PERIODIC REVIEW REPORT
JANUARY 2020 – JANUARY 2025

MAYER LANDFILL SITE
TOWN OF BLOOMING GROVE, NEW YORK 10914

NYSDEC Site No. 336027
Work Assignment No. D009812-25

Prepared for:

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TRC Project No. 470744

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LIST OF ACRONYMS AND ABBREVIATIONS

Class GA Values	NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Standards and Guidance Values
COCs	Contaminants of Concern
DER	Department of Environmental Remediation
DUSRs	Data Usability Summary Reports
ECs	Engineering Controls
EE	Environmental Easement
FS	Feasibility Study
ICs	Institutional Controls
IHWDS	Inactive Hazardous Waste Disposal Site
LNAPL	Light Non-Aqueous Phase Liquid
MCL	Max Contaminant Level
mg/L	Milligrams per liter
NAPL	Non-Aqueous Phase Liquid
ND	Not detected
ng/L	Nanograms per liter
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCBs	Poly-chlorinated Biphenyls
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
RI	Remedial Investigation
RI/FS	Remedial Investigation / Feasibility Study
ROD	Record of Decision
SCO	Soil Cleanup Objective
SCGs	Standards, Criteria, and Guidance
SMP	Site Management Plan
SMR	Site Management Report
SVOCs	Semi-Volatile Organic Compounds
TAL	Target Analyte List
TCL	Target Compound List
TOGS	NYSDEC Division of Water Technical and Operational Guidance Series
TRC	TRC Engineers, Inc.
USEPA	United States Environmental Protection Agency
UMCR	USEPA Unregulated Contaminant Monitoring Rule
VOCs	Volatile Organic Compounds
µg/L	Micrograms per liter

Executive Summary

Category	Summary/Results
Engineering Controls (ECs)	• Groundwater Monitoring Well Network
Institutional Controls (ICs)	• Record of Decision (ROD) (2005) • Environmental Easement (EE) (2012) • Site Management Plan (SMP) (2010, revised 2010 and 2015)
Site Classification	Class 4 Inactive Hazardous Waste Disposal Site (IHWDS)
Site Management Plan (SMP)	SMP – April 2015
Certification/Reporting Period	The Certification Period of this Periodic Review Report (PRR) is from January 1, 2020, to January 1, 2025.
Inspection	**Frequency**
Site-wide Inspection	Annually and additional inspections, as necessary, following severe weather events.
Monitoring	**Frequency**
Groundwater	Every three years.
Prior PRR/SMR Recommendations	The prior PRR prepared for the April 2015 to January 2020 reporting period included the following recommendations: • Three-year groundwater sampling frequency with completion of a Site Management Report (SMR) at the end of the year following the sampling event. • Five-year PRR Certification Period. At the discretion of the New York State Department of Environmental Conservation (NYSDEC), a SMR would not be required when a PRR is due the same year. • Annual site inspection (concurrent with groundwater sampling events, when possible), including water level measurements and additional inspections, as necessary, following severe weather events. • Monitoring well MW-4R should continue to be monitored for Light Non-Aqueous Phase Liquid (LNAPL). • Per- and Polyfluoroalkyl Substances (PFAS) should be included as an analyte for all site monitoring wells for at least one more sampling event. • Contaminant trends should be evaluated once sufficient data is available. • Semi-volatile organic compounds (SVOCs) and pesticides should be considered for removal from the sampling program following another complete round of sampling. Note the recommendations listed above have not been included in the SMP.
Site Management Activities	Site management activities performed during this reporting period (January 1, 2020, through January 1, 2025) included two routine site-wide inspections, one routine groundwater sampling event, two non-routine residential potable water sampling events, and one combined severe weather inspection/routine site-wide inspection. • July 20-21, 2020: TRC Engineers, Inc. (TRC) performed a non-routine residential potable water sampling event at the request of the NYSDEC. • June 4, 2021: TRC performed a routine site-wide inspection. • July 26-28, 2022: TRC performed a routine site-wide inspection and groundwater sampling event at the Site. • February 9, 2023: TRC performed a non-routine residential potable water sampling event.

Category	Summary/Results
	• July 20, 2023: TRC performed a severe weather inspection, combined with a routine site-wide inspection. • 2024 – A routine site-wide inspection and groundwater sampling were not performed. The NYSDEC was made aware that the work was not performed.
Significant Findings or Concerns	Significant findings or concerns identified during this reporting period are summarized as follows: • During the routine groundwater sampling event performed in July 2022, a viscous, tar-like Non-Aqueous Phase Liquid (NAPL) was observed in monitoring well MW-4R. The presence of this NAPL prevented groundwater sampling at this well. In July 2023, TRC attempted to recover the NAPL with hand bailers but was unsuccessful. • Groundwater concentrations of several volatile organic compounds (VOCs) exceeded NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) Number 1.1.1 (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values Class GA Groundwater Values (Class GA Values) at one location (MW-8). • Groundwater concentrations of two SVOC compounds exceeded Class GA Values at one or more locations. • Groundwater concentrations of total PCBs exceeded Class GA Values at three locations (MW-6, MW-4DR, and MW-8). • Groundwater concentrations of the metals iron, manganese, and sodium exceeded Class GA Values at one or more locations during this monitoring period. However, these metals are naturally present in groundwater and not indicative of site contaminant migration. • Groundwater concentrations of perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA) exceeded the Class GA Values at four locations (MW-7, MW-7D, MW-8, and MW-13). • Groundwater concentrations of 1,4-dioxane exceeded New York State public drinking water Maximum Contaminant Levels (MCLs) in two of 13 residential potable water samples.

Recommendations	TRC recommends the following actions, based on the information associated with this reporting period:
	• Update the SMP to:
	  ○ Reflect a three-year groundwater sampling and site-wide inspection frequency.
	  ○ Reflect a five-year PRR Certification Period.
	  ○ Incorporate changes/modifications needed resulting from the recommendations presented below, if such changes/modifications are acceptable to the NYSDEC.
	• Continue annual site inspection (concurrent with groundwater sampling events, when possible) in accordance with the SMP, including water level measurements and additional inspections, as necessary, following severe weather events.
	• Decommission and replace groundwater monitoring well MW-4R prior to the next groundwater sampling event.
	• Complete a drum inventory and drum sampling event prior to coordinating drum disposal activities.
	• Based on the results of the groundwater sampling documented in Section 3.2, TRC also recommend the following:
	  ○ Include PFAS as an analyte for all site monitoring wells during the next groundwater sampling event.

Category	Summary/Results
Cost Evaluation	The total cost of site management activities incurred during this reporting period was $66,350. This cost includes engineering (e.g., labor, equipment, and expense) and subcontractor costs (e.g., data validation service). It should be noted that this total does not include any direct costs incurred by the NYSDEC.
Green and Sustainable Remediation Metrics	Minimal amounts (less than 50 pounds) of solid waste (generally consisting of spent personal protective equipment and groundwater sampling materials) were generated on-site during site management activities this reporting period. Approximately 3,600 miles were driven during this reporting period for site management activities. Less than 25 gallons of public potable water were used during this reporting period for site management activities. No land was disturbed on-site during this reporting period. Additional details concerning green and sustainable remediation metrics are presented in **Appendix A**.

1.0 Introduction

This Periodic Review Report (PRR) has been prepared for the Mayer Landfill Site (Site) and covers the period between January 1, 2020, and January 1, 2025. This PRR was prepared in accordance with New York State Department of Environmental Conservation (NYSDEC) Work Assignment (WA) No. D009812-25, Notice to Proceed, dated November 19, 2021, NYSDEC-approved Scope of Work, dated April 1, 2022 (and subsequent amendments), NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation (DER-10) and NYSDEC DER-31, Green Remediation (DER-31). Historical site information is summarized herein as reported in the documents listed in the Custodial Record (refer to **Appendix B**). A Site summary and applicable remedial program information are presented below.

Site Information			
Site Name:	Mayer Landfill Site	**NYSDEC Site No:**	336027
Site Location:	Prospect and Peddler Hill Roads, Blooming Grove, Orange County New York	**Remedial Program:**	State Superfund Program
Site Type:	Landfill	**Classification:**	Class 4 Inactive Hazardous Waste Disposal Site (IHDWS)
Parcel Identification(s):	Section Block Lot #44-1-63.92, Orange County Tax Mapping	**Parcel Acreage / EE Acreage:**	103 / 15
Selected Remedy:	Excavation, Cover System, Long-Term Monitoring	**Site Contaminants of Concern (COCs):**	• VOCs • SVOCs • Metals • PCBs • Pesticides
Current Remedial Program Phase:	Site Management	**Institutional Controls:**	• Record of Decision (ROD) (2005) • Site Management Plan (SMP) (September 2010, Revised October 2010, and Revised April 2015) • Environmental Easement (EE) (2012)
Post-Remediation Monitoring and Sampling Frequency:	Groundwater monitoring – Every three years Site Inspections - Annually.	**Engineering Controls:**	• Cover System • Groundwater Monitoring Well Network • Restricted Site Access
Monitoring Locations:	Overburden monitoring wells (eight) Bedrock monitoring wells (six)	**Required Reporting:**	PRR – Every Five Years

1.1 Site Location, Ownership, and Description

The Site is located in the Town of Blooming Grove, Orange County, New York and is identified as Section 44 Block 1 Lot 63.92 on the Orange County Tax Map and is presently owned by William R. Mayer and Johanna Mayer. The tax parcel measures approximately 103 acres in size, is bounded to the north by Prospect Road, to the south by private

properties, to the east by Peddler Hill Road, and to the west by a utility right-of-way. Site Location and Site Layout Maps are provided on **Figure 1** and **Figure 2**, respectively. The Site was operated as a landfill beginning in the late 1940s. Residential, commercial, industrial, demolition, and agricultural wastes were reportedly disposed of at the landfill. The limits of the landfill pursuant to the December 2012 Environmental Easement (EE), measure approximately 15 acres in size, and presented on **Figure 2**.

1.2 Investigation/Remedial History

Mayer Landfill began operation in the late 1940s as an open-face dump, with periodic burning of waste. Mixed waste, including residential, commercial, industrial, demolition, and agricultural wastes, were reportedly disposed of at the landfill. In 1965, after being ordered to stop burning, the operator began compacting and covering the mixed waste. The landfill ceased operations in April 1975, due to failure to comply with state and county regulations. In 1975, the Orange County Department of Health conducted an initial investigation of surface water at the landfill and discovered elevated levels of zinc in a wet area to the south of the landfill. The Site was listed in the Registry of IHWDS as a Class 2A site in 1985.

From 1985 to 2002 numerous investigations were conducted by the NYSDEC and New York State Department of Health (NYSDOH), including Phase I and Phase II environmental site assessments, a drinking well sampling event of surrounding private supply wells, and a Remedial Investigation/Feasibility Study (RI/FS) to determine the nature and extent of contamination on-site, and to evaluate remedial alternatives. Based on the RI/FS results, the NYSDEC issued a ROD in 2005, which outlined a clean-up plan. The ROD called for a limited removal action of light non-aqueous phase liquid (LNAPL) impacted soil, discovered buried in the northeastern portion of the landfill. In 2007, further subsurface soil and groundwater investigations were performed as part of design activities associated with remedy implementation. This additional work indicated that the volume of LNAPL-contaminated soil was significantly greater than had been estimated in the ROD. As a result, in 2008 the NYSDEC issued an Explanation of Significant Differences that amended the remedy and called for the removal of a greater volume of contaminated soils.

In 2009, approximately 7,688 tons of LNAPL-impacted soil were excavated and transported off- site for disposal. While a significant quantity of the LNAPL-impacted material was excavated, a limited quantity of LNAPL-impacted material was discovered to extend beyond the limits of the removal activities. The additional area had an estimated volume of approximately 900 cubic yards and was not excavated because the remedial program did not rely on numerical criteria (e.g., Soil Cleanup Objectives (SCOs)) as guidance for the removal action. The additional LNAPL-impacted soil currently remains buried at the Site.

Following the removal of LNAPL-contaminated soil, the excavation area was backfilled with granular backfill from an off-site source and common fill from on-site and off-site sources. Topsoil was imported, installed, and seeded to create a vegetated cover system. Lastly, four sentinel monitoring wells were installed to establish a monitoring well network for continued site monitoring. Following Remedial Action completion, an EE was established for the Site, and a Site Management Plan (SMP) was developed and implemented to manage the Institutional Controls (ICs)/Engineering Controls (ECs), including long-term groundwater monitoring, existing cover maintenance, future soil/excavation management, exclusion against future residential or restricted-residential uses, and a prohibition of groundwater use for portable or industrial/commercial process operations without treatment.

In 2011, the NYSDEC reclassified the Site from a Class 2A IHWDS to a Class 4 site. In 2012, a revised EE was established for the Site to include only 15 of the 103 tax parcel acres, which include 13 acres of landfill and two acres

of buffer, as delineated by the EE survey. In April 2015, the SMP was revised (Rev. 2) to include the same ICs/ECs included in the October 2010 SMP.

Between April 2015 and January 2020, regular site inspections were performed along with a groundwater sampling event (frequency dictated by NYSDEC). A Periodic Review Report (PRR), dated February 2020, was prepared by TRC Engineers, Inc. (TRC) to summarize site work completed between April 2015 and January 2020.

A detailed site history, including the dates and descriptions of significant events is included in **Appendix B**, along with a Custodial Record detailing known and available site reports are.

1.3 Remaining Contamination

While the remedial action completed in 2009 removed a significant quantity of LNAPL-impacted soil, an estimated volume of 900 cubic yards of LNAPL-impacted soil remains in place. Furthermore, all the mixed waste that was historically disposed at the Site remains buried. The landfill area still contains a considerable amount of waste that covers approximately 13 acres. The waste thickness exceeds a depth of 18 feet over most of the landfill. The ROD states that the remaining solid waste is comprised of household garbage including tires, glass, paper, plastic, wood and white goods. Based on observations noted during the 2009 remedial action activities, the solid waste present at the Site also includes domestic waste, construction debris (e.g., shingles and electrical conduit), and some crushed drums or parts of drums.

Other than the LNAPL-impacted soil and mixed waste remaining at the Site, VOCs, PCBs, and PFAS are found on-site in groundwater, as well as low-level concentrations of metals (primarily iron, manganese and sodium).

1.4 Regulatory Requirements/Cleanup Goals

The overall remedial goals for the Site, as per the ROD, is to meet all Standards, Criteria, and Guidance (SCG values, such that the remedial program is protective of human health and the environment. At a minimum, the selected remedy must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the Site. The goals selected for the Site as presented in the ROD are to eliminate or reduce to the extent practicable:

- Exposure to waste in the landfill.
- Exposure to LNAPL-contaminated soil in the landfill.
- The migration of LNAPL from the small, impacted area of the landfill and the release of LNAPL contaminants into groundwater.
- Exposure to on-site groundwater.

2.0 Institutional and Engineering Control Plan Compliance

Since contamination remains at the Site following the implementation of the selected remedy, ICs are required to protect human health and the environment. The IC Plan documented in the SMP describes the procedures for the implementation and management of all ICs at the Site. Appendix C presents the annual certification form required for confirming that all ICs are unchanged from the previous certification and that they comply with the SMP.

2.1 Institutional Controls

ICs required for the Site by the ROD are intended to prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination and limit the use and development of the Site to commercial and industrial uses. Adherence to these ICs is required by the EE and the SMP serves to ensure that the ICs continue to be effectively implemented. The ICs identified in the EE may not be discontinued without an amendment to, or extinguishment of, the EE by the NYSDEC.

The ICs for the Site are as follows:

- The Site may be used for commercial or industrial uses as defined in Section 6 of the New York Codes, Rules and Regulations, Part 375-1.8(g)(2)(iii) and Part 375-1.8(g)(2)(iv), respectively, provided that the long-term ICs included in the SMP are employed.
- All ECs must be operated and maintained, as specified in the SMP.
- All ECs must be inspected at a frequency, and in a manner, defined in the SMP.
- The use of groundwater underlying the Site is prohibited without necessary water quality treatment, as determined by the NYSDOH or the County Department of Health, to render it safe for use as drinking water or for industrial/commercial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC.
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP.
- Data and information pertinent to site management must be reported at the frequency, and in a manner, as defined in the SMP.
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP and the associated Excavation Work Plan.
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed at the frequency, and in a manner, as defined in the SMP.
- Access to the Site must be provided to agents, employees, or other representatives of the State of New York, with reasonable prior notice to the Site's owner, to assure compliance with the restrictions identified by the associated deed restrictions.
- The Site may not be used for Residential or Restricted Residential purposes. Vegetable gardens and farming on the Site, including cattle and dairy farming, are prohibited.

2.2 Engineering Controls

The ROD does not specify any site-related ECs for protecting the public health and the environment. However, the IC/EC Certification form includes sentinel wells for long-term monitoring of site groundwater as an EC for the Site. The SMP recommends that the vegetated cover of the Site be maintained to reduce potential erosion of the surface soils. Also, vehicular access should be limited to reduce the potential for erosion. These actions are not required to protect elements of the remedy but are suggested primarily for aesthetic reasons.

3.0 Monitoring and Sampling Plan Compliance

The SMP serves to manage contamination remaining on the Site and ensure that the remedy remains effective by restricting site use, site development, and soil management. The SMP specifies the following site monitoring and sampling activities:

Summary of SMP Site Monitoring and Sampling Plan[1]				
Site Management Activity	**Frequency[2]**	**Location**	**Laboratory Analysis**	**Completion Date(s):**
Site-Wide Inspection	Annually, and additional inspections, as necessary, following severe weather events	Site Property - Prospect and Peddler Hill Roads, Blooming Grove, NY (Section Block Lot # 44-1-63.92, Orange County Tax Map)	Not Applicable	6/4/2021, 7/26/2023, and 7/20/2023[3]
Groundwater Sampling	Every Three Years	• MW-2 • MW-4R • MW-4DR • MW-5 • MW-6 • MW-7 • MW-7D • MW-8 • MW-11 • MW-13 • BR-3 • BR-5 • BR-6 • BR-7	• TCL VOCs by EPA Method 8260 • TCL SVOCs by EPA Method 8270 • TAL Metals by USEPA Method 6010 • Pesticides by EPA Method 8081 • PCBs by EPA Method 8082	7/26/2022 – 7/28/2022
PRR	Every Five Years	Not Applicable	Not Applicable	January 2020

Notes:

1 – Non-routine residential potable water sampling events were performed by TRC on 7/20/2020 – 7/21/2020 and 2/9/2023, at the request of the NYSDEC.

2 – The frequency of site management activities was changed in the 2020 PRR and approved by the NYSDEC.

3 – A post-storm site inspection was performed by TRC, combined with a routine site-wide inspection.

3.1 Site-Wide Inspection

TRC performed routine site-wide inspections on June 4, 2021, and July 26, 2022, and a combined site-wide inspection and severe weather inspection on July 20, 2023, during this reporting period. Each of the site-wide inspections included visual inspection of the cover system and all monitoring wells, as well as an assessment of the compliance of site conditions with all ICs (including site usage).

A summary of the Site inspections is presented below, and the associated site inspection forms can be found in **Appendix D**.

Summary of Site Activities, Site Monitoring, and Sampling January 2020 through January 2025		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
Site-Wide Inspection	June 4, 2021: TRC completed a routine site-wide inspection and observed the vegetated cover system to be in good condition. The access road gate, utilized to restrict site access, was observed to be in-place and secured with a coded lock. Several tree-stands and trails were noted throughout the Site during the inspection. All site monitoring wells, except for monitoring well BR-5 could be located. Each of the 13 wells located were observed to be in good condition and secured with padlocks. July 26, 2022-July 28, 2022: TRC completed a routine site-wide inspection and observed the monitoring well network to be in good condition. Several tree-stands and trails were noted, consistent with the June 4, 2021 inspection. Debris (scrap metal, tires, and drums) was observed at various locations throughout the site. All monitoring wells were located and observed to be in good condition. A thick, tar-like Non-Aqueous Phase Liquid (NAPL) was encountered within the well riser of monitoring well MW-4R; therefore, this well could not be sampled or gauged. Overgrown vegetation was encountered surrounding monitoring wells MW-7D, MW-7, MW-11, and BR-7. July 20, 2023: TRC performed a severe weather inspection and routine site-wide inspection. The vegetated cover system was observed to be in good condition. The access road gate, utilized to restrict site access, was observed to be in-place and secured. However, the lock previously installed by TRC had been removed and replaced by the site owner. A shipping container was staged on the access road, restricting vehicular access to the Site. Several tree-stands were noted, consistent with the June 4, 2021, and July 26, 2022-July 28, 2022, inspections. Debris (scrap metal, tires, and drums) was observed at various locations throughout the Site. All monitoring wells were located and observed to be in good condition. TRC attempted to remove thick, tar-like NAPL from the well riser of monitoring well MW-4R via hand bailer but was unsuccessful.	TRC recommends that the removal of the shipping container from site access road be confirmed prior to the next Site inspection.
Groundwater Gauging and Monitoring	July 26, 2022-July 28, 2022: TRC performed a routine groundwater monitoring event. The scope of the groundwater monitoring event was to inspect, gauge, and collect groundwater samples from all on-site monitoring wells. All site monitoring wells, except for monitoring well MW-4R were able to be gauged and sampled. TRC was unable to collect samples from monitoring well MW-4R	TRC recommends that prior to the next groundwater sampling event the vegetation surrounding monitoring wells MW-7D, MW-7, MW-11, and BR-7 be cleared.

Summary of Site Activities, Site Monitoring, and Sampling January 2020 through January 2025		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
	due to the presence of thick tar-like NAPL found to be present the riser of this well. Sampling was performed using the United States Environmental Protection Agency (USEPA) low-flow sampling methods. Samples collected from monitoring wells MW-4DR, MW-13, MW-8, MW-6, BR-3, BR-5, BR-6, MW-7D, MW-7, MW-11, BR-7, MW-2, and MW-5, along with associated Quality Assurance/Quality Control (QA/QC) samples, were submitted for routine laboratory analysis of Target Compound List (TCL) volatile organic compounds (VOCs) by USEPA Method 8260C, TCL semi-volatile organic compounds (SVOCs) by USEPA Method 8270, TCL pesticides by USEPA Method 8081B, TCL polychlorinated biphenyls (PCBs) by USEPA Method 8082A, and Target Analyte List (TAL) metals by USEPA Method 6010D, as well as non-routine analysis of PFAS by Con-Test SOP-454. Monitoring well MW-5 was pumped dry during sampling and presented a poor groundwater recharge rate; thus, a sufficient volume of sample could not be collected to facilitate all targeted laboratory analyses. Groundwater collected from monitoring well MW-5 was submitted for the same laboratory analyses as the other 13 wells noted above, except for TCL SVOCs and TCL PCBs.	
Non-Routine Residential Potable Water Sampling for Emerging Contaminants (ECs)	July 20, 2022-July 21, 2020: At the request of NYSDEC, TRC performed a non-routine potable water sampling event. Samples were collected from 12 residences adjacent to the Site. Water was collected from unfiltered sources (i.e., outdoor taps). Samples from each of the 12 residences were submitted for laboratory analysis of 1,4-dioxane by USEPA Method SW-846 8270D with Selective Ion Monitoring and PFAS (21 target analytes) by USEPA Method 537.1 (modified) using Test America SOP BR-LC-009, revision 4.0. February 9, 2023: At the request of NYSDEC, TRC performed a non-routine potable water sampling event. Samples were collected from one residence adjacent to the Site. Water was collected from an unfiltered source (i.e., outdoor tap). This sample was submitted for laboratory analysis of PFAS by USEPA Method 537.1 for the 6 Unregulated Contaminant Monitoring Rule (UMCR) PFAS Compounds.	TRC recommends that the result of the analysis of potable water samples ML-WP-RES-1 and ML-WP-RES-2 be provided to the residences and be evaluated for the potential need for treatment, to protect the health of the affected residences.

3.2 Groundwater Monitoring Summary

3.2.1 Groundwater Gauging

On July 26, 2022, prior to commencing groundwater sample collection, TRC gauged 13 groundwater monitoring wells for depth to groundwater to evaluate potential groundwater flow direction. Monitoring well MW-4R could not be gauged due to a thick, tar-like NAPL within the well riser. Of the 13 wells gauged, eight wells (MW-2, MW-4R, MW-5, MW-6, MW-7, MW-8, MW-11, and MW-13) are screened in the overburden hydrogeologic unit. The remaining six wells (BR-3, BR-5, BR-6, BR-7, MW-4DR, and MW-7D) are screened in the bedrock hydrogeologic unit. The groundwater monitoring well construction details are further summarized in **Table 1**. Groundwater surface elevations, inferred groundwater surface elevation contours, and the inferred groundwater flow directions for the overburden and bedrock monitoring wells are presented on **Figures 3** and **Figure 4**, respectively. Monitoring well MW-2 is screened such to bridge the overburden/bedrock interface. The groundwater surface elevation data for this well has been incorporated into the tables and figures associated with overburden monitoring wells. The groundwater gauging and elevation measurements for the July 2022 gauging event are presented in **Table 2**, while a summary of site hydrogeologic information for this event is presented below:

Site Hydrogeologic Summary
January 2020 through January 2025

Date of Gauging Event	Number of Groundwater Monitoring Wells Gauged	Overburden Groundwater Elevation Range		Inferred On-Site Groundwater Flow Direction (Overburden)
		Lowest (feet Above Mean Sea Level)	Highest (feet Above Mean Sea Level)	
July 26, 2022-July 28, 2022	7 of 8*	585.27 (MW-5)	629.91 (MW-6)	Radial
Date of Gauging Event	**Number of Groundwater Monitoring Wells Gauged**	**Bedrock Groundwater Elevation Range**		**Inferred On-Site Groundwater Flow Direction (Bedrock)**
		Lowest (feet Above Mean Sea Level)	**Highest (feet Above Mean Sea Level)**	
July 26, 2022-July 28, 2022	6 of 6	569.38 (BR-5)	598.17 (MW-4DR)	North

Notes:
* – Monitoring well MW-4R was not able to be gauged or sampled due to the presence of a thick, tar-like NAPL within the well riser.

3.2.2 Groundwater Sampling

One groundwater sampling event was performed during this reporting period. This event was performed in July 2022 by TRC. Samples were collected using standard USEPA low-flow sampling techniques. The associated groundwater sampling logs can be found in **Appendix E.**

Samples were collected from monitoring wells MW-4DR, MW-13, MW-8, MW-6, BR-3, BR-5, BR-6, MW-7D, MW-7, MW-11, BR-7, MW-2, and MW-5 and were submitted along with associated QA/QC) samples for routine laboratory analysis of TCL VOCs by USEPA Method 8260C, TCL SVOCs by USEPA Method 8270, TCL pesticides by USEPA Method 8081B, TCL PCBs by USEPA Method 8082A, and TAL metals by USEPA Method 6010D, as well as non-routine analysis of PFAS by Con-Test SOP-454.

During sampling activities, monitoring well MW-5 was pumped dry and failed to recover sufficiently to allow for complete sampling. Groundwater collected from monitoring well MW-5 was submitted for the same laboratory analyses as the other twelve wells noted above, except for TCL SVOCs and TCL PCBs (insufficient volume of sample due to it purging dry)A summary of the groundwater sampling information and pertinent well details for each well is presented as follows:

Summary of Groundwater Monitoring Activities
January 2020 to January 2025

Well Identification	Monitoring Well Details		July 2022 Groundwater Sampling Event		
	Screen Zone (feet below ground surface)	Geological Unit Screened	Depth to Water (feet below top of casing)	SMP Analytes	Notes
BR-3	43.50 - 63.50	Bedrock	14.46	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
BR-5	72.50 - 92.50	Bedrock	54.54	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
BR-6	79.00 - 99.00	Bedrock	48.65	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
BR-7	23.50 - 43.50	Bedrock	14.14	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
MW-4DR	56.00 - 76.00	Bedrock	28.91	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
MW-7D	14.50 - 29.50	Bedrock	7.54	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
MW-2	55.40 - 65.40	Overburden/ Bedrock Interface	4.60	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
MW-4R[1]	8.00 - 20.00	Overburden	NG[1]	VOCs, SVOCs, PCBs, Pesticides, Metals	Not sampled[1]
MW-5[2]	4.95 - 12.95	Overburden	10.52	VOCs, SVOCs, PCBs, Pesticides, Metals[2]	PFAS also analyzed See Note 2
MW-6	7.00 - 17.00	Overburden	11.66	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
MW-7	4.50 - 14.50	Overburden	2.92	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
MW-8	11.50 - 21.50	Overburden	12.83	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
MW-11	9.50 - 19.50	Overburden	10.15	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed
MW-13	6.00 - 16.00	Overburden	11.7	VOCs, SVOCs, PCBs, Pesticides, Metals	PFAS also analyzed

Notes:
1 Sampling and gauging was not performed at MW-4R due to a thick, tar-like NAPL layer found to be blocking the well riser.
2 Sample collected from MW-5 was not analyzed for all SMP analytes due to poor recharge. MW-5 was sampled for routine SMP analytes VOCs and Metals, as well as non-routine analyte PFAS. SMP analytes SVOCs, PCBs and Pesticides were not sampled at MW-5.

Additional groundwater monitoring well construction details are presented in **Table 1**.

3.2.3 Groundwater Analytical Results

Groundwater analytical data for the groundwater sampling events discussed above in **Section 3.2.2** are presented in **Tables 3 through 8**. Detected compounds exceeding their corresponding Class GA Value for each monitoring well are identified on **Figure 5**. The Data Usability Summary Reports (DUSRs) for the sampling event can be found in **Appendix F**. Concentration trend line graphs for monitoring wells containing COCs at concentrations consistently exceeding Class GA Values are provided in **Appendix G**.

A summary of the compounds that exceeded Class GA Values is provided below:

Summary of Groundwater Analytical Results – VOCs, SVOCs, Pesticides, PCBs, Metals, PFAS				
Constituent	**Class GA Value**	**Concentration Range**	**Location with Highest Concentration**	**Frequency Exceeding Class GA Values**
July 2022				
VOCs (µg/L)				
1,4-Dichlorobenzene	3	ND – 5.4	MW-8	1 of 13
Benzene	1	ND – 8.2	MW-8	1 of 13
Chlorobenzene	5	ND – 65	MW-8	1 of 13
Naphthalene	10	ND – 19	MW-8	1 of 13
SVOCs (µg/L)				
Diethyl Phthalate	50	ND – 110	MW-6	1 of 12
Phenol	1	ND – 2.4 JD	BR-6	1 of 12
Pesticides (µg/L)				
No Exceedances				
PCBs (µg/L)				
Total PCBs[+]	0.09	ND – 0.55	MW-8	3 of 12
Metals (mg/L)				
Antimony	0.003	ND – 0.018 J	MW-8	3 of 13
Cadmium	0.005	ND – 0.0076	MW-11	1 of 13
Chromium	0.05	ND – 0.067	MW-11	1 of 13
Iron	0.3	0.075 – 51	MW-8	4 of 13
Manganese	0.3	0.016 – 3.2	MW-7D	4 of 13
Sodium	20	3.5 – 40	BR-5	6 of 13
PFAS (ng/L)				
Perfluorooctanesulfonic acid (PFOS)	2.7	ND – 55	MW-8	4 of 13
Perfluorooctanoic acid (PFOA)	6.7	ND – 140	MW-8	4 of 13

Notes:
ND – Not detected
J – Estimated value
D – Dilution required
µg/L – Micrograms per liter
ng/L – Nanograms per liter
mg/L – Milligrams per liter
+ - Total PCBs standards apply to the sum of all nine PCB aroclors.
1 Sampling and gauging was not performed at MW-4R due to a thick, tar-like NAPL found to be blocking the well riser.
2 Sample collected from MW-5 was not analyzed for all SMP analytes due to poor recharge. MW-5 was sampled for routine SMP analytes VOCs and Metals, as well as non-routine analyte PFAS. SMP analytes SVOCs, PCBs and Pesticides were not sampled at MW-5.
3 No pesticides were detected above Class GA Values.

3.3 Non-Routine Potable Water Sampling Summary

3.3.1 Non-Routine Potable Water Sampling

Two non-routine potable water sampling events were performed at off-site residences (adjacent to the Site) during this reporting period, at the request of NYSDEC. These events were performed in July 2020 and February 2023 by TRC. Sampling was performed at residences by collecting well water from unfiltered sources (i.e., outdoor taps) in order to assess water quality prior to treatment by any purification or softening systems that exist at the residence. NYSDEC PFAS sampling guidelines were followed during these sampling events.

In early 2020, properties located adjacent to the Site were identified and property owner information was gathered. TRC contacted property owners via phone in May and June 2020. In late June 2020, NYSDEC distributed a total of 36letters to property owners offering to sample their water supply wells. In late July 2020, the first sampling event was performed by TRC at 12 residences. In July 2020, samples were collected from 12 residences adjacent to the Site. These samples were identified as samples WP-RES-1 through WP-RES-12 and submitted for laboratory analysis for 1,4-dioxane by USEPA Method SW-846 8270D with Selective Ion Monitoring and PFAS (21 target analytes), based on USEPA Method 537.1 (modified), using Test America SOP BR-LC-009, revision 4.0.

An additional property owner, who had recently purchased their property, contacted NYSDEC in early 2022 and requested potable water sampling be performed at their property. Sampling was performed at this property by TRC in February 2023. This sample was identified as sample WP-RES-14 and submitted for laboratory analysis for PFAS by USEPA method 537.1 for six UMCR PFAS Compounds.

3.3.2 Laboratory Analysis Results for Non-Routine Potable Water Samples

Laboratory analytical results for the potable water sampling events discussed above in **Section 3.3.1** are presented in **Tables 9**. These results were compared to the 2020 New York State public drinking water Maximum Contaminant Levels (NYS MCLs). Note that the NYS MCLs are not criteria for private drinking water supplies, as New York State does not regulate PFAS or 1,4-Dioxane in private wells, but the NYS MCLs serve as screening criteria for evaluating potential exposure. The Data Usability Summary Reports (DUSRs) for each sampling event can be found in **Appendix F**.

A summary of the compounds that exceeded NYS MCLs is provided below:

Summary of Potable Water Analytical Results – PFAS, 1,4-Dioxane (July 2020)				
Constituent	**2020 NYS MCL Value (µg /L)**	**Concentration Range (results in µg /L)**	**Location with Highest Concentration**	**Frequency Exceeding SCG**
1,4-Dioxane	1	ND – 3.7	WP-RES-2	2 of 12

Notes:
1 PFAS was not detected above NYS MCLs in any sample collected in July 2020 or February 2023.
2 February 2023 sample (WP-RES-14) was analyzed for PFAS only, and PFAS was not detected above NYS MCLs.

4.0 Cost Summary

The total estimated cost of SMP activities for the Site during this reporting period is approximately $66,350. These activities included the following:

- Project management/administration tasks.
- Three annual site-wide inspections, with one being one combined with a severe weather inspection.
- Two non-routine potable water sampling events (for laboratory analysis of PFAS and/or 1,4-dioxane).
- One groundwater monitoring event (for laboratory analysis of VOCs, SVOCs, pesticides, PCBs, metals, and PFAS).
- Preparation of this PRR.

The total cost includes all costs associated labor and expenses associated with the project. A summary of these costs is presented below:

A summary of the site management costs is presented below:

Summary of Site Management Costs - January 2020 through January 2025		
Cost Item	**Amount Expended**	**Percent of Total Cost (Approximate)**
Engineering Support Labor Costs		
TRC	$60,877	91
Expenses		
TRC	$5,113	8
Subcontractors Costs	$360	1
Total Cost	**$ 66,350**	100

Each cost item is further described below:

- Engineering support includes labor costs associated with project management (e.g., monthly invoicing, project scheduling, and coordination, etc.); site inspections; potable water sampling; severe weather inspection; groundwater sampling; and reporting (i.e., site inspection reports, DUSRs, and PRR).
- Subcontractor costs include data validation service costs associated with the July 2022 groundwater sampling event and the February 2023 potable water sampling event.
- Expense costs include travel, equipment, and supplies in support of the site inspection, severe weather inspection, potable water sampling events, and groundwater sampling event.

5.0 Conclusions and Recommendations

5.1 Conclusions

- Site land use and groundwater use were identified to both consistent with the restrictions set forth in the SMP.
- The ICs established for the Site operated as intended during this reporting period.
- The remedy continued to be protective of human health and the environment during this reporting period.
- Based on the groundwater elevations measured during the July 2022 sampling event, the on-site groundwater in the bedrock hydrogeologic unit appears to flow to the north, and the on-site groundwater in the overburden hydrogeologic unit appears to flow outwards radially from the high point in the landscape and generally mirrors the topography. These groundwater flow observations are generally consistent with historical observation.
- Historical site COCs in groundwater include VOCs (chlorobenzene, benzene, 1,4-dichlorobenzene, and total xylenes), SVOCs, pesticides, PCBs, and metals. Based on the available analytical data (**Tables 3** through **7**) collected during this reporting period and information presented in **Appendix G**, conclusions made regarding the detected concentrations of these groundwater contaminants are presented below:
    - VOCs were detected on-site in groundwater but only in association with overburden monitoring well MW-8, which is located within the solid waste remaining within the limits of the landfill. Groundwater concentrations of 1,4-dichlorobenzene, benzene, chlorobenzene, and naphthalene detected at this well exceeded their corresponding Class GA Values. This is consistent with the groundwater results of the previous reporting period. (Note: Overburden monitoring well MW-4R is also present within the limits of the landfill; however, this well has not been able to be sampled during this reporting period or the previous reporting period due to a thick tar-like NAPL found to be present within the well riser.)
    - Groundwater concentrations of total xylenes (a historical COC) did not exceed Class GA Values during this reporting period. This is consistent with groundwater results of the previous reporting period.
    - Groundwater concentrations of the SVOCs diethyl phthalate and phenol each exceeded their corresponding Class GA Values at one location during this reporting period (diethyl phthalate exceeded at monitoring well MW-6 and phenol exceeded at monitoring well BR-6). SVOCs were not detected in groundwater above Class GA Values during the previous reporting period.
    - No Pesticide compounds were detected in groundwater during this reporting period. Although, two Pesticide compounds were detected above Class GA Values during the previous reporting period.
    - Groundwater samples exhibited the presence of total PCBs at concentrations greater than its corresponding Class GA Value of 0.09 at three locations during this monitoring period. Only one groundwater sample collected during the previous reporting period exhibited the presence of total PCBs above Class GA Value.

- Groundwater samples exhibited the presence of the metals antimony, cadmium, chromium, iron, manganese, and sodium at concentrations greater than their corresponding Class GA Values at one or more locations during this reporting period. While these metals are likely not indicative of site contaminant migration and are typically regulated for aesthetic purposes such as odor, taste, and clarity in drinking water, they may be indicative of the overall geochemical quality of the groundwater at the Site. In general, natural organics associated with shale bedrock naturally create reducing conditions in bedrock groundwater. These reducing conditions enhance the dissolution of metals, such as manganese, iron, sodium and other trace metals from the native bedrock.
- Groundwater samples exhibited the presence of PFOS and PFOA at concentrations greater than their corresponding Class GA Values at four locations (monitoring wells MW-7, MW-7D, MW-8, and MW-13) during this monitoring period.

- PFAS compounds were not detected above corresponding NYS MCLs in any of the 13 residential potable water samples collected during this reporting period, but 1,4-dioxane was detected in two residential potable water samples (samples ML-WP-RES-1 and ML-WP-RES-2) above NYS MCLs during this reporting period. It is important to note that the NYS MCLs are not criteria for private drinking water supplies, as New York State does not regulate PFAS or 1,4-Dioxane in private wells, but the NYS MCLs serve as screening criteria for evaluating potential exposure. Based on this information, the remediation goal to *eliminate, to the extent practical ingestion of ground water impacted by the Site that does not attain NYSDOH drinking water standards* appears to have been achieved. It is also important to note that 1,4-dioxane is known to be present in various consumer goods. As such, it cannot be concluded the presence of 1.4-dioxane in these samples is connected to contamination found at the Site.
- The remediation goal to *eliminate, to the extent practicable, further off-site migration of groundwater that does not attain Class GA Values* has been achieved.
- The remediation goal to e*liminate, to the extent practicable, exposure to waste in the landfill* appears to have been achieved through access restrictions and the vegetated cover system installed during remedial action.
- The remediation goal to *eliminate, to the extent practicable, exposure to LNAPL-contaminated soil in the landfill* appears to have been achieved through access restrictions and the vegetated cover system installed during remedial action.
- The remediation goal to *eliminate, to the extent practicable, the migration of LNAPL from the small-impacted area of the landfill and the release of LNAPL contaminants into groundwater* appears to have been achieved.

5.2 Recommendations

- Update the SMP to:
  - Reflect a three-year groundwater sampling and site-wide inspection frequency.
  - Reflect a five-year PRR Certification Period.
  - Incorporate changes/modifications needed resulting from the recommendations presented below, if such changes/modifications are acceptable to the NYSDEC.
- Continue annual site inspection (concurrent with groundwater sampling events, when possible) in accordance with the SMP, including water level measurements and additional inspections, as necessary, following severe weather events.
- Decommission and replace groundwater monitoring well MW-4R prior to the next groundwater sampling event.
- Upon replacement of groundwater monitoring well MW-4R, a New York State licensed Land Surveyor should collect the locations and elevations of all groundwater monitoring wells.
- Complete a drum inventory and drum sampling event prior to coordinating drum disposal activities.
- Based on the results of the groundwater sampling documented in **Section 3.2**, TRC also recommend the following:
  - Include PFAS as an analyte for all site monitoring wells during the next groundwater sampling event.

6.0 Green and Sustainable Remediation Metrics

Green and sustainable remediation metrics implemented during this reporting period included utilizing local staff for site visits and sampling events and visiting multiple sites under a single mobilization, to limit travel (reducing gas consumption). Generally, staff located between approximately 50 and 150 miles from the Site were utilized. Approximately 3,600 miles were travelled during this reporting period by Standby Engineers. Minimal amounts (less than 50 pounds) of solid waste (generally consisting of spent personal protective equipment and groundwater sampling materials) were generated on-site during site management activities this reporting period. Less than 25 gallons of public potable water were used during this reporting period for site management activities. No land was disturbed on-site during this reporting period. A summary of the green and sustainable remediation metrics is included in **Appendix A**.

7.0 Certification of Engineering and Institutional Controls

For each institutional or engineering control identified for the Site, I certify that all the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction.
- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place; or last approved by the NYSDEC.
- Nothing has occurred that would impair the ability of the control to protect the public health and environment.
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control.
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control.
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document.
- Use of the Site is compliant with the deed restriction.
- The engineering control systems are performing as designed and are effective.
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program [and generally accepted engineering practices].
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Allen Zgaljardic, of TRC Engineers, Inc., am certifying as NYSDEC's Designated Site Representative for the Site. I have been authorized and designated by all site owners/remedial parties to sign this certification for the Site.

I Allen Zgaljardic, certify that I am currently a NYS registered professional engineer and that this Periodic Review Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and DER Green Remediation (DER-31) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

TRC Engineers, Inc.

Prepared By: Brock Greene

Brock Greene

Project Manager

Reviewed By: Allen Zgaljardic

Allen Zgaljardic, P.E.

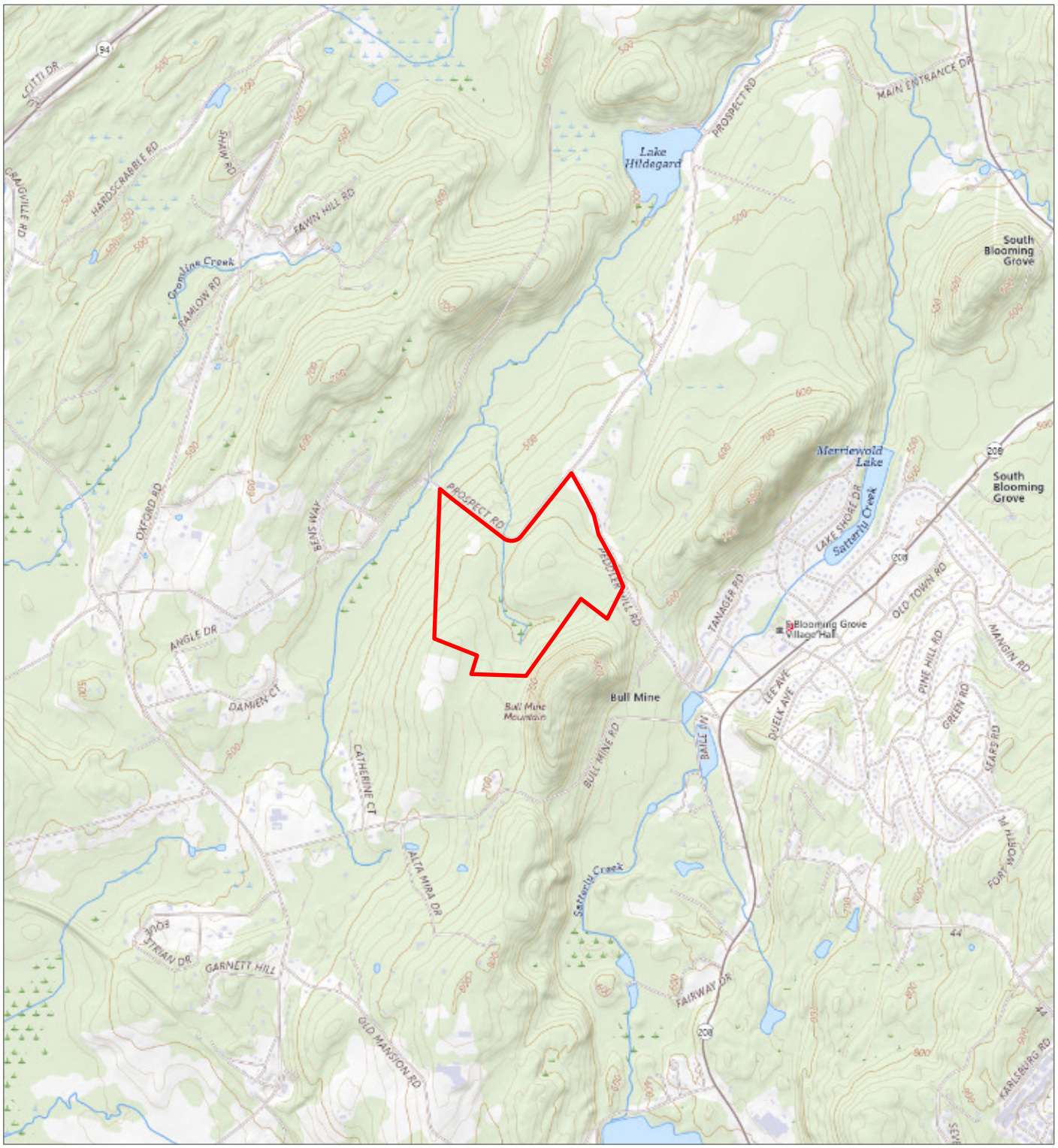
Environmental Engineer

8.0 Future Site Activities

Based on the recommendations discussed in **Section 5.0,** the following site management activities will be completed during the next PRR reporting period (February 2025 to March 2030):

- Site-wide inspections – Every three years (next scheduled: third quarter of 2025)
- Groundwater sampling – Every three years (next scheduled: third quarter of 2025)
- PRR – Every five years (next scheduled: February 2030)

FIGURES



LEGEND

TAX PARCEL BOUNDARY

0 1,000 2,000

FEET

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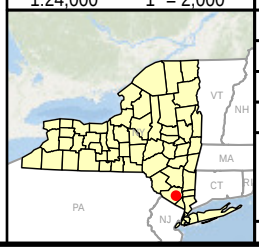


BASE MAP: USGS TOPOGRAPHIC MAP SERVICE, MONROE NEW YORK QUAD
DATA SOURCES: TRC

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
MAYER LANDFILL SITE - SITE NO. 336027
PROSPECT AND PEDDLER HILL ROADS
BLOOMING GROVE, NEW YORK

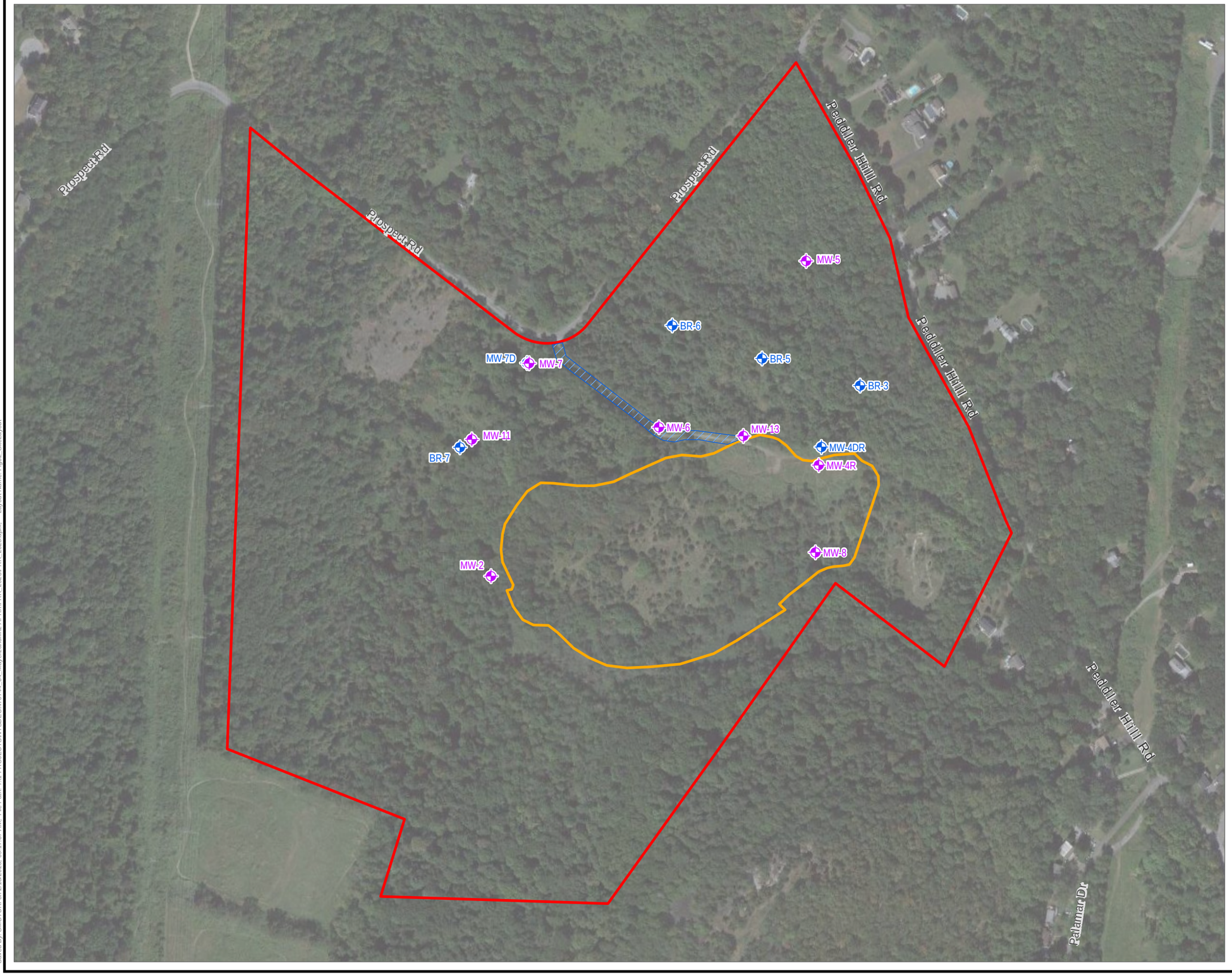
TITLE:

SITE LOCATION MAP

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 4
CHECKED BY:	E. STOBBE		
APPROVED BY:	B. GREENE		FIGURE 1
DATE:	FEBRUARY 2025		

TRC
3 CORPORATE DRIVE
SUITE 202
CLIFTON PARK, NY 12065
PHONE: 518.348.1190

FILE: PRR_2025



LEGEND

- TAX PARCEL BOUNDARY
- LIMITS OF LANDFILL PURSUANT TO THE DECEMBER 2012 ENVIRONMENTAL EASEMENT
- GRAVEL ROAD
- BEDROCK MONITORING WELL
- OVERBURDEN MONITORING WELL

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED SEPTEMBER, 2019
DATA SOURCES: TRC

1:3,840
1" = 320'
0 160 320
FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
MAYER LANDFILL SITE - SITE NO. 336027
PROSPECT AND PEDDLER HILL ROADS
BLOOMING GROVE, NEW YORK

TITLE:
SITE LAYOUT MAP

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 4
CHECKED BY:	E. STOBBE		FIGURE 2
APPROVED BY:	B. GREENE		
DATE:	FEBRUARY 2025		

TRC
3 CORPORATE DRIVE
SUITE 202
CLIFTON PARK, NY 12065
PHONE: 518.348.1190

FILE: PRR_2025.aprx

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet Map Rotation: 0
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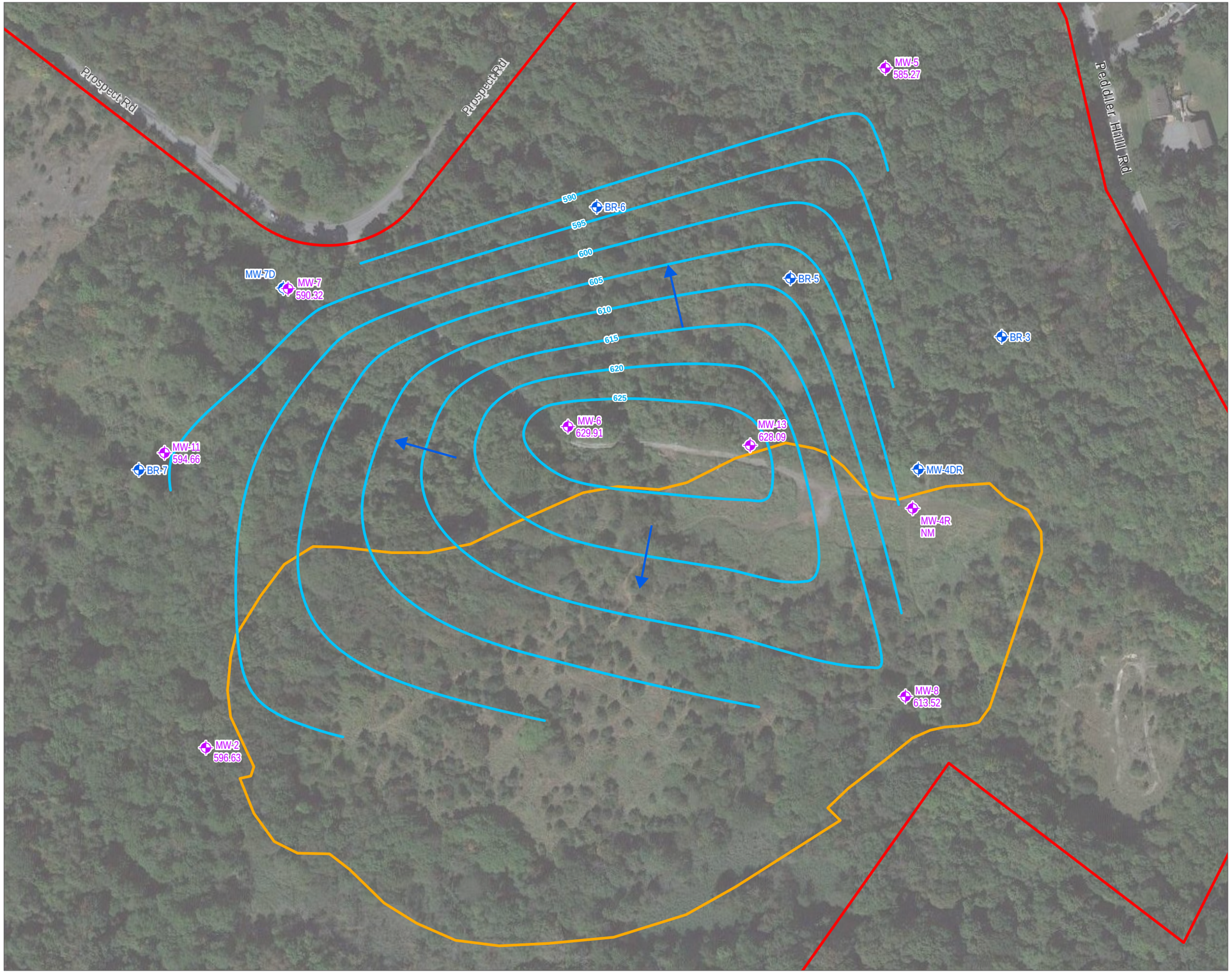


LEGEND

- TAX PARCEL BOUNDARY
- LIMITS OF LANDFILL PURSUANT TO THE DECEMBER 2012 ENVIRONMENTAL EASEMENT
- INFERRED GROUNDWATER ELEVATION CONTOUR (FIVE-FOOT INTERVALS)
- INFERRED GROUNDWATER FLOW DIRECTION
- BEDROCK MONITORING WELL
- OVERBURDEN MONITORING WELL
- 629.91 GROUNDWATER SURFACE ELEVATION (IN FEET AMSL)

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
2. POTENTIOMETRIC SURFACE ELEVATIONS COLLECTED FROM JULY 26 TO 28, 2022.
3. GROUNDWATER MONITORING WELL MW-4R WAS NOT GAUGED OR SAMPLED DUE TO A THICK, TAR-LIKE SUBSTANCE PRESENT WITHIN THE WELL RISER.

ACRONYMS:
AMSL - ABOVE MEAN SEA LEVEL
NM - NOT MEASURED

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED SEPTEMBER, 2019
DATA SOURCES: TRC

N

1:1,800
1" = 150'

0 75 150 FEET

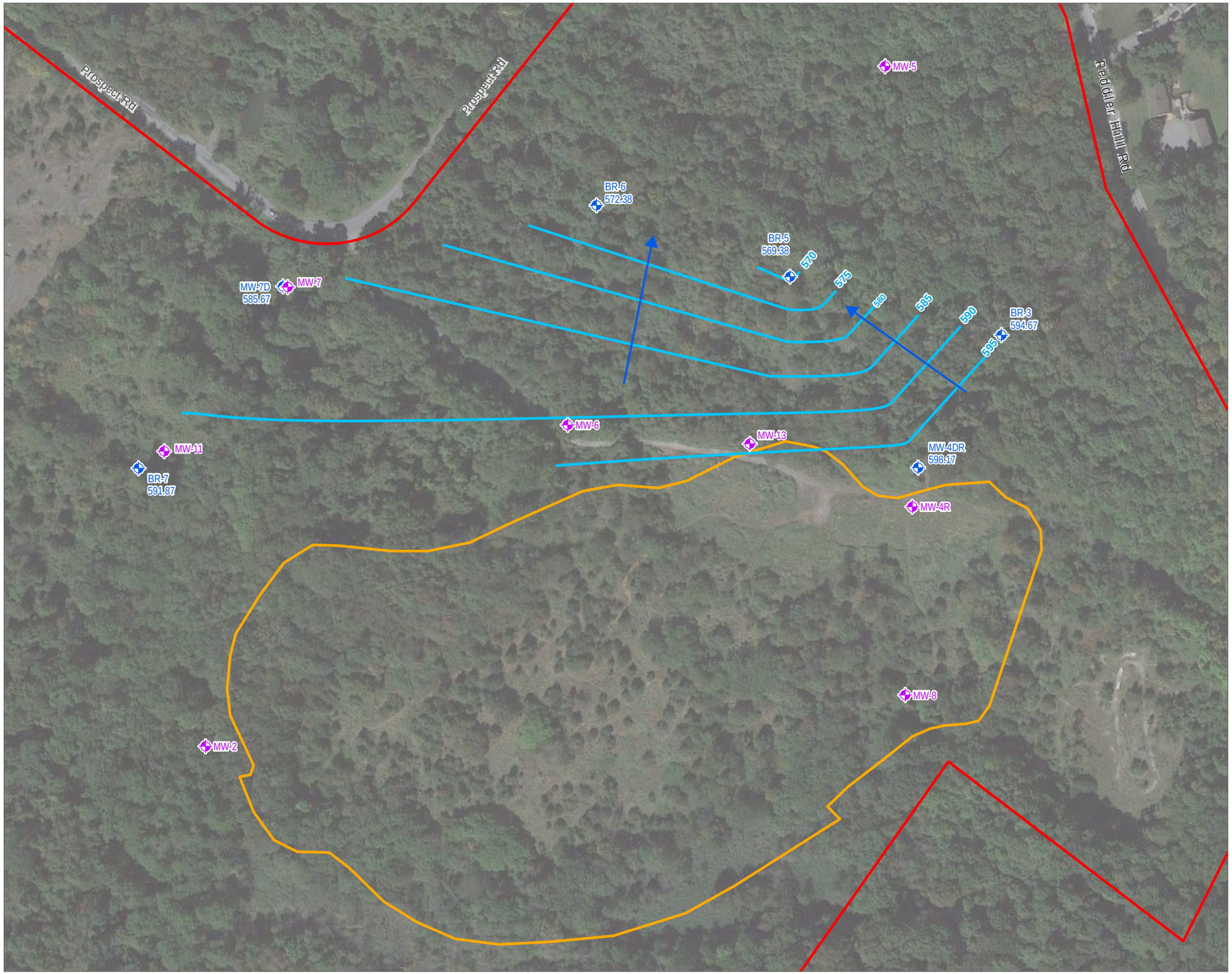
PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
MAYER LANDFILL SITE - SITE NO. 336027
PROSPECT AND PEDDLER HILL ROADS
BLOOMING GROVE, NEW YORK

TITLE:
OVERBURDEN GROUNDWATER SURFACE ELEVATIONS AND FLOW MAP - JULY 2022

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 4
CHECKED BY:	E. STOBBE		FIGURE 3
APPROVED BY:	B. GREENE		
DATE:	FEBRUARY 2025		

TRC
3 CORPORATE DRIVE
SUITE 202
CLIFTON PARK, NY 12065
PHONE: 518.348.1190

FILE: PRR_2025.aprx



LEGEND

- TAX PARCEL BOUNDARY
- LIMITS OF LANDFILL PURSUANT TO THE DECEMBER 2012 ENVIRONMENTAL EASEMENT
- INFERRED GROUNDWATER ELEVATION CONTOUR (FIVE-FOOT INTERVALS)
- INFERRED GROUNDWATER FLOW DIRECTION
- BEDROCK MONITORING WELL
- OVERBURDEN MONITORING WELL
- 629.91 GROUNDWATER SURFACE ELEVATION (IN FEET AMSL)

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.

2. POTENTIOMETRIC SURFACE ELEVATIONS COLLECTED FROM JULY 26 TO 28, 2022.

ACRONYMS:
AMSL - ABOVE MEAN SEA LEVEL

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED SEPTEMBER, 2019
DATA SOURCES: TRC

N

1:1,800
1" = 150'

0 75 150 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
MAYER LANDFILL SITE - SITE NO. 336027
PROSPECT AND PEDDLER HILL ROADS
BLOOMING GROVE, NEW YORK

TITLE:
BEDROCK GROUNDWATER SURFACE ELEVATIONS AND FLOW MAP - JULY 2022

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 4
CHECKED BY:	E. STOBBE		FIGURE 4
APPROVED BY:	B. GREENE		
DATE:	FEBRUARY 2025		

TRC
3 CORPORATE DRIVE
SUITE 202
CLIFTON PARK, NY 12065
PHONE: 518.348.1190

FILE: PRR_2025.aprx

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet - Map Rotation: 0
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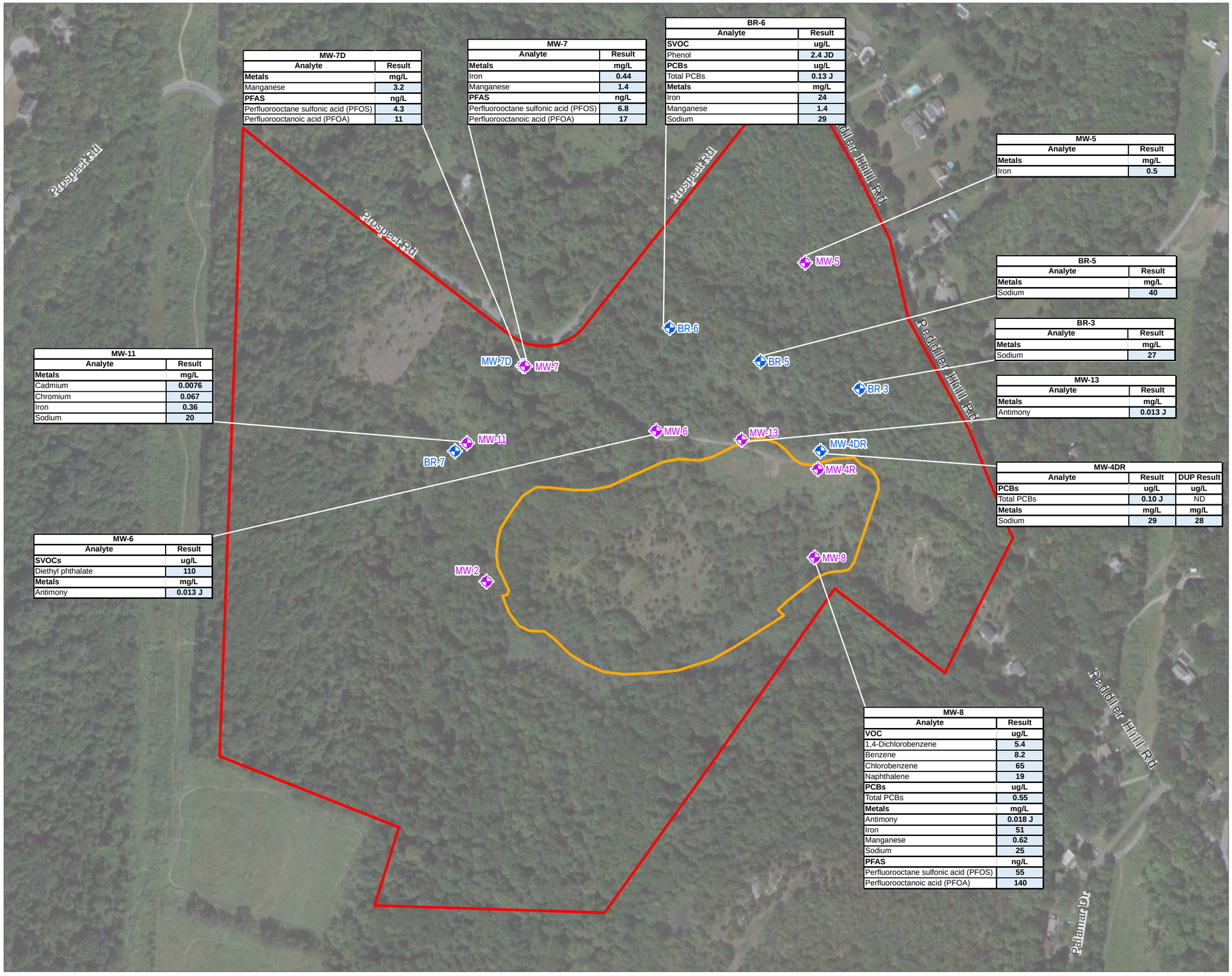


MW-7D	
Analyte	Result
Metals	**mg/L**
Manganese	**3.2**
PFAS	**ng/L**
Perfluorooctane sulfonic acid (PFOS)	**4.3**
Perfluorooctanoic acid (PFOA)	**11**

MW-7	
Analyte	Result
Metals	**mg/L**
Iron	**0.44**
Manganese	**1.4**
PFAS	**ng/L**
Perfluorooctane sulfonic acid (PFOS)	**6.8**
Perfluorooctanoic acid (PFOA)	**17**

BR-6	
Analyte	Result
SVOC	**ug/L**
Phenol	**2.4 JD**
PCBs	**ug/L**
Total PCBs	**0.13 J**
Metals	**mg/L**
Iron	**24**
Manganese	**1.4**
Sodium	**29**

MW-5	
Analyte	Result
Metals	**mg/L**
Iron	**0.5**

BR-5	
Analyte	Result
Metals	**mg/L**
Sodium	**40**

BR-3	
Analyte	Result
Metals	**mg/L**
Sodium	**27**

MW-13	
Analyte	Result
Metals	**mg/L**
Antimony	**0.013 J**

MW-11	
Analyte	Result
Metals	**mg/L**
Cadmium	**0.0076**
Chromium	**0.067**
Iron	**0.36**
Sodium	**20**

MW-4DR		
Analyte	Result	DUP Result
PCBs	**ug/L**	**ug/L**
Total PCBs	**0.10 J**	ND
Metals	**mg/L**	**mg/L**
Sodium	**29**	**28**

MW-6	
Analyte	Result
SVOCs	**ug/L**
Diethyl phthalate	**110**
Metals	**mg/L**
Antimony	**0.013 J**

MW-8	
Analyte	Result
VOC	**ug/L**
1,4-Dichlorobenzene	**5.4**
Benzene	**8.2**
Chlorobenzene	**65**
Naphthalene	**19**
PCBs	**ug/L**
Total PCBs	**0.55**
Metals	**mg/L**
Antimony	**0.018 J**
Iron	**51**
Manganese	**0.62**
Sodium	**25**
PFAS	**ng/L**
Perfluorooctane sulfonic acid (PFOS)	**55**
Perfluorooctanoic acid (PFOA)	**140**

LEGEND

- TAX PARCEL BOUNDARY
- LIMITS OF LANDFILL PURSUANT TO THE DECEMBER 2012 ENVIRONMENTAL EASEMENT
- BEDROCK MONITORING WELL
- OVERBURDEN MONITORING WELL

BOLDED AND HIGHLIGHTED RESULTS EXCEED CLASS GA VALUE	
Analyte	NYSDEC Guidance Value
VOC	**ug/L**
1,4-Dichlorobenzene	3
Benzene	1
Chlorobenzene	5
Naphthalene	10
SVOC	**ug/L**
Diethyl phthalate	50
Phenol	1
PCBs	**ug/L**
Total PCBs**	0.09
Metals	**mg/L**
Antimony	0.003
Cadmium	0.005
Chromium	0.05
Iron	0.3
Manganese	0.3
Sodium	20
PFAS	**ng/L**
Perfluorooctane sulfonic acid (PFOS)	2.7
Perfluorooctanoic acid (PFOA)	6.7

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.

2. GROUNDWATER MONITORING WELL MW-4R WAS NOT GAUGED OR SAMPLED DUE TO A THICK, TAR-LIKE SUBSTANCE PRESENT WITHIN THE WELL RISER.

3. GROUNDWATER SAMPLNG CONDUCTED ON JULY 26 THROUGH 28, 2022.

ACRONYMS:
J - ESTIMATED VALUE
D - DILUTION
ND - NON-DETECT
mg/L - MILLIGRAMS PER LITER
ug/L - MICROGRAMS PER LITER
ng/L - NANOGRAMS PER LITER
VOC - VOLATILE ORGANIC COMPOUNDS
SVOC - SEMI-VOLATILE ORGANIC COMPOUNDS
PCBs - POLYCHLORINATED BIPHENYLS
PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES
NYSDEC GUIDANCE VALUES - NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER, JUNE 1998 WITH ALL ADDENDUMS
** - APPLIES TO THE SUM OF ALL PCB AROCLORS DETECTED

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED SEPTEMBER, 2019
DATA SOURCES: TRC

1:3,840
1" = 320'
0 160 320
FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
MAYER LANDFILL SITE - SITE NO. 336027
PROSPECT AND PEDDLER HILL ROADS
BLOOMING GROVE, NEW YORK

TITLE: SUMMARY OF DETECTED COMPOUNDS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS/GUIDANCE - JULY 2022

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 4
CHECKED BY:	E. STOBBE		FIGURE 5
APPROVED BY:	B. GREENE		
DATE:	FEBRUARY 2025		

TRC
3 CORPORATE DRIVE
SUITE 202
CLIFTON PARK, NY 12065
PHONE: 518.348.1190

FILE: PRR_2025.aprx

TABLES

Table 1
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Groundwater Monitoring Well Construction Details

Well Identification	Installation Date	Screen Diameter (inches)	Screen Material	Total Depth (feet bgs)	Screened Formation	*Screen*			*Elevation (feet AMSL)*				*Location*	
						Top (feet bgs)	Bottom (feet bgs)	Length (feet)	Casing Top	Ground Surface	Screen		Northing (feet)	Easting (feet)
											Top	Bottom		
BR-3	6/2/2009	3	Open	63.5	Bedrock	43.50	63.50	20	609.13	607.10	563.60	543.60	924783.35	574589.26
BR-5	6/5/2009	3	Open	92.5	Bedrock	72.50	92.50	20	623.92	622.38	549.88	529.88	924873.92	574261.84
BR-6	6/11/2009	3	Open	99.0	Bedrock	79.00	99.00	20	621.03	619.54	540.54	520.54	924984.44	573961.91
BR-7	6/16/2009	3	Open	43.5	Bedrock	23.50	43.50	20	606.01	604.66	581.16	561.16	924577.18	573252.55
MW-4DR	5/29/2009	3	Open	76.0	Bedrock	56.00	76.00	20	627.08	625.96	569.96	549.96	924578.06	574460.15
MW-7D	2/29/2000	6	Open	29.5	Bedrock	14.50	29.50	15	593.21	591.01	576.51	561.51	924858.82	573476.25
MW-2	1/11/1990	2	PVC	65.4	Overburden/Bedrock Interface	55.40	65.40	10	601.23	598.50	543.10	533.10	924146.56	573356.27
MW-4R	4/28/2009	2	PVC	20.0	Overburden	8.00	20.00	12	630.18	628.32	620.32	608.32	924517.53	574451.28
MW-5	1/12/1990	2	PVC	13.0	Overburden	4.95	12.95	8	595.79	593.25	588.30	580.30	925199.82	574409.07
MW-6	2/11/2000	2	PVC	17.0	Overburden	7.00	17.00	10	641.57	639.52	632.52	622.52	924644.22	573917.33
MW-7	2/29/2000	2	PVC	14.5	Overburden	4.50	14.50	10	593.24	591.21	586.71	576.71	924857.86	573483.64
MW-8	2/17/2000	2	PVC	21.5	Overburden	11.50	21.50	10	626.35	624.07	612.57	602.57	924226.04	574440.18
MW-11	3/2/2000	2	PVC	19.5	Overburden	9.50	19.50	10	604.81	602.89	593.39	583.39	924603.52	573292.26
MW-13	3/2/2000	2	PVC	16.0	Overburden	6.00	16.00	10	639.79	637.55	631.55	621.55	924615.08	574199.46

Notes
AMSL : above mean sea level
feet bgs : feet below ground surface
PVC : polyvinyl chloride

1) The following monitoring wells were Decommisioned during 2007 Remedial Action and not included in this table: MW-1A, MW-3A, MW-4, MW-4D, MW-9, MW-9D, MW-10, MW-12, and MW-14D.

Table 2
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDECSite No. 336027
Blooming Grove, New York
Summary of Depth to Water Measurements and Groundwater Elevations

Well Identification	Screened Formation	TOC Elevation (feet AMSL)	Gauge Date	Depth to Water (feet below TOC)	Depth to Bottom (feet below TOC)	Groundwater Elevation (feet AMSL)
BR-3	Bedrock	609.13	7/27/2022	14.46	62.06	594.67
BR-5	Bedrock	623.92	7/28/2022	54.54	92.28	569.38
BR-6	Bedrock	621.03	7/28/2022	48.65	86.54	572.38
BR-7	Bedrock	606.01	7/27/2022	14.14	43.25	591.87
MW-4DR	Bedrock	627.08	7/26/2022	28.91	75.41	598.17
MW-7D	Bedrock	593.21	7/27/2022	7.54	24.50	585.67
MW-2	Overburden / Bedrock Interface	601.23	7/27/2025	4.60	68.95	596.63
MW-4R	Overburden	630.18	Not Gauged[1]			
MW-5	Overburden	595.79	7/28/2022	10.52	13.30	585.27
MW-6	Overburden	641.57	7/26/2022	11.66	19.41	629.91
MW-7	Overburden	593.24	7/27/2022	2.92	16.71	590.32
MW-8	Overburden	626.35	7/26/2022	12.83	20.91	613.52
MW-11	Overburden	604.81	7/27/2022	10.15	21.71	594.66
MW-13	Overburden	639.79	7/27/2022	11.70	18.25	628.09

Notes

AMSL : Above Mean Sea Level

TOC : Top of Casing

1) Monitoring well MW-4R was not able to be gauged or sampled due to tar-like non-aqueous phase liquid (NAPL) product present within the well riser.

Table 3
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Groundwater for VOCs - 2022

			Location	BR-3	BR-5	BR-6	BR-7	MW-2	MW-4DR		MW-5	MW-6	MW-7	MW-7D	MW-8	MW-11	MW-13
			Sample ID	BR-3_20220727	BR-5_20220728	BR-6_20220728	BR-7_20220727	MW-2_20220727	MW-4DR_20220726	DUP-01_20220726	MW-5_20220728	MW-6_20220726	MW-7_20220727	MW-7D_20220727	MW-8_20220726	MW-11_20220727	MW-13_20220727
			Lab Sample ID	22G1718-05	22G1718-11	22G1718-10	22G1718-12	22G1718-08	22G1718-16	22G1718-17	22G1718-09	22G1718-03	22G1718-06	22G1718-13	22G1718-15	22G1718-07	22G1718-04
			Sample Date	7/27/2022	7/28/2022	7/28/2022	7/27/2022	7/27/2022	7/26/2022	7/26/2022	7/28/2022	7/26/2022	7/27/2022	7/27/2022	7/26/2022	7/27/2022	7/27/2022
Analyte	**Class GA Values**	**Units**		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
VOCs																	
1,1,1,2-Tetrachloroethane	NC	ug/L		< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
1,1,1-Trichloroethane	5	ug/L		< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
1,1,2,2-Tetrachloroethane	5	ug/L		< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
1,1,2-Trichloroethane	1	ug/L		< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
1,1-Dichloroethane	5	ug/L		< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U
1,1-Dichloroethene	5	ug/L		< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U
1,1-Dichloropropene	NC	ug/L		< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
1,2,3-Trichlorobenzene	5	ug/L		< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U
1,2,3-Trichloropropane	0.04	ug/L		< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U	< 0.28 U
1,2,4-Trichlorobenzene	5	ug/L		< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
1,2,4-Trimethylbenzene	5	ug/L		< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	**0.39 J**	< 0.2 U	< 0.2 U
1,2-Dibromo-3-chloropropane	0.04	ug/L		< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U
1,2-Dibromoethane	0.0006	ug/L		< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
1,2-Dichlorobenzene	3	ug/L		< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	**1.7**	< 0.12 U	< 0.12 U
1,2-Dichloroethane	0.6	ug/L		< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U
1,2-Dichloropropane	1	ug/L		< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
1,3,5-Trichlorobenzene	NC	ug/L		< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U
1,3,5-Trimethylbenzene	5	ug/L		< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	**0.13 J**	< 0.11 U	< 0.11 U
1,3-Dichlorobenzene	3	ug/L		< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	**0.29 J**	< 0.12 U	< 0.12 U
1,3-Dichloropropane	NC	ug/L		< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
1,4-Dichlorobenzene	3	ug/L		< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	**5.4**	< 0.13 U	< 0.13 U
1,4-Dioxane	0.35	ug/L		< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U	< 21 U
2,2-Dichloropropane	NC	ug/L		< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U
2-Butanone	50	ug/L		< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
2-Chlorotoluene	NC	ug/L		< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
2-Hexanone	50	ug/L		< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
4-Chlorotoluene	NC	ug/L		< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
4-Isopropyltoluene	5	ug/L		< 0.097 U	< 0.097 U	< 0.097 U	< 0.097 U	< 0.097 U	< 0.097 U	< 0.097 U	< 0.097 U	< 0.097 U	< 0.097 U	< 0.097 U	**0.49 J**	< 0.097 U	< 0.097 U
4-Methyl-2-pentanone	NC	ug/L		< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U
Acetone	50	ug/L		< 2 U	< 2 U	**3.3 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**2.7 J**	< 2 U	< 2 U
Acrylonitrile	NC	ug/L		< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U
Benzene	1	ug/L		< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	**8.2**	< 0.2 U	< 0.2 U
Bromobenzene	5	ug/L		< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
Bromochloromethane	5	ug/L		< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U	< 0.31 U
Bromodichloromethane	50	ug/L		< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
Bromoform	50	ug/L		< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U
Bromomethane	5	ug/L		< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U
Carbon disulfide	60	ug/L		< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U
Carbon tetrachloride	5	ug/L		< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Chlorobenzene	5	ug/L		< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	**65**	< 0.11 U	< 0.11 U
Chloroethane	5	ug/L		< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U
Chloroform	7	ug/L		< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
Chloromethane	5	ug/L		< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U
cis-1,2-Dichloroethene	5	ug/L		< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
cis-1,3-Dichloropropene	0.4	ug/L		< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U

Notes
NC - No criteria
ug/L - micrograms per liter
J - Detected but below the Reporting Limit (lowest calibration standard); result is estimated.
U - Analyte was not detected at specified quantitation limit.
Bold indicates a detection
Black shading indicates the result exceeds the NYSDEC GA Value
Gray shading indicates a Non-Detection with a reporting limit higher than the GA Value
VOCs - Volatile organic compounds
Class GA Values - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with all Addendums.

Table 3
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Groundwater for VOCs - 2022

			Location	BR-3	BR-5	BR-6	BR-7	MW-2	MW-4DR		MW-5	MW-6	MW-7	MW-7D	MW-8	MW-11	MW-13
			Sample ID	BR-3_20220727	BR-5_20220728	BR-6_20220728	BR-7_20220727	MW-2_20220727	MW-4DR_20220726	DUP-01_20220726	MW-5_20220728	MW-6_20220726	MW-7_20220727	MW-7D_20220727	MW-8_20220726	MW-11_20220727	MW-13_20220727
			Lab Sample ID	22G1718-05	22G1718-11	22G1718-10	22G1718-12	22G1718-08	22G1718-16	22G1718-17	22G1718-09	22G1718-03	22G1718-06	22G1718-13	22G1718-15	22G1718-07	22G1718-04
			Sample Date	7/27/2022	7/28/2022	7/28/2022	7/27/2022	7/27/2022	7/26/2022	7/26/2022	7/28/2022	7/26/2022	7/27/2022	7/27/2022	7/26/2022	7/27/2022	7/27/2022
Analyte	**Class GA Values**	**Units**		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Dibromochloromethane	50	ug/L		< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U
Dibromomethane	NC	ug/L		< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U
Dichlorodifluoromethane (Freon 12)	5	ug/L		< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
Diethyl ether (Ethyl ether)	NC	ug/L		< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	**2.4**	< 0.18 U	< 0.18 U
Di-isopropyl ether	NC	ug/L		< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
Ethyl tert-butyl ether	NC	ug/L		< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
Ethylbenzene	5	ug/L		< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U
Hexachlorobutadiene	0.5	ug/L		< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U
Isopropylbenzene (Cumene)	5	ug/L		< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	**3.6**	< 0.11 U	< 0.11 U
m,p-Xylene	5	ug/L		< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	**1.7 J**	< 0.46 U	< 0.46 U
Methyl acetate	NC	ug/L		< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U
Methyl tert-butyl ether (MTBE)	10	ug/L		< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
Methylcyclohexane	NC	ug/L		< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	**0.35 J**	< 0.24 U	< 0.24 U
Methylene chloride	5	ug/L		< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Naphthalene	10	ug/L		< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	**0.53 J**	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.24 U	**19**	< 0.24 U	< 0.24 U
n-Butylbenzene	5	ug/L		< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	**0.65 J**	< 0.15 U	< 0.15 U
n-Propylbenzene	5	ug/L		< 0.086 U	< 0.086 U	< 0.086 U	< 0.086 U	< 0.086 U	< 0.086 U	< 0.086 U	< 0.086 U	< 0.086 U	< 0.086 U	< 0.086 U	**3.7**	< 0.086 U	< 0.086 U
o-Xylene	5	ug/L		< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	**0.32 J**	< 0.23 U	< 0.23 U
sec-Butylbenzene	5	ug/L		< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	**0.56 J**	< 0.11 U	< 0.11 U
Styrene	5	ug/L		< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
tert-Amyl methyl ether	NC	ug/L		< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U
tert-Butanol	NC	ug/L		< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
tert-Butylbenzene	5	ug/L		< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
Tetrachloroethene	5	ug/L		< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
Tetrahydrofuran	NC	ug/L		< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	**3.8 J**	< 0.49 U	< 0.49 U
Toluene	5	ug/L		< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	**0.28 J**	< 0.22 U	< 0.22 U
trans-1,2-Dichloroethene	5	ug/L		< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
trans-1,3-Dichloropropene	0.4	ug/L		< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
trans-1,4-Dichloro-2-butene	NC	ug/L		< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
Trichloroethene	5	ug/L		< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
Trichlorofluoromethane (Freon 11)	5	ug/L		< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
Trichlorotrifluoroethane (Freon 113)	5	ug/L		< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Vinyl chloride	2	ug/L		< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U

Notes
NC - No criteria
ug/L - micrograms per liter
J - Detected but below the Reporting Limit (lowest calibration standard); result is estimated.
U - Analyte was not detected at specified quantitation limit.
Bold indicates a detection
Black shading indicates the result exceeds the NYSDEC GA Value
Gray shading indicates a Non-Detection with a reporting limit higher than the GA Value
VOCs - Volatile organic compounds
Class GA Values - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with all Addendums.

Table 4
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Groundwater for SVOCs - 2022

			Location	BR-3	BR-5	BR-6	BR-7	MW-2	MW-4DR		MW-6	MW-7	MW-7D	MW-8	MW-11	MW-13
			Sample ID	BR-3_20220727	BR-5_20220728	BR-6_20220728	BR-7_20220727	MW-2_20220727	MW-4DR_20220726	DUP-01_20220726	MW-6_20220726	MW-7_20220727	MW-7D_20220727	MW-8_20220726	MW-11_20220727	MW-13_20220727
			Lab Sample ID	22G1718-05	22G1718-11	22G1718-10	22G1718-12	22G1718-08	22G1718-16	22G1718-17	22G1718-03	22G1718-06	22G1718-13	22G1718-15	22G1718-07	22G1718-04
			Sample Date	7/27/2022	7/28/2022	7/28/2022	7/27/2022	7/27/2022	7/26/2022	7/26/2022	7/26/2022	7/27/2022	7/27/2022	7/26/2022	7/27/2022	7/27/2022
Analyte	**Class GA Values**	**Units**		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
SVOCs																
1,2,4,5-Tetrachlorobenzene	5	ug/L		< 0.67 U	< 1.4 U	< 1.3 U	< 0.72 U	< 0.67 U	< 0.68 U	< 0.68 U	< 0.66 U	< 0.66 U	< 0.65 U	< 0.67 U	< 0.64 U	< 0.66 U
1,2,4-Trichlorobenzene	5	ug/L		< 0.68 U	< 1.4 U	< 1.4 U	< 0.73 U	< 0.69 U	< 0.7 U	< 0.7 U	< 0.68 U	< 0.68 U	< 0.67 U	< 0.69 U	< 0.66 U	< 0.68 U
1,2-Dichlorobenzene	3	ug/L		< 0.68 U	< 1.4 U	< 1.4 U	< 0.73 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.67 U	< 0.67 U	< 0.67 U	**0.80 J**	< 0.65 U	< 0.67 U
1,2-Diphenylhydrazine	NC	ug/L		< 0.59 U	< 1.2 U	< 1.2 U	< 0.63 U	< 0.59 U	< 0.6 U	< 0.6 U	< 0.58 U	< 0.58 U	< 0.57 U	< 0.59 U	< 0.56 U	< 0.58 U
1,3-Dichlorobenzene	3	ug/L		< 0.69 U	< 1.4 U	< 1.4 U	< 0.74 U	< 0.69 U	< 0.7 U	< 0.7 U	< 0.68 U	< 0.68 U	< 0.67 U	< 0.69 U	< 0.66 U	< 0.68 U
1,4-Dichlorobenzene	3	ug/L		< 0.68 U	< 1.4 U	< 1.4 U	< 0.73 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.67 U	< 0.67 U	< 0.67 U	**2.9 J**	< 0.65 U	< 0.67 U
1-Methylnaphthalene	NC	ug/L		< 0.61 U	< 1.3 U	< 1.2 U	< 0.66 U	< 0.62 U	< 0.63 U	< 0.63 U	< 0.61 U	< 0.61 U	< 0.6 U	**0.99 J**	< 0.59 U	< 0.61 U
2,2'-Oxybis(1-chloropropane)	5	ug/L		< 0.7 U	< 1.5 U	< 1.4 U	< 0.76 U	< 0.71 U	< 0.72 U	< 0.72 U	< 0.7 U	< 0.7 U	< 0.69 U	< 0.71 U	< 0.67 U	< 0.7 U
2,4,5-Trichlorophenol	NC	ug/L		< 0.52 U	< 1.1 U	< 1.1 U	< 0.57 U	< 0.53 U	< 0.54 U	< 0.54 U	< 0.52 U	< 0.52 U	< 0.51 U	< 0.53 U	< 0.5 U	< 0.52 U
2,4,6-Trichlorophenol	NC	ug/L		< 0.46 U	< 0.97 U	< 0.93 U	< 0.49 U	< 0.46 U	< 0.47 U	< 0.47 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.46 U	< 0.44 U	< 0.45 U
2,4-Dichlorophenol	5	ug/L		< 0.49 U	< 1 U	< 0.99 U	< 0.53 U	< 0.49 U	< 0.5 U	< 0.5 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.49 U	< 0.47 U	< 0.48 U
2,4-Dimethylphenol	50	ug/L		< 0.72 U	< 1.5 U	< 1.4 U	< 0.77 U	< 0.72 U	< 0.73 U	< 0.73 U	< 0.71 U	< 0.71 U	< 0.7 U	< 0.72 U	< 0.69 U	< 0.71 U
2,4-Dinitrophenol	10	ug/L		< 8.2 U	< 17 U	< 17 U	< 8.9 U	< 8.3 U	< 8.4 U	< 8.4 U	< 8.1 U	< 8.1 U	< 8.1 U	< 8.3 U	< 7.9 U	< 8.1 U
2,4-Dinitrotoluene	5	ug/L		< 0.63 U	< 1.3 U	< 1.3 U	< 0.67 U	< 0.63 U	< 0.64 U	< 0.64 U	< 0.62 U	< 0.62 U	< 0.61 U	< 0.63 U	< 0.6 U	< 0.62 U
2,6-Dinitrotoluene	5	ug/L		< 0.53 U	< 1.1 U	< 1.1 U	< 0.57 U	< 0.53 U	< 0.54 U	< 0.54 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.53 U	< 0.51 U	< 0.52 U
2-Chloronaphthalene	10	ug/L		< 0.5 U	< 1 U	< 1 U	< 0.54 U	< 0.5 U	< 0.51 U	< 0.51 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.5 U	< 0.48 U	< 0.49 U
2-Chlorophenol	NC	ug/L		< 0.48 U	< 1 U	< 0.98 U	< 0.52 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.48 U	< 0.48 U	< 0.47 U	**1.7 J**	< 0.46 U	< 0.48 U
2-Methylnaphthalene	NC	ug/L		< 0.71 U	< 1.5 U	< 1.4 U	< 0.76 U	< 0.71 U	< 0.72 U	< 0.72 U	< 0.7 U	< 0.7 U	< 0.69 U	**1.5 J**	< 0.68 U	< 0.7 U
2-Methylphenol	NC	ug/L		< 0.48 U	< 1 U	**3.8 JD**	< 0.52 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.48 U	< 0.48 U	< 0.47 U	< 0.49 U	< 0.47 U	< 0.48 U
2-Nitroaniline	5	ug/L		< 0.71 U	< 1.5 U	< 1.4 U	< 0.76 U	< 0.71 U	< 0.72 U	< 0.72 U	< 0.7 U	< 0.7 U	< 0.69 U	< 0.71 U	< 0.68 U	< 0.7 U
2-Nitrophenol	NC	ug/L		< 0.52 U	< 1.1 U	< 1.1 U	< 0.56 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.52 U	< 0.52 U	< 0.51 U	< 0.53 U	< 0.5 U	< 0.52 U
3- & 4-Methylphenol (m,p-Cresol)	NC	ug/L		< 0.47 U	< 0.98 U	**14 JD**	< 0.5 U	< 0.47 U	< 0.48 U	< 0.48 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.47 U	< 0.45 U	< 0.46 U
3,3'-Dichlorobenzidine	5	ug/L		< 0.73 U	< 1.5 U	< 1.5 U	< 0.78 U	< 0.73 U	< 0.74 U	< 0.74 U	< 0.72 U	< 0.72 U	< 0.71 U	< 0.73 U	< 0.7 U	< 0.72 U
3-Nitroaniline	5	ug/L		< 0.6 U	< 1.3 U	< 1.2 U	< 0.65 U	< 0.61 U	< 0.61 U	< 0.61 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.61 U	< 0.58 U	< 0.59 U
4,6-Dinitro-2-methylphenol	NC	ug/L		< 7.2 U	< 15 U	< 15 U	< 7.7 U	< 7.3 U	< 7.3 U	< 7.3 U	< 7.1 U	< 7.1 U	< 7 U	< 7.3 U	< 6.9 U	< 7.1 U
4-Bromophenyl phenyl ether	NC	ug/L		< 0.48 U	< 1 U	< 0.97 U	< 0.52 U	< 0.48 U	< 0.49 U	< 0.49 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.48 U	< 0.46 U	< 0.47 U
4-Chloro-3-methylphenol	NC	ug/L		< 0.57 U	< 1.2 U	< 1.1 U	< 0.61 U	< 0.57 U	< 0.58 U	< 0.58 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.57 U	< 0.55 U	< 0.56 U
4-Chloroaniline	5	ug/L		< 0.59 U	< 1.2 U	< 1.2 U	< 0.63 U	< 0.59 U	< 0.6 U	< 0.6 U	< 0.58 U	< 0.58 U	< 0.58 U	< 0.59 U	< 0.56 U	< 0.58 U
4-Chlorophenyl phenyl ether	NC	ug/L		< 0.49 U	< 1 U	< 0.99 U	< 0.53 U	< 0.49 U	< 0.5 U	< 0.5 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.49 U	< 0.47 U	< 0.48 U
4-Nitroaniline	5	ug/L		< 0.61 U	< 1.3 U	< 1.2 U	< 0.66 U	< 0.62 U	< 0.62 U	< 0.62 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.62 U	< 0.59 U	< 0.6 U
4-Nitrophenol	NC	ug/L		< 2.1 U	< 4.5 U	< 4.3 U	< 2.3 U	< 2.2 U	< 2.2 U	< 2.2 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.2 U	< 2.1 U	< 2.1 U
Acenaphthene	20	ug/L		< 0.53 U	< 1.1 U	< 1.1 U	< 0.57 U	< 0.53 U	< 0.54 U	< 0.54 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.53 U	< 0.51 U	< 0.52 U
Acenaphthylene	NC	ug/L		< 0.49 U	< 1 U	< 1 U	< 0.53 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.49 U	< 0.49 U	< 0.48 U	< 0.5 U	< 0.47 U	< 0.49 U
Acetophenone	NC	ug/L		< 0.54 U	< 1.1 U	< 1.1 U	< 0.58 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.54 U	< 0.54 U	< 0.53 U	< 0.55 U	< 0.52 U	< 0.54 U
Aniline	5	ug/L		< 0.71 U	< 1.5 U	< 1.4 U	< 0.77 U	< 0.72 U	< 0.73 U	< 0.73 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.72 U	< 0.68 U	< 0.7 U
Anthracene	50	ug/L		< 0.47 U	**1.2 JD**	**1.1 JD**	< 0.51 U	< 0.47 U	< 0.48 U	< 0.48 U	< 0.46 U	< 0.46 U	< 0.46 U	**0.56 J**	< 0.45 U	< 0.46 U
Benzidine	5	ug/L		< 11 U	< 22 U	< 21 U	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Benzo(a)anthracene	0.002	ug/L		< 0.42 U	< 0.88 U	< 0.84 U	< 0.45 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U	< 0.41 U	< 0.41 U	< 0.42 U	< 0.4 U	< 0.41 U
Benzo(a)pyrene	0	ug/L		< 0.58 U	< 1.2 U	< 1.2 U	< 0.62 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.57 U	< 0.57 U	< 0.57 U	< 0.59 U	< 0.56 U	< 0.57 U
Benzo(b)fluoranthene	0.002	ug/L		< 0.48 U	< 1 U	< 0.97 U	< 0.52 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.48 U	< 0.48 U	< 0.47 U	< 0.49 U	< 0.46 U	< 0.48 U
Benzo(g,h,i)perylene	NC	ug/L		< 0.62 U	< 1.3 U	< 1.3 U	< 0.67 U	< 0.63 U	< 0.64 U	< 0.64 U	< 0.62 U	< 0.62 U	< 0.61 U	< 0.63 U	< 0.6 U	< 0.62 U
Benzo(k)fluoranthene	0.002	ug/L		< 0.5 U	< 1.1 U	< 1 U	< 0.54 U	< 0.5 U	< 0.51 U	< 0.51 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.5 U	< 0.48 U	< 0.49 U
Benzoic acid	NC	ug/L		< 8.6 U	< 18 U	**22 D**	< 9.3 U	< 8.7 U	< 8.8 U	< 8.8 U	< 8.5 U	< 8.5 U	< 8.4 U	< 8.7 U	< 8.3 U	< 8.5 U

Notes
NC - No criteria
ug/L - micrograms per liter
J - Detected but below the Reporting Limit (lowest calibration standard); result is estimated.
B - Analyte is found in the associated laboratory blank as well as in the sample.
D - Dilution
U - Analyte was not detected at specified quantitation limit.
Bold indicates a detection
Black shading indicates the result exceeds the NYSDEC GA Value
Gray shading indicates a Non-Detection with a reporting limit higher than the GA Value
SVOCs - Semi-volatile organic compounds
Class GA Values - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with all Addendums.

Table 4
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Groundwater for SVOCs - 2022

		Location	BR-3	BR-5	BR-6	BR-7	MW-2	MW-4DR		MW-6	MW-7	MW-7D	MW-8	MW-11	MW-13
		Sample ID	BR-3_20220727	BR-5_20220728	BR-6_20220728	BR-7_20220727	MW-2_20220727	MW-4DR_20220726	DUP-01_20220726	MW-6_20220726	MW-7_20220727	MW-7D_20220727	MW-8_20220726	MW-11_20220727	MW-13_20220727
		Lab Sample ID	22G1718-05	22G1718-11	22G1718-10	22G1718-12	22G1718-08	22G1718-16	22G1718-17	22G1718-03	22G1718-06	22G1718-13	22G1718-15	22G1718-07	22G1718-04
		Sample Date	7/27/2022	7/28/2022	7/28/2022	7/27/2022	7/27/2022	7/26/2022	7/26/2022	7/26/2022	7/27/2022	7/27/2022	7/26/2022	7/27/2022	7/27/2022
Analyte	**Class GA Values**	**Units**	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Bis(2-chloroethoxy)methane	5	ug/L	< 0.47 U	< 0.98 U	< 0.94 U	< 0.5 U	< 0.47 U	< 0.48 U	< 0.48 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.47 U	< 0.45 U	< 0.46 U
Bis(2-chloroethyl) ether	1	ug/L	< 0.58 U	< 1.2 U	< 1.2 U	< 0.63 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.58 U	< 0.58 U	< 0.57 U	< 0.59 U	< 0.56 U	< 0.58 U
Bis(2-ethylhexyl)phthalate	5	ug/L	< 0.86 U	< 1.8 U	< 1.7 U	< 0.92 U	< 0.87 U	< 0.88 U	< 0.88 U	< 0.85 U	< 0.85 U	< 0.84 U	< 0.87 U	< 0.82 U	< 0.85 U
Butylbenzylphthalate	50	ug/L	< 0.69 U	< 1.5 U	< 1.4 U	< 0.74 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.68 U	< 0.68 U	< 0.67 U	< 0.7 U	< 0.66 U	< 0.68 U
Carbazole	NC	ug/L	< 0.43 U	< 0.91 U	< 0.88 U	< 0.47 U	< 0.44 U	< 0.44 U	< 0.44 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.44 U	< 0.42 U	< 0.43 U
Chrysene	0.002	ug/L	< 0.4 U	< 0.85 U	< 0.82 U	< 0.44 U	< 0.41 U	< 0.41 U	< 0.41 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.41 U	< 0.39 U	< 0.4 U
Dibenz(a,h)anthracene	NC	ug/L	< 0.7 U	< 1.5 U	< 1.4 U	< 0.76 U	< 0.71 U	< 0.72 U	< 0.72 U	< 0.7 U	< 0.7 U	< 0.69 U	< 0.71 U	< 0.68 U	< 0.7 U
Dibenzofuran	NC	ug/L	< 0.5 U	< 1 U	< 1 U	< 0.54 U	< 0.5 U	< 0.51 U	< 0.51 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.5 U	< 0.48 U	< 0.49 U
Diethyl phthalate	50	ug/L	< 0.43 U	< 0.9 U	< 0.86 U	< 0.46 U	< 0.43 U	**0.69 J**	**2.4 J**	**110**	< 0.42 U	**0.56 J**	**1.0 J**	< 0.41 U	< 0.42 U
Dimethylphthalate	50	ug/L	< 0.38 U	< 0.81 U	< 0.78 U	< 0.41 U	< 0.39 U	< 0.39 U	< 0.39 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.39 U	< 0.37 U	< 0.38 U
Di-n-butylphthalate	50	ug/L	< 0.47 U	< 0.99 U	< 0.95 U	< 0.51 U	< 0.47 U	< 0.48 U	< 0.48 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.47 U	< 0.45 U	< 0.46 U
Di-n-octylphthalate	NC	ug/L	< 4 U	< 8.5 U	< 8.1 U	< 4.3 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4 U	< 4 U	< 3.9 U	< 4.1 U	< 3.9 U	< 4 U
Fluoranthene	50	ug/L	< 0.44 U	**1.2 JD**	< 0.89 U	< 0.47 U	< 0.44 U	< 0.45 U	< 0.45 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.44 U	< 0.42 U	< 0.43 U
Fluorene	50	ug/L	< 0.53 U	< 1.1 U	< 1.1 U	< 0.57 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.53 U	< 0.53 U	< 0.52 U	< 0.54 U	< 0.51 U	< 0.53 U
Hexachlorobenzene	0.04	ug/L	< 0.52 U	< 1.1 U	< 1 U	< 0.56 U	< 0.52 U	< 0.53 U	< 0.53 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.52 U	< 0.5 U	< 0.51 U
Hexachlorobutadiene	0.5	ug/L	< 0.79 U	< 1.7 U	< 1.6 U	< 0.85 U	< 0.8 U	< 0.81 U	< 0.81 U	< 0.78 U	< 0.78 U	< 0.77 U	< 0.8 U	< 0.76 U	< 0.78 U
Hexachlorocyclopentadiene	5	ug/L	< 3.8 U	< 7.9 U	< 7.6 U	< 4 U	< 3.8 U	< 3.8 U	< 3.8 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.8 U	< 3.6 U	< 3.7 U
Hexachloroethane	5	ug/L	< 0.75 U	< 1.6 U	< 1.5 U	< 0.81 U	< 0.76 U	< 0.77 U	< 0.77 U	< 0.75 U	< 0.75 U	< 0.74 U	< 0.76 U	< 0.73 U	< 0.75 U
Indeno(1,2,3-cd)pyrene	0.002	ug/L	< 0.76 U	< 1.6 U	< 1.5 U	< 0.82 U	< 0.77 U	< 0.77 U	< 0.77 U	< 0.75 U	< 0.75 U	< 0.74 U	< 0.77 U	< 0.73 U	< 0.75 U
Isophorone	50	ug/L	< 0.56 U	< 1.2 U	< 1.1 U	< 0.61 U	< 0.57 U	< 0.57 U	< 0.57 U	< 0.56 U	< 0.56 U	< 0.55 U	< 0.57 U	< 0.54 U	< 0.56 U
Naphthalene	10	ug/L	< 0.63 U	< 1.3 U	< 1.3 U	< 0.68 U	< 0.63 U	< 0.64 U	< 0.64 U	< 0.62 U	< 0.62 U	< 0.61 U	**7.2**	< 0.6 U	< 0.62 U
Nitrobenzene	0.4	ug/L	< 0.64 U	< 1.3 U	< 1.3 U	< 0.69 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.65 U	< 0.61 U	< 0.63 U
n-Nitrosodimethylamine	NC	ug/L	< 0.8 U	< 1.7 U	< 1.6 U	< 0.86 U	< 0.81 U	< 0.82 U	< 0.82 U	< 0.79 U	< 0.79 U	< 0.78 U	< 0.81 U	< 0.77 U	< 0.79 U
n-Nitroso-di-n-propylamine	NC	ug/L	< 0.63 U	< 1.3 U	< 1.3 U	< 0.67 U	< 0.63 U	< 0.64 U	< 0.64 U	< 0.62 U	< 0.62 U	< 0.61 U	< 0.63 U	< 0.6 U	< 0.62 U
N-Nitrosodiphenylamine	50	ug/L	< 0.39 U	**1.2 JD**	< 0.79 U	< 0.42 U	< 0.39 U	< 0.4 U	< 0.4 U	< 0.39 U	< 0.39 U	< 0.38 U	**1.4 J**	< 0.37 U	< 0.39 U
Pentachloronitrobenzene	NC	ug/L	< 0.64 U	< 1.3 U	< 1.3 U	< 0.68 U	< 0.64 U	< 0.65 U	< 0.65 U	< 0.63 U	< 0.63 U	< 0.62 U	< 0.64 U	< 0.61 U	< 0.63 U
Pentachlorophenol	1	ug/L	< 3.6 U	< 7.6 U	< 7.2 U	< 3.9 U	< 3.6 U	< 3.7 U	< 3.7 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.6 U	< 3.4 U	< 3.5 U
Phenanthrene	50	ug/L	< 0.49 U	**2.6 JD**	**2.1 JD**	< 0.53 U	< 0.49 U	< 0.5 U	< 0.5 U	< 0.48 U	< 0.48 U	< 0.48 U	**1.2 J**	< 0.47 U	< 0.48 U
Phenol	1	ug/L	< 0.23 U	< 0.49 U	**2.4 JD**	< 0.25 U	< 0.23 U	< 0.24 U	< 0.24 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U
Pyrene	50	ug/L	< 0.62 U	< 1.3 U	< 1.3 U	< 0.67 U	< 0.63 U	< 0.64 U	< 0.64 U	< 0.62 U	< 0.62 U	< 0.61 U	< 0.63 U	< 0.6 U	< 0.62 U
Pyridine	NC	ug/L	**3.6 J**	< 5.3 U	**5.2 JD**	**4.3 JB**	**4.2 J**	**4.8 J**	**4.2 J**	**4.1 J**	**3.7 J**	**4.9 JB**	**5.0 J**	**3.1 J**	**3.8 J**

Notes
NC - No criteria
ug/L - micrograms per liter
J - Detected but below the Reporting Limit (lowest calibration standard); result is estimated.
B - Analyte is found in the associated laboratory blank as well as in the sample.
D - Dilution
U - Analyte was not detected at specified quantitation limit.
Bold indicates a detection
Black shading indicates the result exceeds the NYSDEC GA Value
Gray shading indicates a Non-Detection with a reporting limit higher than the GA Value
SVOCs - Semi-volatile organic compounds
Class GA Values - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with all Addendums.

Table 5
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Groundwater for Pesticides - 2022

	Location		BR-3	BR-5	BR-6	BR-7	MW-2	MW-4DR		MW-6	MW-7	MW-7D	MW-8	MW-11	MW-13
	Sample ID		BR-3_20220727	BR-5_20220728	BR-6_20220728	BR-7_20220727	MW-2_20220727	MW-4DR_20220726	DUP-01_20220726	MW-6_20220726	MW-7_20220727	MW-7D_20220727	MW-8_20220726	MW-11_20220727	MW-13_20220727
	Lab Sample ID		22G1718-05	22G1718-11	22G1718-10	22G1718-12	22G1718-08	22G1718-16	22G1718-17	22G1718-03	22G1718-06	22G1718-13	22G1718-15	22G1718-07	22G1718-04
	Sample Date		7/27/2022	7/28/2022	7/28/2022	7/27/2022	7/27/2022	7/26/2022	7/26/2022	7/26/2022	7/27/2022	7/27/2022	7/26/2022	7/27/2022	7/27/2022
Analyte	**Class GA Values**	**Units**	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Pesticides															
4,4'-DDD	0.3	ug/L	< 0.0043 U	< 0.0047 U	< 0.0045 U	< 0.0048 U	< 0.0045 U	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0045 U	< 0.0046 U	< 0.0044 U	< 0.0045 U	< 0.0045 U
4,4'-DDE	0.2	ug/L	< 0.0041 U	< 0.0045 U	< 0.0043 U	< 0.0046 U	< 0.0043 U	< 0.0045 U	< 0.0046 U	< 0.0045 U	< 0.0043 U	< 0.0044 U	< 0.0042 U	< 0.0043 U	< 0.0043 U
4,4'-DDT	0.2	ug/L	< 0.0037 U	< 0.0041 U	< 0.004 U	< 0.0042 U	< 0.004 U	< 0.0041 U	< 0.0042 U	< 0.0041 U	< 0.0039 U	< 0.004 U	< 0.0039 U	< 0.0039 U	< 0.0039 U
Alachlor	NC	ug/L	< 0.028 U	< 0.031 U	< 0.03 U	< 0.031 U	< 0.03 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.03 U	< 0.03 U	< 0.029 U	< 0.03 U	< 0.03 U
Aldrin	0*	ug/L	< 0.0033 U	< 0.0036 U	< 0.0035 U	< 0.0037 U	< 0.0035 U	< 0.0036 U	< 0.0037 U	< 0.0036 U	< 0.0035 U	< 0.0036 U	< 0.0035 U	< 0.0035 U	< 0.0035 U
alpha-BHC	0.01	ug/L	< 0.025 U	< 0.027 U	< 0.026 U	< 0.027 U	< 0.026 U	< 0.027 U	< 0.027 U	< 0.027 U	< 0.026 U	< 0.027 U	< 0.026 U	< 0.026 U	< 0.026 U
beta-BHC	0.04	ug/L	< 0.02 U	< 0.022 U	< 0.022 U	< 0.023 U	< 0.022 U	< 0.022 U	< 0.023 U	< 0.022 U	< 0.021 U	< 0.022 U	< 0.021 U	< 0.021 U	< 0.021 U
Chlordane	0.05	ug/L	< 0.065 U	< 0.071 U	< 0.069 U	< 0.073 U	< 0.069 U	< 0.071 U	< 0.073 U	< 0.071 U	< 0.068 U	< 0.07 U	< 0.068 U	< 0.068 U	< 0.068 U
delta-BHC	0.04	ug/L	< 0.028 U	< 0.03 U	< 0.029 U	< 0.031 U	< 0.029 U	< 0.03 U	< 0.031 U	< 0.03 U	< 0.029 U	< 0.03 U	< 0.029 U	< 0.029 U	< 0.029 U
Dieldrin	0.004	ug/L	< 0.00074 U	< 0.00081 U	< 0.00079 U	< 0.00083 U	< 0.00079 U	< 0.00081 U	< 0.00083 U	< 0.00081 U	< 0.00078 U	< 0.0008 U	< 0.00077 U	< 0.00078 U	< 0.00078 U
Endosulfan I	NC	ug/L	< 0.024 U	< 0.026 U	< 0.025 U	< 0.026 U	< 0.025 U	< 0.026 U	< 0.026 U	< 0.026 U	< 0.025 U	< 0.025 U	< 0.024 U	< 0.025 U	< 0.025 U
Endosulfan II	NC	ug/L	< 0.014 U	< 0.016 U	< 0.015 U	< 0.016 U	< 0.015 U	< 0.016 U	< 0.016 U	< 0.016 U	< 0.015 U	< 0.016 U	< 0.015 U	< 0.015 U	< 0.015 U
Endosulfan sulfate	NC	ug/L	< 0.014 U	< 0.015 U	< 0.015 U	< 0.016 U	< 0.015 U	< 0.015 U	< 0.016 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.015 U
Endrin	0*	ug/L	< 0.015 U	< 0.016 U	< 0.016 U	< 0.017 U	< 0.016 U	< 0.016 U	< 0.017 U	< 0.016 U	< 0.016 U	< 0.016 U	< 0.015 U	< 0.016 U	< 0.016 U
Endrin aldehyde	5	ug/L	< 0.016 U	< 0.018 U	< 0.017 U	< 0.018 U	< 0.017 U	< 0.018 U	< 0.018 U	< 0.018 U	< 0.017 U	< 0.018 U	< 0.017 U	< 0.017 U	< 0.017 U
Endrin ketone	5	ug/L	< 0.014 U	< 0.015 U	< 0.015 U	< 0.016 U	< 0.015 U	< 0.015 U	< 0.016 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.014 U	< 0.015 U	< 0.015 U
gamma-BHC (Lindan	0.05	ug/L	< 0.0041 U	< 0.0045 U	< 0.0044 U	< 0.0046 U	< 0.0044 U	< 0.0045 U	< 0.0046 U	< 0.0045 U	< 0.0043 U	< 0.0044 U	< 0.0043 U	< 0.0043 U	< 0.0043 U
Heptachlor	0.04	ug/L	< 0.0043 U	< 0.0047 U	< 0.0045 U	< 0.0048 U	< 0.0045 U	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0045 U	< 0.0046 U	< 0.0044 U	< 0.0045 U	< 0.0045 U
Heptachlor epoxide I	0.03	ug/L	< 0.0031 U	< 0.0034 U	< 0.0033 U	< 0.0035 U	< 0.0033 U	< 0.0034 U	< 0.0035 U	< 0.0034 U	< 0.0033 U	< 0.0034 U	< 0.0032 U	< 0.0033 U	< 0.0033 U
Hexachlorobenzene	0.04	ug/L	< 0.024 U	< 0.026 U	< 0.026 U	< 0.027 U	< 0.026 U	< 0.026 U	< 0.027 U	< 0.026 U	< 0.025 U	< 0.026 U	< 0.025 U	< 0.025 U	< 0.025 U
Methoxychlor	35	ug/L	< 0.05 U	< 0.055 U	< 0.053 U	< 0.056 U	< 0.053 U	< 0.055 U	< 0.056 U	< 0.055 U	< 0.053 U	< 0.054 U	< 0.052 U	< 0.053 U	< 0.053 U
Toxaphene	0.06	ug/L	< 0.3 U	< 0.33 U	< 0.32 U	< 0.34 U	< 0.32 U	< 0.33 U	< 0.34 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.31 U	< 0.32 U	< 0.32 U

Notes
NC - No criteria
ug/L - micrograms per liter
U - Analyte was not detected at specified quantitation limit.
0* - A non-detectable concentration by the approved analytical method specified in section 700.3 of the NYCRR Water Quality Regulations.
Bold indicates a detection
Black shading indicates the result exceeds the NYSDEC GA Value
Gray shading indicates a Non-Detection with a reporting limit higher than the GA Value
Class GA Values - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with all Addendums.

Table 6
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Groundwater for PCBs - 2022

			Location	BR-3	BR-5	BR-6	BR-7	MW-2	MW-4DR		MW-6	MW-7	MW-7D	MW-8	MW-11	MW-13
			Sample ID	BR-3_20220727	BR-5_20220728	BR-6_20220728	BR-7_20220727	MW-2_20220727	MW-4DR_20220726	DUP-01_20220726	MW-6_20220726	MW-7_20220727	MW-7D_20220727	MW-8_20220726	MW-11_20220727	MW-13_20220727
			Lab Sample ID	22G1718-05	22G1718-11	22G1718-10	22G1718-12	22G1718-08	22G1718-16	22G1718-17	22G1718-03	22G1718-06	22G1718-13	22G1718-15	22G1718-07	22G1718-04
			Sample Date	7/27/2022	7/28/2022	7/28/2022	7/27/2022	7/27/2022	7/26/2022	7/26/2022	7/26/2022	7/27/2022	7/27/2022	7/26/2022	7/27/2022	7/27/2022
Analyte	**Class GA Values**	**Units**		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
PCBs																
Aroclor-1016	NC	ug/L		< 0.05 U	< 0.055 U	< 0.053 U	< 0.056 U	< 0.053 U	< 0.055 U	< 0.056 U	< 0.055 U	< 0.053 U	< 0.054 U	< 0.052 U	< 0.053 U	< 0.053 U
Aroclor-1221	NC	ug/L		< 0.075 U	< 0.082 U	< 0.08 U	< 0.084 U	< 0.08 U	< 0.082 U	< 0.084 U	< 0.082 U	< 0.079 U	< 0.081 U	**0.55**	< 0.079 U	< 0.079 U
Aroclor-1232	NC	ug/L		< 0.069 U	< 0.076 U	< 0.073 U	< 0.077 U	< 0.073 U	< 0.076 U	< 0.077 U	< 0.076 U	< 0.073 U	< 0.075 U	< 0.072 U	< 0.073 U	< 0.073 U
Aroclor-1242	NC	ug/L		< 0.073 U	< 0.079 U	< 0.077 U	< 0.081 U	< 0.077 U	< 0.079 U	< 0.081 U	< 0.079 U	< 0.076 U	< 0.079 U	< 0.075 U	< 0.076 U	< 0.076 U
Aroclor-1248	NC	ug/L		< 0.084 U	< 0.092 U	< 0.089 U	< 0.094 U	< 0.089 U	< 0.092 U	< 0.094 U	< 0.092 U	< 0.088 U	< 0.091 U	< 0.088 U	< 0.088 U	< 0.088 U
Aroclor-1254	NC	ug/L		< 0.074 U	< 0.092 U	**0.13 J**	< 0.083 U	< 0.079 U	**0.10 J**	< 0.083 U	< 0.081 U	< 0.078 U	< 0.08 U	< 0.077 U	< 0.078 U	< 0.078 U
Aroclor-1260	NC	ug/L		< 0.059 U	< 0.065 U	< 0.063 U	< 0.066 U	< 0.063 U	< 0.065 U	< 0.066 U	< 0.065 U	< 0.062 U	< 0.064 U	< 0.061 U	< 0.062 U	< 0.062 U
Aroclor-1262	NC	ug/L		< 0.061 U	< 0.066 U	< 0.064 U	< 0.068 U	< 0.064 U	< 0.066 U	< 0.068 U	< 0.066 U	< 0.064 U	< 0.066 U	< 0.063 U	< 0.064 U	< 0.064 U
Aroclor-1268	NC	ug/L		< 0.074 U	< 0.081 U	< 0.078 U	< 0.082 U	< 0.078 U	< 0.081 U	< 0.082 U	< 0.081 U	< 0.077 U	< 0.08 U	< 0.077 U	< 0.077 U	< 0.077 U
Total PCB Aroclors	0.09	ug/L		--	--	**0.13 J**	--	--	**0.10 J**	--	--	--	--	**0.55**	--	--

Notes
NC - No criteria
ug/L - micrograms per liter
J - Detected but below the Reporting Limit (lowest calibration standard); result is estimated.
U - Analyte was not detected at specified quantitation limit.
Bold indicates a detection
Black shading indicates the result exceeds the NYSDEC GA Value
PCBs - Polychlorinated Biphenyls
Class GA Values - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with all Addendums.

Table 7
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Groundwater for Metals - 2022

	Location		BR-3		BR-5		BR-6		BR-7		MW-2		MW-4DR		MW-4DR		MW-5		MW-6		MW-7		MW-7D		MW-8		MW-11		MW-13	
	Sample ID		BR-3_20220727		BR-5_20220728		BR-6_20220728		BR-7_20220727		MW-2_20220727		MW-4DR_20220726		DUP-01_20220726		MW-5_20220728		MW-6_20220726		MW-7_20220727		MW-7D_20220727		MW-8_20220726		MW-11_20220727		MW-13_20220727	
	Lab Sample ID		22G1718-05		22G1718-11		22G1718-10		22G1718-12		22G1718-08		22G1718-16		22G1718-17		22G1718-09		22G1718-03		22G1718-06		22G1718-13		22G1718-15		22G1718-07		22G1718-04	
	Sample Date		7/27/2022		7/28/2022		7/28/2022		7/27/2022		7/27/2022		7/26/2022		7/26/2022		7/28/2022		7/26/2022		7/27/2022		7/27/2022		7/26/2022		7/27/2022		7/27/2022	
Analyte	**Class GA Values**	**Units**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Metals																														
Aluminum	NC	mg/L	< 0.015	U	**0.11**		**1.9**		**0.39**		**0.058**		**0.045**	**J**	**0.056**		**0.35**		**0.032**	**J**	< 0.015	U	< 0.015	U	**0.017**	**J**	**0.10**		**0.086**	
Antimony	0.003	mg/L	< 0.0089	U	< 0.0089	U	< 0.0089	U	< 0.0089	U	< 0.0089	U	< 0.0089	U	< 0.0089	U	< 0.0089	U	**0.013**	**J**	< 0.0089	U	< 0.0089	U	**0.018**	**J**	< 0.0089	U	**0.013**	**J**
Arsenic	0.025	mg/L	**0.0057**	**J**	< 0.0047	U	**0.018**		< 0.0047	U	**0.0049**	**J**	< 0.0047	U	< 0.0047	U	< 0.0047	U	< 0.0047	U	**0.0068**	**J**	< 0.0047	U	< 0.0047	U	< 0.0047	U	< 0.0047	U
Barium	1	mg/L	**0.0090**	**J**	**0.011**	**J**	**0.26**		< 0.0056	U	< 0.0056	U	**0.019**	**J**	**0.019**	**J**	**0.012**	**J**	**0.017**	**J**	**0.017**	**J**	**0.0076**	**J**	**0.21**		**0.040**	**J**	**0.011**	**J**
Beryllium	0.003	mg/L	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U
Cadmium	0.005	mg/L	< 0.0008	U	< 0.0008	U	**0.00096**	**J**	< 0.0008	U	< 0.0008	U	< 0.0008	U	< 0.0008	U	< 0.0008	U	< 0.0008	U	< 0.0008	U	< 0.0008	U	< 0.0008	U	**0.0076**		< 0.0008	U
Calcium	NC	mg/L	**54**		**33**		**220**		**25**		**44**		**28**		**27**		**58**		**82**		**79**		**93**		**120**		**10**		**85**	
Chromium	0.05	mg/L	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	< 0.0025	U	**0.067**		< 0.0025	U
Cobalt	NC	mg/L	< 0.0014	U	< 0.0014	U	**0.0051**	**J**	< 0.0014	U	< 0.0014	U	< 0.0014	U	< 0.0014	U	< 0.0014	U	< 0.0014	U	< 0.0014	U	< 0.0014	U	**0.0055**	**J**	< 0.0014	U	**0.0023**	**J**
Copper	0.2	mg/L	< 0.0036	U	< 0.0036	U	**0.0046**	**J**	< 0.0036	U	< 0.0036	U	< 0.0036	U	< 0.0036	U	< 0.0036	U	< 0.0036	U	< 0.0036	U	< 0.0036	U	< 0.0036	U	**0.024**		< 0.0036	U
Iron	0.3	mg/L	**0.075**		**0.14**		**24**		**0.27**		**0.14**		**0.15**		**0.14**		**0.50**		**0.021**	**J**	**0.44**		**0.078**		**51**		**0.36**		**0.11**	
Lead	0.025	mg/L	< 0.003	U	< 0.003	U	< 0.003	U	< 0.003	U	**0.0039**	**J**	**0.0039**	**J**	**0.0036**	**J**	**0.0039**	**J**	< 0.003	U	< 0.003	U	**0.0036**	**J**	**0.011**		< 0.003	U	< 0.003	U
Magnesium	35	mg/L	**24**		**15**		**2.6**		**6.5**		**11**		**12**		**12**		**7.5**		**6.6**		**14**		**15**		**23**	**D**	**2.2**		**7.2**	
Manganese	0.3	mg/L	**0.069**		**0.14**		**1.4**		**0.027**		**0.27**		**0.039**		**0.037**		**0.069**		**0.027**		**1.4**		**3.2**		**0.62**		**0.016**		**0.069**	
Mercury	0.0007	mg/L	**0.000084**	**J**	< 0.00004	U	**0.000054**	**J**	**0.000053**	**J**	**0.000081**	**J**	**0.000057**	**J**	**0.000064**	**J**	**0.000088**	**J**	**0.000060**	**J**	**0.000072**	**J**	**0.000049**	**J**	**0.000065**	**J**	**0.000065**	**J**	**0.000062**	**J**
Nickel	0.1	mg/L	< 0.0088	U	< 0.0088	U	**0.012**		< 0.0088	U	< 0.0088	U	< 0.0088	U	< 0.0088	U	< 0.0088	U	< 0.0088	U	< 0.0088	U	< 0.0088	U	**0.021**		**0.010**		< 0.0088	U
Potassium	NC	mg/L	**1.3**	**J**	**3.7**		**4.9**		**0.63**	**J**	**0.97**	**J**	**4.0**		**3.8**		**1.7**	**J**	**0.79**	**J**	**0.74**	**J**	**0.88**	**J**	**28**		**2.6**		**0.59**	**J**
Selenium	0.01	mg/L	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U	< 0.011	U
Silver	0.05	mg/L	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U	< 0.0032	U
Sodium	20	mg/L	**27**		**40**		**29**		**9.8**		**16**		**29**		**28**		**4.7**		**4.9**		**9.8**		**12**		**25**		**20**		**3.5**	
Thallium	0.0005	mg/L	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U	< 0.019	U
Vanadium	NC	mg/L	**0.0092**	**J**	**0.0076**	**J**	**0.0059**	**J**	**0.0039**	**J**	**0.0062**	**J**	**0.0066**	**J**	**0.0068**	**J**	**0.0043**	**J**	**0.0036**	**J**	**0.0071**	**J**	**0.0078**	**J**	**0.0071**	**J**	< 0.0031	U	**0.0039**	**J**
Zinc	2	mg/L	**0.0061**	**J**	**0.0050**	**J**	**0.040**		**0.0054**	**J**	**0.0086**	**J**	**0.0081**	**J**	**0.0070**	**J**	**0.0093**	**J**	**0.0044**	**J**	**0.0089**	**J**	**0.0055**	**J**	**0.016**		**0.020**		**0.0053**	**J**

Notes
NC - No criteria
mg/L - milligrams per liter
J - Detected but below the Reporting Limit (lowest calibration standard); result is estimated.
D - Dilution
U - Analyte was not detected at specified quantitation limit.
Bold indicates a detection
Black shading indicates the result exceeds the NYSDEC GA Value
Gray shading indicates a Non-Detection with a reporting limit higher than the GA Value
Class GA Values - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with all Addendums.

Table 8
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Groundwater for PFAS - 2022

Analyte	Class GA Values	Units	Location / Sample ID / Lab Sample ID / Sample Date	BR-3 BR-3_20220727 22G1718-05 7/27/2022	BR-5 BR-5_20220728 22G1718-11 7/28/2022	BR-6 BR-6_20220728 22G1718-10 7/28/2022	BR-7 BR-7_20220727 22G1718-12 7/27/2022	MW-2 MW-2_20220727 22G1718-08 7/27/2022	MW-4DR MW-4DR_20220726 22G1718-16 7/26/2022	MW-4DR DUP-01_20220726 22G1718-17 7/26/2022	MW-5 MW-5_20220728 22G1718-09 7/28/2022	MW-6 MW-6_20220726 22G1718-03 7/26/2022	MW-7 MW-7_20220727 22G1718-06 7/27/2022	MW-7D MW-7D_20220727 22G1718-13 7/27/2022	MW-8 MW-8_20220726 22G1718-15 7/26/2022	MW-11 MW-11_20220727 22G1718-07 7/27/2022	MW-13 MW-13_20220727 22G1718-04 7/27/2022
				Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
PFAS																	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	NC	ng/L		< 0.6 U	< 0.58 U	< 0.65 U	< 0.6 U	< 0.58 U	< 0.59 U	< 0.6 U	< 0.63 U	< 0.62 U	< 0.62 U	< 0.58 U	< 0.6 U	< 0.62 U	< 0.62 U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	NC	ng/L		< 0.32 U	< 0.32 U	< 0.35 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.33 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.31 U	< 0.32 U	< 0.34 U	< 0.34 U
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	NC	ng/L		< 0.26 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.27 U
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NC	ng/L		**110**	**51**	**87**	**5.0**	**4.4**	**120**	**130**	**5.1**	**1.1 J**	**2.2**	**6.3**	**6.8**	**19**	**1.0 J**
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NC	ng/L		< 0.57 U	**0.93 J**	< 0.61 U	< 0.57 U	< 0.55 U	< 0.56 U	< 0.57 U	< 0.6 U	< 0.59 U	< 0.59 U	< 0.55 U	< 0.57 U	< 0.59 U	< 0.59 U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	NC	ng/L		< 0.36 U	< 0.36 U	< 0.39 U	< 0.36 U	< 0.35 U	< 0.36 U	< 0.36 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.35 U	< 0.36 U	< 0.38 U	< 0.38 U
N-Methyl perfluorooctane sulfonamido acetic acid (NMeFOSAA)	NC	ng/L		< 0.71 U	< 0.69 U	< 0.77 U	< 0.71 U	< 0.69 U	< 0.7 U	< 0.71 U	< 0.74 U	< 0.73 U	< 0.74 U	< 0.68 U	**6.8**	< 0.73 U	< 0.73 U
N-Ethyl perfluorooctane sulfonamido acetic acid (NEtFOSAA)	NC	ng/L		< 0.59 U	**0.76 J**	< 0.63 U	< 0.59 U	< 0.57 U	< 0.58 U	< 0.59 U	< 0.62 U	< 0.61 U	< 0.61 U	< 0.57 U	**83**	< 0.61 U	< 0.61 U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NC	ng/L		< 0.22 U	< 0.21 U	< 0.23 U	< 0.22 U	< 0.21 U	< 0.21 U	< 0.22 U	< 0.23 U	< 0.22 U	< 0.22 U	< 0.21 U	< 0.22 U	< 0.22 U	< 0.22 U
Perfluoro-2-methyl-3-oxahexanoic acid (HFPO-DA)	NC	ng/L		< 0.22 U	< 0.22 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
Perfluoro-3,6-dioxaheptanoic acid (PFPE-3)	NC	ng/L		< 0.26 U	< 0.25 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.27 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NC	ng/L		< 0.39 U	< 0.38 U	< 0.42 U	< 0.39 U	< 0.38 U	< 0.38 U	< 0.39 U	< 0.41 U	< 0.4 U	< 0.4 U	< 0.37 U	< 0.39 U	< 0.4 U	< 0.4 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NC	ng/L		< 0.32 U	< 0.31 U	< 0.34 U	< 0.32 U	< 0.31 U	< 0.32 U	< 0.32 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.31 U	< 0.32 U	< 0.33 U	< 0.33 U
Perfluorobutane sulfonic acid (PFBS)	NC	ng/L		< 0.26 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U	**0.28 J**	< 0.27 U	**14**	**14**	**6.7**	< 0.27 U	**0.71 J**
Perfluorobutanoic acid (PFBA)	NC	ng/L		< 0.69 U	**1.4 J**	< 0.75 U	< 0.69 U	< 0.68 U	< 0.69 U	< 0.7 U	**0.77 J**	**0.98 J**	**9.9**	**18**	< 0.69 U	< 0.72 U	**8.0**
Perfluorobutylsulfonamide (FBSA)	NC	ng/L		< 0.18 U	< 0.17 U	< 0.19 U	< 0.18 U	< 0.17 U	< 0.18 U	< 0.18 U	< 0.19 U	< 0.18 U	**6.9**	**5.3**	**0.65 J**	< 0.18 U	< 0.18 U
Perfluorodecane sulfonic acid (PFDS)	NC	ng/L		< 0.3 U	< 0.3 U	< 0.33 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.31 U	< 0.32 U	< 0.31 U	< 0.32 U	< 0.29 U	< 0.3 U	< 0.31 U	< 0.31 U
Perfluorodecanoic acid (PFDA)	NC	ng/L		< 0.46 U	**0.47 J**	**0.83 J**	< 0.46 U	< 0.45 U	< 0.45 U	< 0.46 U	< 0.48 U	< 0.47 U	< 0.48 U	< 0.44 U	**0.98 J**	< 0.47 U	< 0.47 U
Perfluorododecanoic acid (PFDoA)	NC	ng/L		< 0.41 U	< 0.4 U	< 0.44 U	< 0.41 U	< 0.4 U	< 0.41 U	< 0.41 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.4 U	< 0.41 U	< 0.43 U	< 0.43 U
Perfluoroheptane sulfonic acid (PFHpS)	NC	ng/L		< 0.87 U	< 0.86 U	< 0.95 U	< 0.87 U	< 0.86 U	< 0.87 U	< 0.88 U	< 0.92 U	< 0.91 U	< 0.91 U	< 0.84 U	< 0.87 U	< 0.91 U	< 0.91 U
Perfluoroheptanoic acid (PFHpA)	NC	ng/L		**1.4 J**	**2.6**	**1.0 J**	< 0.32 U	< 0.31 U	**24**	**23**	**0.68 J**	**0.37 J**	**7.3**	**2.6**	**20**	< 0.33 U	**2.7**
Perfluorohexane sulfonic acid (PFHxS)	NC	ng/L		< 0.32 U	**3.2**	**0.57 J**	< 0.31 U	< 0.31 U	< 0.31 U	< 0.32 U	< 0.33 U	< 0.33 U	**9.0**	**6.7**	**12**	< 0.33 U	**0.66 J**
Perfluorohexanesulfonamide (FHxSA)	NC	ng/L		< 0.29 U	< 0.28 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.29 U	< 0.29 U	< 0.3 U	< 0.3 U	< 0.3 U	< 0.28 U	**0.55 J**	< 0.3 U	< 0.3 U
Perfluorohexanoic acid (PFHxA)	NC	ng/L		**6.5**	**2.5**	**3.0**	< 0.36 U	< 0.35 U	**1.5 J**	**1.4 J**	**0.52 J**	< 0.37 U	**26**	**15**	**32**	< 0.37 U	**3.4**
Perfluorononane sulfonic acid (PFNS)	NC	ng/L		< 0.16 U	< 0.15 U	< 0.17 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.16 U	< 0.16 U
Perfluorononanoic acid (PFNA)	NC	ng/L		< 0.32 U	**0.32 J**	**1.4 J**	< 0.32 U	< 0.31 U	< 0.32 U	< 0.32 U	**0.74 J**	< 0.33 U	< 0.34 U	< 0.31 U	**5.7**	< 0.33 U	**0.62 J**
Perfluorooctane sulfonamide (PFOSA)	NC	ng/L		< 0.39 U	< 0.38 U	< 0.42 U	< 0.39 U	< 0.38 U	< 0.39 U	< 0.39 U	< 0.41 U	< 0.41 U	< 0.41 U	< 0.38 U	**3.2**	< 0.41 U	< 0.41 U
Perfluorooctane sulfonic acid (PFOS)	2.7	ng/L		< 0.56 U	**1.9**	**1.8 J**	< 0.56 U	< 0.55 U	< 0.55 U	< 0.56 U	**1.5 J**	**0.59 J**	**6.8**	**4.3**	**55**	< 0.58 U	**8.9**
Perfluorooctanoic acid (PFOA)	6.7	ng/L		**0.65 J**	**3.9**	**4.5**	< 0.63 U	< 0.62 U	**0.68 J**	< 0.64 U	**4.8**	**2.4**	**17**	**11**	**140**	< 0.66 U	**13**
Perfluoropentane sulfonic acid (PFPeS)	NC	ng/L		< 0.24 U	< 0.24 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.25 U	**4.1**	**3.8**	**4.0**	< 0.25 U	< 0.25 U
Perfluoropentanoic acid (PFPeA)	NC	ng/L		**0.73 J**	**2.2**	**1.4 J**	< 0.37 U	< 0.36 U	**1.3 J**	**1.2 J**	**0.60 J**	< 0.38 U	**8.2**	**7.7**	**12**	< 0.38 U	**4.1**
Perfluorotetradecanoic acid (PFTA)	NC	ng/L		< 0.34 U	< 0.33 U	< 0.37 U	< 0.34 U	< 0.33 U	< 0.34 U	< 0.34 U	< 0.36 U	< 0.35 U	< 0.36 U	< 0.33 U	< 0.34 U	< 0.35 U	< 0.35 U
Perfluorotridecanoic acid (PFTrDA)	NC	ng/L		< 0.26 U	< 0.25 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.27 U
Perfluoroundecanoic acid (PFUnA)	NC	ng/L		< 0.34 U	< 0.34 U	< 0.37 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.35 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.33 U	**2.1**	< 0.36 U	< 0.36 U

Notes
NC - No criteria
ng/L - nanograms per liter
J - Detected but below the Reporting Limit (lowest calibration standard); result is estimated.
D - Dilution
U - Analyte was not detected at specified quantitation limit.
Bold indicates a detection
Black shading indicates the result exceeds the NYSDEC GA Value
PFAS - Per- and polyfluoroalkyl substances
Class GA Values - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with all Addendums.

Table 9
New York State Department of Environmental Conservation
Mayer Landfill Site - NYSDEC Site No. 336027
Blooming Grove, New York
Summary of Analytical Results of Potable Water for PFAS and 1,4-Dioxane - (2020 and 2023)

			Location:	WP-RES-1	WP-RES-2	WP-RES-3	WP-RES-4	WP-RES-5	WP-RES-6	WP-RES-7	WP-RES-8	WP-RES-9	WP-RES-10	WP-RES-11	WP-RES-12	WP-RES-14
			Sample ID:	ML-WP-RES-1	ML-WP-RES-2	ML-WP-RES-3	ML-WP-RES-4	ML-WP-RES-5	ML-WP-RES-6	ML-WP-RES-7	ML-WP-RES-8	ML-WP-RES-9	ML-WP-RES-10	ML-WP-RES-11	ML-WP-RES-12	WP-RES-14
			Lab Sample ID:	480-172890-1	480-172890-2	480-172890-3	480-172890-4	480-172890-5	480-172890-6	480-172890-7	480-172890-8	480-172890-9	480-172890-10	480-172890-11	480-172890-12	23B1178-01
			Sample Date:	7/20/2020	7/20/2020	7/20/2020	7/20/2020	7/20/2020	7/20/2020	7/21/2020	7/21/2020	7/21/2020	7/21/2020	7/21/2020	7/21/2020	2/9/2023
Analyte	**MCL Values**	**Unit**		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
PFAS																
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NC	ng/L		< 18 U	< 17 U	< 17 U	< 17 U	< 16 U	< 18 U	< 17 U	< 17 U	< 18 U	< 17 U	< 18 U	< 17 U	NA
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NC	ng/L		< 18 U	< 17 U	< 17 U	< 17 U	< 16 U	< 18 U	< 17 U	< 17 U	< 18 U	< 17 U	< 18 U	< 17 U	NA
N-Ethyl perfluorooctane sulfonamido acetic acid (NEtFOSAA)	NC	ng/L		< 18 U	< 17 U	< 17 U	< 17 U	< 16 U	< 18 U	< 17 U	< 17 U	< 18 U	< 17 U	< 18 U	< 17 U	NA
N-Methyl perfluorooctane sulfonamido acetic acid (NMeFOSAA)	NC	ng/L		< 18 U	< 17 U	< 17 U	< 17 U	< 16 U	< 18 U	< 17 U	< 17 U	< 18 U	< 17 U	< 18 U	< 17 U	NA
Perfluorobutane sulfonic acid (PFBS)	NC	ng/L		**1.4 J**	**0.81 J**	**1.0 J**	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	**2.8**	< 1.8 U	**5.8**	< 1.9 U
Perfluorobutanoic acid (PFBA)	NC	ng/L		**2.2**	**6.6**	**2.9**	< 1.7 U	**1.4 J**	**2.1**	< 1.7 U	< 1.7 U	< 1.8 U	**2.7**	**1.3 J**	**2.8**	NA
Perfluorodecane sulfonic acid (PFDS)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.8 U	< 1.7 U	NA
Perfluorodecanoic acid (PFDA)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.8 U	< 1.7 U	NA
Perfluorododecanoic acid (PFDoA)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.8 U	< 1.7 U	NA
Perfluoroheptane sulfonic acid (PFHpS)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.8 U	< 1.7 U	NA
Perfluoroheptanoic acid (PFHpA)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	**1.9**	< 1.8 U	**1.8**	< 1.9 U
Perfluorohexane sulfonic acid (PFHxS)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	**1.3 J**	< 1.8 U	**1.0 J**	< 1.9 U
Perfluorohexanoic acid (PFHxA)	NC	ng/L		**1.8**	**1.7**	**0.99 J**	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	**3.4**	< 1.8 U	**4.0**	
Perfluorononanoic acid (PFNA)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.9 U
Perfluorooctane sulfonamide (PFOSA)	NC	ng/L		< 9.1 U	< 8.7 U	< 8.3 U	< 8.4 U	< 8.1 U	< 9.0 U	< 8.3 U	< 8.6 U	< 8.9 U	< 8.6 U	< 9.2 U	< 8.3 U	NA
Perfluorooctane sulfonic acid (PFOS)	10	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	**4.3**	< 1.8 U	**4.7**	< 1.9 U
Perfluorooctanoic acid (PFOA)	10	ng/L		**1.2 J**	**0.77 J**	**0.68 J**	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	**7.0**	< 1.8 U	**6.2**	< 1.9 U
Perfluoropentanoic acid (PFPeA)	NC	ng/L		< 1.8 U	**2.1 J+**	**1.8 J+**	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	**3.2 J+**	< 1.8 U	**3.7 J+**	NA
Perfluorotetradecanoic acid (PFTA)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.8 U	< 1.7 U	NA
Perfluorotridecanoic acid (PFTrDA)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.8 U	< 1.7 U	NA
Perfluoroundecanoic acid (PFUnA)	NC	ng/L		< 1.8 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.7 U	< 1.7 U	< 1.8 U	< 1.7 U	< 1.8 U	< 1.7 U	NA
SVOCs																
1,4-Dioxane	1	ug/L		**1.1**	**3.7**	**0.38**	< 0.19 U	**0.32**	**0.64**	< 0.19 U	< 0.20 U	< 0.19 U	< 0.19 U	**0.25**	< 0.19 U	NA

Notes
MCLs - Maximum Contaminant Levels
NC - No criteria
NA - Not analyized
ug/L - micrograms per liter
ng/L - nanograms per liter
J - Detected but below the Reporting Limit (lowest calibration standard); result is estimated.
J+ - Result is estimated, with a potential high bias.
U - Analyte was not detected at specified quantitation limit.
Bold indicates a detection
Black shading indicates the result exceeds the 2020 NYS Public Drinking Water MCLs
PFAS - Per- and polyfluoroalkyl substances
WP-RES-14 was sampled in February 2023 for only six PFAS compounds.

APPENDIX A

Summary of Green and Sustainable Remediation Metrics for Site Management

Site Name: Mayer Landfill Site Site Code: 336027
Address: Prospect and Peddler Hill Roads City: Blooming Grove
State: NY Zip Code: 10918 County: Orange

Initial Report Period (Start Date of period covered by the Initial Report submittal)
Start Date: April 2015

Current Reporting Period
Reporting Period From: January 1, 2020 To: January 1, 2025

Contact Information
Preparer's Name: Ezra Stobbe Phone No.: 332-237-9961
Preparer's Affiliation: TRC Engineers, Inc.

I. Energy Usage: Quantify the amount of energy used directly on-Site and the portion of that derived from renewable energy sources.

	Current Reporting Period (approximate)	**Total to Date** (approximate)
Fuel Type 1 (e.g. natural gas (cubic feet))	Not Applicable	
Fuel Type 2 (e.g. fuel oil, propane (gallons))	Not Applicable	
Electricity (kilowatt-hours)	0	Unknown
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)	Not Applicable	
Other energy sources (e.g. geothermal, solar thermal (British Thermal Units))	Not Applicable	

Provide a description of all energy usage reduction programs for the Site in the space provided on Page 3.

II. Solid Waste Generation: Quantify the management of solid waste generated on-Site.

	Current Reporting Period (tons - approximate)	**Total to Date (tons -** approximate)
Total waste generated on-site	less than 1	8,814
OM&M generated waste	less than 1	Unknown
Of that total amount, provide quantity:		
Transported off-site to landfills	0	7,687.87
Transported off-site to other disposal facilities	0	0
Transported off-site for recycling/reuse	0	0
Reused on-site	0	1,158 (cubic yards)

Provide a description of any implemented waste reduction programs for the Site in the space provided on Page 3.

III. Transportation/Shipping: Quantify the distances travelled for delivery of supplies and lab-supplied bottles, shipping of laboratory samples, and the removal of waste.

	Current Reporting Period (miles-approximate)	**Total to Date (miles)**
Standby Engineer/Contractor	3500	Unknown
Laboratory Courier/Delivery Service (bottle and sample delivery)	96	Unknown
Waste Removal/Hauling	0	Unknown

Provide a description of all mileage reduction programs for the Site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the Site.

IV. Water Usage: Quantify the volume of water used on-site from various sources.

	Current Reporting Period (gallons)	**Total to Date (gallons)**
Total quantity of water used on-site (not including treated water)	less than 50	Unknown
Of that total amount, provide quantity:		
Public potable water supply usage	less than 50	Unknown
Surface water usage	0	Unknown
On-site groundwater usage	0	Unknown
Collected or diverted storm water usage	0	Unknown

Provide a description of any implemented water consumption reduction programs for the Site in the space provided on Page 3.

V. Land Use and Ecosystems: Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	Current Reporting Period (acres)	**Total to Date (acres – approximate)**
Land disturbed	0	2.1
Land restored	0	2.1

Provide a description of any implemented land restoration/green infrastructure programs for the Site in the space provided on Page 3.

Description of green remediation programs reported above (Attach additional sheets if needed)
Energy Usage: There is minimal energy consumption related to the site, as no remedial systems are active at the site. Energy usage during the reporting period is related only to operation of handheld groundwater sampling equipment. Energy consumption for remedial activities is unknown and not included.

Waste Generation:
Waste generated during this reporting period includes personal protective equipment (e.g., disposable gloves), polyethylene and silicone tubing, and packing material associated with groundwater sampling events. Purge water was disposed of by discharging to the ground surface in unpaved areas. Paper and office supplies were also consumed associated with sampling activities and report preparation. As a part of Remedial Action (RA) at the Site, in accordance with the May 2008 Remedial Design, 7,688 tons of non-hazardous waste was removed from the Site in 2009 and disposed off-site at the Ontario County Landfill. Reportedly, 1,158 cubic yards of non-impacted fill was reused on-site as backfill during RA. Quantities of waste generated during the Site remedial history are approximate and may not include all waste generated.

Transportation/Shipping:
Current reporting period transportation is associated with conducting Site visits to perform Site management activities, including Site inspections and groundwater and non-routine residential potable water sampling. Transportation includes consultant travel activities for TRC Engineers, Inc. (TRC) from TRC's Clifton Park NY office, located approximately 125 miles from the Site. Samples were transported by car to the Pace Analytical laboratory location in Newburgh NY, located approximately 10 miles from the Site.

Water usage:
Minimal amounts of water are used during groundwater sampling activities to decontaminate sampling equipment.

Land Use and Ecosystems:
The current site activities do not disturb land and/or ecosystems. Remedial action activities conducted in 2008 and 2009 disturbed and restored approximately 2.1 acres, according to the Site Plan survey included in the November 2009 Final Engineering Report, which marked out limits of disturbance.

Recommendations/Other:
None.

CONTRACTOR CERTIFICATION

I, _____ (**Name**) do hereby certify that I am _____ (**Title**) of _____ (**Contractor Name**), which is responsible for the work documented on this form. According to my knowledge and belief, all of the information provided in this form is accurate and the site management program complies with the DER-10, DER-31, and CP-49 policies.

_____

Date **Contractor**

APPENDIX B

SITE HISTORY

MAYER LANDFILL SITE (NYSDEC SITE NO. 336027)

Date	Description
1949	The Mayer Landfill began operating the Site as an open-face dump, with periodic refuse burning.
1953	Approximately three acres of land were used as a dump, accepting approximately 180 cubic yards of refuse per week.
1956	Part of the landfill was designed as a public dump.
1961	The landfill occupied approximately eight acres and was receiving approximately 386 cubic yards of refuse per week.
1965	The Mayer Landfill was ordered to stop burning, and the operator began compacting/covering waste.
1968	The landfill was reported to occupy 13 acres and accept 1,000 cubic yards of waste per week.
Early 1970s	The Orange County Department of Health (OCDOH) cited the Site for mismanagement. Violations included inadequate compacting and covering of wastes, waste piled too high and steep, and poor use of space.
January 1975	An OCDOH survey approximated the waste volume received by the Mayer Landfill to be 5,045 cubic yards per week.
April 1975	The Mayer Landfill ceased operations due to failure to comply with State and County regulations.
1975	The OCDOH conducted an initial Site investigation of surface water. The associated analytical results indicated elevated zinc concentrations in a wet area located south of the Site.
1985	The New York State Department of Environmental Conservation (NYSDEC) listed the Mayer Landfill on the NYS Registry of Inactive Hazardous Waste Disposal Sites as a Class 2a site.
June 1987	The NYSDEC completed a Phase I investigation which concluded that a Phase II investigation was required.
April 1987	The New York State Department of Health (NYSDOH) completed a Human Exposure Potential Ranking Hazardous Waste Site Inspection Form for the Mayer Landfill. Additionally, State and County officials sampled five private drinking wells in the vicinity of the Site; no contamination was found.
1989 - 1991	To resolve the Class 2a status, a Phase II Investigation was conducted and found several organic compounds exceeding groundwater standards in one monitoring well.
1991	The NYSDEC listed the Site as a Class 2 site in the Registry.
2000 - 2002	A remedial investigation/feasibility study (RI/FS) was conducted at the Site to determine the nature and extent of contamination and evaluate remedial alternatives.

January 2005	The NYSDEC issued a Record of Decision (ROD) which identified limited soil excavation of light non-aqueous liquid (LNAPL) and groundwater monitoring as the selected remedy.
July 2007	Further subsurface and groundwater investigations were performed to further delineate impacted waste. This additional work showed that the LNAPL contaminated soil volume was significantly greater than estimated in the ROD.
January 2008	A Basis of Design report was prepared and revealed that volatile organic compounds (VOC) and metals were the main contaminants of concern (COCs).
October 2008 – June 2009	Remedial activities were completed, in accordance with the NYSDEC approved May 2008 Remedial Design (RD). Activities included the removal of 7,688 tons of impacted waste, installation of a cover system, decommissioning/installation of monitoring wells, establishment of an Environmental Easement, and development/implementation of a Site Management Plan (SMP).
October 2010	The NYSDEC approved the SMP, which includes long-term groundwater monitoring, existing cover maintenance, future excavation management, exclusion against future residential or restricted-residential uses, and a prohibition of groundwater for portable or process use without treatment.
June 2011	An Environmental Notice for the entire parcel was filed with the Orange County Clerk's Office.
October 2011	The NYSDEC listed the Site as a Class 4 site in the Registry.
December 2012	An Environmental Easement was placed on the Site and recorded by Orange County in March 2013. While the tax parcel containing the Site is approximately 103 acres, the easement only applies to 15 acres (13 acres of landfill and 2 acres of buffer as delineated by the Environmental Easement survey).
April 2015	The SMP was revised to include plans for long term groundwater monitoring.
February 2020	A Periodic Review Report was prepared for the reporting period of April 2015-January 2020 by TRC Engineers, Inc..

CUSTODIAL RECORD/PERTINENT SITE DOCUMENTS

MAYER LANDFILL SITE (NYSDEC SITE NO. 336027)

EA Science and Technology (EA), *Phase I Investigation*, Mayer Landfill Site, June 1987

Lawler, Matusky & Skelly Engineers, *Phase II Investigation*, Mayer Landfill Site, June 1991

Environmental Resources Management (ERM), *Work Plan for the Remedial Investigation/Feasibility Study*, Mayer Landfill Site, August 1999

ERM, *Remedial Investigation Report*, Mayer Landfill Site, March 2001

ERM, *Supplemental Remedial Investigation Work Plan*, Mayer Landfill Site, June 2001

ERM, *Supplemental Remedial Investigation Report*, Mayer Landfill Site, April 2002

ERM, *Final Feasibility Study Report*, Mayer Landfill Site, July 2002

New York State Department of Environmental Conservation (NYSDEC), *Proposed Remedial Action Plan*, Mayer Landfill Site, November 2004

NYSDEC, *Record of Decision*, Mayer Landfill Site, January 2005

EA, *Remedial Design/Remedial Action Work Plan*, Mayer Landfill Site, June 2007

EA, *Basis of Design Report*, Mayer Landfill Site, January 2008

NYSDEC, *Explanation of Significant Differences*, September 2008

EA, *Final Engineering Report*, Mayer Landfill Site, November 2009

EA, *Site Management Plan*, Mayer Landfill Site, September 2010

EA, *Site Management Plan (Rev. 1)*, Mayer Landfill Site, October 2010

NYSDEC, *Site Classification Report*, Mayer Landfill Site, October 2011

NYSDEC, *Environmental Easement*, Site No. 336027, December 2012

EA, *Site Management Plan (Rev. 2)*, Mayer Landfill Site, April 2015

NYSDEC, *Periodic Review Report for January 1, 2012, through April 15, 2015*, Mayer Landfill Site, October 2015

TRC Engineers, Inc., *Periodic Review Report April 2015 – January 2020*, Mayer Landfill Site, February 2020

APPENDIX C

Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form

Site Details **Box 1**

Site No. **336027**

Site Name **Mayer Landfill**

Site Address: Prospect and Peddler Hill Roads Zip Code: 10914
City/Town: Blooming Grove
County: Orange
Site Acreage: 15.2

Reporting Period: January 01, 2020 to January 01, 2025

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. To your knowledge is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

_____ _____
Signature of Standby Consultant/Contractor Date

SITE NO. 336027 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
44-1-63.9	William Mayer	Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan Soil Management Plan

An updated Site Management Plan (SMP) was approved in April 2015 to manage remaining contamination at the Site in perpetuity or until extinguishment of the Environmental Easement in accordance with ECL Article 71, Title 36. An Environmental Easement (File No.20138016785, book ar page 13585/8481) along with a Notice of EN Recission(File No.20130016786,book and page 13585/8499)were recorded with Orange County on 2/13/13.03/27/2013: Affidavit of Service, dated Ma 19, 2013 was recorded on March 27, 2013, in the Orange County Clerk's Office in 2013 as Instrument No.: 20130033295, Book 13533,Page 1071.

The Environmental Easement requires compliance with these ICs, to ensure that:

• All ECs must be operated and maintained as specified in the SMP;and
• Groundwater and other environmental or public health monitoring must be performed as defined in t SMP; and
• Data and information pertinent to Site Management for the Controlled Property must be reported as defined in the SMP; and
• On-site environmental monitoring devices, including but not limited to, groundwater monitoring wells must be protected and replaced as necessary to ensure continued functioning in the manner specified in the SMP.

The Environmental Easement places the following restrictions on the "Controlled Property":

• Vegetable gardens and farming on the property are prohibited;
• Use of groundwater underlying the property is prohibited without treatment rendering it safe for the intended use;
• All future activities on the property that would disturb remaining contaminated material must be conducted in accordance with the Excavation Plan included in the SMP;
• The property may be used for commercial or industrial use, provided that the long-term Engineering and Institutional Controls described in the SMP remain in use.

The above controls are designed to:
• Prevent ingestion/direct contact with contaminated soil
• Prevent exposure to onsite groundwater

Box 4

Description of Engineering Controls

Parcel	Engineering Control
44-1-63.9	Monitoring Wells

The Controlled Property has the following Engineering Controls:

Sentinel wells for long-term monitoring of site groundwater.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification, including data and material prepared by previous contractors for the current certifying period, if any;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

   YES NO

   ☐ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

   YES NO

   ☐ ☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

_____ _____

Signature of Standby Consultant/Contractor Date

Box 6

IC/EC CERTIFICATIONS

Professional Engineer Signature

I certify that all information in Boxes 2 through 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Allen Zgaljardic at TRC Engineers, Inc.
print name

1090 Union Road, Suite 280

West Seneca, NY 14224,
(print business address)

am certifying as a Professional Engineer.

Signature of Professional Engineer

Stamp (Required for PE)

Date 6/25/2025

APPENDIX D

TRC		**DATE: Friday, June 4, 2021**
		REPORT NO. 20210604
		PAGE NO. 1 OF 2
		PROJECT NO. 320919.0000.0000
		LOGBOOK NO. -- PAGES -- to --

DAILY FIELD ACTIVITY REPORT

PROJECT	Mayer Landfill
LOCATION	Blooming Grove, New York
ATTACHMENTS	Photo Log

WEATHER	TIME	TEMP.	PRECIP.	WIND (MPH)	WIND (DIR)
Partly Cloudy	0900	66°F	None	0-5	ENE
Partly Cloudy	1300	76°F	None	0-5	ENE

SITE CONDITIONS: Dry

WORK GOAL FOR DAY: Site inspection

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Steve Johansson	TRC Engineers, Inc.	08:30	11:30
Caitlin Serowik	TRC Engineers, Inc.	08:30	11:30

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL

HEALTH & SAFETY:

PPE REQUIRED: ☒ LEVEL D ☐ LEVEL C ☐ LEVEL B ☐ LEVEL A **HASP?** YES

SITE SAFETY OFFICER: Steve Johansson

H & S NOTES: Site work performed in Level D PPE

TRC		**DATE: Friday, June 4, 2021**
		REPORT NO. 20210604
		PAGE NO. 2 OF 2
		PROJECT NO. 320919.0000.0000

DAILY FIELD ACTIVITY REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

TRC Engineers, Inc. (TRC) conducted a site inspection at the Mayer Landfill Site (Site), located off Prospect Street, in the village of Blooming Grove, NY, on June 4, 2021. The objective of the site inspection was to document the general site conditions and evaluate the condition of the groundwater monitoring wells located throughout the site.

During the event, the team was able to locate thirteen of the fourteen monitoring wells (ML-MW-11, ML-BR-7, ML-MW-4R, ML-MW-4DR, ML-BR-3, ML-BR-6, ML-MW-13, ML-MW-8, ML-MW-6, ML-MW-7, ML-MW-7D, ML-MW-2 and ML-MW-5). The team was unable to locate ML-BR-5, as it appeared that the site had been cleared of some vegetation and the survey tape left on the trees to mark the location of the well had been removed as well. The team utilized the Collector app to drop a pin at the location of the wells that may be difficult to find as seasonal vegetation continues. The wells and outer casings appeared to be generally in good shape. All monitoring wells were noted to be locked with a Master Lock® with code #2537. Multiple tree-stands and bike trails were noted throughout the inspection and it appeared that the site is used regularly for hunting and other sporting activities.

The soil cover and vegetation throughout the landfill cover appear to be stable and in good shape, with no areas of noticeable erosion. No animal burrows, voids, or seeps were noted throughout the inspection. The entrance gate is currently locked with a coded-lock that was placed on the gate by the current site owner.

PREPARED BY (OBSERVER):	**REVIEWED BY:**
PRINT NAME: Caitlin Serowik	**PRINT NAME:** Harry Fuller

NYSDEC Mayer Landfill
Photograph Log
Date: June 4, 2021

Photo 1: Looking southeast. View of the site entry gate.

Photo 2: Looking northeast at one of the tree-stands located throughout the site.

Photo 3: Looking northwest. View of drums and other debris found onsite.

Photo 4: Looking northwest at monitoring well MW-7.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
320919.0000 .0000	Caitlin Serowik	1 of 2	NYSDEC	Mayer Landfill Blooming Grove, NY	TRC

NYSDEC Mayer Landfill
Photograph Log
Date: June 4, 2021

Photo 5: Looking northwest at monitoring well MW-11.

Photo 6: Looking to the northwest at an overview of the landfill area.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
320919.0000 .0000	Caitlin Serowik	2 of 2	NYSDEC	Mayer Landfill Blooming Grove, NY	TRC

TRC		**DATES:** Tuesday, July 26, 2022 – Thursday, July 28, 2022
		REPORT NO. 20220726
		PAGE NO. 1 OF 2
		PROJECT NO. 470744.0000.0000
		LOGBOOK NO. 550F PAGES 27 to 29

DAILY FIELD ACTIVITY REPORT

PROJECT Mayer Landfill

LOCATION Blooming Grove, New York

ATTACHMENTS Photo Log, Low Flow Logs, Site Map

WEATHER	TIME	TEMP.	PRECIP.	WIND (MPH)	WIND (DIR)
Clear, Sunny	0700	75°F	None	0-5	ENE
Clear, Sunny	1400	90°F	None	0-5	ENE

SITE CONDITIONS: Clear, Dry

WORK GOAL FOR DAY: Site inspection and groundwater sampling

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Rich DePolo	TRC Engineers, Inc.	07:00	19:00
Taylor Shanley	TRC Engineers, Inc.	07:00	19:00

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL
PID	MiniRAE 3000	Not Applicable	Not Applicable
Peristaltic Pump	Geotech		
Oil/Water Interface Probe	Heron		
Water Quality Meter	Horiba U-52		
Bladder Pump	QED Sample Pro MP-50		

HEALTH & SAFETY:

PPE REQUIRED: ☒ LEVEL D ☐ LEVEL C ☐ LEVEL B ☐ LEVEL A **HASP?** YES

SITE SAFETY OFFICER: Rich DePolo

H & S NOTES: Site work performed in Level D PPE

TRC		**DATE:** Tuesday, July 26, 2022 – Thursday, July 28, 2022
		REPORT NO. 20220726
		PAGE NO. 2 OF 2
		PROJECT NO. 470744.0000.0000

DAILY FIELD ACTIVITY REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

TRC Engineers, Inc. (TRC) was at the Mayer Landfill (Site) from June 26, 2022, to June 28, 2022 to conduct a site inspection and perform groundwater sampling of the Site, located off of Prospect Street, in the village of Blooming Grove, NY. The objective of the site inspection was to document the general site conditions, to evaluate the condition of the groundwater monitoring wells, and to sample all of the monitoring wells by low flow techniques.

On June 26, 2022, TRC personnel mobilized to the Site to begin the well gauging and sampling event. TRC was able to locate all fourteen monitoring wells (MW-11, BR-7, MW-4R, MW-4DR, BR-3, BR-5, BR-6, MW-13, MW-8, MW-6, MW-7, MW-7D, MW-2 and MW-5). TRC determined that MW-4R was not able to be sampled due to a large amount of product (LNAPL) discovered in the well, consistent with the prior sampling event in May 2019. TRC personnel noted that of the wells, MW-2, MW-5, BR-5 and BR-6 were difficult to find due to the overgrown conditions of the Site, and the poorly maintained paths to the BR-5 and BR-6 wells. All of the inspected wells were noted to be in good condition, all containing J-plugs, protective collars and locks keyed to #2537. TRC personnel also used orange surveying tape to flag paths to the wells, installed 6-foot-high fiberglass markers on each of the wells, and sprayed the wells with high-viz orange paint for visibility. It is recommended that the flags/markers be inspected and replaced every inspection and sampling event if necessary.

Additionally, during site inspection activities, multiple hunting tree stands were encountered, as well as trails that did not lead to any of the wells, presumed to be hunting trails. TRC noted the presence of several drums on the northeastern portion of the Site (near MW-11, BR-7, and the front gate area along the access road), most either empty, or unable to be opened. TRC also encountered the presence of several debris piles of scrap metal and old tires throughout the Site. These were not mentioned in prior reports, as only a drum survey was conducted in the past inspection events. The well conditions, landfill conditions, and drums/debris piles were photographed when encountered. Following site inspection and gauging activities, monitoring wells MW-4DR, MW-13, and MW-8 (including MS/MSD) were sampled using USEPA low-flow sampling methods.

On June 27, 2022, TRC personnel returned to the Site to resume sampling activities. TRC sampled MW-6, BR-3, MW-7D, MW-7, MW-11, BR-7, and MW-2 using USEPA low-flow sampling methods. MW-7D, MW-7, MW-11 and BR-7 were all located in overgrown, heavily forested areas and hand tools were used to cut the vegetation around each of the wells prior to sampling. An existing trail leading to MW-11 and BR-7was used to bring equipment over via a gardening cart. MW-2 is located in a heavily forested area with many fallen trees and heavy vegetation, making it difficult to access the well.

On June 28, 2022, TRC personnel returned to the Site to sample the remaining monitoring wells. TRC sampled MW-5, BR-5, and BR-6 using USEPA low-flow methods. However, BR-5 and BR-6 needed to be sampled using an MP-50 bladder pump due to the depths of the groundwater (around 50 ftbtoc). During sampling activities, MW-5 was pumped dry, and the recovery was poor. This is likely due to the dry season, and the well only had around 2 feet of water column as confirmed during gauging activities. TRC was only able to collect PFAS, Target Analyte List (TAL) Metals, and volatile organic compounds (VOCs) as a result of the poor recovery.

After completing the groundwater sampling on June 28, 2022, TRC demobilized from the site. The collected samples were stored on ice and submitted to Pace Analytical Laboratories in Newburgh, New York following standard chain of custody protocols. Thirteen groundwater samples were submitted for analysis using EPA method 8260C for Target Compound List (TCL) volatile organic compounds (VOCs), EPA method 8270 for TCL Semi-volatile Organic Compounds (SVOCs) plus 20 TICs, EPA method 8081 for TCL Pesticides, EPA method 8082 for TCL Polychlorinated biphenyl (PCBs), EPA method 6010 for Target Analyte List (TAL) Metals, and EPA Method 537 modified for full TAL PFAS. One sample (MW-5) was sampled for EPA method 8260C for Target Compound List (TCL) volatile organic compounds (VOCs), EPA method 6010 for Target Analyte List (TAL) Metals, and EPA Method 537 modified for full TAL PFAS due to the lack of groundwater volume. Additionally, TRC collected another full suite of sampling parameters for a Field Blank (FB-01), and an equipment blank (EB-01) was sampled for EPA Method 537 modified for full TAL PFAS.

PREPARED BY (OBSERVER):	**REVIEWED BY:**
PRINT NAME: Rich DePolo	**PRINT NAME:** Matt Hoskins

NYSDEC Mayer Landfill
Photograph Log
Dates: July 26 - 28, 2022

Photo 1: Photograph of MW-4DR after TRC installed a flag and cleared vegetation, facing south.

Photo 2: View of scrap metal pile near MW-6, facing northeast.

Photo 3: View of MW-7D and MW-7 after installation of a flag and clearing of vegetation, facing northwest.

Photo 4: View of drum and debris pile near the access road where the front gate is located, facing north.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
320919.0000 .0000	Rich DePolo	1 of 5	NYSDEC	Mayer Landfill Blooming Grove, NY	TRC

NYSDEC Mayer Landfill
Photograph Log
Dates: July 26 - 28, 2022

Photo 5: View of large debris pile (remnant of vehicle) on the northwestern side of the property, facing west.

Photo 6: View of MW-2 after the installation of a flag marker, facing northeast.

Photo 7: View of former EPA excavation area, filled in the with gravel/item 4. Facing north.

Photo 8: View of sampling activities at MW-4DR using low-flow methodology. Facing south.

NYSDEC Mayer Landfill
Photograph Log
Dates: July 26 - 28, 2022

Photo 9: View of sampling activities at MW-8, facing southeast.

Photo 10: View of sampling activities at BR-3, facing north.

Photo 11: View of sampling activities at MW-11, facing west.

Photo 12: Photograph of drums near the front gate of the Site, facing north.

NYSDEC Mayer Landfill
Photograph Log
Dates: July 26 - 28, 2022

Photo 13: Photograph of a drum located on the northeastern portion of the property, facing east.

Photo 14: Photograph of metal debris and a lumber pile near MW-4DR, facing north.

Photo 15: View of sampling activities at MW-5, facing northeast.

Photo 16: Photograph of the landfill area on the eastern-central portion of the Site. No evidence of stressed variation, or cap disruptions (i.e holes, depressions). Facing east.

NYSDEC Mayer Landfill
Photograph Log
Dates: July 26 - 28, 2022

Photo 17: View of sampling activities at BR-6, facing northeast.

Photo 18: Photograph of a trail from the access road, leading to MW-11 and BR-7. Observed to be one of the better-maintained trails on the property, facing southeast.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
320919.0000 .0000	Rich DePolo	5 of 5	NYSDEC	Mayer Landfill Blooming Grove, NY	TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer CF		LOCATION ID: MW-8	DATE: 7/26/22
PROJECT NUMBER: Bi2nd19-dddddddd		START TIME: 17:00	END TIME: 17:40
SAMPLE ID: ~~MW~~ MW-8	SAMPLE TIME: 17:35	SITE NAME/NUMBER: 336035	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☒ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	12.83 FT	FINAL DTW (BMP)	13.27 FT	PROT. CASING STICKUP (AGS)	2.0 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	20.91 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	0.1 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	8.08 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.5 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.33 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.75 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
~~17:00~~	13.01	200	25.27	0.001	6.60	7.42	118	119	30'	
17:10	13.10	200	25.18	0.001	6.44	7.52	9.2	81	30'	
17:15	13.18	200	24.98	0.001	6.42	7.21	4.9	48		
17:20	13.22	200	24.96	0.001	6.54	7.39	0.0	45		
17:25	13.25	200	24.97	0.002	6.51	7.31	0.7	42		
~~17:30~~										
17:30	13.27	200	24.99	0.003	6.57	7.30	1.2	40		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

24.99	0.003	6.57	7.30	1.2	40	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.606 = 0.606)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☒ PID
- ☒ WQ METER
- ☒ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NUMBER OF GALLONS GENERATED

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Some Blade color out of First purge
Collect MS/MSD

Sampler Signature: [signature] Print Name: Rich Rebuld

Checked By: Date: 7/27/22

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer LF		LOCATION ID: BR-7	DATE: 7/27/22
PROJECT NUMBER: 470744.0000.0004		START TIME: 14:25	END TIME: 15:25
SAMPLE ID: MS/MSD BR-7	SAMPLE TIME: 15:05	SITE NAME/NUMBER: 336035	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☒ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	14.14 FT	FINAL DTW (BMP)	18.07 FT	PROT. CASING STICKUP (AGS)	1.5 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	43.25 FT	SCREEN LENGTH	20 FT	PID AMBIENT AIR	0. PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	29.11 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.77 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	7.5 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING								48'	
14:25	14.15	200	24.47	0.147	7.96	1.33	18.7	159	48'	
14:30	14.25	200	13.50	0.185	7.76	1.68	14.3	166		
14:35	17.31	200	12.18	0.193	7.64	1.66	9.5	172		
14:40	17.61	150	11.92	0.189	7.44	1.53	5.2	186		
14:45	17.93	100	11.82	0.188	7.39	1.49	3.7	192		
14:50	18.01	100	12.03	0.179	7.29	1.47	2.5	207		
14:55	18.05	100	12.07	0.177	7.28	1.47	1.9	209		
15:00	18.07	100	12.09	0.177	7.22	1.46	0.8	211		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

12.09	0.177	7.22	1.46	0.8	211	

TEMP.: nearest degree (ex. 10.3 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.606 = 0.606)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☒ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

Sampler Signature:

Print Name: Rich Deklo

Checked By:

Date: 7/27/22

SKETCH/NOTES

- Slight Blockage in well around ~15'
- poor recovery

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Meyer LF		LOCATION ID: MW-70	DATE: 7/27/22
PROJECT NUMBER: 470744.0000.0004		START TIME: 11:00	END TIME: 11:40
SAMPLE ID: ~~MW~~ DUP MW-70	SAMPLE TIME: 11:35	SITE NAME/NUMBER: 336035	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☒ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒	☐	☐
CASING	☒	☐	☐
LOCKED	☒	☐	☐
COLLAR	☒	☐	☐

INITIAL DTW (BMP)	7.54 FT	FINAL DTW (BMP)	7.70 FT	PROT. CASING STICKUP (AGS)	2.0 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	24.50 FT	SCREEN LENGTH	15' FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	16.96 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.78 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.0 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
11:00	~~7.53~~ 7.53	200	20.23	0.395	7.13	0.56	0.0	177	35'	
11:05	7.54	200	20.08	0.393	7.12	0.41	0.0	177		
11:10	7.60	200	18.96	0.399	6.99	0.25	0.0	194		
11:15	7.61	200	18.93	0.402	6.89	0.20	0.0	190		
11:20	7.65	200	18.94	0.402	6.91	0.18	0.0	187		
11:25	7.67	200	19.01	0.398	6.98	0.17	0.0	182		
11:30	7.70	200	19.10	0.397	7.01	0.18	0.0	178		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	19.10	0.397	7.01	0.18	0.0	178

TEMP.: nearest degree (ex. 10.3 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.606 = 0.606)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 5.51 = 5.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☒ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Rich Duffala

Checked By: Date: 7/27/22

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer LF		LOCATION ID: ML-MW-4DR	DATE: 7/26/22
PROJECT NUMBER: 477744.04		START TIME: 14:50	END TIME: 15:35
SAMPLE ID: ~~MW-4DR~~ MW-4DR	SAMPLE TIME: 15:25	SITE NAME/NUMBER: 336035	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☒ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	28.91 FT	FINAL DTW (BMP)	29.16 FT	PROT. CASING STICKUP (AGS)	1.5 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	75.41 FT	SCREEN LENGTH	20' FT	PID AMBIENT AIR	0.1 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	46.50 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.5 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	7.62 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.25 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
14:50	28.62	200	21.75	0.309	8.19	8.71	0.0	52	80'	
14:55	28.71	200	16.26	0.317	7.96	9.21	0.0	124		
15:00	29.01	200	14.29	0.315	7.95	9.01	0.0	115		
15:05	29.10	200	14.04	0.313	7.90	8.95	0.0	121		
15:10	29.12	200	14.03	0.310	7.88	8.91	0.0	120		
15:15	29.14	200	14.01	0.311	7.86	8.81	0.0	119		
15:20	29.16	200	13.91	0.305	7.85	8.80	0.0	117		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	13.91	0.305	7.85	8.80	0.0	117

TEMP: nearest degree (ex. 10.3 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.606 = 0.606)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 5.51 = 5.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☒ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☒ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NUMBER OF GALLONS GENERATED

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

Sampler Signature: Print Name: Rich Dibit

Checked By: Date: 7/26/22

SKETCH/NOTES

Clear, low turbidity

Collect DUP-01

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill		LOCATION ID: MW-2	DATE: 7-27-22
PROJECT NUMBER: 470744.04		START TIME: 1710	END TIME: 1810
SAMPLE ID: MW-2	SAMPLE TIME: 1745	SITE NAME/NUMBER	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	4.60 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	68.95 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	64.35 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.4 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	~~0.00~~ GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.0 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
~~1710~~	BEGIN PURGING									
1720	5.66	250	18.45	0.253	8.15	12.49	0.0	176	40	
1725	5.73	250	14.88	0.259	8.18	13.62	0.0	178	40	
1730	5.77	250	14.79	0.259	8.11	13.39	0.0	185	40	
1735	5.80	250	14.40	0.258	8.12	13.27	0.0	187	40	
1740	5.80	250	19.63	0.259	8.08	13.28	0.0	186	40	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

15	0.259	8.1	13.3	0.0	190	

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☐ WL METER
- ☐ PID
- ☐ WQ METER
- ☐ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☐
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Taylor Shanley

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill	LOCATION ID: MW-5
PROJECT NUMBER: 470744.04	DATE: 7-28-22
SAMPLE ID: MW-5	SAMPLE TIME: 0800
START TIME: 0740	END TIME: 0830
SITE NAME/NUMBER:	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	10.52 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	13.30 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	2.78 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.45 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	0.50 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0740	BEGIN PURGING									
0750	11.72	200	18.56	0.320	7.27	14.24	82.5	107	10	Pump as low as
0755	12.45	200	16.23	0.330	7.27	3.82	84.1	109	10	we can get it.
0800	12.79	175	15.72	0.330	7.26	2.92	83.1	110	10	well dry. Sample.

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

16	0.330	7.3	3.0	83.1	110	

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☐ WL METER _____
- ☐ PID _____
- ☐ WQ METER _____
- ☐ TURB. METER _____
- ☐ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☐ YES ☐ NO — NUMBER OF GALLONS GENERATED

NO-PURGE METHOD UTILIZED: ☐ YES ☐ NO — If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

Sampler Signature:

Print Name: T. Shanley

Checked By:

Date:

SKETCH/NOTES

Only enough water to fill VOA vials, PFAS, and metals bottleware

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: SMPA Mayer LF	LOCATION ID: MW-6
PROJECT NUMBER: 470744.04	DATE: 7-26-22
SAMPLE ID: MW-6	SAMPLE TIME: 16:10
START TIME: 15:00	END TIME: 16:50
SITE NAME/NUMBER	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	11.66 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.41 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	7.75 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.1 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.27 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.25 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
~~15:00~~	BEGIN PURGING									
~~15:10~~	~~11~~									
15:00	Begin	purging								
15:15	12.59	250	30.96	0.350	7.90	2.80	54.3	50	18	
15:20	12.96	250	27.57	0.336	7.37	1.95	198	82	18	
15:25	Pump battery died									
15:35	Re-start purging with new pump batter									
1545	13.34	250	18.68	0.371	6.72	1.85	56.8	108	18	
15:50	13.42	250	20.08	0.356	6.70	1.69	61.3	107	18	
15:55	13.66	250	19.77	0.362	6.69	1.71	63.0	107	18	
16:00	13.70	250	19.54	0.365	6.70	1.68	62.2	106	18	
16:05	13.72	250	19.67	0.365	6.70	1.71	56.4	105	18	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	19.7	0.365	6.7	1.7	56.4	110

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☒ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☒ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: T. Shanley

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill	LOCATION ID: MW-7
PROJECT NUMBER: 470744.04	START TIME: 1050
SAMPLE ID: MW-7	SAMPLE TIME: 1135
SITE NAME/NUMBER:	PAGE: 1 OF

DATE: 7-27-22
END TIME: 1205

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER
TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER
MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP		X	
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	2.92 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	16.71 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	13.79 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.25 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.25 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1050	BEGIN PURGING									
1100	3.26	250	23.25	0.433	7.16	1.82	41.0	111	15	
1105	3.26	250	19.69	0.431	7.00	1.14	59.9	118	15	
1110	3.30	250	18.34	0.440	6.92	1.09	78.3	113	15	
1115	3.32	250	17.72	0.447	6.81	0.98	90.8	108	15	
1120	3.32	250	17.55	0.449	6.75	0.92	93.1	105	15	
1125	3.32	250	16.42	0.455	6.70	0.93	92.7	103	15	
1130	3.32	250	16.47	0.459	6.66	0.87	90.4	101	15	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

17	0.459	6.7	0.9	90.4	100	

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☒ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ _____ ☐ WATTERA ☐ OTHER _____ ☐ OTHER _____

DECON FLUIDS USED: ☒ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS: ☒ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☒ HDPE TUBING ☐ LDPE TUBING ☐ OTHER _____ ☐ OTHER _____

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER _____ ☐ OTHER _____ ☐ OTHER _____

EQUIPMENT USED: ☒ WL METER ☒ PID ☒ WQ METER ☐ TURB. METER ☒ PUMP ☐ OTHER _____ ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒
NO-PURGE METHOD UTILIZED: YES ☐ NO ☐
NUMBER OF GALLONS GENERATED
If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature:
Print Name: T. Shanley
Checked By:
Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill	LOCATION ID: MW-11
PROJECT NUMBER: 470744.04	DATE: 7.27.22
SAMPLE ID: MW-11	SAMPLE TIME: 1455
START TIME: 1415	END TIME: 1520
SITE NAME/NUMBER: 336027	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	10.15 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	21.71 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	11.56 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.90 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.50 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1415	BEGIN PURGING									
1425	11.12	250	23.61	0.049	6.74	2.51	35.7	152	20	
1430	11.39	250	20.96	0.052	6.01	2.31	45.9	161	20	
1435	11.43	250	19.46	0.052	5.75	2.49	69.7	170	20	
1440	11.58	250	19.58	0.048	5.63	2.27	77.8	176	20	
1445	11.65	250	19.80	0.047	5.57	2.29	77.0	183	20	
1450	11.72	250	18.66	0.048	5.51	2.42	75.2	186	20	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

19	0.048	5.5	2.4	75.2	190	

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER Sharing w/ Rich
- ☒ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☒ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name T. Shanley

Checked By: Date:

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

10 Maxwell Drive, Suite 200, Clifton Park, NY 12065

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill		LOCATION ID: MW-13	DATE: 7-27-22
PROJECT NUMBER: 470744.04		START TIME: 07:15	END TIME: 0900
SAMPLE ID: MW-13	SAMPLE TIME: 0820	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	11.70 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	18.25 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	6.55 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.1 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.07 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.0 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0715	BEGIN PURGING									
0725	12.75	250	12.17	0.192	7.28	5.58	61.2	108	17	
0730	13.00	250	11.87	0.154	6.56	3.40	52.8	127	17	
0735	13.26	250	11.87	0.179	6.37	2.44	46.3	123	17	
0740	13.48	250	11.90	0.207	6.34	1.92	44.6	115	17	
0745	13.68	250	11.86	0.219	6.32	1.68	44.1	106	17	
0750	13.72	250	11.68	0.248	6.32	1.51	44.3	97	17	
0755	13.84	250	11.61	0.266	6.32	1.60	44.7	97	17	
0800	14.00	250	11.64	0.301	6.36	1.30	44.2	89	17	
0805	14.14	250	11.66	0.310	6.36	1.21	44.8	83	17	
0810	14.23	250	11.59	0.320	6.38	1.13	45.9	76	17	
0815	14.29	250	11.60	0.319	6.39	1.09	45.8	73	17	
	FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])		12	0.319	6.4	1.1	45.8	73		

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☒ WL METER _____
- ☒ PID _____
- ☒ WQ METER _____
- ☐ TURB. METER _____
- ☒ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☒

NUMBER OF GALLONS GENERATED: 3.00

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature:

Print Name: T. Shanley

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill		LOCATION ID: BR-3	DATE: 7-27-22
PROJECT NUMBER: 470744.04		START TIME: 0915	END TIME: 1010
SAMPLE ID: BR-3	SAMPLE TIME: 0945	SITE NAME/NUMBER:	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	14.46 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	62.06 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	47.6 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	7.8 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0915	BEGIN PURGING									
0925	15.82	300	10.72	0.428	7.69	3.35	0.0	177	35	
0930	15.78	275	10.85	0.426	7.65	2.92	0.0	181	35	
0935	15.87	275	11.02	0.426	7.64	2.70	0.0	187	35	
0940	15.96	275	10.92	0.425	7.62	2.65	0.0	191	35	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

11	0.425	7.6	2.7	0	190	

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☒ WL METER _____
- ☒ PID _____
- ☒ WQ METER _____
- ☐ TURB METER _____
- ☒ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: T. Shanley

Checked By: Date:

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

10 Maxwell Drive, Suite 200, Clifton Park, NY 12065

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Mayer Landfill
PROJECT NUMBER	470744.04
SAMPLE ID	BR-5
SAMPLE TIME	1115

LOCATION ID	BR-5
DATE	7.28.22
START TIME	1040
END TIME	1145
SITE NAME/NUMBER	
PAGE	1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	54.54 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	92.28 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	37.7 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	6.20 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1040	BEGIN PURGING									
1050		50	13.34	0.296	11.00	11.33	75.5	68	70	WL meter
1055		50	12.80	0.293	10.93	6.38	76.6	40	70	caught on
10[illegible]										tubing.
1100			12.04	0.298	10.92	4.93	77.4	42	70	
1105			11.96	0.298	10.88	4.29	76.6	46	70	
1110			12.01	0.296	10.69	4.02	86.4	40	70	
1115	51.20									

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☒ SUBMERSIBLE
- ☒ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☒ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: T. Shanley

Checked By: Date:

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill		LOCATION ID: BR-6	DATE: 7.28.22
PROJECT NUMBER: 470744.04		START TIME: 0920	END TIME: 1030
SAMPLE ID: BR-6	SAMPLE TIME: 1000	SITE NAME/NUMBER:	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	Y		
LOCKED	Y		
COLLAR	N		

INITIAL DTW (BMP)	48.65 FT	FINAL DTW (BMP)	52.17 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	86.54 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	37.89 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	6.21 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0920	BEGIN PURGING									
0930	51.0	40	13.49	1.44	11.95	2.22	53.0	155	65	
0935		40	14.71	1.39	11.93	1.72	48.6	168	65	WL meter caught
0940		40	15.23	1.42	11.96	1.82	49.9	172	65	on tubing.
0945		40	16.17	1.43	11.91	2.03	54.3	167	65	
0950		40	16.91	1.42	11.86	2.18	54.9	164	65	
0955	52.17	40	17.61	1.42	11.85	2.38	53.0	161	65	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

18	1.42	11.9	2.3	53.0	160	

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☒ SUBMERSIBLE BLADDER 1.75" QEOPro bladder
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☒ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

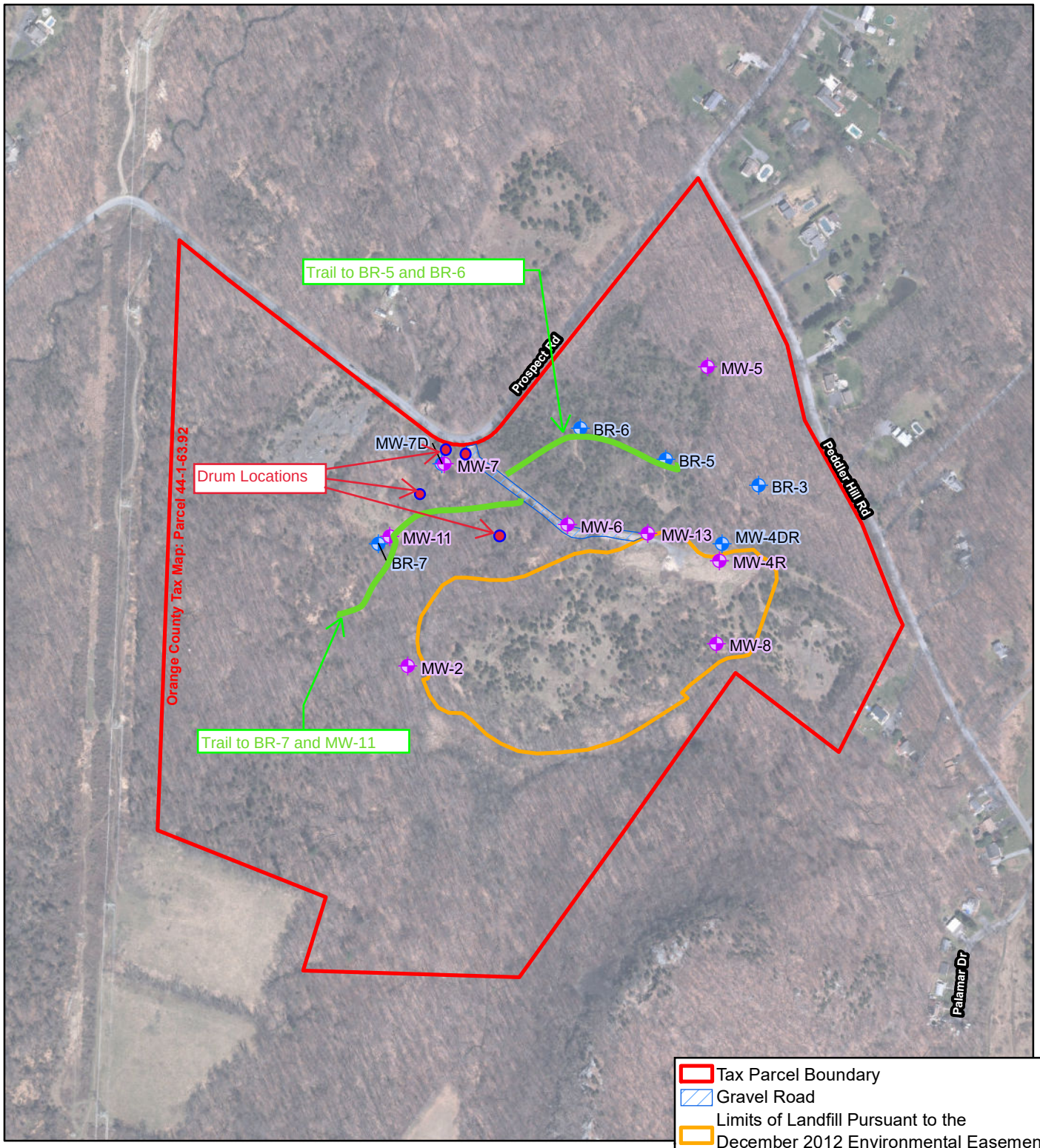
NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: T. Shanley

Checked By: Date:



BASE MAP FROM ESRI

1 " = 500 '
1:6,000

0 200 400
FEET

- Tax Parcel Boundary
- Gravel Road
- Limits of Landfill Pursuant to the December 2012 Environmental Easement
- Bedrock Monitoring Well Location
- Overburden Monitoring Well Location

Note: All locations and boundaries are approximate

TRC
10 Maxwell Drive, Suite 200
Clifton Park, NY 12065
Phone: 518.348.1190
www.trccompanies.com

PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
MAYER LANDFILL SITE - SITE NO. 336027
TOWN OF BLOOMING GROVE, NEW YORK

TITLE:

SITE LAYOUT MAP

DRAWN BY:	M. OPEL
CHECKED BY:	J. KING
APPROVED BY:	N. KRANES
DATE:	FEBRUARY 2020
PROJ. NO.:	320919.0000
FILE:	Fig02_SiteLayout.mxd

FIGURE 2

S:\1-PROJECTS\NYSDEC\320919_MayerLandfill\Fig02_SiteLayout.mxd -- Saved By: SMAJOR on 11/22/2019, 13:39:11 PM

TRC		**DATE: Thursday, February 9, 2023**
		REPORT NO. 20230209
		PAGE NO. 1 OF 2
		PROJECT NO. 470744.0000.0004
		LOGBOOK NO. 550F PAGES 27 to 29

DAILY FIELD ACTIVITY REPORT

PROJECT Mayer Landfill

LOCATION 94 Peddler Hill Road, Monroe, NY

ATTACHMENTS Photo Log

WEATHER	TIME	TEMP.	PRECIP.	WIND (MPH)	WIND (DIR)
Clouds, Rain	1030	38°F	None	0-5	ENE
Clouds, Rain	1115	38°F	None	0-5	ENE

SITE CONDITIONS: Clouds, Rain

WORK GOAL FOR DAY: Residential potable water sampling

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Rich DePolo	TRC Engineers, Inc.	10:30	11:15
Taylor Shanley	TRC Engineers, Inc.	10:30	11:15

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL
Water Quality Meter	Horiba U-52	Not Applicable	Not Applicable

HEALTH & SAFETY:

PPE REQUIRED: ☒ LEVEL D ☐ LEVEL C ☐ LEVEL B ☐ LEVEL A **HASP?** YES

SITE SAFETY OFFICER: Rich DePolo

H & S NOTES: Site work performed in Level D PPE

TRC		**DATE: Thursday, February 9, 2023**
		REPORT NO. 20230209
		PAGE NO. 2 OF 2
		PROJECT NO. 470744.0000.0004

DAILY FIELD ACTIVITY REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

TRC Engineers, Inc. (TRC) arrived at 94 Peddler Hill Road, Monroe, NY, adjacent to the Mayer Landfill Site (Site) to conduct a potable water sampling event on February 9, 2023. The water samples were collected at the request of the property owner.

Prior to sampling the potable well from the kitchen sink, the tap was run for at least 5 minutes, and water quality parameters were monitored using a Horiba U-52 monitor. The sample was then collected directly from the kitchen tap, along with all QA/QC sample requirements. The tap was considered an acceptable conduit to sample as the residence did not have any water treatment/filtration system present and therefore the sample was representative of potable well conditions.

After completing the residential potable water sampling on February 9, 2023, TRC demobilized from the site and submitted the samples to the Pace Analytical Laboratories Service Center in Rotterdam, New York on ice. The potable water sample was submitted for analysis using EPA Method 537 modified for full TAL PFAS.

PREPARED BY (OBSERVER):	**REVIEWED BY:**
PRINT NAME: Rich DePolo	**PRINT NAME:** Matt Hoskins

NYSDEC Mayer Landfill (94 Peddler Hill Road)
Photograph Log
Date: February 9, 2023

Photo 1: Photograph of an old/not in use well located in the front yard of 94 Peddler Hill Road, casing was rusted and well was in poor condition. Facing southeast.

Photo 2: View of the current/in-use potable well in the front yard of 94 Peddler Hill Road, facing south.

Photo 3: Photograph of the sampling location (kitchen sink), during water quality parameter monitoring prior to sampling within the 94 Peddler Hill Road residence.

Photo 4: View of potable water sampling, directly from the kitchen tap.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
470744.0000 .0004	Rich DePolo	1 of 1	NYSDEC	Mayer Landfill (94 Peddler Hill Road) Monroe, NY	TRC

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contract No.

DEC Insp. – N/A

DEC PM – Robert Strang

Contractor Supt. – N/A

Engineer PM – Matthew Hoskins

Engineer Insp. – Rich DePolo & Taylor Shanley

Site Location: Mayer Landfill, Blooming Grove, New York

Weather Conditions

General Description	Sunny, Clear	AM	N/A	PM
Temperature	80°F	AM	N/A	PM
Wind	0-5 mph N	AM	N/A	PM

Health & Safety
If any box below is checked "Yes", provide explanation under "Health & Safety Comments".

Were there any changes to the Health & Safety Plan?	*Yes	No	NA X
Were there any exceedances of the perimeter air monitoring reported on this date?	*Yes	No	NA X
Were there any nuisance issues reported/observed on this date?	*Yes	No	NA X

Health & Safety Comments

Site work performed in Level D PPE.

Summary of Work Performed	Arrived at site:	10:30	Departed Site:	**13:30**

TRC Engineers, Inc. (TRC) performed a severe weather inspection and attempted product recovery from monitoring well MW-4R on July 20, 2023 at the Mayer Landfill site (Site) located on Prospect Road in Blooming Grove, New York. The objective of the Site inspection was to document conditions of the engineering controls (monitoring well network, gated access road, and cover system) after severe weather events and to attempt product recovery from monitoring well MW-4R. All Site work was performed in accordance with the Site Management Plan (SMP) dated April 2015.

The Site inspection included performing a visual inspection of the monitoring well network. All fourteen monitoring wells (MW-11, BR-7, MW-4R, MW-4DR, BR-3, BR-5, BR-6, MW-13, MW-8, MW-6, MW-7, MW-7D, MW-2 and MW-5) were located and observed in good condition, except for MW-4R which contained product as noted in prior inspection reports. Orange surveying tape to flag paths to the wells, high visibility fiberglass markers, and orange paint were observed at each well. It is recommended that the flags/markers be inspected and replaced every inspection and sampling event as appropriate.

As noted above, product has been observed in monitoring well MW-4R preventing sample collection. Product was observed on the top of the polyvinyl chloride (PVC) riser and on the walls of the riser, suggesting that vandalism may have occurred. While on-Site, TRC attempted product recovery using high-density polyethylene (HDPE) bailers. Due to recent heavy rains, a high water level was encountered in the well. TRC purged approximately seven gallons of water from the well before encountering product. A sheen was not observed on the surface of the purged water. At least six inches of viscous product was encountered in the bottom of the well (at approximately 19.5 feet below ground surface). TRC was unable to collect product with a bailer due to the viscosity. TRC recommends that the product be removed with a vactor truck. All purged water was containerized in a steel, 55-gallon drum and was staged on-Site beside the well. Used bailers, rags, and nitrile gloves were double bagged using heavy duty contractor bags and staged on-Site beside the drum. Transport and off-Site disposal will be arranged following complete product recovery.

The Site inspection also included performing a visual inspection of the gated access road and cover system. The access gate was observed in good condition and was locked upon arrival and departure. To access the Site, field staff contacted the property owner, William Mayer. The lock installed by TRC field staff in 2022 had been removed and replaced with a lock by the property owner (access code 7878). Field staff encountered a shipping container blocking the access road and informed the property owner that it must be promptly removed. During the Site walk, the cover system was observed in good condition with no signs of erosion, cracks, settlement, or seeps. Multiple hunting tree stands were encountered across the Site. Additionally, TRC noted that two drums previously observed in the northeastern portion of the Site (near MW-11, BR-7, and the access gate) had been removed. According to prior reports, the drums were empty.

Overall, the engineering controls were observed in good condition and were not compromised during recent severe weather events.

Equipment/Material Tracking **If any box below is checked "Yes", provide explanation under "Material Tracking Comments".**			
Were there any vehicles which did not display proper D.O.T numbers and placards?	*Yes	No	NA X
Were there any vehicles which were not tarped?	* Yes	No	NA X
Were there any vehicles which were not decontaminated prior to exiting the work site?	* Yes	No	NA X

Personnel and Equipment

Individual	Company	Trade	Total Hours
Rich DePolo	TRC Engineers, Inc.	Geologist	3
Taylor Shanley	TRC Engineers, Inc.	Engineer	3

Equipment Description	Contractor/Vendor	Quantity	Used
HDPE Bailers	Pine Environmental	4	2

Material Description	Imported/ Delivered to Site	Exported off Site	Waste Profile (If Applicable)	Source or Disposal Facility (If Applicable)	Daily Loads	Daily Weight (tons)*

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

One drum with approximately seven gallons of purge water from MW-4R and a contractor bag with used bailers, rags, and nitrile gloves is currently staged on-Site near MW-4R for disposal.

Visitors to Site

Name	Representing	Entered Exclusion/CRZ Zone	
		Yes	No
		Yes	No
		Yes	No
		Yes	No
		Yes	No
		Yes	No
		Yes	No
		Yes	No
		Yes	No

Site Representatives

Name	Representing

Project Schedule Comments
A contractor to remove product from MW-4R with a vactor truck will be scheduled upon NYSDEC-approval.
Issues Pending
Product recovery from MW-4R, and disposal of purge water and solids pending.
Interaction with Public, Property Owners, Media, etc.
William Mayer (property owner) arrived at the Site to unlock the entrance gate for field staff. The lock previously installed by TRC field staff was removed and replaced with the property owner's lock. The access code is 7878.

Include (insert) figures with markups showing location of work and job progress

Site Photographs (Descriptions Below)

Photo 1: View of the access gate and storage container, facing south.

Photo 2: View of easement area in central portion of the Site, facing west.

Photo 3: View of monitoring well MW-6, facing northeast.

Photo 4: View of monitoring well MW-8, facing south.

Photo 5: View of monitoring well BR-3, facing northeast.

Photo 6: View of tree stand in eastern portion of the Site, facing north.

Photo 7: View of bailer after being remove from MW-4R.

Photo 8: View of MW-4R top of riser.

Photo 9: View of viscous product from the bottom of MW-4R on measuring tape.

Photo 10: View of staging area with labeled drum and contractor bag near MW-4R.

Comments

Site Inspector(s): Rich DePolo, Taylor Shanley

Date: 7/20/2023

REMEDIAL ACTIVITIES AT PROPERTIES

On-Site Waste Storage

Drums, roll offs and piles are staged in secure areas?	Yes ☒	No ☐	N/A☐
Liners and berms have been installed if necessary to prevent cross contamination of clean areas?	Yes ☐	No ☒	N/A☐
Containers are in good condition or properly overpacked?	Yes ☐	No ☐	N/A☒
Waste materials are scheduled to be properly characterized and disposed of prior to demobilization?	Yes ☐	No ☒	N/A☐
Complying with RCRA 90 day storage limitation for hazardous waste?	Yes ☒	No ☐	N/A☐
Piles are securely covered when not in use?	Yes ☐	No ☐	N/A☒
Containers are closed when not in use?	Yes ☒	No ☐	N/A☐
Staging areas should be inspected periodically and any issues addressed immediately?	Yes ☒	No ☐	N/A☐
Signage and labeling comply with RCRA requirements for all staging areas and containers?	Yes ☒	No ☐	N/A☐
If any issues noted, has Contractor been notified?	Yes ☐	No ☐	N/A☒
Comments:			

NUISANCE CHECKLIST

Were there any community complaints related to work on this date?	Yes ☐	No ☐	N/A☒
Were there any odors detected on this date?	Yes ☐	No ☐	N/A☒
Was noise outside specification and/or above background on this date?	Yes ☐	No ☐	N/A☒
Were vibration readings outside specification and/or above background on this date?	Yes ☐	No ☐	N/A☒
Any visible dust observed beyond the work perimeter on this date?	Yes ☐	No ☐	N/A☒
Any visible contrast (turbidity) beyond engineering controls observed on this date?	Yes ☐	No ☐	N/A☒
Was turbidity checked at the outfall(s)?	AM ☐	PM ☐	N/A☒
Were any property owners NOT provided advance notice for work performed on this property on this date?	Yes ☐	No ☐	N/A☒
Was the temporary fabric structure closed at the end of the day?	Yes ☐	No ☐	N/A☒
Has Contractor failed to protect all foundations and structures adjacent to and adjoining the site which are affected by the excavations or other operations connected with performance of the Work?	Yes ☐	No ☐	N/A☒

If yes, has Contractor been notified?	Yes ☐	No ☐	N/A☒
Comments:			

RESILIENCE/GREEN REMEDIATION CHECKLIST

Is site power procured from renewable energy sources (e.g., solar, wind, geothermal, biomass and biogas)?	Yes ☐	No ☐	N/A☒
Is the Contractor employing 2007 or newer or retrofitted (BART*) diesel on-road trucks and non-road equipment?	Yes ☐	No ☐	N/A☒
Is vehicle idling adequately reduced per 6NYCRR Part 217-3?	Yes ☐	No ☐	N/A☒
Have equipment operators been trained in the idling requirements of 6NYCRR Part 217-3?	Yes ☐	No ☐	N/A☒
Is BART-equipped equipment properly maintained and working?	Yes ☐	No ☐	N/A☒
Is work being sequenced to avoid double handling?	Yes ☐	No ☐	N/A☒
Is there an onsite recycling program for CONTRACTOR-generated wastes and is it complied with?	Yes ☐	No ☐	N/A☒
Are office trailer heating and cooling systems maintained at efficient set points, have programable thermostats been installed?	Yes ☐	No ☐	N/A☒
Are products and materials used in performance of the work appropriately certified (e.g., LEED, Energy Star, Sustainable Forestry Initiative®, etc.)?	Yes ☐	No ☐	N/A☒
Are resiliency features included in the design, or completed remedy properly installed and/or maintained (flood control, storm water controls, erosion measures, etc.)?	Yes ☐	No ☐	N/A☒
Are green remediation elements included in the design, or completed remedy properly installed and/or maintained (e.g., porous pavement, geothermal, variable speed drives, native plantings, natural stream bank restoration, etc.)?	Yes ☐	No ☐	N/A☒
	Yes ☐	No ☐	N/A☒
Has Contractor been notified of any deficiencies?	Yes ☐	No ☐	N/A☒
Comments:			

* BART – Best Available Retrofit Technology

APPENDIX E

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer CF		LOCATION ID: MW-8	DATE: 7/26/22
PROJECT NUMBER: Bi2nd19-dddddddd		START TIME: 17:00	END TIME: 17:40
SAMPLE ID: ~~MW~~ MW-8	SAMPLE TIME: 17:35	SITE NAME/NUMBER: 336035	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☒ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	12.83 FT	FINAL DTW (BMP)	13.27 FT	PROT. CASING STICKUP (AGS)	2.0 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	20.91 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	0.1 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	8.08 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.5 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.33 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.75 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
~~17:00~~	13.01	200	25.27	0.001	6.60	7.42	118	119	30'	
17:10	13.10	200	25.18	0.001	6.44	7.52	9.2	81	30'	
17:15	13.18	200	24.98	0.001	6.42	7.21	4.9	48		
17:20	13.22	200	24.96	0.001	6.54	7.39	0.0	45		
17:25	13.25	200	24.97	0.002	6.51	7.31	0.7	42		
~~17:30~~										
17:30	13.27	200	24.99	0.003	6.57	7.30	1.2	40		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

24.99	0.003	6.57	7.30	1.2	40	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.606 = 0.606)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☒ PID
- ☒ WQ METER
- ☒ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NUMBER OF GALLONS GENERATED

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Some Blade color out of First purge
Collect MS/MSD

Sampler Signature: [signature] Print Name: Rich Rebuld

Checked By: Date: 7/27/22

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer LF		LOCATION ID: BR-7	DATE: 7/27/22
PROJECT NUMBER: 470744.0000.0004		START TIME: 14:25	END TIME: 15:25
SAMPLE ID: MS/MSD BR-7	SAMPLE TIME: 15:05	SITE NAME/NUMBER: 336035	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☒ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	14.14 FT	FINAL DTW (BMP)	18.07 FT	PROT. CASING STICKUP (AGS)	1.5 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	43.25 FT	SCREEN LENGTH	20 FT	PID AMBIENT AIR	0. PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	29.11 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.77 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	7.5 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING								48'	
14:25	14.15	200	24.47	0.147	7.96	1.33	18.7	159	48'	
14:30	14.25	200	13.50	0.185	7.76	1.68	14.3	166		
14:35	17.31	200	12.18	0.193	7.64	1.66	9.5	172		
14:40	17.61	150	11.92	0.189	7.44	1.53	5.2	186		
14:45	17.93	100	11.82	0.188	7.39	1.49	3.7	192		
14:50	18.01	100	12.03	0.179	7.29	1.47	2.5	207		
14:55	18.05	100	12.07	0.177	7.28	1.47	1.9	209		
15:00	18.07	100	12.09	0.177	7.22	1.46	0.8	211		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

12.09	0.177	7.22	1.46	0.8	211	

TEMP.: nearest degree (ex. 10.3 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.606 = 0.606)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☒ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

Sampler Signature:

Print Name: Rich Deklo

Checked By:

Date: 7/27/22

SKETCH/NOTES

- Slight Blockage in well around ~15'
- poor recovery

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Meyer LF		LOCATION ID: MW-70	DATE: 7/27/22
PROJECT NUMBER: 470744.0000.0004		START TIME: 11:00	END TIME: 11:40
SAMPLE ID: ~~MW~~ DUP MW-70	SAMPLE TIME: 11:35	SITE NAME/NUMBER: 336035	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☒ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒	☐	☐
CASING	☒	☐	☐
LOCKED	☒	☐	☐
COLLAR	☒	☐	☐

INITIAL DTW (BMP)	7.54 FT	FINAL DTW (BMP)	7.70 FT	PROT. CASING STICKUP (AGS)	2.0 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	24.50 FT	SCREEN LENGTH	15' FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	16.96 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.78 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.0 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
11:00	~~7.53~~ 7.53	200	20.23	0.395	7.13	0.56	0.0	177	35'	
11:05	7.54	200	20.08	0.393	7.12	0.41	0.0	177		
11:10	7.60	200	18.96	0.399	6.99	0.25	0.0	194		
11:15	7.61	200	18.93	0.402	6.89	0.20	0.0	190		
11:20	7.65	200	18.94	0.402	6.91	0.18	0.0	187		
11:25	7.67	200	19.01	0.398	6.98	0.17	0.0	182		
11:30	7.70	200	19.10	0.397	7.01	0.18	0.0	178		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	19.10	0.397	7.01	0.18	0.0	178

TEMP.: nearest degree (ex. 10.3 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.606 = 0.606)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 5.51 = 5.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☒ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Rich Duffala

Checked By: Date: 7/27/22

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer LF		LOCATION ID: ML-MW-4DR	DATE: 7/26/22
PROJECT NUMBER: 477744.04		START TIME: 14:50	END TIME: 15:35
SAMPLE ID: ~~MW-4DR~~ MW-4DR	SAMPLE TIME: 15:25	SITE NAME/NUMBER: 336035	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☒ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	28.91 FT	FINAL DTW (BMP)	29.16 FT	PROT. CASING STICKUP (AGS)	1.5 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	75.41 FT	SCREEN LENGTH	20' FT	PID AMBIENT AIR	0.1 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	46.50 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.5 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	7.62 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.25 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
14:50	28.62	200	21.75	0.309	8.19	8.71	0.0	52	80'	
14:55	28.71	200	16.26	0.317	7.96	9.21	0.0	124		
15:00	29.01	200	14.29	0.315	7.95	9.01	0.0	115		
15:05	29.10	200	14.04	0.313	7.90	8.95	0.0	121		
15:10	29.12	200	14.03	0.310	7.88	8.91	0.0	120		
15:15	29.14	200	14.01	0.311	7.86	8.81	0.0	119		
15:20	29.16	200	13.91	0.305	7.85	8.80	0.0	117		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	13.91	0.305	7.85	8.80	0.0	117

TEMP: nearest degree (ex. 10.3 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.606 = 0.606)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 5.51 = 5.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☒ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☒ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NUMBER OF GALLONS GENERATED

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

Sampler Signature: Print Name: Rich Dibit

Checked By: Date: 7/26/22

SKETCH/NOTES

Clear, low turbidity

Collect DUP-01

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill		LOCATION ID: MW-2	DATE: 7-27-22
PROJECT NUMBER: 470744.04		START TIME: 1710	END TIME: 1810
SAMPLE ID: MW-2	SAMPLE TIME: 1745	SITE NAME/NUMBER	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	4.60 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	68.95 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	64.35 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.4 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	~~0.00~~ GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.0 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
~~1710~~	BEGIN PURGING									
1720	5.66	250	18.45	0.253	8.15	12.49	0.0	176	40	
1725	5.73	250	14.88	0.259	8.18	13.62	0.0	178	40	
1730	5.77	250	14.79	0.259	8.11	13.39	0.0	185	40	
1735	5.80	250	14.40	0.258	8.12	13.27	0.0	187	40	
1740	5.80	250	19.63	0.259	8.08	13.28	0.0	186	40	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

15	0.259	8.1	13.3	0.0	190	

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☐ WL METER
- ☐ PID
- ☐ WQ METER
- ☐ TURB. METER
- ☐ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☐
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Taylor Shanley

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill	LOCATION ID: MW-5
PROJECT NUMBER: 470744.04	DATE: 7-28-22
SAMPLE ID: MW-5	SAMPLE TIME: 0800
START TIME: 0740	END TIME: 0830
SITE NAME/NUMBER:	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	10.52 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	13.30 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	2.78 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.45 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	0.50 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0740	BEGIN PURGING									
0750	11.72	200	18.56	0.320	7.27	14.24	82.5	107	10	Pump as low as
0755	12.45	200	16.23	0.330	7.27	3.82	84.1	109	10	we can get it.
0800	12.79	175	15.72	0.330	7.26	2.92	83.1	110	10	well dry. Sample.

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

16	0.330	7.3	3.0	83.1	110	

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☐ WL METER _____
- ☐ PID _____
- ☐ WQ METER _____
- ☐ TURB. METER _____
- ☐ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☐ YES ☐ NO — NUMBER OF GALLONS GENERATED

NO-PURGE METHOD UTILIZED: ☐ YES ☐ NO — If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

Sampler Signature:

Print Name: T. Shanley

Checked By:

Date:

SKETCH/NOTES

Only enough water to fill VOA vials, PFAS, and metals bottleware

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: SMPA Mayer LF	LOCATION ID: MW-6
PROJECT NUMBER: 470744.04	DATE: 7-26-22
SAMPLE ID: MW-6	SAMPLE TIME: 16:10
START TIME: 15:00	END TIME: 16:50
SITE NAME/NUMBER	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	11.66 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.41 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	7.75 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.1 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.27 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.25 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
~~15:00~~	BEGIN PURGING									
~~15:10~~	~~11~~									
15:00	Begin	purging								
15:15	12.59	250	30.96	0.350	7.90	2.80	54.3	50	18	
15:20	12.96	250	27.57	0.336	7.37	1.95	198	82	18	
15:25	Pump battery died									
15:35	Re-start purging with new pump batter									
1545	13.34	250	18.68	0.371	6.72	1.85	56.8	108	18	
15:50	13.42	250	20.08	0.356	6.70	1.69	61.3	107	18	
15:55	13.66	250	19.77	0.362	6.69	1.71	63.0	107	18	
16:00	13.70	250	19.54	0.365	6.70	1.68	62.2	106	18	
16:05	13.72	250	19.67	0.365	6.70	1.71	56.4	105	18	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	19.7	0.365	6.7	1.7	56.4	110

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☒ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☒ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: T. Shanley

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill	LOCATION ID: MW-7
PROJECT NUMBER: 470744.04	START TIME: 1050
SAMPLE ID: MW-7	SAMPLE TIME: 1135
SITE NAME/NUMBER:	PAGE: 1 OF

DATE: 7-27-22
END TIME: 1205

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER
TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER
MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP		X	
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	2.92 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	16.71 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	13.79 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.25 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.25 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1050	BEGIN PURGING									
1100	3.26	250	23.25	0.433	7.16	1.82	41.0	111	15	
1105	3.26	250	19.69	0.431	7.00	1.14	59.9	118	15	
1110	3.30	250	18.34	0.440	6.92	1.09	78.3	113	15	
1115	3.32	250	17.72	0.447	6.81	0.98	90.8	108	15	
1120	3.32	250	17.55	0.449	6.75	0.92	93.1	105	15	
1125	3.32	250	16.42	0.455	6.70	0.93	92.7	103	15	
1130	3.32	250	16.47	0.459	6.66	0.87	90.4	101	15	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

17	0.459	6.7	0.9	90.4	100	

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☒ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ _____ ☐ WATTERA ☐ OTHER _____ ☐ OTHER _____

DECON FLUIDS USED: ☒ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS: ☒ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☒ HDPE TUBING ☐ LDPE TUBING ☐ OTHER _____ ☐ OTHER _____

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER _____ ☐ OTHER _____ ☐ OTHER _____

EQUIPMENT USED: ☒ WL METER ☒ PID ☒ WQ METER ☐ TURB. METER ☒ PUMP ☐ OTHER _____ ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒
NO-PURGE METHOD UTILIZED: YES ☐ NO ☐
NUMBER OF GALLONS GENERATED
If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature:
Print Name: T. Shanley
Checked By:
Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill	LOCATION ID: MW-11
PROJECT NUMBER: 470744.04	DATE: 7.27.22
SAMPLE ID: MW-11	SAMPLE TIME: 1455
START TIME: 1415	END TIME: 1520
SITE NAME/NUMBER: 336027	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	10.15 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	21.71 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	11.56 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.90 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.50 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1415	BEGIN PURGING									
1425	11.12	250	23.61	0.049	6.74	2.51	35.7	152	20	
1430	11.39	250	20.96	0.052	6.01	2.31	45.9	161	20	
1435	11.43	250	19.46	0.052	5.75	2.49	69.7	170	20	
1440	11.58	250	19.58	0.048	5.63	2.27	77.8	176	20	
1445	11.65	250	19.80	0.047	5.57	2.29	77.0	183	20	
1450	11.72	250	18.66	0.048	5.51	2.42	75.2	186	20	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

19	0.048	5.5	2.4	75.2	190	

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER Sharing w/ Rich
- ☒ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☒ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name T. Shanley

Checked By: Date:

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

10 Maxwell Drive, Suite 200, Clifton Park, NY 12065

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill		LOCATION ID: MW-13	DATE: 7-27-22
PROJECT NUMBER: 470744.04		START TIME: 07:15	END TIME: 0900
SAMPLE ID: MW-13	SAMPLE TIME: 0820	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	11.70 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	18.25 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	6.55 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.1 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.07 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.0 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0715	BEGIN PURGING									
0725	12.75	250	12.17	0.192	7.28	5.58	61.2	108	17	
0730	13.00	250	11.87	0.154	6.56	3.40	52.8	127	17	
0735	13.26	250	11.87	0.179	6.37	2.44	46.3	123	17	
0740	13.48	250	11.90	0.207	6.34	1.92	44.6	115	17	
0745	13.68	250	11.86	0.219	6.32	1.68	44.1	106	17	
0750	13.72	250	11.68	0.248	6.32	1.51	44.3	97	17	
0755	13.84	250	11.61	0.266	6.32	1.60	44.7	97	17	
0800	14.00	250	11.64	0.301	6.36	1.30	44.2	89	17	
0805	14.14	250	11.66	0.310	6.36	1.21	44.8	83	17	
0810	14.23	250	11.59	0.320	6.38	1.13	45.9	76	17	
0815	14.29	250	11.60	0.319	6.39	1.09	45.8	73	17	
	FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])		12	0.319	6.4	1.1	45.8	73		

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☒ WL METER _____
- ☒ PID _____
- ☒ WQ METER _____
- ☐ TURB. METER _____
- ☒ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☒

NUMBER OF GALLONS GENERATED: 3.00

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature:

Print Name: T. Shanley

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill		LOCATION ID: BR-3	DATE: 7-27-22
PROJECT NUMBER: 470744.04		START TIME: 0915	END TIME: 1010
SAMPLE ID: BR-3	SAMPLE TIME: 0945	SITE NAME/NUMBER:	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	14.46 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	62.06 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	47.6 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	7.8 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0915	BEGIN PURGING									
0925	15.82	300	10.72	0.428	7.69	3.35	0.0	177	35	
0930	15.78	275	10.85	0.426	7.65	2.92	0.0	181	35	
0935	15.87	275	11.02	0.426	7.64	2.70	0.0	187	35	
0940	15.96	275	10.92	0.425	7.62	2.65	0.0	191	35	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

11	0.425	7.6	2.7	0	190	

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☒ WL METER _____
- ☒ PID _____
- ☒ WQ METER _____
- ☐ TURB METER _____
- ☒ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: T. Shanley

Checked By: Date:

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

10 Maxwell Drive, Suite 200, Clifton Park, NY 12065

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Mayer Landfill
PROJECT NUMBER	470744.04
SAMPLE ID	BR-5
SAMPLE TIME	1115

LOCATION ID	BR-5
DATE	7.28.22
START TIME	1040
END TIME	1145
SITE NAME/NUMBER	
PAGE	1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED	☒		
COLLAR	☒		

INITIAL DTW (BMP)	54.54 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	92.28 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	37.7 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	6.20 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1040	BEGIN PURGING									
1050		50	13.34	0.296	11.00	11.33	75.5	68	70	WL meter
1055		50	12.80	0.293	10.93	6.38	76.6	40	70	caught on
10[illegible]										tubing.
1100			12.04	0.298	10.92	4.93	77.4	42	70	
1105			11.96	0.298	10.88	4.29	76.6	46	70	
1110			12.01	0.296	10.69	4.02	86.4	40	70	
1115	51.20									

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☒ SUBMERSIBLE
- ☒ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☒ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: T. Shanley

Checked By: Date:

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mayer Landfill		LOCATION ID: BR-6	DATE: 7.28.22
PROJECT NUMBER: 470744.04		START TIME: 0920	END TIME: 1030
SAMPLE ID: BR-6	SAMPLE TIME: 1000	SITE NAME/NUMBER:	PAGE: 1 OF

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	Y		
LOCKED	Y		
COLLAR	N		

INITIAL DTW (BMP)	48.65 FT	FINAL DTW (BMP)	52.17 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	86.54 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	0.0 PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	37.89 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	0.0 PPM	DISCHARGE TIMER SETTING	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	6.21 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0920	BEGIN PURGING									
0930	51.0	40	13.49	1.44	11.95	2.22	53.0	155	65	
0935		40	14.71	1.39	11.93	1.72	48.6	168	65	WL meter caught
0940		40	15.23	1.42	11.96	1.82	49.9	172	65	on tubing.
0945		40	16.17	1.43	11.91	2.03	54.3	167	65	
0950		40	16.91	1.42	11.86	2.18	54.9	164	65	
0955	52.17	40	17.61	1.42	11.85	2.38	53.0	161	65	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

18	1.42	11.9	2.3	53.0	160	

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☒ SUBMERSIBLE BLADDER 1.75" QEOPro bladder
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER
- ☐ PID
- ☒ WQ METER
- ☐ TURB. METER
- ☒ PUMP
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	See Chain of Custody							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☐

NUMBER OF GALLONS GENERATED

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: T. Shanley

Checked By: Date:

APPENDIX F

Data Usability Summary Report

Site: Mayer Landfill
Laboratory: Eurofins TestAmerica Buffalo – Amherst, NY and Burlington, VT
SDG No.: 480-172890-1
Parameters: Per- and Poly-fluoroalkyl Substances (PFAS), 1,4-Dioxane
Data Reviewer: Kristen Morin/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: August 17, 2020

Samples Reviewed and Evaluation Summary

12 Residential Well Samples: ML-WP-RES-1, ML-WP-RES-2, ML-WP-RES-3, ML-WP-RES-4, ML-WP-RES-5, ML-WP-RES-6, ML-WP-RES-7, ML-WP-RES-8, ML-WP-RES-9, ML-WP-RES-10, ML-WP-RES-11, ML-WP-RES-12

The above-listed residential well samples were collected on July 20 and 21, 2020 and were analyzed for the following parameters:

- 1,4-Dioxane by SW-846 8270D with Selective Ion Monitoring (SIM)
- PFAS (21 target analytes) based on EPA Method 537.1 (modified) using Test America – Burlington, VT standard operating procedure (SOP) BR-LC-009, revision 4.0, effective date 04/12/19.

The samples were analyzed for 1,4-dioxane by TestAmerica – Buffalo, NY and for PFAS by TestAmerica – Burlington, VT. The data validation was performed in accordance with the following guidance, modified for the methodologies utilized:

- USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002), January 2017
- USEPA National Functional Guidelines for High Resolution Superfund Methods Data Review (EPA-542-B-16-001), April 2016
- USEPA Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537 (EPA 910-R-18-001), November 2018
- New York State Department of Environmental Conservation Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids, January 2020

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
* • Holding Times and Sample Preservation
* • GC/MS Tunes (1,4-Dioxane only)
* • Initial and Continuing Calibrations
- Blanks
* • Surrogate Recoveries (1,4-Dioxane only)
* • Isotopically Labeled Surrogate Results (PFAS only)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results

* • Internal Standards
NA • Field Duplicate Results
• Sample Results and Reported Quantitation Limits (QLs)
• Target Compound Identification

* - All criteria were met.
NA - Field duplicates were not associated with this sample set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. There were no qualifications applied to the data because of sampling error. Qualifications applied to the data because of analytical error are discussed below.

- Potential uncertainty exists for select PFAS results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive results for PFPeA in samples ML-WP-RES-1, ML-WP-RES-4, ML-WP-RES-5, ML-WP-RES-6, and ML-WP-RES-7, and PFNA in samples ML-WP-RES-10 and ML-WP-RES-12 were qualified as nondetect (U) at the QL due to method blank contamination. These results can be used as nondetect results, which may have a minor impact on the data usability.

- The positive results for PFPeA in samples ML-WP-RES-2, ML-WP-RES-3, ML-WP-RES-10, and ML-WP-RES-12 were qualified as estimated (J+) with a potential high bias due to method blank contamination. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive result for PFBS in sample ML-WP-RES-1 was qualified as estimated (J) due to the ratio between the two precursor/product ion transitions being outside the acceptance limits and detection below the QL. This result can be used for project objectives as an estimated value, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable with the following exception.

- A discrepancy was noted with the surrogate concentration for 1,4-dioxane-d8 and result for 1,4-dioxane in sample ML-WP-RES-1. The laboratory was contacted during validation and provided a revised report on August 17, 2020 to correct this issue.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met. Samples were collected on July 20 and 21, 2020 but were not shipped to the laboratory until July 24, 2020. The field sampler indicated during data validation that samples were stored in coolers on ice from collection to shipment; no validation actions were taken on this basis since the samples were kept on ice and since the cooler temperature was acceptable upon laboratory receipt.

GC/MS Tunes (1,4-Dioxane only)

All criteria were met in the 1,4-dioxane analyses.

Initial and Continuing Calibrations

1,4-Dioxane and PFAS

The percent relative standard deviations (%RSDs) were within the method acceptance criteria in the initial calibrations. The percent differences met the method acceptance criteria in the continuing calibration standards associated with the samples in this data set.

Blanks

1,4-Dioxane was not detected in the associated method blank.

The following table summarizes the PFAS compounds found in the laboratory method blank, the concentration detected, and the resulting validation actions.

Blank ID	Compound	Result (ng/L)	Validation Action
MB 200-157306/1-A	PFPeA	0.827 J	The positive results for PFPeA in samples ML-WP-RES-2, ML-WP-RES-3, ML-WP-RES-10, and ML-WP-RES-12 were qualified as estimated (J+) with a potential high bias. The positive results for PFPeA in samples ML-WP-RES-1, ML-WP-RES-4, ML-WP-RES-5, ML-WP-RES-6, and ML-WP-RES-7 were qualified as nondetect (U) at the QL. Qualification was not required for the remaining associated samples since PFPeA was not detected.
	PFNA	0.399 J	The positive results for PFNA in samples ML-WP-RES-10 and ML-WP-RES-12 were qualified as nondetect (U) at the QL. Qualification was not required for the remaining associated samples since PFNA was not detected.
Associated samples: All samples in this data set			
Criteria: • If concentration in sample <QL, replace result with QL flagged with "U" • If concentration in sample ≥QL and <10x blank concentration, qualify result as estimated, biased high (J+) • If concentration in sample ≥QL and ≥10x blank concentration, no qualification			

Surrogate Recoveries (1,4-Dioxane only)

The surrogate percent recoveries (%Rs) met the laboratory acceptance criteria.

Isotopically Labeled Surrogate Results (PFAS only)

Eighteen isotopically labeled surrogate were spiked into the samples prior to extraction for isotope dilution quantitation. The %Rs were within the acceptance criteria.

MS/MSD Results

MS/MSD analyses were performed on sample ML-WP-RES-1 for 1,4-dioxane and PFAS. The %Rs and relative percent differences (RPDs) met the laboratory acceptance criteria for 1,4-dioxane and PFAS with one exception. The RPD for NMeFOSAA (24%) was above the laboratory's acceptance criteria (20%). Qualification was not required since NMeFOSAA was not detected in sample ML-WP-RES-1.

LCS Results

1,4-Dioxane

The LCS %Rs were within the laboratory acceptance criteria for the 1,4-dioxane analyses.

PFAS

The %R for PFTriA (134%) in the PFAS LCS analysis associated with all samples in this data set, LCS 200-157306/2-A, was above the laboratory's acceptance criteria (70-130%). Qualification was not required since PFTriA was not detected in the associated samples.

Internal Standards

1,4-Dioxane

The %Rs for the internal standard 1,4-dichlorobenzene-d_4 met the laboratory limits of 50-150% in the 1,4-dioxane analyses.

PFAS

The isotopically labeled internal standard 13C2-PFOA was added to each sample prior to injection to monitor for ion suppression/enhancement at the instrument level. The %Rs met the laboratory limits of 50-150% in the PFAS analyses.

Field Duplicate Results

There were no field duplicates associated with this data set.

Sample Results and Reported Quantitation Limits

Sample calculations were spot-checked; there were no errors noted. The results for select PFAS in several samples were detected below the lowest calibration standard and QL. These results were qualified as estimated (J) by the laboratory.

There were no dilutions performed on samples in this data set.

The result for 1,4-dioxane in sample ML-WP-RES-2 was flagged with an "E" by the laboratory due to a calibration range exceedance after the raw result was corrected for the recovery of the 1,4-dioxane-d8 isotope. Since the actual response for 1,4-dioxane in this sample was not above the calibration range prior to correction based on the recovery of the 1,4-dioxane-d8 isotope, no validation action was required.

Target Compound Identification

1,4-Dioxane

All criteria were met for 1,4-dioxane.

PFAS

Extracted ion chromatograms were reviewed to verify the target compound identifications. The laboratory manually integrated several peaks to ensure the inclusion of linear and branched isomers for PFOA, PFOS, NEtFOSAA, NMeFOSAA, and/or PFHxS; and/or to ensure proper integration of all PFAS.

Two precursor/product ion transitions were used for identification for all compounds except for PFBA, PFPeA, PFOSA, NMeFOSAA, NEtFOSAA, 6:2 FTS, and 8:2 FTS which only used one precursor/product ion transition for identification.

The following table summarizes the ratio between the two precursor/product ion transitions that did not meet the laboratory acceptance criteria and the validation actions.

Sample ID	Compound	Ratio	Ratio QC Limits	Validation Actions
ML-WP-RES-1	PFBS	4.04	1.00-3.01	The positive result for PFBS in sample ML-WP-RES-1 was already qualified as estimated (J) by the laboratory due to detection below the lowest calibration standard; thus no further qualification was required.

QUALIFIED FORM 1s

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-1 Lab Sample ID: 480-172890-1

Matrix: Water Lab File ID: Z001644.D

Analysis Method: 8270D SIM ID Date Collected: 07/20/2020 11:15

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1020(mL) Date Analyzed: 07/29/2020 22:17

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542744 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.1		0.20	0.098

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	29		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-2 Lab Sample ID: 480-172890-2

Matrix: Water Lab File ID: Z001649.D

Analysis Method: 8270D SIM ID Date Collected: 07/20/2020 12:35

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1050(mL) Date Analyzed: 07/30/2020 00:10

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542744 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.7	~~E~~ --	0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	30		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-3 Lab Sample ID: 480-172890-3

Matrix: Water Lab File ID: Z001650.D

Analysis Method: 8270D SIM ID Date Collected: 07/20/2020 12:55

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1050(mL) Date Analyzed: 07/30/2020 00:33

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542744 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.38		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	31		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-4 Lab Sample ID: 480-172890-4

Matrix: Water Lab File ID: Z001651.D

Analysis Method: 8270D SIM ID Date Collected: 07/20/2020 14:15

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1050(mL) Date Analyzed: 07/30/2020 00:55

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542744 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	30		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-5 Lab Sample ID: 480-172890-5

Matrix: Water Lab File ID: Z001652.D

Analysis Method: 8270D SIM ID Date Collected: 07/20/2020 14:25

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1050(mL) Date Analyzed: 07/30/2020 01:18

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542744 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.32		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	30		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-6 Lab Sample ID: 480-172890-6

Matrix: Water Lab File ID: Z001656.D

Analysis Method: 8270D SIM ID Date Collected: 07/20/2020 15:00

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1040(mL) Date Analyzed: 07/30/2020 02:53

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542747 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.64		0.19	0.096

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	31		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-7 Lab Sample ID: 480-172890-7

Matrix: Water Lab File ID: Z001657.D

Analysis Method: 8270D SIM ID Date Collected: 07/21/2020 09:30

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1050(mL) Date Analyzed: 07/30/2020 03:16

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542747 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	28		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-8 Lab Sample ID: 480-172890-8

Matrix: Water Lab File ID: Z001658.D

Analysis Method: 8270D SIM ID Date Collected: 07/21/2020 10:05

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1000(mL) Date Analyzed: 07/30/2020 03:39

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542747 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	31		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-9 Lab Sample ID: 480-172890-9

Matrix: Water Lab File ID: Z001659.D

Analysis Method: 8270D SIM ID Date Collected: 07/21/2020 10:55

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1050(mL) Date Analyzed: 07/30/2020 04:02

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542747 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	31		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-10 Lab Sample ID: 480-172890-10

Matrix: Water Lab File ID: Z001660.D

Analysis Method: 8270D SIM ID Date Collected: 07/21/2020 11:20

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1050(mL) Date Analyzed: 07/30/2020 04:24

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542747 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	30		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-11 Lab Sample ID: 480-172890-11

Matrix: Water Lab File ID: Z001661.D

Analysis Method: 8270D SIM ID Date Collected: 07/21/2020 13:00

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1030(mL) Date Analyzed: 07/30/2020 04:47

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542747 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.25		0.19	0.097

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	30		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-12 Lab Sample ID: 480-172890-12

Matrix: Water Lab File ID: Z001662.D

Analysis Method: 8270D SIM ID Date Collected: 07/21/2020 13:20

Extract. Method: 3510C Date Extracted: 07/27/2020 08:41

Sample wt/vol: 1050(mL) Date Analyzed: 07/30/2020 05:10

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 542747 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	29		15-110

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-1 Lab Sample ID: 480-172890-1

Matrix: Water Lab File ID: PA200728B12.d

Analysis Method: 537 (modified) Date Collected: 07/20/2020 11:15

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 273.9(mL) Date Analyzed: 07/28/2020 22:20

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.2		1.8	0.91
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND/1.8 U ~~1.2~~	~~J B~~	1.8	0.58
307-24-4	Perfluorohexanoic acid (PFHxA)	1.8		1.8	0.69
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.83
335-67-1	Perfluorooctanoic acid (PFOA)	1.2	J	1.8	0.74
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.70
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.71
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.54
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	~~*~~	1.8	0.55
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.84
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.4	J	1.8	0.45
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.73
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.87
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.56
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.82
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		9.1	9.1
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND	~~F2~~	18	1.6
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.4
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	5.0
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	2.6

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-2 Lab Sample ID: 480-172890-2

Matrix: Water Lab File ID: PA200728B15.d

Analysis Method: 537 (modified) Date Collected: 07/20/2020 12:35

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 288.1(mL) Date Analyzed: 07/28/2020 22:45

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	6.6		1.7	0.87
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.1	~~B~~ -- J+	1.7	0.55
307-24-4	Perfluorohexanoic acid (PFHxA)	1.7		1.7	0.66
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.79
335-67-1	Perfluorooctanoic acid (PFOA)	0.77	J	1.7	0.70
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.67
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.68
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	~~*~~	1.7	0.52
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.80
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.81	J	1.7	0.43
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.69
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.82
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.78
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.7	8.7
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.3
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	4.8
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-3 Lab Sample ID: 480-172890-3

Matrix: Water Lab File ID: PA200728B17.d

Analysis Method: 537 (modified) Date Collected: 07/20/2020 12:55

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 300.8(mL) Date Analyzed: 07/28/2020 23:02

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.9		1.7	0.83
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.8	~~B~~ J+	1.7	0.52
307-24-4	Perfluorohexanoic acid (PFHxA)	0.99	J	1.7	0.63
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.76
335-67-1	Perfluorooctanoic acid (PFOA)	0.68	J	1.7	0.67
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.64
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.65
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	~~*~~	1.7	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.76
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.7	0.41
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.66
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.79
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.51
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.75
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.3	8.3
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.2
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	4.6
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-4 Lab Sample ID: 480-172890-4

Matrix: Water Lab File ID: PA200728B18.d

Analysis Method: 537 (modified) Date Collected: 07/20/2020 14:15

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 298.2(mL) Date Analyzed: 07/28/2020 23:10

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.7	0.84
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND/1.7 U ~~0.54~~	~~J B~~	1.7	0.53
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.64
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.76
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.7	0.68
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.65
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.65
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	~~*~~	1.7	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.77
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.41
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.67
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.80
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.51
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.75
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.4	8.4
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.3
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	4.6
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-5 Lab Sample ID: 480-172890-5

Matrix: Water Lab File ID: PA200728B19.d

Analysis Method: 537 (modified) Date Collected: 07/20/2020 14:25

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 308.4(mL) Date Analyzed: 07/28/2020 23:18

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.4	J	1.6	0.81
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND/1.6 U ~~0.60~~	~~J B~~	1.6	0.51
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.6	0.62
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.74
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.6	0.66
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.62
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.63
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	~~*~~	1.6	0.49
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.65
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.77
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.49
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.1	8.1
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		16	1.2
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		16	4.5
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		16	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-6 Lab Sample ID: 480-172890-6

Matrix: Water Lab File ID: PA200728B20.d

Analysis Method: 537 (modified) Date Collected: 07/20/2020 15:00

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 276.6(mL) Date Analyzed: 07/28/2020 23:26

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.1		1.8	0.90
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND/1.8 U ~~0.76~~	~~J B~~	1.8	0.57
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.69
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.82
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.8	0.73
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.70
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.70
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.53
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	~~*~~	1.8	0.54
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.83
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.44
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.72
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.86
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.81
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		9.0	9.0
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.4
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	5.0
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	2.6

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-7 Lab Sample ID: 480-172890-7

Matrix: Water Lab File ID: PA200728B21.d

Analysis Method: 537 (modified) Date Collected: 07/21/2020 09:30

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 301.7(mL) Date Analyzed: 07/28/2020 23:35

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.7	0.83
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND/1.7 U ~~0.55~~	~~J B~~	1.7	0.52
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.63
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.75
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.7	0.67
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.64
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.65
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	~~*~~	1.7	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.76
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.41
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.66
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.79
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.51
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.75
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.3	8.3
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.2
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	4.6
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-8 Lab Sample ID: 480-172890-8

Matrix: Water Lab File ID: PA200728B22.d

Analysis Method: 537 (modified) Date Collected: 07/21/2020 10:05

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 289.2(mL) Date Analyzed: 07/28/2020 23:43

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.7	0.86
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.54
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.66
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.79
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.7	0.70
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.67
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.67
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	*	1.7	0.52
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.80
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.42
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.69
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.82
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.78
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.6	8.6
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.3
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	4.8
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-9 Lab Sample ID: 480-172890-9

Matrix: Water Lab File ID: PA200728B23.d

Analysis Method: 537 (modified) Date Collected: 07/21/2020 10:55

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 280.3(mL) Date Analyzed: 07/28/2020 23:51

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.8	0.89
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.8	0.56
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.68
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.81
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.8	0.72
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.69
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.70
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.53
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	*	1.8	0.54
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.82
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.44
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.71
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.85
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.80
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.9	8.9
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.3
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	4.9
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	2.6

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-10 Lab Sample ID: 480-172890-10

Matrix: Water Lab File ID: PA200728B24.d

Analysis Method: 537 (modified) Date Collected: 07/21/2020 11:20

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 289.8(mL) Date Analyzed: 07/29/2020 00:00

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.7		1.7	0.86
2706-90-3	Perfluoropentanoic acid (PFPeA)	3.2	~~B~~ - J+	1.7	0.54
307-24-4	Perfluorohexanoic acid (PFHxA)	3.4		1.7	0.66
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.9		1.7	0.79
335-67-1	Perfluorooctanoic acid (PFOA)	7.0		1.7	0.70
375-95-1	Perfluorononanoic acid (PFNA)	ND/1.7 U ~~0.37~~	~~J B~~ -	1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.66
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.67
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	~~*~~	1.7	0.52
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.79
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.8		1.7	0.42
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.3	J	1.7	0.69
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.82
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.3		1.7	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.78
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.6	8.6
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.3
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	4.7
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-11 Lab Sample ID: 480-172890-11

Matrix: Water Lab File ID: PA200728B25.d

Analysis Method: 537 (modified) Date Collected: 07/21/2020 13:00

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 273.2(mL) Date Analyzed: 07/29/2020 00:08

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.3	J	1.8	0.92
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.8	0.58
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.70
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.83
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.8	0.74
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.70
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.71
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.54
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	*	1.8	0.55
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.84
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.45
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.73
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.87
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.56
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.82
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		9.2	9.2
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.6
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.4
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		18	5.0
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		18	2.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: ML-WP-RES-12 Lab Sample ID: 480-172890-12

Matrix: Water Lab File ID: PA200728B26.d

Analysis Method: 537 (modified) Date Collected: 07/21/2020 13:20

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 300.2(mL) Date Analyzed: 07/29/2020 00:16

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.8		1.7	0.83
2706-90-3	Perfluoropentanoic acid (PFPeA)	3.7	-B- J+	1.7	0.52
307-24-4	Perfluorohexanoic acid (PFHxA)	4.0		1.7	0.63
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.8		1.7	0.76
335-67-1	Perfluorooctanoic acid (PFOA)	6.2		1.7	0.67
375-95-1	Perfluorononanoic acid (PFNA)	ND/1.7 U 0.55	J B	1.7	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.64
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.65
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND	*	1.7	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.77
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.8		1.7	0.41
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.0	J	1.7	0.67
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.79
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.7		1.7	0.51
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.75
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		8.3	8.3
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.2
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		17	4.6
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		17	2.4

QC NONCONFORMANCE DOCUMENTATION

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-157306/1-A

Matrix: Water Lab File ID: PA200728B02.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 07/28/2020 11:27

Sample wt/vol: 250(mL) Date Analyzed: 07/28/2020 20:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 157325 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	1.0
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.827	J	2.0	0.63
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.76
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.91
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.81
375-95-1	Perfluorononanoic acid (PFNA)	0.399	J	2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.77
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.78
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.59
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.60
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.92
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.49
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.80
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.95
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.61
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.90
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		10	10
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	1.7
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.5
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		20	5.5
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		20	2.9

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA200728B14.d

Lab ID: 480-172890-1 MSD Client ID: ML-WP-RES-1 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	35.0	40.8	110	3	30	40-160	
Perfluoropentanoic acid (PFPeA)	35.0	41.6	115	6	30	40-160	
Perfluorohexanoic acid (PFHxA)	35.0	39.4	107	10	20	40-160	
Perfluoroheptanoic acid (PFHpA)	35.0	39.0	111	6	20	40-160	
Perfluorooctanoic acid (PFOA)	35.0	41.9	116	7	20	40-160	
Perfluorononanoic acid (PFNA)	35.0	37.7	108	8	20	40-160	
Perfluorodecanoic acid (PFDA)	35.0	38.9	111	1	20	40-160	
Perfluoroundecanoic acid (PFUnA)	35.0	39.2	112	7	20	40-160	
Perfluorododecanoic acid (PFDoA)	35.0	37.6	107	10	20	40-160	
Perfluorotridecanoic acid (PFTriA)	35.0	37.4	107	5	20	40-160	
Perfluorotetradecanoic acid (PFTeA)	35.0	41.9	120	10	20	40-160	
Perfluorobutanesulfonic acid (PFBS)	31.0	40.5	127	6	20	40-160	
Perfluorohexanesulfonic acid (PFHxS)	31.9	36.0	113	3	20	40-160	
Perfluoroheptanesulfonic Acid (PFHpS)	33.3	43.9	132	1	30	40-160	
Perfluorooctanesulfonic acid (PFOS)	32.5	42.0	129	4	20	40-160	
Perfluorodecanesulfonic acid (PFDS)	33.8	37.0	110	6	30	40-160	
Perfluorooctanesulfonamide (PFOSA)	35.0	37.4	107	8	30	40-160	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	35.0	38.4	110	24	20	40-160	F2
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	35.0	37.5	107	20	20	40-160	
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	33.2	36.0	108	5	30	40-160	
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	33.5	40.1	120	7	30	40-160	
18O2 PFHxS	41.4	37.5	91			50-150	
13C4 PFHpA	43.8	42.4	97			50-150	
13C4 PFOA	43.8	42.6	97			50-150	
13C4 PFOS	41.8	35.1	84			50-150	
13C5 PFNA	43.8	40.9	93			50-150	
13C4 PFBA	43.8	44.7	102			25-150	
13C2 PFHxA	43.8	46.8	107			50-150	
13C2 PFDA	43.8	41.4	95			50-150	
13C2 PFUnA	43.8	35.8	82			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-172890-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA200728B03.d

Lab ID: LCS 200-157306/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	45.2	113	50-150	
Perfluoropentanoic acid (PFPeA)	40.0	46.8	117	50-150	
Perfluorohexanoic acid (PFHxA)	40.0	45.6	114	70-130	
Perfluoroheptanoic acid (PFHpA)	40.0	45.3	113	70-130	
Perfluorooctanoic acid (PFOA)	40.0	44.9	112	70-130	
Perfluorononanoic acid (PFNA)	40.0	42.7	107	70-130	
Perfluorodecanoic acid (PFDA)	40.0	49.5	124	70-130	
Perfluoroundecanoic acid (PFUnA)	40.0	40.7	102	70-130	
Perfluorododecanoic acid (PFDoA)	40.0	49.9	125	70-130	
Perfluorotridecanoic acid (PFTriA)	40.0	53.6	134	70-130	*
Perfluorotetradecanoic acid (PFTeA)	40.0	47.1	118	70-130	
Perfluorobutanesulfonic acid (PFBS)	35.4	41.6	118	70-130	
Perfluorohexanesulfonic acid (PFHxS)	36.4	39.1	107	70-130	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	46.0	121	50-150	
Perfluorooctanesulfonic acid (PFOS)	37.1	43.8	118	70-130	
Perfluorodecanesulfonic acid (PFDS)	38.6	36.7	95	50-150	
Perfluorooctanesulfonamide (PFOSA)	40.0	48.2	121	50-150	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	43.9	110	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	41.9	105	70-130	
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	37.9	43.0	113	50-150	
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	38.3	39.1	102	50-150	
18O2 PFHxS	47.3	47.6	101	50-150	
13C4 PFHpA	50.0	49.2	98	50-150	
13C4 PFOA	50.0	50.1	100	50-150	
13C4 PFOS	47.8	46.6	98	50-150	
13C5 PFNA	50.0	52.5	105	50-150	
13C4 PFBA	50.0	54.4	109	25-150	
13C2 PFHxA	50.0	51.7	103	50-150	
13C2 PFDA	50.0	47.9	96	50-150	
13C2 PFUnA	50.0	49.7	99	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20200728-42173.b\PA200728B12.d
Lims ID: 480-172890-C-1-A
Client ID: ML-WP-RES-1
Sample Type: Client
Inject. Date: 28-Jul-2020 22:20:39 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 480-172890-C-1-A
Misc. Info.: 200-0042173-012 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20200728-42173.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 29-Jul-2020 13:25:02 Calib Date: 16-Jul-2020 14:39:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20200716-42004.b\PA200716ICAL12.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1055

First Level Reviewer: manopan Date: 29-Jul-2020 11:07:01
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.991	1.998	-0.007	0.576	1121239	1.26		101	13716	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.991	1.998	-0.007	1.000	42327	0.0590			7.2	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.328	2.338	-0.010	0.673	809804	1.24		99.4	3437	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.328	2.338	-0.010	1.000	17617	0.0325			1.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.349	2.360	-0.011	0.679	972808	1.15		99.2	61558	M
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	2.360	2.360	0.0	1.005	26290	0.0372	Target=2.01		14.1	R
298.90 > 99.00	2.349	2.360	-0.011	1.000	6509		4.04(1.00-3.01)		5.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.665	2.675	-0.010	0.771	79063	1.27		109	120	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.655	2.675	-0.020	0.996	99	0.000954			4.1	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.704	2.714	-0.010	0.782	791921	1.21		96.8	3913	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.704	2.714	-0.010	1.000	25780	0.0499	Target=11.67		6.9	M
313.00 > 119.00	2.704	2.714	-0.010	1.000	2182		11.81(5.83-17.50)		5.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.714	2.714	0.0	0.879	1920	0.003277	Target=3.48		4.4	M
349.00 > 99.00	2.714	2.714	0.0	0.879	823		2.33(1.74-5.22)		3.4	M
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.822	2.822	0.0	0.816	82509	1.74		140	930	

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Mayer Landfill
Pace/Con-test SDG#23B1178
March 22, 2023
Sampling date: 2/9/2023

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for TRC Engineers, Inc., project located at Mayer Landfill, Pace/Con-test SDG#23B1178 submitted to Vali-Data of WNY, LLC on March 21, 2023. This DUSR has been prepared in general compliance USEPA National Functional Guidelines(NFG), NYSDEC; 'Guidelines for Sampling and Analysis of PFAS'(6/2021) and NYSDEC Analytical Services Protocols. The laboratory performed the analysis using USEPA method Perfluorinated Hydrocarbons (537 modified).

ID	Sample ID	Laboratory ID
1	Residence 14	23B1178-01

PFAA

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS)
- Surrogate Spike Recoveries
- Blanks
- Field Duplicate Sample Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All the criteria were met.

BLANKS
All the criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
All the criteria were met.

COMPOUND QUANTITATION
All the criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on all of the target analytes, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

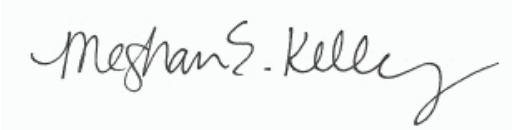
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

REVISED 3/21/23: Sample ID revised, per client request.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

Raymond McCarthy

From: Hoskins, Matthew <MHoskins@trccompanies.com>
Sent: Monday, February 20, 2023 2:15 PM
To: Raymond McCarthy; Schappert, Matthew
Subject: RE: [EXTERNAL] 23B1178 - SMPA0001

RJ,

Please run this by method 537.1, and only report the UCMR 6 PFAS compounds.

Thanks,
Matt

Matthew Hoskins, P.G.
Senior Project Manager

215 Greenfield Parkway, Suite 102, Liverpool, NY 13088
T 315.203.8010 **F** 315.451.7903 | **C** 315.454.7539
LinkedIn | Twitter | Blog | TRCcompanies.com

From: Raymond McCarthy <Raymond.McCarthy@pacelabs.com>
Sent: Monday, February 20, 2023 11:26 AM
To: Schappert, Matthew <MSchappert@trccompanies.com>; Hoskins, Matthew <MHoskins@trccompanies.com>
Subject: [EXTERNAL] 23B1178 - SMPA0001

Good Morning,
I am reaching out just to confirm the method needed for the attached COC.
Samples are from SMPA0001 Site Mayer Landfill, and were received noted as drinking water samples preserved with Trizma. The COC requests Isotope Dilution, which is not typically run on drinking water samples and requests unpreserved bottles, so if Isotope is needed we would need to narrate the bottlewate received. PFAS 537.1 requests Trizma preserved bottles and is the predominant method for drinking water samples, however does not report the full 21 compound list, and is typically requested for the UCMR 6 compound list by DEC.

Can you please clarify which method should be reported for these samples?

Thanks,

RJ McCarthy

NYDEC Lead Project Manager

39 Spruce Street, East Longmeadow, MA 01028

Office (direct): 413.486.5067 | Office: 413.525.2332 | contestlabs.com

PLEASE NOTE: All rush requests must be pre-approved by the laboratory. Please contact me before submitting a rush project.

1 - FORM I
ANALYSIS DATA SHEET

Residence 14

Laboratory:	Pace New England			Work Order:	23B1178
Client:	NYDEC_TRC Environmental Corpo			Project:	Mayer Landfill DW CAT B - CO SMPA0001
Matrix:	Drinking Water	Laboratory ID:	23B1178-01	File ID:	23B1178-01.d
Sampled:	02/09/23 11:10	Prepared:	02/14/23 00:00	Analyzed:	02/16/23 13:07
Solids:		Preparation:	EPA 537.1	Dilution:	1
Initial/Final:	265.51 mL / 1 mL				
Batch:	B331477	Sequence:	S083453	Calibration:	2300154
				Instrument:	QQQ2

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)		0.72	1.9	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		0.61	1.9	
375-85-9	Perfluoroheptanoic acid (PFHpA)		0.64	1.9	
335-67-1	Perfluorooctanoic acid (PFOA)		0.89	1.9	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)		0.82	1.9	
375-95-1	Perfluorononanoic acid (PFNA)		0.83	1.9	

1 - FORM I
ANALYSIS DATA SHEET

Blank

Laboratory:	Pace New England			Work Order:	23B1178
Client:	NYDEC_TRC Environmental Corporation- Clifl		Project:	Mayer Landfill DW CAT B - CO SMPA0001	
Matrix:	Drinking Water	Laboratory ID:	B331477-BLK1	File ID:	B331477-BLK1.d
Sampled:		Prepared:	02/14/23 10:18	Analyzed:	02/16/23 10:40
Solids:		Preparation:	EPA 537.1	Dilution:	
Batch:	B331477	Sequence:	S083453	Calibration:	2300154
Instrument:	QQQ2				
Column:	1				

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)		0.71	1.8	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		0.60	1.8	
375-85-9	Perfluoroheptanoic acid (PFHpA)		0.63	1.8	
335-67-1	Perfluorooctanoic acid (PFOA)		0.87	1.8	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)		0.80	1.8	
375-95-1	Perfluorononanoic acid (PFNA)		0.82	1.8	

1 - FORM I
ANALYSIS DATA SHEET

LCS

Laboratory:	Pace New England			Work Order:	23B1178
Client:	NYDEC_TRC Environmental Corporation- Clifl		Project:	Mayer Landfill DW CAT B - CO SMPA0001	
Matrix:	Drinking Water	Laboratory ID:	B331477-BS1	File ID:	B331477-BS1.d
Sampled:		Prepared:	02/14/23 10:18	Analyzed:	02/16/23 10:32
Solids:		Preparation:	EPA 537.1	Dilution:	
Batch:	B331477	Sequence:	S083453	Calibration:	2300154
Instrument:	QQQ2				
Column:	1				

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.26	0.67	1.7	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	8.17	0.57	1.7	
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.49	0.59	1.7	
335-67-1	Perfluorooctanoic acid (PFOA)	8.10	0.82	1.7	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	7.65	0.76	1.7	
375-95-1	Perfluorononanoic acid (PFNA)	8.65	0.77	1.7	

1 - FORM I
ANALYSIS DATA SHEET

Matrix Spike

Laboratory:	Pace New England			Work Order:	23B1178
Client:	NYDEC_TRC Environmental Corporation- Clifl		Project:	Mayer Landfill DW CAT B - CO SMPA0001	
Matrix:	Drinking Water	Laboratory ID:	B331477-MS1	File ID:	B331477-MS1.d
Sampled:		Prepared:	02/14/23 10:18	Analyzed:	02/16/23 10:47
Solids:		Preparation:	EPA 537.1	Dilution:	
Batch:	B331477	Sequence:	S083453	Calibration:	2300154
Instrument:	QQQ2				
Column:	1				

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)	9.56	0.73	1.9	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	9.31	0.62	1.9	
375-85-9	Perfluoroheptanoic acid (PFHpA)	10.9	0.64	1.9	
335-67-1	Perfluorooctanoic acid (PFOA)	10.3	0.89	1.9	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	8.65	0.82	1.9	
375-95-1	Perfluorononanoic acid (PFNA)	9.77	0.84	1.9	

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Mayer Landfill
Pace/Con-test SDG#23D0302
July 4, 2023
Revised: August 21, 2023
Sampling date: 4/3/2023

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package (revised; August 21, 2023) for TRC Environmental Corporation, project located at Mayer Landfill, Pace/Con-test SDG#23D0302 submitted to Vali-Data of WNY, LLC on July 3, 2023. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) and NYSDEC Analytical Services Protocols. The laboratory performed the analysis using USEPA method Semi-Volatile Organics (EPA 522).

ID	Sample ID	Laboratory #1 ID	Laboratory #2 ID
1	Residence #14	23D0302-01	70251926001
2	DUP-01	23D0302-02	70251926001

SEMIVOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in MS/MSD.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

Data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All the criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
All criteria were met except the concentration of 1,4-Dioxane exceed the calibration range and is qualified with an 'E'.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on the target analyte with acceptable results, so no further action is required.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: 23D0302
Pace Project No.: 70251926

Method: **EPA 522**
Description: 522 MSS 1,4 Dioxane (SIM)
Client: Pace Analytical Services - New England
Date: April 17, 2023

General Information:
2 samples were analyzed for EPA 522 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 522 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 300894

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 1524266)
  - 1,4-Dioxane (p-Dioxane)
- MSD (Lab ID: 1524267)
  - 1,4-Dioxane (p-Dioxane)

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Pace A
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: 23D0302
Pace Project No.: 70251926

Sample: 23D0302-01 **Lab ID: 70251926001** Collected: 04/03/23 10:20 Received: 04/06/23 10:20 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
522 MSS 1,4 Dioxane (SIM)	Analytical Method: EPA 522 Preparation Method: EPA 522 Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**2.7**	ug/L	0.020	0.018	1	04/13/23 07:30	04/13/23 16:49	123-91-1	
Surrogates									
1,4-Dioxane-d8 (S)	94	%	70-130		1	04/13/23 07:30	04/13/23 16:49		

575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: 23D0302
Pace Project No.: 70251926

Sample: 23D0302-02 **Lab ID: 70251926002** Collected: 04/03/23 12:00 Received: 04/06/23 10:20 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
522 MSS 1,4 Dioxane (SIM)	Analytical Method: EPA 522 Preparation Method: EPA 522 Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**2.9**	ug/L	0.020	0.0081	1	04/13/23 07:30	04/14/23 16:39	123-91-1	
Surrogates									
1,4-Dioxane-d8 (S)	107	%	70-130		1	04/13/23 07:30	04/14/23 16:39		

REPORT OF LABORATORY ANALYSIS

SAMPLE NO.
1776

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

MS

Lab Name: Pace Analytical - New York
Contract: 23D0302
Date Received: 04/06/2023 10:20
Matrix: Drinking
SDG No.: 70251926
Date Extracted: 04/13/2023 07:30
Lab Sample ID: 1524266
Date Analyzed: 04/13/2023 17:05
Lab File ID: 522U-041323.B\S40304.D
Initial wt/vol: 500 mL
Final wt/vol: 10 mL
Dilution: 1
Instrument: 70MSS4
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (p-Dioxane)	4.6	E

SAMPLE NO.
182

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

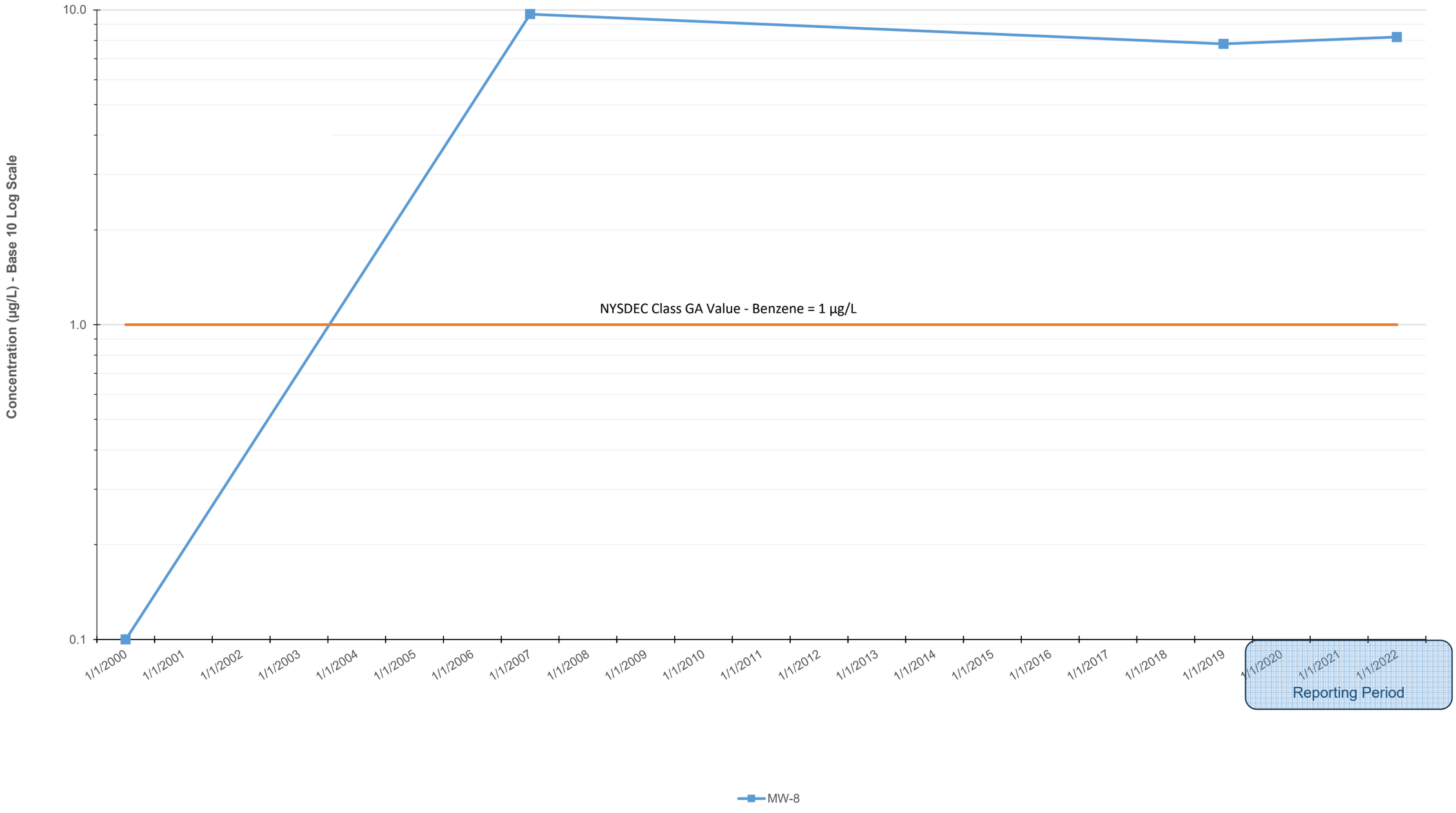
Lab Name: Pace Analytical - New York
Contract: 23D0302
Date Received: 04/06/2023 10:20
Matrix: Drinking SDG No.: 70251926
Date Extracted: 04/13/2023 07:30
Lab Sample ID: 1524267
Date Analyzed: 04/13/2023 17:21
Lab File ID: 522U-041323.B\S40305.D
Initial wt/vol: 500 mL Final wt/vol: 10 mL Dilution: 1
Instrument: 70MSS4 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (p-Dioxane)	4.5	E

APPENDIX G

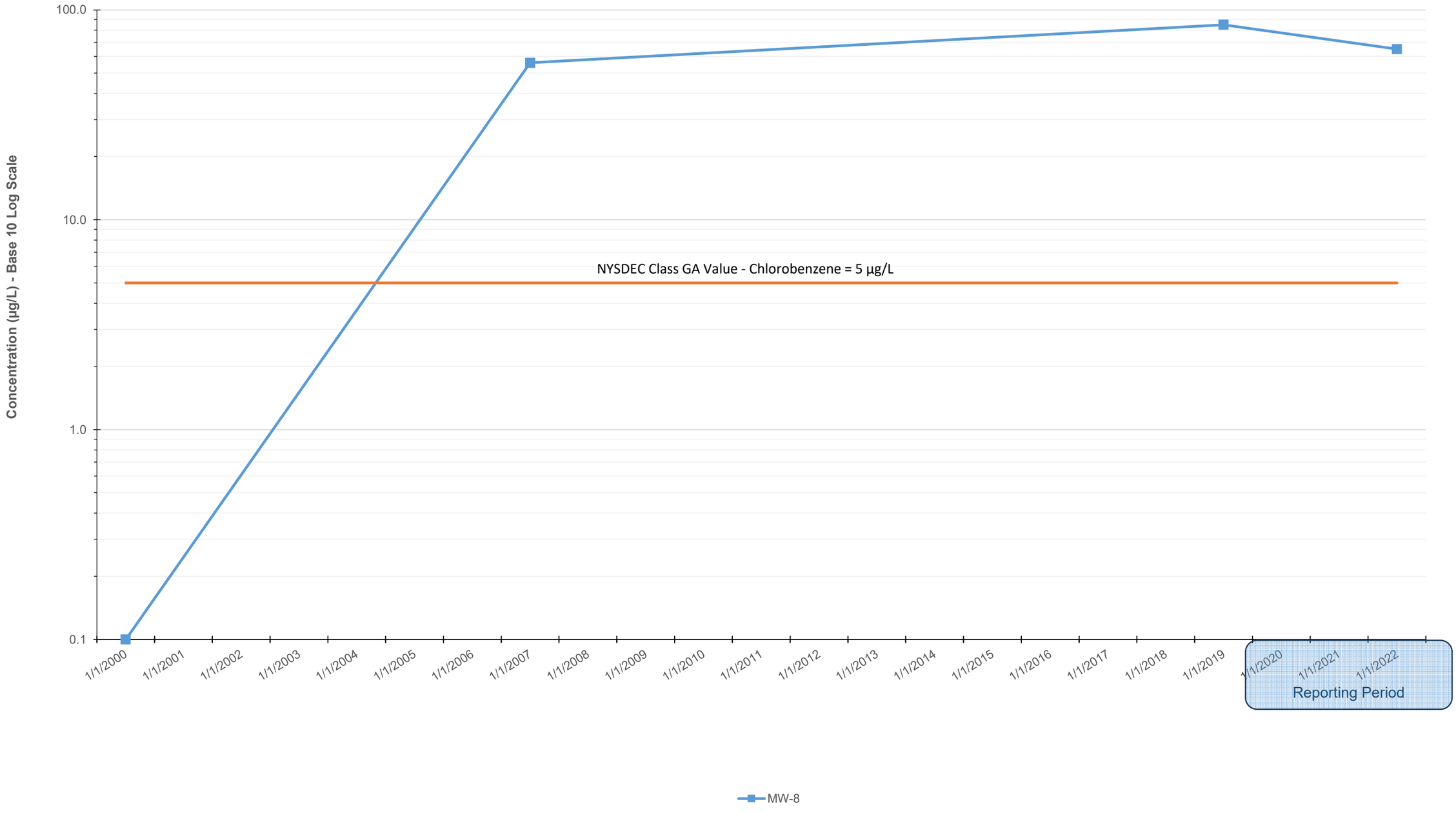
Notes
1) Non-detect values plotted at 0.1 µg/L.
2) Continous data history is not available for all wells. Data from indidivual sampling events may be plotted as singular points.

New York State Department of Environmental Conservation
Mayer Landfill Site - Site No. 336027
Blooming Grove, New York
Benzene Trend



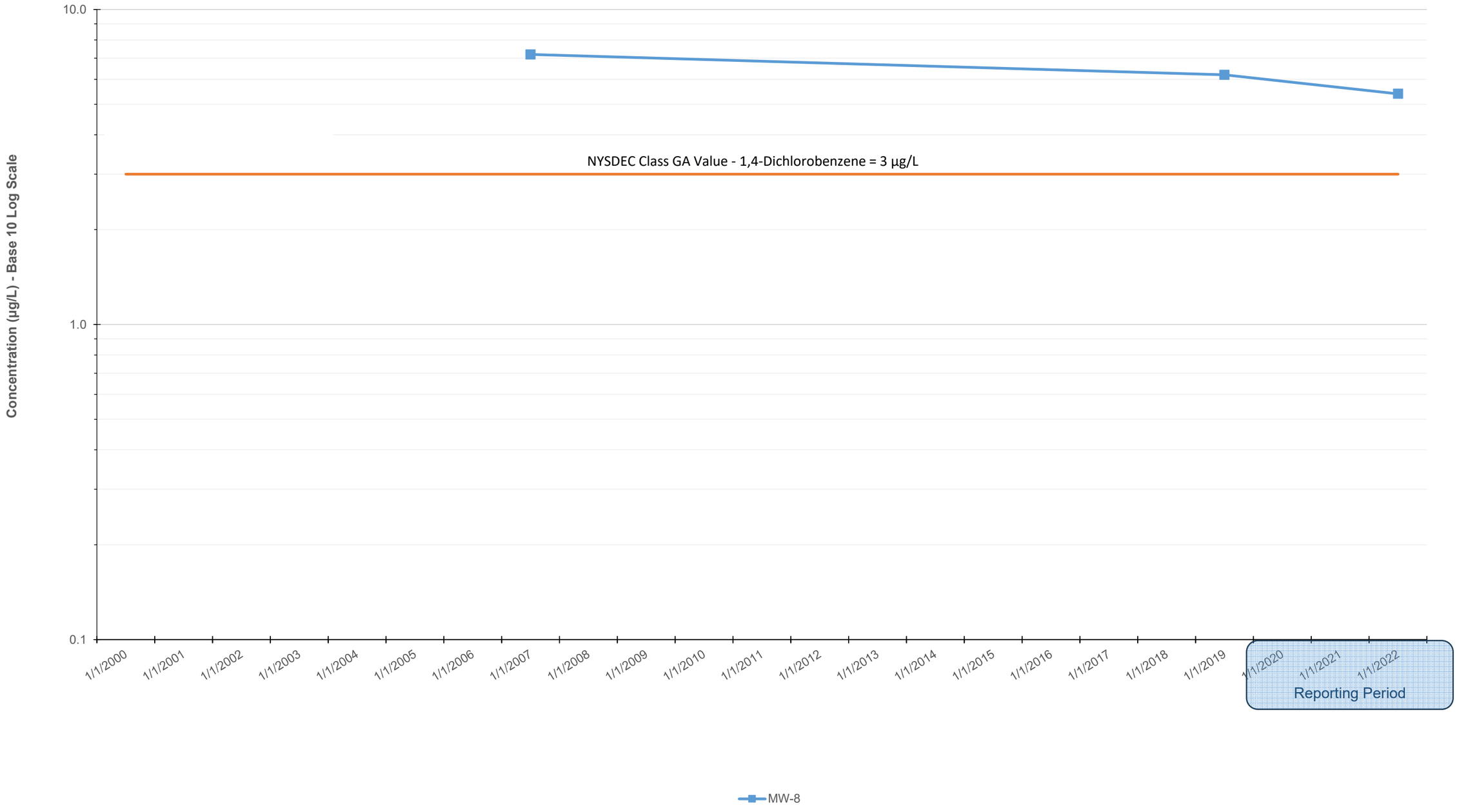
Notes
1) Non-detect values plotted at 0.1 µg/L.
2) Continous data history is not available for all wells. Data from indidivual sampling events may be plotted as singular points.

New York State Department of Environmental Conservation
Mayer Landfill Site - Site No. 336027
Blooming Grove, New York
Chlorobenzene Trend



Notes
1) Non-detect values plotted at 0.1 µg/L.
2) Continous data history is not available for all wells. Data from indidivual sampling events may be plotted as singular points.

New York State Department of Environmental Conservation
Mayer Landfill Site - Site No. 336027
Blooming Grove, New York
1,4-Dichlorobenzene Trend



Notes
1) Non-detect values plotted at 0.1 µg/L.
2) Continous data history is not available for all wells. Data from indidivual sampling events may be plotted as singular points.

New York State Department of Environmental Conservation
Mayer Landfill Site - Site No. 336027
Blooming Grove, New York
Total Xylenes Trend