



**BROOKHAVEN NATIONAL LABORATORY
2025 ENVIRONMENTAL MONITORING
REPORT
CURRENT AND FORMER LANDFILL AREAS**

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February 20, 2026



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**BROOKHAVEN NATIONAL LABORATORY
2025 ENVIRONMENTAL MONITORING REPORT
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Executive Summary

This report documents the Operations and Maintenance (O&M) activities undertaken during calendar year 2025 for the Current Landfill (Area of Concern [AOC] 3) and the Former Landfill Areas. The Former Landfill Areas include the Former Landfill (AOC 2A), Interim Landfill (AOC 2D), and Slit Trench (AOC 2E). Brookhaven National Laboratory is responsible for performing this work to comply with the post-closure O&M requirements specified in 6 New York State Code of Rules and Regulations (6NYCRR) Part 360, Solid Waste Management Facilities, effective December 31, 1988. However, several revisions to 6 NYCRR Part 360 have occurred since 1988 with the most recent revision dated July 22, 2023. The Part 360 Series now includes Parts 360 through 369. The landfill caps are functioning as designed and the 2025 monitoring results are consistent with results from previous years.

GROUNDWATER QUALITY

The groundwater quality at the Current Landfill remains relatively unchanged from 2024. Volatile organic compounds (VOCs) and metals continue to be detected downgradient of the Current Landfill. The most prevalent VOCs detected above New York State Department of Environmental Conservation (NYSDEC) Class GA groundwater guidance values are chloroethane, 1,1-dichloroethane and benzene, at maximum concentrations of 45.5 micrograms per liter ($\mu\text{g/L}$), 19.3 $\mu\text{g/L}$ and 1.7 $\mu\text{g/L}$, respectively. As with previous years, antimony, arsenic, iron, manganese, and sodium were detected downgradient from the Current Landfill at concentrations above applicable standards. Concentrations of these metals were similar to those detected historically. Maximum concentrations of antimony, arsenic, iron, manganese, and sodium in downgradient wells were 7.52 $\mu\text{g/L}$, 16.2 $\mu\text{g/L}$, 81,000 $\mu\text{g/L}$, 3,340 $\mu\text{g/L}$ and 75,600 $\mu\text{g/L}$, respectively. These results are an indicator of continued low-level leachate generation at this landfill. There were no detections of radionuclides above standards at the Current Landfill during 2025 nor have there been since 1998. Detections of 1,4-dioxane above the standard were detected at a maximum of 2.62 $\mu\text{g/L}$. The maximum Perfluorooctane sulfonate (PFOS) value was detected above the standard at a maximum of 40.2 nanograms per liter (ng/L). The maximum Perfluorooctanoic acid (PFOA) value was detected above the standard at a maximum of 13.1 ng/L.

The groundwater monitoring well network for the Current Landfill Area is adequate at this time. VOCs, metals and water quality parameters will continue to be monitored semi-annually but VOCs will be monitored quarterly in wells 088-109 and 098-99. Radionuclides will continue to be monitored annually on wells 087-23, 087-27, 088-109 and 088-21. 1,4-Dioxane and PFAS compounds were added to the list of analytes during 2024 and are expected to remain on the sampling schedule on an annual basis.

The Former Landfill groundwater monitoring program was discontinued in 2020.

SOIL-GAS MONITORING

Soil-gas monitoring at the Current Landfill indicates that decomposition is still occurring. However, as with prior years, there is no indication that the vapors are migrating beyond the monitoring well network. Additionally, at the request of the NYSDEC, an indoor ambient air sample location at the National Weather Service Building (NWS-AIR-1) was added to the soil gas

monitoring on an annual basis. The results of the sample collected during 2025 did not indicate any migration (no measurable amount) of landfill gases within the building. Soil-gas monitoring at the Former Landfill Area indicates that there is no detection of gas emanating from the landfill. The existing soil gas monitoring well networks are sufficient to monitor both landfill areas.

MAINTENANCE AND REPAIR

Monthly inspections and routine maintenance of the cap, drainage channels and wells were performed throughout 2025.

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ACRONYMS

AOC	Area of concern	TOGS	Technical and Operational Guidance Series
BLS	Below Land Surface	TSS	Total suspended solids
BNL	Brookhaven National Laboratory	TVOCs	Total volatile organic compounds
BSA	Brookhaven Science Associates	UEL	Upper explosive limit
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	USEPA	United States Environmental Protection Agency
CY	Calendar year	VOCs	Volatile Organic Compounds
DCS	Derived concentration technical standard	NSLS-II	National Synchrotron Light Source II
DOE	United States Department of Energy		
DQOs	Data quality objectives		
EIMS	Environmental Information Management System		
Ft	Feet		
HWMF	Former Hazardous Waste Management Facility		
LEL	Lower explosive limit		
LLDPE	Linear low-density polyethylene		
µg/L	Micrograms per liter		
mg/L	Milligrams per liter		
mrem	Millirem		
MS/MSD	Matrix spike/matrix spike duplicate		
ng/L	Nanograms per liter		
NPL	National Priorities List		
6NYCRR	6 New York State Code of Rules and Regulations		
NYSDEC	New York State Dept. of Environmental Conservation		
NYSDOH	New York State Department of Health		
O&M	Operations and Maintenance		
OU	Operable Unit		
pCi/L	Picocuries per liter		
PFAS	Per- and polyfluoroalkyl substances		
PFOA	Perfluorooctanoic acid		
PFOS	Perfluorooctane sulfonate		
PPM	Parts per million		
QA/QC	Quality Assurance/Quality Control		
ROD	Record of Decision		
SOP	Standard Operating Procedure		
Sr-90	Strontium 90		
TDS	Total dissolved solids		
TKN	Total Kjeldahl nitrogen		

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1.0 INTRODUCTION

This report documents the Operation and Maintenance (O&M) activities and summarizes monitoring data collected during calendar year (CY) 2025 for the Current Landfill (Area of Concern [AOC] 3) and the Former Landfill Areas (Former Landfill AOC 2A, Interim Landfill AOC 2D, and Slit Trench AOC 2E). Brookhaven National Laboratory (BNL) is responsible for performing this work to comply with the post-closure O&M requirements specified in the 6 New York State Code of Rules and Regulations (6NYCRR) Part 360, Solid Waste Management Facilities, effective December 31, 1988. However, several revisions to 6 NYCRR Part 360 have occurred since 1988 with the most recent version dated July 22, 2023. The 6 NYCRR Part 360 Series now includes Parts 360 through 369. The details of the O&M programs are described in the Final Operations and Maintenance Manuals for the Current Landfill (CDM Federal, 1996a) and the Former Landfill Areas (CDM Federal, 1996c).

The following are the primary objectives of the O&M program:

- Monitor the effectiveness of the impermeable caps in protecting groundwater quality;
- Monitor the potential generation and migration of soil-gas; and
- Maintain and monitor the various components of the closure system (e.g., landfill caps, drainage structures, and environmental monitoring systems).

This is the thirtieth year of O&M for the Current Landfill, the twenty-ninth year for the Former Landfill and Slit Trench, and the twenty-eighth year for the Interim Landfill.

1.1 Site Description and Project Background

BNL is a 5,265-acre site located in central eastern Long Island, New York. The facility is a federally owned and funded international research and learning center managed by Brookhaven Science Associates (BSA) under contract with the United States Department of Energy (DOE). On December 21, 1989, the site was placed on the United States Environmental Protection Agency (USEPA) National Priorities List (NPL), a ranking of hazardous waste sites as part of the

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Placing BNL on the NPL resulted in the establishment of an investigation and remediation task list for various locations around the facility. At the onset of the landfill closures the site was divided into seven separate remediation work areas known as Operable Units (OU). Since the landfill closures, the site has subsequently been divided into ten OUs. The Current Landfill and Former Landfill removal actions were included in OU I, near the south-central portion of the BNL site (**Figure 1**) and their applicable cleanup objectives are specified in the OU I Record of Decision (ROD).

Current Landfill. The Current Landfill consists of one unlined waste-cell that operated from the late 1960s until 1990 for disposing of waste generated at the Laboratory. An impermeable cap system covering the cell was completed in November 1995. The capping system consists of the following: eight-ounce geotextile fabric; one foot of gas venting layer material (screened soil); ten gas vents; a double-sided, textured, 40-mil Linear Low-Density Polyethylene (LLDPE) geomembrane liner; two feet of protection layer material; six inches of topsoil; vegetation; and erosion control blankets on areas with slopes greater than or equal to four percent. Additional information about the cap's construction can be obtained from the *Construction Certification Report for the Current Landfill* (CDM Federal, 1996b). Following the installation of the cap, the post-closure groundwater monitoring program was implemented in January 1996.

Groundwater quality near the Current Landfill is monitored under the O&M program for a wide variety of volatile organic compounds (VOCs), metals, radionuclides, per- and polyfluoroalkyl substances (PFAS), 1,4-dioxane, and water chemistry (landfill leachate) parameters. Monitoring in this vicinity was expanded in 1999 to include a wetland area adjacent to the landfill's eastern boundary. The area shown on **Figure 2**, known as the Wooded Wetland area, is a two-acre wetland located between the Former Hazardous Waste Management Facility (HWMF) and the Current Landfill. The wetland receives surface runoff from the Current Landfill and usually contains standing surface water during the spring/early summer and is dry in late summer/fall. Monitoring of the Wooded Wetland area was incorporated into the Current Landfill Monitoring Program and consisted of sampling and analyzing surface water and sediment annually through 2008, and then every other year to evaluate the potential for leachate migrating into this area, as originally performed under the *OU I Ecological Risk Assessment* (CDM Federal, 1999). In response to information provided in the *2015 Environmental Monitoring Report, Current and Former Landfill*

Areas (BNL, 2016) and additional tiger salamander information provided upon the request of the New York State Department of Environmental Conservation (NYSDEC), it was agreed that further monitoring of the Wooded Wetlands would be limited to visual tiger salamander assessments. Furthermore, it was agreed to that no further sediment and surface water samples will be collected, and care would be taken by BNL to not disturb the buildup of detritus material in the Wooded Wetland.

As required under 6 NYCRR Part 360 Series, groundwater quality must be monitored for a minimum of five years, after which the permittee may request modification of the sampling and analysis requirements. In October 2001, BNL submitted the *Five-Year Evaluation Report for the Current Landfill* (BNL, 2001b). This report assessed groundwater trends over the five years after capping, and proposed changes to the sampling program. These changes were implemented in CY 2002. In July 2006, March 2011, June 2016, and June 2021 BNL issued CERCLA Five-Year Review Reports which discussed all remediation areas at the site, including the Current Landfill (BNL, 2006; BNL, 2011; BNL, 2016; BNL, 2021).

Former Landfill Area. The Former Landfill Area encompasses three closely located landfill units; the Former Landfill, the Slit Trench, and the Interim Landfill. The Former Landfill is an unlined waste-disposal area originally used by the United States Army starting in 1918 and subsequently received waste from Laboratory operations. Waste disposal operations ceased in 1966, and the landfill was covered with soil. The Interim Landfill also is unlined and was reportedly used for approximately one year between the time the Former Landfill was closed, and the Current Landfill was opened. The Slit Trench is unlined as well and is believed to have operated between 1960 and 1967 for disposal of construction and demolition debris (CDM Federal, 1996c).

The Former Landfill and Slit Trench were capped in November 1996 and the Interim Landfill was capped in October 1997. The Former Landfill and Slit Trench cap system consists of eight-ounce geotextile, twelve inches of gas venting material, a 40-mil LLDPE geomembrane liner, eighteen to twenty-four inches of liner protection soil, six inches of topsoil, vegetation, and erosion control fabric. In areas where the slope exceeds 15%, the geomembrane is textured on both sides and the protection layer is twenty-four inches. In the remaining locations, the geomembrane is smooth on both sides and protection layer is eighteen inches. Additionally, the cap is equipped with ten

passive vents. The Interim Landfill cap system consists of eight-ounce geotextile, twelve inches of gas venting material, a 40-mil LLDPE geomembrane liner, eighteen inches of protection soil, six inches of topsoil, vegetation, and erosion control fabric. All of the membrane is of double textured variety, with the protection layer a minimum of eighteen inches thick over the entire landfill. Additionally, the cap is equipped with two passive vents. Additional information about the construction of the caps can be found in the *Construction Certification Report for the Former Landfill* (Roy F. Weston, 1997) and *Construction Certification Report for the Interim Landfill Capping* (P.W. Grosser, 1997). BNL started O&M activities in December 1996 at the Former Landfill and Slit Trench, and in November 1997 at the Interim Landfill. Under this O&M program, groundwater quality in downgradient wells near the Former Landfill was monitored for VOCs, metals, radionuclides, and landfill-leachate parameters.

In March 2002, BNL submitted a *Five-Year Evaluation Report for the Former Landfill* (P.W. Grosser, 2002), which assessed trends in groundwater quality over the five-year period following capping and proposed changes to the sampling program. These changes were implemented in CY 2003. In July 2006, March 2011, June 2016, and June 2021 BNL issued CERCLA Five-Year Review Reports which discussed all remediation areas at the site including the Former Landfill Area (BNL, 2006; BNL, 2011; BNL, 2016; BNL, 2021). With the groundwater data collected during the past two decades as evidence of no continuing impact to groundwater quality, it was recommended in the *2020 Environmental Monitoring Report, Current and Former Landfill Areas* (BNL, 2021) that groundwater monitoring at the Former Landfill be discontinued. With NYSDEC acceptance of the *2020 Environmental Monitoring Report, Current and Former Landfill Areas* (BNL, 2021) Report, these changes were implemented in CY 2021.

1.2 Overview of the Monitoring Program

Groundwater Monitoring

Data quality objectives (DQOs) for each of BNL's groundwater monitoring programs are presented in the *BNL Environmental Monitoring Plan* (BNL, 2025). The design of the data collection network was optimized as part of the process. Such optimization efforts are conducted annually as part of the O&M program and is based on the interpretation of new data as well as

historical trends. The primary DQO decision identified for the landfill monitoring programs is “Are the controls effectively improving groundwater quality below and downgradient of the landfill?”

Groundwater samples are collected from monitoring wells positioned upgradient and downgradient of each landfill area. Analytical data are reviewed, and determinations are made regarding the effectiveness of landfill controls.

The additional monitoring programs for the landfill areas consist of:

Soil-gas Monitoring. Measurements of methane, Lower Explosive Limit (LEL), and hydrogen sulfide are taken quarterly from monitoring locations surrounding the Current Landfill and annually from monitoring locations surrounding the Former Landfill to evaluate the movement of soil-gas from the landfills.

Routine Visual Inspection, Maintenance, and Repair. Monthly inspections are performed to monitor the structural and/or operational status of the landfill caps, drainage structures, and environmental monitoring systems. Semi-annual inspections of the landfills are also performed to ensure that institutional controls continue to be maintained.

Leachate Discharge. Visual inspections of the landfills are performed monthly to monitor for signs of leachate discharge. If observed, samples of the leachate are collected and analyzed. Leachate was not observed during 2025.

These activities are discussed in greater detail in **Sections 2 through 4** of this report. **Section 5** contains the conclusions and recommendations. References are included in **Section 6**.

2.0 GROUNDWATER MONITORING

2.1 Monitoring Well Networks

2.1.1 Current Landfill

Since January 1996, groundwater quality at the Current Landfill has been monitored using eleven downgradient monitoring wells and one background monitoring well. **Figure 2** depicts the location of the monitoring wells. **Figure 3** shows the water table contours for this area in September 2025.

The depths of the screen intervals for the Current Landfill wells and fourth quarter depth to water elevations are listed below.

Well ID	Depth to Water (ft BLS) 4 th Q 2025	Screen Interval (ft BLS)	Screen Zone
087-09*	29.68	24–34	Shallow Upper Glacial
087-11	17.58	11–21	Shallow Upper Glacial
087-23	35.69	25–40	Shallow Upper Glacial
087-24	35.60	70–80	Middle Upper Glacial
087-26	15.94	70–80	Middle Upper Glacial
087-27	16.09	5–20	Shallow Upper Glacial
088-109	14.48	6–21	Shallow Upper Glacial
088-110	16.58	10–25	Shallow Upper Glacial
088-21	11.07	5–20	Shallow Upper Glacial
088-22	11.10	70–80	Middle Upper Glacial
088-23	10.98	120–130	Deep Upper Glacial
098-99	13.12	39.5-49.5	Middle Upper Glacial

Ft BLS = Feet Below Land Surface

*Upgradient well

2.1.2 Former Landfill

Starting in January 1997, groundwater quality at the Former Landfill area was monitored using 14 shallow monitoring wells (three background and 11 downgradient). However, as recommended in the *2020 Environmental Monitoring Report, Current and Former Landfill Areas* (BNL, 2021), groundwater monitoring of the Former Landfill monitoring well network has been discontinued. This change was implemented during CY 2021.

2.1.3 Sampling Frequency and Analytical Parameters

The majority of monitoring wells for the Current Landfill were sampled for VOCs, metals, and water chemistry parameters semi-annually during June and November 2025. A quarterly VOC sampling frequency was maintained for wells 088-109 and 098-99. Samples were collected and analyzed for radionuclides once during 2025 for wells 087-23, 087-27, 088-21, and 088-109. Samples were collected from each of the Current Landfill monitoring wells for 1,4-dioxane and PFAS analysis during the fourth quarter 2025.

The BNL field sampling team conducted the groundwater sampling. General Engineering Laboratories, Inc. (GEL) of Charleston, South Carolina and Eurofins/TestAmerica Laboratories, Inc. analyzed the samples. Groundwater samples were collected using BNL standard operating procedure (SOP) EM-SOP-302, *Groundwater Sampling-Low Flow Purging and Sampling Using Dedicated Bladder Pumps*. See **Table 1** for a summary of analyses performed by monitoring well and sample period.

2.1.4 Quality Assurance / Quality Control

The groundwater samples were collected and analyzed in accordance with BNL's quality assurance/quality control (QA/QC) requirements and the analytical results for groundwater samples collected during 2025 satisfied the data-quality objectives. In addition, a master calibration/maintenance log is maintained for each field-measuring device (e.g., pH, conductivity, and turbidity meters).

The analytical results of samples collected for the Current Landfill project underwent data verification, using EM-SOP-203, *Chemical Data Verification*, and EM-SOP-204, *Radiochemical Data Verification*. These procedures are designed to verify the accuracy and/or completeness of analytical data. The data verification process is implemented to detect the most common analytical problems that affect the quality of the results. To accomplish this task, QA/QC items such as the following were checked: holding times, matrix spikes, laboratory and field blanks, and field logs. If items are found that can affect the use and interpretation of the data, they are either corrected, as in the case of unreadable information on the field logs, or the data are "qualified," as in the case of contamination of the blanks or violations of the holding time.

Specific QA/QC samples are also collected to help ensure the sample data is accurate and defensible. Guidance on the collection of QA/QC samples is contained in BNL procedure EM-SOP-200, *Collection and Frequency of Field Quality Control Samples*. The QA/QC samples collected included trip blanks, field blanks, matrix spike/matrix spike duplicate (MS/MSDs), and blind duplicates.

Trip blanks were analyzed for aqueous VOCs only. One trip blank was shipped to the analytical laboratory with each set of samples submitted for VOC analyses. The results of the trip blank

samples did not indicate significant impact on the quality of the results. One duplicate sample was collected from the Current Landfill during each of the four quarters. No inconsistencies were detected in the blind duplicate analyses. The results were indicative of consistency with contract analytical laboratories and sampling methods, resulting in valid, reproduceable data. Matrix spike/matrix spike duplicate samples were collected at the same frequency as the blind duplicates. Due to lab exceedances of some internal method blank quality control standards, BNL provided a secondary data verification review qualifier on a limited set of analytical data. The data has been qualified for the samples that were affected by this exceedance and subsequently denoted in the respective data tables. The holding time for nitrate and nitrite was exceeded at the analytical laboratory for two wells during the fourth quarter. The qualified data fell within the expected historical range for these wells and did not adversely impact the assessment of groundwater quality.

2.2 Landfill Groundwater Monitoring Results

This section summarizes the 2025 results for VOCs, metals, water-chemistry parameters, radionuclides, 1,4-dioxane, and PFAS detected for the Current Landfill. The historical trends in concentrations of key contaminants were assessed and shown graphically in **Figures 4 through 9**. Summary tables of the 2025 landfill groundwater data are presented in **Tables 2 through 7**. Detections that exceed groundwater standards are presented in bold text. The tables include groundwater standards, laboratory results, reporting limits, minimum detectable concentrations, laboratory data qualifiers, and BNL data verification qualifiers.

The groundwater standards used for evaluating non-radiological groundwater data are those contained in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (June 1998, with addendums April 2000, June 2004 and February 2023) (NYSDEC 1998, 2000, 2004 and 2023) and 6NYCRR Part 703.5. Groundwater standards for radiological isotopes were supplemented with New York State Department of Health (NYSDOH) and USEPA strontium-90 (Sr-90) and tritium standards for drinking water. There were no groundwater standards for the gamma constituents; therefore, a Groundwater Screening Level was used. This value is based on a dose equivalent of 4 millirem (mrem)/year and was calculated as 4% of the DOE Derived Concentration Technical Standards (DCS) (DOE-STD-1196-2021) for the isotope of concern. These values are listed under the

“groundwater standards” column in the summary tables and annotated where appropriate. Laboratory results that exceed the lower of the groundwater standards, or the Cleanup Goals listed in the OUI ROD, are highlighted in the data summary tables to facilitate review of the information.

The laboratory data qualifiers included in the tables vary for the different analyses. Explanations for the data qualifiers are included in the notes section for each table. The complete 2025 laboratory data reports and chain of custody forms were archived and are available upon request. The 2025 Groundwater Sampling Logs are included as **Appendix C**. In addition, analytical results are stored in the BNL Environmental Information Management System (EIMS) database.

2.2.1 Current Landfill

2.2.1.1 Volatile Organic Compounds (VOCs)

Benzene and chloroethane have historically been the primary groundwater contaminants detected downgradient of the Current Landfill. During 2025, benzene was detected above its standard of 1 microgram per liter ($\mu\text{g/L}$) in monitoring wells 087-11 and 088-110, 1,1-dichloroethane was detected above its groundwater standard of 5 $\mu\text{g/L}$ in downgradient monitoring well 088-109, and chloroethane was detected in well 088-109 above its groundwater standard of 5 $\mu\text{g/L}$ (**Table 2**). No other VOCs were detected above their applicable groundwater standards during 2025.

Benzene was detected in two wells, 087-11 and 088-110 above the 1 $\mu\text{g/L}$ standard with concentrations of 1.7 $\mu\text{g/L}$ and 1.2 $\mu\text{g/L}$ respectively. Chloroethane exceeded the 5 $\mu\text{g/L}$ standard in one well, 088-109, in each of the four quarters with concentrations of 17.5 $\mu\text{g/L}$, 17 $\mu\text{g/L}$, 35 $\mu\text{g/L}$ and 45.5 $\mu\text{g/L}$, respectively. These concentrations are significantly below the historic high of 560 $\mu\text{g/L}$ detected in this well in 1998. Well 088-109 also showed detections of 1,1-dichloroethane above the standard of 5 $\mu\text{g/L}$ for each of the four quarters with concentrations of 5.5 $\mu\text{g/L}$, 6.7 $\mu\text{g/L}$, 11 $\mu\text{g/L}$ and 19.3 $\mu\text{g/L}$, respectively. Based upon a review of groundwater elevation data from 2023 through 2025, there appears to be a correlation with water table elevation fluctuations and an increase in VOC concentrations in this well.

Figure 4 plots the concentration trends of total VOCs (TVOCs), benzene and chloroethane. Overall, the trend plots show a distinct decrease in VOC concentrations from the high concentrations detected prior to the installation of the cap. This reflects the positive effects of the

capping on the groundwater quality downgradient of the landfill. During 2025, well 088-109 has shown VOC concentrations increasing during the year. The long-term historical trend on this well shows fluctuating levels of VOCs and the range observed during 2025 remains within the previously observed concentrations.

2.2.1.2 Water Chemistry Parameters

Groundwater samples at the Current Landfill were analyzed semi-annually (annually 088-22 and 088-23) for ammonia, total Kjeldahl nitrogen (TKN), cyanide, sulfate, nitrite, nitrate, total nitrogen, chloride, alkalinity, total dissolved solids (TDS or residue, nonfilterable), and total suspended solids (TSS or residue, filterable) during 2025. The results are provided in **Table 3**. Elevated levels of these parameters can be indicative of the presence of landfill leachate. A comparison of downgradient and background wells shows that leachate continues to be generated from the Current Landfill, albeit at low concentrations. The continued detection of these contaminant indicators is likely due to the shallow depth of groundwater relative to the bottom of the landfilled materials. However, the establishment of stable water chemistry concentration levels indicates that the capping continues to effectively reduce the generation and migration of leachate.

During 2025, ammonia was the only water chemistry parameter detected above standards. Ammonia was detected above the standard of 2 milligrams per liter (mg/L) in wells 087-11 and 088-109. The highest concentration was observed in well 087-11 at a value of 3.99 mg/L in June 2025 (**Table 3**). The levels of ammonia detected in downgradient wells are consistent with historic data.

Chloride was not detected above the standard of 250 mg/L during 2025. Downgradient well 088-21 had the highest concentration of chloride at 111 mg/L. **Figure 5** plots the trends for alkalinity and chloride. The trend graphs show low levels of chloride concentrations near the Current Landfill. The historical concentration trends show overall stable levels of chloride, apart from 087-24 and 087-26 which show a slight overall upward trend.

Alkalinity is the measurement of a body of waters ability to neutralize acids and bases and is directly related to the ratio of bicarbonate, carbonate and hydroxyl anions, and is often used as an indicator of leachate contamination. The alkalinity in background well 087-09 ranged from 21.9 mg/L to 36.6 mg/L. The highest alkalinity concentration during 2025 was detected in

downgradient, shallow Upper Glacial aquifer well 087-11 at 150 mg/L. There is no groundwater standard for alkalinity. The historical concentration trends plotted in **Figure 5** show overall stable to decreasing levels of alkalinity, apart from 087-24 and 087-26 which are showing a slight upward trend.

During 2025, the concentration of sulfate remained below the groundwater standard of 250 mg/L. The highest sulfate value detected was 17.3 mg/L in June 2025 from monitoring well 088-110. This is consistent with historic background levels at the Current Landfill.

Total dissolved solids and Total Suspended Solids results were similar to those from previous years. Total dissolved solid concentrations in upgradient well 087-09 ranged from 11.5 mg/L to 113 mg/L. Total suspended solid concentrations ranged from non-detect to an estimated 1.7 mg/L for well 087-09. The maximum concentrations observed in downgradient wells were 239 mg/L and 95 mg/L of TDS and TSS, respectively.

No water chemistry parameters have exceeded groundwater standards in downgradient wells 087-24, 088-22, and 088-23, since 1998. These wells are all screened in the mid to deep-Upper Glacial aquifer to monitor the vertical extent of contamination from the Current Landfill.

2.2.1.3 Metals

Historically, iron is detected consistently above groundwater standards in the upgradient well, and the majority of downgradient wells surrounding the landfill. Historically, precipitated iron from the BNL Water Treatment Plant was disposed of at the Current Landfill during past operations. However, metals concentrations in upgradient well 087-09 are still lower than in several downgradient wells, suggesting continued leachate migration from the landfill into groundwater.

During 2025, chromium, iron, sodium and thallium exceeded the groundwater standard in upgradient well 087-09. Antimony, arsenic, iron, manganese, and sodium exceeded their respective groundwater standards in several downgradient wells (**Table 4**).

Antimony was reported above the standard of 3 µg/L in downgradient well 088-109, with a concentration of 7.52 µg/L. These results are consistent with sporadic results reported historically for several Current Landfill wells, including upgradient well 087-09. These sporadic results do not represent continuous or ongoing antimony releases from the landfill.

Arsenic was reported above the standard of 10 µg/L in wells 087-11, 087-23 and 088-110 at a maximum concentration of 16.2 µg/L in well 087-23. Arsenic detections have historically been observed at similar concentrations in Current Landfill wells.

Chromium was reported above the standard of 50 µg/L in upgradient well 087-09, at a concentration of 115 µg/L. Historical data shows consistent exceedances of chromium within this well. Monitoring well 087-09 is constructed of stainless-steel casing and screen. The use of chromium in manufacturing stainless-steel alloys could be the source of the detections within this well. However, chromium was not detected above the standard in any of the downgradient wells.

Iron was reported above the standard of 300 µg/L in wells 087-09, 087-11, 087-23, 087-27, 088-109, and 088-110. The maximum concentration of iron detected in upgradient well 087-09 was 488 µg/L, while downgradient concentrations ranged from non-detect to a maximum of 81,000 µg/L observed in well 087-11. Well 087-11 has shown fluctuating elevated iron concentrations since the fourth quarter of 2017. Iron trend graphs are plotted on **Figure 6**.

Manganese was detected above the standard of 300 µg/L in wells 087-11, 087-23, 087-27, 088-109, and 088-110. Manganese was detected at a maximum concentration of 3,340 µg/L in the downgradient well 088-110.

Sodium was detected above the standard of 20,000 µg/L in wells 087-09, 087-24, 087-26, 087-27, 088-21, 088-22, and 088-110. Upgradient well 087-09 had a maximum sodium concentration of 34,600 µg/L. Downgradient sodium concentrations ranged from 6,520 µg/L in well 087-11 to 75,600 µg/L in well 088-21.

Thallium was detected above the standard of 0.5 µg/L in upgradient well 087-09 at a maximum concentration of 0.633 µg/L. Thallium was not detected in any of the remaining monitoring wells during 2025.

2.2.1.4 Radionuclides

No Sr-90, tritium, or gamma constituents were detected above groundwater standards during 2025 as shown in **Table 5**. As noted in **Section 2.2**, there are no groundwater standards for the gamma constituents; therefore, a groundwater screening level was used for comparison purposes and annotated where appropriate. Tritium and Sr-90 were not detected during 2025. The last time tritium was detected was in well 087-27 at a concentration of 318 picocuries per liter (pCi/L) in December of 2015. This is significantly below the groundwater standard of 20,000 pCi/L. **Figure 7** shows the historical Sr-90 and tritium concentration trends for the four wells sampled.

2.2.1.5 1,4-Dioxane

1,4-Dioxane was added in February 2023 as an addendum to the NYSDEC Division of Water TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values with a guidance value of 0.35 µg/L. Brookhaven National Lab added 1,4-dioxane to the list of analytes to be analyzed for in each of the twelve Current Landfill wells on an annual basis beginning in 2024. The analytical data are presented in **Table 6**.

1,4-Dioxane was detected above the standard of 0.35 µg/L in wells 087-11, 087-27, 088-23, 088-109, 088-110 and 098-99. 1,4-Dioxane was not detected in upgradient well 087-09. The highest concentration of 1,4-dioxane was detected in downgradient well 088-23 at 2.62 µg/L. 1,4-Dioxane concentration trend graphs have been included as **Figure 8**.

2.2.1.6 Per- and Polyfluoroalkyl Substances (PFAS)

Guidance values for Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) were added in February 2023 as an addendum to the NYSDEC Division of Water TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values. The guidance values for PFOS and PFOA are 2.7 nanograms per liter (ng/L) and 6.7 ng/L, respectively. Brookhaven National Laboratory added PFAS to the list of analytes for in each of the twelve Current Landfill wells on an annual basis beginning in 2024. The analytical data are presented in **Table 7**.

PFOS was detected above the standard of 2.7 ng/L in downgradient wells 087-24, 087-26, 088-22, and 098-99. PFOS was not detected in upgradient well 087-09. The maximum PFOS concentration was detected in downgradient well 087-26 at a concentration of 40.2 ng/L.

PFOA was detected above the standard of 6.7 ng/L in well 087-27 at a concentration of 13.1 ng/L (Table 7).

PFOS and PFOA concentration trend graphs are presented on Figure 9.

2.2.2 Former Landfill

As recommended in the *2020 Environmental Monitoring Report, Current and Former Landfill Areas* (BNL 2021), groundwater monitoring of the Former Landfill monitoring well network has been discontinued.

3.0 SOIL-GAS MONITORING

3.1 Soil-gas Monitoring Networks

Soil-gas readings were collected from soil-gas surveillance wells surrounding the Current Landfill in March, June, September, and December 2025. Ambient air screening was performed within the National Weather Service (NWS) office building northwest of the Current Landfill in March 2025. Soil-gas readings were collected from soil-gas surveillance wells at the Former Landfill in August 2025. Methane, LEL, and hydrogen sulfide were measured using a Landtec® GEM5000. The LEL for methane is 5.3% and the upper explosive limit (UEL) is 15%.

3.1.1 Current Landfill

Along the perimeter of the Current Landfill, 58 points were sampled for soil-gas, which includes four outpost soil-gas well clusters, GSGM-1 to GSGM-4, located along the south side of Brookhaven Avenue (**Figure 10**). The sampling points include 12 soil-gas well clusters consisting of three sampling intervals per cluster, and 11 soil-gas well couplets consisting of two sampling intervals per couplet. In response to the *2024 Environmental Monitoring Report, Current and Former Landfill Areas* (BNL, 2025), the NYSDEC requested that future reports include measurements of ambient air inside the NWS office building located 480 feet northwest of the Current Landfill using a Landtec® GEM5000 or similar. Soil-gas readings for 2025 are provided in **Table 8**.

3.1.2 Former Landfill Area

Twenty-four soil-gas sampling points were monitored for the Former Landfill Area. These points include 12 well couplets consisting of two sampling points per couplet. Details of each soil-gas well are provided in **Table 8** and their locations shown on **Figure 11**.

3.1.3 Sampling Frequency

Soil-gas was monitored for each landfill in the following months.

Sampling Event	Current Landfill	Former Landfill
Round 1	March 2025	August 2025
Round 2	June 2025	None

Round 3	September 2025	None
Round 4	December 2025	None

3.2 Results of Soil-Gas Monitoring

Action levels for soil-gas are specified in 6 NYCRR Part 363-7.1(e) in terms of percent LEL, which is primarily related to the amount of methane present. This discussion focuses primarily on the methane levels. Hydrogen sulfide is monitored but has no regulatory action level. 6 NYCRR Part 363-7.1(e) specifies that active measures to control decomposition gases are required when the concentration of methane or other explosive gases exceeds 25 percent (%) of the LEL (or 1.3% methane) in facility structures, or 100% of the LEL (or 5.3% methane) at the site boundary.

3.2.1 Current Landfill

A total of 23 soil-gas monitoring well clusters are positioned around the Current Landfill (**Figure 10**) and were sampled quarterly during 2025. There are no potential receptors or occupied structures in the immediate area near the Current Landfill where methane can accumulate. The NWS office building located 480 feet northwest of the Current Landfill on the north side of Brookhaven Avenue is the closest occupied structure. As mentioned in **Section 3.1**, during 2025, indoor ambient air measurements were conducted inside the NWS office building per the request of the NYSDEC. Four outpost soil-gas locations, GSGM-1 to GSGM-4, are located north of the landfill along the south side of Brookhaven Avenue and are used to monitor the expected northern extent landfill gas migration. Should methane extend to the south side of Brookhaven Avenue at concentrations exceeding 25% of the LEL (or 1.3% methane), active measures may be required to control its migration. This is a BNL administrative limit that would trigger further evaluation.

The results of the soil-gas monitoring for 2025 are summarized in **Table 9**. **Appendix A** contains the field notes recorded during the sampling events. Instrument measurements show that methane continues to be generated in several areas of the landfill. The percent of the LEL is elevated along the western side and the southeast boundary of the Current Landfill. In addition, SGMW-19B along the northern side of the landfill had elevated LEL readings in two of the four quarterly sampling events. The LEL readings in these areas have remained stable since 1996 when

monitoring began. The current gas venting system appears to be effective in controlling gas accumulation. These data are consistent with previous years.

Outpost wells, GSGM-1 through GSGM-4, located along the south side of Brookhaven Avenue and immediately upgradient of the landfill showed no methane during 2025. This indicates that the methane accumulation and migration does not extend to this area.

Hydrogen sulfide is a product of anaerobic decay in landfills and can produce an odor like rotten eggs. It is a nuisance, but rarely a toxicity problem. For reference, the National Institute of Occupational Safety and Health sets an exposure limit of 10 parts per million (ppm) hydrogen sulfide in the breathing zone for an 8-hour period.

Hydrogen sulfide measurements collected from the soil-gas monitoring wells ranged from 0 ppm to 190 ppm. Well SGMW-15B, located along the eastern section of the landfill, had the highest hydrogen sulfide concentration of 190 ppm, which was above the 10 ppm exposure limit. However, the measurement was taken from a vapor point screened 8.5 to 11.5 ft below land surface (bls), and not from the ambient breathing zone. Elevated hydrogen sulfide was also detected in well SGMW-12A south of the landfill, which is screened 2.5 to 7.5 ft bls at a concentration of 45 ppm. Like methane, receptors to hydrogen sulfide are considered to be in areas such as basements where the gas can accumulate. Based upon the readings obtained from the outpost soil-gas wells along the south side of Brookhaven Avenue (GSGM-1 to GSGM-4), there is no evidence that hydrogen sulfide is migrating toward the NWS building. Additionally, the indoor ambient air measurement collected at the NWS office building (NWS-AIR-1) did not indicate the presence of landfill gases. Starting in 2025, annual air measurements collected at NWS-AIR-1 and results will be included in the annual Environmental Monitoring Report, Current and Former Landfill Areas.

3.2.1.1 Trend in Soil-Gas Data

Historically, the levels of methane and hydrogen sulfide in the soil-gas wells positioned along the northwest boundary and southeast corner of the Current Landfill have remained elevated but stable.

3.2.2 Former Landfill Area

A total of 12 soil-gas monitoring well clusters are positioned around the Former Landfill Area (**Figure 11**). During 2025, the well clusters were monitored once, in August. There are no occupied structures in the immediate vicinity of the landfill area. The closest downgradient operating facility is Building 670, located approximately 650 feet to the southeast. This building houses the Chemical Holes Sr-90 groundwater treatment system and monitoring equipment for the adjacent solar array. This facility does not have a basement and is generally unoccupied except for brief periods for monitoring or maintenance of equipment. The closest upgradient operating facility is the National Synchrotron Light Source II (NSLS-II) located approximately 430 feet to the northwest and based upon decades of non-detectible results of landfill soil-gas measurements in upgradient SGMW-1 and all the remaining soil-gas points, migration of landfill associated methane or hydrogen sulfide into NSLS-II is not probable. Based upon the 2025 sampling events, there was no methane or hydrogen sulfide detected in any of the soil-gas wells (**Table 10**). **Appendix A** contains the field notes recorded during the sampling events.

3.2.2.1 Trends in Soil-Gas Data

The 2025 soil-gas monitoring results for the Former Landfill Area are consistent with the initial survey of the methane gas migration conducted in 1995, during which concentrations between 0% to 0.1% methane were recorded. Methane has not been detected since 2005. Although hydrogen sulfide gas was measured during this initial survey it has not been detected since 2010. The age of the Former Landfill and the types of materials disposed of would likely result in low levels, or the absence of methane or hydrogen sulfide.

4.0 MAINTENANCE AND REPAIR

Monthly site inspections were performed by BNL at the Current and Former Landfill areas to monitor the structural and/or operational status of the landfill cap, gas vents, drainage structure, fences and environmental monitoring system (groundwater wells, soil-gas wells) in accordance with the O&M Manuals. A copy of the inspection reports and photos taken during inspections is included in **Appendix B**. Maintenance and repair work completed by BNL is discussed below.

4.1 Landfill Cap and Gas Vents

To prevent ruts in the landfills caused by the weight of the lawn mowers during periods of above normal precipitation, grass cutting is typically only conducted when soil conditions are optimal. During 2025, the grass at the Current and Former Landfills was cut during May and September. Several animal burrows at the Current Landfill were filled in throughout 2025. Photos of these areas have been included in **Appendix B**. The burrows did not penetrate past the protection layer of the cap.

4.2 Drainage Structures

The drainage structures at both the Current and Former Landfill areas were maintained. They were observed to be operational and structurally sound during the site inspections. Small pine seedlings and weeds were noted growing in the drainage channels of both landfills during various times of the year. Therefore, manual removal of small pine seedlings around drainage channels occurred throughout 2025. The weeds died off as cold weather set in. If they grow back in sufficient numbers, they will either be cut back or sprayed with herbicide.

4.3 Environmental Monitoring System

The monitoring wells and soil-gas monitoring wells associated with the landfills required no significant maintenance. Access to the soil-gas monitoring wells was cleared via mechanical weed whacking prior to each sampling event.

4.4 Related Structures

No structures other than those described above required maintenance during 2025.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Groundwater Monitoring

5.1.1 *Conclusions for the Current Landfill*

- Although low levels of contaminants continue to be detected, the landfill controls are effective at reducing the impact of the Current Landfill on groundwater quality.
- Benzene was detected in downgradient wells 087-11 and 088-110 at concentrations slightly above the groundwater standard with a maximum concentration of 1.7 µg/L in well 087-11. The other VOCs detected above the groundwater standard were chloroethane and 1,1-dichloroethane. 1,1-Dichloroethane was detected above the standard in monitoring well 088-109 with a maximum concentration of 19.3 µg/L. Chloroethane was detected in one well 088-109 above the groundwater standard at a maximum concentration of 45.5 µg/L. Although VOCs continue to be detected in downgradient wells, an analysis of the trends of VOCs indicate the concentrations are stable, or decreasing, apart from well 088-109 which has shown VOC concentrations increasing during the year. Based upon long-term trends, the VOC concentrations remain within the expected range. These VOCs are naturally attenuating as they migrate south, as shown by groundwater monitoring, and are not detected at the site boundary above the drinking water standard.
- Concentrations of landfill water chemistry parameters and metals, such as ammonia and iron, in several downgradient wells were above the upgradient values. This suggests that leachate continues to emanate from the landfill into groundwater. Ammonia was the only water chemistry parameter detected above the standard, in downgradient wells 087-11 and 088-109, at a maximum concentration of 3.99 mg/L.
- Concentrations of antimony, arsenic, iron, manganese, and sodium in several downgradient wells were detected above their respective groundwater standards. Chromium, iron, sodium, and thallium were also detected in upgradient well 087-09. These parameters and

concentrations are consistent with historic values, and the chromium values may be related to the stainless-steel well casing and screen.

- Tritium and Sr-90 were not detected in any of the monitoring wells sampled during 2025. There have been no detections of radionuclides above the drinking water standards since 1998.

5.1.2 Recommendations for the Current Landfill

- The monitoring well network for the Current Landfill is adequate, and no changes to the sampling frequency or analytical parameters are recommended at this time. 1,4-Dioxane and PFAS were added to the list of analytes during 2024 and will continue to be sampled on an annual basis.

5.2 Soil-Gas Monitoring

5.2.1 Conclusions for the Current Landfill

- Methane and/or hydrogen sulfide levels in wells located along the west landfill boundary, north landfill boundary and southeast corner have remained stable and have not shown any significant increases or decreases over time. No gas migration has been observed this year at the outpost soil-gas wells along Brookhaven Avenue. Additionally, the indoor ambient air measurement collected at the NWS office building (NWS-AIR-1) did not indicate the presence of landfill gases.

5.2.2 Recommendations for the Current Landfill

- The soil-gas monitoring program is adequate, and no changes are recommended.

5.2.3 Conclusions for the Former Landfill Area

- Monitoring at the Former Landfill Area continues to show no detectable levels of methane or hydrogen sulfide. Methane has not been detected at or above standards since monitoring began in 1996.

5.2.4 Recommendations for the Former Landfill Area

- The soil-gas monitoring program is adequate and no changes are recommended.

5.3 Maintenance and Repair

- Maintenance of the landfill caps will continue in accordance with the O&M requirements.

5.3.1 *Current Landfill*

- Monthly inspections and maintenance will continue in accordance with the O&M requirements. Access to the soil-gas monitoring wells will continue to be cleared via mechanical weed whacking. Continued removal of small pines and weeds in the drainage channel during 2026.

5.3.2 *Former Landfill Area*

- Monthly inspections and maintenance will continue in accordance with the O&M requirements. Access to the soil-gas monitoring wells will continue to be cleared via mechanical weed whacking. Continued removal of small pines and weeds in the drainage channel during 2026.

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Table 1

2025 Analytical Requirements for Groundwater Samples

Well ID	Project 1	Project 2	Decision Subunit	EPA 8260 Low Level VOCs	Pesticides Method 608	PCBs Method 608	TSS/TDS	Sulfates/Chloride/Alkalinity	TK Nitrogen	Total Nitrogen	Nitrates	Nitrites	Ammonia	TAL Metals	Cyanide	EPA 901 Gamma Spec	EPA 906 Tritium	EPA 905 Sr 90	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Frequency (events/year)	
087-09	CLF		Background	X ^b			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b					X ^a	X ^a	2b
087-11	CLF		Downgradient	X ^b			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b					X ^a	X ^a	2b
087-23	CLF		Downgradient	X ^b			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^a	X ^a	X ^a		X ^a	X ^a	2b
087-24	CLF		Downgradient	X ^a			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b					X ^a	X ^a	2b
087-26	CLF		Downgradient	X ^b			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b					X ^a	X ^a	2b
087-27	CLF		Downgradient	X ^b			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^a	X ^a	X ^a		X ^a	X ^a	2b
088-109	CLF		Downgradient	X			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^a	X ^a	X ^a		X ^a	X ^a	4
088-110	CLF		Downgradient	X ^b			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b					X ^a	X ^a	2b
088-21	CLF		Downgradient	X ^b			X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^b	X ^a	X ^a	X ^a		X ^a	X ^a	2b
088-22	CLF		Downgradient	X ^a			X ^a	X ^a	X ^a	X ^a	X ^a	X ^a	X ^a	X ^a	X ^a					X ^a	X ^a	1a
088-23	CLF		Downgradient	X ^a			X ^a	X ^a	X ^a	X ^a	X ^a	X ^a	X ^a	X ^a	X ^a					X ^a	X ^a	1a
098-99	CLF	OU I (South Boundary)	Downgradient	X																X ^a	X ^a	4

NOTES:

a: Collect in 4th Quarter only.

b: Collect in 2nd and 4th Quarters.

Table 2
Current Landfill - Summary of 2025 Volatile Organic Compound Data.

Analyte	Groundwater Standards (ug/L)	087-09		087-09		087-11		087-11		087-23		087-23		087-24			
		6/3/2025	11/12/2025	6/4/2025	11/25/2025	6/4/2025	11/24/2025	11/24/2025	6/3/2025	11/12/2025	6/4/2025	11/24/2025	11/24/2025	6/3/2025	11/12/2025	6/4/2025	11/24/2025
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
1,1,1,2-Tetrachloroethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Tetrachloroethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	1	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.04	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.6	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	1	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	1	0.5	U	1	U	1.66		0.78	J	0.55	J	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl	5	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	--	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	50	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	50	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	5	0.5	U	1	U	1.44		0.51	J	1.12		0.49	J	0.5	U	0.5	U
Chloroform	7	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.38	J
cis-1,2-Dichloroethylene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.4	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.04	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.05	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	3	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	5	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	10	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	5	1.59	J*	5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	10	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	5	0.5	U	1	U	0.5	U	0.5	U	0.37	J	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	3	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	3	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.4	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	5	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	2	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	5	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	--	1.59		0		3.1		1.29		2.04		0.49		0.38			

U: Analyte was analyzed for, but not detected above the MDL.

J: Value is estimated.

R: A rejected result; the data is rejected, not usable, and unreliable.

Bold/Shaded: Value exceeds Standard/Guidance Value.

*: Data qualified during secondary data verification review by BNL.

Table 2
Current Landfill - Summary of 2025 Volatile Organic Compound Data.

Analyte	Groundwater Standards (ug/L)	087-26		087-26		087-27		087-27		088-109		088-109		088-109	
		6/3/2025	11/13/2025	6/3/2025	11/13/2025	6/3/2025	11/13/2025	3/13/2025	6/3/2025	9/19/2025	6/3/2025	9/19/2025	6/3/2025	9/19/2025	
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
1,1,1,2-Tetrachloroethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U		
1,1,1-Trichloroethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U		
1,1,2-Tetrachloroethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U		
1,1,2-Trichloroethane	1	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U		
1,1-Dichloroethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	5.51	6.68	11					
1,1-Dichloroethylene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
1,1-Dichloropropene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
1,2,3-Trichlorobenzene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
1,2,3-Trichloropropane	0.04	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
1,2,4-Trichlorobenzene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
1,2-Dichloroethane	0.6	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
1,2-Dichloropropane	1	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
1,3-Dichloropropane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
2,2-Dichloropropane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Benzene	1	0.5 U	1 U	0.69 J	0.78 J	0.39 J	0.35 J	0.82 J							
Benzene, 1,2,4-trimethyl	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Benzene, 1,3,5-trimethyl	5	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	2 U	1 U		
Benzene, 1-methylethyl-	--	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Bromobenzene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Bromodichloromethane	50	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Bromoform	50	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Carbon tetrachloride	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Chlorobenzene	5	0.5 U	1 U	0.5 U	1 U	0.76 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Chlorobromomethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Chloroethane	5	0.5 U	1 U	0.5 U	1 U	0.63 J	17.5	17	35						
Chloroform	7	4.82	3.7	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
cis-1,2-Dichloroethylene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
cis-1,3-Dichloropropene	0.4	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Cymene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
DBCP	0.04	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Dibromochloromethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Dibromomethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Dichlorodifluoromethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
EDB	0.05	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Ethene, 1,2-dichloro-, (E)-	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Ethylbenzene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Hexachlorobutadiene	0.5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
m-Dichlorobenzene	3	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
m/p xylene	5	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	2 U	1 U		
Methyl bromide	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Methyl chloride	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Methyl tert-butyl ether	10	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Methylene chloride	5	1.56 J*	5 U	1.74 J*	5 U	1 U	0.5 U	0.5 U	1.75 J*	5 U					
n-Butylbenzene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
n-Propylbenzene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Naphthalene	10	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
o-Chlorotoluene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
o-Dichlorobenzene	3	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
o-Xylene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
p-Chlorotoluene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
p-Dichlorobenzene	3	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
sec-Butylbenzene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Styrene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
tert-Butylbenzene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Tetrachloroethylene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Toluene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
trans-1,3-Dichloropropene	0.4	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Trichloroethylene	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Trichlorofluoromethane	5	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Vinyl chloride	2	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U		
Xylene (total)	5	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		
8260 TVOC	--	6.38	3.7	2.43	2.17	23.4	25.78	46.82							

J: Analyte was analyzed for, but not detected above the MDL.
 J: Value is estimated.
 R: A rejected result; the data is rejected, not usable, and unreliable
Bold/Shaded: Value exceeds Standard/Guidance Value.
 *: Data qualified during secondary data verification review by BNL

Table 2
Current Landfill - Summary of 2025 Volatile Organic Compound Data.

Analyte	Groundwater Standards (ug/L)	088-109		088-110		088-110		088-21		088-21		088-22		088-23	
		11/12/2025		6/3/2025		11/25/2025		6/4/2025		11/19/2025		11/19/2025		11/19/2025	
		(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)	
1,1,1,2-Tetrachloroethane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,1,1-Trichloroethane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,1,2-Tetrachloroethane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,1-Dichloroethane	5	19.3		0.5	U	0.92	J	0.5	U	1	U	1	U	1	U
1,1-Dichloroethylene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,1-Dichloropropene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,2,3-Trichloropropane	0.04	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,2-Dichloroethane	0.6	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,2-Dichloropropane	1	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
1,3-Dichloropropane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
2,2-Dichloropropane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Benzene	1	0.68	J	0.5	J	1.23		0.5	U	1	U	1	U	1	U
Benzene, 1,2,4-trimethyl	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Benzene, 1,3,5-trimethyl	5	2	U	0.5	U	0.5	U	0.5	U	2	U	2	U	2	U
Benzene, 1-methylethyl	--	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Bromobenzene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Bromodichloromethane	50	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Bromoform	50	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Carbon tetrachloride	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Chlorobenzene	5	1	U	0.5	U	1.44		0.5	U	1	U	1	U	1	U
Chlorobromomethane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Chloroethane	5	45.5		2.01		4.68		0.5	U	1	U	1	U	1	U
Chloroform	7	1	U	0.5	U	0.5	U	0.5	U	1	U	4.56		1	U
cis-1,2-Dichloroethylene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	0.4	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Cymene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
DBCP	0.04	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Dibromochloromethane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Dibromomethane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Dichlorodifluoromethane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
EDB	0.05	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Ethene, 1,2-dichloro-, (E)-	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Ethylbenzene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Hexachlorobutadiene	0.5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
m-Dichlorobenzene	3	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
m/p xylene	5	2	U	0.5	U	0.5	U	0.5	U	2	U	2	U	2	U
Methyl bromide	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Methyl chloride	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Methyl tert-butyl ether	10	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Methylene chloride	5	5	U	1.93	J*	0.5	U	0.5	U	1.46	U*	1.75	U*	1.45	U*
n-Butylbenzene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
n-Propylbenzene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Naphthalene	10	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
o-Chlorotoluene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
o-Dichlorobenzene	3	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
o-Xylene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
p-Chlorotoluene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
p-Dichlorobenzene	3	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
sec-Butylbenzene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Styrene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
tert-Butylbenzene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Tetrachloroethylene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Toluene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	0.4	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Trichloroethylene	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Trichlorofluoromethane	5	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Vinyl chloride	2	1	U	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Xylene (total)	5	3	U	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	--	65.48		4.44		8.27		0		0		4.56		0	

U: Analyte was analyzed for, but not detected above the MDL.

J: Value is estimated.

R: A rejected result; the data is rejected, not usable, and unreliable

Bold/Shaded: Value exceeds Standard/Guidance Value.

*: Data qualified during secondary data verification review by BNL

Table 2
Current Landfill - Summary of 2025 Volatile Organic Compound Data.

Analyte	Groundwater Standards (ug/L)	098-99		098-99		098-99		098-99	
		3/14/2025		6/4/2025		9/19/2025		11/24/2025	
		(ug/L)		(ug/L)		(ug/L)		(ug/L)	
1,1,1,2-Tetrachloroethane	5	0.5	U	0.5	U	1	U	0.5	U
1,1,1-Trichloroethane	5	0.5	U	0.5	U	1	U	0.5	U
1,1,2-Tetrachloroethane	5	0.5	U	0.5	U	1	U	0.5	U
1,1,2-Trichloroethane	1	0.5	U	0.5	U	1	U	0.5	U
1,1-Dichloroethane	5	0.69	J	0.84	J	1.2		0.5	U
1,1-Dichloroethylene	5	0.5	U	0.5	U	1	U	0.5	U
1,1-Dichloropropene	5	0.5	U	0.5	U	1	U	0.5	U
1,2,3-Trichlorobenzene	5	0.5	U	0.5	U	1	U	0.5	U
1,2,3-Trichloropropane	0.04	0.5	U	0.5	U	1	U	0.5	U
1,2,4-Trichlorobenzene	5	0.5	U	0.5	U	1	U	0.5	U
1,2-Dichloroethane	0.6	0.5	U	0.5	U	1	U	0.5	U
1,2-Dichloropropane	1	0.5	U	0.5	U	1	U	0.5	U
1,3-Dichloropropane	5	0.5	U	0.5	U	1	U	0.5	U
2,2-Dichloropropane	5	0.5	U	0.5	U	1	U	0.5	U
Benzene	1	0.5	U	0.5	U	1	U	0.5	U
Benzene, 1,2,4-trimethyl	5	0.5	U	0.5	U	1	U	0.5	U
Benzene, 1,3,5-trimethyl-	5	0.5	U	0.5	U	2	U	0.5	U
Benzene, 1-methylethyl-	--	0.5	U	0.5	U	1	U	0.5	U
Bromobenzene	5	0.5	U	0.5	U	1	U	0.5	U
Bromodichloromethane	50	0.5	U	0.5	U	1	U	0.5	U
Bromoform	50	0.5	U	0.5	U	1	U	0.5	U
Carbon tetrachloride	5	0.5	U	0.5	U	1	U	0.5	U
Chlorobenzene	5	0.5	U	0.5	U	1	U	0.5	U
Chlorobromomethane	5	0.5	U	0.5	U	1	U	0.5	U
Chloroethane	5	0.5	U	0.5	U	1	U	0.5	U
Chloroform	7	0.5	U	0.5	U	1	U	0.5	U
cis-1,2-Dichloroethylene	5	0.5	U	0.5	U	1	U	0.5	U
cis-1,3-Dichloropropene	0.4	0.5	U	0.5	U	1	U	0.5	U
Cymene	5	0.5	U	0.5	U	1	U	0.5	U
DBCP	0.04	0.5	U	0.5	U	1	U	0.5	U
Dibromochloromethane	5	0.5	U	0.5	U	1	U	0.5	U
Dibromomethane	5	0.5	U	0.5	U	1	U	0.5	U
Dichlorodifluoromethane	5	0.5	U	0.5	U	1	U	0.5	U
EDB	0.05	0.5	U	0.5	U	1	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	5	0.5	U	0.5	U	1	U	0.5	U
Ethylbenzene	5	0.5	U	0.5	U	1	U	0.5	U
Hexachlorobutadiene	0.5	0.5	U	0.5	U	1	U	0.5	U
m-Dichlorobenzene	3	0.5	U	0.5	U	1	U	0.5	U
m/p xylene	5	0.5	U	0.5	U	2	U	0.5	U
Methyl bromide	5	0.5	U	0.5	U	1	U	0.5	U
Methyl chloride	5	0.5	U	0.5	U	1	U	0.5	U
Methyl tert-butyl ether	10	0.5	U	0.5	U	1	U	0.5	U
Methylene chloride	5	0.5	U	0.5	U	5	U	0.5	U
n-Butylbenzene	5	0.5	U	0.5	U	1	U	0.5	U
n-Propylbenzene	5	0.5	U	0.5	U	1	U	0.5	U
Naphthalene	10	0.5	U	0.5	U	1	U	0.5	U
o-Chlorotoluene	5	0.5	U	0.5	U	1	U	0.5	U
o-Dichlorobenzene	3	0.5	U	0.5	U	1	U	0.5	U
o-Xylene	5	0.5	U	0.5	U	1	U	0.5	U
p-Chlorotoluene	5	0.5	U	0.5	U	1	U	0.5	U
p-Dichlorobenzene	3	0.5	U	0.5	U	1	U	0.5	U
sec-Butylbenzene	5	0.5	U	0.5	U	1	U	0.5	U
Styrene	5	0.5	U	0.5	U	1	U	0.5	U
tert-Butylbenzene	5	0.5	U	0.5	U	1	U	0.5	U
Tetrachloroethylene	5	0.5	U	0.5	U	1	U	0.5	U
Toluene	5	0.5	U	0.5	U	1	U	0.5	U
trans-1,3-Dichloropropene	0.4	0.5	U	0.5	U	1	U	0.5	U
Trichloroethylene	5	0.5	U	0.5	U	1	U	0.5	U
Trichlorofluoromethane	5	0.5	U	0.5	U	1	U	0.5	U
Vinyl chloride	2	0.5	U	0.5	U	1	U	0.5	U
Xylene (total)	5	3	U	3	U	3	U	3	U
8260 TVOC	--	0.69		0.84		1.2		0	

U: Analyte was analyzed for, but not detected above the MDL.

J: Value is estimated.

R: A rejected result; the data is rejected, not usable, and unreliable

Bold/Shaded: Value exceeds Standard/Guidance Value.

*: Data qualified during secondary data verification review by BNL

Table 3

Current Landfill-Summary of 2025 Water Chemistry Data

<i>Analyte</i>	Groundwater Standards (mg/L)	087-09		087-09		087-11		087-11		087-23		087-23		087-24	
		6/3/2025		11/12/2025		6/4/2025		11/25/2025		6/4/2025		11/24/2025		6/4/2025	
		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Alkalinity (as CaCO3)	--	36.6		21.9		150		122		58.4		68.2		35.9	
Ammonia (as N)	2	0.017	U	0.017	U	3.99		2.84		0.308		0.264		0.017	U
Chloride	250**	24.7		41		21.6		7.16		14.8		15.6		36.8	
Cyanide	0.2	0.00167	U	0.00167	U	0.00835	U	0.00835	U	0.00835	U	0.00835	U	0.00167	U
Nitrate (as N)	10	1.52		1.86	H	0.291	J	0.066	U	0.066	U	0.109	J	0.407	
Nitrite (as N)	1	0.033	U	0.033	UH	0.033	U	0.033	U	0.033	U	0.033	U	0.033	U
Nitrite + Nitrate-N	10	1.74		2.5		0.017	U	0.17	U	0.017	U	0.085	U	0.44	
Nitrogen	--	1.74		2.5		5.96		3.05		0.457		0.652		0.44	
Sulfate	250**	14.3		11.4		14.4		0.813		4.15		6.22		9.7	
TDS	500**	11.5		113		239		128		109		98		125	
Total Kjeldahl Nitrogen	--	0.033	U	0.033	U	5.95		3.05		0.45		0.594		0.033	U
TSS	--	1.7	J*	1.14	U	25.9		95		26.8		7.8		1.14	U

U: Analyte was analyzed for, but not detected above MDL.

J: Value is estimated.

B: The reported value is less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

H: Holding time violation.

*: Data qualified during secondary data verification review by BNL.

Bold/Shaded: Concentration exceeds Standard/Guidance Value.

** : USEPA Secondary Maximum Contaminant Levels (SMCLs).

Non-enforceable secondary drinking water regulations for aesthetics.

Table 3

Current Landfill-Summary of 2025 Water Chemistry Data

Analyte	Groundwater Standards (mg/L)	087-24		087-26		087-26		087-27		087-27		088-109		088-109	
		11/24/2025		6/3/2025		11/13/2025		6/3/2025		11/13/2025		6/3/2025		11/12/2025	
		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Alkalinity (as CaCO3)	--	46.7		23.6		24.7		79.7		138		79.9		131	
Ammonia (as N)	2	0.017	U	0.017	U	0.04	J	0.787		1.37		2.27		1.98	
Chloride	250**	30.6		42.3		42.6		54.2		29.9		18.2		21.2	
Cyanide	0.2	0.00167	U	0.00167	U	0.00167	U	0.00835	U	0.0417		0.00835	U	0.00835	U
Nitrate (as N)	10	0.653		0.29		0.272		0.066	U	0.033	U	0.066	U	0.033	U
Nitrite (as N)	1	0.033	U	0.033	U	0.033	U	0.033	U	0.033	U	0.033	U	0.033	U
Nitrite + Nitrate-N	10	0.84		0.304		0.272		0.017	U	0.085	U	0.017	U	0.085	U
Nitrogen	--	0.916		0.433		0.281		1.09		1.54		3.34		2.38	
Sulfate	250**	6.59		9.61		9.38		13.5		6.15		6.82		3.65	
TDS	500**	113		121		110		215		193		121		213	
Total Kjeldahl Nitrogen	--	0.076	U*	0.129	U*	0.033	U	1.07		1.51		3.33		2.38	
TSS	--	1.14	U	2.28	U	1.14	U	10		10.8		15	J	16.4	

U: Analyte was analyzed for, but not detected above MDL.

J: Value is estimated.

B: The reported value is less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

H: Holding time violation.

*: Data qualified during secondary data verification review by BNL.

Bold/Shaded: Concentration exceeds Standard/Guidance Value.

** : USEPA Secondary Maximum Contaminant Levels (SMCLs).

Non-enforceable secondary drinking water regulations for aesthetics.

Table 3

Current Landfill-Summary of 2025 Water Chemistry Data

<i>Analyte</i>	Groundwater Standards (mg/L)	088-110	088-110	088-21	088-21	088-22	088-23
		6/3/2025	11/25/2025	6/4/2025	11/19/2025	11/19/2025	11/19/2025
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Alkalinity (as CaCO3)	--	66.1	134	29	14.5	16.1	42.1
Ammonia (as N)	2	0.381	1.35	0.017 U	0.017 U	0.017 U	0.017 U
Chloride	250**	38.5	39.1	111	16.9	43.9	16.3
Cyanide	0.2	0.00835 U	0.00835 U	0.00171 J	0.00167 U	0.00167 U	0.00167 U
Nitrate (as N)	10	0.066 U	0.066 U	0.147	0.0959 J	0.3	0.457 H
Nitrite (as N)	1	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 UH
Nitrite + Nitrate-N	10	0.017 U	0.17 U	0.149	0.085 U	0.351	0.555
Nitrogen	--	0.741	1.67	0.272	0.236 J	0.463	0.654
Sulfate	250**	17.3	11.3	4.16	3.63	9.27	13
TDS	500**	175	234	232	52	99	88
Total Kjeldahl Nitrogen	--	0.732 U*	1.67	0.123	0.219	0.112	0.099 J
TSS	--	5.2 J*	28	1.14 U	1.14 U	1.14 U	1.14 U

U: Analyte was analyzed for, but not detected above MDL.

J: Value is estimated.

B: The reported value is less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

H: Holding time violation.

*: Data qualified during secondary data verification review by BNL.

Bold/Shaded: Concentration exceeds Standard/Guidance Value.

** : USEPA Secondary Maximum Contaminant Levels (SMCLs).

Non-enforceable secondary drinking water regulations for aesthetics.

**Table 4
Current Landfill-Summary of 2025 Metals Data**

<i>Analyte</i>	Groundwater Standards (ug/L)	087-09		087-09		087-11		087-11		087-23		087-23		087-24		087-24	
		6/3/2025		11/12/2025		6/4/2025		11/25/2025		6/4/2025		11/24/2025		6/4/2025		11/24/2025	
		(ug/L)	U	(ug/L)	U	(ug/L)	U	(ug/L)	U	(ug/L)	U	(ug/L)	U	(ug/L)	U	(ug/L)	U
Aluminum	200*	68	U	68	U	68	U	76.2	B	68	U	68	U	68	U	68	U
Antimony	3	3.5	U	3.5	U	3.5	U	3.5	U	3.5	U	3.5	U	3.5	U	3.5	U
Arsenic	10**	2	U	2	U	9.17		11.2		16.2		10.3		2	U	2	U
Barium	1000	18.9	B	16.9		39.7	B	25.5		30.5	B	29.2		13.8	B	13.7	
Beryllium	3	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cadmium	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Calcium	--	12200		5120		16600		17900		3470	B	3850		5060		7090	
Chromium	50	115		18.1		1	U	1	U	1	U	1	U	1	U	1	U
Cobalt	--	1	U	1	U	1.16	B	2.28	B	12.9	B	10.7		1	U	1	U
Copper	200	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Iron	300	488		30	U	73400		81000		41100		29100		30	U	30	U
Lead	15***	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Magnesium	35000	4130	B	2480		4010	B	3530		1660	B	2230		3250	B	4200	
Manganese	300	21.2		3.82	B	951		1040		3310		2810		2	U	2	U
Mercury	0.7	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U
Nickel	100	96.5		32.9		1.5	U	1.5	U	1.5	U	2.12	B	1.5	U	1.5	U
Potassium	--	1140	B	662		4360	B	2820		805	B	829		1130	B	1050	
Selenium	10	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Silver	50	1	U	1	U	1	U	1	U	1.07	B	1	U	1	U	1	U
Sodium	20000	19000		34600		13800		6520		7850		12800		32200		27200	
Thallium	0.5	0.633	B	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Vanadium	--	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Zinc	2000	8.48	B	3.3	U	3.3	U	3.3	U	3.3	U	6.2	B	3.3	U	4.71	B

**Table 4
Current Landfill-Summary of 2025 Metals Data**

<i>Analyte</i>	Groundwater Standards (ug/L)	087-26		087-26		087-27		087-27		088-109		088-109		088-110		088-110	
		6/3/2025		11/13/2025		6/3/2025		11/13/2025		6/3/2025		11/12/2025		6/3/2025		11/25/2025	
		(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)	
Aluminum	200*	68	U	68	U	68	U	68	U	68	U	68	U	68	U	68	U
Antimony	3	3.5	U	3.5	U	3.5	U	3.5	U	3.5	U	7.52	B	3.5	U	3.5	U
Arsenic	10**	2	U	2	U	5.93		7.17		5.44		8.26		8.06		11.2	
Barium	1000	30	B	30.1		25.4	B	24.4		37	B	32.8		33.5	B	39.1	
Beryllium	3	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cadmium	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Calcium	--	6850		7450		12100		14500		17200		27100		14100		18200	E
Chromium	50	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cobalt	--	1	U	1	U	2.5	B	1.8	B	2.55	B	4.73	B	3	B	8.78	J-^
Copper	200	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Iron	300	69.4	B	51.8	B	42700		53500		32800		56200		33800		64600	
Lead	15***	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Magnesium	35000	3880	B	4140		3060	B	3090		4100	B	5030		3440	B	4560	
Manganese	300	2	U	2.88	B	2520		2730		840		1690		2970		3340	
Mercury	0.7	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U
Nickel	100	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	--	1450	B	1440		2310	B	2480		3490	B	3410		2500	B	3570	
Selenium	10	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Silver	50	1	U	1	U	1.24	B	1	U	1	U	1	U	1	U	1	U
Sodium	20000	27900		27300		41100		20000		12300		14100		29400		27000	
Thallium	0.5	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Vanadium	--	1	U	1	U	1	U	1.19	B	1	U	1	U	1	U	1	U
Zinc	2000	3.7	B	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U

**Table 4
Current Landfill-Summary of 2025 Metals Data**

<i>Analyte</i>	Groundwater Standards (ug/L)	088-21		088-21		088-22		088-23	
		6/4/2025		11/19/2025		11/19/2025		11/19/2025	
		(ug/L)		(ug/L)		(ug/L)		(ug/L)	
Aluminum	200*	68	U	68	U	68	U	68	U
Antimony	3	3.5	U	3.5	U	3.5	U	3.5	U
Arsenic	10**	2	U	2.37	B	2.84	B	2.31	B
Barium	1000	31.4	B	12.3		31.4		3.71	B
Beryllium	3	1	U	1	U	1	U	1	U
Cadmium	5	1	U	1	U	1	U	1	U
Calcium	--	7290		3250		5740		16700	
Chromium	50	1	U	1	U	1.17	B	1.41	B
Cobalt	--	1	U	1	U	1	U	1	U
Copper	200	3	U	3	U	3	U	3	U
Iron	300	30	U	60.8	B	69.4	B	136	
Lead	15***	0.5	U	0.5	U	0.5	U	0.5	U
Magnesium	35000	4070	B	1790		3620		2670	
Manganese	300	3.85	B	7.55	B	9.48	B	27.2	
Mercury	0.7	0.067	U	0.067	U	0.067	U	0.067	U
Nickel	100	1.5	U	1.5	U	1.5	U	2.06	B
Potassium	--	1730	B	477		1600		482	
Selenium	10	1.5	U	1.5	U	1.5	U	1.5	U
Silver	50	1	U	1	U	1	U	1	U
Sodium	20000	75600		13800		29000		12700	
Thallium	0.5	0.6	U	0.6	U	0.6	U	0.6	U
Vanadium	--	1	U	1	U	1	U	1	U
Zinc	2000	4.31	B	3.3	U	3.3	U	3.3	U

U: Analyte was analyzed for, but not detected above MDL.

J: Value is estimated

J-: An unusually uncertain, detected result. Due to blank contamination above MDL but less than 10x the blank concentration.

Bold/Shaded: Concentration exceeds Standard/Guidance Value.

B: Indicates that the value was less than the Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit(IDL).

E: %Difference of sample and SD is greater than 10%

N:The Matrix spike sample recovery is not within control limits.

*: USEPA SMCL Secondary Maximum Contaminant Levels (SMCLs)

** USEPA Maximum Contaminant Level (MCL)

*** OUI Record of Decision Selected Cleanup Goal

^: Data qualified during secondary data verification review by BNL.

Table 5

Current Landfill-Summary of 2025 Radionuclide Data

Analyte	Groundwater Standards pCi/L	087-23 11/24/2025 pCi/L				087-27 11/13/2025 pCi/L				088-109 11/12/2025 pCi/L				088-21 11/19/2025 pCi/L			
		Result	Qual	MDC	Error	Result	Qual	MDC	Error	Result	Qual	MDC	Error	Result	Qual	MDC	Error
Americium-241	29.6*	0.59	U	7	4.33	3.86	U	10.1	5.38	8.95	U	19.1	10.9	12.7	U	23.2	13
Beryllium-7	100000*	2.47	U	21.4	11.3	2.28	U	31.4	17.7	9.59	U	29.1	15.4	-3.46	U	29.9	17.4
Cesium-134	156*	-1.34	U	2.18	1.79	-0.0388	U	2.56	1.3	0.299	U	3.24	1.63	-1.6	U	2.81	1.65
Cesium-137	164*	0.604	U	2.66	1.4	0.494	U	2.93	1.45	-0.932	U	3.57	2.51	-1.54	U	2.96	1.7
Co-60	560*	-0.109	U	2.19	1.14	-0.0669	U	2.38	1.2	0.348	U	3.35	1.68	0.751	U	3.45	1.59
Cobalt-57	14800*	0.608	U	1.91	0.983	0.807	U	2.16	1.11	0.787	U	2.45	1.26	1.26	U	2.91	1.59
Europium-152	3000*	-0.727	U	5.66	3.15	-2.9	U	6.72	4.08	2.11	U	8.46	4.5	1.9	U	8.68	4.76
Europium-154	2720*	3.87	U	7.35	2.92	-1.45	U	7.16	3.96	2.84	U	9.76	4.61	-3.11	U	6.81	4
Europium-155	40000*	-3.12	U	6.86	3.85	0.259	U	8.15	4.35	-0.526	U	9.72	6.17	8.04	U	11.6	6.06
Manganese-54	3920*	-0.161	U	2.14	1.2	-1.04	U	2.14	1.26	-0.635	U	2.38	1.29	1.16	U	3.23	1.5
Sodium-22	640*	1.45	U	2.66	1.05	-0.814	U	2.43	1.42	1.03	U	3.46	1.63	-1.14	U	2.38	1.41
Strontium-90	8***	-0.486	U	0.65	0.363	0.439	U	0.781	0.469	0.494	U	0.714	0.441	0.442	U	0.66	0.405
Tritium	20000***	122	U	411	235	-97.5	U	434	225	-22.4	U	367	194	-88.7	U	380	210
Zinc-65	48*	0.236	U	4.84	2.47	0.181	U	6.33	3.27	-3.95	U	5.31	3.89	-0.431	U	6.51	3.35

U: Analyte was analyzed for but not detected above the MDC.

*: Department of Energy (DOE) Groundwater Screening Level.

***:Environmental Protection Agency (EPA) Drinking Water Standards.

U: Gamma Spectroscopy-Uncertain identification.

DL: Failed required detection limit.

MDC: Minimum Detectable Concentration.

U(-)B: Sample results less than the MDC (i.e., undetected) shall be qualified as potential false negatives and estimated (U (-) B

^: Data qualified during secondary data verification review by BNL.

Table 6

Current Landfill-Summary of 2025 1,4-Dioxane Data

<i>Analyte</i>	Groundwater Standards (µg/L)	087-09		087-11		087-23		087-24		087-26		087-27	
		11/12/2025		11/25/2025		11/24/2025		11/24/2025		11/13/2025		11/13/2025	
		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)	
1,4-Dioxane	0.35	0.2	U	1.27		0.291		0.296		0.0536	J	1.92	

U: Analyte was analyzed for, but not detected above MDL.

J: Value is estimated.

B: Analyte found in the blank as well as the sample.

Bold/Shaded: Exceeds New York State Ambient Water Quality Guidance Value for Class GA Groundwater.

Table 6

Current Landfill-Summary of 2025 1,4-Dioxane Data

<u>Analyte</u>	Groundwater Standards (µg/L)	088-109	088-110	088-21	088-22	088-23	098-99
		11/12/2025	11/25/2025	11/19/2025	11/19/2025	11/19/2025	11/24/2025
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
1,4-Dioxane	0.35	1.52	2.33	0.0422 JB	0.2 U	2.62 B	0.466

U: Analyte was analyzed for, but not detected above MDL.

J: Value is estimated.

B: Analyte found in the blank as well as the sample.

Bold/Shaded: Exceeds New York State Ambient Water Quality Guidance Value for Class GA Groundwater.

Table 7
Current Landfill - Summary of 2025 PFAS Compound Data.

Analyte	Groundwater Standards (ng/L)	087-09		087-11		087-23		087-24	
		11/12/2025		11/25/2025		11/24/2025		11/24/2025	
		(ng/L)		(ng/L)		(ng/L)		(ng/L)	
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF30uS)	--	7.36	U	7.16	U	7.3	U	6.94	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	--	7.48	U	7.27	U	7.41	U	7.05	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	--	38.9	U	37.9	U	38.6	U	36.7	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	--	38.9	U	37.9	U	38.6	U	36.7	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	--	7.79	U	7.58	U	7.72	U	7.35	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	--	7.36	U	7.16	U	7.3	U	6.94	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF30NS)	--	7.28	U	7.08	U	7.22	U	6.87	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	--	7.3	U	7.1	U	7.24	U	6.89	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	--	7.4	U	7.2	U	7.34	U	6.98	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	--	7.79	U	7.58	U	7.72	U	7.35	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	--	1.95	U	1.89	U	1.93	U	1.84	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	--	1.95	U	1.89	U	1.93	U	1.84	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	--	19.5	U	18.9	U	19.3	U	18.4	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	--	1.95	U	1.89	U	1.93	U	1.84	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	--	1.95	U	1.89	U	1.93	U	1.84	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	--	19.5	U	18.9	U	19.3	U	18.4	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	--	3.89	U	3.79	U	3.86	U	3.67	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	--	3.47	U	3.37	U	3.44	U	3.27	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	--	3.89	U	3.79	U	3.86	U	3.67	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	--	3.89	U	3.79	U	3.86	U	3.67	U
Perfluorobutanesulfonate (PFBS)	--	1.73	U	1.68	U	1.71	U	1.63	U
Perfluorobutyric acid (PFBA)	--	7.79	U	37.9	DU	8.05		7.35	U
Perfluorodecanesulfonate (PFDS)	--	1.88	U	1.83	U	1.86	U	1.77	U
Perfluorodecanoic acid (PFDA)	--	1.95	U	1.89	U	1.93	U	1.84	U
Perfluorododecane sulfonic acid (PFDoS)	--	1.89	U	1.84	U	1.87	U	1.78	U
Perfluorododecanoic acid (PFDoA)	--	1.95	U	1.89	U	1.93	U	1.84	U
Perfluoroheptanesulfonate (PFHpS)	--	1.86	U	1.81	U	1.84	U	1.75	U
Perfluoroheptanoic acid (PFHpA)	--	1.95	U	1.89	U	1.93	U	2.29	
Perfluorohexanesulfonate (PFHxS)	--	1.78	U	3.15		1.76	U	5.4	
Perfluorohexanoic acid (PFHxA)	--	1.95	U	1.89	U	1.93	U	4.3	
Perfluoronanesulfonate (PFNS)	--	1.87	U	1.82	U	1.86	U	1.77	U
Perfluoronanoic acid (PFNA)	--	1.95	U	1.89	U	1.93	U	1.84	U
Perfluorooctane sulfonamide (PFOSAm)	--	1.95	U	1.89	U	1.93	U	1.84	U
Perfluorooctanesulfonate (PFOS)	2.7	1.81	U	2.21		1.79	U	8.67	
Perfluorooctanoic acid (PFOA)	6.7	1.95	U	6.53		2.01		2.07	
Perfluoropentanesulfonate (PFPeS)	--	1.83	U	1.78	U	1.82	U	1.73	U
Perfluoropentanoic acid (PFPeA)	--	1.95	U	1.89	U	1.93	U	2.58	
Perfluorotetradecanoic acid (PFTeDA)	--	1.95	U	1.89	U	1.93	U	1.84	U
Perfluorotridecanoic acid (PFTTrDA)	--	1.95	U	1.89	U	1.93	U	1.84	U
Perfluoroundecanoic acid (PFUdA)	--	1.95	U	1.89	U	1.93	U	1.84	U
EPA Method 1633 TPFAS	--	0		11.89		10.06		25.31	

U: Analyte was analyzed for, but not detected above the MDL.

J: Value is estimated.

D: Results are reported from a diluted aliquot of sample.

R: A rejected result; the data is rejected, not usable, and unreliable.

UJ: The analyte was not detected. The reported numerical value quantitation or detection limit is approximate and may or may not represent the actual detection limit. The datum is valid but estimated.

I: Analyte does not meet the Ion Abundance Ratio and should be considered an estimated concentration.

*: Data qualified during secondary data verification review by BNL.

Bold/Shaded: Value exceeds New York State Ambient Water Quality Guidance Value for Class GA Groundwater.

Table 7
Current Landfill - Summary of 2025 PFAS Compound Data.

<i>Analyte</i>	Groundwater Standards (ng/L)	087-26		087-27		088-109		088-110	
		11/13/2025		11/13/2025		11/12/2025		11/25/2025	
		(ng/L)	U	(ng/L)	U	(ng/L)	U	(ng/L)	U
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF30uS)	--	7.07	U	7.61	U	6.71	U	7.31	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	--	7.18	U	7.73	U	6.82	U	7.43	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	--	37.4	U	40.2	U	35.5	U	38.7	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	--	37.4	U	40.2	U	35.5	U	38.7	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	--	7.48	U	8.05	U	7.1	U	7.74	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	--	7.07	U	7.61	U	6.71	U	7.31	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	--	6.99	U	7.53	U	6.64	U	7.24	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	--	7.01	U	7.55	U	6.66	U	7.26	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	--	7.11	U	7.65	U	6.74	U	7.35	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	--	7.48	U	8.05	U	7.1	U	7.74	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	--	1.87	U	2.01	U	1.77	U	1.93	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	--	1.87	U	2.01	U	1.77	U	1.93	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	--	18.7	U	200	UJ*	200	UJ*	19.3	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	--	1.87	U	2.01	U	1.77	U	1.93	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	--	1.87	U	2.01	U	1.77	U	1.93	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	--	18.7	U	20.1	U	17.7	U	19.3	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	--	3.74	U	4.02	U	3.55	U	3.87	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	--	3.33	U	3.58	U	3.16	U	3.44	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	--	3.74	U	4.02	U	3.55	U	3.87	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	--	3.74	U	4.02	U	3.55	U	3.87	U
Perfluorobutanesulfonate (PFBS)	--	1.66	U	1.79	U	1.57	U	1.72	U
Perfluorobutyric acid (PFBA)	--	7.48	U	12.1		33.5		23.1	
Perfluorodecanesulfonate (PFDS)	--	1.8	U	19.3	UJ*	19.3	UJ*	1.87	U
Perfluorodecanoic acid (PFDA)	--	1.87	U	2.01	U	1.77	U	1.93	U
Perfluorododecane sulfonic acid (PFDoS)	--	1.81	U	19.4	UJ*	19.4	UJ*	1.88	U
Perfluorododecanoic acid (PFDoA)	--	1.87	U	2.01	U	1.77	U	1.93	U
Perfluoroheptanesulfonate (PFHpS)	--	1.78	U	19.1	UJ*	19.1	UJ*	1.84	U
Perfluoroheptanoic acid (PFHpA)	--	1.87	U	2.01	U	1.77	U	1.93	U
Perfluorohexanesulfonate (PFHxS)	--	10.8		7		2.39		1.77	U
Perfluorohexanoic acid (PFHxA)	--	3.92	I	3.27		3.7		4.36	
Perfluoronanesulfonate (PFNS)	--	1.8	U	19.2	UJ*	19.2	UJ*	1.86	U
Perfluoronanoic acid (PFNA)	--	1.89		2.01	U	1.77	U	1.93	U
Perfluorooctane sulfonamide (PFOSAm)	--	1.87	U	2.01	U	1.77	U	1.93	U
Perfluorooctanesulfonate (PFOS)	2.7	40.2		18.6	UJ*	18.6	UJ*	1.95	
Perfluorooctanoic acid (PFOA)	6.7	4.07		13.1		5.14		6.03	
Perfluoropentanesulfonate (PFPeS)	--	1.76	U	1.89	U	1.67	U	1.82	U
Perfluoropentanoic acid (PFPeA)	--	1.87	U	2.01	U	1.77	U	3.65	
Perfluorotetradecanoic acid (PFTeDA)	--	1.87	U	2.01	U	20	UJ*	1.93	U
Perfluorotridecanoic acid (PFTTrDA)	--	1.87	U	2.01	U	20	UJ*	1.93	U
Perfluoroundecanoic acid (PFUdA)	--	1.87	U	2.01	U	1.77	U	1.93	U
EPA Method 1633 TPFAS	--	60.88		35.47		44.73		39.09	

U: Analyte was analyzed for, but not detected above the MDL.

J: Value is estimated.

D: Results are reported from a diluted aliquot of sample.

R: A rejected result; the data is rejected, not usable, and unreliable.

UJ: The analyte was not detected. The reported numerical value quantitation or detection limit is approximate and may or may not represent the actual detection limit. The datum is valid but estimated.

I: Analyte does not meet the Ion Abundance Ratio and should be considered an estimated concentration.

*: Data qualified during secondary data verification review by BNL.

Bold/Shaded: Value exceeds New York State Ambient Water Quality Guidance Value for Class GA Groundwater.

Table 7
Current Landfill - Summary of 2025 PFAS Compound Data.

Analyte	Groundwater Standards (ng/L)	088-21		088-22		088-23		098-99	
		11/19/2025		11/19/2025		11/19/2025		11/24/2025	
		(ng/L)	U	(ng/L)	U	(ng/L)	U	(ng/L)	U
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF30UdS)	--	7.56	U	8.06	U	7.14	U	6.82	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	--	7.68	U	8.19	U	7.25	U	6.93	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	--	40	U	42.7	U	37.8	U	36.1	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	--	40	U	42.7	U	37.8	U	36.1	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	--	8	U	8.53	U	7.55	U	7.22	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	--	7.56	U	8.06	U	7.14	U	6.82	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF30NS)	--	7.48	U	7.98	U	7.06	U	6.75	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	--	7.5	U	8	U	7.08	U	6.77	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	--	7.6	U	8.1	U	7.18	U	6.86	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	--	8	U	8.53	U	7.55	U	7.22	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	--	2	U	2.13	U	1.89	U	1.8	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	--	2	U	2.13	U	1.89	U	1.8	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	--	20	U	21.3	U	18.9	U	18	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	--	2	U	2.13	U	1.89	U	1.8	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	--	2	U	2.13	U	1.89	U	1.8	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	--	20	U	21.3	U	18.9	U	18	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	--	4	U	4.27	U	3.78	U	3.61	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	--	3.56	U	3.8	U	3.36	U	3.21	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	--	4	U	4.27	U	3.78	U	3.61	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	--	4	U	4.27	U	3.78	U	3.61	U
Perfluorobutanesulfonate (PFBS)	--	1.77	U	1.89	U	1.68	U	1.6	U
Perfluorobutyric acid (PFBA)	--	8	U	8.53	U	40.5		7.22	U
Perfluorodecanesulfonate (PFDS)	--	1.93	U	2.06	U	1.82	U	1.74	U
Perfluorodecanoic acid (PFDA)	--	2	U	2.13	U	1.89	U	1.8	U
Perfluorododecane sulfonic acid (PFDoS)	--	1.94	U	2.07	U	1.83	U	1.75	U
Perfluorododecanoic acid (PFDoA)	--	2	U	2.13	U	1.89	U	1.8	U
Perfluoroheptanesulfonate (PFHpS)	--	1.91	U	2.03	U	1.8	U	1.72	U
Perfluoroheptanoic acid (PFHpA)	--	2	U	2.13	U	1.89	U	1.8	U
Perfluorohexanesulfonate (PFHxS)	--	1.83	U	13.2		6.42		7.51	
Perfluorohexanoic acid (PFHxA)	--	2	U	5.99		1.89	U	1.8	U
Perfluoronanesulfonate (PFNS)	--	1.93	U	2.05	U	1.82	U	1.74	U
Perfluoronanoic acid (PFNA)	--	2	U	2.13	U	1.89	U	1.8	U
Perfluorooctane sulfonamide (PFOSAm)	--	2	U	2.13	U	1.89	U	1.8	U
Perfluorooctanesulfonate (PFOS)	2.7	2.64		25.8		1.75	U	11.1	
Perfluorooctanoic acid (PFOA)	6.7	2	U	2.13	U	4.78		1.96	
Perfluoropentanesulfonate (PFPeS)	--	1.88	U	2.01	U	1.78	U	1.7	U
Perfluoropentanoic acid (PFPeA)	--	2	U	2.13	U	1.89	U	1.8	U
Perfluorotetradecanoic acid (PFTeDA)	--	2	U	2.13	U	1.89	U	1.8	U
Perfluorotridecanoic acid (PFTTrDA)	--	2	U	2.13	U	1.89	U	1.8	U
Perfluoroundecanoic acid (PFUdA)	--	2	U	2.13	U	1.89	U	1.8	U
EPA Method 1633 TPFAS	--	2.64		44.99		51.7		20.57	

U: Analyte was analyzed for, but not detected above the MDL.
J: Value is estimated.
D: Results are reported from a diluted aliquot of sample.
R: A rejected result; the data is rejected, not usable, and unreliable.
UJ: The analyte was not detected. The reported numerical value quantitation or detection limit is approximate and may or may not represent the actual detection limit. The datum is valid but estimated.
I: Analyte does not meet the Ion Abundance Ratio and should be considered an estimated concentration.
*: Data qualified during secondary data verification review by BNL.
Bold/Shaded: Value exceeds New York State Ambient Water Quality Guidance Value for Class GA Groundwater.

**Table 8
Current Landfill Soil Gas Monitoring Well Description**

Current Landfill			
Soil Gas Monitoring Well	Screen Location	Top of Screen (Feet BLS)	Bottom Screen (Feet BLS)
SGM-17 PROBE B	Intermediate	8.5	11
SGM-18 PROBE A	Shallow	2.5	7.5
SGM-18 PROBE B	Intermediate	10.5	13.5
SGM-19 PROBE A	Shallow	2.5	7.5
SGM-19 PROBE B	Intermediate	10.5	17

BLS – Below Land Surface

Current Landfill Outpost Wells		
Site ID	Depth to Bottom from top PVC (feet)	PVC Stick Up from Ground (feet)
GSGM-1A	12.00	2.50
GSGM-1B	21.00	2.50
GSGM-1C	29.40	2.50
GSGM-2A	14.25	2.50
GSGM-2B	20.05	2.50
GSGM-2C	27.00	2.50
GSGM-3A	13.91	2.50
GSGM-3B	17.75	2.50
GSGM-4A	11.50	2.50
GSGM-4B	15.20	2.50

Current Landfill National Weather Service Indoor Ambient Air
Site ID
NWS-AIR-1

**Table 8
Former Landfill Soil Gas Monitoring Well Description**

Former Landfill			
Soil Gas Monitoring Well	Screen Location	Top of Screen (Feet BLS)	Bottom Screen (Feet BLS)
SGM-1 PROBE A	Shallow	2.5	10
SGM-1 PROBE B	Intermediate	15	43
SGM-2 PROBE A	Shallow	2.5	10
SGM-2 PROBE B	Intermediate	15	40
SGM-3 PROBE A	Shallow	2	9.5
SGM-3 PROBE B	Intermediate	14.5	36
SGM-4 PROBE A	Shallow	2.5	10
SGM-4 PROBE B	Intermediate	15	35.5
SGM-5 PROBE A	Shallow	2.5	10
SGM-5 PROBE B	Intermediate	15	37
SGM-6 PROBE A	Shallow	2.7	10.2
SGM-6 PROBE B	Intermediate	22	37.2
SGM-7 PROBE A	Shallow	2.8	10.3
SGM-7 PROBE B	Intermediate	15	42
SGM-8 PROBE A	Shallow	2.5	10
SGM-8 PROBE B	Intermediate	15	47
SGM-9 PROBE A	Shallow	2.5	10
SGM-9 PROBE B	Intermediate	15	52
SGM-10 PROBE A	Shallow	2.5	10
SGM-10 PROBE B	Intermediate	15	52
SGM-11 PROBE A	Shallow	2.5	10
SGM-11 PROBE B	Intermediate	15	46
SGM-12 PROBE A	Shallow	2.5	10
SGM-12 PROBE B	Intermediate	15	43.5

BLS – Below Land Surface

Table 9

2025 Current Landfill Soil Gas Monitoring Summary Table

Soil/Gas Monitoring Well	Well ID	Methane (% By Volume) 3/26-28/2025	Methane (% By Volume) 6/17-18/2025	Methane (% By Volume) 9/18-19/2025	Methane (% By Volume) 12/22-23/2025	LEL (% By Volume) 3/26-28/2025	LEL (% By Volume) 6/17-18/2025	LEL (% By Volume) 9/18-19/2025	LEL (% By Volume) 12/22-23/2025	Hydrogen Sulfide (ppm By Volume) 3/26-28/2025	Hydrogen Sulfide (ppm By Volume) 6/17-18/2025	Hydrogen Sulfide (ppm By Volume) 9/18-19/2025	Hydrogen Sulfide (ppm By Volume) 12/22-23/2025
NWS-AIR-1	077-17	0	NS	NS	NS	0	NS	NS	NS	0	NS	NS	NS
GSGM-1A	087-114	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-1B	087-115	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-1C	087-116	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-2A	087-117	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-2B	087-118	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-2C	087-119	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-3A	087-120	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-3B	087-121	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-4A	087-122	0	0	0	0	0	0	0	0	0	0	0	0
GSGM-4B	087-123	0	0	0	0	0	0	0	0	0	0	0	0
SGMW-01A (CLF)	087-62	3.2	5.7	1.1	0	64	>100	22	0	3	3	2	0
SGMW-01B (CLF)	087-78	2.4	5.3	1.2	0	48	>100	24	0	0	0	0	0
SGMW-01C (CLF)	087-79	2.2	4.4	1.8	0.4	44	88	36	8	0	0	1	0
SGMW-02A (CLF)	087-63	27.9	36.7	27	28.8	>100	>100	>100	>100	0	4	6	1
SGMW-02B (CLF)	087-80	24.4	33.5	36.4	25.2	>100	>100	>100	>100	20	12	22	1
SGMW-02C (CLF)	087-81	25.3	33.8	36.7	16.4	>100	>100	>100	>100	4	3	4	0
SGMW-03A (CLF)	087-64	11.5	28.3	21.4	5.2	>100	>100	>100	>100	1	11	2	0
SGMW-03B (CLF)	087-82	31	33.1	38.2	25.3	>100	>100	>100	>100	9	18	17	0
SGMW-03C (CLF)	087-83	29	38.3	38.1	13.8	>100	>100	>100	>100	11	31	17	0
SGMW-04A (CLF)	087-65	29.1	35.3	28.7	20	>100	>100	>100	>100	0	5	4	0
SGMW-04B (CLF)	087-84	26.8	32.4	27.3	17.3	>100	>100	>100	>100	2	5	9	1
SGMW-04C (CLF)	087-85	19.4	25.2	20.6	10	>100	>100	>100	>100	4	5	5	0
SGMW-05A (CLF)	087-66	12.6	21.9	13.6	2.8	>100	>100	>100	56	0	16	9	0
SGMW-05B (CLF)	087-86	18	22.9	18.3	3.1	>100	>100	>100	62	0	1	2	0
SGMW-05C (CLF)	087-87	12.8	17.2	13	7.5	>100	>100	>100	>100	1	1	1	1
SGMW-06A (CLF)	087-67	0	0.5	1	0	0	10	20	0	0	0	0	0
SGMW-06B (CLF)	087-88	19.8	23.7	19.1	15.9	>100	>100	>100	>100	1	4	5	1
SGMW-06C (CLF)	087-89	18	21.4	14.8	13.9	>100	>100	>100	>100	1	3	0	1
SGMW-07A (CLF)	087-68	0	0.1	0	0	0	2	0	0	0	0	0	0

Table 9

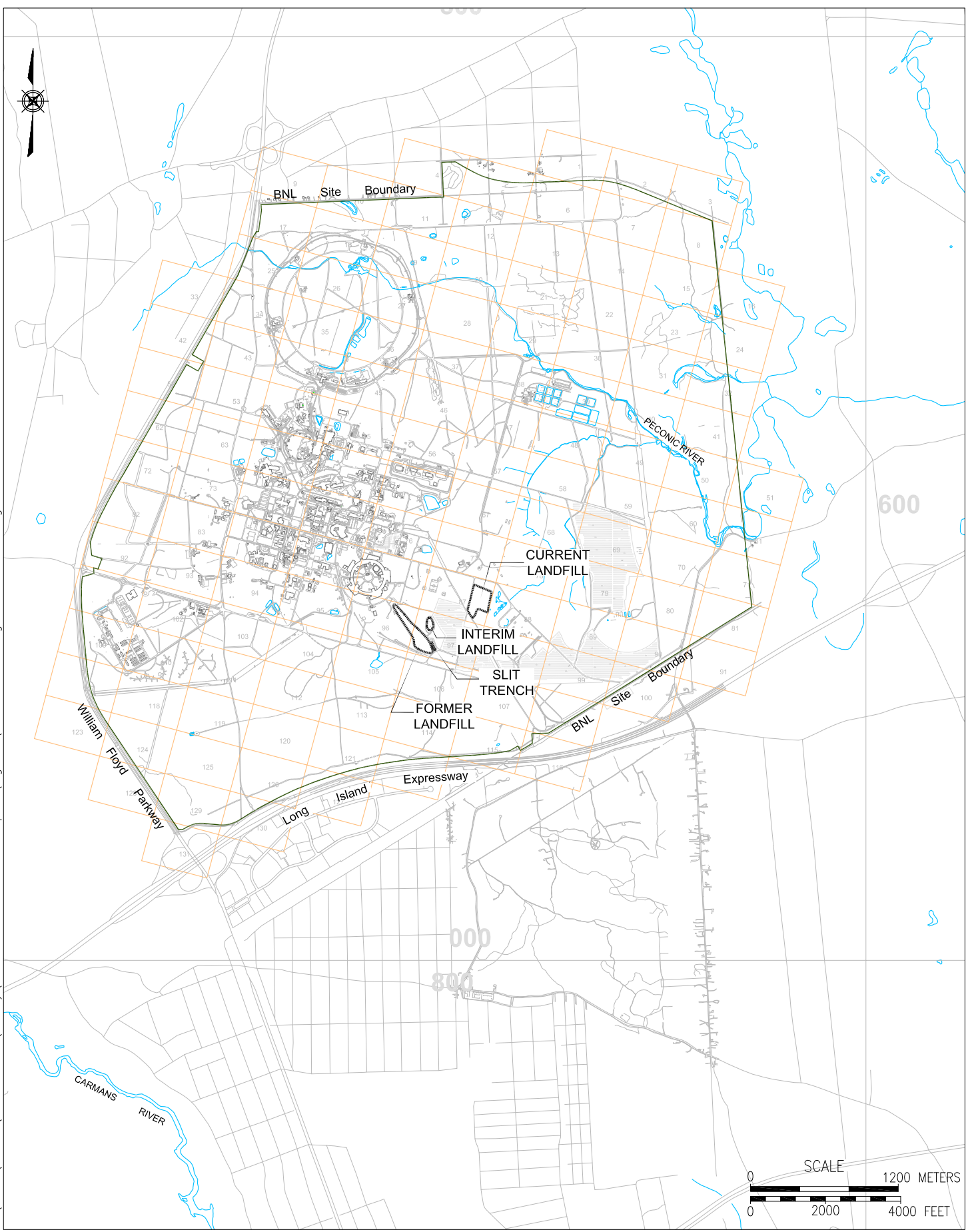
2025 Current Landfill Soil Gas Monitoring Summary Table

Soil/Gas Monitoring Well	Well ID	Methane (% By Volume) 3/26-28/2025	Methane (% By Volume) 6/17-18/2025	Methane (% By Volume) 9/18-19/2025	Methane (% By Volume) 12/22-23/2025	LEL (% By Volume) 3/26-28/2025	LEL (% By Volume) 6/17-18/2025	LEL (% By Volume) 9/18-19/2025	LEL (% By Volume) 12/22-23/2025	Hydrogen Sulfide (ppm By Volume) 3/26-28/2025	Hydrogen Sulfide (ppm By Volume) 6/17-18/2025	Hydrogen Sulfide (ppm By Volume) 9/18-19/2025	Hydrogen Sulfide (ppm By Volume) 12/22-23/2025
SGMW-07B (CLF)	087-90	0	0	0	0	0	0	0	0	0	0	0	0
SGMW-07C (CLF)	087-91	0	0	0	0	0	0	0	0	0	0	0	0
SGMW-08A (CLF)	087-69	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-08B (CLF)	087-92	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-08C (CLF)	087-93	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-09A (CLF)	087-70	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-09B (CLF)	087-94	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-09C (CLF)	087-95	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-10A (CLF)	087-71	0	2.5	0	0	0	50	0	0	0	0	0	0
SGMW-10B (CLF)	087-96	0	10.1	9.3	0.1	0	>100	>100	2	0	0	0	0
SGMW-10C (CLF)	087-97	1.7	9.2	9.2	1.6	34	>100	>100	32	0	0	2	6
SGMW-11A (CLF)	087-72	0	10.1	9.4	0.5	0	>100	>100	10	0	13	11	0
SGMW-11B (CLF)	087-98	0	10.3	10	0	0	>100	>100	0	0	1	0	0
SGMW-12A (CLF)	087-73	21.8	30.1	27.6	16.6	>100	>100	>100	>100	6	45	6	7
SGMW-12B (CLF)	087-99	18.1	18.1	26	13.9	>100	>100	>100	>100	0	0	3	1
SGMW-13A (CLF)	087-74	0	7.4	6	0	0	>100	>100	0	0	1	0	0
SGMW-13B (CLF)	087-100	10	15.9	16.5	7.3	>100	>100	>100	>100	0	0	2	1
SGMW-14A (CLF)	087-75	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-14B (CLF)	087-101	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-15A (CLF)	088-111	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-15B (CLF)	088-114	21.2	25.3	39.8	9.2	>100	>100	>100	>100	0	190	25	14
SGMW-16A (CLF)	088-112	0	0.1	0.1	0	0	2	2	0	0	2	0	0
SGMW-16B (CLF)	088-115	0	0.1	0	0	0	2	0	0	0	1	0	0
SGMW-17A (CLF)	088-113	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-17B (CLF)	088-116	0	0	0	0	0	0	0	0	0	0	0	0
SGMW-18A (CLF)	087-76	0	0.1	0	0	0	2	0	0	0	0	0	0
SGMW-18B (CLF)	087-102	0	0.1	0	7.6	0	2	0	>100	0	0	0	0
SGMW-19A (CLF)	087-77	0	0.9	0	0	0	18	0	0	0	0	0	0
SGMW-19B (CLF)	087-103	0	9.8	4	0	0	>100	80	0	0	6	1	0

Table 10
2025 Former Landfill Soil-Gas Monitoring Summary Table

Soil/Gas Monitoring Well	Well ID	Methane (% By Volume) 8/20/2025	LEL (% By Volume) 8/20/2025	Hydrogen Sulfide (ppm By Volume) 8/20/2025
SGMW-01A (FLF)	096-41	0	0	0
SGMW-01B (FLF)	096-42	0	0	0
SGMW-02A (FLF)	096-43	0	0	0
SGMW-02B (FLF)	096-44	0	0	0
SGMW-03A (FLF)	096-45	0	0	0
SGMW-03B (FLF)	096-46	0	0	0
SGMW-04A (FLF)	096-47	0	0	0
SGMW-04B (FLF)	096-48	0	0	0
SGMW-05A (FLF)	097-50	0	0	0
SGMW-05B (FLF)	097-51	0	0	0
SGMW-06A (FLF)	097-52	0	0	0
SGMW-06B (FLF)	097-53	0	0	0
SGMW-07A (FLF)	097-54	0	0	0
SGMW-07B (FLF)	097-55	0	0	0
SGMW-08A (FLF)	097-56	0	0	0
SGMW-08B (FLF)	097-57	0	0	0
SGMW-09A (FLF)	097-58	0	0	0
SGMW-09B (FLF)	097-59	0	0	0
SGMW-10A (FLF)	097-60	0	0	0
SGMW-10B (FLF)	097-61	0	0	0
SGMW-11A (FLF)	097-62	0	0	0
SGMW-11B (FLF)	097-63	0	0	0
SGMW-12A (FLF)	096-49	0	0	0
SGMW-12B (FLF)	096-50	0	0	0

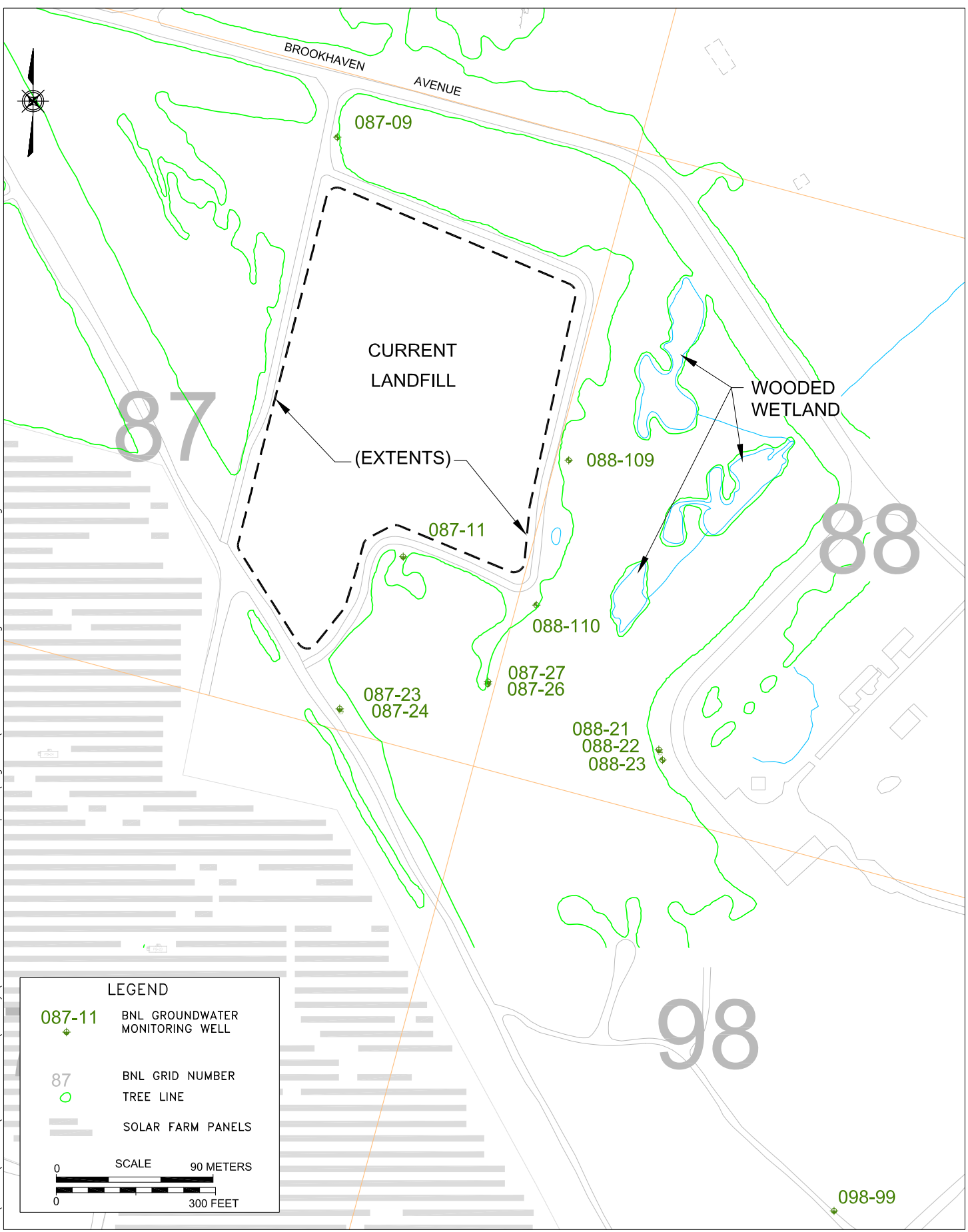
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SITE LOCATION MAP
 2025 ENVIRONMENTAL MONITORING REPORT
 CURRENT AND FORMER LANDFILL AREAS

DWN: AJZ	VT:HZ.: -	DATE: 01/22/26	PROJECT NO.: -
CHKD: JM	APPD: JM	REV.: -	NOTES: -
FIGURE NO.:			1

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LEGEND

- + 087-11 BNL GROUNDWATER MONITORING WELL
- 87 BNL GRID NUMBER
- TREE LINE
- SOLAR FARM PANELS

SCALE

0 90 METERS
0 300 FEET



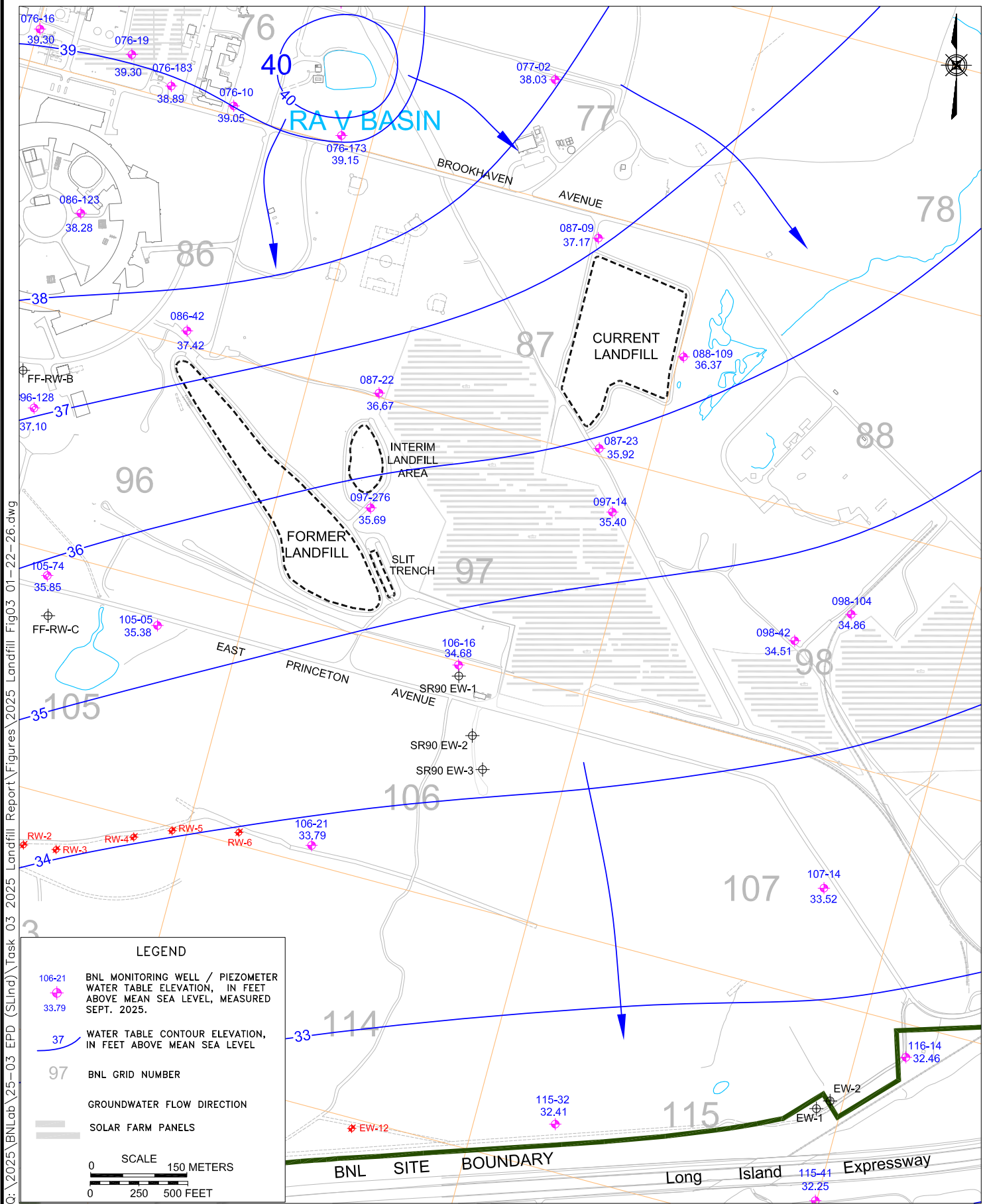
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**CURRENT LANDFILL
GROUNDWATER MONITORING WELL
LOCATIONS**

2025 ENVIRONMENTAL MONITORING REPORT
CURRENT AND FORMER LANDFILL AREAS

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CHKD: JM	APPD: JM	REV.: -	NOTES: -

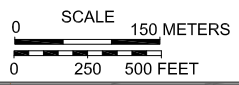
FIGURE NO.: 2



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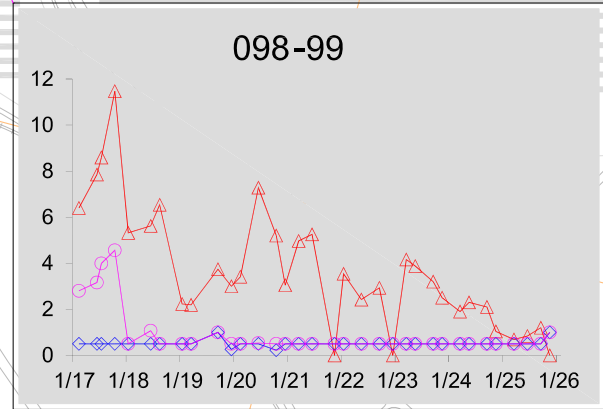
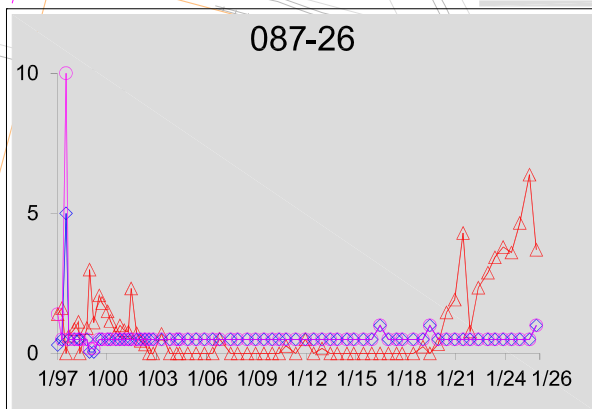
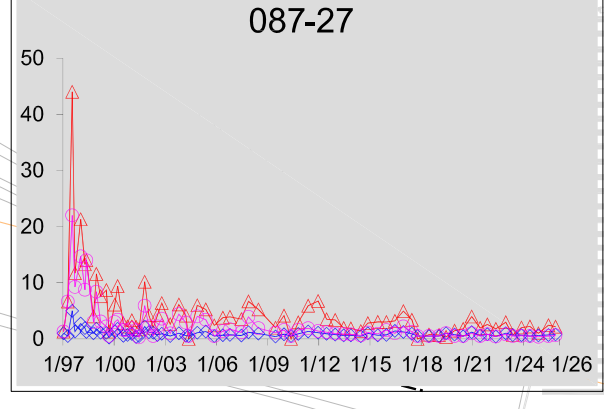
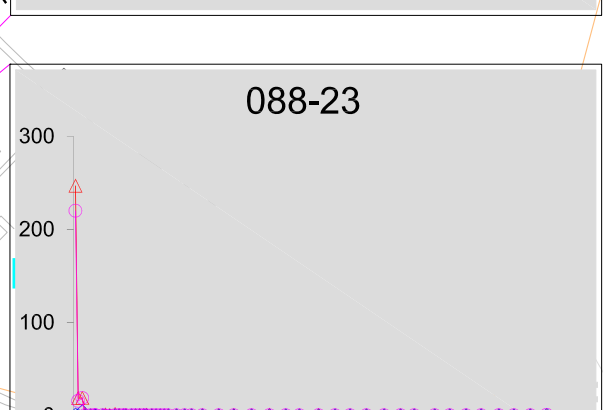
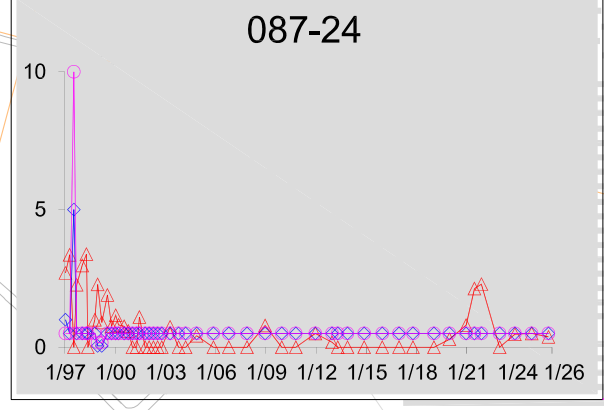
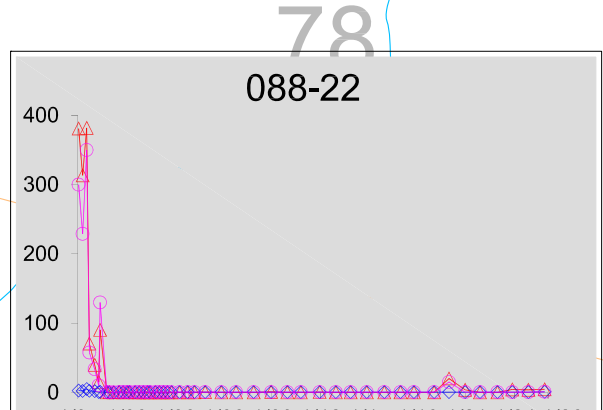
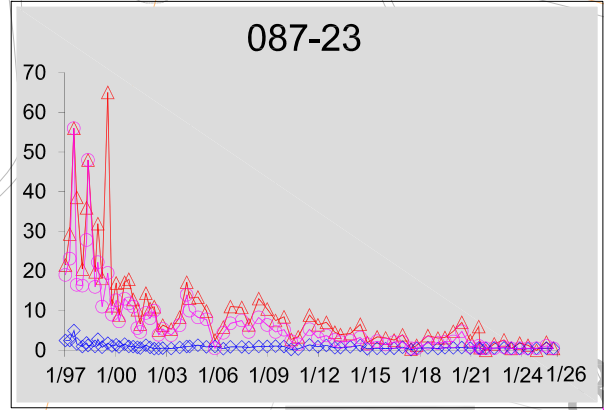
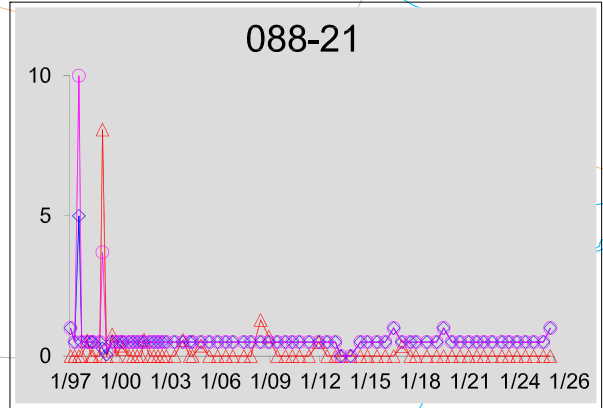
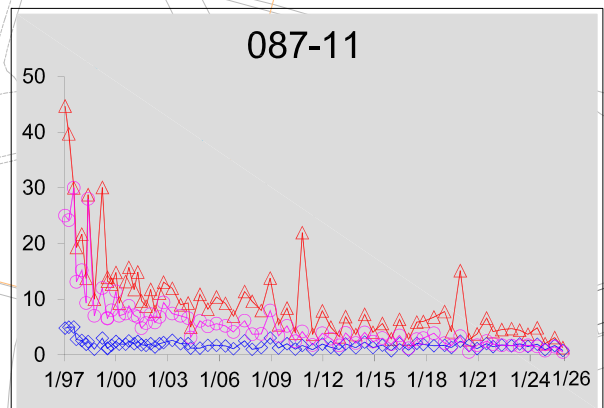
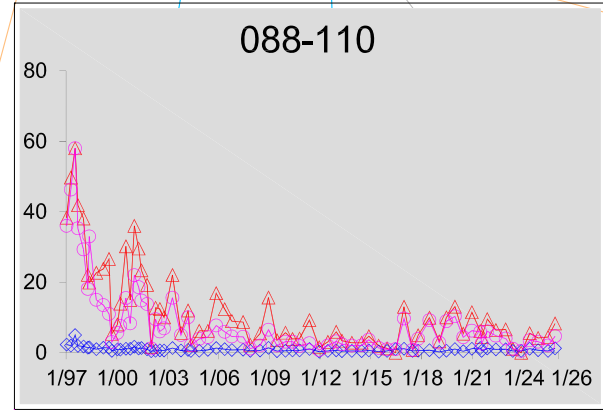
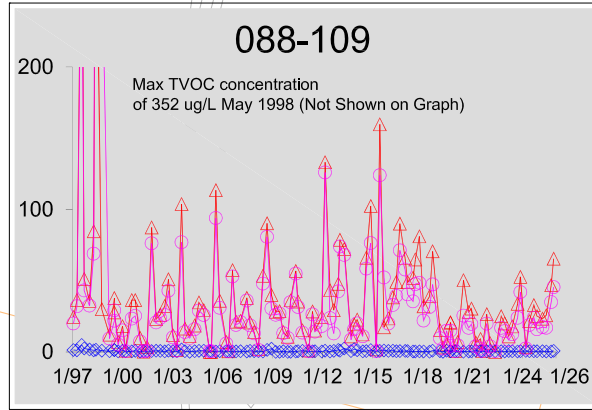
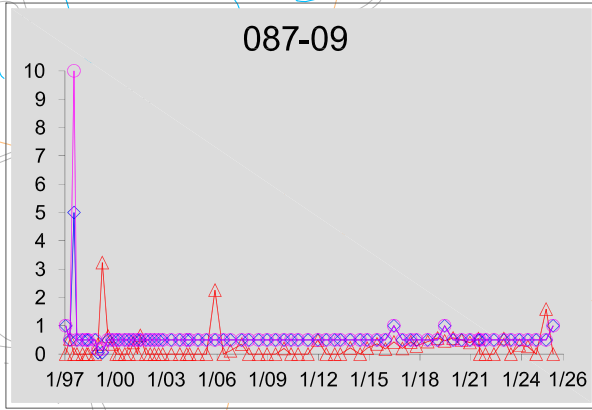
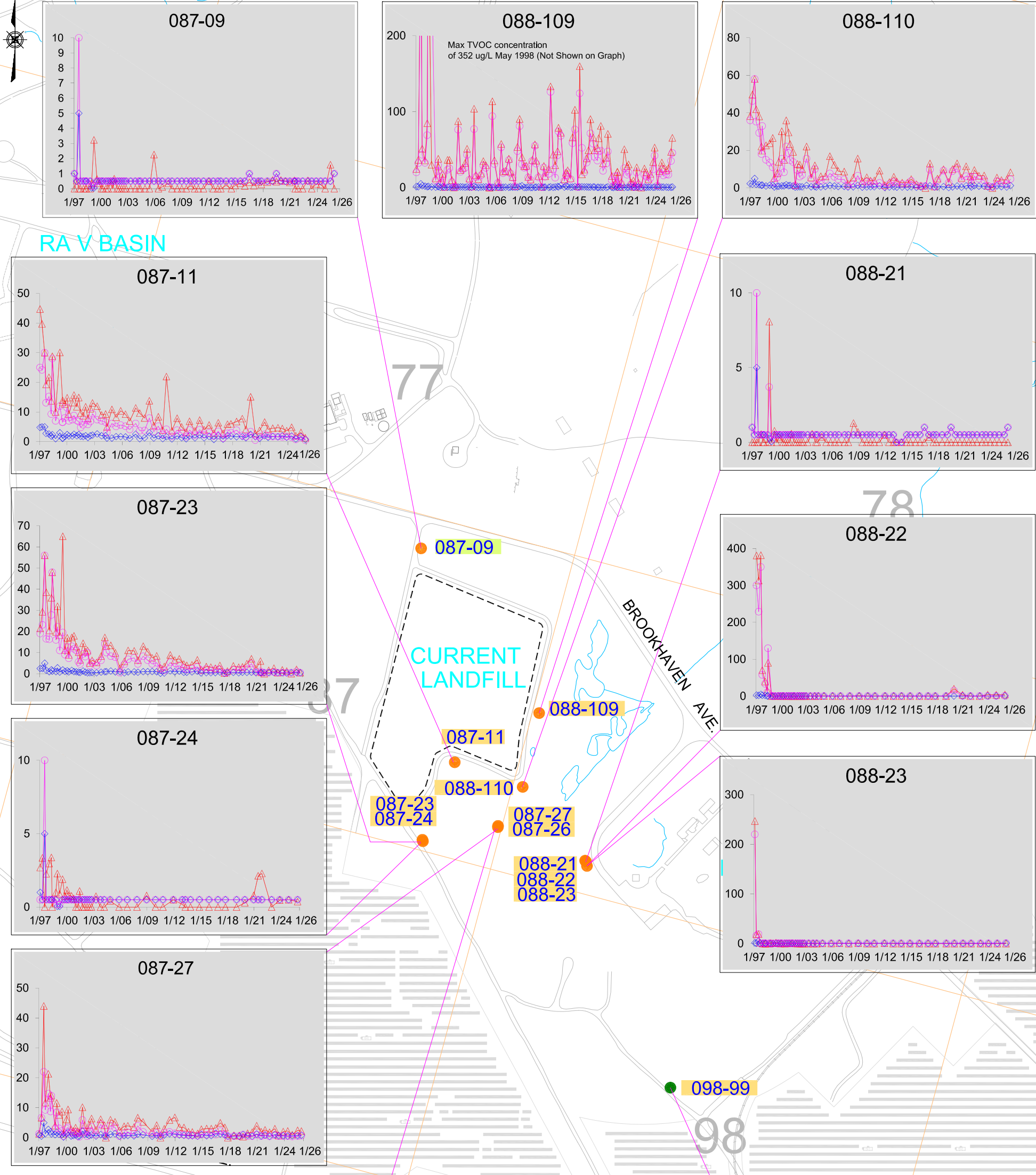
- 106-21 BNL MONITORING WELL / PIEZOMETER WATER TABLE ELEVATION, IN FEET ABOVE MEAN SEA LEVEL, MEASURED SEPT. 2025.
- 33.79
- 37 WATER TABLE CONTOUR ELEVATION, IN FEET ABOVE MEAN SEA LEVEL
- 97 BNL GRID NUMBER
- GROUNDWATER FLOW DIRECTION
- SOLAR FARM PANELS



TITLE:
WATER TABLE CONTOUR MAP
 2025 ENVIRONMENTAL MONITORING REPORT
 CURRENT AND FORMER LANDFILL AREAS

DWN: AJZ	VT: HZ.: -	DATE: 01/22/26	PROJECT NO.: -
CHKD: JM	APPD: JM	REV.: -	NOTES: -
FIGURE NO.:			3

C:\2025\BNLab\25-03 EPD (S\ind)\Task 03 2025 Landfill Report\Figures\2025 Landfill Fig04_01-22-26.dwg

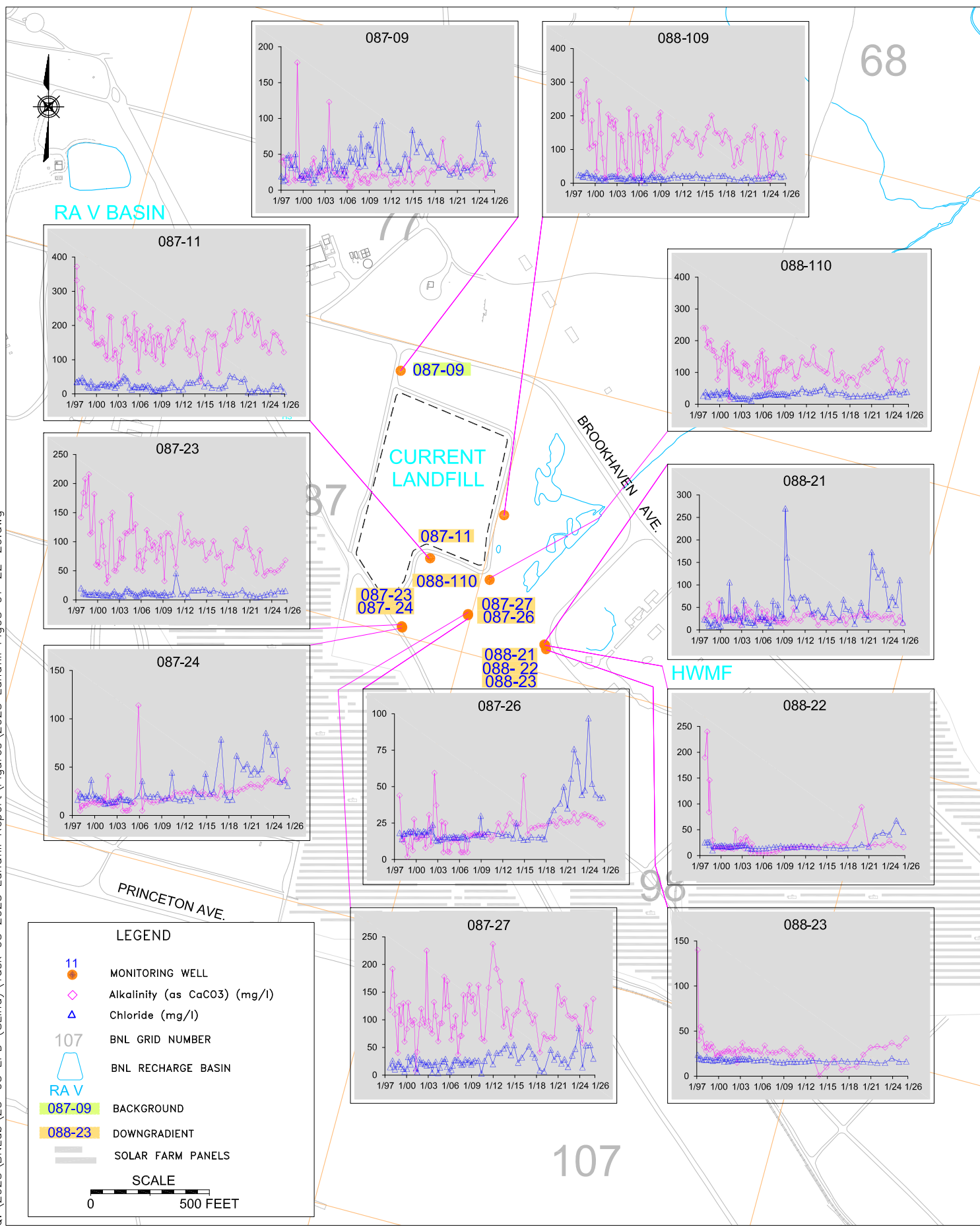


LEGEND

- 11 MONITORING WELL
- ◇ Benzene (μG/L)
- ◇ Chloroethane (μG/L)
- △ TVOC (μG/L)
- 107 BNL GRID NUMBER
- BNL RECHARGE BASIN
- 087-09 BACKGROUND
- 087-11 DOWNGRADIENT
- SOLAR FARM PANELS

SCALE
0 500 FEET

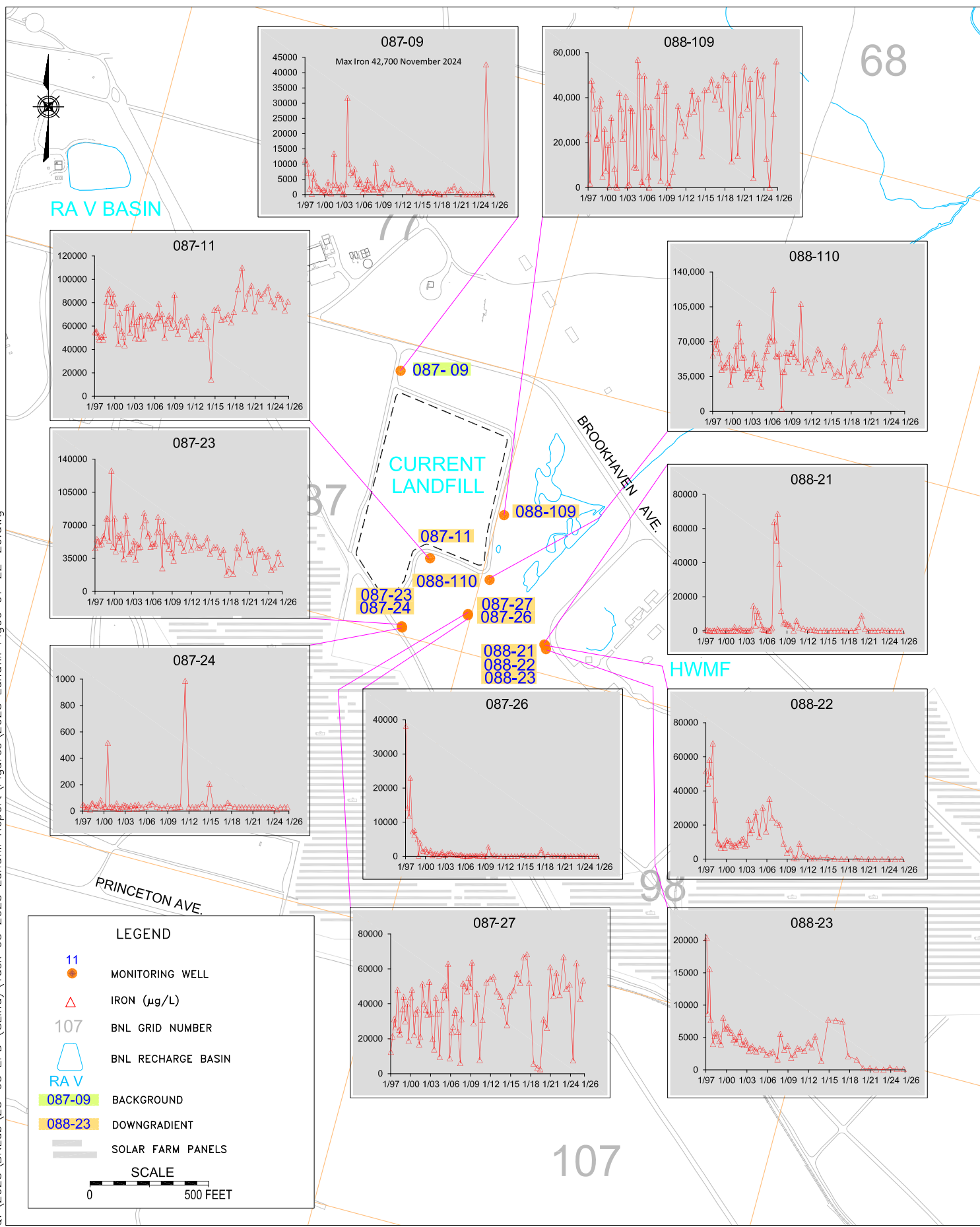
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TITLE:
**CURRENT LANDFILL
 ALKALINITY AND CHLORIDE TREND PLOTS**
 2025 ENVIRONMENTAL MONITORING REPORT
 CURRENT AND FORMER LANDFILL AREAS

DWN: AJZ	VT:HZ.: -	DATE: 01/22/26	PROJECT NO.: -
CHKD: JM	APPD: JM	REV.: -	NOTES: -
FIGURE NO.:			5

Q:\2025\BNLab\25-03 EPD (SLnd)\Task 03 2025 Landfill Report\Figures\2025 Landfill Fig06 01-22-26.dwg



TITLE:
**CURRENT LANDFILL
 IRON TREND PLOTS**
 2025 ENVIRONMENTAL MONITORING REPORT
 CURRENT AND FORMER LANDFILL AREAS

DWN: AJZ	VT.HZ.: -	DATE: 01/22/26	PROJECT NO.: -
CHKD: JM	APPD: JM	REV.: -	NOTES: -
FIGURE NO.:			6

68

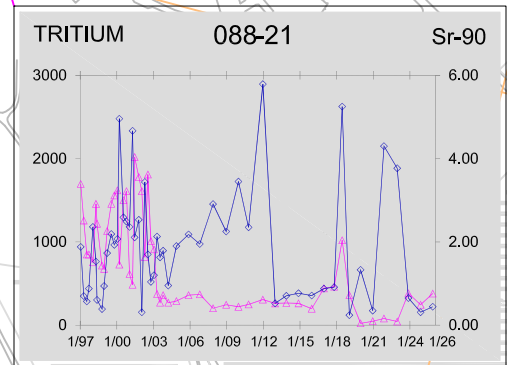
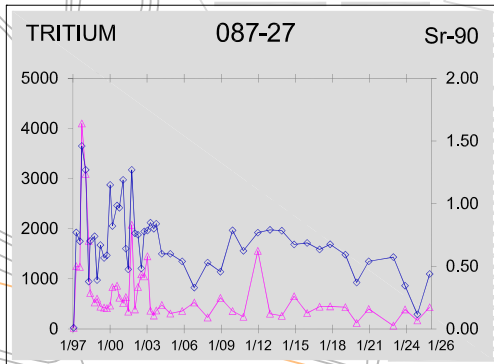
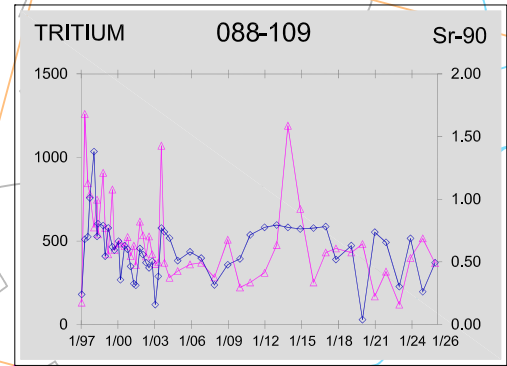
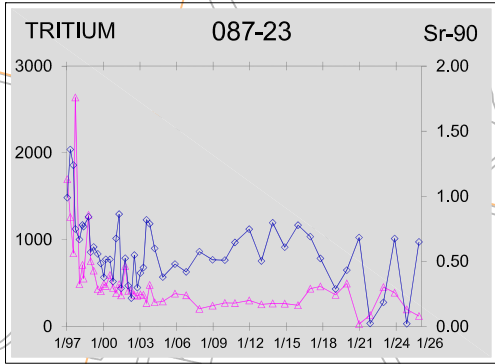
RA V BASIN

77

87

88

107



LEGEND

- MONITORING WELL
- ◇ Strontium-90 (pCi/L) right scale
- △ Tritium (pCi/L) left scale
- 107 BNL GRID NUMBER
- RA V BNL RECHARGE BASIN
- 088-23 DOWNGRADIENT
- SOLAR FARM PANELS
- SCALE

CURRENT LANDFILL

HWMF

PRINCETON AVE.

BROOKHAVEN AVE.

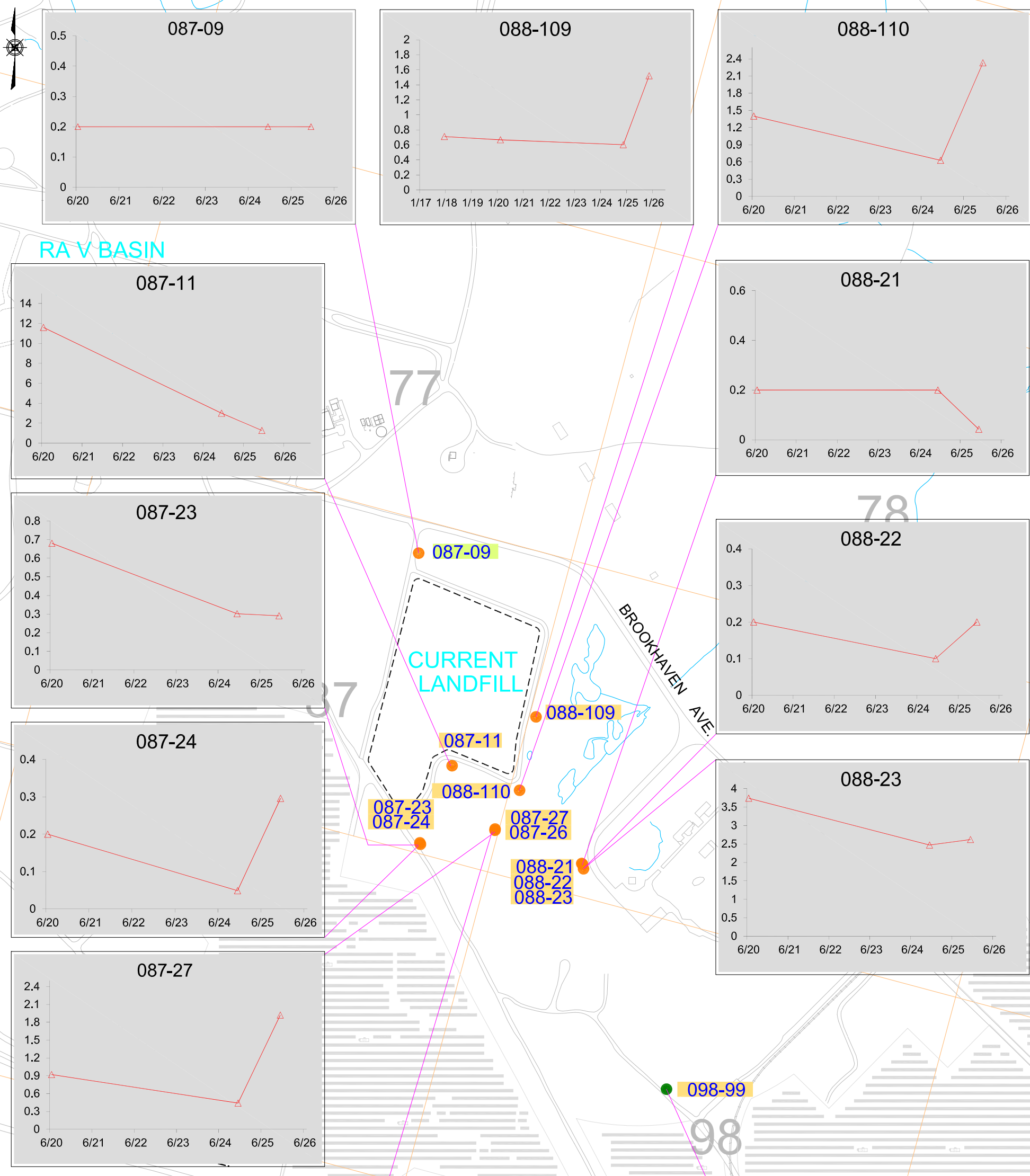
Q:\2025\BNLab\25-03 EPD (SLind)\Task 03 2025 Landfill Report\Figures\2025 Landfill Fig07 01-22-26.dwg



TITLE: CURRENT LANDFILL TRITIUM AND STRONTIUM-90 TREND PLOTS
2025 ENVIRONMENTAL MONITORING REPORT
CURRENT AND FORMER LANDFILL AREAS

DWN: AJZ	VT.HZ.: -	DATE: 01/22/26	PROJECT NO.: -
CHKD: JM	APPD: JM	REV.: -	NOTES: -
FIGURE NO.: 7			

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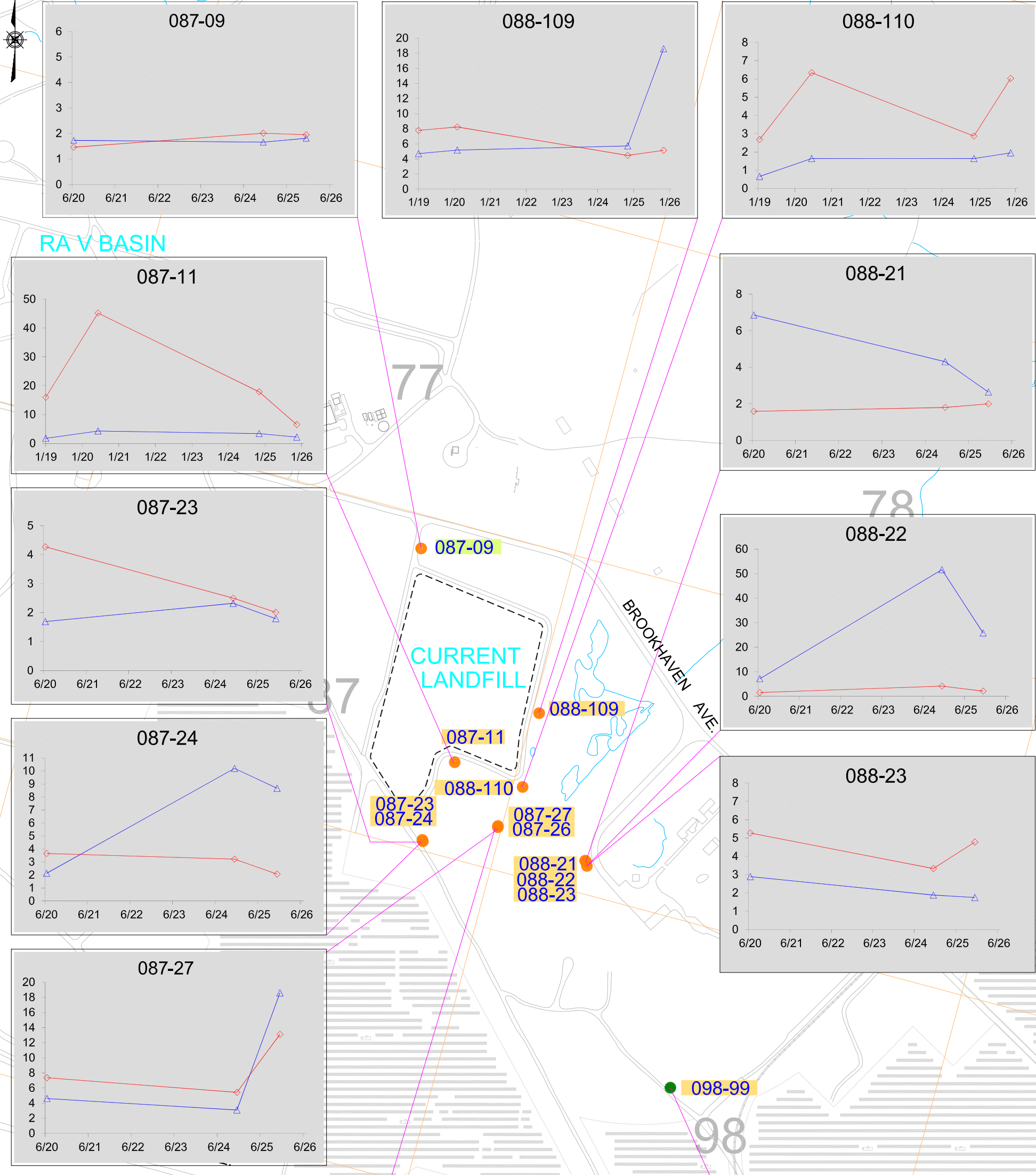


LEGEND

- 11 MONITORING WELL
- ▲— 1,4-DIOXANE
- 107 BNL GRID NUMBER
- BNL RECHARGE BASIN
- RA V
- 087-09 BACKGROUND
- 087-11 DOWNGRADIENT
- SOLAR FARM PANELS

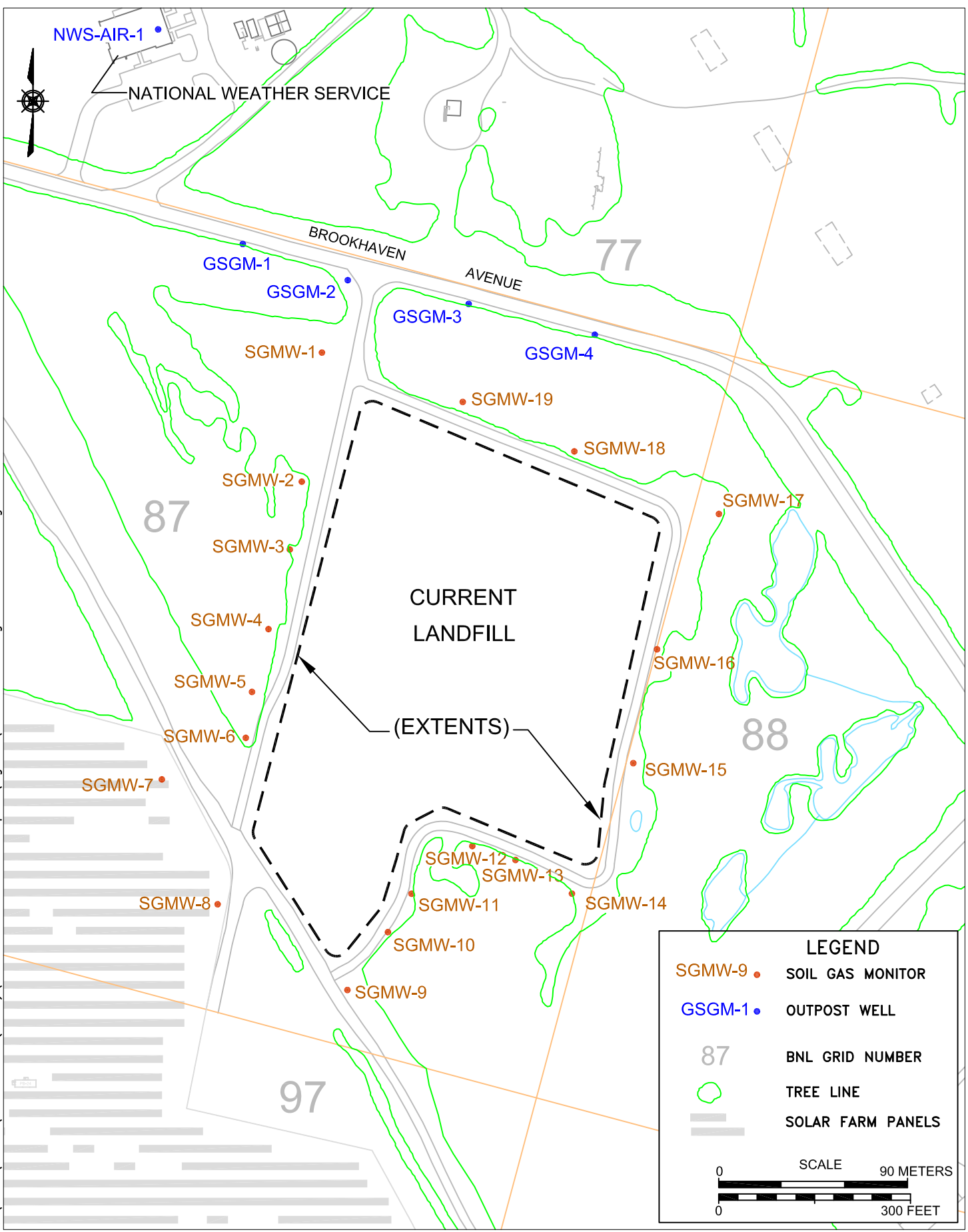
SCALE

0 500 FEET



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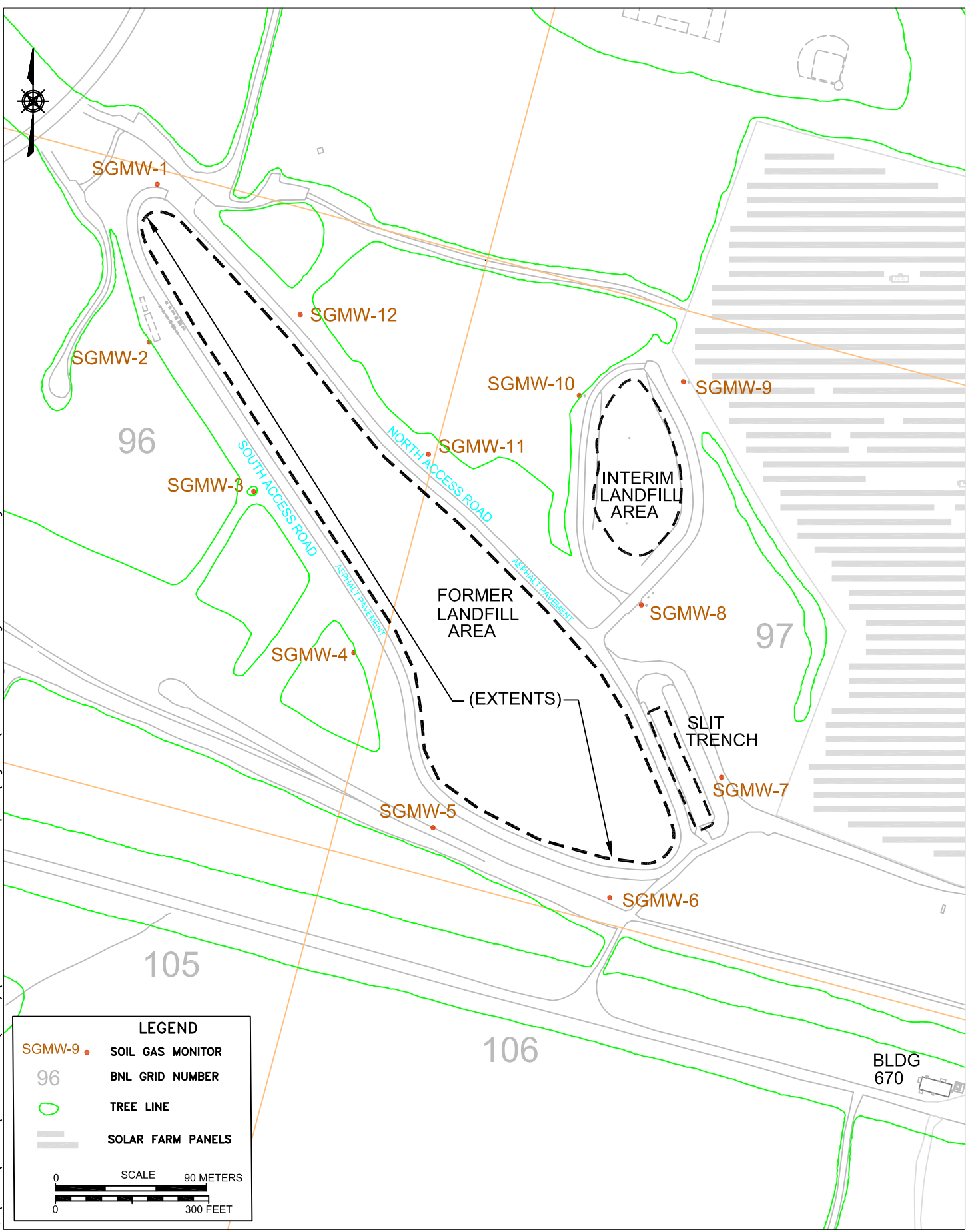
C:\2025\BNLab\25-03 EPD (S\Ind)\Task 03 2025 Landfill Report\Figures\2025 Landfill Fig10 01-22-26.dwg



TITLE:
**CURRENT LANDFILL
 SOIL-GAS MONITOR LOCATION MAP**
 2025 ENVIRONMENTAL MONITORING REPORT
 CURRENT AND FORMER LANDFILL AREAS

DWN: AJZ	VT:HZ.: -	DATE: 01/22/26	PROJECT NO.: -
CHKD: JM	APPD: JM	REV.: -	NOTES: -
FIGURE NO.:			10

Q:\2025\BNLab\25-03 EPD (SLInd)\Task 03 2025 Landfill Report\Figures\2025 Landfill Fig11 01-22-26.dwg



TITLE:
**FORMER LANDFILL AREA
 SOIL-GAS MONITOR LOCATION MAP
 2025 ENVIRONMENTAL MONITORING REPORT
 CURRENT AND FORMER LANDFILL AREAS**

DWN: AJZ	VT:HZ.: -	DATE: 01/22/26	PROJECT NO.: -
CHKD: JM	APPD: JM	REV.: -	NOTES: -
FIGURE NO.:			11

Appendix A

Soil-gas Sampling Field Notes

3/26/25

mid

Indoor air sample request @ NWS

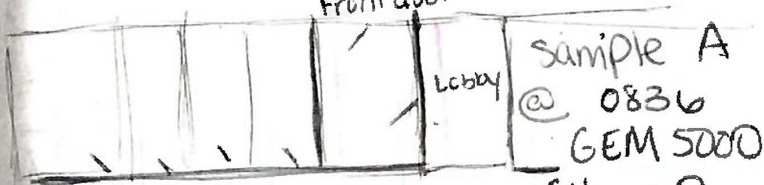
SOP 503

sampled with Jim Milligan

Landtec GEM 5000 +

MSA Altair 5x - 1H 0617

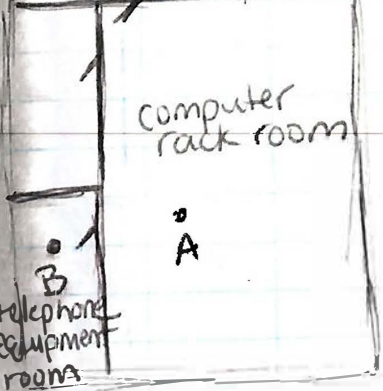
Front door



sample A
@ 0836
GEM 5000
CH₄ - 0
H₂S - 0



Altair 5x
O₂ 20.8
H₂S 0
NO₂ 0
CO 0



Sample B
@ 0843
GEM 5000
CH₄ - 0
H₂S - 0

Altair 5x
O₂ - 20.8
H₂S - 0
NO₂ - 0
CO - 0

Temp 60.6

PROJ 30.05

1 3/8 Humidity 29%

cleaner



Locate well to CHX LELX HAS Time

Locate	well to	CHX	LELX	HAS	Time
G5A N-1A		0	0	0	1114:07 ¹ / ₂ ¹ / ₂
1B		0	0	0	1122
1C		0	0	0	1137
2A		0	0	0	1142
2B		0	0	0	1155
2C		0	0	0	1158
3A		0	0	0	1227
3B		0	0	0	1239
4A		0	0	0	1248
4B		0	0	0	1400

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3/28/25

Temp 46° humidity 59% partly cloudy
 Press 30 in Current Landfill

Location	well ID	CH ₄ %	LEL %	H ₂ S	Time / comment
SGM-1A	087-62	3.2	64	3	1006
1B	087-73	2.4	48	0	1015
1C	087-79	2.2	44	0	1025
2A	087-63	27.9	558	0	1036
2B	087-80	24.4	488	20	1044
2C	087-81	25.3	506	4	1053
3A	087-64	11.5	230	1	1106
3B	087-82	31.0	620	9	1114
3C	087-83	29.0	580	11	1124
4A	087-65	29.1	582	0	1136
4B	087-84	26.8	536	2	1143
4C	087-85	19.4	388	4	1153
5A	087-66	12.6	252	0	1342
5B	087-86	18.0	360	0	1351
5C	087-87	12.8	256	1	1400
6A	087-67	0.0	0	0	1410
6B	087-88	19.8	396	1	1417
6C	087-89	18.0	360	1	1426
317A	087-68	0.0	0	0	1007
7B	087-90	0.0	0	0	1019
7C	087-91	0.0	0	0	1031
8A	087-69	0.0	0	0	1040
8B	087-92	0.0	0	0	1046
8C	087-93	0.0	0	0	1101

32625

3/27 Temp 46 Humidity 35% Sunny 67
 Press 30.09 in CLP

Location	WSPND	CH ₄ %	HC ₂ %	H ₂ S	Time/ Comment
86M- 9A	087-70	0	0	0	1110
9B	087-94	0	0	0	1118
9C	087-95	0	0	0	1122
10A	087-71	0	0	0	1151
10B	087-96	0	0	0	1158
10C	087-97	1.7	34	0	1210
11A	087-72	0	0	0	1424
11B	087-98	0	0	0	1432
12A	087-73	21.8	436	6	1440
12B	087-99	18.1	362	0	1448
13A	087-74	0	0	0	1455
13B	087-100	10.0	200	0	1507
14A	087-75	0	0	0	0926
14B	087-101	0	0	0	0974
15A	088-111	0	0	0	0942
15B	088-114	2.2	424	0	0952
16A	088-112	0	0	0	0959
16B	088-115	0	0	0	1008
17A	088-113	0	0	0	1020
17B	088-116	0	0	0	1070 <small>part filled</small>
18A	087-76	0	0	0	1039
18B	087-102	0	0	0	1046
19A	087-77	0	0	0	1052
19B	087-103	0	0	0	1058

3/27
 3/28

Return to base

NIS 6/17/25 Temp 63°F press. 29.98 in Hg Hum: 96%
 Overcast Current Landfill

LOCATION	WELL ID	CH4%	LEL%	7125	Time Comment	
	SCMW-1A	087-62	5.7	114	3	1046
	1B	087-78	5.3	106	0	1054
	1C	087-79	4.4	88	0	1105
	2A	087-63	36.7	734	4	1111
	2B	087-80	33.5	670	12	1117
	2C	087-81	33.8	676	3	1130
	3A	087-64	28.3	566	11	1137
	3B	087-82	38.1	762	18	1145
	3C	087-83	38.3	766	31	1155
	4A	087-65	35.3	706	50	1336
	4B	087-84	32.4	648	5	1343
	4C	087-85	25.2	564	5	1352
	5A	087-66	21.9	438	16	1401
	5B	087-86	22.9	458	1	1408
	5C	087-87	17.2	344	1	1419
	6A	087-67	0.5	10	0	1426
	6B	087-88	23.7	474	4	1433
	6C	087-89	21.4	428	3	1444
	7A	087-68	0.1	2	0	1422
	7B	087-90	0	0	0	1428
	7C	087-91	0	0	0	1438
	8A	087-69	0.1	2	0	1358
	8B	087-92	0.1	2	0	1405
	8C	087-93	0.1	2	0	1415

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6/17/25

6/18/25

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NS 6/18/25 Temp 45°F pressure 29.95 in Hg
 70 Humidity 96% overcast CLF

NS

LOCATION	WIND	CLF	LEL%	TL25	Time / Comment
8GMW-94	087-70	0.1	2	0	0935
-9B	087-94	0.1	2	0	0941
9C	087-95	0.1	2	0	0951
10A	087-71	2.5	50	0	0957
10B	087-96	10.1	202	0	1004
10C	087-97	9.2	184	0	1014
11A	087-72	10.1	202	13	1019
11B	087-98	10.3	200	1	1027
12A	087-73	30.1	602	45	1033
12B	087-99	18.1	362	0	1040
13A	087-74	7.4	148	1	1047 replace connector
13B	087-100	15.9	318	0	1054
14A	087-75	0.1	2	0	1100
14B	087-101	0.1	2	0	1107
15A	088-111	0.1	2	0	1113
15B	088-114	25.3	500	190	1120
16A	088-112	0.1	2	2	1120
16B	088-115	0.1	2	1	1133
17A	088-113	0.1	2	0	1139
17B	088-116	0	0	0	water 1147 pump fail
18A	087-76	0.1	2	0	1503
18B	087-102	0.1	2	0	1511
19A	087-77	0.9	18	0	1450
19B	087-103	9.8	196	6	1457

6/18/25

6/17

6/18/25

LOC
GSCD

95 in fig
F

NS 6/18/25

Time/
Comment

LOCATION WEL# ID CH14% LE1% T125

Time/
Comment

0935

GSEM 1A 087-114 0 0 0 1538

0941

1B 087-115 0 0 0 1545

0951

1C 087-116 0 0 0 1555

0957

2A 087-117 0 0 0 1533

1004

2B 087-118 0 0 0 1528

1014

2C 087-119 0 0 0 1522

1019

3A 087-120 0 0 0 1507

1027

3B 087-121 0 0 0 1511

1033

4A 087-122 0 0 0 1450

1040

4B 087-123 0 0 0 1458

1047 replace
Connector

1054

1100

1107

1113

1120

1126

1133

1139

1147 PUMP
Fail

1503

1511

1450

1457

6/18/25

NS

6/18/25



GEM 5000

70°
 pressure - 30.03 in
 humidity 76.9%

MJ 8/20/25 Former landfill

Location	Well ID	CH ₄ %	CO ₂ %	H ₂ S (ppm)	Time/Comments
SGM	1A	096-41	50	0	10:18 39
	1B	096-42	0	0	10:55
	2A	096-43	0	0	08:58
	2B	096-44	0	0	09:07
	3A	096-45	0	0	09:14
	3B	096-46	0	0	09:20
	4A	096-47	0	0	09:25
	4B	096-48	0	0	09:32
	5A	097-50	0	0	10:42
	5B	097-51	0	0	10:48
	6A	097-52	0	0	10:53
	6B	097-53	0	0	11:00
	7A	097-54	0	0	10:28
	7B	097-55	0	0	10:35
	8A	097-56	0	0	10:17
	8B	097-57	0	0	10:23
	9A	097-58	0	0	09:52
	9B	097-59	0	0	09:58
	10A	097-60	0	0	10:04
	10B	097-61	0	0	10:10
	11A	097-62	0	0	11:09
	11B	097-63	0	0	11:15
	12A	096-49	0	0	11:21
	12B	096-50	0	0	11:27

At 1000 68 cloudy pressure 29.98 in

9/18/25

CLP

Location	Unit	CH4%	LEL	H2S	Time
1A	087-62	1.1	22	2	0933
1B	087-78	1.2	24	0	0936
1C	087-74	1.8	36	1	0947
2A	087-63	27	540	6	0954
20	087-80	30.4	728	8 22	1004
26	087-81	36.7	774	4 21	1015
3A	087-64	21.4	428	2	1021
3B	087-82	79.2	761	17	1028
3C	087-83	38.2	762	17	1039
4A	087-65	28.7	574	4	1049
40	087-84	27.7	546	9	1059
46	087-85	20.6	412	8 5	1109
5A	087-66	7.6	272	9 2	1123
5B	087-86	8.3	366	2	1136
5C	087-87	3.0	260	1	1146
6A	087-67	1	20	0	1153
6B	087-88	14.1	382	5	1200
6C	087-84	14.8	296	0	1211
7A	087-88	0	0	0	1315
7B	087-90	0	0	0	1323
7C	087-91	0	0	0	1334
8A	087-69	0	0	0	1346
8B	087-92	0	0	0	1352
8C	087-93	0	0	0	1402

9/18/25

73

Location	Well	CH4%	CO2	H2S	Time
9A	087-70	0	0	0	1408
9B	087-94	0	0	0	1417
9C	087-95	0	0	0	1420

9/19/25 weather -

SARAWA	087-71	0	0	0	0771
10B	087-96	9.3	186	0	0777
10C	087-97	9.2	184	2	0747
11A	087-72	9.4	188	11	0953
11B	087-98	10.0	200	0	0801
12A	087-73	27.6	552	6	0807
12B	087-99	26.0	520	3	0814
13A	087-74	6.0	120	0	0820 ^{Perkins}
13B	087-1000	16.5	330	2	0827 ^{Perkins}
14A	087-75	0	0	0	0837
14B	087-101	0	0	0	0844
15A	088-111	0	0	0	0844
15B	088-114	39.8	796	25	0855
16A	088-112	0.1	2	0	0907
16B	088-115	0.0	0	0	0917
17A	088-113	0	0	0	0920
17B	088-116	0	0	0	0926
18A	87-76	0	0	0	0930
18B	87-102	0	0	0	0936
19A	087-77	0	0	0	0941
19B	087-103	4	80	1	0948

9/19/25 Cont'

Loc-tn	Well	CH4%	LEL	1/25	Low
6507-1A	087-114	0	0	0	1036
- 1B	087-115	0	0	0	1045
- 1C	087-116	0	0	0	1054
- 2A	087-117	0	0	0	1106
- 1B	087-118	0	0	0	1115
- 1C	087-119	0	0	0	1127
- 3A	087-120	0	0	0	1129
- 3B	087-121	0	0	0	1177
- 4A	087-122	0	0	0	1140
- 4B	087-123	0	0	0	1151

NS arrived 0700, 26.2°F, 30.4 inHg, Rel Hum 70%

Sunny 12/22/25

Location	Well ID	CH ₄ %	EEL%	H ₂ S	Time/ Comment
SGMW-1A	087-62	0	0	0	0919
	1B 087-78	0	0	0	0926
	1C 087-79	0.4	8	0	0937
	2A 087-63	28.8	576	1	0943
	2B 087-80	25.2	504	1	0950
	2C 087-81	10.4	328	0	1000
	3A 087-64	5.2	104	0	1007
	3B 087-82	25.3	504	0	1014
	3C 087-83	13.8	276	0	1026
	4A 087-65	20.0	400	0	1032
	4B 087-84	17.3	346	1	1039
	4C 087-85	10.0	200	0	1049
	5A 087-66	2.8	56	0	1058
	5B 087-86	3.1	62	0	1105
	5C 087-87	7.5	150	1	1115-
	6A 087-67	0	0	0	1122*
	6B 087-88	15.9	318	1	1128
	6C 087-89	13.9	278	1	1138
	7A 087-68	0	0	0	1416
	7B 087-90	0	0	0	1422
	7C 087-91	0	0	0	1433
	8A 087-69	0	0	0	1349
	8B 087-92	0	0	0	1356
	8C 087-93	0	0	0	1406

12/22/25



76 NSarrived 0700 12/23/25 35.2°F, 30.19 in Hg
 overcast/rain, rel Hum 92%

Location	Well ID	CH ₄ %	LEL%	H ₂ S	Time/ Comment
SEM	9A 087-70	0	0	0	1013
	9B 087-94	0	0	0	1019
	9C 087-95	0	0	0	1029
	10A 087-71	0	0	0	1040
	10B 087-96	0.1	2	0	1047
	10C 087-97	1.6	32	6	1057
	11A 087-72	0.5	10	0	1102
	11B 087-98	0	0	0	1109
	12A 087-73	16.6	332	7	1114
	12B 087-99	13.9	278	1	1121
	13A 087-74	0	0	0	1127
	13B 087-100	7.3	146	1	1134
	14A 087-75	0	0	0	1139
	14B 087-101	0	0	0	1145
	15A 088-111	0	0	0	1150
	15B 088-114	9.2	184	14	1157
	16A 088-112	0	0	0	1203
	16B 088-115	0	0	0	1210
	17A 088-113	0	0	0	1216
	17B 088-116	0	0	0	1223
	18A 087-76	0	0	0	1227
	18B 087-102	7.6	152	0	1234
	19A 087-77	0	0	0	1240
	19B 087-103	0	0	0	1247

12/23/25

pump failed

Location	Well ID	CH ₄ %	UEL%	t12S	Time ⁷⁷ Comment
USGM-1A	087-114	0	0	0	1154
1B	087-115	0	0	0	1201
1C	087-116	0	0	0	1205
2A	087-117	0	0	0	1444
2B	087-118	0	0	0	1457
2C	087-119	0	0	0	1501
3A	087-120	0	0	0	1510
3B	087-121	0	0	0	1574
4A	087-122	0	0	0	1302
4B	087-123	0	0	0	1258

12/22/25-

12/23/25

NS

12/23/25-

Appendix B

Monthly Landfill Site Inspection Forms and Photos

**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan

Date of Inspection: 1/28/2025

Purpose of Inspection: Routine Heavy Rainfall Reported Incident

Time on Site: 1130

Time off Site: 1219

Weather Conditions: 30 Sunny

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Cap	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Gas Vents	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
2.0 Drainage Structures:					
Toe Drain	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Drainage Channels	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
French Drains/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Manholes	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Recharge Areas		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3.0 Monitoring System:					
Soil Gas wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Groundwater Wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
4.0 Site Access:					
Asphalt Access Road		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Crushed-Concrete Access Road	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>

B. Description of Further Action Requirements:

1. Location: CLF
 Observed Conditions: GRASS on Cap OK. Some Ice on access Road present.
No Signs of animal burrows.

Recommendations: photos taken.







**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 1/28/2015
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 1045
 Time off Site: 1130
 Weather Conditions: 30° Sunny

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes					X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road		X			X

B. Description of Further Action Requirements:

1. Location: FLF
 Observed Conditions: Grass on Cap OK. Some snow and ice present.
No animal burrows noted.

Recommendations: Replace faded LULC sign South side entrance.
Photos taken.















**AREA UNDER LAND USE AND
INSTITUTIONAL CONTROLS
-RESTRICTED USE-**

PRIOR TO ANY WORK ACTIVITIES

PLEASE CONTACT:

**Environmental Protection Division
Long Term Stewardship
X-2828**

7.22.2022



**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan

Date of Inspection: 3/25/2025

Purpose of Inspection: Routine Heavy Rainfall Reported Incident

Time on Site: 1:35⁰

Time off Site: 1:50⁰

Weather Conditions: mostly sunny 45°

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	NA				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road	X				X

B. Description of Further Action Requirements:

1. Location: CLF

Observed Conditions: Grass on cap ok. No sign of animal burrows.

Recommendations: Photos taken







**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 3/24/2025
 Purpose of Inspection: Routine ___ Heavy Rainfall ___ Reported Incident
 Time on Site: 11:07
 Time off Site: 11:50
 Weather Conditions: Misty Sunny 45°

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	X				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road		X			X

B. Description of Further Action Requirements:

1. Location: FLF
 Observed Conditions: grass on top of cell on. no animal burrows noted.

Recommendations: photos taken







**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 4/25/2018
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 1330
 Time off Site: 1430
 Weather Conditions: Mostly Sunny 74°

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Cap	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Gas Vents	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
2.0 Drainage Structures:					
Toe Drain	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Drainage Channels	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
French Drains/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Manholes	<u>NA</u>				<input checked="" type="checkbox"/>
Recharge Areas		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3.0 Monitoring System:					
Soil Gas wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Groundwater Wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
4.0 Site Access:					
Asphalt Access Road		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Crushed-Concrete Access Road	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>

B. Description of Further Action Requirements:

1. Location: CLF
 Observed Conditions: grass on cap ok. No sign of animal burrows.
 Recommendations: Photos Taken -







**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan

Date of Inspection: 4/22/2025

Purpose of Inspection: Routine Heavy Rainfall Reported Incident

Time on Site: 1440

Time off Site: 1545

Weather Conditions: Misty Sunny 74°

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	X				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	F				F
Groundwater Wells	F				F
4.0 Site Access:					
Asphalt Access Road		F			F
Crushed-Concrete Access Road		F			F

B. Description of Further Action Requirements:

1. Location: FLF
 Observed Conditions: Grass on Cap OK. No animal burrows noted.

Recommendations: Photo & Notes







**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 5/30/2015
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 0830
 Time off Site: 0925
 Weather Conditions: Cloudy 65°

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	NA				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road	X				X

B. Description of Further Action Requirements:

1. Location: CLK
 Observed Conditions: Grass on cap mowed week of 19th, one burrow noted and filled in.

Recommendations: Photos taken.









**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James S. Milligan

Date of Inspection: 5/30/2023

Purpose of Inspection: Routine Heavy Rainfall Reported Incident

Time on Site: 0935

Time off Site: 1025

Weather Conditions: 65°F Cloudy

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	X				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road		X			X

B. Description of Further Action Requirements:

1. Location: FLR
 Observed Conditions: Grass on Cap marked where we 19th. No gravel beyond
road.

Recommendations: Photos taken.





BROOKHAVEN NATIONAL LABORATORY
SITE INSPECTION FORM

Location (AOC): Current Landfill
 Date of Inspection: Friday, June 13, 2025
 Name of Inspector(s): J. Michaels, D. Paquette, J. Milligan, B. Barth, V. Racaniello
 Purpose of Inspection: Routine Heavy Rain Event Reported Incident

<u>Component</u>	<u>Observed Condition</u>				Action Req'd	Notes
	Excellent	Fair	Poor	N/A		
Landfill Cap/Soil Covers/Wetlands						
Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Soil (Cap/Cover)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 gopher hole
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drainage Structures:						
Standing Water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Toe Drain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drainage Channels	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vegetation
French Drains/Outfalls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manholes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Berms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Roof Drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Recharge Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Monitoring System:						
Soil Gas Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Groundwater Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gas Vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site Access:						
Asphalt Access Road	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Some cracks
Crushed-concrete Access Road	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fence	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gates/Locks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Change lock
Radiological Postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
LUIC Sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Evidence of unauthorized work activities and/or unauthorized access has occurred?

Describe:

Description of Other Observations/Notes: Vegetation established across entire landfill. Some vegetation noted in the drainage swale around the landfill. A work order should be placed to remove. One gopher hole was observed in the SE portion of the landfill, which should be filled. The asphalt access road was in fair condition, some cracks with vegetation emerging was noted. The lock on the south side gate should be replaced. There were no observations of erosion on the landfill.

**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 6/26/2025
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 0900
 Time off Site: 0940
 Weather Conditions: 70° Cloudy overcast

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap		X			X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	NA				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			
Crushed-Concrete Access Road	X				

B. Description of Further Action Requirements:

1. Location: CLF
 Observed Conditions: Grass on Cap OK. Some wildflower growth. Two Burrows noted and filled in. Some small pipe settings pulled from culverts.

Recommendations: Photos Taken.





BROOKHAVEN NATIONAL LABORATORY
SITE INSPECTION FORM

Location (AOC): Former Landfill inc. Interim Landfill and Slit Trench
 Date of Inspection: Tuesday, June 3, 2025
 Name of Inspector(s): J. Michaels, B. Barth, V. Racaniello, J. Milligan, K. Green
 Purpose of Inspection: Routine Heavy Rain Event Reported Incident

Component

Observed Condition

	Excellent	Fair	Poor	N/A	Action Req'd	Notes
Landfill Cap/Soil Covers/Wetlands						
Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Soil (Cap/Cover)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Drainage Structures:						
Standing Water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Toe Drain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Drainage Channels	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vegetation
French Drains/Outfalls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Manholes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Berms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Roof Drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Recharge Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Monitoring System:						
Soil Gas Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Groundwater Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Gas Vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Site Access:						
Asphalt Access Road	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crushed-concrete Access Road	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Fence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Gates/Locks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Radiological Postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
LUIC Sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Evidence of unauthorized work activities and/or unauthorized access has occurred?
 Describe:

Description of Other Observations/Notes: Some vegetation observed in the drainage channels surrounding the landfill(s). One pothole noted in asphalt at entrance of the former landfill area. Vegetation established across the cover system. No new animal burrows noted on landfill cap.

**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): JAMES MILLIGAN
 Date of Inspection: 6/26/2023
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 1000
 Time off Site: 1045
 Weather Conditions: 70° Cloudy, overcast

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X	X			X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	X				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road		X			X

B. Description of Further Action Requirements:

1. Location: FLF
 Observed Conditions: Grass on cap ok. no animal burrows noted. Some small vegetation in drainage channels.

Recommendations: Photos taken.





**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan

Date of Inspection: 7/16/2025

Purpose of Inspection: Routine Heavy Rainfall Reported Incident

Time on Site: 0855

Time off Site: 0930

Weather Conditions: 83° Sunny

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation		X			X
Cap		X			X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	NA				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			
Crushed-Concrete Access Road	X				

B. Description of Further Action Requirements:

1. Location: CLF
 Observed Conditions: Grass on Cap OK. One Borrow Pile is Dry in Colvert.

Recommendations: Photos Taken.





**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 7/16/2025
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 0800
 Time off Site: 0845
 Weather Conditions: 85° Sunny

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation		X			X
Cap		X			X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X	X			X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	X				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	Y				Y
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road		Y			Y

B. Description of Further Action Requirements:

1. Location: FLP
 Observed Conditions: Grass on cap od. one animal burrow filed in. Small vegetation in drainage channel.

Recommendations: Photos taken





**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 8/12/2015
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 10:25
 Time off Site: 11:00
 Weather Conditions: 83° sunny clear

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation		X			X
Cap		X			X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels	X				X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	N/A				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road	X				X

B. Description of Further Action Requirements:

1. Location: CLP
 Observed Conditions: Grass on CAP & R. one Burrow filled in.

Recommendations: Photos taken.







**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 8/14/2025
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 0925
 Time off Site: 1020
 Weather Conditions: 83° Sunny Clear

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation		X			X
Cap		X			X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels		X			X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	X				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road		X			X

B. Description of Further Action Requirements:

1. Location: FLIF
 Observed Conditions: Grout on Cap OK. moved some MW's and Gas wells for inspection.

Recommendations: Photos taken.









**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan

Date of Inspection: 9/9/2025

Purpose of Inspection: Routine Heavy Rainfall Reported Incident

Time on Site: 11:00

Time off Site: 11:29

Weather Conditions: Partly Cloudy 68°

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Cap		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Gas Vents	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
2.0 Drainage Structures:					
Toe Drain	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Drainage Channels	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
French Drains/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Manholes	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Recharge Areas	NA	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3.0 Monitoring System:					
Soil Gas wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Groundwater Wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
4.0 Site Access:					
Asphalt Access Road		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Crushed-Concrete Access Road	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>

B. Description of Further Action Requirements:

1. Location: CLF

Observed Conditions: Grass on cap will be cut in October 2025.

Recommendations: Photos Taken





AREA UNDER LAND USE AND
ENVIRONMENTAL CONTROLS
RESTRICTED USE
THINK IN ANY WAYS AFFECTING
WATER CONTACT
UNAUTHORIZED ENTRY OR REMOVAL
IS PROHIBITED
N-1822

**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 9/9/2025
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 11:35
 Time off Site: 12:00
 Weather Conditions: 85° Sunny Clear

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Cap		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Gas Vents	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
2.0 Drainage Structures:					
Toe Drain	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Drainage Channels		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
French Drains/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Manholes	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Recharge Areas		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3.0 Monitoring System:					
Soil Gas wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Groundwater Wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
4.0 Site Access:					
Asphalt Access Road		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Crushed-Concrete Access Road		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>

B. Description of Further Action Requirements:

1. Location: FLF
 Observed Conditions: Grass on Cap will be moved in October 2025.
 Recommendations: Photos Taken







**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan
 Date of Inspection: 10/3/2025
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 1345
 Time off Site: 1435
 Weather Conditions: Mostly Sunny 68°F

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Cap		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Gas Vents	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
2.0 Drainage Structures:					
Toe Drain	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Drainage Channels	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
French Drains/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Manholes	NA				<input checked="" type="checkbox"/>
Recharge Areas		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3.0 Monitoring System:					
Soil Gas wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Groundwater Wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
4.0 Site Access:					
Asphalt Access Road		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Crushed-Concrete Access Road	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>

B. Description of Further Action Requirements:

1. Location: CLF
 Observed Conditions: Grass mowed September 23rd. Grass in great condition. one animal burrow filled in.
 Recommendations: Photos Taken.







**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): James Milligan

Date of Inspection: 10/3/2025

Purpose of Inspection: Routine Heavy Rainfall Reported Incident

Time on Site: 1440

Time off Site: 1545

Weather Conditions: Mist Sun 68°F

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Cap		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Gas Vents	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
2.0 Drainage Structures:					
Toe Drain	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Drainage Channels		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
French Drains/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Manholes	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Recharge Areas		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3.0 Monitoring System:					
Soil Gas wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Groundwater Wells	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
4.0 Site Access:					
Asphalt Access Road		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Crushed-Concrete Access Road		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>

B. Description of Further Action Requirements:

1. Location: FLF

Observed Conditions: Grass on Cap mowed September 23rd.
No animal burrows observed.

Recommendations: Photos Taken







BROOKHAVEN NATIONAL LABORATORY
SITE INSPECTION FORM

Location (AOC): Current Landfill
 Date of Inspection: Tuesday, November 18, 2025
 Name of Inspector(s): J. Michaels, J. Milligan, V. Racaniello, A. Steinhauft, K. Gree
 Purpose of Inspection: Routine Heavy Rain Event Reported Incident

<u>Component</u>	<u>Observed Condition</u>				Action Req'd	Notes
	Excellent	Fair	Poor	N/A		
Landfill Cap/Soil Covers/Wetlands						
Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Soil (Cap/Cover)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>2 groundhog holes</u>
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drainage Structures:						
Standing Water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Toe Drain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drainage Channels	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Vegetation</u>
French Drains/Outfalls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manholes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Berms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Roof Drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Recharge Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Monitoring System:						
Soil Gas Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Groundwater Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gas Vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site Access:						
Asphalt Access Road	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Some cracks</u>
Crushed-concrete Access Road	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fence	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gates/Locks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Change lock</u>
Radiological Postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
LUIC Sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Evidence of unauthorized work activities and/or unauthorized access has occurred?

Describe:

Description of Other Observations/Notes: Vegetation established across entire landfill. Some vegetation noted in the drainage swale around the landfill. A work order should be placed to remove. The asphalt access road was in fair condition, some cracks with vegetation emerging was noted. The lock on the south side gate should be replaced. There were no observations of erosion on the landfill. 1 groundhog hole eastern top of landfill and one on north side. Being managed by Jim during monthly inspections.

**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): J. Milligan, J. Michaels, V. Palametto, A. Steinhilber, K. Green.
 Date of Inspection: 11/18/2025
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 1000
 Time off Site: 1100
 Weather Conditions: Sunny 39°

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	✓				✓
Cap		✓			✓
Gas Vents	✓				✓
2.0 Drainage Structures:					
Toe Drain	✓				✓
Drainage Channels		✓			✓
French Drains/Outfalls	X				✓
Subsurface Drainage Pipes/Outfalls	P				✓
Manholes					✓
Recharge Areas	NA				✓
3.0 Monitoring System:					
Soil Gas wells	X				✓
Groundwater Wells	X				✓
4.0 Site Access:					
Asphalt Access Road		X			✓
Crushed-Concrete Access Road		NA			✓

B. Description of Further Action Requirements:

1. Location: CLF
 Observed Conditions: Some vegetation in drainage channels. One Burrow filled in on north side filled in.

Recommendations: See photos.







BROOKHAVEN NATIONAL LABORATORY
SITE INSPECTION FORM

Location (AOC): Former Landfill inc. Interim Landfill and Slit Trench
 Date of Inspection: Monday, November 3, 2025
 Name of Inspector(s): J. Michaels, J. Milligan, L. Singh, A. Steinhauuff
 Purpose of Inspection: Routine Heavy Rain Event Reported Incident

Component

Observed Condition

	<u>Observed Condition</u>				<u>Action</u>	
	Excellent	Fair	Poor	N/A	Req'd	Notes
Landfill Cap/Soil Covers/Wetlands						
Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Soil (Cap/Cover)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drainage Structures:						
Standing Water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Toe Drain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drainage Channels	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vegetation
French Drains/Outfalls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Subsurface Drainage Pipes/Outfalls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manholes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Berms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Roof Drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Recharge Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Monitoring System:						
Soil Gas Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Groundwater Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gas Vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site Access:						
Asphalt Access Road	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Crushed-concrete Access Road	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Gates/Locks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Radiological Postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
LUIC Sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Evidence of unauthorized work activities and/or unauthorized access has occurred?
 Describe:

Description of Other Observations/Notes: Some vegetation observed in the drainage channels surrounding the landfill(s). One pothole noted in asphalt at entrance of the former landfill area. Vegetation established across the cover system. No new animal burrows noted on landfill cap.

**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): J. Milroy, J. Michael, L. Singh
A. Sitenko
 Date of Inspection: 11/3/2025
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 10:30
 Time off Site: 11:30
 Weather Conditions: Overcast 40°

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	Y				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels		X			X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	X				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road		X			X

B. Description of Further Action Requirements:

1. Location: FLF Some vegetation noted in drainage channels. One
 Observed Conditions: pothole noted on entrance asphalt roadway.

Recommendations: pull vegetation, fix potholes
see photos







**BROOKHAVEN NATIONAL LABORATORY
CURRENT LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): J. Milligan
 Date of Inspection: 12/10/2023
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 1:30
 Time off Site: 1:00
 Weather Conditions: 35° Cloudy

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap: Vegetation Cap Gas Vents	✓				✓
	✓	/			/
					✓
2.0 Drainage Structures: Toe Drain Drainage Channels French Drains/Outfalls Subsurface Drainage Pipes/Outfalls Manholes Recharge Areas	✓				✓
		/			/
	✓				/
	✓				/
	NA				/
3.0 Monitoring System: Soil Gas wells Groundwater Wells	✓				/
	✓				/
4.0 Site Access: Asphalt Access Road Crushed-Concrete Access Road		/			/
		NA			/

B. Description of Further Action Requirements:

1. Location: CLF
 Observed Conditions: Small vegetation in drainage channels removed during inspection.
 Recommendations: See Photos.







**BROOKHAVEN NATIONAL LABORATORY
FORMER LANDFILL AREA
SITE INSPECTION FORM**

Name of Inspector(s): J. Milligan
 Date of Inspection: 12/10/2025
 Purpose of Inspection: Routine Heavy Rainfall Reported Incident
 Time on Site: 1400
 Time off Site: 1500
 Weather Conditions: 35° cloudy

A. Inspection Checklist

Component	Observed Condition			Further Action Required	
	Excellent	Fair	Poor	Yes	No
1.0 Landfill Cap:					
Vegetation	X				X
Cap	X				X
Gas Vents	X				X
2.0 Drainage Structures:					
Toe Drain	X				X
Drainage Channels		X			X
French Drains/Outfalls	X				X
Subsurface Drainage Pipes/Outfalls	X				X
Manholes	X				X
Recharge Areas		X			X
3.0 Monitoring System:					
Soil Gas wells	X				X
Groundwater Wells	X				X
4.0 Site Access:					
Asphalt Access Road		X			X
Crushed-Concrete Access Road		X			X

B. Description of Further Action Requirements:

1. Location: FLF, Removed vegetation in drainage channel during inspection.
 Observed Conditions: one pothole noted on Asphalt Padway.

Recommendations: See photos.





Appendix C

Groundwater Sample Logs

Groundwater Sample Log

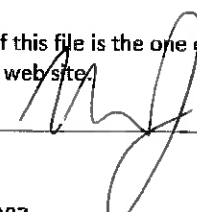
Sample ID (COC# -UID) : 47298-003 **Well ID :** 088-109 **Date :** 03/13/2025
Sampling Personnel : MJ **Project :** sitewd-CLF **WQ Inst# :** 23
Well Depth (ft BLS) : 27 **Screen Interval (ft BLS) :** 6 - 21 **Well Diameter (in) :** 4
Sampling Device : Bladder Pump Other : **Discharge Tubing Size :** 0.37500
Depth to Water from MP (ft) : 14.16 **Casing Stickup :** 1.75 **DTW Meter Serial # :** 556773
Depth to Water from LS (ft) : 12.41 **One Casing Volume (liter) :** 38.16
Pump Start Time : 1128 **Pumping Rate (L/min) :** .5
Minimum Purge Volume (liter) : 1.69 **Maximum Purge Volume (liter) :** 9.54

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1137 Notes :
1132	2	334.2	.42	6.2	4.3	-280.2	11.8	14.16	
1134	3	335.4	.44	6.19	2.7	-272.8	11.8	14.16	
1136	4	338.3	.44	6.19	5.6	-263.3	11.8	14.16	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :
 Comments : Ms/msd bd1 004, fb1 005 @1145

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

- (a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU
- (b) For Redox Measurements, stabilization = ± 10mv

The only official copy of this file is the one online. Before using a copy, verify that it is the most current version by checking with the official copy on the website.
 Sampled By :  _____ Date : 3/13/25

Groundwater Sample Log

Sample ID (COC#-UID) : 47520-001

Well ID : 087-09

Date : 06/03/2025

Sampling Personnel : MJ

Project : Sitewd-Clf

WQ Inst# : 26

Well Depth (ft BLS) : 34

Screen Interval (ft BLS) : 24 - 34

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.25000

Depth to Water from MP (ft) : 28.75

Casing Stickup : 0.80

DTW Meter Serial # : 589355

Depth to Water from LS (ft) : 27.95

One Casing Volume (liter) : 15.8

Pump Start Time : 1133

Pumping Rate (L/min) : .25

Minimum Purge Volume (liter) : 1.68

Maximum Purge Volume (liter) : 3.95

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1146 Notes :
1141	2	210.3	6.61	5.68	12.2	183	13.8	28.78	
1143	2.5	211	6.66	5.68	13.8	185	13.8	28.78	
1145	3	212.8	6.69	5.68	13.8	186	13.8	28.78	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : _____

Date : 6/3/25

Groundwater Sample Log

Sample ID (COG# -UID) : 47520-002 **Well ID :** 088-109 **Date :** 06/03/2025
Sampling Personnel : MJ **Project :** Sitewd-Clf **WQ Inst# :** 26
Well Depth (ft BLS) : 27 **Screen Interval (ft BLS) :** 6 - 21 **Well Diameter (in) :** 4
Sampling Device : Bladder Pump Other : **Discharge Tubing Size :** 0.37500
Depth to Water from MP (ft) : 13.67 **Casing Stickup :** 1.75 **DTW Meter Serial # :** 589355
Depth to Water from LS (ft) : 11.92 **One Casing Volume (liter) :** 39.44
Pump Start Time : 1018 **Pumping Rate (L/min) :** .5
Minimum Purge Volume (liter) : 1.69 **Maximum Purge Volume (liter) :** 9.86

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1029 Notes :
1024	3	285.2	1.67	6.03	5.8	-95.3	13.1	13.71	
1026	4	283.9	1.76	6.03	7	-94.7	13.2	13.71	
1028	5	283.8	1.78	6.03	6	-94.4	13.2	13.71	

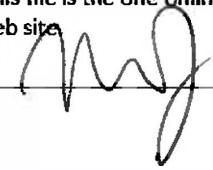
Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : Naoh bottle water turned green + smell, ms/msd bd1 003, fb1 004@1020

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

- (a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU
- (b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 6/3/25

Groundwater Sample Log

Sample ID (COC# -UID) : 47520-007

Well ID : 087-27

Date : 06/03/2025

Sampling Personnel : AC

Project : SITEWD-CLF

WQ Inst# : 23

Well Depth (ft BLS) : 25

Screen Interval (ft BLS) : 5 - 20

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.25000

Depth to Water from MP (ft) : 15.6

Casing Stickup : 2.05

DTW Meter Serial # : 1424

Depth to Water from LS (ft) : 13.55

One Casing Volume (liter) : 29.96

Pump Start Time : 1019

Pumping Rate (L/min) : 0.25

Minimum Purge Volume (liter) : 1.35

Maximum Purge Volume (liter) : 7.49

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1032 Notes :
1027	2	455.7	1.6	6.03	24.3	456	11.8	15.6	
1029	2.5	455	1.7	6.03	16.7	454.6	11.9	15.6	
1031	3	454	1.7	6.03	15.1	456.8	11.9	15.6	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : AC

Date : 6/3/25

Groundwater Sample Log

Sample ID (COC# -UID) : 47524-001 **Well ID :** 087-11 **Date :** 06/04/2025
Sampling Personnel : MJ **Project :** Sitewd-Clf **WQ Inst# :** 26
Well Depth (ft BLS) : 21 **Screen Interval (ft BLS) :** 11 - 21 **Well Diameter (in) :** 4
Sampling Device : **Bladder Pump** **Other :** **Discharge Tubing Size :** 0.37500
Depth to Water from MP (ft) : 16.39 **Casing Stickup :** 1.74 **DTW Meter Serial # :** 26102
Depth to Water from LS (ft) : 14.65 **One Casing Volume (liter) :** 16.64
Pump Start Time : 1137 **Pumping Rate (L/min) :** .25
Minimum Purge Volume (liter) : 1.8 **Maximum Purge Volume (liter) :** 4.16

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1150 Notes :
1145	2	507	1.23	5.98	5.9	-22.6	12.4	16.39	
1147	2.5	507	1.19	5.98	3.9	-22.7	12.4	16.39	
1149	3	506	1.21	5.98	4.3	-22.7	12.4	16.39	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

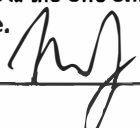
Comments : Naoh bottle water turned green

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Look	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By :  Date : 6/4/25

Groundwater Sample Log

Sample ID (COC# -UID) : 47524-002 **Well ID :** 087-23 **Date :** 06/04/2025
Sampling Personnel : MJ **Project :** Sitewd-Clf **WQ Inst# :** 26
Well Depth (ft BLS) : 45 **Screen Interval (ft BLS) :** 25 - 40 **Well Diameter (in) :** 4
Sampling Device : Bladder Pump Other : **Discharge Tubing Size :** 0.50000
Depth to Water from MP (ft) : 34.82 **Casing Stickup :** 1.83 **DTW Meter Serial # :** 26102
Depth to Water from LS (ft) : 32.99 **One Casing Volume (liter) :** 31.36
Pump Start Time : 1007 **Pumping Rate (L/min) :** .25
Minimum Purge Volume (liter) : 3.65 **Maximum Purge Volume (liter) :** 7.84

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1028 Notes :
1023	4	222.1	2.02	5.8	33.5	47.9	15	34.82	
1025	4.5	221.2	2.06	5.8	30.9	48.3	14.9	34.82	
1027	5	218.9	2.1	5.79	33.7	49.8	14.8	34.82	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : Naoh bottle water turned green

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 6/4/25

Groundwater Sample Log

Sample ID (COC# -UID) : 47524-004

Well ID : 088-21

Date : 06/04/2025

Sampling Personnel : AC

Project : SITEWD-CLF

WQ Inst#: 25

Well Depth (ft BLS) : 25

Screen Interval (ft BLS) : 5 - 20

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.37500

Depth to Water from MP (ft) : 10.39

Casing Stickup : 2.04

DTW Meter Serial # : 1434

Depth to Water from LS (ft) : 8.35

One Casing Volume (liter) : 43.48

Pump Start Time : 1053

Pumping Rate (L/min) : 0.5

Minimum Purge Volume (liter) : 1.65

Maximum Purge Volume (liter): 10.87

Time	Volume Purged (L)	Cond ($\mu\text{S}/\text{cm}$) $\pm 3\%$	DO (mg/L) $\pm 10\%$	pH (SU) ± 0.1	Turb (NTU) $\pm 10\%$ (a)	ORP (mV) $\pm 10\text{mV}$ (b)	Temp ($^{\circ}\text{C}$)	DTW (ft)	Sample Collection Time : 1102 Notes :
1057	2	466	5.15	5.79	3.7	372.8	11.5	10.39	
1059	3	466.4	5.55	5.79	5.1	373.3	11.5	10.39	
1101	4	466.3	5.43	5.79	2.9	373.6	11.5	10.39	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = $\pm 10\text{mv}$

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Sampled By : AC

Date : 6/4/25

Groundwater Sample Log

Sample ID (COC# -UID): 47524-005 **Well ID :** 098-99 **Date :** 06/04/2025
Sampling Personnel : AC **Project :** SiTEWD-CLF **WQ Inst# :** 25
Well Depth (ft BLS) : 54.5 **Screen Interval (ft BLS) :** 39.5- 49.5 **Well Diameter (in) :** 4
Sampling Device : **Bladder Pump** **Other :** **Discharge Tubing Size :** 0.25000
Depth to Water from MP (ft) : 13.55 **Casing Stickup :** 2.11 **DTW Meter Serial # :** 1434
Depth to Water from LS (ft) : 11.44 **One Casing Volume (liter) :** 112.52
Pump Start Time : 1150 **Pumping Rate (L/min) :** 0.25
Minimum Purge Volume (liter) : 1.99 **Maximum Purge Volume (liter) :** 28.13

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1203 Notes :
1158	2	209.8	1.12	6.32	2.2	347.8	13.6	13.55	
1200	2.5	209.7	1.16	6.31	2.1	347.7	13.6	13.55	
1202	3	209.9	1.17	6.31	2.3	347.5	13.7	13.55	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : _____ *AC*

Date : 6/4/25

Groundwater Sample Log

Sample ID (COC# -UID) : 47998-002 **Well ID :** 088-109 **Date :** 09/19/2025
Sampling Personnel : AC **Project :** SITEWD-CLF **WQ Inst# :** 25
Well Depth (ft BLS) : 27 **Screen Interval (ft BLS) :** 6 - 21 **Well Diameter (in) :** 4
Sampling Device : Bladder Pump Other : **Discharge Tubing Size :** 0.37500
Depth to Water from MP (ft) : 15.38 **Casing Stickup :** 1.75 **DTW Meter Serial # :** 1304
Depth to Water from LS (ft) : 13.63 **One Casing Volume (liter) :** 34.92
Pump Start Time : 1135 **Pumping Rate (L/min) :** 1
Minimum Purge Volume (liter) : 1.69 **Maximum Purge Volume (liter) :** 8.73

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1142 Notes :
1137	2	418.9	.7	6.02	4.4	-99	13.8	15.38	
1139	3	427.2	.8	6.01	5.1	-98	13.8	15.38	
1141	4	430.9	.65	6.02	5.5	-99	13.8	15.38	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : MS/MSD: BD1@003, FB1@004=1150

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 10/6/25

Groundwater Sample Log

Sample ID (COC#-UID) : 47998-003 **Well ID :** BD-1 **Date :** 09/19/2025
Sampling Personnel : AC **Project :** SITEWD-CLF **WQ Inst# :** 25
Well Depth (ft BLS) : 27 **Screen Interval (ft BLS) :** 6 - 21 **Well Diameter (in) :** 4
Sampling Device : Bladder Pump Other : **Discharge Tubing Size :** 0.37500
Depth to Water from MP (ft) : 15.38 **Casing Stickup :** 1.75 **DTW Meter Serial # :** 1304
Depth to Water from LS (ft) : 13.63 **One Casing Volume (liter) :** 34.92
Pump Start Time : 1135 **Pumping Rate (L/min) :** 1
Minimum Purge Volume (liter) : 1.69 **Maximum Purge Volume (liter) :** 8.73

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1142 Notes :
1137	2	418.9	.7	6.02	4.4	-99	13.8	15.38	
1139	3	427.2	.8	6.01	5.1	-98	13.8	15.38	
1141	4	430.9	.65	6.02	5.5	-99	13.8	15.38	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : BD-1 for : 088-109

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 10/6/25

Groundwater Sample Log

Sample ID (COC# -UID) : 48151-002

Well ID : 088-109

Date : 11/12/2025

Sampling Personnel : MJ

Project : sitewd-CLF

WQ Inst# : 25

Well Depth (ft BLS) : 27

Screen Interval (ft BLS) : 6 - 21

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.25000

Depth to Water from MP (ft) : 16.23

Casing Stickup : 1.75

DTW Meter Serial # : 556773

Depth to Water from LS (ft) : 14.48

One Casing Volume (liter) : 32.77

Pump Start Time : 1004

Pumping Rate (L/min) : .25

Minimum Purge Volume (liter) : 1.37

Maximum Purge Volume (liter) : 8.19

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1015 Notes :
1010	1.5	456.2	1.56	6.15	8	-60.5	14.2	16.23	
1012	2	456.1	1.56	6.16	10.3	-60.4	14.2	16.23	
1014	2.5	456.9	1.56	6.16	9.2	-60.2	14.2	16.23	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :
 Comments : Ms/msd bd1 48151-003, 48151-004 fb1-@ 1000/ water in NaOH bottle turned green, odor

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

- (a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU
- (b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 11/12/25

Groundwater Sample Log

Sample ID (COCS# -UID) : 48151-003

Well ID : BD-1

Date : 11/12/2025

Sampling Personnel : MJ

Project : sitewd-CLF

WQ Inst# : 25

Well Depth (ft BLS) : 27

Screen Interval (ft BLS) : 6 - 21

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.25000

Depth to Water from MP (ft) : 16.23

Casing Stickup : 1.75

DTW Meter Serial # : 556773

Depth to Water from LS (ft) : 14.48

One Casing Volume (liter) : 32.77

Pump Start Time : 1004

Pumping Rate (L/min) : .25

Minimum Purge Volume (liter) : 1.37

Maximum Purge Volume (liter) : 8.19

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1015 Notes :
1010	1.5	456.2	1.56	6.15	8	-60.5	14.2	16.23	
1012	2	456.1	1.56	6.16	10.3	-60.4	14.2	16.23	
1014	2.5	456.9	1.56	6.16	9.2	-60.2	14.2	16.23	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : BD-1 for : 088-109

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : _____



Date : _____

11/12/25

Groundwater Sample Log

Sample ID (COC# -UID): 48154-002 **Well ID:** 087-27 **Date:** 11/13/2025
Sampling Personnel: MJ **Project:** Sitewd-CLF **WQ Inst#:** 26
Well Depth (ft BLS): 25 **Screen Interval (ft BLS):** 5 - 20 **Well Diameter (in):** 4
Sampling Device: Bladder Pump Other: **Discharge Tubing Size:** 0.25000
Depth to Water from MP (ft): 18.14 **Casing Stickup:** 2.05 **DTW Meter Serial #:** 556773
Depth to Water from LS (ft): 16.09 **One Casing Volume (liter):** 23.92
Pump Start Time: 1026 **Pumping Rate (L/min):** .25
Minimum Purge Volume (liter): 1.35 **Maximum Purge Volume (liter):** 5.83

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1039 Notes :
1034	2	470.3	1.56	5.75	4.5	-83.6	12.8	18.14	
1036	2.5	464.9	1.54	5.75	4.8	-83	12.8	18.14	
1038	3	463.8	1.52	5.75	4.9	-82.5	12.7	18.14	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : NaOH bottle water turned green / pump to 18'

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Look	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 11/13/25

Groundwater Sample Log

Sample ID (COC# -UID) : 48154-003

Well ID : 087-26

Date : 11/13/2025

Sampling Personnel : MJ

Project : Sitewd-CLF

WQ Inst# : 26

Well Depth (ft BLS) : 85

Screen Interval (ft BLS) : 70 - 80

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.50000

Depth to Water from MP (ft) : 18.0

Casing Stickup : 2.06

DTW Meter Serial # : 556773

Depth to Water from LS (ft) : 15.94

One Casing Volume (liter) : 180.44

Pump Start Time : 1121

Pumping Rate (L/min) : 1

Minimum Purge Volume (liter) : 6.96

Maximum Purge Volume (liter) : 45.11

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1133 Notes :
1128	7	231.5	6.81	6.27	3.3	43.5	12.2	18	
1130	9	231.5	6.82	6.27	3.6	44	12.3	18	
1132	11	231.5	6.8	6.27	3.3	44.3	12.2	18	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

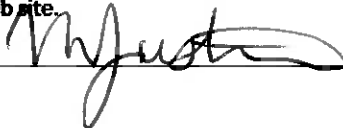
Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 11/13/25

Groundwater Sample Log

Sample ID (COC#-UID) : 48152-001

Well ID : 088-23

Date : 11/19/2025

Sampling Personnel : MF

Project : SITEWD-CLF

WQ Inst# : 23

Well Depth (ft BLS) : 150

Screen Interval (ft BLS) : 120 - 130

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.50000

Depth to Water from MP (ft) : 13.14

Casing Stickup : 2.21

DTW Meter Serial # : 1304

Depth to Water from LS (ft) : 10.93

One Casing Volume (liter) : 363.24

Pump Start Time : 1000

Pumping Rate (L/min) : 1

Minimum Purge Volume (liter) : 10.85

Maximum Purge Volume (liter) : 90.81

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1017 Notes :
1012	12	168.1	6.82	6.92	15	89.1	12	13.14	
1014	14	168.9	6.78	6.92	16.9	89	12	13.14	
1016	16	168.7	6.76	6.93	17.3	88.8	12	13.14	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Look	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : Mathew J. Jumper

Date : 11/19/25

Groundwater Sample Log

Sample ID (COC# -UID) : 48152-002

Well ID : 088-21

Date : 11/19/2025

Sampling Personnel : MF

Project : SITEWD-CLF

WQ Inst# : 23

Well Depth (ft BLS) : 25

Screen Interval (ft BLS) : 5 - 20

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.50000

Depth to Water from MP (ft) : 13.11

Casing Stickup : 2.04

DTW Meter Serial # : 1304

Depth to Water from LS (ft) : 11.07

One Casing Volume (liter) : 36.44

Pump Start Time : 1052

Pumping Rate (L/min) : 1

Minimum Purge Volume (liter) : 2.09

Maximum Purge Volume (liter) : 9.11

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1100 Notes :
1055	3	108	6.29	5.55	2.7	176.8	13	13.11	
1057	5	107.5	6.33	5.55	2.9	177.1	13	13.11	
1059	7	106.5	6.29	5.57	2.3	177.5	13	13.11	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Look	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

- (a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU
- (b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : Matthew Jennings

Date : 11/19/25

Groundwater Sample Log

Sample ID (COG# -UID) : 48152-003

Well ID : 088-22

Date : 11/19/2025

Sampling Personnel : MF

Project : SITEWD-CLF

WQ Inst# : 23

Well Depth (ft BLS) : 85

Screen Interval (ft BLS) : 70 - 80

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.50000

Depth to Water from MP (ft) : 13.15

Casing Stickup : 2.05

DTW Meter Serial # : 1304

Depth to Water from LS (ft) : 11.10

One Casing Volume (liter) : 193.08

Pump Start Time : 1133

Pumping Rate (L/min) : .5

Minimum Purge Volume (liter) : 6.96

Maximum Purge Volume (liter) : 48.27

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1152 Notes :
1147	7	225.1	6.67	6.15	2.7	131.9	12.1	13.15	
1149	8	225.1	6.65	6.15	2.7	131.7	12.1	13.15	
1151	9	225	6.64	6.15	2.7	131.6	12.1	13.15	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Look	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : Mathew J. [Signature]

Date : 11/19/25

Groundwater Sample Log

Sample ID (COC# -UID) : 48172-001 **Well ID :** 087-24 **Date :** 11/24/2025
Sampling Personnel : AC **Project :** SITEWD-CLF **WQ Inst# :** 25
Well Depth (ft BLS) : 85 **Screen Interval (ft BLS) :** 70 - 80 **Well Diameter (in) :** 4
Sampling Device : Bladder Pump Other : **Discharge Tubing Size :** 0.50000
Depth to Water from MP (ft) : 37.52 **Casing Stickup :** 1.92 **DTW Meter Serial # :** 1304
Depth to Water from LS (ft) : 35.60 **One Casing Volume (liter) :** 129.08
Pump Start Time : 1036 **Pumping Rate (L/min) :** 1
Minimum Purge Volume (liter) : 6.96 **Maximum Purge Volume (liter) :** 32.27

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1048 Notes :
1043	7	216.6	8.73	6.05	2.6	81.8	12.3	37.5	
1045	9	217.2	8.72	6.05	2.5	81.8	12.3	37.5	
1047	11	217.5	8.72	6.05	2.6	81.7	12.3	37.5	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : _____

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Lock	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 11/24/2025

Groundwater Sample Log

Sample ID (COC# -UID) : 48172-002

Well ID : 087-23

Date : 11/24/2025

Sampling Personnel : AC

Project : SITEWD-CLF

WQ Inst# : 26

Well Depth (ft BLS) : 45

Screen Interval (ft BLS) : 25 - 40

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.50000

Depth to Water from MP (ft) : 37.52

Casing Stickup : 1.83

DTW Meter Serial # : 1304

Depth to Water from LS (ft) : 35.69

One Casing Volume (liter) : 24.36

Pump Start Time : 1110

Pumping Rate (L/min) : 1

Minimum Purge Volume (liter) : 3.65

Maximum Purge Volume (liter) : 6.09

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1119 Notes :
1114	4	211.1	2.4	5.34	12.6	21.6	12.8	37.52	
1116	6	210.2	2.5	5.34	12.8	22.5	12.8	37.52	
1118	8	209.2	2.8	5.35	15.1	23.9	12.8	37.52	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : NaOH turned an orange color.

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Look	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 11/24/2025

Groundwater Sample Log

Sample ID (COC# -UID) : 48169-001 **Well ID :** 088-110 **Date :** 11/25/2025
Sampling Personnel : AC **Project :** SITEWD-CLF **WQ Inst# :** 26
Well Depth (ft BLS) : 35 **Screen Interval (ft BLS) :** 10 - 25 **Well Diameter (in) :** 4
Sampling Device : **Bladder Pump** **Other :** **Discharge Tubing Size :** 0.37500
Depth to Water from MP (ft) : 18.62 **Casing Stickup :** 2.04 **DTW Meter Serial # :** 1304
Depth to Water from LS (ft) : 16.58 **One Casing Volume (liter) :** 48.16
Pump Start Time : 1030 **Pumping Rate (L/min) :** 1
Minimum Purge Volume (liter) : 1.87 **Maximum Purge Volume (liter) :** 12.04

Time	Volume Purged (L)	Cond (µS/cm) ± 3%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1037 Notes :
1032	2	514	.71	5.96	16.6	-79	14.2	18.6	
1034	4	509	.71	5.95	16.8	-78.9	14.2	18.6	
1036	6	509	.68	5.95	18.1	-78.8	14.2	18.6	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :
Comments : NaOH turned a black/brown color.

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Look	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

- (a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU
- (b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 11/25/2025

Groundwater Sample Log

Sample ID (COC# -UID) : 48169-002

Well ID : 087-11

Date : 11/25/2025

Sampling Personnel : AC

Project : SITEWD-CLF

WQ Inst# : 26

Well Depth (ft BLS) : 21

Screen Interval (ft BLS) : 11 - 21

Well Diameter (in) : 4

Sampling Device : Bladder Pump

Other :

Discharge Tubing Size : 0.37500

Depth to Water from MP (ft) : 19.92

Casing Stickup : 1.74

DTW Meter Serial # : 1304

Depth to Water from LS (ft) : 17.58

One Casing Volume (liter) : 8.92

Pump Start Time : 1108

Pumping Rate (L/min) : 1

Minimum Purge Volume (liter) : 1.8

Maximum Purge Volume (liter) : 2.23

Time	Volume Purged (L)	Cond (µS/cm) ± 5%	DO (mg/L) ± 10%	pH (SU) ± 0.1	Turb (NTU) ± 10% (a)	ORP (mV) ± 10mV (b)	Temp (°C)	DTW (ft)	Sample Collection Time : 1115 Notes :
1110	2	407.5	9.91	6.09	15.4	-36.5	15.1	19.3	
1112	4	411.9	9.91	6.09	13.3	-34.8	15.1	19.3	
1114	6	408.1	9.88	6.08	9.2	-34.5	15.1	19.3	

Purge Water Disposition : Ground Carbon Treat Contains Sr-90 Contains Tritium Other :

Comments : NaOH turned an orange/red color. Well produced a foul odor.

	Good	Poor	Replace	Comments
Paint Condition	X			
Pad	X			
Look	X			
ID Tag	X			
Discharge Tube	X			
Fittings	X			
Sample Pump	X			

(a) For low turbidity conditions, stabilization is reached when three consecutive measurements are <10 NTU

(b) For Redox Measurements, stabilization = ± 10mv

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Sampled By : 

Date : 11/25/2025