June 2025 Monthly Compliance Report

Solid Waste Permit No. 588 Bristol Integrated Solid Waste Management Facility 2655 Valley Drive Bristol, VA 24201 (276) 645-7233

SCS ENGINEERS

02218208.05-37 | July 10, 2025

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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 June 2025 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

SCS performed surface emissions monitoring on June 2, 2025; June 11, 2025; June 16, 2025; and June 24, 2025. 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. SCS also performs quarterly SEM at the landfill in accordance with regulatory requirements.

The details and results of the SEM are included in Appendix A. A summary of the outcomes is provided in Table 1.

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Description	June 2, 2025	June 11, 2025	June 16, 2025	June 24, 2025
Number of Points Sampled	168	168	168	168
Number of Points in Serpentine Route	100	100	100	100
Number of Points at Surface Cover Penetrations	68	68	68	68
Number of Exceedances	3	4	3	4
Number of Serpentine Exceedances	0	0	0	0
Number of Pipe Penetration Exceedances	3	4	3	4

In response to the SEM results, the City and the City's operations, monitoring, and maintenance contractor, SCS Field Services O&M (SCS-FS or SCS-FS) took the following actions:

- In response to a pipe penetration exceedance at EW-76, SCS-FS increased the vacuum at EW-76. Monitoring of this well during a follow-up event did not result in an exceedance.
- In response to a pipe penetration exceedance at EW-82, SCS-FS increased the vacuum at EW-82. Monitoring of this well during a follow-up event did not result in an exceedance.
- Pipe penetration exceedances occurred on June 24, 2025 at EW-49 and EW-51. SCS-FS identified low available vacuum at these two locations. SCS-FS plans to conduct further field investigations on the low available vacuum during the week of July 7, 2025.
- In response to pipe penetration exceedances at EW-54, EW-66, EW-67, and EW-95, the City ordered bentonite and wellbore skirts and plans to install those items at these locations.

1.1.2 Monitoring of Leachate Collection Components

SCS Field Services (SCS-FS) visited the Bristol Landfill on June 12, 2025, 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. 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	6/12/2025 9:01:27 AM	53.2	45.0	0.0	1.8	62.5	62.5	-12.51	-12.51	-14.88
Southern Cleanouts Gradient East	LC02	6/12/2025 9:04:48 AM	47.0	49.9	0.0	3.1	63.8	63.7	-12.98	-12.91	-14.68
Southern Cleanouts Leachate Center	LC03	6/12/2025 9:07:37 AM	11.2	11.8	16.6	60.4	65.7	65.9	-14.86	-14.65	-14.73
Southern Cleanouts Witness East	LC04	6/12/2025 9:11:06 AM	2.3	1.2	20.1	76.5	67.5	67.6	-12.17	-12.41	-14.76
Southern Cleanouts Leachate West	LC05	6/12/2025 9:26:55 AM	46.8	46.8	0.1	6.3	63.7	63.7	-13.18	-13.18	-14.81
Southern Cleanouts Gradient Center West	LC06	6/12/2025 9:23:26 AM	10.9	5.1	17.6	66.6	69.5	69.5	-6.43	-6.42	-14.66
Southern Cleanouts Leachate East	LC08	6/12/2025 9:14:34 AM	47.2	50.4	0.1	2.3	64.0	63.9	-12.84	-12.84	-14.78
Southern Cleanouts Gradient Center East	LC09	6/12/2025 9:20:37 AM	43.3	30.4	5.4	20.9	69.5	69.6	-14.87	-14.87	-14.77
Southern Cleanouts Leachate West	LC10	6/12/2025 9:17:59 AM	4.9	5.7	19.0	70.5	69.3	69.5	-14.87	-14.86	-14.59
Northern Cleanouts Leachate East	NC01	6/12/2025 7:52:51 AM	0.0	0.0	21.6	78.4	66.9	67.2	-12.13	-12.15	0.00
Northern Cleanouts Leachate Center	NC02	6/12/2025 7:54:48 AM	0.0	0.0	21.6	78.4	67.4	67.5	-12.10	-12.08	0.00
Northern Cleanouts Leachate West	NC03	6/12/2025 7:56:19 AM	0.0	0.0	21.6	78.4	67.4	67.5	-12.17	-12.13	0.00
Northern Cleanouts Witness East	NC04	6/12/2025 7:58:11 AM	0.1	0.0	21.5	78.4	67.5	67.5	-12.17	-12.17	0.00
Northern Cleanouts Witness Center	NC05	6/12/2025 8:00:32 AM	0.1	0.1	21.3	78.5	67.5	67.6	-12.17	-12.17	0.00

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)
Northern Cleanouts Witness West	NC06	6/12/2025 8:02:05 AM	0.0	0.0	21.5	78.5	67.6	67.6	-12.17	-12.17	0.00
Northern Cleanouts Gradient East	NC07	6/12/2025 8:04:56 AM	0.0	0.0	21.4	78.5	67.7	67.5	-12.22	-12.25	0.00
Northern Cleanouts Gradient Center East	NC08	6/12/2025 8:06:29 AM	0.0	0.0	21.4	78.6	67.6	67.6	-12.17	-12.17	0.00
Northern Cleanouts Gradient Center West	NC09	6/12/2025 8:09:11 AM	0.0	0.0	21.5	78.5	67.7	67.7	-12.17	-12.17	0.00
Northern Cleanouts Gradient West	NC10	6/12/2025 8:10:30 AM	0.0	0.0	21.4	78.6	67.8	67.8	-12.31	-12.24	0.00

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
- Replacement of a section of blocked forcemain
- Temporary relocation of header pipes to facilitate placement of additional soil.

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 wellhead gas temperatures via cellular connection to a database managed by SCS-RMC. Since the initial installation, some sensors have been relocated and additional sensors have been added to the network. There are currently 59 wellhead temperature sensors operating within the wellfield.

The City is providing the minimum, maximum, and average daily temperature recorded by each sensor to VDEQ on a daily basis via email. Minimum, maximum, and average daily temperatures recorded by the remote monitoring system during the month of June 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. Accordingly, this section is a summary of temperature monitoring activities during the monthly monitoring period of June 2025.

1.3.1 Automated Wellhead Temperature Measurements

SCS reviewed the automated hourly temperature measurements from June 2025, and observed the following:

- The average temperature in June was above the regulatory threshold of 145°F at 18 wells.
- EW-89 recorded the highest average temperature was 191.8°F. Temperatures at EW-89 greater than 200°F continued from May into June until June 27, 2025, decreasing to ~170°F. The pump in EW-89 was replaced in May in an effort to increase the removal of excess heat. Pump stroke data in June indicate that a substantial amount of liquid (carrying heat) was removed from the well.

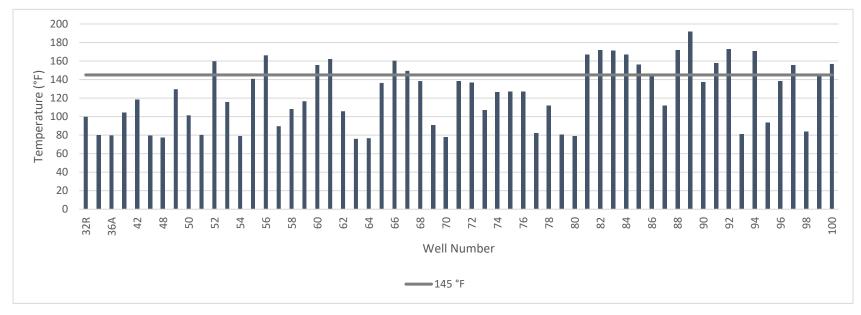


Figure 1. Monthly Average Automated Wellhead Temperatures¹

¹ 145°F is the NESHAP AAAA compliance threshold for well temperature, included here for reference.

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 compares instantaneous hourly automated temperature measurements with temperatures measured at each wellhead using a handheld sensor during monthly compliance monitoring. These comparisons are shown in Figure 2, with the $\pm 8\,^{\circ}$ F deviation thresholds as prescribed in the VDEQ approval.

Each well demonstrated compliant readings within the $\pm 8\,^{\circ}$ F deviation lines during this reporting period.

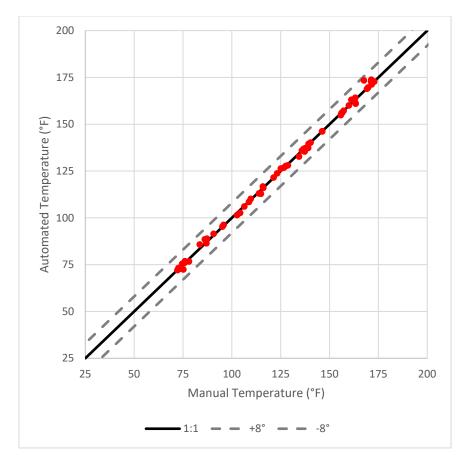


Figure 2. Automated vs. Manual Temperature Measurements

1.3.3 Monthly Regulatory Wellhead Temperature Measurements

Routine monthly temperature monitoring was conducted on June 3, 2025 to comply with 40 CFR 60.36f(a)(5). Table 3 provides the status of exceedances recorded during this monitoring period.

Table 3. May Temperature Exceedance Summary

Well ID	Initial Exceedance Date	Compliant Reading	Most Recent Reading	Duration of Exceedance	Status as of 7/1/2025
EW-56	5/29/25	N/A	6/30/25 171.4°F	34 days	Ongoing, within 60-day timeline
EW-60	6/16/25	N/A	6/30/25 146.8°F	15 days	Resolved within 15- day timeline
EW-66	6/4/25	6/5/25 163.2°F	6/30/25 164.4°F	2 days	Resolved within 15- day timeline
EW-77	6/5/25	6/5/25 144.6°F	6/30/25 99.3°F	1 day	Resolved within 15- day timeline
EW-89	6/3/25	6/30/25 141.4°F	6/30/25 141.4°F	28 days	Resolved within 60- day timeline
EW-92	6/3/25	N/A	6/30/25 179.7°F	29 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 laboratory analysis of carbon monoxide (CO) and hydrogen (H₂) content. As of July 1, 2025, the City has received lab results for sampling on May 21, 2025, May 29, 2025, June 5, 2025, June 12, and June 18, 2025 to fulfill the requirement in 40 CFR 63.1961(a)(5). The lab data are summarized in Table 4.

Table 4. LFG Wellhead Sampling Summary

Sample Da	ite	5/21/25	5/29/25	6/5/25	6/12/25	6/18/25
EW EC	CO (ppmv)	400	381	421	463	399
EW-56	H2 (Vol. %)	16.2	15.9	15.8	14.7	14.8
EW 60	CO (ppmv)					500
EW-60	H2 (Vol. %)					13.5
EW-77	CO (ppmv)		432			
EVV-//	H2 (Vol. %)		0.19			
FW 70	CO (ppmv)	ND	128			
EW-79	H2 (Vol. %)	2.78	7.01			
EW 80	CO (ppmv)			1210	1160	
EW-89	H2 (Vol. %)			24.8	12.8	
EW 00	CO (ppmv)			1270	1260	1240
EW-92	H2 (Vol. %)			31.4	31.9	30.5

The presence of hydrogen in the majority of samples collected during this monitoring period indicates that combustion reactions are unlikely in most cases. As shown in Figure 3, the carbon monoxide and hydrogen data collected during this period appear to be generally consistent with the data collected previously in 2024 and 2025, except for EW-77. EW-77 has been offline since May

due to concern for heightened risk of a subsurface reaction in the area. SCS-FS tested applying vacuum at the wellhead in June, but the high temperature recorded upon opening the valve prompted technicians to keep the well offline for the time being. Hydrogen levels in samples taken from EW-77 were low in comparison to samples taken from other wells.

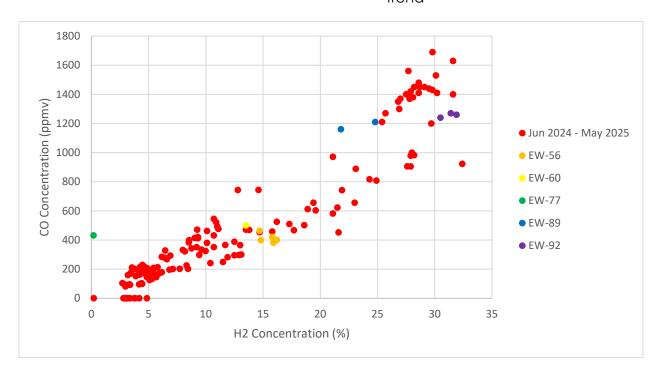


Figure 3. CO vs H₂ Concentration from gas wells in June 2025 with historical trend

2.0 SIDEWALL ODOR MITIGATION

On the City's behalf, SCS designed and constructed a system to control fugitive emissions emanating from the quarry sidewalls.

2.1 PERIMETER GAS COLLECTION SYSTEM

Refer to the April 2023 Monthly Compliance Report for the SWP No. 588 Landfill, for information about the perimeter gas extraction wells.

2.2 SIDEWALL ODOR MITIGATION SYSTEM

Refer to the October 2022 Monthly Compliance Report for the SWP No. 588 Landfill, for information about the design of the sidewall odor mitigation system.

2.3 PILOT SYSTEM CONSTRUCTION

Refer to the February 2023 Monthly Compliance Report for the SWP No. 588 Landfill, for information about the design of the construction of the pilot sidewall odor mitigation system.

2.4 FULL SYSTEM CONSTRUCTION

Operation of the sidewall odor mitigation system is monitored on a monthly basis. SCS-FS collected monitoring data at each wellhead under vacuum in May. A summary of system averages during the month is shown in Table 5.

Table 5. Average SOMS Gas Composition

Record Dates	Average CH4 [%]	Average CO ₂ [%]	Average O ₂ [%]	Average Bal Gas [%]
6/9/2025	4.8	7.7	17.0	70.6
6/24/2025	4.9	7.7	16.7	70.7

The sidewall system average gas composition indicates lower methane content than other components in the LFGCCS. These gas composition measurements indicate that the SOMS is collecting a mixture of LFG escaping the sidewall and ambient air. Adjustments to vacuum at each wellhead are made on a regular basis to address changes in sidewall emissions and facilitate placement of additional soil.

3.0 WASTE TEMPERATURE MONITORING

SCS designed a 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 SUMMARY OF WASTE TEMPERATURE MONITORING

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.

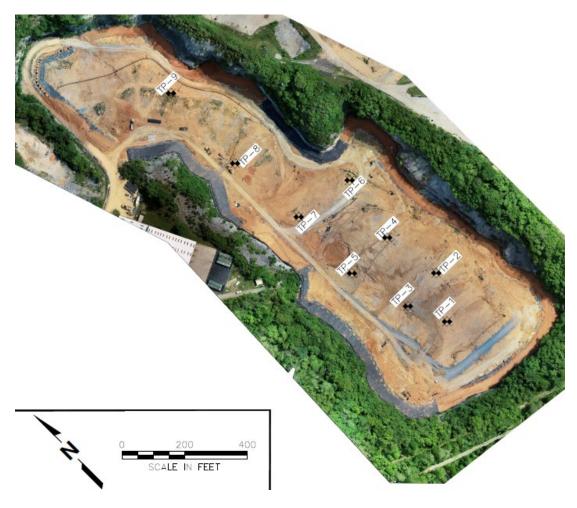


Figure 4. Temperature Monitoring Probe Locations

SCS began collecting temperature data daily on February 15, 2023.

Average daily temperatures recorded by the sensors for the month of June 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 June are shown in Appendix B. The average temperatures recorded for March 2023, March 2024, March 2025, May 2025, and June 2025 are shown in Figures 5 through 11 on the following pages.

Overall, these data indicate that temperatures within the landfill are generally stable and are typical of those observed at elevated temperature landfills (ETLFs). The temperatures recorded are substantially lower than those associated with landfill fires or other combustion processes, which can exceed 1000°F, which is further evidence that the elevated temperatures are due to sources other than combustion.

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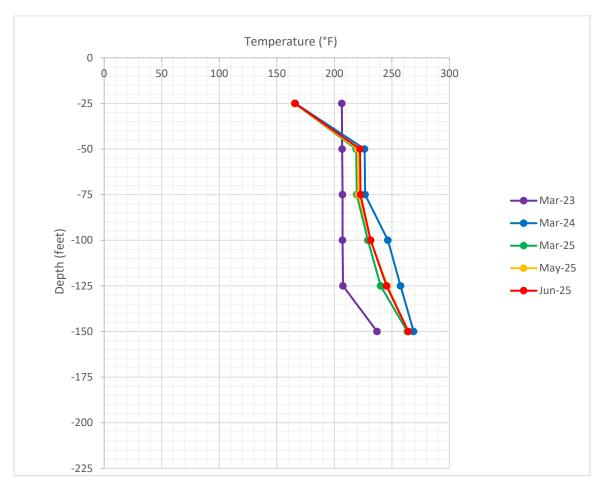
3.1.1 Operational Challenges

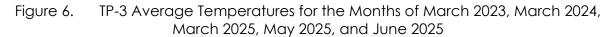
Multiple sensors in TP-2 and TP-3 started to fault in late 2024/early 2025. SCS coordinated with the City in March to pull the string of thermocouples from TP-2 and TP-3 but were unable to remove the strings in either probe due to suspected pinching of the casings. The City is planning to replace the loss of TP-2 and TP-3 by utilizing nearby well casings as housing for the thermocouples. EW-91 and EW-92 have been jetted to remove solids that would impede the installation of temperature probes, however the wells' casing was unable to be cleared past 140 feet below surface. Because VDEQ has asked that the replacement probes achieve at least 150 feet in depth, the City is working with another contractor with more powerful equipment and a heat tolerant video camera to investigate further. This work is expected to be completed in July/August.

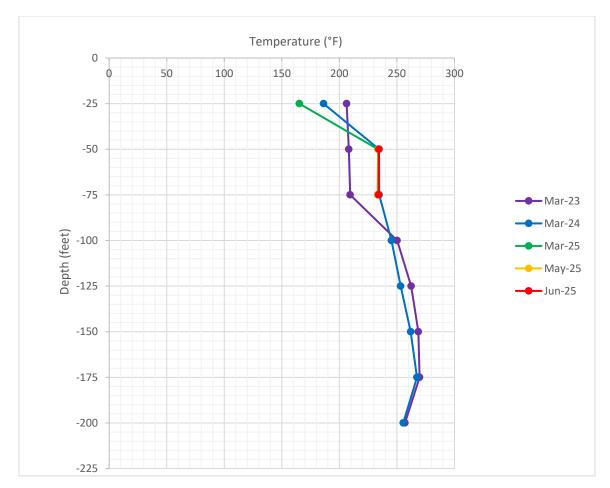
3.1.2 Temperature Profiles

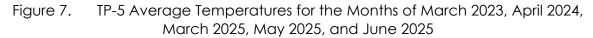
During the month of June, SCS has observed variations in measurements of temperatures reported by TP-6 and intends to perform additional analysis and potentially troubleshooting to determine the cause of these variations. The data may be revised upon further review.

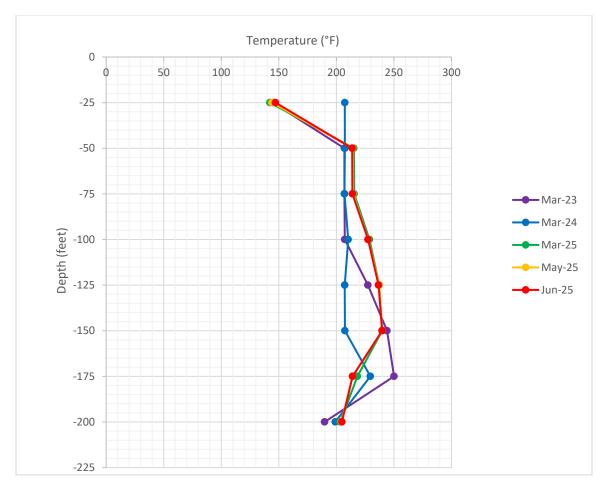


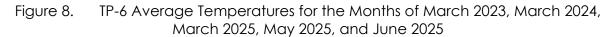


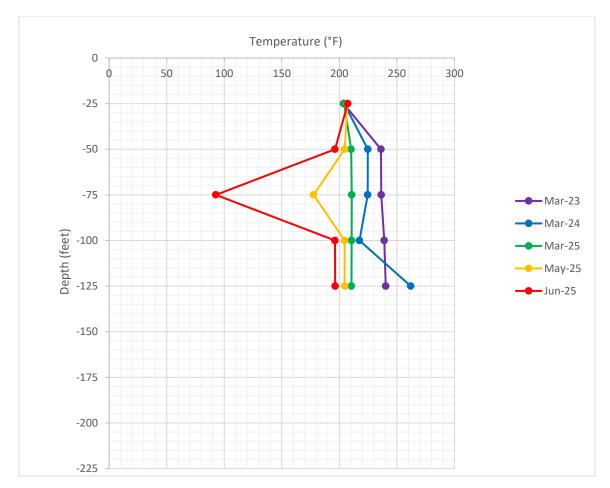


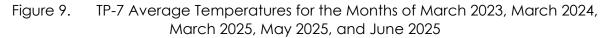


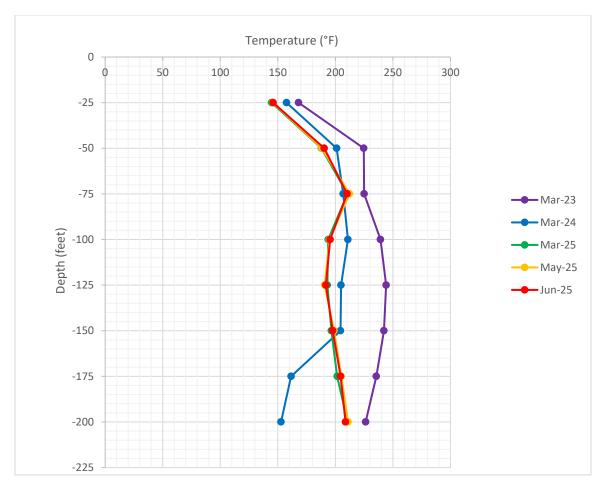


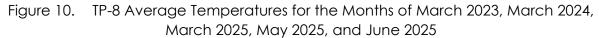


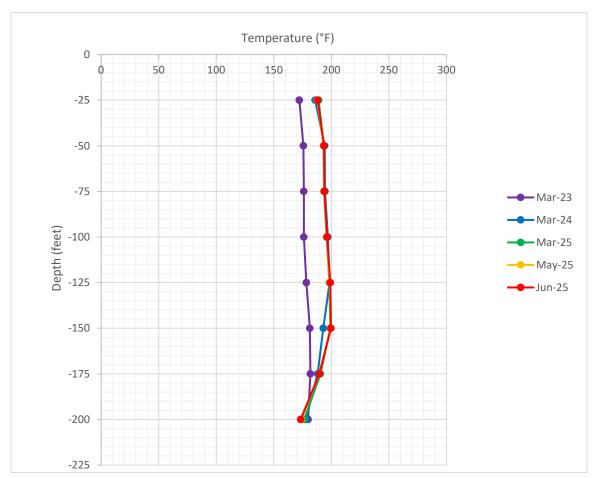


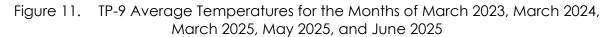


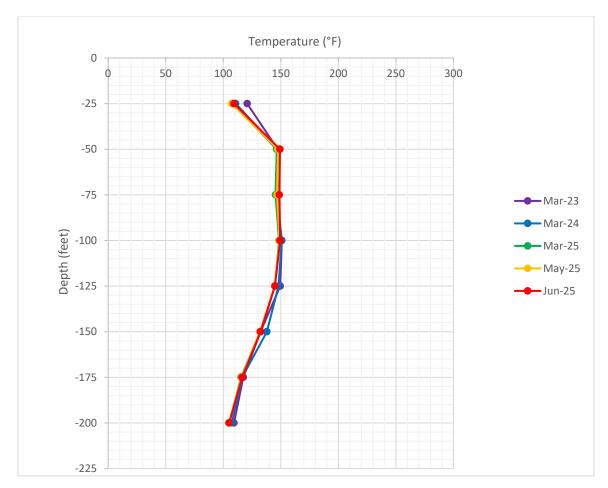












4.0 LEACHATE EXTRACTION AND MONITORING

The City is continuously taking steps to maintain and 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. Refer to Appendix G for narrative sections without updates.

4.1 DEWATERING PUMP OPERATIONS AND MAINTENANCE

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.

Figure 12 illustrates landfill gas liquids removal over the past year. During September, November, December 2024 through April 2025, and June 2025, the liquids data recorded by the flowmeter were replaced with estimates from stroke counter data (colored in blue in Figure 12). These replacements were due to either the use of stormwater liquids for cleaning the dewatering forcemain or air intrusion in the dewatering forcemain, which caused the flowmeter readings to be nonrepresentative or erroneous.

SCS and the City continue to address the air intrusion into liquids force mains, which interferes with the LFG liquids flowmeter, by installing additional air release valves and cleanouts to decrease interruptions to its function. The installation is planned to be completed in September under a GCCS expansion contract. SCS will continue to use stroke count estimates to track total liquids removal in the meantime. Stroke counts indicate approximately 127,000 gallons of liquid were pumped out of the landfill in June.

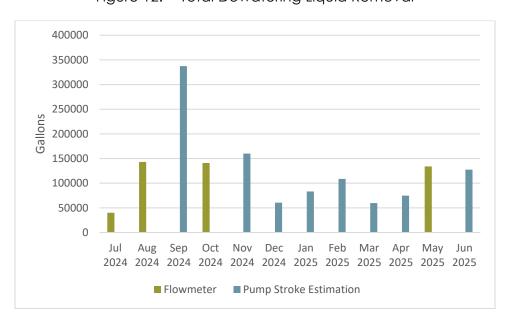


Figure 12. Total Dewatering Liquid Removal

4.1.2 Status of LFG Liquids Pumps

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.

Daily pump checks and maintenance of spare pumps will continue indefinitely, along with pump replacements as needed. The City, along with SCS-FS, have found that the best pumps for the landfill's current conditions are QED pumps designed for high temperature operation.

Estimated volumes of liquids removed at each pump are presented in **Table G-1**, **Appendix G**. SCS has prepared the summary below to outline the operating conditions and specific challenges associated with each pump.

Pump Maintenance Activities

- The pumps in EW-50, EW-59, EW-60, EW-65, EW-66, EW-78, EW-88, and EW-94 were swapped in June.
- The pumps in EW-59, EW-61, and EW-98 were swapped in June, and the tri-tubing was replaced.
- The flex hose and clamps were replaced at EW-86 in June.
- The discharge line was replaced at EW-89 in June.

Wells with Inactive Pumps

- The pumps in EW-33B, EW-76, and EW-87 are stuck in the well casing and have been disconnected. SCS-FS is coordinating with the City to attempt to pull the pumps with a piece of heavy equipment.
 - Action at EW-33B was postponed in June for safety reasons.
- The casings of EW-36A, EW-49, and EW-83 extend too high above the existing ground level for a pump to be safely accessed. These are stainless steel wells that cannot be lowered through conventional means. SCS-FS and the City are coordinating placement of additional soil around the wells to provide safe access.
 - Soil was added around EW-36A in April, and SCS-FS intends to replace the Blackhawk pump with a QED.
- Pumps in EW-51, EW-57, EW-90, and EW-100 are permanently stuck, and not able to function.
- The pumps in EW-52, EW-53, EW-55, EW-67, and EW-93 are unable to be operated due to clogging and/or over pressurization in forcemain line. SCS-FS and the City have procured a contractor to clean the forcemain.
- The pump in EW-62 is offline due to a damaged airline that needs to be replaced.
- EW-82 has a Blackwhawk pump that is not functional, planned to be replaced with a stainless-steel QED pump.

In addition to the challenges associated with the individual pumps, SCS-FS has generally observed high forcemain pressures and significant build-up of solids within the forcemain. An example of

solids build-up within the forcemain is shown in Figure 13. This results in SCS-FS dedicating substantial amounts of time to relieving air pressure on the system. The City issued a solicitation for bids for installation of additional cleanouts and air release valves in the wellfield to address the issue on February 18, 2025. This work was awarded to the Harnden Group, LLC on May 27, 2025.



Figure 13. Solids in Landfill Gas Liquids Forcemain

4.2 SAMPLING AND ANALYSIS PLAN

4.2.1 Sample Collection

On June 24, 2025, SCS collected a leachate sample from a Dual Phase LFG extraction well (EW-78). Field measurements for dissolved oxygen, oxidation-reduction potential, pH, specific conductance, temperature, and turbidity were taken and recorded at the time of sample collection. The associated field logs are included in **Appendix F**. In June 2025, SCS field staff were not able to collect samples from the wells summarized in **Table 6**. Additional details about the condition of these wells and planned maintenance activities are included in Section 4.1.2.

Table 6. Summary Wells Unable to be Sampled for Leachate

	olo le de dampiea lei Ledenare
Wells With Pumps	Wells Without Pumps
 Pump was not running at the time of monitoring for the following wells: EW-50, EW-59, EW-60, EW-62, EW-61, EW-65, EW-66, EW-68, EW-85, EW-88, EW- 93, and EW-98. 	 There was no pump at the time of the monitoring for the following wells: EW-54, EW-56, EW-63, EW-69, EW-70, EW-73, EW-77, EW-79, EW-80, EW-84, EW-86, EW-91, EW-92, EW-95, EW-97, and EW-99.
 Pump was disconnected or off at the time of monitoring for EW-53, EW-55, EW- 64, EW-67, EW-81, EW-82, EW-83, and EW- 96. 	There is no pump and the well appeared dry at the time of monitoring for EW-56.
 Pump was disconnected or off at the time of monitoring and well was too tall to safely measure the liquid level for EW-49. 	There was no pump at the time of the monitoring and well was too tall to safely measure the liquid level for EW-92 and EW-97. There was no pump at the time of the monitoring and well was too tall to safely measure the liquid level for EW-92 and EW-97.
 Pump was not running and the liquid depth was not measured at the time of monitoring for EW-89 and EW-94. 	There is no pump and the liquid depth was not measured at the time of monitoring for EW-33B and EW-76.
Pump was disconnected or off at the time of monitoring and the liquid depth	 There was no pump at the time of the monitoring and liquid level could not be safely measured for EW-95.
was not measured at the time of monitoring for EW-36A, EW-52, and EW-87.	EW-77 and EW-79 had the vacuums shut down and were unable to be approached during the time of the
EW-64 had the vacuum shut down and	monitoring.
was unable to be approached during the time of the monitoring.	 EW-63 alarmed the 4 gas meters when approached, monitoring was unable to be completed.
EW-50 and EW-55 alarmed the 4 gas	12.5.5.5
meters when approached, monitoring	

The samples were delivered to Enthalpy Analytical (Enthalpy) in Richmond, Virginia for analysis. The samples were analyzed for the parameters utilizing the analytical methods described in the Dual Phase Landfill Gas Extraction Well Leachate Monitoring Plan, December 1, 2022, prepared by SCS Engineers. At the time of preparation of this report, laboratory analytical results were not available for the June 2025 monitoring event. The June 2025 analytical results will be provided in the July 2025 Monthly Compliance Report.

4.2.2 Quality Assurance and Quality Control

was unable to be completed.

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 QC blank detects were identified for the May 2025 monitoring event. The laboratory analysis report for the May 2025 monitoring event trip blank is included in **Appendix F**. The May 2025 monitoring event laboratory QA/QC report, including the method blank results, is included in the COA in **Appendix F**.

4.2.3 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) guidance². 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 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 May 2025 monitoring event as there were no QC blank detections. The May 2025 detections flagged with a "J" qualifier are shown on **Table 7**.

4.2.4 Laboratory Analytical Results

The analytical results for the May 2025 leachate samples collected from extraction wells EW-88 and EW-89 are summarized in **Table 7**. The associated COA is included in **Appendix F**. Parameter results from May 2025 and previous monitoring events (November 2022 – May 2025) 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-88	EW-89		
Parameter	_	2025 ntration	LOD	LOQ
Ammonia	2030	2360	146	200
BOD	42196.44	42316.44	0.2	2
Chemical Oxygen Demand	60700	67900	6300	10000
Nitrate	4210	4700	500	500
Nitrite as N	ND	ND	1	5
Phenolics, Total Recoverable	56	67.4	3	5
Total Kieldahl Nitragan	2580		27.7	151
Total Kjeldahl Nitrogen		2800	55.3	301
SEMI-VOLATILE ORGANIC COMPOUND (ug/L)			
Anthracene	ND	ND	400	800
TOTAL METALS (mg/L)				
Arsenic	0.15	0.2	0.0025	0.005
Barium	2.1	1.76	0.005	0.025

² 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.

Table 7. Monthly LFG-EW Leachate Monitoring Event Summary

Well ID	EW-88	EW-89						
Parameter	May	LOD	LOQ					
raidificier	Conce							
Cadmium	ND	ND	0.0005	0.005				
Chromium	0.371	0.342	0.002	0.005				
Copper	ND	0.0123	0.0015	0.005				
Lead	0.016	0.049	0.005	0.005				
Mercury	ND	0.0128	0.001	0.001				
Nickel	0.07897	0.03695	0.005	0.005				
Selenium	ND	ND	0.00425	0.005				
Silver	ND	ND	0.0003	0.005				
Zinc	1.1	1.55	0.0125	0.025				
VOLATILE FATTY ACIDS (mg/L)								
Acetic Acid	6640	6530	71.4	500				
Butyric Acid	2220	2160	70.3	500				
Formic acid	2940	2840	64.5	500				
Hexanoic Acid	534	459	30.2	250				
i-Hexanoic Acid	ND	ND	25.4	250				
i-Pentanoic Acid	288	282	51	250				
Lactic Acid	963	783	55.7	500				
Pentanoic Acid	331	355	28	250				
Propionic Acid	2570	2560	57.3	500				
Pyruvic Acid	132 J	124 J	44.4	250				

Table 7. Monthly LFG-EW Leachate Monitoring Event Summary

Well ID	EW-88	EW-89					
Parameter	May 2025 Concentration		LOD	LOQ			
VOLATILE ORGANIC COMPOUNDS (ug/L)							
2-Butanone	12500		150	500			
z-butanone		16700	1500	5000			
Acetone	57300	58600	3500	5000			
Benzene	255	222	20	50			
Ethylbenzene	29 J	38 J	20	50			
Tetrahydrofuran	4080	5700	500	500			
Toluene	ND	ND	25	50			
Xylenes	ND	ND	50	150			

^{--- =} not available

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. Refer to Appendix G for narrative sections without updates.

5.1 SETTLEMENT MONITORING AND MANAGEMENT PLAN

Information about the Settlement Monitoring and Management Plan for the SWP No. 588 Landfill and a copy of the plan can be found in the November 2022 Compliance Report for the SWP No. 588 Landfill.

5.2 MONTHLY SURVEYS

5.2.1 Topographic Data Collection

SCS collected topographic data of the Solid Waste Permit No. 588 Landfill using photogrammetric methods via an unmanned aerial vehicle (UAV or drone) on June 12, 2025. Aerial imagery collected

on June 12, 2025, is depicted in Figure 14. The topographic data collected is shown on Sheet 4 in Appendix E.



Figure 14. Aerial Photo of the SWP No. 588 Landfill

The topography within the landfill footprint was compared to topographic data collected by SCS using photogrammetric methods on May 15, 2025. A drawing depicting the May 15, 2025 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 1,000 cubic yards across the site. Fill may have been placed and spread on the site to address differential settlement, surface emissions, and to provide access to LFG collection vertical wells. Additionally, a substantial increase in spring vegetation at the site can influence the topographic data recorded by the drone, which contributes to the fill volume. During that same time period, calculations indicate a "cut" volume of approximately 8,000 cubic yards. Cut volumes are typically attributed to settlement. This resulted in a net volume decrease of approximately 6,900 cubic yards.

A visual depiction of settlement and filling at the landfill during this time is depicted in Figure 15. 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.

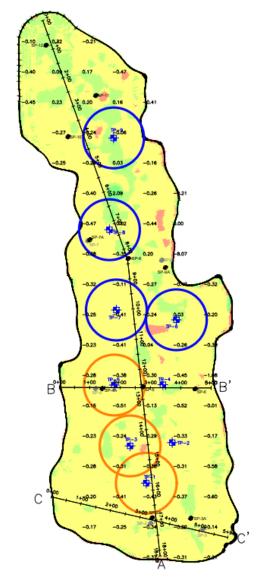


Figure 15. 1-Month Elevation Change Map

The locations of in-waste temperature monitoring probes are also shown on Figure 15, Figure 16, and Figure 17. 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. Probes with no circle around them represent no temperature readings for this month due to sensor malfunctions. There were no probes measuring average temperatures greater than 250°F and less than 300°F during the month of May 2025.

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 0.2 feet.

SCS also compared the topographic data collected in June to the topographic data collected on March 11, 2025. 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 6,800 cubic yards. During that same time period, calculations indicate approximately 3,300 cubic yards of fill were placed on the landfill, for a net decrease in waste volume of 3,500 cubic yards.

A visual depiction of settlement and filling at the landfill during this time is depicted in Figure 16. 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.

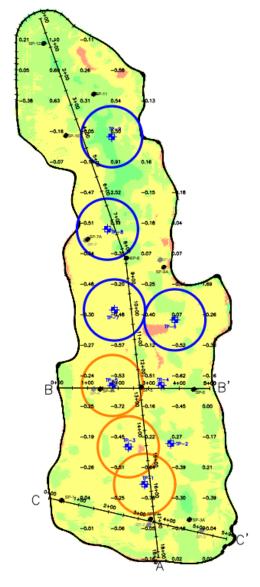


Figure 16. 3-Month Elevation Change Map

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 June 2025 to the drone topographic data collected on June 25, 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 32,800 cubic yards. During that same time period, approximately 2,900 cubic yards of construction-related fill were placed on the landfill. This fill was primarily soil placed as part of ongoing maintenance (i.e. filling to compensate for settlement). This resulted in a net volume decrease of approximately 29,800 cubic yards.

A visual depiction of settlement and filling at the landfill during this time is depicted in Figure 17. 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.

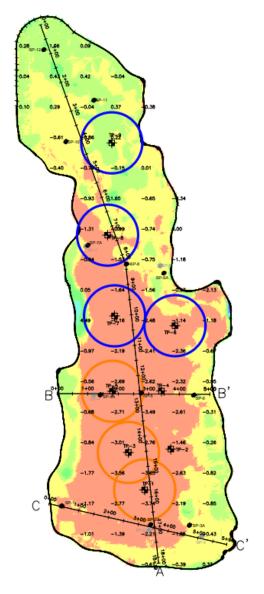


Figure 17. 1-Year Elevation Change Map

The largest settlement occurred primarily at the southern end of the landfill where the waste settled by 3 feet or more in some areas. Significant settlements are typical of elevated temperature landfill conditions. The landfill perimeter exhibited an increase in elevation, likely due to soil placement associated with 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 1.0 feet.

SCS will collect topographic data covering the landfill surface again in July using photogrammetric methods via UAV. This data will be compared to the data collected in July 2024, April 2025, and June 2025.

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. 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. The settlement plate locations are depicted in Figure 18 and on Sheet 1 in Appendix E. The construction and installation of the settlement plates generally conforms to the design outline in the Settlement Monitoring and Management Plan.

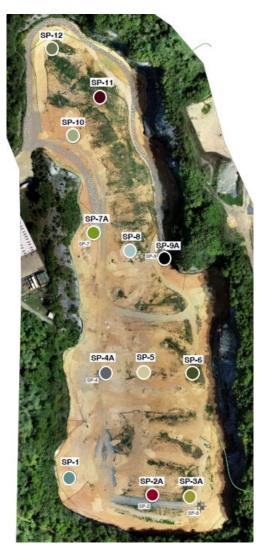


Figure 18. Settlement Plate Locations

The locations of the settlement plates were initially surveyed on November 14, 2022, and have been surveyed monthly thereafter. The survey coordinates and elevation changes of the settlement plates are shown in Table 8.

Table 8. Elevation and Strain Data at Settlement Plate Locations

Settlement Plate	Northing	Easting	Elevation on June 27, 2025 (ft)	Elevation Change Since May 30, 2025 (ft)	Strain ³ Since May 30, 2024	Elevation Change Since Installation (ft)
SP-1	3,397,887.6	10,412,080.9	1,828.7	-0.05	-0.1%	-5.7
SP-2A	3,397,823.2	10,412,370.6	1,792.8	-0.20	-0.1%	-3.0
SP-3A	3,397,820.2	10,412,498.2	1,779.1	-0.02	0.0%	-1.1
SP-4A	3,398,247.0	10,412,207.3	1,802.5	-0.14	-0.1%	-2.6
SP-5	3,398,255.8	10,412,339.7	1,788.2	-0.14	-0.1%	-12.6
SP-6	3,398,248.8	10,412,509.8	1,772.9	-0.01	0.0%	-4.7
SP-7A	3,398,731.6	10,412,158.2	1,822.2	-0.07	-0.1%	-1.3
SP-8	3,398,678.1	10,412,290.9	1,799.7	-0.12	0.0%	-7.7
SP-9A	3,398,644.2	10,412,416.1	1,788.2	0.08	0.1%	-0.6
SP-10 ⁴	3,399,080.1	10,412,093.3	1,836.8	-0.06	-0.0%	-3.4
SP-11	3,399,216.3	10,412,183.9	1,814.4	-0.03	0.0%	-1.9
SP-12	3,399,381.7	10,412,019.7	1,809.6	0.01	0.0%	-1.0

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 Plates 4A, 5 and 8 demonstrated larger strains due to settlement than at other locations in the past month. Settlement Plates 1, 2A, and 4A are in the middle of the landfill. This area contains gas wells and temperature probes exhibiting higher temperatures. These higher strain values are typical of elevated temperature landfill conditions.

Figure 19 shows the changes in elevation of select settlement plates over time. For the purposes of recording data in this figure, times are reported 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.

⁴ Settlement data for SP-10 is based off May Reading. The June reading is excluded because the settlement plate was disturbed.

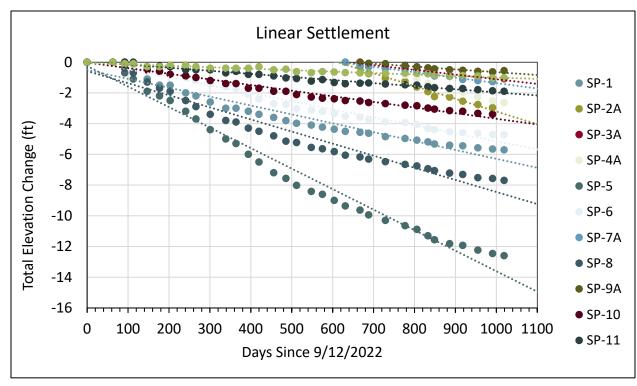


Figure 19. Elevation Change of Select Settlement Plates Over Time

The settlement plates will be surveyed again during July 2025. 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 describe the steps taken by the City and future plans related to cover.

6.1 INTERMEDIATE COVER INSTALLATION

A summary of the intermediate cover installation can be found in the October 2022 Monthly Compliance Report for the SWP No. 588 Landfill.

6.2 EVOH COVER SYSTEM DESIGN

An amendment to the Consent Decree was issued on March 21, 2024 which requires an ethylene vinyl alcohol (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 submitted on April 10, 2025. The next assessment will be submitted on or before July 10, 2025.

6.3 EVOH COVER SYSTEM PROCUREMENT

Information about the procurement of materials for the EVOH cover system can be found in the January 2023 Monthly Compliance Report for the SWP No. 588 Landfill.

6.4 EVOH COVER SYSTEM INSTALLATION

As outlined in the amendment to the Consent Decree dated March 21, 2024, the deadline for EVOH Cover System installation has been extended. The City is conducting the assessments described in Section 6.2 to determine the appropriate time for installation.

7.0 STORMWATER MANAGEMENT

Information about the most recent stormwater management plans, basin location, plan implementation, long-term control, and stormwater monitoring for the SWP No. 588 Landfill can be found in the December 2023 Monthly Compliance Report for the SWP No. 588 Landfill.

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

Refer to the December 2022 and March 2023 Monthly Compliance Reports for the SWP No. 588 Landfill for additional information about the development and implementation of the Monitoring, Maintenance, and Repair Plan.

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

The City's consultant leading community outreach, McGuireWoods Consulting, prepared a summary of the actions taken as part of their community outreach efforts. For the month of June 2025, those actions include:

- Ongoing basis: Four (4) posts on each the BristalVALandfill.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 at the Quarry Landfill included cleaning and repairing/replacing worn parts to the gas extraction system well heads; removing condensation from the lateral lines

in the gas extraction system; swapping out three pumps in the leachate removal system; replacing the force main line for the stormwater pump that removes surface water during rainfall; replacing several gas well pumps; replacing a leachate pump in the dual phase extraction well; performing maintenance on spare leachate pumps; reinstalling the leachate pumps that received maintenance; replacing gas extraction system well-head hoses and fittings; and moving tons of soil in the continuing effort to address settlement at the landfill.

- 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 from May 15, 2023, and running through June 8, 2025. Additional reports will be posted as the they are received.
- 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

Quarterly SEM

SCS performed the Second Quarter 2025 surface emissions monitoring event on May 27, 2025. The results of the Quarterly SEM were summarized in the May 2025 Compliance Report for the SWP Np. 588 Landfill. A report outlining the results and exceedance locations will be included in the Semi-Annual report to be submitted to VDEO prior to September 1, 2025.

The Third Quarter 2025 SEM Event is scheduled to be completed by September 30, 2025.

Weekly SEM

In addition to the standard regulatory quarterly surface emissions monitoring, the monitoring in June 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 SEM route included the 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 applicable surface cover penetrations within the waste footprint.

The Facility submitted letters to VDEQ describing the results of the June monitoring events on June 11, 2025; June 18, 2025; June 25, 2025; and July 2, 2025. Copies of those letters are included in this Appendix.

The Facility continues to take proactive steps to limit fugitive surface emissions including dewatering activities, additional cover soil placement, and LFG system maintenance and tuning to increase gas extraction.

SCS ENGINEERS

June 11, 2025 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 – June 2, 2025

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 Management Facility located in Bristol, Virginia on June 2, 2025. 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 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	168
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	68
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 retests

On June 5, 2025, the City submitted an Alternate Remedy Request for corrective actions for exceedances at four specific locations. Details regarding the specific proposed corrective actions 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	6/2/25 Event	6/2/25 Event Result	Comments
EW-54	2/24/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-66	2/24/25	N/A	Passed	Alternate Remedy Requested – undergoing corrective actions
EW-67	4/18/25	N/A	Passed	Alternate Remedy Requested – undergoing corrective actions
EW-95	4/18/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-82	5/19/25	N/A	Passed	Requires 1-Month Retest

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

Sincerely,

Wylie R Hicklin Staff Professional **SCS** Engineers

Wylin R Hicklin

Lucas S. Nachman Senior Project Professional

Lucus D. Nachman

SCS Engineers

LSN/WRH

Randall Eads, City of Bristol cc:

> Jonathan Hayes, City of Bristol Laura Socia, City of Bristol Susan "Tracey" Blalock, VDEQ

Encl. Surface Emissions Monitoring Results

Bristol SEM Route Drawing

	Methane		GPS Co	ordinates	
ID#	Concentration	Compliance	Lat.	Long.	Comments
1	0.2 PPM	OK			Start Serpentine Route
2	1.5 PPM	OK			
3	0.1 PPM	OK			
4	0.1 PPM	OK			
5	0.0 PPM	OK			
6	0.0 PPM	OK			
7	0.0 PPM	OK			
8	0.0 PPM	OK			
9	0.0 PPM	OK			
10	0.1 PPM	OK			
11	0.7 PPM	OK			
12	0.0 PPM	OK			
13	0.0 PPM	OK			
14	0.1 PPM	OK			
15	0.1 PPM	OK			
16	0.0 PPM	OK			
1 <i>7</i>	0.1 PPM	OK			
18	0.1 PPM	OK			
19	0.1 PPM	OK			
20	0.1 PPM	OK			
21	0.1 PPM	OK			
22	1.7 PPM	OK			
23	0.5 PPM	OK			
24	0.6 PPM	OK			
25	0.9 PPM	OK			
26	0.2 PPM	OK			
27	0.1 PPM	OK			
28	0.2 PPM	OK			
29	0.1 PPM	OK			
30	1.8 PPM	OK			
31	2.9 PPM	OK			
32	18.1 PPM	OK			
33	175.0 PPM	OK			
34	312.0 PPM	OK			
35	1 <i>47</i> .0 PPM	OK			
36	0.7 PPM	OK			
37	16.8 PPM	OK			
38	15.3 PPM	OK			
39	8.4 PPM	OK			
40	0.1 PPM	OK			
41	0.0 PPM	OK			
42	0.0 PPM	OK			
43	4.1 PPM	OK			
44	0.2 PPM	OK			
45	0.0 PPM	OK			
46	0.1 PPM	OK			
47	0.1 PPM	OK			

		Methane		GPS Coordinates			
IC) #	Concentration	Compliance	Lat.	Long.	Comments	
	48	0.2 PPM	OK				
4	49	0.0 PPM	OK				
į	50	0.0 PPM	OK				
Į	51	0.2 PPM	OK				
	52	0.0 PPM	OK				
Į	53	0.0 PPM	OK				
Į	54	0.0 PPM	OK				
	55	0.2 PPM	OK				
	56	0.0 PPM	OK				
	57	0.1 PPM	OK				
	58	0.1 PPM	OK				
	59	0.1 PPM	OK				
	50	0.0 PPM	OK				
	51	0.0 PPM	OK				
	52	0.3 PPM	OK				
	63	0.0 PPM	OK				
	54	0.0 PPM	OK				
	55	0.0 PPM	OK				
	56 56	0.3 PPM	OK				
	57 57	0.1 PPM	OK				
	58	0.0 PPM	OK				
	59 59	3.1 PPM	OK				
	70	0.8 PPM	OK				
	71	5.6 PPM	OK				
	72	1.6 PPM	OK OK				
	73	1.1 PPM	OK OK				
	74	0.0 PPM	OK OK				
	75	0.2 PPM	OK OK				
	76	0.1 PPM	OK OK				
	77	0.2 PPM	OK OK				
	78	4.9 PPM	OK OK				
	79	11.2 PPM	OK OK				
	30		OK OK				
	30 31	0.5 PPM	OK OK				
	32	1.1 PPM 1.2 PPM	OK OK				
	33	0.4 PPM	OK OK				
	34 25	0.9 PPM	OK OK				
	35 24	0.3 PPM	OK OK				
	36 27	0.0 PPM	OK OK				
	37 . o	1.5 PPM	OK OK				
	38 20	0.4 PPM	OK OK				
	39	0.0 PPM	OK OK				
	90	0.0 PPM	OK				
	91	0.0 PPM	OK				
	92	0.0 PPM	OK				
	93	0.0 PPM	OK				
9	94	0.1 PPM	OK				

	Methane		GPS Co	ordinates	
ID#	Concentration	Compliance	Lat.	Long.	Comments
95	0.0 PPM	OK			
96	0.0 PPM	OK			
97	0.1 PPM	OK			
98	0.1 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	0.1 PPM	OK			EW-32R
104	0.0 PPM	OK			EW-72
105	0.1 PPM	OK			EW-62
106	0.1 PPM	OK			EW-33B
107	2.2 PPM	OK			EW-63
108	2.0 PPM	OK			EW-77
109	0.1 PPM	OK			EW-64
110	0.2 PPM	OK			EW-79
111	0.1 PPM	OK			TP-8
112	0.0 PPM	OK			EW-81
113	O.1 PPM	OK			EW-80
114	0.6 PPM	OK			EW-84
115	0.1 PPM	OK			EW-83
116	2.7 PPM	OK			EW-65
11 <i>7</i>	0.8 PPM	OK			EW-36A
118	48.1 PPM	OK			EW-49
119	412.0 PPM	OK			TP-7
120	1.9 PPM	OK			EW-50
121	0.5 PPM	OK			TP-6
122	0.7 PPM	OK			EW-61
123	0.5 PPM	OK			EW-85
124	0.3 PPM	OK			EW-88
125	36.8 PPM	OK			EW-48
126	19.2 PPM	OK			EW-60
127	208.0 PPM	OK			EW-87
128	4.4 PPM	OK			EW-38
129	294.0 PPM	OK			EW-86
130	2.0 PPM	OK			EW-90
131	0.6 PPM	OK			TP-5
132	7.1 PPM	OK			EW-68
133	188.0 PPM	OK			EW-52
134	4.6 PPM	OK			TP-4
135	16.6 PPM	OK			EW-89
136	0.3 PPM	OK			EW-93
137	123.0 PPM	OK			EW-92
138	4.9 PPM	OK			EW-91
139	60.8 PPM	OK			EW-51
140	116.0 PPM	OK			EW-67

	Methane		GPS Co		
ID#	Concentration	Compliance	Lat.	Long.	Comment
141	291.0 PPM	OK			EW-53
142	2.7 PPM	OK			TP-3
143	7.3 PPM	OK			EW-96
144	53.8 PPM	OK			EW-66
145	246.0 PPM	OK			TP-2
146	41400.0 PPM	HIGH_ALRM	36.59866	-82.14742	EW-54
147	3.7 PPM	OK			EW-55
148	8.1 PPM	OK			EW-94
149	1.6 PPM	OK			EW-58
150	1.5 PPM	OK			EW-98
151	21.2 PPM	OK			EW-59
152	7.7 PPM	OK			EW-57
153	6.8 PPM	OK			TP-1
154	19.4 PPM	OK			EW-100
155	3.5 PPM	OK			EW-56
156	0.9 PPM	OK			EW-97
1 <i>57</i>	0.6 PPM	OK			EW-99
158	5225.0 PPM	HIGH_ALRM	36.59837	-82.14835	EW-95
159	64.8 PPM	OK			EW-82
160	0.7 PPM	OK			EW-78
161	3.9 PPM	OK			EW-42
162	1632.0 PPM	HIGH_ALRM	36.60126	-82.14804	EW-76
163	33.3 PPM	OK			TP-9
164	60.0 PPM	OK			EW-73
165	0.3 PPM	OK			EW-70
166	0.0 PPM	OK			EW-74
167	0.0 PPM	OK			EW-75
168	0.4 PPM	ОК			EW-47
	, , , , , , , , , , , , , , , , , , ,		140		
	Number of loc	ations sampled:	168 3		

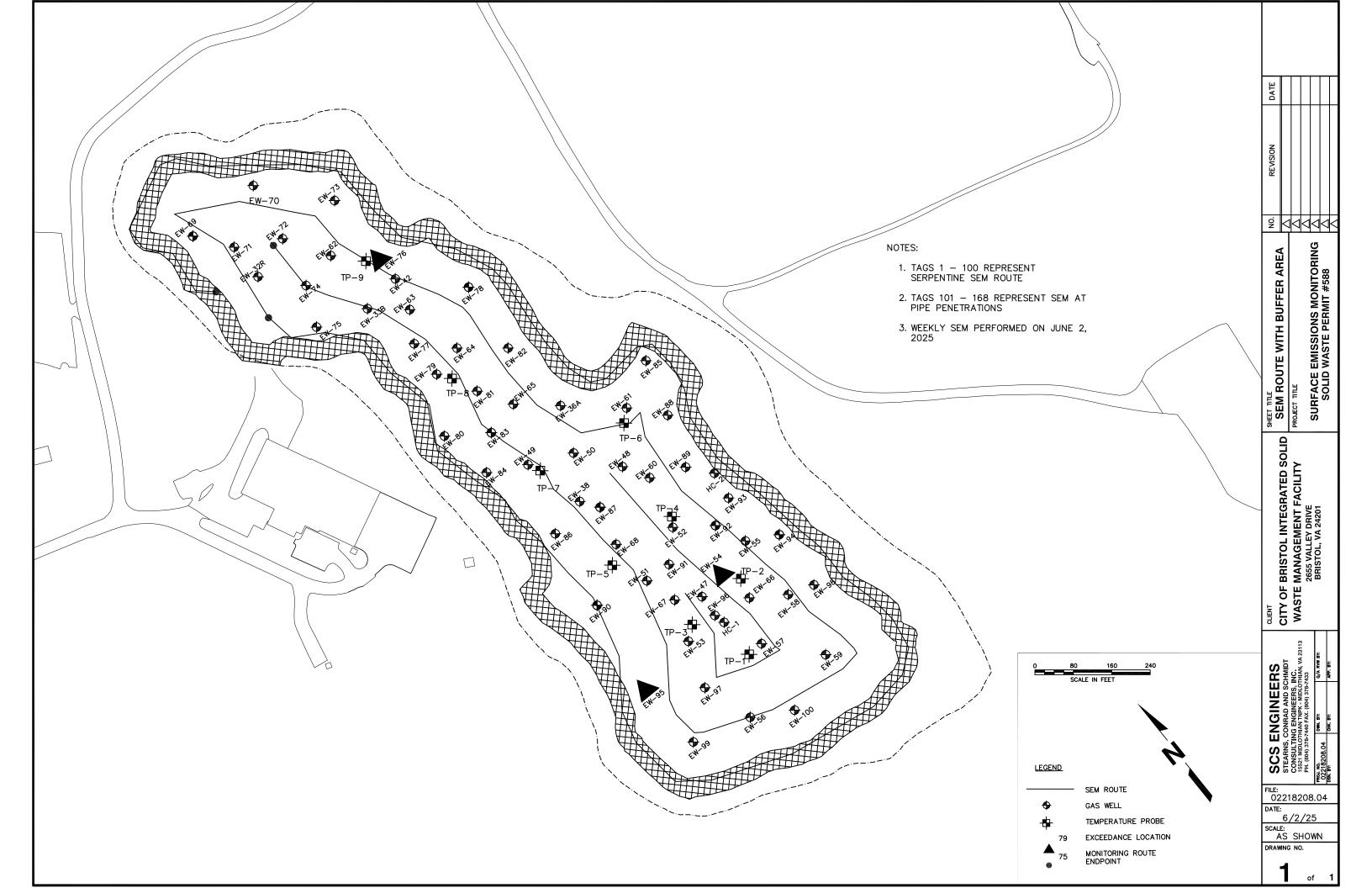
NOTES:

Points 1 through 100 represent serpentine SEM route.

Points 101 through 168 represent SEM at Pipe Penetrations

Weather Conditions: Sunny, 71°F Wind: 4 mph S

Sampling Calib	ration: Meth	ane - 500 ppm	<u>, Zero Air - 0.0</u>) ppm
6/2/2025	10:36	ZERO	0.1	PPM
6/2/2025	10:50	SPAN	500.0	PPM
Background Re	ading:			
6/2/2025	10:54	Upwind	0.4	PPM
6/2/2025	10:58	Downwind	0.0	PPM



SCS ENGINEERS

June 18, 2025 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 – June 11, 2025

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 Management Facility located in Bristol, Virginia on June 11, 2025. 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 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	168
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	68
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 retests

On June 5, 2025, the City submitted an Alternate Remedy Request for corrective actions for exceedances at four specific locations. Details regarding the specific proposed corrective actions 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	6/11/25 Event	6/11/25 Event Result	Comments
EW-54	2/24/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-66	2/24/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-67	4/18/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-95	4/18/25	N/A	Passed	Alternate Remedy Requested – undergoing corrective actions
EW-82	5/19/25	1-Month Retest	Failed	Requires 1-Month Retest Follow-Up
EW-76	6/2/25	10-Day Retest	Passed	Requires 1-Month Retest

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

Lucus D. Nachman

Lucas S. Nachman

SCS Engineers

Senior Project Professional

Sincerely,

William J. Fabrie 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

	Methane		GPS Co	ordinates	
ID#	Concentration	Compliance	Lat.	Long.	Comments
1	1.2 PPM	OK			Start Serpentine Route
2	1.1 PPM	OK			
3	6.4 PPM	OK			
4	1.0 PPM	OK			
5	0.8 PPM	OK			
6	0.9 PPM	OK			
7	0.9 PPM	OK			
8	0.8 PPM	OK			
9	4.1 PPM	OK			
10	0.9 PPM	OK			
11	1.3 PPM	OK			
12	0.8 PPM	OK			
13	1.1 PPM	OK			
14	1.8 PPM	OK			
15	1.7 PPM	OK			
16	2.5 PPM	OK			
17	0.5 PPM	OK			
18	0.5 PPM	OK			
19	1.6 PPM	OK			
20	1.7 PPM	OK			
21	0.8 PPM	OK			
22	0.7 PPM	OK			
23	0.5 PPM	OK			
24	1.6 PPM	OK			
25	1.1 PPM	OK			
26	0.8 PPM	OK			
27	0.4 PPM	OK			
28	0.3 PPM	OK			
29	0.3 PPM	OK			
30	0.3 PPM	OK			
31	0.2 PPM	OK			
32	0.2 PPM	OK			
33	15.1 PPM	OK			
34	2.2 PPM	OK			
35	85.8 PPM	OK			
36	29.0 PPM	OK			
37	7.4 PPM	OK			
38	58.5 PPM	OK			
39	3.3 PPM	OK			
40	4.2 PPM	OK			
41	29.9 PPM	OK			
42	0.4 PPM	OK			
43	133.0 PPM	OK			
44	2.9 PPM	OK			
45	1.4 PPM	OK			
46	9.7 PPM	OK OK			
47	0.2 PPM	OK			

	Meth		•	GPS Coordina	tes	
ID#	Concen	tration Com	pliance La	at. l	ong.	Comments
48	0.0	PPM	OK .			
49	0.1 [PPM	OK			
50	0.1 [PPM	OK			
51	2.4 1	PPM	OK			
52	0.3 1	PPM	OK			
53	0.2 I	PPM	OK			
54	0.2 I	PPM	OK			
55	0.4	PPM	OK			
56	0.6 I	PPM	OK			
57	0.6	PPM	OK			
58	0.1 (PPM	OK			
59	0.1 (PPM	OK			
60	0.3 I	PPM	OK			
61	0.3 1	PPM	OK			
62	0.2 I	PPM	OK			
63	0.2 I	PPM	OK			
64	0.0	PPM	OK			
65	2.4 1	PPM	OK			
66	6.8 1	PPM	OK			
67	3.4 1		OK			
68	6.6		OK			
69	3.6 1		OK			
70	1.2 I		OK			
<i>7</i> 1	0.1 1		OK			
72	0.9 1		OK			
73	0.8 I		OK			
74	1.4		ЭK			
75	13.0 I		ЭK			
76	12.0		ЭK			
77	0.4 1		ЭK			
78	3.5 1		ЭK			
79	1.6 I		ЭK			
80	83.6 1		OK			
81	4.1 1		OK			
82	0.0		ЭK			
83	0.1 I		ЭK			
84	0.0		ЭK			
85	427.0		OK .			
86	1.4		ЭK			
87	0.1 I		ЭK			
88	0.4 1		ЭK			
89	0.5 1		OK			
90	0.1 I		OK			
91	0.9 1		OK .			
92	0.3 1		OK .			
93	4.7		OK .			
94	14.6		OK .			

	Methane	ordinates			
ID#	Concentration	Compliance	Lat.	Long.	Comments
95	0.3 PPM	OK			
96	0.5 PPM	OK			
97	0.7 PPM	OK			
98	5.0 PPM	OK			
99	0.6 PPM	OK			
100	0.3 PPM	OK			End Serpentine Route
101	333.0 PPM	OK			EW-52
102	16.5 PPM	OK			TP-4
103	223.0 PPM	OK			EW-60
104	2.5 PPM	OK			EW-48
105	0.0 PPM	OK			TP-6
106	0.1 PPM	OK			EW-61
107	0.8 PPM	OK			EW-50
108	13500.0 PPM	HIGH_ALRM	36.59857	-82.1 <i>477</i> 1	EW-67
109	4.5 PPM	OK	30.37037	-02.14//1	EW-47
110	833.0 PPM	HIGH_ALRM	36.59855	-82.14754	EW-54
111	1.4 PPM	OK	30.37033	-02.14/54	EW-55
112	290.0 PPM	OK OK			EW-92
113	4.5 PPM	OK OK			EW-91
114	1.0 PPM	OK OK			EW-96
		OK OK			TP-2
115 116	0.5 PPM 1660.0 PPM		24 500 42	00 1 47 40	EW-66
		HIGH_ALRM	36.59843	-82.14740	
117	0.4 PPM	OK			EW-58
118	3.4 PPM	OK			EW-57
119	0.7 PPM	OK			TP-1
120	3.9 PPM	OK			EW-59
121	8.9 PPM	OK			EW-100
122	1.4 PPM	OK			EW-56
123	0.4 PPM	OK			EW-97
124	278.0 PPM	OK			EW-53
125	2.3 PPM	OK			TP-3
126	86.0 PPM	OK			EW-51
127	0.2 PPM	OK			TP-5
128	0.8 PPM	OK			EW-68
129	248.0 PPM	OK			EW-87
130	2.8 PPM	OK			EW-38
131	136.0 PPM	OK			TP-7
132	0.0 PPM	OK			EW-49
133	0.1 PPM	OK			EW-83
134	0.1 PPM	OK			EW-65
135	0.1 PPM	OK			EW-81
136	0.1 PPM	OK			TP-8
137	0.0 PPM	OK			EW-64
138	0.0 PPM	OK			EW-63
139	1 <i>4.</i> 7 PPM	OK			EW-42
140	0.9 PPM	OK			EW-76

	Methane		GPS Co	ordinates			
ID#	Concentration	Compliance	Lat.	Long.	Comments		
141	3.8 PPM	OK			TP-9		
142	0.7 PPM	OK			EW-62		
143	0.0 PPM	OK			EW-74		
144	0.0 PPM	OK			EW-32R		
145	0.1 PPM	OK			EW-69		
146	0.3 PPM	OK			EW-71		
147	0.2 PPM	OK			EW-72		
148	0.0 PPM	OK			EW-70		
149	0.4 PPM	OK			EW-73		
150	0.5 PPM	OK			EW-78		
151	1264.0 PPM	HIGH_ALRM	36.60049	-82.14751	EW-82		
152	0.9 PPM	OK			EW-36A		
153	1.1 PPM	OK			EW-85		
154	0.9 PPM	OK			EW-88		
155	138.0 PPM	OK			EW-89		
156	5.2 PPM	OK			EW-93		
1 <i>57</i>	2.1 PPM	OK			EW-94		
158	0.4 PPM	OK			EW-98		
159	1.2 PPM	OK			EW-99		
160	36.9 PPM	OK			EW-95		
161	11.1 PPM	OK			EW-90		
162	3.2 PPM	OK			EW-86		
163	0.9 PPM	OK			EW-84		
164	0.8 PPM	OK			EW-80		
165	1.2 PPM	OK			EW-79		
166	2.6 PPM	OK			EW-77		
167	0.0 PPM	OK			EW-33B		
168	0.3 PPM	OK			EW-75		
	Number of loc	ations sampled:	168				
	Number of exceed	dance locations:	4				

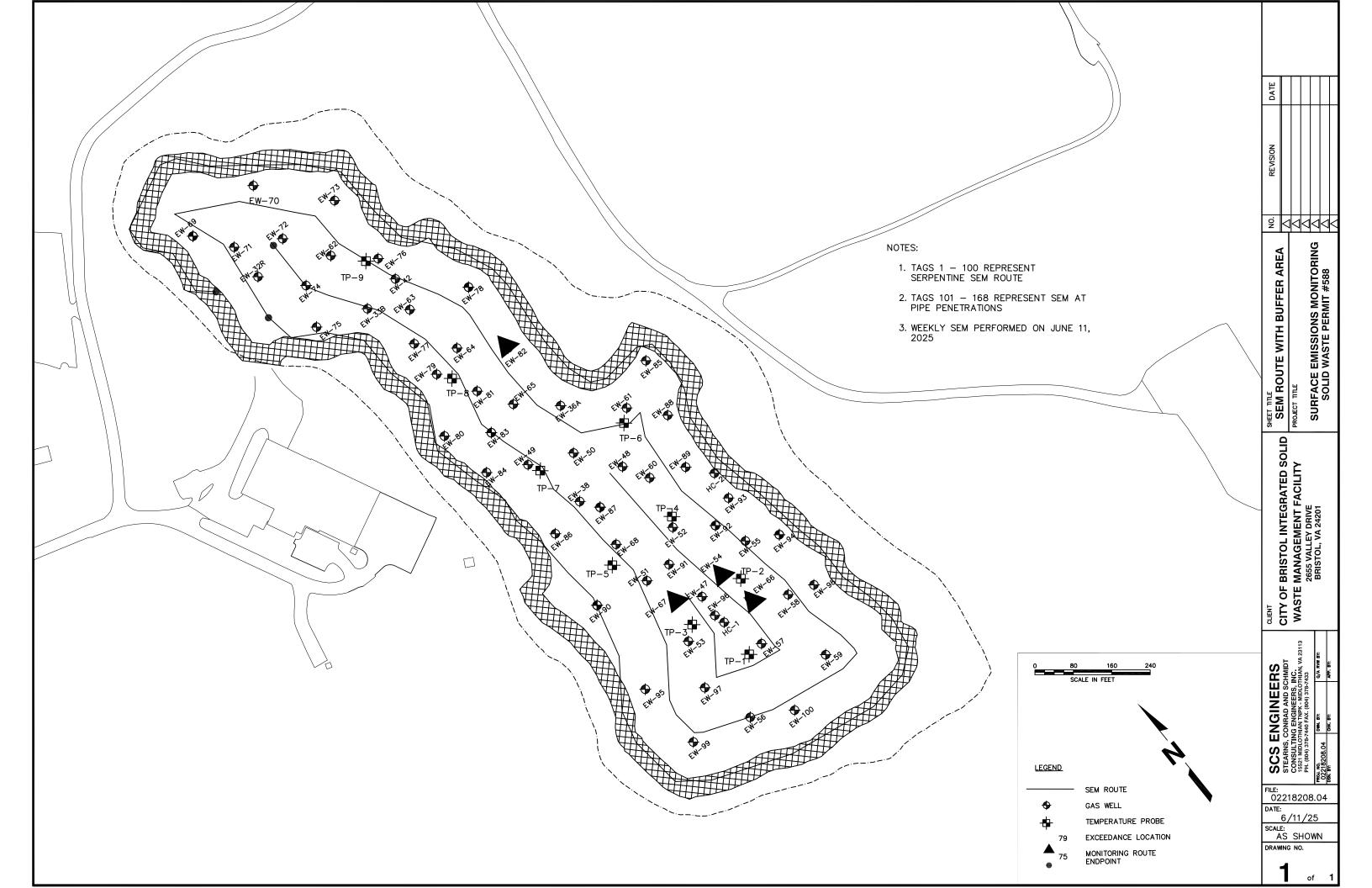
NOTES:

Points 1 through 100 represent serpentine SEM route.

Points 101 through 168 represent SEM at Pipe Penetrations

Weather Conditions: Sunny, $84^{\circ}F$ Wind: 3 mph SE

Sampling Calib	ration: Meth	ane - 500 ppm	, Zero Air - 0.0) ppm
6/11/2025	11:08	ZERO	0.1	PPM
6/11/2025	11:09	SPAN	502.0	PPM
Background Red	ading:			
6/11/2025	11:12	Upwind	2.5	PPM
6/11/2025	11:18	Downwind	1.3	PPM



SCS ENGINEERS

June 25, 2025 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 – June 16, 2025

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 Management Facility located in Bristol, Virginia on June 16, 2025. 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 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	168
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	68
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 retests

On June 5, 2025, the City submitted an Alternate Remedy Request for corrective actions for exceedances at four specific locations. Details regarding the specific proposed corrective actions 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	6/16/25 Event	6/16/25 Event Result	Comments
EW-54	2/24/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-66	2/24/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-67	4/18/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-95	4/18/25	N/A	Passed	Alternate Remedy Requested – undergoing corrective actions
EW-82	5/19/25	1-Month Retest Follow-Up	Passed	Exceedance Resolved
EW-76	6/2/25	N/A	Passed	Requires 1-Month Retest

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

Sincerely,

Wylie R Hicklin Staff Professional SCS Engineers

Wylin R Hicklin

Lucas S. Nachman Senior Project Professional SCS Engineers

Lucus D. Nachman

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

	Methane		GPS Co	ordinates	
ID#	Concentration	Compliance	Lat.	Long.	Comments
1	0.9 PPM	OK			Start Serpentine Route
2	1.1 PPM	OK			
3	0.9 PPM	OK			
4	0.8 PPM	OK			
5	0.8 PPM	OK			
6	0.7 PPM	OK			
7	0.8 PPM	OK			
8	1.1 PPM	OK			
9	0.7 PPM	OK			
10	0.7 PPM	OK			
11	0.6 PPM	OK			
12	1.9 PPM	OK			
13	0.8 PPM	OK			
14	2.3 PPM	OK			
15	2.1 PPM	OK			
16	2.1 PPM	OK			
17	1.9 PPM	OK			
18	1.3 PPM	OK			
19	2.6 PPM	OK			
20	1.0 PPM	OK			
21	1.4 PPM	OK			
22	1.1 PPM	OK			
23	1.7 PPM	OK			
24	2.2 PPM	OK			
25	0.6 PPM	OK			
26	3.2 PPM	OK			
27	1.1 PPM	OK			
28	0.6 PPM	OK			
29	0.6 PPM	OK OK			
30	0.5 PPM	OK			
31	0.4 PPM	OK			
32	2.8 PPM	OK			
33	5.9 PPM	OK OK			
34	1.8 PPM	OK OK			
35	0.7 PPM	OK OK			
36	1.6 PPM	OK OK			
37	18.4 PPM	OK OK			
38	1.4 PPM	OK OK			
39	1.2 PPM	OK OK			
40	5.1 PPM	OK OK			
41	3.3 PPM	OK OK			
42	0.5 PPM	OK OK			
43	0.5 PPM	OK OK			
44		OK OK			
	0.5 PPM				
45 46	0.3 PPM 0.2 PPM	OK OK			
46 47	0.2 PPM 0.1 PPM	OK OK			

	Methane		GPS Co	ordinates	
ID#	Concentration	Compliance	Lat.	Long.	Comments
48	0.1 PPM	OK			
49	0.1 PPM	OK			
50	0.3 PPM	OK			
51	0.3 PPM	OK			
52	0.5 PPM	OK			
53	0.3 PPM	OK			
54	0.2 PPM	OK			
55	0.3 PPM	OK			
56	0.1 PPM	OK			
57	0.2 PPM	OK			
58	1.0 PPM	OK			
59	4.8 PPM	OK			
60	12.0 PPM	OK			
61	1.0 PPM	OK			
62	1.2 PPM	OK			
63	1.0 PPM	OK			
64	1.8 PPM	OK			
65	1.0 PPM	OK			
66	2.9 PPM	OK			
67	1.1 PPM	OK			
68	21.6 PPM	OK			
69	6.9 PPM	OK			
70	7.6 PPM	OK			
<i>7</i> 1	2.5 PPM	OK			
72	1.1 PPM	OK			
73	2.2 PPM	OK			
74	1.1 PPM	OK			
<i>7</i> 5	1.7 PPM	OK			
76	2.8 PPM	OK			
77	2.6 PPM	OK			
78	1.4 PPM	OK			
79	1.6 PPM	OK			
80	126.0 PPM	OK			
81	2.8 PPM	OK			
82	150.0 PPM	OK			
83	2.8 PPM	OK			
84	2.1 PPM	OK			
85	4.0 PPM	OK			
86	1.5 PPM	OK			
87	1.4 PPM	OK			
88	1.9 PPM	OK			
89	2.1 PPM	OK			
90	3.1 PPM	OK			
91	4.1 PPM	OK			
92	2.1 PPM	OK			
93	2.0 PPM	OK			
94	14.5 PPM	OK			

	Methane		GPS Co	ordinates	
ID#	Concentration	Compliance	Lat.	Long.	Comments
95	7.7 PPM	OK			
96	4.0 PPM	OK			
97	4.2 PPM	OK			
98	1.7 PPM	OK			
99	1.6 PPM	OK			
100	1.8 PPM	OK			End Serpentine Route
101	97.4 PPM	OK			EW-52
102	7.5 PPM	OK			TP-4
103	95.7 PPM	OK			EW-60
104	25.4 PPM	OK			EW-48
105	19.1 PPM	OK			TP-6
106	8.3 PPM	OK			EW-61
107	7.5 PPM	OK			EW-50
108	2290.0 PPM	HIGH_ALRM	36.59857	-82.1 <i>477</i> 1	EW-67
109	9.7 PPM	OK	30.37037	-02.14//1	EW-47
110	2967.0 PPM	HIGH_ALRM	36.59855	-82.14754	EW-54
111	2.2 PPM	OK	30.37033	-02.14/54	EW-55
112	34.7 PPM	OK OK			EW-92
113	3.1 PPM	OK OK			EW-91
113		OK OK			EW-96
114	2.9 PPM	OK OK			TP-2
	1.8 PPM		24 500 42	00 1 47 40	
116	894.0 PPM	HIGH_ALRM	36.59843	-82.14740	EW-66
117	1.7 PPM	OK			EW-58
118	7.4 PPM	OK			EW-57
119	7.7 PPM	OK			TP-1
120	4.3 PPM	OK			EW-59
121	38.3 PPM	OK			EW-100
122	10.5 PPM	OK			EW-56
123	2.7 PPM	OK			EW-97
124	5.8 PPM	OK			EW-53
125	1.7 PPM	OK			TP-3
126	2.7 PPM	OK			EW-51
127	2.6 PPM	OK			TP-5
128	12.9 PPM	OK			EW-68
129	81.4 PPM	OK			EW-87
130	15.6 PPM	OK			EW-38
131	82.9 PPM	OK			TP-7
132	15.6 PPM	OK			EW-49
133	2.2 PPM	OK			EW-83
134	1.6 PPM	OK			EW-65
135	1.5 PPM	OK			EW-81
136	1.9 PPM	OK			TP-8
137	2.1 PPM	OK			EW-64
138	1.9 PPM	OK			EW-63
139	5.6 PPM	OK			EW-42
140	6.8 PPM	OK			EW-76

	Methane		GPS Co		
ID#	Concentration	Compliance	Lat.	Long.	Comment
141	9.9 PPM	ОК			TP-9
142	1.7 PPM	OK			EW-62
143	1.9 PPM	OK			EW-74
144	1.4 PPM	OK			EW-32R
145	1.2 PPM	OK			EW-69
146	1.3 PPM	OK			EW-71
147	1.3 PPM	OK			EW-72
148	1.3 PPM	OK			EW-70
149	2.2 PPM	OK			EW-73
150	5.2 PPM	OK			EW-78
151	3.7 PPM	OK			EW-82
152	1.5 PPM	OK			EW-36A
153	1.5 PPM	OK			EW-85
154	1.5 PPM	OK			EW-88
155	15.1 PPM	OK			EW-89
156	1.3 PPM	OK			EW-93
1 <i>57</i>	1.2 PPM	OK			EW-94
158	1.1 PPM	OK			EW-98
159	3.8 PPM	OK			EW-99
160	392.0 PPM	OK			EW-95
161	12.1 PPM	OK			EW-90
162	25.6 PPM	OK			EW-86
163	1.0 PPM	OK			EW-84
164	1.0 PPM	OK			EW-80
165	1.5 PPM	OK			EW-79
166	1.1 PPM	OK			EW-77
1 <i>67</i>	0.8 PPM	OK			EW-33B
168	0.8 PPM	OK			EW-75
			1.40]	
		ations sampled:	168		
	Number of exceed	dance locations:	3		

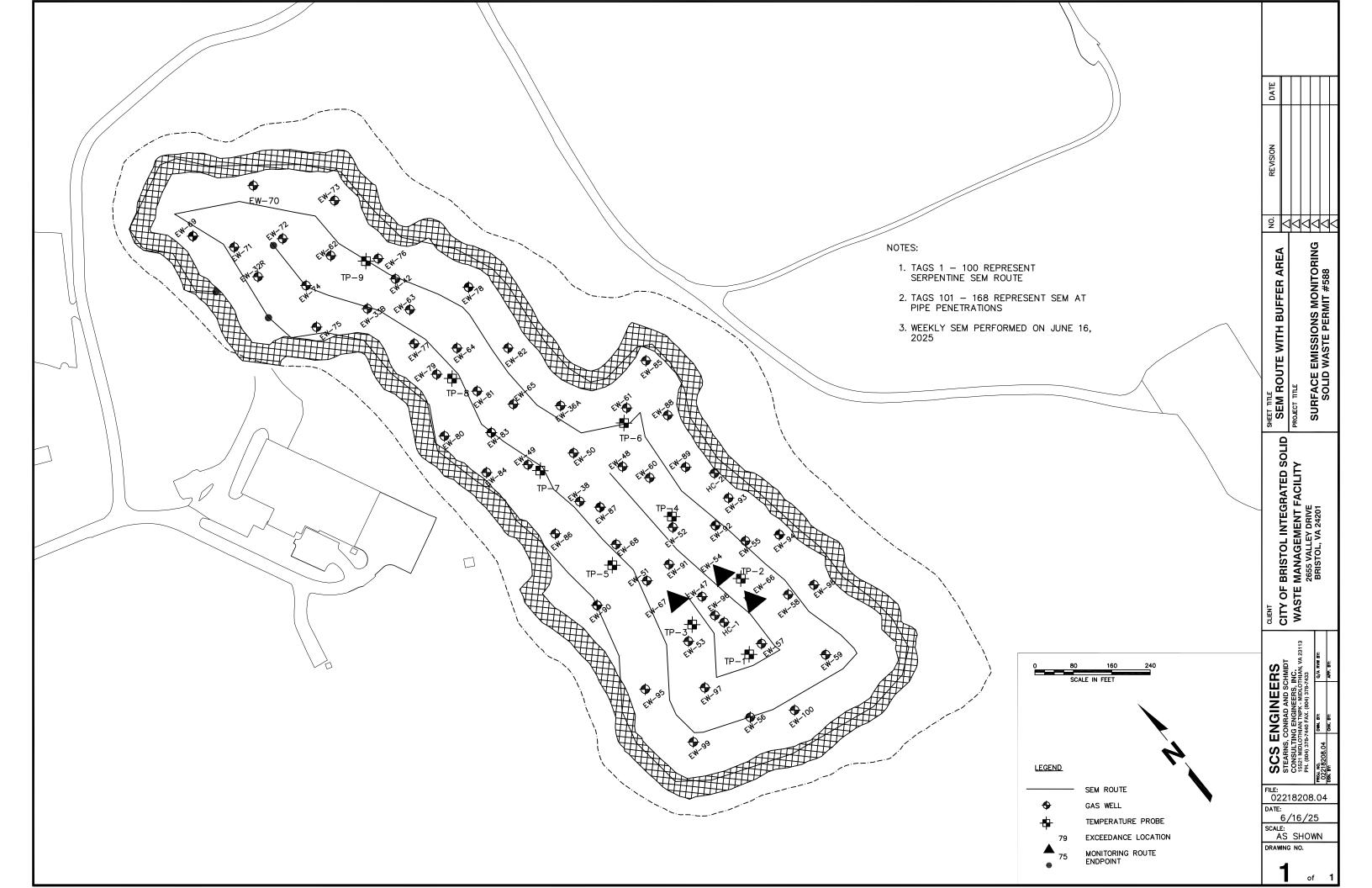
NOTES:

Points 1 through 100 represent serpentine SEM route.

Points 101 through 168 represent SEM at Pipe Penetrations

Weather Conditions: Cloudy-Light Rain, 73°F Wind: 8 mph NE

Sampling Calib	ration: Meth	ane - 500 ppn	n, Zero Air - 0.0) ppm
6/16/2025	11:10	ZERO	0.3	PPM
6/16/2025	11:14	SPAN	501.0	PPM
Background Re	ading:			
6/16/2025	11:16	Upwind	1.8	PPM
6/16/2025	11:21	Downwind	1.2	PPM



SCS ENGINEERS

July 2, 2025 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 – June 24, 2025

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 Management Facility located in Bristol, Virginia on June 24, 2025. 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 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	168
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	68
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 retests.

On June 5, 2025, the City submitted an Alternate Remedy Request for corrective actions for exceedances at four specific locations. Details regarding the specific proposed corrective actions 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	6/24/25 Event	6/24/25 Event Result	Comments
EW-54	2/24/25	N/A	Passed	Alternate Remedy Requested – undergoing corrective actions
EW-66	2/24/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-67	4/18/25	N/A	Failed	Alternate Remedy Requested – undergoing corrective actions
EW-95	4/18/25	N/A	Passed	Alternate Remedy Requested – undergoing corrective actions
EW-76	6/2/25	N/A	Passed	Requires 1-Month Retest

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

Sincerely,

Wylie R Hicklin Staff Professional SCS Engineers

Wylin R Hicklin

Lucas S. Nachman Senior Project Professional SCS Engineers

Lucus D. Nachman

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

	Methane		GPS Co	ordinates	
ID#	Concentration	Compliance	Lat.	Long.	Comments
1	0.2 PPM	OK			Start Serpentine Route
2	0.3 PPM	OK			
3	0.4 PPM	OK			
4	0.0 PPM	OK			
5	0.1 PPM	OK			
6	0.0 PPM	OK			
7	0.0 PPM	OK			
8	0.1 PPM	OK			
9	0.7 PPM	OK			
10	0.0 PPM	OK			
11	0.6 PPM	OK			
12	0.5 PPM	OK			
13	0.7 PPM	OK			
14	0.2 PPM	OK			
15	1.9 PPM	OK			
16	1.3 PPM	OK			
17	0.4 PPM	OK			
18	0.3 PPM	OK			
19	1.8 PPM	OK			
20	O.1 PPM	OK			
21	1.2 PPM	OK			
22	1.2 PPM	OK			
23	2.1 PPM	OK			
24	7.4 PPM	OK			
25	4.5 PPM	OK			
26	1.9 PPM	OK			
27	0.7 PPM	OK			
28	16.1 PPM	OK			
29	7.2 PPM	OK			
30	440.0 PPM	OK			
31	0.2 PPM	OK			
32	0.6 PPM	OK			
33	6.8 PPM	OK OK			
34	16.3 PPM	OK OK			
35	6.8 PPM	OK			
36	0.0 PPM	OK OK			
37	0.0 PPM	OK OK			
38	0.0 PPM	OK OK			
39	0.2 PPM	OK OK			
40	0.0 PPM	OK OK			
41	0.8 PPM	OK OK			
42	0.0 PPM	OK OK			
43	0.0 PPM	OK OK			
43	0.0 PPM	OK OK			
45	0.1 PPM	OK OK			
46	0.0 PPM	OK OK			
46 47	0.0 PPM	OK OK			

		Methane	GPS Coordinates				
ID:	#	Concentration	Compliance	Lat.	Long.	Comments	
48	8	0.0 PPM	OK				
49	9	0.0 PPM	OK				
50	0	0.0 PPM	OK				
51	1	0.1 PPM	OK				
52	2	0.4 PPM	OK				
53	3	0.2 PPM	OK				
54	4	0.5 PPM	OK				
55	5	0.3 PPM	OK				
56	6	0.4 PPM	OK				
57	7	2.6 PPM	OK				
58	8	0.8 PPM	OK				
59	9	1.0 PPM	OK				
60	0	8.2 PPM	OK				
61	1	5.0 PPM	OK				
62	2	2.9 PPM	OK				
63	3	1.7 PPM	OK				
64	4	1.3 PPM	OK				
65	5	1.3 PPM	OK				
66	5	6.9 PPM	OK				
67	7	8.8 PPM	OK				
68	8	11.8 PPM	OK				
69		1.3 PPM	OK				
70		0.6 PPM	OK				
<i>7</i> 1	1	0.2 PPM	OK				
72	2	3.4 PPM	OK				
73	3	0.9 PPM	OK				
74		6.1 PPM	OK				
75	5	8.8 PPM	OK				
76	5	0.5 PPM	OK				
77	7	0.3 PPM	OK				
78	8	0.9 PPM	OK				
79	9	0.2 PPM	OK				
80	0	0.5 PPM	OK				
81		0.0 PPM	OK				
82	2	0.1 PPM	OK				
83	3	0.0 PPM	OK				
84	4	0.1 PPM	OK				
85		0.0 PPM	OK				
86		0.0 PPM	OK				
87	7	0.0 PPM	OK				
88	В	0.0 PPM	OK				
89		0.0 PPM	OK				
90	0	0.0 PPM	OK				
91	1	5.4 PPM	OK				
92	2	0.8 PPM	OK				
93		1.2 PPM	OK				
94	4	0.3 PPM	OK				

	Methane				
ID#	Concentration	Compliance	Lat.	Long.	Comments
95	0.0 PPM	OK			
96	0.2 PPM	OK			
97	0.1 PPM	OK			
98	0.1 PPM	OK			
99	0.6 PPM	OK			
100	0.0 PPM	OK			End Serpentine Route
101	0.0 PPM	OK			EW-69
102	0.1 PPM	OK			EW-71
103	0.0 PPM	OK			EW-32R
104	0.1 PPM	OK			EW-72
105	0.0 PPM	OK			EW-74
106	0.0 PPM	OK			EW-62
107	0.0 PPM	OK			EW-33B
108	0.1 PPM	OK			EW-63
109	0.1 PPM	OK			EW-77
110	0.2 PPM	OK			EW-64
111	0.1 PPM	OK			EW-79
112	1.6 PPM	OK			TP-8
113	0.4 PPM	OK			EW-81
114	0.1 PPM	OK			EW-80
115	1.9 PPM	OK			EW-84
116	0.6 PPM	OK			EW-83
11 <i>7</i>	0.2 PPM	OK			EW-65
118	5.0 PPM	OK			EW-36A
119	1535.0 PPM	HIGH_ALRM	36.59978	-82.14805	EW-49
120	84.9 PPM	OK			TP-7
121	0.6 PPM	OK			EW-50
122	66.9 PPM	OK			TP-6
123	2.3 PPM	OK			EW-61
124	0.9 PPM	OK			EW-85
125	1.3 PPM	OK			EW-88
126	27.2 PPM	OK			EW-48
127	43.3 PPM	OK			EW-87
128	273.0 PPM	OK			EW-38
129	460.0 PPM	OK			EW-86
130	184.0 PPM	OK			EW-90
131	1.4 PPM	OK			TP-5
132	4.8 PPM	OK			EW-68
133	146.0 PPM	OK			EW-52
134	6.8 PPM	OK			TP-4
135	17.3 PPM	OK			EW-89
136	8.7 PPM	OK			EW-93
137	65.4 PPM	OK			EW-92
138	37.9 PPM	OK			EW-55
139	8.4 PPM	OK			EW-94
140	281.0 PPM	OK			EW-54

	Methane		GPS Coordinates			
ID#	Concentration	Compliance	Lat.	Long.	Comments	
141	14.0 PPM	OK			EW-91	
142	556.0 PPM	HIGH_ALRM	36.59884	-82.14787	EW-51	
143	2951.0 PPM	HIGH_ALRM	36.59857	-82.14771	EW-67	
144	2.9 PPM	OK			EW-47	
145	6.2 PPM	OK			TP-2	
146	717.0 PPM	HIGH_ALRM	36.59843	-82.14740	EW-66	
147	0.4 PPM	OK			EW-96	
148	1.4 PPM	OK			TP-3	
149	39.7 PPM	OK			EW-53	
150	0.5 PPM	OK			TP-1	
151	9.2 PPM	OK			EW-57	
152	105.0 PPM	OK			EW-58	
153	0.8 PPM	OK			EW-98	
154	19.1 PPM	OK			EW-59	
155	12.0 PPM	OK			EW-100	
156	0.3 PPM	OK			EW-56	
1 <i>57</i>	0.8 PPM	OK			EW-97	
158	1.8 PPM	OK			EW-99	
159	125.0 PPM	OK			EW-95	
160	401.0 PPM	OK			EW-60	
161	93.9 PPM	OK			EW-82	
162	7.9 PPM	OK			EW-78	
163	107.0 PPM	OK			EW-42	
164	254.0 PPM	OK			EW-76	
165	4.0 PPM	OK			TP-9	
166	0.9 PPM	OK			EW-73	
167	0.0 PPM	OK			EW-70	
168	0.6 PPM	OK			EW-75	
	N. 1. 21		1/0			
	Number of loc Number of excee	ations sampled:	168 4			

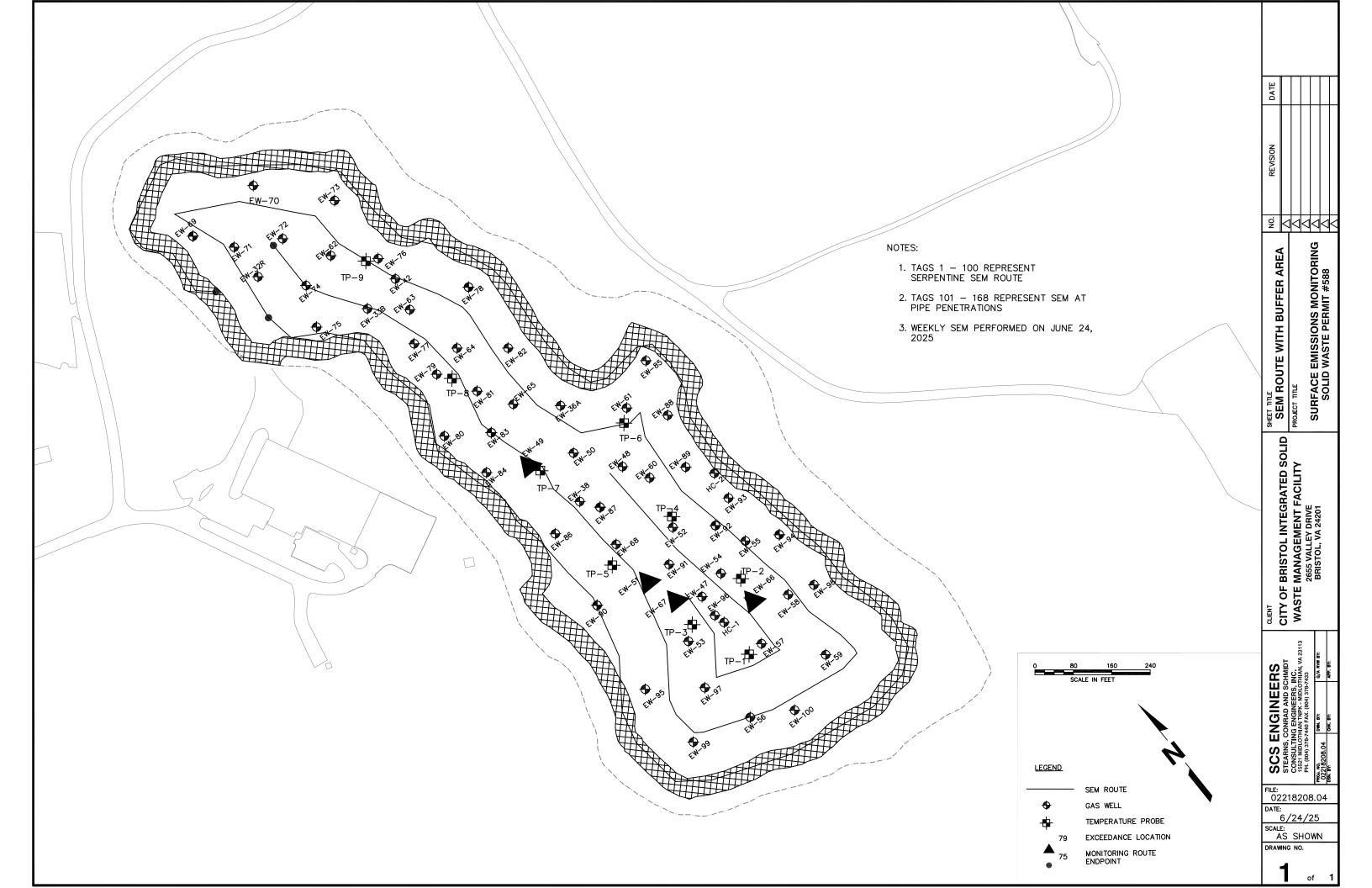
NOTES:

Points 1 through 100 represent serpentine SEM route.

Points 101 through 168 represent SEM at Pipe Penetrations

Weather Conditions: Passing Clouds, 90°F Wind: 2 mph S

Sampling Calib	ration: Meth	ane - 500 ppm	, Zero Air - 0.0) ppm				
6/24/2025	11:04	ZERO	0.0	PPM				
6/24/2025	11:08	SPAN	500.0	PPM				
Background Reading:								
6/24/2025	11:12	Upwind	0.5	PPM				
6/24/2025	11:27	Downwind	0.0	PPM				



Appendix B

In-Waste Temperatures on Select Days in June

Appendix B Figures

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Figure B - 27 Average Temperatures Recorded by TP-9 on June 18, 2025	B-16
Figure B - 28 Average Temperatures Recorded by TP-9 on June 25, 2025	B-16

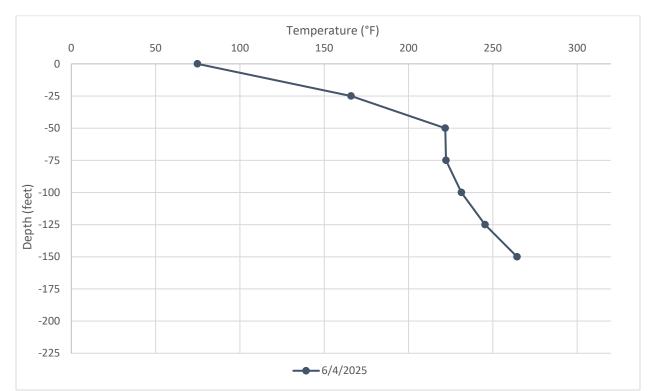
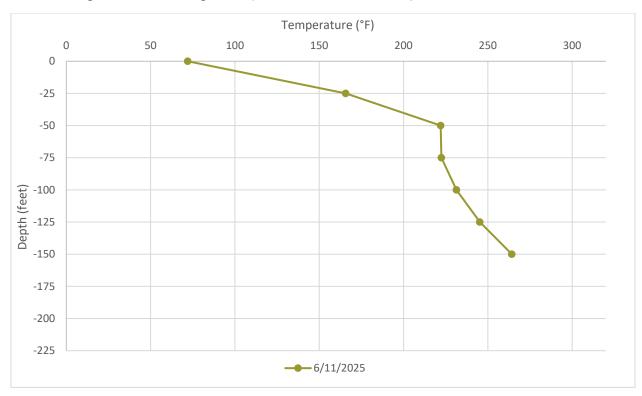


Figure B - 1 Average Temperatures Recorded by TP-1 on June 4, 2025





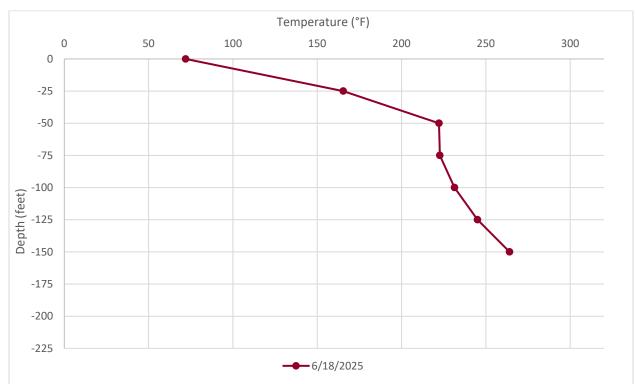
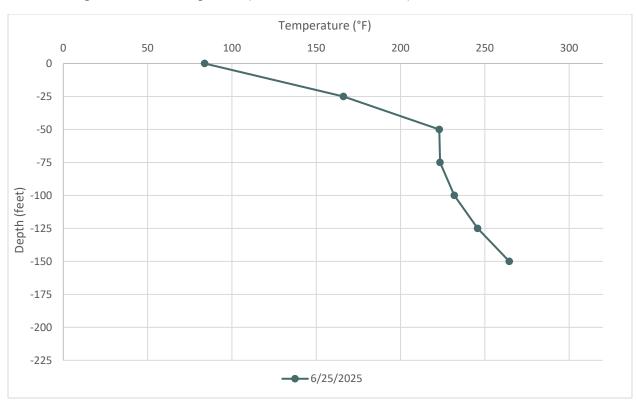


Figure B - 3 Average Temperatures Recorded by TP-1 on June 18, 2025





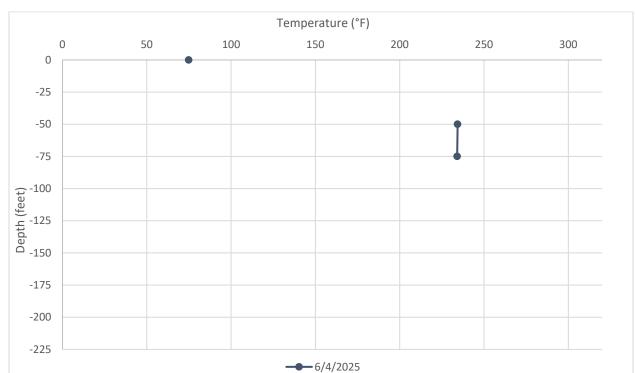
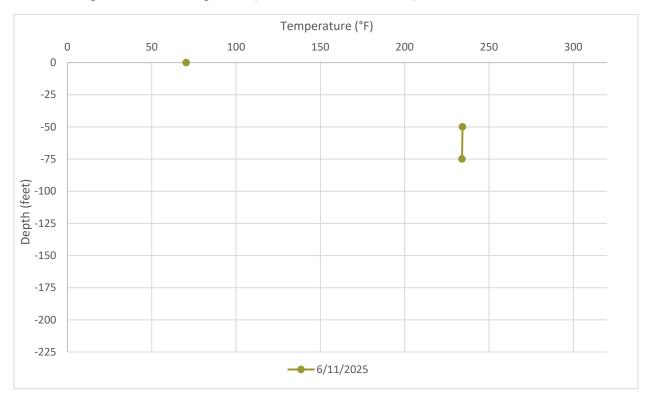


Figure B - 5 Average Temperatures Recorded by TP-3 on June 4, 2025





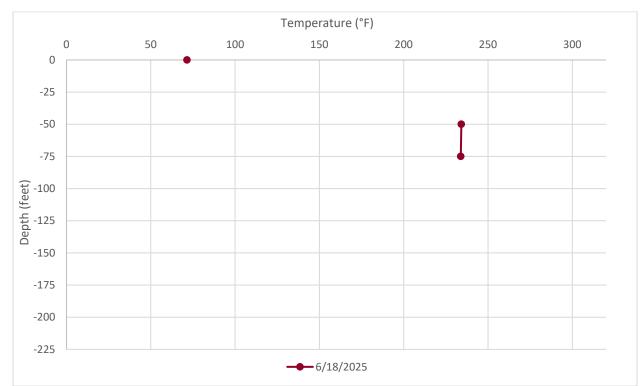
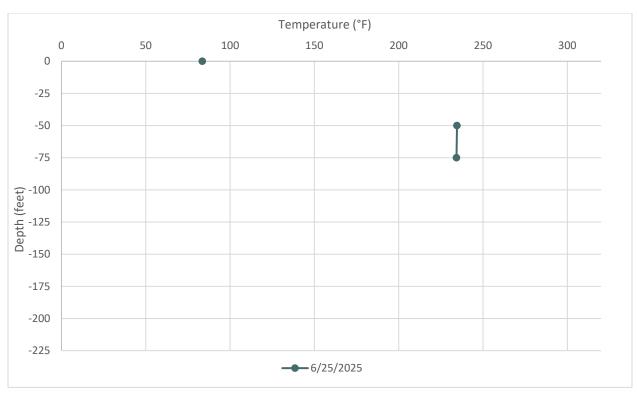


Figure B - 7 Average Temperatures Recorded by TP-3 on June 18, 2025





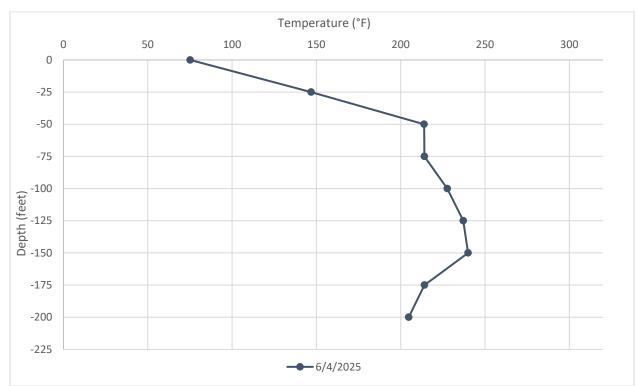
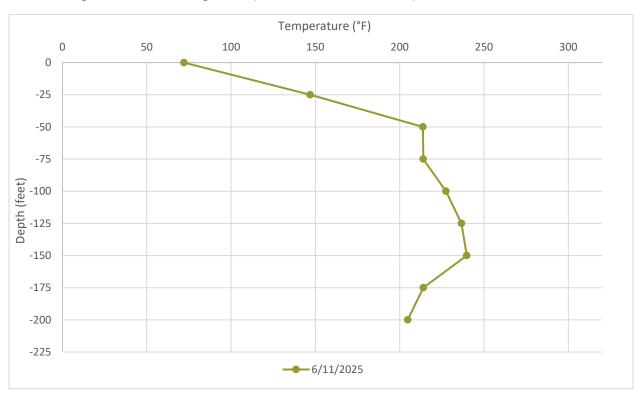


Figure B - 9 Average Temperatures Recorded by TP-5 on June 4, 2025





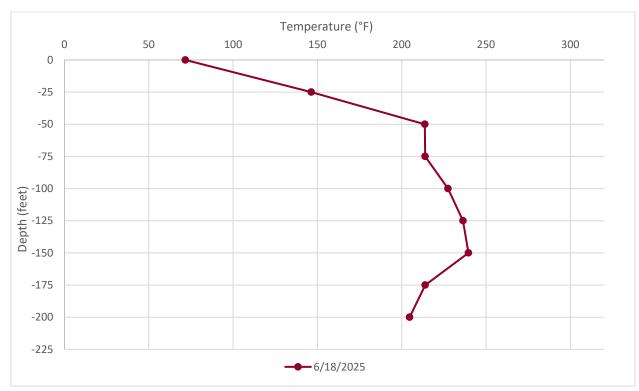
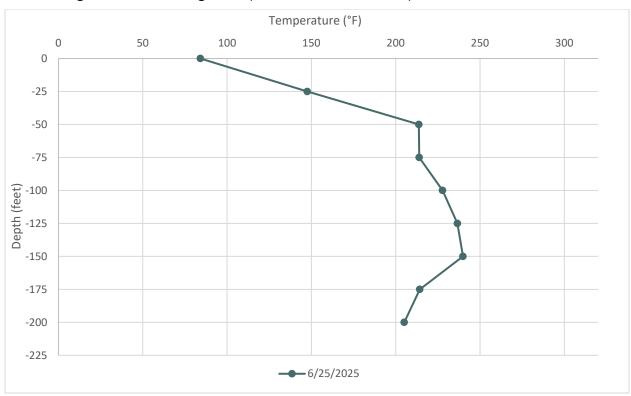


Figure B - 11 Average Temperatures Recorded by TP-5 on June 18, 2025

Figure B - 12 Average Temperatures Recorded by TP-5 on June 25, 2025



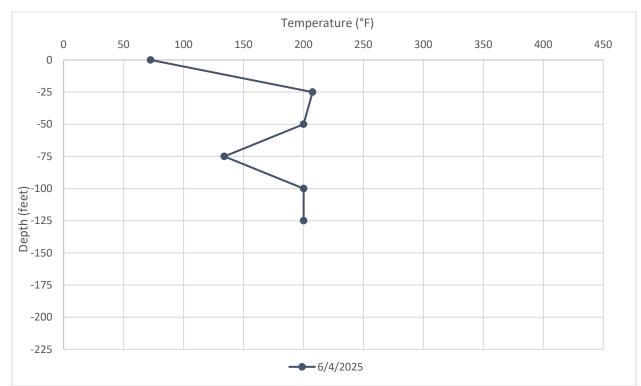
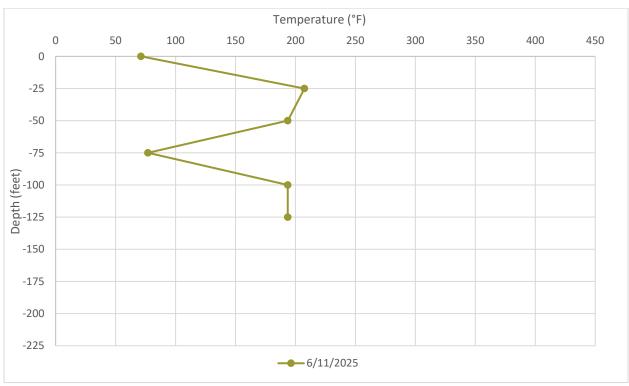


Figure B - 13 Average Temperatures Recorded by TP-6 on June 4, 2025





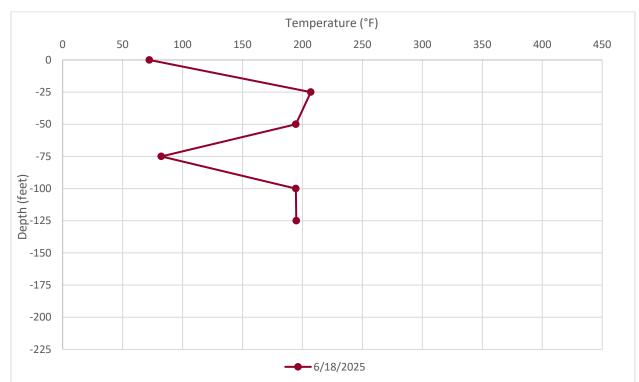
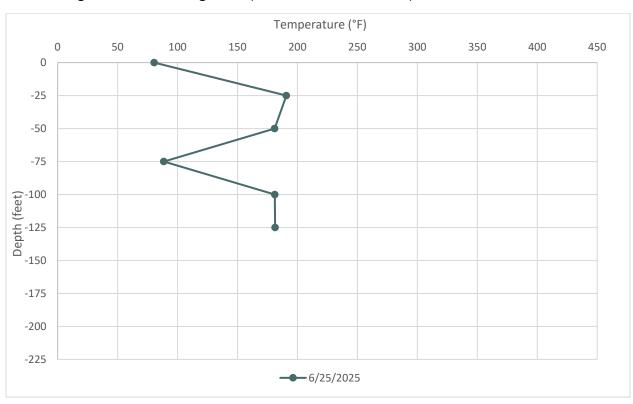


Figure B - 15 Average Temperatures Recorded by TP-6 on June 18, 2025





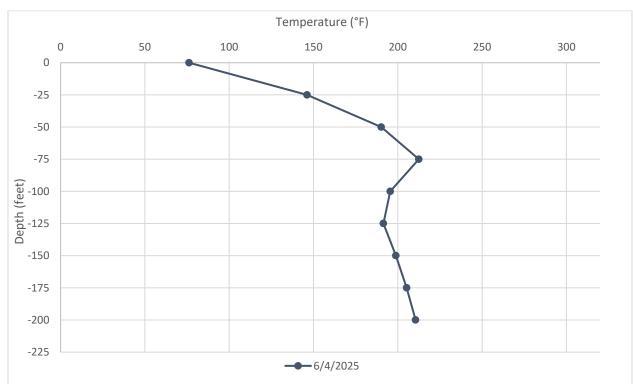
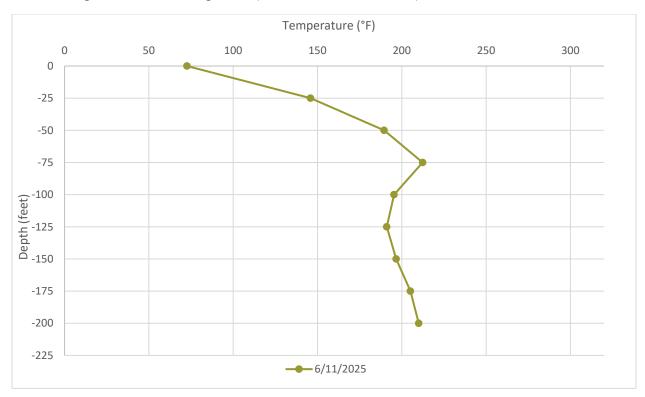


Figure B - 17 Average Temperatures Recorded by TP-7 on June 4, 2025

Figure B - 18 Average Temperatures Recorded by TP-7 on June 11, 2025



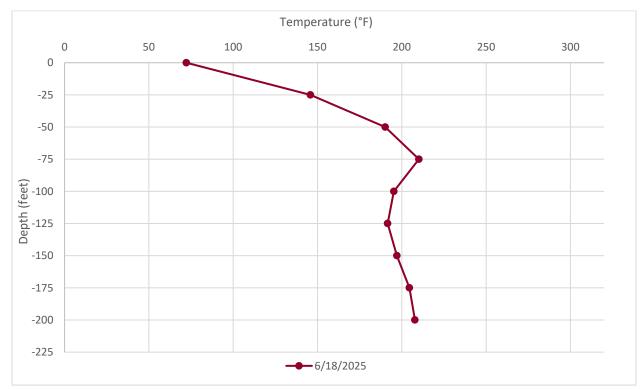
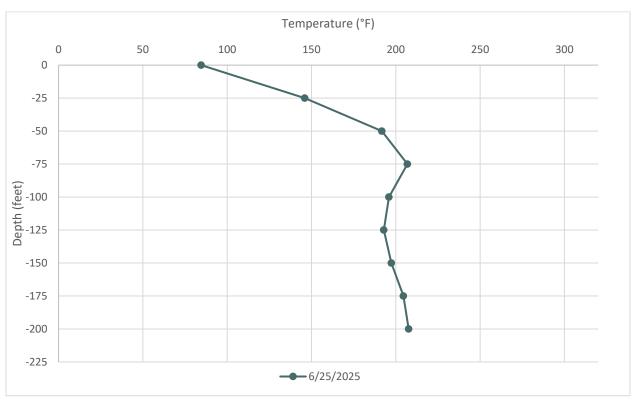


Figure B - 19 Average Temperatures Recorded by TP-7 on June 18, 2025





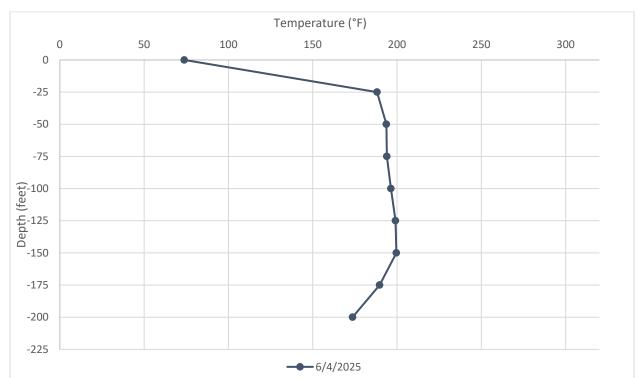
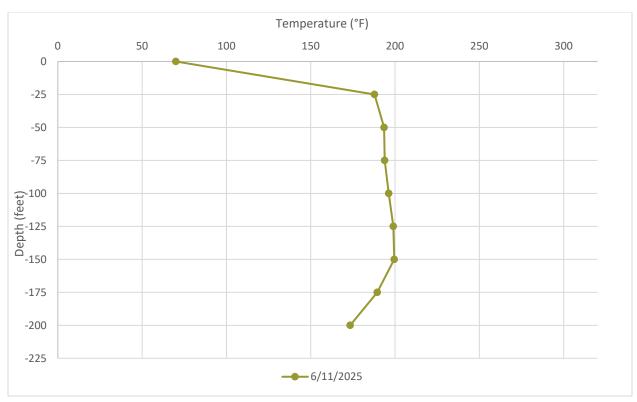


Figure B - 21 Average Temperatures Recorded by TP-8 on June 4, 2025





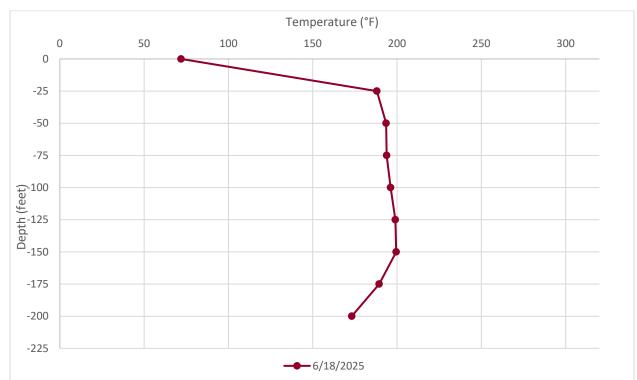
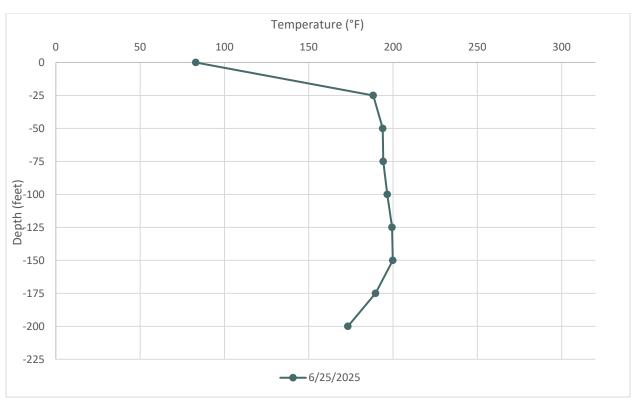


Figure B - 23 Average Temperatures Recorded by TP-8 on June 18, 2025





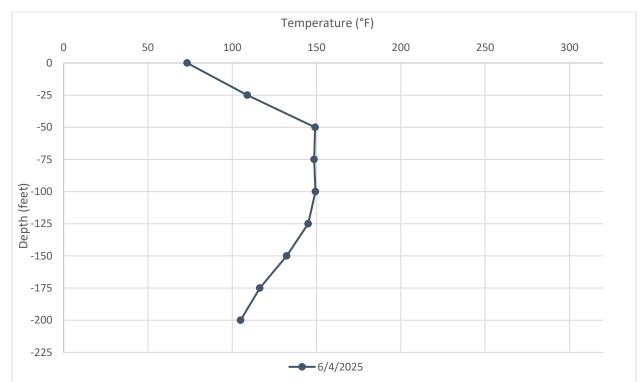
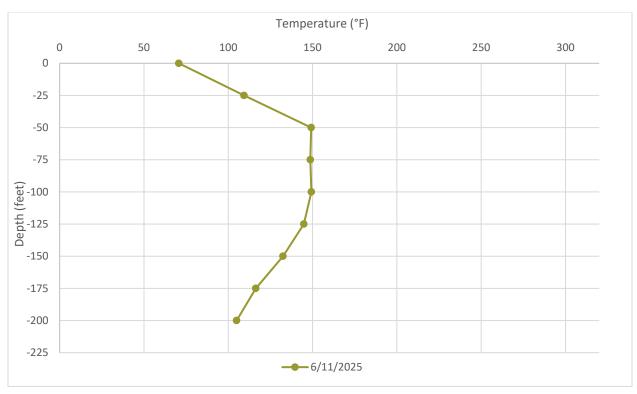


Figure B - 25 Average Temperatures Recorded by TP-9 on June 4, 2025





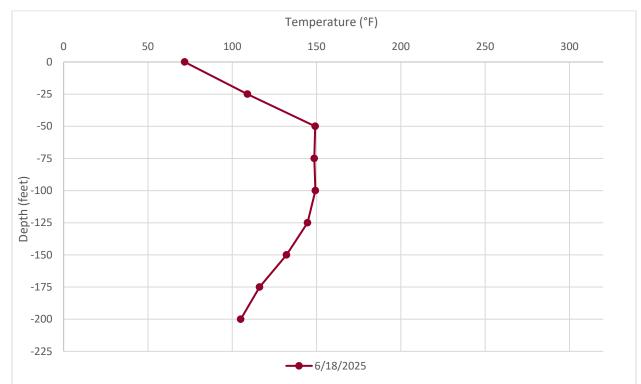
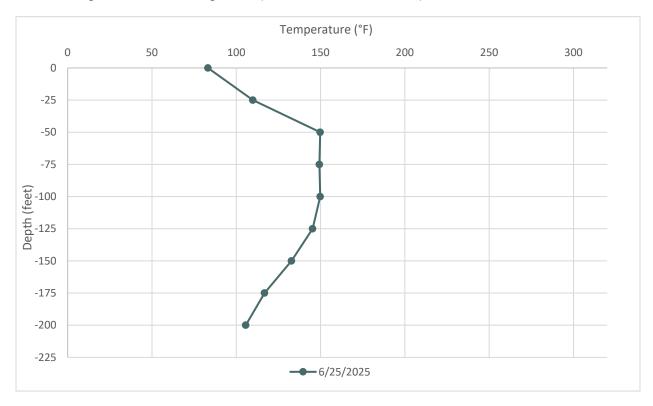


Figure B - 27 Average Temperatures Recorded by TP-9 on June 18, 2025

Figure B - 28 Average Temperatures Recorded by TP-9 on June 25, 2025



Appendix C

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 | July 7, 2025

_		(a-)	• • • •
Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	89.5	84.0	96.4
Jun 2	90.3	78.8	101.4
Jun 3	92.5	81.8	103.0
Jun 4	92.3	80.8	102.6
Jun 5	92.1	86.4	99.8
Jun 6	91.9	84.8	102.8
Jun 7	90.1	81.1	99.5
Jun 8	90.2	84.9	98.0
Jun 9	90.3	82.4	98.6
Jun 10	88.9	81.2	98.7
Jun 11	90.0	78.8	100.8
Jun 12	92.0	82.6	102.8
Jun 13	93.6	85.0	103.4
Jun 14	93.0	84.6	104.7
Jun 15	90.0	84.5	97.1
Jun 16	90.9	86.3	98.4
Jun 17	103.7	83.8	115.1
Jun 18	109.6	107.4	113.2
Jun 19	109.5	106.8	112.7
Jun 20	109.3	106.4	112.2
Jun 21	109.9	106.7	113.5
Jun 22	110.5	107.2	113.9
Jun 23	110.8	107.5	113.9
Jun 24	111.1	107.5	114.9
Jun 25	110.6	81.6	115.7
Jun 26	110.3	105.6	113.7
Jun 27	110.4	106.8	114.8
Jun 28	109.9	104.4	114.3
Jun 29	110.8	107.6	114.7
Summary	99.4	88.9	111.1

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	69.5	57.9	83.4
Jun 2	73.2	51.0	95.7
Jun 3	77.3	52.7	102.3
Jun 4	80.8	60.4	100.4
Jun 5	78.9	68.1	93.5
Jun 6	78.7	64.4	98.5
Jun 7	74.9	65.3	95.2
Jun 8	75.3	66.1	92.1
Jun 9	76.1	62.2	94.8
Jun 10	76.8	64.1	94.9
Jun 11	79.0	58.4	101.5
Jun 12	80.0	62.2	103.1
Jun 13	82.1	68.2	102.2
Jun 14	81.1	68.2	101.3
Jun 15	75.7	70.2	92.0
Jun 16	76.7	70.2	88.2
Jun 17	81.7	68.9	101.7
Jun 18	77.0	68.6	93.7
Jun 19	75.1	67.8	93.6
Jun 20	79.9	65.5	95.3
Jun 21	83.5	64.1	103.0
Jun 22	87.3	67.5	107.2
Jun 23	88.3	69.6	107.3
Jun 24	90.1	71.7	110.4
Jun 25	90.4	70.6	110.5
Jun 26	80.6	73.0	106.1
Jun 27	84.7	68.1	107.1
Jun 28	80.8	68.3	100.1
Jun 29	84.3	69.2	103.7
Summary	80.0	69.5	90.4

		,	
Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	68.9	59.9	80.6
Jun 2	72.8	53.6	95.7
Jun 3	76.6	55.4	102.4
Jun 4	81.0	61.8	101.6
Jun 5	78.8	69.1	92.2
Jun 6	77.7	65.8	95.9
Jun 7	74.5	66.9	90.6
Jun 8	75.0	67.6	88.4
Jun 9	75.5	64.2	89.5
Jun 10	76.1	65.4	93.8
Jun 11	78.6	60.6	101.8
Jun 12	79.8	64.0	101.0
Jun 13	81.1	69.4	102.3
Jun 14	80.2	69.7	102.0
Jun 15	75.1	70.9	85.9
Jun 16	77.1	71.1	87.7
Jun 17	80.9	70.3	100.7
Jun 18	76.0	70.4	89.9
Jun 19	75.0	69.5	90.0
Jun 20	80.0	67.4	96.4
Jun 21	82.5	66.1	103.1
Jun 22	86.5	68.8	111.2
Jun 23	87.5	70.6	110.4
Jun 24	90.2	72.8	114.6
Jun 25	89.3	71.6	111.5
Jun 26	79.9	74.0	102.9
Jun 27	85.1	69.7	109.7
Jun 28	81.5	70.7	102.7
Jun 29	84.1	70.9	100.0
Summary	79.6	68.9	90.2

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	97.0	94.2	100.8
Jun 2	99.5	90.2	106.5
Jun 3	102.6	96.4	108.5
Jun 4	103.4	98.1	108.1
Jun 5	102.9	100.7	106.4
Jun 6	102.9	99.9	107.0
Jun 7	102.2	97.8	106.5
Jun 8	102.4	100.5	105.2
Jun 9	103.1	100.1	106.5
Jun 10	102.9	99.8	106.9
Jun 11	103.9	99.1	108.7
Jun 12	104.5	100.4	109.7
Jun 13	105.0	101.5	109.2
Jun 14	104.8	101.5	109.3
Jun 15	103.5	102.1	106.4
Jun 16	104.5	102.2	107.7
Jun 17	106.3	101.2	110.3
Jun 18	104.9	103.4	108.5
Jun 19	104.7	102.4	107.7
Jun 20	105.7	103.0	109.6
Jun 21	104.9	102.0	109.2
Jun 22	105.7	100.9	111.0
Jun 23	107.0	101.9	112.4
Jun 24	108.5	104.0	113.5
Jun 25	108.4	96.0	113.3
Jun 26	106.7	101.9	111.5
Jun 27	107.4	102.6	112.7
Jun 28	106.7	103.5	111.4
Jun 29	107.8	104.2	111.9
Summary	104.5	97.0	108.5

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	114.7	113.7	115.7
Jun 2	115.6	113.6	117.6
Jun 3	116.2	114.4	118.3
Jun 4	116.7	115.4	118.3
Jun 5	116.8	115.9	118.3
Jun 6	116.6	115.7	118.0
Jun 7	116.6	114.6	117.7
Jun 8	116.7	116.1	117.8
Jun 9	117.1	116.2	118.2
Jun 10	117.2	116.1	118.7
Jun 11	117.9	116.4	119.5
Jun 12	118.2	116.9	119.7
Jun 13	118.4	117.0	119.9
Jun 14	118.7	117.2	120.0
Jun 15	118.5	117.5	119.7
Jun 16	118.9	118.2	120.0
Jun 17	119.3	117.9	120.7
Jun 18	119.2	118.5	120.3
Jun 19	119.2	118.2	120.5
Jun 20	119.8	118.8	120.8
Jun 21	120.0	118.8	121.3
Jun 22	120.2	118.6	121.8
Jun 23	120.5	119.0	122.2
Jun 24	121.0	119.5	122.8
Jun 25	119.9	92.8	122.4
Jun 26	120.6	119.9	122.3
Jun 27	120.8	118.8	122.3
Jun 28	120.4	119.5	122.1
Jun 29	120.7	119.7	122.0
Summary	118.5	114.7	121.0

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	69.2	59.8	83.0
Jun 2	72.2	52.2	91.1
Jun 3	76.6	56.2	98.5
Jun 4	80.6	63.1	97.8
Jun 5	79.2	70.4	91.8
Jun 6	79.2	66.3	94.6
Jun 7	76.4	68.1	91.5
Jun 8	76.4	68.6	89.2
Jun 9	76.9	64.2	90.9
Jun 10	76.5	64.9	92.1
Jun 11	77.9	60.0	97.5
Jun 12	80.3	64.0	100.1
Jun 13	82.3	70.7	98.0
Jun 14	81.4	70.8	97.8
Jun 15	77.1	71.8	90.3
Jun 16	78.0	71.4	87.7
Jun 17	80.7	70.6	97.5
Jun 18	76.6	70.9	90.3
Jun 19	75.4	68.7	91.4
Jun 20	78.0	66.3	93.9
Jun 21	80.9	65.0	99.8
Jun 22	83.5	66.3	102.9
Jun 23	84.5	68.5	104.8
Jun 24	88.5	71.7	109.9
Jun 25	87.5	69.3	106.6
Jun 26	80.1	72.6	101.7
Jun 27	83.2	68.2	103.3
Jun 28	79.8	69.2	100.4
Jun 29	83.0	69.0	102.3
Summary	79.4	69.2	88.5

		, g	
Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	67.2	56.7	79.8
Jun 2	69.0	48.7	90.6
Jun 3	74.3	49.7	98.7
Jun 4	78.1	57.8	97.9
Jun 5	76.9	65.8	94.0
Jun 6	76.0	62.3	94.1
Jun 7	72.9	65.1	89.1
Jun 8	72.8	65.4	85.7
Jun 9	73.9	59.9	88.8
Jun 10	74.5	62.7	91.6
Jun 11	74.3	55.4	97.5
Jun 12	78.6	59.8	101.1
Jun 13	79.4	66.3	97.5
Jun 14	78.7	67.1	96.9
Jun 15	73.4	68.6	88.3
Jun 16	75.6	69.1	88.0
Jun 17	79.7	68.1	94.4
Jun 18	74.5	68.1	89.0
Jun 19	73.3	66.1	90.5
Jun 20	76.8	63.5	93.6
Jun 21	79.9	62.4	100.6
Jun 22	83.9	65.2	105.1
Jun 23	85.3	67.7	105.9
Jun 24	87.5	70.0	110.7
Jun 25	86.6	69.0	107.8
Jun 26	79.2	71.2	102.7
Jun 27	82.4	66.6	105.1
Jun 28	79.9	67.7	101.5
Jun 29	82.1	67.5	99.6
Summary	77.5	67.2	87.5

Jun 1 103.0 88.7 129.3 Jun 2 88.3 65.9 107.4 Jun 3 113.7 79.9 171.6 Jun 4 161.8 158.2 164.4 Jun 5 158.8 156.3 160.6 Jun 6 157.2 154.9 159.9 Jun 7 155.7 149.0 158.0 Jun 8 154.8 151.4 156.4 Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 20			., (05)	N
Jun 2 88.3 65.9 107.4 Jun 3 113.7 79.9 171.6 Jun 4 161.8 158.2 164.4 Jun 5 158.8 156.3 160.6 Jun 6 157.2 154.9 159.9 Jun 7 155.7 149.0 158.0 Jun 8 154.8 151.4 156.4 Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.9 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21	Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 3 113.7 79.9 171.6 Jun 4 161.8 158.2 164.4 Jun 5 158.8 156.3 160.6 Jun 6 157.2 154.9 159.9 Jun 7 155.7 149.0 158.0 Jun 8 154.8 151.4 156.4 Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9<	_			
Jun 4 161.8 158.2 164.4 Jun 5 158.8 156.3 160.6 Jun 6 157.2 154.9 159.9 Jun 7 155.7 149.0 158.0 Jun 8 154.8 151.4 156.4 Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7<				
Jun 5 158.8 156.3 160.6 Jun 6 157.2 154.9 159.9 Jun 7 155.7 149.0 158.0 Jun 8 154.8 151.4 156.4 Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.6 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 </td <td>_</td> <td></td> <td></td> <td></td>	_			
Jun 6 157.2 154.9 159.9 Jun 7 155.7 149.0 158.0 Jun 8 154.8 151.4 156.4 Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 <td></td> <td></td> <td></td> <td></td>				
Jun 7 155.7 149.0 158.0 Jun 8 154.8 151.4 156.4 Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 <td>Jun 5</td> <td>158.8</td> <td>156.3</td> <td>160.6</td>	Jun 5	158.8	156.3	160.6
Jun 8 154.8 151.4 156.4 Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.2 Jun 15 154.7 153.4 155.3 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 <td>Jun 6</td> <td>157.2</td> <td>154.9</td> <td>159.9</td>	Jun 6	157.2	154.9	159.9
Jun 9 155.5 153.6 156.9 Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8	Jun 7	155.7	149.0	158.0
Jun 10 154.8 153.8 156.2 Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8	Jun 8	154.8	151.4	156.4
Jun 11 155.1 153.5 158.0 Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 9	155.5	153.6	156.9
Jun 12 154.9 152.8 156.7 Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 10	154.8	153.8	156.2
Jun 13 154.8 153.0 156.4 Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 11	155.1	153.5	158.0
Jun 14 155.2 154.1 156.2 Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 12	154.9	152.8	156.7
Jun 15 154.7 153.4 155.9 Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 13	154.8	153.0	156.4
Jun 16 154.9 152.6 156.3 Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 14	155.2	154.1	156.2
Jun 17 154.8 151.1 156.5 Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 15	154.7	153.4	155.9
Jun 18 154.2 152.1 155.6 Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 16	154.9	152.6	156.3
Jun 19 154.2 152.1 155.6 Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 17	154.8	151.1	156.5
Jun 20 154.9 153.7 156.9 Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 18	154.2	152.1	155.6
Jun 21 142.6 105.6 155.9 Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 19	154.2	152.1	155.6
Jun 22 95.7 75.9 111.3 Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 20	154.9	153.7	156.9
Jun 23 85.8 67.7 105.6 Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 21	142.6	105.6	155.9
Jun 24 85.8 69.6 103.6 Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 22	95.7	75.9	111.3
Jun 25 87.3 68.8 109.2 Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 23	85.8	67.7	105.6
Jun 26 79.6 72.0 98.7 Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 24	85.8	69.6	103.6
Jun 27 80.3 66.1 96.2 Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 25	87.3	68.8	109.2
Jun 28 77.9 67.8 96.3 Jun 29 81.0 68.8 95.7	Jun 26	79.6	72.0	98.7
Jun 29 81.0 68.8 95.7	Jun 27	80.3	66.1	96.2
	Jun 28	77.9	67.8	96.3
Summary 129.9 77.9 161.8	Jun 29	81.0	68.8	95.7
	Summary	129.9	77.9	161.8

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	66.9	59.2	78.8
Jun 2	69.4	48.9	89.5
Jun 3	82.2	55.3	116.1
Jun 4	104.4	99.6	109.9
Jun 5	103.1	100.2	109.4
Jun 6	101.9	98.6	107.1
Jun 7	100.5	95.5	103.9
Jun 8	99.3	98.1	101.1
Jun 9	100.7	97.2	106.0
Jun 10	100.8	97.4	105.6
Jun 11	105.2	96.1	112.9
Jun 12	110.0	106.5	114.0
Jun 13	110.6	106.3	114.3
Jun 14	112.3	108.5	117.3
Jun 15	112.8	110.8	115.5
Jun 16	113.0	111.8	114.9
Jun 17	113.3	110.5	116.5
Jun 18	112.7	111.5	115.2
Jun 19	112.6	110.6	116.1
Jun 20	113.5	111.7	116.8
Jun 21	110.1	97.4	115.2
Jun 22	101.0	91.9	112.9
Jun 23	101.2	89.9	112.9
Jun 24	100.6	88.1	113.6
Jun 25	91.2	74.5	104.8
Jun 26	88.3	77.2	103.8
Jun 27	98.0	87.8	111.8
Jun 28	96.0	86.4	109.7
Jun 29	98.5	90.1	108.6
Summary	101.0	66.9	113.5

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	69.9	59.5	84.4
Jun 2	73.0	51.0	101.3
Jun 3	78.4	53.6	107.0
Jun 4	82.6	62.5	101.7
Jun 5	82.1	72.6	95.6
Jun 6	82.2	68.1	101.7
Jun 7	79.5	69.4	98.0
Jun 8	79.1	70.7	93.0
Jun 9	80.7	66.4	95.4
Jun 10	78.8	66.7	97.6
Jun 11	80.5	60.9	103.5
Jun 12	82.4	64.8	103.6
Jun 13	84.7	71.8	103.0
Jun 14	83.1	72.0	102.4
Jun 15	77.4	72.0	90.4
Jun 16	77.9	72.0	90.2
Jun 17	81.2	70.4	98.0
Jun 18	75.1	68.8	88.7
Jun 19	75.5	68.3	92.4
Jun 20	76.9	65.1	93.7
Jun 21	79.5	63.0	98.5
Jun 22	82.5	65.0	102.1
Jun 23	83.5	67.0	104.0
Jun 24	87.2	69.4	108.0
Jun 25	86.5	68.5	107.4
Jun 26	79.2	71.1	100.1
Jun 27	83.8	67.8	103.5
Jun 28	78.6	67.7	99.2
Jun 29	81.6	67.5	97.6
Summary	80.1	69.9	87.2

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	157.6	156.6	158.9
Jun 2	157.9	154.7	160.1
Jun 3	157.9	154.6	161.0
Jun 4	158.9	156.5	161.0
Jun 5	158.7	157.7	159.8
Jun 6	158.8	157.5	160.4
Jun 7	158.4	155.0	160.0
Jun 8	158.4	157.0	159.2
Jun 9	158.9	157.4	160.4
Jun 10	158.6	157.2	160.3
Jun 11	158.8	156.7	161.0
Jun 12	159.4	157.3	161.6
Jun 13	159.9	157.3	162.0
Jun 14	160.1	158.6	161.3
Jun 15	159.5	157.6	160.5
Jun 16	160.2	158.2	161.6
Jun 17	157.4	154.7	160.1
Jun 18	156.7	155.7	159.0
Jun 19	156.5	154.3	158.5
Jun 20	157.7	155.8	160.1
Jun 21	160.2	157.3	163.8
Jun 22	162.6	160.2	164.9
Jun 23	162.8	161.2	164.5
Jun 24	162.9	161.0	165.1
Jun 25	161.8	133.5	164.6
Jun 26	162.0	157.9	164.3
Jun 27	162.7	161.0	165.3
Jun 28	162.3	160.1	164.6
Jun 29	163.1	162.0	164.6
Summary	159.7	156.5	163.1

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Date	Average (°F)	Minimum (°F)	Maximum (°F)	
Jun 1	105.7	99.1	115.9	
Jun 2	107.0	86.9	126.8	
Jun 3	110.2	92.5	129.6	
Jun 4	113.3	99.0	129.0	
Jun 5	112.6	105.4	124.0	
Jun 6	113.8	103.5	128.3	
Jun 7	112.1	97.0	126.4	
Jun 8	112.2	105.8	123.6	
Jun 9	112.2	103.1	126.1	
Jun 10	111.6	101.8	126.6	
Jun 11	113.4	100.0	130.6	
Jun 12	116.5	103.2	132.8	
Jun 13	118.6	108.5	132.6	
Jun 14	118.9	107.9	132.1	
Jun 15	114.6	106.3	121.5	
Jun 16	117.0	105.8	125.7	
Jun 17	111.4	99.8	126.4	
Jun 18	108.3	101.2	121.7	
Jun 19	106.6	95.0	118.1	
Jun 20	110.7	99.4	127.6	
Jun 21	115.4	103.7	131.7	
Jun 22	120.2	107.6	135.5	
Jun 23	122.3	111.9	135.4	
Jun 24	125.2	114.1	139.7	
Jun 25	125.3	113.3	139.2	
Jun 26	120.7	108.2	132.2	
Jun 27	123.7	114.5	138.7	
Jun 28	122.5	106.5	138.1	
Jun 29	126.3	118.1	138.6	
Summary	115.5	105.7	126.3	

Zinetel, ill gille				
Date	Average (°F)	Minimum (°F)	Maximum (°F)	
Jun 1	68.6	59.9	81.3	
Jun 2	70.0	50.0	93.3	
Jun 3	75.2	52.6	101.7	
Jun 4	79.6	60.5	99.7	
Jun 5	79.4	69.2	94.4	
Jun 6	78.4	65.1	96.8	
Jun 7	76.1	66.1	92.9	
Jun 8	76.3	68.1	90.9	
Jun 9	75.9	63.1	92.8	
Jun 10	75.4	62.0	93.0	
Jun 11	76.8	57.7	99.7	
Jun 12	80.1	62.1	102.9	
Jun 13	81.9	69.6	99.6	
Jun 14	80.7	69.6	97.9	
Jun 15	75.0	70.4	84.3	
Jun 16	77.3	72.0	88.6	
Jun 17	81.6	71.2	97.3	
Jun 18	77.0	71.9	89.4	
Jun 19	75.9	69.2	88.2	
Jun 20	78.5	67.3	96.2	
Jun 21	79.6	64.3	99.2	
Jun 22	82.8	66.0	102.1	
Jun 23	83.9	68.4	103.4	
Jun 24	88.1	71.1	107.8	
Jun 25	86.9	69.4	107.6	
Jun 26	79.3	71.1	97.2	
Jun 27	82.7	68.0	102.9	
Jun 28	80.1	69.4	100.9	
Jun 29	82.7	69.4	99.8	
Summary	78.8	68.6	88.1	

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	127.2	123.3	130.8
Jun 2	131.2	123.9	139.6
Jun 3	133.0	124.8	141.4
Jun 4	134.5	128.0	143.0
Jun 5	136.2	132.3	142.5
Jun 6	135.5	131.6	139.1
Jun 7	133.6	124.3	138.2
Jun 8	133.6	126.2	138.1
Jun 9	133.9	54.8	142.0
Jun 10	135.8	130.8	142.2
Jun 11	138.7	132.9	146.3
Jun 12	140.9	134.5	147.9
Jun 13	140.9	122.8	147.3
Jun 14	141.7	137.5	146.3
Jun 15	139.4	131.7	142.4
Jun 16	141.0	129.3	145.4
Jun 17	140.4	121.2	149.1
Jun 18	139.0	135.1	145.0
Jun 19	138.9	129.6	144.7
Jun 20	143.2	139.6	150.3
Jun 21	144.0	139.3	153.7
Jun 22	146.6	140.0	155.5
Jun 23	148.0	143.1	156.2
Jun 24	149.8	144.7	158.1
Jun 25	148.9	103.9	157.1
Jun 26	146.9	116.9	155.0
Jun 27	150.0	146.1	159.2
Jun 28	148.7	137.0	157.1
Jun 29	151.8	147.2	156.9
Summary	140.5	127.2	151.8

Division, vin ginna				
Date	Average (°F)	Minimum (°F)	Maximum (°F)	
Jun 1	161.8	160.8	162.7	
Jun 2	161.9	158.8	164.1	
Jun 3	162.1	159.8	164.5	
Jun 4	163.1	161.3	165.2	
Jun 5	163.6	162.6	164.9	
Jun 6	163.9	162.7	165.3	
Jun 7	164.0	162.3	165.3	
Jun 8	164.0	162.2	165.1	
Jun 9	164.2	163.2	165.4	
Jun 10	164.0	163.1	165.6	
Jun 11	164.5	163.0	166.0	
Jun 12	165.3	163.7	167.0	
Jun 13	165.7	163.2	167.3	
Jun 14	166.0	164.3	167.6	
Jun 15	165.9	164.1	166.6	
Jun 16	166.4	165.5	167.5	
Jun 17	166.2	164.8	167.6	
Jun 18	166.2	165.4	167.5	
Jun 19	166.4	164.9	167.9	
Jun 20	166.5	165.6	167.9	
Jun 21	167.7	166.1	169.7	
Jun 22	168.8	167.6	170.4	
Jun 23	169.0	168.4	170.1	
Jun 24	168.9	167.6	170.6	
Jun 25	169.5	168.4	170.8	
Jun 26	169.2	168.2	170.1	
Jun 27	169.3	167.1	171.2	
Jun 28	169.5	167.7	171.1	
Jun 29	170.2	169.3	171.8	
Summary	166.0	161.8	170.2	

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	77.4	68.3	89.8
Jun 2	79.4	58.3	102.2
Jun 3	84.0	61.5	107.3
Jun 4	88.8	69.6	106.7
Jun 5	87.8	78.3	102.0
Jun 6	87.1	73.9	104.5
Jun 7	84.6	73.2	101.0
Jun 8	85.3	75.9	99.5
Jun 9	85.6	73.0	101.3
Jun 10	85.3	73.6	102.2
Jun 11	86.7	67.7	109.0
Jun 12	89.6	72.7	110.7
Jun 13	91.8	79.0	108.7
Jun 14	91.0	79.0	107.1
Jun 15	85.6	79.6	96.6
Jun 16	88.6	81.6	101.7
Jun 17	91.2	79.5	107.4
Jun 18	87.3	81.8	100.3
Jun 19	86.5	79.0	98.9
Jun 20	89.5	78.2	106.2
Jun 21	90.8	76.1	110.2
Jun 22	95.0	77.8	113.4
Jun 23	96.4	81.0	114.9
Jun 24	100.9	84.7	119.9
Jun 25	99.9	82.1	119.0
Jun 26	92.7	82.8	109.0
Jun 27	95.9	81.3	116.7
Jun 28	93.3	80.8	112.5
Jun 29	96.3	82.6	113.1
Summary	89.4	77.4	100.9

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	107.0	105.7	108.5
Jun 2	107.8	104.7	110.6
Jun 3	108.6	106.0	111.2
Jun 4	109.0	106.9	111.1
Jun 5	109.0	107.8	110.9
Jun 6	108.9	107.6	110.8
Jun 7	108.6	106.8	110.3
Jun 8	108.6	107.7	109.9
Jun 9	108.6	107.4	109.9
Jun 10	108.5	107.0	110.1
Jun 11	108.2	106.4	110.4
Jun 12	108.4	106.5	110.4
Jun 13	108.5	106.8	110.3
Jun 14	108.6	107.3	110.3
Jun 15	107.9	106.7	109.7
Jun 16	108.2	107.3	109.5
Jun 17	108.5	106.3	110.2
Jun 18	108.1	107.6	109.4
Jun 19	108.0	107.1	109.4
Jun 20	108.4	107.1	110.0
Jun 21	108.4	107.1	110.5
Jun 22	108.4	106.5	110.9
Jun 23	105.5	35.1	110.9
Jun 24	109.3	107.5	111.3
Jun 25	108.6	96.2	111.2
Jun 26	108.4	106.7	110.2
Jun 27	106.3	38.9	111.0
Jun 28	108.5	106.8	110.5
Jun 29	108.8	107.5	110.8
Summary	108.3	105.5	109.3

D-:	A (OF)	NA:	NA
Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	113.1	112.5	113.8
Jun 2	113.5	112.1	114.9
Jun 3	116.3	112.3	121.4
Jun 4	120.4	117.3	123.2
Jun 5	120.9	115.7	123.0
Jun 6	117.5	114.3	123.4
Jun 7	114.7	113.7	115.3
Jun 8	114.8	114.2	115.5
Jun 9	117.1	114.1	120.8
Jun 10	118.2	115.0	123.2
Jun 11	117.1	114.6	121.8
Jun 12	117.1	114.6	121.8
Jun 13	117.2	115.1	123.1
Jun 14	115.8	115.1	117.8
Jun 15	116.3	114.8	119.5
Jun 16	115.9	115.0	117.8
Jun 17	116.3	114.3	118.5
Jun 18	115.7	114.9	117.6
Jun 19	115.9	114.5	117.9
Jun 20	117.7	114.8	123.0
Jun 21	117.4	116.3	119.1
Jun 22	118.2	116.9	120.9
Jun 23	113.8	26.1	118.8
Jun 24	117.3	116.5	118.6
Jun 25	116.9	110.3	119.9
Jun 26	116.2	115.6	118.2
Jun 27	117.0	115.2	119.8
Jun 28	116.1	115.3	117.1
Jun 29	116.2	115.1	117.9
Summary	116.6	113.1	120.9

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	126.8	124.6	129.3
Jun 2	130.7	122.4	153.7
Jun 3	132.3	123.8	153.0
Jun 4	132.5	126.5	152.0
Jun 5	133.4	128.7	151.6
Jun 6	132.5	127.8	152.9
Jun 7	129.0	123.7	132.4
Jun 8	129.1	127.3	131.2
Jun 9	132.4	127.9	152.3
Jun 10	133.0	128.1	152.1
Jun 11	153.7	81.4	175.4
Jun 12	175.4	173.6	177.0
Jun 13	177.1	176.0	178.3
Jun 14	177.6	176.8	178.3
Jun 15	177.1	175.9	177.7
Jun 16	177.5	176.4	178.2
Jun 17	176.9	175.0	178.4
Jun 18	177.2	176.5	178.2
Jun 19	176.3	174.4	177.6
Jun 20	175.4	173.0	176.3
Jun 21	173.5	171.7	175.1
Jun 22	173.1	171.9	174.8
Jun 23	172.3	165.9	174.0
Jun 24	164.1	151.2	172.4
Jun 25	164.0	145.9	179.2
Jun 26	177.7	175.0	179.4
Jun 27	161.7	148.3	178.0
Jun 28	144.9	142.5	147.2
Jun 29	143.1	140.7	145.5
Summary	156.2	126.8	177.7

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	167.1	166.5	167.8
Jun 2	165.6	163.8	167.0
Jun 3	164.6	163.1	166.5
Jun 4	164.6	163.3	165.8
Jun 5	165.2	164.4	166.2
Jun 6	165.2	164.2	165.9
Jun 7	165.1	164.1	166.0
Jun 8	164.8	164.2	165.5
Jun 9	164.4	163.6	165.4
Jun 10	163.9	163.1	164.9
Jun 11	163.8	162.6	165.1
Jun 12	164.1	162.8	165.6
Jun 13	164.4	163.3	165.6
Jun 14	164.5	163.6	165.5
Jun 15	164.1	163.0	164.9
Jun 16	164.2	160.1	165.2
Jun 17	160.3	151.3	165.2
Jun 18	163.5	162.8	164.6
Jun 19	163.3	162.3	164.4
Jun 20	159.1	152.9	163.3
Jun 21	153.4	151.6	155.3
Jun 22	153.5	151.9	154.8
Jun 23	156.5	143.5	166.4
Jun 24	146.0	131.3	150.4
Jun 25	154.3	106.5	164.3
Jun 26	163.4	162.1	164.5
Jun 27	163.7	162.5	165.4
Jun 28	163.7	162.3	165.2
Jun 29	164.2	162.7	165.5
Summary	162.1	146.0	167.1

D		., g (OE)	NA (OF)
Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	99.2	95.8	104.5
Jun 2	101.2	90.6	111.1
Jun 3	103.8	94.1	113.8
Jun 4	105.1	97.7	113.6
Jun 5	104.3	99.8	109.7
Jun 6	103.2	98.7	111.2
Jun 7	100.9	92.2	109.6
Jun 8	100.7	96.6	106.6
Jun 9	100.8	95.8	107.7
Jun 10	100.4	95.3	108.2
Jun 11	101.2	92.1	110.5
Jun 12	101.9	94.5	111.1
Jun 13	102.5	93.8	111.6
Jun 14	101.9	95.6	110.5
Jun 15	99.3	93.4	107.3
Jun 16	99.8	96.8	105.3
Jun 17	108.8	93.4	117.9
Jun 18	112.0	111.1	114.1
Jun 19	110.6	108.1	113.4
Jun 20	110.6	108.6	112.9
Jun 21	110.7	108.1	113.7
Jun 22	108.4	47.1	114.4
Jun 23	108.8	49.4	114.3
Jun 24	111.7	108.8	115.5
Jun 25	111.6	103.8	115.4
Jun 26	110.5	106.7	113.7
Jun 27	110.9	108.3	114.7
Jun 28	110.2	106.8	114.0
Jun 29	110.8	108.5	113.6
Summary	105.6	99.2	112.0

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	66.1	56.0	79.1
Jun 2	67.7	47.6	87.5
Jun 3	72.0	49.4	94.0
Jun 4	75.4	57.5	92.8
Jun 5	75.6	64.9	90.6
Jun 6	74.5	61.9	92.1
Jun 7	72.3	64.6	88.8
Jun 8	72.6	64.7	86.5
Jun 9	72.3	59.5	87.0
Jun 10	72.3	60.8	88.0
Jun 11	73.0	54.8	92.8
Jun 12	75.7	59.0	96.4
Jun 13	77.4	65.5	93.5
Jun 14	77.1	66.5	94.1
Jun 15	72.7	68.1	87.1
Jun 16	74.5	68.5	86.5
Jun 17	78.0	67.5	92.9
Jun 18	73.8	67.5	85.7
Jun 19	72.6	65.5	86.7
Jun 20	75.5	63.3	92.4
Jun 21	78.3	61.9	95.9
Jun 22	81.8	64.9	100.4
Jun 23	83.1	67.2	101.3
Jun 24	85.3	69.5	103.7
Jun 25	84.9	68.6	105.2
Jun 26	76.9	69.5	96.2
Jun 27	80.4	65.9	101.1
Jun 28	77.7	67.0	94.4
Jun 29	80.0	66.8	99.3
Summary	75.8	66.1	85.3

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	66.2	56.2	80.9
Jun 2	68.3	47.9	90.6
Jun 3	73.0	49.1	97.6
Jun 4	76.4	57.4	97.2
Jun 5	76.2	65.0	93.6
Jun 6	75.1	61.6	94.9
Jun 7	72.7	64.5	92.3
Jun 8	73.2	64.7	90.1
Jun 9	72.7	59.4	90.6
Jun 10	73.2	60.2	92.1
Jun 11	74.1	54.7	97.8
Jun 12	76.4	58.8	100.2
Jun 13	78.0	65.6	96.9
Jun 14	77.7	66.7	97.8
Jun 15	73.0	68.2	89.9
Jun 16	74.7	68.6	88.6
Jun 17	78.7	67.5	97.7
Jun 18	73.9	67.4	87.9
Jun 19	72.6	65.2	88.5
Jun 20	76.3	63.0	95.3
Jun 21	79.1	62.1	99.4
Jun 22	82.8	65.1	105.2
Jun 23	83.9	67.1	104.6
Jun 24	86.8	69.5	108.9
Jun 25	85.8	68.5	107.4
Jun 26	77.5	70.8	100.2
Jun 27	81.2	66.3	103.4
Jun 28	79.0	67.2	101.9
Jun 29	80.9	67.0	99.8
Summary	76.5	66.2	86.8

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	134.2	133.3	135.0
Jun 2	136.9	132.6	140.6
Jun 3	135.8	133.1	139.4
Jun 4	138.2	133.2	142.1
Jun 5	137.8	135.6	141.3
Jun 6	137.2	134.7	141.4
Jun 7	135.4	132.8	136.8
Jun 8	134.8	133.7	135.9
Jun 9	136.8	134.5	140.3
Jun 10	136.9	133.9	141.2
Jun 11	136.2	133.9	140.8
Jun 12	136.8	134.8	139.8
Jun 13	136.3	133.0	138.6
Jun 14	136.4	134.6	138.3
Jun 15	135.9	134.0	137.4
Jun 16	136.3	135.2	138.7
Jun 17	135.8	133.9	137.9
Jun 18	135.5	134.6	136.5
Jun 19	135.2	133.4	137.6
Jun 20	136.7	135.2	138.6
Jun 21	136.3	134.5	138.4
Jun 22	136.6	134.6	139.2
Jun 23	136.8	134.7	138.7
Jun 24	136.9	135.0	139.5
Jun 25	136.7	117.4	138.9
Jun 26	136.5	135.1	138.6
Jun 27	136.5	134.3	138.4
Jun 28	136.2	134.5	138.0
Jun 29	136.4	135.4	137.7
Summary	136.3	134.2	138.2

Jun 1 156.0 153.7 158. Jun 2 158.8 153.2 163. Jun 3 160.3 153.4 166. Jun 4 162.1 157.1 166. Jun 5 162.1 160.1 164. Jun 6 160.7 158.6 163. Jun 7 157.3 125.0 162. Jun 8 154.5 148.9 158. Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 20 159.9	_		· · · · · · · · · · · · · · · · · ·	
Jun 2 158.8 153.2 163. Jun 3 160.3 153.4 166. Jun 4 162.1 157.1 166. Jun 5 162.1 160.1 164. Jun 6 160.7 158.6 163. Jun 7 157.3 125.0 162. Jun 8 154.5 148.9 158. Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 20 159.9 157.6 163. Jun 21 159.4 <th>Date</th> <th>Average (°F)</th> <th>Minimum (°F)</th> <th>Maximum (°F)</th>	Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 3 160.3 153.4 166. Jun 4 162.1 157.1 166. Jun 5 162.1 160.1 164. Jun 6 160.7 158.6 163. Jun 7 157.3 125.0 162. Jun 8 154.5 148.9 158. Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 23 162.6 158.9 1	Jun 1	156.0	153.7	158.3
Jun 4 162.1 157.1 166. Jun 5 162.1 160.1 164. Jun 6 160.7 158.6 163. Jun 7 157.3 125.0 162. Jun 8 154.5 148.9 158. Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9	Jun 2	158.8	153.2	163.8
Jun 5 162.1 160.1 164.4 Jun 6 160.7 158.6 163. Jun 7 157.3 125.0 162. Jun 8 154.5 148.9 158. Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 <t< td=""><td>Jun 3</td><td>160.3</td><td>153.4</td><td>166.3</td></t<>	Jun 3	160.3	153.4	166.3
Jun 6 160.7 158.6 163. Jun 7 157.3 125.0 162. Jun 8 154.5 148.9 158. Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 <t< td=""><td>Jun 4</td><td>162.1</td><td>157.1</td><td>166.4</td></t<>	Jun 4	162.1	157.1	166.4
Jun 7 157.3 125.0 162. Jun 8 154.5 148.9 158. Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 <	Jun 5	162.1	160.1	164.6
Jun 8 154.5 148.9 158. Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 28 163.0 159.3	Jun 6	160.7	158.6	163.5
Jun 9 158.1 154.8 161. Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3	Jun 7	157.3	125.0	162.6
Jun 10 157.5 153.7 161. Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3	Jun 8	154.5	148.9	158.2
Jun 11 159.5 155.8 163. Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 9	158.1	154.8	161.6
Jun 12 160.1 157.2 163. Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 10	157.5	153.7	161.3
Jun 13 160.9 157.1 163. Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 11	159.5	155.8	163.0
Jun 14 161.1 158.4 163. Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 12	160.1	157.2	163.4
Jun 15 160.1 153.9 162. Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 13	160.9	157.1	163.9
Jun 16 161.2 154.9 164. Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 14	161.1	158.4	163.2
Jun 17 157.1 129.9 162. Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 15	160.1	153.9	162.5
Jun 18 158.4 155.9 160. Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 16	161.2	154.9	164.2
Jun 19 157.7 151.7 160. Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 17	157.1	129.9	162.1
Jun 20 159.9 157.6 163. Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 18	158.4	155.9	160.7
Jun 21 159.4 156.5 163. Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 19	157.7	151.7	160.2
Jun 22 160.8 156.8 165. Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 20	159.9	157.6	163.7
Jun 23 162.6 158.9 166. Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 21	159.4	156.5	163.8
Jun 24 164.3 161.3 167. Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 22	160.8	156.8	165.6
Jun 25 164.6 155.4 168. Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 23	162.6	158.9	166.8
Jun 26 161.6 131.1 166. Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 24	164.3	161.3	167.8
Jun 27 163.2 161.0 167. Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 25	164.6	155.4	168.1
Jun 28 163.0 159.3 166. Jun 29 164.3 162.3 167.	Jun 26	161.6	131.1	166.7
Jun 29 164.3 162.3 167.	Jun 27	163.2	161.0	167.0
·	Jun 28	163.0	159.3	166.1
Summary 160.3 154.5 164.	Jun 29	164.3	162.3	167.7
	Summary	160.3	154.5	164.6

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	138.6	135.6	141.3
Jun 2	139.1	125.1	148.7
Jun 3	142.1	131.3	151.7
Jun 4	145.4	138.0	151.7
Jun 5	145.1	142.5	148.6
Jun 6	144.7	140.9	149.8
Jun 7	143.3	129.4	148.9
Jun 8	145.0	139.8	147.3
Jun 9	145.8	142.4	149.7
Jun 10	144.3	140.8	151.0
Jun 11	145.8	139.6	152.6
Jun 12	147.9	141.6	155.2
Jun 13	148.9	144.1	154.6
Jun 14	149.2	145.9	154.1
Jun 15	147.8	142.0	153.4
Jun 16	150.2	144.2	155.0
Jun 17	151.8	141.1	158.5
Jun 18	152.0	149.5	154.8
Jun 19	151.7	145.3	155.4
Jun 20	153.2	149.3	158.5
Jun 21	153.2	149.2	160.3
Jun 22	155.2	150.4	161.5
Jun 23	156.0	151.8	160.6
Jun 24	157.7	153.0	163.8
Jun 25	157.7	149.9	163.0
Jun 26	152.0	120.0	161.9
Jun 27	153.7	148.8	161.4
Jun 28	153.7	143.1	160.1
Jun 29	156.2	152.9	160.9
Summary	149.2	138.6	157.7

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	135.0	133.8	136.9
Jun 2	136.6	128.6	142.7
Jun 3	139.6	135.3	145.0
Jun 4	139.5	136.1	143.2
Jun 5	139.5	138.0	142.9
Jun 6	139.4	137.5	142.9
Jun 7	138.7	136.5	140.5
Jun 8	138.4	137.0	139.7
Jun 9	138.5	136.3	140.1
Jun 10	137.8	136.2	139.6
Jun 11	138.5	136.4	142.5
Jun 12	138.8	136.6	141.4
Jun 13	139.1	136.7	141.4
Jun 14	138.7	137.1	141.2
Jun 15	138.1	136.9	139.6
Jun 16	138.6	135.7	140.5
Jun 17	139.4	135.4	141.4
Jun 18	138.1	136.9	139.3
Jun 19	137.4	135.0	138.9
Jun 20	137.4	135.8	138.6
Jun 21	136.5	134.9	139.3
Jun 22	136.7	133.8	141.2
Jun 23	138.6	134.4	143.1
Jun 24	139.7	137.9	142.4
Jun 25	139.0	114.4	142.9
Jun 26	138.8	135.9	140.7
Jun 27	138.3	132.4	141.5
Jun 28	138.1	135.6	141.3
Jun 29	138.7	136.9	141.1
Summary	138.3	135.0	139.7

Data	Avorago (0E)	Minimum (OE)	Maximum (95)
Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	84.0	76.5	94.4
Jun 2	84.1	69.6	100.2
Jun 3	87.0	72.9	104.6
Jun 4	90.5	78.7	104.2
Jun 5	89.0	83.6	97.6
Jun 6	89.8	82.3	103.0
Jun 7	87.9	81.0	99.2
Jun 8	88.4	83.1	99.1
Jun 9	88.8	79.9	101.6
Jun 10	88.2	81.7	101.3
Jun 11	88.9	77.2	104.4
Jun 12	90.7	79.8	105.1
Jun 13	91.8	83.3	103.2
Jun 14	90.7	82.9	106.1
Jun 15	88.0	84.4	95.7
Jun 16	88.7	84.9	97.8
Jun 17	92.5	82.3	104.9
Jun 18	91.9	88.4	100.9
Jun 19	91.2	86.9	99.8
Jun 20	93.2	86.7	103.1
Jun 21	93.7	85.1	106.6
Jun 22	95.5	85.7	108.0
Jun 23	95.8	86.5	109.0
Jun 24	97.5	88.0	111.3
Jun 25	96.4	73.0	111.3
Jun 26	92.8	88.8	103.7
Jun 27	94.4	86.3	107.6
Jun 28	92.6	85.2	105.8
Jun 29	93.8	85.8	106.5
Summary	91.0	84.0	97.5

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	67.0	59.0	81.9
Jun 2	69.2	51.4	91.1
Jun 3	74.4	52.5	100.5
Jun 4	76.9	59.1	100.6
Jun 5	76.0	66.0	92.2
Jun 6	76.5	63.6	96.1
Jun 7	73.5	67.0	89.0
Jun 8	74.0	67.1	87.3
Jun 9	74.6	62.6	95.3
Jun 10	75.5	65.4	94.8
Jun 11	75.8	58.9	101.5
Jun 12	78.2	61.8	104.1
Jun 13	79.2	67.6	97.8
Jun 14	79.3	68.8	97.0
Jun 15	74.6	69.8	85.2
Jun 16	76.9	70.4	88.4
Jun 17	79.2	69.1	95.2
Jun 18	74.9	69.9	88.7
Jun 19	74.7	69.4	87.9
Jun 20	78.1	66.6	96.8
Jun 21	80.1	64.8	101.1
Jun 22	84.7	67.3	105.4
Jun 23	84.3	69.6	104.4
Jun 24	87.6	71.2	108.2
Jun 25	86.4	69.7	108.3
Jun 26	78.5	72.7	97.0
Jun 27	83.2	68.9	101.6
Jun 28	80.7	70.3	98.8
Jun 29	81.9	70.0	103.9
Summary	77.8	67.0	87.6

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	136.4	135.9	137.2
Jun 2	137.1	135.8	138.8
Jun 3	137.8	136.4	139.8
Jun 4	138.2	137.3	139.3
Jun 5	138.0	137.0	138.7
Jun 6	138.0	137.2	138.7
Jun 7	137.8	136.6	138.6
Jun 8	137.8	137.1	138.3
Jun 9	138.2	137.5	138.8
Jun 10	138.0	137.3	139.0
Jun 11	138.3	137.3	139.4
Jun 12	138.4	137.6	139.4
Jun 13	138.4	136.1	139.6
Jun 14	138.4	137.6	140.0
Jun 15	138.2	136.8	139.2
Jun 16	138.3	137.8	138.6
Jun 17	138.2	137.1	139.6
Jun 18	138.0	137.1	138.9
Jun 19	137.7	135.3	138.6
Jun 20	138.3	137.5	139.3
Jun 21	138.6	137.6	139.6
Jun 22	138.8	137.9	140.2
Jun 23	139.1	138.2	140.1
Jun 24	139.2	138.0	140.6
Jun 25	138.5	122.2	140.2
Jun 26	138.8	137.6	140.2
Jun 27	138.9	136.8	140.4
Jun 28	138.7	137.4	139.9
Jun 29	139.0	138.3	140.3
Summary	138.3	136.4	139.2

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	134.6	134.0	135.5
Jun 2	135.8	133.4	138.3
Jun 3	136.6	134.7	139.1
Jun 4	137.0	135.2	139.2
Jun 5	136.9	135.7	138.4
Jun 6	137.0	135.2	138.0
Jun 7	136.6	133.4	138.1
Jun 8	136.3	134.6	137.1
Jun 9	137.0	136.0	138.2
Jun 10	136.5	135.5	138.0
Jun 11	137.2	135.3	139.1
Jun 12	137.6	136.3	139.5
Jun 13	137.6	132.6	139.6
Jun 14	137.4	135.7	139.7
Jun 15	137.1	134.2	138.7
Jun 16	137.5	135.9	138.9
Jun 17	136.6	133.9	139.1
Jun 18	136.4	135.2	138.1
Jun 19	135.9	132.3	137.5
Jun 20	136.9	135.6	139.3
Jun 21	136.9	135.1	139.0
Jun 22	137.4	135.7	139.9
Jun 23	138.0	136.3	140.1
Jun 24	138.4	136.5	140.8
Jun 25	137.4	115.2	140.4
Jun 26	137.5	134.0	139.5
Jun 27	137.6	133.6	140.3
Jun 28	137.1	133.6	139.7
Jun 29	137.8	136.1	139.9
Summary	137.0	134.6	138.4

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	106.0	105.3	107.0
Jun 2	106.6	104.9	108.7
Jun 3	107.0	105.4	109.0
Jun 4	107.1	105.6	108.6
Jun 5	106.9	106.1	108.7
Jun 6	106.6	105.9	108.0
Jun 7	106.4	105.4	107.9
Jun 8	106.4	105.7	107.5
Jun 9	106.6	105.7	107.8
Jun 10	106.5	105.5	107.9
Jun 11	106.6	105.2	108.5
Jun 12	106.7	105.4	108.5
Jun 13	106.7	105.7	108.3
Jun 14	106.7	105.4	108.4
Jun 15	106.2	105.4	107.5
Jun 16	106.5	105.7	108.0
Jun 17	107.4	105.4	109.6
Jun 18	107.9	107.5	109.0
Jun 19	107.7	107.0	108.6
Jun 20	108.2	107.2	109.6
Jun 21	108.1	107.2	109.4
Jun 22	108.1	107.1	109.8
Jun 23	108.3	107.1	109.7
Jun 24	108.7	107.5	110.7
Jun 25	108.0	97.7	109.9
Jun 26	107.9	107.1	109.2
Jun 27	108.2	107.2	109.8
Jun 28	108.1	107.3	109.4
Jun 29	108.2	107.3	109.6
Summary	107.3	106.0	108.7

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	124.6	123.5	125.6
Jun 2	124.9	121.1	127.9
Jun 3	125.2	122.0	129.3
Jun 4	125.7	123.3	129.3
Jun 5	127.0	125.2	129.0
Jun 6	127.1	125.4	129.1
Jun 7	127.0	118.3	129.0
Jun 8	126.7	124.9	128.2
Jun 9	126.7	125.1	128.8
Jun 10	125.1	123.7	127.4
Jun 11	125.6	123.5	128.8
Jun 12	126.5	123.4	130.1
Jun 13	127.1	122.1	130.3
Jun 14	127.2	125.1	129.7
Jun 15	126.2	121.2	128.4
Jun 16	126.6	124.7	128.3
Jun 17	124.3	120.0	129.0
Jun 18	122.8	119.6	125.8
Jun 19	123.6	120.1	127.0
Jun 20	125.1	122.3	129.8
Jun 21	126.0	122.9	129.9
Jun 22	127.2	123.5	131.5
Jun 23	128.7	124.8	132.5
Jun 24	128.7	124.6	133.7
Jun 25	129.0	112.2	134.1
Jun 26	128.0	118.4	132.3
Jun 27	128.0	117.7	134.0
Jun 28	126.6	118.1	131.3
Jun 29	129.0	126.1	133.3
Summary	126.4	122.8	129.0

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	125.5	125.2	125.8
Jun 2	126.2	124.9	128.0
Jun 3	126.8	125.7	128.3
Jun 4	126.9	125.7	128.4
Jun 5	126.7	126.2	127.6
Jun 6	126.7	126.0	128.1
Jun 7	126.4	125.5	127.7
Jun 8	126.1	125.6	127.2
Jun 9	126.7	125.9	127.6
Jun 10	126.6	125.8	127.8
Jun 11	127.0	125.9	128.6
Jun 12	127.2	126.2	128.6
Jun 13	127.1	126.3	128.5
Jun 14	127.0	126.3	128.3
Jun 15	126.5	125.5	126.9
Jun 16	126.6	126.3	127.1
Jun 17	126.8	124.7	128.4
Jun 18	126.4	125.8	127.1
Jun 19	126.4	125.7	127.5
Jun 20	126.9	126.0	128.4
Jun 21	127.2	126.2	128.6
Jun 22	127.4	126.1	128.9
Jun 23	127.7	126.4	129.0
Jun 24	128.0	126.6	129.7
Jun 25	127.7	123.3	129.0
Jun 26	127.1	125.8	128.4
Jun 27	127.5	125.2	129.3
Jun 28	127.2	125.9	128.8
Jun 29	127.6	126.8	128.9
Summary	126.9	125.5	128.0

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	126.9	126.7	127.2
Jun 2	127.1	126.7	127.7
Jun 3	127.2	126.8	127.8
Jun 4	127.2	126.8	127.6
Jun 5	127.2	126.9	127.6
Jun 6	127.1	126.8	127.5
Jun 7	127.0	126.6	127.3
Jun 8	126.9	126.7	127.1
Jun 9	127.0	126.7	127.4
Jun 10	127.0	126.7	127.5
Jun 11	127.0	126.7	127.4
Jun 12	127.1	126.7	127.7
Jun 13	127.0	126.8	127.4
Jun 14	127.1	126.7	127.6
Jun 15	126.8	126.6	127.0
Jun 16	126.9	126.6	127.2
Jun 17	126.9	126.5	127.3
Jun 18	126.8	126.6	127.1
Jun 19	126.7	126.4	127.1
Jun 20	126.9	126.5	127.3
Jun 21	126.8	126.5	127.2
Jun 22	126.9	126.4	127.5
Jun 23	127.0	126.6	127.5
Jun 24	127.0	126.6	127.6
Jun 25	126.4	111.3	127.6
Jun 26	126.8	126.5	127.4
Jun 27	126.9	126.5	127.3
Jun 28	126.8	126.4	127.2
Jun 29	126.8	126.5	127.3
Summary	126.9	126.4	127.2

D - 4 -	A	BALLETING (OF)	Marriago (OF)
Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	75.7	67.4	89.2
Jun 2	80.8	61.0	105.2
Jun 3	82.4	58.7	109.1
Jun 4	85.1	63.1	107.2
Jun 5	85.6	72.6	134.6
Jun 6	81.9	69.9	100.2
Jun 7	78.0	65.5	98.8
Jun 8	78.8	68.1	92.5
Jun 9	80.8	66.9	95.4
Jun 10	80.6	67.6	101.8
Jun 11	82.3	63.4	103.2
Jun 12	83.1	66.7	103.2
Jun 13	83.2	68.8	104.4
Jun 14	81.8	69.5	103.8
Jun 15	76.9	70.0	91.8
Jun 16	78.5	71.9	91.0
Jun 17	81.9	69.4	102.1
Jun 18	76.6	69.0	93.0
Jun 19	75.3	68.3	93.8
Jun 20	80.7	66.4	99.3
Jun 21	84.2	65.7	106.0
Jun 22	88.2	69.2	110.7
Jun 23	89.6	71.8	107.9
Jun 24	91.4	73.3	115.2
Jun 25	90.9	72.5	111.3
Jun 26	81.4	74.0	106.0
Jun 27	85.9	69.3	108.5
Jun 28	81.6	69.3	103.5
Jun 29	85.1	70.4	102.1
Summary	82.4	75.3	91.4

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	106.3	104.2	109.3
Jun 2	109.3	101.7	115.3
Jun 3	110.4	104.5	116.4
Jun 4	111.7	107.7	116.4
Jun 5	112.0	108.9	115.5
Jun 6	111.2	108.0	114.8
Jun 7	110.5	105.9	114.3
Jun 8	110.0	107.8	112.3
Jun 9	110.6	107.7	114.0
Jun 10	110.4	107.3	114.3
Jun 11	111.7	107.0	117.9
Jun 12	112.9	109.6	116.9
Jun 13	113.2	109.7	116.1
Jun 14	113.9	111.4	117.0
Jun 15	112.8	108.8	115.6
Jun 16	113.5	109.8	116.4
Jun 17	113.5	109.9	116.6
Jun 18	112.6	110.8	115.4
Jun 19	112.5	108.8	115.4
Jun 20	112.9	110.4	116.2
Jun 21	111.7	107.4	116.1
Jun 22	111.9	105.5	118.3
Jun 23	111.5	108.1	116.2
Jun 24	112.1	105.2	119.0
Jun 25	113.7	102.1	118.9
Jun 26	112.8	108.2	115.5
Jun 27	113.4	106.4	118.9
Jun 28	114.1	111.1	118.0
Jun 29	114.7	112.0	118.8
Summary	112.0	106.3	114.7

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	70.5	59.5	86.2
Jun 2	74.2	52.1	100.9
Jun 3	78.4	54.1	106.1
Jun 4	82.0	61.7	104.9
Jun 5	80.2	69.5	95.3
Jun 6	79.7	66.1	100.3
Jun 7	76.1	65.6	96.9
Jun 8	76.3	67.1	94.6
Jun 9	77.6	63.6	95.7
Jun 10	77.9	65.1	99.4
Jun 11	79.5	59.7	103.0
Jun 12	81.0	63.3	103.6
Jun 13	83.1	68.9	103.1
Jun 14	81.9	69.1	104.7
Jun 15	76.1	70.2	88.0
Jun 16	77.8	71.0	91.7
Jun 17	81.5	69.4	102.5
Jun 18	76.9	69.6	95.3
Jun 19	75.7	68.5	95.4
Jun 20	80.4	66.4	99.9
Jun 21	83.4	65.1	106.9
Jun 22	87.6	68.1	113.6
Jun 23	88.7	71.0	112.5
Jun 24	91.1	72.7	116.2
Jun 25	90.1	71.6	113.5
Jun 26	80.9	69.6	102.9
Jun 27	85.5	69.1	110.9
Jun 28	81.2	69.1	102.6
Jun 29	84.5	70.0	105.7
Summary	80.7	70.5	91.1

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	67.1	55.9	85.7
Jun 2	70.1	48.4	96.2
Jun 3	76.4	49.5	104.1
Jun 4	80.0	58.1	102.6
Jun 5	78.5	65.5	97.9
Jun 6	78.4	62.1	100.1
Jun 7	73.6	65.2	93.0
Jun 8	74.7	65.5	91.7
Jun 9	75.7	60.2	96.8
Jun 10	74.7	61.4	97.3
Jun 11	77.0	55.2	103.9
Jun 12	80.6	59.3	107.8
Jun 13	81.1	66.4	101.3
Jun 14	79.8	67.2	100.5
Jun 15	73.9	68.5	86.9
Jun 16	76.4	68.9	93.3
Jun 17	81.0	68.0	100.1
Jun 18	74.9	67.9	90.3
Jun 19	74.2	65.9	90.1
Jun 20	78.2	63.5	98.9
Jun 21	81.2	62.0	102.7
Jun 22	85.2	64.8	108.8
Jun 23	85.7	67.3	108.5
Jun 24	90.1	69.6	112.1
Jun 25	88.5	68.9	114.6
Jun 26	80.6	71.1	105.8
Jun 27	83.7	66.5	107.2
Jun 28	79.5	67.7	102.4
Jun 29	83.6	67.2	106.5
Summary	78.8	67.1	90.1

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	163.8	163.1	164.8
Jun 2	163.9	162.5	164.8
Jun 3	163.6	161.9	166.2
Jun 4	165.9	164.5	167.3
Jun 5	166.7	165.9	167.8
Jun 6	166.6	165.6	167.3
Jun 7	166.1	160.9	167.6
Jun 8	165.8	163.7	166.6
Jun 9	165.9	164.3	167.4
Jun 10	165.3	164.3	166.4
Jun 11	165.5	163.6	166.9
Jun 12	165.9	164.1	167.4
Jun 13	166.1	164.9	167.6
Jun 14	166.0	165.3	167.1
Jun 15	165.4	163.5	166.5
Jun 16	165.5	163.7	166.3
Jun 17	165.8	161.1	169.0
Jun 18	166.8	164.8	168.7
Jun 19	167.0	163.3	168.8
Jun 20	167.9	166.9	169.4
Jun 21	168.9	167.3	170.5
Jun 22	170.2	168.5	171.6
Jun 23	170.6	169.8	171.9
Jun 24	170.2	168.9	172.2
Jun 25	169.6	141.5	172.8
Jun 26	169.3	161.7	171.3
Jun 27	169.3	165.3	171.3
Jun 28	168.7	166.8	170.7
Jun 29	169.8	167.5	171.2
Summary	167.0	163.6	170.6

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	171.2	169.0	173.1
Jun 2	172.7	171.2	174.1
Jun 3	172.8	170.9	174.1
Jun 4	172.7	171.1	173.8
Jun 5	173.4	172.6	174.9
Jun 6	172.5	170.9	173.7
Jun 7	172.2	170.1	174.1
Jun 8	171.6	168.2	173.6
Jun 9	172.5	170.6	173.9
Jun 10	171.8	170.5	172.9
Jun 11	172.4	171.0	173.2
Jun 12	172.6	170.6	174.2
Jun 13	172.5	170.7	173.6
Jun 14	172.5	170.2	173.5
Jun 15	172.0	169.8	173.5
Jun 16	172.5	170.6	173.3
Jun 17	170.5	165.4	173.0
Jun 18	169.9	167.8	172.0
Jun 19	169.1	164.4	172.4
Jun 20	170.4	169.0	172.3
Jun 21	171.5	169.6	172.8
Jun 22	172.4	170.1	173.8
Jun 23	173.3	171.8	174.4
Jun 24	172.9	156.9	174.9
Jun 25	173.8	167.5	174.9
Jun 26	172.1	160.6	174.8
Jun 27	171.5	169.3	173.4
Jun 28	171.5	169.9	173.4
Jun 29	172.4	171.2	173.6
Summary	172.0	169.1	173.8

D - 4 -		Minimum (OF)	Marine (05)
Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	172.3	171.5	172.9
Jun 2	172.3	171.0	172.9
Jun 3	171.9	171.0	172.8
Jun 4	172.2	171.1	173.1
Jun 5	172.1	171.3	172.9
Jun 6	172.1	171.6	172.7
Jun 7	171.8	170.4	172.6
Jun 8	171.4	169.4	172.2
Jun 9	171.9	171.2	172.6
Jun 10	171.5	170.1	172.1
Jun 11	171.7	171.0	172.6
Jun 12	171.7	170.8	172.5
Jun 13	171.7	169.0	172.7
Jun 14	171.8	171.1	172.3
Jun 15	171.4	170.0	172.3
Jun 16	171.5	170.5	172.1
Jun 17	171.2	169.9	172.0
Jun 18	171.1	170.2	171.7
Jun 19	171.0	169.2	171.9
Jun 20	171.3	170.7	172.3
Jun 21	171.5	170.6	172.3
Jun 22	171.8	171.1	172.5
Jun 23	171.5	170.8	172.1
Jun 24	171.2	169.6	172.1
Jun 25	170.9	162.2	173.9
Jun 26	170.4	158.5	171.9
Jun 27	170.8	169.9	172.2
Jun 28	170.5	168.7	171.7
Jun 29	170.9	170.2	171.7
Summary	171.5	170.4	172.3

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	171.7	169.4	174.8
Jun 2	171.7	168.6	180.8
Jun 3	168.5	167.9	169.1
Jun 4	168.2	167.7	168.7
Jun 5	168.1	167.8	168.5
Jun 6	168.0	167.7	168.3
Jun 7	167.9	167.3	168.4
Jun 8	167.6	167.4	167.9
Jun 9	167.6	167.3	168.2
Jun 10	167.4	167.1	167.9
Jun 11	167.3	166.9	167.9
Jun 12	167.2	166.7	167.9
Jun 13	167.2	166.6	167.8
Jun 14	167.1	166.8	167.8
Jun 15	166.9	166.5	167.2
Jun 16	166.8	166.6	167.2
Jun 17	166.7	166.3	167.1
Jun 18	166.4	166.1	166.7
Jun 19	166.3	165.9	166.8
Jun 20	166.2	165.8	166.7
Jun 21	166.4	165.6	167.1
Jun 22	166.6	166.0	167.3
Jun 23	166.5	166.0	167.0
Jun 24	166.3	165.7	166.9
Jun 25	166.1	159.7	167.3
Jun 26	166.1	165.7	166.5
Jun 27	166.0	165.4	166.8
Jun 28	165.8	165.3	166.6
Jun 29	166.0	165.5	166.5
Summary	167.3	165.8	171.7

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	149.4	147.8	150.3
Jun 2	153.8	147.8	159.7
Jun 3	156.8	154.6	160.0
Jun 4	157.3	155.5	160.3
Jun 5	158.2	156.8	160.1
Jun 6	157.7	156.1	159.0
Jun 7	157.7	155.7	159.1
Jun 8	157.0	153.5	158.2
Jun 9	155.7	151.5	158.8
Jun 10	157.1	156.0	158.9
Jun 11	157.4	155.9	159.7
Jun 12	157.7	155.2	159.7
Jun 13	156.1	150.6	159.4
Jun 14	154.2	152.3	156.4
Jun 15	156.6	154.1	158.2
Jun 16	157.3	154.5	159.3
Jun 17	156.8	152.6	159.9
Jun 18	157.2	153.7	158.8
Jun 19	155.2	150.6	158.3
Jun 20	153.9	150.2	157.1
Jun 21	153.6	150.2	156.0
Jun 22	153.4	151.3	157.3
Jun 23	156.0	151.9	160.3
Jun 24	157.5	148.2	161.2
Jun 25	157.2	134.9	159.7
Jun 26	156.9	154.9	157.5
Jun 27	157.6	154.7	160.4
Jun 28	157.4	155.4	160.0
Jun 29	157.8	156.6	160.2
Summary	156.2	149.4	158.2

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	146.6	146.1	147.4
Jun 2	146.4	145.2	147.2
Jun 3	146.1	144.7	147.3
Jun 4	146.2	145.1	147.2
Jun 5	146.3	145.7	147.3
Jun 6	146.4	145.7	147.3
Jun 7	146.3	145.5	147.1
Jun 8	146.3	145.9	147.0
Jun 9	146.3	145.7	147.2
Jun 10	145.9	145.4	146.9
Jun 11	145.9	145.1	146.9
Jun 12	146.0	145.1	147.2
Jun 13	146.1	145.4	147.1
Jun 14	146.1	145.4	147.1
Jun 15	145.7	145.2	146.4
Jun 16	145.8	145.3	146.4
Jun 17	145.6	144.7	146.8
Jun 18	145.3	145.0	146.4
Jun 19	145.4	144.7	146.5
Jun 20	145.5	144.9	146.3
Jun 21	146.3	132.0	151.2
Jun 22	150.2	146.6	154.4
Jun 23	149.6	147.7	153.2
Jun 24	147.3	146.3	148.2
Jun 25	147.1	145.8	152.9
Jun 26	146.2	145.1	147.3
Jun 27	146.2	144.7	147.7
Jun 28	146.0	145.3	147.2
Jun 29	146.3	145.6	147.2
Summary	146.4	145.3	150.2

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	107.2	102.7	112.1
Jun 2	111.5	89.8	127.6
Jun 3	113.8	96.4	130.3
Jun 4	117.6	104.7	128.8
Jun 5	115.3	111.3	123.1
Jun 6	113.8	106.4	120.1
Jun 7	109.4	91.4	118.6
Jun 8	108.3	100.4	112.6
Jun 9	113.4	107.7	119.2
Jun 10	110.3	102.6	120.0
Jun 11	113.3	102.1	124.7
Jun 12	113.5	102.1	126.1
Jun 13	112.9	93.9	125.5
Jun 14	112.9	105.1	121.3
Jun 15	108.2	95.4	117.5
Jun 16	110.7	101.9	117.1
Jun 17	107.6	91.3	124.8
Jun 18	106.6	101.1	115.7
Jun 19	104.4	94.5	113.9
Jun 20	109.9	102.5	121.7
Jun 21	111.5	98.1	126.8
Jun 22	115.5	102.8	128.8
Jun 23	117.7	106.2	129.3
Jun 24	119.1	108.5	132.9
Jun 25	118.3	105.1	131.2
Jun 26	111.5	89.5	128.6
Jun 27	114.1	94.2	131.2
Jun 28	109.3	91.3	126.3
Jun 29	113.7	105.3	123.9
Summary	112.1	104.4	119.1

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	174.5	174.0	175.2
Jun 2	173.2	171.9	174.9
Jun 3	171.8	170.4	172.7
Jun 4	170.2	169.4	170.8
Jun 5	170.8	166.8	173.9
Jun 6	172.5	171.1	173.6
Jun 7	172.7	171.7	173.5
Jun 8	173.2	172.6	174.3
Jun 9	173.2	172.4	173.8
Jun 10	172.8	172.2	173.3
Jun 11	172.2	170.8	173.2
Jun 12	172.3	170.4	173.1
Jun 13	170.4	169.0	171.3
Jun 14	171.5	170.4	172.8
Jun 15	170.0	169.4	171.8
Jun 16	170.4	169.5	172.4
Jun 17	171.0	168.2	173.0
Jun 18	171.9	171.1	172.5
Jun 19	171.0	169.9	172.0
Jun 20	170.2	169.1	172.1
Jun 21	170.5	168.7	171.8
Jun 22	171.1	170.3	172.0
Jun 23	172.4	170.6	174.0
Jun 24	172.5	170.9	173.8
Jun 25	172.3	170.8	178.4
Jun 26	171.0	170.2	173.2
Jun 27	172.1	169.7	174.1
Jun 28	172.1	171.1	173.6
Jun 29	171.0	168.8	173.2
Summary	171.8	170.0	174.5

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	200.4	199.5	200.9
Jun 2	197.6	196.6	200.3
Jun 3	176.4	74.2	201.4
Jun 4	132.3	62.7	200.9
Jun 5	200.3	198.1	201.0
Jun 6	197.3	196.8	198.0
Jun 7	196.5	195.8	196.9
Jun 8	195.9	195.4	196.3
Jun 9	198.9	195.7	201.0
Jun 10	200.7	200.5	200.9
Jun 11	200.8	200.6	201.2
Jun 12	200.9	200.7	201.2
Jun 13	200.8	200.6	201.0
Jun 14	200.5	198.7	200.9
Jun 15	200.7	200.5	200.8
Jun 16	200.7	200.5	200.8
Jun 17	199.6	197.5	200.9
Jun 18	200.4	198.3	200.8
Jun 19	199.3	197.1	200.8
Jun 20	200.1	197.5	200.9
Jun 21	196.9	196.5	197.4
Jun 22	196.4	196.1	196.8
Jun 23	198.9	195.7	201.2
Jun 24	201.0	200.8	201.3
Jun 25	200.3	198.2	201.0
Jun 26	199.9	197.5	200.9
Jun 27	187.4	169.8	200.7
Jun 28	164.3	160.2	169.1
Jun 29	157.5	154.1	159.8
Summary	193.2	132.3	201.0

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	137.2	136.9	137.7
Jun 2	137.4	136.2	138.3
Jun 3	137.4	136.3	138.3
Jun 4	137.5	136.8	138.2
Jun 5	137.5	137.1	138.0
Jun 6	137.5	137.0	138.2
Jun 7	137.4	136.6	138.0
Jun 8	137.4	137.1	137.9
Jun 9	137.4	136.9	138.0
Jun 10	137.2	136.9	137.8
Jun 11	137.3	136.7	138.0
Jun 12	137.3	136.7	138.0
Jun 13	137.3	136.8	138.1
Jun 14	137.3	136.8	138.1
Jun 15	137.0	136.7	137.5
Jun 16	137.1	136.7	137.5
Jun 17	137.1	136.4	137.7
Jun 18	136.9	136.7	137.3
Jun 19	136.8	136.4	137.4
Jun 20	136.8	136.4	137.4
Jun 21	136.9	136.3	137.8
Jun 22	137.2	136.5	138.4
Jun 23	137.3	136.7	138.2
Jun 24	137.4	136.6	138.2
Jun 25	137.0	126.7	138.1
Jun 26	137.0	136.3	137.8
Jun 27	137.0	136.2	137.9
Jun 28	136.8	136.1	137.6
Jun 29	137.1	136.5	137.7
Summary	137.2	136.8	137.5

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	156.8	154.9	158.5
Jun 2	157.3	152.6	159.1
Jun 3	142.6	79.5	157.8
Jun 4	156.6	154.8	158.3
Jun 5	157.4	155.9	158.5
Jun 6	158.0	157.1	159.0
Jun 7	157.6	152.6	158.8
Jun 8	157.8	155.2	158.9
Jun 9	158.3	156.7	159.5
Jun 10	157.9	156.5	159.1
Jun 11	158.5	157.4	159.6
Jun 12	158.6	156.9	160.2
Jun 13	158.9	157.2	160.0
Jun 14	158.7	157.4	159.6
Jun 15	158.3	155.1	159.4
Jun 16	158.7	157.3	159.6
Jun 17	157.4	149.6	159.4
Jun 18	157.7	156.2	158.8
Jun 19	157.2	154.7	158.9
Jun 20	158.0	157.1	159.5
Jun 21	158.6	156.8	161.1
Jun 22	159.8	158.2	161.5
Jun 23	159.8	158.9	160.8
Jun 24	159.7	158.8	161.4
Jun 25	159.7	156.6	160.9
Jun 26	158.7	143.7	160.7
Jun 27	159.2	157.4	161.4
Jun 28	159.0	157.5	160.5
Jun 29	159.6	158.7	160.7
Summary	157.8	142.6	159.8

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	148.4	134.3	166.0
Jun 2	160.4	147.4	172.5
Jun 3	163.0	146.8	175.1
Jun 4	168.3	156.2	177.4
Jun 5	171.6	164.7	175.2
Jun 6	168.9	158.0	174.4
Jun 7	166.2	147.2	178.9
Jun 8	163.5	136.8	178.7
Jun 9	172.5	158.6	180.1
Jun 10	169.0	161.0	177.8
Jun 11	174.9	168.7	181.3
Jun 12	176.1	169.0	181.8
Jun 13	173.2	125.8	181.0
Jun 14	174.8	165.8	180.3
Jun 15	171.6	151.7	181.6
Jun 16	176.4	167.7	181.4
Jun 17	169.9	140.0	181.1
Jun 18	171.2	162.2	181.0
Jun 19	169.4	139.7	182.2
Jun 20	178.1	173.5	185.1
Jun 21	178.4	168.9	185.1
Jun 22	180.5	175.5	184.7
Jun 23	181.6	178.0	184.4
Jun 24	181.2	167.6	186.4
Jun 25	181.8	175.8	186.1
Jun 26	179.1	141.9	185.5
Jun 27	180.2	162.1	186.9
Jun 28	179.6	170.2	185.6
Jun 29	181.9	173.0	185.3
Summary	172.8	148.4	181.9

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	69.3	60.5	82.6
Jun 2	72.7	52.8	97.9
Jun 3	76.5	53.5	106.1
Jun 4	80.5	61.2	104.2
Jun 5	79.9	69.7	94.6
Jun 6	79.1	67.0	98.4
Jun 7	76.8	68.9	93.8
Jun 8	76.9	69.4	90.6
Jun 9	76.2	64.2	94.7
Jun 10	76.6	64.5	98.0
Jun 11	78.7	60.5	105.5
Jun 12	81.2	65.0	106.5
Jun 13	82.0	71.2	103.0
Jun 14	82.2	70.9	102.4
Jun 15	76.9	72.2	91.3
Jun 16	78.9	72.5	92.0
Jun 17	83.2	71.9	102.0
Jun 18	78.7	72.4	93.7
Jun 19	77.5	71.3	93.0
Jun 20	81.1	68.5	101.3
Jun 21	82.8	67.3	107.6
Jun 22	86.2	69.6	111.4
Jun 23	87.3	71.8	111.1
Jun 24	91.4	74.3	116.5
Jun 25	90.2	70.8	113.8
Jun 26	82.4	76.9	99.0
Jun 27	86.3	72.8	110.3
Jun 28	85.9	75.2	107.3
Jun 29	88.2	76.2	106.6
Summary	80.9	69.3	91.4

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	162.6	149.5	174.9
Jun 2	161.7	145.1	176.5
Jun 3	174.5	173.2	178.3
Jun 4	175.4	174.3	178.2
Jun 5	176.5	174.8	178.6
Jun 6	176.1	174.7	178.3
Jun 7	176.0	173.8	178.5
Jun 8	175.9	174.7	178.1
Jun 9	172.7	160.7	175.7
Jun 10	175.9	174.5	178.2
Jun 11	175.4	174.2	178.2
Jun 12	175.0	173.9	178.1
Jun 13	175.5	174.2	177.6
Jun 14	160.6	155.4	169.1
Jun 15	152.4	149.6	156.0
Jun 16	149.7	147.3	153.6
Jun 17	157.9	143.1	175.7
Jun 18	173.9	172.6	176.7
Jun 19	173.1	171.4	176.1
Jun 20	173.0	171.8	175.7
Jun 21	172.3	171.1	175.4
Jun 22	172.6	171.3	175.2
Jun 23	172.4	171.5	175.3
Jun 24	172.6	171.1	175.1
Jun 25	172.6	171.4	175.4
Jun 26	172.9	170.2	175.9
Jun 27	173.0	172.0	175.7
Jun 28	172.3	166.2	175.7
Jun 29	172.2	171.2	174.8
Summary	170.6	149.7	176.5

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Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	68.3	55.8	87.7
Jun 2	72.3	49.5	101.2
Jun 3	79.7	57.8	106.9
Jun 4	98.2	62.3	139.9
Jun 5	106.4	82.4	140.0
Jun 6	90.5	72.1	104.5
Jun 7	82.7	72.0	99.4
Jun 8	83.9	73.8	96.5
Jun 9	82.8	71.6	100.3
Jun 10	80.4	68.5	100.0
Jun 11	83.3	67.1	104.2
Jun 12	84.8	69.2	105.4
Jun 13	85.1	71.5	104.6
Jun 14	83.4	69.2	105.3
Jun 15	80.5	75.0	92.8
Jun 16	101.0	78.5	138.3
Jun 17	130.9	92.2	140.2
Jun 18	136.1	128.2	138.7
Jun 19	135.7	129.9	138.6
Jun 20	132.4	122.6	139.2
Jun 21	100.5	72.1	119.3
Jun 22	85.4	65.0	113.8
Jun 23	87.0	67.7	111.0
Jun 24	91.4	73.5	117.7
Jun 25	91.3	70.4	113.7
Jun 26	85.0	76.9	104.6
Jun 27	89.3	74.3	108.6
Jun 28	85.7	75.9	104.3
Jun 29	89.5	77.9	106.6
Summary	93.2	68.3	136.1

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	136.0	134.0	137.6
Jun 2	136.5	132.0	138.6
Jun 3	136.6	134.1	139.5
Jun 4	137.3	135.4	139.4
Jun 5	136.7	135.2	138.0
Jun 6	137.1	135.7	138.6
Jun 7	136.7	130.6	138.4
Jun 8	137.0	133.7	138.1
Jun 9	137.7	136.3	139.0
Jun 10	137.5	136.0	139.1
Jun 11	138.5	136.5	141.3
Jun 12	138.8	137.1	140.7
Jun 13	139.2	137.4	141.3
Jun 14	139.3	138.3	140.8
Jun 15	138.8	137.3	139.9
Jun 16	139.2	135.3	140.2
Jun 17	137.2	132.4	139.6
Jun 18	137.5	136.5	138.7
Jun 19	137.2	134.9	138.8
Jun 20	138.2	137.2	140.0
Jun 21	139.5	136.5	143.0
Jun 22	141.4	139.1	143.9
Jun 23	140.9	139.6	142.8
Jun 24	140.3	138.7	142.3
Jun 25	139.5	119.9	141.9
Jun 26	138.2	123.2	141.1
Jun 27	139.5	135.2	142.5
Jun 28	139.5	137.4	142.2
Jun 29	140.4	139.3	141.9
Summary	138.4	136.0	141.4

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Date	Average (°F)	Minimum (°F)	Maximum (°F)					
Jun 1	156.1	154.7	157.5					
Jun 2	155.7	152.7	157.4					
Jun 3	154.7	152.0	156.8					
Jun 4	155.6	154.0	157.2					
Jun 5	155.5	154.4	156.3					
Jun 6	155.8	155.0	156.5					
Jun 7	155.7	154.2	156.7					
Jun 8	155.2	153.3	156.3					
Jun 9	155.5	154.7	156.5					
Jun 10	155.0	154.2	156.3					
Jun 11	155.3	153.8	156.7					
Jun 12	155.7	154.4	157.3					
Jun 13	156.1	153.9	157.3					
Jun 14	156.4	155.6	157.8					
Jun 15	156.0	154.4	157.2					
Jun 16	156.1	155.5	157.1					
Jun 17	153.1	148.6	156.4					
Jun 18	152.9	152.0	154.0					
Jun 19	153.0	150.6	154.6					
Jun 20	153.3	151.9	154.4					
Jun 21	155.4	152.3	158.4					
Jun 22	157.9	156.4	159.8					
Jun 23	157.9	156.9	159.5					
Jun 24	157.4	156.3	159.4					
Jun 25	157.0	148.2	159.9					
Jun 26	156.9	155.3	158.3					
Jun 27	157.6	155.0	159.4					
Jun 28	157.3	156.0	158.8					
Jun 29	157.9	156.9	159.2					
Summary	155.8	152.9	157.9					

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	66.8	56.2	82.3
Jun 2	69.5	48.1	95.7
Jun 3	74.1	50.8	101.8
Jun 4	78.5	58.3	102.1
Jun 5	78.8	66.2	97.7
Jun 6	77.1	62.6	96.5
Jun 7	73.6	65.6	91.1
Jun 8	74.4	65.7	90.3
Jun 9	75.4	60.6	94.3
Jun 10	78.6	63.9	95.0
Jun 11	77.0	56.1	103.3
Jun 12	80.6	60.2	104.5
Jun 13	87.1	78.4	99.7
Jun 14	87.8	79.2	99.7
Jun 15	84.5	80.2	92.9
Jun 16	87.8	81.9	97.6
Jun 17	88.2	75.0	101.8
Jun 18	86.4	82.5	95.5
Jun 19	85.0	80.2	93.8
Jun 20	87.7	78.3	100.5
Jun 21	89.2	77.3	103.8
Jun 22	91.5	80.3	107.0
Jun 23	93.0	82.2	108.3
Jun 24	96.1	84.2	112.6
Jun 25	95.3	83.2	111.9
Jun 26	90.3	85.4	102.1
Jun 27	92.4	82.3	107.8
Jun 28	91.5	83.9	104.7
Jun 29	93.1	83.4	107.6
Summary	83.8	66.8	96.1

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	145.4	144.9	146.0
Jun 2	145.9	144.4	147.0
Jun 3	146.1	145.3	146.9
Jun 4	146.2	145.6	146.9
Jun 5	146.1	145.7	146.5
Jun 6	146.1	145.6	146.8
Jun 7	145.9	145.2	146.7
Jun 8	145.9	145.5	146.2
Jun 9	145.8	145.4	146.3
Jun 10	145.6	145.3	146.3
Jun 11	145.7	145.1	146.4
Jun 12	145.9	145.3	146.7
Jun 13	145.9	145.1	146.6
Jun 14	145.9	145.3	146.5
Jun 15	145.7	145.3	146.2
Jun 16	145.8	145.6	146.2
Jun 17	146.0	145.4	146.6
Jun 18	145.6	145.5	146.0
Jun 19	145.6	145.3	146.1
Jun 20	145.7	145.5	146.3
Jun 21	145.7	145.3	146.3
Jun 22	145.9	145.3	146.9
Jun 23	146.3	145.7	147.4
Jun 24	146.6	146.0	147.4
Jun 25	146.1	131.5	147.5
Jun 26	146.3	145.9	146.9
Jun 27	146.3	145.5	147.1
Jun 28	146.3	145.8	147.0
Jun 29	146.5	146.1	147.2
Summary	146.0	145.4	146.6

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Jun 1	154.6	154.1	155.1
Jun 2	136.6	128.6	142.7
Jun 3	155.6	154.3	156.9
Jun 4	139.5	136.1	143.2
Jun 5	155.9	155.5	156.6
Jun 6	139.4	137.5	142.9
Jun 7	156.0	155.0	156.8
Jun 8	138.4	137.0	139.7
Jun 9	156.5	155.9	157.2
Jun 10	137.8	136.2	139.6
Jun 11	156.6	156.0	157.5
Jun 12	138.8	136.6	141.4
Jun 13	156.9	156.3	157.8
Jun 14	138.7	137.1	141.2
Jun 15	156.8	156.3	157.2
Jun 16	138.6	135.7	140.5
Jun 17	157.1	155.8	158.0
Jun 18	138.1	136.9	139.3
Jun 19	156.9	156.3	157.6
Jun 20	137.4	135.8	138.6
Jun 21	157.2	156.3	158.5
Jun 22	136.7	133.8	141.2
Jun 23	157.8	157.0	158.7
Jun 24	139.7	137.9	142.4
Jun 25	157.6	149.1	158.7
Jun 26	138.8	135.9	140.7
Jun 27	157.8	157.0	159.0
Jun 28	138.1	135.6	141.3
Jun 29	158.0	157.3	158.8
Summary	156.8	154.6	158.0

Appendix D

Solid Waste Permit 588 Daily Borehole Temperature Averages

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	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft		
1-Jun	165.4	221.4	221.8	231.2	245.4	264.2		
2-Jun	165.4	221.4	221.8	231.1	245.4	264.1		
3-Jun	165.5	221.6	222.0	231.2	245.4	264.2		
4-Jun	165.9	221.8	222.2	231.4	245.4	264.4		
5-Jun	165.8	221.8	222.3	231.4	245.3	264.3		
6-Jun	166.0	221.9	222.3	231.5	245.3	264.4		
7-Jun	165.9	221.8	222.3	231.4	245.1	264.2		
8-Jun	166.1	221.8	222.3	231.4	245.1	264.3		
9-Jun	166.0	221.9	222.4	231.5	245.2	264.3		
10-Jun	165.9	221.9	222.3	231.3	245.1	264.1		
11-Jun	165.7	222.0	222.5	231.4	245.3	264.2		
12-Jun	165.9	222.0	222.6	231.8	245.4	264.4		
13-Jun	166.1	222.3	222.7	231.6	245.5	264.4		
14-Jun	165.9	222.1	222.6	231.5	245.5	264.3		
15-Jun	165.7	222.1	222.5	231.3	245.3	264.2		
16-Jun	165.8	222.2	222.7	231.5	245.4	264.2		
17-Jun	165.9	222.4	222.9	231.7	245.4	264.3		
18-Jun	165.5	222.2	222.7	231.4	245.1	264.1		
19-Jun	165.4	222.2	222.7	231.4	245.1	264.1		
20-Jun	165.5	222.4	222.9	231.5	245.2	264.2		
21-Jun	165.7	222.6	223.0	231.5	245.2	264.2		
22-Jun	166.0	222.7	223.2	231.7	245.4	264.4		
23-Jun	165.9	222.8	223.2	231.7	245.5	264.4		
24-Jun	166.1	223.0	223.4	231.9	245.8	264.5		
25-Jun	166.1	223.0	223.5	231.9	245.8	264.5		
26-Jun	165.8	222.8	223.2	231.8	245.4	264.3		
27-Jun	165.9	223.0	223.5	231.8	245.3	264.4		
28-Jun	165.7	222.8	223.3	231.7	245.1	264.1		
29-Jun	165.9	223.0	223.4	231.8	245.3	264.3		
30-Jun	165.9	223.0	223.3	231.8	245.2	264.2		
Average	165.8	222.3	222.7	231.5	245.3	264.3		

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Jun	*	234.1	233.8	*	*	*	*	*
2-Jun	*	234.2	233.9	*	*	*	*	*
3-Jun	*	234.3	234.0	*	*	*	*	*
4-Jun	*	234.3	234.1	*	*	*	*	*
5-Jun	*	234.4	234.1	*	*	*	*	*
6-Jun	*	234.4	234.1	*	*	*	*	*
7-Jun	*	234.4	234.1	*	*	*	*	*
8-Jun	*	234.3	234.1	*	*	*	*	*
9-Jun	*	234.3	234.0	*	*	*	*	*
10-Jun	*	234.4	234.0	*	*	*	*	*
11-Jun	*	234.3	234.0	*	*	*	*	*
12-Jun	*	234.3	234.0	*	*	*	*	*
13-Jun	*	234.4	234.1	*	*	*	*	*
14-Jun	*	234.5	234.1	*	*	*	*	*
15-Jun	*	234.3	233.9	*	*	*	*	*
16-Jun	*	234.4	234.0	*	*	*	*	*
17-Jun	*	234.4	234.0	*	*	*	*	*
18-Jun	*	234.2	233.9	*	*	*	*	*
19-Jun	*	234.2	233.8	*	*	*	*	*
20-Jun	*	234.2	233.9	*	*	*	*	*
21-Jun	*	234.3	233.9	*	*	*	*	*
22-Jun	*	234.4	234.0	*	*	*	*	*
23-Jun	*	234.4	234.1	*	*	*	*	*
24-Jun	*	234.5	234.2	*	*	*	*	*
25-Jun	*	234.6	234.3	*	*	*	*	*
26-Jun	*	234.4	234.1	*	*	*	*	*
27-Jun	*	234.6	234.1	*	*	*	*	*
28-Jun	*	234.3	234.0	*	*	*	*	*
29-Jun	*	234.4	234.0	*	*	*	*	*
30-Jun	*	234.4	234.1	*	*	*	*	*
Average	N/A	234.3	234.0	N/A	N/A	N/A	N/A	N/A

^{*} Indicates sensor reading issues

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Jun	146.5	213.6	213.9	227.5	237.1	239.8	214.0	204.6
2-Jun	146.5	213.7	213.9	227.5	237.0	239.8	214.0	204.5
3-Jun	146.7	213.8	214.0	227.6	237.2	239.9	214.1	204.7
4-Jun	146.9	213.9	214.1	227.6	237.1	240.0	214.1	204.8
5-Jun	146.7	213.9	214.1	227.7	237.1	239.9	214.1	204.8
6-Jun	146.7	213.8	214.0	227.6	236.9	239.9	214.1	204.8
7-Jun	146.7	213.8	214.0	227.5	236.8	239.8	214.0	204.8
8-Jun	146.6	213.8	214.0	227.5	236.7	239.8	214.0	204.7
9-Jun	146.6	213.7	213.9	227.4	236.6	239.7	213.9	204.6
10-Jun	147.0	213.7	214.0	227.5	236.7	239.8	214.0	204.8
11-Jun	146.9	213.8	214.0	227.4	236.6	239.8	214.0	204.8
12-Jun	147.3	213.7	213.9	227.4	236.6	239.7	214.0	204.8
13-Jun	148.2	213.9	214.0	227.6	236.7	239.9	214.2	204.9
14-Jun	147.6	213.9	214.1	227.5	236.7	239.9	214.2	205.0
15-Jun	147.3	213.6	213.9	227.3	236.5	239.7	214.0	204.8
16-Jun	147.9	213.7	214.0	227.4	236.5	239.7	214.0	204.8
17-Jun	146.9	213.9	214.1	227.5	236.6	239.8	214.1	204.9
18-Jun	146.5	213.7	213.9	227.5	236.4	239.6	213.9	204.8
19-Jun	146.3	213.7	213.9	227.4	236.3	239.5	213.9	204.7
20-Jun	147.7	213.7	214.0	227.4	236.4	239.6	214.0	204.7
21-Jun	147.9	213.8	214.0	227.6	236.5	239.7	214.1	204.8
22-Jun	148.1	213.9	214.1	227.7	236.5	239.8	214.2	205.0
23-Jun	148.1	213.8	214.0	227.8	236.6	239.9	214.3	205.0
24-Jun	147.9	213.8	214.0	227.9	236.6	240.0	214.3	205.1
25-Jun	147.5	213.7	213.9	227.8	236.6	239.9	214.3	205.1
26-Jun	147.3	213.5	213.7	227.5	236.2	239.6	214.0	204.8
27-Jun	146.5	213.6	213.8	227.5	236.4	239.7	214.1	204.9
28-Jun	146.6	213.4	213.7	227.5	236.3	239.6	214.1	204.9
29-Jun	147.2	213.6	213.7	227.6	236.4	239.7	214.1	205.0
30-Jun	146.3	213.5	213.7	227.5	236.3	239.6	214.1	204.9
Average	147.1	213.7	213.9	227.5	236.6	239.8	214.1	204.8

	Depth from Surface						
Date	25 ft	50 ft	75 ft	100 ft	125 ft		
1-Jun	206.8	195.0	93.4	195.2	195.1		
2-Jun	207.3	197.5	113.6	197.6	197.6		
3-Jun	207.6	195.8	95.0	195.9	195.9		
4-Jun	207.6	200.0	133.3	200.1	200.1		
5-Jun	207.5	199.0	125.8	199.0	199.0		
6-Jun	207.3	200.5	140.1	200.5	200.5		
7-Jun	207.0	196.6	108.3	196.5	196.6		
8-Jun	207.0	196.3	104.1	196.2	196.3		
9-Jun	206.9	193.9	83.7	193.8	194.0		
10-Jun	207.2	193.3	79.6	193.1	193.3		
11-Jun	207.5	193.7	77.4	193.6	193.7		
12-Jun	207.5	194.3	80.8	194.3	194.4		
13-Jun	207.4	195.0	83.4	195.1	195.1		
14-Jun	207.6	194.6	79.9	194.6	194.7		
15-Jun	207.4	194.9	79.5	194.8	194.8		
16-Jun	207.4	195.1	82.3	195.0	195.1		
17-Jun	207.3	195.3	87.4	195.3	195.5		
18-Jun	207.0	194.7	81.3	194.6	194.9		
19-Jun	206.9	194.2	80.0	194.2	194.5		
20-Jun	207.0	194.6	86.9	194.7	195.1		
21-Jun	207.4	194.9	84.4	194.8	195.0		
22-Jun	207.9	196.5	82.9	196.3	196.4		
23-Jun	207.9	198.4	85.9	198.5	198.5		
24-Jun	207.9	199.3	90.2	199.3	199.5		
25-Jun	207.4	196.8	92.4	196.9	197.2		
26-Jun	206.5	195.7	90.1	195.9	196.4		
27-Jun	207.0	197.5	92.2	197.5	197.9		
28-Jun	207.0	197.1	86.5	197.0	197.4		
29-Jun	206.9	198.2	91.4	198.1	198.6		
30-Jun	206.8	197.4	88.7	197.3	197.8		
Average	207.3	196.2	92.7	196.2	196.4		

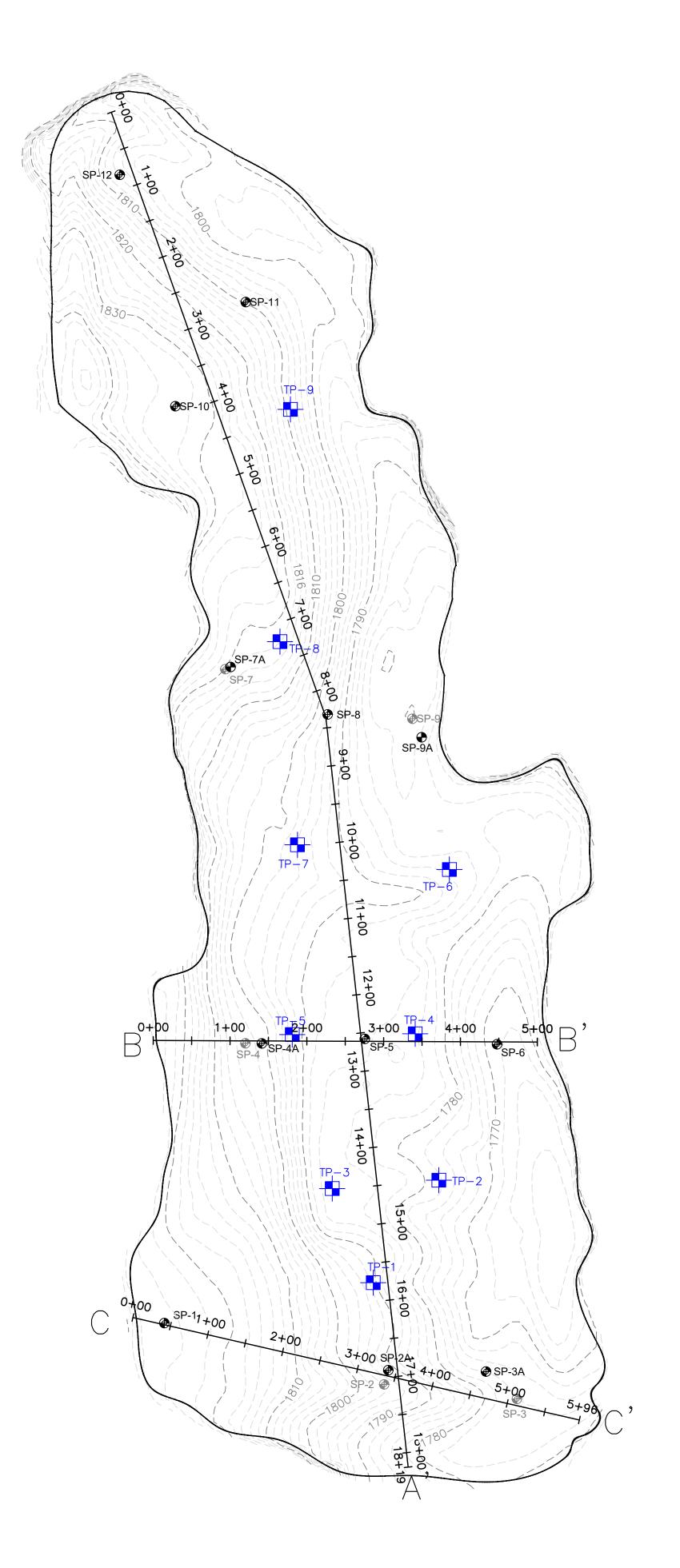
	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Jun	145.8	189.2	211.9	194.7	190.7	198.3	204.4	210.4
2-Jun	146.0	190.0	212.1	195.2	191.5	198.9	204.4	210.0
3-Jun	146.0	190.1	212.5	195.5	191.5	199.0	204.9	210.4
4-Jun	146.2	190.2	212.5	195.5	191.5	198.9	205.3	210.6
5-Jun	146.1	189.6	212.4	195.4	191.3	199.1	205.4	210.3
6-Jun	146.0	189.7	212.4	195.3	191.2	198.8	204.7	209.8
7-Jun	146.0	189.7	212.1	195.1	191.0	197.8	204.6	209.9
8-Jun	145.9	189.9	212.1	195.0	191.0	196.6	204.7	209.8
9-Jun	145.8	189.4	212.0	195.0	190.8	198.7	204.6	209.7
10-Jun	145.9	190.1	212.1	195.3	191.4	197.7	204.5	209.4
11-Jun	145.8	189.5	212.3	195.4	191.0	196.7	205.1	210.0
12-Jun	146.0	189.9	212.2	195.6	191.3	199.1	204.8	210.2
13-Jun	146.0	190.0	212.2	195.6	191.5	197.4	204.4	210.1
14-Jun	146.0	189.5	212.3	195.5	191.4	197.2	204.6	208.9
15-Jun	145.9	189.4	211.9	195.3	191.2	196.2	203.7	209.2
16-Jun	146.0	189.6	211.7	195.4	191.3	196.9	204.4	208.8
17-Jun	146.0	190.1	210.7	195.4	191.5	197.1	205.1	208.0
18-Jun	145.8	190.0	210.5	195.1	191.4	196.9	204.5	207.4
19-Jun	145.8	190.3	209.9	195.3	191.7	197.3	204.5	207.8
20-Jun	145.9	190.7	210.1	195.4	191.9	197.5	204.7	207.8
21-Jun	145.9	190.9	208.5	195.6	192.3	197.1	204.9	207.7
22-Jun	146.0	191.6	206.9	195.9	192.8	197.0	204.7	207.5
23-Jun	146.0	191.5	207.1	195.9	192.8	197.5	204.7	207.5
24-Jun	146.1	191.6	207.1	196.1	193.0	197.8	204.6	207.7
25-Jun	146.0	191.7	206.9	195.9	192.9	197.4	204.6	207.7
26-Jun	145.8	191.2	206.3	195.4	192.3	196.4	203.7	207.2
27-Jun	145.9	191.2	207.0	195.8	192.4	198.1	204.4	207.9
28-Jun	145.8	191.1	207.0	195.7	192.4	198.2	203.9	207.9
29-Jun	145.8	191.3	206.9	195.8	192.6	198.3	203.4	207.7
30-Jun	145.8	191.4	206.9	195.7	192.5	198.1	203.9	207.7
Average	145.9	190.3	210.2	195.4	191.7	197.7	204.5	208.8

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Jun	188.1	193.4	193.7	196.0	198.7	199.4	189.5	173.4
2-Jun	187.8	193.4	193.6	196.0	198.7	199.3	189.4	173.3
3-Jun	187.6	193.5	193.9	196.3	199.0	199.6	189.7	173.6
4-Jun	188.1	193.7	194.0	196.4	199.1	199.6	189.7	173.6
5-Jun	188.3	193.7	194.0	196.4	199.1	199.6	189.7	173.6
6-Jun	188.2	193.6	193.9	196.3	199.0	199.6	189.6	173.5
7-Jun	188.3	193.5	193.8	196.2	198.9	199.5	189.6	173.5
8-Jun	188.1	193.5	193.7	196.1	198.8	199.5	189.6	173.4
9-Jun	188.1	193.5	193.8	196.1	198.8	199.4	189.5	173.4
10-Jun	187.9	193.5	193.9	196.2	199.0	199.6	189.6	173.6
11-Jun	187.8	193.5	193.9	196.3	199.0	199.5	189.5	173.4
12-Jun	188.2	193.6	193.9	196.3	199.0	199.5	189.5	173.4
13-Jun	188.3	193.7	194.0	196.4	199.2	199.7	189.6	173.5
14-Jun	188.4	193.8	194.1	196.5	199.3	199.8	189.8	173.6
15-Jun	188.2	193.6	193.9	196.3	199.0	199.6	189.5	173.3
16-Jun	188.2	193.6	193.9	196.3	199.1	199.6	189.5	173.4
17-Jun	188.1	193.6	194.0	196.3	199.1	199.7	189.7	173.4
18-Jun	188.0	193.5	193.9	196.2	199.0	199.6	189.4	173.2
19-Jun	188.0	193.5	193.8	196.2	199.0	199.5	189.4	173.1
20-Jun	187.9	193.6	193.9	196.3	199.1	199.6	189.5	173.2
21-Jun	188.0	193.7	194.0	196.4	199.2	199.7	189.5	173.2
22-Jun	188.2	193.8	194.2	196.5	199.3	199.8	189.7	173.3
23-Jun	188.1	193.9	194.2	196.6	199.4	199.8	189.6	173.3
24-Jun	188.2	193.9	194.2	196.6	199.5	199.9	189.7	173.3
25-Jun	188.3	193.9	194.2	196.6	199.4	199.9	189.6	173.2
26-Jun	188.2	193.6	193.9	196.3	199.1	199.6	189.3	172.9
27-Jun	188.2	193.8	194.1	196.5	199.3	199.9	189.6	173.2
28-Jun	188.2	193.7	194.0	196.4	199.3	199.8	189.5	173.1
29-Jun	188.2	193.7	194.0	196.4	199.2	199.8	189.4	173.1
30-Jun	188.3	193.7	194.0	196.4	199.2	199.8	189.4	173.0
Average	188.1	193.6	193.9	196.3	199.1	199.6	189.5	173.3

	Depth from Surface							
Date	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Jun	108.4	148.5	147.9	149.0	144.7	132.1	116.0	104.5
2-Jun	108.8	148.7	148.1	149.0	144.7	132.0	115.9	104.5
3-Jun	108.8	148.9	148.4	149.2	144.9	132.2	116.2	104.8
4-Jun	109.0	149.2	148.6	149.4	145.0	132.3	116.4	105.0
5-Jun	108.9	149.1	148.4	149.4	145.1	132.2	116.4	105.0
6-Jun	109.0	149.0	148.3	149.4	145.0	132.1	116.4	104.9
7-Jun	108.9	148.9	148.2	149.3	144.8	132.0	116.2	104.7
8-Jun	108.9	148.9	148.3	149.4	144.9	132.2	116.3	104.8
9-Jun	109.2	149.0	148.4	149.3	144.8	132.4	116.3	104.8
10-Jun	109.3	149.0	148.5	149.3	144.8	132.5	116.3	104.8
11-Jun	109.4	149.2	148.7	149.3	144.9	132.5	116.4	105.0
12-Jun	109.2	149.3	148.7	149.5	144.9	132.6	116.5	105.1
13-Jun	109.5	149.3	148.8	149.5	144.9	132.6	116.5	105.2
14-Jun	109.6	149.4	148.9	149.4	144.9	132.3	116.5	105.1
15-Jun	109.0	149.1	148.6	149.2	144.7	132.0	116.2	104.9
16-Jun	109.2	149.2	148.7	149.4	144.9	132.4	116.4	105.1
17-Jun	109.2	149.3	148.7	149.5	144.9	132.4	116.5	105.2
18-Jun	109.4	149.2	148.7	149.3	144.7	132.3	116.2	105.0
19-Jun	108.7	149.1	148.6	149.3	144.7	132.1	116.2	105.0
20-Jun	109.6	149.4	149.0	149.5	144.9	132.4	116.4	105.3
21-Jun	109.3	149.4	148.9	149.6	145.0	132.5	116.5	105.4
22-Jun	109.8	149.6	149.2	149.6	145.1	132.6	116.7	105.5
23-Jun	109.8	149.7	149.2	149.6	145.2	132.6	116.7	105.5
24-Jun	110.2	149.9	149.4	149.8	145.2	132.8	116.8	105.7
25-Jun	109.9	149.8	149.3	149.8	145.3	132.8	116.8	105.6
26-Jun	109.0	149.3	148.7	149.5	145.0	132.4	116.5	105.3
27-Jun	109.8	149.6	149.1	149.6	145.0	132.5	116.5	105.3
28-Jun	109.6	149.5	149.0	149.4	145.0	132.4	116.4	105.2
29-Jun	109.7	149.6	149.1	149.5	145.0	132.4	116.5	105.3
30-Jun	109.6	149.5	149.1	149.4	145.0	132.4	116.5	105.3
Average	109.3	149.3	148.7	149.4	144.9	132.4	116.4	105.1

Appendix E

Monthly Topography Analysis

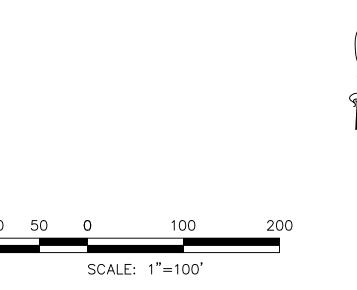


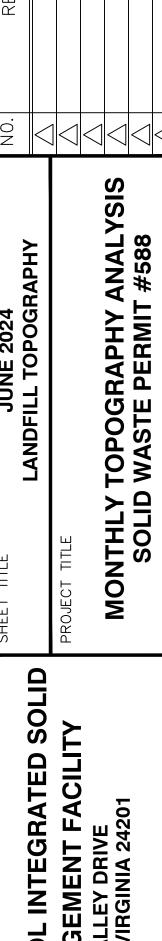


NOTES:

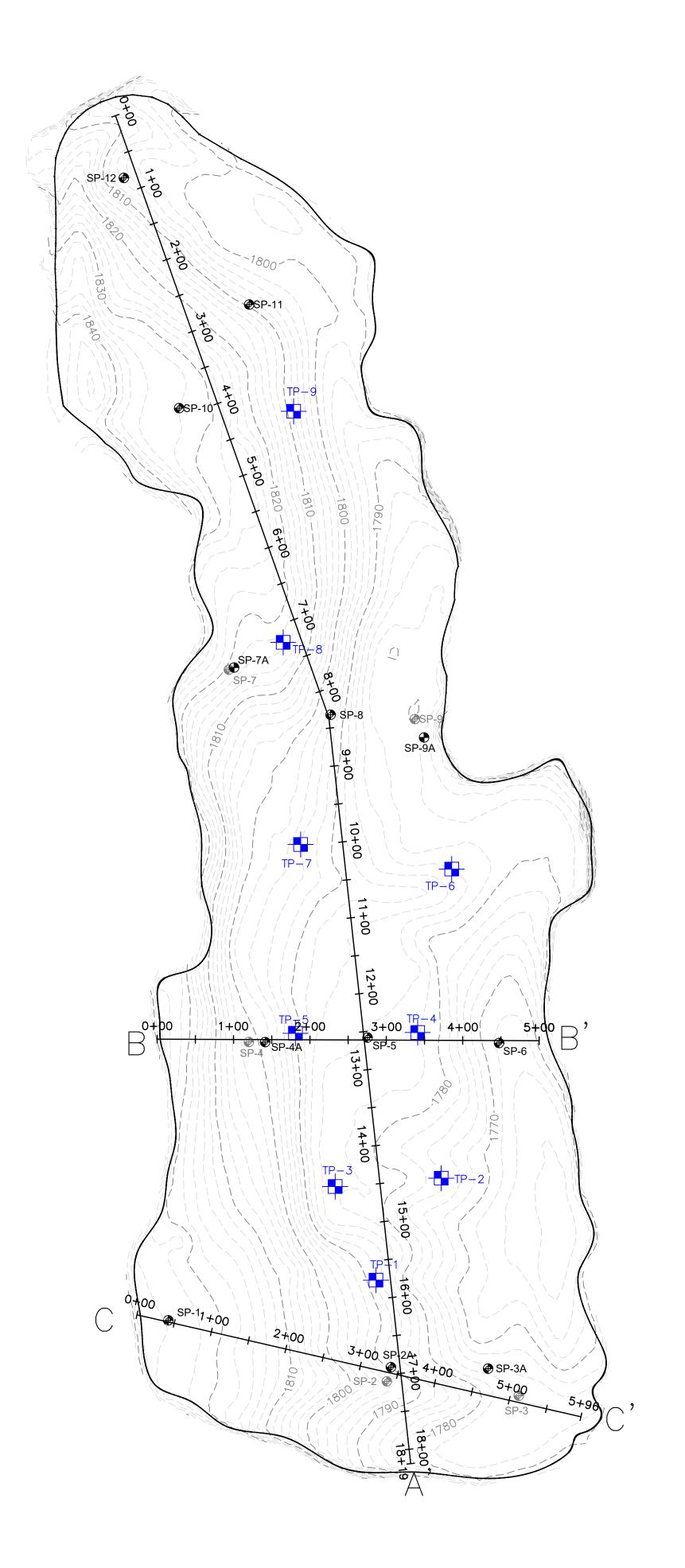
- 1. GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON JUNE 25, 2024 BY SCS ENGINEERS.
- 2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL 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.

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DRAWING NO.



LEGEND

MAJOR CONTOURS (EVERY 10')

MINOR CONTOURS (EVERY 2')

APPROXIMATE SIDEWALL LOCATION

SETTLEMENT PLATE

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 MARCH 11, 2025 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.

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SCALE: 1"=100'

	SHEET TITLE	MARCH 2025	NO.	REVISION	DATE	
RATED SOLID		LANDLIEL IOTOGNATUI	<			
FACILITY	PROJECT TITLE					
			\triangleleft			
4201	MONTHL	MONTHLY TOPOGRAPHY ANALYSIS	\triangleleft			
	SOLI	SOLID WASTE PERMIT #588	\triangleleft			
			<			

CITY OF BR WASTE M	BRIS	
RS:HMIDT:NC.	Q/A RVW BY: CJW	·\a qqv
ENGINEERS CONRAD AND SCHMIDT ING ENGINEERS, INC. OTHIAN TNPK - MIDLOTHIAN, VA 23113 3-7440 FAX. (804) 378-7433	DWN. BY:	יאם אודט

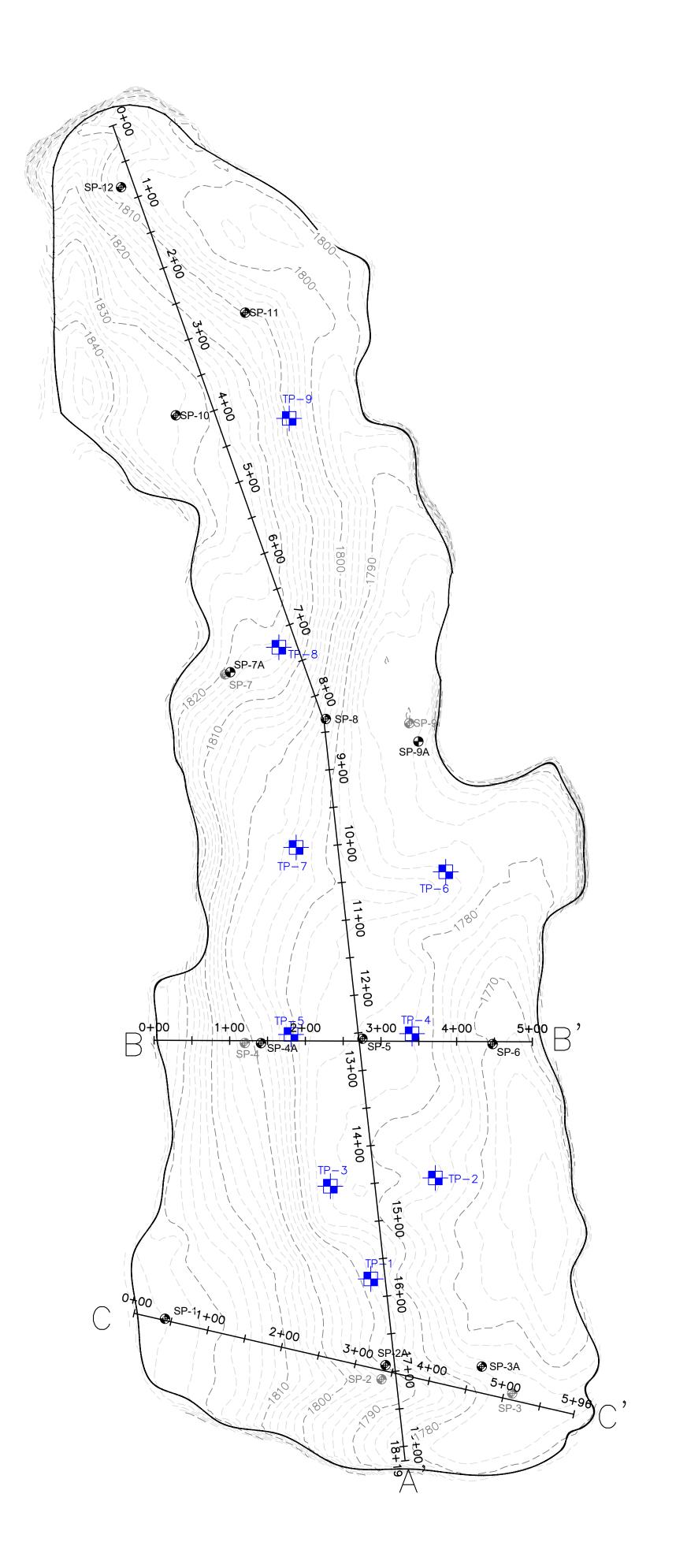
CADD FILE:
SURF COMP

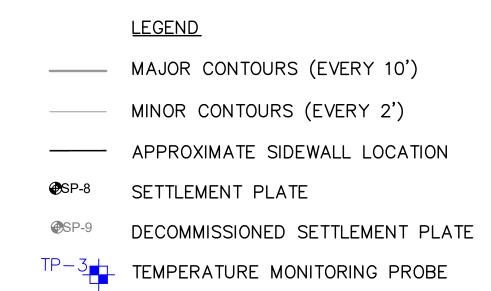
DATE:
7/2/2025

SCALE:

DRAWING NO.

2





NOTES:

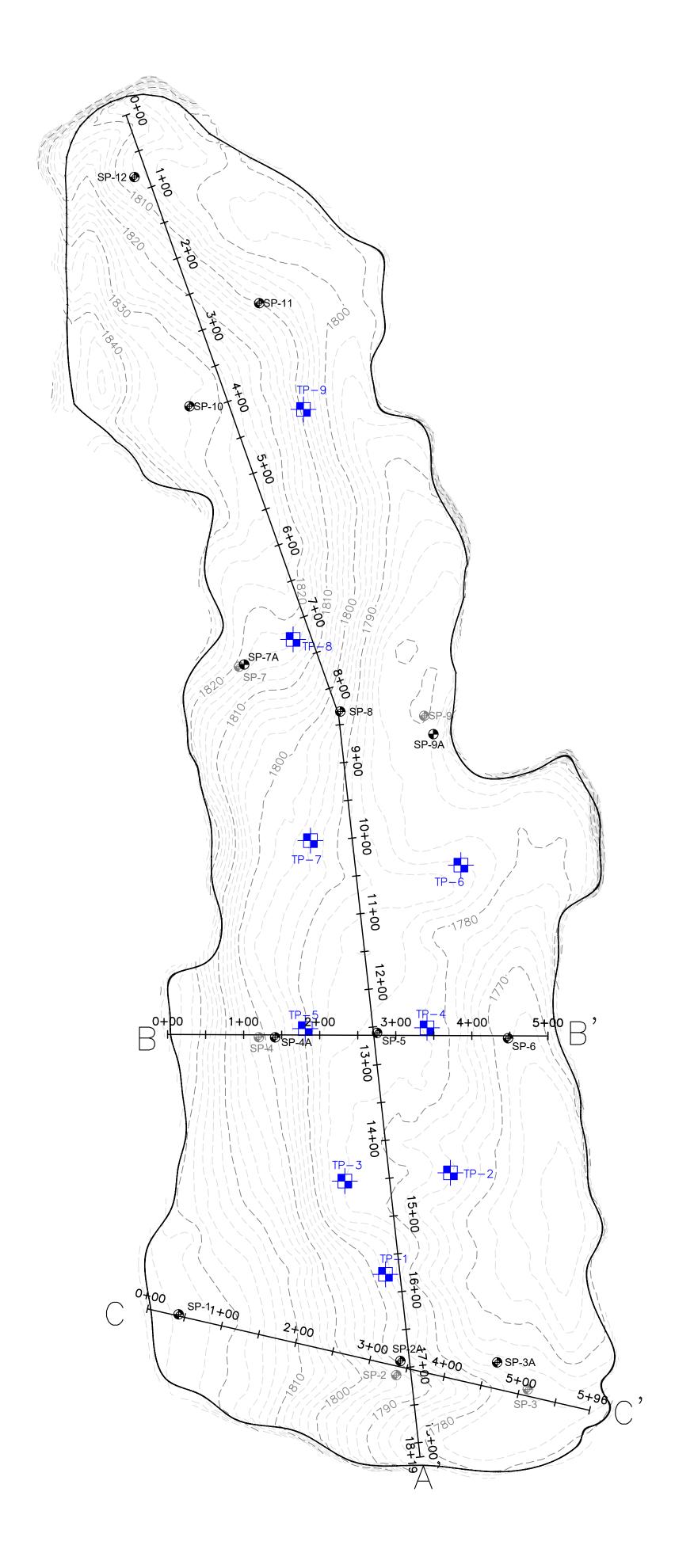
- 1. GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON MAY 15, 2025 BY SCS ENGINEERS.
- 2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL 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.

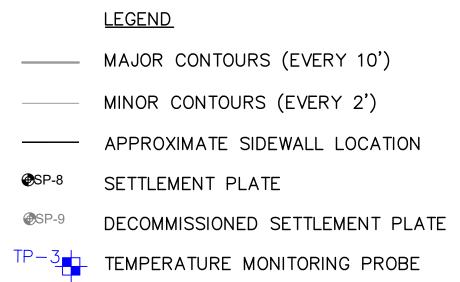


DRAWING NO.

). REVISION DATE							
SHEET TITLE MAY 2025 NO		PROJECT TITLE	7	MONTHLY TOPOGRAPHY ANALYSIS	A SALA MANATE DEBMIT #E88		
	CILY OF BRISTOL INTEGRATED SOLID	WASTE MANAGEMENT FACILITY P	2655 VALLEY DRIVE		DAISTOR, VINGINIA 24201		
SCS ENGINEERS	STEARNS, CONRAD AND SCHMIDT	CONSULTING ENGINEERS, INC. 15521 MIDI OTHIAN TNPK - MIDI OTHIAN VA 23113	PH. (804) 378-7440 FAX. (804) 378-7433		02218208.05 VMM CJW CJW	DSN. BY: APP. BY: CHK. BY: CHK	

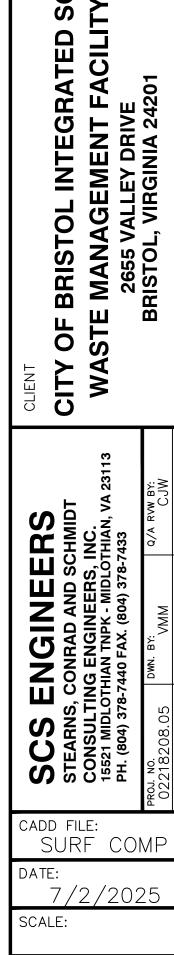
100 50 0 100 2 SCALE: 1"=100'





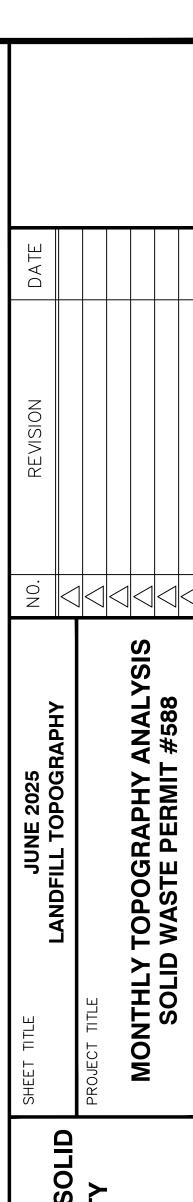
NOTES:

- 1. GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON JUNE 12, 2025 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.



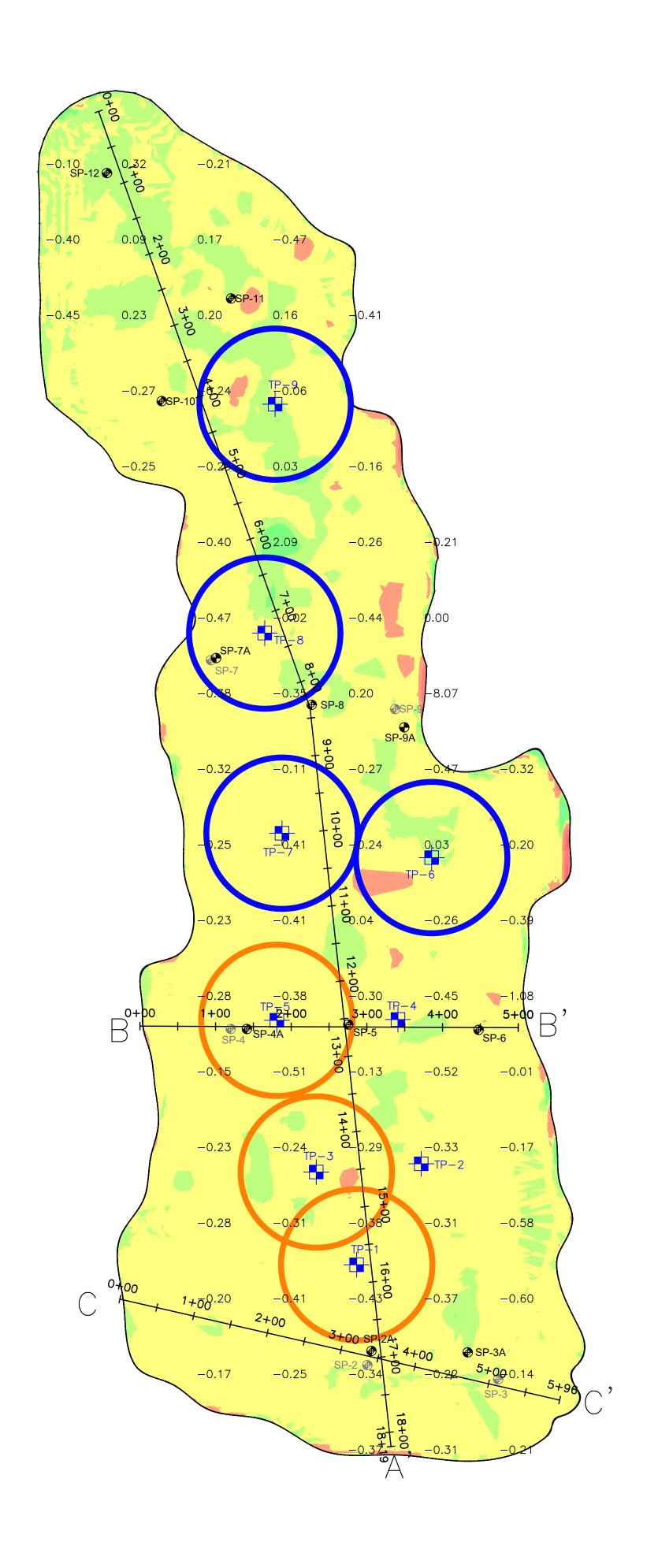


SCALE: 1"=100'



DRAWING NO.

4



<u>LEGEND</u>

— MAJOR CONTOURS (EVERY 10')

MINOR CONTOURS (EVERY 2')

----- APPROXIMATE WASTE BOUNDARY

SP-8 SETTLEMENT PLATE

©SP-9 DECOMMISSIONED SETTLEMENT PLATE

SPOT ELEVATION ON 100' GRID

TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH LESS THAN 200 °F

TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 200 °F AND 250 °F

TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 250 °F AND 300 °F

Base Surface TOPO — May 15, 2025 Comparison Surface TOPO — June 12, 2025

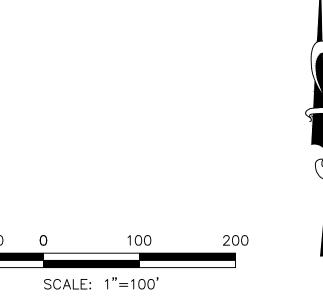
Cut Volume	7,984	Cu. Yd.
Fill Volume	1,035	Cu. Yd.
Net Cut	6,949	Cu. Yd.

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 MAY 15, 2025 AND JUNE 12, 2025 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 TOPÓGRAPHY 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.

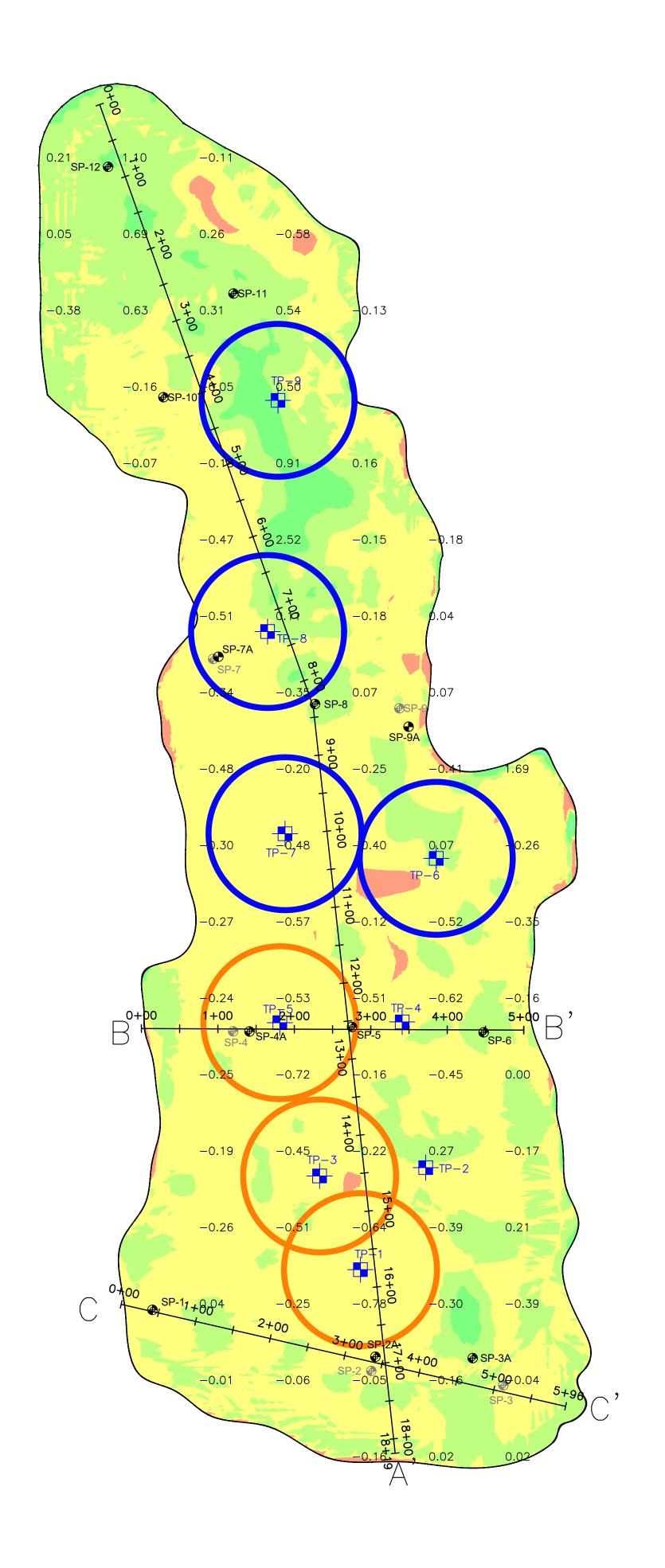


!	SHEET TITLE	JUNE VOLUME CHANGE	NO.	REVISION	DATE	
SOLID		MAT 2023 TO 30INE 2023				
<u>></u>	PROJECT TITLE		\triangleleft			
ı						
	MONTHE	MONTHLY TOPOGRAPHY ANALYSIS				
		SOLID WASTE PERMIT #588	\triangleleft			
			<			

FRS CHMIDT INC. THIAN, VA 2311	Q/A RVW BY: CJW	APP. BY:
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 15521 MIDLOTHIAN TNPK - MIDLOTHIAN, VA 2311 PH. (804) 378-7440 FAX. (804) 378-7433	DWN. BY: VMM	CHK. BY:
SCS E STEARNS, C CONSULTIN 15521 MIDLOTH PH. (804) 378-7	PROJ. NO. 02218208.05	DSN. BY:
CADD FILE: SURF CON	ИP	
DATE: 7/2/202	25	
SCALE:		

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

DRAWING NO.



<u>LEGEND</u>

— MAJOR CONTOURS (EVERY 10')

— MINOR CONTOURS (EVERY 2')

----- APPROXIMATE WASTE BOUNDARY

⊕SP-8 SETTLEMENT PLATE

DECOMMISSIONED SETTLEMENT PLATE

SPOT ELEVATION ON 100' GRID

TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH LESS THAN 200 °F

TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 200 °F AND 250 °F

TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 250 °F AND 300 °F

TOPO - March 11, 2025 Base Surface Comparison Surface TOPO — June 12, 2025

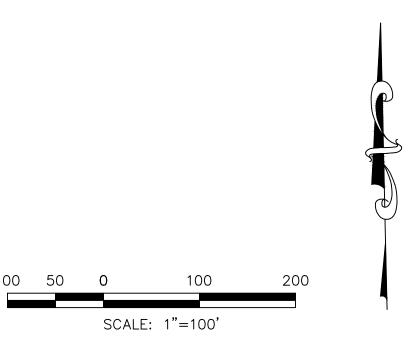
6,820 Cu. Yd. Cut Volume 3,284 Cu. Yd. Fill Volume 3,535 Net Cut Cu. Yd.

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 MARCH 11, 2025 AND JUNE 12, 2025 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.



HEET TITLE JUNE VOLUME CHANGE	NO.	REVISION	DATE	
MARCH 2025 I JONE 2025				
ROJECT TITLE				
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MONTHLY TOPOGRAPHY ANALYSIS	\triangleleft			
SOLID WASTE PERMIT #588	\triangleleft			
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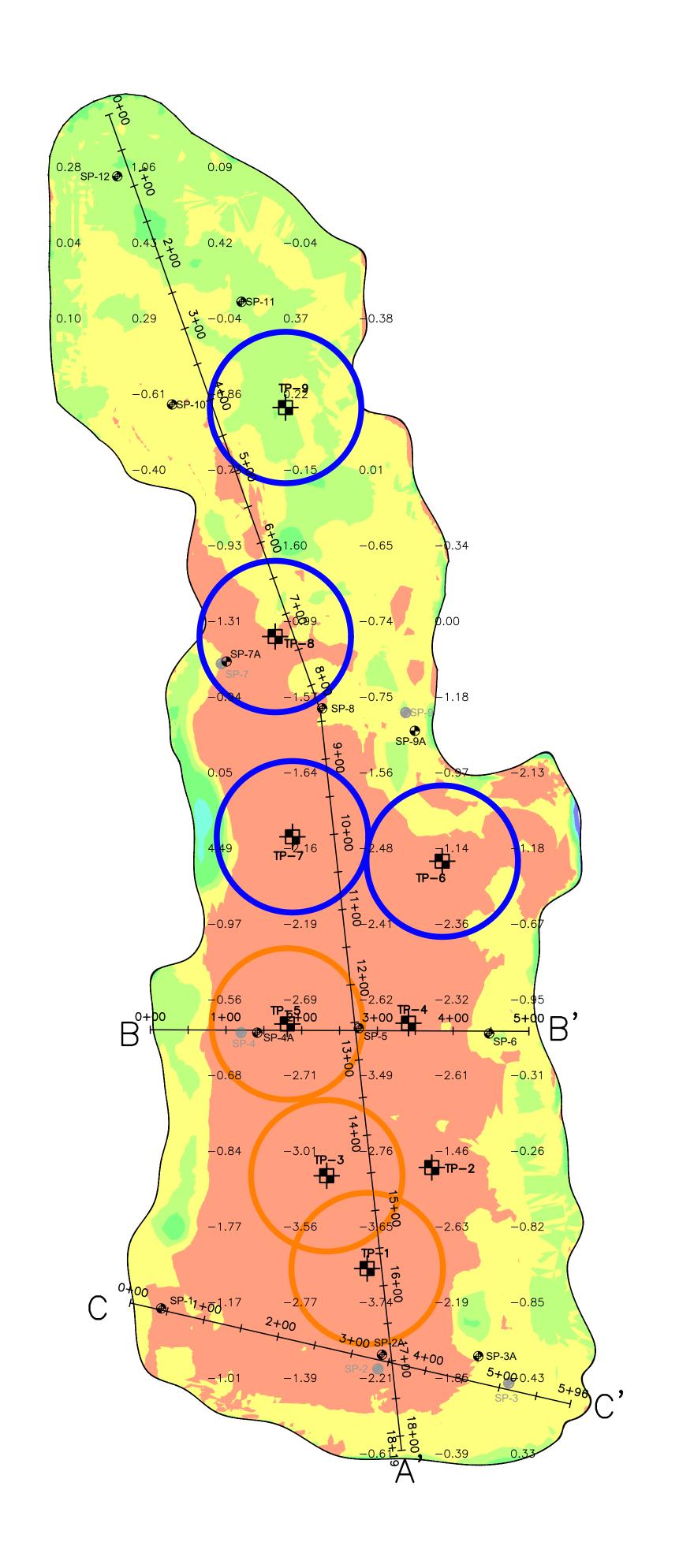
CLIENT CITY (CITY (WAS		
RS HMIDT NC. HIAN, VA 23	Q/A RVW BY: CJW	
GINEERS IRAD AND SCHMIDT SNGINEERS, INC. N TNPK - MIDLOTHIAN, VA 23113 FAX. (804) 378-7433	4. BY: VMM	

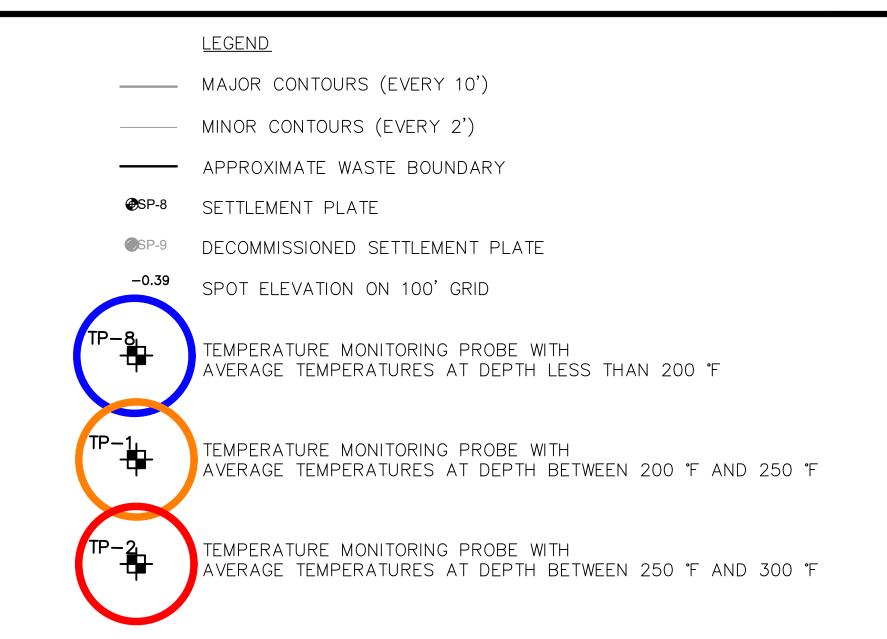
SURF COMP

7/2/2025 SCALE:

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Volume

Base Surface TOPO — June 25, 2024 Comparison Surface TOPO — June 12, 2025

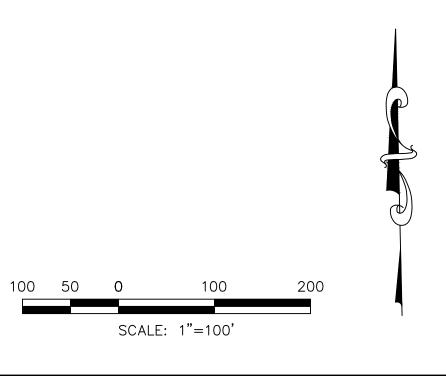
Cut Volume 32,763 Cu. Yd. Fill Volume 2,929 Cu. Yd. Net Cut 29,834 Cu. Yd.

Elevations Table

	Lievati	ons ruble	
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:

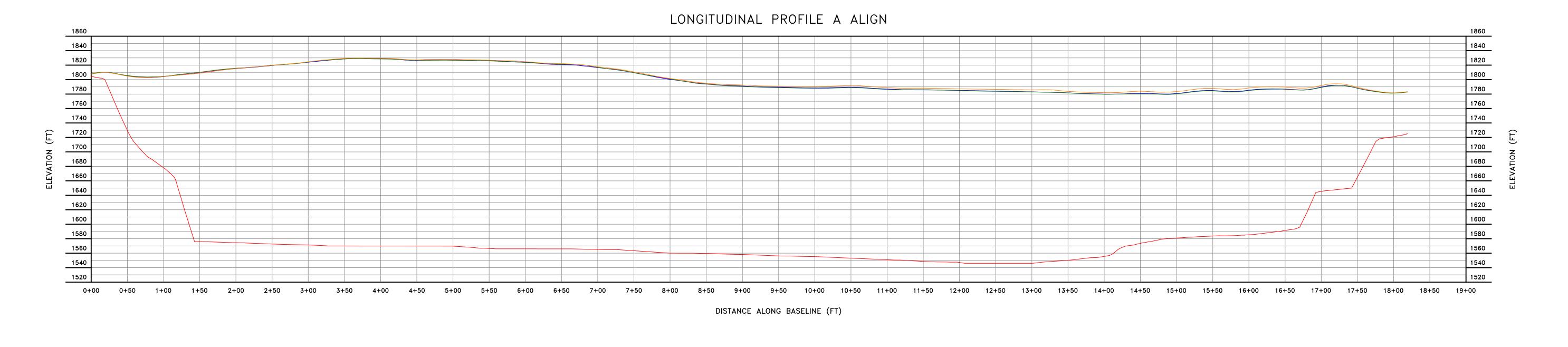
- 1. THE ELEVATION CHANGES ARE CALCULATED BETWEEN THE AERIAL TOPOGRAPHY DATA CAPTURED ON JUNE 25, 2024 AND JUNE 12, 2025 BY SCS ENGINEERS. POSITIVE VALUES (+) INDICATE AREAS OF FILL AND NEGATIVE VALUES (-) INDICATE AREAS OF CUT (SETTLEMENT). VALUES ARE ROUNDED TO THE NEAREST FOOT
- 2. ANY DETERMINATION 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.

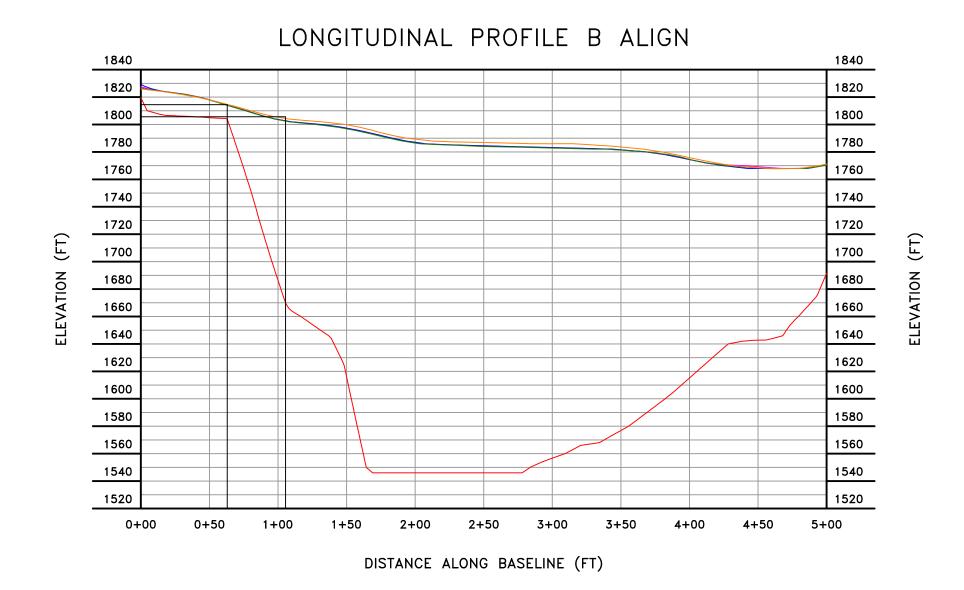


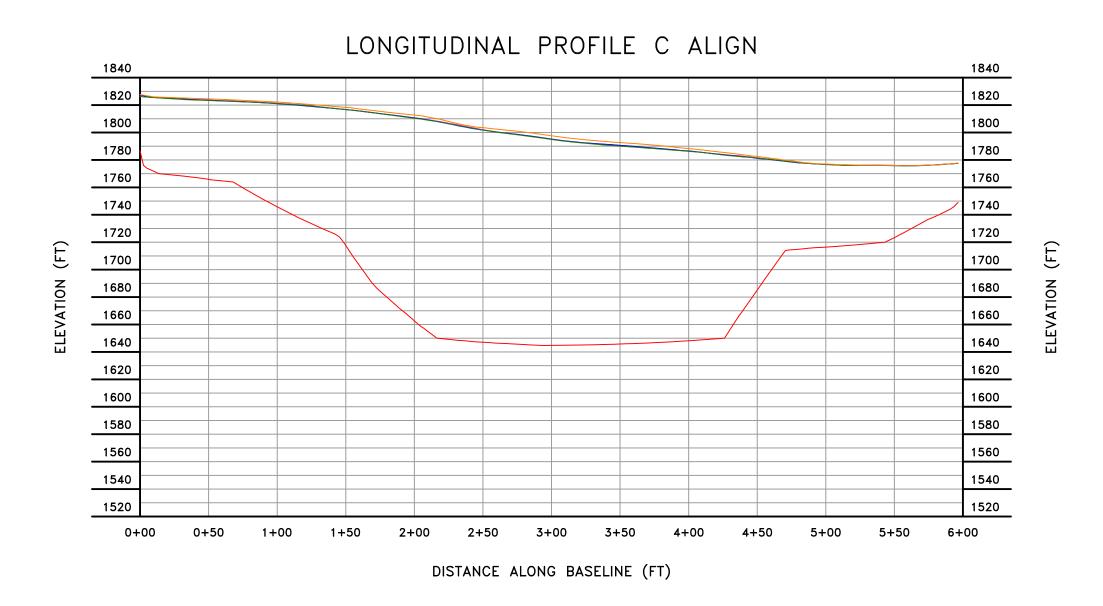
REVISION DATE						
NO.			\triangleleft	\triangleleft	\triangleleft	<
SHEET TITLE JUNE VOLUME CHANGE	JOINE SOZ HODO	PROJECT TITLE		MONTHLY TOPOGRAPHY ANALYSIS	SOLID WASTE PERMIT #588	
CLIENT	CITY OF BRISTOL INTEGRATED SOLID	WASTE MANAGEMENT FACILITY	2655 VALLEY DRIVE	BRISTOL VIRGINIA 24201		
EERS	SCHMIDT C	RS, INC.	378-7433	Q/A RVW BY:	WCO.	.10 .17

SCS ENGINEE STEARNS, CONRAD AND S CONSULTING ENGINEERS, 15521 MIDLOTHIAN TNPK - MIDLC PH. (804) 378-7440 FAX. (804) 378	DWN. BY: VMM	CHK. BY:
SCS E STEARNS, C CONSULTIN 15521 MIDLOTI PH. (804) 378-7	PROJ. NO. 02218208.05	DSN. BY:
cadd file: SURF COI	МР	
DATE: 7/2/202	25	
SCALE:		
DRAWING NO.		

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SCS ENGINEERS

STEARNS, CONRAD AND SCHMIDT

CONSULTING ENGINEERS, INC.

15521 MIDLOTHIAN TAPP. ST. (804) 378-7433

PH. (804) 378-7440 FAX. (804) 378-7433

PROJ. NO.

SASTE MANAGEMENT FACILITY

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WASTE MANAGEMENT FACILITY

SASTE MANAGEMENT FACILITY

COLENT

WASTE MANAGEMENT FACILITY

SASTE MANAGEMENT FACILITY

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Appendix F

Field Logs

Lab Report

Historical LFG-EW Leachate Monitoring Results Summary

Appendix F

Field Logs (June 2025)
Lab Report (May 2025)
Historical LFG-EW Leachate Monitoring Results Summary
Time-Series Plots

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

Date								6/23-6/24						
Personnel				M.Myers 8	& C.Kirby						Check	ed By:		L. Howard
Location ID	Date	Casing Stickup (ft)	Depth to Liquid (ft)	Prior Depth to Liquid (ft)	Cycle Count	Prior Cycle Count	Well Casing Depth (ft)	Pump Depth (ft)	Liquid Column Thickness	Pump (Y/N)	Pump PSI	Sample Collected	Check/ Photo	Comments
PUMP INSTALL	ED											I		
EW-49	6/24/2025	65.00			79565	79565	96.15	87		Y	0	N	Y	Too tall, loose dirt at top
EW-50	6/24/2025	54.00		46.67	157797	1577699	77.70	83		Y	100	N	Y	4 gas meter went off at 14:00
EW-53	6/23/2025	61.00	50.70	49.82	3294540	3294540	100.70	77	50.00	Υ	0	N	Y	
EW-55	6/23/2025	49.00		40.07	73387	73387	90.40	90		Υ	0	N	Y	4 gas meter went off at 15:15
EW-59	6/23/2025	51.00	40.99	53.79	3679152	3639040	73.40	61	32.41	Υ	100	N	Y	
EW-60	6/24/2025	56.00	42.62	41.34	245163	191283	81.80	72.5	39.18	Υ	90	N	Y	
EW-61	6/24/2025	37.00	72.35	65.24	103848		87.80	75	15.45	Υ		N	Y	
EW-62	6/24/2025	49.00	81.24	77.88	214599	214599	110.60	91.5	29.36	Υ		N	Y	
EW-64				81.68		196791	109.00	90				N		SOP concerns, instructed not to approach
EW-65	6/24/2025	34.00	46.42	47.19	111452	106332	88.40	70	41.98	Υ		N	Y	
EW-66	6/24/2025	45.00	32.91	32.76	38790	35486				Υ		N	Y	Needs Label
EW-67	6/24/2025	40.00	40.11	38.74	288744	288744	107.75	76	67.64	Y		N	Y	
EW-68	6/24/2025	24.00	44.79	43.37	2662091	2661124	73.57	60	28.78	Υ		N	Y	
EW-78	6/24/2025	45.00	46.21	46.35	77174	54639	57.00	47	10.79	Υ		Y	Y	Sampled at 9:20
EW-81	6/24/2025	54.00	105.05	82.23			151.56	125	46.51	Y		N	Y	
EW-82	6/24/2025	47.00	120.31	121.33	631288	631288	163.26	145	42.95	Y		N	Y	
EW-83	6/24/2025	49.00	81.39	85.25	Too Tall	Too tall	167.04	145	85.65	Υ		N	Y	Lost PVC
EW-85	6/24/2025	59.00	61.05	61.79	312919	312919	91.00	78	29.95	Υ		N	Υ	
EW-93	6/24/2025	48.00	35.82	35.31	1408232	1408232	111.00		75.18	Y		N	Y	
EW-96	6/23/2025	88.00	47.97	47.21	Too Tall	Too tall	164.35	145	116.38	Υ		N	Y	
EW-98	6/23/2025	52.00	35.05	45.18	1886306	1886306	51.00	46	15.95	Υ		N	Y	

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

Date								6/23-6/24						
Personnel				M.Myers 8	& C.Kirby						Check	ed By:		L. Howard
Location ID	Date	Casing Stickup (ft)	Depth to Liquid (ft)	Prior Depth to Liquid (ft)	Cycle Count	Prior Cycle Count	Well Casing Depth (ft)	Pump Depth (ft)	Liquid Column Thickness	Pump (Y/N)	Pump PSI	Sample Collected	Check/ Photo	Comments
NO PUMP			1									1		
EW-54	6/24/2025	54.00	35.12	35.08			82.70	65	47.58	N		N	Y	
EW-56	6/23/2025	40.00	Dry	Dry			42.71			N		N	Y	
EW-63	6/24/2025	56.00		59.12			117.00			N		N	Υ	SOP Concerns, MX4 Went off at 11:50
EW-69	6/24/2025	55.00	93.11	94			98.00		4.89	N		N	Υ	
EW-70	6/24/2025	20.00	64.64	65.53			71.00	58	6.36	N		N	Y	
EW-73	6/24/2025	42.00	107.42	107.34			116.00			N		N	Y	
EW-77				125.26			185.22							SOP concerns, instructed not to approach
EW-79				155.21			185.64		#VALUE!					SOP concerns, instructed not to approach
EW-80	6/24/2025	28.00	137.15	137.38			149.00		11.85	N		N	Υ	
EW-84	6/24/2025	48.00	79.95	80.37			130.56		50.61	N		N	Υ	
EW-86	6/24/2025	42.00	77.02	77.50			153.00		75.98	N		N	Υ	
EW-91	6/24/2025	63.00	46.06	47.13			137.70		91.64	N		N	Υ	
EW-92	6/24/2025	86.00					112.99			N		N	Υ	Too Tall
EW-95	6/23/2025						68.00			N		N	Υ	Caution tape around well
EW-97	6/23/2025	100.00					144.50			N		N	Υ	Too Tall
EW-99	6/23/2025	45.00	59.11	59.37			65.00		5.89	N		N	Y	

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

Date								6/23-6/24						
Personnel				M.Myers 8	k C.Kirby						Check	ed By:		L. Howard
Location ID	Date	Casing Stickup (ft)	Depth to Liquid (ft)	Prior Depth to Liquid (ft)		Prior Cycle Count	Well Casing Depth (ft)	Pump Depth (ft)	Liquid Column Thickness	Pump (Y/N)	Pump PSI	Sample Collected	Check/ Photo	Comments
MEASURE CASING STICKUP AND CYCLE COUNTER ONLY														
EW-33B ²	6/24/2025	59.00		DNM			185.00	140		N		N	Y	SOP Concerns
EW-36A ²	6/24/2025	56.00		DNM	459999	459999	180.00	135		Y	20	N	Υ	
EW-52 ²	6/24/2025	41.00		DNM	1239186	1239186	98.70	80		Y	0	N	Y	
EW-76 ²	6/24/2025	39.00		DNM			127.00	108		N		N	Υ	
EW-87 ²	6/24/2025	45.00		DNM	340749	340749	149.57	110		Y	0	N	Υ	
EW-88 ²	6/24/2025	36.00	61.32	61.88	365317	332881	100.00	61	38.68	Y	100	N	Y	
EW-89 ²	6/24/2025	54.00		52.68	229976	41203	84.57	70		Y	100	N	Υ	
EW-94 ¹	6/23/2025	43.00		DNM	1642543	1484006	50.00	38		Y	80	N	Y	

DNM = Do not measure

^{1 =} Not Measured as gauging equipment has historically become stuck in well.2 = Not Measured as pump is shut off and intended to be pulled for maintenance/replacement.

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									
EW-49									
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-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	6/24/2025	9:20	44.60	8.12	17555.00	0.50	120.40	27.50	Dark amber color
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:		M.Myers, C. Kir	by			Sampl	es Shipped By:		
Log Checked	By:	L. Howard					Laboratory:	Enthalpy Analy	ytical





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

Certificate of Analysis

Final Report

Laboratory Order ID 25E2019

Client Name: SCS Engineers - Winchester

Client Site I.D.: LFG-EW Monthly Monitoring

296 Victory Road

Winchester, VA 22602

Submitted To: Jennifer Robb

Date Received:

Date Issued:

May 22, 2025 8:00

June 6, 2025 18:02

Project Number:

02218208.15 Task 4

Purchase Order:

Enclosed are the results of analyses for samples received by the laboratory on 05/22/2025 08:00. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Sarah R. Endsley

Laboratory Manager

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.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Enthalpy Analytical.



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

Analysis Detects Report

Date Issued: 6/6/2025 6:02:23PM

Client Name: SCS Engineers - Winchester

Submitted To: Jennifer Robb

Client Site ID:

Laboratory Sample ID: 25E2019-01 Client Sample ID: EW-89

LFG-EW Monthly Monitoring

							Dil.	
Parameter	Samp ID	Reference Method	Sample Results	Qual	DL	LOQ	Factor	Units
Arsenic	01	SW6020B	200		2.5	5.0	5	ug/L
Barium	01	SW6020B	1760		5.00	25.0	5	ug/L
Chromium	01	SW6020B	342		2.00	5.00	5	ug/L
Copper	01	SW6020B	12.3		1.50	5.00	5	ug/L
Lead	01	SW6020B	49		5.0	5.0	5	ug/L
Mercury	01	SW6020B	12.8		1.00	1.00	5	ug/L
Nickel	01	SW6020B	36.95		5.000	5.000	5	ug/L
Zinc	01	SW6020B	1550		12.5	25.0	5	ug/L
2-Butanone (MEK)	01RE1	SW8260D	16700		1500	5000	500	ug/L
Acetone	01RE1	SW8260D	58600		3500	5000	500	ug/L
Benzene	01	SW8260D	222		20.0	50.0	50	ug/L
Ethylbenzene	01	SW8260D	38.0	J	20.0	50.0	50	ug/L
Tetrahydrofuran	01	SW8260D	5700		500	500	50	ug/L
Acetic Acid	01	D3705	6530		71.4	500	1000	mg/L
Butyric Acid	01	D3705	2160		70.3	500	1000	mg/L
Formic Acid	01	D3705	2840		64.5	500	1000	mg/L
i-Pentanoic Acid	01RE1	D3705	282		51.0	250	500	mg/L
Lactic Acid	01	D3705	783		55.7	500	1000	mg/L
n-Hexanoic Acid	01RE1	D3705	459		30.2	250	500	mg/L
n-Pentanoic Acid	01RE1	D3705	355		28.0	250	500	mg/L
Propionic Acid	01	D3705	2560		57.3	500	1000	mg/L
Pyruvic Acid	01RE1	D3705	124	J	44.4	250	500	mg/L
Ammonia as N	01	EPA350.1 R2.0	2360		146	200	2000	mg/L
BOD	01	SM5210B-2016	>42316.44		0.2	2.0	1	mg/L
COD	01	SM5220D-2011	67900		6300	10000	1000	mg/L
Nitrate as N	01	SM4500-NO3F-2019CALC	4700		500	500	5000	mg/L
Nitrate+Nitrite as N	01RE2	SM4500-NO3F-2019	4700		500	500	5000	mg/L



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

6/6/2025 6:02:23PM

Date Issued:

Analysis Detects Report

Client Name: SCS Engineers - Winchester

LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb

Client Site ID:

Laboratory Sample ID: 25E2019-01 Client Sample ID: EW-89

						DII.		
Parameter	Samp ID	Reference Method	Sample Results	Qual	DL	LOQ	Factor	Units
TKN as N	01RE1	EPA351.2 R2.0	2800		55.3	301	2	mg/L
Total Recoverable Phenolics	01	SW9065	67.4		3.00	5.00	100	mg/L



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

6/6/2025 6:02:23PM

Date Issued:

Analysis Detects Report

Client Name: SCS Engineers - Winchester

Client Site ID: LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb

Laboratory Sample ID: 25E2019-02 Client Sample ID: EW-88

25E2019-02	Official Campic ID. Liv-00							
Parameter	Samp ID	Reference Method	Sample Results	Qual	DL	LOQ	Dil. Factor	Units
Arsenic	02	SW6020B	150		2.5	5.0	5	ug/L
Barium	02	SW6020B	2100		5.00	25.0	5	ug/L
Chromium	02	SW6020B	371		2.00	5.00	5	ug/L
Lead	02	SW6020B	16		5.0	5.0	5	ug/L
Nickel	02	SW6020B	78.97		5.000	5.000	5	ug/L
Zinc	02	SW6020B	1100		12.5	25.0	5	ug/L
2-Butanone (MEK)	02	SW8260D	12500		150	500	50	ug/L
Acetone	02RE1	SW8260D	57300		3500	5000	500	ug/L
Benzene	02	SW8260D	255		20.0	50.0	50	ug/L
Ethylbenzene	02	SW8260D	29.0	J	20.0	50.0	50	ug/L
Tetrahydrofuran	02	SW8260D	4080		500	500	50	ug/L
Acetic Acid	02	D3705	6640		71.4	500	1000	mg/L
Butyric Acid	02	D3705	2220		70.3	500	1000	mg/L
Formic Acid	02	D3705	2940		64.5	500	1000	mg/L
i-Pentanoic Acid	02RE1	D3705	288		51.0	250	500	mg/L
Lactic Acid	02	D3705	963		55.7	500	1000	mg/L
n-Hexanoic Acid	02RE1	D3705	534		30.2	250	500	mg/L
n-Pentanoic Acid	02RE1	D3705	331		28.0	250	500	mg/L
Propionic Acid	02	D3705	2570		57.3	500	1000	mg/L
Pyruvic Acid	02RE1	D3705	132	J	44.4	250	500	mg/L
Ammonia as N	02	EPA350.1 R2.0	2030		146	200	2000	mg/L
BOD	02	SM5210B-2016	>42196.44		0.2	2.0	1	mg/L
COD	02	SM5220D-2011	60700		6300	10000	1000	mg/L
Nitrate as N	02	SM4500-NO3F-2019CALC	4210		500	500	5000	mg/L
Nitrate+Nitrite as N	02RE2	SM4500-NO3F-2019	4210		500	500	5000	mg/L
TKN as N	02	EPA351.2 R2.0	2580		27.7	151	1	mg/L
Total Recoverable Phenolics	02	SW9065	56.0		3.00	5.00	100	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".



Certificate of Analysis

Client Name: SCS Engineers - Winchester

Client Site I.D.: LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb

Date Issued:

6/6/2025 6:02:23PM

Work Order:

25E2019

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EW-89	25E2019-01	Ground Water	05/20/2025 16:16	05/22/2025 08:00
EW-88	25E2019-02	Ground Water	05/20/2025 16:38	05/22/2025 08:00



Certificate of Analysis

Client Name: SCS Engineers - Winchester

LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb

Client Site I.D.:

Date Issued: 6/6/2025 6:02:23PM

Work Order: 25E2019

		0.1.0	Reference	Sample Prep	Analyzed	Sample	0 1	5.		5-		
Parameter	Samp ID	CAS	Method	Date/Time	Date/Time	Results	Qual	DL	LOQ	DF	Units	Analys
Metals (Total) by EPA 6000/7000 Series	s Methods											
Silver	01	7440-22-4	SW6020B	05/27/2025 17:00	05/28/2025 11:12	BLOD		0.300	5.00	5	ug/L	AB
Arsenic	01	7440-38-2	SW6020B	05/27/2025 17:00	05/28/2025 11:12	200		2.5	5.0	5	ug/L	AB
Barium	01	7440-39-3	SW6020B	05/27/2025 17:00	05/28/2025 11:12	1760		5.00	25.0	5	ug/L	AB
Cadmium	01	7440-43-9	SW6020B	05/27/2025 17:00	05/28/2025 11:12	BLOD		0.500	5.00	5	ug/L	AB
Chromium	01	7440-47-3	SW6020B	05/27/2025 17:00	05/28/2025 11:12	342		2.00	5.00	5	ug/L	AB
Copper	01	7440-50-8	SW6020B	05/27/2025 17:00	05/28/2025 11:12	12.3		1.50	5.00	5	ug/L	AB
Mercury	01	7439-97-6	SW6020B	05/27/2025 17:00	05/28/2025 11:12	12.8		1.00	1.00	5	ug/L	AB
Nickel	01	7440-02-0	SW6020B	05/27/2025 17:00	05/28/2025 11:12	36.95		5.000	5.000	5	ug/L	AB
Lead	01	7439-92-1	SW6020B	05/27/2025 17:00	05/28/2025 11:12	49		5.0	5.0	5	ug/L	AB
Selenium	01	7782-49-2	SW6020B	05/27/2025 17:00	05/28/2025 11:12	BLOD		4.25	5.00	5	ug/L	AB
Zinc	01	7440-66-6	SW6020B	05/27/2025 17:00	05/28/2025 11:12	1550		12.5	25.0	5	ug/L	AB
Volatile Organic Compounds by GCMS	3											
2-Butanone (MEK)	01RE1	78-93-3	SW8260D	05/27/2025 17:52	05/27/2025 17:52	16700		1500	5000	500	ug/L	DPE
Acetone	01RE1	67-64-1	SW8260D	05/27/2025 17:52	05/27/2025 17:52	58600		3500	5000	500	ug/L	DPE
Benzene	01	71-43-2	SW8260D	05/27/2025 18:15	05/27/2025 18:15	222		20.0	50.0	50	ug/L	DPE
Ethylbenzene	01	100-41-4	SW8260D	05/27/2025 18:15	05/27/2025 18:15	38.0	J	20.0	50.0	50	ug/L	DPE
Toluene	01	108-88-3	SW8260D	05/27/2025 18:15	05/27/2025 18:15	BLOD		25.0	50.0	50	ug/L	DPE
Xylenes, Total	01	1330-20-7	SW8260D	05/27/2025 18:15	05/27/2025 18:15	BLOD		50.0	150	50	ug/L	DPE
Tetrahydrofuran	01	109-99-9	SW8260D	05/27/2025 18:15	05/27/2025 18:15	5700		500	500	50	ug/L	DPE
Surr: 1,2-Dichloroethane-d4 (Surr)	01	114	% 70-120	05/27/2025 1	8:15 05/27/2025 18:1	5						
Surr: 4-Bromofluorobenzene (Surr)	01	104	% 75-120	05/27/2025 1	8:15 05/27/2025 18:1	5						
Surr: Dibromofluoromethane (Surr)	01	111	% 70-130	05/27/2025 1	8:15 05/27/2025 18:1	5						
Surr: Toluene-d8 (Surr)	01	102	% 70-130	05/27/2025 1	8:15 05/27/2025 18:1	5						
Surr: 1,2-Dichloroethane-d4 (Surr)	01RE1	110	% 70-120	05/27/2025 1	7:52 05/27/2025 17:5	2						



Certificate of Analysis

Client Name: SCS Engineers - Winchester

Date Issued:

6/6/2025 6:02:23PM

Client Site I.D.: Submitted To: LFG-EW Monthly Monitoring

Jennifer Robb

Work Order:

25E2019

					,							
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 GCM	S											
Surr: 4-Bromofluorobenzene (Surr)	01RE1	103 %	6 75-120	05/27/2025 17:52	2 05/27/2025 17:52	2						
Surr: Dibromofluoromethane (Surr)	01RE1	112 %	6 70-130	05/27/2025 17:5	2 05/27/2025 17:52	2						
Surr: Toluene-d8 (Surr)	01RE1	101 %	6 70-130	05/27/2025 17:52	2 05/27/2025 17:52	2						
Semivolatile Organic Compounds by	GCMS											
Anthracene	01	120-12-7	SW8270E	05/23/2025 12:40	05/28/2025 16:15	BLOD		400	800	20	ug/L	BMS
Surr: 2,4,6-Tribromophenol (Surr)	01	9	6 5-136	05/23/2025 12:40	0 05/28/2025 16:18	5						DS
Surr: 2-Fluorobiphenyl (Surr)	01	63.2 %	6 9-117	05/23/2025 12:40	0 05/28/2025 16:13	5						
Surr: 2-Fluorophenol (Surr)	01	21.2 %	6 5-60	05/23/2025 12:40	0 05/28/2025 16:13	5						
Surr: Nitrobenzene-d5 (Surr)	01	1010 %	6 5-151	05/23/2025 12:40	0 05/28/2025 16:13	5						DS
Surr: Phenol-d5 (Surr)	01	4.00 %	6 5-60	05/23/2025 12:40	0 05/28/2025 16:1	5						DS
Surr: p-Terphenyl-d14 (Surr)	01	55.2 %	6 5-141	05/23/2025 12:40	0 05/28/2025 16:13	5						



6/6/2025 6:02:23PM

Date Issued:



Certificate of Analysis

Client Name: SCS Engineers - Winchester

Client Site I.D.:

LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb Work Order: 25E2019

			Reference	Sample Prep	Analyzed	Sample						
Parameter	Samp ID	CAS	Method	Date/Time	Date/Time	Results	Qual	DL	LOQ	DF	Units	Analys
Ion Chromatography Analyses												
Acetic Acid	01	64-19-7	D3705	05/23/2025 14:01	05/23/2025 14:01	6530		71.4	500	1000	mg/L	MGC
Butyric Acid	01	107-92-6	D3705	05/23/2025 14:01	05/23/2025 14:01	2160		70.3	500	1000	mg/L	MGC
Formic Acid	01	64-18-6	D3705	05/23/2025 14:01	05/23/2025 14:01	2840		64.5	500	1000	mg/L	MGC
n-Hexanoic Acid	01RE1	142-62-1	D3705	05/23/2025 16:57	05/23/2025 16:57	459		30.2	250	500	mg/L	MGC
i-Hexanoic Acid	01RE1	646-07-1	D3705	05/23/2025 16:57	05/23/2025 16:57	BLOD		25.4	250	500	mg/L	MGC
Lactic Acid	01	50-21-5	D3705	05/23/2025 14:01	05/23/2025 14:01	783		55.7	500	1000	mg/L	MGC
n-Pentanoic Acid	01RE1	109-52-4	D3705	05/23/2025 16:57	05/23/2025 16:57	355		28.0	250	500	mg/L	MGC
i-Pentanoic Acid	01RE1	503-74-2	D3705	05/23/2025 16:57	05/23/2025 16:57	282		51.0	250	500	mg/L	MGC
Propionic Acid	01	79-09-4	D3705	05/23/2025 14:01	05/23/2025 14:01	2560		57.3	500	1000	mg/L	MGC
Pyruvic Acid	01RE1	127-17-3	D3705	05/23/2025 16:57	05/23/2025 16:57	124	J	44.4	250	500	mg/L	MGC
Wet Chemistry Analysis												
Ammonia as N	01	7664-41-7	EPA350.1 R2.0	06/05/2025 13:37	06/05/2025 13:37	2360		146	200	2000	mg/L	SPH
BOD	01	E1640606	SM5210B-20 16	05/22/2025 15:26	05/22/2025 15:26	>42316.44		0.2	2.0	1	mg/L	CET
BOD	01	E1640606	SM5210B-20 16	05/22/2025 15:26	05/22/2025 15:26	>42316.44		0.2	2.0	1	mg/L	CET
COD	01	NA	SM5220D-20 11	06/02/2025 14:47	06/02/2025 14:47	67900		6300	10000	1000	mg/L	CET
Nitrate as N	01	14797-55-8	SM4500-NO 3F-2019CAL C	06/06/2025 00:30	06/06/2025 00:30	4700		500	500	5000	mg/L	AAH
Nitrate+Nitrite as N	01RE2	E701177	SM4500-NO 3F-2019	06/06/2025 00:30	06/06/2025 00:30	4700		500	500	5000	mg/L	AAH
Nitrite as N	01	14797-65-0	SM4500-NO 2B-2021	05/22/2025 11:20	05/22/2025 11:20	BLOD		1.00	5.00	100	mg/L	KJM
Total Recoverable Phenolics	01	NA	SW9065	06/06/2025 16:55	06/06/2025 16:55	67.4		3.00	5.00	100	mg/L	AAL



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Certificate of Analysis

Client Name: SCS Engineers - Winchester

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LFG-EW Monthly Monitoring

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Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analys
Wet Chemistry Analysis												
TKN as N	01RE1	E17148461	EPA351.2 R2.0	06/05/2025 09:00	06/05/2025 10:00	2800		55.3	301	2	mg/L	HJB



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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	05/27/2025 17:00	05/28/2025 11:15	BLOD		0.300	5.00	5	ug/L	AB
Arsenic	02	7440-38-2	SW6020B	05/27/2025 17:00	05/28/2025 11:15	150		2.5	5.0	5	ug/L	AB
Barium	02	7440-39-3	SW6020B	05/27/2025 17:00	05/28/2025 11:15	2100		5.00	25.0	5	ug/L	AB
Cadmium	02	7440-43-9	SW6020B	05/27/2025 17:00	05/28/2025 11:15	BLOD		0.500	5.00	5	ug/L	AB
Chromium	02	7440-47-3	SW6020B	05/27/2025 17:00	05/28/2025 11:15	371		2.00	5.00	5	ug/L	AB
Copper	02	7440-50-8	SW6020B	05/27/2025 17:00	05/28/2025 11:15	BLOD		1.50	5.00	5	ug/L	AB
Mercury	02	7439-97-6	SW6020B	05/27/2025 17:00	05/28/2025 11:15	BLOD		1.00	1.00	5	ug/L	AB
Nickel	02	7440-02-0	SW6020B	05/27/2025 17:00	05/28/2025 11:15	78.97		5.000	5.000	5	ug/L	AB
Lead	02	7439-92-1	SW6020B	05/27/2025 17:00	05/28/2025 11:15	16		5.0	5.0	5	ug/L	AB
Selenium	02	7782-49-2	SW6020B	05/27/2025 17:00	05/28/2025 11:15	BLOD		4.25	5.00	5	ug/L	AB
Zinc	02	7440-66-6	SW6020B	05/27/2025 17:00	05/28/2025 11:15	1100		12.5	25.0	5	ug/L	AB



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Cheff Gample 15.					Laborator	y Campic ID.	ZOLZ	010-02				
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 GCM	S											
2-Butanone (MEK)	02	78-93-3	SW8260D	05/27/2025 19:00	05/27/2025 19:00	12500		150	500	50	ug/L	DPE
Acetone	02RE1	67-64-1	SW8260D	05/27/2025 18:38	05/27/2025 18:38	57300		3500	5000	500	ug/L	DPE
Benzene	02	71-43-2	SW8260D	05/27/2025 19:00	05/27/2025 19:00	255		20.0	50.0	50	ug/L	DPE
Ethylbenzene	02	100-41-4	SW8260D	05/27/2025 19:00	05/27/2025 19:00	29.0	J	20.0	50.0	50	ug/L	DPE
Toluene	02	108-88-3	SW8260D	05/27/2025 19:00	05/27/2025 19:00	BLOD		25.0	50.0	50	ug/L	DPE
Xylenes, Total	02	1330-20-7	SW8260D	05/27/2025 19:00	05/27/2025 19:00	BLOD		50.0	150	50	ug/L	DPE
Tetrahydrofuran	02	109-99-9	SW8260D	05/27/2025 19:00	05/27/2025 19:00	4080		500	500	50	ug/L	DPE
Surr: 1,2-Dichloroethane-d4 (Surr)	02	110	% 70-120	05/27/2025 1	9:00 05/27/2025 19:	00						
Surr: 4-Bromofluorobenzene (Surr)	02	104	% 75-120	05/27/2025 1	9:00 05/27/2025 19:	.00						
Surr: Dibromofluoromethane (Surr)	02	113	% 70-130	05/27/2025 1	9:00 05/27/2025 19:	00						
Surr: Toluene-d8 (Surr)	02	101	% 70-130	05/27/2025 1	9:00 05/27/2025 19:	00						
Surr: 1,2-Dichloroethane-d4 (Surr)	02RE1	114	% 70-120	05/27/2025 1	8:38 05/27/2025 18:	·38						
Surr: 4-Bromofluorobenzene (Surr)	02RE1	104	% 75-120	05/27/2025 1	8:38 05/27/2025 18:	38						
Surr: Dibromofluoromethane (Surr)	02RE1	112	% 70-130	05/27/2025 1	8:38 05/27/2025 18:	38						
Surr: Toluene-d8 (Surr)	02RE1	101	% 70-130	05/27/2025 1	8:38 05/27/2025 18:	38						
Semivolatile Organic Compounds by	GCMS											
Anthracene	02	120-12-7	SW8270E	05/23/2025 12:40	05/28/2025 16:48	BLOD		400	800	20	ug/L	BMS
Surr: 2,4,6-Tribromophenol (Surr)	02		% 5-136	05/23/2025 1	2:40 05/28/2025 16:	·48					,	DS
Surr: 2-Fluorobiphenyl (Surr)	02	60.0	% 9-117	05/23/2025 1	2:40 05/28/2025 16:	48						
Surr: 2-Fluorophenol (Surr)	02	47.6	% 5-60	05/23/2025 1	2:40 05/28/2025 16:	48						
Surr: Nitrobenzene-d5 (Surr)	02	855	% 5-151	05/23/2025 1	2:40 05/28/2025 16:	48						DS
Surr: Phenol-d5 (Surr)	02	1.60	% 5-60	05/23/2025 1	2:40 05/28/2025 16:	48						DS
Surr: p-Terphenyl-d14 (Surr)	02	56.0	% 5-141	05/23/2025 1	2:40 05/28/2025 16:	48						





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Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analys
Ion Chromatography Analyses												
Acetic Acid	02	64-19-7	D3705	05/23/2025 15:29	05/23/2025 15:29	6640		71.4	500	1000	mg/L	MGC
Butyric Acid	02	107-92-6	D3705	05/23/2025 15:29	05/23/2025 15:29	2220		70.3	500	1000	mg/L	MGC
Formic Acid	02	64-18-6	D3705	05/23/2025 15:29	05/23/2025 15:29	2940		64.5	500	1000	mg/L	MGC
n-Hexanoic Acid	02RE1	142-62-1	D3705	05/23/2025 17:26	05/23/2025 17:26	534		30.2	250	500	mg/L	MGC
i-Hexanoic Acid	02RE1	646-07-1	D3705	05/23/2025 17:26	05/23/2025 17:26	BLOD		25.4	250	500	mg/L	MGC
Lactic Acid	02	50-21-5	D3705	05/23/2025 15:29	05/23/2025 15:29	963		55.7	500	1000	mg/L	MGC
n-Pentanoic Acid	02RE1	109-52-4	D3705	05/23/2025 17:26	05/23/2025 17:26	331		28.0	250	500	mg/L	MGC
i-Pentanoic Acid	02RE1	503-74-2	D3705	05/23/2025 17:26	05/23/2025 17:26	288		51.0	250	500	mg/L	MGC
Propionic Acid	02	79-09-4	D3705	05/23/2025 15:29	05/23/2025 15:29	2570		57.3	500	1000	mg/L	MGC
Pyruvic Acid	02RE1	127-17-3	D3705	05/23/2025 17:26	05/23/2025 17:26	132	J	44.4	250	500	mg/L	MGC
Wet Chemistry Analysis												
Ammonia as N	02	7664-41-7	EPA350.1 R2.0	06/05/2025 13:39	06/05/2025 13:39	2030		146	200	2000	mg/L	SPH
BOD	02	E1640606	SM5210B-20 16	05/22/2025 15:30	05/22/2025 15:30	>42196.44		0.2	2.0	1	mg/L	CET
BOD	02	E1640606	SM5210B-20 16	05/22/2025 15:30	05/22/2025 15:30	>42196.44		0.2	2.0	1	mg/L	CET
COD	02	NA	SM5220D-20 11	06/02/2025 14:47	06/02/2025 14:47	60700		6300	10000	1000	mg/L	CET
Nitrate as N	02	14797-55-8	SM4500-NO 3F-2019CAL C	06/06/2025 00:32	06/06/2025 00:32	4210		500	500	5000	mg/L	AAH
Nitrate+Nitrite as N	02RE2	E701177	SM4500-NO 3F-2019	06/06/2025 00:32	06/06/2025 00:32	4210		500	500	5000	mg/L	AAH
Nitrite as N	02	14797-65-0	SM4500-NO 2B-2021	05/22/2025 11:20	05/22/2025 11:20	BLOD		1.00	5.00	100	mg/L	KJM
Total Recoverable Phenolics	02	NA	SW9065	06/06/2025 16:55	06/06/2025 16:55	56.0		3.00	5.00	100	mg/L	AAL



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Parameter	Samp ID	CAS	Reference Method	Sample Prep Date/Time	Analyzed Date/Time	Sample Results	Qual	DL	LOQ	DF	Units	Analys
Wet Chemistry Analysis												
TKN as N	02	E17148461	EPA351.2 R2 0	06/05/2025 09:00	06/05/2025 10:00	2580		27.7	151	1	mg/L	HJB



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

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Ва	tch BIE1298 - EPA200).2R2.8/SW30	05A-ICP	MS						
Blank (BIE1298-BLK1)				Prepared: 05/27	/2025 Analyzed: (05/28/2025				
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 (BIE1298-BS1)				Prepared: 05/27	/2025 Analyzed: (05/28/2025				
Mercury	1.01	0.200	ug/L	1.00		101	80-120			
Arsenic	50	1.0	ug/L	50.0		100	80-120			
Barium	52.3	5.00	ug/L	50.0		105	80-120			
Cadmium	51.0	1.00	ug/L	50.0		102	80-120			
Chromium	53.2	1.00	ug/L	50.0		106	80-120			
Copper	53.3	1.00	ug/L	50.0		107	80-120			
Lead	53	1.0	ug/L	50.0		106	80-120			
Nickel	53.77	1.000	ug/L	50.0		108	80-120			
Selenium	47.0	1.00	ug/L	50.0		94.0	80-120			
Silver	10.6	1.00	ug/L	10.0		106	80-120			
Zinc	50.3	5.00	ug/L	50.0		101	80-120			
Matrix Spike (BIE1298-MS1)	Source	ce: 25E2179-01	ı	Prepared: 05/27	/2025 Analyzed: (05/28/2025				



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

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	BIE1298 - EPA200).2R2.8/SW3(005A-ICP	MS						
Matrix Spike (BIE1298-MS1)	Sour	ce: 25E2179-0	1	Prepared: 05/27	/2025 Analyzed: (05/28/2025				
Mercury	1.03	0.200	ug/L	1.00	BLOD	103	70-130			
Arsenic	50	1.0	ug/L	50.0	0.53	98.2	75-125			
Barium	100	5.00	ug/L	50.0	50.3	100	75-125			
Cadmium	49.9	1.00	ug/L	50.0	BLOD	99.9	75-125			
Chromium	53.2	1.00	ug/L	50.0	BLOD	106	75-125			
Copper	50.7	1.00	ug/L	50.0	BLOD	101	75-125			
Lead	50	1.0	ug/L	50.0	BLOD	100	75-125			
Nickel	57.17	1.000	ug/L	50.0	5.368	104	75-125			
Selenium	44.1	1.00	ug/L	50.0	BLOD	88.2	75-125			
Silver	10.5	1.00	ug/L	10.0	BLOD	105	75-125			
Zinc	56.4	5.00	ug/L	50.0	10.1	92.6	75-125			
Matrix Spike Dup (BIE1298-MSD1)	Sour	ce: 25E2179-0	1	Prepared: 05/27	/2025 Analyzed: (05/28/2025				
Mercury	1.04	0.200	ug/L	1.00	BLOD	104	70-130	0.350	20	
Arsenic	50	1.0	ug/L	50.0	0.53	98.5	75-125	0.257	20	
Barium	101	5.00	ug/L	50.0	50.3	101	75-125	0.240	20	
Cadmium	49.8	1.00	ug/L	50.0	BLOD	99.6	75-125	0.259	20	
Chromium	51.8	1.00	ug/L	50.0	BLOD	104	75-125	2.64	20	
Copper	49.8	1.00	ug/L	50.0	BLOD	99.6	75-125	1.82	20	
Lead	50	1.0	ug/L	50.0	BLOD	99.2	75-125	1.15	20	
Nickel	55.76	1.000	ug/L	50.0	5.368	101	75-125	2.51	20	
Selenium	44.1	1.00	ug/L	50.0	BLOD	88.1	75-125	0.0414	20	
Silver	10.3	1.00	ug/L	10.0	BLOD	103	75-125	1.31	20	
Zinc	59.3	5.00	ug/L	50.0	10.1	98.4	75-125	5.03	20	



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch Bl	E1338 - SW5030	DB-MS								
Blank (BIE1338-BLK1)				Prepared & Analy	zed: 05/27/2025	i				
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)	55.3		ug/L	50.0		111	70-120			
Surr: 4-Bromofluorobenzene (Surr)	51.6		ug/L	50.0		103	75-120			
Surr: Dibromofluoromethane (Surr)	55.0		ug/L	50.0		110	70-130			
Surr: Toluene-d8 (Surr)	50.8		ug/L	50.0		102	70-130			
CS (BIE1338-BS1)				Prepared & Analy	/zed: 05/27/2025	i				
1,1,1,2-Tetrachloroethane	45.4		ug/L	50.0		90.8	80-130			
1,1,1-Trichloroethane	42.0		ug/L	50.0		83.9	65-130			
1,1,2,2-Tetrachloroethane	52.2		ug/L	50.0		104	65-130			
1,1,2-Trichloroethane	46.4		ug/L	50.0		92.8	75-125			
1,1-Dichloroethane	42.5		ug/L	50.0		85.1	70-135			
1,1-Dichloroethylene	39.8		ug/L	50.0		79.7	70-130			
1,1-Dichloropropene	43.2		ug/L	50.0		86.4	75-135			
1,2,3-Trichlorobenzene	41.5		ug/L	50.0		82.9	55-140			
1,2,3-Trichloropropane	53.3		ug/L	50.0		107	75-125			
1,2,4-Trichlorobenzene	42.4		ug/L	50.0		84.8	65-135			
1,2,4-Trimethylbenzene	43.8		ug/L	50.0		87.6	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	50.5		ug/L	50.0		101	50-130			
1,2-Dibromoethane (EDB)	47.7		ug/L	50.0		95.3	80-120			



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batc	h BIE1338 - SW5030	DB-MS							
LCS (BIE1338-BS1)		I	Prepared & Anal	yzed: 05/27/2025					
1,2-Dichlorobenzene	45.3	ug/L	50.0		90.6	70-120			
1,2-Dichloroethane	43.0	ug/L	50.0		86.1	70-130			
1,2-Dichloropropane	43.9	ug/L	50.0		87.7	75-125			
1,3,5-Trimethylbenzene	42.5	ug/L	50.0		85.0	75-125			
1,3-Dichlorobenzene	44.2	ug/L	50.0		88.4	75-125			
1,3-Dichloropropane	46.9	ug/L	50.0		93.8	75-125			
1,4-Dichlorobenzene	45.1	ug/L	50.0		90.2	75-125			
2,2-Dichloropropane	44.0	ug/L	50.0		88.1	70-135			
2-Butanone (MEK)	49.6	ug/L	50.0		99.3	30-150			
2-Chlorotoluene	39.3	ug/L	50.0		78.6	75-125			
2-Hexanone (MBK)	53.6	ug/L	50.0		107	55-130			
4-Chlorotoluene	40.8	ug/L	50.0		81.6	75-130			
4-Isopropyltoluene	47.4	ug/L	50.0		94.8	75-130			
4-Methyl-2-pentanone (MIBK)	49.8	ug/L	50.0		99.7	60-135			
Acetone	40.8	ug/L	50.0		81.5	40-140			
Benzene	42.7	ug/L	50.0		85.4	80-120			
Bromobenzene	45.8	ug/L	50.0		91.6	75-125			
Bromochloromethane	46.9	ug/L	50.0		93.7	65-130			
Bromodichloromethane	44.9	ug/L	50.0		89.8	75-120			
Bromoform	48.3	ug/L	50.0		96.6	70-130			
Bromomethane	45.2	ug/L	50.0		90.3	30-145			
Carbon disulfide	48.0	ug/L	50.0		96.1	35-160			
Carbon tetrachloride	41.3	ug/L	50.0		82.6	65-140			
Chlorobenzene	43.4	ug/L	50.0		86.7	80-120			
Chloroethane	42.6	ug/L	50.0		85.2	60-135			



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Bato	h BIE1338 - SW5030I	3-MS							
_CS (BIE1338-BS1)			Prepared & Anal	yzed: 05/27/2025					
Chloroform	42.3	ug/L	50.0		84.6	65-135			
Chloromethane	36.2	ug/L	50.0		72.5	40-125			
cis-1,2-Dichloroethylene	44.5	ug/L	50.0		89.1	70-125			
cis-1,3-Dichloropropene	46.6	ug/L	50.0		93.3	70-130			
Dibromochloromethane	40.7	ug/L	50.0		81.3	60-135			
Dibromomethane	46.2	ug/L	50.0		92.4	75-125			
Dichlorodifluoromethane	36.2	ug/L	50.0		72.3	30-155			
Ethylbenzene	43.3	ug/L	50.0		86.7	75-125			
Hexachlorobutadiene	42.5	ug/L	50.0		84.9	50-140			
Isopropylbenzene	40.6	ug/L	50.0		81.1	75-125			
m+p-Xylenes	85.1	ug/L	100		85.1	75-130			
Methylene chloride	44.3	ug/L	50.0		88.6	55-140			
Methyl-t-butyl ether (MTBE)	49.6	ug/L	50.0		99.3	65-125			
Naphthalene	43.4	ug/L	50.0		86.8	55-140			
n-Butylbenzene	47.1	ug/L	50.0		94.2	70-135			
n-Propylbenzene	40.3	ug/L	50.0		80.6	70-130			
o-Xylene	43.3	ug/L	50.0		86.5	80-120			
sec-Butylbenzene	49.2	ug/L	50.0		98.5	70-125			
Styrene	46.3	ug/L	50.0		92.6	65-135			
tert-Butylbenzene	42.8	ug/L	50.0		85.6	70-130			
Tetrachloroethylene (PCE)	53.7	ug/L	50.0		107	45-150			
Toluene	40.0	ug/L	50.0		79.9	75-120			
trans-1,2-Dichloroethylene	40.6	ug/L	50.0		81.2	60-140			
trans-1,3-Dichloropropene	43.1	ug/L	50.0		86.1	55-140			
Trichloroethylene	41.5	ug/L	50.0		83.1	70-125			



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch Bli	E1338 - SW5030	B-MS							
LCS (BIE1338-BS1)			Prepared & Ana	lyzed: 05/27/2025					
Trichlorofluoromethane	53.6	ug/L	50.0		107	60-145			
Vinyl chloride	43.7	ug/L	50.0		87.5	50-145			
Surr: 1,2-Dichloroethane-d4 (Surr)	51.8	ug/L	50.0		104	70-120			
Surr: 4-Bromofluorobenzene (Surr)	51.4	ug/L	50.0		103	75-120			
Surr: Dibromofluoromethane (Surr)	51.2	ug/L	50.0		102	70-130			
Surr: Toluene-d8 (Surr)	49.4	ug/L	50.0		98.8	70-130			
Matrix Spike (BIE1338-MS1)	Sourc	ce: 25E2280-01	Prepared & Ana	lyzed: 05/27/2025					
1,1,1,2-Tetrachloroethane	51.4	ug/L	50.0	BLOD	103	80-130			
1,1,1-Trichloroethane	50.9	ug/L	50.0	BLOD	102	65-130			
1,1,2,2-Tetrachloroethane	56.7	ug/L	50.0	BLOD	113	65-130			
1,1,2-Trichloroethane	52.3	ug/L	50.0	BLOD	105	75-125			
1,1-Dichloroethane	50.5	ug/L	50.0	BLOD	101	70-135			
1,1-Dichloroethylene	48.0	ug/L	50.0	BLOD	96.0	50-145			
1,1-Dichloropropene	52.1	ug/L	50.0	BLOD	104	75-135			
1,2,3-Trichlorobenzene	43.7	ug/L	50.0	BLOD	87.4	55-140			
1,2,3-Trichloropropane	57.5	ug/L	50.0	BLOD	115	75-125			
1,2,4-Trichlorobenzene	44.0	ug/L	50.0	BLOD	87.9	65-135			
1,2,4-Trimethylbenzene	49.4	ug/L	50.0	BLOD	98.7	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	54.1	ug/L	50.0	BLOD	108	50-130			
1,2-Dibromoethane (EDB)	51.9	ug/L	50.0	BLOD	104	80-120			
1,2-Dichlorobenzene	49.8	ug/L	50.0	BLOD	99.5	70-120			
1,2-Dichloroethane	48.0	ug/L	50.0	BLOD	96.1	70-130			
1,2-Dichloropropane	51.4	ug/L	50.0	BLOD	103	75-125			
1,3,5-Trimethylbenzene	47.8	ug/L	50.0	BLOD	95.7	75-124			



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ Uni	its	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	n BIE1338 - SW503	0B-MS								
Matrix Spike (BIE1338-MS1)	Source	ce: 25E2280-01	Pi	repared & Anal	lyzed: 05/27/2025					
1,3-Dichlorobenzene	50.3	ι	ug/L	50.0	BLOD	101	75-125			
1,3-Dichloropropane	52.5	ι	ug/L	50.0	BLOD	105	75-125			
1,4-Dichlorobenzene	49.5	ι	ug/L	50.0	BLOD	98.9	75-125			
2,2-Dichloropropane	52.5	ι	ug/L	50.0	BLOD	105	70-135			
2-Butanone (MEK)	56.2	ι	ug/L	50.0	BLOD	112	30-150			
2-Chlorotoluene	44.2	ι	ug/L	50.0	BLOD	88.3	75-125			
2-Hexanone (MBK)	56.9	ι	ug/L	50.0	BLOD	114	55-130			
4-Chlorotoluene	46.4	ι	ug/L	50.0	BLOD	92.8	75-130			
4-Isopropyltoluene	53.4	ι	ug/L	50.0	BLOD	107	75-130			
4-Methyl-2-pentanone (MIBK)	59.0	ι	ug/L	50.0	2.36	113	60-135			
Acetone	52.0	ι	ug/L	50.0	10.8	82.5	40-140			
Benzene	49.8	ι	ug/L	50.0	BLOD	99.5	80-120			
Bromobenzene	51.4	ι	ug/L	50.0	BLOD	103	75-125			
Bromochloromethane	52.3	ι	ug/L	50.0	BLOD	105	65-130			
Bromodichloromethane	51.4	ι	ug/L	50.0	BLOD	103	75-136			
Bromoform	51.8	ι	ug/L	50.0	BLOD	104	70-130			
Bromomethane	50.7	ι	ug/L	50.0	BLOD	101	30-145			
Carbon disulfide	47.8	ι	ug/L	50.0	BLOD	94.8	35-160			
Carbon tetrachloride	49.0	ι	ug/L	50.0	BLOD	97.9	65-140			
Chlorobenzene	48.9	ι	ug/L	50.0	BLOD	97.8	80-120			
Chloroethane	53.4	ι	ug/L	50.0	BLOD	107	60-135			
Chloroform	49.5	ι	ug/L	50.0	BLOD	99.1	65-135			
Chloromethane	43.3	ι	ug/L	50.0	BLOD	86.6	40-125			
cis-1,2-Dichloroethylene	51.2	ι	ug/L	50.0	BLOD	102	70-125			
cis-1,3-Dichloropropene	52.8	ι	ug/L	50.0	BLOD	106	47-136			



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ U	Inits	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch E	BIE1338 - SW503	0B-MS								
Matrix Spike (BIE1338-MS1)	Sour	ce: 25E2280-01		Prepared & Anal	yzed: 05/27/2025					
Dibromochloromethane	45.0		ug/L	50.0	BLOD	90.0	60-135			
Dibromomethane	50.2		ug/L	50.0	BLOD	100	75-125			
Dichlorodifluoromethane	43.7		ug/L	50.0	BLOD	87.5	30-155			
Ethylbenzene	50.0		ug/L	50.0	BLOD	100	75-125			
Hexachlorobutadiene	44.0		ug/L	50.0	BLOD	88.0	50-140			
Isopropylbenzene	47.0		ug/L	50.0	BLOD	93.9	75-125			
m+p-Xylenes	97.3		ug/L	100	BLOD	97.3	75-130			
Methylene chloride	50.4		ug/L	50.0	BLOD	101	55-140			
Methyl-t-butyl ether (MTBE)	55.7		ug/L	50.0	BLOD	111	65-125			
Naphthalene	44.5		ug/L	50.0	BLOD	89.0	55-140			
n-Butylbenzene	52.7		ug/L	50.0	BLOD	105	70-135			
n-Propylbenzene	44.6		ug/L	50.0	BLOD	89.3	70-130			
o-Xylene	49.6		ug/L	50.0	BLOD	99.3	80-120			
sec-Butylbenzene	55.7		ug/L	50.0	BLOD	111	70-125			
Styrene	52.1		ug/L	50.0	BLOD	104	65-135			
tert-Butylbenzene	48.6		ug/L	50.0	BLOD	97.2	70-130			
Tetrachloroethylene (PCE)	62.0		ug/L	50.0	BLOD	124	51-231			
Toluene	47.0		ug/L	50.0	BLOD	93.4	75-120			
trans-1,2-Dichloroethylene	48.1		ug/L	50.0	BLOD	96.2	60-140			
trans-1,3-Dichloropropene	48.2		ug/L	50.0	BLOD	96.4	55-140			
Trichloroethylene	48.6		ug/L	50.0	BLOD	97.3	70-125			
Trichlorofluoromethane	64.4		ug/L	50.0	BLOD	129	60-145			
Vinyl chloride	52.7		ug/L	50.0	BLOD	105	50-145			
Surr: 1,2-Dichloroethane-d4 (Surr)	53.7		ug/L	50.0		107	70-120			



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ U	nits	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch Bli	E1338 - SW5030	B-MS								
Matrix Spike (BIE1338-MS1)	Source	e: 25E2280-01		Prepared & Analy	yzed: 05/27/2025					
Surr: 4-Bromofluorobenzene (Surr)	50.9		ug/L	50.0		102	75-120			
Surr: Dibromofluoromethane (Surr)	51.4		ug/L	50.0		103	70-130			
Surr: Toluene-d8 (Surr)	50.0		ug/L	50.0		99.9	70-130			
Matrix Spike Dup (BIE1338-MSD1)	Source	e: 25E2280-01		Prepared & Analy	yzed: 05/27/2025					
1,1,1,2-Tetrachloroethane	50.5		ug/L	50.0	BLOD	101	80-130	1.77	30	
1,1,1-Trichloroethane	49.2		ug/L	50.0	BLOD	98.4	65-130	3.44	30	
1,1,2,2-Tetrachloroethane	58.8		ug/L	50.0	BLOD	118	65-130	3.64	30	
1,1,2-Trichloroethane	53.2		ug/L	50.0	BLOD	106	75-125	1.57	30	
1,1-Dichloroethane	48.9		ug/L	50.0	BLOD	97.9	70-135	3.12	30	
1,1-Dichloroethylene	45.8		ug/L	50.0	BLOD	91.7	50-145	4.65	30	
1,1-Dichloropropene	51.0		ug/L	50.0	BLOD	102	75-135	2.17	30	
1,2,3-Trichlorobenzene	42.7		ug/L	50.0	BLOD	85.4	55-140	2.29	30	
1,2,3-Trichloropropane	59.7		ug/L	50.0	BLOD	119	75-125	3.75	30	
1,2,4-Trichlorobenzene	44.1		ug/L	50.0	BLOD	88.3	65-135	0.409	30	
1,2,4-Trimethylbenzene	48.3		ug/L	50.0	BLOD	96.6	75-130	2.15	30	
1,2-Dibromo-3-chloropropane (DBCP)	56.4		ug/L	50.0	BLOD	113	50-130	4.07	30	
1,2-Dibromoethane (EDB)	52.1		ug/L	50.0	BLOD	104	80-120	0.269	30	
1,2-Dichlorobenzene	49.5		ug/L	50.0	BLOD	99.0	70-120	0.463	30	
1,2-Dichloroethane	48.7		ug/L	50.0	BLOD	97.5	70-130	1.47	30	
1,2-Dichloropropane	49.3		ug/L	50.0	BLOD	98.6	75-125	4.15	30	
1,3,5-Trimethylbenzene	46.8		ug/L	50.0	BLOD	93.6	75-124	2.18	30	
1,3-Dichlorobenzene	48.5		ug/L	50.0	BLOD	97.0	75-125	3.58	30	
1,3-Dichloropropane	53.4		ug/L	50.0	BLOD	107	75-125	1.62	30	
1,4-Dichlorobenzene	48.8		ug/L	50.0	BLOD	97.7	75-125	1.26	30	



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	BIE1338 - SW503	0B-MS							
Matrix Spike Dup (BIE1338-MSD1)	Source	ce: 25E2280-01	Prepared & Ana	lyzed: 05/27/2025	;				
2,2-Dichloropropane	51.2	ug/	50.0	BLOD	102	70-135	2.49	30	
2-Butanone (MEK)	65.3	ug/	50.0	BLOD	131	30-150	15.1	30	
2-Chlorotoluene	43.2	ug/	50.0	BLOD	86.3	75-125	2.24	30	
2-Hexanone (MBK)	67.0	ug/	50.0	BLOD	134	55-130	16.4	30	М
4-Chlorotoluene	44.7	ug/	50.0	BLOD	89.4	75-130	3.75	30	
4-Isopropyltoluene	51.6	ug/	50.0	BLOD	103	75-130	3.33	30	
4-Methyl-2-pentanone (MIBK)	66.7	ug/	50.0	2.36	129	60-135	12.3	30	
Acetone	57.9	ug/	50.0	10.8	94.2	40-140	10.6	30	
Benzene	48.3	ug/	50.0	BLOD	96.7	80-120	2.92	30	
Bromobenzene	50.2	ug/	50.0	BLOD	100	75-125	2.36	30	
Bromochloromethane	52.9	ug/	50.0	BLOD	106	65-130	1.08	30	
Bromodichloromethane	50.7	ug/	50.0	BLOD	101	75-136	1.43	30	
Bromoform	51.8	ug/	50.0	BLOD	104	70-130	0.0579	30	
Bromomethane	50.2	ug/	50.0	BLOD	100	30-145	0.971	30	
Carbon disulfide	49.3	ug/	50.0	BLOD	98.0	35-160	3.25	30	
Carbon tetrachloride	47.4	ug/	50.0	BLOD	94.8	65-140	3.18	30	
Chlorobenzene	47.9	ug/	50.0	BLOD	95.8	80-120	2.15	30	
Chloroethane	47.8	ug/	50.0	BLOD	95.5	60-135	11.2	30	
Chloroform	48.1	ug/	50.0	BLOD	96.2	65-135	2.95	30	
Chloromethane	40.7	ug/	50.0	BLOD	81.5	40-125	6.07	30	
cis-1,2-Dichloroethylene	50.1	ug/	50.0	BLOD	100	70-125	2.29	30	
cis-1,3-Dichloropropene	52.3	ug/	50.0	BLOD	105	47-136	0.876	30	
Dibromochloromethane	45.6	ug/	50.0	BLOD	91.1	60-135	1.30	30	
Dibromomethane	51.6	ug/	50.0	BLOD	103	75-125	2.81	30	
Dichlorodifluoromethane	41.6	ug/	50.0	BLOD	83.2	30-155	5.06	30	



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Volatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch B	IE1338 - SW503	OB-MS							
Matrix Spike Dup (BIE1338-MSD1)	Sour	ce: 25E2280-01	Prepared & Ana	llyzed: 05/27/2025					
Ethylbenzene	48.3	ug	L 50.0	BLOD	96.5	75-125	3.58	30	
Hexachlorobutadiene	43.0	ug.	L 50.0	BLOD	86.1	50-140	2.23	30	
Isopropylbenzene	45.0	ug.	L 50.0	BLOD	89.9	75-125	4.35	30	
m+p-Xylenes	94.7	ug.	L 100	BLOD	94.7	75-130	2.69	30	
Methylene chloride	48.4	ug.	L 50.0	BLOD	96.9	55-140	3.89	30	
Methyl-t-butyl ether (MTBE)	57.2	ug	L 50.0	BLOD	114	65-125	2.57	30	
Naphthalene	45.9	ug	L 50.0	BLOD	91.7	55-140	3.06	30	
n-Butylbenzene	51.2	ug	L 50.0	BLOD	102	70-135	2.85	30	
n-Propylbenzene	43.4	ug	L 50.0	BLOD	86.7	70-130	2.91	30	
o-Xylene	47.7	ug	L 50.0	BLOD	95.5	80-120	3.90	30	
sec-Butylbenzene	54.9	ug	L 50.0	BLOD	110	70-125	1.50	30	
Styrene	50.7	ug	L 50.0	BLOD	101	65-135	2.70	30	
tert-Butylbenzene	46.6	ug	L 50.0	BLOD	93.2	70-130	4.24	30	
Tetrachloroethylene (PCE)	60.1	ug.	L 50.0	BLOD	120	51-231	3.24	30	
Toluene	46.0	ug	L 50.0	BLOD	91.3	75-120	2.22	30	
trans-1,2-Dichloroethylene	45.6	ug	L 50.0	BLOD	91.3	60-140	5.27	30	
trans-1,3-Dichloropropene	47.7	ug	L 50.0	BLOD	95.4	55-140	1.02	30	
Trichloroethylene	47.1	ug	L 50.0	BLOD	94.2	70-125	3.18	30	
Trichlorofluoromethane	61.1	ug	L 50.0	BLOD	122	60-145	5.25	30	
Vinyl chloride	51.5	ug	L 50.0	BLOD	103	50-145	2.34	30	
Surr: 1,2-Dichloroethane-d4 (Surr)	53.3	ug	L 50.0		107	70-120			
Surr: 4-Bromofluorobenzene (Surr)	51.2	ug.	L 50.0		102	75-120			
Surr: Dibromofluoromethane (Surr)	<i>53.4</i>	ug.	L 50.0		107	70-130			
Surr: Toluene-d8 (Surr)	50.2	ug	L 50.0		100	70-130			



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Semivolatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	BIE1226 - SW3510	C/EPA600-l	MS							
Blank (BIE1226-BLK1)			F	Prepared: 05/23/2	2025 Analyzed: 0)5/27/2025				
Anthracene	ND	10.0	ug/L							
Surr: 2,4,6-Tribromophenol (Surr)	64.6		ug/L	100		64.6	5-136			
Surr: 2-Fluorobiphenyl (Surr)	24.9		ug/L	50.0		49.8	9-117			
Surr: 2-Fluorophenol (Surr)	32.3		ug/L	100		32.3	5-60			
Surr: Nitrobenzene-d5 (Surr)	28.1		ug/L	50.0		56.2	5-151			
Surr: Phenol-d5 (Surr)	21.8		ug/L	100		21.8	5-60			
Surr: p-Terphenyl-d14 (Surr)	35.5		ug/L	50.0		71.0	5-141			
.CS (BIE1226-BS1)			F	Prepared: 05/23/2	2025 Analyzed: 0)5/27/2025				
1,2,4-Trichlorobenzene	27.8	10.0	ug/L	50.0		55.5	57-130			L
1,2-Dichlorobenzene	24.1	10.0	ug/L	50.0		48.1	22-115			
1,3-Dichlorobenzene	22.6	10.0	ug/L	50.0		45.3	22-112			
1,4-Dichlorobenzene	22.1	10.0	ug/L	50.0		44.2	13-112			
2,4,6-Trichlorophenol	28.5	10.0	ug/L	50.0		57.0	52-129			
2,4-Dichlorophenol	32.2	10.0	ug/L	50.0		64.4	53-122			
2,4-Dimethylphenol	29.1	5.00	ug/L	50.0		58.3	42-120			
2,4-Dinitrophenol	45.0	50.0	ug/L	50.0		90.1	48-127			
2,4-Dinitrotoluene	39.9	10.0	ug/L	50.0		79.9	10-173			
2,6-Dinitrotoluene	36.1	10.0	ug/L	50.0		72.2	68-137			
2-Chloronaphthalene	27.7	10.0	ug/L	50.0		55.4	65-120			L
2-Chlorophenol	29.7	10.0	ug/L	50.0		59.5	36-120			
2-Nitrophenol	38.6	10.0	ug/L	50.0		77.3	45-167			
3,3'-Dichlorobenzidine	21.4	10.0	ug/L	50.0		42.7	10-213			
4,6-Dinitro-2-methylphenol	51.5	50.0	ug/L	50.0		103	53-130			
4-Bromophenyl phenyl ether	29.4	10.0	ug/L	50.0		58.9	65-120			L



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Semivolatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	n BIE1226 - SW3510	C/EPA600-	MS							
.CS (BIE1226-BS1)			F	Prepared: 05/23	/2025 Analyzed: 0	05/27/2025				
4-Chlorophenyl phenyl ether	29.1	10.0	ug/L	50.0		58.3	38-145			
4-Nitrophenol	11.7	50.0	ug/L	50.0		23.3	13-129			
Acenaphthene	29.5	10.0	ug/L	50.0		59.1	60-132			L
Acenaphthylene	31.3	10.0	ug/L	50.0		62.6	54-126			
Acetophenone	29.8	20.0	ug/L	50.0		59.6	0-200			
Anthracene	29.1	10.0	ug/L	50.0		58.1	43-120			
Benzo (a) anthracene	32.4	10.0	ug/L	50.0		64.9	42-133			
Benzo (a) pyrene	35.2	10.0	ug/L	50.0		70.3	32-148			
Benzo (b) fluoranthene	36.4	10.0	ug/L	50.0		72.9	42-140			
Benzo (g,h,i) perylene	35.4	10.0	ug/L	50.0		70.8	10-195			
Benzo (k) fluoranthene	28.7	10.0	ug/L	50.0		57.4	25-146			
bis (2-Chloroethoxy) methane	32.0	10.0	ug/L	50.0		64.0	49-165			
bis (2-Chloroethyl) ether	32.6	10.0	ug/L	50.0		65.2	43-126			
2,2'-Oxybis (1-chloropropane)	31.7	10.0	ug/L	50.0		63.4	63-139			
bis (2-Ethylhexyl) phthalate	42.0	10.0	ug/L	50.0		83.9	29-137			
Butyl benzyl phthalate	46.8	10.0	ug/L	50.0		93.7	10-140			
Chrysene	31.5	10.0	ug/L	50.0		63.0	44-140			
Dibenz (a,h) anthracene	36.5	10.0	ug/L	50.0		73.1	10-200			
Diethyl phthalate	32.5	10.0	ug/L	50.0		64.9	10-120			
Dimethyl phthalate	32.6	10.0	ug/L	50.0		65.1	10-120			
Di-n-butyl phthalate	30.4	10.0	ug/L	50.0		60.8	10-120			
Di-n-octyl phthalate	40.6	10.0	ug/L	50.0		81.2	19-132			
Fluoranthene	28.9	10.0	ug/L	50.0		57.8	43-121			
Fluorene	29.8	10.0	ug/L	50.0		59.7	70-120			L
Hexachlorobenzene	29.1	2.50	ug/L	50.0		58.2	10-142			



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25E2019

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch Bli	E1226 - SW3510	C/EPA600-	MS							
_CS (BIE1226-BS1)			F	Prepared: 05/23	/2025 Analyzed: 0	05/27/2025				
Hexachlorobutadiene	27.5	10.0	ug/L	50.0		55.0	38-120			
Hexachlorocyclopentadiene	26.1	10.0	ug/L	50.0		52.2	10-76			
Hexachloroethane	23.7	10.0	ug/L	50.0		47.4	55-120			L
Indeno (1,2,3-cd) pyrene	32.9	10.0	ug/L	50.0		65.7	10-151			
Isophorone	24.2	10.0	ug/L	50.0		48.4	47-180			
Naphthalene	23.4	5.00	ug/L	50.0		46.9	36-120			
Nitrobenzene	33.4	10.0	ug/L	50.0		66.9	54-158			
n-Nitrosodimethylamine	20.5	10.0	ug/L	50.0		40.9	10-85			
n-Nitrosodi-n-propylamine	26.2	10.0	ug/L	50.0		52.4	14-198			
n-Nitrosodiphenylamine	24.8	10.0	ug/L	50.0		49.6	12-97			
p-Chloro-m-cresol	32.2	10.0	ug/L	50.0		64.3	10-142			
Pentachloronitrobenzene (quintozene)	ND	10.0	ug/L				0-200			
Pentachlorophenol	29.6	20.0	ug/L	50.0		59.1	38-152			
Phenanthrene	31.7	10.0	ug/L	50.0		63.4	65-120			L
Phenol	13.8	10.0	ug/L	50.5		27.4	17-120			
Pyrene	39.7	10.0	ug/L	50.0		79.3	70-120			
Pyridine	28.8	10.0	ug/L	50.0		57.6	10-103			
Surr: 2,4,6-Tribromophenol (Surr)	62.9		ug/L	100		62.9	5-136			
Surr: 2-Fluorobiphenyl (Surr)	27.6		ug/L	50.0		55.1	9-117			
Surr: 2-Fluorophenol (Surr)	39.0		ug/L	100		39.0	5-60			
Surr: Nitrobenzene-d5 (Surr)	33.6		ug/L	50.0		67.3	5-151			
Surr: Phenol-d5 (Surr)	24.9		ug/L	100		24.9	5-60			
Surr: p-Terphenyl-d14 (Surr)	33.9		ug/L	50.0		67.7	5-141			



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Ion Chromatography Analyses - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Bat	ch BIE1224 - No Prep	IC								
Blank (BIE1224-BLK1)				Prepared & Analy	/zed: 05/23/2025	i				
Acetic Acid	ND	0.5	mg/L							
Butyric Acid	ND	0.5	mg/L							
Formic Acid	ND	0.5	mg/L							
n-Hexanoic Acid	ND	0.5	mg/L							
i-Hexanoic Acid	ND	0.5	mg/L							
Lactic Acid	ND	0.5	mg/L							
n-Pentanoic Acid	ND	0.5	mg/L							
i-Pentanoic Acid	ND	0.5	mg/L							
Propionic Acid	ND	0.5	mg/L							
Pyruvic Acid	ND	0.5	mg/L							
LCS (BIE1224-BS1)				Prepared & Analy	/zed: 05/23/2025	i				
Acetic Acid	5.2		mg/L	5.00		104	70-130			
Butyric Acid	4.5		mg/L	5.00		89.9	70-130			
Formic Acid	4.6		mg/L	4.99		92.3	70-130			
n-Hexanoic Acid	4.4		mg/L	5.00		87.5	70-130			
i-Hexanoic Acid	4.9		mg/L	5.00		97.9	70-130			
Lactic Acid	5.6		mg/L	5.00		112	70-130			
n-Pentanoic Acid	4.6		mg/L	5.00		92.9	70-130			
i-Pentanoic Acid	4.3		mg/L	5.00		86.6	70-130			
Propionic Acid	4.2		mg/L	5.00		84.6	70-130			
Pyruvic Acid	4.9		mg/L	5.00		97.3	70-130			
Matrix Spike (BIE1224-MS1)	Sourc	e: 25E2019-01		Prepared & Analy	/zed: 05/23/2025	<u>; </u>				
Acetic Acid	10600	500	mg/L	5000	6530	81.1	70-130			
Butyric Acid	7040	500	mg/L	5000	2160	97.7	70-130			



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Ion Chromatography Analyses - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	BIE1224 - No Prep	IC								
Matrix Spike (BIE1224-MS1)	Source	e: 25E2019-0 1	ı	Prepared & Analy	/zed: 05/23/2025	;				
Formic Acid	7670	500	mg/L	5000	2840	96.5	70-130			
n-Hexanoic Acid	5650	500	mg/L	5000	365	106	70-130			
i-Hexanoic Acid	5980	500	mg/L	5000	BLOD	120	70-130			
Lactic Acid	6050	500	mg/L	5000	783	105	70-130			
n-Pentanoic Acid	5510	500	mg/L	5000	247	105	70-130			
i-Pentanoic Acid	4930	500	mg/L	5000	275	93.1	70-130			
Propionic Acid	7090	500	mg/L	5000	2560	90.5	70-130			
Pyruvic Acid	5000	500	mg/L	5000	142	97.1	70-130			
Matrix Spike Dup (BIE1224-MSD1)	Source	e: 25E2019-0 1	l	Prepared & Analy	/zed: 05/23/2025	;				
Acetic Acid	11000	500	mg/L	5000	6530	88.5	70-130	3.41	20	
Butyric Acid	7480	500	mg/L	5000	2160	106	70-130	5.99	20	
Formic Acid	7930	500	mg/L	5000	2840	102	70-130	3.33	20	
n-Hexanoic Acid	5850	500	mg/L	5000	365	110	70-130	3.49	20	
i-Hexanoic Acid	6090	500	mg/L	5000	BLOD	122	70-130	1.77	20	
Lactic Acid	6250	500	mg/L	5000	783	109	70-130	3.20	20	
n-Pentanoic Acid	5760	500	mg/L	5000	247	110	70-130	4.38	20	
i-Pentanoic Acid	5190	500	mg/L	5000	275	98.4	70-130	5.26	20	
Propionic Acid	7310	500	mg/L	5000	2560	95.0	70-130	3.08	20	
Pyruvic Acid	5240	500	mg/L	5000	142	102	70-130	4.79	20	



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Wet Chemistry Analysis - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	BIE1110 - No Prep	Wet Chem								
Blank (BIE1110-BLK1)				Prepared & Analy	yzed: 05/22/2025					
BOD	ND	2.0	mg/L							
LCS (BIE1110-BS1)				Prepared & Analyzed: 05/22/2025						
BOD	206		mg/L	198		104	84.6-115.4			
Duplicate (BIE1110-DUP1)	plicate (BIE1110-DUP1) Source: 25E1873-03			Prepared & Analy	yzed: 05/22/2025					
BOD	4.0	2.0	mg/L		3.9			1.79	20	
Batch	BIE1139 - No Prep	Wet Chem								
Blank (BIE1139-BLK1)				Prepared & Analy	yzed: 05/22/2025					
Nitrite as N	ND	0.05	mg/L							
LCS (BIE1139-BS1)				Prepared & Analy	yzed: 05/22/2025					
Nitrite as N	0.10	0.05	mg/L	0.100		103	80-120			
Matrix Spike (BIE1139-MS1)	Sourc	e: 25E2050-0	6	Prepared & Analy	yzed: 05/22/2025					
Nitrite as N	0.09	0.05	mg/L	0.100	BLOD	90.0	80-120			
Matrix Spike Dup (BIE1139-MSD1)	Sourc	e: 25E2050-0	6	Prepared & Analy	yzed: 05/22/2025					
Nitrite as N	0.09	0.05	mg/L	0.100	BLOD	90.0	80-120	0.00	20	
Batch	BIF0049 - No Prep	Wet Chem								
Blank (BIF0049-BLK1)				Prepared & Analy	yzed: 06/02/2025					
COD	ND	10.0	mg/L							



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Wet Chemistry Analysis - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	BIF0049 - No Prep	Wet Chem								
LCS (BIF0049-BS1)				Prepared & Anal	yzed: 06/02/2025					
COD	50.1	10.0	mg/L	50.0		100	88-119			
Matrix Spike (BIF0049-MS1)	MS1) Source: 25E2509-04 F		Prepared & Analyzed: 06/02/2025							
COD	58.5	10.0	mg/L	50.0	10.3	96.4	72.4-130			
Matrix Spike Dup (BIF0049-MSD1)	ike Dup (BIF0049-MSD1) Source: 25E2509-04			Prepared & Anal	yzed: 06/02/2025					
COD	55.4	10.0	mg/L	50.0	10.3	90.2	72.4-130	5.50	20	
Batch	BIF0219 - No Prep	Wet Chem								
Blank (BIF0219-BLK1)				Prepared & Anal	yzed: 06/05/2025					
TKN as N	ND	0.50	mg/L							
LCS (BIF0219-BS1)				Prepared & Anal	yzed: 06/05/2025					
TKN as N	5.33		mg/L	5.00		107	90-110			
Matrix Spike (BIF0219-MS1)	Source	e: 25F0038-0	1	Prepared & Anal	yzed: 06/05/2025					
TKN as N	6.29	0.50	mg/L	5.00	1.08	104	90-110			
Matrix Spike (BIF0219-MS2)	Sourc	e: 25F0038-0	2	Prepared & Anal	yzed: 06/05/2025					
TKN as N	6.70	0.50	mg/L	5.00	1.10	112	90-110			М
Matrix Spike Dup (BIF0219-MSD1)	Source	e: 25F0038-0	1	Prepared & Anal	yzed: 06/05/2025					
TKN as N	6.40	0.50	mg/L	5.00	1.08	107	90-110	1.83	20	
Matrix Spike Dup (BIF0219-MSD2)	Sourc	e: 25F0038-0	2	Prepared & Anal	yzed: 06/05/2025					
TKN as N	6.41	0.50	mg/L	5.00	1.10	106	90-110	4.41	20	



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Wet Chemistry Analysis - Quality Control

Result	LOQ	Units			%REC Limits	RPD	RPD Limit	Qual
F0260 - No Prep	Wet Chem							
			Prepared & Analyzed: (06/05/2025				
ND	0.10	mg/L						
			Prepared & Analyzed: (06/05/2025				
1.04		mg/L	1.00	104	90-110			
trix Spike (BIF0260-MS1) Source: 25E2050-01		Prepared & Analyzed: (06/05/2025					
0.75	0.10	mg/L	1.00	BLOD 75.4	89.3-131			М
Source: 25E2050-02		Prepared & Analyzed: (06/05/2025					
0.79	0.10	mg/L	1.00	BLOD 78.7	89.3-131			М
Matrix Spike Dup (BIF0260-MSD1) Source: 25E2050-01			Prepared & Analyzed: (06/05/2025				
0.76	0.10	mg/L	1.00	BLOD 76.1	89.3-131	0.924	20	М
Sourc	e: 25E2050-0	2	Prepared & Analyzed: (06/05/2025				
0.73	0.10	mg/L	1.00	BLOD 72.7	89.3-131	7.93	20	М
F0297 - No Prep	Wet Chem							
			Prepared & Analyzed: (06/05/2025				
ND	0.10	mg/L						
			Prepared & Analyzed: (06/05/2025				
1.04		mg/L	1.00	104	90-110			
Sourc	e: 25E2050-0	4	Prepared & Analyzed: (06/05/2025				
0.19	0.10		1.00		90-120			М
	ND 1.04 Source 0.75 Source 0.79 Source 0.76 Source 0.73 F0297 - No Prep	ND 0.10 1.04 Source: 25E2050-0 0.75 0.10 Source: 25E2050-0 0.79 0.10 Source: 25E2050-0 0.76 0.10 Source: 25E2050-0 0.73 0.10 F0297 - No Prep Wet Chem ND 0.10	ND 0.10 mg/L	Result LOQ Units Level F	Result LOQ Units Level Result %REC	Result LOQ Units Level Result %REC Limits	Result LOQ Units Level Result %REC Limits RPD	Result LOQ Units Level Result %REC Limits RPD Limit



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Wet Chemistry Analysis - Quality Control

Analyte	Result	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch	BIF0297 - No Prep	Wet Chem								
Matrix Spike Dup (BIF0297-MSD1)	Source	e: 25E2050-04		Prepared & Analy	/zed: 06/05/2025					
Nitrate+Nitrite as N	0.19	0.10	mg/L	1.00	BLOD	19.2	90-120	1.04	20	М
Batch	BIF0324 - No Prep	Wet Chem								
Blank (BIF0324-BLK1)				Prepared & Analyzed: 06/06/2025						
Total Recoverable Phenolics	ND	0.050	mg/L			<u> </u>		<u> </u>		<u> </u>
LCS (BIF0324-BS1)				Prepared & Analy	zed: 06/06/2025					
Total Recoverable Phenolics	0.49	0.050	mg/L	0.510		96.5	80-120			
Matrix Spike (BIF0324-MS1)	Sourc	e: 25E2019-01		Prepared & Analy	zed: 06/06/2025					
Total Recoverable Phenolics	115	5.00	mg/L	50.0	67.4	96.0	70-130			
Matrix Spike Dup (BIF0324-MSD1)	Sourc	e: 25E2019-01		Prepared & Analy	zed: 06/06/2025					
Total Recoverable Phenolics	119	5.00	mg/L	50.0	67.4	104	70-130	3.41	20	



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Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA	A 6000/7000 Series Methods		Preparation Method:	EPA200.2R2.8/SW300	05A-ICPMS
25E2019-01	50.0 mL / 50.0 mL	SW6020B	BIE1298	SIE1159	AE50323
25E2019-02	50.0 mL / 50.0 mL	SW6020B	BIE1298	SIE1159	AE50323
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Ion Chromatography	Analyses		Preparation Method:	No Prep IC	
25E2019-01	1.00 mL / 1.00 mL	D3705	BIE1224	SIE1171	AE50224
25E2019-01RE1	1.00 mL / 1.00 mL	D3705	BIE1224	SIE1171	AE50224
25E2019-02	1.00 mL / 1.00 mL	D3705	BIE1224	SIE1171	AE50224
25E2019-02RE1	1.00 mL / 1.00 mL	D3705	BIE1224	SIE1171	AE50224
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analy	rsis		Preparation Method:	No Prep Wet Chem	
25E2019-01	300 mL / 300 mL	SM5210B-2016	BIE1110	SIE1131	
25E2019-02	300 mL / 300 mL	SM5210B-2016	BIE1110	SIE1131	
25E2019-01	25.0 mL / 25.0 mL	SM4500-NO2B-2021	BIE1139	SIE0986	AD50358
25E2019-02	25.0 mL / 25.0 mL	SM4500-NO2B-2021	BIE1139	SIE0986	AD50358
25E2019-01	2.00 mL / 2.00 mL	SM5220D-2011	BIF0049	SIF0040	AE50148
25E2019-02	2.00 mL / 2.00 mL	SM5220D-2011	BIF0049	SIF0040	AE50148
25E2019-01	0.0830 mL / 25.0 mL	EPA351.2 R2.0	BIF0219	SIF0216	AF50178
25E2019-01RE1	0.0830 mL / 25.0 mL	EPA351.2 R2.0	BIF0219	SIF0216	AF50178
25E2019-02	0.0830 mL / 25.0 mL	EPA351.2 R2.0	BIF0219	SIF0216	AF50178
25E2019-01	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
25E2019-02	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
25E2019-01	5.00 mL / 5.00 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analy	<i>y</i> sis		Preparation Method:	No Prep Wet Chem	1
25E2019-01RE1	5.00 mL / 5.00 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
25E2019-01RE2	5.00 mL / 5.00 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
25E2019-02	5.00 mL / 5.00 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
25E2019-02RE1	5.00 mL / 5.00 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
25E2019-02RE2	5.00 mL / 5.00 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
25E2019-01	5.00 mL / 10.0 mL	SW9065	BIF0324	SIF0270	AF50192
25E2019-02	5.00 mL / 10.0 mL	SW9065	BIF0324	SIF0270	AF50192
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organic	Compounds by GCMS		Preparation Method:	SW3510C/EPA600-	MS
25E2019-01	500 mL / 2.00 mL	SW8270E	BIE1226	SIE1247	AD50293
25E2019-02	500 mL / 2.00 mL	SW8270E	BIE1226	SIE1247	AD50293
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Com	npounds by GCMS		Preparation Method:	SW5030B-MS	
25E2019-01	5.00 mL / 5.00 mL	SW8260D	BIE1338	SIE1142	AE50300
25E2019-01RE1	5.00 mL / 5.00 mL	SW8260D	BIE1338	SIE1142	AE50300
25E2019-02	5.00 mL / 5.00 mL	SW8260D	BIE1338	SIE1142	AE50300
25E2019-02RE1	5.00 mL / 5.00 mL	SW8260D	BIE1338	SIE1142	AE50300



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QC Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EP	A 6000/7000 Series Methods		Preparation Method:	EPA200.2R2.8/SW30	05A-ICPMS
BIE1298-BLK1	50.0 mL / 50.0 mL	SW6020B	BIE1298	SIE1159	AE50323
BIE1298-BS1	50.0 mL / 50.0 mL	SW6020B	BIE1298	SIE1159	AE50323
BIE1298-MS1	50.0 mL / 50.0 mL	SW6020B	BIE1298	SIE1159	AE50323
BIE1298-MSD1	50.0 mL / 50.0 mL	SW6020B	BIE1298	SIE1159	AE50323
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
lon Chromatography	y Analyses		Preparation Method:	No Prep IC	
BIE1224-BLK1	1.00 mL / 1.00 mL	D3705	BIE1224	SIE1171	AE50224
BIE1224-BS1	1.00 mL / 1.00 mL	D3705	BIE1224	SIE1171	AE50224
BIE1224-MS1	0.00500 mL / 5.00 mL	D3705	BIE1224	SIE1171	AE50224
BIE1224-MSD1	0.00500 mL / 5.00 mL	D3705	BIE1224	SIE1171	AE50224
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Anal	ysis		Preparation Method:	No Prep Wet Chem	
BIE1110-BLK1	300 mL / 300 mL	SM5210B-2016	BIE1110	SIE1131	
BIE1110-BS1	300 mL / 300 mL	SM5210B-2016	BIE1110	SIE1131	
BIE1110-DUP1	300 mL / 300 mL	SM5210B-2016	BIE1110	SIE1131	
BIE1139-BLK1	25.0 mL / 25.0 mL	SM4500-NO2B-2021	BIE1139	SIE0986	AD50358
BIE1139-BS1	25.0 mL / 25.0 mL	SM4500-NO2B-2021	BIE1139	SIE0986	AD50358
BIE1139-MS1	25.0 mL / 25.0 mL	SM4500-NO2B-2021	BIE1139	SIE0986	AD50358
BIE1139-MSD1	25.0 mL / 25.0 mL	SM4500-NO2B-2021	BIE1139	SIE0986	AD50358
BIF0049-BLK1	2.00 mL / 2.00 mL	SM5220D-2011	BIF0049	SIF0040	AE50148
BIF0049-BS1	2.00 mL / 2.00 mL	SM5220D-2011	BIF0049	SIF0040	AE50148
BIF0049-MRL1	2.00 mL / 2.00 mL	SM5220D-2011	BIF0049	SIF0040	AE50148



Certificate of Analysis

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LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb

Client Site I.D.:

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Wet Chemistry Analysis BIF0049-MS1 BIF0049-MSD1 BIF0219-BLK1 BIF0219-BS1 BIF0219-MRL1 BIF0219-MS2 BIF0219-MSD1 BIF0219-MSD1 BIF0219-MSD2 BIF0260-BLK1 BIF0260-BS1	2.00 mL / 2.00 mL 2.00 mL / 2.00 mL 25.0 mL / 25.0 mL 25.0 mL / 25.0 mL 25.0 mL / 25.0 mL 25.0 mL / 25.0 mL	SM5220D-2011 SM5220D-2011 EPA351.2 R2.0 EPA351.2 R2.0	Preparation Method: BIF0049 BIF0049 BIF0219	No Prep Wet Chem SIF0040 SIF0040 SIF0216	AE50148 AE50148
BIF0049-MSD1 BIF0219-BLK1 BIF0219-BS1 BIF0219-MRL1 BIF0219-MS2 BIF0219-MSD1 BIF0219-MSD2 BIF0260-BLK1	2.00 mL / 2.00 mL 25.0 mL / 25.0 mL 25.0 mL / 25.0 mL 25.0 mL / 25.0 mL	SM5220D-2011 EPA351.2 R2.0 EPA351.2 R2.0	BIF0049 BIF0219	SIF0040	
BIF0219-BLK1 BIF0219-BS1 BIF0219-MRL1 BIF0219-MS1 BIF0219-MS2 BIF0219-MSD1 BIF0219-MSD2 BIF0260-BLK1	25.0 mL / 25.0 mL 25.0 mL / 25.0 mL 25.0 mL / 25.0 mL	EPA351.2 R2.0 EPA351.2 R2.0	BIF0219		AE50148
BIF0219-BS1 BIF0219-MRL1 BIF0219-MS1 BIF0219-MS2 BIF0219-MSD1 BIF0219-MSD2	25.0 mL / 25.0 mL 25.0 mL / 25.0 mL	EPA351.2 R2.0		SIE0246	
BIF0219-MRL1 BIF0219-MS1 BIF0219-MS2 BIF0219-MSD1 BIF0219-MSD2	25.0 mL / 25.0 mL			SIFU210	AF50178
BIF0219-MS1 BIF0219-MS2 BIF0219-MSD1 BIF0219-MSD2 BIF0260-BLK1			BIF0219	SIF0216	AF50178
BIF0219-MS2 BIF0219-MSD1 BIF0219-MSD2 BIF0260-BLK1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BIF0219	SIF0216	AF50178
BIF0219-MSD1 BIF0219-MSD2 BIF0260-BLK1		EPA351.2 R2.0	BIF0219	SIF0216	AF50178
BIF0219-MSD2 BIF0260-BLK1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BIF0219	SIF0216	AF50178
BIF0260-BLK1	25.0 mL / 25.0 mL	EPA351.2 R2.0	BIF0219	SIF0216	AF50178
	25.0 mL / 25.0 mL	EPA351.2 R2.0	BIF0219	SIF0216	AF50178
BIF0260-BS1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
BIF0260-MRL1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
BIF0260-MS1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
BIF0260-MS2	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
BIF0260-MSD1	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
BIF0260-MSD2	6.00 mL / 6.00 mL	EPA350.1 R2.0	BIF0260	SIF0225	AF50181
BIF0297-BLK1	5.00 mL / 5.00 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
BIF0297-BS1	5.00 mL / 5.00 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
BIF0297-MS1	10.0 mL / 10.0 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
BIF0297-MSD1	10.0 mL / 10.0 mL	SM4500-NO3F-2019	BIF0297	SIF0246	AF50182
BIF0324-BLK1	5.00 mL / 10.0 mL	SW9065	BIF0324	SIF0270	AF50192
BIF0324-BS1	5.00 mL / 10.0 mL	SW9065	BIF0324	SIF0270	AF50192
BIF0324-MRL1	5.00 mL / 10.0 mL	SW9065	BIF0324	SIF0270	AF50192
3IF0324-MS1	0.0500 mL / 10.0 mL	SW9065	BIF0324	SIF0270	AF50192
BIF0324-MSD1	0.0500 mL / 10.0 mL	SW9065	BIF0324	SIF0270	AF50192
Sample ID	Preparation Factors				
Semivolatile Organic Co	Initial / Final	Method	Batch ID	Sequence ID	Calibration ID



Certificate of Analysis

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LFG-EW Monthly Monitoring

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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organi	c Compounds by GCMS		Preparation Method:	-MS	
BIE1226-BLK1	1000 mL / 1.00 mL	SW8270E	BIE1226	SIE1138	AC50298
BIE1226-BLK2		SW8270E	BIE1226	SIE1233	AD50293
BIE1226-BS1	1000 mL / 1.00 mL	SW8270E	BIE1226	SIE1138	AC50298
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Cor	mpounds by GCMS		Preparation Method:	SW5030B-MS	
BIE1338-BLK1	5.00 mL / 5.00 mL	SW8260D	BIE1338	SIE1142	AE50300
BIE1338-BS1	5.00 mL / 5.00 mL	SW8260D	BIE1338	SIE1142	AE50300
BIE1338-MS1	5.00 mL / 5.00 mL	SW8260D	BIE1338	SIE1142	AE50300
BIE1338-MSD1	5.00 mL / 5.00 mL	SW8260D	BIE1338	SIE1142	AE50300



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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,TXCEQ
EPA351.2 R2.0 in Non-Potable Water	
TKN as N	VELAP,NCDEQ,WVDEP,SCDHEC,PADEP
SM4500-NO2B-2021 in Non-Potable Water	
Nitrite as N	VELAP,WVDEP,NCDEQ,SCDHEC,PADEP
SM4500-NO3F-2019 in Non-Potable Water	
Nitrate+Nitrite as N	VELAP,WVDEP,NCDEQ,SCDHEC,PADEP
SM5210B-2016 in Non-Potable Water	
BOD	VELAP,NCDEQ,WVDEP
SM5220D-2011 in Non-Potable Water	
COD	VELAP,NCDEQ,PADEP,WVDEP,SCDHEC,TXCEQ
SW6020B in Non-Potable Water	
Mercury	VELAP,NCDEQ,PADEP,WVDEP
Arsenic	VELAP,WVDEP,NCDEQ,SCDHEC,PADEP
Barium	VELAP,WVDEP,NCDEQ,SCDHEC,PADEP
Cadmium	VELAP,WVDEP,NCDEQ,SCDHEC,PADEP
Chromium	VELAP,WVDEP,NCDEQ,SCDHEC,PADEP
Copper	VELAP,WVDEP,NCDEQ,SCDHEC,PADEP
Lead	VELAP,WVDEP,SCDHEC,NCDEQ,PADEP
Nickel	VELAP,WVDEP,SCDHEC,NCDEQ,PADEP
Selenium	VELAP,WVDEP,SCDHEC,NCDEQ,PADEP
Silver	VELAP,WVDEP,SCDHEC,NCDEQ,PADEP
Zinc	VELAP,WVDEP,SCDHEC,NCDEQ,PADEP
SW8260D in Non-Potable Water	



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Date Issued:

Certificate of Analysis

Client Name: SCS Engineers - Winchester

LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb Work Order: 25E2019

Certified Analyses included in this Report

AnalyteCertifications2-Butanone (MEK)NCDEQ,PADEP,VELAP,WVDEP,TXCEQAcetoneNCDEQ,PADEP,VELAP,WVDEP,TXCEQBenzeneNCDEQ,PADEP,VELAP,WVDEP,TXCEQEthylbenzeneNCDEQ,PADEP,VELAP,WVDEP,TXCEQ

Toluene NCDEQ,PADEP,VELAP,WVDEP,TXCEQ
Xylenes, Total NCDEQ,PADEP,VELAP,WVDEP,TXCEQ

Tetrahydrofuran VELAP

SW8270E in Non-Potable Water

Client Site I.D.:

Anthracene NCDEQ,VELAP,PADEP,WVDEP,TXCEQ

SW9065 in Non-Potable Water

Total Recoverable Phenolics VELAP, WVDEP, PADEP



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LFG-EW Monthly Monitoring

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Client Site I.D.:

Date Issued: 6/6/2025 6:02:23PM

Work Order: 25E2019

Code	Description	Laboratory ID	Expires
DURSC-NCDEQ	NCDEQ Durham Service Center	703	12/31/2025
DURSC-NCDHHS	NCDHHS Durham Service Center	37918	07/31/2025
MdDOE	Maryland DE Drinking Water	341	12/31/2025
NCDEQ	North Carolina DEQ	495	12/31/2025
NCDHHS	North Carolina Department of Health and Human Services	51714	07/31/2025
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 #TX-C25-00143	T104704576	05/31/2026
VELAP	NELAP-Virginia Certificate #13307	460021	06/14/2025
WVDEP	West Virginia DEP Cert ID: WV-C25-00088	350	11/30/2025



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25E2019

Qualifiers and Definitions

DS Surrogate concentration reflects a dilution factor.

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

TextValuea >42316.44

Client Site I.D.:

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.



1941 REYMET ROAD **RICHMOND, VIRGINIA 23237** (804) 358-8295 PHONE (804)358-8297 FAX

CHAIN OF CUSTODY

	C	HAIN OF CUS	IODI			PAGE 1 OF 1
COMPANY NAME: SCS Engineers	INVOICE TO:	City of I	Bristol, VA	PROJECT NAME/Quo	te#: City	of Bristol Landfill #588
CONTACT: Jennifer Robb	INVOICE CONT	TACT: Jon Haye:	s	SITE NAME: LFG-	EW Monthly N	Monitoring
ADDRESS: 296 Victory Road. Winchester, VA	INVOICE ADDR	RESS: 2655 Valley D	Drive, Bristol, VA, 24201	PROJECT NUMBER:	02218208.15	Task 4
PHONE #: 703-471-6150	INVOICE PHON	NE #: 276-645-3	788	P.O. #:		
EMAIL: jrobb@scsengineers.com	EMAIL: jon.ha	ayes@bristolva.org]	Pretreatment Program		
Is sample for compliance reporting? YES NO	Regulatory State: V	A Is sample from	m a chlorinated sup	ply? YES NO	PWS I.D. #:	
SAMPLER NAME (PRINT): Logan Nelson / La	wrel Tuker SAME	PLER SIGNATURE	= Lanny /	and Zula Ti	ırn Around Tin	ne: 10 Day(s)
Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water		ids OR=Organic A=Air \	WP=Wipe OT=Other			COMMENTS
(8)			ANAI	YSIS / (PRESERVATIV	'E)	Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid
Composite Start Date Composite Start Date		Time Preserved Matrix (See Codes)	X X EB, MEK, THF, Toluene, Xylene) Custom List X Mercury Method 6020	X Metals 6010 (Ag, As, Ba, Cd, Cr, Cu, Ni, Pb, Se, Zn) X X Phenolics X X TKN, Nitrate (Cd), Nitrite X X SVOC (Anthracene only)	XX COD, Ammonia XX BOD XX VFAs	H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol Note VOC 8260 NO HCI PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS or PUMP RATE (L/min)
3) 4)		GW		 		
5)		GW				
6)		GW			1 1	7 Temp °C: - 7
7)		GW				NICE OF C
8)		GW			Corre	ction Factor °C: 0.0
9)		GW			LL card	cted Temp °C: 1.2
10)	CEIVED:	DATE / TIME	QC Data Package LA	AB USE ONLY Therm ID:		LER TEMP°C
RELINQUISHED: DATE / TIME RE S/21/15/1200	1/1/	/ DATE / TIME		istody Seals used and intact? (Y/		Received on ice? (Y/N)
RELINIQUISHED: DATE / TIME RE	ceived was flo	DATE / TIME 5/11/15 080 DATE / TIME	Level III Level IV	SCS-W Bristol LFG-E	2 W Monthly	25E2019
Section 1997	<i>V</i>			Recd: 05/22/20	25 Due: 00	5/06/2025



Sample Preservation Log

Analyst Performing Check: MY Order ID 15E 2019 Date Performed: 5/13/15 For MAB Pesticide Pest/PCB SVOC Sulfide **TKN** Phos. Tot NO3+NO2 CrVI * ** (508) / (01) Metals Cvanide Ammonia DRO (8081/608/508) (525/8270/625) SVOC(525) PCB DW only Sample ID pH as Received pH as Final pH celved pH 표 Final pH Received Received Received Received Received Received Received Received Res. Cl Res. Ci final 4 or or -< 2 Other Other > 9 Other 0 (0 L (0 L 0 (0 LZ |u|HNO3 ID: 5802900 NaOH ID: ___ CrVI preserved date/time: Analyst Initials: * pH must be adjusted between 9.3 - 9.7 H2SO4 ID: <u>5003894</u> Na₂S₂O₃ ID: ______ Ammonia Buffer Sol'n ID: HCL ID: _____ Na₂SO₃ ID: 5N NaOH ID: ____ Metals were received with pH = 6 HNO3 was added at 1011 on May 23, 2025, by MAB in the Log-In room to bring pH=<2.



Certificate of Analysis

Client Name: SCS Engineers - Winchester

LFG-EW Monthly Monitoring

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Client Site I.D.:

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Certificate of Analysis

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Client Site I.D.:

LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb Work Order: 25E2019

Laboratory Order ID: 25E2019

Sample Conditions Checklist

Samples Received at:	1.20°C
How were samples received?	Logistics Courier
Were Custody Seals used?	Yes
Are the custody papers filled out completely and correctty?	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.	No
Are all samples received appropriately preserved? Metals (except Hg, B) do not require field preservation, but lab preservation may delay analysis. Field parameters performed by the lab are always received past holding time and will be noted as such.	No

Work Order Comments

The lab received two P250mLH2SO4 containers (one for sample 01 and one for sample 02) for TKN, ammonia, COD, Nitrate-Nitrite with a pH of 6. They were adjusted in the lab to bring it to the required pH of <2.

There were no trip blanks to accompany the VOAC40 mL containers.



25E2019

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LFG-EW Monthly Monitoring

Submitted To: Jennifer Robb Work Order:

Jennifer Robb notified via email. 05/28/25 1909 DLJ

VAV	ell 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 47	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-89	EW-94	EW-98		
	-	EW-30A	EW-30	EW-31	EW-32	EW-33	EW-34	EW-35	EW-5/	EW-30	EW-37	EW-00		oncentration	EVV-04	E44-02	EW-0/	EAA-00	EW-/O	EVV-02	E44-03	EVV-0/	EW-00	EVV-07	EVV-74	EW-70	LOD	LOQ
Parameter	Monitoring Event				I						15/0					1200								1				50
	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
	34.104.17 2020										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
																			1180								73.1	100
	July-2023		1570						2260																2350	310	146	200
	August-2023						1600		1890																2140	222	146	200
																			1720								73.1	100
	September-2023				1250																						146	200
	October-2023							1980											1730			2890					146	200
	00.000.2020		1260		2490	1830		2070											1800			2590					146	200
	November-2023													1170												2080	183	250
											2440																366	500
																			1540								73.1	100
	December-2023				2900													2200									146	200
Ammonia as N	January-2024			2160							2400															1610	146	200
(mg/L)	February-2024			1900		2600															1780		2380				146	200
(3) =)	March-2024																						2280			968	146	200
	April-2024				2290									928				2140	1800								146	200
																										898	73.1	100
	May-2024										2550								1620		1950	2660					146	200
	June-2024																		1990		2170					1850	146	200
											1860																73.1	100
	July-2024											1950															146	200
							1110																				73.1	100
	August-2024																				2130				2550		146	200
	0 1 1 600						1440																				73.1	100
	September-2024				2210													2290									146	200
	0 -1 -1 000 4	343																		1490							73.1	100
	October-2024		1370		2180																						146	200
	November-2024	934	1370																								146	200
	December-2024				1510																					1560	146	200
	January-2025																				0.68						0.005	0.01
	Falari an , 0005		1300																		1400						73.1	100
	February-2025												1160														199	199
	March-2025		1240									1480						2110									146	200
	April-2025											2440						2580									146	200
	May-2025																						2030	2360			146	200

Historical LFG-EW Leachate Monitoring Results Summary

We	ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event													oncentration													LOD	LOQ
	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
Biological	December-2023				>44105													13700	681								0.2	2
Oxygen Demand	January-2024			26000							17100															14000	0.2	2
(mg/L)	1 Oblodity 202 1			23200		26200															21400		34300				0.2	2
(9, =)	March-2024				41140																		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										25000	4750							421		24400					16200	0.2	2
	July-2024 August-2024						31000				25800	4750									20800				33400		0.2	2
	September-2024				ND		36100											27400			20000				33400		0.2	2
	October-2024	180	6680		ND															36100							0.2	2
	November-2024	4760	7360																								0.2	2
	December-2024				42600																					20300	0.2	2
	January-2025																				22900						0.2	2
	February-2025		4420										43418.4								16200						0.2	2
	March-2025		3490									20400						22000									0.2	2
	April-2025											33900						24600									0.2	2
	May-2025																						42196.44	42316.44			0.2	2

	ell ID Monitoring Event	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 oncentration	EW-64	EW-65	EW-67	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-89	EW-94	EW-98	LOD	LOQ
Parameter				l		T		l					9790	oncentration 		10800											1000	1000
	November-2022										23500																2000	2000
			7440																								1000	1000
	December-2022										13200	8000					20300	14100									2000	2000
	BOCCITIBOT 2022								22400																		5000	5000
					86800					2420																	10000	10000
	January-2023		14900							3630						8430											500 2000	500 2000
	January-2023										47600																5000	5000
	February-2023																	9210									1000	1000
	,									1690																	500	500
	March-2023										10600																2000	2000
	April-2023											7370															1000	1000
			7500							16800																	2000	2000
	May-2023		7590							18700	44700																2000 4000	2000 4000
											44700		44800														5000	5000
	June-2023										41300				55000												10000	10000
																										2180	500	500
	July-2023		6480																2460								1000	1000
	J01y-2023																								41000		5000	5000
									50100																	1750	10000	10000
	August-2023						59000		58600																60600	1750	500 5000	500 5000
	Contamb 0000																		6260								1000	1000
	September-2023				87400																						10000	10000
	0 1 1 0000																		5320								500	500
	October-2023							51000														63600					5000 10000	5000 10000
																			4710								1000	10000
	November-2023		6200											5620													2000	2000
	14076111061-2023					48100		57900			43700															37600	5000	5000
					77100														4870			63900					10000	10000
Chemical	December-2023																	19900									5000	5000
Oxygen Demand					94200																						10000	10000
(mg/L)	January-2024			48600							59800										40000					38200	5000	5000
	February-2024			42700		51200															48900		68400				5000 10000	5000 10000
	11 1 000 1																									14400	2000	2000
	March-2024																						75500				10000	10000
														3110					4200								1000	1000
	April-2024																	32400									5000	5000
					79700														4020								10000	10000
	May-2024																		4930							17700	1000 5000	1000 5000
	Widy-2024										48500										43100	70700					10000	10000
	luma 2004																		4520								1000	1000
	June-2024																				51400					31300	5000	5000
	July-2024										42400																5000	5000
												98500									48100				59500		10000 5000	10000 5000
	August-2024						56600																				10000	10000
																		26800									4000	4000
	September-2024				78300		55900																				5000	5000
		951			78300																						10000 500	10000
	October-2024		10700																								2000	2000
					83300															62000							10000	10000
	November-2024	9540	8840																								1000	1000
			8840																							36600	2000 5000	2000 5000
	December-2024				81500																						10000	10000
	January-2025																				36800						5000	5000
	Eobar - 2007		3630																								1000	1000
	February-2025												447000								23400						5000 100000	5000 100000
			8700																								1000	10000
	March-2025																	51500									5000	5000
												74600 47900						24100									10000 6300	10000 10000
	April-2025 May-2025																	24100									6300	10000
																							60700	67900			6300	10000

Parameter	AAamilanina Frank			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-89	EW-94	EW-98	LOD	100
	Monitoring Event												C	oncentration													LOD	LOQ
																	ND										0.2	0.2
												ND															0.2	0.6
	December-2022		ND		ND				ND		ND																1,1	5.1
																		ND									1.5	5.5
										ND																	0.35	1.35
	-					_							_															
	January-2023															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
	Widy-2023									ND	ND																1.2	5.2
											ND				ND												1.1	5.1
	June-2023												ND														1.2	5.2
																			0.355								0.15	0.35
																										ND	0.55	0.75
	July-2023		ND																								1	3
									ND																ND		1.5	5.5
																										ND	0.15	0.35
	August-2023						ND		ND																ND		1.5	3.5
																			ND								0.3	1.1
	September-2023				ND																						0.7	1.5
																			ND								0.35	1.35
	October-2023							ND																			1	3
	00.000.2020																					ND					1.5	3.5
			ND																ND								0.15	0.35
														ND													0.35	1.35
	November-2023							ND																			0.75	1.75
					ND																						1,1	5.1
						ND					ND											ND				ND	1.5	5.5
Nitrate as N	Daganahar 2002				ND														ND								1.1	5.1
(mg/L)	December-2023																	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
	1 6 D 1 0 G 1 y - 2 0 2 4					ND																					3.5	7.5
	March-2024																						ND			ND	0.75	1.75
														ND					ND								0.35	0.35
	April-2024				ND																						1.5	5.5
																		ND									2.5	10.5
																			ND								0.15	0.35
																										ND	0.35	1.35
	May-2024																				ND						0.6	2.6
																						1.9					1	3
											ND																1.1	5.1
																			0.692								0.6	2.6
	June-2024																				ND					ND	1.5	3.5
												ND															0.5	2.5
	July-2024										6.66																5	25
	August-2024						1.57														ND				ND		0.25	1.25
					ND		2.42																				0.25	1.25
	September-2024																	ND									5	25
		ND																									0.1	0.5
	October-2024		ND																	ND							1	5
					ND																						10	50
	November-2024	ND																									0.25	1.25
			ND																								0.5	2.5
	December-2024				ND																					ND	0.5	2.5
	January-2025																				ND						0.5	1.25
	February-2025		ND																		ND						1	5
	1 GD10G1y-2023												ND														10	50
	March-2025		ND									ND						ND									2	10
	April-2025											ND															0.5	1.25
																		ND									1	5
	May-2025																						4210	4700			500	500

	11.15																											
	ell 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-89	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event													Concentration														
	December-2022											0.12 J															0.1	0.5
			ND		ND				ND		ND						ND	ND									1	5
										ND																	0.25	1.25
	January-2023															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
																			ND							ND	0.05	0.25
	July-2023		ND																								0.5	2.5
									1.2 J																ND		1	5
																										ND	0.05	0.25
	August-2023						ND		ND																ND		0.5	2.5
	September-2023				ND														ND								0.2	1
																			ND								0.25	1.25
	October-2023							ND														ND					0.5	2.5
			0.06 J																ND								0.05	0.25
	November-2023							ND						ND													0.25	1.25
					ND	ND					ND											ND				ND	1	5
	December-2023				ND													ND	ND								1	5
	January-2024			1.7 J							ND															ND	1	5
	February-2024			ND		ND															ND		ND				1	5
Nitrite as N	March-2024																						ND			0.25 J	0.25	1.25
(mg/L)														ND					ND								0.25	0.25
	April-2024				ND																						1	5
																		ND									2	10
																			ND								0.05	0.25
	May-2024																									ND	0.25	1.25
	11107 2021																				ND	ND					0.5	2.5
											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
		ND																ND									-	25
	October-2024		ND																	ND							0.1	0.5 5
	OC100061-2024				ND																						10	50
		ND																									0.25	1.25
	November-2024		1.35 J																								0.25	2.5
	December-2024				ND																					ND	0.5	2.5
	January-2025																				ND						0.25	1.25
			ND																		ND						1	5
	February-2025												ND														10	50
	March-2025		ND									ND						ND									2	10
	April-2025											ND															0.25	1.25
	Aprii-2025																	7.6									1	5
	May-2025																						ND	ND			1	5

Wel	II ID	F)4/ O/ A	FW 50	F)4/ F1	FW 50	F)4/ F0	F)4/ F.4	F)4/ FF	FW 57	FW 50	FW 50	FW 40	F)4/ / 1	FW 40	FW /4	F14/ / F	F)4/ /7	FW 40	FW 70	FW 00	FW 05	FW 07	FW 00	FW 00	FW 04	FW 00		
		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 Concentration	EW-64	EW-65	EW-6/	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-89	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event				I			1 1	I		T I					1.470						I						50
	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
	Sarioary 2020										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
											3080				2750												100	250
	June-2023												2650														200	500
	July-2023		1670						2960										1670						2720	285	40	100
																										279	10	25
	August-2023						2240		2820																2850		100	250
	September-2023				3340														2680								100	250
	·							1050														1320					40	100
	October-2023																		4630								100	250
								2240																		2120	80	200
	November-2023		1440		3290	2630					2530			1120					2270			3170					100	250
																		1880									80	200
	December-2023				3130														1890								100	250
	January-2024			2450							3020															1810	100	250
	February-2024			2540		2890															2470		2970				100	250
																										1030	50	125
Total Kjeldahl	March-2024																						2980				100	250
Nitrogen (mg/L)														1030					1730								40	100
	April-2024																	2320									50	125
	, (piii 202 i				3260																						100	250
-																												100
	May-2024										2100								1700			2000				1140	40	
-											3120								1780		2470	3280				47.50	100	250
	June-2024																		1870							4750	100	250
-	1.1.000.4																				2680						200	500
-	July-2024						1000				2840	2680									14/0				21.50		100	250
-	August-2024						1980														1460				3150		100	250
	Santambar 2024						2090											2450									50	125
	September-2024				2220													2650									80	200
		251			3320															1970							100	250 100
	October-2024	351	1360		2850															1870							100	250
-	November 2024	1070	1610		2850																							100
-	November-2024 December-2024				2790																					2210	40 100	250
	January-2025												0.040								1960						40	100
	February-2025		1100										0.948								1500						0.0398	0.0995
-			1190																		1520						100	250
	March-2025		1230									1920						2700									40 100	100 250
-																												
	April-2025											2240						2600									45.9 80	250 200
												2240											2580				27.7	151
	May-2025																						2580	2800			55.3	301
																								2000			JJ.J	, 501

We	ell 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-89	EW-94	EW-98	100	100
Parameter	Monitoring Event												C	oncentration													LOD	LOQ
													5.68			3											0.3	0.5
	November-2022										28.8																0.75	1.25
												8.94															0.3	0.5
	December-2022		24.9		54.6				28.3		32						20.2	36									1.5	2.5
			27.2							1.3						20.2											0.75	1.25
	January-2023										_																	
	F 1 0000										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
																			0.7								0.15	0.25
	July-2023																									2.92	0.3	0.5
			11.6						47.9																37.3		1.5	2.5
																										1.46	0.15	0.25
	August-2023						28.6		31.4																40.4	1.40	1.5	2.5
							20.0		31.4										4.58						40.4		0.3	0.5
	September-2023				38.2														4.56								3	5
																			4.13								0.15	0.25
	October-2023							37											4.13			38.7					0.13	0.23
																			3.65			36.7					0.15	0.25
			7.88			36.4								4.76					3.65								0.13	1
	November-2023				38.8			47.4														47.1					0.75	1.25
											46.9											47.1				29.1	1.5	2.5
																			3.72								0.06	0.1
	December-2023																	23									0.75	1.25
	DCCCITIBCI 2020				34.2																						1.5	2.5
				38																						22.7	1.5	2.5
Total	January-2024										39.2																3	5
Recoverable	February-2024			37.3		42.9															50.2		43.1				1.5	2.5
Phenolics (mg/L)	March-2024																						46.6			12.8	3	5
	March 2024													1.68					1.16								0.3	0.5
	April-2024				38.4									1.00				28.6									1.5	2.5
													_															
	.,																		1.06								0.3	0.5
	May-2024																									13.6	1.5	2.5
											36.6										33.6	51					3	5
																			0.82								0.3	0.5
	June-2024																									23.2	1.5	2.5
																					44.8						3	5
	July-2024											28.8															0.75	1.25
											37.8										44.0						3	5
	August-2024				20.4		29.2											21.4			44.2				39.2		3	5
	September-2024	0.27/			39.6		31.6											31.6									3	5
		0.376	0.4																								0.03	0.05
	October-2024		8.4																	AE 1							0.3	0.5
					27.4															45.1							1.5	2.5
		 5 22			37.6																						3	5
	November-2024	5.22	10.1																								0.3	0.5
			10.1																							26.4	1.5	2.5
	December-2024				37.2																					20.4	3	5
	January-2025		0.15																		34.4						3	5
	Fobruary 2025		8.15																		20.0						0.75	1.25
	February-2025												 E14								20.8						1.5	2.5
			2 00										516														495	495
	March-2025		3.88									21.4						25.0									0.3	0.5
												21.4						25.9									0.75	1.25
	April-2025											42						35									0.75	1.25
	May-2025											43											56	67.4			1.5 3	2.5
																							. 56	0/.4			3	3

We	II 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-89	EW-94	EW-98	100	100
Parameter CP	Monitoring Event) ((I)											С	oncentration	ì												LOD	LOQ
SEMI-VOLATILE OR	GANIC COMPOUNI) (ug/L)				l							ND			ND											46.7	93.5
	November-2022										ND																93.5	187
											ND	ND						ND									9.35	9.35
	December-2022								ND								ND										11.7	11.7
			ND		ND 																						23.4 485	23.4 971
										ND																	243	485
	January-2023															ND											253	505
	54.154.7 2525		ND																								490	980
	February-2023										ND 							ND									500 187	1000 374
											ND																51	102
	March-2023									ND																	117	234
	April-2023									ND																	37.4	74.8
	,,											ND															38.8	77.7
	May-2023		ND 							ND	ND 																93.5 467	187 935
	l 0000										ND				ND												485	971
	June-2023												ND														490	980
																										ND	46.7	93.5
	July-2023		ND 																ND								100 250	200 500
									ND																ND		1000	2000
	August-2023																									ND	19.6	39.2
	September-2023						ND		ND																ND		1000	2000
	3epiember-2023				ND 														ND 			ND					40 40	80 80
	October-2023																		ND								50	100
			ND					ND 						ND													500 20	1000 40
																			ND								50	100
	November-2023																									ND	100	200
					ND	ND 		ND 			ND 											ND 					400 1000	800 2000
																			ND								50	100
Anthracene	December-2023																	ND									100	200
7				ND	ND 																						200 100	400 200
	January-2024																									ND	250	500
											ND																1000	2000 400
	February-2024			ND		ND 																					200 250	500
	·																				ND		ND				400000	800000
	March-2024																						ND			ND 	20 80	40 160
														ND													5	100
	April-2024																		ND								20	40
	April-2024																	ND									100	200
					ND						ND								ND		NID.						400	800 10
	May-2024																				ND 	ND				ND 	10 80	160
	June-2024																		ND								20	40
											ND										ND 					ND 	100	200
	July-2024										ND 	ND															40 80	80 160
							ND																				400	800
	August-2024																				ND 				ND		500 1000	1000 2000
	September-2024																	ND									1000	2000
	36P16111D61-2024				ND		ND																				200	400
	October-2024	ND 	ND 		ND															ND							50 200	100 400
	November-2024		ND																								50	100
	December-2024																									ND	200	400
					ND																ND						100	800
	January-2025		ND																		ND 						100	200 200
	February-2025																				ND						200	400
			ND										ND 					ND									4160 100	4160 200
	March-2025											ND															200	400
	April-2025																	ND									100	200
	May-2025											ND 											ND	ND			200 400	400 800
	111Gy 2020		!					-			!											!	110	110			.00	

W	ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event	בוו סטא	211 00				211 03	111 00	211 07	211 00	211 07	211 00		oncentration		211 00	211 07	211 00	211 70	211 02	211 00	211 07	211 00		211 /4		LOD	LOQ
TOTAL METALS (m														oncennano.	-													
TOTAL MILIALO (III	November-2022										0.863		0.464			1.3											0.02	0.04
	December-2022		1.02		0.406				0.174		1.69	0.49	0.404			1.3	0.159	0.574									0.02	0.04
																												0.04
	January-2023		0.285							0.596	0.225					0.846											0.01	
	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
	July-2023								0.7																		0.0025	0.005
	August-2023																									0.15	0.0025	0.005
	A09031-2023						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
Arsenic				0.47															0.24								0.001	0.002
7 (1301110	January-2024			0.47							0.23															0.18	0.0025	0.005
	February-2024			0.68		0.42															0.33		0.23			0.10	0.002	0.002
	March-2024																						0.23			0.12	0.001	0.002
														0.40					0.10								0.0025	0.003
	April-2024													0.49					0.18									
	14 0004				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 August-2024						0.18				300	0.095									0.49				0.13		0.0025	0.005
	September-2024				0.27		0.15											0.19			0.47						0.005	0.01
	October-2024	0.1	0.26		0.27		0.15											0.17		0.18							0.005	0.01
	November-2024		0.15																								0.005	0.01
	December-2024	0.16			0.28																					0.09	0.005	0.01
	January-2025				0.26																1.88						0.003	0.05
			0.17																		0.73						0.005	0.03
	February-2025		0.17										0.774 J								0.73						0.465	1
	March-2025		0.158									0.344	0.774 J					0.254									0.463	0.02
	April-2025		0.130									0.344						0.234									0.01	0.02
	May-2025																	0.217					0.15	0.2			0.0025	0.005
	11107 2020				1	1	-					1						1				1	0.10	V. <u>~</u>			3.0020	0.000

We	ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event													oncentration													LOD	LOQ
	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	0.02
			0.043							0.003	1.72					0.554		1.04									0.003	0.01
	February-2023																											
	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
	30110 2020												3.01														0.01	0.05
																										0.217	0.001	0.005
	July-2023																		0.558								0.002	0.01
			0.542						2.28																1.02		0.005	0.025
	August-2023																									0.218	0.005	0.025
	A09031-2023						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		1		0.68													1.36									0.005	0.025
Barium											1.00								0.672							1.01	0.002	0.01
	January-2024			3.27							1.92															1.91	0.005	0.025 0.05
	Fabruary 2024					4.41															0.45		0.925					
	February-2024			3.03		4.41															2.65		0.925			1.03	0.005	0.025
	March-2024																						1.54			1.03	0.002	0.01
														0.4					0.634				1.54				0.003	0.025
	April-2024				1.02													2.15									0.001	0.005
	Many 2024										1.79																	
	May-2024 June-2024										1./7								0.619		2.8 3.44	2.06				0.872 1.51	0.01	0.05
	July-2024										1.28	2.75									3.44					1.51	0.005	0.03
	August-2024						1.27				1.20	2./3									2.39				0.862		0.003	0.025
	September-2024				1.34		1.33											3.65			2.57						0.01	0.05
	October-2024		0.568		1.17															3.33							0.01	0.05
	November-2024		0.69																								0.01	0.05
	December-2024				2.4																					1.21	0.01	0.05
	January-2025																				1.88						0.01	0.05
			0.633																		1.48						0.01	0.05
	February-2025												ND														0.465	0.5
	March-2025		0.516									1.05						2.93									0.005	0.01
	April-2025											1.96						2.95									0.005	0.01
	May-2025																						2.1	1.76			0.005	0.025
	, 2020																											

W	/ell 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-89	EW-94	EW-98	LOD	100
Parameter	Monitoring Event													Concentration	1												LOD	LOQ
	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
	· · · · · · · · · · · · · · · · · · ·																									ND	0.0005	0.005
	August-2023						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
			1																ND								0.0002	0.002
Cadmium	January-2024			ND							ND															ND	0.0005	0.005
Caamiom	February-2024			ND		ND															0.0175		ND				0.0005	0.005
	March-2024																									ND	0.0002	0.002
														0.000204 J					0.000195 J				ND				0.0005	0.005
	April-2024																										0.0001	
	14 0004				ND													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						NID.				ND	ND													0.00047.1		0.0005	0.005
	August-2024 September-2024				NID.		ND											ND.			0.00508 J				0.00247 J		0.001	0.01
	October-2024	0.00117.1			ND ND		ND											ND		ND							0.001	0.01
	November-2024	ND	ND ND		ND															ND 							0.001	0.01
	December-2024				0.00661 J																0.100					0.00304 J	0.001	0.01
	January-2025		ND.																		0.198						0.004	0.01
	February-2025		ND																		0.0101						0.001	0.01
	March 0005											0.0110	ND					ND.									0.186	0.2
	March-2025		ND									0.0119						ND									0.002	0.004
	April-2025											0.0284						ND					ND				0.002	0.004
	May-2025																						ND	ND			0.0005	0.005

W	Vell 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-89	EW-94	EW-98		
Parameter	Monitoring Event	LW-JUA	LW-30	LW-J1	LW-32	LW-33	LW-34	LW-33	LW-37	L#F-30	LW-57	LW-00		oncentration		LW-03	LW-07	LW-00	LW-70	LW-02	LW-03	LW-07	L VV-00	LW-07	LW-74	LW-70	LOD	LOQ
raidillelei	November-2022		1								0.208	1	0.112		T	0.354		1		1			1		 		0.016	0.02
			0.500																									
	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
	Aprii-2025									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
	A																									0.0276	0.002	0.005
	August-2023						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
	OCIODEI-2023							0.273																			0.0008	0.002
			0.391																								0	0.003
	November-2023					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
Chromium				0.17															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																						0.414			0.0759	0.0008	0.002
																			0.045				0.414				0.002	
	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									0.105						0.002	0.005
	August-2024						0.549														0.185				0.233		0.004	0.01
	September-2024	0.0072	0.047		0.948		0.541											0.228		0.240							0.004	0.01
	October-2024		0.246		0.929															0.349							0.004	0.01
			0.237		0.773																					0.104	0.004	0.01
	December-2024																				0.00041					0.184	0.004	
	January-2025																				0.00941						0.003	0.01
	February-2025		0.21										0.0000								0.196						0.004	0.01
	March 2025		0.240									0.100	0.0992					0.155									0.0465	0.05
	March-2025 April-2025		0.248									0.199						0.155 0.143									0.008	0.01
	Aprii-2025 May-2025											0.248						0.143					0.371	0.342			0.008	0.005
	Muy-2025																						0.371	0.342			0.002	0.005

W	/ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event	••,												oncentration								211 07			_,,,,		LOD	LOQ
	November-2022					I					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																0.0005	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	0.003
	· ·		0.00124						0.00163										0.00611							ND	0.0003	0.001
	August-2023						0.00343 J		0.0176																ND		0.0013	0.003
	September-2023				ND														0.00407 J								0.003	0.01
																			0.00361			0.000609 J					0.0003	0.001
	October-2023							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
Copper	February-2024			ND		0.00201															ND		ND				0.0015	0.002
	March-2024																									0.00115 J	0.0006	0.002
			1																				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		ND		ND															0.00306 J							0.003	0.01
	November-2024	0.00569 J	ND																								0.003	0.01
	December-2024				ND																					ND	0.003	0.01
	January-2025																				0.035 J						0.01	0.01
	February-2025		ND																		0.00381 J						0.003	0.01
	·												ND														0.0465	0.05
	March-2025		0.0087 J									ND						0.0142									0.008	0.01
	April-2025											ND						0.009 J									0.008	0.01
	May-2025																						ND	0.0123			0.0015	0.005

W	ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event	LW-30A	LW-30	LW-31	LW-JZ	LW-33	LW-54	LW-33	LW-37	LW-30	LW-37	L#F-00		Concentration		LW-03	LW-07	L 14-00	LW-70	LW-02	LW-03	LW-07	L11-00	LW-07	LW-74	LW-70	LOD	LOQ
rarameter	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
																										ND	0.005	0.005
	August-2023						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
	OCIODEI-2023							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
	Janes 1 200 4			ND	0.16						0.0081							0.002								ND	0.0015 0.005	0.0015 0.005
Lead	January-2024 February-2024			0.0065		0.01					0.0001										0.051		0.012				0.003	0.003
	,			0.0003		0.01															0.031		0.012			ND	0.001	0.002
	March-2024																						0.02				0.005	0.005
														0.0013					0.0025								0.001	0.001
	April-2024				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
	December-2024				0.18																					ND	0.01	0.01
	January-2025																				ND						0.002	0.002
	February-2025		ND																		0.02						0.01	0.01
	March-2025		0.0113									0.0816	0.0561					0.0229									0.0465	0.05
	April-2025		0.0113									0.0816						0.0229									0.006	0.01
	May-2025																	0.0207					0.016	0.049			0.006	0.005
	1VIGY-2023																						0.010	0.047			0.000	0.003

V	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-89	EW-94	EW-98	LOD	100
Parameter	Monitoring Event													Concentration													LOD	LOQ
													0.00169			0.00053											0.0004	0.0004
	November-2022										ND																0.0008	0.0008
			0.00051																								0.0004	0.0004
	December-2022								0.00118		ND	0.00588					0.0048	ND									0.0008	0.0008
					ND															T							0.004	0.004
			ND							ND						ND											0.0004	0.0004
	January-2023										ND																0.004	0.004
	February-2023																	ND									0.0004	0.0004
	<i>'</i>									ND																	0.0002	0.0002
	March-2023										ND																0.0002	0.0004
												0.00128															0.0004	0.0002
	April-2023									ND																	0.0002	0.0002
	May-2023		ND							ND	ND																0.0004	0.0004
	June-2023										ND		ND		ND												0.0002	0.0002
	JUNE-2023		0.000306								1		ND						ND	_						ND		0.004
	July-2023								0.0107																		0.0002	
									0.0107																ND	ND	0.001	0.001
	August-2023						0.00312		0.00397																ND	ND	0.001	0.001
	September-2023				0.00503		0.00312		0.00377										ND								0.002	0.002
	October-2023				0.00505			0.00165											ND			0.00055					0.002	0.002
	OC10D61-2023		ND					0.00103						ND													0.000000	
	November-2023																		ND								0.0000004	0.0000004
Mercury					0.00576	0.00606		0.00578			ND											0.00954				ND	0.000004	0.000004
	D 1 0000				0.00484													ND									0.001	0.001
	December-2023																		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
	March 2024																						ND				0.001	0.001
	April-2024													0.000201					ND								0.0002	0.0002
	7 (0111 202 1				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																								0.002	0.002
	December-2024				0.00213																					ND	0.002	0.002
	January-2025																				0.1047						0.01	0.01
	February-2025												0.00011														0.000009	0.000009
	, , ,		ND																		ND						0.002	0.002
	March-2025		ND									0.0147						ND									0.001	0.001
												0.0146															0.002	0.002
	April-2025 May-2025											0.00169						ND					ND	0.0128			0.001	0.001
	Muy-2025																						ND	0.0128			0.001	

We	ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event													oncentration	-												LOD	LOQ
	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									0.1054	0.1022							0.1726									0.001	0.001
	March-2023 April-2023									0.1254 0.1143	0.1033	0.1732															0.007	0.01
	May-2023		0.113							0.09726	0.05657																0.005	0.001
	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
					0.5150		0.1457		0.09673										0.0207						0.0513		0.01	0.01
	September-2023				0.5152														0.2387			0.09206					0.01	0.01
	October-2023							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
	January-2024			0.06308							0.04911								0.2127							0.0326	0.002	0.002
Nickel	February-2024			0.07945		0.07013															0.09174		0.06183				0.005	0.005
	March-2024																									0.02232	0.002	0.002
														 0 1210					0.104				0.08678				0.005	0.005
	April-2024				0.3136									0.1319				0.1139	0.196								0.001	0.001
	May-2024										0.0538							0.1137	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				0.207		0.1008											0.00770			0.0822				0.02104		0.01	0.01
	September-2024 October-2024	0.07251	0.115		0.396 0.3536		0.1138											0.08772		0.05751							0.01	0.01
	November-2024		0.09665																								0.01	0.01
	December-2024				0.2964																					0.03528	0.01	0.01
	January-2025																				ND						0.0085	0.01
	February-2025		0.09275																		0.1021						0.01	0.01
	March-2025		0.0933									0.0375	ND 					0.0818									0.0465	0.05
	April-2025											0.0161						0.0713									0.007	0.01
	May-2025																						0.07897	0.03695			0.005	0.005
	November-2022										ND		ND			ND											0.08	0.1
	December-2022		ND		ND				ND	ND.	ND	ND				ND.	ND	ND									0.08	0.1
	January-2023 February-2023		ND 							ND 	ND 					ND 		0.00199									0.04	0.05
	March-2023									ND	ND																0.000	0.001
	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		ND																ND	ND 	0.00425 0.0085	0.005
	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 0.00785	0.00314		0.00315			ND 			ND 				0.00253	ND			0.0032				ND 	0.003	0.003
	December-2023																		0.00215								0.0013	0.0013
	January-2024			ND							ND															ND	0.00425	0.005
Selenium	February-2024			ND		ND															0.00571		0.00651				0.00425	0.005
	March-2024																						0.00627			ND 	0.0017 0.00425	0.002
	4 11 000 1													ND					0.000929 J								0.00423	0.003
	April-2024				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 August-2024						ND				ND 	ND									ND				ND		0.00425	0.005
	September-2024				ND		ND											ND									0.0085	0.01
	October-2024	ND	ND		ND															ND							0.0085	0.01
	November-2024		ND																								0.0085	0.01
	December-2024				ND																					ND	0.0085	0.01
	January-2025		ND																		ND ND						0.0006	0.01
	February-2025												ND														2.32	2.5
	March-2025		ND									ND						ND									0.04	0.05
	April-2025											ND						ND									0.04	0.05
	May-2025																						ND	ND			0.00425	0.005

W	/ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event	EW-JOA	EW-30	[EW-31	EVV-32	E44-33	E44-34	E44-33	EW-3/	E44-30	EVV-37	EW-00		oncentration		EW-03	LW-07	LVV-00	EW-70	LW-02	EW-03	EW-0/	E44-00	LW-07	EVV-74	LW-70	LOD	LOQ
rarameter	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
																										ND	0.0003	0.005
	August-2023						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
	January-2024			ND							ND								ND 							ND	0.00012	0.002 0.005
Silver	February-2024			ND		ND															ND		ND				0.0003	0.005
	,																									ND	0.00012	0.002
	March-2024																						ND				0.0003	0.005
	April-2024													ND					ND								0.00006	0.001
	Aprii-2024				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 December-2024	ND	ND		ND																						0.0006	0.01
	January-2025																				0.789					ND	0.0006	0.01
	Juli001y-2025		ND																		0.789 ND						0.0006	0.05
	February-2025												ND														0.0008	0.0025
	March-2025		ND									ND						ND									0.00252	0.0023
	April-2025											0.007 J						ND									0.005	0.01
	May-2025																						ND	ND			0.0003	0.005

W	ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event	LII OUA	211 00				211 01	211 00	211 07	211 00	211 07	211 00		ncentration	211 04			211 00	211 70		211 00	211 07		211 07		211 70	LOD	LOQ
raidificiei	November-2022										ND		0.032			0.694											0.02	0.02
			0.208		29.7				0.162		0.0686	0.75	0.032			0.074	0.364	0.286										
	December-2022																										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
	7 (prii 2020											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
			0.0488																0.0714						0.354	0.0782	0.0025	0.005
	July-2023								2.03																		0.0125	0.025
																										0.112	0.0125	0.025
	August-2023								1.71																0.914		0.025	0.05
							5.92																				0.05	0.1
	0 1 2000																		0.0788								0.025	0.05
	September-2023				45																						0.25	0.5
	0.1.1.0000																		0.0622								0.0025	0.005
	October-2023							0.203														633					0.005	0.01
			0.0471 J			0.0534		0.74			0.053			0.0618					0.0722			0.845				0.0313 J	0.025	0.05
	November-2023				30.4																						0.25	0.5
					52.7																						0.25	0.5
	December-2023																		0.061								0.005	0.01
																		0.0462									0.025	0.025
Zinc	January-2024			0.117							0.0974															0.0261	0.0125	0.025
ZITIC	February-2024			0.0879		0.0554															0.475		0.809				0.0125	0.025
	1.4 avrala 2004																									0.0342	0.005	0.01
	March-2024																						2.09				0.0125	0.025
														0.0565					0.0539								0.0025	0.005
	April-2024																	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										0.103								0.0505		0.498					ND	0.025	0.05
	July-2024										0.104	0.0451							0.0303		0.470						0.0125	0.025
	August-2024						3.49				0.104	0.0451									0.512				0.417		0.0123	0.023
					0.212																						0.0025	0.005
	September-2024						3.68											0.111									0.0025	0.005
		0.266	0.077																	0.342							0.025	0.05
	October-2024				20.2																						0.25	0.5
	November-2024	0.0325 J	0.0367 J																								0.025	0.05
																										0.0696	0.025	0.05
	December-2024				14.3																						0.25	0.5
	January-2025																				ND						0.002	0.002
	Jul 1001 y-2023		0.0405 J																		0.527						0.002	0.002
	February-2025												0.136															0.05
	Marrala 0005		0.0415									0.155						0.0077									0.0465	
	March-2025		0.0415									0.155						0.0277									0.01	0.01
	April-2025																	0.0297									0.01	0.01
	·											0.366															0.05	0.05
1	May-2025																						1.1	1.55			0.0125	0.025

We	ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event													oncentration			1										LOD	LOQ
VOLATILE FATTY AC																												
	g, _,												1600														25	100
	November-2022					_					3500					150 J											62	250
	Dagamahar 2022																											
	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
																										ND	150	200
	July-2023		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
			ND											ND					ND							4160	250	500
	November-2023					4950		6650			5350											7300					500	1000
					9900																						1000	2000
																		660										100
	December-2023																		ND									250
					11200																							1000
	January-2024			4410							5290															3080		250
	February-2024			3130		3530																						250
Acetic Acid	, .																				3530		6770					500
	March-2024																						4/000			2700		200
														ND					ND				46000					1000
	April-2024																	1670	ND									100 250
	Apiii-2024				9170													1670										1250
																			ND		4370					221		250
	May-2024										4950																	500
	Muy-2024																					-						1250
																			 ND			6530						100
	June-2024																				3890					4450		500
	July-2024										6280	6180									3670					4430		1250
	August-2024						5210														3500				5540			500
	7109031 202 1																	2950										250
	September-2024						5970																					500
					10400																							1250
		ND																										50
	October 2024		260																									100
	October-2024																			4780								250
					9410																							1250
	November-2024	960	230																									200
	December 2024																									10000		200
	December-2024				17000																							400
	January-2025																				3500							100
	May-2025																						6640	6530			71.4	500
	1VIUy-2023																						0040	0000			/ 1.4	1 3

W	ell 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-89	EW-94	EW-98		
Parameter	Monitoring Event									2 00				oncentration													LOD	LOQ
	November-2022												430														12	100
											830					ND											29	250
	December-2022		ND																								29	250
	January-2023 February-2023		ND 							ND 	1800					ND 		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 2022		ND																							ND	130	200
	July-2023		ND 						2800										ND						650		330 650	1000
	August-2023						1400		1700																1600	ND		500
	September-2023				3100														ND								330	500
	October-2023							1200											ND			2000					330	500
	November-2023		ND 		3420	1670		1760			1370			ND 					ND 			2730				740	250 500	1000
																		336										100
	December-2023																		ND									250
Butyric Acid	January-2024			813	3390						1230															594		1000 250
	,			583		1170																						250
	February-2024																				1180		2980					500
	March-2024																									500		20
														ND					ND				2100					100
	April-2024				3120													444										250
	May-2024										1190								ND		984	2370				448		250
	June-2024																		ND		1190					1030		100
	July-2024 August-2024						1630				2400	2360									1180				1930			250 500
	September-2024				3550		2060											670										250
		ND																										50
	October-2024		ND 																	1630								100 250
					3070																							1250
	November-2024	480	ND																									200
	December-2024				4/00																					2200		200 400
	January-2025				4600																1100							100
	May-2025																						2220	2160			70.3	500
	November-2022												ND														11	100
											ND					ND											27	250
	December-2022		90 J			968		1800			969			ND					ND			1170				324	27 250	250 500
	November-2023				6030																						500	1000
																		ND										100
	December-2023				9050														ND									250
	January-2024			629	9050						979															256		1000 250
	February-2024			334		180																						250
	. 35.031, 2024																				756		1650					500
	March-2024																						ND			ND 		200
														ND					ND									100
	April-2024																	ND										250
Lactic Acid	May-2024				5120						1160								ND		1170	1730				ND		1250 250
	June-2024																		ND		706					246		100
	July-2024										1220	1210																250
	August-2024						2270														593				959			500
	September-2024				5510		2550											ND 										250 1250
		ND																										50
	October-2024		ND																									100
					5630															2590								250 1250
	November-2024		ND																									200
	December-2024																									730		200
					5300																							400
	January-2025																				480		042	702			 EE 7	100
	May-2025																						963	783			55.7	500

We	ell 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-89	EW-94	EW-98	LOD	100
Parameter	Monitoring Event						1							oncentration								1					LOD	LOQ
	November-2022										1600		620			73 J											27	100 250
	December-2022		640													/3.1											27	250
	January-2023		ND							ND	2000					ND												500
	February-2023																	ND										500
	March-2023									ND	ND																	500
	April-2023 May-2023		520							800 800	1400	ND 															340 340	500
	June-2023										2900		2000		2900												680	1000
	30110 2020																									ND	140	200
	July-2023		ND																ND								340	500
									3100																680		680	1000
	August-2023				1000		1200		2000																1900	ND	240	500
	September-2023 October-2023				1800			1300											ND ND			2000					340 340	500
	November-2023		ND			2170		2310			2080			387					ND			3350				1420	250	500
	NOVEITIBEI 2020				2580																						500	1000
	December-2023																	996	ND									100 250
Dramiania A sid	3000111001 2020				2280																							1000
Propionic Acid	January-2024			1680							1970															1030		250
	February-2024			1210		1510															1980		2900					250 500
	14																									570		20
	March-2024																						2100					200
	April-2024													ND					ND									100
	May-2024				2300						1730							1150	ND		1640	2770				647		250 250
	June-2024																		ND		1870					1400		100
	July-2024										2500	2470																250
	August-2024 September-2024				2640		1320 1690											1300			1920				2040			500 250
	3epiembei-2024	ND			2040																							50
	October-2024		275																									100
	0010001 2024																			1470								250
	November-2024	1300	310		2240																							1250 200
	December-2024																									3300		200
					4200																							400
	January-2025																				1800							100
	May-2025												46 J										2570	2560			57.3 12	100
	November-2022										98 J					ND											30	250
	December-2022		ND																								30	250
	November-2023		ND			ND		ND			ND			ND					ND			ND				ND	250	500
					ND 													ND									500	1000
	December-2023																		ND									250
	1				ND																							1000
	January-2024			ND ND		ND					ND 															ND 		250 250
	February-2024																				ND		ND					500
	March-2024																									130		20
														ND					ND				460					100
Pyruvic Acid	April-2024				ND													ND										250
	May-2024										ND								ND		ND	ND				ND		250
	June-2024																		ND		113					ND		100
	July-2024 August-2024						ND				ND 	ND 									ND				ND			250 500
	September-2024				ND		ND											ND										250
		ND																										50
	October-2024		ND 																	ND								100 250
					ND																							1250
	November-2024		ND																									200
	December-2024				440																					410		200
	January-2025				460																ND							100
	May-2025																						132 J	124 J			44.4	250
	, -,																											

W	ell 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-89	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event												С	Concentration	ı												LOD	LOQ
VOLATILE ORGAN	IIC COMPOUNDS (ug	-						l		l	2510					1140	-										20	100
	November-2022										3510		15600			1140											300	100
			3140									3390															30	1000
	December-2022				26800				27700		5670						21700	7150									300	1000
	January-2023		3480							632																	30	100
	,										7840					5470											300	1000
	February-2023																	14400									600	2000
	March-2023 April-2023									257 3420	2770	5530															750	100 2500
	,		5360							5970																	150	500
	May-2023										13600																750	2500
	luna 2022										13800																750	2500
	June-2023												20100		22600												1500	5000
			5860																ND								60	200
	July-2023								20400																21/00	13500	750	2500
									38400																31600	5950	3000 60	10000
	A																								7350		150	500
	August-2023								3000																		750	2500
							25600												420								1500	5000
	September-2023				17500														439								750	200
	October-2023																		211								15	50
	OCTOBET-2023							17800														33400					1500	5000
								17700			10400								78.8 J								30	100
	November-2023		3990					17700			10600																150 300	500 1000
	11010111001 2020				25700																						750	2500
						22300								17600								26700				31200	1500	5000
	December-2023				13700						10000							7060	ND								150	500
	January-2024			34700							10800															28900	150 1500	500 5000
2-Butanone	February-2024																				12700						150	500
(MEK)	1 ebiodiy-2024			30500		28900																	17400				1500	5000
	March-2024																						11700			25200	150	500 5000
																			ND							25200	1500 30	100
	April-2024													14600													750	2500
					37200													28700									1500	5000
																			ND								60	200
	May-2024																				7340					18600	150	500
											25700											32700					1500	5000
	June-2024																		ND 		13800						150	200 500
	30110 2021																									33200	15000	25000
	July-2024										15600																150	500
							17700					25400									7240				17000		1500	5000
	August-2024				19000		17700 16600														7260				17900		150 150	500
	September-2024																	32200									1500	5000
		28.2																									3	10
	October-2024		2770		13000															10800							150	200 500
	No. 1 222		4140		13000																						60	200
	November-2024	28800																									750	2500
	December-2024				658																						150	500
																					47000					41800	600	2000
	January-2025		6930																		17000						1500	200
	February-2025		6930																		23900						150	500
	. 52.541, 2525												ND														24500	24500
	March-2025		2540																								150	500
	141GICI1-2025											30600						33700									1500	5000
I	April-2025											20800						28100					10500				150	500
	April-2023																						12500				150	500
	May-2025																							16700			1500	5000

	Vell 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-89	EW-94	EW-98	LOD	LOG
Parameter	Monitoring Event												C	oncentration								ı	1	1				
	November-2022															4420											70	100
											16100		38300														700	1000
											15600	5170						9800									700	1000
	December-2022	·	8500																								1750	2500
					53100				49900								45600										3500	5000
										1530																	70	100
	January-2023										22200					14000											700	1000
	,		8130																								1750	2500
	February-2023																	23900									1400	2000
	16510019-2020	,								375						+											70	100
	March-2023										/010																-	
	. "										6810																700	1000
	April-2023									8290		7560															1750	2500
	May-2023		10700							11700																	350	500
	11107 2020	1									29600																1750	2500
	luna 2002										29600																1750	2500
	June-2023												61800		50800												3500	5000
																			1180								140	200
			9780																								700	1000
	July-2023																									11600	1750	2500
									77200																69700		7000	1000
																_										20000		
	August-2023								18700																	20900	700 1750	2500
	Augusi-2023					_																						
							72500												100 I						87700		3500	5000
	September-2023				40100														188 J								140 1750	200
					40100														79								35	50
	October-2023							66900														92900					3500	5000
																			104			72700					70	100
			5560																104								700	1000
	November-2023	S			64700																						1750	2500
cetone						43100		61100			36800			32800								53900				67800	3500	5000
						43100												ND									140	200
	December-2023																		ND								350	500
	DCCCITIBOT 2020				44300																						1750	2500
	January-2024			96600							22800															47300	3500	5000
	February-2024			81600		70200															45600		63100				3500	5000
	March-2024	1																					50800			57600	3500	5000
	11101112021																		ND								70	100
	April-2024													24300													1750	2500
	April-2024					1										+											 	
					95300													55200									3500	5000
	May-2024																		ND								140	200
	,										63200										39000	91300				33300	3500	5000
	June-2024																		ND								140	200
																					94400					84400	35000	5000
	July-2024										32200	52600															3500	5000
		!					57700														36000				81500		3500	5000
	August-2024	-			FOOD		44500											69300									3500	5000
	September-2024				59800	_																					7	10
	September-2024	30.1																									140	200
	September-2024 October-2024	30.1	5230																	40700								
	September-2024	30.1	5230 		 49800															40700							3500	5000
	September-2024 October-2024	30.1	5230 8680		49800															40700							3500 350	5000 500
	October-2024 November-2024	30.1	5230 		49800 															40700							3500 350 1750	5000 500 2500
	September-2024 October-2024 November-2024 December-2024	30.1	5230 8680		49800															40700	 						3500 350 1750 1400	5000 500 2500 2000
	October-2024 November-2024	30.1	5230 8680 		49800 															40700							3500 350 1750	5000 500 2500
	September-2024 October-2024 November-2024 December-2024	30.1	5230 8680 		49800 51700				 					 	 			 		40700	 			 	 	 69700	3500 350 1750 1400	5000 500 2500 2000
	September-2024 October-2024 November-2024 December-2024	30.1	5230 8680 		49800 51700									 	 			 		40700 	 65300	 		 	 	 69700	3500 350 1750 1400 3500	5000 500 2500 2000 5000
	November-2024 December-2025 January-2025	30.1	5230 8680 9820		49800 51700				 						 					40700 	 65300	 		 	 	 69700 	3500 350 1750 1400 3500 700	5000 500 2500 2000 5000
	September-2024 October-2024 November-2024 December-2024 January-2025 February-2025	30.1 44400 	5230 8680 9820		49800 51700 										 			 		40700 	65300 46400		 	 	 	69700 	3500 350 1750 1400 3500 700 3500	5000 500 2500 2000 5000 1000 5000
	November-2024 December-2025 January-2025	30.1 44400 	5230 8680 9820		49800 51700 								 ND		 			 		40700 	65300 46400			 	 	69700 	3500 350 1750 1400 3500 700 3500 49000	5000 500 2500 2000 5000 1000 5000 9800
	September-2024 October-2024 November-2024 December-2024 January-2025 February-2025	30.1 44400 	5230 8680 9820 4460		49800 51700 													 		40700 	 65300 46400	 				69700 	3500 350 1750 1400 3500 700 3500 49000 350	5000 500 2500 2000 5000 1000 5000 9800 500

14/	-II ID	FW 0/4	FW 50	F14/ F1	FW 50	FW 50	F\4/ F.4	FW 55	F)4/ 57	F14/ F0	FW 50	FW 40	F14/ / 2	F)4/ /O	F)4/ / 4	FW 15	F14/ 47	FW 40	F14/ 70	FW 00	FW 05	FW 07	FW 00	FW 00	FW 04	F14/ 00		
	ell 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 oncentration	EW-64	EW-65	EW-6/	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-89	EW-94	EW-98	LOD	LOQ
Parameter	Monitoring Event			I	l	T T	l	T 1	1		741					50.4			I		l	I					4	10
	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
											2630																8	20
	June-2023												1400		1590												20	50
			824																80.8								8	20
	July-2023								4050																1420		20	50
	JUIY-2023																											
																										11800	100	250
	August-2023						0200		1/0																	379	8	20
	-						2320		168										193						ND 		20 8	50
	September-2023																		173									20
					468														399								100	250 5
	October-2023							576														3100					20	50
			80.8											31.3								3100					20	5
																			323								4	10
	November-2023					1070		654			982											1960				1190	20	50
					870						702																100	250
																		932									8	20
Benzene	December-2023				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
														52.1					13.8								4	10
	April-2024				2040													3420									20	50
																			276								8	20
	May-2024										3080										144	818				2990	20	50
																			173								8	20
	June-2024																				210					2740	20	50
	July-2024										1410	1820															20	50
	August-2024						828														162				384		20	50
	September-2024				960		727											2710									20	50
	SCPICITIBEI ZOZ4	306																									0.4	1
	October-2024		429																								2	5
					1200															828							20	50
	November-2024	119	512																								8	20
	December-2024				675																					3280	20	50
	January-2025																				588						20	50
	January 2025		739																								8	20
	February-2025		739																		443						20	50
	1 05/00/y-2025												559000								443						24500	24500
	March-2025		157									1260	357000					2350									24500	50
	April-2025											938						1540									20	50
	May-2025											730						1340					255	222			20	50
	/viuy-2023							1	- 1	-			1										200		-	- 1	20	

We	II ID	EW-36A	EW-50	EW-51	EW-52	EW-53	EW-54	F\W 55	EW-57	EW-58	FW 50	FW /0	EW-61	FW 40	EW-64	FW / F	FW /7	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-89	EW-94	EW-98		
		EW-36A	EW-5U	EW-51	EW-52	EW-53	EW-54	EW-55	EW-5/	EW-38	EW-59	EW-60		EW-62 oncentration		EW-65	EW-0/	EAA-09	EW-/8	EW-82	EW-00	EW-8/	EW-00	EW-89	EW-74	EW-78	LOD	LOQ
Parameter	Monitoring Event	1	47.3		170				207		ND	40.5					100	07.4				I	I I					10
	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
	30110 2020												98		116												20	50
																										666	4	10
	July-2023		128																82								8	20
									224																87.5		20	50
	August 2022																									16.8 J	8	20
	August-2023						80		ND																ND		20	50
	September-2023																		22.8								8	20
	3epiembei-2023				ND																						100	250
	October-2023																		34.8								2	5
	OC10D61-2023							42.5 J														247					20	50
			26.3											45.4													2	5
	November-2023																		26.9								4	10
	110101111111111111111111111111111111111					62		54			76.5											224				60.5	20	50
					ND																						100	250
	December-2023		1															46									8	20
Ethylbenzene					69.5														44 J								20	50
	January-2024			99		40.1					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				44.5.1		27.5 J											100			ND				27 J		20	50
	September-2024				46.5 J		44 J											192									20	50
	October-2024	59.6	112																								0.4	5
	OCIODEI-2024				62.5															76							20	50
	November-2024	14.4 J	135		62.5																						8	20
	December-2024				52.5																					252	20	50
																					 EA E							
	January-2025		1/4																		54.5						20	50
	Fobricani 2005		164																		150						-	20
	February-2025												2000000								158						20	50
	March 2005		 /1.5									1/0	2090000					117									24500	24500
	March-2025		61.5									168						117									20	50
	April-2025 May-2025											52.5						73.5					29 J	38 J			20	50 50
	Muy-2025																							30 J				30

Wo	ell 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 47	EW-68	EW-78	EW-82	EW-85	EW-87	EW-88	EW-89	EW-94	EW-98		
		EW-36A	E44-20	EW-31	EW-32	EW-33	EW-54	EW-35	EW-5/	E44-20	EW-57	EAA-OO		oncentration		E44-03	EW-0/	EAA-00	EW-/O	EW-02	EW-03	EW-07	EAA-00	EVV-07	EVV-74	EW-70	LOD	LOQ
Parameter	Monitoring Event						I		1		200									I	I	I	I I				100	100
	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
											2100																200	200
	June-2023												7320		6670												500	500
																										2960	100	100
	July-2023		411																616								200	200
	30., 2020								8380																5310		500	500
																										2880	200	200
	August-2023						7370		3210																1200		500	500
																			343								200	200
	September-2023				ND																						2500	2500
	0 1 1 0000																		606								50	50
	October-2023							4870														9140					500	500
			199											325													50	50
	Navanahar 0002																		358								100	100
	November-2023					4780		3320			785											5370				4600	500	500
					4620																						2500	2500
Tetrahydrofuran	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
	1VIGY 2024										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	040			2950		2730											6640									500	500
	October 2024	248	210																								10	10
	October-2024		318		2580															2730							500	500
	November-2024	6620	452																	2/30							500 200	500 200
	December-2024		452		5660																					17000	500	500
																												-
	January-2025		1020																		11200						500	500
	Eobruga, 2005		1020																		7400						200	200
	February-2025																				7490						500 24500	500 24500
	March-2025		ND									4890	ND 					10000									500	500
	April-2025		ND									3660						5920									500	500
	May-2025																						4080	5700			500	500
	1VIUY-2023																						4000	3700			500	

W	ell 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-89	EW-94	EW-98		100
Parameter	Monitoring Event												С	oncentration													LOD	LOQ
	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
	1VIGY-2020										165																10	20
	June-2023												67		212												25	50
																_												
	Luk 2002																		107							965	5	10
	July-2023		248																107						110		10	20
									218																118		25	50
	August-2023						105																			36.6	10	20
	-						105		ND 										40.6						ND 		25 10	50
	September-2023				ND														40.6								125	250
																			59.2								2.5	5
	October-2023							37 J														235					2.5	50
			47.3											50.4													2.5	5
																			48.7								5	10
	November-2023					62.5		51.5			114											167				114	25	50
					ND																						125	250
	December-2023																	73.2									10	20
Toluene	December-2023				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
	1, .				104													263									25	50
	May-2024																		53.8								10	20
	May 2021										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	 EE 7			80		63.5											226									25	50
	October-2024	55.7	173																								0.5 2.5	5
	00100061-2024				65.5															72							2.5	50
	November-2024	44.6	245																								10	20
	December-2024				42 J																					288	25	50
	January-2025																				36 J						25	50
	3G110G1y-2023		271																		30 3						10	20
	February-2025																				54.5						25	50
	100.001, 2020												537000														24500	24500
	March-2025		90.5									150						166									25	50
	April-2025											51						114									25	50
	May-2025																						ND	ND			25	50
	, 2020			-							-					-				+								

Historical LFG-EW Leachate Monitoring Results Summary

We	ll 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-89	EW-94	EW-98		100
Parameter	Monitoring Event													oncentration													LOD	LOQ
	November-2022					T					ND		185			37.8											10	30
	December-2022		161		222				186		ND	112					197	59.9									10	30
			138	1		+				ND	134					38.1											10	30
	January-2023																	040										
	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
	JUNE-2023												92 J		136 J												50	150
																										1130	10	30
	July-2023		257			+													74.4								20	60
	50., 2020								230																174		50	150
																										48.4 J	20	60
	August-2023						180		ND																ND	40.4 J	50	150
																			ND								20	60
	September-2023				ND																						250	750
																			30.6								5	15
	October-2023							134 J											30.6			328					50	150
			56					134 J						48								326					5	150
	-													48				-									0	
	November-2023					116 J		104 J			132 J								25.3 J			306				138 J	10 50	30 150
	-				ND	110 J		104 J			132 J																250	750
																		167									20	60
V. Jana and Tarker	December-2023				224														ND								50	150
Xylenes, Total	January-2024			142 J							ND															534	50	150
	February-2024			63 J		59 J															ND		ND				50	150
	March-2024																						ND			1360	50	150
	Mulcii-2024													110					ND								10	30
	April-2024					+																						
					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
		54.3																									1	3
	October-2024		201																								5	15
					144 J															75.5 J							50	150
	November-2024	ND	223																								20	60
	December-2024				98.5 J																					487	50	150
	January-2025																				82 J						50	150
[267																								20	60
	February-2025																				354						50	150
													4260000														24500	24500
[March-2025		108 J									386						200									50	150
[April-2025											87.5 J						144 J									50	150
1	May-2025																						ND	ND			50	150

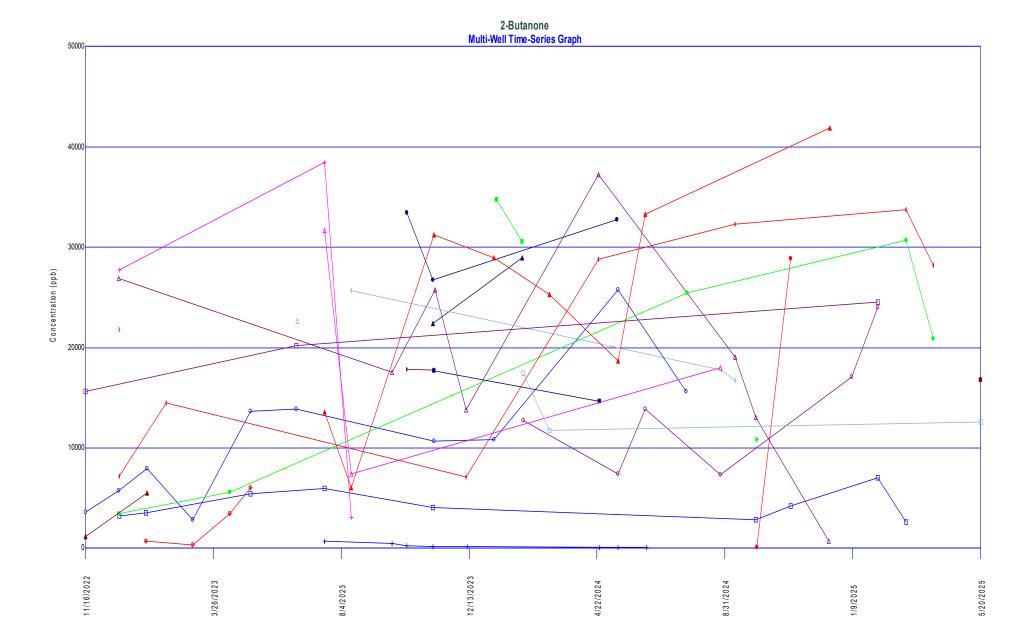
^{--- =} not applicable/available

mg/L = milligrams per liter
ND = Not Detected

ug/L = micrograms per liter

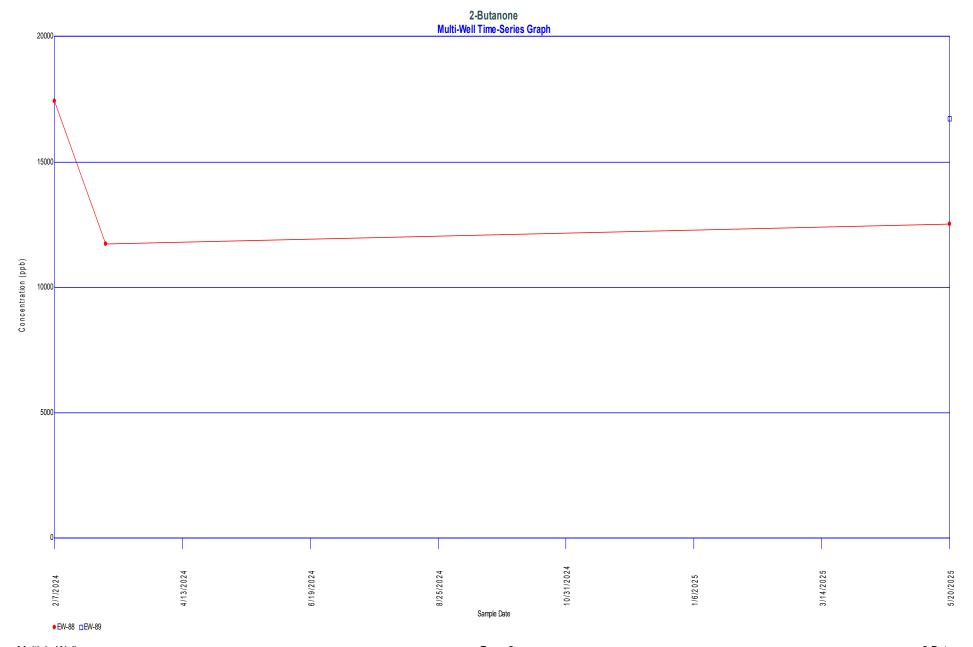
J = Parameter was detected at a concentration greater than the laboratory's LOD, but less than the laboratory's LOQ. Concentration is considered estimated. LOD = laboratory's Limit of Detection

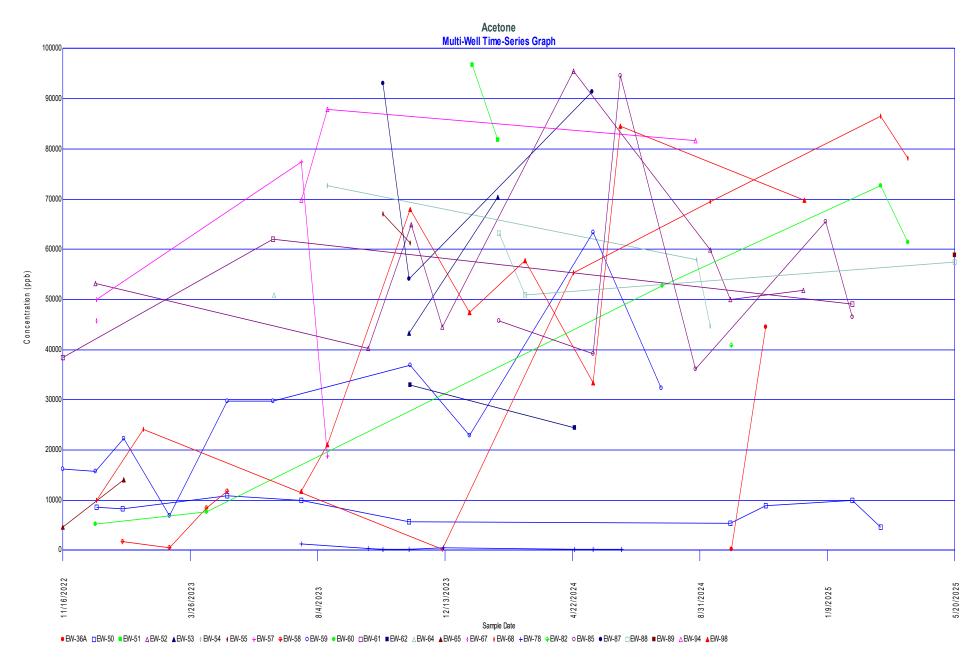
LOQ = laboratory's Limit of Quantitation

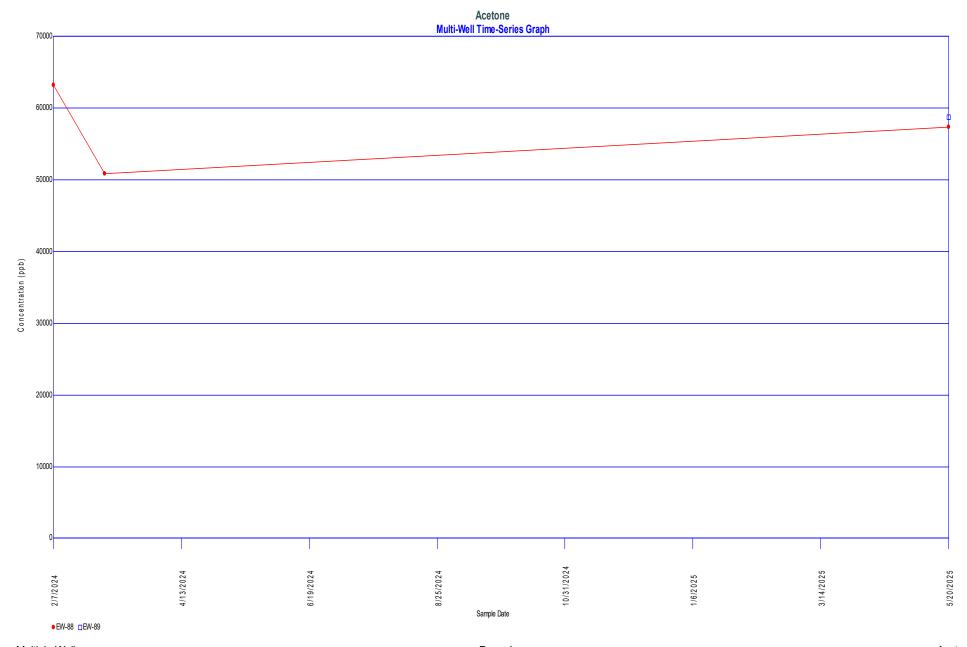


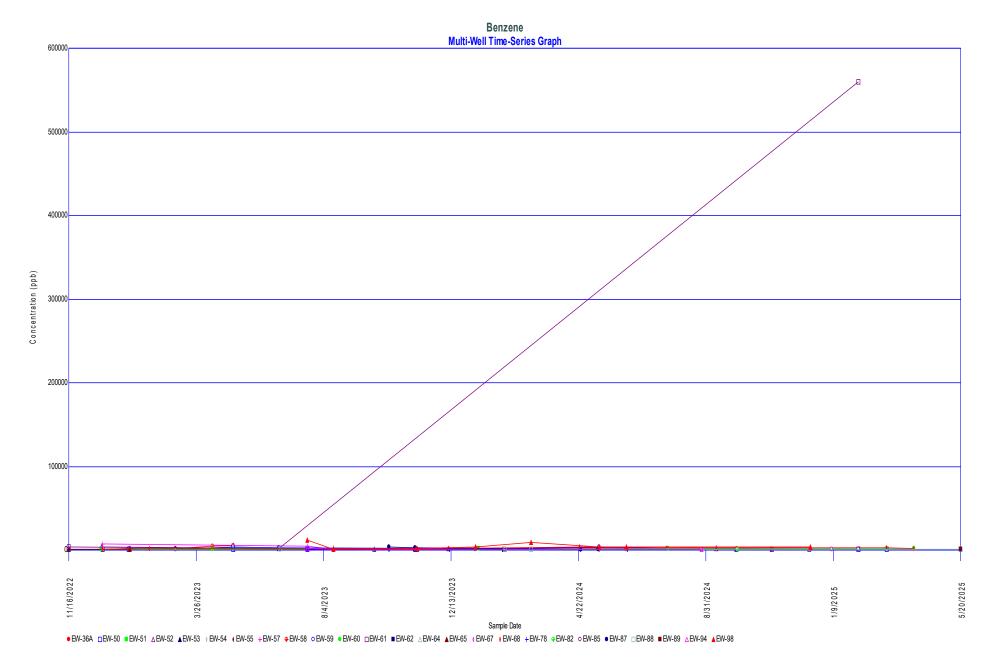
Sample Date

● EW-36A □ EW-50 ■ EW-51 △ EW-52 ▲ EW-53 + EW-54 + EW-57 ◆ EW-58 ● EW-59 ● EW-60 □ EW-61 ■ EW-62 △ EW-65 + EW-67 • EW-68 + EW-78 ◆ EW-82 ○ EW-85 ● EW-87 □ EW-89 △ EW-94 ▲ EW-98

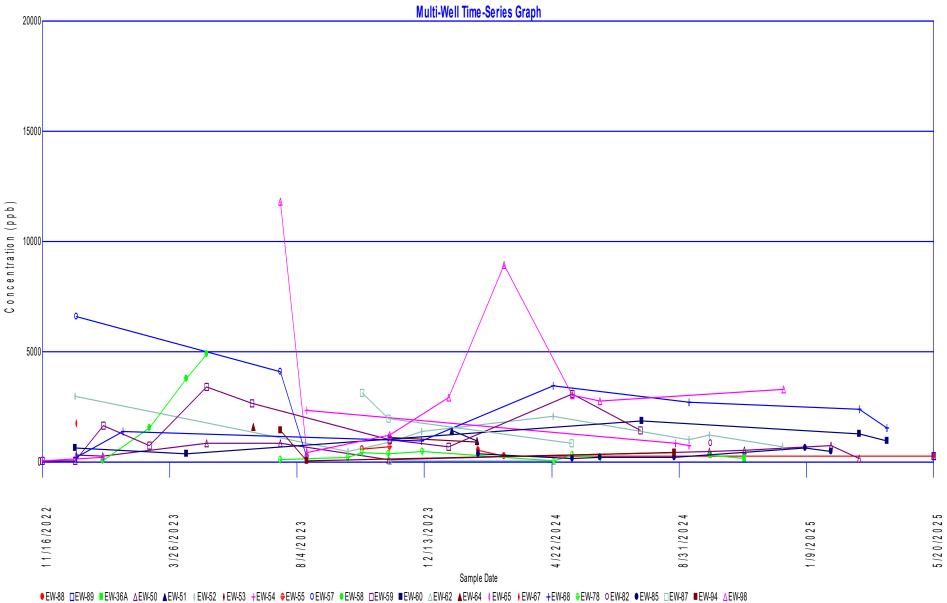


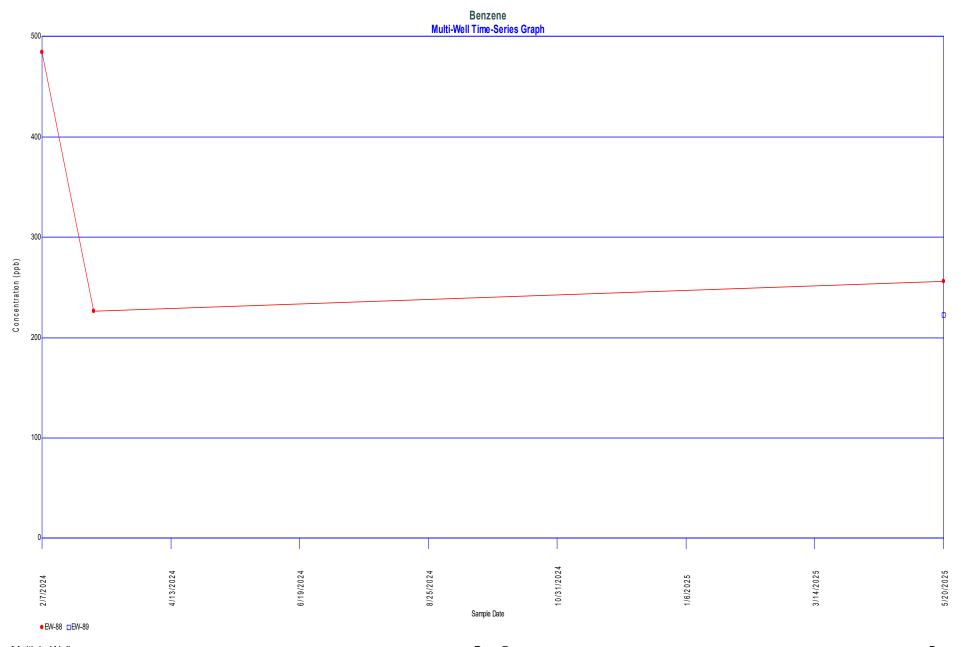


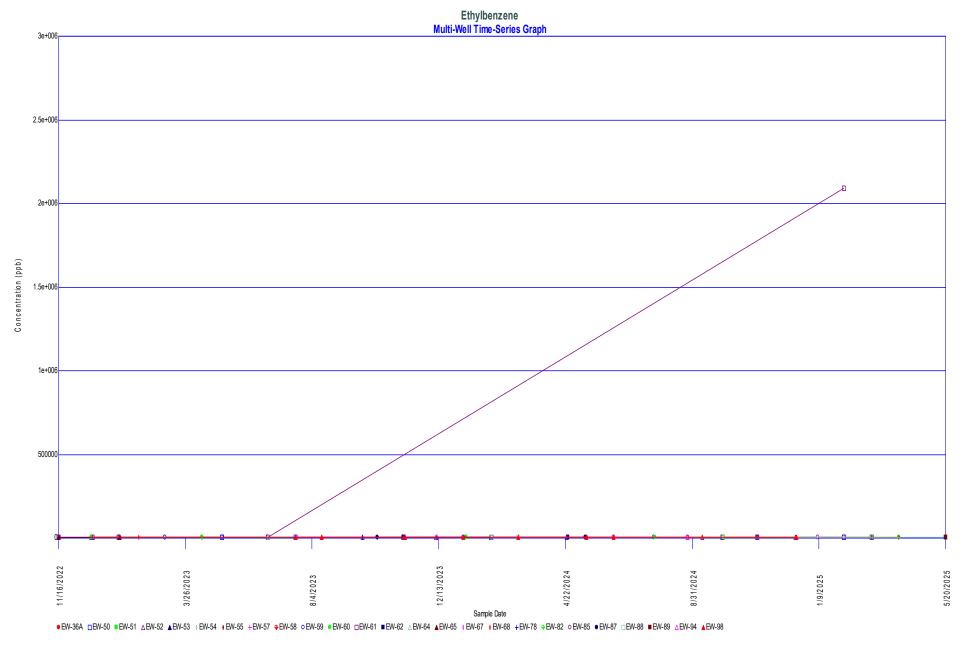


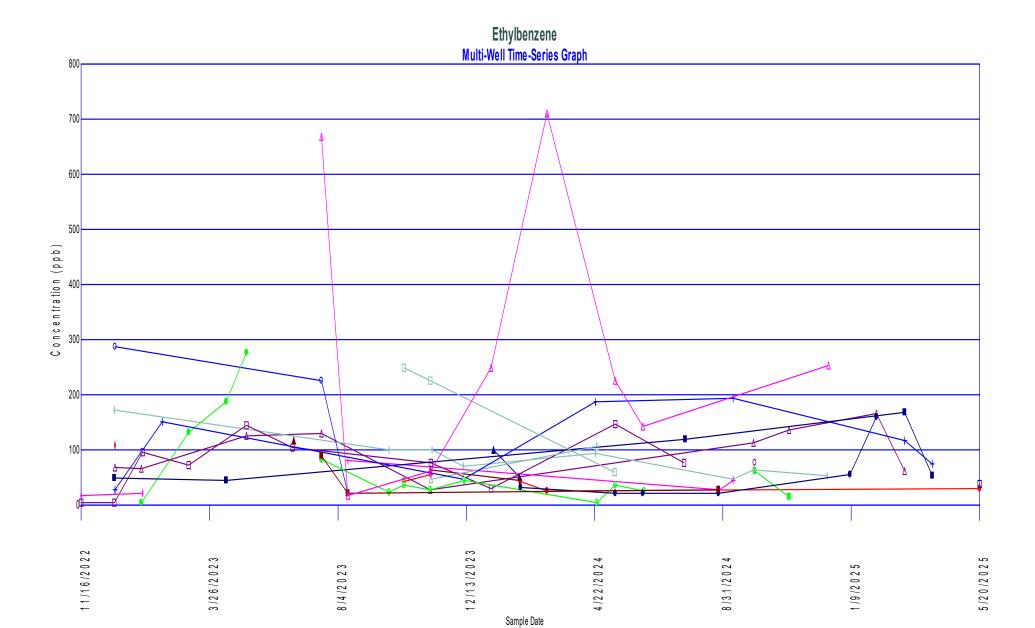




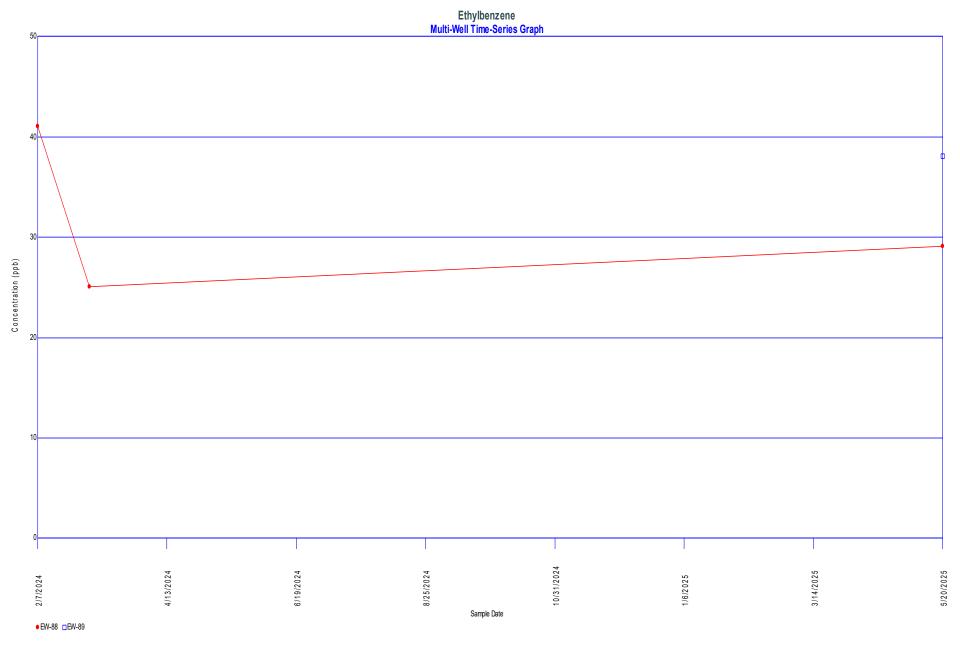


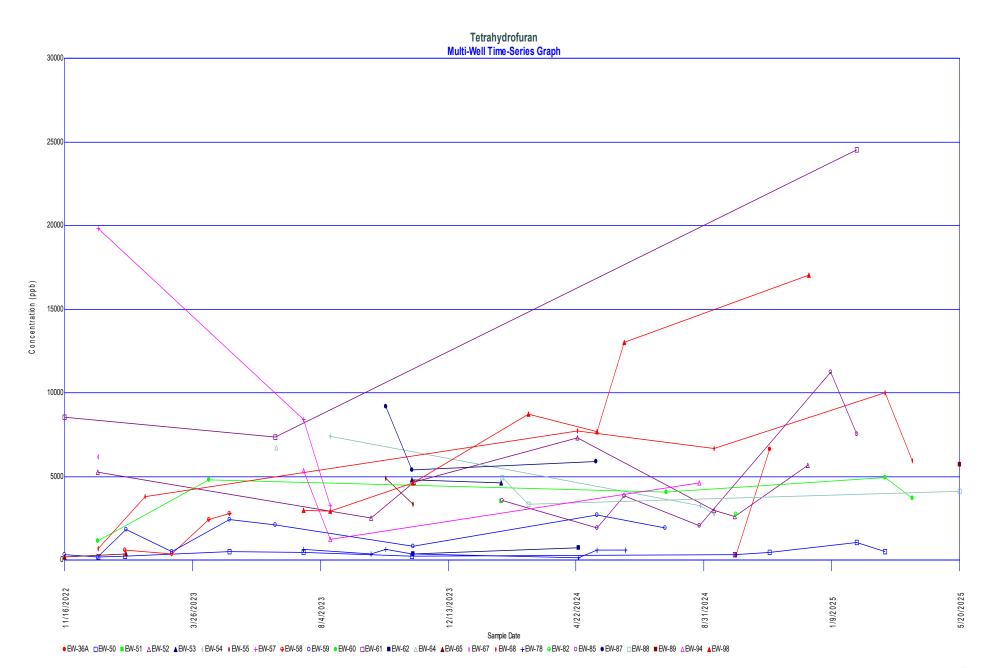


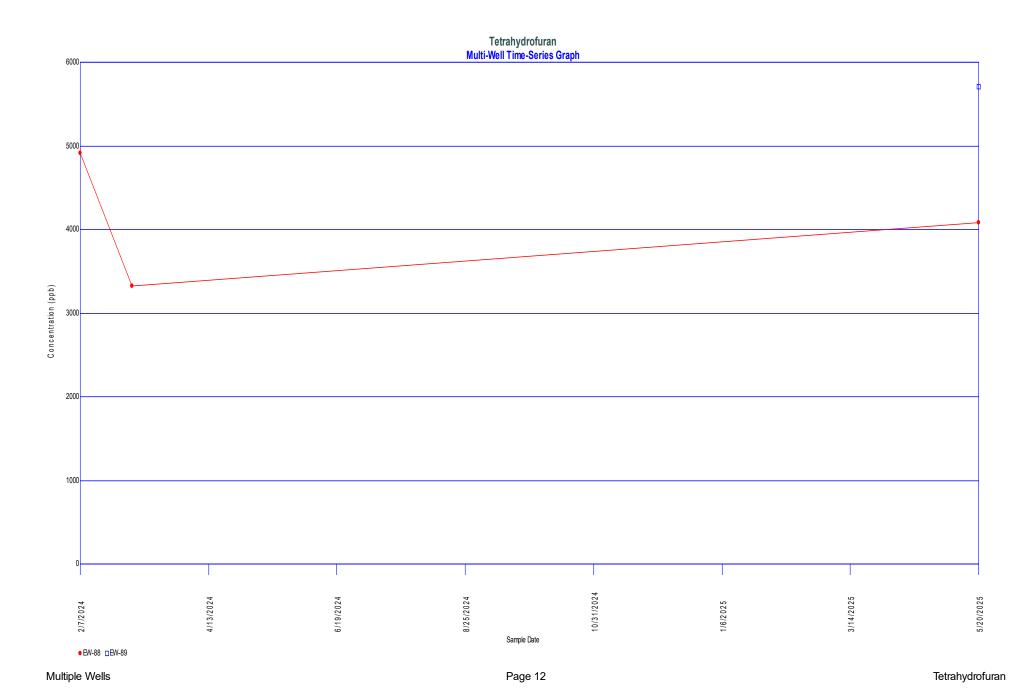


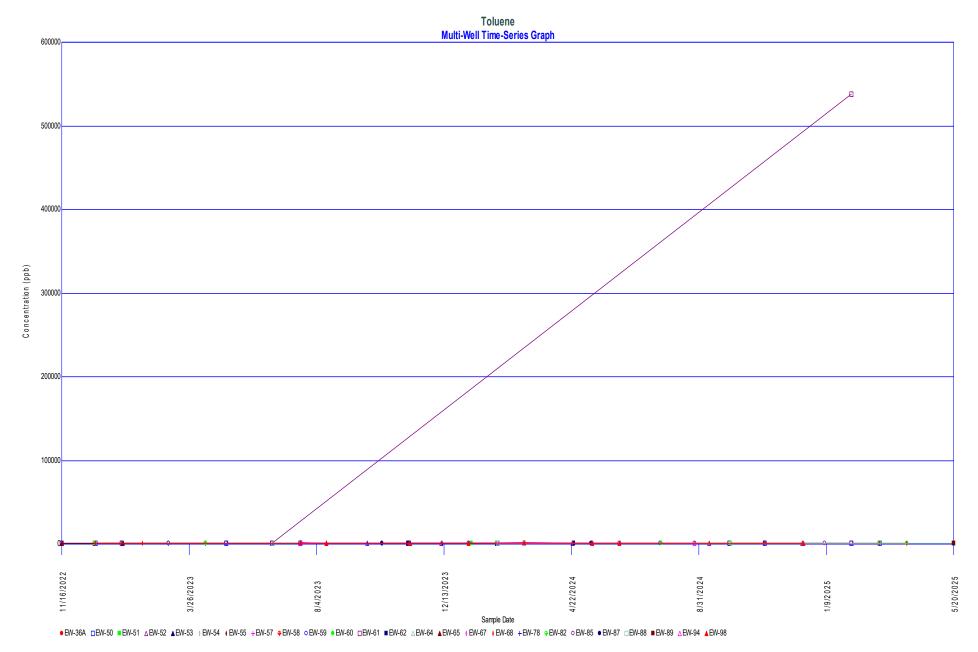


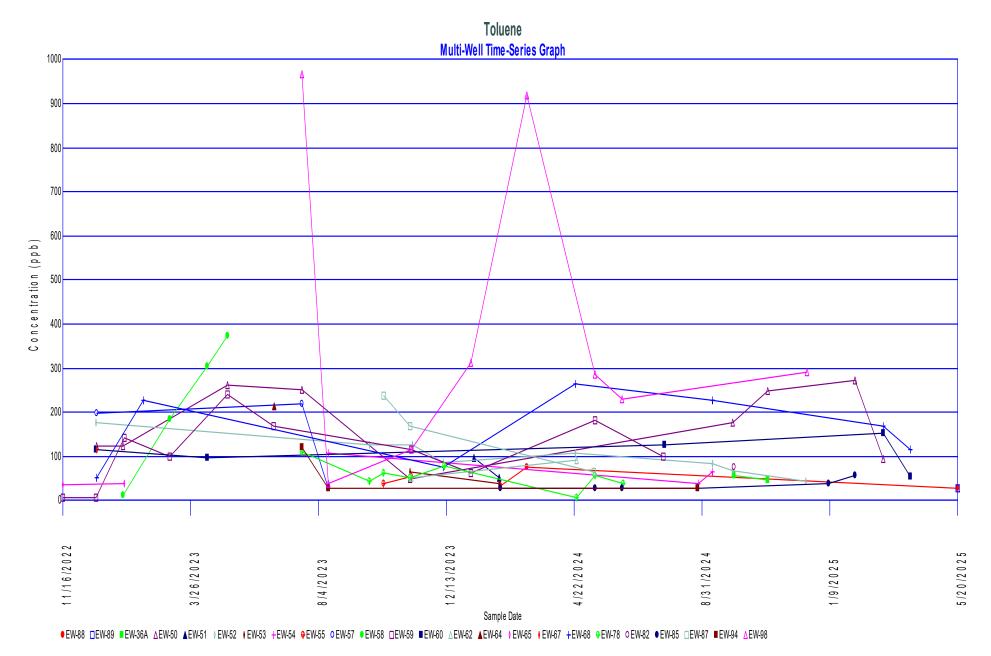
● EW-88 □ EW-89 ■ EW-36A △ EW-50 ▲ EW-51 | EW-52 | EW-53 + EW-53 + EW-54 | EW-55 ○ EW-57 ● EW-55 ○ EW-57 ● EW-59 ■ EW-60 △ EW-62 ▲ EW-64 | EW-65 | EW-67 + EW-68 | EW-67 + EW-68 ○ EW-87 ■ EW-98 □ EW-98

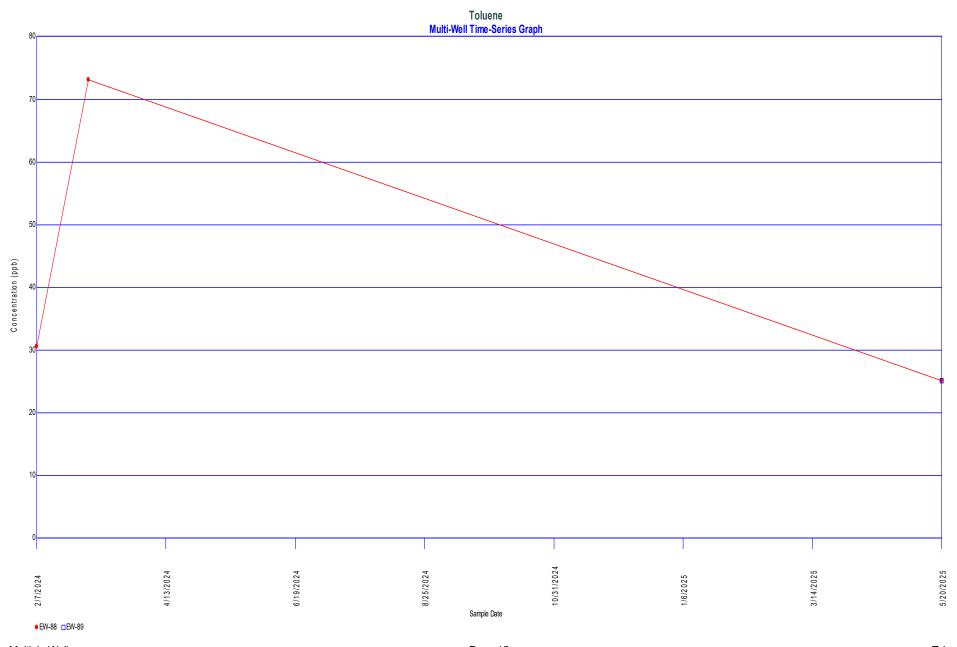


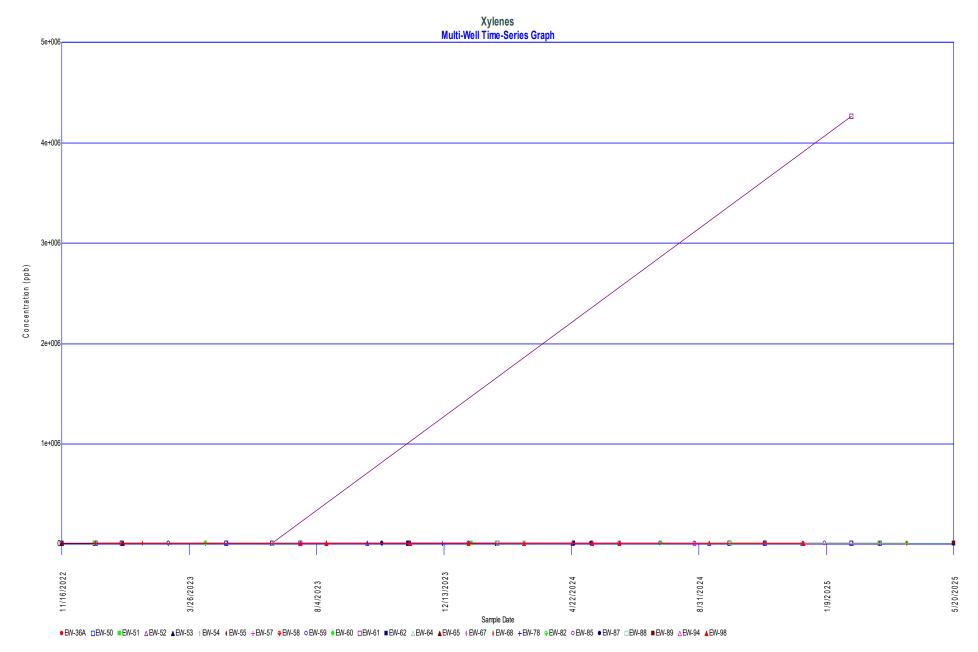


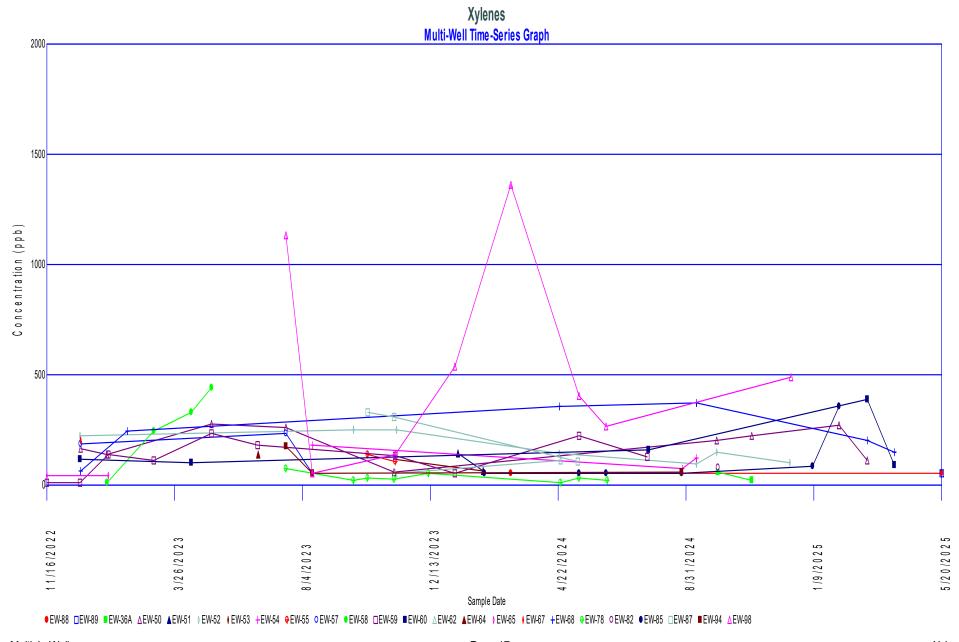


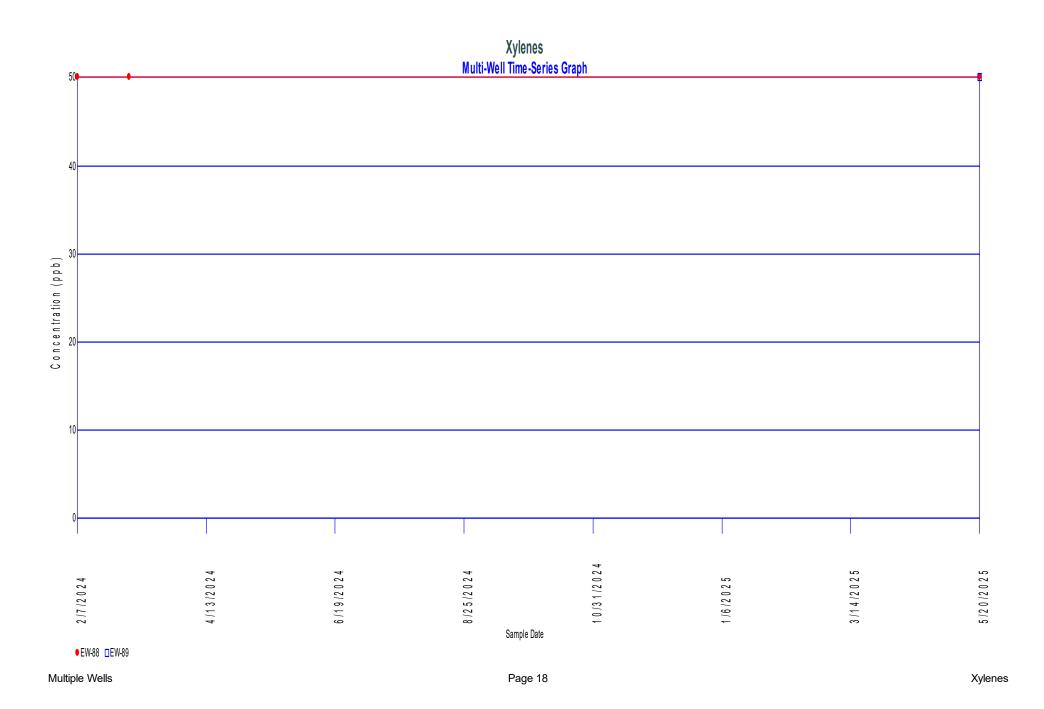












Appendix G

LFG Dewatering Pump Stroke Counter Data Analysis

Stroke Counter Data Analysis

During the monthly liquid depth measurement event and during LFG monitoring, SCS collected stroke counter data from the pumps installed in the GCCS extraction wells. These stroke counts were collected from 25 wells from May 21, 2025 to June 24, 2025. The recorded stroke count data from each well during April are included in Table G-1.

Based on the number of strokes in each well, SCS can estimate the number of gallons of liquid pumped from each well to assess pump performance. 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.

Table G - 1 Summary of Dual Extraction Well Pump Stroke Counter Data

Well	5/21/2025	6/24/2025	# of strokes between measurements	Estimated liquid removed (gallons)
EW33B			-	0
EW36A	459999	459999	-	0
EW49	79565	79565	-	0
EW50	1577699	1577970	271	81
EW52	1239186	1239186	-	0
EW53	3294540	3294540	-	0
EW55	73387	73387	-	0
EW59	3639040	3679152	40,112	12034
EW60	191283	245163	53,880	16164
EW61		103848	52,841	15852
EW62	214599	214599	-	0
EW65	106332	111452	5,120	1536
EW66	35486	38790	3,304	991
EW67	288744	288744	-	0
EW68	2661124	2662091	967	290
EW76			-	0
EW78	54639	77174	22,535	2524
EW82	631288	631288	-	0
EW85	312919	312919	-	0
EW87	340749	340749	-	0
EW88	332881	365317	32,436	3633
EW89	41203	229976	188,773	56632
EW93	1408232	1408232	-	0
EW94	1484006	1642543	158,537	17756
EW98	1886306	1886306	-	0
Total Estimated Liquid Removal				127,493