nov 4	107.2	106.1	109.9
Nov 5	107.6	106.6	110.2
Nov 6	108.0	106.4	110.2
Nov 7	106.8	76.5	110.8
Nov 8	107.5	106.2	110.2
Nov 9	107.2	105.8	109.2
Nov 10	106.2	105.1	106.9
Nov 11	107.0	105.6	109.9
Nov 12	105.7	104.2	109.7
Nov 13	105.4	103.3	108.0
Nov 14	104.3	103.4	105.3
Nov 15	105.3	104.0	107.5
Nov 16	104.9	103.8	106.8
Nov 17	104.4	102.6	106.7
Nov 18	105.2	102.8	108.9
Nov 19	105.7	104.2	108.3
Nov 20	105.2	103.3	106.7
Nov 21	103.3	101.7	106.6
Nov 22	102.8	101.5	105.6
Nov 23	103.5	102.5	104.2
Nov 24	103.6	101.8	105.4
Nov 25	104.1	101.9	107.0
Nov 26	104.5	102.6	107.5
Nov 27	103.7	102.0	105.2
Nov 28	103.3	102.6	104.2
Nov 29	102.4	101.3	103.5
Summary	**105.4**	**102.4**	**108.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 51

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	62.5	59.0	66.1
Nov 2	62.5	50.7	81.4
Nov 3	63.3	53.7	83.3
Nov 4	62.0	50.8	79.2
Nov 5	66.0	57.8	78.3
Nov 6	67.5	52.2	84.9
Nov 7	71.7	61.9	91.3
Nov 8	66.2	53.6	83.3
Nov 9	63.6	47.5	89.6
Nov 10	61.1	54.1	67.7
Nov 11	62.1	52.3	76.3
Nov 12	55.1	44.1	76.2
Nov 13	53.8	42.9	71.7
Nov 14	48.8	44.6	54.5
Nov 15	50.9	47.5	56.2
Nov 16	51.6	41.8	70.4
Nov 17	49.8	35.0	74.2
Nov 18	52.4	-12.7	72.8
Nov 19	56.6	48.1	64.8
Nov 20	56.9	39.5	70.5
Nov 21	39.6	34.1	49.6
Nov 22	37.0	33.8	40.6
Nov 23	41.9	35.9	48.6
Nov 24	42.5	29.9	64.7
Nov 25	48.3	30.5	71.8
Nov 26	51.4	34.2	63.4
Nov 27	45.0	30.5	59.9
Nov 28	44.9	37.2	48.9
Nov 29	34.9	25.9	40.7
Summary	**54.1**	**34.9**	**71.7**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 52

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	186.2	186.0	186.5
Nov 2	186.7	186.1	187.7
Nov 3	189.3	186.5	197.7
Nov 4	194.2	189.1	199.1
Nov 5	193.2	188.8	198.8
Nov 6	192.9	183.4	198.9
Nov 7	180.1	166.9	191.8
Nov 8	181.8	169.6	188.7
Nov 9	164.9	162.9	169.2
Nov 10	161.2	159.6	162.7
Nov 11	174.9	158.2	186.7
Nov 12	187.6	186.3	188.9
Nov 13	178.8	164.0	188.6
Nov 14	163.3	162.4	164.5
Nov 15	160.1	158.7	161.8
Nov 16	157.4	156.7	158.7
Nov 17	157.6	156.6	158.5
Nov 18	157.4	156.0	158.0
Nov 19	155.9	154.8	157.0
Nov 20	153.6	139.3	155.1
Nov 21	152.7	151.4	154.7
Nov 22	151.8	151.3	152.5
Nov 23	151.7	151.4	152.0
Nov 24	152.2	151.4	152.9
Nov 25	152.5	151.3	153.5
Nov 26	152.4	151.5	153.2
Nov 27	152.4	151.8	153.1
Nov 28	151.1	150.2	152.6
Nov 29	150.0	149.1	151.1
Summary	**167.0**	**150.0**	**194.2**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 53

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	127.2	121.2	132.3
Nov 2	125.2	115.3	138.4
Nov 3	124.7	112.4	140.0
Nov 4	127.7	114.9	138.4
Nov 5	132.3	126.3	142.0
Nov 6	132.7	127.0	143.1
Nov 7	133.5	127.9	141.1
Nov 8	128.1	121.0	137.0
Nov 9	127.3	117.3	140.7
Nov 10	126.1	119.2	132.7
Nov 11	136.9	119.8	173.3
Nov 12	117.9	111.1	133.0
Nov 13	114.7	102.6	127.2
Nov 14	111.7	103.3	116.5
Nov 15	118.4	114.4	121.3
Nov 16	118.9	113.0	130.2
Nov 17	119.6	110.6	131.7
Nov 18	120.1	109.9	131.6
Nov 19	117.6	68.5	122.3
Nov 20	117.7	106.4	126.7
Nov 21	107.7	97.9	117.3
Nov 22	104.2	100.8	108.5
Nov 23	109.4	106.1	113.7
Nov 24	113.4	105.0	123.4
Nov 25	117.7	107.3	130.2
Nov 26	117.1	108.5	124.1
Nov 27	115.9	105.7	123.5
Nov 28	111.1	105.6	122.2
Nov 29	106.6	99.0	114.0
Summary	**120.1**	**104.2**	**136.9**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 54

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	174.8	171.9	182.8
Nov 2	169.9	167.0	171.5
Nov 3	165.6	163.2	169.0
Nov 4	162.8	155.7	170.2
Nov 5	161.4	159.0	165.5
Nov 6	160.7	156.6	163.1
Nov 7	160.1	156.5	162.7
Nov 8	157.5	152.5	162.3
Nov 9	155.7	151.9	163.7
Nov 10	154.6	148.2	159.6
Nov 11	155.0	147.9	158.6
Nov 12	153.0	149.1	158.0
Nov 13	150.5	144.8	155.5
Nov 14	148.2	143.5	152.4
Nov 15	150.9	147.0	154.2
Nov 16	151.0	147.2	156.4
Nov 17	150.5	144.6	156.0
Nov 18	158.8	73.2	188.7
Nov 19	189.8	188.2	191.4
Nov 20	178.8	171.7	189.0
Nov 21	165.7	158.7	171.2
Nov 22	158.7	156.3	162.7
Nov 23	158.1	156.3	160.4
Nov 24	159.3	155.2	164.2
Nov 25	160.7	153.7	167.5
Nov 26	159.4	154.4	164.9
Nov 27	157.0	151.3	161.0
Nov 28	153.1	148.6	158.9
Nov 29	150.1	144.4	156.1
Summary	**159.7**	**148.2**	**189.8**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 55

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	174.0	169.1	188.0
Nov 2	168.9	167.0	170.4
Nov 3	166.2	164.8	168.2
Nov 4	163.4	160.1	165.3
Nov 5	162.1	160.3	164.3
Nov 6	161.1	159.8	162.6
Nov 7	161.4	160.0	163.3
Nov 8	160.2	155.7	162.3
Nov 9	160.0	157.2	163.7
Nov 10	159.4	156.4	161.9
Nov 11	158.6	154.9	162.0
Nov 12	159.8	156.5	163.7
Nov 13	159.2	139.3	167.3
Nov 14	156.5	150.9	158.9
Nov 15	156.4	152.3	159.8
Nov 16	155.8	150.5	160.8
Nov 17	158.5	150.6	162.5
Nov 18	161.2	157.0	164.4
Nov 19	162.7	160.4	165.4
Nov 20	159.5	143.6	163.7
Nov 21	148.1	128.9	159.6
Nov 22	145.6	135.5	152.2
Nov 23	151.8	143.6	159.8
Nov 24	160.7	157.2	164.0
Nov 25	162.2	157.1	166.3
Nov 26	160.4	154.5	165.5
Nov 27	164.1	158.3	167.7
Nov 28	160.3	151.5	167.8
Nov 29	155.5	143.0	163.1
Summary	**159.8**	**145.6**	**174.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 56

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	145.9	144.4	147.2
Nov 2	146.1	143.7	148.7
Nov 3	146.9	143.5	150.7
Nov 4	148.6	146.5	150.0
Nov 5	150.5	149.2	151.2
Nov 6	151.0	149.9	152.0
Nov 7	150.9	149.3	152.4
Nov 8	149.7	147.4	151.2
Nov 9	149.5	147.4	152.7
Nov 10	150.1	148.0	152.3
Nov 11	150.2	148.2	152.1
Nov 12	147.7	146.0	150.8
Nov 13	146.6	141.6	149.8
Nov 14	147.8	144.8	149.4
Nov 15	149.3	148.4	150.1
Nov 16	149.3	147.9	150.4
Nov 17	149.2	147.4	150.9
Nov 18	149.4	146.4	152.0
Nov 19	150.3	148.3	151.4
Nov 20	150.3	145.9	151.9
Nov 21	148.1	145.0	150.1
Nov 22	147.4	145.9	148.8
Nov 23	148.6	147.5	149.7
Nov 24	149.3	147.6	150.6
Nov 25	150.3	148.5	152.0
Nov 26	149.1	146.3	151.8
Nov 27	149.2	145.6	151.3
Nov 28	148.1	146.2	150.8
Nov 29	147.1	145.6	148.5
Summary	**148.8**	**145.9**	**151.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 57

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	131.4	131.3	131.3
Nov 2	131.3	131.3	131.3
Nov 3	131.3	131.3	131.3
Nov 4	131.2	131.2	131.2
Nov 5	131.2	131.2	131.2
Nov 6	131.1	131.1	131.1
Nov 7	131.1	131.1	131.1
Nov 8	131.0	131.0	131.0
Nov 9	131.0	131.0	131.0
Nov 10	131.0	130.9	130.9
Nov 11	130.9	130.9	130.9
Nov 12	130.9	130.8	130.8
Nov 13	130.8	130.8	130.8
Nov 14	130.8	130.7	130.7
Nov 15	130.7	130.7	130.7
Nov 16	130.7	130.6	130.6
Nov 17	130.6	130.6	130.6
Nov 18	129.9	126.0	131.2
Nov 19	125.9	120.5	130.4
Nov 20	124.8	108.9	131.5
Nov 21	110.0	93.5	121.6
Nov 22	105.0	98.7	111.4
Nov 23	113.0	108.7	117.6
Nov 24	117.9	109.9	126.2
Nov 25	123.0	110.6	134.0
Nov 26	119.4	102.9	132.2
Nov 27	118.5	102.1	130.0
Nov 28	115.5	106.3	129.4
Nov 29	110.1	98.9	118.5
Summary	**125.5**	**105.0**	**131.4**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 58

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	95.2	93.0	96.8
Nov 2	94.9	90.7	100.6
Nov 3	95.0	90.8	102.5
Nov 4	94.9	91.1	101.0
Nov 5	97.0	94.4	101.0
Nov 6	97.1	91.5	102.5
Nov 7	98.8	95.5	104.5
Nov 8	96.1	91.4	100.0
Nov 9	95.0	88.5	104.6
Nov 10	95.0	92.1	98.3
Nov 11	93.7	90.2	96.9
Nov 12	91.1	86.8	97.6
Nov 13	90.4	86.9	96.6
Nov 14	87.9	85.3	90.3
Nov 15	89.3	87.3	91.3
Nov 16	89.2	85.9	94.5
Nov 17	88.5	82.3	96.6
Nov 18	90.9	83.5	98.7
Nov 19	92.9	88.2	97.0
Nov 20	91.1	84.2	95.0
Nov 21	81.2	77.8	84.0
Nov 22	79.4	77.3	82.8
Nov 23	83.7	81.8	85.9
Nov 24	85.7	81.1	90.7
Nov 25	89.1	80.6	96.3
Nov 26	89.5	83.1	93.5
Nov 27	88.3	80.9	94.4
Nov 28	85.6	83.3	90.9
Nov 29	80.8	76.5	85.9
Summary	**90.6**	**79.4**	**98.8**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 59

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	111.1	110.3	111.7
Nov 2	110.8	109.3	113.9
Nov 3	110.7	109.5	113.8
Nov 4	110.4	108.8	112.4
Nov 5	111.0	109.8	112.3
Nov 6	111.2	109.1	113.4
Nov 7	111.6	110.3	114.1
Nov 8	110.7	108.9	113.3
Nov 9	110.3	108.3	113.6
Nov 10	110.2	109.2	111.4
Nov 11	109.9	108.6	111.8
Nov 12	108.4	106.5	112.1
Nov 13	108.1	106.2	110.6
Nov 14	107.7	106.7	108.6
Nov 15	108.3	107.6	108.7
Nov 16	107.9	106.4	109.7
Nov 17	107.1	104.3	110.1
Nov 18	107.6	103.9	110.7
Nov 19	108.9	106.9	110.2
Nov 20	108.6	105.9	110.1
Nov 21	104.8	102.6	106.4
Nov 22	104.3	103.0	105.5
Nov 23	105.4	104.7	106.1
Nov 24	105.7	104.0	107.9
Nov 25	106.8	103.4	109.1
Nov 26	106.7	103.2	108.6
Nov 27	106.1	102.2	108.7
Nov 28	105.9	104.7	108.2
Nov 29	103.7	101.3	105.6
Summary	**108.3**	**103.7**	**111.6**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 60

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	128.3	125.2	131.8
Nov 2	125.8	124.0	128.5
Nov 3	124.5	118.8	128.5
Nov 4	134.7	106.3	161.7
Nov 5	138.9	101.0	165.1
Nov 6	133.0	120.7	156.2
Nov 7	136.4	128.3	159.1
Nov 8	134.4	128.4	155.6
Nov 9	128.3	126.4	131.5
Nov 10	128.1	126.1	141.9
Nov 11	142.3	131.0	160.0
Nov 12	132.5	128.4	154.2
Nov 13	129.1	126.8	131.4
Nov 14	127.8	125.4	128.9
Nov 15	131.6	127.8	149.5
Nov 16	129.3	127.7	132.0
Nov 17	129.4	127.4	132.1
Nov 18	133.9	127.6	158.3
Nov 19	136.8	130.2	153.4
Nov 20	132.7	129.1	135.0
Nov 21	130.9	127.2	148.1
Nov 22	130.6	126.1	154.5
Nov 23	129.2	127.9	130.6
Nov 24	130.6	128.6	132.5
Nov 25	134.2	129.0	154.6
Nov 26	131.8	129.9	133.7
Nov 27	134.2	129.7	153.6
Nov 28	130.8	128.7	136.2
Nov 29	131.8	127.0	153.6
Summary	**131.8**	**124.5**	**142.3**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 61

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	157.4	156.9	156.9
Nov 2	156.5	156.0	156.0
Nov 3	155.5	155.1	155.1
Nov 4	154.6	154.2	154.2
Nov 5	153.7	153.3	153.3
Nov 6	152.8	152.3	152.3
Nov 7	151.9	151.4	151.4
Nov 8	151.0	150.5	150.5
Nov 9	150.1	149.6	149.6
Nov 10	149.2	148.7	148.7
Nov 11	148.3	147.8	147.8
Nov 12	147.4	146.9	146.9
Nov 13	146.4	146.0	146.0
Nov 14	145.5	145.1	145.1
Nov 15	144.6	144.2	144.2
Nov 16	143.7	143.3	143.3
Nov 17	142.8	142.4	142.4
Nov 18	141.8	140.8	141.8
Nov 19	141.1	140.3	142.0
Nov 20	140.5	138.8	141.5
Nov 21	139.0	137.8	139.6
Nov 22	138.5	138.0	139.3
Nov 23	138.5	138.0	139.1
Nov 24	139.3	138.6	140.5
Nov 25	139.8	138.3	141.4
Nov 26	140.0	139.0	140.8
Nov 27	140.3	139.1	141.3
Nov 28	139.2	138.2	140.8
Nov 29	138.0	136.8	138.8
Summary	**145.8**	**138.0**	**157.4**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 62

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	101.3	98.1	103.6
Nov 2	101.4	94.8	111.7
Nov 3	101.5	93.9	111.8
Nov 4	105.5	92.2	118.2
Nov 5	116.9	114.1	119.9
Nov 6	117.0	114.8	119.2
Nov 7	117.0	114.6	121.3
Nov 8	114.0	110.1	118.4
Nov 9	112.7	108.0	120.4
Nov 10	110.1	106.6	114.0
Nov 11	109.0	104.8	113.4
Nov 12	104.6	98.6	112.2
Nov 13	102.1	94.6	111.1
Nov 14	97.1	93.9	104.0
Nov 15	98.9	96.9	100.6
Nov 16	97.5	93.5	107.7
Nov 17	97.1	90.2	108.1
Nov 18	104.6	89.2	116.3
Nov 19	109.8	106.8	112.6
Nov 20	106.5	99.2	111.1
Nov 21	94.8	86.5	100.7
Nov 22	88.5	86.3	92.0
Nov 23	89.5	86.7	92.6
Nov 24	93.4	85.6	101.6
Nov 25	96.8	86.1	108.6
Nov 26	97.6	90.7	105.5
Nov 27	94.9	87.9	101.8
Nov 28	89.8	84.9	96.9
Nov 29	83.5	78.0	88.4
Summary	**101.8**	**83.5**	**117.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 63

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	61.7	57.8	64.3
Nov 2	61.0	47.8	81.4
Nov 3	61.7	51.1	79.4
Nov 4	61.0	49.3	75.0
Nov 5	65.6	57.2	83.2
Nov 6	66.6	53.0	82.0
Nov 7	70.4	61.7	88.5
Nov 8	64.5	51.4	77.6
Nov 9	61.3	44.4	81.6
Nov 10	59.9	53.4	66.4
Nov 11	64.3	55.3	80.8
Nov 12	60.4	44.8	82.5
Nov 13	70.5	47.3	92.2
Nov 14	75.8	70.0	81.5
Nov 15	82.0	76.0	90.3
Nov 16	83.4	78.3	97.4
Nov 17	83.9	73.6	99.5
Nov 18	85.8	73.9	98.5
Nov 19	86.9	80.3	93.5
Nov 20	84.7	74.9	94.0
Nov 21	70.6	61.9	80.6
Nov 22	65.1	61.1	71.7
Nov 23	69.8	64.6	74.5
Nov 24	75.8	65.6	87.8
Nov 25	79.0	66.9	94.4
Nov 26	80.2	69.9	89.1
Nov 27	76.4	66.4	86.0
Nov 28	72.3	67.7	78.5
Nov 29	64.9	59.5	69.7
Summary	**71.2**	**59.9**	**86.9**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 64

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	88.1	83.4	91.1
Nov 2	89.8	79.4	103.8
Nov 3	89.9	79.6	101.6
Nov 4	88.1	80.8	96.2
Nov 5	91.3	83.7	99.6
Nov 6	94.1	82.4	104.4
Nov 7	96.3	88.4	108.0
Nov 8	90.0	81.0	99.5
Nov 9	89.7	76.1	104.6
Nov 10	86.8	81.0	92.9
Nov 11	101.5	79.1	118.6
Nov 12	113.0	109.6	118.4
Nov 13	114.1	106.2	120.5
Nov 14	112.5	108.8	116.4
Nov 15	113.7	110.0	115.7
Nov 16	113.6	110.7	117.8
Nov 17	113.9	108.1	120.4
Nov 18	115.2	109.3	120.7
Nov 19	116.2	112.0	120.1
Nov 20	114.4	106.9	117.7
Nov 21	104.9	100.0	110.0
Nov 22	101.4	98.4	104.6
Nov 23	104.7	101.9	108.3
Nov 24	108.2	101.5	113.6
Nov 25	110.9	103.2	117.7
Nov 26	111.3	106.4	115.2
Nov 27	110.1	103.5	116.7
Nov 28	107.3	103.6	111.6
Nov 29	102.0	97.5	105.5
Summary	**103.2**	**86.8**	**116.2**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 65

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	61.8	58.4	65.2
Nov 2	62.2	48.6	82.6
Nov 3	62.3	51.5	81.1
Nov 4	61.3	49.4	77.3
Nov 5	65.9	57.1	81.6
Nov 6	67.0	52.9	82.7
Nov 7	71.0	61.4	88.8
Nov 8	65.3	51.8	80.9
Nov 9	62.0	44.7	85.4
Nov 10	60.2	53.5	66.8
Nov 11	92.8	57.3	122.6
Nov 12	135.8	117.0	149.7
Nov 13	151.6	147.3	154.3
Nov 14	152.6	150.7	154.4
Nov 15	153.8	152.7	154.7
Nov 16	153.8	152.7	155.0
Nov 17	154.1	152.3	155.7
Nov 18	154.4	152.4	155.7
Nov 19	154.3	153.2	155.1
Nov 20	153.4	150.5	154.8
Nov 21	150.2	148.2	152.2
Nov 22	149.4	148.1	150.3
Nov 23	150.4	149.2	151.9
Nov 24	151.6	150.4	152.7
Nov 25	152.1	149.9	153.5
Nov 26	151.6	150.1	153.1
Nov 27	151.0	149.7	152.5
Nov 28	149.1	147.1	151.9
Nov 29	147.7	145.2	150.0
Summary	**118.9**	**60.2**	**154.4**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 66

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	151.1	148.5	152.6
Nov 2	151.3	149.2	153.8
Nov 3	150.9	149.2	153.1
Nov 4	150.8	148.9	152.7
Nov 5	151.9	150.4	153.3
Nov 6	151.9	149.8	153.4
Nov 7	152.7	150.9	154.8
Nov 8	151.2	147.1	153.2
Nov 9	151.5	149.4	154.4
Nov 10	151.1	149.2	153.5
Nov 11	150.8	148.3	152.5
Nov 12	149.8	147.5	152.8
Nov 13	149.0	146.4	151.7
Nov 14	148.3	145.2	151.0
Nov 15	150.0	148.1	151.5
Nov 16	149.9	148.0	151.7
Nov 17	149.8	146.5	152.4
Nov 18	150.4	146.3	153.5
Nov 19	151.6	149.4	153.4
Nov 20	151.0	144.5	153.1
Nov 21	145.6	140.3	150.2
Nov 22	145.1	143.3	147.4
Nov 23	147.5	145.6	148.9
Nov 24	148.8	146.8	151.4
Nov 25	150.8	147.1	153.0
Nov 26	150.1	147.7	152.8
Nov 27	150.2	146.1	153.1
Nov 28	148.8	144.1	152.6
Nov 29	146.4	141.2	150.7
Summary	**149.9**	**145.1**	**152.7**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 67

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	182.8	171.2	195.9
Nov 2	164.9	160.5	170.0
Nov 3	155.3	151.7	159.5
Nov 4	158.4	148.5	174.0
Nov 5	177.1	174.1	179.0
Nov 6	179.9	178.0	181.9
Nov 7	170.8	161.5	181.8
Nov 8	158.5	154.0	161.7
Nov 9	153.9	149.8	158.3
Nov 10	151.9	148.5	155.3
Nov 11	152.4	150.2	154.7
Nov 12	150.3	147.7	153.4
Nov 13	147.4	143.4	150.9
Nov 14	147.2	145.7	149.5
Nov 15	147.0	145.3	149.3
Nov 16	147.1	145.9	149.9
Nov 17	147.7	144.7	152.1
Nov 18	149.4	146.3	152.9
Nov 19	150.2	148.2	153.4
Nov 20	147.9	138.7	152.2
Nov 21	141.5	136.7	145.5
Nov 22	140.1	135.4	142.2
Nov 23	141.3	139.0	143.2
Nov 24	144.0	140.1	147.3
Nov 25	146.6	140.8	150.6
Nov 26	146.0	141.7	150.1
Nov 27	146.9	142.2	150.4
Nov 28	144.3	138.9	150.0
Nov 29	140.8	135.3	145.1
Summary	**152.8**	**140.1**	**182.8**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 68

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	142.9	139.5	157.3
Nov 2	138.0	135.7	140.1
Nov 3	132.8	110.3	136.8
Nov 4	108.2	49.7	155.4
Nov 5	129.5	59.4	158.5
Nov 6	125.3	53.1	157.4
Nov 7	143.1	139.8	156.5
Nov 8	142.8	139.4	155.8
Nov 9	138.3	136.3	139.4
Nov 10	134.7	133.1	136.3
Nov 11	142.6	133.1	154.6
Nov 12	143.6	139.1	155.0
Nov 13	142.6	137.6	156.1
Nov 14	137.5	136.4	139.6
Nov 15	140.6	135.9	155.5
Nov 16	137.2	135.8	139.4
Nov 17	135.8	134.7	137.0
Nov 18	139.9	133.8	153.0
Nov 19	142.2	137.3	155.2
Nov 20	138.1	135.7	140.8
Nov 21	139.9	135.5	153.0
Nov 22	140.4	135.5	152.0
Nov 23	137.2	136.1	139.5
Nov 24	135.7	134.9	136.6
Nov 25	139.5	134.0	152.4
Nov 26	134.8	130.7	139.6
Nov 27	139.9	132.1	152.7
Nov 28	137.1	135.3	140.9
Nov 29	134.2	132.7	135.8
Summary	**137.1**	**108.2**	**143.6**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 69

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	101.6	101.0	102.1
Nov 20	101.1	99.8	102.2
Nov 21	99.2	97.7	101.1
Nov 22	97.9	96.9	98.9
Nov 23	99.6	98.4	100.6
Nov 24	101.2	99.7	103.3
Nov 25	102.0	100.2	104.5
Nov 26	101.9	100.6	102.9
Nov 27	101.1	99.7	102.3
Nov 28	100.0	99.3	101.2
Nov 29	99.7	99.2	100.2
Summary	**38.1**	**0.0**	**102.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 70

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	60.6	56.1	67.6
Nov 20	54.9	36.3	71.1
Nov 21	37.6	31.8	48.4
Nov 22	36.1	32.1	42.8
Nov 23	41.3	34.5	49.4
Nov 24	42.8	30.6	70.1
Nov 25	48.7	31.1	79.2
Nov 26	53.4	35.7	74.3
Nov 27	44.9	31.4	61.9
Nov 28	45.0	37.1	48.9
Nov 29	36.6	29.8	46.0
Summary	**17.3**	**0.0**	**60.6**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 71

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	134.9	133.5	135.4
Nov 20	134.4	131.5	135.7
Nov 21	131.7	125.5	134.9
Nov 22	130.8	126.7	133.3
Nov 23	133.0	132.0	134.6
Nov 24	134.4	133.3	135.1
Nov 25	135.1	133.5	136.5
Nov 26	134.0	131.7	136.0
Nov 27	134.6	132.3	136.2
Nov 28	133.9	132.0	135.9
Nov 29	132.9	131.0	134.4
Summary	**50.7**	**0.0**	**135.1**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 72

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	138.4	137.2	139.2
Nov 20	137.3	133.7	138.9
Nov 21	134.8	131.8	137.0
Nov 22	133.6	132.2	135.4
Nov 23	134.7	133.4	136.6
Nov 24	136.9	135.4	138.6
Nov 25	137.7	135.6	140.2
Nov 26	137.2	135.7	138.9
Nov 27	137.6	135.3	139.2
Nov 28	136.0	134.5	138.2
Nov 29	134.7	132.1	136.7
Summary	**51.7**	**0.0**	**138.4**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 73

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	80.3	78.3	82.8
Nov 20	77.0	69.7	83.2
Nov 21	66.7	62.1	72.0
Nov 22	64.3	60.9	70.5
Nov 23	68.1	65.1	72.1
Nov 24	71.7	65.0	82.5
Nov 25	74.5	65.8	86.9
Nov 26	76.1	67.8	85.8
Nov 27	72.6	65.0	80.3
Nov 28	70.5	66.8	74.0
Nov 29	65.2	61.2	70.3
Summary	**27.1**	**0.0**	**80.3**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 74

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	131.3	127.8	133.7
Nov 20	128.4	118.4	132.4
Nov 21	123.0	116.8	128.8
Nov 22	119.3	117.3	121.8
Nov 23	120.3	117.4	123.9
Nov 24	125.2	120.1	128.0
Nov 25	127.4	121.5	133.2
Nov 26	126.5	120.3	131.8
Nov 27	128.9	124.7	134.2
Nov 28	124.7	117.4	131.9
Nov 29	119.9	116.0	124.1
Summary	**47.4**	**0.0**	**131.3**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 75

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	67.1	61.4	71.8
Nov 20	60.7	45.2	79.4
Nov 21	43.7	35.7	60.4
Nov 22	38.3	34.4	45.5
Nov 23	44.2	40.1	52.8
Nov 24	49.7	33.4	76.0
Nov 25	54.5	36.0	85.0
Nov 26	59.0	43.5	73.0
Nov 27	52.4	38.4	68.5
Nov 28	48.1	39.8	55.0
Nov 29	38.2	29.8	46.6
Summary	**19.2**	**0.0**	**67.1**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 76

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	126.3	126.1	126.5
Nov 20	126.1	125.8	126.3
Nov 21	125.6	125.3	125.8
Nov 22	125.4	125.3	125.6
Nov 23	125.6	125.2	125.8
Nov 24	125.9	125.6	126.3
Nov 25	125.9	125.6	126.3
Nov 26	125.9	125.7	126.1
Nov 27	125.9	125.5	126.3
Nov 28	125.7	125.5	126.0
Nov 29	125.5	125.2	125.7
Summary	**47.7**	**0.0**	**126.3**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 77

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	62.2	56.7	68.1
Nov 20	56.5	39.0	72.7
Nov 21	38.7	32.0	52.6
Nov 22	35.9	31.6	41.8
Nov 23	41.3	36.6	48.5
Nov 24	45.4	30.8	69.2
Nov 25	50.8	32.5	77.5
Nov 26	55.6	39.5	72.0
Nov 27	46.8	33.7	61.8
Nov 28	45.5	38.2	49.4
Nov 29	36.6	29.9	46.3
Summary	**17.8**	**0.0**	**62.2**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 78

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	111.2	109.8	113.1
Nov 21	108.3	105.4	111.2
Nov 22	105.2	103.7	108.1
Nov 23	105.8	103.2	110.6
Nov 24	111.5	109.7	114.6
Nov 25	110.0	107.4	114.3
Nov 26	108.5	106.8	111.3
Nov 27	107.2	105.3	110.2
Nov 28	102.3	99.7	107.1
Nov 29	100.0	97.5	102.5
Summary	**36.9**	**0.0**	**111.5**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 79

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	63.1	65.0	65.0
Nov 2	66.8	68.7	68.7
Nov 3	70.6	72.5	72.5
Nov 4	74.3	76.2	76.2
Nov 5	78.0	79.9	79.9
Nov 6	81.7	83.6	83.6
Nov 7	85.4	87.3	87.3
Nov 8	89.1	91.0	91.0
Nov 9	92.8	94.7	94.7
Nov 10	96.5	98.4	98.4
Nov 11	100.2	102.1	102.1
Nov 12	103.9	105.7	105.7
Nov 13	107.6	109.4	109.4
Nov 14	111.3	113.1	113.1
Nov 15	115.0	116.8	116.8
Nov 16	118.7	120.5	120.5
Nov 17	122.4	124.2	124.2
Nov 18	126.1	127.9	127.9
Nov 19	129.8	131.6	131.6
Nov 20	133.4	135.3	135.3
Nov 21	137.1	139.0	139.0
Nov 22	140.8	139.2	144.1
Nov 23	144.4	141.9	147.8
Nov 24	147.4	144.2	149.8
Nov 25	148.2	144.2	150.3
Nov 26	146.6	142.1	150.2
Nov 27	146.9	143.3	149.3
Nov 28	143.7	137.4	148.7
Nov 29	141.4	135.2	146.1
Summary	**112.5**	**63.1**	**148.2**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 80

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	58.0	31.8	76.3
Nov 26	53.2	35.3	69.3
Nov 27	45.5	31.0	62.9
Nov 28	44.5	36.1	48.9
Nov 29	35.4	29.8	44.7
Summary	**8.2**	**0.0**	**58.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 81

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	180.9	177.7	182.4
Nov 21	179.1	176.0	182.2
Nov 22	178.2	176.5	179.2
Nov 23	179.0	177.4	180.8
Nov 24	180.3	179.1	181.6
Nov 25	180.8	179.1	182.1
Nov 26	179.9	176.0	182.0
Nov 27	180.3	178.6	181.8
Nov 28	178.4	175.3	181.4
Nov 29	176.5	172.5	179.0
Summary	**61.8**	**0.0**	**180.9**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 82

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	178.6	175.9	179.8
Nov 21	177.0	173.9	179.7
Nov 22	176.2	173.5	178.1
Nov 23	177.0	174.9	179.3
Nov 24	178.9	177.8	179.8
Nov 25	179.4	177.5	180.4
Nov 26	178.8	177.1	180.4
Nov 27	179.6	178.2	180.6
Nov 28	178.1	174.1	180.6
Nov 29	176.3	172.4	179.1
Summary	**61.4**	**0.0**	**179.6**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 83

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	185.3	183.1	186.1
Nov 21	184.1	180.8	186.3
Nov 22	183.4	182.4	184.4
Nov 23	184.1	183.3	185.8
Nov 24	185.2	184.0	186.0
Nov 25	185.5	184.6	186.3
Nov 26	184.9	183.3	186.2
Nov 27	185.2	184.1	185.9
Nov 28	184.1	182.1	185.7
Nov 29	183.1	181.0	184.7
Summary	**63.6**	**0.0**	**185.5**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 84

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	57.7	31.3	76.9
Nov 26	52.6	35.4	65.0
Nov 27	46.3	30.7	64.6
Nov 28	45.1	35.8	51.0
Nov 29	35.0	29.8	40.0
Summary	**8.2**	**0.0**	**57.7**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 85

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	149.7	148.8	150.5
Nov 21	149.5	148.0	151.5
Nov 22	149.1	148.4	150.3
Nov 23	149.4	148.7	150.3
Nov 24	150.6	149.8	151.4
Nov 25	150.8	149.9	151.9
Nov 26	150.6	149.1	151.3
Nov 27	151.0	150.2	151.8
Nov 28	149.8	148.8	151.3
Nov 29	149.4	148.5	150.3
Summary	**51.7**	**0.0**	**151.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 86

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	145.8	145.5	146.3
Nov 21	145.7	145.3	146.1
Nov 22	145.5	145.2	145.8
Nov 23	145.6	145.3	145.8
Nov 24	145.9	145.5	146.3
Nov 25	146.2	145.6	147.1
Nov 26	146.3	145.8	146.6
Nov 27	146.6	146.0	147.0
Nov 28	146.3	145.8	146.9
Nov 29	145.9	145.4	146.3
Summary	**50.3**	**0.0**	**146.6**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 87

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	156.6	144.4	161.1
Nov 21	151.3	139.0	161.2
Nov 22	149.2	141.4	154.5
Nov 23	154.8	150.2	161.3
Nov 24	160.3	157.1	163.3
Nov 25	161.2	158.2	163.7
Nov 26	159.3	152.5	163.1
Nov 27	160.5	156.0	163.1
Nov 28	155.8	146.3	163.0
Nov 29	153.4	143.3	162.1
Summary	**53.9**	**0.0**	**161.2**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 88

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	159.2	158.9	159.9
Nov 21	159.3	158.8	159.6
Nov 22	158.9	158.3	159.7
Nov 23	158.7	158.2	159.1
Nov 24	159.2	158.6	160.0
Nov 25	159.5	158.2	160.4
Nov 26	159.7	159.0	160.3
Nov 27	160.1	159.7	160.7
Nov 28	159.2	158.8	160.3
Nov 29	158.6	158.2	159.0
Summary	**54.9**	**0.0**	**160.1**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 89

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	190.6	189.7	191.5
Nov 26	190.2	189.4	191.1
Nov 27	190.5	189.7	191.3
Nov 28	189.0	188.0	190.3
Nov 29	188.2	186.8	189.5
Summary	**32.7**	**0.0**	**190.6**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 90

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	147.5	147.0	148.0
Nov 26	147.4	147.0	147.7
Nov 27	147.6	147.1	148.0
Nov 28	147.3	146.8	147.9
Nov 29	147.0	146.7	147.3
Summary	**25.4**	**0.0**	**147.6**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 91

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	168.0	166.6	168.8
Nov 26	167.2	165.1	168.6
Nov 27	167.2	165.9	168.0
Nov 28	165.0	162.4	167.4
Nov 29	163.9	161.0	165.8
Summary	**28.7**	**0.0**	**168.0**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 92

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	173.7	164.0	180.4
Nov 26	168.7	151.4	180.5
Nov 27	174.4	167.6	180.5
Nov 28	159.0	135.9	179.8
Nov 29	146.5	112.1	171.5
Summary	**28.4**	**0.0**	**174.4**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 93

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	161.4	144.1	189.2
Nov 26	158.1	148.4	188.7
Nov 27	157.3	146.3	188.7
Nov 28	147.3	145.1	152.4
Nov 29	143.5	139.9	147.7
Summary	**26.5**	**0.0**	**161.4**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 94

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	179.8	179.4	180.5
Nov 26	179.5	178.9	180.1
Nov 27	179.7	179.1	180.5
Nov 28	179.4	178.3	180.6
Nov 29	175.1	169.5	179.3
Summary	**30.8**	**0.0**	**179.8**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 95

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	135.1	134.1	135.7
Nov 26	134.4	133.8	135.1
Nov 27	134.3	133.3	135.0
Nov 28	134.2	133.6	134.6
Nov 29	133.9	133.4	134.3
Summary	**23.2**	**0.0**	**135.1**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 96

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	150.3	148.6	150.8
Nov 26	149.2	147.2	150.4
Nov 27	149.7	148.0	150.8
Nov 28	148.7	145.4	151.0
Nov 29	148.0	145.2	149.9
Summary	**25.7**	**0.0**	**150.3**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 97

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	167.8	162.9	169.0
Nov 26	166.3	162.2	169.5
Nov 27	168.9	166.2	170.1
Nov 28	164.7	158.9	169.7
Nov 29	162.4	158.6	165.0
Summary	**28.6**	**0.0**	**168.9**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 98

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	72.7	38.7	121.2
Nov 26	81.8	54.7	135.6
Nov 27	53.3	45.0	66.9
Nov 28	47.8	40.5	52.1
Nov 29	37.6	29.9	43.6
Summary	**10.1**	**0.0**	**81.8**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 99

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	0.0	0.0	0.0
Nov 2	0.0	0.0	0.0
Nov 3	0.0	0.0	0.0
Nov 4	0.0	0.0	0.0
Nov 5	0.0	0.0	0.0
Nov 6	0.0	0.0	0.0
Nov 7	0.0	0.0	0.0
Nov 8	0.0	0.0	0.0
Nov 9	0.0	0.0	0.0
Nov 10	0.0	0.0	0.0
Nov 11	0.0	0.0	0.0
Nov 12	0.0	0.0	0.0
Nov 13	0.0	0.0	0.0
Nov 14	0.0	0.0	0.0
Nov 15	0.0	0.0	0.0
Nov 16	0.0	0.0	0.0
Nov 17	0.0	0.0	0.0
Nov 18	0.0	0.0	0.0
Nov 19	0.0	0.0	0.0
Nov 20	0.0	0.0	0.0
Nov 21	0.0	0.0	0.0
Nov 22	0.0	0.0	0.0
Nov 23	0.0	0.0	0.0
Nov 24	0.0	0.0	0.0
Nov 25	142.4	141.3	143.1
Nov 26	141.8	141.2	142.6
Nov 27	142.1	141.0	142.9
Nov 28	141.3	140.3	142.6
Nov 29	140.7	140.3	141.2
Summary	**24.4**	**0.0**	**142.4**

Solid Waste Permit 588 Daily Wellhead Temperature Averages for Well 100

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Nov 1	118.1	114.7	119.9
Nov 2	138.0	135.7	140.1
Nov 3	115.4	110.1	120.5
Nov 4	108.2	49.7	155.4
Nov 5	119.5	117.4	122.6
Nov 6	125.3	53.1	157.4
Nov 7	121.4	118.8	125.7
Nov 8	142.8	139.4	155.8
Nov 9	116.0	109.8	123.4
Nov 10	134.7	133.1	136.3
Nov 11	116.7	113.5	119.4
Nov 12	143.6	139.1	155.0
Nov 13	111.2	106.1	116.0
Nov 14	137.5	136.4	139.6
Nov 15	111.6	110.0	113.6
Nov 16	137.2	135.8	139.4
Nov 17	111.8	106.8	118.2
Nov 18	139.9	133.8	153.0
Nov 19	115.4	112.0	119.7
Nov 20	138.1	135.7	140.8
Nov 21	105.0	102.5	108.0
Nov 22	140.4	135.5	152.0
Nov 23	106.6	104.2	109.9
Nov 24	135.7	134.9	136.6
Nov 25	112.5	105.0	118.7
Nov 26	134.8	130.7	139.6
Nov 27	110.9	104.6	115.2
Nov 28	137.1	135.3	140.9
Nov 29	104.4	100.6	108.8
Summary	**113.0**	**103.2**	**121.4**

Appendix D

Solid Waste Permit 588 Daily Borehole Temperature Averages

Appendix D Table of Contents

Section Page

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 1

	Depth from Surface					
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft
1-Nov	166.7	215.5	216.0	229.9	243.7	265.4
2-Nov	166.6	215.6	216.1	230.3	244.8	265.7
3-Nov	166.8	215.7	216.2	230.0	244.9	265.7
4-Nov	166.6	215.8	216.1	229.5	243.8	265.5
5-Nov	166.9	215.9	216.3	229.8	243.8	265.7
6-Nov	166.9	216.0	216.3	229.9	244.0	265.7
7-Nov	167.1	216.1	216.5	230.1	244.2	266.0
8-Nov	166.9	216.0	216.5	229.9	244.0	265.8
9-Nov	166.8	215.9	216.4	229.7	243.8	265.7
10-Nov	166.7	215.9	216.3	229.5	243.6	265.4
11-Nov	166.9	216.0	216.4	229.6	243.8	265.5
12-Nov	166.5	215.7	216.2	229.3	243.5	265.3
13-Nov	166.5	215.7	216.2	229.2	243.2	265.2
14-Nov	166.3	215.5	215.9	228.9	242.9	265.0
15-Nov	166.4	215.7	216.1	229.1	243.0	265.1
16-Nov	166.5	215.7	216.3	229.2	243.1	265.2
17-Nov	166.4	215.8	216.3	229.1	243.0	265.2
18-Nov	166.5	215.9	216.4	229.2	243.1	265.2
19-Nov	166.7	216.1	216.5	229.2	243.1	265.3
20-Nov	166.7	216.2	216.7	229.3	243.2	265.3
21-Nov	166.1	215.6	216.1	228.6	242.4	264.6
22-Nov	166.0	215.6	216.1	228.6	242.4	264.6
23-Nov	166.0	215.8	216.3	228.7	242.5	264.7
24-Nov	166.2	216.1	216.6	228.8	242.4	264.8
25-Nov	166.4	216.4	216.9	228.9	242.4	265.0
26-Nov	166.6	216.7	217.1	229.0	242.5	265.0
27-Nov	166.3	216.4	216.9	228.8	242.2	264.8
28-Nov	166.1	216.4	216.9	228.7	242.0	264.8
29-Nov	165.8	216.2	216.6	228.4	241.5	264.4
30-Nov	165.7	216.2	216.6	228.4	241.6	264.4
Average	**166.5**	**215.9**	**216.4**	**229.2**	**243.1**	**265.2**

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 2

	Depth from Surface					
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft
1-Nov	157.1	237.3	244.1	260.2	246.8	264.7
2-Nov	157.3	237.4	246.3	260.2	246.9	275.7
3-Nov	157.3	237.4	244.5	261.2	246.8	271.4
4-Nov	157.2	237.5	244.3	261.5	246.7	270.0
5-Nov	157.2	237.7	243.1	262.8	246.5	268.2
6-Nov	157.4	237.7	243.4	262.8	246.7	266.3
7-Nov	157.2	238.0	243.7	263.9	246.6	268.0
8-Nov	157.3	237.9	244.3	264.8	246.8	269.8
9-Nov	156.5	237.7	246.7	265.1	246.6	274.3
10-Nov	156.4	237.8	248.9	265.8	246.3	278.2
11-Nov	156.5	237.9	250.0	268.5	246.3	280.8
12-Nov	156.2	237.7	252.1	269.6	246.1	290.8
13-Nov	156.1	237.8	258.1	270.3	245.9	300.0
14-Nov	156.1	237.8	265.4	268.1	246.2	313.7
15-Nov	156.2	237.9	273.4	267.4	245.7	312.2
16-Nov	156.2	238.0	276.3	265.3	245.9	307.7
17-Nov	156.2	238.0	271.4	264.2	245.9	310.6
18-Nov	156.4	238.0	262.5	262.3	245.8	300.5
19-Nov	156.6	238.3	259.6	261.0	245.7	287.8
20-Nov	156.6	238.1	258.2	261.8	245.8	284.1
21-Nov	156.1	237.8	259.4	261.2	245.4	286.2
22-Nov	155.9	237.8	260.0	261.7	245.4	287.5
23-Nov	156.1	237.8	259.3	259.8	245.3	283.8
24-Nov	156.2	238.1	259.5	259.7	245.5	284.1
25-Nov	156.5	238.3	258.9	259.8	245.6	283.3
26-Nov	157.2	238.4	258.6	259.9	245.5	282.7
27-Nov	157.1	238.2	260.0	259.5	245.4	283.4
28-Nov	156.3	238.1	258.8	259.5	245.3	280.4
29-Nov	156.1	238.0	262.7	260.2	245.2	283.2
30-Nov	156.1	238.0	264.1	259.8	245.3	285.0
Average	**156.6**	**237.9**	**255.9**	**262.9**	**246.0**	**284.5**

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 3

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Nov	168.7	231.8	231.6	246.9	250.7	*	264.0	252.7
2-Nov	168.8	232.3	232.1	247.2	251.1	*	264.4	253.2
3-Nov	168.8	232.7	232.5	247.2	251.1	*	264.4	253.2
4-Nov	168.6	232.6	232.5	246.9	250.8	*	264.1	252.8
5-Nov	168.7	232.8	232.7	247.0	250.9	*	264.2	252.8
6-Nov	169.0	232.8	232.7	247.2	251.0	*	264.3	253.1
7-Nov	169.1	232.8	232.7	247.3	251.2	*	264.4	253.2
8-Nov	168.7	232.7	232.6	247.0	250.9	*	264.1	252.8
9-Nov	168.6	232.7	232.7	247.0	250.9	*	264.2	252.9
10-Nov	168.4	232.7	232.6	246.8	250.6	*	263.9	252.5
11-Nov	168.4	232.9	232.7	246.9	250.6	*	263.9	252.6
12-Nov	168.3	232.8	232.8	246.8	250.6	*	263.8	252.6
13-Nov	168.0	232.9	232.8	246.7	250.5	*	263.7	252.5
14-Nov	167.6	232.5	232.3	246.4	249.9	*	263.2	252.0
15-Nov	167.6	232.6	232.4	246.4	250.0	*	263.2	252.0
16-Nov	167.7	232.8	232.7	246.6	250.2	*	263.4	252.2
17-Nov	167.7	233.0	232.9	246.7	250.5	*	263.7	252.5
18-Nov	167.8	233.0	232.9	246.8	250.4	*	263.6	252.4
19-Nov	167.7	232.9	232.7	246.6	250.1	*	263.3	252.1
20-Nov	167.7	232.9	232.7	246.6	250.1	*	263.3	252.1
21-Nov	167.0	232.3	232.2	246.2	249.8	*	262.9	251.6
22-Nov	167.0	232.3	232.1	246.1	249.5	*	262.6	251.4
23-Nov	*	232.4	232.3	246.2	249.6	*	262.7	251.5
24-Nov	*	232.9	232.7	246.5	249.9	*	263.0	251.8
25-Nov	*	232.9	232.8	246.7	250.0	*	263.1	251.9
26-Nov	*	233.2	232.9	246.8	250.0	*	263.1	251.9
27-Nov	*	232.8	232.7	246.5	249.8	*	262.9	251.7
28-Nov	*	232.6	232.4	246.4	249.6	*	262.7	251.5
29-Nov	*	232.5	232.3	246.2	249.3	*	262.5	251.2
30-Nov	*	232.7	232.5	246.4	249.6	*	262.6	251.3
Average	**168.2**	**232.7**	**232.6**	**246.7**	**250.3**	**N/A**	**263.5**	**252.3**

* Indicates sensor reading issues

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 4

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Nov	222.0	224.0	223.2	224.4	231.8	225.8	224.2	223.7
2-Nov	221.4	223.5	222.6	223.8	229.1	226.0	223.6	222.9
3-Nov	217.2	219.3	218.4	219.7	230.1	224.7	219.7	219.0
4-Nov	218.1	220.3	219.3	220.7	228.0	223.8	220.5	219.8
5-Nov	222.2	224.6	223.7	224.9	229.5	226.4	224.7	224.1
6-Nov	222.7	224.7	223.9	225.1	230.3	227.0	224.9	224.4
7-Nov	218.3	220.6	219.7	221.0	227.0	225.1	220.9	220.3
8-Nov	216.4	218.9	217.8	219.1	225.1	222.4	219.2	218.4
9-Nov	215.4	217.6	216.6	218.1	229.8	223.8	218.1	217.3
10-Nov	217.8	219.9	219.0	220.3	230.2	223.7	220.2	219.5
11-Nov	220.8	222.7	221.9	223.1	229.8	224.1	222.9	222.2
12-Nov	221.6	223.7	222.8	224.2	228.3	225.9	224.0	223.3
13-Nov	217.1	219.4	218.3	219.8	228.3	224.3	219.8	218.9
14-Nov	214.8	217.1	216.1	217.6	228.3	222.3	217.7	216.6
15-Nov	216.4	218.5	217.5	219.0	228.4	222.9	219.0	218.1
16-Nov	219.3	221.3	220.5	221.8	229.0	224.2	221.7	220.8
17-Nov	220.7	222.8	222.0	223.1	229.6	224.9	223.0	222.3
18-Nov	222.3	224.6	224.0	224.9	229.2	224.8	224.7	224.3
19-Nov	215.3	216.8	216.5	217.1	222.5	217.6	217.4	216.8
20-Nov	203.1	203.6	204.1	204.6	217.4	208.2	204.8	204.0
21-Nov	*	*	*	*	*	*	*	*
22-Nov	*	*	*	*	*	*	*	*
23-Nov	*	*	*	*	*	*	*	*
24-Nov	*	*	*	*	*	*	*	*
25-Nov	*	*	*	*	*	*	*	*
26-Nov	*	*	*	*	*	*	*	*
27-Nov	*	*	*	*	*	*	*	*
28-Nov	*	*	*	*	*	*	*	*
29-Nov	*	*	*	*	*	*	*	*
30-Nov	*	*	*	*	*	*	*	*
Average	**218.1**	**220.2**	**219.4**	**220.6**	**228.1**	**223.4**	**220.5**	**219.8**

* Indicates sensor reading issues

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 5

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Nov	164.8	216.3	216.5	229.2	236.9	231.4	224.4	201.6
2-Nov	163.4	216.3	216.4	229.3	237.0	231.7	224.4	201.6
3-Nov	163.0	216.4	216.6	229.7	237.2	232.2	224.5	201.6
4-Nov	162.6	216.3	216.5	230.0	237.3	232.5	224.5	201.6
5-Nov	162.8	216.3	216.5	230.4	237.5	232.9	224.6	201.7
6-Nov	162.1	216.3	216.5	230.6	237.6	233.1	224.6	201.7
7-Nov	161.3	216.4	216.6	230.9	237.7	233.4	224.7	201.8
8-Nov	160.8	216.3	216.5	231.1	237.8	233.6	224.6	201.9
9-Nov	160.9	216.2	216.4	231.2	237.6	233.6	224.3	201.7
10-Nov	164.7	216.2	216.5	231.5	237.7	233.8	224.6	201.7
11-Nov	163.8	216.2	216.5	231.6	237.7	233.9	224.4	201.7
12-Nov	160.1	215.9	216.1	231.4	237.6	233.8	224.1	201.4
13-Nov	162.1	215.8	216.0	231.5	237.6	234.0	224.1	201.4
14-Nov	173.0	215.6	215.9	231.4	237.5	234.0	224.1	201.3
15-Nov	161.8	215.7	215.9	231.5	237.7	234.3	224.2	201.4
16-Nov	160.9	215.8	216.0	231.8	237.7	234.4	224.4	201.5
17-Nov	161.0	215.8	216.0	231.8	237.7	234.6	224.2	201.3
18-Nov	183.6	215.7	216.0	232.0	237.9	234.9	224.3	201.5
19-Nov	190.0	215.8	216.0	232.2	237.9	235.1	224.3	201.6
20-Nov	190.3	215.8	215.9	232.1	238.0	235.3	224.4	201.6
21-Nov	181.1	215.3	215.5	231.7	237.5	235.0	224.0	201.1
22-Nov	165.7	215.2	215.5	231.8	237.5	235.2	224.2	201.2
23-Nov	162.9	215.4	215.6	231.9	237.6	235.4	224.2	201.3
24-Nov	160.8	215.6	215.9	232.2	237.7	235.7	224.4	201.5
25-Nov	159.1	215.8	216.0	232.4	237.9	236.0	224.6	201.6
26-Nov	157.9	215.9	216.2	232.4	237.9	236.1	224.6	201.7
27-Nov	158.8	215.6	216.0	232.2	237.7	236.0	224.4	201.5
28-Nov	165.9	215.5	215.9	232.1	237.6	236.0	224.2	201.4
29-Nov	157.7	215.3	215.8	232.0	237.4	235.9	224.0	201.2
30-Nov	156.3	215.4	215.8	232.0	237.5	236.1	224.3	201.3
Average	**165.3**	**215.9**	**216.1**	**231.4**	**237.6**	**234.3**	**224.4**	**201.5**

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 6

	Depth from Surface				
Date	25 ft	50 ft	75 ft	100 ft	125 ft
1-Nov	171.4	213.7	216.3	215.7	214.6
2-Nov	203.7	220.0	220.8	220.2	220.3
3-Nov	207.5	226.7	225.8	226.5	226.9
4-Nov	207.3	215.2	215.6	214.9	215.1
5-Nov	207.2	215.4	215.1	215.1	215.3
6-Nov	207.3	213.4	215.1	213.3	213.4
7-Nov	207.6	215.9	215.0	215.6	216.1
8-Nov	207.5	215.0	214.4	214.7	215.0
9-Nov	207.5	215.1	214.0	214.8	215.0
10-Nov	207.2	214.1	214.6	214.0	214.1
11-Nov	207.0	213.5	214.3	213.3	213.3
12-Nov	207.0	213.4	214.2	213.1	213.3
13-Nov	207.1	212.7	212.1	212.3	212.6
14-Nov	206.6	211.7	211.0	211.2	211.5
15-Nov	206.7	211.6	210.8	211.1	211.5
16-Nov	206.5	212.0	211.6	211.7	211.7
17-Nov	180.9	212.1	217.1	213.7	214.4
18-Nov	173.6	212.3	216.7	214.9	215.0
19-Nov	171.0	212.6	216.9	215.2	215.3
20-Nov	169.3	219.8	224.0	222.3	222.6
21-Nov	167.3	227.5	231.5	229.8	230.1
22-Nov	166.2	238.8	242.1	240.7	240.8
23-Nov	165.5	235.6	239.5	237.4	238.0
24-Nov	165.1	240.4	244.3	242.2	242.7
25-Nov	164.7	247.5	251.0	249.3	250.0
26-Nov	164.1	237.2	240.8	239.2	239.8
27-Nov	163.3	221.3	225.8	224.1	224.2
28-Nov	165.3	221.0	223.4	221.5	222.1
29-Nov	169.0	222.4	225.3	222.5	223.0
30-Nov	173.7	218.3	219.9	218.3	218.5
Average	**187.8**	**220.2**	**222.0**	**221.0**	**221.2**

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 7

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Nov	159.8	192.2	195.4	196.8	195.3	198.5	202.3	221.1
2-Nov	159.1	192.6	195.2	197.5	196.1	199.4	203.0	221.1
3-Nov	159.7	192.5	194.7	197.6	196.0	199.5	203.0	221.2
4-Nov	159.4	191.6	195.0	197.1	195.7	198.6	202.4	221.2
5-Nov	159.9	191.7	194.9	196.8	195.3	198.5	202.0	220.2
6-Nov	161.1	192.0	195.2	197.2	195.5	198.5	202.5	220.0
7-Nov	160.9	191.1	195.6	196.5	195.0	197.7	201.8	217.3
8-Nov	160.6	190.0	195.9	195.9	194.6	197.4	201.8	216.6
9-Nov	159.2	189.8	196.1	196.3	195.1	197.9	202.7	215.9
10-Nov	157.3	188.8	196.9	195.4	194.4	197.5	202.3	215.9
11-Nov	156.3	188.8	197.1	195.6	194.1	197.4	202.8	216.0
12-Nov	154.0	187.2	198.6	194.7	193.2	195.9	202.5	215.4
13-Nov	152.9	186.2	198.6	194.6	192.9	196.1	203.7	215.7
14-Nov	152.5	187.9	198.9	195.8	194.6	197.6	204.2	213.7
15-Nov	152.3	187.7	199.6	196.3	194.5	198.0	206.3	213.2
16-Nov	152.2	186.4	200.5	195.9	193.7	197.7	208.5	214.0
17-Nov	151.7	185.7	202.0	195.2	192.6	196.8	208.2	215.8
18-Nov	151.5	185.5	200.9	194.7	192.5	196.5	206.8	213.5
19-Nov	151.3	187.4	206.7	194.0	193.8	196.2	203.4	206.6
20-Nov	150.2	187.2	209.7	194.1	193.6	196.2	203.8	206.2
21-Nov	150.1	187.7	209.3	194.0	193.3	195.6	204.2	206.9
22-Nov	150.1	188.3	210.6	194.7	194.3	196.4	204.4	205.2
23-Nov	150.3	188.0	210.0	193.8	193.9	195.8	202.3	203.6
24-Nov	150.4	187.8	210.4	194.1	194.0	196.3	203.6	206.1
25-Nov	150.5	188.6	210.4	194.5	194.5	196.6	203.5	205.5
26-Nov	150.5	189.6	210.6	194.5	195.2	196.6	202.9	203.6
27-Nov	150.1	188.1	210.2	194.1	193.8	196.1	204.2	207.4
28-Nov	149.9	191.2	210.2	194.3	195.8	196.6	201.1	198.5
29-Nov	149.7	192.1	210.3	194.2	197.0	197.3	199.3	194.7
30-Nov	149.7	191.8	210.3	194.3	197.5	197.6	199.4	195.3
Average	**154.1**	**189.2**	**202.3**	**195.3**	**194.6**	**197.2**	**203.3**	**211.6**

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 8

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Nov	190.6	*	194.3	196.7	198.5	198.4	190.5	173.7
2-Nov	190.6	*	194.4	196.8	198.7	198.6	190.7	173.9
3-Nov	190.4	*	194.3	196.9	198.7	198.6	190.6	173.8
4-Nov	190.5	*	194.3	196.7	198.6	198.5	190.5	173.7
5-Nov	190.4	*	194.4	196.8	198.7	198.7	190.7	173.9
6-Nov	190.4	*	194.3	196.8	198.7	198.7	190.7	173.8
7-Nov	190.1	*	194.4	196.9	198.8	198.8	190.8	174.2
8-Nov	190.6	*	194.4	196.8	198.7	198.8	190.8	174.2
9-Nov	190.6	*	194.3	196.8	198.7	198.8	190.8	174.4
10-Nov	190.4	*	194.2	196.6	198.5	198.6	190.7	174.3
11-Nov	190.2	*	194.2	196.6	198.5	198.7	190.8	174.4
12-Nov	190.4	*	194.0	196.4	198.3	198.5	190.6	174.2
13-Nov	190.4	*	193.9	196.4	198.3	198.4	190.4	174.0
14-Nov	190.1	*	193.7	196.1	198.1	198.3	190.3	173.9
15-Nov	190.1	*	193.7	196.2	198.1	198.3	190.4	173.9
16-Nov	190.2	*	193.9	196.3	198.2	198.4	190.5	174.1
17-Nov	189.9	*	193.8	196.3	198.2	198.4	190.2	173.9
18-Nov	189.9	*	193.9	196.3	198.2	198.4	190.1	173.9
19-Nov	189.7	*	193.8	196.2	198.2	198.4	190.2	174.0
20-Nov	189.8	*	193.8	196.1	198.1	198.4	190.3	174.0
21-Nov	189.4	*	193.3	195.6	197.6	197.9	189.8	173.6
22-Nov	189.5	192.4	192.9	195.3	197.2	197.4	189.3	173.1
23-Nov	189.4	193.0	193.3	195.8	197.8	197.9	189.7	173.8
24-Nov	189.6	193.2	193.6	196.0	198.0	198.1	189.6	174.0
25-Nov	189.7	193.4	193.8	196.2	198.2	198.3	189.6	174.3
26-Nov	189.7	193.5	193.8	196.2	198.2	198.4	189.5	174.2
27-Nov	189.4	193.2	193.5	196.0	198.0	198.1	189.2	173.9
28-Nov	189.5	193.1	193.4	195.8	197.8	198.0	189.3	173.9
29-Nov	189.4	193.0	193.3	195.8	197.7	197.9	189.1	173.8
30-Nov	188.9	193.0	193.3	195.8	197.8	197.9	188.7	173.4
Average	**190.0**	**193.1**	**193.9**	**196.3**	**198.2**	**198.4**	**190.1**	**173.9**

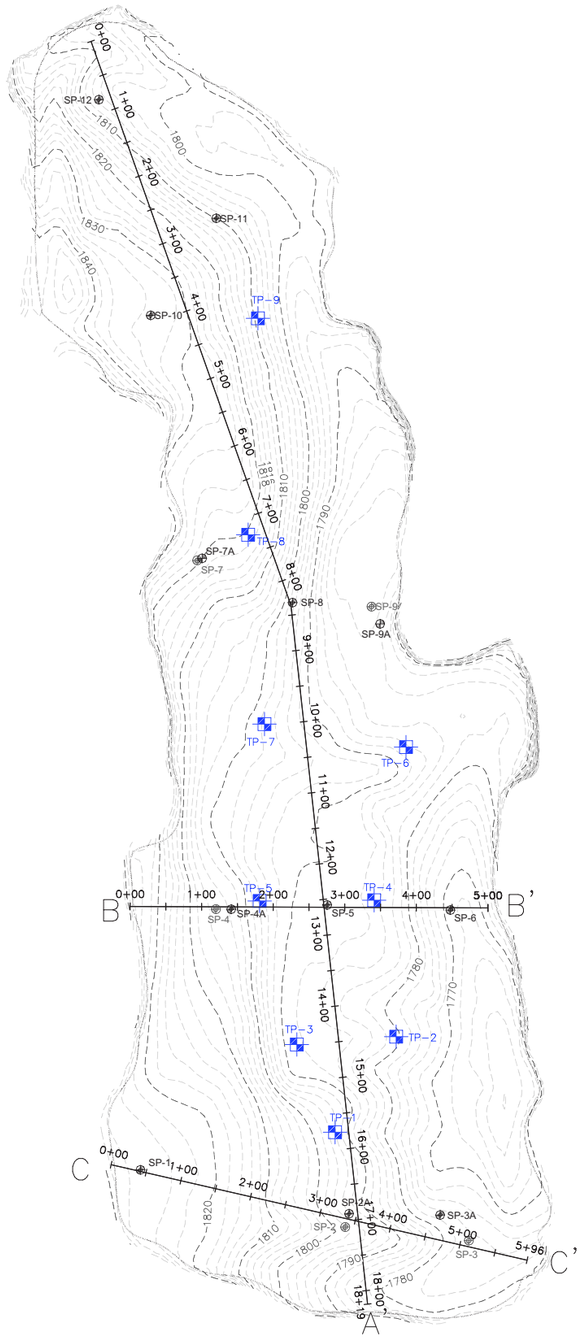
* Indicates sensor reading issues

Solid Waste Permit 588 Daily Borehole Temperature Averages for Borehole 9

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Nov	112.1	149.5	148.9	150.5	146.0	133.0	115.3	105.8
2-Nov	112.4	149.8	149.3	150.5	146.0	133.0	115.3	105.9
3-Nov	112.3	149.8	149.3	150.5	146.0	133.1	115.4	105.9
4-Nov	112.3	149.7	149.2	150.4	145.9	133.0	115.3	105.9
5-Nov	112.7	150.1	149.4	150.7	146.1	133.1	115.6	106.1
6-Nov	112.6	150.0	149.4	150.6	146.1	133.0	115.6	106.1
7-Nov	112.8	150.3	149.6	150.8	146.3	133.2	115.8	106.3
8-Nov	112.8	150.2	149.6	150.7	146.1	133.1	115.8	106.1
9-Nov	112.9	150.1	149.6	150.4	145.9	133.1	115.6	105.9
10-Nov	112.9	150.1	149.5	150.3	145.7	133.0	115.5	105.8
11-Nov	112.8	150.1	149.4	150.5	145.8	133.1	115.6	106.0
12-Nov	112.6	149.7	149.3	150.1	145.5	132.8	115.3	105.5
13-Nov	112.9	149.9	149.5	150.0	145.4	132.6	115.2	105.5
14-Nov	112.4	149.7	149.2	149.9	145.2	132.2	115.1	105.3
15-Nov	112.3	149.6	149.0	149.9	145.3	132.2	115.2	105.4
16-Nov	112.9	149.9	149.5	149.9	145.3	132.2	115.3	105.5
17-Nov	112.9	149.9	149.5	149.9	145.2	132.2	115.2	105.4
18-Nov	113.0	150.1	149.6	150.0	145.3	132.2	115.3	105.5
19-Nov	113.0	150.1	149.6	150.1	145.4	132.2	115.4	105.6
20-Nov	112.9	150.2	149.5	150.2	145.4	132.2	115.5	105.7
21-Nov	112.5	149.5	149.0	149.4	144.7	131.4	114.7	104.9
22-Nov	112.3	149.5	149.1	149.4	144.6	131.4	114.8	104.9
23-Nov	112.6	149.6	149.2	149.5	144.7	131.4	114.8	105.0
24-Nov	113.3	150.1	149.8	149.7	144.9	131.6	115.1	105.2
25-Nov	113.4	150.4	150.0	149.9	145.1	131.9	115.4	105.5
26-Nov	113.4	150.4	150.0	150.1	145.2	132.0	115.5	105.6
27-Nov	113.4	150.2	149.9	149.7	144.9	131.9	115.3	105.3
28-Nov	112.7	149.8	149.3	149.7	144.8	131.6	115.1	105.2
29-Nov	112.9	149.8	149.5	149.3	144.4	131.2	114.8	104.9
30-Nov	113.2	150.1	149.8	149.3	144.4	131.2	114.9	105.0
Average	**112.8**	**149.9**	**149.4**	**150.1**	**145.4**	**132.3**	**115.3**	**105.6**

Appendix E

Monthly Topography Analysis



LEGEND

- MAJOR CONTOURS (EVERY 10')
- MINOR CONTOURS (EVERY 2')
- APPROXIMATE SIDEWALL LOCATION
- SP-8 SETTLEMENT PLATE
- SP-9 DECOMMISSIONED SETTLEMENT PLATE
- TP-3 TEMPERATURE MONITORING PROBE

NOTES:

1. GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON NOVEMBER 16, 2023 BY SCS ENGINEERS.
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD–83 (2011).
4. THE VERTICAL DATUM IS BASED UPON NAVD–88.

100 50 0 100 200

SCALE: 1"=100'

NO.	REVISION	DATE

SHEET TITLE: NOVEMBER 2023 LANDFILL TOPOGRAPHY

PROJECT TITLE: MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588

CLIENT: CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15821 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7433

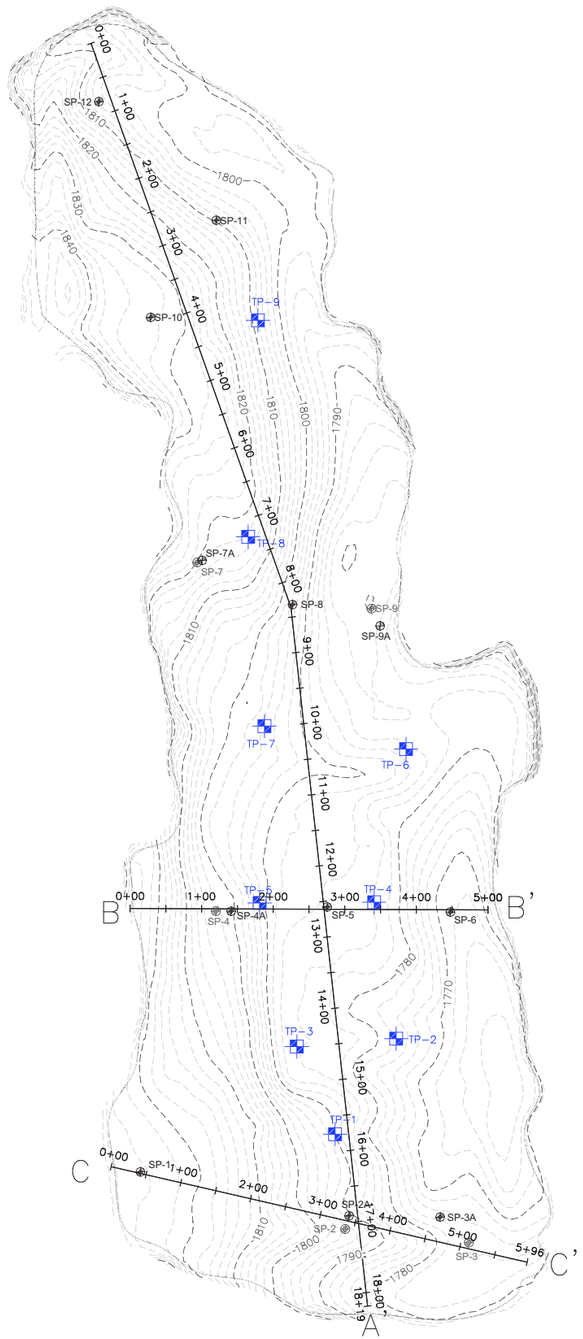
PROJ. NO. 02218208.05
DSN. BY: LLH
CHK. BY: CJW
Q/A RVW. BY: CJW
APP. BY: CJW

CADD FILE: SURF COMP

DATE: 12/1/2024

SCALE:

DRAWING NO. 1 of 8



LEGEND

- MAJOR CONTOURS (EVERY 10')
- MINOR CONTOURS (EVERY 2')
- APPROXIMATE SIDEWALL LOCATION
- SP-8 SETTLEMENT PLATE
- SP-9 DECOMMISSIONED SETTLEMENT PLATE
- TP-3 TEMPERATURE MONITORING PROBE

NOTES:

1. GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON AUGUST 14, 2024 BY SCS ENGINEERS.
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD-83 (2011).
4. THE VERTICAL DATUM IS BASED UPON NAVD-88.

100 50 0 100 200

SCALE: 1"=100'

NO.	REVISION	DATE

SHEET TITLE: AUGUST 2024 LANDFILL TOPOGRAPHY

PROJECT TITLE: MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588

CLIENT: CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15821 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX (804) 378-7433

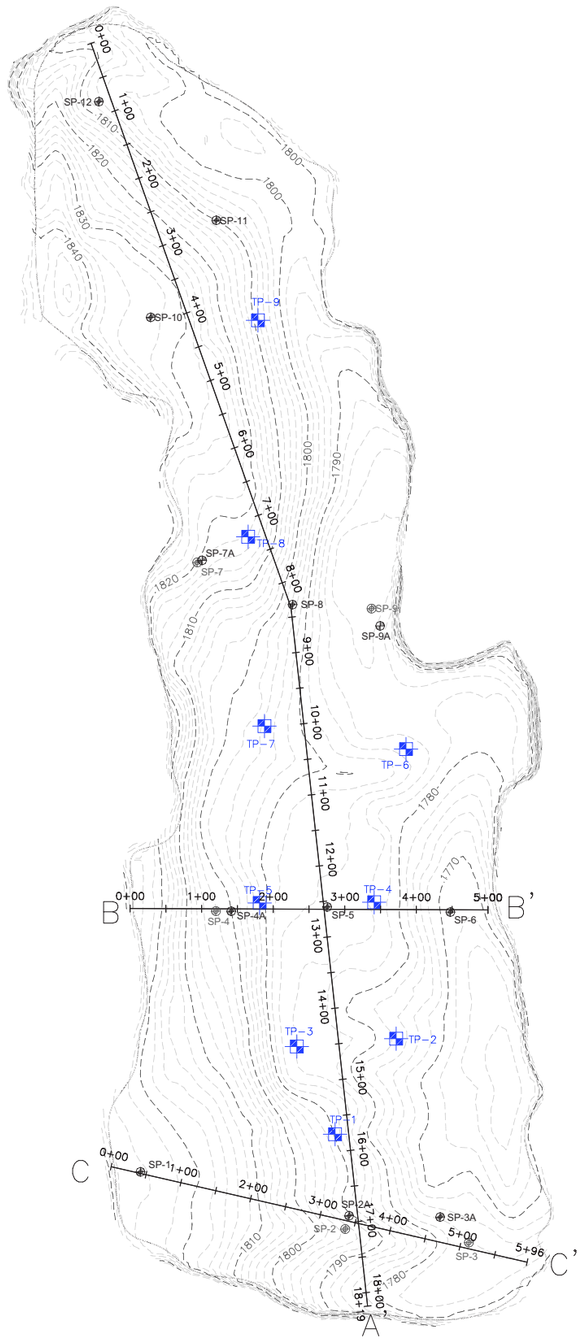
PROJ. NO. 02218208.05
DSN. BY: SRB
DWN. BY: LLH
CHK. BY: CJW
Q/A RVW BY: CJW
APP. BY: CJW

CADD FILE: SURF COMP

DATE: 12/1/2024

SCALE:

DRAWING NO. 2 of 8



LEGEND

- MAJOR CONTOURS (EVERY 10')
- MINOR CONTOURS (EVERY 2')
- APPROXIMATE SIDEWALL LOCATION
- SP-8 SETTLEMENT PLATE
- SP-9 DECOMMISSIONED SETTLEMENT PLATE
- TP-3 TEMPERATURE MONITORING PROBE

NOTES:

1. GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON OCTOBER 16, 2024 BY SCS ENGINEERS.
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD–83 (2011).
4. THE VERTICAL DATUM IS BASED UPON NAVD–88.

100 50 0 100 200

SCALE: 1"=100'

NO.	REVISION	DATE

SHEET TITLE: OCTOBER 2024 LANDFILL TOPOGRAPHY

PROJECT TITLE: MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588

CLIENT: CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15821 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX (804) 378-7433

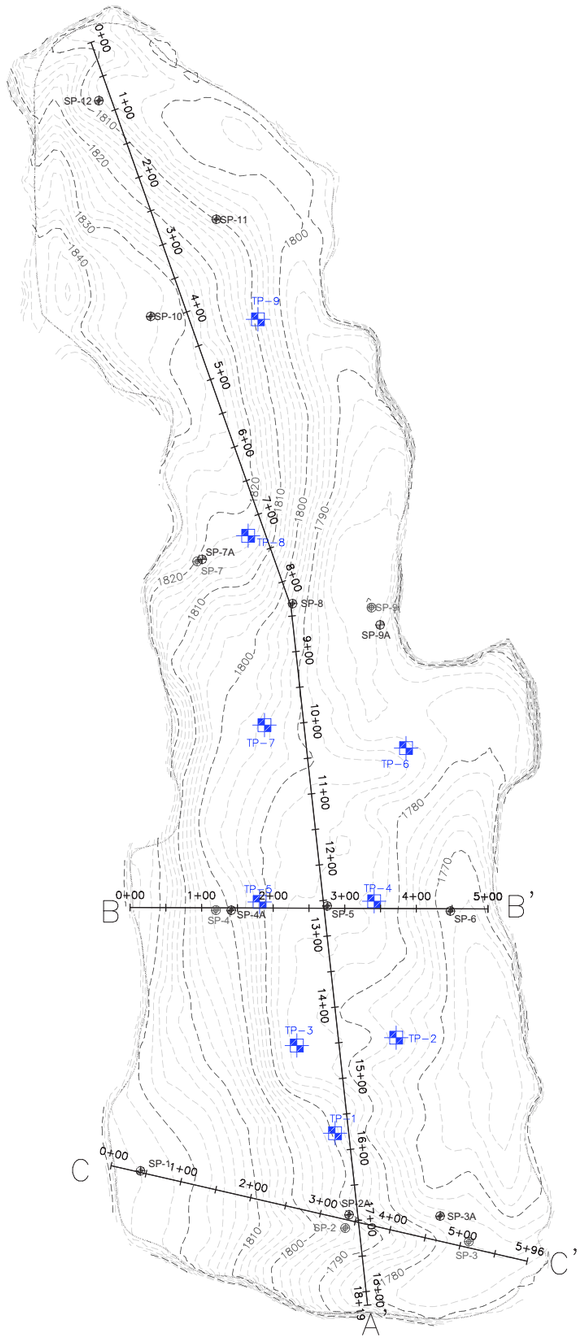
PROJ. NO. 02218208.05
DSN. BY:
DWN. BY: LLH
CHK. BY: CJW
Q/A RVW BY: CJW
APP. BY: CJW

CADD FILE: SURF COMP

DATE: 12/1/2024

SCALE:

DRAWING NO. 3 of 8



LEGEND

- MAJOR CONTOURS (EVERY 10')
- MINOR CONTOURS (EVERY 2')
- APPROXIMATE SIDEWALL LOCATION
- SP-8 SETTLEMENT PLATE
- SP-9 DECOMMISSIONED SETTLEMENT PLATE
- TP-3 TEMPERATURE MONITORING PROBE

NOTES:

1. GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON NOVEMBER 12, 2024 BY SCS ENGINEERS.
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD-83 (2011).
4. THE VERTICAL DATUM IS BASED UPON NAVD-88.

100 50 0 100 200
SCALE: 1"=100'

NO.	REVISION	DATE

SHEET TITLE: NOVEMBER 2024 LANDFILL TOPOGRAPHY

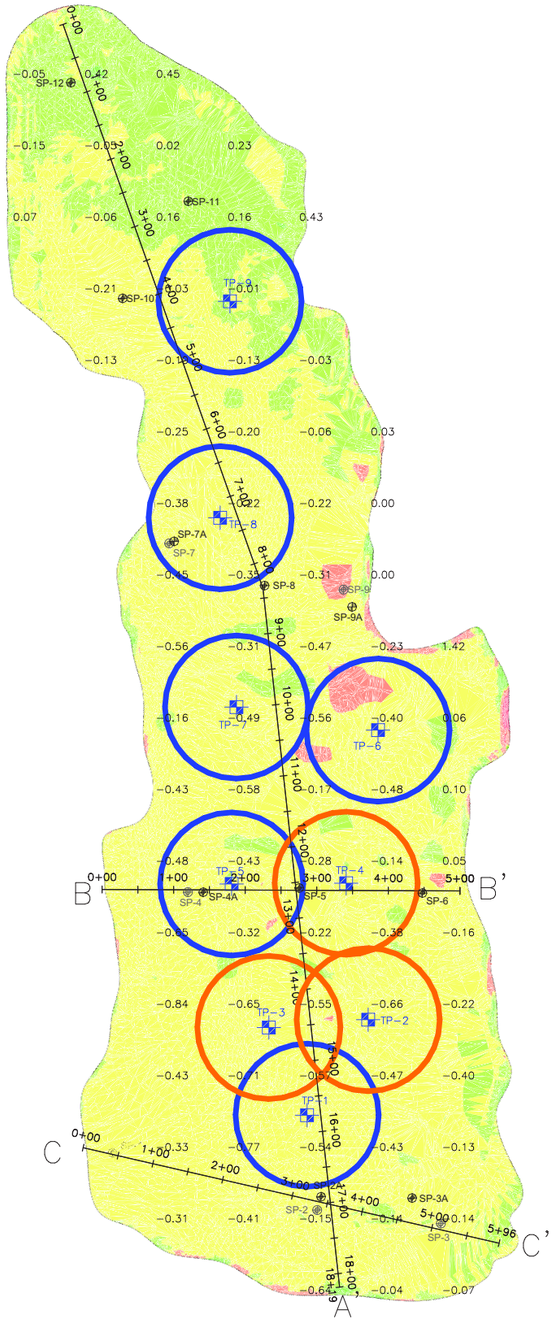
PROJECT TITLE: MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588

CLIENT: CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15821 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH: (804) 378-7440 FAX: (804) 378-7453

PROJ. NO. 02218208.05
DWN. BY: LLH
CHK. BY: CJW
Q/A RVW BY:
APP. BY: CJW

CADD FILE: SURF COMP
DATE: 12/1/2024
SCALE:
DRAWING NO. 4 of 8



LEGEND

- MAJOR CONTOURS (EVERY 10')
- MINOR CONTOURS (EVERY 2')
- APPROXIMATE WASTE BOUNDARY
- SP-8 SETTLEMENT PLATE
- SP-9 DECOMMISSIONED SETTLEMENT PLATE
- -0.39 SPOT ELEVATION ON 100' GRID
- TP-8 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH LESS THAN 200 °F
- TP-1 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 200 °F AND 250 °F
- TP-2 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 250 °F AND 300 °F

Volume

Base Surface TOPO – October 16, 2024
Comparison Surface TOPO – November 12, 2024

Cut Volume	8,449	Cu. Yd.
Fill Volume	1,064	Cu. Yd.
Net Fill	7,385	Cu. Yd.

Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	-20.000	-10.000	
2	-10.000	-5.000	
3	-5.000	-1.000	
4	-1.000	0.000	
5	0.000	1.000	
6	1.000	5.000	
7	5.000	10.000	
8	10.000	20.000	

NOTES:

1. THE ELEVATION CHANGES ARE CALCULATED BETWEEN THE AERIAL TOPOGRAPHY DATA CAPTURED ON OCTOBER 16, 2024 AND NOVEMBER 12, 2024 BY SCS ENGINEERS. POSITIVE VALUES (+) INDICATE AREAS OF FILL AND NEGATIVE VALUES (–) INDICATE AREAS OF CUT (SETTLEMENT). VALUES ARE ROUNDED TO THE NEAREST FOOT
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FOR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD–83 (2011)
4. THE VERTICAL DATUM IS BASED UPON NAVD–88.

100 50 0 100 200
SCALE: 1"=100'

NO.	REVISION	DATE

SHEET TITLE: NOVEMBER VOLUME CHANGE OCTOBER 2024 TO NOVEMBER 2024

PROJECT TITLE: MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588

CLIENT: CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15821 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7453

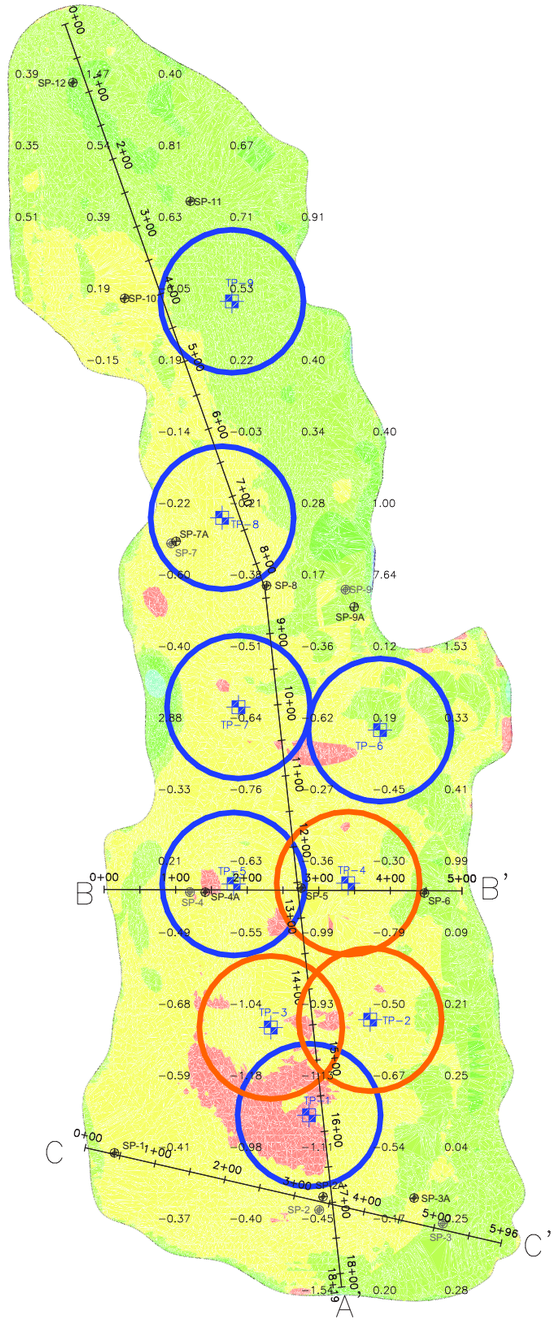
PROJ. NO. 022182208.05
DSN. BY:
DWN. BY: LLH
CHK. BY: CJW
QA/A RVW BY: CJW
APP. BY: CJW

CADD FILE: SURF COMP

DATE: 12/1/2024

SCALE:

DRAWING NO. 5 of 8



LEGEND

- MAJOR CONTOURS (EVERY 10')
- MINOR CONTOURS (EVERY 2')
- APPROXIMATE WASTE BOUNDARY
- SP-8 SETTLEMENT PLATE
- SP-9 DECOMMISSIONED SETTLEMENT PLATE
- -0.39 SPOT ELEVATION ON 100' GRID
- TP-8 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH LESS THAN 200 °F
- TP-1 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 200 °F AND 250 °F
- TP-2 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 250 °F AND 300 °F

Volume

Base Surface TOPO – August 14, 2024
Comparison Surface TOPO – November 12, 2024

Cut Volume	8,050	Cu. Yd.
Fill Volume	6,752	Cu. Yd.
Net Cut	1,298	Cu. Yd.

Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	-20.000	-10.000	
2	-10.000	-5.000	
3	-5.000	-1.000	
4	-1.000	0.000	
5	0.000	1.000	
6	1.000	5.000	
7	5.000	10.000	
8	10.000	20.000	

NOTES:

1. THE ELEVATION CHANGES ARE CALCULATED BETWEEN THE AERIAL TOPOGRAPHY DATA CAPTURED ON AUGUST 14, 2024 AND NOVEMBER 12, 2024 BY SCS ENGINEERS. POSITIVE VALUES (+) INDICATE AREAS OF FILL AND NEGATIVE VALUES (–) INDICATE AREAS OF CUT (SETTLEMENT). VALUES ARE ROUNDED TO THE NEAREST FOOT.
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FOR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD–83 (2011).
4. THE VERTICAL DATUM IS BASED UPON NAVD–88.

100 50 0 100 200
SCALE: 1"=100'

NO.	REVISION	DATE

SHEET TITLE: NOVEMBER VOLUME CHANGE AUGUST 2024 TO NOVEMBER 2024

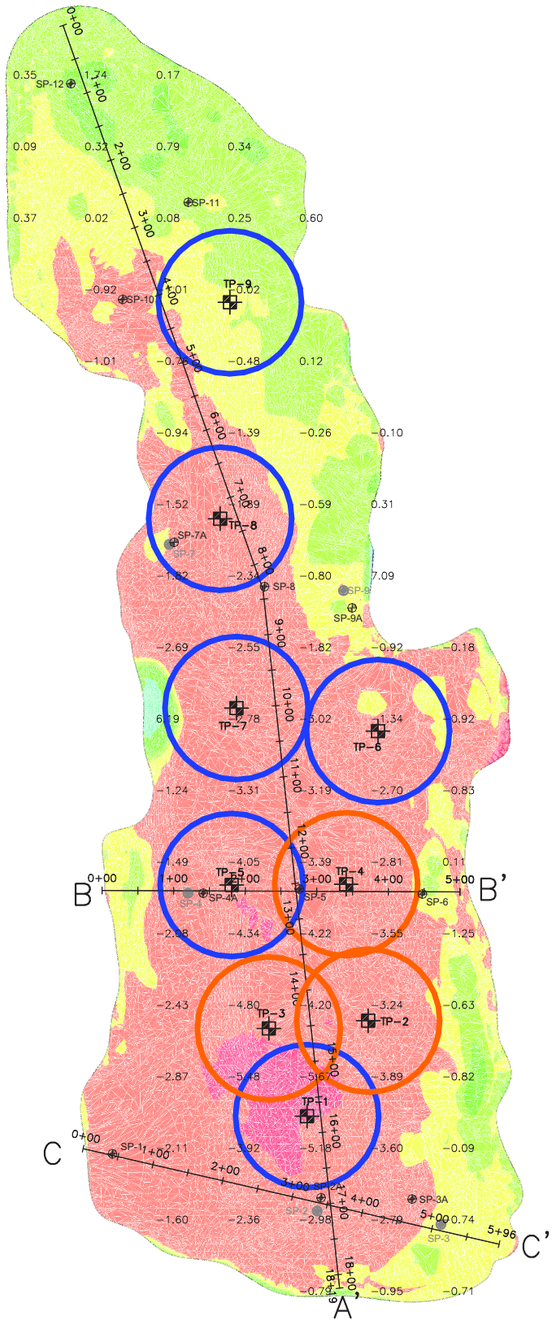
PROJECT TITLE: MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588

CLIENT: CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH: (804) 378-7440 FAX: (804) 378-7433

PROJ. NO. 02218208.05
DSN. BY:
DWN. BY: LLH
CHK. BY: CJW
Q/A RVW BY: CJW
APP. BY: CJW

CADD FILE: SURF COMP
DATE: 12/1/2024
SCALE:
DRAWING NO. 6 of 8



LEGEND

- MAJOR CONTOURS (EVERY 10')
- MINOR CONTOURS (EVERY 2')
- APPROXIMATE WASTE BOUNDARY
- SP-8 SETTLEMENT PLATE
- SP-9 DECOMMISSIONED SETTLEMENT PLATE
- −0.39 SPOT ELEVATION ON 100' GRID
- TP-8 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH LESS THAN 200 °F
- TP-1 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 200 °F AND 250 °F
- TP-2 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 250 °F AND 300 °F

Volume

Base Surface	TOPO – November 16, 2023	
Comparison Surface	TOPO – November 12, 2024	
Cut Volume	49,906	Cu. Yd.
Fill Volume	3,512	Cu. Yd.
Net Cut	46,394	Cu. Yd.

Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	−20.000	−10.000	
2	−10.000	−5.000	
3	−5.000	−1.000	
4	−1.000	0.000	
5	0.000	1.000	
6	1.000	5.000	
7	5.000	10.000	
8	10.000	20.000	

NOTES:

1. THE ELEVATION CHANGES ARE CALCULATED BETWEEN THE AERIAL TOPOGRAPHY DATA CAPTURED ON NOVEMBER 16, 2023 AND NOVEMBER 12, 2024 BY SCS ENGINEERS. POSITIVE VALUES (+) INDICATE AREAS OF FILL AND NEGATIVE VALUES (−) INDICATE AREAS OF CUT (SETTLEMENT). VALUES ARE ROUNDED TO THE NEAREST FOOT
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FOR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD−83 (2011)
4. THE VERTICAL DATUM(S) IS BASED UPON NAVD−88.

100 50 0 100 200

SCALE: 1"=100'

NO. | REVISION | DATE

SHEET TITLE: NOVEMBER VOLUME CHANGE
NOVEMBER 2023 TO NOVEMBER 2024

PROJECT TITLE: MONTHLY TOPOGRAPHY ANALYSIS
SOLID WASTE PERMIT #588

CLIENT: CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7433

PROJ. NO. 02218208.05 | DSN. BY: | DWN. BY: LLH | CHK. BY: CJW | D/A RVW BY: CJW | APP. BY: CJW

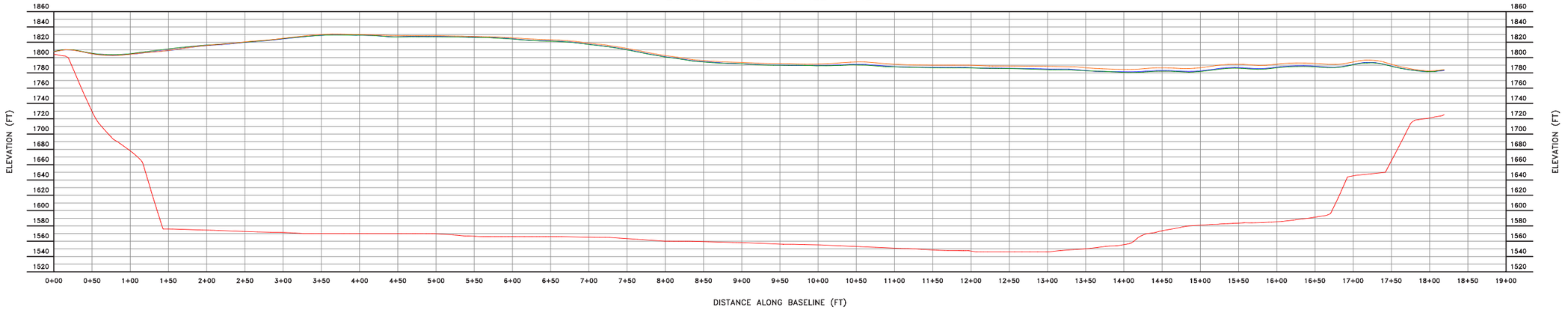
CADD FILE: SURF COMP

DATE: 12/1/2024

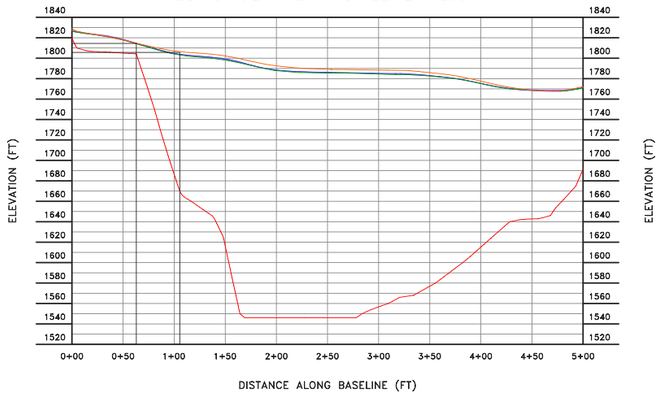
SCALE:

DRAWING NO. 7 of 8

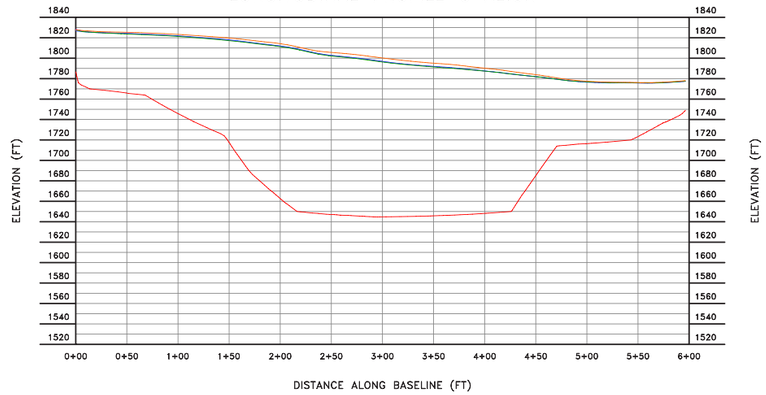
LONGITUDINAL PROFILE A ALIGN



LONGITUDINAL PROFILE B ALIGN



LONGITUDINAL PROFILE C ALIGN



LEGEND

- BOTTOM LINER ELEVATION
- NOVEMBER 2023 TOPO
- AUGUST 2024 TOPO
- OCTOBER 2024 TOPO
- NOVEMBER 2024 TOPO

NO.	REVISION	DATE

SHEET TITLE: **PROFILES**

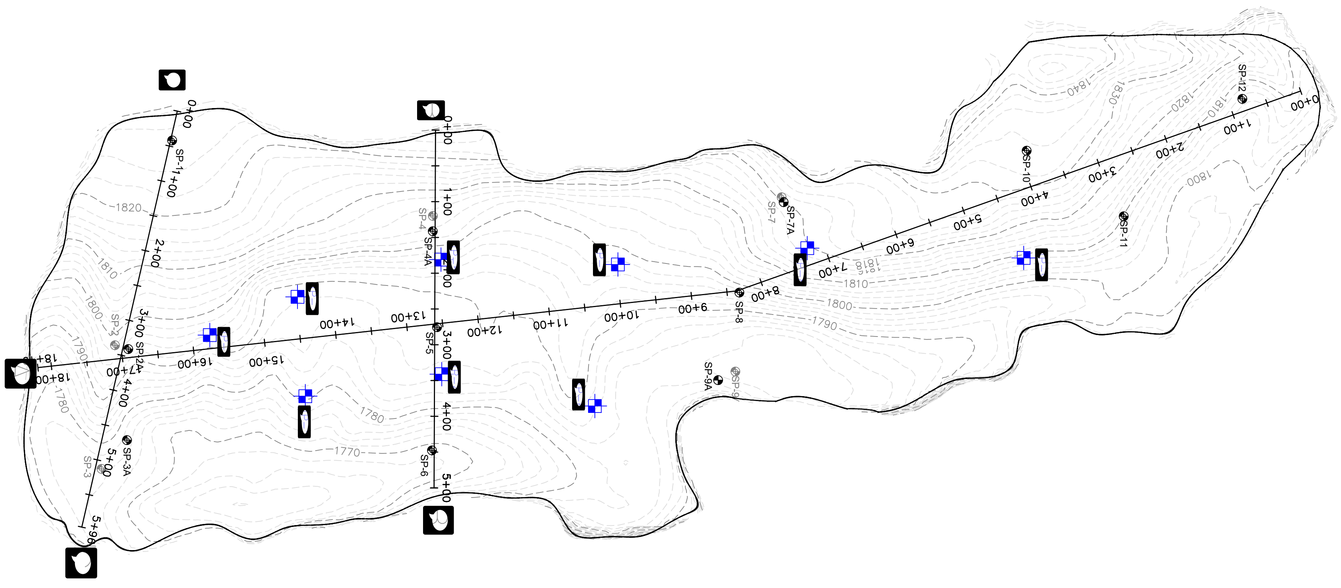
PROJECT TITLE: **MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588**

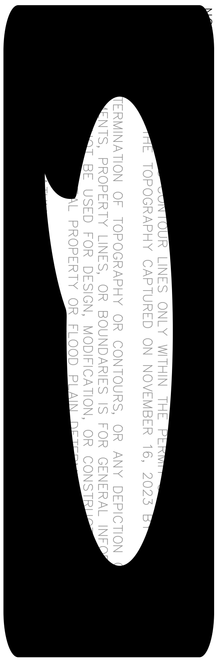
CLIENT
CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

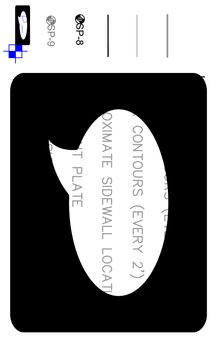
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
15821 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7453

PROJ. NO. 02218208.05
DWN. BY: LLH
CHK. BY: CJW
Q/A RVW BY: CJW
APP. BY: CJW

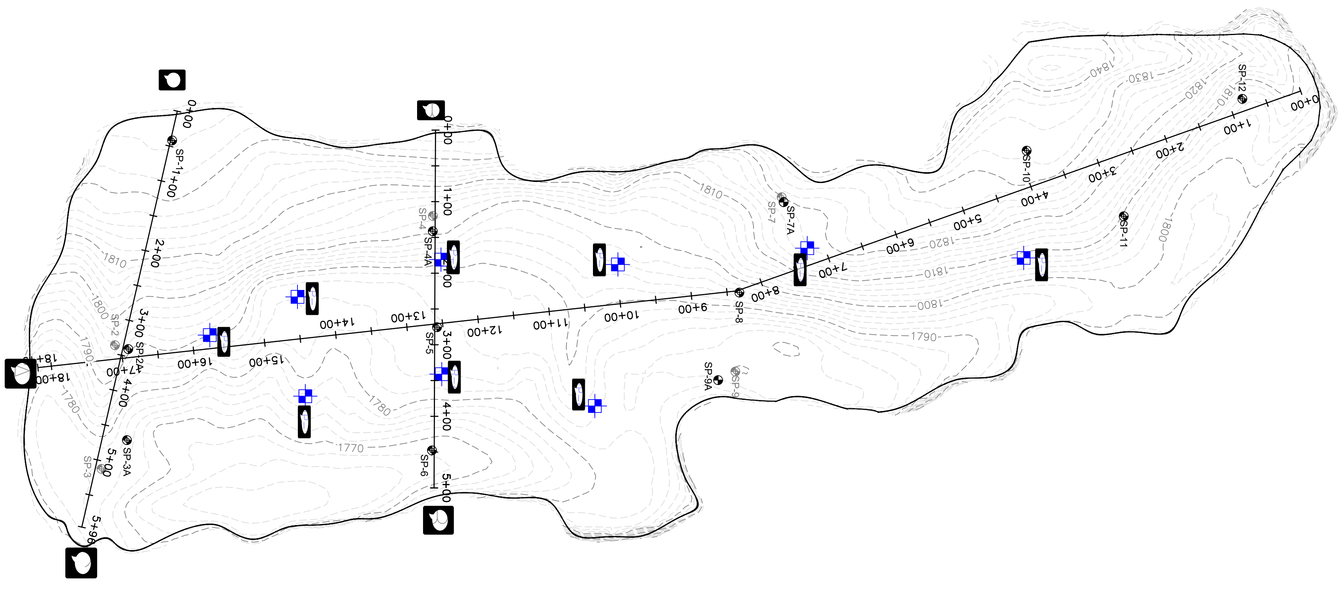
CADD FILE: SURF COMP
DATE: 12/1/2024
SCALE:
DRAWING NO. **8** of 8

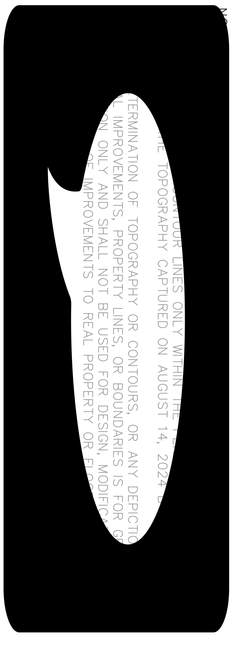


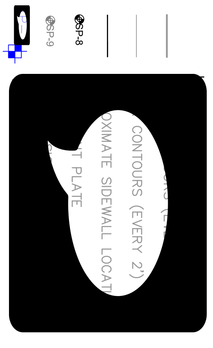


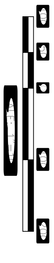


18	SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113 PH. (804) 378-7440 FAX. (804) 378-7433	CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201	NOVEMBER 2023 LANDFILL TOPOGRAPHY MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588

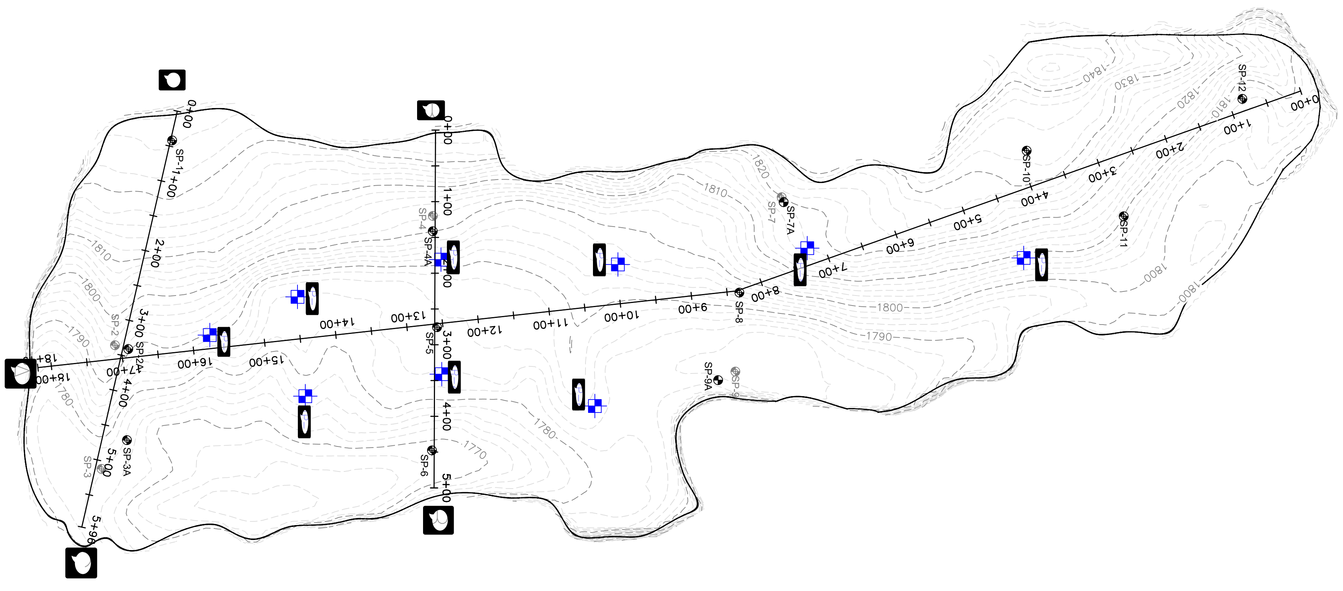


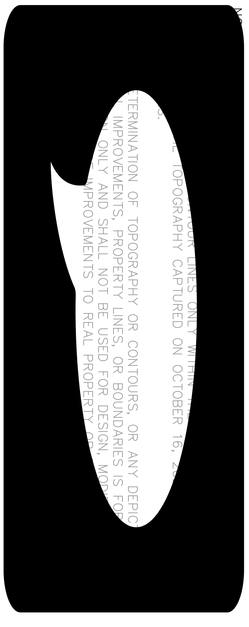


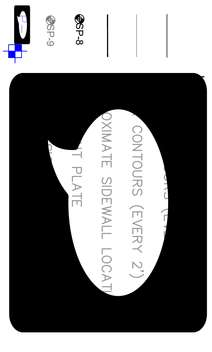




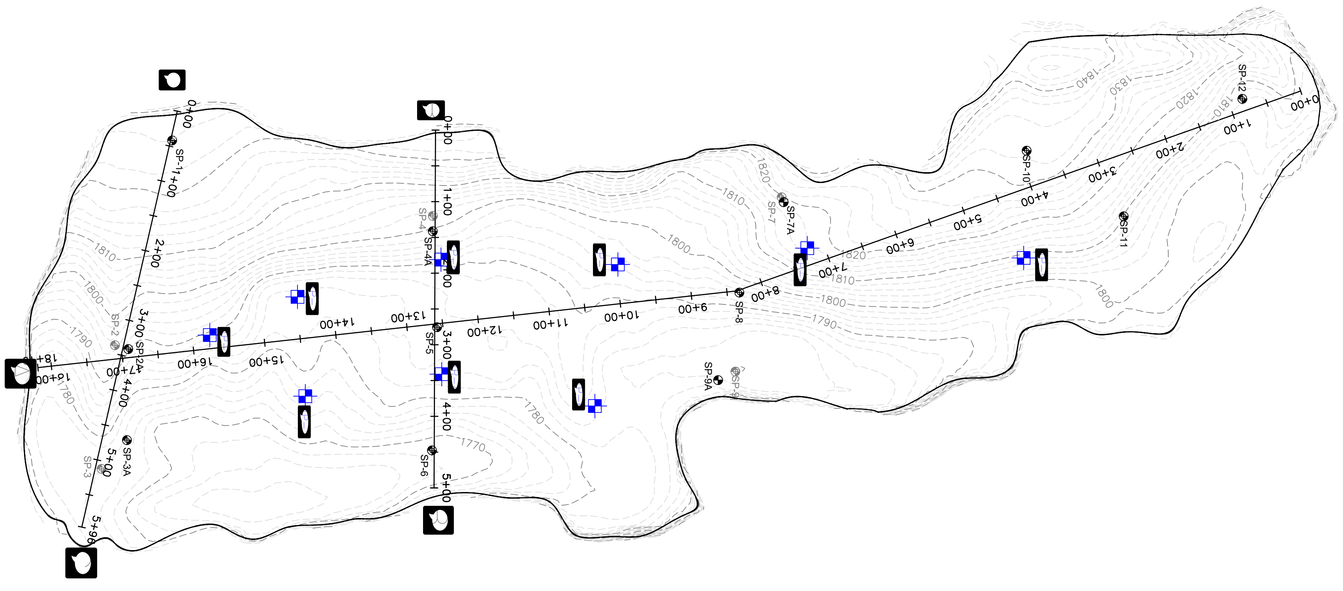
2 of 8	**SCS ENGINEERS** STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113 PH. (804) 378-7440 FAX. (804) 378-7433	**CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY** 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201	AUGUST 2024 LANDFILL TOPOGRAPHY **MONTHLY TOPOGRAPHY ANALYSIS** **SOLID WASTE PERMIT #588**

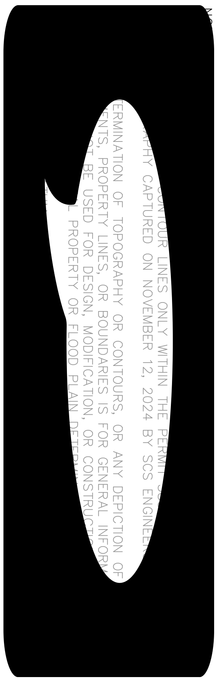


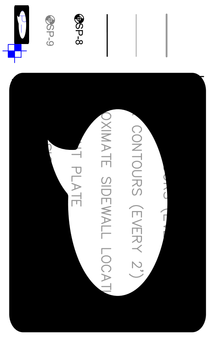




3 of 8	**SCS ENGINEERS** STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113 PH. (804) 378-7440 FAX. (804) 378-7433	**CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY** 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201	OCTOBER 2024 LANDFILL TOPOGRAPHY **MONTHLY TOPOGRAPHY ANALYSIS** **SOLID WASTE PERMIT #588**







4 of 8	**SCS ENGINEERS** STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113 PH. (804) 378-7440 FAX. (804) 378-7433	**CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY** 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201	**NOVEMBER 2024** **LANDFILL TOPOGRAPHY** **MONTHLY TOPOGRAPHY ANALYSIS** **SOLID WASTE PERMIT #588**

Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	−20.000	−10.000	
2	−10.000	−5.000	
3	−5.000	−1.000	
4	−1.000	0.000	
5	0.000	1.000	
6	1.000	5.000	
7	5.000	10.000	
8	10.000	20.000	

NOVEMBER VOLUME CHANGE
OCTOBER 2024 TO NOVEMBER 2024

MONTHLY TOPOGRAPHY ANALYSIS
SOLID WASTE PERMIT #588

CITY OF BRISTOL INTEGRATED SOLID
WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
1652† MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7453

[redacted]

[redacted]

Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	−20.000	−10.000	
2	−10.000	−5.000	
3	−5.000	−1.000	
4	−1.000	0.000	
5	0.000	1.000	
6	1.000	5.000	
7	5.000	10.000	
8	10.000	20.000	

[redacted]

NOVEMBER VOLUME CHANGE
AUGUST 2024 TO NOVEMBER 2024

MONTHLY TOPOGRAPHY ANALYSIS
SOLID WASTE PERMIT #588

CITY OF BRISTOL INTEGRATED SOLID
WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
1652T MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7453

6

8

Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	−20.000	−10.000	
2	−10.000	−5.000	
3	−5.000	−1.000	
4	−1.000	0.000	
5	0.000	1.000	
6	1.000	5.000	
7	5.000	10.000	
8	10.000	20.000	

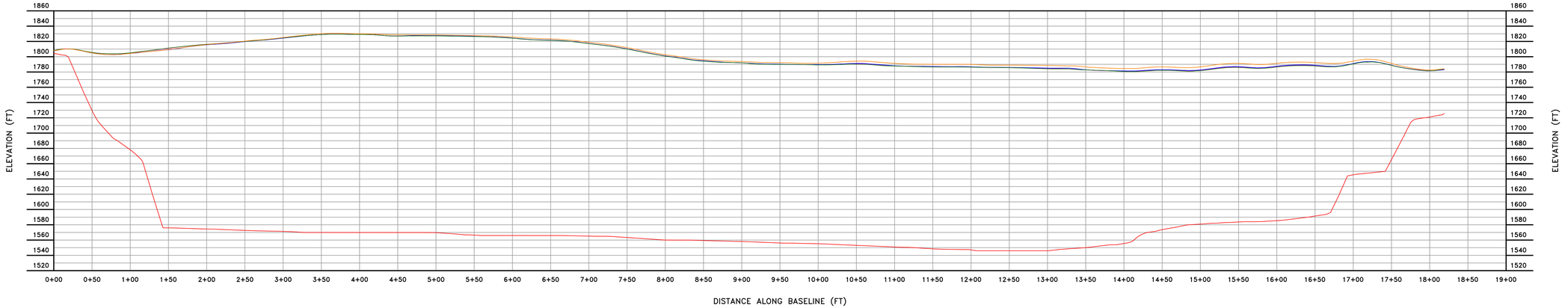
NOVEMBER VOLUME CHANGE
NOVEMBER 2023 TO NOVEMBER 2024

MONTHLY TOPOGRAPHY ANALYSIS
SOLID WASTE PERMIT #588

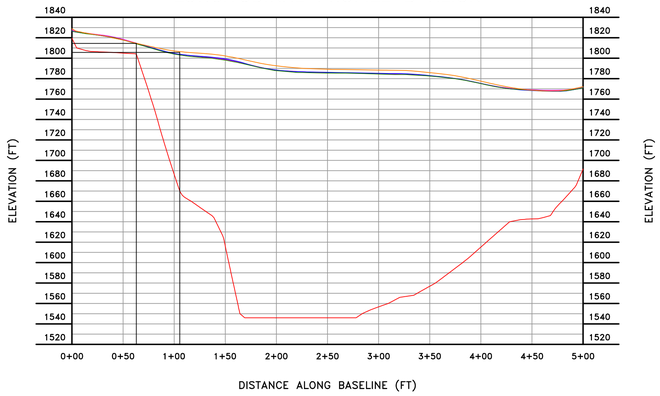
CITY OF BRISTOL INTEGRATED SOLID
WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
1652I MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX: (804) 378-7433

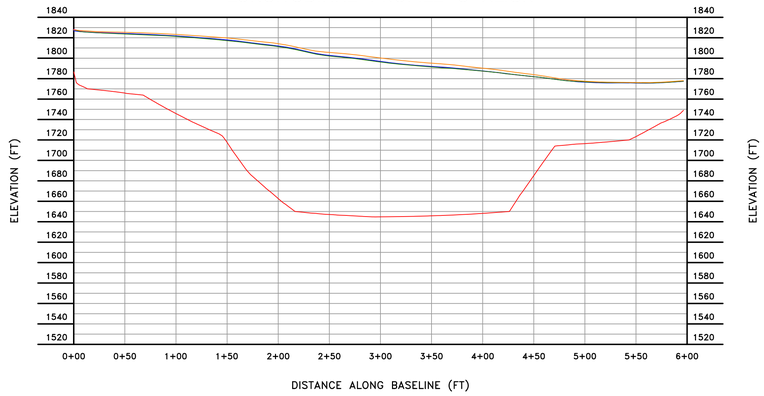
LONGITUDINAL PROFILE A ALIGN



LONGITUDINAL PROFILE B ALIGN



LONGITUDINAL PROFILE C ALIGN



PROFILES

MONTHLY TOPOGRAPHY ANALYSIS
SOLID WASTE PERMIT #588

CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
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CONSULTING ENGINEERS, INC.
15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 23113
PH: (804) 378-7440 FAX: (804) 378-7453

8

Appendix F

Field Logs

Lab Report

Historical LFG-EW Leachate Monitoring Results Summary

City of Bristol SWP 588 Landfill
Dual Phase LFG-EW Liquid Level Measurement Log

Date	11/7/2024													
Personnel	L. Tucker, L. Nelson								L. Howard					
Location ID	Date	Casing Stickup (ft)	Depth to Liquid (ft)	Prior Depth to Liquid (ft)	Cycle Count	Prior Cycle Count (10/01)	Measured Well Casing Depth (ft)	Pump Depth (ft)	Liquid Column Thickness	Pump (Y/N)	Pump PSI	Sample Collected	Check/ Photo	Comments
PUMP INSTALLED														
EW-33B*	---	---	---	---	---	---	185.00	140	---	---	---	---	---	
EW-36A	11/7/2024	5.33	60.72	50.48	81637	488578	180.00	135	129.52	Y	BH	Y	Y	
EW-49*	---	---	---	---	---	---	96.15	90	---	---	---	---	---	
EW-50	11/7/2024	3.83	46.73	38.99	1486564	1464410	77.70	83	38.71	Y	80	Y	Y	
EW-51	11/7/2024	4.17	33.10	33.02	180635	180635	92.80	95	59.78	Y	0	N	Y	
EW-52	11/7/2024	3.50	54.10	72.14	972653	894051	98.70	93	26.56	Y	103	N	Y	
EW-53	11/7/2024	4.00	43.89	53.22	3294310	3290412	100.70	---	47.48	Y	120	N	Y	
EW-54	11/7/2024	4.50	40.98	36.54	1116394	1077260	82.70	75	46.16	Y	0	N	Y	Air disconnected
EW-59	11/7/2024	4.42	42.18	42.51	3475073	3418361	73.40	64	30.89	Y	0	N	Y	Air off
EW-60	11/7/2024	4.75	41.27	41.20	63010	698147	81.80	70	40.60	Y	110	N	Y	
EW-61	11/7/2024	3.17	66.17	68.96	319360	279959	87.80	66	18.84	Y	60	N	Y	
EW-62	11/7/2024	4.92	81.12	72.25	214599	214599	110.60	80	38.35	Y	0	N	Y	Air disconnected
EW-64*	---	---	---	---	---	---	109.00	113	---	---	---	---	---	
EW-65*	---	---	---	---	---	---	88.40	50	---	---	---	---	---	
EW-67	11/7/2024	3.08	38.16	41.38	170183	102098	107.75	62.5	66.37	Y	100	N	Y	
EW-68	11/7/2024	1.88	49.62	52.45	2576627	2540476	73.57	68	21.12	Y	120	N	Y	
EW-69	11/7/2024	4.42	92.88	93.09	18	18	98.00	---	4.91	Y	0	N	Y	
EW-70	11/7/2024	2.17	56.41	---	14	---	71.00	58	---	Y	110	N	Y	
EW-74	11/7/2024	6.42	162.08	162.54	---	---	184.15	140	21.61	N	---	N	Y	
EW-78	11/7/2024	3.92	44.38	44.01	130611	130591	57.00	47	12.99	Y	80	N	Y	
EW-81*	---	---	---	---	---	---	151.56	125	---	---	---	---	---	
EW-82	11/7/2024	4.33	123.50	119.34	201285	39311	163.26	145	43.92	Y	BH	N	Y	

City of Bristol SWP 588 Landfill
Dual Phase LFG-EW Liquid Level Measurement Log

Date	11/7/2024													
Personnel	L. Tucker, L. Nelson								L. Howard					
Location ID	Date	Casing Stickup (ft)	Depth to Liquid (ft)	Prior Depth to Liquid (ft)	Cycle Count	Prior Cycle Count (10/01)	Measured Well Casing Depth (ft)	Pump Depth (ft)	Liquid Column Thickness	Pump (Y/N)	Pump PSI	Sample Collected	Check/ Photo	Comments
EW-83*	---	---	---	---	---	---	167.04	145	---	---	---	---	---	
EW-85	11/7/2024	4.58	55.25	54.11	237292	237195	91.00	78.5	36.89	Y	110	N	Y	
EW-87	11/7/2024	5.08	59.83	57.96	340749	276139	149.57	125	91.61	Y	0	N	Y	Air off
EW-88	11/7/2024	4.17	DNM	60.86	254732	199456	100.00	58	39.14	Y	0	N	Y	Crust has sealed well cap
EW-89	11/7/2024	4.75	39.95	42.07	---	---	84.57	70	42.50	Y	0	N	Y	
EW-90	11/7/2024	3.92	49.42	---	---	---	114.00	101	---	Y	0	N	Y	
EW-91	11/7/2024	5.67	50.41	46.35	---	---	137.70	115	91.35	Y	0	N	Y	
EW-92	11/7/2024	7.75	---	50.96	---	---	112.99	95	62.03	N	---	N	Y	Too tall to measure
EW-96	11/7/2024	7.58	64.34	53.63	---	---	164.35	145	110.72	Y	BH	N	Y	
EW-98	11/7/2024	4.33	31.84	45.12	1387046	1256797	51.00	43	5.88	Y	120	N	Y	
EW-100	11/7/2024	4.25	72.21	70.84	---	733311	108.50	96.5	37.66	N	---	N	Y	
NO PUMP														
EW-55	11/7/2024	3.92	24.86	39.33	55091	---	90.40	90	51.07	Y	0	N	Y	Well Label Obscured
EW-56	11/7/2024	5.67	Dry	Dry	---	---	42.71	58	---	---	---	---	Y	Hit bottom at 39'
EW-57	11/7/2024	5.17	39.74	85.64	---	---	107.40	71	21.76	---	---	---	Y	
EW-58	11/7/2024	3.75	30.05	26.67	---	---	84.50	82	---	---	---	---	Y	
EW-63*	---	---	---	---	---	---	62.10	64	---	---	---	---	---	
EW-66	11/7/2024	5.75	38.99	36.27	---	---	---	---	---	---	---	---	Y	
EW-71	11/7/2024	5.38	>165	161.40	---	---	185.80	---	---	---	---	---	Y	Meter max length is 165' did not encounter liquid at 165'
EW-72	11/7/2024	5.00	121.03	125.99	---	---	141.21	---	---	---	---	---	Y	
EW-73	11/7/2024	3.58	106.16	106.52	---	---	116.00	---	---	---	---	---	Y	
EW-77*	---	---	---	---	---	---	185.22	---	---	---	---	---	---	
EW-79*	---	---	---	---	---	---	185.64	---	---	---	---	---	---	
EW-80*	---	---	---	---	---	---	149.00	---	---	---	---	---	---	
EW-84*	---	---	---	---	---	---	130.56	---	---	---	---	---	---	

City of Bristol SWP 588 Landfill
Dual Phase LFG-EW Liquid Level Measurement Log

Date	11/7/2024													
Personnel	L. Tucker, L. Nelson								L. Howard					
Location ID	Date	Casing Stickup (ft)	Depth to Liquid (ft)	Prior Depth to Liquid (ft)	Cycle Count	Prior Cycle Count (10/01)	Measured Well Casing Depth (ft)	Pump Depth (ft)	Liquid Column Thickness	Pump (Y/N)	Pump PSI	Sample Collected	Check/ Photo	Comments
EW-86	11/7/2024	3.00	78.70	73.68	---	---	153.00	---	---	---	---	---	Y	
EW-93	11/7/2024	4.08	41.74	32.68	837901	---	111.00	---	---	Y	93	N	Y	
EW-95	11/7/2024	4.00	59.34	56.61	---	---	68.00	---	---	---	---	---	Y	
EW-97	11/7/2024	8.08	DNM	DNM	---	---	144.50	---	---	---	---	---	Y	Too tall to measure
EW-99	11/7/2024	4.17	59.81	36.65	---	---	65.00	---	---	---	---	---	Y	
MEASURE CASING STICKUP AND CYCLE COUNTER ONLY														
EW-75*	11/7/2024	5.58	DNM	DNM	---	---	130.82	140	---	N	---	---	---	
EW-76	11/7/2024	3.58	DNM	DNM	---	41	127.00	108	---	N	---	N	Y	
EW-94	11/7/2024	3.92	DNM	DNM	576769	502253	50.00	45	---	---	90	N	Y	

DNM = Do not measure
* = Unable to get depth to liquid due to damage to forcemain causing wells to be not under vacuum and therefore unsafe to open.

Dual Phase LFG-EW Sample Collection Log

Location ID	Sample Date	Sample Time	Temperature (oC)	pH (s.u.)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Observations
EW-33B									
EW-36A	11/7/2024	10:50	49.20	7.52	12135.00	0.05	-198.20	0.00	Black Opaque
EW-49									
EW-50	11/7/2024	10:25	65.70	7.47	193666.00	0.24	-197.80	15.52	yellow-green
EW-51									
EW-52									
EW-53									
EW-54									
EW-55									
EW-57									
EW-58									
EW-59									
EW-60									
EW-61									
EW-62									
EW-64									
EW-67									
EW-68									
EW-70									
EW-72									

Dual Phase LFG-EW Sample Collection Log

Location ID	Sample Date	Sample Time	Temperature (oC)	pH (s.u.)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Observations
EW-73									
EW-74									
EW-75									
EW-76									
EW-78									
EW-81									
EW-82									
EW-83									
EW-85									
EW-87									
EW-88									
EW-89									
EW-90									
EW-91									
EW-92									
EW-94									
EW-96									
EW-98									
EW-100									
Sampler:		L. Nelson, L. Tucker				Samples Shipped By: Courier			
Log Checked By:		L. Howard				Laboratory: Enthalpy Analytical			

TNI Accredited
VELAP ID 460021

ENTHALPY ANALYTICAL

1941 Reymet Road ● Richmond, Virginia 23237 ● Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

DRAFT REPORT

Laboratory Order ID 24K0529

Client Name:	SCS Engineers-Winchester 296 Victory Road Winchester, VA 22602	Date Received:	November 8, 2024 8:00
		Date Issued:	November 22, 2024 17:20
		Project Number:	0218208.15
Submitted To:	Jennifer Robb	Purchase Order:	
Client Site I.D.:	Bristol Landfill		

Enclosed are the results of analyses for samples received by the laboratory on 11/08/2024 08:00. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

End Notes:
The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

Enthalpy Analytical
1941 Reymet Road
Richmond, VA 23237
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(804)-358-8297 - Fax

Analysis Detects Report

Client Name: SCS Engineers-Winchester
Client Site ID: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM

Laboratory Sample ID: **24K0529-01** **Client Sample ID:** **EW-36A**

Parameter	Samp ID	Reference Method	Sample Results	Qual	DL	LOQ	Dil. Factor	Units
Arsenic	01	SW6020B	180		5.0	10	10	ug/L
Barium	01	SW6020B	262		10.0	50.0	10	ug/L
Chromium	01	SW6020B	79.7		4.00	10.0	10	ug/L
Copper	01	SW6020B	5.69	J	3.00	10.0	10	ug/L
Nickel	01	SW6020B	38.79		10.00	10.00	10	ug/L
Zinc	01	SW6020B	32.5	J	25.0	50.0	10	ug/L
2-Butanone (MEK)	01RE1	SW8260D	28800		750	2500	250	ug/L
Acetone	01RE1	SW8260D	44400		1750	2500	250	ug/L
Benzene	01	SW8260D	119		8.00	20.0	20	ug/L
Ethylbenzene	01	SW8260D	14.4	J	8.00	20.0	20	ug/L
Tetrahydrofuran	01	SW8260D	6620		200	200	20	ug/L
Toluene	01	SW8260D	44.6		10.0	20.0	20	ug/L
Ammonia as N	01	EPA350.1 R2.0	934		146	200	2000	mg/L
BOD	01	SM5210B-2016	4760		0.2	2.0	1	mg/L
COD	01	SM5220D-2011	9540		1000	1000	100	mg/L
Cyanide	01	SW9012B	0.09		0.05	0.05	5	mg/L
TKN as N	01RE1	EPA351.2 R2.0	1070		40.0	100	200	mg/L
Total Recoverable Phenolics	01	SW9065	5.22		0.300	0.500	1	mg/L

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Analysis Detects Report

Client Name: SCS Engineers-Winchester
Client Site ID: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM

Laboratory Sample ID: **24K0529-02** **Client Sample ID:** **EW-50**

Parameter	Samp ID	Reference Method	Sample Results	Qual	DL	LOQ	Dil. Factor	Units
Arsenic	02	SW6020B	150		5.0	10	10	ug/L
Barium	02	SW6020B	690		10.0	50.0	10	ug/L
Chromium	02	SW6020B	237		4.00	10.0	10	ug/L
Nickel	02	SW6020B	96.65		10.00	10.00	10	ug/L
Zinc	02	SW6020B	36.7	J	25.0	50.0	10	ug/L
2-Butanone (MEK)	02	SW8260D	4140		60.0	200	20	ug/L
Acetone	02RE1	SW8260D	8680		350	500	50	ug/L
Benzene	02	SW8260D	512		8.00	20.0	20	ug/L
Ethylbenzene	02	SW8260D	135		8.00	20.0	20	ug/L
Tetrahydrofuran	02	SW8260D	452		200	200	20	ug/L
Toluene	02	SW8260D	245		10.0	20.0	20	ug/L
Xylenes, Total	02	SW8260D	223		20.0	60.0	20	ug/L
Ammonia as N	02	EPA350.1 R2.0	1370		146	200	2000	mg/L
BOD	02	SM5210B-2016	7360		0.2	2.0	1	mg/L
COD	02	SM5220D-2011	8840		2000	2000	200	mg/L
Cyanide	02	SW9012B	0.14	CI	0.05	0.05	5	mg/L
Nitrite as N	02	SM4500-NO2B-2011	1.35	J	0.50	2.50	50	mg/L
TKN as N	02	EPA351.2 R2.0	1610		40.0	100	200	mg/L
Total Recoverable Phenolics	02	SW9065	10.1		1.50	2.50	1	mg/L

Note that this report is not the "Certificate of Analysis". This report only lists the target analytes that displayed concentrations that exceeded the detection limit specified for that analyte. For a complete listing of all analytes requested and the results of the analysis see the " Certificate of Analysis".

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Certificate of Analysis

Client Name: SCS Engineers-Winchester
Client Site I.D.: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EW-36A	24K0529-01	Ground Water	11/07/2024 10:50	11/08/2024 08:00
EW-50	24K0529-02	Ground Water	11/07/2024 10:25	11/08/2024 08:00
Trip Blank	24K0529-03	Non-Potable Water	10/29/2024 13:16	11/08/2024 08:00

Please be advised that due to matrix interference, all samples were diluted per method protocol, causing the MCLs for multiple analytes and compounds to be exceeded.

ENTHALPY ANALYTICAL

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Certificate of Analysis

Client Name: SCS Engineers-Winchester
Client Site I.D.: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Client Sample ID: **EW-36A** **Laboratory Sample ID:** **24K0529-01**

Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analyst
Metals (Total) by EPA 6000/7000 Series Methods												
Silver	01	7440-22-4	SW6020B	11/12/2024 17:00	11/13/2024 11:53	BLOD		0.600	10.0	10	ug/L	AB
Arsenic	01	7440-38-2	SW6020B	11/12/2024 17:00	11/13/2024 11:53	180		5.0	10	10	ug/L	AB
Barium	01	7440-39-3	SW6020B	11/12/2024 17:00	11/13/2024 11:53	262		10.0	50.0	10	ug/L	AB
Cadmium	01	7440-43-9	SW6020B	11/12/2024 17:00	11/13/2024 11:53	BLOD		1.00	10.0	10	ug/L	AB
Chromium	01	7440-47-3	SW6020B	11/12/2024 17:00	11/13/2024 11:53	79.7		4.00	10.0	10	ug/L	AB
Copper	01	7440-50-8	SW6020B	11/12/2024 17:00	11/13/2024 11:53	5.69	J	3.00	10.0	10	ug/L	AB
Mercury	01	7439-97-6	SW6020B	11/12/2024 17:00	11/13/2024 11:53	BLOD		2.00	2.00	10	ug/L	AB
Nickel	01	7440-02-0	SW6020B	11/12/2024 17:00	11/13/2024 11:53	38.79		10.00	10.00	10	ug/L	AB
Lead	01	7439-92-1	SW6020B	11/12/2024 17:00	11/13/2024 11:53	BLOD		10	10	10	ug/L	AB
Selenium	01	7782-49-2	SW6020B	11/12/2024 17:00	11/13/2024 11:53	BLOD		8.50	10.0	10	ug/L	AB
Zinc	01	7440-66-6	SW6020B	11/12/2024 17:00	11/13/2024 11:53	32.5	J	25.0	50.0	10	ug/L	AB
Volatile Organic Compounds by GCMS							**Sample Qualifier:**	**pH**				
2-Butanone (MEK)	01RE1	78-93-3	SW8260D	11/14/2024 13:49	11/14/2024 13:49	28800		750	2500	250	ug/L	JWR
Acetone	01RE1	67-64-1	SW8260D	11/14/2024 13:49	11/14/2024 13:49	44400		1750	2500	250	ug/L	JWR
Benzene	01	71-43-2	SW8260D	11/11/2024 16:47	11/11/2024 16:47	119		8.00	20.0	20	ug/L	JWR
Ethylbenzene	01	100-41-4	SW8260D	11/11/2024 16:47	11/11/2024 16:47	14.4	J	8.00	20.0	20	ug/L	JWR
Toluene	01	108-88-3	SW8260D	11/11/2024 16:47	11/11/2024 16:47	44.6		10.0	20.0	20	ug/L	JWR
Xylenes, Total	01	1330-20-7	SW8260D	11/11/2024 16:47	11/11/2024 16:47	BLOD		20.0	60.0	20	ug/L	JWR
Tetrahydrofuran	01	109-99-9	SW8260D	11/11/2024 16:47	11/11/2024 16:47	6620		200	200	20	ug/L	JWR
Surr: 1,2-Dichloroethane-d4 (Surr)	*01*	*99.1 %*	*70-120*	*11/11/2024 16:47*	*11/11/2024 16:47*							
Surr: 4-Bromofluorobenzene (Surr)	*01*	*96.8 %*	*75-120*	*11/11/2024 16:47*	*11/11/2024 16:47*							
Surr: Dibromofluoromethane (Surr)	*01*	*99.2 %*	*70-130*	*11/11/2024 16:47*	*11/11/2024 16:47*							
Surr: Toluene-d8 (Surr)	*01*	*95.3 %*	*70-130*	*11/11/2024 16:47*	*11/11/2024 16:47*							
Surr: 1,2-Dichloroethane-d4 (Surr)	*01RE1*	*125 %*	*70-120*	*11/14/2024 13:49*	*11/14/2024 13:49*							*S*

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Certificate of Analysis

Client Name: SCS Engineers-Winchester
Client Site I.D.: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Client Sample ID: **EW-36A** **Laboratory Sample ID:** **24K0529-01**

Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analys
Volatile Organic Compounds by GCMS							**Sample Qualifier:**	**pH**				
Surr: 4-Bromofluorobenzene (Surr)	*01RE1*	*98.6 %*	*75-120*	*11/14/2024 13:49*	*11/14/2024 13:49*							
Surr: Dibromofluoromethane (Surr)	*01RE1*	*114 %*	*70-130*	*11/14/2024 13:49*	*11/14/2024 13:49*							
Surr: Toluene-d8 (Surr)	*01RE1*	*100 %*	*70-130*	*11/14/2024 13:49*	*11/14/2024 13:49*							
Semivolatile Organic Compounds by GCMS												
Anthracene	01	120-12-7	SW8270E	11/11/2024 09:00	11/11/2024 20:05	BLOD		50.0	100	10	ug/L	BMS
Surr: 2,4,6-Tribromophenol (Surr)	*01*	*56.4 %*	*5-136*	*11/11/2024 09:00*	*11/11/2024 20:05*							
Surr: 2-Fluorobiphenyl (Surr)	*01*	*36.0 %*	*9-117*	*11/11/2024 09:00*	*11/11/2024 20:05*							
Surr: 2-Fluorophenol (Surr)	*01*	*14.8 %*	*5-60*	*11/11/2024 09:00*	*11/11/2024 20:05*							
Surr: Nitrobenzene-d5 (Surr)	*01*	*56.2 %*	*5-151*	*11/11/2024 09:00*	*11/11/2024 20:05*							
Surr: Phenol-d5 (Surr)	*01*	*11.1 %*	*5-60*	*11/11/2024 09:00*	*11/11/2024 20:05*							
Surr: p-Terphenyl-d14 (Surr)	*01*	*36.1 %*	*5-141*	*11/11/2024 09:00*	*11/11/2024 20:05*							

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Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Client Sample ID: **EW-36A** **Laboratory Sample ID:** **24K0529-01**

Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analyst
Wet Chemistry Analysis												
Ammonia as N	01	7664-41-7	EPA350.1 R2.0	11/19/2024 15:37	11/19/2024 15:37	934		146	200	2000	mg/L	MGC
BOD	01	E1640606	SM5210B-2016	11/08/2024 13:29	11/08/2024 13:29	4760		0.2	2.0	1	mg/L	NBT
Cyanide	01	57-12-5	SW9012B	11/20/2024 15:00	11/20/2024 16:15	0.09		0.05	0.05	5	mg/L	BKR
COD	01	NA	SM5220D-2011	11/22/2024 13:23	11/22/2024 13:23	9540		1000	1000	100	mg/L	TEG
Nitrate as N	01	14797-55-8	Calc.	11/19/2024 15:42	11/19/2024 15:42	BLOD		0.250	1.25	25	mg/L	KKB
Nitrate+Nitrite as N	01	E701177	SM4500-NO3F-2016	11/19/2024 15:42	11/19/2024 15:42	BLOD		0.10	0.10	1	mg/L	SPH
Nitrite as N	01	14797-65-0	SM4500-NO2B-2011	11/08/2024 16:10	11/08/2024 16:10	BLOD		0.25	1.25	25	mg/L	KKB
Total Recoverable Phenolics	01	NA	SW9065	11/15/2024 16:30	11/15/2024 16:30	5.22		0.300	0.500	1	mg/L	SPH
TKN as N	01RE1	E17148461	EPA351.2 R2.0	11/19/2024 11:26	11/19/2024 11:26	1070		40.0	100	200	mg/L	TEG

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Certificate of Analysis

Client Name: SCS Engineers-Winchester
Client Site I.D.: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Client Sample ID: **EW-50** **Laboratory Sample ID:** **24K0529-02**

Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analys
Metals (Total) by EPA 6000/7000 Series Methods												
Silver	02	7440-22-4	SW6020B	11/12/2024 17:00	11/13/2024 11:56	BLOD		0.600	10.0	10	ug/L	AB
Arsenic	02	7440-38-2	SW6020B	11/12/2024 17:00	11/13/2024 11:56	150		5.0	10	10	ug/L	AB
Barium	02	7440-39-3	SW6020B	11/12/2024 17:00	11/13/2024 11:56	690		10.0	50.0	10	ug/L	AB
Cadmium	02	7440-43-9	SW6020B	11/12/2024 17:00	11/13/2024 11:56	BLOD		1.00	10.0	10	ug/L	AB
Chromium	02	7440-47-3	SW6020B	11/12/2024 17:00	11/13/2024 11:56	237		4.00	10.0	10	ug/L	AB
Copper	02	7440-50-8	SW6020B	11/12/2024 17:00	11/13/2024 11:56	BLOD		3.00	10.0	10	ug/L	AB
Mercury	02	7439-97-6	SW6020B	11/12/2024 17:00	11/13/2024 11:56	BLOD		2.00	2.00	10	ug/L	AB
Nickel	02	7440-02-0	SW6020B	11/12/2024 17:00	11/13/2024 11:56	96.65		10.00	10.00	10	ug/L	AB
Lead	02	7439-92-1	SW6020B	11/12/2024 17:00	11/13/2024 11:56	BLOD		10	10	10	ug/L	AB
Selenium	02	7782-49-2	SW6020B	11/12/2024 17:00	11/13/2024 11:56	BLOD		8.50	10.0	10	ug/L	AB
Zinc	02	7440-66-6	SW6020B	11/12/2024 17:00	11/13/2024 11:56	36.7	J	25.0	50.0	10	ug/L	AB

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Certificate of Analysis

Client Name: SCS Engineers-Winchester
Client Site I.D.: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Client Sample ID: **EW-50** **Laboratory Sample ID:** **24K0529-02**

Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analyst
Volatile Organic Compounds by GCMS							**Sample Qualifier:**	**pH**				
2-Butanone (MEK)	02	78-93-3	SW8260D	11/11/2024 17:11	11/11/2024 17:11	4140		60.0	200	20	ug/L	JWR
Acetone	02RE1	67-64-1	SW8260D	11/13/2024 18:52	11/13/2024 18:52	8680		350	500	50	ug/L	TLH
Benzene	02	71-43-2	SW8260D	11/11/2024 17:11	11/11/2024 17:11	512		8.00	20.0	20	ug/L	JWR
Ethylbenzene	02	100-41-4	SW8260D	11/11/2024 17:11	11/11/2024 17:11	135		8.00	20.0	20	ug/L	JWR
Toluene	02	108-88-3	SW8260D	11/11/2024 17:11	11/11/2024 17:11	245		10.0	20.0	20	ug/L	JWR
Xylenes, Total	02	1330-20-7	SW8260D	11/11/2024 17:11	11/11/2024 17:11	223		20.0	60.0	20	ug/L	JWR
Tetrahydrofuran	02	109-99-9	SW8260D	11/11/2024 17:11	11/11/2024 17:11	452		200	200	20	ug/L	JWR
Surr: 1,2-Dichloroethane-d4 (Surr)	*02*	*103 %*	*70-120*	*11/11/2024 17:11*	*11/11/2024 17:11*							
Surr: 4-Bromofluorobenzene (Surr)	*02*	*96.4 %*	*75-120*	*11/11/2024 17:11*	*11/11/2024 17:11*							
Surr: Dibromofluoromethane (Surr)	*02*	*100 %*	*70-130*	*11/11/2024 17:11*	*11/11/2024 17:11*							
Surr: Toluene-d8 (Surr)	*02*	*95.5 %*	*70-130*	*11/11/2024 17:11*	*11/11/2024 17:11*							
Surr: 1,2-Dichloroethane-d4 (Surr)	*02RE1*	*126 %*	*70-120*	*11/13/2024 18:52*	*11/13/2024 18:52*							*S*
Surr: 4-Bromofluorobenzene (Surr)	*02RE1*	*101 %*	*75-120*	*11/13/2024 18:52*	*11/13/2024 18:52*							
Surr: Dibromofluoromethane (Surr)	*02RE1*	*114 %*	*70-130*	*11/13/2024 18:52*	*11/13/2024 18:52*							
Surr: Toluene-d8 (Surr)	*02RE1*	*102 %*	*70-130*	*11/13/2024 18:52*	*11/13/2024 18:52*							
Semivolatile Organic Compounds by GCMS												
Anthracene	02	120-12-7	SW8270E	11/11/2024 09:00	11/11/2024 20:35	BLOD		50.0	100	10	ug/L	BMS
Surr: 2,4,6-Tribromophenol (Surr)	*02*	*54.8 %*	*5-136*	*11/11/2024 09:00*	*11/11/2024 20:35*							
Surr: 2-Fluorobiphenyl (Surr)	*02*	*39.3 %*	*9-117*	*11/11/2024 09:00*	*11/11/2024 20:35*							
Surr: 2-Fluorophenol (Surr)	*02*	*14.9 %*	*5-60*	*11/11/2024 09:00*	*11/11/2024 20:35*							
Surr: Nitrobenzene-d5 (Surr)	*02*	*47.2 %*	*5-151*	*11/11/2024 09:00*	*11/11/2024 20:35*							
Surr: Phenol-d5 (Surr)	*02*	*17.2 %*	*5-60*	*11/11/2024 09:00*	*11/11/2024 20:35*							
Surr: p-Terphenyl-d14 (Surr)	*02*	*14.1 %*	*5-141*	*11/11/2024 09:00*	*11/11/2024 20:35*							

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Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Client Sample ID: **EW-50** **Laboratory Sample ID:** **24K0529-02**

Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analyst
Wet Chemistry Analysis												
Ammonia as N	02	7664-41-7	EPA350.1 R2.0	11/22/2024 14:24	11/22/2024 14:24	1370		146	200	2000	mg/L	KKB
BOD	02	E1640606	SM5210B-2016	11/08/2024 13:31	11/08/2024 13:31	7360		0.2	2.0	1	mg/L	NBT
Cyanide	02	57-12-5	SW9012B	11/20/2024 15:00	11/20/2024 16:16	0.14	CI	0.05	0.05	5	mg/L	BKR
COD	02	NA	SM5220D-2011	11/22/2024 13:23	11/22/2024 13:23	8840		2000	2000	200	mg/L	TEG
Nitrate as N	02	14797-55-8	Calc.	11/19/2024 15:42	11/19/2024 15:42	BLOD		0.500	2.50	50	mg/L	KKB
Nitrate+Nitrite as N	02	E701177	SM4500-NO3F-2016	11/19/2024 15:42	11/19/2024 15:42	BLOD		0.10	0.10	1	mg/L	SPH
Nitrite as N	02	14797-65-0	SM4500-NO2B-2011	11/08/2024 16:10	11/08/2024 16:10	1.35	J	0.50	2.50	50	mg/L	KKB
Total Recoverable Phenolics	02	NA	SW9065	11/15/2024 16:30	11/15/2024 16:30	10.1		1.50	2.50	1	mg/L	SPH
TKN as N	02	E17148461	EPA351.2 R2.0	11/19/2024 11:11	11/19/2024 11:11	1610		40.0	100	200	mg/L	TEG

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Client Sample ID: **Trip Blank** **Laboratory Sample ID:** **24K0529-03**

Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analyst
Volatile Organic Compounds by GCMS							**Sample Qualifier:**	**pH**				
2-Butanone (MEK)	03	78-93-3	SW8260D	11/11/2024 15:36	11/11/2024 15:36	BLOD		3.00	10.0	1	ug/L	JWR
Acetone	03	67-64-1	SW8260D	11/11/2024 15:36	11/11/2024 15:36	BLOD		7.00	10.0	1	ug/L	JWR
Benzene	03	71-43-2	SW8260D	11/11/2024 15:36	11/11/2024 15:36	BLOD		0.40	1.00	1	ug/L	JWR
Ethylbenzene	03	100-41-4	SW8260D	11/11/2024 15:36	11/11/2024 15:36	BLOD		0.40	1.00	1	ug/L	JWR
Toluene	03	108-88-3	SW8260D	11/11/2024 15:36	11/11/2024 15:36	BLOD		0.50	1.00	1	ug/L	JWR
Xylenes, Total	03	1330-20-7	SW8260D	11/11/2024 15:36	11/11/2024 15:36	BLOD		1.00	3.00	1	ug/L	JWR
Tetrahydrofuran	03	109-99-9	SW8260D	11/11/2024 15:36	11/11/2024 15:36	BLOD		10.0	10.0	1	ug/L	JWR
Surr: 1,2-Dichloroethane-d4 (Surr)	*03*	*99.3 %*	*70-120*	*11/11/2024 15:36*	*11/11/2024 15:36*							
Surr: 4-Bromofluorobenzene (Surr)	*03*	*96.2 %*	*75-120*	*11/11/2024 15:36*	*11/11/2024 15:36*							
Surr: Dibromofluoromethane (Surr)	*03*	*101 %*	*70-130*	*11/11/2024 15:36*	*11/11/2024 15:36*							
Surr: Toluene-d8 (Surr)	*03*	*94.6 %*	*70-130*	*11/11/2024 15:36*	*11/11/2024 15:36*							

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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0575 - EPA200.2R2.8/SW3005A-ICPMS										
Blank (BHK0575-BLK1)				Prepared: 11/12/2024 Analyzed: 11/13/2024						
Mercury	ND	0.200	ug/L							
Arsenic	ND	1.0	ug/L							
Barium	ND	5.00	ug/L							
Cadmium	ND	1.00	ug/L							
Chromium	ND	1.00	ug/L							
Copper	ND	1.00	ug/L							
Lead	ND	1.0	ug/L							
Nickel	ND	1.000	ug/L							
Selenium	ND	1.00	ug/L							
Silver	ND	1.00	ug/L							
Zinc	ND	5.00	ug/L							
LCS (BHK0575-BS1)				Prepared: 11/12/2024 Analyzed: 11/13/2024						
Mercury	1.07	0.200	ug/L	1.00		107	80-120			
Arsenic	50	1.0	ug/L	50.0		100	80-120			
Barium	50.5	5.00	ug/L	50.0		101	80-120			
Cadmium	50.1	1.00	ug/L	50.0		100	80-120			
Chromium	50.6	1.00	ug/L	50.0		101	80-120			
Copper	50.8	1.00	ug/L	50.0		102	80-120			
Lead	54	1.0	ug/L	50.0		108	80-120			
Nickel	51.24	1.000	ug/L	50.0		102	80-120			
Selenium	51.5	1.00	ug/L	50.0		103	80-120			
Silver	10.2	1.00	ug/L	10.0		102	80-120			
Zinc	51.5	5.00	ug/L	50.0		103	80-120			
Matrix Spike (BHK0575-MS1)	**Source: 24K0420-03**			Prepared: 11/12/2024 Analyzed: 11/13/2024						

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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0575 - EPA200.2R2.8/SW3005A-ICPMS										
Matrix Spike (BHK0575-MS1)	**Source: 24K0420-03**			Prepared: 11/12/2024 Analyzed: 11/13/2024						
Mercury	1.05	0.200	ug/L	1.00	BLOD	105	70-130			
Arsenic	52	1.0	ug/L	50.0	2.5	99.9	75-125			
Barium	57.2	5.00	ug/L	50.0	5.36	104	75-125			
Cadmium	52.0	1.00	ug/L	50.0	0.409	103	75-125			
Chromium	53.1	1.00	ug/L	50.0	1.12	104	75-125			
Copper	51.2	1.00	ug/L	50.0	0.413	101	75-125			
Lead	55	1.0	ug/L	50.0	BLOD	110	75-125			
Nickel	55.02	1.000	ug/L	50.0	3.666	103	75-125			
Selenium	49.0	1.00	ug/L	50.0	BLOD	97.9	75-125			
Silver	10.3	1.00	ug/L	10.0	BLOD	103	75-125			
Zinc	54.2	5.00	ug/L	50.0	2.90	103	75-125			
Matrix Spike (BHK0575-MS2)	**Source: 24K0492-03**			Prepared: 11/12/2024 Analyzed: 11/13/2024						
Mercury	1.01	0.200	ug/L	1.00	BLOD	101	70-130			
Arsenic	51	1.0	ug/L	50.0	0.92	99.3	75-125			
Barium	61.2	5.00	ug/L	50.0	12.3	97.8	75-125			
Cadmium	49.2	1.00	ug/L	50.0	BLOD	98.4	75-125			
Chromium	49.8	1.00	ug/L	50.0	0.533	98.5	75-125			
Copper	50.9	1.00	ug/L	50.0	2.40	96.9	75-125			
Lead	53	1.0	ug/L	50.0	BLOD	107	75-125			
Nickel	49.86	1.000	ug/L	50.0	1.458	96.8	75-125			
Selenium	49.0	1.00	ug/L	50.0	BLOD	98.0	75-125			
Silver	10.0	1.00	ug/L	10.0	BLOD	100	75-125			
Zinc	70.9	5.00	ug/L	50.0	23.3	95.2	75-125			
Matrix Spike Dup (BHK0575-MSD1)	**Source: 24K0420-03**			Prepared: 11/12/2024 Analyzed: 11/13/2024						

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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0575 - EPA200.2R2.8/SW3005A-ICPMS										
Matrix Spike Dup (BHK0575-MSD1)	**Source: 24K0420-03**			Prepared: 11/12/2024 Analyzed: 11/13/2024						
Mercury	1.05	0.200	ug/L	1.00	BLOD	105	70-130	0.00514	20	
Arsenic	53	1.0	ug/L	50.0	2.5	102	75-125	1.53	20	
Barium	56.4	5.00	ug/L	50.0	5.36	102	75-125	1.50	20	
Cadmium	52.7	1.00	ug/L	50.0	0.409	105	75-125	1.32	20	
Chromium	53.1	1.00	ug/L	50.0	1.12	104	75-125	0.0461	20	
Copper	50.6	1.00	ug/L	50.0	0.413	100	75-125	1.11	20	
Lead	54	1.0	ug/L	50.0	BLOD	107	75-125	3.01	20	
Nickel	56.62	1.000	ug/L	50.0	3.666	106	75-125	2.87	20	
Selenium	50.4	1.00	ug/L	50.0	BLOD	101	75-125	2.80	20	
Silver	10.4	1.00	ug/L	10.0	BLOD	104	75-125	0.799	20	
Zinc	54.0	5.00	ug/L	50.0	2.90	102	75-125	0.314	20	
Matrix Spike Dup (BHK0575-MSD2)	**Source: 24K0492-03**			Prepared: 11/12/2024 Analyzed: 11/13/2024						
Mercury	1.04	0.200	ug/L	1.00	BLOD	104	70-130	2.96	20	
Arsenic	51	1.0	ug/L	50.0	0.92	101	75-125	1.66	20	
Barium	64.9	5.00	ug/L	50.0	12.3	105	75-125	5.90	20	
Cadmium	50.2	1.00	ug/L	50.0	BLOD	100	75-125	1.93	20	
Chromium	51.1	1.00	ug/L	50.0	0.533	101	75-125	2.57	20	
Copper	51.7	1.00	ug/L	50.0	2.40	98.7	75-125	1.71	20	
Lead	54	1.0	ug/L	50.0	BLOD	109	75-125	1.74	20	
Nickel	50.96	1.000	ug/L	50.0	1.458	99.0	75-125	2.18	20	
Selenium	50.3	1.00	ug/L	50.0	BLOD	101	75-125	2.62	20	
Silver	10.3	1.00	ug/L	10.0	BLOD	103	75-125	2.20	20	
Zinc	72.2	5.00	ug/L	50.0	23.3	97.8	75-125	1.82	20	

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
Blank (BHK0546-BLK1)				Prepared & Analyzed: 11/11/2024						
2-Butanone (MEK)	ND	10.0	ug/L							
Acetone	ND	10.0	ug/L							
Benzene	ND	1.00	ug/L							
Ethylbenzene	ND	1.00	ug/L							
Toluene	ND	1.00	ug/L							
Xylenes, Total	ND	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4 (Surr)	*49.5*		ug/L	*50.0*		*99.0*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*48.2*		ug/L	*50.0*		*96.4*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*51.6*		ug/L	*50.0*		*103*	*70-130*			
Surr: Toluene-d8 (Surr)	*47.4*		ug/L	*50.0*		*94.8*	*70-130*			
LCS (BHK0546-BS1)				Prepared & Analyzed: 11/11/2024						
1,1,1,2-Tetrachloroethane	49.1	0.4	ug/L	50.0		98.2	80-130			
1,1,1-Trichloroethane	63.4	1	ug/L	50.0		127	65-130			
1,1,2,2-Tetrachloroethane	48.8	0.4	ug/L	50.0		97.5	65-130			
1,1,2-Trichloroethane	48.9	1	ug/L	50.0		97.7	75-125			
1,1-Dichloroethane	60.1	1	ug/L	50.0		120	70-135			
1,1-Dichloroethylene	56.1	1	ug/L	50.0		112	70-130			
1,1-Dichloropropene	70.2	1	ug/L	50.0		140	75-135			*L*
1,2,3-Trichlorobenzene	48.4	1	ug/L	50.0		96.8	55-140			
1,2,3-Trichloropropane	44.9	1	ug/L	50.0		89.7	75-125			
1,2,4-Trichlorobenzene	50.7	1	ug/L	50.0		101	65-135			
1,2,4-Trimethylbenzene	54.1	1	ug/L	50.0		108	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	48.5	1	ug/L	50.0		96.9	50-130			
1,2-Dibromoethane (EDB)	48.8	1	ug/L	50.0		97.5	80-120			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
LCS (BHK0546-BS1)				Prepared & Analyzed: 11/11/2024						
1,2-Dichlorobenzene	51.6	0.5	ug/L	50.0		103	70-120			
1,2-Dichloroethane	54.0	1	ug/L	50.0		108	70-130			
1,2-Dichloropropane	55.6	0.5	ug/L	50.0		111	75-125			
1,3,5-Trimethylbenzene	55.1	1	ug/L	50.0		110	75-125			
1,3-Dichlorobenzene	53.8	1	ug/L	50.0		108	75-125			
1,3-Dichloropropane	47.4	1	ug/L	50.0		94.9	75-125			
1,4-Dichlorobenzene	51.0	1	ug/L	50.0		102	75-125			
2,2-Dichloropropane	63.4	1	ug/L	50.0		127	70-135			
2-Butanone (MEK)	47.7	10	ug/L	50.0		95.4	30-150			
2-Chlorotoluene	53.9	1	ug/L	50.0		108	75-125			
2-Hexanone (MBK)	46.4	5	ug/L	50.0		92.8	55-130			
4-Chlorotoluene	54.4	1	ug/L	50.0		109	75-130			
4-Isopropyltoluene	58.3	1	ug/L	50.0		117	75-130			
4-Methyl-2-pentanone (MIBK)	44.0	5	ug/L	50.0		88.1	60-135			
Acetone	44.7	10	ug/L	50.0		89.4	40-140			
Benzene	53.8	1	ug/L	50.0		108	80-120			
Bromobenzene	45.6	1	ug/L	50.0		91.3	75-125			
Bromochloromethane	51.9	1	ug/L	50.0		104	65-130			
Bromodichloromethane	53.4	0.5	ug/L	50.0		107	75-120			
Bromoform	47.2	1	ug/L	50.0		94.3	70-130			
Bromomethane	45.6	1	ug/L	50.0		91.2	30-145			
Carbon disulfide	40.7	10	ug/L	50.0		81.5	35-160			
Carbon tetrachloride	60.6	1	ug/L	50.0		121	65-140			
Chlorobenzene	52.8	1	ug/L	50.0		106	80-120			
Chloroethane	51.9	1	ug/L	50.0		104	60-135			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
LCS (BHK0546-BS1)				Prepared & Analyzed: 11/11/2024						
Chloroform	54.9	0.5	ug/L	50.0		110	65-135			
Chloromethane	58.2	1	ug/L	50.0		116	40-125			
cis-1,2-Dichloroethylene	55.0	1	ug/L	50.0		110	70-125			
cis-1,3-Dichloropropene	52.8	1	ug/L	50.0		106	70-130			
Dibromochloromethane	48.2	0.5	ug/L	50.0		96.4	60-135			
Dibromomethane	47.4	1	ug/L	50.0		94.7	75-125			
Dichlorodifluoromethane	99.7	1	ug/L	50.0		199	30-155			*L*
Ethylbenzene	54.5	1	ug/L	50.0		109	75-125			
Hexachlorobutadiene	58.0	0.8	ug/L	50.0		116	50-140			
Isopropylbenzene	49.3	1	ug/L	50.0		98.6	75-125			
m+p-Xylenes	107	2	ug/L	100		107	75-130			
Methylene chloride	57.1	4	ug/L	50.0		114	55-140			
Methyl-t-butyl ether (MTBE)	49.8	1	ug/L	50.0		99.7	65-125			
Naphthalene	48.3	1	ug/L	50.0		96.7	55-140			
n-Butylbenzene	60.7	1	ug/L	50.0		121	70-135			
n-Propylbenzene	55.6	1	ug/L	50.0		111	70-130			
o-Xylene	51.5	1	ug/L	50.0		103	80-120			
sec-Butylbenzene	60.6	1	ug/L	50.0		121	70-125			
Styrene	49.8	1	ug/L	50.0		99.7	65-135			
tert-Butylbenzene	56.4	1	ug/L	50.0		113	70-130			
Tetrachloroethylene (PCE)	76.9	1	ug/L	50.0		154	45-150			*L*
Toluene	50.9	1	ug/L	50.0		102	75-120			
trans-1,2-Dichloroethylene	55.0	1	ug/L	50.0		110	60-140			
trans-1,3-Dichloropropene	54.8	1	ug/L	50.0		110	55-140			
Trichloroethylene	57.0	1	ug/L	50.0		114	70-125			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
LCS (BHK0546-BS1)				Prepared & Analyzed: 11/11/2024						
Trichlorofluoromethane	65.8	1	ug/L	50.0		132	60-145			
Vinyl chloride	54.7	0.5	ug/L	50.0		109	50-145			
Surr: 1,2-Dichloroethane-d4 (Surr)	*53.1*		ug/L	*50.0*		*106*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*48.4*		ug/L	*50.0*		*96.8*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*54.0*		ug/L	*50.0*		*108*	*70-130*			
Surr: Toluene-d8 (Surr)	*47.2*		ug/L	*50.0*		*94.4*	*70-130*			
Matrix Spike (BHK0546-MS1)	**Source: 24K0542-08**			Prepared & Analyzed: 11/11/2024						
1,1,1,2-Tetrachloroethane	50.8	0.4	ug/L	50.0	BLOD	102	80-130			
1,1,1-Trichloroethane	62.8	1	ug/L	50.0	BLOD	126	65-130			
1,1,2,2-Tetrachloroethane	50.5	0.4	ug/L	50.0	BLOD	101	65-130			
1,1,2-Trichloroethane	51.8	1	ug/L	50.0	BLOD	104	75-125			
1,1-Dichloroethane	62.4	1	ug/L	50.0	BLOD	125	70-135			
1,1-Dichloroethylene	58.6	1	ug/L	50.0	BLOD	117	50-145			
1,1-Dichloropropene	70.8	1	ug/L	50.0	BLOD	142	75-135			*M*
1,2,3-Trichlorobenzene	51.3	1	ug/L	50.0	BLOD	103	55-140			
1,2,3-Trichloropropane	47.6	1	ug/L	50.0	BLOD	95.3	75-125			
1,2,4-Trichlorobenzene	53.2	1	ug/L	50.0	BLOD	106	65-135			
1,2,4-Trimethylbenzene	56.5	1	ug/L	50.0	BLOD	113	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	50.3	1	ug/L	50.0	BLOD	101	50-130			
1,2-Dibromoethane (EDB)	50.1	1	ug/L	50.0	BLOD	100	80-120			
1,2-Dichlorobenzene	54.1	0.5	ug/L	50.0	BLOD	108	70-120			
1,2-Dichloroethane	55.4	1	ug/L	50.0	BLOD	111	70-130			
1,2-Dichloropropane	56.0	0.5	ug/L	50.0	BLOD	112	75-125			
1,3,5-Trimethylbenzene	57.0	1	ug/L	50.0	BLOD	114	75-124			

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Volatile Organic Compounds by GCMS - Quality Control

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
Matrix Spike (BHK0546-MS1)		**Source: 24K0542-08**		Prepared & Analyzed: 11/11/2024						
1,3-Dichlorobenzene	55.8	1	ug/L	50.0	BLOD	112	75-125			
1,3-Dichloropropane	51.2	1	ug/L	50.0	BLOD	102	75-125			
1,4-Dichlorobenzene	53.0	1	ug/L	50.0	BLOD	106	75-125			
2,2-Dichloropropane	63.6	1	ug/L	50.0	BLOD	127	70-135			
2-Butanone (MEK)	40.4	10	ug/L	50.0	BLOD	80.8	30-150			
2-Chlorotoluene	55.1	1	ug/L	50.0	BLOD	110	75-125			
2-Hexanone (MBK)	49.4	5	ug/L	50.0	BLOD	98.9	55-130			
4-Chlorotoluene	55.6	1	ug/L	50.0	BLOD	111	75-130			
4-Isopropyltoluene	59.0	1	ug/L	50.0	BLOD	118	75-130			
4-Methyl-2-pentanone (MIBK)	49.1	5	ug/L	50.0	BLOD	98.3	60-135			
Acetone	51.3	10	ug/L	50.0	BLOD	95.5	40-140			
Benzene	56.1	1	ug/L	50.0	BLOD	112	80-120			
Bromobenzene	46.7	1	ug/L	50.0	BLOD	93.3	75-125			
Bromochloromethane	53.6	1	ug/L	50.0	BLOD	107	65-130			
Bromodichloromethane	52.6	0.5	ug/L	50.0	BLOD	105	75-136			
Bromoform	48.5	1	ug/L	50.0	BLOD	97.0	70-130			
Bromomethane	49.5	1	ug/L	50.0	BLOD	99.1	30-145			
Carbon disulfide	45.3	10	ug/L	50.0	BLOD	90.1	35-160			
Carbon tetrachloride	59.6	1	ug/L	50.0	BLOD	119	65-140			
Chlorobenzene	53.3	1	ug/L	50.0	BLOD	107	80-120			
Chloroethane	52.5	1	ug/L	50.0	BLOD	105	60-135			
Chloroform	55.8	0.5	ug/L	50.0	BLOD	112	65-135			
Chloromethane	60.2	1	ug/L	50.0	BLOD	120	40-125			
cis-1,2-Dichloroethylene	57.4	1	ug/L	50.0	BLOD	115	70-125			
cis-1,3-Dichloropropene	54.7	1	ug/L	50.0	BLOD	109	47-136			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
Matrix Spike (BHK0546-MS1)		**Source: 24K0542-08**		Prepared & Analyzed: 11/11/2024						
Dibromochloromethane	50.3	0.5	ug/L	50.0	BLOD	101	60-135			
Dibromomethane	49.6	1	ug/L	50.0	BLOD	99.2	75-125			
Dichlorodifluoromethane	101	1	ug/L	50.0	BLOD	202	30-155			*M*
Ethylbenzene	54.3	1	ug/L	50.0	BLOD	109	75-125			
Hexachlorobutadiene	57.3	0.8	ug/L	50.0	BLOD	115	50-140			
Isopropylbenzene	49.2	1	ug/L	50.0	BLOD	98.4	75-125			
m+p-Xylenes	106	2	ug/L	100	BLOD	105	75-130			
Methylene chloride	58.7	4	ug/L	50.0	BLOD	117	55-140			
Methyl-t-butyl ether (MTBE)	53.0	1	ug/L	50.0	BLOD	106	65-125			
Naphthalene	52.8	1	ug/L	50.0	BLOD	106	55-140			
n-Butylbenzene	61.2	1	ug/L	50.0	BLOD	122	70-135			
n-Propylbenzene	56.3	1	ug/L	50.0	BLOD	113	70-130			
o-Xylene	51.7	1	ug/L	50.0	BLOD	103	80-120			
sec-Butylbenzene	62.0	1	ug/L	50.0	BLOD	124	70-125			
Styrene	50.8	1	ug/L	50.0	BLOD	102	65-135			
tert-Butylbenzene	56.8	1	ug/L	50.0	BLOD	114	70-130			
Tetrachloroethylene (PCE)	75.7	1	ug/L	50.0	BLOD	151	51-231			
Toluene	52.0	1	ug/L	50.0	BLOD	104	75-120			
trans-1,2-Dichloroethylene	56.4	1	ug/L	50.0	BLOD	113	60-140			
trans-1,3-Dichloropropene	58.2	1	ug/L	50.0	BLOD	116	55-140			
Trichloroethylene	57.0	1	ug/L	50.0	BLOD	114	70-125			
Trichlorofluoromethane	67.7	1	ug/L	50.0	BLOD	135	60-145			
Vinyl chloride	57.5	0.5	ug/L	50.0	BLOD	115	50-145			
Surr: 1,2-Dichloroethane-d4 (Surr)	*51.8*		ug/L	*50.0*		*104*	*70-120*			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
Matrix Spike (BHK0546-MS1)	**Source: 24K0542-08**			Prepared & Analyzed: 11/11/2024						
Surr: 4-Bromofluorobenzene (Surr)	*48.0*		ug/L	*50.0*		*95.9*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*55.2*		ug/L	*50.0*		*110*	*70-130*			
Surr: Toluene-d8 (Surr)	*47.3*		ug/L	*50.0*		*94.6*	*70-130*			
Matrix Spike Dup (BHK0546-MSD1)	**Source: 24K0542-08**			Prepared & Analyzed: 11/11/2024						
1,1,1,2-Tetrachloroethane	51.6	0.4	ug/L	50.0	BLOD	103	80-130	1.48	30	
1,1,1-Trichloroethane	63.0	1	ug/L	50.0	BLOD	126	65-130	0.350	30	
1,1,2,2-Tetrachloroethane	51.3	0.4	ug/L	50.0	BLOD	103	65-130	1.49	30	
1,1,2-Trichloroethane	51.9	1	ug/L	50.0	BLOD	104	75-125	0.251	30	
1,1-Dichloroethane	63.5	1	ug/L	50.0	BLOD	127	70-135	1.78	30	
1,1-Dichloroethylene	57.0	1	ug/L	50.0	BLOD	114	50-145	2.82	30	
1,1-Dichloropropene	69.1	1	ug/L	50.0	BLOD	138	75-135	2.47	30	*M*
1,2,3-Trichlorobenzene	51.5	1	ug/L	50.0	BLOD	103	55-140	0.428	30	
1,2,3-Trichloropropane	49.3	1	ug/L	50.0	BLOD	98.7	75-125	3.48	30	
1,2,4-Trichlorobenzene	53.4	1	ug/L	50.0	BLOD	107	65-135	0.450	30	
1,2,4-Trimethylbenzene	57.5	1	ug/L	50.0	BLOD	115	75-130	1.74	30	
1,2-Dibromo-3-chloropropane (DBCP)	52.1	1	ug/L	50.0	BLOD	104	50-130	3.52	30	
1,2-Dibromoethane (EDB)	50.2	1	ug/L	50.0	BLOD	100	80-120	0.140	30	
1,2-Dichlorobenzene	54.7	0.5	ug/L	50.0	BLOD	109	70-120	1.07	30	
1,2-Dichloroethane	55.3	1	ug/L	50.0	BLOD	111	70-130	0.235	30	
1,2-Dichloropropane	57.8	0.5	ug/L	50.0	BLOD	116	75-125	3.13	30	
1,3,5-Trimethylbenzene	58.0	1	ug/L	50.0	BLOD	116	75-124	1.74	30	
1,3-Dichlorobenzene	56.8	1	ug/L	50.0	BLOD	114	75-125	1.94	30	
1,3-Dichloropropane	51.3	1	ug/L	50.0	BLOD	103	75-125	0.0585	30	
1,4-Dichlorobenzene	52.8	1	ug/L	50.0	BLOD	105	75-125	0.378	30	

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
Matrix Spike Dup (BHK0546-MSD1)	**Source: 24K0542-08**			Prepared & Analyzed: 11/11/2024						
2,2-Dichloropropane	63.1	1	ug/L	50.0	BLOD	126	70-135	0.837	30	
2-Butanone (MEK)	48.9	10	ug/L	50.0	BLOD	97.7	30-150	19.0	30	
2-Chlorotoluene	55.3	1	ug/L	50.0	BLOD	111	75-125	0.290	30	
2-Hexanone (MBK)	47.7	5	ug/L	50.0	BLOD	95.3	55-130	3.67	30	
4-Chlorotoluene	57.3	1	ug/L	50.0	BLOD	115	75-130	3.12	30	
4-Isopropyltoluene	60.2	1	ug/L	50.0	BLOD	120	75-130	2.06	30	
4-Methyl-2-pentanone (MIBK)	46.8	5	ug/L	50.0	BLOD	93.5	60-135	4.98	30	
Acetone	45.2	10	ug/L	50.0	BLOD	83.3	40-140	12.6	30	
Benzene	56.3	1	ug/L	50.0	BLOD	113	80-120	0.302	30	
Bromobenzene	46.3	1	ug/L	50.0	BLOD	92.5	75-125	0.839	30	
Bromochloromethane	54.8	1	ug/L	50.0	BLOD	110	65-130	2.05	30	
Bromodichloromethane	53.9	0.5	ug/L	50.0	BLOD	108	75-136	2.35	30	
Bromoform	49.6	1	ug/L	50.0	BLOD	99.2	70-130	2.26	30	
Bromomethane	47.6	1	ug/L	50.0	BLOD	95.1	30-145	4.08	30	
Carbon disulfide	46.3	10	ug/L	50.0	BLOD	92.2	35-160	2.31	30	
Carbon tetrachloride	61.6	1	ug/L	50.0	BLOD	123	65-140	3.27	30	
Chlorobenzene	54.0	1	ug/L	50.0	BLOD	108	80-120	1.42	30	
Chloroethane	51.6	1	ug/L	50.0	BLOD	103	60-135	1.69	30	
Chloroform	56.3	0.5	ug/L	50.0	BLOD	113	65-135	0.910	30	
Chloromethane	60.8	1	ug/L	50.0	BLOD	122	40-125	0.975	30	
cis-1,2-Dichloroethylene	55.3	1	ug/L	50.0	BLOD	111	70-125	3.74	30	
cis-1,3-Dichloropropene	55.3	1	ug/L	50.0	BLOD	111	47-136	0.964	30	
Dibromochloromethane	51.7	0.5	ug/L	50.0	BLOD	103	60-135	2.65	30	
Dibromomethane	49.6	1	ug/L	50.0	BLOD	99.2	75-125	0.0202	30	
Dichlorodifluoromethane	102	1	ug/L	50.0	BLOD	204	30-155	1.19	30	*M*

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0546 - SW5030B-MS										
Matrix Spike Dup (BHK0546-MSD1)	**Source: 24K0542-08**			Prepared & Analyzed: 11/11/2024						
Ethylbenzene	55.4	1	ug/L	50.0	BLOD	111	75-125	2.15	30	
Hexachlorobutadiene	58.1	0.8	ug/L	50.0	BLOD	116	50-140	1.37	30	
Isopropylbenzene	50.2	1	ug/L	50.0	BLOD	100	75-125	2.15	30	
m+p-Xylenes	107	2	ug/L	100	BLOD	107	75-130	1.58	30	
Methylene chloride	57.9	4	ug/L	50.0	BLOD	116	55-140	1.39	30	
Methyl-t-butyl ether (MTBE)	53.7	1	ug/L	50.0	BLOD	107	65-125	1.29	30	
Naphthalene	53.8	1	ug/L	50.0	BLOD	108	55-140	1.95	30	
n-Butylbenzene	62.3	1	ug/L	50.0	BLOD	125	70-135	1.86	30	
n-Propylbenzene	56.3	1	ug/L	50.0	BLOD	113	70-130	0.0178	30	
o-Xylene	52.4	1	ug/L	50.0	BLOD	105	80-120	1.34	30	
sec-Butylbenzene	61.8	1	ug/L	50.0	BLOD	124	70-125	0.452	30	
Styrene	51.1	1	ug/L	50.0	BLOD	102	65-135	0.451	30	
tert-Butylbenzene	58.4	1	ug/L	50.0	BLOD	117	70-130	2.66	30	
Tetrachloroethylene (PCE)	76.4	1	ug/L	50.0	BLOD	153	51-231	0.881	30	
Toluene	52.7	1	ug/L	50.0	BLOD	105	75-120	1.30	30	
trans-1,2-Dichloroethylene	57.2	1	ug/L	50.0	BLOD	114	60-140	1.41	30	
trans-1,3-Dichloropropene	58.0	1	ug/L	50.0	BLOD	116	55-140	0.465	30	
Trichloroethylene	58.0	1	ug/L	50.0	BLOD	116	70-125	1.63	30	
Trichlorofluoromethane	69.7	1	ug/L	50.0	BLOD	139	60-145	2.90	30	
Vinyl chloride	57.1	0.5	ug/L	50.0	BLOD	114	50-145	0.768	30	
Surr: 1,2-Dichloroethane-d4 (Surr)	*51.6*		ug/L	*50.0*		*103*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*48.5*		ug/L	*50.0*		*97.0*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*54.4*		ug/L	*50.0*		*109*	*70-130*			
Surr: Toluene-d8 (Surr)	*47.3*		ug/L	*50.0*		*94.6*	*70-130*			

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Volatile Organic Compounds by GCMS - Quality Control

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
Blank (BHK0669-BLK1)				Prepared & Analyzed: 11/13/2024						
2-Butanone (MEK)	ND	10.0	ug/L							
Acetone	ND	10.0	ug/L							
Benzene	ND	1.00	ug/L							
Ethylbenzene	ND	1.00	ug/L							
Toluene	ND	1.00	ug/L							
Xylenes, Total	ND	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4 (Surr)	*59.1*		ug/L	*50.0*		*118*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*50.3*		ug/L	*50.0*		*101*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*54.4*		ug/L	*50.0*		*109*	*70-130*			
Surr: Toluene-d8 (Surr)	*51.6*		ug/L	*50.0*		*103*	*70-130*			
LCS (BHK0669-BS1)				Prepared & Analyzed: 11/13/2024						
1,1,1,2-Tetrachloroethane	55.8	0.4	ug/L	50.0		112	80-130			
1,1,1-Trichloroethane	55.7	1	ug/L	50.0		111	65-130			
1,1,2,2-Tetrachloroethane	59.7	0.4	ug/L	50.0		119	65-130			
1,1,2-Trichloroethane	62.2	1	ug/L	50.0		124	75-125			
1,1-Dichloroethane	52.9	1	ug/L	50.0		106	70-135			
1,1-Dichloroethylene	50.6	1	ug/L	50.0		101	70-130			
1,1-Dichloropropene	55.3	1	ug/L	50.0		111	75-135			
1,2,3-Trichlorobenzene	59.3	1	ug/L	50.0		119	55-140			
1,2,3-Trichloropropane	55.1	1	ug/L	50.0		110	75-125			
1,2,4-Trichlorobenzene	56.9	1	ug/L	50.0		114	65-135			
1,2,4-Trimethylbenzene	53.6	1	ug/L	50.0		107	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	49.2	1	ug/L	50.0		98.3	50-130			
1,2-Dibromoethane (EDB)	58.0	1	ug/L	50.0		116	80-120			

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Date Issued: 11/22/2024 5:20:18PM
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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
LCS (BHK0669-BS1)				Prepared & Analyzed: 11/13/2024						
1,2-Dichlorobenzene	56.3	0.5	ug/L	50.0		113	70-120			
1,2-Dichloroethane	56.6	1	ug/L	50.0		113	70-130			
1,2-Dichloropropane	57.2	0.5	ug/L	50.0		114	75-125			
1,3,5-Trimethylbenzene	53.7	1	ug/L	50.0		107	75-125			
1,3-Dichlorobenzene	54.6	1	ug/L	50.0		109	75-125			
1,3-Dichloropropane	60.5	1	ug/L	50.0		121	75-125			
1,4-Dichlorobenzene	53.8	1	ug/L	50.0		108	75-125			
2,2-Dichloropropane	60.7	1	ug/L	50.0		121	70-135			
2-Butanone (MEK)	45.2	10	ug/L	50.0		90.4	30-150			
2-Chlorotoluene	52.5	1	ug/L	50.0		105	75-125			
2-Hexanone (MBK)	49.3	5	ug/L	50.0		98.5	55-130			
4-Chlorotoluene	55.2	1	ug/L	50.0		110	75-130			
4-Isopropyltoluene	57.6	1	ug/L	50.0		115	75-130			
4-Methyl-2-pentanone (MIBK)	49.0	5	ug/L	50.0		97.9	60-135			
Acetone	41.2	10	ug/L	50.0		82.3	40-140			
Benzene	54.1	1	ug/L	50.0		108	80-120			
Bromobenzene	53.5	1	ug/L	50.0		107	75-125			
Bromochloromethane	54.9	1	ug/L	50.0		110	65-130			
Bromodichloromethane	60.1	0.5	ug/L	50.0		120	75-120			*L*
Bromoform	50.0	1	ug/L	50.0		100	70-130			
Bromomethane	40.5	1	ug/L	50.0		81.1	30-145			
Carbon disulfide	43.9	10	ug/L	50.0		87.8	35-160			
Carbon tetrachloride	58.8	1	ug/L	50.0		118	65-140			
Chlorobenzene	54.7	1	ug/L	50.0		109	80-120			
Chloroethane	43.6	1	ug/L	50.0		87.2	60-135			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
LCS (BHK0669-BS1)				Prepared & Analyzed: 11/13/2024						
Chloroform	53.1	0.5	ug/L	50.0		106	65-135			
Chloromethane	41.6	1	ug/L	50.0		83.3	40-125			
cis-1,2-Dichloroethylene	52.6	1	ug/L	50.0		105	70-125			
cis-1,3-Dichloropropene	61.8	1	ug/L	50.0		124	70-130			
Dibromochloromethane	64.4	0.5	ug/L	50.0		129	60-135			
Dibromomethane	57.8	1	ug/L	50.0		116	75-125			
Dichlorodifluoromethane	57.9	1	ug/L	50.0		116	30-155			
Ethylbenzene	54.4	1	ug/L	50.0		109	75-125			
Hexachlorobutadiene	59.9	0.8	ug/L	50.0		120	50-140			
Isopropylbenzene	47.5	1	ug/L	50.0		95.0	75-125			
m+p-Xylenes	110	2	ug/L	100		110	75-130			
Methylene chloride	49.1	4	ug/L	50.0		98.2	55-140			
Methyl-t-butyl ether (MTBE)	60.9	1	ug/L	50.0		122	65-125			
Naphthalene	60.2	1	ug/L	50.0		120	55-140			
n-Butylbenzene	56.7	1	ug/L	50.0		113	70-135			
n-Propylbenzene	56.1	1	ug/L	50.0		112	70-130			
o-Xylene	54.0	1	ug/L	50.0		108	80-120			
sec-Butylbenzene	58.3	1	ug/L	50.0		117	70-125			
Styrene	55.4	1	ug/L	50.0		111	65-135			
tert-Butylbenzene	54.5	1	ug/L	50.0		109	70-130			
Tetrachloroethylene (PCE)	80.2	1	ug/L	50.0		160	45-150			*L*
Toluene	55.7	1	ug/L	50.0		111	75-120			
trans-1,2-Dichloroethylene	53.2	1	ug/L	50.0		106	60-140			
trans-1,3-Dichloropropene	53.3	1	ug/L	50.0		107	55-140			
Trichloroethylene	55.7	1	ug/L	50.0		111	70-125			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
LCS (BHK0669-BS1)				Prepared & Analyzed: 11/13/2024						
Trichlorofluoromethane	53.3	1	ug/L	50.0		107	60-145			
Vinyl chloride	45.6	0.5	ug/L	50.0		91.1	50-145			
Surr: 1,2-Dichloroethane-d4 (Surr)	*54.4*		ug/L	*50.0*		*109*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*51.2*		ug/L	*50.0*		*102*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*53.3*		ug/L	*50.0*		*107*	*70-130*			
Surr: Toluene-d8 (Surr)	*52.8*		ug/L	*50.0*		*106*	*70-130*			
Duplicate (BHK0669-DUP1)	**Source: 24K0742-02**			Prepared & Analyzed: 11/13/2024						
1,1,1,2-Tetrachloroethane	ND	0.40	ug/L		BLOD			NA	30	
1,1,1-Trichloroethane	ND	1.00	ug/L		BLOD			NA	30	
1,1,2,2-Tetrachloroethane	ND	0.40	ug/L		BLOD			NA	30	
1,1,2-Trichloroethane	ND	1.00	ug/L		BLOD			NA	30	
1,1-Dichloroethane	ND	1.00	ug/L		BLOD			NA	30	
1,1-Dichloroethylene	ND	1.00	ug/L		BLOD			NA	30	
1,1-Dichloropropene	ND	1.00	ug/L		BLOD			NA	30	
1,2,3-Trichlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
1,2,3-Trichloropropane	ND	1.00	ug/L		BLOD			NA	30	
1,2,4-Trichlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
1,2,4-Trimethylbenzene	ND	1.00	ug/L		BLOD			NA	30	
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.00	ug/L		BLOD			NA	30	
1,2-Dibromoethane (EDB)	ND	1.00	ug/L		BLOD			NA	30	
1,2-Dichlorobenzene	ND	0.50	ug/L		BLOD			NA	30	
1,2-Dichloroethane	ND	1.00	ug/L		BLOD			NA	30	
1,2-Dichloropropane	ND	0.50	ug/L		BLOD			NA	30	
1,3,5-Trimethylbenzene	ND	1.00	ug/L		BLOD			NA	30	

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
Duplicate (BHK0669-DUP1)	**Source: 24K0742-02**			Prepared & Analyzed: 11/13/2024						
1,3-Dichlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
1,3-Dichloropropane	ND	1.00	ug/L		BLOD			NA	30	
1,4-Dichlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
2,2-Dichloropropane	ND	1.00	ug/L		BLOD			NA	30	
2-Butanone (MEK)	ND	10.0	ug/L		BLOD			NA	30	
2-Chlorotoluene	ND	1.00	ug/L		BLOD			NA	30	
2-Hexanone (MBK)	ND	5.00	ug/L		BLOD			NA	30	
4-Chlorotoluene	ND	1.00	ug/L		BLOD			NA	30	
4-Isopropyltoluene	ND	1.00	ug/L		BLOD			NA	30	
4-Methyl-2-pentanone (MIBK)	ND	5.00	ug/L		BLOD			NA	30	
Acetone	ND	10.0	ug/L		BLOD			NA	30	
Benzene	ND	1.00	ug/L		BLOD			NA	30	
Bromobenzene	ND	1.00	ug/L		BLOD			NA	30	
Bromochloromethane	ND	1.00	ug/L		BLOD			NA	30	
Bromodichloromethane	ND	0.50	ug/L		BLOD			NA	30	
Bromoform	ND	1.00	ug/L		BLOD			NA	30	
Bromomethane	ND	1.00	ug/L		BLOD			NA	30	
Carbon disulfide	ND	10.0	ug/L		BLOD			NA	30	
Carbon tetrachloride	ND	1.00	ug/L		BLOD			NA	30	
Chlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
Chloroethane	ND	1.00	ug/L		BLOD			NA	30	
Chloroform	ND	0.50	ug/L		BLOD			NA	30	
Chloromethane	ND	1.00	ug/L		BLOD			NA	30	
cis-1,2-Dichloroethylene	ND	1.00	ug/L		BLOD			NA	30	
cis-1,3-Dichloropropene	ND	1.00	ug/L		BLOD			NA	30	

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
Duplicate (BHK0669-DUP1)	**Source: 24K0742-02**			Prepared & Analyzed: 11/13/2024						
Dibromochloromethane	ND	0.50	ug/L		BLOD			NA	30	
Dibromomethane	ND	1.00	ug/L		BLOD			NA	30	
Dichlorodifluoromethane	ND	1.00	ug/L		BLOD			NA	30	
Di-isopropyl ether (DIPE)	ND	5.00	ug/L		BLOD			NA	30	
Ethylbenzene	ND	1.00	ug/L		BLOD			NA	30	
Hexachlorobutadiene	ND	0.80	ug/L		BLOD			NA	30	
Iodomethane	ND	10.0	ug/L		BLOD			NA	30	
Isopropylbenzene	ND	1.00	ug/L		BLOD			NA	30	
m+p-Xylenes	ND	2.00	ug/L		BLOD			NA	30	
Methylene chloride	ND	4.00	ug/L		BLOD			NA	30	
Methyl-t-butyl ether (MTBE)	ND	1.00	ug/L		BLOD			NA	30	
Naphthalene	ND	1.00	ug/L		BLOD			NA	30	
n-Butylbenzene	ND	1.00	ug/L		BLOD			NA	30	
n-Propylbenzene	ND	1.00	ug/L		BLOD			NA	30	
o-Xylene	ND	1.00	ug/L		BLOD			NA	30	
sec-Butylbenzene	ND	1.00	ug/L		BLOD			NA	30	
Styrene	ND	1.00	ug/L		BLOD			NA	30	
tert-Butylbenzene	ND	1.00	ug/L		BLOD			NA	30	
Tetrachloroethylene (PCE)	ND	1.00	ug/L		BLOD			NA	30	
Toluene	ND	1.00	ug/L		BLOD			NA	30	
trans-1,2-Dichloroethylene	ND	1.00	ug/L		BLOD			NA	30	
trans-1,3-Dichloropropene	ND	1.00	ug/L		BLOD			NA	30	
Trichloroethylene	ND	1.00	ug/L		BLOD			NA	30	
Trichlorofluoromethane	ND	1.00	ug/L		BLOD			NA	30	
Vinyl acetate	ND	10.0	ug/L		BLOD			NA	30	

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
Duplicate (BHK0669-DUP1)	**Source: 24K0742-02**			Prepared & Analyzed: 11/13/2024						
Vinyl chloride	ND	0.50	ug/L		BLOD			NA	30	
Xylenes, Total	ND	3.00	ug/L		BLOD			NA	30	
Tetrahydrofuran	ND	10.0	ug/L		BLOD			NA	30	
Surr: 1,2-Dichloroethane-d4 (Surr)	*59.4*		ug/L	*50.0*		*119*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*49.8*		ug/L	*50.0*		*99.7*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*55.0*		ug/L	*50.0*		*110*	*70-130*			
Surr: Toluene-d8 (Surr)	*52.6*		ug/L	*50.0*		*105*	*70-130*			
Matrix Spike (BHK0669-MS1)	**Source: 24K0742-01**			Prepared & Analyzed: 11/13/2024						
1,1,1,2-Tetrachloroethane	52.1	0.4	ug/L	50.0	BLOD	104	80-130			
1,1,1-Trichloroethane	50.9	1	ug/L	50.0	BLOD	102	65-130			
1,1,2,2-Tetrachloroethane	54.5	0.4	ug/L	50.0	BLOD	109	65-130			
1,1,2-Trichloroethane	55.3	1	ug/L	50.0	BLOD	111	75-125			
1,1-Dichloroethane	48.5	1	ug/L	50.0	BLOD	96.9	70-135			
1,1-Dichloroethylene	47.2	1	ug/L	50.0	BLOD	94.4	50-145			
1,1-Dichloropropene	50.4	1	ug/L	50.0	BLOD	101	75-135			
1,2,3-Trichlorobenzene	54.0	1	ug/L	50.0	BLOD	108	55-140			
1,2,3-Trichloropropane	50.0	1	ug/L	50.0	BLOD	100	75-125			
1,2,4-Trichlorobenzene	51.3	1	ug/L	50.0	BLOD	103	65-135			
1,2,4-Trimethylbenzene	47.5	1	ug/L	50.0	BLOD	94.9	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	43.8	1	ug/L	50.0	BLOD	87.5	50-130			
1,2-Dibromoethane (EDB)	54.5	1	ug/L	50.0	BLOD	109	80-120			
1,2-Dichlorobenzene	50.7	0.5	ug/L	50.0	BLOD	101	70-120			
1,2-Dichloroethane	52.5	1	ug/L	50.0	BLOD	105	70-130			
1,2-Dichloropropane	51.3	0.5	ug/L	50.0	BLOD	103	75-125			

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
Matrix Spike (BHK0669-MS1)	**Source: 24K0742-01**			Prepared & Analyzed: 11/13/2024						
1,3,5-Trimethylbenzene	48.5	1	ug/L	50.0	BLOD	97.0	75-124			
1,3-Dichlorobenzene	48.5	1	ug/L	50.0	BLOD	96.9	75-125			
1,3-Dichloropropane	54.5	1	ug/L	50.0	BLOD	109	75-125			
1,4-Dichlorobenzene	47.7	1	ug/L	50.0	BLOD	95.4	75-125			
2,2-Dichloropropane	55.6	1	ug/L	50.0	BLOD	111	70-135			
2-Butanone (MEK)	55.7	10	ug/L	50.0	BLOD	111	30-150			
2-Chlorotoluene	48.1	1	ug/L	50.0	BLOD	96.1	75-125			
2-Hexanone (MBK)	43.9	5	ug/L	50.0	BLOD	87.9	55-130			
4-Chlorotoluene	49.7	1	ug/L	50.0	BLOD	99.4	75-130			
4-Isopropyltoluene	51.3	1	ug/L	50.0	BLOD	103	75-130			
4-Methyl-2-pentanone (MIBK)	46.6	5	ug/L	50.0	BLOD	93.2	60-135			
Acetone	39.1	10	ug/L	50.0	BLOD	75.5	40-140			
Benzene	48.9	1	ug/L	50.0	BLOD	97.8	80-120			
Bromobenzene	49.8	1	ug/L	50.0	BLOD	99.6	75-125			
Bromochloromethane	50.1	1	ug/L	50.0	BLOD	100	65-130			
Bromodichloromethane	51.2	0.5	ug/L	50.0	BLOD	102	75-136			
Bromoform	45.9	1	ug/L	50.0	BLOD	91.8	70-130			
Bromomethane	43.0	1	ug/L	50.0	BLOD	86.0	30-145			
Carbon disulfide	45.7	10	ug/L	50.0	BLOD	91.5	35-160			
Carbon tetrachloride	53.0	1	ug/L	50.0	BLOD	106	65-140			
Chlorobenzene	51.3	1	ug/L	50.0	BLOD	103	80-120			
Chloroethane	39.9	1	ug/L	50.0	BLOD	79.7	60-135			
Chloroform	47.8	0.5	ug/L	50.0	BLOD	95.5	65-135			
Chloromethane	37.7	1	ug/L	50.0	BLOD	75.4	40-125			
cis-1,2-Dichloroethylene	48.6	1	ug/L	50.0	BLOD	97.2	70-125			

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
Matrix Spike (BHK0669-MS1)	**Source: 24K0742-01**			Prepared & Analyzed: 11/13/2024						
cis-1,3-Dichloropropene	56.8	1	ug/L	50.0	BLOD	114	47-136			
Dibromochloromethane	57.0	0.5	ug/L	50.0	BLOD	114	60-135			
Dibromomethane	51.0	1	ug/L	50.0	BLOD	102	75-125			
Dichlorodifluoromethane	53.2	1	ug/L	50.0	BLOD	106	30-155			
Ethylbenzene	50.1	1	ug/L	50.0	BLOD	100	75-125			
Hexachlorobutadiene	54.6	0.8	ug/L	50.0	BLOD	109	50-140			
Isopropylbenzene	45.0	1	ug/L	50.0	BLOD	90.0	75-125			
m+p-Xylenes	102	2	ug/L	100	BLOD	102	75-130			
Methylene chloride	45.8	4	ug/L	50.0	BLOD	90.8	55-140			
Methyl-t-butyl ether (MTBE)	56.9	1	ug/L	50.0	BLOD	114	65-125			
Naphthalene	54.7	1	ug/L	50.0	BLOD	109	55-140			
n-Butylbenzene	50.1	1	ug/L	50.0	BLOD	100	70-135			
n-Propylbenzene	51.2	1	ug/L	50.0	BLOD	102	70-130			
o-Xylene	50.0	1	ug/L	50.0	BLOD	100	80-120			
sec-Butylbenzene	51.4	1	ug/L	50.0	BLOD	103	70-125			
Styrene	51.1	1	ug/L	50.0	BLOD	102	65-135			
tert-Butylbenzene	48.8	1	ug/L	50.0	BLOD	97.7	70-130			
Tetrachloroethylene (PCE)	73.4	1	ug/L	50.0	BLOD	147	51-231			
Toluene	50.4	1	ug/L	50.0	BLOD	101	75-120			
trans-1,2-Dichloroethylene	50.9	1	ug/L	50.0	BLOD	102	60-140			
trans-1,3-Dichloropropene	48.5	1	ug/L	50.0	BLOD	97.0	55-140			
Trichloroethylene	50.0	1	ug/L	50.0	BLOD	100	70-125			
Trichlorofluoromethane	49.4	1	ug/L	50.0	BLOD	98.7	60-145			
Vinyl chloride	41.9	0.5	ug/L	50.0	BLOD	83.8	50-145			

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Certificate of Analysis

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Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0669 - SW5030B-MS										
Matrix Spike (BHK0669-MS1)	**Source: 24K0742-01**			Prepared & Analyzed: 11/13/2024						
Surr: 1,2-Dichloroethane-d4 (Surr)	*56.8*		ug/L	*50.0*		*114*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*53.0*		ug/L	*50.0*		*106*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*53.5*		ug/L	*50.0*		*107*	*70-130*			
Surr: Toluene-d8 (Surr)	*52.2*		ug/L	*50.0*		*104*	*70-130*			
Batch BHK0730 - SW5030B-MS										
Blank (BHK0730-BLK1)				Prepared & Analyzed: 11/14/2024						
2-Butanone (MEK)	ND	10.0	ug/L							
Acetone	ND	10.0	ug/L							
Benzene	ND	1.00	ug/L							
Ethylbenzene	ND	1.00	ug/L							
Toluene	ND	1.00	ug/L							
Xylenes, Total	ND	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4 (Surr)	*58.4*		ug/L	*50.0*		*117*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*50.4*		ug/L	*50.0*		*101*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*54.9*		ug/L	*50.0*		*110*	*70-130*			
Surr: Toluene-d8 (Surr)	*51.1*		ug/L	*50.0*		*102*	*70-130*			
LCS (BHK0730-BS1)				Prepared & Analyzed: 11/14/2024						
1,1,1,2-Tetrachloroethane	53.0	0.4	ug/L	50.0		106	80-130			
1,1,1-Trichloroethane	53.0	1	ug/L	50.0		106	65-130			
1,1,2,2-Tetrachloroethane	54.8	0.4	ug/L	50.0		110	65-130			
1,1,2-Trichloroethane	57.4	1	ug/L	50.0		115	75-125			
1,1-Dichloroethane	50.4	1	ug/L	50.0		101	70-135			
1,1-Dichloroethylene	49.0	1	ug/L	50.0		98.1	70-130			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
LCS (BHK0730-BS1)				Prepared & Analyzed: 11/14/2024						
1,1-Dichloropropene	52.2	1	ug/L	50.0		104	75-135			
1,2,3-Trichlorobenzene	55.6	1	ug/L	50.0		111	55-140			
1,2,3-Trichloropropane	50.2	1	ug/L	50.0		100	75-125			
1,2,4-Trichlorobenzene	53.3	1	ug/L	50.0		107	65-135			
1,2,4-Trimethylbenzene	50.5	1	ug/L	50.0		101	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	45.3	1	ug/L	50.0		90.7	50-130			
1,2-Dibromoethane (EDB)	54.9	1	ug/L	50.0		110	80-120			
1,2-Dichlorobenzene	53.9	0.5	ug/L	50.0		108	70-120			
1,2-Dichloroethane	53.9	1	ug/L	50.0		108	70-130			
1,2-Dichloropropane	51.8	0.5	ug/L	50.0		104	75-125			
1,3,5-Trimethylbenzene	51.7	1	ug/L	50.0		103	75-125			
1,3-Dichlorobenzene	51.5	1	ug/L	50.0		103	75-125			
1,3-Dichloropropane	55.2	1	ug/L	50.0		110	75-125			
1,4-Dichlorobenzene	50.6	1	ug/L	50.0		101	75-125			
2,2-Dichloropropane	57.1	1	ug/L	50.0		114	70-135			
2-Butanone (MEK)	55.7	10	ug/L	50.0		111	30-150			
2-Chlorotoluene	51.0	1	ug/L	50.0		102	75-125			
2-Hexanone (MBK)	46.6	5	ug/L	50.0		93.2	55-130			
4-Chlorotoluene	52.8	1	ug/L	50.0		106	75-130			
4-Isopropyltoluene	54.6	1	ug/L	50.0		109	75-130			
4-Methyl-2-pentanone (MIBK)	47.6	5	ug/L	50.0		95.1	60-135			
Acetone	37.7	10	ug/L	50.0		75.4	40-140			
Benzene	50.1	1	ug/L	50.0		100	80-120			
Bromobenzene	50.5	1	ug/L	50.0		101	75-125			
Bromochloromethane	53.0	1	ug/L	50.0		106	65-130			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
LCS (BHK0730-BS1)				Prepared & Analyzed: 11/14/2024						
Bromodichloromethane	55.2	0.5	ug/L	50.0		110	75-120			
Bromoform	46.8	1	ug/L	50.0		93.6	70-130			
Bromomethane	39.5	1	ug/L	50.0		79.1	30-145			
Carbon disulfide	44.7	10	ug/L	50.0		89.4	35-160			
Carbon tetrachloride	53.9	1	ug/L	50.0		108	65-140			
Chlorobenzene	51.5	1	ug/L	50.0		103	80-120			
Chloroethane	42.5	1	ug/L	50.0		85.0	60-135			
Chloroform	50.6	0.5	ug/L	50.0		101	65-135			
Chloromethane	38.2	1	ug/L	50.0		76.4	40-125			
cis-1,2-Dichloroethylene	49.7	1	ug/L	50.0		99.3	70-125			
cis-1,3-Dichloropropene	57.5	1	ug/L	50.0		115	70-130			
Dibromochloromethane	58.2	0.5	ug/L	50.0		116	60-135			
Dibromomethane	53.1	1	ug/L	50.0		106	75-125			
Dichlorodifluoromethane	55.1	1	ug/L	50.0		110	30-155			
Ethylbenzene	49.9	1	ug/L	50.0		99.7	75-125			
Hexachlorobutadiene	56.4	0.8	ug/L	50.0		113	50-140			
Isopropylbenzene	44.4	1	ug/L	50.0		88.8	75-125			
m+p-Xylenes	102	2	ug/L	100		102	75-130			
Methylene chloride	47.6	4	ug/L	50.0		95.1	55-140			
Methyl-t-butyl ether (MTBE)	56.8	1	ug/L	50.0		114	65-125			
Naphthalene	54.9	1	ug/L	50.0		110	55-140			
n-Butylbenzene	53.4	1	ug/L	50.0		107	70-135			
n-Propylbenzene	54.6	1	ug/L	50.0		109	70-130			
o-Xylene	50.3	1	ug/L	50.0		101	80-120			
sec-Butylbenzene	54.6	1	ug/L	50.0		109	70-125			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
LCS (BHK0730-BS1)				Prepared & Analyzed: 11/14/2024						
Styrene	51.6	1	ug/L	50.0		103	65-135			
tert-Butylbenzene	51.8	1	ug/L	50.0		104	70-130			
Tetrachloroethylene (PCE)	73.8	1	ug/L	50.0		148	45-150			
Toluene	51.0	1	ug/L	50.0		102	75-120			
trans-1,2-Dichloroethylene	46.7	1	ug/L	50.0		93.4	60-140			
trans-1,3-Dichloropropene	48.9	1	ug/L	50.0		97.8	55-140			
Trichloroethylene	51.5	1	ug/L	50.0		103	70-125			
Trichlorofluoromethane	50.9	1	ug/L	50.0		102	60-145			
Vinyl chloride	41.4	0.5	ug/L	50.0		82.8	50-145			
Surr: 1,2-Dichloroethane-d4 (Surr)	*54.7*		ug/L	*50.0*		*109*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*50.3*		ug/L	*50.0*		*101*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*53.1*		ug/L	*50.0*		*106*	*70-130*			
Surr: Toluene-d8 (Surr)	*50.3*		ug/L	*50.0*		*101*	*70-130*			
Duplicate (BHK0730-DUP1)	**Source: 24K0799-02**			Prepared & Analyzed: 11/14/2024						
1,1,1,2-Tetrachloroethane	ND	0.40	ug/L		BLOD			NA	30	
1,1,1-Trichloroethane	ND	1.00	ug/L		BLOD			NA	30	
1,1,2,2-Tetrachloroethane	ND	0.40	ug/L		BLOD			NA	30	
1,1,2-Trichloroethane	ND	1.00	ug/L		BLOD			NA	30	
1,1-Dichloroethane	ND	1.00	ug/L		BLOD			NA	30	
1,1-Dichloroethylene	ND	1.00	ug/L		BLOD			NA	30	
1,1-Dichloropropene	ND	1.00	ug/L		BLOD			NA	30	
1,2,3-Trichlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
1,2,3-Trichloropropane	ND	1.00	ug/L		BLOD			NA	30	
1,2,4-Trichlorobenzene	ND	1.00	ug/L		BLOD			NA	30	

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
Duplicate (BHK0730-DUP1)	**Source: 24K0799-02**			Prepared & Analyzed: 11/14/2024						
1,2,4-Trimethylbenzene	ND	1.00	ug/L		BLOD			NA	30	
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.00	ug/L		BLOD			NA	30	
1,2-Dibromoethane (EDB)	ND	1.00	ug/L		BLOD			NA	30	
1,2-Dichlorobenzene	ND	0.50	ug/L		BLOD			NA	30	
1,2-Dichloroethane	ND	1.00	ug/L		BLOD			NA	30	
1,2-Dichloropropane	ND	0.50	ug/L		BLOD			NA	30	
1,3,5-Trimethylbenzene	ND	1.00	ug/L		BLOD			NA	30	
1,3-Dichlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
1,3-Dichloropropane	ND	1.00	ug/L		BLOD			NA	30	
1,4-Dichlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
2,2-Dichloropropane	ND	1.00	ug/L		BLOD			NA	30	
2-Butanone (MEK)	ND	10.0	ug/L		BLOD			NA	30	
2-Chlorotoluene	ND	1.00	ug/L		BLOD			NA	30	
2-Hexanone (MBK)	ND	5.00	ug/L		BLOD			NA	30	
4-Chlorotoluene	ND	1.00	ug/L		BLOD			NA	30	
4-Isopropyltoluene	ND	1.00	ug/L		BLOD			NA	30	
4-Methyl-2-pentanone (MIBK)	ND	5.00	ug/L		BLOD			NA	30	
Acetone	ND	10.0	ug/L		BLOD			NA	30	
Benzene	ND	1.00	ug/L		BLOD			NA	30	
Bromobenzene	ND	1.00	ug/L		BLOD			NA	30	
Bromochloromethane	ND	1.00	ug/L		BLOD			NA	30	
Bromodichloromethane	ND	0.50	ug/L		BLOD			NA	30	
Bromoform	ND	1.00	ug/L		BLOD			NA	30	
Bromomethane	ND	1.00	ug/L		BLOD			NA	30	
Carbon disulfide	ND	10.0	ug/L		BLOD			NA	30	

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
Duplicate (BHK0730-DUP1)	**Source: 24K0799-02**			Prepared & Analyzed: 11/14/2024						
Carbon tetrachloride	ND	1.00	ug/L		BLOD			NA	30	
Chlorobenzene	ND	1.00	ug/L		BLOD			NA	30	
Chloroethane	ND	1.00	ug/L		BLOD			NA	30	
Chloroform	ND	0.50	ug/L		BLOD			NA	30	
Chloromethane	ND	1.00	ug/L		BLOD			NA	30	
cis-1,2-Dichloroethylene	ND	1.00	ug/L		BLOD			NA	30	
cis-1,3-Dichloropropene	ND	1.00	ug/L		BLOD			NA	30	
Dibromochloromethane	ND	0.50	ug/L		BLOD			NA	30	
Dibromomethane	ND	1.00	ug/L		BLOD			NA	30	
Dichlorodifluoromethane	ND	1.00	ug/L		BLOD			NA	30	
Di-isopropyl ether (DIPE)	ND	5.00	ug/L		BLOD			NA	30	
Ethylbenzene	ND	1.00	ug/L		BLOD			NA	30	
Hexachlorobutadiene	ND	0.80	ug/L		BLOD			NA	30	
Iodomethane	ND	10.0	ug/L		BLOD			NA	30	
Isopropylbenzene	ND	1.00	ug/L		BLOD			NA	30	
m+p-Xylenes	ND	2.00	ug/L		BLOD			NA	30	
Methylene chloride	ND	4.00	ug/L		BLOD			NA	30	
Methyl-t-butyl ether (MTBE)	ND	1.00	ug/L		BLOD			NA	30	
Naphthalene	ND	1.00	ug/L		BLOD			NA	30	
n-Butylbenzene	ND	1.00	ug/L		BLOD			NA	30	
n-Propylbenzene	ND	1.00	ug/L		BLOD			NA	30	
o-Xylene	ND	1.00	ug/L		BLOD			NA	30	
sec-Butylbenzene	ND	1.00	ug/L		BLOD			NA	30	
Styrene	ND	1.00	ug/L		BLOD			NA	30	
tert-Butylbenzene	ND	1.00	ug/L		BLOD			NA	30	

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
Duplicate (BHK0730-DUP1)	**Source: 24K0799-02**			Prepared & Analyzed: 11/14/2024						
Tetrachloroethylene (PCE)	ND	1.00	ug/L		BLOD			NA	30	
Toluene	ND	1.00	ug/L		BLOD			NA	30	
trans-1,2-Dichloroethylene	ND	1.00	ug/L		BLOD			NA	30	
trans-1,3-Dichloropropene	ND	1.00	ug/L		BLOD			NA	30	
Trichloroethylene	ND	1.00	ug/L		BLOD			NA	30	
Trichlorofluoromethane	ND	1.00	ug/L		BLOD			NA	30	
Vinyl acetate	ND	10.0	ug/L		BLOD			NA	30	
Vinyl chloride	ND	0.50	ug/L		BLOD			NA	30	
Xylenes, Total	ND	3.00	ug/L		BLOD			NA	30	
Tetrahydrofuran	ND	10.0	ug/L		BLOD			NA	30	
Surr: 1,2-Dichloroethane-d4 (Surr)	*59.3*		ug/L	*50.0*		*119*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*49.1*		ug/L	*50.0*		*98.2*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*55.6*		ug/L	*50.0*		*111*	*70-130*			
Surr: Toluene-d8 (Surr)	*49.8*		ug/L	*50.0*		*99.6*	*70-130*			
Matrix Spike (BHK0730-MS1)	**Source: 24K0799-01**			Prepared & Analyzed: 11/14/2024						
1,1,1,2-Tetrachloroethane	49.4	0.4	ug/L	50.0	BLOD	98.9	80-130			
1,1,1-Trichloroethane	48.8	1	ug/L	50.0	BLOD	97.5	65-130			
1,1,2,2-Tetrachloroethane	53.7	0.4	ug/L	50.0	BLOD	107	65-130			
1,1,2-Trichloroethane	55.8	1	ug/L	50.0	BLOD	112	75-125			
1,1-Dichloroethane	47.7	1	ug/L	50.0	BLOD	95.4	70-135			
1,1-Dichloroethylene	45.0	1	ug/L	50.0	BLOD	90.0	50-145			
1,1-Dichloropropene	47.8	1	ug/L	50.0	BLOD	95.6	75-135			
1,2,3-Trichlorobenzene	49.0	1	ug/L	50.0	BLOD	98.1	55-140			
1,2,3-Trichloropropane	48.4	1	ug/L	50.0	BLOD	96.8	75-125			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
Matrix Spike (BHK0730-MS1)	**Source: 24K0799-01**			Prepared & Analyzed: 11/14/2024						
1,2,4-Trichlorobenzene	45.0	1	ug/L	50.0	BLOD	90.0	65-135			
1,2,4-Trimethylbenzene	45.2	1	ug/L	50.0	BLOD	90.3	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	42.1	1	ug/L	50.0	BLOD	84.2	50-130			
1,2-Dibromoethane (EDB)	52.8	1	ug/L	50.0	BLOD	106	80-120			
1,2-Dichlorobenzene	49.6	0.5	ug/L	50.0	BLOD	99.2	70-120			
1,2-Dichloroethane	51.6	1	ug/L	50.0	BLOD	103	70-130			
1,2-Dichloropropane	49.1	0.5	ug/L	50.0	BLOD	98.2	75-125			
1,3,5-Trimethylbenzene	45.4	1	ug/L	50.0	BLOD	90.8	75-124			
1,3-Dichlorobenzene	46.4	1	ug/L	50.0	BLOD	92.9	75-125			
1,3-Dichloropropane	53.5	1	ug/L	50.0	BLOD	107	75-125			
1,4-Dichlorobenzene	45.2	1	ug/L	50.0	BLOD	90.5	75-125			
2,2-Dichloropropane	46.8	1	ug/L	50.0	BLOD	93.7	70-135			
2-Butanone (MEK)	48.8	10	ug/L	50.0	BLOD	97.6	30-150			
2-Chlorotoluene	46.5	1	ug/L	50.0	BLOD	93.0	75-125			
2-Hexanone (MBK)	43.3	5	ug/L	50.0	BLOD	86.6	55-130			
4-Chlorotoluene	47.8	1	ug/L	50.0	BLOD	95.7	75-130			
4-Isopropyltoluene	47.5	1	ug/L	50.0	BLOD	95.0	75-130			
4-Methyl-2-pentanone (MIBK)	43.5	5	ug/L	50.0	BLOD	87.0	60-135			
Acetone	37.8	10	ug/L	50.0	BLOD	71.1	40-140			
Benzene	47.1	1	ug/L	50.0	BLOD	94.1	80-120			
Bromobenzene	47.0	1	ug/L	50.0	BLOD	94.0	75-125			
Bromochloromethane	50.0	1	ug/L	50.0	BLOD	99.9	65-130			
Bromodichloromethane	51.9	0.5	ug/L	50.0	BLOD	104	75-136			
Bromoform	44.4	1	ug/L	50.0	BLOD	88.7	70-130			
Bromomethane	38.8	1	ug/L	50.0	BLOD	77.6	30-145			

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Date Issued: 11/22/2024 5:20:18PM
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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
Matrix Spike (BHK0730-MS1)		**Source: 24K0799-01**		Prepared & Analyzed: 11/14/2024						
Carbon disulfide	50.7	10	ug/L	50.0	BLOD	101	35-160			
Carbon tetrachloride	50.2	1	ug/L	50.0	BLOD	100	65-140			
Chlorobenzene	48.9	1	ug/L	50.0	BLOD	97.9	80-120			
Chloroethane	38.4	1	ug/L	50.0	BLOD	76.9	60-135			
Chloroform	47.7	0.5	ug/L	50.0	BLOD	95.3	65-135			
Chloromethane	36.5	1	ug/L	50.0	BLOD	73.1	40-125			
cis-1,2-Dichloroethylene	47.5	1	ug/L	50.0	BLOD	94.9	70-125			
cis-1,3-Dichloropropene	52.0	1	ug/L	50.0	BLOD	104	47-136			
Dibromochloromethane	55.0	0.5	ug/L	50.0	BLOD	110	60-135			
Dibromomethane	50.3	1	ug/L	50.0	BLOD	101	75-125			
Dichlorodifluoromethane	45.3	1	ug/L	50.0	BLOD	90.6	30-155			
Ethylbenzene	47.2	1	ug/L	50.0	BLOD	94.4	75-125			
Hexachlorobutadiene	45.6	0.8	ug/L	50.0	BLOD	91.3	50-140			
Isopropylbenzene	41.6	1	ug/L	50.0	BLOD	83.2	75-125			
m+p-Xylenes	95.7	2	ug/L	100	BLOD	95.7	75-130			
Methylene chloride	45.4	4	ug/L	50.0	BLOD	90.2	55-140			
Methyl-t-butyl ether (MTBE)	52.5	1	ug/L	50.0	BLOD	105	65-125			
Naphthalene	51.7	1	ug/L	50.0	BLOD	103	55-140			
n-Butylbenzene	45.1	1	ug/L	50.0	BLOD	90.1	70-135			
n-Propylbenzene	47.5	1	ug/L	50.0	BLOD	95.0	70-130			
o-Xylene	47.5	1	ug/L	50.0	BLOD	95.1	80-120			
sec-Butylbenzene	48.4	1	ug/L	50.0	BLOD	96.8	70-125			
Styrene	48.4	1	ug/L	50.0	BLOD	96.8	65-135			
tert-Butylbenzene	47.2	1	ug/L	50.0	BLOD	94.3	70-130			
Tetrachloroethylene (PCE)	66.5	1	ug/L	50.0	BLOD	133	51-231			

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Volatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0730 - SW5030B-MS										
Matrix Spike (BHK0730-MS1)	**Source: 24K0799-01**			Prepared & Analyzed: 11/14/2024						
Toluene	48.1	1	ug/L	50.0	BLOD	96.2	75-120			
trans-1,2-Dichloroethylene	43.7	1	ug/L	50.0	BLOD	87.4	60-140			
trans-1,3-Dichloropropene	44.7	1	ug/L	50.0	BLOD	89.3	55-140			
Trichloroethylene	47.4	1	ug/L	50.0	BLOD	94.8	70-125			
Trichlorofluoromethane	45.1	1	ug/L	50.0	BLOD	90.1	60-145			
Vinyl chloride	38.0	0.5	ug/L	50.0	BLOD	76.0	50-145			
Surr: 1,2-Dichloroethane-d4 (Surr)	*56.9*		ug/L	*50.0*		*114*	*70-120*			
Surr: 4-Bromofluorobenzene (Surr)	*51.6*		ug/L	*50.0*		*103*	*75-120*			
Surr: Dibromofluoromethane (Surr)	*53.8*		ug/L	*50.0*		*108*	*70-130*			
Surr: Toluene-d8 (Surr)	*51.4*		ug/L	*50.0*		*103*	*70-130*			

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Semivolatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
Blank (BHK0500-BLK1)				Prepared & Analyzed: 11/11/2024						
Anthracene	ND	10.0	ug/L							
Surr: 2,4,6-Tribromophenol (Surr)	*68.4*		ug/L	*200*		*34.2*	*5-136*			
Surr: 2-Fluorobiphenyl (Surr)	*29.4*		ug/L	*100*		*29.4*	*9-117*			
Surr: 2-Fluorophenol (Surr)	*26.8*		ug/L	*200*		*13.4*	*5-60*			
Surr: Nitrobenzene-d5 (Surr)	*33.2*		ug/L	*100*		*33.2*	*5-151*			
Surr: Phenol-d5 (Surr)	*31.5*		ug/L	*200*		*15.8*	*5-60*			
Surr: p-Terphenyl-d14 (Surr)	*34.2*		ug/L	*100*		*34.2*	*5-141*			
Blank (BHK0500-BLK3)				Prepared: 11/11/2024 Analyzed: 11/18/2024						
Anthracene	ND	10.0	ug/L							
Surr: 2,4,6-Tribromophenol (Surr)	*76.3*		ug/L	*200*		*38.1*	*5-136*			
Surr: 2-Fluorobiphenyl (Surr)	*31.7*		ug/L	*100*		*31.7*	*9-117*			
Surr: 2-Fluorophenol (Surr)	*41.3*		ug/L	*200*		*20.6*	*5-60*			
Surr: Nitrobenzene-d5 (Surr)	*53.0*		ug/L	*100*		*53.0*	*5-151*			
Surr: Phenol-d5 (Surr)	*32.3*		ug/L	*200*		*16.1*	*5-60*			
Surr: p-Terphenyl-d14 (Surr)	*38.8*		ug/L	*100*		*38.8*	*5-141*			
LCS (BHK0500-BS1)				Prepared & Analyzed: 11/11/2024						
1,2,4-Trichlorobenzene	21.7	10.0	ug/L	50.0		43.4	57-130			*L*
1,2-Dichlorobenzene	24.8	10.0	ug/L	50.0		49.7	22-115			
1,3-Dichlorobenzene	24.0	10.0	ug/L	50.0		48.0	22-112			
1,4-Dichlorobenzene	23.0	10.0	ug/L	50.0		46.1	13-112			
2,4,6-Trichlorophenol	28.0	10.0	ug/L	50.0		56.0	52-129			
2,4-Dichlorophenol	29.0	10.0	ug/L	50.0		58.0	53-122			
2,4-Dimethylphenol	32.7	5.00	ug/L	50.0		65.3	42-120			

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
LCS (BHK0500-BS1)				Prepared & Analyzed: 11/11/2024						
2,4-Dinitrophenol	28.8	50.0	ug/L	50.0		57.7	48-127			
2,4-Dinitrotoluene	36.2	10.0	ug/L	50.0		72.3	10-173			
2,6-Dinitrotoluene	34.7	10.0	ug/L	50.0		69.3	68-137			
2-Chloronaphthalene	28.9	10.0	ug/L	50.0		57.7	65-120			*L*
2-Chlorophenol	32.4	10.0	ug/L	50.0		64.7	36-120			
2-Nitrophenol	35.1	10.0	ug/L	50.0		70.3	45-167			
3,3'-Dichlorobenzidine	36.5	10.0	ug/L	50.0		73.0	10-213			
4,6-Dinitro-2-methylphenol	35.5	50.0	ug/L	50.0		70.9	53-130			
4-Bromophenyl phenyl ether	34.1	10.0	ug/L	50.0		68.2	65-120			
4-Chlorophenyl phenyl ether	29.3	10.0	ug/L	50.0		58.7	38-145			
4-Nitrophenol	15.6	50.0	ug/L	50.0		31.2	13-129			
Acenaphthene	33.2	10.0	ug/L	50.0		66.3	60-132			
Acenaphthylene	34.7	10.0	ug/L	50.0		69.4	54-126			
Acetophenone	27.2	20.0	ug/L	50.0		54.3	0-200			
Anthracene	34.7	10.0	ug/L	50.0		69.3	43-120			
Benzo (a) anthracene	35.0	10.0	ug/L	50.0		70.1	42-133			
Benzo (a) pyrene	37.8	10.0	ug/L	50.0		75.6	32-148			
Benzo (b) fluoranthene	34.6	10.0	ug/L	50.0		69.2	42-140			
Benzo (g,h,i) perylene	41.0	10.0	ug/L	50.0		81.9	10-195			
Benzo (k) fluoranthene	34.7	10.0	ug/L	50.0		69.4	25-146			
bis (2-Chloroethoxy) methane	33.9	10.0	ug/L	50.0		67.9	49-165			
bis (2-Chloroethyl) ether	34.8	10.0	ug/L	50.0		69.6	43-126			
2,2'-Oxybis (1-chloropropane)	32.8	10.0	ug/L	50.0		65.6	63-139			
bis (2-Ethylhexyl) phthalate	39.4	10.0	ug/L	50.0		78.9	29-137			
Butyl benzyl phthalate	43.8	10.0	ug/L	50.0		87.5	10-140			

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
LCS (BHK0500-BS1)				Prepared & Analyzed: 11/11/2024						
Chrysene	37.8	10.0	ug/L	50.0		75.5	44-140			
Dibenz (a,h) anthracene	41.3	10.0	ug/L	50.0		82.6	10-200			
Diethyl phthalate	36.2	10.0	ug/L	50.0		72.3	10-120			
Dimethyl phthalate	33.9	10.0	ug/L	50.0		67.7	10-120			
Di-n-butyl phthalate	45.2	10.0	ug/L	50.0		90.3	10-120			
Di-n-octyl phthalate	41.1	10.0	ug/L	50.0		82.2	19-132			
Fluoranthene	36.2	10.0	ug/L	50.0		72.3	43-121			
Fluorene	32.2	10.0	ug/L	50.0		64.3	70-120			*L*
Hexachlorobenzene	35.1	1.00	ug/L	50.0		70.2	10-142			
Hexachlorobutadiene	20.7	10.0	ug/L	50.0		41.4	38-120			
Hexachlorocyclopentadiene	12.6	10.0	ug/L	50.0		25.3	10-76			
Hexachloroethane	23.7	10.0	ug/L	50.0		47.4	55-120			*L*
Indeno (1,2,3-cd) pyrene	37.9	10.0	ug/L	50.0		75.8	10-151			
Isophorone	27.7	10.0	ug/L	50.0		55.3	47-180			
Naphthalene	26.2	5.00	ug/L	50.0		52.4	36-120			
Nitrobenzene	30.1	10.0	ug/L	50.0		60.2	54-158			
n-Nitrosodimethylamine	21.3	10.0	ug/L	50.0		42.6	10-85			
n-Nitrosodi-n-propylamine	27.2	10.0	ug/L	50.0		54.4	14-198			
n-Nitrosodiphenylamine	27.1	10.0	ug/L	50.0		54.1	12-97			
p-Chloro-m-cresol	34.0	10.0	ug/L	50.0		68.0	10-142			
Pentachloronitrobenzene (quintozene)	ND	10.0	ug/L				0-200			
Pentachlorophenol	30.2	20.0	ug/L	50.0		60.4	38-152			
Phenanthrene	36.7	10.0	ug/L	50.0		73.4	65-120			
Phenol	15.1	10.0	ug/L	50.5		29.9	17-120			
Pyrene	33.2	10.0	ug/L	50.0		66.4	70-120			*L*

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Semivolatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
LCS (BHK0500-BS1)				Prepared & Analyzed: 11/11/2024						
Pyridine	18.1	10.0	ug/L	50.0		36.2	10-103			
Surr: 2,4,6-Tribromophenol (Surr)	*66.3*		ug/L	*200*		*33.2*	*5-136*			
Surr: 2-Fluorobiphenyl (Surr)	*27.9*		ug/L	*100*		*27.9*	*9-117*			
Surr: 2-Fluorophenol (Surr)	*42.4*		ug/L	*200*		*21.2*	*5-60*			
Surr: Nitrobenzene-d5 (Surr)	*30.5*		ug/L	*100*		*30.5*	*5-151*			
Surr: Phenol-d5 (Surr)	*29.2*		ug/L	*200*		*14.6*	*5-60*			
Surr: p-Terphenyl-d14 (Surr)	*32.8*		ug/L	*100*		*32.8*	*5-141*			
Matrix Spike (BHK0500-MS1)	**Source: 24K0289-01**			Prepared & Analyzed: 11/11/2024						
1,2,4-Trichlorobenzene	18.2	10.0	ug/L	49.0	BLOD	37.1	44-142			*M*
1,2-Dichlorobenzene	21.3	10.0	ug/L	49.0	BLOD	43.4	22-115			
1,3-Dichlorobenzene	20.7	10.0	ug/L	49.0	BLOD	42.3	22-112			
1,4-Dichlorobenzene	19.9	10.0	ug/L	49.0	BLOD	40.5	13-112			
2,4,6-Trichlorophenol	20.6	10.0	ug/L	49.0	BLOD	42.0	37-144			
2,4-Dichlorophenol	21.0	10.0	ug/L	49.0	BLOD	42.8	39-135			
2,4-Dimethylphenol	22.9	5.00	ug/L	49.0	BLOD	46.6	32-120			
2,4-Dinitrophenol	21.0	50.0	ug/L	49.0	BLOD	42.9	39-139			
2,4-Dinitrotoluene	28.3	10.0	ug/L	49.0	BLOD	57.8	10-191			
2,6-Dinitrotoluene	26.2	10.0	ug/L	49.0	BLOD	53.5	50-158			
2-Chloronaphthalene	22.5	10.0	ug/L	49.0	BLOD	45.8	60-120			*M*
2-Chlorophenol	24.4	10.0	ug/L	49.0	BLOD	49.7	23-134			
2-Nitrophenol	25.8	10.0	ug/L	49.0	BLOD	52.6	29-182			
3,3'-Dichlorobenzidine	27.9	10.0	ug/L	49.0	BLOD	57.0	10-262			
4,6-Dinitro-2-methylphenol	27.6	50.0	ug/L	49.0	BLOD	56.4	10-181			
4-Bromophenyl phenyl ether	27.3	10.0	ug/L	49.0	BLOD	55.6	53-127			

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
Matrix Spike (BHK0500-MS1)	**Source: 24K0289-01**			Prepared & Analyzed: 11/11/2024						
4-Chlorophenyl phenyl ether	22.4	10.0	ug/L	49.0	BLOD	45.6	25-158			
4-Nitrophenol	11.9	50.0	ug/L	49.0	BLOD	24.3	10-132			
Acenaphthene	25.1	10.0	ug/L	49.0	BLOD	51.1	47-145			
Acenaphthylene	26.5	10.0	ug/L	49.0	BLOD	54.0	33-145			
Acetophenone	20.6	20.0	ug/L	49.0	BLOD	42.1	0-200			
Anthracene	27.7	10.0	ug/L	49.0	BLOD	56.6	27-133			
Benzo (a) anthracene	28.1	10.0	ug/L	49.0	BLOD	57.4	33-143			
Benzo (a) pyrene	30.8	10.0	ug/L	49.0	BLOD	62.8	17-163			
Benzo (b) fluoranthene	29.9	10.0	ug/L	49.0	BLOD	61.0	24-159			
Benzo (g,h,i) perylene	31.4	10.0	ug/L	49.0	BLOD	64.1	10-219			
Benzo (k) fluoranthene	28.2	10.0	ug/L	49.0	BLOD	57.5	11-162			
bis (2-Chloroethoxy) methane	24.9	10.0	ug/L	49.0	BLOD	50.8	33-184			
bis (2-Chloroethyl) ether	26.4	10.0	ug/L	49.0	BLOD	53.9	12-158			
2,2'-Oxybis (1-chloropropane)	25.0	10.0	ug/L	49.0	BLOD	51.0	36-166			
bis (2-Ethylhexyl) phthalate	33.0	10.0	ug/L	49.0	BLOD	67.3	10-158			
Butyl benzyl phthalate	36.3	10.0	ug/L	49.0	BLOD	74.1	10-152			
Chrysene	31.4	10.0	ug/L	49.0	BLOD	64.1	17-169			
Dibenz (a,h) anthracene	31.8	10.0	ug/L	49.0	BLOD	64.9	10-227			
Diethyl phthalate	28.5	10.0	ug/L	49.0	BLOD	58.2	10-120			
Dimethyl phthalate	25.8	10.0	ug/L	49.0	BLOD	52.6	10-120			
Di-n-butyl phthalate	37.0	10.0	ug/L	49.0	BLOD	75.5	10-120			
Di-n-octyl phthalate	36.0	10.0	ug/L	49.0	BLOD	73.4	10-146			
Fluoranthene	29.7	10.0	ug/L	49.0	BLOD	60.6	26-137			
Fluorene	24.7	10.0	ug/L	49.0	BLOD	50.4	59-121			*M*
Hexachlorobenzene	28.2	1.00	ug/L	49.0	BLOD	57.5	10-152			

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
Matrix Spike (BHK0500-MS1)	**Source: 24K0289-01**			Prepared & Analyzed: 11/11/2024						
Hexachlorobutadiene	17.7	10.0	ug/L	49.0	BLOD	36.1	24-120			
Hexachlorocyclopentadiene	9.23	10.0	ug/L	49.0	BLOD	18.8	10-90			
Hexachloroethane	20.7	10.0	ug/L	49.0	BLOD	42.2	40-120			
Indeno (1,2,3-cd) pyrene	29.0	10.0	ug/L	49.0	BLOD	59.2	10-171			
Isophorone	20.1	10.0	ug/L	49.0	BLOD	41.1	21-196			
Naphthalene	21.4	5.00	ug/L	49.0	BLOD	43.6	21-133			
Nitrobenzene	22.9	10.0	ug/L	49.0	BLOD	46.7	35-180			
n-Nitrosodimethylamine	9.87	10.0	ug/L	49.0	BLOD	20.1	10-85			
n-Nitrosodi-n-propylamine	20.6	10.0	ug/L	49.0	BLOD	42.1	10-230			
n-Nitrosodiphenylamine	21.1	10.0	ug/L	49.0	BLOD	43.1	12-111			
p-Chloro-m-cresol	24.2	10.0	ug/L	49.0	BLOD	49.3	10-127			
Pentachloronitrobenzene (quintozene)	ND	10.0	ug/L		BLOD		0-200			
Pentachlorophenol	23.8	20.0	ug/L	49.0	BLOD	48.5	14-176			
Phenanthrene	29.1	10.0	ug/L	49.0	BLOD	59.3	54-120			
Phenol	10.9	10.0	ug/L	49.5	BLOD	22.1	10-120			
Pyrene	27.5	10.0	ug/L	49.0	BLOD	56.2	52-120			
Pyridine	13.0	10.0	ug/L	49.0	BLOD	26.6	10-110			
Surr: 2,4,6-Tribromophenol (Surr)	*50.2*		ug/L	*196*		*25.6*	*5-136*			
Surr: 2-Fluorobiphenyl (Surr)	*20.6*		ug/L	*98.0*		*21.0*	*9-117*			
Surr: 2-Fluorophenol (Surr)	*17.1*		ug/L	*196*		*8.75*	*5-60*			
Surr: Nitrobenzene-d5 (Surr)	*22.2*		ug/L	*98.0*		*22.6*	*5-151*			
Surr: Phenol-d5 (Surr)	*20.9*		ug/L	*196*		*10.7*	*5-60*			
Surr: p-Terphenyl-d14 (Surr)	*22.5*		ug/L	*98.0*		*22.9*	*5-141*			
Matrix Spike Dup (BHK0500-MSD1)	**Source: 24K0289-01**			Prepared & Analyzed: 11/11/2024						

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Semivolatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
Matrix Spike Dup (BHK0500-MSD1)	**Source: 24K0289-01**			Prepared & Analyzed: 11/11/2024						
1,2,4-Trichlorobenzene	21.5	10.0	ug/L	49.0	BLOD	43.8	44-142	16.6	20	*M*
1,2-Dichlorobenzene	25.3	10.0	ug/L	49.0	BLOD	51.6	22-115	17.1	20	
1,3-Dichlorobenzene	24.7	10.0	ug/L	49.0	BLOD	50.3	22-112	17.5	20	
1,4-Dichlorobenzene	23.8	10.0	ug/L	49.0	BLOD	48.6	13-112	18.1	20	
2,4,6-Trichlorophenol	23.2	10.0	ug/L	49.0	BLOD	47.4	37-144	12.0	20	
2,4-Dichlorophenol	24.5	10.0	ug/L	49.0	BLOD	49.9	39-135	15.3	20	
2,4-Dimethylphenol	26.2	5.00	ug/L	49.0	BLOD	53.5	32-120	13.7	20	
2,4-Dinitrophenol	27.5	50.0	ug/L	49.0	BLOD	56.0	39-139	26.5	20	*P*
2,4-Dinitrotoluene	31.3	10.0	ug/L	49.0	BLOD	63.8	10-191	9.94	20	
2,6-Dinitrotoluene	29.6	10.0	ug/L	49.0	BLOD	60.4	50-158	12.1	20	
2-Chloronaphthalene	25.9	10.0	ug/L	49.0	BLOD	52.8	60-120	14.2	20	*M*
2-Chlorophenol	27.7	10.0	ug/L	49.0	BLOD	56.5	23-134	12.8	20	
2-Nitrophenol	30.1	10.0	ug/L	49.0	BLOD	61.4	29-182	15.4	20	
3,3'-Dichlorobenzidine	29.5	10.0	ug/L	49.0	BLOD	60.2	10-262	5.39	20	
4,6-Dinitro-2-methylphenol	33.3	50.0	ug/L	49.0	BLOD	67.9	10-181	18.5	20	
4-Bromophenyl phenyl ether	29.9	10.0	ug/L	49.0	BLOD	61.1	53-127	9.29	20	
4-Chlorophenyl phenyl ether	25.2	10.0	ug/L	49.0	BLOD	51.4	25-158	12.0	20	
4-Nitrophenol	13.2	50.0	ug/L	49.0	BLOD	26.9	10-132	10.0	20	
Acenaphthene	28.7	10.0	ug/L	49.0	BLOD	58.6	47-145	13.6	20	
Acenaphthylene	30.3	10.0	ug/L	49.0	BLOD	61.7	33-145	13.4	20	
Acetophenone	23.2	20.0	ug/L	49.0	BLOD	47.2	0-200	11.5	20	
Anthracene	29.9	10.0	ug/L	49.0	BLOD	61.0	27-133	7.49	20	
Benzo (a) anthracene	29.6	10.0	ug/L	49.0	BLOD	60.3	33-143	4.96	20	
Benzo (a) pyrene	31.4	10.0	ug/L	49.0	BLOD	64.1	17-163	2.08	20	
Benzo (b) fluoranthene	30.6	10.0	ug/L	49.0	BLOD	62.3	24-159	2.14	20	

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Semivolatile Organic Compounds by GCMS - Quality Control

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
Matrix Spike Dup (BHK0500-MSD1)	**Source: 24K0289-01**			Prepared & Analyzed: 11/11/2024						
Benzo (g,h,i) perylene	33.2	10.0	ug/L	49.0	BLOD	67.7	10-219	5.46	20	
Benzo (k) fluoranthene	28.5	10.0	ug/L	49.0	BLOD	58.0	11-162	0.935	20	
bis (2-Chloroethoxy) methane	28.5	10.0	ug/L	49.0	BLOD	58.1	33-184	13.3	20	
bis (2-Chloroethyl) ether	29.8	10.0	ug/L	49.0	BLOD	60.9	12-158	12.2	20	
2,2'-Oxybis (1-chloropropane)	28.8	10.0	ug/L	49.0	BLOD	58.8	36-166	14.3	20	
bis (2-Ethylhexyl) phthalate	34.3	10.0	ug/L	49.0	BLOD	69.9	10-158	3.76	20	
Butyl benzyl phthalate	37.6	10.0	ug/L	49.0	BLOD	76.7	10-152	3.50	20	
Chrysene	32.4	10.0	ug/L	49.0	BLOD	66.1	17-169	3.07	20	
Dibenz (a,h) anthracene	34.0	10.0	ug/L	49.0	BLOD	69.4	10-227	6.79	20	
Diethyl phthalate	31.4	10.0	ug/L	49.0	BLOD	64.1	10-120	9.68	20	
Dimethyl phthalate	28.9	10.0	ug/L	49.0	BLOD	58.9	10-120	11.2	20	
Di-n-butyl phthalate	40.1	10.0	ug/L	49.0	BLOD	81.7	10-120	7.91	20	
Di-n-octyl phthalate	35.8	10.0	ug/L	49.0	BLOD	73.0	10-146	0.656	20	
Fluoranthene	31.3	10.0	ug/L	49.0	BLOD	63.9	26-137	5.24	20	
Fluorene	27.8	10.0	ug/L	49.0	BLOD	56.6	59-121	11.7	20	*M*
Hexachlorobenzene	30.7	1.00	ug/L	49.0	BLOD	62.7	10-152	8.61	20	
Hexachlorobutadiene	21.0	10.0	ug/L	49.0	BLOD	42.8	24-120	16.9	20	
Hexachlorocyclopentadiene	11.5	10.0	ug/L	49.0	BLOD	23.5	10-90	22.3	20	*P*
Hexachloroethane	25.1	10.0	ug/L	49.0	BLOD	51.2	40-120	19.3	20	
Indeno (1,2,3-cd) pyrene	31.0	10.0	ug/L	49.0	BLOD	63.2	10-171	6.47	20	
Isophorone	22.9	10.0	ug/L	49.0	BLOD	46.7	21-196	12.8	20	
Naphthalene	24.9	5.00	ug/L	49.0	BLOD	50.7	21-133	15.0	20	
Nitrobenzene	26.0	10.0	ug/L	49.0	BLOD	53.1	35-180	12.8	20	
n-Nitrosodimethylamine	19.6	10.0	ug/L	49.0	BLOD	40.1	10-85	66.2	20	*P*
n-Nitrosodi-n-propylamine	23.2	10.0	ug/L	49.0	BLOD	47.3	10-230	11.7	20	

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Semivolatile Organic Compounds by GCMS - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0500 - SW3510C/EPA600-MS										
Matrix Spike Dup (BHK0500-MSD1)	**Source: 24K0289-01**			Prepared & Analyzed: 11/11/2024						
n-Nitrosodiphenylamine	23.6	10.0	ug/L	49.0	BLOD	48.1	12-111	10.8	20	
p-Chloro-m-cresol	27.7	10.0	ug/L	49.0	BLOD	56.5	10-127	13.6	20	
Pentachloronitrobenzene (quintozene)	ND	10.0	ug/L		BLOD		0-200		20	
Pentachlorophenol	28.0	20.0	ug/L	49.0	BLOD	57.1	14-176	16.3	20	
Phenanthrene	31.4	10.0	ug/L	49.0	BLOD	64.1	54-120	7.65	20	
Phenol	12.3	10.0	ug/L	49.5	BLOD	24.9	10-120	12.1	20	
Pyrene	29.0	10.0	ug/L	49.0	BLOD	59.3	52-120	5.37	20	
Pyridine	16.3	10.0	ug/L	49.0	BLOD	33.3	10-110	22.5	20	*P*
Surr: 2,4,6-Tribromophenol (Surr)	*57.1*		ug/L	*196*		*29.1*	*5-136*			
Surr: 2-Fluorobiphenyl (Surr)	*24.0*		ug/L	*98.0*		*24.5*	*9-117*			
Surr: 2-Fluorophenol (Surr)	*20.5*		ug/L	*196*		*10.5*	*5-60*			
Surr: Nitrobenzene-d5 (Surr)	*25.6*		ug/L	*98.0*		*26.1*	*5-151*			
Surr: Phenol-d5 (Surr)	*23.7*		ug/L	*196*		*12.1*	*5-60*			
Surr: p-Terphenyl-d14 (Surr)	*26.6*		ug/L	*98.0*		*27.1*	*5-141*			

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Wet Chemistry Analysis - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0391 - No Prep Wet Chem										
Blank (BHK0391-BLK1)				Prepared & Analyzed: 11/08/2024						
BOD	ND	2.0	mg/L							
LCS (BHK0391-BS1)				Prepared & Analyzed: 11/08/2024						
BOD	209	2	mg/L	198		106	84.6-115.4			
Duplicate (BHK0391-DUP1)	**Source: 24K0472-05**			Prepared & Analyzed: 11/08/2024						
BOD	4.9	2.0	mg/L		5.0			1.21	20	
Batch BHK0443 - No Prep Wet Chem										
Blank (BHK0443-BLK1)				Prepared & Analyzed: 11/08/2024						
Nitrite as N	ND	0.05	mg/L							
LCS (BHK0443-BS1)				Prepared & Analyzed: 11/08/2024						
Nitrite as N	0.11	0.05	mg/L	0.100		107	80-120			
Matrix Spike (BHK0443-MS1)	**Source: 24K0530-01**			Prepared & Analyzed: 11/08/2024						
Nitrite as N	1.62	0.50	mg/L	1.00	0.65	97.0	80-120			
Matrix Spike Dup (BHK0443-MSD1)	**Source: 24K0530-01**			Prepared & Analyzed: 11/08/2024						
Nitrite as N	1.64	0.50	mg/L	1.00	0.65	99.0	80-120	1.23	20	
Batch BHK0834 - No Prep Wet Chem										
Blank (BHK0834-BLK1)				Prepared & Analyzed: 11/15/2024						
Total Recoverable Phenolics	ND	0.050	mg/L							

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Wet Chemistry Analysis - Quality Control

Enthalpy Analytical

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0834 - No Prep Wet Chem										
LCS (BHK0834-BS1)				Prepared & Analyzed: 11/15/2024						
Total Recoverable Phenolics	0.42	0.050	mg/L	0.510		82.0	80-120			
Matrix Spike (BHK0834-MS1)		**Source: 24K1040-01**		Prepared & Analyzed: 11/15/2024						
Total Recoverable Phenolics	0.41	0.050	mg/L	0.500	BLOD	82.4	70-130			
Matrix Spike Dup (BHK0834-MSD1)		**Source: 24K1040-01**		Prepared & Analyzed: 11/15/2024						
Total Recoverable Phenolics	0.42	0.050	mg/L	0.500	BLOD	83.6	70-130	1.45	20	
Batch BHK0907 - No Prep Wet Chem										
Blank (BHK0907-BLK1)				Prepared & Analyzed: 11/19/2024						
TKN as N	ND	0.50	mg/L							
LCS (BHK0907-BS1)				Prepared & Analyzed: 11/19/2024						
TKN as N	5.38	0.5	mg/L	5.00		108	90-110			
Matrix Spike (BHK0907-MS1)		**Source: 24K1111-01**		Prepared & Analyzed: 11/19/2024						
TKN as N	6.52	0.50	mg/L	5.00	1.26	105	90-110			
Matrix Spike (BHK0907-MS2)		**Source: 24K1111-02**		Prepared & Analyzed: 11/19/2024						
TKN as N	5.94	0.50	mg/L	5.00	0.49	109	90-110			
Matrix Spike Dup (BHK0907-MSD1)		**Source: 24K1111-01**		Prepared & Analyzed: 11/19/2024						
TKN as N	6.28	0.50	mg/L	5.00	1.26	100	90-110	3.80	20	
Matrix Spike Dup (BHK0907-MSD2)		**Source: 24K1111-02**		Prepared & Analyzed: 11/19/2024						
TKN as N	5.57	0.50	mg/L	5.00	0.49	102	90-110	6.35	20	

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0948 - No Prep Wet Chem										
Blank (BHK0948-BLK1)				Prepared & Analyzed: 11/19/2024						
Ammonia as N	ND	0.10	mg/L							
LCS (BHK0948-BS1)				Prepared & Analyzed: 11/19/2024						
Ammonia as N	1.05	0.1	mg/L	1.00		105	90-110			
Matrix Spike (BHK0948-MS1)	**Source: 24K0915-05**			Prepared & Analyzed: 11/19/2024						
Ammonia as N	0.96	0.1	mg/L	1.00	BLOD	91.4	89.3-131			
Matrix Spike (BHK0948-MS2)	**Source: 24K0934-05**			Prepared & Analyzed: 11/19/2024						
Ammonia as N	0.93	0.1	mg/L	1.00	BLOD	88.4	89.3-131			*M*
Matrix Spike Dup (BHK0948-MSD1)	**Source: 24K0915-05**			Prepared & Analyzed: 11/19/2024						
Ammonia as N	0.97	0.1	mg/L	1.00	BLOD	93.0	89.3-131	1.66	20	
Matrix Spike Dup (BHK0948-MSD2)	**Source: 24K0934-05**			Prepared & Analyzed: 11/19/2024						
Ammonia as N	0.94	0.1	mg/L	1.00	BLOD	89.2	89.3-131	0.855	20	*M*
Batch BHK0950 - No Prep Wet Chem										
Blank (BHK0950-BLK1)				Prepared & Analyzed: 11/19/2024						
Nitrate+Nitrite as N	ND	0.10	mg/L							
LCS (BHK0950-BS1)				Prepared & Analyzed: 11/19/2024						
Nitrate+Nitrite as N	1.04	0.1	mg/L	1.00		104	90-110			
Matrix Spike (BHK0950-MS1)	**Source: 24K0884-02**			Prepared & Analyzed: 11/19/2024						
Nitrate+Nitrite as N	1.36	0.10	mg/L	1.00	0.64	71.5	90-120			*M*

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Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHK0950 - No Prep Wet Chem										
Matrix Spike Dup (BHK0950-MSD1)	**Source: 24K0884-02**			Prepared & Analyzed: 11/19/2024						
Nitrate+Nitrite as N	1.39	0.10	mg/L	1.00	0.64	74.9	90-120	2.47	20	*M*
Batch BHK1016 - No Prep Wet Chem										
Blank (BHK1016-BLK1)				Prepared & Analyzed: 11/20/2024						
Cyanide	ND	0.01	mg/L							
LCS (BHK1016-BS1)				Prepared & Analyzed: 11/20/2024						
Cyanide	0.27	0.01	mg/L	0.250		109	80-120			
Matrix Spike (BHK1016-MS1)	**Source: 24K0876-05**			Prepared & Analyzed: 11/20/2024						
Cyanide	0.26	0.01	mg/L	0.250	0.03	95.7	80-120			
Matrix Spike Dup (BHK1016-MSD1)	**Source: 24K0876-05**			Prepared & Analyzed: 11/20/2024						
Cyanide	0.28	0.01	mg/L	0.250	0.03	101	80-120	5.05	20	
Batch BHK1147 - No Prep Wet Chem										
Blank (BHK1147-BLK1)				Prepared & Analyzed: 11/22/2024						
COD	ND	10.0	mg/L							
LCS (BHK1147-BS1)				Prepared & Analyzed: 11/22/2024						
COD	48.1	10.0	mg/L	50.0		96.1	88-119			
Matrix Spike (BHK1147-MS1)	**Source: 24K1250-01**			Prepared & Analyzed: 11/22/2024						
COD	47.4	10.0	mg/L	50.0	BLOD	94.8	72.4-130			

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Batch BHK1147 - No Prep Wet Chem										
Matrix Spike Dup (BHK1147-MSD1)	**Source: 24K1250-01**			Prepared & Analyzed: 11/22/2024						
COD	48.7	10.0	mg/L	50.0	BLOD	97.4	72.4-130	2.66	20	
Batch BHK1172 - No Prep Wet Chem										
Blank (BHK1172-BLK1)				Prepared & Analyzed: 11/22/2024						
Ammonia as N	ND	0.10	mg/L							
LCS (BHK1172-BS1)				Prepared & Analyzed: 11/22/2024						
Ammonia as N	1.09	0.1	mg/L	1.00		109	90-110			
Matrix Spike (BHK1172-MS1)	**Source: 24K1031-01**			Prepared & Analyzed: 11/22/2024						
Ammonia as N	1.00	0.10	mg/L	1.00	BLOD	100	89.3-131			
Matrix Spike (BHK1172-MS2)	**Source: 24K1124-01**			Prepared & Analyzed: 11/22/2024						
Ammonia as N	0.98	0.10	mg/L	1.00	BLOD	98.5	89.3-131			
Matrix Spike Dup (BHK1172-MSD1)	**Source: 24K1031-01**			Prepared & Analyzed: 11/22/2024						
Ammonia as N	1.02	0.10	mg/L	1.00	BLOD	102	89.3-131	1.49	20	
Matrix Spike Dup (BHK1172-MSD2)	**Source: 24K1124-01**			Prepared & Analyzed: 11/22/2024						
Ammonia as N	1.00	0.10	mg/L	1.00	BLOD	100	89.3-131	1.81	20	

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Certificate of Analysis

Client Name: SCS Engineers-Winchester
Client Site I.D.: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods			**Preparation Method:**	**EPA200.2R2.8/SW3005A-ICPMS**	
24K0529-01	50.0 mL / 50.0 mL	SW6020B	BHK0575	SHK0559	AK40222
24K0529-02	50.0 mL / 50.0 mL	SW6020B	BHK0575	SHK0559	AK40222

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis			**Preparation Method:**	**No Prep Wet Chem**	
24K0529-01	300 mL / 300 mL	SM5210B-2016	BHK0391	SHK0440	
24K0529-02	300 mL / 300 mL	SM5210B-2016	BHK0391	SHK0440	
24K0529-01	25.0 mL / 25.0 mL	SM4500-NO2B-2011	BHK0443	SHK0358	AJ40362
24K0529-02	25.0 mL / 25.0 mL	SM4500-NO2B-2011	BHK0443	SHK0358	AJ40362
24K0529-01	0.500 mL / 10.0 mL	SW9065	BHK0834	SHK0692	AK40246
24K0529-02	0.100 mL / 10.0 mL	SW9065	BHK0834	SHK0692	AK40246
24K0529-01	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
24K0529-01RE1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
24K0529-02	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
24K0529-01	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK0948	SHK0792	AK40262
24K0529-01	5.00 mL / 5.00 mL	SM4500-NO3F-2016	BHK0950	SHK0838	AK40270
24K0529-02	5.00 mL / 5.00 mL	SM4500-NO3F-2016	BHK0950	SHK0838	AK40270
24K0529-01	6.00 mL / 6.00 mL	SW9012B	BHK1016	SHK0855	AK40274
24K0529-02	6.00 mL / 6.00 mL	SW9012B	BHK1016	SHK0855	AK40274
24K0529-01	2.00 mL / 2.00 mL	SM5220D-2011	BHK1147	SHK0947	AK40242
24K0529-02	2.00 mL / 2.00 mL	SM5220D-2011	BHK1147	SHK0947	AK40242
24K0529-02	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK1172	SHK0970	AK40292

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Work Order: 24K0529

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organic Compounds by GCMS			**Preparation Method:**	**SW3510C/EPA600-MS**	
24K0529-01	500 mL / 0.500 mL	SW8270E	BHK0500	SHK0464	AK40150
24K0529-02	500 mL / 0.500 mL	SW8270E	BHK0500	SHK0464	AK40150

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Compounds by GCMS			**Preparation Method:**	**SW5030B-MS**	
24K0529-01	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
24K0529-02	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
24K0529-03	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
24K0529-02RE1	5.00 mL / 5.00 mL	SW8260D	BHK0669	SHK0574	AK40200
24K0529-01RE1	5.00 mL / 5.00 mL	SW8260D	BHK0730	SHK0626	AK40200

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QC Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods			**Preparation Method:**	**EPA200.2R2.8/SW3005A-ICPMS**	
BHK0575-BLK1	50.0 mL / 50.0 mL	SW6020B	BHK0575	SHK0559	AK40222
BHK0575-BS1	50.0 mL / 50.0 mL	SW6020B	BHK0575	SHK0559	AK40222
BHK0575-MS1	50.0 mL / 50.0 mL	SW6020B	BHK0575	SHK0559	AK40222
BHK0575-MS2	50.0 mL / 50.0 mL	SW6020B	BHK0575	SHK0559	AK40222
BHK0575-MSD1	50.0 mL / 50.0 mL	SW6020B	BHK0575	SHK0559	AK40222
BHK0575-MSD2	50.0 mL / 50.0 mL	SW6020B	BHK0575	SHK0559	AK40222

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis			**Preparation Method:**	**No Prep Wet Chem**	
BHK0391-BLK1	300 mL / 300 mL	SM5210B-2016	BHK0391	SHK0440	
BHK0391-BS1	300 mL / 300 mL	SM5210B-2016	BHK0391	SHK0440	
BHK0391-DUP1	300 mL / 300 mL	SM5210B-2016	BHK0391	SHK0440	
BHK0443-BLK1	25.0 mL / 25.0 mL	SM4500-NO2B-2011	BHK0443	SHK0358	AJ40362
BHK0443-BS1	25.0 mL / 25.0 mL	SM4500-NO2B-2011	BHK0443	SHK0358	AJ40362
BHK0443-MRL1	25.0 mL / 25.0 mL	SM4500-NO2B-2011	BHK0443	SHK0358	AJ40362
BHK0443-MS1	2.50 mL / 25.0 mL	SM4500-NO2B-2011	BHK0443	SHK0358	AJ40362
BHK0443-MSD1	2.50 mL / 25.0 mL	SM4500-NO2B-2011	BHK0443	SHK0358	AJ40362
BHK0834-BLK1	5.00 mL / 10.0 mL	SW9065	BHK0834	SHK0692	AK40246
BHK0834-BS1	5.00 mL / 10.0 mL	SW9065	BHK0834	SHK0692	AK40246
BHK0834-MRL1	5.00 mL / 10.0 mL	SW9065	BHK0834	SHK0692	AK40246
BHK0834-MS1	5.00 mL / 10.0 mL	SW9065	BHK0834	SHK0692	AK40246
BHK0834-MSD1	5.00 mL / 10.0 mL	SW9065	BHK0834	SHK0692	AK40246
BHK0907-BLK1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
BHK0907-BS1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
BHK0907-MRL1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260

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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis			**Preparation Method:**	**No Prep Wet Chem**	
BHK0907-MS1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
BHK0907-MS2	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
BHK0907-MSD1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
BHK0907-MSD2	25.0 mL / 25.0 mL	EPA351.2 R2.0	BHK0907	SHK0768	AK40260
BHK0948-BLK1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK0948	SHK0792	AK40262
BHK0948-BS1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK0948	SHK0792	AK40262
BHK0948-MS1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK0948	SHK0792	AK40262
BHK0948-MS2	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK0948	SHK0792	AK40262
BHK0948-MSD1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK0948	SHK0792	AK40262
BHK0948-MSD2	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK0948	SHK0792	AK40262
BHK0950-BLK1	5.00 mL / 5.00 mL	SM4500-NO3F-2016	BHK0950	SHK0838	AK40270
BHK0950-BS1	5.00 mL / 5.00 mL	SM4500-NO3F-2016	BHK0950	SHK0838	AK40270
BHK0950-MS1	25.0 mL / 25.0 mL	SM4500-NO3F-2016	BHK0950	SHK0838	AK40270
BHK0950-MSD1	25.0 mL / 25.0 mL	SM4500-NO3F-2016	BHK0950	SHK0838	AK40270
BHK1016-BLK1	6.00 mL / 6.00 mL	SW9012B	BHK1016	SHK0855	AK40274
BHK1016-BS1	6.00 mL / 6.00 mL	SW9012B	BHK1016	SHK0855	AK40274
BHK1016-MRL1	6.00 mL / 6.00 mL	SW9012B	BHK1016	SHK0855	AK40274
BHK1016-MRL2	6.00 mL / 6.00 mL	SW9012B	BHK1016	SHK0855	AK40274
BHK1016-MS1	6.00 mL / 6.00 mL	SW9012B	BHK1016	SHK0855	AK40274
BHK1016-MSD1	6.00 mL / 6.00 mL	SW9012B	BHK1016	SHK0855	AK40274
BHK1147-BLK1	2.00 mL / 2.00 mL	SM5220D-2011	BHK1147	SHK0947	AK40242
BHK1147-BS1	2.00 mL / 2.00 mL	SM5220D-2011	BHK1147	SHK0947	AK40242
BHK1147-MRL1	2.00 mL / 2.00 mL	SM5220D-2011	BHK1147	SHK0947	AK40242
BHK1147-MS1	2.00 mL / 2.00 mL	SM5220D-2011	BHK1147	SHK0947	AK40242
BHK1147-MSD1	2.00 mL / 2.00 mL	SM5220D-2011	BHK1147	SHK0947	AK40242
BHK1172-BLK1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK1172	SHK0970	AK40292
BHK1172-BS1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK1172	SHK0970	AK40292
BHK1172-MRL1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK1172	SHK0970	AK40292

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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis			**Preparation Method:**	**No Prep Wet Chem**	
BHK1172-MS1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK1172	SHK0970	AK40292
BHK1172-MS2	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK1172	SHK0970	AK40292
BHK1172-MSD1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK1172	SHK0970	AK40292
BHK1172-MSD2	6.00 mL / 6.00 mL	EPA350.1 R2.0	BHK1172	SHK0970	AK40292

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organic Compounds by GCMS			**Preparation Method:**	**SW3510C/EPA600-MS**	
BHK0500-BLK1	1000 mL / 1.00 mL	SW8270E	BHK0500	SHK0464	AK40150
BHK0500-BLK2		SW8270E	BHK0500	SHK0482	AJ40294
BHK0500-BLK3	1000 mL / 1.00 mL	SW8270E	BHK0500	SHK0759	AH40174
BHK0500-BS1	1000 mL / 1.00 mL	SW8270E	BHK0500	SHK0464	AK40150
BHK0500-MS1	1020 mL / 1.00 mL	SW8270E	BHK0500	SHK0464	AK40150
BHK0500-MSD1	1020 mL / 1.00 mL	SW8270E	BHK0500	SHK0464	AK40150

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Compounds by GCMS			**Preparation Method:**	**SW5030B-MS**	
BHK0546-BLK1	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
BHK0546-BLK2	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
BHK0546-BS1	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
BHK0546-BS2	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
BHK0546-MS1	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
BHK0546-MSD1	5.00 mL / 5.00 mL	SW8260D	BHK0546	SHK0454	AJ40296
BHK0669-BLK1	5.00 mL / 5.00 mL	SW8260D	BHK0669	SHK0574	AK40200
BHK0669-BS1	5.00 mL / 5.00 mL	SW8260D	BHK0669	SHK0574	AK40200
BHK0669-DUP1	5.00 mL / 5.00 mL	SW8260D	BHK0669	SHK0574	AK40200
BHK0669-MS1	5.00 mL / 5.00 mL	SW8260D	BHK0669	SHK0574	AK40200
BHK0730-BLK1	5.00 mL / 5.00 mL	SW8260D	BHK0730	SHK0626	AK40200

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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Compounds by GCMS			**Preparation Method:**	**SW5030B-MS**	
BHK0730-BS1	5.00 mL / 5.00 mL	SW8260D	BHK0730	SHK0626	AK40200
BHK0730-DUP1	5.00 mL / 5.00 mL	SW8260D	BHK0730	SHK0626	AK40200
BHK0730-MS1	5.00 mL / 5.00 mL	SW8260D	BHK0730	SHK0626	AK40200

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Certified Analyses included in this Report

Analyte	Certifications
EPA350.1 R2.0 in Non-Potable Water	
Ammonia as N	VELAP,NCDEQ,PADEP,WVDEP,SCDHEC
EPA351.2 R2.0 in Non-Potable Water	
TKN as N	VELAP,NCDEQ,WVDEP,SCDHEC
SM4500-NO2B-2011 in Non-Potable Water	
Nitrite as N	VELAP,WVDEP,NCDEQ,SCDHEC
SM4500-NO3F-2016 in Non-Potable Water	
Nitrate+Nitrite as N	VELAP,WVDEP,NCDEQ,SCDHEC
SM5210B-2016 in Non-Potable Water	
BOD	VELAP,NCDEQ,WVDEP
SM5220D-2011 in Non-Potable Water	
COD	VELAP,NCDEQ,PADEP,WVDEP,SCDHEC
SW6020B in Non-Potable Water	
Mercury	VELAP
Arsenic	VELAP,WVDEP,NCDEQ,SCDHEC
Barium	VELAP,WVDEP,NCDEQ,SCDHEC
Cadmium	VELAP,WVDEP,NCDEQ,SCDHEC
Chromium	VELAP,WVDEP,NCDEQ,SCDHEC
Copper	VELAP,WVDEP,NCDEQ,SCDHEC
Lead	VELAP,WVDEP,SCDHEC
Nickel	VELAP,WVDEP,SCDHEC
Selenium	VELAP,WVDEP,SCDHEC
Silver	VELAP,WVDEP,SCDHEC
Zinc	VELAP,WVDEP,SCDHEC
SW8260D in Non-Potable Water	

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Certified Analyses included in this Report

Analyte	Certifications
2-Butanone (MEK)	NCDEQ,PADEP,WVDEP,VELAP
Acetone	NCDEQ,PADEP,WVDEP,VELAP
Benzene	NCDEQ,PADEP,WVDEP,VELAP
Ethylbenzene	NCDEQ,PADEP,WVDEP,VELAP
Toluene	NCDEQ,PADEP,WVDEP,VELAP
Xylenes, Total	NCDEQ,PADEP,WVDEP,VELAP
Tetrahydrofuran	PADEP,VELAP
SW8270E in Non-Potable Water	
Anthracene	NCDEQ,VELAP,PADEP,WVDEP
SW9012B in Non-Potable Water	
Cyanide	VELAP,WVDEP,NCDEQ
SW9065 in Non-Potable Water	
Total Recoverable Phenolics	VELAP,WVDEP

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Code	Description	Laboratory ID	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2024
NCDEQ	North Carolina DEQ	495	12/31/2024
NCDOH	North Carolina Department of Health	51714	07/31/2025
NYDOH	New York DOH Drinking Water	12069	04/01/2025
PADEP	NELAP-Pennsylvania Certificate #009	68-03503	10/31/2025
SCDHEC	South Carolina Dept of Health and Environmental Control Certificate 93016001	93016	06/14/2025
TXCEQ	Texas Comm on Environmental Quality #T104704576-23-1	T104704576	05/31/2025
VELAP	NELAP-Virginia Certificate #12969	460021	06/14/2025
WVDEP	West Virginia DEP	350	11/30/2024

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Qualifiers and Definitions

Cl	Residual Chlorine or other oxidizing agent was detected in the container used to analyze this sample.
J	The reported result is an estimated value.
L	LCS recovery is outside of established acceptance limits
M	Matrix spike recovery is outside established acceptance limits
P	Duplicate analysis does not meet the acceptance criteria for precision
pH	The container used to analyze this sample had a pH measurement of greater than 2 s.u.
S	Surrogate recovery was outside acceptance criteria

RPD	Relative Percent Difference
Qual	Qualifers
-RE	Denotes sample was re-analyzed
LOD	Limit of Detection, same as Method Detection Limit (MDL) as defined by 40 CFR 136 Appendix B
BLOD	Below Limit of Detection, same as Below Method Detection Limit (MDL) as defined by 40 CFR 136 Appendix B
LOQ	Limit of Quantitation
DF	Dilution Factor
DL	Detection Limit, same as MDL as defined by 40 CFR 136 Appendix B
TIC	Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library. A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.
PCBs, Total	Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.

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CHAIN OF CUSTODY

COMPANY NAME: SCS Engineers	INVOICE TO: SCS Reston	Project Name: 24-11 Bristol LFG - EW
CONTACT: Jennifer Robb	INVOICE CONTACT: Jennifer Robb	Site Name: Bristol Landfill
ADDRESS: 296 Victory Road, Winchester, VA 22602	INVOICE ADDRESS:	PROJECT NUMBER: 02182208.15
PHONE #: (703) 471-6150	INVOICE PHONE #:	P.O. #:
FAX #: (703) 471-6676 EMAIL: Jrobb@scsengineers.com		Pretreatment Program:
Is sample for compliance reporting? YES Va	Is sample from a chlorinated supply? YES (NO)	PWS I.D. #:
SAMPLER NAME (PRINT): Logan Nelson / Laurel Tucker	SAMPLER SIGNATURE:	Turn Around Time: 10 Day(s)

Matrix Codes: WW=Waste Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other_____

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE) VOCs (Acetone, Benzene, EB, MEK, THF, Toluene, Xylene) Custom list	VFAs	Phenolics	Metals 6020 (Ag, As, Ba, Cd, Cr, Cu, Ni, Pb, Se, Zn, Hg)	TKN, Nitrate (Cd), Nitrite,	COD, Ammonia	SVOC (Anthracene only)	Cyanide	BOD	COMMENTS
1) EW-36A	X					11/7/24	1050		WW	13	X	X	X	X	X	X	X	X	X	Nitrite and BOD has 48hr hold ..
2) EW-50	X					↓	1025		WW	13	X	X	X	X	X	X	X	X	X	
3)																				
4)																				
5)																				
6)																				
7)																				
8)																				Sealed 393 Ice 0.7-0.1 CF-0.0
9)																				
10) Trip Blank	X					10/29/24	1316		DI	2	X									

PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS or PUMP RATE (L/min)

RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME
	11/7/24 13:30		11/8/24 0800
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME

QC Data Package
- Level I ☐
- Level II ☒
- Level III ☐
- Level IV ☐

LAB USE ONLY COOLER TEMP 0.1 °C

SCS-W 24K0529
24-11 Bristol LFG - EW
Recd: 11/08/2024 Due: 11/22/2024

24K0529

v130325002

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Sample Preservation Log

Order ID 24K0529 Date Performed: 11/8/24 Analyst Performing Check: AER

Sample ID	Container ID	Metals pH as Received < 2	Metals pH as Received Other	Metals Final pH	Cyanide pH as Received > 12	Cyanide pH as Received Other	Cyanide Final pH	Sulfide pH as Received > 9	Sulfide pH as Received Other	Sulfide Final pH	Ammonia pH as Received < 2	Ammonia pH as Received Other	Ammonia Final pH	TKN pH as Received < 2	TKN pH as Received Other	TKN Final pH	Phos, Tot pH as Received < 2	Phos, Tot pH as Received Other	Phos, Tot Final pH	NO3+NO2 pH as Received < 2	NO3+NO2 pH as Received Other	NO3+NO2 Final pH	DRO pH as Received < 2	DRO pH as Received Other	DRO Final pH	Pesticide (8081/608/508) PCB DW only Received Res. Cl +	Pesticide Received Res. Cl -	Pesticide final + or -	SVOC (525/8270/625) Received Res. Cl +	SVOC Received Res. Cl -	SVOC final + or -	CrVI * ** Received pH	CrVI Final pH	Pest/PCB (508) / SVOC(525) pH as Received < 2	Pest/PCB (508) / SVOC(525) pH as Received Other	Pest/PCB (508) / SVOC(525) Final pH	COD pH as Received <2	COD pH as Received Other	COD Final pH	Phenolics pH as Received	Phenolics pH as Received Other	Phenolics Final pH
01	A		7	<2																																						
01	D											6	<2		6	<2																								6	<2		
01	E																																									6	<2
01	F																																									
01	M					9	>12																																			
02	A		7	<2																																						
02	D											7	<2		7	<2																								7	<2		
02	E																																									7	<2
02	F																																									
02	M					9	>12																																			

NaOH ID: 4A03375 HNO3 ID: 4J04344

H2SO4 ID: 4J02496 Na2S2O3 ID:

HCL ID: Na2SO3 ID:

CrVI preserved date/time: Analyst Initials:

* pH must be adjusted between 9.3 - 9.7

Ammonia Buffer Sol'n ID:

5N NaOH ID:

Metals were received with pH = 7 HNO3 was added at 1345 on 8 November 2024 by AER in the Log-In room to bring pH= <2.

W.Va only certifies DISS CrVI and not T CrVI as an approved analyte under 40CFR136 for waste water.

Enthalpy Analytical
1941 Reymet Road
Richmond, Virginia 23237
(804)-358-8295 - Telephone
(804)-358-8297 - Fax

Certificate of Analysis

Client Name: SCS Engineers-Winchester
Client Site I.D.: Bristol Landfill
Submitted To: Jennifer Robb

Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

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Laboratory Order ID: 24K0529

Sample Conditions Checklist

Samples Received at:	**0.10°C**
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	Yes
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits or received on ice, and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	Yes
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis. In addition, field parameters are always received outside holding time and will be marked accordingly.	No

Work Order Comments

Jennifer Robb notified via email for all the containers received were preserved in the lab to the appropriate pH for analysis. HEG 11/11/24 0935

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Date Issued: 11/22/2024 5:20:18PM
Work Order: 24K0529

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Ammonia as N (mg/L)	November-2022	---	---	---	---	---	---	---	---	---	1560	---	1400	---	---	1380	---	---	---	---	---	---	---	---	---	50	50
	December-2022	---	1700	---	2280	---	---	---	2110	---	1410	1310	---	---	---	---	1150	1780	---	---	---	---	---	---	---	100	100
	January-2023	---	1520	---	---	---	---	---	---	936	---	---	---	---	---	1330	---	---	---	---	---	---	---	---	---	50	50
		---	---	---	---	---	---	---	---	---	2440	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	100
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1490	---	---	---	---	---	---	---	100	100
	March-2023	---	---	---	---	---	---	---	---	667	1480	---	---	---	---	---	---	---	---	---	---	---	---	---	---	73.1	100
	April-2023	---	---	---	---	---	---	---	---	1410	---	1220	---	---	---	---	---	---	---	---	---	---	---	---	---	73.1	100
	May-2023	---	1390	---	---	---	---	---	---	1860	2380	---	---	---	---	---	---	---	---	---	---	---	---	---	---	146	200
	June-2023	---	---	---	---	---	---	---	---	---	2740	---	2370	---	2170	---	---	---	---	---	---	---	---	---	---	146	200
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1180	---	---	---	---	---	---	73.1	100
		---	1570	---	---	---	---	---	2260	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2350	310	146	200
	August-2023	---	---	---	---	---	1600	---	1890	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2140	222	146	200
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1720	---	---	---	---	---	---	73.1	100
		---	---	---	1250	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	146	200
	October-2023	---	---	---	---	---	---	1980	---	---	---	---	---	---	---	---	---	---	1730	---	---	2890	---	---	---	146	200
	November-2023	---	1260	---	2490	1830	---	2070	---	---	---	---	---	---	---	---	---	---	1800	---	---	2590	---	---	---	146	200
		---	---	---	---	---	---	---	---	---	---	---	---	1170	---	---	---	---	---	---	---	---	---	---	2080	183	250
		---	---	---	---	---	---	---	---	---	2440	---	---	---	---	---	---	---	---	---	---	---	---	---	---	366	500
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1540	---	---	---	---	---	---	73.1	100
		---	---	---	2900	---	---	---	---	---	---	---	---	---	---	---	---	2200	---	---	---	---	---	---	---	146	200
	January-2024	---	---	2160	---	---	---	---	---	---	2400	---	---	---	---	---	---	---	---	---	---	---	---	---	1610	146	200
	February-2024	---	---	1900	---	2600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1780	---	2380	---	---	146	200
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2280	---	968	146	200
	April-2024	---	---	---	2290	---	---	---	---	---	---	---	---	928	---	---	---	2140	1800	---	---	---	---	---	---	146	200
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	898	73.1	100
		---	---	---	---	---	---	---	---	---	2550	---	---	---	---	---	---	---	1620	---	1950	2660	---	---	---	146	200
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1990	---	2170	---	---	---	1850	146	200
	July-2024	---	---	---	---	---	---	---	---	---	1860	---	---	---	---	---	---	---	---	---	---	---	---	---	---	73.1	100
		---	---	---	---	---	---	---	---	---	---	1950	---	---	---	---	---	---	---	---	---	---	---	---	---	146	200
	August-2024	---	---	---	---	---	1110	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	73.1	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2130	---	---	2550	---	146	200
	September-2024	---	---	---	---	---	1440	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	73.1	100
		---	---	---	2210	---	---	---	---	---	---	---	---	---	---	---	---	2290	---	---	---	---	---	---	---	146	200
	October-2024	343	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1490	---	---	---	---	---	73.1	100
		---	1370	---	2180	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	146	200
	November-2024	934	1370	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	146	200
Biological Oxygen Demand (mg/L)	November-2022	---	---	---	---	---	---	---	---	---	15700	---	5860	---	---	5140	---	---	---	---	---	---	---	---	---	0.2	2
	December-2022	---	6440	---	12500	---	---	---	11400	---	9240	3330	---	---	---	---	8360	6770	---	---	---	---	---	---	---	0.2	2
	January-2023	---	9920	---	---	---	---	---	---	999	28100	---	---	---	---	7060	---	---	---	---	---	---	---	---	---	0.2	2
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7230	---	---	---	---	---	---	---	0.2	2
	March-2023	---	---	---	---	---	---	---	---	1570	9190	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	2
	April-2023	---	---	---	---	---	---	---	---	8430	---	2860	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	2
	May-2023	---	7350	---	---	---	---	---	---	11900	35300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	2
	June-2023	---	---	---	---	---	---	---	---	---	20000	---	27400	---	23100	---	---	---	---	---	---	---	---	---	---	0.2	2
	July-2023	---	6820	---	---	---	---	---	32900	---	---	---	---	---	---	---	---	---	330	---	---	---	---	31800	937	0.2	2
	August-2023	---	---	---	---	---	>33045	---	>33225	---	---	---	---	---	---	---	---	---	---	---	---	---	---	>32805	506	0.2	2
	September-2023	---	---	---	40185.5	---	---	---	---	---	---	---	---	---	---	---	---	---	659	---	---	---	---	---	---	0.2	2
	October-2023	---	---	---	---	---	---	34600	---	---	---	---	---	---	---	---	---	---	690	---	---	37000	---	---	---	0.2	2
	November-2023	---	1910	---	30400	27500	---	32015	---	---	29600	---	---	3640	---	---	---	---	480	---	---	32135	---	---	21500	0.2	2
	December-2023	---	---	---	>44105	---	---	---	---	---	---	---	---	---	---	---	---	13700	681	---	---	---	---	---	---	0.2	2
	January-2024	---	---	26000	---	---	---	---	---	---	17100	---	---	---	---	---	---	---	---	---	---	---	---	---	14000	0.2	2
	February-2024	---	---	23200	---	26200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	21400	---	34300	---	---	0.2	2
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	40600	---	7680	0.2	2
	April-2024	---	---	---	41142	---	---	---	---	---	---	---	---	1210	---	---	---	19600	386	---	---	---	---	---	---	0.2	2
	May-2024	---	---	---	---	---	---	---	---	---	25600	---	---	---	---	---	---	---	448	---	22200	33400	---	---	7750	0.2	2
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	421	---	24400	---	---	---	16200	0.2	2
	July-2024	---	---	---	---	---	---	---	---	---	25800	4750	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	2
	August-2024	---	---	---	---	---	31000	---	---	---	---	---	---	---	---	---	---	---	---	---	20800	---	---	33400	---	0.2	2
	September-2024	---	---	---	ND	---	36100	---	---	---	---	---	---	---	---	---	---	27400	---	---	---	---	---	---	---	0.2	2
	October-2024	180	6680	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---	36100	---	---	---	---	---	0.2	2
	November-2024	4760	7360	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	2

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Chemical Oxygen Demand (mg/L)	November-2022	---	---	---	---	---	---	---	---	---	---	---	**9790**	---	---	**10800**	---	---	---	---	---	---	---	---	---	1000	1000
		---	---	---	---	---	---	---	---	---	**23500**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2000	2000
	December-2022	---	**7440**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1000	1000
		---	---	---	---	---	---	---	---	---	**13200**	**8000**	---	---	---	---	**20300**	**14100**	---	---	---	---	---	---	---	2000	2000
		---	---	---	---	---	---	---	**22400**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5000	5000
		---	---	---	**86800**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10000	10000
	January-2023	---	---	---	---	---	---	---	---	**3630**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	500
		---	**14900**	---	---	---	---	---	---	---	---	---	---	---	---	**8430**	---	---	---	---	---	---	---	---	---	2000	2000
		---	---	---	---	---	---	---	---	---	**47600**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5000	5000
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**9210**	---	---	---	---	---	---	---	1000	1000
	March-2023	---	---	---	---	---	---	---	---	**1690**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	500
		---	---	---	---	---	---	---	---	---	**10600**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2000	2000
	April-2023	---	---	---	---	---	---	---	---	---	---	**7370**	---	---	---	---	---	---	---	---	---	---	---	---	---	1000	1000
		---	---	---	---	---	---	---	---	**16800**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2000	2000
	May-2023	---	**7590**	---	---	---	---	---	---	**18700**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2000	2000
		---	---	---	---	---	---	---	---	---	**44700**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4000	4000
	June-2023	---	---	---	---	---	---	---	---	---	---	---	**44800**	---	---	---	---	---	---	---	---	---	---	---	---	5000	5000
		---	---	---	---	---	---	---	---	---	**41300**	---	---	---	**55000**	---	---	---	---	---	---	---	---	---	---	10000	10000
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2180**	500	500
		---	**6480**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2460**	---	---	---	---	---	---	1000	1000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**41000**	---	5000	5000
		---	---	---	---	---	---	---	**50100**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10000	10000
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1750**	500	500
		---	---	---	---	---	**59000**	---	**58600**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**60600**	---	5000	5000
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**6260**	---	---	---	---	---	---	1000	1000
		---	---	---	**87400**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10000	10000
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**5320**	---	---	---	---	---	---	500	500
		---	---	---	---	---	---	**51000**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5000	5000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**63600**	---	---	---	10000	10000
	November-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4710**	---	---	---	---	---	---	1000	1000
		---	**6200**	---	---	---	---	---	---	---	---	---	---	**5620**	---	---	---	---	---	---	---	---	---	---	---	2000	2000
		---	---	---	---	**48100**	---	**57900**	---	---	**43700**	---	---	---	---	---	---	---	---	---	---	---	---	---	**37600**	5000	5000
		---	---	---	**77100**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**63900**	---	---	---	10000	10000
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4870**	---	---	---	---	---	---	1000	1000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**19900**	---	---	---	---	---	---	---	5000	5000
		---	---	---	**94200**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10000	10000
	January-2024	---	---	**48600**	---	---	---	---	---	---	**59800**	---	---	---	---	---	---	---	---	---	---	---	---	---	**38200**	5000	5000
	February-2024	---	---	**42700**	---	**51200**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**48900**	---	---	---	---	5000	5000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**68400**	---	---	10000	10000
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**14400**	2000	2000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**75500**	---	---	10000	10000
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**3110**	---	---	---	---	**4200**	---	---	---	---	---	---	1000	1000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**32400**	---	---	---	---	---	---	---	5000	5000
		---	---	---	**79700**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10000	10000
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4930**	---	---	---	---	---	---	1000	1000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**17700**	5000	5000
		---	---	---	---	---	---	---	---	---	**48500**	---	---	---	---	---	---	---	---	---	**43100**	**70700**	---	---	---	10000	10000
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4520**	---	---	---	---	---	---	1000	1000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**51400**	---	---	---	**31300**	5000	5000
	July-2024	---	---	---	---	---	---	---	---	---	**42400**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5000	5000
		---	---	---	---	---	---	---	---	---	---	**98500**	---	---	---	---	---	---	---	---	---	---	---	---	---	10000	10000
	August-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**48100**	---	---	**59500**	---	5000	5000
		---	---	---	---	---	**56600**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10000	10000
	September-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**26800**	---	---	---	---	---	---	---	4000	4000
		---	---	---	---	---	**55900**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5000	5000
		---	---	---	**78300**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10000	10000
	October-2024	**951**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	500
		---	**10700**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2000	2000
		---	---	---	**83300**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**62000**	---	---	---	---	---	10000	10000
	November-2024	**9540**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1000	1000
		---	**8840**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2000	2000
Nitrate+Nitrite as N (mg/L)	November-2022	---	---	---	---	---	---	---	---	---	**2.91**	---	**0.16**	---	---	**0.33**	---	---	---	---	---	---	---	---	---	0.1	0.1

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Nitrate as N (mg/L)	December-2022	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	0.2	0.2
		---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	0.6
		---	ND	---	ND	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.1	5.1
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	1.5	5.5
	January-2023	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.35	1.35
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	1.1	1.1
		---	**3.9**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2.1	2.1
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2.2	2.2
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.35	1.35
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.04	5.1
	April-2023	---	---	---	---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.6	2.6
	May-2023	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.1	5.1
		---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.2	5.2
	June-2023	---	---	---	---	---	---	---	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	1.1	5.1
		---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	1.2	5.2
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.355**	---	---	---	---	---	---	0.15	0.35
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.55	0.75
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	3
		---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	1.5	5.5
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.15	0.35
		---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	1.5	3.5
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.3	1.1
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.7	1.5
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.35	1.35
		---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	3
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	1.5	3.5
	November-2023	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.15	0.35
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		---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.75	1.75
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.1	5.1
	December-2023	---	---	---	ND	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	1.5	5.5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	1.1	5.1
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	1.5	5.5
	January-2024	---	---	**2.01**	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	1.5	5.5
	February-2024	---	---	**9.1**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	1.5	5.5
		---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.5	7.5
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	0.75	1.75
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	ND	---	---	---	---	---	---	0.35	0.35
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.5	5.5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	2.5	10.5
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.15	0.35
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.35	1.35
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	0.6	2.6
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1.9**	---	---	---	1	3
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.1	5.1
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.692**	---	---	---	---	---	---	0.6	2.6
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	ND	1.5	3.5
	July-2024	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.5	2.5
		---	---	---	---	---	---	---	---	---	**6.66**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5	25
	August-2024	---	---	---	---	---	**1.57**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	---	0.25	1.25
	September-2024	---	---	---	ND	---	**2.42**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	1.25
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	5	25
	October-2024	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.1	0.5
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	1	5
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10	50
	November-2024	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	1.25
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.5	2.5

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Nitrite as N (mg/L)	December-2022	---	---	---	---	---	---	---	---	---	---	**0.12 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.1	0.5
		---	ND	---	ND	---	---	---	ND	---	ND	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	1	5
	January-2023	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	1.25
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	1	1
		---	ND	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2	2
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.48 J**	---	---	---	---	---	---	---	0.25	1.25
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	5
	April-2023	---	---	---	---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.5	2.5
	May-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	5
	June-2023	---	---	---	---	---	---	---	---	---	**2 J**	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	1	5
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	ND	0.05	0.25
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.5	2.5
		---	---	---	---	---	---	---	**1.2 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	1	5
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.05	0.25
		---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	0.5	2.5
	September-2023	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.2	1
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.25	1.25
		---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	0.5	2.5
	November-2023	---	**0.06 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.05	0.25
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	December-2023	---	---	---	ND	ND	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	1	5
	January-2024	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	1	5
	February-2024	---	---	**1.7 J**	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	1	5
	March-2024	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	1	5
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**0.25 J**	0.25	1.25
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	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.05	0.25
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		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	5
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	---	ND	0.5	2.5
	July-2024	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.5	2.5
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5	25
	August-2024	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	---	0.25	1.25
	September-2024	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	1.25
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	October-2024	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.1	0.5
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	1	5
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10	50
	November-2024	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	1.25
		---	**1.35 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.5	2.5

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Total Kjeldahl Nitrogen (mg/L)	November-2022	---	---	---	---	---	---	---	---	---	---	---	1290	---	---	1470	---	---	---	---	---	---	---	---	---	20	50
		---	---	---	---	---	---	---	---	---	2110	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	125
	December-2022	---	1510	---	3570	---	---	---	1790	---	1830	1490	---	---	---	---	1340	1940	---	---	---	---	---	---	---	200	500
	January-2023	---	1840	---	---	---	---	---	---	881	---	---	---	---	---	1410	---	---	---	---	---	---	---	---	---	20	50
		---	---	---	---	---	---	---	---	---	2970	---	---	---	---	---	---	---	---	---	---	---	---	---	---	40	100
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1870	---	---	---	---	---	---	---	16.8	50
	March-2023	---	---	---	---	---	---	---	---	879	1920	---	---	---	---	---	---	---	---	---	---	---	---	---	---	33.6	100
	April-2023	---	---	---	---	---	---	---	---	1820	---	1510	---	---	---	---	---	---	---	---	---	---	---	---	---	16.8	50
	May-2023	---	1590	---	---	---	---	---	---	1950	2910	---	---	---	---	---	---	---	---	---	---	---	---	---	---	40	100
	June-2023	---	---	---	---	---	---	---	---	---	3080	---	---	---	2750	---	---	---	---	---	---	---	---	---	---	100	250
		---	---	---	---	---	---	---	---	---	---	---	2650	---	---	---	---	---	---	---	---	---	---	---	---	200	500
	July-2023	---	1670	---	---	---	---	---	2960	---	---	---	---	---	---	---	---	---	1670	---	---	---	---	2720	285	40	100
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	279	10	25
		---	---	---	---	---	2240	---	2820	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2850	---	100	250
	September-2023	---	---	---	3340	---	---	---	---	---	---	---	---	---	---	---	---	---	2680	---	---	---	---	---	---	100	250
	October-2023	---	---	---	---	---	---	1050	---	---	---	---	---	---	---	---	---	---	---	---	---	1320	---	---	---	40	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4630	---	---	---	---	---	---	100	250
	November-2023	---	---	---	---	---	---	2240	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2120	80	200
		---	1440	---	3290	2630	---	---	---	---	2530	---	---	1120	---	---	---	---	2270	---	---	3170	---	---	---	100	250
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1880	---	---	---	---	---	---	---	80	200
		---	---	---	3130	---	---	---	---	---	---	---	---	---	---	---	---	---	1890	---	---	---	---	---	---	100	250
	January-2024	---	---	2450	---	---	---	---	---	---	3020	---	---	---	---	---	---	---	---	---	---	---	---	1810	---	100	250
	February-2024	---	---	2540	---	2890	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2470	---	2970	---	---	100	250
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1030	50	125
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2980	---	---	100	250
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	1030	---	---	---	---	1730	---	---	---	---	---	---	40	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2320	---	---	---	---	---	---	---	50	125
		---	---	---	3260	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	250
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1140	40	100
		---	---	---	---	---	---	---	---	---	3120	---	---	---	---	---	---	---	1780	---	2470	3280	---	---	---	100	250
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1870	---	---	---	---	---	4750	100	250
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2680	---	---	---	---	200	500
	July-2024	---	---	---	---	---	---	---	---	---	2840	2680	---	---	---	---	---	---	---	---	---	---	---	---	---	100	250
	August-2024	---	---	---	---	---	1980	---	---	---	---	---	---	---	---	---	---	---	---	---	1460	---	---	3150	---	100	250
		---	---	---	---	---	2090	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	125
	September-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2650	---	---	---	---	---	---	---	80	200
		---	---	---	3320	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	250
	October-2024	351	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1870	---	---	---	---	---	40	100
		---	1360	---	2850	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	250
	November-2024	1070	1610	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	40	100

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Total Recoverable Phenolics (mg/L)	November-2022	---	---	---	---	---	---	---	---	---	---	---	**5.68**	---	---	**3**	---	---	---	---	---	---	---	---	---	0.3	0.5
		---	---	---	---	---	---	---	---	---	**28.8**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.75	1.25
	December-2022	---	---	---	---	---	---	---	---	---	---	**8.94**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.3	0.5
		---	**24.9**	---	**54.6**	---	---	---	**28.3**	---	**32**	---	---	---	---	---	**20.2**	**36**	---	---	---	---	---	---	---	1.5	2.5
	January-2023	---	**27.2**	---	---	---	---	---	---	**1.3**	---	---	---	---	---	**20.2**	---	---	---	---	---	---	---	---	---	0.75	1.25
		---	---	---	---	---	---	---	---	---	**56.5**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.5	2.5
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**22.4**	---	---	---	---	---	---	---	1.5	2.5
	March-2023	---	---	---	---	---	---	---	---	**0.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	0.05
		---	---	---	---	---	---	---	---	---	**13.9**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.3	0.5
	April-2023	---	---	---	---	---	---	---	---	**18.7**	---	**5.1**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.3	0.5
	May-2023	---	**18.6**	---	---	---	---	---	---	**20**	**50**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.5	2.5
	June-2023	---	---	---	---	---	---	---	---	---	**39.1**	---	**45.6**	---	**80.6**	---	---	---	---	---	---	---	---	---	---	1.5	2.5
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.7**	---	---	---	---	---	---	0.15	0.25
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2.92**	0.3	0.5
		---	**11.6**	---	---	---	---	---	**47.9**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**37.3**	---	1.5	2.5
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1.46**	0.15	0.25
		---	---	---	---	---	**28.6**	---	**31.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**40.4**	---	1.5	2.5
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4.58**	---	---	---	---	---	---	0.3	0.5
		---	---	---	**38.2**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3	5
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4.13**	---	---	---	---	---	---	0.15	0.25
		---	---	---	---	---	---	**37**	---	---	---	---	---	---	---	---	---	---	---	---	---	**38.7**	---	---	---	0.6	1
	November-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**3.65**	---	---	---	---	---	---	0.15	0.25
		---	**7.88**	---	---	**36.4**	---	---	---	---	---	---	---	**4.76**	---	---	---	---	---	---	---	---	---	---	---	0.6	1
		---	---	---	**38.8**	---	---	**47.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	**47.1**	---	---	---	0.75	1.25
		---	---	---	---	---	---	---	---	---	**46.9**	---	---	---	---	---	---	---	---	---	---	---	---	---	**29.1**	1.5	2.5
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**3.72**	---	---	---	---	---	---	0.06	0.1
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**23**	---	---	---	---	---	---	---	0.75	1.25
		---	---	---	**34.2**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.5	2.5
	January-2024	---	---	**38**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**22.7**	1.5	2.5
		---	---	---	---	---	---	---	---	---	**39.2**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3	5
	February-2024	---	---	**37.3**	---	**42.9**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**50.2**	---	**43.1**	---	---	1.5	2.5
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**46.6**	---	**12.8**	3	5
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**1.68**	---	---	---	---	**1.16**	---	---	---	---	---	---	0.3	0.5
		---	---	---	**38.4**	---	---	---	---	---	---	---	---	---	---	---	---	**28.6**	---	---	---	---	---	---	---	1.5	2.5
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1.06**	---	---	---	---	---	---	0.3	0.5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**13.6**	1.5	2.5
		---	---	---	---	---	---	---	---	---	**36.6**	---	---	---	---	---	---	---	---	---	**33.6**	**51**	---	---	---	3	5
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.82**	---	---	---	---	---	---	0.3	0.5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**23.2**	1.5	2.5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**44.8**	---	---	---	---	3	5
	July-2024	---	---	---	---	---	---	---	---	---	---	**28.8**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.75	1.25
		---	---	---	---	---	---	---	---	---	**37.8**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3	5
	August-2024	---	---	---	---	---	**29.2**	---	---	---	---	---	---	---	---	---	---	---	---	---	**44.2**	---	---	**39.2**	---	3	5
	September-2024	---	---	---	**39.6**	---	**31.6**	---	---	---	---	---	---	---	---	---	---	**31.6**	---	---	---	---	---	---	---	3	5
	October-2024	**0.376**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	0.05
		---	**8.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.3	0.5
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		---	---	---	**37.6**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3	5
	November-2024	**5.22**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.3	0.5
		---	**10.1**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.5	2.5

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
SEMI-VOLATILE ORGANIC COMPOUND (ug/L)																											
Anthracene	November-2022	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	---	---	---	---	---	---	---	---	---	46.7	93.5
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	93.5	187
	December-2022	---	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	ND	---	---	---	---	---	---	---	9.35	9.35
		---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	11.7	11.7
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	23.4	23.4
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	485	971
	January-2023	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	243	485
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	253	505
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	490	980
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	1000
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	187	374
	March-2023	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	51	102
		---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	117	234
	April-2023	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.4	74.8
		---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	38.8	77.7
	May-2023	---	ND	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	93.5	187
		---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	467	935
	June-2023	---	---	---	---	---	---	---	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	485	971
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	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	46.7	93.5
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	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	19.6	39.2
		---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	1000	2000
	September-2023	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	40	80
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	40	80
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	November-2023	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	20	40
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	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	ND	50	100
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	January-2024	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	200
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	February-2024	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	200	400
		---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	250	500
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	400000	800000
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	20	40
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	80	160
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	5	10
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	20	40
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	100	200
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	400	800
	May-2024	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	ND	---	ND	---	---	---	ND	10	10
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	80	160
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	20	40
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	ND	100	200
	July-2024	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	40	80
		---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	80	160
	August-2024	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	400	800
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	500	1000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	1000	2000
	September-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	100	200
		---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	200	400
	October-2024	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	100
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	200	400
	November-2024	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	100

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
TOTAL METALS (mg/L)																											
Arsenic	November-2022	---	---	---	---	---	---	---	---	---	**0.863**	---	**0.464**	---	---	**1.3**	---	---	---	---	---	---	---	---	---	0.02	0.04
	December-2022	---	**1.02**	---	**0.406**	---	---	---	**0.174**	---	**1.69**	**0.49**	---	---	---	---	**0.159**	**0.574**	---	---	---	---	---	---	---	0.02	0.04
	January-2023	---	**0.285**	---	---	---	---	---	---	**0.596**	**0.225**	---	---	---	---	**0.846**	---	---	---	---	---	---	---	---	---	0.01	0.02
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.29**	---	---	---	---	---	---	---	0.005	0.01
	March-2023	---	---	---	---	---	---	---	---	**1.07**	**1**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.02
	April-2023	---	---	---	---	---	---	---	---	---	---	**0.11**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0005	0.001
		---	---	---	---	---	---	---	---	**0.36**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.01
	May-2023	---	**0.26**	---	---	---	---	---	---	**0.3**	**0.27**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0025	0.005
	June-2023	---	---	---	---	---	---	---	---	---	**0.26**	---	**0.5**	---	**0.14**	---	---	---	---	---	---	---	---	---	---	0.0025	0.005
	July-2023	---	**0.23**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.24**	---	---	---	---	**0.19**	**0.06**	0.0005	0.001
		---	---	---	---	---	---	---	**0.7**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0025	0.005
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.15**	0.0025	0.005
		---	---	---	---	---	**0.32**	---	**0.43**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.29**	---	0.005	0.01
	September-2023	---	---	---	**0.42**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.25**	---	---	---	---	---	---	0.005	0.01
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.24**	---	---	**0.31**	---	---	---	0.0005	0.001
		---	---	---	---	---	---	**0.36**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.001	0.002
	November-2023	---	**0.23**	---	**0.33**	**0.53**	---	**0.43**	---	---	**0.35**	---	---	**0.78**	---	---	---	---	**0.34**	---	---	**0.27**	---	---	**0.2**	0.003	0.003
	December-2023	---	---	---	**0.4**	---	---	---	---	---	---	---	---	---	---	---	---	**0.26**	---	---	---	---	---	---	---	0.0025	0.005
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.24**	---	---	---	---	---	---	0.001	0.002
	January-2024	---	---	**0.47**	---	---	---	---	---	---	**0.23**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.18**	0.0025	0.005
	February-2024	---	---	**0.68**	---	**0.42**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.33**	---	**0.23**	---	---	0.002	0.002
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.12**	0.001	0.002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.23**	---	---	0.0025	0.005
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**0.49**	---	---	---	---	**0.18**	---	---	---	---	---	---	0.0005	0.001
		---	---	---	**0.31**	---	---	---	---	---	---	---	---	---	---	---	---	**0.33**	---	---	---	---	---	---	---	0.004	0.004
	May-2024	---	---	---	---	---	---	---	---	---	**0.33**	---	---	---	---	---	---	---	**0.2**	---	**0.73**	**0.22**	---	---	**0.22**	0.005	0.01
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.19**	---	**0.49**	---	---	---	**0.14**	0.005	0.01
	July-2024	---	---	---	---	---	---	---	---	---	**300**	**0.095**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0025	0.005
	August-2024	---	---	---	---	---	**0.18**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.49**	---	---	**0.13**	---	0.005	0.01
	September-2024	---	---	---	**0.27**	---	**0.15**	---	---	---	---	---	---	---	---	---	---	**0.19**	---	---	---	---	---	---	---	0.005	0.01
	October-2024	**0.1**	**0.26**	---	**0.24**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.18**	---	---	---	---	---	0.005	0.01
	November-2024	**0.18**	**0.15**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.01

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Barium	November-2022	---	---	---	---	---	---	---	---	---	0.871	---	0.485	---	---	0.36	---	---	---	---	---	---	---	---	---	0.01	0.02
	December-2022	---	0.566	---	0.803	---	---	---	0.978	---	0.438	0.214	---	---	---	---	0.856	0.793	---	---	---	---	---	---	---	0.01	0.02
	January-2023	---	0.643	---	---	---	---	---	---	0.683	1.92	---	---	---	---	0.554	---	---	---	---	---	---	---	---	---	0.005	0.01
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.04	---	---	---	---	---	---	---	0.01	0.05
	March-2023	---	---	---	---	---	---	---	---	0.406	0.683	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.01
	April-2023	---	---	---	---	---	---	---	---	1.21	---	0.326	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.05
	May-2023	---	0.636	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.025
		---	---	---	---	---	---	---	---	1.2	1.83	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.05
	June-2023	---	---	---	---	---	---	---	---	---	1.69	---	---	---	1.65	---	---	---	---	---	---	---	---	---	---	0.005	0.025
		---	---	---	---	---	---	---	---	---	---	---	3.01	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.05
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.217	0.001	0.005
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.558	---	---	---	---	---	---	0.002	0.01
		---	0.542	---	---	---	---	---	2.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.02	---	0.005	0.025
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.218	0.005	0.025
		---	---	---	---	---	1.61	---	1.58	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.48	---	0.01	0.05
	September-2023	---	---	---	0.72	---	---	---	---	---	---	---	---	---	---	---	---	---	0.649	---	---	---	---	---	---	0.01	0.05
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.664	---	---	---	---	---	---	0.002	0.01
		---	---	---	---	---	---	2.56	---	---	---	---	---	---	---	---	---	---	---	---	---	1.93	---	---	---	0.005	0.025
	November-2023	---	0.572	---	0.81	2.28	---	2.51	---	---	1.96	---	---	0.418	---	---	---	---	0.67	---	---	2.06	---	---	2.84	0.01	0.05
	December-2023	---	---	---	0.68	---	---	---	---	---	---	---	---	---	---	---	---	1.36	---	---	---	---	---	---	---	0.005	0.025
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.672	---	---	---	---	---	---	0.002	0.01
	January-2024	---	---	---	---	---	---	---	---	---	1.92	---	---	---	---	---	---	---	---	---	---	---	---	---	1.91	0.005	0.025
		---	---	3.27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.05
	February-2024	---	---	3.03	---	4.41	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2.65	---	0.925	---	---	0.005	0.025
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.03	0.002	0.01
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.54	---	---	0.005	0.025
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	0.4	---	---	---	---	0.634	---	---	---	---	---	---	0.001	0.005
		---	---	---	1.02	---	---	---	---	---	---	---	---	---	---	---	---	2.15	---	---	---	---	---	---	---	0.01	0.05
	May-2024	---	---	---	---	---	---	---	---	---	1.79	---	---	---	---	---	---	---	0.619	---	2.8	2.06	---	---	0.872	0.01	0.05
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.6	---	3.44	---	---	---	1.51	0.01	0.05
	July-2024	---	---	---	---	---	---	---	---	---	1.28	2.75	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.025
	August-2024	---	---	---	---	---	1.27	---	---	---	---	---	---	---	---	---	---	---	---	---	2.39	---	---	0.862	---	0.01	0.05
	September-2024	---	---	---	1.34	---	1.33	---	---	---	---	---	---	---	---	---	---	3.65	---	---	---	---	---	---	---	0.01	0.05
	October-2024	0.26	0.568	---	1.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.33	---	---	---	---	---	0.01	0.05
	November-2024	0.262	0.69	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.05

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Cadmium	November-2022	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	ND	---	---	---	---	---	---	---	---	---	0.004	0.008
	December-2022	---	ND	---	**0.0104**	---	---	---	ND	---	ND	ND	---	---	---	---	ND	ND	---	---	---	---	---	---	---	0.004	0.008
	January-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	0.002	0.004
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.000297 J**	---	---	---	---	---	---	---	0.0001	0.001
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0.004
	April-2023	---	---	---	---	---	---	---	---	**0.000158 J**	---	**0.000333 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0001	0.001
	May-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0005	0.005
	June-2023	---	---	---	---	---	---	---	---	---	ND	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	0.0005	0.005
	July-2023	---	**0.000219 J**	---	---	---	---	---	**0.000156 J**	---	---	---	---	---	---	---	---	---	**0.000186 J**	---	---	---	---	ND	ND	0.0001	0.001
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.0005	0.005
		---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	0.001	0.01
	September-2023	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.001	0.01
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.000171 J**	---	---	ND	---	---	---	0.0001	0.001
		---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0002	0.002
	November-2023	---	ND	---	ND	ND	---	ND	---	---	ND	---	---	ND	---	---	---	---	ND	---	---	ND	---	---	ND	0.001	0.003
	December-2023	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	**0.000604 J**	---	---	---	---	---	---	---	0.0005	0.0015
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.0002	0.002
	January-2024	---	---	ND	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.0005	0.005
	February-2024	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0175**	---	ND	---	---	0.0005	0.005
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.0002	0.002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	0.0005	0.005
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**0.000204 J**	---	---	---	---	**0.000195 J**	---	---	---	---	---	---	0.0001	0.001
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.001	0.004
	May-2024	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	ND	---	**0.0483**	ND	---	---	ND	0.001	0.01
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**0.0175**	---	---	---	ND	0.001	0.01
	July-2024	---	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0005	0.005
	August-2024	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00508 J**	---	---	**0.00247 J**	---	0.001	0.01
	September-2024	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.001	0.01
	October-2024	**0.00117 J**	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	0.001	0.01
	November-2024	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.001	0.01
Chromium	November-2022	---	---	---	---	---	---	---	---	---	**0.208**	---	**0.112**	---	---	**0.354**	---	---	---	---	---	---	---	---	---	0.016	0.02
	December-2022	---	**0.503**	---	**1.08**	---	---	---	**1.76**	---	**0.274**	**0.319**	---	---	---	---	**0.499**	**0.822**	---	---	---	---	---	---	---	0.016	0.02
	January-2023	---	**0.31**	---	---	---	---	---	---	**0.488**	**0.178**	---	---	---	---	**0.155**	---	---	---	---	---	---	---	---	---	0.008	0.01
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.277**	---	---	---	---	---	---	---	0.004	0.01
	March-2023	---	---	---	---	---	---	---	---	**0.213**	**0.188**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.008	0.01
	April-2023	---	---	---	---	---	---	---	---	---	---	**0.142**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0004	0.001
		---	---	---	---	---	---	---	---	**0.306**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.004	0.01
	May-2023	---	**0.422**	---	---	---	---	---	---	**0.281**	**0.237**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0.005
	June-2023	---	---	---	---	---	---	---	---	---	**0.251**	---	**0.191**	---	**0.272**	---	---	---	---	---	---	---	---	---	---	0.002	0.005
	July-2023	---	**0.308**	---	---	---	---	---	**0.535**	---	---	---	---	---	---	---	---	---	**0.231**	---	---	---	---	**0.215**	**0.0265**	0.0004	0.001
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0276**	0.002	0.005
		---	---	---	---	---	**0.606**	---	**0.449**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.259**	---	0.004	0.01
	September-2023	---	---	---	**1.17**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.234**	---	---	---	---	---	---	0.004	0.01
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.144**	---	---	**0.194**	---	---	---	0.0004	0.001
		---	---	---	---	---	---	**0.273**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0008	0.002
	November-2023	---	**0.391**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0.003
		---	---	---	---	**0.51**	---	---	---	---	---	---	---	---	---	---	---	---	**0.251**	---	---	**0.403**	---	---	---	0.003	0.003
		---	---	---	**1.04**	---	---	**0.402**	---	---	**0.246**	---	---	**0.343**	---	---	---	---	---	---	---	---	---	---	**0.222**	0.004	0.01
	December-2023	---	---	---	**1.34**	---	---	---	---	---	---	---	---	---	---	---	---	**0.259**	---	---	---	---	---	---	---	0.002	0.005
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.219**	---	---	---	---	---	---	0.0008	0.002
	January-2024	---	---	**0.17**	---	---	---	---	---	---	**0.193**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.128**	0.002	0.005
	February-2024	---	---	**0.23**	---	**0.272**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.203**	---	**0.336**	---	---	0.002	0.005
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0759**	0.0008	0.002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.414**	---	---	0.002	0.005
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**0.36**	---	---	---	---	**0.245**	---	---	---	---	---	---	0.0004	0.001
		---	---	---	**0.836**	---	---	---	---	---	---	---	---	---	---	---	---	**0.228**	---	---	---	---	---	---	---	0.004	0.01
	May-2024	---	---	---	---	---	---	---	---	---	**0.268**	---	---	---	---	---	---	---	**0.226**	---	**0.183**	**0.352**	---	---	**0.11**	0.004	0.01
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.226**	---	**0.188**	---	---	---	**0.16**	0.004	0.01
	July-2024	---	---	---	---	---	---	---	---	---	**0.252**	**0.246**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0.005
	August-2024	---	---	---	---	---	**0.549**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.185**	---	---	**0.233**	---	0.004	0.01
	September-2024	---	---	---	**0.948**	---	**0.541**	---	---	---	---	---	---	---	---	---	---	**0.228**	---	---	---	---	---	---	---	0.004	0.01
	October-2024	**0.0873**	**0.246**	---	**0.929**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.349**	---	---	---	---	---	0.004	0.01
	November-2024	**0.0797**	**0.237**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.004	0.01

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Copper	November-2022	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	ND	---	---	---	---	---	---	---	---	---	0.016	0.02
	December-2022	---	ND	---	ND	---	---	---	ND	---	ND	ND	---	---	---	---	ND	ND	---	---	---	---	---	---	---	0.016	0.02
	January-2023	---	ND	---	---	---	---	---	---	**0.0127**	**0.0256**	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	0.008	0.01
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00365**	---	---	---	---	---	---	---	0.0003	0.001
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.008	0.01
	April-2023	---	---	---	---	---	---	---	---	**0.00664**	---	**0.00767**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0003	0.001
	May-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0015	0.005
	June-2023	---	---	---	---	---	---	---	---	---	**0.00154 J**	---	**0.00362 J**	---	**0.00269 J**	---	---	---	---	---	---	---	---	---	---	0.0015	0.005
	July-2023	---	**0.00124**	---	---	---	---	---	**0.00163**	---	---	---	---	---	---	---	---	---	**0.00811**	---	---	---	---	ND	**0.0027**	0.0003	0.001
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.0015	0.005
		---	---	---	---	---	**0.00343 J**	---	**0.0176**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	0.003	0.01
	September-2023	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00407 J**	---	---	---	---	---	---	0.003	0.01
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00361**	---	---	**0.000609 J**	---	---	---	0.0003	0.001
		---	---	---	---	---	---	**0.00806**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0006	0.002
	November-2023	---	**0.00607**	---	**0.00352**	**0.0212**	---	**0.00756**	---	---	ND	---	---	**0.00341**	---	---	---	---	**0.00387**	---	---	ND	---	---	ND	0.003	0.003
	December-2023	---	---	---	**0.00184**	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.0015	0.0015
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0034**	---	---	---	---	---	---	0.0006	0.002
	January-2024	---	---	ND	---	---	---	---	---	---	**0.019**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.0015	0.005
	February-2024	---	---	ND	---	**0.00201**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	0.0015	0.002
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00115 J**	0.0006	0.002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00184 J**	---	---	0.0015	0.005
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**0.00443**	---	---	---	---	**0.004**	---	---	---	---	---	---	0.0003	0.001
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.003	0.004
	May-2024	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	**0.00486 J**	---	**0.00688 J**	ND	---	---	ND	0.003	0.01
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00409 J**	---	ND	---	---	---	ND	0.003	0.01
	July-2024	---	---	---	---	---	---	---	---	---	**0.398**	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0015	0.005
	August-2024	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	---	0.003	0.01
	September-2024	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.003	0.01
	October-2024	**0.00612 J**	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00306 J**	---	---	---	---	---	0.003	0.01
	November-2024	**0.00569 J**	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.003	0.01
Lead	November-2022	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	**0.017 J**	---	---	---	---	---	---	---	---	---	0.012	0.02
	December-2022	---	ND	---	**0.0381**	---	---	---	ND	---	ND	ND	---	---	---	---	ND	ND	---	---	---	---	---	---	---	0.012	0.02
	January-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	0.006	0.01
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.006**	---	---	---	---	---	---	---	0.001	0.001
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.006	0.01
	April-2023	---	---	---	---	---	---	---	---	**0.0022**	---	**0.0067**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.001	0.001
	May-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.005
	June-2023	---	---	---	---	---	---	---	---	---	ND	---	ND	---	**0.0069**	---	---	---	---	---	---	---	---	---	---	0.005	0.005
	July-2023	---	**0.0014**	---	---	---	---	---	**0.019**	---	---	---	---	---	---	---	---	---	**0.0092**	---	---	---	---	ND	**0.0017**	0.001	0.001
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.005	0.005
		---	---	---	---	---	**0.014**	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.013**	---	0.01	0.01
	September-2023	---	---	---	**0.12**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.01	0.01
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0036**	---	---	**0.0034**	---	---	---	0.001	0.001
		---	---	---	---	---	---	**0.0077**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0.002
	November-2023	---	ND	---	**0.13**	**0.0046**	---	**0.014**	---	---	ND	---	---	ND	---	---	---	---	**0.0032**	---	---	**0.0043**	---	---	ND	0.003	0.003
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0043**	---	---	---	---	---	---	0.002	0.002
		---	---	---	**0.16**	---	---	---	---	---	---	---	---	---	---	---	---	**0.002**	---	---	---	---	---	---	---	0.0015	0.0015
	January-2024	---	---	ND	---	---	---	---	---	---	**0.0081**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.005	0.005
	February-2024	---	---	**0.0065**	---	**0.01**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.051**	---	**0.012**	---	---	0.001	0.002
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.002	0.002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.02**	---	---	0.005	0.005
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**0.0013**	---	---	---	---	**0.0025**	---	---	---	---	---	---	0.001	0.001
		---	---	---	**0.13**	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.004	0.004
	May-2024	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	ND	---	**0.11**	ND	---	---	ND	0.01	0.01
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**0.024**	---	---	---	ND	0.01	0.01
	July-2024	---	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.005
	August-2024	---	---	---	---	---	**0.031**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.027**	---	---	ND	---	0.01	0.01
	September-2024	---	---	---	**0.098**	---	**0.057**	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.01	0.01
	October-2024	ND	ND	---	**0.12**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	0.01	0.01
	November-2024	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.01

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Mercury	November-2022	---	---	---	---	---	---	---	---	---	---	---	**0.00169**	---	---	**0.00053**	---	---	---	---	---	---	---	---	---	0.0004	0.0004
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0008	0.0008
	December-2022	---	**0.00051**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0004	0.0004
		---	---	---	---	---	---	---	**0.00118**	---	ND	**0.00588**	---	---	---	---	**0.0048**	ND	---	---	---	---	---	---	---	0.0008	0.0008
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.004	0.004
	January-2023	---	ND	---	---	---	---	---	---	ND	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	0.0004	0.0004
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.004	0.004
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.0004	0.0004
	March-2023	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0002	0.0002
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0004	0.0004
	April-2023	---	---	---	---	---	---	---	---	---	---	**0.00128**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0002	0.0002
		---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0004	0.0004
	May-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0002	0.0002
	June-2023	---	---	---	---	---	---	---	---	---	ND	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	0.004	0.004
	July-2023	---	**0.000306**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	ND	0.0002	0.0002
		---	---	---	---	---	---	---	**0.0107**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	0.001	0.001
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.001	0.001
		---	---	---	---	---	**0.00312**	---	**0.00397**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	0.002	0.002
	September-2023	---	---	---	**0.00503**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.002	0.002
	October-2023	---	---	---	---	---	---	**0.00165**	---	---	---	---	---	---	---	---	---	---	ND	---	---	**0.00055**	---	---	---	0.0004	0.0004
	November-2023	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	0.0000002	0.0000002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.0000004	0.0000004
		---	---	---	**0.00576**	**0.00606**	---	**0.00578**	---	---	ND	---	---	---	---	---	---	---	---	---	---	**0.00954**	---	---	ND	0.000004	0.000004
	December-2023	---	---	---	**0.00484**	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.001	0.001
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.0004	0.0004
	January-2024	---	---	ND	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.001	0.001
	February-2024	---	---	**0.00376**	---	**0.0115**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00238**	---	**0.00284**	---	---	0.001	0.001
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00124**	0.0004	0.0004
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	0.001	0.001
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**0.000201**	---	---	---	---	ND	---	---	---	---	---	---	0.0002	0.0002
		---	---	---	**0.00382**	---	---	---	---	---	---	---	---	---	---	---	---	**0.00151**	---	---	---	---	---	---	---	0.0008	0.0008
	May-2024	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	ND	---	ND	ND	---	---	ND	0.002	0.002
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**0.0119**	---	---	---	ND	0.002	0.002
	July-2024	---	---	---	---	---	---	---	---	---	ND	**0.00104**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.001	0.001
	August-2024	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00671**	---	---	ND	---	0.002	0.002
	September-2024	---	---	---	**0.00244**	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.002	0.002
	October-2024	ND	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00254**	---	---	---	---	---	0.002	0.002
	November-2024	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0.002

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Nickel	November-2022	---	---	---	---	---	---	---	---	---	**0.0866**	---	**0.1344**	---	---	**0.173**	---	---	---	---	---	---	---	---	---	0.014	0.02
	December-2022	---	**0.1722**	---	**0.5025**	---	---	---	**0.2989**	---	**0.1299**	**0.287**	---	---	---	---	**0.1853**	**0.346**	---	---	---	---	---	---	---	0.014	0.02
	January-2023	---	**0.1074**	---	---	---	---	---	---	**0.1442**	**0.0407**	---	---	---	---	**0.0769**	---	---	---	---	---	---	---	---	---	0.007	0.01
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.1726**	---	---	---	---	---	---	---	0.001	0.001
	March-2023	---	---	---	---	---	---	---	---	**0.1254**	**0.1033**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.007	0.01
	April-2023	---	---	---	---	---	---	---	---	**0.1143**	---	**0.1732**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.001	0.001
	May-2023	---	**0.113**	---	---	---	---	---	---	**0.09726**	**0.05657**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.005
	June-2023	---	---	---	---	---	---	---	---	---	**0.05978**	---	**0.05892**	---	**0.07161**	---	---	---	---	---	---	---	---	---	---	0.005	0.005
	July-2023	---	**0.09872**	---	---	---	---	---	**0.08332**	---	---	---	---	---	---	---	---	---	**0.1576**	---	---	---	---	**0.03074**	**0.01403**	0.001	0.001
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.02029**	0.005	0.005
		---	---	---	---	---	**0.1457**	---	**0.09673**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0513**	---	0.01	0.01
	September-2023	---	---	---	**0.5152**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.2387**	---	---	---	---	---	---	0.01	0.01
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.2019**	---	---	**0.09206**	---	---	---	0.001	0.001
		---	---	---	---	---	---	**0.104**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0.002
	November-2023	---	**0.1178**	---	**0.4227**	**0.1242**	---	**0.07791**	---	---	**0.05944**	---	---	**0.1493**	---	---	---	---	**0.2492**	---	---	**0.1332**	---	---	**0.05277**	0.01	0.01
	December-2023	---	---	---	**0.6091**	---	---	---	---	---	---	---	---	---	---	---	---	**0.1447**	---	---	---	---	---	---	---	0.005	0.005
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.2127**	---	---	---	---	---	---	0.002	0.002
	January-2024	---	---	**0.06308**	---	---	---	---	---	---	**0.04911**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0326**	0.005	0.005
	February-2024	---	---	**0.07945**	---	**0.07013**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.09174**	---	**0.06183**	---	---	0.005	0.005
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.02232**	0.002	0.002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.08678**	---	---	0.005	0.005
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**0.1319**	---	---	---	---	**0.196**	---	---	---	---	---	---	0.001	0.001
		---	---	---	**0.3136**	---	---	---	---	---	---	---	---	---	---	---	---	**0.1139**	---	---	---	---	---	---	---	0.01	0.01
	May-2024	---	---	---	---	---	---	---	---	---	**0.0538**	---	---	---	---	---	---	---	**0.2065**	---	**0.07835**	**0.09235**	---	---	**0.02884**	0.01	0.01
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.211**	---	**0.07664**	---	---	---	**0.03166**	0.01	0.01
	July-2024	---	---	---	---	---	---	---	---	---	**0.1917**	**0.03634**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.005
	August-2024	---	---	---	---	---	**0.1008**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0822**	---	---	**0.02104**	---	0.01	0.01
	September-2024	---	---	---	**0.396**	---	**0.1138**	---	---	---	---	---	---	---	---	---	---	**0.08772**	---	---	---	---	---	---	---	0.01	0.01
	October-2024	**0.07251**	**0.115**	---	**0.3536**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.05751**	---	---	---	---	---	0.01	0.01
	November-2024	**0.03879**	**0.09665**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.01

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Selenium	November-2022	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	ND	---	---	---	---	---	---	---	---	---	0.08	0.1
	December-2022	---	ND	---	ND	---	---	---	ND	---	ND	ND	---	---	---	---	ND	ND	---	---	---	---	---	---	---	0.08	0.1
	January-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	0.04	0.05
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00199**	---	---	---	---	---	---	---	0.00085	0.001
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.04	0.05
	April-2023	---	---	---	---	---	---	---	---	**0.00189**	---	**0.00185**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00085	0.001
	May-2023	---	ND	---	---	---	---	---	---	ND	**0.00569**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00425	0.005
	June-2023	---	---	---	---	---	---	---	---	---	ND	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	0.00425	0.005
	July-2023	---	**0.00101**	---	---	---	---	---	**0.00331**	---	---	---	---	---	---	---	---	---	**0.00116**	---	---	---	---	**0.00251**	ND	0.00085	0.001
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.00425	0.005
		---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	0.0085	0.01
	September-2023	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.0085	0.01
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00186**	---	---	**0.0044**	---	---	---	0.00085	0.001
		---	---	---	---	---	---	**0.00332**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0017	0.002
	November-2023	---	ND	---	**0.00425**	**0.00314**	---	**0.00315**	---	---	ND	---	---	ND	---	---	---	---	ND	---	---	**0.0032**	---	---	ND	0.003	0.003
	December-2023	---	---	---	**0.00785**	---	---	---	---	---	---	---	---	---	---	---	---	**0.00253**	---	---	---	---	---	---	---	0.0015	0.0015
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00215**	---	---	---	---	---	---	0.0017	0.002
	January-2024	---	---	ND	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.00425	0.005
	February-2024	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00571**	---	**0.00651**	---	---	0.00425	0.005
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.0017	0.002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.00627**	---	---	0.00425	0.005
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	**0.000929 J**	---	---	---	---	---	---	0.00085	0.001
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.0085	0.01
	May-2024	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	ND	---	ND	ND	---	---	ND	0.0085	0.01
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	---	ND	0.0085	0.01
	July-2024	---	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00425	0.005
	August-2024	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	---	0.0085	0.01
	September-2024	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.0085	0.01
	October-2024	ND	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	0.0085	0.01
	November-2024	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0085	0.01
Silver	November-2022	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	ND	---	---	---	---	---	---	---	---	---	0.01	0.02
	December-2022	---	ND	---	**0.0187 J**	---	---	---	ND	---	ND	ND	---	---	---	---	ND	ND	---	---	---	---	---	---	---	0.01	0.02
	January-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	0.005	0.01
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.00006	0.001
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.005	0.01
	April-2023	---	---	---	---	---	---	---	---	ND	---	**0.00011 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00006	0.001
	May-2023	---	ND	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0003	0.005
	June-2023	---	---	---	---	---	---	---	---	---	ND	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	0.0003	0.005
	July-2023	---	ND	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	ND	ND	0.00006	0.001
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.0003	0.005
		---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	0.0006	0.01
	September-2023	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.0006	0.01
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	---	---	---	0.00006	0.001
		---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00012	0.002
	November-2023	---	ND	---	ND	ND	---	ND	---	---	ND	---	---	ND	---	---	---	---	ND	---	---	ND	---	---	ND	0.0006	0.01
	December-2023	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.00025	0.001
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	0.00012	0.002
	January-2024	---	---	ND	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.0003	0.005
	February-2024	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	0.0003	0.005
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	0.00012	0.002
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	0.0003	0.005
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	ND	---	---	---	---	---	---	0.00006	0.001
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.0004	0.001
	May-2024	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	ND	---	ND	ND	---	---	ND	0.0006	0.01
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	---	ND	0.0006	0.01
	July-2024	---	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0003	0.0005
	August-2024	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	ND	---	0.0006	0.01
	September-2024	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	0.0006	0.01
	October-2024	ND	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	0.0006	0.01
	November-2024	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0006	0.01

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Zinc	November-2022	---	---	---	---	---	---	---	---	---	ND	---	**0.032**	---	---	**0.694**	---	---	---	---	---	---	---	---	---	0.02	0.02
	December-2022	---	**0.208**	---	**29.7**	---	---	---	**0.162**	---	**0.0686**	**0.75**	---	---	---	---	**0.364**	**0.286**	---	---	---	---	---	---	---	0.02	0.02
	January-2023	---	**0.133**	---	---	---	---	---	---	**0.15**	**0.074**	---	---	---	---	**0.0752**	---	---	---	---	---	---	---	---	---	0.01	0.01
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0851**	---	---	---	---	---	---	---	0.0025	0.005
	March-2023	---	---	---	---	---	---	---	---	**0.0689**	**0.0538**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.01
	April-2023	---	---	---	---	---	---	---	---	**0.0539**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0025	0.005
		---	---	---	---	---	---	---	---	---	---	**0.414**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.025	0.05
	May-2023	---	**0.079**	---	---	---	---	---	---	**0.0635**	**0.0519**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0125	0.025
	June-2023	---	---	---	---	---	---	---	---	---	**0.0538**	---	**0.0253**	---	**0.945**	---	---	---	---	---	---	---	---	---	---	0.0125	0.025
	July-2023	---	**0.0488**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0714**	---	---	---	---	**0.354**	**0.0782**	0.0025	0.005
		---	---	---	---	---	---	---	**2.03**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0125	0.025
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.112**	0.0125	0.025
		---	---	---	---	---	---	---	**1.71**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.914**	---	0.025	0.05
		---	---	---	---	---	**5.92**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.05	0.1
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0788**	---	---	---	---	---	---	0.025	0.05
		---	---	---	**45**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	0.5
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0622**	---	---	---	---	---	---	0.0025	0.005
		---	---	---	---	---	---	**0.203**	---	---	---	---	---	---	---	---	---	---	---	---	---	**633**	---	---	---	0.005	0.01
	November-2023	---	**0.0471 J**	---	---	**0.0534**	---	**0.74**	---	---	**0.053**	---	---	**0.0618**	---	---	---	---	**0.0722**	---	---	**0.845**	---	---	**0.0313 J**	0.025	0.05
		---	---	---	**30.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	0.5
	December-2023	---	---	---	**52.7**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	0.5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.061**	---	---	---	---	---	---	0.005	0.01
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0462**	---	---	---	---	---	---	---	0.025	0.025
	January-2024	---	---	**0.117**	---	---	---	---	---	---	**0.0974**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0261**	0.0125	0.025
	February-2024	---	---	**0.0879**	---	**0.0554**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.475**	---	**0.809**	---	---	0.0125	0.025
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0342**	0.005	0.01
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2.09**	---	---	0.0125	0.025
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**0.0565**	---	---	---	---	**0.0539**	---	---	---	---	---	---	0.0025	0.005
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0394**	---	---	---	---	---	---	---	0.02	0.02
		---	---	---	**24.7**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	0.5
	May-2024	---	---	---	---	---	---	---	---	---	**0.165**	---	---	---	---	---	---	---	**0.0568**	---	**1.3**	**1.43**	---	---	**0.0812**	0.025	0.05
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.0505**	---	**0.498**	---	---	---	ND	0.025	0.05
	July-2024	---	---	---	---	---	---	---	---	---	**0.104**	**0.0451**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0125	0.025
	August-2024	---	---	---	---	---	**3.49**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.512**	---	---	**0.417**	---	0.025	0.05
	September-2024	---	---	---	**0.212**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0025	0.005
		---	---	---	---	---	**3.68**	---	---	---	---	---	---	---	---	---	---	**0.111**	---	---	---	---	---	---	---	0.025	0.05
	October-2024	**0.266**	**0.077**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.342**	---	---	---	---	---	0.025	0.05
		---	---	---	**20.2**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	0.5
	November-2024	**0.0325 J**	**0.0367 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.025	0.05

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
VOLATILE FATTY ACIDS (mg/L)																											
Acetic Acid	November-2022	---	---	---	---	---	---	---	---	---	---	---	**1600**	---	---	---	---	---	---	---	---	---	---	---	---	25	100
		---	---	---	---	---	---	---	---	---	**3500**	---	---	---	---	**150 J**	---	---	---	---	---	---	---	---	---	62	250
	December-2022	---	**1800**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	62	250
	January-2023	---	ND	---	---	---	---	---	---	ND	**4400**	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	500
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	500
	March-2023	---	---	---	---	---	---	---	---	ND	**640**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500
	April-2023	---	---	---	---	---	---	---	---	**1200**	---	**520**	---	---	---	---	---	---	---	---	---	---	---	---	---	370	500
	May-2023	---	**990**	---	---	---	---	---	---	**1800**	**3000**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	370	500
	June-2023	---	---	---	---	---	---	---	---	---	**5900**	---	**4100**	---	**5000**	---	---	---	---	---	---	---	---	---	---	750	1000
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	150	200
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	370	500
		---	---	---	---	---	---	---	**6100**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**750**	---	750	1000
	August-2023	---	---	---	---	---	**3300**	---	**5300**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4200**	ND	---	500
	September-2023	---	---	---	**7400**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	370	500
	October-2023	---	---	---	---	---	---	**3200**	---	---	---	---	---	---	---	---	---	---	**720**	---	---	**4100**	---	---	---	370	500
	November-2023	---	ND	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	ND	---	---	---	---	---	**4160**	250	500
		---	---	---	---	**4950**	---	**6650**	---	---	**5350**	---	---	---	---	---	---	---	---	---	---	**7300**	---	---	---	500	1000
		---	---	---	**9900**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1000	2000
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**660**	---	---	---	---	---	---	---	---	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	250
		---	---	---	**11200**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1000
	January-2024	---	---	**4410**	---	---	---	---	---	---	**5290**	---	---	---	---	---	---	---	---	---	---	---	---	---	**3080**	---	250
	February-2024	---	---	**3130**	---	**3530**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	250
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**3530**	---	**6770**	---	---	---	500
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2700**	---	200
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**46000**	---	---	---	1000
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	ND	---	---	---	---	---	---	---	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1670**	---	---	---	---	---	---	---	---	250
		---	---	---	**9170**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**4370**	---	---	---	**221**	---	250
		---	---	---	---	---	---	---	---	---	**4950**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**6530**	---	---	---	---	1250
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**3890**	---	---	---	**4450**	---	500
	July-2024	---	---	---	---	---	---	---	---	---	**6280**	**6180**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250
	August-2024	---	---	---	---	---	**5210**	---	---	---	---	---	---	---	---	---	---	---	---	---	**3500**	---	---	**5540**	---	---	500
	September-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2950**	---	---	---	---	---	---	---	---	250
		---	---	---	---	---	**5970**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500
		---	---	---	**10400**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250
	October-2024	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50
		---	260	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4780**	---	---	---	---	---	---	250
		---	---	---	**9410**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Butyric Acid	November-2022	---	---	---	---	---	---	---	---	---	---	---	**430**	---	---	---	---	---	---	---	---	---	---	---	---	12	100
		---	---	---	---	---	---	---	---	---	**830**	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	29	250
	December-2022	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	29	250
	January-2023	---	ND	---	---	---	---	---	---	ND	**1800**	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	500
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	500
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500
	April-2023	---	---	---	---	---	---	---	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	330	500
	May-2023	---	ND	---	---	---	---	---	---	ND	**1200**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	330	500
	June-2023	---	---	---	---	---	---	---	---	---	**2500**	---	**1500**	---	**2900**	---	---	---	---	---	---	---	---	---	---	650	1000
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	130	200
		---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	330	500
		---	---	---	---	---	---	---	**2800**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**650**	---	650	1000
	August-2023	---	---	---	---	---	**1400**	---	**1700**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1600**	ND	---	500
	September-2023	---	---	---	**3100**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	330	500
	October-2023	---	---	---	---	---	---	**1200**	---	---	---	---	---	---	---	---	---	---	ND	---	---	**2000**	---	---	---	330	500
	November-2023	---	ND	---	---	**1670**	---	**1760**	---	---	**1370**	---	---	ND	---	---	---	---	ND	---	---	**2730**	---	---	**740**	250	500
		---	---	---	**3420**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	1000
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**336**	---	---	---	---	---	---	---	---	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	250
		---	---	---	**3390**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1000
	January-2024	---	---	**813**	---	---	---	---	---	---	**1230**	---	---	---	---	---	---	---	---	---	---	---	---	---	**594**	---	250
	February-2024	---	---	**583**	---	**1170**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	250
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1180**	---	**2980**	---	---	---	500
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**500**	---	20
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2100**	---	---	---	200
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	ND	---	---	---	---	---	---	---	100
		---	---	---	**3120**	---	---	---	---	---	---	---	---	---	---	---	---	**444**	---	---	---	---	---	---	---	---	250
	May-2024	---	---	---	---	---	---	---	---	---	**1190**	---	---	---	---	---	---	---	ND	---	**984**	**2370**	---	---	**448**	---	250
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**1190**	---	---	---	**1030**	---	100
	July-2024	---	---	---	---	---	---	---	---	---	**2400**	**2360**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	250
	August-2024	---	---	---	---	---	**1630**	---	---	---	---	---	---	---	---	---	---	---	---	---	**1180**	---	---	**1930**	---	---	500
	September-2024	---	---	---	**3550**	---	**2060**	---	---	---	---	---	---	---	---	---	---	**670**	---	---	---	---	---	---	---	---	250
	October-2024	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50
		---	**ND**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1630**	---	---	---	---	---	---	250
		---	---	---	**3070**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250
Lactic Acid	November-2022	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	11	100
		---	---	---	---	---	---	---	---	---	ND	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	27	250
	December-2022	---	**90 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	27	250
	November-2023	---	ND	---	---	**968**	---	**1800**	---	---	**969**	---	---	ND	---	---	---	---	ND	---	---	**1170**	---	---	**324**	250	500
		---	---	---	**6030**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	1000
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	100
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		---	---	---	**9050**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1000
	January-2024	---	---	**629**	---	---	---	---	---	---	**979**	---	---	---	---	---	---	---	---	---	---	---	---	---	**256**	---	250
	February-2024	---	---	**334**	---	**180**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	250
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**756**	---	**1650**	---	---	---	500
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	20
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	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	ND	---	---	---	---	---	---	---	100
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		---	---	---	**5120**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250
	May-2024	---	---	---	---	---	---	---	---	---	**1160**	---	---	---	---	---	---	---	ND	---	**1170**	**1730**	---	---	ND	---	250
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**706**	---	---	---	**246**	---	100
	July-2024	---	---	---	---	---	---	---	---	---	**1220**	**1210**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	250
	August-2024	---	---	---	---	---	**2270**	---	---	---	---	---	---	---	---	---	---	---	---	---	**593**	---	---	**959**	---	---	500
	September-2024	---	---	---	---	---	**2550**	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	250
		---	---	---	**5510**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250
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Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Propionic Acid	November-2022	---	---	---	---	---	---	---	---	---	---	---	620	---	---	---	---	---	---	---	---	---	---	---	---	11	100
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	December-2022	---	640	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	27	250
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	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	500
	March-2023	---	---	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500
	April-2023	---	---	---	---	---	---	---	---	600	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	340	500
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	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	140	200
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Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
VOLATILE ORGANIC COMPOUNDS (ug/L)																											
2-Butanone (MEK)	November-2022	---	---	---	---	---	---	---	---	---	3510	---	---	---	---	1140	---	---	---	---	---	---	---	---	---	30	100
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	December-2022	---	3140	---	---	---	---	---	---	---	---	3390	---	---	---	---	---	---	---	---	---	---	---	---	---	30	100
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		---	---	---	---	---	---	---	---	---	---	25400	---	---	---	---	---	---	---	---	---	---	---	---	---	1500	5000
	August-2024	---	---	---	---	---	17700	---	---	---	---	---	---	---	---	---	---	---	---	---	7260	---	---	17900	---	150	500
	September-2024	---	---	---	19000	---	16600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	150	500
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	32200	---	---	---	---	---	---	---	1500	5000
	October-2024	28.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3	10
		---	2770	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	60	200
		---	---	---	13000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10800	---	---	---	---	---	150	500
	November-2024	---	4140	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	60	200
		28800	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	750	2500

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Acetone	November-2022	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4420**	---	---	---	---	---	---	---	---	---	70	100
		---	---	---	---	---	---	---	---	---	**16100**	---	**38300**	---	---	---	---	---	---	---	---	---	---	---	---	700	1000
	December-2022	---	---	---	---	---	---	---	---	---	**15600**	**5170**	---	---	---	---	---	**9800**	---	---	---	---	---	---	---	700	1000
		---	**8500**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
		---	---	---	**53100**	---	---	---	**49900**	---	---	---	---	---	---	---	**45600**	---	---	---	---	---	---	---	---	3500	5000
	January-2023	---	---	---	---	---	---	---	---	**1530**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	70	100
		---	---	---	---	---	---	---	---	---	**22200**	---	---	---	---	**14000**	---	---	---	---	---	---	---	---	---	700	1000
		---	**8130**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**23900**	---	---	---	---	---	---	---	1400	2000
	March-2023	---	---	---	---	---	---	---	---	**375**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	70	100
		---	---	---	---	---	---	---	---	---	**6810**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	700	1000
	April-2023	---	---	---	---	---	---	---	---	**8290**	---	**7560**	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
	May-2023	---	**10700**	---	---	---	---	---	---	**11700**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	350	500
		---	---	---	---	---	---	---	---	---	**29600**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
	June-2023	---	---	---	---	---	---	---	---	---	**29600**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
		---	---	---	---	---	---	---	---	---	---	---	**61800**	---	**50800**	---	---	---	---	---	---	---	---	---	---	3500	5000
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1180**	---	---	---	---	---	---	140	200
		---	**9780**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	700	1000
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**11600**	1750	2500
		---	---	---	---	---	---	---	**77200**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**69700**	---	7000	10000
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**20900**	700	1000
		---	---	---	---	---	---	---	**18700**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
		---	---	---	---	---	**72500**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**87700**	---	3500	5000
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**188 J**	---	---	---	---	---	---	140	200
		---	---	---	**40100**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**79**	---	---	---	---	---	---	35	50
		---	---	---	---	---	---	**66900**	---	---	---	---	---	---	---	---	---	---	---	---	---	**92900**	---	---	---	3500	5000
	November-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**104**	---	---	---	---	---	---	70	100
		---	**5560**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	700	1000
		---	---	---	**64700**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
		---	---	---	---	**43100**	---	**61100**	---	---	**36800**	---	---	**32800**	---	---	---	---	---	---	---	**53900**	---	---	**67800**	3500	5000
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	140	200
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	350	500
		---	---	---	**44300**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500
	January-2024	---	---	**96600**	---	---	---	---	---	---	**22800**	---	---	---	---	---	---	---	---	---	---	---	---	---	**47300**	3500	5000
	February-2024	---	---	**81600**	---	**70200**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**45600**	---	**63100**	---	---	3500	5000
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**50800**	---	**57600**	3500	5000
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	70	100
		---	---	---	---	---	---	---	---	---	---	---	---	**24300**	---	---	---	---	---	---	---	---	---	---	---	1750	2500
		---	---	---	**95300**	---	---	---	---	---	---	---	---	---	---	---	---	**55200**	---	---	---	---	---	---	---	3500	5000
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	140	200
		---	---	---	---	---	---	---	---	---	**63200**	---	---	---	---	---	---	---	---	---	**39000**	**91300**	---	---	**33300**	3500	5000
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	140	200
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**94400**	---	---	---	**84400**	35000	50000
	July-2024	---	---	---	---	---	---	---	---	---	**32200**	**52600**	---	---	---	---	---	---	---	---	---	---	---	---	---	3500	5000
	August-2024	---	---	---	---	---	**57700**	---	---	---	---	---	---	---	---	---	---	---	---	---	**36000**	---	---	**81500**	---	3500	5000
	September-2024	---	---	---	**59800**	---	**44500**	---	---	---	---	---	---	---	---	---	---	**69300**	---	---	---	---	---	---	---	3500	5000
	October-2024	**30.1**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7	10
		---	**5230**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	140	200
		---	---	---	**49800**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**40700**	---	---	---	---	---	3500	5000
	November-2024	---	**8680**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	350	500
		44400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1750	2500

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Benzene	November-2022	---	---	---	---	---	---	---	---	---	**7.4 J**	---	**2860**	---	---	**50.4**	---	---	---	---	---	---	---	---	---	4	10
	December-2022	---	**301**	---	**2960**	---	---	---	---	---	**6.3 J**	**622**	---	---	---	---	**1750**	**179**	---	---	---	---	---	---	---	4	10
		---	---	---	---	---	---	---	**6550**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	40	100
	January-2023	---	**240**	---	---	---	---	---	---	**28.7**	**1620**	---	---	---	---	**167**	---	---	---	---	---	---	---	---	---	4	10
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1370**	---	---	---	---	---	---	---	4	10
	March-2023	---	---	---	---	---	---	---	---	**1540**	**727**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4	10
	April-2023	---	---	---	---	---	---	---	---	**3740**	---	**320**	---	---	---	---	---	---	---	---	---	---	---	---	---	4	10
	May-2023	---	**814**	---	---	---	---	---	---	**4890**	**3370**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20	50
	June-2023	---	---	---	---	---	---	---	---	---	**2630**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8	20
		---	---	---	---	---	---	---	---	---	---	---	**1400**	---	**1590**	---	---	---	---	---	---	---	---	---	---	20	50
	July-2023	---	**824**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**80.8**	---	---	---	---	---	---	8	20
		---	---	---	---	---	---	---	**4050**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1420**	---	20	50
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**11800**	100	250
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**379**	8	20
		---	---	---	---	---	**2320**	---	**168**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	20	50
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**193**	---	---	---	---	---	---	8	20
		---	---	---	**468**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	250
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**399**	---	---	---	---	---	---	2	5
		---	---	---	---	---	---	**576**	---	---	---	---	---	---	---	---	---	---	---	---	---	**3100**	---	---	---	20	50
	November-2023	---	**80.8**	---	---	---	---	---	---	---	---	---	---	**31.3**	---	---	---	---	---	---	---	---	---	---	---	2	5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**323**	---	---	---	---	---	---	4	10
		---	---	---	---	**1070**	---	**654**	---	---	**982**	---	---	---	---	---	---	---	---	---	---	**1960**	---	---	**1190**	20	50
		---	---	---	**870**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	250
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**932**	---	---	---	---	---	---	---	8	20
		---	---	---	**1330**	---	---	---	---	---	---	---	---	---	---	---	---	---	**463**	---	---	---	---	---	---	20	50
	January-2024	---	---	**1410**	---	---	---	---	---	---	**662**	---	---	---	---	---	---	---	---	---	---	---	---	---	**2900**	20	50
	February-2024	---	---	**906**	---	**884**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**346**	---	**484**	---	---	20	50
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**226**	---	**8910**	20	50
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**52.1**	---	---	---	---	**13.8**	---	---	---	---	---	---	4	10
		---	---	---	**2040**	---	---	---	---	---	---	---	---	---	---	---	---	**3420**	---	---	---	---	---	---	---	20	50
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**276**	---	---	---	---	---	---	8	20
		---	---	---	---	---	---	---	---	---	**3080**	---	---	---	---	---	---	---	---	---	**144**	**818**	---	---	**2990**	20	50
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**173**	---	---	---	---	---	---	8	20
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**210**	---	---	---	**2740**	20	50
	July-2024	---	---	---	---	---	---	---	---	---	**1410**	**1820**	---	---	---	---	---	---	---	---	---	---	---	---	---	20	50
	August-2024	---	---	---	---	---	**828**	---	---	---	---	---	---	---	---	---	---	---	---	---	**162**	---	---	**384**	---	20	50
	September-2024	---	---	---	**960**	---	**727**	---	---	---	---	---	---	---	---	---	---	**2710**	---	---	---	---	---	---	---	20	50
	October-2024	**306**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.4	1
		---	**429**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2	5
		---	---	---	**1200**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**828**	---	---	---	---	---	20	50
	November-2024	**119**	**512**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8	20

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Ethylbenzene	December-2022	---	**67.3**	---	**172**	---	---	---	**287**	---	ND	**48.5**	---	---	---	---	**108**	**27.4**	---	---	---	---	---	---	---	4	10
	November-2022	---	---	---	---	---	---	---	---	---	ND	---	**194**	---	---	**16.2**	---	---	---	---	---	---	---	---	---	4	10
	January-2023	---	**65.1**	---	---	---	---	---	---	ND	**93.9**	---	---	---	---	**20.8**	---	---	---	---	---	---	---	---	---	4	10
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**151**	---	---	---	---	---	---	---	4	10
	March-2023	---	---	---	---	---	---	---	---	**131**	**71.5**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4	10
	April-2023	---	---	---	---	---	---	---	---	**186**	---	**43.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	4	10
	May-2023	---	**124**	---	---	---	---	---	---	**276**	**144**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20	50
	June-2023	---	---	---	---	---	---	---	---	---	**104**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8	20
		---	---	---	---	---	---	---	---	---	---	---	**98**	---	**116**	---	---	---	---	---	---	---	---	---	---	20	50
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**666**	4	10
		---	**128**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**82**	---	---	---	---	---	---	8	20
		---	---	---	---	---	---	---	**224**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**87.5**	---	20	50
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**16.8 J**	8	20
		---	---	---	---	---	**80**	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	20	50
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**22.8**	---	---	---	---	---	---	8	20
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	250
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**34.8**	---	---	---	---	---	---	2	5
		---	---	---	---	---	---	**42.5 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	**247**	---	---	---	20	50
	November-2023	---	**26.3**	---	---	---	---	---	---	---	---	---	---	**45.4**	---	---	---	---	---	---	---	---	---	---	---	2	5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**26.9**	---	---	---	---	---	---	4	10
		---	---	---	---	**62**	---	**54**	---	---	**76.5**	---	---	---	---	---	---	---	---	---	---	**224**	---	---	**60.5**	20	50
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	250
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**46**	---	---	---	---	---	---	---	8	20
		---	---	---	**69.5**	---	---	---	---	---	---	---	---	---	---	---	---	---	**44 J**	---	---	---	---	---	---	20	50
	January-2024	---	---	**99**	---	---	---	---	---	---	**28 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	**248**	20	50
	February-2024	---	---	**51**	---	**43 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**31 J**	---	**41 J**	---	---	20	50
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**25 J**	---	**710**	20	50
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**106**	---	---	---	---	ND	---	---	---	---	---	---	4	10
		---	---	---	**91.5**	---	---	---	---	---	---	---	---	---	---	---	---	**186**	---	---	---	---	---	---	---	20	50
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**35.4**	---	---	---	---	---	---	8	20
		---	---	---	---	---	---	---	---	---	**146**	---	---	---	---	---	---	---	---	---	ND	**59**	---	---	**225**	20	50
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**23.6**	---	---	---	---	---	---	8	20
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	**142**	20	50
	July-2024	---	---	---	---	---	---	---	---	---	**76**	**118**	---	---	---	---	---	---	---	---	---	---	---	---	---	20	50
	August-2024	---	---	---	---	---	**27.5 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	**27 J**	---	20	50
	September-2024	---	---	---	**46.5 J**	---	**44 J**	---	---	---	---	---	---	---	---	---	---	**192**	---	---	---	---	---	---	---	20	50
	October-2024	**59.6**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.4	1
		---	**112**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2	5
		---	---	---	**62.5**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**76**	---	---	---	---	---	20	50
	November-2024	**14.4 J**	**135**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8	20

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Tetrahydrofuran	November-2022	---	---	---	---	---	---	---	---	---	309	---	176	---	---	---	---	---	---	---	---	---	---	---	---	100	100
		---	---	---	---	---	---	---	---	---	---	---	8530	---	---	---	---	---	---	---	---	---	---	---	---	1000	1000
	December-2022	---	151	---	---	---	---	---	---	---	170	1120	---	---	---	---	---	663	---	---	---	---	---	---	---	100	100
		---	---	---	5210	---	---	---	19800	---	---	---	---	---	---	---	6130	---	---	---	---	---	---	---	---	1000	1000
	January-2023	---	183	---	---	---	---	---	---	566	1810	---	---	---	---	352	---	---	---	---	---	---	---	---	---	100	100
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3760	---	---	---	---	---	---	---	2000	2000
	March-2023	---	---	---	---	---	---	---	---	353	464	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	100
	April-2023	---	---	---	---	---	---	---	---	2410	---	4790	---	---	---	---	---	---	---	---	---	---	---	---	---	100	100
	May-2023	---	ND	---	---	---	---	---	---	2740	2380	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	500
	June-2023	---	---	---	---	---	---	---	---	---	2100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	200	200
		---	---	---	---	---	---	---	---	---	---	---	7320	---	6670	---	---	---	---	---	---	---	---	---	---	500	500
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2960	100	100
		---	411	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	616	---	---	---	---	---	---	200	200
		---	---	---	---	---	---	---	8380	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5310	---	500	500
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2880	200	200
		---	---	---	---	---	7370	---	3210	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1200	---	500	500
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	343	---	---	---	---	---	---	200	200
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2500	2500
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	606	---	---	---	---	---	---	50	50
		---	---	---	---	---	---	4870	---	---	---	---	---	---	---	---	---	---	---	---	---	9140	---	---	---	500	500
	November-2023	---	199	---	---	---	---	---	---	---	---	---	---	325	---	---	---	---	---	---	---	---	---	---	---	50	50
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	358	---	---	---	---	---	---	100	100
		---	---	---	---	4780	---	3320	---	---	785	---	---	---	---	---	---	---	---	---	---	5370	---	---	4600	500	500
		---	---	---	4620	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2500	2500
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4240	---	---	---	---	---	---	---	200	200
		---	---	---	2620	---	---	---	---	---	---	---	---	---	---	---	---	---	502	---	---	---	---	---	---	500	500
	January-2024	---	---	5160	---	---	---	---	---	---	1040	---	---	---	---	---	---	---	---	---	---	---	---	---	10900	500	500
	February-2024	---	---	3500	---	4580	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3520	---	4910	---	---	500	500
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3320	---	8710	500	500
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	697	---	---	---	---	ND	---	---	---	---	---	---	100	100
		---	---	---	7290	---	---	---	---	---	---	---	---	---	---	---	---	7680	---	---	---	---	---	---	---	500	500
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	555	---	---	---	---	---	---	200	200
		---	---	---	---	---	---	---	---	---	2660	---	---	---	---	---	---	---	---	---	1880	5860	---	---	7640	500	500
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	568	---	---	---	---	---	---	200	200
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3830	---	---	---	13000	500	500
	July-2024	---	---	---	---	---	---	---	---	---	1900	4020	---	---	---	---	---	---	---	---	---	---	---	---	---	500	500
	August-2024	---	---	---	---	---	3220	---	---	---	---	---	---	---	---	---	---	---	---	---	2020	---	---	4610	---	500	500
	September-2024	---	---	---	2950	---	2730	---	---	---	---	---	---	---	---	---	---	6640	---	---	---	---	---	---	---	500	500
	October-2024	248	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10	10
		---	318	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	50
		---	---	---	2580	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2730	---	---	---	---	---	500	500
	November-2024	6620	452	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	200	200

Historical LFG-EW Leachate Monitoring Results Summary

Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Toluene	November-2022	---	---	---	---	---	---	---	---	---	ND	---	**214**	---	---	**32.8**	---	---	---	---	---	---	---	---	---	5	10
	December-2022	---	**122**	---	**175**	---	---	---	**195**	---	ND	**113**	---	---	---	---	**113**	**48.3**	---	---	---	---	---	---	---	5	10
	January-2023	---	**122**	---	---	---	---	---	---	**8 J**	**139**	---	---	---	---	**35.3**	---	---	---	---	---	---	---	---	---	5	10
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**224**	---	---	---	---	---	---	---	5	10
	March-2023	---	---	---	---	---	---	---	---	**182**	**98.1**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5	10
	April-2023	---	---	---	---	---	---	---	---	**303**	---	**94.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	5	10
	May-2023	---	**258**	---	---	---	---	---	---	**371**	**239**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	25	50
	June-2023	---	---	---	---	---	---	---	---	---	**165**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10	20
		---	---	---	---	---	---	---	---	---	---	---	**67**	---	**212**	---	---	---	---	---	---	---	---	---	---	25	50
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**965**	5	10
		---	**248**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**107**	---	---	---	---	---	---	10	20
		---	---	---	---	---	---	---	**218**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**118**	---	25	50
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**36.6**	10	20
		---	---	---	---	---	**105**	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	25	50
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**40.6**	---	---	---	---	---	---	10	20
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	125	250
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**59.2**	---	---	---	---	---	---	2.5	5
		---	---	---	---	---	---	**37 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	**235**	---	---	---	25	50
	November-2023	---	**47.3**	---	---	---	---	---	---	---	---	---	---	**50.4**	---	---	---	---	---	---	---	---	---	---	---	2.5	5
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**48.7**	---	---	---	---	---	---	5	10
		---	---	---	---	**62.5**	---	**51.5**	---	---	**114**	---	---	---	---	---	---	---	---	---	---	**167**	---	---	**114**	25	50
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	125	250
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**73.2**	---	---	---	---	---	---	---	10	20
		---	---	---	**83.5**	---	---	---	---	---	---	---	---	---	---	---	---	---	**74.5**	---	---	---	---	---	---	25	50
	January-2024	---	---	**95.5**	---	---	---	---	---	---	**60**	---	---	---	---	---	---	---	---	---	---	---	---	---	**310**	25	50
	February-2024	---	---	**49 J**	---	**37 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**30.5 J**	---	---	25	50
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**73**	---	**916**	25	50
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**90.1**	---	---	---	---	ND	---	---	---	---	---	---	5	10
		---	---	---	**104**	---	---	---	---	---	---	---	---	---	---	---	---	**263**	---	---	---	---	---	---	---	25	50
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**53.8**	---	---	---	---	---	---	10	20
		---	---	---	---	---	---	---	---	---	**180**	---	---	---	---	---	---	---	---	---	ND	**62.5**	---	---	**284**	25	50
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**34.6**	---	---	---	---	---	---	10	20
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	**228**	25	50
	July-2024	---	---	---	---	---	---	---	---	---	**97**	**125**	---	---	---	---	---	---	---	---	---	---	---	---	---	25	50
	August-2024	---	---	---	---	---	**35 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	**25 J**	---	25	50
	September-2024	---	---	---	**80**	---	**63.5**	---	---	---	---	---	---	---	---	---	---	**226**	---	---	---	---	---	---	---	25	50
	October-2024	**55.7**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.5	1
		---	**173**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2.5	5
		---	---	---	**65.5**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**72**	---	---	---	---	---	25	50
	November-2024	**44.6**	**245**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10	20

Historical LFG-EW Leachate Monitoring Results Summary

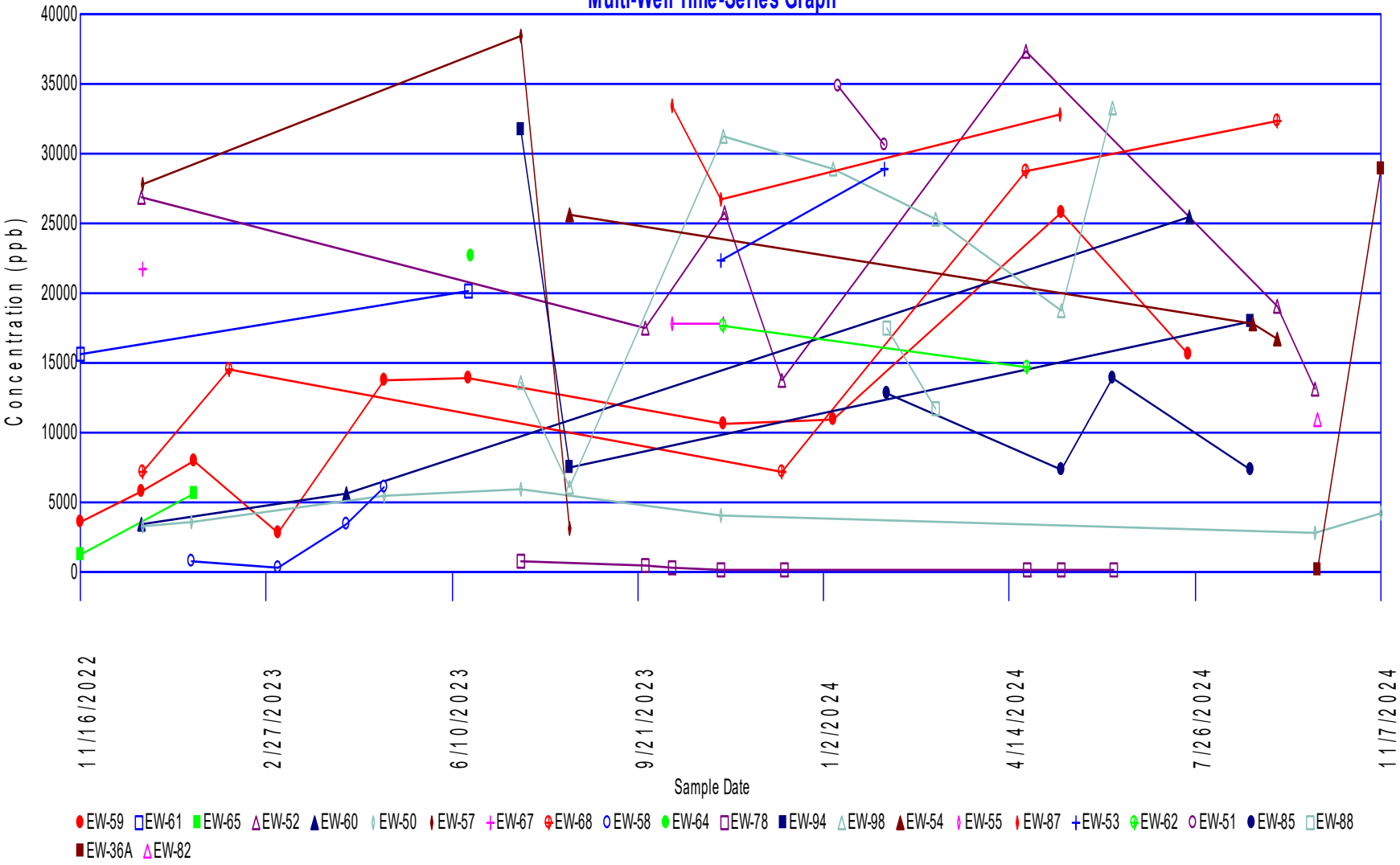
Well ID		EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	EW-55	EW-57	EW-58	EW-59	EW-60	EW-61	EW-62	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event	Concentration																									
Xylenes, Total	November-2022	---	---	---	---	---	---	---	---	---	ND	---	**185**	---	---	**37.8**	---	---	---	---	---	---	---	---	---	10	30
	December-2022	---	**161**	---	**222**	---	---	---	**186**	---	ND	**112**	---	---	---	---	**197**	**59.9**	---	---	---	---	---	---	---	10	30
	January-2023	---	**138**	---	---	---	---	---	---	ND	**134**	---	---	---	---	**38.1**	---	---	---	---	---	---	---	---	---	10	30
	February-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**240**	---	---	---	---	---	---	---	10	30
	March-2023	---	---	---	---	---	---	---	---	**240**	**111**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10	30
	April-2023	---	---	---	---	---	---	---	---	**329**	---	**97.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	10	30
	May-2023	---	**274**	---	---	---	---	---	---	**441**	**230**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	150
	June-2023	---	---	---	---	---	---	---	---	---	**177**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20	60
		---	---	---	---	---	---	---	---	---	---	---	**92 J**	---	**136 J**	---	---	---	---	---	---	---	---	---	---	50	150
	July-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1130**	10	30
		---	**257**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**74.4**	---	---	---	---	---	---	20	60
		---	---	---	---	---	---	---	**230**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**174**	---	50	150
	August-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**48.4 J**	20	60
		---	---	---	---	---	**180**	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	50	150
	September-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	20	60
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	250	750
	October-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**30.6**	---	---	---	---	---	---	5	15
		---	---	---	---	---	---	**134 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	**328**	---	---	---	50	150
	November-2023	---	**56**	---	---	---	---	---	---	---	---	---	---	**48**	---	---	---	---	---	---	---	---	---	---	---	5	15
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**25.3 J**	---	---	---	---	---	---	10	30
		---	---	---	---	**116 J**	---	**104 J**	---	---	**132 J**	---	---	---	---	---	---	---	---	---	---	**306**	---	---	**138 J**	50	150
		---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	250	750
	December-2023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**167**	---	---	---	---	---	---	---	20	60
		---	---	---	**224**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	50	150
	January-2024	---	---	**142 J**	---	---	---	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	**534**	50	150
	February-2024	---	---	**63 J**	---	**59 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	ND	---	---	50	150
	March-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	**1360**	50	150
	April-2024	---	---	---	---	---	---	---	---	---	---	---	---	**110**	---	---	---	---	ND	---	---	---	---	---	---	10	30
		---	---	---	**140 J**	---	---	---	---	---	---	---	---	---	---	---	---	**352**	---	---	---	---	---	---	---	50	150
	May-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**31.6 J**	---	---	---	---	---	---	20	60
		---	---	---	---	---	---	---	---	---	**223**	---	---	---	---	---	---	---	---	---	ND	**105 J**	---	---	**400**	50	150
	June-2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	20	60
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	**261**	50	150
	July-2024	---	---	---	---	---	---	---	---	---	**125 J**	**157**	---	---	---	---	---	---	---	---	---	---	---	---	---	50	150
	August-2024	---	---	---	---	---	**72.5 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	**55.5 J**	50	150
	September-2024	---	---	---	**90.5 J**	---	**120 J**	---	---	---	---	---	---	---	---	---	---	**368**	---	---	---	---	---	---	---	50	150
	October-2024	**54.3**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	3
		---	**201**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5	15
		---	---	---	**144 J**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**75.5 J**	---	---	---	---	---	50	150
	November-2024	ND	**223**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20	60

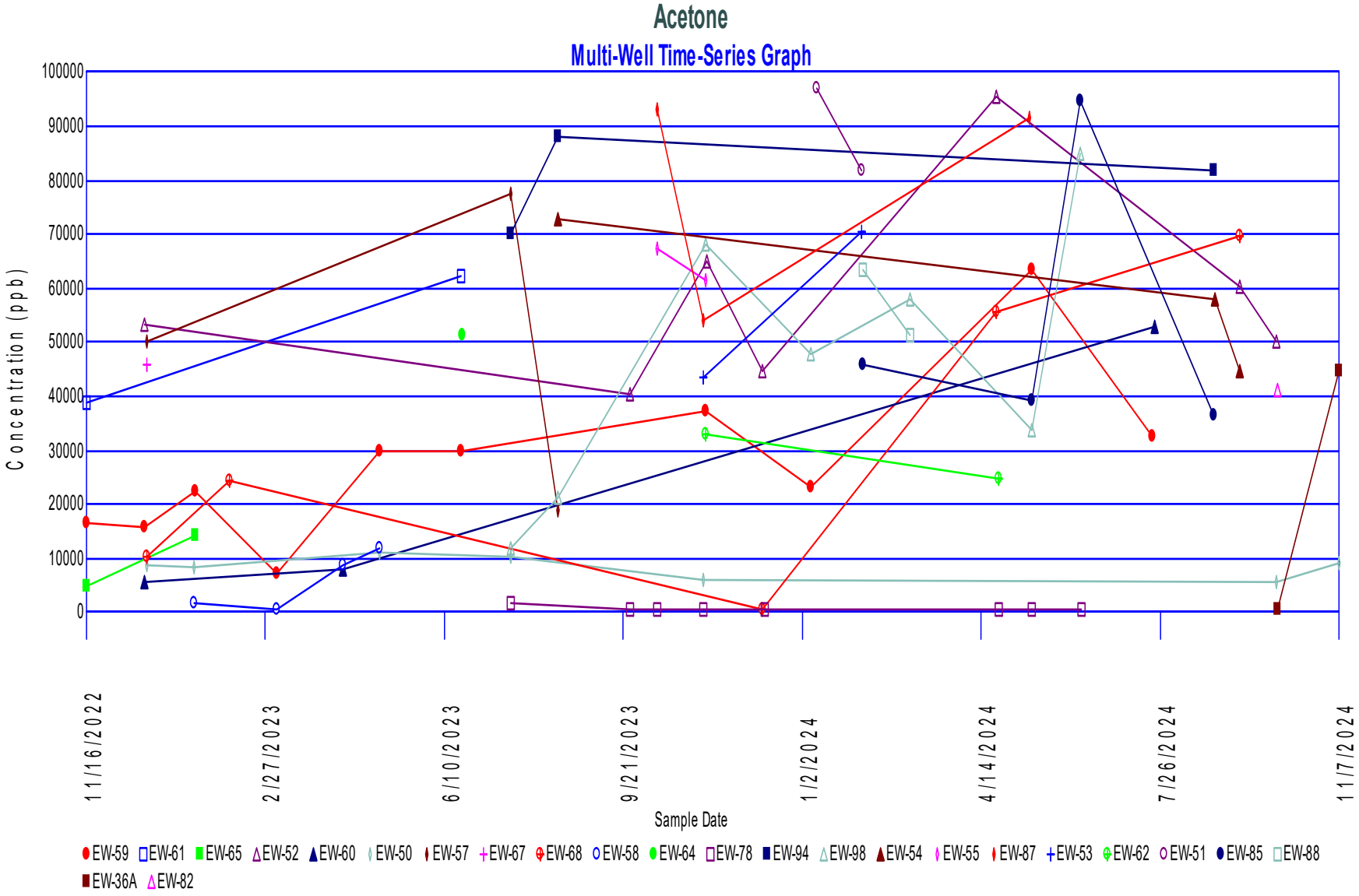
--- = not applicable/available
J = Parameter was detected at a concentration greater than the laboratory's LOD, but less than the laboratory's LOQ. Concentration is considered estimated.
LOD = laboratory's Limit of Detection
LOQ = laboratory's Limit of Quantitation

mg/L = milligrams per liter
ND = Not Detected
ug/L = micrograms per liter

2-Butanone

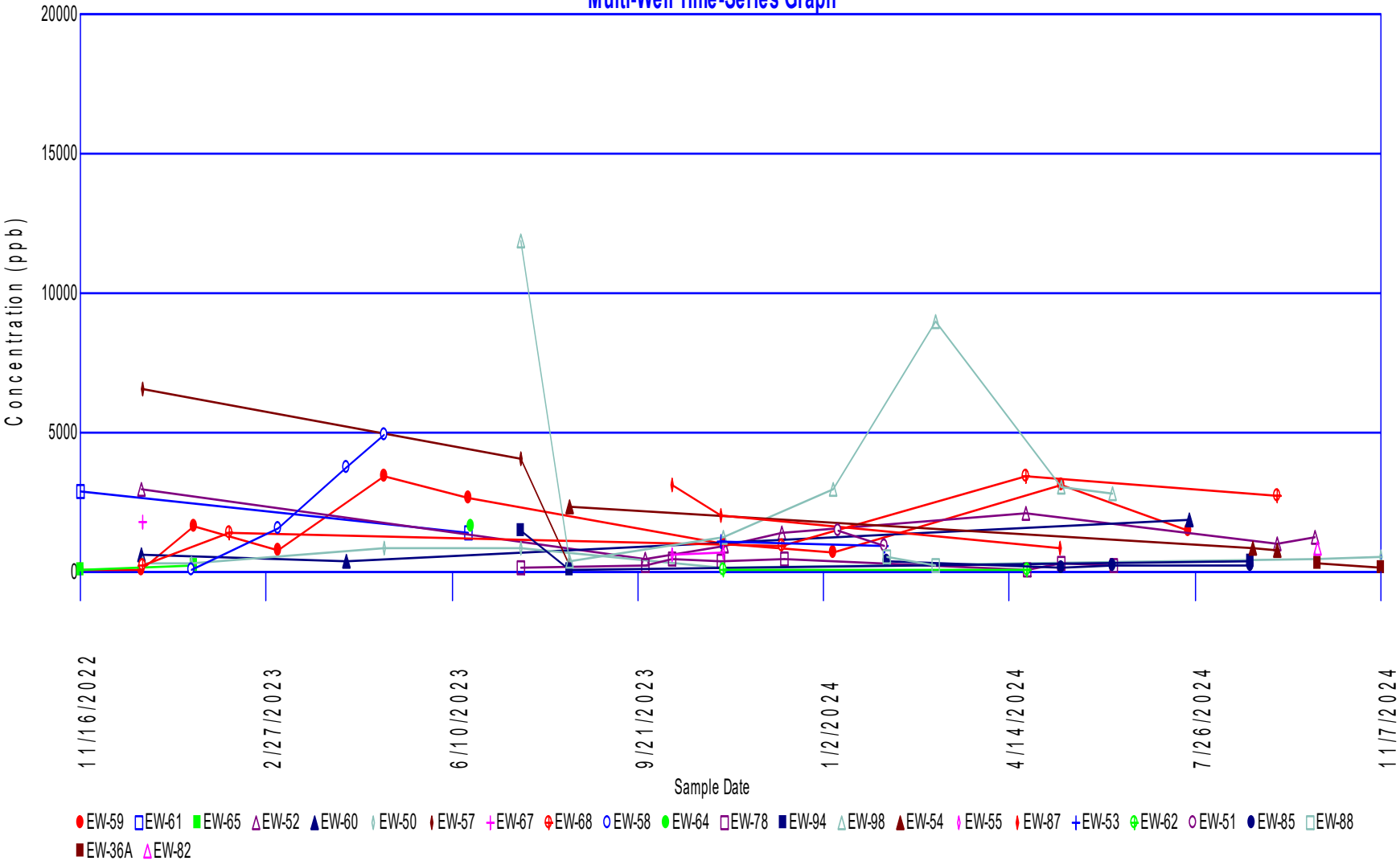
Multi-Well Time-Series Graph

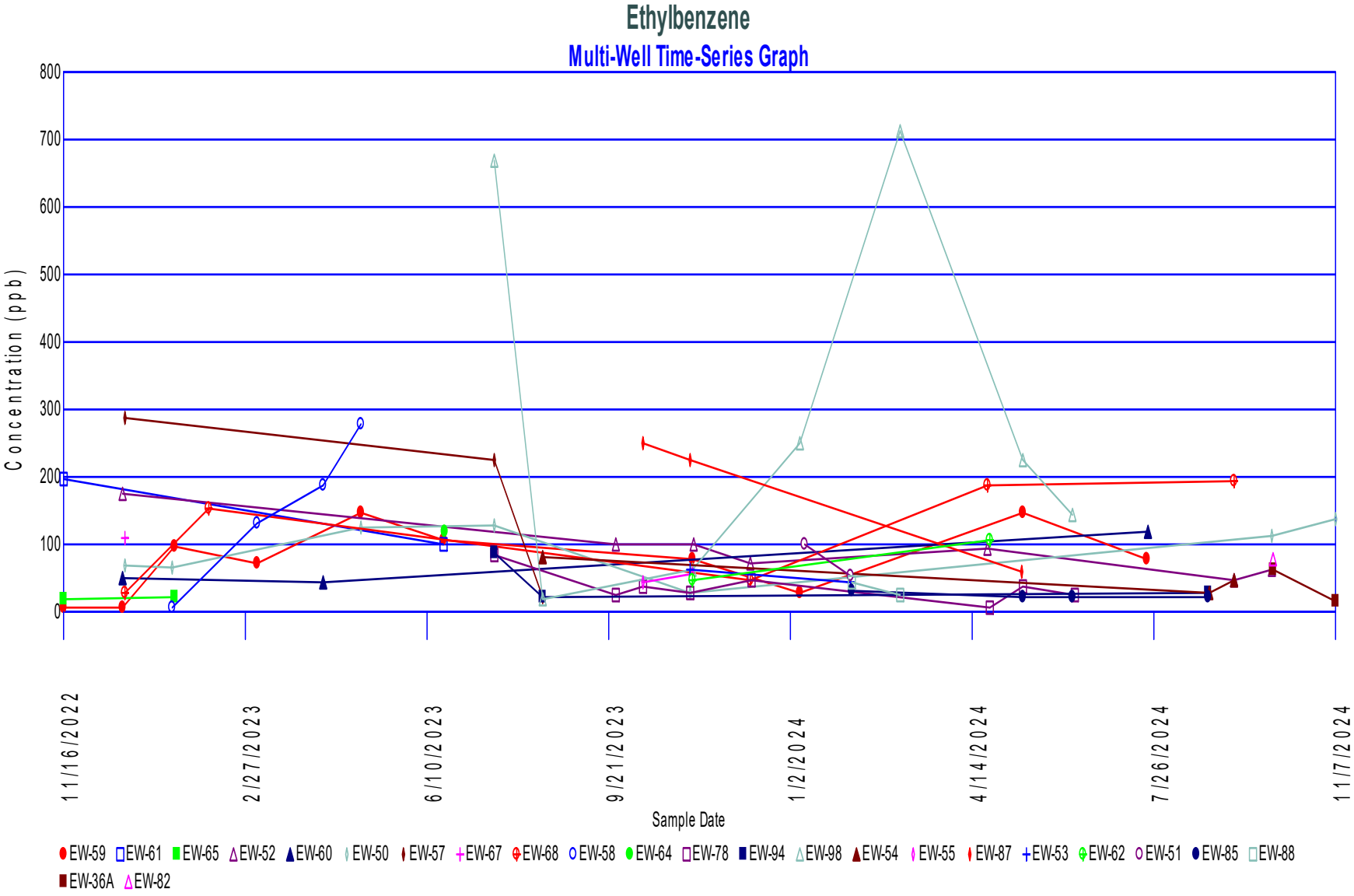



Acetone
Multi-Well Time-Series Graph
Concentration (ppb)
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
11/16/2022
2/27/2023
6/10/2023
9/21/2023
1/2/2024
4/14/2024
7/26/2024
11/7/2024
Sample Date
EW-59 EW-61 EW-65 EW-52 EW-60 EW-50 EW-57 EW-67 EW-68 EW-58 EW-64 EW-78 EW-94 EW-98 EW-54 EW-55 EW-87 EW-53 EW-62 EW-51 EW-85 EW-88 EW-36A EW-82

Benzene

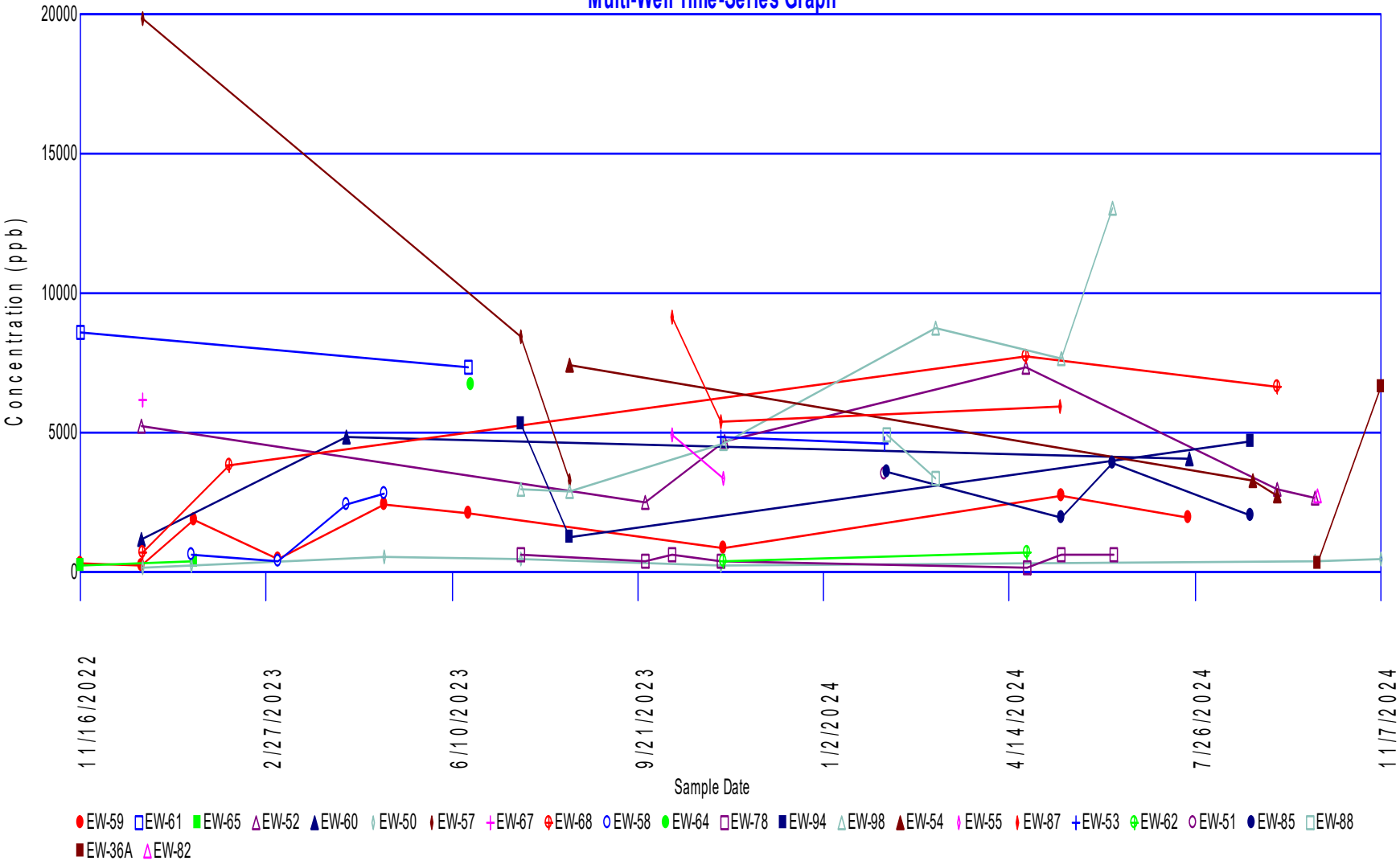
Multi-Well Time-Series Graph

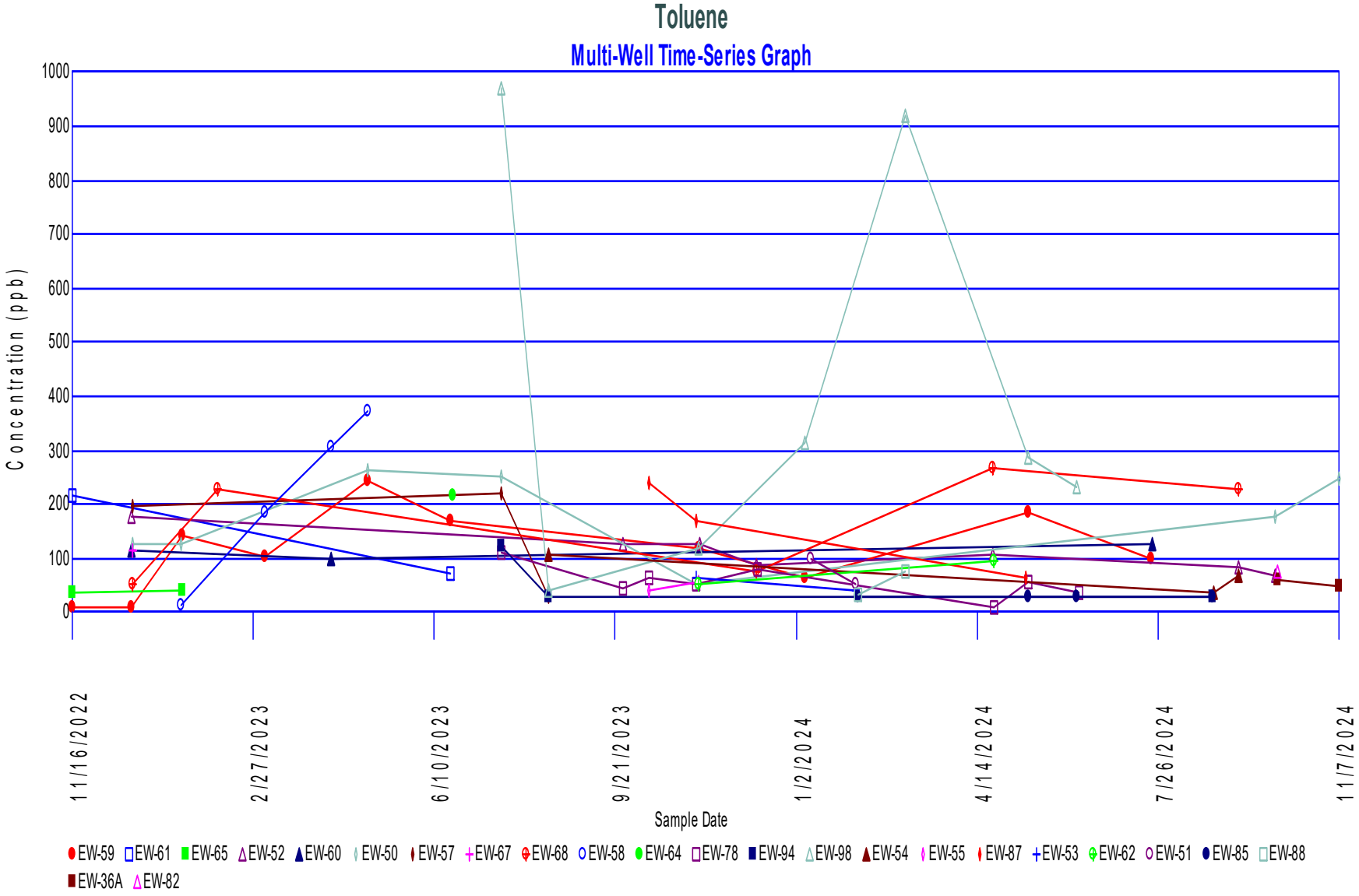


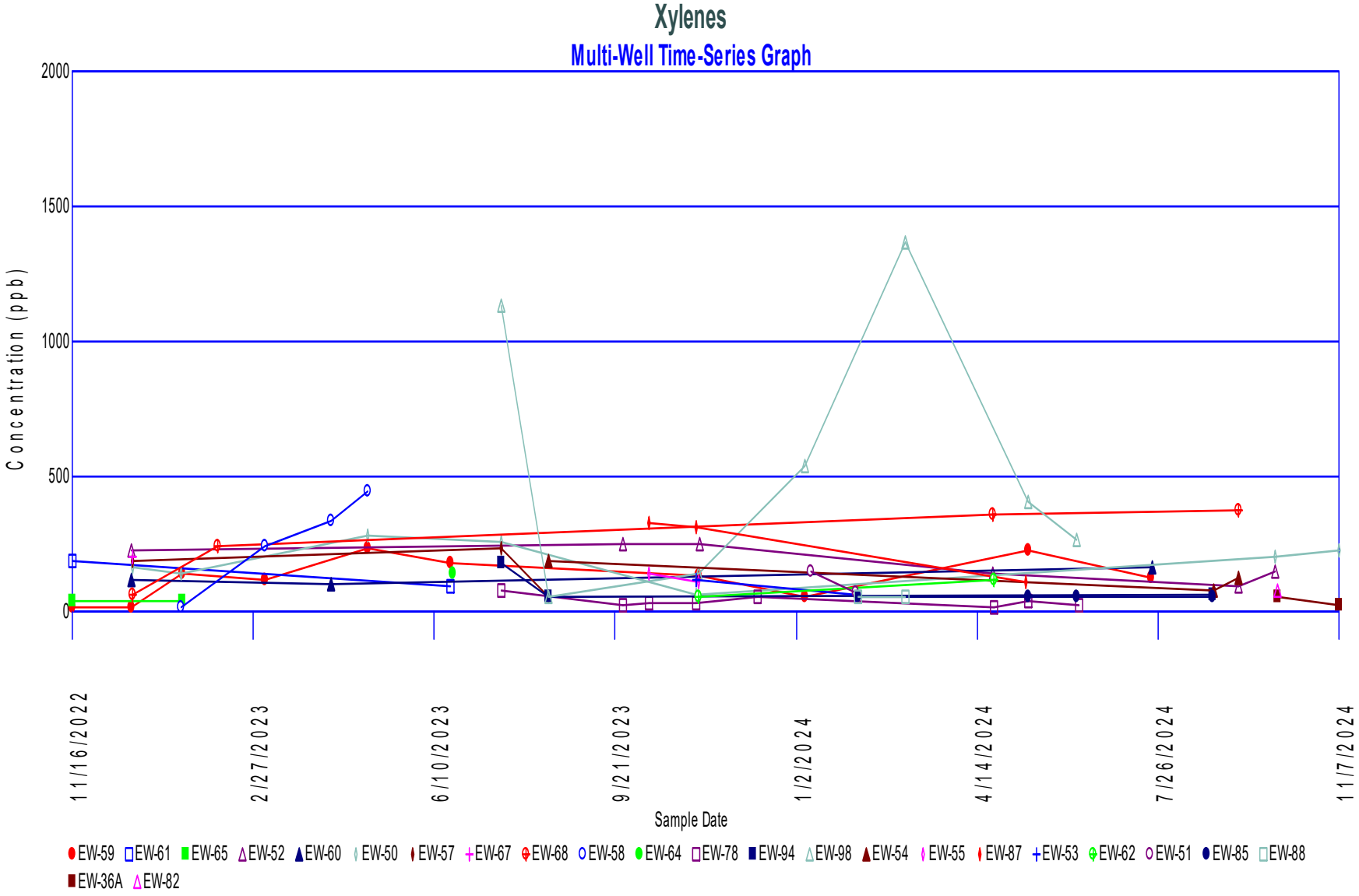

Ethylbenzene
Multi-Well Time-Series Graph
Concentration (ppb)
800
700
600
500
400
300
200
100
0
11/16/2022
2/27/2023
6/10/2023
9/21/2023
1/2/2024
4/14/2024
7/26/2024
11/7/2024
Sample Date
EW-59 EW-61 EW-65 EW-52 EW-60 EW-50 EW-57 EW-67 EW-68 EW-58 EW-64 EW-78 EW-94 EW-98 EW-54 EW-55 EW-87 EW-53 EW-62 EW-51 EW-85 EW-88
EW-36A EW-82

Tetrahydrofuran

Multi-Well Time-Series Graph




Toluene
Multi-Well Time-Series Graph
Concentration (ppb)
1000
900
800
700
600
500
400
300
200
100
0
11/16/2022
2/27/2023
6/10/2023
9/21/2023
1/2/2024
4/14/2024
7/26/2024
11/7/2024
Sample Date
EW-59 EW-61 EW-65 EW-52 EW-60 EW-50 EW-57 EW-67 EW-68 EW-58 EW-64 EW-78 EW-94 EW-98 EW-54 EW-55 EW-87 EW-53 EW-62 EW-51 EW-85 EW-88 EW-36A EW-82


Xylenes
Multi-Well Time-Series Graph
2000
1500
1000
500
0
Concentration (ppb)
11/16/2022
2/27/2023
6/10/2023
9/21/2023
1/2/2024
4/14/2024
7/26/2024
11/7/2024
Sample Date
EW-59 EW-61 EW-65 EW-52 EW-60 EW-50 EW-57 EW-67 EW-68 EW-58 EW-64 EW-78 EW-94 EW-98 EW-54 EW-55 EW-87 EW-53 EW-62 EW-51 EW-85 EW-88
EW-36A EW-82