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PERIODIC REVIEW REPORT
OCTOBER 2019 – OCTOBER 2024

HIDDEN VALLEY ELECTRONICS SITE
VESTAL, NEW YORK 13850

NYSDEC Site No. 704029
Work Assignment No. D009812-25

Prepared for:

NEW YORK STATE

Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233

Prepared by:

TRC Engineers, Inc.
3 Corporate Drive, Suite 202
Clifton Park, New York 12065

JULY 2025

TRC Project No. 470744

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LIST OF ACRONYMS AND ABBREVIATIONS

AGVs	Air Guidance Values
Aztech	Aztech Environmental Technologies
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
cis-1,2-DCE	cis-1,2-Dichloroethene
COCs	Contaminants of Concern
D&B	D&B Engineers and Architects, P.C.
1,1-DCE	1,1-Dichloroethene
1,1-DCA	1,1-Dichloroethane
DER	Department of Environmental Remediation
DTW	Depth to Water
DUSRs	Data Usability Summary Reports
ECs	Engineering Controls
Freon 113	1,1,2-Trichloro-1,2,2-Trifluoroethane
FS	Feasibility Study
HVE	Hidden Valley Electronics
ICs	Institutional Controls
IHWDS	Inactive Hazardous Waste Disposal Site
IRM	Intermediate Remedial Measure
MACTEC	MACTEC Engineering & Consulting, P.C.
mg/L	Milligrams per liter
MNA	Monitored Natural Attenuation
ND	Not detected
ng/L	Nanograms per liter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	Tetrachloroethylene, also known as Perchloroethylene
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
PRR	Periodic Review Report
PVC	Polyvinyl chloride
QA/QC	Quality Assurance/Quality Control
RI	Remedial Investigation
ROD	Record of Decision
SCGs	Standards, Criteria, and Guidance
SCOs	Soil Cleanup Objectives
SIM	Selective Ion Monitoring
SMP	Site Management Plan
SMR	Site Management Report
SSDS	Sub-Slab Depressurization System
SSSV	Sub-Slab Soil Vapor
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
1,1,1-TCA	1,1,1-Trichloroethane
TCE	Trichloroethene
TCL	Target Compound List

TICs	Tentatively Identified Compounds
TOGS	NYSDEC Division of Water Technical and Operational Guidance Series
TRC	TRC Engineers, Inc.
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds
µg/L	Micrograms per liter

Executive Summary

Category	Summary/Results
Engineering Controls (ECs)	• Cover system (consisting of the building slab and surrounding asphalt pavement). • On-site hybrid sub-slab depressurization system (SSDS)/soil vapor extraction (SVE) system. • Thirteen off-site residential sub-slab depressurization systems (SSDSs). • Groundwater monitoring/injection well network.

Institutional Controls (ICs)	• The property may be used for Commercial or Industrial use only, in accordance with current zoning restrictions. Site Management Plan (SMP) (2012, revised in 2017 and 2021).
	• Environmental Easement (2012).
	  ○ Groundwater-Use Restriction.
	  ○ Soil Management Plan.
	  ○ Land-Use Restriction.
	  ○ Building Use Restriction.
	  ○ Monitoring Plan.

Site Classification	Class 4 Inactive Hazardous Waste Disposal Site (IHWDS) (reclassified in August 2019).
Site Management Plan	SMP – May 2012 (revised in 2017 and 2021)
Certification/Reporting Period	The Certification Period of this Periodic Review Report (PRR) is October 31, 2019, to October 31, 2024.
Inspection	**Frequency**
Site-wide Inspection	Annually
Cover System Inspection	Annually
Inspection of Groundwater Monitoring Wells and Injection Wells	Annually
Monitoring	**Frequency**
Groundwater	Annually
Prior PRR/SMR* Recommendations	The May 2020 PRR prepared for the May 16, 2015, to October 31, 2019, reporting period included the following recommendations: 1. Update SMP to reflect changes to Site Monitoring Plan and continue annual groundwater monitoring, site inspections, on-site SSDS inspections, and off-site SVI sampling. 2. Evaluate monitoring well MW-102 for the need of possible repairs. 3. Since the waste mass remains at the Site, site inspections should continue as specified in the SMP, to ensure there are no future adverse impacts to public health and/or the environment. 4. The PRR should be completed every five years to certify the ICs and ECs are in-place, effective and protective of human health and the environment. 5. Following the submission and approval of the revised SMP, Operation, Maintenance, and Monitoring forms should be completed for the on-site SSDS/SVE System, and the performance of these systems should be evaluated. 6. It is recommended that groundwater sample results continue to be analyzed for Volatile Organic Compounds (VOCs), 1,4-Dioxane, and natural attenuation parameters as specified in the SMP.

Category	Summary/Results
	7. Continue to evaluate groundwater sampling results to determine whether natural attenuation continues to degrade the plume and whether additional injections or remedial actions are required. Note the recommendations listed above have been included in the Revised SMP, dated September 2021. *A Site Management Report (SMR) was not completed during the reporting period. As a cost saving measure, SMRs are no longer required as part of site management.
Site Management Activities	Site management activities performed during this reporting period (October 31, 2019 to October 31, 2024) included one non-routine inspection and maintenance event involving the on-site SSDS/SVE system; one non-routine communication testing and indoor air sampling even; three site-wide inspections; three groundwater gauging and sampling events; one post-storm inspection event; and one non-routine site visit. • 4/8/2020 - 4/10/2020: At the direction of the New York State Department of Environmental Conservation (NYSDEC), D&B and Aztech Environmental Technologies (Aztech), performed a non-routine inspection and unscheduled maintenance of the on-site SSDS/SVE System. • 5/14/2020 - 5/15/2020: At the direction of the NYSDEC, D&B and Aztech performed non-routine communication testing to evaluate the performance of the on-site SSDS/SVE System. D&B and Aztech made repairs to the system, and on the following day, D&B collected one confirmatory indoor air sample for VOC analysis to evaluate the effectiveness of the repairs. • 10/5/2020 - 10/8/2020: D&B performed a routine annual site-wide inspection and annual groundwater monitoring event. • 10/25/2021 - 10/28/2021: D&B performed a routine annual site-wide inspection and annual groundwater monitoring event. TRC Engineers, Inc. (TRC) performed a Site visit during D&B's annual monitoring/inspection event. • 11/7/2022 - 11/9/2022: TRC performed a routine annual site-wide inspection and annual groundwater monitoring event. • 08/17/2023: TRC conducted a post-storm site inspection.
Significant Findings or Concerns	• Groundwater concentrations of several VOC compounds 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 or more locations during this monitoring period. • Groundwater concentrations of the monitored natural attenuation (MNA) parameters iron, manganese, and chloride exceeded the Class GA Values at one or more locations during this monitoring period. • Groundwater concentrations of perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), and 1,4-dioxane exceeded the Class GA Values at one or more locations during this monitoring period. • The on-site SSDS/SVE System was observed to be leaking and was repaired in May and April 2020. An eight-hour indoor air sample collected following SSDS/SVE system repairs showed no VOCs detected above NYSDEC Air Guidance Values (AGVs). This work was performed at the request of NYSDEC. Note that the Operation and Maintenance of the on-site SSDS/SVE System and the off-site residential SSDSs was managed by a separate state-wide contract and these activities were therefore not covered by this Periodic Review Report.

Category	Summary/Results
Recommendations	• Continue annual site-wide inspections and groundwater monitoring in accordance with the SMP. • Utilizing passive diffusion samplers at the next sampling event for all wells that are only sampled for VOCs. The remaining wells will continue to be sampled with low flow sampling techniques. • Removing monitoring wells MW-19 and MW-25 form the sampling network. • Sampling monitoring wells MW-20, MW-22, and MW-28 every five years instead of annually. MNA parameters should be added to monitoring well MW-13 for the annual sampling to replace MW-22 as the off-site/down gradient MNA monitoring point. • It is recommended that the casing lids and/or casing lid bolts for monitoring wells MW-1, MW-7, MW-9, MW-11, MW-17, MW-33, MW-101, TWMW-1, TW-1, TW-2, TW-3, and TW-6 be repaired/replaced during the next site inspection. • The riser for monitoring well MW-102 should be cut down to make room for the J-Plug during the next site inspection. • Remove the fallen tree and overgrown vegetation surrounding monitoring wells MW-13 and MW-15 prior to next sampling event. • Exterior inspections of the on-site SSDS/SVE system and off-site residential SSDSs shall be conducted at least annually, and perform comprehensive inspections at least every five years. • The SMP should be revised to reflect the above changes/modifications if changes are acceptable to the NYSDEC.
Cost Evaluation	The total estimated cost of Site SMP activities since TRC took over such activities from April 2022 through October 2024 is approximately $33,291. These activities included project management/administration, one annual site-wide inspection, one post-storm inspection, one orientation site walk with D&B, one groundwater sampling event for the analysis of VOCs, including additional groundwater sampling and analysis for 1,4-Dioxane, MNA parameters, and PFAS. The total cost includes labor costs and expenses associated with the project.
Green Remediation Metrics	Green and sustainable remediation metrics implemented during this reporting period included utilizing local staff for site visits and visiting multiple sites under a single mobilization to limit travel and gas consumption. Approximately 12,445 miles were travelled during this reporting period. Off-site SSDS and on-site SSDS/SVE System utilized approximately 180,000 kilowatt-hours of electricity this reporting period. Additional details of the green and sustainable remediation metrics are included in **Section 6.0** and **Appendix A**.

1.0 Introduction

This Periodic Review Report (PRR) has been prepared for the Hidden Valley Electronics Site (referred to as "the Site") and covers the period between October 31, 2019, through October 31, 2024. 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, NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation (DER-10) and NYSDEC 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:	Hidden Valley Electronics Site	**NYSDEC Site No:**	704029
Site Location:	1808 Vestal Parkway East, Vestal, NY 13850	**Remedial Program:**	State Superfund Program
Site Type:	Electronic Component Manufacturer	**Classification:**	Class 4 Inactive Hazardous Waste Disposal Site (IHWDS)
Parcel Identification(s):	Parcel # 158.13-3-2.1, Broome County Tax Map	**Parcel Acreage / EE Acreage:**	2.64-acres
Selected Remedy:	• On-Site hybrid sub-slab depressurization system (SSDS)/soil vapor extraction (SVE) system • Cover System • Off-Site SSDSs • In-Situ Enhanced Biodegradation Injections	**Site COC(s):**	Volatile Organic Compounds (VOCs)
Current Remedial Program Phase:	• Post Remedial Action Site Monitoring • Site Management	**Institutional Controls:**	• Site Management Plan (SMP) (2012, revised in 2017 and 2021) • Environmental Easement (2012) ○ Land and groundwater use restrictions
Post-Remediation Monitoring and Sampling Frequency:	Annual Groundwater Monitoring Annual Site-Wide Inspections	**Engineering Controls:**	• Site Cover System (consisting of the building slab and surrounding asphalt pavement) • Groundwater Monitoring Well /Injection Well Network • On-Site SSDS/SVE System • Thirteen Off-Site Residential SSDSs
Monitoring Locations:	52 Overburden Monitoring Wells Two Injection Wells Six Recovery Wells from former Groundwater Extraction and Treatment System	**Required Reporting:**	• PRR – Every Five Years

1.1 Site Location, Ownership, and Description

The Site is located at 1808 Vestal Parkway East in the City of Vestal, Broome County, New York (see **Figure 1**). The Site consists of one parcel, parcel # 158.13-3-2.1 of the Broome County Tax map and is currently owned by Bahama Mama, LLC. The Site is approximately 2.64-acres and is bounded by Vestal Parkway to the north, commercial property and Ridgehaven Drive to the east, a self-storage facility and residential properties (up a steep incline) to the south, and an automobile repair shop to the west. A vacant lot, which formerly contained the Miller Sunoco Site (Spill Site # 9401630), is also located on the north side of the Site (surrounded on three sides by the Site) (see **Figure 2**).

1.2 Investigation/Remedial History

The first structure constructed on the Site was constructed in approximately 1957; although, according to the property title, a portion of the Site historically contained an easement allowing Broome County to perform drainage improvements and stage minor equipment on the property.

The permit application for the first building structure was approved in December of 1956. The structure, an approximately 20,000-square-foot facility, was presumably constructed around 1957 for Federal Radio, a small electronics manufacturer. Federal Radio received approval for a facility addition in December 1967 and constructed an approximate 10,000-square-foot addition around 1968 (east side of current building). Federal Radio, also known as Harvey Electronics and Federal Electronics, manufactured electrical equipment at the facility until 1991, when Hidden Valley Electronics (HVE) purchased their assets from Key Bank. The solvents or processes used by Federal Radio during their approximately 30 years occupying the Site are not known.

Following the purchase of Federal Electronics assets, HVE continued to work as a contract electrical manufacturer at the Site. Manufacturing involved the mounting of electrical parts onto bare circuit boards and assemblies and attaching them by machine or hand soldering. HVE reportedly used a movable vapor degreaser for cleaning circuit boards for one of its customers. The degreaser apparently used 1,1,1-trichloroethane (1,1,1-TCA) that was re-circulated through an above-ground sump that was part of the degreaser system. The sump was drained into a 55-gallon drum, when the 1,1,1-TCA became contaminated with residues. HVE reported that three drums of 1,1,-TCA were purchased, used, repackaged, and sent off-Site for disposal between January and June 1993. After June 1993 1,1,1-TCA was reportedly no longer used at the facility. The process for cleaning electrical circuit boards for other customers was a water-based process. HVE relocated their operation to Apalachin, New York in March 1995.

After HVE vacated the premises in 1995, the Site building was eventually converted to its current use as retail space, a fitness center, and a radio station. In addition, a self-storage center was constructed in approximately 2003, on the south side of the Site, south of the on-site paved parking area. In February 2005, the original 4.5-acre property associated with the Site was divided into two parcels, with one parcel comprising the current Site, made up of the north half of the original property (2.64 acres) and the other parcel comprising the self-storage center and the south half of the property (1.89 acres - Block 158.13-3 and Lot 8.1 on the Town of Vestal Tax Map).

Groundwater sampling conducted in 1994 and 1995 at the Miller Sunoco Site (Spill Site # 9401630), located immediately north of the Site, found elevated levels of trichloroethene (TCE) and 1,1,1-TCA in groundwater. A

subsurface investigation of the Site was conducted by O'Brien and Gere Engineers, Inc. in 2001, and a Remedial Investigation (RI) and a Feasibility Study (FS) were completed for the Site by MACTEC in 2008.

Generally, the RI determined that chlorinated solvents, primarily 1,1,1-TCA and TCE were discharged to the ground surface either within the site building, or in the vicinity of a former storage shed just south of the site building. Although only limited soil contamination was identified during the subsurface investigation and RI, the Conceptual Site Model suggested that soil contamination may be present beneath the site building resulting in the contamination of site groundwater above NYSDEC Standards, Criteria, and Guidance Values (SCGs). Site related contaminants are migrating in groundwater off -site to the north. This groundwater contamination has resulted in the potential for soil vapor intrusion (SVI) into the site building, as well as into residential and commercial properties present above the groundwater plume.

The highest concentrations of TCE and 1,1,1-TCA exhibited in soil during the RI (conducted between 2004 and 2008) were found at 36 to 38 feet below grade at 4.2 parts per million(ppm) and 0.95 ppm, respectively, at soil boring BS-102 (location of monitoring well MW-102, located outside the southeastern corner of the former HVE building) (see **Figure 2**). These concentrations were the only ones to exceed NYSDEC Soil Cleanup Objectives (SCOs) for TCE and 1,1,1-TCA (0.47 ppm and 0.68 ppm, respectively). Other volatile organic compounds (VOCs) were detected in soil, but such detections were confined to the footprint, or the vicinity, of the HVE Annex. However, due to the elevated soil vapor levels outside the footprint of the site building, and the limited number of soil samples collected in this area, it was suspected that soil contamination may be more significant than the data reflected, and that subsurface soil contamination was suspected to be located beneath the site building.

The highest concentrations of TCE and 1,1,1-TCA observed in site groundwater during the RI were detected in monitoring well TW-2, located immediately north of the site building (see **Figure 2**) at 1,300 micrograms per liter (µg/L) and 2,300 µg/L, respectively. These levels exceeded the 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) of 5 µg/L for both compounds. These groundwater contaminants appeared to be migrating in a northerly direction, across Vestal Parkway towards the Twin Orchards residential neighborhood (serviced by public water). Concentrations of TCE and 1,1,1-TCA were shown to diminish northward where concentrations of individual chlorinated solvents ranged from non-detect to less than 10 µg/L.

The RI data also showed that the groundwater plume from HVE merges with the benzene, toluene, ethyl benzene, and xylene (BTEX) plume north of the Site, in the vicinity of the former Kost Tire (now occupied by Battery World, located at 1801 Vestal Parkway E). The source of the BTEX plume is reported to be the former Miller Sunoco Site, located adjacent to the HVE facility to the northeast. The Miller Sunoco Site has been managed separately by the NYSDEC as a petroleum spill (Spill # 9401630).

A groundwater extraction and treatment system was previously operated north of the Site, on the north side of Vestal Parkway and just west of the former Kost Tire (currently Battery World, 1801 Vestal Parkway E). The system was originally installed to intercept groundwater contamination from the Miller Sunoco Site (Spill Site # 9401630) and then was later modified to capture groundwater contamination originating from the Site. The system was operated

from 2008 until the summer of 2011, when it was determined that it was minimally effective in remediating groundwater due to the low groundwater contaminant concentrations present.

Site-Related SVI samples were collected during the RI from below and surrounding the site building, as well as below and surrounding the former Kost Tire facility north of Vestal Parkway (Battery World). In addition, sub-slab soil vapor (SSSV) and indoor air samples were collected from approximately 60 homes located in the Twin Orchards residential area, located north of Vestal Parkway, between April 2005 and December 2007. Data collected from these samples indicated that chlorinated solvent vapors from the groundwater in this area, and potentially soil beneath the HVE building, are moving upward into the vadose zone, beneath building foundations and impacting indoor air. Concentrations of TCE in soil vapor were observed below the former HVE Annex building up to 2,800 micrograms per cubic meter ($\mu g/m^3$) and up to 930 $\mu g/m^3$ below residences in the Twin Orchards development. Concentrations of TCE in indoor air marginally exceeded the New York State Department of Health (NYSDOH) general air guidance value for TCE in one residence of Twin Orchards.

To address the potential for SVI into the site building, as well as into buildings located off-site to the north, sub-slab depressurization systems (SSDSs) were installed in the site building and 13 off-site residential buildings (installation between 2005 and 2008) as Interim Remedial Measures. The SSDSs were designed to depressurize the soil vapor below the buildings by removing it from below the building subgrade and releasing it to the ambient outdoor air above the roofline, and thereby prevent potential contaminants located in soil vapor from migrating into the buildings. Monitoring of indoor air and soil vapor continued at three off-Site residential buildings up through 2018. In 2020, the NYSDOH concluded that no further action was warranted to either mitigate or monitor for soil vapor intrusion.

To address the contamination remaining at the Site, pilot tests were conducted in 2011 involving in-situ remediation of saturated soil and groundwater using enhanced bioremediation. Based on these results of these tests, further remedial actions were conducted in 2012 and 2014.

In 2012, the NYSDEC established an Environmental Easement restricting land and groundwater use at the Site. Also in 2012, the site building SSDS was enhanced with a larger blower and deeper vacuum point installation (up to 3 feet below grade), making it a hybrid SSDS/soil vapor extraction (SVE) system. This was done to further assist in mass removal of contaminants located below the site building within the vadose zone.

In March 2014, five injection wells were installed for injecting FEROX Plus (a concentrated emulsified zero valent iron treatment solution) within the suspected contaminant source area. The objective of the injection program was to reduce contaminant levels within, and immediately downgradient of, the source area and expedite shutdown of the SSDS located at the Site and at the SSDSs at the residential properties downgradient of the Site. During the injections, which were conducted in April 2014, approximately 4,900 gallons of FEROX Plus were injected into the subsurface via the five injection wells.

The NYSDOH has recommended monitoring indoor air sampling, or installation of an SSDS, at one additional residential property located at 309 Maple Street, north of Vestal Parkway but, the owners of this property were unresponsive to several attempts made to schedule SVI sampling. In a NYSDOH letter dated April 18, 2019, the property at 309 Maple was recommended for no further action regarding SVI.

In 2020, a leak was observed at the Site from an overhead horizontal SVE vent pipe located above the drop ceiling associated with extraction well EW-6. Upon inspection, it was observed that the vent pipe had been deformed to

varying degrees at several locations. The most significant damage to the vent pipe resulted in failure of the pipe sidewalls, as evidenced by cracks in the pipe. It was determined that the SVE System vent pipe was constructed using Schedule 10 polyvinyl chloride (PVC) or PVC D2729 (thin walled) drainpipe. As a result, the pipes associated with extraction wells EW-5 and EW-6 were replaced in April 2020, and a two-inch drain line was added to manage the potential for condensation accumulation stemming from extraction well EW-6.

Additionally in May 2020, communication testing and indoor air sampling were conducted within site building. The associated results showed no VOCs to be detected above NYSDOH Air Guidance Values (AGVs) in the indoor air sample.

In February 2024, NYSDEC released an Order on Consent and Administrative Settlement for reimbursement to settle past and future costs from the Settling Respondents. Since contamination remains at the Site, the on-site hybrid SSDS/SVE System and off-site SSDSs continue to be operated, maintained, and monitored; and long-term groundwater monitoring continues to be conducted on an annual basis.

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

1.3 Remaining Contamination

Limited soil contamination has been identified on-site. VOCs are present in soil above NYSDEC SCOs at a depth of 36 to 38 feet below the ground surface at the southeast corner of the site building. Additionally, contaminated soil likely exists beneath the on-site building. Exposure to the soil is prevented by the cover system consisting of the building slab and surrounding asphalt pavement. Any future construction activities which may disturb remaining potentially contaminated material must be conducted in accordance with the SMP.

Groundwater concentrations at on-site and off-site monitoring wells exceed NYSDEC Class GA Values for VOCs; monitored natural attenuation (MNA) parameters; 1,4-dioxane; and per- and poly-fluoroalkyl compounds (PFAS/PFOA). However, exposure to groundwater contamination is prevented by groundwater use restrictions implemented under the 2012 Environmental Easement and SMP. Groundwater analytical results for VOCs, MNA parameters, 1,4-dioxane, and PFAS/PFOA are discussed in Section 3.2 and presented collectively in **Tables 3** and **4**.

The potential for soil vapor intrusion exists due to the remaining contamination present in soil and groundwater. Soil vapor intrusion in the on-site building has been mitigated by the installation of a hybrid SSDS/SVE system. Soil vapor intrusion in the off-site residences is mitigated by the 13 off-site residential SSDSs. The results of recent air sampling within the on-site building show no VOCs to be present above NYSDOH AGVs (refer to Section 3.3 and **Table 5**).

1.4 Regulatory Requirements/Cleanup Goals

The goals for the remedial program for the Site are outlined in the Record of Decision (ROD) dated March 2008 and the Environmental Easement dated November 2012. The overall remedial goal is to meet all NYSDEC Standards, Criteria, and Guidance Values (SCGs) and that the remedial program be 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 as follows:

Eliminate or reduce the following, to the extent practical:

- Exposures of persons at or around the Site to chlorinated solvents (i.e., TCE and 1,1,1-TCA) in groundwater and soil.
- Potential exposures of persons at or in the vicinity of the Site to chlorinated solvents in indoor air.
- The release of contaminants from soil into groundwater such that may create further exceedances of groundwater quality standards.
- The release of contaminants from subsurface soil and/or groundwater under buildings into indoor air through soil vapor.

Further, the cleanup goals for the Site include attaining to the extent practicable:

- Class GA Values.
- NYSDEC SCOs.
- NYSDOH AGVs.

2.0 Institutional and Engineering Control Plan Compliance

2.1 Institutional Controls

A series of Institutional Controls (ICs) are required by the SMP to:

- Implement, maintain, and monitor Engineering Controls (ECs).
- Prevent future exposure to remaining contamination.
- Limit the use and development of the Site to commercial or industrial uses only.

The adherence to these ICs is required by the Environmental Easement for the Site, which are implemented under the SMP. ICs identified in the SMP and Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

These ICs are:

- The Site may be used for commercial or industrial use.
- All ECs must be operated 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 unless treated to render it safe for the intended use and determined by the NYSDOH.
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP.
- Future site activities that will disturb remaining contaminated material must be conducted in accordance with this SMP.
- Monitoring to assess the performance and effectiveness of 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 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 property owner to assure compliance with the restrictions identified by the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 1-2 of the SMP, and any potential impacts that are identified must be monitored or mitigated.
- Vegetable gardens and farming on the Site are prohibited.
- An evaluation shall be performed to determine the need for further investigation and remediation, should large-scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible.

2.2 Engineering Controls

The ECs for the Site include the groundwater monitoring well/injection well network, a cover system, an on-site SSDS/SVE System, and thirteen off-site active SSDSs. Note that the operation and maintenance of the on-site SSDS/SVE System and off-site SSDSs was managed by a separate state-wide contract; thus, these activities were not covered by this PRR. The completed IC/EC form is included in **Appendix C**.

3.0 Monitoring and Sampling Plan Compliance

The SMP was prepared to manage remaining on and off-site contamination and ensure that the remedy remains effective by restricting site use, site development and site soil movement. The table below summarized the SMP-specified monitoring and sampling activities for the Site and the dates those activities were completed:

Summary of SMP Site Monitoring and Sampling Plan				
Site Management Activity	**Frequency**	**Location**	**Laboratory Analysis**	**Completion Date(s):**
Site-Wide Inspection	Annually	1808 Vestal Parkway East, Vestal, NY 13850 (Parcel # 158.13-3-2.1) and groundwater wells located on surrounding properties	Not Applicable	10/5-10/8/2020, 10/25-10/28/2021, and 11/7-11/9/2022
Groundwater Sampling (VOCs)	Annually	• MW-1 • MW-7 • MW-8 • MW-9 • MW-11 • MW-13 • MW-15 • MW-17 • MW-19 • MW-20 • MW-22 • MW-25 • MW-26 • MW-28 • MW-31 • MW-33 • MW-101 • MW-102 • MW-103 • MW-104 • MW-B • RW-8 • RW-9 • TW-1 • TW-2 • TW-3 • TW-6 • TWMW-01	VOCs by United States Environmental Protection Agency (USEPA) Method 8260C	10/5-10/8/2020, 10/25-10/28/2021, and 11/7-11/9/2022
Groundwater Sampling (1,4-Dioxane)	Annually	• MW-101 • MW-104 • TW-2 • TWMW-01	1,4-Dioxane by USEPA Method 8270D SIM	10/5-10/8/2020, 10/25-10/28/2021, and 11/7-11/9/2022
Groundwater Sampling (PFAS)	Annually	• MW-101 • TW-2 • MW-11	PFAS by USEPA Method 537.1	10/25-10/28/2021, and 11/7-11/9/2022

Summary of SMP Site Monitoring and Sampling Plan				
Site Management Activity	**Frequency**	**Location**	**Laboratory Analysis**	**Completion Date(s):**
Groundwater Sampling (MNA Parameters)	Annually	• MW-101 • MW-102 • MW-104 • TW-2 • TWMW-01 • MW-22	• Total Organic Carbon by USEPA Method 9060A • Nitrate and Nitrite by Method 353.2, • Sulfate and Chloride by Method 300.0_28D • Sulfides by Method SM4500_S2_F • Total Alkalinity by Method 2320B • Carbon Dioxide by Method RSK_175_CO2 • Iron and Manganese by Method 6010C/3005AMethane/ Ethane/Ethene by Method RSK_175	10/5-10/8/2020, 10/25-10/28/2021, and 11/7-11/9/2022
PRR	Every five years	Not Applicable	Not Applicable	November 2024

Note:

In 2020, the NYSDOH concluded that no further action was warranted to either mitigate or monitor for soil vapor intrusion.

3.1 Site-Wide Inspection

On October 25, 2021, D&B performed an annual site-wide inspection in accordance with the SMP. After acquiring site management responsibilities in early 2022, TRC performed an annual site-wide inspection on November 7, 2022, in accordance with the SMP. A site inspection was not completed within the reporting period in 2023; therefore, groundwater analytical results and site conditions were not noted in 2023. NYSDEC was notified that this work was not completed. The 2021 and 2022 site inspections included an evaluation of the Site's cover system, inspection of groundwater monitoring/injection wells, and confirmation of compliance with all ICs (including Site usage). Note that inspection and operation and maintenance of the on-site SSDS/SVE System and off-site residential SSDSs was managed by a separate state-wide contract; thus, these activities were not covered by this PRR.

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

Summary of Site Activities and Site Monitoring and Sampling October 2019 through October 2024		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
Site-Wide Inspection	October 6, 2020: D&B performed a site-wide inspection and noted the cover system to be in good condition. Note that no daily report was provided for this site event, so additional information regarding the cover system inspection and well inspections performed during this annual event is not available. Based on the comments provided in D&B's 2021 annual inspection report, it is assumed that the following was observed in 2020: asphalt top course in the western parking lot was observed to be in good condition. October 25, 2021: D&B performed a site-wide inspection and noted the cover system to be in good condition. Additionally, the steel plate located at 1801 Vestal Parkway East was noted to be in similar condition as was observed in 2020. November 7, 2022: TRC performed a site-wide inspection and noted the cover system to be in good condition. Several inspection reports noted that the steel plate covering an unknown structure at 1801 Vestal Parkway East appeared to have been damaged by a snowplow. This steel plate is located off-site and not covered by the SMP.	No routine maintenance or corrective measures needed at this time.
Groundwater Gauging and Monitoring	October 5 through 8, 2020: D&B gauged 28 wells for depth to water to evaluate potential groundwater flow direction. After gauging the wells, D&B collected groundwater samples and associated quality control samples from 27 of the 28 wells (no sample was collected from MW-31 for unknown reasons) for routine analysis of Target Compound List (TCL) VOCs by USEPA Method 8260C. Additionally, D&B collected samples from six wells (MW-22, MW-101, MW-102, MW-104, TW-2, and TWMW-01) for analysis of MNA parameters. Refer to Section 3.0 for full list of MNA parameter analyses. Also, four wells (MW-101, MW-104, TW-2, and TWMW-01) were sampled for the analysis of 1,4-dioxane by USEPA Method 8270D SIM. October 25 through 28, 2021: D&B gauged 28 wells for depth to water to evaluate potential groundwater flow direction. After gauging the wells, D&B collected groundwater samples and associated quality control samples from 27 (MW-B was not sampled because it purged dry and did not recharge sufficient groundwater for sample collection). These samples were submitted for routine analysis of TCL VOCs by USEPA Method 8260C.	The riser for monitoring well MW-102 was found to be installed too high for the casing lid to be secured while the j-plug is installed. As such, this riser should be cut down to allow the lid to close. Additionally, monitoring wells MW-1, MW-7, MW-11, MW-17, MW-33, MW-101, MW-102, TWMW-1, TW-1, TW-2, TW-3, TW-6, and MW-9 were found to have damaged casing lids and/or missing bolts. These conditions should be corrected. The following is recommended: • Repair or replacement of casing lids and/or casing lid bolts for monitoring wells MW-1, MW-7, MW-9, MW-11, MW-17, MW-33, MW-101, TWMW-1, TW-1, TW-2, TW-3, and TW-6.

Summary of Site Activities and Site Monitoring and Sampling October 2019 through October 2024		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
	Additionally, D&B collected samples from six wells (MW-22, MW-101, MW-102, MW-104, TW-2, and TWMW-01) for the analysis of MNA parameters. Refer to Section 3.0 for full list of MNA parameter analyses. Also, three wells (MW-101, MW-104, and TW-2) were sampled for the analysis of 1,4-dioxane by USEPA Method 8270D SIM, and three wells (MW-11, MW-101, and TW-1) were sampled for the analysis of PFAS by USPEA Method 537.1. November 7 through 9, 2022: TRC gauged 27 wells for depth to water to evaluate potential groundwater flow direction. Monitoring well MW-102 was not gauged due to an obstruction found at approximately six feet below top of riser. After gauging the wells, TRC collected groundwater samples and associated quality control samples from 25 of the 27 wells subject to gauging. Monitoring well MW-102 was not sampled due to an obstruction found approximately six feet below top of riser, and monitoring wells MW-B and MW-31 were not sampled because they purged dry and did not recharge sufficient groundwater. These samples were submitted for routine analysis for TCL VOCs by USEPA Method 8260C. Additionally, TRC collected samples from five wells (MW-22, MW-101, MW-102, MW-104, TW-2, and TWMW-01) for the analysis of MNA parameters. Refer to Section 3.0 for full list of MNA parameter analyses. Note that Manganese results were qualified as unusable within the Data Usability Summary Report (DUSR) and are, therefore, not reported on **Tables 3** and **4**. Also, four wells (MW-101, MW-104, TW-2, and TWMW-01) were sampled for the analysis of 1,4-dioxane by USEPA Method 8270D SIM, and three wells (MW-11, MW-101, and TW-1) were sampled for the analysis of PFAS by USPEA Method 537.1.	• Monitoring well MW-102 should be evaluated for redevelopment or decommissioning and replacement with a well nearby within the source area, due to the issue with the riser height and the blockage found at approximately six feet below top of riser. • There is a fallen tree and overgrown vegetation surrounding monitoring wells MW-13 and MW-15 that should be removed prior to the next sampling event.
Non-Routine Confirmatory Indoor Air Sampling Following SSD/SVE System Maintenance	April 8 through 10, 2020: D&B and Aztech Environmental Technologies (Aztech), performed maintenance on the on-site SSDS/SVE System. In early 2020, the on-site building's owner reported (to the NYSDEC) that there was a leak in the SSDS/SVE System piping. May 14, 2020: D&B and Aztech performed communication testing to evaluate the effectiveness of the on-site SSDS/SVE System repairs. On May 15, 2020,	The off-site residential SSDSs and on-site SSDS/SVE System should continue to be operated, maintained, and monitored, as required by the SMP.

Summary of Site Activities and Site Monitoring and Sampling October 2019 through October 2024		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
	D&B performed confirmatory indoor air sampling within the on-site building. At the request of NYSDEC, D&B attempted to contact the owner of the residential property located at 309 Maple Street to schedule SVI sampling but was unsuccessful. The May 2020 indoor air sample was collected from the Aerobics Room/Gym area of the on-site building, adjacent to repaired SSDS/SVE System piping. D&B deployed a single eight-hour Summa canister to collect an indoor air sample for VOC analysis by USEPA Method TO-15. The canister was shipped to Eurofins/TestAmerica in Burlington, Vermont for analysis. Note that operation, maintenance, and monitoring of the on-site SSDS/SVE System and off-site residential SSDSs was managed by a separate state-wide contract. Therefore, this section summarizes the result of indoor air testing performed by D&B on May 15, 2020. May 15, 2020: At the request of NYSDEC, D&B collected one eight-hour indoor air sample for VOC analysis by USEPA method TO-15. The indoor air sample was collected from the Aerobics Room/Gym Area of the on-site building. This sample was collected at a height of three to five feet above the floor, to simulate a typical breathing zone. The purpose of this sample was to confirm the SSDS/SVE System repairs performed in April and May 2020 were effective.	

3.2 Groundwater Monitoring Summary

3.2.1 Groundwater Gauging

On October 5, 2020, and October 25, 2021, prior to groundwater sample collection during each event, D&B gauged 28 wells for depth to groundwater to evaluate potential groundwater flow direction. On November 7, 2022, prior to groundwater sample collection, TRC gauged 27 wells for depth to groundwater to evaluate potential groundwater flow direction. Monitoring well MW-102 was gauged; however, a blockage was present at 6.28 feet below the top of its riser, preventing the measurement of depth to water.

The site wells are all screened in the overburden hydrogeologic unit. The groundwater well construction details are summarized in **Table 1**. The groundwater gauging and elevation measurements for each gauging event are presented on **Table 2.** Groundwater elevations for the overburden monitoring wells, groundwater surface elevation contours, and interpreted groundwater flow directions are presented on **Figures 4, 5 and 6**. A summary of the site hydrogeologic information for each event is presented below:

Site Hydrogeologic Summary October 2019 through October 2024				
Date of Gauging Event	**Number of Wells Gauged**	**Overburden Groundwater Elevation Range (feet above mean Sea level)**		**Inferred Overburden Groundwater Flow Direction**
		Lowest	**Highest**	
October 5, 2020	28	804.28 (MW-28)	834.43 (MW-101)	North
October 25, 2021	28	809.39 (MW-28)	835.89 (MW-101)	North
November 7, 2022	27	804.57 (MW-28)	834.43 (MW-101)	North

3.2.2 Groundwater Sampling

Three groundwater sampling events were conducted during the reporting period utilizing standard low-flow sampling techniques, each corresponding with the gauging events noted in **Section 3.2.1**.

In October 2020, D&B collected groundwater and associated Quality Assurance/Quality Control (QA/QC) samples from 27 wells (no sample was collected from MW-31 for unknown reasons). These samples were submitted to Eurofins/TestAmerica for routine analysis of Target Compound List (TCL) VOCs by USEPA Method 8260C. Additionally, D&B collected samples from six wells (MW-22, MW-101, MW-102, MW-104, TW-2, and TWMW-01) for analysis of MNA parameters, including Total Organic Carbon (TOC) by USEPA Method 9060A, Nitrate and Nitrite by Method 353.2, Chloride and Sulfate by Method 300.0_28D, Alkalinity by Method 2320B, Carbon Dioxide by Method RSK-175_CO2, Iron and Manganese by Method 6010C, Sulfides by Method SM4500_S2, and Methane/Ethane/Ethene by Method RSK_175. Also, four wells (MW-101, MW-104, TW-2, and TWMW-01) were sampled for 1,4-dioxane analysis by Method 8270D SIM. No daily report or purge logs were provided for this sampling event.

In October 2021, D&B collected groundwater samples and associated quality control samples from 27 wells (MW-B was not sampled because it purged dry and did not recharge sufficient groundwater for sample collection). These samples were submitted for laboratory analysis consistent with the October 2020 sampling event, including TCL VOCs, MNA parameters (TOC by USEPA Method 9060A, Nitrate and Nitrite by Method 353.2, Chloride and Sulfate by Method 300.0_28D, Alkalinity by Method 2320B, Carbon Dioxide by Method RSK-175_CO2, Iron and Manganese by Method 6010C, Sulfides by Method SM4500_S2, and Methane/Ethane/Ethene by Method RSK_175) and 1,4-dioxane Method 8270D SIM, accordingly. The associated field can be found in **Appendix E**.

In 2022, TRC collected groundwater samples and associated quality control samples from 25 wells. Monitoring well MW-102 was not sampled due to an obstruction found within the well riser at approximately six feet below top of riser, and monitoring wells MW-B and MW-31 were not sampled because they due to being purged dry and did not recharge sufficient groundwater. These samples were submitted for routine analysis by USEPA Method 8260C for TCL VOCs by USEPA Method 8260C. Additionally, TRC collected samples from five wells (MW-22, MW-101,

MW-102, MW-104, TW-2, and TWMW-01) for analysis of MNA parameters. Note that Manganese results were qualified as unusable within the DUSR, and are, therefore, not reported on the **Tables 3** and **4**. Also, four wells (MW-101, MW-104, TW-2, and TWMW-01) were sampled for the analysis of 1,4-dioxane by USEPA Method 8270D SIM, and three wells (MW-11, MW-101, and TW-1) were sampled for the analysis of PFAS by USPEA Method 537.1 These samples were analyzed by Con-Test/Pace Analytical Laboratories. The associated field can be found in **Appendix E**.

A summary of the groundwater sampling information and pertinent well details for each well is presented as follows:

Summary of Groundwater Monitoring Well Details and Sampling Activities
October 2019 to October 2024

Well Identification	Monitoring Well Details		Groundwater Sampling Event				
	Screen Zone (feet below ground surface)	Type of Well	Depth to Water (feet below top of riser)			SMP Analytes	
			2020	2021	2020	2020	2021 & 2022
MW-1	8-18	Monitoring Well	13.25	12.05	13.14	VOCs,	VOCs
MW-7	10-30	Monitoring Well	19.52	18.43	19.39	VOCs	VOCs
MW-8	10-32	Monitoring Well	22.50	21.09	22.19	VOCs	VOCs
MW-9	10-30	Monitoring Well	19.71	18.28	19.49	VOCs	VOCs
MW-11	10-30	Monitoring Well	21.09	20.00	20.99	VOCs	VOCs, PFAS
MW-13	5-25	Monitoring Well	14.00	11.18	13.50	VOCs	VOCs
MW-15	5-25	Monitoring Well	15.39	12.31	14.80	VOCs	VOCs
MW-17	5-25	Monitoring Well	14.82	13.82	14.66	VOCs	VOCs
MW-19	5-20	Monitoring Well	13.04	10.09	12.40	VOCs	VOCs
MW-20	3-18	Monitoring Well	11.50	9.13	11.40	VOCs	VOCs
MW-22	3-18	Monitoring Well	13.29	11.16	12.85	VOCs, MNA	VOCs, MNA[3]
MW-25	10-25	Monitoring Well	18.10	15.88	18.00	VOCs	VOCs
MW-26	8-25	Monitoring Well	20.56	16.64	19.90	VOCs	VOCs
MW-28	20-35	Monitoring Well	26.59	21.48	26.30	VOCs	VOCs
MW-31 [4]	15-30	Monitoring Well	20.34	19.05	20.40	VOCs	VOCs
MW-33	5-20	Monitoring Well	13.49	12.42	13.39	VOCs	VOCs
MW-101	5-15	Monitoring Well	7.87	6.37	7.83	VOCs, MNA, 1,4-dioxane	VOCs, MNA[3], 1,4-dioxane, PFAS
MW-102 [5]	11-21	Monitoring Well	8.53	7.21	NG	VOCs, MNAP	VOCs, MNAP*
MW-103	9-19	Monitoring Well	11.85	11.40	12.02	VOCs	VOCs
MW-104	38-48	Monitoring Well	12.88	11.49	12.42	VOCs, MNA, 1,4-dioxane	VOCs, MNA[3], 1,4-dioxane
MW-B [6]	9.5-12.5	Monitoring Well	9.90	8.92	10.41	VOCs	VOCs
RW-8	28.9-43.9	Recovery Well	22.32	20.00	21.68	VOCs	VOCs
RW-9	25.2-40.2	Recovery Well	22.85	21.73	22.39	VOCs	VOCs
TW-1	10-20	Monitoring Well	10.09	9.06	9.93	VOCs	VOCs, PFAS
TW-2	10-20	Monitoring Well	13.29	12.51	13.22	VOCs, MNA, 1,4-dioxane	VOCs, MNA[3], 1,4-dioxane
TW-3	10-20	Monitoring Well	14.15	13.09	14.02	VOCs	VOCs
TW-6	9-19	Monitoring Well	9.90	8.89	9.78	VOCs	VOCs
TWMW-01 [7]	22-39	Monitoring Well	13.67	12.69	13.69	VOCs, MNA, 1,4-dioxane	VOCs, MNA[3], 1,4-dioxane

Notes:
1 - Only the monitoring wells currently included in the SMP monitoring plan are represented in this table.
2 - Refer to **Table 1** for all monitoring well construction details.
3 - MNA analysis for Manganese performed in 2022 was deemed unusable by the DUSR.
4 - MW-31 was not sampled in 2020 for unknown reasons and not sampled in 2022 due to purging dry with low recovery rate.
5 - MW-102 was not fully gauged or sampled in 2022 due to blockage in riser.
6 - MW-B was not sampled in 2021 or 2022 due to purging dry with low recovery rate.
7 - TWMW-01 the analysis for 1,4-dioxane was not performed in 2021.

3.2.3 Groundwater Analytical Results

Groundwater analytical data for the October 2020, October 2021, and November 2022 sampling events presented in **Tables 3** and **4**. Detected compounds exceeding their respective NYSDEC Class GA Values for each monitoring well are identified on **Figures 4**, **5**, and **6**, respectively. The DUSRs for each sampling event can be found in **Appendix F**. Concentration trend line graphs are provided in **Appendix G** for monitoring wells exhibiting concentrations of Contaminants of Concern (COCs) consistently above NYSDEC Class GA Values.

A summary of the COCs that exceeded NYSDEC Class GA Values based on the October 2020, October 2021, and November 2022 groundwater analytical results are provided below:

Summary of Groundwater Analytical Results – VOCs, 1,4-Dioxane, PFAS, MNA

Constituent	NYSDEC Class GA Values *	Concentration Range	Location with Highest Concentration	Frequency Exceeding NYSDEC Class GA Values
October 2020				
TCL VOCs (results in µg/L)				
1,1,1-Trichloroethane	5	ND – 82	TW-2	10/27
Freon 113	5	ND – 6.1	TW-3	1/27
1,1-Dichloroethane	5	ND – 31 J	MW-104	11/27
1,1-Dichloroethene	5	ND – 110	MW-104	7/27
Benzene	1	ND – 130	MW-9	3/27
Chloroethane	5	ND – 5.9	MW-102	1/27
cis-1,2-Dichloroethene	5	ND – 1,300	MW-104	10/27
Ethylbenzene	5	ND - 930	MW-9	4/27
Isopropylbenzene	5	ND – 18	MW-7	1/27
Methyl tert butyl ether	10	ND – 26	MW-8	1/27
Methylene chloride	5	ND – 26 J	MW-104	3/27
Toluene	5	ND – 120	MW-9	2/27
Trichloroethene	5	ND – 380 J	TW-2	12/27
Trichlorofluoromethane (Freon 11)	5	ND – 30	TW-2	4/27
Vinyl chloride	2	ND – 440 J	TWMW-01	5/27
Xylenes, Total	5	ND – 1700	MW-9	6/27
VOC TICs (results in µg/L)				
1,2,4-Trimethylbenzene	5	ND – 130 JN	MW-8	2/27
m,p-Xylene	5	ND – 14	MW-15	1/27
1,3,5-Trimethylbenzene	5	ND – 120 JN	MW-8	1/27
1,4-Dioxane (results in µg/L)				
1,4-Dioxane	0.35	ND – 4.3	TW-2	3/4
MNA Parameters (results in µg/L)				
Iron	300	ND – 14,300	MW-102	3/6
Manganese	300	15 – 2,600	MW-22	4/6
Chloride	250,000	94,400 – 365,000	TWMW-01	3/6

October 2021				
TCL VOCs (results in µg/L)				
1,1,1-Trichloroethane	5	ND – 69	TW-2	6/27
Freon 113	5	ND – 9.0	MW-11	2/27
1,1-Dichloroethane	5	ND – 24	MW-104	9/27
1,1-Dichloroethene	5	ND – 90	MW-104	7/27
Benzene	1	ND – 1.3	RW-09	2/27
Chloroethane	5	ND – 35	MW-104	1/27
cis-1,2-Dichloroethene	5	ND – 1,400	MW-104	12/27
Ethylbenzene	5	ND – 210	MW-9	3/27
Isopropylbenzene	5	ND – 18	MW-7	2/27
Methylene chloride	5	ND - 23	MW-8	2/27
Toluene	5	ND – 27 J	MW-9	1/27
Trichloroethene	5	ND – 390	TW-2	13/27
Trichlorofluoromethane (Freon 11)	5	ND – 24	TW-2	3/27
Vinyl chloride	2	ND – 640	TWMW-01	7/27
Xylenes, Total	5	ND – 180	MW-7	3/27
VOC TICs (results in µg/L)				
1,2,4-Trimethylbenzene	5	ND – 310 JN	MW-8	1/27
1,4-Dioxane (results in µg/L)				
1,4-Dioxane	0.35	ND – 3.8	TW-2	2/3
PFAS (results in ng/L)				
PFOA	6.7	7.5 – 18	MW-101	3/3
PFOS	2.7	1.3 J – 13	MW-11	1/3
MNA Parameters (results in µg/L)				
Iron	300	ND – 19,200	MW-102	3/6
Manganese	300	ND – 2,100	MW-22	3/6
Chloride	250,000	155,000 – 283,000	TW-2	1/6
November 2022				
TCL VOCs (results in µg/L)				
1,1,1-Trichloroethane	5	ND – 34	TW-2	6/25
1,1-Dichloroethane	5	ND – 27	MW-104	9/25
1,1-Dichloroethene	5	ND – 34	MW-104	5/25
Benzene	1	ND – 74	MW-9	2/25
Chloroethane	5	ND – 14 J	MW-104	2/25
cis-1,2-Dichloroethene	5	ND – 720	MW-104	9/25
Ethylbenzene	5	ND – 580	MW-9	4/25
Isopropylbenzene	5	ND – 66	MW-8	4/25
Toluene	5	ND – 83	MW-9	1/25
Trichloroethene	5	ND – 240	TW-2	11/25
Trichlorofluoromethane (Freon 11)	5	ND – 8.8	TW-2	2/25
Vinyl chloride	2	ND – 580	MW-104	6/25
Xylenes, Total	5	ND – 1,000	MW-9	4/25
1,4-Dioxane (results in µg/L)				
1,4-Dioxane	0.35	ND – 3.2	TW-2	3/4

PFAS (results in ng/L)				
PFOA	6.7	7.8 – 25	TW-2	3/3
PFOS	2.7	1.7 J – 15	MW-11	2/3
Monitored Natural Attenuation Parameters (results in µg/L)				
Iron	300	ND – 2,800	MW-104	1/5
Chloride	250,000	100,000 – 390,000	MW-101	4/5

Notes:
ND – Not detected.

3.3 Non-Routine Indoor Air Sampling

3.3.1 Non-Routine Indoor Air Sampling Summary

On May 15, 2020, D&B performed confirmatory indoor air sampling within the on-site building. The May 2020 indoor air sample was collected from the Aerobics Room/Gym area of the on-site building, adjacent to repaired SSDS/SVE System piping. D&B deployed a single eight-hour Summa canister to collect an indoor air sample for VOC analysis by USEPA Method TO-15. The canister was shipped to Eurofins/TestAmerica in Burlington, Vermont for analysis.

3.3.2 Applicable Air Standards, Criteria, and Guidance

Table 5 compares the results of analysis of the May 2020 indoor air sample to the air guidance values (AGV) found on Table 3.1 from the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 with September 2013 and August 2015 updates). No SSSV samples were collected; therefore, the May 2020 results could not be compared to NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York Matrices. The approximate location of the indoor air sample and approximate SSDS/SVE System layout within the on-site building is presented in **Figure 4**.

3.3.3 Indoor Air Analytical Results

The associated analytical results indicated the presence of the several VOCs in indoor air, but none of detected concentrations was above NYSDOH AGVs. The indoor air analytical data for the May 2020 sampling event is summarized in **Table 5**.

4.0 Cost Summary

The total estimated cost of site SMP activities since TRC took over such activities from April 2022 through October 2024 is approximately $33,291. These activities included project management/administration, one annual site-wide inspection, one post-storm inspection, one orientation site walk with D&B, one groundwater sampling event for the analysis of VOCs, including additional groundwater sampling and analysis for 1,4-Dioxane, MNA parameters, and PFAS. The total cost includes labor costs and expenses associated with the project. A summary of these costs is presented below:

Summary of Site Management Costs
April 2022 through September 2024

Cost Item	Amount Expended	Percent of Total Cost (Approximate)
Engineering Support		
TRC	$ 27,107	81%
Expenses		
TRC	$ 4,859	15%
Subcontractor Costs	$ 1,325	4%
Total Cost	**$ 33,291**	---

The following provides a review of each cost item:

- Engineering support includes labor costs associated with project management (e.g., WA Package preparation, monthly invoicing, project scheduling and coordination, etc.); site inspections; groundwater sampling; post-storm inspection, and reporting (i.e., site inspection report, DUSR, and PRR).
- Subcontractors include analytical laboratory costs associated with the November 2022 groundwater sampling event and associated data validation services.
- Expense costs include travel, equipment, and supplies in support of the site-wide inspection, post-storm inspection, and groundwater sampling event.

5.0 Conclusions and Recommendations

5.1 Conclusions

- Site and groundwater use are consistent with the restrictions set forth in the SMP. The ICs operated as intended during this reporting period.
- The remedy continued to be protective of human health and the environment during this reporting period.
- ECs operated as intended during this reporting period, with the exception of a leak along the piping associated with the on-site SSDS/SVE System piping which was repaired in April 2020.
- Based on the groundwater elevations measured during the October 2020, October 2021, and November 2022 sampling events, groundwater flow in the overburden hydrogeologic unit is to the North. This is consistent with historical observations.
- Site COCs in groundwater include 1,1,1-TCA; cis-1,2-DCE; vinyl chloride; TCE; 1,1-dichloroethane; and 1,1-dichloroethene. Based on the analytical data collected during this reporting period presented in **Tables 3** and **4** and further evaluated in **Appendix G**, the following conclusions are made regarding concentrations of these groundwater contaminants:
    - Groundwater concentrations of 1,1,1-TCA, freon 113, 1,1-dichloroethane, 1,1-dichloroethene, benzene, chloroethane, cis-1,2-DCE, ethylbenzene, isopropylbenzene, methyl tert butyl ether, methylene chloride, toluene, TCE, trichlorofluoromethane (freon 11), vinyl chloride, and total xylenes exceeded NYSDEC Class GA Values at one or more locations during this reporting period. Groundwater concentrations of the MNA parameters iron, manganese, and chloride also exceeded NYSDEC Class GA Values at one or more location during this reporting period. Additionally, 1,4-dioxane, PFOA, and PFOS were detected above NYSDEC Part 375 PFAS sampling guidelines during this reporting period.
    - Samples collected at monitoring wells within the northern portion of the impacted area of the Site generally contained low concentrations of VOCs, below NYSDEC Class GA Values. Based on this, it appears VOCs concentrations in groundwater is generally decreasing in this area.
    - Groundwater concentrations at monitoring wells MW-19, MW-20, MW-22, MW-25, MW-26, MW-28, and MW-101 have been less than VOC Class GA Values since 2016 (eight consecutive sampling events).
- The remediation goal to eliminate or reduce, to the extent practical, exposures of persons at or around the Site to chlorinated solvents in subsurface soil and groundwater and indoor air appears to have been achieved with the aid of the Site's cover system and groundwater use restrictions imposed by the Environmental Notice.
- The remediation goal to eliminate or reduce to the extent practical potential exposures of persons at or in the vicinity of the Site to chlorinated solvents in indoor air appears to have been achieved with the aid of the on-site SSDS/SVE System and off-site SSDSs.
- The remediation goal to prevent the release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards appears to have been partially achieved through remedial action and subsequent post-remedial injection activities.
- The remediation goal to prevent the release of contaminants from groundwater and subsurface soil in the parking area and under buildings, into indoor air through soil vapor intrusion appears to be achieved. Potential soil vapor intrusion has been mitigated by the on-site SSDS/SVE System and off-site SSDSs. Based

on historical indoor air monitoring/sampling results, NYSDOH approved removal of the requirement for indoor air monitoring in 2020.

- The remediation goal to achieve NYSDEC groundwater quality standards to the extent practicable has not been achieved.
- The remediation goal to achieve NYCRR and NYSDEC SCOs to the extent practicable has not been achieved.
- The remediation goal to achieve NYSDOH AGVs has been achieved.

5.2 Recommendations

- Continue annual site-wide inspections and groundwater monitoring in accordance with the SMP.
- Utilizing passive diffusion samplers at the next sampling event for all wells that are only sampled for VOCs. This should reduce the number of days required to collect groundwater samples, reduce the emissions associated with the project, and for MW-17 (located in the median of a divided roadway) be safer for sampling. The remaining wells will continue to be sampled with low flow sampling techniques.
- Removing monitoring wells MW-19 and MW-25 form the sampling network because these wells have been historically below Class GA Values, have neutral trends for COCs, and the well's proximity to surrounding monitoring wells that will continue to be sampled.
- Sampling monitoring wells MW-20, MW-22, and MW-28 every five years instead of annually because these wells have been historically below Class GA Values and have neutral trends for COCs. TRC believes collecting samples at monitoring wells MW-20 and MW-28 is still needed because they are located in the outer ring of monitoring wells, but the frequency should be reduced. MNA parameters should be added to monitoring well MW-13 for the annual sampling to replace MW-22 as the off-site/down gradient MNA monitoring point and reduce the frequency of sampling MW-22.
- Monitoring wells MW-26 remain on an annual sampling cycle because it appears to have an increasing trend for COCs although it historically has been below Class GA Values.
- It is recommended that the casing lids and/or casing lid bolts for monitoring wells MW-1, MW-7, MW-9, MW-11, MW-17, MW-33, MW-101, TWMW-1, TW-1, TW-2, TW-3, and TW-6 be repaired/replaced during the next site inspection.
- The casing lid for monitoring well MW-102 is not able to be secured with a J-Plug installed and it is recommended that the riser be cut down to make room for the J-Plug during the next site inspection.
- It is recommended that a contractor be retained to remove the fallen tree and overgrown vegetation surrounding monitoring wells MW-13 and MW-15 prior to the next sampling event.
- Exterior inspections of the on-site SSDS/SVE system and off-site residential SSDSs shall be conducted at least annually, and perform comprehensive inspections at least every five years. Exterior inspections will include confirming that the fan is running, determining whether there is damage to the stack or other exterior system components, and identifying any structural changes, such as additions to the structure. Comprehensive inspections will include all activities required in the exterior inspection, as well as an interior inspection. The interior inspection will involve confirming a pressure differential on the manometer, inspecting the interior components for damage, recording vacuum readings from sub-slab vacuum monitoring

points (if installed), and inspecting the basement area for cracks in the basement floors and walls that may have developed since the SSDS was installed.

- The SMP should be revised to reflect the above changes/modifications if changes are acceptable to the NYSDEC.

6.0 Green and Sustainable Remediation

Green and sustainable remediation metrics implemented during this reporting period included utilizing local staff for site visits and visiting multiple sites under a single mobilization to limit travel and gas consumption. Generally, staff located between approximately 50 and 100 miles from the Site were utilized. Approximately 12,445 miles were travelled during this reporting period by standby engineer, contractor, and laboratory courier staff. Although, full-time operation of the on-site SSDS/SVE System and off-site SSDSs is necessary to protect the health of site occupants, emission rates are not calculated, and no emission reduction program has been implemented in relation to these activities. Site emissions are limited to VOCs from the on-site SSDS/SVE System and off-site SSDSs which are operated without vapor treatment. No known renewable energy programs have been utilized to operate these systems that utilized approximately 180,000 kilowatt-hours of electricity this reporting period. Additional details of the green and sustainable remediation metrics are 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 NYSDEC 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 environmental easement.
- 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.

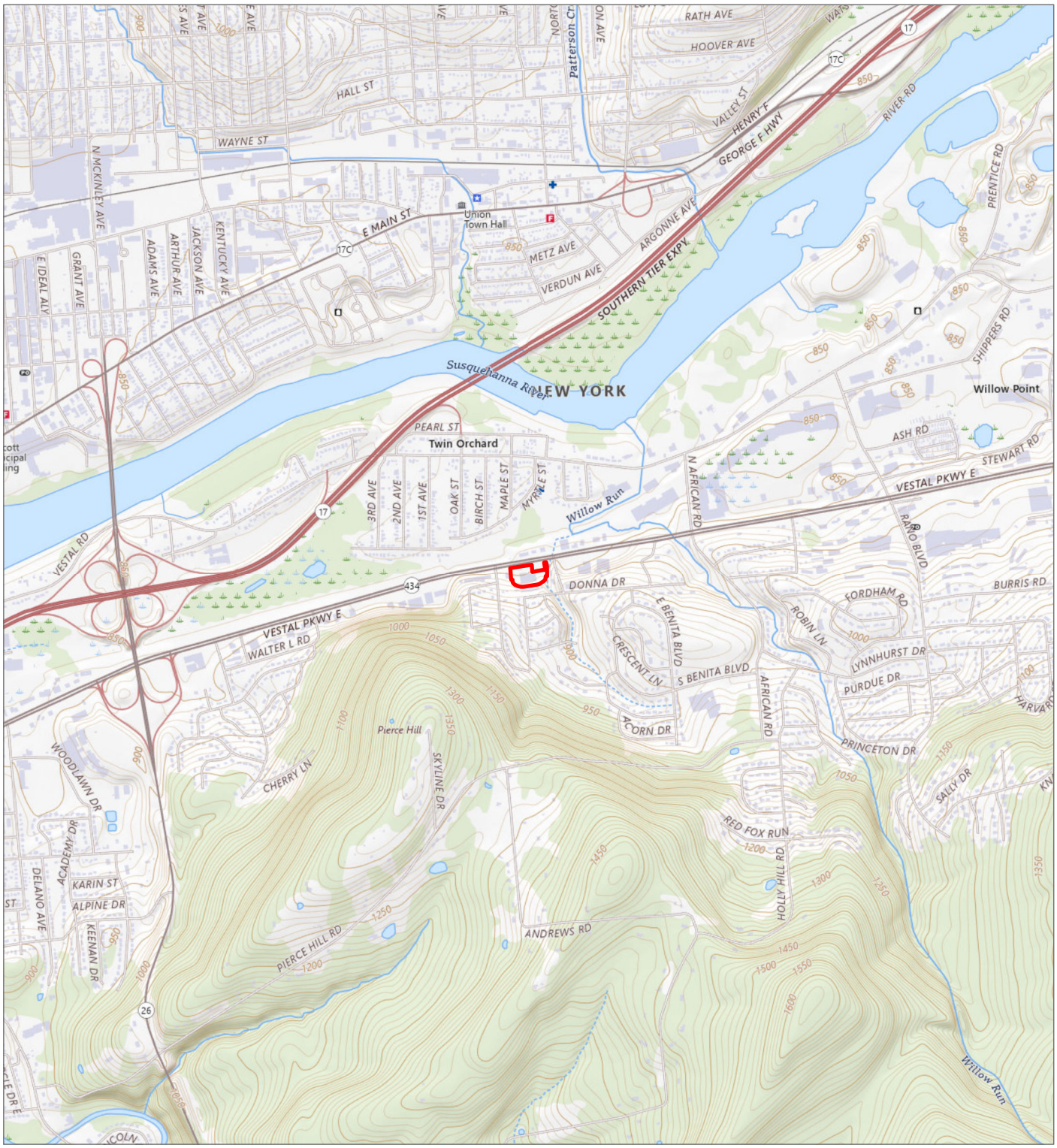
Environmental Engineer

8.0 Future Site Activities

Based on the recommendations in **Section 5.0,** the following site management activities will be completed during the next PRR reporting period (October 2024 to October 2029):

- Site inspections – Annually (next scheduled: fourth quarter of 2024)
- Groundwater sampling – Annually (next scheduled: fourth quarter of 2024)
- Repair and Corrective Actions – As needed
- PRR – Every five years (next scheduled: October 2029)

FIGURES



LEGEND

APPROXIMATE SITE BOUNDARY

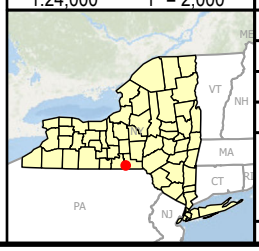
BASE MAP: USGS TOPOGRAPHIC MAP SERVICE, ENDICOTT NEW YORK QUAD
DATA SOURCES: TRC

N

0 1,000 2,000

FEET

1:24,000 1" = 2,000'



PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HIDDEN VALLEY ELECTRONICS SITE - NYSDEC SITE NO. 704029
1808 VESTAL PARKWAY E
VESTAL, NY 13850

TITLE:

SITE LOCATION MAP

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 25
CHECKED BY:	E. STOBBE		
APPROVED BY:	B. GREENE		**FIGURE 1**
DATE:	NOVEMBER 2024		

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

FILE: PRR_2024

COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK CENTRAL FIPS 3102 FEET; MAP ROTATION: 0
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COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK CENTRAL FIPS 3102 FEET; MAP ROTATION: 0
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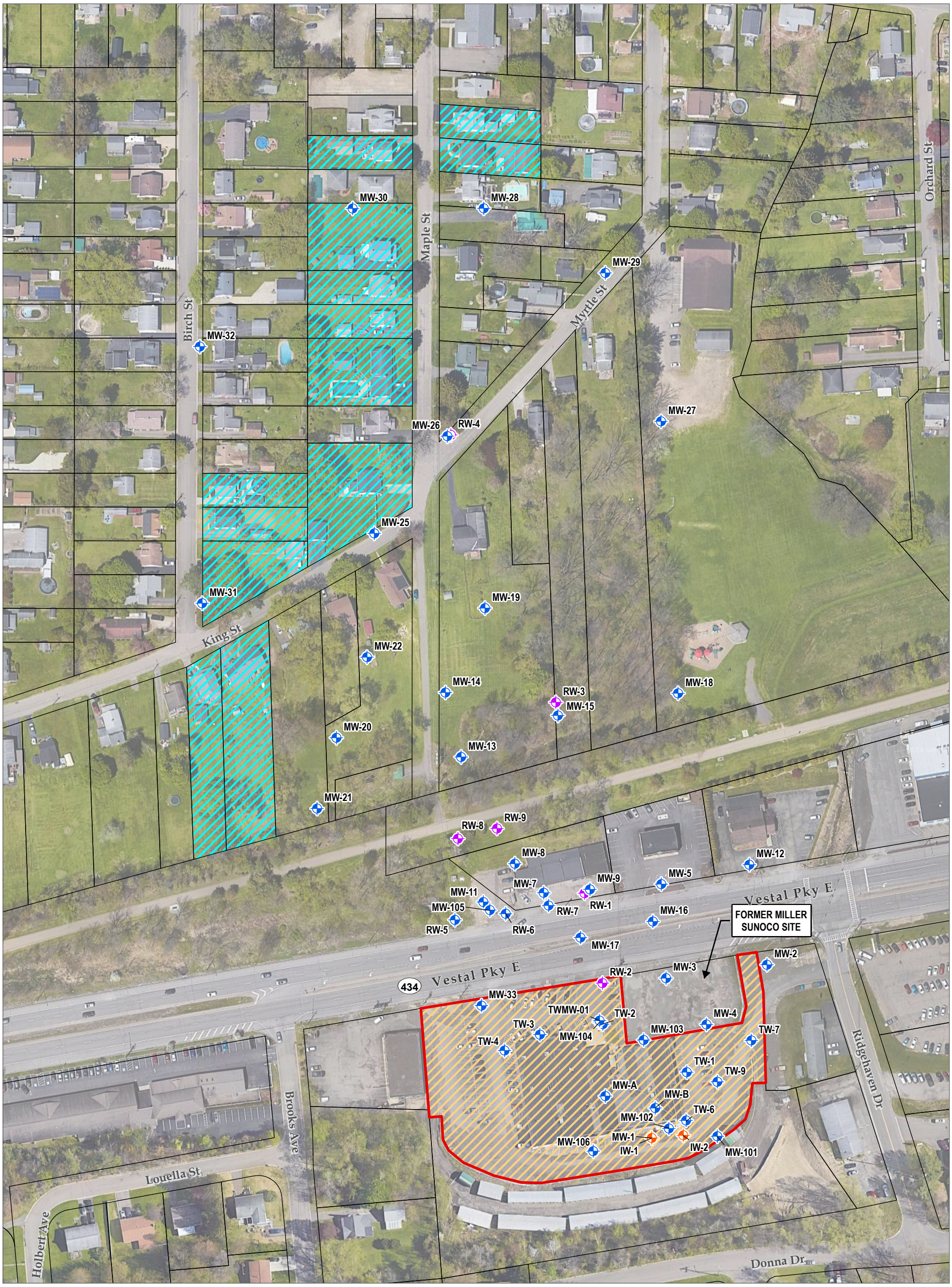

LEGEND

- APPROXIMATE SITE BOUNDARY
- TAX PARCEL BOUNDARY
- SSDS/SVE SYSTEM INSTALLED
- SSDS INSTALLED
- OVERBURDEN MONITORING WELL
- INJECTION WELL
- RECOVERY WELL

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
2. WELL TYPES FROM SITE MANAGEMENT PLAN REVISION 2, JANUARY 2018, PREPARED BY MACTEC ENGINEERING AND CONSULTING P.C. AND SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.
3. WELL COORDINATES AND CASING ELEVATIONS FROM SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.
4. ONLY WELLS WITH SURVEYED COORDINATES ARE SHOWN.

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED MAY, 2022
DATA SOURCES: TRC

0 70 140 FEET
1:1,680 1" = 140'

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HIDDEN VALLEY ELECTRONICS - NYSDEC SITE NO. 704029
1808 VESTAL PARKWAY E
VESTAL, NY 13850

TITLE:
SITE LAYOUT MAP

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 25
CHECKED BY:	E. STOBBE		
APPROVED BY:	B. GREENE		FIGURE 2
DATE:	JANUARY 2025		

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

FILE: PRR_2024

LEGEND

- APPROXIMATE SITE BOUNDARY
- SVE ENCLOSURE
- SVE PIPE
- OVERBURDEN MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- INDOOR AIR SAMPLE LOCATION
- EXTRACTION WELL

NOTES:

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

2. WELL TYPES FROM SITE MANAGEMENT PLAN REVISION 2, JANUARY 2018, PREPARED BY MACTEC ENGINEERING AND CONSULTING P.C. AND SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.

3. WELL COORDINATES AND CASING ELEVATIONS FROM SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.

4. SSD/SVE SYSTEM LAYOUT FROM FIGURE 1 - SSDS MAP, PREPARED BY AZTECH ENVRONMENTAL TECHNOLOGIES, MAY 2020.

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED MAY, 2022
DATA SOURCES: TRC

1:360
1" = 30'
0 15 30 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HIDDEN VALLEY ELECTRONICS - NYSDEC SITE NO. 704029
1808 VESTAL PARKWAY E
VESTAL, NY 13850

TITLE:
2020 INDOOR AIR SAMPLE LOCATION AND SSD/SVE SYSTEM LAYOUT

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 25
CHECKED BY:	E. STOBBE		**FIGURE 3**
APPROVED BY:	B. GREENE		
DATE:	NOVEMBER 2024		

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

FILE: PRR_2024.aprx

Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet; Map Rotation: -10
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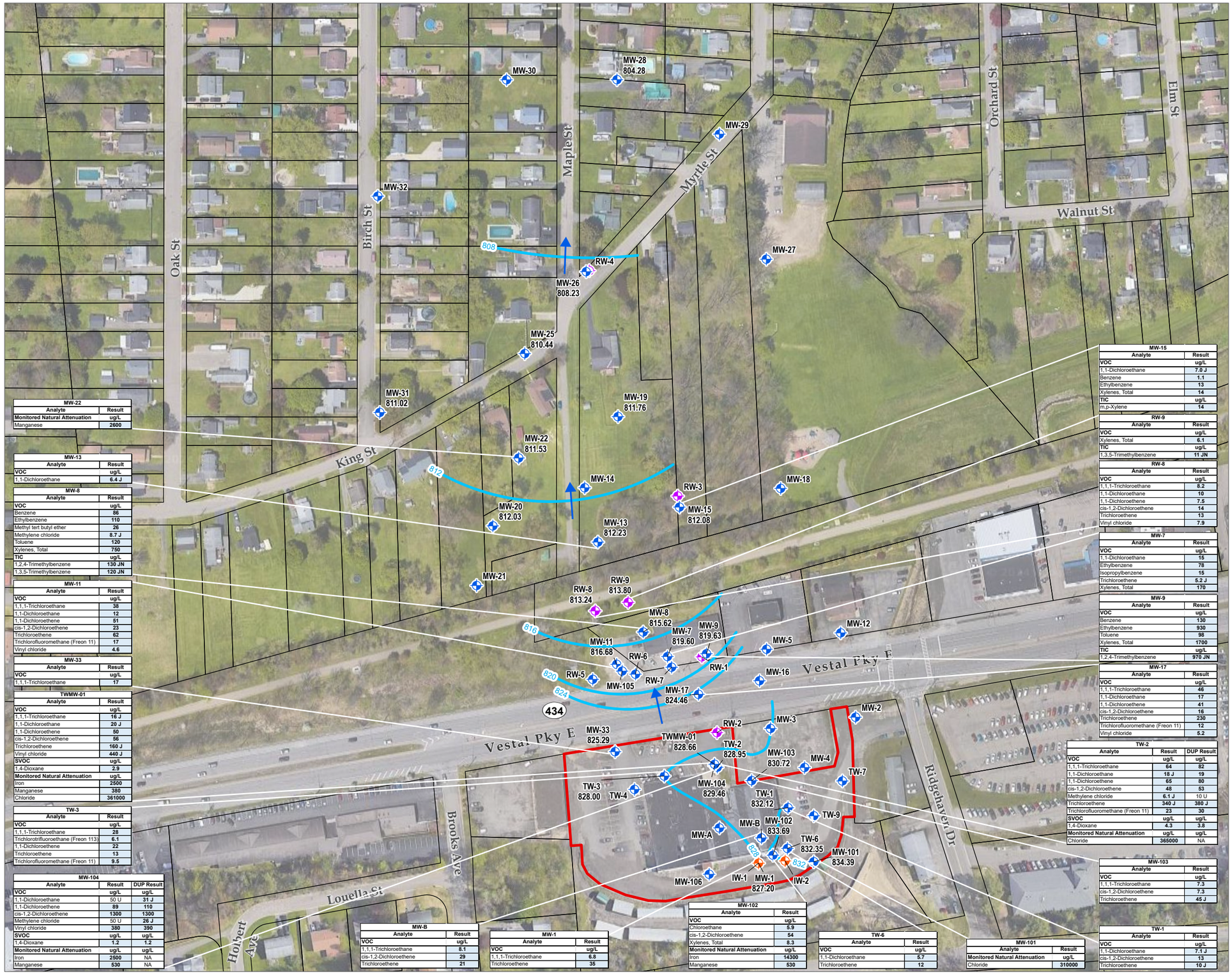

MW-22	
Analyte	Result
Monitored Natural Attenuation	ug/L
Manganese	2600

MW-13	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	6.4 J

MW-8	
Analyte	Result
VOC	ug/L
Benzene	86
Ethylbenzene	110
Methyl tert butyl ether	26
Methylene chloride	8.7 J
Toluene	120
Xylenes, Total	750
TIC	ug/L
1,2,4-Trimethylbenzene	130 JN
1,3,5-Trimethylbenzene	120 JN

MW-11	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	38
1,1-Dichloroethane	12
1,1-Dichloroethene	51
cis-1,2-Dichloroethene	23
Trichloroethene	62
Trichlorofluoromethane (Freon 11)	17
Vinyl chloride	4.6

MW-33	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	17

TWMW-01	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	16 J
1,1-Dichloroethane	20 J
1,1-Dichloroethene	50
cis-1,2-Dichloroethene	56
Trichloroethene	160 J
Vinyl chloride	440 J
SVOC	ug/L
1,4-Dioxane	2.9
Monitored Natural Attenuation	ug/L
Iron	2500
Manganese	380
Chloride	361000

TW-3	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	28
Trichlorotrifluoroethane (Freon 113)	6.1
1,1-Dichloroethene	22
Trichloroethene	13
Trichlorofluoromethane (Freon 11)	9.5

MW-104		
Analyte	Result	DUP Result
VOC	ug/L	ug/L
1,1-Dichloroethane	50 U	31 J
1,1-Dichloroethene	89	110
cis-1,2-Dichloroethene	1300	1300
Methylene chloride	50 U	26 J
Vinyl chloride	380	390
SVOC	ug/L	ug/L
1,4-Dioxane	1.2	1.2
Monitored Natural Attenuation	ug/L	ug/L
Iron	2500	NA
Manganese	530	NA

MW-B	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	8.1
cis-1,2-Dichloroethene	29
Trichloroethene	21

MW-1	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	6.8
Trichloroethene	35

MW-102	
Analyte	Result
VOC	ug/L
Chloroethane	5.9
cis-1,2-Dichloroethene	54
Xylenes, Total	8.3
Monitored Natural Attenuation	ug/L
Iron	14300
Manganese	530

TW-6	
Analyte	Result
VOC	ug/L
1,1-Dichloroethene	5.7
Trichloroethene	12

MW-101	
Analyte	Result
Monitored Natural Attenuation	ug/L
Chloride	310000

MW-15	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	7.0 J
Benzene	1.1
Ethylbenzene	13
Xylenes, Total	14
TIC	ug/L
m,p-Xylene	14

RW-9	
Analyte	Result
VOC	ug/L
Xylenes, Total	6.1
TIC	ug/L
1,3,5-Trimethylbenzene	11 JN

RW-8	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	8.2
1,1-Dichloroethane	10
1,1-Dichloroethene	7.5
cis-1,2-Dichloroethene	14
Trichloroethene	13
Vinyl chloride	7.9

MW-7	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	15
Ethylbenzene	78
Isopropylbenzene	15
Trichloroethene	5.2 J
Xylenes, Total	170

MW-9	
Analyte	Result
VOC	ug/L
Benzene	130
Ethylbenzene	930
Toluene	98
Xylenes, Total	1700
TIC	ug/L
1,2,4-Trimethylbenzene	970 JN

MW-17	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	46
1,1-Dichloroethane	17
1,1-Dichloroethene	41
cis-1,2-Dichloroethene	16
Trichloroethene	230
Trichlorofluoromethane (Freon 11)	12
Vinyl chloride	5.2

TW-2		
Analyte	Result	DUP Result
VOC	ug/L	ug/L
1,1,1-Trichloroethane	64	82
1,1-Dichloroethene	18 J	19
1,1-Dichloroethene	65	80
cis-1,2-Dichloroethene	48	53
Methylene chloride	6.1 J	10 U
Trichloroethene	340 J	380 J
Trichlorofluoromethane (Freon 11)	23	30
SVOC	ug/L	ug/L
1,4-Dioxane	4.3	3.8
Monitored Natural Attenuation	ug/L	ug/L
Chloride	365000	NA

MW-103	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	7.3
cis-1,2-Dichloroethene	7.3
Trichloroethene	45 J

TW-1	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	7.1 J
cis-1,2-Dichloroethene	13
Trichloroethene	10 J

LEGEND

- APPROXIMATE SITE BOUNDARY
- TAX PARCEL BOUNDARY
- INFERRED GROUNDWATER CONTOUR (4' INTERVALS)
- INFERRED GROUNDWATER FLOW DIRECTION
- OVERBURDEN MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- 813.24 GROUNDWATER SURFACE ELEVATION (IN FEET)

BOLDED AND HIGHLIGHTED RESULTS EXCEED CLASS GA VALUE	
Analyte	NYSDEC Guidance Value
VOC	ug/L
1,1,1-Trichloroethane	5
Trichlorotrifluoroethane (Freon 113)	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Benzene	1
Chloroethane	5
cis-1,2-Dichloroethene	5
Ethylbenzene	5
Isopropylbenzene	5
Methyl tert butyl ether	10
Methylene chloride	5
Toluene	5
Trichloroethene	5
Trichlorofluoromethane (Freon 11)	5
Vinyl chloride	2
Xylenes, Total	5
TICs	ug/L
1,2,4-Trimethylbenzene	5
m,p-Xylene	5
1,3,5-Trimethylbenzene	5
SVOC	ug/L
1,4-Dioxane	0.35*
Monitored Natural Attenuaton	ug/L
Iron	300
Manganese	300
Chloride	250,000
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. POTENTIOMETRIC SURFACE ELEVATIONS WERE COLLECTED ON OCTOBER 5, 2020.
3. WELL TYPES FROM SITE MANAGEMENT PLAN REVISION 2, JANUARY 2018, PREPARED BY MACTEC ENGINEERING AND CONSULTING P.C. AND SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.
4. WELL COORDINATES AND CASING ELEVATIONS FROM SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.
5. MW-B WAS GAUGED AS PART OF SAMPLING EVENT. HOWEVER, NO TOP OF RISER ELEVATION HAS BEEN PROVIDED FOR MW-B; THEREFORE, GROUNDWATER ELEVATION IS NOT ABLE TO BE DETERMINED.

ACRONYMS:
J - ESTIMATED VALUE
N - INDICATES PRESUMPTIVE EVIDENCE OF A COMPOUND
U - ANALYTE WAS NOT DETECTED AT SPECIFIED QUANTITATION LIMIT
NA - NOT ANALYZED
ug/L - MICROGRAMS PER LITER
ng/L - NANOGRAMS PER LITER
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
VOC - VOLATILE ORGANIC COMPOUNDS
SVOC - SEMI-VOLATILE ORGANIC COMPOUNDS
PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES
NYSDEC GUIDANCE VALUES - NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER, JUNE 1998 WITH THE APRIL 2000 ADDENDUM
* - GUIDELINES FOR SAMPLING AND ANALYSIS OF PFAS NYSDEC PART 375 REMEDIAL PROGRAMS, APRIL 2023

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED MAY, 2022
DATA SOURCES: TRC
1:2,040
1" = 170'
0 85 170
FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HIDDEN VALLEY ELECTRONICS - NYSDEC SITE NO. 704029
1808 VESTAL PARKWAY E
VESTAL, NY 13850

TITLE:
GROUNDWATER MONITORING MAP OCTOBER 2020

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 25
CHECKED BY:	E. STOBBE		
APPROVED BY:	B. GREENE		
DATE:	DECEMBER 2024		

FIGURE 4

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

FILE: PRR_2024.aprx

Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet, Map Rotation: 0
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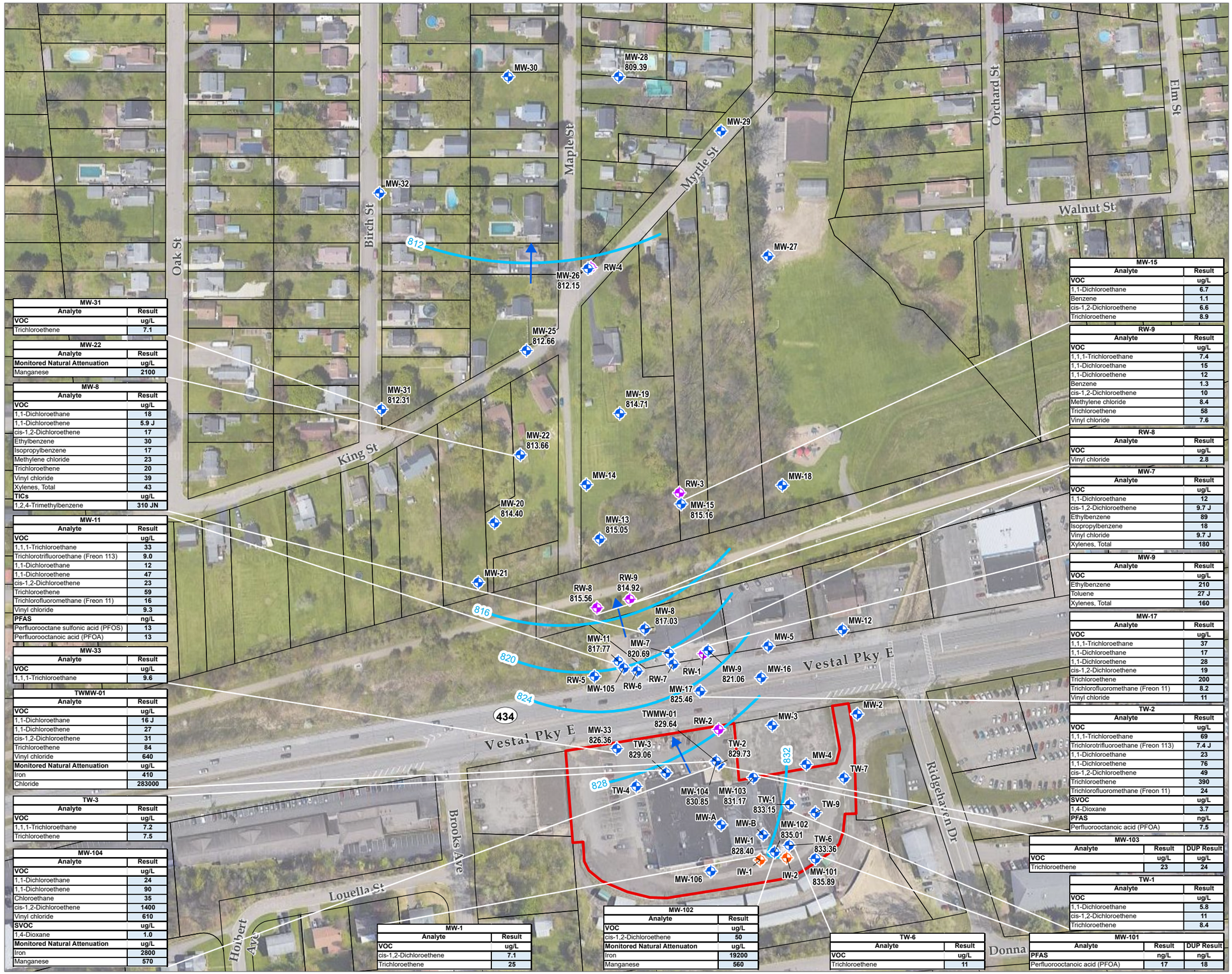

MW-31	
Analyte	Result
VOC	ug/L
Trichloroethene	7.1

MW-22	
Analyte	Result
Monitored Natural Attenuation	ug/L
Manganese	2100

MW-8	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	18
1,1-Dichloroethene	5.9 J
cis-1,2-Dichloroethene	17
Ethylbenzene	30
Isopropylbenzene	17
Methylene chloride	23
Trichloroethene	20
Vinyl chloride	39
Xylenes, Total	43
TICs	ug/L
1,2,4-Trimethylbenzene	310 JN

MW-11	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	33
Trichlorotrifluoroethane (Freon 113)	9.0
1,1-Dichloroethane	12
1,1-Dichloroethene	47
cis-1,2-Dichloroethene	23
Trichloroethene	59
Trichlorofluoromethane (Freon 11)	16
Vinyl chloride	9.3
PFAS	ng/L
Perfluorooctane sulfonic acid (PFOS)	13
Perfluorooctanoic acid (PFOA)	13

MW-33	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	9.6

TWMW-01	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	16 J
1,1-Dichloroethene	27
cis-1,2-Dichloroethene	31
Trichloroethene	84
Vinyl chloride	640
Monitored Natural Attenuation	ug/L
Iron	410
Chloride	283000

TW-3	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	7.2
Trichloroethene	7.5

MW-104	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	24
1,1-Dichloroethene	90
Chloroethane	35
cis-1,2-Dichloroethene	1400
Vinyl chloride	610
SVOC	ug/L
1,4-Dioxane	1.0
Monitored Natural Attenuation	ug/L
Iron	2800
Manganese	570

MW-1	
Analyte	Result
VOC	ug/L
cis-1,2-Dichloroethene	7.1
Trichloroethene	25

MW-102	
Analyte	Result
VOC	ug/L
cis-1,2-Dichloroethene	50
Monitored Natural Attenuaton	ug/L
Iron	19200
Manganese	560

TW-6	
Analyte	Result
VOC	ug/L
Trichloroethene	11

MW-15	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	6.7
Benzene	1.1
cis-1,2-Dichloroethene	6.6
Trichloroethene	8.9

RW-9	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	7.4
1,1-Dichloroethane	15
1,1-Dichloroethene	12
Benzene	1.3
cis-1,2-Dichloroethene	10
Methylene chloride	8.4
Trichloroethene	58
Vinyl chloride	7.6

RW-8	
Analyte	Result
VOC	ug/L
Vinyl chloride	2.8

MW-7	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	12
cis-1,2-Dichloroethene	9.7 J
Ethylbenzene	89
Isopropylbenzene	18
Vinyl chloride	9.7 J
Xylenes, Total	180

MW-9	
Analyte	Result
VOC	ug/L
Ethylbenzene	210
Toluene	27 J
Xylenes, Total	160

MW-17	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	37
1,1-Dichloroethane	17
1,1-Dichloroethene	28
cis-1,2-Dichloroethene	19
Trichloroethene	200
Trichlorofluoromethane (Freon 11)	8.2
Vinyl chloride	11

TW-2	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	69
Trichlorotrifluoroethane (Freon 113)	7.4 J
1,1-Dichloroethane	23
1,1-Dichloroethene	76
cis-1,2-Dichloroethene	49
Trichloroethene	390
Trichlorofluoromethane (Freon 11)	24
SVOC	ug/L
1,4-Dioxane	3.7
PFAS	ng/L
Perfluorooctanoic acid (PFOA)	7.5

MW-103		
Analyte	Result	DUP Result
VOC	ug/L	ug/L
Trichloroethene	23	24

TW-1	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	5.8
cis-1,2-Dichloroethene	11
Trichloroethene	8.4

MW-101		
Analyte	Result	DUP Result
PFAS	ng/L	ng/L
Perfluorooctanoic acid (PFOA)	17	18

LEGEND

- APPROXIMATE SITE BOUNDARY
- TAX PARCEL BOUNDARY
- INFERRED GROUNDWATER CONTOUR (4' INTERVALS)
- INFERRED GROUNDWATER FLOW DIRECTION
- OVERBURDEN MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- 815.05 GROUNDWATER SURFACE ELEVATION (IN FEET)

BOLDED AND HIGHLIGHTED RESULTS EXCEED CLASS GA VALUE	
Analyte	NYSDEC Guidance Value
VOC	ug/L
1,1,1-Trichloroethane	5
Trichlorotrifluoroethane (Freon 113)	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Benzene	1
Chloroethane	5
cis-1,2-Dichloroethene	5
Ethylbenzene	5
Isopropylbenzene	5
Methyl tert butyl ether	10
Methylene chloride	5
Toluene	5
Trichloroethene	5
Trichlorofluoromethane (Freon 11)	5
Vinyl chloride	2
Xylenes, Total	5
TICs	ug/L
1,2,4-Trimethylbenzene	5
m,p-Xylene	5
1,3,5-Trimethylbenzene	5
SVOC	ug/L
1,4-Dioxane	0.35*
Monitored Natural Attenuaton	ug/L
Iron	300
Manganese	300
Chloride	250,000
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. POTENTIOMETRIC SURFACE ELEVATIONS WERE COLLECTED ON OCTOBER 25, 2021.
3. WELL TYPES FROM SITE MANAGEMENT PLAN REVISION 2, JANUARY 2018, PREPARED BY MACTEC ENGINEERING AND CONSULTING P.C. AND SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.
4. WELL COORDINATES AND CASING ELEVATIONS FROM SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.
5. MW-B WAS GAUGED AS PART OF SAMPLING EVENT. HOWEVER, NO TOP OF RISER ELEVATION HAS BEEN PROVIDED FOR MW-B; THEREFORE, GROUNDWATER ELEVATION IS NOT ABLE TO BE DETERMINED.

ACRONYMS:
J - ESTIMATED VALUE
N - INDICATES PRESUMPTIVE EVIDENCE OF A COMPOUND
ug/L - MICROGRAMS PER LITER
ng/L - NANOGRAMS PER LITER
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
VOC - VOLATILE ORGANIC COMPOUNDS
SVOC - SEMI-VOLATILE ORGANIC COMPOUNDS
PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES
NYSDEC GUIDANCE VALUES - NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER, JUNE 1998 WITH THE APRIL 2000 ADDENDUM
* - GUIDELINES FOR SAMPLING AND ANALYSIS OF PFAS NYSDEC PART 375 REMEDIAL PROGRAMS, APRIL 2023

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED MAY, 2022
DATA SOURCES: TRC

1:2,040
1" = 170'
0 85 170
FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HIDDEN VALLEY ELECTRONICS - NYSDEC SITE NO. 704029
1808 VESTAL PARKWAY E
VESTAL, NY 13850

TITLE:
GROUNDWATER MONITORING MAP OCTOBER 2021

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 25
CHECKED BY:	E. STOBBE		FIGURE 5
APPROVED BY:	B. GREENE		
DATE:	DECEMBER 2024		

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

FILE: PRR_2024.aprx

Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet Map Rotation: 0
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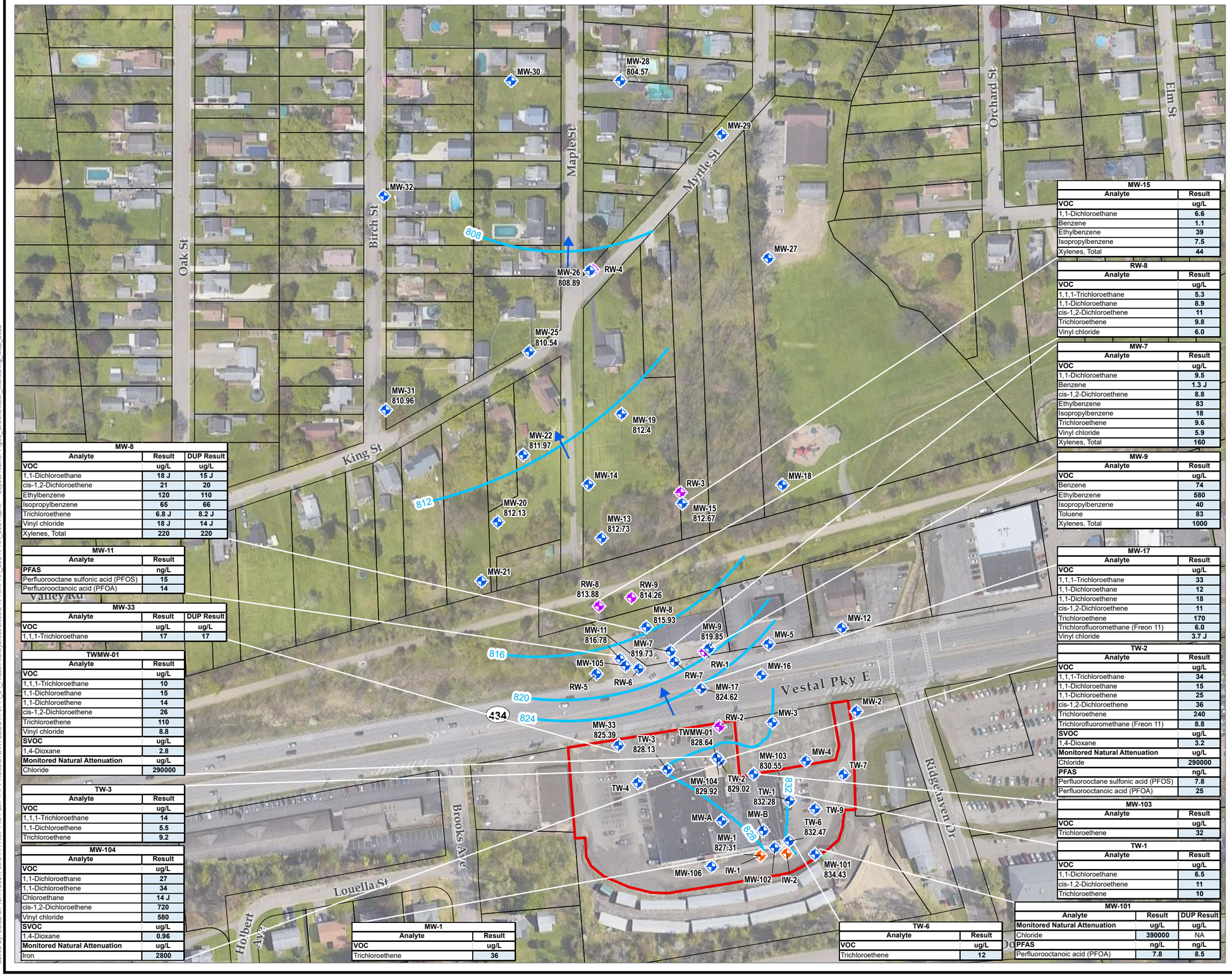

MW-8		
Analyte	Result	DUP Result
VOC	ug/L	ug/L
1,1-Dichloroethane	18 J	15 J
cis-1,2-Dichloroethene	21	20
Ethylbenzene	120	110
Isopropylbenzene	65	66
Trichloroethene	6.8 J	8.2 J
Vinyl chloride	18 J	14 J
Xylenes, Total	220	220

MW-11	
Analyte	Result
PFAS	ng/L
Perfluorooctane sulfonic acid (PFOS)	15
Perfluorooctanoic acid (PFOA)	14

MW-33		
Analyte	Result	DUP Result
VOC	ug/L	ug/L
1,1,1-Trichloroethane	17	17

TWMW-01	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	10
1,1-Dichloroethane	15
1,1-Dichloroethene	14
cis-1,2-Dichloroethene	26
Trichloroethene	110
Vinyl chloride	8.8
SVOC	ug/L
1,4-Dioxane	2.8
Monitored Natural Attenuation	ug/L
Chloride	290000

TW-3	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	14
1,1-Dichloroethene	5.5
Trichloroethene	9.2

MW-104	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	27
1,1-Dichloroethene	34
Chloroethane	14 J
cis-1,2-Dichloroethene	720
Vinyl chloride	580
SVOC	ug/L
1,4-Dioxane	0.96
Monitored Natural Attenuation	ug/L
Iron	2800

MW-1	
Analyte	Result
VOC	ug/L
Trichloroethene	36

TW-6	
Analyte	Result
VOC	ug/L
Trichloroethene	12

MW-15	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	6.6
Benzene	1.1
Ethylbenzene	39
Isopropylbenzene	7.5
Xylenes, Total	44

RW-8	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	5.3
1,1-Dichloroethane	8.9
cis-1,2-Dichloroethene	11
Trichloroethene	9.8
Vinyl chloride	6.0

MW-7	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	9.5
Benzene	1.3 J
cis-1,2-Dichloroethene	8.8
Ethylbenzene	83
Isopropylbenzene	18
Trichloroethene	9.6
Vinyl chloride	5.9
Xylenes, Total	160

MW-9	
Analyte	Result
VOC	ug/L
Benzene	74
Ethylbenzene	580
Isopropylbenzene	40
Toluene	83
Xylenes, Total	1000

MW-17	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	33
1,1-Dichloroethane	12
1,1-Dichloroethene	18
cis-1,2-Dichloroethene	11
Trichloroethene	170
Trichlorofluoromethane (Freon 11)	6.0
Vinyl chloride	3.7 J

TW-2	
Analyte	Result
VOC	ug/L
1,1,1-Trichloroethane	34
1,1-Dichloroethane	15
1,1-Dichloroethene	25
cis-1,2-Dichloroethene	36
Trichloroethene	240
Trichlorofluoromethane (Freon 11)	8.8
SVOC	ug/L
1,4-Dioxane	3.2
Monitored Natural Attenuation	ug/L
Chloride	290000
PFAS	ng/L
Perfluorooctane sulfonic acid (PFOS)	7.8
Perfluorooctanoic acid (PFOA)	25

MW-103	
Analyte	Result
VOC	ug/L
Trichloroethene	32

TW-1	
Analyte	Result
VOC	ug/L
1,1-Dichloroethane	6.5
cis-1,2-Dichloroethene	11
Trichloroethene	10

MW-101		
Analyte	Result	DUP Result
Monitored Natural Attenuation	ug/L	ug/L
Chloride	390000	NA
PFAS	ng/L	ng/L
Perfluorooctanoic acid (PFOA)	7.8	8.5

LEGEND

- TAX PARCEL BOUNDARY
- APPROXIMATE SITE BOUNDARY
- INFERRED GROUNDWATER CONTOUR (4' INTERVALS)
- INFERRED GROUNDWATER FLOW DIRECTION
- OVERBURDEN MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- 812.67 GROUNDWATER SURFACE ELEVATION (IN FEET)

BOLDED AND HIGHLIGHTED RESULTS EXCEED CLASS GA VALUE	
Analyte	NYSDEC Guidance Value
VOC	ug/L
1,1,1-Trichloroethane	5
Trichlorotrifluoroethane (Freon 113)	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Benzene	1
Chloroethane	5
cis-1,2-Dichloroethene	5
Ethylbenzene	5
Isopropylbenzene	5
Methyl tert butyl ether	10
Methylene chloride	5
Toluene	5
Trichloroethene	5
Trichlorofluoromethane (Freon 11)	5
Vinyl chloride	2
Xylenes, Total	5
TICs	ug/L
1,2,4-Trimethylbenzene	5
m,p-Xylene	5
1,3,5-Trimethylbenzene	5
SVOC	ug/L
1,4-Dioxane	0.35*
Monitored Natural Attenuaton	ug/L
Iron	300
Manganese	300
Chloride	250,000
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. POTENTIOMETRIC SURFACE ELEVATIONS WERE COLLECTED ON NOVEMBER 7, 2022.
3. WELL TYPES FROM SITE MANAGEMENT PLAN REVISION 2, JANUARY 2018, PREPARED BY MACTEC ENGINEERING AND CONSULTING P.C. AND SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.
4. WELL COORDINATES AND CASING ELEVATIONS FROM SITE MANAGEMENT PLAN REVISION 3, SEPTEMBER 2021, PREPARED BY D&B ENGINEERS AND ARCHITECTS, P.C.
5. MW-11 WAS SAMPLED FOR PFAS ONLY DURING THE NOVEMBER 2022 GROUNDWATER MONITORING EVENT.
6. MW-B WAS GAUGED AS PART OF SAMPLING EVENT. HOWEVER, NO TOP OF RISER ELEVATION HAS BEEN PROVIDED FOR MW-B; THEREFORE, GROUNDWATER ELEVATION IS NOT ABLE TO BE DETERMINED.

ACRONYMS:
J - ESTIMATED VALUE
NA - NOT ANALYZED
ug/L - MICROGRAMS PER LITER
ng/L - NANOGRAMS PER LITER
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
VOC - VOLATILE ORGANIC COMPOUNDS
SVOC - SEMI-VOLATILE ORGANIC COMPOUNDS
PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES
NYSDEC GUIDANCE VALUES - NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER, JUNE 1998 WITH THE APRIL 2000 ADDENDUM
* - GUIDELINES FOR SAMPLING AND ANALYSIS OF PFAS NYSDEC PART 375 REMEDIAL PROGRAMS, APRIL 2023

BASE MAP: GOOGLE EARTH SERVICE LAYER DATED MAY, 2022
DATA SOURCES: TRC

1:2,040
1" = 170'
0 85 170 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HIDDEN VALLEY ELECTRONICS - NYSDEC SITE NO. 704029
1808 VESTAL PARKWAY E
VESTAL, NY 13850

TITLE:
GROUNDWATER MONITORING MAP NOVEMBER 2022

DRAWN BY:	L. LILL	PROJ. NO.:	470744 TASK 25
CHECKED BY:	E. STOBBE		FIGURE 6
APPROVED BY:	B. GREENE		
DATE:	DECEMBER 2024		

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

FILE: PRR_2024.aprx

Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet; Map Rotation: 0
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TABLES

Table 1
New York State Department of Environmental Conservation
Hidden Valley Electronics Site - Site No. 704029
Vestal, New York
Summary of Groundwater Well Construction Details

Well Identification	Installation Date	Well Diameter (inches)	Total Depth (feet bgs)	Well Type	*Screen*			*Elevation (feet AMSL)*			*Location (feet)*	
					Top (feet bgs)	Bottom (feet bgs)	Length (feet)	Top of Riser	Screen Top	Screen Bottom	Northing	Easting
On-Site Wells												
MW-1	5/6/1994	2	23.0	Monitoring Well	8.0	18.0	10.0	840.45	832.45	822.45	972451.2	762774.9
MW-2	5/6/1994	2	19.0	Monitoring Well	4.0	19.0	15.0	842.04	838.04	823.04	972621.6	763031.1
MW-3	5/9/1994	2	20.0	Monitoring Well	5.0	20.0	15.0	841.24	836.24	821.24	972472.3	763011.3
MW-4	5/10/1994	2	20.0	Monitoring Well	5.0	20.0	15.0	842.41	837.41	822.41	972532.1	762942.8
MW-33	11/7/1994	2	20.0	Monitoring Well	5.0	20.0	15.0	838.78	833.78	818.78	972199.4	762970.6
MW-101	12/13/2004	2	15.4	Monitoring Well	5.0	15.0	10.0	842.26	837.26	827.26	972548.2	762777.4
MW-102	12/21/2004	2	21.3	Monitoring Well	11.0	21.0	10.0	842.22	831.22	821.22	972476.5	762788.9
MW-103	12/14/2004	2	19.4	Monitoring Well	9.0	19.0	10.0	842.57	833.57	823.57	972439.2	762919.8
MW-104	12/21/2004	2	48.4	Monitoring Well	38.0	48.0	10.0	842.34	804.34	794.34	972373.8	762946.0
MW-106	12/10/2009	2	20.1	Monitoring Well	10.5	20.1	9.6	841.77	831.27	821.67	972364.6	762755.4
TW-1	~2001	2	20.0	Monitoring Well	10.0	20.0	10.0	842.21	832.21	822.21	972503.0	762872.2
TW-2	~2001	2	20.0	Monitoring Well	10.0	20.0	10.0	842.24	832.24	822.24	972378.8	762943.3
TW-3	~2001	2	20.0	Monitoring Well	10.0	20.0	10.0	842.15	832.15	822.15	972285.8	762927.8
TW-4	~2001	-	20.0	Monitoring Well	10.0	20.0	10.0	841.83	831.83	821.83	972233.5	762904.3
TW-6	~2001	2	19.0	Monitoring Well	9.0	19.0	10.0	842.25	833.25	823.25	972502.0	762800.8
TW-7	~2001	-	20.0	Monitoring Well	10.0	20.0	10.0	841.97	831.97	821.97	972598.5	762919.2
TW-9	~2001	-	20.0	Monitoring Well	10.0	20.0	10.0	841.57	831.57	821.57	972548.2	762858.0
RW-2	~1995	-	33.0	Recovery Well	-	-	-	-	-	-	972378.3	763004.0
IW-1	12/10/2009	2	34.2	Injection Well	5.7	39.9	34.2	842.02	836.32	802.12	972451.2	762774.9
IW-2	12/10/2009	2	14.4	Injection Well	11.4	14.4	3.0	841.88	830.48	827.48	972497.9	762778.8
MW-A	9/16/2005	-	14.4	Monitoring Well	11.4	14.4	3.0	-	-	-	972382.5	762836.8
MW-B	9/16/2005	2	12.5	Monitoring Well	9.5	12.5	3.0	-	-	-	972456.3	762819.2
TWMW-01	5/16/2013	1	39.0	Monitoring Well	22.0	39.0	17.0	842.33	820.33	803.33	972374.0	762948.5
Off-Site Wells												
RW-1	~1995	-	-	Recovery Well	-	-	-	838.91	-	-	972351.80	763137.00
RW-3	~1995	-	-	Recovery Well	-	-	-	826.63	-	-	972309.30	763419.30
RW-4	~1995	-	-	Recovery Well	-	-	-	-	-	-	972154.10	763814.90
RW-5	10/11/2006	6	29.1	Monitoring Well	24.5	29.1	4.6	-	-	-	972160.10	763097.50
RW-6	10/17/2006	6	28.0	Monitoring Well	21.0	26.0	5.0	-	-	-	972235.20	763106.60
RW-7	10/17/2006	6	27.0	Monitoring Well	20.0	25.0	5.0	-	-	-	972298.60	763118.80
RW-8	12/6/2007	6	45.0	Recovery Well	28.9	43.9	15.0	835.56	806.66	791.66	972164.50	763217.70
RW-9	12/11/2007	6	41.9	Recovery Well	25.2	40.2	15.0	836.65	811.45	796.45	972222.30	763232.70
MW-5	5/10/1994	2	30.0	Monitoring Well	10.0	30.0	20.0	840.37	830.37	810.37	972465.30	763150.40
MW-7	5/11/1994	2	30.0	Monitoring Well	10.0	30.0	20.0	839.12	829.12	809.12	972291.40	763137.60
MW-8	5/12/1994	2	32.0	Monitoring Well	10.0	32.0	22.0	838.12	828.12	806.12	972248.70	763180.60
MW-9	5/13/1994	2	30.0	Monitoring Well	10.0	30.0	20.0	839.34	829.34	809.34	972359.80	763142.60

Table 1
New York State Department of Environmental Conservation
Hidden Valley Electronics Site - Site No. 704029
Vestal, New York
Summary of Groundwater Well Construction Details

Well Identification	Installation Date	Well Diameter (inches)	Total Depth (feet bgs)	Well Type	*Screen*			*Elevation (feet AMSL)*			*Location (feet)*	
					Top (feet bgs)	Bottom (feet bgs)	Length (feet)	Top of Riser	Screen Top	Screen Bottom	Northing	Easting
Off-Site Wells												
MW-11	5/16/1994	2	30.0	Monitoring Well	10.0	30.0	20.0	837.77	827.77	807.77	972202.10	763123.90
MW-12	5/18/1994	2	30.0	Monitoring Well	10.0	30.0	20.0	840.88	830.88	810.88	972595.50	763179.10
MW-13	5/19/1994	2	25.0	Monitoring Well	5.0	25.0	20.0	826.23	821.23	801.23	972169.20	763338.50
MW-14	5/20/1994	2	25.0	Monitoring Well	5.0	25.0	20.0	825.53	820.53	800.53	972146.00	763433.80
MW-15	5/23/1994	2	25.0	Monitoring Well	5.0	25.0	20.0	827.47	822.47	802.47	972312.40	763399.90
MW-16	5/24/1994	2	25.0	Monitoring Well	5.0	25.0	20.0	840.62	835.62	815.62	972452.90	763095.10
MW-17	5/25/1994	2	25.0	Monitoring Well	5.0	25.0	20.0	839.28	834.28	814.28	972345.80	763071.30
MW-18	6/30/1994	2	20.0	Monitoring Well	5.0	20.0	15.0	826.89	821.89	806.89	972490.10	763432.70
MW-19	5/1/1994	2	20.0	Monitoring Well	5.0	20.0	15.0	824.80	819.80	804.80	972204.50	763558.70
MW-20	7/5/1994	2	18.0	Monitoring Well	3.0	18.0	15.0	823.53	820.53	805.53	971984.80	763366.90
MW-21	7/5/1994	2	18.0	Monitoring Well	3.0	18.0	15.0	823.97	820.97	805.97	971956.20	763262.20
MW-22	7/6/1994	2	18.0	Monitoring Well	3.0	18.0	15.0	824.82	821.82	806.82	972030.10	763486.10
MW-25	7/8/2024	2	25.0	Monitoring Well	10.0	25.0	15.0	828.54	818.54	803.54	972040.80	763669.30
MW-26	7/11/1994	2	25.0	Monitoring Well	8.0	25.0	17.0	828.79	820.79	803.79	972148.90	763813.10
MW-27	8/8/1994	2	23.0	Monitoring Well	8.0	23.0	15.0	822.13	814.13	799.13	972464.90	763835.00
MW-28	8/9/1994	2	35.0	Monitoring Well	20.0	35.0	15.0	830.87	810.87	795.87	972202.70	764150.10
MW-29	8/10/1994	2	30.0	Monitoring Well	15.0	30.0	15.0	828.27	813.27	798.27	972382.50	764054.50
MW-30	8/10/1994	2	34.0	Monitoring Well	15.0	30.0	15.0	833.24	818.24	803.24	972008.80	764149.90
MW-31	8/11/1994	2	30.0	Monitoring Well	15.0	30.0	15.0	831.36	816.36	801.36	971786.20	763565.90
MW-32	8/11/1994	2	34.0	Monitoring Well	15.0	30.0	15.0	834.71	819.71	804.71	971782.80	763945.60
MW-105	10/16/2006	2	52.0	Monitoring Well	41.5	51.5	10.0	837.81	796.31	786.31	972211.80	763112.00

Notes
AMSL : Above Mean Sea Level
feet bgs : Feet Below Ground Surface
- : Information not available.
All wells are are installed withing the overburden.
All wells are constucted using schedule 40 Polyvinyl Chloride (PVC).

1) Sources : Site Management Plan (SMP) Rev. 3 prepared by D&B Enginers and Architects, P.C., September 2021 and SMP Rev. 2 prepared by Mactec Engineering and Consulting, P.C.
2) TW-5, TW-8, MW-6, MW-10, MW-23, and MW-24 are noted as Destroyed in Mactec Engineering and Consulting, P.C.'s April 2008 RI/FS. Therefore, these wells are not included in this table.

Table 2
New York State Department of Environmental Conservation
Hidden Valley Electronics Site - Site No. 704029
Vestal, New York
Summary of Depth to Water Measurements and Groundwater Elevations

Well Identification	Well Type	TOR Elevation* (feet AMSL)	Gauge Date	Depth to Water (feet below TOR)	Depth to Bottom (feet below TOR)	Groundwater Elevation (feet AMSL)
MW-1	Monitoring Well	840.45	10/5/2020	13.25	18.45	827.20
			10/25/2021	12.05	18.45	828.40
			11/7/2022	13.14	18.44	827.31
MW-7	Monitoring Well	839.12	10/5/2020	19.52	26.44	819.60
			10/25/2021	18.43	26.49	820.69
			11/7/2022	19.39	26.48	819.73
MW-8	Monitoring Well	838.12	10/5/2020	22.50	29.71	815.62
			10/25/2021	21.09	29.82	817.03
			11/7/2022	22.19	29.71	815.93
MW-9	Monitoring Well	839.34	10/5/2020	19.71	29.20	819.63
			10/25/2021	18.28	29.27	821.06
			11/7/2022	19.49	29.21	819.85
MW-11	Monitoring Well	837.77	10/5/2020	21.09	29.42	816.68
			10/25/2021	20.00	29.54	817.77
			11/7/2022	20.99	29.38	816.78
MW-13	Monitoring Well	826.23	10/5/2020	14.00	23.08	812.23
			10/25/2021	11.18	22.09	815.05
			11/7/2022	13.50	23.30	812.73
MW-15	Monitoring Well	827.47	10/5/2020	15.39	24.01	812.08
			10/25/2021	12.31	24.00	815.16
			11/7/2022	14.80	24.40	812.67
MW-17	Monitoring Well	839.28	10/5/2020	14.82	22.72	824.46
			10/25/2021	13.82	22.73	825.46
			11/7/2022	14.66	22.63	824.62
MW-19	Monitoring Well	824.80	10/5/2020	13.04	19.44	811.76
			10/25/2021	10.09	19.45	814.71
			11/7/2022	12.40	19.50	812.40
MW-20	Monitoring Well	823.53	10/5/2020	11.50	17.49	812.03
			10/25/2021	9.13	17.48	814.40
			11/7/2022	11.40	17.40	812.13
MW-22	Monitoring Well	824.82	10/5/2020	13.29	18.39	811.53
			10/25/2021	11.16	18.32	813.66
			11/7/2022	12.85	18.70	811.97
MW-25	Monitoring Well	828.54	10/5/2020	18.10	24.16	810.44
			10/25/2021	15.88	24.10	812.66
			11/7/2022	18.00	24.30	810.54
MW-26	Monitoring Well	828.79	10/5/2020	20.56	25.00	808.23
			10/25/2021	16.64	24.93	812.15
			11/7/2022	19.90	24.55	808.89
MW-28	Monitoring Well	830.87	10/5/2020	26.59	32.58	804.28
			10/25/2021	21.48	32.22	809.39
			11/7/2022	26.30	32.90	804.57
MW-31	Monitoring Well	831.36	10/5/2020	20.34	21.30	811.02
			10/25/2021	19.05	20.64	812.31
			11/7/2022	20.40	21.65	810.96
MW-33	Monitoring Well	838.78	10/5/2020	13.49	18.88	825.29
			10/25/2021	12.42	18.89	826.36
			11/7/2022	13.39	18.94	825.39
MW-101	Monitoring Well	842.26	10/5/2020	7.87	14.76	834.39
			10/25/2021	6.37	14.85	835.89
			11/7/2022	7.83	14.74	834.43
MW-102	Monitoring Well	842.22	10/5/2020	8.53	20.55	833.69
			10/25/2021	7.21	20.55	835.01
			11/7/2022**	Not Gauged	Not Gauged	Not Gauged

Table 2
New York State Department of Environmental Conservation
Hidden Valley Electronics Site - Site No. 704029
Vestal, New York
Summary of Depth to Water Measurements and Groundwater Elevations

Well Identification	Well Type	TOR Elevation* (feet AMSL)	Gauge Date	Depth to Water (feet below TOR)	Depth to Bottom (feet below TOR)	Groundwater Elevation (feet AMSL)
MW-103	Monitoring Well	842.57	10/5/2020	11.85	19.37	830.72
			10/25/2021	11.40	19.44	831.17
			11/7/2022	12.02	19.26	830.55
MW-104	Monitoring Well	842.34	10/5/2020	12.88	47.68	829.46
			10/25/2021	11.49	47.70	830.85
			11/7/2022	12.42	47.67	829.92
MW-B	Monitoring Well	Unknown	10/5/2020	9.90	12.11	Unknown
			10/25/2021	8.92	12.11	Unknown
			11/7/2022	10.41	12.73	Unknown
RW-8	Recovery Well	835.56	10/5/2020	22.32	46.50	813.24
			10/25/2021	20.00	44.60	815.56
			11/7/2022	21.68	42.18	813.88
RW-9	Recovery Well	836.65	10/5/2020	22.85	43.00	813.80
			10/25/2021	21.73	41.90	814.92
			11/7/2022	22.39	40.37	814.26
TW-1	Monitoring Well	842.21	10/5/2020	10.09	19.09	832.12
			10/25/2021	9.06	19.05	833.15
			11/7/2022	9.93	19.07	832.28
TW-2	Monitoring Well	842.24	10/5/2020	13.29	19.25	828.95
			10/25/2021	12.51	19.25	829.73
			11/7/2022	13.22	19.16	829.02
TW-3	Monitoring Well	842.15	10/5/2020	14.15	18.45	828.00
			10/25/2021	13.09	18.44	829.06
			11/7/2022	14.02	18.44	828.13
TW-6	Monitoring Well	842.25	10/5/2020	9.90	18.25	832.35
			10/25/2021	8.89	18.24	833.36
			11/7/2022	9.78	18.01	832.47
TWMW-01	Monitoring Well	842.33	10/5/2020	13.67	38.00	828.66
			10/25/2021	12.69	38.10	829.64
			11/7/2022	13.69	38.11	828.64

Notes

AMSL : Above Mean Sea Level
TOR : Top of Riser
* : Source: SMP prepared by D&B Enginers and Architects, September 2021
** : MW-102 was not able to be gauged in 2022 due to an obstruction present within the riser at 6.28 feet below TOR.

All wells are installed in the overburden.

1) No TOR Elevation has been determined for MW-B, therefore groundwater elevation is not able to be determined.

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	MW-1			MW-7			MW-8				MW-9			MW-11		MW-13		
			Sample Name:	MW-1_20201008	MW-1_20211025	MW-01-20221108	MW-7_20201008	MW-7_20211027	MW-7-20221109	MW-8_20201008	MW-8_20211026	MW-08-20221109	DUP-02	MW-9_20201008	MW-9_20211027	MW-9-20221109	MW-11_20201008	MW-11_20211026	MW-13_20201007	MW-13_20211025	MW-13-20221108
			Lab Sample ID:	480-176220-2	480-191472-1	22K1575-12	480-176220-3	480-191614-3	22K1575-27	480-176220-4	480-191472-20	22K1575-24	22K1575-25	480-176220-5	480-191614-4	22K1575-28	480-176220-6	480-191472-18	480-176137-3	480-191472-6	22K1575-17
			Sample Date:	10/8/2020	10/25/2021	11/8/2022	10/8/2020	10/27/2021	11/9/2022	10/8/2020	10/26/2021	11/9/2022	11/9/2022	10/8/2020	10/27/2021	11/9/2022	10/8/2020	10/26/2021	10/7/2020	10/25/2021	11/8/2022
Analysis	Analyte	Unit	Class GA Values*										Field Dup								
VOCs																					
	1,1,1-Trichloroethane	ug/L	5	**6.8**	**4.7**	**4.9**	10 U	10 U	**3.3**	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	**38**	**33**	1.0 U	1.0 U	1 U
	1,1,2,2-Tetrachloroethane	ug/L	5	1.0 U	1.0 U	0.5 U	10 U	10 U	1 U	10 U	8.0 U	10 U	10 U	50 U	50 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U
	Trichlorotrifluoroethane (Freon 113)	ug/L	5	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	**9.0**	1.0 U	1.0 U	1 U
	1,1,2-Trichloroethane	ug/L	1	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	1,1-Dichloroethane	ug/L	5	**2.8**	**3.8**	**2.3**	**15**	**12**	**9.5**	10 U	**18**	**18 J**	**15 J**	50 U	50 U	5 U	**12**	**12**	**6.4 J**	**0.69 J**	**4.3**
	1,1-Dichloroethene	ug/L	5	**2.4**	**1.8**	**0.87 J**	10 U	10 U	**2.0**	10 U	**5.9 J**	20 U	20 U	50 U	50 U	5 U	**51**	**47**	**0.69 J**	1.0 U	**0.31 J**
	1,2,3-Trichlorobenzene	ug/L	5	1.0 U	1.0 U	5 U	10 U	10 U	10 U	10 U	8.0 U	100 U	100 U	50 U	50 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	5 U
	1,2,4-Trichlorobenzene	ug/L	5	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1 U
	1,2-Dibromo-3-chloropropane	ug/L	0.04	1.0 U	1.0 U	5 U	10 U	10 U	10 U	10 U	8.0 U	100 U	100 U	50 U	50 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	5 U
	1,2-Dibromoethane	ug/L	0.0006	1.0 U	1.0 U	0.5 U	10 U	10 U	1 U	10 U	8.0 U	10 U	10 U	50 U	50 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U
	1,2-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1 U
	1,2-Dichloroethane	ug/L	0.6	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	**0.22 J**	1.0 U	1.0 U	1 U
	1,2-Dichloropropane	ug/L	1	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	1,3-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	1,4-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	2-Butanone (MEK)	ug/L	50	10 U	10 U	20 U	100 U	100 U	40 U	100 U	80 UT	400 U	400 U	500 U	500 U	100 U	10 U	10 UT	**1.6 J**	10 U	20 U
	2-Hexanone	ug/L	50	5.0 U	5.0 U	10 U	50 U	50 U	20 U	50 U	40 U	200 U	200 U	250 U	250 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U
	Methyl isobutyl ketone	ug/L	NC	5.0 U	5.0 U	10 U	50 U	50 U	20 U	50 U	40 U	200 U	200 U	250 U	250 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U
	Acetone	ug/L	50	10 U	10 UB	50 U	**32 J**	100 U	100 U	**43 J**	80 U	1,000 U	1,000 U	500 U	500 U	250 U	10 U	10 U	10 U	10 U	50 U
	Benzene	ug/L	1	1.0 U	1.0 U	1 U	10 U	10 U	**1.3 J**	**86**	8.0 U	20 U	20 U	**130**	50 U	**74**	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	Bromochloromethane	ug/L	5	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	Bromodichloromethane	ug/L	50	1.0 U	1.0 U	0.5 U	10 U	10 U	1 U	10 U	8.0 U	10 U	10 U	50 U	50 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U
	Bromoform	ug/L	50	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	Bromomethane	ug/L	5	1.0 U	1.0 U	2 UJ	10 U	10 U	4 UJ	10 U	8.0 U	40 UJ	40 UJ	50 U	50 U	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	2 UJ
	Carbon disulfide	ug/L	60	1.0 U	1.0 U	5 U	10 U	10 U	10 UJ	10 U	8.0 U	100 U	100 UJ	50 U	50 U	25 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5 UJ
	Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	5 U	10 U	10 U	10 U	10 U	8.0 U	100 U	100 U	50 U	50 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	5 U
	Chlorobenzene	ug/L	5	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1 U
	Chloroethane	ug/L	5	1.0 U	1.0 U	2 U	10 U	10 U	4 UJ	10 U	8.0 U	40 U	40 UJ	50 U	50 U	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	2 UJ
	Chloroform	ug/L	7	1.0 U	1.0 U	2 U	10 U	10 U	**2.5 J**	10 U	8.0 U	40 U	40 U	50 U	50 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.23 J**
	Chloromethane	ug/L	5	1.0 U	1.0 U	2 U	10 U	10 U	4 U	10 U	8.0 U	40 U	40 U	50 U	50 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2 U
	1,4-Dioxane	ug/L	NC	40 U	40 U	50 UJ	400 U	400 U	100 UJ	400 U	320 U	1,000 UJ	1,000 UJ	2,000 U	2,000 U	250 UJ	40 U	40 U	40 U	40 U	50 UJ
	cis-1,2-Dichloroethene	ug/L	5	**4.2**	**7.1**	**3.0**	10 U	**9.7 J**	**8.8**	10 U	**17**	**21**	**20**	50 U	50 U	5 U	**23**	**23**	**2.7**	1.0 U	**1.4**
	cis-1,3-Dichloropropene	ug/L	0.4(a)	1.0 U	1.0 U	0.5 U	10 U	10 U	1 U	10 U	8.0 U	10 U	10 U	50 U	50 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U
	Cyclohexane	ug/L	NC	1.0 U	1.0 U	5 U	**91**	**81**	10 U	10 U	**88**	100 U	100 U	**160**	**70**	25 U	1.0 U	**0.35 J**	**19**	1.0 U	5 U
	Dibromochloromethane	ug/L	50	1.0 U	1.0 U	0.5 U	10 U	10 U	1 U	10 U	8.0 U	10 U	10 U	50 U	50 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U
	Dichlorodifluoromethane	ug/L	5	1.0 U	1.0 U	2 U	10 U	10 U	4 U	10 U	8.0 U	40 U	40 U	50 U	50 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2 U
	Ethylbenzene	ug/L	5	1.0 U	1.0 U	1 U	**78**	**89**	**83**	**110**	**30**	**120**	**110**	**930**	**210**	**580**	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	Isopropylbenzene	ug/L	5	1.0 U	1.0 U	1 U	**15**	**18**	**18**	10 U	**17**	**65**	**66**	50 U	50 U	**40**	1.0 U	1.0 U	1.0 UJ	1.0 U	**0.25 J**
	Methyl acetate	ug/L	NC	2.5 U	2.5 U	1 U	25 U	25 U	2 U	25 U	20 U	20 U	20 U	130 U	130 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U
	Methyl tert butyl ether	ug/L	10	1.0 U	1.0 U	1 U	10 U	10 U	2 U	**26**	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1 U
	Methylcyclohexane	ug/L	NC	1.0 U	1.0 U	1 U	**51**	**51**	**35**	**3.1 J**	**46**	**62**	**65**	**58**	**14 J**	**32**	1.0 U	1.0 U	1.0 U	1.0 U	**0.62 J**
	Methylene chloride	ug/L	5	1.0 U	1.0 U	5 U	10 U	10 U	10 U	**8.7 J**	**23**	100 U	100 U	50 U	50 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	5 U
	Styrene	ug/L	5	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	Toluene	ug/L	5	1.0 U	1.0 U	1 U	10 U	10 U	**3.9**	**120**	8.0 U	20 U	20 U	**98**	**27 J**	**83**	1.0 U	1.0 U	1.0 UJ	1.0 U	1 U
	trans-1,2-Dichloroethene	ug/L	5	1.0 U	1.0 U	1 U	10 U	10 U	2 U	10 U	8.0 U	20 U	20 U	50 U	50 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
	trans-1,3-Dichloropropene	ug/L	0.4(a)	1.0 U	1.0 U	0.5 UJ	10 U	10 U	1 UJ	10 U	8.0 U	10 UJ	10 UJ	50 U	50 U	2.5 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	0.5 UJ
	Trichloroethene	ug/L	5	**35**	**25**	**36**	**5.2 J**	10 U	**9.6**	10 U	**20**	**6.8 J**	**8.2 J**	50 U	50 U	5 U	**62**	**59**	**2.3 J**	1.0 U	**1.3**
	Trichlorofluoromethane (Freon 11)	ug/L	5	1.0 U	1.0 U	**0.34 J**	10 U	10 U	4 U	10 U	8.0 U	40 U	40 U	50 U	50 U	10 U	**17**	**16**	1.0 U	1.0 U	2 U
	Vinyl chloride	ug/L	2	1.0 U	1.0 U	2 U	10 U	**9.7 J**	**5.9**	10 U	**39**	**18 J**	**14 J**	50 U	50 U	10 U	**4.6**	**9.3**	1.0 UJ	1.0 U	2 U
	Xylenes, Total	ug/L	5	2.0 U	2.0 U	1 U	**170**	**180**	**160**	**750**	**43**	**220**	**220**	**1,700**	**160**	**1,000**	2.0 U	2.0 U	2.0 U	2.0 U	1 U
	TICs																				
	Unknown Volatile Organic With 1st Highest Conc.	ug/L	NC	NA	NA	NA	**240 J**	**360 J**	**180 N**	NA	NA	**430 N**	**740 N**	**1,300 J**	**130 J**	**390 N**	NA	NA	NA	NA	**15 N**
	Unknown Volatile Organic With 2nd Highest Conc.	ug/L	NC	NA	NA	NA	**200 J**	**220 J**	**60 N**	NA	NA	**410 N**	**330 N**	**400 J**	NA	**270 N**	NA	NA	NA	NA	**6.0 N**
	Unknown Volatile Organic With 3rd Highest Conc.	ug/L	NC	NA	NA	NA	**83 J**	NA	**47 N**	NA	NA	**350 N**	NA	**360 J**	NA	**140**	NA	NA	NA	NA	**3.2 N**
	Unknown Volatile Organic With 4th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	**44 N**	NA	NA	NA	NA	NA	NA	**130 N**	NA	NA	NA	NA	**3.2**
	Unknown Volatile Organic With 5th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**120 N**	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 6th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**86 N**	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 7th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**78 N**	NA	NA	NA	NA	NA
	Indan, 1-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methylcyclopentane	ug/L	NC	NA	NA	NA	NA	**280 JN**	**100 N**	NA	**240 JN**	**740 N**	**740 N**	**620 JN**	**230 JN**	**240 N**	NA	NA	NA	NA	NA
	n-Pentane	ug/L	NC	NA	NA	NA	NA	**160 JN**	NA	NA	**170 JN**	NA	NA	**610 JN**	NA	NA	NA	NA	NA	NA	NA
	2-Methyl-pentane	ug/L	NC	NA	NA	NA	**420 JN**	**320 JN**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,6-Dimethyl-2,3-Dihydro-1H-Indene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Ethenyl-1,4-Dimethylbenzene	ug/L	NC	NA	NA	NA	NA	**120 JN**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-trimethylbenzene	ug/L	NC	NA	NA	NA	**190 JN**	**290 JN**	NA	**450 JN**	**80 JN**	NA	NA	NA	**150 JN**	NA	NA	NA	NA	NA	NA

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	MW-1			MW-7			MW-8				MW-9			MW-11		MW-13		
			Sample Name:	MW-1_20201008	MW-1_20211025	MW-01-20221108	MW-7_20201008	MW-7_20211027	MW-7-20221109	MW-8_20201008	MW-8_20211026	MW-08-20221109	DUP-02	MW-9_20201008	MW-9_20211027	MW-9-20221109	MW-11_20201008	MW-11_20211026	MW-13_20201007	MW-13_20211025	MW-13-20221108
			Lab Sample ID:	480-176220-2	480-191472-1	22K1575-12	480-176220-3	480-191614-3	22K1575-27	480-176220-4	480-191472-20	22K1575-24	22K1575-25	480-176220-5	480-191614-4	22K1575-28	480-176220-6	480-191472-18	480-176137-3	480-191472-6	22K1575-17
			Sample Date:	10/8/2020	10/25/2021	11/8/2022	10/8/2020	10/27/2021	11/9/2022	10/8/2020	10/26/2021	11/9/2022	11/9/2022	10/8/2020	10/27/2021	11/9/2022	10/8/2020	10/26/2021	10/7/2020	10/25/2021	11/8/2022
Analysis	Analyte	Unit	Class GA Values*										Field Dup								
	TICs																				
	Cyclopropylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	**74** JN	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	ug/L	5	NA	NA	NA	NA	NA	NA	**130** JN	**310** JN	NA	NA	**970** JN	NA	NA	NA	NA	NA	NA	NA
	1H-Indene 2,3-Dihydro-5-Methyl-	ug/L	NC	NA	NA	NA	**80** JN	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,3-Dimethylcyclohexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl-1-Pentene	ug/L	NC	NA	NA	NA	**280** JN	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isobutylene (2-methyl-1-propene)	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	trans-3-Methyl-2-Pentene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl Butane	ug/L	NC	NA	NA	NA	**570** JN	NA	NA	NA	**330** JN	NA	NA	NA	**300** JN	NA	NA	**2.7** JN	NA	NA	NA
	3-Methylpentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	**190** JN	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indane	ug/L	NC	NA	NA	NA	NA	**110** JN	**59** N	**110** JN	NA	**200** N	**190** N	**430** JN	**220** JN	**290** N	NA	NA	NA	NA	NA
	3-Phenylbut-1-Ene	ug/L	NC	NA	NA	NA	NA	NA	NA	**51** JN	NA	NA x	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dimethylcyclohexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	m,p-Xylene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3,5-Trimethylbenzene	ug/L	5	NA	NA	NA	NA	NA	NA	**120** JN	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-Ethyltoluene	ug/L	NC	NA	NA	NA	NA	NA	**49** N	**130** JN	**77** JN	NA	**400** N	**360** JN	NA	NA	NA	NA	NA	NA	NA
	2,3-Dimethyl-butane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3-Methylhexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1-Butene, 3-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**400** JN	**150** JN	NA	NA	NA	NA	NA	NA
	1-Ethyl-3-Methylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs																					
	1,4-Dioxane	ug/L	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, total																					
	Iron	ug/L	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	ug/L	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Gas																					
	Ethane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Ethene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Carbon dioxide	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	**260**	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry																					
	Alkalinity, total	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	ug/L	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrite as Nitrogen	ug/L	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as Nitrogen	ug/L	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate/Nitrite	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	pH	su	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	ug/L	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
ug/L - micrograms per liter.
su - Standard unit,
B - Analyte detected in associated method blank.
R - Data unusable, as determined by DUSR.
J - Estimated value.
N - Indicates presumptive evidence of a compound.
NA - Sample not analyzed for the listed analyte.
NC - No NYSDEC standards exist for this analyte.
T - Indicates that a quality control parameter doesn't meet the control limit requirements.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standard.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
MNA - Monitored Natural Attenuation parameters
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.
(a) - criteria applicable to the sum of the cis and trans isomers.

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	MW-15			MW-17			MW-19			MW-20			MW-22			MW-25		
			Sample Name:	MW-15_20201007	MW-15_20211025	MW-15-20221108	MW-17_20201008	MW-17_20211025	MW-17-20221109	MW-19_20201007	MW-19_20211028	MW-19-20221108	MW-20_20201007	MW-20_20211028	MW-20-20221108	MW-22_20201007	MW-22_20211026	MW-22-20221108	MW-25_20201006	MW-25_20211027	MW-25-20221108
			Lab Sample ID:	480-176137-5	480-191472-7	22K1575-06	480-176220-7	480-191472-8	22K1575-22	480-176137-6	480-191614-9	22K1575-02	480-176137-10	480-191614-8	22K1575-03	480-176137-8	480-191472-19	22K1575-07	480-176136-2	480-191614-6	22K1575-18
			Sample Date:	10/7/2020	10/25/2021	11/8/2022	10/8/2020	10/25/2021	11/9/2022	10/7/2020	10/28/2021	11/8/2022	10/7/2020	10/28/2021	11/8/2022	10/7/2020	10/26/2021	11/8/2022	10/6/2020	10/27/2021	11/8/2022
Analysis	Analyte	Unit	Class GA Values*																		
VOCs																					
	1,1,1-Trichloroethane	ug/L	5	1.0 U	**3.6**	1 U	**46**	**37**	**33**	1.0 U	1.0 U	1 U	1.0 U	1.0 U	**0.26 J**	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,1,2,2-Tetrachloroethane	ug/L	5	1.0 U	1.0 U	0.5 U	5.0 U	4.0 U	1 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	Trichlorotrifluoroethane (Freon 113)	ug/L	5	1.0 U	1.0 U	1 U	5.0 U	4.0 U	**1.1 J**	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,1,2-Trichloroethane	ug/L	1	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,1-Dichloroethane	ug/L	5	**7.0 J**	**6.7**	**6.6**	**17**	**17**	**12**	**1.6 J**	**2.7**	**1.5**	1.0 UJ	1.0 U	**0.37 J**	**0.72 J**	**0.54 J**	**0.67 J**	**1.7**	**0.38 J**	**1.8**
	1,1-Dichloroethene	ug/L	5	1.0 U	**0.64 J**	1 U	**41**	**28**	**18**	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,2,3-Trichlorobenzene	ug/L	5	1.0 U	1.0 U	5 U	5.0 U	4.0 U	10 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U
	1,2,4-Trichlorobenzene	ug/L	5	1.0 UJ	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,2-Dibromo-3-chloropropane	ug/L	0.04	1.0 U	1.0 U	5 U	5.0 U	4.0 U	10 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U
	1,2-Dibromoethane	ug/L	0.0006	1.0 U	1.0 U	0.5 U	5.0 U	4.0 U	1 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	1,2-Dichlorobenzene	ug/L	3	1.0 UJ	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,2-Dichloroethane	ug/L	0.6	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,2-Dichloropropane	ug/L	1	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,3-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,4-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	2-Butanone (MEK)	ug/L	50	**2.6 J**	10 U	20 U	50 U	40 U	40 U	10 U	10 U	20 U	10 U	10 U	20 U	10 U	10 UT	20 U	10 U	10 U	20 U
	2-Hexanone	ug/L	50	5.0 U	5.0 U	10 U	25 U	20 U	20 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U
	Methyl isobutyl ketone	ug/L	NC	5.0 U	5.0 U	10 U	25 U	20 U	20 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U
	Acetone	ug/L	50	**3.1 J**	10 U	50 U	50 U	40 U	100 U	10 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	50 U
	Benzene	ug/L	1	**1.1**	**1.1**	**1.1**	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Bromochloromethane	ug/L	5	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Bromodichloromethane	ug/L	50	1.0 U	1.0 U	0.5 U	5.0 U	4.0 U	1 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	Bromoform	ug/L	50	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Bromomethane	ug/L	5	1.0 U	1.0 U	2 UJ	5.0 U	4.0 U	4 UJ	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	2 UJ
	Carbon disulfide	ug/L	60	1.0 U	1.0 U	5 U	5.0 U	4.0 U	10 UJ	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 UJ
	Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	5 U	5.0 U	4.0 U	10 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U
	Chlorobenzene	ug/L	5	**1.1 J**	1.0 U	**1.3**	5.0 U	4.0 U	2 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 U	1.0 U	1 U
	Chloroethane	ug/L	5	**1.1**	1.0 U	2 U	5.0 U	4.0 U	4 UJ	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 UJ
	Chloroform	ug/L	7	1.0 U	1.0 U	**0.80 J**	5.0 U	4.0 U	4 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U
	Chloromethane	ug/L	5	1.0 U	1.0 U	2 U	5.0 U	4.0 U	4 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U
	1,4-Dioxane	ug/L	NC	40 U	40 U	50 UJ	200 U	160 U	100 UJ	40 U	40 U	50 UJ	40 U	40 U	50 UJ	40 U	40 U	50 UJ	40 U	40 U	50 UJ
	cis-1,2-Dichloroethene	ug/L	5	**4.9**	**6.6**	**2.7**	**16**	**19**	**11**	1.0 U	**1.0**	**0.58 J**	1.0 U	1.0 U	1 U	1.0 U	1.0 U	**0.38 J**	1.0 U	1.0 U	**0.63 J**
	cis-1,3-Dichloropropene	ug/L	0.4(a)	1.0 U	1.0 U	0.5 U	5.0 U	4.0 U	1 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	Cyclohexane	ug/L	NC	**22**	**1.4**	5 U	5.0 U	4.0 U	10 U	**6.8**	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U
	Dibromochloromethane	ug/L	50	1.0 U	1.0 U	0.5 U	5.0 U	4.0 U	1 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	Dichlorodifluoromethane	ug/L	5	1.0 U	1.0 U	2 U	5.0 U	4.0 U	4 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U
	Ethylbenzene	ug/L	5	**13**	1.0 U	**39**	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Isopropylbenzene	ug/L	5	**4.0 J**	1.0 U	**7.5**	5.0 U	4.0 U	2 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 U	1.0 U	1 U
	Methyl acetate	ug/L	NC	2.5 U	2.5 U	1 U	13 U	10 U	2 U	2.5 U	2.5 U	1 U	2.5 U	2.5 U	1 U	2.5 U	2.5 U	1 U	2.5 U	2.5 U	1 U
	Methyl tert butyl ether	ug/L	10	1.0 UJ	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 U	1.0 U	1 U
	Methylcyclohexane	ug/L	NC	**6.1**	1.0 U	**5.9**	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Methylene chloride	ug/L	5	1.0 UJ	1.0 U	5 U	5.0 U	4.0 U	10 U	**0.45 J**	1.0 U	5 U	1.0 UJ	1.0 U	5 U	**0.50 J**	1.0 U	5 U	1.0 U	1.0 U	5 U
	Styrene	ug/L	5	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Toluene	ug/L	5	1.0 UJ	1.0 U	**0.23 J**	5.0 U	4.0 U	2 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	1.0 U	1.0 U	1 U
	trans-1,2-Dichloroethene	ug/L	5	1.0 U	1.0 U	1 U	5.0 U	4.0 U	2 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	trans-1,3-Dichloropropene	ug/L	0.4(a)	1.0 UJ	1.0 U	0.5 UJ	5.0 U	4.0 U	1 UJ	1.0 UJ	1.0 U	0.5 UJ	1.0 UJ	1.0 U	0.5 UJ	1.0 UJ	1.0 U	0.5 UJ	1.0 U	1.0 U	0.5 UJ
	Trichloroethene	ug/L	5	1.0 UJ	**8.9**	**0.50 J**	**230**	**200**	**170**	1.0 UJ	1.0 U	1 U	1.0 UJ	1.0 U	1 U	**0.57 J**	**0.57 J**	**0.57 J**	**1.4**	1.0 U	**1.9**
	Trichlorofluoromethane (Freon 11)	ug/L	5	1.0 U	1.0 U	2 U	**12**	**8.2**	**6.0**	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U
	Vinyl chloride	ug/L	2	**1.6 J**	1.0 U	**1.4 J**	**5.2**	**11**	**3.7 J**	1.0 UJ	1.0 U	**0.30 J**	1.0 UJ	1.0 U	2 U	1.0 UJ	1.0 U	2 U	1.0 U	1.0 U	2 U
	Xylenes, Total	ug/L	5	**14**	2.0 U	**44**	10 U	8.0 U	2 U	2.0 U	2.0 U	1 U	2.0 U	2.0 U	1 U	2.0 U	2.0 U	1 U	2.0 U	2.0 U	1 U
	TICs																				
	Unknown Volatile Organic With 1st Highest Conc.	ug/L	NC	NA	**5.0 J**	**34 N**	NA	NA	NA	NA	**8.9 J**	**8.8 N**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 2nd Highest Conc.	ug/L	NC	NA	**3.6 J**	**22**	NA	NA	NA	NA	**3.2 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 3rd Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 4th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 5th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 6th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 7th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indan, 1-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methylcyclopentane	ug/L	NC	NA	NA	**34 N**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Pentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl-pentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,6-Dimethyl-2,3-Dihydro-1H-Indene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Ethenyl-1,4-Dimethylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-trimethylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	MW-15			MW-17			MW-19			MW-20			MW-22			MW-25		
			Sample Name:	MW-15_20201007	MW-15_20211025	MW-15-20221108	MW-17_20201008	MW-17_20211025	MW-17-20221109	MW-19_20201007	MW-19_20211028	MW-19-20221108	MW-20_20201007	MW-20_20211028	MW-20-20221108	MW-22_20201007	MW-22_20211026	MW-22-20221108	MW-25_20201006	MW-25_20211027	MW-25-20221108
			Lab Sample ID:	480-176137-5	480-191472-7	22K1575-06	480-176220-7	480-191472-8	22K1575-22	480-176137-6	480-191614-9	22K1575-02	480-176137-10	480-191614-8	22K1575-03	480-176137-8	480-191472-19	22K1575-07	480-176136-2	480-191614-6	22K1575-18
			Sample Date:	10/7/2020	10/25/2021	11/8/2022	10/8/2020	10/25/2021	11/9/2022	10/7/2020	10/28/2021	11/8/2022	10/7/2020	10/28/2021	11/8/2022	10/7/2020	10/26/2021	11/8/2022	10/6/2020	10/27/2021	11/8/2022
Analysis	Analyte	Unit	Class GA Values*																		
	TICs																				
	Cyclopropylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1H-Indene 2,3-Dihydro-5-Methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,3-Dimethylcyclohexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl-1-Pentene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isobutylene (2-methyl-1-propene)	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	trans-3-Methyl-2-Pentene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl Butane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3-Methylpentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indane	ug/L	NC	NA	NA	**29** N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3-Phenylbut-1-Ene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dimethylcyclohexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	m,p-Xylene	ug/L	5	**14**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3,5-Trimethylbenzene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-Ethyltoluene	ug/L	NC	NA	NA	**20** N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,3-Dimethyl-butane	ug/L	NC	NA	**8.5** JN	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3-Methylhexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1-Butene, 3-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1-Ethyl-3-Methylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs																					
	1,4-Dioxane	ug/L	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, total																					
	Iron	ug/L	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**160**	**120**	**260**	NA	NA	NA
	Manganese	ug/L	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,600**	**2,100**	R	NA	NA	NA
Dissolved Gas																					
	Ethane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 U	7.5 U	14 U	NA	NA	NA
	Ethene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 U	7.0 U	17 U	NA	NA	NA
	Methane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.0 J**	**1.9 J**	**2.0 J**	NA	NA	NA
	Carbon dioxide	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**80,000**	**73,000**	**167,000**	NA	NA	NA
General Chemistry																					
	Alkalinity, total	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**161,000**	**184,000**	NA	NA	NA	NA
	Chloride	ug/L	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**94,400**	**249,000**	**100,000**	NA	NA	NA
	Nitrite as Nitrogen	ug/L	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50 U	NA	50 UJ	NA	NA	NA
	Nitrate as Nitrogen	ug/L	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**500**	**440**	**31 J**	NA	NA	NA
	Nitrate/Nitrite	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**500**	NA	NA	NA	NA	NA
	pH	su	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.7 J**	NA	NA	NA
	Sulfate	ug/L	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**17,900**	**46,600**	**20,000**	NA	NA	NA
	Sulfide	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000 U	1,000 U	**3,400**	NA	NA	NA
	Total Organic Carbon	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,000**	**850 J**	**1,200**	NA	NA	NA

Notes:
ug/L - micrograms per liter.
su - Standard unit,
B - Analyte detected in associated method blank.
R - Data unusable, as determined by DUSR.
J - Estimated value.
N - Indicates presumptive evidence of a compound.
NA - Sample not analyzed for the listed analyte.
NC - No NYSDEC standards exist for this analyte.
T - Indicates that a quality control parameter doesn't meet the control limit requirements.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standard.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
MNA - Monitored Natural Attenuation parameters
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.
(a) - criteria applicable to the sum of the cis and trans isomers.

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	MW-26			MW-28			MW-31	MW-33				MW-B	MW-101					MW-102	
			Sample Name:	MW-26_20201006	MW-26_20211025	MW-26-20221108	MW-28_20201006	MW-28_20211028	MW-28-20221108	MW-31_20211027	MW-33_20201008	MW-33_20211027	DUP-01-20221108	MW-33-20221108	MW-B_20201008	MW-101_20201006	MW-101_20211026	DUP-2_20211026	MW-101-20221107	MW-101-20221108	MW-102_20201006	MW-102_20211026
			Lab Sample ID:	480-176136-5	480-191472-9	22K1575-01	480-176136-7	480-191614-7	22K1575-08	480-191614-5	480-176220-8	480-191614-2	22K1575-13	22K1575-11	480-176220-1	480-176136-1	480-191472-12	480-191472-22	22K1627-01	22K1575-16	480-176136-4	480-191472-13
			Sample Date:	10/6/2020	10/25/2021	11/8/2022	10/6/2020	10/28/2021	11/8/2022	10/27/2021	10/8/2020	10/27/2021	11/8/2022	11/8/2022	10/8/2020	10/6/2020	10/26/2021	10/26/2021	11/7/2022	11/8/2022	10/6/2020	10/26/2021
Analysis	Analyte	Unit	Class GA Values*										Field Dup					Field Dup				
VOCs																						
	1,1,1-Trichloroethane	ug/L	5	**1.7**	1.0 U	**1.4**	**0.99 J**	**1.3**	**0.81 J**	**5.0**	**17**	**9.6**	**17**	**17**	**8.1**	**1.1**	1.0 U	1.0 U	NA	**0.99 J**	1.0 U	1.0 U
	1,1,2,2-Tetrachloroethane	ug/L	5	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 U	1.0 U
	Trichlorotrifluoroethane (Freon 113)	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	**0.95 J**	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	1,1,2-Trichloroethane	ug/L	1	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	1,1-Dichloroethane	ug/L	5	**4.1**	**0.81 J**	**4.0**	1.0 U	**0.50 J**	**0.23 J**	**2.6**	1.0 U	1.0 U	1 U	**0.25 J**	**3.7**	1.0 U	1.0 U	1.0 U	NA	1 U	**1.6**	**5.0**
	1,1-Dichloroethene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	**0.41 J**	**0.25 J**	**3.1**	**2.3**	**0.79 J**	**2.1**	**2.4**	**3.2**	1.0 U	1.0 U	1.0 U	NA	1 U	**4.5**	**3.3**
	1,2,3-Trichlorobenzene	ug/L	5	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	1.0 U	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	5 U	1.0 U	1.0 U
	1,2,4-Trichlorobenzene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	1,2-Dibromo-3-chloropropane	ug/L	0.04	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	1.0 U	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	5 U	1.0 U	1.0 U
	1,2-Dibromoethane	ug/L	0.0006	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 U	1.0 U
	1,2-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	1,2-Dichloroethane	ug/L	0.6	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	1,2-Dichloropropane	ug/L	1	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	1,3-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	1,4-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	2-Butanone (MEK)	ug/L	50	10 U	10 U	20 U	10 U	10 U	20 U	10 U	10 U	10 U	20 U	20 U	10 U	10 U	10 UT	10 U	NA	20 U	10 U	10 UT
	2-Hexanone	ug/L	50	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	10 U	5.0 U	5.0 U
	Methyl isobutyl ketone	ug/L	NC	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	10 U	5.0 U	5.0 U
	Acetone	ug/L	50	10 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U	50 U	50 U	**3.9 J**	10 U	10 U	10 U	NA	50 U	**6.0 J**	10 UB
	Benzene	ug/L	1	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Bromochloromethane	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Bromodichloromethane	ug/L	50	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 U	1.0 U
	Bromoform	ug/L	50	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Bromomethane	ug/L	5	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	1.0 U	2 UJ	2 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NA	2 UJ	1.0 U	1.0 U
	Carbon disulfide	ug/L	60	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	1.0 U	5 UJ	5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	5 UJ	1.0 U	1.0 U
	Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	1.0 U	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	5 U	1.0 U	1.0 U
	Chlorobenzene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Chloroethane	ug/L	5	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	1.0 U	2 UJ	2 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	2 UJ	**5.9**	**3.9**
	Chloroform	ug/L	7	1.0 U	1.0 U	2 U	**0.74 J**	**0.51 J**	**0.38 J**	1.0 U	**0.44 J**	1.0 U	**0.27 J**	**0.31 J**	1.0 U	1.0 U	1.0 U	1.0 U	NA	2 U	1.0 U	1.0 U
	Chloromethane	ug/L	5	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	1.0 U	2 U	2 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	2 U	1.0 U	1.0 U
	1,4-Dioxane	ug/L	NC	40 U	40 U	50 UJ	40 U	40 U	50 UJ	40 U	40 U	40 U	50 UJ	50 UJ	40 U	40 U	40 U	40 U	NA	50 UJ	40 U	40 U
	cis-1,2-Dichloroethene	ug/L	5	**2.7**	1.0 U	**1.9**	1.0 U	1.0 U	1 U	**2.0**	1.0 U	1.0 U	1 U	1 U	**29**	1.0 U	1.0 U	1.0 U	NA	1 U	**54**	**50**
	cis-1,3-Dichloropropene	ug/L	0.4(a)	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 U	1.0 U
	Cyclohexane	ug/L	NC	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	1.0 U	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	5 U	1.0 U	1.0 U
	Dibromochloromethane	ug/L	50	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 U	1.0 U
	Dichlorodifluoromethane	ug/L	5	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	1.0 U	2 U	2 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	2 U	1.0 U	1.0 U
	Ethylbenzene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	**0.94 J**	1.0 U
	Isopropylbenzene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Methyl acetate	ug/L	NC	2.5 U	2.5 U	1 U	2.5 U	2.5 U	1 U	2.5 U	2.5 U	2.5 U	1 U	1 U	2.5 U	2.5 U	2.5 U	2.5 U	NA	1 U	2.5 U	2.5 U
	Methyl tert butyl ether	ug/L	10	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Methylcyclohexane	ug/L	NC	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Methylene chloride	ug/L	5	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	1.0 U	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	5 U	1.0 U	1.0 U
	Styrene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	Toluene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	**1.7**	**0.86 J**
	trans-1,2-Dichloroethene	ug/L	5	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U	1.0 U	1.0 U
	trans-1,3-Dichloropropene	ug/L	0.4(a)	1.0 U	1.0 U	0.5 UJ	1.0 U	1.0 U	0.5 UJ	1.0 U	1.0 U	1.0 U	0.5 UJ	0.5 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.5 UJ	1.0 U	1.0 U
	Trichloroethene	ug/L	5	**3.4**	**0.85 J**	**2.5**	**2.1**	**2.0**	**1.9**	**7.1**	**3.0**	**2.1**	**3.0**	**2.9**	**21**	1.0 U	1.0 U	1.0 U	NA	**0.40 J**	1.0 U	**0.61 J**
	Trichlorofluoromethane (Freon 11)	ug/L	5	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	1.0 U	2 U	2 U	**1.2**	1.0 U	1.0 U	1.0 U	NA	2 U	1.0 U	1.0 U
	Vinyl chloride	ug/L	2	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	1.0 U	2 U	2 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	2 U	1.0 U	1.0 U
	Xylenes, Total	ug/L	5	2.0 U	2.0 U	1 U	2.0 U	2.0 U	1 U	2.0 U	2.0 U	2.0 U	1 U	1 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	1 U	**8.3**	2.0 U
	TICs																					
	Unknown Volatile Organic With 1st Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.2 J**	**2.8 J**
	Unknown Volatile Organic With 2nd Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 3rd Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 4th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 5th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 6th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 7th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indan, 1-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methylcyclopentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Pentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl-pentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,6-Dimethyl-2,3-Dihydro-1H-Indene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Ethenyl-1,4-Dimethylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-trimethylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	MW-26			MW-28			MW-31	MW-33				MW-B	MW-101					MW-102	
			Sample Name:	MW-26_20201006	MW-26_20211025	MW-26-20221108	MW-28_20201006	MW-28_20211028	MW-28-20221108	MW-31_20211027	MW-33_20201008	MW-33_20211027	DUP-01-20221108	MW-33-20221108	MW-B_20201008	MW-101_20201006	MW-101_20211026	DUP-2_20211026	MW-101-20221107	MW-101-20221108	MW-102_20201006	MW-102_20211026
			Lab Sample ID:	480-176136-5	480-191472-9	22K1575-01	480-176136-7	480-191614-7	22K1575-08	480-191614-5	480-176220-8	480-191614-2	22K1575-13	22K1575-11	480-176220-1	480-176136-1	480-191472-12	480-191472-22	22K1627-01	22K1575-16	480-176136-4	480-191472-13
			Sample Date:	10/6/2020	10/25/2021	11/8/2022	10/6/2020	10/28/2021	11/8/2022	10/27/2021	10/8/2020	10/27/2021	11/8/2022	11/8/2022	10/8/2020	10/6/2020	10/26/2021	10/26/2021	11/7/2022	11/8/2022	10/6/2020	10/26/2021
Analysis	Analyte	Unit	Class GA Values*										Field Dup					Field Dup				
	TICs																					
	Cyclopropylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4.9** **JN**	NA
	1H-Indene 2,3-Dihydro-5-Methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,3-Dimethylcyclohexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl-1-Pentene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isobutylene (2-methyl-1-propene)	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4.8** **JN**	NA
	trans-3-Methyl-2-Pentene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl Butane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3-Methylpentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3-Phenylbut-1-Ene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dimethylcyclohexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	m,p-Xylene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3,5-Trimethylbenzene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-Ethyltoluene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,3-Dimethyl-butane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3-Methylhexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1-Butene, 3-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1-Ethyl-3-Methylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.5** **JN**	NA
SVOCs																						
	1,4-Dioxane	ug/L	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20 U	0.21 U	0.22 U	0.22 U	NA	NA	NA
Metals, total																						
	Iron	ug/L	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**29** **J**	50 U	NA	NA	**36** **J**	**14,300**	**19,200**
	Manganese	ug/L	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**35**	**6.9**	NA	NA	R	**530**	**560**
Dissolved Gas																						
	Ethane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 U	7.5 U	NA	NA	14 U	83 U	83 U
	Ethene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 U	7.0 U	NA	NA	17 U	77 U	77 U
	Methane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	NA	NA	7 U	**10,000**	**14,000**
	Carbon dioxide	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**30,000**	**68,000**	NA	NA	**194,000**	**83,000**	**72,000**
General Chemistry																						
	Alkalinity, total	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**236,000**	**217,000**	NA	NA	NA	**390,000**	**366,000**
	Chloride	ug/L	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**310,000**	**166,000**	NA	NA	**390,000**	**205,000**	**197,000**
	Nitrite as Nitrogen	ug/L	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50 U	NA	NA	NA	50 UJ	50 U	NA
	Nitrate as Nitrogen	ug/L	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,800**	**200** **J**	NA	NA	**1,600** **J**	50 U	250 U
	Nitrate/Nitrite	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,800**	NA	NA	NA	NA	50 U	NA
	pH	su	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.1** **J**	NA	NA
	Sulfate	ug/L	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**18,900**	**11,800**	NA	NA	**20,000**	10,000 U	10,000 U
	Sulfide	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000 U	1,000 U	NA	NA	**2,200**	1,000 U	1,000 U
	Total Organic Carbon	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**590** **J**	**1,100**	NA	NA	**660** **J**	**9,100**	**4,800**

Notes:
ug/L - micrograms per liter.
su - Standard unit,
B - Analyte detected in associated method blank.
R - Data unusable, as determined by DUSR.
J - Estimated value.
N - Indicates presumptive evidence of a compound.
NA - Sample not analyzed for the listed analyte.
NC - No NYSDEC standards exist for this analyte.
T - Indicates that a quality control parameter doesn't meet the control limit requirements.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standard.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
MNA - Monitored Natural Attenuation parameters
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.
(a) - criteria applicable to the sum of the cis and trans isomers.

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	MW-103				MW-104					RW-008			RW-009			TW-1		
			Sample Name:	MW-103_20201007	MW-103_20211025	DUP-1_20211025	MW-103-20221108	MW-104_20201006	DUP-1_20201006	MW-104_20211026	MW-104-20221108	MW-104-20221108	RW-8_20201008	RW-8_20211026	RW-8-20221108	RW-9_20201008	RW-9_20211026	RW-9-20221108	TW-1_20201007	TW-1_20211025	TW-1-20221108
			Lab Sample ID:	480-176137-4	480-191472-2	480-191472-10	22K1575-09	480-176136-8	480-176136-9	480-191472-14	22K1575-19	22K1627-04	480-176220-9	480-191472-16	22K1575-05	480-176220-10	480-191472-17	22K1575-04	480-176137-2	480-191472-3	22K1575-14
			Sample Date:	10/7/2020	10/25/2021	10/25/2021	11/8/2022	10/6/2020	10/6/2020	10/26/2021	11/8/2022	11/8/2022	10/8/2020	10/26/2021	11/8/2022	10/8/2020	10/26/2021	11/8/2022	10/7/2020	10/25/2021	11/8/2022
Analysis	Analyte	Unit	Class GA Values*			Field Dup			Field Dup												
VOCs																					
	1,1,1-Trichloroethane	ug/L	5	**7.3**	**3.6**	**3.3**	**4.1**	50 U	50 U	20 U	5 U	NA	**8.2**	**2.5**	**5.3**	1.0 U	**7.4**	**4.5**	1.0 U	1.0 U	**0.44 J**
	1,1,2,2-Tetrachloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	0.5 U	50 U	50 U	20 U	2.5 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	Trichlorotrifluoroethane (Freon 113)	ug/L	5	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	**0.36 J**	**0.52 J**	1.0 U	**0.91 J**	**0.27 J**	1.0 U	1.0 U	1 U
	1,1,2-Trichloroethane	ug/L	1	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,1-Dichloroethane	ug/L	5	**2.8 J**	**1.7**	**1.8**	**4.0**	50 U	**31 J**	**24**	**27**	NA	**10**	**2.8**	**8.9**	**4.6**	**15**	**2.4**	**7.1 J**	**5.8**	**6.5**
	1,1-Dichloroethene	ug/L	5	**1.8**	**0.48 J**	**0.41 J**	**0.85 J**	**89**	**110**	**90**	**34**	NA	**7.5**	**2.5**	**5.0**	1.0 U	**12**	**0.69 J**	**0.59 J**	**0.46 J**	**0.61 J**
	1,2,3-Trichlorobenzene	ug/L	5	1.0 U	1.0 U	1.0 U	5 U	50 U	50 U	20 U	25 U	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U
	1,2,4-Trichlorobenzene	ug/L	5	1.0 UJ	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 UJ	1.0 U	1 U
	1,2-Dibromo-3-chloropropane	ug/L	0.04	1.0 U	1.0 U	1.0 U	5 U	50 U	50 U	20 U	25 U	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U
	1,2-Dibromoethane	ug/L	0.0006	1.0 U	1.0 U	1.0 U	0.5 U	50 U	50 U	20 U	2.5 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	1,2-Dichlorobenzene	ug/L	3	1.0 UJ	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 UJ	1.0 U	1 U
	1,2-Dichloroethane	ug/L	0.6	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,2-Dichloropropane	ug/L	1	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,3-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	1,4-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	2-Butanone (MEK)	ug/L	50	10 U	10 U	10 U	20 U	500 U	500 U	200 UT	100 U	NA	10 U	10 UT	**2.2 J**	10 U	10 UT	20 U	10 U	10 U	20 U
	2-Hexanone	ug/L	50	5.0 U	5.0 U	5.0 U	10 U	250 U	250 U	100 U	50 U	NA	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U
	Methyl isobutyl ketone	ug/L	NC	5.0 U	5.0 U	5.0 U	10 U	250 U	250 U	100 U	50 U	NA	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U
	Acetone	ug/L	50	10 U	10 U	10 U	50 U	500 U	500 U	200 U	250 U	NA	10 U	10 UB	50 U	10 U	10 UB	50 U	10 U	10 U	50 U
	Benzene	ug/L	1	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	**1.3**	1 U	1.0 U	1.0 U	1 U
	Bromochloromethane	ug/L	5	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Bromodichloromethane	ug/L	50	1.0 U	1.0 U	1.0 U	0.5 U	50 U	50 U	20 U	2.5 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	Bromoform	ug/L	50	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Bromomethane	ug/L	5	1.0 U	1.0 U	1.0 U	2 UJ	50 U	50 U	20 U	10 UJ	NA	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	2 UJ
	Carbon disulfide	ug/L	60	1.0 U	1.0 U	1.0 U	5 U	50 U	50 U	20 U	25 UJ	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 UJ
	Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	1.0 U	5 U	50 U	50 U	20 U	25 U	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U
	Chlorobenzene	ug/L	5	1.0 UJ	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 UJ	1.0 U	1 U
	Chloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	2 U	50 U	50 U	**35**	**14 J**	NA	1.0 U	1.0 U	2 U	1.0 U	**0.96 J**	2 U	1.0 U	1.0 U	2 UJ
	Chloroform	ug/L	7	1.0 U	1.0 U	1.0 U	2 U	50 U	50 U	20 U	10 U	NA	1.0 U	1.0 U	**0.35 J**	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U
	Chloromethane	ug/L	5	1.0 U	1.0 U	1.0 U	2 U	50 U	50 U	20 U	10 U	NA	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U
	1,4-Dioxane	ug/L	NC	40 U	40 U	40 U	50 UJ	2,000 U	2,000 U	800 U	250 UJ	NA	40 U	40 U	50 UJ	40 U	40 U	50 UJ	40 U	40 U	50 UJ
	cis-1,2-Dichloroethene	ug/L	5	**7.3**	**3.7**	**3.8**	**5.5**	**1,300**	**1,300**	**1,400**	**720**	NA	**14**	**4.2**	**11**	**2.3**	**10**	**1.6**	**13**	**11**	**11**
	cis-1,3-Dichloropropene	ug/L	0.4(a)	1.0 U	1.0 U	1.0 U	0.5 U	50 U	50 U	20 U	2.5 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	Cyclohexane	ug/L	NC	1.0 U	1.0 U	1.0 U	5 U	50 U	50 U	20 U	25 U	NA	1.0 U	**11**	5 U	**13**	**42**	5 U	1.0 U	1.0 U	5 U
	Dibromochloromethane	ug/L	50	1.0 U	1.0 U	1.0 U	0.5 U	50 U	50 U	20 U	2.5 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U
	Dichlorodifluoromethane	ug/L	5	1.0 U	1.0 U	1.0 U	2 U	50 U	50 U	20 U	10 U	NA	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U
	Ethylbenzene	ug/L	5	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	**2.9**	1.0 U	1 U	1.0 U	1.0 U	1 U
	Isopropylbenzene	ug/L	5	1.0 UJ	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	**0.89 J**	1.0 U	**0.59 J**	**1.7**	**4.0**	1 U	1.0 UJ	1.0 U	1 U
	Methyl acetate	ug/L	NC	2.5 U	2.5 U	2.5 U	1 U	130 U	130 U	50 U	5 U	NA	2.5 U	2.5 U	1 U	2.5 U	2.5 U	1 U	2.5 U	2.5 U	1 U
	Methyl tert butyl ether	ug/L	10	1.0 UJ	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 UJ	1.0 U	1 U
	Methylcyclohexane	ug/L	NC	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	**1.3**	**4.3**	**9.7**	1 U	1.0 U	1.0 U	1 U
	Methylene chloride	ug/L	5	1.0 UJ	1.0 U	1.0 U	5 U	50 U	**26 J**	20 U	25 U	NA	1.0 U	1.0 U	5 U	1.0 U	**8.4**	5 U	1.0 UJ	1.0 U	5 U
	Styrene	ug/L	5	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	Toluene	ug/L	5	1.0 UJ	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 UJ	1.0 U	1 U
	trans-1,2-Dichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1 U	50 U	50 U	20 U	5 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U
	trans-1,3-Dichloropropene	ug/L	0.4(a)	1.0 UJ	1.0 U	1.0 U	0.5 UJ	50 U	50 U	20 U	2.5 UJ	NA	1.0 U	1.0 U	0.5 UJ	1.0 U	1.0 U	0.5 UJ	1.0 UJ	1.0 U	0.5 UJ
	Trichloroethene	ug/L	5	**45 J**	**23**	**24**	**32**	50 U	50 U	20 U	5 U	NA	**13**	**3.0**	**9.8**	**4.7**	**58**	**3.0**	**10 J**	**8.4**	**10**
	Trichlorofluoromethane (Freon 11)	ug/L	5	1.0 U	1.0 U	1.0 U	**0.19 J**	50 U	50 U	20 U	10 U	NA	**1.0**	1.0 U	**0.45 J**	1.0 U	1.0 U	**0.37 J**	1.0 U	1.0 U	2 U
	Vinyl chloride	ug/L	2	1.0 UJ	1.0 U	1.0 U	2 U	**380**	**390**	**610**	**580**	NA	**7.9**	**2.8**	**6.0**	1.0 U	**7.6**	2 U	1.0 UJ	1.0 U	2 U
	Xylenes, Total	ug/L	5	2.0 U	2.0 U	2.0 U	1 U	100 U	100 U	40 U	5 U	NA	2.0 U	2.0 U	1 U	**6.1**	2.0 U	1 U	2.0 U	2.0 U	1 U
	TICs																				
	Unknown Volatile Organic With 1st Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	**48 J**	NA	**13 N**	**32 J**	**31 J**	NA	NA	NA	NA
	Unknown Volatile Organic With 2nd Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	**44 J**	NA	**7.2 N**	**19 J**	**28 J**	NA	NA	NA	NA
	Unknown Volatile Organic With 3rd Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	**44 J**	NA	NA	**7.7 J**	**24 J**	NA	NA	NA	NA
	Unknown Volatile Organic With 4th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	**22 J**	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 5th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.0 J**	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 6th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 7th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indan, 1-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.3 JN**	**30 JN**	NA	NA	NA	NA
	Methylcyclopentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	**13 JN**	**2.7 JN**	NA	**39 JN**	**120 JN**	NA	NA	NA	NA
	n-Pentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl-pentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**54 JN**	NA	NA	NA	NA	NA
	1,6-Dimethyl-2,3-Dihydro-1H-Indene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**13 JN**	NA	NA	NA	NA
	2-Ethenyl-1,4-Dimethylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-trimethylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	MW-103				MW-104					RW-008			RW-009			TW-1		
			Sample Name:	MW-103_20201007	MW-103_20211025	DUP-1_20211025	MW-103-20221108	MW-104_20201006	DUP-1_20201006	MW-104_20211026	MW-104-20221108	MW-104-20221108	RW-8_20201008	RW-8_20211026	RW-8-20221108	RW-9_20201008	RW-9_20211026	RW-9-20221108	TW-1_20201007	TW-1_20211025	TW-1-20221108
			Lab Sample ID:	480-176137-4	480-191472-2	480-191472-10	22K1575-09	480-176136-8	480-176136-9	480-191472-14	22K1575-19	22K1627-04	480-176220-9	480-191472-16	22K1575-05	480-176220-10	480-191472-17	22K1575-04	480-176137-2	480-191472-3	22K1575-14
			Sample Date:	10/7/2020	10/25/2021	10/25/2021	11/8/2022	10/6/2020	10/6/2020	10/26/2021	11/8/2022	11/8/2022	10/8/2020	10/26/2021	11/8/2022	10/8/2020	10/26/2021	11/8/2022	10/7/2020	10/25/2021	11/8/2022
Analysis	Analyte	Unit	Class GA Values*			Field Dup			Field Dup												
	TICs																				
	Cyclopropylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1H-Indene 2,3-Dihydro-5-Methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,3-Dimethylcyclohexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.8**	**JN**	NA	NA	**11**	**JN**	NA	NA	NA
	2-Methyl-1-Pentene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isobutylene (2-methyl-1-propene)	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	trans-3-Methyl-2-Pentene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**10**	**JN**	NA	NA	NA
	2-Methyl Butane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**11**	**JN**	**83**	**JN**	NA	NA	NA	NA
	3-Methylpentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**24**	**JN**	NA	NA	NA	NA	NA	NA
	Indane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.7**	**JN**	NA	NA	NA	NA
	3-Phenylbut-1-Ene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dimethylcyclohexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.1**	**JN**	NA	NA	NA	NA	NA	NA
	m,p-Xylene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3,5-Trimethylbenzene	ug/L	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**11**	**JN**	NA	NA	NA	NA
	o-Ethyltoluene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,3-Dimethyl-butane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**20**	**JN**	NA	NA	NA	NA	NA	NA
	3-Methylhexane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**14**	**JN**	NA	NA	NA
	1-Butene, 3-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1-Ethyl-3-Methylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs																					
	1,4-Dioxane	ug/L	0.35	NA	NA	NA	NA	**1.2**	**1.2**	**1.0**	NA	**0.96**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, total																					
	Iron	ug/L	300	NA	NA	NA	NA	**2,500**	NA	**2,800**	**2,800**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	ug/L	300	NA	NA	NA	NA	**530**	NA	**570**	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Gas																					
	Ethane	ug/L	NC	NA	NA	NA	NA	**12**	NA	**13**	**7.5** **J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Ethene	ug/L	NC	NA	NA	NA	NA	**1.9** **J**	NA	7.0 U	**7.2** **J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methane	ug/L	NC	NA	NA	NA	NA	**11,000**	NA	**16,000**	**7,400**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Carbon dioxide	ug/L	NC	NA	NA	NA	NA	**9,700**	NA	**9,600**	**212,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry																					
	Alkalinity, total	ug/L	NC	NA	NA	NA	NA	**248,000**	NA	**260,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	ug/L	250,000	NA	NA	NA	NA	**147,000**	NA	**155,000**	**160,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrite as Nitrogen	ug/L	1,000	NA	NA	NA	NA	50 U	NA	NA	50 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as Nitrogen	ug/L	10,000	NA	NA	NA	NA	50 U	NA	250 U	50 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate/Nitrite	ug/L	NC	NA	NA	NA	NA	50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	pH	su	NC	NA	NA	NA	NA	NA	NA	NA	**7.7** **J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	ug/L	250,000	NA	NA	NA	NA	10,000 U	NA	10,000 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	ug/L	NC	NA	NA	NA	NA	1,000 U	NA	1,000 U	**2,800**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	ug/L	NC	NA	NA	NA	NA	**13,500**	NA	**3,400**	**1,300**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
ug/L - micrograms per liter.
su - Standard unit,
B - Analyte detected in associated method blank.
R - Data unusable, as determined by DUSR.
J - Estimated value.
N - Indicates presumptive evidence of a compound.
NA - Sample not analyzed for the listed analyte.
NC - No NYSDEC standards exist for this analyte.
T - Indicates that a quality control parameter doesn't meet the control limit requirements.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standard.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
MNA - Monitored Natural Attenuation parameters
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.
(a) - criteria applicable to the sum of the cis and trans isomers.

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	TW-2					TW-3			TW-6			TWMW-01			
			Sample Name:	TW-2_20201007	DUP-2_20201007	TW-2_20211026	TW-2-20221108	TW-2-20221108	TW-3_20201006	TW-3_20211025	TW-3-20221109	TW-6_20201006	TW-6_20211025	TW-6-20221108	TWMW-01_20201007	TWMW-01_20211027	TWMW-01-20221108	TWMW-01-20221108
			Lab Sample ID:	480-176137-9	480-176137-11	480-191472-15	22K1575-10	22K1627-06	480-176136-6	480-191472-4	22K1575-23	480-176136-3	480-191472-5	22K1575-15	480-176137-7	480-191614-1	22K1575-20	22K1627-02
			Sample Date:	10/7/2020	10/7/2020	10/26/2021	11/8/2022	11/8/2022	10/6/2020	10/25/2021	11/9/2022	10/6/2020	10/25/2021	11/8/2022	10/7/2020	10/27/2021	11/8/2022	11/8/2022
Analysis	Analyte	Unit	Class GA Values*		Field Dup													
VOCs																		
	1,1,1-Trichloroethane	ug/L	5	**64**	**82**	**69**	**34**	NA	**28**	**7.2**	**14**	**2.2**	**1.7**	**2.4**	**16 J**	20 U	**10**	NA
	1,1,2,2-Tetrachloroethane	ug/L	5	10 U	10 U	8.0 U	1 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	20 U	20 U	0.5 U	NA
	Trichlorotrifluoroethane (Freon 113)	ug/L	5	10 U	10 U	**7.4 J**	**2.6**	NA	**6.1**	1.0 U	**0.91 J**	1.0 U	1.0 U	1 U	20 U	20 U	**2.1**	NA
	1,1,2-Trichloroethane	ug/L	1	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	1,1-Dichloroethane	ug/L	5	**18 J**	**19**	**23**	**15**	NA	**2.4**	**0.96 J**	**1.7**	**5.7**	**4.2**	**4.3**	**20 J**	**16 J**	**15**	NA
	1,1-Dichloroethene	ug/L	5	**65**	**80**	**76**	**25**	NA	**22**	**1.8**	**5.5**	1.0 U	1.0 U	1 U	**50**	**27**	**14**	NA
	1,2,3-Trichlorobenzene	ug/L	5	10 U	10 U	8.0 U	10 U	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	20 U	20 U	5 U	NA
	1,2,4-Trichlorobenzene	ug/L	5	10 UJ	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 UJ	20 U	1 U	NA
	1,2-Dibromo-3-chloropropane	ug/L	0.04	10 U	10 U	8.0 U	10 U	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	20 U	20 U	5 U	NA
	1,2-Dibromoethane	ug/L	0.0006	10 U	10 U	8.0 U	1 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	20 U	20 U	0.5 U	NA
	1,2-Dichlorobenzene	ug/L	3	10 UJ	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 UJ	20 U	1 U	NA
	1,2-Dichloroethane	ug/L	0.6	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	1,2-Dichloropropane	ug/L	1	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	1,3-Dichlorobenzene	ug/L	3	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	1,4-Dichlorobenzene	ug/L	3	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	2-Butanone (MEK)	ug/L	50	100 U	100 U	80 UT	40 U	NA	10 U	10 U	20 U	10 U	10 U	20 U	200 U	200 U	20 U	NA
	2-Hexanone	ug/L	50	50 U	50 U	40 U	20 U	NA	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	100 U	100 U	10 U	NA
	Methyl isobutyl ketone	ug/L	NC	50 U	50 U	40 U	20 U	NA	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	100 U	100 U	10 U	NA
	Acetone	ug/L	50	100 U	100 U	80 U	100 U	NA	10 U	10 UB	50 U	10 U	10 U	50 U	200 U	200 U	50 U	NA
	Benzene	ug/L	1	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	Bromochloromethane	ug/L	5	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	Bromodichloromethane	ug/L	50	10 U	10 U	8.0 U	1 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	20 U	20 U	0.5 U	NA
	Bromoform	ug/L	50	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	Bromomethane	ug/L	5	10 U	10 U	8.0 U	4 UJ	NA	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	2 UJ	20 U	20 U	2 UJ	NA
	Carbon disulfide	ug/L	60	10 U	10 U	8.0 U	10 U	NA	1.0 U	1.0 U	5 UJ	1.0 U	1.0 U	5 UJ	20 U	20 U	5 UJ	NA
	Carbon tetrachloride	ug/L	5	10 U	10 U	8.0 U	10 U	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	20 U	20 U	5 U	NA
	Chlorobenzene	ug/L	5	10 UJ	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 UJ	20 U	1 U	NA
	Chloroethane	ug/L	5	10 U	10 U	8.0 U	4 U	NA	1.0 U	1.0 U	2 UJ	1.0 U	1.0 U	2 UJ	20 U	20 U	**0.53 J**	NA
	Chloroform	ug/L	7	10 U	10 U	8.0 U	4 U	NA	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	20 U	20 U	2 U	NA
	Chloromethane	ug/L	5	10 U	10 UJ	8.0 U	4 U	NA	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	20 U	20 U	2 U	NA
	1,4-Dioxane	ug/L	NC	400 U	400 U	320 U	100 UJ	NA	40 U	40 U	50 UJ	40 U	40 UT	50 UJ	800 U	800 U	50 UJ	NA
	cis-1,2-Dichloroethene	ug/L	5	**48**	**53**	**49**	**36**	NA	1.0 U	**1.4**	**1.4**	**2.5**	**1.9**	**1.7**	**56**	**31**	**26**	NA
	cis-1,3-Dichloropropene	ug/L	0.4(a)	10 U	10 U	8.0 U	1 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	20 U	20 U	0.5 U	NA
	Cyclohexane	ug/L	NC	10 U	10 U	8.0 U	10 U	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	20 U	20 U	5 U	NA
	Dibromochloromethane	ug/L	50	10 U	10 U	8.0 U	1 U	NA	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	20 U	20 U	0.5 U	NA
	Dichlorodifluoromethane	ug/L	5	10 U	10 U	8.0 U	4 U	NA	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	20 U	20 U	2 U	NA
	Ethylbenzene	ug/L	5	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	Isopropylbenzene	ug/L	5	10 UJ	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 UJ	20 U	1 U	NA
	Methyl acetate	ug/L	NC	25 U	25 U	20 U	2 U	NA	2.5 U	2.5 U	1 U	2.5 U	2.5 U	1 U	50 U	50 U	1 U	NA
	Methyl tert butyl ether	ug/L	10	10 UJ	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 UJ	20 U	1 U	NA
	Methylcyclohexane	ug/L	NC	10 U	10 U	8.0 U	**1.5 J**	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	**0.75 J**	NA
	Methylene chloride	ug/L	5	**6.1 J**	10 U	8.0 U	10 U	NA	1.0 U	1.0 U	5 U	1.0 U	1.0 U	5 U	20 UJ	20 U	5 U	NA
	Styrene	ug/L	5	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	Tetrachloroethene	ug/L	5	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	Toluene	ug/L	5	10 UJ	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 UJ	20 U	1 U	NA
	trans-1,2-Dichloroethene	ug/L	5	10 U	10 U	8.0 U	2 U	NA	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1 U	20 U	20 U	1 U	NA
	trans-1,3-Dichloropropene	ug/L	0.4(a)	10 UJ	10 U	8.0 U	1 UJ	NA	1.0 U	1.0 U	0.5 UJ	1.0 U	1.0 U	0.5 UJ	20 UJ	20 U	0.5 UJ	NA
	Trichloroethene	ug/L	5	**340 J**	**380 J**	**390**	**240**	NA	**13**	**7.5**	**9.2**	**12**	**11**	**12**	**160 J**	**84**	**110**	NA
	Trichlorofluoromethane (Freon 11)	ug/L	5	**23**	**30**	**24**	**8.8**	NA	**9.5**	1.0 U	**2.2**	1.0 U	1.0 U	2 U	20 U	20 U	**2.4**	NA
	Vinyl chloride	ug/L	2	10 UJ	10 U	8.0 U	4 U	NA	1.0 U	1.0 U	2 U	1.0 U	1.0 U	2 U	**440 J**	**640**	**8.8**	NA
	Xylenes, Total	ug/L	5	20 U	20 U	16 U	2 U	NA	2.0 U	2.0 U	1 U	2.0 U	2.0 U	1 U	40 U	40 U	1 U	NA
	TICs																	
	Unknown Volatile Organic With 1st Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 2nd Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 3rd Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 4th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 5th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 6th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Unknown Volatile Organic With 7th Highest Conc.	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indan, 1-methyl-	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methylcyclopentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Pentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methyl-pentane	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,6-Dimethyl-2,3-Dihydro-1H-Indene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Ethenyl-1,4-Dimethylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-trimethylbenzene	ug/L	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3
New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for VOCs, 1,4-Dioxane, MNA (2020, 2021, and 2022)

			Sample Location:	TW-2																									
			Sample Name:	TW-2_20201007		DUP-2_20201007		TW-2_20211026		TW-2-20221108		TW-2-20221108		TW-3_20201006		TW-3_20211025		TW-3-20221109		TW-6_20201006		TW-6_20211025		TW-6-20221108		TWMW-01_20201007		TWMW-01_20211027		TWMW-01-20221108		TWMW-01-20221108	
			Lab Sample ID:	480-176137-9		480-176137-11		480-191472-15		22K1575-10		22K1627-06		480-176136-6		480-191472-4		22K1575-23		480-176136-3		480-191472-5		22K1575-15		480-176137-7		480-191614-1		22K1575-20		22K1627-02	
			Sample Date:	10/7/2020		10/7/2020		10/26/2021		11/8/2022		11/8/2022		10/6/2020		10/25/2021		11/9/2022		10/6/2020		10/25/2021		11/8/2022		10/7/2020		10/27/2021		11/8/2022		11/8/2022	
Analysis	Analyte	Unit	Class GA Values*			Field Dup																											
	TICs																																
	Cyclopropylbenzene	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	1,2,4-Trimethylbenzene	ug/L	5	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	1H-Indene 2,3-Dihydro-5-Methyl-	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	cis-1,3-Dimethylcyclohexane	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	2-Methyl-1-Pentene	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Isobutylene (2-methyl-1-propene)	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	trans-3-Methyl-2-Pentene	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	2-Methyl Butane	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	3-Methylpentane	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Indane	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	3-Phenylbut-1-Ene	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	1,4-Dimethylcyclohexane	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	m,p-Xylene	ug/L	5	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	1,3,5-Trimethylbenzene	ug/L	5	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	o-Ethyltoluene	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	2,3-Dimethyl-butane	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	3-Methylhexane	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	1-Butene, 3-methyl-	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	1-Ethyl-3-Methylbenzene	ug/L	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
SVOCs																																	
	1,4-Dioxane	ug/L	0.35	**4.3**		**3.8**		**3.7**		NA		**3.2**		NA		NA		NA		NA		NA		NA		**2.9**		NA		NA		**2.8**	
Metals, total																																	
	Iron	ug/L	300	50	U	NA		**100**		50	U	NA		NA		NA		NA		NA		NA		NA		**2,500**		**410**		**87**		NA	
	Manganese	ug/L	300	**15**		NA		3	UB		R	NA		NA		NA		NA		NA		NA		NA		**380**		**240**			R	NA	
Dissolved Gas																																	
	Ethane	ug/L	NC	**3.6**	**J**	NA		**3.9**	**J**	**3.3**	**J**	NA		NA		NA		NA		NA		NA		NA		**5.3**	**J**	**4.5**	**J**	14	U	NA	
	Ethene	ug/L	NC	7.0	U	NA		7.0	U	17	U	NA		NA		NA		NA		NA		NA		NA		**16**		**20**		17	U	NA	
	Methane	ug/L	NC	**1,700**		NA		**1,500**		**420**		NA		NA		NA		NA		NA		NA		NA		**3,900**		**4,900**		**180**		NA	
	Carbon dioxide	ug/L	NC	**43,000**		NA		**60,000**		**176,000**		NA		NA		NA		NA		NA		NA		NA		**33,000**		**32,000**		**203,000**		NA	
General Chemistry																																	
	Alkalinity, total	ug/L	NC	**205,000**		NA		**169,000**		NA		NA		NA		NA		NA		NA		NA		NA		**235,000**		**243,000**		NA		NA	
	Chloride	ug/L	250,000	**365,000**		NA		**179,000**		**290,000**		NA		NA		NA		NA		NA		NA		NA		**361,000**		**283,000**		**290,000**		NA	
	Nitrite as Nitrogen	ug/L	1,000	50	U	NA		NA		50	UJ	NA		NA		NA		NA		NA		NA		NA		50	U	250	U	**8.00**	**J**	NA	
	Nitrate as Nitrogen	ug/L	10,000	**640**		NA		**230**	**J**	**300**	**J**	NA		NA		NA		NA		NA		NA		NA		**170**		**220**	**J**	**490**	**J**	NA	
	Nitrate/Nitrite	ug/L	NC	**640**		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		**170**		NA		NA		NA	
	pH	su	NC	NA		NA		NA		**7.0**	**J**	NA		NA		NA		NA		NA		NA		NA		NA		NA		**7.1**	**J**	NA	
	Sulfate	ug/L	250,000	**13,300**		NA		**9,200**	**J**	**15,000**		NA		NA		NA		NA		NA		NA		NA		**10,800**		**8,100**	**J**	**14,000**		NA	
	Sulfide	ug/L	NC	1,000	U	NA		1,000	U	**3,200**		NA		NA		NA		NA		NA		NA		NA		1,000	U	1,000	U	**2,600**		NA	
	Total Organic Carbon	ug/L	NC	**900**	**J**	NA		**1,100**		**1,100**		NA		NA		NA		NA		NA		NA		NA		**2,100**		**1,700**		**1,900**		NA	

Notes:
ug/L - micrograms per liter.
su - Standard unit,
B - Analyte detected in associated method blank.
R - Data unusable, as determined by DUSR.
J - Estimated value.
N - Indicates presumptive evidence of a compound.
NA - Sample not analyzed for the listed analyte.
NC - No NYSDEC standards exist for this analyte.
T - Indicates that a quality control parameter doesn't meet the control limit requirements.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standard.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
MNA - Monitored Natural Attenuation parameters
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.
(a) - criteria applicable to the sum of the cis and trans isomers.

Table 4
New York State Department of Environmental Conservation
Hidden Valley Electronics - NYSDEC Site No. 704029
Vestel, New York
Summary of Groundwater Analytical Results for PFAS (2021 and 2022)

				Sample Location:	MW-11				MW-101										TW-2			
				Sample Name:	MW-11_20211026		MW-11-20221109		MW-101_20211026		DUP-2_20211026		MW-101-20221107		DUP-01-20221107		TW-2_20211026		TW-2-20221108	
				Lab Sample ID:	480-191472-18		22K1573-06		480-191472-12		480-191472-22		22K1573-01		22K1573-02		480-191472-15		22K1573-05	
				Sample Date:	10/26/2021		11/9/2022		10/26/2021		10/26/2021		11/7/2022		11/7/2022		10/26/2021		11/8/2022	
Analysis	Analyte	Unit	PFAS*								Field Dup				Field Dup					
PFAS																				
	Perfluorobutanoic Acid (PFBA)	ng/L	NC		**5.4**		**6.4**		**5.2**		**4.9**		**3.4**		**4.1**		**2.1**	**J**	**4.3**	
	Perfluorobutanesulfonic Acid (PFBS)	ng/L	NC		**4.3**		**5.5**		**5.2**		**5.3**		**9.8**		**11**		**3.0**		**4.9**	
	Perfluoropentanoic Acid (PFPeA)	ng/L	NC		**14**		**13**		**1.2**	**J**	**1.3**	**J**	**1.9**	**J**	**2.3**		**1.9**		**3.8**	
	Perfluorohexanoic Acid (PFHxA)	ng/L	NC		**9.5**		**10**		**2.7**		**2.8**		**1.8**	**J**	**2.0**		**2.1**		**3.8**	
	8:2 Fluorotelomer Sulfonate (8:2 FTS)	ng/L	NC		**0.94**	**J**	1.8	U	1.9	U	**0.41**	**J**	2	U	1.9	U	1.9	U	2	U
	Perfluorodecanoic Acid (PFDA)	ng/L	NC		**0.43**	**J**	1.8	U	1.9	U	**0.28**	**J**	2	U	1.9	U	1.9	U	2	U
	Perfluorododecanoic Acid (PFDoA)	ng/L	NC		1.9	U	1.8	U	1.9	U	1.7	U	2	U	1.9	U	1.9	U	2	UJ
	Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	NC		1.9	U	**0.44**	**J**	1.9	U	1.7	U	2	U	1.9	U	1.9	U	2	U
	N-EtFOSAA	ng/L	NC		4.6	U	NA		4.7	U	4.3	U	NA		NA		4.8	U	NA	
	N-MeFOSAA	ng/L	NC		4.6	U	NA		4.7	U	4.3	U	NA		NA		4.8	U	NA	
	Perfluorotetradecanoic Acid (PFTeA)	ng/L	NC		1.9	U	1.8	U	1.9	U	1.7	U	2	U	1.9	U	1.9	U	2	UJ
	Perfluorotridecanoic Acid (PFTriA)	ng/L	NC		1.9	U	1.8	U	1.9	U	1.7	U	2	U	1.9	U	1.9	U	2	UJ
	Perfluorodecanesulfonic Acid (PFDS)	ng/L	NC		1.9	U	1.8	U	1.9	U	1.7	U	2	U	1.9	U	1.9	U	2	U
	Perfluorooctane Sulfonamide (FOSA)	ng/L	NC		1.9	U	1.8	U	1.9	U	1.7	U	2	U	1.9	U	1.9	U	2	U
	Perfluorohexanesulfonic Acid (PFHxS)	ng/L	NC		**2.3**		**2.7**		**0.52**	**J**	**0.40**	**J**	**0.67**	**J**	1.9	U	**0.46**	**J**	**1.6**	**J**
	Perfluoro(4-methoxybutanoic) Acid (PFMBA)	ng/L	NC		NA		1.8	U	NA		NA		2	U	1.9	U	NA		2	U
	6:2 Fluorotelomer Sulfonate (6:2 FTS)	ng/L	NC		**1.2**	**J**	**38**		4.7	U	4.3	U	2	U	1.9	U	4.8	U	2	U
	Perfluoroundecanoic Acid (PFUnA)	ng/L	NC		1.9	U	NA		1.9	U	1.7	U	NA		NA		1.9	U	NA	
	Perfluoroheptanoic Acid (PFHpA)	ng/L	NC		**3.4**		**3.4**		**5.1**		**5.5**		**2.0**		**2.0**		**0.95**	**J**	**2.6**	
	Perfluorooctanoic Acid (PFOA)	ng/L	6.7		**13**		**14**		**17**		**18**		**7.8**		**8.5**		**7.5**		**25**	
	Perfluorooctanesulfonic Acid (PFOS)	ng/L	2.7		**13**		**15**		**2.3**		**2.4**		**1.7**	**J**	**1.7**	**J**	**1.3**	**J**	**7.8**	
	Perfluorononanoic Acid (PFNA)	ng/L	NC		**8.7**		**10**		**3.1**		**3.3**		**2.6**		**3.0**		**1.3**	**J**	**2.2**	

Notes:

ng/L - nanograms per liter.

J - Estimated value.

NA - Sample not analyzed for the listed analyte.

NC - No NYSDEC standards exist for this analyte.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type exceed the listed NYSDEC standard.

PFAS - Per- and Poly-fluoroalkyl Substances.

* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.

Table 5
New York State Department of Environmental Conservation
Hidden Valley Electronics - NYSDEC Site No. 704029
Vestel, New York
Summary of Indoor Air Analytical Results for VOCs (May 2020)

			Sample Name:	IAEW3A20	
			Lab Sample ID:	140-19103-1	
			Sample Date:	5/15/2020	
Analysis	Analyte	Unit	AGVs		
TO-15					
	1,1,1-Trichloroethane	ug/m3	-	0.44	U
	1,1,2,2-Tetrachloroethane	ug/m3	-	0.55	U
	1,1,2-Trichloroethane	ug/m3	-	0.44	U
	1,1,2-Trichlorotrifluoroethane	ug/m3	-	0.61	U
	1,1-Dichloroethane	ug/m3	-	0.32	U
	1,1-Dichloroethene	ug/m3	-	0.16	U
	1,2,4-Trichlorobenzene	ug/m3	-	0.59	U
	1,2,4-Trimethylbenzene	ug/m3	-	**0.43**	
	1,2-Dibromoethane	ug/m3	-	0.61	U
	1,2-Dichlorobenzene	ug/m3	-	0.48	U
	1,2-Dichloroethane	ug/m3	-	0.32	U
	1,2-Dichloropropane	ug/m3	-	0.37	U
	1,2-Dichlorotetrafluoroethane	ug/m3	-	0.56	U
	1,3,5-Trimethylbenzene	ug/m3	-	0.39	U
	1,3-Dichlorobenzene	ug/m3	-	0.48	U
	1,4-Dichlorobenzene	ug/m3	-	0.48	U
	1,4-Dioxane	ug/m3	-	0.72	U
	2,2,4-Trimethylpentane	ug/m3	-	0.93	U
	2-Butanone	ug/m3	-	**1.8**	
	4-Methyl-2-pentanone (MIBK)	ug/m3	-	**1.0**	
	Benzene	ug/m3	-	**0.34**	
	Benzyl chloride	ug/m3	-	0.83	U
	Bromodichloromethane	ug/m3	-	0.54	U
	Bromoform	ug/m3	-	0.83	U
	Bromomethane	ug/m3	-	0.31	U
	Carbon tetrachloride	ug/m3	-	**0.49**	
	Chlorobenzene	ug/m3	-	0.37	U
	Chloroethane	ug/m3	-	0.21	U
	Chloroform	ug/m3	-	0.39	U
	Chloromethane	ug/m3	-	**1.5**	
	cis-1,2-Dichloroethene	ug/m3	-	0.16	U
	cis-1,3-Dichloropropene	ug/m3	-	0.36	U
	Cyclohexane	ug/m3	-	0.69	U
	Dibromochloromethane	ug/m3	-	0.68	U
	Dichlorodifluoromethane	ug/m3	-	**2.7**	
	Ethanol	ug/m3	-	**63**	
	Ethylbenzene	ug/m3	-	**0.52**	
	Hexachlorobutadiene	ug/m3	-	0.85	U
	Hexane	ug/m3	-	0.7	U
	Methyl tert-butyl ether	ug/m3	-	0.58	U
	Methylene Chloride	ug/m3	60	1.4	U
	m-Xylene & p-Xylene	ug/m3	-	**1.5**	
	Naphthalene	ug/m3	-	1	U
	o-Xylene	ug/m3	-	**0.49**	
	Styrene	ug/m3	-	0.34	U
	t-Butyl alcohol	ug/m3	-	0.97	U
	Tetrachloroethene	ug/m3	30	0.54	U
	Toluene	ug/m3	-	**3.1**	
	trans-1,2-Dichloroethene	ug/m3	-	0.32	U
	trans-1,3-Dichloropropene	ug/m3	-	0.36	U
	Trichloroethene	ug/m3	2	**0.37**	
	Trichlorofluoromethane	ug/m3	-	**1.6**	
	Vinyl chloride	ug/m3	-	0.1	U

Notes:

ug/m3 - micrograms per cubic meter.

"-" - No listed standards exist for this analyte.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

TO - Toxic organics.

AGV - Air Guidance Values from Table 3.1 of the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 with September 2013 and August 2015 updates).

APPENDIX A

Summary of Green Remediation Metrics for Site Management

Site Name: Hidden Valley Electronics Site Site Code: 704029
Address: 1808 Vestal Parkway East City: Vestal
State: New York Zip Code: 13850 County: Broome

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

Current Reporting Period
Reporting Period From: October 31, 2019 To: October 31, 2024

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	**Total to Date**
Fuel Type 1 (e.g. natural gas (cubic feet))	Not Applicable	Unknown
Fuel Type 2 (e.g. fuel oil, propane (gallons))	Not Applicable	Unknown
Electricity (kilowatt-hours)	180,000 (approximate)	2,536,000 (approximate)
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)	Unknown	Unknown
Other energy sources (e.g. geothermal, solar thermal (British thermal unit)	Unknown	Unknown

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)	**Total to Date (tons)**
Total waste generated on-site	Less than 1	10 (approximate)
OM&M generated waste	Less than 1	Unknown
Of that total amount, provide quantity:		
Transported off-site to landfills	Less than 1	8.9 (approximate)
Transported off-site to other disposal facilities	0	Less than 1
Transported off-site for recycling/reuse	0	1.2 (approximate)
Reused on-site	0	0

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)	**Total to Date (miles)**
Standby Engineer/Contractor	11,332	Unknown
Laboratory Courier/Delivery Service (bottle and sample delivery)	1,113	Unknown
Waste Removal/Hauling	N/A	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)**
Land disturbed	0	Less than 2
Land restored	0	Less than 2

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:

The 13 off-site residential sub-slab depressurization systems (SSDSs) and the one on-site sub-slab depressurization system (SSDS)/soil vapor extraction system (SVES) related to the Site currently obtain 100% of their electricity from the local electric utility. Each off-site SSDS fan draws approximately 100 watts of power each hour and operates continuously year-round; therefore, the total energy consumption of these 13 systems is approximately 11,400 kilowatt-hours (KWh) per year (approximately 57,000 KWh for five years). The 13 off-site residential SSDSs were installed between 2005 and 2008 and are assumed to have been operational since. The on-site SSDS/SVE System draws approximately 2050 KWh every month and operates continuously year-round; therefore, the total energy consumption of this system is approximately 24,600 KWh per year (approximately 123,000 KWh for five years). The on-site SSDS/SVES has been in operation since September 2005.

This energy usage estimate does not include the energy consumed from the following remedial systems, as energy use is unknown:

- Operation of groundwater extraction and treatment system (air stripper), between April 2008 and September 2011.
- Operation of air sparging system (AS) and soil vapor extraction (SVE) System (The SVESystem has been offline since October 2001, and the AS system has been offline since August 2006.

Waste Generation:

Waste generated during this reporting period includes personal protective equipment (e.g., disposable gloves), sample tubing, and sample packing material associated with groundwater and indoor air sampling events. Office supplies were also consumed associated with the sampling activities as well as report preparation. An estimated 1,000 pounds of construction debris were produced and dispose of during the on-site SSDS/SVE system repairs (May 2020). Approximately 4.4 tons of waste related to groundwater extraction system installation were disposed of off-site (2008). Approximately 20 drums of soil cuttings and 7 drums of purge water resulting from remedial investigation(s) are documented as being disposed of in the 2018 Final Engineering Report. Quantities of waste generated during the Site remedial history are approximate and may not include all waste generated.

Transportation/Shipping:

Transportation miles are associated with Site visits to perform routine annual Site management activities including post-storm inspections, site-wide inspections, groundwater monitoring, non-routine SSDS/SVES operation and inspection activities, and indoor air sampling activities performed in 2020. Transportation includes standby engineer (D&B, TRC), standby contractor (Aztech), and laboratory courier services (Eurofins, Con-Test). Generally, local staff and laboratories are utilized to perform work at the site. Staff primarily utilized at the site are located between 50 and 100 miles from the Site.

Water usage:
Minimal amounts of water are used during groundwater sampling activities to decontaminate sampling equipment. Historical water quantities do not include quantities of water utilized during in-situ enhanced biodegradation injection performed in April 2014, or injection pilot testing.

Land Use and Ecosystems:
The current Site activities do not disturb land and/or ecosystems. Historical Site activities (cover system installation, remedial investigations) disturbed less than one acre of land and have been restored to pre-existing conditions.

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

HIDDEN VALLEY ELECTRONICS (NYSDEC SITE NO. 704029)

Date	Description
~1957 to 1991	First structure at the Site was constructed in approximately 1957; although, according to the property title, a portion of the Site historically contained an easement allowing Broome County to perform drainage improvements and stage minor equipment. The structure was an approximate 20,000-square foot facility, presumably for Federal Radio (also known as Harvey Electronics and Federal Electronics), a small electronics manufacturer. A 10,000-square foot addition was constructed around 1968 by Federal Radio along the east side of the initial building. Hidden Valley Electronics (HVE) purchased the assets of Federal Radios in 1991. The manufacturing processes and associated chemicals used by Federal radio from 1957 to 1991 are unknown.
1991 to 1995	HVE continued manufacturing operations at the Site. These operations involved the mounting electrical parts onto bare circuit boards by machine or hand soldering. HVE reportedly used a movable vapor degreaser for cleaning circuit boards. This degreaser reportedly used 1,1,1-trichlorethane (TCA) that was recirculated through an above-ground sump that was part of the degreaser operation. The sump was drained to 55-gallon drums when the TCA became contaminated with residues. HVE reported that three drums of TCA were purchased, used, and sent off-site for disposal between January and June 1993. TCA was reportedly no longer used after June 1993. After June 1993, HVE used a water-based process for cleaning the electrical boards. In March 1995, HVE relocated their operation to Appalachian, New York. Groundwater sampling was conducted in 1994 and 1995 at the Miller Sunoco Site (Spill Site #9401630) located on the north side of the Site. Elevated levels of trichloroethene (TCE) and 1,1,1-TCA were detected in the groundwater.
1995 to 2002	After HVE vacated the premises in 1995, the on-site building was eventually converted to a retail space, fitness center, and a radio station, which are the current uses of the Site. A subsurface investigation was conducted by O'Brien and Gere Engineers, Inc. in 2001. The subsurface investigation identified that limited soil contamination

exists at the Site, however the conceptual site model suggests that soil contamination may be present below the site building.

In 2002, the New York State Department of Health classified the Site as Class 2 on the State Registry of Inactive Hazardous Waste Disposal Sites.

A self-storage center was approximately constructed in 2003 on the south side of the Site, south of the Site's paved parking area.

2005 to 2008

In February 2005, the Site was divided into two parcels, one parcel comprising the northern portion of the Site and measuring 2.64 acres in size, and the other parcel comprising the southern portion of the Site and measuring 1.89 acres in size.

Between April 2005 and December 2007, soil vapor samples were collected from approximately 60 homes located in the Twin Orchards residential area, located North of Vestal Parkway. These samples were analyzed for volatile organic compounds, and results indicated that the presence of chlorinated solvents in the groundwater and potentially in the soil beneath the Site, moving upward into the vadose zone and impacting indoor air quality.

Between 2005 and 2008, sub-slab depressurization systems (SSDSs) were installed at the site building and in approximately 13 residential buildings as Interim Remedial Measures, to address soil vapor intrusion identified as a result of the sampling analysis activities performed between April 2005 and December 2007.

In 2006, MACTEC Engineering & Consulting, P.C. (MACTEC) performed a hydrogeological evaluation in support of the installation of three new groundwater monitoring wells. MACTEC then completed a Remedial Investigation/Feasibility Study for the Site 2008. This investigation determined that chlorinated solvents, primarily 1,1,1-TCA and TCE had been discharged to the ground surface either within the site building, or in the vicinity of the former storage shed south of the site building.

The New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) for remedial action at the Site. Through its issuing of the ROD, the NYSDEC's selected remedy for the Site consisted of on-Site groundwater/saturated soil bioremediation; continued operation, maintenance

and monitoring of the on- and off-Site SSDSs; and an environmental easement for the Site, with periodic certification.

2008 to 2011

From 2008 to 2011, a groundwater extraction and treatment system was operated north of the Site, on the north side of Vestal Parkway. This system was originally installed to intercept groundwater contamination from the Miller Sunoco Site and then was modified to capture groundwater contamination originating from the Site. During the summer of 2011, the system was deactivated, when it was determined that it was having a minimal effect on the remediation the groundwater, due to the low concentrations of contaminants present at the time.

MACTEC conducted tests in 2011 for in-situ remediation of saturated soil and groundwater using enhanced bioremediation to address contamination.

2012 to 2014

In 2012, the NYSDEC established an Environmental Easement restricting land and groundwater use at the Site. Also in 2012, the on-site SSDS was enhanced with a larger blower and deeper vacuum point installation (soil vapor extraction points up to three feet below grade). Operation, maintenance, and monitoring of this system has been conducted since 2012.

Five injection wells were installed in March 2014 for injecting FEROX plus, a concentrated emulsified zero-valent iron (ZVI) treatment solution. Injections were conducted in April 2014. Long term groundwater monitoring has been conducted annually since 2014.

2017	MACTEC prepared a Final Engineering Report (FER) for remedial action at the Site required by the ROD. The FER concluded the following: • Direct contact exposure of persons at the Site to chlorinated solvents in soil beneath the building slab is prevented by the building slab remaining in-place. • Site groundwater is not used as a drinking water source. • Exposure of persons at or near the Site to chlorinated solvents in indoor air is minimized by the operation of on-Site SSDS/Soil Vapor Extraction system (SVES) and the 13 off-Site SSDSs. • Release of contaminants from soil into groundwater is being remedied by the subsurface ZVI injections performed in 2014. Ongoing groundwater monitoring shows these injections to be effective. • Release of contaminants from subsurface soil and or groundwater under buildings and homes into indoor air through soil vapor is decreasing.
2019	In the context of the NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites, the Site is reclassified from Class 2 to Class 4 (the Site has been properly closed but requires continued site management).
2020	An overhead horizontal pipe associated with the on-site SSDS/SVES (above the drop ceiling) was observed to be leaking. An inspection of the vent pipes concluded that the pipes were deformed in various locations. The deformed vent pipes were replaced in April 2020, along with a drain line, to manage potential condensation accumulation. A Periodic Review Report (PRR) was prepared by D&B Engineers and Architects, P.C. The Site was reported to be in the NYSDEC's Registry of Inactive Hazardous Waste Sites as a Class 4 Site. Further reclassification was not feasible.
2024	NYSDEC releases an Order on Consent and Administrative Settlement for reimbursement to settle past and future costs from the Settling Respondents.

CUSTODIAL RECORD

PERTINENT SITE DOCUMENTS

HIDDEN VALLEYE ELCTRONICS SITE (NYSDEC SITE NO. 704029)

OBG, 2002. *Subsurface Investigation Letter Report, Former Hidden Valley Electronics Site, Town of Vestal, Broome County, New York, Site No. 704029*. (February 2002).

NYSDEC, 2008. *Record of Decision, Hidden Valley Electronics Inactive Hazardous Waste Disposal Site, Town of Vestal, Broome County, New York, Site No. 704029*. (March 2008).

MACTEC, 2008. *Final Remedial Investigation/Feasibility Study Report, Hidden Valley Electronics Site, Town of Vestal, Broome County, New York, Site No. 704029*. (April 2008).

MACTEC, 2012. *Site Management Plan, Hidden Valley Electronics, Town of Vestal, Broome County, New York, Site No. 704029*. (May 2012).

MACTEC, 2014. *Rotosonic Angled Drilling and Injection Activities Summary, Hidden Valley Electronics Site, Town of Vestal, Broome County, New York, Site No. 704029*. (June 2014).

MACTEC, 2015a. *April 2015 Soil Vapor Intrusion Evaluation Report, Hidden Valley Electronics Site No. 704029*. (April 2015).

MACTEC, 2015b. *July 2015 Groundwater Sampling Report, Hidden Valley Electronics Site No. 704029*. (August 2015).

MACTEC, 2016b. *April 2016 Groundwater Sampling Report, Hidden Valley Electronics Site No. 704029*. (September 2016).

MACTEC, 2017a. *February 2017 Soil Vapor Intrusion Evaluation Report, Hidden Valley Electronics Site No. 704029*. (April 2017).

MACTEC, 2017b. *April 2017 Groundwater Sampling Report, Hidden Valley Electronics Site No. 704029*. (August 2017).

MACTEC, 2017c. *Final Engineering Report, Hidden Valley Electronics Remedial Action Site No. 704029*. (September 2017).

MACTEC, 2018a. *Site Management Plan, Hidden Valley Electronics, Broome County, Vestal, New York, NYSDEC Site No. 704029*. (January 2018).

MACTEC, 2018b. *March 2018 Soil Vapor Intrusion Evaluation Report, Hidden Valley Electronics Site No. 704029*. (April 2018).

MACTEC, 2018c. *July 2018 Groundwater Sampling Report, Hidden Valley Electronics Site No. 704029*. (November 2018)

D&B, 2020a. *Periodic Review Report (May 2015 through October 2019), Hidden Valley Electronics Site Monitoring Program, Site No. 704029*. (May 2020).

D&B, 2020b. *EW-5 and EW-6 Soil Vapor Intrusion Pipe Repairs Construction Completion Report, Hidden Valley Electronics (Site No. 704029).* (September 2020).

D&B, 2020c.*Soil Vapor Intrusion Evaluation Report, Hidden Valley Electronics Site (Site No. 704029).* (November 2020).

NYSDOH, 2020. *Letter corresponding to Soil Vapor Intrusion Evaluation Report, Hidden Valley Electronics Site (Site No. 704029).* (December 2020).

D&B, 2021. *Site Management Plan, Hidden Valley Electronics, Broome County, Vestal, New York, NYSDEC Site No. 704029*. (September 2021).

NYSDEC, 2023. *Sampling, Analysis, and Assessment of Per and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs*. (January 2023)

NYSDEC, 2024. *Order on Consent and Administrative Settlement.* (February 2024)

APPENDIX C

Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form

Site Details **Box 1**

Site No. **704029**

Site Name Hidden Valley Electronics

Site Address: 1808 Vestal Parkway Zip Code: 13850
City/Town: East Vestal
County: Broome
Site Acreage: 2.6

Reporting Period: October 31, 2019 to October 31, 2024

	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? 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. 704029 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
158.13-3-2.1	BAHAMA MAMA LLC	Ground Water Use Restriction Landuse Restriction Monitoring Plan O&M Plan IC/EC Plan

The Environmental Easement was recorded with the Broome County Clerk's office on December 19, 2012 in Book 2391 at Page 569 as document number #201200049465.

The ICs are:

- The property may be used for commercial or industrial use
- 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
- Groundwater and other environmental or public health monitoring must be performed as defined ir the SMP
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP
- Future activities that will disturb remaining contaminated material must be conducted in accordanc with the SMP
- 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 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 property owner to assure compliance with the restrictions identified by the Environmental Easement
- The Controlled Property shall not be used for any of the following listed uses, and the above-state engineering controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

o Residential or Restricted Residential purposes, as defined in 6 NYCRR 375-1.8(g)(2)(i) and (ii), unless additional remediation and amendment of the Environmental Easement occurs, as approved by the NYSDEC.

o Any activity that will potentially disturb remaining contaminated material that is not conducted in accordance with the SMP.

o The use of groundwater underlying the Controlled Property for any use unless treated to render it safe for the intended use as determined by the NYSDOH.

o Construction of any new building on the Controlled Property without first evaluating the potential fc vapor intrusion for any building to be developed on Controlled Property and the development and implementation of a plan to monitor or mitigate, as appropriate, any identified potential vapor intrusion impacts.

o Any use which prohibits NYSDEC's access to the Controlled Property at any time to inspect, evaluate, maintain, repair, upgrade or replace any and all controls.

- This SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors anc assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlle Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from the NYSDEC.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
158.13-3-2.1	Vapor Mitigation Groundwater Treatment System Cover System Monitoring Wells

1. Site Cover (Parking Lot and Site Building)
2. Injection Wells and Monitoring Wells
3. On-Site SSD/SVI System
4. Off-Site SSD Systems

1. Soil or Cap: Exposure to remaining/potential contamination in soil/fill at the Site is prevented by the buildir foundation and Site pavement, which act as a soil cap system. Although the only contamination identified tha exceeded SCOs was present at depths below 15 feet, it is possible that additional shallow soil contamination is present below the Site building.

2. On-Site Enhanced Sub-Slab Depressurization System: A hybrid SSD/SVE system was installed under the Site building in 2005. The SSD system was designed to depressurize the soil vapor below the building and thereby prevent potential contaminants located in soil vapor from migrating into the building. The SSD syster installed at the Site building was enhanced with a larger blower and deeper vacuum point installation (up to 3 feet below grade) to also assist in mass removal of contaminants located below the Site building within the vadose zone.

3. Residential Sub-Slab Depressurization Systems: SSD systems were installed between 2005 and 2008 at 13 residential buildings north of the Site, as IRMs. Like the on-Site system, these SSD systems were designed to depressurize the soil vapor below each residence and prevent potential contaminants in soil vap from migrating into the residences.

4. Injection Wells: Ten injection wells were installed around the southeastern perimeter of the Site building as IRMs. The injection wells are no longer being operated, but they remain in place.

5. Monitoring Wells:Twenty-eight monitoring wells are currently part of the groundwater sampling and water level measurement program.

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
X	☐

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
X	☐

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.

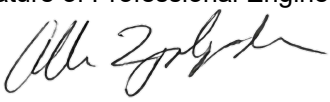
I Allen Zgaljardic at TRC Engineers, Inc.
print name

1090 Union Road, Suite 280

West Seneca, NY 14224,
(print business address)

am certifying as a Professional Engineer.

Signature of Professional Engineer



Seal and
(Required for PE)

Date 8/12/2025

APPENDIX D

D&B ENGINEERS AND ARCHITECTS, P.C.

DATE: 04/08/20

REPORT NO.: 200408

PROJECT NO.: 3150-45Y

DAILY INSPECTION REPORT

PROJECT Hidden Valley Electronics

LOCATION Vestal, New York

ATTACHMENTS Photographic Log

WEATHER	TIME	TEMP (F)	PRECIP.	WIND (MPH)	WIND (DIR)
Partly Sunny	10:00 am	50	0.00”	5-10	NW

SITE CONDITIONS: Dry.

WORK GOAL FOR DAY: Remove existing damaged piping associated with EW-6 SVE system and install new piping.

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Gunther Schnorr	D&B	10:00	16:30
Brian Andrulevich	American Family Fitness	10:00	
Lewis Gelinas	Aztech Environmental	10:00	16:30
John Stutzke	Aztech Environmental	10:00	16:30
Jay Jerome	American Family Fitness	10.15	

EQUIPMENT ON SITE:

TYPE	MODEL		MODEL
Hand Tools			
Roll-off waste container	(5 cubic yards)		

HEALTH & SAFETY:

PPE REQUIRED: Level D

HASP? Yes

SITE SAFETY OFFICER: Gunther J. Schnorr

☒ ☐ ☐ ☐

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** 04/08/20
		REPORT NO.: 200408
		PAGE NO.: 2 OF 3
		PROJECT NO.: 3150-45Y

DAILY INSPECTION REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

D&B Engineers and Architects, P.C. (D&B), and Aztech Environmental Technologies (Aztech) arrived at the Hidden Valley Electric Site (Site) to perform repairs to the EW-5 and EW-6 soil vapor extraction (SVE) system piping located inside the Site building, currently owned by Mr. Brian Andrulevich (owner) and operated as American Family Fitness (i.e., a workout facility). Upon arriving at the Site, the owner indicated additional leaks were observed yesterday in the general location of the EW-6 piping leaks previously observed (above the drop ceiling). Aztech received a shipment of 20-foot lengths of three-inch diameter Schedule 40 polyvinyl chloride (PVC) pipe and fittings from F.W. Webb.

D&B and Aztech observed the system was not currently operating. Aztech restarted the system and was operational. Aztech indicated that a high/high alarm associated with the condensation drum may have triggered the system to shut down. D&B indicated that they have attempted to call into the auto-dialer to check the status of the system but did not connect. Aztech indicated the auto-dialer number is currently password protected. Aztech also indicated that they perform periodic maintenance check on the SSDS/SVE system and details of these activities have been documented.

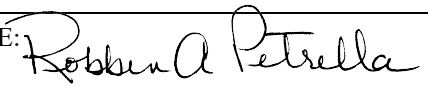
Aztech field crew was not aware that pressure extension testing was required following implementation of repairs and startup of the system and they do not have a digital monometer. D&B attempted to locate the historic monitoring points shown on Figure 2 of the OM&M manual (MACTEC, 2012) and could not be found. All the floors in the facility are covered with high density rubber-like mats and most of the equipment in the facility is bolted to the concrete slab using wedge anchors. In addition, rubber-like mats located on the northern side of the facility are glued to the concrete floor. Over the years it appears equipment has been relocated and surface penetrations through the mats and into the upper surface of the concrete slab were abundant. If pressure field extension testing is to be conducted, D&B recommend new penetrations be drilled through the slab and into the subgrade material.

Following a general inspection of the piping to be replaced, Aztech began removing the existing four-inch Schedule 10 PVC piping from the EW-6 SVE well to the southern exterior wall of the facility. D&B observed the EW-6 extraction well is a three-inch PVC pipe that has a four-to three-inch reducer attached. Aztech was able to remove the four-to three-inch reducer located at the EW-6 extraction well and installed a three-inch coupler as the new piping to be installed will be three-inch Schedule 40 PVC.

Aztech started to install new Schedule 40 pipe above the ceiling. Aztech had to reduce the 20-foot lengths of pipe sections to get them into the limited space above the drop ceiling. Aztech installed the new vertical pipe at EW-6 and associated 45-degree sections to bypass the structural I-beam overhead. Approximately 4 feet south of the vertical pipe at EW-6, the EW-6 horizontal pipe runs above a 2-feet diameter HVAC duct that runs perpendicular to the path of the new horizontal pipe.

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** April 8, 2020
		REPORT NO. 200408
		PAGE NO. 3 OF 3
		PROJECT NO. 3150-45Y

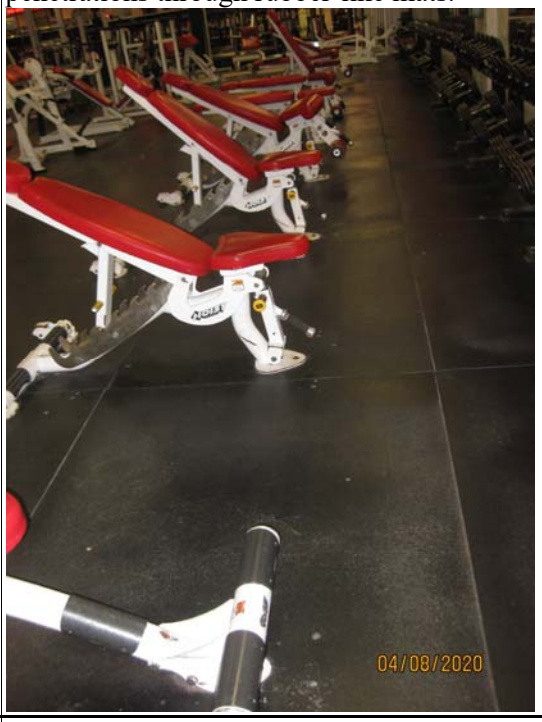
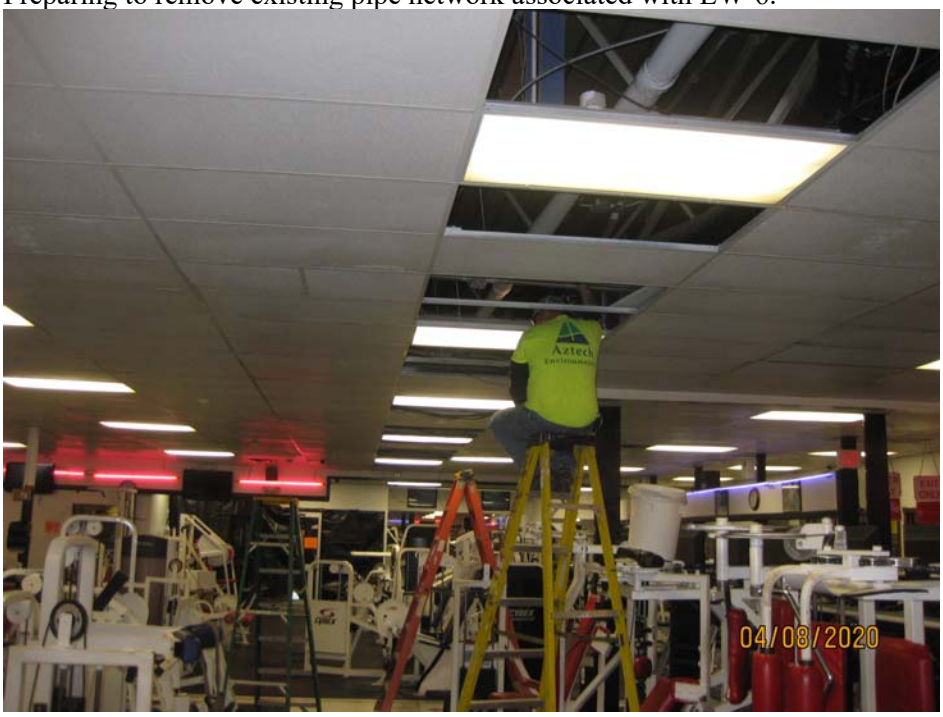
DAILY INSPECTION REPORT

PREPARED BY (OBSERVER)	**REVIEWED BY**
PRINT NAME: Gunther J. Schnorr	PRINT NAME: Robbin Petrella
SIGNATURE:	SIGNATURE: 
☐ **ADDITIONAL SHEETS USED**	
☒ emailed draft / final to NYSDEC – date: 04/14/2020	☐ hardcopy to NYSDEC – date:

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

PHOTO	DATE	DESCRIPTION
IMG_9692	04-08-20	Approximate location of leak observed on 4/7/2020 by the owner.
IMG_9693	04-08-20	Soil vapor extraction well EW-6 with existing four-to-three reducer attached.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG-9694	04-08-20	Equipment attached to concrete floor using wedge anchors. Can observe historic penetrations through rubber-like mats. 
IMG-9697	04-08-20	Preparing to remove existing pipe network associated with EW-6. 

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG-9699	04-08-20	Damaged Schedule 10 thin walled pipe associated with EW-6 that was removed.
IMG-9700	04-08-20	New 3-inch Schedule 40 PVC coupler installed at EW-6 extraction well.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG-9702	04-08-20	New 3-inch Schedule 40 PVC pipe installed from extraction well into ceiling.

D&B ENGINEERS AND ARCHITECTS, P.C.

DATE: 04/09/20

REPORT NO.: 200409

PROJECT NO.: 3150-45Y

DAILY INSPECTION REPORT

PROJECT Hidden Valley Electronics

LOCATION Vestal, New York

ATTACHMENTS Photo Log

WEATHER	TIME	TEMP (F)	PRECIP.	WIND (MPH)	WIND (DIR)
AM Overcast, PM Overcast	07:45	50	0.00”	10-15	S

SITE CONDITIONS: Dry.

WORK GOAL FOR DAY: Continue excavation, trucking and disposal operations.

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Gunther Schnorr	D&B	07:45	
Brian Andrulevich	American Family Fitness	10:00	
Lewis Gelinas	Aztech Environmental	07:30	
John Stutzke	Aztech Environmental	07:30	
Jay Jerome	American Family Fitness	7:30	

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL
Hand Tools			
Roll-off waste container			

HEALTH & SAFETY:

PPE REQUIRED: Level D ☒ ☐ ☐ ☐

HASP? Yes

SITE SAFETY OFFICER: Gunther J. Schnorr

H & S NOTES:

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** 04/09/20
		REPORT NO.: 200409
		PAGE NO.: 2 OF 3
		PROJECT NO.: 3150-45Y

DAILY INSPECTION REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

D&B Engineers and Architects, P.C. (D&B), and Aztech Environmental Technologies (Aztech) arrived at the Hidden Valley Electric Site (Site) to continue to perform repairs to the EW-5 and EW-6 soil vapor extraction (SVE) system piping located inside the Site building, currently owned by Mr. Brian Andrulevich (owner) and operated as American Family Fitness (i.e., a workout facility). Aztech received a shipment of miscellaneous clamps and fittings from F.W. Webb.

Aztech continued to install three-inch diameter Schedule 40 polyvinyl chloride (PVC) piping associated with the EW-6 SVE well above the drop ceiling. Aztech secured the vertical pipe at EW-6 to the wall using split ring clamps. In addition, Aztech secured the horizontal pipe to the roof trusses using threaded rod and split ring anchors. The use of threaded rod allows for adjustments to be made to the height/slope of the pipe as warranted.

D&B and Aztech discussed possible locations of drops (drains) along the approximate 100-foot section of horizontal pipe associated with EW-6 SVE well. Due to the numerous obstructions potentially within the pipe layout, these locations cannot be predetermined. D&B requested a cleanout be place outside of the building consisting of a T-fitting with a threaded cap in the current location of the 90-degree elbow.

Approximately 30 feet south of the EW-6 extraction well, the EW-6 horizontal pipe runs below a two-feet-diameter HVAC duct that runs perpendicular to the path of the horizontal pipe. The horizontal pipe is deflected slightly downward at this location.

Aztech installed a T-fitting and a four- to two-inch diameter reducer approximately 45 feet south of the EW-6 extraction well to install an in-line drain pipe. Aztech drilled a four-inch-diameter hole through the 7-inch-thick concrete slab using a 4-inch-diameter diamond core bit at the base of the black dimensional lumber column adjacent to the location of the T-fitting. Subbase and underlying soil material were removed to a depth of 15 inches below the top of the concrete slab and backfilled with rounded and angular stone up to one inch below the bottom of the concrete slab. The two-inch-diameter vertical drain pipe was placed on top of the stone, centered in the hole and, and additional stone backfill was placed surrounding the pipe up to three inches below the top of the concrete slab. The vertical drain pipe was secured to the black dimensional lumber column using two split ring clamp. A rag was placed on top of the stone surrounding the vertical drain pipe and hydraulic cement was used to seal the annular space surrounding the pipe up to the elevation of the rubber-like mats (approximately 4 inches in depth).

Aztech completed the installation of new three-inch Schedule 40 PVC piping associated with the EW-6 SVE well to the exterior of the building.

Aztech removed existing four-inch Schedule 10 PVC piping from the EW-5 SVE well to the southern exterior wall of the facility. Aztech also removed the four- to three-inch reducer located at the EW-5 extraction well and installed a three-inch coupler as the new piping to be installed will be three-inch Schedule 40 PVC.

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** April 9, 2020
		REPORT NO. 200409
		PAGE NO. 3 OF 3
		PROJECT NO. 3150-45Y

DAILY INSPECTION REPORT

PREPARED BY (OBSERVER)	**REVIEWED BY**
PRINT NAME: Gunther J. Schnorr	PRINT NAME: Robbin Petrella
SIGNATURE:	SIGNATURE:
☐ **ADDITIONAL SHEETS USED**	
☒ emailed draft / final to NYSDEC – date: 04/14/2020	☐ hardcopy to NYSDEC – date:

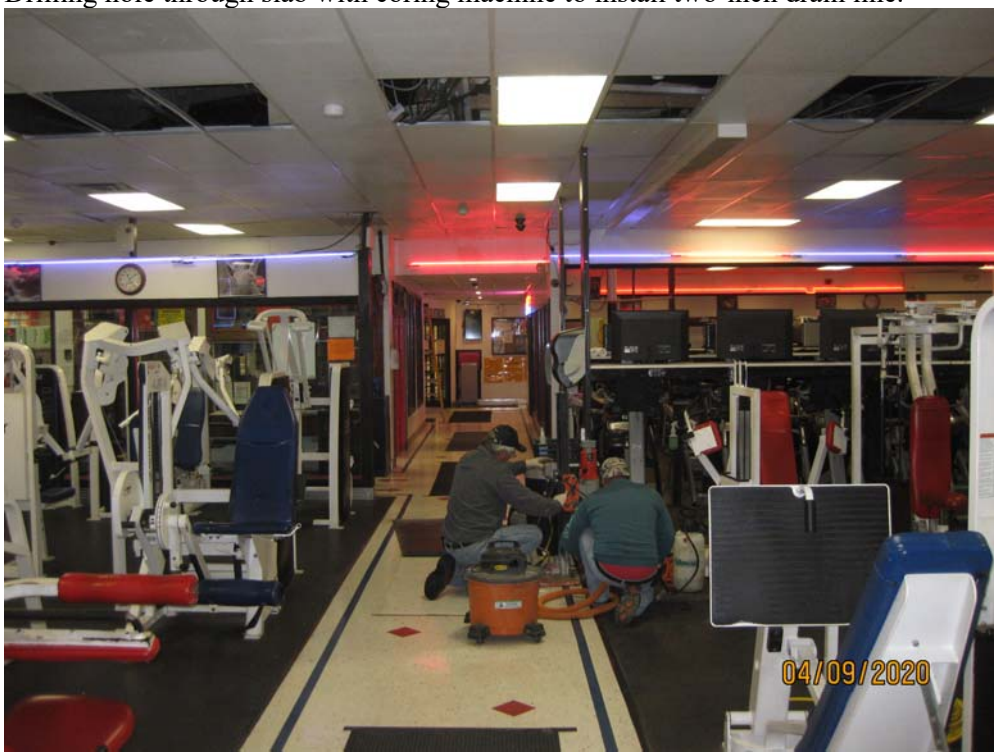
PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

PHOTO	DATE	DESCRIPTION
IMG_9705	04-09-20	Slight downward deflection of new 3-inch Sch. 40 PVC due to HVAC duct located approximately 30 feet south of EW-6 extraction well.
IMG_9707	04-09-20	Same as above, from below.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG-9708	04-09-20	New 3-inch Sch. 40 PVC pipe above duct approximately 4 feet south of EW-6 extraction well.
IMG-9709	04-09-20	New 3-inch Sch. 40 PVC pipe secured to wall with split ring clamp adjacent to EW-6 extraction well.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG-9712	02/20/19	Tee and four-to-two-inch reducer for drain line installed approximately 45 feet south of EW-6 extraction well.
IMG_9713	04-09-20	Drilling hole through slab with coring machine to install two-inch drain line. 

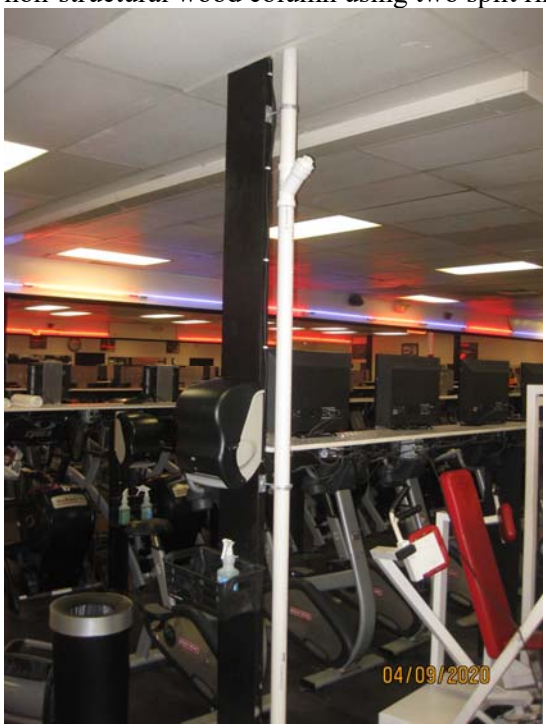
PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9718	04-09-20	Completed 4-inch core through slab with subbase material removed.
IMG_9720	04-09-20	Two-inch Sch. 40 PVC drain pipe installed on top of rounded and angular stone.

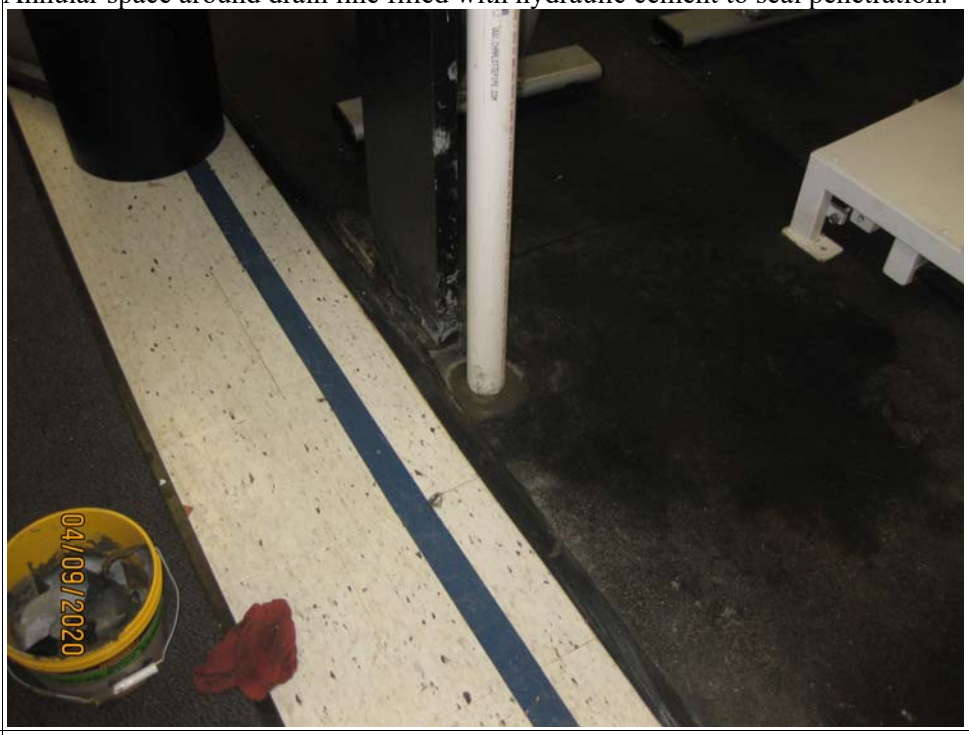
PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9724	04-09-20	New 3-inch Sch. 40 PVC secured to truss with beam and split ring clamp.
IMG_9725	04-09-20	3-inch tee and reducer associated with drain line.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9729	04-09-20	Close-up of beam and split ring clam attached to truss.
IMG_9731	04-09-20	Wye fitting and treaded cleanout plug installed in drain line. Drain line secured to non-structural wood column using two split ring clamps. 

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9732	04-09-20	Annular space around drain line filled with hydraulic cement to seal penetration. 
IMG_9733	04-09-20	Existing 4-inch Sch. 10 (thin walled) pipe associated with EW-5 extraction well.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9734	04-09-20	New 3-inch Sch. 40 PVC pipe from exterior wall, facing north towards EW-6.
IMG_9735	04-09-20	Close-up of beam and split ring clamp. Threaded rod allows for adjustment of height.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9736	04-09-20	New Sch. 40 coupler installed at EW-5 extraction well following removal of the 4- to 3-inch reducer.

D&B ENGINEERS AND ARCHITECTS, P.C.

DATE: 04/10/20

REPORT NO.: 200410

PROJECT NO.: 3150-45Y

DAILY INSPECTION REPORT

PROJECT Hidden Valley Electronics

LOCATION Vestal, New York

ATTACHMENTS Photo Log

WEATHER	TIME	TEMP (F)	PRECIP.	WIND (MPH)	WIND (DIR)
AM Overcast	09:50	32	0.00”	10-15	W

SITE CONDITIONS: Dry.

WORK GOAL FOR DAY: Continue excavation, trucking and disposal operations.

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Gunther Schnorr	D&B	09:50	11:20
Lewis Gelinas	Aztech Environmental	07:30	11:15
John Stutzke	Aztech Environmental	07:30	11:15
Jay Jerome	American Family Fitness	7:30	

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL
Hand Tools			
Roll-off waste container			

HEALTH & SAFETY:

PPE REQUIRED: Level D ☒ ☐ ☐ ☐

HASP? Yes

SITE SAFETY OFFICER: Gunther J. Schnorr

H & S NOTES:

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** 04/10/20
		REPORT NO.: 200410
		PAGE NO.: 2 OF 3
		PROJECT NO.: 3150-45Y

DAILY INSPECTION REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

D&B Engineers and Architects, P.C. (D&B), and Aztech Environmental Technologies (Aztech) arrived at the Hidden Valley Electric Site (Site) to complete the repairs to the EW-5 and EW-6 soil vapor extraction (SVE) system piping located inside and outside the Site building, currently owned by Mr. Brian Andrulevich (owner) and operated as American Family Fitness (i.e., a workout facility).

Aztech completed the installation of three-inch Schedule 40 polyvinyl chloride (PVC) piping from the EW-5 SVE well to the Schedule 40 PVC piping on the roof. Aztech secured the sloped piping associated with EW-5 to the wall using two-hole pipe straps.

In addition, Aztech completed the installation of three-inch Schedule 40 PVC piping associated with the EW-6 SVE well to the Schedule 40 PVC piping on the roof. Aztech installed a tee fitting and a threaded cleanout plug where the piping exits the building.

Aztech used hydraulic cement to create a watertight seal around the pipe penetrations at the exterior of the building.

Aztech cleaned all work areas prior to departing the Site. All waste material was placed in the roll-off waste container Aztech had delivered to the Site. Miscellaneous construction and demolition debris were observed in the roll-off waste container that was placed by others and not generated as part of the SVE repairs.

D&B observed, and photo documented extraction points EW-1, EW-3, and EW-4 associated with the sub-slab depressurization system. Extraction point EW-2 was not observed and appears to be in a room where spinning classes are conducted and has been enclosed in a drywall box that is approximately five feet in height.

Aztech sealed the exhaust pipe that was not aligned with elbow inside of SSDS enclosure shed with tape prior to departing the site.

The following activities requested by the NYSDEC/NYSDOH still need to be conducted:

- Perform post replacement communication tests at existing/available monitoring points. As indicated in the April 8, 2020 Daily Inspection Report, if these activities are to be conducted, D&B believes new penetrations will need to be drilled through the slab and into the subgrade material.

- Collection of one indoor air sample for laboratory analysis by method TO-15 under a routine 10-day turnaround time.

- Submission of a Construction Completion Report (CCR) that will include a set of figures depicting actual constructed conditions (i.e., as-built drawings) and the existing SSDS system, operations and maintenance documents, and data collected during startup and testing of the SSDS. The final CCR submitted to the Department for approval is to be prepared, stamped, certified and signed by an individual licensed or otherwise authorized in accordance with article 145 of the Education Law to practice the profession of engineering.

In addition, D&B recommends the installation of u-tube manometers at all six extraction points.

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** April 10, 2020
		REPORT NO. 200410
		PAGE NO. 3 OF 3
		PROJECT NO. 3150-45Y

DAILY INSPECTION REPORT

PREPARED BY (OBSERVER)	**REVIEWED BY**
PRINT NAME: Gunther J. Schnorr	PRINT NAME: Robbin Petrella
SIGNATURE:	SIGNATURE:
☐ **ADDITIONAL SHEETS USED**	
☒ emailed draft / final to NYSDEC – date: 04/14/2020	☐ hardcopy to NYSDEC – date:

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

PHOTO	DATE	DESCRIPTION
IMG_9737	04-10-20	Preparing to seal around the annular space from the exterior of the building.
IMG_9738	04-10-20	New 3-inch Sch. 40 PVC pipe associated with EW-5 extraction point.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG-9739	04-10-20	New 3-inch Sch. 40 PVC pipe associated with EW-5 secured to wall with pipe strap.
IMG-9740	04-10-20	New 3-inch Sch. 40 PVC pipe secured to wall with pipe strap, looking towards direction of EW-5 extraction well.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG-9741	02/20/19	Location above the drop ceiling where pipes penetrate the southern exterior wall.
IMG_9742	04-10-20	New 3-inch Sch. 40 PVC pipe, photo taken from location where pipes exit building looking towards direction of EW-5 extraction well.

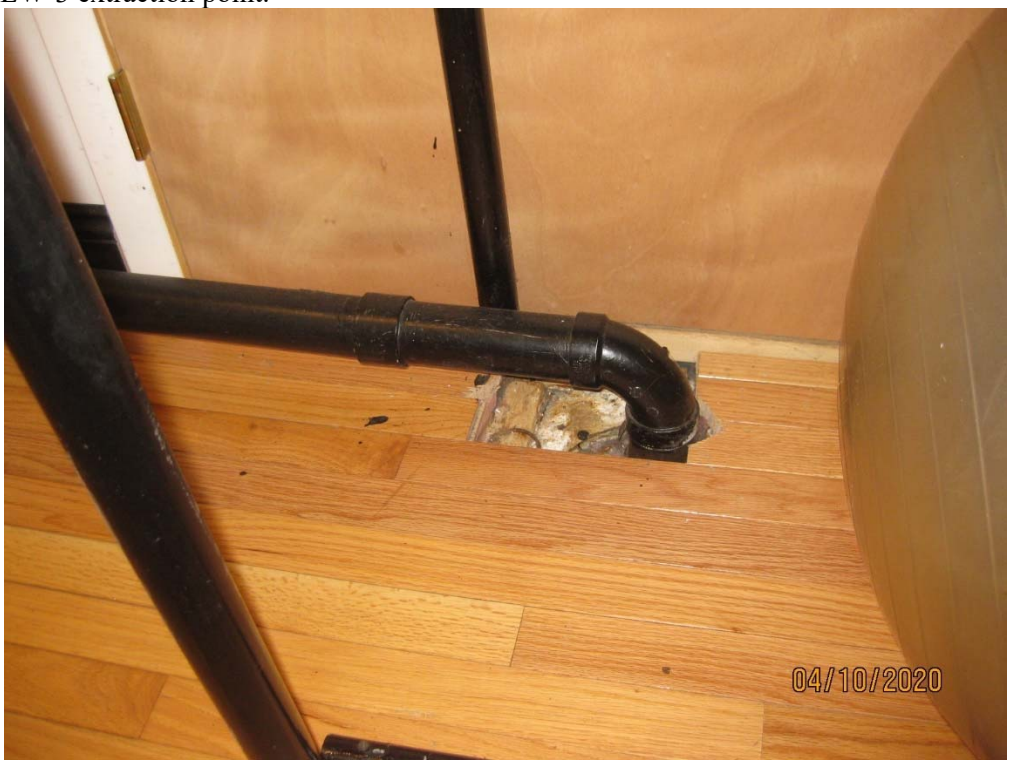
PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9743	04-10-20	Hardened hydraulic cement surrounding two-inch-diameter Sch. 40 PVC drain pipe.
IMG_9744	04-10-20	Annular space sealed with hydraulic cement at the exterior wall. Tee with threaded cleanout plug associated with EW-6.

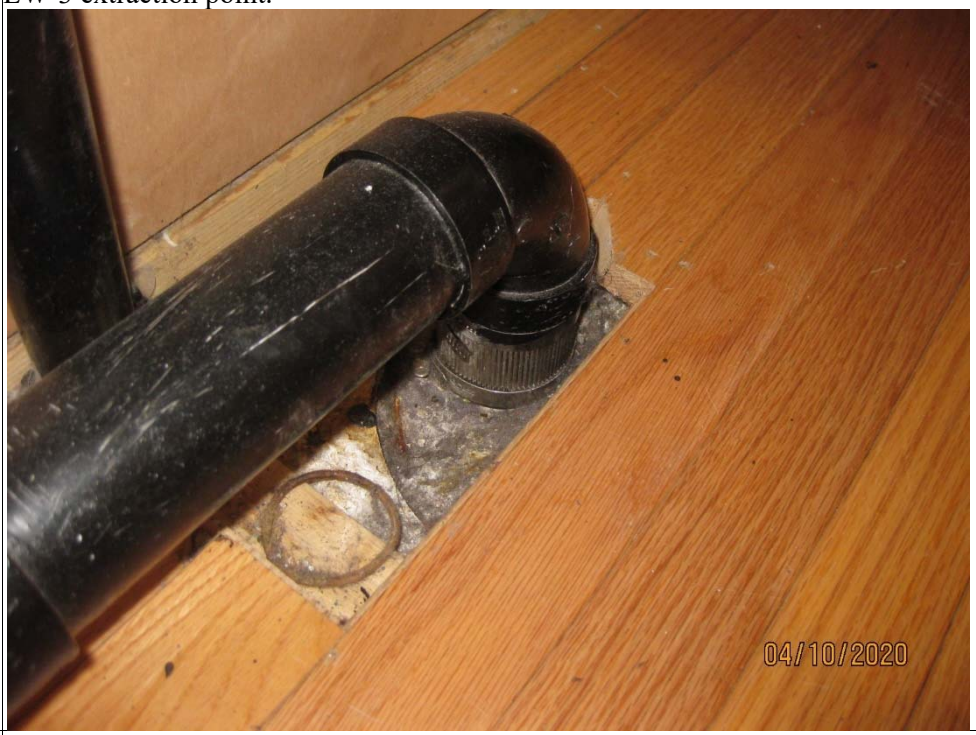
PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9746	04-10-20	Pipe associated with EW-1 extraction point.
IMG_9747	04-10-20	Pipe associated with EW-1 extraction point.

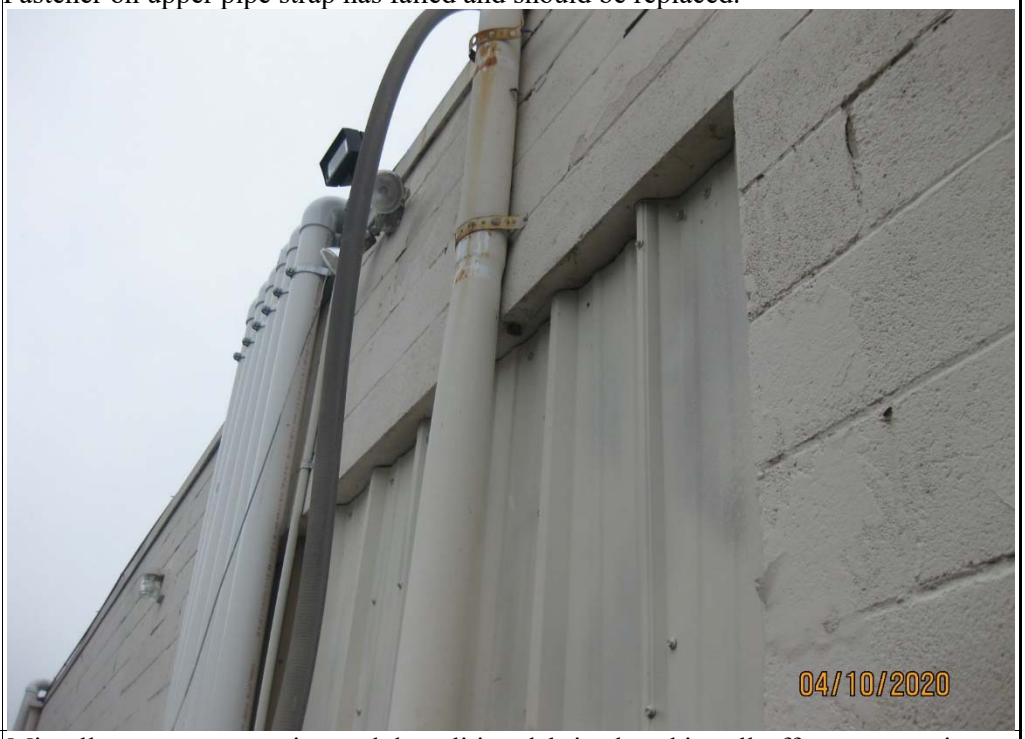
PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9749	04-10-20	Pipe associated with EW-3 extraction point.
IMG_9750	04-10-20	EW-3 extraction point. 

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9751	04-10-20	EW-3 extraction point. 
IMG_9754	04-10-20	EW-4 extraction point.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9759	04-10-20	Fastener on upper pipe strap has failed and should be replaced. 
IMG_9762	04-10-20	Miscellaneous construction and demolition debris placed in roll-off waste container by others overnight.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9770	04-10-20	Tape wrapped around exhaust pipe that was not aligned with elbow inside of SSDS enclosure shed.

D&B ENGINEERS AND ARCHITECTS, P.C.

DATE: May 14-15, 2020

REPORT NO.: 200514

PROJECT NO.: 3150-45Y

DAILY INSPECTION REPORT

PROJECT Hidden Valley Electronics

LOCATION Vestal, New York

ATTACHMENTS Photo Log, Figure

WEATHER	TIME	TEMP (F)	PRECIP.	WIND (MPH)	WIND (DIR)
Overcast	09:50 (5/14/2020)	45	0.00"	0-5	SSE
Overcast	06:55 (5/15/2020)	57	0.00	5-10	SW

SITE CONDITIONS: Dry.

WORK GOAL FOR DAY: Conduct Pressure Field Extension Test and Screen Building and SVE System for VOCs.

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Gunther Schnorr	D&B (5/14/2020)	09:50	15:20
Carl Aldrich	Aztech Environmental	10:00	15:15
John Stutzke	Aztech Environmental	10:45	15:15
Jay Jerome	American Family Fitness	9:50	
Brian Andrulevich	American Family Fitness	12:30	
Gunther Schnorr	D&B(5/15/2020)	06:55	15:00
Jay Jerome	American Family Fitness	6:50	15:00
Brian Andrulevich	American Family Fitness	13:00	

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL
Hand Tools			
Hammer Drill			
Digital Micro manometer	Dwyer Series 475		
Photoionization Detector (PID)	ppbRAE 3000 +		
Summa Canisters	SilcoCan 6L		
Camera	PowerShot SD790 IS		

HEALTH & SAFETY:

PPE REQUIRED: Level D ☒ ☐ ☐ ☐

HASP? Yes

SITE SAFETY OFFICER: Gunther J. Schnorr

H & S NOTES:

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** May 14-15, 2020
		REPORT NO.: 200514
		PAGE NO.: 2 OF 3
		PROJECT NO.: 3 1 5 0 - 4 5 Y

DAILY INSPECTION REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

D&B Engineers and Architects, P.C. (D&B) and Aztech Environmental Technologies (Aztech) were on site at the Hidden Valley Electric Site (Site) in the town of Vestal, New York on May 14, 2020 to conduct communication testing to evaluate the influence of the existing sub-slab depressurization/soil vapor extraction system. D&B returned to the Site on May 15, 2020 to collect an indoor air sample.

May 14 – Using a cordless hammer drill and a ¼ inch concrete bit, temporary penetrations were installed through the concrete floor slab to conduct the communication testing. A portable vacuum was used to control dust generation during installation of the temporary penetrations. Test locations were selected in areas where the concrete slab could be observed without damage to floor coverings, typically areas where floor coverings were loose and could be pulled back to allow drilling. No temporary monitoring points were installed in the northwest corner of the main Gym area as historical drain lines were observed beneath the floor coverings.

Aztech utilized a digital monometer to conduct the communication testing and modeling clay to create a seal at the sampling points. D&B and Aztech were able to locate two existing monitoring points (VMW-1 and VMW-2) that are both located in the Women's Gym section of the facility. At both locations, no pressure was observed. Temporary penetrations installed adjacent to VMW-1 and VMW-2, however, did confirm that negative pressure existed beneath the concrete slab in these areas. A figure identifying the approximate test locations and the negative pressure readings in water column inches (wci) observed during the communication testing is attached.
Upon completion of the communication testing the temporary penetrations were sealed using Sakrete Concrete Crack filler.

The liquid u-tube manometers provided to Aztech by their supplier were not the models requested and were not installed. Aztech installed 1/2 -inch threaded plugs in the vertical pipe sections at EW-2, EW-5, EW-6 and in the drain pipe associated with EW-6. The threaded plugs can be removed, and the hole can be used as a monitoring point.

Aztech used a photoionization detector (PID) capable of measuring in part per billion to screen for volatile organic compounds (VOCs) throughout the interior of the building. No VOCs were detected. In addition, Aztech measured pressure readings and total VOCs at each extraction well location and the new drain pipe associated with EW-6. These results are presented in the table below.

Well ID	Pressure Reading (wci)	Total VOCs (ppb)
EW-1	-2.59	0.0
EW-2	-2.80	0.0
EW-3	-3.50	75.0
EW-4	-3.50	1.9
EW-5	-1.90	2.0
EW-6	-3.38	32.0
2-inch drain	-3.40	41.0

May 15 – D&B collected one 8-hour Summa canister indoor air sample for VOC analysis. The air sample (Sample ID: IAEW3A20) was collected in the Aerobics Room/Gym and the approximate location is shown on the attached figure. Based on discussions with Mr. Jerome, no paints, solvents, or thinners have been used recently. Portable ozone generators have been operating occasionally throughout the facility as a means of disinfection due to the COVID-19 pandemic. The collected environmental air sample were dropped off at Eurofins TestAmerica Service Center in their original packaging using chain-of-custody documentation to be shipped to Eurofins TestAmerica in Burlington, Vermont for laboratory analysis by method TO-15 under a routine 10-day turnaround time.

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** May 14-15, 2020
		REPORT NO. 200514
		PAGE NO. 3 OF 3
		PROJECT NO. 3150-45Y

DAILY INSPECTION REPORT

PREPARED BY (OBSERVER)	**REVIEWED BY**
PRINT NAME: Gunther J. Schnorr	PRINT NAME: Robbin Petrella
SIGNATURE:	SIGNATURE:
☐ **ADDITIONAL SHEETS USED**	
☒ emailed draft / final to NYSDEC – date: 05/19/2020	☐ hardcopy to NYSDEC – date:

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

PHOTO	DATE	DESCRIPTION
IMG_9797	05-14-20	Existing vapor monitoring point VMW-1.
IMG_9798	05-14-20	Existing vapor monitoring point VMW-2.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG-9801	05-14-20	Piping associated with extraction well EW-2 located in drywall box to the left of the paper towel dispenser.
IMG-9803	05-14-20	Pulling back loose seam in carpet to install temporary monitoring point ET-1.

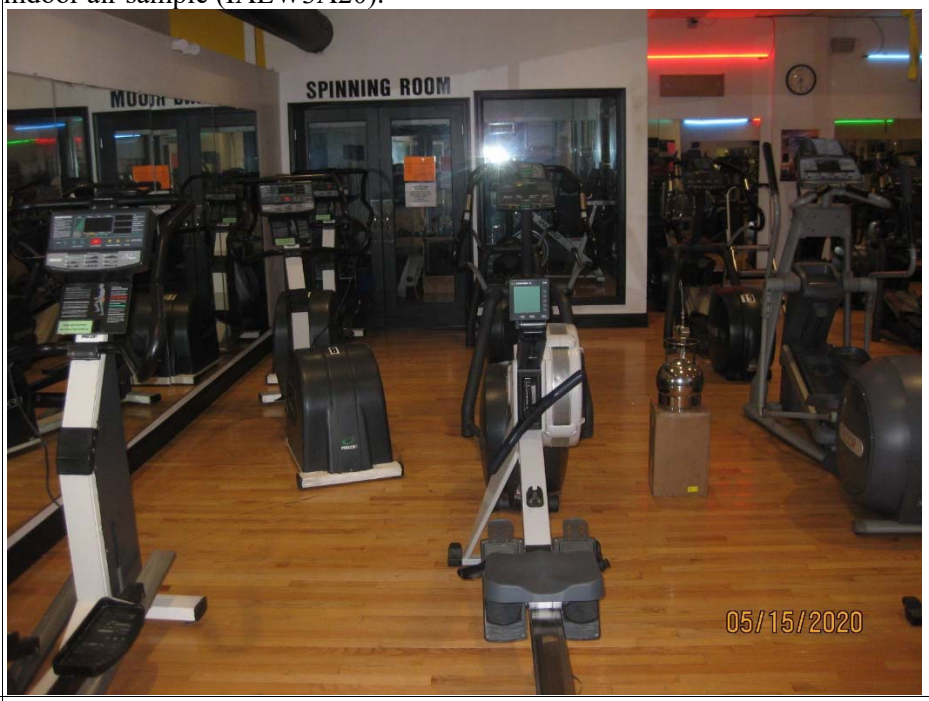
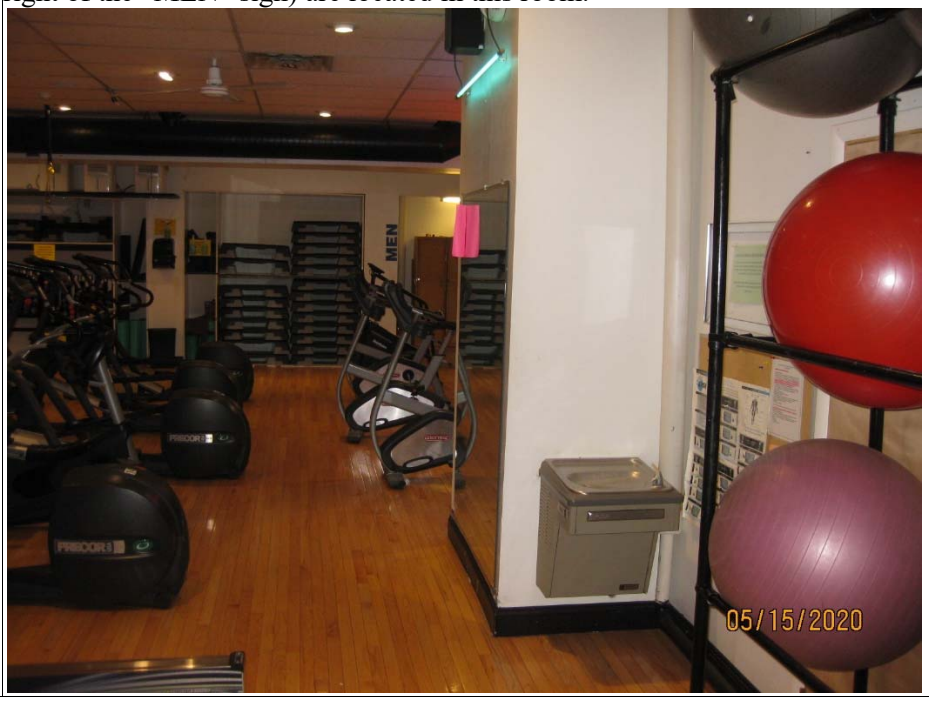
PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

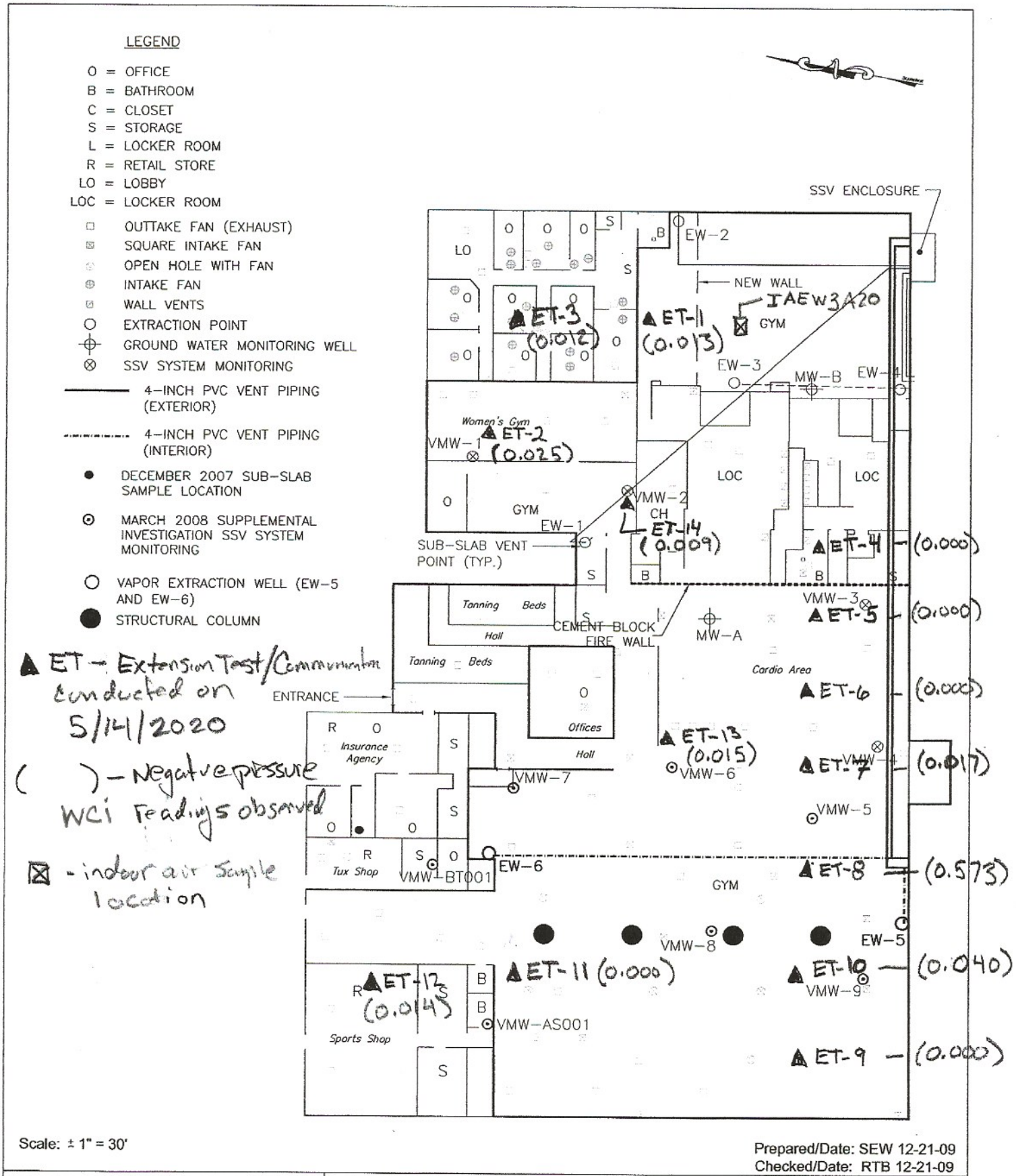
IMG-9806	02/20/19	Approximate location of ET-2 located 6 feet west of existing monitoring point VMW-1 where no vacuum was observed.
IMG_9809	05-14-20	Approximate location of ET-5 located adjacent to the entrance to the Men's Locker Room.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9815	05-14-20	Historical capped drain pipe observed while looking for a temporary monitoring location in the northwest corner of the Gym. Drilling temporary monitoring points in this area was not conducted due to the presence of historical drains observed.
IMG_9817	05-14-20	Typical ½-inch threaded plug installed in vertical pipe sections above extraction well locations EW-2, EW-5 and EW-6.

PHOTOGRAPH LOG
D&B JOB NO. 3150-45Y
HIDDEN VALLEY ELECTRONICS
VESTAL, NEW YORK

IMG_9823	05-15-20	Location of Summa canister located in the Aerobics Room/Gym collecting ambient indoor air sample (IAEW3A20). 
IMG_9834	05-15-20	Aerobics Room/Gym where ambient indoor air sample (IAEW3A20) was collected. Vertical pipe sections for EW-3 (on the right) and EW-4 (in the background to the right of the "MEN" sign) are located in this room. 



Scale: ± 1" = 30'

Prepared/Date: SEW 12-21-09
Checked/Date: RTB 12-21-09

SSV INVESTIGATION NYSDEC Hidden Valley Electronics Site Vestal, New York	MACTEC	VAPOR EXTRACTION WELLS AND PIPING Project 3612-07-2082 Figure 2*

* Base map (figure 2) from Appendix I of MACTEC's 2018 Site management plan used to illustrate Monitoring and Sample location associated with the May 14 and 15, 2020 Site activities Conducted by D+B + Aztech.

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NYSDEC Contract No. D009812

NYSDEC PM: Brianna Scharf

Consultant PM: Nathan Kranes

Consultant Site Inspectors: Kevin Murphy

Site Location: 1808 Vestal Parkway, Vestal, New York

Weather Conditions

General Description	Clear	AM	Clear	PM
Temperature	28°F	AM	30°F	PM
Wind	3 mph W	AM	3 mph NW	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 **X**	NA
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 **X**	NA

Health & Safety Comments

Site-specific HASP was followed accordingly.

Summary of Work Performed	Arrived at site:	**1050**	Departed Site:	**1215**

TRC Companies, Inc (TRC) performed a site visit at Hidden Valley Electronics (Site) located at 1808 Vestal Parkway in Vestal, NY on Thursday, October 28, 2021. The purpose of the site visit was for TRC to become familiar with the Site prior to the completion of D&B Engineers SMP A work assignment.

TRC arrived at the Site at 1050 and met with personnel from D&B Engineers. The teams performed a site walk which consisted of locating monitoring wells and Site features. TRC also observed D&B Engineers perform low-flow groundwater sampling activities.

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
Kevin Murphy	TRC	Project Scientist	1.5
Gunther Schnorr	D&B Engineers	Senior Engineer	

Equipment Description	Contractor/Vendor	Quantity	Used

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:			
Visitors to Site			
Name	**Representing**	**Entered Exclusion/CRZ Zone**	
		Yes	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**

Site Representatives	
Name	**Representing**

Project Schedule Comments
Issues Pending
Interaction with Public, Property Owners, Media, etc.

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

Photo 1: Low-flow groundwater sampling.

Photo 2: Marking MW locations.

Photo 3: Locating MWs.

Photo 4: Marking MW locations.

Comments

Site Inspector(s): Kevin Murphy

Date: 10/28/21

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes ☒	No ☐
Is the tail gate safety meeting held outdoors?	Yes ☒	No ☐
Are remote/call in job meetings being held in lieu of meeting in person where possible?	Yes ☒	No ☐
Were personal protective gloves, masks, and eye protection being used?	Yes ☒	No ☐
Are sanitizing wipes, wash stations or spray available?	Yes ☒	No ☐
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes ☐	No ☒
Comments:		

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes ☐	No ☒
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes ☐	No ☒
3. Has anyone at this locaton had contact with anyone known to have COVID-19 in the past 14 days?	Yes ☐	No ☒
4. Does anyone at this locaton have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes ☐	No ☒
5. Does the Department and its contractors have your permission to enter the property at this time?	Yes ☒	No ☐
If Yes to <u>any</u> of 1-4 above: • If it is <u>not</u> critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone or conduct service without entry. • If it <u>is</u> critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry.	Yes ☐	No ☐
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 the site supplied with green power and is it properly installed and/or maintained?	Yes ☐	No ☐	N/A☒
Is the site employing 2007 or newer or retrofitted diesel trucks?	Yes ☐	No ☐	N/A☒
Is vehicle idling adequately reduced per 6NYCRR Part 217-3?	Yes ☒	No ☐	N/A☐
Is equipment properly maintained and operated by trained personnel?	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?	AM ☐	PM ☐	N/A☒
Are products and materials 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☒
Are appropriate metrics documented for inclusion on Form A, Summary of Green Remediation Metrics, by the CONTRACTOR?	Yes ☐	No ☐	N/A☒
Has Contractor been notified of any deficiencies?	Yes ☐	No ☐	N/A☒
Comments:			

D&B ENGINEERS AND ARCHITECTS, P.C.

DATE: October 25-28, 2021

REPORT NO. 211025

PAGE NO. 1 OF 3

PROJECT NO. 3150-45Y

SITE NO. 70429

DAILY FIELD ACTIVITY REPORT

PROJECT Hidden Valley Electronics

LOCATION Vestal, New York

ATTACHMENTS Well Depth Table, IC/EC Inspection Groundwater Sampling Records, Figure 2-1 from 2008 RI/FS

WEATHER	TIME	TEMP.	PRECIP.	WIND (MPH)	WIND (DIR)
P. Sunny	7:30 (10/25/21)	50°F	0.0	5-10	S
Rain	8:20 (10/26/21)	43°F	0.0	0-5	NE
Overcast	8:30 (10/27/21)	55°F	0.0	5-10	NW
Overcast/ Fog	8:15 (10/28/21)	39°F	0.0	5-10	NW

SITE CONDITIONS: The Site was in good condition, overgrown vegetation surrounding select off-site monitoring wells.

WORK GOAL FOR DAY: Site Inspection and Groundwater Monitoring.

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Gunther J. Schnorr	D&B	7:30 (10/25/21)	14:30
Tracey Garland	D&B	7:45 (10/25/21)	14:30
Gunther J. Schnorr	D&B	8:20 (10/26/21)	17:10
Tracey Garland	D&B	8:20 (10/26/21)	16:45
Gunther J. Schnorr	D&B	8:30 (10/27/21)	16:15
Gunther J. Schnorr	D&B	8:15 (10/28/21)	15:10
Kevin Murphy	TRC	10:45 (10/28/21)	12:00

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL
Camera	iPhone	Five Gallon Carbon Filter System	CFS # 11203
Two Water Interface Meters	Solinst Model 101		
Two Water Quality Meters	Horiba U-53-2		
Two Peristaltic Pumps	Pine Peri-Pump		

HEALTH & SAFETY:

PPE REQUIRED: Level D

HASP? YES

SITE SAFETY OFFICER: Gunther J. Schnorr

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

☒ ☐ ☐ ☐

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** October 25-28, 2021
		REPORT NO. 211025
		PAGE NO. 2 OF 3
		PROJECT NO. 3150-45Y **SITE NO.** 70429

DAILY FIELD ACTIVITY REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

D&B Engineers and Architects (D&B) were at Hidden Valley Electronics (Site) on Monday, October 25 through Thursday, October 28, 2021 to conduct a site inspection and perform fifth quarter long-term groundwater monitoring, as outlined in the revised Site Management Plan (SMP) (D&B, updated September 2021). The objective of the site inspection was to evaluate compliance with all engineering and institutional controls, document general Site conditions, including the condition of the Site-wide cover (parking lot and building) and condition of groundwater monitoring wells.

Overall, the Site was in good condition. A new asphalt top course that was observed in 2020 in the eastern, northern and portions of the western parking lot remain competent. No new construction or evidence of unauthorized excavation in the parking lot were observed at the Site. The steel plate observed in 2020 covering an unknown structure in the parking lot at 1801 Vestal Parkway East (across the highway from the Site) was deformed has not appeared to worsen. This steel plate is located approximately 20 feet southeast of offsite monitoring well MW-11 and shown on MACTEC's Figure 2-1 presented in the April 2008 RI/FS and provided as an attachment to this report.

Groundwater monitoring wells were in good condition and easily accessible, except as noted. All monitoring wells have been completed with flush mount manholes and the following had one or more missing bolts and/or missing threaded ears inside the curb box: MW-1, MW-7, MW-11, MW-17, MW-33, MW-101, MW-102, TWMW-1, TW-1, TW-2, TW-3, and TW-6. Monitoring well MW-9 was missing all three bolts and threaded ears. Sediment was observed up to the top of the PVC riser at MW-1 which was removed prior to accessing the well. The well cover cannot be secured with a J-plug installed at MW-102 as the riser pipe is too high. The nitrile glove and plastic bag that was secured over the riser at MW-102 in 2020 was observed in good condition. Offsite monitoring wells MW-13 and MW-15 were overgrown with vegetation and difficult to locate. These flush mount monitoring wells were marked with orange reflective driveway markers to identify their locations.

D&B took depth to water and total well depth measurements at all 28 monitoring wells prior to initiating sampling activities. The water level meters were decontaminated between each monitoring well location using an Alconox solution and deionized water rinse. The total well depth and depth to water measurements are presented in the Well Depth Table, attached.
Using peristaltic pumps and dedicated tubing, D&B purged each well using USEPA low stress (low flow) purging and sampling procedures to collect groundwater samples from the 27 of 28 wells identified in the SMP. Field parameters were allowed to stabilize prior to sample collection and are presented in the attached Groundwater Sampling Records. Petroleum-like odors were observed in samples collected at offsite monitoring wells MW-7 and MW-9. Monitoring well MW-B was purged dry the morning of October 28 and the water level did not recover enough to sample with a bailer. No sample was collected from monitoring well MW-B. Purge and decontamination water was treated onsite using a portable granular activated carbon unit and disposed of into an onsite catch basin that drains into a storm sewer. Personal protective equipment and dedicated tubing was bagged and disposed of offsite.

The collected groundwater samples and associated quality control samples (i.e., blind duplicate, matrix spike and matrix spike duplicate, trip blank, and equipment blank) were relinquished following standard chain-of-custody procedures to Eurofins TestAmerica in Syracuse, New York. The groundwater samples from 27 of 28 well locations were submitted for laboratory analysis by Method 8260C for Target Compound List volatile organic compounds. Groundwater samples from four locations (MW-101, MW-104, TW-2 and TWMW-01) were submitted for laboratory analysis by Method 8270D SIM for 1,4-Dioxane. Groundwater samples from three locations (MW-11, MW-101 and TW-1) were submitted for laboratory analysis by Method 537.1for per- and polyfluoroalkyl substances (PFAS). Groundwater samples from six locations (TW-2, MW-22, MW-101, MW-102, MW-104, and TWMW-01) were submitted for laboratory analysis for monitored natural attenuation parameters.

D&B ENGINEERS AND ARCHITECTS, P.C.		**DATE:** October 25-28, 2021
		REPORT NO. 211025
		PAGE NO. 3 OF 3
		PROJECT NO. 3150-45Y **SITE NO.** 70429

DAILY FIELD ACTIVITY REPORT

PREPARED BY (OBSERVER)	**REVIEWED BY**
PRINT NAME: Gunther J. Schnorr	PRINT NAME: Robbin A. Petrella
SIGNATURE:	SIGNATURE:
☐ **ADDITIONAL SHEETS USED**	
☒ emailed draft / final to NYSDEC – date: 11/16/21	☐ hardcopy to NYSDEC – date:

NYSDEC Site No. 704029, Hidden Valley Electronics Site

Inspection Report October 2021

WELL I.D.	NORTHING	EASTING	TOP OF RISER (ft AMSL)	SCREENED INTERVAL (ft bgs)	DATE					
					9/13/19		10/5/2020		10/25/2021	
					DTW	DTB	DTW	DTB	DTW	DTB
MW-1	972451.20	762774.90	840.27	8-18	12.50	18.00	13.25	18.45	12.05	18.45
MW-7	972291.40	763137.60	839.12	10-30	18.87	26.49	19.52	26.44	18.43	26.49
MW-8	972248.70	763180.60	838.12	10-32	21.27	29.74	22.50	29.71	21.09	29.82
MW-9	972359.80	763142.60	839.34	10-30	18.84	29.28	19.71	29.2	18.28	29.27
MW-11	972202.10	763123.90	837.77	10-30	20.36	29.47	21.09	29.42	20.00	29.54
MW-13	972169.20	763338.50	826.23	5-25	12.46	23.04	14.00	23.08	11.18	22.09
MW-15	972312.40	763399.90	827.47	5-25	13.86	23.93	15.39	24.01	12.31	24.00
MW-17	972345.80	763071.30	839.28	5-25	14.16	22.73	14.82	22.72	13.82	22.73
MW-19	972204.50	763558.70	824.80	5-20	11.37	19.42	13.04	19.44	10.09	19.45
MW-20	971984.80	763366.90	823.53	3-18	10.13	17.45	11.50	17.49	9.13	17.48
MW-22	972030.10	763486.10	824.82	3-18	12.17	18.27	13.29	18.39	11.16	18.32
MW-25	972040.80	763669.30	828.54	10-25	16.97	24.12	18.10	24.16	15.88	24.10
MW-26	972148.9	763813.10	828.79	8-25	17.95	32.21	20.56	25	16.64	24.93
MW-28	972202.70	764150.10	830.87	20-35	25.39	32.21	26.59	32.58	21.48	32.22
MW-31	971786.20	763565.90	831.36	15-30	19.84	20.16	20.34	21.3	19.05	20.64
MW-33	972199.40	762970.60	838.54	5-20	12.75	18.68	13.49	18.88	12.42	18.89
MW-101	972548.20	762777.40	842.20	5-15	6.26	14.81	7.87	14.76	6.37	14.85
MW-102	972476.50	762788.90	842.22	11-21	6.25	6.35	8.53	20.55	7.21	20.55
MW-103	972439.20	762919.80	842.57	9-19	11.25	19.40	11.85	19.37	11.40	19.44
MW-104	972373.80	762946.00	842.34	38-48	12.06	47.74	12.88	47.68	11.49	47.70
MW-B	972456.30	762819.20	--	9.5-12.5	8.72	12.15	9.90	12.11	8.92	12.11
RW-8	972164.50	763217.70	835.56	28.9-43.9	20.92	42.32	22.32	46.5	20.00	44.60
RW-9	972222.30	763232.70	836.65	25.2-40.2	13.17	19.50	22.85	43	21.73	41.90
TW-1	972503.00	762872.20	842.21	10-20	8.92	19.07	10.09	19.09	9.06	19.05
TW-2	972378.80	762943.30	842.33	10-20	12.68	19.28	13.29	19.25	12.51	19.25
TW-3	972285.80	762927.80	842.15	10-20	13.17	19.50	14.15	18.45	13.09	18.44
TW-6	972502.00	762800.80	842.25	9-19	8.45	18.34	9.90	18.25	8.89	18.24
TWMW-01	972374.00	762948.50	842.33	22-39	12.72	38.19	13.67	38	12.69	38.10

Notes:

ft AMSL : Feet above mean sea level.

ft bgs: Feet below ground surface.

DTB : Depth to bottom of well relative to top of riser.

DTW : Depth to water in feet relative to top of riser.

--- : Information not available.

1. Horizontal coordinates in New York Central Zone State Plane, North American Datum 1983.
2. Well coordinates and construction measurements obtained from MACTEC 2015- 2018 Annual Groundwater Sampling Events.

INSTITUTIONAL AND ENGINEERING CONTROL INSPECTION FORM

I. Site Background Information

A. Site Name and Location:

Site name as it appears on the Environmental Easement: Hidden Valley Electronics

Name of the current property owner(s): Bahama Mama, LLC

Site Street Address: 1808 Vestal Parkway East

Municipality (-ies): Vestal County (-ies): Broome

Blocks: Section 158.13 Block 3

Lots: Lot 2.1

Source information obtained from: Broome County Tax Map

B. Person responsible for preparing Institutional and Engineering Control Evaluation Form:

Person's Name: Gunther J. Schnorr

Person's Title: Senior Engineer

Company Name: D&B Engineers & Architects

Relationship to the Site (check as appropriate): Owner _____ Operator _____

Lessee _____ Person Who Conducted the Cleanup _____
Other (describe) Consultant

Street Address: 5879 Fisher Road

City: E. Syracuse State: NY

Telephone Number: (315) 437-1142

Fax Number: (___) ___-____

E-mail Address: gschnorr@db-eng.com

C. Case Specific Information (Complete all that apply)

- Site Name: Hidden Valley Electronics Site
- Site Registry Number: 704029
- Date of final Remediation Report and/or Certificate of Completion: 9/2017
- Name and program of assigned Project Manager at issuance of Environmental Easement:

D. Existing Site Conditions

- Describe the physical characteristics of the site (features, topography, drainage, vegetation, access, etc.). If necessary, attach additional sheets.

Site building and paved parking areas and sidewalks. Southern portion of the site is flat, north of site building properly slopes to the north (towards Vestal Parkway east).

- Describe the current site operations/use. If necessary, attach additional sheets.

The Site currently operates as a fitness Center.

- Describe visual integrity/condition engineering control. If necessary, attach additional sheets.

Majority of paved areas were improved with a new asphalt top course in 2020. Current asphalt condition is good.

SSDS/SUE System is inspected as part of a separate Contract.

Monitory well observations are presented in DFAR (Report No. 211025).

II. Protectiveness Evaluation

A. Environmental Easement and Engineering Control Information (Complete below)

- Provide the following information for the recorded Environmental Easement:

  Book Number: 2391

  Page Number: 569

  Date the date the Environmental Easement was filed in the office of the county recording officer: 12/19/2012

- Have any amendments and/or additional filings been recorded that may modify or supersede the Environmental Easement?

Yes ____ No X

If "Yes", provide an explanation. If necessary, attach additional sheets.

_____

_____

_____

_____

_____

B. Evaluation of Institutional and Engineering Controls

1. Zoning or Land Use Changes (Complete below)

a. Land use at the time the Environmental Easement was filed (check all that apply):

Non-Residential X Residential _____ Agricultural _____ Other _____

b. Current land use (check all that apply):

Non-Residential X Residential _____ Agricultural _____ Other _____

c. Has there been an actual or pending zoning or land-use change?

Yes ____ No X

2. Inspections (Complete below)

Have periodic inspections of the site identified any excavation or other disturbance activities that have taken place within the restricted areas?

Yes ____ No X

Date(s) of Disturbance: _____

Duration of Disturbance: Years ____ Months ____ Days ____

Date the NYSDEC was notified: _____

Date Work Plan Approved: _____

Description of the disturbance and methods to address the disturbance. If necessary, attach additional sheets

_____

_____

_____

Name of Contact Person Relative to the Disturbance:

_____

Title: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Telephone Number: _____

Email Address: _____

3. Changes to Laws and Regulations (Complete below)

a. Are there any subsequently promulgated or modified environmental laws or regulations, which apply to the site?

Yes ____ No X

b. If "Yes", has the evaluation also determined that the Environmental Easement and engineering control, as applicable, meets the requirements of the new laws and regulations?

Yes____ No_____

c. The Environmental Easement and engineering control, as applicable that did not meet the requirements of the new laws and regulations has been addressed in the following manner to bring them into compliance. If necessary, attach additional sheets.

_____

_____

_____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: MW-1
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 18.45
Initial static water level (feet from top of casing/riser) 12.05

Depth to 8 / 18 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	6.4 ft. of water x 0.16 =	___	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1.6 gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1550		12.42	6.69	18.07	1.70	6.8	5.23	215
1555		12.49	6.58	17.78	1.48	2.9	1.69	215
1600		12.50	6.50	17.52	1.19	0.0	1.17	214
1605		12.50	6.48	17.34	1.09	0.0	1.09	214
1610		12.51	6.47	17.26	1.40	0.0	0.94	213
1615		12.51	6.46	17.21	1.40	0.0	0.90	213
1620		12.51	6.47	17.19	1.40	0.0	0.87	213

Purge Volume: 1.6 Purging Time: 35mm
Purge Rate (gph): 2.74 gph

Sampling

Time of Sample Collection: 1620

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Small Cover with hex bolts, one Broken in tab, one missing
Weather/Temperature: 70°F P. Sunny S-10 South
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-33
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser): 18.89
Initial static water level (feet from top of casing/riser): 10.80
Depth to 5 / 20 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	8.09 ft. of water x 0.16 =	1.29	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1100		10.95	6.85	16.91	1.92	82.1	5.10	154
1105		11.18	6.60	18.08	1.99	71.4	2.17	154
1110		11.18	6.60	18.14	2.03	40.2	1.74	154
1115		11.18	6.59	18.14	2.04	11.8	1.83	156
1120		11.20	6.57	18.12	2.06	0.4	1.86	160
1125		11.20	6.57	18.12	2.06	0.1	1.83	161
1130		11.21	6.56	18.13	2.07	0.0	1.85	161
1135								

Purge Volume: Purging Time:
Purge Rate (gph):

Sampling

Time of Sample Collection: 1130

Method:		Analyses:	
	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
	Teflon bailer		MNA Parameters
	Pos. Disp. Pump		
	Disposable bailer		
X	Dedicated pump and tubing		

Observations

Well Observations: 2 of 3 threaded tabs broken, secured by 1 bolt. Good
Weather/Temperature: 48°F 10-15mph NW Overcast
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/26/21

WELL ID: MW-101
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 14.85
Initial static water level (feet from top of casing/riser)..... 6.20

Depth to 5 / 15 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	8.65	ft. of water x 0.04 =	1.38	gallons
2 in. casing:	~~6.37~~	ft. of water x 0.16 =	~~1.85~~	gallons
3 in. casing:		ft. of water x 0.37 =		gallons
4 in. casing:		ft. of water x 0.65 =		gallons
5 in. casing:		ft. of water x 1.02 =		gallons
6 in. casing:		ft. of water x 1.47 =		gallons

volume of water removed: 1.1 gal. >3 volumes: yes ____ no X purged dry? yes ____ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
0935	~150	6.30	6.87	16.43	0.861	0.0	2.83	205
0940		6.30	6.75	16.45	0.861	0.0	1.93	208
0945		6.31	6.55	16.52	0.857	0.0	1.15	216
0950		6.34	6.51	16.57	0.857	0.0	0.96	220
0955		6.38	6.50	16.56	0.858	0.0	0.96	221
1000		6.39	6.48	16.55	0.862	0.0	0.95	223
1005								
1010								

Purge Volume: Purging Time:
Purge Rate (gph): 2.2 gpm

Sampling

Time of Sample Collection: 1000 (41 Bottles)

mw-101-20211026; MS/MSD
DUP-2-20211026
Dup Collected for:
- VOCs
- 1,4 Dioxane
- PFAS

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- X MNA Parameters
- X 1,4-Dioxane
- X PFAS

Observations

Well Observations: 1 of 3 tubes broken, Good
Weather/Temperature: 52°F Rain 5-10mph NNE
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/20/21

WELL ID: MW-102
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 20.55
Initial static water level (feet from top of casing/riser)..... 7.35

Depth to 11 / 21 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =	___	gallons
2 in. casing:	13.2 ft. of water x 0.16 =	2.11	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1.1 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1205	~150	7.39	6.68	18.04	1.18	47.4	1.90	-126
1210		8.55	6.73	18.39	1.18	47.2	0.48	-131
1215		9.41	6.70	18.66	1.18	47.8	0.00	-134
1220		10.25	6.70	18.75	1.19	33.1	0.00	-135
1225		10.73	6.72	18.67	1.18	16.9	0.00	-135
1230		11.23	6.72	18.63	1.18	8.3	0.00	-135
1235		11.44	6.74	18.24	1.19	2.4	0.00	-137

Purge Volume: Purging Time: 35
Purge Rate (gph): 1.8gph

Turbidity dropping but fluctuates ~2 to 3 NTUs up & down.

Sampling

Time of Sample Collection: 1235

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	X	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Cellulose low profile

Observations

Well Observations: 1 of 3 tabs broken, Riser too high to use J-plug, Glove & Ziplock was intact from last year
Weather/Temperature: 52°F Heavy Rain 5-10mph N.
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: MW-103
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 19.44
Initial static water level (feet from top of casing/riser) 11.40

Depth to 9 / 19 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	8.04 ft. of water x 0.16 =	1.29	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 2 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1450	~150	11.40	7.02	19.15	3.14	16.9	17.68	177
1455		11.42	6.92	18.85	3.24	12.0	3.62	185
1500		11.42	6.72	18.58	3.58	0.9	3.59	205
1505		11:42	6.66	18.51	3.89	0.0	2.21	217
1510		11.42	6.62	18.47	3.99	0.0	2.05	225
1515		11.42	6.59	18.43	4.03	0.0	1.85	230
1520		11.42	6.57	18.41	4.01	0.0	1.74	234
1525		11.42	6.56	18.39	4.07	0.0	4.67	236
1530								

Purge Volume: 2 Purging Time: 45mm
Purge Rate (gph): ~2.66gph

MW-103_20211025
DUP-1_20211025 (COC

Sampling

Time of Sample Collection: 1525

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good evolution. Dedicated tubing slipped & had to recover.
Weather/Temperature: 73F Sunny 5-10mph S.
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/26/21

WELL ID: MW-104
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 47.70
Initial static water level (feet from top of casing/riser)..... 11.49

Depth to 38 / 48 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	36.21 ft. of water x 0.16 =	5.79	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1510	~150	11.83	7.20	15.91	0.832	0.0	0.00	-171
1515		11.80	7.34	15.80	0.838	0.0	0.00	-183
1520		11.80	7.40	15.78	0.840	0.0	0.00	-187
1525		11.83	7.41	15.62	0.836	0.0	0.00	-185
1530		11.85	7.40	15.59	0.837	0.0	0.00	-184
1535								
1540								
1545								
1550								

Purge Volume: Purging Time:
Purge Rate (gph):

Sampling

Time of Sample Collection: 1530

Method:		Analyses:	
	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
	Teflon bailer	X	MNA Parameters
	Pos. Disp. Pump	X	1,4 Dioxane
	Disposable bailer		
X	Dedicated pump and tubing		

Observations

Well Observations: Good, had to bail from surface water prior
Weather/Temperature: 50°F Rain 15-20 N
Sample description: Clear

Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: TW-1
SAMPLERS: GJS

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser) 19.05
Initial static water level (feet from top of casing/riser) 9.06
Depth to 10 / 20 of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	9.99 ft. of water x 0.16 =	1.60	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1355	250	9.18	6.93	20.69	0.995	0.0	2.72	93
1400		9.20	6.69	19.64	0.956	0.0	0.00	114
1405		9.18	6.52	19.37	0.963	0.0	0.00	129
1410		9.18	6.40	19.23	0.950	0.0	0.00	134
1415		9.19	6.37	19.12	0.954	0.0	2.9	128
1420								
1425								
1430								

Purge Volume: Purging Time:
Purge Rate (gph):

Sampling

Time of Sample Collection: 1415

Method:		Analyses:	
____	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
____	Teflon bailer	____	MNA Parameters
____	Pos. Disp. Pump	____	
____	Disposable bailer	____	
X	Dedicated pump and tubing	____	

Observations

Well Observations: 3 tabs - 1 tab broken/dead
Weather/Temperature: 72° Sunny S-10 South
Sample description: Clear

Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/26/21

WELL ID: TW-2
SAMPLERS: GTS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 19.25
Initial static water level (feet from top of casing/riser) 12.51
Depth to 10 / 20 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing		ft. of water x 0.04 =	gallons
2 in. casing:	6.74	ft. of water x 0.16 =	1.08 gallons
3 in. casing:		ft. of water x 0.37 =	gallons
4 in. casing:		ft. of water x 0.65 =	gallons
5 in. casing:		ft. of water x 1.02 =	gallons
6 in. casing:		ft. of water x 1.47 =	gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1350	~150	12.70	6.71	16.91	0.936	0.0	1.91	135
1355		12.75	6.59	17.02	0.890	0.0	0.23	138
1400		12.77	6.48	17.08	0.804	0.0	0.00	144
1405		12.84	6.34	17.19	0.704	0.0	0.00	158
1410		12.84	6.30	17.23	0.737	0.0	0.00	164
1415		12.84	6.29	17.24	0.737	0.0	0.00	166
1420		12.85	6.29	17.24	0.736	0.0	0.00	169
1425								

Purge Volume: Purging Time:
Purge Rate (gph):

Sampling

Time of Sample Collection: 1420

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- X MNA Parameters
- X 1,4 Dioxane
- X PFAS

Observations

Well Observations: Missing 1 of 3 b/l's (all labs present, Had to transfer water over Tyvek
Weather/Temperature: 52°F Rain 10-15 mph NNW
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: TW-3
SAMPLERS: GJS

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser): 18.44
Initial static water level (feet from top of casing/riser): 13.09
Depth to 16 / 20 of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	5.35 ft. of water x 0.16 =	0.90	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: 1.4 gal. >3 volumes: yes ____ no X purged dry? yes ____ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1645	~180	13.18	6.97	18.41	4.13	0.0	6.71	202
1650		13.20	6.89	18.34	4.14	0.0	4.45	210
1655		13.21	6.80	18.39	4.15	0.0	3.62	220
1700		13.23	6.76	18.42	4.22	0.0	3.20	225
1705		13.23	6.74	18.42	4.25	0.0	3.30	227
1710		13.24	6.74	18.40	4.27	0.0	3.28	228
1715								
1720								

Purge Volume: 1.4 Purging Time: 30
Purge Rate (gph): 2.8 gph

Sampling

Time of Sample Collection: 1710

Method:		Analyses:	
____	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
____	Teflon bailer	____	MNA Parameters
____	Pos. Disp. Pump	____	
____	Disposable bailer	____	
X	Dedicated pump and tubing	____	

Observations

Well Observations: Two tab Carb box, 1 bolt Stripped / Good.
Weather/Temperature: 70°F overcast S-10mph S.
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: TW-6
SAMPLERS: GTS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 18.24
Initial static water level (feet from top of casing/riser) 8.89

Depth to 9 / 19 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	9.35 ft. of water x 0.16 =	1.50	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 2 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1235	~180	9.13	6.55	18.76	1.16	36.2	1.09	176
1240		9.21	6.75	18.46	1.15	14.1	0.19	162
1245		9.23	6.79	18.52	1.14	5.9	0.00	151
1250		9.25	6.83	18.61	1.14	0.0	0.0	138
1255		9.25	6.85	18.69	1.14	0.0	0.0	126
1300		9.25	6.86	18.71	1.14	0.0	0.0	121
1305		9.25	6.86	18.73	1.14	0.0	0.0	116
1310		9.25	6.86	18.75	1.14	0.0	0.0	113
1315								
1320								

Purge Volume: Purging Time: 40 min
Purge Rate (gph): 3 gph

TW-6-20211025
also collected ms/msD

Sampling

Time of Sample Collection: 1310

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Dedicated tubing from 2020. Good conditions
Weather/Temperature: 70°F, Sunny 5-10mph South
Sample description: Clear

Free Product? yes ___ no X describe
Sheen? yes ___ no X describe
Odor? yes ___ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/28/21

WELL ID: MW-B
SAMPLERS: GTS

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser) 12.11
Initial static water level (feet from top of casing/riser)..... 8.49

Depth to 9.5 / 12.5 of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	6.58 ft. of water x 0.16 =	____	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
		4.25	7.79	17.95	0.671	256	1.05	-110
			6.58	16.95	0.862	>1000	0.36	-120
			Pump keeps going dry attempt low flow					
				*	do			

Purge Volume: Purging Time:
Purge Rate (gph):

tubing getting caught on lips in sidewall well did not recharge to collect sample with bailer

Sampling

Time of Sample Collection: _____

Method:		Analyses:	
____	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
____	Teflon bailer	____	MNA Parameters
____	Pos. Disp. Pump	____	
____	Disposable bailer	____	
X	Dedicated pump and tubing	____	

* No Sample Collected

Observations

Well Observations: _____
Weather/Temperature: _____
Sample description: _____
Free Product? yes ____ no ____ describe _____
Sheen? yes ____ no ____ describe _____
Odor? yes ____ no ____ describe _____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE: Hidden Valley Electronic (Site No. 704029) DATE: 10/27/21

WELL ID: TWMW-01
SAMPLERS: GJS

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser): 38.10
Initial static water level (feet from top of casing/riser): 12.30
Depth to 22.39 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	25.8 ft. of water x 0.04 =	1.03	gallons
2 in. casing:	___ ft. of water x 0.16 =	___	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1.75 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
0925	~150	12.30	7.10	16.88	1.09	0.0	1.83	-35
0930		1" pipe.	6.93	16.65	1.15	0.0	0.21	-16
0935		Cut from	6.84	16.37	1.20	0.0	0.00	10
0940		draw down	6.82	16.26	1.19	0.0	0.00	10
0945		purging	6.81	16.20	1.19	0.0	0.00	-12
0950			6.80	16.17	1.20	0.0	0.00	-20
0955			6.80	16.12	1.21	0.0	0.00	-26
1000			6.81	16.12	1.20	0.0	0.00	-28

Purge Volume: 1.75g Purging Time: 40 min
Purge Rate (gph): 2.6 gph

Sampling

Time of Sample Collection: 1000

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	X	MNA Parameters
___	Pos. Disp. Pump	X	1,4-Dioxane
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: 1 of 3 tabs broken, 1 bolt is bent. Good. Replaced 1 bolt.
Weather/Temperature: 45°F Overcast 5-10 mph NNW
Sample description: Clear
Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-26-21

WELL ID: RW-8
SAMPLERS: TG

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 20.00
Initial static water level (feet from top of casing/riser) 44.60

Depth to 28.9 / 43.9 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	ft. of water x 0.16 =		gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
15:35	15:35	20.00	6.70	13.63	42	0.0	0.99	-28
	15:40		6.71	13.64	43	0.0	0.42	-26
	15:45		6.71	13.64	45	0.0	0.31	-28

Purge Volume: 13
Purge Rate (gph):
Purging Time: 15:30 - 15:45

Sampling
Time of Sample Collection: 15:45

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ____ MNA Parameters

Observations
Well Observations: Good
Weather/Temperature: Rain
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-26-21

WELL ID: RW-9
SAMPLERS: TG

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 41.90
Initial static water level (feet from top of casing/riser) 20.75
Depth to 25, 40 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	ft. of water x 0.16 =		gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 1.25 gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
14:30		20.75	6.87	14.20	1.70	0.0	1.81	-16
14:35		20.75	6.87	14.19	1.70	0.0	1.71	-21
14:40		20.25		14.13	1.69		0.55	
14:45		20.25	6.87	14.12	1169	0.0	0.38	

1.69 -24 -28

Purge Volume: 1.25 gal Purging Time: 14:25 - 14:45
Purge Rate (gph):

Sampling

Time of Sample Collection: 14:45

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ____ MNA Parameters

Observations

Well Observations: Good
Weather/Temperature: 52°F Rain
Sample description: Clear

Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-7
SAMPLERS: GTS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 26.49
Initial static water level (feet from top of casing/riser) 18.30

Depth to 10 / 30 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	9.6 ft. of water x 0.16 =	1.37	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 0.75 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1205	~150	19.05	6.50	16.30	2.33	0.0	1.09	-36
1210		19.20	6.50	16.28	2.35	0.0	0.00	-52
1215		19.30	6.50	16.26	2.38	0.0	0.00	-56
1220		19.35	6.49	16.24	2.39	0.0	0.00	-57
1225								
1230								
1235								
1240								

Purge Volume: 0.75g Purging Time: 20
Purge Rate (gph): 2.5gph

Sampling

Time of Sample Collection: 1220

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: 1 of 3 tabs broken, No bolts
Weather/Temperature: 50° overcast 5-10mph NW
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes X no ___ describe Slight degraded gasoline odor.

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/26/21

WELL ID: MW-8
SAMPLERS: TG

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) .....
Initial static water level (feet from top of casing/riser) ..... 21.07 - 24.82

Depth to ____ / ____ of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	____ ft. of water x 0.16 =	____	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: ____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1325		21.53	6.86	15.31	1.96	0.0	1.80	-99
1330		21.70	6.89	15.08	1.95	0.0	0.44	-114
1335		21.71	6.89	14.99	1.93	0.0	0.32	-116
1340		21.72	6.89	14.94	1.91	0.0	0.28	-119

Purge Volume:
Purge Rate (gph):
Purging Time: 13:20 - 13:40

Sampling

Time of Sample Collection: 13:40

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ____ MNA Parameters

Observations

Well Observations: Good Condition
Weather/Temperature: Rain 52°F
Sample description: Clear

Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-9
SAMPLERS: GTS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 29.27
Initial static water level (feet from top of casing/riser) 18.23

Depth to 10 / 30 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	11.04 ft. of water x 0.16 =	1.77	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 0.75 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1240		18.43	6.38	16.84	4.40	0.0	0.85	-60
1245		18.46	6.35	16.94	4.49	1.9	0.00	-65
1250		18.47	6.33	17.01	4.52	0.0	0.00	-67
1255		18.48	6.33	17.07	4.55	0.0	0.00	-68
1300		18.50	6.34	17.14	4.59	0.0	0.0	-70
1305								

Purge Volume: Purging Time:
Purge Rate (gph): 1.8 gph

Sampling

Time of Sample Collection: 1300

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: 3 of 3 tabs broken, No bolts
Weather/Temperature: 50°F overcast 10-15mph NW
Sample description: Clear
Free Product? yes ___ no X describe
Sheen? yes ___ no X describe
Odor? yes X no ___ describe Slight degraded gasoline odor

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 12-26-21

WELL ID: MW-11
SAMPLERS: TRW

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) .....
Initial static water level (feet from top of casing/riser).....

Depth to ____ / ____ of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	____ ft. of water x 0.16 =	____	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: 0.33 gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
12:35		20.69	6.89	15.59	1.73	2.8	0.66	202
12:40		20.92	6.88	15.66	1.73	0.0	0.60	202
12:45		21.07	6.88	15.70	1.73	0.0	0.38	200

Purge Volume: 0.33 gal Purging Time: 12:30 - 12:45
Purge Rate (gph):

Sampling

Time of Sample Collection: 12:45

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ____ MNA Parameters

Observations

Well Observations: Good Condition
Weather/Temperature: Rain 52°F
Sample description: Cloudy

Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-25-21

WELL ID: MW-13
SAMPLERS: Tracey Cortland

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser) 22.09
Initial static water level (feet from top of casing/riser) 11.18

Depth to 9.5 / 12.5 of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	10.91 ft. of water x 0.04 =	____	gallons
2 in. casing:	10.91 ft. of water x 0.16 =	1.75	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: 1.0 gal. >3 volumes: yes ____ no X purged dry? yes ____ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1435 ~~1430~~		11.35	6.49	18.97	0.746	8.3	1.08	177
14:40 ~~13:40~~		11.38	6.23	17.26	0.417	23.8	2.10	196
14:45 ~~13:45~~		11.39	6.05	16.76	0.334	12.0	2.15	218
14:50 ~~13:50~~		11.40	6.08	16.50	0.367	3.7	2.21	224
14:55		11.40	6.07	16.42	0.386	0.0	2.05	225

Purge Volume: 1.0 gal Purging Time: ~~13:30~~ 14:30 - 14:55
Purge Rate (gph):

Sampling

Time of Sample Collection: 14:55

Method:		Analyses:	
____	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
____	Teflon bailer	____	MNA Parameters
____	Pos. Disp. Pump	____	
____	Disposable bailer	____	
X	Dedicated pump and tubing	____	

Observations

Well Observations: Covered by Vegetation. No lock on plug
Weather/Temperature: 73°F clear
Sample description: clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

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FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-25-21

WELL ID: MW-15
SAMPLERS: Tracey Orlud

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 24.00
Initial static water level (feet from top of casing/riser) 12.31

Depth to 5.125 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	11.69 ft. of water x 0.16 =	1.87	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 15 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1535		12.38	6.42	16.00	1.96	0.0	2.83	132
1540								
15:45		12.38	6.39	15.48	2.01	0.0	0.35	145
15:50		12.38	6.39	15.34	2.01	0.0	0.34	143

Purge Volume: 15 gal Purging Time: 15:30 - 15:50
Purge Rate (gph):

Sampling

Time of Sample Collection: 15:50

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Covered by vegetation
Weather/Temperature: 72°F Clear
Sample description: clear
Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE

WELL ID: MW-17
SAMPLERS: Tracey Corkum

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 22.73
Initial static water level (feet from top of casing/riser)..... 13.82

Depth to 5 / 25 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	8.91 ft. of water x 0.16 =	1.43	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 0.25 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
13:55		14.01	7.04	22.56	1.27	0.0	0.64	136
14:00		14.01	7.01	21.60	1.29	0.0	0.40	132
14:05		14.01	7.00	21.45	1.29	0.0	0.34	132

Purge Volume: 0.25 Purging Time: ~~13:45~~ 13:50 - 1405
Purge Rate (gph):

Sampling

Time of Sample Collection: 1405

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

MW-17_20210825

Observations

Well Observations: No lock, No bolts, concrete elevated above surrounding grade
Weather/Temperature: 72°F Clear
Sample description: Clear
Free Product? yes ___ no X describe
Sheen? yes ___ no X describe
Odor? yes ___ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/28/21

WELL ID: MW-19
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 19.45
Initial static water level (feet from top of casing/riser)..... 9.25

Depth to 5 / 20 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	10.2 ft. of water x 0.16 =	1.63	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: .75 gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1240	~150	9.25	6.32	14.66	1.39	0.0	0.94	8
1245		9.25	6.42	14.76	1.39	0.0	0.00	-6
1250		9.26	6.39	14.93	1.40	0.0	0.00	-9
1255		9.27	6.38	14.99	1.40	0.00	0.00	-10
1300								
1305								
1310								
1315								
1320								

Purge Volume: 0.75 Purging Time: 20
Purge Rate (gph): 2.25

Sampling

Time of Sample Collection: 1255

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good
Weather/Temperature: 46°F, 0-5mph Sunny
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/28/21

WELL ID: MW-20
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 17.48
Initial static water level (feet from top of casing/riser) 8.20

Depth to 3 / 18 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	9.28 ft. of water x 0.16 =	1.48	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 1 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1150	~150	8.39	6.31	14.38	0.958	0.1	0.35	162
1155		8.45	6.12	14.67	0.964	0.0	0.00	164
1200		8.50	6.11	14.85	0.965	0.0	0.00	163
1205		8.51	6.13	14.89	0.964	0.0	0.00	162
1210								
1215								
1220								
1225								

Purge Volume: 2 l Purging Time: 20 min
Purge Rate (gph): 3 gph

Sampling

Time of Sample Collection: 1205

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good
Weather/Temperature: 46°F Clear, 0-5mph East
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-26-21

WELL ID: MW-22
SAMPLERS: Tracey Gould

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 18.32
Initial static water level (feet from top of casing/riser)..... 11.16

Depth to 3 / 18 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	7.16 ft. of water x 0.16 =	1.15	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 2 gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
9:35		11.42	7.04	15.85	1.01	0.0	1.19	166
9:40		11.51	6.89	15.31	0.988	0.0	0.62	151
9:45		11.58	6.81	14.82	0.983	0.0	0.51	143
9:50		11.68	6.78	14.62	0.957	0.0	0.46	135
9:55		11.71	6.73	14.56	0.860	0.0	0.38	139
10:00	11.77	~~11.77~~	6.63	14.51	0.725	0.0	0.41	153
~~10:05~~		11.82	6.54	14.49	0.666	0.0	0.41	159
10:10		11.87	6.52	14.57	0.654	0.0	0.47	161

Purge Volume: 2 gal Purging Time: 9:30 - ~~9:55~~ 10:10
Purge Rate (gph):

Sampling

Time of Sample Collection: ~~9:55~~ 10:10

Method:
- ___ Stainless steel bailer
- ___ Teflon bailer
- ___ Pos. Disp. Pump
- ___ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- X MNA Parameters

Observations

Well Observations: Gerard Conelton
Weather/Temperature: Rain 57°F
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

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FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-25
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 24.10
Initial static water level (feet from top of casing/riser)..... 15.03

Depth to 10 / 25 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing		ft. of water x 0.04 =	gallons
2 in. casing:	9.07	ft. of water x 0.16 =	1.45 gallons
3 in. casing:		ft. of water x 0.37 =	gallons
4 in. casing:		ft. of water x 0.65 =	gallons
5 in. casing:		ft. of water x 1.02 =	gallons
6 in. casing:		ft. of water x 1.47 =	gallons

volume of water removed: 1 gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1520	250	15.13	6.77	16.70	0.991	9.7	9.02	127
1525		15.14	6.62	15.92	0.930	6.5	~~0.98~~ 4.83	148
1530		15.15	6.60	16.01	0.911	4.7	2.53	151
1535		15.15	6.58	16.17	0.910	0.0	2.43	156
1540		15.15	6.56	16.21	0.930	0.0	2.38	159
1545								
1550								
1555								
1600								

Purge Volume: 2 gal Purging Time: 25 min
Purge Rate (gph): 2.4 gph

Sampling

Time of Sample Collection: 1540

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good
Weather/Temperature: 55F Mostly Sunny 3-10 mph NW
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-25-21

WELL ID: MW-26
SAMPLERS:

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 24.93
Initial static water level (feet from top of casing/riser)..... 16.04

Depth to 8.25 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	8.81 ft. of water x 0.16 =	1.33	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1.5 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
17:15		16.89	7.29	16.89	1.02	0.0	5.84	174
17:20		16.89	7.31	17.47	0.988	0.0	5.73	185
17:25		16.90	7.28	17.01	1.14	0.0	5.86	196
17:30		16.91	7.19	16.56	1.29	0.0	5.89	203
17:35		16.90	7.18	16.75	1.31	0.0	5.65	206

Purge Volume: 1.5gal Purging Time: 17:10 - 17:35
Purge Rate (gph):

Sampling

Time of Sample Collection: 17:35

Method:
- ___ Stainless steel bailer
- ___ Teflon bailer
- ___ Pos. Disp. Pump
- ___ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ___ MNA Parameters

Observations

Well Observations: Pulled tubing slightly in MW-26
Weather/Temperature: Cloudy 60°F
Sample description: Clear
Free Product? yes ___ no X describe
Sheen? yes ___ no X describe
Odor? yes ___ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/28/21

WELL ID: MW-28
SAMPLERS: GES

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 32.22 ~~32.44~~
Initial static water level (feet from top of casing/riser) 18.30

Depth to 20 / 35 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	13.92 ft. of water x 0.16 =	2.2	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1030		18.30	6.67	14.29	1.02	3.2	4.89	77
1035		18.35	6.77	13.92	1.03	0.0	4.37	69
1040		18.35	6.84	13.73	1.04	0.0	3.79	79
1045		18.35	6.87	13.66	1.04	0.0	3.69	80
1050		18.35	6.88	13.64	1.04	0.0	3.58	85
1055								
1100								
1105								

Purge Volume: 1 gal Purging Time: 25 mn
Purge Rate (gph): 2.4 gph

Sampling

Time of Sample Collection: 1050

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good Condition
Weather/Temperature: 41°F overcast, 0-5mph E
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-31
SAMPLERS: CJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser): 21.20 / 18.70
Initial static water level (feet from top of casing/riser): 18.70

Depth to 15 / 30 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	2.5 ft. of water x 0.16 =	0.4	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 1.25 gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1435	~150	18.88	6.73	15.71	1.19	121	4.35	112
1440		18.77	6.55	15.29	1.11	48.7	2.24	122
1445		18.78	6.48	15.10	1.06	2.2	1.09	132
1450		18.79	6.46	15.03	1.06	0.0	0.82	135
1455		18.78	6.48	15.02	1.06	0.0	0.66	137
1500		18.77	6.47	15.00	1.06	0.0	0.65	138
1505		18.77	6.48	15.00	1.06	0.0	0.64	139

Purge Volume: Purging Time: 35min
Purge Rate (gph): 2.14gph

Set tubing ~6" off of bottom

Sampling

Time of Sample Collection: 1505

Property being sold, buyer stopped by to inquire about what we were doing.

Method:		Analyses:	
	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
	Teflon bailer		MNA Parameters
	Pos. Disp. Pump		
	Disposable bailer		
X	Dedicated pump and tubing		

may be pipe joint

Hard bottom

Observations

Well Observations: ~8ft of Accumulation, Soft feel obstruction ~6ft bgs. ~6ft of Screen.
Weather/Temperature: 55°F Mostly Sunny 5-10mph NW wind
Sample description: Clear

Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

NYSDEC
Division of Environmental Remediation

Site Location: Hidden Valley Electronics

Contract No.

DEC Insp. – N/a

DEC PM – Robert Strang

Contractor Supt. – N/a

Engineer PM – Matthew Hoskins

Engineer Insp. – Matthew Schappert, Josh Yaeger and Liz Alvut

Weather Conditions

General Description	Clear	AM	Clear	PM
Temperature	40°F	AM	62°F	PM
Wind	Calm	AM	Calm	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 X	NA
Were there any exceedances of the perimeter air monitoring reported on this date?	*Yes	No X	NA
Were there any nuisance issues reported/observed on this date?	*Yes	No X	NA

Health & Safety Comments

Site-specific HASP was followed accordingly

Summary of Work Performed	Arrived at site:	**11/7/22 0700**	Departed Site:	**1530**
		11/8/22 0700		**1630**
		11/9/22 0700		**1030**

TRC Engineers, Inc. (TRC) performed an annual site inspection and annual groundwater sampling event on Monday, November 7 through Wednesday, November 9, 2022, of the Hidden Valley Electronics (Site) located in the Town of Vestal, in Broome County, NY. The Site Inspection was performed to document general site conditions, including the site-wide cover (parking lot and building), the condition of groundwater monitoring wells. The sampling event included collection of groundwater samples from the 28 monitoring wells and general conformance with the Site Management Plan.

Overall, the Site was in good condition. No new construction or evidence of unauthorized excavation was observed at the Site. The steel plate observed in 2020 covering an unknown structure in the parking lot at 1801 Vestal Parkway East is damaged from a plow. The corner of the steel plate is bent upward and not covering the associated pit.

Groundwater monitoring wells were in good condition and easily accessible, except for MW-13 and MW-15 which were overgrown and difficult to locate due to the high vegetation. A large fallen tree knocked over the high-vis marker stick near MW-13. TRC located the well and placed the marker stick back into place, with high-vis surveyor ribbon to make it more visible in the dense vegetation. TRC also placed high-vis surveyor ribbon on the stick up marker located at MW-15.. The following wells were observed to have missing bolts or damaged threading: MW-1, MW-7, MW-9, MW-11, MW-17, MW-33, MW-101, MW-102, TWMW-1, TW-1, TW-2, TW-3 and TW-6. Water did infiltrate the concrete casings with damaged or missing bolts, but the well caps were securely in place which prevented storm water from entering the PVC wells. TRC recommends replacing all damaged or missing bolts where possible during the next site inspection.

Depth the groundwater and total depth measurements were collected on November 7, 2022, from the 28 monitoring wells prior to sampling activities. The water level meters were decontaminated between each monitoring well using an Alconox solution and deionized water. Water level measurements are provided on the attached monitoring well observation table. MW-102 was dry due to an obstruction approximately 6 fbgs. MW-102 is one of three wells installed in the source area, and historically has had high concentrations of 1,1,1-TCA, cis-1,2-DCE and TCE. TRC recommends that MW-102 be decommissioned and replaced with a well nearby within the source area.

Prior to groundwater sampling, TRC purged each following USEPA low flow purging and sampling procedures using peristaltic pumps and dedicated tubing. Upon completion of purging and stabilization of groundwater parameters, groundwater samples from 25 of 28 wells identified in the SMP. No sample was collected from MW-102, MW-B, or MW-31. As previously discussed, MW-102 was observed to be obstructed. MW-B was purged dry the morning of November 8 and the water level did not recharge enough to sample via bailer. MW-31 was purged dry after only 500 mL and did not recharge enough to sample.

The collected groundwater samples and associated quality control samples (i.e., blind duplicate, matrix spike and matrix spike duplicate, equipment blank, field blank and trip blank) from 25 of 28 wells were submitted for laboratory analysis by Method 8260C for TCL and TIC to PACE Analytical in Syracuse, New York following standard chain-of-custody protocols. Groundwater samples from three locations (MW-101, TW-2 and MW-11) were submitted for laboratory analysis by Method 537 M for per and polyfluoroalkyl substances (PFAs). Groundwater samples from four locations (MW-101, MW-104, TW-2 and TWMW-101) were submitted for laboratory analysis by Method 8270D SIM for 1,4-Dioxane. Groundwater samples at five locations (MW-101, MW-104, TW-2, TWMW-101 and MW-22) were submitted for laboratory analysis for monitored natural attenuation parameters.

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
Matthew Schappert	TRC	Project Scientist	22.5
Liz Alvut	TRC	Environmental Scientist	22.5
Josh Yaeger	TRC	Environmental Engineer	22.5

Equipment Description	Contractor/Vendor	Quantity	Used
Water level Meter	Eco-rental	3	Yes
Peri-pump	Eco-rental	3	Yes
YSI – Pro DSS	Eco-rental	3	Yes
Camera	TRC	1	Yes

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

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

Equipment/Material Tracking Comments: N/A

Visitors to Site

Name	Representing	Entered Exclusion/CRZ Zone	
N/A	**N/A**	**Yes**	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**

Site Representatives

Name	Representing
N/A	**N/A**

Project Schedule Comments
N/A

Issues Pending
N/A

Interaction with Public, Property Owners, Media, etc.
N/A

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

Site Photographs (Descriptions Below)

Photo 1: TW-2, TWMW-101 and MW-104 after clearing dirt off the caps, facing south

Photo 2: RW-9 after removing manhole cover, facing north

Photo 3: MW-15 and associated marker stick, facing east

Photo 4: Marker stick placed in ground near MW-13, facing south

Photo 5: RW-9 location, facing north

Photo 6: Access path to off-site wells, facing north

Photo 7: Cleared path and associated surveyor ribbon at MW-13, with fallen tree in background, facing south

Photo 8: MW-17 location in median, facing west

	Intentionally left blank
Photo 9: Steel plate located at 1801 Vestal Parkway East, facing south	Intentionally left blank

Comments
N/A

Site Inspector(s): Matthew Schappert, Liz Alvut and Josh Yaeger	**Date: 11/2/2022**

Videos of discreet operations have been provided to the DEC Project Manager to facilitate understanding of the ongoing work? Yes ☐

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes ☒	No ☐
Is the tail gate safety meeting held outdoors?	Yes ☒	No ☐
Are remote/call in job meetings being held in lieu of meeting in person where possible?	Yes ☒	No ☐
Were personal protective gloves, masks, and eye protection being used?	Yes ☒	No ☐
Are sanitizing wipes, wash stations or spray available?	Yes ☒	No ☐
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes ☐	No ☒
Comments:		

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes ☐	No ☒
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes ☐	No ☒
3. Has anyone at this location had contact with anyone known to have COVID-19 in the past 14 days?	Yes ☐	No ☒
4. Does anyone at this location have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes ☐	No ☒
5. Does the Department and its contractors have your permission to enter the property at this time?	Yes ☐	No ☒
If Yes to <u>any</u> of 1-4 above: • If it is <u>not</u> critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone or conduct service without entry. • If it <u>is</u> critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry.	Yes ☐	No ☐

Comments: N/A

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: N/A			

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: N/A			

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: N/A			

* BART – Best Available Retrofit Technology

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	DATE:
SAMPLE ID: MW-9	START TIME:
SAMPLE TIME: 10:05	END TIME:
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	19.48 FT	FINAL DTW (BMP)	19.93 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	29.21 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
09:20	BEGIN PURGING									
09:30	19.48	100	15.9	4.052	6.54	1.65	7.44	-155.1	25	
09:35	19.48	100	16.0	4.393	6.54	1.58	4.17	-155.0	25	
09:40	19.48	100	15.9	4.669	6.55	1.61	8.21	-154.6	25	
09:45	19.48	100	15.9	4.844	6.55	1.58	8.82	-152.2	25	
09:50	19.48	100	15.9	4.930	6.55	1.57	2.35	-150.4	25	
09:55	19.48	100	15.9	5.004	6.55	1.62	7.42	-148.6	25	
10:00	19.48	100	15.9	5.067	6.56	1.66	9.91	-147.9	25	

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
- [X] WL METER Heron
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics	LOCATION ID		DATE	
PROJECT NUMBER		START TIME		END TIME	
SAMPLE ID	MW-7	SAMPLE TIME	09:00	SITE NAME/NUMBER		PAGE	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	19.40 FT	FINAL DTW (BMP)	20.15 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	26.37 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
08:00	BEGIN PURGING									
08:10	19.40	100	15.3	2.937	6.64	1.66	14.39	-152.4	22	
08:15	19.40	100	15.3	2.962	6.66	1.57	24.20	-153.0	22	
08:20	19.40	100	15.3	3.031	6.66	1.55	94.09	-152.2	22	
08:25	19.40	100	15.2	3.063	6.67	1.55	217.70	-151.3	22	
08:30	19.40	100	15.3	3.099	6.67	1.52	105.20	-149.9	22	
08:35	19.40	100	15.2	3.098	6.67	1.51	740.51	-149.9	22	
08:40	19.40	100	15.2	3.111	6.67	1.51	425.76	-150.9	22	*Sensor issues resolved
08:45	19.40	100	15.4	3.121	6.66	1.61	16.15	-149.8	22	
08:50	19.40	100	15.3	3.126	6.66	1.52	15.62	-150.6	22	
08:55	19.40	100	15.4	3.126	6.67	1.51	15.46	-153.0	22	

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	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[ ] PERISTALTIC	[ ] LIQUINOX	[ ] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[x] WL METER Heron
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[x] WQ METER YSI
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[x] TURB. METER YSI
[ ] OTHER	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[x] PUMP Pine Peri Pump
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER
	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hilton Valley Elec	LOCATION ID	MW-03
PROJECT NUMBER		DATE	11/9/22
SAMPLE ID	MW-03-20221109	START TIME	845
SAMPLE TIME	930	END TIME	945
SITE NAME/NUMBER		PAGE	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

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

INITIAL DTW (BMP)	22.9 FT	FINAL DTW (BMP)	23.1 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	30 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2 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
350	BEGIN PURGING									
900	23.0	200	13.7	1.851	7.10	0.32	118.27	-125.7	25	
910			13.6	1.847	7.09	0.21	119.18	-128.0	25	
915			13.5	1.837	7.06	0.19	120.36	-124.5	25	
920	23.1		13.4	1.823	7.04	0.19	123.02	-121.8	25	
925			13.5	1.834	7.04	0.20	123.00	-121.6	25	
930										

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: [X] 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: [X] WL METER Heron [ ] PID [X] WQ METER YSI [X] TURB. METER YSI [X] PUMP Pine Peri Pump [ ] OTHER [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] NO [ ]

NUMBER OF GALLONS GENERATED: 2

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

SKETCH/NOTES

MS/MSD Dup-02-20221109 Dupe 2 @ 1200

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec	LOCATION ID: MW-08
PROJECT NUMBER:	START TIME: 725
SAMPLE ID: MW-08-20221109	SAMPLE TIME:
SITE NAME/NUMBER:	DATE: 11/9/22
	END TIME:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [X] 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) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	21.15 FT	FINAL DTW (BMP)	22.85 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	+0.3 FT
WELL DEPTH (BMP)	30.0 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
750	BEGIN PURGING									
800	21.9	200	14.9	1.844	6.86	0.49	27.70	112.3	25	
810	22.65	"	15.0	1.846	6.88	0.41	28 37	116.6	25	
815	—	—	14.9	1.851	6.89	0.40	26.27	116.3	25	
820	22.85	—	15.0	1.847	6.83	0.47	25.77	118.5	25	
825	—	—	14.9	1.858	6.92	0.42	27.02	117.4	25	
830										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: [X] YES [ ] NO

NUMBER OF GALLONS GENERATED: 1.5

NO-PURGE METHOD UTILIZED: [ ] YES [ ] NO

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

SKETCH/NOTES

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	DATE:
SAMPLE ID: MW-17-20220409	START TIME:
SAMPLE TIME: 0940	END TIME:
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	14.68 FT	FINAL DTW (BMP)	14.88 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	22.63 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
0855	BEGIN PURGING									
0900	.20	100	14.7	1.376	6.84	0.89	-2.32	132.5	18	
0905	0	100	14.9	1.401	6.86	0.56	-3.05	128.4	18	
0910	0	100	14.6	1.408	6.88	0.50	-3.24	124.8	18	
0915	0	100	14.4	1.404	6.88	0.51	-2.80	123.2	18	
0920	0	100	14.5	1.400	6.89	0.43	-3.16	120.2	18	
0925	0	100	14.6	1.405	6.88	0.39	-3.11	119.9	18	
0930	0	100	14.6	1.405	6.88	0.37	-3.22	118.3	18	
0935	0	100	14.6	1.406	6.88	0.35	-3.18	118.2	18	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:	DATE:
PROJECT NUMBER:	START TIME:	END TIME:
SAMPLE ID: TW-3-20211109 / SAMPLE TIME: 0825	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	~~14.29~~ 14.29 FT	FINAL DTW (BMP)	14.29 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	18.44 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
0750	BEGIN PURGING									
0755	0	100	10.2	1,520	6.84	6.42	7.87	137.5	16.0	
0800	0	100	13.6	1,498	6.85	5.82	8.47	141.6	16.0	
0805	0	100	14.7	1.500	6.88	5.59	6.82	140.4	16.0	
0810	0	100	15.0	1,488	6.88	5.38	5.96	138.9	16.0	
0815	0	100	15.1	1483	6.88	5.37	5.23	138.5	16.0	
0820	0	100	14.7	1,481	6.88	5.29	4.76	138.3	16.0	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	DATE:
SAMPLE ID: MW-B-20221108	START TIME:
SAMPLE TIME:	END TIME:
	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			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	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
0730	BEGIN PURGING									
										Could not purge

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 Heron
- ☐ PID
- ☒ WQ METER YSI
- ☒ TURB. METER YSI
- ☒ PUMP Pine Peri Pump
- ☐ OTHER
- ☐ FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

went dry after 500 ml

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: ~~TWMW-01-20220105~~ TWMW-01-20220105	SAMPLE TIME: 0910
SITE NAME/NUMBER:	END TIME:
	DATE:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [X] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	13.31 FT	FINAL DTW (BMP)	13.31 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	38.11 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~~3~~ 1 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
0835	BEGIN PURGING									
0840	~~13.310~~	~~150~~ 150	15.5	1.464	6.62	1.44	9.18	-46.8	30	
0845	13.310	150	15.4	1.606	6.63	0.97	5.91	-40.7	30	
0850	13.310	150	15.5	1.734	6.65	0.65	0.33	0.9	30	
0855	13.310	150	15.3	1.747	6.66	0.50	-1.36	10.6	30	
0900	13.310	150	15.5	1.751	6.67	0.48	-2.20	14.9	30	
0905	0	150	15.5	1.752	6.67	0.46	-0.64	17.4	30	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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.

Sampler Signature: Print Name

Checked By: Justin King Date:

SKETCH/NOTES

- 1" PVC, could not have water level meter & tubing in at same time. Took initial depth, and depth after sampling
- MS/MSD/FB/EB for 1,4-Dioxane MNAP + VOC(2)

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD
10 Maxwell Drive, Suite 200, Clifton Park, NY 12065

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-104-20221108
SAMPLE TIME	1135

LOCATION ID	DATE
START TIME	END TIME
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			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	12.82 FT	FINAL DTW (BMP)	12.64 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	47.67 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1100		BEGIN PURGING								
1105		200	15.7	0.952	7.56	0.69	150.2	-157.7	40	
1110		200	15.7	0.962	7.70	0.44	99.26	-178.2	40	
1115		200	15.9	0.961	7.72	0.39	127.9	-179.2	40	
1120		200	15.9	0.963	7.73	0.35	123.4	-181.2	40	
1125		200	15.9	0.961	7.73	0.34	124.8	-182.1	40	
1130		200	15.9	0.959	7.74	0.33	127.3	-184.2	40	

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 Heron
- ☐ PID
- ☒ WQ METER YSI
- ☒ TURB. METER YSI
- ☒ PUMP Pine Peri Pump
- ☐ OTHER
- ☐ FILTERS NO. ____ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

SKETCH/NOTES

MW-104-20221108

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: TW-2-20221108	SAMPLE TIME: 1300
	SITE NAME/NUMBER:
	DATE:
	END TIME:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	13.23 FT	FINAL DTW (BMP)	13.43 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.16 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	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
1225	BEGIN PURGING									
1230	0.2	100	16.5	1.325	6.76	0.44	-2.83	67.4	15	
1235	0	100	16.4	1.325	6.76	0.37	-2.97	73.9	15	
1240	0	100	16.4	1.323	6.75	0.29	-2.73	78.3	15	
1245	0	100	16.3	1.318	6.76	0.27	-2.88	83.2	15	
1250	0	100	16.4	1.317	6.75	0.25	-3.01	83.7	15	
1255	0	100	16.5	1.318	6.75	0.25	-3.16	85.2	15	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-103-20221108
SAMPLE TIME	1450

LOCATION ID	
DATE	
START TIME	
END TIME	
SITE NAME/NUMBER	
PAGE	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	12.07 FT	FINAL DTW (BMP)	12.02 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.26 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1410	BEGIN PURGING									
1415	0	200	15.0	2.945	6.81	4.01	92.81	104.4	~~15~~ 17	
1420	0	100	14.0	2.989	6.83	3.70	74.2	115.8	~~15~~ 17	
1425	0	100	15.3	3.053	6.83	~~3.70~~ 3.71	>	122.5	~~15~~ 17	very turbid, raised tubing
1430	0	100	15.3	2.949	6.84	3.83	8.42	126.3	~~15~~ 15	
1435	0	100	16.0	3.048	6.83	3.33	4.73	128.1	15	
1440	0	100	15.7	3.073	6.84	3.24	4.98	128.9	15	
1445	0	100	15.3	3.085	6.84	3.19	3.31	130.1	15	

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
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec	LOCATION ID: MW-28
PROJECT NUMBER:	DATE: 11/8/22
SAMPLE ID: MW-28-20221108	SAMPLE TIME: 820
	START TIME: 730
	END TIME: 820
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

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

INITIAL DTW (BMP)	26.2 FT	FINAL DTW (BMP)	26.3 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	+0.4 FT
WELL DEPTH (BMP)	32.5 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
740	BEGIN PURGING									
750	26.25	215	13.3	1.175	7.39	8.23	409.77	144.4		
800	—	—	13.3	1.175	7.38	8.10	29.40	147.4		
805	—	—	13.3	1.181	7.37	8.07	[illegible]	148.8		-13.67
810	26.3	—	13.4	1.181	7.37	8.12	13.20	149.0		
815	—	—	13.3	1.180	7.37	8.33	13.59	149.4		
820										

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	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[X] PERISTALTIC	[ ] LIQUINOX	[ ] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER Heron
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER YSI
[ ]	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER YSI
[ ] WATTERA	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[X] PUMP Pine Peri Pump
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] NO [ ]

NUMBER OF GALLONS GENERATED: 1.5

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

SKETCH/NOTES

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec		LOCATION ID: MW-31	DATE: 1/8/22
PROJECT NUMBER:		START TIME: 835	END TIME: 845
SAMPLE ID: MW-31-20220108	SAMPLE TIME: 920	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	20.9 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	+0.4 FT
WELL DEPTH (BMP)	70.65 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	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
840	BEGIN PURGING									
850										
900										
905										
910										
915										
920										

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Dry

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec		LOCATION ID: MW-~~20~~22	DATE: 11/8/22
PROJECT NUMBER: 22		START TIME: 950	END TIME: 1030
SAMPLE ID: MW-~~20~~-20221108	SAMPLE TIME: 1030	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	13.0 FT	FINAL DTW (BMP)	14.65 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	+ 0.35 FT
WELL DEPTH (BMP)	18.4 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
950	BEGIN PURGING									
1000	13.5	220	13.4	0.696	6.68	0.77	11.40	127.6	16	
1010	14.65	—	13.3	0.680	6.69	0.63	[illegible]	81.4	16	1021
1015	—	—	13.4	0.665	6.67	0.63	7.81	61.9	16	
1020	—	—	13.2	0.673	6.67	0.63	10.26	57.2	16	
1025	—	—	13.2	0.675	6.67	0.64	8.26	57.4	16	
1030										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] NO [ ]

NUMBER OF GALLONS GENERATED: 1.5

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

SKETCH/NOTES

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec	LOCATION ID: MW-15
PROJECT NUMBER:	DATE: 11/8/22
SAMPLE ID: MW-15-20221108	SAMPLE TIME: 1400
	START TIME: 1320
	END TIME: 1415
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	15.0 FT	FINAL DTW (BMP)	15.9 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	-0.6 FT
WELL DEPTH (BMP)	24.0 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2 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
1320	BEGIN PURGING									
1330	15.6	225	13.2	1.935	6.56	0.59	40.40	-71.7	20	
1340	15.8	—	13.2	1.920	6.56	0.51	42.60	-82.9	20	
1345	15.85	—	13.2	1.927	6.57	0.56	43.62	-87.3	20	
1350	—	—	13.1	1.930	6.57	0.53	43.11	-89.1	20	
1355	—	—	13.1	1.931	6.57	0.51	42.57	-89.7	20	
1400										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: [X] YES [ ] NO

NUMBER OF GALLONS GENERATED: 2

NO-PURGE METHOD UTILIZED: [ ] YES [ ] NO

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

SKETCH/NOTES

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec	LOCATION ID: RW-8
PROJECT NUMBER:	DATE: 11/8/22
SAMPLE ID: RW-08-20221108	SAMPLE TIME: 1540
	START TIME: 1445
	END TIME: 1550
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 4 [X] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [ ] TOP OF RISER (TOR) [x] TOP OF CASING (TOC) [ ] OTHER

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

INITIAL DTW (BMP)	21.7 FT	FINAL DTW (BMP)	22.8 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	1.7 FT
WELL DEPTH (BMP)	44.8 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1500	BEGIN PURGING									
1510	2.75	175	13.0	1.728	6.80	0.62	1.33	-30.5	30	
1520	—	—	12.9	1.728	6.80	0.52	0.80	-35.8	30	
1525	—	—	12.9	1.729	6.80	0.49	0.20	-38.2	30	
1530	—	—	12.9	1.729	6.80	0.50	0.63	-39.5	30	
1535	—	—	12.9	1.729	6.80	0.10	0.49	-41.2	30	
1540										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] 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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: RW-9	SAMPLE TIME: 15:55
	SITE NAME/NUMBER:
	DATE:
	END TIME:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	22.40 FT	FINAL DTW (BMP)	22.50 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	40.37 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
15:10	BEGIN PURGING									
15:20	22.50	100	13.1	1.960	6.39	2.08	6.45	-37.9	30	
15:25	22.51	100	13.1	1.961	6.39	1.98	5.41	-41.1	30	
15:30	22.51	100	13.0	1.960	6.39	1.92	7.62	-42.8	30	
15:35	22.52	100	13.1	1.962	6.39	1.91	5.75	-43.6	30	
15:40	22.52	100	13.0	1.965	6.39	1.91	4.69	-43.9	30	
15:45	22.52	100	12.9	1.973	6.39	1.89	6.00	-44.6	30	
15:50	22.52	100	12.8	1.974	6.38	1.89	4.25	-45.0	30	

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
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: M	
PROJECT NUMBER:	
SAMPLE ID: MW-20	SAMPLE TIME: 13:05

LOCATION ID:	DATE:
START TIME:	END TIME:
SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	11.40 FT	FINAL DTW (BMP)	11.47 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	17.15 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
12:20	BEGIN PURGING									
12:30	11.40	100	12.9	1.957	6.42	1.83	85.12	-35.9	15	
12:35	11.40	100	12.9	1.954	6.41	1.86	17.21	-36.8	15	
12:40	11.40	100	12.8	1.953	6.41	1.86	6.43	-38.8	15	
12:45	11.40	100	12.8	1.952	6.40	1.82	4.33	-40.2	15	
12:50	11.40	100	12.8	1.951	6.40	1.80	3.26	-41.2	15	
12:55	11.40	100	12.8	1.951	6.39	1.78	2.82	-42.0	15	
13:00	11.40	100	12.7	1.951	6.39	1.76	2.62	-42.9	15	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: MW-19	SAMPLE TIME: 10:45
	SITE NAME/NUMBER:
	DATE:
	END TIME:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	12.45 FT	FINAL DTW (BMP)	12.45 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.5 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
10:00	BEGIN PURGING									
10:10	12.47	100	13.1	2.066	6.62	1.94	19.33	-78.6	15	
10:15	12.47	100	13.4	2.058	6.61	1.82	11.90	-80.6	15	
10:20	12.48	100	13.6	2.059	6.60	1.75	8.10	-83.0	15	
10:25	12.48	100	13.6	2.062	6.60	1.72	6.30	-84.9	15	
10:30	12.48	100	13.7	2.059	6.60	1.71	4.28	-85.4	15	
10:35	12.49	100	13.7	2.063	6.60	1.71	3.37	-85.9	15	
10:40	12.49	100	13.8	2.060	6.60	1.71	2.65	-85.7	15	

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
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-26
SAMPLE TIME	08:10

LOCATION ID	DATE
START TIME	END TIME
SITE NAME/NUMBER	PAGE 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	19.85 FT	FINAL DTW (BMP)	21.40 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	24.55 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
07:35	BEGIN PURGING									
07:40	19.85	100	13.2	2.188	6.62	5.22	9.34	-34.8	23	
07:45	19.85	100	13.5	2.286	6.52	4.98	12.55	-31.0	23	
07:50	19.85	100	13.6	2.284	6.55	5.13	11.46	-29.7	23	
07:55	20.99	100	13.6	2.300	6.52	5.19	9.73	-27.4	23	
08:00	20.99	100	13.6	2.304	6.51	5.32	8.15	-24.9	23	
08:05	21.08	100	13.6	2.298	6.51	5.52	8.53	-21.3	23	
08:10										

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
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-25
SAMPLE TIME	09:30

LOCATION ID	DATE
START TIME	END TIME
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			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	18.04 FT	FINAL DTW (BMP)	18.28 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	24.3 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
08:45	BEGIN PURGING									
08:55	18.35	100	13.9	1.966	6.71	2.09	73.11	-65.2	20	
09:00	18.35	100	14.0	1.963	6.69	1.90	36.17	-66.7	20	
09:05	18.37	100	14.1	1.963	6.69	1.84	18.40	-67.4	20	
09:10	18.37	100	14.1	1.966	6.69	1.83	9.90	-68.6	20	
09:15	18.30	100	14.2	1.966	6.69	1.82	7.11	-69.7	20	
09:20	18.30	100	13.8	1.969	6.69	1.83	6.68	-70.6	20	
09:25	18.31	100	14.0	1.967	6.70	1.78	7.77	-71.5	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 Heron
- ☐ PID
- ☒ WQ METER YSI
- ☒ TURB. METER YSI
- ☒ PUMP Pine Peri Pump
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: MW-13	SAMPLE TIME: 14:25
	DATE:
	END TIME:
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	13.45 FT	FINAL DTW (BMP)	13.66 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	23.3 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
13:40	BEGIN PURGING									
13:50	13.45	100	12.8	2.310	6.51	1.70	12.43	-70.0	20	
13:55	13.45	100	12.9	2.315	6.50	1.67	8.07	-72.2	20	
14:00	13.45	100	12.8	2.321	6.51	1.64	6.51	-74.8	20	
14:05	13.45	100	12.8	2.322	6.51	1.63	4.04	-76.0	20	
14:10	13.45	100	12.8	2.326	6.51	1.63	8.44	-77.3	20	
14:15	13.45	100	12.8	2.328	6.51	1.62	8.62	-78.7	20	
14:20	13.45	100	12.7	2.331	6.51	1.62	2.82	-79.9	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
- [x] 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
- [x] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Midland Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-101-20221107
SAMPLE TIME	1340

LOCATION ID	DATE
START TIME	END TIME
SITE NAME/NUMBER	PAGE 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	7.88 FT	FINAL DTW (BMP)	7.92 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	14.74 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~~1.5~~ 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
1300	BEGIN PURGING									
1305	7.88	100	14.8	1.365	6.75	4.81	2.04	163.1	10	
1310	7.88	100	14.8	1.380	6.79	4.97	1.35	162.3	10	
1315	7.92	100	14.7	1.373	6.83	4.98	0.22	161.7	10	
1320	7.92	100	15.2	1.379	6.87	5.02	0.15	162.2	10	
1325	7.92	100	14.9	1.392	6.89	5.08	0.11	162.4	10	
1330	7.92	100	14.7	1.385	6.87	5.15	0.10	162.7	10	

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
- [x] WL METER Heron
- [ ] PID _____
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER _____
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	TW-6
SAMPLE TIME	14:005

LOCATION ID	DATE
START TIME	END TIME
SITE NAME/NUMBER	PAGE 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	9.77 FT	FINAL DTW (BMP)	10.00 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	18.01 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2 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
13:10	BEGIN PURGING									
13:15	9.77	100	18.3	2.023	7.05	3.7	46.00	-70.7	15	
13:20	9.77	100	18.3	2.024	7.05	2.9	41.82	-72.8	15	
13:25	9.77	100	18.1	2.026	7.05	2.3	31.28	-75.8	15	
13:30	9.77	100	18.1	2.022	7.05	2.19	29.30	-77.4	15	
13:35	9.77	100	18.2	2.023	7.05	2.12	25.36	-78.8	15	
13:40	9.77	100	18.4	2.021	7.06	2.08	18.85	-79.5	15	
13.45	9.77	100	20.0	2.037	7.07	2.15	18.00	-79.9	15	
13:50	9.77	100	17.5	2.019	7.05	2.12	17.40	-82.2	15	
13:55	9.77	100	17.5	2.016	7.05	1.86	17.55	-83.9	15	
14:00	9.77	100	17.4	2.020	7.05	1.74	17.38	-84.9	15	

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
- [v] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	DATE:
SAMPLE ID: TW-1	START TIME:
SAMPLE TIME: 15:15	END TIME:
SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	9.40 FT	FINAL DTW (BMP)	9.91 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.07 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
14:30	BEGIN PURGING									
14:35	9.40	100	18.1	2.044	6.76	1.63	23.40	-64.9	15	
14:40	10.20	100	17.9	2.057	6.75	1.54	26.30	-69.3	15	
14:45	10.20	100	17.8	2.073	6.76	1.49	25.85	-73.5	15	
14:50	10.20	100	17.7	2.073	6.76	1.48	53.32	-75.7	15	
14:55	10.26	100	17.6	2.078	6.76	1.46	38.18	-77.4	15	
15:00	10.20	100	17.6	2.085	6.77	1.46	33.91	-78.8	15	
15:05	10.20	100	17.6	2.094	6.77	1.45	31.40	-79.4	15	
15:10	10.42	100	17.6	2.102	6.77	1.45	35.02	-81.4	15	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec		LOCATION ID: MW-53	DATE: 11/7/22
PROJECT NUMBER:		START TIME: 1245	END TIME: 1345
SAMPLE ID: MW-53-20221107	SAMPLE TIME: 1335	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	✓		
CASING	✓		
LOCKED	✓		
COLLAR			✓

INITIAL DTW (BMP)	13.4 FT	FINAL DTW (BMP)	13.7 FT	PROT. CASING STICKUP (AGS)	— FT	TOC/TOR DIFFERENCE	+ 0.7 FT
WELL DEPTH (BMP)	18.9 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1255	BEGIN PURGING									
1305	13.8	250	18.0	1.713	7.10	31.7	15.86	131.5	15	
1315	—	—	18.1	1.782	7.08	31.4	18.45	129.6	15	
1320	—	—	18.0	1.850	7.05	33.3	15.44	131.1	15	
1325	13.6	—	17.9	1.897	7.02	33.8	12.87	132.1	15	
1330	13.7	—	17.9	1.907	7.01	35.3	14.04	132.6	15	
1335										

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 Alconox

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

PURGE OBSERVATIONS

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

NUMBER OF GALLONS GENERATED: 2

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

SKETCH/NOTES

~~MW-53~~ DUP-01-20221107 @1200

Dup

Sampler Signature: Print Name:

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Elec	LOCATION ID	MW-01
PROJECT NUMBER		DATE	11/7/22
SAMPLE ID	MW-01-221107	START TIME	1400
SAMPLE TIME	1440	END TIME	1445
		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)	13.3 FT	FINAL DTW (BMP)	13.6 FT	PROT. CASING STICKUP (AGS)	— FT	TOC/TOR DIFFERENCE	0.6 FT
WELL DEPTH (BMP)	18.5 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1400	BEGIN PURGING									
1410	13.5	250	17.1	1.503	6.74	3.15	8.67	168.8	15	
1420	13.6	—	16.9	1.500	6.75	3.20	8.62	168.2	15	
1425	—	—	16.8	1.497	6.75	3.11	5.13	168.0	15	
1430	—	—	16.9	1.498	6.75	3.26	9.66	168.0	15	
1435	—	—	16.9	1.498	6.75	3.20	9.62	168.2	15	
1440										

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

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☒ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☐ NO

NUMBER OF GALLONS GENERATED: 2.125

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

SKETCH/NOTES

MS/MSD

Sampler Signature: Print Name:

Checked By: Date:

Pace Analytical®

Phone: 612-607-6400
Fax: 612-607-6344

https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name:	TRC
Address:	215 Greenfield Parkway, Suite 102, Liverpool NY 13088
Phone:	
Project Name:	Hidden Valley Electronics
Project Location:	Vestal, NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	MHOSKINS@TRCCOMPANIES
Sampled By:	MS

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	# of Containers	[2] Preservation Code	[3] Container Code	1,4-Dioxane SIM
	MW-101-20221107	1340	11/7/22		X	GW		2		A	X
	TWMW-01-20221108	0910	11/8/22		X						X
	TWMW-01-MS-20221108	0910	11/8/22		X						X
	TWMW-01-MSD-20221108	0910	11/8/22		X						X
	EB-02	1200	11/8/22		X						X
	MW-104-20221104	1135	11/8/22		X						X
	FB-02	1200	11/8/22		X						X
	TW-2-20221108	1300	11/8/22		X						X

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☒ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name:	TRL
Address:	215 Greenfield Parkway, Suite 102, Liverpool NY 13088
Phone:	
Project Name:	Hidden Valley Electronics
Project Location:	Vestal, NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	mhoskins@TRLcompanies.com
Sampled By:	MS

Requested Turnaround Time
7-Day [X] 10-Day [ ]
Due Date:

Rush-Approval Required
1-Day [ ] 3-Day [ ]
2-Day [ ] 4-Day [ ]

Data Delivery
Format: PDF [X] EXCEL [ ]
Other:
CLP Like Data Pkg Required: [ ]
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	PFAs 537 M	# of Containers	[2] Preservation Code	[3] Container Code
	MW-101-20221107	1340	11/7/22		X	GW		X	2		P
	MW-101-MS-20221107	1340			X			X			
	MW-101-MSD-20221107	1340			X			X			
	DUP-01-20221107	1200			X			X			
	FD-01	1200			X			X			
	EB-01	1200	↓		X			X			
	TW-2-20221108	1300	11/8/22		X			X			
	MW-11-20221109	0830	11/9/22		X	↓		X			

ANALYSIS REQUESTED

Dissolved Metals Samples
[ ] Field Filtered
[ ] Lab to Filter

Orthophosphate Samples
[ ] Field Filtered
[ ] Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments:

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H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
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Program & Regulatory Information
[ ] AWQ STDS
[ ] NYC Sewer Discharge
[ ] Part 360 GW (Landfill)
[ ] NY Restricted Use
[ ] NY Unrestricted Use
[ ] NY Part 375
[ ] NY TOGS
[ ] NY CP-51
Other:

Deliverables
[ ] Enhanced Data Package
[X] NYSDEC EQuIS EDD
[ ] EQuIS (Standard) EDD
[ ] NY Regulatory EDD
[ ] NY Regs Hits-Only EDD
Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
[ ] Government [ ] Municipality [ ] MWRA [ ] WRTA
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[ ] City [ ] Brownfield [ ] MBTA

Other
[ ] Chromatogram
[ ] *AIHA-LAP,LLC*

PCB ONLY
[ ] Soxhlet
[ ] Non Soxhlet

CHAIN OF CUSTODY RECORD (New York)

Pace Analytical
1800 Elm Street SE
Minneapolis, MN 55414

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name:	TRC
Address:	215 Greenfield Parkway, Suite 102 Liverpool NY 13088
Phone:	
Project Name:	Hidden Valley Electronics
Project Location:	Vestal, NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	MHOSKINS@TRCCOMPANIES.COM
Sampled By:	MS

Requested Turnaround Time
7-Day [X] 10-Day [ ]
Due Date:

Rush-Approval Required
1-Day [ ] 3-Day [ ]
2-Day [ ] 4-Day [ ]

Data Delivery
Format: PDF [X] EXCEL [ ]
Other:
CLP Like Data Pkg Required: [ ]
Email To:
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Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	8260 TCL/TIC	Methane/Ethane/Ethene	Iron/Manganese	Carbon Dioxide	Alkalinity SM2320B	Sulfide SM4500S-F	Nitrate/Nitrite, Sulfate, Chloride, pH	TOC
	MW-26-20221108	0810	11/8/22		G	GW		X							
	MW-19-20221108	1045	11/8/22					X							
	MW-20-20221108	1305	11/8/22					X							
	RW-9-20221108	1555	11/8/22					X							
	RW-08-20221108	1540	11/8/22					X							
	MW-15-20221108	1400	11/8/22					X							
	MW-22-20221108	1030	11/8/22					X	X	X	X	X	X	X	X
	MW-28-20221108	0820	11/8/22					X							
	MW-103-20221108	1450	11/8/22					X							
	TW-2-20221108	1300	11/8/22					X	X	X	X	X	X	X	X

[2] Preservation Code	H	H	N	H		X		O	
[3] Container Code	V	V	P	V	P	P	P	A	

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Program & Regulatory Information
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https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name:	TRC
Address:	215 Greenfield Parkway, Suite 102, Liverpool NY 13088
Phone:	
Project Name:	Hidden Valley Electronics
Project Location:	Vestal, NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	MHOSKINS@TRCCOMPANIES.COM
Sampled By:	MS

Requested Turnaround Time
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	MW-33-20221107	1335	11/7/22		X	GW		X										
	MW-01-20221107	1440	11/7/22		X			X										
	MW-01-MS-20221107	1440	11/7/22		X			X										
	MW-01-MSD-20221107	1440	11/7/22		X			X										
	DUP-01-20221107	1200	11/7/22		X			X										
	TW-1-20221107	1515	11/7/22		X			X										
	TW-6-20221107	1405	11/7/22		X			X										
	MW-101-20221107	1340	11/7/22		X			X	X	X	X	X	X	X	X			
	MW-13-20221108	1425	11/8/22		X			X										
	MW-25-20221108	0930	11/8/22		X			X										

	2	2	1	2	1	1	1	1			
[2] # of Containers											
[2] Preservation Code	H	H	N	H		X		O			
[3] Container Code	V	P	P	V	P	P	P	A			

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Pace Analytical

Phone: 612-607-6400
Fax: 612-607-6344

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Phone:	
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Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	MHOSKINS@TRCCOMPANIES.COM
Sampled By:	MH

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								2	2	1	2	1	1	1	1				# of Containers
								H	H	NZ	H		X		O				[2] Preservation Code
								V	V	P	V	P	P	P	A				[3] Container Code
	MW-104-20221108	1135	11/8/22		6	GW		X	X	X	X	X	X	X	X				
	TWMW-01-20221108	0910	11/8/22					X	X	X	X	X	X	X	X				
	TRIPBLANK	—	—					X											
	MW-17-20221109	0940	11/9/22					X											
	TW-3-20221109	825	11/9/22					X											
	MW-08-20221109	0930	11/9/22					X											
	MW-08-MS-20221109	0930	11/9/22					X											
	MW-08-MSD-20221109	0936	11/9/22					X											
	DUP-02	1200	11/9/22					X											
	TRIPBLANK	—	—					X											

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Page 4 of 4

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CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

| Pace Analytical Work Order# | Client Sample ID / Description | Beginning Date/Time | Ending Date/Time | Composite | Grab | [1]Matrix Code | Conc Code | 2 | H | V | 8260 TCL/TIL | | |

NYSDEC
Division of Environmental Remediation

Contract No.

DEC Insp. – N/a

DEC PM – Robert Strang

Contractor Supt. – N/a

Engineer PM – Matthew Hoskins

Engineer Insp. – Matthew Schappert and Lucas Heaslip

Site Location: Vestal, Broome County, NY

Weather Conditions

General Description	Clear	AM	NA	PM
Temperature	75°F	AM	NA	PM
Wind	0-5 mph N	AM	NA	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 X	NA
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 X	NA

Health & Safety Comments

Site-specific HASP was followed accordingly

Summary of Work Performed	Arrived at site:	**1100**	Departed Site:	**1125**

TRC Engineers, Inc. (TRC) performed a post storm inspection on Thursday, August 17, 2023, at the Hidden Valley Electronics Site (Site) located in Vestal in Broome County, New York. The Site inspection was performed to investigate general site conditions and look for any evidence of damage caused by severe weather events.

Overall the Site was in good condition except where noted. MW-13 was found to be overgrown with grassy foliage and weeds. A fallen tree was also seen nearby, likely caused by a storm event. MW-15 was unable to be found due to the immense overgrowth in its vicinity. TRC recommends that a qualified contractor be hired to clear out the foliage and fallen tree before the next sampling event.

The wells in the parking lots on the south side of the site were found to be in generally good condition. MW-101 was found to be missing a bolt.

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
Matthew Schappert	TRC	Project Scientist	0.5
Lucas Heaslip	TRC	Project Geologist	0.5

Equipment Description	Contractor/Vendor	Quantity	Used
Camera	TRC	1	Yes

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

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

Equipment/Material Tracking Comments: N/A

Visitors to Site

Name	Representing	Entered Exclusion/CRZ Zone	
N/A	**N/A**	**Yes**	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**

Site Representatives

Name	Representing
N/A	**N/A**

Project Schedule Comments

N/A

Issues Pending

N/A

Interaction with Public, Property Owners, Media, etc.

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

Site Photographs (Descriptions Below)

Photo 1: General area of MW-13, facing south.

Photo 2: MW-13 overgrown with vegetation.

Photo 3: Fallen tree nearby MW-13.

Photo 4: The approximate location of MW-15, overgrown by foliage.

Photo 5: Looking toward the approximate location of MW-15, facing east.	**Photo 6:** MW-102 located behind the building at the southern end of the Site, facing west.
Photo 7: MW-101 located in the parking lot at the southern end of the Site, facing east.	**Photo 8**: MW-101 with a missing bolt.

Comments	
N/A	
Site Inspector(s): Matthew Schappert, Lucas Heaslip	**Date: 08/18/2023**

Videos of discreet operations have been provided to the DEC Project Manager to facilitate understanding of the ongoing work? Yes ☐

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes ☒	No ☐
Is the tail gate safety meeting held outdoors?	Yes ☒	No ☐
Are remote/call in job meetings being held in lieu of meeting in person where possible?	Yes ☒	No ☐
Were personal protective gloves, masks, and eye protection being used?	Yes ☒	No ☐
Are sanitizing wipes, wash stations or spray available?	Yes ☒	No ☐
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes ☐	No ☒
Comments:		

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes ☐	No ☒
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes ☐	No ☒
3. Has anyone at this location had contact with anyone known to have COVID-19 in the past 14 days?	Yes ☐	No ☒
4. Does anyone at this location have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes ☐	No ☒
5. Does the Department and its contractors have your permission to enter the property at this time?	Yes ☐	No ☒
If Yes to any of 1-4 above: • If it is not critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone or conduct service without entry. • If it is critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry.	Yes ☐	No ☐
Comments: N/A		

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: N/A			

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: N/A			

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: N/A			

* BART – Best Available Retrofit Technology

APPENDIX E

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: MW-1
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 18.45
Initial static water level (feet from top of casing/riser) 12.05

Depth to 8 / 18 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	6.4 ft. of water x 0.16 =	___	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1.6 gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1550		12.42	6.69	18.07	1.70	6.8	5.23	215
1555		12.49	6.58	17.78	1.48	2.9	1.69	215
1600		12.50	6.50	17.52	1.19	0.0	1.17	214
1605		12.50	6.48	17.34	1.09	0.0	1.09	214
1610		12.51	6.47	17.26	1.40	0.0	0.94	213
1615		12.51	6.46	17.21	1.40	0.0	0.90	213
1620		12.51	6.47	17.19	1.40	0.0	0.87	213

Purge Volume: 1.6 Purging Time: 35mm
Purge Rate (gph): 2.74 gph

Sampling

Time of Sample Collection: 1620

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Small Cover with hex bolts, one Broken in tab, one missing
Weather/Temperature: 70°F P. Sunny S-10 South
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-33
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser): 18.89
Initial static water level (feet from top of casing/riser): 10.80
Depth to 5 / 20 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	8.09 ft. of water x 0.16 =	1.29	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1100		10.95	6.85	16.91	1.92	82.1	5.10	154
1105		11.18	6.60	18.08	1.99	71.4	2.17	154
1110		11.18	6.60	18.14	2.03	40.2	1.74	154
1115		11.18	6.59	18.14	2.04	11.8	1.83	156
1120		11.20	6.57	18.12	2.06	0.4	1.86	160
1125		11.20	6.57	18.12	2.06	0.1	1.83	161
1130		11.21	6.56	18.13	2.07	0.0	1.85	161
1135								

Purge Volume: Purging Time:
Purge Rate (gph):

Sampling

Time of Sample Collection: 1130

Method:		Analyses:	
	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
	Teflon bailer		MNA Parameters
	Pos. Disp. Pump		
	Disposable bailer		
X	Dedicated pump and tubing		

Observations

Well Observations: 2 of 3 threaded tabs broken, secured by 1 bolt. Good
Weather/Temperature: 48°F 10-15mph NW Overcast
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/26/21

WELL ID: MW-101
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 14.85
Initial static water level (feet from top of casing/riser)..... 6.20

Depth to 5 / 15 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	8.65	ft. of water x 0.04 =	1.38	gallons
2 in. casing:	~~6.37~~	ft. of water x 0.16 =	~~1.85~~	gallons
3 in. casing:		ft. of water x 0.37 =		gallons
4 in. casing:		ft. of water x 0.65 =		gallons
5 in. casing:		ft. of water x 1.02 =		gallons
6 in. casing:		ft. of water x 1.47 =		gallons

volume of water removed: 1.1 gal. >3 volumes: yes ____ no X purged dry? yes ____ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
0935	~150	6.30	6.87	16.43	0.861	0.0	2.83	205
0940		6.30	6.75	16.45	0.861	0.0	1.93	208
0945		6.31	6.55	16.52	0.857	0.0	1.15	216
0950		6.34	6.51	16.57	0.857	0.0	0.96	220
0955		6.38	6.50	16.56	0.858	0.0	0.96	221
1000		6.39	6.48	16.55	0.862	0.0	0.95	223
1005								
1010								

Purge Volume: Purging Time:
Purge Rate (gph): 2.2 gpm

Sampling

Time of Sample Collection: 1000 (41 Bottles)

mw-101-20211026; MS/MSD
DUP-2-20211026
Dup Collected for:
- VOCs
- 1,4 Dioxane
- PFAS

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- X MNA Parameters
- X 1,4-Dioxane
- X PFAS

Observations

Well Observations: 1 of 3 tubes broken, Good
Weather/Temperature: 52°F Rain 5-10mph NNE
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/20/21

WELL ID: MW-102
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 20.55
Initial static water level (feet from top of casing/riser)..... 7.35

Depth to 11 / 21 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =	___	gallons
2 in. casing:	13.2 ft. of water x 0.16 =	2.11	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1.1 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1205	~150	7.39	6.68	18.04	1.18	47.4	1.90	-126
1210		8.55	6.73	18.39	1.18	47.2	0.48	-131
1215		9.41	6.70	18.66	1.18	47.8	0.00	-134
1220		10.25	6.70	18.75	1.19	33.1	0.00	-135
1225		10.73	6.72	18.67	1.18	16.9	0.00	-135
1230		11.23	6.72	18.63	1.18	8.3	0.00	-135
1235		11.44	6.74	18.24	1.19	2.4	0.00	-137

Purge Volume: Purging Time: 35
Purge Rate (gph): 1.8gph

Turbidity dropping but fluctuates ~2 to 3 NTUs up & down.

Sampling

Time of Sample Collection: 1235

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	X	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Cellulose low profile

Observations

Well Observations: 1 of 3 tabs broken, Riser too high to use J-plug, Glove & Ziplock was intact from last year
Weather/Temperature: 52°F Heavy Rain 5-10mph N.
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

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FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: MW-103
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 19.44
Initial static water level (feet from top of casing/riser) 11.40

Depth to 9 / 19 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	8.04 ft. of water x 0.16 =	1.29	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 2 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1450	~150	11.40	7.02	19.15	3.14	16.9	17.68	177
1455		11.42	6.92	18.85	3.24	12.0	3.62	185
1500		11.42	6.72	18.58	3.58	0.9	3.59	205
1505		11:42	6.66	18.51	3.89	0.0	2.21	217
1510		11.42	6.62	18.47	3.99	0.0	2.05	225
1515		11.42	6.59	18.43	4.03	0.0	1.85	230
1520		11.42	6.57	18.41	4.01	0.0	1.74	234
1525		11.42	6.56	18.39	4.07	0.0	4.67	236
1530								

Purge Volume: 2 Purging Time: 45mm
Purge Rate (gph): ~2.66gph

MW-103_20211025
DUP-1_20211025 (COC

Sampling

Time of Sample Collection: 1525

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good evolution. Dedicated tubing slipped & had to recover.
Weather/Temperature: 73F Sunny 5-10mph S.
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/26/21

WELL ID: MW-104
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 47.70
Initial static water level (feet from top of casing/riser)..... 11.49

Depth to 38 / 48 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	36.21 ft. of water x 0.16 =	5.79	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1510	~150	11.83	7.20	15.91	0.832	0.0	0.00	-171
1515		11.80	7.34	15.80	0.838	0.0	0.00	-183
1520		11.80	7.40	15.78	0.840	0.0	0.00	-187
1525		11.83	7.41	15.62	0.836	0.0	0.00	-185
1530		11.85	7.40	15.59	0.837	0.0	0.00	-184
1535								
1540								
1545								
1550								

Purge Volume: Purging Time:
Purge Rate (gph):

Sampling

Time of Sample Collection: 1530

Method:		Analyses:	
	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
	Teflon bailer	X	MNA Parameters
	Pos. Disp. Pump	X	1,4 Dioxane
	Disposable bailer		
X	Dedicated pump and tubing		

Observations

Well Observations: Good, had to bail from surface water prior
Weather/Temperature: 50°F Rain 15-20 N
Sample description: Clear

Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: TW-1
SAMPLERS: GJS

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser) 19.05
Initial static water level (feet from top of casing/riser) 9.06
Depth to 10 / 20 of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	9.99 ft. of water x 0.16 =	1.60	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1355	250	9.18	6.93	20.69	0.995	0.0	2.72	93
1400		9.20	6.69	19.64	0.956	0.0	0.00	114
1405		9.18	6.52	19.37	0.963	0.0	0.00	129
1410		9.18	6.40	19.23	0.950	0.0	0.00	134
1415		9.19	6.37	19.12	0.954	0.0	2.9	128
1420								
1425								
1430								

Purge Volume: Purging Time:
Purge Rate (gph):

Sampling

Time of Sample Collection: 1415

Method:		Analyses:	
____	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
____	Teflon bailer	____	MNA Parameters
____	Pos. Disp. Pump	____	
____	Disposable bailer	____	
X	Dedicated pump and tubing	____	

Observations

Well Observations: 3 tabs - 1 tab broken/dead
Weather/Temperature: 72° Sunny S-10 South
Sample description: Clear

Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/26/21

WELL ID: TW-2
SAMPLERS: GTS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 19.25
Initial static water level (feet from top of casing/riser) 12.51
Depth to 10 / 20 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing		ft. of water x 0.04 =	gallons
2 in. casing:	6.74	ft. of water x 0.16 =	1.08 gallons
3 in. casing:		ft. of water x 0.37 =	gallons
4 in. casing:		ft. of water x 0.65 =	gallons
5 in. casing:		ft. of water x 1.02 =	gallons
6 in. casing:		ft. of water x 1.47 =	gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1350	~150	12.70	6.71	16.91	0.936	0.0	1.91	135
1355		12.75	6.59	17.02	0.890	0.0	0.23	138
1400		12.77	6.48	17.08	0.804	0.0	0.00	144
1405		12.84	6.34	17.19	0.704	0.0	0.00	158
1410		12.84	6.30	17.23	0.737	0.0	0.00	164
1415		12.84	6.29	17.24	0.737	0.0	0.00	166
1420		12.85	6.29	17.24	0.736	0.0	0.00	169
1425								

Purge Volume: Purging Time:
Purge Rate (gph):

Sampling

Time of Sample Collection: 1420

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- X MNA Parameters
- X 1,4 Dioxane
- X PFAS

Observations

Well Observations: Missing 1 of 3 b/l's (all labs present, Had to transfer water over Tyvek
Weather/Temperature: 52°F Rain 10-15 mph NNW
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

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FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: TW-3
SAMPLERS: GJS

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser): 18.44
Initial static water level (feet from top of casing/riser): 13.09
Depth to 16 / 20 of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	5.35 ft. of water x 0.16 =	0.90	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: 1.4 gal. >3 volumes: yes ____ no X purged dry? yes ____ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1645	~180	13.18	6.97	18.41	4.13	0.0	6.71	202
1650		13.20	6.89	18.34	4.14	0.0	4.45	210
1655		13.21	6.80	18.39	4.15	0.0	3.62	220
1700		13.23	6.76	18.42	4.22	0.0	3.20	225
1705		13.23	6.74	18.42	4.25	0.0	3.30	227
1710		13.24	6.74	18.40	4.27	0.0	3.28	228
1715								
1720								

Purge Volume: 1.4 Purging Time: 30
Purge Rate (gph): 2.8 gph

Sampling

Time of Sample Collection: 1710

Method:		Analyses:	
____	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
____	Teflon bailer	____	MNA Parameters
____	Pos. Disp. Pump	____	
____	Disposable bailer	____	
X	Dedicated pump and tubing	____	

Observations

Well Observations: Two tab Carb box, 1 bolt Stripped / Good.
Weather/Temperature: 70°F overcast S-10mph S.
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/25/21

WELL ID: TW-6
SAMPLERS: GTS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 18.24
Initial static water level (feet from top of casing/riser) 8.89

Depth to 9 / 19 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	9.35 ft. of water x 0.16 =	1.50	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 2 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1235	~180	9.13	6.55	18.76	1.16	36.2	1.09	176
1240		9.21	6.75	18.46	1.15	14.1	0.19	162
1245		9.23	6.79	18.52	1.14	5.9	0.00	151
1250		9.25	6.83	18.61	1.14	0.0	0.0	138
1255		9.25	6.85	18.69	1.14	0.0	0.0	126
1300		9.25	6.86	18.71	1.14	0.0	0.0	121
1305		9.25	6.86	18.73	1.14	0.0	0.0	116
1310		9.25	6.86	18.75	1.14	0.0	0.0	113
1315								
1320								

Purge Volume: Purging Time: 40 min
Purge Rate (gph): 3 gph

TW-6-20211025
also collected ms/msD

Sampling

Time of Sample Collection: 1310

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Dedicated tubing from 2020. Good conditions
Weather/Temperature: 70°F, Sunny 5-10mph South
Sample description: Clear

Free Product? yes ___ no X describe
Sheen? yes ___ no X describe
Odor? yes ___ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/28/21

WELL ID: MW-B
SAMPLERS: GTS

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser) 12.11
Initial static water level (feet from top of casing/riser)..... 8.49

Depth to 9.5 / 12.5 of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	6.58 ft. of water x 0.16 =	____	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
		4.25	7.79	17.95	0.671	256	1.05	-110
			6.58	16.95	0.862	>1000	0.36	-120
			Pump keeps going dry attempt low flow					
				*	do			

Purge Volume: Purging Time:
Purge Rate (gph):

tubing getting caught on lips in sidewall well did not recharge to collect sample with bailer

Sampling

Time of Sample Collection: _____

Method:		Analyses:	
____	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
____	Teflon bailer	____	MNA Parameters
____	Pos. Disp. Pump	____	
____	Disposable bailer	____	
X	Dedicated pump and tubing	____	

* No Sample Collected

Observations

Well Observations: _____
Weather/Temperature: _____
Sample description: _____
Free Product? yes ____ no ____ describe _____
Sheen? yes ____ no ____ describe _____
Odor? yes ____ no ____ describe _____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE: Hidden Valley Electronic (Site No. 704029) DATE: 10/27/21

WELL ID: TWMW-01
SAMPLERS: GJS

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser): 38.10
Initial static water level (feet from top of casing/riser): 12.30
Depth to 22.39 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	25.8 ft. of water x 0.04 =	1.03	gallons
2 in. casing:	___ ft. of water x 0.16 =	___	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1.75 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
0925	~150	12.30	7.10	16.88	1.09	0.0	1.83	-35
0930		1" pipe.	6.93	16.65	1.15	0.0	0.21	-16
0935		Cut from	6.84	16.37	1.20	0.0	0.00	10
0940		draw down	6.82	16.26	1.19	0.0	0.00	10
0945		purging	6.81	16.20	1.19	0.0	0.00	-12
0950			6.80	16.17	1.20	0.0	0.00	-20
0955			6.80	16.12	1.21	0.0	0.00	-26
1000			6.81	16.12	1.20	0.0	0.00	-28

Purge Volume: 1.75g Purging Time: 40 min
Purge Rate (gph): 2.6 gph

Sampling

Time of Sample Collection: 1000

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	X	MNA Parameters
___	Pos. Disp. Pump	X	1,4-Dioxane
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: 1 of 3 tabs broken, 1 bolt is bent. Good. Replaced 1 bolt.
Weather/Temperature: 45°F Overcast 5-10 mph NNW
Sample description: Clear
Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-26-21

WELL ID: RW-8
SAMPLERS: TG

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 20.00
Initial static water level (feet from top of casing/riser) 44.60

Depth to 28.9 / 43.9 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	ft. of water x 0.16 =		gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
15:35	15:35	20.00	6.70	13.63	42	0.0	0.99	-28
	15:40		6.71	13.64	43	0.0	0.42	-26
	15:45		6.71	13.64	45	0.0	0.31	-28

Purge Volume: 13
Purge Rate (gph):
Purging Time: 15:30 - 15:45

Sampling
Time of Sample Collection: 15:45

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ____ MNA Parameters

Observations
Well Observations: Good
Weather/Temperature: Rain
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-26-21

WELL ID: RW-9
SAMPLERS: TG

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 41.90
Initial static water level (feet from top of casing/riser) 20.75
Depth to 25, 40 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	ft. of water x 0.16 =		gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 1.25 gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
14:30		20.75	6.87	14.20	1.70	0.0	1.81	-16
14:35		20.75	6.87	14.19	1.70	0.0	1.71	-21
14:40		20.25		14.13	1.69		0.55	
14:45		20.25	6.87	14.12	1169	0.0	0.38	

1.69 -24 -28

Purge Volume: 1.25 gal Purging Time: 14:25 - 14:45
Purge Rate (gph):

Sampling

Time of Sample Collection: 14:45

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ____ MNA Parameters

Observations

Well Observations: Good
Weather/Temperature: 52°F Rain
Sample description: Clear

Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-7
SAMPLERS: GTS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 26.49
Initial static water level (feet from top of casing/riser) 18.30

Depth to 10 / 30 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	9.6 ft. of water x 0.16 =	1.37	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 0.75 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1205	~150	19.05	6.50	16.30	2.33	0.0	1.09	-36
1210		19.20	6.50	16.28	2.35	0.0	0.00	-52
1215		19.30	6.50	16.26	2.38	0.0	0.00	-56
1220		19.35	6.49	16.24	2.39	0.0	0.00	-57
1225								
1230								
1235								
1240								

Purge Volume: 0.75g Purging Time: 20
Purge Rate (gph): 2.5gph

Sampling

Time of Sample Collection: 1220

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: 1 of 3 tabs broken, No bolts
Weather/Temperature: 50° overcast 5-10mph NW
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes X no ___ describe Slight degraded gasoline odor.

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/26/21

WELL ID: MW-8
SAMPLERS: TG

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) .....
Initial static water level (feet from top of casing/riser) ..... 21.07 - 24.82

Depth to ____ / ____ of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	____ ft. of water x 0.16 =	____	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: ____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1325		21.53	6.86	15.31	1.96	0.0	1.80	-99
1330		21.70	6.89	15.08	1.95	0.0	0.44	-114
1335		21.71	6.89	14.99	1.93	0.0	0.32	-116
1340		21.72	6.89	14.94	1.91	0.0	0.28	-119

Purge Volume:
Purge Rate (gph):
Purging Time: 13:20 - 13:40

Sampling

Time of Sample Collection: 13:40

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ____ MNA Parameters

Observations

Well Observations: Good Condition
Weather/Temperature: Rain 52°F
Sample description: Clear

Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-9
SAMPLERS: GTS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 29.27
Initial static water level (feet from top of casing/riser) 18.23

Depth to 10 / 30 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	11.04 ft. of water x 0.16 =	1.77	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 0.75 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1240		18.43	6.38	16.84	4.40	0.0	0.85	-60
1245		18.46	6.35	16.94	4.49	1.9	0.00	-65
1250		18.47	6.33	17.01	4.52	0.0	0.00	-67
1255		18.48	6.33	17.07	4.55	0.0	0.00	-68
1300		18.50	6.34	17.14	4.59	0.0	0.0	-70
1305								

Purge Volume: Purging Time:
Purge Rate (gph): 1.8 gph

Sampling

Time of Sample Collection: 1300

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: 3 of 3 tabs broken, No bolts
Weather/Temperature: 50°F overcast 10-15mph NW
Sample description: Clear
Free Product? yes ___ no X describe
Sheen? yes ___ no X describe
Odor? yes X no ___ describe Slight degraded gasoline odor

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 12-26-21

WELL ID: MW-11
SAMPLERS: TRW

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) .....
Initial static water level (feet from top of casing/riser).....

Depth to ____ / ____ of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	____ ft. of water x 0.04 =	____	gallons
2 in. casing:	____ ft. of water x 0.16 =	____	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: 0.33 gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
12:35		20.69	6.89	15.59	1.73	2.8	0.66	202
12:40		20.92	6.88	15.66	1.73	0.0	0.60	202
12:45		21.07	6.88	15.70	1.73	0.0	0.38	200

Purge Volume: 0.33 gal Purging Time: 12:30 - 12:45
Purge Rate (gph):

Sampling

Time of Sample Collection: 12:45

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ____ MNA Parameters

Observations

Well Observations: Good Condition
Weather/Temperature: Rain 52°F
Sample description: Cloudy

Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-25-21

WELL ID: MW-13
SAMPLERS: Tracey Cortland

Time On-site: _____ Time Off-site: _____

Depth of well (feet from top of casing/riser) 22.09
Initial static water level (feet from top of casing/riser) 11.18

Depth to 9.5 / 12.5 of screen (top / bottom)

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	____

Well Volume Calculation:

1 in casing	10.91 ft. of water x 0.04 =	____	gallons
2 in. casing:	10.91 ft. of water x 0.16 =	1.75	gallons
3 in. casing:	____ ft. of water x 0.37 =	____	gallons
4 in. casing:	____ ft. of water x 0.65 =	____	gallons
5 in. casing:	____ ft. of water x 1.02 =	____	gallons
6 in. casing:	____ ft. of water x 1.47 =	____	gallons

volume of water removed: 1.0 gal. >3 volumes: yes ____ no X purged dry? yes ____ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1435 ~~1430~~		11.35	6.49	18.97	0.746	8.3	1.08	177
14:40 ~~13:40~~		11.38	6.23	17.26	0.417	23.8	2.10	196
14:45 ~~13:45~~		11.39	6.05	16.76	0.334	12.0	2.15	218
14:50 ~~13:50~~		11.40	6.08	16.50	0.367	3.7	2.21	224
14:55		11.40	6.07	16.42	0.386	0.0	2.05	225

Purge Volume: 1.0 gal Purging Time: ~~13:30~~ 14:30 - 14:55
Purge Rate (gph):

Sampling

Time of Sample Collection: 14:55

Method:		Analyses:	
____	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
____	Teflon bailer	____	MNA Parameters
____	Pos. Disp. Pump	____	
____	Disposable bailer	____	
X	Dedicated pump and tubing	____	

Observations

Well Observations: Covered by Vegetation. No lock on plug
Weather/Temperature: 73°F clear
Sample description: clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-25-21

WELL ID: MW-15
SAMPLERS: Tracey Orlud

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 24.00
Initial static water level (feet from top of casing/riser) 12.31

Depth to 5.125 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	11.69 ft. of water x 0.16 =	1.87	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 15 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1535		12.38	6.42	16.00	1.96	0.0	2.83	132
1540								
15:45		12.38	6.39	15.48	2.01	0.0	0.35	145
15:50		12.38	6.39	15.34	2.01	0.0	0.34	143

Purge Volume: 15 gal Purging Time: 15:30 - 15:50
Purge Rate (gph):

Sampling

Time of Sample Collection: 15:50

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Covered by vegetation
Weather/Temperature: 72°F Clear
Sample description: clear
Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE

WELL ID: MW-17
SAMPLERS: Tracey Corkum

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 22.73
Initial static water level (feet from top of casing/riser)..... 13.82

Depth to 5 / 25 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	8.91 ft. of water x 0.16 =	1.43	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 0.25 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
13:55		14.01	7.04	22.56	1.27	0.0	0.64	136
14:00		14.01	7.01	21.60	1.29	0.0	0.40	132
14:05		14.01	7.00	21.45	1.29	0.0	0.34	132

Purge Volume: 0.25 Purging Time: ~~13:45~~ 13:50 - 1405
Purge Rate (gph):

Sampling

Time of Sample Collection: 1405

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

MW-17_20210825

Observations

Well Observations: No lock, No bolts, concrete elevated above surrounding grade
Weather/Temperature: 72°F Clear
Sample description: Clear
Free Product? yes ___ no X describe
Sheen? yes ___ no X describe
Odor? yes ___ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/28/21

WELL ID: MW-19
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 19.45
Initial static water level (feet from top of casing/riser)..... 9.25

Depth to 5 / 20 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	10.2 ft. of water x 0.16 =	1.63	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: .75 gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1240	~150	9.25	6.32	14.66	1.39	0.0	0.94	8
1245		9.25	6.42	14.76	1.39	0.0	0.00	-6
1250		9.26	6.39	14.93	1.40	0.0	0.00	-9
1255		9.27	6.38	14.99	1.40	0.00	0.00	-10
1300								
1305								
1310								
1315								
1320								

Purge Volume: 0.75 Purging Time: 20
Purge Rate (gph): 2.25

Sampling

Time of Sample Collection: 1255

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good
Weather/Temperature: 46°F, 0-5mph Sunny
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/28/21

WELL ID: MW-20
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 17.48
Initial static water level (feet from top of casing/riser) 8.20

Depth to 3 / 18 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	9.28 ft. of water x 0.16 =	1.48	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 1 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1150	~150	8.39	6.31	14.38	0.958	0.1	0.35	162
1155		8.45	6.12	14.67	0.964	0.0	0.00	164
1200		8.50	6.11	14.85	0.965	0.0	0.00	163
1205		8.51	6.13	14.89	0.964	0.0	0.00	162
1210								
1215								
1220								
1225								

Purge Volume: 2 l Purging Time: 20 min
Purge Rate (gph): 3 gph

Sampling

Time of Sample Collection: 1205

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good
Weather/Temperature: 46°F Clear, 0-5mph East
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-26-21

WELL ID: MW-22
SAMPLERS: Tracey Gould

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 18.32
Initial static water level (feet from top of casing/riser)..... 11.16

Depth to 3 / 18 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	7.16 ft. of water x 0.16 =	1.15	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 2 gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
9:35		11.42	7.04	15.85	1.01	0.0	1.19	166
9:40		11.51	6.89	15.31	0.988	0.0	0.62	151
9:45		11.58	6.81	14.82	0.983	0.0	0.51	143
9:50		11.68	6.78	14.62	0.957	0.0	0.46	135
9:55		11.71	6.73	14.56	0.860	0.0	0.38	139
10:00	11.77	~~11.77~~	6.63	14.51	0.725	0.0	0.41	153
~~10:05~~		11.82	6.54	14.49	0.666	0.0	0.41	159
10:10		11.87	6.52	14.57	0.654	0.0	0.47	161

Purge Volume: 2 gal Purging Time: 9:30 - ~~9:55~~ 10:10
Purge Rate (gph):

Sampling

Time of Sample Collection: ~~9:55~~ 10:10

Method:
- ___ Stainless steel bailer
- ___ Teflon bailer
- ___ Pos. Disp. Pump
- ___ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- X MNA Parameters

Observations

Well Observations: Gerard Conelton
Weather/Temperature: Rain 57°F
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-25
SAMPLERS: GJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 24.10
Initial static water level (feet from top of casing/riser)..... 15.03

Depth to 10 / 25 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing		ft. of water x 0.04 =	gallons
2 in. casing:	9.07	ft. of water x 0.16 =	1.45 gallons
3 in. casing:		ft. of water x 0.37 =	gallons
4 in. casing:		ft. of water x 0.65 =	gallons
5 in. casing:		ft. of water x 1.02 =	gallons
6 in. casing:		ft. of water x 1.47 =	gallons

volume of water removed: 1 gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1520	250	15.13	6.77	16.70	0.991	9.7	9.02	127
1525		15.14	6.62	15.92	0.930	6.5	~~0.98~~ 4.83	148
1530		15.15	6.60	16.01	0.911	4.7	2.53	151
1535		15.15	6.58	16.17	0.910	0.0	2.43	156
1540		15.15	6.56	16.21	0.930	0.0	2.38	159
1545								
1550								
1555								
1600								

Purge Volume: 2 gal Purging Time: 25 min
Purge Rate (gph): 2.4 gph

Sampling

Time of Sample Collection: 1540

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good
Weather/Temperature: 55F Mostly Sunny 3-10 mph NW
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10-25-21

WELL ID: MW-26
SAMPLERS:

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 24.93
Initial static water level (feet from top of casing/riser)..... 16.04

Depth to 8.25 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	8.81 ft. of water x 0.16 =	1.33	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1.5 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
17:15		16.89	7.29	16.89	1.02	0.0	5.84	174
17:20		16.89	7.31	17.47	0.988	0.0	5.73	185
17:25		16.90	7.28	17.01	1.14	0.0	5.86	196
17:30		16.91	7.19	16.56	1.29	0.0	5.89	203
17:35		16.90	7.18	16.75	1.31	0.0	5.65	206

Purge Volume: 1.5gal Purging Time: 17:10 - 17:35
Purge Rate (gph):

Sampling

Time of Sample Collection: 17:35

Method:
- ___ Stainless steel bailer
- ___ Teflon bailer
- ___ Pos. Disp. Pump
- ___ Disposable bailer
- X Dedicated pump and tubing

Analyses:
- X USEPA Method 8260C TCL VOCs
- ___ MNA Parameters

Observations

Well Observations: Pulled tubing slightly in MW-26
Weather/Temperature: Cloudy 60°F
Sample description: Clear
Free Product? yes ___ no X describe
Sheen? yes ___ no X describe
Odor? yes ___ no X describe

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/28/21

WELL ID: MW-28
SAMPLERS: GES

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser) 32.22 ~~32.44~~
Initial static water level (feet from top of casing/riser) 18.30

Depth to 20 / 35 of screen (top / bottom)

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	___

Well Volume Calculation:

1 in casing	___ ft. of water x 0.04 =	___	gallons
2 in. casing:	13.92 ft. of water x 0.16 =	2.2	gallons
3 in. casing:	___ ft. of water x 0.37 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons
5 in. casing:	___ ft. of water x 1.02 =	___	gallons
6 in. casing:	___ ft. of water x 1.47 =	___	gallons

volume of water removed: 1 gal. >3 volumes: yes ___ no X purged dry? yes ___ no X

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1030		18.30	6.67	14.29	1.02	3.2	4.89	77
1035		18.35	6.77	13.92	1.03	0.0	4.37	69
1040		18.35	6.84	13.73	1.04	0.0	3.79	79
1045		18.35	6.87	13.66	1.04	0.0	3.69	80
1050		18.35	6.88	13.64	1.04	0.0	3.58	85
1055								
1100								
1105								

Purge Volume: 1 gal Purging Time: 25 mn
Purge Rate (gph): 2.4 gph

Sampling

Time of Sample Collection: 1050

Method:		Analyses:	
___	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
___	Teflon bailer	___	MNA Parameters
___	Pos. Disp. Pump	___	
___	Disposable bailer	___	
X	Dedicated pump and tubing	___	

Observations

Well Observations: Good Condition
Weather/Temperature: 41°F overcast, 0-5mph E
Sample description: Clear

Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

D&B ENGINEERS AND ARCHITECTS, P.C.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Hidden Valley Electronic (Site No. 704029) DATE 10/27/21

WELL ID: MW-31
SAMPLERS: CJS

Time On-site: Time Off-site:

Depth of well (feet from top of casing/riser): 21.20 / 18.70
Initial static water level (feet from top of casing/riser): 18.70

Depth to 15 / 30 of screen (top / bottom)

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Peri Pump (dedicated tubing)	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

1 in casing	ft. of water x 0.04 =		gallons
2 in. casing:	2.5 ft. of water x 0.16 =	0.4	gallons
3 in. casing:	ft. of water x 0.37 =		gallons
4 in. casing:	ft. of water x 0.65 =		gallons
5 in. casing:	ft. of water x 1.02 =		gallons
6 in. casing:	ft. of water x 1.47 =		gallons

volume of water removed: 1.25 gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Time	Purge Rate (ml/min)	Depth to Water (ft)	pH [+/-0.1 units]	Temp (c°) [3%]	Spec. Cond. (ms/cm) [3%]	Turbidity (NTUs) [10% >5 NTU]	DO (mg/l) [10% >0.5mg/l]	ORP (mv) [+/- 10]
1435	~150	18.88	6.73	15.71	1.19	121	4.35	112
1440		18.77	6.55	15.29	1.11	48.7	2.24	122
1445		18.78	6.48	15.10	1.06	2.2	1.09	132
1450		18.79	6.46	15.03	1.06	0.0	0.82	135
1455		18.78	6.48	15.02	1.06	0.0	0.66	137
1500		18.77	6.47	15.00	1.06	0.0	0.65	138
1505		18.77	6.48	15.00	1.06	0.0	0.64	139

Purge Volume: Purging Time: 35min
Purge Rate (gph): 2.14gph

Set tubing ~6" off of bottom

Sampling

Time of Sample Collection: 1505

Property being sold, buyer stopped by to inquire about what we were doing.

Method:		Analyses:	
	Stainless steel bailer	X	USEPA Method 8260C TCL VOCs
	Teflon bailer		MNA Parameters
	Pos. Disp. Pump		
	Disposable bailer		
X	Dedicated pump and tubing		

may be pipe joint

Hard bottom

Observations

Well Observations: ~8ft of Accumulation, Soft feel obstruction ~6ft bgs. ~6ft of Screen.
Weather/Temperature: 55°F Mostly Sunny 5-10mph NW wind
Sample description: Clear

Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	DATE:
SAMPLE ID: MW-9	START TIME:
SAMPLE TIME: 10:05	END TIME:
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	19.48 FT	FINAL DTW (BMP)	19.93 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	29.21 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
09:20	BEGIN PURGING									
09:30	19.48	100	15.9	4.052	6.54	1.65	7.44	-155.1	25	
09:35	19.48	100	16.0	4.393	6.54	1.58	4.17	-155.0	25	
09:40	19.48	100	15.9	4.669	6.55	1.61	8.21	-154.6	25	
09:45	19.48	100	15.9	4.844	6.55	1.58	8.82	-152.2	25	
09:50	19.48	100	15.9	4.930	6.55	1.57	2.35	-150.4	25	
09:55	19.48	100	15.9	5.004	6.55	1.62	7.42	-148.6	25	
10:00	19.48	100	15.9	5.067	6.56	1.66	9.91	-147.9	25	

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
- [X] WL METER Heron
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics	LOCATION ID		DATE	
PROJECT NUMBER		START TIME		END TIME	
SAMPLE ID	MW-7	SAMPLE TIME	09:00	SITE NAME/NUMBER		PAGE	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	19.40 FT	FINAL DTW (BMP)	20.15 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	26.37 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
08:00	BEGIN PURGING									
08:10	19.40	100	15.3	2.937	6.64	1.66	14.39	-152.4	22	
08:15	19.40	100	15.3	2.962	6.66	1.57	24.20	-153.0	22	
08:20	19.40	100	15.3	3.031	6.66	1.55	94.09	-152.2	22	
08:25	19.40	100	15.2	3.063	6.67	1.55	217.70	-151.3	22	
08:30	19.40	100	15.3	3.099	6.67	1.52	105.20	-149.9	22	
08:35	19.40	100	15.2	3.098	6.67	1.51	740.51	-149.9	22	
08:40	19.40	100	15.2	3.111	6.67	1.51	425.76	-150.9	22	*Sensor issues resolved
08:45	19.40	100	15.4	3.121	6.66	1.61	16.15	-149.8	22	
08:50	19.40	100	15.3	3.126	6.66	1.52	15.62	-150.6	22	
08:55	19.40	100	15.4	3.126	6.67	1.51	15.46	-153.0	22	

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	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[ ] PERISTALTIC	[ ] LIQUINOX	[ ] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[x] WL METER Heron
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[x] WQ METER YSI
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[x] TURB. METER YSI
[ ] OTHER	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[x] PUMP Pine Peri Pump
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER
	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hilton Valley Elec	LOCATION ID	MW-03
PROJECT NUMBER		DATE	11/9/22
SAMPLE ID	MW-03-20221109	START TIME	845
SAMPLE TIME	930	END TIME	945
SITE NAME/NUMBER		PAGE	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

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

INITIAL DTW (BMP)	22.9 FT	FINAL DTW (BMP)	23.1 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	30 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2 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
350	BEGIN PURGING									
900	23.0	200	13.7	1.851	7.10	0.32	118.27	-125.7	25	
910			13.6	1.847	7.09	0.21	119.18	-128.0	25	
915			13.5	1.837	7.06	0.19	120.36	-124.5	25	
920	23.1		13.4	1.823	7.04	0.19	123.02	-121.8	25	
925			13.5	1.834	7.04	0.20	123.00	-121.6	25	
930										

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: [X] 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: [X] WL METER Heron [ ] PID [X] WQ METER YSI [X] TURB. METER YSI [X] PUMP Pine Peri Pump [ ] OTHER [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] NO [ ]

NUMBER OF GALLONS GENERATED: 2

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

SKETCH/NOTES

MS/MSD Dup-02-20221109 Dupe 2 @ 1200

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec	LOCATION ID: MW-08
PROJECT NUMBER:	START TIME: 725
SAMPLE ID: MW-08-20221109	SAMPLE TIME:
SITE NAME/NUMBER:	DATE: 11/9/22
	END TIME:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [X] 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) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	21.15 FT	FINAL DTW (BMP)	22.85 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	+0.3 FT
WELL DEPTH (BMP)	30.0 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
750	BEGIN PURGING									
800	21.9	200	14.9	1.844	6.86	0.49	27.70	112.3	25	
810	22.65	"	15.0	1.846	6.88	0.41	28 37	116.6	25	
815	—	—	14.9	1.851	6.89	0.40	26.27	116.3	25	
820	22.85	—	15.0	1.847	6.83	0.47	25.77	118.5	25	
825	—	—	14.9	1.858	6.92	0.42	27.02	117.4	25	
830										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: [X] YES [ ] NO

NUMBER OF GALLONS GENERATED: 1.5

NO-PURGE METHOD UTILIZED: [ ] YES [ ] NO

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

SKETCH/NOTES

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	DATE:
SAMPLE ID: MW-17-20220409	START TIME:
SAMPLE TIME: 0940	END TIME:
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	14.68 FT	FINAL DTW (BMP)	14.88 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	22.63 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
0855	BEGIN PURGING									
0900	.20	100	14.7	1.376	6.84	0.89	-2.32	132.5	18	
0905	0	100	14.9	1.401	6.86	0.56	-3.05	128.4	18	
0910	0	100	14.6	1.408	6.88	0.50	-3.24	124.8	18	
0915	0	100	14.4	1.404	6.88	0.51	-2.80	123.2	18	
0920	0	100	14.5	1.400	6.89	0.43	-3.16	120.2	18	
0925	0	100	14.6	1.405	6.88	0.39	-3.11	119.9	18	
0930	0	100	14.6	1.405	6.88	0.37	-3.22	118.3	18	
0935	0	100	14.6	1.406	6.88	0.35	-3.18	118.2	18	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:	DATE:
PROJECT NUMBER:	START TIME:	END TIME:
SAMPLE ID: TW-3-20211109 / SAMPLE TIME: 0825	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	~~14.29~~ 14.29 FT	FINAL DTW (BMP)	14.29 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	18.44 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
0750	BEGIN PURGING									
0755	0	100	10.2	1,520	6.84	6.42	7.87	137.5	16.0	
0800	0	100	13.6	1,498	6.85	5.82	8.47	141.6	16.0	
0805	0	100	14.7	1.500	6.88	5.59	6.82	140.4	16.0	
0810	0	100	15.0	1,488	6.88	5.38	5.96	138.9	16.0	
0815	0	100	15.1	1483	6.88	5.37	5.23	138.5	16.0	
0820	0	100	14.7	1,481	6.88	5.29	4.76	138.3	16.0	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	DATE:
SAMPLE ID: MW-B-20221108	START TIME:
SAMPLE TIME:	END TIME:
	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			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	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
0730	BEGIN PURGING									
										Could not purge

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 Heron
- ☐ PID
- ☒ WQ METER YSI
- ☒ TURB. METER YSI
- ☒ PUMP Pine Peri Pump
- ☐ OTHER
- ☐ FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

went dry after 500 ml

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: ~~TWMW-01-20220105~~ TWMW-01-20220105	SAMPLE TIME: 0910
SITE NAME/NUMBER:	END TIME:
	DATE:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [X] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	13.31 FT	FINAL DTW (BMP)	13.31 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	38.11 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~~3~~ 1 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
0835	BEGIN PURGING									
0840	~~13.310~~	~~150~~ 150	15.5	1.464	6.62	1.44	9.18	-46.8	30	
0845	13.310	150	15.4	1.606	6.63	0.97	5.91	-40.7	30	
0850	13.310	150	15.5	1.734	6.65	0.65	0.33	0.9	30	
0855	13.310	150	15.3	1.747	6.66	0.50	-1.36	10.6	30	
0900	13.310	150	15.5	1.751	6.67	0.48	-2.20	14.9	30	
0905	0	150	15.5	1.752	6.67	0.46	-0.64	17.4	30	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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.

Sampler Signature: Print Name

Checked By: Justin King Date:

SKETCH/NOTES

- 1" PVC, could not have water level meter & tubing in at same time. Took initial depth, and depth after sampling
- MS/MSD/FB/EB for 1,4-Dioxane MNAP + VOC(2)

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD
10 Maxwell Drive, Suite 200, Clifton Park, NY 12065

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-104-20221108
SAMPLE TIME	1135

LOCATION ID	DATE
START TIME	END TIME
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			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	12.82 FT	FINAL DTW (BMP)	12.64 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	47.67 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1100		BEGIN PURGING								
1105		200	15.7	0.952	7.56	0.69	150.2	-157.7	40	
1110		200	15.7	0.962	7.70	0.44	99.26	-178.2	40	
1115		200	15.9	0.961	7.72	0.39	127.9	-179.2	40	
1120		200	15.9	0.963	7.73	0.35	123.4	-181.2	40	
1125		200	15.9	0.961	7.73	0.34	124.8	-182.1	40	
1130		200	15.9	0.959	7.74	0.33	127.3	-184.2	40	

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 Heron
- ☐ PID
- ☒ WQ METER YSI
- ☒ TURB. METER YSI
- ☒ PUMP Pine Peri Pump
- ☐ OTHER
- ☐ FILTERS NO. ____ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

SKETCH/NOTES

MW-104-20221108

TRC

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: TW-2-20221108	SAMPLE TIME: 1300
	SITE NAME/NUMBER:
	DATE:
	END TIME:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	13.23 FT	FINAL DTW (BMP)	13.43 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.16 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	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
1225	BEGIN PURGING									
1230	0.2	100	16.5	1.325	6.76	0.44	-2.83	67.4	15	
1235	0	100	16.4	1.325	6.76	0.37	-2.97	73.9	15	
1240	0	100	16.4	1.323	6.75	0.29	-2.73	78.3	15	
1245	0	100	16.3	1.318	6.76	0.27	-2.88	83.2	15	
1250	0	100	16.4	1.317	6.75	0.25	-3.01	83.7	15	
1255	0	100	16.5	1.318	6.75	0.25	-3.16	85.2	15	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-103-20221108
SAMPLE TIME	1450

LOCATION ID	
DATE	
START TIME	
END TIME	
SITE NAME/NUMBER	
PAGE	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	12.07 FT	FINAL DTW (BMP)	12.02 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.26 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1410	BEGIN PURGING									
1415	0	200	15.0	2.945	6.81	4.01	92.81	104.4	~~15~~ 17	
1420	0	100	14.0	2.989	6.83	3.70	74.2	115.8	~~15~~ 17	
1425	0	100	15.3	3.053	6.83	~~3.70~~ 3.71	>	122.5	~~15~~ 17	very turbid, raised tubing
1430	0	100	15.3	2.949	6.84	3.83	8.42	126.3	~~15~~ 15	
1435	0	100	16.0	3.048	6.83	3.33	4.73	128.1	15	
1440	0	100	15.7	3.073	6.84	3.24	4.98	128.9	15	
1445	0	100	15.3	3.085	6.84	3.19	3.31	130.1	15	

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
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec	LOCATION ID: MW-28
PROJECT NUMBER:	DATE: 11/8/22
SAMPLE ID: MW-28-20221108	START TIME: 730
SAMPLE TIME: 820	END TIME: 820
SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	26.2 FT	FINAL DTW (BMP)	26.3 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	+0.4 FT
WELL DEPTH (BMP)	32.5 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
740	BEGIN PURGING									
750	26.25	215	13.3	1.175	7.39	8.23	409.77	144.4		
800	—	—	13.3	1.175	7.38	8.10	29.40	147.4		
805	—	—	13.3	1.181	7.37	8.07	[illegible]	148.8		-13.67
810	26.3	—	13.4	1.181	7.37	8.12	13.20	149.0		
815	—	—	13.3	1.180	7.37	8.33	13.59	149.4		
820										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER _____
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] NO [ ]

NUMBER OF GALLONS GENERATED: 1.5

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

SKETCH/NOTES

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec		LOCATION ID: MW-31	DATE: 1/8/22
PROJECT NUMBER:		START TIME: 835	END TIME: 845
SAMPLE ID: MW-31-20220108	SAMPLE TIME: 920	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	20.9 FT	FINAL DTW (BMP)	FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	+0.4 FT
WELL DEPTH (BMP)	70.65 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	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
840	BEGIN PURGING									
850										
900										
905										
910										
915										
920										

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Dry

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec		LOCATION ID: MW-~~20~~22	DATE: 11/8/22
PROJECT NUMBER: 22		START TIME: 950	END TIME: 1030
SAMPLE ID: MW-~~20~~-20221108	SAMPLE TIME: 1030	SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	13.0 FT	FINAL DTW (BMP)	14.65 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	+ 0.35 FT
WELL DEPTH (BMP)	18.4 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
950	BEGIN PURGING									
1000	13.5	220	13.4	0.696	6.68	0.77	11.40	127.6	16	
1010	14.65	—	13.3	0.680	6.69	0.63	[illegible]	81.4	16	1021
1015	—	—	13.4	0.665	6.67	0.63	7.81	61.9	16	
1020	—	—	13.2	0.673	6.67	0.63	10.26	57.2	16	
1025	—	—	13.2	0.675	6.67	0.64	8.26	57.4	16	
1030										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] NO [ ]

NUMBER OF GALLONS GENERATED: 1.5

NO-PURGE METHOD UTILIZED: YES [ ] NO [ ]

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

SKETCH/NOTES

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec	LOCATION ID: MW-15
PROJECT NUMBER:	DATE: 11/8/22
SAMPLE ID: MW-15-20221108	SAMPLE TIME: 1400
	START TIME: 1320
	END TIME: 1415
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	15.0 FT	FINAL DTW (BMP)	15.9 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	-0.6 FT
WELL DEPTH (BMP)	24.0 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2 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
1320	BEGIN PURGING									
1330	15.6	225	13.2	1.935	6.56	0.59	40.40	-71.7	20	
1340	15.8	—	13.2	1.920	6.56	0.51	42.60	-82.9	20	
1345	15.85	—	13.2	1.927	6.57	0.56	43.62	-87.3	20	
1350	—	—	13.1	1.930	6.57	0.53	43.11	-89.1	20	
1355	—	—	13.1	1.931	6.57	0.51	42.57	-89.7	20	
1400										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: [X] YES [ ] NO

NUMBER OF GALLONS GENERATED: 2

NO-PURGE METHOD UTILIZED: [ ] YES [ ] NO

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

SKETCH/NOTES

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec	LOCATION ID: RW-8
PROJECT NUMBER:	DATE: 11/8/22
SAMPLE ID: RW-08-20221108	SAMPLE TIME: 1540
	START TIME: 1445
	END TIME: 1550
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 4 [X] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [ ] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [ ] TOP OF RISER (TOR) [x] TOP OF CASING (TOC) [ ] OTHER

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

INITIAL DTW (BMP)	21.7 FT	FINAL DTW (BMP)	22.8 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	1.7 FT
WELL DEPTH (BMP)	44.8 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1500	BEGIN PURGING									
1510	2.75	175	13.0	1.728	6.80	0.62	1.33	-30.5	30	
1520	—	—	12.9	1.728	6.80	0.52	0.80	-35.8	30	
1525	—	—	12.9	1.729	6.80	0.49	0.20	-38.2	30	
1530	—	—	12.9	1.729	6.80	0.50	0.63	-39.5	30	
1535	—	—	12.9	1.729	6.80	0.10	0.49	-41.2	30	
1540										

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
- [X] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] 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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: RW-9	SAMPLE TIME: 15:55
	SITE NAME/NUMBER:
	DATE:
	END TIME:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	22.40 FT	FINAL DTW (BMP)	22.50 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	40.37 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
15:10	BEGIN PURGING									
15:20	22.50	100	13.1	1.960	6.39	2.08	6.45	-37.9	30	
15:25	22.51	100	13.1	1.961	6.39	1.98	5.41	-41.1	30	
15:30	22.51	100	13.0	1.960	6.39	1.92	7.62	-42.8	30	
15:35	22.52	100	13.1	1.962	6.39	1.91	5.75	-43.6	30	
15:40	22.52	100	13.0	1.965	6.39	1.91	4.69	-43.9	30	
15:45	22.52	100	12.9	1.973	6.39	1.89	6.00	-44.6	30	
15:50	22.52	100	12.8	1.974	6.38	1.89	4.25	-45.0	30	

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
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: M	
PROJECT NUMBER:	
SAMPLE ID: MW-20	SAMPLE TIME: 13:05

LOCATION ID:	DATE:
START TIME:	END TIME:
SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	11.40 FT	FINAL DTW (BMP)	11.47 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	17.15 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
12:20	BEGIN PURGING									
12:30	11.40	100	12.9	1.957	6.42	1.83	85.12	-35.9	15	
12:35	11.40	100	12.9	1.954	6.41	1.86	17.21	-36.8	15	
12:40	11.40	100	12.8	1.953	6.41	1.86	6.43	-38.8	15	
12:45	11.40	100	12.8	1.952	6.40	1.82	4.33	-40.2	15	
12:50	11.40	100	12.8	1.951	6.40	1.80	3.26	-41.2	15	
12:55	11.40	100	12.8	1.951	6.39	1.78	2.82	-42.0	15	
13:00	11.40	100	12.7	1.951	6.39	1.76	2.62	-42.9	15	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: MW-19	SAMPLE TIME: 10:45
	SITE NAME/NUMBER:
	DATE:
	END TIME:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	12.45 FT	FINAL DTW (BMP)	12.45 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.5 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
10:00	BEGIN PURGING									
10:10	12.47	100	13.1	2.066	6.62	1.94	19.33	-78.6	15	
10:15	12.47	100	13.4	2.058	6.61	1.82	11.90	-80.6	15	
10:20	12.48	100	13.6	2.059	6.60	1.75	8.10	-83.0	15	
10:25	12.48	100	13.6	2.062	6.60	1.72	6.30	-84.9	15	
10:30	12.48	100	13.7	2.059	6.60	1.71	4.28	-85.4	15	
10:35	12.49	100	13.7	2.063	6.60	1.71	3.37	-85.9	15	
10:40	12.49	100	13.8	2.060	6.60	1.71	2.65	-85.7	15	

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
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-26
SAMPLE TIME	08:10

LOCATION ID	DATE
START TIME	END TIME
SITE NAME/NUMBER	PAGE 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	19.85 FT	FINAL DTW (BMP)	21.40 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	24.55 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
07:35	BEGIN PURGING									
07:40	19.85	100	13.2	2.188	6.62	5.22	9.34	-34.8	23	
07:45	19.85	100	13.5	2.286	6.52	4.98	12.55	-31.0	23	
07:50	19.85	100	13.6	2.284	6.55	5.13	11.46	-29.7	23	
07:55	20.99	100	13.6	2.300	6.52	5.19	9.73	-27.4	23	
08:00	20.99	100	13.6	2.304	6.51	5.32	8.15	-24.9	23	
08:05	21.08	100	13.6	2.298	6.51	5.52	8.53	-21.3	23	
08:10										

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
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-25
SAMPLE TIME	09:30

LOCATION ID	DATE
START TIME	END TIME
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			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	18.04 FT	FINAL DTW (BMP)	18.28 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	24.3 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
08:45	BEGIN PURGING									
08:55	18.35	100	13.9	1.966	6.71	2.09	73.11	-65.2	20	
09:00	18.35	100	14.0	1.963	6.69	1.90	36.17	-66.7	20	
09:05	18.37	100	14.1	1.963	6.69	1.84	18.40	-67.4	20	
09:10	18.37	100	14.1	1.966	6.69	1.83	9.90	-68.6	20	
09:15	18.30	100	14.2	1.966	6.69	1.82	7.11	-69.7	20	
09:20	18.30	100	13.8	1.969	6.69	1.83	6.68	-70.6	20	
09:25	18.31	100	14.0	1.967	6.70	1.78	7.77	-71.5	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 Heron
- ☐ PID
- ☒ WQ METER YSI
- ☒ TURB. METER YSI
- ☒ PUMP Pine Peri Pump
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	START TIME:
SAMPLE ID: MW-13	SAMPLE TIME: 14:25
	DATE:
	END TIME:
	SITE NAME/NUMBER:
	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	13.45 FT	FINAL DTW (BMP)	13.66 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	23.3 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
13:40	BEGIN PURGING									
13:50	13.45	100	12.8	2.310	6.51	1.70	12.43	-70.0	20	
13:55	13.45	100	12.9	2.315	6.50	1.67	8.07	-72.2	20	
14:00	13.45	100	12.8	2.321	6.51	1.64	6.51	-74.8	20	
14:05	13.45	100	12.8	2.322	6.51	1.63	4.04	-76.0	20	
14:10	13.45	100	12.8	2.326	6.51	1.63	8.44	-77.3	20	
14:15	13.45	100	12.8	2.328	6.51	1.62	8.62	-78.7	20	
14:20	13.45	100	12.7	2.331	6.51	1.62	2.82	-79.9	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
- [x] 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
- [x] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [x] WL METER Heron
- [ ] PID
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								
[ ]								

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Midland Valley Electronics
PROJECT NUMBER	
SAMPLE ID	MW-101-20221107
SAMPLE TIME	1340

LOCATION ID	DATE
START TIME	END TIME
SITE NAME/NUMBER	PAGE 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	7.88 FT	FINAL DTW (BMP)	7.92 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	14.74 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~~1.5~~ 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
1300	BEGIN PURGING									
1305	7.88	100	14.8	1.365	6.75	4.81	2.04	163.1	10	
1310	7.88	100	14.8	1.380	6.79	4.97	1.35	162.3	10	
1315	7.92	100	14.7	1.373	6.83	4.98	0.22	161.7	10	
1320	7.92	100	15.2	1.379	6.87	5.02	0.15	162.2	10	
1325	7.92	100	14.9	1.392	6.89	5.08	0.11	162.4	10	
1330	7.92	100	14.7	1.385	6.87	5.15	0.10	162.7	10	

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
- [x] WL METER Heron
- [ ] PID _____
- [x] WQ METER YSI
- [x] TURB. METER YSI
- [x] PUMP Pine Peri Pump
- [ ] OTHER _____
- [ ] FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Electronics
PROJECT NUMBER	
SAMPLE ID	TW-6
SAMPLE TIME	14:005

LOCATION ID	DATE
START TIME	END TIME
SITE NAME/NUMBER	PAGE 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	9.77 FT	FINAL DTW (BMP)	10.00 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	18.01 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2 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
13:10	BEGIN PURGING									
13:15	9.77	100	18.3	2.023	7.05	3.7	46.00	-70.7	15	
13:20	9.77	100	18.3	2.024	7.05	2.9	41.82	-72.8	15	
13:25	9.77	100	18.1	2.026	7.05	2.3	31.28	-75.8	15	
13:30	9.77	100	18.1	2.022	7.05	2.19	29.30	-77.4	15	
13:35	9.77	100	18.2	2.023	7.05	2.12	25.36	-78.8	15	
13:40	9.77	100	18.4	2.021	7.06	2.08	18.85	-79.5	15	
13.45	9.77	100	20.0	2.037	7.07	2.15	18.00	-79.9	15	
13:50	9.77	100	17.5	2.019	7.05	2.12	17.40	-82.2	15	
13:55	9.77	100	17.5	2.016	7.05	1.86	17.55	-83.9	15	
14:00	9.77	100	17.4	2.020	7.05	1.74	17.38	-84.9	15	

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
- [v] 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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Electronics	LOCATION ID:
PROJECT NUMBER:	DATE:
SAMPLE ID: TW-1	START TIME:
SAMPLE TIME: 15:15	END TIME:
SITE NAME/NUMBER:	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [x] 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) [x] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	9.40 FT	FINAL DTW (BMP)	9.91 FT	PROT. CASING STICKUP (AGS)	FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	19.07 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 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
14:30	BEGIN PURGING									
14:35	9.40	100	18.1	2.044	6.76	1.63	23.40	-64.9	15	
14:40	10.20	100	17.9	2.057	6.75	1.54	26.30	-69.3	15	
14:45	10.20	100	17.8	2.073	6.76	1.49	25.85	-73.5	15	
14:50	10.20	100	17.7	2.073	6.76	1.48	53.32	-75.7	15	
14:55	10.26	100	17.6	2.078	6.76	1.46	38.18	-77.4	15	
15:00	10.20	100	17.6	2.085	6.77	1.46	33.91	-78.8	15	
15:05	10.20	100	17.6	2.094	6.77	1.45	31.40	-79.4	15	
15:10	10.42	100	17.6	2.102	6.77	1.45	35.02	-81.4	15	

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
- [X] WL METER Heron
- [ ] PID
- [X] WQ METER YSI
- [X] TURB. METER YSI
- [X] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS

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

Sampler Signature: Print Name

Checked By: Justin King Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Hidden Valley Elec		LOCATION ID: MW-53	DATE: 11/7/22
PROJECT NUMBER:		START TIME: 1245	END TIME: 1345
SAMPLE ID: MW-53-20221107	SAMPLE TIME: 1335	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	✓		
CASING	✓		
LOCKED	✓		
COLLAR			✓

INITIAL DTW (BMP)	13.4 FT	FINAL DTW (BMP)	13.7 FT	PROT. CASING STICKUP (AGS)	— FT	TOC/TOR DIFFERENCE	+ 0.7 FT
WELL DEPTH (BMP)	18.9 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1255	BEGIN PURGING									
1305	13.8	250	18.0	1.713	7.10	31.7	15.86	131.5	15	
1315	—	—	18.1	1.782	7.08	31.4	18.45	129.6	15	
1320	—	—	18.0	1.850	7.05	33.3	15.44	131.1	15	
1325	13.6	—	17.9	1.897	7.02	33.8	12.87	132.1	15	
1330	13.7	—	17.9	1.907	7.01	35.3	14.04	132.6	15	
1335										

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 Alconox

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

PURGE OBSERVATIONS

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

NUMBER OF GALLONS GENERATED: 2

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

SKETCH/NOTES

~~MW-53~~ DUP-01-20221107 @1200

Dup

Sampler Signature: Print Name:

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Hidden Valley Elec	LOCATION ID	MW-01
PROJECT NUMBER		DATE	11/7/22
SAMPLE ID	MW-01-221107	START TIME	1400
SAMPLE TIME	1440	END TIME	1445
		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)	13.3 FT	FINAL DTW (BMP)	13.6 FT	PROT. CASING STICKUP (AGS)	— FT	TOC/TOR DIFFERENCE	0.6 FT
WELL DEPTH (BMP)	18.5 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	PPM	REFILL TIMER SETTING	SEC
WATER COLUMN	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)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1 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
1400	BEGIN PURGING									
1410	13.5	250	17.1	1.503	6.74	3.15	8.67	168.8	15	
1420	13.6	—	16.9	1.500	6.75	3.20	8.62	168.2	15	
1425	—	—	16.8	1.497	6.75	3.11	5.13	168.0	15	
1430	—	—	16.9	1.498	6.75	3.26	9.66	168.0	15	
1435	—	—	16.9	1.498	6.75	3.20	9.62	168.2	15	
1440										

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

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☒ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☐ NO

NUMBER OF GALLONS GENERATED: 2.125

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

SKETCH/NOTES

MS/MSD

Sampler Signature: Print Name:

Checked By: Date:

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CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name:	TRC
Address:	215 Greenfield Parkway, Suite 102, Liverpool NY 13088
Phone:	
Project Name:	Hidden Valley Electronics
Project Location:	Vestal, NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	MHOSKINS@TRCCOMPANIES
Sampled By:	MS

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	# of Containers	[2] Preservation Code	[3] Container Code	1,4-Dioxane SIM
	MW-101-20221107	1340	11/7/22		X	GW		2		A	X
	TWMW-01-20221108	0910	11/8/22		X						X
	TWMW-01-MS-20221108	0910	11/8/22		X						X
	TWMW-01-MSD-20221108	0910	11/8/22		X						X
	EB-02	1200	11/8/22		X						X
	MW-104-20221104	1135	11/8/22		X						X
	FB-02	1200	11/8/22		X						X
	TW-2-20221108	1300	11/8/22		X						X

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☒ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Phone:	
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Project Location:	Vestal, NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	mhoskins@TRLcompanies.com
Sampled By:	MS

Requested Turnaround Time
7-Day [X] 10-Day [ ]
Due Date:

Rush-Approval Required
1-Day [ ] 3-Day [ ]
2-Day [ ] 4-Day [ ]

Data Delivery
Format: PDF [X] EXCEL [ ]
Other:
CLP Like Data Pkg Required: [ ]
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	PFAs 537 M	# of Containers	[2] Preservation Code	[3] Container Code
	MW-101-20221107	1340	11/7/22		X	GW		X	2		P
	MW-101-MS-20221107	1340			X			X			
	MW-101-MSD-20221107	1340			X			X			
	DUP-01-20221107	1200			X			X			
	FD-01	1200			X			X			
	EB-01	1200	↓		X			X			
	TW-2-20221108	1300	11/8/22		X			X			
	MW-11-20221109	0830	11/9/22		X	↓		X			

ANALYSIS REQUESTED

Dissolved Metals Samples
[ ] Field Filtered
[ ] Lab to Filter

Orthophosphate Samples
[ ] Field Filtered
[ ] Lab to Filter

[1] **Matrix Codes:**
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SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
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H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
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ST = Sterile
V = Vial
S = Summa Canister
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O = Other (please define)

Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
[ ] AWQ STDS
[ ] NYC Sewer Discharge
[ ] Part 360 GW (Landfill)
[ ] NY Restricted Use
[ ] NY Unrestricted Use
[ ] NY Part 375
[ ] NY TOGS
[ ] NY CP-51
Other:

Deliverables
[ ] Enhanced Data Package
[X] NYSDEC EQuIS EDD
[ ] EQuIS (Standard) EDD
[ ] NY Regulatory EDD
[ ] NY Regs Hits-Only EDD
Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
[ ] Government [ ] Municipality [ ] MWRA [ ] WRTA
[ ] Federal [ ] 21 J [ ] School
[ ] City [ ] Brownfield [ ] MBTA

Other
[ ] Chromatogram
[ ] *AIHA-LAP,LLC*

PCB ONLY
[ ] Soxhlet
[ ] Non Soxhlet

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Company Name:	TRC
Address:	215 Greenfield Parkway, Suite 102 Liverpool NY 13088
Phone:	
Project Name:	Hidden Valley Electronics
Project Location:	Vestal, NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	MHOSKINS@TRCCOMPANIES.COM
Sampled By:	MS

Requested Turnaround Time
7-Day [X] 10-Day [ ]
Due Date:

Rush-Approval Required
1-Day [ ] 3-Day [ ]
2-Day [ ] 4-Day [ ]

Data Delivery
Format: PDF [X] EXCEL [ ]
Other:
CLP Like Data Pkg Required: [ ]
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	8260 TCL/TIC	Methane/Ethane/Ethene	Iron/Manganese	Carbon Dioxide	Alkalinity SM2320B	Sulfide SM4500S-F	Nitrate/Nitrite, Sulfate, Chloride, pH	TOC
	MW-26-20221108	0810	11/8/22		G	GW		X							
	MW-19-20221108	1045	11/8/22					X							
	MW-20-20221108	1305	11/8/22					X							
	RW-9-20221108	1555	11/8/22					X							
	RW-08-20221108	1540	11/8/22					X							
	MW-15-20221108	1400	11/8/22					X							
	MW-22-20221108	1030	11/8/22					X	X	X	X	X	X	X	X
	MW-28-20221108	0820	11/8/22					X							
	MW-103-20221108	1450	11/8/22					X							
	TW-2-20221108	1300	11/8/22					X	X	X	X	X	X	X	X

[2] Preservation Code	H	H	N	H		X		O	
[3] Container Code	V	V	P	V	P	P	P	A	

ANALYSIS REQUESTED

Dissolved Metals Samples
[ ] Field Filtered
[ ] Lab to Filter

Orthophosphate Samples
[ ] Field Filtered
[ ] Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
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DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define) Phosphoric Acid

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
[ ] AWQ STDS [ ] NY TOGS
[ ] NYC Sewer Discharge [ ] NY CP-51
[ ] Part 360 GW (Landfill)
[ ] NY Restricted Use
[ ] NY Unrestricted Use
[ ] NY Part 375
Other:

Deliverables
[ ] Enhanced Data Package
[X] NYSDEC EQuIS EDD
[ ] EQuIS (Standard) EDD
[ ] NY Regulatory EDD
[ ] NY Regs Hits-Only EDD
Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
[ ] Government [ ] Municipality [ ] MWRA [ ] WRTA
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Other
[ ] Chromatogram
[ ] *AIHA-LAP,LLC*

PCB ONLY
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[ ] Non Soxhlet

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Minneapolis, MN 55414

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Address:	215 Greenfield Parkway, Suite 102, Liverpool NY 13088
Phone:	
Project Name:	Hidden Valley Electronics
Project Location:	Vestal, NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	MHOSKINS@TRCCOMPANIES.COM
Sampled By:	MS

Requested Turnaround Time
7-Day [X] 10-Day [ ]
Due Date:

Rush-Approval Required
1-Day [ ] 3-Day [ ]
2-Day [ ] 4-Day [ ]

Data Delivery
Format: PDF [X] EXCEL [ ]
Other:
CLP Like Data Pkg Required: [ ]
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	Conc Code	8260 TCL/TIC	Methane/Ethane/Ethene	Iron/Manganese	Carbon Dioxide	Alkalinity SM2320B	Sulfide SM4500S-F	Nitrate/Nitrite/Sulfate	TOC			
	MW-33-20221107	1335	11/7/22		X	GW		X										
	MW-01-20221107	1440	11/7/22		X			X										
	MW-01-MS-20221107	1440	11/7/22		X			X										
	MW-01-MSD-20221107	1440	11/7/22		X			X										
	DUP-01-20221107	1200	11/7/22		X			X										
	TW-1-20221107	1515	11/7/22		X			X										
	TW-6-20221107	1405	11/7/22		X			X										
	MW-101-20221107	1340	11/7/22		X			X	X	X	X	X	X	X	X			
	MW-13-20221108	1425	11/8/22		X			X										
	MW-25-20221108	0930	11/8/22		X			X										

	2	2	1	2	1	1	1	1			
[2] # of Containers											
[2] Preservation Code	H	H	N	H		X		O			
[3] Container Code	V	P	P	V	P	P	P	A			

ANALYSIS REQUESTED

Dissolved Metals Samples
[ ] Field Filtered
[ ] Lab to Filter

Orthophosphate Samples
[ ] Field Filtered
[ ] Lab to Filter

Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
[ ] AWQ STDS [ ] NY TOGS
[ ] NYC Sewer Discharge [ ] NY CP-51
[ ] Part 360 GW (Landfill)
[ ] NY Restricted Use
[ ] NY Unrestricted Use
[ ] NY Part 375
Other:

Deliverables
[ ] Enhanced Data Package
[X] NYSDEC EQuIS EDD
[ ] EQuIS (Standard) EDD
[ ] NY Regulatory EDD
[ ] NY Regs Hits-Only EDD
Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
[ ] Government [ ] Municipality [ ] MWRA [ ] WRTA
[ ] Federal [ ] 21 J [ ] School
[ ] City [ ] Brownfield [ ] MBTA

Other
[ ] Chromatogram
[ ] *AIHA-LAP,LLC*

PCB ONLY
[ ] Soxhlet
[ ] Non Soxhlet

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define) Phosphoric Acid

[3] Container Codes:
A = Amber Glass
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T = Tedlar Bag
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Project Location:	Vestal NY
Project Number:	470744.0025
Project Manager:	Matthew Hoskins
Pace Analytical Quote Name/Number	
Invoice Recipient:	MHOSKINS@TRCCOMPANIES.COM
Sampled By:	MH

Requested Turnaround Time
7-Day [X] 10-Day [ ]
Due Date:

Rush-Approval Required
1-Day [ ] 3-Day [ ]
2-Day [ ] 4-Day [ ]

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Other:
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Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc. Code	8260 TCL/TIC	Methane/Ethane/Ethene	Iron/Manganese	Carbon Dioxide	Alkalinity SM2320B	Sulfide SM4500S-F	Nitrate/Nitrite/Sulfate/Chloride/PH	TOC				
								2	2	1	2	1	1	1	1				# of Containers
								H	H	NZ	H		X		O				[2] Preservation Code
								V	V	P	V	P	P	P	A				[3] Container Code
	MW-104-20221108	1135	11/8/22		6	GW		X	X	X	X	X	X	X	X				
	TWMW-01-20221108	0910	11/8/22					X	X	X	X	X	X	X	X				
	TRIPBLANK	—	—					X											
	MW-17-20221109	0940	11/9/22					X											
	TW-3-20221109	825	11/9/22					X											
	MW-08-20221109	0930	11/9/22					X											
	MW-08-MS-20221109	0930	11/9/22					X											
	MW-08-MSD-20221109	0936	11/9/22					X											
	DUP-02	1200	11/9/22					X											
	TRIPBLANK	—	—					X											

ANALYSIS REQUESTED

Dissolved Metals Samples
[ ] Field Filtered
[ ] Lab to Filter

Orthophosphate Samples
[ ] Field Filtered
[ ] Lab to Filter

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Program & Regulatory Information
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Other:
NELAC and AIHA-LAP, LLC Accredited

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Page 4 of 4

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Sampled By:	MS

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1-Day ☐ 3-Day ☐
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Data Delivery
Format: PDF ☒ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

| Pace Analytical Work Order# | Client Sample ID / Description | Beginning Date/Time | Ending Date/Time | Composite | Grab | [1]Matrix Code | Conc Code | 2 | H | V | 8260 TCL/TIL | | |

APPENDIX F

APPENDIX F

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION CHECKLIST

Project Name:	Hidden Valley
Project Number:	3150-45Y
Sample Date(s):	May 15, 2020
Matrix/Number of Samples:	Air/ 1 (IAEW3A20)
Analyzing Laboratory:	Eurofins TestAmerica, Knoxville, TN
Analyses:	VOC by EPA TO-15
Laboratory Report No:	140-19103 Date: 5/28/2020

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA Hazardous Waste Support Branch Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method T0-15, September 2016, method performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

ORGANIC ANALYSES
VOC

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Method blanks		X		X	
3. Surrogate %R		X		X	
4. Laboratory Control Sample (LCS) spike %R		X		X	
5. Instrument performance check		X		X	
6. Internal standard retention times and areas		X		X	
7. Initial calibration RRF's and %RSD's		X		X	
8. Continuing calibration RRF's and %D's		X		X	
9. Transcriptions – quant report vs. Form I		X		X	

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 8/13/2020
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS, P.C.

`DATA VALIDATION CHECKLIST

Project Name:	Hidden Valley
Project Number:	3150-45Y
Sample Date(s):	October 6, 2020
Sample Team:	GS/TG
Matrix/Number of Samples:	Water/ 8 Field Duplicates/ 1 Trip Blank / 1 Field Blank/ 0
Analyzing Laboratory:	Eurofins TestAmerica, Buffalo, NY or Burlington, VT
Analyses:	Volatile Organic Compounds (VOCS): by method SW846 8260C at Buffalo, NY 1,4-Dioxane: by method SW846 8270D SIM at Buffalo, NY Metals: by SW846 method 6010C iron and manganese at Buffalo, NY Other: Methane, ethane and ethene (dissolved gases) by method RSK-175; chloride and sulfate by method 300.0; nitrate and nitrite by method 353.2; total organic carbon by method 9040A; sulfide by SM 4500 S2 F; and alkalinity by method SM2320B at Buffalo, NY; and carbon dioxide (dissolved gases) by method RSK-175 at Burlington, VT
Laboratory Report No:	480-176136 Date: 10/16/2020

ANALYTICAL DATA PACKAGE DOCUMENTATION
GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017 or USEPA National Functional Guidelines of Inorganic Data Review, January 2017, method performance criteria, and D&B Engineers and

Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS, P.C.

Custody Numbers: 480-176136
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis			
				VOC	1,4-Dioxane	Metals	Other
MW-101	480-176136-1	10/6/2020		X	X	X	X
MW-25	480-176136-2	10/7/2020		X			
TW-6	480-176136-3	10/7/2020		X			
MW-102	480-176136-4	10/7/2020		X		X	X
MW-26	480-176136-5	10/7/2020		X			
TW-3	480-176136-6	10/7/2020		X			
MW-28	480-176136-7	10/7/2020		X			
MW-104	480-176136-8	10/7/2020		X	X	X	X
DUP-1	480-176136-9	10/7/2020	MW-104	X	X		
TRIP BLANK	480-176136-10	10/7/2020		X			

ORGANIC ANALYSES
VOCS & 1,4-Dioxane

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Rinse blanks		X		X	
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory control sample (LCS) %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

3&6. The VOC 1,4-dioxane and 2-hexanone RPDs were above QC limits in the MS/MSD associated with all samples. It was not detected in the associated samples therefore qualification of the data was not necessary.

12. 1,4-Dioxane was reported with an E flag by the lab due to a bias correction based on the recovery of the 1,4-dioxane-d8 for sample MW-104. The E flag was removed from the sample MW-104.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample (LCS) %R		X		X	
8. Matrix spike (MS) %R		X		X	
9. Post digestive spike sample %R		X		X	
10. Duplicate RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD					X

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

2A. Manganese was detected in the method blank and it was detected at a concentration in the associated samples much greater than the blank therefore the "B" qualifier was removed from the data.

INORGANIC ANALYSES
OTHER

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Equipment blank					X
3. Initial calibration verification %R or RPD		X		X	
4. Continuing calibration verification %R or %D		X		X	
5. Laboratory control sample (LCS) & LCS Duplicate %R and RPD		X		X	
6. Matrix spike (MS) %R		X		X	
7. Duplicate RPD		X		X	
8. Field duplicates RPD					X

%R - percent recovery RPD - relative percent difference

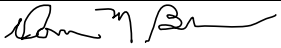
Comments:
Performance was acceptable.

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: 480-176136

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
No qualification of the data was necessary.			
1,4-Dioxane			
MW-104	1,4-Dioxane	E removed	Flag by the lab due to a bias correction based on the recovery of the 1,4-dioxane-d8
Metals			
All samples	Manganese	B removed	Detected in the method blank and it was detected at a concentration in the associated samples much greater than the blank
Other			
No qualification of the data was not necessary.			

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/21/2020
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS, P.C.

`DATA VALIDATION CHECKLIST

Project Name:	Hidden Valley
Project Number:	3150-45Y
Sample Date(s):	October 7, 2020
Sample Team:	GS/TG
Matrix/Number of Samples:	Water/ 9 Field Duplicates/ 1 Rinse Blank / 1 Field Blank/ 0
Analyzing Laboratory:	Eurofins TestAmerica, Buffalo, NY or Burlington, VT
Analyses:	Volatile Organic Compounds (VOCS): by method SW846 8260C at Buffalo, NY 1,4-Dioxane: by method SW846 8270D SIM at Buffalo, NY Metals: by SW846 method 6010C iron and manganese at Buffalo, NY Other: Methane, ethane and ethene (dissolved gases) by method RSK-175; chloride and sulfate by method 300.0; nitrate and nitrite by method 353.2; total organic carbon by method 9040A; sulfide by SM 4500 S2 F; and alkalinity by method SM2320B at Buffalo, NY; and carbon dioxide (dissolved gases) by method RSK-175 at Burlington, VT
Laboratory Report No:	480-176137 Date: 10/19/2020

ANALYTICAL DATA PACKAGE DOCUMENTATION
GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017 or USEPA National Functional Guidelines of Inorganic Data Review, January 2017, method performance criteria, and D&B Engineers and

Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS, P.C.

Custody Numbers: 480-176137
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis			
				VOC	1,4-Dioxane	Metals	Other
RINSE BLANK	480-176137-1	10/7/2020			X		
TW-1	480-176137-2	10/7/2020		X			
MW-13	480-176137-3	10/7/2020		X			
MW-103	480-176137-4	10/7/2020		X			
MW-15	480-176137-5	10/7/2020		X			
MW-19	480-176137-6	10/7/2020		X			
TWMW-01	480-176137-7	10/7/2020		X	X	X	X
MW-22	480-176137-8	10/7/2020		X		X	X
TW-2	480-176137-9	10/7/2020		X	X	X	X
MW-20	480-176137-10	10/7/2020		X			
DUP-2	480-176137-11	10/7/2020	TW-2	X	X		

ORGANIC ANALYSES
VOCS & 1,4-Dioxane

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Rinse blanks		X		X	
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory control sample (LCS) %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

3&6. The VOC 1,4-dioxane %R was above QC limit in the LCS and 1,1-dichloroethane, 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, chlorobenzene, isopropylbenzene, methyl tert-butyl- ether, methylene chloride, toluene, trans-1,3-dichloropropene, trichloroethene, and vinyl chloride %Rs were below QC limit in the MS and/or MSD associated with all samples except DUP-2. The following VOCs were qualified as estimated (J/UJ): 1,1-dichloroethane, 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, chlorobenzene, isopropylbenzene, methyl tert-butyl- ether, methylene chloride, toluene, trans-1,3-dichloropropene, trichloroethene, and vinyl chloride in all samples except DUP-2.

The %Rs were below the QC limits for chloromethane and trichloroethene in the MSD and the RPDs were above QC limits for chloromethane and vinyl chloride in the MS/MSD associated with sample DUP-2. Chloromethane and trichloroethene were qualified as estimated (J/UJ) in sample DUP-2.

12. 1,4-Dioxane was reported with an E flag by the lab due to a bias correction based on the recovery of the 1,4-dioxane-d8 for samples TWMW-01, TW-2, and DUP-2. The E flag was removed from the associated samples.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample (LCS) %R		X		X	
8. Matrix spike (MS) %R					X
9. Post digestive spike sample %R					X
10. Duplicate RPD					X
11. Serial dilution check %D					X
12. Field duplicates RPD					X

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

2A. Manganese was detected in the method blank and it was detected at a concentration in the associated samples much greater than the blank therefore the "B" qualifier was removed from the data.

INORGANIC ANALYSES
OTHER

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Equipment blank					X
3. Initial calibration verification %R or RPD		X		X	
4. Continuing calibration verification %R or %D		X		X	
5. Laboratory control sample (LCS) & LCS Duplicate %R and RPD		X		X	
6. Matrix spike (MS) %R		X		X	
7. Duplicate RPD		X		X	
8. Field duplicates RPD					X

%R - percent recovery RPD - relative percent difference

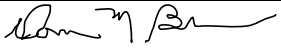
Comments:
Performance was acceptable.

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: 480-176137

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
All samples except DUP-2	1,1-Dichloroethane, 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, chlorobenzene, isopropylbenzene, methyl tert-butyl- ether, methylene chloride, toluene, trans-1,3-dichloropropene, trichloroethene, and vinyl chloride	J/UJ	%Rs were below QC limit in the MS and/or MSD
DUP-2	Chloromethane and trichloroethene	J/UJ	The %Rs were below the QC limits in the MSD
1,4-Dioxane			
TWMW-01, TW-2, and DUP-2	1,4-Dioxane	E removed	Flag by the lab due to a bias correction based on the recovery of the 1,4-dioxane-d8
Metals			
All samples	Manganese	B removed	Detected in the method blank and it was detected at a concentration in the associated samples much greater than the blank
Other			
No qualification of the data was not necessary.			

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/26/2020
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS, P.C.

`DATA VALIDATION CHECKLIST

Project Name:	Hidden Valley
Project Number:	3150-45Y
Sample Date(s):	October 8, 2020
Sample Team:	GS/TG
Matrix/Number of Samples:	Water/ 9 Field Duplicates/ 0 Trip Blank / 1 Field Blank/ 0
Analyzing Laboratory:	Eurofins TestAmerica, Buffalo, NY
Analyses:	Volatile Organic Compounds (VOCS): by method SW846 8260C at Buffalo, NY
Laboratory Report No:	480-176220 Date: 10/16/2020

ANALYTICAL DATA PACKAGE DOCUMENTATION
GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017, method performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS, P.C.

Custody Numbers: 480-176220
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis			
				VOC	1,4-Dioxane	Metals	Other
MW-B	480-176220-1	10/8/2020		X			
MW-1	480-176220-2	10/8/2020		X			
MW-7	480-176220-3	10/8/2020		X			
MW-8	480-176220-4	10/8/2020		X			
MW-9	480-176220-5	10/8/2020		X			
MW-11	480-176220-6	10/8/2020		X			
MW-17	480-176220-7	10/8/2020		X			
MW-33	480-176220-8	10/8/2020		X			
RW-8	480-176220-9	10/8/2020		X			
RW-9	480-176220-10	10/8/2020		X			
TRIP BLANK	480-176220-11	10/8/2020		X			

D&B ENGINEERS AND ARCHITECTS, P.C.

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Rinse blanks					X
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory control sample (LCS) %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

4&5. The 1,4-dioxane %R was above QC limit in the MSD and the RPD was above QC limits associated with all samples. 1,4-Dioxane was not detected in the samples therefore qualification of the data was not necessary.

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: 480-176220

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
No qualification of the data was necessary.			

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/26/2020
VALIDATION PERFORMED BY SIGNATURE:	

`DATA VALIDATION CHECKLIST

Project Name:	Hidden Valley
Project Number:	3150-45Y
Sample Date(s):	October 25 &26, 2021
Sample Team:	GS/TG
Matrix/Number of Samples:	Water/ 18 Field Duplicates/ 2 Trip Blank / 1 Equipment Blank/ 1
Analyzing Laboratory:	Eurofins TestAmerica, Buffalo, NY
Analyses:	Volatile Organic Compounds (VOCS): by method SW846 8260C 1,4-Dioxane: by method SW846 8270D SIM Fluorinated Alkyl Substances (PFAS): by method 537 Metals: by SW846 method 6010C iron and manganese Other: Methane, ethane, ethene, and carbon dioxide (dissolved gases) by method RSK-175; chloride, nitrate, and sulfate by method 300.0; total organic carbon by method 9060A; sulfide by SM 4500 S2 F; and alkalinity by method SM2320B
Laboratory Report No:	480-191472 Date: 11/08/2021

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, November 2020, or USEPA National Functional Guidelines of Inorganic Data Review, November 2020, method performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS

Custody Numbers: 480-191472
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	1,4-Dioxane	Metals	PFA	Other
MW-1	480-191472-1	10/25/2021		X				
MW-103	480-191472-2	10/25/2021		X				
TW-1	480-191472-3	10/25/2021		X				
TW-3	480-191472-4	10/25/2021		X				
TW-6	480-191472-5	10/25/2021		X				
MW-13	480-191472-6	10/25/2021		X				
MW-15	480-191472-7	10/25/2021		X				
MW-17	480-191472-8	10/25/2021		X				
MW-26	480-191472-9	10/25/2021		X				
DUP-1	480-191472-10	10/25/2021	MW-103	X				
TRIP BLANK	480-191472-11	10/25/2021		X				
MW-101	480-191472-12	10/26/2021		X	X	X	X	X
MW-102	480-191472-13	10/26/2021		X		X		X
MW-104	480-191472-14	10/26/2021		X	X	X		X
TW-2	480-191472-15	10/26/2021		X	X	X	X	X
RW-8	480-191472-16	10/26/2021		X				
RW-9	480-191472-17	10/26/2021		X				
MW-11	480-191472-18	10/26/2021		X			X	
MW-22	480-191472-19	10/26/2021		X		X		X
MW-8	480-191472-20	10/26/2021		X				
EQUIPMENT BLANK	480-191472-21	10/26/2021					X	
DUP-2	480-191472-22	10/26/2021	MW-101	X	X		X	

ORGANIC ANALYSES
VOCS & 1,4-Dioxane

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X	X		
C. Equipment blanks					X
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X	X		
6. Laboratory control sample (LCS) %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

2B. Acetone was detected in the TRIP BLANK and was qualified as non-detect (UB) in samples MW-1, MW-102, RW-8, RW-9, and TW-3.

5. The VOC 1,4-dioxane RPD was above the QC limit associated with samples MW-1, MW-103, TW-1, TW-3, TW-6, MW-13, MW-15, MW-17, MW-26, DUP-1, and TRIP BLANK. It was not detected therefore qualification of the data was necessary.

6. The %R was above the QC limit in the LCS for 2-butanone associated with samples MW-101, MW-102, MW-104, TW-2, RW-8, RW-9, MW-11, MW-22, and MW-8. It was not detected therefore qualification of the data was not necessary.

ORGANIC ANALYSES
PFAS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Equipment blanks		X		X	
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X		X	
6. Laboratory Control Sample (LCS) spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Internal standard retention times and areas		X		X	
9. Initial calibration RRF's and %RSD's		X		X	
10. Continuing calibration RRF's and %D's		X		X	
11. Transcriptions – quant report vs. Form I		X		X	
12. Field duplicates RPD		X		X	

%D - percent difference RRF - relative response factor
%R - percent recovery %RSD - percent relative standard deviation RPD - relative percent difference

Comments:
Performance was acceptable.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample (LCS) %R		X		X	
8. Matrix spike (MS) %R					X
9. Post digestive spike sample %R					X
10. Duplicate RPD					X
11. Serial dilution check %D					X
12. Field duplicates RPD					X

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

2A. Manganese was detected in the method blank, and it was qualified as non-detect (UB) in sample TW-2, and "B" qualifier was removed from the data remaining data due to sample concentration.

INORGANIC ANALYSES
OTHER

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Equipment blank					X
3. Initial calibration verification %R or RPD		X		X	
4. Continuing calibration verification %R or %D		X		X	
5. Laboratory control sample (LCS) & LCS Duplicate %R and RPD		X		X	
6. Matrix spike (MS) %R		X		X	
7. Duplicate RPD		X		X	
8. Field duplicates RPD					X

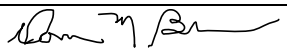
%R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable.

D&B ENGINEERS AND ARCHITECTS

DATA VALIDATION AND QUALIFICATION SUMMARY — Laboratory Numbers: 480-191472

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
MW-1, MW-102, RW-8, RW-9, and TW-3	Acetone	UB	Detected in the TRIP BLANK
1,4-Dioxane			
No qualification of the data was necessary.			
PFAS			
No qualification of the data was necessary.			
Metals			
All samples except TW-2	Manganese	B removed	Detected in the method blank
TW-2		UB	
Other			
No qualification of the data was not necessary.			

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 12/16/2021
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS

`DATA VALIDATION CHECKLIST

Project Name:	Hidden Valley
Project Number:	3150-45Y
Sample Date(s):	October 27 & 28, 2021
Sample Team:	GS/TG
Matrix/Number of Samples:	Water/ 10 Field Duplicates/ 0 Trip Blank / 1 Equipment Blank/ 0
Analyzing Laboratory:	Eurofins TestAmerica, Buffalo, NY
Analyses:	Volatile Organic Compounds (VOCS): by method SW846 8260C Metals: by SW846 method 6010C iron and manganese Other: Methane, ethane, ethene, and carbon dioxide (dissolved gases) by method RSK-175; chloride, nitrate, nitrite, and sulfate by method 300.0; total organic carbon by method 9060A; sulfide by SM 4500 S2 F; and alkalinity by method SM2320B
Laboratory Report No:	480-191614 Date: 12/16/2021

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, November 2020, or USEPA National Functional Guidelines of Inorganic Data Review, November 2020, method performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS

Custody Numbers: 480-191614
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	1,4-Dioxane	Metals	PFA	Other
TWMW-01	480-191614-1	10/27/2021		X		X		X
MW-33	480-191614-2	10/27/2021		X				
MW-7	480-191614-3	10/27/2021		X				
MW-9	480-191614-4	10/27/2021		X				
MW-31	480-191614-5	10/27/2021		X				
MW-25	480-191614-6	10/27/2021		X				
MW-28	480-191614-7	10/28/2021		X				
MW-20	480-191614-8	10/28/2021		X				
MW-19	480-191614-9	10/28/2021		X				
TRIP BLANK	480-191614-10	10/27/2021		X				

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Equipment blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory control sample (LCS) %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					
6. Interference check sample %R		X		X	
7. Laboratory control sample (LCS) %R		X		X	
8. Matrix spike (MS) %R					X
9. Post digestive spike sample %R					X
10. Duplicate RPD		X		X	
11. Serial dilution check %D					X
12. Field duplicates RPD					X

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable.

INORGANIC ANALYSES
OTHER

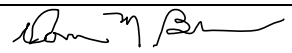
	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Equipment blank					X
3. Initial calibration verification %R or RPD		X		X	
4. Continuing calibration verification %R or %D		X		X	
5. Laboratory control sample (LCS) & LCS Duplicate %R and RPD		X		X	
6. Matrix spike (MS) %R					X
7. Duplicate RPD					X
8. Field duplicates RPD					X

%R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable.

DATA VALIDATION AND QUALIFICATION SUMMARY **Laboratory Numbers: 480-191614**

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
No qualification of the data was necessary.			
Metals			
No qualification of the data was not necessary.			
Other			
No qualification of the data was not necessary.			

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 12/16/2021
VALIDATION PERFORMED BY SIGNATURE:	

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Hidden Valley Electronics
Pace/Con-test SDG#22K1573
March 22, 2024
Sampling date: 11/7-9/2022

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 Hidden Valley Electronics, Pace/Con-test #22K1573 submitted to Vali-Data of WNY, LLC on December 26, 2023. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG), NYSDEC; 'Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)' (4/2023) and NYSDEC Analytical Services Protocols. The laboratory performed the analysis using the USEPA method Perfluorinated Hydrocarbons (mod. 537).

ID	Sample ID	Laboratory ID
1	MW-101-20221107	22K1573-01
2	DUP-01-20221107	22K1573-02
3	FD-01	22K1573-03
4	EB-01	22K1573-04
5	TW-2-20221108	22K1573-05
6	MW-11-20221109	22K1573-06

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)
- 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 except where qualified below in Internal Standards, Laboratory Control Samples, MS/MSD and Compound Quantitation.

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 except several internal standards were outside QC limits in the samples and should be qualified as estimated. Associated target analytes in these samples should be qualified as estimated.

IS	Qualifier	Associated Target Analyte	Associated Sample
M2PFTA	UJ	PFTA, PFTrDA	5RE
MPFDoA	UJ	PFDoA	5RE
MPFBA	J	PFBA, PFMPA	B323021-BS
M3PFBS	J	PFBS, PFDS	B323021-BS, 1MSD
M5PFPeA	J	PFPeA	B323021-BS, 1MSD
M5PFHxA	J	PFHxA	B323021-BS
M3PFHxS	J	PFHxS	B323021-BS
M4PFHpA	J	PFHpA	B323021-BS
M8PFOA	J	PFOA	B323021-BS, 1MSD

BLANKS
All the criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met except PFHxS was detected in DUSR ID#1 but was not detected in #2.

LABORATORY CONTROL SAMPLES
All criteria were met except a couple of target analytes were outside QC limits in a laboratory control sample and should be qualified as estimated.

LCS ID	Target Analyte	%Rec	Qualifier	Associated Sample
B324530	NEtFOSAA	141	UJ	1RE-3RE, 5RE, 6RE
B324530	NMeFOSAA	149	UJ	1RE-3RE, 5RE, 6RE

MS/MSD
All criteria were met except a couple of target analytes were outside QC limits in the matrix spikes and should be qualified as estimated.

Target Analyte	%Rec #1MS	%Rec #1MSD	Qualifier	Associated Sample
NEtFOSAA	142	138	UJ	1
NMeFOSAA	149	149	UJ	1

Some target analytes were outside QC limits in the matrix spike or the matrix spike duplicate but not both, so no further action is required.
Some target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

COMPOUND QUANTITATION
All criteria were met except the signal to noise ratio of a few target analytes was outside QC limits and should be qualified in the associated samples.

Target Analyte	Qualifier	Associated Sample
PFHpS	J	6RE
PFHxS	J	5RE
PFPeA	J	1RE

The ion ratio of a couple of target analytes was outside QC limits and should be qualified in the associated samples.

Target Analyte	Qualifier	Associated Sample
PFHpS	J	6RE
PFHxS	J	1RE

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on all target analytes, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

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SOP-454 PFAS

Qualifications:

L-01

Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.

Analyte & Samples(s) Qualified:

N-EtFOSAA (NEtFOSAA)
B324530-BS1

N-MeFOSAA (NMeFOSAA)
B324530-BS1

MS-12

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

N-EtFOSAA (NEtFOSAA)
B323021-MS1, B323021-MSD1

N-MeFOSAA (NMeFOSAA)
B323021-MS1, B323021-MSD1

MS-14

Matrix spike recovery is outside of control limits. Data validation is not affected since sample result is "not detected" and recovery bias is on the high side for this compound.

Analyte & Samples(s) Qualified:

N-MeFOSAA (NMeFOSAA)
B324530-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Perfluorodecanoic acid (PFDA)
B323021-MS1

PF-20

Quantifying ion signal to noise ratio is <10. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluoroheptanesulfonic acid (PFI
22K1573-06RE1[MW-11-20221109]

Perfluorohexanesulfonic acid (PFH
22K1573-05RE1[TW-2-20221108]

Perfluoropentanoic acid (PFPeA)
22K1573-01RE1[MW-101-20221107]

PF-23

Qualifier ion ratio <50% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluoroheptanesulfonic acid (PFI
22K1573-06RE1[MW-11-20221109]

Perfluorohexanesulfonic acid (PFH
22K1573-01RE1[MW-101-20221107]

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S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

M2-6:2FTS
S080062-CCV3

M2PFTA
22K1573-05RE1[TW-2-20221108]

M3PFBS
B323021-BS1, B323021-MSD1

M3PFHxS
B323021-BS1

M4PFHpA
B323021-BS1

M5PFHxA
B323021-BS1

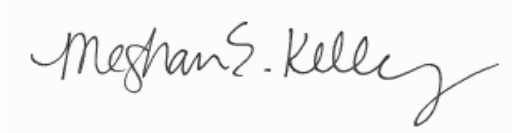
M5PFPeA
B323021-BS1, B323021-MSD1

M8PFOA
B323021-BS1, B323021-MSD1

MPFBA
B323021-BS1

MPFDoA
22K1573-05RE1[TW-2-20221108]

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

1 - FORM I
ANALYSIS DATA SHEET

MW-101-20221107

Laboratory:	Pace New England			Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1573-01RE1	File ID:	22K1573-01RE1.d
Sampled:	11/07/22 13:40	Prepared:	12/02/22 13:20	Analyzed:	12/05/22 13:18
Solids:		Preparation:	SOP 454-PFAAS	Dilution:	1
Initial/Final:	247.86 mL / 1 mL				
Batch:	B324530	Sequence:	S080289	Calibration:	2200931	Instrument:	QQQ4

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-22-4	Perfluorobutanoic acid (PFBA)	3.4	0.64	2.0	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	9.8	0.58	2.0	
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.9	0.66	2.0	PF-20, J
307-24-4	Perfluorohexanoic acid (PFHxA)	1.8	0.66	2.0	J
39108-34-4	8:2 Fluorotelomersulfonic acid (8:2FTS A)		0.67	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)		0.75	2.0	
307-55-1	Perfluorododecanoic acid (PFDoA)		0.73	2.0	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		0.45	2.0	
2991-50-6	N-EtFOSAA (NEtFOSAA)		0.55	2.0	
2355-31-9	N-MeFOSAA (NMeFOSAA)		0.63	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		0.61	2.0	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		0.53	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		0.54	2.0	
754-91-6	Perfluorooctanesulfonamide (FOSA)		0.79	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.67	0.61	2.0	PF-23, J
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)		0.55	2.0	
27619-97-2	6:2 Fluorotelomersulfonic acid (6:2FTS A)		1.5	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	2.0	0.51	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	7.8	0.74	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.7	0.43	2.0	J
375-95-1	Perfluorononanoic acid (PFNA)	2.6	0.70	2.0	

1 - FORM I
ANALYSIS DATA SHEET

DUP-01-20221107

Laboratory:	Pace New England			Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1573-02RE1	File ID:	22K1573-02RE1.d
Sampled:	11/07/22 12:00	Prepared:	12/02/22 13:20	Analyzed:	12/05/22 13:26
Solids:		Preparation:	SOP 454-PFAAS	Dilution:	1
Initial/Final:	261.01 mL / 1 mL				
Batch:	B324530	Sequence:	S080289	Calibration:	2200931	Instrument:	QQQ4

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-22-4	Perfluorobutanoic acid (PFBA)	4.1	0.61	1.9	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	11	0.55	1.9	
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.3	0.63	1.9	
307-24-4	Perfluorohexanoic acid (PFHxA)	2.0	0.62	1.9	
39108-34-4	8:2 Fluorotelomersulfonic acid (8:2FTS A)		0.64	1.9	
335-76-2	Perfluorodecanoic acid (PFDA)		0.71	1.9	
307-55-1	Perfluorododecanoic acid (PFDoA)		0.69	1.9	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		0.42	1.9	
2991-50-6	N-EtFOSAA (NEtFOSAA)		0.52	1.9	
2355-31-9	N-MeFOSAA (NMeFOSAA)		0.59	1.9	
376-06-7	Perfluorotetradecanoic acid (PFTA)		0.58	1.9	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		0.50	1.9	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		0.52	1.9	
754-91-6	Perfluorooctanesulfonamide (FOSA)		0.75	1.9	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		0.58	1.9	
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)		0.52	1.9	
27619-97-2	6:2 Fluorotelomersulfonic acid (6:2FTS A)		1.4	1.9	
375-85-9	Perfluoroheptanoic acid (PFHpA)	2.0	0.49	1.9	
335-67-1	Perfluorooctanoic acid (PFOA)	8.5	0.70	1.9	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.7	0.41	1.9	J
375-95-1	Perfluorononanoic acid (PFNA)	3.0	0.67	1.9	

1 - FORM I
ANALYSIS DATA SHEET

FD-01

Laboratory:	Pace New England			Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1573-03RE1	File ID:	22K1573-03RE1.d
Sampled:	11/07/22 12:00	Prepared:	12/02/22 13:20	Analyzed:	12/05/22 13:33
Solids:		Preparation:	SOP 454-PFAAS	Dilution:	1
Initial/Final:	282.36 mL / 1 mL				
Batch:	B324530	Sequence:	S080289	Calibration:	2200931	Instrument:	QQQ4

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-22-4	Perfluorobutanoic acid (PFBA)		0.56	1.8	
375-73-5	Perfluorobutanesulfonic acid (PFBS)		0.51	1.8	
2706-90-3	Perfluoropentanoic acid (PFPeA)		0.58	1.8	
307-24-4	Perfluorohexanoic acid (PFHxA)		0.58	1.8	
39108-34-4	8:2 Fluorotelomersulfonic acid (8:2FTS A)		0.59	1.8	
335-76-2	Perfluorodecanoic acid (PFDA)		0.65	1.8	
307-55-1	Perfluorododecanoic acid (PFDoA)		0.64	1.8	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		0.39	1.8	
2991-50-6	N-EtFOSAA (NEtFOSAA)		0.48	1.8	
2355-31-9	N-MeFOSAA (NMeFOSAA)		0.55	1.8	
376-06-7	Perfluorotetradecanoic acid (PFTA)		0.54	1.8	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		0.46	1.8	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		0.48	1.8	
754-91-6	Perfluorooctanesulfonamide (FOSA)		0.69	1.8	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		0.53	1.8	
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)		0.48	1.8	
27619-97-2	6:2 Fluorotelomersulfonic acid (6:2FTS A)		1.3	1.8	
375-85-9	Perfluoroheptanoic acid (PFHpA)		0.45	1.8	
335-67-1	Perfluorooctanoic acid (PFOA)		0.65	1.8	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)		0.38	1.8	
375-95-1	Perfluorononanoic acid (PFNA)		0.62	1.8	

1 - FORM I
ANALYSIS DATA SHEET

EB-01

Laboratory:	Pace New England			Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1573-04	File ID:	22K1573-04.d
Sampled:	11/07/22 12:00	Prepared:	11/17/22 00:00	Analyzed:	11/30/22 13:35
Solids:		Preparation:	SOP 454-PFAAS	Dilution:	1
Initial/Final:	284.06 mL / 1 mL				
Batch:	B323021	Sequence:	S080062	Calibration:	2200931
				Instrument:	QQQ4

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-22-4	Perfluorobutanoic acid (PFBA)		0.56	1.8	
375-73-5	Perfluorobutanesulfonic acid (PFBS)		0.50	1.8	
2706-90-3	Perfluoropentanoic acid (PFPeA)		0.58	1.8	
307-24-4	Perfluorohexanoic acid (PFHxA)		0.57	1.8	
39108-34-4	8:2 Fluorotelomersulfonic acid (8:2FTS A)		0.59	1.8	
335-76-2	Perfluorodecanoic acid (PFDA)		0.65	1.8	
307-55-1	Perfluorododecanoic acid (PFDoA)		0.63	1.8	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		0.39	1.8	
2991-50-6	N-EtFOSAA (NEtFOSAA)		0.48	1.8	
2355-31-9	N-MeFOSAA (NMeFOSAA)		0.55	1.8	
376-06-7	Perfluorotetradecanoic acid (PFTA)		0.53	1.8	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		0.46	1.8	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		0.47	1.8	
754-91-6	Perfluorooctanesulfonamide (FOSA)		0.69	1.8	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		0.53	1.8	
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)		0.48	1.8	
27619-97-2	6:2 Fluorotelomersulfonic acid (6:2FTS A)		1.3	1.8	
375-85-9	Perfluoroheptanoic acid (PFHpA)		0.45	1.8	
335-67-1	Perfluorooctanoic acid (PFOA)		0.64	1.8	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)		0.38	1.8	
375-95-1	Perfluorononanoic acid (PFNA)		0.61	1.8	

1 - FORM I
ANALYSIS DATA SHEET

TW-2-20221108

Laboratory:	Pace New England			Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1573-05RE1	File ID:	22K1573-05RE1.d
Sampled:	11/08/22 13:00	Prepared:	12/02/22 13:20	Analyzed:	12/05/22 13:40
Solids:		Preparation:	SOP 454-PFAAS	Dilution:	1
Initial/Final:	253.51 mL / 1 mL				
Batch:	B324530	Sequence:	S080289	Calibration:	2200931
				Instrument:	QQQ4

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-22-4	Perfluorobutanoic acid (PFBA)	4.3	0.63	2.0	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	4.9	0.56	2.0	
2706-90-3	Perfluoropentanoic acid (PFPeA)	3.8	0.65	2.0	
307-24-4	Perfluorohexanoic acid (PFHxA)	3.8	0.64	2.0	
39108-34-4	8:2 Fluorotelomersulfonic acid (8:2FTS A)		0.66	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)		0.73	2.0	
307-55-1	Perfluorododecanoic acid (PFDoA)		0.71	2.0	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		0.44	2.0	
2991-50-6	N-EtFOSAA (NEtFOSAA)		0.54	2.0	
2355-31-9	N-MeFOSAA (NMeFOSAA)		0.61	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		0.60	2.0	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		0.52	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		0.53	2.0	
754-91-6	Perfluorooctanesulfonamide (FOSA)		0.77	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.6	0.60	2.0	PF-20, J
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)		0.54	2.0	
27619-97-2	6:2 Fluorotelomersulfonic acid (6:2FTS A)		1.4	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	2.6	0.50	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	25	0.72	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	7.8	0.42	2.0	
375-95-1	Perfluorononanoic acid (PFNA)	2.2	0.69	2.0	

1 - FORM I
ANALYSIS DATA SHEET

MW-11-20221109

Laboratory:	Pace New England			Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1573-06RE1	File ID:	22K1573-06RE1.d
Sampled:	11/09/22 08:30	Prepared:	12/02/22 13:20	Analyzed:	12/05/22 13:47
Solids:		Preparation:	SOP 454-PFAAS	Dilution:	1
Initial/Final:	285.5 mL / 1 mL				
Batch:	B324530	Sequence:	S080289	Calibration:	2200931
				Instrument:	QQQ4

CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-22-4	Perfluorobutanoic acid (PFBA)	6.4	0.56	1.8	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.5	0.50	1.8	
2706-90-3	Perfluoropentanoic acid (PFPeA)	13	0.57	1.8	
307-24-4	Perfluorohexanoic acid (PFHxA)	10	0.57	1.8	
39108-34-4	8:2 Fluorotelomersulfonic acid (8:2FTS A)		0.59	1.8	
335-76-2	Perfluorodecanoic acid (PFDA)		0.65	1.8	
307-55-1	Perfluorododecanoic acid (PFDoA)		0.63	1.8	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	0.44	0.39	1.8	PF-20, PF-23, J
2991-50-6	N-EtFOSAA (NEtFOSAA)		0.48	1.8	
2355-31-9	N-MeFOSAA (NMeFOSAA)		0.54	1.8	
376-06-7	Perfluorotetradecanoic acid (PFTA)		0.53	1.8	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		0.46	1.8	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		0.47	1.8	
754-91-6	Perfluorooctanesulfonamide (FOSA)		0.68	1.8	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.7	0.53	1.8	
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)		0.48	1.8	
27619-97-2	6:2 Fluorotelomersulfonic acid (6:2FTS A)	38	1.3	1.8	
375-85-9	Perfluoroheptanoic acid (PFHpA)	3.4	0.44	1.8	
335-67-1	Perfluorooctanoic acid (PFOA)	14	0.64	1.8	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	15	0.37	1.8	
375-95-1	Perfluorononanoic acid (PFNA)	10	0.61	1.8	

3 - FORM III

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-101-20221107

Laboratory:	Pace New England	Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Water	Analysis:	SOP-454 PFAS
Batch:	B323021	Preparation:	SOP 454-PFAAS
% Solids:		Laboratory ID:	B323021-MS1
Initial/Final:	263.65 mL / 1 mL	Sample Lab ID:	22K1573-01
Column:			

ANALYTE	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC.		QC LIMITS REC.
Perfluorobutanoic acid (PFBA)	9.48	2.81	14.5	123		73 - 129
Perfluorobutanesulfonic acid (PFBS)	8.39	8.51	18.1	114		72 - 130
Perfluoropentanoic acid (PFPeA)	9.48	1.83	12.8	115		72 - 129
Perfluorohexanoic acid (PFHxA)	9.48	1.56	12.9	119		72 - 129
8:2 Fluorotelomersulfonic acid (8:2FTS A)	9.10	ND	11.5	126		67 - 138
Perfluorodecanoic acid (PFDA)	9.48	ND	12.3	130	*	71 - 129
Perfluorododecanoic acid (PFDoA)	9.48	ND	11.8	125		72 - 134
Perfluoroheptanesulfonic acid (PFHpS)	9.06	ND	11.1	123		69 - 134
N-EtFOSAA (NEtFOSAA)	9.48	ND	13.5	142	*	61 - 135
N-MeFOSAA (NMeFOSAA)	9.48	ND	14.1	149	*	65 - 136
Perfluorotetradecanoic acid (PFTA)	9.48	ND	11.2	118		71 - 132
Perfluorotridecanoic acid (PFTrDA)	9.48	ND	11.1	117		65 - 144
Perfluorodecanesulfonic acid (PFDS)	9.15	ND	9.50	104		53 - 142
Perfluorooctanesulfonamide (FOSA)	9.48	ND	11.8	124		67 - 137
Perfluorohexanesulfonic acid (PFHxS)	8.68	ND	9.97	115		68 - 131
Perfluoro-5-oxahexanoic acid (PFMBA)	9.48	ND	11.8	125		61.4 - 142
6:2 Fluorotelomersulfonic acid (6:2FTS A)	9.01	ND	11.8	131		64 - 140
Perfluoroheptanoic acid (PFHpA)	9.48	1.54	12.9	120		72 - 130
Perfluorooctanoic acid (PFOA)	9.48	6.13	17.3	118		71 - 133
Perfluorooctanesulfonic acid (PFOS)	8.77	1.26	10.9	110		65 - 140
Perfluorononanoic acid (PFNA)	9.48	2.38	14.3	126		69 - 130

3 - FORM III

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-101-20221107

Laboratory:	Pace New England	Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Water	Analysis:	SOP-454 PFAS
Batch:	B323021	Preparation:	SOP 454-PFAAS
% Solids:		Laboratory ID:	B323021-MS1
Initial/Final:	263.65 mL / 1 mL	Sample Lab ID:	22K1573-01
Column:			

ANALYTE	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC. #		% RPD	QC LIMITS RPD	QC LIMITS REC.
Perfluorobutanoic acid (PFBA)	9.65	13.5	111		7.06	30	73 - 129
Perfluorobutanesulfonic acid (PFBS)	8.54	17.7	107		2.29	30	72 - 130
Perfluoropentanoic acid (PFPeA)	9.65	12.5	110		2.41	30	72 - 129
Perfluorohexanoic acid (PFHxA)	9.65	12.7	116		0.907	30	72 - 129
8:2 Fluorotelomersulfonic acid (8:2FTS A)	9.27	11.5	124		0.380	30	67 - 138
Perfluorodecanoic acid (PFDA)	9.65	11.6	120		6.01	30	71 - 129
Perfluorododecanoic acid (PFDoA)	9.65	11.3	117		4.84	30	72 - 134
Perfluoroheptanesulfonic acid (PFHpS)	9.22	11.7	127		4.98	30	69 - 134
N-EtFOSAA (NEtFOSAA)	9.65	13.3	138	*	0.873	30	61 - 135
N-MeFOSAA (NMeFOSAA)	9.65	14.4	149	*	2.32	30	65 - 136
Perfluorotetradecanoic acid (PFTA)	9.65	10.0	104		11.2	30	71 - 132
Perfluorotridecanoic acid (PFTrDA)	9.65	10.1	105		8.90	30	65 - 144
Perfluorodecanesulfonic acid (PFDS)	9.31	8.68	93.1		9.07	30	53 - 142
Perfluorooctanesulfonamide (FOSA)	9.65	11.7	121		1.24	30	67 - 137
Perfluorohexanesulfonic acid (PFHxS)	8.83	9.54	108		4.42	30	68 - 131
Perfluoro-5-oxahexanoic acid (PFMBA)	9.65	11.3	117		4.80	30	61.4 - 142
6:2 Fluorotelomersulfonic acid (6:2FTS A)	9.17	9.97	109		17.1	30	64 - 140
Perfluoroheptanoic acid (PFHpA)	9.65	12.4	112		4.34	30	72 - 130
Perfluorooctanoic acid (PFOA)	9.65	16.7	109		3.88	30	71 - 133
Perfluorooctanesulfonic acid (PFOS)	8.93	11.4	114		4.51	30	65 - 140
Perfluorononanoic acid (PFNA)	9.65	13.6	116		5.57	30	69 - 130

3 - FORM III

LCS / LCS DUPLICATE RECOVERY

SOP-454 PFAS

Laboratory:	Pace New England	Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Water	Preparation:	SOP 454-PFAAS
Batch:	B324530	Laboratory ID:	B324530-BS1
Column:		Initial/Final:	266.94 mL / 1 mL

ANALYTE	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC.		QC LIMITS REC.
Perfluorobutanoic acid (PFBA)	9.37	11.1	118		73 - 129
Perfluorobutanesulfonic acid (PFBS)	8.29	9.51	115		72 - 130
Perfluoropentanoic acid (PFPeA)	9.37	10.9	117		72 - 129
Perfluorohexanoic acid (PFHxA)	9.37	11.0	117		72 - 129
8:2 Fluorotelomersulfonic acid (8:2FTS A)	8.99	10.9	121		67 - 138
Perfluorodecanoic acid (PFDA)	9.37	11.3	121		71 - 129
Perfluorododecanoic acid (PFDoA)	9.37	11.2	120		72 - 134
Perfluoroheptanesulfonic acid (PFHpS)	8.94	11.4	127		69 - 134
N-EtFOSAA (NEtFOSAA)	9.37	13.2	141	*	61 - 135
N-MeFOSAA (NMeFOSAA)	9.37	13.9	149	*	65 - 136
Perfluorotetradecanoic acid (PFTA)	9.37	10.8	115		71 - 132
Perfluorotridecanoic acid (PFTrDA)	9.37	10.4	112		65 - 144
Perfluorodecanesulfonic acid (PFDS)	9.04	9.67	107		53 - 142
Perfluorooctanesulfonamide (FOSA)	9.37	11.8	126		67 - 137
Perfluorohexanesulfonic acid (PFHxS)	8.57	9.72	113		68 - 131
Perfluoro-5-oxahexanoic acid (PFMBA)	9.37	10.7	115		59.5 - 146
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.90	10.4	117		64 - 140
Perfluoroheptanoic acid (PFHpA)	9.37	10.3	109		72 - 130
Perfluorooctanoic acid (PFOA)	9.37	11.5	123		71 - 133
Perfluorooctanesulfonic acid (PFOS)	8.66	9.51	110		65 - 140
Perfluorononanoic acid (PFNA)	9.37	11.6	123		69 - 130

8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory:	Pace New England	Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Sequence:	S080062	Instrument:	QQQ4
		Calibration:	2200931

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (B323021-BS1)			*Lab File ID: B323021-BS1.d*			*Analyzed: 11/30/22 12:44*			
M8FOSA	391512.7	3.980567	350163	3.980583	112	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	168537.9	2.431	116095	2.431	145	50 - 150	0.0000	+/-0.50	
M2PFTA	1539923	4.281116	1201425	4.281133	128	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	302398.7	3.778883	202950	3.778883	149	50 - 150	0.0000	+/-0.50	
MPFBA	850313.6	1.066783	500664	1.066783	170	50 - 150	0.0000	+/-0.50	*
M3HFPO-DA	144216.6	2.76565	118864	2.76565	121	50 - 150	0.0000	+/-0.50	
M6PFDA	985135	3.779417	720425	3.779417	137	50 - 150	0.0000	+/-0.50	
M3PFBS	189918.8	1.853533	116133	1.853533	164	50 - 150	0.0000	+/-0.50	*
M7PFUnA	1036121	3.91405	798825	3.914067	130	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	113779.5	3.4205	86983	3.4205	131	50 - 150	0.0000	+/-0.50	
M5PFPeA	658789.4	1.681733	399310	1.681733	165	50 - 150	0.0000	+/-0.50	*
M5PFHxA	1146283	2.51485	736903	2.51485	156	50 - 150	0.0000	+/-0.50	*
M3PFHxS	174625.3	3.185733	115660	3.185733	151	50 - 150	0.0000	+/-0.50	*
M4PFHpA	1317127	3.14655	869697	3.14655	151	50 - 150	0.0000	+/-0.50	*
M8PFOA	1240242	3.437833	819822	3.437833	151	50 - 150	0.0000	+/-0.50	*
M8PFOS	161350.9	3.6282	116208	3.6282	139	50 - 150	0.0000	+/-0.50	
M9PFNA	931352.9	3.629233	648685	3.629233	144	50 - 150	0.0000	+/-0.50	
MPFDoA	1111319	4.048683	834430	4.048683	133	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	293666.3	3.921533	224764	3.921533	131	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	377391.2	3.8497	278958	3.8497	135	50 - 150	0.0000	+/-0.50	

8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory:	Pace New England	Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Sequence:	S080062	Instrument:	QQQ4
		Calibration:	2200931

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (B323021-MSD1)			*Lab File ID: B323021-MSD1.d*			*Analyzed: 11/30/22 13:06*			
M8FOSA	419276.9	3.980583	350163	3.980583	120	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	138491.6	2.431017	116095	2.431	119	50 - 150	0.0000	+/-0.50	
M2PFTA	1489879	4.281133	1201425	4.281133	124	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	288452.7	3.7789	202950	3.778883	142	50 - 150	0.0000	+/-0.50	
MPFBA	617412.7	1.066783	500664	1.066783	123	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	142730.7	2.76565	118864	2.76565	120	50 - 150	0.0000	+/-0.50	
M6PFDA	980516.4	3.779417	720425	3.779417	136	50 - 150	0.0000	+/-0.50	
M3PFBS	187263.4	1.853533	116133	1.853533	161	50 - 150	0.0000	+/-0.50	*
M7PFUnA	1025025	3.914067	798825	3.914067	128	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	118439.2	3.4205	86983	3.4205	136	50 - 150	0.0000	+/-0.50	
M5PFPeA	617010.4	1.681733	399310	1.681733	155	50 - 150	0.0000	+/-0.50	*
M5PFHxA	1106298	2.51485	736903	2.51485	150	50 - 150	0.0000	+/-0.50	
M3PFHxS	170688.5	3.185733	115660	3.185733	148	50 - 150	0.0000	+/-0.50	
M4PFHpA	1290482	3.14655	869697	3.14655	148	50 - 150	0.0000	+/-0.50	
M8PFOA	1254064	3.437833	819822	3.437833	153	50 - 150	0.0000	+/-0.50	*
M8PFOS	160842.6	3.6282	116208	3.6282	138	50 - 150	0.0000	+/-0.50	
M9PFNA	870725.1	3.629233	648685	3.629233	134	50 - 150	0.0000	+/-0.50	
MPFDoA	1011677	4.048683	834430	4.048683	121	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	250738.3	3.921533	224764	3.921533	112	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	321355.8	3.8497	278958	3.8497	115	50 - 150	0.0000	+/-0.50	

8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Laboratory:	Pace New England	Work Order:	22K1573
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Sequence:	S080289	Instrument:	QQQ4
		Calibration:	2200931

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TW-2-20221108 (22K1573-05RE1)			*Lab File ID: 22K1573-05RE1.d*			*Analyzed: 12/05/22 13:40*			
M8FOSA	229884.5	3.980583	328777	3.980583	70	50 - 150	0.0000	+/-0.50	
M2PFTA	135165.3	4.30535	1275309	4.313433	11	50 - 150	-0.0081	+/-0.50	*
M2-8:2FTS	145185	3.794833	176770	3.8028	82	50 - 150	-0.0080	+/-0.50	
MPFBA	376918.4	1.0834	469380	1.0834	80	50 - 150	0.0000	+/-0.50	
M6PFDA	612265.7	3.79535	653600	3.79535	94	50 - 150	0.0000	+/-0.50	
M3PFBS	129726.5	1.878383	114889	1.886667	113	50 - 150	-0.0083	+/-0.50	
M2-6:2FTS	94350.35	3.4373	87961	3.4453	107	50 - 150	-0.0080	+/-0.50	
M5PFPeA	416322.8	1.714833	379660	1.714833	110	50 - 150	0.0000	+/-0.50	
M5PFHxA	760021.1	2.5477	703561	2.564133	108	50 - 150	-0.0164	+/-0.50	
M3PFHxS	115289.6	3.201883	115565	3.21025	100	50 - 150	-0.0084	+/-0.50	
M4PFHpA	892939.9	3.170783	834907	3.170783	107	50 - 150	0.0000	+/-0.50	
M8PFOA	813014.3	3.453817	797590	3.453817	102	50 - 150	0.0000	+/-0.50	
M8PFOS	105283.1	3.644167	115731	3.644183	91	50 - 150	0.0000	+/-0.50	
M9PFNA	594174.7	3.6452	649290	3.645217	92	50 - 150	0.0000	+/-0.50	
MPFDoA	394529.9	4.072667	872754	4.072667	45	50 - 150	0.0000	+/-0.50	*
D5-NEtFOSAA	155054.6	3.945517	240658	3.945517	64	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	209908.8	3.873767	279181	3.873783	75	50 - 150	0.0000	+/-0.50	

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Hidden Valley Electronics
Pace/Con-Test Analytical Laboratory SDG#22K1575
March 25, 2024
Sampling date: 11/8, 9/2022

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 Hidden Valley Electronics, Pace/Con-Test Analytical Laboratory SDG #22K1575 submitted to Vali-Data of WNY, LLC on December 26, 2023. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) and NYSDEC Analytical Services Protocols. The laboratory performed the analyses using the USEPA method Volatile Organics (8260D), Dissolved Gases (RSK175), Inorganics (6010D) and in accordance with wet chemistry methods.

ID	Sample ID	Laboratory ID
1	MW-26-20221108	22K1575-01
2	MW-19-20221108	22K1575-02
3	MW-20-20221108	22K1575-03
4	RW-9-20221108	22K1575-04
5	RW-8-20221108	22K1575-05
6	MW-15-20221108	22K1575-06
7	MW-22-20221108	22K1575-07
8	MW-28-20221108	22K1575-08
9	MW-103-20221108	22K1575-09
10	TW-2-20221108	22K1575-10
11	MW-33-20221108	22K1575-11
12	MW-01-20221108	22K1575-12
13	DUP-01-20221108	22K1575-13
14	TW-1-20221108	22K1575-14
15	TW-6-20221108	22K1575-15
16	MW-101-20221108	22K1575-16
17	MW-13-20221108	22K1575-17
18	MW-25-20221108	22K1575-18
19	MW-104-20221108	22K1575-19
20	TWMW-01-20221108	22K1575-20
21	Trip Blank	22K1575-21
22	MW-17-20221109	22K1575-22
23	TW-3-20221109	22K1575-23
24	MW-08-20221109	22K1575-24
25	DUP-02	22K1575-25
27	MW-7-20221109	22K1575-27
28	MW-9-20221109	22K1575-28

VOLATILE 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
-Field Duplicate Sample Precision
-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, Initial Calibration and Continuing Calibration.

Samples: DUSR ID#10, #19, #22, #24, #25, #27 and #28 were diluted due to high target analyte concentrations.

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 criteria were met.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met except 1,1-Dichloroethane was detected in DUSR ID#11 but was not detected in #13.

LABORATORY CONTROL SAMPLES
All criteria were met.
Some target analytes were outside QC limits in the laboratory control sample or the laboratory control sample duplicate but not both, so no further action is required.

MS/MSD
All criteria were met except a target analyte was outside QC limits in the matrix spikes and should be qualified as estimated.

Target Analyte	%Rec #12MS	%Rec #12MSD	Qualifier	Associated Sample
Bromomethane	59.1	62.7	UJ	12

Target Analyte	%Rec #24MS	%Rec #24MSD	Qualifier	Associated Sample
Bromomethane	42.3	41.3	UJ	24, 25

The %Rec of a target analyte was outside QC limits, high in the matrix spikes but was not detected in the associated samples, so no further action is required.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met except a couple of target analytes were outside QC limits in the initial calibration and/or the initial calibration verification and should be qualified as estimated in the associated samples, blanks and spikes.

ICal Instrument	Target Analyte	RRF/%D	Qualifier	Associated Sample
ICal/ICV GCMSVOA2	1,4-Dioxane	RRF	UJ/J	B322772, B322773, B322778, 1-25, 27, 28, 12MS/MSD, 24MS/MSD
ICV GCMSVOA2	trans-1,3-Dichloropropene	27.7	UJ/J	B322772, B322773, B322778, 1-25, 27, 28, 12MS/MSD, 24MS/MSD

CONTINUING CALIBRATION
All criteria were met except a couple of target analytes were outside QC limits in the continuing calibrations and should be qualified as estimated in the associated samples, blanks and spikes.

CCal ID	Target Analyte	%D/RRF	Qualifier	Associated Sample
S079282-CCV1	1,4-Dioxane	RRF	UJ/J	B322772, 1, 12, 12MS/MSD
S079282-CCV1	Bromomethane	-47.5	UJ/J	B322772, 1, 12, 12MS/MSD
S079289-CCV1	1,4-Dioxane	RRF/-20.6	UJ/J	B322773, 2-11, 24, 24MS/MSD
S079289-CCV1	Bromomethane	-41.7	UJ/J	B322773, 2-11, 24, 24MS/MSD
S079293-CCV1	1,4-Dioxane	RRF	UJ/J	B322778, 13-23, 25, 27, 28
S079293-CCV1	Bromomethane	-44.9	UJ/J	B322778, 13-23, 25, 27, 28
S079293-CCV1	Carbon disulfide	-25.7	UJ/J	B322778, 13-23, 25, 27, 28
S079293-CCV1	Chloroethane	-29.0	UJ/J	B322778, 13-23, 25, 27, 28

Some target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

GC/MS PERFORMANCE CHECK
All criteria were met.

DISSOLVED GASES

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
-Method Blank
-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.

Sample: DUSR ID#19 was diluted due to high target analyte concentrations.

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.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired for this analysis.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
No MS/MSD was acquired for this analysis.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.

CONTINUING CALIBRATION
All criteria were met.

METALS

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
- -Blanks
- -Laboratory Control Sample
- -MS/MSD/Duplicate
- -Field Duplicate
- -Serial Dilution
- -Compound Quantitation
- -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.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Data Completeness.

DATA COMPLETENESS
All criteria were met except the raw data for the analysis of Mn in DUSR ID#7, #10, #16, #19 and #20 was not included in the package. The result for Mn in these samples should be qualified as unusable.

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.

BLANKS
All criteria were met.

LABORATORY CONTROL SAMPLE
All criteria were met.

MS/MSD/DUPLICATE
All criteria were met.

FIELD DUPLICATE
No field duplicate was acquired for this analysis.

SERIAL DILUTION
No serial dilution was performed.

COMPOUND QUANTITATION
All criteria were met.

CALIBRATION
All criteria were met.

GENERAL CHEMISTRY

The following items/criteria were reviewed for this analytical suite:

- Alkalinity
- Carbon Dioxide
- Chloride
- Nitrate, Nitrite
- pH
- Sulfate
- Sulfide
- TOC

The items listed above were technically in compliance with the method and SOP criteria with any exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below.

ALKALINITY
All criteria were met.

CARBON DIOXIDE
No data was provided for the analysis of Carbon dioxide, so this target analyte could not be validated.

CHLORIDE
All criteria were met.

NITRATE, NITRITE
All criteria were met except DUSR ID#7, #10, #16, #19, #20 and #7MS/DUP were analyzed outside hold time for the Nitrate and Nitrite analyses. These target analytes should be qualified as estimated in DUSR ID#7, #10, #16, #19, #20 and #7MS/DUP.
Nitrate was detected in DUSR ID#7 but was not detected in DUSR ID#7DUP.

pH
All criteria were met except DUSR ID#7, #10, #16, #19, #20 and #7MS/DUP were analyzed outside hold time. This target analyte should be qualified as estimated in DUSR ID#7, #10, #16, #19, #20 and #7DUP.

SULFATE
All criteria were met.

SULFIDE
All criteria were met.

TOC
All criteria were met.

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

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NECi N07-0003

Qualifications:

H-09

Sample received by laboratory with insufficient time remaining to perform analysis within the recommended holding time.

Analyte & Samples(s) Qualified:

Nitrate as N
22K1575-07[MW-22-20221108], 22K1575-10[TW-2-20221108], 22K1575-16[MW-101-20221108], 22K1575-19[MW-104-20221108], 22K1575-20[TWMW-01-20221108]

Nitrite as N
22K1575-07[MW-22-20221108], 22K1575-10[TW-2-20221108], 22K1575-16[MW-101-20221108], 22K1575-19[MW-104-20221108], 22K1575-20[TWMW-01-20221108]

MS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Nitrite as N
22K1575-07[MW-22-20221108], B322761-MS1

Z-01

For test method NECi, there was a calibration point outside acceptable back calculate recovery. Reanalysis yielded similar non-conformance.

Analyte & Samples(s) Qualified:

Nitrate as N
22K1575-07[MW-22-20221108], 22K1575-10[TW-2-20221108], 22K1575-16[MW-101-20221108], 22K1575-19[MW-104-20221108], 22K1575-20[TWMW-01-20221108], B322759-BLK1, B322759-BS1, B322759-BSD1, B322759-DUP1, B322759-MS1

SM 21-23 5310B

Qualifications:

W-18

Test replicates show more than 10% difference between values.

Analyte & Samples(s) Qualified:

Total Organic Carbon
22K1575-19[MW-104-20221108]

SM21-23 4500 H B

Qualifications:

H-05

Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.

Analyte & Samples(s) Qualified:

pH
22K1575-07[MW-22-20221108], 22K1575-10[TW-2-20221108], 22K1575-16[MW-101-20221108], 22K1575-19[MW-104-20221108], 22K1575-20[TWMW-01-20221108], B322740-DUP1

SW-846 6010D

Qualifications:

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Manganese
22K1575-07[MW-22-20221108], B323099-MS1

SW-846 8260D

Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Carbon Disulfide
B322778-BSD1

Chloroethane
B322778-BSD1

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MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Bromomethane

22K1575-12[MW-01-20221108], 22K1575-24[MW-08-20221109], B322772-MS1, B322772-MSD1, B322773-MS1, B322773-MSD1

MS-15

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

Analyte & Samples(s) Qualified:

Cyclohexane

B322773-MS1, B322773-MSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

22K1575-10[TW-2-20221108], 22K1575-19[MW-104-20221108], 22K1575-22[MW-17-20221109], 22K1575-27[MW-7-20221109], 22K1575-28[MW-9-20221109]

RL-13

Elevated reporting limit due to high concentration of non-target compounds.

Analyte & Samples(s) Qualified:

22K1575-24[MW-08-20221109], 22K1575-25[DUP-02]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

1,2-Dibromo-3-chloropropane (DB

22K1575-01[MW-26-20221108], 22K1575-12[MW-01-20221108], B322772-BLK1, B322772-BS1, B322772-BSD1, B322772-MS1, B322772-MSD1, S079282-CCV1

1,4-Dioxane

22K1575-02[MW-19-20221108], 22K1575-03[MW-20-20221108], 22K1575-04[RW-9-20221108], 22K1575-05[RW-8-20221108], 22K1575-06[MW-15-20221108], 22K1575-07[MW-22-20221108], 22K1575-08[MW-28-20221108], 22K1575-09[MW-103-20221108], 22K1575-10[TW-2-20221108], 22K1575-11[MW-33-20221108], 22K1575-24[MW-08-20221109], B322773-BLK1, B322773-BS1, B322773-BSD1, B322773-MS1, B322773-MSD1, S079289-CCV1

Bromomethane

22K1575-01[MW-26-20221108], 22K1575-02[MW-19-20221108], 22K1575-03[MW-20-20221108], 22K1575-04[RW-9-20221108], 22K1575-05[RW-8-20221108], 22K1575-06[MW-15-20221108], 22K1575-07[MW-22-20221108], 22K1575-08[MW-28-20221108], 22K1575-09[MW-103-20221108], 22K1575-10[TW-2-20221108], 22K1575-11[MW-33-20221108], 22K1575-12[MW-01-20221108], 22K1575-13[DUP-01-20221108], 22K1575-14[TW-1-20221108], 22K1575-15[TW-6-20221108], 22K1575-16[MW-101-20221108], 22K1575-17[MW-13-20221108], 22K1575-18[MW-25-20221108], 22K1575-19[MW-104-20221108], 22K1575-20[TWMW-01-20221108], 22K1575-21[Trip Blank], 22K1575-22[MW-17-20221109], 22K1575-23[TW-3-20221109], 22K1575-24[MW-08-20221109], 22K1575-25[DUP-02], 22K1575-27[MW-7-20221109], 22K1575-28[MW-9-20221109], B322772-BLK1, B322772-BS1, B322772-BSD1, B322772-MS1, B322772-MSD1, B322773-BLK1, B322773-BS1, B322773-BSD1, B322773-MS1, B322773-MSD1, B322778-BLK1, B322778-BS1, B322778-BSD1, S079282-CCV1, S079289-CCV1, S079293-CCV1

Carbon Disulfide

22K1575-02[MW-19-20221108], 22K1575-03[MW-20-20221108], 22K1575-04[RW-9-20221108], 22K1575-05[RW-8-20221108], 22K1575-06[MW-15-20221108], 22K1575-07[MW-22-20221108], 22K1575-08[MW-28-20221108], 22K1575-09[MW-103-20221108], 22K1575-10[TW-2-20221108], 22K1575-11[MW-33-20221108], 22K1575-13[DUP-01-20221108], 22K1575-14[TW-1-20221108], 22K1575-15[TW-6-20221108], 22K1575-16[MW-101-20221108], 22K1575-17[MW-13-20221108], 22K1575-18[MW-25-20221108], 22K1575-19[MW-104-20221108], 22K1575-20[TWMW-01-20221108], 22K1575-21[Trip Blank], 22K1575-22[MW-17-20221109], 22K1575-23[TW-3-20221109], 22K1575-24[MW-08-20221109], 22K1575-25[DUP-02], 22K1575-27[MW-7-20221109], 22K1575-28[MW-9-20221109], B322773-BLK1, B322773-BS1, B322773-BSD1, B322773-MS1, B322773-MSD1, B322778-BLK1, B322778-BS1, B322778-BSD1, S079289-CCV1, S079293-CCV1

Chloroethane

22K1575-02[MW-19-20221108], 22K1575-03[MW-20-20221108], 22K1575-04[RW-9-20221108], 22K1575-05[RW-8-20221108], 22K1575-06[MW-15-20221108], 22K1575-07[MW-22-20221108], 22K1575-08[MW-28-20221108], 22K1575-09[MW-103-20221108], 22K1575-10[TW-2-20221108], 22K1575-11[MW-33-20221108], 22K1575-13[DUP-01-20221108], 22K1575-14[TW-1-20221108], 22K1575-15[TW-6-20221108], 22K1575-16[MW-101-20221108], 22K1575-17[MW-13-20221108], 22K1575-18[MW-25-20221108], 22K1575-19[MW-104-20221108], 22K1575-20[TWMW-01-20221108], 22K1575-21[Trip Blank], 22K1575-22[MW-17-20221109], 22K1575-23[TW-3-20221109], 22K1575-24[MW-08-20221109], 22K1575-25[DUP-02], 22K1575-27[MW-7-20221109], 22K1575-28[MW-9-20221109], B322773-BLK1, B322773-BS1, B322773-BSD1, B322773-MS1, B322773-MSD1, B322778-BLK1, B322778-BS1, B322778-BSD1, S079289-CCV1, S079293-CCV1

Chloromethane

22K1575-13[DUP-01-20221108], 22K1575-14[TW-1-20221108], 22K1575-15[TW-6-20221108], 22K1575-16[MW-101-20221108], 22K1575-17[MW-13-20221108], 22K1575-18[MW-25-20221108], 22K1575-19[MW-104-20221108], 22K1575-20[TWMW-01-20221108], 22K1575-21[Trip Blank], 22K1575-22[MW-17-20221109], 22K1575-23[TW-3-20221109], 22K1575-25[DUP-02], 22K1575-27[MW-7-20221109], 22K1575-28[MW-9-20221109], B322778-BLK1, B322778-BS1, B322778-BSD1, S079293-CCV1

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V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Methyl Acetate

B322773-BS1, B322773-BSD1, S079289-CCV1

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

con-test® A Pace Analytical® Laboratory
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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-26-20221108 | Sampled: 11/8/2022 08:10

Sample ID: 22K1575-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/11/22 19:02	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,1-Dichloroethane	4.0	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
cis-1,2-Dichloroethylene	1.9	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-26-20221108 | Sampled: 11/8/2022 08:10

Sample ID: 22K1575-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	1.4	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Trichloroethylene	2.5	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:02	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.5	70-130		11/11/22 19:02
Toluene-d8	97.8	70-130		11/11/22 19:02
4-Bromofluorobenzene	101	70-130		11/11/22 19:02

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-26-20221108 | Sampled: 11/8/2022 08:10

Sample ID: 22K1575-01

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/11/22 19:02	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-19-20221108 | Sampled: 11/8/2022 10:45

Sample ID: 22K1575-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 3:46	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,1-Dichloroethane	1.5	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
cis-1,2-Dichloroethylene	0.58	1.0	0.15	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 3:46	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-19-20221108 | Sampled: 11/8/2022 10:45

Sample ID: 22K1575-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Vinyl Chloride	0.30	2.0	0.21	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 3:46	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 3:46	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	92.1	70-130		11/12/22 3:46
Toluene-d8	97.2	70-130		11/12/22 3:46
4-Bromofluorobenzene	103	70-130		11/12/22 3:46

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-19-20221108 | Sampled: 11/8/2022 10:45

Sample ID: 22K1575-02

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Pentane, 2,3,4-trimethyl-	8.8	µg/L	166906	5.559	1	000565-75-3	90	SW-846 8260D	11/11/22	11/12/22 3:46	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-20-20221108 | Sampled: 11/8/2022 13:05

Sample ID: 22K1575-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 4:12	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,1-Dichloroethane	0.37	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-20-20221108 | Sampled: 11/8/2022 13:05

Sample ID: 22K1575-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	0.26	1.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:12	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.7	70-130		11/12/22 4:12
Toluene-d8	99.2	70-130		11/12/22 4:12
4-Bromofluorobenzene	100	70-130		11/12/22 4:12

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-20-20221108
Sampled: 11/8/2022 13:05

Sample ID: 22K1575-03

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 4:12	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: RW-9-20221108 | Sampled: 11/8/2022 15:55

Sample ID: 22K1575-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 4:38	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,1-Dichloroethane	2.4	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,1-Dichloroethylene	0.69	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 4:38	MFF
cis-1,2-Dichloroethylene	1.6	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: RW-9-20221108 | Sampled: 11/8/2022 15:55

Sample ID: 22K1575-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	4.5	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Trichloroethylene	3.0	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Trichlorofluoromethane (Freon 11)	0.37	2.0	0.18	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 4:38	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.27	1.0	0.23	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 4:38	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.2	70-130		11/12/22 4:38
Toluene-d8	98.8	70-130		11/12/22 4:38
4-Bromofluorobenzene	102	70-130		11/12/22 4:38

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: RW-9-20221108
Sampled: 11/8/2022 15:55

Sample ID: 22K1575-04

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 4:38	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: RW-8-20221108 | Sampled: 11/8/2022 15:40

Sample ID: 22K1575-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
2-Butanone (MEK)	2.2	20	1.6	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Chloroform	0.35	2.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,1-Dichloroethane	8.9	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,1-Dichloroethylene	5.0	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
cis-1,2-Dichloroethylene	11	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Isopropylbenzene (Cumene)	0.59	1.0	0.11	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Methyl Cyclohexane	1.3	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: RW-8-20221108 | Sampled: 11/8/2022 15:40

Sample ID: 22K1575-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	5.3	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Trichloroethylene	9.8	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Trichlorofluoromethane (Freon 11)	0.45	2.0	0.18	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.52	1.0	0.23	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Vinyl Chloride	6.0	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:04	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	91.9	70-130		11/12/22 5:04
Toluene-d8	97.6	70-130		11/12/22 5:04
4-Bromofluorobenzene	97.5	70-130		11/12/22 5:04

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: RW-8-20221108 | Sampled: 11/8/2022 15:40

Sample ID: 22K1575-05

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Pentane, 2,3,4-trimethyl-	13	µg/L	265041	5.556	1	000565-75-3	90	SW-846 8260D	11/11/22	11/12/22 5:04	MFF
Pentane, 2,4-dimethyl-	7.2	µg/L	100155	3.223	1	000108-08-7	83	SW-846 8260D	11/11/22	11/12/22 5:04	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-15-20221108 | Sampled: 11/8/2022 14:00

Sample ID: 22K1575-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Benzene	1.1	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Chlorobenzene	1.3	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Chloroform	0.80	2.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,1-Dichloroethane	6.6	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
cis-1,2-Dichloroethylene	2.7	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Ethylbenzene	39	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Isopropylbenzene (Cumene)	7.5	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Methyl Cyclohexane	5.9	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Toluene	0.23	1.0	0.22	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-15-20221108 | Sampled: 11/8/2022 14:00

Sample ID: 22K1575-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Trichloroethylene	0.50	1.0	0.19	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Vinyl Chloride	1.4	2.0	0.21	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Xylenes (total)	44	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 7:42	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	91.6	70-130		11/12/22 7:42
Toluene-d8	97.3	70-130		11/12/22 7:42
4-Bromofluorobenzene	103	70-130		11/12/22 7:42

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-15-20221108 | Sampled: 11/8/2022 14:00

Sample ID: 22K1575-06

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene, 1-ethyl-2-methyl-	20	µg/L	627387	9.356	1	000611-14-3	94	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Butane, 2-methyl-	34	µg/L	991137	1.464	1	000078-78-4	90	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Cyclopentane, methyl-	34	µg/L	969050	3.305	1	000096-37-7	90	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Indane	29	µg/L	911204	10.129	1	000496-11-7	96	SW-846 8260D	11/11/22	11/12/22 7:42	MFF
Pentane, 2,3,3-trimethyl-	22	µg/L	524140	5.67	1	000560-21-4	59	SW-846 8260D	11/11/22	11/12/22 7:42	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-22-20221108 | Sampled: 11/8/2022 10:30

Sample ID: 22K1575-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:31	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,1-Dichloroethane	0.67	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
cis-1,2-Dichloroethylene	0.38	1.0	0.15	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:31	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-22-20221108 | Sampled: 11/8/2022 10:30

Sample ID: 22K1575-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Trichloroethylene	0.57	1.0	0.19	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:31	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	92.8	70-130		11/12/22 5:31
Toluene-d8	98.8	70-130		11/12/22 5:31
4-Bromofluorobenzene	101	70-130		11/12/22 5:31

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-22-20221108
Sampled: 11/8/2022 10:30

Sample ID: 22K1575-07

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 5:31	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-22-20221108 | Sampled: 11/8/2022 10:30

Sample ID: 22K1575-07

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	ND	0.014	0.0026	mg/L	1		RSK175	11/22/22	11/22/22 13:16	TPH
Ethene	ND	0.017	0.0030	mg/L	1		RSK175	11/22/22	11/22/22 13:16	TPH
Methane	0.0020	0.0070	0.0012	mg/L	1	J	RSK175	11/22/22	11/22/22 13:16	TPH

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-22-20221108 | Sampled: 11/8/2022 10:30

Sample ID: 22K1575-07

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	0.26	0.050	0.019	mg/L	1		SW-846 6010D	11/14/22	11/16/22 23:35	ATP
Manganese	4.2	0.010	0.0017	mg/L	1	MS-19	SW-846 6010D	11/14/22	11/15/22 16:32	ATP

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-22-20221108 | Sampled: 11/8/2022 10:30

Sample ID: 22K1575-07

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	190	1.0	0.65	mg/L	1		SM21-23 2320B	11/14/22	11/14/22 11:15	DET
Chloride	100	1.0	0.52	mg/L	1		SM21-23 4500 CL B	11/20/22	11/20/22 11:00	DET
Nitrate as N	0.031	0.050	0.027	mg/L	1	H-09, Z-01, J	NECi N07-0003	11/11/22	11/11/22 9:37	MMH
Nitrite as N	ND	0.0500	0.00720	mg/L	1	H-09, MS-07	NECi N07-0003	11/11/22	11/11/22 7:56	MMH
pH @19.4°C	6.7			pH Units	1	H-05	SM21-23 4500 H B	11/10/22	11/10/22 16:52	JEC
Sulfate	20	1.0	0.65	mg/L	1		ASTM D516-16	11/17/22	11/17/22 10:35	EC
Sulfide	3.4	2.0	1.1	mg/L	1		SM21-23 4500S-F	11/12/22	11/12/22 11:30	DRA
Total Organic Carbon	1.2	1.0	0.54	mg/L	1		SM 21-23 5310B	11/14/22	11/14/22 13:24	IS

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-22-20221108 | Sampled: 11/8/2022 10:30

Sample ID: 22K1575-07

Sample Matrix: Ground Water

Miscellaneous Inorganic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Carbon Dioxide	167			mg/L	1		SM 4500 CO2 C	11/16/22	11/16/22 8:39	LL

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-28-20221108 | Sampled: 11/8/2022 08:20

Sample ID: 22K1575-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:57	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Chloroform	0.38	2.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,1-Dichloroethane	0.23	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,1-Dichloroethylene	0.25	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:57	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-28-20221108 | Sampled: 11/8/2022 08:20

Sample ID: 22K1575-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	0.81	1.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Trichloroethylene	1.9	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 5:57	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	92.7	70-130		11/12/22 5:57
Toluene-d8	98.5	70-130		11/12/22 5:57
4-Bromofluorobenzene	102	70-130		11/12/22 5:57

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-28-20221108 | Sampled: 11/8/2022 08:20

Sample ID: 22K1575-08

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 5:57	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-103-20221108 | Sampled: 11/8/2022 14:50

Sample ID: 22K1575-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 6:23	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,1-Dichloroethane	4.0	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,1-Dichloroethylene	0.85	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 6:23	MFF
cis-1,2-Dichloroethylene	5.5	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-103-20221108 | Sampled: 11/8/2022 14:50

Sample ID: 22K1575-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	4.1	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Trichloroethylene	32	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Trichlorofluoromethane (Freon 11)	0.19	2.0	0.18	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 6:23	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:23	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.5	70-130		11/12/22 6:23
Toluene-d8	97.8	70-130		11/12/22 6:23
4-Bromofluorobenzene	99.4	70-130		11/12/22 6:23

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-103-20221108
Sampled: 11/8/2022 14:50

Sample ID: 22K1575-09

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 6:23	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-2-20221108 | Sampled: 11/8/2022 13:00

Sample ID: 22K1575-10

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	4.1	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Benzene	ND	2.0	0.40	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Bromochloromethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Bromodichloromethane	ND	1.0	0.36	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Bromoform	ND	2.0	0.77	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Bromomethane	ND	4.0	3.1	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 7:16	MFF
2-Butanone (MEK)	ND	40	3.2	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Carbon Disulfide	ND	10	2.9	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Chlorobenzene	ND	2.0	0.21	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Chlorodibromomethane	ND	1.0	0.44	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Chloroethane	ND	4.0	0.64	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Chloroform	ND	4.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Chloromethane	ND	4.0	1.0	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Cyclohexane	ND	10	3.5	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.6	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,2-Dibromoethane (EDB)	ND	1.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,2-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,3-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.38	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,1-Dichloroethane	15	2.0	0.28	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,2-Dichloroethane	ND	2.0	0.62	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,1-Dichloroethylene	25	2.0	0.28	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
cis-1,2-Dichloroethylene	36	2.0	0.29	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,2-Dichloropropane	ND	2.0	0.36	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
cis-1,3-Dichloropropene	ND	1.0	0.32	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
trans-1,3-Dichloropropene	ND	1.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,4-Dioxane	ND	100	41	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Ethylbenzene	ND	2.0	0.43	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
2-Hexanone (MBK)	ND	20	2.2	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Isopropylbenzene (Cumene)	ND	2.0	0.22	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Methyl Acetate	ND	2.0	0.91	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Methyl Cyclohexane	1.5	2.0	0.49	µg/L	2	J	SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Methylene Chloride	ND	10	0.47	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
4-Methyl-2-pentanone (MIBK)	ND	20	2.6	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Styrene	ND	2.0	0.21	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Tetrachloroethylene	ND	2.0	0.37	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Toluene	ND	2.0	0.45	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,2,3-Trichlorobenzene	ND	10	0.61	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,2,4-Trichlorobenzene	ND	2.0	0.50	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-2-20221108 | Sampled: 11/8/2022 13:00

Sample ID: 22K1575-10

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	34	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,1,2-Trichloroethane	ND	2.0	0.37	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Trichloroethylene	240	2.0	0.38	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Trichlorofluoromethane (Freon 11)	8.8	4.0	0.35	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2.6	2.0	0.45	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Vinyl Chloride	ND	4.0	0.42	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF
Xylenes (total)	ND	2.0	2.0	µg/L	2		SW-846 8260D	11/11/22	11/12/22 7:16	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.0	70-130		11/12/22 7:16
Toluene-d8	99.0	70-130		11/12/22 7:16
4-Bromofluorobenzene	100	70-130		11/12/22 7:16

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-2-20221108 | Sampled: 11/8/2022 13:00

Sample ID: 22K1575-10

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			2			SW-846 8260D	11/11/22	11/12/22 7:16	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-2-20221108 | Sampled: 11/8/2022 13:00

Sample ID: 22K1575-10

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	0.0033	0.014	0.0026	mg/L	1	J	RSK175	11/22/22	11/22/22 13:24	TPH
Ethene	ND	0.017	0.0030	mg/L	1		RSK175	11/22/22	11/22/22 13:24	TPH
Methane	0.42	0.0070	0.0012	mg/L	1		RSK175	11/22/22	11/22/22 13:24	TPH

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-2-20221108 | Sampled: 11/8/2022 13:00

Sample ID: 22K1575-10

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	ND	0.050	0.019	mg/L	1		SW-846 6010D	11/14/22	11/17/22 0:03	ATP
Manganese	0.014	0.010	0.0017	mg/L	1		SW-846 6010D	11/14/22	11/15/22 17:06	ATP

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-2-20221108 | Sampled: 11/8/2022 13:00

Sample ID: 22K1575-10

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	200	1.0	0.65	mg/L	1		SM21-23 2320B	11/14/22	11/14/22 11:19	DET
Chloride	290	5.0	2.6	mg/L	5		SM21-23 4500 CL B	11/20/22	11/20/22 11:00	DET
Nitrate as N	0.30	0.050	0.027	mg/L	1	H-09, Z-01	NECi N07-0003	11/11/22	11/11/22 9:37	MMH
Nitrite as N	ND	0.0500	0.00720	mg/L	1	H-09	NECi N07-0003	11/11/22	11/11/22 7:58	MMH
pH @17.9°C	7.0			pH Units	1	H-05	SM21-23 4500 H B	11/10/22	11/10/22 16:52	JEC
Sulfate	15	1.0	0.65	mg/L	1		ASTM D516-16	11/17/22	11/17/22 10:35	EC
Sulfide	3.2	2.0	1.1	mg/L	1		SM21-23 4500S-F	11/12/22	11/12/22 11:30	DRA
Total Organic Carbon	1.1	1.0	0.54	mg/L	1		SM 21-23 5310B	11/14/22	11/14/22 13:40	IS

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-2-20221108 | Sampled: 11/8/2022 13:00

Sample ID: 22K1575-10

Sample Matrix: Ground Water

Miscellaneous Inorganic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Carbon Dioxide	176			mg/L	1		SM 4500 CO2 C	11/16/22	11/16/22 8:39	LL

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-33-20221108 | Sampled: 11/8/2022 13:35

Sample ID: 22K1575-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 6:49	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Chloroform	0.31	2.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,1-Dichloroethane	0.25	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,1-Dichloroethylene	2.4	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,4-Dioxane	ND	50	21	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-33-20221108 | Sampled: 11/8/2022 13:35

Sample ID: 22K1575-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	17	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Trichloroethylene	2.9	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 6:49	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.7	70-130		11/12/22 6:49
Toluene-d8	98.1	70-130		11/12/22 6:49
4-Bromofluorobenzene	101	70-130		11/12/22 6:49

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-33-20221108 | Sampled: 11/8/2022 13:35

Sample ID: 22K1575-11

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 6:49	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-01-20221108 | Sampled: 11/8/2022 14:40

Sample ID: 22K1575-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	MS-07A, V-05	SW-846 8260D	11/11/22	11/11/22 19:28	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,1-Dichloroethane	2.3	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,1-Dichloroethylene	0.87	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/11/22 19:28	MFF
cis-1,2-Dichloroethylene	3.0	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-01-20221108 | Sampled: 11/8/2022 14:40

Sample ID: 22K1575-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	4.9	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Trichloroethylene	36	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Trichlorofluoromethane (Freon 11)	0.34	2.0	0.18	µg/L	1	J	SW-846 8260D	11/11/22	11/11/22 19:28	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/11/22 19:28	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.1	70-130		11/11/22 19:28
Toluene-d8	98.3	70-130		11/11/22 19:28
4-Bromofluorobenzene	101	70-130		11/11/22 19:28

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-01-20221108 | Sampled: 11/8/2022 14:40

Sample ID: 22K1575-12

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/11/22 19:28	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: DUP-01-20221108 | Sampled: 11/8/2022 12:00

Sample ID: 22K1575-13

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 13:49	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Chloroform	0.27	2.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,1-Dichloroethylene	2.1	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: DUP-01-20221108 | Sampled: 11/8/2022 12:00

Sample ID: 22K1575-13

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	17	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Trichloroethylene	3.0	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:49	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.4	70-130		11/12/22 13:49
Toluene-d8	99.2	70-130		11/12/22 13:49
4-Bromofluorobenzene	101	70-130		11/12/22 13:49

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: DUP-01-20221108
Sampled: 11/8/2022 12:00

Sample ID: 22K1575-13

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 13:49	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-1-20221108 | Sampled: 11/8/2022 15:15

Sample ID: 22K1575-14

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 14:15	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,1-Dichloroethane	6.5	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,1-Dichloroethylene	0.61	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 14:15	MFF
cis-1,2-Dichloroethylene	11	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-1-20221108 | Sampled: 11/8/2022 15:15

Sample ID: 22K1575-14

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	0.44	1.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Trichloroethylene	10	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:15	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	87.6	70-130		11/12/22 14:15
Toluene-d8	95.2	70-130		11/12/22 14:15
4-Bromofluorobenzene	101	70-130		11/12/22 14:15

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-1-20221108
Sampled: 11/8/2022 15:15

Sample ID: 22K1575-14

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 14:15	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-6-20221108 | Sampled: 11/8/2022 14:05

Sample ID: 22K1575-15

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 14:42	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,1-Dichloroethane	4.3	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
cis-1,2-Dichloroethylene	1.7	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-6-20221108 | Sampled: 11/8/2022 14:05

Sample ID: 22K1575-15

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	2.4	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Trichloroethylene	12	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 14:42	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	91.4	70-130		11/12/22 14:42
Toluene-d8	97.1	70-130		11/12/22 14:42
4-Bromofluorobenzene	102	70-130		11/12/22 14:42

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-6-20221108 | Sampled: 11/8/2022 14:05

Sample ID: 22K1575-15

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 14:42	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-101-20221108 | Sampled: 11/8/2022 13:40

Sample ID: 22K1575-16

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 15:08	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-101-20221108 | Sampled: 11/8/2022 13:40

Sample ID: 22K1575-16

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	0.99	1.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Trichloroethylene	0.40	1.0	0.19	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:08	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.8	70-130		11/12/22 15:08
Toluene-d8	96.9	70-130		11/12/22 15:08
4-Bromofluorobenzene	101	70-130		11/12/22 15:08

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-101-20221108 | Sampled: 11/8/2022 13:40

Sample ID: 22K1575-16

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 15:08	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-101-20221108 | Sampled: 11/8/2022 13:40

Sample ID: 22K1575-16

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	ND	0.014	0.0026	mg/L	1		RSK175	11/22/22	11/22/22 13:46	TPH
Ethene	ND	0.017	0.0030	mg/L	1		RSK175	11/22/22	11/22/22 13:46	TPH
Methane	ND	0.0070	0.0012	mg/L	1		RSK175	11/22/22	11/22/22 13:46	TPH

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-101-20221108 | Sampled: 11/8/2022 13:40

Sample ID: 22K1575-16

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	0.036	0.050	0.019	mg/L	1	J	SW-846 6010D	11/14/22	11/17/22 0:08	ATP
Manganese	0.032	0.010	0.0017	mg/L	1		SW-846 6010D	11/14/22	11/15/22 17:12	ATP

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-101-20221108 | Sampled: 11/8/2022 13:40

Sample ID: 22K1575-16

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	220	1.0	0.65	mg/L	1		SM21-23 2320B	11/14/22	11/14/22 11:22	DET
Chloride	390	10	5.2	mg/L	10		SM21-23 4500 CL B	11/20/22	11/20/22 11:00	DET
Nitrate as N	1.6	0.050	0.027	mg/L	1	H-09, Z-01	NECi N07-0003	11/11/22	11/11/22 9:37	MMH
Nitrite as N	ND	0.0500	0.00720	mg/L	1	H-09	NECi N07-0003	11/11/22	11/11/22 8:00	MMH
pH @17.5°C	7.1			pH Units	1	H-05	SM21-23 4500 H B	11/10/22	11/10/22 16:52	JEC
Sulfate	20	1.0	0.65	mg/L	1		ASTM D516-16	11/17/22	11/17/22 10:35	EC
Sulfide	2.2	2.0	1.1	mg/L	1		SM21-23 4500S-F	11/12/22	11/12/22 11:30	DRA
Total Organic Carbon	0.66	1.0	0.54	mg/L	1	J	SM 21-23 5310B	11/14/22	11/14/22 14:02	IS

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-101-20221108 | Sampled: 11/8/2022 13:40

Sample ID: 22K1575-16

Sample Matrix: Ground Water

Miscellaneous Inorganic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Carbon Dioxide	194			mg/L	1		SM 4500 CO2 C	11/16/22	11/16/22 8:39	LL

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-13-20221108 | Sampled: 11/8/2022 14:25

Sample ID: 22K1575-17

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Chloroform	0.23	2.0	0.17	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,1-Dichloroethane	4.3	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,1-Dichloroethylene	0.31	1.0	0.14	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
cis-1,2-Dichloroethylene	1.4	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Isopropylbenzene (Cumene)	0.25	1.0	0.11	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Methyl Cyclohexane	0.62	1.0	0.24	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-13-20221108 | Sampled: 11/8/2022 14:25

Sample ID: 22K1575-17

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Trichloroethylene	1.3	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 15:34	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.7	70-130		11/12/22 15:34
Toluene-d8	96.4	70-130		11/12/22 15:34
4-Bromofluorobenzene	103	70-130		11/12/22 15:34

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-13-20221108 | Sampled: 11/8/2022 14:25

Sample ID: 22K1575-17

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Butane, 2-methyl-	3.2	µg/L	46726	1.464	1	000078-78-4	90	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Cyclopentene, 1,2,3-trimethyl-	3.2	µg/L	77546	6.611	1	000473-91-6	80	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Pentane, 2,3,4-trimethyl-	15	µg/L	282545	5.556	1	000565-75-3	90	SW-846 8260D	11/11/22	11/12/22 15:34	MFF
Pentane, 2,4-dimethyl-	6.0	µg/L	85910	3.223	1	000108-08-7	83	SW-846 8260D	11/11/22	11/12/22 15:34	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-25-20221108 | Sampled: 11/8/2022 09:30

Sample ID: 22K1575-18

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:00	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,1-Dichloroethane	1.8	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
cis-1,2-Dichloroethylene	0.63	1.0	0.15	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 16:00	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-25-20221108 | Sampled: 11/8/2022 09:30

Sample ID: 22K1575-18

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Trichloroethylene	1.9	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:00	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.9	70-130		11/12/22 16:00
Toluene-d8	99.2	70-130		11/12/22 16:00
4-Bromofluorobenzene	104	70-130		11/12/22 16:00

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-25-20221108
Sampled: 11/8/2022 09:30

Sample ID: 22K1575-18

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 16:00	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-104-20221108 | Sampled: 11/8/2022 11:35

Sample ID: 22K1575-19

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	10	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Benzene	ND	5.0	1.0	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Bromochloromethane	ND	5.0	1.5	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Bromodichloromethane	ND	2.5	0.90	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Bromoform	ND	5.0	1.9	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Bromomethane	ND	10	7.7	µg/L	5	V-05	SW-846 8260D	11/11/22	11/12/22 17:19	MFF
2-Butanone (MEK)	ND	100	8.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Carbon Disulfide	ND	25	7.2	µg/L	5	V-05	SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Carbon Tetrachloride	ND	25	0.82	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Chlorobenzene	ND	5.0	0.53	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Chlorodibromomethane	ND	2.5	1.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Chloroethane	14	10	1.6	µg/L	5	V-05	SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Chloroform	ND	10	0.84	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Chloromethane	ND	10	2.6	µg/L	5	V-05	SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Cyclohexane	ND	25	8.8	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	4.0	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,2-Dibromoethane (EDB)	ND	2.5	0.85	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,2-Dichlorobenzene	ND	5.0	0.61	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,3-Dichlorobenzene	ND	5.0	0.59	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,4-Dichlorobenzene	ND	5.0	0.65	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	0.96	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,1-Dichloroethane	27	5.0	0.71	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,2-Dichloroethane	ND	5.0	1.5	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,1-Dichloroethylene	34	5.0	0.71	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
cis-1,2-Dichloroethylene	720	5.0	0.73	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
trans-1,2-Dichloroethylene	ND	5.0	0.84	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,2-Dichloropropane	ND	5.0	0.91	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
cis-1,3-Dichloropropene	ND	2.5	0.79	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
trans-1,3-Dichloropropene	ND	2.5	0.84	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,4-Dioxane	ND	250	100	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Ethylbenzene	ND	5.0	1.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
2-Hexanone (MBK)	ND	50	5.6	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Isopropylbenzene (Cumene)	ND	5.0	0.54	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Methyl Acetate	ND	5.0	2.3	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	0.86	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Methyl Cyclohexane	ND	5.0	1.2	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Methylene Chloride	ND	25	1.2	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	6.4	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Styrene	ND	5.0	0.53	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	0.63	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Tetrachloroethylene	ND	5.0	0.94	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Toluene	ND	5.0	1.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,2,3-Trichlorobenzene	ND	25	1.5	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,2,4-Trichlorobenzene	ND	5.0	1.2	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-104-20221108 | Sampled: 11/8/2022 11:35

Sample ID: 22K1575-19

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	5.0	0.84	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,1,2-Trichloroethane	ND	5.0	0.91	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Trichloroethylene	ND	5.0	0.95	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Trichlorofluoromethane (Freon 11)	ND	10	0.88	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	1.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Vinyl Chloride	580	10	1.0	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF
Xylenes (total)	ND	5.0	5.0	µg/L	5		SW-846 8260D	11/11/22	11/12/22 17:19	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.2	70-130		11/12/22 17:19
Toluene-d8	97.2	70-130		11/12/22 17:19
4-Bromofluorobenzene	103	70-130		11/12/22 17:19

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-104-20221108 | Sampled: 11/8/2022 11:35

Sample ID: 22K1575-19

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			5			SW-846 8260D	11/11/22	11/12/22 17:19	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-104-20221108 | Sampled: 11/8/2022 11:35

Sample ID: 22K1575-19

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	0.0075	0.014	0.0026	mg/L	1	J	RSK175	11/22/22	11/22/22 13:54	TPH
Ethene	0.0072	0.017	0.0030	mg/L	1	J	RSK175	11/22/22	11/22/22 13:54	TPH
Methane	7.4	0.014	0.0024	mg/L	2		RSK175	11/22/22	11/22/22 14:04	TPH

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-104-20221108 | Sampled: 11/8/2022 11:35

Sample ID: 22K1575-19

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	2.8	0.050	0.019	mg/L	1		SW-846 6010D	11/14/22	11/17/22 0:25	ATP
Manganese	0.61	0.010	0.0017	mg/L	1		SW-846 6010D	11/14/22	11/15/22 17:18	ATP

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-104-20221108 | Sampled: 11/8/2022 11:35

Sample ID: 22K1575-19

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	240	1.0	0.65	mg/L	1		SM21-23 2320B	11/14/22	11/14/22 11:26	DET
Chloride	160	1.0	0.52	mg/L	1		SM21-23 4500 CL B	11/20/22	11/20/22 11:00	DET
Nitrate as N	ND	0.050	0.027	mg/L	1	H-09, Z-01	NECi N07-0003	11/11/22	11/11/22 9:37	MMH
Nitrite as N	ND	0.0500	0.00720	mg/L	1	H-09	NECi N07-0003	11/11/22	11/11/22 8:01	MMH
pH @17.8°C	7.7			pH Units	1	H-05	SM21-23 4500 H B	11/10/22	11/10/22 16:52	JEC
Sulfate	ND	1.0	0.65	mg/L	1		ASTM D516-16	11/17/22	11/17/22 10:36	EC
Sulfide	2.8	2.0	1.1	mg/L	1		SM21-23 4500S-F	11/12/22	11/12/22 11:30	DRA
Total Organic Carbon	1.3	1.0	0.54	mg/L	1	W-18	SM 21-23 5310B	11/14/22	11/14/22 14:26	IS

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-104-20221108 | Sampled: 11/8/2022 11:35

Sample ID: 22K1575-19

Sample Matrix: Ground Water

Miscellaneous Inorganic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Carbon Dioxide	212			mg/L	1		SM 4500 CO2 C	11/16/22	11/16/22 8:39	LL

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TWMW-01-20221108 | Sampled: 11/8/2022 09:10

Sample ID: 22K1575-20

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:53	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Chloroethane	0.53	2.0	0.32	µg/L	1	V-05, J	SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,1-Dichloroethane	15	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,1-Dichloroethylene	14	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
cis-1,2-Dichloroethylene	26	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Methyl Cyclohexane	0.75	1.0	0.24	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TWMW-01-20221108 | Sampled: 11/8/2022 09:10

Sample ID: 22K1575-20

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	10	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Trichloroethylene	110	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Trichlorofluoromethane (Freon 11)	2.4	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2.1	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Vinyl Chloride	8.8	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:53	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	91.6	70-130		11/12/22 16:53
Toluene-d8	98.0	70-130		11/12/22 16:53
4-Bromofluorobenzene	101	70-130		11/12/22 16:53

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TWMW-01-20221108
Sampled: 11/8/2022 09:10

Sample ID: 22K1575-20

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 16:53	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TWMW-01-20221108 | Sampled: 11/8/2022 09:10

Sample ID: 22K1575-20

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	ND	0.014	0.0026	mg/L	1		RSK175	11/22/22	11/22/22 14:13	TPH
Ethene	ND	0.017	0.0030	mg/L	1		RSK175	11/22/22	11/22/22 14:13	TPH
Methane	0.18	0.0070	0.0012	mg/L	1		RSK175	11/22/22	11/22/22 14:13	TPH

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TWMW-01-20221108 | Sampled: 11/8/2022 09:10

Sample ID: 22K1575-20

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	0.087	0.050	0.019	mg/L	1		SW-846 6010D	11/14/22	11/17/22 0:31	ATP
Manganese	0.19	0.010	0.0017	mg/L	1		SW-846 6010D	11/14/22	11/15/22 17:24	ATP

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TWMW-01-20221108 | Sampled: 11/8/2022 09:10

Sample ID: 22K1575-20

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	230	1.0	0.65	mg/L	1		SM21-23 2320B	11/14/22	11/14/22 12:05	DET
Chloride	290	10	5.2	mg/L	10		SM21-23 4500 CL B	11/20/22	11/20/22 11:00	DET
Nitrate as N	0.49	0.050	0.027	mg/L	1	H-09, Z-01	NECi N07-0003	11/11/22	11/11/22 9:37	MMH
Nitrite as N	0.00800	0.0500	0.00720	mg/L	1	H-09, J	NECi N07-0003	11/11/22	11/11/22 8:04	MMH
pH @18.7°C	7.1			pH Units	1	H-05	SM21-23 4500 H B	11/10/22	11/10/22 16:52	JEC
Sulfate	14	1.0	0.65	mg/L	1		ASTM D516-16	11/17/22	11/17/22 10:36	EC
Sulfide	2.6	2.0	1.1	mg/L	1		SM21-23 4500S-F	11/12/22	11/12/22 11:30	DRA
Total Organic Carbon	1.9	1.0	0.54	mg/L	1		SM 21-23 5310B	11/14/22	11/14/22 14:45	IS

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TWMW-01-20221108 | Sampled: 11/8/2022 09:10

Sample ID: 22K1575-20

Sample Matrix: Ground Water

Miscellaneous Inorganic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Carbon Dioxide	203			mg/L	1		SM 4500 CO2 C	11/16/22	11/16/22 8:39	LL

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: Trip Blank | Sampled: 11/8/2022 00:00

Sample ID: 22K1575-21

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 13:23	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: Trip Blank | Sampled: 11/8/2022 00:00

Sample ID: 22K1575-21

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 13:23	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.8	70-130		11/12/22 13:23
Toluene-d8	98.5	70-130		11/12/22 13:23
4-Bromofluorobenzene	105	70-130		11/12/22 13:23

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: Trip Blank | Sampled: 11/8/2022 00:00

Sample ID: 22K1575-21

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 13:23	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-17-20221109 | Sampled: 11/9/2022 09:40

Sample ID: 22K1575-22

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	4.1	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Benzene	ND	2.0	0.40	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Bromochloromethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Bromodichloromethane	ND	1.0	0.36	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Bromoform	ND	2.0	0.77	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Bromomethane	ND	4.0	3.1	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 17:45	MFF
2-Butanone (MEK)	ND	40	3.2	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Carbon Disulfide	ND	10	2.9	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Chlorobenzene	ND	2.0	0.21	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Chlorodibromomethane	ND	1.0	0.44	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Chloroethane	ND	4.0	0.64	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Chloroform	ND	4.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Chloromethane	ND	4.0	1.0	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Cyclohexane	ND	10	3.5	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.6	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,2-Dibromoethane (EDB)	ND	1.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,2-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,3-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.38	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,1-Dichloroethane	12	2.0	0.28	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,2-Dichloroethane	ND	2.0	0.62	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,1-Dichloroethylene	18	2.0	0.28	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
cis-1,2-Dichloroethylene	11	2.0	0.29	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,2-Dichloropropane	ND	2.0	0.36	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
cis-1,3-Dichloropropene	ND	1.0	0.32	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
trans-1,3-Dichloropropene	ND	1.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,4-Dioxane	ND	100	41	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Ethylbenzene	ND	2.0	0.43	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
2-Hexanone (MBK)	ND	20	2.2	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Isopropylbenzene (Cumene)	ND	2.0	0.22	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Methyl Acetate	ND	2.0	0.91	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Methyl Cyclohexane	ND	2.0	0.49	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Methylene Chloride	ND	10	0.47	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
4-Methyl-2-pentanone (MIBK)	ND	20	2.6	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Styrene	ND	2.0	0.21	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Tetrachloroethylene	ND	2.0	0.37	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Toluene	ND	2.0	0.45	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,2,3-Trichlorobenzene	ND	10	0.61	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,2,4-Trichlorobenzene	ND	2.0	0.50	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-17-20221109 | Sampled: 11/9/2022 09:40

Sample ID: 22K1575-22

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	33	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,1,2-Trichloroethane	ND	2.0	0.37	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Trichloroethylene	170	2.0	0.38	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Trichlorofluoromethane (Freon 11)	6.0	4.0	0.35	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.1	2.0	0.45	µg/L	2	J	SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Vinyl Chloride	3.7	4.0	0.42	µg/L	2	J	SW-846 8260D	11/11/22	11/12/22 17:45	MFF
Xylenes (total)	ND	2.0	2.0	µg/L	2		SW-846 8260D	11/11/22	11/12/22 17:45	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.6	70-130		11/12/22 17:45
Toluene-d8	98.7	70-130		11/12/22 17:45
4-Bromofluorobenzene	101	70-130		11/12/22 17:45

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-17-20221109 | Sampled: 11/9/2022 09:40

Sample ID: 22K1575-22

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			2			SW-846 8260D	11/11/22	11/12/22 17:45	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-3-20221109 | Sampled: 11/9/2022 08:25

Sample ID: 22K1575-23

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:27	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Chloromethane	ND	2.0	0.52	µg/L	1	V-05	SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,1-Dichloroethane	1.7	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,1-Dichloroethylene	5.5	1.0	0.14	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
cis-1,2-Dichloroethylene	1.4	1.0	0.15	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-3-20221109 | Sampled: 11/9/2022 08:25

Sample ID: 22K1575-23

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	14	1.0	0.17	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Trichloroethylene	9.2	1.0	0.19	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Trichlorofluoromethane (Freon 11)	2.2	2.0	0.18	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.91	1.0	0.23	µg/L	1	J	SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/11/22	11/12/22 16:27	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	90.4	70-130		11/12/22 16:27
Toluene-d8	98.3	70-130		11/12/22 16:27
4-Bromofluorobenzene	99.0	70-130		11/12/22 16:27

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Project Location: Vestal, NY
Sample Description:
Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: TW-3-20221109
Sampled: 11/9/2022 08:25

Sample ID: 22K1575-23

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/11/22	11/12/22 16:27	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-08-20221109 | Sampled: 11/9/2022 09:30

Sample ID: 22K1575-24

Sample Matrix: Ground Water

Sample Flags: RL-13

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	41	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Benzene	ND	20	4.0	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Bromochloromethane	ND	20	6.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Bromodichloromethane	ND	10	3.6	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Bromoform	ND	20	7.7	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Bromomethane	ND	40	31	µg/L	20	MS-07A, V-05	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
2-Butanone (MEK)	ND	400	32	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Carbon Disulfide	ND	100	29	µg/L	20	V-05	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Carbon Tetrachloride	ND	100	3.3	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Chlorobenzene	ND	20	2.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Chlorodibromomethane	ND	10	4.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Chloroethane	ND	40	6.4	µg/L	20	V-05	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Chloroform	ND	40	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Chloromethane	ND	40	10	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Cyclohexane	ND	100	35	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	16	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,2-Dibromoethane (EDB)	ND	10	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,2-Dichlorobenzene	ND	20	2.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,3-Dichlorobenzene	ND	20	2.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,4-Dichlorobenzene	ND	20	2.6	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Dichlorodifluoromethane (Freon 12)	ND	40	3.8	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,1-Dichloroethane	18	20	2.8	µg/L	20	J	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,2-Dichloroethane	ND	20	6.2	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,1-Dichloroethylene	ND	20	2.8	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
cis-1,2-Dichloroethylene	21	20	2.9	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
trans-1,2-Dichloroethylene	ND	20	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,2-Dichloropropane	ND	20	3.6	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
cis-1,3-Dichloropropene	ND	10	3.2	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
trans-1,3-Dichloropropene	ND	10	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,4-Dioxane	ND	1000	410	µg/L	20	V-05	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Ethylbenzene	120	20	4.3	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
2-Hexanone (MBK)	ND	200	22	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Isopropylbenzene (Cumene)	65	20	2.2	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Methyl Acetate	ND	20	9.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Methyl tert-Butyl Ether (MTBE)	ND	20	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Methyl Cyclohexane	62	20	4.9	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Methylene Chloride	ND	100	4.7	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
4-Methyl-2-pentanone (MIBK)	ND	200	26	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Styrene	ND	20	2.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,1,2,2-Tetrachloroethane	ND	10	2.5	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Tetrachloroethylene	ND	20	3.7	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Toluene	ND	20	4.5	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,2,3-Trichlorobenzene	ND	100	6.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,2,4-Trichlorobenzene	ND	20	5.0	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-08-20221109 | Sampled: 11/9/2022 09:30

Sample ID: 22K1575-24

Sample Matrix: Ground Water

Sample Flags: RL-13

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	20	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,1,2-Trichloroethane	ND	20	3.7	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Trichloroethylene	6.8	20	3.8	µg/L	20	J	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Trichlorofluoromethane (Freon 11)	ND	40	3.5	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	4.5	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Vinyl Chloride	18	40	4.2	µg/L	20	J	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Xylenes (total)	220	20	20	µg/L	20		SW-846 8260D	11/11/22	11/12/22 8:08	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.4	70-130		11/12/22 8:08
Toluene-d8	99.0	70-130		11/12/22 8:08
4-Bromofluorobenzene	100	70-130		11/12/22 8:08

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-08-20221109 | Sampled: 11/9/2022 09:30

Sample ID: 22K1575-24

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene, 1-ethyl-2-methyl- (01)	350	µg/L	550599	9.097	20	000611-14-3	93	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Benzene, 1-ethyl-2-methyl- (02)	410	µg/L	645205	9.359	20	000611-14-3	93	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Benzene, 1-ethyl-3-methyl-	200	µg/L	315170	9.077	20	000620-14-4	95	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Carbon Dioxide	260	µg/L	351318	0.932	20	000124-38-9	4	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Cyclopentane, methyl-	740	µg/L	981550	3.302	20	000096-37-7	90	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Indane	200	µg/L	318088	10.126	20	000496-11-7	92	SW-846 8260D	11/11/22	11/12/22 8:08	MFF
Pentane	430	µg/L	577759	1.611	20	000109-66-0	90	SW-846 8260D	11/11/22	11/12/22 8:08	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: DUP-02 | Sampled: 11/9/2022 12:00

Sample ID: 22K1575-25

Sample Matrix: Ground Water

Sample Flags: RL-13

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	41	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Benzene	ND	20	4.0	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Bromochloromethane	ND	20	6.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Bromodichloromethane	ND	10	3.6	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Bromoform	ND	20	7.7	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Bromomethane	ND	40	31	µg/L	20	V-05	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
2-Butanone (MEK)	ND	400	32	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Carbon Disulfide	ND	100	29	µg/L	20	V-05	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Carbon Tetrachloride	ND	100	3.3	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Chlorobenzene	ND	20	2.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Chlorodibromomethane	ND	10	4.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Chloroethane	ND	40	6.4	µg/L	20	V-05	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Chloroform	ND	40	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Chloromethane	ND	40	10	µg/L	20	V-05	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Cyclohexane	ND	100	35	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	16	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,2-Dibromoethane (EDB)	ND	10	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,2-Dichlorobenzene	ND	20	2.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,3-Dichlorobenzene	ND	20	2.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,4-Dichlorobenzene	ND	20	2.6	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	40	3.8	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,1-Dichloroethane	15	20	2.8	µg/L	20	J	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,2-Dichloroethane	ND	20	6.2	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,1-Dichloroethylene	ND	20	2.8	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
cis-1,2-Dichloroethylene	20	20	2.9	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
trans-1,2-Dichloroethylene	ND	20	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,2-Dichloropropane	ND	20	3.6	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
cis-1,3-Dichloropropene	ND	10	3.2	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
trans-1,3-Dichloropropene	ND	10	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,4-Dioxane	ND	1000	410	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Ethylbenzene	110	20	4.3	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
2-Hexanone (MBK)	ND	200	22	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Isopropylbenzene (Cumene)	66	20	2.2	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Methyl Acetate	ND	20	9.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	20	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Methyl Cyclohexane	65	20	4.9	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Methylene Chloride	ND	100	4.7	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	200	26	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Styrene	ND	20	2.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,1,2,2-Tetrachloroethane	ND	10	2.5	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Tetrachloroethylene	ND	20	3.7	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Toluene	ND	20	4.5	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,2,3-Trichlorobenzene	ND	100	6.1	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,2,4-Trichlorobenzene	ND	20	5.0	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: DUP-02 | Sampled: 11/9/2022 12:00

Sample ID: 22K1575-25

Sample Matrix: Ground Water

Sample Flags: RL-13

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	20	3.4	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,1,2-Trichloroethane	ND	20	3.7	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Trichloroethylene	8.2	20	3.8	µg/L	20	J	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Trichlorofluoromethane (Freon 11)	ND	40	3.5	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	4.5	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Vinyl Chloride	14	40	4.2	µg/L	20	J	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Xylenes (total)	220	20	20	µg/L	20		SW-846 8260D	11/11/22	11/12/22 18:12	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	90.1	70-130		11/12/22 18:12
Toluene-d8	97.9	70-130		11/12/22 18:12
4-Bromofluorobenzene	100	70-130		11/12/22 18:12

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: DUP-02 | Sampled: 11/9/2022 12:00

Sample ID: 22K1575-25

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene, 1-ethyl-2-methyl-	400	µg/L	563313	9.356	20	000611-14-3	94	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Benzene, 1-ethyl-3-methyl-	200	µg/L	278697	9.077	20	000620-14-4	95	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Benzene, 1-ethyl-4-methyl-	330	µg/L	464186	9.097	20	000622-96-8	91	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Butane, 2-methyl-	740	µg/L	897440	1.461	20	000078-78-4	83	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Cyclopentane, methyl-	740	µg/L	894811	3.303	20	000096-37-7	90	SW-846 8260D	11/11/22	11/12/22 18:12	MFF
Indane	190	µg/L	276629	10.129	20	000496-11-7	96	SW-846 8260D	11/11/22	11/12/22 18:12	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-7-20221109 | Sampled: 11/9/2022 09:00

Sample ID: 22K1575-27

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	4.1	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Benzene	1.3	2.0	0.40	µg/L	2	J	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Bromochloromethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Bromodichloromethane	ND	1.0	0.36	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Bromoform	ND	2.0	0.77	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Bromomethane	ND	4.0	3.1	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
2-Butanone (MEK)	ND	40	3.2	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Carbon Disulfide	ND	10	2.9	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Chlorobenzene	ND	2.0	0.21	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Chlorodibromomethane	ND	1.0	0.44	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Chloroethane	ND	4.0	0.64	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Chloroform	2.5	4.0	0.34	µg/L	2	J	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Chloromethane	ND	4.0	1.0	µg/L	2	V-05	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Cyclohexane	ND	10	3.5	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.6	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,2-Dibromoethane (EDB)	ND	1.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,2-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,3-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.38	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,1-Dichloroethane	9.5	2.0	0.28	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,2-Dichloroethane	ND	2.0	0.62	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,1-Dichloroethylene	2.0	2.0	0.28	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
cis-1,2-Dichloroethylene	8.8	2.0	0.29	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,2-Dichloropropane	ND	2.0	0.36	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
cis-1,3-Dichloropropene	ND	1.0	0.32	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
trans-1,3-Dichloropropene	ND	1.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,4-Dioxane	ND	100	41	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Ethylbenzene	83	2.0	0.43	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
2-Hexanone (MBK)	ND	20	2.2	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Isopropylbenzene (Cumene)	18	2.0	0.22	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Methyl Acetate	ND	2.0	0.91	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Methyl Cyclohexane	35	2.0	0.49	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Methylene Chloride	ND	10	0.47	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
4-Methyl-2-pentanone (MIBK)	ND	20	2.6	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Styrene	ND	2.0	0.21	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Tetrachloroethylene	ND	2.0	0.37	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Toluene	3.9	2.0	0.45	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,2,3-Trichlorobenzene	ND	10	0.61	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,2,4-Trichlorobenzene	ND	2.0	0.50	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-7-20221109 | Sampled: 11/9/2022 09:00

Sample ID: 22K1575-27

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	3.3	2.0	0.34	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,1,2-Trichloroethane	ND	2.0	0.37	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Trichloroethylene	9.6	2.0	0.38	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Trichlorofluoromethane (Freon 11)	ND	4.0	0.35	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.45	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Vinyl Chloride	5.9	4.0	0.42	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Xylenes (total)	160	2.0	2.0	µg/L	2		SW-846 8260D	11/11/22	11/12/22 18:38	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	86.5	70-130		11/12/22 18:38
Toluene-d8	96.1	70-130		11/12/22 18:38
4-Bromofluorobenzene	104	70-130		11/12/22 18:38

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-7-20221109 | Sampled: 11/9/2022 09:00

Sample ID: 22K1575-27

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene, 1-ethenyl-3-ethyl-	44	µg/L	602386	10.703	2	007525-62-4	91	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Benzene, 1-ethyl-2-methyl-	49	µg/L	680114	9.356	2	000611-14-3	94	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Benzene, 1-ethyl-4-methyl-	47	µg/L	646787	9.1	2	000622-96-8	93	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Benzene, 2-ethenyl-1,4-dime...	60	µg/L	826125	11.462	2	002039-89-6	96	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Butane, 2-methyl-	180	µg/L	3541110	1.464	2	000078-78-4	90	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Cyclopentane, methyl-	100	µg/L	2028040	3.302	2	000096-37-7	90	SW-846 8260D	11/11/22	11/12/22 18:38	MFF
Indane	59	µg/L	807461	10.129	2	000496-11-7	95	SW-846 8260D	11/11/22	11/12/22 18:38	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-9-20221109 | Sampled: 11/9/2022 10:05

Sample ID: 22K1575-28

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	10	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Benzene	74	5.0	1.0	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Bromochloromethane	ND	5.0	1.5	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Bromodichloromethane	ND	2.5	0.90	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Bromoform	ND	5.0	1.9	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Bromomethane	ND	10	7.7	µg/L	5	V-05	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
2-Butanone (MEK)	ND	100	8.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Carbon Disulfide	ND	25	7.2	µg/L	5	V-05	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Carbon Tetrachloride	ND	25	0.82	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Chlorobenzene	ND	5.0	0.53	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Chlorodibromomethane	ND	2.5	1.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Chloroethane	ND	10	1.6	µg/L	5	V-05	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Chloroform	ND	10	0.84	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Chloromethane	ND	10	2.6	µg/L	5	V-05	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Cyclohexane	ND	25	8.8	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	4.0	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,2-Dibromoethane (EDB)	ND	2.5	0.85	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,2-Dichlorobenzene	ND	5.0	0.61	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,3-Dichlorobenzene	ND	5.0	0.59	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,4-Dichlorobenzene	ND	5.0	0.65	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	0.96	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,1-Dichloroethane	ND	5.0	0.71	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,2-Dichloroethane	ND	5.0	1.5	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,1-Dichloroethylene	ND	5.0	0.71	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
cis-1,2-Dichloroethylene	ND	5.0	0.73	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
trans-1,2-Dichloroethylene	ND	5.0	0.84	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,2-Dichloropropane	ND	5.0	0.91	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
cis-1,3-Dichloropropene	ND	2.5	0.79	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
trans-1,3-Dichloropropene	ND	2.5	0.84	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,4-Dioxane	ND	250	100	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Ethylbenzene	580	5.0	1.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
2-Hexanone (MBK)	ND	50	5.6	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Isopropylbenzene (Cumene)	40	5.0	0.54	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Methyl Acetate	ND	5.0	2.3	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	0.86	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Methyl Cyclohexane	32	5.0	1.2	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Methylene Chloride	ND	25	1.2	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	6.4	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Styrene	ND	5.0	0.53	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	0.63	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Tetrachloroethylene	ND	5.0	0.94	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Toluene	83	5.0	1.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,2,3-Trichlorobenzene	ND	25	1.5	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,2,4-Trichlorobenzene	ND	5.0	1.2	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF

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Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-9-20221109 | Sampled: 11/9/2022 10:05

Sample ID: 22K1575-28

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	5.0	0.84	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,1,2-Trichloroethane	ND	5.0	0.91	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Trichloroethylene	ND	5.0	0.95	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Trichlorofluoromethane (Freon 11)	ND	10	0.88	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	1.1	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Vinyl Chloride	ND	10	1.0	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Xylenes (total)	1000	5.0	5.0	µg/L	5		SW-846 8260D	11/11/22	11/12/22 19:04	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.4	70-130		11/12/22 19:04
Toluene-d8	101	70-130		11/12/22 19:04
4-Bromofluorobenzene	102	70-130		11/12/22 19:04

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Vestal, NY | Sample Description: | Work Order: 22K1575

Date Received: 11/10/2022

Field Sample #: MW-9-20221109 | Sampled: 11/9/2022 10:05

Sample ID: 22K1575-28

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
1H-Indene, 2,3-dihydro-5-me...	120	µg/L	661500	11.462	5	000874-35-1	95	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Benzene, 1-ethyl-2-methyl- (01)	86	µg/L	492297	9.097	5	000611-14-3	95	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Benzene, 1-ethyl-2-methyl- (02)	270	µg/L	1522150	9.356	5	000611-14-3	94	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Butane, 2-methyl-	390	µg/L	2732140	1.458	5	000078-78-4	83	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Cyclobutane, methyl-	140	µg/L	988541	2.288	5	000598-61-8	80	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Cyclopentane, methyl-	240	µg/L	1656790	3.303	5	000096-37-7	90	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Cyclopropane, 1,2-dimethyl-...	78	µg/L	547927	1.805	5	000930-18-7	91	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Indane	290	µg/L	1670670	10.129	5	000496-11-7	95	SW-846 8260D	11/11/22	11/12/22 19:04	MFF
Pentane	130	µg/L	877566	1.612	5	000109-66-0	90	SW-846 8260D	11/11/22	11/12/22 19:04	MFF

3 - FORM III

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-01-20221108

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Water	Analysis:	SW-846 8260D
Batch:	B322772	Preparation:	SW-846 5030B
% Solids:		Laboratory ID:	B322772-MS1
Initial/Final:	5 mL / 5 mL	Sample Lab ID:	22K1575-12
Column:			

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.		QC LIMITS REC.
Acetone	100	ND	85.6	85.6		70 - 130
Benzene	10.0	ND	9.10	91.0		70 - 130
Bromochloromethane	10.0	ND	10.9	109		70 - 130
Bromodichloromethane	10.0	ND	9.62	96.2		70 - 130
Bromoform	10.0	ND	9.81	98.1		70 - 130
Bromomethane	10.0	ND	5.91	59.1	*	70 - 130
2-Butanone (MEK)	100	ND	108	108		70 - 130
Carbon Disulfide	100	ND	82.5	82.5		70 - 130
Carbon Tetrachloride	10.0	ND	10.8	108		70 - 130
Chlorobenzene	10.0	ND	11.3	113		70 - 130
Chlorodibromomethane	10.0	ND	9.67	96.7		70 - 130
Chloroethane	10.0	ND	8.23	82.3		70 - 130
Chloroform	10.0	ND	9.27	92.7		70 - 130
Chloromethane	10.0	ND	9.55	95.5		70 - 130
Cyclohexane	10.0	ND	10.5	105		70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	ND	7.60	76.0		70 - 130
1,2-Dibromoethane (EDB)	10.0	ND	9.87	98.7		70 - 130
1,2-Dichlorobenzene	10.0	ND	9.69	96.9		70 - 130
1,3-Dichlorobenzene	10.0	ND	9.72	97.2		70 - 130
1,4-Dichlorobenzene	10.0	ND	9.74	97.4		70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	ND	11.0	110		70 - 130
1,1-Dichloroethane	10.0	2.32	12.6	103		70 - 130
1,2-Dichloroethane	10.0	ND	10.4	104		70 - 130
1,1-Dichloroethylene	10.0	0.870	10.4	95.0		70 - 130
cis-1,2-Dichloroethylene	10.0	2.97	12.9	99.3		70 - 130
trans-1,2-Dichloroethylene	10.0	ND	10.4	104		70 - 130
1,2-Dichloropropane	10.0	ND	10.4	104		70 - 130
cis-1,3-Dichloropropene	10.0	ND	8.71	87.1		70 - 130
trans-1,3-Dichloropropene	10.0	ND	8.80	88.0		70 - 130

3 - FORM III

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-01-20221108

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Water	Analysis:	SW-846 8260D
Batch:	B322772	Preparation:	SW-846 5030B
% Solids:		Laboratory ID:	B322772-MSD1
Initial/Final:	5 mL / 5 mL	Sample Lab ID:	22K1575-12
Column:			

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #		% RPD	QC LIMITS RPD	QC LIMITS REC.
Acetone	100	87.7	87.7		2.38	30	70 - 130
Benzene	10.0	9.26	92.6		1.74	30	70 - 130
Bromochloromethane	10.0	10.5	105		3.54	30	70 - 130
Bromodichloromethane	10.0	10.5	105		8.37	30	70 - 130
Bromoform	10.0	10.9	109		10.2	30	70 - 130
Bromomethane	10.0	6.27	62.7	*	5.91	30	70 - 130
2-Butanone (MEK)	100	111	111		2.09	30	70 - 130
Carbon Disulfide	100	83.7	83.7		1.43	30	70 - 130
Carbon Tetrachloride	10.0	11.0	110		1.74	30	70 - 130
Chlorobenzene	10.0	11.6	116		3.06	30	70 - 130
Chlorodibromomethane	10.0	10.7	107		10.5	30	70 - 130
Chloroethane	10.0	8.54	85.4		3.70	30	70 - 130
Chloroform	10.0	9.24	92.4		0.324	30	70 - 130
Chloromethane	10.0	10.2	102		6.58	30	70 - 130
Cyclohexane	10.0	10.3	103		1.92	30	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	7.70	77.0		1.31	30	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.4	104		5.04	30	70 - 130
1,2-Dichlorobenzene	10.0	10.3	103		5.81	30	70 - 130
1,3-Dichlorobenzene	10.0	10.1	101		4.23	30	70 - 130
1,4-Dichlorobenzene	10.0	10.3	103		5.69	30	70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	10.5	105		5.01	30	70 - 130
1,1-Dichloroethane	10.0	12.6	103		0.0795	30	70 - 130
1,2-Dichloroethane	10.0	11.4	114		8.44	30	70 - 130
1,1-Dichloroethylene	10.0	10.4	95.7		0.673	30	70 - 130
cis-1,2-Dichloroethylene	10.0	13.2	103		2.60	30	70 - 130
trans-1,2-Dichloroethylene	10.0	10.8	108		4.24	30	70 - 130
1,2-Dichloropropane	10.0	10.7	107		2.75	30	70 - 130
cis-1,3-Dichloropropene	10.0	9.41	94.1		7.73	30	70 - 130
trans-1,3-Dichloropropene	10.0	9.26	92.6		5.09	30	70 - 130

3 - FORM III

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-08-20221109

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Water	Analysis:	SW-846 8260D
Batch:	B322773	Preparation:	SW-846 5030B
% Solids:		Laboratory ID:	B322773-MS1
Initial/Final:	5 mL / 5 mL	Sample Lab ID:	22K1575-24
Column:			

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.		QC LIMITS REC.
Acetone	2000	ND	1820	90.9		70 - 130
Benzene	200	ND	187	93.5		70 - 130
Bromochloromethane	200	ND	219	110		70 - 130
Bromodichloromethane	200	ND	200	99.8		70 - 130
Bromoform	200	ND	211	106		70 - 130
Bromomethane	200	ND	84.6	42.3	*	70 - 130
2-Butanone (MEK)	2000	ND	2220	111		70 - 130
Carbon Disulfide	2000	ND	1640	82.1		70 - 130
Carbon Tetrachloride	200	ND	212	106		70 - 130
Chlorobenzene	200	ND	231	116		70 - 130
Chlorodibromomethane	200	ND	205	103		70 - 130
Chloroethane	200	ND	163	81.7		70 - 130
Chloroform	200	ND	195	97.5		70 - 130
Chloromethane	200	ND	196	98.2		70 - 130
Cyclohexane	200	ND	429	214	*	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	200	ND	169	84.3		70 - 130
1,2-Dibromoethane (EDB)	200	ND	205	103		70 - 130
1,2-Dichlorobenzene	200	ND	195	97.4		70 - 130
1,3-Dichlorobenzene	200	ND	198	99.1		70 - 130
1,4-Dichlorobenzene	200	ND	195	97.7		70 - 130
Dichlorodifluoromethane (Freon 12)	200	ND	232	116		70 - 130
1,1-Dichloroethane	200	18.0	225	104		70 - 130
1,2-Dichloroethane	200	ND	206	103		70 - 130
1,1-Dichloroethylene	200	ND	187	93.5		70 - 130
cis-1,2-Dichloroethylene	200	20.6	217	98.3		70 - 130
trans-1,2-Dichloroethylene	200	ND	208	104		70 - 130
1,2-Dichloropropane	200	ND	215	108		70 - 130
cis-1,3-Dichloropropene	200	ND	175	87.4		70 - 130
trans-1,3-Dichloropropene	200	ND	175	87.5		70 - 130

3 - FORM III

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-08-20221109

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Water	Analysis:	SW-846 8260D
Batch:	B322773	Preparation:	SW-846 5030B
% Solids:		Laboratory ID:	B322773-MSD1
Initial/Final:	5 mL / 5 mL	Sample Lab ID:	22K1575-24
Column:			

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #		% RPD	QC LIMITS RPD	QC LIMITS REC.
Acetone	2000	1670	83.7		8.21	30	70 - 130
Benzene	200	190	95.1		1.70	30	70 - 130
Bromochloromethane	200	224	112		2.07	30	70 - 130
Bromodichloromethane	200	198	98.8		1.01	30	70 - 130
Bromoform	200	205	102		3.17	30	70 - 130
Bromomethane	200	82.6	41.3	*	2.39	30	70 - 130
2-Butanone (MEK)	2000	2200	110		1.14	30	70 - 130
Carbon Disulfide	2000	1570	78.5		4.45	30	70 - 130
Carbon Tetrachloride	200	213	107		0.658	30	70 - 130
Chlorobenzene	200	226	113		2.54	30	70 - 130
Chlorodibromomethane	200	204	102		0.782	30	70 - 130
Chloroethane	200	157	78.5		4.00	30	70 - 130
Chloroform	200	194	97.2		0.308	30	70 - 130
Chloromethane	200	191	95.3		3.00	30	70 - 130
Cyclohexane	200	422	211	*	1.50	30	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	200	170	85.2		1.06	30	70 - 130
1,2-Dibromoethane (EDB)	200	207	104		0.970	30	70 - 130
1,2-Dichlorobenzene	200	196	98.2		0.818	30	70 - 130
1,3-Dichlorobenzene	200	195	97.6		1.53	30	70 - 130
1,4-Dichlorobenzene	200	197	98.4		0.714	30	70 - 130
Dichlorodifluoromethane (Freon 12)	200	217	109		6.58	30	70 - 130
1,1-Dichloroethane	200	221	102		1.88	30	70 - 130
1,2-Dichloroethane	200	201	100		2.26	30	70 - 130
1,1-Dichloroethylene	200	177	88.4		5.61	30	70 - 130
cis-1,2-Dichloroethylene	200	217	98.0		0.277	30	70 - 130
trans-1,2-Dichloroethylene	200	203	102		2.24	30	70 - 130
1,2-Dichloropropane	200	211	105		2.07	30	70 - 130
cis-1,3-Dichloropropene	200	173	86.4		1.15	30	70 - 130
trans-1,3-Dichloropropene	200	175	87.3		0.229	30	70 - 130

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Calibration:	2200668	Instrument:	GCMSVOA2
		Calibration Date:	9/23/2022 10:27:32AM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
1,3-Dichlorobenzene	1.205725	6.3			20	
1,4-Dichlorobenzene	1.220462	8.2			20	
trans-1,4-Dichloro-2-butene	0.4202342	8.7			20	
Dichlorodifluoromethane (Freon 12)	0.5245523	6.4			20	
1,1-Dichloroethane	0.93662	9.7			20	
1,2-Dichloroethane	0.5011401	9.8			20	
1,1-Dichloroethylene	0.8406581	8.1			20	
cis-1,2-Dichloroethylene	0.9069879	9.4			20	
trans-1,2-Dichloroethylene	0.7958999	10.2			20	
Dichlorofluoromethane (Freon 21)	0.8677409	4.9			20	
1,2-Dichloropropane	0.3595268	9.8			20	
1,3-Dichloropropane	0.4279134	13.3			20	
2,2-Dichloropropane	0.6950154	5.4			20	
1,1-Dichloropropene	0.6097073	6.9			20	
cis-1,3-Dichloropropene	0.4543908	10.4			20	
trans-1,3-Dichloropropene	0.3954146	13.4			20	
Diethyl Ether	0.4498622	7.4			20	
Difluorochloromethane (Freon 22)	0.9947701	5.5			20	
Diisopropyl Ether (DIPE)	2.546082	6.7			20	
1,4-Dioxane	4.207708E-03	4.9			20	
Ethanol	1.265842E-02	15.9			20	
Ethyl Acetate	0.9540238	3.5			20	
Ethylbenzene	2.559739	9.5			20	
Hexachlorobutadiene	0.3320099	13.8			20	
2-Hexanone (MBK)	0.4046183	7.7			20	
Iodomethane	0.6095881	13.1			20	
Isopropylbenzene (Cumene)	2.737554	8.5			20	
p-Isopropyltoluene (p-Cymene)	2.23095	9.8			20	
Methyl Acetate	0.8029664	6.0			20	
Methyl tert-Butyl Ether (MTBE)	1.219111	6.6			20	
Methyl Cyclohexane	0.5137859	8.5			20	

INITIAL CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2200668
Lab File ID:	B22V26623.D	Calibration Date:	09/23/22 10:27
Sequence:	S076983	Injection Date:	09/23/22
Lab Sample ID:	S076983-ICV1	Injection Time:	17:51

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
1,2-Dichlorobenzene	A	10.0	12.0	1.087871	1.303569		19.8	30
1,3-Dichlorobenzene	A	10.0	11.8	1.205725	1.421104		17.9	30
1,4-Dichlorobenzene	A	10.0	11.8	1.220462	1.435691		17.6	30
trans-1,4-Dichloro-2-butene	A	10.0	9.37	0.4202342	0.39371		-6.3	30
Dichlorodifluoromethane (Freon 12)	A	10.0	7.28	0.5245523	0.3819897		-27.2	30
1,1-Dichloroethane	A	10.0	11.6	0.93662	1.085745		15.9	30
1,2-Dichloroethane	A	10.0	11.2	0.5011401	0.5619742		12.1	30
1,1-Dichloroethylene	A	10.0	10.5	0.8406581	0.885419		5.3	30
cis-1,2-Dichloroethylene	A	10.0	11.5	0.9069879	1.039825		14.6	30
trans-1,2-Dichloroethylene	A	10.0	10.9	0.7958999	0.8674748		9.0	30
Dichlorofluoromethane (Freon 21)	A	10.0	10.0	0.8677409	0.8703801		0.3	30
1,2-Dichloropropane	A	10.0	11.9	0.3595268	0.4278413		19.0	30
1,3-Dichloropropane	A	10.0	11.8	0.4279134	0.5031022		17.6	30
2,2-Dichloropropane	A	10.0	10.2	0.6950154	0.7112918		2.3	30
1,1-Dichloropropene	A	10.0	10.6	0.6097073	0.6456843		5.9	30
cis-1,3-Dichloropropene	A	10.0	11.7	0.4543908	0.5296906		16.6	30
trans-1,3-Dichloropropene	A	10.0	12.8	0.3954146	0.504832		27.7	30
Diethyl Ether	A	10.0	11.1	0.4498622	0.5011906		11.4	30
Difluorochloromethane (Freon 22)	A	10.0	7.28	0.9947701	0.7242287		-27.2	30
Diisopropyl Ether (DIPE)	A	10.0	11.1	2.546082	2.825292		11.0	30
1,4-Dioxane	A	100	83.1	4.207708E-03	3.496823E-03		-16.9	30
Ethanol	A	100	78.9	1.265842E-02	9.98724E-03		-21.1	30
Ethyl Acetate	A	10.0	9.18	0.9540238	0.8757463		-8.2	30
Ethylbenzene	A	10.0	11.8	2.559739	3.019895		18.0	30
Hexachlorobutadiene	A	10.0	11.1	0.3320099	0.3694584		11.3	30
2-Hexanone (MBK)	A	100	99.0	0.4046183	0.4004632		-1.0	30
Iodomethane	A	10.0	9.17	0.6095881	0.559176		-8.3	30
Isopropylbenzene (Cumene)	A	10.0	11.8	2.737554	3.239426		18.3	30

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2200668
Lab File ID:	B22V31507.D	Calibration Date:	09/23/22 10:27
Sequence:	S079282	Injection Date:	11/11/22
Lab Sample ID:	S079282-CCV1	Injection Time:	09:53

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	100	90.4	0.238786	0.215747		-9.6	20	
Benzene	A	10.0	9.16	1.649064	1.51021		-8.4	20	
Bromochloromethane	A	10.0	10.6	0.1968477	0.2095749		6.5	20	
Bromodichloromethane	A	10.0	9.20	0.3900733	0.3589732		-8.0	20	
Bromoform	A	10.0	9.49	0.4587575	0.4353442		-5.1	20	
Bromomethane	A	10.0	5.25	0.2509831	0.1316459		-47.5	20	*
2-Butanone (MEK)	A	100	112	0.3571896	0.400511		12.1	20	
Carbon Disulfide	A	100	81.3	1.177679	0.9569294		-18.7	20	
Carbon Tetrachloride	A	10.0	10.1	0.6726032	0.6763796		0.6	20	
Chlorobenzene	A	10.0	11.0	1.499661	1.645497		9.7	20	
Chlorodibromomethane	A	10.0	9.63	0.3179661	0.3061281		-3.7	20	
Chloroethane	A	10.0	8.17	0.3886458	0.3175766		-18.3	20	
Chloroform	A	10.0	9.00	0.7874059	0.7087782		-10.0	20	
Chloromethane	A	10.0	8.87	1.066904	0.9468325		-11.3	20	
Cyclohexane	A	10.0	10.3	1.425292	1.471951		3.3	20	
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	7.80	0.1224495	9.547156E-02		-22.0	20	*
1,2-Dibromoethane (EDB)	A	10.0	9.65	0.2706643	0.2612674		-3.5	20	
1,2-Dichlorobenzene	A	10.0	9.69	1.087871	1.054642		-3.1	20	
1,3-Dichlorobenzene	A	10.0	9.76	1.205725	1.176621		-2.4	20	
1,4-Dichlorobenzene	A	10.0	9.94	1.220462	1.213423		-0.6	20	
Dichlorodifluoromethane (Freon 12)	A	10.0	10.6	0.5245523	0.5571143		6.2	20	
1,1-Dichloroethane	A	10.0	10.1	0.93662	0.948902		1.3	20	
1,2-Dichloroethane	A	10.0	10.1	0.5011401	0.5050117		0.8	20	
1,1-Dichloroethylene	A	10.0	8.76	0.8406581	0.736122		-12.4	20	
cis-1,2-Dichloroethylene	A	10.0	10.0	0.9069879	0.9075475		0.06	20	
trans-1,2-Dichloroethylene	A	10.0	10.2	0.7958999	0.8109009		1.9	20	
1,2-Dichloropropane	A	10.0	10.2	0.3595268	0.3666317		2.0	20	
cis-1,3-Dichloropropene	A	10.0	9.13	0.4543908	0.4148641		-8.7	20	
trans-1,3-Dichloropropene	A	10.0	9.27	0.3954146	0.3666066		-7.3	20	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2200668
Lab File ID:	B22V31507.D	Calibration Date:	09/23/22 10:27
Sequence:	S079282	Injection Date:	11/11/22
Lab Sample ID:	S079282-CCV1	Injection Time:	09:53

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dioxane	A	100	80.0	4.207708E-03	3.367998E-03		-20.0	20
Ethylbenzene	A	10.0	10.8	2.559739	2.757984		7.7	20
2-Hexanone (MBK)	A	100	111	0.4046183	0.4480703		10.7	20
Isopropylbenzene (Cumene)	A	10.0	10.4	2.737554	2.844387		3.9	20
Methyl Acetate	A	10.0	11.2	0.8029664	0.8965037		11.6	20
Methyl tert-Butyl Ether (MTBE)	A	10.0	8.72	1.219111	1.062545		-12.8	20
Methyl Cyclohexane	A	10.0	10.1	0.5137859	0.5205168		1.3	20
Methylene Chloride	A	10.0	10.8	0.9862663	1.070347		8.5	20
4-Methyl-2-pentanone (MIBK)	A	100	113	0.541737	0.6140611		13.4	20
Styrene	A	10.0	10.3	1.704195	1.747743		2.6	20
1,1,2,2-Tetrachloroethane	A	10.0	9.33	0.7038898	0.6570074		-6.7	20
Tetrachloroethylene	A	10.0	11.0	0.2627327	0.2885548		9.8	20
Toluene	A	10.0	10.0	1.184721	1.185919		0.1	20
1,2,3-Trichlorobenzene	A	10.0	8.63	0.5344218	0.4609407		-13.7	20
1,2,4-Trichlorobenzene	A	10.0	9.58	0.6532933	0.6261087		-4.2	20
1,1,1-Trichloroethane	A	10.0	9.87	0.7059811	0.6971118		-1.3	20
1,1,2-Trichloroethane	A	10.0	9.53	0.2405517	0.2293422		-4.7	20
Trichloroethylene	A	10.0	10.6	0.2898346	0.3056392		5.5	20
Trichlorofluoromethane (Freon 11)	A	10.0	9.27	0.6600919	0.6115822		-7.3	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	9.49	0.38434	0.364627		-5.1	20
Vinyl Chloride	A	10.0	9.34	0.6770396	0.6324976		-6.6	20
m+p Xylene	A	20.0	21.8	2.033565	2.220068		9.2	20
o-Xylene	A	10.0	10.6	2.086783	2.200691		5.5	20
1,2-Dichloroethane-d4	A	25.0	23.0	0.6928696	0.6365817		-8.1	
Toluene-d8	A	25.0	24.7	1.237958	1.224833		-1.1	
4-Bromofluorobenzene	A	25.0	25.2	0.9618698	0.9702729		0.9	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2200668
Lab File ID:	B22V31535.D	Calibration Date:	09/23/22 10:27
Sequence:	S079289	Injection Date:	11/11/22
Lab Sample ID:	S079289-CCV1	Injection Time:	22:05

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	100	90.0	0.238786	0.2148045		-10.0	20	
Benzene	A	10.0	8.79	1.649064	1.450101		-12.1	20	
Bromochloromethane	A	10.0	10.3	0.1968477	0.2033419		3.3	20	
Bromodichloromethane	A	10.0	9.41	0.3900733	0.3669572		-5.9	20	
Bromoform	A	10.0	10.1	0.4587575	0.4621973		0.7	20	
Bromomethane	A	10.0	5.83	0.2509831	0.1462379		-41.7	20	*
2-Butanone (MEK)	A	100	112	0.3571896	0.4000784		12.0	20	
Carbon Disulfide	A	100	76.6	1.177679	0.9025791		-23.4	20	*
Carbon Tetrachloride	A	10.0	9.81	0.6726032	0.6599542		-1.9	20	
Chlorobenzene	A	10.0	10.9	1.499661	1.634874		9.0	20	
Chlorodibromomethane	A	10.0	9.99	0.3179661	0.3177157		-0.08	20	
Chloroethane	A	10.0	7.78	0.3886458	0.3021825		-22.2	20	*
Chloroform	A	10.0	9.11	0.7874059	0.7171179		-8.9	20	
Chloromethane	A	10.0	9.44	1.066904	1.006803		-5.6	20	
Cyclohexane	A	10.0	9.57	1.425292	1.363758		-4.3	20	
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	8.41	0.1224495	0.1029292		-15.9	20	
1,2-Dibromoethane (EDB)	A	10.0	9.81	0.2706643	0.2656051		-1.9	20	
1,2-Dichlorobenzene	A	10.0	9.72	1.087871	1.05692		-2.8	20	
1,3-Dichlorobenzene	A	10.0	9.42	1.205725	1.135667		-5.8	20	
1,4-Dichlorobenzene	A	10.0	9.73	1.220462	1.187024		-2.7	20	
Dichlorodifluoromethane (Freon 12)	A	10.0	9.67	0.5245523	0.5072185		-3.3	20	
1,1-Dichloroethane	A	10.0	9.84	0.93662	0.921556		-1.6	20	
1,2-Dichloroethane	A	10.0	9.93	0.5011401	0.4976457		-0.7	20	
1,1-Dichloroethylene	A	10.0	8.52	0.8406581	0.716221		-14.8	20	
cis-1,2-Dichloroethylene	A	10.0	9.50	0.9069879	0.8617812		-5.0	20	
trans-1,2-Dichloroethylene	A	10.0	9.79	0.7958999	0.7795236		-2.1	20	
1,2-Dichloropropane	A	10.0	10.1	0.3595268	0.3619878		0.7	20	
cis-1,3-Dichloropropene	A	10.0	9.00	0.4543908	0.4087995		-10.0	20	
trans-1,3-Dichloropropene	A	10.0	8.81	0.3954146	0.3484522		-11.9	20	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2200668
Lab File ID:	B22V31535.D	Calibration Date:	09/23/22 10:27
Sequence:	S079289	Injection Date:	11/11/22
Lab Sample ID:	S079289-CCV1	Injection Time:	22:05

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
1,4-Dioxane	A	100	79.4	4.207708E-03	3.339968E-03		-20.6	20	*
Ethylbenzene	A	10.0	10.3	2.559739	2.64632		3.4	20	
2-Hexanone (MBK)	A	100	111	0.4046183	0.4496575		11.1	20	
Isopropylbenzene (Cumene)	A	10.0	10.1	2.737554	2.776806		1.4	20	
Methyl Acetate	A	10.0	12.9	0.8029664	1.034409		28.8	20	*
Methyl tert-Butyl Ether (MTBE)	A	10.0	8.39	1.219111	1.023067		-16.1	20	
Methyl Cyclohexane	A	10.0	8.71	0.5137859	0.4473334		-12.9	20	
Methylene Chloride	A	10.0	10.6	0.9862663	1.046387		6.1	20	
4-Methyl-2-pentanone (MIBK)	A	100	114	0.541737	0.6199067		14.4	20	
Styrene	A	10.0	10.3	1.704195	1.759252		3.2	20	
1,1,2,2-Tetrachloroethane	A	10.0	8.71	0.7038898	0.6131701		-12.9	20	
Tetrachloroethylene	A	10.0	10.9	0.2627327	0.2872263		9.3	20	
Toluene	A	10.0	9.74	1.184721	1.153655		-2.6	20	
1,2,3-Trichlorobenzene	A	10.0	8.59	0.5344218	0.4588319		-14.1	20	
1,2,4-Trichlorobenzene	A	10.0	9.50	0.6532933	0.6203964		-5.0	20	
1,1,1-Trichloroethane	A	10.0	9.77	0.7059811	0.6894329		-2.3	20	
1,1,2-Trichloroethane	A	10.0	9.52	0.2405517	0.2289656		-4.8	20	
Trichloroethylene	A	10.0	10.7	0.2898346	0.3104812		7.1	20	
Trichlorofluoromethane (Freon 11)	A	10.0	9.65	0.6600919	0.637292		-3.5	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	8.17	0.38434	0.3140617		-18.3	20	
Vinyl Chloride	A	10.0	8.80	0.6770396	0.5958742		-12.0	20	
m+p Xylene	A	20.0	20.9	2.033565	2.124326		4.5	20	
o-Xylene	A	10.0	10.2	2.086783	2.126203		1.9	20	
1,2-Dichloroethane-d4	A	25.0	22.9	0.6928696	0.6343102		-8.5		
Toluene-d8	A	25.0	24.6	1.237958	1.21845		-1.6		
4-Bromofluorobenzene	A	25.0	25.6	0.9618698	0.984181		2.3		

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2200668
Lab File ID:	B22V31564.D	Calibration Date:	09/23/22 10:27
Sequence:	S079293	Injection Date:	11/12/22
Lab Sample ID:	S079293-CCV1	Injection Time:	10:46

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	100	87.0	0.238786	0.2077835		-13.0	20	
Benzene	A	10.0	9.22	1.649064	1.519745		-7.8	20	
Bromochloromethane	A	10.0	10.6	0.1968477	0.2079357		5.6	20	
Bromodichloromethane	A	10.0	9.49	0.3900733	0.3700311		-5.1	20	
Bromoform	A	10.0	10.5	0.4587575	0.4818151		5.0	20	
Bromomethane	A	10.0	5.51	0.2509831	0.1383295		-44.9	20	*
2-Butanone (MEK)	A	100	114	0.3571896	0.4076745		14.1	20	
Carbon Disulfide	A	100	74.3	1.177679	0.8746299		-25.7	20	*
Carbon Tetrachloride	A	10.0	10.4	0.6726032	0.7002517		4.1	20	
Chlorobenzene	A	10.0	11.3	1.499661	1.694139		13.0	20	
Chlorodibromomethane	A	10.0	10.4	0.3179661	0.3318774		4.4	20	
Chloroethane	A	10.0	7.10	0.3886458	0.2757947		-29.0	20	*
Chloroform	A	10.0	8.92	0.7874059	0.7020365		-10.8	20	
Chloromethane	A	10.0	7.63	1.066904	0.813801		-23.7	20	*
Cyclohexane	A	10.0	10.2	1.425292	1.446382		1.5	20	
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	8.07	0.1224495	0.0988339		-19.3	20	
1,2-Dibromoethane (EDB)	A	10.0	10.3	0.2706643	0.2782311		2.8	20	
1,2-Dichlorobenzene	A	10.0	10.1	1.087871	1.094913		0.6	20	
1,3-Dichlorobenzene	A	10.0	9.84	1.205725	1.187023		-1.6	20	
1,4-Dichlorobenzene	A	10.0	10.3	1.220462	1.251686		2.6	20	
Dichlorodifluoromethane (Freon 12)	A	10.0	10.4	0.5245523	0.5441309		3.7	20	
1,1-Dichloroethane	A	10.0	10.2	0.93662	0.9576727		2.2	20	
1,2-Dichloroethane	A	10.0	10.5	0.5011401	0.5241653		4.6	20	
1,1-Dichloroethylene	A	10.0	8.27	0.8406581	0.6955362		-17.3	20	
cis-1,2-Dichloroethylene	A	10.0	10.0	0.9069879	0.9101601		0.3	20	
trans-1,2-Dichloroethylene	A	10.0	10.2	0.7958999	0.8093485		1.7	20	
1,2-Dichloropropane	A	10.0	10.6	0.3595268	0.3823941		6.4	20	
cis-1,3-Dichloropropene	A	10.0	9.55	0.4543908	0.4337288		-4.5	20	
trans-1,3-Dichloropropene	A	10.0	9.18	0.3954146	0.3631614		-8.2	20	

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	22K1575
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Hidden Valley Electronics - CO SMPA0001
Instrument ID:	GCMSVOA2	Calibration:	2200668
Lab File ID:	B22V31564.D	Calibration Date:	09/23/22 10:27
Sequence:	S079293	Injection Date:	11/12/22
Lab Sample ID:	S079293-CCV1	Injection Time:	10:46

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dioxane	A	100	92.9	4.207708E-03	3.908871E-03		-7.1	20
Ethylbenzene	A	10.0	10.9	2.559739	2.793479		9.1	20
2-Hexanone (MBK)	A	100	117	0.4046183	0.4718929		16.6	20
Isopropylbenzene (Cumene)	A	10.0	10.9	2.737554	2.975287		8.7	20
Methyl Acetate	A	10.0	11.7	0.8029664	0.9362366		16.6	20
Methyl tert-Butyl Ether (MTBE)	A	10.0	8.91	1.219111	1.085707		-10.9	20
Methyl Cyclohexane	A	10.0	9.71	0.5137859	0.4986732		-2.9	20
Methylene Chloride	A	10.0	10.4	0.9862663	1.025795		4.0	20
4-Methyl-2-pentanone (MIBK)	A	100	118	0.541737	0.6406094		18.3	20
Styrene	A	10.0	10.8	1.704195	1.842914		8.1	20
1,1,2,2-Tetrachloroethane	A	10.0	9.40	0.7038898	0.66176		-6.0	20
Tetrachloroethylene	A	10.0	11.4	0.2627327	0.2987105		13.7	20
Toluene	A	10.0	10.4	1.184721	1.231385		3.9	20
1,2,3-Trichlorobenzene	A	10.0	9.61	0.5344218	0.5137941		-3.9	20
1,2,4-Trichlorobenzene	A	10.0	9.57	0.6532933	0.6254469		-4.3	20
1,1,1-Trichloroethane	A	10.0	10.0	0.7059811	0.7066206		0.09	20
1,1,2-Trichloroethane	A	10.0	10.5	0.2405517	0.2521806		4.8	20
Trichloroethylene	A	10.0	11.2	0.2898346	0.3251895		12.2	20
Trichlorofluoromethane (Freon 11)	A	10.0	9.32	0.6600919	0.6152589		-6.8	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	8.32	0.38434	0.3198505		-16.8	20
Vinyl Chloride	A	10.0	8.31	0.6770396	0.5623168		-16.9	20
m+p Xylene	A	20.0	21.9	2.033565	2.229093		9.6	20
o-Xylene	A	10.0	10.8	2.086783	2.262661		8.4	20
1,2-Dichloroethane-d4	A	25.0	22.5	0.6928696	0.6238897		-10.0	
Toluene-d8	A	25.0	24.6	1.237958	1.21748		-1.7	
4-Bromofluorobenzene	A	25.0	25.8	0.9618698	0.9916067		3.1	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Hidden Valley Electronics
Pace/Con-Test Analytical Laboratory SDG#22K1627
March 22, 2024
Sampling date: 11/7, 8/2022

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 Hidden Valley Electronics, SDG#22K1627 submitted to Vali-Data of WNY, LLC on December 26, 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 (8270E).

ID	Sample ID	Laboratory ID
1	MW-101-20221107	22K1627-01
2	TWMW-01-20221108	22K1627-02
3	EB-02	22K1627-03
4	MW-104-20221108	22K1627-04
5	FB-02	22K1627-05
6	TW-2-20221108	22K1627-06

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.

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
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
All criteria were met.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.

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.

Tod E. Kopyscinski
Laboratory Director

1 - FORM I
ANALYSIS DATA SHEET

MW-101-20221107

Laboratory:	Pace New England			Work Order:	22K1627
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1627-01	File ID:	F22S325006.D
Sampled:	11/07/22 13:40	Prepared:	11/10/22 15:27	Analyzed:	11/21/22 14:14
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	930 mL / 1 mL				
Batch:	B322731	Sequence:	S079686	Calibration:	2200697
				Instrument:	GCMSSV6

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane		0.035	0.22	

1 - FORM I
ANALYSIS DATA SHEET

TWMW-01-20221108

Laboratory:	Pace New England			Work Order:	22K1627
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1627-02	File ID:	F22S325007.D
Sampled:	11/08/22 09:10	Prepared:	11/10/22 15:27	Analyzed:	11/21/22 14:33
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	970 mL / 1 mL				
Batch:	B322731	Sequence:	S079686	Calibration:	2200697
Instrument:	GCMSSV6				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	2.8	0.034	0.21	

1 - FORM I
ANALYSIS DATA SHEET

EB-02

Laboratory:	Pace New England			Work Order:	22K1627
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1627-03	File ID:	F22S325008.D
Sampled:	11/08/22 12:00	Prepared:	11/15/22 15:16	Analyzed:	11/21/22 14:52
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	990 mL / 1 mL				
Batch:	B323124	Sequence:	S079686	Calibration:	2200697
Instrument:	GCMSSV6				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane		0.033	0.20	

1 - FORM I
ANALYSIS DATA SHEET

MW-104-20221108

Laboratory:	Pace New England			Work Order:	22K1627
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1627-04	File ID:	F22S325009.D
Sampled:	11/08/22 11:35	Prepared:	11/15/22 15:16	Analyzed:	11/21/22 15:12
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	985 mL / 1 mL				
Batch:	B323124	Sequence:	S079686	Calibration:	2200697
				Instrument:	GCMSSV6

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	0.96	0.033	0.20	

1 - FORM I
ANALYSIS DATA SHEET

FB-02

Laboratory:	Pace New England			Work Order:	22K1627
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1627-05	File ID:	F22S325010.D
Sampled:	11/08/22 12:00	Prepared:	11/15/22 15:16	Analyzed:	11/21/22 15:31
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	1030 mL / 1 mL				
Batch:	B323124	Sequence:	S079686	Calibration:	2200697	Instrument:	GCMSSV6

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane		0.032	0.19	

1 - FORM I
ANALYSIS DATA SHEET

TW-2-20221108

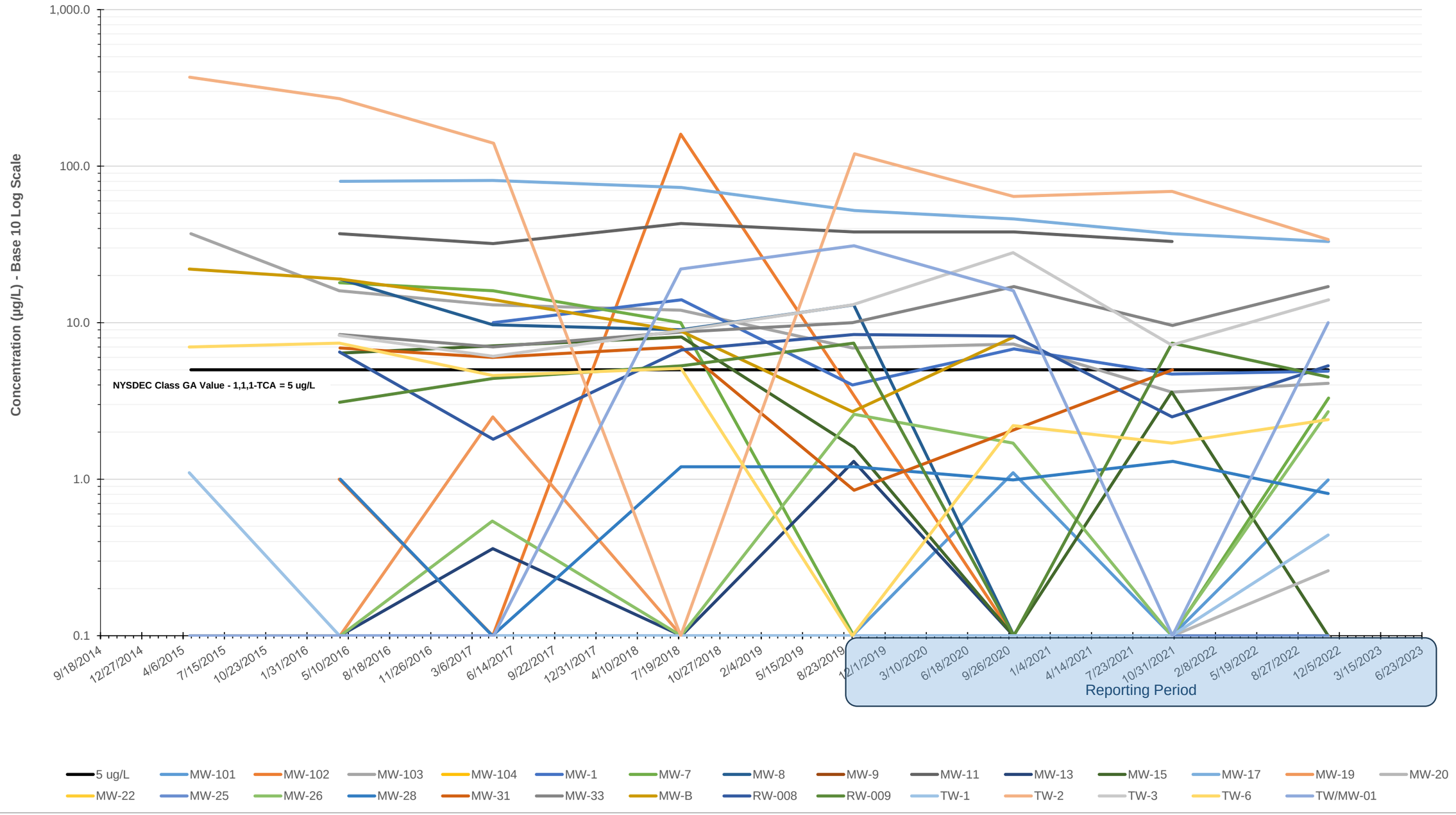
Laboratory:	Pace New England			Work Order:	22K1627
Client:	NYDEC_TRC Engineers, Inc. - New			Project:	Hidden Valley Electronics - CO SMPA0001
Matrix:	Ground Water	Laboratory ID:	22K1627-06	File ID:	F22S325011.D
Sampled:	11/08/22 13:00	Prepared:	11/15/22 15:16	Analyzed:	11/21/22 15:51
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	980 mL / 1 mL				
Batch:	B323124	Sequence:	S079686	Calibration:	2200697	Instrument:	GCMSSV6

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	3.2	0.033	0.20	

APPENDIX G

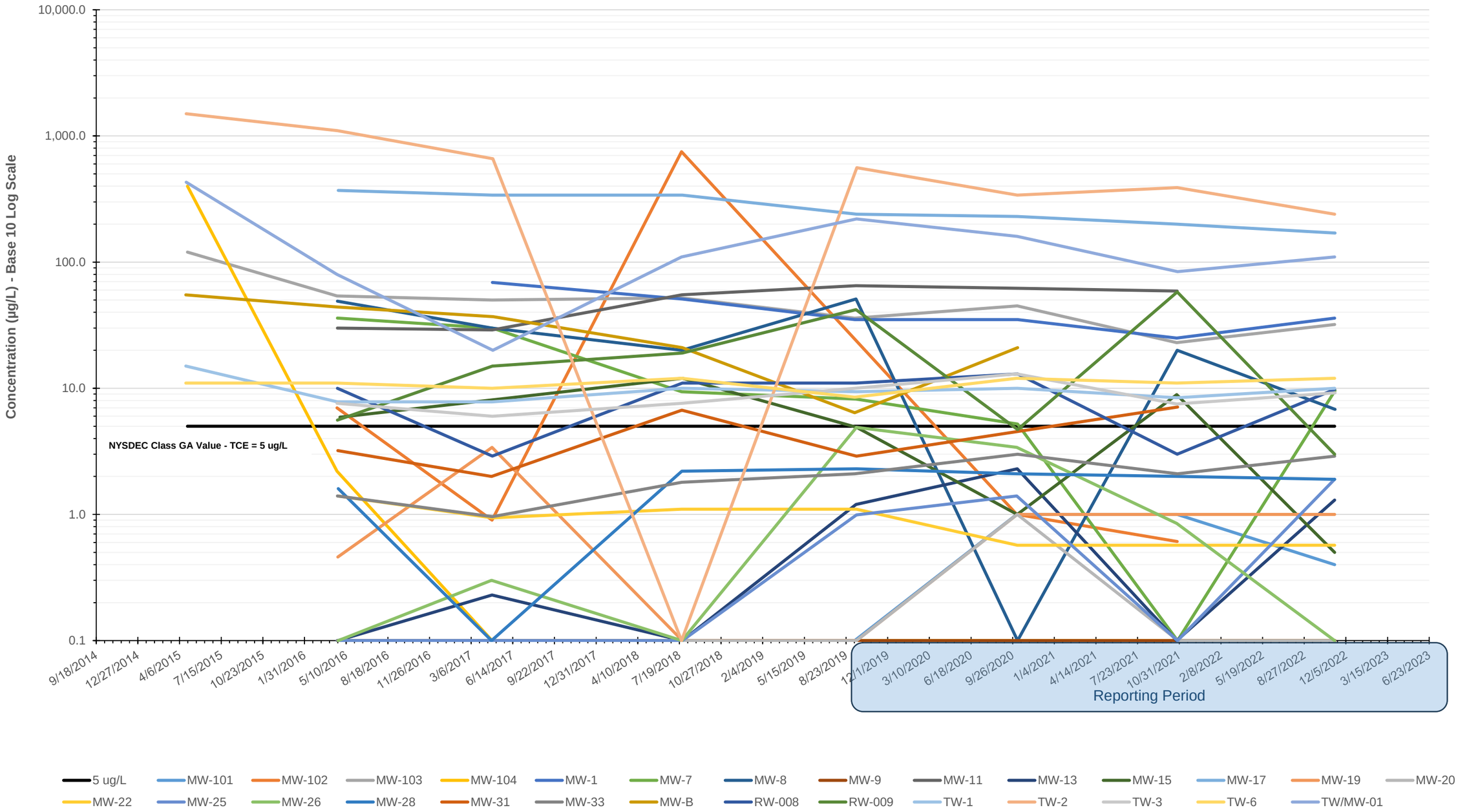
Notes
1) Non-detect values plotted at 0.1 µg/L.
2) Continous data history is not available for all wells. Data from indidivual sampling events may be plotted as singular points.

New York State Department of Environmental Conservation
Hidden Valley Electronics - Site No. 704029
Vestel, New York
1,1,1-TCA 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
Hidden Valley Electronics- Site No. 704029
Vestel, New York
TCE 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
Hidden Valley Electronics- Site No. 704029
Vestel, New York
Cis-1,2-DCE Trend