Remedial System Optimization Report
National Heatset Printing Company Site (No. 152140)
Babylon, Suffolk County, New York

Prepared for

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Prepared by

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May 2024
Version: FINAL
EA Project No. 1602518

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LIST OF ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Microgram(s) per liter
%	Percent
AARCO	AARCO Environmental
AWQS	Ambient Water Quality Standard
bgs	Below ground surface
COC	Contaminant of concern
CMT	Continuous multichannel tubing
CSM	Conceptual site model
CVOC	Chlorinated volatile organic compound
DCE	Dichloroethene
DDC	Density driven convection
DER	Division of Environmental Remediation
DNAPL	Dense non-aqueous phase liquid
DO	Dissolved oxygen
EA	EA Engineering, P.C. and its Affiliate EA Science and Technology
EPA	U.S. Environmental Protection Agency
EZVI	Emulsified zero valent iron
FS	Feasibility Study
ft	Feet(foot)
ft/day	Foot (feet) per day
ft/ft	Foot (feet) per foot
g/cm^3	Grams per cubic centimeter
g/d	Grams per day
$g/d/ft^2$	Grams per day per square foot
GPR	Ground penetrating radar
GPS	Global Positioning System
HPT	Hydraulic profiling tool
HSVE	Horizontal soil vapor extraction
ID	Identification
in.	Inch(es)
ISB	In situ bioaugmentation
ISCO	In situ chemical oxidation
ISCR	In situ chemical reduction

K	Hydraulic conductivity
lb	Pound(s)
lb/d	Pound(s) per day
mg/L	Milligram(s) per liter
MNA	Monitored natural attenuation
mV	Millivolt(s)
NAPL	Non-aqueous phase liquid
No.	Number
NYSDEC	New York State Department of Environmental Conservation
ORP	Oxidation-reduction potential
PCE	Tetrachloroethene
PID	Photoionization detector
pH	Potential of hydrogen
ppb	Part(s) per billion
ppm	Part(s) per million
PVC	Polyvinyl chloride
RAO	Remedial action objectives
RI	Remedial investigation
ROD	Record of Decision
RSO	Remedial System Optimization
SCDES	Suffolk County Department of Health Services
SCG	Standards, criteria, and guidance
SCWA	Suffolk County Water Authority
Site	National Heatset Printing Company Site
SPC	Screen point coupler
SVE	Soil vapor extraction
TCE	Trichloroethene
TCH	Thermal conductive heating
TOGS	Technical and Operational Guidance Series
VOC	Volatile organic compound
ZVI	Zero valent iron

1. INTRODUCTION AND PROJECT OVERVIEW

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) to perform a remedial system optimization (RSO) investigation at the National Heatset Printing Company Site (NYSDEC Site Number [No.] 152140) (Site) in Babylon, Suffolk County, New York (**Figure 1-1**). This RSO report was prepared to discuss field activities, present tables and figures summarizing the RSO investigation results, present the findings/conclusions of the RSO investigation, and evaluate RSO options that will aid in achieving the remediation goals established in the Record of Decision (ROD) (NYSDEC 1999).

1.1 PURPOSE AND SCOPE

The National Heatset Printing Company Site has been in active remediation for 20 years; however, significant groundwater concentrations of contaminants of concern (COCs) remain north of, and beneath, the site building at 1 Adams Boulevard. To implement the RSO investigation, EA needed to collect sufficient data to evaluate current on-site conditions with respect to chlorinated volatile organic compound (CVOC) contaminant mass (i.e., tetrachloroethene [PCE], trichloroethene [TCE], *cis*-1,2-dichloroethene [DCE], *trans*-1,2-DCE, and vinyl chloride) and update the on-site conceptual site model (CSM).

Specifically, the objectives of the RSO investigation were as follows:

- Further delineate and refine the magnitude and extent of CVOC impacts in on-site groundwater for the purpose of evaluating alternative treatment technologies, specifically within the building footprint.
- Refine the understanding of the subsurface stratigraphy on-site.
- Conduct an off-site downgradient private well survey and evaluate potential risk of contamination of downgradient water supply production wells and surface water bodies.
- Assess ongoing natural attenuation processes using general chemistry.
- Evaluate RSO options that would be effective in aiding remedial efforts on-site and reducing remedial timeframes that are consistent with NYSDEC Standards, Criteria, and Guidance (SCGs) and the ROD.

RSO field activities included soil profiling and collection of groundwater samples from within the 1 Adams Boulevard building footprint. This RSO report was prepared to identify necessary requirements and remedial options to optimize the remedial action, including any recommended changes and/or additions to the selected remedial alternative as described in the ROD. This RSO report includes the following elements:

- Summary of field activities, analytical data, and figures depicting impacted media, identification of any remaining data gaps, an updated CSM, and conclusions/recommendations based upon the RSO investigation results.

- Evaluation of analytical data against existing NYSDEC Class GA Ambient Water Quality Criteria to provide a basis for comparison of optimized remedial options for costs, feasibility, sustainability, and effectiveness.

- Updated CSM based on data collected during the field activities to inform the selection of technologies to be evaluated for the RSO.

- Identification of potential RSO options to supplement remediation efforts at the Site. RSO options were evaluated for saturated soil and groundwater; each option provided includes a conceptual layout, regulatory requirements, and other design features needed for implementation.

1.2 REPORT ORGANIZATION

This report presents the overall approach and details specific activities that were performed during the RSO investigation. The RSO report consists of the following sections:

- ***Section 1 – Introduction and Project Overview***—Provides a description of the site background, including site history, a summary of previous investigations, and physical characteristics of the Site.

- ***Section 2 – Remedial System Optimization Investigation***—Provides a summary of the procedures and techniques used to complete the RSO investigation program.

- ***Section 3 – Remedial System Optimization Investigation Results***—Presents a discussion of the findings of the RSO investigation and remaining data gaps.

- ***Section 4 – RSO Technology Evaluation***—Presents a description and discussion of remedial options applicable to the Site.

- ***Section 5 – Recommendations and Conclusions***—Presents conclusions and recommendations based on the available data.

- ***Section 6 – References***—Presents references utilized in preparing this RSO report.

1.3 BACKGROUND

1.3.1 Site Description

The Site is currently a Class 4 site listed on the NYSDEC Registry of Inactive Hazardous Waste Sites. The Site is located at 1 Adams Boulevard in the Hamlet of Farmingdale, Town of Babylon,

Suffolk County, New York, and is identified as Block 1.00 and Lot 20.001 on the Town of Babylon Tax Map No. 132.20-1-3.2. A site location map is provided as **Figure 1-1**. The Site is currently owned by Brookfield Properties, managed by Finkelstein Realty, and leased by the Sun Dial Corporation. The Site consists of both on-site and off-site areas. The on-site area is zoned for industrial use and contains one 90,000 square foot (ft) multi-tenant industrial building/warehouse situated on an approximately 4.5-acre lot with paved parking on the east and south sides of the building. The on-site area is bounded by railroad tracks to the north, Adams Boulevard and an industrial property to the south, and industrial properties to the east and west (**Figure 1-2**).

The off-site downgradient groundwater contaminant plume extends southeast from the Site approximately 1.2 miles. This area includes both industrial (close to the Site) and residential/commercial (0.5 to 1.2 miles downgradient from the Site) properties. The leading edge of the plume consists of the Suffolk County Water Authority (SCWA) Albany Avenue well field property located at the corner of Albany Avenue and 45th Street.

1.3.2 Site History

The National Heatset Printing Company occupied a portion of the building at 1 Adams Boulevard from July 1983 to April 1989. Their operations consisted of lithographic tri-color printing of newspaper and periodical advertisements and manufacturing of lithographic printing plates. The company had been using organic solvents at the Site since 1983. An inspection by the Suffolk County Department of Health Services (SCDHS) in 1983 revealed that National Heatset Printing was discharging photo-plating waste to the on-site sanitary system. In March 1986, an inspection performed by SCDHS revealed strong evidence of dumping from staining of inks and oils on the ground. The inspection report indicated that drums were stored improperly both inside and outside of the building.

The National Heatset Printing Company filed for bankruptcy in 1987. SCDHS discovered that after filing for bankruptcy, National Heatset Printing disposed of its chemical inventory by dumping the materials onto the soil and into a leaching pool located off the rear of the building in the northeast side of the property.

1.4 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Several phases of field investigation and remedial activities have taken place at the Site since contamination was discovered in 1983. Previous investigations and remedial efforts include:

- **1988 –** SCDHS sampling of leaching pool revealed elevated levels of volatile organic compounds (VOCs) (i.e., 24,000 parts per billion [ppb] of *cis*-1,2-DCE and 1,000 ppb of p-ethyltoluene). At the request of SCDHS, the leaching pool bottom sediments were excavated to a depth of 15 ft and end-point samples were collected in November 1988. The end-point soil samples indicated that the remaining leaching pool sediment contained elevated levels of VOCs (i.e., 13,000 parts per million [ppm] of PCE).

- **1993** – Site listed in the Registry as a Class 2 site.

- **1997-1999** – Remedial investigation (RI) performed by Holzmacher, McLendon & Murrell, P.C. for NYSDEC indicated a groundwater plume extending approximately 7,100 ft downgradient of the Site at a depth of approximately 75-85 ft below ground surface (bgs).

- **March 31, 1999** – ROD issued; selected remedy included pilot test for in-well stripping system at the source area, as well as alternative remedy such as extraction and treatment or sparging with air or ozone to recover and/or treat the undissolved product. Three in-well stripping systems were proposed: one at the source area, one at the south end of the Site, and one at the downgradient southern edge of the contaminant plume. Public water was also to be provided to any properties utilizing private wells within the affected area. Long-term monitoring and institutional controls would be implemented due to remaining contamination at the Site.

- **2002** – NYSDEC installed a soil vapor extraction (SVE) system using a single existing monitoring well within the footprint of the building.

- **2000-2005**– Remedial design investigation concluded injection of sodium and potassium permanganate would be the most effective source area remedy. Permanganate injection was completed in 2005.

- **2006**– As part of NYSDEC construction contract D005539, Earth Tech and Wasatch completed a pilot study of a density driven convection (DDC) in-well stripping system on-site adjacent to the south end of the building; it was concluded that the DDC system achieved the project performance requirements.

- **2010** – DDC system from pilot study was augmented with a second well for full implementation, and a second on-site DDC system was installed south of the building.

- **2012** – Off-site DDC system was installed at the downgradient leading edge of the CVOC plume.

- **2014** – The existing SVE well was converted to a buried horizontal screen to improve the capacity for extraction.

- **2016** – EA conducted an RSO investigation of site building sub-slab soil and soil vapor; as a result, the SVE system was modified with five new horizontal wells. Also in 2016, groundwater plume delineation activities were completed.

- **2017-2019** – Due to high water table and other issues, DDC systems were not continually operating; as a result, it was determined during periodic review that the DDC systems were not operating as designed and a Corrective Measures Work Plan was developed (EA 2022a).

- **2021** – DDC systems were shut down and RSO investigation activities were initiated to further delineate the continuing source area on-site, and to evaluate treatment technologies to address remaining contamination.

1.5 ENVIRONMENTAL SETTING

1.5.1 Topography

The Site is located approximately 4 miles north of South Oyster Bay, which is just north of Jones Beach Island and the Atlantic Ocean. Regional topography is relatively flat with a slope to the south and southeast. Topography at the on-site area is relatively flat with an elevation of approximately 50 ft above mean sea level. The land surface slopes slightly south-southwest with a gradient of less than 4 ft. Gradients of man-made surfaces (i.e., paved areas) at the on-site area can vary as much as 4 ft due to truck loading bays sloping back toward the building.

1.5.2 Hydrology

There are no surface water bodies at the on-site area. A recharge basin is present on the vacant former industrial lot to the west, with moderately sloping sides and a base elevation approximately 15 to 20 ft below that of the surrounding property. The nearest streams include Amityville Creek approximately 1.7 miles south of the on-site area; Santapogue Creek approximately 2.7 miles east/southeast of the on-site area; Carmans Creek approximately 2 miles south/southwest of the Site; and Massapequa Creek approximately 2 miles southwest of the on-site area.

1.5.3 Geology

The geologic formations that underlie Suffolk County are composed of a series of thick deposits of unconsolidated water bearing sediments of Pleistocene to late Cretaceous age. These unconsolidated deposits reach a maximum thickness of over 2,000 ft in southeastern Long Island and are underlain by crystalline bedrock of Precambrian age. Geologic units are as follows:

- Upper Pleistocene: glacial outwash consisting of up to 100 ft of stratified sand and gravel and glacial till consisting of poorly sorted sand, pebbles, rock, and boulders

- Pleistocene Gardiners Clay: marine interglacial deposit generally 20 to 40 ft thick and consisting of dark-colored clay with lenses of green silt and very fine sand and thin layers of gravel

- Cretaceous Monmouth Group (Monmouth greensand): marine deposits up to 200 ft thick and composed of interbedded dark-greenish gray, greenish black, greenish, dark-gray, and black glauconitic clay, silt, and sand

- Cretaceous Matawan Group and Magothy Formation: transitional fluviodeltaic deposits approximately 1,000 to 1,200 ft thick and consisting of gray to white fine to coarse sand with interstitial clay interbedded with lenses and thin to thick beds of clay, silt, and clayey to silty sand and laminae and thin beds of lignite and pyrite

- Cretaceous Raritan Formation upper clay member (Raritan Clay): up to 250 ft thick and consisting of light to dark gray, brownish-red, red, pink, and grayish-white clay, silty clay, and clayey and silty fine sand

- Cretaceous Raritan Formation lower sand member (Lloyd Sand): up to 550 ft thick and consisting of grayish-white, light to medium gray, and yellowish-gray coarse sand and gravel and intercalated beds and lenses of light to dark gray clay, silt, clayey and silty sand, and some lignite and pyrite

- Precambrian bedrock: metamorphic gneiss and schist

1.5.4 Hydrogeology

There are three primary water bearing aquifers underlying Suffolk County. These aquifers, from shallow to deep, are the Upper Glacial Aquifer (consisting of outwash sand and gravel), Magothy Aquifer (consisting of the Matawan Group and Magothy Formation), and Lloyd Aquifer (consisting of the Lloyd Sand of the Raritan Formation). The Gardiners Clay and Monmouth greensand form the lower boundary of the Upper Glacial aquifer and forms a confining unit for the underlying Magothy Aquifer, while the Raritan Clay forms the lower boundary of the Magothy Aquifer and forms a confining unit for the underlying Lloyd Aquifer. The aquifers are considered to be hydraulically connected in areas where confining units are absent, with the Glacial and Magothy contributing recharge for the underlying Lloyd Aquifer. Together, they are a federally designated sole source of drinking water for Long Island.

Outwash deposits constitute most of the Upper Glacial Aquifer. Because these sand and gravel deposits contain virtually no interstitial clay and silt, the Upper Glacial Aquifer is the most permeable. The estimated average horizontal hydraulic conductivity of the outwash is from 1,000 to 1,500 gallons per day/square ft. The direction of groundwater movement through Long Island's aquifers is horizontal and is generally more rapid than the movement in the vertical direction. This arises because of an anisotropic effect; the largest dimensions of particles in the interbedded fine- and coarse-grained layers tend to be oriented horizontally.

Groundwater in the Upper Glacial Aquifer flows away from two major highs on the main water table divide on Long Island. The general directions of groundwater flow of the island are north toward the Long Island Sound and south toward the Great South Bay. Groundwater has been encountered on-site at depths ranging from approximately 4 to 19 ft bgs. Based on site-specific data, local groundwater flow at the Site moves south to southeast toward the Great South Bay with a gradient of 0.001625 feet per foot (ft/ft) and velocity of approximately 0.45373 ft per day (ft/day).

2. REMEDIAL SYSTEM OPTIMIZATION FIELD INVESTIGATION

Field investigation activities were conducted from June 2022 to March 2023 in accordance with the RSO Work Plan Memorandum (EA 2022b), Generic Field Activities Plan (EA 2023a), Generic Quality Assurance Project Plan (EA 2020a), and the Generic Health and Safety Plan (EA 2020b). Health and safety officer responsibilities were assigned to one of the team members throughout the field program to ensure that the personnel were protected from both physical and chemical health hazards. Appropriate protective clothing was worn by all field personnel while performing all intrusive activities for protection against contamination and to prevent cross-contamination between sample locations and matrices.

The following field activities were completed as part of the RSO field investigation:

- Hydraulic profiling using the Waterloo Advanced Profiling System (Waterloo^{APS}) at four locations distributed longitudinally through the suspected center of the on-site groundwater plume.

- In situ groundwater sampling, including use of a FROG-5000^{TM} (portable hand-held micro gas chromatograph) for field screening of site-specific VOCs and collection of confirmatory groundwater samples for off-site laboratory analysis VOCs.

- Continuous multichannel tubing (CMT) well installation and development

- Existing monitoring well and CMT well groundwater sampling

Hydraulic profiling services were provided by EA's subcontractor, Cascade Environmental. CMT well drilling and installation services were provided by EA's subcontractor, AARCO Environmental (AARCO). RSO investigation locations including soil borings and CMT wells were surveyed by MJ Engineering. Off-site laboratory analytical services were provided by Chemtech Consulting Group and SGS North America Inc.

Field activities were documented in a dedicated field logbook maintained for all site activities (**Appendix A**). Daily field reports were prepared and photographs were taken to document field activities (**Appendix B**). Field forms completed during field activities are provided in **Appendix C**.

2.1 PROJECT COORDINATION AND UTILITY MARK

Prior to initiation of drilling activities, each proposed hydraulic profiling tool (HPT) and CMT well location was marked and Dig Safe was contacted for the utility one-call. A geophysical survey was conducted using a concrete scanning ground penetrating radar (GPR) antenna, an underground scanning (GPR) antenna, and an electromagnetic pipe and cable locator on 6 June 2022 to identify underground infrastructure both within and outside of the building.

2.2 HYDRAULIC PROFILING TOOL

Four hydraulic profiling points (HPT-01, HPT-03, HPT-05, and HPT-09) were advanced on 27 and 28 June 2022 using a direct-push Geoprobe® rig to collect hydrostratigraphic data along the presumed centerline of the plume within the building footprint. HPT-01 was located behind the building in the original source area, and HPT-03, HPT-05, and HPT-09 were located downgradient from HPT-01 along a transect oriented northwest-southwest, with profiling points spaced approximately 100 ft apart (**Figure 2-1**). The target depth of each profiling location was the top of the Gardiners Clay unit, anticipated between 80–85 ft bgs.

At each location, electrical conductivity, pressure, flow, and hydraulic conductivity were measured from ground surface to the base of the boring. Continuous logs were collected until the boring was advanced into the clay unit, or until the decision was made to not advance further. HPT-01 was terminated above the clay confining layer at 73 ft bgs due to refusal; however, subsequent borings indicated that the depth to the clay confining layer at this location was approximately 85 ft bgs. HPT-03 was advanced to 91 ft bgs, but clay was identified at approximately 83 ft bgs, with a significant decrease in hydraulic conductivity from an average of 92.69 ft/day to 0.1 ft/day. HPT-05 and HPT-09 were advanced to the clay confining layer, which is expected to be between 20 and 40 ft thick, 83.75 ft bgs, and 83.35 ft bgs, respectively.

Lithologic data from the HPT probe logs were reviewed and used to refine hydrogeologic calculations for hydraulic conductivity at the Site. Data were collected using a custom software that provides real-time visual display of the depth to potentiometric surface (hydraulic head), rate of penetration, a continuous index of conductivity, and a continuous index of estimated hydraulic conductivity values versus depth. Following completion of profiling, each borehole was backfilled to the ground surface with a bentonite grout mixture.

2.3 IN SITU SCREEN POINT COUPLER GROUNDWATER SAMPLING

On 29 and 30 June 2022, a screen point coupler (SPC) was advanced using a Geoprobe® at the 4 locations where HPT was conducted: SPC-01 in the HPT-01 area, SPC-03 in the HPT-03 area, SPC-05 in the HPT-05 area, and SPC-09 in the HPT-09 area (**Figure 2-1**). Discrete in situ groundwater samples were collected from immediately below the groundwater surface at 20 ft bgs and at 10-ft intervals to 80 ft bgs, for a total of 7 vertically discrete samples per location. A total of three well volumes were purged from each interval and water quality parameters (temperature, potential of hydrogen [pH], dissolved oxygen [DO], oxidation-reduction potential [ORP], specific conductivity, and turbidity) were recorded using a calibrated water quality meter (Horiba). Samples from each interval were analyzed in the field using a chromatography field tool (FROG-5000™) with a chlorinated alkenes setting to detect PCE, TCE, DCE, and vinyl chloride within the 20 to 2,000 ppb range; field analysis results were used to make decisions regarding additional step-out boring locations to bolster the investigation.

In addition, confirmatory samples were collected from each SPC interval for off-site laboratory analysis to compare with field screening results. Confirmatory samples were shipped via overnight delivery to Chemtech for analysis of VOCs by U.S. Environmental Protection Agency (EPA) method 8260D.

2.4 SOIL BORINGS AND SPC SAMPLING

In July and August 2022, following the first round of SPC sampling activities described in Section 2.3, soil borings (SB-01 through SB-10) were advanced at each proposed CMT well location to log the subsurface geology and collect VOC readings using a photoionization detector (PID) (**Figure 2-1**). The field analysis results from the first round of SPC sampling (SPC-01, -03, -05, and -09) indicated the highest concentrations of PCE were at the deepest interval just above the deep confining unit clay interface. Based on this information, additional SPC groundwater samples were collected from the deep confining unit clay interface from soil borings SB-02, -04, -06, -07, and -10 for off-site laboratory analysis of VOCs. A total of three well volumes were purged from each boring and water quality parameters (temperature, pH, DO, ORP, specific conductivity, and turbidity) were recorded using a calibrated water quality meter (Horiba) prior to sample collection.

The soil boring SB-01 in the original source area just north of the building at 1 Adams Boulevard was advanced to the clay layer at approximately 84 ft bgs on 5 July 2022. Black weathered dense non-aqueous phase liquid (DNAPL) was visually observed by the on-site geologist from the soil core and an elevated readings with a PID (3,350 ppm) was measured at the clay interface. Photographs of the weathered DNAPL are provided in the daily field reports in **Appendix B**. Following discussion with NYSDEC, additional step-out soil borings were advanced to the east and west of SB-01 (later re-named SB-01B) to identify the extent of DNAPL on 6-7 July 2022 and 12-14 July 2022. Four borings (SB-01C, SB-01D, SB-01E, and SB-01F) were advanced along the back (north) wall of the building spaced 20-30 ft apart to the east of the original SB-01(B). DNAPL was visually observed by the on-site geologist at SB-01C, SB-01D, and SB-01E, but was not observed at SB-01F, located 100 ft east of SB-01B. Boring SB-01A, located 25 ft to the west of SB-01B, also did not contain visual staining or DNAPL. Two additional borings (SB-01BN and SB-01DN) were advanced north of SB-01B and SB-01D. Although DNAPL was observed at SB-01BN and SB-01DN, no further delineation to the north was conducted due to the presence of railroad tracks and private properties to the north. SPC groundwater samples were collected from the deep confining unit clay interface from each of the borings. A sample from 83 to 84 ft bgs at SB-01C was collected and sent to Chemtech to be analyzed for fingerprint analysis. The sample was compared with several petroleum product standards to assess a potentially matching source of the impacts to the sample.

In July and August 2022, 7 soil borings (SB-02, SB-03, SB-04, SB-05, SB-06, SB-07, and SB-09) were advanced within the building footprint and 3 soil borings (SB-08, SB-10, and SB-11) were advanced outside of the building at the locations identified on **Figure 2-1**. SPC groundwater samples were collected from the deep confining unit clay interface from each of the borings. On 18 July 2022, clear DNAPL along with PID readings of greater than 15,000 ppm was identified at the clay interface in SB-04, approximately 84 ft bgs. When SB-04 was purged prior to SPC sampling, a clear DNAPL with a strong solvent odor was observed in the purge water (photographs provided in daily field reports in **Appendix B**). An additional boring, SB-11, was advanced east of SB-04 just outside of the building to delineate the DNAPL, and to collect an SPC groundwater sample from the deep confining unit clay interface; no DNAPL was observed and no elevated PID readings were collected, indicating that the DNAPL is contained within the footprint of the building.

A total of 13 groundwater samples collected from the borings (not including the samples collected from multiple intervals of SB-01, SB-03, SB-05, and SB-09 discussed in Section 2.3) were shipped to Chemtech for analysis of VOCs by EPA method 8260D.

2.5 CONTINUOUS MULTICHANNEL TUBING WELL INSTALLATION

Ten CMT wells were installed within the investigation area in November 2022 and January 2023 (**Figure 2-2**). The drilling and installation of the CMT wells was supervised and documented using well construction logs by an EA field geologist according to the procedures described in the RSO Letter Work Plan (EA 2022b). CMT well construction logs are provided in **Appendix D**.

The purpose of the CMT well installation was to further refine vertical contaminant concentration and mass calculations for remediation optimization planning and to provide a long-term monitoring network. Each CMT well was constructed with four discrete depth interval sampling ports. The depth of each sampling port was determined based on soil boring characterization and in situ groundwater VOC concentrations obtained using the FROG-5000™ and confirmed with laboratory analysis discussed in Section 2.4. Based on groundwater and clay elevation data, sampling intervals were installed as summarized below:

Well ID	Port ID	Depth to Bottom (ft)	Well ID	Port ID	Depth to Bottom (ft)
CMT-1	5	22.35	CMT-6	1	23.30
	6	53.51		3	43.42
	1	73.39		4	63.88
	2	83.33		7	83.00
CMT-2	4	20.20	CMT-7	3	19.95
	6	51.80		4	52.54
	7	64.84		5	72.35
	1	80.65		6	81.80
CMT-3	6	19.75	CMT-8	2	20.20
	7	49.50		3	50.25
	2	69.30		4	71.00
	3	79.63		5	79.00
CMT-4	4	20.92	CMT-9	4	20.50
	5	53.30		3	50.50
	6	63.54		2	70.50
	1	83.00		1	80.00
CMT-5	1	22.90	CMT-10	3	19.96
	7	52.36		2	51.10
	3	73.40		1	75.00
	5	83.30		6	79.80

Notes:
ID = Identification

The CMT wells were installed using rotosonic drilling methods to advance a 6-inch (in.) diameter borehole to the required depth. The CMT wells consist of a 1.7-in. outer diameter polyethylene tube that is internally partitioned to form 7 separate internal channels within the larger tube (i.e., 6 outside channels and 1 central channel). The diameter of the 6 outer channels is 0.4 in. while the diameter of the central channel is 0.375 in. The CMT wells were cut to the appropriate length and assembled by the drilling subcontractor prior to mobilizing to the Site. The bottom of each channel

was fitted with stoppers, and a 3-in. sampling port was cut into each channel at the prescribed sampling depth interval. Ultrafine stainless-steel mesh screen was fitted over the sample ports, and each channel was sealed below the port with a polyethylene plug to prevent the accumulation of stagnant water. The completed CMT tubing was then fitted with finned centralizers that maintained the CMT well position in the center of the boring and allowed sand and bentonite chips to be placed around the tubing. Once the CMT tubing was set in the boring, the drill rods were retracted, and the space was backfilled with #1 gravel pack up to 15 ft below grade and granular bentonite was added to grade. CMT wells were completed with a protective CMT wellhead with numbered channels and a well cap specifically designed for CMT wells. Soil investigation-derived waste generated during soil boring installation was containerized and stored in 55-gallon Department of Transportation approved drums.

2.5.1 Continuous Multichannel Tubing Well Development

The newly installed CMT wells were developed no sooner than 48 hours following installation; CMT-01 and CMT-10 were developed on 30 November 2022, and CMT-02-09 were developed in January and February 2023. Due to the small size of each channel within the CMT wells, each channel was developed using a peristaltic pump with dedicated ¼-inch tubing. With the exception of CMT-08 port 3 (intermediate port), CMT well development was considered complete when temperature, conductivity, and pH had stabilized (plus or minus 10 percent [%] for 3 consecutive readings) within each channel. Development water was pumped through carbon and discharged to grade. CMT-08 port 3 purged dry twice before 3 consecutive field parameter readings could be taken. Well development forms completed during purging and development activities and are provided in **Appendix C**.

2.5.2 Existing Monitoring Well and Continuous Multichannel Tubing Well Groundwater Sampling Methods

A full round of sampling of all on-site wells was conducted on 20-23 March 2023. This sampling included the 10 newly installed CMT wells with up to 4 discrete sampling depths per well and 18 pre-existing on-site monitoring wells. Groundwater levels and well depths were measured from the polyvinyl chloride (PVC) or tubing riser using an electronic water level indicator with an accuracy of 0.01 ft and recorded on a gauging log provided in **Appendix C**. All samples were analyzed for VOCs and samples from the deepest intervals of CMT-01, CMT-02, CMT-03, CMT-05, CMT-06, CMT-07, CMT-08, CMT-09, and CMT-10 were sent to a selected laboratory (SGS North America, Inc.) to be analyzed for monitored natural attenuation (MNA) parameters. The deepest interval of CMT-04 was not sampled due to the presence of DNAPL.

Groundwater level measurements were taken at all CMT and pre-existing monitoring wells, both on-site and off-site, prior to groundwater sampling during the March 2023 groundwater sampling event. All groundwater measurements were taken from the top of the inner PVC casing or tubing using an electronic water level meter. A gauging log is provided in **Appendix C**.

Groundwater sampling was completed using low-flow sampling methodologies and sampled in a manner that minimized interaction of the sample and surface environment. During sampling, all

purge water was discharged through granular activated carbon per the work plan. Further details of the groundwater sampling methods are described in the RSO Letter Work Plan (EA 2022b):

- Personal protective equipment was worn as specified in the Generic Health and Safety Plan (EA 2020b). In addition, new nitrile sampling gloves were used for the collection of each sample.

- Monitoring locations were identified, and the caps or flush mount covers were removed.

- PID readings from each well and channel were taken and recorded on sampling forms.

- Static water levels were measured at each location using an electric water level indicator. The water level indicator was washed with Alconox® detergent and water, then rinsed with deionized water between individual monitoring wells to prevent cross-contamination.

- Calculations were completed to determine the volume of water in the well.

- Polyethylene sheeting was placed around well casings indoors to prevent contamination of sampling equipment in the event sampling equipment was dropped.

- A Solinst® Peristaltic Pump with new polyethylene tubing dedicated to each channel or well was used in accordance with low-flow purging techniques. The pump intake was set at the sample port depth or screened interval specific to each channel or well.

- Field parameters of pH, ORP, DO, specific conductivity, turbidity, and temperature were allowed to stabilize prior to sampling (with the exception of CMT-08 port 3, which went dry before stabilization occurred). A minimum of 3-5 well volumes were purged until the following until following conditions were met:

  — Consecutive pH readings were ±0.1 pH units of each other
  — Consecutive dissolved oxygen readings were ± 10% of each other
  — Consecutive redox readings were ±0.10 units of each other
  — Consecutive measured specific conductance readings were ± 3% of each other
  — Turbidity measurements were below 50 nephelometric turbidity units
  — Purge rates were 250 milliliters per minute with a drawdown of less than 0.3 ft

- Field parameters of pH, ORP, DO, specific conductivity, turbidity, and temperature were recorded on the monitoring well gauging, purging, and sampling forms.

- Once groundwater quality field parameters had stabilized under low-flow pumping conditions, sampling was performed. Samples collected for VOC analysis were collected at a targeted flow rate of 250 milliliters per minute.

- Sample bottles containing the appropriate preservatives, if required, for the parameters to be analyzed were obtained from the laboratory prior to sampling.

- Analytical samples were placed in coolers and chilled to 4 degrees Celsius (°C). The samples were then shipped and delivered to the analytical laboratories within the required hold time for each analytical method.

- Field instruments were decontaminated between wells and well channels to prevent cross-contamination.

- The existing monitoring wells were capped, and re-locked and flush mount covers were re-secured to each CMT well.

- Field logbooks, sample log forms, labels, custody seals, and chain-of-custody forms with all analytes listed were completed after sampling at each monitoring well and CMT well location.

Monitoring well gauging, purging, and sampling forms are provided in **Appendix C**.

2.5.3 Laboratory Analysis of Groundwater Samples

All groundwater samples were analyzed for VOCs by EPA Method 8260B. A subset of four samples collected were also analyzed for total and dissolved iron, total and dissolved manganese (SW846 6010D); nitrate (EPA 353.2/SM4500); sulfide and chloride (EPA 300/SW846 9056A); biological oxygen demand (SM5210B); chemical oxygen demand (SM5220C); nitrogen as ammonia (SM4500NH3 H-11 Lachat); total organic carbon (SM5310B); sulfate (EPA 300/SW846 9056A); alkalinity (EPA SM2320B); and methane, ethane, ethene, and carbon dioxide (RSK-175). All samples were analyzed in accordance with the NYSDEC Analytical Services Protocol. Analytical results were validated by a third-party data validator, Environmental Data Services, Inc. Data Usability Summary Reports are provided in **Appendix E**.

2.6 OFF-SITE DOWNGRADIENT RECEPTORS INVESTIGATION

EA conducted an off-site downgradient receptor investigation in the area identified on **Figure 2-3**. The receptor investigation included a survey of existing private wells, Suffolk County water supply production wells, and surface water bodies within the area identified.

2.6.1 Suffolk County Water Supply Wells

The SCWA Albany Avenue well field is located 6,500 ft downgradient from the Site. The wells are screened at depths of 419-509 ft bgs, below the contaminant plume and the Gardiners Clay confining unit. Monthly monitoring of these wells has not detected the presence of any site contaminants (SCWA 2023). The RI/Feasibility Study (FS) (H2M Group and Lawler, Matusky & Skelly Engineers, LLP [H2M] 1999) indicated that the groundwater contaminant plume migrating from the Site is sinking, and that it could potentially contaminate the public drinking water well field; however, exposure to contaminants that would reach the Albany Avenue well field is not

expected since these wells are monitored on a monthly basis and must meet New York State Department of Health standards.

2.6.2 Private Downgradient Wells

As identified in the RI/FS, six homes down-gradient from the Site that had historically been served by private wells were connected to public water in 1988 by the Town of Babylon. During the RI, an Interim Remedial Measure was conducted to provide public water to six additional homes and two businesses that were still using private wells (H2M 1999). A review of the EPA Private Domestic Well Map (https://epa.maps.arcgis.com/apps/webappviewer/index.html) indicated there are no private wells currently recorded within an area encompassing the known downgradient plume with a buffer of approximately 1,000 ft in all directions.

2.6.3 Surface Water Impact Assessment

The nearest downgradient shallow water body is the Amityville Creek, located 2.6 miles south of the Site. VOC concentrations within the shallow monitoring well network 1.2 miles south of the Site have consistently been non-detect or well below SCGs. Impacts to downgradient surface water bodies due to site contamination is not likely to occur.

3. REMEDIAL SYSTEM OPTIMIZATION INVESTIGATION RESULTS

This section presents the findings of the RSO investigation, which included:

- Hydraulic profiling and field screening
- Soil boring installation and in situ groundwater sample collection
- Oil fingerprinting
- New CMT well and existing monitoring well sampling

The findings of the RSO investigation are summarized in the following sections.

3.1 GEOLOGY

Section 1.5 presents the physical profile for the site, including topography, site hydrology, site geology, and site hydrogeology. Geologic and hydrogeologic information from the current and previous investigations were used to update the conceptual site model.

Soil boring logs generated during RSO investigation drilling activities are provided in **Appendix C**. The subsurface material encountered during the RSO investigation included unconsolidated outwash sand and gravel underlain by a clay unit (suspected to be the Gardiners Clay unit) encountered between 80 to 85 ft bgs. A thin silty sand layer was observed in some soil borings approximately 4 ft thick directly underneath the surface asphalt layer. Underneath the silty sand layer, an approximately 80 ft thick well graded sand and gravel (glacial outwash) was observed underlain by the clay unit of an undetermined thickness.

3.2 HYDRAULIC PROFILING RESULTS

Groundwater hydrostratigraphic logs generated for each Waterloo^{APS} point are provided in **Appendix F**. Site lithology was relatively uniform for the four HPT points, and the clay confining layer was encountered during HPT activities as evidenced by a significant decrease in hydraulic conductivity around 80 ft bgs. Hydraulic conductivity was consistent throughout the glacial outwash unit. Average hydraulic conductivity was 87.87 ft/day at HPT-01 and HPT-09, 88.96 ft/day at HPT-05, and 92.69 ft/day at HPT-03.

3.2.1 Hydraulic Gradient

Gauging data and groundwater elevations for all on-site wells in March 2023 have been included in **Appendix C** and are summarized in **Table 3-1**. Groundwater was encountered in on-site CMT and monitoring wells during the gauging event ranging from 15.13 to 19.1 ft bgs. Groundwater is slightly shallower at the off-site monitoring wells ranging from 8.58 to 13.62 ft bgs.

Based on gauging results and previous investigations, groundwater flow moves in a generally south-southeast direction from the source area. Interpreted groundwater elevation surface maps illustrating the direction of groundwater flow for the March 2023 sampling event are shown on **Figure 3-1**.

Hydraulic gradient was calculated by dividing the change in the groundwater elevation between two monitoring wells (Δh) and the distance between the two points (Δl). The hydraulic gradient was established between CMT-1 and MW-15D. The horizontal hydraulic gradient from CMT-1 to MW-15D was 0.001625 ft/ft.

3.2.2 Hydraulic Conductivity

Hydraulic conductivity (K) is the rate at which water moves through a porous medium under a unit potential-energy gradient. The rate is determined by the porosity and permeability (i.e., void spaces and connectivity between void spaces) of the aquifer. Although slug testing, a common method to determine hydraulic conductivity, was not performed during the RSO investigation, estimated hydraulic conductivities were collected during the HPT investigation at the Site. Since site lithology was observed to be relatively uniform, an average hydraulic conductivity was calculated between four HPT points (1, 3, 5, and 9) and was determined to be 89.35 ft/day. The following table identifies the estimated geologic and hydraulic characteristics of the geologic units encountered.

Geologic Characteristics

Unit	Effective Porosities [(a)]	Soil Bulk Densities (mean)
Clay	0.06	1.40 g/cm^3
Sand	0.32	1.50 g/cm^3

Notes:
(a) Argonne National Laboratory – arithmetic mean
g/cm^3 = Gram per cubic centimeter

As noted in the table above and based upon boring logs generated during the RSO investigation, the homogeneity of the subsurface soil will play a substantial role in the migration and distribution of contaminant mass because sand is a transmissive material. These characteristics and values were used to assess mass flux, mass discharge, and total contaminant mass in groundwater and source area soil, as detailed further under Section 3.8.

3.2.3 Advection

Advective transport is the transport of solutes by the bulk movement of groundwater. Advection is typically the most important process driving contaminant migration in the subsurface. The average linear groundwater velocity in a direction parallel with groundwater flow caused by advection (seepage velocity) is given by:

$$V_s = \frac{-K * (\frac{\Delta h}{\Delta l})}{\eta_e}$$

Where V_s = Average linear velocity = ft/day
K = Hydraulic conductivity = 89.35 ft/day
η_e = Effective porosity of a Sand = 0.32 dimensionless
$\Delta h/\Delta l$ = hydraulic gradient = 0.001625 ft/ft

The estimated average effective porosity was assumed to be 0.32 for sand as this was the largest geologic unit and was relatively uniform across the Site. Using an average on-site hydraulic gradient of 0.001625 ft/ft and hydraulic conductivity of 89.35 ft/day, the approximate linear groundwater seepage velocity was calculated to be 0.45373 ft/day or 165.61 ft/yr.

3.3 IN SITU GROUNDWATER SAMPLING

In situ groundwater samples collected from discrete intervals in SB-01, SB-03, SB-05, and SB-09 (**Figure 2-1**) contained PCE detected by the FROG-5000™ ranging from 1,272 to 2,226,54 micrograms per liter (µg/L) with detections occurring primarily at the 80 ft intervals of the soil borings. Field samples and laboratory confirmatory samples were in good agreement for both TCE and PCE (**Table 3-2A** and **Figure 3-2**). FROG-5000™ results were slightly lower than analytical results for both PCE and TCE as demonstrated by the slope of the linear regression being greater than 1.

Laboratory analysis of in situ samples collected from just above the clay in the soil borings behind the building (SPC-01A-F, -BN and -DN) indicated all borings contained detected concentrations of PCE and TCE exceeding the NYSDEC Class GA Ambient Water Quality Standard (AWQS) (5 µg/L). Concentrations of PCE ranged from 140 to 69,600 µg/L in SPC-01C-84 and the duplicate sample of parent sample SPC-01BN, respectively. TCE concentrations in these borings ranged from 7.7 to 590 µg/L in SPC-01C-84 and SPC-01E-84, respectively. Limited detections of *cis*-1,2-DCE and vinyl chloride were also present in the groundwater collected from these locations. Results are summarized in **Table 3-2B**.

Laboratory analysis of in situ groundwater samples collected from just above the clay in the remaining soil borings (SB-02, SB-04, SB-06, SB-07, SB-08, SB-10, and SB-11) indicated all borings contained detected concentrations of PCE and TCE, though only some exceeded the AWQS. As discussed in Section 2.4, purge water from SB-04 contained DNAPL; laboratory analysis indicated 65,200,000 µg/L PCE, 103,000 µg/L TCE, and 93.6 µg/L *cis*-1,2-DCE. PCE was detected exceeding the AWQS in water collected from SB-02 (770 µg/L) and SB-06 (110 µg/L). TCE was not detected exceeding the AWQS in any other in situ samples. Results are summarized in **Table 3-2**. A figure showing in situ groundwater sampling results for CVOCs is provided on **Figure 3-3**.

3.4 OIL FINGERPRINTING

The sample collected from the 83-84 ft interval of SB-01C was fingerprinted as #4 Fuel Oil, a distillate fuel oil which is commonly used in diesel engines, industrial plants, and burner installations. It is important to note that petroleum products are located on-site as treatment strategies may be influenced by the presence of the #4 Fuel Oil. The analytical report is provided as **Appendix G**.

3.5 LOW FLOW GROUNDWATER SAMPLING RESULTS

On-site groundwater monitoring wells, including CMT wells and additional pre-existing monitoring wells were sampled in March 2023. Overall, PCE, TCE, and *cis*-1,2-DCE were the most frequently detected COCs in the March 2023 sampling event, as summarized in **Table 3-3**. As noted in Section 2.5.2, the deepest interval of CMT-04 was not sampled as free phase product was observed in the well.

3.5.1 Existing On-site Monitoring Well Network – March 2023

The March 2023 groundwater sampling results for the existing monitoring well network, which includes the on-site monitoring wells and the DDC wells, are presented in **Table 3-4** and **Figure 3-4**. PCE, TCE, and *cis*-1,2-DCE exceeded the Class GA AWQS and were the most frequently detected COCs (**Table 3-3**). PCE, TCE, and cis-1,2-DCE concentrations ranged from 0.29 to 3,800 µg/L, 0.43 to 4.1 µg/L, and 0.62 to 5.7 µg/L, respectively. The maximum concentrations of PCE were observed in MW-2D, and TCE and *cis*-1,2-DCE at MW-5D.

3.5.2 Continuous Multichannel Tubing Wells –March 2023

The March 2023 groundwater sampling results for newly installed CMT wells are presented in **Table 3-5**; CVOC concentrations are shown on **Figure 3-4**. Groundwater results for the CMT wells identified PCE, TCE, and *cis*-1,2-DCE in exceedance of the Class GA AWQS and were the most frequently detected COCs (**Table 3-3**). PCE, TCE, and *cis*-1,2-DCE concentrations ranged from 0.82 to 20,000 µg/L, 0.26 to 110 µg/L, and 0.27 to 1,600 µg/L, respectively. The greatest PCE concentration was observed at CMT-01-02 (20,000 µg/L) which is screened from 82.83 to 83.33 ft bgs. The greatest TCE and *cis*-1,2-DCE concentrations were observed in CMT-01-06 which is screened from 53.51 to 53.01 ft bgs.

Concentrations of PCE in the samples collected from CMT-01, CMT-02, CMT-04, CMT-05, CMT-09, and CMT-10 were generally consistent with the expected lower concentrations of PCE in the shallow and intermediate intervals, and highest concentrations in the deepest interval, as observed during in situ groundwater sampling activities. The concentration of PCE in the sample collected from the intermediate interval of CMT-03 had the highest concentration of PCE (5,000 µg/L) in that well, and the concentrations of PCE in all four intervals of CMT-09 were between 2,200 to 2,700 µg/L.

Concentrations of PCE from the in situ groundwater sampling activities in 2022 and the March 2023 CMT and monitoring well sampling activities were compiled to create deep and shallow PCE plume maps and cross sections, provided on **Figures 3-5**, **3-6**, and **3-7**.

3.6 NATURAL ATTENUATION

Natural attenuation relies on intrinsic natural processes to attenuate contaminant mass in soil and groundwater. Basic natural attenuation processes occur at most contaminated sites; however, defining the effectiveness and capability of the natural attenuation mechanism in situ aids in

predicting if complete degradation can be achieved under existing geochemical groundwater conditions.

Chlorinated solvents such as PCE are generally biodegraded under natural conditions via reductive dechlorination, a process that requires both electron acceptors (e.g. CVOCs) and electron donors (e.g., anthropogenic carbon, natural organic carbon, fuel hydrocarbons, landfill leachate, etc.). Biodegradation of CVOCs, whether natural or anthropogenic, displays quantifiable geochemical changes in a dissolved-phase groundwater contaminant plume. Measuring these changes in groundwater chemistry is important because, for example, reductive dechlorination is pH sensitive and reduction rates decrease below pH 6.0, particularly for cis-1,2-DCE and vinyl chloride.

As part of this RSO investigation, EA evaluated current site conditions for natural attenuation parameters and groundwater quality indicators to determine the potential effectiveness of natural attenuation processes as a potential remedial technology (**Table 3-6**). To evaluate geochemical natural attenuation parameters (alkalinity, biochemical oxygen demand, chemical oxygen demand, total organic carbon, chloride, ammonia, nitrate, nitrate & nitrite, nitrite, sulfate, sulfide, methane, ethane, ethene, iron, and manganese) where the greatest contaminant concentrations were observed, nine samples were collected from the deepest interval of each CMT well. CMT-04 was not sampled for natural attenuation parameters as free phase product was observed in the deepest interval.

Additionally, historic groundwater concentrations and geochemical parameters were evaluated for evidence of monitored natural attenuation at the Site. Groundwater VOC concentrations do not have a clear downward trend as presented in the Corrective Measures Work Plan (EA 2022a) and with the discovery of DNAPL at the site, the presence of a continuing source confounds contaminant degradation by natural attenuation as decreases in PCE concentrations may be replenished by source dissolution. It does appear that limited natural attenuation has occurred onsite, as the presence of daughter products, particularly cis-1,2-DCE in the CMT monitoring wells suggests some microbial degradation has occurred and/or is occurring. Additionally, ethene concentrations were sampled at the deepest CMT monitoring wells during the May 2023 sampling event and concentrations were low, which may suggest that there is not substantial microbial activity at these locations. An evaluation of site microbial communities has not been performed to quantify *dehalococcoides* (DHC) cell counts; which would assist in determining whether natural attenuation may be expected at the Site following source remediation.

3.6.1 Groundwater Quality Indicators and Natural Attenuation Parameters

Groundwater quality parameters including pH, temperature, DO, ORP, conductivity, and turbidity, were measured and recorded at each existing monitoring well location, and each CMT well channel during the March 2023 sampling event. These data were used to evaluate trends within specific portions of the dissolved-phase contaminant plume, and to determine whether adequate evidence is present to declare that natural attenuation is favorable.

Natural attenuation of CVOCs primarily occurs under anaerobic conditions that would be evidenced by DO concentrations below 0.5 milligrams per liter (mg/L) and ORP readings less than 0.0 millivolts (mV). DO concentrations and ORP readings collected from five of the nine locations

analyzed for natural attenuation parameters met the criteria indicating potential for reductive dechlorination. A summary of DO and ORP groundwater measurements recorded prior to sample collection at wells designated for natural attenuation parameter sampling are provided in **Table 3-6**.

In general, if DO and nitrate concentrations are less than 1 mg/L, and there are increased concentrations of ferrous iron, sulfide, and methane, then it can be concluded that anaerobic conditions exist at a site. In addition, if sulfate concentrations in groundwater are less than 0.5 mg/L, and methane concentrations are greater than 0.5 mg/L, it can be concluded that methanogenesis is the predominant redox process in the aquifer. Nitrate concentrations were less than 1 mg/L at 4 of the 9 locations. Sulfate concentrations greater than 20 mg/L were observed at 2 of the 9 locations which may cause competitive exclusion of reductive dechlorination when concentrations greater than 20 mg/L are observed. Methane was detected at every location sampled which indicates that reducing conditions may be present in that area, however, methane was detected at a concentration less than 0.5 mg/L, except for one location (CMT-05-05) which suggests methanogenesis is not prevalent at the Site.

Another limiting factor observed during the RSO investigation was the lower concentrations of total organic carbon. Groundwater total organic carbon concentrations ranged from 1.1 to 19.6 mg/L. Typically, a total organic carbon concentration less than 20 mg/L is a limiting factor in the availability of electron donors required for reductive dechlorination of CVOCs. Based on a review of the natural attenuation parameter results for groundwater, conditions necessary for biological reductive dechlorination appear to be limited.

3.6.2 Monitored Natural Attenuation Evaluation

As a secondary evaluation, the EPA screening tool (EPA 1998) was used to complete preliminary screening for anaerobic biodegradation processes at nine CMT locations (**Table 3-7**). The screening tool uses field parameters and analytical data to determine the potential for biological reductive dechlorination at the Site. EA utilized the screening assessment to further evaluate current site conditions. Following is the scoring rationale:

- 0–5 indicates inadequate evidence for anaerobic biodegradation
- 6–14 indicates limited evidence for anaerobic biodegradation
- 15–20 indicates adequate evidence of anaerobic biodegradation
- Greater than 20 indicates strong evidence of anaerobic biodegradation.

The CMT well channels sampled for natural attenuation parameters were used to determine the potential for reductive dechlorination at this site. Scores ranged from 6 to 16, with 7 of 9 samples demonstrating limited evidence for anaerobic biodegradation, and 2 of 9 samples demonstrating adequate evidence. There were no scores greater than 20 at any of the sampling locations. Based

on data generated from the EPA screening tool, there is limited to adequate evidence for anaerobic biodegradation at the CMT wells.

3.7 MASS FLUX AND MASS DISCHARGE EVALUATION

In an effort to further evaluate potential RSO options and to better define site-related contaminant mass, two transects were evaluated using the newly installed CMT wells at locations downgradient of the source area (behind the warehouse building) to determine mass flux and mass discharge estimates. Understanding the strength of source materials and the dissolved-phase contaminant plume (i.e., contaminant mass moving within the aquifer) aids in the evaluation of natural attenuation processes, estimates total contaminant mass, and identifies areas of a site where remediation efforts are most effective for reducing/destroying contaminant mass.

It is important to note that mass flux is a rate measurement specific to a defined area, which is a subsection of a dissolved-phase contaminant plume cross-section that lies perpendicular to groundwater flow direction. Mass flux is expressed as mass/time/area (e.g., grams per day per square ft [g/d/ft^2]), while mass discharge is an integrated mass flux estimate through an area, which can be extended to the entire transect plane (sum of each mass flux subsections) and is expressed as mass/time (e.g., grams per day [g/d]).

3.7.1 Mass Flux Evaluation

Mass flux (*J*) is the mass of a contaminant that passes through a defined cross-sectional area over a period of time, combining two key features of a contaminant plume: 1) how much contaminant is in the groundwater (dissolved phase), and 2) how fast groundwater is moving through the defined cross-sectional area. It is noted that mass flux will vary both spatially and temporally across the control plane, and that variations may be significant.

Two CMT transects were chosen as the mass flux grid-planes to evaluate mass flux across as an approximation of the actual depths and distances between the CMT wells. To calculate the mass flux through the transect, the grid-plane was divided into seven sections to reflect the four depth intervals across three CMT wells. These areas were assigned a physical dimension based on the difference in depth intervals along a single CMT well and the distance between each CMT well along the transect. The physical dimensions for each section are presented below.

The PCE concentration data were then converted to mass flux in g/d/ft^2 based on the following equation:

$$Mass\ Flux\ (J) = (C)(K)(i)$$

Where J = Mass Flux of the grid-plane (g/d/ft^2)
C = PCE concentration at sampling interval (g/ft^3)
K = Hydraulic conductivity of the geologic unit (ft/day) = 89.35 ft/day
i = Hydraulic gradient (ft/ft) = 0.001625 ft/ft

Here, the hydraulic conductivity is assumed to be uniform across the vertical and horizontal extent of the grid-plane as results from the HPT analysis demonstrated a relatively consistent hydraulic conductivity within the aquifer. It is important to note that a source of uncertainty in these calculations stems from the assumption that the geologic features are homogenous.

PCE Mass Flux Through Two Transects

Depth	Transect 1			Transect 2		
	CMT-06	CMT-05	CMT-04	CMT-07	CMT-09	CMT-10
	g/ft²/d			g/ft²/d		
Shallow	2.0971E-05	4.5200E-05	0.0009	6.5790E-06	0.0107	9.4600E-06
Intermediate Shallow	0.0028	0.0078	0.0058	Non-Detect	0.0111	2.1400E-05
Intermediate Deep	0.0015	0.0086	0.0074	7.8126E-05	0.0111	3.3700E-06
Deep	0.0020	0.0062	NA*	3.6184E-06	0.0090	0.0028

* CMT-04 not sampled in March 2023 due to presence of DNAPL; mass flux through Transect 1 is artificially low due to a lack of data from this point.

Generally, the bulk of the mass is being transported within the deepest interval, though only by a small fraction. The deepest interval of Transect 2 has 26% of the mass flux of the 4 intervals measured. The calculated mass flux of the deepest interval of Transect 2 is artificially low, due to the lack of data from CMT-04; however, due to the presence of DNAPL and very high groundwater concentration of PCE in the in situ sample collected during the soil boring activities, it is understood that mass is being transported from this interval. The concentration from the in situ sample was not used in this calculation because it resulted in an inflated mass flux, which is not reflected down gradient, indicating that the DNAPL is not as mobile as the dissolved contaminants. Mass flux data and calculations worksheets for each sampling event have been included in **Appendix H**.

3.7.2 Mass Discharge Evaluation

Mass discharge across the two CMT transects was evaluated to establish baseline mass discharge data, and to determine a localized attenuation rate over the plume by measuring the difference between mass discharges at two transects. Establishing a groundwater system attenuation rate also allows for assessment of remedy performance and effectiveness by monitoring changes to the attenuation rate.

The PCE mass flux data were then converted to mass discharge (g/d) based on the following equation:

$$Mass\ Discharge = J * A$$

Where J = Mass Flux of the grid-plane (g/d/ft^2)
A = Cross sectional area associated with a CMT well interval

PCE Mass Discharge Through Two Transects

Depth	Transect 1			Transect 2		
	CMT-06	CMT-05	CMT-04	CMT-07	CMT-09	CMT-10
	g/d			g/d		
Shallow	0.0243	0.0812	1.8869	0.0231	35.8621	0.0342
Intermediate Shallow	6.6236	24.0509	15.8004	NA	62.0690	0.1366
Intermediate Deep	3.4643	16.2864	14.1565	0.2460	36.6319	0.0112
Deep	1.0855	1.8612	NA	0.0018	4.8046	0.7786

Mass discharge rates varied between the two transects with a total PCE mass discharge of 85.32 g/d (0.19 pounds per day [lb/d]) at the upgradient transect (Transect 1), and a total PCE mass discharge of 140.59 g/d (0.31 lb/d) at the downgradient transect (Transect 2). As noted in Section 3.7.1, the mass flux in the deepest interval of CMT-04 was not included, due to the artificially high calculated mass flux caused by the presence of DNAPL. Mass discharge through this interval is expected to be significant, which is evident based on the higher downgradient mass discharge compared to the upgradient mass discharge.

An estimate of the mass of PCE within the groundwater plume was calculated to be 347.46 kilograms (766 pounds [lb]) using C-Tech's Earth Volumetric Studio (EVS) (version 2021.4.3) software. Kriging algorithms within EVS were used to interpolate the three-dimensional PCE plume. Kriging has advantages over other interpolation approaches (such as nearest neighbor) in that the spatial trends of the data are honored. As a result, dynamics such as groundwater flow direction are implicitly accounted for in the interpolation. The PCE plume interpolation was then truncated by the inferred water table at the top and the inferred clay layer at the bottom. Plume volumetrics were then calculated over this truncated interpolated plume. Importantly, this mass estimate does not include soil contamination; because the DNAPL is not fully delineated or incorporated into this estimate, the results are biased lower than expected. Contaminant mass is a function of both interpolated concentrations and soil porosity. For this analysis a homogenous porosity of 0.32 (corresponding to a sand) was assumed and used in this calculation.

3.8 CONCEPTUAL SITE MODEL

EA has developed a CSM that identifies COC sources, migration pathways, exposure media, exposure pathways, and potential receptors based on a review of historical documents, investigations, and the RSO investigation. Additional information and data acquired during any pre-design investigation will be used to confirm existing conditions and if required update the

CSM. Some of the additional information will likely be necessary to fully design/cost remedial technologies identified under this RSO.

COC Sources—Based on information provided in the RI/FS (H2M 1999), the National Heatset Printing Company historically used organic solvents as part of their lithographic tri-color printing operations. These solvents were discharged to the on-site sanitary system starting in 1983, and drums of the solvent were improperly stored both inside and outside of the building. After the National Heatset Printing Company filed for bankruptcy, chemical inventory was disposed of by being dumped into a leaching pool off the northeast side of the building in 1987. Source area soils were removed down to just above the water table at 15 ft bgs prior to the RI in 1999, and permanganate injections were conducted in the source area down to 80 ft bgs in 2005 to address dissolved CVOC concentrations; however, during the RSO activities in 2022 and 2023, a continuing source of PCE was identified beneath the historic leaching pool and downgradient beneath the building. The groundwater samples collected during the RSO investigation indicate high levels of CVOC contamination in the groundwater collected from 80 to 85 ft beneath the reported disposal area, as well as in the building footprint directly down gradient (SB-04). In addition to the dissolved CVOCs, weathered DNAPL was identified at the clay interface (83-85 ft bgs) in borings advanced behind the building consisting of fuel oil and PCE. Within the building footprint at CMT-04, a chlorinated DNAPL was also identified at the clay interface.

As presented in Section 3.7.2, the estimated dissolved phase mass was approximately 766 lbs of PCE. This estimate may be biased low as it assumes that no adsorption occurs beyond the estimated boundary of soil impacts, and it also may not account for DNAPL mass.

COC Release Mechanisms—The primary release mechanism consists of groundwater flow through impacted source zones with the potential for volatilization to soil gas from unsaturated source soil and groundwater, and vertical soil gas movement to outdoor and potentially indoor air via vapor intrusion.

COC Migration Pathways—There are no known exposure routes for contaminated drinking water for several reasons. The remaining source zones are in the deep subsurface and although there are elevated dissolved-phase contaminants in the shallow groundwater within and immediately downgradient from the source zone, shallow groundwater concentrations at the leading edge of the plume have historically been and continue to be below the NYSDEC AWQS. In addition, in the vicinity of the site and in the residential areas downgradient from the site, the shallow aquifer is not used as drinking water and there are no surface water bodies near the local shallow plume. The dissolved-phase contaminants in groundwater follow preferential flow pathways within the shallow aquifer, with the contaminants likely moving downgradient along the clay interface identified at approximately 85 ft bgs on-site. There are limited monitoring points in plume; however, concentrations in the deep monitoring wells at the leading edge are low or non-detect, and concentrations in the shallow monitoring wells are below the NYSDEC AWQS, as presented in the 1st Quarter 2023 Operation and Maintenance Monitoring Report (EA 2023b). The limited downgradient monitoring well data indicate that the plume is stable.

Soil gas within the vicinity of the footprint of the dissolved-phase groundwater plume is a migration pathway that could impact indoor air of nearby commercial structures.

COC Exposure Routes/Receptors—The source area is a continuing source for groundwater and soil gas contamination at the Site and potential receptors would include nearby commercial buildings. The site building is equipped with an SVE system that protects against potential vapor intrusion. Utility/construction workers could be exposed to COCs in soil gas during activities that require subsurface excavations and to potentially impacted groundwater depending on the depth of these activities. Off-site migration is limited to deep groundwater; as long as no private wells are installed downgradient, there are no exposure routes to off-site receptors.

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4. REMEDIAL SYSTEM OPTIMIZATION TECHNOLOGY EVALUATION AND DEVELOPMENT

This RSO report has been prepared to also identify, evaluate, and conceptually develop supplemental remedial options to achieve remediation goals and remediate site related COCs at the Site to appropriate and applicable SCGs listed below. The former remedy consisted of a series of DDC in-well vapor stripping systems located at the leading edge of the plume both on-site and off-site approximately one mile downgradient to control contaminant migration (i.e., containment), which due to high groundwater were often inoperable and were determined to not be effective at achieving remediation goals (EA 2022a). Operation of the DDC systems was halted in December 2021. This RSO focuses on remedial technologies proven effective for remediating chlorinated compounds and DNAPL based on the updated CSM and evaluates remedial options that would be the most appropriate, cost effective, and protective of public health and the environment. For the purposes of this RSO report and the evaluation of remedial technologies, the site has been divided into two units. The first unit is defined as the DNAPL source area behind and beneath the building at 1 Adams Boulevard. The second unit is defined as the dissolved-phase CVOC groundwater plume.

4.1 STANDARDS, CRITERIA AND GUIDANCE

SCGs are promulgated requirements and non-promulgated guidance which govern activities that may affect the environment and are widely used at different stages of an investigation and remediation of a site. The SCGs applicable for the data set collected during this RSO investigation include:

- Groundwater – NYSDEC Class GA AWQS, as presented in the Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 (NYSDEC 1998; as amended).

4.2 IDENTIFICATION OF REMEDIAL TECHNOLOGIES

In accordance with NYSDEC's Division of Environmental Remediation (DER)-10, Technical Guidance for Site Investigation and Remediation (NYSDEC 2010, as amended), the remedial goal for all remedial actions is the restoration of the site to pre-disposal/pre-release conditions to the extent practicable and legal. Remedial action objectives (RAOs) are defined as the medium specific cleanup objectives to provide protection of public health and the environment and are based on contaminant-specific SCGs. COCs at the Site were determined based on site history, previous investigations, and were defined in the ROD (NYSDEC 1999) primarily as PCE; other VOCs identified were breakdown contaminants TCE, *cis*-1,2-DCE, *trans*-1,2-DCE, and vinyl chloride. For this RSO investigation, current NYSDEC Unrestricted Use soil cleanup objectives and NYSDEC Class GA AWQS were used to update and establish cleanup standards for soil and groundwater at the Site, respectively (**Table 4-1**). Based on the ROD, the selected remedy should eliminate or mitigate significant threats to public health and/or the environment presented by the hazardous waste disposed at the Site through the proper application of scientific and engineering principals (NYSDEC 1999). Goals (or RAOs) for the remedial program at the site established by the ROD included:

- Eliminate, to the extent practicable, the source area contamination by remediating the groundwater directly below the leaching pool; this has not been achieved sufficiently to prevent off-site migration of contaminants.

- Eliminate, to the extent practicable, ingestion of groundwater affected by the site that does not attain New York State Department of Health drinking water standards; this has been achieved through the connection of all downgradient residences to public water.

- Eliminate, to the extent practicable, further off-site migration of groundwater that does not attain NYSDEC Class GA Ambient Water Quality Criteria; this has not been achieved, as DNAPL continues to contribute to the dissolved phase plume immediately downgradient from the site; reduction/elimination of DNAPL will further reduce contaminant mass migration to meet this RAO.

The selected remedy presented in the ROD was as follows: In Situ DDC Type In-Well Stripping (NYSDEC 1999). Specific elements of the selected remedy included:

- Installation and implementation of in situ DDC type in-well stripping systems.

- Public water will be provided to any properties that utilize private wells within the affected area.

- Contaminated subsurface soil will remain on-site, the subsurface soil will be treated to below SCGs as a result of groundwater treatment.

- Evaluation of treatment of source area with in-well stripping system, or alternative remedy.

As noted in Section 1.4, injection of sodium and potassium permanganate was initially identified as the alternative remedy for the source area and was implemented in 2005. Also noted in Section 1.4, operation of the DDC systems was discontinued in 2021 as recommended in the Corrective Measures Work Plan (EA 2022a). The development of remedial options for this RSO began with the identification of technologies that could meet remedial goals for the current DNAPL source area behind and beneath the building and the dissolved-phase groundwater plume. These technologies were generally screened based on effectiveness, implementability, and cost to address contaminated media at the Site (**Table 4-2**). To be effective, the technologies would need to first address DNAPL contamination in the source area, followed by treatment of the dissolved-phase groundwater plume.

4.2.1 Source Area (DNAPL) Remedial Technologies

Technologies capable of remediating DNAPL are limited to physical removal via excavation or pump and treat, or in situ treatments such as in situ chemical oxidation (ISCO), in situ chemical reduction (ISCR), and in situ thermal remediation (ISTR). Due to the depth of the DNAPL and location beneath the active building, excavation was removed from consideration. The following

sections provide descriptions of surfactant-enhanced pump and treat, ISCO, ISCR, and ISTR to support the evaluation of the technologies for remedial optimization at the Site.

4.2.1.1 Surfactant-Enhanced Pump and Treat

Traditional pump and treat technologies involve pumping or extracting contaminated water or free-phase product from the aquifer above ground for treatment. A common challenge for pump and treat extraction systems is a non-mobile non-aqueous phase liquid (NAPL) source and sorbed DNAPL contamination on fine grained materials that become sources of matrix back diffusion to groundwater at significantly high concentrations. Surface acting agents, commonly known as surfactants, have been used at NAPL sites to mobilize NAPL and allow for easier extraction. Treated water can then either be re-circulated or discharged. A surfactant pump and treat system often involves an array of extraction wells surrounded by injection wells, that are located within the source area as well as downgradient to prevent the expansion of the dissolved phase contaminant plume. Importantly, at the National Heatset Printing Company Site, a surfactant injection would likely be conducted behind the building and would be paired with angled extraction and injection wells installed within the footprint of the building, and vertical extraction wells along the east and south sides of the building.

A large-scale Pre-Design Investigation would need to be conducted, which would include bench scale testing to identify the appropriate surfactant or surfactant mix to effectively mobilize the DNAPL located near CMT-4 while also avoiding the creation of hazardous byproducts such as acetone. Additional data collection as part of a Pre-Design Investigation would include:

- DNAPL physical properties
- DNAPL saturation, distribution, and extent, which would require many samples throughout the identified hot spot
- More detailed hydrostratigraphy including grain-size distributions, capillary barrier properties and structure, and fraction organic content
- Pumping/slug tests

Implementation of surfactant-enhanced extraction would involve the installation of injection wells behind the building, angled and vertical extraction wells along the east side of the building, and additional vertical extraction wells along the south side of the building, as determined during the design process. Extraction well spacing and placement would be intended to provide hydraulic control; however, this is difficult to achieve, and a high factor of safety would be required to prevent downgradient migration of mobilized contaminants. Additional monitoring wells would be installed on-site and downgradient to monitor the dissolved phase plume. Monitoring wells would be monitored regularly throughout operation of the system to adequately capture the movement of DNAPL and fluctuations in the CVOC concentrations present within the dissolved phase plume. It is expected that a surfactant enhanced pump and treat operation would be conducted over a period of several months to years.

Once extracted, fluids (DNAPL, surfactant, and water) would be sent through an on-site treatment system and handled for off-site disposal or re-circulation.

4.2.1.2 In Situ Chemical Oxidation

ISCO involves the addition or injection of oxidants directly into the source area to facilitate the conversion of organic COCs to carbon dioxide and water or less toxic intermediates (i.e., inorganic chloride when treating chlorinated compounds). The four primary oxidants used for ISCO include persulfate, permanganate, peroxide, and ozone. Of the four primary oxidants, activated sodium persulfate or permanganate would be the recommended ISCO reagents to treat the source area, given the presence of DNAPL, safety concerns associated with aggressive oxidants (peroxide) beneath a building, cost, and implementability.

Injection wells could be installed as angled or horizontal wells to target the source area within the building footprint; vertical wells could be installed to target the source area behind the building to a depth of up to approximately 85 ft bgs (i.e., to the top of the confining layer). While horizontal wells are more costly, they would allow for optimal contact of the oxidant with the DNAPL.

- Three rows of six angled wells would be installed within the building footprint, and a single row of six vertical wells would be installed behind the building.

- Alternatively, six horizontal wells would be installed across the plume with an additional four vertical wells to be installed behind the building.

A bench-scale study would be required to identify the appropriate dosing of the oxidant. If angled wells are selected, a pilot test would be conducted to verify the technology can reach the targeted area; equipment with Global Positioning System (GPS) could be used to reduce uncertainty in placement of the wells but comes with a greater cost than angled drilling without GPS. If horizontal wells are selected, access to the property to the west of the site would be required for the drilling entry point to allow for the 300 ft offset required to get down to 80 ft bgs.

ISCO would be implemented as follows:

- A utility locator would be brought on-site to locate any underground utilities or other obstructions that may prove problematic to drilling.

- Predesign sampling would be conducted to determine baseline groundwater quality, saturated soil conditions, and further characterize the source area (i.e., DNAPL extent and concentration) to refine treatment volumes and as a benchmark for evaluating treatment effectiveness.

- Sonic drilling methods would be used to install angled and vertical injection wells across the total area of the DNAPL source area. Alternatively, a horizontal drilling rig would be used to install horizontal wells across the DNAPL source area. Pre-injection samples would be collected to determine baseline groundwater quality, saturated soil conditions, and

verify presence of DNAPL. Selected oxidant would be injected over the total footprint of the source area.

- Post-performance groundwater monitoring would be conducted 30- and 60-days following injections, samples would be analyzed for VOCs and geochemistry.

- Groundwater samples would be collected and analyzed for VOCs quarterly to determine if additional injections are appropriate. Saturated soil samples would be collected from the source area via direct-push methods approximately 6 months after completion of remedial activities to evaluate performance; access to building would need to be obtained.

- Several injections are expected to be required to achieve RAOs specifically related to source area (DNAPL) contamination.

4.2.1.3 In Situ Chemical Reduction – Emulsified Zero Valent Iron

ISCR involves the placement of a reductant or reductant generating material (i.e., zero valent iron [ZVI]) into the subsurface for the purpose of degrading organic contaminants to nontoxic or less toxic compounds. For DNAPL destruction, a stable emulsified zero valent iron (EZVI) formula that is miscible with DNAPLs would target the hydrophobic constituents to provide the required contact with ZVI for reductive dehalogenation. While the use of EZVI for DNAPL degradation is an abiotic reaction, additional amendments may be added to promote biotic degradation which would treat the dissolved phase contaminants, discussed in Section 4.2.2. It is estimated that a single application of EZVI could have a remedial lifetime of up to 5 to 10 years; DNAPL treatment is expected to take several months, while dissolved phase contaminant degradation would be seen over the course of several years. Factors that favor the application of ISCR include sulfate concentrations less than 500 mg/L and ORP less than 150 mV. Sulfate concentrations were less than 500 mg/L and ORP was less than 150 mV at all locations sampled for MNA parameters during the RSO investigation.

Angled direct-push methods would be used to inject EZVI into the DNAPL source mass (80-85 ft bgs)within the footprint of the building. Injections would be conducted using transects of varying angles throughout the identified DNAPL area identified on **Figure 3-5**. Vertical direct-push methods would be used to inject EZVI for treatment of DNAPL behind the building (78-85 ft bgs)in a grid with 15-ft spacing. Based on the remedial lifetime of ISCR, it is assumed that one injection event would be sufficient to address the DNAPL. If DNAPL mass is greater than expected based on the current CSM, an additional injection may be necessary. It is likely that this additional injection event would be at a reduced volume of reagent. ISCR would be implemented as follows:

- A utility locator would be brought on-site to locate any underground utilities or other obstructions that may prove problematic to drilling.

- Predesign sampling would be conducted to determine baseline groundwater quality conditions at the site and as a benchmark for evaluating treatment effectiveness.

- EZVI would be injected into the aquifer using direct-push equipment at approximately 30 direct push locations at varying angles within the building footprint, and additional vertical direct push locations behind the building spaced 15 ft apart.

- Following injection, injection points would be filled with sand to the top of the treatment zone (i.e., saturated zone), then sealed with bentonite and backfilled with drill cuttings.

- Post-performance groundwater monitoring would be conducted 30- and 60-days following injections, samples would be analyzed for VOCs and geochemistry.

- Groundwater samples would be collected quarterly for the first 2 years and semi-annually up to 5 years thereafter, to measure the concentration of VOCs until RAOs are achieved. Samples would be collected from the existing CMT wells (a total of 40 CMT channels) and up to 5 additional existing monitoring wells.

4.2.1.4 In Situ Thermal Remediation

ISTR can be accomplished using a few different methods. These include thermal conductive heating (TCH), electrical resistive heating, and steam enhanced extraction. Initially, it is anticipated that TCH is the appropriate ISTR method for the Site given the COCs present and physical conditions. TCH involves the use of heaters to target the boiling point of DNAPL within the vadose and saturated zone; the effectiveness of this technology is not affected by grain size (as with injection technologies) and would treat contaminants in the confining clay layer as well as in the transmissive sand, thereby reducing the risk of matrix back diffusion in the long term. Soil vapor and steam extraction from vertical and angled multi-phase extraction wells would be used to extract the vaporized contaminants and steam, and to maintain pneumatic and hydraulic control. Extracted liquid (condensate) and vapor will be treated using granular activated carbon; any DNAPL that is extracted will be containerized separately for off-site disposal. Primary components of a typical TCH system include multi-phase extraction wells, vertical extraction wells, TCH heater borings, power distribution system, heat exchanger knockout pot, temperature and pressure monitoring holes, vapor treatment, and water treatment. Throughout system operation, performance monitoring would be required and include temperature and pressure monitoring to track subsurface heating, pneumatic, and hydraulic control, and vapor and liquid treatment system monitoring for mass removal and discharge compliance. Remediation progress would be assessed by comparing the cumulative contaminant mass removed to estimates of the total contaminant mass.

The saturated zone would be heated to target the boiling point of water via a network of 70 heater borings. There would be 7 cross-gradient angled heater boring transects spaced 15 ft apart designed to cover the extent of the DNAPL source area within the building footprint. An additional 32 vertical heater borings would be installed behind the building. The existing PVC horizontal SVE (HSVE) wells would be replaced with steel HSVE wells. The vertical and angled multi-phase extraction wells and HSVE wells would be used to extract the vaporized contaminants, the steam, and to maintain pneumatic and hydraulic control. This remedy would require the installation of treatment infrastructure at the site including heater and extraction wells, power distribution system,

heat exchanger, water and vapor treatment. The system would operate continuously until RAOs are achieved, with a total operating time of several months.

Thermal conductive heating would be implemented as follows:

- A utility locator would be brought on-site to locate any underground utilities or other obstructions that may prove problematic to well installation.

- Pre-Design Investigation would be conducted to further characterize the source area total organic carbon and porosity. In addition, a geotechnical evaluation of the building would need to be conducted prior to implementation.

- A network of vertical and angled heater borings, replacement of existing PVC HSVE wells and CMT wells with stainless steel wells, vertical and angled multi-phase extraction wells, and temperature/pressure monitoring points, would be installed using a series of transects at varying angles throughout the building source area footprint. A grid design would be used behind the building. The TCH system would include all areas where DNAPL is suspected.

- Installation of a power system and water treatment system; the existing soil vapor extraction system trailer would be reused to the extent practicable.

- A field crew member (1 person on average) housed within a 30-minute drive to the Site in addition to office support.

- Groundwater and saturated soil samples would be collected after remediation to confirm the TCH treatment worked. Samples would be collected from the stainless steel monitoring wells that replaced the CMT wells and other existing monitoring wells (up to 20 wells). Saturated soil samples would be collected from behind the building via direct-push methods and from within the building footprint via angled soil borings.

- Demobilization includes grouting wells and removal of equipment.

4.2.2 Dissolved-Phase Groundwater Plume Remedial Technologies

To maximize effectiveness, source area DNAPL removal or treatment should be performed in tandem with dissolved-phase groundwater plume treatment assessment. The goal of source area removal or treatment at the site is to significantly reduce contaminant mass flux and mass discharge rates to remove source area contributions to the dissolved-phase groundwater plume immediately downgradient from the site. Once mass flux and mass discharge rates have been significantly reduced to levels that would make in situ bioaugmentation/MNA or a supplemental groundwater treatment technology more effective, then treatment of the dissolved-phase groundwater plume can be further evaluated and/or implemented.

4.2.2.1 Monitored Natural Attenuation

For groundwater contaminated with VOCs, MNA consists of sampling groundwater for contaminant concentrations and natural attenuation parameters. Natural attenuation with monitoring allows natural processes to achieve site-specific remedial objectives without enhancement or aggressive treatment. The "natural attenuation processes" that are at work in such a remedial approach include physical, chemical, or biological processes, that under favorable conditions, reduce the mass, toxicity, mobility, volume, or concentration of contaminants in the groundwater. Natural attenuation processes that could occur include biodegradation (aerobic or anaerobic), abiotic transformation (e.g., hydrolysis), adsorption, dispersion, dilution, or volatilization.

Natural attenuation with monitoring consists of monitoring groundwater COCs to ensure the contamination footprint and contaminant concentrations are stable or decreasing. This RSO option includes long-term groundwater monitoring for VOCs and natural attenuation parameters subsequent to source area removal or treatment. The existing monitoring well network would continue to be used; however, supplemental monitoring wells would be required to provide adequate coverage of the dissolved-phase plume footprint downgradient of the source area. MNA parameters were collected from the site as part of this RSO investigation and existing data indicate that there is limited potential for natural attenuation at the site.

Monitoring would be implemented as follows:

- Groundwater samples would be collected from up to 40 CMT well channels and up to 10 additional downgradient monitoring wells to continue monitoring the contaminant plume.

- Groundwater samples would be collected semi-annually for the first 5 years and annually thereafter to measure the concentration of VOCs and natural attenuation parameters.

- Because data generated as part of this RSO investigation indicated limited potential for natural attenuation, an evaluation of the effectiveness of this remedial technology would be required after the first 5 years.

4.2.2.2 In Situ Chemical Reduction with Bioaugmentation

ISCR with in situ bioaugmentation involves the placement of a reductant or reductant generating material (i.e., emulsion) into the subsurface for the purpose of degrading organic contaminants to nontoxic or less toxic compounds. This could be conducted in conjunction with the source area ISCR approach detailed in Section 4.2.1.2 or following implementation of the IST approach detailed in Section 4.2.1.3. An ISCR amendment would include ZVI particles, a controlled-release carbon source, micronutrients, and organic binding agents. The ISCR process is not only enhanced anaerobic biodegradation but combines both biotic and abiotic (i.e., chemical) reactions to treat organic COCs by creating reducing conditions. Bioaugmentation involves the addition of dechlorinating bacteria into the contaminated aquifer to supplement ISCR and optimize anaerobic biodegradation. It is estimated that a single application of ISCR supplemented with bioaugmentation would have a remedial lifetime of 3 to 5 years. Although results associated with

MNA parameters collected as part of this RSO investigation suggested limited natural attenuation, this is likely due to the very high concentrations of PCE within the source area. Factors that favor the application of ISCR include sulfate concentrations less than 500 mg/L and ORP less than 150 mV. Sulfate concentrations were less than 500 mg/L and ORP was less than 150 mV at all locations sampled for MNA parameters during the RSO investigation.

Angled direct-push methods would be used to inject ISCR emulsion perpendicular to the dissolved-phase CVOC plume within the building footprint, and vertical direct push methods would be used behind the building. If coupled with EZVI injections within the DNAPL contaminated zone as described in section 4.2.1.2, the ISCR emulsion with bioaugmentation would be injected during the same event in the same points as DNAPL remediation, but at shallower depths, within the 20 ft to 75 ft depth interval. Based on the remedial lifetime of ISCR supplemented with bioaugmentation, it has been assumed that one injection event would be sufficient to treat the accessible dissolved-phase CVOC plume on-site. Due to access constraints, only the portions of the dissolved plume closest to the east side and back of the building would be able to be treated. Additional injections could be conducted at the down gradient edge of the building if post-injection monitoring reveals that off-site migration does not dissipate following DNAPL and source area dissolved plume treatment. ISCR supplemented with bioaugmentation would be implemented as follows:

- A utility locator would be brought on-site to locate any underground utilities or other obstructions that may prove problematic to drilling.

- Predesign sampling would be conducted to determine baseline groundwater quality conditions at the site and as a benchmark for evaluating treatment effectiveness.

- ISCR emulsion and dechlorinating bacteria would be injected into the aquifer using direct-push equipment in the same locations identified in Section 4.2.1.2.

- Following injection, injection points would be filled with sand to the top of the treatment zone (i.e., saturated zone), then sealed with bentonite and backfilled with drill cuttings.

- Post-performance groundwater monitoring would be conducted at 45 and 90 days following injections, samples would be analyzed for VOCs and geochemistry.

- Groundwater samples would be collected quarterly for the first 2 years and semi-annually up to 5 years thereafter, to measure the concentration of VOCs until RAOs are achieved. Samples would be collected from the existing CMT wells (a total of 40 well intervals) and up to five additional existing monitoring wells.

4.3 GREEN REMEDIATION EVALUATION

NYSDEC's DER-31 Green Remediation (NYSDEC 2011) requires that green remediation concepts and techniques be considered during all stages of the remedial program with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any

implemented green technology. It is intended to be a holistic approach, which improves the sustainability of the cleanups by promoting the use of more sustainable practices and technologies. Such practices and technologies are less disruptive to the environment, generate less waste, increase reuse and recycling, and emit fewer pollutants, including GHGs, to the atmosphere. Green remediation concepts can be considered in the selection of the remedial system optimization strategy and incorporated into the design phase. A list of best management practices and opportunities to employ green remediation strategies across all presented approaches is provided below (ASTM International 2014):

- Reuse of existing monitoring well network:
  - Existing monitoring wells, including new CMT wells will be adequate for groundwater monitoring during any injection strategy.
- Reuse of structures for in situ treatment:
  - Proposal to install injection wells instead of using direct push technology for ISCO allows for fewer driller mobilizations to the site for subsequent injections.
  - Existing treatment system enclosures could potentially be reused for injection equipment.
- Use of recycled, reused, reusable, and/or regenerated products:
  - Use of recycled metals in EZVI
  - Use of dedicated groundwater sampling equipment (e.g., tubing) that can be reused across multiple sampling events
  - Use of passive groundwater samplers
  - Recycle of non-usable/spent equipment/materials at completion of construction.
  - Use of recycled/refurbished 55-gallon drums to containerize investigative derived waste (i.e., purge water, soil cuttings)
  - When possible and appropriate, use of roll off dumpsters to containerize and transport investigative derived waste
- Use of on-site and/or local materials/services:
  - Could contract local drilling company in the vicinity of the Site. A local driller was utilized for the RSO investigation (less than 10 miles from the Site)
  - Use of local laboratory to reduce transportation/shipping impacts

- On-site treatment of treatment condensate and purge water using granular activated carbon
- Steam clean and/or use of biodegradable detergents for equipment decontamination
- Use of sodium persulfate as ISCO reagent provides a less destructive option to the subsurface environment than other ISCO reagents, also supporting bioremediation of dissolved phase concentrations following initial oxidation phase
- Selection of bioremediation reagent with lower environmental impact
- Use of direct-push technology or sonic drilling to reduce generation of soil cuttings needing to be disposed off-site.
- Install erosion control measures to capture sediment runoff.
- Discharge of condensate generated by in situ thermal remediation to publicly owned treatment works.
- Purchase of renewable energy credits/certificates to power and/or off set remedial activities.
- Implement engine idling reduction plan.
- Establish green requirements and tracking system during implementation.

4.4 EVALUATION OF REMEDIAL SYSTEM OPTIMIZATION OPTIONS

A review of applicable remedial technologies for both the source area DNAPL and dissolved-phase CVOC plume was conducted to evaluate RSO options to address contamination at the National Heatset Printing Company Site. Each technology was evaluated using NYSDEC screening matrixes as available, provided in **Appendix I** and based on effectiveness, implementability, and cost as part of the RSO option selection process (**Table 4-2**). The results of that process have been included in the following sections. In addition, a summary of anticipated costs is provided as **Table 4-3** with cost backup provided as **Appendix J**.

4.4.1 Source Area Option

Each remedial technology identified in Section 4.2.1 could be effective at treating the source area (i.e., a permanent reduction of DNAPL mass) to meet RAOs established for the Site. Additionally, each remedial technology is readily implementable and has been proven successful on a number of similar sites nationally, though surfactant-enhanced extraction is typically performed on light non-aqueous phase liquid (**Table 4-2**). ISCO, while easily implementable, would require repeated injections over the course of several years to effectively reduce the DNAPL mass identified at the site. Baseline conditions for DO and ORP indicate a moderately reducing condition; coupled with

the inability of ISCO to promote direct degradation of DNAPL, there is risk of failing to achieve RAOs within a reasonable timeframe. Surfactant-enhanced extraction is difficult to implement at the depths required at the site, and access limitations due to the occupied building above most of the DNAPL would limit the success of the technology and increase the risk of mobilizing contaminants downgradient from the Site. In addition, treatment equipment would need to be maintained over a longer duration than other technologies evaluated. Subsurface conditions including groundwater flow and homogenous strata make this site favorable for implementation of ISTR. Although ISTR would achieve the most mass reduction of both DNAPL and dissolved phase contaminants in the shortest amount of time, this technology would pose some risk to the building occupants and would require many protective measures and substantial monitoring to allay health and safety concerns from increased volatilization to soil gas and potentially indoor air. Of the identified technologies, ISCR would be the easiest to implement as it does not require infrastructure or the use of a significant amount of heavy machinery and does not pose a risk to the existing site building or its occupants. In addition, ISCR is a more efficient DNAPL treatment compared to ISCO and is expected to meet the source area RAOs with a single injection event. Hydraulic conductivity and groundwater velocity is acceptable for reductant application, and baseline conditions are suitable for reduction. It should be noted, however, that ISTR is the only proposed technology that would directly target contaminants that have seeped into the Gardiners clay layer; ISCR and ISCO would both present some risk of continued matrix back diffusion to groundwater following DNAPL treatment, though at much lower concentrations that could be addressed using the proposed dissolved-phase technologies.

When evaluated based on green and sustainable remediation metrics, ISCR would have the smallest carbon footprint of the other technologies due to the expected effectiveness of a single injection event and the ability to use existing monitoring wells. Energy consumption would be the primary contributor of greenhouse gas emissions for ISTR; in addition, the existing monitoring well and HSVE well networks within the treatment zone would need to be replaced with stainless steel wells due to the high temperatures required to remediate the contaminants. Similar to ISTR, energy consumption would be the primary contributor of greenhouse gas emissions for surfactant-enhanced pump and treat; surfactant delivery and off-site transport and disposal of recovered DNAPL would add to the carbon footprint associated this technology. Greenhouse gas emissions associated with implementation of ISCO would be greater than ISCR due to the repeated deliveries of oxidant and mobilizations to the site to conduct injections.

Costs associated with each technology would differ significantly. ISTR comes with a high price not only due to the equipment requirements and protective measures, but also energy use. Though not as expensive as ISTR, surfactant-enhanced pump and treat has a higher price than other injection technologies, due to system operations, maintenance, and monitoring, as well as disposal costs; compared to ISCO and ISCR, surfactant does not treat the DNAPL directly, it mobilizes it so it can be treated/handled above ground. Additionally, there is a risk of mobilization of DNAPL to other areas of the site. Additional plume management would be required due to the risks of contaminant migration inherent in surfactant-enhanced pump and treat. Although the cost of a single ISCO injection is low, the need for multiple injections and continued monitoring increases this cost significantly as ISCO targets the dissolved phase impacts, which increase dissolution of

DNAPL as the primary mechanism for DNAPL remediation. The cost of a single ISCR injection would be comparable to a single ISCO injection but would be more effective.

Given the existing occupied building and depth of the target contamination, access is compromised and complicates implementation for each of the technologies. Angled borings would need to be used to reach the DNAPL within the building footprint but is expected to be achievable. A pilot test could be conducted to confirm implementability assumptions and radius of influence of the selected technology.

4.4.2 Dissolved-Phase CVOC Plume Option

Dissolved-phase CVOC plume treatment depends first on treatment of the DNAPL source, which will continue to feed the dissolved phase plume until remediated, and the natural attenuation of site COCs is likely to follow implementation of ISCR and ISTR, as both technologies support a reducing environment. ISCO injections would temporarily stunt potential for natural attenuation of contaminants.

Implementation of ISCR with bioaugmentation would enhance the natural degradation processes and decrease the remediation timeframe compared to MNA. As noted in Section 4.2.2.2, this could be accomplished at the same time as injection of EZVI, which would have a positive impact on cost and sustainability. ISCR with bioaugmentation would be easy to implement, moderate in cost, and is expected to be effective at remediating the dissolved-phase CVOC plume. Although MNA is the least expensive option, as discussed in section 3.6, data collected historically and as part of this RSO investigation has indicated that limited natural attenuation is occurring, likely due to the presence of a continuing DNAPL source. As a result, this technology would have to be re-evaluated after the first 5 years to assess its effectiveness and to determine post-DNAPL removal attenuation rates (i.e., first order decay rates) near the source and in the downgradient plume area. Based on that evaluation, another review of alternate remedial technologies for dissolved groundwater plume remediation may be required in the future.

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5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSION

Four remedial technologies for the source area and three remedial technologies for the dissolved-phase CVOC plume were identified and generally screened for their effectiveness to meet soil and groundwater RAOs, implementability at the Site, and cost effectiveness. The estimated technology costs ranged from $5,300,000 to $13,800,000, with ISCR being the anticipated lowest cost option. While all technologies are expected to be able to achieve RAOs, the remedial timeframes, sustainability, and cost-effectiveness vary significantly, and these differences should be considered when selecting a technology or technologies to optimize site remediation.

5.2 RECOMMENDED PILOT TEST

Prior to implementation of RSO options, it is recommended to perform a pilot test to verify angled borings will be able to reach the target contamination. The following could be accomplished as part of a pilot test:

- Baseline groundwater samples would be collected from surrounding existing CMT wells prior to injection.

- Borings to a depth of 85 ftat angles of 15 degrees from vertical (23 horizontal ft), 20 degrees from vertical (30 horizontal ft), 25 degrees from vertical (40 horizontal ft),30 degrees from vertical (50 horizontal ft)and 35 degrees from vertical (60 horizontal ft) utilizing GPS to verify the target can be reached using selected drilling technology.

- Borings would be within 20 ft of existing CMT wells to allow for monitoring of effectiveness and radius of influence.

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Tables

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Table 3-1. On-site Groundwater Elevation Data (March 2023)

Well ID	Date	Time	PID (ppm)	DTW	DTB
MW-1D	3/20/2023	0845	0.7	17.45	82.29
MW-1S	3/20/2023	0840	1.2	17.25	30.76
MW-2D	3/20/2023	0915	1.5	17.84	81.94
MW-2S	3/20/2023	0915	1.3	17.87	28.88
MW-2AD	3/21/2023		0	18.31	78.75
MW-2A	3/20/2023	1030	0.0	17.75	24.00
MW-3A	3/20/2023	1025	0.6	17.72	27.19
MW-3D	3/20/2023	0908	1.5	18.1	84.21
MW-3S	3/20/2023	0910	0.4	18.17	29.8
MW-4D	3/20/2023	0955	1.0	17.53	81.91
MW-4S	3/20/2023	1006	0.7	17.77	27.82
MW-5D	3/20/2023	1000	1.6	16.7	81.09
MW-5S	3/20/2023	1000	1.4	16.54	26.90
MW-13S	3/20/2023	1020	0.0	17.60	28.82
MW-14D	3/20/2023	0805	0.0	16.92	76.65
MW-14S	3/20/2023	0945	0.0	17.08	26.35
MW-15D	3/20/2023	1010	0.1	17.27	72.68
MW-15S	3/20/2023	1010	0.0	17.28	27.49
DDC-1 PDB	3/20/2023	0935	0.7	17.89	83.8
DDC-1 PDA	3/20/2023	0935	0.6	16.64	82.35
DDC-1PS	3/20/2023	0935	0.8	16.74	27.36
DDC-2-PD	3/20/2023	1020	1.4	15.51	80.71
DDC-2-PS	3/20/2023	1020	1.5	25.51	25.51
DDC-3-PD	3/20/2023	0950	0.4	17.14	80.54
DDC-3-PS	3/20/2023	0950	0.0	17.14	26.65
DDC-4PD	3/20/2023	1000	0.2	15.23	79.82
DDC-4PS	3/20/2023	1000	0.0	15.13	25.84
CMT-1 (Port 5 - Shallow)	3/21/2023	--	0.0	18.11	22.35
CMT-1 (Port 6 - Intermediate Shallow)	3/21/2023	--	0.0	18.19	53.51
CMT-1 (Port 1 - Intermediate Deep)	3/21/2023	--	0.0	18.09	73.39
CMT-1 (Port 2 - Deep)	3/21/2023	--	0.0	18.09	83.33
CMT-2 (Port 4 - Shallow)	3/21/2023	1625	0.0	18.71	20.20
CMT-2 (Port 6 - Intermediate Shallow)	3/21/2023	1630	0.0	18.51	51.80
CMT-2 (Port 7 - Intermediate Deep)	3/21/2023	1633	0.0	18.53	64.84

Table 3-1. On-site Groundwater Elevation Data (March 2023)

Well ID	Date	Time	PID (ppm)	DTW	DTB
CMT-2 (Port 1 - Deep)	3/21/2023	1636	0.0	18.53	80.65
CMT-3 (Port 6 - Shallow)	3/21/2023	1645	0.4	18.61	19.75
CMT-3 (Port 7 - Intermediate Shallow)	3/21/2023	1647	0.4	18.61	49.50
CMT-3 (Port 2 - Intermediate Deep)	3/21/2023	1640	0.4	18.61	69.3
CMT-3 (Port 3 - Deep)	3/21/2023	1643	0.4	18.61	79.63
CMT-4 (Port 4 - Shallow)	3/21/2023	1708	0.0	19.10	20.92
CMT-4 (Port 5 - Intermediate Shallow)	3/21/2023	1706	0.0	19.1	53.3
CMT-4 (Port 6 - Intermediate Deep)	3/21/2023	1702	0.0	18.8	63.54
CMT-4 (Port 1 - Deep)	3/21/2023	1710	**3072**	21.10	83.00
CMT-5 (Port 1 - Shallow)	3/21/2023	1556	0.0	18.86	22.90
CMT-5 (Port 7 - Intermediate Shallow)	3/21/2023	1602	0.0	19.25	52.36
CMT-5 (Port 3 - Intermediate Deep)	3/21/2023	1559	0.0	18.95	73.40
CMT-5 (Port 5 - Deep)	3/21/2023	1600	0.0	19.34	83.30
CMT-6 (Port 1 - Shallow)	3/21/2023	1500	0.0	18.60	23.30
CMT-6 (Port 3 - Intermediate Shallow)	3/21/2023	1520	0.0	18.90	43.42
CMT-6 (Port 4 - Intermediate Deep)	3/21/2023	1540	0.0	18.75	63.88
CMT-6 (Port 7 - Deep)	3/21/2023	1550	0.0	18.60	83.00
CMT-7 (Port 3 - Shallow)	3/22/2023	--	0.0	18.90	19.95
CMT-7 (Port 4 - Intermediate Shallow)	3/22/2023	--	0.0	18.85	52.54
CMT-7 (Port 5 - Intermediate Deep)	3/22/2023	--	0.0	27.02	72.35
CMT-7 (Port 6 - Deep)	3/22/2023	--	0.0	37.01	81.80
CMT-8 (Port 2 - Shallow)	3/21/2023	1347	0.0	15.79	20.20
CMT-8 (Port 3 - Intermediate Shallow)	3/21/2023	1345	0.0	15.85	50.25
CMT-8 (Port 4 - Intermediate Deep)	3/21/2023	1341	0.0	15.98	71.00
CMT-8 (Port 5 - Deep)	3/21/2023	1335	0.0	15.89	79.00
CMT-9 (Port 4 - Shallow)	3/22/2023	1539	0.0	18.94	20.50

Table 3-1. On-site Groundwater Elevation Data (March 2023)

Well ID	Date	Time	PID (ppm)	DTW	DTB
CMT-9 (Port 3 - Intermediate Shallow)	3/22/2023	1541	0.0	19.03	50.50
CMT-9 (Port 2 - Intermediate Deep)	3/22/2023	1546	0.0	19.07	70.50
CMT-9 (Port 1 - Deep)	3/22/2023	1550	0.0	19.00	80.00
CMT-10 (Port 3 - Shallow)	3/21/2023		0.0	18.52	19.96
CMT-10 (Port 2 - Intermediate Shallow)	3/21/2023	--	0.0	18.52	51.10
CMT-10 (Port 1 - Intermediate Deep)	3/21/2023	--	0.0	18.59	75.00
CMT-10 (Port 6 - Deep)	3/21/2023	--	0.0	17.68	79.8

Notes:
DTB = Depth to Bottom
DTW = Depth to Water
PID = Photoionization detector
ppm = Part(s) per million

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Table 3-2A. Laboratory and Field Analysis Results Summary for Contaminants of Concern in In Situ Groundwater Samples (June 2022)

Parameters List	Sample ID	SPC-01-20		SPC-01-30		SPC-01-40		SPC-01-50		SPC-01-60		SPC-91-60		SPC-01-70		NYSDEC AWQS (µg/L)
	Sample Type	Groundwater		Groundwater		Groundwater		Duplicate		Groundwater		Groundwater		Groundwater		
	Sample Date	6/29/2022		6/29/2022		6/29/2022		6/29/2022		6/29/2022		6/29/2022		6/29/2022		
	Analysis	Lab	Field	Lab	Field	Lab	Field	Lab	Field	Lab	Field	Lab	Field	Lab	Field	
Cis -1,2-Dichloroethylene	(µg/L)	0.95 J	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	5
Tetrachloroethylene (PCE)	(µg/L)	1	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	5
Trichloroethylene (TCE)	(µg/L)	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	0.32 J	ND	0.7 J	0.26	5
Vinyl Chloride	(µg/L)	(<1)	**7.65**	(<1)	**23.51**	(<1)	**10.78**	(<1)	**29.60**	(<1)	**22.61**	(<1)	**28.46**	(<1)	**27.10**	2
Parameters List	Sample ID	SPC-03-20		SPC-03-30		SPC-03-40		SPC-03-50		SPC-03-60		SPC-03-70		SPC-03-80		NYSDEC AWQS (µg/L)
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	6/29/2023		6/29/2023		6/29/2023		6/29/2023		6/29/2023		6/29/2023		6/29/2023		
	Analysis	Lab	Field	Lab	Field	Lab	Field	Lab	Field	Lab	Field	Lab	Field	Lab	Field	
Cis -1,2-Dichloroethylene	(µg/L)	1.5	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	5
Tetrachloroethylene (PCE)	(µg/L)	(<1)	ND	(<1)	ND	0.45 J	ND	(<1)	ND	(<1)	ND	(<1)	ND	**1200**	**1336.47**	5
Trichloroethylene (TCE)	(µg/L)	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	0.5 J	0.27	0.71 J	0.44	2.6	1.70	5
Vinyl Chloride	(µg/L)	(<1)	**9.43**	(<1)	**8.43**	(<1)	**3.58**	(<1)	**2.45**	(<1)	**3.19**	(<1)	**21.01**	(<1)	**21.79**	2

Notes:

µg/L = Microgram(s) per liter (parts per billion)
AWQS = Ambient Water Quality Standard
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Estimated Value
NYSDEC = New York State Department of Environmental Conservation
SPC = Screen Point Coupler
U = Analyte not detected at the listed laboratory reporting limit.

Laboratory analysis conducted using EPA Method 8260C

Field analysis was conducted using a FROG-5000™

Bold values indicate that the analyte was detected greater than the NYSDEC AWQS.

Table 3-2A. Laboratory and Field Analysis Results Summary for Contaminants of Concern in In Situ Groundwater Samples (June 2022)

	Sample ID	SPC-05-20		SPC-05-30		SPC-05-40		SPC-05-50		SPC-05-60		SPC-05-70		SPC-05-80		SPC-95-80	
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Sample Date	6/30/2023		6/30/2023		6/30/2023		6/30/2023		6/30/2023		6/30/2023		6/30/2023		6/30/2023	
Parameters List	**Analysis**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**
Cis-1,2-Dichloroethylene	(µg/L)	1.9	ND	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	**7.8**	**32.74**	(<1)	ND	(<1)	ND
Tetrachloroethylene (PCE)	(µg/L)	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	0.27 J	ND	1.4	ND	**1200**	**2169.38**	**3000**	**2226.54**
Trichloroethylene (TCE)	(µg/L)	(<1)	ND	(<1)	ND	(<1)	ND	(<1)	ND	0.45 J	ND	2.5	3.25	2.6	4.95	**6.6**	**5.05**
Vinyl Chloride	(µg/L)	0.4 J	**40.24**	(<1)	**26.54**	(<1)	**16.24**	(<1)	**30.72**	(<1)	**12.86**	(<1)	**26.67**	(<1)	**19.09**	(<1)	**19.00**

	Sample ID	SPC-09-20		SPC-09-30		SPC-09-40		SPC-09-50		SPC-09-60		SPC-09-70		SPC-09-80		NYSDEC AWQS (µg/L)	
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater			
	Sample Date	6/30/2023		6/30/2023		6/30/2023		6/30/2023		6/30/2023		6/30/2023		6/30/2023			
Parameters List	**Analysis**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**	**Lab**	**Field**		
Cis-1,2-Dichloroethylene	(µg/L)	1.8		(<1)		**5.2**	**88.38**	(<1)		(<1)		(<1)		0.31 J		5	
Tetrachloroethylene (PCE)	(µg/L)	0.83 J	5.61	(<1)	0.74	(<1)		(<1)		(<1)		(<1)		**1000**	**1271.69**	5	
Trichloroethylene (TCE)	(µg/L)	0.51 J	0.72	(<1)		0.53 J	0.35	(<1)		0.34 J		0.53 J	0.36	2.8	2.06	5	
Vinyl Chloride	(µg/L)	0.59 J	**23.87**	(<1)		(<1)		(<1)		(<1)		(<1)		(<1)		2	

Table 3-2B. Summary of Detected Volatile Organic Compounds in In Situ Groundwater Samples (July 2022)

Parameters List EPA Method 8260C	Sample ID	SPC-01A-84		SPC-01C-84		SPC-01D-84		SPC-01E-84		SPC-01F-84		SPC-01BN		SPC-01DN		NYSDEC AWQS (µg/L)
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/13/2022		7/7/2022		7/11/2022		7/11/2022		7/12/2022		7/14/2022		7/14/2022		
1,1,1-Trichloroethane (TCA)	(µg/L)	(<25)	U	(<1)	U	(<1)	U	0.83	J	(<50)	U	(<200)	U	(<200)	U	5
1,2,4-Trichlorobenzene	(µg/L)	**10**	J	(<1)	U	(<1)	U	0.72	J	(<50)	U	(<200)	U	(<200)	U	5
1,2-Dichloropropane	(µg/L)	(<25)	U	(<1)	U	**2.1**		**4.4**		(<50)	UQ	(<200)	U	(<200)	U	1
1,3-Dichlorobenzene	(µg/L)	(<25)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	(<200)	U	(<200)	U	3
1,4-Dichlorobenzene	(µg/L)	(<25)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	(<200)	U	(<200)	U	3
Acetone	(µg/L)	38.4	J	2.1	J	**400**		36.4		(<250)	UQ	**480**	J	(<1000)	U	50
Bromodichloromethane	(µg/L)	(<25)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	(<200)	U	(<200)	U	50
Carbon Disulfide	(µg/L)	(<25)	U	(<1)	U	2.4		(<1)	U	(<50)	U	(<200)	U	(<200)	U	---
Carbon Tetrachloride	(µg/L)	(<25)	U	(<1)	U	(<1)	U	**22.4**		(<50)	U	(<200)	U	(<200)	U	5
Chlorobenzene	(µg/L)	(<25)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	(<200)	U	(<200)	U	5
Chloroform	(µg/L)	**11.9**	J	0.42	J	**490**	JD	**17.5**		(<50)	UQ	(<200)	U	(<200)	U	7
Chloromethane (Methyl Chloride)	(µg/L)	(<25)	U	(<1)	U	0.24	J	(<1)	U	(<50)	U	(<200)	U	(<200)	U	5
Cis -1,2-Dichloroethylene	(µg/L)	**440**		**63.6**		**25.2**		**63.6**		(<50)	U	(<200)	U	(<200)	U	5
Ethylbenzene	(µg/L)	(<25)	U	(<1)	UQ	0.33	JQ	0.24	JQ	(<50)	U	(<200)	U	(<200)	U	5
Isopropylbenzene (Cumene)	(µg/L)	(<25)	U	(<1)	U	0.23	J	(<1)	U	(<50)	U	(<200)	U	(<200)	U	5
m,p-Xylene	(µg/L)	(<50)	U	(<2)	U	0.8	J	0.5	J	(<100)	U	(<400)	U	(<400)	U	---
Methylcyclohexane	(µg/L)	(<25)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	(<200)	U	(<200)	U	---
Methylene Chloride	(µg/L)	(<25)	U	(<1)	U	**140**	E	**98.7**		(<50)	U	(<200)	U	(<200)	U	2
o-xylene (1,2-Dimethylbenzene)	(µg/L)	(<25)	U	(<1)	U	13.1		3.4		(<50)	U	(<200)	U	(<200)	U	---
Styrene	(µg/L)	(<25)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	(<200)	U	(<200)	U	5
Tetrachloroethylene (PCE)	(µg/L)	**5200**	D	**140**	D	**26500**	D	**21400**	D	**21200**	D	**27400**	D	**22900**	D	5
Toluene	(µg/L)	(<25)	U	(<1)	U	2.8		2.1		(<50)	U	(<200)	U	(<200)	U	5
Trichloroethylene (TCE)	(µg/L)	**30.9**		**7.7**		**520**	D	**590**	D	**14.8**	J	**74.2**	J	**110**	J	5
Vinyl Chloride	(µg/L)	(<25)	U	(<1)	U	**7.3**		**19.8**		(<50)	U	(<200)	U	(<200)	U	2

Notes:

µg/L = Microgram(s) per liter (parts per billion)
AWQS = Ambient Water Quality Standard
D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded The calibration range.
E = Value exceeds calibration range
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Estimated Value
NYSDEC = New York State Department of Environmental Conservation
U = Analyte not detected at the listed laboratory reporting limit.

Bold values indicate that the analyte was detected greater than the NYSDEC AWQS.

Table 3-2B. Summary of Detected Volatile Organic Compounds in In Situ Groundwater Samples (July 2022)

Parameters List EPA Method 8260B	Sample ID	SPC-02-84		SPC-04-84		SPC-06-84		SPC-07-84		SPC-10-84		SPC-11-84		SPC-91-BN		NYSDEC AWQS (µg/L)
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/20/2022		7/18/2022		7/19/2022		7/22/2022		7/22/2022		7/21/2022		7/14/2022		
1,1,1-Trichloroethane (TCA)	(µg/L)	(<10)	U	(<200000)	UD	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	5
1,2,4-Trichlorobenzene	(µg/L)	(<10)	U	**320**		(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	5
1,2-Dichloropropane	(µg/L)	(<10)	U	**170**	JQ	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	UQ	1
1,3-Dichlorobenzene	(µg/L)	(<10)	U	(<200)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	3
1,4-Dichlorobenzene	(µg/L)	(<10)	U	(<200)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	3
Acetone	(µg/L)	17.1	J	(<1000)	UQ	1.2	J	3.1	J	2.8	J	2.9	J	(<250)	UQ	50
Bromodichloromethane	(µg/L)	(<10)	U	**56.2**	J	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	50
Carbon Disulfide	(µg/L)	2.9	J	(<200)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	---
Carbon Tetrachloride	(µg/L)	(<10)	U	**4400**		(<1)	U	(<1)	U	(<1)	U	(<1)	U	83.6		5
Chlorobenzene	(µg/L)	(<10)	U	**56.8**	J	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	5
Chloroform	(µg/L)	2.3	J	**13300**	Q	(<1)	U	(<1)	U	(<1)	U	(<1)	U	41.4	JQ	7
Chloromethane (Methyl Chloride)	(µg/L)	(<10)	U	**51**	J	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	5
Cis-1,2-Dichloroethylene	(µg/L)	(<10)	U	**93.6**	J	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	5
Ethylbenzene	(µg/L)	(<10)	UQ	**97.4**	J	(<1)	UQ	(<1)	UQ	(<1)	UQ	(<1)	UQ	(<50)	U	5
Isopropylbenzene (Cumene)	(µg/L)	(<10)	U	**120**	J	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	5
m,p-Xylene	(µg/L)	(<20)	U	170	J	(<2)	U	(<2)	U	(<2)	U	(<2)	U	(<100)	U	---
Methylcyclohexane	(µg/L)	(<10)	U	74.8	J	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	---
Methylene Chloride	(µg/L)	(<10)	UQ	(<200)	U	(<1)	UQ	(<1)	U	(<1)	U	(<1)	U	**35.1**	J	2
o-xylene (1,2-Dimethylbenzene)	(µg/L)	(<10)	UQ	1800		(<1)	UQ	(<1)	U	(<1)	U	(<1)	U	(<50)	U	---
Styrene	(µg/L)	(<10)	UQ	(<200)	U	(<1)	UQ	(<1)	U	(<1)	U	(<1)	U	(<50)	U	5
Tetrachloroethylene (PCE)	(µg/L)	**770**		**6.51594e+007**	ED	**82.9**	D	0.38	J	0.31	J	0.42	J	**69600**	D	5
Toluene	(µg/L)	(<10)	U	**430**		(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	5
Trichloroethylene (TCE)	(µg/L)	3.1	J	**103200**	JD	1.2		0.77	J	0.37	J	0.84	J	18.2	J	5
Vinyl Chloride	(µg/L)	(<10)	U	(<200)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<50)	U	2

Table 3-3. Contaminant of Concern Detection Frequency in Groundwater (March 2023)

Analyte	Total Number of Submitted Samples (Without FDs)	Number of Detects	Maximum Detected Concentration	Units	Maximum Location	NYSDEC Class GA AWQS	Number of samples exceeding NYSDEC Class GA AWQS	Percentage of Samples that Exceed NYSDEC Class GA AWQS
cis -1,2-dichloroethene	57	27	1,600	µg/L	CMT-01-06	5	17	29.8%
Tetrachloroethene	57	57	20,000	µg/L	CMT-01-02	5	40	70.2%
Trichloroethene	57	39	110	µg/L	CMT1-05-03	5	19	33.3%

µg/L = Micrograms per liter.
AWQS = Ambient Water Quality Standards and Guidance Values
FD = Field duplicate.
GA = Source of drinking water (groundwater)
NYSDEC = New York State Department of Environmental Conservation

Table 3-4. Summary of Detected Volatile Organic Compounds in Site Monitoring Well Samples (March 2023)

Parameters List EPA Method 8260B	Sample ID	MW-1D		MW-1S		MW-2A		152140-FD-02		MW-2AD		MW-2D		MW-2S		MW-3D		MW-3S		NYSDEC AWQS (µg/L)
	Sample Type	Groundwater		Groundwater		Groundwater		Duplicate		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		
Acetone	(µg/L)	(<10)	U	(<10)	U	(<10)	U	(<10)	U	(<10)	U	(<100)	U	(<10)	U	(<10)	U	(<10)	U	50 (s)
cis - 1,2-Dichloroethene	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<10)	U	(<1)	U	(<1)	U	(<1)	U	5 (s)
Trichloroethene (TCE)	(µg/L)	1.1	J	(<1)	U	(<1)	U	(<1)	U	0.94	J	4.0	J	(<1)	U	1.10	J	(<1)	U	5 (s)
Tetrachloroethene (PCE)	(µg/L)	2.7	J	0.29	J	1.2	J	1.1	J	**21.0**		**3800**		0.83	J	**200**		1.4	J	5 (s)
Carbon Tetrachloride	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	**10**	J	(<1)	U	0.41	J	(<1)	U	5 (s)
1,4-Dichlorobenzene	(µg/L)	(<1)	U	(<1)	U	0.24	BJ	0.24	BJ	(<1)	U	(<10)	U	(<1)	U	(<1)	U	0.23	BJ	3 (s)
Chloroform	(µg/L)	(<1)	U	(<1)	U	(<1)	U	(<1)	U	(<1)	U	5.8	J	(<1)	U	(<1)	U	(<1)	U	7 (s)

Parameters List EPA Method 8260B	Sample ID	MW-5D		MW-5S		MW-14D		MW-14S		MW-15D		MW-15S		DDC-2-PD		DDC-2-PS		DDC-4-PD		NYSDEC AWQS (µg/L)
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		3/21/2023		
Acetone	(µg/L)	(<20)	U	(<10)	U	(<10)	U	(<10)	U	(<20)	U	(<10)	J	(<10)	U	(<10)	U	(<10)	U	50 (s)
cis- 1,2-Dichloroethene	(µg/L)	**5.7**	J	0.62	J	(<1)	U	(<1)	U	(<2)	U	(<1)	U	0.85	J	1.2	J	(<1)	U	5 (s)
Trichloroethene (TCE)	(µg/L)	4.1	J	(<1)	U	1.20	J	(<1)	U	1.5	J	(<1)	U	2.4	J	0.43	J	(<1)	U	5 (s)
Tetrachloroethene (PCE)	(µg/L)	**320**		0.30	J	**29**		0.90	J	**410**		1.8	J	**46**		1.3	J	1.80	J	5 (s)
Carbon Tetrachloride	(µg/L)	(<2)	U	(<1)	U	(<1)	U	(<1)	U	1.1	J	(<1)	U	(<10)	U	(<1)	U	(<1)	U	5 (s)
1,4-Dichlorobenzene	(µg/L)	(<2)	U	0.79	BJ	(<1)	U	(<1)	U	(<2)	U	(<1)	U	(<10)	U	0.49	BJ	(<1)	U	3 (s)
Chloroform	(µg/L)	(<2)	U	(<1)	U	(<1)	U	(<1)	U	(<2)	U	(<1)	U	(<10)	U	(<1)	U	(<1)	U	7 (s)

Parameters List EPA Method 8260B	Sample ID	DDC-4-PS		NYSDEC AWQS (µg/L)
	Sample Type	Groundwater		
	Sample Date	3/21/2023		
Acetone	(µg/L)	(<10)	U	50 (s)
cis- 1,2-Dichloroethene	(µg/L)	(<1)	U	5 (s)
Trichloroethene (TCE)	(µg/L)	(<1)	U	5 (s)
Tetrachloroethene (PCE)	(µg/L)	1.6	J	5 (s)
Carbon Tetrachloride	(µg/L)	(<1)	U	5 (s)
1,4-Dichlorobenzene	(µg/L)	(<1)	U	3 (s)
Chloroform	(µg/L)	(<1)	U	7 (s)

Notes:

µg/L = Microgram(s) per liter (parts per billion)
AWQS = Ambient Water Quality Standard
B = Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Estimated Value
NYSDEC = New York State Department of Environmental Conservation
U = Analyte not detected at the listed laboratory reporting limit.

152140-FD-02 was a blind field duplicate quality assurance/quality control sample of on-site sample MW-2A for this sampling event.
Bold values indicate that the analyte was detected with a concentration greater than the NYSDEC AWQS.

Table 3-5. Summary of Detected Volatile Organic Compounds in CMT Well Samples (March 2023)

Parameters List EPA Method 8260C	Location ID	CMT-01		CMT-01		CMT-01		CMT-01		CMT-01		CMT-02		CMT-02		CMT-02		CMT-02		NYSDEC AWQS (µg/L)
	Sample Name	152140-CMT-1-5-032123		152140-CMT-1-6-032123		152140-CMT-1-1-032123		152140-CMT-1-2-032323		152140-FD-04-032323		152140-CMT-2-4-032223		152140-CMT-2-6-032223		152140-CMT-2-7-032223		152140-CMT-2-1-032223		
	Sample Date	3/21/2023		3/21/2023		3/21/2023		3/23/2023		3/23/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023		
	Unit	Sample Depth: 22.35 ft bgs		Sample Depth: 53.51 ft bgs		Sample Depth: 73.39 ft bgs		Sample Depth: 83.33 ft bgs		Sample Depth: 83.33 ft bgs		Sample Depth: 20.20 ft bgs		Sample Depth: 51.80 ft bgs		Sample Depth: 64.84 ft bgs		Sample Depth: 80.65 ft bgs		
1,1,2,2-Tetrachloroethane	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	(< 100)	U	(< 1)	U	(< 2)	U	(< 5)	U	(< 10)	U	5
1,1-Dichloroethene	µg/L	0.60	J	3.2	J	0.80	J	(< 200)	U	(< 100)	U	(< 1)	U	(< 2)	U	(< 5)	U	(< 10)	U	5
1,4-Dichlorobenzene	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	**42**	J	(< 100)	U	(< 1)	U	(< 2)	U	(< 5)	U	(< 10)	U	3
2-Hexanone	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	(< 100)	U	1.7	J	(< 2)	U	(< 5)	U	(< 10)	U	50
Acetone	µg/L	(< 20)	U	(< 100)	U	(< 20)	U	(< 2000)	U	(< 1000)	U	9.4	J	(< 20)	U	(< 50)	U	(< 100)	U	50
Carbon Disulfide	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	(< 100)	U	(< 1)	U	(< 2)	U	(< 5)	U	(< 10)	U	NSL
Carbon Tetrachloride	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	**58**	J	(< 1)	U	(< 2)	U	2.5	J	(< 10)	U	5
Chlorobenzene	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	(< 100)	U	(< 1)	U	(< 2)	U	(< 5)	U	(< 10)	U	5
Chloroform	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	**79**	J	(< 1)	U	(< 2)	U	(< 5)	U	(< 10)	U	7
Cis -1,2-Dichloroethylene	µg/L	**380**		**1600**		**180**		(< 200)	U	(< 100)	U	**6.2**		(< 2)	U	(< 5)	U	4.1	J	5
m,p-Xylene	µg/L	(< 4)	U	(< 20)	U	(< 4)	U	(< 400)	U	(< 200)	U	(< 2)	U	(< 4)	U	(< 10)	U	(< 20)	U	NSL
Methyl Ethyl Ketone (2-Butanone)	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	(< 100)	U	1.7	J	(< 2)	U	(< 5)	U	(< 10)	U	50
Methyl Isobutyl Ketone (4-Methyl-2-Pen	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	(< 100)	U	0.24	J	(< 2)	U	(< 5)	U	(< 10)	U	NSL
Tetrachloroethylene (PCE)	µg/L	2.7 J	J	**1900**		**110**		**20000**		**18000**		**63**		**120**		**600**		**1100**		5
Toluene	µg/L	(< 2)	U	(< 10)	U	(< 2)	U	(< 200)	U	(< 100)	U	(< 1)	U	(< 2)	U	(< 5)	U	(< 10)	U	5
Trichloroethylene (TCE)	µg/L	0.76	J	**110**		**34**		(< 200)	U	(< 100)	U	1.8	J	1.8	J	3.9	J	**9.1**	J	5
Xylenes, Total	µg/L	(< 6)	U	(< 30)	U	(< 6)	U	(< 600)	U	(< 300)	U	(< 3)	U	(< 6)	U	(< 15)	U	(< 30)	U	NSL
Parameters List EPA Method 8260C	Location ID	CMT-03		CMT-03		CMT-03		CMT-03		CMT-03		CMT-04		CMT-04		CMT-04		CMT-05		NYSDEC AWQS (µg/L)
	Sample Name	152140-CMT-3-6-032223		152140-CMT-3-7-032223		152140-CMT-3-2-032223		152140-CMT-3-3-032223		152140-FD-03-032223		152140-CMT-4-4-032223		152140-CMT-4-5-032223		152140-CMT-4-6-032223		152140-CMT-5-1-032123		
	Sample Date	3/22/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023		3/21/2023		
	Unit	Sample Depth: 19.75 ft bgs		Sample Depth: 49.50 ft bgs		Sample Depth: 69.30 ft bgs		Sample Depth: 79.63 ft bgs		Sample Depth: 79.63 ft bgs		Sample Depth: 20.92 ft bgs		Sample Depth: 53.3 ft bgs		Sample Depth: 63.54 ft bgs		Sample Depth: 22.90 ft bgs		
1,1,2,2-Tetrachloroethane	µg/L	(< 1)	U	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	5
1,1-Dichloroethene	µg/L	(< 1)	U	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	5
1,4-Dichlorobenzene	µg/L	(< 1)	U	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	3
2-Hexanone	µg/L	1.7	J	(< 50)	U	0.41	J	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	50
Acetone	µg/L	14	J	(< 500)	U	(< 10)	U	(< 100)	U	(< 50)	U	(< 50)	U	(< 100)	U	(< 200)	U	(< 50)	U	50
Carbon Disulfide	µg/L	(< 1)	U	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	NSL
Carbon Tetrachloride	µg/L	(< 1)	U	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	5
Chlorobenzene	µg/L	(< 1)	U	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	5
Chloroform	µg/L	(< 1)	U	(< 50)	U	(< 1)	U	5.2	J	4.5	J	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	7
Cis -1,2-Dichloroethylene	µg/L	**99**		(< 50)	U	3.2	J	2.4	J	4.3	J	**44**		(< 10)	U	(< 20)	U	3.0	J	5
m,p-Xylene	µg/L	(< 2)	U	(< 100)	U	(< 2)	U	(< 20)	U	(< 10)	U	(< 10)	U	(< 20)	U	(< 40)	U	(< 10)	U	NSL
Methyl Ethyl Ketone (2-Butanone)	µg/L	2.6	J	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	50
Methyl Isobutyl Ketone (4-Methyl-2-Pen	µg/L	0.36	J	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	NSL
Tetrachloroethylene (PCE)	µg/L	**6**		**5000**		**78**		**1400**		**1400**		**220**		**1400**		**1800**		**11**	J	5
Toluene	µg/L	(< 1)	U	(< 50)	U	(< 1)	U	(< 10)	U	(< 5)	U	(< 5)	U	(< 10)	U	(< 20)	U	(< 5)	U	5
Trichloroethylene (TCE)	µg/L	2.3	J	**28**	J	2.2	J	**8.8**	J	**9.1**	J	**5.4**	J	**8.5**	J	**13**	J	(< 5)	U	5
Xylenes, Total	µg/L	(< 3)	U	(< 150)	U	(< 3)	U	(< 30)	U	(< 15)	U	(< 15)	U	(< 30)	U	(< 60)	U	(< 15)	U	NSL

Notes:
(1) Screening level is the NYSDEC Class GA Ambient Water Quality Standards, 6 NYCRR Part 703, July 2021.
CMT = Continuous Multichannel Tubing
ft bgs = feet below ground surface
Concentrations that exceed the screening level are **bold**
µg/L = Microgram(s) per liter
U = Analyte not detected
J = Concentration is estimated
152140-FD-04-032323 was a blind field duplicate quality assurance/quality control sample of on-site sample CMT-1-2 for this sampling event
152140-FD-03-032223 was a blind field duplicate quality assurance/quality control sample of on-site sample CMT-3-3 for this sampling event

Table 3-5. Summary of Detected Volatile Organic Compounds in CMT Well Samples (March 2023)

Parameters List EPA Method 8260C	Unit	Location ID	CMT-05		CMT-05		CMT-05		CMT-06		CMT-06		CMT-06		CMT-06		CMT-07		CMT-07		NYSDEC AWQS (µg/L)
		Sample Name	152140-CMT-5-7-032223		152140-CMT-5-3-032223		152140-CMT-5-5-032223		152140-CMT-6-1-032123		152140-CMT-6-3-032123		152140-CMT-6-4-032223		152140-CMT-6-7-032223		152140-CMT-7-3-032223		152140-CMT-7-4-032223		
		Sample Date	3/22/2023		3/22/2023		3/22/2023		3/21/2023		3/21/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023		
			Well Depth: 52.36 ft bgs		Well Depth: 73.40 ft bgs		Well Depth: 83.30 ft bgs		Well Depth: 23.3 ft bgs		Well Depth: 43.42 ft bgs		Well Depth: 63.88 ft bgs		Well Depth: 83 ft bgs		Sample Depth: 19.95 ft bgs		Sample Depth: 52.54 ft bgs		
1,1,2,2-Tetrachloroethane	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	0.95	J	0.29	J	(< 2.5)	U	(< 1)	U	(< 1)	U	5
1,1-Dichloroethene	µg/L		3.9	J	(< 10)	U	(< 20)	U	(< 10)	U	(< 2.5)	U	(< 1)	U	(< 2.5)	U	(< 1)	U	(< 1)	U	5
1,4-Dichlorobenzene	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	(< 2.5)	U	(< 1)	U	(< 2.5)	U	(< 1)	U	0.42	J	3
2-Hexanone	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	2.9	J	(< 2.5)	U	(< 1)	U	(< 2.5)	U	0.45	J	0.29	J	50
Acetone	µg/L		(< 100)	U	(< 100)	U	(< 200)	U	(< 100)	U	(< 25)	U	(< 10)	U	(< 25)	U	(< 10)	U	(< 10)	U	50
Carbon Disulfide	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	1.4	J	0.79	J	(< 2.5)	U	(< 1)	U	(< 1)	U	NSL
Carbon Tetrachloride	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	(< 2.5)	U	(< 1)	U	(< 2.5)	U	(< 1)	U	(< 1)	U	5
Chlorobenzene	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	(< 2.5)	U	(< 1)	U	(< 2.5)	U	(< 1)	U	0.20	J	5
Chloroform	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	1.7	J	1.5	J	1.7	J	(< 1)	U	(< 1)	U	7
Cis -1,2-Dichloroethylene	µg/L		**7.8**	J	**9.1**	J	**69**	J	**6.9**	J	1.6	J	0.27	J	(< 2.5)	U	(< 1)	U	(< 1)	U	5
m,p-Xylene	µg/L		(< 20)	U	(< 20)	U	(< 40)	U	(< 20)	U	(< 5)	U	(< 2)	U	(< 5)	U	(< 2)	U	(< 2)	U	NSL
Methyl Ethyl Ketone (2-Butanone)	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	13	J	1.5	J	(< 2.5)	U	(< 1)	U	(< 1)	U	50
Methyl Isobutyl Ketone (4-Methyl-2-Pen	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	(< 2.5)	U	(< 1)	U	(< 2.5)	U	(< 1)	U	(< 1)	U	NSL
Tetrachloroethylene (PCE)	µg/L		**1500**		**1900**		**2100**		**5.1**	J	**690**		**370**		**480**		1.6	J	(< 1)	U	5
Toluene	µg/L		(< 10)	U	(< 10)	U	(< 20)	U	(< 10)	U	(< 2.5)	U	(< 1)	U	(< 2.5)	U	(< 1)	U	(< 1)	U	5
Trichloroethylene (TCE)	µg/L		**54**		**30**	J	**37**	J	(< 10)	U	**5.5**	J	2.9	J	3.7	J	(< 1)	U	(< 1)	U	5
Xylenes, Total	µg/L		(< 30)	U	(< 30)	U	(< 60)	U	(< 10)	U	(< 7.5)	U	(< 3)	U	(< 7.5)	U	(< 3)	U	(< 3)	U	NSL

Parameters List EPA Method 8260C	Unit	Location ID	CMT-07		CMT-07		CMT-08		CMT-08		CMT-08		CMT-08		CMT-09		CMT-09		CMT-09		NYSDEC AWQS (µg/L)
		Sample Name	152140-CMT-7-5-032223		152140-CMT-7-6-032323		152140-CMT-8-2-032123		152140-CMT-8-3-032123		152140-CMT-8-4-032123		152140-CMT-8-5-032223		152140-CMT-9-4-032223		152140-CMT-9-3-032323		152140-CMT-9-2-032323		
		Sample Date	3/22/2023		3/23/2023		3/21/2023		3/21/2023		3/21/2023		3/22/2023		3/22/2023		3/23/2023		3/23/2023		
			Sample Depth: 72.35 ft bgs		Sample Depth: 81.80 ft bgs		Sample Depth: 20.20 ft bgs		Sample Depth: 50.25 ft bgs		Sample Depth: 71.00 ft bgs		Sample Depth: 79.00 ft bgs		Sample Depth: 20.50 ft bgs		Sample Depth: 50.50 ft bgs		Sample Depth: 70.50 ft bgs		
1,1,2,2-Tetrachloroethane	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	5
1,1-Dichloroethene	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	5
1,4-Dichlorobenzene	µg/L		(< 10)	U	0.31	J	(< 5)	U	(< 5)	U	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	3
2-Hexanone	µg/L		(< 10)	U	(< 1)	U	4.0	J	6.3	J	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	50
Acetone	µg/L		(< 100)	U	(< 10)	U	(< 50)	U	(< 50)	U	(< 50)	U	(< 10)	U	(< 200)	U	(< 250)	U	(< 200)	U	50
Carbon Disulfide	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	NSL
Carbon Tetrachloride	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	5
Chlorobenzene	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	5
Chloroform	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	0.84	J	(< 20)	U	(< 25)	U	(< 20)	U	7
Cis -1,2-Dichloroethylene	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	4.6	J	**7.7**		**18**	J	**7.5**	J	**5.2**	J	5
m,p-Xylene	µg/L		(< 20)	U	(< 2)	U	(< 10)	U	(< 10)	U	(< 10)	U	0.38	J	(< 40)	U	(< 50)	U	(< 40)	U	NSL
Methyl Ethyl Ketone (2-Butanone)	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	50
Methyl Isobutyl Ketone (4-Methyl-2-Pen	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	(< 1)	U	(< 20)	U	(< 25)	U	(< 20)	U	NSL
Tetrachloroethylene (PCE)	µg/L		**19**	J	0.88	J	**10**	J	**7.2**	**J**	**64**		**33**		**2200**		**2700**		**2700**		5
Toluene	µg/L		(< 10)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	0.41	J	(< 20)	U	(< 25)	U	(< 20)	U	5
Trichloroethylene (TCE)	µg/L		(< 10)	U	1.7	J	1.4	J	(< 5)	U	**58**		**49**		**16**	J	**11**	J	**9.4**	J	5
Xylenes, Total	µg/L		(< 30)	U	(< 3)	U	(< 15)	U	(< 15)	U	(< 15)	U	0.38	J	(< 60)	U	(< 75)	U	(< 60)	U	NSL

Parameters List EPA Method 8260C	Unit	Location ID	CMT-09		CMT-10		CMT-10		CMT-10		CMT-10		NYSDEC AWQS (µg/L)
		Sample Name	152140-CMT-9-1-032323		152140-CMT-10-3-032123		152140-CMT-10-2-032123		152140-CMT-10-1-032123		152140-CMT-10-6-032323		
		Sample Date	3/23/2023		3/21/2023		3/21/2023		3/21/2023		3/23/2023		
			Sample Depth: 80.00 ft bgs		Sample Depth: 19.96 ft bgs		Sample Depth: 51.10 ft bgs		Sample Depth: 75.00 ft bgs		Sample Depth: 79.8 ft bgs		
1,1,2,2-Tetrachloroethane	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	5
1,1-Dichloroethene	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	5
1,4-Dichlorobenzene	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	3
2-Hexanone	µg/L		(< 20)	U	0.26	J	(< 5)	U	(< 5)	U	(< 5)	U	50
Acetone	µg/L		(< 200)	U	(< 10)	U	(< 50)	U	(< 50)	U	(< 50)	U	50
Carbon Disulfide	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	NSL
Carbon Tetrachloride	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	5
Chlorobenzene	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	5
Chloroform	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	7
Cis-1,2-Dichloroethylene	µg/L		**18**	J	(< 1)	U	(< 5)	U	(< 5)	U	**65**		5
m,p-Xylene	µg/L		(< 40)	U	(< 2)	U	(< 10)	U	(< 10)	U	(< 10)	U	NSL
Methyl Ethyl Ketone (2-Butanone)	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	50
Methyl Isobutyl Ketone (4-Methyl-2-Pen	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	NSL
Tetrachloroethylene (PCE)	µg/L		**2600**		0.82	J	**5.2**	J	2.3	J	**680**		5
Toluene	µg/L		(< 20)	U	(< 1)	U	(< 5)	U	(< 5)	U	(< 5)	U	5
Trichloroethylene (TCE)	µg/L		**32**	J	0.26	J	(< 5)	U	(< 5)	U	**26**		5
Xylenes, Total	µg/L		(< 60)	U	(< 3)	U	(< 15)	U	(< 15)	U	(< 15)	U	NSL

Table 3-6. Summary of Monitored Natural Attenuation and Total Organic Carbon Sampling Results for Groundwater (March 2023)

MNA parameters and Total Organic Carbon	Sample ID	CMT-01-02		CMT-02-01		CMT-03-03		CMT-05-05		CMT-06-07		CMT-07-06		CMT-08-05		CMT-09-01		CMT-10-06	
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Date Sampled	3/23/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023		3/23/2023		3/22/2023		3/23/2023		3/23/2023	
Inorganics (EPA Method 6010D)																			
Iron	µg/L	288		2380		3380		6550		2840		2940		3790		1820		4690	
Dissolved Iron	µg/L	325		1820		1890			U	2190		723		1670		1690		4100	
Manganese	µg/L	494		921		2550		697		761		3490		2780		4470		6010	
Dissolved Manganese	µg/L	485		916		2760		41.8		766		3620		2650		4020		5570	
General Chemistry																			
Alkalinity, Total (as $CaCO_3$)[1]	mg/L	75.1		79		107		108		63.5		71.3		79.5		52.7		135	
Biological Oxygen Demand (BOD), 5 Day[2]	mg/L	1.9		5.2		9.3		9.1		2.2		1.8		6.7		4.4		12.9	
Chemical Oxygen Demand (COD)[3]	mg/L		U	95		96.8		68.1		97.6		59.2		79.3			U		U
Chloride (as Cl)[4]	mg/L	100		49.4		80.6		67.6		26		87.7		75.4		92.2		74.1	
Nitrogen, Ammonia (as N)[5]	mg/L		U	0.31		0.52		0.94			U		U	0.86		0.22		0.78	
Nitrogen, Nitrate (as N)[6]	mg/L	1.7		0.11		1.1			U	1.6		1.4		0.87		1.7		0.99	
Nitrogen, Nitrate + Nitrite[7]	mg/L	1.7		0.13		1.1			U	1.7		1.4		1		1.7		1	
Nitrogen, Nitrite[8]	mg/L	0.049		0.022		0.01		0.013		0.11		0.014		0.13		0.05		0.0098	B
Sulfate (as SO_4)[4]	mg/L	19.6		22.5		48.4		13.4		17.3		14.6		19.6		17.6		17.6	
Sulfide[9]	mg/L		U		U		U		U		U		U		U		U		U
Total organic carbon (TOC)[10]	mg/L	1.1		6.5		19.6		10.9		3.3		1.1		13.1		2		12.6	
Dissolved Gases (RSK 175)																			
Ethane	µg/L	0.14	U	1.7		1.2		1.9		< 0.23	U	8.5		2.76		0.33		0.62	
Ethene	µg/L	0.16	U	0.92		0.63		1.7		< 0.31	U	0.59		1.3		0.29	J	0.78	
Methane	µg/L	0.26		2.75		2.17		1230		0.25		11.5		4.31		1.38		2.38	
Field Parameters																			
Dissolved Oxygen	mg/L	3.19		1.30		0.44		0.00		0.32		0.41		0.54		0.43		0.28	
Oxidation Reduction Potential	mV	31		-20		-136		-158		-158		-91		-192		-111		-199	
pH	SU	5.79		6.07		6.85		7.43		6.31		6.52		6.64		6.14		6.70	

1. Alkalinity via SM2320B.
2. BOD, 5 Day via SM5210.
3. COD via A5220C.
4. Chloride and Sulfate via SW9056.
5. Nitrogen, Ammonia via M4500A.
6. Nitrogen, Nitrate was calculated by the lab.
7. Nitrogen, Nitrate + Nitrite via E353.2.
8. Nitrogen, Nitrite via A4500B.
9. Sulfide via 4500-S F
10. TOC via SM5310B.

Notes:
EPA = U.S. Environmental Protection Agency
mg/L = Milligrams per liter.
µg/L = Micrograms per liter.
mV = Millivolts
SU = Standard unit
U = Analyte was not detected and is reported as less than the method detection limit.
J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
B = Analyte was found in the blank and the sample.
Data provided by SGS North America.

Table 3-7. Analytical Parameters and Weighting for Preliminary Screening for Anaerobic Biodegradation Processes

Analysis	Concentration in Most Contaminated Zone	Interpretation	Value	CMT-01-02	CMT-02-01	CMT-03-03	CMT-05-05	CMT-06-07	CMT-07-06	CMT-08-05	CMT-09-01	CMT-10-06
Oxygen	< 0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	3	0	0	3	3	3	3	0	3	3
	> 5 mg/L	Not tolerated; however, VC may be oxidized aerobically	-3									
Nitrate	< 1 mg/L	At higher concentrations may compete with reductive pathway	2	0	2	0	2	0	0	2	0	2
Iron II	> 1 mg/L	Reductive pathway possible; VC may be oxidized under iron III-reducing conditions	3	0	3	3	0	3	0	3	3	3
Sulfate	< 20 mg/L	At higher concentrations may compete with reductive pathway	2	2	0	0	2	2	2	2	2	2
Sulfide	> 1 mg/L	Reductive pathway possible	3	0	0	0	0	0	0	0	0	0
Methane	< 0.5 mg/L	VC oxidizes	0	0	0	0	3	0	0	0	0	0
	> 0.5 mg/L	Ultimate reductive daughter compound, VC accumulates	3									
ORP	< 50 mV	Reductive pathway possible	1	1	1	2	2	2	1	2	2	2
	< -100 mV	Reductive pathway likely	2									
pH	5 < pH < 9	Optimal range for reductive pathway	0	0	0	0	0	0	0	0	0	0
	5 > pH > 9	Outside optimal range for reductive pathway	-2									
TOC	> 20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	2	0	0	0	0	0	0	0	0	0
Temperature	> 20°C	At temperature > 20°C biochemical process accelerated	1	0	0	0	0	0	0	0	0	0
Carbon dioxide	> 2x background	Ultimate oxidative daughter compound	1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity	> 2x background	Results from interaction between carbon dioxide and aquifer minerals	1	0	0	0	0	0	0	0	0	0
Chloride	> 2x background	Daughter compound of organic chlorine	2	0	0	0	0	0	0	0	0	0
Hydrogen	> 1 nM	Reductive pathway possible, VC may accumulate	3	NS	NS	NS	NS	NS	NS	NS	NS	NS
	< 1 nM	VC oxidizes	0	NS	NS	NS	NS	NS	NS	NS	NS	NS
Volatile fatty acids	> 0.1 mg/L	Intermediates resulting from biodegradation of more complex compounds; carbon and energy source	2	NS	NS	NS	NS	NS	NS	NS	NS	NS
BTEX	> 0.1 mg/L	Carbon and energy source; drives dechlorination	2	0	0	0	0	0	0	0	0	0
Tetrachloroethene (PCE)	---	Material released	0	0	0	0	0	0	0	0	0	0
Trichloroethene (TCE)	---	Material released	0	0	2	2	2	2	2	2	2	2
		Daughter compound of PCE	2									
Dichloroethene (DCE)	---	Material released	0	0	2	2	2	0	0	2	2	2
		Daughter compound of TCE	2									
		If cis is > 80% of total DCE it is likely a daughter compound	---									
		1,1-DCE can be a chemical reaction product of TCA	---									
Vinyl Chloride (VC)	---	Material released	0	0	0	0	0	0	0	0	0	0
		Daughter compound of DCE	2									
1,1,1-Trichloroethane (TCA)	---	Material released	0	0	0	0	0	0	0	0	0	0
Dichloroethane (DCA)	---	Daughter compound of TCA under reducing conditions	2	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	---	Material released	0	0	0	0	0	0	0	0	0	0
Chloroethane	---	Daughter product of DCA or VC under reducing conditions	2	0	0	0	0	0	0	0	0	0
Ethene	> 0.01 mg/L	Daughter compound of VC	2	0	0	0	0	0	0	0	0	0
Ethane	> 0.1 mg/L	Daughter compound of ethene	3	0	0	0	0	0	0	0	0	0
Chloroform	---	Material released	0	0	0	0	0	0	0	0	0	0
		Daughter compound of carbon tetrachloride	2									
Dichloromethane	---	Material released	0	0	0	0	0	0	0	0	0	0
		Daughter compound of chloroform	2									
		Total Score		***3***	***10***	***12***	***16***	***12***	***8***	***13***	***14***	***16***
		Inadequate evidence for anaerobic biodegradation (0 - 5)		X								
		Limited evidence for anaerobic biodegradation (6 - 14)			X	X		X	X	X	X	
		Adequate evidence for anaerobic biodegradation (15 - 20)					X					X
		Strong evidence for anaerobic biodegradation (>20)										

Notes:
°C = Degrees Celsius
BTEX = Benzene, toluene, ethylbenzene, and xylenes
mg/L = Milligram(s) per liter
mV = Millivolt(s)
nM = Nanomolar
ORP = Oxidation reduction potential
TOC = Total organic carbon

Table 4-1. Contaminant Specific Cleanup Standards for Soil and Groundwater

Parameter List EPA Method 8260C	NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg)	NYSDEC Class GA Ambient Water Quality Standard (µg/L)
Tetrachloroethene	1.3	5.0
Trichloroethene	0.47	5.0
cis-1,2-Dichloroethene	0.25	5.0
trans-1,2-Dichloroethene	0.19	5.0
Vinyl chloride	0.02	2.0

Notes:
µg/L = Microgram(s) per liter
EPA = U.S. Environmental Protection Agency
mg/kg = Milligram(s) per kilogram
NYSDEC = New York State Department of Environmental Conservation

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Table 4-2. Remedial Technology Screening

Technology	Process Options	Effectiveness in Addressing RAOs	Implementability	Green and Sustainable Remediation	Cost
REMAINING SOURCE AREA (DNAPL)					
Target Contaminant of Concern: Volatile Organic Compounds (DNAPL)					
In Situ Treatment	Thermal treatment.	Effective at promoting degradation and volatilization of DNAPL and dissolved contaminants in groundwater and saturated soils.	Implementable, but requires infrastructure for both the thermal treatment system and vapor extraction system. Expected to meet objectives within short amount of time. Difficult to implement beneath building at deep depths of contamination.	Large carbon footprint due to high energy use; limited reuse of some existing system enclosures.	High
	In situ chemical reduction using emulsified zero valent iron (EZVI).	Effective at promoting degradation of DNAPL within saturated soil and groundwater.	Implementable. Easy to implement behind building. Difficult to implement beneath building at deep depths of contamination with angled direct push technology. Expected to meet objectives with a single round of injections. Would require long-term monitoring.	Small carbon footprint due to single round of injections; use of regenerated material in the form of zero valent iron.	Low
	In situ chemical oxidation	Effective at promoting degradation of dissolved contaminants and to promote partitioning of contaminants from DNAPL, thereby reducing contaminant mass within saturated soil and groundwater.	Implementable, but requires infrastructure for injection wells. Easy to implement behind building; would require angled or horizontal borings for beneath the building. Would likely require several treatments and long-term monitoring.	Moderate carbon footprint due to the number of mobilizations for injection events.	Moderate
Ex Situ Treatment	Surfactant-enhanced pump and treat	Effective at extracting pooled DNAPL for above ground treatment and/or off-site disposal.	Implementable, but requires infrastructure for the injection, extraction, and treatment systems. Operation period uncertain, could take months to years.	Large carbon footprint due to high energy use; limited reuse of some existing system enclosures.	High
DISSOLVED-PHASE CHLORINATED VOLATILE ORGANIC COMPOUND GROUNDWATER PLUME					
Target Contaminant of Concern: Volatile Organic Compounds Dissolved Phase					
Monitoring	Long-term monitoring with monitored natural attenuation.	Not effective as a short-term remedy. Time to meet objectives would be reduced with source remediation.	Implementable.	Small carbon footprint due to limited actions involved.	Low
In Situ Treatment	In situ chemical reduction with bioaugmentation.	Effective at promoting degradation of contaminants within aquifer.	Easy to implement, with no infrastructure required. Best if implemented in conjunction with EZVI injection	Small carbon footprint due to single round of injections; use of regenerated material in the form of zero valent iron; use of bioremediation reagent with low environmental impact (i.e. vegetable oil, kelp).	Moderate

Notes:
EZVI = Emulsified zero valent iron
DNAPL = Dense non-aqueous phase liquid
RAO = Remedial action objective

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Table 4-3. Alternatives Cost Summary

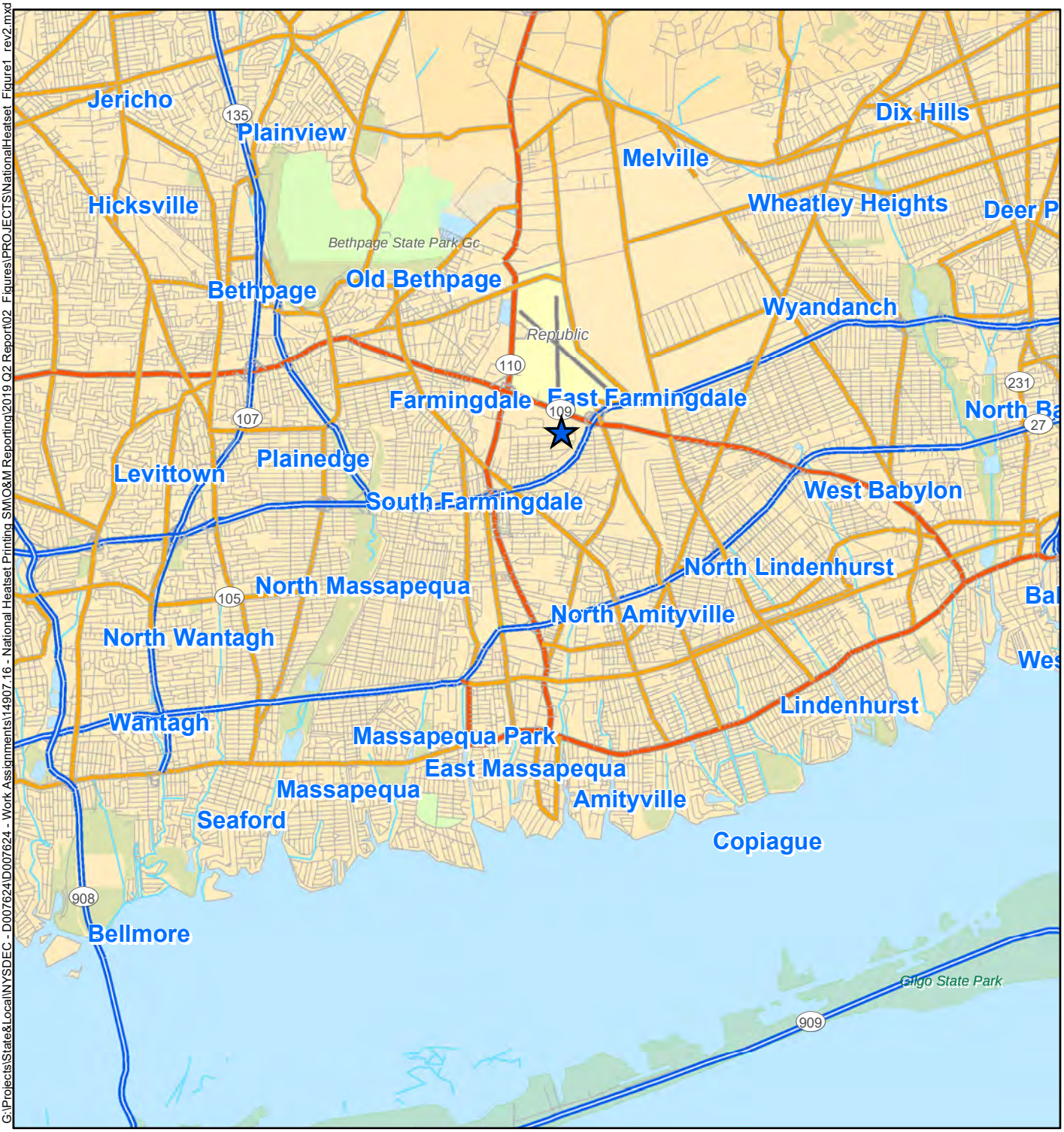
Technology	Description	Design	Construction and Operation	Utilities Cost	Implementation Time (months)	Annual Costs LTM for 30 yrs	Total Cost with Contingency (Capital + LTM)
In Situ Thermal Treatment	Thermal Conductive Heating, implemented behind the building with vertical wells, and under building with angled heaters, originating from outside of the building. Would treat full water column.	$500,000	$8,000,000	$1,860,000	10	$60,000 quarterly yrs 1-3 $15,000 annual yrs 4-30 $400,000	$ 10,500,000
In Situ Chemical Reduction and Bioaugmentation	EZVI/ZVI+Bio injection via vertical borings behind the building and alongside the east side of the building, and angled borings under the building. Two injections, follow up in year 5 at 75% of the first.	$200,000	$3,000,000	NA	3 months first injection / 2 months second injection	$84,000 quarterly yrs 1-2 and yr 5 $30,000 semiannual yrs 3-4 and 6-10 $15,000 annual yrs 11-30 $500,000	$ 4,900,000
In Situ Chemical Oxidation	Permanganate injection via vertical borings behind the building and alongside the east side of the building, and angled borings under the building. Five injections, follow up injections annually, first follow up at 75% of the first, 10% reduction each injection after.	$400,000	$ 7,000,000	NA	3 months first injection / 1.5 months each follow up injections	$60,000 quarterly yrs 1-10 $15,000 annual yrs 11-30 $650,000	$ 12,700,000
Surfactant-Enhanced Extraction	Surfactant injection into 20 injection wells spaced 10 ft apart along north side of building; extraction from 30 extraction wells 10 ft apart along east and south sides of building. Operation for 5 years due to difficulty to target DNAPL.	$400,000	$ 7,000,000	$ 300,000	60 months	$60,000 quarterly yrs 1-10 $15,000 annual yrs 11-30 $650,000	$ 10,300,000

Notes:
LTM = Long-term monitoring

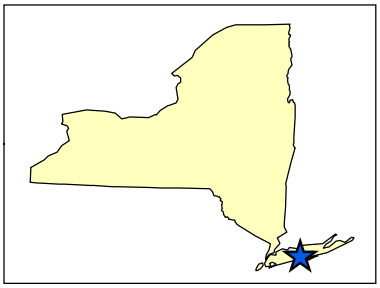
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Figures

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0 0.5 1 2
Miles

1 inch = 1.5 miles

N

Legend

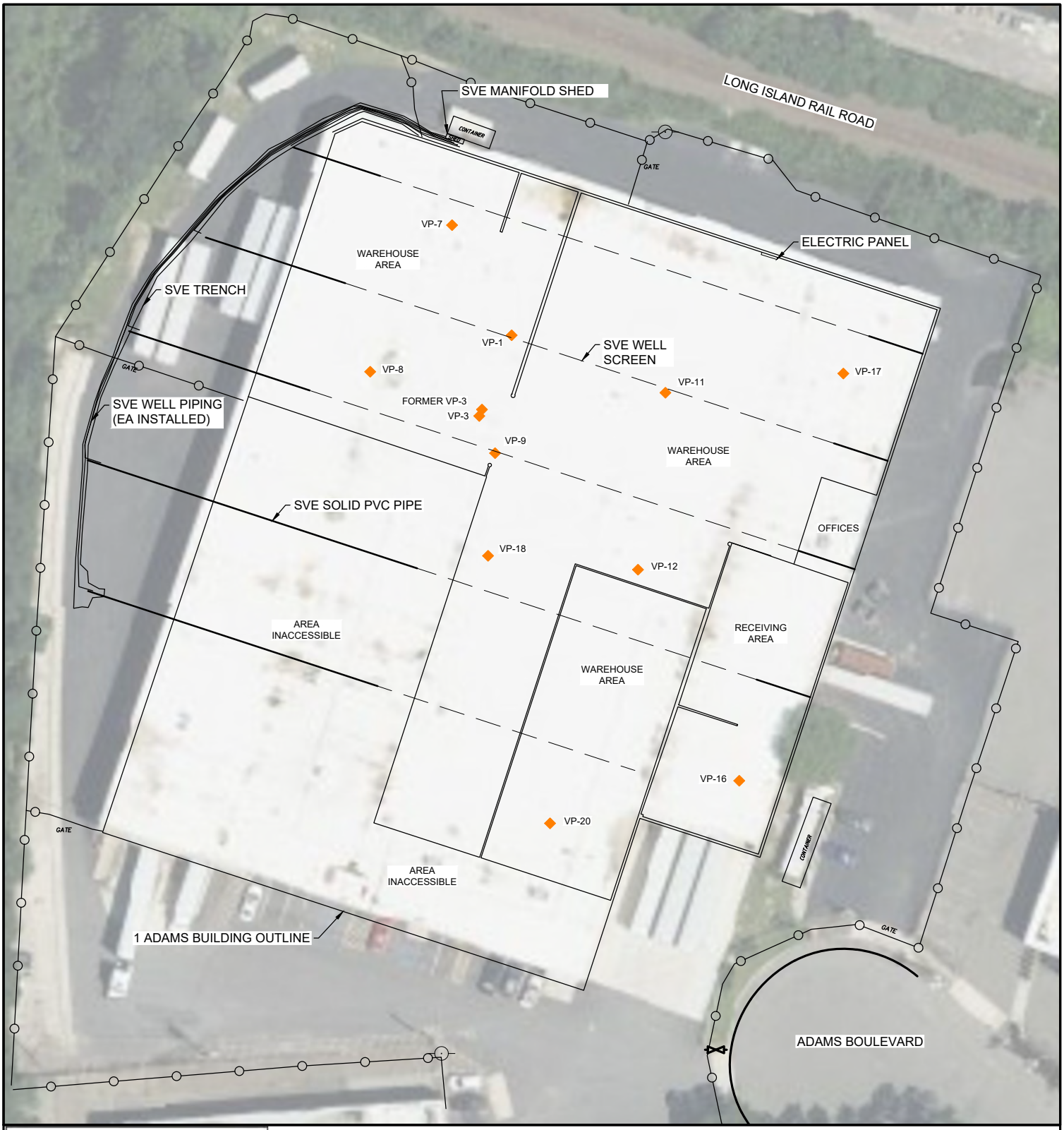
★ Site Location

Figure 1-1
SITE LOCATION MAP
NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY

Map Date: 1/27/2020
Source: ESRI, 2011

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

EA®





Legend

- Site Location
- Vapor Point
- Chainlink Fence

0 60 120 Feet

N

Figure 1-2
SITE LAYOUT AND EXISTING MONITORING WELL NETWORK
NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY

Map Date: 11/13/2023
Source: NY83 New York State Planes and MJ Engineering and Land Surveying, PC March 8, 2016 and February 7 2017

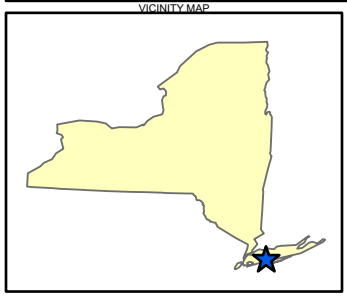
NEW YORK STATE Department of Environmental Conservation

FILE PATH: \\SYRACUSEFP\SYRACUSE\PROJECTS\STATE&LOCAL\NYSDEC - D009806\WORK ASSIGNMENTS\1602518_NATIONAL HEATSET PRINTING CO._SM\08_CAD\NATIONALHEATSET_FIGURE1-2_SITE LAYOUT.DWG [FIGURE 1-2] KATZER, KATHRYN 11/13/2023 2:59 PM



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VICINITY MAP



Legend

- Soil Boring Location
- Soil Boring/Screen Point Coupler Sample Location
- Soil Boring/Screen Point Coupler Sample/Hydraulic Profiling Point Location

0 25 50
Feet

N

Figure 2-1
RSO Investigation Layout
NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

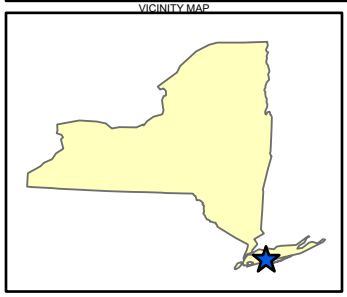
Map Date: 10/27/2023
Projection: NAD 83 (2011) StatePlane
New York Long Isl FIPS 3101 (US Feet)

NEW YORK STATE Department of Environmental Conservation



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VICINITY MAP



Legend

A Existing Monitoring Wells

A CMT Wells

0 50 100

Feet

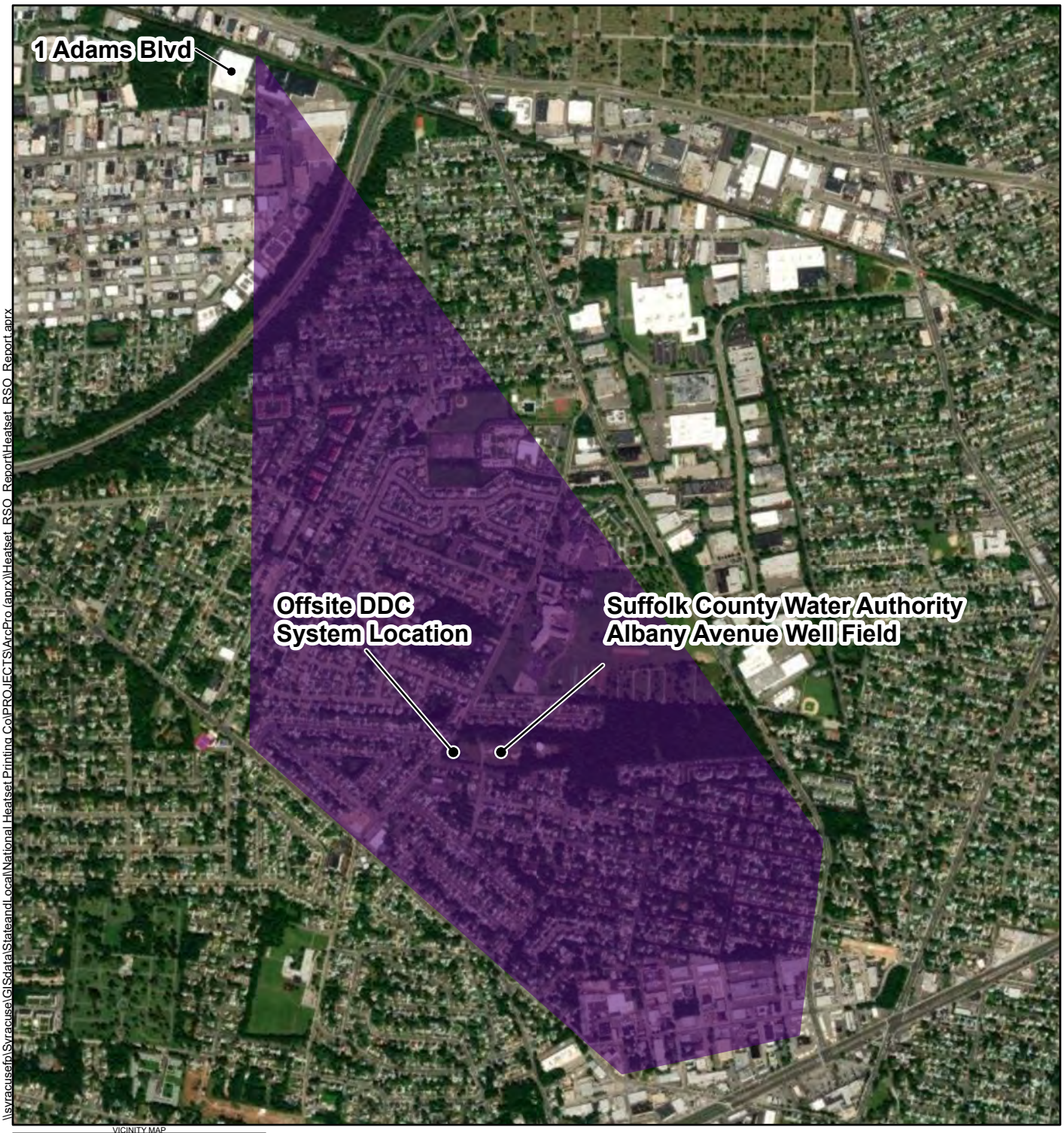
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Notes:
CMT = Continuous Multichannel Tubing

Figure 2-2
New and Existing Monitoring Well Network
NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

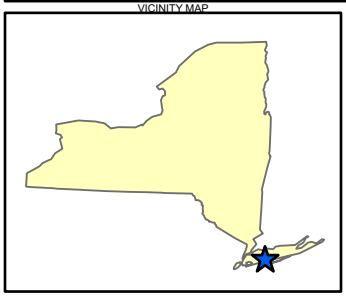
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VICINITY MAP



Legend

Receptor Area

0 750 1,500

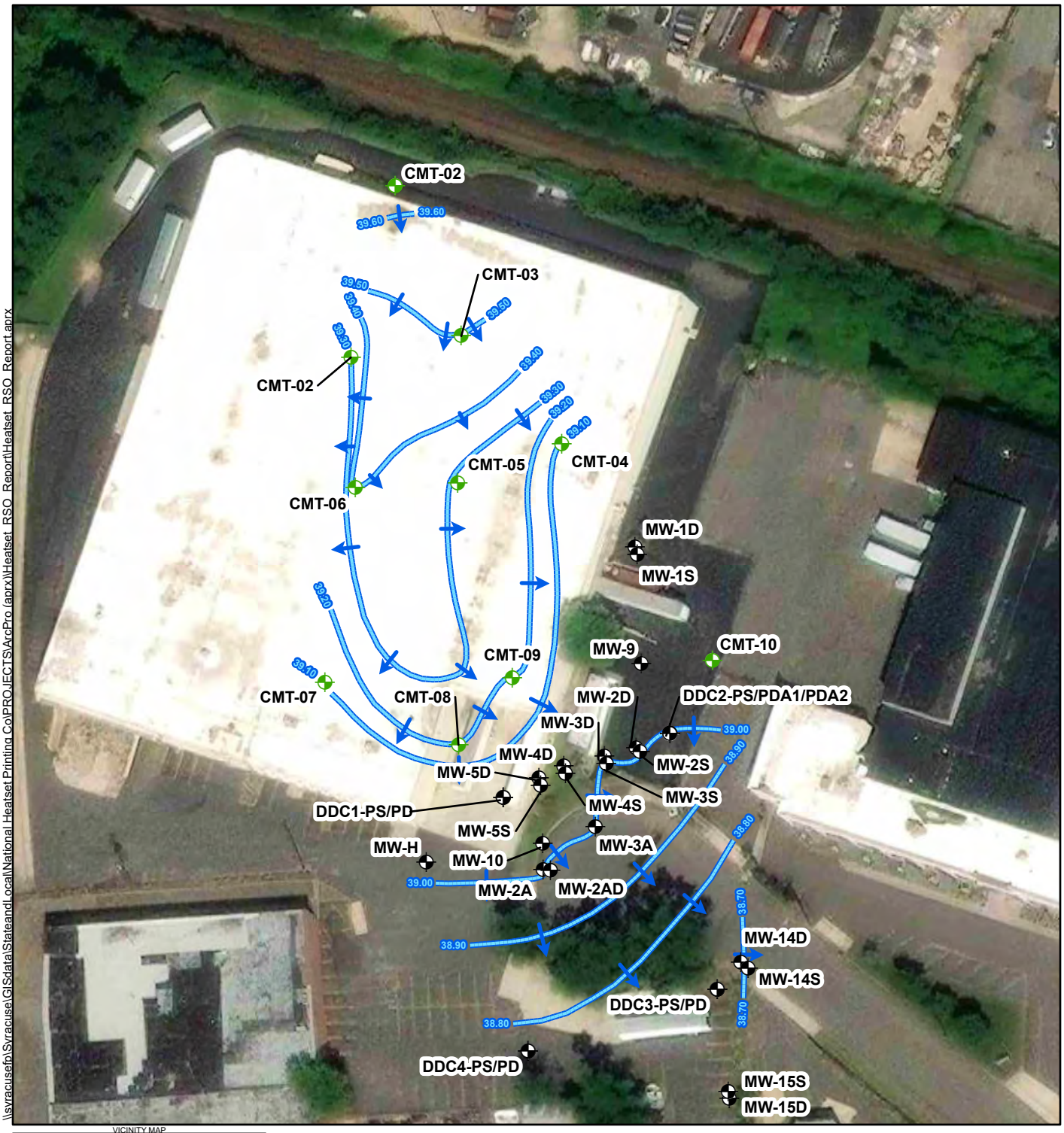
Feet

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Figure 2-3
Downgradient Receptors Investigation Area
NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

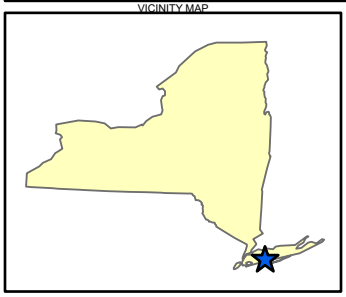
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VICINITY MAP



Legend

- Groundwater Elevation Contour (0.1 ft)
- Groundwater Flow Direction
- Existing Monitoring Wells
- CMT Wells

0 25 50 100
Feet

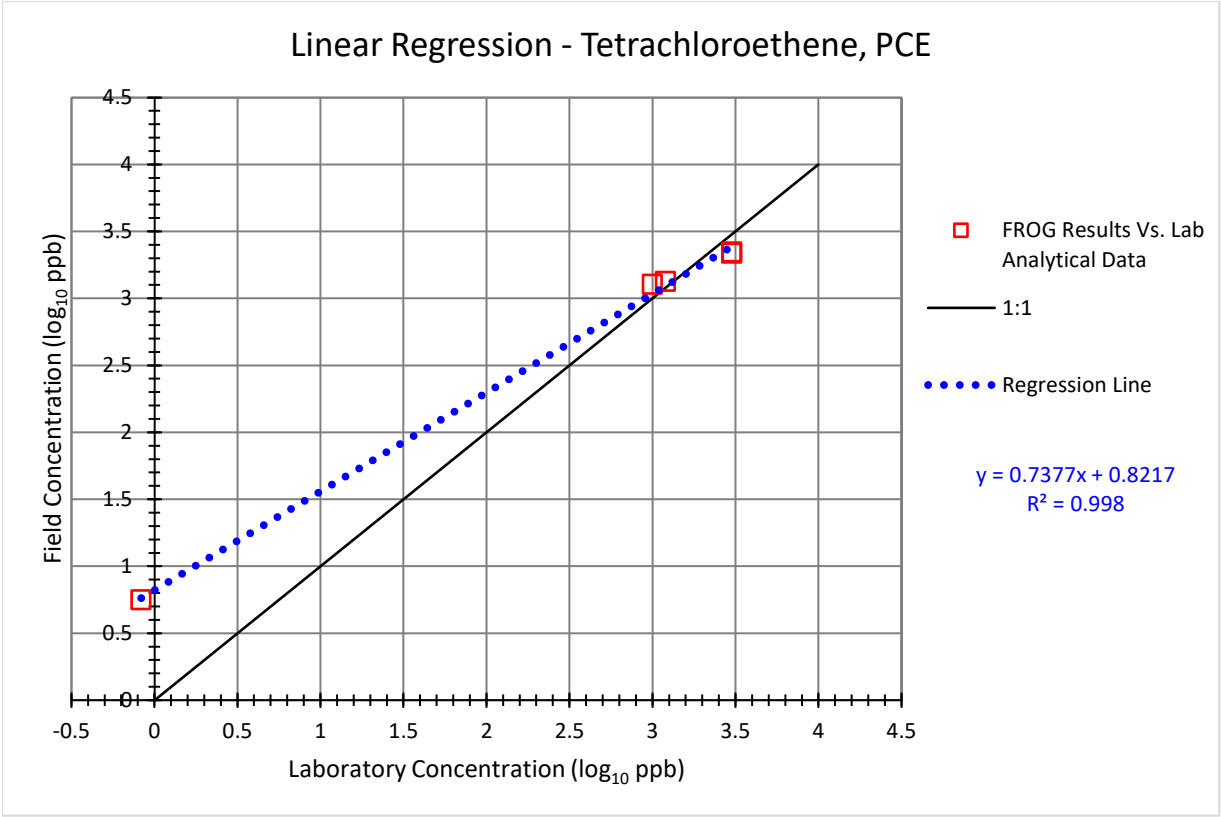
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Notes:
Groundwater elevation data for individual wells presented in Table 3-1.
CMT = Continuous Multichannel Tubing
ft = feet

Figure 3-1
Groundwater Elevation Contours
March 2023
NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

Map Date: 10/13/2023
Projection: NAD 83 (2011) StatePlane
New York Long Isl FIPS 3101 (US Feet)

NEW YORK STATE Department of Environmental Conservation



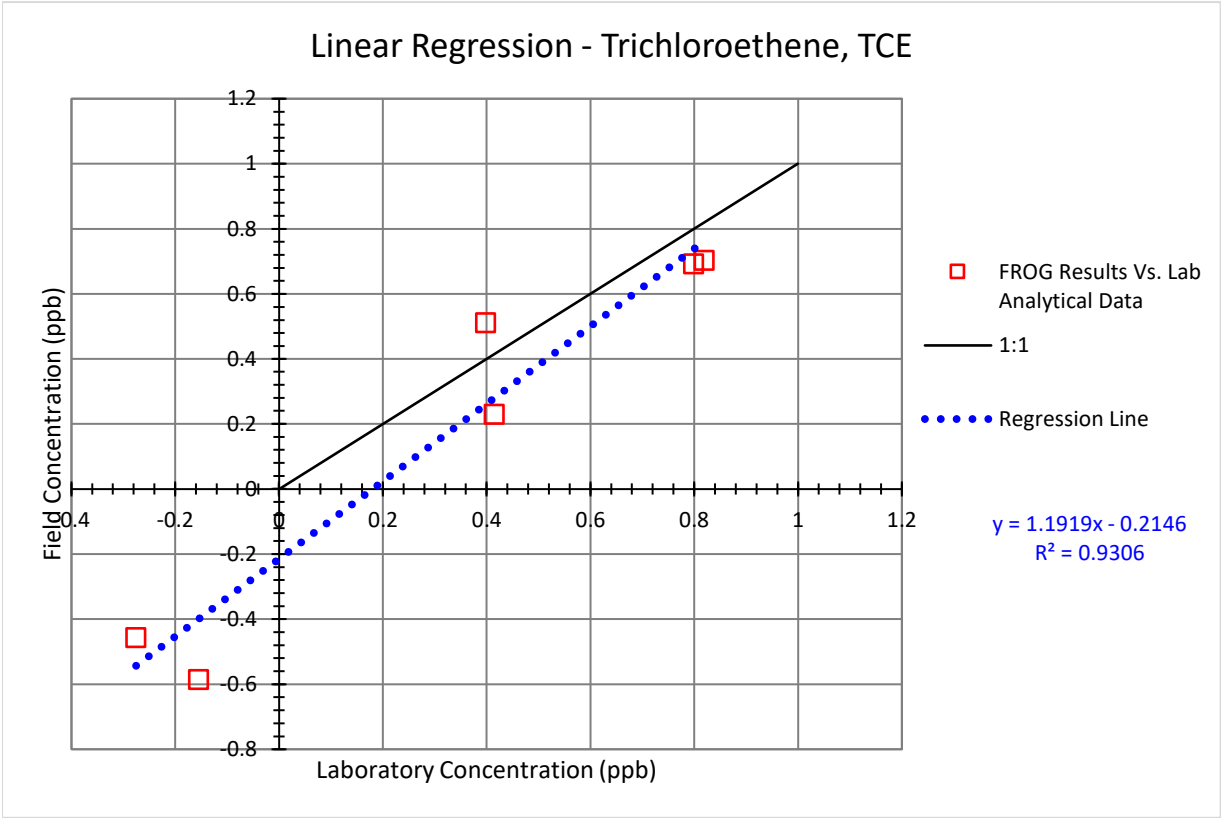
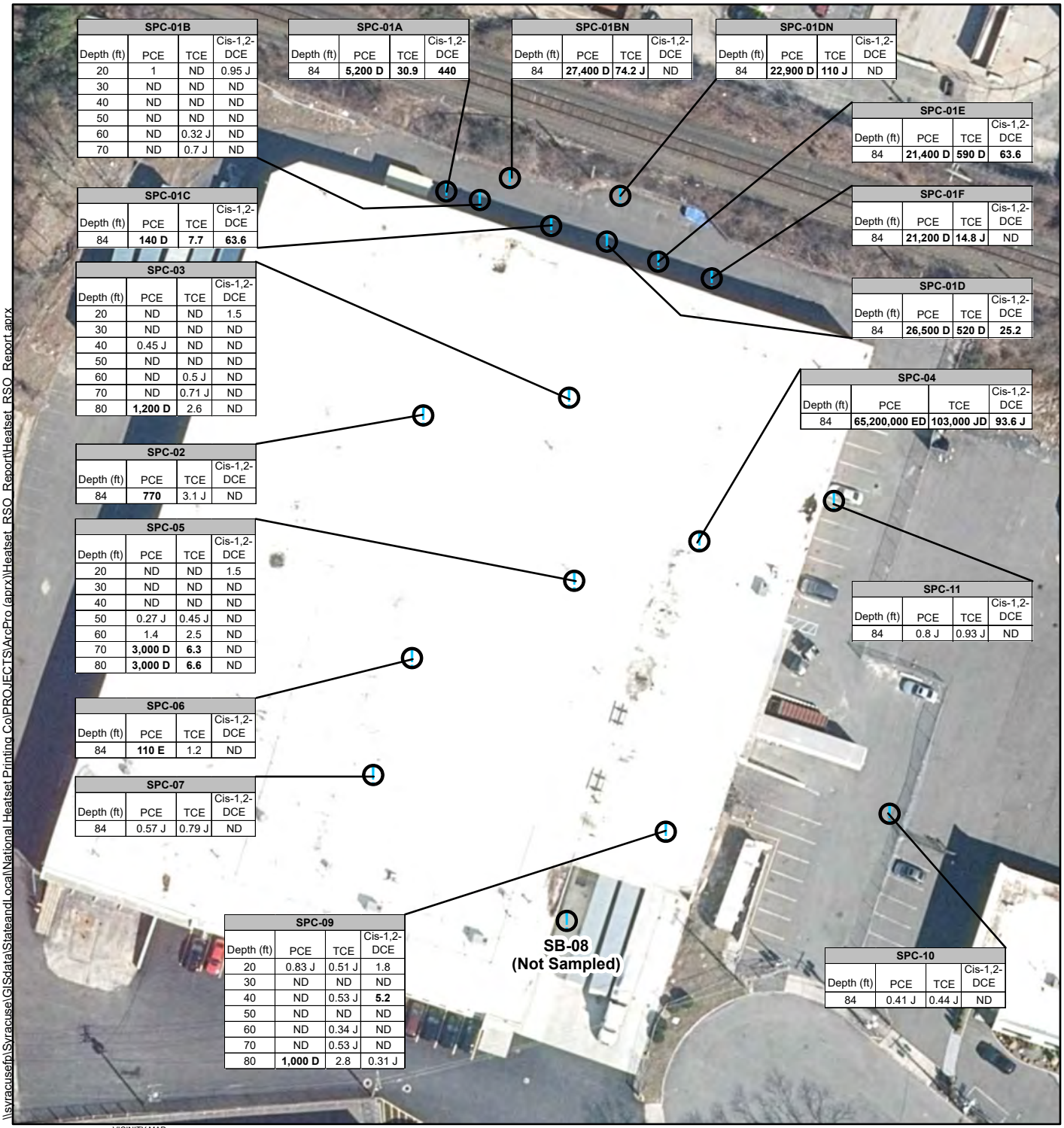
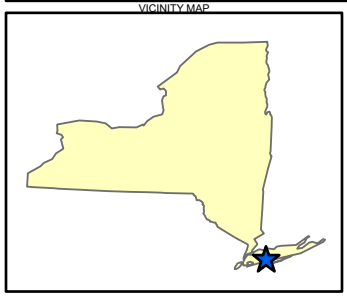


Figure 3-2
LINEAR REGRESSION MODEL - PCE AND TCE
NATIONAL HEATSET SITE (152140)
BABYLON, NEW YORK
SUFFOLK COUNTY



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VICINITY MAP



Legend

Sample Location

Figure 3-3
CVOC Concentrations In Situ Groundwater Sampling Locations
NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

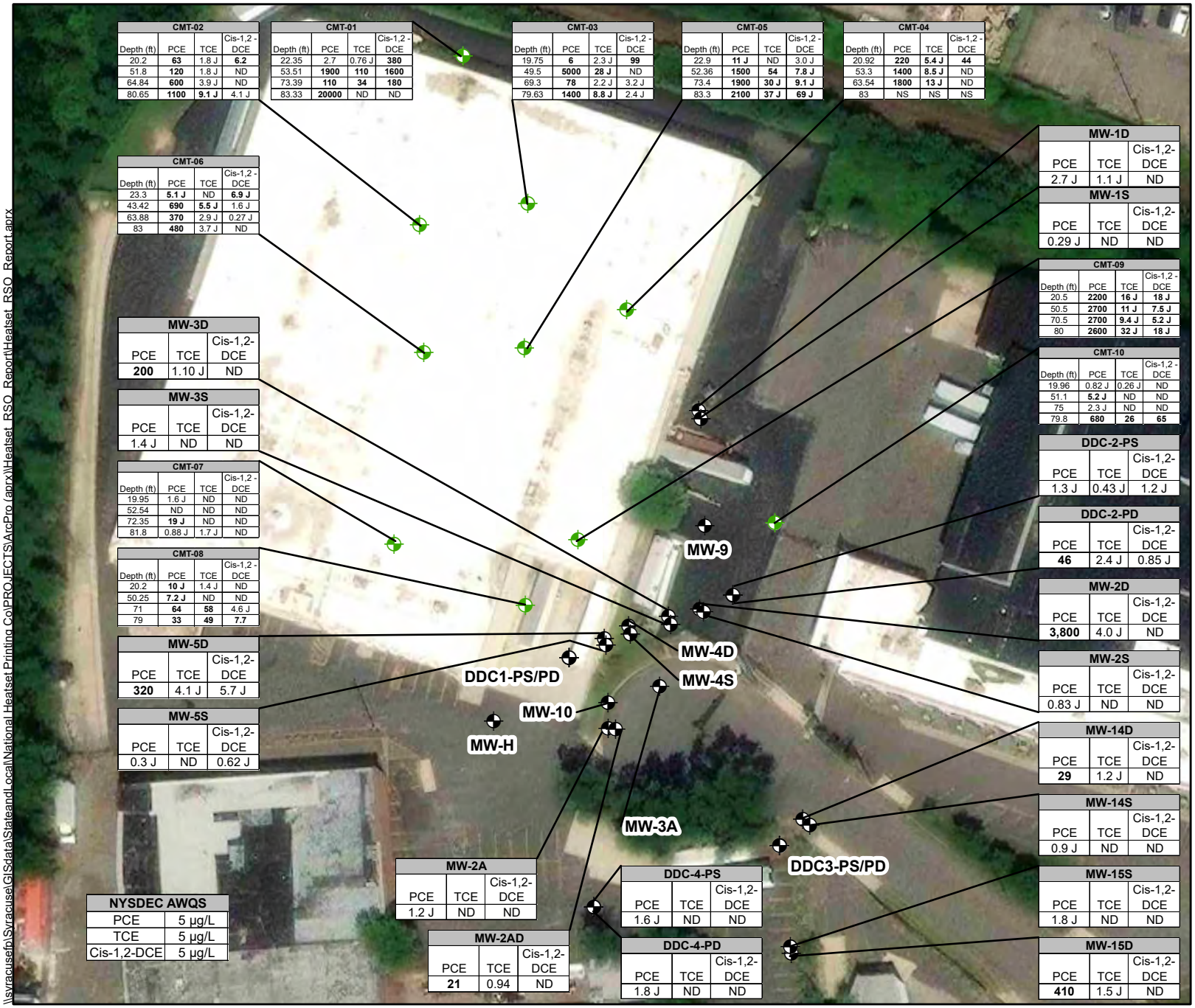
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Projection: NAD 83 (2011) StatePlane
New York Long Isl FIPS 3101 (US Feet)

0 25 50
Feet

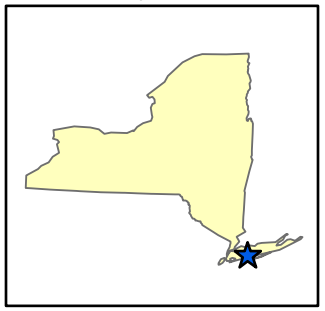
N

Notes:
HPT = Hydraulic Profiling Tool
SB = Soil Boring
SPC = Screen Point Coupler

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VICINITY MAP



Legend

- Existing Monitoring Wells
- CMT Wells

Notes:

Groundwater analytical data presented in units of micrograms per liter (µg/L).
µg/L = micrograms per liter
AWQS = Ambient Water Quality Standards
Cis-1,2-DCE = *cis*-1,2-Dichloroethene
NYSDEC = New York State Department of Environmental Conservation
PCE = Tetrachloroethene
TCE = Trichloroethene

N

0 50 100

Feet

Map Date: 10/13/2023
Projection: NAD 83 (2011) StatePlane New York Long Isl FIPS 3101 (US Feet)

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Figure 3-4
CVOC Concentrations On-site Monitoring Wells (March 2023)

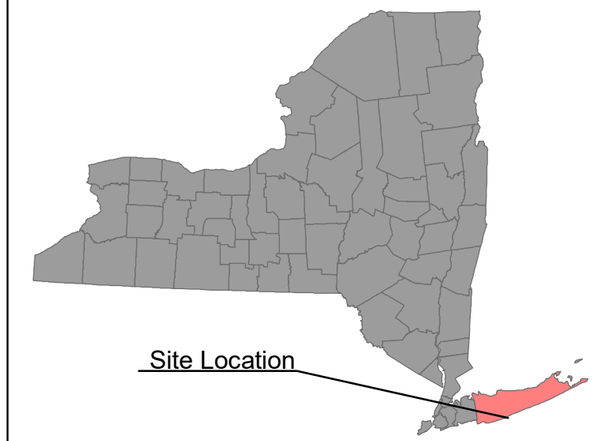
NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

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Deep PCE Plume

SPC-01BN 27,400
SPC-01D 26,500
SPC-01DN 22,900
SPC-01E 21,400
SPC-01A 5,200
SPC-01F 21,200
CMT-01-02 20,000
SPC-01C 140
Railroad Line
CMT-02-01 1100
CMT-03-03 1,400
SPC-11 0.8
CMT-06-07 480
CMT-04-06 65,200,000
CMT-05-05 2,100
MW-1D 2.7
CMT-09-01 2,600
CMT-10-06 680
CMT-07-03 1.6
MW-3D 200
MW-2D 3,800
CMT-08-05 33
MW-5D 320
1 Adams Boulevard Building Footprint
DDC-2PD 46
MW-2AD 21
MW-14D 29
DDC-4PD 1.8
MW-15D 410



Legend

- Monitoring Locations (PCE concentration shown below location ID)
- SVE Trench
- SVE Solid PVC Pipe
- SVE Well Screen
- HSVE Treatment Trailer

PCE Concentration in Groundwater

µg/L

- 5 - 50
- 50 - 500
- 500 - 5,000
- 5,000 - 50,000
- > 50,000

100 50 0 100 Feet

Notes:
Samples taken in March 2023
Deep interval includes samples taken from 66 ft bgs to 84 ft bgs
Acroynms:
bgs = below ground surface
ft = feet
PCE = Tetrachloroethene
PVC = Polvinyl Chloride
SVE = Soil Vapor Extraction
µg/L = micrograms per liter

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

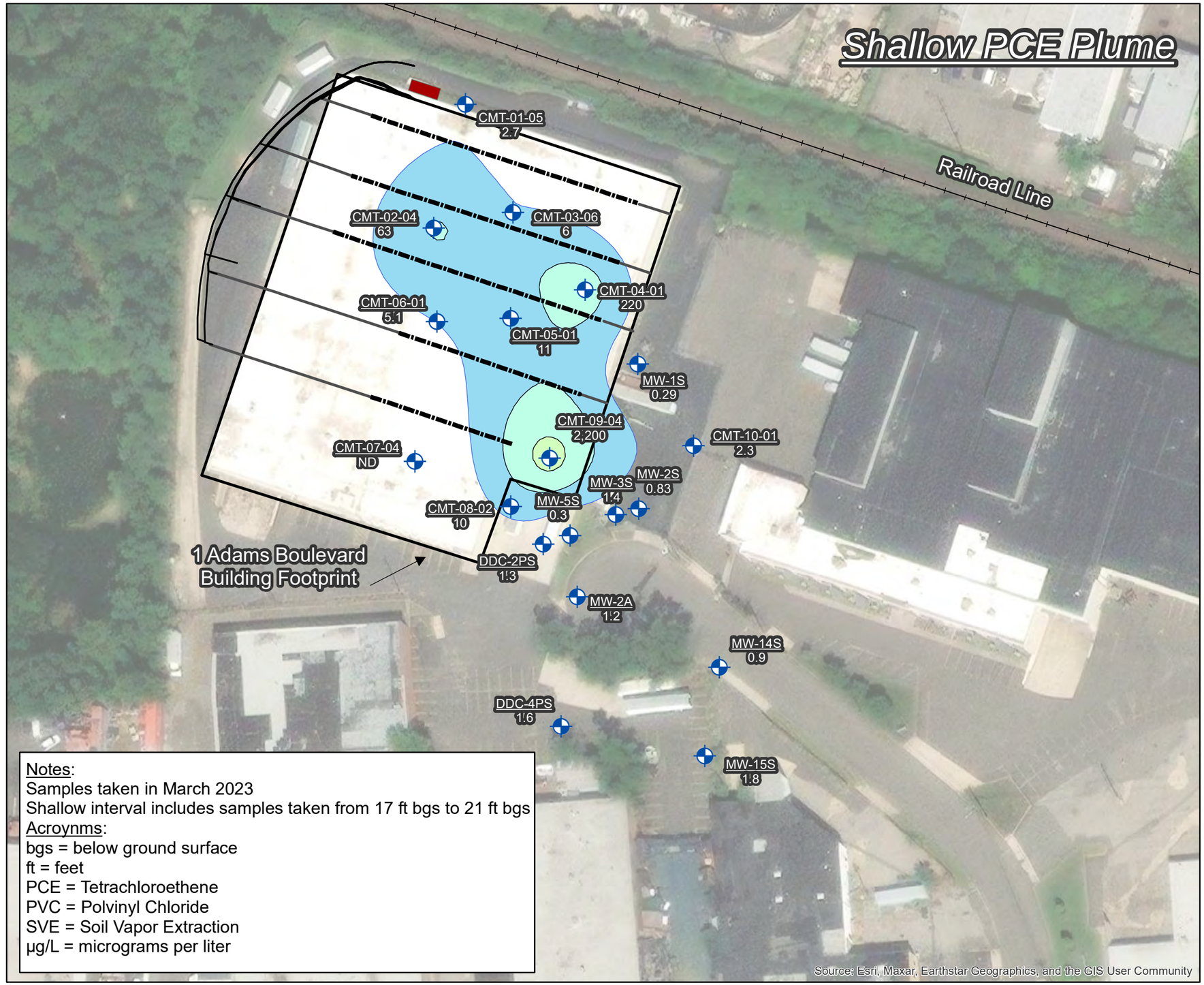
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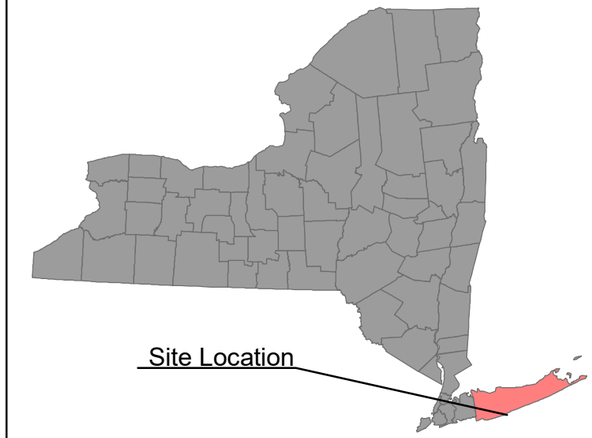
NEW YORK STATE Department of Environmental Conservation

NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

FIGURE 3-5
DEEP PCE PLUME MAP

Shallow PCE Plume





Legend

- Monitoring Locations (PCE concentration shown below location ID)
- SVE Trench
- SVE Solid PVC Pipe
- SVE Well Screen
- HSVE Treatment Trailer

PCE Concentration in Groundwater

µg/L

- 5 - 50
- 50 - 500
- 500 - 5,000
- 5,000 - 50,000
- > 50,000

100 50 0 100 Feet

Notes:
Samples taken in March 2023
Shallow interval includes samples taken from 17 ft bgs to 21 ft bgs

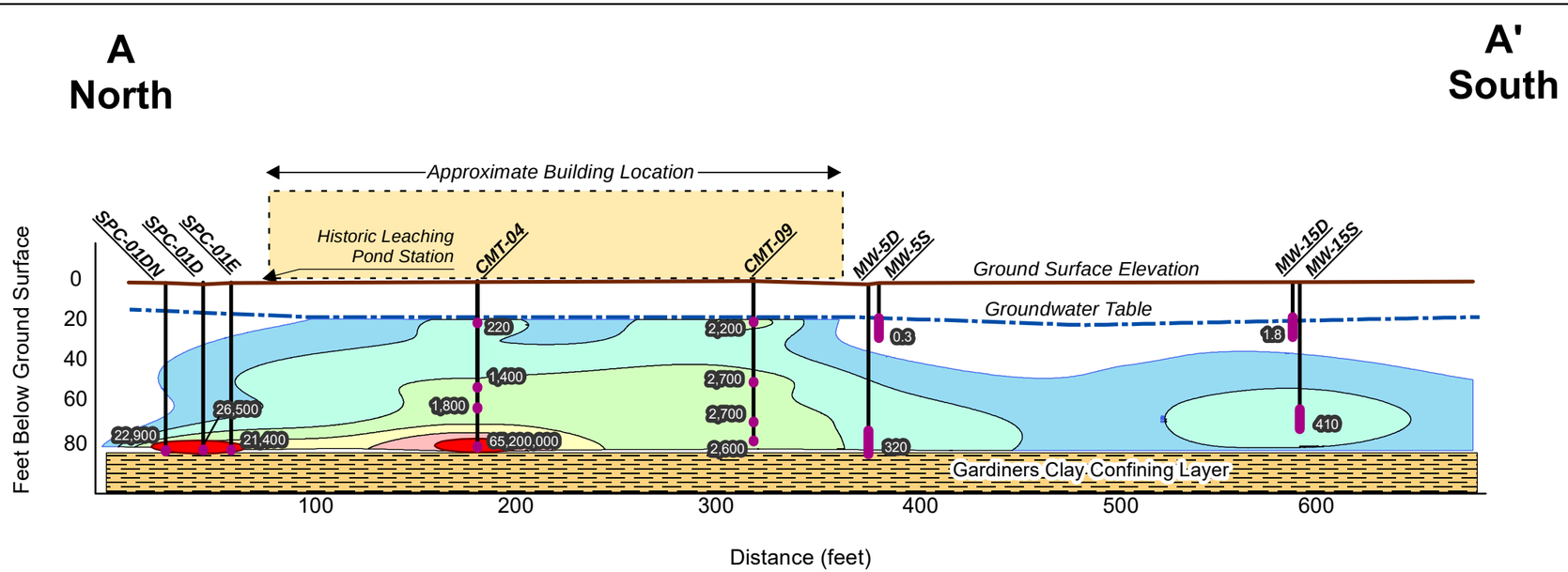
Acroynms:
bgs = below ground surface
ft = feet
PCE = Tetrachloroethene
PVC = Polvinyl Chloride
SVE = Soil Vapor Extraction
µg/L = micrograms per liter

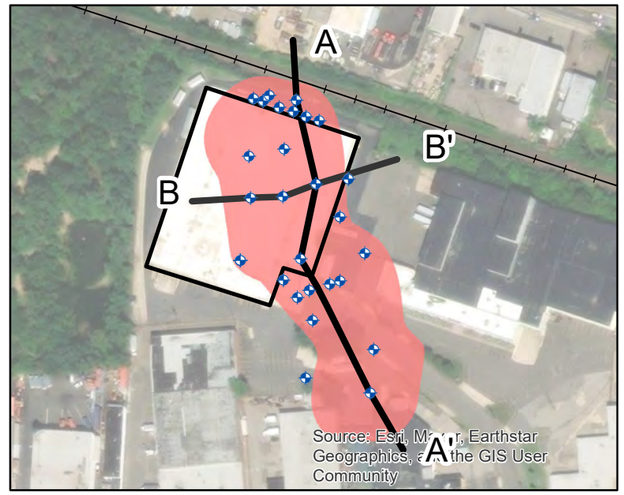
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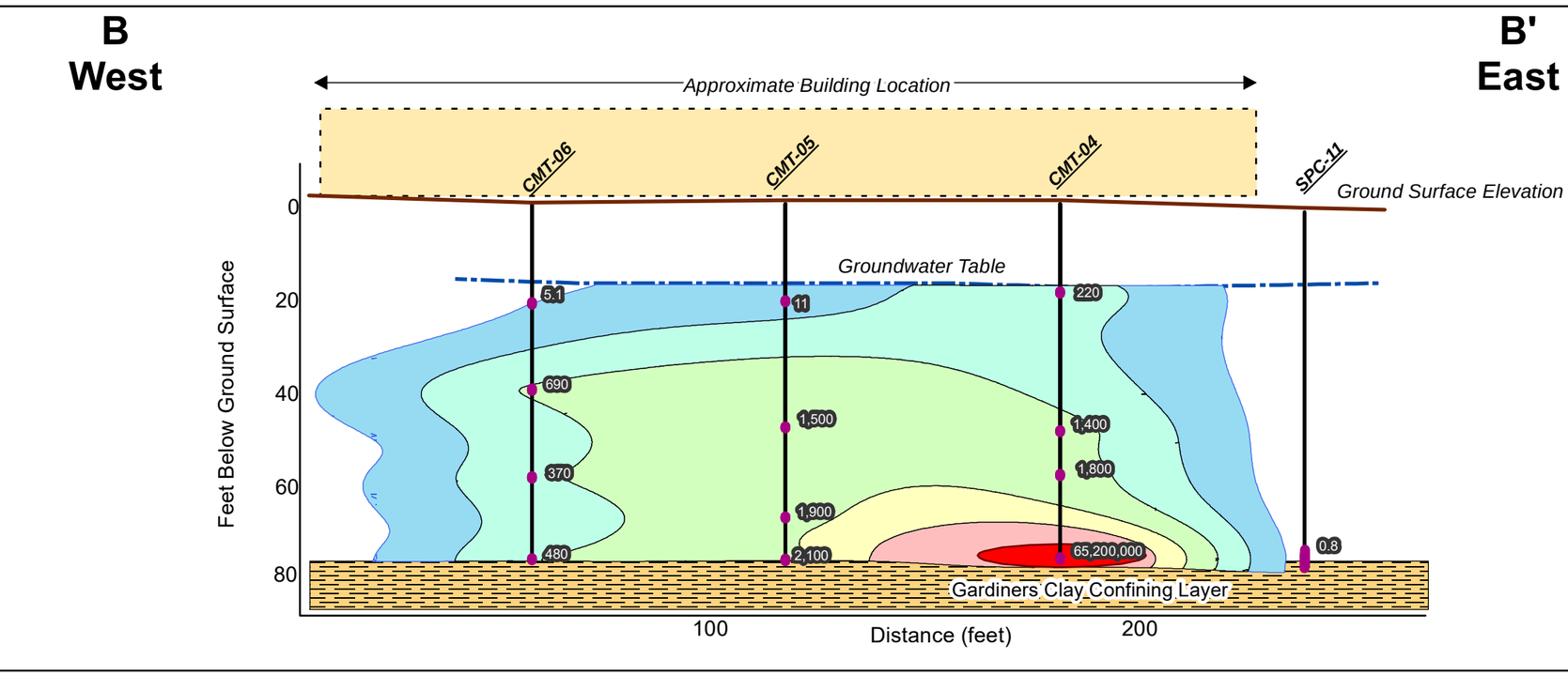
NEW YORK STATE Department of Environmental Conservation

NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

FIGURE 3-6
SHALLOW PCE PLUME MAP







Legend

Monitoring Location
Screened Interval

DNAPL

PCE Concentration in Groundwater

µg/L

- 5 - 50
- 50 - 500
- 500 - 5,000
- 5,000 - 50,000
- > 50,000

Notes:
1. DNAPL thickness and extent are approximate and only indicate presence
2. Bottom of Interpolation Corresponds to Impermeable Clay Layer 80 - 85 ft bgs

Acroynms:
bgs = Below ground surface
DNAPL = Dense nonaqueous phase liquids
ft = Feet
PCE = Tetrachloroethene
µg/L = Micrograms per liter

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Department of Environmental Conservation

NATIONAL HEATSET PRINTING CO. SITE (152140)
BABYLON, NEW YORK

FIGURE 3-7
PCE PLUME CROSS SECTIONS

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Appendix A

Field Log Book

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6/27/2022 Overcast 65°F

National Heatset Printing Co.

P. Gannon on site, M. Miller will arrive later today.

Goal: Goal for the week is to perform Hydraulic Profiling across the site at (4) locations, while also taking samples every 10 feet, starting at 20 feet bgs. Today we will start at

Mon: HPT-01, restore
Tues: HPT-03, restore
Wed HPT-05, restore
Thur HPT-09, restore
Fri: (HPT-09, restore) as needed.

0800 P. Gannon on site for the day. Meet with Property owners, and calibrate Horiba, PID, FROG.

0915 - Vinny onsite (from Cascade).
- with HPT van

0945 - Patrick and Zach from Cascade on site with Drill rig and auxiliary truck.

1000 Site walk, showing all HPT/CMT install spots.

2

Scale: 1 square = _____

6/27/2022 Overcast 68°F

National Heatset

1000 (cont.) Cascade sets-up at HPT/CMT-01 waiting for go ahead. Downtime because HPT may not be correct for what we need.

1130 M. Miller on site

1330 Confirm that we will do HPT & Method of sampling water. Mobilizing to HPT/CMT-01

1334 Begin HPT at HPT/CMT-01

1530 Completed HPT at HPT-01 Refusal at ~~78~~ 72' bgs.

1600 Cascade finished demob for the day. Goal for tomorrow is to grab samples for HPT-01, Cascade off-site

1625 P. Gannon & M. Miller Off site

6/27/2022

3

Scale: 1 square = _____

Rite in the Rain

6/28/2022 Partly Sunny 65s

National Heatset Printing CO. P Gannon

Goal of the day: Collect discrete samples at HPT-01, and Perform HPT-09. Collecting samples from 20' bgs every 10 feet after.

0645 P. Gannon on site

0700 M. Miller & Cascade Personnel on site, Conduct H&S Meeting. Calibrate Horiba and do a blank for the FROG.

Anticipated Sample Matrix:

Depth	Sample ID
20	152140-~~HPT~~-01-20
30	152140-~~HPT~~-01-30
40	152140-~~HPT~~-01-40
50	152140-~~HPT~~-01-50
* 60‡	152140-~~HPT~~-01-60
70	152140-~~HPT~~-01-70
80*	152140-~~HPT~~-01-80

* 80 is reserved if we get that far, 90 too.

*‡ Duplicate: ID will be: ✓ 152140-~~HPT~~-91-60 SPC

Scale: 1 square = _____

6/28/2022 Partly Sunny

National Heatset Printing CO P Gannon

0715 Mobilize to HPT-09 set-up rig & HPT

0745 Begin coring HPT-09,

0800 concrete cored - 8" slab, begin Piping for HPT.

0815 Begin HPT-09 Sample ID will have: SPC VS. HPT

0920 Refusal at 82.60'; Suspected Coarse/hard layer ~72'-82' bgs.

1100 Set-up at SPC-01 ready to Sample top down, starting at 20' bgs, every 10'.

1130 NO word on Shipment with IDW Drums, tubing, etc. Regroup. Plan to do HPT-05 in warehouse. Begin prep.

1138 Begin concrete coring at HPT-05

1300 Begin HPT at HPT-05

Scale: 1 square = _____

Rite in the Rain

6/28/2022 Sunny 75°F

National Heatset Printing Co. P. Gannon

1345 encounteding same harder layer from 65'-74' 74'-83' is less resistant to the HPT.

1400 Refusal at 83.00'
let rig cool down
Begin Pulling rods out.

Calc for purging water in SPC. For figuring out volume needed to purge.

0.5 $\frac{\sim 1.5}{12} = .125 = \frac{.125}{2} = 0.0625^2 \times \pi$

$= 7.46 \times$ Depth $\times$ 0.012718
W Table
Conversion .00136

y gallons = Depth $\times$ 0.0918

y Liters = $\times$ .347

1455 Begin Coring concrete at HPT-03

1515 Begin HPT at HPT-03

1610 HPT encountered harder/coarser layer at 68'

1623 Refusal at 90.3

6

Scale: 1 square = _____

6/28/2022 Sunny 75°F

National Heatset Printing Co P. Gannon

1625 Cascade let Rig cool down, ~~de~~mobilize from all HPT Activities

1810 Cascade & P. Gannon off-site

Goal for tomorrow is to do SPC-01 & SPC-03, then ship samples.



Scale: 1 square = _____

Rite in the Rain 7

6/29/2022 Partly cloudy 65°F
National Heatset P. Gannon

Goal Begin SPC-01 and SPC-03 for analysis via FROG and Lab. AM. We will Finish SPC-01, PM SPC-03, then Ship Samples.

0645 P. Gannon on-Site

0700 Cascade on-site, Conduct H&S meeting, mobilize to SPC-01.

0745 start SPC-01

0908 Purge 16-23 feet bgs. Sample

0808 SPC-01-20 FROG & Sample Sample & FROG

0841 Sample SPC-01-30

0908 Sample SPC-01-40

0945 Sample SPC-01-50

1049 Sample SPC-01-60 Parent

1001 Duplicate: SPC-91-60

1142 Sample SPC-01-70

1215 Move to SPC-03, SPC-01-80 Did not deploy screen interval.

1400 Begin SPC-03

1404 Sample at SPC-03-20

Scale: 1 square = _____

6/29/2022 Sunny 84°F
Heatset P. Gannon

1426 Sample at SPC-03-30

1456 Sample at SPC-03-40 MS/MSD volume.

1518 Sample at SPC-03-50

1553 Sample at SPC-03-60

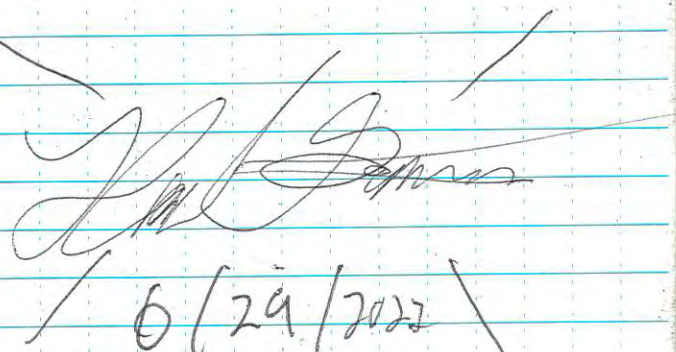
1624 Sample at SPC-03-70

1704 Sample at SPC-03-80

EA & Cascade Breakdown for the day.

1730 P. Gannon off-site to Package coolers, while Cascad breaks down

1830 Samples Shipped/dropped off Coolers at FedEx. P. Gannon buys more ice & DI water for tomorrow



6/29/2022

Scale: 1 square = _____

Rite in the Rain 9

6/30/2022 Sunny 70 → 85
National Heatset P. Gannon

Goal: SPC Sample at SPC-05 then SPC-09. The ship samples for lab analysis.

0650 P. Gannon (EA) onsite

0700 Cascade onsite. P. Gannon conducts health and safety meeting

0715 Begin mobilizing to SPC-05.

0815 Begin SPC-05 Sample at SPC-05

0831 Sample at SPC-05-20

0849 Sample at SPC-05-30

0918 Sample at SPC-05-40

0952 Sample at SPC-05-50

1012 Sample at SPC-05-60

1049 Sample at SPC-05-70

11:29 Sample at SPC-05-80 Duplicate collected:

11:11 Dup. 152140-SPC-05-80
Parent. 152140-SPC-05-80

11:35 Cascade breaks down, P. Gannon runs FROG.

1315 Begin mobilization/Prep of SPC-09

Scale: 1 square = _____

6/30/2022 Sunny 85
National Heatset. P. Gannon

1348 Begin SPC-09

1354 Sample at SPC-09-20

1412 Sample at SPC-09-30

1438 Sample at SPC-09-40

507 Sample at SPC-09-50

1533 Sample at SPC-09-60

1616 Sample at SPC-09-70

1658 Sample at SPC-09-80

cascade begins to breakdown for the week. P. Gannon Packs cooler.

Cascade & EA Plan for next week 9-10AM Tuesday for boring & CMT well Installs.

1800 Cascade & P. Gannon off site to FedEX

6/30/2022

Scale: 1 square = _____

Rite in the Rain.

Heatset — 70°F cloudy
7/5/2022 — P Gannon
Goal: 2 soil Borings.

0800 Cascade and EA (P. Gannon) on site to do two borings for the day

0850 Set-up at HPT/CMT/SB-01 Outside. Cascade begins at SB-01

1300 Finished at SB-01, breaking down, building containment for inside.

1420 Cascade back on site with materials for containment.

1530 Cascade & EA offsite

07/05/2022

12

Scale: 1 square = _____

Heatset — 70's cloudy
7/6/2022. — P. Gannon
Heatset RSO
Goal: 2 Soil Borings SB-03 and SB-05.

0650 P. Gannon (EA) & Cascade onsite

0710 Conduct H&S meeting and Discuss Plan for the day

0715 Mobilize to SB-03

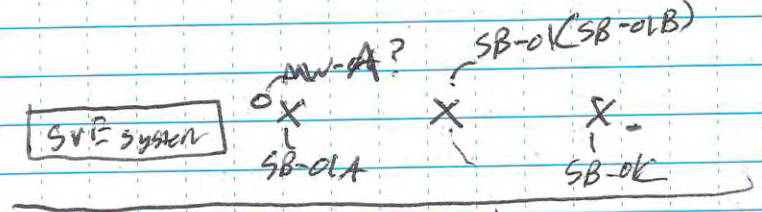
0807 Begin SB-03

1220 Cascade takes a break, Run at 70-75 feet bgs

1300 Resume at SB-03

1430 Finish at SB-03, no NAPL above clay layer.

1345 Set-up at SB-01C



1800 Stop at 45' bgs at SB01C resume tomorrow

1815 Everyone offsite

SB-03 X

07/06/2022

13

Scale: 1 square = _____

Heatset RSO — 70°F Overcast
7/7/2022 — P. Gannon

Goal: Finish SB-01C, and complete SB-01A. Delineate the NAPL on north end of the building.

0650 P. Gannon (CEA) onsite.

0700 cascade on site. P. Gannon conducts H&S meeting, discuss plan for the day/last work day of the week.

0715 Mobilize to SB-01C.

0740 Resume SB-01C

1040 Finish SB-01C DNAPL present at 84' bgs. Change to sample SP-16, water at 84' bgs.

1200 Purging 8.6 gal from SB-01C at 84' bgs. 8.6 gal is 3X casing volume (1" casing.

Cascade begins at SB-01D

1259 Sample at SPC-01C-84

Temp	pH	ORP	conductivity	NTU	DO mg/L
23.97	5.73	98	0.175	92.1	8.79

Continue with borings SB-01D.

Scale: 1 square = _____

14

Heatset RSO — 90°F Sunny
7/7/2022 — P. Gannon

1300 cascade at 50 feet bgs at SB-01D.

1601 Finish SB-01D at 85 bgs DNAPL encountered at 84.25-83.50 feet bgs. Cascade begins to break down at SB-01D.

1715 P. Gannon (CEA) and cascade offsite for the weekend.

Goal next week:
- ~~If~~ SPC sample water at 84' bgs at SB-01C
- SB-01E & water at 84'
- SB-01N & water at 84'
- SB-01A & water at 84'
- continue to delineate DNAPL.
- Soil borings/well installs in the warehouse.

07/07/2022

Scale: 1 square = _____

15

Rite in the Rain

Heatset RSO — clear 74°F
7/11/2022 — P. Gannon

Goal: This week:
Mon | SPC-01D, SB-01E
Tues-Fri | SB-01F*, SB-01BN, SB-01A, etc.
Delineate the DNAPL with soil borings and water samples.

0800 P. Gannon (CEA) on site.
0825 Cascade arrives on site.
0905 Begin boring for SPC-01D-84
0930 ~~Sample~~ Begin purging SPC-01D-84
0935 8.6 gallons purged
~~0935~~ Begin SB-01E
1107 Sample at SPC-01D-84

Temp	pH	ORP	Cond mS/cm	Turb NTU	DO mg/L
24.94	6.72	5	1.09	593	8.51

1305 Logging soil at SB-01E
Finish SB-01E, DNAPL Present
1505 Sample SB-01E-83.75-84 ~~SPC~~
1515 Cascade set-up for SPC-01E-84
1530 Purging SPC-01E-84
Sample at SPC-01E-84 after 8.6 gal purged

16

Scale: 1 square = _____

Heatset RSO — sun 82°F
7/11/2022 — P. Gannon

Temp	pH	ORP	Cond mS/cm	Turb	DO mg/L
19.39	7.37	105	1.48	>800	14.55

1652 Sample at SPC-01E-84
Cascade & EA breakdown for the day.
1710 P. Gannon off site to FedEX. Cascade ofs. for the day.

07/11/2022

17

Scale: 1 square = _____

Rite in the Rain

Heatset RSO — Cloudy 71°F

7/12/2022 — P. Gannon

Goal: SB-01F, SPC-01F-84, then if needed SB-01G, SPC-01G, or SB-01BN, SPC-01BN-84

0650 P. Gannon (EA) on site

0705 cascade onsite

0710 conduct H&S meeting, Mobilize to SB-01F

0745 Begin SB-01F

1250 complete SB-01F. NO visible Product at 84 bgs but, staining and smell. NO sample taken.

1345 cascade begins SPC-01F-84 Plan to purge ~~8 gallons~~ 8 gallons.

I.D. of casing is .5" not 1.5"

2.4 gal min needed.

1400 Begin Purging, geopump is purging this time, Pump did not purge at ~~SB~~ SPC-01E and SPC-01D.

Temp	PH	ORP	cond ms/cm	Turb	Do mg/L
2044	5.90	65	0.472	>800	11.04

1420 cascade begins SB-01A.

18

Scale: 1 square = _____

Heatset RSO — Clear 82°F

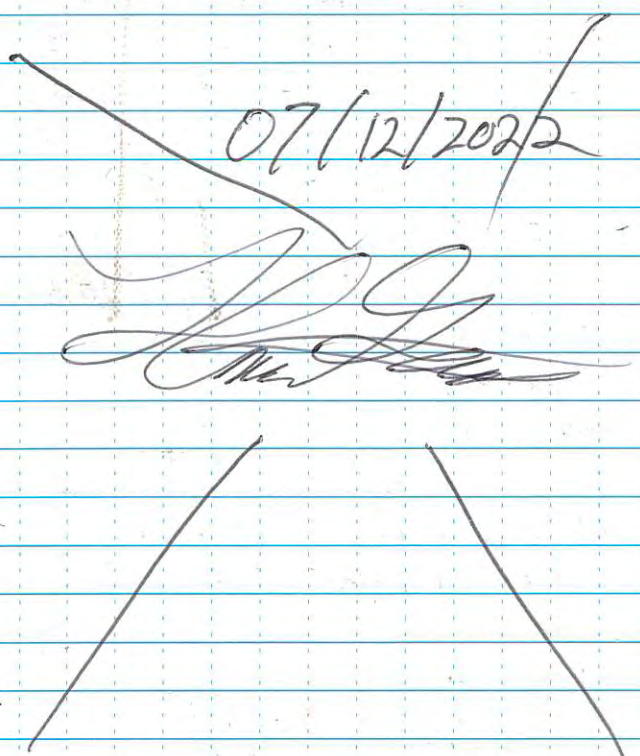
7/12 — P. Gannon

1448 Sample at SPC-01F-84

1800 Pause advancement of SB-01A at 80 feet. Will finish logging 75-85'

1825 EA & cascade off-site for the day.

07/12/2022



19

Scale: 1 square = _____

Rite in the Rain

Heatset RSO — Clear 77°
7/13/2022 — P. Gannon

Goal: complete SB-01A, SPC-01A-84, and SB-01BN.

0700 - P. Gannon (EA) on site
0725 - Cascade on site. P. Gannon conduct H&S meeting.
0745 - Mobilize to SB-01A
0800 - Resume SB-01A
0850 - Complete SB-01A, No DNAPL Present, no hits with PID, or smell/staining.
0905 Cascade begins SPC-01A-84
0930 Purge 8.6 gallons
1009 Sample at SPC-01A-84
Cascade moves to
0940 SB-01BN For next soil boring.
1005 SB-01BN begins.
SPC-01A-84 Water Quality Parameters

Temp	PH	ORP	con $\frac{mS}{cm}$	Turb NTU	DO $\frac{mg}{L}$
23.47	5.77	191	0.502	290	8.40

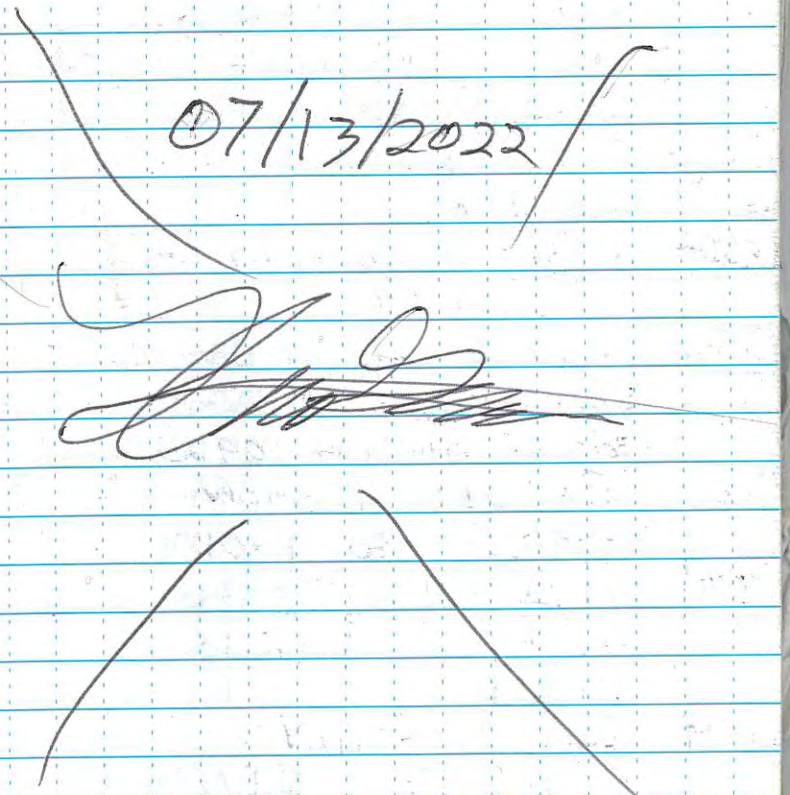
1540 cascade pauses at 82.5. need more fuel for continuation
1725 Complete SB-01BN.
Interval 82.5-85
20 DNAPL Present (oil stain)

Scale: 1 square = _____

Heatset RSO — Clear 90°F
7/13/2022 — P. Gannon

1725 Cascade breaks down and departs site
1730 P. Gannon departs site
Goal for tomorrow - SPC-01BN-84 water sample. Then move inside for SB-05.

07/13/2022



2C

Scale: 1 square = _____

Rite in the Rain

Hearts of RSO — Mostly cloudy 70s

7/14/2022 — P. Gannon

Goal: SPC-01BN-84, then clean-up outside, move inside, and perform SB-05.

0700: P. Gannon (EA) on site

0710: cascade arrives onsite

0715: conduct H&S meeting, discuss plan for the day.

0720 Mobilize to begin SPC-01BN-84.

0800 Cascade begins SPC-01BN-84

0850 Purging 8.6 gallons from SPC-01BN-84,

0948 Sample at SPC-01 BN-84 Duplicate SPC-91BN-84 taken with time 0925

1000 Move off SPC-01BN Mobilize to SB-01DN

Temp	pH	ORP	Cond mS/cm	Turb NTU	DO mg/L
22.79	5.81	84	0.488	197	8.44

1048 Begin SB-01DN

1530 Complete SB01DN, DNAPL present

1535 Begin SPC-SB01DN-84

22

Scale: 1 square = _____

Begin purging SPC-01DN-84

1615 8.6 gallons.

1642 Sample at SPC-01DN-84 Cascade breaks down for the day.

Temp	pH	ORP	Cond mS/cm	Turb	DO mg/L
22.84	6.27	12	0.446	>800	10.52

Cascade breaks down for the day

1720 Cascade of site, and P. Gannon

07/14/2022

23

Rite in the Rain

Scale: 1 square = _____

Heatset RSO — mostly cloudy 68°
7/15/2022 — P. Gannon

Goal: SB-05 in the warehouse

0645 P. Gannon arrives on site
0720 Cascade on site
0730 H&S meeting, mobilize from the back into the warehouse.
0840 Begin SB-05
1305 Complete SB-05. NO DNAPL present at sand-clay interface. Cascade breaks down for the day.
1415 Cascade and P. Gannon (EA) off-site for the weekend.

7/15/2022

Scale: 1 square = _____

Heatset RSO — Overcast 80°F
7/18/2022 — P. Gannon

Goal: Today SB-04, SPC-04-84, ship samples to FedEX. Then do SB-02, SPC-02-84, SB-06, SPC-06-84, SB-07, SPC-07-84, SB-09, SB-10, SPC-10-84. The days after

0845: P. Gannon on site
0905: Cascade arrives on site
0915: conduct H&S Tailgate meeting, and prep for the day.
1010 Begin SB-05
1530 Complete SB-05, DNAPL present at 84.0-84.75 feet bgs.
1550 cascade begins SPC-04-84 Purging 4.5 gallons
1705 Sample at SPC-04-84 sample smells of solvent. Purge water has "oil-water" seperation going on initially

Temp	pH	ORP	Cond mS/cm	Turb	DO mg/L
21.79	5.93	120	0.416	>800	8.10

1755 cascade off-site
1810 P. Gannon off-site to FedEX

7/18/2022

Scale: 1 square = _____

Rite in the Rain

Heatset RSO — 70's Partly cloudy
7/19/2022 — P. Cannon

Goal: Additional Soil boring ~~to the east. Install 1" well at~~ SB-06 & SPC-06-84.

0700 P-Cannon arrived on-site
0715 Cascade arrived onsite.
0815 Begin SB-06
1447 Complete SB-06, Clean site prep for SPC-06-84
1505 Begin SPC-06-84 Purge 8.6 gal
1648 Sample SPC-06-84

Temp	PH	ORP	cond mS/cm	Turb	DO mg/L
21.84	5.36	120	0.439	86.7	9.03

GW is clear, has chlorinated-solvent smell.

1650 Cascade breaks down for the day
1727 Cascade offsite for the day.
1730 P. Cannon offsite

7/19/2022

Scale: 1 square = _____

Heatset RSO — 80's Partly cloudy
7/20/2022 — P. Cannon

Goal: SB-02 & SPC-02-84

0700 - P. Cannon on-site
0720 - Cascade on-site, P. Cannon conducts tailgate safety meeting & discussed plan for the day
0730 - Mobilize inside for SB-02
0831 Begin SB-02.
1455 Complete SB-02, NO DNAPL
1515 Begin SPC-02-84
1530 Begin Purging SPC-02-84, 8.6 gallons.
1627 Sample at SPC-02-84
Break-down for the day and clean site

Temp	PH	ORP	cond mS/cm	Turb	DO mg/L
26.44	5.56	230	0.431	441	9.31

1737 Cascade and P. Cannon off-site.

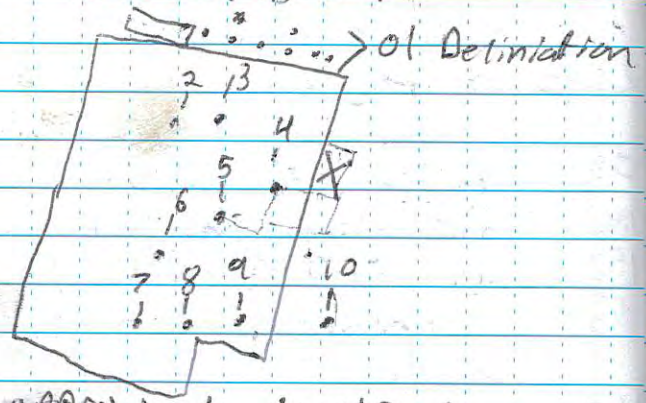
7/20/2022

Scale: 1 square = _____

Rite in the Rain

Heatset RSO — 80°F, Humid
7/21/2022 — P. Gannon

Goal: SB-11, SPC-11-84. SB-11 will be east of SB-04 and on trend with SB-05 & SB-04



approximate location

0655 P. Gannon on site
0715 Cascade on site, conduct H&S meeting, discuss plan
0730 Mobilize to SB-11
0745 Begin SB-11
1400 Complete SB-11.
1410 Thunder delay
1600 Resume work, begin SPC-011-84
1620 Purging SPC-11-84 8.6 gallons to be
28 Purged.

Scale: 1 square = _____

Heatset RSO — 88° Stormy
7/21/2022 — P. Gannon

Temp	PH	ORP	cond ms/cm	Turb	Do mg/L
22.90	5.60	68	0.435	>800	9.86

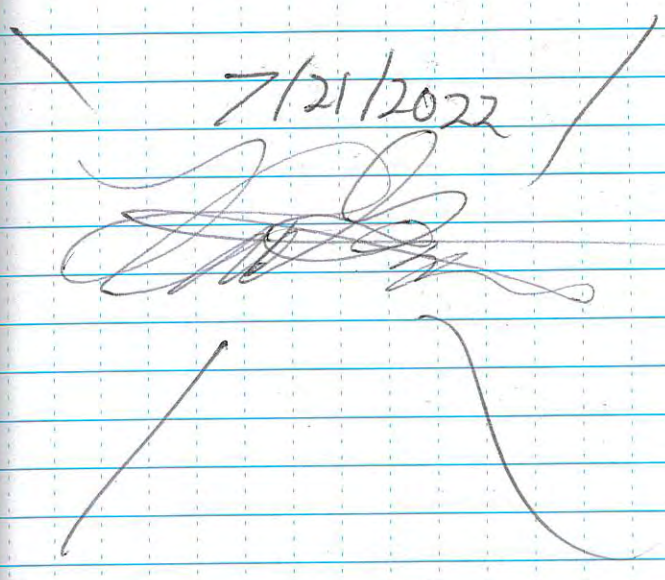
~~Samples~~

1711 Sample at SPC-11-84

Cascade breaks down for the day

1735 Cascade & P. Gannon depart site for the day. Plan to do SB-10 & SPC-10-84 tomorrow.

7/21/2022



29

Scale: 1 square = _____

Rite in the Rain

Heatset RSO — 90's Sunday — P. Gannon

7/22/2022

Goal: ~~SB-10~~ SB-09 & SPC-10-84

0700: P Gannon on site

0715: Cascade on site

0730: Mobilize to SPC-10-84

0800: Begin purging at SPC-10-84
Cascade mobilizes to SB-09.

0842: Sample at SPC-10-84

Temp	PH	ORP	cond mg/cm	Turb	DO mg/L
19.44	5.72	66	0.279	7800	1302

~~0900~~ Cascade encounters 1000 early refusal at 20' at SB-09. We step off 5' to the SE and encounter early refusal at 8' bgs.

1015 Decide to prioritize water sample at SPC-07-84.

1045 Begin SPC-07-84
Plan to purge @ 6 gallons

1203 Sample at SPC-07-84

Temp	pH	ORP	cond mg/cm	Turb	DO mg/L
21.57	5.93	39	0.434	>800	9.87

Scale: 1 square = _____

Heatset RSO — 90's Sunday — P. Gannon

7/22/2022

1345 Cascade offsite

1400 P. Gannon offsite to FedEx for sample shipment.

- Soil borings left to complete
  - SB-07
  - SB-08
  - SB-09
  - SB-10
- SPC (water samples left)
  - SPC-08-84
- ~~All~~ A total of 6.5 drums are full. #7 is the current drum in use.

7/22/2022

Scale: 1 square = _____

Rite in the Rain

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Heatfield RSO 80's Sunny
8/08/22 E. Fenner
Goal: Complete SB-07 boring 10ft

0900 E. Fenner onsite
0920 M. Miller onsite, check in w/ warehouse
0950 Cascade Brandon onsite
1000 Cascade Shane onsite
1020 Mob to SB-07
1120 Begin boring at SB-07
1050 M. Miller departs to grab PID from Pine
1230 Brief break @ 35'
1240 M. Miller returns with PID
1245 Resume boring
1640 Borings 80-85 and 85-90 got stuck
1730 Recovered 80-85, Will attempt to recover 85-90 tomorrow. Cleaning for the day
1800 Everyone offsite

8/08/22

Scale: 1 square = _____

Heatfield RSO (1602518) 80's Clear
8/09/22 E. Fenner
Goal: Complete SB-07 boring and well

0700 EA onsite. Cascade already present.
0710 (EF) Go over plan for the day & Health and Safety Meeting: Slippery surfaces
0705 Mob to SB-07 and Set up
0750 (EF) Resume SB-07 for 85-90.
0840 Boring SB-07 completed. Attempting to retrieve sleeve to confirm depth of clay
1024 Cleaning up briefly. Return to vehicles to build CMT wells.
1155 Break for lunch
1235 Resume building CMT wells
1330 Clean up SB-07 for the day
1630 (EF) CMT walls and cross construction for CMT-01 and CMT-07. Will install CMT-07 tomorrow
1645 EA and Cascade offsite

8/9/22

Scale: 1 square = _____

Rite in the Rain.

Heatset RSO
8/10/22

1/2 70s Partly Cloudy E-W Trimble

0645 Stopped at Walmart to purchase ice for drinking water.

0700 EA onsite. Cascade already present. Go over plan for the day: Install CMT-07. Conduct safety meeting: Fumes from equipment.

0715 Mob to SB-07/CMT-07 location.

0815 Set up at CMT-07, almost complete. Waiting on shaw to return with ~~Drill Series~~ Drum.

0850 Final setup tasks complete. Begin drilling CMT-07

1045 Issues with drilling: Sand is not flowing at depth. Sand is locking up the rig at ~77'. Cascade will try to free/unlock

1100 Waiting on call from Joe V. Cascade will continue to free up the augers.

1130 Pulling up the augers so they don't get stuck in the sand completely. Still waiting on instructions

1220 Break for lunch. Augers completely out of the hole.

1225 Joined a call with M. Miller and Joe VanUdeitz to discuss situation. Decide to switch to soil borings and finish those before any more CMT wells are installed.

1300 Relay plan to Cascade. Start clearing

Scale: 1 square = _____

Heatset RSO
8/10/22

2/2 Low 80's Cloudy Pioneer

up CMT-07 and move on to SB-10.

1330 Mini Cascade personnel (Pat) arrive onsite ~~with larger rig~~ to consult w/ Brandon

1345 Larger rig not on site. Pat stopped by to take measurements in case a bigger ~~set~~ rig is needed.

1400 Cascade and EA communicating. Both field teams on standby

1420 Begin labeling IDW drums

1500 Cascade decides to install CMT-01 tomorrow.

1520 After conversing with EA and Cascade PM's. All operations will resume tomorrow.

1540 Cascade offsite

1605 EA offsite

Emily Fellman

8/10/22

Scale: 1 square = _____

Rite in the Rain

Heatset RSO
8/10/22

1/2

70's cloudy rainy
E. Finner

0700 EA on site. Grinder from Cascade already present.

0702 Shane and Pat arrive from Cascade. Discuss plan for the day: Install CMT-01 and begin boring on SB-10. Health and Safety meeting topic: Heat Stress

0710 Begin mob to CMT-01

0735 Setup drums and rig at CMT-01

0750 Set up the rest of the drums, augers, and other equipment.

0755 Begin drilling at CMT-01, Shane leaves.

1025 An excessive amount of sand has been removed from the hole. 10 55-gallon drums have been filled. Operations paused to evaluate

1050 Continuing drilling. Auger has started to be at a bit of an angle.

1125 Augers are walking through the subsurface. 15' of augers were retracted.

1130 All augers will be removed from the hole. Waiting on battery recharge before continuing

1205 All augers pulled out.

1220 Clean up area for now. Cascade suggests bringing a larger rig to install wells.

1240 Break for lunch. Hoping to clean up quickly to be able to start boring SB-10

Scale: 1 square = _____

Heatset RSO
8/10/22

2/2

Mid 80's partly cloudy
Finner

1245 EA begin to label drums from yesterday

1350 Cascade loads up first 3 drums to haul back to parking lot. Rig also being walked back.

1445 All drums and equipment returned to the parking lot. Hole at CMT-01 has been plugged with cement.

1450 Cascade measuring 8040 rig and measuring the warehouse to see if it will fit. No boring today.

1525 Measurements look like the 8040 rig will fit. Cascade will do a test run through the warehouse to make sure it will fit all the aisles and make all the turns.

1630 Finally get someone to move the floor sweeper out of the way of the garage door so we could drive the rig in and see if it fits.

1640 It fits.

1645 Back out it goes.

1715 EA and Cascade offsite

8/11/22

Scale: 1 square = _____

Rite in the Rain

Heather RSO
8/12/22

15mph S 70's P.cloudy E.Fennes

0700 EA onsite.
0707 Cascade onsite. Discuss plan for the day (Install CMT-01 with 8040) and conduct Health & Safety meeting: Overhead hazards
0710 Begin mob to CMT-01
0805 Mob and setup complete. Begin drilling at CMT-01
0940 Taking a short break. Augers are getting locked up by sand again.
0945 Resume drilling.
0950 Taking a break again. Cascade consulting the issue
1025 Cascade continuing to try and resolve the issue
1050 Pulling up the augers. Could not get well installed
1155 All augers out. Taking lunch.
1240 Pat to the rescue?
1255 Nope. Cascade suggests wrapping up for the weekend. Waiting on word from EA
1300 Start cleaning up around CMT-01 in the mean time
1330 Meeting with M. Miller, J. Vu, and D. Crum to discuss the project moving forward
1348 No mob next week. Finish cleaning up CMT area and plug open holes.
1445 Holes plugged, equipment removed from warehouse.

Scale: 1 square = _____

Heather RSO
8/12/22

80's Sunny Final

1530 Everything cleared out from crew. Cascade will return on Monday to gather the rest of the vehicles.
1535 Headed to Pine to drop off PID
1600 PID returned to Pine. EA office

8/12/22

Scale: 1 square = _____

Rite in the Rain

Heatset RSO
10/11/2022

65°F Sun
K Cassidy

0945 K Cassidy (EA) on site to perform well materials inventory.

0958 Materials located, outside on pallets near/south of IDW drums.
- Buckets of Rel-Plug 3/8" non-coated bentonite pellets (~48-50)
- PPS bentonite plug bags (~50)
- Sakrete high-strength concrete mix 60 lb bags (~20)
- Fill Pro gravel/sand (~30-40) bags

1030 Consulted Emily Fenner and Patrick Gannon on location of materials - under black tarp is three wound-up constructed wells. Consulted Don Coreen on entering warehouse.

1100 Mob. to warehouse. Warehouse staff walked me through warehouse to show me there are no remaining well materials inside.

1115 Taking final pictures on site.

1125 EA offsite.

K Cassidy

Scale: 1 square = _____

Heatset RSO
11/14/2022

34°F
E. Fenner

0558 EA (E. Fenner) arrives on site

0710 AARCO (Daiyuki + William) arrive onsite, do a brief outside site walk to discuss plan for today. (Install CMT-01 and decon SB-10). Mob to SB-10

0747 Begin boring at SB-10

1140 Completed logging of SB-10

1145 Clean up around SB-10, mob to CMT-01 location and set up. Have lunch in meantime until Ed arrives 12

1240 Ed (EA) arrives. Update him, go talk to Julio about the plan. He says "Later"

1317 Call Megan to update on borings and CMT wells. Plug/anchor on bottom is too wide to fit down 4 in boring casings. Need 6 in to mitigate risk of damaging the well. Megan will talk to Sue about potentially removing the anchor.

1430 Julio does not believe the rotosonic will be able to function in tandem with Unilever's operations. The exhaust pipes from the rig will have to cut across aisles that Unilever might need to access at any time. The increased volume in the warehouse is also a concern as everyone would need hearing protection. Unilever's

Scale: 1 square = _____

Rite in the Rain

Heatset RSO
11/14/2022

44°F clear
E. Fenner

Safety team will come look at the rig and assess whether or not they want the rig in the warehouse.

1445 Megan and Joe agree the anchor of the CMT wells can be removed so the 4-in casings can be used to install wells rather than 6-in casings. Wells CMT-01 and CMT-10 will be installed tomorrow. The safety team will meet at 9 am tomorrow to look at the rig.

1500 AARCO offsite. EA continues to discuss options. Best option seems to be to work after hours, but that is up to Unilever to approve.

1530 EA makes sure any open holes are covered, then move offsite

E. Fenner
11/14/22

Scale: 1 square = _____

Heatset RSO
1602518 11/15/2022

Safety: Cold

8 mph NW 36°F
E. Fenner

0658 E. Fenner (EA) arrives onsite, Ed arrives (0702)

0710 AARCO arrives onsite

0715 Mob to CMT well storage area to find CMT-01

0730 CMT-01 has been identified through process of elimination of the marker has worn off. Screens will be measured again to make sure it is CMT-01.

0800 CMT-01 confirmed at depths. Screens are accurate and depths listed in SOW table are the bottom of screen, not the top. The plug/anchor on the bottom adds an extra ~6 in with a small 2 in screen that will not be used.

0810 Called AARCO to confirm well construction instructions

0830 ~~Megan~~ (ED) Continue drilling for CMT-01, drilling an extra 6 in for the anchor accommodations.

0835 Run PID around rig to make sure fumes aren't accumulating

0840 Talk with Megan to confirm well installation. 2 ft above screen for sand and below, bentonite in between

0945 AARCO Safety inspector (Winges, Andrew)

Scale: 1 square = _____

Rite in the Rain

arrives to perform safety audit for drill crew. Safety team for Unilever still not here.

1000 Andrew leaves for a moment

1015 Unilever's safety arrives. Ed goes with them to show where the wells will be installed and ~~exit~~ (EF) corresponding exit points for the exhaust. Andrew offsite. Sabier Rodriguez is Unilever Safety

1100 Spacers on well are creating issues, is essentially blocking bentonite from flowing down. Vibrating helps, but will take longer to finish installing CMT-01. There is consideration to use 6-inch casings for CMT-10 to make process easier.

1113 Ed returns from talking to Unilever Safety. Afterhours seems to be the way to go. Julio wants the rig encapsulated to prevent dust.

1135 Ed offsite to stop at a hardware store to purchase petroleum pens/markers. Will be used to relabel drums.

1200 Finish installing CMT-01. Clean up area so pad can be installed.

1220 Area for pad cut out. Mob to CMT-10 to begin overdrilling with 6in casings. Pad

for CMT-01 will be laid out in the meantime.

1235 Begin over drilling for CMT-10

1320 Drilled 5.5ft of 6in casing at CMT-10, will finish tomorrow

1330 Walk around warehouse with Ed and Dayuli to review Unilever's safety concerns.

1400 Relabel IDW drums with petroleum pens

1500 EA offsite

Emily Fenner
11/15/22

Heather RSO
11/16/22

Rain 49°F
E. Fenner

0650 E. Fenner arrives (EA). AARCO already present
0700 E. Ashton arrives
0705 Go over plan for the day (Install CMT-10 and set up
0715 Continue overdrilling CMT-10
0740 Drilled down to 81.6'. Begin installing well. Set up PID for breathing zone
0950 Well installation complete. Moving rig and cleaning up area to install pad. Used 9 buckets of bentonite
1040 Concrete pad installed CMT-10 complete
1045 Drums moved to storing location. Materials and wells covered up.
1055 E. Ashton tells Julio we are offsite. AARCO offsite
1115 E. Ashton offsite. E. Fenner remains to label drums from this MW
1120 E. Fenner offsite.

Emily Fenner
11/16/22

Scale: 1 square = _____

Scale: 1 square = _____

Rite in the Rain

11/30/22 Headset O&M

Cloudy 52°
J. Guy

0750 J. Guy + Pat Crannon Active onsite.
0815 start Suma cans (influent and effluent)
0830 Begin Indoor VP readings
0945 OFFsite to home depot
1030 ONSITE For leg cover repair.
1130 complete box repair begin O&M Readings
1200 Begin CMT-01 development
1220 complete Suma canister removal
1430 complete CMT-01, move to CMT-10
1500 START CMT-10 Development
1715 Finish CMT-10 Development
move down to staging area
1730 offsite

Jennifer Guy
11/30/2022

Scale: 1 square = _____

Rite in the Rain

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Heatset RSO (152140) 01/23/23

Weather: 36 F, cloudy

Personnel: L. Backman-Lowe, E. Ashton

Objective: install CMT-07

1740 - E. Ashton Onsite, met with Yeissen Rodriguez to discuss scope of work

1820 - L. Backman-Lowe onsite, site walk w/ E. Ashton to identify drilling locations

1840 - AARCO onsite (Daibi Pacheco, Julio Cabrera, William Cabrera)

1855 - discuss SOW w/ AARCO personnel, health + safety

1900 - EA field team call with EA PM to confirm scw + goals for today's work

1920 - AARCO begins unloading equipment and materials

1940 - calibrate RKI GX-6000

1945 - AARCO brings Geoprobe 8140LC into warehouse

2000 - AARCO mobilizes equipment + mats to CMT-07 location + begins setting up

2030 - AARCO cuts concrete slab w/ Sengore SS100 saw

Scale: 1 square = _____

Heatset RSO (152140) 01/23/23

2110 ~~0710~~ - AARCO preps hole for drilling @ CMT-07 location

2120 ~~0920~~ - AARCO begins hand clearing CMT-07

2135 boring to 5' bgs

~~0935~~ AARCO finishes hand clearing CMT-07

2140 boring to 5' bgs

~~0940~~ AARCO moves Geoprobe 8140LC over hole, begins advancing boring

2200 - PID recorded in breathing zone 0.0 ppm

2205 - CMT-07 boring advanced to 15.0 ft bgs, pressure lost in lines → downtime of ~ 10 min

2215 - AARCO resumes advancement of CMT-07 boring

2218 - pressure lost in lines again → downtime of ~ 10 min

2228 - AARCO resumes advancement of CMT-07 boring

2230 - boring (CMT07) advancement stops again, AARCO lead driller explains that the lube pressure is too low (~15-18 psi) and needs to be higher. (~ 50-70 psi) - AARCO troubleshoots the issue

Scale: 1 square = _____

Rite in the Rain

Headset RSO (152140) 01/23/23

2240 - PID reading recorded in breathing zone 0.0 ppm

2243 - AARCO resumes advancement of CMT-07 boring

2250 - CMT-07 boring advanced to 30 ft bgs

2300 - CMT-07 boring advanced to 45 ft bgs

2310 - CMT-07 boring advanced to 60 ft bgs

2322 - PID reading recorded in breathing zone 0.0 ppm

2325 - CMT-07 boring advanced to 75 ft bgs

2335 - AARCO begins dropping smaller steel down boring to collect samples + tag clay

[01/24/23]

0015 - samples pulled, clay tagged @ 84 ft bgs

0020 - AARCO advances CMT-07 boring to 84

0030 - AARCO retrieves mats for CMT-07

0100 - AARCO begins installing CMT-07

0320 - all steel out of boring, additional drums required, William C. offsite to get drums

0330 - Geoprobe moved to trailer

0340 - begin cleaning up work area

Scale: 1 square = _____

Headset RSO (152140) 01/24/23

0420 - set well CMT-07 in concrete, continue cleaning up work area

0500 - finish cleaning, AARCO offsite

0505 - EA walks to all points and marks w/ GPS

0515 - EA exits building + awaits arrival of super to discuss today's work + show work area

0540 - EA approached by security guard onsite, told we cannot be onsite from 6 am - 6:45 am, EA offsite.

01/24/23

Scale: 1 square = _____

Rite in the Rain

Heatset RSO (152140) 01/24/23

Weather: 38 F, cloudy

Personnel: L. Backman-Lowe, E. Ashton

Objective: classify SB-09 (CMT-09), tag clay layer depth

~~1745~~ 1705 - E. Ashton onsite

~~0545~~ ~~0610~~ 1810 - AARCO onsite, begin decontaminating drill steel w/ potable H_2O + Alx mix and potable H_2O rinse

1850 - L. Backman-Lowe onsite, H+S meeting

~~0655~~ 1895 - calibrate PID (RKI GX-6000)

~~0705~~ 1905 - EA moves equipment into warehouse

~~0710~~ 1910 - EA gauges CMT-07 ports,

~~0720~~ 1920 - AARCO begins moving equipment into warehouse

~~0800~~ 2000 - AARCO moves Geoprobe 8140LC over hole

~~0805~~ 2005 - EA sets up soil boring log station

~~0815~~ 2015 - 15 min downtime waiting until 2030 to begin work

2030 - AARCO begins cutting concrete @ CMT-09 boring location

2050 - AARCO begins hand-clearing boring to 5' bgs

2100 - large rock encountered in boring, EA instructs AARCO to bust through and remove rock w/ Geoprobe

Scale: 1 square = _____

Heatset (RSO) (152140) 01/24/23

2115 - Geoprobe gets through obstacle, reveals double concrete floor

2120 - AARCO preps to begin collecting borings in 5' intervals w/ Geoprobe

2125 - AARCO begins advancing CMT-09 boring

2145 - boring (CMT-09) advanced to 25' bgs

2150 - PID reading recorded in breathing zone 0.0 ppm

2225 - boring (CMT-09) advanced to 50' bgs

2340 - PID reading recorded in breathing zone 0.0 ppm

2355 - PID reading recorded in breathing zone 0.0 ppm

0125 - boring (CMT-09) advanced to 75' bgs

0140 - boring (CMT-09) advanced to 85' bgs

0150 - PID reading recorded near borehole 0.1 ppm

0220 - SB-09 (CMT-09) boring log complete, clay encountered @ 81.5 ft bgs

Scale: 1 square = _____

Rite in the Rain

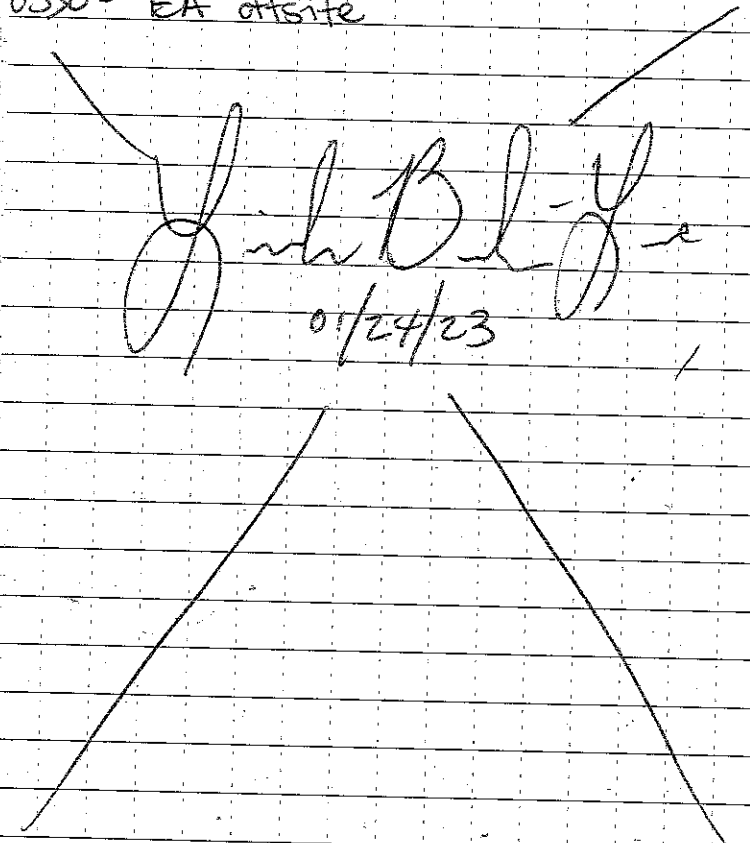
HEATSET RSO (152140) 01/25/23

0225 - AARCO leaves 5.5" steel casing in boring, for well install in next work session

0230 - AARCO begins cleaning up work area

0300 - AARCO finishes cleaning work area, AARCO offsite

0330 - EA offsite



Scale: 1 square = _____

Heatset RSO (152140) 01/25/23

Weather: 42F, rain

Personnel: L. Backman-Love

Objective: install CMT-09, start boring @ CMT-05

1830 - EA onsite

1840 - calibrate RKI GX-6000 PID

1850 - discuss SOW + work areas w/ warehouse foreman

1855 - AARCO lead driller calls to inform EA of potential tardiness - well construction took longer than planned

1940 - call w/ EA PM to discuss SOW for today

1945 - AARCO onsite, begin decontaminating equipment

2025 - ~~and~~ loading supplies into warehouse, H+S meeting

2055 - AARCO sets Geoprobe 8140LC on CMT-09 location, prepares to install well

2120 - AARCO begins installing CMT-09 well

2150 - PID reading recorded @ breathing zone 0.0 ppm

2255 - AARCO finishes backfilling well

Scale: 1 square = _____

Rite in the Rain

Heatset RSO (152140) 01/25/23

2255 - AARCO moves Geoprobe 8140LC outside to decontaminate drill steel, begins constructing well pad + surface casing for CMT-09 well

2320 - AARCO finishes constructing concrete pad + outer casing for CMT-09 well

2325 - AARCO moves equipment to CMT-05 location, cuts concrete and prepares to bore hole

2335 - AARCO begins advancing boring @ CMT-05 location

0000
~~2400~~ - PID reading recorded @ breathing zone 0.0 ppm

0005
~~2405~~ - boring advanced to 20 ft bgs (CMT-05)

0020 - CMT-05 boring advanced to 40 ft bgs

0030 - drill rig downtime to allow for water tank to re-fill

0045 - CMT-05 boring advancement resumes

0100 - CMT-05 boring advanced to 60 ft bgs

0105 - PID reading recorded @ breathing zone 0.0 ppm

Scale: 1 square = _____

Heatset RSO (152140) 01/26/23

0110 - drill rig downtime to re-fill water tank

0135 - CMT-05 boring advanced to 80 ft bgs

0135 - AARCO begins cleaning up work area, cannot proceed w/ well install due to shortage of Bentonite chips, will resume w/ well install @ next work session

0200 - AARCO finishes cleaning work area + packing up equipment, EA discusses SOW for Thurs + Fri work sessions w/ AARCO drillers

0210 - AARCO offsite

0230 - EA offsite

01/26/23

Scale: 1 square = _____

HEATSET RSO (152140) 01/26/23

Weather: 40 F, clear
Personnel: L. Backman-Lowe
Objective: install CMTs -05 and -06
1825 - EA onsite, label drums
1845 - Calibrate RKI GX-6000 PID
1855 - enter warehouse to discuss today's SOW w/ warehouse foreman
1900 - AARCO onsite, H+S meeting
1930 - AARCO notifies EA that they have to return to shop to gather well assembly materials, AARCO offsite
1945 - EA begins gauging newly constructed CMT-09
2015 - AARCO back onsite to assemble CMT-05 well
2045 - AARCO finishes constructing well, prepares to install @ CMT-05 location
2140 - AARCO advances CMT-05 borehole to 85 ft bgs
2145 - AARCO begins installing CMT-05 well + backfilling
2150 - PID reading recorded @ breathing zone 0.0 ppm

Scale: 1 square = _____

Heatset RSO (152140) 01/26/23

2230 - PID reading recorded @ breathing zone 0.2 ppm
2300 - PID recording recorded @ breathing zone 0.0 ppm
2315 - AARCO moves drill rig off of CMT-05 location, takes drill steel outside to decon, begins constructing concrete pad + casing
2330 - AARCO hangs poly sheeting along sides of aisle to protect pallets from dust + water, AARCO cuts through concrete pad w/ saw + preps hole for drilling @ CMT-06 location
2345 - AARCO begins advancing CMT-06 boring
2350 - PID reading taken @ breathing zone 2.2 ppm, likely elevated due to saw, odor like exhaust from 2-stroke motor
0000 - AARCO advances CMT-06 boring to 20' bgs
0010 - drill rig downtime to fill water tank

Scale: 1 square = _____

HEATSET (RSO) (152140) 01/27/23

0025 - AARCO resumes advancement of CMT-06 boring

0045 ~~0445~~ - CMT-06 boring advanced to 40' bgs

0105 - PID reading taken @ breathing zone 0.0 ppm

0130 - CMT-B6 boring advanced to 60' bgs, drill rig downtime to allow for water tank to re-fill

0205 - CMT boring advanced to 80' bgs, PID reading recorded @ breathing zone 0.3 ppm

0220 - AARCO begins cleaning up work area around CMT-06, leaves drill steel in boring.

0240 - AARCO finishes cleaning work area, moves Geoprobe 8140LC to staging area + packs up equipment

0250 - discuss tomorrow's sow w/ AARCO + building security

0300 - AARCO offsite

0330 - EA offsite

01/27/23

Scale: 1 square =

Heatset RSO (152140) 01/27/23

Weather; 36 F, clear

Personnel; L. Backman-Lowe

Objective; Install CMT-06+02 wells

1930 - EA + AARCO onsite, AARCO begins loading up materials

1950 - building security arrives onsite to let EA + AARCO into building

2000 ~~08~~ - EA calibrates PID, AARCO begins moving equipment into warehouse, EA hosts H+S meeting

2030 - AARCO sets up all equipment @ CMT-06 location, begins installing CMT-06 well

2035 - EA gauges newly installed CMT-05.

2055 - AARCO advances CMT-06 boring to 84' bgs

2100 - AARCO begins installing CMT-06 well + backfilling boring

2130 - PID reading recorded @ breathing zone 0.2 ppm

2200 - PID reading recorded @ breathing zone 0.0 ppm

2210 - AARCO finishes backfilling CMT-06 well, begins cleaning work area

Scale: 1 square =

Rite in the Rain

Heatset RSO (152140) 01/27/23

2220 - AARCO moves Geoprobe 8140LC to CMT-02 location, begins constructing concrete well pad and casing

2235 - AARCO cuts through concrete slab w/ saw @ CMT-02 location

2245 - AARCO uses drill bit to break through concrete slab

2300 - AARCO begins advancing CMT-02 boring

2320 - CMT-02 boring advanced to 20' bgs

2325 - PID reading recorded @ breathing zone 0.1 ppm

2330 - AARCO gets additional ~~we~~ drums to containerize IDW, drill rig downtime from 2325 - 2340

2345 - CMT-02 boring advanced to 40' bgs, drill rig downtime from 2350 - 0005 for filling water tank + getting additional IDW drums.

0015 - drill rig down time, allow for water tank to re-fill

0025 - AARCO continues drilling,

0030 - CMT-02 boring advanced to 60' bgs

Scale: 1 square = ____

Heatset RSO (152140) 01/28/23

0035 - drill rig downtime to allow for water tank to re-fill

0045 - AARCO continues drilling

0105 - CMT-02 boring advanced to 80' bgs

0110 - CMT-02 boring advanced to 85' bgs

0120 - AARCO begins installing CMT-02 well + backfilling hole

0200 - PID reading recorded @ breathing zone 0.0 ppm

0235 - AARCO finishes backfilling CMT-02 boring, begins cleaning up work area

0250 - AARCO begins constructing concrete well pad + moving equipment to staging area

0315 - AARCO finishes constructing well pad @ CMT-02 location

0325 - EA discusses SOW w/ AARCO

0330 - AARCO offsite

0330 - Backman-Lowe remains onsite to help transition day crew into drilling outdoors

Scale: 1 square = ____

01/28/23

HEATSET (RSO) (152140) 01/28/23

0555 EA personnel onsite (H. young)
0605 AARCO arrives, mentions limited bags of bentonite. Call Joe V. on what to do next.
0615 Mob into building to sign in with gaurd.
0645 AARCO set up rig at CMT-08 location. EA calibrates PID.
0738 EA sets up soil boring log station
0741 AARCO begins cutting concrete @ CMT-08 boring location
0750 AARCO begins hand clearing boring to 5' bgs.
0815 AARCO encounters pipe ~4' bgs. Stop hand clearing and begin cutting concrete after outstepping ~3 Ft.
0830 AARCO begins hand clearing boring to 5' bgs.
0843 AARCO preps to begin collecting borings in 5' intervals. w Geoprobe
0850 AARCO begins advancing CMT-08 boring.
0910 Boring advanced to 25' bgs.

Scale: 1 square = _____

HEATSET (RSO) (152140) 1/28/23

0913 AARCO encounter issue with rig — paros to fix issue ~10 min.
0915 PID reading of breathing zone: 2.2 ppm
1020 Boring (CMT-08) advanced to 50' bgs.
1025 PID reading of breathing zone: 2.1 ppm.
1135 Boring (CMT-08) advanced to 65' bgs
1138 PID reading of breathing zone: 0.8 ppm
1140 AARCO break ~10 min
1152 AARCO resume.
1200 Boring (CMT-08) advanced to 75' bgs.
PID reading of breathing zone: 0.6 ppm.
Boring (CMT-08) advanced to
1246 85' bgs.
1248 PID reading of breathing zone: 0.6 ppm.
AARCO complete SB-08 (CMT-08). Off site to shop to construct well + grab lunch
1310

Scale: 1 square = _____

Rite in the Rain

Headset RSO (Mean 152140) 1/28/23

1535 AARCO back onsite.
1544 AARCO begins installing CMT-08 well.
1654 PID reading of breathing air: 0.0 ppm
1733 AARCO finish installing CMT-08, begin packing equipment.
1738 AARCO fills cement into holes cut for drilling.
1820 AARCO finish, wait for night crew to arrive.
1838 Night crew arrive + begin setting up equipment
1900 H.Young offsite

Haley Young 1/28/23

Scale: 1 square = _____

Headset RSO (152140) 01/28/23

Weather: 43 F, cloudy
Personnel: L. Backman-Lowe
Objective: install CMT-03 + CMT-04
~~0630~~ 1830 - EA onsite to relieve day crew, label drums
~~0650~~ 1850 - AARCO night crew onsite, begin loading equipment into warehouse., H+S meeting
~~0715~~ 1915 - EA begins gauging CMT-06 and CMT-02
~~0750~~ 1950 - AARCO sets Geoprobe 8140LC over CMT-03 hole
2010 - AARCO cuts through concrete slab w/ saw
2030 - AARCO begins advancing CMT-03 boring
2100 - AARCO advances CMT-03 boring to 20' bgs
2105 - PID reading recorded @ breathing zone 0.0 ppm
2115 - AARCO retrieves additional IDW drums
2125 - AARCO advances CMT-03 boring to 40' bgs
2130 - PID reading recorded @ breathing zone 0.4 ppm

Scale: 1 square = _____

Return to Rain

Heatset RSO (152140) 01/28/23

2200 - AARCO advances CMT-03 boring to 60' bgs

2210 - PID reading recorded @ breathing zone 0.2 ppm

2220 - AARCO advances CMT-03 boring to 80' bgs

2240 - AARCO advances CMT-03 boring to 83' bgs, begins installing CMT-03 well and backfilling boring w/ sand + bentonite

0015 - AARCO finishes installing + backfilling CMT-03 well, begins cleaning up work area and moving Geoprobe 6140C to CMT-04 location

0105 - AARCO begins constructing concrete well pad @ CMT-03 and cutting through concrete slab @ CMT-04 location

0110 - PID reading recorded @ breathing zone 0.0 ppm

0130 - AARCO begins advancing boring @ CMT-04

0145 - AARCO advances CMT-04 boring to 20' bgs

Scale: 1 square = _____

Heatset RSO (152140) 01/29/23

0205 - AARCO advances CMT-04 boring to 40' bgs

0215 - PID Reading recorded @ breathing zone, 0.7 ppm

0300 - AARCO advances CMT-04 boring to 60' bgs

0310 - PID reading recorded @ breathing zone 0.3 ppm

0335 - PID reading recorded @ breathing zone 0.4 ppm

0410 - AARCO advances boring to 85' bgs,

0415 - AARCO begins installing + backfilling CMT-04

0440 - PID reading recorded @ breathing zone 0.6 ppm

0520 - AARCO finishes installing well @ CMT-04 location, begins cleaning work area, de-mobilizing equipment

0530 - H. Young (EA) onsite to relieve L. Backman-Lowe

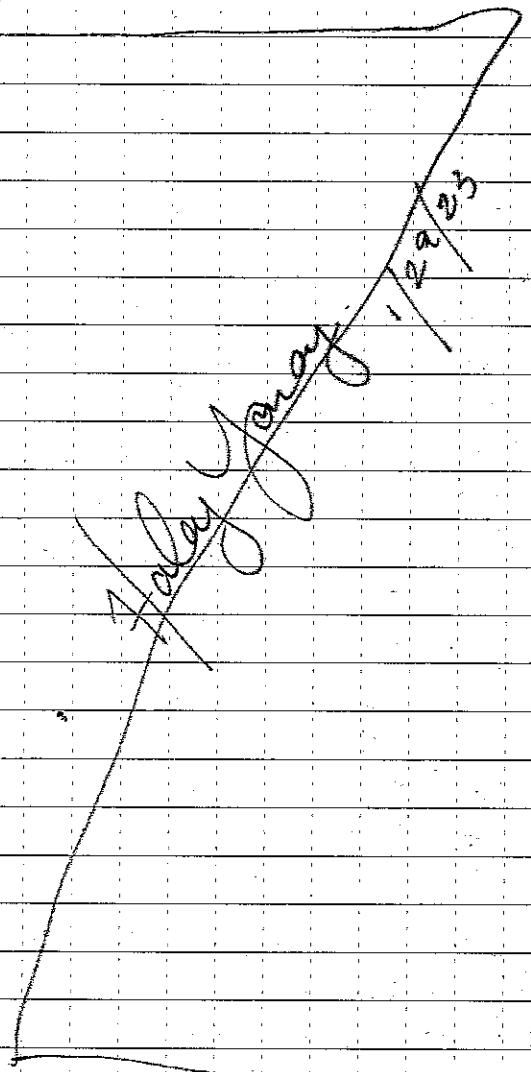
0624 AARCO offsite, EA (H. Young) continue to gauge new wells.

0652 Complete well gauging. Hob to IDW area for labeling.

Scale: 1 square = _____

Heatset RSO (152140) 1/29/23

0700 Check out with security gaurd. EA offsite.



Heatset RSO (152140) 01/31/23

WX:

1105 M. Gilkey & C. Badman (EA) onsite inspecting new drums

1115 H. Young (EA) onsite

1120 Label drums & Calibrate Honbas

1135 Cal MiniRAE 3000

1300 Check in w/ safety officer & get building access card

1313 Start purge of CMT-06-01 (shallow)
Is cloudy turbid water
0.6 ppm PID Reading
Port 2 is blocked (will develop)

1415 M. Gilkey (EA) locates CMT-07

	DTW	DTB	248.5 ppm
Port 1	68.60	69.50	
2	~~09.00~~	21.00	DRY
3	19.25	20.12	
4	19.20	52.54	
5	19.20	72.35	
6	19.20	81.80	
7	19:20	19.95	

1518 Start purge of CMT-07 Port 3

1535 Purged DRY

1535 Start purge of CMT-07 Port 4 (1/5)

1717 End purge of CMT-06 Port 3

~~Start purge of CMT-07 Port 4 (1/5)~~

Scale: 1 square = _____

Scale: 1 square = _____

National Heatset 01/31/23

NX:

15 33 End CMT-06 port 1

17 07 Small purge of CMT-07 port 4

15 20 Start purge of CMT-07 port 7
↳ Dry @ 1545

17 45 M. Gilkey, C. Badman, & H. Young (EA) offsite.

Mark Gilkey
01-31-23

Scale: 1 square = _____

National Heatset 02/01/23

WX: 27°F Snow (AM),

06 50 M. Gilkey, C. Badman & H. Young (EA) on site, M. Gilkey signs in w/ Sundial

07 00 bring in equipment to building

07 10 Calibrate Honbas
Cal PID

07 25 Start purge of CMT-06 Port 4

0745 Locate CMT-02 Gauge

	DTW	DTB	
Port 1	18.84	80.65	Deep
Port 2	→		blocked @ 50
Port 3	28.49	81.15	
Port 4	18.85	20.20	Shallow
Port 5	18.90	21.00?	→ blocked
Port 6	18.85	51.80	Int/Shallow
Port 7	18.90	51.95	Int/Deep

Start purge CMT-06 port 6
Run dry & recharge

0902 Start purge of CMT-06 port 7
↳ Deep interval

0911 Start purge of CMT-07 port 5
↳ Intermediate / Deep interval

09 53 End purge of CMT-06 port 7

10 01 End purge at CMT-07 port 5

10 07 Start purge at CMT-07 port 6
↳ DEEP interval

Scale: 1 square = _____

National Heatset 02/01/23

Wx: 31°F Cloudy (AM);

~~10 22~~ 10 15 Start purge of CMT-02 port 4
↳ Assumed shallow port
↳ Immediately went dry

10 25 Start purge of CMT-02 port 6
while troubleshooting port 4
↳ Assumed shallow/intermediate

10 40 Locate CMT-03; Gauge

	DTW	DTB	Assumed Int?
Port 1	18.96	~~20.20~~ 49.69 blocked?	
Port 2	18.97	69.30	Int/Deep
Port 3	18.95	79.63	Deep
Port 4	46.45	79.75	X
Port 5	51.19	79.80	X
Port 6	18.95	19.75	Shallow
Port 7	18.95	49.50	Int/shallow

11 10 End purge of CMT-02 port ~~5~~ 6
11 24 Start purge of CMT ~~02~~ again
11 54 End purge of CMT-02 port 4
12 03 Start purge of CMT-02 port 7
* 11 25 End purge of CMT-07 port 6
12 06 Start purge of CMT-03 port 6
↳ Assumed shallow interval
* Note: Channel Vol: 40mL/ft
30 mL/ft [Center]
12 30 CMT-03 Port 6 dry

Scale: 1 square = _____

National Heatset 02/01/23

Wx: 31°F Cloudy (PM)

12 31 Start purge of CMT-03 Port 7
↳ Assumed shallow/Intermediate
12 57 Locate CMT-05; Gauge (392.2 ppm)

	DTW	DTB	Interval?
Port 1	19.20	22.90	Shallow
Port 2	7.22	53.60	*Water rose as tape was lowered
Port 3	19.20	~~23.40~~ 73.40 ?	
Port 4	19.30	74.19	*Int/Deep
Port 5	19.30	83.30	
Port 6	19.40	83.30	
Port 7	19.40	~~33.0~~ blocked	Int/S

Odor when well cover opened
12 53 End purge of CMT-02 port 7
13 00 Start purge of CMT-02 port 1 (Deep)
13 30 End purge of CMT-02 port 1
14 00 Start purge of CMT-05 port 1 (Shallow)
14 42 Start purge of CMT-03 port 2
16 00 Locate CMT-04; Gauge

	DTW	DTB	Interval
Port 1	~~19.18~~ 19.18	83.0	DEEP
Port 2	17.86	83.40	X
Port 3	11.52	83.40	X
Port 4	18.89	20.92	SHALLOW
Port 5	19.15	53.30	
Port 6	19.15	63.59	Int/DEEP
Port 7	19.05	53.50	

Scale: 1 square = _____

National Heatset 02-01-23

WX 40°F Sunny (PM)

15 40 End purge of CMT-05 port 1

15 47 Start purge of CMT-05 port 7

16 27 End purge of CMT-03 port 2

16 42 Start purge of CMT-03 port 3

17 00 Locate & CMT-08

	DTW	DTB	Fish Tape
Port 1	16.28	~~22.20~~	81
Port 2	16.28	20.20	Shallow
Port 3	16.20	~~20.40~~ 50	Int/S
Port 4	16.25	~~57.05~~ 71	Int/D
Port 5	16.38	~~70.70~~ 79	Deep
Port 6	16.45	79.20	80
Port 7	16.42	79.95	80

No # Ring on well (Lined 1/2 up w/ North & labeled Plastic Pipe

17 27 End purge of CMT-03 port 3

↳ pump having issues would ø start, noise but rollers & moving

17 47 End purge of CMT-05 port 7

17 50 Dump purge water & sign out

18 00 M. Gilkey, H. Young, & C. Badman (EA) offsite

Morgan Gilkey 02-02-23

Scale: 1 square = _____

National Heatset 02/02/23

WX: 27°F Sunny (AM)

06 20 M. Gilkey & C. Badman (EA) onsite

06 30 Calibrate Horiba

06 56 Start purge of CMT-05 port 3

↳ Assume Int/Deep

Outstanding ports for Today

CMT-04 (ALL)

CMT-09 (ALL)

CMT-08 (ALL)

CMT-05 = port 5? (Deep) ✓

CMT-03 = port 7? (Int/Shallow)

8 26 End CMT-05 port 3

08 31 Start purge of CMT-05 port 5

↳ Assumed Deep well (2.56 L)

10 32 End purge of CMT-05 port 5

10 40 Start purge of CMT-03 port 7

↳ Assumed Intermediate/Shallow

12 20 C. Badman (EA) offsite to switch out peristaltic pumps @ Pine

13 02 End purge of CMT-03 port 7

Turbidity High but stable

13 15 C. Badman (EA) onsite w/ new Horiba

13 20 Start purge of CMT-04 port 4

↳ Assumed Shallow Interval

Scale: 1 square = _____

Rite in the Rain

National Headset 02/02/23

Wx 37°F Sunny (PM);

1347 End purge of CMT-04 (DRY)

1500 Gauge CMT-09

	DTW	DTB	Interval
Port 1	19.16	~~37.20~~	blockage @ 80
Port 2	19.38	51.10	
Port 3	19.38	50.50	Shallow/Int
Port 4	19.38	20.50	Shallow
Port 5	19.38	80.50	
Port 6	19.38	90.50	
Port 7	19.38	51.05	

1352 Start purge of CMT-04-05
↳ Assumed Shallow/Inter

1543 End purge of CMT-04-05

1533 Start purge of CMT-09-04
↳ Assumed Shallow Interval

1546 Start purge of CMT-04 port 6
↳ Assume Intermediate/Deep

16 34 Stoped pumping CMT-09 port 4 so warehouse could access truck bay safely

1533 Began pumping CMT-09 port 4

1753 Stopped purging CMT-04 port 6

1824 End purge of CMT-09 port ~~4~~ 7

~~08~~ 20 Dumped purge water in drums

~~08~~ 30 Signed out & EA offsite

Scale: 1 square = _____

National Headset 02/03/23

Wx: 27°F Wind (19mph SE) (AM-PM)

0615 M. Gilkey & C. Badman (EA) onsite

0620 M. Gilkey signs in w/ Sundial

0630 Cali Honiboas

0636 Start purge of CMT-04-01
↳ Assumed deep interval

0053 Start purge of CMT-09 port 3
↳ Assume Intermediate-Shallow

0804 End purge of CMT-09 port 3

0810 Start purge of CMT-09 port 2
↳ Assumed Intermediate-Deep

0837 End purge of CMT-04 port 01

0839 Start purge of CMT-04 port 4
↳ Shallow interval that went dry last night

0904 End purge of CMT-04 port 4 (DRY)

0905 End purge of CMT-09 port 2

0908 Start purge of CMT-09 port 1
↳ Assumed DEEP interval

0950 Start purge of CMT-08 02
↳ Assumed Shallow Interval

1040 End purge of CMT-09 port 1

1149 Start purge of CMT-08 port 4
↳ Assumed Intermediate Deep

1156 End purge of CMT-08 port 2

1296 Start purge of CMT-08 port 5
↳ Assumed Deep Interval

Scale: 1 square = _____

National Heatset 02/03

WX: 27°F 19mph SE Sunny (PM)

13 58 End purge of CMT-08-05

14 00 ~~Bob~~ MG Got permission from PM to head offsite & finish development of wells the following week

14 30 Secure & label drums (83 full drums onsite)

14 45 M. Gilkey & C. Badnau (EA) ~~offsite~~ sign out

15 00 EA offsite

Monica Gilkey
02-03-23

Scale: 1 square = _____

National Heatset 02.08.23

WX - 53°F Sunny (AM)

10 45 M. Gilkey & H. Bedell (EA) onsite

10 55 Start purge of CMT-08 port 3
↳ Assume shallow intermediate

11 05 CMT-08 port 3 dry
1el port Recharge 15 mins

11 20 Start purge again / port ran dry after ~10 mins

11 30 Label drums & dump water

11 45 M. Gilkey & H. Bedell (EA) offsite

Monica Gilkey
02.08.23

Scale: 1 square = _____

Rite in the Rain

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National Heatset Printing (152140) 03/20/23

WX: 28°F ; Sunny ; 5 mph WNW (AM)

07 00 M. Gilkey, L. Backman-Lowe, H. Young & K. Cassidy Onsite

07 15 Calibrate PIDs

07 30 Split up to gauge Offsite & Onsite wells

MW-7 located → flooded & J-plug

MW-2AD located → opened Filled w/ benotite → cap unable to be opened

11 00 All EA members back @ offsite location

Calibrate Horibas

11 35 ~~DDC-5PD~~ DDC-5PS start purge

11 33 DDC-5PD start purge

11 41 DDC-6PS start purge

11 47 DDC-6PD start purge

12 02 sample DDC-5PS & DDC-5PD for VOCs

12 15 sample DDC-6D for VOCs

12 20 Sample DDC-6PS for VOCs

12 48 start purge of MW-3D (offsite)

12 56 start purge of MW-3S (offsite)

13 09 start purge of DDC-7PS

13 10 start purge of DDC-8PS

1324 Sample MW-3S (offsite) for VOCs

1326 Sample MW-3D (offsite) for VOCs

1331 Sample DDC-8PS for VOCs

1339 Sample DDC-7PS for VOCs

Scale: 1 square = _____

National Heatset Printing 03/20/23

WX: 28°F, Sunny; 19 mph SE (PM)

1358 Start purge of DDC-8PD

1401 Start purge of DDC-7PD

1414 Start purge of MW-2S (offsite)

1415 H. Young & K. Cassidy (EA) offsite

1431 Sample DDC-7PD for VOCs

1437 Sample DDC-8PD for VOCs

1440 H. Young & K. Cassidy (EA) onsite

1441 Start purge of MW-2D (offsite)

1455 Sample MW-2S (offsite) & Dup for VOCs

1505 Start purge of ~~FB~~ MS/MSD DDC-9PD

1506 Start purge of DDC-9PS

1515 Sample MW-2D (offsite) for VOCs

1535 Sample DDC-9PD for VOCs

1530 Interaction w/ property owner → Said water came out of her furnace when we sampled DDC-7; informed her we are operating on water line

1536 Sample DDC-9PS for VOCs (MS/MSD)

1545 M. Gilkey (EA) offsite to Pine Env.

1603 Start purge of MW-1D (offsite)

1610 Start purge of MW-1S (offsite)

1612 Start purge of DDC-10PS & DDC-10PD

1645 Sample DDC-10PS & DDC-10PD for VOCs

1652 Sample MW-1D (offsite) for VOCs

1655 Sample MW-1S (offsite) for VOCs

Scale: 1 square = _____

Rite in the Rain

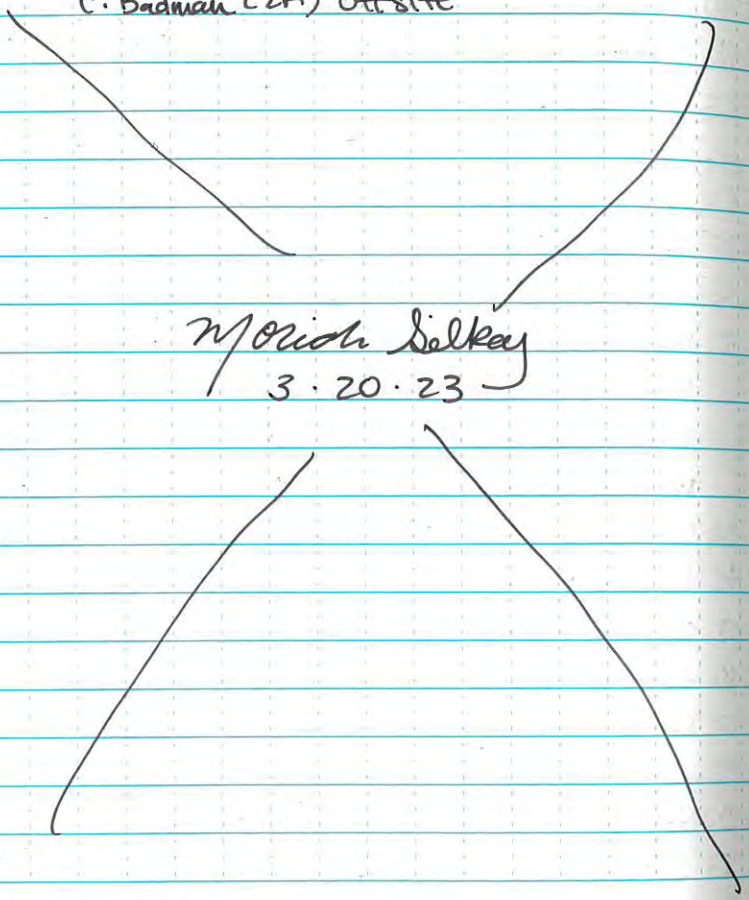
National Heatset Printing 03/20/23

WX: 46°F; sunny; 5mph (PM)

1700 L. Backman-Lowe, K. Cassidy, H. Young, & C. Badman (EA) store equip & samples in offsite trailers

1710 M. Gilkey (EA) arrives @ offsite location; locked trailers & gate

1720 M. Gilkey, L. Backman-Lowe, H. Young, K. Cassidy, C. Badman (EA) offsite



Scale: 1 square = _____

National Heatset Printing 03/21/23

WX: 36°F; sunny; 6mph (AM)

0650 M. Gilkey, L. Backman-Lowe, H. Young, J. Fountaine, C. Badman, K. Cassidy (EA) onsite @ offsite location

Calibrate Horibas

0720 Load up Equipment into trucks

0734 Start purge of MW-14D

0734 Start purge of MW-14S

0750 Start purge of MW-1D(onsite)

0800 Set up GW treatment of purge water on two 55 drums; Start pump 1

Start pump 2; Rate 1 = 0.5 Rate 2 = 0.6

845 M. Gilkey (EA) offsite for supplies & ice

807 Sample MW-14S for VOCs

Sample MW-

753 Start purge of MW-1S(onsite)

820 Sample MW-1S(onsite) for VOCs

837 Sample MW-1D(onsite) for VOCs

843 Sample MW-14D for VOCs

903 Start purge of ~~MW-~~ DDC-4PS

905 Start purge of DDC-4PD

925 Start purge of MW-3S(onsite)

931 Sample DDC-4S for VOCs

933 Start purge of MW-2S(onsite)

935 Sample DDC-4D for VOCs

945 M. Gilkey (EA) onsite

Scale: 1 square = _____

Rite in the Rain

National Headset Printing (152140) 3/21/23

WX: 35°F; Sunny; 3mph WNW (AM)

0953 Start purge of MW-15S

1000 M. Gilkey opened MW-2AD w/ drill & gauged well

1005 Sample MW-3S (onsite) for VOCs

1006 Sample MW-2S (onsite) for VOCs (MS/MSD)

0958 Start purge of MW-15D

1024 Sample MW-15S for VOCs

1025 Start purge of MW-3D (onsite)

1043 Sample MW-15D for VOCs

1048 Start purge of MW-2D (onsite)

1055 Sample MW-3D (onsite) for VOCs

1100 Drillers lube plugged filter on carbon bucket; removed filter & decon'd w/ rags, AlX, & DI water before replacing

1105 Start purge of DDC-2PD

1106 Start purge of DDC-2PS

1110 Sample MW-2D (onsite) for VOCs

1119 Start purge of MW-5D

1135 Sample DDC-2PD for VOCs

1140 Start purge of MW-5S

1142 Sample DDC-2PS for VOCs

1154 Sample MW-5D for VOCs

1203 Start purge of MW-2A

1208 Start purge of MW-2AD

1210 Sample MW-5S for VOCs

Scale: 1 square = _____

WX: 57°F; Sun & Clear; 17 mph SSW (PM)

1236 Sample MW-2A for VOCs (FD-02)

1251 Sample MW-2AD for VOCs

1323 Start purge of CMT-10 port 3 (Shallow)

1400 Sample CMT-10 port 3 for VOCs

↳ No DTW is recorded during purge of CMT wells due to port diameter

1402 Start purge of CMT-10 port 2 (Int/Shallow)

1420 Start purge of CMT-01 port 5 (Shallow)

1450 Sample CMT-01 port 5 (Shallow) for VOCs

1452 Start purge of CMT-01 port 6 (Int/Shallow)

1452 Sample CMT-10 port 2 (Int/Shallow) for VOCs

1510 Start purge of CMT-10 port 1 (Int/Deep)

1519 Sample CMT-8 port 3 for VOCs (port ran dry) ~~(Shallow)~~ Int/Shallow

~~1426~~ Start purge of CMT-8 port 2 (Shallow)

~~1430~~ 1420 sample CMT-8 port 2 (Shallow)

1528 Sample CMT-01 port 6 (Int/Shallow)

1535 Start purge of CMT-01 port 1 (Int/Deep)

1550 Sample CMT-10 port 1 (Int/Deep) for VOCs

1547 Start purge of CMT-8 port 4 (Int/Deep)

1603 Sample CMT-01 port 1 (Int/Deep) for VOCs

1751 sample MT-8 port 4 for VOCs

1600 Gain Access & Sign in w/ sundial & locate CMT wells

Scale: 1 square = _____

Rite in the Rain

National Heatset Printing (152140) 3.21.23

WX: 57°F; Sun & Clear; 17 mph SSW (AM)

1643 Sample CMT-5 port 1 for VOCs
↳ Sample collected first due to port going dry during development

1728 End purge of CMT-5 port 1

1705 Collect Sample for CMT-06 port 1
↳ purge end @ ~~1705~~ 1735

1730 Sign out w/ Sundial; Secure drums

1800 Arrive @ offsite system & store equipment & trash in system

1830 M. Gilkey, L. Backman-Lowe, K. Cassidy H. Young, C. Badman, & J. Fontaine (EA) offsite

Mark Gilkey
3.21.23

Scale: 1 square = _____

National Heatset Printing (152140) 3.22.23

WX: 38°F; Sun; 5mph SSW (AM)

0630 M. Gilkey (EA) arrived @ offsite system

0645 H. Young & K. Cassidy (EA) arrive @ offsite

0700 J. Fontaine (EA) arrives onsite and begins purging drums into carbon bucket

0650 L. Backman-Lowe & C. Badman (EA) arrives offsite
Calibrate Horibas

715 M. Gilkey (EA) signs in w/ Sundial & starts moving equipment into the building

727 Start purge of CMT-06 port 3 (Int/shallow)

727 Start purge of CMT-05 port 7 (Int/shallow)

746 Sample CMT-02 port 4 for VOCs after port is purged dry

0800 Sample CMT-5 port 7 for VOCs (Int/shallow)

0813 ~~Sample CMT-5~~ mg Start purge of CMT-05 port 3 (Int/Deep)

815 CMT-06 port 3 (Int/shallow) sampled ~~purge started~~

922 Start purge of CMT-02 port 6 (

~~828~~ Start purge of CMT-6 port 4 (Int/Deep)

858 Sample CMT-6 port 4 (Int/Deep) ΣVOCs

900 Sample CMT-2 port 6 for VOCs

911 Start purge CMT-2 port 7

922 Sample CMT-5 port 3 (Int/Deep) for VOCs

942 Start purge of CMT-5 port 5 (Deep)

Scale: 1 square = _____

Rite in the Rain

National Heatset Printing (152140) 3.22.23

WX: [38°F; Sun; 5mph (AM)]; [58°F; sun; 18mph SSW (PM)]

0943 Sample CMT-2 port 7 ( ) for VOCs

1000 Start purge of CMT-2 port 1

1001 Sample CMT-3 port 6 (shallow) as well was going dry (for VOCs)

1023 Start purge of CMT-3 port 7

1038 Sample CMT-2 port 1 (Deep) for VOCs & MNA parameters (MS/MSD)

1047 Sample CMT-5 port 5 (Deep) for VOCs & MNA

1102 Sample CMT-3 port 7 (Int/Shallow) [VOCs]

1134 Start purge of CMT-3 port 2 (Int/Deep)

1153 Start purge of CMT-06 port 7 (Deep)

1202 ~~Start~~ Sample CMT-3 port 2 for VOCs

1222 Start purge of CMT-3 port 3 (Deep)

1223 Sample CMT-6 port 7 (Deep) for VOCs & MNA

1254 Sample CMT-3 port 3 (Deep) for VOCs & MNA (FD-03 for VOCs)

1300 K. Cassidy (EA) offsite to Pine Env in Hicksville for batteries

1353 Start purge of CMT-7 port 3 (shallow)

1411 Start purge of CMT-8 port 5 (Deep)

1424 Sample CMT-7 port 3 (shallow) for VOCs

1439 Start purge of CMT-7 port 4 (shallow/Int)

1440 K. Cassidy (EA) onsite w/ batteries

1441 Sample CMT-08 port 5 for VOCs & MNA

Scale: 1 square = _____

National Heatset Printing (152140) 3.22.23

WX: 58°F; Sun & Clear; 18mph SSW (PM)

1432 Sample CMT-4 port 4 (shallow) for VOCs after well had gone dry during purge

1500 Start purge of CMT-4 port 5

1508 sample CMT-7 port 4 (Int/S) for VOCs

1538 Start purge of CMT-7 port 5 (Int/Deep)

1551 Sample CMT-4 port 5 for VOCs

1608 Sample CMT-7 port 5 (Int/Deep) for VOCs

1608 Start purge of CMT-4 port 6

1655 Sample CMT-4 port 6 for VOCs

1600 Start labeling & taking composite soil samples from IDW drums

1659 Start purge of CMT-09 port 4 (shallow)

1715 Finish composite samples of soil

1735 Sample CMT-09 port 4 for VOCs

1815 Sign out w/ sundial

1830 All arrive offsite & stash equipment & trash in system building

1845 M. Gilkay, L. Backman-Lowe, C. Badman, K. Cassidy, H. Young, J. Fontaine (EA) offsite.

Monica Gilkay
3.22.23

Scale: 1 square = _____

Rite in the Rain

National Heatset Printing (152140) 3.23.23

WX: 45°F; Cloudy; Light Rain; 3mph SSW (AM)

07 30 M. Gilkey & C. Badman (EA) arrive @ offsite

07 45 J. Fontaine (EA) arrive onsite & start pumping drum
H. Young & K. Cassidy (EA) arrive @ offsite
Calibrate Horibas

0815 Arrive onsite & sign in w/ sundial

08 23 Start purge of CMT-09 port 3 (Int/S)

09 00 start composite samples & labeling of water IDW drums

0905 Sample CMT-09 port 3 (~~Deep~~ Int/S) for VOCs

0919 start purge of CMT-09 port 2 (Int/Deep)

09 38 Tried to purge CMT-4 port 1 Deep pump would ∅ bring up water on strongest setting; pulled tubing & observed DNAPL in bottom of tubing; Ran RKI ~~@~~ down port 1 & in read 3072ppm Removed tubing & did ∅ sample

09 46 Sample CMT-09 port 2 for VOCs

09 58 Start purge of CMT-09 port 1 (Deep)

10 05 Start purge of CMT-7 port 6 (Deep)

10 25 Sample CMT-9 port 1 for VOCs & MNA

10 48 Sample CMT-7 port 6 for VOCs & MNA

11 17 Start purge of CMT-10 port 6 (Deep)

11 50 Start purge of CMT-1 port 2 (Deep)

11 53 Sample CMT-10 port 6 for VOCs & MNA

12 44 Sample CMT-1 port 2 for VOCs & MNA

Scale: 1 square = (FD-04 taken for VOCs)

National Heatset Printing (152140) 3.23.23

WX: 52°F; Light Rain → Sun; 14mph SSW (PM)

1300 Take all EA equipment out of sundial building

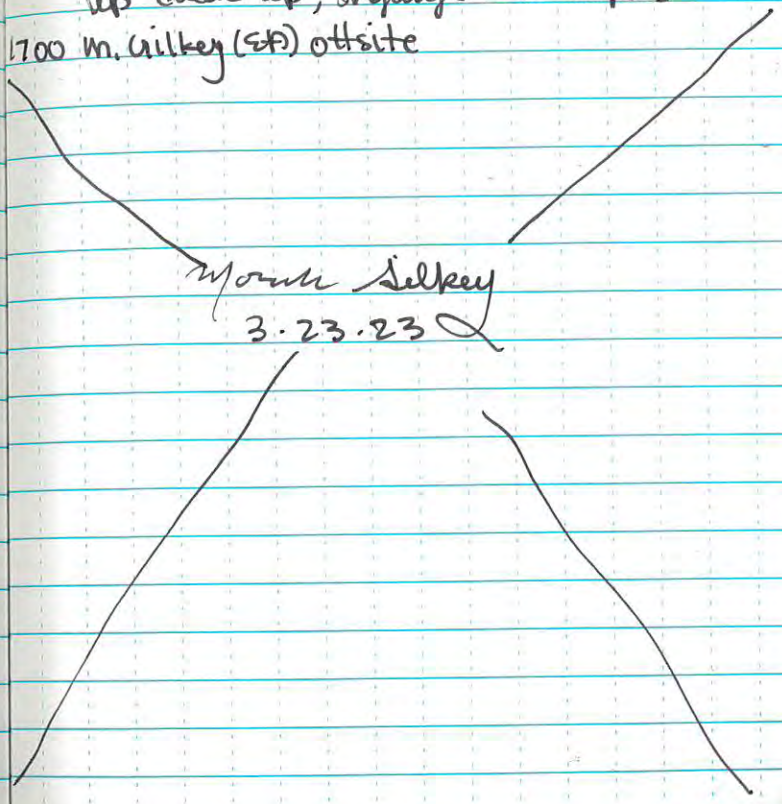
1430 H. Young & K. Cassidy (EA) offsite to ship MNA & TCLP samples

1445 J. Fontaine & C. Badman (EA) clean up drum area & offsite

1500 M. Gilkey (EA) signs out w/ sundial

1530 M. Gilkey arrive @ offsite location; look up clean up; organize VOC samples

1700 M. Gilkey (EA) offsite



Scale: 1 square =

Rite in the Rain

Appendix B

Daily Field Reports

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Daily Field Report
Heatset RSO
Monday June 27, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: 8 mph W
NYSDEC Site # 152140	**Weather (am)**: mid 60s, Overcast
Contract # D006129-07	**Weather (pm)**: mid 60s, Heavy Rain
Location: Babylon, New York	**Arrival time**: 0800
EA Staff: Patrick Gannon and Megan Miller	**Departure time**: 1620

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Road/vehicle awareness, being aware of forklifts operating in the area. General drill rig awareness.
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Mobilization/Hydraulic Profiling

EA mobilized to the site and began prepping the site for arrival of Hydraulic Profiling tool and Geoprobe arrival at the site. EA staff, coordinated with tenants and warehouse staff, to gain access into the building and, prepare the site for direct push activities. The goal for the week is to conduct Hydraulic profiling, and discrete sampling at four locations, to determine the screen interval for ten, onsite CMT wells.

- 0800 P. Gannon (EA) arrived onsite and meet with tenants and warehouse personnel, discussing the activities for the next five days.
- 0900 Calibration of the PID occurs and a blank is performed with the FROG 5000
- 0915 The Hydraulic Profiling tool arrives with Cascade
- 0945 The drill rig, and an auxiliary truck (Cascade) arrive on site.
- 1000 P.Gannon conducts a site walk with Cascade, through the warehouse discussing the location of HPT/CMT wells for the next three weeks.
- 1130 M. Miller arrives on site
- 1330 mobilize to location HPT-01
- 1334 begin Hydraulic profiling
- 1430 Brief lightning delay
- 1500 Resume HPT
- 1530 complete HPT-01, resistance at 72 bgs. Cascade breaks down for the day
- 1600 Cascade departs the site
- 1620 EA departs the site.

Daily Field Report
Heatset RSO
Tuesday June 28, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: Calm
NYSDEC Site # 152140	**Weather (am)**: mid 60s, Mostly Sunny
Contract # D006129-07	**Weather (pm)**: upper 70s, Mostly Sunny
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Patrick Gannon and Megan Miller	**Departure time**: 1810

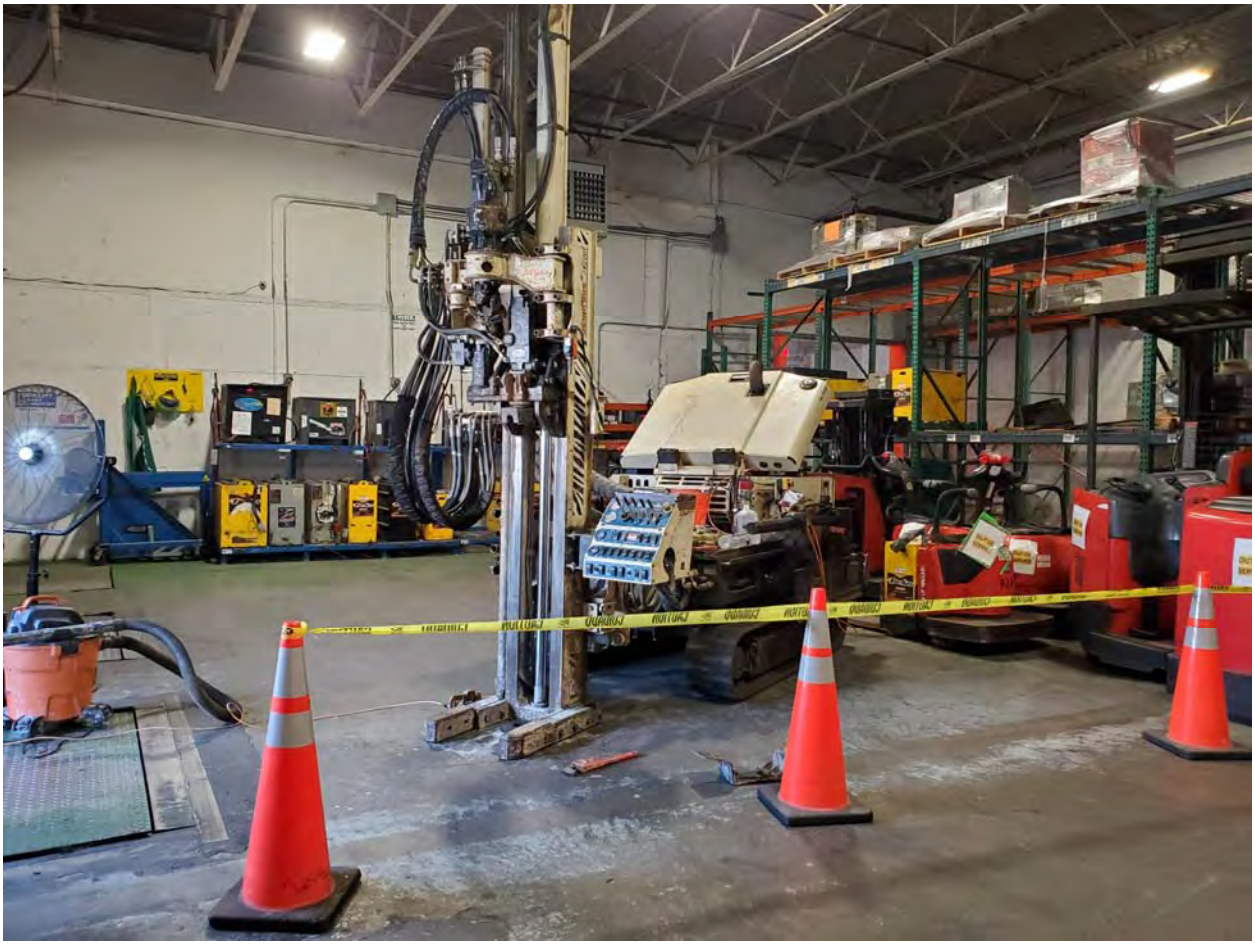
HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Warehouse awareness, noise protection
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Hydraulic Profiling

EA continued and completed the hydraulic profiling survey of the site. A total of three HPT's were conducted, HPT-09, HPT-05, and HPT-03. The goal for the rest of the week is to collect discrete samples of the aquifer, for FROG analysis and analytical analysis. Then EA will delineate screen intervals for CMT wells.

- 0700 P. Gannon and M. Miller (EA) arrived onsite and conduct health and safety meeting with Cascade.
- 0715 Mobilize to location HPT-09
- 0745 Begin coring concrete at HPT-09
- 0800 Concrete cored, 8-inch slab, begin HPT
- 0920 Refusal at 82.60 feet bgs, decide to prep Cascade HPT equipment for indoor use.
- 1100 mobilize to SPC-01, begin penetration, stop at 10 feet bgs
- 1130 No shipment of IDW drum, tubing, etc. Decide to complete HPT-05 and HPT-03 for remainder of the day. Return back tomorrow for SPC.
- 1138 Begin concrete coring at HPT-05
- 1300 Begin HPT at HPT-05
- 1330 M. Miller off-site
- 1345 HPT-09, like HPT-05, encounter more resistant layer at ~68 feet bgs-75 feet bgs
- 1400 Refusal at 83.00, presumed clay layer, begin breaking down and moving to HPT-03
- 1455 Begin coring concrete at HPT-03
- 1515 Begin HPT-03
- 1610 HPT-03 encounters resistant layer at 68 feet bgs-75 bgs.
- 1623 Refusal at 90.30
- 1625 Cascade starts to break down for the day, and plan for work tomorrow
- 1810 Cascade and EA off-site



HPT-09 in the southern loading bay area

Daily Field Report
Heatset RSO
Wednesday June 29, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: Calm
NYSDEC Site # 152140	**Weather (am)**: mid 60s, Mostly Sunny
Contract # D006129-07	**Weather (pm)**: upper 80s, Mostly Sunny
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Patrick Gannon	**Departure time**: 1730

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Warehouse awareness, high visibility in the warehouse
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Screen Point Coupler (SPC) Sampling

EA began collecting discrete samples of the aquifer across the site, beginning at 20 feet bgs, collecting every 10 feet, until refusal or 80 feet bgs. EA and Cascade conducted SPC-01 in the morning and SPC-03 in the afternoon/evening. SPC-01, was conducted adjacent to HPT-01, and SPC-03, was conducted adjacent HPT-03. All samples were analyzed by the FROG-5000 for Vinyl Chloride, *cis* 1,2-DCE, TCE, and PCE concentrations. Additionally, a Horiba was used to gain water quality parameters of each sample. The goal for the rest of the week is to collect SPC-05 and SPC-09 and repair any locations where soil borings were performed.

- 0645 P. Gannon (EA) arrived onsite
- 0700 Cascade arrived onsite, P.Gannon conducted health and safety meeting with Cascade.
- 0715 Mobilize to location SPC-01
- 0745 Begin SPC-01
- 0808 Sample collected for SPC-01-20
- 0841 Sample collected for SPC-01-30
- 0908 Sample collected for SPC-01-40
- 0945 Sample collected for SPC-01-50
- 1049 Sample collected for SPC-01-60
- 1142 Sample collected for SPC-01-70
- 1212 Breakdown at SPC-01, refusal at resistant layer did not allow for a sample at 80 feet bgs.
- 1400 Begin SPC-03
- 1409 Sample collected for SPC-03-20
- 1426 Sample collected for SPC-03-30
- 1456 Sample collected for SPC-03-40
- 1518 Sample collected for SPC-03-50
- 1553 Sample collected for SPC-03-60
- 1624 Sample collected for SPC-03-70

- 1704 Sample collected for SPC-03-80
- 1730 P.Gannon off-site to prep cooler, Cascade continues to Breakdown for the day
- 1830 P.Gannon tenders cooler at FedEx for Priority Overnight Delivery to Chemtech.

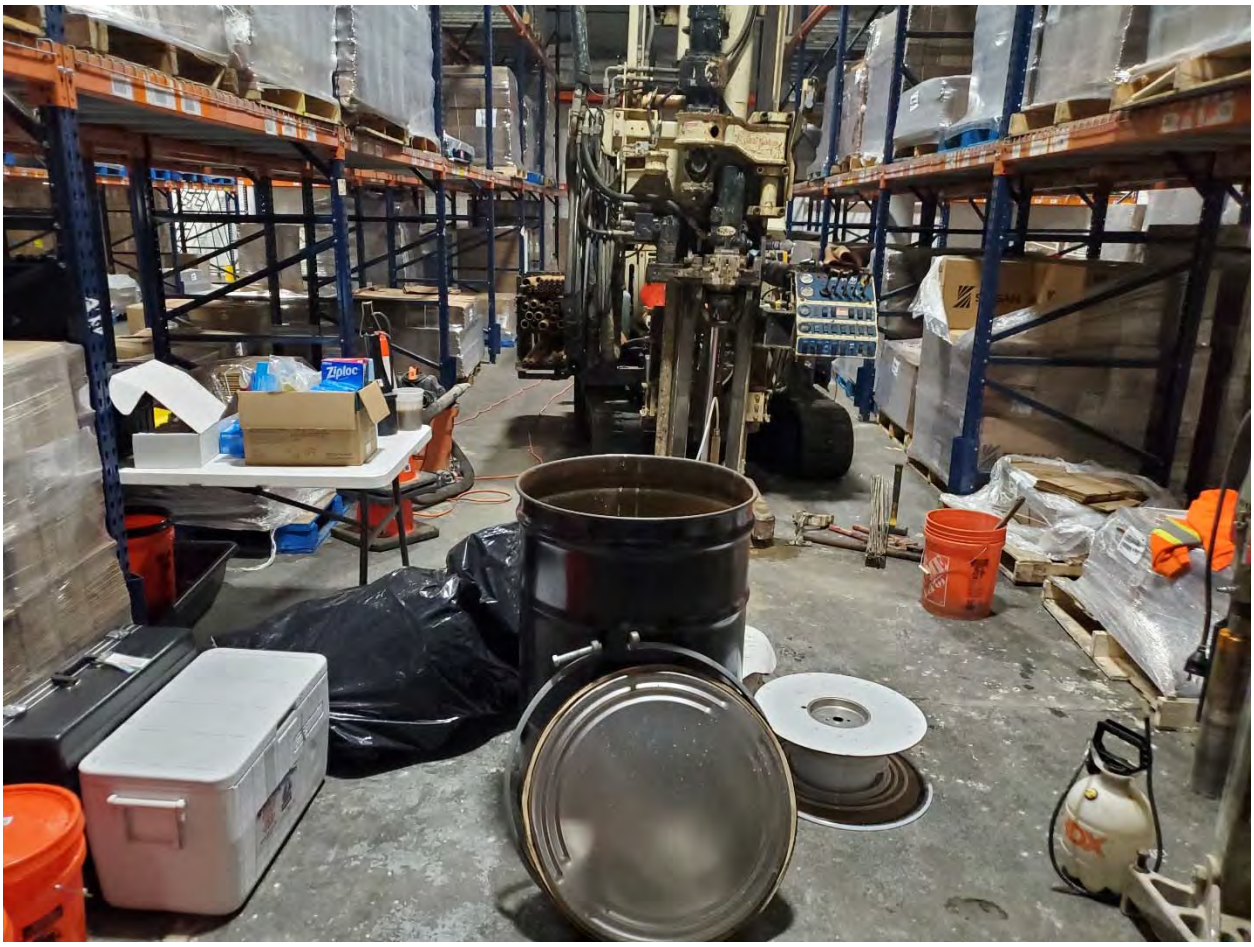
Photographs



SPC-01 Northern edge of the building



FROG-5000 set-up at SPC-01



SPC-03 Located next to HPT/CMT-03

Daily Field Report
Heatset RSO
Thursday June 30, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: Calm
NYSDEC Site # 152140	**Weather (am)**: mid 70s, Mostly Sunny
Contract # D006129-07	**Weather (pm)**: upper 80s, Sunny
Location: Babylon, New York	**Arrival time**: 0650
EA Staff: Patrick Gannon	**Departure time**: 1800

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Noise hazards / high visibility clothing
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Screen Point Coupler (SPC) Sampling

EA completed collection of discrete samples at SPC-05 in the morning and SPC-09 in the afternoon/evening. All samples were analyzed by the FROG-5000 for vinyl chloride, *cis* 1,2-DCE, TCE, and PCE concentrations. Additionally, a Horiba was used to gain water quality parameters of each sample.

EA and Cascade are off-site for the rest of the week. Work at the site will resume on Tuesday, July 5th with the goal of conducting soil borings and installing CMT-wells.

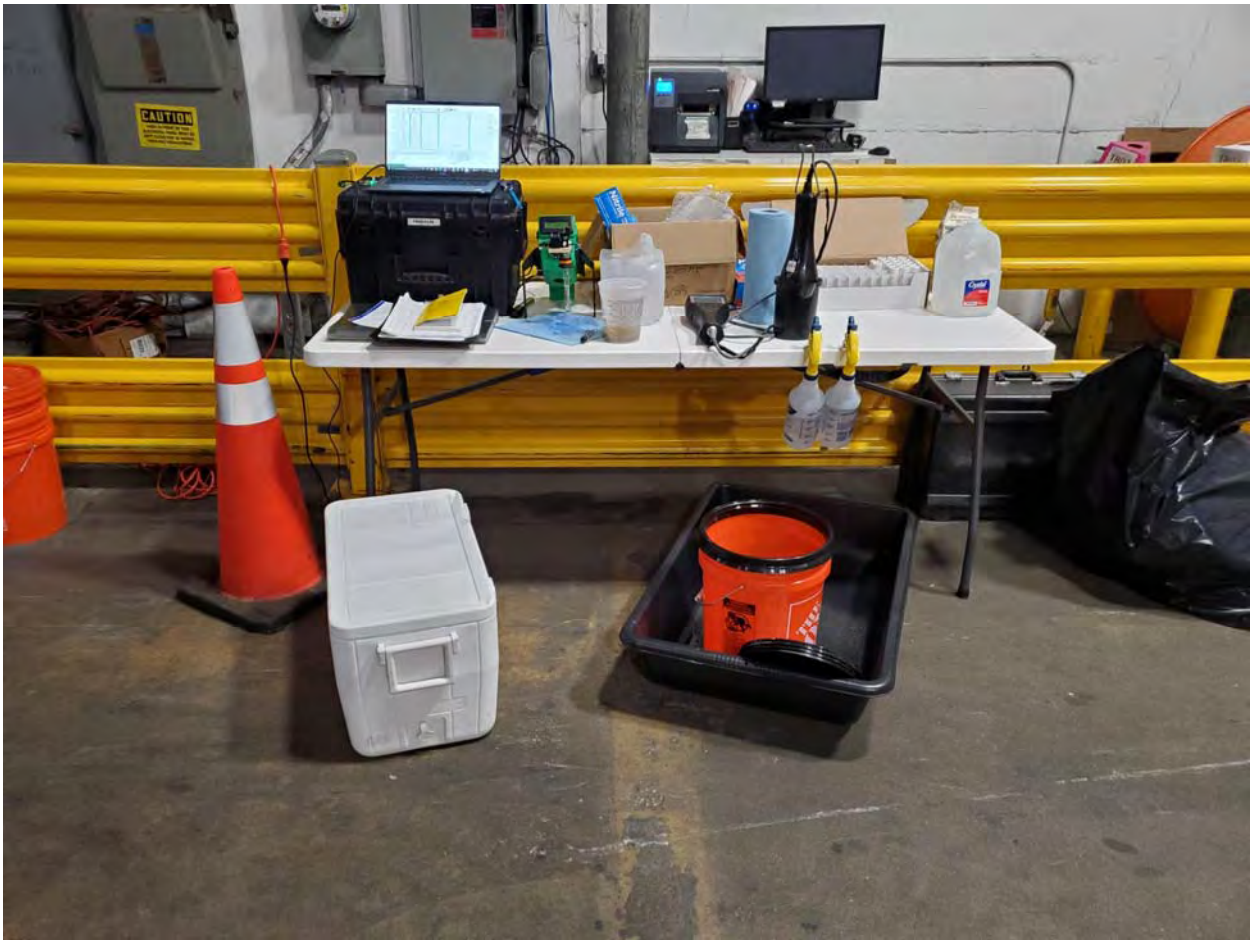
- 0650 P. Gannon (EA) arrived onsite
- 0700 Cascade arrived onsite, P. Gannon conducted health and safety meeting with Cascade.
- 0715 Mobilize to location SPC-05
- 0815 Begin SPC-05
- 0831 Sample collected for SPC-05-20
- 0849 Sample collected for SPC-05-30
- 0918 Sample collected for SPC-05-40
- 0952 Sample collected for SPC-05-50
- 1012 Sample collected for SPC-05-60
- 1049 Sample collected for SPC-05-70
- 1129 Sample collected for SPC-05-80, field duplicate (152140-SPC-95-80) as well, with time 11:11
- 1135 Cascade demobilizing from SPC-05
- 1315 Begin mobilization/prep for SPC-09
- 1340 Begin SPC-09
- 1354 Sample collected for SPC-09-20
- 1412 Sample collected for SPC-09-30
- 1438 Sample collected for SPC-09-40

- 1507 Sample collected for SPC-09-50, MS/MSD
- 1533 Sample collected for SPC-09-60
- 1616 Sample collected for SPC-09-70
- 1658 Sample collected for SPC-09-80
- 1700 Cascade breaks down for the day/weekend, P. Gannon packs cooler
- 1800 Cascade and P. Gannon offsite. P. Gannon to FedEx for shipment of cooler.

Photographs



SPC-09 Southeast loading bay



FROG-5000 set-up at SPC-09

Daily Field Report
Heatset RSO
Tuesday July 5, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: Calm
NYSDEC Site # 152140	**Weather (am)**: mid 70s, Mostly Sunny
Contract # D006129-07	**Weather (pm)**: mid 80s, Cloudy
Location: Babylon, New York	**Arrival time**: 0800
EA Staff: Patrick Gannon	**Departure time**: 1530

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Heat stress
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA mobilized to the site and completed one soil boring for the day. The goal for the week is to continue with soil borings for all ten locations, while installing CMT wells once well materials arrive.

- 0800 P. Gannon (EA) and Cascade arrived onsite
- 0850 Cascade mobilizes to SB-01 and begins to advance the geoprobe
- 1300 Cascade completes and restores SB-01, begins to demobilize back to the staging area
- 1420 Cascade leaves for lunch and to gather equipment at Home Depot to construct a better containment system of water and soil produced at the manifest during drilling activities.
- 1530 EA and Cascade off-site, plan to do two borings tomorrow and Thursday. Waiting on CMT well materials.

Photographs



SB-01: Soil boring interval 80-85 feet bgs (deeper sediment toward the bottom of the photo frame). There is a black layer of product present at ~84 feet bgs, sitting atop the garters clay unit.

Daily Field Report
Heatset RSO
Wednesday July 6, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: Calm
NYSDEC Site # 152140	**Weather (am)**: mid 70s, Mostly cloudy
Contract # D006129-07	**Weather (pm)**: mid 80s, Cloudy
Location: Babylon, New York	**Arrival time**: 0650
EA Staff: Patrick Gannon	**Departure time**: 1800

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Hardhats, ear protection, safe lifting.
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA continued soil borings for the day, with the directive to focus on delineating the DNAPL, found at SB-01 yesterday. Over the course of the day EA and Cascade completed soil boring SB-03, and began SB-01C. The goal for tomorrow is to complete SB-01C and complete SB-01A, SB-01 will be renamed SB-01B for consistency along the transect of the DNAPL.

- 0650 P. Gannon (EA) and Cascade arrived onsite
- 0710 Conduct health and safety meeting and discuss the plan for the day
- 0715 Mobilize to SB-03
- 0805 Begin at SB-03
- 1130 F. DeSantis (EA) and J. Von Uderitz (EA) arrive on site
- 1220 Cascade breaks for lunch stopping at 70-75 feet bgs
- 1310 Cascade resumes at SB-03
- 1430 Finish SB-03, No DNAPL present at the clay interface at 84 feet bgs, begin to break down and mobilize to SB-01C
- 1545 Set-up at SB-01C
- 1600 F. DeSantis and J. Von Uderitz off-site
- 1800 Stop at SB-01C for the day at 45 feet bgs. Plan to resume and complete the boring tomorrow AM
- 1810 P. Gannon (EA) and Cascade off site.

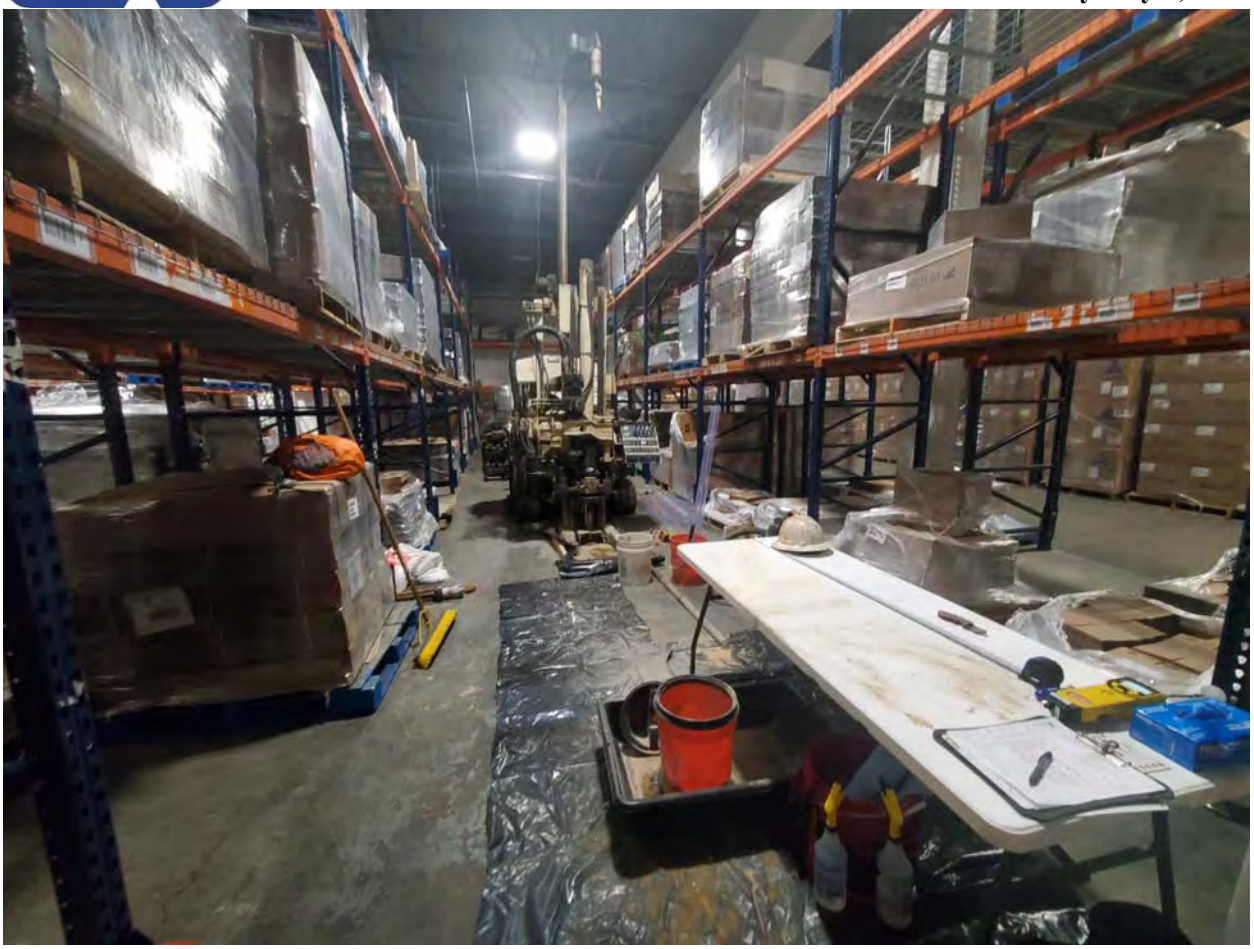
Photographs



SB-03: Soil boring interval 20-25 feet bgs (deeper sediment toward the bottom of the photo frame). Slight discoloration between 23 and 24 feet bgs, with sheen and smell of product.



SB-03: Containment system in-use to minimize spillage onto the warehouse floor.



SB-03: Set-up within the warehouse for soil borings and logging soil.

Daily Field Report
Heatset RSO
Thursday July 7, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: Calm
NYSDEC Site # 152140	**Weather (am)**: mid 70s, Mostly cloudy
Contract # D006129-07	**Weather (pm)**: mid 80s, Cloudy
Location: Babylon, New York	**Arrival time**: 0650
EA Staff: Patrick Gannon	**Departure time**: 1800

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Thunderstorm potential, heat stress
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA continued soil borings for the day, with the goal of continuing to delineate the DNAPL, north of the building. Over the course of the day EA and Cascade completed soil boring SB-01C, SPC water sampling at SPC-01C-84, and completed soil boring SB-01D. DNAPL was detected at 84 feet bgs at SB-01C and SB-01D. The goal for next week is to complete SB-01E, SB-01BN (18 feet north of SB-01B), and SB-01A. Additional soil borings may be warranted based on the presence/absence of DNAPL at the additional soil borings.

- 0650 P. Gannon (EA) and Cascade arrived onsite
- 0710 Conduct health and safety meeting and discuss the plan for the day
- 0715 Mobilize to SB-01C
- 0740 Resume SB-01C starting at interval 45-50 feet bgs
- 1040 Complete SB-01C, DNAPL present at clay interface at 84 feet bgs. Cascade breaks down and preps to do a SP water sample at 84 (screen interval of 86-82) feet bgs. DNAPL soil sample collected between 84.5 feet bgs-83.5 feet bgs
- 1200 Purge 8.6 gallons (three casing volumes), Cascade begins SB-01D
- 1258 sample at SPC-01C-84
- 1300 Cascade at 50 feet bgs at SB-01D
- 1601 Complete SB-01D, DNAPL present at 84 feet bgs, soil sample collected at 84.25-83.50 feet bgs. Cascade begins to break down for the weekend, and clean the site
- 1715 P. Gannon and Cascade offsite.

Photographs



SB-01C: Soil boring interval 80-85 feet bgs (deeper sediment toward the bottom of the photo frame). DNAPL present at 84 feet bgs, with sheen, staining, and smell of product.



SPC-01C-84: Purging/groundwater sampling set-up. Removing three casing volumes prior to sample.



SB-01D: Soil boring SB-01D in progress



SPC-01C-84: Purge water with sheen, approximately 6 gallons purged.



SB-01D: Soil boring interval 80-85 feet bgs (deeper sediment toward the bottom of the photo frame). DNAPL present at 84 feet bgs, with sheen, staining, and smell of product. Note: The acetate liner was stuck in the well casing and had to be poured out of the casing onto the table.



SB-01D: Close up of the DNAPL at soil boring SB-01D.

Daily Field Report
Heatset RSO
Monday July 11, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: Calm
NYSDEC Site # 152140	**Weather (am)**: mid 70s, Clear
Contract # D006129-07	**Weather (pm)**: mid 80s, Clear
Location: Babylon, New York	**Arrival time**: 0800
EA Staff: Patrick Gannon	**Departure time**: 1715

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Heat stress, biological hazards (Canadian Geese)
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings DNAPL Delineation

EA continued soil borings for the day, with the goal of continuing to delineate the DNAPL, north of the building. Over the course of the day EA and Cascade completed soil boring SB-01E, SPC water sampling at SPC-01D-84 and SPC-01E-84. DNAPL was identified at 84 feet bgs in SB-01E. The goal for the rest of the week is to complete SB-01F, SB-01BN (18 feet north of SB-01B), and SB-01A. Additional soil borings may be warranted based on the presence/absence of DNAPL at the additional soil borings. Once delineation of the DNAPL north of the building is complete, soil borings located within the building will be completed.

- 0800 P. Gannon (EA) arrived onsite
- 0825 Cascade arrived onsite
- 0800 P. Gannon (EA) and Cascade arrived onsite, conduct health and safety meeting and discuss the plan for the day
- 0905 Begin SPC sample for SPC-01D-84
- 0935 P. Gannon begins purging 8.6 gallons from SPC-01D-84, Cascade begins soil boring SB-01E
- 1107 Sample at SPC-01D
- 1305 P. Gannon (EA) logging soil for SB-01E, DNAPL present at 84 feet bgs
- 1505 Sample (DNAPL) SB-01E-84-83.75
- 1515 Cascade set-up for SPC-01E-84
- 1530 Purging SPC-01E-84, removing 8.6 gallons
- 1652 Sample at SPC-01E-84, Cascade and EA break down for the day
- 1710 P. Gannon offsite to FedEx, Cascade departed site for the day.

Photographs



View of where soil borings SB-01B, SB-01C, SB-01D were conducted.



SB-01E: DNAPL at 84 feet bgs



SB-01E: View of DNAPL at 84 feet bgs

Daily Field Report
Heatset RSO
Tuesday July 12, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: 10 mph SE
NYSDEC Site # 152140	**Weather (am)**: mid 70s, Overcast
Contract # D006129-07	**Weather (pm)**: low 80s, Clear
Location: Babylon, New York	**Arrival time**: 0650
EA Staff: Patrick Gannon	**Departure time**: 1825

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Lightning risk/weather hazards
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings DNAPL Delineation

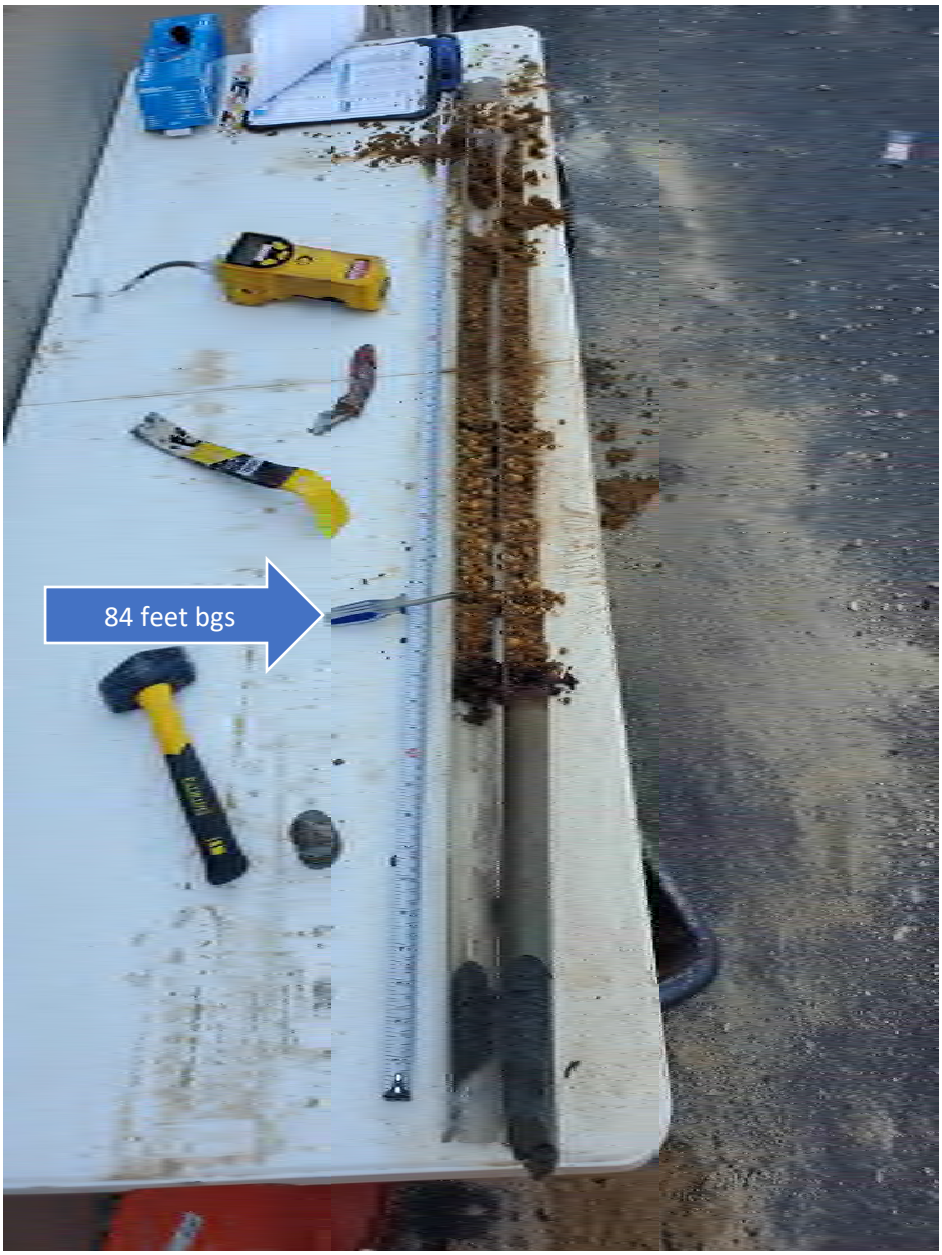
EA continued soil borings for the day, with the goal of continuing to delineate the DNAPL north of the building. Over the course of the day EA and Cascade completed soil boring SB-01F, collected SP water sample at SPC-01F-84, and partially completed SB-01A. DNAPL was not detected at 84 feet bgs in SB-01F, thus concluding the eastern portion of delineation. The goal for the rest of the week is to complete SB-01A, and SB-01BN (18 feet north of SB-01B). Additional soil borings may be warranted based on the presence/absence of DNAPL. Once delineation of the DNAPL north of the building is complete, soil borings located within the building will be completed.

- 0650 P. Gannon (EA) arrived onsite
- 0705 Cascade arrived onsite
- 0710 P. Gannon, conducts health and safety meeting and discusses the plan for the day
- 0745 Begin SB-01F
- 1250 Complete SB-01F, No visible product, staining and solvent smell present
- 1345 Cascade begins SPC-01F-84
- 1400 P. Gannon begins purging 8.6 gallons from SPC-01F-84, Cascade begins soil boring SB-01A
- 1448 Sample at SPC-01F-84
- 1800 Pause advancement of SB-01A at 80 feet bgs before pulling up the sample
- 1825 EA and Cascade offsite.

Photographs



IDW drum placement, two drums were full at the start of the day. A third drum was full by the end of the day, and placed alongside with these drums pictured.



SB-01F: Final segment of the soil boring for SB-01F, the screwdriver marks 84 feet bgs.



SB-01F: View of sand – clay interface, the screwdriver marks 84 feet bgs.

Daily Field Report
Heatset RSO
Wednesday July 13, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: Low 80s, Clear
Contract # D006129-07	**Weather (pm)**: low 90s, Clear
Location: Babylon, New York	**Arrival time**: 07000
EA Staff: Patrick Gannon	**Departure time**: 1730

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Heat stress, biological hazards (poison ivy)
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings DNAPL Delineation

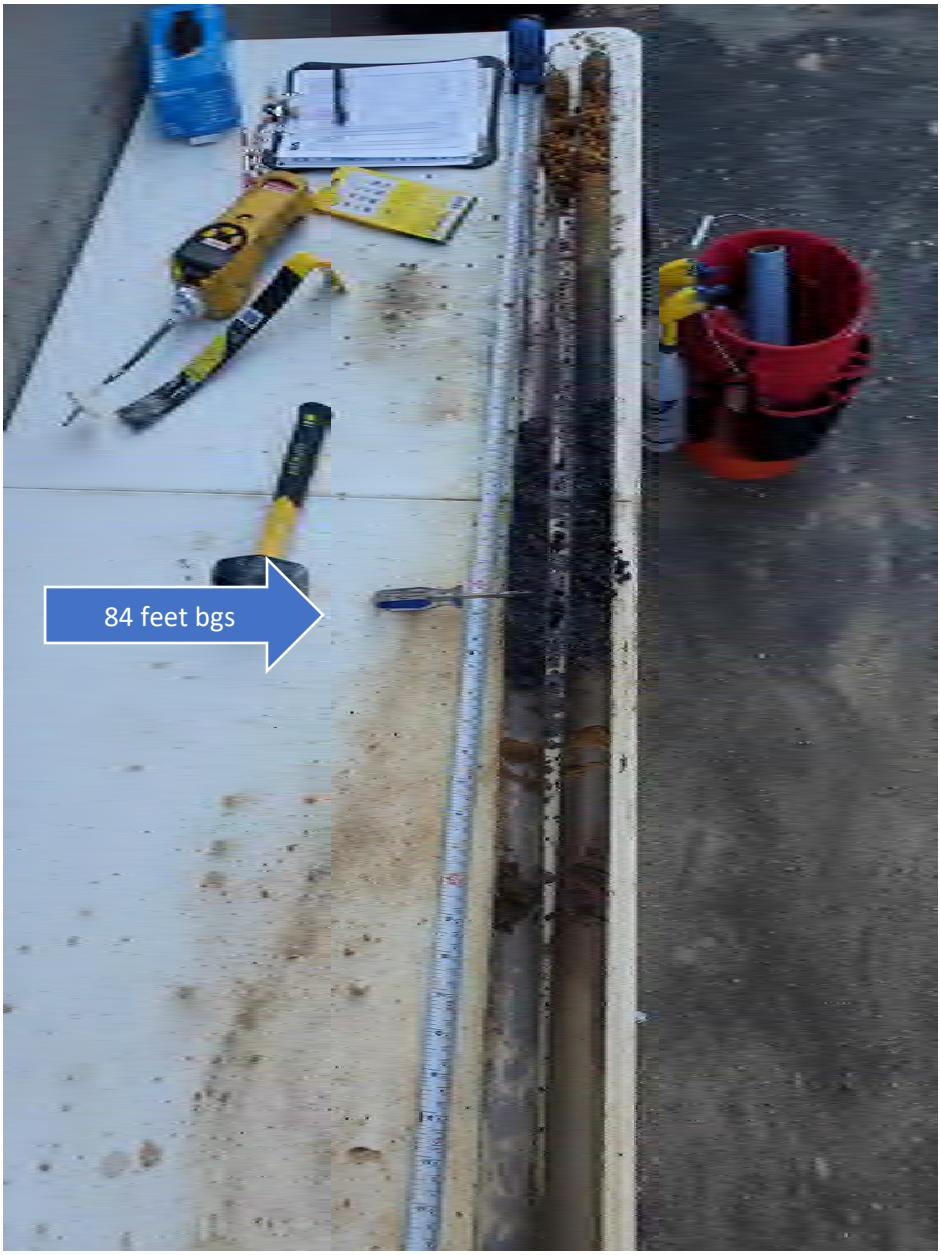
EA continued soil borings for the day, with the goal of continuing to delineate the DNAPL north of the building. Over the course of the day EA and Cascade completed soil boring SB-01A, collected SP water sample at SPC-01A-84, and completed SB-01BN. DNAPL was not detected at 84 feet bgs in SB-01A, thus concluding the western portion of delineation; DNAPL was detected at 84 feet bgs in SB-01BN. The goal for the rest of the week is to complete SPC-01BN-84, and then move into the building to complete the originally planned soil borings.

- 0700 P. Gannon (EA) arrived onsite
- 0725 Cascade arrived onsite P. Gannon, conducts health and safety meeting and discusses the plan for the day
- 0745 Mobilize to SB-01A
- 0800 Resume SB-01A
- 0850 Complete SB-01A, No DNAPL present at 84 feet bgs
- 0905 Cascade begins SPC-01A-84
- 0940 Cascade begins SB-01BN
- 1009 Sample at SPC-01A-84
- 1540 Cascade pauses at 82.5 feet to refuel the rig
- 1705 Cascade completes SB-01BN, DNAPL present
- 1725 Cascade breaks down for the day and departs site
- 1730 P. Gannon departs site.

Photographs



SB-01BN sampling 82.5-85 feet bgs.



SB-01BN: Final segment of the soil boring for SB-01F, the screwdriver marks 84 feet bgs. Interval is 82.5 to 85 feet bgs.



SB-01BN: View of DNAPL, the screwdriver marks 84 feet bgs.



SB-01BN: View of DNAPL at gravel-clay interface. Free product present, leaking onto the table, the screwdriver marks 84 feet bgs



SB-01A: View of soil boring segment 80-85 feet bgs. No DNAPL present, the screwdriver marks 84 feet bgs.



SB-01A: View of gravel-clay interface. No DNAPL present, the screwdriver marks 84 feet bgs.

Daily Field Report
Heatset RSO
Thursday July 14, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: Low 70s, overcast
Contract # D006129-07	**Weather (pm)**: low 80s, mostly cloudyr
Location: Babylon, New York	**Arrival time**: 07000
EA Staff: Patrick Gannon	**Departure time**: 1730

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Heat stress, best-lifting practices
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

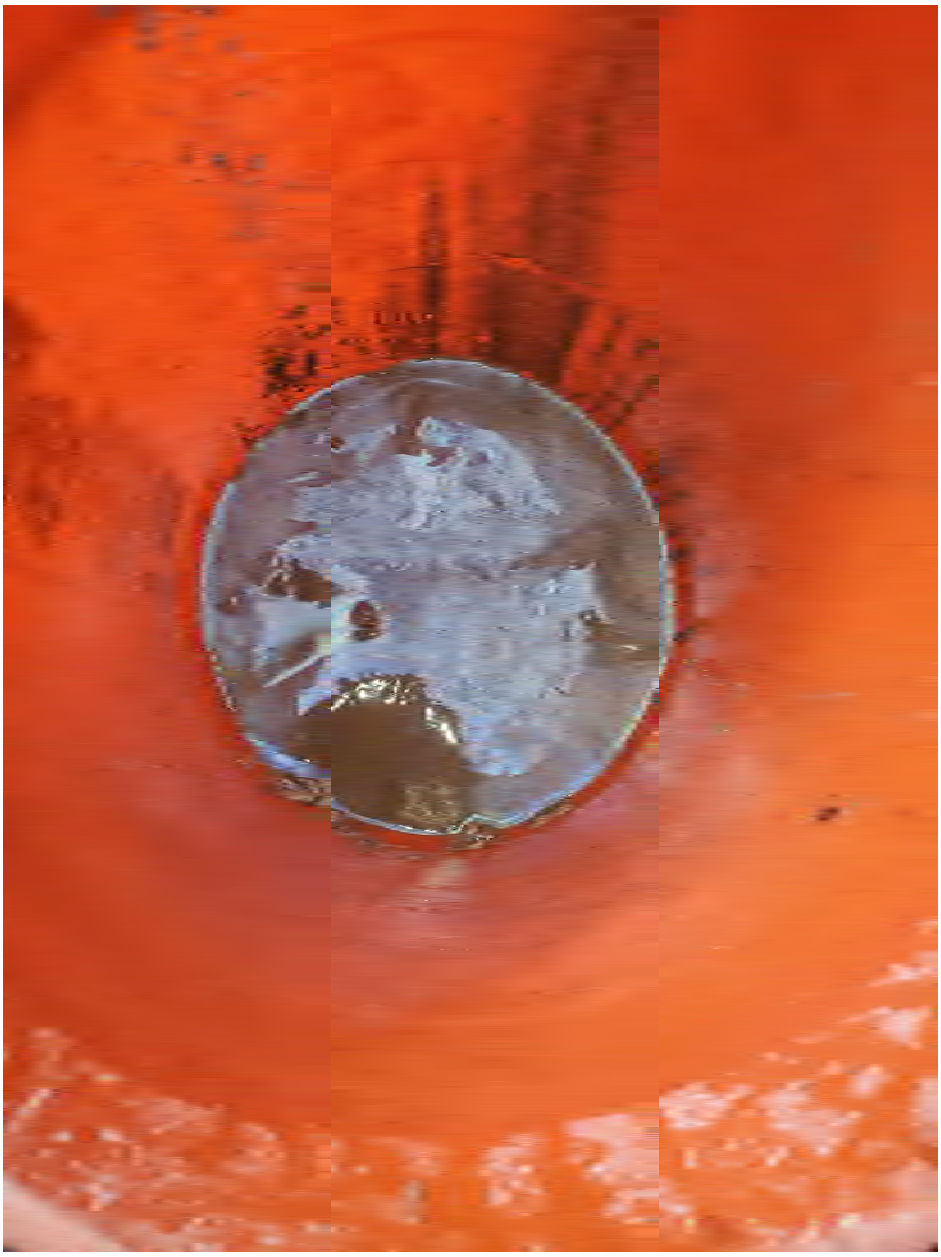
DESCRIPTION OF WORK PERFORMED

Soil Borings DNAPL Delineation

EA continued soil borings for the day, with the goal of continuing to delineate the DNAPL north of the building. Over the course of the day EA and Cascade completed soil boring SB-01DN, collected SP water sample at SPC-01BN-84, and completed SPC-01BN-84. DNAPL was detected at 82-84 feet bgs in SB-01DN. The goal for tomorrow is to complete SB-05, inside the warehouse.

- 0700 P. Gannon (EA) arrived onsite
- 0710 Cascade arrived onsite P. Gannon, conducts health and safety meeting and discusses the plan for the day
- 0720 Mobilize to SPC-01BN-84
- 0800 Cascade begins SPC-01BN-84
- 0850 Begin purging SPC-01BN-84, purge 8.6 gallons
- 0948 Sample at SPC-01BN-84
- 1000 Move off of SPC-01BN-84 to SB-01DN
- 1048 Begin SB-01DN
- 1530 Complete SB-01BN, DNAPL present
- 1535 Begin SPC-01DN-84
- 1615 Begin purging SPC-01DN-84
- 1642 Sample at SPC-01DN-84
- 1700 Cascade breaks down for the day
- 1720 P. Gannon and Cascade departs site for the day.

Photographs



SPC-01BN: Initial purge water from water at 84 feet bgs.



Purging at SPC-01BN-84.



SB-01DN: View of DNAPL in soil interval 80-85, the screwdriver marks 83 feet bgs.



SB-01DN: View of DNAPL at gravel-clay interface. Free product present in gravel pore space, the screwdriver marks 83 feet bgs.



SPC-01DN-84: Initial sheen in purge water from 84 feet.

Daily Field Report
Heatset RSO
Friday July 15, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: Low 70s, overcast
Contract # D006129-07	**Weather (pm)**: low 80s, mostly cloudy
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Patrick Gannon	**Departure time**: 1730

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Eye protection, warehouse awareness
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

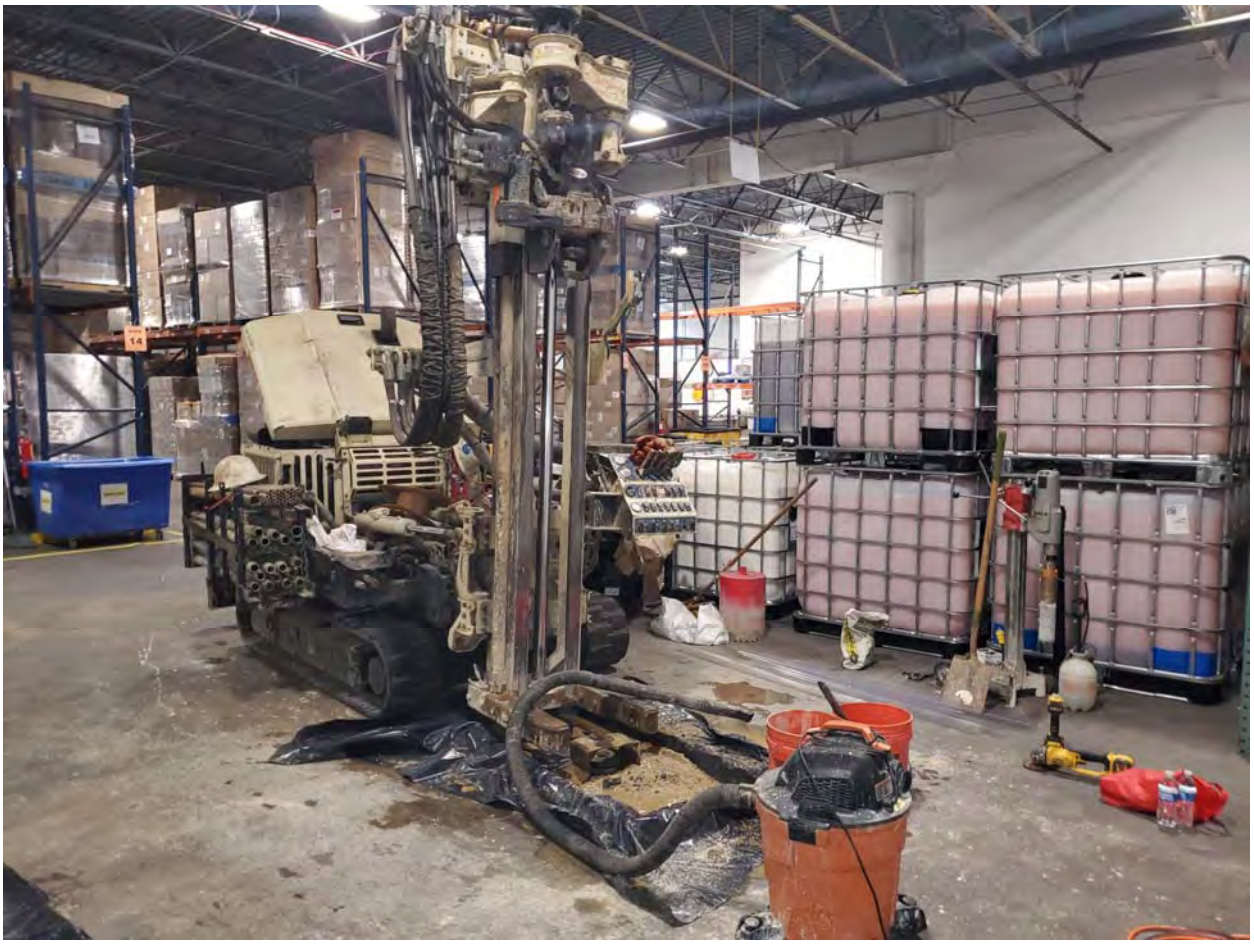
DESCRIPTION OF WORK PERFORMED

Soil Borings

EA continued soil borings for the day. Over the course of the day EA and Cascade completed soil boring SB-05.

- 0645 P. Gannon (EA) arrived onsite
- 0720 Cascade arrived onsite P. Gannon, conducts health and safety meeting and discusses the plan for the day
- 0730 Mobilize to SB-05
- 0840 Cascade begins SB-05
- 1350 Complete SB-05
- 1415 Cascade breaks down for the day. P. Gannon and Cascade depart site for the day.

Photographs



SB-05: Containment and set-up at SB-05.



SB-05: Soil interval 80-85 feet.



SB-05: Clay-gravel interface. No DNAPL present.

Daily Field Report
Heatset RSO
Monday July 18, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: Low 80s, overcast
Contract # D006129-07	**Weather (pm)**: Upper 80s, mostly cloudy
Location: Babylon, New York	**Arrival time**: 0845
EA Staff: Patrick Gannon	**Departure time**: 1810

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Eye protection, high visibility, noise protection
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

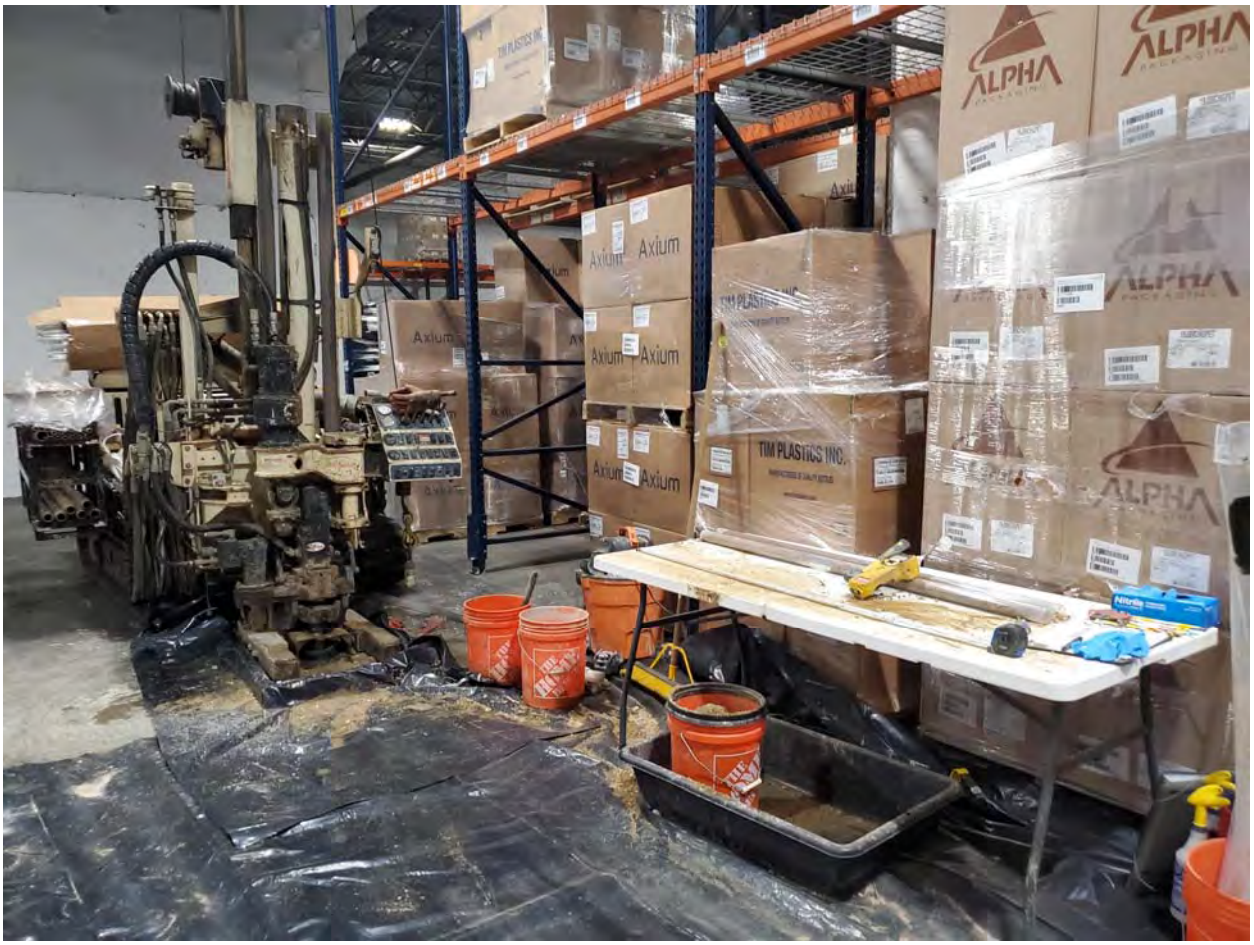
DESCRIPTION OF WORK PERFORMED

Soil Borings

EA continued soil borings for the day. Over the course of the day EA and Cascade completed soil boring SB-04, and SPC-04-84. DNAPL was present at the clay-gravel interface in SB-04 and a dense yellow liquid was purged out of the water sample. The yellow liquid was denser than turbid water, and had a solvent smell.

- 0845 P. Gannon (EA) arrived onsite
- 0905 Cascade arrived onsite P. Gannon,
- 0915 P. Gannon conducts health and safety meeting and discusses the plan for the day
- 1010 Begin SB-05
- 1530 Complete SB-05, DNAPL present at 84-84.75 feet bgs
- 1550 Cascade begins SPC-04-84
- 1705 Sample at SPC-04-84. Sample smelled of solvent, is yellow, separates from water, and is denser than water. Purged 4.0 gallons
- 1755 Cascade offsite
- 1810 P. Gannon offsite to FedEx.

Photographs



SB-04: Containment and set-up at SB-04.



SB-04: Soil interval 80-85 feet.



SB-04: Clay-gravel interface. DNAPL present. Screwdriver marks at 84 feet bgs.



SPC-04-84: Purge water from SPC-04-84. Purge water consists of a yellowish, solvent smelling, chemical that is more dense than turbid water.



SPC-04-84: VOA vial filled with sample from SPC-04-84. The sample consists of a yellow chemical, and turbid water. Turbid water floats on top of the dense yellow chemical. There is no headspace in the VOA container.

Daily Field Report
Heatset RSO
Tuesday July 19, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: Low 80s, sunny
Contract # D006129-07	**Weather (pm)**: Low 90s, sunny
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Patrick Gannon	**Departure time**: 1730

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Heat stress
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

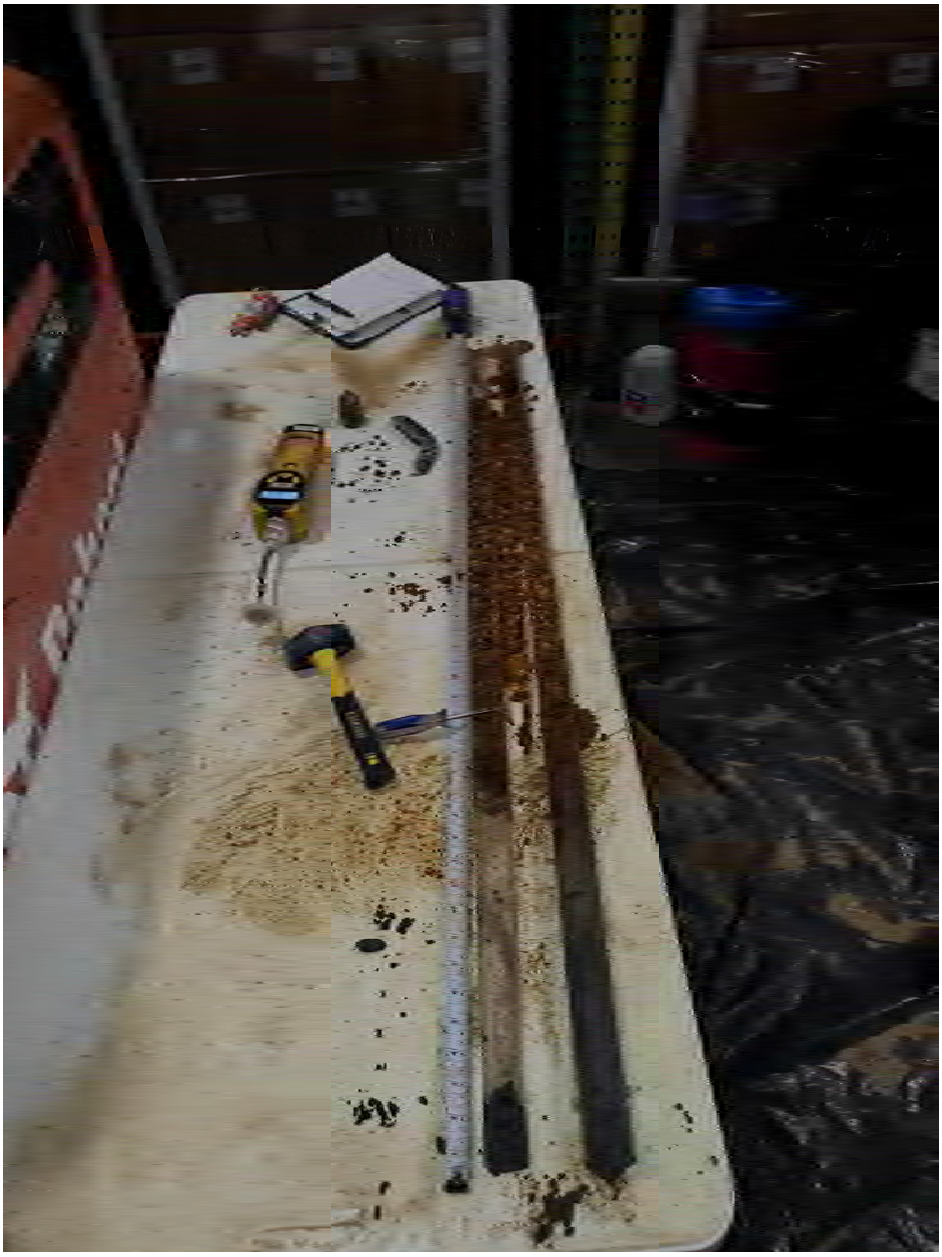
EA continued soil borings for the day. Over the course of the day EA and Cascade completed soil boring SB-06, and SPC-06-84. No DNAPL was present at the clay-gravel interface in SB-06, however purge water generated during SPC-06-84 had a solvent smell.

- 070 P. Gannon (EA) arrived onsite
- 07105 Cascade arrived onsite, P. Gannon conducts health and safety meeting and discusses the plan for the day
- 0815 Begin SB-06
- 1447 Complete SB-06, No DNAPL present
- 1500 Cascade begins SPC-06-84
- 1648 Sample at SPC-06-84. Sample smelled of solvent, purged 8.6 gallons. Cascade breaks down for the day
- 1727 Cascade offsite
- 1730 P. Gannon offsite to FedEx.

Photographs



SB-06: Containment and set-up at SB-06.



SB-06: Soil interval 80-85 feet. No DNAPL or product, staining present.

Daily Field Report
Heatset RSO
Wednesday July 20, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: Low 80s, sunny
Contract # D006129-07	**Weather (pm)**: mid 90s, sunny
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Patrick Gannon	**Departure time**: 1737

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Heat stress, noise protection, forklift awareness
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

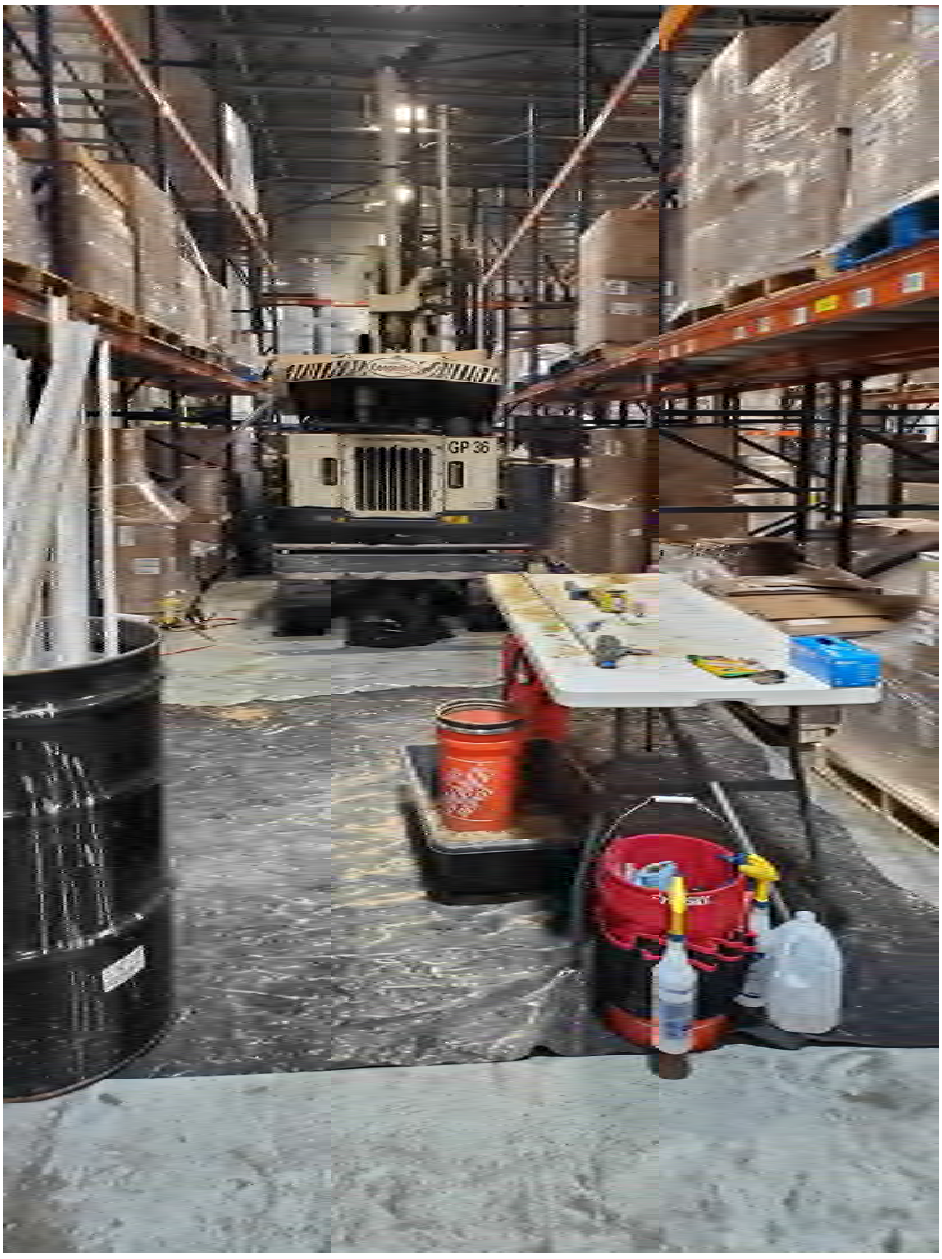
DESCRIPTION OF WORK PERFORMED

Soil Borings

EA continued soil borings for the day. Over the course of the day EA and Cascade completed soil boring SB-02, and SPC-02-84. No DNAPL was present at the clay-gravel interface in SB-02.

- 0700 P. Gannon (EA) arrived onsite
- 0720 Cascade arrived onsite, P. Gannon conducts health and safety meeting and discusses the plan for the day
- 0730 Mobilize to SB-02
- 0831 Begin SB-02
- 1455 Complete SB-02, No DNAPL present
- 1515 Cascade begins SPC-02-84
- 1627 Sample at SPC-02-84. Purged 8.6 gallons. Cascade breaks down for the day
- 1737 Cascade and P. Gannon offsite

Photographs



SB-02: Containment and set-up at SB-02.



SB-02: Soil interval 80-85 feet. No DNAPL or product, slight staining present.



SB-02: Gravel-clay interface below 83 feet bgs. Screwdriver marks 83 feet bgs. No DNAPL present, slight staining present.

Daily Field Report
Heatset RSO
Thursday July 21, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: Low 80s, sunny
Contract # D006129-07	**Weather (pm)**: mid 90s, stormy
Location: Babylon, New York	**Arrival time**: 0655
EA Staff: Patrick Gannon	**Departure time**: 1735

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Thunderstorms, lightning.
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

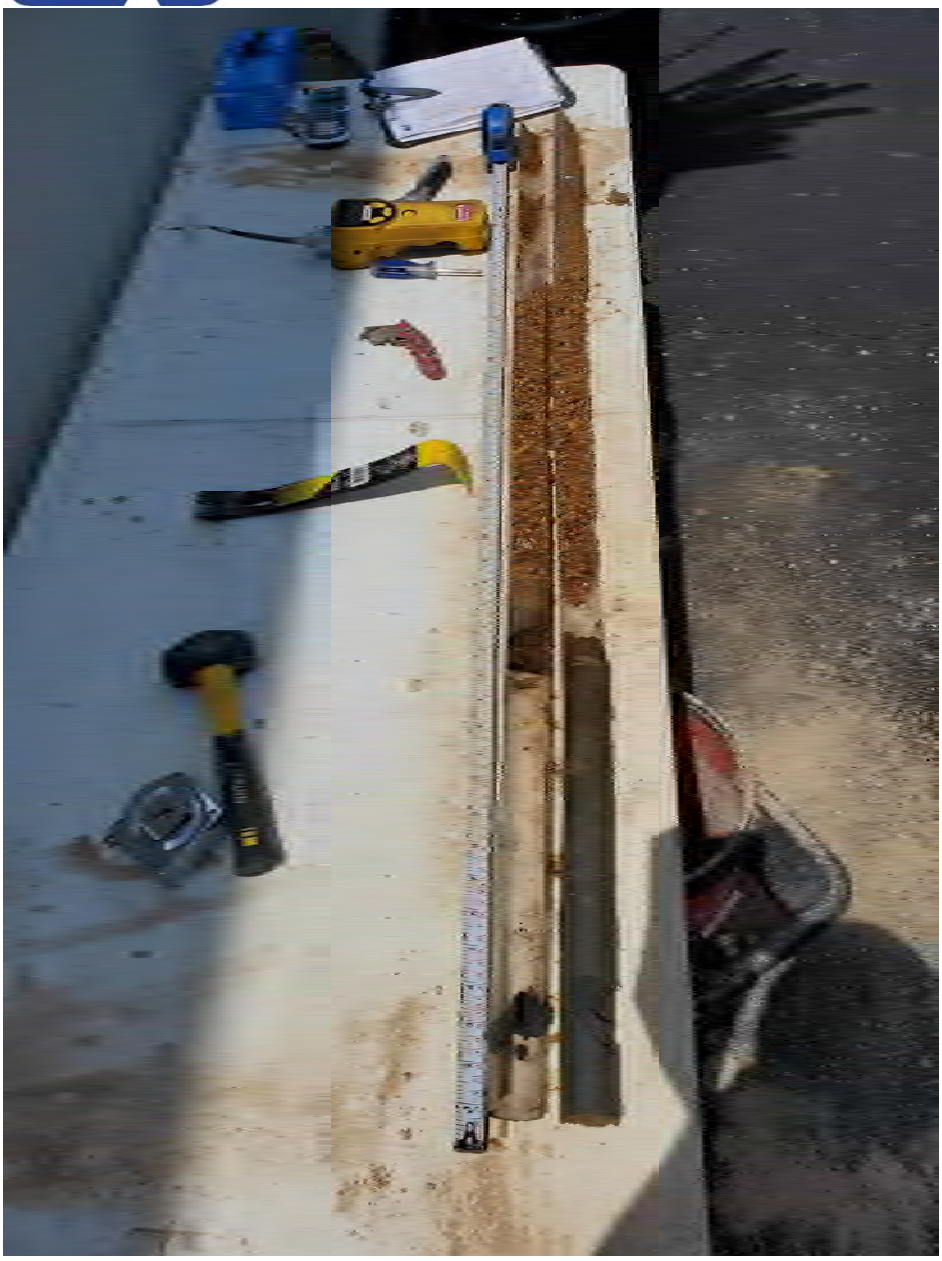
EA continued soil borings for the day. Over the course of the day EA and Cascade completed soil boring SB-11, and SPC-11-84. No DNAPL was present at the clay-gravel interface in SB-11.

- 0655 P. Gannon (EA) arrived onsite
- 0715 Cascade arrived onsite, P. Gannon conducts health and safety meeting and discusses the plan for the day
- 0730 Mobilize to SB-11
- 0745 Begin SB-11
- 1400 Complete SB-11, No DNAPL present
- 1410 Stop work because of an approaching severe thunderstorm
- 1600 Resume work, begin SPC-11-84
- 1620 Begin purging SPC-11-84
- 1711 Sample at SPC-11-84
- 1735 Cascade and P. Gannon offsite

Photographs



SB-11: Set-up 70 feet to the south of the NE corner of the building. .



SB-11: Soil interval 80-85 feet. No DNAPL or product, slight staining present.



SB-11: Gravel-clay interface below 83 feet bgs. Screwdriver marks 83 feet bgs. No DNAPL present, slight staining present.



SPC-11-84: Purging 8.6 gallons from SPC-11-84.



SPC-11-84: Purge water, no sheen or smell of product present.

Daily Field Report
Heatset RSO
Friday July 22, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: Low 70s, sunny
Contract # D006129-07	**Weather (pm)**: mid 80s, partly cloudy
Location: Babylon, New York	**Arrival time**: 0655
EA Staff: Patrick Gannon	**Departure time**: 1430

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Warehouse safety, eye protection, high visibility, steel-toe boots
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA continued soil borings for the day. Over the course of the day EA and Cascade completed soil boring SPC-10-84 and SPC-07-84. No product was present in the purge water in either SPC samples.

- 0655 P. Gannon (EA) arrived onsite
- 0715 Cascade arrived onsite, P. Gannon conducts health and safety meeting and discusses the plan for the day
- 0730 Mobilize to SPC-10-84
- 0745 Begin purging SPC-10-84
- 0815 Cascade moves to begin SB-09
- 0842 Sample at SPC-10-84
- 1030 Cascade encounters early refusal at SB-09
- 1100 EA abandons and repairs SB-09, plans to mobilize to SPC-07-84 for a water sample. SB-09 will be completed when Cascade mobilizes back out to the site.
- 1115 Begin purging SPC-07-84
- 1203 Sample at SPC-07-84, Cascade begins to breakdown for the weekend
- 1430 Cascade and P. Gannon offsite. P. Gannon offsite to FedEx.

Soil borings left to complete at the site:

- SB-07
- SB-08
- SB-09
- SB-10

SPC samples left to complete:

- SPC-08-84

Photographs



SPC-10-84: Set-up at SPC-10-84, eastern limit of the property



SPC-10-84: Purge water for SPC-10-84. No product present in purge water.



SPC-07-84: Set-up at SPC-07-84. Purging 8.6 gallons.



SPC-07-84: Purging 8.6 gallons from SPC-07-84. No Product or sheen present in the purge water.

Daily Field Report
Heatset RSO
Monday August 8, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: mid 80s, sunny
Contract # D006129-07	**Weather (pm)**: mid 80s, sunny
Location: Babylon, New York	**Arrival time**: 0900
EA Staff: Emily Fenner	**Departure time**: 1800

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Warehouse safety, eye protection, high visibility, steel-toe boots
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA continued soil borings for the day. Over the course of the day EA and Cascade performed the drilling at soil boring SB-07.

- 0900 E. Fenner (EA) arrived onsite.
- 0920 M. Miller (EA) arrived onsite. Check in with warehouse and perform walk-through.
- 0950 Brandon from Cascade arrived onsite
- 1000 Shane from Cascade arrived onsite; held health and safety meeting. Topic: Operating around the warehouse and around its employees.
- 1020 Mobilize to SB-07
- 1050 M. Miller departs to retrieve Pine equipment.
- 1120 Begin boring at SB-07.
- 1230 Took a break at 35'
- 1240 M. Miller returns from Pine. Leaves again to purchase water.
- 1245 Resume boring.
- 1345 M. Miller offsite
- 1640 Borings from 80-85 and 85-90 were lost. Attempting recovery.
- 1730 Recovered 80-85. Clay layer not yet encountered. Second recovery attempt will be performed tomorrow. Clean up for the day.
- 1800 EA and Cascade offsite.

Soil borings left to complete at the site:

- SB-07
- SB-08
- SB-09
- SB-10

Photographs



SB-07: Boring 5-30



SB-07: Boring 35-40



SB-07: Boring 50-55



SB-07: Boring 65-70

Daily Field Report
Heatset RSO
Tuesday August 9, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: mid 80s, sunny
Contract # D006129-07	**Weather (pm)**: low 70s, sunny
Location: Babylon, New York	**Arrival time**: 0900
EA Staff: Emily Fenner	**Departure time**: 1645

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Slippery surfaces, stable footing
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA continued soil borings for the day and constructed well screens. Over the course of the day EA and Cascade completed soil boring SB-07.

- 0700 E. Fenner (EA) arrived onsite. Cascade already present. Go over plan for the day and conduct Health & Safety Meeting.
- 0705 Mobilize to SB-07 and set up.
- 0750 Resume boring on SB-07 to recover 85-90.
- 0840 Boring SB-07 completed. Attempting to remove sleeve from rod to confirm depth of clay.
- 0900 Brief pause to receive Cascade rod/auger delivery.
- 0950 Rod only down to 87’ bgs before hitting refusal. Fat blue clay confirmed at 85’ bgs.
- 1024 Began cleaning up the area before mobilizing back to vehicles to construct CMT well screens.
- 1155 Well screen for CMT-01 about halfway constructed. Break for lunch.
- 1235 Resume building CMT well screens.
- 1330 EA finishes cleaning the area around SB-07 for the day.
- 1630 Well screens for CMT-01 and CMT-07 constructed. Will install CMT-07 tomorrow.
- 1645 EA and Cascade offsite.

Soil borings left to complete at the site:

- SB-08
- SB-09
- SB-10

Photographs



Constructing the well screen for CMT-01



Intermediate screen of CMT-01



Deep screen A and bottom of well CMT-01

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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Daily Field Report
Heatset RSO
Wednesday August 10, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: high 70s, sunny
Contract # D006129-07	**Weather (pm)**: low 80s, cloudy
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Emily Fenner	**Departure time**: 1605

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Working around exhaust fumes
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA attempted to install the first CMT well onsite, CMT-07.

- 0700 E. Fenner (EA) arrived onsite. Cascade already present. Go over plan for the day (install CMT-07) and conduct Health & Safety Meeting.
- 0715 Mobilize to SB-07/CMT-07 and set up.
- 0815 Set up at CMT-07 almost complete. Waiting on Cascade to move drums to drill location.
- 0850 Final setup tasks complete. Begin drilling CMT-07.
- 1045 Issues with drilling: Sand is not flowing at depth. Sand is locking up the rig and the sand itself is locking up. Rig stuck at 77' bgs. Cascade will try to free augers.
- 1100 Waiting on call from EA; Cascade continues attempts to free augers.
- 1130 Cascade decides to pull up augers before they get completely stuck in the sand. Still waiting on instructions from EA and Cascade.
- 1220 Augers completely out. Break for lunch.
- 1225 Joined a call with M. Miller and J. Vonuderitz to discuss the situation. Decide to switch to soil borings and finish those before any more CMT wells are installed.
- 1300 Relay plan to Cascade. Start cleaning up CMT-07 and move on to SB-10.
- 1330 More Cascade personnel (Pat) arrive onsite to consult with Brandon (lead driller).
- 1345 Pat takes measurements of aisles and ceiling limits of warehouse for considerations of employing a larger drill rig.
- 1400 Cascade and EA communicating. Cascade moving soil-filled drums while both field teams are on stand-by.
- 1420 Begin labeling IDW drums.
- 1500 Cascade and EA decide to install CMT-01 tomorrow.
- 1520 After conversing with Cascade and EA, all operations paused until tomorrow.
- 1540 Cascade offsite.
- 1605 EA offsite.

Soil borings left to complete at the site:

- SB-08
- SB-09
- SB-10

Photographs

None taken on 8/10/2022.

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Daily Field Report
Heatset RSO
Thursday August 11, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: calm
NYSDEC Site # 152140	**Weather (am)**: high 70s, rainy
Contract # D006129-07	**Weather (pm)**: low 80s, partly cloudy
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Emily Fenner	**Departure time**: 1715

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Heat stress
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA attempted to install the CMT-01.

- 0700 E. Fenner (EA) arrived onsite. Brandon from Cascade already present.
- 0702 Shane and Pat arrive from Cascade. Go over plan for the day (install CMT-01) and conduct Health & Safety Meeting.
- 0710 Begin mob to CMT-01.
- 0735 Set up drums and rig at CMT-01.
- 0750 Set up the rest of the drums, augers, and the other equipment.
- 0755 Begin drilling at CMT-01. Shane leaves.
- 1025 An excessive amount of sand has been removed from the hole. Ten 55-gallon drums have been filled. Operations paused to evaluate.
- 1050 Continuing drilling. Auger has started to develop a bit of an angle.
- 1125 Augers are walking through the subsurface. Fifteen feet of augers have been pulled out.
- 1130 All augers will be removed from the hole. Waiting on battery to charge before starting again.
- 1205 All augers pulled out.
- 1220 Clean up area for now. Cascade suggests bringing a larger rig to install wells.
- 1240 Break for lunch.
- 1245 EA begins to label drums from yesterday and today.
- 1350 Cascade loads up first 3 drums to haul back to parking lot. Rig also being walked back.
- 1445 All drums and equipment returned to the parking lot. Hole at CMT-01 has been plugged with cement.
- 1450 Cascade measuring 8040 rig and measuring the warehouse to see if it will fit.
- 1500 Measurements look like the 8040 rig will fit. Cascade will do a test run through the warehouse to make sure it will fit all the aisles and make all the turns.
- 1630 Finally got someone to move the floor sweeper out of the way of the garage door so we could drive the rig in and see if it fits.

- 1640 It fits.
- 1645 Mobilizing the 8040 rig back out to the parking lot.
- 1715 EA and Cascade offsite.

Soil borings left to complete at the site:

- SB-08
- SB-09
- SB-10

Photographs



Drilling at CMT-01.



Auger has walked in the subsurface and is no longer straight.

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Daily Field Report
Heatset RSO
Thursday August 11, 2022



Borehole created by walking auger.



Bringing in the Geoprobe 8040 to evaluate how much space it takes up in the warehouse.

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Daily Field Report
Heatset RSO
Friday August 12, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: 14 mph S
NYSDEC Site # 152140	**Weather (am)**: high 70s, partly cloudy
Contract # D006129-07	**Weather (pm)**: low 80s, sunny
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Emily Fenner	**Departure time**: 1545

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Overhead hazards
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA attempted to install the CMT-01 with the 8040DT Geoprobe.

- 0700 E. Fenner (EA) arrived onsite.
- 0707 Cascade arrives onsite. Discuss plan for the day (install CMT-01 with 8040DT rig) and conduct Health & Safety Meeting.
- 0710 Begin mob to CMT-01.
- 0805 Mob and setup complete. Begin drilling at CMT-01.
- 0940 Taking a short break. Augers are getting locked up by the sand again.
- 0945 Resume drilling.
- 0950 Taking a break again. Drillers consulting with Cascade about the issue.
- 1025 Cascade continuing to try and resolve the issue.
- 1050 Pulling up the augers. Plug pulled off bottom auger in attempt to get sand to flow, collapsing the hole over the plug and rendering the hole incapable of housing the CMT well screen.
- 1155 All augers removed from the hole. Taking lunch to consider next steps.
- 1240 Pat from Cascade arrives onsite.
- 1255 Cascade suggests wrapping up for the day. Waiting on word from EA.
- 1300 Start cleaning up around CMT-01.
- 1330 Meeting with M. Miller, J. Von Uderitz, and D. Conan to discuss project moving forward. Cascade moving drums in the meantime.
- 1348 No mob next week. Finish cleaning up CMT areas and plug any open holes (CMT-01 and CMT-07).
- 1445 Holes plugged; equipment removed from warehouse.
- 1530 Everything cleared out from warehouse. All equipment from Cascade is loaded onto their vehicles. Cascade will return on Monday to retrieve the rest of their vehicles. Cascade offsite.
- 1535 Headed to Pine to drop off PID. EA offsite.
- 1600 PID returned to Pine. Driving back to Syracuse.

Soil borings left to complete at the site:

- SB-08
- SB-09
- SB-10

Photographs



Transporting drums



Hole at CMT-01 plugged.



Plugging hole at CMT-07.



CMT well screens wrapped up onsite.

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Daily Field Report
Heatset RSO
Wednesday September 14, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: 16 mph E
NYSDEC Site # 152140	**Weather (am)**: mid 70s, sunny
Contract # D006129-07	**Weather (pm)**: NA
Location: Babylon, New York	**Arrival time**: 1050
EA Staff: Emily Fenner	**Departure time**: 1220

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	NA
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

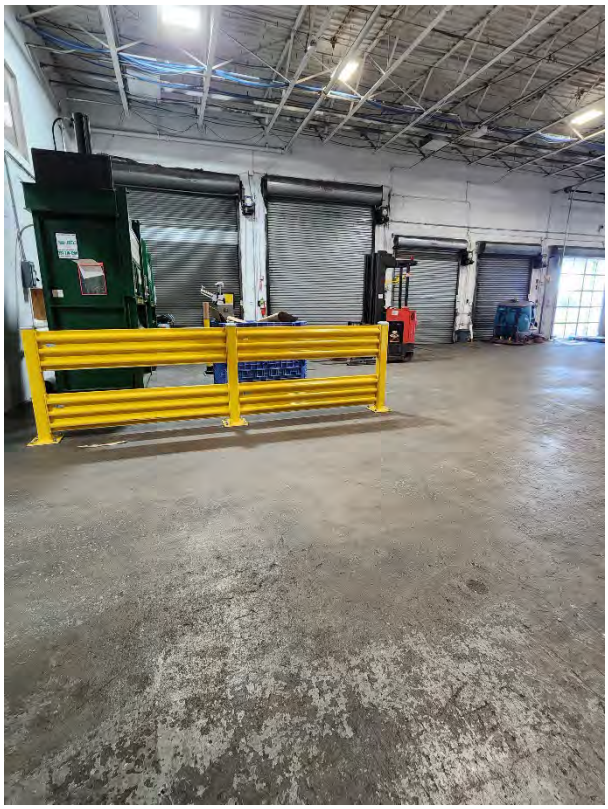
EA and Cascade assess the warehouse to determine the suitability of a sonic rig:

- 1050 EA arrives onsite
- 1103 Meet up with Bill from Cascade, go over plan. Begin assessment of warehouse.
- 1115 First two major corners by cardboard compactors clear. No need to remove scaffolding, pallets, or guard rails.
- 1125 Aisles clear. Would need Unilever to remove forklifts around SB-09, but otherwise good.
- 1135 Entranceway to SB-08 is of concern. Scaffolding edge is within clearance of sonic drill. Entranceway is 10'8" (128"), drill is 8'4" (100"), entranceway with scaffolding is just under 100". It would be a tight fit but would really need to remove scaffolding to enter lab area to avoid damage to warehouse or drill.
- 1140 Talking to Julio. Says we would need clearance to move the scaffolding and to be in the lab area after hours. Requests written notes expressing concerns to be sent to himself and Jackie to approve.
- 1150 EA and Cascade agree to create our own note sheets and send all to Unilever. Walkthrough by Cascade completed.
- 1155 Cascade offsite.
- 1215 Brief chat with Megan about the walkthrough.
- 1220 EA Offsite

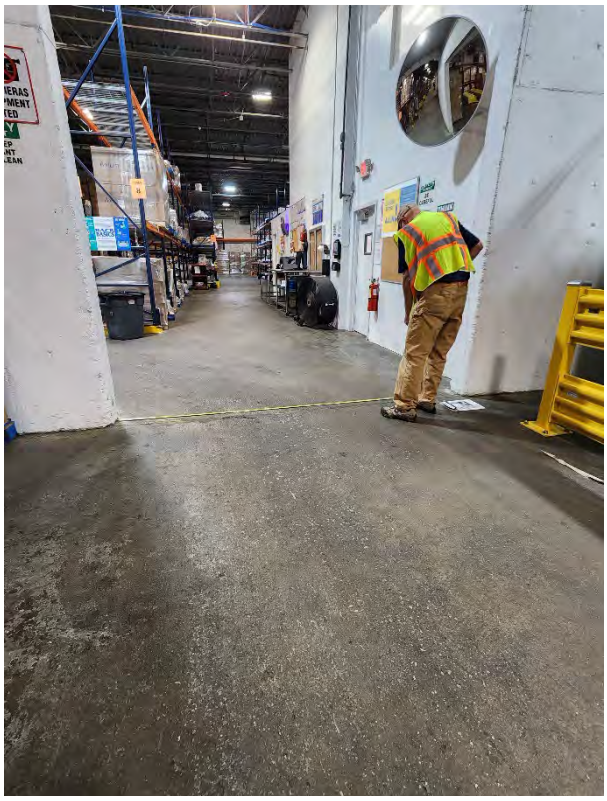
Soil borings left to complete at the site:

- SB-08
- SB-09
- SB-10

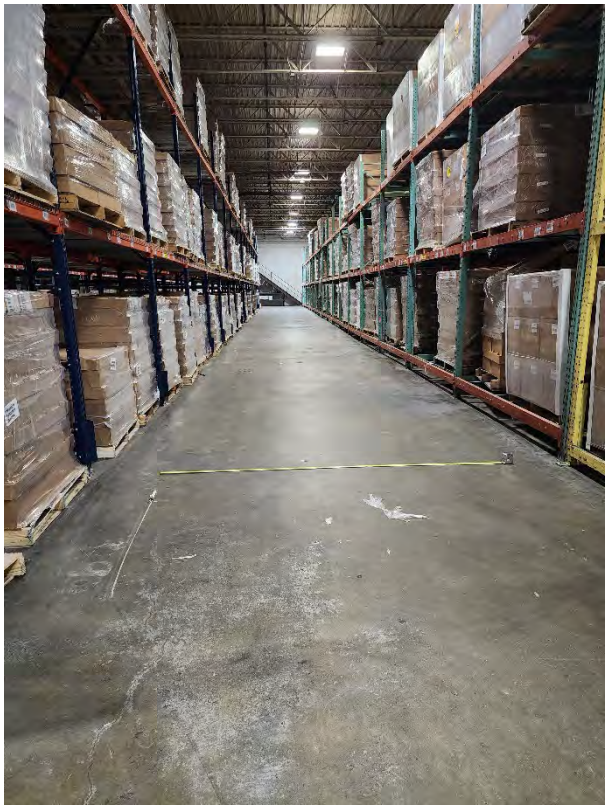
Photographs



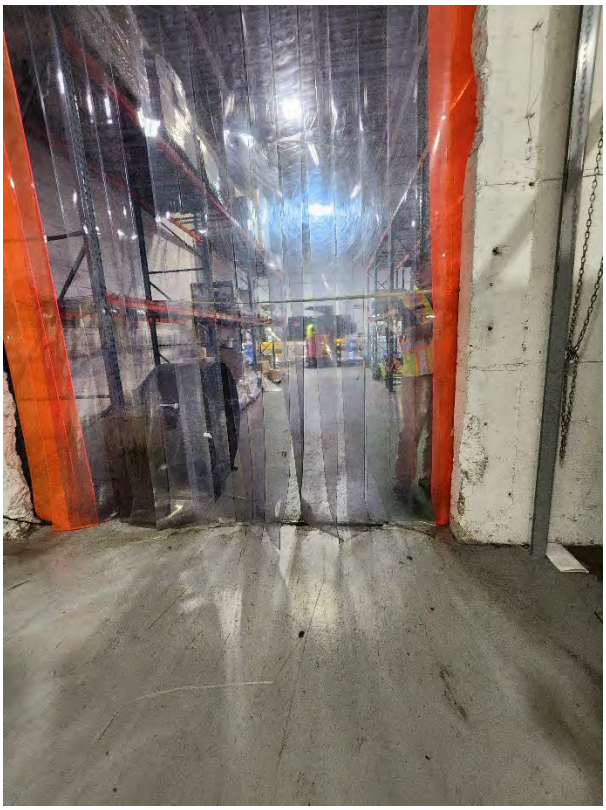
Garage door (second from left) for sonic rig to enter into the warehouse.



Measuring doorway by cardboard compactor



Measuring aisle near SB-06



Measuring doorway into lab area. Scaffolding (left) prevents the rig from entering without risk of damage

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Daily Field Report
Heatset RSO
Monday November 14, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: 5 mph NW
NYSDEC Site # 152140	**Weather (am)**: high 30s, sunny
Contract # D006129-07	**Weather (pm)**: mid 40s, sunny
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Emily Fenner	**Departure time**: 1530

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Overhead hazards/tight spaces
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA drilled and logged SB-10 and began drilling to install CMT-01.

- 0700 E. Fenner (EA) arrived onsite.
- 0710 Dayvhi and William arrive from AARCO. Conduct a brief site walk outside and go over plan for the day (log SB-10 and install CMT-01). Conduct Health & Safety Meeting. Mob and set up at SB-10.
- 0737 Begin boring to SB-10.
- 1140 Completed logging of SB-10.
- 1145 Clean up around SB-10, mob to CMT-01 location and set up. Break for lunch.
- 1220 Begin drilling at CMT-01.
- 1240 E. Ashton (EA) arrives. Discuss plan with him, go talk to Julio about well installment plan in the warehouse.
- 1317 Drilling complete at CMT-01. Wait until tomorrow to install the well. Call Megan to update on borings and CMT wells. Anchor on bottom of well is too wide to fit down 4" boring casings, need 6" to mitigate risk of damaging the well. Megan will discuss with Joe about potentially removing the anchor.
- 1430 Julio does not believe the Rotosonic will be able to function in tandem with Unilever's operations. The exhaust pipes from the rig will have to cut across aisles that Unilever might need to access at any time. The increased volume in the warehouse is also a concern as everyone would need hearing protection. Unilever's safety team will come look at the rig and assess whether or not they want the rig in the warehouse.
- 1445 Megan and Joe agree the anchor can be removed so the 4" casings can be used to install the CMT wells rather than the 6" casings. Wells CMT-01 and CMT-10 will be installed tomorrow. the safety team will meet at 9am tomorrow to look at the rig.
- 1500 AARCO offsite. EA continues to discuss options. Considering after hours unless alternative can be identified.
- 1530 EA makes sure any open holes are covered. EA offsite.

Soil borings left to complete at the site:

- SB-08
- SB-09

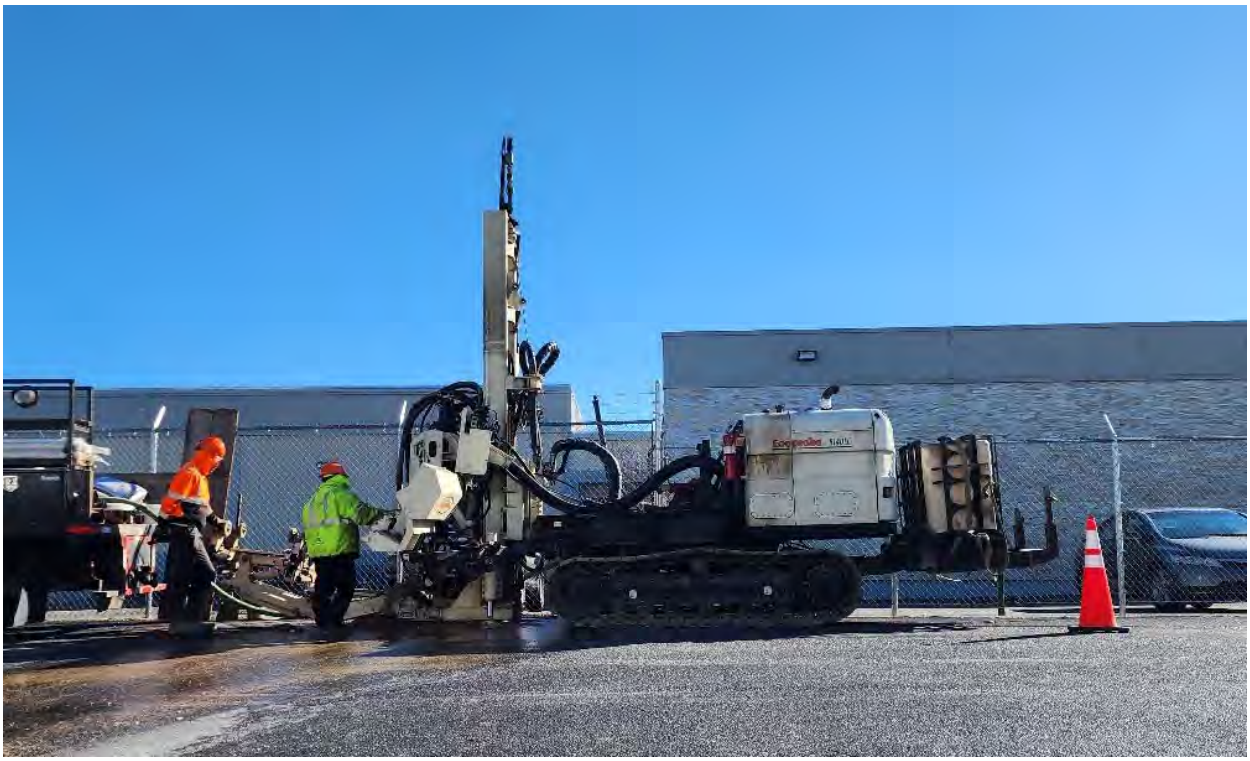
Photographs



SB-10 at 30-34 ft bgs.



SB-10 at 45-48.7 ft bgs. Some reddish brown iron oxidation staining at 47.5 ft bgs.



Drilling on SB-10.

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Daily Field Report
Heatset RSO
Tuesday November 15, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: 8 mph W
NYSDEC Site # 152140	**Weather (am)**: mid 30s, sunny
Contract # D006129-07	**Weather (pm)**: high 30s, sunny
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Emily Fenner	**Departure time**: 1500

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Cold, slips, trips, falls
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA installed CMT-01.

- 0658 E. Fenner (EA) arrived onsite.
- 0702 E. Ashton (EA) arrived onsite.
- 0710 Dayvhi, William, and Julio arrive from AARCO. Go over plan for the day (Install CMT-01).
- 0715 Mob to CMT well storage to identify CMT-01.
- 0730 CMT-01 has been identified. Screens will be measured to confirm.
- 0800 CMT-01 confirmed for total depth and depth of well screens. Screens are accurate. Depths listed in the SOW table are the bottom of the screens, not the top. The anchor on the bottom of the well adds an extra ~10 in, which includes a small ~2 in screen that will not be used.
- 0810 Called AARCO to confirm well construction instructions.
- 0830 Continue drilling for CMT-01 to accommodate anchor.
- 0835 Run PID around rig to make sure any fumes were not accumulated in the breathing zone.
- 0840 Talk with Megan to confirm well installation: 2 ft above and below screens, all bentonite between screens.
- 0945 AARCO safety inspector (A. Winges) arrives to perform a safety audit for the drill crew.
- 1015 Unilever's safety team (S. Rodriguez) arrives. E. Ashton goes with them to show the locations of the potential wells and the corresponding exit points for the exhaust piping. A. Winges offsite.
- 1100 Spacers on well are creating issues, essentially blocking bentonite from flowing down the hole. Shaking and vibrating the casings helps, but is slowing progess. There is consideration to use 6 in casings for CMT-10 to make the process more efficient.
- 1200 Finish installing CMT-01. Clean up area so pad can be installed.
- 1220 Area for pad cut out. Mob rig to CMT-10 to begin overdrilling with 6 in casings.
- 1235 Begin overdrilling for CMT-10. Pad for CMT-01 installed.
- 1320 Drilled 55 ft of 6 in casing at CMT-10, will finish tomorrow.

- 1330 Walk around warehouse with E. Ashton and Dayvhi to review Unilever's safety concerns.
- 1400 AARCO offsite. Relabel IDW drums with petroleum pens.
- 1500 EA offsite.

Soil borings left to complete at the site:

- SB-08
- SB-09

Photographs



Drilling and installation complete at CMT-01.



AARCO cutting out area for pad installment on CMT-01.



Refueling Rotosonic rig.



Location of CMT-01



Relabeled drums with petroleum pens.

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Daily Field Report
Heatset RSO
Wednesday November 16, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: 10 mph NW
NYSDEC Site # 152140	**Weather (am)**: high 40s, rain
Contract # D006129-07	**Weather (pm)**: NA
Location: Babylon, New York	**Arrival time**: 0700
EA Staff: Emily Fenner	**Departure time**: 1130

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Freezing rain, traffic awareness
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA installed CMT-10.

- 0650 E. Fenner (EA) arrived onsite. AARCO already present.
- 0700 E. Ashton (EA) arrived onsite.
- 0705 Go over plan for the day (Install CMT-10) and set up at CMT-10.
- 0715 Continue over drilling CMT-10 with 6 in casings.
- 0740 Drilled down to 81.6 ft. Begin installing well. Set up PID to monitor breathing zone.
- 0950 Well installation complete. Moving rig and cleaning up area to install pad. Used 9 buckets of bentonite.
- 1040 Concrete pad installed. CMT-10 complete.
- 1045 IDW drums moved to storing location. Materials and constructed wells covered up.
- 1055 E. Ashton informs Unilever of the demobilization. AARCO offsite.
- 1115 E. Ashton offsite. Label IDW drums with petroleum pens and stick-on labels.
- 1130 EA offsite.

Soil borings left to complete at the site:

- SB-08
- SB-09

Photographs



Installing CMT-10.



Completed CMT-10.

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Daily Field Report
Heatset RSO
Wednesday November 16, 2022



Rotosonic rig moved to be retrieved at a later date.



Constructed wells covered.



Bentonite buckets and bags stored onsite.



Concrete mix stored onsite.



Sand and bentonite bags and bentonite buckets stored onsite.

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

Daily Field Report
Heatset RSO
Wednesday November 30, 2022

Project Name: National Heatset Printing Company Remedial Site Optimization	**Wind Direction**: 10 mph NW
NYSDEC Site # 152140	**Weather (am)**: high 40s, rain
Contract # D006129-07	**Weather (pm)**: NA
Location: Babylon, New York	**Arrival time**: 0730
EA Staff: J.Guy, P.Gannon	**Departure time**: 1730

HEALTH AND SAFETY	
Tailgate Safety Topic of the Day:	Freezing rain, traffic awareness
Any changes to the HASP:	no
Are monitoring results at acceptable levels?	Soil: n/a Water: n/a Air: n/a

DESCRIPTION OF WORK PERFORMED

Soil Borings

EA installed CMT-10.

- 0730 J. Guy and P. Gannon (EA) arrived onsite.
- 0815 Set air cannisters for sample collection.
- 0830 Begin indoor VP readings.
- 0945 EA offsite for Home Depot lumber and hardware pickup.
- 1030 Begin repair of wooden cover for SSDS leg cover.
- 1130 Complete box repair, and begin O&M reading for SSDS.
- 1200 Begin well development of CMT-01.
- 1220 Complete air cannister sampling and begin packaging for shipment.
- 1430 Complete well development for CMT-01 and begin moving equipment to CMT-10.
- 1500 Start well development for CMT-10.
- 1715 Complete well development for CMT-10 and begin moving drum to staging area.
- 1730 offsite.

Photo Log


Property of
CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900
10700
15
10
20
5
25
30
inHg
vac
ASHCROFT
4 HD
6LT

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Daily Field Report
Heatset RSO
Wednesday November 16, 2022



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Heatset RSO
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Daily Field Report
Heatset RSO
Wednesday November 16, 2022



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Daily Field Report
Heatset RSO
Wednesday November 16, 2022



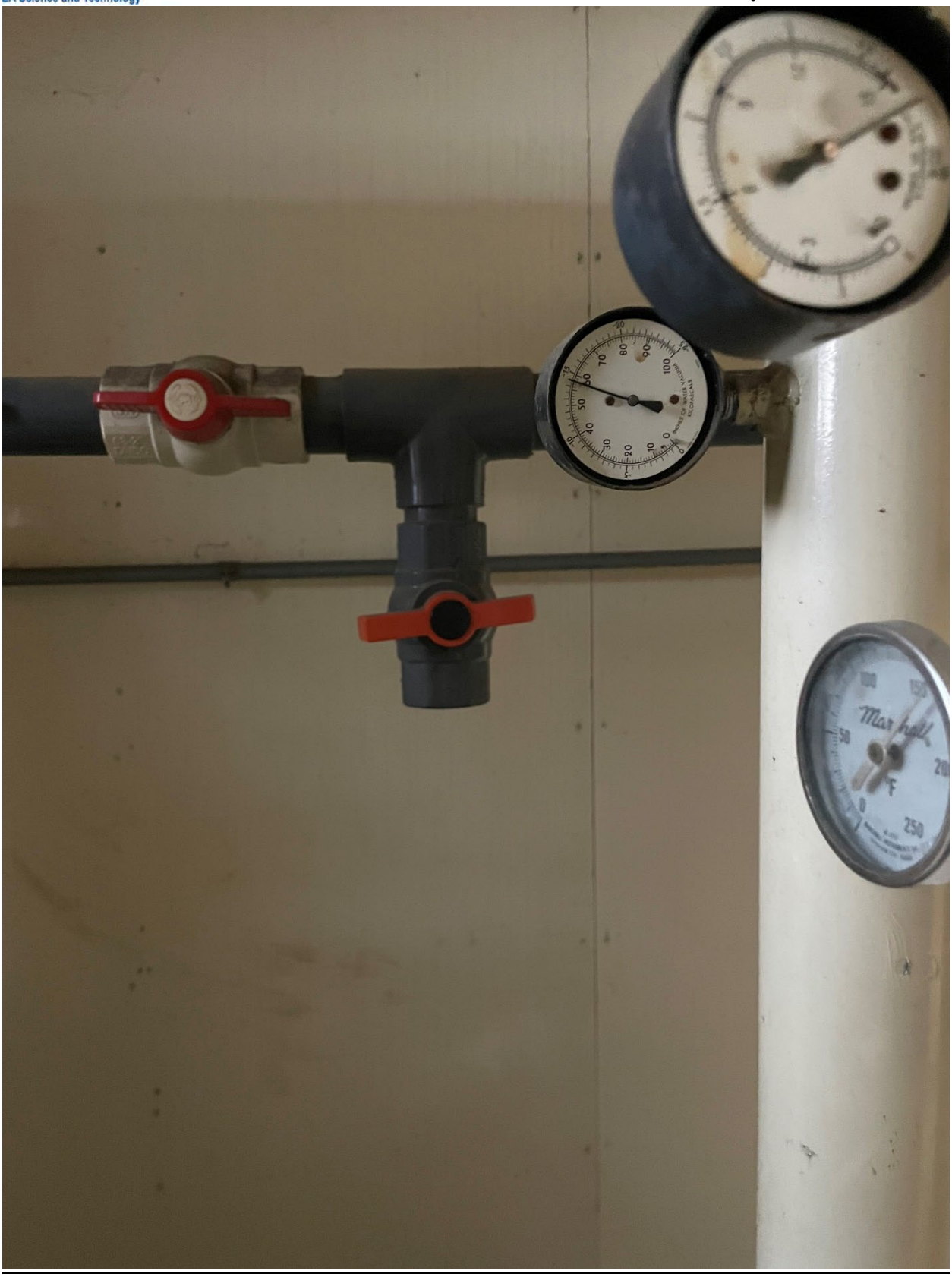
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EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Daily Field Report
Heatset RSO
Wednesday November 16, 2022






Marshall
F

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Daily Field Report
Heatset RSO
Wednesday November 16, 2022



NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contract No.

DEC PM –

Engineer PM – Megan Miller

Engineer Insp. – L. Backman-Lowe

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Cloudy	PM	Cloudy	AM
Temperature	36°F	PM	31°F	AM
Wind	6 mph W	PM	10 mph W	AM

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

Tailgate safety meeting held upon arrival onsite. Topics covered included: slips, trips, and falls; dehydration; traffic; and risks associated with drilling.

Summary of Work Performed	Arrived at site:	0540 01/23/2023	Departed Site:	~

(0540) Edward Ashton [EA] onsite, met with Yeissen Rodriguez to discuss today's scope of work. (1820) Lincoln Backman-Lowe [EA] onsite, walk with E. Ashton to identify drilling locations. (1840) AARCO onsite (Daibi Pacheco, Julio Cabrera, William Cabrera). (1855) EA Personnel discuss SOW with AARCO personnel, also go through health and safety meeting. (1900) EA field team calls EA PM to confirm scope of work and goals for today's work. (1920) AARCO begins unloading equipment and materials. (1940) EA calibrates RKI GX-6000 PID. (1945) AARCO brings Geoprobe 8140LC into warehouse. (2000) AARCO mobilizes equipment and materials to CMT-07 location and begin setting up to hand clear. (2030) AARCO cuts concrete slab with Sengore S8100 saw. (2120) AARCO begins hand clearing CMT-07 boring to 5 feet bgs with a hand auger. (2135) AARCO finishes hand clearing CMT-07 boring to 5 feet bgs. (2140) AARCO moves Geoprobe 8140LC over hole, begins advancing boring. (2200) PID reading recorded in the breathing zone [0.0 ppm]. (2205) CMT-07 boring advanced to 15.0 feet bgs. Driller alerts EA that 'lube pressure' is low, a downtime of 10 minutes occurs. (2215) AARCO resumes advancement of CMT-07 boring. (2230) Boring advancement stops again, AARCO lead driller explains that the lube pressure is too low [~15-18 psi] and needs to be higher [~50-70 psi] – AARCO troubleshoots the issue. (2240) PID reading recorded in the breathing zone. (2243) AARCO resumes advancement of CMT-07 boring. (2250) CMT-07 boring advanced to 30 feet bgs. (2300) CMT-07 boring advanced to 45 feet bgs. (2310) CMT-07 boring advanced to 60 feet bgs. (2322) PID reading recorded in breathing zone [0.0 ppm]. (2325) CMT-07 boring advanced to 75 feet bgs. (2335) AARCO begins dropping smaller steel down boring to collect samples and tag the clay layer. (0015) Samples pulled, clay tagged at 84 feet bgs. (0020) AARCO advances CMT-07 boring to 85 feet bgs. (0030) AARCO retrieves materials for CMT-07. (0100) AARCO begins installing CMT-07. (0320) All steel out of boring, additional drums required. (0330) Geoprobe moved to trailer. (0340) Begin cleaning up work area. (0500) Finish cleaning, AARCO offsite. (0505) EA walks to all points and marks them with GPS. (0515) EA exits building and awaits arrival of site representative to discuss nex (0540) EA offsite.

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 X	NA	
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
Lincoln Backman-Lowe	EA	Scientist	11.5
Edward Ashton	EA	Scientist	12
Daibi Pacheco	AARCO	Driller	10.5
Julio Cabrera	AARCO	Driller's Helper	10.5
William Cabrera	AARCO	Runner	10.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
RKI GX-6000 PID	Pine	1	Yes
Heron WLM	Pine	1	No
Geoprobe 8140LC	AARCO	1	Yes
Shopvac	AARCO	1	Yes
55 gallon drum	AARCO	7	Yes
Assorted hand tools	EA/AARCO	-	Yes
Sengore S8100 saw	AARCO	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						

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

Equipment/Material Tracking Comments:

None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial

Project Schedule Comments

Project remains on schedule, target for tomorrow's work is to classify soil boring at CMT-09 location.

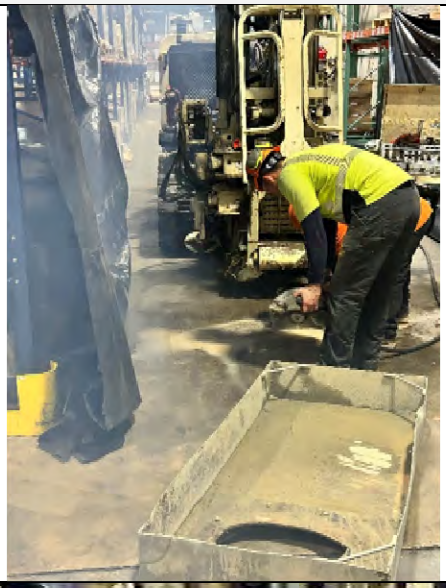
Issues Pending
CMT-07 install required a large amount of bentonite chips – tomorrow's shift will determine if more is required in order to complete all well installations outlined in the work plan.

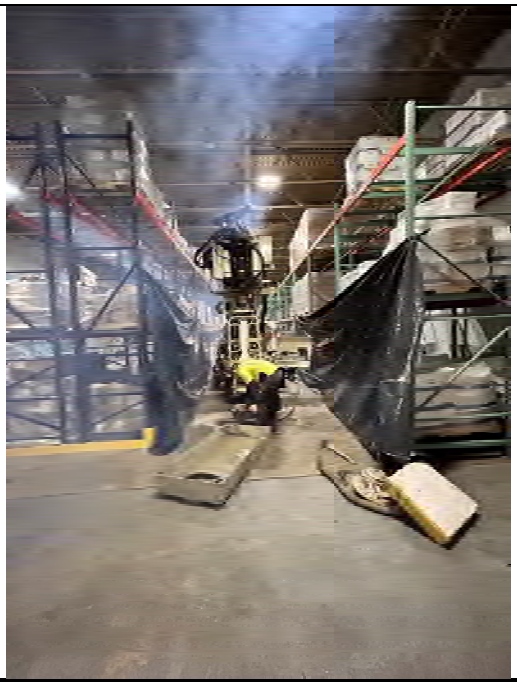
Interaction with Public, Property Owners, Media, etc.
Nothing to note.

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

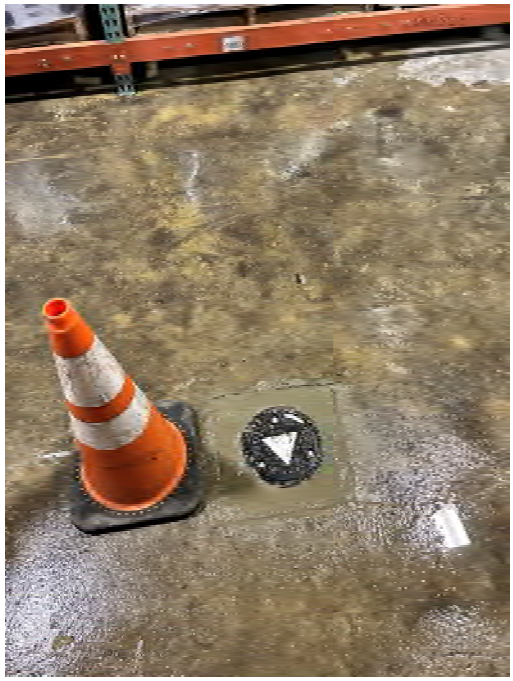
Site Photographs (Descriptions Below)









Comments	
N/A	
Site Inspector(s): Lincoln Backman-Lowe	**Date: 01/23/2023**

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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contract No.

DEC PM –

Engineer PM – Megan Miller

Engineer Insp. – L. Backman-Lowe

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Cloudy	PM	Cloudy	AM
Temperature	38°F	PM	30°F	AM
Wind	6 mph W	PM	3 mph N	AM

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

Tailgate safety meeting held upon arrival onsite. Topics covered included: slips, trips, and falls; dehydration; traffic; and risks associated with drilling.

Summary of Work Performed	Arrived at site:	1745 01/24/2023	Departed Site:	0330 01/25/2023

(1745) E. Ashton [EA] onsite. (1810) AARCO onsite, begin decontaminating drill steel with potable water and Alconox mix and rinse with potable water. (1850) L. Backman-Lowe onsite, hosts health and safety meeting. (1855) Calibrate PID. (1905) EA moves equipment into warehouse. (1910) EA gauges CMT-07 [installed day prior] ports. (1920) AARCO begins moving equipment into warehouse. (2000) AARCO moves Geoprobe 8140LC over CMT-09 location. (2005) EA sets up soil boring logging station. (2015) 15 minute downtime waiting until 2030 to begin work. (2030) AARCO begins cutting concrete @ CMT-09 boring location. (2050) AARCO begins hand-clearing boring to 5 feet bgs. (2100) Large rock encountered in boring, EA instructs AARCO to bust through and remove rock with Geoprobe. (2115) Geoprobe gets through obstacle [second concrete slab]. (2120) AARCO prepares to begin collecting boring samples in 5 foot intervals with Geoprobe. (2125) AARCO begins advancing CMT-09 boring. (2245) CMT-09 boring advanced to 25 feet bgs. (2250) PID reading recorded in breathing zone [0.0 ppm]. (2325) CMT-09 boring advanced to 50 feet bgs. (2340) PID reading recorded in breathing zone [0.0 ppm]. (2455) PID reading recorded in breathing zone [0.0 ppm]. (0125) CMT-09 boring advanced to 75 feet bgs. (0140) CMT-09 boring advanced to 85 feet bgs. (0150) PID reading recorded near borehole [0.1 ppm]. (0220) CMT-09 boring log complete, clay encountered at 81.5 feet bgs. (0225) AARCO leaves 5.5" steel casing in boring, for well install in next work session. (0230) AARCO begins cleaning up work area. (0300) AARCO finishes cleaning work area, AARCO offsite. (0330) EA offsite.

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 X	NA
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
Lincoln Backman-Lowe	EA	Scientist	10
Edward Ashton	EA	Scientist	10
Daibi Pacheco	AARCO	Driller	9.5
Julio Cabrera	AARCO	Driller's Helper	9.5
William Cabrera	AARCO	Runner	9.5
Jose Garcia	AARCO	Runner	9.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
RKI GX-6000 PID	Pine	1	Yes
Heron WLM	Pine	1	No
Geoprobe 8140LC	AARCO	1	Yes
Shopvac	AARCO	1	Yes
55 gallon drum	AARCO	7	Yes
Assorted hand tools	EA/AARCO	-	Yes
Sengore S8100 saw	AARCO	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						

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

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial

Project Schedule Comments

Project remains on schedule, target for tomorrow's work is to install CMT well at CMT-09 location and begin boring at CMT-05 location.

Issues Pending

None.

Interaction with Public, Property Owners, Media, etc.
Nothing to note.

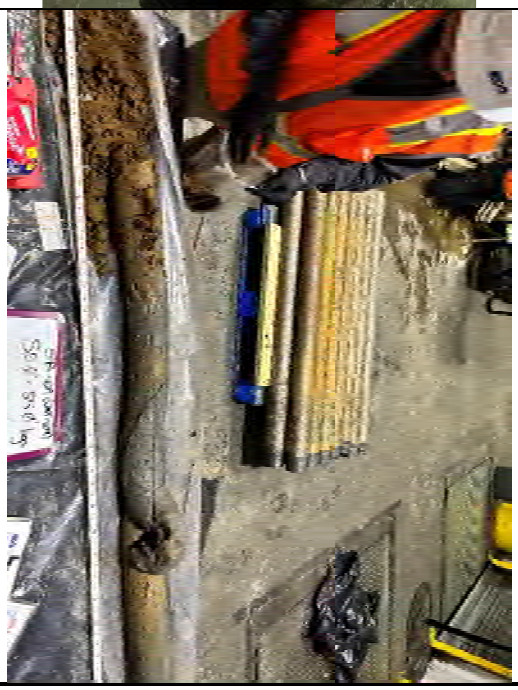
Include (insert) figures with markups showing location of work and job progress

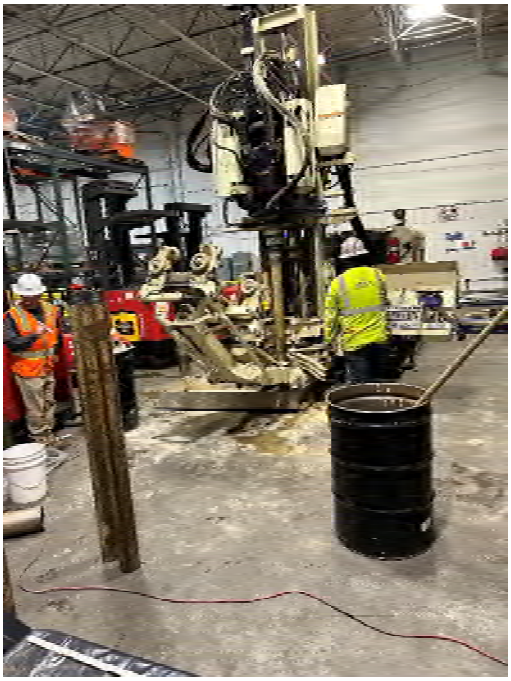
Site Photographs (Descriptions Below)









Comments	
N/A	
Site Inspector(s): Lincoln Backman-Lowe	**Date: 01/24/2023**

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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contract No.

DEC PM –

Engineer PM – Megan Miller

Engineer Insp. – L. Backman-Lowe

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Rain	PM	Rain	AM
Temperature	42°F	PM	52°F	AM
Wind	8 mph SW	PM	11 mph SW	AM

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

Tailgate safety meeting held upon arrival onsite. Topics covered included: slips, trips, and falls; dehydration; traffic; and risks associated with drilling.

Summary of Work Performed	Arrived at site:	1830 01/25/2023	Departed Site:	0230 01/26/2023

(1830) L. Backman-Lowe [EA] onsite. (1840) Calibrate RKI GX-6000 [PID]. (1850) Discuss today's scope of work with warehouse foreman and show where work will be performed. (1855) AARCO lead driller calls to inform EA of potential tardiness – well construction/assembly took longer than planned. (1940) Call with EA project manager to discuss scope of work and goals for today's work session. (1945) AARCO onsite, begin decontaminating equipment and drill steel. (2025) AARCO begins loading supplies into warehouse, health and safety meeting is held by EA. (2055) AARCO sets Geoprobe 8140LC on CMT-09 location, prepares to install well. (2120) AARCO begins installing CMT-09 well. (2150) PID reading recorded at breathing zone height [0.0 ppm]. (2255) AARCO finishes backfilling well with sand and bentonite chips [14 bags of bentonite used, 7 bags of sand used]. (2255) AARCO moves Geoprobe 8140LC outside to decontaminate drill steel, begins constructing well pad and surface casing for CMT-09 well. (2320) AARCO finishes constructing concrete pad and outer casing for CMT-09 well. (2335) AARCO moves equipment to CMT-05 location, cuts concrete and prepares to bore hole. (2335) AARCO begins advancing boring at CMT-05 location. (0000) PID reading recorded at breathing zone height [0.0 ppm]. (0005) CMT-05 boring advanced to 20 feet bgs. (0020) CMT-05 boring advanced to 40 feet bgs. (0030) Drill rig downtime to allow for water tank to re-fill [formation not holding water very well, driller explains that additional water is needed to lubricate and keep drills steel cool while advancing the boring]. (0045) CMT-05 boring advancement resumes. (0100) CMT-05 boring advanced to 60 feet bgs. (0105) PID reading recorded at breathing zone height [0.0 ppm]. (0110) Drill rig downtime to re-fill water tank. (0135) CMT-05 boring advanced to 80 feet bgs. (0135) AARCO begins cleaning up work area, leaves drill steel in borehole to be used for well installation tomorrow [could not proceed with well install today due to shortage of bentonite chips, will resume with well installation during next work session]. (0200) AARCO finishes cleaning work area and packing up equipment, EA discusses scope of work for Thursday and Friday work sessions with AARCO drillers. (0210) AARCO offsite. (0230) EA offsite.

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 X	NA	
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
Lincoln Backman-Lowe	EA	Scientist	10
Edward Ashton	EA	Scientist	10
Daibi Pacheco	AARCO	Driller	9.5
Julio Cabrera	AARCO	Driller's Helper	9.5
William Cabrera	AARCO	Runner	9.5
Jose Garcia	AARCO	Runner	9.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
RKI GX-6000 PID	Pine	1	Yes
Heron WLM	Pine	1	No
Geoprobe 8140LC	AARCO	1	Yes
Shopvac	AARCO	1	Yes
55 gallon drum	AARCO	7	Yes
Assorted hand tools	EA/AARCO	-	Yes
Sengore S8100 saw	AARCO	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						

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

Equipment/Material Tracking Comments:

None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial

Project Schedule Comments
AARCO was instructed by EA to have 30 buckets of bentonite ready for work tomorrow (Thursday 1/26/23) – each well takes about 14-15 buckets and the goal for tomorrow is to complete the CMT-05 well installation and also complete the CMT-06 well installation. AARCO was also instructed to have the remaining requisite bentonite delivered to the Site on Friday so that the wells can be installed in a timely manner. AARCO informed EA that a new driller (Jose Garcia) will be taking over for the Thursday and Friday shifts.
Issues Pending
Not enough bentonite onsite to continue installing wells. Drilling subcontractor (AARCO) was instructed to have bentonite ready for tomorrow's work.
Interaction with Public, Property Owners, Media, etc.
Nothing to note.

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

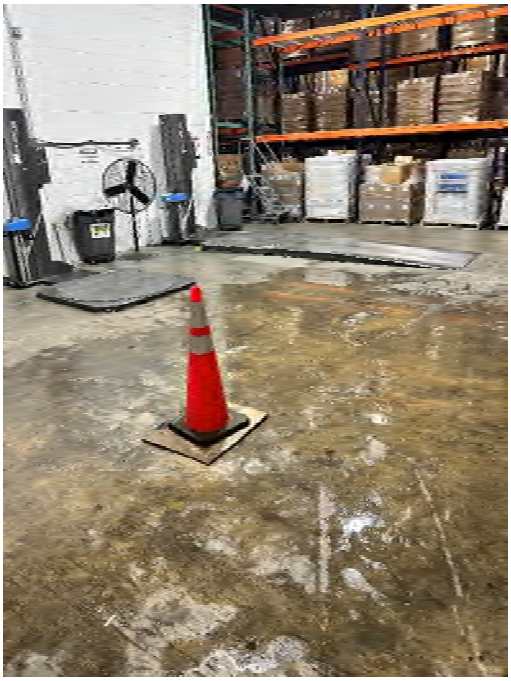
Site Photographs (Descriptions Below)









Comments
N/A

Site Inspector(s): Lincoln Backman-Lowe	**Date: 01/25/2023**

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 <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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contract No.

DEC PM –

Engineer PM – Megan Miller

Engineer Insp. – L. Backman-Lowe

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Clear	PM	Clear	AM
Temperature	40°F	PM	35°F	AM
Wind	5 mph W	PM	7 mph W	AM

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

Tailgate safety meeting held upon arrival onsite. Topics covered included: slips, trips, and falls; dehydration; traffic; and risks associated with drilling.

Summary of Work Performed	Arrived at site:	1825 01/26/2023	Departed Site:	0330 01/27/2023

(1825) EA onsite, labels IDW drums. (1845) EA calibrates RKI GX-6000 PID. (1855) EA enters warehouse to discuss today's SOW with warehouse foreman. (1900) AARCO onsite, EA hosts health and safety meeting. (1930) AARCO notifies EA that they have to return to shop to gather well assembly materials, AARCO offsite. (1945) EA begins gauging newly constructed CMT-09 well. (2015) AARCO arrives onsite, begins assembling CMT-05 well. (2045) AARCO finishes assembling CMT-05 well, prepares to install at the boring location. (2140) AARCO advances CMT-05 borehole to 85 feet bgs. (2145) AARCO begins installing CMT-05 well and backfilling borehole. (2150) PID reading recorded at breathing zone height [0.0 ppm]. (2230) PID reading recorded at breathing zone height [0.2 ppm]. (2300) PID reading recorded at breathing zone height [0.0 ppm]. (2315) AARCO moves drill rig off of CMT-05 location, takes drill steel outside to decontaminate, begins constructing concrete pad and casing. (2330) AARCO hangs poly sheeting along sides of aisle to protect pallets from dust and water, AARCO cuts through concrete slab with saw and preps hole for drilling at CMT-06 location. (2345) AARCO begins advancing CMT-06 boring. (2350) PID reading taken at breathing zone height [2.2 ppm] – PID reading likely elevated due to saw, odor smelled like exhaust from a 2-stroke motor. (0000) AARCO advances CMT-06 boring to 20 feet bgs. (0010) Drill rig down time to fill water tank. (0025) AARCO resumes advancement of CMT-06 boring. (0045) CMT-06 boring advanced to 40 feet bgs. (0105) PID reading take at breathing zone height [0.0 ppm]. (0130) CMT-06 boring advanced to 60 feet bgs, drill rig downtime to allow for water tank to re-fill. (0205) CMT-06 boring advanced to 80 feet bgs, PID reading recorded at breathing height [0.3 ppm]. (0220) AARCO begins cleaning up work area around CMT-06, leaves drill steel in boring. (0240) AARCO finishes cleaning work area, moves Geoprobe 8140LC to staging area and begins packing up equipment. (0250) EA discusses tomorrow's scope of work with AARCO and building security officer. (0300) AARCO offsite. (0330) EA offsite.

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 X	NA
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
Lincoln Backman-Lowe	EA	Scientist	10
Julio Cabrera	AARCO	Driller's Helper	9.5
William Cabrera	AARCO	Runner	9.5
Jose Garcia	AARCO	Runner	9.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
RKI GX-6000 PID	Pine	1	Yes
Heron WLM	Pine	1	No
Geoprobe 8140LC	AARCO	1	Yes
Shopvac	AARCO	1	Yes
55 gallon drum	AARCO	7	Yes
Assorted hand tools	EA/AARCO	-	Yes
Sengore S8100 saw	AARCO	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						

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

Equipment/Material Tracking Comments:

None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial

Project Schedule Comments
After tonight's work, there is one open borehole that is ready for well install. There are 4 additional locations that still need to be bored out and have wells installed. EA requested that AARCO build the CMT-06 well prior to arriving onsite so that work can commence right away. Building representative informed EA that there will be only one day shift tomorrow, so access into building will not be there until 8pm when the security officer arrives. EA and AARCO plan to arrive onsite at 8pm and begin by installing CMT-06 well. Goal is to install that well and complete boring and installation of CMT-03.
Issues Pending
Not enough bentonite onsite to continue installing wells. Drilling subcontractor (AARCO) was instructed to have bentonite ready for tomorrow's work, response was that bentonite pallets should arrive onsite tomorrow.
Interaction with Public, Property Owners, Media, etc.
Nothing to note.

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

Site Photographs (Descriptions Below)









Comments	
N/A	
Site Inspector(s): Lincoln Backman-Lowe	**Date: 01/26/2023**

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 <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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contract No.

DEC PM –

Engineer PM – Megan Miller

Engineer Insp. – L. Backman-Lowe

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Clear	PM	Clear	AM
Temperature	36°F	PM	33°F	AM
Wind	5 mph W	PM	7 mph W	AM

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

Tailgate safety meeting held upon arrival onsite. Topics covered included: slips, trips, and falls; dehydration; traffic; and risks associated with drilling.

Summary of Work Performed	Arrived at site:	1930 01/27/2023	Departed Site:	0330 01/28/2023

(1930) EA onsite and AARCO onsite, AARCO begins loading up materials. (1950) Building security arrives onsite to let EA and AARCO into warehouse. (2000) EA calibrates PID, AARCO begins moving equipment into warehouse, EA hosts Health and Safety meeting. (2030) AARCO sets up all equipment at CMT-06 location, begins installing CMT-06 well. (2035) EA gauges newly installed CMT-05 well. (2055) AARCO advances CMT-06 boring to 84 feet bgs. (2100) AARCO begins installing CMT-06 well and backfilling boring. (2130) PID reading recorded at breathing zone height [0.2 ppm]. (2200) PID reading recorded at breathing zone height [0.0 ppm]. (2210) AARCO finishes backfilling CMT-06 well, begins cleaning up work area. (2220) AARCO moves Geoprobe 8140LC to CMT-02 location, begins constructing concrete well pad and casing. (2235) AARCO cuts through concrete slab with saw at CMT-02 location. (2245) AARCO uses drill bit to break through concrete slab. (2300) AARCO begins advancing CMT-02 boring. (2320) CMT-02 boring advanced to 20 feet bgs. (2325) PID reading recorded at breathing zone [0.1 ppm]. (2330) AARCO gets additional drums to containerize IDW, drill rig downtime from 2325-2340. (2345) CMT-02 boring advanced to 40 feet bgs, drill rig downtime from 2350-0005 for filling water tank and getting additional IDW drums. (0015) Drill rig down time, allow for water tank to re-fill. (0025) AARCO continues drilling. (0030) CMT-02 boring advanced to 60 feet bgs. (0035) Drill rig downtime to allow for water tank to re-fill. (0045) AARCO continues drilling. (0105) CMT-02 boring advanced to 80 feet bgs. (0110) CMT-02 boring advanced to 85 feet bgs. (0120) AARCO begins installing CMT-2 well and backfilling boring. (0200) PID reading recorded at breathing zone height [0.0 ppm]. (0235) AARCO finishes backfilling CMT-02 boring, begins cleaning up work area. (0250) AARCO begins constructing concrete well pad and moving equipment to staging area. (0315) AARCO finishes constructing well pad at CMT-02 location. (0325) EA discusses remaining work with AARCO. (0330) AARCO offsite, L. Backman-Lowe remains onsite to help transition day crew into drilling outdoors.

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 X	NA
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
Lincoln Backman-Lowe	EA	Scientist	10
Julio Cabrera	AARCO	Driller's Helper	9.5
William Cabrera	AARCO	Runner	9.5
Jose Garcia	AARCO	Runner	9.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
RKI GX-6000 PID	Pine	1	Yes
Heron WLM	Pine	1	No
Geoprobe 8140LC	AARCO	1	Yes
Shopvac	AARCO	1	Yes
55 gallon drum	AARCO	7	Yes
Assorted hand tools	EA/AARCO	-	Yes
Sengore S8100 saw	AARCO	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						

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

Equipment/Material Tracking Comments:

None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial

Project Schedule Comments
None.
Issues Pending
None.
Interaction with Public, Property Owners, Media, etc.
Nothing to note.

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

Site Photographs (Descriptions Below)







Comments	
N/A	
Site Inspector(s): Lincoln Backman-Lowe	**Date: 01/27/2023**

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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contract No.

DEC PM –

Engineer PM – Megan Miller

Engineer Insp. – L. Backman-Lowe

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Clear	AM	Clear	PM
Temperature	33 °F	AM	43 °F	PM
Wind	4 mph SW	AM	8 mph SW	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

Tailgate safety meeting held upon arrival onsite. Topics covered included: slips, trips, and falls; dehydration; traffic; and risks associated with drilling.

Summary of Work Performed	Arrived at site:	0555 01/28/2023	Departed Site:	0700 01/29/2023

(0555) EA personnel onsite [H. Young] to relieve L. Backman-Lowe. (0605) Mob into building to sign in with security guard, host Health and Safety meeting with day crew. (0645) AARCO sets up rig at CMT-08 location, EA calibrates PID. (0738) EA sets up soil boring log station. (0741) AARCO begins cutting concrete at CMT-08 location. (0750) AARCO begins hand clearing boring to 5 feet bgs. (0815) AARCO encounters pipe about 4 feet bgs, stops hand clearing and begins cutting concrete after outstepping about 3 feet. (0843) AARCO prepares to begin collecting borings in 5 feet intervals with Geoprobe 8140LC. (0850) AARCO begins advancing CMT-08 boring. (0910) Boring advanced to 25 feet bgs. (0913) AARCO encounters issue with drill rig – pauses to fix issue for about 10 minutes. (0915) PID reading recorded at breathing zone height [2.2 ppm]. (1020) CMT-08 boring advanced to 40 feet bgs. (1025) PID reading recorded at breathing zone height [2.1 ppm]. (1135) CMT-08 boring advanced to 65 feet bgs. (1138) PID reading recorded at breathing zone [0.8 ppm]. (1140) AARCO takes 10 minute break. (1152) AARCO resumes work. (1200) CMT-08 boring advanced to 75 feet bgs. (1246) CMT-08 boring advanced to 85 feet bgs. (1248) PID reading recorded at breathing zone height [0.6 ppm]. (1310) AARCO completes SB-08 boring, offsite to shop to construct well and grab lunch. (1535) AARCO onsite. (1544) AARCO begins installing CMT-08 well. (1554) PID reading recorded at breathing zone height [0.0 ppm]. (1733) AARCO finishes installing CMT-08, begin packing equipment. (1738) AARCO constructs concrete well pad. (1820) AARCO finishes work, awaits night crew arrival.

(1830) Night crew arrives [EA & AARCO], begins setting up equipment. (1850) Health and Safety Meeting hosted by L. Backman-Lowe of EA. (1900) H. Young offsite. (1915) EA begins gauging CMT-06 and CMT-02 wells. (1950) AARCO sets Geoprobe 8140LC over CMT-03 hole. (2010) AARCO cuts through concrete slab with saw. (2030) AARCO begins advancing CMT-03 boring. (2100) AARCO advances CMT-03 boring to 20 feet bgs. (2105) PID reading recorded at breathing zone height [0.0 ppm]. (2115) AARCO retrieves additional IDW drums. (2125) AARCO advances CMT-03 boring to 40 feet bgs. (2130) PID reading recorded at breathing zone height [0.4 ppm]. (2200) AARCO advances boring to 60 feet bgs. (2210) PID reading recorded at breathing zone height [0.2 ppm]. (2220) AARCO advances CMT-03 boring to 80 feet bgs. (2240) AARCO advances CMT-03 boring to 83 feet bgs, begins installing CMT-03 well and backfilling boring with sand and bentonite. (0015) AARCO finishes installing and backfilling CMT-03 well, begins cleaning up work area and moving Geoprobe 8140LC to CMT-04 location. (0105) AARCO begins constructing concrete well pad at CMT-03 and cutting through concrete slab at CMT-04 location. (0110) PID reading recorded at

breathing zone height [0.0 ppm]. (0145) AARCO advances CMT-04 boring to 20 feet bgs. (0205) AARCO advances CMT-04 to 40 feet bgs. (0215) PID reading recorded at breathing zone height [0.7 ppm]. (0300) AARCO advances CMT-04 boring to 60 feet bgs. (0310) PID reading recorded at breathing zone height [0.3 ppm]. (0335) PID reading recorded at breathing zone height [0.4 ppm]. (0410) AARCO advances boring to 85 feet bgs. (0415) AARCO begins installing and backfilling CMT-04. (0440) PID reading recorded at breathing zone height [0.6 ppm]. (0520) AARCO finishes installing well at CMT-04 location, begins cleaning work area and demobilizing equipment. (0530) H. Young [EA] onsite to relieve L. Backman-Lowe. (0624) AARCO offsite, H. Young continues to gauge new wells. (0652) Gauging complete, EA labels IDW drums. (0700) EA checks out with security guard, offsite.

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 X	NA
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
Lincoln Backman-Lowe	EA	Scientist	10
Julio Cabrera	AARCO	Driller's Helper	9.5
William Cabrera	AARCO	Runner	9.5
Jose Garcia	AARCO	Runner	9.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
RKI GX-6000 PID	Pine	1	Yes
Heron WLM	Pine	1	No
Geoprobe 8140LC	AARCO	1	Yes
Shopvac	AARCO	1	Yes
55 gallon drum	AARCO	7	Yes
Assorted hand tools	EA/AARCO	-	Yes
Sengore S8100 saw	AARCO	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						

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

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives	
Name	**Representing**
Julio Fanas	Sundial

Project Schedule Comments

After tonight's work, there is one open borehole that is ready for well install. There are 4 additional locations that still need to be bored out and have wells installed. EA requested that AARCO build the CMT-06 well prior to arriving onsite so that work can commence right away.

Building representative informed EA that there will be only one day shift tomorrow, so access into building will not be there until 8pm when the security officer arrives. EA and AARCO plan to arrive onsite at 8pm and begin by installing CMT-06 well. Goal is to install that well and complete boring and installation of CMT-03.

Issues Pending

Not enough bentonite onsite to continue installing wells. Drilling subcontractor (AARCO) was instructed to have bentonite ready for tomorrow's work, response was that bentonite pallets should arrive onsite tomorrow.

Interaction with Public, Property Owners, Media, etc.

Nothing to note.

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

Site Photographs (Descriptions Below)







Comments	
N/A	
Site Inspector(s): Lincoln Backman-Lowe	**Date: 01/28/2023**

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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contract No.

DEC PM – Payson Long

Engineer PM – Megan Miller

Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Cloudy	AM	Cloudy	PM
Temperature	43 °F	AM	36°F	PM
Wind	4 mph SW	AM	8 mph SW	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

Summary of Work Performed	Arrived at site:	100	Departed Site:	1730

(1100) M. Gilkey, H. Young, and C. Badman (EA) onsite to develop newly installed CMT wells. (1120) Calibrate Horibas and label drums that AARCO delivered to the site. (1130) Calibrate Horiba. (1200) Access building and sign in with safety officer. (1230) Located all CMT wells in building. (1313) Was able to complete purge of CMT-06 ports 1 and 3 (shallow and shallow intermediate intervals) and CMT-07 port 4 (shallow intermediate). CMT-07 port 3 (shallow interval) purged dry in under 15 minutes. Will attempt another purge on 02/01/23. (1700) Discharged purge water to drum. (1730) Signed out with building safety office and M. Gilkey, H. Young, and C. Badman (EA) offsite.

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 X	NA
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
Moriah Gilkey	EA	Engineer	6.5
Haley Young	EA	Scientist	6.5
Cody Badman	EA	Scientist	6.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
MiniRae 3000	Pine	1	Yes
Heron WLM	Pine	2	Yes
Perristatlic Pumps	Pine	2	Yes
Horiba	Pine	2	Yes
55 gallon drum	AARCO	3	Yes
Assorted hand tools	EA	-	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)*
3 x 55 gal Drums	Y			AARCO	1	NA

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

Issues Pending

Interaction with Public, Property Owners, Media, etc.

Nothing to note.

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

Site Photographs (Descriptions Below)	

Comments
N/A

Site Inspector(s): Moriah Gilkey	**Date: 01/31/2023**

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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT

National Heatset Printing Co. RSO, Site No. 152140 **Date: 02/01/2023**

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No.

DEC PM – Payson Long

Engineer PM – Megan Miller

Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Cloudy	AM	Cloudy	PM
Temperature	43 °F	AM	36°F	PM
Wind	4 mph SW	AM	8 mph SW	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

Summary of Work Performed	Arrived at site:	0645	Departed Site:	1800

(0645) M. Gilkey, H. Young, and C. Badman onsite and signed in with Sundial. (0710) Calibrated Horibas and PID. (0725) Began developing remaining wells onsite. (1730) One of the Perri pumps stopped functioning will swap out at the Pine Environmental Long Island office tomorrow. (1750) Finished developing the last well port of the day and dumped water in drums and secured them. (1800) Signed out with Sundial and M. Gilkey, H. Young, and C. Badman (EA) offsite.

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 X	NA
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
Moriah Gilkey	EA	Engineer	11.25
Haley Young	EA	Scientist	11.25
Cody Badman	EA	Scientist	11.25

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
MiniRae 3000	Pine	1	Yes
Heron WLM	Pine	2	Yes
Perristatlic Pumps	Pine	2	Yes
Horiba	Pine	2	Yes
55 gallon drum	AARCO	3	Yes
Assorted hand tools	EA	-	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)*

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

Issues Pending

Broken peristaltic pump to be swapped out

Interaction with Public, Property Owners, Media, etc.

Nothing to note.

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

Site Photographs (Descriptions Below)	

Comments
N/A

Site Inspector(s): Moriah Gilkey	**Date: 02/01/2023**

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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT

National Heatset Printing Co. RSO, Site No. 152140 **Date: 02/02/2023**

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No.

DEC PM – Payson Long

Engineer PM – Megan Miller

Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Sunny	AM	Sunny	PM
Temperature	27 °F	AM	37°F	PM
Wind	4 mph SW	AM	8 mph SW	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

Summary of Work Performed	Arrived at site:	0615	Departed Site:	1845

(0615) M. Gilkey and C. Badman (EA) onsite and signed in with Sundial. (0630) Calibrated Horibas and PID. (0650) Began developing remaining wells onsite. (1220) C. Badman (EA) offsite to swap the broken perri pump at the Hicksville Pine Environmental office. (1315) C. Badman (EA) onsite with new perri pump. (1533) Started development of CMT-09 ports and had to stop intermittently due to proximity to loading docks so Sundial could load semi-trailers. (1820) Drummed purge water in drums and secured. (1830) Signed out with Sundial (0645) M. Gilkey and C. Badman (EA) offsite.

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 X	NA
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
Moriah Gilkey	EA	Engineer	12.5
Cody Badman	EA	Scientist	12.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
MiniRae 3000	Pine	1	Yes
Heron WLM	Pine	2	Yes
Perristatlic Pumps	Pine	2	Yes
Horiba	Pine	2	Yes
55 gallon drum	AARCO	3	Yes
Assorted hand tools	EA	-	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)*

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

Issues Pending

N/A

Interaction with Public, Property Owners, Media, etc.

Nothing to note.

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

Site Photographs (Descriptions Below)	

Comments
N/A

Site Inspector(s): Moriah Gilkey	**Date: 02/02/2023**

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 <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:		

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: None.			

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:
None.

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: None.			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT

National Heatset Printing Co. RSO, Site No. 152140 **Date: 02/03/2023**

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No.

DEC PM – Payson Long

Engineer PM – Megan Miller

Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Sunny	AM	Sunny	PM
Temperature	27 °F	AM	27 °F	PM
Wind	4 mph SE	AM	19 mph SE	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

NA

Summary of Work Performed	Arrived at site:	0615	Departed Site:	1500

(0615) M. Gilkey and C. Badman (EA) onsite. (0620) M. Gilkey (EA) signs in with Sundial. (0630) Calibrated the Horibas. (0638) Began developing remaining wells onsite. (1400) Received permission to continue developing remaining well ports the following week due to inclement weather beginning. (1430) Discharged purge water into onsite drums. Secured and labeled well development water drums. (1445) M. Gilkey (EA) signed out with Sundial brands and turned in building pass. (1500) M. Gilkey and C. Badman (EA) offsite.

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 X	NA
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
Moriah Gilkey	EA	Engineer	8.75
C. Badman	EA	Scientist	8.75

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
Honeywell MiniRae	Pine	1	Yes
Heron WLM	Pine	2	Yes
Perristatlic Pumps	Pine	2	Yes
Horiba	Pine	2	Yes
55 gallon drum	AARCO	3	Yes
Assorted hand tools	EA	-	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)*

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

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

Issues Pending

N/A

Interaction with Public, Property Owners, Media, etc.

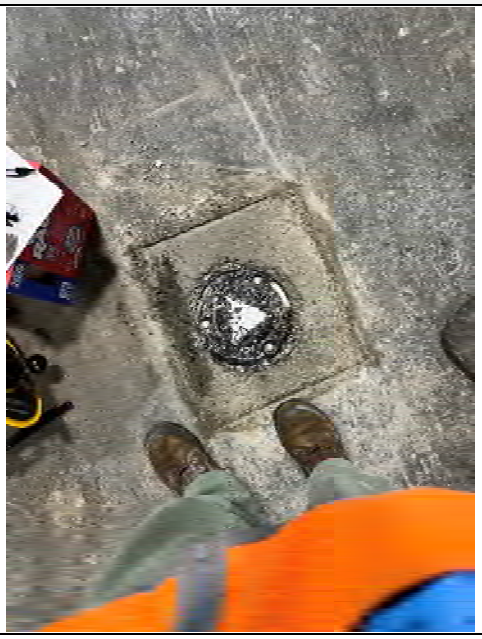
Nothing to note.

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

Site Photographs (Descriptions Below)



Liquid coming out of the well during the first ~30 mins (later determined it was lubricant from the drillers)



Concrete pad for CMT-04



CMT well gauging

Comments

N/A

Site Inspector(s): Moriah Gilkey	**Date: 02/08/2023**

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 <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:		

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: None.			

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: None.			

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: None.			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT

National Heatset Printing Co. RSO, Site No. 152140 **Date: 02/08/2023**

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No.

DEC PM – Payson Long

Engineer PM – Megan Miller

Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Sunny	AM		PM
Temperature	53 °F	AM		PM
Wind	NA	AM		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

NA

Summary of Work Performed	Arrived at site:	1045	Departed Site:	1145

(1045) M. Gilkey and H. Bedell (EA) onsite. (1055) Start well development of CMT-08 port 3. After 10 mins the port ran dry. Let the port recharge for 15 minutes and started purge again. Port went dry after another 10 mins. Called PM and received permission to consider well development. (1130) labeled drums. There are currently 81 drums onsite. (1145) M. Gilkey and H. Bedell (EA) offsite.

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 X	NA
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
Moriah Gilkey	EA	Engineer	1
Hannah Bedell	EA	Engineer	1

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	1	Yes
MiniRae 3000	Pine	1	Yes
Heron WLM	Pine	1	Yes
Perristatlic Pumps	Pine	1	Yes
Horiba	Pine	1	Yes
55 gallon drum	AARCO	3	Yes
Assorted hand tools	EA	-	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)*

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

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

Issues Pending

N/A

Interaction with Public, Property Owners, Media, etc.

Nothing to note.

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

Site Photographs (Descriptions Below)	
CMT-04	Labeled well tubing

Comments
N/A

Site Inspector(s): Moriah Gilkey	**Date: 02/08/2023**

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:		

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: None.			

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: None.			

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No.
DEC PM – Payson Long
Engineer PM – Megan Miller
Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Sunny	AM	Sunny	PM
Temperature	28 °F	AM	27 °F	PM
Wind	5 mph WNW	AM	19 mph SE	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

NA

Summary of Work Performed | Arrived at site: 0700 | Departed Site: 1730

(0700) M. Gilkey, L. Backman-Lowe, H. Young, C. Badman, and K. Cassidy (EA) arrive at the offsite location. When EA arrived there were wires hanging down from the telephone poles; notified PSEG. See pictures. (0715) Calibrated RKI-GX6000s. (0730) Spilt into two groups to gauge onsite and offsite wells. Wells damaged or unlocated included MW-6S (appeared to be paved over and has a record of not being located), MW-7 (found but filled in with sediment and water), MW-2AD (Found but filled to the top of the casing with Bentonite, when bentonite was removed the PVC cap would not loosen). (1100) Calibrated Horibas. (1135) Began purging and sampling offsite wells. (1700) Ended purging for the day. Stored trash and equipment in the treatment system buildings, locked up buildings and site gate. (1720) M. Gilkey, L. Backman-Lowe, H. Young, C. Badman, and K. Cassidy (EA) offsite.

Well ID	Date	Start purge	End purge	Sample time	QA/QC	Analysis
DDC-5-PS	3/20/2023	1120	1202	1202		8260 VOCs
DDC-5-PD	3/20/2023	1133	1202	1202		8260 VOCs
DDC-6-PS	3/20/2023	1141	1220	1220		8260 VOCs
DDC-6-PD	3/20/2023	1147	1214	1215		8260 VOCs
MW-3D (offsite)	3/20/2023	1248	1326	1326		8260 VOCs
MW-3S(offsite)	3/20/2023	1256	1324	1324		8260 VOCs
DDC-7-PS	3/20/2023	1309	1339	1339		8260 VOCs
DDC-8-PS	3/20/2023	1310	1337	1337		8260 VOCs
DDC-8-PD	3/20/2023	1358	1358	1437		8260 VOCs
DDC-7-PD	3/20/2023	1401	1431	1431		8260 VOCs
MW-2S(offsite)	3/20/2023	1414	1455	1455	FD-01	8260 VOCs
MW-2D(offsite)	3/20/2023	1441	1515	1515		8260 VOCs
DDC-9-PD	3/20/2023	1505	1535	1535		8260 VOCs
DDC-9-PS	3/20/2023	1506	1536	1536	MS/MSD	8260 VOCs
MW-1D(offsite)	3/20/2023	1603	1652	1652		8260 VOCs
MW-1S(offsite)	3/20/2023	1610	1655	1655		8260 VOCs
DDC-10-PS	3/20/2023	1612	1645	1645		8260 VOCs
DDC-10-PD	3/20/2023	1612	1645	1645		8260 VOCs

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 X	NA
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
Moriah Gilkey	EA	Engineer	10.5
Lincoln Backman-Lowe	EA	Scientist	10.5
Cody Badman	EA	Scientist	10.5
Katherine Cassidy	EA	Scientist	10.5
Haley Young		Scientist	10.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	2	Yes
RXI-GX-6000	Pine	4	Yes
Heron WLM	Pine	4	Yes
Peristaltic Pumps	Pine	4	Yes
Horiba	Pine	4	Yes
Assorted hand tools	EA	-	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)*

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

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments
N/A
Issues Pending
N/A
Interaction with Public, Property Owners, Media, etc.
Nothing to note.

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

Site Photographs (Descriptions Below)



Wires from Telephone pole laying on the ground outside of the offsite area.



Connections of the wires laying on the ground



MW-2AD filled with bentonite when opened



MW-7S

	
MW-7S filled in with water and sediment	

Comments	
N/A	
Site Inspector(s): Moriah Gilkey	**Date: 03/20/2023**

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:		

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: None.			

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: None.			

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No.
DEC PM – Payson Long
Engineer PM – Megan Miller
Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Sunny	AM	Sunny	PM
Temperature	35 °F	AM	57 °F	PM
Wind	3 mph WNW	AM	17 mph SSW	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

NA

Summary of Work Performed	Arrived at site:	0650	Departed Site:	1830

(0650) M. Gilkey, L. Backman-Lowe, H. Young, K. Cassidy, and C. Badman (EA) onsite at the offsite treatment system location for quarterly sampling and RSO sampling. J. Fontaine (EA) onsite for IDW management and treatment. (0705) Horibas were calibrated. (0720) Loaded equipment and coolers for sampling. (0730) Began purging and sampling wells. See table below for details. (0800) Set up two pumps and carbon buckets and began treating IDW purge water from well development. (0845) M. Gilkey (EA) offsite for ice and for tools to open MW-2AD (0900) Cable company arrived at the offsite location to remove the wires outside the gate. (0945) M. Gilkey (EA) onsite. MW-2AD was successfully opened and gauged. (1100) EZ-Mudd (drill lubricant) clogged filter on one of the carbon buckets. Filter was decon'ed and flow into the bucket was restored. (1300) M. Gilkey (EA) began gauging CMT well ports. (1400) Began the purging and sampling of the CMT wells outside of the building. The port label ring was aligned with the division of port 1 and Port 2 facing north on all CMT wells. Shallow port that went dry multiple times during development were sampled for VOCs prior to purging. (1600) Gained Access to the Sundial building and signed in with the safety coordinator. (1605) Set up and begin purging of the CMT wells inside the Sundial building. (1730) Sign out with Sundial Safety Coordinator. (1800) Arrive at the offsite treatment system building and store equipment and trash in building. Buildings and gate were then secured. The wires that were in front of the offsite gate had been removed during the day. (1830) M. Gilkey, L. Backman-Lowe, H. Young, K. Cassidy, J. Fontaine, and C. Badman (EA) offsite.

Well ID	Purge Date	Purge Start Time	Purge End Time	Sample Time	QA/QC	Analysis	Interval	Notes
MW-14S	3/21/2023	734	807	807		8260 VOCs		
Mw-1D(onsite)	3/21/2023	750	837	837		8260 VOCs		
MW-14D	3/21/2023	734	843	843		8260 VOCs		
DDC-4PS	3/21/2023	903	931	931		8260 VOCs		
DDC-4PD	3/21/2023	905	935	935		8260 VOCs		
MW-3S(onsite)	3/21/2023	925	1005	1005		8260 VOCs		
MW-2S(onsite)	3/21/2023	933	1006	1006	MS/MSD	8260 VOCs		
MW-15S	3/21/2023	953	1024	1024		8260 VOCs		
MW-15D	3/21/2023	958	1040	1043		8260 VOCs		
MW-3D(onsite)	3/21/2023	1025	1055	1055		8260 VOCs		
MW-2D(onsite)	3/21/2023	1048	1109	1110		8260 VOCs		
DDC-2-PD	3/21/2023	1105	1135	1135		8260 VOCs		
DDC-2-PS	3/21/2023	1106	1142	1142		8260 VOCs		
MW-5D	3/21/2023	1119	1154	1154		8260 VOCs		
MW-5S	3/21/2023	1140	1210	1210		8260 VOCs		
MW-2A	3/21/2023	1203	1236	1236	FD-02	8260 VOCs		
MW-2AD	3/21/2023	1208	1256	1259		8260 VOCs		
CMT-10-3	3/21/2023	1323	1400	1400		8260 VOCs	Shallow	
CMT-10-2	3/21/2023	1402	1452	1452		8260 VOCs	Shallow/Int	
CMT-8-3	3/21/2023	1534	1537	1519		8260 VOCs	Shallow/Int	Sample taken first due to port going dry 3x during development
CMT-8-2	3/21/2023	1436	1515	1420		8260 VOCs	Shallow	Sample collected before purging due to port going dry twice during development
CMT-1-5	3/21/2023	1346	1413	1413		8260 VOCs	Shallow	
CMT-1-6	3/21/2023	1452	1528	1528		8260 VOCs	Shallow/Int	
CMT-10-1	3/21/2023	1510	1550	1550		8260 VOCs	Int/Deep	
CMT-1-1	3/21/2023	1535	1605	1605		8260 VOCs	Int/Deep	
CMT-8-4	3/21/2023	1547	1751	1751		8260 VOCs	Int/Deep	
CMT-5-1	3/21/2023	1607	1643	1643		8260 VOCs	Shallow	

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 X	NA
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
Moriah Gilkey	EA	Engineer	10.5
Lincoln Backman-Lowe	EA	Scientist	10.5
Cody Badman	EA	Scientist	10.5
Katherine Cassidy	EA	Scientist	10.5
Haley Young	EA	Scientist	10.5
Jeremy Fontaine	EA	Geologist	10.5

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	2	Yes
RXI-GX-6000	Pine	4	Yes
Heron WLM	Pine	6	Yes
Peristaltic Pumps	Pine	4	Yes
Horiba	Pine	4	Yes
Assorted hand tools	EA	-	Yes

GAC 5 gal Bucket	EA	2	Y

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:

None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

Issues Pending

N/A

Interaction with Public, Property Owners, Media, etc.

Nothing to note.

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

Site Photographs (Descriptions Below)



Wires from Telephone pole laying on the ground outside of the offsite area.



Connections of the wires laying on the ground



MW-2AD filled with bentonite when opened



MW-7S

	
MW-7S filled in with water and sediment	

Comments	
N/A	
Site Inspector(s): Moriah Gilkey	**Date: 03/21/2023**

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:		

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: None.			

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: None.			

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No.

DEC PM – Payson Long

Engineer PM – Megan Miller

Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Sunny	AM	Sunny	PM
Temperature	38 °F	AM	58 °F	PM
Wind	NA	AM	18 mph SSW	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

NA

Summary of Work Performed	Arrived at site:	0630	Departed Site:	1845

(0630) M. Gilkey (EA) arrives at the offsite location and begins to load trucks and equipment. (0645) H. Young and K. Cassidy (EA) arrive offsite and begin calibrating Horibas. (0650) L. Backman-Lowe and C. Badman (EA) arrive at the offsite location. (0800) J. Fontaine (EA) arrives at the onsite locations and begins treating the IDW with Carbon buckets. (0715) M. Gilkey (EA) arrives at the offsite location and signs in with the Sundial safety coordinator. (0725) Began purging and sampling CMT wells inside the building. See table below for details. The port label ring was aligned with the division of port 1 and Port 2 facing north on all CMT wells. Shallow port that went dry multiple times during development were sampled for VOCs prior to purging. (1300) K. Cassidy (EA) offsite to retrieve extra perri pump batteries. (1440) K. Cassidy (EA) onsite with extra batteries. (1600) L. Backman-Lowe and J. Fontaine (EA) began labeling and taking composite soil samples from the IDW drums onsite for TCLP and VOCs. (1615) M. Gilkey (EA) offsite to ship MNA parameters. (1715) M. Gilkey (EA) onsite. Composite soil samples had been completed. (1815) M. Gilkey (EA) signed out with Sundial's safety coordinator. (1830) All arrive at the offsite treatment system to store equipment, trash, and samples. Buildings and gate were then secured. (1845) M. Gilkey, L. Backman-Lowe, H. Young, K. Cassidy, J. Fontaine, and C. Badman (EA) offsite.

Well ID	Purge Date	Purge Start Time	Purge End Time	Sample Time	QA/QC	Analysis	Interval	Notes
CMT-5-7	3/22/2023	727	800	800		8260 VOCs	Shallow/Int	
CMT-6-3	3/22/2023	727	815	815		8260 VOCs	Shallow/Int	Sample collect first
CMT-6-1	3/21/2023	1708	1735	1705		8260 VOCs	Shallow	Sample collected before purge due to port going dry twice during development
CMT-2-4	3/22/2023	757	746	818		8260 VOCs	Shallow	well went dry during purge; sample collect before purge
CMT-2-6	3/22/2023	822	900	900		8260 VOCs	Shallow/Int	
CMT-5-3	3/22/2023	813	922	922		8260 VOCs	Int/Deep	
CMT-3-6	3/22/2023	1001	1019	958		8260 VOCs	Shallow	well purged dry; sample taken before purge
CMT-2-7	3/22/2023	911	943	943		8260 VOCs	Int/Deep	
CMT-2-1	3/22/2023	1000	1038	1038	MS/MSD	8260 VOCs and MNA	Deep	pump issues
CMT-5-5	3/22/2023	942	1047	1047		8260 VOCs and MNA	Deep	
CMT-3-7	3/22/2023	1023	1102	1102		8260 VOCs	Shallow/Int	
CMT-3-2	3/22/2023	1134	1202	1202		8260 VOCs	Int/Deep	
CMT-6-4	3/22/2023	828	855	858		8260 VOCs	Int/Deep	
CMT-6-7	3/22/2023	1153	1223	1223		8260 VOCs and MNA	Deep	
CMT-3-3	3/22/2023	1222	1254	1254	FD-03	8260 VOCs and MNA	Deep	
CMT-7-3	3/22/2023	1353	1412	1424		8260 VOCs	Shallow	Well went dry; took sample after recharge
CMT-8-5	3/22/2023	1411	1441	1441		8260 VOCs and MNA	Deep	
CMT-7-4	3/22/2023	1439	1508	1508		8260 VOCs	Shallow/Int	
CMT-4-4	3/22/2023	1443	1452	1432		8260 VOCs	Shallow	Well went dry; collected sample before purge
CMT-4-5	3/22/2023	1500	1551	1551		8260 VOCs	Shallow/Int	
CMT-7-5	3/22/2023	1538	1608	1608		8260 VOCs	Int/Deep	
CMT-4-6	3/22/2023	1608	1655	1655		8260 VOCs	Int/Deep	
CMT-9-4	3/22/2023	1659	1735	1735		8260 VOCs	Shallow	

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 X	NA
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
Moriah Gilkey	EA	Engineer	12.25
Lincoln Backman-Lowe	EA	Scientist	11.75
Cody Badman	EA	Scientist	11.75
Katherine Cassidy	EA	Scientist	12.0
Haley Young	EA	Scientist	12.0
Jeremy Fontaine	EA	Geologist	12.0

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	2	Yes
RXI-GX-6000	Pine	4	Yes
Heron WLM	Pine	6	Yes
Peristaltic Pumps	Pine	4	Yes
Horiba	Pine	4	Yes
Assorted hand tools	EA	-	Yes

GAC 5 gal buckets	EA	2	Y

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:

None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

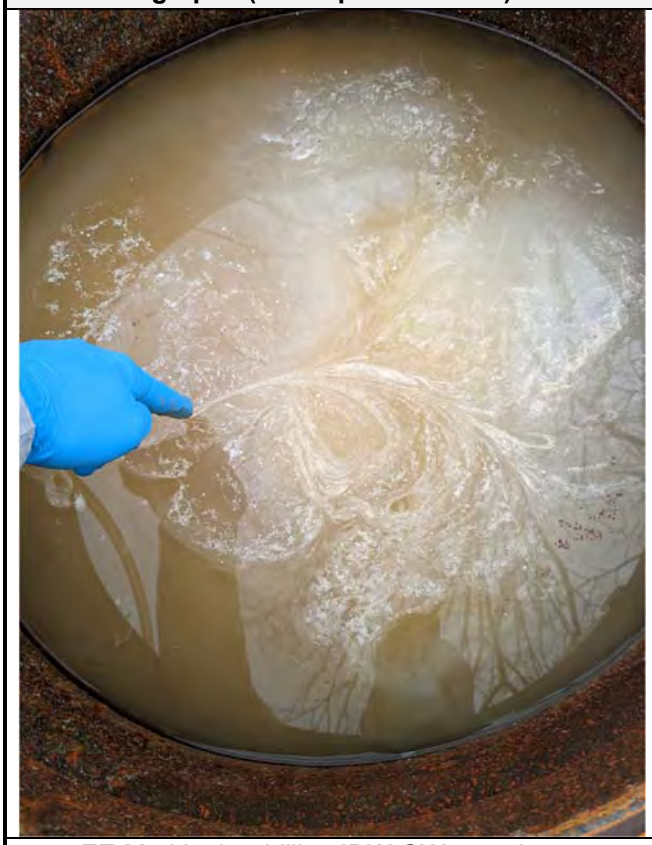
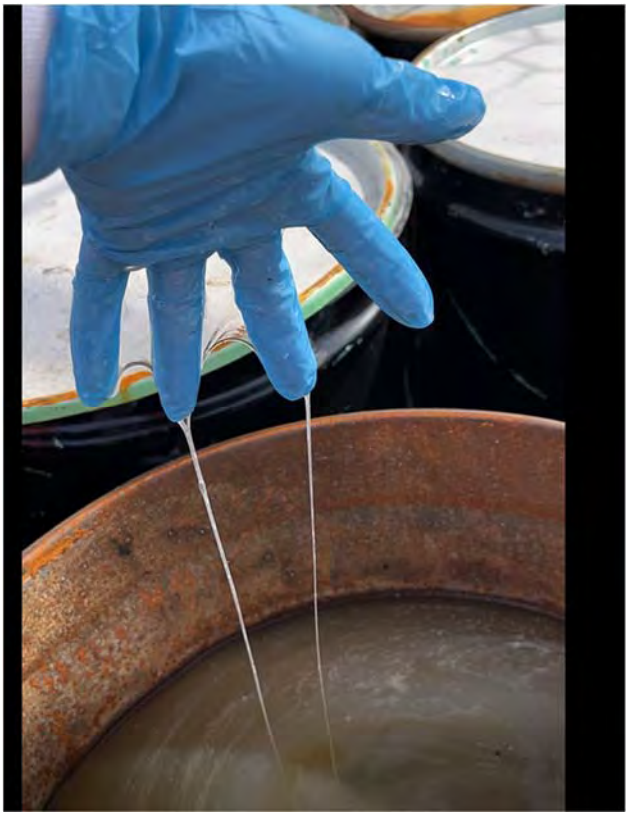
Issues Pending

N/A

Interaction with Public, Property Owners, Media, etc.

Nothing to note.

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

Site Photographs (Descriptions Below)	
	
EZ-Mud in the drilling IDW GW containers. Extremely high viscosity that clogs the carbon bucket filters	EZ-Mud in the drilling IDW GW containers. Extremely high viscosity that clogs the carbon bucket filters

Comments
N/A

Site Inspector(s): Moriah Gilkey	**Date: 03/22/2023**

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:		

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: None.			

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: None.			

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: None.			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No.
DEC PM – Payson Long
Engineer PM – Megan Miller
Engineer Insp. – Moriah Gilkey

Site Location: Farmingdale, NY

Weather Conditions				
General Description	Sunny	AM	Sunny	PM
Temperature	45 °F	AM	52 °F	PM
Wind	3 mph S	AM	6 mph SSW	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

NA

Summary of Work Performed	Arrived at site:	0730	Departed Site:	1700

(0730) M. Gilkey and C. Badman (EA) arrive at the offsite location and begin to load trucks and equipment. (0745) H. Young and K. Cassidy arrive offsite and begin calibrating Horibas. (0745) J. Fontaine (EA) arrives at the onsite locations and begins treating the IDW with Carbon buckets. (0815) M. Gilkey (EA) arrives onsite and signs in with Sundial Safety Coordinator. (0820) Began purging and sampling CMT wells inside the building. See table below for details. The port label ring was aligned with the division of port 1 and Port 2 facing north on all CMT wells. Shallow port that went dry multiple times during development were sampled for VOCs prior to purging. (0900) Began labeling and sampling GW IDW drums for TCLP VOCs. Liquid was very viscous, confirmed with AARCO that the liquid is EZ-Mud mixed with water from well installation. (0930) CMT-4 port 1 began to act as if it was dry. M. Gilkey (EA) pulled tubing and about 2 ft of DNAPL was in the last ~ 4 ft of tubing. Turned on the RKI GX-6000 and took a reading of Port 1. The RKI read 3072 PPM. M. Gilkey (EA) called PM and received permission of cap the well and move on. (1100) End composite groundwater IDW samples. (1300) Took all EA equipment out of the Sundial building. (1430) H. Young and K. Cassidy (EA) offsite to ship MNA samples. The drum area cleaned up and all drums were labeled and secured. (1445) J. Fontaine and C. Badman (EA) offsite. (1500) M. Gilkey (EA) signs out with the Sundial Safety Coordinator and returned building pass. (1530) M. Gilkey (EA) arrived at the offsite system location and cleaned up areas and stored extra tubing rolls in the storage area. Organized samples. Secured buildings and gate. (1700) M. Gilkey (EA) offsite.

Well ID	Purge Date	Purge Start Time	Purge End Time	Sample Time	QA/QC	Analysis	Interval	Notes
CMT-10-6	3/23/2023	1117	1153	1153		8260 VOCs and MNA	Deep	
CMT-7-6	3/23/2023	1005	1048	1048		8260 VOCs and MNA	Deep	
CMT-9-1	3/23/2023	958	1025	1025		8260 VOCs and MNA	Deep	
CMT-9-2	3/23/2023	919	946	946		8260 VOCs	Int/Deep	
CMT-9-3	3/23/2023	823	905	905		8260 VOCs	Shallow/Int	
CMT-1-2	3/23/2023	1150	1241	1241	FD-04	8260 VOCs and MNA	Deep	

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 X	NA
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
Moriah Gilkey	EA	Engineer	9.5
Cody Badman	EA	Scientist	7.25
Katherine Cassidy	EA	Scientist	7.0
Haley Young	EA	Scientist	7.0
Jeremy Fontaine	EA	Geologist	7.25

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	2	Yes
RXI-GX-6000	Pine	4	Yes
Heron WLM	Pine	6	Yes
Peristaltic Pumps	Pine	4	Yes
Horiba	Pine	4	Yes
Assorted hand tools	EA	-	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)*

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

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

Issues Pending
N/A

Interaction with Public, Property Owners, Media, etc.
Nothing to note.

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

Site Photographs (Descriptions Below)



DNAPL in the bottom of CMT-4 port 1



DNAPL in the bottom of CMT-4 port 1



PPE and WASTE in a drum labeled GW



Drums staged onsite.

	
Offsite secured	

Comments	
N/A	
Site Inspector(s): Moriah Gilkey	**Date: 03/23/2023**

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:		

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: None.			

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: None.			

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: None.			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT

National Heatset Printing Co. RSO, Site No. 152140 **Date: 06/20/2023**

NYSDEC
Division of Environmental Remediation

NEW YORK STATE Department of Environmental Conservation

Contract No.

DEC PM – Payson Long

Engineer PM – Megan Miller

Engineer Insp. – Noah Robinson

Site Location: Farmingdale, NY

Weather Conditions				
General Description	NA	AM	Partly Cloudy	PM
Temperature	NA	AM	52 °F	PM
Wind	NA	AM	6 mph SSW	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

NA

Summary of Work Performed	Arrived at site:	1645	Departed Site:	1730

(1645) N. Robinson (EA) onsite to sample composite samples from drum series Y and Z. EA sample composite from Z series (1655). EA sample composite from Y series (1700). N. Robinson open up MW-6S by drilling through stripped bolt and replacing. EA offsite (1730).

Well ID	Purge Date	Purge Start Time	Purge End Time	Sample Time	QA/QC	Analysis	Interval	Notes
152140-Z-062023				1655		8260 VOCs		
152140-Y-062023				1700		8260 VOCs		

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 X	NA
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
N. Robinson	EA	Scientist	0.75

Equipment Description	Contractor/Vendor	Quantity	Used
Ford F-150	EA	2	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)*

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

Equipment/Material Tracking Comments:
None.

Visitors to Site

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

Site Representatives

Name	Representing
Julio Fanas	Sundial
Moriah Gilkey	EA

Project Schedule Comments

N/A

Issues Pending

N/A

Interaction with Public, Property Owners, Media, etc.

Nothing to note.

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

Site Photographs (Descriptions Below)	

Comments	
N/A	
Site Inspector(s): Noah Robinson	**Date: 06/20/2023**

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:		

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: None.			

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: None.			

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: None.			

* BART – Best Available Retrofit Technology

Appendix C

Field Forms

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Boring Logs

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EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location: SB-01A
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 1 of 4

	Drilling	
Water Level:	Start	Finish
Time:	DATE	DATE
Date:	TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	N/A		0.8	0	Asphalt / silty Sand w gravel / few, s-l, sub angular gravel / moist-dens / D. Brown
5/2	SM		1.4	1	Silty sand w gravel / few, s-l, sub angular / moist-dens / D. Brown
	SM		20	2	SAA
	SM		0.1	3	SAA
	SM		0.9	4	SAA
	SM		3.2	5	SAA
5/1.5	SM		1.7	6	SAA
	SM		1.1	7	SAA
	SM		1.1	8	SAA
	SM		0.3	9	SAA
	SM/SW		0.5	10	SAA WG Sand w gravel / few, s-m, angular gravel / loose-moist / orange-brown
5/4.2	SW		0.9	11	SAA
	SW		2.0	12	SAA
	SW		1.1	13	WG Sand w gravel / some, s-l, sub angular gravel / loose-moist / Beige
	SW		1.8	14	SAA
5/4.4	SM		0.5	15	Silty Sand with gravel / some, s-l, sub angular gravel / moist-dens / D. Brown
	SM		16.1	16	SAA
	SW		1.2	17	WG Sand w gravel / few, s-m, sub rounded gravel / Moist-loose / Beige
	GW		0.9	18	WG gravel w Sand / some, coarse sand / s-l, sub angular gravel / wet-dense / Beige — water table
	GW		2.9	19	SAA
5/4.2	SM		2.0	20	Silty Sand w gravel / few, s-l, sub angular gravel / loose-moist / D. Brown
	SW		21.2	21	WG Sand w gravel / some, s-l, sub rounded gravel / wet-m dense / Beige
	SW		0.4	22	SAA
	SW		0.2	23	SAA
	GW		6.0	24	WG gravel w sand / s-l, sub rounded gravel / some, coarse sand / wet loose / Beige
5/4.5	SM		0.7	25	See next pg for unit descrip

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-01A
	Project:	
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 2 of 4
		Drilling
Water Level:		Start / Finish
Time:		DATE / DATE
Date:		TIME / TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SM		6.1	26	Silty Sand w gravel/some, S-L, gravel Subangular/Moist-dense/d. brown
	SW		8.4	27	WG-Sand w/gravel/some, S-L, gravel well rnd/loos-wet/beige
	SW		3.2	28	SAA
	GW		0.4	29	WG-gravel w Sand/some, coarse Sand/S-L, gravel well rounded/loose-wet/Beige
	SW		1.1	30	WG-Sand/fine-coarse, Subangular grains/loose-wet/beige
5	SW		2.4	31	SAA
3.7	GW		0.2	32	WG-gravel w sand/some, coarse Sand, Subangular/S-M, gravel Subangular/loose-wet/beige
	GW		0.7	33	SAA
	SW				
	SW		0.2	34	WG-Sand w gravel/some, coarse gravel, Sub rounded/loose-wet/beige
	PAG		0.2	35	WG Sand w gravel/some, gravel Subrounded/loose-wet/beige
	GP		0.6	36	PG-gravel with Sand/Minor, coarse Sand, Sub rounded/S-L, Sub rounded/loose-wet Beige
5	SW		0.3	37	WG-Sand/f-Coarse, Subangular Sand/wet-loose/Beige
2.8	SW		0.3	38	WG-Sand SAA
	SW		0.2	39	WG-Sand w gravel/some, S, gravel Subrounded/Coarse sand/wet-loose/Beige
	SW		0.2	40	WG Sand/f-Coarse, Subangular Sand/loose-wet/beige
	SW		0.5	41	WG-Sand SAA
5	SW		0.6	42	WG Sand w gravel/some, S, gravel Subangular/loose-wet/beige
1.8	GW		0.3	43	WG-gravel w Sand/some sand, coarse/S-M, Subangular gravel/loose wet/beige
	GP		0.2	44	PG-gravel w sand/Minor, coarse sand/S-M, Subangular gravel/loose-moist beige
	SW		0.2	45	WG Sand/f-Coarse, Subangular Sand/loose-wet/beige
	SW		0.6	46	SAA
5	GW		0.2	47	WG-gravel w Sand/some sand, coarse/S-M, gravel Subangular/Wet-loose/Dense
4	GW		0.2	48	SAA
	SW		0.1	49	WG-Sand w gravel/some, M-L, gravel well rounded/Wet-M.dense/beige
	SW		0.3	50	WG-Sand/fine-coarse, Sub rounded Sand/wet-loose/beige
5/3.3	SW		0.6	51	WG-Sand w gravel/some, S, gravel well rounded/wet-loose/beige

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-01A
	Project:	Soil Boring Number:
Drilling Method:		Sheet 3 of 4
Sampling Method:		Drilling

	Start	Finish
Water Level:	DATE	DATE
Time:	TIME	TIME
Date:		

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GW		0.3	52	WG gravel with sand/ some, coarse, subrounded sand/ loose-wet/ beige gravel is subrounded, S-L, fines upwards
	GW		0.3	53	
	SW		0.7	54	WG sand with gravel/ few, S-L, subrounded/ loose-wet/ beige
5	GP		5.2	55	PG gravel/ S-M, well rounded gravel/ loose-wet/ beige
	SW		2.4	56	WG sand/ fine-coarse, well rounded gravel/ loose-wet/ beige
X 3.5	SW		0.4	57	SAA.
	SW		0.4	58	WG sand with gravel/ some, S-L, well rounded gravel/ loose wet/ beige,
	SW		0.2	59	SAA
	GP		0.6	60	PG gravel/ S-M, well rounded gravels/ loose-wet/ beige
	SW		0.3	61	WG sand/ f-very coarse, subangular sand/ loose-wet/ beige
X 5	SW		0.1	62	SAA
2.2	SW		0.1	63	SAA
	SW		0.1	64	SAA
	GP		8.2	65	PG gravel with sand/ minor, coarse sand, S-M, well rounded gravel/ loose-wet
5	GP		1.0	66	PG gravel/ M-L, well rounded clasts/ loose-wet/ beige
X 4.2	SW		0.2	67	WG sand/ fine-coarse, subangular sand/ loose-wet/ D. Tan/brown
	SW		0.2	68	SAA/
	SW		0.1	69	WG sand w gravel/ few, S-in, subangled clasts/ Wet medium dense/ D. Tan/brown
	SW		0.2	70	WG sand/ F-coarse, subangular/ wet-loose/ Beige
	GW			71	WG gravel w sand/ some, coarse sand, S-L, subrounded gravel/ loose-wet/ beige
5	SW		0.2	72	WG sand w gravel/ Minor, S, subrounded gravel/ loose-wet/ beige
X 4.2	SW		0.1	73	WG sand w gravel/ some, S-L, subrounded/ loose-wet/ beige
	GW		0.2	74	WG gravel w sand/ some, coarse sand/ S-M, subrounded clasts/ loose-wet/ beige and 7/12
	GW		0.1	75	WG gravel w sand/ little, coarse sand/ S-M, subrounded clasts/ loose-wet/ D Brown
5			0.0	76	WG sand/ coarse, subangular sand/ M. dense-wet/ D Brown
4.3			0.3	77	WG sand w gravel/ some S-L, subrounded gravel/ M. dense-wet D Brown
			0.1		

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location: SB-01A
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 4 of 4

Water Level:					Drilling Start	Drilling Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Recvd	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5	SW		0.6	78	G/F sand w gravel/some, s-r, clasts, sub rounded/M. dense - wet/D. brown
	SW		0.1	79	SAA
	N/A		0	80	
4	GW		0.3	81	W.G. gravel w sand/s-r, sub rounded clasts/some, sand coarse/loose-wet-D.Brown
	SW		1.1	82	W.G. sand w gravel/some, s-r, sub rounded clasts/wet-dense/D.Brown
4,4	GW		2.7	83	W.G. gravel, sand/s-r, sub angular clasts/some, sand coarse/wet-dense/D.Brown
	CH		4.8	84	Fat clay/Moist-Very dense/Blue-gray
				85	
				86	End of SB-01A
				87	
				88	7/13/22
				89	
				90	
				91	
				92	
				93	
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				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client: NYSDEC	Location: SB-01BV
	Project:	
Drilling Method: Geoprobe		Soil Boring Number:
Sampling Method: Disturbed Sampler		Sheet 1 of 4
Water Level:		Drilling Start / Finish
Time:		DATE / DATE
Date:		TIME / TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/3.8	N/A		1.9	0	Asphalt
	SM		6.6	1	Silty sand w gravel / some, f-L, clasts sub angular / Moist - m.dense / D. Brown
	SW		17.2	2	wb Sand w gravel / little, f-m, clasts sub angular / moist - loose / Beige
	SW		33.4	3	SAA
	SW		74.8	4	SAA
5/3.2	SM		5.0	5	wb Sand with silty & gravel / some, f-L, clasts sub angular / moist - L dense / D. Brown
	SW		22.7	6	wb Sand w gravel / some, f-L, subangular clasts / moist - loose / Beige
	SW		75.9	7	Thin asphalt layer SAA, marked in 6"
	SW		228.7	8	SAA
	SW		84.1	9	SAA
5/2.6	SM		27.4	10	silty sand w gravel / little, f, clasts sub angular / moist - loose / D. Brown
	SW		56.7	11	wb Sand w gravel / little, f, clasts sub angular / moist - loose / Beige
	SW		87.4	12	SAA
	SM		7.4	13	silty sand w gravel / few, f-L, clasts subangular / Moist - L dense / D. Brown
	GW		4.6	14	Wb gravel w sand / some, Sand coarse / f-L, clasts sub angular / Beige
5/4.2	SW		3.8	15	wb Sand w silty gravel / few, f, clasts sub round / Moist - loose / D. Brown
	SW		31.9	16	PG sand / medium-coarse, sub rounded / moist - loose / D. Brown Beige
	SP			17	wb sand w gravel / few, m-L, sub rounded / wet - m.dense / Beige — water Table
	SW		12.4	18	SAA
	SW		10.6	19	SAA
	SW		88.3	20	SAA
5/4.6	SW		3.1	21	SAA
	SW		25.3	22	wb gravel w sand / f-m, clasts sub angular / coarse sand / loose - wet / brown - beige
	GW		13.3	23	wb Sand w gravel / Minor, f-L, clasts sub angular / coarse sand / wet - m.dense / beige
	SW		7.5	24	wb gravel w sand / f-L, clasts sub rounded / coarse sand / wet - loose / beige
	GW		7.1	25	silty sand / f-m, sub rounded sand / loose - wet / beige
X 5/2.1	SM		41.8		

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: GB-01BN
	Project:	
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 2 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		20.7	26	WG sand/f-coarse, sub rounded clasts / loose-wet/beige
	SW		21.7	27	WG sand w gravel/some, s, sub rounded / loos-wet/beige
	GP		20.5	28	SAA
	GP		17.7	29	WPG gravel w ith sand/Minor, sand course / s-m clasts sub rnd / loose-wet/beige
	SW		3.8	30	WG Sand/f-coarse, Sub rounded sand/wet-L dense/beige
X 5	SW		6.0	31	WG sand w gravel/some, s, sub rounded clasts/wet-L dense/beige
3.6	GW		1.6	32	WG gravel w sand/few, coarse sand/s-L, sub round clasts/loose-wet/beige
	SW		1.8	33	WG Sand w gravel/some, s-L, sub round clasts/loose-wet/beige
			17.8	34	SAA
	SW		11.0	35	WG Sand/F-coarse, sub round sand/loose-wet/beige
X	SW		24.9	36	WG sand w gravel/some, S, sub angular clasts/loose-wet/beige
5	GW		30.1	37	WG gravel w sand/some, coarse sand/s-m, sub angular clasts/loose-wet/beige
3.9	GP		9.7	38	PG gravel w sand/s-m, sub round clasts/loose-wet/beige
	SW		39.5	39	WG sand w gravel/some, s-m, well round/loose-wet/bdge
	SW		17.5	40	WG sand w gravel/some, s-m, sub rond clasts/loose-wet/beige
X	SW		12.8	41	SAA
5	GW		8.7	42	WG gravel w sand/some, sand course/s-L, sub round clasts/loose-wet/beige
2.8	GW		7.8	43	WG sand w gravel/l. ttle, S, sub angular clasts/loose-wet/beige
	SW		15.2	44	SAA
	GW		15.8	45	WG gravel w sand/s-L, sub round clasts/l.ttle, sand course/loose-wet/beige
X	SW		39.8	46	WG sand w gravel/some m-L, sub angular clasts/wet-m dense/beige
5	SW		15.7	47	WG sand w gravel/l.ttle, M, gravel sub round/wet-loose/beige
3.5	SW		2.0	48	SAA
	SW		10.9	49	WG Sand w gravel/some, s-L, gravels sub angular/wet-m dens/beige
5	SW		58.1	50	WG sand/F-coarse, sub angular sand/loose-wet/beige
3.2	SW		10.1	51	Description on next Page

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Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No. | Client: NYSDEC | Project:
Drilling Method:
Sampling Method:

Location: SB-01BN
Soil Boring Number:
Sheet 3 of 4

Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		5.3	52	WB sand w gravel / little, M, clasts, sub round / loose-wet / beige
	SW		4.7	53	SAA
	GW		35.5	54	WB gravel w sand / S-M, clasts sub round / some sand, coarse / wet - M dense / beige
	SW		21.9	55	WB sand w gravel / some, S, clasts sub angular / loose - wet / beige
5	GW		21.2	56	WB gravel w sand / S-M, clasts sub angular / some, sand coarse / loose-wet-beige
3	GW		24.7	57	SAA
	GW		31.1	58	SAA
	SW		18.1	59	WB sand / F-coarse, sub rounded / loose-wet / beige
	GP		13.9	60	PG gravel / Med., sub rounded clasts / loose-wet / beige
5	GW		23.5	61	WB gravel w sand / some, coarse sand / S-L, sub round clasts / loose wet / beige
	SW		8.8	62	WB sand w gravel / some, S-L, clasts sub round / loose-wet / beige
3.9	SW		3.3	63	SAA
	SW		2.2	64	WB sand / F-coarse, sub rounded sand / loose-wet / beige
	SW		3.7	65	WB sand w gravel / some, S, clasts sub angular / loose-wet / D. brown
5	GW		0.7	66	WB gravel w sand / few, sand coarse / S-L, clasts sub round / D brown
	SW		0.5	67	WB sand w gravel / few, M-L, clasts sub round / wet-dense / D. brown
3.4	SW		0.6	68	SAA
	SW		0.5	69	SAA
	GP		4.2	70	PG gravel with sand / little, coarse, sand sub rounded / some, clasts sub rounded / loose-wet / beige O. brown
5	GP		1.7	71	SAA
	SW		1.8	72	WB sand w gravel / few, M-L, clasts sub rounded / loose - wet / D. Brown
3.8	SW		0.8	73	WB sand / medium & fine, sand coarse / loose-wet / D Brown
	GW		0.8	74	WB gravel w/ fine sand / some, sand coarse / S-L, clasts sub angular / loose-wet / D. brown
5	SW		6.5	75	WB sand / med-coarse, sand sub rounded / loose-wet / beige
	SW		1.8	76	SAA
3	SW		1.3	77	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-01BN
	Project:	
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 4 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		0.6	78	Sub sand w gravel/some, sl, clasts, Subangular/wet loose/Beige
	GW		1.9	79	WG gravel w sand/fine, course sand f-L, Sub clasts rounded/wet m. dense/Beige
2.5/4.8	GW		0.9	80	[illegible] w/ gravel - sand/f-L, sub clasts/ rounded/ D Brown/ loose
	GP		0.5	81	PG gravel w sand/ f-m, course sand f-L, sub clasts/ angular/ Subround/ loose wet
	GP		0.5	82	PG gravel f-course sand f-L, sub clasts/ angular/ Beige
	SW		93.2	83	WG Sand with gravel/some f-L clasts/ moist/ gravel/ Black
	GW		20.3	84	WG gravel with sand/ DNAPL/ coal/ some f-L clasts/ sand/ Black
			21.3	85	Fat clay/ Blue-gray/ moist/ loose
				86	
				87	End of SB-01BN 07/13/2022
				88	
				89	
				90	- originally interval 80-81 was not
				91	going to be driven but it was.
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

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Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-01-B	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	Pg 1/4	Logged By:	Checked By: Page ___ of ___

Date	Time	~~Drill Rate, ft/min~~ SAG	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
		0.0		0	Asphalt	
		0.8	SM	1	silty sand w gravel, Dark brown, rounded qtz clasts, PS	
		0.3	SW	2	~~Sand~~ with gravel, tan, sub rounded qtz, PS.	
		0.5	SM	3	Silty Sand, with gravel, reddish brown, rounded qtz, PS.	
1/5		0.2	SM	4	silty sand, with gravel, light orange/brown, rounded qtz, PS.	
		0.2	SP	5	~~silty sand with PG~~ WG Sand with gr & silt orang brown, qtz clasts	
		0.6	SM	6	well graded Sand w. Gr & Silt, brown, qtz sub rounded clasts	
		1.5	SW	7	W Sand with gravel, well rounded sand & gravel, brown sand PS	
		0.3	SP	8	WG Sand with gravel -11- Poorly graded	
1/5		0.3	SP	9	WG Sand with gravel -11- -11-	
1/5	0856	0.1	SP	10	WG Sand with gravel -11- -11-	
		0.1	SW	11	well graded sand w gr & clay. brown sub rounded	
		0.5	SP	12	Poorly WG graded Sand w gravel, tan/beige	
		0.1	SP	13	Poorly WG graded sand w gravel, tan/beige	
1/5		0.2	SW	14	sand with gravel & clay, Well graded, dark brown.	water
1/5		0.2	SP	15	~~Poorly~~ WG graded Sand w gravel. tan/beig	
		0.0	SP	16	~~Poorly~~ WG graded sand w gravel, rounded Sand & gravel tan/beige	
		0.1	SP	17	~~Well~~ Poorly graded sand w gravel & ~~clay~~ silt brown, sub rounded	
1/5	SW	19.7	~~14.7~~ SP	18	~~Poorly~~ WG ~~well~~ graded Sand w gravel & ~~clay~~ silt brown, sub rounded	
2/5	GW	87.3	~~87.3~~ SP	19	Gravel with sand, gray, well rounded, Sheen / Product smell	
↑	SW	33.0	~~33.0~~ SP	20	~~Sand~~ WG Sand with ~~gravel~~ silt, well rounded sheen / Product smell.	Product
	SW	27.4	SP	21	~~Poorly~~ WG graded sand, gray / tan, well rounded sand	
	SW	15.1	SP	22	~~Poorly~~ WG graded sand with gravel, well rounded Sand, tan/gray	
	GW	16.1	GP	23	~~Poorly~~ WG graded ~~gravel~~ gravel with sand, well rounded, beige/orange	
2/5	GW	12.6	GP	24	~~Poorly~~ WG graded gravel, well rounded granite/quartzite clasts. Pink tan	

Abbreviations:
SAA = same as above qtz = quartz dol = dolomite lith = lithic fragments
vfg = very fine grained fg = fine grained mg = medium grained cg = coarse grained

P, S Poorly Sorted

Rochester,
New York

EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-01B	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	Pg 2/3	Logged By:	Checked By: Page of

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
13	5	5.8	SW	25	well Poorly graded, sand with gravel, tan/brown, well rounded.	
		11.2	SW	26	Poorly, graded sand, buff/beige	
		16.8	SW	27	Poorly graded sand, very coarse sand, buff/beige	
3.5		5.5	SP	28	Poorly graded sand < 10% gravel (gravel .3 small) beige/tan	
		5.1	SP	29	Poorly graded sand with VC sand grains, tan/beige.	
—		4.8	SW	30	Poorly graded sand with gravel sub rounded clasts of qtz, buff/tan	
		14.6	SM	31	Silty poorly graded fine sand, gray/beige.	
		15.4	SW	32	Poorly graded sand with silt, buff/tan, coarse sand	
2.25		15.9	SW	33	Poorly graded sand, moars with VC clasts, tan/buff	
		12.8	GW	34	Poorly graded gravel with sand, well rounded gravels, qtz, tan/buff	
	0932	6.1	GW	35	Poorly graded gravel with sand, well rounded gravels qtz, quartzite clasts	
		4.8	GW	36	Poorly graded gravel with sand, well rounded gravels, qtz clasts	
	SP	44.5	SP	37	Poorly graded sand, well rounded sand, tan/buff	
2.25	SW	28.1	SP	38	Poorly well graded sand with gravel, tan/buff.	
	SW	14.5	SP	39	Poorly graded sand with gravel, sub rounded gravel, tan/buff	
↑	GW	24.4	GP	40	Poorly well graded gravel with sand, sub rounded, tan/buff	
	SP	0.7	SP	41	Poorly graded sand, with VC sub rounded qtz sand, gray/beige	
	SW	0.8	SP	42	Poorly well graded sand with gravel, gray/beige	
5	SW	0.6	SP	43	Poorly well graded sand with gravel, gray/tan	
min	SW	0.6	SP	44	Poorly well graded sand with gravel, tan/beige, sub rounded qtz clasts	
↑	GW	0.6	GP	45	Poorly well graded gravel with sand, tan/beige, sub rounded qtz clasts	
	SW	75.1	SP	46	Poorly well graded sand with gravel, gray, sub rounded, sheen	
6	GW	60.9	GP	47	Poorly well graded gravel with sand, gray, sub rounded, sheen/smell	
7.25	SW	100.9	SP	48	Poorly well graded sand w gravels, sub rounded, gray, sheen/smell	
7	SW	72.7	SP	49	Poorly graded sand w gravels, sub rounded, gray, sheen/smell	

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EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-01B ~~SB~~ 3/4	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:		Logged By:	Checked By: Page ___ of ___

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
		54	SP	50	Poorly graded sand with gravel, subrounded, gray, green/steel	
		68.1	GP	51	P. graded gravel, well rounded clasts, black, gray, qtz	
		17.3	SW	52	W. graded sand, coarse sand, tan/buff	
		8.9	SW	53	W. graded sand, coarse sand, tan/buff	
		11.3	SW	54	W. graded sand with gravel/small gravels, tan/buff	
	4:15	1.8	SW	55	W. graded sand with gravels/gravel qtz gravel clasts, tan/buff	
		13.4	GW	56	W. graded gravel with sand/subrounded qtz, gray/tan	
		10.26	GW	57	W. graded gravel with sand/subrounded qtz, gray/tan	
		7.5	GW	58	W. graded gravel with sand/subrounded qtz, tan/buff	
	12:3	6.6	GW	59	W. graded gravel with sand/subrounded qtz, tan/buff	
		35.4	GW	60	W. graded gravel with sand/subrounded qtz, tan/buff	
		37.1	GW	61	W. graded gravel with sand/subrounded qtz, tan/buff	
		40.3	SW	62	W. Graded sand with gravel, subrounded, tan/buff	
		11.2	SW	63	W. graded sand with gravel tan/buff	
	2:15	12.3	GW	64	W. graded gravel with sand tan/buff	
		17.6	SW	65	W. graded sand tan/buff	
		4.4	GW	66	W. graded gravel with gravel/subrounded qtz gray, tan, white	
		2.1	GW	67	W. graded gravel with sand, subrounded qtz, gray/tan/white or	
	4:15	1.8	SW	68	W. graded sand, tan/orange/subrounded	
		1.6	SP	69	P. graded sand, tan/orange/subrounded	
		1.9	GW	70	W. graded gravel with sand, subrounded Orange/tan	
		4.3	GP	71	P. graded gravel, white, black, buff clasts, sub rounded	
	5	1.8	SP	72	P. graded sand medium sand, buff/tan	
	5	1.2	GW	73	W. graded gravel with sand, buff/tan, well rounded	
		1.1	SW	74	W. graded sand with gravel, tan/buff, subrounded	

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EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-01B	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	Pg 4/4	Logged By:	Checked By: Page ___ of ___

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
	1136	1.1	SW	75	W graded Sand w gravel, tan/buff sub rounded	
		3.3	GP	76	P-graded gravel with sand, gray black, tan subrnded	
		1.2	SW	77	W graded Sand with gravel, tan/buff, sub angular clasts	
		1.1	GW	78	W graded gravel with Sand, tan/buff, sub angular clasts	
		0.6	SP	79	P graded sand, buff/tan	
4.29	1136	0.7	GW	80	W graded gravel with sand, tan clasts of qtz/chert sub rded	
		11.6	GW	81	W graded gravel with sand, brown, sub angular	
		2.8	GP	82	P graded gravel, sub rounded, brown	
		24.6	W	83	W graded gravel with Sand, brown, steen subangular	
	1350	SW		84	W graded sand, black, steen/smell Product, angular grains	
		23.6	CH	85	Fat clay, gray/blue very malleable.	
					End of SB-01 7/5/2022	

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BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-01C	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	C	Logged By: / Checked By:	Page 1 of 4

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
		17.4	N/A	0	Asphalt	
		31.4	SM	1	Silty sand w gravel / D. Brown / compact / Angular clasts	
		58.2	SM	2	silty sand w gravel / D. Brown / compact / sub angular clasts	
		9.0	SM	3	W/G-sand w clay & gravel / D. Brown / compact / lean clay	
3.7/5		12.1	SW	4	W/G-Sand with gravel / tan / loose / angular clasts	
1/5		9.9	SW	5	W/G- Sand with gravel / Beige / loose / angular small clasts	
		16.5	SW	6	W/G Sand with gravel / Tan / beige / angular qtz clasts / dry - loose	
		13.1	SW	7	W/G- Sand with gravel / Tan / subangular small qtz clasts / dry - loose	
		0.3	CL	8	Sandy clay / lean clay / Blue/Grey / moist / compact	
		13.8	GW	9	W/G Gravel w sand / Tan-brown / sub rounded small qtz / dry loose	
3.5/5		21.3	SP	10	P/G Sand w gravel / small qtz, sub rounded clasts / orange-brown	
		23.7	SW	11	W/G- Sand w gravel / small qtz, subrounded clasts / brown / dry / loose	
		1.1	SW	12	W/G- Sand w gravel / small qtz, subrounded clasts / beige / dry loose	
		0.9	SW	13	W/G- Sand w gravel / small qtz subrounded clasts / beige / dry loose	
		1.3	SW	14	W/G- Sand w gravel / small qtz subrounded clasts / beige / dry loose	
2.9/5		5.5	GW	15	W/G- gravel w sand / small qtz subrounded clasts / beige / dry loose	
		3.1	SW	16	W/G Sand w gravel / small qtz subrounded clasts / tan / dry loose	
		0.6	SW	17	W/G sand w gravel / small qtz subrounded clasts / tan / moist - WT at	
		3.1	SW	18	W/G- sand w gravel / med qtz, subrounded clasts / brown / moist loose	
		2.1	SW	19	~~W/G~~ SAA	
1.5/5		0.1	SW	20	SAA	
		0.0	GW	21	W/G Gravel with Sand / sub rounded clasts / brown / wet / loose	
		0.0	GW	22	SAA	
		0.0	GW	23	SAA	
1/2		0.0	GW	24	SAA	

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BORING/WELL CONSTRUCTION LOG

Project:	Hentset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	7/06/2022
Drilling Rig/Bit Diameter:		End Date:	7/07/2022
Driller:		Final Drilled Depth:	
Location:		Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	SB-01C	Logged By: / Checked By:	Page 2 of 4

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
		0.0	GW	25	SAA	
		2.1	SW	26	WG Sand with gravel/ large gravel clasts, subrnde/ beige/ wet	
		5.6	SW	27	WG sand w gravel/ med gravel clasts, subrounded/ beige/ loose/ wet	
		0.0	SW	28	WG sand w gravel/ med gravel, sub angular, qtz /loose/ wet	
		0.1	SW	29	SAA	
2.5/5		0.0	SW	30	SAA	
		0.0	SW	31	WG Sand/ med-coarse gravel/ sub rounded/ wet	
		0.0	SW	32	WG sand with gravel/ small gravels/ qtz clasts/ wet	
		0.0	GW	33	WG gravel with sand/ small gravels/ qtz, well rounded clasts/ wet	
		0.0	GP	34	PG gravel ~~with~~ med-large gravels/ sub rounded/ wet	
3.5/5		0.0	SW	35	WG sand with gravel/ small gravels/ sub rounded/ wet	
		0.0	SW	36	WG sand with gravel/ small gravels/ sub rounded/ wet beige	
		0.0	SW	37	SAA	
		0.1	GW	38	WG gravel with sand/ med-large gravel/ sub rounded/ wet beige	
4/5		0.0	GW	39	SAA	
		0.0	SW	40	WG-SWG sand/ f-c sands/ sub rounded/ beige/ wet.	
		0.0	GP	41	PG gravel with sand/ sub rounded qtz clasts/ beige/ wet/ large gravel	
		0.0	GP	42	PG gravel with sand/ small gravels/ qtz, sub rounded clasts/ wet/ beige	
		0.0	SW	43	WG sand with gravel/ sub rnded, small gravel/ Beige/ wet = loose	
		0.0	SW	44	WG sand with gravel/ angular small clasts/ Beige/ wet loose	
2.5		0.2	SW	45	SAA	end 7/6
		0.1	SW	46	WG sand with gravel/ beige/ sub rounded med-large gravel/ loose wet	
		0.0	SW	47	WG sand with gravel/ beige/ small sub angular gravel/ loose wet	
		0.0	SW	48	SAA	
		0.0	GW	49	WG gravel with Sand/ beige/ small sub angular gravel/ few sand seams/ loose	

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EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	~~North Star Drilling~~ Cascade	Start Date:	07/06/2022
Drilling Rig/Bit Diameter:		End Date:	07/07/2022
Driller:		Final Drilled Depth:	
Location:		Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	SB-01C	Logged By: P. Cannon	Checked By: Page 3 of 4

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
7-2/5		0.1	GW	50	WG gravel w sand/Trace sand/beige/sub angular clasts/loose wet	
	900	0.1	SW	51	WG Sand w gravel/few gravel/beige/sub angular clasts/loose wet	
		0.1	SW	52	SAA	
		0.0	SW	53	SAA	
4.5/5		0.0	GW	54	WG gravel with sand/some sand/beige/sub rounded, small clasts/loose wet	
		0.0	GW	55	WG gravel w sand/some sand/beige/sub rounded, med clasts/loose wet.	
		0.6	SW	56	WG sand w gravel/some gravel, sub rded, med-large/Beige/Dense wet	
		1.1	SW	57	WG Sand w gravel/some, sub rded gravels, med size/Beige/Dense, wet	
		0.1	SW	58	WG Sand w gravel/few, sub rndd, med gravels/Beige/Dense, wet	
		0.2	SW	59	WG Sand w gravel/few, sub rdd, small-med gravels/Beige/Dense, wet	
4.5		0.0	GW	60	WG gravel w sand/some sand, sub angular grains/clasts/Med-L clasts/loose wet	
		0.6	SW	61	WG Sand w gravel/few gravel, sub angular, small clasts/Dense-wet	
		0.8	SW	62	WG-Sand w gravel/few gravel, sub rounded, small clasts/Dense-wet	
		1.6	SP	63	PG-Sand/Med-Coarse, sub rounded grains/Dense-wet	
3.7/5		0.3	GW	64	WG gravel with sand/some Sand, sub rounded, small-Md clasts/loose wet	
		0.3	GW	65	WG gravel with sand/some sand, sub rded small clasts/loose/wet	Dark Red-Brown
		0.0	SM	66	Silty Sand with gravel/angular, Lrg-small clasts/loose wet	
		0.0	GW	67	WG gravel with sand/small, angular clasts/loose wet/Some sand	D. Red Brown
		0.0	GW	68	WG-Gravel with sand/few sand/small-med, sub rdd gravel/loose wet	
4.3		0.8	GW	69	WG gravel with sand/some sand/S-L, sub angular clasts/D. Red Brown/loose wet	
5		0.9	GW	70	WG sand w/ gravel/some sand/S-L, sub rounded clasts/D. Red Brown/loose wet	
	0925	1.1	GP	71	PG gravel/Med, sub angular clasts/Tan-Clear/loose-wet	
		3.2	GW	72	WG gravel w sand/S-L, sub rounded clasts/Tan/loose-wet	
		0.5	SW	73	WG sand/M-Coarse, sub rounded grains/Tan/loose-wet	
3.5/5		0.1	SW	74	WG Sand w gravel/some, sub angular grains/Tan/loose-wet	

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EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	~~North Star Drilling~~ Cascade	Start Date:	0.0 PID background.
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:		Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	SB-06	Logged By: / Checked By:	Page 4 of 4

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
					Asphalt, Trace, little, few, some, 13-24, 25-49 mod. 0-5% 6-12	
5/5	0935	0.3	SW	75	WB Sand w gravel/g-m, sub rounded gravel, few gravels/Tan/loose-wet	
		0.1		76	WB Sand w gravel/some gravel-med-Lar, well rounded/D. Brown/Loose-wet	
		0.2		77	WB Sand w gravel/few, g-m gravel, sub rounded/D-Brown/Loose-wet	
		0.2		78	WB Sand w gravel/few g-m gravel, Subangular/Orange-brown/Loose-wet	
		0.1		79	WB sand w gravel/little gravel, f-, Sub rounded gravels/Beige/Loose-wet	
4.6/5		0.2		80	WB Sand w gravel/little, Large sub rdd clasts/brine/	loose-wet
		49.1		81	WB Sand w gravel/g-L, subrounded clasts/brine/loose-wet	
		30.8		82	WB Sand with gravel/g, subrounded gravel/D.brown/loose-wet	
		24.7		83	WB gravel w Sand/g-L, Sub rounded gravel/some sand/D-Rd brown/	loose-wet
5/5		30.8	12K	84	WB Sand w gravel/g-L, subrounded, some gravels/Dark brown/black	
		56.7		85	WB Sand w gravel/g-L, subrounded, some gravel/BLACK NAPL/	solvent smell wet, stained
				83.5	Fat clay/Blue-gray/high Plastic/moist/stiff	
				84.5		

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BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-01D	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:		Logged By: / Checked By:	Page 1 of 7

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations) Trace 0-5 / minor 6-12 / few 13-24 / some 24-49 %	Packer Testing or Boring Details
	1200	7.3		0	Asphalt	
		5.2		1	Silty sand with gravel / clasts are well rdd, med, few / dark brown / dry dense	
		56.6		2	sandy clay with gravel / angular, m-L, few clasts / dark brown / moist dense	
		308.8		3	Silty Sand w gravel / well rdd, m-L, few clasts / dark brown / moist loose	
		223.2		4	Wb Sand w gravel / sub angular, s-L, few clasts / angular sand / tan-beach / dry very loose	
3.3/5		0.6		5	Wb Sand w gravel / Subangular, s-M, Minor clasts / angular sand / tan-beach / dry v. loose	
		11.9		6	Wb Silty Sand w gravel / sub rdd, s-L, few clasts / Well rdd sd / Brown / moist loose	
		0.1	CL	7	Lean Sandy lean clay with grave / Sub rounded, s-L, few clasts / Dark beige / moist loose	
		0.8		8	Sandy lean clay / beige trace small rounded gravels / moist-dense	
4.5/5		13.6		9	Wb Sand with gravel / Subangular, s-m, Some clasts / tan-beach / moist-loose	
		0.8		10	Wb Sand w gravel / Subangular, s-m, some clasts / tan-orange / moist-loose	
		2.2		11	Silty Sand w gravel / Sub rounded, s-L, Some clasts / brown / moist dense	
		9.0		12	Wb Sand w gravel / angular, s, minor clasts / tan-beach / moist loose	
		8.9		13	Wb Sand w gravel / Sub rounded, s-L, few clasts / tan-beach / Moist loose	
		2.3		14	Wb Sand w gravel / Sub angular, s-m, few clasts / tan-beach / moist loose	
5/5		0.3		15	Wb Sand w gravel / well rounded, s-L, some clasts / beige / moist loose	
		13.7		16	Silty sand w gravel / Sub rounded / s-m / few clasts / brown / moist loose	
		03.9		17	Silty sand w gravel / Sub rounded / s-L / few clasts / brown / moist Medium	
		1.9		18	Wb Sand w gravel / Sub rdd, s-L / few clasts / tan-beach / moist-loose	18.5 DTW
4.5/5		0.2		19	Wb Sand w gravel / Sub rounded, s-L, Some clasts / tan-beach / wet-loose	
	1212	0.1		20	Wb Sand w gravel / Sub angular, s-m, Some clasts / tan / wet-loose	
		5.9		21	Silty Sand w gravel / Sub rounded, s-L, Some Clasts / Brown / moist-loose	
		0.5		22	Wb Sand w gravel / Sub angular, s-m, Some clasts / Beige / wet-dense	
		0.2		23	Wb Sand w gravel / Sub rounded, s-L, Some clasts / Beige / wet-loose	
5/5		0.2		24	SAA	

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BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-010	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:		Logged By: / Checked By:	Page 2 of 4

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
		0.2		25	WG sand w gravel/well rounded, S-L, few clasts/ wet dense	
		9.6		26	Silty sand w gravel/sub angular, S-M, few clasts/moist loose/Brown	
		0.4		27	WG sand w gravel/well rounded, S-L, some clasts/wet med dense	
		0.2		28	WG-Sand w gravel/sub rounded, S-M, few clasts/ Wet dense	
		1.5		29	WG-gravel w sand/Sub angular, S-L, some sand/wet dense	
1	5/5	0.5		30	WG sand w gravel/sub rounded, S, little gravel/wet loose	
		0.2		31	Silty Sand w gravel/sub angular, S-M, few clasts/moist - med dens.	
		2.9		32	WG sand with gravel/sub rounded, S-M, few clasts/wet - Med dense	
		1.7		33	WG Sand with gravel/sub angular, S, some clasts/ wet - loose	
		1.2		34	WG sand with gravel/sub angular, S-M-some clasts/ wet - loose	
5/5		1.7		35	WG ~~Sand~~ Gravel with sand/sub rounded, S-L, some sand/wet - loose	
		0.4		36	WG gravel with sand/sub rounded, S/clasts/some sand/tan-beige/wet	
		3.2		37	WG gravel with sand/sub rounded, S-L clasts/ few sand/tan-beige/wet	
		5.3		38	WG sand with gravel/sub angular, S-L, some clasts/tan-beige/wet	
1	4.5/5	0.9		39	WG sand with gravel/sub rounded, S, little clasts/tan-beige/wet	
		3.8		40	WG sand with gravel/sub rounded, S-L, few clasts/tan-beige/wet	
		0.9		41	WG sand with gravel/sub rounded, S-L, little gravels/tanbeige/wet - dense	
		0.3		42	WG sand with gravel/sub angular, S, little gravel/tanbeige/wet - dense	
3.9		0.3		43	WG sand with gravel/sub rounded, S-L, little clasts/tanbeige/wet - dense	
2	4.5/5	5.2		44	WG gravel with sand/sub angular, S-L/clasts/som sand/Tan-beige/wet loose	
		0.2	GW	45	WG gravel with sand/sub rounded, S-L clasts/little sand/tan, clean, wet loose	
		0.6		46	WG gravel with sand/sub angu, S-M clasts/some sand/Tan/loose-wet	
		1.1		47	WG gravel with sand/sub angular, S-L clasts/few sand/Tan/loose-wet	
4	4.5/5	1.5		48	WG sand with gravel/sub angular, S-L some clasts/tan/loose-wet	
		0.4		49	WG gravel with sand/sub angular, S/clasts/some sand/Tan/loose-wet	

Abbreviations:
SAA = same as above qtz = quartz dol = dolomite lith = lithic fragments
vfg = very fine grained fg = fine grained mg = medium grained cg = coarse grained

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-01D	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:		Logged By: / Checked By:	Page 3 of 4

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
		0.6		50	WG-Sand with gravel / Subangular, S, Some gravel / Tan / wet-loose	
		0.7		51	WG-Sand with gravel / Sub angular, S, Some gravel / Tan / wet-Loose	
		0.5		52	WG-Sand with gravel / sub angular S-M, Some gravel / Tan / wet-loose	
		0.4		53	WG-gravel with sand / Sub rounded, S-L, Clasts / Some sand / Tan / wet-Loose	
		0.3		54	WG-Sand / Sub angular, M-Coarse grains / Tan / wet-loose	
4.3/5		0.2		55	SAA	
		1.0		56	WG gravel with sand / Sub rounded, S, clasts / Some sand / Tan / wet loose	
		0.9		57	WG-gravel with Sand / Sub rounded, S-M, clasts / some sand / Tan / wet loose	
		0.3		58	WG-gravel with sand / Sub rounded, S-L, Clasts / some sand / Tan / wet loose	
		0.3		59	SAA WG grav. with sand / Sub rded, S-L clasts / few sand / Tan / wet loose	
4.5/5		0.3		60	WG-gravel with Sand / Sub rounded, S-L clasts / few sand / Tan / wet loose	
		0.3		61	PG-gravel with Sand / Sub rounded, medium clasts, minor sand / Tan / wet loose	
		0.2		62	WG-Sand with gravel / Subround, S, few clasts / Tan / wet-loose	
		0.1		63	WG-Sand with gravel / Sub angular, S-L, some clasts / Tan / wet-med dense	
		0.4		64	WG-Sand with grave / Sub rounded, S, few clasts / Tan / wet-loose-med dense	
4.6/5		0.4		65	WG-gravel with sand / Sub rounded, S-L, clasts / few sand / Tan / wet loose	
		0.2		66	WG-gravel with Sand / Well rounded, S-M clasts / few lith sand / D. Brown wet-loose	
		1.1		67	WG-Sand with gravel / Sub rounded, S-L, some clasts / D. Brown / wet-med dense	
		1.5		68	SAA	
		1.2		69	WG-gravel with Sand / Subangular, S-L, some Sand clasts / D. Brown / wet-med dense	
4.3/5		0.9		70	SAA	
		0.6		71	WG-gravel with Sand / Subangular, S-L, Some sand / D. Brown / wet loose	
		0.2		72	WG-Sand / M-Coarse grained, Sub rounded grains / D-Brown / wet-dense	
		0.2		73	SAA ~~SAA~~ WG-Sand w gravel / Subrounded, S-L, few clasts / D. Brown / wet-dense	
4.5/5		0.2		74	Incl (73 is same as 72), description for 73 is for 74.	

Five Runs

Abbreviations:
SAA = same as above qtz = quartz dol = dolomite lith = lithic fragments
vfg = very fine grained fg = fine grained mg = medium grained cg = coarse grained

EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-01D	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:		Logged By:	Checked By: Page 4 of 4

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
		0.2		75	WG- gravel with sand / sub rounded, S-L, few clasts / D. Brown / wet dense	
		0.3		76	WG- gravel with sand / sub rounded, S-L, some sand / D. Brown / wet dense	
		1.0		77	WG- sand with gravel / sub rounded, S-L, few gravel / D. Brown / wet dense	
		0.2		78	WG- gravel with sand / sub angular, S-M, some sand / D. Brown / wet dense	
		0.2		79	WG- gravel with sand / sub rounded, S-L, some sand / D. Brown / wet loose	
	4/5	0.2		80	WG- sand with gravel / sub rounded, S-M, some gravel / D. Brown / wet dense	
		57.8		81	WG- sand with gravel / sub rounded, S-L, some gravel / red-dark brown / wet-dense	
		295.8		82	WG- sand with gravel / sub rounded, S-L, some gravel / red-d.brown / wet-dense	
		367.7		83	WG- Grand wit sand / sub rounded, S-L / few sand / red-black / wet, Solvent	
	4.5	3072.8		84	WG- sand with gravel / angular, S-M / some gravel Black / DNAPL smell	
		8.0		85	Fat clay / bluish-gray / moist / stiff	84.25
				86	Last 60 was poured out of tube, acetate sleeve (80-85 was stuck in casing.	83.5 DNAPL
					End of SB-01D	
					7/7/2022	

Abbreviations:
SAA = same as above qtz = quartz dol = dolomite lith = lithic fragments
vfg = very fine grained fg = fine grained mg = medium grained cg = coarse grained

EA Engineering, P.C. and its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No. | Client: NYSDEC | Project:
Drilling Method: Geo Probe - Direct Push
Sampling Method: Discrete Sampler

Location:
Soil Boring Number: SB-01DN
Sheet 1 of 4

Water Level:				
Time:				
Date:				

Drilling	
Start	Finish
DATE	DATE
TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth In Feet	
5 / 3.6	N/A		8.2	0	Asphalt
	SM		2.3	1	Silty sand w/gravel/some, s-m, clasts subangular/moist-dense/D-brown
	SW		1.5	2	Sand with clay & gravel/some s-c clasts sub angular/moist-dense/D-brown
	SW		2.6	3	WG-Sand w gravel/some, s-l, clasts subangular/Dry-L-dense/tan-beige
	SW		6.6	4	SAA
5 / 4.6	SW		1.7	5	WG-Sand w gravel/some, s-l, clasts subangular/moist-dense/D Brown
	CL		1.2	6	WG-sand w gravel/some, s, subrounded/Moist-loose/orange brown
	SW		2.5	7	WG-sand w gravel/some, s-l, clasts subround/Loose-Dry/Beige
	SW		2.9	8	SAA
	SW		5.5	9	SAA
5 / 4.8	SAA		0.8	10	Silty sand w/gravel/some, s-l, clasts subround/moist-L-dense/Gray
	SW		5.3	11	WG-sand w gravel/some, s-l, subangular/loose-Dry/orange-beige
	SW		3.1	12	SAA
	SW		4.0	13	SAA
	SW		3.8	14	SAA
5 / 4.7	SM		0.7	15	Silty sand w/gravel/some, s-m, clasts subangular/moist-L-dense/D brown
	SM		4.1	16	SAA
	SW		5.2	17	WG-Sand w gravel/some, s-l, clasts subangular/loose-dry/beige — water table
	SW		1.5	18	SAA / loose-wet/beige
	SW		0.6	19	SAA
5 / 4.7	SM		1.4	20	Silty sand w/gravel/some, s-l, clasts subround/loose-moist/D Brown
	SW		2.5	21	WG-Sand w gravel/some, s-l, subround, clasts/loose-wet/beige
	SW		1.3	22	SAA
	SW		6.8	23	SAA
	SW		2.9	24	SAA
5 / 1.8	SW		6.9	25	WG-Sand w silt & gravel/some, s-a, clasts subround/loose-wet/D brown

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____

Screen Interval:	_____	To	_____ ft bgs
Riser Interval:	_____	To	_____ ft bgs
Sand Pack Interval:	_____	To	_____ ft bgs
Bentonite Seal:	_____	To	_____ ft bgs
Grout Interval:	_____	To	_____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location: SB-01DN
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 2 of 4
Water Level:		Drilling Start / Finish
Time:		DATE / DATE
Date:		TIME / TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		3.5	26	Wb sand w gravel/few, s, clasts sub round/loose-wet/beige
	SW		2.7	27	SAA
	SW		0.6	28	SAA
	SW		1.9	29	SAA
	SP		1.2	30	Poorly graded sand with gravel/little, s, clasts sub rnd/med, sand sub rnd/wet-moderate/beige
X 5 / 2.5	SP		2.4	31	SAA
	SW		0.5	32	Wb sand with gravel/few, s, clasts subangular/loose-wet/beige
	SW		0.9	33	SAA
	SW		1.2	34	SAA
	GW		3.6	35	Wb gravel w sand/mod-poor, clasts angular/some, sand coarse/loose-wet/beige
X	SW		4.7	36	Wb sand w gravel/some, s-m, clasts subrounded/loose-wet/beige
5	SW		4.4	37	SAA
/	SW		6.2	38	SAA
3.2	SW		2.6	39	SAA
	GW		0.7	40	wb gravel w sand/some, sand coarse/s-m, clasts sub round/wet-moderate/beige
X	SW		1.0	41	wb sand w gravel/some, s-m, clasts sub round/wet-loose/beige
5	SW		0.5	42	SAA
/	SW		0.4	43	SAA
4.2	SW		0.4	44	SAA
	GP		1.3	45	Pg gravel w sand/few, sand coarse/s-m, clasts sub round/loose-wet/beige
X	SW		5.0	46	Wb sand w gravel/little, s, clasts sub rnd/loose-wet/beige
5	SW		0.5	47	SAA
/	SW		0.5	48	SAA
3.9	SW		0.2	49	WB sand w gravel/some, s-l, clasts well round/loose-wet/beige
	SW		0.8	50	Wb sand w gravel/little, s, clasts well rnd/loose-wet/beige
5 / 3.8	GP		0.2	51	Pg gravel w sand/few, sand coarse/s-m, clasts sub round/loose-wet/beige

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No. | Client: NYSDEC | Project:
Drilling Method:
Sampling Method:
Water Level: | Time: | Date:

Location: SB-01DN
Soil Boring Number:
Sheet 3 of 4

Drilling	Start	Finish
DATE		
TIME		

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GP		0.1	52	PG-gravel w sand/S-M, clasts well round/coarse sand/loose-wet/beige
	SW		0.1	53	WG-sand w gravel/trtles, S, clasts well round/loose-wet/beige
	SW		0.1	54	SAA
	GW		1.1	55	WG-gravel w sand/S-L, clasts well round/M-coarse gravel/loose-wet/beige
5	GW		2.8	56	SAA
X 1/3.8	SW		0.6	57	WG-Sand/F-coarse, Subround sand/loose-wet/beige
	SW		1.3	58	WG-sand w gravel/some, S, clasts sub round/coarse gravel/loose-wet/beige
	SW		0.2	59	SAA
	SW		0.5	60	SAA
5	SW		0.7	61	WG-sand w gravel/some, S, clasts sub round/coarse-wet/beige
X 3.6	GP		0.6	62	PG-gravel w sand/few, coarse/S-L, clasts well-round/loose-wet/beige
	SW		0.1	63	WG-sand w gravel/some, S-L, clasts sub round/loose-wet/beige
	SW		0.2	64	SAA
5	GW		0.5	65	WG-gravel w sand/few coarse sand/S-L, clasts sub round/loose-wet/Beige to Brown
1.6	GW		0.2	66	SAA
X	SW		0.2	67	WG-sand/M-coarse/Sub round/loose-wet/Brown
	SW		0.1	68	SAA
	SW		0.0	69	SAA
	SW		0.4	70	WG-Sand w gravel/some, S, clasts sub angular/loose-wet/Beige
5	SW		0.3	71	SAA
X 3.3	SW		0.2	72	SAA
	GW		0.2	73	WG-gravel w sand/some, sand coarse/S-L, clasts sub round/wet-no diesel/beige
	GW		0.3	74	SAA
5	SP		0.4	75	PG sand/coarse, sub round/loose-wet/beige
	SW		0.5	76	WG-Sand w gravel/some, gravel sub round/loose-wet/beige
2.8	GW		1.4	77	WG-gravel/w sand/some, sand coarse/S, clasts sub round/loose-wet beige
X					

Fill up from 79

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location: SB-01DN
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 4 of 4

					Drilling	
Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GP		2.1	78	PG-gravel w sand/Few, coarse/5-6 subround clasts/100%-wet/brn
5	GW		5.7	79	WG-gravel w Sand/some coarse sand/SAA-L, subround clasts/wet-M.dense/brn
4.6	GP		36.7	80	PG-gravel w sand/Few sand/5-M, Sub rounded clasts/wet-loose/D.Brown stain
	GW		16.3	81	WG-gravel w sand/Few sand/5-M, Sub rounded clasts/Black DNAPL
	GW		36.7	82	SAA
X	CH		3.7	83	Fat clay/Stained Black/moist-dense -515K PID
	CH		73.8	84	Fat clay/Blue-Grey/moist-dense
	CH		52.1	85	SAA
				86	
				87	End of SB-01DN
X				88	7/14/2020
				89	
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project: 1602518	Location: SB-01E
Drilling Method: Direct Push		Soil Boring Number:
Sampling Method: Acetate - Sleeve		Sheet 1 of 4
		Drilling

					Start	Finish
Water Level:	18					
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	N/A		3.7	0	Asphalt
5	SM		0.8	1	Silty sand w gravel / Sub Rded, few clasts / moist / med dense
	CL		1.4	2	SAA
3.8	CL		0.6	3	sand clay with gravel / little, sub rdd clasts / moist dense lean clay
	GW		4.4	4	Well graded gravel w Sand / Sub angular clasts, some sand / moist loose
	SM		0.5	5	Silty sand w gravel / angular, few clasts / moist, med dense
5	SW		1.6	6	WG Sand w gravel / Sub rounded, some clasts / dry moist
	SW		12.4	7	SAA
4.8	SW		16.0	8	SAA
	SW		7.8	9	SAA, except color & Sub angular clasts
	SW		0.4	10	WG sand w gravel / some sub angular clasts / dry moist / beige
5	SM		4.8	11	Silty Sand w gravel / some, sub rounded clasts / moist, med dens
	SW		4.1	12	WG Sand w gravel / some, Subangular clasts / moist, loose / orang-brown
4.8	SW		5.8	13	SAA
	SW		1.1	14	WG Sand w gravel / some, S, Sub rounded clasts / moist-loose / beige
	SW		0.3	15	SAA
	SW		4.1	16	SAA Silty Sand w gravel / few, S-L, Sub rounded clasts / moist-med dens / D. Brn
5	SM		4.6	17	GW Sand w gravel / some, S-L, Sub rnd gravel / loose-dry / Beige
	SW		8.4	18	WG-Sand w gravel / some S-L, Subrnd gravel / wet-loose / Beige — water table
4.8	SW		0.3	19	WG-Sand w gravel / some, S-L, subrounded gravel / wet-loose Beige
	SW		3.9	20	SAA
	SW		5.5	21	SAA, except, discrete dbrown color, same lithology
5	SW		0.5	22	SAA
3.2	SW		0.4	23	SAA
	SW		0.2	24	SAA
5/4.3	SW		0.2	25	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-01E
	Project:	
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 2 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SM		17.4	26	Silty sand w gravel / some, s-m gravel, sub angular / ~~moist~~ wet - medium dense D. Brown
	SW				
	SW		20.6	27	Wb sand w gravel / few, s-m, sub rounded gravel / wet - beige
			7.6	28	Wb sand w gravel / some, s-L, sub rounded gravel / wet - loose beige
	GW		0.1	29	Wb gravel w sand / some, coarse sand, subangular grains / wet - loose
X 5	SW		PA	30	Wb sand w gravel / some, M-L, angular gravel / wet - Medium / D. Brown
	SW		1.3	31	Wb sand w gravel / few, M, sub rounded gravel / wet - loose / Beige
45	SW		0.0	32	Wb gravel w sand / some, VC grains, s-L / sub rounded clasts to grains / wet - loose Beige
	GW		0.0	33	← Desc. for 32 is for 33, 34, 35
	GW		0.0	34	SAA
	GW		5.0	35	SAA, Coarsen upwards
X 5	SW		0.2	36	Wb sand w gravel / few, s-m, subrounded clasts / wet - loose / Beige
	SW		1.4	37	SAA
1.8	SW		0.4	38	SAA
	SW		0.0	39	SAA
	SW		0.9	40	Wb sand w gravel / few, s-L, subangular clasts / wet - medium dense / D Brown
X 5	SW		0.4	41	Wb sand w gravel / little, s, sub rounded clasts / wet - loose / Beige
	SW		0.4	42	SAA
3.5	SW		0.2	43	~~SAA~~
	SW		0.1	44	~~Wb Sand w gravel / some, s-L, sub angular clasts / wet - M. dense / beige~~
	SW		0.1	45	Wb sand w gravel / some, s-L, subrounded clasts / wet - M. dense / beige
X 5	SW		0.9	46	SAA
2.75	SW		0.5	47	
	SW		0.4	48	Wb Sand w gravel / little, s, subrounde clasts / wet - loose / beige
	GW		0.1	49	Wb gravel w sand / s-L, sub rounded clasts / coarse grains / wet - loose / beige
5	SM		0.4	50	Silty Sand / M-Coarse, sub angular grains / loose - wet / Beige
3.3	GP		0.3	51	Pb gravel w sand / minor sand / well rounded grains / clasts / loose / fine upwards

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-01E
	Project:	
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 3 of 4
		Drilling

					Start	Finish
Water Level:					DATE	DATE
Time:					TIME	TIME
Date:						

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GW		0M	52	WG gravel w sand / few sand, coarse / S-L, sub angular gravel / loose-wet Beige
	GW		0.2	53	SAA
	SW		0.1	54	WG sand w gravel / few, S, Well rounded gravel / loose-wet / Beige
	SW		0.6	55	WG sand w gravel / some, S-L well rounded gravel / loose-wet / Beige
X 5 / 3.6	SP		2.2	56	PG sand w gravel / some, S, sub angular gravel / coarse sand / M.dense-wet Beige
	SP		2.3	57	SAA
	SW		0.5	58	WG gravel w gravel / some, S-L, sub rounded gravel / M-dense-wet / Beige
	SW		0.2	59	SAA
	GP		0.8	60	PG gravel w sand / S-M sub angular gravel / few, coarse sand / loose-wet Beige
5	GW		0.3	61	WG gravel w sand / some, coarse sands / S-L sub rounded clasts / loose-we
X — 3.6	GS		0.5	62	WG sand w gravel / some, S, sub rounded clasts / M.dense-wet beige
	GW		0.3	63	WG gravel w sand / some, coarse sand / S-L / clasts / sub rounde / loose-wet
	GS		0.1	64	WG sand w gravel / minor, S, well rounded clasts / M.dense-wet
	GP		0.1	65	PG gravel / Minor sand / S, well rounded clasts / loos-wet
5	GW		0.9	66	WG gravel w sand / S-L, sub rounded clasts / coarse sand / loose-wet
X — 4.4	SP		0.3	67	PG sand / coarse sand, Sub rounded grains / M.dens-wet orange Beige
	GP		0.1	68	PG gravel w sand / M, sub rauded gravel / coarse sands / loose-wet
	SW		0.3	69	WG sand w gravel / some, S-L subangular gravel / loose-wet / D.Brown
	GP		0.2	70	PG gravel w sand / fine↑ M-S gravel; sub rounded / few sand / Beige / wet loos
5	GW		0.2	71	WG gravel w sand / some, G-L sub angular gravel / Dense-wet — angular sand
X — 4.5	SW		0.1	72	WG sand / angular, coarse sand / Beige / wet Dense
	GW		0.1	73	WG sand w gravels / Some, G-L, well rauded gravel / Dense-wet / D. Brown
	SW		0.2	74	WG-gravel / S-M, Sub angular gravels / Dense-wet / D.Brown
5	SW		0.0	75	WG-sand w gravel / S-L, Some, sub angular gravel / loose-wet D.Brown
— 4.5	SP		6.0	76	Silty sand / sub angular fine-coarse grains / moist-dense Beige ↑ Fine up Sequence
	GW		6.0	77	PG-sand / coarse sand, Subangular grains moist-loose / Beige

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location: SB-01E
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 4 of 4
		Drilling

	Start	Finish
Water Level:		
Time:	DATE	DATE
Date:	TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		0.0	78	WG sand w gravel/some, S-L subrounded gravel/dense-wet D.Brown
	GW		0.0	79	WG-gravel w sand/some-coarse sands/S-L gravels, well rounded/DBrown
	SP		17.6	80	PL Sand w gravel/gravel at base/f-coarse sand/Red-brown
4	GP		25.3	81	PG-gravel w sand/Minor, Coarse sand/Well graded, S-M gravel/Red-brown Fine w sands
	GP		2.7	82	SAA
X4.7	GW		07.1	83	DNAPL, WG gravel with sand/angular, S-L cobbles/few sand/Black
	CH		12.1	84	Fat clay/Blue gray/Dense-moist
				85	
				86	End of SB-01E
				87	
X				88	84' bgs
				89	
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-01
	Project:	
Drilling Method: Direct Push		Soil Boring Number:
Sampling Method: acetate sleeve		Sheet 1 of 4
Water Level: 17.5		Drilling Start: DATE / TIME; Finish: DATE / TIME
Time:		
Date:		

Surface Conditions: Pavement
Weather: Sunny
Temperature: 80°F

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
			5.7	0	Asphalt
5	SM		6.0	1	Silty sand with gravel / Sub angular, S-L clasts / well graded / moist - dense / D. Brown
3.9	CL		3.3	2	lean sandy clay with gravel / W6 - Sub angular S-L clasts / moist - dense / D. Brown
	SW		0.7	3	W6 sand with gravel / some, S-L, sub rounded clasts / loose - dry / orange brown
	GW		1.3	4	W6 gravel with Sand / some, coarse sand / S-L, sub rounded clasts / loose - dry / Beige
	SM		0.4	5	W6 silty sand w gravel / some, S-L sub angular clasts / moist - dense / D. Brown
5	SW		4.1	6	W6 Sand w gravel / some, S-L, sub rounded clasts / loose - dry / Beige
4.6	SW		1.2	7	SAA
	SW		1.4	8	SAA
	SW		2.4	9	W6 sand w gravel / some, S-M, sub angular / loose - dry / Orange - brown
	SW		0.2	10	W6 Sand w gravel / some, S-M, sub rounded / loose - dry / Beige
5	SM		0.9	11	W6 Silty Sand w gravel / some - S-M, sub rounded / moist - dense / D. Brown
1	SW		2.3	12	W6 - Sand w gravel / some, S-L sub angular / moist - loose / orange - brown
4.8	SW		4.8	13	SAA
	SW		2.7	14	SAA
	SW		3.6	15	W6 sand w gravel / some, S-L gravel sub rounded / loose - dry / Beige
5	SM		1.2	16	Silty sand w gravel / some, S-M gravel well rounded / dry - dense / D. Brown
3	SW		2.2	17	W6 Sand w gravel / little, S-M gravel well rounded / wet - loose / Beige — water
	SW		0.6	18	SAA
	SW		0.4	19	SAA
	SW		2.4	20	W6 Sand w gravel / some, S-L gravel well rounded / wet - dense / Beige
5	SW		1.6	21	W6 sand w gravel / some, S-M gravels well rounded / wet - medium / Beige
3	SW		1.4	22	SAA
	GW		2.4	23	W6 gravel w sand / some, coarse sand / sub rounded clasts / wet - loose / orange brown
	GW		1.1	24	SAA
5/4	SW		1.4	25	Description on next Page

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project: Heatset RSD	Location: SB-01F
Drilling Method: Direct Push		Soil Boring Number:
Sampling Method: Discrete Sampler		Sheet 2 of 4

	Drilling Start	Drilling Finish
Water Level:		
Time:	DATE	DATE
Date:	TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		0.2	26	Wb sand w gravel/some, g-L, subrounded/wet-dense/Beige
	SW		0.1	27	SAA
	GW		0.4	28	wb gravel w sand/some, s-m, subrounded/some coarse sand/wet-dense/Brown
	GW		0.3	29	SAA
	SW		0.2	30	Wb Sand w gravel/some, s-L, subrounded/ 10% gravel/ loose/ orange brown
5	SW		33	31	wb Sand w gravel/silted, s-L, subrounded/wet-dense/grey-Dk Brown
4.8	SW		1.3	32	wb sand w gravel/some, s-L, rounded/wet-dense/Beige
	SW		03	33	SAA
	GW		0.1	34	wb gravel w sand/s-L, subrounded/some coarse sand/wet-loose/beige
	SM		1.3	35	Silty sand/coarse-fine sub rounded sand/moist-mdense/beige
5	SW		2.4	36	wb sand w gravel/some, s, subrounded/wet-mdense/beige
1	SW		1.1	37	SAA
2.5	GP		0.3	38	wb gravel w sand/s, well rounded gravel/few coarse, subrnd/loose/wet/beige
	GP		0.1	39	SAA
	SW		0.4	40	wb sand/f-coarse, subrounded sand/loose-wet/beige
5	SW		0.2	41	SAA
1	SW		0.4	42	wb sand w gravel/some, s, well rounded gravel/loose-wet/beige
2.3	GW		0.4	43	wb gravel w sand/s-m, well rounded gravel/loose-wet/beige
	GW		0.2	44	SAA
	SW		0.4	45	Wb Sand w gravel/some, s-L, subrounded/wet-mdense/beige
	SW		1.6	46	SAA
5	SW		0.4	47	SAA
4.8	SW		0.2	48	SAA
	SW		0.3	49	SAA
	GP		0.1	50	PG gravel w sand/s-M, subrounded/few subrounded sand/loose-wet/beige
5	SP		0.3	51	PG sand/coarse, sub rounded sands/loose-wet/beige

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-01F
	Project:	
Drilling Method: Direct Push		Soil Boring Number:
Sampling Method: Discrete Sampling		Sheet 3 of 4
		Drilling
Water Level:		Start / Finish
Time:		DATE / DATE
Date:		TIME / TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		0.2	52	WG Sand w gravel/some, S-L, gravel, Sub rounded/Wet - M.dense/Beige
	GW		0.5	53	WG gravel w sand/S-L, gravel, Subrounded/wet - loose/beige/some, coarse sand
	GW		0.6	54	SAA
	SW		0.2	55	WG sand w/gravel/few, S-M, gravel, Subrounded/wet-loose/beige — Fine up
5	GW		0.6	56	WG-gravel w sand/little, coarse sand/wet-loose/beige
5/4	SW		0.1	57	WG Sand w/gravel/some, S-L, gravel, Sub round/wet-m dense/tan
	SW		0.6	58	SAA
	SW		0.2	59	SAA
	GP		0.2	60	WG-gravel w sand/little, coarse Sand, Sub angular/fine-m, gravel, Subangular/loose-wet/beige
	SW		0.1	61	WG-Sand w gravel/little, S, gravel, Subrounded/fine sand/wet-m dense/beige
5	SW		0.1	62	WG-Sand w/gravel/some, S-L, gravel, Subrounded/coarse sand/wet-M.dense/beige
3.3	SW		0.1	63	SAA
	SW		0.1	64	SAA
	GW		0.1	65	WG-gravel w sand/little, S-L, gravel, Subrounded/wet-loose/beige
5	SW		0.0	66	WG-Sand w/gravel/some, S-L, gravel, Subrounded/wet-m dense/beige
—	SW		0.0	67	SAA
3.8	GW		0.0	68	~~SAA~~ WG-gravel w sand/some, course sand/S-L, Sub angular/coarse/beige
	SW		0.0	69	WG-Sand with gravel/little, S-M, gravel, Subrounded/loose-wet/D.brown
	SW		0.1	70	WG-Sand with gravel/some, S, gravel, Subangular/loose-wet/Beige
5	GW		0.5	71	WG-Gravel/Trace, coarse sand/S-L, Sub angular gravel/loose-wet/Beige
5	SW		0.5	72	WG-Sand with gravel/some, S-L, gravel, Sub angular/loose-wet/Beige
—	SW		0.1	73	SAA
4.5	SW		0.1	74	SAA
5	SW		0.1	75	WG-Sand w/gravel/some, S-L, gravel, Subrounded/wet-M.Dense/Beige
—	SW		0.1	76	SAA
4.6	SW		0.5	77	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
	Project:	
Drilling Method: Direct push		Soil Boring Number: SB-01F
Sampling Method: Discrete Sampling		Sheet 4 of 4

Water Level:				
Time:				
Date:				

Drilling	
Start	Finish
DATE	DATE
TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		0.6	78	WG Sand w gravel/few, s-l, gravel sub rounded/wet-m dense/Beige
	SW		0.0	79	SAA
NO Record			0.2	80	
4	SW		0.6	81	WG Sand/coarse-med/sub angular sand/wet-Dense/D. Brown Red/Brn
	SW		0.6	82	WG Sand w gravel/few, s-l, gravel sub angular/wet-Dense/D. Brown Red Sh
4.5	GW		0.2	83	WG gravel w sand/some sand, coarse sub angular/wet-Dense/Red Sh Brown
	GW			84	
	GW		6.7	85	WG gravel w sand/some sand, coarse, sub angular/wet-Dense/Red Sh Brown
	CH		63.3	86	Fat clay/Blue-gray/moist dense
				87	
				88	End of SB-01F
				89	7/12/2022
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____

Screen Interval:	_____	To _____	ft bgs
Riser Interval:	_____	To _____	ft bgs
Sand Pack Interval:	_____	To _____	ft bgs
Bentonite Seal:	_____	To _____	ft bgs
Grout Interval:	_____	To _____	ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

Heatset RSO
7/20/2022

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location: SB-02
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 1 of 4
Water Level:		Drilling: Start DATE TIME / Finish DATE TIME
Time:		
Date:		

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5 / 2.8	N/A		5.1	0	concrete
	SM		3.9	1	Silty sand w gravel/few, M, clasts, Sub rnd/Moist-loose/D-brown
	SP		12.0	2	PG-sand/M-coarse, Subangular grains/loose-moist/tan-ocrs
	CL		21.7	3	Sandy lean clay with gravel/some, M-L, clasts, Sub angled/Moist-loose/D.Brown
	CL		16.0	4	SAA
5 / 4.7	SM		2.7	5	Silty sand w gravel/some, S-L, clasts/subangled/Dry-loose/Red-brown
	SW		3.6	6	WG-sand w gravel & silt/some, S-L, clasts/Sub rnd/dry-loose/Red-brown
	SW		3.0	7	SAA
	SW		3.1	8	SAA
	SW		2.7	9	SAA
5 / 3.8	SM		4.8	10	Silty sand with gravel/some, S-M, clasts, Subrnd/dry-loose/D.Brown
	SM		7.7	11	SAA
	SW		2.8	12	WG-sand w gravel & silt/some, S-L, clasts, Subangled/dry-loose/Red-brown
	SW		3.5	13	WG-Sand w gravel/some, S-L, clasts, Subangled/dry-loose/tan
	SW		2.4	14	SAA
5 / 4.8	SM		1.9	15	Silty Sand w gravel/some, S-M, clasts, Subangled/dry-loose/light-brown
	SM		2.8	16	
	SW		2.5	17	
	GW		5.5	18	WG-Sand w gravel/some, S-M, clasts, Subrnd/Moist-loose/beige
	GW		3.5	19	WG-gravel w sand/some, coarse Sand/S-L, clasts, Subrnd/wet-loose/beige (water Table)
5 / 4.3	GW		2.0	20	SAA
	SW		3.1	21	WG-Sand w gravel/some, S-L, clasts, Subrnd/wet-loose/beige
	SW		2.6	22	SAA
	SW		3.1	23	WG-Sand/M-coarse, Subrnd/wet-loose/beige
	SW		1.8	24	WG-Sand w gravel/some, S-L, Subrnd/wet-loose/beige
5 / 4.3	SW		2.1	25	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

Background 14 PID

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SOIL BORING LOG

Job. No.	Client: NYSDEC Project:	Location:	
Drilling Method:		Soil Boring Number: SB-02	
Sampling Method:		Sheet 2 of 4	
		Drilling	
Water Level:		Start	Finish
Time:		DATE	DATE
Date:		TIME	TIME

Coordinates: Northing _____ Easting _____
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/4.5	SW		3.3	26	SAA (25)
	SW		4.7	27	W6-sand w gravel/few S, clasts subround/loose-wet/beige
	SW		3.8	28	W6-sand w gravel/some, S-L, clasts subround/loose-wet/beige
	SW		4.7	29	SAA
5/4.5	SM		2.6	30	Silty sand w gravel/some, S-L, clasts subround/mais f-loose/Brown
	SW		4.5	31	W6-sand w gravel/some, S-L, clasts subround/wet-loose/Beige
	SW		9.7	32	SAA
	SW		8.1	33	SAA
	SW		4.3	34	SAA
5/4.2	SW		4.1	35	W6-sand w silt & gravel/some, M-L, clasts well rnd/wet-loose/Brown
	SW		5.3	36	W6-sand w gravel/some, M-L, clasts well rnd/wet-loose/Beige
	SW		6.1	37	SAA
	SW		6.2	38	SAA
	SW		4.9	39	SAA
5/3.7	GW		1.7	40	W6-gravel w sand/S-M, clasts well rnd/some, sand coarse/wet-loose/beige
	SW		2.8	41	W6-sand w grav/some, M-L, clasts well rnd/loose-wet/beige
	SW		2.2	42	SAA
	SW		1.9	43	SAA
	SW		1.8	44	SAA
5/2.1	SW		2.4	45	W6-sand/M-coarse-subround/wet-loose/beige
	GW		1.7	46	W6-gravel w sand/some, sand coarse/S, clasts subrnd/wet-loose/beige
	SW		1.6	47	W6-sand w gravel/some, M-L, clasts subrnd/wet-loose/beige
	SW		2.5	48	SAA
	SW		2.2	49	SAA
	SW		1.7	50	SAA
	SW		1.6	51	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number: SB-02
Sampling Method:		Sheet 3 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/0.8	SW		1.6	52	SAA (SI)
	SW		1.7	53	SAA
	SW		1.8	54	SAA
5/3.2	GP		2.1	55	PG gravel/S-L, well rounded clasts/fine↑/loose-wet/beige
	SW		2.2	56	WG sand w gravel/some, S-L clasts, well rnd/loose-wet/beige
	SW		1.7	57	SAA
	SW		3.9	58	SAA
	SW		2.1	59	SAA
5/4	GP		3.1	60	PG gravel/fine-S, subangular clasts/loose-wet/beige
	GW		2.7	61	WG gravel w sand/some sand, coarse/S-L, subrnd clasts/loose-wet/beige
	SW		2.7	62	WG sand w gravel/some, S-L, subrnd clasts/loose-wet/beige
	GP		2.0	63	PG gravel/some, subrnd clasts/loose-wet/beige
	SM		2.3	64	Silty sand/sand is med-fine/moist-loose/beige
5/4.7	GW		1.4	65	WG gravel w sand/few sand/S-L, well rnd clasts/loose-wet/beige
	SW		1.4	66	WG sand w gravel/some, S-M, subrnd clasts/loose-wet/beige
	SW		1.6	67	SAA
	SW		1.4	68	SAA
	SM		2.5	69	Silty Sand/Fine-med, subrnd sand/loose-wet/~~beige~~ brown
5/4.2	SW		3.2	70	WG sand w gravel/some, S-L clasts subrnd/loose-wet/~~beige~~ brown
	GP		3.5	71	PG gravel/S-L, well rnd/loose-wet/~~beige~~ brown
	SW		3.4	72	WG sand w silt/Fine-med, clasts subrnd/loose-wet/Brown
	SW		2.3	73	WG sand w gravel/some, S-M, clasts subrnd/loose-wet/Brown
	SW		2.4	74	SAA
5/3.4	SW		1.8	75	WG sand w gravel/little, M, clasts subrnd/loose-wet/~~Brown~~ Beige
	SW		2.0	76	SAA
	GW		1.6	77	WG gravel w sand/some, sand coarse/loose-wet/beige

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number: SB-02
Sampling Method:		Sheet 4 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GW		1.4	78	SAA (77)
	SW		1.3	79	W-G Sand w gravel/some, S-M, subround/loose-wet/brown
5	SP		4.8	80	P-G sand/M-coarse, subround/loose-wet/D.Brown
	GP		1.5	81	P-G gravel/S-AA, well round cobbles/loose-wet/D.brown
4.8	GW		2.4	82	Tr-gravel w sand/some coarse/S-M, angular/wet-dense/D-brown
	CH		1.1	83	Fat clay/moist-dense/blue-gray
			4.3	84	SAA
				85	End of SB-02
				86	
				87	14:55 7/20/2022
				88	
				89	
				90	
				91	
				92	
				93	
				94	
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				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	07/06/2022
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-03	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	Pg 1 of 4	Logged By:	Checked By: Page ___ of ___

Recovery Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
	0905	0.0		0	concrete	
		0.1	SM	1	silty sand with gravel, dark brown, moist, sub angular	
		0.7	SM	2	SAA	
		0.3	SM	3	SAA	
		0.2	SM	4	WG, sand with silt & gravel, moist, dark brown subangular	
3/5		0.3	GW	5	WG, Gravel w sand, sub angular subangular gravel, tan/grey/brown	
		0.0	GW	6	SAA	
		0.0	GW	7	SAA	
		0.0	GW	8	WG, SAA sand with gravel, dry/loose, tan/buff, subangular	
		0.0	SW	9	clay layer 8.25 → 8.75, gray, ~~fat~~ clay lean clay	
4/5		0.0	SW	10	WG sand with gravel, dry/loose, tan/buff, subangular	
		0.0	SM	11	WG, ~~fine~~ silty sand with gravel, gray/loose, Angular clasts	
		0.0	SW	12	WG Sand w gravel/tan/loose sub angular	
		0.0	SW	13	WG sand w gravel/tan, yellow/angular/loose	
		0.0	SW	14	WG sand w gravel/tan, yellow, subangular/loose	
5/5		0.0	GW	15	WG gravel w sand/tan, brown, loose, subangular	
	0950	0.1	SP	16	PG Sand with gravel/tan, orange/angular med sand, moist	
		0.0	SP	17	SAA	
		0.1	SW	18	WG sand/gray/angular sand grains	
		0.1	GW	19	WG gravel w sand/gray/beige/subangular gravel/moist	
2.1/5		0.1	SW	20	WG sand w gravel/gray/angular grains, qtz clasts/moist	
		8.3	GW	21	WG gravel w sand/gray/subangular clasts/qtz/moist/smell	
		23.7	GW	22	WG gravel w sand/gray/sub angular clasts/qtz/smell, sheen	
2.1/5		28.7	SM	23	WG Silty sand/grey/black/angular grains/qtz/smell, sheen	
		58.7	GW	24	WG gravel w sand/subangular/coarse sand/smell, sheen/gray/tan	

Abbreviations:
SAA = same as above qtz = quartz dol = dolomite lith = lithic fragments
vfg = very fine grained fg = fine grained mg = medium grained cg = coarse grained

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EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-03	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	pg 2 of 4	Logged By:	Checked By: Page ___ of ___

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
		26.9	GW	25	Wb Gravel w sand/Brown/sub rounded clasts	
		3.9	SM	26	Wb Silty sand w gravel/Brown/sub rounded clasts/moist	
		2.1	SM	27	~~Wb gravel w sand/Brown/sub~~ SAA	
		1.3	SW	28	Wb Sand w gravel/Beige/sub angular clast/coarse sand	
2.5/5		1.4	SW	29	Wb Sand w gravel/Tan-Beige/sub rouded/coarse sand	
	1015	1.3	GW	30	Wb gravel w Sand/Tan-Beige/sub rounded/coarse sand	
		0.3	SW	31	Wb Sand w gravel/Tan Beige/sub rounded/coarse sand	
		0.3	GW	32	Wb gravel w sand/rounded clasts/qtz, granite clasts	
		0.2	SP	33	Pb Sand/Tan-beige/sub rounded clasts	
3.2/5		0.2	SW	34	Wb Sand w gravel/Tan-beige/rounded clasts/qtz-granite clasts	
		0.3	SW	35	Wb Sand w gravel/Tan-beige/sub rounded clasts	
		0.2	SW	36	Wb sand w gravel/Beige/sub angular clasts/coarse sand	
		0.2	SW	37	SAA Tan	
		0.2	GW	38	Wb Gravel w Sand/sub rounded qtz, granite clasts/coarse sand	
3.8/5		0.1	SW	39	Wb Sand w gravel/beige/sub rounded clasts/coarse sand	
		0.1	SW	40	Wb Sand w gravel/beige/sub rounded clasts	
	1059		N/A	41	zero recovery	
			N/A	42	Zero recovery material was	
			N/A	43	Zero recovery	
			N/A	44	Zero recovery not able to be brought up	
		0.2	GW	45	Wb gravel w sand/beige/sub rounded clasts/qtz clasts	
		0.2	SP	46	Pb Sand/Beige/Medium-Coarse sand/sub rounded	
		0.3	SW	47	Wb Sand w gravel/Beige/coarse sand/sub rounded	
		0.3	SW	48	SAA	
		0.3	GW	49	Wb gravel w Sand/Beige/sub rounded clasts/qtz-granite clasts	

Abbreviations:
SAA = same as above qtz = quartz dol = dolomite lith = lithic fragments
vfg = very fine grained fg = fine grained mg = medium grained cg = coarse grained

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EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

PID 0.6

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:	SB-03	Final Drilled Depth:	
Location:		Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	Pg 3 of 4	Logged By:	Checked By: Page ___ of

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
4.2/5		0.2	SW	50	wb Sand with gravel / Beige / Sub rounded grains / coarse sand	
		0.2	GP	51	Pb Gravel w Sand / sub rnded / qtz clasts / Beige-tan	
		0.2	SP	52	Pb Sand w gravel / Beige-tan / sub angular grains / coarse-med grains	
		0.2	GW	53	wb gravel w sand / Beige-tan / sub angular clasts / coarse grains	
4.4/5		0.2	GW	54	Wb gravel w sand / Beige-tan / sub angular clasts / coarse sand	
	1125	0.2	GW	55	Wb gravel w Sand / Beige-tan / Sub-rounded / qtz clasts	
		33.1	GW	56	Wb gravel w Sand / Beige / Sub rounded / qtz clasts + grains	
		2.1	SW	57	Wb Sand / Beige-tan / sub rounded grains / coarse-med grains	
		1.9	SW	58	Wb Sand with gravel / Beige-tan / Sub rounded grains & clasts	
4.8/5		0.7	GW	59	wb gravel with san / Beige tan / rounded clasts & grains	
		1.3	SW	60	wb Sand with gravel / Beige-tan sub rnded / qtz clasts	
		33.5	SW	61	wb Sand with gravel / Beige-tan / sub rnded / qtz & grnd clasts	
		11.7	SW	62	wb Sand with gravel / Beige / sub angular grains / coarse grains	
4.4.7		35.7	GW	63	wb gravel with sand / Beige / Sub angular sand grains / coarse sand	
		55.8	GW	64	wb gravel with sand / Beige / sub rnded / large grains / coarse sand	
		144	SW	65	Wb Sand with gravel / angular gravel / Dark brown / coarse sand	
		197.6	SW	66	SAA	
		304	SW	67	SAA	
4.4.3		4.4	SP	68	Pb sand / sub rounded grains / beige / med-coarse sand	
		2.8	SP	69	SAA	
		0.0	GW	70	wb Gravel with sand / Tan-brown / sub rounded / qtz clasts	
		0.0	GW	71	SAA	
		0.0	GW	72	wb sand with gravel / Tan brown / Sub angular / md clasts	
2.1/5		0.0	GW	73	wb sand with gravel / Tan-brown / sub rounded / sm clasts	
		0.0	SW	74	Wb sand / Brown / Angular grains / med-coarse grains	

Abbreviations:
SAA = same as above qtz = quartz dol = dolomite lith = lithic fragments
vfg = very fine grained fg = fine grained mg = medium grained cg = coarse grained

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New York

EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Heatset 2022 RSO, Babylon, NY	Project Number:	1602518.0006.B
Drilling Company:	North Star Drilling	Start Date:	
Drilling Rig/Bit Diameter:		End Date:	
Driller:		Final Drilled Depth:	
Location:	SB-03	Sample Type:	Direct Push/Geo Probe
Boring/Well ID:	Pg 1 of 4	Logged By:	Checked By: Page ___ of ___

Date	Time	Drill Rate, ft/min	USCS Soil Type	Depth, ft bgs	Lithologic Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity, mineralogy, % grain size breakdown, odors, other observations)	Packer Testing or Boring Details
6/5	1320	0.0	SW	75	W/- Sand / Brown / angular Sand / med-coarse grains	
		0.0	GW	76	W/- gravel with sand / Brown / Sub Rnded / mixed grades / loose / c ↑ / compact	
		0.0	SW	77	W/- Sand with gravel / Tan-beige / coarse sand / small/thin natl. → Small/compact	
		0.0	SW	78	W/- Sand w/ gravel / Tan-beige / coarse sand / small / small grains / compact	
		0.0	SW	79	W/- Sand w/ gravel / Tan / coarse sand / med gravel / compact	
6/5		3.9	SW	80	W/- Sand w gravel / Tan / coarse sand / med-coarse sand / compact	
		1.1	SW	81	W/- Sand w gravel / Tan brown / Sub angular / small gravel / loose	
		0.9	GW	82	W/- gravel / Tan-brown / Sub angular / large gravel / compact → 82.4 clay	
		4.1	CH	83	Lean fat clay / blue-gray / no grains / Dense-med	
6/5		1.8	CH	84	Fat clay / blue-gray / no grains / Dense-soft	
6/5	1538	0.0	CH	85	Fat clay / blue-gray / no grains / Dense-med	
					End of SB-03	
					7/6/2022	

Abbreviations:
SAA = same as above qtz = quartz dol = dolomite lith = lithic fragments
vfg = very fine grained fg = fine grained mg = medium grained cg = coarse grained

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2/18 1010 Start.

Headset R90

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No. | Client: NYSDEC | Project:
Location: SB-04
Drilling Method:
Soil Boring Number:
Sampling Method:
Sheet 1 of 4

Water Level:				
Time:				
Date:				

Drilling: Start DATE TIME | Finish DATE TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	N/A		0.0	0	concrete
5/4.8	SM		3.4	1	Silty sand w gravel/little gravel, S-subround/WG-/moist-dense/brown
	SM		8.3	2	SAA
	CL		1.0	3	very stiff/dark brown/lean clay w sand/little gravel/little, S, angular/moist-F/lite brown
	SM		2.3	4	Silty sand w gravel/some, S-M, clasts subround/moist-dense/gray-brown
5/4.2	SW		2.7	5	WG Sand w gravel/some, S-L, clasts subround/dry-loose/orange-beige
	SW		0.0	6	SAA
	SW		0.0	7	SAA, black coloring
	SW		0.0	8	SAA
	SW		1.1	9	SAA
5/4.3	SM		0.0	10	Silty sand with gravel/some, S-L, clasts subangular/subround/moist-dry/beige
	SM		3.7	11	SAA
	SM		6.9	12	SAA
	SW		3.0	13	WG Sand w gravel/some, S-L, clasts subround/loose-dry/orange-brown
	SW		0.0	14	SAA
5/4.8	SM		0.0	15	Silty sand w gravel/some, S-L, clasts subround/loose-dry/beige
	SW		0.0	16	WG Sand w gravel/some, S-L, clasts subround/loose-dry/beige-tan
	SW		0.0	17	SAA
	SW		0.0	18	SAA
	SW		0.0	19	WG Sand w gravel/some, S-L, subround/wet-loose/beige — water table
5/4.5	SW		0.0	20	WG Sand w gravel/some, S-L, clasts subround/wet-loose/beige
	SW		0.0	21	
	SW		2.3	22	
	SM		0.3	23	Silty Sand w gravel/some, M-L, clasts subround/moist-dense/tan-brown
	SM		0.0	24	SAA
5/4.2	SM		0.0	25	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number: SB-04
Sampling Method:		Sheet 2 of 4
		Drilling
Water Level:		Start: DATE / TIME
Time:		Finish: DATE / TIME
Date:		

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SM		0.0	26	SAA 25 & 24
5/4.2	SW		2.6	27	Wt Sand w gravel/some, s-m, clasts, subround/loose-wet/beige
	SW		1.5	28	SAA
	GW		0.6	29	Wt gravel w Sand/some, sand, course/some, clasts, subround/loose-wet/beige
	GW		0.0	30	SAA
5/4.5	SW		0.0	31	Wt Sand w gravel/some, s-m, clasts, subrnd/wet-dense/beige
	SW		0.0	32	SAA
	SM		0.2	33	SAA
	SM		2.3	34	Silty sand w gravel/some, s-t, clasts, subangle/moist-dense/brown-tan
	SW		0.0	35	Wt Sand w gravel/some, s-t, clasts, subrnd/wet-loose/beige
5/4.7	SW		0.1	36	SAA
	SW		0.0	37	SAA
	SW		0.1	38	SAA
	SW		0.0	39	SAA
	SM		1.4	40	Silty sand w gravel/some, s-t, clasts, subrnd/wet-loose/D Brown
5/4.1	SW		2.9	41	Wt Sand w gravel/some, s-m, subrnd/wet-loose/Beige
	SW		0.2	42	SAA
	SW		0.3	43	SAA
	SW		0.2	44	SAA
	SW		0.7	45	SAA
5/3.9	GW		0.7	46	Wt gravel w Sand/s-t, clasts, subrnd/some, course-vc grave/wet-loose/beige
	GW		0.9	47	SAA
	GW		1.7	48	SAA
	GW		0.3	49	SAA
5/4.7	GW		0.1	50	SAAA
	SW		0.7	51	Wt Sand w gravel/some, s-t, clasts, subrnd/wet-loose/beige

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number: SB-04
Sampling Method:		Sheet 3 of 4
Water Level:		Drilling Start / Finish
Time:		DATE / DATE
Date:		TIME / TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		1.1	52	WG Sand/M-VC, sub rnd gravel/loose-wet/beige
	SW		1.3	53	WG Sand w gravel/some, G-L, sub rnd clasts/loose-wet/beige
	GW		0.2	54	WG gravel w sand/some, coarse sand/G-L, sub rnd clasts/loose-wet/beige
5 / 3.2	GW		1.2	55	SAA
	SW		2.0	56	WG sand w gravel/some, S-M, G, sub rnd clasts/loose-wet/beige
	GW		2.1	57	WG gravel w sand/some coarse sand, S-coarse/G-M, sub rnd clasts/loose-wet/beige
	GW		0.6	58	SAA
	GW		0.7	59	SAA
	SW		0.3	60	WG sand/M-VC, sub rnd gravels/loose-wet/beige
5 / 4.5	SW		2.5	61	SAA
	SW		2.8	62	SAA
	GW		1.7	63	WG gravel w sand/some coarse sand/G-M, sub rnd gravel/loose-wet/beige
	SW		2.4	64	WG Sand w gravel/some, G-L, sub rnd gravels/loose-wet/beige
	GW		1.7	65	WG gravel w sand/some coarse sand/G-M, sub rnd clasts/loose-wet/beige
5 / 3.4	GW		1.3	66	SAA
	SW		1.0	67	WG sand w gravel/some, S-L, sub rnd clasts/loose-wet/beige
	SW		0.3	68	SAA
	SW		0.3	69	SAA
	GW		1.2	70	WG gravel w sand/some, sub rnd clasts/loose-wet/some sand, mix/beige
5 / 2.8	SW		1.4	71	WG sand w gravel/some, S-M, sub rnd clasts/loose-wet/beige
	SW		1.0	72	SAA
	SP		1.1	73	PG Sand/M-coarse/loose-wet/beige
	SP		0.2	74	SAA
	SW		0.7	75	WG sand w gravel/some, S-L, sub rnd clasts/loose-wet/beige
5 / 4.5	SP		2.8	76	PG sand/med-coarse, sub rnd gravels/loose-wet/beige
	SW		0.4	77	WG sand with gravel/some, S-L sub rnd clasts/loose-wet/beige

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number: SB-04
Sampling Method:		Sheet 4 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GW		8.5	78	Wb gravel w sand/S-L, subround clasts/M-C sand/Dense-wet/M. Brown SA 1
	GW		0.1	79	
	SP		76.7	80	F-M Sand/M-coarse, subround/Dense-wet/base
5/5	SW		51.0	81	Wb sand w gravel/F-M sand, S, subround clasts/Dense-wet/base SA 1
	SW		70.6	82	
	GW		54.7	83	Wb gravel-w sand/S-L, S subround clasts/Dense-wet/D. brown/bleed SA 2 + DNAPL
	GW		65.7	84	
	CH			85	Red Clay/Most dense/Blue-gray
				86	
				87	End of SB-04
				88	7/18/2022
				89	
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

-> 1.4' DNAPL

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-05
	Project:	Soil Boring Number:
Drilling Method: Geo probe Direct Push		Sheet 1 of 4
Sampling Method: Discrete Sampler		Drilling
		Start: DATE / TIME
Water Level:		Finish: DATE / TIME
Time:		
Date:		

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
			2.3	0	Concrete
5 / 3.8			6.5	1	sand w clay&gravel / lean clay / few, S-L, clasts, Sub round / moist-dense / D.Brown
			43.4	2	Silty sand w gravel / few, S-M, clasts, Subround / moist-dense / Tan-Brown
			14.8	3	silty sand w gravel / some, S-L, clasts, Sub angled / moist-M dense / D.Brown
			17.6	4	silty sand w gravel / some, L, clasts, Sub rnd / moist-M dense / Tan-orange
			0.9	5	SAA
5 / 4.7			2.1	6	Wb sand w gravel / some, S-L, clasts, Subround / loose-moist / Tan-orange
			1.3	7	wb gravel w sand / S-M, clasts, Subangular / Loose-moist / Orange-brown
			1.1	8	Wb sand w gravel / few, S-M, Subangular / loose-moist / Tan
			2.8	9	wb gravel w sand / S-M, clasts, Sub angular / loose-moist / Tan
			6.7	10	Wb silty sand w gravel / some, S-M, clasts, Subrnd / moist, m dense / D brown
5 / 3.1			23.4	11	Wb sand w silt & gravel / some, S-M, clasts, Subang / loose-moist / orange
			3.0	12	
			1.6	13	
			1.7	14	Wb sand w gravel / some, S-M, clasts, Sub angular / moist-loose / Beige
			3.6	15	Silty sand w gravel / some, S-M, clasts, Sub angular / moist-loose / tan/brown
5 / 2.9			4.4	16	SAA
			5.6	17	Wb sand w gravel / some, S-L, clasts, Subround / moist-loose / Beige — water
			19.2	18	SAA
			6.2	19	Wb gravel w sand / S-L, clasts, Subround / wet moist-loose / Beige
			9.8	20	Wb silty sand w gravel / some, S-M, clasts, Subrnd / moist-loose / Brown/tan
5 / 2.2			18.6	21	SAA
			8.6	22	SAA
			14.3	23	Wb sand w gravel / some, S-L, clasts, subround / wet-loose / Petro smell / Brn-gr
			345.5	24	SAA
5 / 3.5			113.2	25	Silty sand w gravel / some, S-L, clasts, Subrnd / wet-M dense / Petro Smell / Brn

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-05
	Project:	
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 2 of 4
Water Level:		Drilling Start / Finish
Time:		DATE / DATE
Date:		TIME / TIME
Surface Conditions:		
Weather:		
Temperature:		

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
			83.4	26	wb s.l.t sandy gravel/some, s-L subround clasts/wet-m.dense/Petro.sm/Brn
			42.0	27	wb sand w gravel/some, s-L clasts subround/loose-wet/Petro.sm/Gray
			87.1	28	SAA
			245	29	SAA
			41.1	30	wb sand w silt & gravel/some, s-L, subangular clasts/moist-loose/Brown
5/4.3			93.5	31	wb sand w gravel/some, s-L, subround clasts/moist-loose/Beige
			20.6	32	wb sand w gravel/some, s-L, subround clasts/wet-L.dense/Gray/Petro sm
			104.6	33	SAA
			46.5	34	SAA
5/3.75			34.2	35	wb sand w silt & gravel/some, s-L subround clasts/wet-loose/Brown
			34.1	36	SAA
			37.2	37	wb sand w gravel/some, s-L, subangular clasts/wet-dense/Gray/Petro.sm
			65.4	38	SAA
			159.7	39	wb sand w gravel/few, s, subround clasts/wet-loose/Beige
			[illegible]	40	NO Recovery
X 5/3.4			[illegible]	41	NO Recovery
			[illegible]	42	SAA
			[illegible]	43	SAA
			[illegible]	44	SAA
			5.6	45	SP-SM sand/coarse sand/loose-wet/beige
			6.3	46	wb sand w gravel/some, s clasts/loose-wet/beige
			4.8	47	wb gravel w sand/some sand, loose/wet/beige
			4.4	48	Pb gravel with sand/l. lts sand/loose-wet/beige
			3.6	49	wb-sand w gravel/some, s-m, subround clasts/wet-m.dense/beige
5/2.9			6.0	50	SAA
			12.5	51	Pb Gravel/m-L, well round clasts/loose-wet/assorted/beige
					wb sand w gravel/some, s-L, subround clasts-wet/beige

F.UP sequence

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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EA Science and Technology

SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location: SB-05
	Project:	
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 3 of 5
Water Level:		Drilling Start: DATE TIME / Finish: DATE TIME
Time:		
Date:		

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
			5.5	52	WG-Sand / M-coarse, subround / wet-loose / beige
			2.0	53	SAA
			2.1	54	SAA
			9.7	55	WG gravel w sand / fine, Sand / S-M clasts / loose-wet beige
5 / 3.8			10.9	56	PG-gravel / S-L subround clasts / loose-wet / beige
			6.6	57	WG sand / M-coarse, subround clasts / loose-wet
			19.1	58	WG Sand w gravel / some M, clasts subround / loose-wet > beige
			10.6	59	SAA
			35.8	60	WG-gravel w sand / few, Sand coarse / loose-wet / beige / S, subround clast
5 / 3.4			38.6	61	WG-gravel w sand / M-F, clasts subrounded / loose-wet / beige
			9.8	62	WG sand / M-coarse, subangular / loose-wet / beige
			17.7	63	SAA
			6.8	64	SAA
5 / 4.2			29.3	65	WG gravel w sand / Some clasts S-L, subround / loose-wet / beige
			20.4	66	SAA
			4.1	67	WG gravel w SAA / some sand / S-L, clasts subround / loose-wet - D. brown
			3.3	68	SAA
			4.9	69	WG Sand w gravel / some, S-M, clasts subangular / loose-wet / D. brown
5 / 3.4			61.6	70	PG gravel / S-M, well round clasts / loose-wet / Beige
			57.7	71	WG-gravel w sand / Some clasts S-L, subround / loose-wet / Beige
			5.8	72	SAA
			7.2	73	WG sand w gravel / some, S-M subround / loose-wet beige
			3.5	74	SAA
5 / 3			90.8	75	WG-sand / F-coarse, well graded / loose-wet / beige
			60.6	76	SAA
			93	77	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location: SB-05
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 4 of 4
Water Level:		Drilling Start / Finish
Time:		DATE / DATE
Date:		TIME / TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
			55.7	78	Wb gravel w sand/ some Coarse sand/ S-M, sub rounded to rounded/ loose - wet/ Brown
			19.6	79	SA
4			26.3	80	Pt sand/ coarse grained/ sub rounded/ loose-wet - brown
			7.2	81	Wb gravel w sand/ S-M, Clasts rounded/ loose - wet - brown
4.8			15.7	82	Pt gravel/ S-1 well rounded clasts/ loose-wet/ D. Brown
X			37.8	83	Wb sand w gravel/ some, S-M, Clasts angular wet - loose/ D. Brown
X				84	Fat clay/ Moist - Dense/ Dark Brown
				85	
				86	
				87	
X				88	End SB-05
				89	7/15/2022
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____
Drilling Contractor: _____
Date: _____
Driller: _____

1.1 background PID

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
	Project:	
Drilling Method:		Soil Boring Number: SB-06
Sampling Method:		Sheet 1 of 4
		Drilling

					Start	Finish
Water Level:					DATE	DATE
Time:					TIME	TIME
Date:						

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	N/A	+ + + + + +	7.9	0	Concrete
5	SM		7.3	1	Silty Sand w gravel/some, S angular clasts/dry-loose/beige
3.0	SW		2.3	2	WG sand w gravel/some, S-M, ang clasts/dry-loose/tan-brown
	SW		4.0	3	SAA
	SW		1.8	4	SAA
	SM		2.4	5	Silty sand w gravel/some, S-M, subround clasts/dry-loose/D-brown
5	SP		5.5	6	PG sand w gravel/little, M, well rnd clasts/med sand/Tan
3.3	SP		5.6	7	SAA
	CL		9.3	8	WG tan sandy lean clay w gravel/few, S-L, well rnd clasts/Dry, St-loose/D Brn
	SM		8.1	9	Silty sand w gravel/some, S, subround clasts/Moist-loose/D. brown
	SM		1.6	10	SAA
5	SW		1.9	11	Silty sand w gravel/some, S-M, angular clast/dry ~~dense~~ -dense/beige-tan
—	SW		2.9	12	SAA
4.6	SW		2.7	13	SAA
	SW		7.1	14	WG Sand w gravel/some, S-L, subround clasts/dry-loose/beige
	SM		1.6	15	Silty Sand w gravel/some, S-L, subangular clasts/dry-loose/beige
5	SM		1.9	16	SAA
—	SW		2.0	17	SAA
4.4	SW		2.1	18	WG Sand w gravel/some, S-L, subround clasts/moist-loose/beig-
	SW		6.0	19	SAA Wet-loose/beige — water Table
	SM		1.6	20	Silty Sand w gravel/some, S-L, subround clasts/dry-loose/beige
5	SW		1.8	21	WG sand w gravel/some, S-L, subround clasts/wet-loose/beige
—	SW		1.3	22	SAA
4.6	SW		5.6	23	SAA
	SW		4.8	24	SAA
5/3.9	SM		1.0	25	Silty Sand with gravel/some, S-M, clast, well rnd/Moist-loose/Beige

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number: SB-06
Sampling Method:		Sheet 2 of 4
		Drilling

	Start	Finish
Water Level:		
Time:	DATE	DATE
Date:	TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SM		0.9	26	WG-Sand w gravel/some, clasts M-L, Sub rand/wet-dense/Beige
	SW		1.3	27	SAA
	SW		8.1	28	SAA
	SW		2.8	29	SAA
5/4.6	SM		1.3	30	Silty sand w gravel/some, S-L, clasts Subangular/Moist-dense/D. brown
	SW		1.1	31	WG sand w gravel/some, S-L, clasts well rand/wet-loose/Beige
	SW		2.4	32	SAA
	SW		1.4	33	SAA
	GW		0.4	34	WG gravel W sand/some, S-L, clasts well rand/wet-loose/Beige
5/4.5	SM		>.1	35	Silty sand w gravel/some, S-L, clasts well rand/Moist-M. dense/D. Brown
	SW		2.8	36	WG Sandy gravel/some, S-L, clasts well rand/wet-loose/Beige
	SW		7.6	37	SAA
	SW		8.10	38	SAA
	SW		5.5	39	SAA
5/4.5	SM		2.4	40	Silty sand w gravel/some, S-M, clasts subangled/Moist-loose/Dark Brown
	SW		5.5	41	WG Sand w gravel/some, S-L, clasts subrand/loose-wet/Beige
	SW		1.5	42	SAA
	SW		1.7	43	SAA
	SW		1.1	44	SAA
5/3.8	SW		1.5	45	SAA
	SW		1.7	46	SAA
	SW		3.5	47	SAA
	SW		1.3	48	WG Sand/m-coarse grains/wet-loose/beige
	SW		1.2	49	WG Sand w gravel/some-M-L subround clasts/wet-loose/beige
5/2.5	SW		0.9	50	WG sand w Silt/m-coarse, sub round clasts/wet-loose/beige
	SW		1.0	51	cont on next row

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number: SB-04
Sampling Method:		Sheet 3 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		1.0	52	WG sand w gravel/some, S, clasts subangular/ wet loose/beige
	SW		1.0	53	SAA
	SW		1.1	54	SAA
5/0				55	NO Recovery
				56	-11-
				57	-11-
				58	-11-
				59	-11-
5/0				60	-11-
				61	-11-
				62	-11-
				63	-11-
				64	-11-
5/4	GW		2.3	65	WG gravel with sand/some, S-m, clasts subround/loose-wet beige
	SW		1.9	66	WG sand with gravel/some, S-L, clasts subround/wet-dense/beige
	SW		1.8	67	SAA
	SW		1.8	68	SAA
	SW		1.8	69	SAA
5/3.4	SW		1.8	70	SAA
	SW		2.5	71	WG Sand/m-coarse, and subround/wet-loose/beige
	SW		2.4	72	SAA
	SW		2.2	73	SAA
	SW		1.5	74	WG sand w gravel/few, S, clasts subround/wet-loose/beige
	SW		2.5	75	SAA
	SW		1.1	76	WG sand w grad/some, m-L, well rnd/wet-dense/beige
	SW		1.0	77	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates:	Northing _____ Easting _____
Surface Elevation:	_____
Casing Below Surface:	_____
Reference Elevation:	_____
Reference Description:	_____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number: SB-06
Sampling Method:		Sheet 4 of 4

Water Level:					Drilling Start	Drilling Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GW		1.1	78	W-G gravel w sand / some, sand, coarse / wet-dense / M-L, well round clasts / large
	SW		2.3	79	W-G sand w gravel / some, clasts, mg well round / wet-dense / large
5 / 4.5	GP		2.9	80	P-G gravel w sand / S, sub clasts, angular / coarse sand / wet-loose / D. brown
	GP		1.1	81	P-G gravel / M-L, well round clasts / loose-wet / D. Brown
	GP			82	SAA
	SW		1.5		
	CH		1.2	83	W-G sand / M-coarse, sub round sand / Moist-loose / D. brown
	CH		3.1	84	Fat clay / moist-dense / Blue-gray
				85	
				86	END OF SB-06
				87	
				88	NO DNAPL
				89	
				90	7/19/2022
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information			Soil Vapor Point Installation Information	
Monitoring Well Diameter:	_____ in		Depth of Soil Vapor Point:	_____ ft
Bottom of Monitoring Well:	_____ ft bgs		Bottom of Tubing:	_____ ft
Stick Up or Flush Mount:	_____		Top of Sand Pack:	_____ ft
Screen Interval:	_____ To _____	ft bgs	Top of Bentonite Seal:	_____ ft
Riser Interval:	_____ To _____	ft bgs		
Sand Pack Interval:	_____ To _____	ft bgs		
Bentonite Seal:	_____ To _____	ft bgs		
Grout Interval:	_____ To _____	ft bgs		

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
160518	Project: Hentrek RSO	SB-07 Utrecht
Drilling Method: Direct Push		Soil Boring Number: SB-07
Sampling Method: —		Sheet 1 of 4

					Drilling Start	Drilling Finish
Water Level:	22.5					
Time:					DATE 8/8	DATE 8/9
Date:	8/8/22				TIME 1115	TIME 0840

Surface Conditions: Concrete (Inside Warehouse)
Weather: 80's, Clear
Temperature: 80's

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
			—	0	0-0.5: Concrete
5/3.5	SM			1	0.5- Loose, light tan to brown, silty sand with some gravel, dry, NP, NC fine to medium sand.
				2	
	SW-SM			3	2.5-3.5: Loose, Dark brown, ~~Fine Sand to Small Gravel~~ with Little clay, Moist, NC Low plasticity coarse gravel
				4	3.5-5 NR
5/3.5	SM			5	5-5.5: Loose, Brown, silty (fine) sand, little gravel, Dry, Non plas NC, NC
	SW			6	5.5-8.5: Loose Light tan to tan, gravelly sand, Subrounded clasts, dry, NP, NC
				7	
				8	
				9	8.5-10: No recovery
5/2	SM			10	10-11.3: Loose, light gray, Silty, sand with little small gravel, Dry, NP, NC Fine
	ML			11	11.3-12: Loose, light gray, Silt, little fine sands, Dry, NP, NC
	SW			12	11.5-12: Loose, light tan, fine to coarse sand, little gravel (small subrounded) Dry, NP, NC
				13	12-15: NR
				14	
5/3.5	ML to GM			15	15-17.5: Loose, Gray to light tan, ~~silt~~ silt loam (~60% silt, 30% sand, 10% gravel) few small gravel, Dry, NP, NC. Coarsening downwards.
				16	
	SP			17	17.5-18.5: Loose, tan, uniform medium sand. Trace gravel, Moist, NP, NC
				18	
				19	18.5-20: NR
5/4	SP			20	20-21.2: SAA, little sub-angular gravel
	SM to ML			21	21.2-21.8: Loose, Light gray/light tan, Silt, fine sands, little small gravel, dry, NP, NC
	SP to GW			22	22.5: Water
				23	21.8-24: Loose, light tan, fine-medium uniform sand coarsening downward into small gravel. ~~WET~~ Moist at 22.3, wet at 22.4, NP, NC w/trace angular gravel @ 22.5
				24	24-25: NR
5/5	SW		1.7	25	25-27.5: Loose, tan, fine to medium sands, little small gravel, ~~wet~~, ~~coarsens~~ wet at 27.4, NP, NC Saturated

pic 2

Saturated @ 22.5

Monitoring Well Construction Information

Monitoring Well Diameter: 1.7 in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: Flush
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: E. Fenner
Drilling Contractor: Cascade
Date: 8/8/22
Driller: Brandon

PID background @ 1 ppm

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SOIL BORING LOG

Job. No.	Client: NYSDEC Project: Hewlett 160254	Location: SB-07 Wreck pit	
Drilling Method: Geoprobe Direct push		Soil Boring Number: SB-07	
Sampling Method:		Sheet 2 of 4	
Coordinates: Northing ____ Easting ____		Drilling	
Surface Elevation:	Water Level:	Start: DATE / TIME	Finish: DATE / TIME
Casing Below Surface:	Time:		
Reference Elevation:	Date:		
Reference Description:	Surface Conditions: Weather: Temperature:		

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
			1.3	26	
5/5	SW		1.1	27	27.5-29.6: Loose, light grayish-tan, very fine sand with some small-medium gravel (Correcting downwards) moist until 28.5, then dry until 29.6. NP, NC, trace silt
p.c.l			1.2	28	
	SW		1.2	29	29.6-30: Loose, tan, med. sand with little small gravel. Trace silt. wet, NP, NC
	SW-SM		1.3	30	30-32.2: Loose, gray, fine sand, few silt, little small-med. gravel, NP, NC, wet to moist. Saturated at 31.5
				31	31.5: Saturated
5/5	SW-SP				32.2-35: Loose, Light gray to tan, Medium sand with some small gravel that becomes finer w/depth, (little) small gravel by 35'. Saturated, NP, NC
			1.1	32	
			1.2	33	
			1.2	34	
	SM		1.1	35	35-35.3: Loose, dark tan, silty fine-med. (fine to large) sand, some gravel, wet, NP, NC
5/5	ML			36	35.3-36: Loose dark tan, sandy silt with fine gravel (little), moist, NP, NC
	SW-SM to (SP)		1.3	37	36-36.5: Loose, tan, gravelly sand with little silt, moist to dry until 36.5 then wet to 36.6, then saturated. Gravel becomes finer
			1.0	38	with depth to a fine gravel/coarse sand.
	SP		1.0	39	39-40: Loose, tan, uniform med-coarse sands, saturated, NP, NC
	SM		1.0	40	40-40.3: Loose, dark tan, silty fine-med. sand, some fine to large gravel, wet NP, NC
5/5	SW-SP			41	40.7-41.4: Loose, tan, gravelly sand with little silt, moist to dry until 41.2 where it becomes wet. NP, NC
	~~SW-SP~~ (SP)		1.0	42	41.4-45: Loose, tan, gravelly sand (fine to med gravel, med-coarse sand), gravel becomes finer with depth to fine gravel, sand becomes well sorted
			1.0	43	with depth. NP, NC
			1.0	44	
PID background @ 0.9	SM SW		0.9	45	45-45.2: Loose, dark tan, silty med-sand, trace gravel (fine), wet, NP, NC
				46	45.2-46.4: Loose, tan, gravelly sand, few silt, gravel are fine-med, moist to dry, NP, NC
5/5	SW		0.9	47	46.4-50: Loose, gravelly sand (fine-med gravel, med-coarse sand), gravel become finer with depth. Moist from 46.4-46.6, then saturated NP, NC
			0.9	48	
			0.9	49	
PID background 0.5	SM		0.5	50	50-51.1: Loose, tan, fine-med sand, little fine-med gravel, saturated. NP, NC some silt
	SW		0.7	51	51.1-51.9: SAA, trace silt

Monitoring Well Construction Information				Soil Vapor Point Installation Information	
Monitoring Well Diameter:	in			Depth of Soil Vapor Point:	ft
Bottom of Monitoring Well:	ft bgs			Bottom of Tubing:	ft
Stick Up or Flush Mount:				Top of Sand Pack:	ft
Screen Interval:	To		ft bgs	Top of Bentonite Seal:	ft
Riser Interval:	To		ft bgs		
Sand Pack Interval:	To		ft bgs		
Bentonite Seal:	To		ft bgs		
Grout Interval:	To		ft bgs		

Logged by: ____ Date: ____
Drilling Contractor: ____ Driller: ____

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project: Hertel 1602518	Location: Warehouse
Drilling Method:		Soil Boring Number: SB-07
Sampling Method:		Sheet 3 of 4
		Drilling

					Start	Finish
Water Level:						
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

PID background 0.5

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/5	SW		0.6	52	51.5-53: SAA, no silt, gravel med-large, ~50% gravel
	SP		0.5	53	53-55: SAA: trace gravel (med-coarse), well sorted sand,
			0.7	54	
5/5	SM		0.5	55	55-55.8: Loose, dark grayish-tan, silty-fine sands, little gravel, moist-wet, NP, NC
	SW		0.5	56	55.8-60: Loose, tan, gravelly sand, (fine to coarse gravel, fine to coarse sands), Saturated, NP, NC
				57	
			0.6	58	
			0.5	59	
5/5	SM		0.5	60	60-60.9: Same as 55-55.8
p.3	SW		0.5	61	60.9: same as 55.8-60
				62	
			0.5	63	
			0.5	64	
5/5	SW to GP		0.5	65	65-67.5: well graded, loose, tan, fine to mid sands coarsening downwards to large subrounded-subangular gravel, Saturated, NP, NC
	~~SP to GP~~			66	
p.4	SW to GP		0.5	67	67.5-70: SAA
	~~SP to GP~~		0.5	68	
			0.5	69	
5/5	SW to GW		0.5	70	70-75: SAA, gravel at bottom mixed with coarse sands
			0.5	71	
				72	
			0.5	73	
			0.5	74	
5/4.5	SW to GW		0.5	75	75-~~80~~ 78.5: SAA
			0.5	76	
			0.5	77	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project: Heatset 1602518	Location: Warehouse
Drilling Method:		Soil Boring Number: SB-07
Sampling Method:		Sheet 4 of 4
		Drilling
Water Level:		Start / Finish
Time:		DATE / DATE 8/9
Date:		TIME / TIME 0846

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/4.5			0.5	78	
			0.5	79	78.5-80: NR
	SW/G		0.5	80	80-85: SAA well graded, loose, tan, fine to med sands coarsening downwards to med, subrounded gravel and some sand. Saturated, NP, NC
5/5			0.5	81	
			0.5	82	
				83	
			0.5	84	
PID background @0.3	CH		0.4	85	85-87 Clay. Dense, dark gray, silty clay, micaceous, wet, high plasticity, cohesive. Fat clay
5/			0.5	86	
			0.5	87	
				88	End of Boring at ~~87~~ 87'
				89	8/9/22
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____ **PENDING SURVEY**
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	NYSDEC	Location:
1602518	Project:	Heatset RSO	Front loading dock
Drilling Method:			**Soil Boring Number:**
Rotosonic			SB-08/CMT-08
Sampling Method:			**Sheet 1 of 4**
Rotosonic with plastic sleeve			

					Drilling	
Water Level:	~24	ft bgs			**Start**	**Finish**
Time:					1/28/23	1/28/23
Date:					0850	1310

Surface Conditions: Good
Weather: Sunny
Temperature: 47 F

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/5			2.0	0	0.0 - 0.5: Concrete (Cored out with core drill)
			2.4	1	0.5 - 2.3: "Fill" Brown (WG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, wet
				2	2.3 - 5.0: "Fill" Reddish Brown (WG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, wet
				3	
				4	
5/5			2.4	5	5.0 - 5.09: "Fill" Brown (WG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, moist
			2.3	6	5.09 - 10.0: "Fill" Reddish Tan (PG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, moist
				7	
				8	
				9	
5/3.8			2.3	10	10.0 - 15.0: "Fill" Reddish Tan (PG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, dry
				11	
				12	
				13	
				14	
5/3.1			2.1	15	15.0 - 15.6: "Fill" Reddish Tan (PG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, wet
			2.3	16	15.6 - 16.3: "Fill" Tan (PG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, wet
			2.3	17	16.3 - 17.5: "Fill" Reddish Tan (PG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, wet
	SP		2.2	18	17.5 - 20.0: Tan (PG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, wet
				19	
5/2.7	SW		2.0	20	20.0 - 25.0: Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, wet
				21	
				22	
				23	
				24	-------- WATER TABLE @ 24' bgs --------
				25	

Monitoring Well Construction Information

Monitoring Well Diameter: 1.7 in
Bottom of Monitoring Well: 81 ft bgs
Stick Up or Flush Mount:
Screen Interval: To ft bgs
Riser Interval: To ft bgs
Sand Pack Interval: To ft bgs
Bentonite Seal: To ft bgs
Grout Interval: To ft bgs

SEE WELL CONSTRUCTION DIAGRAM

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: N/A ft
Bottom of Tubing: N/A ft
Top of Sand Pack: N/A ft
Top of Bentonite Seal: N/A ft

Logged by: H. Young Date: 1/28/23
Drilling Contractor: AARCO Driller: Daybi Pacheco

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SOIL BORING LOG

Job. No. 1602518	**Client:** NYSDEC		**Location:** Front loading dock
	Project: Heatset RSO		
Drilling Method: Rotosonic			**Soil Boring Number:** SB-08/CMT-08
Sampling Method: Rotosonic with plastic sleeve			**Sheet 2 of 4**
			Drilling
Water Level: ~24 ft bgs			**Start** 1/28/23 0850
Time:			**Finish** 1/28/23 1310
Date:			

Coordinates: Northing _____ Easting: _____ **PENDING SURVEY**
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Surface Conditions: Good
Weather: Sunny
Temperature: 47 F

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/2.8	SW		2.0	26	25.0 - 30.0: Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, wet
				27	
				28	
				29	
5/2.1	SW		2.0	30	30.0 - 32.3: Reddish Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, wet
	SW		2.0	31	32.3 - 35.0: Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, wet
				32	
				33	
				34	
5/2.3	SW		2.0	35	35.0 - 35.7: Brownish Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, moist
	SW		2.0	36	35.7 - 40.0: Tan (WG) FINE SAND, some fine silt, M-C subrounded gravel, no odor, no stain, loose, wet
				37	
				38	
				39	
5/5	SW		2.4	40	40.0 - 45.0: Tan (WG) FINE SAND, some fine silt, F-C subrounded gravel, no odor, no stain, loose, moist
				41	
				42	
				43	
				44	
5/5	SW		2.4	45	45.0 - 50.0: Tan (WG) FINE SAND, some fine silt, F-C subrounded gravel, no odor, no stain, loose, moist
				46	
				47	
				48	
				49	
	SW		2.4	50	50.0 - 55.0: Tan (WG) FINE SAND, some fine silt, F-C subrounded gravel, no odor, no stain, loose, moist
				51	

Monitoring Well Construction Information

Monitoring Well Diameter: 1.7 in
Bottom of Monitoring Well: 81 ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

SEE WELL CONSTRUCTION DIAGRAM

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: N/A ft
Bottom of Tubing: N/A ft
Top of Sand Pack: N/A ft
Top of Bentonite Seal: N/A ft

Logged by: H. Young
Drilling Contractor: AARCO
Date: 1/28/23
Driller: Daybi Pacheco

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____ **PENDING SURVEY**
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	NYSDEC	Location:
1602518	Project:	Heatset RSO	Front loading dock

Drilling Method:	Soil Boring Number:
Rotosonic	SB-08/CMT-08
Sampling Method:	**Sheet 3 of 4**
Rotosonic with plastic sleeve	**Drilling**

					Start	Finish
Water Level:	~24	ft bgs				
Time:					1/28/23	1/28/23
Date:					0850	1310

Surface Conditions: Good
Weather: Sunny
Temperature: 47 F

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
				52	
				53	
				54	
	SW		2.4	55	55.0 - 60.0: Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, moist
				56	
5/3.5				57	
				58	
				59	
	SW		1.0	60	60.0 - 65.0: Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, moist
				61	
5/3.3				62	
				63	
				64	
	SP		0.6	65	65.0 - 66.2: Tan (PG) FINE SAND, some fine silt, fine subrounded gravel, no odor, no stain, dense, moist
	SW			66	62.2 - 70.0: Brownish Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, moist
5/2.9				67	
				68	
				69	
	SW		0.6	70	70.0 - 75.0: Brownish Tan (WG) FINE SAND, some fine silt, F-M subrounded gravel, no odor, no stain, loose, wet
				71	
5/1.8				72	
				73	
				74	
	SP		0.0	75	75.0 - 80.0: Light Brown (PG) FINE SAND, some fine silt, F-C subrounded gravel, no odor, no stain, dense, wet
5/2.3				76	
				77	

Monitoring Well Construction Information

Monitoring Well Diameter: 1.7 in
Bottom of Monitoring Well: 81 ft bgs
Stick Up or Flush Mount:
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

SEE WELL CONSTRUCTION DIAGRAM

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: N/A ft
Bottom of Tubing: N/A ft
Top of Sand Pack: N/A ft
Top of Bentonite Seal: N/A ft

Logged by: H. Young
Drilling Contractor: AARCO
Date: 1/28/23
Driller: Daybi Pacheco

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____ **PENDING SURVEY**
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	NYSDEC	Location:
1602518	Project:	Heatset RSO	Front loading dock
Drilling Method:			**Soil Boring Number:**
Rotosonic			SB-08/CMT-08
Sampling Method:			**Sheet 4 of 4**
Rotosonic with plastic sleeve			**Drilling**

					Start	Finish
Water Level:	~24	ft bgs				
Time:					1/28/23	1/28/23
Date:					0850	1310

Surface Conditions: Good
Weather: Sunny
Temperature: 47 F

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
				78	
				79	
	CH		0.0	80	80.0 - 85.0: Blueish Gray FAT CLAY, stiff, medium - high plasticity, cohesive, no odor, no stain, no DNAPL, dense, wet
				81	81.0 feet bgs -------- END OF BORING --------
5/3.5				82	
				83	
				84	
				85	
				86	
				87	
				88	
				89	
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: 1.7 in
Bottom of Monitoring Well: 81 ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

SEE WELL CONSTRUCTION DIAGRAM

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: N/A ft
Bottom of Tubing: N/A ft
Top of Sand Pack: N/A ft
Top of Bentonite Seal: N/A ft

Logged by: H. Young Date: 1/28/23
Drilling Contractor: AARCO Driller: Daybi Pacheco

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SOIL BORING LOG

Coordinates: Northing _____ Easting: _____ PENDING SURVEY
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client: NYSDEC	Location:
1602518	Project: Heatset RSO	Warehouse
Drilling Method: Retosonic		Soil Boring Number: SB-09/CMW-09
Sampling Method:		Sheet 1 of 4

					Drilling Start	Drilling Finish
Water Level:	~19.5	ft bgs				
Time:					1/24/23 2125	1/25/23 0220
Date:						

Surface Conditions:
Weather:
Temperature: DRILLING DONE INDOORS

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	NA		0.0	0	0.0 - 0.6 : Concrete
5/5			0.0	1	0.6 - 3.8 : "Fill" - Brown, FINE SAND (PG), some silt (fine), M-C subrounded gravel, no odor, no stain, loose, dry
				2	
			0.0	3	3.8 - 5.0 : Concrete
				4	
			1.5	5	5.0 - 5.4 : "Fill" - Brown, PG FINE SAND, some fine silt, M-C subrounded gravel, loose, dry, no odor, no stain
			1.5	6	5.4 - 5.7 : "Fill" - Grey, PG FINE SAND, some fine silt, M-C subrounded gravel, loose, dry, no odor, no stain
5/2.5			1.4	7	5.7 - 6.5 : "Fill" - Light Brown, PG FINE SAND, some fine silt, M-C subrounded gravel, loose, dry, no odor, no stain
			1.2	8	6.5 - 10.0 : "Fill" - tan, PG FINE SAND, some fine silt, M-C subrounded gravel, loose, dry, no odor, no stain
				9	
			0.0	10	10.0 - 11.0 : "Fill" - reddish tan, PG FINE SAND, some silt (fine), M-C subrounded gravel, loose, dry, no odor, no stain
5/3.85			0.0	11	11.0 - 12.15 : "Fill" - tan, PG FINE SAND, some fine silt, M-C subrounded gravel, loose, dry, no odor, no stain
	SP		0.2	12	12.15 - 12.55 : [redacted] Brown (light), PG FINE SAND, F-M subrounded gravel, loose, dry, no odor, no stain
	SW		0.0	13	12.55 - 15.0 : Brown, WG F-C SAND, some FG subrounded gravel loose, dry, no stain no odor
				14	
	SP		0.0	15	15.0 - 16.8 : Tan, PG FINE SAND, little F-C subrounded gravel loose, moist, no stain, no odor
	SW		0.0	16	16.8 - 20.0 : Brown, WG F-C SAND, some F-M subrounded gravel medium dense, moist, no stain, no odor
5/3.45				17	
				18	
				19	19.5 - WATER TABLE
	SW		0.4	20	20.0 - 21.5 : Greyish Tan, WG F-C SAND, some F-M subrounded gravel, loose, wet, no odor, no stain
5/2.7	SP		0.3	21	21.5 - 25.0 : Tan, PG F-M SAND, some F-M subrounded gravel, loose, wet, no odor, no stain
				22	
				23	
				24	
5/2	SW		0.1	25	25.0 - 30.0 : Tan, WG F-C SAND, little F-C subrounded gravel loose, wet, no odor, no stain

Monitoring Well Construction Information

Monitoring Well Diameter:	1.7	in		
Bottom of Monitoring Well:	82	ft bgs		
Stick Up or Flush Mount:	NO		SEE WELL CONST. DIAGRAM	
Screen Interval:		To		ft bgs
Riser Interval:		To		ft bgs
Sand Pack Interval:		To		ft bgs
Bentonite Seal:		To		ft bgs
Grout Interval:		To		ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point:	N/A	ft
Bottom of Tubing:	N/A	ft
Top of Sand Pack:	N/A	ft
Top of Bentonite Seal:	N/A	ft

Logged by: L. Backman-Lowe
Drilling Contractor: AARCO
Date: 01/25/23
Driller: Daibi Pacheco

F: Fine
M: Medium
C: Coarse
WG: well graded
PG: poorly graded

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SOIL BORING LOG

Job. No. 16025.18	Client: NYSDEC		Location: Warehouse
	Project: Heatset RSO		
Drilling Method: Rotosonic			Soil Boring Number: SB09/CMT-09
Sampling Method:			Sheet 2 of 4
Coordinates: Northing ____ Easting ____ PENDING SURVEY			Drilling
Surface Elevation:			
Casing Below Surface:			
Reference Elevation:			
Reference Description:			
Water Level: N/9.5 ftbgs			Start 1/24/23 1725
Time:			Finish 1/25/23 0210
Date:			

Surface Conditions:
Weather: DRILLING DONE INDOORS
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/2	SW		0.1	26	Continued; 25.0-30.0: Tan, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				27	
				28	
				29	
5/2.35	SW		0.1	30	30.0-35.0: Tan, WG F-C SAND, some F-C subrounded gravel, trace subrounded (C) gravel, loose, wet, no odor, no stain
				31	
				32	
				33	
				34	
5/2	SW		0.0	35	35.0-40.0: Tan, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				36	
				37	
				38	
				39	
5/2.6	SW		0.1	40	40.0-45.0: Greyish brown, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				41	
				42	
				43	
				44	
5/3.7	SW		0.2	45	45.0-50.0: Greyish brown, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				46	
				47	
				48	
				49	
5/4.8	SW		0.1	50	50.0-55.0: Tan, WG F-C SAND, little F-C subrounded gravel loose, wet, no odor, no stain
				51	

Monitoring Well Construction Information

Monitoring Well Diameter: 1.1 in
Bottom of Monitoring Well: ~~54~~ 52 ft bgs
Stick Up or Flush Mount:

SEE WELL CONST. DIAGRAM

Screen Interval:	To		ft bgs
Riser Interval:	To		ft bgs
Sand Pack Interval:	To		ft bgs
Bentonite Seal:	To		ft bgs
Grout Interval:	To		ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: N/A ft
Bottom of Tubing: N/A ft
Top of Sand Pack: N/A ft
Top of Bentonite Seal: N/A ft

Logged by: L. Backman-Lowe
Drilling Contractor: AARCO
Date: 01/25/23
Driller: Daibi Pacheco

F: Fine
M: Medium
C: Coarse
WG: well graded
PG: poorly graded

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____ PENDING SURVEY
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
1602518	Project: Heatset RSO	Warehouse
Drilling Method: Rotosonic		Soil Boring Number: SB-09/CMT-09
Sampling Method:		Sheet 3 of 4
		Drilling
Water Level: N/A, 5 ft bgs		Start: 1/24/23 Finish: 1/25/23
Time:		2105 0210
Date:		

Surface Conditions:
Weather: DRILLING DONE INDOORS
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/4.8	SW		0.1	52	Continued: 50.0-55.0: Tan, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				53	
				54	
5/4.35	SW		0.0	55	55.0-60.0: Tan, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				56	
				57	
				58	
				59	
5/4.6	SW		0.4	60	60.0-64.5: Tan, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				61	
				62	
				63	
			0.0	64	64.5-65.0: Tan, WG F-C SAND, little F-C subrounded gravel, trace fine silt, loose, wet, no odor, no stain
5/3.4	SW		0.0	65	65.0-67.6: Brown, WG F-C SAND, little F-M subrounded gravel, some C subrounded gravel, trace F silt, loose, wet, no odor, no stain
				66	
			0.0	67	67.6-70.0: Brown, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				68	
				69	
5/4.25	SW		0.0	70	70.0-75.0: Light Brown, WG F-C SAND, little F-C subrounded gravel loose, wet, no odor, no stain
				71	
				72	
				73	
				74	
5/4.2	SW		0.0	75	75.0-80.0: Light Brown, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				76	
				77	

Monitoring Well Construction Information

Monitoring Well Diameter: 1.7 in
Bottom of Monitoring Well: 82 ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

~~PENDING~~ SURVEY SEEWELL CONST. DIAGRAM

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: N/A ft
Bottom of Tubing: N/A ft
Top of Sand Pack: N/A ft
Top of Bentonite Seal: N/A ft

Logged by: L. Backman-Lowe
Drilling Contractor: AARCO
Date: 01/25/23
Driller: Daibi Pacheco

F: Fine
M: Medium
C: Coarse
WG: Well graded
PG: Poorly graded

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____ PENDING SURVEY
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client: NYSDEC				Location:
	Project: Heatset RSO				Warehouse
Drilling Method: Rotosonic					Soil Boring Number: SB-09 / CMT-09
Sampling Method:					Sheet 4 of 4
					Drilling
Water Level:	V19.5	ft bgs			Start: 1/24/23 2125 — Finish: 1/25/23 0220
Time:					
Date:					

Surface Conditions:
Weather: DRILLING DONE INDOORS
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/4.2	SW		0.0	78	Continued: 75.0-80.0: Light Brown, WG F-C SAND, little F-C subrounded gravel, loose, wet, no odor, no stain
				79	
	SP	44.5		80	80.0-81.5: Brown, PG FINE SAND, dense, wet, no odor, no stain
5/5	CH		5.4	81	81.5-83.0: Blue-grey w/ mottled Brown, FAT CLAY, medium soft, medium-high plasticity, cohesive, little F sand, dense, wet, NO DNAPL, no odor, no stain
				82	
				83	83.0-85.0: Blue-grey, FAT CLAY, ~~medium~~ stiff, medium-high plasticity, cohesive, dense, wet, NO DNAPL, no odor, no stain
				84	
2/2				85	85.0-87.0: Blue-grey, FAT CLAY, very stiff, medium-high plasticity, cohesive, dense, wet, NO DNAPL, no odor, no stain
				86	
				87	
				88	
				89	
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: 1.7 in
Bottom of Monitoring Well: 82 ft bgs
Stick Up or Flush Mount: _____
SEE WELL CONST. DIAGRAM
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: N/A ft
Bottom of Tubing: N/A ft
Top of Sand Pack: N/A ft
Top of Bentonite Seal: N/A ft

Logged by: L. Backman-Lowe
Drilling Contractor: AARCO
Date: 01/25/23
Driller: Daibi Pacheco

F: Fine
M: Medium
C: Coarse
WG: well graded
PG: poorly graded

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SOIL BORING LOG *TB1

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
iW2518	Project: Hertel RSC	Parking Lot (E)
Drilling Method: Rotosonic Geoprobe 8140 LC		Soil Boring Number: SB-10
Sampling Method: NA		Sheet 1 of 4

Water Level:					Drilling Start	Drilling Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions: Asphalt
Weather: 34°F Clear
Temperature: 34°F

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/5	SW	NA	NA	0	0-0.5 Asphalt 0.5-5.0 Light brown/tan to brown MEDIUM SAND (uniform, PG) fine to coarse, some gravel (non-uniform) subangular-subrounded, loose, moist overall (slightly) dry from 1.4-1.7. No staining, No Plasticity, No odor, Gravel is well-graded (WG) (Poorly sorted (PS))
	SW		2.0	1	
	SW		2.1	2	
	SM		1.2	3	0.6-2.0' Brown silt, some Fine Sands, little subangular-subrounded WG gravel (non-uniform) (WG) (fine-med gravel), stiff medium density, moist,
	SM		1.4	4	No odor, no staining, non plastic, cohesive Non
5/4.5	SW-SM		4.4	5	5.0-6.0 Brown, Fine Sands (PG), few silt, little fine-coarse subangular-subrounded WG gravel, loose, Dry (moist from 5.8-6.0, no staining, no odor, NP, NC
	CW		4.3	6	6.0-6.4: Dark brown, Fine-Small Subrounded Gravel, some med. sands, loose, moist. No staining, no odor, NP, NC
	SW		NA	7	6.4-9.5, Tan/beige, Fine-Med SAND, trace silt, some fine to extra coarse WG subangular-subrounded gravel + cobbles, moist (dry 7.6-8.1),
	AA		4.2	8	No staining, No odor, NP, NC
	AA		NA	9	9.5-10: No Recovery
5/3.5	SP		5.4	10	10-12.0: Tan, Med. Sand (PG) Fine-coarse subrounded gravel (non-uniform) WG, loose, wet, no staining, no odor, NP, NC grading into 12.0-13.5
	A		5.0	11	
	SW		NA	12	12.0-13.5: Light tan/beige Med-Fine Sands, some fine to extra coarse gravel WG (non-uniform) subangular/subrounded, loose, dry-moist, No staining,
	—		5.0	13	No odor, Non plastic, non cohesive.
	—		—	14	13.5-15 NO RECOVERY
5/2.5	SW		5.7	15	15.0-16.3 Beige, Fine-Med Sands (WG), trace silt, some fine-coarse gravel (non-uniform) WG subangular-subrounded, loose, moist to dry, no staining, no odor, NP, NC
	SW		5.1	16	Gravel grades to 16.3-17.5
	SP		4.7	17	16.3-17.5: Tan, Uniform Med. Sands (WG, PG), trace small gravel (subrounded), PG, loose, moist, No staining, No odor, NP, NC
	—		—	18	17.5-20: NO RECOVERY
	—		—	19	
5/1.5	SP	WT	4.4	20	20-21.5: Tan, MED. SANDS, uniform (PG) some fine-coarse subangular-subrounded gravel, WG (non-uniform), loose, wet, No staining, no odor, NP, NC
	—		4.7	21	
	—		—	22	21.5-25: NO RECOVERY
	—		—	23	
	—		—	24	
5/2	SP		4.7	25	25-27.0: SAA but COARSE SANDS instead of med. (uniform, PG)

Fill

2.0

Bentonite (16 ft)

18.0

20.0

20.5

22.5

Bentonite

Monitoring Well Construction Information

Monitoring Well Diameter: 1.7 in
Bottom of Monitoring Well: 81.6 ft bgs
Stick Up or Flush Mount: Flush
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

* See CMT well construction Form

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: NA ft
Bottom of Tubing: NA ft
Top of Sand Pack: NA ft
Top of Bentonite Seal: NA ft

Logged by: E. Feeney
Drilling Contractor: AARCO
Date: 11/14/22
Driller: Dayvhi Pacheco

*Densities are ~~not~~ relative to the human hand as split spoons were not utilized on this project

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SOIL BORING LOG — TBD

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
160254	Project: Hewlett BSO	Parking Lot (East)
Drilling Method: Rotosonic Geoprobe 8140LC		Soil Boring Number: SB-10
Sampling Method: NA		Sheet 2 of 4
		Drilling
Water Level: —		Start: DATE 11/14 Finish: DATE 11/14
Time: —		~~TIME~~ 0747 TIME 1140
Date: —		

Surface Conditions: Asphalt
Weather: 39°F clear
Temperature: 39°F

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/2	SP	NA	4.9	26	See Pg. 1
	—		—	27	27-30: NO ~~RECORY~~ RECOVERY
	—		—	28	
	—		—	29	
5/4	SW		4.9	30	30-34: Tan, MED-COARSE SANDS, (WG) some fine-~~coarse~~ Sub rounded, WG, non-uniform gravel, loose, wet, no staining, no odor, NP, NC
	SW		5.0	31	
	SW		5.0	32	
	SW		5.2	33	
	—		—	34	34-35: NO RECOVERY
5/3.7	SP		5.1	35	35-38.5: Tan, MED SANDS, (MG) little fine-~~coarse~~, Sub rounded, WG,
	SP		4.7	36	non-uniform gravel, loose, wet, no staining, no odor, NP, NC
	SP		4.8	37	
	—		4.9	38	38.5-40: NO RECOVERY
	—		—	39	
5/4	SP		5.0	40	40-44.0: SAA
	SP		5.1	41	
	SP		4.9	42	
	SP		4.8	43	
	—		—	44	44-45.0 NO RECOVERY
5/3.1	SP		4.9	45	45-48.1: SAA, ~~slight~~ (SG) Parches of reddish-brown staining at 47.5,
	SP		5.0	46	no odor
	SP		4.8	47	
	SP		4.9	48	48.7-50: NO RECOVERY
	—		—	49	
5/4	SP		5.1	50	50-54.0: Same as 35-38.5, but COARSE SANDS (SG) instead of Med,
	SP		5.7	51	grades into MED-COARSE SANDS (WG) by 54.0 ft

Pic 1
Pic 2
Bentonite (25.5 ft)

48.1 Sand 50.1 Screen 50.6 Sand

Monitoring Well Construction Information

Monitoring Well Diameter:		in	* See CMT Well construction form
Bottom of Monitoring Well:		ft bgs	
Stick Up or Flush Mount:			
Screen Interval:		To	ft bgs
Riser Interval:		To	ft bgs
Sand Pack Interval:		To	ft bgs
Bentonite Seal:		To	ft bgs
Grout Interval:		To	ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point:	NA	ft
Bottom of Tubing:	NA	ft
Top of Sand Pack:	NA	ft
Top of Bentonite Seal:	NA	ft

Logged by: Emily Fenner
Drilling Contractor: AARCO
Date: 11/14/22
Driller: Dayvhi Pacheco

*Depths are relative to the human hand or split spoon were not utilized on this project

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SOIL BORING LOG *TBD

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
	Project: Hempstead RSO	Parking Lot (East)
Drilling Method:	Rotosonic Geoprobe 8140 LC	Soil Boring Number: SB-10
Sampling Method:	NA	Sheet 3 of 4

					Drilling	
Water Level:	—	—	—	—	Start	Finish
Time:	—	—	—	—	DATE	DATE
Date:	—	—	—	—	TIME	TIME

Surface Conditions: Asphalt
Weather: 30's F Clear
Temperature: 29°F

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/4	SP	NA	5.1	52	
	SP		4.9	53	SEE PAGE 2
	SP			54	54 - 55.0: NR
5/3.5	SP		5.0	55	55-55.8: Tan, MED SANDS, Little fine (PG) -med Subrounded gravel (WG) (non uniform), trace xtra coarse Subrounded gravel, loose, wet, No stain, no
	SP		4.7	56	NP NC
	SP			57	55.8-58.5: SAA, but COARSE SANDS (PG) instead of med sand
	—		4.9	58	58.5-59 NR
	—		5.0	59	
5/4.3	SP		4.7	60	60-64.3: Same as 55.4-58.5
	SP		4.9	61	
	SP		4.9	62	
	SP		4.6	63	64.3-65: NR
	—		—	64	
5/3.5	SP		4.9	65	65-66.0 CCB Tan, COARSE SANDS, some fine Subrounded-rounded non uniform gravel, trace coarse Subangular-Subrounded gravel,
	SW		4.4	66	loose, wet, no staining, no odor, NP, NC
	SW		4.7	67	66.0-67.6 SAA but MED-FINE SANDS instead of coarse (WG)
	—		4.8	68	67.6-68.5 SAA but MED-COARSE SANDS (WG)
	—		—	69	68.5-70 NR
5/4	SP		5.7	70	70-74: Light Tan, MED SANDS, little fine to thin coarse (PG) Subrounded WG, non uniform gravel, loose, wet, no staining, no Odor, NP, NC
	SP		4.8	71	
	SP		4.8	72	
	SP		4.6	73	
	—		—	74	74-75.0: NR
5/4	SP		4.9	75	75-79: SAA, gravel becomes more abundant with depth. little gravel (PG) ~20% to 40%. Saturated @ 77.0ft
	SP		5.5	76	
	SP	Screened	11.4	77	some gravel (PG)

Sand 52.0
Bentonite (15.5ft)
68.1
Sand
Screen 70.1 - 70.6
Sand 72.0
Bentonite (5ft)
77.6
Sand

Monitoring Well Construction Information				Soil Vapor Point Installation Information	
Monitoring Well Diameter:	in			Depth of Soil Vapor Point:	ft
Bottom of Monitoring Well:	ft bgs		See CMT Well Construction Form	Bottom of Tubing:	ft
Stick Up or Flush Mount:				Top of Sand Pack:	ft
Screen Interval:	To	ft bgs		Top of Bentonite Seal:	ft
Riser Interval:	To	ft bgs		NA	
Sand Pack Interval:	To	ft bgs			
Bentonite Seal:	To	ft bgs			
Grout Interval:	To	ft bgs			

Logged by: E. Fenner
Drilling Contractor: AARCO
Date: 11/14/22
Driller: Dayuli Pacheco

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SOIL BORING LOG

* TBD

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
160258	Project: Herkert RSO	Parking Lot (East)
Drilling Method:	Rotosonic Geoprobe 8140 LC	Soil Boring Number: SB-10
Sampling Method:	NA	Sheet 4 of 4

					Drilling	
Water Level:	—	—	—	—	Start	Finish
Time:	—	—	—	—	DATE 11/14	DATE 11/14
Date:	—	—	—	—	TIME 0747	TIME 1140

Surface Conditions: Asphalt
Weather: Clear
Temperature: 39°F a

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5/4	SP	NA	24.3	78	SEE PAGE 3
	—		—	79	79.0-80.0: NR
	SP		11.5	80	80-80.6 Same as 70-74
	CH		6.9	81	80.6-83: Dark brown, ~~clay~~ CLAY, some silt, micaceous, med-high plasticity, cohesive, stiff, wet, no staining, no odor, no DNAPL, FAT CLAY
3/3	CH		21.5	82	
	—		5.5	83	
	—		—	84	END of BORING @ 83.0 ft
				85	
				86	
				87	
				88	
				89	
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

11/14/22
1140
77.6
Sand
79.6
Screen
80.6
Sand
81.6

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

+ See CMT well construction form

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: NA ft
Bottom of Tubing: NA ft
Top of Sand Pack: NA ft
Top of Bentonite Seal: NA ft

Logged by: E. Fenner
Drilling Contractor: AARCO
Date: 11/14/22
Driller: Dayshi Pacheco

Headset RSO

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC				Location: SB-11
	Project:				
Drilling Method: Direct Push					Soil Boring Number:
Sampling Method: Discrete Sampler					Sheet 1 of 4
					Drilling
Water Level:					Start: DATE / TIME
Time:					Finish: DATE / TIME
Date:					

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
5 / 3.4	NA		6.9	0	Asphalt
	SW		3.4	1	W-G sand w silt & gravel / minor clasts, L, subrnd / orange brown / moist-loose
	CL		0.8	2	lean clay w sand & gravel / few s-m clasts, well rnd / moist-dense / black
	SW		2.5	3	W-G sand w gravel / some clasts, s-L, well rnd / moist-loose / beige
	SW		5.9	4	SAA
5 / 4.3	SW		14.9	5	SAA
	SW		15.3	6	W-G sand w silt & gravel / few clasts, s-M, well rnd / moist-dense / D. Brown
	SW		7.2	7	W-G sand w gravel / some clasts, s-M, well rnd / moist-loose / M dense-brown
	SW		14.5	8	SAA
	SW		1.2	9	SAA
5 / 3.6	SM		12.0	10	silty sand w rnd / few clasts, M-L, well rnd / moist-M dense / Brown
	SW		8.4	11	W-G sand w gravel / some clasts, s-L, subrnd / moist-loose / beige
	SW		11.4	12	SAA
	GW		9.8	13	W-G gravel w sand / some coarse sand / clasts, s-L, subrnd / moist-loose / beige
	GW		2.0	14	SAA
5 / 3.9	SW		1.9	15	W-G sand w gravel / some clasts, s-M, subrnd / moist-loose / beige
	SW		39.5	16	W-G sand w silt & gravel / some clasts, s-L, subrnd / moist-loose / beige
	SW		10.0	17	W-G sand w gravel / some clasts, s-L, subrnd / loose-moist / beige
	SW		0.9	18	SAA — water table
	GW		1.5	19	W-G gravel w sand / some coarse sand / clasts, s-L, subrnd / wet-M dense / beige
5 / 4.4	SW		1.1	20	W-G sand w silt and gravel / some clasts, s-M, subrnd / wet-M dense / brown
	SW		3.8	21	W-G sand w gravel / some clasts, s-L, subrnd / wet-loose / beige
	SW		9.9	22	SAA
	GW		0.3	23	W-G gravel w sand / some coarse sand / clasts, s-M, subrnd / wet-loose / beige
	GW		0.8	24	SAA
5/4.3	GW		1.5	25	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

SB-11

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 2 of 4
		Drilling

					Start	Finish
Water Level:						
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GW		11.8	26	WB gravel w sand/some, gravels fine-L, clasts sub round/wet-loose/beige
	GW		0.5	27	SAA
	SW		0.6	28	WB sand w gravel/some, S-M, clasts sub rnd/wet-loose/beige
	SW		0.4	29	SAA
5/3.5	SW		1.1	30	WB sand w gravel/some, S-L, clasts sub rnd/wet-m dense/beige
	SW		0.5	31	SAA
	SW		0.8	32	SAA
	SW		0.5	33	SAA
	SW		0.4	34	SAA
5/3.5	SW		4.2	35	SAA
	SW		0.5	36	SAA
	SW		0.3	37	SAA
	SW		2.6	38	SAA
	SW		0.9	39	SAA
5/3.8	SW		0.9	40	WB sand w gravel/some, S-M, clasts sub rnd/loose-wet/beige
	SW		0.5	41	SAA
	SW		0.6	42	SAA
	SW		0.6	43	SAA
	SW		0.2	44	SAA
5/2.5	SW		4.1	45	WB sand w silt & gravel/some, S-M, clasts sub rnd/loose-wet/beige
	SW		0.7	46	WB sand w gravel/some S-M, clasts sub rnd/loose-wet/beige
	SW		0.5	47	WB sand w gravel/few, S-M, clasts sub rnd/loose-wet/beige
	SW		0.3	48	SAA
	SW		0.5	49	SAA
5/3.6	GW		1.2	50	WB gravel w sand/few coarse, coarse sand/S-L, clasts sub rnd/loose-wet/beige
	GW		1.4	51	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

SB-11

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC	Location:
	Project:	
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 3 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	SW		0.9	52	WG sand w gravel / some, S-L, clasts subround / loose-wet / beige
	SW		0.9	53	SAA
	SW		0.1	54	SAA
5 / 3.0	SW		1.2	55	WG Sand w gravel / few, S, clasts well rnd / loose-wet / beige
	SW		1.0	56	SAA
	SW		1.1	57	SAA
	GW		1.0	58	WG gravel w sand / some, S-L, well rnd / loose-wet / beige
	GW		0.5	59	SAA
5 / 3.2	SW		1.6	60	WG Sand with gravel / few, S, clasts well rnd / loose-wet / beige
	SW		1.6	61	SAA
	SW		0.1	62	SAA
	SW		0.1	63	SAA
	GW		0.8	64	WG gravel w sand / some, sand coarse / S-L, clasts well rnd / loose-wet / beige
5 / 3.2	SW		0.6	65	WG Sand w gravel / some, S-L, clasts Subround / loose-wet / beige
	SW		1.0	66	SAA
	GW		0.7	67	WG gravel w sand / some, coarse, gravels angular / some, clasts angular / loose-wet / beige
	GW		0.2	68	SAA
	GW		0.3	69	SAA
5 / 3.8	GW		0.5	70	SAA
	SM		0.1	71	Silty sand w gravel / little, S, clasts Subround / loose-wet / beige
	GW		0.1	72	WG Gravel w sand / few, S-L, clasts rnd round / loose-wet / beige
	GW		0.1	73	SAA
	SW		0.1	74	WG sand w gravel / some, S-L, clasts Subangular / wet-dense / beige
5 / 2.0	GW		247.7	75	WG gravel w sand / little, coarse sand / S-L, well rnd clasts / loose wet beige
	GW		177	76	SAA
	GW		69.4	77	SAA

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

recent soil RSO

SB-11

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SOIL BORING LOG

Coordinates: Northing _____ Easting _____
Surface Elevation: _____
Casing Below Surface: _____
Reference Elevation: _____
Reference Description: _____

Job. No.	Client: NYSDEC Project:	Location:
Drilling Method:		Soil Boring Number:
Sampling Method:		Sheet 4 of 4
		Drilling

Water Level:					Start	Finish
Time:					DATE	DATE
Date:					TIME	TIME

Surface Conditions:
Weather:
Temperature:

Ft. Driven/ Ft. Record	USCS Log	Boring Diagram	PID (ppm)	Depth in Feet	
	GW		35.6	78	WD gravel w sand/ little coarse sand/ 5-6, well rnd/ loose-dense wet
	GW		15.8	79	SAA
	SP		24.2	80	PG sand/ coarse, some gravel, sub rounded wet-loose/ D. brown
	PGP		15.7	81	PG- gravel/ 5-M, sub rnd clasts/ wet-loose/ D. brown
	GP		28.6	82	PG- gravel w sand/ minor coarse sand/ 5-M, sub rnd clasts/ wet/loose/ D. br
	GP		25.0	83	SAA
	CH		4.3	84	Fat clay/ Moist-dense/ blue-gray
				85	
				86	End of SB-11
				87	
				88	7/21/2022
				89	
				90	
				91	
				92	
				93	
				94	
				95	
				96	
				97	
				98	
				99	
				100	
				101	
				102	
				103	

Monitoring Well Construction Information

Monitoring Well Diameter: _____ in
Bottom of Monitoring Well: _____ ft bgs
Stick Up or Flush Mount: _____
Screen Interval: _____ To _____ ft bgs
Riser Interval: _____ To _____ ft bgs
Sand Pack Interval: _____ To _____ ft bgs
Bentonite Seal: _____ To _____ ft bgs
Grout Interval: _____ To _____ ft bgs

Soil Vapor Point Installation Information

Depth of Soil Vapor Point: _____ ft
Bottom of Tubing: _____ ft
Top of Sand Pack: _____ ft
Top of Bentonite Seal: _____ ft

Logged by: _____ Date: _____
Drilling Contractor: _____ Driller: _____

Development Logs

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-01-D	EA Personnel: J.Guy	Client: NYSDEC
Location: HEATSET	Well Condition: NEW	Weather: RAIN
Sounding Method: Skinny	Gauge Date: 11/30/22 Gauge Time: 1330	Measurement Ref: TOC
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.2	Well Diameter (in): 0.00136 ft^2

Purge Date: 11/30/22	Purge Time: 1339
Purge Method: Peri Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 43.71	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.34	E. Well Volume (gal) C*D): 0.248 gal	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B): 24.37	F. Three Well Volumes (gal) (E3): 0.744 gal	Pump Intake Depth: ~40

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1340	6.73	0.388	11.3	10.09	15.15	-114	N/A	0.250	0
1345	7.09	0.516	7.7	8.85	15.09	-131	N/A	0.250	1.250
1350	7.30	0.562	12.0	7.95	15.08	-131	N/A	0.250	2.500
1355	7.40	0.547	11.4	7.21	15.09	-129	N/A	0.250	3.750
1400	7.46	0.544	13.7	7.45	15.10	-125	N/A	0.250	5.000
1405	7.43	0.578	15.9	5.51	15.09	-120	N/A	0.250	6.250
1410	7.34	0.582	15.7	5.04	15.10	-105	N/A	0.250	7.500

Total Quantity of Water Removed (gal): _____ Personnel: J. Guy

COMMENTS AND OBSERVATIONS: _____

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-01-C	EA Personnel: J.Guy	Client: NYSDEC
Location: Heatsel	Well Condition: Acceptable	Weather: Rain
Sounding Method: string dipper T	Gauge Date: 11/30 Gauge Time: 1308	Measurement Ref: TOC
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.3 PPM	Well Diameter (in): CMT 0.00136

Purge Date: 11/30/2022	Purge Time: 1308
Purge Method: Peristatic Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 43.52	D. Well Volume (ft): >7.45	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.32	E. Well Volume (gal) C*D): 0.246 gal	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3): 0.739 gal	Pump Intake Depth: ~40

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1308	6.62	0.643	62.8	9.51	15.27	-155	NA	0.250	0
1313	7.14	0.821	1.2	8.02	15.14	-179	NA	0.250	1.25
1318	7.10	0.751	3.2	6.82	15.13	-173	NA	0.250	2.50
1323	6.99	0.705	11.2	6.15	15.15	-161	-	-	3.750
1328	6.85	0.680	12.6	5.42	15.16	-145	-	-	5.000
1333	6.85	0.679	12.2	5.42	15.15	-145	-	-	6.25
1338	6.85	0.679	4.9	5.42	15.15	-145	-	-	7.5

Total Quantity of Water Removed (gal): _____ Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

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EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-01-B	EA Personnel: J.Guy	Client: NYSDEC
Location: HeatSet	Well Condition: Acceptable	Weather: Rain
Sounding Method: 5 Rimy dipper T	Gauge Date: 11/30/2022 Gauge Time: 1238	Measurement Ref: TOC
Stick Up/Down (ft): Flush-cmt	PID Headspace Reading:	Well Diameter (in): CMT (0.00136 cuft)

Purge Date: 11/30/2022	Purge Time: 1233
Purge Method: Peristaltic Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): ~~22.37~~ vs. 43.16	D. Well Volume (ft): 0.033144 cuft	Depth/Height of Top of PVC: N/A
B. Depth to Water (ft): ~~14.33~~ 19.45	E. Well Volume (gal) C*D): 0.248	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 23.71	F. Three Well Volumes (gal) (E3): 0.745 gal / 2.8 L	Pump Intake Depth: 43.00

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1238	6.69	0.278	0.0	9.61	15.37	-222	NA	0.250	0
1238	6.93	0.264	0.0	9.35	15.08	-234	NA	0.250	1.250
1243	6.85	0.265	0.0	8.51	14.93	-184	NA	0.250	3.500
1246	6.92	0.252	0.0	8.04	14.89	-155	NA	0.250	3.750
1253	6.68	0.243	0.0	6.68	15.21	-145	NA	0.500	5.000
1258	6.46	0.222	0.0	6.50	15.25	-95	NA	0.500	7.500
1303	6.37	0.218	0.0	6.37	15.23	-75	NA	0.500	10.000
1308	6.34	0.213	0.0	6.24	15.22	-73	NA	0.500	12.500

Total Quantity of Water Removed (gal): 12.5 L Personnel: J. Guy

COMMENTS AND OBSERVATIONS: No dTW because of the CMT well diameter.

2 0.014

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-01-A	EA Personnel: J.Guy	Client: NYSDEC
Location: Headset	Well Condition: Acceptable	Weather: Rain
Sounding Method: Skinny dipper	Gauge Date: / Gauge Time:	Measurement Ref: TOC
Stick Up/Down (ft): Flush mount	PID Headspace Reading: 0.3 PPM	Well Diameter (in): CMT ~~0.75~~ 1/2" 0.00136

Purge Date: 11/30/2022	Purge Time: 1148
Purge Method: Peristaltic Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 22.37	D. Well Volume (ft): 0.004145 ft3	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.33	E. Well Volume (gal) C*D): 0.0310 gal	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 3.04ft	F. Three Well Volumes (gal) (E3): 0.093	Pump Intake Depth: 22.00

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1148								0.250	0
~~1203~~ 1153	7.37	0.497	6.7	5.45	13.36	-165	N/A	0.250	1.250
~~1208~~ 1158	6.93	0.477	9.0	3.89	13.89	-100	N/A	0.250	2.500
~~1233~~ 1203	6.71	0.462	5.0	3.28	15.05	-55	N/A	0.250	3.750
1208	6.64	0.450	0.0	3.52	15.46	-31	N/A	0.250	5.000
1213	6.51	0.446	0.0	4.24	15.39	-27	~	0.250	6.250
1218	6.47	0.442	0.0	4.16	15.52	-21	~	0.250	7.500
1223	6.43	0.439	0.0	4.20	15.57	-17	~	0.250	8.750
1228	6.49	0.435	0.0	4.31	15.71	-18	~	0.250	10.000
~~1233~~									
~~1238~~									

Total Quantity of Water Removed ~~(gal)~~: 10.00L Personnel: J. Guy

COMMENTS AND OBSERVATIONS: Could not use WLM with tubing because of channel diameter.

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: LMT-10-03	EA Personnel: J.Guy	Client: NYSDEC
Location: HEADSET	Well Condition: NEW	Weather: RAIN
Sounding Method: SKI/NNY	Gauge Date: 11/30/22 Gauge Time: 1640	Measurement Ref: TOC
Stick Up/Down (ft): FLUSH	PID Headspace Reading: 0.0	Well Diameter (in): 0.00136

Purge Date: 11/30/22	Purge Time: 1640
Purge Method: Peri Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 74.14	D. Well Volume (ft):	Depth/Height of Top of PVC: FLUSH
B. Depth to Water (ft): 13.70	E. Well Volume (gal) C*D): 0.615 gal	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B): 60.44	F. Three Well Volumes (gal) (E3): 1.85 gal	Pump Intake Depth: ~75

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1640	7.01	0.350	57.5	11.05	15.44	199	N/A	2mL	0.0
1645	7.02	0.274	61.2	9.41	15.44	-122	N/A	2mL	1.0
1650	7.00	0.288	68.1	8.88	15.41	-122	N/A	2mL	2.0
1655	6.98	0.320	84.2	7.74	15.40	-117	N/A	2mL	3.0
1700	6.89	0.330	96.0	6.82	19.35	-106	N/A	2mL	4.0
1705	6.80	0.346	~~96.0~~ 73.3	5.89	15.30	-92	N/A	2mL	5.0
1710	6.76	0.356	73.8	5.49	15.31	-89	N/A	2mL	6.0
1715	6.73	0.352	71.3	5.42	15.30	-87	N/A	2mL	7.0

Total Quantity of Water Removed (gal): 7.0 Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-10-01	EA Personnel: J.Guy	Client: NYSDEC
Location: Heatset	Well Condition: Acceptable	Weather: Rain
Sounding Method: String	Gauge Date: 11/30/2022 Gauge Time:	Measurement Ref: TOC
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.2	Well Diameter (in): 0.00136

Purge Date: 11/30/2022	Purge Time: 1600
Purge Method: Peristaltic	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 70.33	D. Well Volume (ft): 0.07027	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.66	E. Well Volume (gal) C*D): 0.5256	Pump Type:
C. Liquid Depth (ft) (A-B): 51.67	F. Three Well Volumes (gal) (E3): 1.577=5.96L	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1600	7.41	0.269	50.3	10.15	15.65	-117	N/A	0.2	0	
1605	7.39	0.271	50.1	9.91	15.66	-121	N/A	0.2	0.5	
1610	7.38	0.274	50.2	9.81	15.68	-124	N/A	0.2	1.0	
1615	7.40	0.311	64.4	9.43	15.67	-144	N/A	0.2	3.5	
1620	7.18	0.347	50.4	8.10	15.60	-136	N/A	0.2	~~5.0~~	2.5
1625	6.93	0.341	54.1	7.08	15.54	-120	N/A	0.2	~~3.0~~	3.5
1630	6.68	0.372	56.4	5.76	15.46	-102	N/A	0.2	~~4.0~~	4.5
1635	6.55	0.387	50.4	4.82	15.40	-91	N/A	0.2	~~5.0~~	5.5
1640	6.47	0.412	44.0	4.20	15.38	-82	N/A	0.2	~~6.0~~	6.5

Total Quantity of Water Removed (gal): _____ Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-10-05	EA Personnel: J.Guy	Client: NYSDEC
Location: HEATSET	Well Condition: NEW	Weather: Rain
Sounding Method: SKINNY	Gauge Date: 11/30/2022 Gauge Time: 13	Measurement Ref: TOC
Stick Up/Down (ft): FLUSH	PID Headspace Reading: 0.1	Well Diameter (in): 0.00136

Purge Date: 11/30/2022	Purge Time: 1530
Purge Method: Peri. Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 50.15	D. Well Volume (ft): 0.0427492	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.68	E. Well Volume (gal) C*D): 0.3201	Pump Type:
C. Liquid Depth (ft) (A-B): 31.47	F. Three Well Volumes (gal) (E3): 0.9604	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1530	6.88	0.324	35.7	9.87	16.33	-103	N/A	0.2	0
1535	6.87	0.322	34.5	9.92	16.15	-148	N/A	0.2	1.00
1540	8.05	0.334	35.1	9.66	16.03	-205	N/A	0.2	2.0
1545	7.57	0.334	31.0	9.55	15.93	-209	N/A	0.2	3.0
1550	7.98	0.344	31.0	9.47	15.80	-193	N/A	0.2	4.0
1555	7.87	0.353	31.7	9.29	15.76	-197	N/A	0.2	5.0
1600	7.48	0.364	33.1	9.07	15.74	-179	N/A	0.2	6.0

Total Quantity of Water Removed (gal): 6.0L Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-10-06	EA Personnel: J.Guy	Client: NYSDEC
Location: HEATSET	Well Condition: NEW	Weather: RAIN
Sounding Method: SKINNY	Gauge Date:	Measurement Ref: TOC
	Gauge Time:	
Stick Up/Down (ft): FLUSH	PID Headspace Reading: 0.1	Well Diameter (in): 0.00136

Purge Date: 11/30/2022	Purge Time: 1457
Purge Method: Peri Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 19.97	D. Well Volume (ft): 0.0017136	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.71	E. Well Volume (gal) C*D): 0.0128	Pump Type:
C. Liquid Depth (ft) (A-B): 1.26	F. Three Well Volumes (gal) (E3): 0.03845	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1500	7.44	0.369	146	10.32	16.17	-165	N/A	~~0.200~~ 0.2	0
1505	7.28	0.351	116	9.60	16.42	-152	N/A	~~0.200~~ 0.2	1.0
1510	7.11	0.336	74.8	9.20	16.46	-133	N/A	0.200	2.0
1515	7.00	0.329	45.6	8.94	16.55	-121	N/A	0.200	3.0
1520	6.93	0.326	34.0	8.64	16.51	-110	N-A	0.200	4.0
1525	6.91	0.326	31.3	8.48	16.66	-108	N-A	0.200	5.0
1530	6.88	0.323	32.3	8.31	16.65	-102	N-A	0.20	6.0

Total Quantity of Water Removed (gal): _____ Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: MNT-05-03	EA Personnel: M. Gilkey K. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Sunny 23°F; 14mph SE
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 1200
Purge Method: Perm Pump - low flow	Field Technician: M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth: Mid Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
12:01	6.61	0.512	**	2.37	9.32	-70			
12:06	7.45	0.465	**	0.54	9.50	-258			
12:11			DRY						
12:16									
12:21									
12:26									

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:
* Water Level Intermediate Interval
** Water level can not be gauged while purging due to 7 Channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: MW CMT-08-03	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: / Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date: 02/08/23	Purge Time: 1053
Purge Method:	Field Technician: M. Gilkey / H. Bedell

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1055	8.11	1.04	818	2.00	11.40	-217		0.20	0
[illegible]	—	pump issue	—	—	—	—	—	—	—
1105	7.61	0.456	488	1.33	12.28	-230	\	0.20	6
—	—	—	purged DRY AGAIN	—	—	—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:
Shallow - Intermediate port

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-03-03	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather:
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time: 1642
Purge Method:	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 78.63	D. Well Volume (~~ft~~): 1820.4 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.95	E. ~~Well Volume~~ (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 60.68	F. Three Well Volumes (~~gal~~) (E3): 5.46 (L)	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (✓) (pH units)	Conductivity (✓) (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1642	6.33	0.346	541	6.54	18.35	-196	—	0.25	
1647	6.43	0.461	242	6.82	17.21	-531	—	0.25	
1652	6.39	0.530	320	5.82	17.06	-556	|	|	
1657	6.32	0.555	120	4.96	16.79	-557	|	|	
1702	6.23	0.596	107	3.69	16.64	-544	|	|	
1707	6.14	0.601	115	3.17	16.57	-535	|	|	
1712	6.09	0.611	104	2.49	16.57	-520	|	|	
1717	6.08	0.619	110	2.31	16.55	-510	|	|	
1722	6.04	0.616	124	1.87	16.50	-498	|	|	
1727	6.04	0.613	84.1	1.72	16.87	-500	|	|	
~~1732~~			Stop	purge	@ 1727				
1737									
1742									
1747									
1752									

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Deep

EA Engineering, P.C. and Its Affiliate
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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-02-04	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: Good/New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 4th channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 24.5 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 1124
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 20.20	D. Well Volume (ft): 54 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.85	~~E. Well Volume (gal) C*D):~~	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 1.35 ft	F. Three Well Volumes (gal) (E3): 0.162 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1124	6.54	0.476	202	7.14	18.02	40	—	0.10	0.0
1129	7.39	0.492	121	7.41	18.20	26	—	0.10	0.50
1134	7.66	0.509	107	8.19	18.28	38	—	0.10	1.0
1139	7.76	0.518	96.9	8.84	18.34	48	—	0.10	1.5
1144	7.82	0.521	92.1	8.38	18.38	56	—	0.10	2.0
1149	7.85	0.517	88.8	8.91	18.43	60	—	0.10	2.5
1154	7.87	0.519	89.3	8.65	18.49	63	—	0.10	3.0
				STOP PURGING @ 1154					

Total Quantity of Water Removed (gal): 3.0 Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Shallow Internal
* Water level can not be recorded during purge due to channel diameter

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EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-02-06	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** Good/New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:**	**Measurement Ref:** 6th channel
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 24.5 ppm	**Well Diameter (in):** CMT

Purge Date: 02/01/23	**Purge Time:** 1025
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 51.8	**D. Well Volume (L):** 1318 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 18.85	**E. ~~Well Volume (gal) C*D~~:**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 32.95	**F. Three Well Volumes (gal) (E3):** 3.954 (L)	**Pump Intake Depth:** Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1025	6.76	0.160	320	4.70	16.92	-58	—	0.25	0.0
1030	6.95	0.190	116	2.11	16.31	-138	—	0.25	1.25
1035	6.76	0.243	89.5	2.31	16.35	-132	—	0.25	2.50
1040	6.57	0.270	74.6	2.35	16.29	-113	—	0.25	3.75
1045	6.45	0.283	61.3	2.32	16.25	-97	—	0.25	5.00
1050	6.37	0.293	57.3	1.94	16.22	-85	—	0.25	6.25
1065	6.28	0.305	52.1	1.95	16.20	-72	—	0.25	7.50
1100	6.23	0.309	49.3	1.94	16.19	-64	—	0.25	8.75
1105	6.19	0.313	47.1	1.94	16.14	-60	—	0.25	10.0
1110	6.17	0.317	49.3	1.93	16.08	-57	—	0.25	11.25
—	—	—	—	STOP @ 1110	PURGING	—	—	—	

Total Quantity of Water Removed (gal): 11.25 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate - Shallow

*Unable to Record GW level during purge due to Channel depth

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-02-07	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: Good / New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 24.5 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 1203
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 64.84	D. Well Volume (gal): 1378.2 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.90	E. Well Volume (gal) C*D): ~~[illegible]~~	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 45.94	F. Three Well Volumes (gal) (E3): 4.136 (L)	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1203	8.01	0.188	480	5.49	17.64	-81	—	0.25	0.0
1208	7.15	0.298	425	5.65	16.68	-95	—	0.25	1.25
1213	6.71	0.321	414	5.69	16.42	-80	—	0.25	2.50
1218	6.47	0.334	50.3	4.25	15.94	-68	—	0.25	3.75
1223	6.30	0.340	43.6	3.21	15.79	-57	—	0.25	5.00
1228	6.23	0.343	41.4	3.24	15.73	-53	—	0.25	6.25
1233	6.16	0.348	43.3	1.58	15.62	-46	—	0.25	7.50
1238	6.12	0.351	48.0	1.59	15.59	-43	—	0.25	8.25
1243	6.10	0.354	45.2	1.60	15.55	-40	—	0.25	10.0
1248	6.07	0.356	42.9	1.60	15.56	-38	—	0.25	11.25
1253	6.05	0.358	46.1	1.61	15.54	-37	—	0.25	12.50
—	—	—	—	STOP PURGING @ 1258		—	—	—	

Total Quantity of Water Removed (gal): 12.50 Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate - Deep

*Unable to Record GW level during purging due to Channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-02-01	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** Good / New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:**	**Measurement Ref:** 1st channel
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 24.5 ppm	**Well Diameter (in):** CMT

Purge Date: 02/01/23	**Purge Time:** 1300
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 80.65	**D. Well Volume (ft):** 2472.2 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 18.84	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 61.81	**F. Three Well Volumes (gal) (E3):** 7.4142 (L)	**Pump Intake Depth:** Mid - screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1300	6.37	0.253	190	1.74	15.82	-67	—	0.25	0.0
1305	6.15	0.345	80.6	1.40	15.52	-79	—	0.25	1.25
1310	6.06	0.356	73.2	1.36	15.42	-74	—	0.25	2.50
1315	6.02	0.367	67.0	1.43	15.38	-62	—	0.25	3.75
1320	5.97	0.373	43.6	1.52	15.32	-49	—	0.25	5.00
1325	5.94	0.375	40.7	1.56	15.32	-42	—	0.25	6.25
1330	5.94	0.376	40.2	1.58	15.31	-40	—	0.25	7.50
—	—	—	—	STOP PURGING @ 1330	—	—	—	—	

Total Quantity of Water Removed (gal): ~~≈~~ 7.50 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:

Deep

*Unable to record gw level during purging due to channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
GMT-03-06	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY		Indoors
Sounding Method:	**Gauge Date:** 02/01/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:** 1045	OD of 7th Channel
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	0.0	7 Channels = 1.7"

Purge Date:	Purge Time:
02/01/23	1206
Purge Method:	**Field Technician:**
Perri Pump	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (~~ft~~):	Depth/Height of Top of PVC:
18.95	24 mL	
B. Depth to Water (ft):	**E. Well ~~Volume (gal) C*D~~):**	**Pump Type:**
19.75		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (~~gal~~) (E3):**	**Pump Intake Depth:**
0.8	0.072 (L)	

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1210	6.42	0.357	236	7.62	19.32	-186	\	0.15	0.75
1215	6.61	0.424	246	1.09	18.97	-168	|	|	1.50
1220	6.76	0.499	255	1.93	18.91	-60	|	|	2.25
1225	6.85	0.519	246	5.49	19.07	-26	|	|	3.00
1230	—	—	DRY	—	—	—	—	—	~~3~~ 3.75
1235							|	|	~~4~~ 4.50
1240							|	|	5.25
1245							|	|	6.00
1250							|	|	6.75
1255							|	|	
1300							|	|	
1305							|	|	
1310							|	|	

Total Quantity of Water Removed (~~gal~~): 3.00 (L) Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
SHALLOW interval
* low rate due to low water column volume
** Unable to record GW level during purge due to Channel depth

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CMT-03-07 **MONITORING WELL DEVELOPMENT LOG** page 1 of 2

Well I.D.: ~~CMT-03/06~~	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors
Sounding Method: Heron Sliny Dipper	Gauge Date: 2/1/23 Gauge Time: 1045	Measurement Ref: OD of 7th Channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.0	Well Diameter (in): 7 channels = 1.7"

Purge Date: 02/01/23	Purge Time: 1231
Purge Method: Perri Pump	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1231	6.53	0.009	491	7.87	19.1	108	—	.20	
1236	6.81	0.136	402	6.91	18.90	-108	—	.20	
1241	6.46	0.150	394	4.04	18.11	-270	—	.20	
1246	6.26	0.177	387	2.78	18.14	-290	—		
1251	6.10	0.197	369	2.62	17.98	-384			
1256	6.06	0.260	382	2.60	17.64	-442			
1301	6.03	0.297	372	2.41	17.48	-465			
1306	6.03	0.315	159	2.00	17.19	-478			
1311	6.04	0.340	144	1.45	16.96	-499			
1316	6.02	0.395	141	1.14	16.86	-512			
1321	6.02	0.433	126	1.01	17.00	-508			
1326	6.01	0.490	140	0.83	16.90	-508			
1331	6.00	0.523	116	0.74	16.79	-507			
1336	6.00	0.538	113	0.46	16.80	-487			
1341	6.00	0.564	106	0.43	16.90	-476			
1346	6.00	0.564	101	0.43	16.97	-464			

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Shallow - Intermediate

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: 03-07 ~~MT-02-07~~	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:**
Sounding Method: Heron Skinny Dipper	**Gauge Date:** / **Gauge Time:**	**Measurement Ref:**
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** 7 Channels

Purge Date: 02/01/23	**Purge Time:** 1231
Purge Method: Peri Pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units) (√)	Conductivity (mS/cm) (√)	Turbidity (ntu)	DO (mg/L) (√)	Temperature (°C)	ORP (mV) (√)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1351	5.99	0.596	102	0.36	16.93	472	\		
1356	5.98	0.611	98.3	0.35	16.92	-471	—	0.25	
1401	5.98	0.618	95.5	0.35	16.94	-475			
1406	5.98	0.630	95.3	0.34	16.93	-475			
1411	5.98	0.652	95.4	0.29	17.03	-473			
1416	5.98	0.668	93.8	0.31	17.11	-469			
1421	5.96	0.662	89.1	0.29	17.15	-468			
1426	5.96	0.659	89.9	0.29	17.19	-469			
1431	5.94	0.639	89.3	0.30	17.19	-457			
1436									
1441									
1446									
1451									
1456									
1501									

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Shallow - Intermediate

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-03-02	EA Personnel: M. Gilkey / C. Badman	Client: NYSDEC
Location:	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time: 1045	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.0	Well Diameter (in): 7 channels

Purge Date: 02/01/23	Purge Time: 1442
Purge Method: Peri Pump	Field Technician: M. Gilkey & C. Badman

Well Volume

A. Well Depth (ft): 69.3	D. Well Volume (gal): 1509 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.97	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 50.33	F. Three Well Volumes (gal) (E3): 4.5-3.0(L)	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1442	6.79	0.185	1000+	6.04	17.67	-559	—	0.25	0
1447	6.67	0.218	250	5.53	17.16	-527	—	0.25	1.25
1452	6.35	0.279	159	4.67	17.19	-510	—	0.25	2.50
1457	6.28	0.288	147	3.81	17.27	-491			3.75
1502	6.22	0.319	147	2.69	17.21	-476			5.00
1507	6.18	0.332	144	2.49	17.30	-465			6.25
1512	5.80	0.351	166	2.45	17.31	-454			7.50
1517	6.24	0.328	262	2.62	17.66	-309			8.75
1522	6.20	0.310	166	2.71	17.71	-310			10.00
1527	6.33	0.345	150	2.32	17.80	-250			11.25
1532	6.27	0.358	135	1.50	17.16	-468			12.50
1537	6.18	0.371	123	1.26	16.93	-411			13.75
1542	6.12	0.378	116	1.25	16.88	-384			15.00
1547	6.08	0.383	105	1.20	16.98	-357			16.25
1552	6.06	0.389	138	1.13	16.93	-333			17.50
1557	6.03	0.394	98.1	1.07	16.89	-331			18.75

Total Quantity of Water Removed (gal): 26.25(L) Personnel: M. Gilkey & C. Badman

COMMENTS AND OBSERVATIONS:

Deep - Intermediate

*Unable to record water level during purging due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT - 03 - 02	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY		See Page #1
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
	Gauge Time:	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**

Purge Date:	Purge Time:
see page	1
Purge Method:	**Field Technician:**
	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1602	6.00	0.399	81.1	0.91	16.85	-304	—	0.25	20.00
1607	5.99	0.405	79.3	0.74	16.75	-307			21.25
1612	5.96	0.408	80.4	0.73	16.93	-294			22.50
1617	5.96	0.411	70.1	0.71	16.97	-292			23.75
1622	5.95	0.414	58.7	0.66	17.07	-292			25.00
1627	5.94	0.416	54.9	0.65	17.27	-283			26.25
~~1632~~				stopped purge @ 16.27					
1637									
1642									

Total Quantity of Water Removed (gal): 26.25 Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Deep Intermediate

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-03-07D	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors ~73°F
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:**	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** 7 Channels = 1.7"

Purge Date: 02/02/23	**Purge Time:** 1040
Purge Method: Perri Pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 18.95	**D. Well Volume ~~(ft)~~ (mL):** 30 mL/ft · 30.55 ft = 9165	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 4.90	**E. Well Volume ~~(gal) C*D~~):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 30.55	**F. Three Well Volumes ~~(gal) (E3)~~:** 2.75 L	**Pump Intake Depth:** Mid screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1042	6.89	0.535	76.0	1.70	19.91	-19	—	0.25	0
1046	6.36	0.531	113	0.82	16.08	-22	—	0.25	1.25
1052	6.29	0.584	225	0.76	15.99	-51	—	0.25	2.50
1056	6.29	0.623	273	0.72	15.84	-70	—	0.25	3.75
1102	6.50	0.668	248	0.77	15.77	-82	—	0.25	5.00
1106	6.29	0.709	206	0.71	15.79	-87	—	0.25	6.25
1112	6.25	0.765	206	0.73	15.75	-92	—	0.25	7.50
1116	6.24	0.787	219	0.74	15.75	-96	—	0.25	8.75
1122	6.24	0.777	220	0.73	15.74	-97	—	0.25	10.00
1126	6.26	0.774	160	0.70	15.56	-97	—	0.25	11.25
1132	6.24	0.747	146	0.70	15.54	-98	—	0.25	12.50
1136	6.22	0.720	156	0.70	15.55	-98	—	0.25	13.75
1142	6.22	0.690	126	0.70	15.55	-99	—	0.25	15.00
1146	6.21	0.669	130	0.68	15.50	-100	—	0.25	16.25
1152	6.20	0.649	137	0.69	15.49	-100	—	0.25	17.50
1156	6.18	0.636	160	0.68	15.58	-100	—	0.25	18.75

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:

Assumed Shallow / Intermediate

*Cannot record water level during purging due to channel diameter

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CON'T 2/2

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-03-07	EA Personnel: M. Gilkey / C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Indoors @ 73° F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 1040
Purge Method: Perm Pump	Field Technician: M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft): 18.95	D. Well Volume (ft): 916.5 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 49.50	E. Well Volume (gal) C*D):	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 30.55	F. Three Well Volumes (gal) (E3): 2.75 (L)	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units) (✓)	Conductivity (mS/cm) (✓)	Turbidity (ntu)	DO (mg/L) (✓)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1202	6.18	0.627	140	0.67	15.61	-101	—	0.25	20.0
1206	—	—	—	pump	off to	troubleshoot	Horiba	—	—
1212	6.17	0.622	138	0.76	15.91	-64	—	0.25	21.25
1216	6.17	0.627	161	0.75	15.82	-87	—	0.25	22.50
1222	6.16	0.642	142	0.76	15.83	-87	—	0.25	23.75
1226	6.15	0.656	144	0.75	15.81	-89	—	0.25	25.00
1232	6.13	0.674	133	0.74	15.80	-90	—	0.25	26.25
1236	6.12	0.686	160	0.74	15.78	-90	—	0.25	27.50
1242	6.12	0.702	114	0.76	15.74	-90	—	0.25	28.75
1246	6.12	0.715	151	0.76	15.76	-90	—	0.25	30.00
1252	6.12	0.727	134	0.76	15.76	-90	—	0.25	31.25
1256	6.12	0.729	129	0.76	15.76	-90	—	0.25	32.50
1302	6.12	0.735	136	0.75	15.79	-90	—	0.25	33.75
—	—	—	Stop	purge	@ 1302	—	—	—	—

2 hrs

Total Quantity of Water Removed (gal): 33.75 Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:

See page 1

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-04	EA Personnel: C. Badman/M. Gilkey	Client: NYSDEC
Location: Nation Heatset, Farmingdale	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time: 1400	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.0	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 0839
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 20.92	D. Well Volume (gal): 81.2 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.89	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 2.03	F. Three Well Volumes (gal) (E3): 0.2436 (L)	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0839	6.50	0.807	116	4.64	17.16	34	—	0.15	0
0844	7.01	0.784	104	5.24	17.62	42	—	0.15	0.75
0849	7.29	0.780	97.8	5.53	17.80	50	—	0.15	1.50
0854	7.45	0.791	63.5	5.84	18.08	65	—	0.15	2.25
0859	7.52	0.801	63.0	6.07	18.23	75	—	0.15	3.00
0904	~	~	DRY	~	~	~	~	~	

Total Quantity of Water Removed (gal): 3.00 (L)

Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:
Shallow Interval

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-4	EA Personnel: M. Gilkey	Client: NYSDEC
Location: National Heatset, Farmingdale	Well Condition: New	Weather: indoors @ 73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/07/23	Purge Time: 1320
Purge Method: Perri Pump - low flow	Field Technician: M. Gilkey & C. Badman

Well Volume

A. Well Depth (ft): 20.92	D. Well Volume (ft): 81.2 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.89	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 2.03	F. Three Well Volumes (gal) (E3): 0.2436 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1322	6.83	0.810	441	1.98	17.27	-60	—	0.15	0
1327	7.30	0.916	117	1.12	17.54	-159	—	0.15	~~0.15~~ 0.75
1332	7.50	0.936	210	2.75	17.73	-158	—	0.15	1.50
1337	7.60	0.960	205	3.50	17.75	-65	—	0.15	2.25
1342	7.62	0.959	185	3.92	17.87	-5	—	0.15	3.00
1347	—	—	DRY	—	—	—	—		3.75
1352									4.50
1357									5.25
1402									6.00
1407									6.75
1412									7.50

Total Quantity of Water Removed (gal): 3.75 L

Personnel: M. Gilkey & C. Badman

COMMENTS AND OBSERVATIONS:

Assumed shallow well

*Can't record waterlevel during purge due to well ~~diameter~~ diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-05	EA Personnel: M. Gilkey & C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Indoors ~ 73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 1352
Purge Method: Peri Pump	Field Technician: M. Gilkey & C. Badman

Well Volume

A. Well Depth (ft): 53.3	D. Well Volume (gal): 13660 (mL)	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.15	E. Well Volume (gal) C*D:	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 34.15	F. Three Well Volumes (gal) (E3): 4.098 (L)	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1353	8.18	0.288	524	1.52	17.02	-76	—	0.25	0
1358	7.84	0.284	285	0.89	16.11	-221	—	0.25	1.25
1403	7.79	0.274	236	0.77	16.09	-243	—	0.25	2.50
1408	7.72	0.269	234	0.73	16.08	-252	—	0.25	3.75
1413	7.60	0.270	302	0.73	15.93	-250	—	0.25	5.00
1418	7.48	0.270	205	0.76	15.88	-242	—	0.25	6.25
1423	7.38	0.270	211	0.77	15.84	-236	—	0.25	7.50
1428	7.26	0.269	207	0.79	15.79	-229	—	0.25	8.75
1433	7.18	0.269	196	0.80	15.75	-224	—	0.25	10.00
1438	7.11	0.271	132	0.86	15.75	-218	—	0.25	11.25
1443	7.04	0.270	122	0.88	15.71	-212	—	0.25	12.50
1448	6.97	0.270	137	0.89	15.69	-206	—	0.25	13.75
1453	6.92	0.270	157	0.95	15.71	-201	—	0.25	15.00
1458	6.86	0.270	148	0.95	15.77	-196	—	0.25	16.25
1503	6.81	0.270	169	0.96	16.03	-193	—	0.25	17.50
1508	6.78	0.266	170	0.97	15.76	-189	—	0.25	18.75

Total Quantity of Water Removed (gal): 27.50 Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:
Shallow Intermediate
*Waterlevel can't be recorded during purge due to Channel diameter

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See Page #1

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-05	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1513	6.77	0.272	116	1.00	15.74	-188	—	0.25	20.00
1518	6.74	0.272	124	1.01	15.74	-185	—	0.25	21.25
1523	6.70	0.272	71.0	1.02	15.79	-182	—	0.25	22.50
1528	6.68	0.270	69.9	1.02	15.76	-180	—	0.25	23.75
1533	6.66	0.274	49.2	1.03	15.81	-178	—	0.25	25.00
1538	6.64	0.274	47.8	1.03	15.82	-177	—	0.25	26.25
1543	6.62	0.273	45.4	1.04	15.83	-176	—	0.25	27.50
1548									28.75
1553									30.00

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS: _____

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-06	EA Personnel: M. Gilkey/C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Indoors 73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 1546
Purge Method: Perri Pump	Field Technician: M. Gilkey

Well Volume

A. Well Depth (ft): 63.54	D. Well Volume (ft): 40 mL/ft * 44.39 ft = 17756 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.15 ~~63.54~~	E. ~~Well~~ Volume (gal) C*D):	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 44.39 ft	F. Three Well Volumes ~~(gal)~~ (E3): 5,327 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1548	6.94	0.251	425	0.87	15.60	-134	—	0.25	0
1553	7.16	0.258	255	0.72	15.88	-182	—	0.25	1.25
1558	7.25	0.260	248	0.66	16.02	-205	—	0.25	2.50
1603	7.29	0.260	237	0.66	16.03	-212	—	0.25	3.75
1608	7.31	0.262	257	0.66	15.94	-215	—	0.25	5.00
1613	7.28	0.268	195	0.67	15.80	-218	—	0.25	6.25
1618	7.20	0.276	213	0.70	15.76	-212	—	0.25	7.50
1623	7.13	0.280	237	0.72	15.78	-204	—	0.25	8.75
1628	7.04	0.289	217	0.75	15.75	-196	—	0.25	10.00
1633	6.95	0.295	199	0.78	15.76	-186	—	0.25	11.25
1638	6.89	0.300	208	0.80	15.85	-180	—	0.25	12.50
1643	6.83	0.310	202	0.82	15.83	-173	—	0.25	13.75
1648	6.75	0.314	196	0.84	15.83	-166	—	0.25	15.00
1653	6.72	0.317	171	0.85	15.77	-163	—	0.25	16.25
1658	6.67	0.318	155	0.86	15.72	-159	—	0.25	17.50
1703	6.64	0.325	138	0.86	15.75	-157	—	0.25	18.75

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey/C. Badman

COMMENTS AND OBSERVATIONS:
Intermediate Deep
* Water level can't be recorded during purge due to manifold diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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See page #1

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-06	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1703	6.61	0.327	140	0.87	15.72	-154	—	0.25	20.00
1713	6.59	0.330	135	0.87	15.73	-152	—	0.25	21.25
1718	6.58	0.336	125	0.87	15.74	-150	—	0.25	22.50
1723	6.56	0.338	114	0.88	15.76	-148	—	0.25	23.75
1728	6.53	0.348	120	0.88	15.73	-146	—	0.25	25.00
1733	6.52	0.343	108	0.89	15.74	-144	—	0.25	26.25
1738	6.50	0.350	103	0.90	15.73	-143	—	0.25	27.50
1743	6.50	0.352	88.6	0.91	15.74	-142	—	0.25	28.75
1748	6.48	0.354	94.7	0.91	15.87	-141	—	0.25	30.00
1753	6.44	0.357	97.2	0.91	16.04	-140	—	0.25	31.25

Total Quantity of Water Removed (gal): _____ Personnel: N. Gilkey/C. Berman

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-01	EA Personnel: C. Badman	Client: NYSDEC
Location:	Well Condition: New	Weather: Indoors ~73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/07/23	Measurement Ref: 7th Channel OD
	Gauge Time: 1400	
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 0638
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 83.0	D. Well Volume (gal): 1915.2 (mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.16	E. Well Volume (gal) C*D:	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 63.84	F. Three Well Volumes (gal) (E3): 5.75 (L)	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0642	5.55	0.257	424	2.01	10.42	107	—	0.25	0
0647	6.25	0.275	769	1.57	12.46	9	—	0.25	1.25
0652	6.43	0.285	730	1.34	13.28	-33	—	0.25	2.50
0657	6.60	0.288	641	1.13	14.06	-57	—	0.25	3.75
0702	6.73	0.306	491	1.04	14.42	-75	—	0.25	5.00
0707	6.75	0.335	421	0.98	14.75	-82	—	0.25	6.25
0712	6.73	0.356	260	0.93	15.05	-84	—	0.25	7.50
0717	6.73	0.372	235	0.89	15.27	-84	—	0.25	8.75
0722	6.69	0.385	165	0.86	15.48	-79	—	0.25	10.00
0727	6.58	0.398	106	0.85	15.67	-72	—	0.25	11.25
0732	6.52	0.405	110	0.84	15.78	-66	—	0.25	12.50
0737	6.48	0.414	92.7	0.83	15.90	-60	—	0.25	13.75
0742	6.41	0.416	79.3	0.80	16.01	-57	—	0.25	15.00
0747	6.38	0.416	68.9	0.78	16.15	-52	—	0.25	16.25
0752	6.35	0.422	61.3	0.77	16.24	-47	—	0.25	17.50
0757	6.34	0.419	75.9	0.75	16.24	-51	—	0.25	18.75

Total Quantity of Water Removed (gal): 28.75 (L)

Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:

Deep Interval

*Unable to record water level during purge due to channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

See page #1

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-01	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: / Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading: See page 1	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0802	6.33	0.415	61.4	0.73	16.34	-57	—	0.25	20.00
0807	6.32	0.414	63.2	0.73	16.34	-58	—	0.25	21.25
0812	6.33	0.409	68.8	0.70	16.33	-71	—	0.25	22.50
0817	6.34	0.406	70.8	0.69	16.40	-85	—	0.25	23.75
0822	6.35	0.413	65.1	0.67	16.47	-94	—	0.25	25.00
0827	6.34	0.422	49.9	0.67	16.50	-99	—	0.25	26.25
0832	6.33	0.426	49.2	0.65	16.56	-103	—	0.25	27.50
0837	6.32	0.429	48.7	0.65	16.59	-105	—	0.25	28.75
0842	—	—	Stop purge @		0837	—	—	—	30.00

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-01	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:** 1300	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 392.2 ppm	**Well Diameter (in):** CMT

Purge Date: 02/01/23	**Purge Time:** 1400
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 22.90	**D. Well Volume (~~gal~~):** 148 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.20	**E. ~~Well Volume (gal)~~ C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 3.70	**F. Three Well Volumes (~~gal~~) (E3):** 0.444 L	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1400	6.58	0.330	776	3.53	18.21	-61	—	0.25	0
1405	7.13	0.342	754	1.22	18.47	-149	—	0.25	1.25
1410	7.40	0.380	752	1.11	18.24	-198	—	0.25	2.50
1415	7.68	0.379	748	1.02	17.96	-230	—	0.25	3.75
1420	7.62	0.371	742	0.98	17.81	-233	—	0.25	5.00
1425	7.57	0.366	748	0.95	17.70	-235	—	0.25	6.25
1430	7.50	0.368	738	0.93	17.61	-237	—	0.25	7.50
1435	7.44	0.365	735	0.96	17.43	-239	—	0.25	8.75
1440	7.39	0.352	613	0.96	17.33	-239	—	0.25	10.00
1445	7.35	0.349	589	0.93	17.30	-240	—	0.25	11.25
1450	7.32	0.339	464	0.91	17.33	-240	—	0.25	12.50
1455	7.30	0.335	387	0.92	17.31	-240	—	0.25	13.75
1500	7.28	0.331	342	0.92	17.32	-239	—	0.25	15.00
1505	7.27	0.331	281	0.93	17.29	-238	—	0.25	16.25
1510	7.27	0.330	254	0.93	17.34	-238	—	0.25	17.50
1515	7.25	0.327	236	0.96	17.41	-232	—	0.25	18.75

Total Quantity of Water Removed (~~gal~~): 25.0 L **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Shallow
* Unable to record GW level due to Channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-01	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time: 1300	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 392.2 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 1400
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft): See Page 1	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1520	7.26	0.327	243	5.73	17.41	-231	—	0.25	20.0
1525	7.24	0.326	240	4.76	17.39	-229	—	0.25	21.25
1530	7.22	0.325	239	4.49	17.37	-226	—	0.25	22.50
1535	7.22	0.323	241	4.34	17.37	-225	—	0.25	23.75
1540	7.22	0.323	235	4.30	17.36	-225	—	0.25	25.0
				STOP PURGING @ 1540					

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Shallow

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EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-07	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time: 1300	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 392.2 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 1547
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 52.36	D. Well Volume (ft): 1318.4 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.4	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 32.96	F. Three Well Volumes (gal) (E3): 3.955 (L)	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1547	7.17	0.327	787	2.80	17.42	-62	—	0.25	0.0
1552	7.39	0.300	317	1.31	16.14	-105	—	0.25	1.25
1557	7.57	0.295	205	1.14	15.99	-145	—	0.25	2.50
1602	7.67	0.291	188	1.09	15.90	-166	—	0.25	3.75
1607	7.64	0.288	166	1.07	15.90	-178	—	0.25	5.0
1612	7.57	0.289	147	1.00	15.87	-185	—	0.25	6.25
1617	7.50	0.291	154	0.97	15.83	-190	—	0.25	7.50
1622	7.42	0.292	160	0.97	15.82	-192	—	0.25	8.75
1627	7.36	0.292	146	1.47	15.78	-196	—	0.25	10.0
1632	7.40	0.290	144	1.46	15.77	-198	—	0.25	11.25
1637	7.33	0.288	146	1.33	15.70	-203	—	0.25	12.50
1642	7.28	0.286	129	0.84	15.70	-206	—	0.25	13.75
1647	7.28	0.286	133	0.84	15.70	-207	—	0.25	15.00
1652	7.27	0.284	125	0.84	15.70	-210	—	0.25	16.25
1657	7.25	0.282	115	0.84	15.68	-210	—	0.25	17.50
1702	7.24	0.280	112	0.85	15.69	-212	—	0.25	18.75

Total Quantity of Water Removed (gal): 30.0 (L) Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate - Shallow

* Unable to Record GW level during purging due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-05-07	M.Gilkey/H.young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset	New	Indoors
Sounding Method:	**Gauge Date:** 02/01/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:** 1300	7th Channel OD
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	392.2 ppm	CMT

Purge Date:	Purge Time:
02/01/23	1547
Purge Method:	**Field Technician:**
low flow	M.Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1707	7.24	0.281	110	1.10	15.70	-213	—	0.25	20.0
1712	7.23	0.280	105	1.24	15.70	-213	—	0.25	21.25
1717	7.23	0.280	104	0.84	15.69	-214	—	0.25	22.50
1722	7.23	0.279	100	0.84	15.68	-214	—	0.25	23.75
1727	7.27	0.280	95.8	0.84	15.69	-216	—	0.25	25.0
1732	7.25	0.282	94.8	0.83	15.70	-215	—	0.25	26.25
1737	7.25	0.283	92.3	0.84	15.69	-215	—	0.25	27.50
1742 ~~1742~~	7.23	0.286	93.7	0.83	15.69	-214	—	0.25	28.75
1747	7.22	0.287	90.4	0.82	15.68	-214	—	0.25	30.0
—	—	—	—	STOP PURGING @ 1747	—	—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: M.Gilkey / H.Young

COMMENTS AND OBSERVATIONS: Intermediate — Shallow

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-03	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors ~73°F
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:** 12:57	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 392.2ppm	**Well Diameter (in):** 7 Channels = 1.7"

Purge Date: 02/02/23	**Purge Time:** 0644
Purge Method: Perri Pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 73.4	**D. Well Volume (ft):** 2160 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.2	**E. ~~Well Volume (gal) C*D~~):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 54.2	**F. Three Well Volumes (gal) (E3):** 6.504(L)	**Pump Intake Depth:** Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0646	4.73	0.258	380	2.38	10.59	181	—	0.25	0
0651	6.04	0.375	266	1.69	14.10	-49	—	0.25	1.25
0656	6.41	0.362	185	1.40	15.06	-110	—	0.25	2.50
0701	6.60	0.358	135	1.27	15.45	-146	—	0.25	3.75
0706	6.75	0.358	138	1.20	15.68	-166	—	0.25	5.00
0711	6.92	0.360	100	1.14	15.86	-184	—	0.25	6.25
0716	7.03	0.361	93.2	1.10	15.96	-195	—	0.25	7.50
0721	7.12	0.363	96.7	1.06	16.08	-205	—	0.25	8.75
0726	7.19	0.365	82.5	1.02	16.18	-212	—	0.25	10.00
0731	7.23	0.369	89.2	0.98	16.26	-213	—	0.25	11.25
0736	7.25	0.371	92.4	0.96	16.33	-217	—	0.25	12.50
0741	7.24	0.371	92.0	0.95	16.38	-218	—	0.25	13.75
0746	7.25	0.374	82.9	0.93	16.45	-219	—	0.25	15.00
0751	7.25	0.376	76.8	0.91	16.49	-218	—	0.25	16.25
0756	7.24	0.379	85.1	0.90	16.53	-217	—	0.25	17.50
0801	7.25	0.381	88.5	0.88	16.56	-216	—	0.25	18.75

Total Quantity of Water Removed (~~gal~~): 25.00(L) **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:

Assumed intermediate ~~depth~~ Deep interval
*Water level can't be recorded while purging due to Channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-OS-03	EA Personnel:	Client: NYSDEC
Location:	Well Condition: New	Weather: See page #1
Sounding Method: Heron Skinny Dipper	Gauge Date:	Measurement Ref:
	Gauge Time:	
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in):

Purge Date: 02/02/23	Purge Time: 0644
Purge Method: Peri Pump	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0806	7.23	0.386	75.2	0.85	16.61	-214	—	0.25	20.00
0811	7.22	0.389	96.8	0.84	16.57	-210	—	0.25	21.25
0816	7.21	0.388	76.1	0.83	16.60	-210	—	0.25	22.50
0821	7.20	0.391	89.1	0.81	16.64	-212	—	0.25	23.75
0826	7.20	0.393	84.1	0.81	16.71	-213	—	0.25	25.00
~~0831~~	—	—	STOP	Purge	@ 0826	—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-05	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors ~73°F
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:**	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** 7 Channels = 1.7"

Purge Date: 02/02/23	**Purge Time:** 0831
Purge Method: Perri Pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. ~~Well Depth~~ (ft): ~~83.3~~ 5000 (illegible)	**D. Well Volume (ft):** 2560 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.3	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 64	**F. Three Well Volumes (~~gal~~) (E3):** 7.68 L	**~~Pump Intake Depth~~:** Mid screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0832	7.45	0.319	322	1.41	17.21	-80	—	0.25	~~1.25~~ 0
0837	7.07	0.394	106	0.95	16.45	-137	—	0.25	1.25
0842	7.10	0.397	115	0.89	16.28	-160	—	0.25	2.50
0847	7.12	0.404	108	0.83	16.13	-178	—	0.25	3.75
0852	7.13	0.407	104	0.81	16.13	-185	—	0.25	5.00
0857	7.13	0.410	120	0.81	16.06	-190	—	0.25	6.25
0902	7.16	0.416	89.0	0.82	15.95	-184	—	0.25	7.50
0907	7.12	0.420	87.1	0.81	15.87	-188	—	0.25	8.75
0912	7.13	0.424	85.4	0.80	15.91	-193	—	0.25	10.00
0917	7.13	0.429	86.9	0.80	15.88	-195	—	0.25	11.25
0922	7.14	0.430	85.7	0.80	15.91	-197	—	0.25	12.50
0927	7.13	0.431	113	0.79	15.95	-200	—	0.25	13.75
0932	7.14	0.437	103	0.81	16.03	-200	—	0.25	15.00
0937	7.13	0.436	116	0.80	16.12	-200	—	0.25	16.25
0942	7.15	0.438	91.8	0.81	16.07	-199	—	0.25	17.50
0947	7.14	0.442	90.3	0.80	16.07	-200	—	0.25	18.75

Total Quantity of Water Removed (gal): 30.0 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Assumed Deep Interval
*Water level can not be taken while purging due to well channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

See Page #1 page 2 of 2

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-05	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors ~73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/22 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 0931
Purge Method: Perri Pump	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth: mid Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0952	7.13	0.444	88.0	0.79	16.11	-201	/	0.25	20.00
0957	7.14	0.445	100.0	0.82	16.21	-201	/	0.25	21.25
1002	7.14	0.448	87.4	0.78	16.06	-200	/	0.25	22.50
1007	7.14	0.452	86.0	0.77	16.07	-200	/	0.25	23.75
1012	7.13	0.453	88.0	0.82	16.17	-201	/	0.25	25.00
1017	7.13	0.454	84.9	0.78	16.18	-200	/	0.25	26.25
1022	7.13	0.458	89.9	0.80	16.23	-199	/	0.25	27.50
1027	7.12	0.459	89.9	0.76	16.29	-198	/	0.25	28.75
1032	7.17	0.459	89.9	0.76	16.29	-198	/	0.25	30.0
			Stop purge @			1032			

2 hrs

Total Quantity of Water Removed (gal): 30.0		Personnel:	M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: See page 1

EA Engineering, P.C. and Its Affiliate
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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-06-01	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY	New	Indoors
Sounding Method:	**Gauge Date:** 01/31/23	**Measurement Ref:**
Heron SkimmyDipper	**Gauge Time:** @ 1300	4th Channel OD
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	0.0 ppm	CMT

Purge Date:	Purge Time:
01/31/23	1313
Purge Method:	**Field Technician:**
low flow	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
23.31	178.8 mL	
B. Depth to Water (ft):	**E. ~~Well Volume (gal) C*D~~:**	**Pump Type:**
18.84		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**
4.47	0.536 (L)	Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1313	5.12	0.266	706	10.25	14.12	110	—	0.25	0.0
1318	5.77	0.243	732	3.03	15.50	37	—	0.25	1.25
1323	6.27	0.223	1000+	2.00	15.73	1	—	0.25	2.50
1328	6.63	0.224	1000+	1.27	15.79	-28	—	0.25	3.75
1333	6.89	0.234	873	1.17	15.81	-31	—	0.25	5.0
1338	7.11	0.247	511	1.45	15.83	-74	—	0.25	6.25
1343	7.21	0.255	390	1.50	15.84	-48	—	0.25	7.50
1348	7.27	0.260	323	1.24	15.82	-51	—	0.25	8.75
1353	7.29	0.262	297	1.25	15.81	-53	—	0.25	10.0
1358	7.30	0.264	260	1.15	16.07	-53	—	0.25	11.25
1403	7.25	0.270	204	1.11	16.22	-121	—	0.25	12.50
1408	7.20	0.278	192	1.27	16.23	-120	—	0.25	13.75
1413	7.13	0.285	218	1.16	16.24	-117	—	0.25	15.0
1418	7.05	0.295	226	1.05	16.26	-111	—	0.25	16.25
1423	7.00	0.295	223	1.22	16.37	-104	—	0.25	17.50
1428	6.93	0.308	175	1.10	16.30	-96	—	0.25	18.75

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: ~~Shallow Port~~ ~~Deep Port~~ Shallow Interval
*Water level can not be recorded due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-06-01	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY	Good / New	Indoors
Sounding Method:	**Gauge Date:** 01/31/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:**	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	0.0 ppm	CMT

Purge Date:	Purge Time:
01/31/23	1313
Purge Method:	**Field Technician:**
low flow	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
	See page 1	
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:**
		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1433	6.86	0.334	153	1.05	16.12	-92	—	0.25	20.0
1438	6.80	0.348	140	1.03	16.04	-89	—	0.25	21.25
1443	6.71	0.367	114	0.99	15.98	-86	—	0.25	22.50
1448	6.73	0.376	103	1.04	15.93	-82	—	0.25	23.75
1452	6.62	0.380	101	0.90	15.94	-78	—	0.25	25.0
1458	6.60	0.388	94.2	0.89	16.00	-75	—	0.25	26.25
1503	6.54	0.399	83.5	0.91	15.96	-72	—	0.25	27.50
1508	6.50	0.407	80.9	1.02	15.96	-68	—	0.25	28.75
1513	6.46	0.417	74.2	0.89	15.96	-64	—	0.25	30.0
1518	6.44	0.427	69.4	1.00	16.00	-58	—	0.25	31.25
1523	6.39	0.432	63.8	0.94	16.01	-54	—	0.25	32.50
1528	6.36	0.435	63.1	0.94	16.05	-50	—	0.25	33.75
1533	6.35	0.438	57.5	0.94	16.07	-48	—	0.25	35.0
			STOP PURGING						
				@ 1533					

Total Quantity of Water Removed (gal): 35.0 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Shallow port

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-06-03	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babylon NY	**Well Condition:** Good/New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:** 1300	**Measurement Ref:** 7-in Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 0.0ppm	**Well Diameter (in):** CMT

Purge Date: 01/31/23	**Purge Time:** 1542
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 43.42	**D. Well Volume (ft):** 977.6 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 18.98	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 24.44	**F. Three Well Volumes (gal) (E3):** 2.933 (L)	**Pump Intake Depth:** mid screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1542	6.78	0.365	1000+	7.10	16.70	-58	—	0.25	0.0
1547	6.96	0.390	1000+	7.04	16.45	-83	—	0.25	1.25
1552	6.82	0.401	623	4.88	16.28	-60	—	0.25	2.50
1557	6.49	0.420	216	0.99	16.21	-50	—	0.25	3.75
1602	6.34	0.432	167	0.93	16.20	-38	—	0.25	5.0
1607	6.29	0.435	160	0.92	16.17	-35	—	0.25	6.25
1612	6.26	0.435	147	0.94	16.17	-34	—	0.25	7.50
1617	6.25	0.437	131	0.94	16.13	-33	—	0.25	8.75
1622	6.24	0.440	117	0.96	16.09	-33	—	0.25	10.0
1627	6.23	0.446	103	0.97	16.08	-30	—	0.25	11.25
1632	6.21	0.445	95.4	0.97	16.06	-29	—	0.25	12.50
1637	6.20	0.447	93.9	0.97	16.04	-28	—	0.25	13.75
1642	6.20	0.454	88.0	1.00	16.13	-27	—	0.26	15.0
1647	6.18	0.454	82.4	0.99	16.28	-26	—	0.25	16.25
1652	6.18	0.455	79.6	0.98	16.38	-24	—	0.25	17.50
1657	6.18	0.441	73.2	0.95	16.51	-23	—	0.25	18.75

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate Shallow?
*Unable to record DTW level during purging due to channel diameter

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EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-06-03	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** Good / New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:**	**Measurement Ref:**
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** CMT

Purge Date: 01/31/23	**Purge Time:** 1542
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D:** See Page 1	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1702	6.19	0.450	68.2	0.97	16.16	-23	—	0.25	20.0
1707	6.18	0.446	67.0	0.96	16.04	-24	—	0.25	21.25
1712	6.16	0.459	66.8	0.99	16.12	-24	—	0.25	22.50
1717	6.16	0.459	59.1	1.00	16.31	-23	—	0.25	23.75
—	—	—	— STOP PURGING @ 1717	—	—	—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate Shallow?

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-06-04	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY	Good/New	Indoors
Sounding Method:	**Gauge Date:** 02/01/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:**	4th Channel
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	0.0ppm	CMT

Purge Date:	Purge Time:
02/01/23	0725
Purge Method:	**Field Technician:**
low flow	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. ~~Well Volume (ft)~~:	Depth/Height of Top of PVC:
63.88	1789 mL	
B. Depth to Water (ft):	**E. ~~Well Volume (gal) C*D)~~:**	**Pump Type:**
19.15		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**
44.73	5.36(L)	Mid Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0725	5.53	0.473	567	2.47	10.65	56	—	0.25	0.0
0730	5.92	0.467	1000+	2.09	12.65	8	—	0.25	1.25
0735	6.10	0.453	180	1.81	13.74	-18	—	0.25	2.50
0740	6.14	0.452	54.9	1.65	14.10	-25	—	0.25	3.75
0745	6.15	0.448	49.3	1.57	14.55	-26	—	0.25	5.0
0750	6.15	0.447	24.0	1.49	14.80	-25	—	0.25	6.25
0755	6.15	0.445	16.8	1.42	15.05	-22	—	0.25	7.50
0800	6.16	0.444	15.1	1.37	15.25	-23	—	0.25	8.75
0805	6.16	0.446	14.0	1.33	15.42	-23	—	0.25	10.0
0810	6.18	0.445	14.6	1.30	15.53	-23	—	0.25	11.25
				STOP PURGING @ 0810					

Total Quantity of Water Removed (gal): 11.25 Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate - Deep?

*Unable to record GW level while purging due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-06-07	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: Good/New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.0 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 0902
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.98	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0902	6.94	0.308	469	8.84	17.60	-55	—	0.25	0.0
0907	6.45	0.424	467	6.30	16.54	-68	—	0.25	1.25
0912	6.36	0.431	434	6.00	16.31	-56	—	0.25	2.50
0917	6.30	0.432	266	5.28	16.15	-43	—	0.25	3.75
0922	6.28	0.430	89.9	5.14	16.04	-30	—	0.25	5.0
0927	6.21	0.428	38.0	5.33	15.98	-21	—	0.25	6.25
0932	6.17	0.427	29.7	4.68	15.96	-14	—	0.25	7.50
0937	6.14	0.432	23.1	1.27	15.70	-9	—	0.25	8.75
0942	6.10	0.434	17.2	1.23	15.65	-4	—	0.25	10.0
0947	6.08	0.434	16.7	1.21	15.60	-1	—	0.25	11.25
0952	6.06	0.432	16.8	1.20	15.57	-2	—	0.25	12.50
—	—	—	STOP PURGING @ 0953			—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Deep?

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
OMT-07-0007	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY	New	Indoors
Sounding Method:	**Gauge Date:** 01/31/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:**	TOC (middle channel)
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	248.5 ppm	(7 channels = 1.7")

Purge Date:	Purge Time:
01/31/23	1518
Purge Method:	**Field Technician:**
Peri pump	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
20.12		
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:**
19.25		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1520	5.29	0.651	2891	2.27	18.35	-224	↓	0.25	
1525	6.17	0.701	140	1.01	18.40	-336	↓		
1530	6.45	0.691	146	2.84	18.62	-209	↓		
1535	—	—	DRY	—	—	—			
1540									
1545	19.84 DTW		20.06						
~~1550~~	02/01/23 (0740)								
0742 ~~1555~~	7.16	0.841	262	1.94	15.04	-316	—	0.25	
0747 ~~1600~~	7.15	0.787	188	1.39	16.77	-306	—	0.25	
0752	7.18	0.789	137	2.26	16.29	-190	—	0.25	
0757	7.21	0.799	96.4	5.71	16.32	-89	—	0.25	
0802	7.27	0.800	92.6	7.00	16.76	-58	—	0.25	
0807	—	—	DRY	—	—	—			
	Recharged to 19.50			Start Purge @ 1005					
			well goes dry after 5 mins						

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
SHALLOW interval?
~~water level can't be recorded simultaneously w/ purge~~ due to channel size

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-04	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoor
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:** 1400	**Measurement Ref:** (7th Channel OD)
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 248 5	**Well Diameter (in):** 7 channels = 1.7"

Purge Date: 01/31/23	**Purge Time:** 1335
Purge Method: Perri pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 52.54	**D. Well Volume (ft):** 1333.6 (mL)	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.20	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 33.34	**F. Three Well Volumes (gal) (E3):** 4.00 (L)	**Pump Intake Depth:** Mid-Screen

Water Quality Parameters ± 10

Time (hrs)	pH ±.1 (pH units)	Conductivity (mS/cm) 3%	Turbidity ±50 (ntu)	DO 10% (mg/L)	Temperature (°C) 3%	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1537	6.91	0.205	496	2.45	18.37	-313		0.25	1.25
1542	6.93	0.302	292	1.07	18.01	-374			2.50
1547	7.04	0.341	147	0.78	17.82	-454			3.75
1552	6.97	0.341	78.7	0.59	17.63	-484			5.00
1557	6.98	0.343	80.1	0.53	17.57	-502			6.25
1602	6.79	0.343	72.2	0.51	17.57	-496			7.50
1607	6.67	0.342	63.0	0.52	17.54	-461			8.75
1612	6.56	0.334	58.4	0.57	17.50	-420			10.00
1617	6.49	0.317	55.4	0.61	17.47	-400			11.25
1622	6.45	0.293	48.1	0.67	17.46	-382			12.50
1627	6.40	0.272	40.4	0.72	17.56	-366			13.75
1632	6.35	0.257	35.8	0.78	17.56	-356			15.00
1637	6.33	0.248	29.3	0.86	17.36	-342			16.25
1642	6.30	0.238	24.3	0.90	17.36	-332			17.50
1647	6.27	0.231	29.9	0.93	17.37	-323			18.75
1652	6.25	0.227	17.8	0.96	17.36	-318			20.00

Total Quantity of Water Removed (gal): 23.75 (L) **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:

Intermediate-shallow
* Water level could not be recorded due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-04	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** See Page 1	**Weather:**
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
	Gauge Time:	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**

Purge Date: See Page 1	**Purge Time:**
Purge Method:	**Field Technician:** M. Gilkey / ~~H. Young~~

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1657	6.23	0.220	16.2	1.07	17.26	-308	~	0.25	21.25
~~1700~~ 1702	6.19	0.218	17.3	1.00	17.33	-302		1	22.50
1707	6.18	0.214	14.2	0.99	17.35	-299		1	23.75

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Intermediate/Shallow

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-05	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 1/31/23 Gauge Time: 1400	Measurement Ref: OD 7th channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 248.5 ppm	Well Diameter (in): 7 channels = 1.7"

Purge Date: 2/1/23	Purge Time: 0811
Purge Method: Perri pump	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 72.35	D. Well Volume (~~ft~~): 2126 (mL)	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.20	E. ~~Well Volume~~ (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 53.15	F. Three Well Volumes (gal) (E3): 6.378 (L)	Pump Intake Depth: Mid-Screen

+- .1 | 3% | <50 Water Quality Parameters | +- 10

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0811	7.06	0.147	332	2.98	16.55	-437	—	0.25	1.25
0816	6.86	0.151	299	2.43	16.45	-497	—	0.25	2.50
0821	6.83	0.153	296	1.85	16.50	-513	—	0.25	3.75
0826	6.82	0.154	318	1.70	16.56	-521	—	0.25	5.00
0831	6.80	0.156	311	1.14	16.63	-535	—	0.25	6.25
0836	6.80	0.160	309	0.82	16.70	-542	—	0.25	7.50
0841	6.79	0.165	280	0.69	16.56	-547	—	0.25	8.75
0846	6.79	0.172	310	0.57	16.53	-554	—	0.25	10.00
0851	6.77	0.183	295	0.49	16.55	-557	—	0.25	11.25
0856	6.75	0.207	257	0.44	16.49	-564	—	0.25	12.90
0901	6.75	0.231	71.5	0.41	16.48	-567	—	0.25	13.75
0906	6.72	0.259	71.8	0.39	16.51	-578	—	0.25	15.00
0911	6.70	0.288	83.3	0.36	16.47	-586	—	0.25	16.25
0916	6.67	0.321	87.2	0.33	16.49	-593	—	0.25	17.50
0921	6.67	0.357	56.1	0.34	16.52	-600	—	0.25	18.75
0926	6.63	0.395	27.0	0.31	16.48	-606	—	0.25	20.00

Total Quantity of Water Removed (~~gal~~): 28.75 (L) 10% | Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Intermediate / deep Interval
*Water level could ø be recorded due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-05	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** See Page #1	**Weather:**
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:** 1400	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 248.5	**Well Diameter (in):** (7 Channels = 1.7")

Purge Date: 02/01/23	**Purge Time:** 0811
Purge Method: Peri pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH ±.1 (pH units)	Conductivity 3% (mS/cm)	Turbidity ±5 (ntu)	DO 10% (mg/L)	Temperature 3% (°C)	ORP ±10 (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0931	6.61	0.429	21.8	0.30	16.47	-617	—	0.25	21.25
0936	6.58	0.451	18.5	0.29	16.47	-620	—	0.25	22.50
0941	6.58	0.472	15.9	0.29	16.48	-617	—	0.25	23.75
0946	6.57	0.487	13.9	0.29	16.47	-615			25.00
0951	6.56	0.499	12.1	0.29	16.45	-611			26.25
0956	6.53	0.506	10.8	0.30	16.47	-612			27.5
1001	6.51	0.507	9.9	0.29	16.48	-609			28.75
1006									
1011									
1016									

Total Quantity of Water Removed (gal): 28.75 (L) **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Intermediate / DEEP Interval

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-06	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors u 73°F
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:** 1715	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** 7 Channels = 1.7"

Purge Date: 01/31/23	**Purge Time:** 1007
Purge Method: Perr. Pump low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 81.80	**D. Well Volume ~~(ft)~~:** 2509 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.20	**~~E. Well Volume (gal) C*D):~~**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 62.60	**F. Three Well Volumes ~~(gal)~~ (E3):** 7.5 L	**Pump Intake Depth:** Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1010	6.72	0.139	344	2.32	17.44	-378	\	0.25	0
1015	6.36	0.169	352	1.90	17.	-564	|	|	1.25
1020	6.17	0.211	370	1.03	16.69	-567	|	|	2.50
1025	6.06	0.251	338	0.62	16.84	-566	|	|	3.75
1030	5.96	0.293	241	0.40	16.66	-559	|	|	5.00
1035	5.92	0.315	39.0	0.32	16.58	-555	|	|	6.25
1040	5.87	0.329	20.1	0.30	16.58	-556	|	|	7.50
1045	5.86	0.338	15.7	0.29	16.53	-554	|	|	8.75
1050	5.85	0.351	25.8	0.29	16.40	-555	|	|	10.00
1055	5.83	0.358	11.2	0.29	16.38	-555	|	|	11.25
1100	5.83	0.368	7.6	0.30	16.36	-548	|	|	12.50
1105	5.83	0.378	10.9	0.29	16.21	-552	|	|	13.75
1110	5.82	0.388	4.3	0.28	16.18	-545	|	|	15.00
1115	5.80	0.397	13.1	0.29	16.16	-537	|	|	16.25
1120	5.77	0.403	26.5	0.28	16.16	-531	|	|	17.50
1125	5.77	0.408	12.1	0.28	16.17	-527	|	|	18.75

Total Quantity of Water Removed (gal): 18.75 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
DEEP Interval
*water level can ø be recorded simultaneously w/ purge due to channel size

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-08-02	EA Personnel: M.Gilkey / C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: 27°F Sun, 19 mph SE
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 0950
Purge Method: Peri Pump - Low Flow	Field Technician: M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft): 20.2	D. Well Volume (gal): 160 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.20	E. Well Volume (gal) C*D):	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 4.0	F. Three Well Volumes (gal) (E3): 0.480 (L)	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0951	8.05	0.403	283	2.74	14.33	-51		0.2	0
0956	8.20	0.408	779	1.16	13.66	-231		0.2	1.00
1001	8.35	0.408	865	0.97	13.05	-247		0.2	2.00
1006	8.20	0.319	1000+	0.50	12.45	-271		0.2	3.00
1011	7.95	0.306	1000*	0.77	12.09	-270		0.2	4.00
1016	7.76	0.316	1000*	0.75	12.06	-252		0.2	5.00
1021	7.45	0.326	930	0.76	12.51	-241		0.2	6.00
1026	7.26	0.332	862	0.75	11.13	-231			7.00
1031	7.10	0.334	839	0.74	10.98	-226			8.00
1036	6.93	0.347	650	0.77	10.95	-216			9.00
1041	6.87	0.347	599	0.80	10.95	-216			10.0
1046	6.78	0.352	498	0.76	10.77	-211			11.0
1051	6.65	0.355	269	0.77	10.74	-206			12.0
1056	6.53	0.371	236	0.80	10.11	-202			13.0
1101	6.45	0.373	146	0.77		-200			14.00
1106	6.43	0.374	154	0.76	10.06	-209			15.00

Total Quantity of Water Removed (gal): 2500 (L)

Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:

SHALLOW interval

*Water level could not be recorded due to channel depth

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-08-02	EA Personnel:	Client: NYSDEC
Location: National Heatset	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
	Gauge Time:	
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date: 02/03/23	Purge Time: 0750
Purge Method: Peristaltic Pump - Lawliss	Field Technician: M. Gilkey / CI Badaracco

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1111	6.42	0.370	190	0.73	10.20	-205	\	0.2	16.00
1116	6.37	0.372	123	0.74	10.51	-202	|	|	17.00
1121	6.36	0.372	150	0.73	10.82	-203	|	|	18.00
1126	6.32	0.375	156	0.69	10.81	-199	|	|	19.00
1131	6.30	0.380	152	0.70	10.56	-207	|	|	20.00
1136	6.31	0.375	171	0.65	11.30	-210	|	|	21.00
1141	6.26	0.397	157	0.68	10.56	-205	|	|	22.00
1146	6.25	0.393	138	0.68	10.71	-204	|	|	23.00
2hr → 1151	6.24	0.409	132	0.72	10.63	-204	|	|	24.00
1156	6.23	0.410	130	0.71	10.63	-202	|	|	25.00
~~1201~~	~~—~~	~~—~~	Stop	purge	@ 1156	~~—~~	~~—~~	~~—~~	~~—~~
1206									
1211									
1216									

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:
Assumed Shallow Interval

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-08-04	EA Personnel: M. Gilkey/C. Badman	Client: NYSDEC
Location:	Well Condition: New	Weather: 27°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/23	Measurement Ref: 7th Channel OD
	Gauge Time:	
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channel 1.7"

Purge Date: 02/03/23	Purge Time: 1149
Purge Method: Peri Pump	Field Technician: M. Gilkey/C. Badman

Well Volume

A. Well Depth (ft): 16.38	D. Well Volume (ft): 1394 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 51.25	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 34.87	F. Three Well Volumes (gal) (E3): 4.184 (L)	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1154	7.23	0.232	1000+	1.15	12.98	-563	—	0.25	0
1159	7.38	0.234	744	0.73	13.16	-653	—	0.25	1.25
1204	7.40	0.236	1000+	0.49	13.33	-654	—	0.25	2.50
1209	7.43	0.263	1000+	0.39	12.99	-651	—	0.25	3.75
1214	7.33	0.282	1000+	0.37	12.88	-623	—	0.25	5.00
1219	7.15	0.298	1000+	0.42	12.93	-610	—	0.25	6.25
1224	7.06	0.280	640	0.37	13.07	-641	—	0.25	7.50
1229	6.93	0.282	395	0.35	13.06	-645	—	0.25	8.75
1234	6.84	0.298	364	0.36	13.13	-640	—	0.25	10.00
1239	6.77	0.301	256	0.33	13.10	-637	—	0.25	11.25
1244	6.73	0.303	257	0.30	13.12	-635	—	0.25	12.50
1249	6.69	0.296	312	0.31	13.15	-607	—	0.25	13.75
1254	6.73	0.244	355	0.27	13.17	-600	—	0.25	15.00
1259	6.80	0.236	374	0.25	12.97	-574	—	0.25	16.25
1304	6.88	0.236	358	0.25	12.86	-602	—	0.25	17.50
1309	6.86	0.236	342	0.25	12.89	-604	—	0.25	18.75

Total Quantity of Water Removed (gal): 35.00(L) Personnel: M. Gilkey/C. Badman

COMMENTS AND OBSERVATIONS: Assumed shallow intermediate interval
*Water level can ø be recorded during purge due to Channel diameter

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See page #1 MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-08-04	EA Personnel:	Client: NYSDEC
Location:	Well Condition: New	Weather:
Sounding Method: Heron Skinny Dipper	Gauge Date: / Gauge Time:	Measurement Ref:
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1314	6.93	0.356	1000+	0.95	12.55	-619	—	0.25	20.00
1319	6.73	0.305	511	0.82	12.10	-604	—	0.25	21.25
1324	6.53	0.347	330	0.63	12.44	-504	—	0.25	22.50
1329	6.43	0.347	321	0.55	12.61	-495	—	0.25	23.75
1334	6.36	0.364	192	0.61	12.69	-557	—	0.25	25.00
1339	6.32	0.367	179	0.47	13.51	-595	—	0.25	26.25
1344	6.32	0.371	165	0.36	13.47	-599	—	0.25	27.50
1349	6.31	0.373	166	0.32	13.56	-595	—	0.25	28.75
1354	6.28	0.376	131	0.30	13.55	-572	—	0.25	30.00
1359	6.27	0.373	181	0.29	13.48	-578	—	0.25	31.25
1404	6.30	0.356	220	0.28	13.54	-585	—	0.25	32.50
1409	6.33	0.349	181	0.28	13.50	-588	—	0.25	33.75
1414	6.32	0.353	165	0.28	13.40	-587	—	0.25	35.00

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:
Intermediate Deep

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-OB-05	EA Personnel: M. Gilkey / C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Sunny 27°F; 19mph SE
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 1246
Purge Method: Peri Pump - low flow	Field Technician: M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft): 79	D. Well Volume (ft): 2502 (mL)	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.45	E. Well Volume (gal) C*D):	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 62.55	F. Three Well Volumes (gal) (E3): 7.506 (L)	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1245	8.28	0.257	**	2.99	7.13	-59	\	0.25	0
1253	7.19	0.296	727	1.35	8.09	-291	\		1.25
1258	7.35	0.305	385	1.08	8.51	-292	\		2.80
1303	~~8.11~~	0.303	299	1.06	8.93	-299	\		5.75
1308	7.05	0.299	0**	0.97	8.96	-307	\		5.0
1313	7.00	0.311	**	0.88	9.47	-311	\		6.25
1318	6.81	0.397	302	0.86	9.21	-288	\		7.50
1323	6.58	0.425	211	0.84	9.03	-260	\		8.75
1328	~~6.50~~	~~0.433~~	~~135~~	0.86	12.49	-237	\		10.00
1333	6.44	0.442	72.2	0.83	9.07	-242	\		11.25
1338	6.39	0.446	65.7	0.78	8.87	-250	\		12.5
1343	6.38	0.446	52.3	0.78	8.90	-247	\		13.75
1348	6.35	0.445	49.7	0.79	8.85	-254	\		15.00
1353	6.32	0.444	47.2	0.79	8.62	-256			16.25
1358	6.31	0.443	46.2	0.77	8.33	-257			17.50
1400				Stop purge @ 1358					

Total Quantity of Water Removed (gal): 17.50

Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:

~~Deep~~ Deep Interval

* Water level can't be recorded during purge due to Channel diameter

** Turbidity above detectable range.

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-09-04	EA Personnel: M. Gillkey & C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Indoors @ 70°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/01 Gauge Time: 1500	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 100.0 ppm	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 1533
Purge Method: Peri Pump	Field Technician: M. Gillkey

Well Volume

A. Well Depth (ft): 20.50	D. Well Volume (ft): 40 ml/ft · 1.12 ft = 44.8 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.38	E. Well Volume (gal) C*D):	Pump Type: Perristaltic
C. Liquid Depth (ft) (A-B): 1.12	F. Three Well Volumes (gal) (E3) (L): 0.134 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1534	5.55	0.392	331	1.28	15.97	-470	—		0
1539	6.15	0.302	316	0.59	16.35	-557	—	0.25	1.25
1544	6.61	0.345	294	0.54	16.39	-506	—	0.25	2.50
1549	5.93	0.369	295	0.54	16.35	-498	—	0.25	3.75
1554	5.85	0.373	296	0.53	16.34	-483	—	0.25	5.00
1559	5.77	0.395	359	0.51	16.30	-452	—	0.25	6.25
1604	5.68	0.414	289	0.49	16.42	-421	—	0.25	7.50
1609	5.63	0.427	230	0.47	16.39	-397	—	0.25	8.75
1614	5.60	0.433	225	0.55	16.40	-381	—	0.25	10.00
1619	5.57	0.438	146	0.45	16.40	-372	—	0.25	11.25
1624	5.59	0.419	116	0.49	16.42	-346	—	0.25	12.50
1629	5.57	0.429	86.9	0.47	16.42	-340	—	0.25	13.75
1634	5.55	0.437	89.9	0.45	16.43	-341	—	0.25	15.00
—	—	Turned off pump so we could load truck							
1714	5.53	0.442	59.3	0.53	16.43	-249	—	0.25	16.25
1719	5.53	0.436	50.0	0.50	16.71	-379	—	0.25	17.50

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:

Assume shallow interval

* Can't record water level during purge due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-09-04		NYSDEC
Location:	Well Condition:	Weather:
	See page 1	
Sounding Method:	Gauge Date:	Measurement Ref:
	Gauge Time:	
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1724	5.52	0.434	36.4	0.72	16.53	-408	\	0.25	18.75
1729	5.52	0.434	31.4	0.07	16.60	-395	\	0.25	20.0
1734	5.50	0.439	31.3	0.64	16.59	-371	\	|	21.25
1739	5.51	0.433	32.0	0.62	16.58	-388	\	|	22.50
1744	5.52	0.439	32.0	0.60	16.60	-353	\	0.25	23.75
1749	5.53	0.424	35.1	0.58	16.64	-352	\	0.25	25.0
1754	5.51	0.435	31.3	0.57	16.64	-338	\	0.25	26.25
1759	5.51	0.433	34.0	0.56	16.65	-341	\	|	27.50
1804	5.49	0.441	32.0	0.55	16.65	-321	\	|	28.75
1809	5.47	0.446	33.4	0.54	16.65	-322	\	|	30.0
1814	5.40	0.447	30.9	0.53	16.65	-309	\	|	31.25
1819	5.47	0.451	27.7	0.51	16.71	-304	\	|	32.50
1824	5.46	0.453	29.9	0.50	16.71	-299	\	|	33.75
1829		Stop purge @			1824				

Total Quantity of Water Removed (gal): 33.75 Personnel: BB M. Gilkey

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: MW-09-~~mG~~ 03	EA Personnel: M. Gilkey & C. Badman	Client: NYSDEC
Location: National Heritage	Well Condition: New	Weather: Indoors ~ 70°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 0653
Purge Method: Peristaltic Pump - low flow	Field Technician: M. Gilkey & C. Badman

Well Volume

A. Well Depth (ft): 50.50	D. Well Volume (~~ft~~): mL 40mL/ft · 31.12ft = 311.2	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.38	E. Well Volume (~~gal~~) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 31.12	F. Three Well Volumes (~~gal~~) (E3): .933 (L)	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (√) (pH units)	Conductivity (√) (mS/cm)	Turbidity (ntu)	DO (√) (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0654	5.17	~~340~~	256	2.46	13.11	-316		0.25	0
0659	5.87	0.348	244	1.04	14.60	-510			1.25
0704	5.78	0.394	114	0.79	14.93	-532			2.50
0709	5.73	0.409	89.7	0.77	15.14	-522			3.75
0714	5.73	0.416	88.3	0.75	15.36	-510			5.00
0719	5.69	0.421	78.7	0.72	15.39	-490			6.25
0724	5.69	0.418	60.9	0.70	15.60	-480			7.50
0729	5.68	0.420	56.8	0.67	15.74	-470			8.75
0734	5.67	0.421	50.9	0.65	15.84	-460			10.00
0739	5.66	0.424	42.1	0.63	15.95	-450			11.25
0744	5.65	0.426	40.9	0.63	16.02	-441			12.50
0749	5.64	0.427	27.7	0.63	16.07	-436			13.75
0754	5.64	0.428	25.8	0.61	16.12	-426			15.00
0759	5.63	0.428	26.4	0.59	16.12	-426			16.25
0804	5.63	0.429	27.0	0.58	16.15	-428			17.50
0809			Stop purge at 0804						

Total Quantity of Water Removed (~~gal~~): 17.50(L) Personnel: M. Gilkey

COMMENTS AND OBSERVATIONS:
Assumed Intermediate-Shallow Interval
* Water level can't be recorded ~~during~~ during purge due to Channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-09-02	M. Gilkey / C. Badman	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset	New	Indoors ~70°F
Sounding Method:	**Gauge Date:** 02/02/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:**	7th Channel OD
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush		7 channels = 1.7"

Purge Date:	Purge Time:
02/03/23	0808
Purge Method:	**Field Technician:**
Perristaltic Pump- Low flow	M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft):	D. Well Volume (gal):	Depth/Height of Top of PVC:
~70.50**	2044.8 mL	
B. Depth to Water (ft):	**E. ~~Well Volume (gal) C*D~~:**	**Pump Type:**
19.38		Perristaltic
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**
51.12	6.134 (L)	mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0810	6.01	0.240	286	2.43	16.48	-199	—	0.25	0
0815	5.80	0.364	146	0.94	16.56	-467	—	0.25	1.25
0820	5.59	0.448	91.9	0.70	16.48	-455	—	0.25	2.50
0825	5.58	0.459	96.4	0.59	16.45	-452	—	0.25	3.75
0830	5.57	0.464	77.4	0.49	16.43	-448	—	0.25	5.00
0835	5.57	0.466	55.4	0.43	16.42	-448	—	0.25	6.25
0840	5.57	0.465	62.9	0.41	16.40	-443	—	0.25	7.50
0845	5.58	0.465	58.0	0.40	16.36	-428	—	0.25	8.75
0850	5.57	0.465	44.5	0.39	16.36	-422	—	0.25	10.00
0855	5.58	0.465	44.0	0.37	16.23	-416	—	0.25	11.25
0900	5.58	0.466	47.6	0.36	16.18	-414	—	0.25	12.50
0905	5.58	0.466	44.0	0.35	16.12	-408	—	0.25	12.5
~~0910~~				Stop pump @ 0905					
0915									
0920									
0925									

Total Quantity of Water Removed (gal): 12.15 Personnel: M. Gilkey & C. Badman

COMMENTS AND OBSERVATIONS:

↳ Assumed Intermediate — ~~screened~~ Deep

* Water level can not be recorded during purge due to Channel

** Blockage that skinny Dipper can not get past although soft but fish tape goes to approximately 70.5 ft / Same w/ tubing ~70 ft

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-09-01	M. Gilkey / C. Badman	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset	New	
Sounding Method:	**Gauge Date:** 02/02/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:** 1500	7th Channel OD
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush		7 Channels = 1.7"

Purge Date:	Purge Time:
02/03/23	0908
Purge Method:	**Field Technician:**
Perri Pump - low flow	M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft):	D. Well Volume (gal):	Depth/Height of Top of PVC:
80.0	2433.16	
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:**
19.16		Peristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**
60.84	7.301 (L)	mid screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0910	6.02	0.159	137	2.39	16.13	-222	—	0.25	0
0915	6.11	0.177	69.8	1.27	16.10	-336	—	0.25	1.25
0920	5.80	0.294	20.5	0.98	16.12	-486	—	0.25	2.50
0925	5.75	0.352	18.6	0.80	16.08	-491	—	0.25	3.75
0930	5.75	0.383	12.2	0.68	16.06	-480	—	0.25	5.00
0935	5.71	0.395	13.2	0.62	16.05	-474	—	0.25	6.25
0940	5.67	0.405	11.5	0.58	16.08	-463	—	0.25	7.50
0945	5.68	0.416	12.2	0.58	16.09	-449	—	0.25	8.75
0950	5.66	0.424	7.6	0.56	16.12	-443	—	0.25	10.00
0955	5.66	0.434	5.0	0.56	16.12	-424	—	0.25	11.25
1000	5.65	0.443	4.2	0.56	16.16	-414	—	0.25	12.50
1005	5.64	0.450	1.1	0.58	16.18	-394	—	0.25	13.75
1010	5.64	0.455	4.9	0.57	16.21	-381	—	0.25	15.00
1015	5.63	0.467	0.1	0.60	16.29	-346	—	0.25	16.25
1020	5.62	0.472	0.0	0.59	16.33	-313	—	0.25	17.50
1025	5.61	0.475	1.8	0.58	16.36	-300	—	0.25	18.75

Total Quantity of Water Removed (gal): 22.50 (L) Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:
↳ Assumed Deep Interval
* water level can not be recorded during purge due to Channel Diameter

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See page #1

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-09-01	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: / Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time: 0908
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1030	5.61	0.479	0.0	0.56	16.43	-281	—	0.25	20.00
1035	5.60	0.482	0.0	0.54	16.51	-272	—	0.25	21.25
1040	5.60	0.483	0.0	0.53	16.54	-282	—	0.25	22.50
~~1045~~	—	—	—	Stop purge @ 1040	—	—	—	—	—
1050									
1055									

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS: _____

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Purging and Sampling Logs

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EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-25 (onsite)	EA Personnel: H. Young	Client: NYSDEC (152140)
Location: Heatset (East Farmingdale NY)	Well Condition: good	Weather: 39°F, Sunny
Sounding Method: Heron skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0915	Well Diameter (in): 2"

Purge Date: 03/21/23	Purge Time: 0933
Purge Method: Low Flow	Field Technician: H. Young

Well Volume

A. Well Depth (ft): 28.88	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.85	E. Well Volume ~~(gal)~~ C*D): (L) 6.80	Pump Type: peri pump
C. Liquid Depth (ft) (A-B): 11.03	F. Three Well Volumes ~~(gal)~~ (E3): (L) 20.41	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0933	13.82	6.01	198	0.390	0.0	6.66	17.85	0.25	0.00
0936	14.08	5.96	190	0.387	0.0	6.09	17.85	0.25	0.75
0939	14.21	5.94	187	0.381	0.0	5.77	17.85	0.25	1.50
0942	14.29	5.94	186	0.378	0.0	5.66	17.85	0.25	2.25
0945	14.40	5.93	184	0.379	0.0	5.54	17.85	0.25	3.00
0948	14.46	5.94	183	0.374	0.0	5.80	17.85	0.25	3.75
0951	14.44	5.94	183	0.378	0.0	5.84	17.85	0.25	4.50
0954	14.50	5.93	183	0.374	0.0	5.98	17.84	0.25	5.25
0957	14.58	5.93	183	0.375	0.0	6.34	17.84	0.25	6.00
1000 ~~MW-25~~	14.60	5.94	183	0.378	0.0	6.37	17.84	0.25	6.75
1003	14.62	5.94	183	0.373	0.0	6.51	17.84	0.25	7.50
1006	14.64	5.90	187	0.378	0.0	6.56	17.84	0.25	8.25
					SAMPLE @ 1006				

Total Quantity of Water Removed (gal):		Sampling Time:	1006
Samplers:	HY	Split Sample With:	~~MW-25~~ MS/MSD
Sampling Date:	03/21/23	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

~~MW-25~~ MS/MSD taken

SAMPLE ID: 152140-MW-25(onsite)-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-155	EA Personnel: CB, LBL	Client: National Headset Printing NYSDEC #152190
Location: On Site	Well Condition: OK	Weather: Sunny 42°F
Sounding Method: Heron Sticky Dipper	Gauge Date: 03/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1010	Well Diameter (in): 1

Purge Date: 3/21/2023	Purge Time: 953
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 27.49	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.28	E. Well Volume (gal) C*D: 0.42	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 10.21	F. Three Well Volumes (gal) (E3): 1.26	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
954	14.53	6.24	245	0.368	7.7	4.96	17.28	0.25	—
957	14.40	6.28	245	0.361	5.1	4.72	17.28	0.25	0.75
1000	14.53	6.30	242	0.362	1.9	4.49	17.28	0.25	1.50
1003	14.71	6.31	240	0.334	1.8	4.91	17.28	0.25	2.25
1006	14.87	6.29	238	0.349	0.7	4.60	17.28	0.25	3.00
1009	14.95	6.30	234	0.354	0.4	4.54	17.28	0.25	3.75
1012	15.15	6.34	228	0.354	0.0	4.55	17.28	0.25	4.50
1015	14.85	6.32	226	0.354	0.0	4.56	17.28	0.25	5.25
1018	14.99	6.32	217	0.356	0.0	4.47	17.28	0.25	6.00
1021	15.05	6.33	212	0.351	0.0	4.57	17.28	0.25	6.75
1024	15.16	6.35	213	0.353	0.0	4.57	17.28	0.25	7.50

Total Quantity of Water Removed (gal): 1.98
Samplers: CB, LBL
Sampling Date: 3/21/2023
Sampling Time: 1024
Split Sample With: X
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-MW-155-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15D	EA Personnel: LBL	Client: National ~~Headset~~ Printing NYSDEC #152140
Location: 1 Adams Blvd Lot	Well Condition: O.K.	Weather: 39 F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/23	Measurement Ref: TOIC
Stick Up/Down (ft):	Gauge Time: 1010	Well Diameter (in): 1

Purge Date: 3/21/23	Purge Time: 0958
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 72.68	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.27	E. Well Volume (gal) C*D): 2.27	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 55.41	F. Three Well Volumes (gal) (E3): 6.81	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (mS/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1001	15.14	6.27	236	0.031	21.9	3.21	17.27	0.3	0.9
1004	15.04	6.00	253	0.025	12.3	2.68	17.29		1.8
1007	15.03	5.44	268	0.024	7.3	2.08	17.29		2.7
1010	15.10	5.31	274	0.025	7.1	1.80	17.29		3.6
1013	15.23	5.22	276	0.034	6.2	1.71	17.29		4.5
1016	15.26	5.25	276	0.096	7.6	1.63	17.29		5.4
1019	15.27	5.48	271	0.235	4.7	3.01	17.29		6.3
1022	15.24	5.61	271	0.288	5.7	3.19	17.29		7.2
1025	15.25	5.63	271	0.275	2.6	2.99	17.29		8.1
1028	15.29	5.71	272	0.313	0.0	2.78	17.29		9.0
1031	15.24	5.74	273	0.319	0.2	2.73	17.29		9.9
1034	15.27	5.77	274	0.325	0.0	2.67	17.29		10.8
1037	15.25	5.79	276	0.328	0.0	2.62	17.29		11.7
1040	15.30	5.80	277	0.332	0.0	2.58	17.29		12.6
1043									13.5

Total Quantity of Water Removed (gal):
Samplers: LBL, CB
Sampling Date: 3/21/23
Sampling Time: 1043
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: None.
SAMPLE ID: 152140-MW-15D-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-3D (onsite)	EA Personnel: K. Cassidy	Client: NYSDEC 152140
Location: East Farmedale, NY	Well Condition: Good	Weather: 46°F sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): 2" PVC

Purge Date: 3/21/2023	Purge Time: 1025
Purge Method: Low-flow peri pump	Field Technician: K. Cassidy M. Gilkey H. Young

Well Volume

A. Well Depth (ft): 84.21	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.11	E. Well Volume (gal) C*D: (L) 40.84	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 66.11	F. Three Well Volumes (gal) (E3): (L) 122.53	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1026	14.41	6.05	76	0.282	0.0	3.85	18.11	0.25	0
1029	14.38	6.01	90	0.380	0.0	2.91	18.11	0.25	0.75
1032	14.40	5.77	96	0.387	0.0	2.76	18.11	0.25	1.50
1034	14.42	5.79	96	0.402	0.0	2.54	18.11	0.25	2.25
1037	14.35	5.80	97	0.406	0.0	2.46	18.11	0.25	3.00
1040	14.38	5.80	98	0.413	0.0	2.35	18.11	0.25	3.75
1043	14.47	5.80	99	0.413	0.0	2.14	18.10	0.25	4.50
1046	14.48	5.80	100	0.415	0.0	2.10	18.09	0.25	5.25
1049	14.50	5.80	101	0.415	0.0	2.09	18.09	0.25	6.00
1052	14.53	5.80	102	0.415	0.0	2.07	18.09	0.25	6.75
1055	14.53	5.80	102	0.415	0.0	2.06	18.09	0.25	7.50
~~1058~~									

Total Quantity of Water Removed (gal): (L) 7.50
Samplers: K. Cassidy H. Young M. Gilkey
Sampling Date: 3/21/2023

Sampling Time: 1055
Split Sample With:
Sample Type: grab

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-mw-3D(onsite)-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2D (onsite)	EA Personnel: H. Young	Client: NYSDEC (152140)
Location: Heatset (East Farmingdale NY)	Well Condition: good	Weather: 47°F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0915	Well Diameter (in): 2"

Purge Date: 03/21/23	Purge Time: 1048
Purge Method: Low Flow	Field Technician: H. Young

Well Volume

A. Well Depth (ft): 81.94	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.64	E. Well Volume (gal) C*D):	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B): 64.30	F. Three Well Volumes (gal) (E3):	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1048	16.15	5.95	167	0.404	0.0	3.50	17.64	0.25	0.0
1051	16.39	5.77	177	0.413	0.0	2.95	17.64	0.25	0.75
1054	16.47	5.67	182	0.417	0.0	2.61	17.64	0.25	1.50
1057	16.28	5.63	183	0.422	0.0	2.47	17.64	0.25	2.25
1100	16.20	5.62	183	0.423	0.0	2.40	17.66	0.25	3.00
1103	16.12	5.62	183	0.425	0.0	2.32	17.66	0.25	3.75
1106	15.99	5.61	183	0.427	0.0	2.28	17.66	0.25	4.50
1109	15.97	5.61	183	0.428	0.0	2.26	17.66	0.25	5.25
				SAMPLE @ 1110					

Total Quantity of Water Removed (gal):	5.25	Sampling Time:	1110
Samplers:	HY	Split Sample With:	N/A
Sampling Date:	03/21/23	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

SAMPLE ID: 152140 - MW-2D (onsite) - 032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-2PD	EA Personnel: LBL	Client: National Headset Printing NYSDEC #152140
Location: 1 Adams Blvd. loading dock	Well Condition: O.K.	Weather: 50F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): DDC	Gauge Time: 0900	Well Diameter (in): 2

Purge Date: 3/21/23	Purge Time: 1105
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 80.71	D. Well Volume (ft): ~~1.63~~ 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.51	E. Well Volume (gal) C*D: 10.63	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 65.20	F. Three Well Volumes (gal) (E3): 31.89	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1108	15.43	6.19	273	0.314	0.0	0.48	15.51	0.3	0.9
1111	15.44	6.07	279	0.312	0.0	0.00	15.51	|	1.8
1114	15.37	6.02	281	0.311	0.0	0.00	15.51	|	2.7
1117	15.37	6.03	280	0.311	0.0	0.00	15.51	|	3.6
1120	15.42	6.02	282	0.311	0.0	0.00	15.51	|	4.5
1123	15.48	6.02	282	0.311	0.0	0.00	15.51	|	5.4
1126	15.57	6.00	280	0.311	0.0	0.00	15.51	|	6.3
1129	15.53	6.03	277	0.311	0.0	0.00	15.51	|	7.2
1132	15.62	6.00	273	0.311	0.0	0.00	15.51	|	8.1
1135	15.66	6.01	273	0.312	0.0	0.00	15.51	|	9.0

Total Quantity of Water Removed (gal):		Sampling Time:	1135
Samplers:	LBL, CB	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOCs (grab)

COMMENTS AND OBSERVATIONS: None.

Sample ID: 152140-DDC-2-PD-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-2PS	EA Personnel: CB, LBL	Client: National Heatset Printing NYSDEC #152140
Location: On site	Well Condition: OK	Weather: Sunny 45°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): DDC	Gauge Time: 1019	Well Diameter (in): 2

Purge Date: 3/21/2023	Purge Time: 1106
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 25.51	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.39	E. Well Volume (gal) C*D): 1.65	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 10.12	F. Three Well Volumes (gal) (E3): 4.95	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1109	16.36	6.54	225	0.325	17.8	1.41	15.43	0.25	—
1112	15.74	6.57	223	0.327	18.1	0.77	15.43		0.75
1115	15.64	6.58	219	0.326	14.2	0.63	15.43		1.50
1118	15.54	6.58	216	0.325	14.7	0.54	15.43		2.25
1121	15.63	6.58	214	0.324	14.1	0.52	15.43		3.00
1124	15.86	6.58	212	0.323	13.1	0.51	15.43		3.75
1127	15.89	6.59	213	0.322	9.7	0.50	15.43		4.50
1130	15.92	6.59	213	0.322	8.5	0.50	15.43		5.25
1133	15.2	6.58	208	0.332	8.9	0.54	15.43		6.00
1136	14.77	6.57	209	0.332	8.1	0.57	15.43		6.75
1139	14.78	6.55	210	0.330	8.0	0.59	15.43		7.5
1142	14.78	6.55	211	0.329	8.0	0.55	15.43		8.25

Total Quantity of Water Removed (gal):	2.178	Sampling Time:	1142
Samplers:	CB, LBL	Split Sample With:	
Sampling Date:	3/21/2023	Sample Type:	

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-DDC-2-PS-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-5D(onsite)	EA Personnel: K. Cassidy	Client: NYSDEC 152140
Location: East Farmingdale, NY	Well Condition: Good	Weather: 48°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): 2" PVC

Purge Date: 3/21/2023	Purge Time: 1119
Purge Method: low-flow peri pump	Field Technician: K Cassidy M Gilkey H Young

Well Volume

A. Well Depth (ft): 81.09	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.70	E. Well Volume (gal) C*D: 39.78	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 64.39	F. Three Well Volumes (gal) (E3): 119.34	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1121	15.23	6.18	61	0.354	0.0	3.64	15.75	0.25	0
1124	15.14	6.19	62	0.365	0.0	1.16	15.75	0.25	0.75
1127	15.09	6.18	61	0.367	0.0	0.85	15.75	0.25	1.50
1130	15.26	6.18	59	0.367	0.0	0.70	15.75	0.25	2.25
1133	15.23	6.17	59	0.371	0.0	0.65	15.75	0.25	3.00
1136	15.17	6.16	55	0.370	0.0	0.44	15.75	0.25	3.75
1139	15.18	6.15	53	0.370	0.0	0.36	15.75	0.25	4.50
1142	15.18	6.15	53	0.370	0.0	0.36	15.75	0.25	5.25
1145	15.18	6.15	52	0.370	0.0	0.33	15.75	0.25	6.00
1148	15.17	6.15	51	0.368	0.0	0.31	15.75	0.25	6.75
1151	15.29	6.14	51	0.367	0.0	0.36	15.75	0.25	7.50
1154	15.28	6.14	51	0.368	0.0	0.30	15.75	0.25	8.25

Total Quantity of Water Removed (gal): 8.25
Samplers: K Cassidy M Gilkey H Young
Sampling Date: 3/21/2023

Sampling Time: 1154
Split Sample With: —
Sample Type: grab

COMMENTS AND OBSERVATIONS:
Sample ID: 152140-mw-5D(onsite)-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: NW-5S(onsite)	EA Personnel: H. Young	Client: NYSDEC (152140)
Location: Heatset	Well Condition: good	Weather: 52°F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1000	Well Diameter (in): 2"

Purge Date: 03/21/23	Purge Time: 1140
Purge Method: Low Flow	Field Technician: H. Young

Well Volume

A. Well Depth (ft): 26.90	D. Well Volume ~~(ft)~~: 6.40	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.56	E. Well Volume ~~(gal)~~ ~~C*D~~): (L) 6.40	Pump Type: Peri pump
C. Liquid Depth (ft) (A-B): 10.34	F. Three Well Volumes ~~(gal)~~ (E3): (L3) 19.20	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1143	15.27	6.04	-32	0.372	92.1	2.37	16.56	0.25	0.75
1146	14.93	6.01	-27	0.382	67.3	1.59	16.56	0.25	1.50
1149	14.92	6.03	-27	0.384	59.0	1.46	16.56	0.25	2.25
1152	14.96	6.02	-36	0.388	44.9	1.42	16.56	0.25	3.00
1155	15.05	6.05	-51	0.394	29.0	1.36	16.56	0.25	3.75
1158	15.04	6.07	-60	0.397	26.5	1.34	16.56	0.25	4.50
1201	15.16	6.09	-67	0.399	22.5	1.31	16.56	0.25	5.25
1204	15.34	6.14	-78	0.403	10.6	1.28	16.56	0.25	6.00
1207	15.33	6.14	-80	0.404	11.6	1.27	16.56	0.25	6.75
1210	15.35	6.15	-82	0.405	12.8	1.26	16.56	0.25	7.50
				SAMPLE @					
					1210				

Total Quantity of Water Removed (gal):	7.50	Sampling Time:	1210
Samplers:	HY	Split Sample With:	N/A
Sampling Date:	03/21/23	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-NW-5S(onsite)-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2A	EA Personnel: CB, LBL	Client: National Headset Printing #152140 NYSDEC
Location: On Site	Well Condition: OK	Weather: Sunny 48°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1030	Well Diameter (in): 2

Purge Date: 3/21/2023	Purge Time: 1203
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 24.00	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.75	E. Well Volume (gal) C*D): 1.02	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 6.25	F. Three Well Volumes (gal) (E3): 3.06	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1206	14.96	6.72	202	0.224	8.6	5.34	17.73	0.25	—
1209	14.84	6.49	216	0.217	8.0	4.70	17.73	|	0.75
1212	14.80	6.37	224	0.208	6.0	4.30	17.73	|	1.50
1215	14.84	6.31	227	0.204	4.0	3.88	17.73	|	2.25
1218	14.89	6.27	229	0.220	2.1	4.05	17.73	|	3.00
1221	15.06	6.28	228	0.211	2.6	3.75	17.73	|	3.75
1224	15.12	6.26	230	0.212	2.7	3.72	17.73	|	4.50
1227	15.14	6.26	229	0.216	2.2	3.77	17.73	|	5.25
1230	15.17	6.27	229	0.201	2.1	3.31	17.73	|	6.00
1233	15.28	6.25	227	0.204	2.5	3.34	17.73	|	6.75
1236	15.28	6.27	225	0.202	2.4	3.29	17.73	|	7.50

Total Quantity of Water Removed (gal): 1.98
Samplers: CB, LBL
Sampling Date: 3/21/2023

Sampling Time: 1236
Split Sample With: FD
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-MW-2A-032123 / 152140-FD-02-032123
Analysis: VOCs / VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2AD	EA Personnel: LBL, CB, MG	Client: National Heatset Printing NYSDEC #152140
Location: 1 Adams Blvd	Well Condition: O.K.	Weather: 53 F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1200	Well Diameter (in): 1

Purge Date: 3/21/23	Purge Time: 1208
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 78.75	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.31	E. Well Volume (gal) C*D: (L) 9.33	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 60.44	F. Three Well Volumes (gal) (E3): (L) 28.00	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1211	16.19	6.12	56	0.349	5.3	0.00	18.31	0.3	0.9
1214	16.02	6.02	86	0.360	25.7	0.00	18.31		1.8
1217	15.95	5.99	100	0.363	37.5	0.00	18.31		2.7
1220	15.91	5.96	119	0.367	35.7	0.00	18.31		3.6
1223	15.93	5.94	129	0.368	26.9	0.00	18.31		4.5
1226	15.82	5.93	155	0.370	7.3	0.00	18.31		5.4
1229	15.82	5.93	161	0.370	5.2	0.00	18.31		6.3
1232	15.82	5.93	169	0.371	3.1	0.00	18.31		7.2
1235	15.83	5.93	186	0.371	0.0	0.00	18.31		8.1
1238	15.79	5.93	191	0.371	0.0	0.00	18.31		9.0
1241	15.76	5.93	199	0.371	0.0	0.00	18.31		9.9
1244	15.77	5.94	204	0.371	0.0	0.00	18.31		10.8
1247	15.85	5.94	212	0.372	0.0	0.00	18.31		11.7
1250	15.84	5.94	220	0.372	0.0	0.00	18.31		12.6
1253	15.82	5.95	222	0.372	0.0	0.00	18.31		13.5
1256	15.77	5.95	227	0.372	0.0	0.00	18.31		14.4
1259									

Total Quantity of Water Removed (gal):		Sampling Time:	1259
Samplers:	LBL, CB	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOCs (grab)

COMMENTS AND OBSERVATIONS: None.

SAMPLE ID: 152140-MW-2AD-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-10 part 3	EA Personnel: C. Badman	Client: National Headset Printing NYSDEC #152140
Location: On Site	Well Condition: Good	Weather: Sunny 50°F
Sounding Method: Heron Sticky Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1315	Well Diameter (in): 7 Channels = 1.7" Channel = 0.4"

Purge Date: 03/21/2023	Purge Time: 1323
Purge Method: Peristaltic pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 19.96	D. ~~Well Volume (ft)~~: 40mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.52	E. Well Volume (gal) C*D): 0.0576	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 1.44	F. Three Well Volumes (gal) (E3): 0.1728	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1324	18.14	6.55	-46	0.312	1.5	1.73		0.25	—
1327	16.83	6.61	-44	0.316	0.8	1.75		0.25	0.75
1330	16.56	6.62	-36	0.318	0.1	2.00		0.25	1.50
1333	16.38	6.60	-29	0.319	0.0	2.20		0.25	2.25
1336	16.21	6.58	-26	0.321	0.0	2.20		0.25	3.00
1339	16.21	6.55	-24	0.322	0.0	2.14		0.25	3.75
1342	15.92	6.50	-21	0.324	0.4	2.08		0.25	4.50
1345	15.95	6.48	-18	0.325	0.3	2.09		0.25	5.25
1348	15.87	6.45	-16	0.326	0.0	2.21		0.25	6.00
1351	15.68	6.43	-20	0.327	0.0	2.32		0.25	6.75
1354	15.57	6.44	-12	0.329	0.0	2.54		0.25	7.50
1357	15.51	6.42	-11	0.329	0.0	2.56		0.25	8.25
1400	15.40	6.40	-10	0.329	0.0	2.61		0.25	9.00

Total Quantity of Water Removed (gal): L	9.00	Sampling Time:	1400
Samplers:	C. Badman	Split Sample With:	X
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Shallow Interval * due to channel diameter DTW can not be recorded during purge

SAMPLE ID: 152140-CMT-10-3-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-10 part 2	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: On Site	Well Condition: Good	Weather: Sunny 50°F
Sounding Method: Heron Sticky Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1315	Well Diameter (in): 0.4"

Purge Date: 3/21/2023	Purge Time: 1402
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 51.10	D. Well Volume (ft): 0.40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.52	E. Well Volume (gal) C*D: 1.30	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 32.58	F. Three Well Volumes (gal) (E3): 3.90	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1404	15.99	7.03	-140	0.333	240	1.66		0.25	—
1407	16.05	7.14	-150	0.332	225	1.35		0.25	0.75
1410	16.49	7.24	-151	0.330	237	0.94		0.25	1.50
1413	16.71	7.27	-148	0.331	225	0.73		0.25	2.25
1416	16.63	7.31	-144	0.331	227	0.68		0.25	3.00
1419	16.40	7.20	-125	0.305	219	0.51		0.25	3.75
1422	16.20	7.16	-122	0.299	218	0.52		0.25	4.50
1425	16.08	7.01	-115	0.292	116	0.66		0.25	5.25
1428	15.90	6.89	-107	0.280	114	0.74		0.25	6.00
1431	16.05	6.83	-103	0.267	91.8	0.73		0.25	6.75
1434	15.91	6.77	-99	0.258	120	0.70		0.25	7.50
1437	15.83	6.74	-97	0.249	79.5	0.67		0.25	8.25
1440	15.80	6.71	-96	0.239	61.2	0.67		0.25	9.00
1443	15.72	6.69	-91	0.233	58.0	0.69		0.25	9.75
1446	15.74	6.72	-88	0.229	49.5	0.73		0.25	10.50
1449	15.73	6.66	-85	0.225	45.6	0.74		0.25	11.25
1452	15.72	6.65	-84	0.221	43.0	0.75		0.25	12.00

Total Quantity of Water Removed (gal):	12.00	Sampling Time:	1452
Samplers:	C. Badman	Split Sample With:	N
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Intermediate Shallow Interval * DTW can ø be recorded during purge due to channel diameter *

SAMPLE ID = 152140-CMT-10-2-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 Port 3	EA Personnel: K. Cassidy	Client: National Headset Printing NYSDEC #152140
Location: Farmingdale NY	Well Condition: New	Weather: 50 °F sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOC of 7th Channel
Stick Up/Down (ft): Flush/CMT	Gauge Time: 0900	Well Diameter (in): 0.4"

Purge Date: 3/21/2023	Purge Time: 1532
Purge Method: low-flow peri pump	Field Technician: K. Cassidy / M. Gilkey

Well Volume

A. Well Depth (ft): ◊ 50.25	D. Well Volume (ft): 40 m/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.85	E. Well Volume ~~(gal)~~ C*D): (L) 1.38	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 34.40	F. Three Well Volumes ~~(gal)~~ (E3): (L) 4.13	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1534	17.42	7.20	-125	0.788	588	2.26		0.2	
1537	17.27	7.68	-165	0.788	549	1.75		0.1	
~~1540~~				DRY					

Total Quantity of Water Removed (gal):	Sampling Time: 1519
Samplers:	Split Sample With:
Sampling Date:	Sample Type:

COMMENTS AND OBSERVATIONS: bubbles in sample bottles due to soapy/syrupy condition of water sampled prior to purge ~~dry~~
Well ran dry at 1540.

◊ This port went DRY during the Feb 2023 Development x3
↳ Sample was collected before purge for this reason

Shallow/Int port

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 Port 2	EA Personnel: K. Cassidy	Client: National Headset Printing NYSDEC #152140
Location: East Farmingdale, NY	Well Condition: Good	Weather: 56°F sunny
Sounding Method: Heron SF Tinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1347	Well Diameter (in): 0.411

Purge Date: 3/21/2023	Purge Time: 1435
Purge Method: Geo-Flow peri pump	Field Technician: K Cassidy M Gilkey H Young

Well Volume

A. Well Depth (ft): 20-2	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.79 ~~15.20~~	E. Well Volume ~~(gal)~~ C*D: (L) 0.1764	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 4.41	F. Three Well Volumes ~~(gal)~~ (E3): (L) 0.529	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1436	17.98	6.03	-3	0.001	149	5.88		0.25	0
1439	17.98	6.03	-3	0.001	149	5.88			0.75
1442	17.98	6.03	-3	0.001	149	5.88			1.50
1445	17.98	6.03	-3	0.001	149	5.88			2.25
1448	17.53	7.46	-56	0.533	46.6	1.22			3.00
1451	17.38	7.31	-195	0.541	45.2	1.22			3.75
1454	17.30	7.21	-41	0.535	40.0	1.22			4.50
1457	17.16	7.07	-128	0.532	32.8	1.22			5.25
1500	17.08	7.00	-177	0.530	31.4	1.20			6.00
1503	16.99	6.93	-172	0.529	29.5	1.19			6.75
1506	16.90	6.85	-167	0.528	30.0	1.20			7.50
1509	16.81	6.79	-163	0.528	27.3	1.19			8.25
1512	16.74	6.76	-159	0.527	27.0	1.18			9.00
1515	16.64	6.72	-156	0.525	27.2	1.18			9.75
~~1518~~									

turned Hepa filtration →

Total Quantity of Water Removed ~~(gal)~~ (L): 9.75		Sampling Time: 1420	
Samplers: M Gilkey H Young		Split Sample With:	
Sampling Date: 3/21/2023		Sample Type: GRAB	

COMMENTS AND OBSERVATIONS: small bubbles in sample bottles due to soapy consistency of water. Sampled prior to purge. consistent syrup lubricant consistency throughout purge.

Shallow port

◇ DTW can not be recorded due to diameter of CMT port

◇ Sample collect before purge due to port going dry during development x2

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-01-5	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: Farmingdale, NY	Well Condition: Good	Weather: 59°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1350	Well Diameter (in): .4"

Purge Date: 03/21/23	Purge Time: ~~1346~~ 1346
Purge Method: Low-flow → peri pump	Field Technician: LBL

Well Volume

A. Well Depth (ft): 22.35	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.11	E. Well Volume ~~(gal) C*D~~: (L) 0.169	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 4.24	F. Three Well Volumes ~~(gal)~~ (E3): L 0.509	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1346	14.71	6.18	-17	0.243	0	3.89		0.3	0
1349	14.68	6.09	-4	0.235	0	3.28			0.9
1352	14.63	6.05	4	0.230	0	3.32			1.8
1355	14.61	6.03	9	0.228	0	3.35			2.7
1358	14.49	6.02	10	0.227	0	3.19			3.6
1401	14.46	6.02	17	0.226	0	3.17			4.5
1404	14.43	6.02	13	0.225	0	3.15			5.4
1407	14.40	6.01	15	0.225	0	3.04			6.3
1410	14.42	6.00	18	0.224	0	2.96			7.2
1413	14.41	6.00	19	0.223	0	2.95			8.1

Total Quantity of Water Removed (gal):	8.1	Sampling Time:	1413
Samplers:	LBL	Split Sample With:	
Sampling Date:	03/21/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

* NL can ø be recorded during purge due to port diameter

SAMPLE ID: 152140-CMT-1-5-032123
Analysis: VOCs
Interval: Shallow

Port #6 (Int-Shallow)

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-01	EA Personnel: LBL, MG, CB, HH, KC	Client: NYSDEC [National Heatset Printing #152140]
Location: behind warehouse	Well Condition: Good	Weather: 59 F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1350	Well Diameter (in): 0.411

Purge Date: 3/21/23	Purge Time: 1452
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 53.51	D. Well Volume ~~(ft)~~: 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.19	E. Well Volume ~~(gal)~~ C*D): L 1.412	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 35.32	F. Three Well Volumes ~~(gal)~~ (E3): (L) 4.24	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW * (ft btoc)	Rate (Lpm)	Volume (liters)
1455	14.86	6.32	-19	0.268	24.6	0.00	—	0.3	0.9
1458	14.88	6.31	-4	0.272	4.2	0.00	—		1.8
1501	14.95	6.19	17	0.253	0.0	0.97	—		2.7
1504	14.96	6.10	31	0.241	0.0	1.57	—		3.6
1507	14.97	6.03	43	0.232	0.0	2.10	—		4.5
1510	14.99	5.99	49	0.227	0.0	2.36	—		5.4
1513	15.00	5.94	55	0.223	0.0	2.55	—		6.3
1516	14.99	5.91	60	0.219	0.0	2.69	—		7.2
1519	15.00	5.89	63	0.218	0.0	2.76	—		8.1
1522	14.99	5.86	66	0.216	0.0	2.83	—		9.0
1525	14.99	5.86	70	0.215	0.0	2.87	—		9.9
1528	15.00	5.84	70	0.214	0.0	2.94	—		10.8

Total Quantity of Water Removed (gal):		Sampling Time:	1528
Samplers:	LBL	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOC (grab)

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-CMT-1-6-032123
Analysis: VOCs

* could not measure drawdown, well too small to fit both tubing and WLM *

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT - 10 - 1	EA Personnel: C. Badman	Client: National Heatset NYSDEC #152140
Location: On Site	Well Condition: Good	Weather: Sunny 50°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1315	Well Diameter (in): .4"

Purge Date: 3/21/2023	Purge Time: 1510
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 75.00	D. Well Volume ~~(ft)~~: ~~2.256~~ 10 mL/L	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.99	E. Well Volume ~~(gal)~~ C*D): (L) 2-2.5L	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 56.41	F. Three Well Volumes ~~(gal)~~ (E3): L 6.77	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1511	16.40	7.02	-136	0.435	207	2.81		0.25	—
1514	16.65	7.27	-205	0.433	207	1.00			0.75
1517	16.75	7.29	-196	0.442	216	0.72			1.50
1520	16.30	7.43	-163	0.473	217	0.61			2.25
1523	15.81	7.25	-144	0.514	218	0.61			3.00
1526	15.62	6.95	-132	0.529	212	0.50			3.75
1529	15.50	6.83	-123	0.535	118	0.48			4.50
1532	15.28	6.70	-127	0.542	70.9	0.45			5.25
1535	15.24	6.67	-117	0.558	47.8	0.47			6.00
1538	15.19	6.62	-102	0.552	27.0	0.51			6.75
1541	15.19	6.57	-94	0.544	23.9	0.53			7.50
1544	15.18	6.55	-88	0.535	21.1	0.57			8.25
1547	15.23	6.59	-88	0.531	20.6	0.60			9.00
1550	15.23	6.54	-82	0.525	19.3	0.61			9.75

Total Quantity of Water Removed (gal):	9.75	Sampling Time:	1550
Samplers:	C. Badman	Split Sample With:	—
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:
Interval: Intermediate Deep Interval
SAMPLE ID: 152140-CMT-10-1-032123
Analysis: VOCs
* WL can ø be recorded during purge due to channel diameter

Port #1 (Int-Deep)

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-01	EA Personnel: LBL	Client: NYSDEC
Location: behind warehouse	Well Condition: Good	Weather: 58 F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1350	Well Diameter (in): .4"

Purge Date: 3/21/23	Purge Time: 1535
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 73.39	D. Well Volume ~~(ft)~~: 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.09	E. Well Volume ~~(gal)~~ C*D): (L) 2.212	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 55.3	F. Three Well Volumes ~~(gal)~~ (E3): (L) 6.64	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW * (ft btoc)	Rate (Lpm)	Volume (liters)
1538	14.74	6.50	-63	0.443	6.5	0.00	—	0.3	0.9
1541	14.75	6.52	-60	0.473	1.8	0.00	—	|	1.8
1544	14.81	6.46	-59	0.534	1.3	0.00	—	|	2.7
1547	14.84	6.37	-49	0.519	0.0	0.00	—	|	3.6
1550	14.78	6.28	-36	0.503	0.0	0.00	—	|	4.5
1553	14.80	6.25	-32	0.498	0.0	0.00	—	|	5.4
1556	14.75	6.21	-26	0.492	0.0	0.00	—	|	6.3
1559	14.74	6.19	-21	0.489	0.0	0.00	—	|	7.2
1602	14.73	6.17	-18	0.486	0.0	0.00	—	|	8.1
1605	14.70	6.15	-14	0.483	0.0	0.00	—	|	9.0

Total Quantity of Water Removed (gal):		Sampling Time:	1605
Samplers:	LBL	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOC (grab)

COMMENTS AND OBSERVATIONS: * could not measure drawdown, well too small to fit both tubing and WLM *

SAMPLE ID: 152140-CMT-1-1-032123

Analyses: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 Port 4	EA Personnel: K Cassidy	Client: National Heatset Printing NYSDEC #152190
Location: E. Farmingdale, NY	Well Condition: Good	Weather: 56°F Sunny
Sounding Method: Tape	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1345	Well Diameter (in): ~~2~~ ~~PP~~

Purge Date: 3/21/2023	Purge Time: 1547
Purge Method: low-flow peri pump	Field Technician: K Cassidy M Gilkey H Young

Well Volume

A. Well Depth (ft): 71.00	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.98	E. Well Volume ~~(gal)~~ ~~(C)~~ (D): (L) 2.2	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 55.02	F. Three Well Volumes ~~(gal)~~ (E3): (L) 6.6	Pump Intake Depth: Mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1549	15.69	7.89	-134	0.384	943	3.77		0.25	0
1552	15.48	7.28	-117	0.381	171	2.74		0.25	0.75
1555	15.45	7.01	-114	0.385	121	1.56		0.25	1.50
1558	15.46	6.94	-117	0.387	103	1.45		0.25	2.25
1601	15.41	6.81	-118	0.390	150	1.27		0.25	3.00
1604	15.41	6.81	-126	0.391	159	1.24		0.25	3.75
1607	15.40	6.77	-129	0.394	179	1.22		0.25	4.5
1610	15.36	6.73	-130	0.403	184	1.20		0.25	5.25
1613	15.37	6.68	-124	0.385	265	1.20		0.25	6.0
1616	15.36	6.58	-113	0.388	154	1.20		0.25	6.75
1619	15.35	6.49	-101	0.402	185	1.20		0.25	7.50
1622	15.34	6.45	-106	0.408	256	1.20		0.25	8.25
1625	15.33	6.45	-102	0.409	233	1.20		0.25	9.00
1628	15.29	6.42	-99	0.420	159	1.20		0.25	9.75
1631	15.29	6.44	-99	0.421	168	1.26		0.25	10.5
1634	15.25	6.49	-98	0.423	137	1.35		0.25	11.25
1637	15.25	6.43	-97	0.423	131	1.25		0.25	12.00

Total Quantity of Water Removed (gal): 29.25
Samplers: K Cassidy M Gilkey H Young
Sampling Date: 3/21/2023
Sampling Time: 1757
Split Sample With:
Sample Type: grab

COMMENTS AND OBSERVATIONS: *WL can not be taken during purge due to channel diameter
SAMPLE ID: 152140-CMT-8-4-032123
VOCs → Analysis
Interval: Intermediate/Deep

Dat 4 Pg 2

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 Pad 4	EA Personnel: K Cassidy	Client: NYSDEC
Location:	Well Condition: SEE PAGE 1	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1640	15.24	~~6.42~~ 6.42	-96	0.474	107	1.24		0.25	12.75
1643	15.21	6.43	-96	0.436	70.9	1.23		0.25	13.5
1646	15.18	6.446	-97	0.446	49.6	1.23		0.25	14.25
1649	15.18	6.44	-97	0.446	92.1	1.22		0.25	15.00
1652	15.18	6.47	-97	0.448	59.8	1.24		0.25	15.75
1655	15.14	6.47	-97	0.452	69.1	1.24		0.25	16.5
1658	15.14	6.47	-97	0.451	38.1	1.24		0.25	17.25
1701	15.15	6.47	-96	0.457	62.6	1.25		0.25	18.00
1704	15.16	6.47	-96	0.457	47.9	1.25		0.25	18.75
1707	15.16	6.47	-96	0.453	47.9	1.25		0.25	19.50
1710	15.11	6.47	-96	0.453	43.4	1.25		0.25	20.25
1713	15.11	6.46	-95	0.457	14.2	1.25		0.25	21.00
1716	15.13	6.44	-94	0.458	29.6	1.25		0.25	21.75
1719	15.12	6.44	-92	0.461	12.3	1.25		0.25	22.5
1722	15.12	6.44	-92	0.461	22.2	1.27		0.25	23.25
1725	15.12	6.461	-92	0.461	40.3	1.27		0.25	24.00
1728	15.12	6.43	-88	0.465	17.5	3.98		0.25	24.75

Total Quantity of Water Removed (gal): _____ Sampling Time: _____

Samplers: _____ Split Sample With: _____

Sampling Date: _____ Sample Type: _____

COMMENTS AND OBSERVATIONS: SEE PAGE 1

POR4 Pg 3

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 POR4	EA Personnel: K. Cassidy	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

SEE PAGE 1

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1730	15.13	6.58	-88	0.464	10.1	1.84		0.25	25.5
1733	15.13	6.50	-88	0.461	12.3	1.84		0.25	26.25
1736	15.10	6.40	-86	0.467	21.3	1.36		0.25	27.00
1739	15.10	6.40	-85	0.466	8.0	1.36		0.25	27.75
1742	15.08	6.39	-85	0.466	43.1	1.36		0.25	28.5
1745	15.08	6.40	-85	0.466	21.1	1.36		0.25	29.25
1748	15.04	6.36	-83	0.466	35.8	1.35			
1751	15.06	6.39	-83	0.466	38.0	1.35			

Total Quantity of Water Removed (gal):	Sampling Time: 1751
Samplers:	Split Sample With:
Sampling Date:	Sample Type:

COMMENTS AND OBSERVATIONS:

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-5-1	EA Personnel: C. Badman / L. Buckman Lab	Client: National Heatset Printing NYSDEC #152140
Location: North Amityville, NY	Well Condition:	Weather: ~50°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/23	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4"

Purge Date: 03/21/23	Purge Time: 1607
Purge Method: Low flow Peri pump	Field Technician: C. Badman / LBL

Well Volume

A. Well Depth (ft): 22.90	D. Well Volume (~~ft~~): ~~0.161~~ 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.86	E. Well Volume (gal) C*D): 0.161 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 4.04	F. Three Well Volumes (~~gal~~) (E3): 0.484 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1607	18.66	7.25	-179	0.386	25.7	1.09		0.25	0
1610	18.46	7.98	-243	0.386	26.4	0.45			0.75
1613	18.47	8.22	-285	0.393	27.8	0.43			1.5
1616	18.52	8.24	-287	0.393	27.2	0.41			2.25
1619	18.56	8.20	-282	0.396	28.1	0.38			3.0
1622	18.54	8.14	-277	0.398	30.1	0.35			3.75
1625	18.56	8.07	-269	0.400	30.4	0.35			4.5
1628	18.56	8.03	-263	0.402	29.6	0.32			5.25
1631	18.55	7.96	-257	0.403	28.8	0.31			6.0
1634	18.57	7.89	-249	0.403	27.2	0.29			6.75
1637	18.50	7.81	-242	0.407	26.4	0.28			7.5
1640	18.53	7.79	-241	0.407	26.1	0.27			8.25
1643	18.54	7.73	-234	0.409	25.0	0.27			9.0

Total Quantity of Water Removed (~~gal~~):	9.0 L	Sampling Time:	1643
Samplers:	CB/LBL	Split Sample With:	N
Sampling Date:	03/21/22	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

Interval: Shallow
Analysis: VOCs
SAMPLE ID: 152140-CMT-5-1-032123

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15 (onsite)	EA Personnel: H.Young	Client: NYSDEC (152140)
Location: Heatset (East Farmingdale NY)	Well Condition: good	Weather: 34°F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0840	Well Diameter (in): 2"

Purge Date: 03/21/23	Purge Time: 0753
Purge Method: Low Flow	Field Technician: H.Young

Well Volume

A. Well Depth (ft): 30.76	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.29	E. Well Volume (gal) C*D): L 8.45	Pump Type: Peri pump
C. Liquid Depth (ft) (A-B): 13.47	F. Three Well Volumes (gal) (E3): L 25.04	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0753	8.09	5.15	277	0.297	3.0	11.18	17.29	0.20	0.00	
0756	8.70	5.46	269	0.285	0.0	8.43	17.29	0.20	1.50	0.6
0759	9.35	5.69	261	0.277	0.0	7.78	17.29	0.20	2.25	1.20
0802	9.98	5.82	252	0.271	0.0	7.35	17.29	0.20	3.00	1.80
0805	10.21	5.88	249	0.264	0.0	7.35	17.29	0.20	3.75	2.40
0808	10.40	5.93	245	0.265	0.0	7.24	17.29	0.20	4.50	3.0
0811	10.51	5.96	243	0.266	0.0	7.03	17.29	0.20	5.25	3.6
0814	10.62	5.98	242	0.267	0.0	6.90	17.29	0.20	6.00	4.2
0817	10.78	5.99	240	0.265	0.0	6.90	17.26	0.20	6.75	4.8
0820	10.86	6.00	239	0.264	0.0	6.93	17.26	0.20	7.50	5.40
				SAMPLE @ 0820						

Total Quantity of Water Removed (gal): L 5.40
Samplers: HN
Sampling Date: 03/21/23
Sampling Time: 0820
Split Sample With: N/A
Sample Type: Grab

COMMENTS AND OBSERVATIONS:
Sample ID: 152140 - MW-15(offsite) - 032123
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14S	EA Personnel: LBL	Client: NYSDEC [National Heatset Printing] 152140
Location: 1 Adams Blvd turnaround	Well Condition: O.K.	Weather: 34 F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0945	Well Diameter (in): 1" PVC

Purge Date: 3/21/23	Purge Time: 0734
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 26.35	D. Well Volume (ft): ~~0.163~~ 0.141	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.08	E. Well Volume (gal) C*D: 0.38 ~~1.51~~	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 9.27	F. Three Well Volumes (gal) (E3): 1.14 ~~4.53~~	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0737	13.18	5.22	293	0.449	41.3	4.37	17.08	0.3	0.9
0740	13.43	5.53	297	0.369	20.8	4.56	17.08		1.8
0743	13.62	5.64	273	0.339	12.1	4.69	17.08		2.7
0746	13.78	5.70	269	0.320	6.9	4.80	17.08		3.6
0749	13.79	5.76	265	0.325	2.8	4.85	17.08		4.5
0752	13.80	5.80	264	0.319	1.1	4.87	17.09		5.4
0755	13.85	5.82	263	0.312	1.4	4.90	17.09		6.3
0758	13.88	5.85	261	0.324	0.4	4.94	17.10		7.2
0801	13.94	5.88	259	0.321	0.0	4.99	17.10		8.1
0804	13.96	5.92	257	0.323	0.0	5.01	17.10		9.0
0807									9.9

Total Quantity of Water Removed (gal): 9.9L → 2.6 gal
Samplers: LBL, CB
Sampling Date: 3/21/23
Sampling Time: 0807
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: None.
Sample ID: 152140-MW-14S-032123
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-1D (on site)	EA Personnel: K. Cassidy	Client: NYSDEC 152140
Location: East Farmingdale, NY	Well Condition: Good	Weather: 34°F Sunny
Sounding Method:	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time:	Well Diameter (in): 2" PVC

Purge Date: 3/21/2023	Purge Time: 0750
Purge Method: Low-flow peri pump	Field Technician: M. Gilkey H Young K Cassidy

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0752	9.12	4.88	200	0.428	6.2	5.17	17.45	0.25	0.75
0755	10.20	5.22	183	0.392	8.1	4.17	17.45	0.25	1.50
0758	10.52	5.27	177	0.385	6.2	3.96	17.45	0.25	2.25
0801	10.90	5.32	171	0.382	1.8	3.84	17.45	0.25	3.00
0804	11.16	5.37	166	0.382	0.0	3.78	17.45	0.25	3.75
0807	11.26	5.41	163	0.383	0.0	3.74	17.45	0.25	4.50
0810	11.38	5.49	157	0.386	0.0	3.71	17.45	0.25	5.25
0813	11.52	5.55	152	0.391	0.0	3.68	17.45	0.25	6.00
0816	11.46	5.62	148	0.396		3.63	17.45	0.25	6.75
0819	11.78	5.67	145	0.404	0.0	3.58	17.45	0.25	7.50
0822	11.90	5.70	143	0.405	0.0	3.46	17.45	0.25	8.25
0825	11.93	5.72	142	0.411	0.0	3.43	17.45	0.25	9.00
0828	12.02	5.73	140	0.419	0.0	3.39	17.45	0.25	9.75
0831	12.11	5.74	139	0.418	0.0	3.37	17.45	0.25	10.50
0834	12.17	5.75	138	0.420	0.0	3.35	17.45	0.25	11.25
0837	12.21	5.76	137	0.421	0.0	3.33	17.45	0.25	12.00

Total Quantity of Water Removed (gal):		Sampling Time:	0837
Samplers:	K Cassidy M Gilkey H Young	Split Sample With:	—
Sampling Date:	3/21/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14D	EA Personnel: CB, LBL	Client: National Headset Printing NYSDEC #152140
Location: Farmingdale NY On site	Well Condition: OK	Weather: Sunny 40°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0805	Well Diameter (in): 1

Purge Date: 03/21/2023	Purge Time: 0734
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 76.65	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.92	E. Well Volume (gal) C*D): 2.45	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 59.73	F. Three Well Volumes (gal) (E3): 7.35	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
737	13.65	5.84	223	1.42	26.4	0.0	16.93	0.25	—
740	13.76	5.91	217	1.50	24.1	0.0	16.93	0.25	0.75
743	13.97	5.93	216	1.48	44.8	0.0	16.93	0.25	1.50
746	13.98	5.93	216	1.44	49.7	0.0	16.93	0.25	2.25
749	14.10	5.94	212	1.36	47.3	0.0	16.93	0.25	3.00
752	14.18	5.93	202	1.25	46.1	0.0	16.93	0.25	3.75
755	14.12	5.93	189	1.14	43.1	0.0	16.93	0.25	4.50
758	14.11	5.95	179	1.03	35.3	0.14	16.93	0.25	5.25
801	14.15	5.93	173	0.964	28.5	0.28	16.93	0.25	6.00
804	14.19	5.92	167	0.887	23.2	0.41	16.93	0.25	6.75
807	14.23	5.92	163	0.826	19.9	0.51	16.93	0.25	7.50
810	14.26	5.93	159	0.767	18.7	0.60	16.93	0.25	8.25
813	14.32	5.93	158	0.711	17.0	0.68	16.93	0.25	9.00
816	14.37	5.94	157	0.682	22.9	0.74	16.93	0.25	9.75
819	14.45	5.94	156	0.641	18.9	0.77	16.93	0.25	10.50
822	14.47	5.95	157	0.607	14.7	0.84	16.93	0.25	11.25
825	14.44	5.95	157	0.576	11.2	0.87	16.93	0.25	12.00

Total Quantity of Water Removed (gal)(L)	116.50	Sampling Time:	0843
Samplers:	CB, LBL	Split Sample With:	X
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-MW-14D-032123
Analysis: VOCs

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See Page #1

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14D	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
828	14.54	5.95	158	0.552	8.9	0.91	16.93	0.25	12.75
831	14.62	5.95	159	0.531	7.0	0.97	16.93	0.25	13.50
834	14.65	5.96	159	0.515	4.7	1.00	16.93	0.25	14.25
837	14.69	5.95	162	0.491	4.0	1.04	16.93	0.25	15.00
840	14.75	5.95	164	0.484	3.8	1.05	16.93	0.25	15.75
843	14.82	5.94	166	0.479	3.8	1.07	16.93	0.25	16.50

Total Quantity of Water Removed (gal): 4.35G
Samplers: CB, LBL
Sampling Date: 3/21/2023
Sampling Time: 843
Split Sample With:
Sample Type:

COMMENTS AND OBSERVATIONS:

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EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-4PS	EA Personnel: CB, LBL	Client: National Heatset Printing NYSDEC #152140
Location: On-Site	Well Condition: OK	Weather: Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): DDC	Gauge Time: 1000	Well Diameter (in): 2

Purge Date: 03/21/2023	Purge Time: 0903
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 25.84	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.13	E. Well Volume (gal) C*D): 1.75	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 10.71	F. Three Well Volumes (gal) (E3): 5.25	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
904	13.98	6.08	247	0.301	9.4	3.95	15.07	0.25	—
907	14.20	6.06	248	0.300	8.3	3.18	15.07	0.25	0.75
910	14.40	6.06	249	0.300	6.8	2.98	15.07	0.25	1.50
913	14.53	6.05	249	0.300	5.2	2.78	15.07	0.25	2.25
916	14.56	6.06	249	0.299	4.4	2.72	15.07	0.25	3.00
919	14.62	6.07	249	0.299	3.6	2.59	15.07	0.25	3.75
922	14.62	6.06	250	0.299	3.1	2.47	15.07	0.25	4.50
925	14.66	6.06	250	0.300	2.5	2.35	15.07	0.25	5.25
928	14.66	6.06	250	0.299	2.4	2.32	15.07	0.25	6.00
931	14.69	6.07	249	0.298	2.4	2.25	15.07	0.25	6.75

Total Quantity of Water Removed (gal):	1.782	Sampling Time:	931
Samplers:	CB, LBL	Split Sample With:	X
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-DDC-4-PS-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-4PD	EA Personnel: LBL	Client: National Headset Printing NYSDEC 152140
Location: Farmingdale, NY	Well Condition: O.K.	Weather: 39 F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): DDC	Gauge Time: 1000	Well Diameter (in): 2

Purge Date: 3/21/23	Purge Time: 0905
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 79.82	D. Well Volume (ft): 0.163 gal/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.23	E. Well Volume (gal) C*D): 10.53	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 64.59	F. Three Well Volumes (gal) (E3): 31.59	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0908	15.39	6.23	189	0.129	3.2	4.97	15.24	0.3	0.9
0911	15.68	6.20	204	0.122	1.3	4.67	15.21		1.8
0914	15.75	6.25	210	0.121	1.4	4.72	15.21		2.7
0917	15.80	6.30	211	0.120	1.5	4.77	15.21		3.6
0920	15.84	6.31	216	0.120	0.9	4.71	15.21		4.5
0923	15.88	6.27	223	0.120	0.0	4.37	15.21		5.4
0926	15.84	6.18	233	0.121	0.0	4.26	15.21		6.3
0929	15.93	6.18	237	0.120	0.0	3.99	15.21		7.2
0932	15.87	6.18	243	0.120	0.0	3.93	15.21		8.1
0935									9.0

Total Quantity of Water Removed (gal):
Samplers: LBL, CB
Sampling Date: 3/21/23

Sampling Time: 0935
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS:
Sample ID: 152140-DDC-4B-PD-032123
Analysis: VOCs

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EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-35 (onsite)	EA Personnel: K. Cassidy	Client: National Headset Printing NYSDEC #152140
Location: East Farmingdale, NY	Well Condition: Good	Weather: 46°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): 2" PVC

Purge Date: 3/21/2023	Purge Time: 0925
Purge Method: Low-flow peri pump	Field Technician: K Cassidy, M Gilkey, H Young

Well Volume

A. Well Depth (ft): 29.80	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.17	E. Well Volume ~~(gal) C~~ D (L) 7.18	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 11.63	F. Three Well Volumes ~~(gal) (E3)~~ (L) 21.55	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0926	12.88	6.15	97	0.343	0.0	4.91	18.10	0.25	0.75	0
0929	13.04	6.15	92	0.343	0.0	4.55	18.10	0.25	1.50	0.75
0932	13.15	6.16	92	0.343	0.0	4.52	18.10	0.25	2.25	1.50
0935	13.24	6.16	90	0.341	0.0	4.50	18.10	0.25	3.00	2.25
0938	13.28	6.17	90	0.337	0.0	4.45	18.10	0.25	3.75	3.00
0941	13.49	6.17	90	0.339	0.0	4.35	18.10	0.25	4.50	3.75
0944	13.53	6.17	90	0.346	0.6	4.42	18.10	0.25	5.25	4.50
0947	13.50	6.16	90	0.341	1.8	4.44	18.10	0.25	6.00	5.25
0950	13.51	6.16	89	0.340	2.0	4.50	18.10	0.25	6.75	6.00
0953	13.52	6.16	86	0.338	1.1	4.48	18.10	0.25	7.50	6.75
0956	13.56	6.15	85	0.340	0.8	4.51	18.10	0.25	8.25	7.50
0959	13.62	6.15	83	0.337	0.0	4.54	18.10	0.25	9.00	8.25
1002	13.66	6.16	81	0.337	0.0	4.53	18.10	0.25	9.75	9.00
1005	13.70	6.16	81	0.336	0.0	4.51	18.10	0.25	10.50	9.75

Total Quantity of Water Removed (gal): 9.75
Samplers: M Gilkey H Young
Sampling Date: 3/21/2023

Sampling Time: 1005
Split Sample With:
Sample Type: grab

COMMENTS AND OBSERVATIONS:
Sample ID: 152140-MW-35(onsite)-032123
Analysis: VOCs

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EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-7	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 3/22/2023	Purge Time: 0727
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 52.36	D. Well Volume (ft): 30mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.4	E. Well Volume (gal) C*D): 988.8 mL	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 32.96	F. Three Well Volumes (gal) (E3): 2.966 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
730	12.56	4.00	280	0.434	97.8	7.08		0.25	—	0.15
733	14.85	6.19	-17	0.436	56.5	7.21			0.75	0.9
736	15.51	6.97	-99	0.489	53.2	6.89			1.50	1.65
739	15.99	7.39	-130	0.489	44.6	6.47			2.25	2.4
742	16.22	7.58	-143	0.488	41.9	6.21			3.00	3.15
745	16.53	7.74	-164	0.477	41.3	5.87			3.75	3.90
748	16.52	7.79	-168	0.477	40.0	5.84			4.50	4.65
751	16.61	7.83	-175	0.473	38.6	5.69			5.25	5.40
754	16.87	7.90	-182	0.466	35.0	5.30			6.00	6.15
757	16.95	7.92	-186	0.463	32.4	5.18			6.75	6.90
800	16.98	7.94	-189	0.458	32.4	5.14			7.50	7.65
CDP 803										
806										
809										

Total Quantity of Water Removed (gal): 2.02
Samplers: C. Badman
Sampling Date: 3/22/2023
Sampling Time: 0800
Split Sample With: N/A
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:
Intermediate Shallow Interval
Port diameter too small to fit Meter down
SAMPLE ID: 152140-CMT-5-7-032223
Analysis: VOCs

Port #1 (Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-06	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in):

Purge Date: 3/21/23	Purge Time: ~~1642~~ ~~1652~~ 1705
Purge Method: low flow-peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 23.30	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.60	E. Well Volume (gal) C*D: .180	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 4.70	F. Three Well Volumes (gal) (E3): 0.564	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW* (ft btoc)	Rate (Lpm)	Volume (liters)
1708	17.44	7.66	-199	0.420	53.9	0.91	—	0.3	0.9
1711	17.41	7.75	-225	0.511	62.6	0.00	—		1.8
1714	17.31	7.67	-228	0.532	55.6	0.00	—		2.7
1717	17.29	7.62	-227	0.532	47.6	0.00	—		3.6
1720	17.25	7.55	-224	0.534	40.6	0.00	—		4.5
1723	17.23	7.52	-221	0.536	37.1	0.00	—		5.4
1726	17.22	7.50	-220	0.537	36.5	0.00	—		6.3
1729	17.21	7.48	-218	0.538	34.6	0.00	—		7.2
1732	17.21	7.48	-216	0.538	33.9	0.00	—		8.1
1735	17.19	7.47	-215	0.538	33.4	0.00	—		9.0
							—		

Total Quantity of Water Removed (gal): ~~150~~
Samplers: LBL
Sampling Date: 3/21/23

Sampling Time: ~~1650~~ 1705
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: ~~Water~~ water smells of sulfur, brown, bubbly, viscous

* could not measure drawdown, well too small to fit both tubing and WLM*

☆Sample collected first due to port going dry during development

Port #3 (Int. - Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-06	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Chanel

Purge Date: 3/22/23	Purge Time: 0727
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 43.42	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.90	E. Well Volume ~~(gal) C*D~~: L 0.980	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 24.52	F. Three Well Volumes ~~(gal)~~ (E3): 2.94 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0730	15.40	5.79	-105	0.672	120	2.50	—	0.3	0.9
0733	15.87	6.74	-253	0.681	114	1.56	—		1.8
0736	15.94	7.03	-268	0.719	46.5	0.93	—		2.7
0739	16.03	7.10	-269	0.725	35.8	0.62	—		3.6
0742	16.11	7.11	-266	0.693	26.2	0.49	—		4.5
0745	16.15	7.10	-263	0.676	24.3	0.45	—		5.4
0748	16.21	7.08	-258	0.663	21.1	0.44	—		6.3
0751	16.24	7.07	-256	0.659	20.2	0.44	—		7.2
0754	16.28	7.05	-255	0.653	18.9	0.45	—		8.1
0757	16.31	7.01	-254	0.644	16.3	0.48	—		9.0
0800	16.33	6.98	-251	0.637	13.9	0.51	—		9.9
0803	16.39	6.96	-250	0.620	12.7	0.62	—		10.8
0806	16.41	6.91	-249	0.617	12.1	0.56	—		11.7
0809	16.42	6.88	-247	0.609	11.9	0.52	—		12.6
0812	16.42	6.86	-246	0.603	11.4	0.52	—		13.5
0815	16.46	6.81	-243	0.598	10.8	0.51	—		14.4

Total Quantity of Water Removed (gal): ____
Samplers: LBL
Sampling Date: 3/22/23
Sampling Time: 0815
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: *could not measure drawdown, well too small to fit both tubing and WLM*
SAMPLE ID: 152140-CMT-6-3-032223
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 4	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E Farmingdale, NY	Well Condition: Good	Weather: 45°F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1625	Well Diameter (in): 0.4" CMT Channel D.

Purge Date: 3/22/2023	Purge Time: 0756
Purge Method: Low flow peristaltic pump	Field Technician: M Gilkey H Young K Cassidy

Well Volume

A. Well Depth (ft): 20.20	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.71	E. Well Volume ~~(gal)~~ C*D): .059 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 1.49	F. Three Well Volumes ~~(gal)~~ (E3): 0.1788 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0757	11.43	4.24	255	0.803	70.0	5.70		0.2	0
0800	13.96	6.01	5	0.966	58.7	5.60		0.2	0.6
0803	16.08	7.00	-71	0.886	37.1	6.28		0.2	1.2
0806	16.10	7.06	-86	0.888	32.0	6.29		0.2	1.8
0809	16.50	7.31	-95	0.871	29.1	6.74		0.2	2.4
0812	17.11	7.47	-96	0.857	26.0	6.56		0.2	3.0
0815	17.46	7.54	-95	0.840	28.1	6.47		0.2	3.6
0818	— dry —								
0821									

Total Quantity of Water Removed (gal):	3.6	Sampling Time:	0746
Samplers:	K. Cassidy/M. Gilkey	Split Sample With:	◇
Sampling Date:	03/22/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Syrupy/soapy consistency of water. Went dry @ 0818.

Interval: Shallow

SAMPLE ID: 152140-CMT-2-4-032223 Analysis: VOCs

◇WL can ∅ be recorded during purge due to CMT channel diameter

◇Sample collected before purge due to well going dry during development

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 6	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E Farmingdale, NY	Well Condition: Good	Weather: 45°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1630	Well Diameter (in): 0.41" CMT Channel

Purge Date: 3/22/2023	Purge Time: 0822
Purge Method: low-flow peri pump	Field Technician: K Cassidy MGilkey H Yang

Well Volume

A. Well Depth (ft): 51.80	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC: —
B. Depth to Water (ft): 18.51	E. Well Volume (~~gal~~) C*D): 1.33 L	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 33.29	F. Three Well Volumes (gal) (E3): 3.99 L	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0824	17.70	7.59	-144	0.475	37.4	2.05		0.20	0.40
0827	17.47	7.15	-143	0.557	29.6	1.67		0.20	1.00
0830	17.42	7.02	-139	0.573	24.3	1.54		0.20	1.60
0833	17.39	6.92	-136	0.584	21.0	1.48		0.20	2.20
0836	17.38	6.79	-135	0.595	19.0	1.44		0.20	2.8
0839	17.36	6.69	-129	0.594	16.0	1.49		0.20	3.40
0842	17.34	6.64	-123	0.590	15.8	1.52		0.20	4.00
0845	17.35	6.56	-110	0.581	15.9	1.56		0.20	4.60
0848	17.35	6.52	-105	0.579	14.3	1.57		0.20	5.20
0851	17.41	6.47	-98	0.576	14.0	1.55		0.20	5.80
0854	17.49	6.39	-93	0.575	12.5	1.58		0.20	6.40
0857	17.55	6.40	-88	0.572	12.8	1.53		0.20	7.00
0900	17.56	6.39	-86	0.570	12.5	1.51		0.20	7.60

Total Quantity of Water Removed (gal):
Samplers: HY, MG, KC, LBL, CB
Sampling Date: 03/22/23

Sampling Time: 0900
Split Sample With: N/A
Sample Type: Grab

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-CMT-2-6-032223
Interval: Int/Shallow
Analysis: VOCs

*NL can not be collected during purge due to CMT Channel diameter

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-3	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 3/22/2023	Purge Time: 0813
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 73.4	D. Well Volume (ft): 40 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.2	E. Well Volume (gal) C*D): 2.168 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 54.2	F. Three Well Volumes (gal) (E3): 6.504 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0816	17.72	8.43	-92	0.278	103	4.89		0.25	—	0.15
0819	17.49	8.62	-174	0.324	95.4	4.18			0.75	0.90
0822	17.60	8.31	-187	0.345	114	3.53			1.50	1.65
0825	17.66	8.12	-191	0.346	125	3.36			2.25	2.40
0828	17.72	7.94	-186	0.348	137	3.12			3.00	3.15
0831	17.77	7.85	-186	0.356	147	2.93			3.75	3.90
0834	17.74	7.82	-191	0.360	146	2.89			4.50	4.65
0837	17.77	7.81	-194	0.366	152	2.75			5.25	5.40
0840	17.77	7.79	-197	0.380	158	2.66			6.00	6.15
0843	17.79	7.77	-195	0.393	151	2.51			6.75	6.90
0846	17.83	7.76	-195	0.397	151	2.33			7.50	7.65
0849	17.89	7.72	-187	0.399	118	2.54			8.25	8.40
0852	17.88	7.71	-187	0.401	111	2.78			9.00	9.15
0855	17.94	7.69	-190	0.403	112	2.58			9.75	9.90
0858	17.97	7.67	-180	0.407	71.3	2.48			10.50	10.65
0901	18.01	7.67	-186	0.409	76.9	2.52			11.25	11.40
0904	18.04	7.66	-186	0.407	81.7	2.47			12.00	12.15

Total Quantity of Water Removed (gal): 4.40
Samplers: C. Badman
Sampling Date: 3/22/2023
Sampling Time: 0922
Split Sample With: N/A
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:
Intermediate Deep Interval
Port Diameter too small to fit meter down
SAMPLE ID: 152140-CMT-5-3-032223 Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-3	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0907	18.11	7.65	-186	0.410	76.7	2.60		0.25	~~12.75~~	12.90
0910	18.09	7.61	-184	0.413	80.5	3.01		|	~~13.50~~	13.65
0913	18.08	7.62	-182	0.413	84.2	3.23		|	~~14.25~~	14.40
0916	18.10	7.62	-185	0.415	28.4	2.03		|	~~15.00~~	15.15
0919	18.39	7.57	-185	0.414	27.7	1.86		|	~~15.75~~	15.90
0922	18.26	7.58	-186	0.414	28.6	1.88		|	~~16.50~~	16.65

Total Quantity of Water Removed (gal): ~~0.25~~ 4.40 Sampling Time: 0922
Samplers: C. Bachman Split Sample With:
Sampling Date: 3/22/2023 Sample Type:

COMMENTS AND OBSERVATIONS:
See page 1

Port #6 (Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-03	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Channel
Purge Date: 3/22/23	Purge Time: ~~0953~~ 1001	
Purge Method: low flow - peri	Field Technician: LBL/CB/MG/HY/KC	

Well Volume

A. Well Depth (ft): 19.75	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.61	E. Well Volume (gal) C*D): 0.0460 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 1.14	F. Three Well Volumes (gal) (E3): 0.1368 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW* (ft btoc)	Rate (Lpm)	Volume (liters)
1004	18.97	6.84	-148	0.812	43.4	2.61	—	0.3	0.9
1007	19.26	7.11	-185	0.808	40.9	1.25	—	|	1.8
1010	19.35	7.20	-194	0.820	39.2	0.73	—	|	2.7
1013	19.21	7.20	-171	0.816	27.5	0.69	—	|	3.6
1016	18.67	7.26	-149	0.802	48.7	0.62	—	|	~~4.5~~
1019	—	—	DRY	—	—	—	—	|	5.4
1022							—	|	6.3
1025							—	|	7.2
1028							—	|	8.1
1031							—	|	9.0

Total Quantity of Water Removed (gal): 4.5 L
Samplers: LBL
Sampling Date: 3/22/23
Sampling Time: 0958
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS:
well dry @ 1019 A.M.

* could not measure drawdown, well too small to fit both tubing and WLM*

SAMPLE ID: 152140-CMT-3-6-032223
Analysis: VOCs

◇ Sample collected prior to purge due to well going dry during development

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 7	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E Farmingdale, NY	Well Condition: Good	Weather: 45°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1633	Well Diameter (in): ~~0.4~~ 3/8" CMT Channel

Purge Date: 3/22/2023	Purge Time: 0911
Purge Method: Low-flow peri pump	Field Technician: K Cassidy, M Gilkey, H Yang

Well Volume

A. Well Depth (ft): 64.84	D. Well Volume (ft): 30 mL/ft (center)	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.53	E. Well Volume (gal) C*D): 1.39 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 46.31	F. Three Well Volumes (gal) (E3): 4.17 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0913	18.19	6.55	-88	0.533	52.7	7.33		0.25	0.75
0916	18.18	6.66	-83	0.493	42.1	1.88		0.25	1.50
0919	18.19	6.50	-75	0.479	46.7	1.69		0.25	2.25
0922	18.14	6.38	-67	0.499	37.7	1.60		0.25	3.00
0925	18.10	6.32	-67	0.516	34.4	1.53		0.25	3.75
0928	18.03	6.27	-58	0.521	87.0	1.49		0.25	4.50
0931	18.00	6.24	-55	0.524	30.0	1.46		0.25	5.25
0934	18.00	6.21	-53	0.525	27.2	1.45		0.25	6.00
0937	17.99	6.19	-50	0.526	28.9	1.44		0.25	6.75
0940	17.99	6.18	-49	0.526	28.9	1.44		0.25	7.50
0943	17.69	6.17	-47	0.528	28.8	1.44		0.25	8.25

Total Quantity of Water Removed (gal): 8.25		Sampling Time: 0943	
Samplers: MG HY RE LBC CB		Split Sample With: X	
Sampling Date: 03/22/23		Sample Type: grab	

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-CMT-2-7-032223
Analysis: VOCs
Interval: Intermediate/Deep

*WL can ø be measured during purge due to channel diameter

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 1	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E. Farmingdale, NY	Well Condition: Good	Weather: 45°F sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1636	Well Diameter (in): 0.4" CMT Channel

Purge Date: 3/22/2023	Purge Time: 1000
Purge Method: Low-flow peri pump	Field Technician: K Cassidy, M Gilkey, H Yang

Well Volume

A. Well Depth (ft): 80.65	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.53	E. Well Volume (gal) C*D): 2.48 L	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 62.12	F. Three Well Volumes (gal) (E3): 7.45	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1002	18.88	10.52	-80	0.320	36.2	2.66		0.25	0
1005	18.76	6.72	-56	0.389	32.7	2.02		0.25	0.75
1008	18.74	6.38	-39	0.421	35.6	1.77		0.25	1.50
1011	18.70	6.21	-27	0.455	36.3	1.60		0.25	2.25
1014	18.62	6.21	-26	0.488	33.9	1.49		0.25	3.0
1017	18.58	6.17	-26	0.496	33.5	1.46		0.25	3.75
1020	18.49	6.15	-25	0.507	33.6	1.42		0.25	4.5
1023	18.38	6.13	-23	0.515	33.9	1.38		0.25	5.25
1026	18.26	6.11	-22	0.518	33.2	1.37		0.25	6.0
1029	18.19	6.10	-21	0.521	30.7	1.33		0.25	6.75
1032	18.13	6.09	-20	0.524	30.1	1.31		0.25	7.5
1035	18.13	6.08	-20	0.524	30.6	1.32		0.25	8.25
1038	18.14	6.07	-20	0.525	30.7	1.30		0.25	9.0
~~1041~~									

Total Quantity of Water Removed (gal):	9.0 L	Sampling Time:	1039
Samplers:	KP HH MG MBL LB	Split Sample With:	MS/MSD
Sampling Date:	3/22/2023	Sample Type:	grab

COMMENTS AND OBSERVATIONS: odor + bubbles present; 1150 – Stopped sampling due to low head, waiting for recharge. Sampling resumed at 1355

Interval: DEEP
Analysis: VOC/MNA
Sample ID: 152140-CMT-2-1-032223

◊ WL can ø be recorded due to CMT Channel diameter

◊ MS/MSD taken for VOCs only (Sample IDs identical)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 1	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E. Farmingdale, NY	Well Condition: Good	Weather: 45°F sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1436	Well Diameter (in): 0.4" CMT Channel

Purge Date: 3/22/2023	Purge Time: 1000
Purge Method: Low-flow peri pump	Field Technician: K Cassidy, M Gilkey, H Yang

Well Volume

A. Well Depth (ft): 80.65	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.53	E. Well Volume (gal) C*D): 2.48 L	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 62.12	F. Three Well Volumes (gal) (E3): 7.45	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1002	18.88	6.52	-80	0.320	36.2	2.66		0.25	0
1005	18.76	6.72	-76	0.389	32.7	2.02		0.25	0.75
1008	18.74	6.38	-39	0.421	35.6	1.77		0.25	1.50
1011	18.70	6.21	-27	0.455	36.3	1.60		0.25	2.25
1014	18.62	6.21	-26	0.488	33.9	1.49		0.25	3.0
1017	18.58	6.17	-26	0.496	33.5	1.46		0.25	3.75
1020	18.49	6.15	-25	0.507	33.6	1.47		0.25	4.5
1023	18.38	6.13	-23	0.515	33.9	1.38		0.25	5.25
1026	18.26	6.11	-22	0.518	33.2	1.37		0.25	6.0
1029	18.19	6.10	-21	0.521	30.7	1.33		0.25	6.75
1032	18.13	6.09	-20	0.524	30.1	1.31		0.25	7.5
1035	18.13	6.08	-20	0.524	30.6	1.32		0.25	8.25
1038	18.14	6.07	-20	0.525	30.7	1.30		0.25	9.0
~~1044~~									

Total Quantity of Water Removed (gal): 9.0 L
Samplers: KC HH MG CBL ZB
Sampling Date: 3/22/2023

Sampling Time: 1038
Split Sample With: MS/MSD
Sample Type: grab

COMMENTS AND OBSERVATIONS: odor + bubbles present; 1150 - Stopped sampling due to low head, waiting for recharge. Sampling resumed at 1355

Interval: DEEP
Analysis: VOC/MNA
Sample ID: 152140-CMT-2-1-032223

✧ WL can ø be recorded due to CMT Channel diameter

✧ MS/MSD taken for VOCs only (Sample IDs identical)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-5	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 03/22/2023	Purge Time: 0942
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 83.3	D. Well Volume (ft): 40ML	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.3	E. Well Volume (gal) C*D): 2.56 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 64	F. Three Well Volumes (gal) (E3): 7.68 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0944	19.65	8.02	-69	0.252	142	1.15		0.25	—	0.10
0947	18.67	8.43	-132	0.275	157	0.0			0.75	0.85
0950	18.83	8.28	-148	0.302	170	0.0			1.50	1.60
0953	18.74	7.87	-162	0.330	152	0.0			2.25	2.35
0956	18.61	7.72	-163	0.352	157	0.0			3.00	3.10
0959	18.95	7.66	-166	0.361	156	0.0			3.75	3.85
1002	18.57	7.61	-169	0.374	170	0.0			4.50	4.60
1005	18.72	7.59	-172	0.382	144	0.0			5.25	5.35
1008	18.57	7.57	-173	0.390	151	0.0			6.00	6.10
1011	18.51	7.56	-174	0.395	108	0.0			6.75	6.85
1014	18.60	7.52	-171	0.402	136	0.0			7.50	7.60
1017	18.54	7.52	-173	0.407	140	0.0			8.25	8.35
1020	18.50	7.53	-175	0.410	73.3	0.0			9.00	9.10
1023	18.63	7.53	-176	0.413	78.8	0.0			9.75	9.85
1026	18.49	7.56	-180	0.419	111	0.0			10.50	10.60
1029	18.55	7.57	-181	0.426	98.3	0.0			11.25	11.35
1032	18.46	7.56	-178	0.429	102	0.0			12.00	12.10

Total Quantity of Water Removed (gal): ~~4.18~~
Samplers: C. Badman
Sampling Date: 3/22/2023
Sampling Time: 1047
Split Sample With: N/A
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:

Deep ~~Monitoring Well~~ Interval
~~Port~~ Diameter too small to fit meter down
Sample ID: 152140-CMT-5-5-032223

Analysis: VOCs / MNA

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See page #1

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-5	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1035	18.43	7.54	-176	0.429	75.6	0.0		0.25	~~12.75~~	12.85
1038	18.51	7.51	-176	0.430	73.8	0.0			~~13.50~~	13.60
1041	18.36	7.51	-173	0.433	49.3	0.0			~~14.25~~	14.35
1044	18.32	7.51	-173	0.433	49.1	0.0			~~15.00~~	15.10
1047	18.49	7.43	-169	0.432	48.2	0.0			~~15.75~~	15.85

Total Quantity of Water Removed (gal): TWNAPS 4.19
Samplers: C. Bachman
Sampling Date: 3/22/2023
Sampling Time: 1047
Split Sample With:
Sample Type:

COMMENTS AND OBSERVATIONS:

Port #7 (Int.-Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-03	EA Personnel: LBL	Client: National Headset Printing NYSDEC #152140
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft):	Gauge Time: 1300	Well Diameter (in): 3/8" CMT (center Channel)

Purge Date: 3/22/23	Purge Time: 1023
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 49.50	D. Well Volume (ft): 30 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.61	E. Well Volume (gal) C*D): 0.93 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 30.89	F. Three Well Volumes (gal) (E3): 2.78	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1026	19.02	7.41	-90	0.382	23.4	2.17	—	0.3	0.9
1029	19.21	7.06	-119	0.518	22.6	1.17	—	|	1.8
1032	19.07	7.05	-145	0.687	24.0	0.64	—	|	2.7
1035	18.92	7.03	-145	0.753	24.6	0.53	—	|	3.6
1038	17.91	7.00	-143	0.758	25.1	0.53	—	|	4.5
1041	17.30	6.96	-138	0.765	24.4	0.55	—	|	5.4
1044	17.18	6.91	-137	0.767	24.1	0.53	—	|	6.3
1047	16.95	6.89	-134	0.767	23.5	0.53	—	|	7.2
1050	16.89	6.86	-133	0.772	22.8	0.53	—	|	8.1
1053	16.84	6.94	-133	0.775	21.1	0.53	—	|	9.0
1056	16.82	6.86	-132	0.775	20.5	0.41	—	|	9.9
1059	16.80	6.83	-132	0.771	20.0	0.38	—	|	10.8
1102	16.79	6.82	-131	0.766	19.8	0.38	—	|	11.7

Total Quantity of Water Removed (gal):	Sampling Time: 1102
Samplers: LBL	Split Sample With: N/A
Sampling Date: 3/22/23	Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: * could not measure drawdown, well too small to fit both tubing and WLM *

SAMPLE ID: 152140-CMT-3-7-032223
Interval: Int/Shallow
analysis: VOCs

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EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-03-2	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT well

Purge Date: 03/22/2023	Purge Time: 1134
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 69.3	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.97	E. Well Volume (gal) C*D): 2.01 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 50.33	F. Three Well Volumes (gal) (E3): 6.03L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1138	18.59	7.26	-89	0.375	44.7	2.79	—	0.25	—	0.20
1141	18.86	7.03	-91	0.392	40.1	1.53	—		0.75	0.95
1144	17.68	6.92	-91	0.478	37.9	1.15	—		1.50	1.70
1147	17.59	6.86	-89	0.505	38.8	0.96	—		2.25	2.45
1150	17.54	6.82	-87	0.517	36.7	0.80	—		3.00	3.20
1153	17.51	6.78	-84	0.523	37.4	0.71	—		3.75	3.95
1156	17.52	6.74	-81	0.528	38.2	0.64	—		4.50	4.70
1159	17.50	6.71	-78	0.531	39.2	0.63	—		5.25	5.45
1202	17.47	6.68	-74	0.533	38.7	0.63	—		6.00	6.20
CDB 1205										

Total Quantity of Water Removed (gal):	1.64	Sampling Time:	1202
Samplers:	C. Badman	Split Sample With:	N/A
Sampling Date:	3/22/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Intermediate Deep Interval
Port diameter too small to fit meter down
SAMPLE ID: 152140-CMT-3-2-032223
Analysis: VOCs

Port #4 (Int. - Deep)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-06	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152190
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Channel

Purge Date: 3/22/23	Purge Time: 0828
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 63.88	D. Well Volume (ft): ~~D&E~~ 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.75	E. Well Volume (gal) C*D): 1.81 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 45.13	F. Three Well Volumes (gal) (E3): 5.42 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0831	17.04	6.99	-230	0.540	27.4	1.65	—	0.3	0.9
0834	17.08	6.69	-225	0.585	6.9	0.96	—	|	1.8
0837	17.05	6.64	-219	0.584	4.1	0.78	—	|	2.7
0840	17.06	6.58	-210	0.581	2.6	0.58	—	|	3.6
0843	17.06	6.53	-201	0.580	2.0	0.50	—	|	4.5
0846	17.04	6.49	-196	0.577	1.8	0.41	—	|	5.4
0849	17.01	6.46	-190	0.574	1.5	0.40	—	|	6.3
0852	16.90	6.43	-184	0.570	1.1	0.36	—	|	7.2
0855	16.96	6.39	-177	0.563	0.7	0.34	—	|	8.1
0858	"						—	|	9.0

Total Quantity of Water Removed (gal): ____
Samplers: LBL
Sampling Date: 3/22/23
Sampling Time: 0858
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: * could not measure drawdown, well too small to fit both tubing and WLM *
SAMPLE ID: 152190 CMT-6-4-032223
Analysis: VOCs

Port #7 (Deep)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-06	EA Personnel: LBL	Client: National Headset Printing NYSDEC #152190
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: ~~BTOF~~ ~~BTOC~~ TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): ~~3/8~~ 3/8" CMT Channel (center)

Purge Date: 3/22/23	Purge Time: 1153
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 83.00	D. Well Volume (ft): 30 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.60	E. Well Volume (gal) C*D): 1.932 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 64.40	F. Three Well Volumes (gal) (E3): 5.98 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW* (ft btoc)	Rate (Lpm)	Volume (liters)
1156	17.94	5.96	-54	0.659	82.8	1.24	—	0.3	0.9
1159	16.67	6.31	-156	0.622	12.9	0.99	—		1.8
1202	16.36	6.34	-170	0.568	0.9	0.74	—		2.7
1205	16.08	6.35	-169	0.556	0.0	0.53	—		3.6
1208	15.99	6.36	-168	0.555	0.0	0.49	—		4.5
1211	15.91	6.36	-166	0.553	0.0	0.40	—		5.4
1214	15.87	6.35	-165	0.551	0.0	0.39	—		6.3
1217	15.83	6.34	-162	0.547	0.0	0.35	—		7.2
1220	15.77	6.32	-160	0.545	0.0	0.34	—		8.1
1223	15.74	6.31	-158	0.543	0.0	0.32	—		9.0

Total Quantity of Water Removed (gal): 9.0
Samplers: LBL
Sampling Date: 3/22/23

Sampling Time: 1223
Split Sample With: N/A
Sample Type: VOCs, MNA (grab)

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152190-CMT-6-7-032223
Analysis: VOCs/MNA

* could not measure drawdown, well too small to fit both tubing and WLM *

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-03-3	EA Personnel: C. Badman	Client: National Headset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Bldg Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 3/22/2023	Purge Time: 12:22
Purge Method: Peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 79.63	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.95	E. Well Volume (gal) C*D): 2.43L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 60.68	F. Three Well Volumes (gal) (E3): 7.29L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1224	18.80	6.97	-102	0.404	41.4	1.50	—	0.25	—	0.10
1227	17.45	7.07	-143	0.575	27.2	1.20	—		0.75	0.85
1230	17.40	7.05	-146	0.668	22.3	1.07	—		1.50	1.60
1233	17.42	7.01	-143	0.727	21.4	0.93	—		2.25	2.35
1236	17.49	6.97	-141	0.757	20.9	0.80	—		3.00	3.10
1239	17.48	6.94	-140	0.768	20.4	0.68	—		3.75	3.85
1242	17.58	6.91	-139	0.774	22.4	0.57	—		4.50	4.60
1245	17.66	6.96	-136	0.779	20.5	0.57	—		5.25	5.35
1248	17.58	6.88	-136	0.785	17.6	0.48	—		6.00	6.10
1251	17.62	6.87	-136	0.784	17.9	0.45	—		6.75	6.85
1254	17.47	6.85	-136	0.785	17.3	0.44	—		7.50	7.60

Total Quantity of Water Removed (gal): 2.00
Samplers: C. Badman
Sampling Date: 3/22/2023
Sampling Time: 1254
Split Sample With: DUP
Sample Type: FD-03

COMMENTS AND OBSERVATIONS:
Deep Interval
Port diameter too small to fit Meter down
SAMPLE ID: 152140-CMT-3-3-032223 Analysis: VOCs(FD)/MNA

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-07-3	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Sticky Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 03/22/2023	Purge Time: 1353
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 20.12	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.25	E. Well Volume (gal) C*D): 34.8mL	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 0.87	F. Three Well Volumes (gal) (E3): 104.4 mL	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1354	22.49	6.49	72	0.780	3.6	4.61	—	0.25	—	0.05
1357	22.35	7.03	-108	0.740	4.4	2.35	—	0.25	0.75	0.80
1400	21.93	7.27	-157	0.738	2.9	1.73	—	|	1.50	1.55
1403	21.63	7.43	-176	0.733	3.2	1.55	—	|	2.25	2.30
1406	21.55	7.48	-185	0.724	3.5	1.50	—	|	3.00	3.05
1409	21.06	7.50	-183	0.724	2.1	1.48	—	|	3.75	3.80
1412	~	Well	DRY	~	~	~	~	~	4.50	4.55
1415									5.25	CDB
1418									6.00	
									6.75	

CDB

Total Quantity of Water Removed (gal):	1.20	Sampling Time:	1424
Samplers:	C. Badman	Split Sample With:	N/A
Sampling Date:	3/22/2023	Sample Type:	

COMMENTS AND OBSERVATIONS:
Shallow Interval
Port diameter too small to fit meter down

Port #5 (Deep)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-08	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: loading dock	Well Condition: Good	Weather: 54 F, cloudy
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.411 CMT Channel

Purge Date: 3/22/23	Purge Time: 1411
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 79.00	D. Well Volume (ft): 40 mL/L	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.89	E. Well Volume (gal) C*D): 2.52L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 63.11	F. Three Well Volumes (gal) (E3): 7.57L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW * (ft btoc)	Rate (Lpm)	Volume (liters)
1414	16.39	6.83	-228	0.378	66.6	1.26	—	0.3	0.9
1417	16.02	6.83	-221	0.399	51.0	1.13	—	|	1.8
1420	15.12	6.87	-208	0.436	34.2	0.92	—	|	2.7
1423	15.02	6.78	-203	0.454	19.1	0.74	—	|	3.6
1426	14.67	6.75	-201	0.461	13.1	0.72	—	|	4.5
1429	14.60	6.72	-198	0.464	11.8	0.71	—	|	5.4
1432	14.56	6.68	-195	0.472	7.2	0.63	—	|	6.3
1435	14.55	6.66	-193	0.477	6.2	0.59	—	|	7.2
1438	14.50	6.64	-192	0.479	6.1	0.55	—	|	8.1
1441	14.48	6.64	-192	0.482	5.8	0.54	—	|	9.0

Total Quantity of Water Removed (gal): 9.00
Samplers: LBL
Sampling Date: 3/22/23
Sampling Time: 1441
Split Sample With: N/A
Sample Type: VOCs + MNA (grab)

COMMENTS AND OBSERVATIONS: * Could not measure drawdown, well too small to fit both tubing and WLM *
SAMPLE ID: 152140-CMT-8-S-032223
Analysis: VOCs/MNA

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-07-4	EA Personnel: C. Badman	Client: National Headset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well 0.4"

Purge Date: 03/22/2023	Purge Time: 1439
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 52.54	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.2	E. Well Volume (gal) C*D): 1.33 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 33.34	F. Three Well Volumes (gal) (E3): 4 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1441	20.65	7.30	-91	0.243	7.3	2.80	—	0.25	—	0.10
1444	20.46	7.25	-134	0.244	5.1	1.64	—		0.75	0.85
1447	19.77	7.02	-141	0.248	1.3	1.53	—		1.50	1.60
1450	19.22	6.87	-139	0.247	0.0	1.50	—		2.25	2.35
1453	18.86	6.79	-131	0.246	0.0	1.42	—		3.00	3.10
1456	18.71	6.73	-124	0.245	0.0	1.39	—		3.75	3.85
1459	18.62	6.69	-120	0.244	0.0	1.41	—		4.50	4.60
1502	18.51	6.63	-113	0.242	0.0	1.42	—		5.25	5.35
1505	18.39	6.59	-108	0.241	0.0	1.44	—		6.00	6.10
1508	18.30	6.56	-104	0.241	0.0	1.45	—		6.75	6.85

Total Quantity of Water Removed (gal):	1.8 L	Sampling Time:	1508
Samplers:	C. Badman	Split Sample With:	N/A
Sampling Date:	3/22/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Intermediate Shallow Interval Port diameter too small to fit meter down

SAMPLE ID: 152140-CMT-7-4-032223

Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-04 Port 4	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152190
Location: Farmingdale, NY	Well Condition: Good / New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/22	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Channel

Purge Date: 3/22/2023	Purge Time: 1443
Purge Method: Low-flow per pump	Field Technician: K. Cassidy / H. Young / M. Gilkey

Well Volume

A. Well Depth (ft): 20.92	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.10	E. Well Volume (gal) C*D): 0.072 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 1.82	F. Three Well Volumes (gal) (E3): 0.218 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1446	21.66	7.80	-83	0.480	20.6	7.78		0.28	0
1449	20.41	7.99	-94	0.478	22.9	6.69		0.28	0.75
1452	21.65	7.61	-89	0.455	16.1	6.66		0.28	1.50
1455	—	—	—	well went dry				—	—

Total Quantity of Water Removed (gal):	1.50	Sampling Time:	1432
Samplers:	NG HH KE LBL CB	Split Sample With:	—
Sampling Date:	3/22/2023	Sample Type:	grab

COMMENTS AND OBSERVATIONS: well went dry @ 1455

* Due to well diameter WL can not be recorded during purge
$ Sample collected prior to purge due to well going dry during development
SAMPLE ID: 152190-CMT-4-4-032223

Interval: Shallow
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-04 P&T 5	EA Personnel: K. Cassidy	Client: National Headset Printing NYSDEC #152140
Location: E. Farmingdale, NY	Well Condition: Good	Weather: 50°F Sunny
Sounding Method: Heron skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" Channel width ~~Diameter~~

Purge Date: 3/22/2023	Purge Time: 1500
Purge Method: Low-flow peri pump	Field Technician: KCassidy MGilkey HYoung

Well Volume

A. Well Depth (ft): 53.30	D. Well Volume (ft): 40 mL/FT	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.10	E. Well Volume (gal) C*D: 1.37	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 34.20	F. Three Well Volumes (gal) (E3): 4.10	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1503	19.45	7.92	-129	0.260	117	0.00		0.25	0.75
1506	19.44	7.56	-116	0.253	133	0.00		0.25	1.50
1509	19.45	7.45	-111	0.250	57.3	0.00		0.25	2.25
1512	18.99	7.34	-108	0.250	56.0	0.00		0.25	3.00
1515	18.83	7.19	-103	0.248	60.4	0.00		0.25	3.75
1518	18.69	7.11	-101	0.249	28.10	0.00		0.25	4.50
1521	18.48	7.02	-97	0.250	28.9	0.00		0.25	5.25
1524	18.42	7.03	-96	0.249	40.2	0.00		0.25	6.00
1527	18.35	6.93	-95	0.250	23.7	0.00		0.25	6.75
1530	18.32	6.89	-93	0.250	28.1	0.00		0.25	7.50
1533	18.24	6.89	-95	0.258	20.1	0.00		0.25	8.25
1536	18.21	6.88	-92	0.247	20.1	0.00		0.25	9.00
1539	18.20	6.85	-90	0.248	19.0	0.00		0.25	9.75
1542	18.15	6.79	-88	0.245	15.9	0.00		0.25	10.50
1545	18.08	6.76	-89	0.245	19.9	0.00		0.25	11.25
1548	18.05	6.75	-86	0.244	20.2	0.00		0.25	12.00
1551	18.24	6.72	-84	0.242	19.5	0.00		0.25	12.75

Total Quantity of Water Removed (gal):	12.75	Sampling Time:	1551
Samplers:	MG/HY/LBL/KC/CB	Split Sample With:	∞
Sampling Date:	03/22/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

Interval: Shallow/Int
SAMPLE ID: 152140-CMT-4-5-032223
Analysis: VOCs

*WL can not be recorded during purge due to well diameter

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-07-S	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside warehouse	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/22/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT-well

Purge Date: 03/22/2023	Purge Time: 1538
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 72.35	D. Well Volume (ft): 40 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.2	E. Well Volume (gal) C*D): 2.126 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 53.15	F. Three Well Volumes (gal) (E3): 6.378 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1538	19.74	6.51	-47	0.309	27.4	2.46	—	0.25	—
1541	18.90	6.80	-77	0.332	6.2	1.75	—	0.25	0.75
1544	18.84	6.90	-94	0.347	6.9	1.50	—		1.50
1547	18.60	6.94	-101	0.355	6.8	1.44	—		2.25
1550	18.71	6.98	-110	0.364	9.7	1.34	—		3.00
1553	18.68	7.01	-116	0.379	11.9	1.25	—		3.75
1556	18.37	7.04	-119	0.393	18.1	1.22	—		4.50
1559	18.20	7.05	-122	0.397	9.2	1.21	—		5.25
1602	18.18	7.06	-126	0.407	14.2	1.21	—		6.00
1605	18.01	7.07	-129	0.414	14.5	1.23	—		6.75
1608	17.89	7.08	-131	0.414	14.2	1.24	—		7.50

Total Quantity of Water Removed (gal):	1.98	Sampling Time:	1608
Samplers:	C. Badman	Split Sample With:	N/A
Sampling Date:	3/22/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Intermediate Deep Interval Port diameter too small to fit meter down

SAMPLE ID: 152140-CMT-7-S-032223

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-4-6	EA Personnel: K. Cassidy	Client: NYSDEC (152140)
Location: E. Farmingdale, NY	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny	Gauge Date: 03/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in):

Purge Date: 03/22/23	Purge Time: 1608
Purge Method: Low Flow	Field Technician: K Cassidy MGikey H Young

Well Volume

A. Well Depth (ft): 63.54	D. Well Volume (ft)~~(gal)~~: 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.80	E. Well Volume (gal) C*D: 1.79 L	Pump Type: peri pump
C. Liquid Depth (ft) (A-B): 44.74	F. Three Well Volumes (gal) (E3): 5.37	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1610	19.54	7.45	-96	0.275	190	0.43		0.25	0.50
1613	19.36	7.42	-95	0.343	122	0.04		0.25	1.25
1616	19.22	7.40	-91	0.388	85.0	0.00		0.25	2.00
1619	19.06	7.41	-89	0.418	95.1	0.00		0.25	2.75
1622	19.05	7.41	-88	0.419	81.2	0.00		0.25	3.50
1625	19.00	7.39	-87	0.428	83.2	0.00		0.25	4.25
1628	18.93	7.37	-84	0.437	75.0	0.02		0.25	5.00
1631	18.92	7.33	-71	0.440	109.3	0.13		0.25	5.75
1634	18.98	7.23	-71	0.448	47.7	0.00		0.25	6.50
1637	18.97	7.19	-68	0.449	42.5	0.00		0.25	7.25
1640	18.96	7.14	-62	0.451	37.2	0.00		0.25	8.00
1643	18.95	7.11	-59	0.451	38.4	0.00		0.25	8.75
1646	18.90	7.10	-53	0.451	26.3	0.00		0.25	9.50
1649	18.89	7.00	-46	0.450	22.2	0.00		0.25	10.25
1652	18.88	6.99	-44	0.450	23.4	0.00		0.25	11.75
1655	18.85	6.96	-40	0.449	20.4	0.00		0.25	12.00
1658									

Total Quantity of Water Removed (gal):	Sampling Time: 1655
Samplers: HY, MG, LBL, KC, CB	Split Sample With: N/A
Sampling Date: 03/22/23	Sample Type: Grab

COMMENTS AND OBSERVATIONS:
Interval: Int/Deep
SAMPLE ID: 152140-CMT-4-6-032223
Analysis: VOCs

Water level can't be recorded during purge due to channel width

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-09-4	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Warehouse	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 03/22/2023	Purge Time: 1659
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 20.5	D. Well Volume (ft): 40 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.38	E. Well Volume (gal) C*D: 44.8 mL	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 1.12	F. Three Well Volumes (gal) (E3): 134.4 mL	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1659	19.73	7.02	-142	0.418	0.0	2.21	—	0.25	—
1702	19.58	7.01	-196	0.420	0.0	1.69	—		0.75
1705	19.40	7.11	-254	0.415	0.0	1.38	—		1.50
1708	19.29	7.30	-269	0.415	0.0	1.26	—		2.25
1711	19.13	7.21	-254	0.421	0.0	1.25	—		3.00
1714	18.97	6.96	-237	0.436	0.0	1.34	—		3.75
1717	18.75	6.71	-225	0.456	0.0	1.43	—		4.50
1720	18.61	6.67	-222	0.461	0.0	1.44	—		5.25
1723	18.51	6.58	-216	0.472	0.0	1.44	—		6.00
1726	18.28	6.47	-206	0.484	0.0	1.42	—		6.75
1729	18.06	6.42	-200	0.489	0.0	1.42	—		7.50
1732	18.24	6.38	-194	0.489	0.0	1.41	—		8.25
1735	18.24	6.34	-190	0.492	0.0	1.40	—		9.00
~~1738~~									~~9.75~~

CDB CDB

Total Quantity of Water Removed (gal):	2.376	Sampling Time:	1735
Samplers:	C. Badman	Split Sample With:	
Sampling Date:	3/22/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Shallow Interval

SAMPLE ID: 152140-CMT-9-4-032223

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-07 PDA-6	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E Farmingdale, NY	Well Condition: Good	Weather: 45°, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/22/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Width

Purge Date: 3/23/2023	Purge Time: 1005
Purge Method: Low-flow	Field Technician: K Cassidy, M Gilkey, H Yang

Well Volume

A. Well Depth (ft): 81.80	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 37.01	E. Well Volume (gal) C*D: 1.79 L	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 44.79	F. Three Well Volumes (gal) (E3): 5.37 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1000	16.49	5.96	42	0.439	6.4	2.76		0.25	0.25
1009	16.50	6.26	-58	0.482	3.9	0.96		0.25	1.00
1012	16.90	6.35	-73	0.489	11.5	0.76		0.25	1.75
1015	16.96	6.44	-91	0.492	10.6	0.65		0.25	2.50
1018	16.91	6.49	-98	0.492	14.0	0.58		0.25	3.25
1021	16.88	6.51	-100	0.492	9.3	0.54		0.25	4.00
1024	16.84	6.53	-102	0.491	9.0	0.51		0.25	4.75
1027	16.81	6.55	-102	0.490	10.8	0.50		0.25	5.50
1030	16.77	6.55	-101	0.487	13.6	0.46		0.25	6.25
1033	16.73	6.56	-100	0.485	20.1	0.45		0.25	7.00
1036	16.70	6.55	-97	0.482	27.6	0.44		0.25	7.75
1039	16.66	6.55	-96	0.482	27.7	0.44		0.25	8.50
1042	16.68	6.54	-94	0.481	35.5	0.41		0.25	9.25
1045	16.64	6.53	-92	0.488	33.7	0.41		0.25	10.00
1048	16.73	6.52	-91	0.481	36.6	0.41		0.25	10.75

Total Quantity of Water Removed (gal):
Samplers: KC HY MG CB LBL
Sampling Date: 3/23/2023

Sampling Time: 1048
Split Sample With:
Sample Type: grab

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-CMT-7-6-032323
Interval: Deep
Analysis: VOCs/MNA

Water level can't be recorded during purge due to CMT channel width

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-09-1	EA Personnel: C. Bachman	Client: NYSDEC (152140)
Location: Inside warehouse	Well Condition: Good	Weather: Indoors
Sounding Method: Heron SlimY Dipper	Gauge Date: 03/22/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 03/23/2023	Purge Time: 0958
Purge Method: Low flow Peri Pump	Field Technician: C. Bachman

Well Volume

A. Well Depth (ft): 80	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.16	E. Well Volume (gal) C*D): 2.434 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 60.84	F. Three Well Volumes (gal) (E3): 7.3L	Pump Intake Depth: Mid - screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0958	16.01	6.47	-127	0.333	7.4	1.05		0.25	—
1001	15.73	6.29	-116	0.427	10.0	0.57			0.75
1004	15.75	6.21	-109	0.459	9.7	0.49			1.50
1007	15.76	6.18	-107	0.472	10.0	0.45			2.25
1010	15.71	6.16	-106	0.475	9.1	0.44			3.00
1013	15.62	6.15	-108	0.477	5.8	0.44			3.75
1016	15.60	6.15	-109	0.478	4.5	0.43			4.50
1019	15.62	6.14	-110	0.480	4.8	0.43			5.25
1022	15.65	6.14	-111	0.481	4.8	0.43			6.00
1025	15.65	6.14	-111	0.481	4.7	0.43			6.75

Total Quantity of Water Removed (gal): 1.782
Samplers: C. Bachman, H. Young
Sampling Date: 3/23/2023
Sampling Time: 1025
Split Sample With: N/A
Sample Type: VOCs and MNA (6 to 6)

COMMENTS AND OBSERVATIONS: Deep Interval
Port diameter too small to fit meter down
Sample ID: 152140-CMT-9-1-032323
Analysis: VOCs/MNA

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-09-2	EA Personnel: C. Badman	Client: NYSDEC (152140)
Location: HeatsEA	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/22/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 03/23/2023	Purge Time: 0919
Purge Method: Low flow Peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 70.5	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.38	E. Well Volume (gal) C*D): 2.044 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 51.12	F. Three Well Volumes (gal) (E3): 6.134 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0919	15.55	6.59	-160	0.399	19.8	1.04		0.25	—
0922	15.61	6.43	-150	0.458	20.8	0.66			0.75
0925	15.63	6.32	-144	0.475	21.7	0.59			1.50
0928	15.60	6.26	-143	0.480	18.2	0.59			2.25
0931	15.59	6.24	-143	0.484	18.5	0.54			3.00
0934	15.60	6.24	-148	0.486	20.5	0.51			3.75
0937	15.63	6.24	-147	0.487	18.4	0.49			4.50
0940	15.66	6.23	-147	0.486	16.5	0.49			5.25
0943	15.68	6.22	-147	0.486	17.6	0.48			6.00
0946	15.71	6.22	-147	0.486	16.8	0.47			6.75

Total Quantity of Water Removed (gal): 1.782
Samplers: C. Badman
Sampling Date: 3/23/2023
Sampling Time: 0946
Split Sample With: N/A
Sample Type: Grab

COMMENTS AND OBSERVATIONS: Intermediate deep Interval
Port diameter too small to fit meter down
SAMPLE ID: 152140-CMT-9-2-0323
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-4-1	EA Personnel: HY, MG, KC, CB	Client: NYSDEC 152140
Location: HeatSet (East Farmingdale NY)	Well Condition: good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/27/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time:	Well Diameter (in):

Purge Date: 03/23/23	Purge Time: 0938
Purge Method: low flow	Field Technician: HY

Well Volume

A. Well Depth (ft): 83.00	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 21.10	E. Well Volume (gal) C*D): 2.48 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 61.90	F. Three Well Volumes (gal) (E3): 7.43 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0938									

Total Quantity of Water Removed (gal):		Sampling Time:	N/A
Samplers:	HY/MG	Split Sample With:	
Sampling Date:	N/A	Sample Type:	

COMMENTS AND OBSERVATIONS: DNAPL product present. Not able due to product present. Water would not purge fully due to density of DNAPL - some product through into Horiba Water Quality Meter.

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-09-3	EA Personnel: MG, HY, CB, KC	Client: NYSDEC (152140)
Location: Heatset (East Farmingdale NY)	Well Condition: good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/22/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1539	Well Diameter (in): CMT well 0.4"

Purge Date: 03/23/2023	Purge Time: 0823
Purge Method: ~~Peri Pump~~ low flow	Field Technician: MG, HY, CB, KC

Well Volume

A. Well Depth (ft): 50.5	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.03	E. Well Volume (gal) C*D: 1.26L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 31.47	F. Three Well Volumes (gal) (E3): 3.78L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0826	13.93	5.42	-94	0.353	49.9	1.03		0.25	0.75
0829	15.04	6.22	-215	0.351	55.0	0.79		0.25	1.50
0832	15.14	6.71	-275	0.380	28.1	0.64		0.25	2.25
0835	15.14	6.76	-278	0.405	14.2	0.55		0.25	3.00
0838	15.25	6.65	-273	0.428	7.3	0.50		0.25	3.75
0841	15.26	6.62	-270	0.434	6.2	0.51		0.25	4.50
0844	15.28	6.56	-261	0.444	4.5	0.47		0.25	5.25
0847	15.28	6.51	-250	0.451	3.5	0.45		0.25	6.00
0850	15.30	6.48	-239	0.456	3.0	0.43		0.25	6.75
0853	15.32	6.45	-225	0.460	1.9	0.41		0.25	7.50
0856	15.34	6.41	-213	0.462	1.3	0.42		0.25	8.25
0859	15.34	6.40	-207	0.464	1.0	0.40		0.25	9.00
0902	15.37	6.38	-201	0.466	0.4	0.40		0.25	9.75
0905	15.41	6.37	-197	0.467	0.2	0.40		0.25	10.50

Total Quantity of Water Removed (gal):	2.772	Sampling Time:	0905
Samplers:	HY, CB	Split Sample With:	N/A
Sampling Date:	03/23/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS: Intermediate Shallow Interval strong sulfuric odor

SAMPLE ID: 152140-CMT-9-3-032323

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-1-2	EA Personnel: HY, KC	Client: NYSDEC 152140
Location: Heatset (East Farmingdale NY)	Well Condition: good	Weather: 56°F Rainy
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1500	Well Diameter (in): 0.4" CMT Channel Width

Purge Date: 03/23/23	Purge Time: 1150
Purge Method: low flow	Field Technician: HY, KC

Well Volume

A. Well Depth (ft): 83.33	D. Well Volume ~~(ft)~~: 40mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.09	E. Well Volume ~~(gal)~~ C*D): 2.61 L	Pump Type: peri pump
C. Liquid Depth (ft) (A-B): 65.24	F. Three Well Volumes ~~(gal)~~ (E3): 7.83 L	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1153	15.35	6.76	-45	0.714	1.5	7.64		0.25	0.75
1156	14.75	6.93	-90	0.729	0.0	6.97		0.25	1.50
1159	14.60	6.94	-94	0.720	0.0	6.71		0.25	2.25
1202	14.53	6.88	-90	0.699	0.0	6.23		0.25	3.00
1205	14.48	6.83	-83	0.686	0.0	5.96		0.25	3.75
1208	14.39	6.84	-60	0.656	0.0	5.48		0.25	4.50
1211	14.34	6.45	-37	0.629	0.0	5.14		0.25	5.25
1214	14.32	6.34	-26	0.617	0.0	4.86		0.25	6.00
1217	14.29	6.23	-15	0.606	0.0	4.63		0.25	6.75
1220	14.27	6.10	-1	0.595	0.0	4.29		0.25	7.50
1223	14.75	6.02	7	0.588	0.0	4.06		0.25	8.25
1226	14.22	5.96	13	0.583	0.0	3.83		0.25	9.00
1229	14.18	5.92	17	0.580	0.0	3.67		0.25	9.75
1232	14.17	5.87	22	0.576	0.0	3.47		0.25	10.50
1235	14.19	5.82	27	0.572	0.0	3.21		0.25	11.25
1238	14.18	5.80	30	0.570	0.0	3.18		0.25	12.00
1241	14.19	5.79	31	0.569	0.0	3.19		0.25	12.75

Total Quantity of Water Removed (gal):	Sampling Time: 1241
Samplers: HY, KC	Split Sample With: ~~[redacted]~~ DUP
Sampling Date: 03/23/23	Sample Type: Grab

COMMENTS AND OBSERVATIONS: FD-04 * Water level can't be taken during purge due to channel diameter

SAMPLE ID: 152190-CMT-1-2-032323

Interval: Deep

Analysis: VOCs & MNA

FD (VOCs)

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-10-6	EA Personnel: C. Badman	Client: NYSDEC (152140)
Location: outside warehouse	Well Condition: Good	Weather: Cloudy 50°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/22/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): CMT well

Purge Date: 03/23/2023	Purge Time: 1117
Purge Method: Low flow peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 79.8	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.68	E. Well Volume (gal) C*D: 2.5718 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 62.12	F. Three Well Volumes (gal) (E3): 7.45L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1117	15.81	6.61	-183	0.462	226	2.65		0.25	—
1120	14.54	6.78	-234	0.505	233	0.85			0.75
1123	14.44	6.80	-229	0.565	231	0.47			1.50
1126	14.42	6.80	-222	0.600	225	0.34			2.25
1129	14.39	6.80	-220	0.589	222	0.36			3.00
1132	14.29	6.77	-215	0.588	226	0.36			3.75
1135	14.27	6.76	-212	0.585	209	0.34			4.50
1138	14.24	6.74	-208	0.581	194	0.32			5.25
1141	14.18	6.73	-206	0.580	200	0.32			6.00
1144	13.98	6.70	-204	0.579	195	0.29			6.75
1147	13.86	6.71	-202	0.571	24.9	0.30			7.50
1150	13.84	6.71	-201	0.571	25.8	0.29			8.25
1153	13.79	6.70	-199	0.568	25.1	0.28			9.00

Total Quantity of Water Removed (gal): 2.376
Samplers: CB, MG
Sampling Date: 3/23/2023
Sampling Time: 1153
Split Sample With: N/A
Sample Type: VOCs and MNA (Grab)

COMMENTS AND OBSERVATIONS: Water level could be recorded during purge due to channel diameter
Interval: Deep
Sample ID: 152140-CMT-10-6
Analysis: VOCs & MNA

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-01-D	EA Personnel: J.Guy	Client: NYSDEC
Location: HEATSET	Well Condition: NEW	Weather: RAIN
Sounding Method: Skinny	Gauge Date: 11/30/22 Gauge Time: 1330	Measurement Ref: TOC
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.2	Well Diameter (in): 0.00136 ft^2

Purge Date: 11/30/22	Purge Time: 1339
Purge Method: Peri Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 43.71	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.34	E. Well Volume (gal) C*D): 0.248 gal	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B): 24.37	F. Three Well Volumes (gal) (E3): 0.744 gal	Pump Intake Depth: ~40

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1340	6.73	0.388	11.3	10.09	15.15	-114	N/A	0.250	0
1345	7.09	0.516	7.7	8.85	15.09	-131	N/A	0.250	1.250
1350	7.30	0.562	12.0	7.95	15.08	-131	N/A	0.250	2.500
1355	7.40	0.547	11.4	7.21	15.09	-129	N/A	0.250	3.750
1400	7.46	0.544	13.7	7.45	15.10	-125	N/A	0.250	5.000
1405	7.43	0.578	15.9	5.51	15.09	-120	N/A	0.250	6.250
1410	7.34	0.582	15.7	5.04	15.10	-105	N/A	0.250	7.500

Total Quantity of Water Removed (gal): _____ Personnel: J. Guy

COMMENTS AND OBSERVATIONS: _____

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EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-01-C	EA Personnel: J.Guy	Client: NYSDEC
Location: Heatset	Well Condition: Acceptable	Weather: Rain
Sounding Method: string dipper T	Gauge Date: 11/30 Gauge Time: 1308	Measurement Ref: TOC
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.3 PPM	Well Diameter (in): CMT 0.00136

Purge Date: 11/30/2022	Purge Time: 1308
Purge Method: Peristatic Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 43.52	D. Well Volume (ft): >7.45	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.32	E. Well Volume (gal) C*D): 0.246 gal	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3): 0.739 gal	Pump Intake Depth: ~40

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1308	6.62	0.643	62.8	9.51	15.27	-155	NA	0.250	0
1313	7.14	0.821	1.2	8.02	15.14	-179	NA	0.250	1.25
1318	7.10	0.751	3.2	6.82	15.13	-173	NA	0.250	2.50
1323	6.99	0.705	11.2	6.15	15.15	-161	-	-	3.750
1328	6.85	0.680	12.6	5.42	15.16	-145	-	-	5.000
1333	6.85	0.679	12.2	5.42	15.15	-145	-	-	6.25
1338	6.85	0.699	4.9	5.42	15.15	-145	-	-	7.5

Total Quantity of Water Removed (gal): _____ Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-01-B	EA Personnel: J.Guy	Client: NYSDEC
Location: HeatSet	Well Condition: Acceptable	Weather: Rain
Sounding Method: 5 Rimy dipper T	Gauge Date: 11/30/2022 Gauge Time: 1238	Measurement Ref: TOC
Stick Up/Down (ft): Flush-cmt	PID Headspace Reading:	Well Diameter (in): CMT (0.00136 cuft)

Purge Date: 11/30/2022	Purge Time: 1233
Purge Method: Peristaltic Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): ~~22.37~~ vs. 43.16	D. Well Volume (ft): 0.033144 cuft	Depth/Height of Top of PVC: N/A
B. Depth to Water (ft): ~~14.33~~ 19.45	E. Well Volume (gal) C*D): 0.248	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 23.71	F. Three Well Volumes (gal) (E3): 0.745 gal / 2.8 L	Pump Intake Depth: 43.00

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1238	6.69	0.278	0.0	9.61	15.37	-222	NA	0.250	0
1238	6.93	0.264	0.0	9.35	15.08	-234	NA	0.250	1.250
1243	6.85	0.265	0.0	8.51	14.93	-184	NA	0.250	3.500
1246	6.92	0.252	0.0	8.04	14.89	-155	NA	0.250	3.750
1253	6.68	0.243	0.0	6.68	15.21	-145	NA	0.500	5.000
1258	6.46	0.222	0.0	6.50	15.25	-95	NA	0.500	7.500
1303	6.37	0.218	0.0	6.37	15.23	-75	NA	0.500	10.000
1308	6.34	0.213	0.0	6.24	15.22	-73	NA	0.500	12.500

Total Quantity of Water Removed (gal): 12.5 L Personnel: J. Guy

COMMENTS AND OBSERVATIONS: No dTW because of the CMT well diameter.

2 0.014

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-01-A	EA Personnel: J.Guy	Client: NYSDEC
Location: Headset	Well Condition: Acceptable	Weather: Rain
Sounding Method: Skinny dipper	Gauge Date: / Gauge Time:	Measurement Ref: TOC
Stick Up/Down (ft): Flush mount	PID Headspace Reading: 0.3 PPM	Well Diameter (in): CMT ~~0.75~~ 1/2" 0.00136

Purge Date: 11/30/2022	Purge Time: 1148
Purge Method: Peristaltic Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 22.37	D. Well Volume (ft): 0.004145 ft3	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.33	E. Well Volume (gal) C*D): 0.0310 gal	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 3.04ft	F. Three Well Volumes (gal) (E3): 0.093	Pump Intake Depth: 22.00

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1148								0.250	0
~~1203~~ 1153	7.37	0.497	6.7	5.45	13.36	-165	N/A	0.250	1.250
~~1208~~ 1158	6.93	0.477	9.0	3.89	13.89	-100	N/A	0.250	2.500
~~1233~~ 1203	6.71	0.462	5.0	3.28	15.05	-55	N/A	0.250	3.750
1208	6.64	0.450	0.0	3.52	15.46	-31	N/A	0.250	5.000
1213	6.51	0.446	0.0	4.24	15.39	-27	~	0.250	6.250
1218	6.47	0.442	0.0	4.16	15.52	-21	~	0.250	7.500
1223	6.43	0.439	0.0	4.20	15.57	-17	~	0.250	8.750
1228	6.49	0.435	0.0	4.31	15.71	-18	~	0.250	10.000
~~1233~~									
~~1238~~									

Total Quantity of Water Removed ~~(gal)~~: 10.00L Personnel: J. Guy

COMMENTS AND OBSERVATIONS: Could not use WLM with tubing because of channel diameter.

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: LMT-10-03	EA Personnel: J.Guy	Client: NYSDEC
Location: HEADSET	Well Condition: NEW	Weather: RAIN
Sounding Method: SKI/NNY	Gauge Date: 11/30/22 Gauge Time: 1640	Measurement Ref: TOC
Stick Up/Down (ft): FLUSH	PID Headspace Reading: 0.0	Well Diameter (in): 0.00136

Purge Date: 11/30/22	Purge Time: 1640
Purge Method: Peri Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 74.14	D. Well Volume (ft):	Depth/Height of Top of PVC: FLUSH
B. Depth to Water (ft): 13.70	E. Well Volume (gal) C*D): 0.615 gal	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B): 60.44	F. Three Well Volumes (gal) (E3): 1.85 gal	Pump Intake Depth: ~75

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1640	7.01	0.350	57.5	11.05	15.44	199	N/A	2mL	0.0
1645	7.02	0.274	61.2	9.41	15.44	-122	N/A	2mL	1.0
1650	7.00	0.288	68.1	8.88	15.41	-122	N/A	2mL	2.0
1655	6.98	0.320	84.2	7.74	15.40	-117	N/A	2mL	3.0
1700	6.89	0.330	96.0	6.82	19.35	-106	N/A	2mL	4.0
1705	6.80	0.346	~~96.0~~ 73.3	5.89	15.30	-92	N/A	2mL	5.0
1710	6.76	0.356	73.8	5.49	15.31	-89	N/A	2mL	6.0
1715	6.73	0.352	71.3	5.42	15.30	-87	N/A	2mL	7.0

Total Quantity of Water Removed (gal): 7.0 Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-10-01	EA Personnel: J.Guy	Client: NYSDEC
Location: Heatset	Well Condition: Acceptable	Weather: Rain
Sounding Method: String	Gauge Date: 11/30/2022 Gauge Time:	Measurement Ref: TOC
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.2	Well Diameter (in): 0.00136

Purge Date: 11/30/2022	Purge Time: 1600
Purge Method: Peristaltic	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 70.33	D. Well Volume (ft): 0.07027	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.66	E. Well Volume (gal) C*D): 0.5256	Pump Type:
C. Liquid Depth (ft) (A-B): 51.67	F. Three Well Volumes (gal) (E3): 1.577=5.96L	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1600	7.41	0.269	50.3	10.15	15.65	-117	N/A	0.2	0	
1605	7.39	0.271	50.1	9.91	15.66	-121	N/A	0.2	0.5	
1610	7.38	0.274	50.2	9.81	15.68	-124	N/A	0.2	1.0	
1615	7.40	0.311	64.4	9.43	15.67	-144	N/A	0.2	3.5	
1620	7.18	0.347	50.4	8.10	15.60	-136	N/A	0.2	~~5.0~~	2.5
1625	6.93	0.341	54.1	7.08	15.54	-120	N/A	0.2	~~3.0~~	3.5
1630	6.68	0.372	56.4	5.76	15.46	-102	N/A	0.2	~~4.0~~	4.5
1635	6.55	0.387	50.4	4.82	15.40	-91	N/A	0.2	~~5.0~~	5.5
1640	6.47	0.412	44.0	4.20	15.38	-82	N/A	0.2	~~6.0~~	6.5

Total Quantity of Water Removed (gal): _____ Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-10-05	EA Personnel: J.Guy	Client: NYSDEC
Location: HEATSET	Well Condition: NEW	Weather: Rain
Sounding Method: SKINNY	Gauge Date: 11/30/2022 Gauge Time: 13	Measurement Ref: TOC
Stick Up/Down (ft): FLUSH	PID Headspace Reading: 0.1	Well Diameter (in): 0.00136

Purge Date: 11/30/2022	Purge Time: 1530
Purge Method: Peri. Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 50.15	D. Well Volume (ft): 0.0427492	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.68	E. Well Volume (gal) C*D): 0.3201	Pump Type:
C. Liquid Depth (ft) (A-B): 31.47	F. Three Well Volumes (gal) (E3): 0.9604	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1530	6.88	0.324	35.7	9.87	16.33	-103	N/A	0.2	0
1535	6.87	0.322	34.5	9.92	16.15	-148	N/A	0.2	1.00
1540	8.05	0.334	35.1	9.66	16.03	-205	N/A	0.2	2.0
1545	7.57	0.334	31.0	9.55	15.93	-209	N/A	0.2	3.0
1550	7.98	0.344	31.0	9.47	15.80	-193	N/A	0.2	4.0
1555	7.87	0.353	31.7	9.29	15.76	-197	N/A	0.2	5.0
1600	7.48	0.364	33.1	9.07	15.74	-179	N/A	0.2	6.0

Total Quantity of Water Removed (gal): 6.0L Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-10-06	EA Personnel: J.Guy	Client: NYSDEC
Location: HEATSET	Well Condition: NEW	Weather: RAIN
Sounding Method: SKINNY	Gauge Date:	Measurement Ref: TOC
	Gauge Time:	
Stick Up/Down (ft): FLUSH	PID Headspace Reading: 0.1	Well Diameter (in): 0.00136

Purge Date: 11/30/2022	Purge Time: 1457
Purge Method: Peri Pump	Field Technician: J.Guy

Well Volume

A. Well Depth (ft): 19.97	D. Well Volume (ft): 0.0017136	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.71	E. Well Volume (gal) C*D): 0.0128	Pump Type:
C. Liquid Depth (ft) (A-B): 1.26	F. Three Well Volumes (gal) (E3): 0.03845	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1500	7.44	0.369	146	10.32	16.17	-165	N/A	~~0.200~~ 0.2	0
1505	7.28	0.351	116	9.60	16.42	-152	N/A	~~0.200~~ 0.2	1.0
1510	7.11	0.336	74.8	9.20	16.46	-133	N/A	0.200	2.0
1515	7.00	0.329	45.6	8.94	16.55	-121	N/A	0.200	3.0
1520	6.93	0.326	34.0	8.64	16.51	-110	N-A	0.200	4.0
1525	6.91	0.326	31.3	8.48	16.66	-108	N-A	0.200	5.0
1530	6.88	0.323	32.3	8.31	16.65	-102	N-A	0.20	6.0

Total Quantity of Water Removed (gal): _____ Personnel: J. Guy

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: MNT-05-03	EA Personnel: M. Gilkey K. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Sunny 23°F; 14mph SE
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 1200
Purge Method: Perm Pump - low flow	Field Technician: M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth: Mid Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
12:01	6.61	0.512	**	2.37	9.32	-70			
12:06	7.45	0.465	**	0.54	9.50	-258			
12:11			DRY						
12:16									
12:21									
12:26									

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:
* Water Level Intermediate Interval
** Water level can not be gauged while purging due to 7 Channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: MW CMT-08-03	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: / Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date: 02/08/23	Purge Time: 1053
Purge Method:	Field Technician: M. Gilkey / H. Bedell

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1055	8.11	1.04	818	2.00	11.40	-217		0.20	0
[illegible]	—	pump issue	—	—	—	—	—	—	—
1105	7.61	0.456	488	1.33	12.28	-230	\	0.20	6
—	—	—	purged DRY AGAIN	—	—	—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:
Shallow - Intermediate port

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-03-03	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather:
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time: 1642
Purge Method:	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 78.63	D. Well Volume (~~ft~~): 1820.4 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.95	E. ~~Well Volume~~ (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 60.68	F. Three Well Volumes (~~gal~~) (E3): 5.46 (L)	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (✓) (pH units)	Conductivity (✓) (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1642	6.33	0.346	541	6.54	18.35	-196	—	0.25	
1647	6.43	0.461	242	6.82	17.21	-531	—	0.25	
1652	6.39	0.530	320	5.82	17.06	-556	|	|	
1657	6.32	0.555	120	4.96	16.79	-557	|	|	
1702	6.23	0.596	107	3.69	16.64	-544	|	|	
1707	6.14	0.601	115	3.17	16.57	-535	|	|	
1712	6.09	0.611	104	2.49	16.57	-520	|	|	
1717	6.08	0.619	110	2.31	16.55	-510	|	|	
1722	6.04	0.616	124	1.87	16.50	-498	|	|	
1727	6.04	0.613	84.1	1.72	16.87	-500	|	|	
~~1732~~			Stop	purge	@ 1727				
1737									
1742									
1747									
1752									

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Deep

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-02-04	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: Good/New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 4th channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 24.5 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 1124
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 20.20	D. Well Volume (ft): 54 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.85	~~E. Well Volume (gal) C*D):~~	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 1.35 ft	F. Three Well Volumes (gal) (E3): 0.162 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1124	6.54	0.476	202	7.14	18.02	40	—	0.10	0.0
1129	7.39	0.492	121	7.41	18.20	26	—	0.10	0.50
1134	7.66	0.509	107	8.19	18.28	38	—	0.10	1.0
1139	7.76	0.518	96.9	8.84	18.34	48	—	0.10	1.5
1144	7.82	0.521	92.1	8.38	18.38	56	—	0.10	2.0
1149	7.85	0.517	88.8	8.91	18.43	60	—	0.10	2.5
1154	7.87	0.519	89.3	8.65	18.49	63	—	0.10	3.0
				STOP PURGING @ 1154					

Total Quantity of Water Removed (gal): 3.0 Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Shallow Internal
* Water level can not be recorded during purge due to channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-02-06	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** Good/New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:**	**Measurement Ref:** 6th channel
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 24.5 ppm	**Well Diameter (in):** CMT

Purge Date: 02/01/23	**Purge Time:** 1025
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 51.8	**D. Well Volume (L):** 1318 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 18.85	**E. ~~Well Volume (gal) C*D~~:**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 32.95	**F. Three Well Volumes (gal) (E3):** 3.954 (L)	**Pump Intake Depth:** Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1025	6.76	0.160	320	4.70	16.92	-58	—	0.25	0.0
1030	6.95	0.190	116	2.11	16.31	-138	—	0.25	1.25
1035	6.76	0.243	89.5	2.31	16.35	-132	—	0.25	2.50
1040	6.57	0.270	74.6	2.35	16.29	-113	—	0.25	3.75
1045	6.45	0.283	61.3	2.32	16.25	-97	—	0.25	5.00
1050	6.37	0.293	57.3	1.94	16.22	-85	—	0.25	6.25
1065	6.28	0.305	52.1	1.95	16.20	-72	—	0.25	7.50
1100	6.23	0.309	49.3	1.94	16.19	-64	—	0.25	8.75
1105	6.19	0.313	47.1	1.94	16.14	-60	—	0.25	10.0
1110	6.17	0.317	49.3	1.93	16.08	-57	—	0.25	11.25
—	—	—	—	STOP @ 1110	PURGING	—	—	—	

Total Quantity of Water Removed (gal): 11.25 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate - Shallow

*Unable to Record GW level during purge due to Channel depth

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-02-07	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: Good / New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 24.5 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 1203
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 64.84	D. Well Volume (gal): 1378.2 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.90	E. Well Volume (gal) C*D): ~~[illegible]~~	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 45.94	F. Three Well Volumes (gal) (E3): 4.136 (L)	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1203	8.01	0.188	480	5.49	17.64	-81	—	0.25	0.0
1208	7.15	0.298	425	5.65	16.68	-95	—	0.25	1.25
1213	6.71	0.321	414	5.69	16.42	-80	—	0.25	2.50
1218	6.47	0.334	50.3	4.25	15.94	-68	—	0.25	3.75
1223	6.30	0.340	43.6	3.21	15.79	-57	—	0.25	5.00
1228	6.23	0.343	41.4	3.24	15.73	-53	—	0.25	6.25
1233	6.16	0.348	43.3	1.58	15.62	-46	—	0.25	7.50
1238	6.12	0.351	48.0	1.59	15.59	-43	—	0.25	8.25
1243	6.10	0.354	45.2	1.60	15.55	-40	—	0.25	10.0
1248	6.07	0.356	42.9	1.60	15.56	-38	—	0.25	11.25
1253	6.05	0.358	46.1	1.61	15.54	-37	—	0.25	12.50
—	—	—	—	STOP PURGING @ 1258		—	—	—	

Total Quantity of Water Removed (gal): 12.50 Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate - Deep

*Unable to Record GW level during purging due to Channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-02-01	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** Good / New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:**	**Measurement Ref:** 1st channel
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 24.5 ppm	**Well Diameter (in):** CMT

Purge Date: 02/01/23	**Purge Time:** 1300
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 80.65	**D. Well Volume (ft):** 2472.2 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 18.84	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 61.81	**F. Three Well Volumes (gal) (E3):** 7.4142 (L)	**Pump Intake Depth:** Mid - screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1300	6.37	0.253	190	1.74	15.82	-67	—	0.25	0.0
1305	6.15	0.345	80.6	1.40	15.52	-79	—	0.25	1.25
1310	6.06	0.356	73.2	1.36	15.42	-74	—	0.25	2.50
1315	6.02	0.367	67.0	1.43	15.38	-62	—	0.25	3.75
1320	5.97	0.373	43.6	1.52	15.32	-49	—	0.25	5.00
1325	5.94	0.375	40.7	1.56	15.32	-42	—	0.25	6.25
1330	5.94	0.376	40.2	1.58	15.31	-40	—	0.25	7.50
—	—	—	—	STOP PURGING @ 1330	—	—	—	—	

Total Quantity of Water Removed (gal): ~~≈~~ 7.50 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:

Deep

*Unable to record gw level during purging due to channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
GMT-03-06	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY		Indoors
Sounding Method:	**Gauge Date:** 02/01/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:** 1045	OD of 7th Channel
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	0.0	7 Channels = 1.7"

Purge Date:	Purge Time:
02/01/23	1206
Purge Method:	**Field Technician:**
Perri Pump	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (~~ft~~):	Depth/Height of Top of PVC:
18.95	24 mL	
B. Depth to Water (ft):	**E. Well ~~Volume (gal) C*D~~):**	**Pump Type:**
19.75		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (~~gal~~) (E3):**	**Pump Intake Depth:**
0.8	0.072 (L)	

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1210	6.42	0.357	236	7.62	19.32	-186	\	0.15	0.75
1215	6.61	0.424	246	1.09	18.97	-168	|	|	1.50
1220	6.76	0.499	255	1.93	18.91	-60	|	|	2.25
1225	6.85	0.519	246	5.49	19.07	-26	|	|	3.00
1230	—	—	DRY	—	—	—	—	—	~~3~~ 3.75
1235							|	|	~~4~~ 4.50
1240							|	|	5.25
1245							|	|	6.00
1250							|	|	6.75
1255							|	|	
1300							|	|	
1305							|	|	
1310							|	|	

Total Quantity of Water Removed (~~gal~~): 3.00 (L) Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
SHALLOW interval
* low rate due to low water column volume
** Unable to record GW level during purge due to Channel depth

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CMT-03-07 **MONITORING WELL DEVELOPMENT LOG** page 1 of 2

Well I.D.: ~~CMT-03/06~~	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors
Sounding Method: Heron Sliny Dipper	Gauge Date: 2/1/23 Gauge Time: 1045	Measurement Ref: OD of 7th Channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.0	Well Diameter (in): 7 channels = 1.7"

Purge Date: 02/01/23	Purge Time: 1231
Purge Method: Perri Pump	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1231	6.53	0.009	491	7.87	19.1	108	—	.20	
1236	6.81	0.136	402	6.91	18.90	-108	—	.20	
1241	6.46	0.150	394	4.04	18.11	-270	—	.20	
1246	6.26	0.177	387	2.78	18.14	-290	—		
1251	6.10	0.197	369	2.62	17.98	-384			
1256	6.06	0.260	382	2.60	17.64	-442			
1301	6.03	0.297	372	2.41	17.48	-465			
1306	6.03	0.315	159	2.00	17.19	-478			
1311	6.04	0.340	144	1.45	16.96	-499			
1316	6.02	0.395	141	1.14	16.86	-512			
1321	6.02	0.433	126	1.01	17.00	-508			
1326	6.01	0.490	140	0.83	16.90	-508			
1331	6.00	0.523	116	0.74	16.79	-507			
1336	6.00	0.538	113	0.46	16.80	-487			
1341	6.00	0.564	106	0.43	16.90	-476			
1346	6.00	0.564	101	0.43	16.97	-464			

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Shallow - Intermediate

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: 03-07 ~~MT-02-07~~	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:**
Sounding Method: Heron Skinny Dipper	**Gauge Date:** / **Gauge Time:**	**Measurement Ref:**
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** 7 Channels

Purge Date: 02/01/23	**Purge Time:** 1231
Purge Method: Peri Pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units) (√)	Conductivity (mS/cm) (√)	Turbidity (ntu)	DO (mg/L) (√)	Temperature (°C)	ORP (mV) (√)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1351	5.99	0.596	102	0.36	16.93	472	\		
1356	5.98	0.611	98.3	0.35	16.92	-471	—	0.25	
1401	5.98	0.618	95.5	0.35	16.94	-475			
1406	5.98	0.630	95.3	0.34	16.93	-475			
1411	5.98	0.652	95.4	0.29	17.03	-473			
1416	5.98	0.668	93.8	0.31	17.11	-469			
1421	5.96	0.662	89.1	0.29	17.15	-468			
1426	5.96	0.659	89.9	0.29	17.19	-469			
1431	5.94	0.639	89.3	0.30	17.19	-457			
1436									
1441									
1446									
1451									
1456									
1501									

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Shallow - Intermediate

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-03-02	EA Personnel: M. Gilkey / C. Badman	Client: NYSDEC
Location:	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time: 1045	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.0	Well Diameter (in): 7 channels

Purge Date: 02/01/23	Purge Time: 1442
Purge Method: Peri Pump	Field Technician: M. Gilkey & C. Badman

Well Volume

A. Well Depth (ft): 69.3	D. Well Volume (gal): 1509 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.97	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 50.33	F. Three Well Volumes (gal) (E3): 4.5-3.0(L)	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1442	6.79	0.185	1000+	6.04	17.67	-559	—	0.25	0
1447	6.67	0.218	250	5.53	17.16	-527	—	0.25	1.25
1452	6.35	0.279	159	4.67	17.19	-510	—	0.25	2.50
1457	6.28	0.288	147	3.81	17.27	-491			3.75
1502	6.22	0.319	147	2.69	17.21	-476			5.00
1507	6.18	0.332	144	2.49	17.30	-465			6.25
1512	5.80	0.351	166	2.45	17.31	-454			7.50
1517	6.24	0.328	262	2.62	17.66	-309			8.75
1522	6.20	0.310	166	2.71	17.71	-310			10.00
1527	6.33	0.345	150	2.32	17.80	-250			11.25
1532	6.27	0.358	135	1.50	17.16	-468			12.50
1537	6.18	0.371	123	1.26	16.93	-411			13.75
1542	6.12	0.378	116	1.25	16.88	-384			15.00
1547	6.08	0.383	105	1.20	16.98	-357			16.25
1552	6.06	0.389	138	1.13	16.93	-333			17.50
1557	6.03	0.394	98.1	1.07	16.89	-331			18.75

Total Quantity of Water Removed (gal): 26.25(L) Personnel: M. Gilkey & C. Badman

COMMENTS AND OBSERVATIONS:

Deep - Intermediate

*Unable to record water level during purging due to channel diameter

EA Engineering, P.C. and Its Affiliate
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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT - 03 - 02	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY		See Page #1
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
	Gauge Time:	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**

Purge Date:	Purge Time:
see page	1
Purge Method:	**Field Technician:**
	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1602	6.00	0.399	81.1	0.91	16.85	-304	—	0.25	20.00
1607	5.99	0.405	79.3	0.74	16.75	-307			21.25
1612	5.96	0.408	80.4	0.73	16.93	-294			22.50
1617	5.96	0.411	70.1	0.71	16.97	-292			23.75
1622	5.95	0.414	58.7	0.66	17.07	-292			25.00
1627	5.94	0.416	54.9	0.65	17.27	-283			26.25
~~1632~~				stopped purge @ 16.27					
1637									
1642									

Total Quantity of Water Removed (gal): 26.25 Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Deep Intermediate

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-03-07D	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors ~73°F
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:**	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** 7 Channels = 1.7"

Purge Date: 02/02/23	**Purge Time:** 1040
Purge Method: Perri Pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 18.95	**D. Well Volume ~~(ft)~~ (mL):** 30 mL/ft · 30.55 ft = 9165	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 4.90	**E. Well Volume ~~(gal) C*D~~):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 30.55	**F. Three Well Volumes ~~(gal) (E3)~~:** 2.75 L	**Pump Intake Depth:** Mid screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1042	6.89	0.535	76.0	1.70	19.91	-19	—	0.25	0
1046	6.36	0.531	113	0.82	16.08	-22	—	0.25	1.25
1052	6.29	0.584	225	0.76	15.99	-51	—	0.25	2.50
1056	6.29	0.623	273	0.72	15.84	-70	—	0.25	3.75
1102	6.50	0.668	248	0.77	15.77	-82	—	0.25	5.00
1106	6.29	0.709	206	0.71	15.79	-87	—	0.25	6.25
1112	6.25	0.765	206	0.73	15.75	-92	—	0.25	7.50
1116	6.24	0.787	219	0.74	15.75	-96	—	0.25	8.75
1122	6.24	0.777	220	0.73	15.74	-97	—	0.25	10.00
1126	6.26	0.774	160	0.70	15.56	-97	—	0.25	11.25
1132	6.24	0.747	146	0.70	15.54	-98	—	0.25	12.50
1136	6.22	0.720	156	0.70	15.55	-98	—	0.25	13.75
1142	6.22	0.690	126	0.70	15.55	-99	—	0.25	15.00
1146	6.21	0.669	130	0.68	15.50	-100	—	0.25	16.25
1152	6.20	0.649	137	0.69	15.49	-100	—	0.25	17.50
1156	6.18	0.636	160	0.68	15.58	-100	—	0.25	18.75

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:

Assumed Shallow / Intermediate

*Cannot record water level during purging due to channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

CON'T 2/2

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-03-07	EA Personnel: M. Gilkey / C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Indoors @ 73° F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 1040
Purge Method: Perm Pump	Field Technician: M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft): 18.95	D. Well Volume (ft): 916.5 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 49.50	E. Well Volume (gal) C*D):	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 30.55	F. Three Well Volumes (gal) (E3): 2.75 (L)	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units) (✓)	Conductivity (mS/cm) (✓)	Turbidity (ntu)	DO (mg/L) (✓)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1202	6.18	0.627	140	0.67	15.61	-101	—	0.25	20.0
1206	—	—	—	pump	off to	troubleshoot	Horiba	—	—
1212	6.17	0.622	138	0.76	15.91	-64	—	0.25	21.25
1216	6.17	0.627	161	0.75	15.82	-87	—	0.25	22.50
1222	6.16	0.642	142	0.76	15.83	-87	—	0.25	23.75
1226	6.15	0.656	144	0.75	15.81	-89	—	0.25	25.00
1232	6.13	0.674	133	0.74	15.80	-90	—	0.25	26.25
1236	6.12	0.686	160	0.74	15.78	-90	—	0.25	27.50
1242	6.12	0.702	114	0.76	15.74	-90	—	0.25	28.75
1246	6.12	0.715	151	0.76	15.76	-90	—	0.25	30.00
1252	6.12	0.727	134	0.76	15.76	-90	—	0.25	31.25
1256	6.12	0.729	129	0.76	15.76	-90	—	0.25	32.50
1302	6.12	0.735	136	0.75	15.79	-90	—	0.25	33.75
—	—	—	Stop	purge	@ 1302	—	—	—	—

2 hrs

Total Quantity of Water Removed (gal): 33.75 Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:

See page 1

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-04	EA Personnel: C. Badman/M. Gilkey	Client: NYSDEC
Location: Nation Heatset, Farmingdale	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time: 1400	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.0	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 0839
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 20.92	D. Well Volume (gal): 81.2 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.89	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 2.03	F. Three Well Volumes (gal) (E3): 0.2436 (L)	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0839	6.50	0.807	116	4.64	17.16	34	—	0.15	0
0844	7.01	0.784	104	5.24	17.62	42	—	0.15	0.75
0849	7.29	0.780	97.8	5.53	17.80	50	—	0.15	1.50
0854	7.45	0.791	63.5	5.84	18.08	65	—	0.15	2.25
0859	7.52	0.801	63.0	6.07	18.23	75	—	0.15	3.00
0904	~	~	DRY	~	~	~	~	~	

Total Quantity of Water Removed (gal): 3.00 (L)

Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:
Shallow Interval

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-4	EA Personnel: M. Gilkey	Client: NYSDEC
Location: National Heatset, Farmingdale	Well Condition: New	Weather: indoors @ 73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/07/23	Purge Time: 1320
Purge Method: Perri Pump - low flow	Field Technician: M. Gilkey & C. Badman

Well Volume

A. Well Depth (ft): 20.92	D. Well Volume (ft): 81.2 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.89	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 2.03	F. Three Well Volumes (gal) (E3): 0.2436 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1322	6.83	0.810	441	1.98	17.27	-60	—	0.15	0
1327	7.30	0.916	117	1.12	17.54	-159	—	0.15	~~0.15~~ 0.75
1332	7.50	0.936	210	2.75	17.73	-158	—	0.15	1.50
1337	7.60	0.960	205	3.50	17.75	-65	—	0.15	2.25
1342	7.62	0.959	185	3.92	17.87	-5	—	0.15	3.00
1347	—	—	DRY	—	—	—	—		3.75
1352									4.50
1357									5.25
1402									6.00
1407									6.75
1412									7.50

Total Quantity of Water Removed (gal): 3.75 L

Personnel: M. Gilkey & C. Badman

COMMENTS AND OBSERVATIONS:

Assumed shallow well

*Can't record waterlevel during purge due to well ~~diameter~~ diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-05	EA Personnel: M. Gilkey & C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Indoors ~ 73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 1352
Purge Method: Peri Pump	Field Technician: M. Gilkey & C. Badman

Well Volume

A. Well Depth (ft): 53.3	D. Well Volume (gal): 13660 (mL)	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.15	E. Well Volume (gal) C*D:	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 34.15	F. Three Well Volumes (gal) (E3): 4.098 (L)	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1353	8.18	0.288	524	1.52	17.02	-76	—	0.25	0
1358	7.84	0.284	285	0.89	16.11	-221	—	0.25	1.25
1403	7.79	0.274	236	0.77	16.09	-243	—	0.25	2.50
1408	7.72	0.269	234	0.73	16.08	-252	—	0.25	3.75
1413	7.60	0.270	302	0.73	15.93	-250	—	0.25	5.00
1418	7.48	0.270	205	0.76	15.88	-242	—	0.25	6.25
1423	7.38	0.270	211	0.77	15.84	-236	—	0.25	7.50
1428	7.26	0.269	207	0.79	15.79	-229	—	0.25	8.75
1433	7.18	0.269	196	0.80	15.75	-224	—	0.25	10.00
1438	7.11	0.271	132	0.86	15.75	-218	—	0.25	11.25
1443	7.04	0.270	122	0.88	15.71	-212	—	0.25	12.50
1448	6.97	0.270	137	0.89	15.69	-206	—	0.25	13.75
1453	6.92	0.270	157	0.95	15.71	-201	—	0.25	15.00
1458	6.86	0.270	148	0.95	15.77	-196	—	0.25	16.25
1503	6.81	0.270	169	0.96	16.03	-193	—	0.25	17.50
1508	6.78	0.266	170	0.97	15.76	-189	—	0.25	18.75

Total Quantity of Water Removed (gal): 27.50 Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:
Shallow Intermediate
*Waterlevel can't be recorded during purge due to Channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-05	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1513	6.77	0.272	116	1.00	15.74	-188	—	0.25	20.00
1518	6.74	0.272	124	1.01	15.74	-185	—	0.25	21.25
1523	6.70	0.272	71.0	1.02	15.79	-182	—	0.25	22.50
1528	6.68	0.270	69.9	1.02	15.76	-180	—	0.25	23.75
1533	6.66	0.274	49.2	1.03	15.81	-178	—	0.25	25.00
1538	6.64	0.274	47.8	1.03	15.82	-177	—	0.25	26.25
1543	6.62	0.273	45.4	1.04	15.83	-176	—	0.25	27.50
1548									28.75
1553									30.00

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS: _____

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-06	EA Personnel: M. Gilkey/C. Badman	Client: NYSDEC
Location: National Headset	Well Condition: New	Weather: Indoors 73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 1546
Purge Method: Perri Pump	Field Technician: M. Gilkey

Well Volume

A. Well Depth (ft): ~~63.54~~	D. Well Volume (ft): 40 mL/ft * 44.39 ft = 1775.6 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.16 ~~63.54~~	E. ~~Well~~ Volume (gal) C*D):	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 44.39 ft	F. Three Well Volumes ~~(gal)~~ (E3): 5.327 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1548	6.94	0.251	425	0.87	15.60	-134	—	0.25	0
1553	7.16	0.258	255	0.72	15.88	-182	—	0.25	1.25
1558	7.25	0.260	248	0.66	16.02	-205	—	0.25	2.50
1603	7.29	0.260	237	0.66	16.03	-212	—	0.25	3.75
1608	7.31	0.262	257	0.66	15.94	-215	—	0.25	5.00
1613	7.28	0.268	195	0.67	15.80	-218	—	0.25	6.25
1618	7.20	0.276	213	0.70	15.76	-212	—	0.25	7.50
1623	7.13	0.280	237	0.72	15.78	-204	—	0.25	8.75
1628	7.04	0.289	217	0.75	15.75	-196	—	0.25	10.00
1633	6.95	0.295	199	0.78	15.76	-186	—	0.25	11.25
1638	6.89	0.300	208	0.80	15.85	-180	—	0.25	12.50
1643	6.83	0.310	202	0.82	15.83	-173	—	0.25	13.75
1648	6.75	0.314	196	0.84	15.83	-166	—	0.25	15.00
1653	6.72	0.317	171	0.85	15.77	-163	—	0.25	16.25
1658	6.67	0.318	155	0.86	15.72	-159	—	0.25	17.50
1703	6.64	0.325	138	0.86	15.75	-157	—	0.25	18.75

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey/C. Badman

COMMENTS AND OBSERVATIONS:
Intermediate Deep
* Water level can't be recorded during purge due to manifold diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-06	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1703	6.61	0.327	140	0.87	15.72	-154	—	0.25	20.00
1713	6.59	0.330	135	0.87	15.73	-152	—	0.25	21.25
1718	6.58	0.336	125	0.87	15.74	-150	—	0.25	22.50
1723	6.56	0.338	114	0.88	15.76	-148	—	0.25	23.75
1728	6.53	0.348	120	0.88	15.73	-146	—	0.25	25.00
1733	6.52	0.343	108	0.89	15.74	-144	—	0.25	26.25
1738	6.50	0.350	103	0.90	15.73	-143	—	0.25	27.50
1743	6.50	0.352	88.6	0.91	15.74	-142	—	0.25	28.75
1748	6.48	0.354	94.7	0.91	15.87	-141	—	0.25	30.00
1753	6.44	0.357	97.2	0.91	16.04	-140	—	0.25	31.25

Total Quantity of Water Removed (gal): _____ Personnel: N. Gilkey/C. Berman

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C. and Its Affiliate
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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-01	EA Personnel: C. Badman	Client: NYSDEC
Location:	Well Condition: New	Weather: Indoors ~73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/07/23	Measurement Ref: 7th Channel OD
	Gauge Time: 1400	
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 0638
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 83.0	D. Well Volume (gal): 1915.2 (mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.16	E. Well Volume (gal) C*D:	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 63.84	F. Three Well Volumes (gal) (E3): 5.75 (L)	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0642	5.55	0.257	424	2.01	10.42	107	—	0.25	0
0647	6.25	0.275	769	1.57	12.46	9	—	0.25	1.25
0652	6.43	0.285	730	1.34	13.28	-33	—	0.25	2.50
0657	6.60	0.288	641	1.13	14.06	-57	—	0.25	3.75
0702	6.73	0.306	491	1.04	14.42	-75	—	0.25	5.00
0707	6.75	0.335	421	0.98	14.75	-82	—	0.25	6.25
0712	6.73	0.356	260	0.93	15.05	-84	—	0.25	7.50
0717	6.73	0.372	235	0.89	15.27	-84	—	0.25	8.75
0722	6.69	0.385	165	0.86	15.48	-79	—	0.25	10.00
0727	6.58	0.398	106	0.85	15.67	-72	—	0.25	11.25
0732	6.52	0.405	110	0.84	15.78	-66	—	0.25	12.50
0737	6.48	0.414	92.7	0.83	15.90	-60	—	0.25	13.75
0742	6.41	0.416	79.3	0.80	16.01	-57	—	0.25	15.00
0747	6.38	0.416	68.9	0.78	16.15	-52	—	0.25	16.25
0752	6.35	0.422	61.3	0.77	16.24	-47	—	0.25	17.50
0757	6.34	0.419	75.9	0.75	16.24	-51	—	0.25	18.75

Total Quantity of Water Removed (gal): 28.75 (L)

Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:

Deep Interval

*Unable to record water level during purge due to channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-04-01	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: / Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading: See page 1	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0802	6.33	0.415	61.4	0.73	16.34	-57	—	0.25	20.00
0807	6.32	0.414	63.2	0.73	16.34	-58	—	0.25	21.25
0812	6.33	0.409	68.8	0.70	16.33	-71	—	0.25	22.50
0817	6.34	0.406	70.8	0.69	16.40	-85	—	0.25	23.75
0822	6.35	0.413	65.1	0.67	16.47	-94	—	0.25	25.00
0827	6.34	0.422	49.9	0.67	16.50	-99	—	0.25	26.25
0832	6.33	0.426	49.2	0.65	16.56	-103	—	0.25	27.50
0837	6.32	0.429	48.7	0.65	16.59	-105	—	0.25	28.75
0842	—	—	Stop purge @		0837	—	—	—	30.00

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-01	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:** 1300	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 392.2 ppm	**Well Diameter (in):** CMT

Purge Date: 02/01/23	**Purge Time:** 1400
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 22.90	**D. Well Volume (~~gal~~):** 148 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.20	**E. ~~Well Volume (gal)~~ C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 3.70	**F. Three Well Volumes (~~gal~~) (E3):** 0.444 L	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1400	6.58	0.330	776	3.53	18.21	-61	—	0.25	0
1405	7.13	0.342	754	1.22	18.47	-149	—	0.25	1.25
1410	7.40	0.380	752	1.11	18.24	-198	—	0.25	2.50
1415	7.68	0.379	748	1.02	17.96	-230	—	0.25	3.75
1420	7.62	0.371	742	0.98	17.81	-233	—	0.25	5.00
1425	7.57	0.366	748	0.95	17.70	-235	—	0.25	6.25
1430	7.50	0.368	738	0.93	17.61	-237	—	0.25	7.50
1435	7.44	0.365	735	0.96	17.43	-239	—	0.25	8.75
1440	7.39	0.352	613	0.96	17.33	-239	—	0.25	10.00
1445	7.35	0.349	589	0.93	17.30	-240	—	0.25	11.25
1450	7.32	0.339	464	0.91	17.33	-240	—	0.25	12.50
1455	7.30	0.335	387	0.92	17.31	-240	—	0.25	13.75
1500	7.28	0.331	342	0.92	17.32	-239	—	0.25	15.00
1505	7.27	0.331	281	0.93	17.29	-238	—	0.25	16.25
1510	7.27	0.330	254	0.93	17.34	-238	—	0.25	17.50
1515	7.25	0.327	236	0.96	17.41	-232	—	0.25	18.75

Total Quantity of Water Removed (~~gal~~): 25.0 L **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Shallow
* Unable to record GW level due to Channel diameter

NEXT PAGE ==>

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-01	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time: 1300	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 392.2 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 1400
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft): See Page 1	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1520	7.26	0.327	243	5.73	17.41	-231	—	0.25	20.0
1525	7.24	0.326	240	4.76	17.39	-229	—	0.25	21.25
1530	7.22	0.325	239	4.49	17.37	-226	—	0.25	22.50
1535	7.22	0.323	241	4.34	17.37	-225	—	0.25	23.75
1540	7.22	0.323	235	4.30	17.36	-225	—	0.25	25.0
				STOP PURGING @ 1540					

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Shallow

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-07	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time: 1300	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 392.2 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 1547
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 52.36	D. Well Volume (ft): 1318.4 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.4	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 32.96	F. Three Well Volumes (gal) (E3): 3.955 (L)	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1547	7.17	0.327	787	2.80	17.42	-62	—	0.25	0.0
1552	7.39	0.300	317	1.31	16.14	-105	—	0.25	1.25
1557	7.57	0.295	205	1.14	15.99	-145	—	0.25	2.50
1602	7.67	0.291	188	1.09	15.90	-166	—	0.25	3.75
1607	7.64	0.288	166	1.07	15.90	-178	—	0.25	5.0
1612	7.57	0.289	147	1.00	15.87	-185	—	0.25	6.25
1617	7.50	0.291	154	0.97	15.83	-190	—	0.25	7.50
1622	7.42	0.292	160	0.97	15.82	-192	—	0.25	8.75
1627	7.36	0.292	146	1.47	15.78	-196	—	0.25	10.0
1632	7.40	0.290	144	1.46	15.77	-198	—	0.25	11.25
1637	7.33	0.288	146	1.33	15.70	-203	—	0.25	12.50
1642	7.28	0.286	129	0.84	15.70	-206	—	0.25	13.75
1647	7.28	0.286	133	0.84	15.70	-207	—	0.25	15.00
1652	7.27	0.284	125	0.84	15.70	-210	—	0.25	16.25
1657	7.25	0.282	115	0.84	15.68	-210	—	0.25	17.50
1702	7.24	0.280	112	0.85	15.69	-212	—	0.25	18.75

Total Quantity of Water Removed (gal): 30.0 (L) Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate - Shallow

* Unable to Record GW level during purging due to channel diameter

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EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-05-07	M.Gilkey/H.young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset	New	Indoors
Sounding Method:	**Gauge Date:** 02/01/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:** 1300	7th Channel OD
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	392.2 ppm	CMT

Purge Date:	Purge Time:
02/01/23	1547
Purge Method:	**Field Technician:**
low flow	M.Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1707	7.24	0.281	110	1.10	15.70	-213	—	0.25	20.0
1712	7.23	0.280	105	1.24	15.70	-213	—	0.25	21.25
1717	7.23	0.280	104	0.84	15.69	-214	—	0.25	22.50
1722	7.23	0.279	100	0.84	15.68	-214	—	0.25	23.75
1727	7.27	0.280	95.8	0.84	15.69	-216	—	0.25	25.0
1732	7.25	0.282	94.8	0.83	15.70	-215	—	0.25	26.25
1737	7.25	0.283	92.3	0.84	15.69	-215	—	0.25	27.50
1742 ~~1742~~	7.23	0.286	93.7	0.83	15.69	-214	—	0.25	28.75
1747	7.22	0.287	90.4	0.82	15.68	-214	—	0.25	30.0
—	—	—	—	STOP PURGING @ 1747	—	—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: M.Gilkey / H.Young

COMMENTS AND OBSERVATIONS: Intermediate — Shallow

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-03	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors ~73°F
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:** 12:57	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 392.2ppm	**Well Diameter (in):** 7 Channels = 1.7"

Purge Date: 02/02/23	**Purge Time:** 0644
Purge Method: Perri Pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 73.4	**D. Well Volume (ft):** 2160 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.2	**E. ~~Well Volume (gal) C*D~~):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 54.2	**F. Three Well Volumes (gal) (E3):** 6.504(L)	**Pump Intake Depth:** Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0646	4.73	0.258	380	2.38	10.59	181	—	0.25	0
0651	6.04	0.375	266	1.69	14.10	-49	—	0.25	1.25
0656	6.41	0.362	185	1.40	15.06	-110	—	0.25	2.50
0701	6.60	0.358	135	1.27	15.45	-146	—	0.25	3.75
0706	6.75	0.358	138	1.20	15.68	-166	—	0.25	5.00
0711	6.92	0.360	100	1.14	15.86	-184	—	0.25	6.25
0716	7.03	0.361	93.2	1.10	15.96	-195	—	0.25	7.50
0721	7.12	0.363	96.7	1.06	16.08	-205	—	0.25	8.75
0726	7.19	0.365	82.5	1.02	16.18	-212	—	0.25	10.00
0731	7.23	0.369	89.2	0.98	16.26	-213	—	0.25	11.25
0736	7.25	0.371	92.4	0.96	16.33	-217	—	0.25	12.50
0741	7.24	0.371	92.0	0.95	16.38	-218	—	0.25	13.75
0746	7.25	0.374	82.9	0.93	16.45	-219	—	0.25	15.00
0751	7.25	0.376	76.8	0.91	16.49	-218	—	0.25	16.25
0756	7.24	0.379	85.1	0.90	16.53	-217	—	0.25	17.50
0801	7.25	0.381	88.5	0.88	16.56	-216	—	0.25	18.75

Total Quantity of Water Removed (~~gal~~): 25.00(L) **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:

Assumed intermediate ~~depth~~ Deep interval
*Water level can't be recorded while purging due to Channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-OS-03	EA Personnel:	Client: NYSDEC
Location:	Well Condition: New	Weather: See page #1
Sounding Method: Heron Skinny Dipper	Gauge Date:	Measurement Ref:
	Gauge Time:	
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in):

Purge Date: 02/02/23	Purge Time: 0644
Purge Method: Peri Pump	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0806	7.23	0.386	75.2	0.85	16.61	-214	—	0.25	20.00
0811	7.22	0.389	96.8	0.84	16.57	-210	—	0.25	21.25
0816	7.21	0.388	76.1	0.83	16.60	-210	—	0.25	22.50
0821	7.20	0.391	89.1	0.81	16.64	-212	—	0.25	23.75
0826	7.20	0.393	84.1	0.81	16.71	-213	—	0.25	25.00
~~0831~~	—	—	STOP	Purge	@ 0826	—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-05	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors ~73°F
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 02/01/23 **Gauge Time:**	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** 7 Channels = 1.7"

Purge Date: 02/02/23	**Purge Time:** 0831
Purge Method: Perri Pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. ~~Well Depth~~ (ft): ~~83.3~~ 5000 (illegible)	**D. Well Volume (ft):** 2560 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.3	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 64	**F. Three Well Volumes (~~gal~~) (E3):** 7.68 L	**~~Pump Intake Depth~~:** Mid screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0832	7.45	0.319	322	1.41	17.21	-80	—	0.25	~~1.25~~ 0
0837	7.07	0.394	106	0.95	16.45	-137	—	0.25	1.25
0842	7.10	0.397	115	0.89	16.28	-160	—	0.25	2.50
0847	7.12	0.404	108	0.83	16.13	-178	—	0.25	3.75
0852	7.13	0.407	104	0.81	16.13	-185	—	0.25	5.00
0857	7.13	0.410	120	0.81	16.06	-190	—	0.25	6.25
0902	7.16	0.416	89.0	0.82	15.95	-184	—	0.25	7.50
0907	7.12	0.420	87.1	0.81	15.87	-188	—	0.25	8.75
0912	7.13	0.424	85.4	0.80	15.91	-193	—	0.25	10.00
0917	7.13	0.429	86.9	0.80	15.88	-195	—	0.25	11.25
0922	7.14	0.430	85.7	0.80	15.91	-197	—	0.25	12.50
0927	7.13	0.431	113	0.79	15.95	-200	—	0.25	13.75
0932	7.14	0.437	103	0.81	16.03	-200	—	0.25	15.00
0937	7.13	0.436	116	0.80	16.12	-200	—	0.25	16.25
0942	7.15	0.438	91.8	0.81	16.07	-199	—	0.25	17.50
0947	7.14	0.442	90.3	0.80	16.07	-200	—	0.25	18.75

Total Quantity of Water Removed (gal): 30.0 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Assumed Deep Interval
*Water level can not be taken while purging due to well channel diameter

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

See Page #1 page 2 of 2

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-05-05	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors ~73°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/22 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 0931
Purge Method: Perri Pump	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth: mid Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0952	7.13	0.444	88.0	0.79	16.11	-201	/	0.25	20.00
0957	7.14	0.445	100.0	0.82	16.21	-201	/	0.25	21.25
1002	7.14	0.448	87.4	0.78	16.06	-200	/	0.25	22.50
1007	7.14	0.452	86.0	0.77	16.07	-200	/	0.25	23.75
1012	7.13	0.453	88.0	0.82	16.17	-201	/	0.25	25.00
1017	7.13	0.454	84.9	0.78	16.18	-200	/	0.25	26.25
1022	7.13	0.458	89.9	0.80	16.23	-199	/	0.25	27.50
1027	7.12	0.459	89.9	0.76	16.29	-198	/	0.25	28.75
1032	7.17	0.459	89.9	0.76	16.29	-198	/	0.25	30.0
			Stop purge @			1032			

2 hrs

Total Quantity of Water Removed (gal): 30.0		Personnel:	M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: See page 1

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-06-01	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY	New	Indoors
Sounding Method:	**Gauge Date:** 01/31/23	**Measurement Ref:**
Heron SkimmyDipper	**Gauge Time:** @ 1300	4th Channel OD
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	0.0 ppm	CMT

Purge Date:	Purge Time:
01/31/23	1313
Purge Method:	**Field Technician:**
low flow	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
23.31	178.8 mL	
B. Depth to Water (ft):	**E. ~~Well Volume (gal) C*D~~:**	**Pump Type:**
18.84		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**
4.47	0.536 (L)	Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1313	5.12	0.266	706	10.25	14.12	110	—	0.25	0.0
1318	5.77	0.243	732	3.03	15.50	37	—	0.25	1.25
1323	6.27	0.223	1000+	2.00	15.73	1	—	0.25	2.50
1328	6.63	0.224	1000+	1.27	15.79	-28	—	0.25	3.75
1333	6.89	0.234	873	1.17	15.81	-31	—	0.25	5.0
1338	7.11	0.247	511	1.45	15.83	-74	—	0.25	6.25
1343	7.21	0.255	390	1.50	15.84	-48	—	0.25	7.50
1348	7.27	0.260	323	1.24	15.82	-51	—	0.25	8.75
1353	7.29	0.262	297	1.25	15.81	-53	—	0.25	10.0
1358	7.30	0.264	260	1.15	16.07	-53	—	0.25	11.25
1403	7.25	0.270	204	1.11	16.22	-121	—	0.25	12.50
1408	7.20	0.278	192	1.27	16.23	-120	—	0.25	13.75
1413	7.13	0.285	218	1.16	16.24	-117	—	0.25	15.0
1418	7.05	0.295	226	1.05	16.26	-111	—	0.25	16.25
1423	7.00	0.295	223	1.22	16.37	-104	—	0.25	17.50
1428	6.93	0.308	175	1.10	16.30	-96	—	0.25	18.75

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: ~~Shallow Port~~ ~~Deep Port~~ Shallow Interval
*Water level can not be recorded due to channel diameter

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EA Engineering, P.C. and Its Affiliate
EA Science and Technology

MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-06-01	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY	Good / New	Indoors
Sounding Method:	**Gauge Date:** 01/31/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:**	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	0.0 ppm	CMT

Purge Date:	Purge Time:
01/31/23	1313
Purge Method:	**Field Technician:**
low flow	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
	See page 1	
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:**
		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1433	6.86	0.334	153	1.05	16.12	-92	—	0.25	20.0
1438	6.80	0.348	140	1.03	16.04	-89	—	0.25	21.25
1443	6.71	0.367	114	0.99	15.98	-86	—	0.25	22.50
1448	6.73	0.376	103	1.04	15.93	-82	—	0.25	23.75
1452	6.62	0.380	101	0.90	15.94	-78	—	0.25	25.0
1458	6.60	0.388	94.2	0.89	16.00	-75	—	0.25	26.25
1503	6.54	0.399	83.5	0.91	15.96	-72	—	0.25	27.50
1508	6.50	0.407	80.9	1.02	15.96	-68	—	0.25	28.75
1513	6.46	0.417	74.2	0.89	15.96	-64	—	0.25	30.0
1518	6.44	0.427	69.4	1.00	16.00	-58	—	0.25	31.25
1523	6.39	0.432	63.8	0.94	16.01	-54	—	0.25	32.50
1528	6.36	0.435	63.1	0.94	16.05	-50	—	0.25	33.75
1533	6.35	0.438	57.5	0.94	16.07	-48	—	0.25	35.0
			STOP PURGING						
				@ 1533					

Total Quantity of Water Removed (gal): 35.0 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Shallow port

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-06-03	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babylon NY	**Well Condition:** Good/New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:** 1300	**Measurement Ref:** 7-in Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 0.0ppm	**Well Diameter (in):** CMT

Purge Date: 01/31/23	**Purge Time:** 1542
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 43.42	**D. Well Volume (ft):** 977.6 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 18.98	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 24.44	**F. Three Well Volumes (gal) (E3):** 2.933 (L)	**Pump Intake Depth:** mid screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1542	6.78	0.365	1000+	7.10	16.70	-58	—	0.25	0.0
1547	6.96	0.390	1000+	7.04	16.45	-83	—	0.25	1.25
1552	6.82	0.401	623	4.88	16.28	-60	—	0.25	2.50
1557	6.49	0.420	216	0.99	16.21	-50	—	0.25	3.75
1602	6.34	0.432	167	0.93	16.20	-38	—	0.25	5.0
1607	6.29	0.435	160	0.92	16.17	-35	—	0.25	6.25
1612	6.26	0.435	147	0.94	16.17	-34	—	0.25	7.50
1617	6.25	0.437	131	0.94	16.13	-33	—	0.25	8.75
1622	6.24	0.440	117	0.96	16.09	-33	—	0.25	10.0
1627	6.23	0.446	103	0.97	16.08	-30	—	0.25	11.25
1632	6.21	0.445	95.4	0.97	16.06	-29	—	0.25	12.50
1637	6.20	0.447	93.9	0.97	16.04	-28	—	0.25	13.75
1642	6.20	0.454	88.0	1.00	16.13	-27	—	0.26	15.0
1647	6.18	0.454	82.4	0.99	16.28	-26	—	0.25	16.25
1652	6.18	0.455	79.6	0.98	16.38	-24	—	0.25	17.50
1657	6.18	0.441	73.2	0.95	16.51	-23	—	0.25	18.75

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate Shallow?
*Unable to record DTW level during purging due to channel diameter

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EA Engineering, P.C. and Its Affiliate
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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-06-03	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** Good / New	**Weather:** Indoors
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:**	**Measurement Ref:**
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** CMT

Purge Date: 01/31/23	**Purge Time:** 1542
Purge Method: low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D:** See Page 1	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1702	6.19	0.450	68.2	0.97	16.16	-23	—	0.25	20.0
1707	6.18	0.446	67.0	0.96	16.04	-24	—	0.25	21.25
1712	6.16	0.459	66.8	0.99	16.12	-24	—	0.25	22.50
1717	6.16	0.459	59.1	1.00	16.31	-23	—	0.25	23.75
—	—	—	— STOP PURGING @ 1717	—	—	—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate Shallow?

EA Engineering, P.C. and Its Affiliate
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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-06-04	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY	Good/New	Indoors
Sounding Method:	**Gauge Date:** 02/01/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:**	4th Channel
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	0.0ppm	CMT

Purge Date:	Purge Time:
02/01/23	0725
Purge Method:	**Field Technician:**
low flow	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. ~~Well Volume (ft)~~:	Depth/Height of Top of PVC:
63.88	1789 mL	
B. Depth to Water (ft):	**E. ~~Well Volume (gal) C*D)~~:**	**Pump Type:**
19.15		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**
44.73	5.36(L)	Mid Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0725	5.53	0.473	567	2.47	10.65	56	—	0.25	0.0
0730	5.92	0.467	1000+	2.09	12.65	8	—	0.25	1.25
0735	6.10	0.453	180	1.81	13.74	-18	—	0.25	2.50
0740	6.14	0.452	54.9	1.65	14.10	-25	—	0.25	3.75
0745	6.15	0.448	49.3	1.57	14.55	-26	—	0.25	5.0
0750	6.15	0.447	24.0	1.49	14.80	-25	—	0.25	6.25
0755	6.15	0.445	16.8	1.42	15.05	-22	—	0.25	7.50
0800	6.16	0.444	15.1	1.37	15.25	-23	—	0.25	8.75
0805	6.16	0.446	14.0	1.33	15.42	-23	—	0.25	10.0
0810	6.18	0.445	14.6	1.30	15.53	-23	—	0.25	11.25
				STOP PURGING @ 0810					

Total Quantity of Water Removed (gal): 11.25 Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Intermediate - Deep?

*Unable to record GW level while purging due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-06-07	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: Good/New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 0.0 ppm	Well Diameter (in): CMT

Purge Date: 02/01/23	Purge Time: 0902
Purge Method: low flow	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.98	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0902	6.94	0.308	469	8.84	17.60	-55	—	0.25	0.0
0907	6.45	0.424	467	6.30	16.54	-68	—	0.25	1.25
0912	6.36	0.431	434	6.00	16.31	-56	—	0.25	2.50
0917	6.30	0.432	266	5.28	16.15	-43	—	0.25	3.75
0922	6.28	0.430	89.9	5.14	16.04	-30	—	0.25	5.0
0927	6.21	0.428	38.0	5.33	15.98	-21	—	0.25	6.25
0932	6.17	0.427	29.7	4.68	15.96	-14	—	0.25	7.50
0937	6.14	0.432	23.1	1.27	15.70	-9	—	0.25	8.75
0942	6.10	0.434	17.2	1.23	15.65	-4	—	0.25	10.0
0947	6.08	0.434	16.7	1.21	15.60	-1	—	0.25	11.25
0952	6.06	0.432	16.8	1.20	15.57	-2	—	0.25	12.50
—	—	—	STOP PURGING @ 0953			—	—	—	—

Total Quantity of Water Removed (gal): _____ Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS: Deep?

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
OMT-07-0007	M. Gilkey / H. Young	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset - Babalyon NY	New	Indoors
Sounding Method:	**Gauge Date:** 01/31/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:**	TOC (middle channel)
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush	248.5 ppm	(7 channels = 1.7")

Purge Date:	Purge Time:
01/31/23	1518
Purge Method:	**Field Technician:**
Peri pump	M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
20.12		
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:**
19.25		Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1520	5.29	0.651	2891	2.27	18.35	-224	↓	0.25	
1525	6.17	0.701	140	1.01	18.40	-336	↓		
1530	6.45	0.691	146	2.84	18.62	-209	↓		
1535	—	—	DRY	—	—	—			
1540									
1545	19.84 DTW		20.06						
~~1550~~	02/01/23 (0740)								
0742 ~~1555~~	7.16	0.841	262	1.94	15.04	-316	—	0.25	
0747 ~~1600~~	7.15	0.787	188	1.39	16.77	-306	—	0.25	
0752	7.18	0.789	137	2.26	16.29	-190	—	0.25	
0757	7.21	0.799	96.4	5.71	16.32	-89	—	0.25	
0802	7.27	0.800	92.6	7.00	16.76	-58	—	0.25	
0807	—	—	DRY	—	—	—			
	Recharged to 19.50			Start Purge @ 1005					
			well goes dry after 5 mins						

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
SHALLOW interval?
~~water level can't be recorded simultaneously w/ purge~~ due to channel size

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-04	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoor
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:** 1400	**Measurement Ref:** (7th Channel OD)
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 248 5	**Well Diameter (in):** 7 channels = 1.7"

Purge Date: 01/31/23	**Purge Time:** 1335
Purge Method: Perri pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 52.54	**D. Well Volume (ft):** 1333.6 (mL)	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.20	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 33.34	**F. Three Well Volumes (gal) (E3):** 4.00 (L)	**Pump Intake Depth:** Mid-Screen

Water Quality Parameters ± 10

Time (hrs)	pH ±.1 (pH units)	Conductivity (mS/cm) 3%	Turbidity ±50 (ntu)	DO 10% (mg/L)	Temperature (°C) 3%	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1537	6.91	0.205	496	2.45	18.37	-313		0.25	1.25
1542	6.93	0.302	292	1.07	18.01	-374			2.50
1547	7.04	0.341	147	0.78	17.82	-454			3.75
1552	6.97	0.341	78.7	0.59	17.63	-484			5.00
1557	6.98	0.343	80.1	0.53	17.57	-502			6.25
1602	6.79	0.343	72.2	0.51	17.57	-496			7.50
1607	6.67	0.342	63.0	0.52	17.54	-461			8.75
1612	6.56	0.334	58.4	0.57	17.50	-420			10.00
1617	6.49	0.317	55.4	0.61	17.47	-400			11.25
1622	6.45	0.293	48.1	0.67	17.46	-382			12.50
1627	6.40	0.272	40.4	0.72	17.56	-366			13.75
1632	6.35	0.257	35.8	0.78	17.56	-356			15.00
1637	6.33	0.248	29.3	0.86	17.36	-342			16.25
1642	6.30	0.238	24.3	0.90	17.36	-332			17.50
1647	6.27	0.231	29.9	0.93	17.37	-323			18.75
1652	6.25	0.227	17.8	0.96	17.36	-318			20.00

Total Quantity of Water Removed (gal): 23.75 (L) **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:

Intermediate-shallow
* Water level could not be recorded due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-04	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** See Page 1	**Weather:**
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
	Gauge Time:	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**

Purge Date: See Page 1	**Purge Time:**
Purge Method:	**Field Technician:** M. Gilkey / ~~H. Young~~

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1657	6.23	0.220	16.2	1.07	17.26	-308	~	0.25	21.25
~~1700~~ 1702	6.19	0.218	17.3	1.00	17.33	-302		1	22.50
1707	6.18	0.214	14.2	0.99	17.35	-299		1	23.75

Total Quantity of Water Removed (gal): _____ **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Intermediate/Shallow

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-05	EA Personnel: M. Gilkey / H. Young	Client: NYSDEC
Location: National Heatset - Babalyon NY	Well Condition: New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 1/31/23 Gauge Time: 1400	Measurement Ref: OD 7th channel
Stick Up/Down (ft): Flush	PID Headspace Reading: 248.5 ppm	Well Diameter (in): 7 channels = 1.7"

Purge Date: 2/1/23	Purge Time: 0811
Purge Method: Perri pump	Field Technician: M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 72.35	D. Well Volume (~~ft~~): 2126 (mL)	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.20	E. ~~Well Volume~~ (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 53.15	F. Three Well Volumes (gal) (E3): 6.378 (L)	Pump Intake Depth: Mid-Screen

+- .1 | 3% | <50 Water Quality Parameters | +- 10

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0811	7.06	0.147	332	2.98	16.55	-437	—	0.25	1.25
0816	6.86	0.151	299	2.43	16.45	-497	—	0.25	2.50
0821	6.83	0.153	296	1.85	16.50	-513	—	0.25	3.75
0826	6.82	0.154	318	1.70	16.56	-521	—	0.25	5.00
0831	6.80	0.156	311	1.14	16.63	-535	—	0.25	6.25
0836	6.80	0.160	309	0.82	16.70	-542	—	0.25	7.50
0841	6.79	0.165	280	0.69	16.56	-547	—	0.25	8.75
0846	6.79	0.172	310	0.57	16.53	-554	—	0.25	10.00
0851	6.77	0.183	295	0.49	16.55	-557	—	0.25	11.25
0856	6.75	0.207	257	0.44	16.49	-564	—	0.25	12.90
0901	6.75	0.231	71.5	0.41	16.48	-567	—	0.25	13.75
0906	6.72	0.259	71.8	0.39	16.51	-578	—	0.25	15.00
0911	6.70	0.288	83.3	0.36	16.47	-586	—	0.25	16.25
0916	6.67	0.321	87.2	0.33	16.49	-593	—	0.25	17.50
0921	6.67	0.357	56.1	0.34	16.52	-600	—	0.25	18.75
0926	6.63	0.395	27.0	0.31	16.48	-606	—	0.25	20.00

Total Quantity of Water Removed (~~gal~~): 28.75 (L) 10% | Personnel: M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Intermediate / deep Interval
*Water level could ø be recorded due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-05	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** See Page #1	**Weather:**
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:** 1400	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:** 248.5	**Well Diameter (in):** (7 Channels = 1.7")

Purge Date: 02/01/23	**Purge Time:** 0811
Purge Method: Peri pump	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**

Water Quality Parameters

Time (hrs)	pH ±.1 (pH units)	Conductivity 3% (mS/cm)	Turbidity ±5 (ntu)	DO 10% (mg/L)	Temperature 3% (°C)	ORP ±10 (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0931	6.61	0.429	21.8	0.30	16.47	-617	—	0.25	21.25
0936	6.58	0.451	18.5	0.29	16.47	-620	—	0.25	22.50
0941	6.58	0.472	15.9	0.29	16.48	-617	—	0.25	23.75
0946	6.57	0.487	13.9	0.29	16.47	-615			25.00
0951	6.56	0.499	12.1	0.29	16.45	-611			26.25
0956	6.53	0.506	10.8	0.30	16.47	-612			27.5
1001	6.51	0.507	9.9	0.29	16.48	-609			28.75
1006									
1011									
1016									

Total Quantity of Water Removed (gal): 28.75 (L) **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
Intermediate / DEEP Interval

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-07-06	**EA Personnel:** M. Gilkey / H. Young	**Client:** NYSDEC
Location: National Heatset - Babalyon NY	**Well Condition:** New	**Weather:** Indoors u 73°F
Sounding Method: Heron Skinny Dipper	**Gauge Date:** 01/31/23 **Gauge Time:** 1715	**Measurement Ref:** 7th Channel OD
Stick Up/Down (ft): Flush	**PID Headspace Reading:**	**Well Diameter (in):** 7 Channels = 1.7"

Purge Date: 01/31/23	**Purge Time:** 1007
Purge Method: Perr. Pump low flow	**Field Technician:** M. Gilkey / H. Young

Well Volume

A. Well Depth (ft): 81.80	**D. Well Volume ~~(ft)~~:** 2509 mL	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 19.20	**~~E. Well Volume (gal) C*D):~~**	**Pump Type:** Perristaltic Pump
C. Liquid Depth (ft) (A-B): 62.60	**F. Three Well Volumes ~~(gal)~~ (E3):** 7.5 L	**Pump Intake Depth:** Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1010	6.72	0.139	344	2.32	17.44	-378	\	0.25	0
1015	6.36	0.169	352	1.90	17.	-564	|	|	1.25
1020	6.17	0.211	370	1.03	16.69	-567	|	|	2.50
1025	6.06	0.251	338	0.62	16.84	-566	|	|	3.75
1030	5.96	0.293	241	0.40	16.66	-559	|	|	5.00
1035	5.92	0.315	39.0	0.32	16.58	-555	|	|	6.25
1040	5.87	0.329	20.1	0.30	16.58	-556	|	|	7.50
1045	5.86	0.338	15.7	0.29	16.53	-554	|	|	8.75
1050	5.85	0.351	25.8	0.29	16.40	-555	|	|	10.00
1055	5.83	0.358	11.2	0.29	16.38	-555	|	|	11.25
1100	5.83	0.368	7.6	0.30	16.36	-548	|	|	12.50
1105	5.83	0.378	10.9	0.29	16.21	-552	|	|	13.75
1110	5.82	0.388	4.3	0.28	16.18	-545	|	|	15.00
1115	5.80	0.397	13.1	0.29	16.16	-537	|	|	16.25
1120	5.77	0.403	26.5	0.28	16.16	-531	|	|	17.50
1125	5.77	0.408	12.1	0.28	16.17	-527	|	|	18.75

Total Quantity of Water Removed (gal): 18.75 **Personnel:** M. Gilkey / H. Young

COMMENTS AND OBSERVATIONS:
DEEP Interval
*water level can ø be recorded simultaneously w/ purge due to channel size

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-08-02	EA Personnel: M.Gilkey / C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: 27°F Sun, 19 mph SE
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 0950
Purge Method: Peri Pump - Low Flow	Field Technician: M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft): 20.2	D. Well Volume (gal): 160 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.20	E. Well Volume (gal) C*D):	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 4.0	F. Three Well Volumes (gal) (E3): 0.480 (L)	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0951	8.05	0.403	283	2.74	14.33	-51		0.2	0
0956	8.20	0.408	779	1.16	13.66	-231		0.2	1.00
1001	8.35	0.408	865	0.97	13.05	-247		0.2	2.00
1006	8.20	0.319	1000+	0.50	12.45	-271		0.2	3.00
1011	7.95	0.306	1000*	0.77	12.09	-270		0.2	4.00
1016	7.76	0.316	1000*	0.75	12.06	-252		0.2	5.00
1021	7.45	0.326	930	0.76	12.51	-241		0.2	6.00
1026	7.26	0.332	862	0.75	11.13	-231			7.00
1031	7.10	0.334	839	0.74	10.98	-226			8.00
1036	6.93	0.347	650	0.77	10.95	-216			9.00
1041	6.87	0.347	599	0.80	10.95	-216			10.0
1046	6.78	0.352	498	0.76	10.77	-211			11.0
1051	6.65	0.355	269	0.77	10.74	-206			12.0
1056	6.53	0.371	236	0.80	10.11	-202			13.0
1101	6.45	0.373	146	0.77		-200			14.00
1106	6.43	0.374	154	0.76	10.06	-209			15.00

Total Quantity of Water Removed (gal): 2500 (L)

Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:

SHALLOW interval

*Water level could not be recorded due to channel depth

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-08-02	EA Personnel:	Client: NYSDEC
Location: National Heatset	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
	Gauge Time:	
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date: 02/03/23	Purge Time: 0750
Purge Method: Peristaltic Pump - Lawliss	Field Technician: M. Gilkey / CI Badaracco

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1111	6.42	0.370	190	0.73	10.20	-205	\	0.2	16.00
1116	6.37	0.372	123	0.74	10.51	-202	|	|	17.00
1121	6.36	0.372	150	0.73	10.82	-203	|	|	18.00
1126	6.32	0.375	156	0.69	10.81	-199	|	|	19.00
1131	6.30	0.380	152	0.70	10.56	-207	|	|	20.00
1136	6.31	0.375	171	0.65	11.30	-210	|	|	21.00
1141	6.26	0.397	157	0.68	10.56	-205	|	|	22.00
1146	6.25	0.393	138	0.68	10.71	-204	|	|	23.00
2hr → 1151	6.24	0.409	132	0.72	10.63	-204	|	|	24.00
1156	6.23	0.410	130	0.71	10.63	-202	|	|	25.00
~~1201~~	~~—~~	~~—~~	Stop	purge	@ 1156	~~—~~	~~—~~	~~—~~	~~—~~
1206									
1211									
1216									

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:
Assumed Shallow Interval

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-08-04	EA Personnel: M. Gilkey/C. Badman	Client: NYSDEC
Location:	Well Condition: New	Weather: 27°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/23	Measurement Ref: 7th Channel OD
	Gauge Time:	
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channel 1.7"

Purge Date: 02/03/23	Purge Time: 1149
Purge Method: Peri Pump	Field Technician: M. Gilkey/C. Badman

Well Volume

A. Well Depth (ft): 16.38	D. Well Volume (ft): 1394 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 51.25	E. Well Volume (gal) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 34.87	F. Three Well Volumes (gal) (E3): 4.184 (L)	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1154	7.23	0.232	1000+	1.15	12.98	-563	—	0.25	0
1159	7.38	0.234	744	0.73	13.16	-653	—	0.25	1.25
1204	7.40	0.236	1000+	0.49	13.33	-654	—	0.25	2.50
1209	7.43	0.263	1000+	0.39	12.99	-651	—	0.25	3.75
1214	7.33	0.282	1000+	0.37	12.88	-623	—	0.25	5.00
1219	7.15	0.298	1000+	0.42	12.93	-610	—	0.25	6.25
1224	7.06	0.280	640	0.37	13.07	-641	—	0.25	7.50
1229	6.93	0.282	395	0.35	13.06	-645	—	0.25	8.75
1234	6.84	0.298	364	0.36	13.13	-640	—	0.25	10.00
1239	6.77	0.301	256	0.33	13.10	-637	—	0.25	11.25
1244	6.73	0.303	257	0.30	13.12	-635	—	0.25	12.50
1249	6.69	0.296	312	0.31	13.15	-607	—	0.25	13.75
1254	6.73	0.244	355	0.27	13.17	-600	—	0.25	15.00
1259	6.80	0.236	374	0.25	12.97	-574	—	0.25	16.25
1304	6.88	0.236	358	0.25	12.86	-602	—	0.25	17.50
1309	6.86	0.236	342	0.25	12.89	-604	—	0.25	18.75

Total Quantity of Water Removed (gal): 35.00(L) Personnel: M. Gilkey/C. Badman

COMMENTS AND OBSERVATIONS: Assumed shallow intermediate interval
*Water level can ø be recorded during purge due to Channel diameter

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See page #1 MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-08-04	EA Personnel:	Client: NYSDEC
Location:	Well Condition: New	Weather:
Sounding Method: Heron Skinny Dipper	Gauge Date: / Gauge Time:	Measurement Ref:
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1314	6.93	0.356	1000+	0.95	12.55	-619	—	0.25	20.00
1319	6.73	0.305	511	0.82	12.10	-604	—	0.25	21.25
1324	6.53	0.347	330	0.63	12.44	-504	—	0.25	22.50
1329	6.43	0.347	321	0.55	12.61	-495	—	0.25	23.75
1334	6.36	0.364	192	0.61	12.69	-557	—	0.25	25.00
1339	6.32	0.367	179	0.47	13.51	-595	—	0.25	26.25
1344	6.32	0.371	165	0.36	13.47	-599	—	0.25	27.50
1349	6.31	0.373	166	0.32	13.56	-595	—	0.25	28.75
1354	6.28	0.376	131	0.30	13.55	-572	—	0.25	30.00
1359	6.27	0.373	181	0.29	13.48	-578	—	0.25	31.25
1404	6.30	0.356	220	0.28	13.54	-585	—	0.25	32.50
1409	6.33	0.349	181	0.28	13.50	-588	—	0.25	33.75
1414	6.32	0.353	165	0.28	13.40	-587	—	0.25	35.00

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:
Intermediate Deep

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-OB-05	EA Personnel: M. Gilkey / C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Sunny 27°F; 19mph SE
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/01/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 1246
Purge Method: Peri Pump - low flow	Field Technician: M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft): 79	D. Well Volume (ft): 2502 (mL)	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.45	E. Well Volume (gal) C*D):	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 62.55	F. Three Well Volumes (gal) (E3): 7.506 (L)	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1245	8.28	0.257	**	2.99	7.13	-59	\	0.25	0
1253	7.19	0.296	727	1.35	8.09	-291	\		1.25
1258	7.35	0.305	385	1.08	8.51	-292	\		2.80
1303	~~8.11~~	0.303	299	1.06	8.93	-299	\		5.75
1308	7.05	0.299	0**	0.97	8.96	-307	\		5.0
1313	7.00	0.311	**	0.88	9.47	-311	\		6.25
1318	6.81	0.397	302	0.86	9.21	-288	\		7.50
1323	6.58	0.425	211	0.84	9.03	-260	\		8.75
1328	~~6.50~~	~~0.433~~	~~135~~	0.86	12.49	-237	\		10.00
1333	6.44	0.442	72.2	0.83	9.07	-242	\		11.25
1338	6.39	0.446	65.7	0.78	8.87	-250	\		12.5
1343	6.38	0.446	52.3	0.78	8.90	-247	\		13.75
1348	6.35	0.445	49.7	0.79	8.85	-254	\		15.00
1353	6.32	0.444	47.2	0.79	8.62	-256			16.25
1358	6.31	0.443	46.2	0.77	8.33	-257			17.50
1400				Stop purge @ 1358					

Total Quantity of Water Removed (gal): 17.50

Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:

~~Deep~~ Deep Interval

* Water level can't be recorded during purge due to Channel diameter

** Turbidity above detectable range.

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-09-04	EA Personnel: M. Gillkey & C. Badman	Client: NYSDEC
Location: National Heatset	Well Condition: New	Weather: Indoors @ 70°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/01 Gauge Time: 1500	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading: 100.0 ppm	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/02/23	Purge Time: 1533
Purge Method: Peri Pump	Field Technician: M. Gillkey

Well Volume

A. Well Depth (ft): 20.50	D. Well Volume (ft): 40 ml/ft · 1.12 ft = 44.8 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.38	E. Well Volume (gal) C*D):	Pump Type: Perristaltic
C. Liquid Depth (ft) (A-B): 1.12	F. Three Well Volumes (gal) (E3) (L): 0.134 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1534	5.55	0.392	331	1.28	15.97	-470	—		0
1539	6.15	0.302	316	0.59	16.35	-557	—	0.25	1.25
1544	6.61	0.345	294	0.54	16.39	-506	—	0.25	2.50
1549	5.93	0.369	295	0.54	16.35	-498	—	0.25	3.75
1554	5.85	0.373	296	0.53	16.34	-483	—	0.25	5.00
1559	5.77	0.395	359	0.51	16.30	-452	—	0.25	6.25
1604	5.68	0.414	289	0.49	16.42	-421	—	0.25	7.50
1609	5.63	0.427	230	0.47	16.39	-397	—	0.25	8.75
1614	5.60	0.433	225	0.55	16.40	-381	—	0.25	10.00
1619	5.57	0.438	146	0.45	16.40	-372	—	0.25	11.25
1624	5.59	0.419	116	0.49	16.42	-346	—	0.25	12.50
1629	5.57	0.429	86.9	0.47	16.42	-340	—	0.25	13.75
1634	5.55	0.437	89.9	0.45	16.43	-341	—	0.25	15.00
—	—	Turned off pump so we could load truck							
1714	5.53	0.442	59.3	0.53	16.43	-249	—	0.25	16.25
1719	5.53	0.436	50.0	0.50	16.71	-379	—	0.25	17.50

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS:

Assume shallow interval

* Can't record water level during purge due to channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-09-04		NYSDEC
Location:	Well Condition:	Weather:
	See page 1	
Sounding Method:	Gauge Date:	Measurement Ref:
	Gauge Time:	
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1724	5.52	0.434	36.4	0.72	16.53	-408	\	0.25	18.75
1729	5.52	0.434	31.4	0.07	16.60	-395	\	0.25	20.0
1734	5.50	0.439	31.3	0.64	16.59	-371	\	|	21.25
1739	5.51	0.433	32.0	0.62	16.58	-388	\	|	22.50
1744	5.52	0.439	32.0	0.60	16.60	-353	\	0.25	23.75
1749	5.53	0.424	35.1	0.58	16.64	-352	\	0.25	25.0
1754	5.51	0.435	31.3	0.57	16.64	-338	\	0.25	26.25
1759	5.51	0.433	34.0	0.56	16.65	-341	\	|	27.50
1804	5.49	0.441	32.0	0.55	16.65	-321	\	|	28.75
1809	5.47	0.446	33.4	0.54	16.65	-322	\	|	30.0
1814	5.40	0.447	30.9	0.53	16.65	-309	\	|	31.25
1819	5.47	0.451	27.7	0.51	16.71	-304	\	|	32.50
1824	5.46	0.453	29.9	0.50	16.71	-299	\	|	33.75
1829		Stop purge @			1824				

Total Quantity of Water Removed (gal): 33.75 Personnel: BB M. Gilkey

COMMENTS AND OBSERVATIONS:

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MONITORING WELL DEVELOPMENT LOG

Well I.D.: MW-09-~~mG~~ 03	EA Personnel: M. Gilkey & C. Badman	Client: NYSDEC
Location: National Heritage	Well Condition: New	Weather: Indoors ~ 70°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 02/02/23 Gauge Time:	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	PID Headspace Reading:	Well Diameter (in): 7 Channels = 1.7"

Purge Date: 02/03/23	Purge Time: 0653
Purge Method: Peristaltic Pump - low flow	Field Technician: M. Gilkey & C. Badman

Well Volume

A. Well Depth (ft): 50.50	D. Well Volume (~~ft~~): mL 40mL/ft · 31.12ft = 311.2	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.38	E. Well Volume (~~gal~~) C*D):	Pump Type: Perristaltic Pump
C. Liquid Depth (ft) (A-B): 31.12	F. Three Well Volumes (~~gal~~) (E3): .933 (L)	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	pH (√) (pH units)	Conductivity (√) (mS/cm)	Turbidity (ntu)	DO (√) (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0654	5.17	~~340~~	256	2.46	13.11	-316		0.25	0
0659	5.87	0.348	244	1.04	14.60	-510			1.25
0704	5.78	0.394	114	0.79	14.93	-532			2.50
0709	5.73	0.409	89.7	0.77	15.14	-522			3.75
0714	5.73	0.416	88.3	0.75	15.36	-510			5.00
0719	5.69	0.421	78.7	0.72	15.39	-490			6.25
0724	5.69	0.418	60.9	0.70	15.60	-480			7.50
0729	5.68	0.420	56.8	0.67	15.74	-470			8.75
0734	5.67	0.421	50.9	0.65	15.84	-460			10.00
0739	5.66	0.424	42.1	0.63	15.95	-450			11.25
0744	5.65	0.426	40.9	0.63	16.02	-441			12.50
0749	5.64	0.427	27.7	0.63	16.07	-436			13.75
0754	5.64	0.428	25.8	0.61	16.12	-426			15.00
0759	5.63	0.428	26.4	0.59	16.12	-426			16.25
0804	5.63	0.429	27.0	0.58	16.15	-428			17.50
0809			Stop purge at 0804						

Total Quantity of Water Removed (~~gal~~): 17.50(L) Personnel: M. Gilkey

COMMENTS AND OBSERVATIONS:
Assumed Intermediate-Shallow Interval
* Water level can't be recorded ~~during~~ during purge due to Channel diameter

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-09-02	M. Gilkey / C. Badman	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset	New	Indoors ~70°F
Sounding Method:	**Gauge Date:** 02/02/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:**	7th Channel OD
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush		7 channels = 1.7"

Purge Date:	Purge Time:
02/03/23	0808
Purge Method:	**Field Technician:**
Perristaltic Pump- Low flow	M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft):	D. Well Volume (gal):	Depth/Height of Top of PVC:
~70.50**	2044.8 mL	
B. Depth to Water (ft):	**E. ~~Well Volume (gal) C*D~~:**	**Pump Type:**
19.38		Perristaltic
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**
51.12	6.134 (L)	mid-screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0810	6.01	0.240	286	2.43	16.48	-199	—	0.25	0
0815	5.80	0.364	146	0.94	16.56	-467	—	0.25	1.25
0820	5.59	0.448	91.9	0.70	16.48	-455	—	0.25	2.50
0825	5.58	0.459	96.4	0.59	16.45	-452	—	0.25	3.75
0830	5.57	0.464	77.4	0.49	16.43	-448	—	0.25	5.00
0835	5.57	0.466	55.4	0.43	16.42	-448	—	0.25	6.25
0840	5.57	0.465	62.9	0.41	16.40	-443	—	0.25	7.50
0845	5.58	0.465	58.0	0.40	16.36	-428	—	0.25	8.75
0850	5.57	0.465	44.5	0.39	16.36	-422	—	0.25	10.00
0855	5.58	0.465	44.0	0.37	16.23	-416	—	0.25	11.25
0900	5.58	0.466	47.6	0.36	16.18	-414	—	0.25	12.50
0905	5.58	0.466	44.0	0.35	16.12	-408	—	0.25	12.5
~~0910~~				Stop pump @ 0905					
0915									
0920									
0925									

Total Quantity of Water Removed (gal): 12.15 Personnel: M. Gilkey & C. Badman

COMMENTS AND OBSERVATIONS:

↳ Assumed Intermediate — ~~screened~~ Deep

* Water level can not be recorded during purge due to Channel

** Blockage that skinny Dipper can not get past although soft but fish tape goes to approximately 70.5 ft / Same w/ tubing ~70 ft

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MONITORING WELL DEVELOPMENT LOG

Well I.D.:	EA Personnel:	Client:
CMT-09-01	M. Gilkey / C. Badman	NYSDEC
Location:	**Well Condition:**	**Weather:**
National Heatset	New	
Sounding Method:	**Gauge Date:** 02/02/23	**Measurement Ref:**
Heron Skinny Dipper	**Gauge Time:** 1500	7th Channel OD
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):**
Flush		7 Channels = 1.7"

Purge Date:	Purge Time:
02/03/23	0908
Purge Method:	**Field Technician:**
Perri Pump - low flow	M. Gilkey / C. Badman

Well Volume

A. Well Depth (ft):	D. Well Volume (gal):	Depth/Height of Top of PVC:
80.0	2433.16	
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:**
19.16		Peristaltic Pump
C. Liquid Depth (ft) (A-B):	**F. Three Well Volumes (gal) (E3):**	**Pump Intake Depth:**
60.84	7.301 (L)	mid screen

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0910	6.02	0.159	137	2.39	16.13	-222	—	0.25	0
0915	6.11	0.177	69.8	1.27	16.10	-336	—	0.25	1.25
0920	5.80	0.294	20.5	0.98	16.12	-486	—	0.25	2.50
0925	5.75	0.352	18.6	0.80	16.08	-491	—	0.25	3.75
0930	5.75	0.383	12.2	0.68	16.06	-480	—	0.25	5.00
0935	5.71	0.395	13.2	0.62	16.05	-474	—	0.25	6.25
0940	5.67	0.405	11.5	0.58	16.08	-463	—	0.25	7.50
0945	5.68	0.416	12.2	0.58	16.09	-449	—	0.25	8.75
0950	5.66	0.424	7.6	0.56	16.12	-443	—	0.25	10.00
0955	5.66	0.434	5.0	0.56	16.12	-424	—	0.25	11.25
1000	5.65	0.443	4.2	0.56	16.16	-414	—	0.25	12.50
1005	5.64	0.450	1.1	0.58	16.18	-394	—	0.25	13.75
1010	5.64	0.455	4.9	0.57	16.21	-381	—	0.25	15.00
1015	5.63	0.467	0.1	0.60	16.29	-346	—	0.25	16.25
1020	5.62	0.472	0.0	0.59	16.33	-313	—	0.25	17.50
1025	5.61	0.475	1.8	0.58	16.36	-300	—	0.25	18.75

Total Quantity of Water Removed (gal): 22.50 (L) Personnel: M. Gilkey / C. Badman

COMMENTS AND OBSERVATIONS:
↳ Assumed Deep Interval
* water level can not be recorded during purge due to Channel Diameter

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See page #1

MONITORING WELL DEVELOPMENT LOG

Well I.D.: CMT-09-01	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date: / Gauge Time:	Measurement Ref:
Stick Up/Down (ft):	PID Headspace Reading:	Well Diameter (in):

Purge Date:	Purge Time: 0908
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1030	5.61	0.479	0.0	0.56	16.43	-281	—	0.25	20.00
1035	5.60	0.482	0.0	0.54	16.51	-272	—	0.25	21.25
1040	5.60	0.483	0.0	0.53	16.54	-282	—	0.25	22.50
~~1045~~	—	—	—	Stop purge @ 1040	—	—	—	—	—
1050									
1055									

Total Quantity of Water Removed (gal): _____ Personnel: _____

COMMENTS AND OBSERVATIONS: _____

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-25 (onsite)	EA Personnel: H. Young	Client: NYSDEC (152140)
Location: Heatset (East Farmingdale NY)	Well Condition: good	Weather: 39°F, Sunny
Sounding Method: Heron skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0915	Well Diameter (in): 2"

Purge Date: 03/21/23	Purge Time: 0933
Purge Method: Low Flow	Field Technician: H. Young

Well Volume

A. Well Depth (ft): 28.88	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.85	E. Well Volume ~~(gal)~~ C*D): (L) 6.80	Pump Type: peri pump
C. Liquid Depth (ft) (A-B): 11.03	F. Three Well Volumes ~~(gal)~~ (E3): (L) 20.41	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0933	13.82	6.01	198	0.390	0.0	6.66	17.85	0.25	0.00
0936	14.08	5.96	190	0.387	0.0	6.09	17.85	0.25	0.75
0939	14.21	5.94	187	0.381	0.0	5.77	17.85	0.25	1.50
0942	14.29	5.94	186	0.378	0.0	5.66	17.85	0.25	2.25
0945	14.40	5.93	184	0.379	0.0	5.54	17.85	0.25	3.00
0948	14.46	5.94	183	0.374	0.0	5.80	17.85	0.25	3.75
0951	14.44	5.94	183	0.378	0.0	5.84	17.85	0.25	4.50
0954	14.50	5.93	183	0.374	0.0	5.98	17.84	0.25	5.25
0957	14.58	5.93	183	0.375	0.0	6.34	17.84	0.25	6.00
1000 ~~MW-25~~	14.60	5.94	183	0.378	0.0	6.37	17.84	0.25	6.75
1003	14.62	5.94	183	0.373	0.0	6.51	17.84	0.25	7.50
1006	14.64	5.90	187	0.378	0.0	6.56	17.84	0.25	8.25
					SAMPLE @ 1006				

Total Quantity of Water Removed (gal):		Sampling Time:	1006
Samplers:	HY	Split Sample With:	~~MW-25~~ MS/MSD
Sampling Date:	03/21/23	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

~~MW-25~~ MS/MSD taken

SAMPLE ID: 152140-MW-25(onsite)-032123
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-155	EA Personnel: CB, LBL	Client: National Headset Printing NYSDEC #152190
Location: On Site	Well Condition: OK	Weather: Sunny 42°F
Sounding Method: Heron Sticky Dipper	Gauge Date: 03/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1010	Well Diameter (in): 1

Purge Date: 3/21/2023	Purge Time: 953
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 27.49	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.28	E. Well Volume (gal) C*D: 0.42	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 10.21	F. Three Well Volumes (gal) (E3): 1.26	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
954	14.53	6.24	245	0.368	7.7	4.96	17.28	0.25	—
957	14.40	6.28	245	0.361	5.1	4.72	17.28	0.25	0.75
1000	14.53	6.30	242	0.362	1.9	4.49	17.28	0.25	1.50
1003	14.71	6.31	240	0.334	1.8	4.91	17.28	0.25	2.25
1006	14.87	6.29	238	0.349	0.7	4.60	17.28	0.25	3.00
1009	14.95	6.30	234	0.354	0.4	4.54	17.28	0.25	3.75
1012	15.15	6.34	228	0.354	0.0	4.55	17.28	0.25	4.50
1015	14.85	6.32	226	0.354	0.0	4.56	17.28	0.25	5.25
1018	14.99	6.32	217	0.356	0.0	4.47	17.28	0.25	6.00
1021	15.05	6.33	212	0.351	0.0	4.57	17.28	0.25	6.75
1024	15.16	6.35	213	0.353	0.0	4.57	17.28	0.25	7.50

Total Quantity of Water Removed (gal): 1.98
Samplers: CB, LBL
Sampling Date: 3/21/2023
Sampling Time: 1024
Split Sample With: X
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-MW-155-032123
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15D	EA Personnel: LBL	Client: National ~~Headset~~ Printing NYSDEC #152140
Location: 1 Adams Blvd Lot	Well Condition: O.K.	Weather: 39 F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/23	Measurement Ref: TOIC
Stick Up/Down (ft):	Gauge Time: 1010	Well Diameter (in): 1

Purge Date: 3/21/23	Purge Time: 0958
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 72.68	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.27	E. Well Volume (gal) C*D): 2.27	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 55.41	F. Three Well Volumes (gal) (E3): 6.81	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (mS/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1001	15.14	6.27	236	0.031	21.9	3.21	17.27	0.3	0.9
1004	15.04	6.00	253	0.025	12.3	2.68	17.29		1.8
1007	15.03	5.44	268	0.024	7.3	2.08	17.29		2.7
1010	15.10	5.31	274	0.025	7.1	1.80	17.29		3.6
1013	15.23	5.22	276	0.034	6.2	1.71	17.29		4.5
1016	15.26	5.25	276	0.096	7.6	1.63	17.29		5.4
1019	15.27	5.48	271	0.235	4.7	3.01	17.29		6.3
1022	15.24	5.61	271	0.288	5.7	3.19	17.29		7.2
1025	15.25	5.63	271	0.275	2.6	2.99	17.29		8.1
1028	15.29	5.71	272	0.313	0.0	2.78	17.29		9.0
1031	15.24	5.74	273	0.319	0.2	2.73	17.29		9.9
1034	15.27	5.77	274	0.325	0.0	2.67	17.29		10.8
1037	15.25	5.79	276	0.328	0.0	2.62	17.29		11.7
1040	15.30	5.80	277	0.332	0.0	2.58	17.29		12.6
1043									13.5

Total Quantity of Water Removed (gal):
Samplers: LBL, CB
Sampling Date: 3/21/23
Sampling Time: 1043
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: None.
SAMPLE ID: 152140-MW-15D-032123
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-3D (onsite)	EA Personnel: K. Cassidy	Client: NYSDEC 152140
Location: East Farmedale, NY	Well Condition: Good	Weather: 46°F sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): 2" PVC

Purge Date: 3/21/2023	Purge Time: 1025
Purge Method: Low-flow peri pump	Field Technician: K. Cassidy M. Gilkey H. Young

Well Volume

A. Well Depth (ft): 84.21	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.11	E. Well Volume (gal) C*D: (L) 40.84	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 66.11	F. Three Well Volumes (gal) (E3): (L) 122.53	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1026	14.41	6.05	76	0.282	0.0	3.85	18.11	0.25	0
1029	14.38	6.01	90	0.380	0.0	2.91	18.11	0.25	0.75
1032	14.40	5.77	96	0.387	0.0	2.76	18.11	0.25	1.50
1034	14.42	5.79	96	0.402	0.0	2.54	18.11	0.25	2.25
1037	14.35	5.80	97	0.406	0.0	2.46	18.11	0.25	3.00
1040	14.38	5.80	98	0.413	0.0	2.35	18.11	0.25	3.75
1043	14.47	5.80	99	0.413	0.0	2.14	18.10	0.25	4.50
1046	14.48	5.80	100	0.415	0.0	2.10	18.09	0.25	5.25
1049	14.50	5.80	101	0.415	0.0	2.09	18.09	0.25	6.00
1052	14.53	5.80	102	0.415	0.0	2.07	18.09	0.25	6.75
1055	14.53	5.80	102	0.415	0.0	2.06	18.09	0.25	7.50
~~1058~~									

Total Quantity of Water Removed (gal): (L) 7.50
Samplers: K. Cassidy H. Young M. Gilkey
Sampling Date: 3/21/2023

Sampling Time: 1055
Split Sample With:
Sample Type: grab

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-mw-3D(onsite)-032123
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2D (onsite)	EA Personnel: H. Young	Client: NYSDEC (152140)
Location: Heatset (East Farmingdale NY)	Well Condition: good	Weather: 47°F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0915	Well Diameter (in): 2"

Purge Date: 03/21/23	Purge Time: 1048
Purge Method: Low Flow	Field Technician: H. Young

Well Volume

A. Well Depth (ft): 81.94	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.64	E. Well Volume (gal) C*D):	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B): 64.30	F. Three Well Volumes (gal) (E3):	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1048	16.15	5.95	167	0.404	0.0	3.50	17.64	0.25	0.0
1051	16.39	5.77	177	0.413	0.0	2.95	17.64	0.25	0.75
1054	16.47	5.67	182	0.417	0.0	2.61	17.64	0.25	1.50
1057	16.28	5.63	183	0.422	0.0	2.47	17.64	0.25	2.25
1100	16.20	5.62	183	0.423	0.0	2.40	17.66	0.25	3.00
1103	16.12	5.62	183	0.425	0.0	2.32	17.66	0.25	3.75
1106	15.99	5.61	183	0.427	0.0	2.28	17.66	0.25	4.50
1109	15.97	5.61	183	0.428	0.0	2.26	17.66	0.25	5.25
				SAMPLE @ 1110					

Total Quantity of Water Removed (gal):	5.25	Sampling Time:	1110
Samplers:	HY	Split Sample With:	N/A
Sampling Date:	03/21/23	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

SAMPLE ID: 152140 - MW-2D (onsite) - 032123
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-2PD	EA Personnel: LBL	Client: National Headset Printing NYSDEC #152140
Location: 1 Adams Blvd. loading dock	Well Condition: O.K.	Weather: 50F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): DDC	Gauge Time: 0900	Well Diameter (in): 2

Purge Date: 3/21/23	Purge Time: 1105
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 80.71	D. Well Volume (ft): ~~1.63~~ 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.51	E. Well Volume (gal) C*D: 10.63	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 65.20	F. Three Well Volumes (gal) (E3): 31.89	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1108	15.43	6.19	273	0.314	0.0	0.48	15.51	0.3	0.9
1111	15.44	6.07	279	0.312	0.0	0.00	15.51	|	1.8
1114	15.37	6.02	281	0.311	0.0	0.00	15.51	|	2.7
1117	15.37	6.03	280	0.311	0.0	0.00	15.51	|	3.6
1120	15.42	6.02	282	0.311	0.0	0.00	15.51	|	4.5
1123	15.48	6.02	282	0.311	0.0	0.00	15.51	|	5.4
1126	15.57	6.00	280	0.311	0.0	0.00	15.51	|	6.3
1129	15.53	6.03	277	0.311	0.0	0.00	15.51	|	7.2
1132	15.62	6.00	273	0.311	0.0	0.00	15.51	|	8.1
1135	15.66	6.01	273	0.312	0.0	0.00	15.51	|	9.0

Total Quantity of Water Removed (gal):		Sampling Time:	1135
Samplers:	LBL, CB	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOCs (grab)

COMMENTS AND OBSERVATIONS: None.

Sample ID: 152140-DDC-2-PD-032123

Analysis: VOCs

EA Engineering, P.C.
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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-2PS	EA Personnel: CB, LBL	Client: National Heatset Printing NYSDEC #152140
Location: On site	Well Condition: OK	Weather: Sunny 45°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): DDC	Gauge Time: 1019	Well Diameter (in): 2

Purge Date: 3/21/2023	Purge Time: 1106
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 25.51	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.39	E. Well Volume (gal) C*D): 1.65	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 10.12	F. Three Well Volumes (gal) (E3): 4.95	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1109	16.36	6.54	225	0.325	17.8	1.41	15.43	0.25	—
1112	15.74	6.57	223	0.327	18.1	0.77	15.43		0.75
1115	15.64	6.58	219	0.326	14.2	0.63	15.43		1.50
1118	15.54	6.58	216	0.325	14.7	0.54	15.43		2.25
1121	15.63	6.58	214	0.324	14.1	0.52	15.43		3.00
1124	15.86	6.58	212	0.323	13.1	0.51	15.43		3.75
1127	15.89	6.59	213	0.322	9.7	0.50	15.43		4.50
1130	15.92	6.59	213	0.322	8.5	0.50	15.43		5.25
1133	15.2	6.58	208	0.332	8.9	0.54	15.43		6.00
1136	14.77	6.57	209	0.332	8.1	0.57	15.43		6.75
1139	14.78	6.55	210	0.330	8.0	0.59	15.43		7.5
1142	14.78	6.55	211	0.329	8.0	0.55	15.43		8.25

Total Quantity of Water Removed (gal):	2.178	Sampling Time:	1142
Samplers:	CB, LBL	Split Sample With:	
Sampling Date:	3/21/2023	Sample Type:	

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-DDC-2-PS-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-5D(onsite)	EA Personnel: K. Cassidy	Client: NYSDEC 152140
Location: East Farmingdale, NY	Well Condition: Good	Weather: 48°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): 2" PVC

Purge Date: 3/21/2023	Purge Time: 1119
Purge Method: low-flow peri pump	Field Technician: K Cassidy M Gilkey H Young

Well Volume

A. Well Depth (ft): 81.09	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.70	E. Well Volume (gal) C*D: 39.78	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 64.39	F. Three Well Volumes (gal) (E3): 119.34	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1121	15.23	6.18	61	0.354	0.0	3.64	15.75	0.25	0
1124	15.14	6.19	62	0.365	0.0	1.16	15.75	0.25	0.75
1127	15.09	6.18	61	0.367	0.0	0.85	15.75	0.25	1.50
1130	15.26	6.18	59	0.367	0.0	0.70	15.75	0.25	2.25
1133	15.23	6.17	59	0.371	0.0	0.65	15.75	0.25	3.00
1136	15.17	6.16	55	0.370	0.0	0.44	15.75	0.25	3.75
1139	15.18	6.15	53	0.370	0.0	0.36	15.75	0.25	4.50
1142	15.18	6.15	53	0.370	0.0	0.36	15.75	0.25	5.25
1145	15.18	6.15	52	0.370	0.0	0.33	15.75	0.25	6.00
1148	15.17	6.15	51	0.368	0.0	0.31	15.75	0.25	6.75
1151	15.29	6.14	51	0.367	0.0	0.36	15.75	0.25	7.50
1154	15.28	6.14	51	0.368	0.0	0.30	15.75	0.25	8.25

Total Quantity of Water Removed (gal): 8.25
Samplers: K Cassidy M Gilkey H Young
Sampling Date: 3/21/2023

Sampling Time: 1154
Split Sample With: —
Sample Type: grab

COMMENTS AND OBSERVATIONS:
Sample ID: 152140-mw-5D(onsite)-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: NW-5S(onsite)	EA Personnel: H. Young	Client: NYSDEC (152140)
Location: Heatset	Well Condition: good	Weather: 52°F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1000	Well Diameter (in): 2"

Purge Date: 03/21/23	Purge Time: 1140
Purge Method: Low Flow	Field Technician: H. Young

Well Volume

A. Well Depth (ft): 26.90	D. Well Volume ~~(ft)~~: 6.40	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.56	E. Well Volume ~~(gal)~~ ~~C*D~~): (L) 6.40	Pump Type: Peri pump
C. Liquid Depth (ft) (A-B): 10.34	F. Three Well Volumes ~~(gal)~~ (E3): (L3) 19.20	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1143	15.27	6.04	-32	0.372	92.1	2.37	16.56	0.25	0.75
1146	14.93	6.01	-27	0.382	67.3	1.59	16.56	0.25	1.50
1149	14.92	6.03	-27	0.384	59.0	1.46	16.56	0.25	2.25
1152	14.96	6.02	-36	0.388	44.9	1.42	16.56	0.25	3.00
1155	15.05	6.05	-51	0.394	29.0	1.36	16.56	0.25	3.75
1158	15.04	6.07	-60	0.397	26.5	1.34	16.56	0.25	4.50
1201	15.16	6.09	-67	0.399	22.5	1.31	16.56	0.25	5.25
1204	15.34	6.14	-78	0.403	10.6	1.28	16.56	0.25	6.00
1207	15.33	6.14	-80	0.404	11.6	1.27	16.56	0.25	6.75
1210	15.35	6.15	-82	0.405	12.8	1.26	16.56	0.25	7.50
				SAMPLE @					
					1210				

Total Quantity of Water Removed (gal):	7.50	Sampling Time:	1210
Samplers:	HY	Split Sample With:	N/A
Sampling Date:	03/21/23	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-NW-5S(onsite)-032123

Analysis: VOCs

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EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2A	EA Personnel: CB, LBL	Client: National Headset Printing #152140 NYSDEC
Location: On Site	Well Condition: OK	Weather: Sunny 48°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1030	Well Diameter (in): 2

Purge Date: 3/21/2023	Purge Time: 1203
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 24.00	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.75	E. Well Volume (gal) C*D): 1.02	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 6.25	F. Three Well Volumes (gal) (E3): 3.06	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1206	14.96	6.72	202	0.224	8.6	5.34	17.73	0.25	—
1209	14.84	6.49	216	0.217	8.0	4.70	17.73	|	0.75
1212	14.80	6.37	224	0.208	6.0	4.30	17.73	|	1.50
1215	14.84	6.31	227	0.204	4.0	3.88	17.73	|	2.25
1218	14.89	6.27	229	0.220	2.1	4.05	17.73	|	3.00
1221	15.06	6.28	228	0.211	2.6	3.75	17.73	|	3.75
1224	15.12	6.26	230	0.212	2.7	3.72	17.73	|	4.50
1227	15.14	6.26	229	0.216	2.2	3.77	17.73	|	5.25
1230	15.17	6.27	229	0.201	2.1	3.31	17.73	|	6.00
1233	15.28	6.25	227	0.204	2.5	3.34	17.73	|	6.75
1236	15.28	6.27	225	0.202	2.4	3.29	17.73	|	7.50

Total Quantity of Water Removed (gal): 1.98
Samplers: CB, LBL
Sampling Date: 3/21/2023

Sampling Time: 1236
Split Sample With: FD
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-MW-2A-032123 / 152140-FD-02-032123
Analysis: VOCs / VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2AD	EA Personnel: LBL, CB, MG	Client: National Heatset Printing NYSDEC #152140
Location: 1 Adams Blvd	Well Condition: O.K.	Weather: 53 F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1200	Well Diameter (in): 1

Purge Date: 3/21/23	Purge Time: 1208
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 78.75	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.31	E. Well Volume (gal) C*D: (L) 9.33	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 60.44	F. Three Well Volumes (gal) (E3): (L) 28.00	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1211	16.19	6.12	56	0.349	5.3	0.00	18.31	0.3	0.9
1214	16.02	6.02	86	0.360	25.7	0.00	18.31		1.8
1217	15.95	5.99	100	0.363	37.5	0.00	18.31		2.7
1220	15.91	5.96	119	0.367	35.7	0.00	18.31		3.6
1223	15.93	5.94	129	0.368	26.9	0.00	18.31		4.5
1226	15.82	5.93	155	0.370	7.3	0.00	18.31		5.4
1229	15.82	5.93	161	0.370	5.2	0.00	18.31		6.3
1232	15.82	5.93	169	0.371	3.1	0.00	18.31		7.2
1235	15.83	5.93	186	0.371	0.0	0.00	18.31		8.1
1238	15.79	5.93	191	0.371	0.0	0.00	18.31		9.0
1241	15.76	5.93	199	0.371	0.0	0.00	18.31		9.9
1244	15.77	5.94	204	0.371	0.0	0.00	18.31		10.8
1247	15.85	5.94	212	0.372	0.0	0.00	18.31		11.7
1250	15.84	5.94	220	0.372	0.0	0.00	18.31		12.6
1253	15.82	5.95	222	0.372	0.0	0.00	18.31		13.5
1256	15.77	5.95	227	0.372	0.0	0.00	18.31		14.4
1259									

Total Quantity of Water Removed (gal):		Sampling Time:	1259
Samplers:	LBL, CB	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOCs (grab)

COMMENTS AND OBSERVATIONS: None.

SAMPLE ID: 152140-MW-2AD-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-10 part 3	EA Personnel: C. Badman	Client: National Headset Printing NYSDEC #152140
Location: On Site	Well Condition: Good	Weather: Sunny 50°F
Sounding Method: Heron Sticky Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1315	Well Diameter (in): 7 Channels = 1.7" Channel = 0.4"

Purge Date: 03/21/2023	Purge Time: 1323
Purge Method: Peristaltic pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 19.96	D. ~~Well Volume (ft)~~: 40mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.52	E. Well Volume (gal) C*D): 0.0576	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 1.44	F. Three Well Volumes (gal) (E3): 0.1728	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1324	18.14	6.55	-46	0.312	1.5	1.73		0.25	—
1327	16.83	6.61	-44	0.316	0.8	1.75		0.25	0.75
1330	16.56	6.62	-36	0.318	0.1	2.00		0.25	1.50
1333	16.38	6.60	-29	0.319	0.0	2.20		0.25	2.25
1336	16.21	6.58	-26	0.321	0.0	2.20		0.25	3.00
1339	16.21	6.55	-24	0.322	0.0	2.14		0.25	3.75
1342	15.92	6.50	-21	0.324	0.4	2.08		0.25	4.50
1345	15.95	6.48	-18	0.325	0.3	2.09		0.25	5.25
1348	15.87	6.45	-16	0.326	0.0	2.21		0.25	6.00
1351	15.68	6.43	-20	0.327	0.0	2.32		0.25	6.75
1354	15.57	6.44	-12	0.329	0.0	2.54		0.25	7.50
1357	15.51	6.42	-11	0.329	0.0	2.56		0.25	8.25
1400	15.40	6.40	-10	0.329	0.0	2.61		0.25	9.00

Total Quantity of Water Removed (gal): L	9.00	Sampling Time:	1400
Samplers:	C. Badman	Split Sample With:	X
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Shallow Interval * due to channel diameter DTW can not be recorded during purge

SAMPLE ID: 152140-CMT-10-3-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-10 part 2	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: On Site	Well Condition: Good	Weather: Sunny 50°F
Sounding Method: Heron Sticky Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1315	Well Diameter (in): 0.4"

Purge Date: 3/21/2023	Purge Time: 1402
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 51.10	D. Well Volume (ft): 0.40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.52	E. Well Volume (gal) C*D: 1.30	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 32.58	F. Three Well Volumes (gal) (E3): 3.90	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1404	15.99	7.03	-140	0.333	240	1.66		0.25	—
1407	16.05	7.14	-150	0.332	225	1.35		0.25	0.75
1410	16.49	7.24	-151	0.330	237	0.94		0.25	1.50
1413	16.71	7.27	-148	0.331	225	0.73		0.25	2.25
1416	16.63	7.31	-144	0.331	227	0.68		0.25	3.00
1419	16.40	7.20	-125	0.305	219	0.51		0.25	3.75
1422	16.20	7.16	-122	0.299	218	0.52		0.25	4.50
1425	16.08	7.01	-115	0.292	116	0.66		0.25	5.25
1428	15.90	6.89	-107	0.280	114	0.74		0.25	6.00
1431	16.05	6.83	-103	0.267	91.8	0.73		0.25	6.75
1434	15.91	6.77	-99	0.258	120	0.70		0.25	7.50
1437	15.83	6.74	-97	0.249	79.5	0.67		0.25	8.25
1440	15.80	6.71	-96	0.239	61.2	0.67		0.25	9.00
1443	15.72	6.69	-91	0.233	58.0	0.69		0.25	9.75
1446	15.74	6.72	-88	0.229	49.5	0.73		0.25	10.50
1449	15.73	6.66	-85	0.225	45.6	0.74		0.25	11.25
1452	15.72	6.65	-84	0.221	43.0	0.75		0.25	12.00

Total Quantity of Water Removed (gal):	12.00	Sampling Time:	1452
Samplers:	C. Badman	Split Sample With:	N
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Intermediate Shallow Interval * DTW can ø be recorded during purge due to channel diameter *

SAMPLE ID = 152140-CMT-10-2-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 Port 3	EA Personnel: K. Cassidy	Client: National Headset Printing NYSDEC #152140
Location: Farmingdale NY	Well Condition: New	Weather: 50 °F sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOC of 7th Channel
Stick Up/Down (ft): Flush/CMT	Gauge Time: 0900	Well Diameter (in): 0.4"

Purge Date: 3/21/2023	Purge Time: 1532
Purge Method: low-flow peri pump	Field Technician: K. Cassidy / M. Gilkey

Well Volume

A. Well Depth (ft): ◊ 50.25	D. Well Volume (ft): 40 m/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.85	E. Well Volume ~~(gal)~~ C*D): (L) 1.38	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 34.40	F. Three Well Volumes ~~(gal)~~ (E3): (L) 4.13	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1534	17.42	7.20	-125	0.788	588	2.26		0.2	
1537	17.27	7.68	-165	0.788	549	1.75		0.1	
~~1540~~				DRY					

Total Quantity of Water Removed (gal):	Sampling Time: 1519
Samplers:	Split Sample With:
Sampling Date:	Sample Type:

COMMENTS AND OBSERVATIONS: bubbles in sample bottles due to soapy/syrupy condition of water sampled prior to purge ~~dry~~
Well ran dry at 1540.

◊ This port went DRY during the Feb 2023 Development x3
↳ Sample was collected before purge for this reason

Shallow/Int port

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EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 Port 2	EA Personnel: K. Cassidy	Client: National Headset Printing NYSDEC #152140
Location: East Farmingdale, NY	Well Condition: Good	Weather: 56°F sunny
Sounding Method: Heron SF Tinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1347	Well Diameter (in): 0.411

Purge Date: 3/21/2023	Purge Time: 1435
Purge Method: Geo-Flow peri pump	Field Technician: K Cassidy M Gilkey H Young

Well Volume

A. Well Depth (ft): 20-2	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.79 ~~15.20~~	E. Well Volume ~~(gal)~~ C*D: (L) 0.1764	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 4.41	F. Three Well Volumes ~~(gal)~~ (E3): (L) 0.529	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1436	17.98	6.03	-3	0.001	149	5.88		0.25	0
1439	17.98	6.03	-3	0.001	149	5.88			0.75
1442	17.98	6.03	-3	0.001	149	5.88			1.50
1445	17.98	6.03	-3	0.001	149	5.88			2.25
1448	17.53	7.46	-56	0.533	46.6	1.22			3.00
1451	17.38	7.31	-195	0.541	45.2	1.22			3.75
1454	17.30	7.21	-41	0.535	40.0	1.22			4.50
1457	17.16	7.07	-128	0.532	32.8	1.22			5.25
1500	17.08	7.00	-177	0.530	31.4	1.20			6.00
1503	16.99	6.93	-172	0.529	29.5	1.19			6.75
1506	16.90	6.85	-167	0.528	30.0	1.20			7.50
1509	16.81	6.79	-163	0.528	27.3	1.19			8.25
1512	16.74	6.76	-159	0.527	27.0	1.18			9.00
1515	16.64	6.72	-156	0.525	27.2	1.18			9.75
~~1518~~									

turned Hepa filtration →

Total Quantity of Water Removed ~~(gal)~~ (L): 9.75		Sampling Time: 1420	
Samplers: M Gilkey H Young		Split Sample With:	
Sampling Date: 3/21/2023		Sample Type: GRAB	

COMMENTS AND OBSERVATIONS: small bubbles in sample bottles due to soapy consistency of water. Sampled prior to purge. consistent syrup lubricant consistency throughout purge.

Shallow port

◇ DTW can not be recorded due to diameter of CMT port

◇ Sample collect before purge due to port going dry during development x2

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-01-5	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: Farmingdale, NY	Well Condition: Good	Weather: 59°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1350	Well Diameter (in): .4"

Purge Date: 03/21/23	Purge Time: ~~1346~~ 1346
Purge Method: Low-flow → peri pump	Field Technician: LBL

Well Volume

A. Well Depth (ft): 22.35	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.11	E. Well Volume ~~(gal) C*D~~: (L) 0.169	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 4.24	F. Three Well Volumes ~~(gal)~~ (E3): L 0.509	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1346	14.71	6.18	-17	0.243	0	3.89		0.3	0
1349	14.68	6.09	-4	0.235	0	3.28			0.9
1352	14.63	6.05	4	0.230	0	3.32			1.8
1355	14.61	6.03	9	0.228	0	3.35			2.7
1358	14.49	6.02	10	0.227	0	3.19			3.6
1401	14.46	6.02	17	0.226	0	3.17			4.5
1404	14.43	6.02	13	0.225	0	3.15			5.4
1407	14.40	6.01	15	0.225	0	3.04			6.3
1410	14.42	6.00	18	0.224	0	2.96			7.2
1413	14.41	6.00	19	0.223	0	2.95			8.1

Total Quantity of Water Removed (gal):	8.1	Sampling Time:	1413
Samplers:	LBL	Split Sample With:	
Sampling Date:	03/21/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

* NL can ø be recorded during purge due to port diameter

SAMPLE ID: 152140-CMT-1-5-032123
Analysis: VOCs
Interval: Shallow

Port #6 (Int-Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-01	EA Personnel: LBL, MG, CB, HH, KC	Client: NYSDEC [National Heatset Printing #152140]
Location: behind warehouse	Well Condition: Good	Weather: 59 F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1350	Well Diameter (in): 0.411

Purge Date: 3/21/23	Purge Time: 1452
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 53.51	D. Well Volume ~~(ft)~~: 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.19	E. Well Volume ~~(gal)~~ C*D): L 1.412	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 35.32	F. Three Well Volumes ~~(gal)~~ (E3): (L) 4.24	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW * (ft btoc)	Rate (Lpm)	Volume (liters)
1455	14.86	6.32	-19	0.268	24.6	0.00	—	0.3	0.9
1458	14.88	6.31	-4	0.272	4.2	0.00	—		1.8
1501	14.95	6.19	17	0.253	0.0	0.97	—		2.7
1504	14.96	6.10	31	0.241	0.0	1.57	—		3.6
1507	14.97	6.03	43	0.232	0.0	2.10	—		4.5
1510	14.99	5.99	49	0.227	0.0	2.36	—		5.4
1513	15.00	5.94	55	0.223	0.0	2.55	—		6.3
1516	14.99	5.91	60	0.219	0.0	2.69	—		7.2
1519	15.00	5.89	63	0.218	0.0	2.76	—		8.1
1522	14.99	5.86	66	0.216	0.0	2.83	—		9.0
1525	14.99	5.86	70	0.215	0.0	2.87	—		9.9
1528	15.00	5.84	70	0.214	0.0	2.94	—		10.8

Total Quantity of Water Removed (gal):		Sampling Time:	1528
Samplers:	LBL	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOC (grab)

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-CMT-1-6-032123
Analysis: VOCs

* could not measure drawdown, well too small to fit both tubing and WLM *

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT - 10 - 1	EA Personnel: C. Badman	Client: National Heatset NYSDEC #152140
Location: On Site	Well Condition: Good	Weather: Sunny 50°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1315	Well Diameter (in): .4"

Purge Date: 3/21/2023	Purge Time: 1510
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 75.00	D. Well Volume ~~(ft)~~: ~~2.256~~ 10 mL/L	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.99	E. Well Volume ~~(gal)~~ C*D): (L) 2-2.5L	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 56.41	F. Three Well Volumes ~~(gal)~~ (E3): L 6.77	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1511	16.40	7.02	-136	0.435	207	2.81		0.25	—
1514	16.65	7.27	-205	0.433	207	1.00			0.75
1517	16.75	7.29	-196	0.442	216	0.72			1.50
1520	16.30	7.43	-163	0.473	217	0.61			2.25
1523	15.81	7.25	-144	0.514	218	0.61			3.00
1526	15.62	6.95	-132	0.529	212	0.50			3.75
1529	15.50	6.83	-123	0.535	118	0.48			4.50
1532	15.28	6.70	-127	0.542	70.9	0.45			5.25
1535	15.24	6.67	-117	0.558	47.8	0.47			6.00
1538	15.19	6.62	-102	0.552	27.0	0.51			6.75
1541	15.19	6.57	-94	0.544	23.9	0.53			7.50
1544	15.18	6.55	-88	0.535	21.1	0.57			8.25
1547	15.23	6.59	-88	0.531	20.6	0.60			9.00
1550	15.23	6.54	-82	0.525	19.3	0.61			9.75

Total Quantity of Water Removed (gal):	9.75	Sampling Time:	1550
Samplers:	C. Badman	Split Sample With:	—
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:
Interval: Intermediate Deep Interval
SAMPLE ID: 152140-CMT-10-1-032123
Analysis: VOCs
* WL can ø be recorded during purge due to channel diameter

Port #1 (Int-Deep)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-01	EA Personnel: LBL	Client: NYSDEC
Location: behind warehouse	Well Condition: Good	Weather: 58 F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1350	Well Diameter (in): .4"

Purge Date: 3/21/23	Purge Time: 1535
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 73.39	D. Well Volume ~~(ft)~~: 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.09	E. Well Volume ~~(gal)~~ C*D): (L) 2.212	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 55.3	F. Three Well Volumes ~~(gal)~~ (E3): (L) 6.64	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW * (ft btoc)	Rate (Lpm)	Volume (liters)
1538	14.74	6.50	-63	0.443	6.5	0.00	—	0.3	0.9
1541	14.75	6.52	-60	0.473	1.8	0.00	—	|	1.8
1544	14.81	6.46	-59	0.534	1.3	0.00	—	|	2.7
1547	14.84	6.37	-49	0.519	0.0	0.00	—	|	3.6
1550	14.78	6.28	-36	0.503	0.0	0.00	—	|	4.5
1553	14.80	6.25	-32	0.498	0.0	0.00	—	|	5.4
1556	14.75	6.21	-26	0.492	0.0	0.00	—	|	6.3
1559	14.74	6.19	-21	0.489	0.0	0.00	—	|	7.2
1602	14.73	6.17	-18	0.486	0.0	0.00	—	|	8.1
1605	14.70	6.15	-14	0.483	0.0	0.00	—	|	9.0

Total Quantity of Water Removed (gal):		Sampling Time:	1605
Samplers:	LBL	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOC (grab)

COMMENTS AND OBSERVATIONS: * could not measure drawdown, well too small to fit both tubing and WLM *

SAMPLE ID: 152140-CMT-1-1-032123

Analyses: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 Port 4	EA Personnel: K Cassidy	Client: National Heatset Printing NYSDEC #152190
Location: E. Farmingdale, NY	Well Condition: Good	Weather: 56°F Sunny
Sounding Method: Tape	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1345	Well Diameter (in): ~~2~~ ~~PP~~

Purge Date: 3/21/2023	Purge Time: 1547
Purge Method: low-flow peri pump	Field Technician: K Cassidy M Gilkey H Young

Well Volume

A. Well Depth (ft): 71.00	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.98	E. Well Volume ~~(gal)~~ ~~(C)~~ (D): (L) 2.2	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 55.02	F. Three Well Volumes ~~(gal)~~ (E3): (L) 6.6	Pump Intake Depth: Mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1549	15.69	7.89	-134	0.384	943	3.77		0.25	0
1552	15.48	7.28	-117	0.381	171	2.74		0.25	0.75
1555	15.45	7.01	-114	0.385	121	1.56		0.25	1.50
1558	15.46	6.94	-117	0.387	103	1.45		0.25	2.25
1601	15.41	6.81	-118	0.390	150	1.27		0.25	3.00
1604	15.41	6.81	-126	0.391	159	1.24		0.25	3.75
1607	15.40	6.77	-129	0.394	179	1.22		0.25	4.5
1610	15.36	6.73	-130	0.403	184	1.20		0.25	5.25
1613	15.37	6.68	-124	0.385	265	1.20		0.25	6.0
1616	15.36	6.58	-113	0.388	154	1.20		0.25	6.75
1619	15.35	6.49	-101	0.402	185	1.20		0.25	7.50
1622	15.34	6.45	-106	0.408	256	1.20		0.25	8.25
1625	15.33	6.45	-102	0.409	233	1.20		0.25	9.00
1628	15.29	6.42	-99	0.420	159	1.20		0.25	9.75
1631	15.29	6.44	-99	0.421	168	1.26		0.25	10.5
1634	15.25	6.49	-98	0.423	137	1.35		0.25	11.25
1637	15.25	6.43	-97	0.423	131	1.25		0.25	12.00

Total Quantity of Water Removed (gal): 29.25
Samplers: K Cassidy M Gilkey H Young
Sampling Date: 3/21/2023
Sampling Time: 1757
Split Sample With:
Sample Type: grab

COMMENTS AND OBSERVATIONS: *WL can not be taken during purge due to channel diameter
SAMPLE ID: 152140-CMT-8-4-032123
VOCs → Analysis
Interval: Intermediate/Deep

Dat 4 Pg 2

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 Pad 4	EA Personnel: K Cassidy	Client: NYSDEC
Location:	Well Condition: SEE PAGE 1	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1640	15.24	~~6.42~~ 6.42	-96	0.474	107	1.24		0.25	12.75
1643	15.21	6.43	-96	0.436	70.9	1.23		0.25	13.5
1646	15.18	6.446	-97	0.446	49.6	1.23		0.25	14.25
1649	15.18	6.44	-97	0.446	92.1	1.22		0.25	15.00
1652	15.18	6.47	-97	0.448	59.8	1.24		0.25	15.75
1655	15.14	6.47	-97	0.452	69.1	1.24		0.25	16.5
1658	15.14	6.47	-97	0.451	38.1	1.24		0.25	17.25
1701	15.15	6.47	-96	0.457	62.6	1.25		0.25	18.00
1704	15.16	6.47	-96	0.457	47.9	1.25		0.25	18.75
1707	15.16	6.47	-96	0.453	47.9	1.25		0.25	19.50
1710	15.11	6.47	-96	0.453	43.4	1.25		0.25	20.25
1713	15.11	6.46	-95	0.457	14.2	1.25		0.25	21.00
1716	15.13	6.44	-94	0.458	29.6	1.25		0.25	21.75
1719	15.12	6.44	-92	0.461	12.3	1.25		0.25	22.5
1722	15.12	6.44	-92	0.461	22.2	1.27		0.25	23.25
1725	15.12	6.461	-92	0.461	40.3	1.27		0.25	24.00
1728	15.12	6.43	-88	0.465	17.5	3.98		0.25	24.75

Total Quantity of Water Removed (gal): _____ Sampling Time: _____

Samplers: _____ Split Sample With: _____

Sampling Date: _____ Sample Type: _____

COMMENTS AND OBSERVATIONS: SEE PAGE 1

POR4 Pg 3

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-8 POR4	EA Personnel: K. Cassidy	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

SEE PAGE 1

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1730	15.13	6.58	-88	0.464	10.1	1.84		0.25	25.5
1733	15.13	6.50	-88	0.461	12.3	1.84		0.25	26.25
1736	15.10	6.40	-86	0.467	21.3	1.36		0.25	27.00
1739	15.10	6.40	-85	0.466	8.0	1.36		0.25	27.75
1742	15.08	6.39	-85	0.466	43.1	1.36		0.25	28.5
1745	15.08	6.40	-85	0.466	21.1	1.36		0.25	29.25
1748	15.04	6.36	-83	0.466	35.8	1.35			
1751	15.06	6.39	-83	0.466	38.0	1.35			

Total Quantity of Water Removed (gal):	Sampling Time: 1751
Samplers:	Split Sample With:
Sampling Date:	Sample Type:

COMMENTS AND OBSERVATIONS:

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-5-1	EA Personnel: C. Badman / L. Buckman Lab	Client: National Heatset Printing NYSDEC #152140
Location: North Amityville, NY	Well Condition:	Weather: ~50°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/23	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4"

Purge Date: 03/21/23	Purge Time: 1607
Purge Method: Low flow Peri pump	Field Technician: C. Badman / LBL

Well Volume

A. Well Depth (ft): 22.90	D. Well Volume (~~ft~~): ~~0.161~~ 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.86	E. Well Volume (gal) C*D): 0.161 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 4.04	F. Three Well Volumes (~~gal~~) (E3): 0.484 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1607	18.66	7.25	-179	0.386	25.7	1.09		0.25	0
1610	18.46	7.98	-243	0.386	26.4	0.45			0.75
1613	18.47	8.22	-285	0.393	27.8	0.43			1.5
1616	18.52	8.24	-287	0.393	27.2	0.41			2.25
1619	18.56	8.20	-282	0.396	28.1	0.38			3.0
1622	18.54	8.14	-277	0.398	30.1	0.35			3.75
1625	18.56	8.07	-269	0.400	30.4	0.35			4.5
1628	18.56	8.03	-263	0.402	29.6	0.32			5.25
1631	18.55	7.96	-257	0.403	28.8	0.31			6.0
1634	18.57	7.89	-249	0.403	27.2	0.29			6.75
1637	18.50	7.81	-242	0.407	26.4	0.28			7.5
1640	18.53	7.79	-241	0.407	26.1	0.27			8.25
1643	18.54	7.73	-234	0.409	25.0	0.27			9.0

Total Quantity of Water Removed (~~gal~~):	9.0 L	Sampling Time:	1643
Samplers:	CB/LBL	Split Sample With:	N
Sampling Date:	03/21/22	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

Interval: Shallow
Analysis: VOCs
SAMPLE ID: 152140-CMT-5-1-032123

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC - SPS	EA Personnel: C. Backman, L. Backman-Lowe	Client: NYSDEC (#152140)
Location: Offsite Laydown	Well Condition: OK	Weather: Sunny
Sounding Method: Heron Sticky Dipper	Gauge Date: 3/20/23	Measurement Ref: TOC
Stick Up/Down (ft): DDC	Gauge Time: 755	Well Diameter (in): 2

Purge Date: 3/20/2023	Purge Time: 1120
Purge Method: Peri Pump - Low flow	Field Technician: C. Backman, L. Backman-Lowe

Well Volume

A. Well Depth (ft): 31.51	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 13.62	E. Well Volume (gal) C*D): 2.92	Pump Type: Peri Pump
C. Liquid Depth (ft) (A-B): 17.89	F. Three Well Volumes (gal) (E3): 8.74	Pump Intake Depth: Mid Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1135	13.62	5.86	233	0.297	25.2	0.30	13.67	0.25	—
1138	14.16	6.17	207	0.252	21.0	0.00	13.67		0.75
1141	14.34	6.27	195	0.238	12.7	0.00	13.60		1.50
1144	14.50	6.32	187	0.232	12.5	0.00	13.67		2.25
1147	14.69	6.36	180	0.230	11.1	0.00	13.67		3.00
1150	14.76	6.37	176	0.230	11.0	0.00	13.67		3.75
1153	14.86	6.39	172	0.229	9.4	0.00	13.67		4.50
1156	14.90	6.38	171	0.228	9.4	0.00	13.67		5.25
1159	14.96	6.39	169	0.228	9.1	0.00	13.67		6.00
1202	14.95	6.39	167	0.227	9.0	0.00	13.67		6.75

Total Quantity of Water Removed (gal):	1.782	Sampling Time:	1202
Samplers:	C. Backman, L. Backman-Lowe	Split Sample With:	N
Sampling Date:	3/20/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

152140-DDC-5-PS-032023

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15 (onsite)	EA Personnel: H.Young	Client: NYSDEC (152140)
Location: Heatset (East Farmingdale NY)	Well Condition: good	Weather: 34°F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0840	Well Diameter (in): 2"

Purge Date: 03/21/23	Purge Time: 0753
Purge Method: Low Flow	Field Technician: H.Young

Well Volume

A. Well Depth (ft): 30.76	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.29	E. Well Volume (gal) C*D): L 8.45	Pump Type: Peri pump
C. Liquid Depth (ft) (A-B): 13.47	F. Three Well Volumes (gal) (E3): L 25.04	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0753	8.09	5.15	277	0.297	3.0	11.18	17.29	0.20	0.00	
0756	8.70	5.46	269	0.285	0.0	8.43	17.29	0.20	1.50	0.6
0759	9.35	5.69	261	0.277	0.0	7.78	17.29	0.20	2.25	1.20
0802	9.98	5.82	252	0.271	0.0	7.35	17.29	0.20	3.00	1.80
0805	10.21	5.88	249	0.264	0.0	7.35	17.29	0.20	3.75	2.40
0808	10.40	5.93	245	0.265	0.0	7.24	17.29	0.20	4.50	3.0
0811	10.51	5.96	243	0.266	0.0	7.03	17.29	0.20	5.25	3.6
0814	10.62	5.98	242	0.267	0.0	6.90	17.29	0.20	6.00	4.2
0817	10.78	5.99	240	0.265	0.0	6.90	17.26	0.20	6.75	4.8
0820	10.86	6.00	239	0.264	0.0	6.93	17.26	0.20	7.50	5.40
				SAMPLE @ 0820						

Total Quantity of Water Removed (gal): L 5.40
Samplers: HN
Sampling Date: 03/21/23
Sampling Time: 0820
Split Sample With: N/A
Sample Type: Grab

COMMENTS AND OBSERVATIONS:
Sample ID: 152140 - MW-15(offsite) - 032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14S	EA Personnel: LBL	Client: NYSDEC [National Heatset Printing] 152140
Location: 1 Adams Blvd turnaround	Well Condition: O.K.	Weather: 34 F, Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0945	Well Diameter (in): 1" PVC

Purge Date: 3/21/23	Purge Time: 0734
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 26.35	D. Well Volume (ft): ~~0.163~~ 0.141	Depth/Height of Top of PVC:
B. Depth to Water (ft): 17.08	E. Well Volume (gal) C*D: 0.38 ~~1.51~~	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 9.27	F. Three Well Volumes (gal) (E3): 1.14 ~~4.53~~	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0737	13.18	5.22	293	0.449	41.3	4.37	17.08	0.3	0.9
0740	13.43	5.53	297	0.369	20.8	4.56	17.08	|	1.8
0743	13.62	5.64	273	0.339	12.1	4.69	17.08	|	2.7
0746	13.78	5.70	269	0.320	6.9	4.80	17.08	|	3.6
0749	13.79	5.76	265	0.325	2.8	4.85	17.08	|	4.5
0752	13.80	5.80	264	0.319	1.1	4.87	17.09	|	5.4
0755	13.85	5.82	263	0.312	1.4	4.90	17.09	|	6.3
0758	13.88	5.85	261	0.324	0.4	4.94	17.10	|	7.2
0801	13.94	5.88	259	0.321	0.0	4.99	17.10	|	8.1
0804	13.96	5.92	257	0.323	0.0	5.01	17.10	|	9.0
0807								|	9.9

Total Quantity of Water Removed (gal):	9.9L → 2.6 gal	Sampling Time:	0807
Samplers:	LBL, CB	Split Sample With:	N/A
Sampling Date:	3/21/23	Sample Type:	VOCs (grab)

COMMENTS AND OBSERVATIONS: None.

Sample ID: 152140-MW-14S-032123

Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-1D (on site)	EA Personnel: K. Cassidy	Client: NYSDEC 152140
Location: East Farmingdale, NY	Well Condition: Good	Weather: 34°F Sunny
Sounding Method:	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time:	Well Diameter (in): 2" PVC

Purge Date: 3/21/2023	Purge Time: 0750
Purge Method: Low-flow peri pump	Field Technician: M. Gilkey H Young K Cassidy

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0752	9.12	4.88	200	0.428	6.2	5.17	17.45	0.25	0.75
0755	10.20	5.22	183	0.392	8.1	4.17	17.45	0.25	1.50
0758	10.52	5.27	177	0.385	6.2	3.96	17.45	0.25	2.25
0801	10.90	5.32	171	0.382	1.8	3.84	17.45	0.25	3.00
0804	11.16	5.37	166	0.382	0.0	3.78	17.45	0.25	3.75
0807	11.26	5.41	163	0.383	0.0	3.74	17.45	0.25	4.50
0810	11.38	5.49	157	0.386	0.0	3.71	17.45	0.25	5.25
0813	11.52	5.55	152	0.391	0.0	3.68	17.45	0.25	6.00
0816	11.46	5.62	148	0.396		3.63	17.45	0.25	6.75
0819	11.78	5.67	145	0.404	0.0	3.58	17.45	0.25	7.50
0822	11.90	5.70	143	0.405	0.0	3.46	17.45	0.25	8.25
0825	11.93	5.72	142	0.411	0.0	3.43	17.45	0.25	9.00
0828	12.02	5.73	140	0.419	0.0	3.39	17.45	0.25	9.75
0831	12.11	5.74	139	0.418	0.0	3.37	17.45	0.25	10.50
0834	12.17	5.75	138	0.420	0.0	3.35	17.45	0.25	11.25
0837	12.21	5.76	137	0.421	0.0	3.33	17.45	0.25	12.00

Total Quantity of Water Removed (gal):		Sampling Time:	0837
Samplers:	K Cassidy M Gilkey H Young	Split Sample With:	—
Sampling Date:	3/21/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14D	EA Personnel: CB, LBL	Client: National Headset Printing NYSDEC #152140
Location: Farmingdale NY On site	Well Condition: OK	Weather: Sunny 40°F
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0805	Well Diameter (in): 1

Purge Date: 03/21/2023	Purge Time: 0734
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 76.65	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC:
B. Depth to Water (ft): 16.92	E. Well Volume (gal) C*D): 2.45	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 59.73	F. Three Well Volumes (gal) (E3): 7.35	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
737	13.65	5.84	223	1.42	26.4	0.0	16.93	0.25	—
740	13.76	5.91	217	1.50	24.1	0.0	16.93	0.25	0.75
743	13.97	5.93	216	1.48	44.8	0.0	16.93	0.25	1.50
746	13.98	5.93	216	1.44	49.7	0.0	16.93	0.25	2.25
749	14.10	5.94	212	1.36	47.3	0.0	16.93	0.25	3.00
752	14.18	5.93	202	1.25	46.1	0.0	16.93	0.25	3.75
755	14.12	5.93	189	1.14	43.1	0.0	16.93	0.25	4.50
758	14.11	5.95	179	1.03	35.3	0.14	16.93	0.25	5.25
801	14.15	5.93	173	0.964	28.5	0.28	16.93	0.25	6.00
804	14.19	5.92	167	0.887	23.2	0.41	16.93	0.25	6.75
807	14.23	5.92	163	0.826	19.9	0.51	16.93	0.25	7.50
810	14.26	5.93	159	0.767	18.7	0.60	16.93	0.25	8.25
813	14.32	5.93	158	0.711	17.0	0.68	16.93	0.25	9.00
816	14.37	5.94	157	0.682	22.9	0.74	16.93	0.25	9.75
819	14.45	5.94	156	0.641	18.9	0.77	16.93	0.25	10.50
822	14.47	5.95	157	0.607	14.7	0.84	16.93	0.25	11.25
825	14.44	5.95	157	0.576	11.2	0.87	16.93	0.25	12.00

Total Quantity of Water Removed (gal)(L)	116.50	Sampling Time:	0843
Samplers:	CB, LBL	Split Sample With:	X
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-MW-14D-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14D	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
828	14.54	5.95	158	0.552	8.9	0.91	16.93	0.25	12.75
831	14.62	5.95	159	0.531	7.0	0.97	16.93	0.25	13.50
834	14.65	5.96	159	0.515	4.7	1.00	16.93	0.25	14.25
837	14.69	5.95	162	0.491	4.0	1.04	16.93	0.25	15.00
840	14.75	5.95	164	0.484	3.8	1.05	16.93	0.25	15.75
843	14.82	5.94	166	0.479	3.8	1.07	16.93	0.25	16.50

Total Quantity of Water Removed (gal): 4.35G
Samplers: CB, LBL
Sampling Date: 3/21/2023
Sampling Time: 843
Split Sample With:
Sample Type:

COMMENTS AND OBSERVATIONS:

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EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-4PS	EA Personnel: CB, LBL	Client: National Heatset Printing NYSDEC #152140
Location: On-Site	Well Condition: OK	Weather: Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): DDC	Gauge Time: 1000	Well Diameter (in): 2

Purge Date: 03/21/2023	Purge Time: 0903
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 25.84	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.13	E. Well Volume (gal) C*D): 1.75	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 10.71	F. Three Well Volumes (gal) (E3): 5.25	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
904	13.98	6.08	247	0.301	9.4	3.95	15.07	0.25	—
907	14.20	6.06	248	0.300	8.3	3.18	15.07	0.25	0.75
910	14.40	6.06	249	0.300	6.8	2.98	15.07	0.25	1.50
913	14.53	6.05	249	0.300	5.2	2.78	15.07	0.25	2.25
916	14.56	6.06	249	0.299	4.4	2.72	15.07	0.25	3.00
919	14.62	6.07	249	0.299	3.6	2.59	15.07	0.25	3.75
922	14.62	6.06	250	0.299	3.1	2.47	15.07	0.25	4.50
925	14.66	6.06	250	0.300	2.5	2.35	15.07	0.25	5.25
928	14.66	6.06	250	0.299	2.4	2.32	15.07	0.25	6.00
931	14.69	6.07	249	0.298	2.4	2.25	15.07	0.25	6.75

Total Quantity of Water Removed (gal):	1.782	Sampling Time:	931
Samplers:	CB, LBL	Split Sample With:	X
Sampling Date:	3/21/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

Sample ID: 152140-DDC-4-PS-032123

Analysis: VOCs

EA Engineering, P.C.
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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DDC-4PD	EA Personnel: LBL	Client: National Headset Printing NYSDEC 152140
Location: Farmingdale, NY	Well Condition: O.K.	Weather: 39 F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/23	Measurement Ref: TOIC
Stick Up/Down (ft): DDC	Gauge Time: 1000	Well Diameter (in): 2

Purge Date: 3/21/23	Purge Time: 0905
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 79.82	D. Well Volume (ft): 0.163 gal/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.23	E. Well Volume (gal) C*D): 10.53	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 64.59	F. Three Well Volumes (gal) (E3): 31.59	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0908	15.39	6.23	189	0.129	3.2	4.97	15.24	0.3	0.9
0911	15.68	6.20	204	0.122	1.3	4.67	15.21		1.8
0914	15.75	6.25	210	0.121	1.4	4.72	15.21		2.7
0917	15.80	6.30	211	0.120	1.5	4.77	15.21		3.6
0920	15.84	6.31	216	0.120	0.9	4.71	15.21		4.5
0923	15.88	6.27	223	0.120	0.0	4.37	15.21		5.4
0926	15.84	6.18	233	0.121	0.0	4.26	15.21		6.3
0929	15.93	6.18	237	0.120	0.0	3.99	15.21		7.2
0932	15.87	6.18	243	0.120	0.0	3.93	15.21		8.1
0935									9.0

Total Quantity of Water Removed (gal):
Samplers: LBL, CB
Sampling Date: 3/21/23

Sampling Time: 0935
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS:
Sample ID: 152140-DDC-4B-PD-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-35 (onsite)	EA Personnel: K. Cassidy	Client: National Headset Printing NYSDEC #152140
Location: East Farmingdale, NY	Well Condition: Good	Weather: 46°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/20/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): 2" PVC

Purge Date: 3/21/2023	Purge Time: 0925
Purge Method: Low-flow peri pump	Field Technician: K Cassidy, M Gilkey, H Young

Well Volume

A. Well Depth (ft): 29.80	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.17	E. Well Volume ~~(gal) C~~ D (L) 7.18	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 11.63	F. Three Well Volumes ~~(gal) (E3)~~ (L) 21.55	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0926	12.88	6.15	97	0.343	0.0	4.91	18.10	0.25	0.75	0
0929	13.04	6.15	92	0.343	0.0	4.55	18.10	0.25	1.50	0.75
0932	13.15	6.16	92	0.343	0.0	4.52	18.10	0.25	2.25	1.50
0935	13.24	6.16	90	0.341	0.0	4.50	18.10	0.25	3.00	2.25
0938	13.28	6.17	90	0.337	0.0	4.45	18.10	0.25	3.75	3.00
0941	13.49	6.17	90	0.339	0.0	4.35	18.10	0.25	4.50	3.75
0944	13.53	6.17	90	0.346	0.6	4.42	18.10	0.25	5.25	4.50
0947	13.50	6.16	90	0.341	1.8	4.44	18.10	0.25	6.00	5.25
0950	13.51	6.16	89	0.340	2.0	4.50	18.10	0.25	6.75	6.00
0953	13.52	6.16	86	0.338	1.1	4.48	18.10	0.25	7.50	6.75
0956	13.56	6.15	85	0.340	0.8	4.51	18.10	0.25	8.25	7.50
0959	13.62	6.15	83	0.337	0.0	4.54	18.10	0.25	9.00	8.25
1002	13.66	6.16	81	0.337	0.0	4.53	18.10	0.25	9.75	9.00
1005	13.70	6.16	81	0.336	0.0	4.51	18.10	0.25	10.50	9.75

Total Quantity of Water Removed (gal): 9.75
Samplers: M Gilkey H Young
Sampling Date: 3/21/2023

Sampling Time: 1005
Split Sample With:
Sample Type: grab

COMMENTS AND OBSERVATIONS:
Sample ID: 152140-MW-35(onsite)-032123
Analysis: VOCs

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-7	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 3/22/2023	Purge Time: 0727
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 52.36	D. Well Volume (ft): 30mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.4	E. Well Volume (gal) C*D): 988.8 mL	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 32.96	F. Three Well Volumes (gal) (E3): 2.966 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
730	12.56	4.00	280	0.434	97.8	7.08		0.25	—	0.15
733	14.85	6.19	-17	0.436	56.5	7.21			0.75	0.9
736	15.51	6.97	-99	0.489	53.2	6.89			1.50	1.65
739	15.99	7.39	-130	0.489	44.6	6.47			2.25	2.4
742	16.22	7.58	-143	0.488	41.9	6.21			3.00	3.15
745	16.53	7.74	-164	0.477	41.3	5.87			3.75	3.90
748	16.52	7.79	-168	0.477	40.0	5.84			4.50	4.65
751	16.61	7.83	-175	0.473	38.6	5.69			5.25	5.40
754	16.87	7.90	-182	0.466	35.0	5.30			6.00	6.15
757	16.95	7.92	-186	0.463	32.4	5.18			6.75	6.90
800	16.98	7.94	-189	0.458	32.4	5.14			7.50	7.65
CDP 803										
806										
809										

Total Quantity of Water Removed (gal): 2.02
Samplers: C. Badman
Sampling Date: 3/22/2023
Sampling Time: 0800
Split Sample With: N/A
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:
Intermediate Shallow Interval
Port diameter too small to fit Meter down
SAMPLE ID: 152140-CMT-5-7-032223
Analysis: VOCs

Port #1 (Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-06	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in):

Purge Date: 3/21/23	Purge Time: ~~1642~~ ~~1652~~ 1705
Purge Method: low flow-peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 23.30	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.60	E. Well Volume (gal) C*D: .180	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 4.70	F. Three Well Volumes (gal) (E3): 0.564	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW* (ft btoc)	Rate (Lpm)	Volume (liters)
1708	17.44	7.66	-199	0.420	53.9	0.91	—	0.3	0.9
1711	17.41	7.75	-225	0.511	62.6	0.00	—		1.8
1714	17.31	7.67	-228	0.532	55.6	0.00	—		2.7
1717	17.29	7.62	-227	0.532	47.6	0.00	—		3.6
1720	17.25	7.55	-224	0.534	40.6	0.00	—		4.5
1723	17.23	7.52	-221	0.536	37.1	0.00	—		5.4
1726	17.22	7.50	-220	0.537	36.5	0.00	—		6.3
1729	17.21	7.48	-218	0.538	34.6	0.00	—		7.2
1732	17.21	7.48	-216	0.538	33.9	0.00	—		8.1
1735	17.19	7.47	-215	0.538	33.4	0.00	—		9.0
							—		

Total Quantity of Water Removed (gal): ~~150~~
Samplers: LBL
Sampling Date: 3/21/23

Sampling Time: ~~1650~~ 1705
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: ~~Water~~ water smells of sulfur, brown, bubbly, viscous

* could not measure drawdown, well too small to fit both tubing and WLM*

☆Sample collected first due to port going dry during development

Port #3 (Int. - Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-06	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Chanel

Purge Date: 3/22/23	Purge Time: 0727
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 43.42	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.90	E. Well Volume ~~(gal) C*D~~: L 0.980	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 24.52	F. Three Well Volumes ~~(gal)~~ (E3): 2.94 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0730	15.40	5.79	-105	0.672	120	2.50	—	0.3	0.9
0733	15.87	6.74	-253	0.681	114	1.56	—		1.8
0736	15.94	7.03	-268	0.719	46.5	0.93	—		2.7
0739	16.03	7.10	-269	0.725	35.8	0.62	—		3.6
0742	16.11	7.11	-266	0.693	26.2	0.49	—		4.5
0745	16.15	7.10	-263	0.676	24.3	0.45	—		5.4
0748	16.21	7.08	-258	0.663	21.1	0.44	—		6.3
0751	16.24	7.07	-256	0.659	20.2	0.44	—		7.2
0754	16.28	7.05	-255	0.653	18.9	0.45	—		8.1
0757	16.31	7.01	-254	0.644	16.3	0.48	—		9.0
0800	16.33	6.98	-251	0.637	13.9	0.51	—		9.9
0803	16.39	6.96	-250	0.620	12.7	0.62	—		10.8
0806	16.41	6.91	-249	0.617	12.1	0.56	—		11.7
0809	16.42	6.88	-247	0.609	11.9	0.52	—		12.6
0812	16.42	6.86	-246	0.603	11.4	0.52	—		13.5
0815	16.46	6.81	-243	0.598	10.8	0.51	—		14.4

Total Quantity of Water Removed (gal): ____
Samplers: LBL
Sampling Date: 3/22/23
Sampling Time: 0815
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: *could not measure drawdown, well too small to fit both tubing and WLM*
SAMPLE ID: 152140-CMT-6-3-032223
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 4	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E Farmingdale, NY	Well Condition: Good	Weather: 45°F, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1625	Well Diameter (in): 0.4" CMT Channel D.

Purge Date: 3/22/2023	Purge Time: 0756
Purge Method: Low flow peristaltic pump	Field Technician: M Gilkey H Young K Cassidy

Well Volume

A. Well Depth (ft): 20.20	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.71	E. Well Volume ~~(gal)~~ C*D): .059 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 1.49	F. Three Well Volumes ~~(gal)~~ (E3): 0.1788 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0757	11.43	4.24	255	0.803	70.0	5.70		0.2	0
0800	13.96	6.01	5	0.966	58.7	5.60		0.2	0.6
0803	16.08	7.00	-71	0.886	37.1	6.28		0.2	1.2
0806	16.10	7.06	-86	0.888	32.0	6.29		0.2	1.8
0809	16.50	7.31	-95	0.871	29.1	6.74		0.2	2.4
0812	17.11	7.47	-96	0.857	26.0	6.56		0.2	3.0
0815	17.46	7.54	-95	0.840	28.1	6.47		0.2	3.6
0818	— dry —								
0821									

Total Quantity of Water Removed (gal):	3.6	Sampling Time:	0746
Samplers:	K. Cassidy/M. Gilkey	Split Sample With:	◇
Sampling Date:	03/22/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Syrupy/soapy consistency of water. Went dry @ 0818.

Interval: Shallow

SAMPLE ID: 152140-CMT-2-4-032223 Analysis: VOCs

◇WL can ∅ be recorded during purge due to CMT channel diameter

◇Sample collected before purge due to well going dry during development

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 6	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E Farmingdale, NY	Well Condition: Good	Weather: 45°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1630	Well Diameter (in): 0.41" CMT Channel

Purge Date: 3/22/2023	Purge Time: 0822
Purge Method: low-flow peri pump	Field Technician: K Cassidy MGilkey H Yang

Well Volume

A. Well Depth (ft): 51.80	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC: —
B. Depth to Water (ft): 18.51	E. Well Volume (~~gal~~) C*D): 1.33 L	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 33.29	F. Three Well Volumes (gal) (E3): 3.99 L	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0824	17.70	7.59	-144	0.475	37.4	2.05		0.20	0.40
0827	17.47	7.15	-143	0.557	29.6	1.67		0.20	1.00
0830	17.42	7.02	-139	0.573	24.3	1.54		0.20	1.60
0833	17.39	6.92	-136	0.584	21.0	1.48		0.20	2.20
0836	17.38	6.79	-135	0.595	19.0	1.44		0.20	2.8
0839	17.36	6.69	-129	0.594	16.0	1.49		0.20	3.40
0842	17.34	6.64	-123	0.590	15.8	1.52		0.20	4.00
0845	17.35	6.56	-110	0.581	15.9	1.56		0.20	4.60
0848	17.35	6.52	-105	0.579	14.3	1.57		0.20	5.20
0851	17.41	6.47	-98	0.576	14.0	1.55		0.20	5.80
0854	17.49	6.39	-93	0.575	12.5	1.58		0.20	6.40
0857	17.55	6.40	-88	0.572	12.8	1.53		0.20	7.00
0900	17.56	6.39	-86	0.570	12.5	1.51		0.20	7.60

Total Quantity of Water Removed (gal):
Samplers: HY, MG, KC, LBL, CB
Sampling Date: 03/22/23

Sampling Time: 0900
Split Sample With: N/A
Sample Type: Grab

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-CMT-2-6-032223
Interval: Int/Shallow
Analysis: VOCs

*NL can not be collected during purge due to CMT Channel diameter

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-3	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 3/22/2023	Purge Time: 0813
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 73.4	D. Well Volume (ft): 40 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.2	E. Well Volume (gal) C*D): 2.168 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 54.2	F. Three Well Volumes (gal) (E3): 6.504 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0816	17.72	8.43	-92	0.278	103	4.89		0.25	—	0.15
0819	17.49	8.62	-174	0.324	95.4	4.18			0.75	0.90
0822	17.60	8.31	-187	0.345	114	3.53			1.50	1.65
0825	17.66	8.12	-191	0.346	125	3.36			2.25	2.40
0828	17.72	7.94	-186	0.348	137	3.12			3.00	3.15
0831	17.77	7.85	-186	0.356	147	2.93			3.75	3.90
0834	17.74	7.82	-191	0.360	146	2.89			4.50	4.65
0837	17.77	7.81	-194	0.366	152	2.75			5.25	5.40
0840	17.77	7.79	-197	0.380	158	2.66			6.00	6.15
0843	17.79	7.77	-195	0.393	151	2.51			6.75	6.90
0846	17.83	7.76	-195	0.397	151	2.33			7.50	7.65
0849	17.89	7.72	-187	0.399	118	2.54			8.25	8.40
0852	17.88	7.71	-187	0.401	111	2.78			9.00	9.15
0855	17.94	7.69	-190	0.403	112	2.58			9.75	9.90
0858	17.97	7.67	-180	0.407	71.3	2.48			10.50	10.65
0901	18.01	7.67	-186	0.409	76.9	2.52			11.25	11.40
0904	18.04	7.66	-186	0.407	81.7	2.47			12.00	12.15

Total Quantity of Water Removed (gal): 4.40
Samplers: C. Badman
Sampling Date: 3/22/2023
Sampling Time: 0922
Split Sample With: N/A
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:
Intermediate Deep Interval
Port Diameter too small to fit meter down
SAMPLE ID: 152140-CMT-5-3-032223 Analysis: VOCs

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See Page #1

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-3	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0907	18.11	7.65	-186	0.410	76.7	2.60		0.25	~~12.75~~	12.90
0910	18.09	7.61	-184	0.413	80.5	3.01		|	~~13.50~~	13.65
0913	18.08	7.62	-182	0.413	84.2	3.23		|	~~14.25~~	14.40
0916	18.10	7.62	-185	0.415	28.4	2.03		|	~~15.00~~	15.15
0919	18.39	7.57	-185	0.414	27.7	1.86		|	~~15.75~~	15.90
0922	18.26	7.58	-186	0.414	28.6	1.88		|	~~16.50~~	16.65

Total Quantity of Water Removed (gal): ~~0.25~~ 4.40 Sampling Time: 0922
Samplers: C. Bachman Split Sample With:
Sampling Date: 3/22/2023 Sample Type:

COMMENTS AND OBSERVATIONS:
See page 1

Port #6 (Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-03	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush/CMT	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Channel
Purge Date: 3/22/23	Purge Time: ~~0953~~ 1001	
Purge Method: low flow - peri	Field Technician: LBL/CB/MG/HY/KC	

Well Volume

A. Well Depth (ft): 19.75	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.61	E. Well Volume (gal) C*D): 0.0460 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 1.14	F. Three Well Volumes (gal) (E3): 0.1368 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW* (ft btoc)	Rate (Lpm)	Volume (liters)
1004	18.97	6.84	-148	0.812	43.4	2.61	—	0.3	0.9
1007	19.26	7.11	-185	0.808	40.9	1.25	—	|	1.8
1010	19.35	7.20	-194	0.820	39.2	0.73	—	|	2.7
1013	19.21	7.20	-171	0.816	27.5	0.69	—	|	3.6
1016	18.67	7.26	-149	0.802	48.7	0.62	—	|	~~4.5~~
1019	—	—	DRY	—	—	—	—	|	5.4
1022							—	|	6.3
1025							—	|	7.2
1028							—	|	8.1
1031							—	|	9.0

Total Quantity of Water Removed (gal): 4.5 L
Samplers: LBL
Sampling Date: 3/22/23
Sampling Time: 0958
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS:
well dry @ 1019 A.M.

* could not measure drawdown, well too small to fit both tubing and WLM*

SAMPLE ID: 152140-CMT-3-6-032223
Analysis: VOCs

◇ Sample collected prior to purge due to well going dry during development

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 7	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E Farmingdale, NY	Well Condition: Good	Weather: 45°F Sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1633	Well Diameter (in): ~~0.4~~ 3/8" CMT Channel

Purge Date: 3/22/2023	Purge Time: 0911
Purge Method: Low-flow peri pump	Field Technician: K Cassidy, M Gilkey, H Yang

Well Volume

A. Well Depth (ft): 64.84	D. Well Volume (ft): 30 mL/ft (center)	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.53	E. Well Volume (gal) C*D): 1.39 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 46.31	F. Three Well Volumes (gal) (E3): 4.17 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0913	18.19	6.55	-88	0.533	52.7	7.33		0.25	0.75
0916	18.18	6.66	-83	0.493	42.1	1.88		0.25	1.50
0919	18.19	6.50	-75	0.479	46.7	1.69		0.25	2.25
0922	18.14	6.38	-67	0.499	37.7	1.60		0.25	3.00
0925	18.10	6.32	-67	0.516	34.4	1.53		0.25	3.75
0928	18.03	6.27	-58	0.521	87.0	1.49		0.25	4.50
0931	18.00	6.24	-55	0.524	30.0	1.46		0.25	5.25
0934	18.00	6.21	-53	0.525	27.2	1.45		0.25	6.00
0937	17.99	6.19	-50	0.526	28.9	1.44		0.25	6.75
0940	17.99	6.18	-49	0.526	28.9	1.44		0.25	7.50
0943	17.69	6.17	-47	0.528	28.8	1.44		0.25	8.25

Total Quantity of Water Removed (gal): 8.25		Sampling Time: 0943	
Samplers: MG HY RE LBC CB		Split Sample With: X	
Sampling Date: 03/22/23		Sample Type: grab	

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-CMT-2-7-032223
Analysis: VOCs
Interval: Intermediate/Deep

*WL can ø be measured during purge due to channel diameter

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 1	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E. Farmingdale, NY	Well Condition: Good	Weather: 45°F sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1636	Well Diameter (in): 0.4" CMT Channel

Purge Date: 3/22/2023	Purge Time: 1000
Purge Method: Low-flow peri pump	Field Technician: K Cassidy, M Gilkey, H Yang

Well Volume

A. Well Depth (ft): 80.65	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.53	E. Well Volume (gal) C*D): 2.48 L	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 62.12	F. Three Well Volumes (gal) (E3): 7.45	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1002	18.88	10.52	-80	0.320	36.2	2.66		0.25	0
1005	18.76	6.72	-56	0.389	32.7	2.02		0.25	0.75
1008	18.74	6.38	-39	0.421	35.6	1.77		0.25	1.50
1011	18.70	6.21	-27	0.455	36.3	1.60		0.25	2.25
1014	18.62	6.21	-26	0.488	33.9	1.49		0.25	3.0
1017	18.58	6.17	-26	0.496	33.5	1.46		0.25	3.75
1020	18.49	6.15	-25	0.507	33.6	1.42		0.25	4.5
1023	18.38	6.13	-23	0.515	33.9	1.38		0.25	5.25
1026	18.26	6.11	-22	0.518	33.2	1.37		0.25	6.0
1029	18.19	6.10	-21	0.521	30.7	1.33		0.25	6.75
1032	18.13	6.09	-20	0.524	30.1	1.31		0.25	7.5
1035	18.13	6.08	-20	0.524	30.6	1.32		0.25	8.25
1038	18.14	6.07	-20	0.525	30.7	1.30		0.25	9.0
~~1041~~									

Total Quantity of Water Removed (gal):	9.0 L	Sampling Time:	1039
Samplers:	KP HH MG MBL LB	Split Sample With:	MS/MSD
Sampling Date:	3/22/2023	Sample Type:	grab

COMMENTS AND OBSERVATIONS: odor + bubbles present; 1150 – Stopped sampling due to low head, waiting for recharge. Sampling resumed at 1355

Interval: DEEP
Analysis: VOC/MNA
Sample ID: 152140-CMT-2-1-032223

◊ WL can ø be recorded due to CMT Channel diameter

◊ MS/MSD taken for VOCs only (Sample IDs identical)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-02 Port 1	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E. Farmingdale, NY	Well Condition: Good	Weather: 45°F sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1436	Well Diameter (in): 0.4" CMT Channel

Purge Date: 3/22/2023	Purge Time: 1000
Purge Method: Low-flow peri pump	Field Technician: K Cassidy, M Gilkey, H Yang

Well Volume

A. Well Depth (ft): 80.65	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.53	E. Well Volume (gal) C*D): 2.48 L	Pump Type: peristaltic pump
C. Liquid Depth (ft) (A-B): 62.12	F. Three Well Volumes (gal) (E3): 7.45	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1002	18.88	6.52	-80	0.320	36.2	2.66		0.25	0
1005	18.76	6.72	-76	0.389	32.7	2.02		0.25	0.75
1008	18.74	6.38	-39	0.421	35.6	1.77		0.25	1.50
1011	18.70	6.21	-27	0.455	36.3	1.60		0.25	2.25
1014	18.62	6.21	-26	0.488	33.9	1.49		0.25	3.0
1017	18.58	6.17	-26	0.496	33.5	1.46		0.25	3.75
1020	18.49	6.15	-25	0.507	33.6	1.47		0.25	4.5
1023	18.38	6.13	-23	0.515	33.9	1.38		0.25	5.25
1026	18.26	6.11	-22	0.518	33.2	1.37		0.25	6.0
1029	18.19	6.10	-21	0.521	30.7	1.33		0.25	6.75
1032	18.13	6.09	-20	0.524	30.1	1.31		0.25	7.5
1035	18.13	6.08	-20	0.524	30.6	1.32		0.25	8.25
1038	18.14	6.07	-20	0.525	30.7	1.30		0.25	9.0
~~1044~~									

Total Quantity of Water Removed (gal): 9.0 L
Samplers: KC HH MG CBL ZB
Sampling Date: 3/22/2023

Sampling Time: 1038
Split Sample With: MS/MSD
Sample Type: grab

COMMENTS AND OBSERVATIONS: odor + bubbles present; 1150 - Stopped sampling due to low head, waiting for recharge. Sampling resumed at 1355

Interval: DEEP
Analysis: VOC/MNA
Sample ID: 152140-CMT-2-1-032223

✧ WL can ø be recorded due to CMT Channel diameter

✧ MS/MSD taken for VOCs only (Sample IDs identical)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-5	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 03/22/2023	Purge Time: 0942
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 83.3	D. Well Volume (ft): 40ML	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.3	E. Well Volume (gal) C*D): 2.56 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 64	F. Three Well Volumes (gal) (E3): 7.68 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
0944	19.65	8.02	-69	0.252	142	1.15		0.25	—	0.10
0947	18.67	8.43	-132	0.275	157	0.0			0.75	0.85
0950	18.83	8.28	-148	0.302	170	0.0			1.50	1.60
0953	18.74	7.87	-162	0.330	152	0.0			2.25	2.35
0956	18.61	7.72	-163	0.352	157	0.0			3.00	3.10
0959	18.95	7.66	-166	0.361	156	0.0			3.75	3.85
1002	18.57	7.61	-169	0.374	170	0.0			4.50	4.60
1005	18.72	7.59	-172	0.382	144	0.0			5.25	5.35
1008	18.57	7.57	-173	0.390	151	0.0			6.00	6.10
1011	18.51	7.56	-174	0.395	108	0.0			6.75	6.85
1014	18.60	7.52	-171	0.402	136	0.0			7.50	7.60
1017	18.54	7.52	-173	0.407	140	0.0			8.25	8.35
1020	18.50	7.53	-175	0.410	73.3	0.0			9.00	9.10
1023	18.63	7.53	-176	0.413	78.8	0.0			9.75	9.85
1026	18.49	7.56	-180	0.419	111	0.0			10.50	10.60
1029	18.55	7.57	-181	0.426	98.3	0.0			11.25	11.35
1032	18.46	7.56	-178	0.429	102	0.0			12.00	12.10

Total Quantity of Water Removed (gal): ~~4.18~~
Samplers: C. Badman
Sampling Date: 3/22/2023
Sampling Time: 1047
Split Sample With: N/A
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:

Deep ~~Monitoring Well~~ Interval
~~Port~~ Diameter too small to fit meter down
Sample ID: 152140-CMT-5-5-032223

Analysis: VOCs / MNA

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See page #1

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-05-5	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1035	18.43	7.54	-176	0.429	75.6	0.0		0.25	~~12.75~~	12.85
1038	18.51	7.51	-176	0.430	73.8	0.0			~~13.50~~	13.60
1041	18.36	7.51	-173	0.433	49.3	0.0			~~14.25~~	14.35
1044	18.32	7.51	-173	0.433	49.1	0.0			~~15.00~~	15.10
1047	18.49	7.43	-169	0.432	48.2	0.0			~~15.75~~	15.85

Total Quantity of Water Removed (gal): TWNAPS 4.19
Samplers: C. Bachman
Sampling Date: 3/22/2023
Sampling Time: 1047
Split Sample With:
Sample Type:

COMMENTS AND OBSERVATIONS:

Port #7 (Int.-Shallow)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-03	EA Personnel: LBL	Client: National Headset Printing NYSDEC #152140
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft):	Gauge Time: 1300	Well Diameter (in): 3/8" CMT (center Channel)

Purge Date: 3/22/23	Purge Time: 1023
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 49.50	D. Well Volume (ft): 30 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.61	E. Well Volume (gal) C*D): 0.93 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 30.89	F. Three Well Volumes (gal) (E3): 2.78	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1026	19.02	7.41	-90	0.382	23.4	2.17	—	0.3	0.9
1029	19.21	7.06	-119	0.518	22.6	1.17	—	|	1.8
1032	19.07	7.05	-145	0.687	24.0	0.64	—	|	2.7
1035	18.92	7.03	-145	0.753	24.6	0.53	—	|	3.6
1038	17.91	7.00	-143	0.758	25.1	0.53	—	|	4.5
1041	17.30	6.96	-138	0.765	24.4	0.55	—	|	5.4
1044	17.18	6.91	-137	0.767	24.1	0.53	—	|	6.3
1047	16.95	6.89	-134	0.767	23.5	0.53	—	|	7.2
1050	16.89	6.86	-133	0.772	22.8	0.53	—	|	8.1
1053	16.84	6.94	-133	0.775	21.1	0.53	—	|	9.0
1056	16.82	6.86	-132	0.775	20.5	0.41	—	|	9.9
1059	16.80	6.83	-132	0.771	20.0	0.38	—	|	10.8
1102	16.79	6.82	-131	0.766	19.8	0.38	—	|	11.7

Total Quantity of Water Removed (gal):	Sampling Time: 1102
Samplers: LBL	Split Sample With: N/A
Sampling Date: 3/22/23	Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: * could not measure drawdown, well too small to fit both tubing and WLM *

SAMPLE ID: 152140-CMT-3-7-032223
Interval: Int/Shallow
analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-03-2	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT well

Purge Date: 03/22/2023	Purge Time: 1134
Purge Method: Peristaltic Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 69.3	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.97	E. Well Volume (gal) C*D): 2.01 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 50.33	F. Three Well Volumes (gal) (E3): 6.03L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1138	18.59	7.26	-89	0.375	44.7	2.79	—	0.25	—	0.20
1141	18.86	7.03	-91	0.392	40.1	1.53	—		0.75	0.95
1144	17.68	6.92	-91	0.478	37.9	1.15	—		1.50	1.70
1147	17.59	6.86	-89	0.505	38.8	0.96	—		2.25	2.45
1150	17.54	6.82	-87	0.517	36.7	0.80	—		3.00	3.20
1153	17.51	6.78	-84	0.523	37.4	0.71	—		3.75	3.95
1156	17.52	6.74	-81	0.528	38.2	0.64	—		4.50	4.70
1159	17.50	6.71	-78	0.531	39.2	0.63	—		5.25	5.45
1202	17.47	6.68	-74	0.533	38.7	0.63	—		6.00	6.20
CDB 1205										

Total Quantity of Water Removed (gal):	1.64	Sampling Time:	1202
Samplers:	C. Badman	Split Sample With:	N/A
Sampling Date:	3/22/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Intermediate Deep Interval
Port diameter too small to fit meter down
SAMPLE ID: 152140-CMT-3-2-032223
Analysis: VOCs

Port #4 (Int. - Deep)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-06	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152190
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Channel

Purge Date: 3/22/23	Purge Time: 0828
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 63.88	D. Well Volume (ft): ~~D&E~~ 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.75	E. Well Volume (gal) C*D): 1.81 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 45.13	F. Three Well Volumes (gal) (E3): 5.42 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0831	17.04	6.99	-230	0.540	27.4	1.65	—	0.3	0.9
0834	17.08	6.69	-225	0.585	6.9	0.96	—	|	1.8
0837	17.05	6.64	-219	0.584	4.1	0.78	—	|	2.7
0840	17.06	6.58	-210	0.581	2.6	0.58	—	|	3.6
0843	17.06	6.53	-201	0.580	2.0	0.50	—	|	4.5
0846	17.04	6.49	-196	0.577	1.8	0.41	—	|	5.4
0849	17.01	6.46	-190	0.574	1.5	0.40	—	|	6.3
0852	16.90	6.43	-184	0.570	1.1	0.36	—	|	7.2
0855	16.96	6.39	-177	0.563	0.7	0.34	—	|	8.1
0858	"						—	|	9.0

Total Quantity of Water Removed (gal): ____
Samplers: LBL
Sampling Date: 3/22/23
Sampling Time: 0858
Split Sample With: N/A
Sample Type: VOCs (grab)

COMMENTS AND OBSERVATIONS: * could not measure drawdown, well too small to fit both tubing and WLM *
SAMPLE ID: 152190 CMT-6-4-032223
Analysis: VOCs

Port #7 (Deep)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-06	EA Personnel: LBL	Client: National Headset Printing NYSDEC #152190
Location: inside warehouse	Well Condition: Good	Weather: inside
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: ~~BTOF~~ ~~BTOC~~ TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): ~~3/8~~ 3/8" CMT Channel (center)

Purge Date: 3/22/23	Purge Time: 1153
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 83.00	D. Well Volume (ft): 30 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.60	E. Well Volume (gal) C*D): 1.932 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 64.40	F. Three Well Volumes (gal) (E3): 5.98 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW* (ft btoc)	Rate (Lpm)	Volume (liters)
1156	17.94	5.96	-54	0.659	82.8	1.24	—	0.3	0.9
1159	16.67	6.31	-156	0.622	12.9	0.99	—		1.8
1202	16.36	6.34	-170	0.568	0.9	0.74	—		2.7
1205	16.08	6.35	-169	0.556	0.0	0.53	—		3.6
1208	15.99	6.36	-168	0.555	0.0	0.49	—		4.5
1211	15.91	6.36	-166	0.553	0.0	0.40	—		5.4
1214	15.87	6.35	-165	0.551	0.0	0.39	—		6.3
1217	15.83	6.34	-162	0.547	0.0	0.35	—		7.2
1220	15.77	6.32	-160	0.545	0.0	0.34	—		8.1
1223	15.74	6.31	-158	0.543	0.0	0.32	—		9.0

Total Quantity of Water Removed (gal): 9.0
Samplers: LBL
Sampling Date: 3/22/23

Sampling Time: 1223
Split Sample With: N/A
Sample Type: VOCs, MNA (grab)

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152190-CMT-6-7-032223
Analysis: VOCs/MNA

* could not measure drawdown, well too small to fit both tubing and WLM *

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-03-3	EA Personnel: C. Badman	Client: National Headset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Bldg Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 3/22/2023	Purge Time: 12:22
Purge Method: Peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 79.63	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.95	E. Well Volume (gal) C*D): 2.43L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 60.68	F. Three Well Volumes (gal) (E3): 7.29L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1224	18.80	6.97	-102	0.404	41.4	1.50	—	0.25	—	0.10
1227	17.45	7.07	-143	0.575	27.2	1.20	—		0.75	0.85
1230	17.40	7.05	-146	0.668	22.3	1.07	—		1.50	1.60
1233	17.42	7.01	-143	0.727	21.4	0.93	—		2.25	2.35
1236	17.49	6.97	-141	0.757	20.9	0.80	—		3.00	3.10
1239	17.48	6.94	-140	0.768	20.4	0.68	—		3.75	3.85
1242	17.58	6.91	-139	0.774	22.4	0.57	—		4.50	4.60
1245	17.66	6.96	-136	0.779	20.5	0.57	—		5.25	5.35
1248	17.58	6.88	-136	0.785	17.6	0.48	—		6.00	6.10
1251	17.62	6.87	-136	0.784	17.9	0.45	—		6.75	6.85
1254	17.47	6.85	-136	0.785	17.3	0.44	—		7.50	7.60

Total Quantity of Water Removed (gal): 2.00
Samplers: C. Badman
Sampling Date: 3/22/2023
Sampling Time: 1254
Split Sample With: DUP
Sample Type: FD-03

COMMENTS AND OBSERVATIONS:
Deep Interval
Port diameter too small to fit Meter down
SAMPLE ID: 152140-CMT-3-3-032223 Analysis: VOCs(FD)/MNA

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-07-3	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Sticky Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 03/22/2023	Purge Time: 1353
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 20.12	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.25	E. Well Volume (gal) C*D): 34.8mL	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 0.87	F. Three Well Volumes (gal) (E3): 104.4 mL	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1354	22.49	6.49	72	0.780	3.6	4.61	—	0.25	—	0.05
1357	22.35	7.03	-108	0.740	4.4	2.35	—	0.25	0.75	0.80
1400	21.93	7.27	-157	0.738	2.9	1.73	—	|	1.50	1.55
1403	21.63	7.43	-176	0.733	3.2	1.55	—	|	2.25	2.30
1406	21.55	7.48	-185	0.724	3.5	1.50	—	|	3.00	3.05
1409	21.06	7.50	-183	0.724	2.1	1.48	—	|	3.75	3.80
1412	~	Well	DRY	~	~	~	~	~	4.50	4.55
1415									5.25	CDB
1418									6.00	
									6.75	

CDB

Total Quantity of Water Removed (gal):	1.20	Sampling Time:	1424
Samplers:	C. Badman	Split Sample With:	N/A
Sampling Date:	3/22/2023	Sample Type:	

COMMENTS AND OBSERVATIONS:
Shallow Interval
Port diameter too small to fit meter down

Port #5 (Deep)

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-08	EA Personnel: LBL	Client: National Heatset Printing NYSDEC #152140
Location: loading dock	Well Condition: Good	Weather: 54 F, cloudy
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.411 CMT Channel

Purge Date: 3/22/23	Purge Time: 1411
Purge Method: low flow - peri	Field Technician: LBL

Well Volume

A. Well Depth (ft): 79.00	D. Well Volume (ft): 40 mL/L	Depth/Height of Top of PVC:
B. Depth to Water (ft): 15.89	E. Well Volume (gal) C*D): 2.52L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 63.11	F. Three Well Volumes (gal) (E3): 7.57L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW * (ft btoc)	Rate (Lpm)	Volume (liters)
1414	16.39	6.83	-228	0.378	66.6	1.26	—	0.3	0.9
1417	16.02	6.83	-221	0.399	51.0	1.13	—	|	1.8
1420	15.12	6.87	-208	0.436	34.2	0.92	—	|	2.7
1423	15.02	6.78	-203	0.454	19.1	0.74	—	|	3.6
1426	14.67	6.75	-201	0.461	13.1	0.72	—	|	4.5
1429	14.60	6.72	-198	0.464	11.8	0.71	—	|	5.4
1432	14.56	6.68	-195	0.472	7.2	0.63	—	|	6.3
1435	14.55	6.66	-193	0.477	6.2	0.59	—	|	7.2
1438	14.50	6.64	-192	0.479	6.1	0.55	—	|	8.1
1441	14.48	6.64	-192	0.482	5.8	0.54	—	|	9.0

Total Quantity of Water Removed (gal): 9.00
Samplers: LBL
Sampling Date: 3/22/23
Sampling Time: 1441
Split Sample With: N/A
Sample Type: VOCs + MNA (grab)

COMMENTS AND OBSERVATIONS: * Could not measure drawdown, well too small to fit both tubing and WLM *
SAMPLE ID: 152140-CMT-8-S-032223
Analysis: VOCs/MNA

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-07-4	EA Personnel: C. Badman	Client: National Headset Printing NYSDEC #152140
Location: Inside Building	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well 0.4"

Purge Date: 03/22/2023	Purge Time: 1439
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 52.54	D. Well Volume (ft): 40mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.2	E. Well Volume (gal) C*D): 1.33 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 33.34	F. Three Well Volumes (gal) (E3): 4 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)	
1441	20.65	7.30	-91	0.243	7.3	2.80	—	0.25	—	0.10
1444	20.46	7.25	-134	0.244	5.1	1.64	—		0.75	0.85
1447	19.77	7.02	-141	0.248	1.3	1.53	—		1.50	1.60
1450	19.22	6.87	-139	0.247	0.0	1.50	—		2.25	2.35
1453	18.86	6.79	-131	0.246	0.0	1.42	—		3.00	3.10
1456	18.71	6.73	-124	0.245	0.0	1.39	—		3.75	3.85
1459	18.62	6.69	-120	0.244	0.0	1.41	—		4.50	4.60
1502	18.51	6.63	-113	0.242	0.0	1.42	—		5.25	5.35
1505	18.39	6.59	-108	0.241	0.0	1.44	—		6.00	6.10
1508	18.30	6.56	-104	0.241	0.0	1.45	—		6.75	6.85

Total Quantity of Water Removed (gal):	1.8 L	Sampling Time:	1508
Samplers:	C. Badman	Split Sample With:	N/A
Sampling Date:	3/22/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Intermediate Shallow Interval Port diameter too small to fit meter down

SAMPLE ID: 152140-CMT-7-4-032223

Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-04 Port 4	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152190
Location: Farmingdale, NY	Well Condition: Good / New	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/22	Measurement Ref: 7th Channel OD
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Channel

Purge Date: 3/22/2023	Purge Time: 1443
Purge Method: Low-flow per pump	Field Technician: K. Cassidy / H. Young / M. Gilkey

Well Volume

A. Well Depth (ft): 20.92	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.10	E. Well Volume (gal) C*D): 0.072 L	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 1.82	F. Three Well Volumes (gal) (E3): 0.218 L	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1446	21.66	7.80	-83	0.480	20.6	7.78		0.28	0
1449	20.41	7.99	-94	0.478	22.9	6.69		0.28	0.75
1452	21.65	7.61	-89	0.455	16.1	6.66		0.28	1.50
1455	—	—	—	well went dry				—	—

Total Quantity of Water Removed (gal):	1.50	Sampling Time:	1432
Samplers:	NG HH KE LBL CB	Split Sample With:	—
Sampling Date:	3/22/2023	Sample Type:	grab

COMMENTS AND OBSERVATIONS: well went dry @ 1455

* Due to well diameter WL can not be recorded during purge
$ Sample collected prior to purge due to well going dry during development
SAMPLE ID: 152190-CMT-4-4-032223

Interval: Shallow
Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-04 P&T 5	EA Personnel: K. Cassidy	Client: National Headset Printing NYSDEC #152140
Location: E. Farmingdale, NY	Well Condition: Good	Weather: 50°F Sunny
Sounding Method: Heron skinny Dipper	Gauge Date: 3/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" Channel width ~~Diameter~~

Purge Date: 3/22/2023	Purge Time: 1500
Purge Method: Low-flow peri pump	Field Technician: KCassidy MGilkey HYoung

Well Volume

A. Well Depth (ft): 53.30	D. Well Volume (ft): 40 mL/FT	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.10	E. Well Volume (gal) C*D: 1.37	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 34.20	F. Three Well Volumes (gal) (E3): 4.10	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1503	19.45	7.92	-129	0.260	117	0.00		0.25	0.75
1506	19.44	7.56	-116	0.253	133	0.00		0.25	1.50
1509	19.45	7.45	-111	0.250	57.3	0.00		0.25	2.25
1512	18.99	7.34	-108	0.250	56.0	0.00		0.25	3.00
1515	18.83	7.19	-103	0.248	60.4	0.00		0.25	3.75
1518	18.69	7.11	-101	0.249	28.10	0.00		0.25	4.50
1521	18.48	7.02	-97	0.250	28.9	0.00		0.25	5.25
1524	18.42	7.03	-96	0.249	40.2	0.00		0.25	6.00
1527	18.35	6.93	-95	0.250	23.7	0.00		0.25	6.75
1530	18.32	6.89	-93	0.250	28.1	0.00		0.25	7.50
1533	18.24	6.89	-95	0.258	20.1	0.00		0.25	8.25
1536	18.21	6.88	-92	0.247	20.1	0.00		0.25	9.00
1539	18.20	6.85	-90	0.248	19.0	0.00		0.25	9.75
1542	18.15	6.79	-88	0.245	15.9	0.00		0.25	10.50
1545	18.08	6.76	-89	0.245	19.9	0.00		0.25	11.25
1548	18.05	6.75	-86	0.244	20.2	0.00		0.25	12.00
1551	18.24	6.72	-84	0.242	19.5	0.00		0.25	12.75

Total Quantity of Water Removed (gal):	12.75	Sampling Time:	1551
Samplers:	MG/HY/LBL/KC/CB	Split Sample With:	∞
Sampling Date:	03/22/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

Interval: Shallow/Int
SAMPLE ID: 152140-CMT-4-5-032223
Analysis: VOCs

*WL can not be recorded during purge due to well diameter

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-07-S	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside warehouse	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/22/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT-well

Purge Date: 03/22/2023	Purge Time: 1538
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 72.35	D. Well Volume (ft): 40 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.2	E. Well Volume (gal) C*D): 2.126 L	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 53.15	F. Three Well Volumes (gal) (E3): 6.378 L	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1538	19.74	6.51	-47	0.309	27.4	2.46	—	0.25	—
1541	18.90	6.80	-77	0.332	6.2	1.75	—	0.25	0.75
1544	18.84	6.90	-94	0.347	6.9	1.50	—		1.50
1547	18.60	6.94	-101	0.355	6.8	1.44	—		2.25
1550	18.71	6.98	-110	0.364	9.7	1.34	—		3.00
1553	18.68	7.01	-116	0.379	11.9	1.25	—		3.75
1556	18.37	7.04	-119	0.393	18.1	1.22	—		4.50
1559	18.20	7.05	-122	0.397	9.2	1.21	—		5.25
1602	18.18	7.06	-126	0.407	14.2	1.21	—		6.00
1605	18.01	7.07	-129	0.414	14.5	1.23	—		6.75
1608	17.89	7.08	-131	0.414	14.2	1.24	—		7.50

Total Quantity of Water Removed (gal):	1.98	Sampling Time:	1608
Samplers:	C. Badman	Split Sample With:	N/A
Sampling Date:	3/22/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Intermediate Deep Interval Port diameter too small to fit meter down

SAMPLE ID: 152140-CMT-7-S-032223

Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-4-6	EA Personnel: K. Cassidy	Client: NYSDEC (152140)
Location: E. Farmingdale, NY	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny	Gauge Date: 03/21/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in):

Purge Date: 03/22/23	Purge Time: 1608
Purge Method: Low Flow	Field Technician: K Cassidy MGikey H Young

Well Volume

A. Well Depth (ft): 63.54	D. Well Volume (ft)~~(gal)~~: 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 18.80	E. Well Volume (gal) C*D: 1.79 L	Pump Type: peri pump
C. Liquid Depth (ft) (A-B): 44.74	F. Three Well Volumes (gal) (E3): 5.37	Pump Intake Depth: mid screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1610	19.54	7.45	-96	0.275	190	0.43		0.25	0.50
1613	19.36	7.42	-95	0.343	122	0.04		0.25	1.25
1616	19.22	7.40	-91	0.388	85.0	0.00		0.25	2.00
1619	19.06	7.41	-89	0.418	95.1	0.00		0.25	2.75
1622	19.05	7.41	-88	0.419	81.2	0.00		0.25	3.50
1625	19.00	7.39	-87	0.428	83.2	0.00		0.25	4.25
1628	18.93	7.37	-84	0.437	75.0	0.02		0.25	5.00
1631	18.92	7.33	-71	0.440	109.3	0.13		0.25	5.75
1634	18.98	7.23	-71	0.448	47.7	0.00		0.25	6.50
1637	18.97	7.19	-68	0.449	42.5	0.00		0.25	7.25
1640	18.96	7.14	-62	0.451	37.2	0.00		0.25	8.00
1643	18.95	7.11	-59	0.451	38.4	0.00		0.25	8.75
1646	18.90	7.10	-53	0.451	26.3	0.00		0.25	9.50
1649	18.89	7.00	-46	0.450	22.2	0.00		0.25	10.25
1652	18.88	6.99	-44	0.450	23.4	0.00		0.25	11.75
1655	18.85	6.96	-40	0.449	20.4	0.00		0.25	12.00
1658									

Total Quantity of Water Removed (gal):	Sampling Time: 1655
Samplers: HY, MG, LBL, KC, CB	Split Sample With: N/A
Sampling Date: 03/22/23	Sample Type: Grab

COMMENTS AND OBSERVATIONS:
Interval: Int/Deep
SAMPLE ID: 152140-CMT-4-6-032223
Analysis: VOCs

Water level can't be recorded during purge due to channel width

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-09-4	EA Personnel: C. Badman	Client: National Heatset Printing NYSDEC #152140
Location: Inside Warehouse	Well Condition: Good	Weather: Indoors
Sounding Method: Heron Skinny Dipper	Gauge Date: 03/21/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): CMT well

Purge Date: 03/22/2023	Purge Time: 1659
Purge Method: Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 20.5	D. Well Volume (ft): 40 mL	Depth/Height of Top of PVC:
B. Depth to Water (ft): 19.38	E. Well Volume (gal) C*D: 44.8 mL	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 1.12	F. Three Well Volumes (gal) (E3): 134.4 mL	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1659	19.73	7.02	-142	0.418	0.0	2.21	—	0.25	—
1702	19.58	7.01	-196	0.420	0.0	1.69	—		0.75
1705	19.40	7.11	-254	0.415	0.0	1.38	—		1.50
1708	19.29	7.30	-269	0.415	0.0	1.26	—		2.25
1711	19.13	7.21	-254	0.421	0.0	1.25	—		3.00
1714	18.97	6.96	-237	0.436	0.0	1.34	—		3.75
1717	18.75	6.71	-225	0.456	0.0	1.43	—		4.50
1720	18.61	6.67	-222	0.461	0.0	1.44	—		5.25
1723	18.51	6.58	-216	0.472	0.0	1.44	—		6.00
1726	18.28	6.47	-206	0.484	0.0	1.42	—		6.75
1729	18.06	6.42	-200	0.489	0.0	1.42	—		7.50
1732	18.24	6.38	-194	0.489	0.0	1.41	—		8.25
1735	18.24	6.34	-190	0.492	0.0	1.40	—		9.00
~~1738~~									~~9.75~~

CDB CDB

Total Quantity of Water Removed (gal):	2.376	Sampling Time:	1735
Samplers:	C. Badman	Split Sample With:	
Sampling Date:	3/22/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS: Shallow Interval

SAMPLE ID: 152140-CMT-9-4-032223

Analysis: VOCs

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: CMT-07 PDA-6	EA Personnel: K. Cassidy	Client: National Heatset Printing NYSDEC #152140
Location: E Farmingdale, NY	Well Condition: Good	Weather: 45°, sunny
Sounding Method: Heron Skinny Dipper	Gauge Date: 3/22/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1300	Well Diameter (in): 0.4" CMT Width

Purge Date: 3/23/2023	Purge Time: 1005
Purge Method: Low-flow	Field Technician: K Cassidy, M Gilkey, H Yang

Well Volume

A. Well Depth (ft): 81.80	D. Well Volume (ft): 40 mL/ft	Depth/Height of Top of PVC:
B. Depth to Water (ft): 37.01	E. Well Volume (gal) C*D: 1.79 L	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 44.79	F. Three Well Volumes (gal) (E3): 5.37 L	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1000	16.49	5.96	42	0.439	6.4	2.76		0.25	0.25
1009	16.50	6.26	-58	0.482	3.9	0.96		0.25	1.00
1012	16.90	6.35	-73	0.489	11.5	0.76		0.25	1.75
1015	16.96	6.44	-91	0.492	10.6	0.65		0.25	2.50
1018	16.91	6.49	-98	0.492	14.0	0.58		0.25	3.25
1021	16.88	6.51	-100	0.492	9.3	0.54		0.25	4.00
1024	16.84	6.53	-102	0.491	9.0	0.51		0.25	4.75
1027	16.81	6.55	-102	0.490	10.8	0.50		0.25	5.50
1030	16.77	6.55	-101	0.487	13.6	0.46		0.25	6.25
1033	16.73	6.56	-100	0.485	20.1	0.45		0.25	7.00
1036	16.70	6.55	-97	0.482	27.6	0.44		0.25	7.75
1039	16.66	6.55	-96	0.482	27.7	0.44		0.25	8.50
1042	16.68	6.54	-94	0.481	35.5	0.41		0.25	9.25
1045	16.64	6.53	-92	0.488	33.7	0.41		0.25	10.00
1048	16.73	6.52	-91	0.481	36.6	0.41		0.25	10.75

Total Quantity of Water Removed (gal):
Samplers: KC HY MG CB LBL
Sampling Date: 3/23/2023

Sampling Time: 1048
Split Sample With:
Sample Type: grab

COMMENTS AND OBSERVATIONS:
SAMPLE ID: 152140-CMT-7-6-032323
Interval: Deep
Analysis: VOCs/MNA

Water level can't be recorded during purge due to CMT channel width

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Appendix D

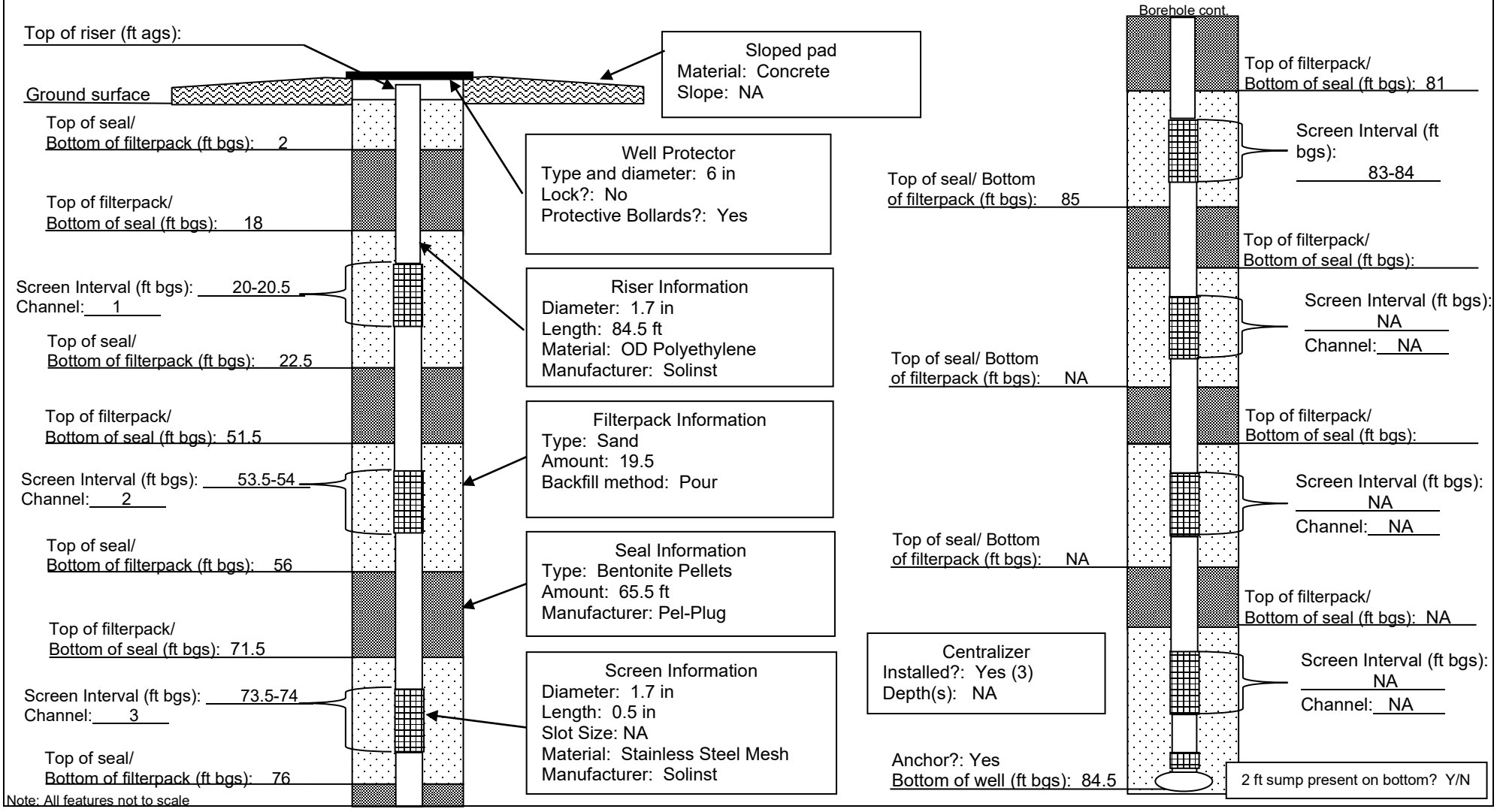
CMT Well Construction Logs

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RECORD OF MONITORING WELL CONSTRUCTION

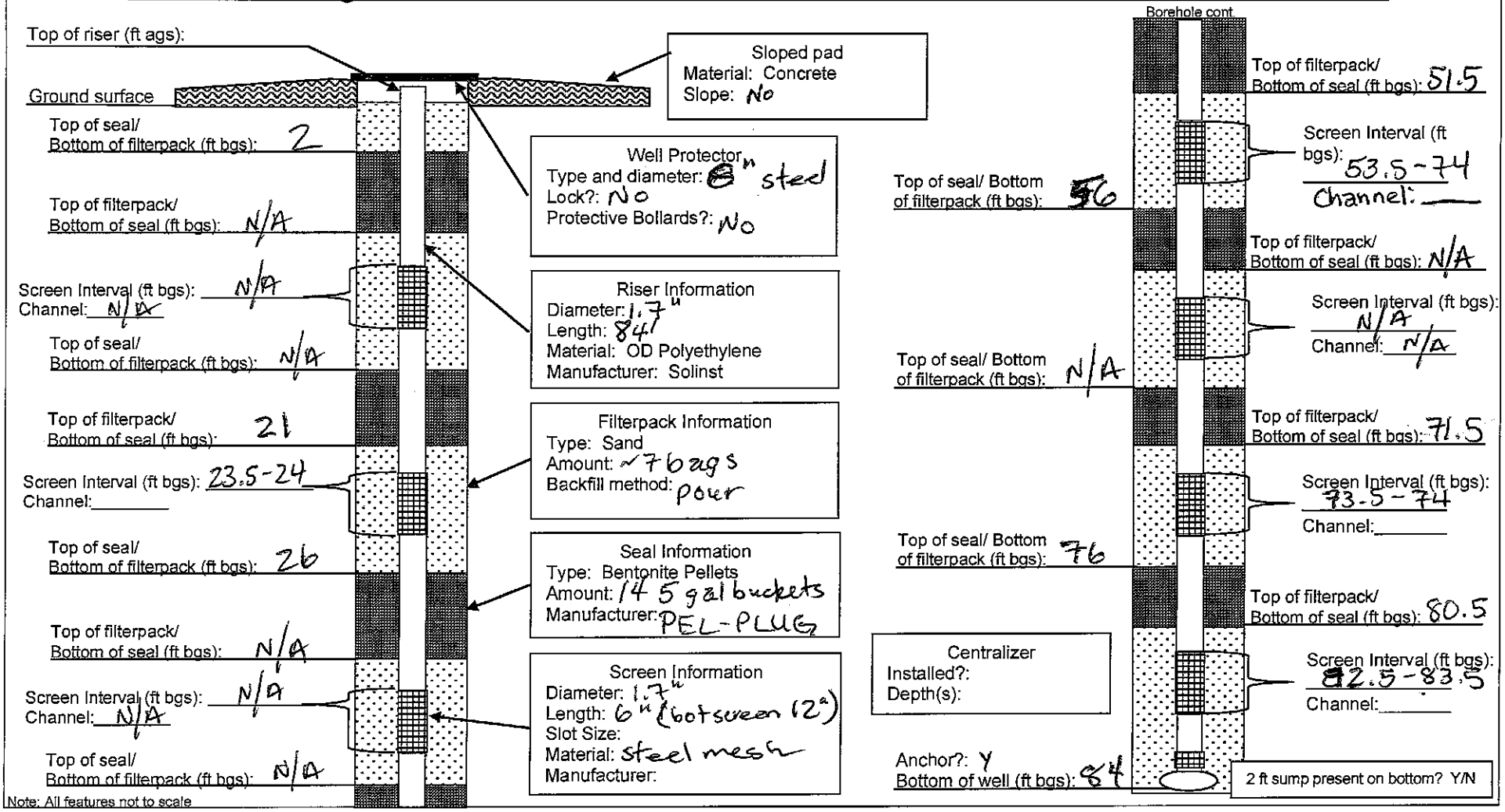
(FLUSH MOUNT CMT WELL)

EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT-01	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 11/15/2022	# Channels utilized: 4
	Time Finished: 1200	Borehole Diameter: 4 in
Location: 1 Adams Blvd	Depth to Water: ~19 ft	Borehole Depth: 85 ft
Site Geologist: E. Fenner	Drilling Method: Rotosonic	Outer Casing?: No



RECORD OF MONITORING WELL CONSTRUCTION
(FLUSH MOUNT CMT WELL)

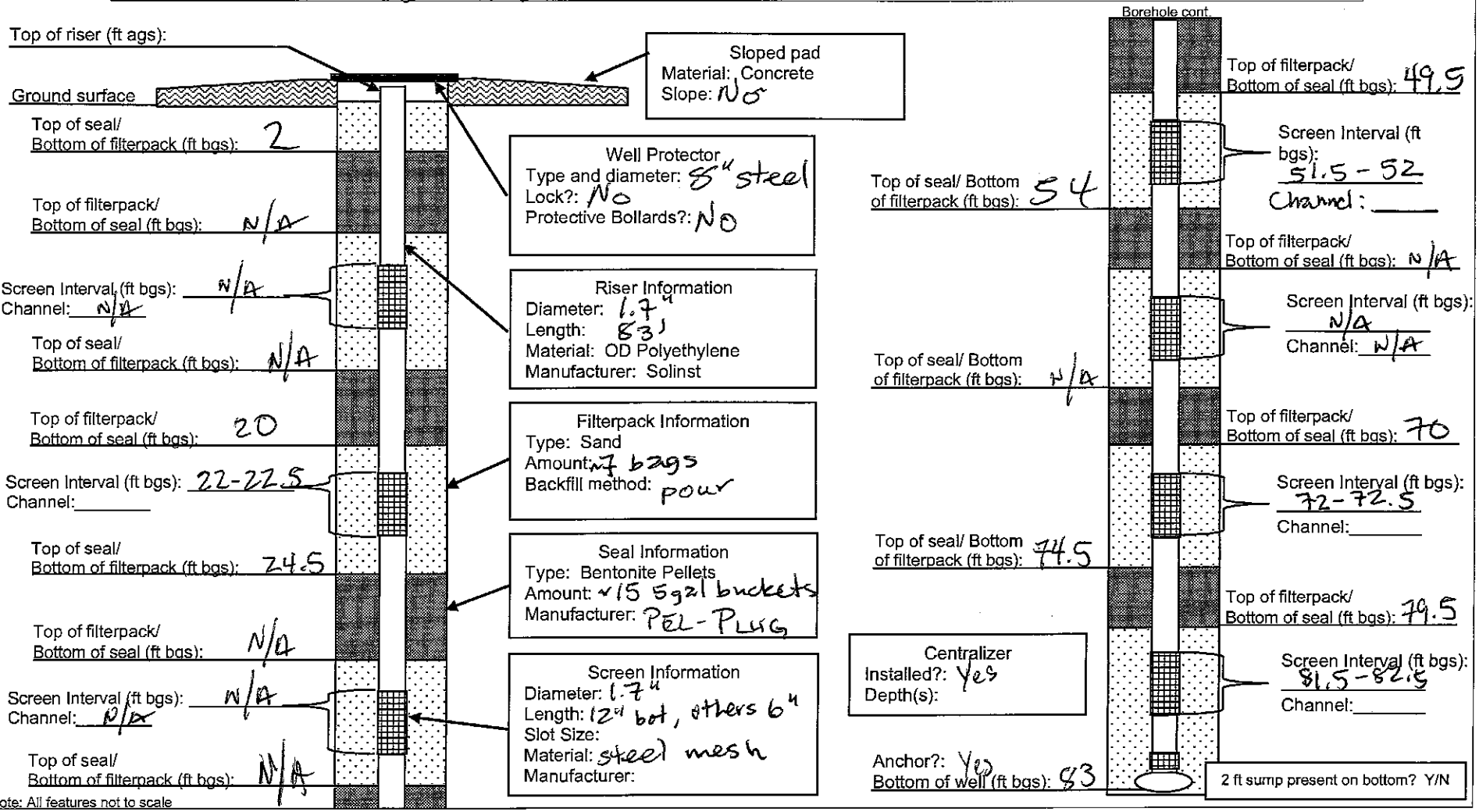
EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT-02	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 01/28/23	# Channels utilized: 4
	Time Finished:	Borehole Diameter: 6"
Location: 1 Adams Blvd	Depth to Water:	Borehole Depth: 84'
Site Geologist: L. Backman-Lowe	Drilling Method: Rotosonic	Outer Casing?: No



RECORD OF MONITORING WELL CONSTRUCTION

(FLUSH MOUNT CMT WELL)

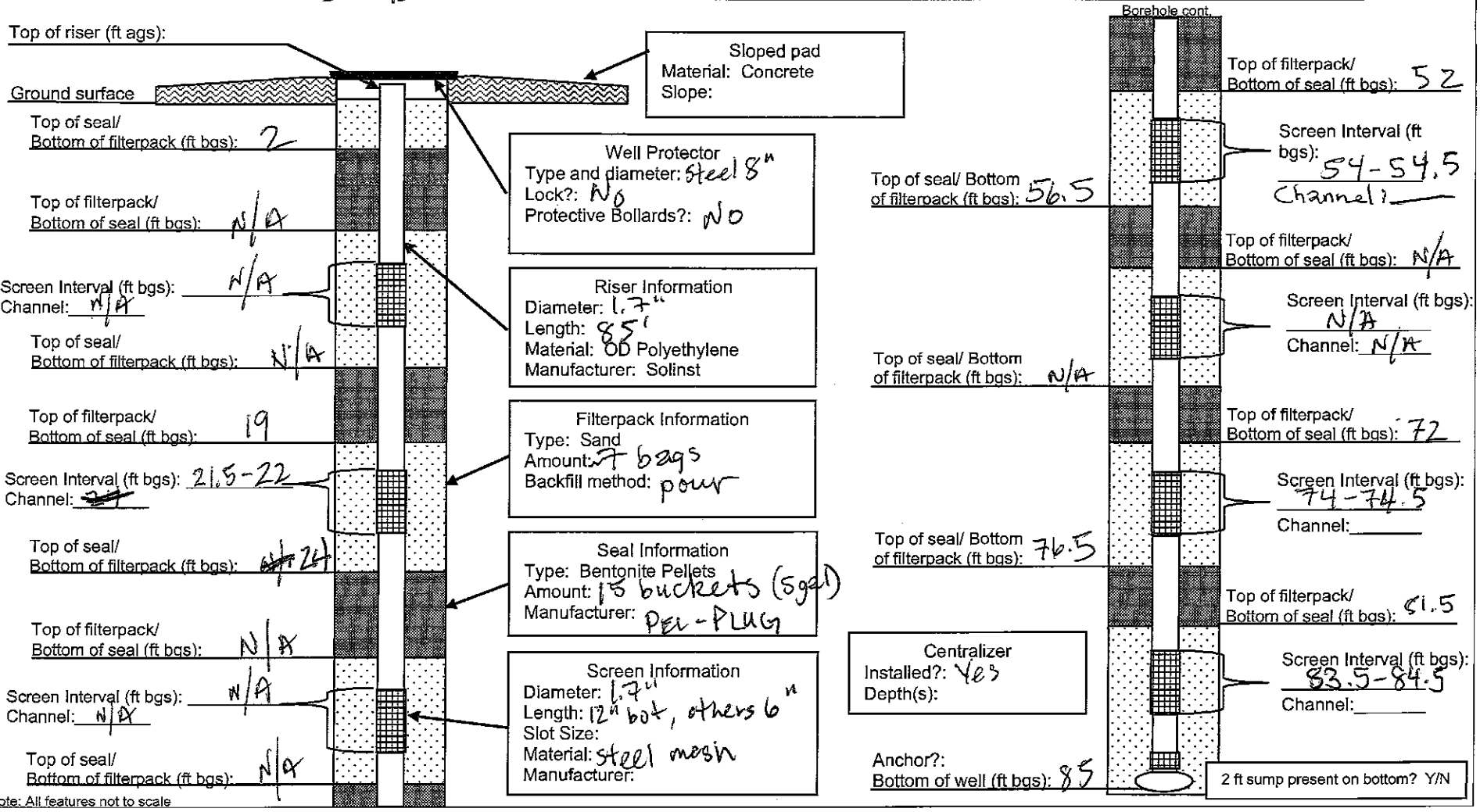
EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT- 03	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 01/29/23	# Channels utilized: 4
	Time Finished:	Borehole Diameter: 6"
Location: 1 Adams Blvd	Depth to Water:	Borehole Depth: 85'
Site Geologist: L. Bachman-Lowe	Drilling Method: Rotosonic	Outer Casing?: NO



RECORD OF MONITORING WELL CONSTRUCTION

(FLUSH MOUNT CMT WELL)

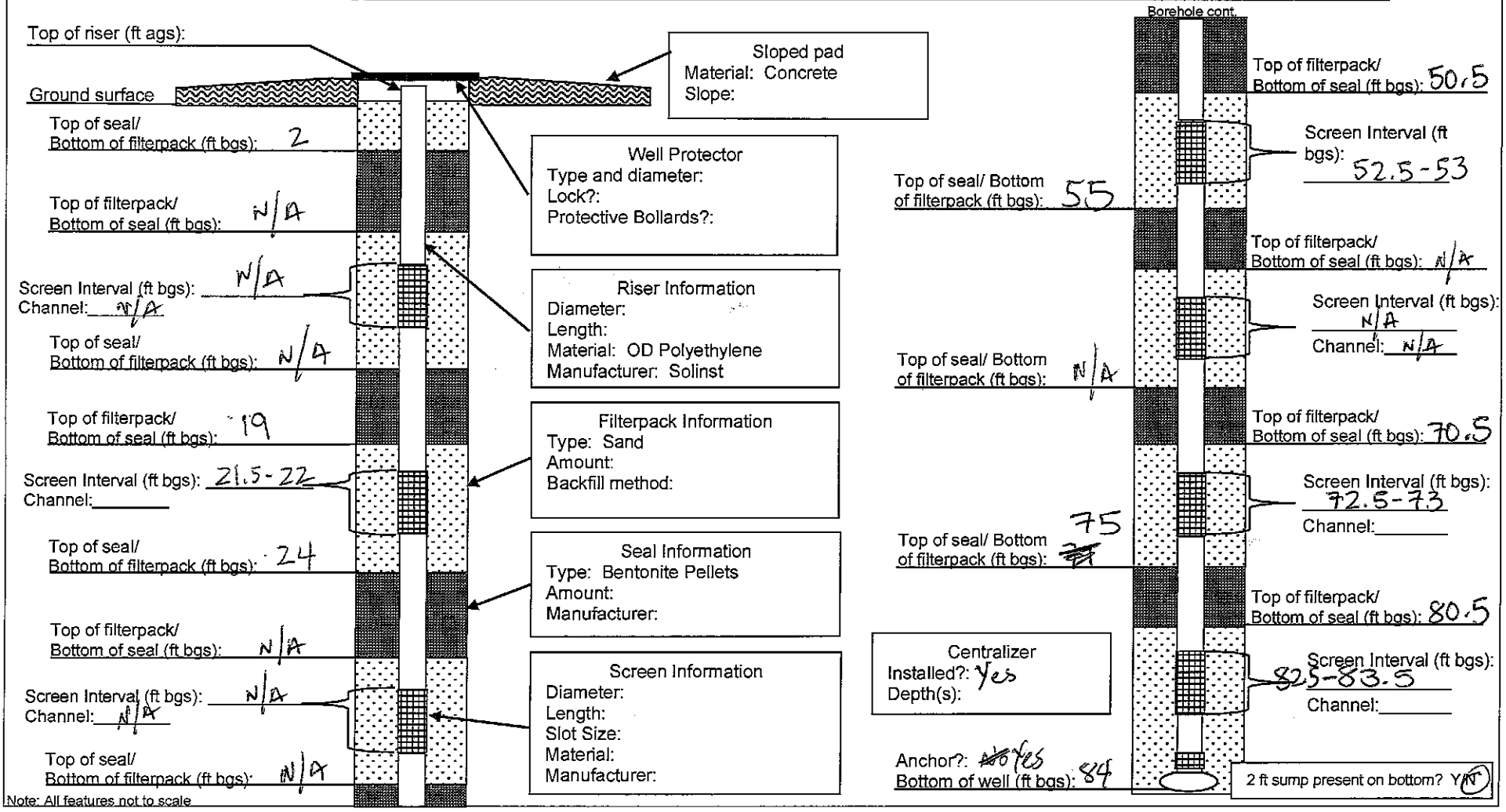
EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT-04	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 01/29/23	# Channels utilized: 4
	Time Finished:	Borehole Diameter: 6"
Location: 1 Adams Blvd	Depth to Water:	Borehole Depth: 85'
Site Geologist: L. Buckman Lowe	Drilling Method: Rotosonic	Outer Casing?: NO



RECORD OF MONITORING WELL CONSTRUCTION

(FLUSH MOUNT CMT WELL)

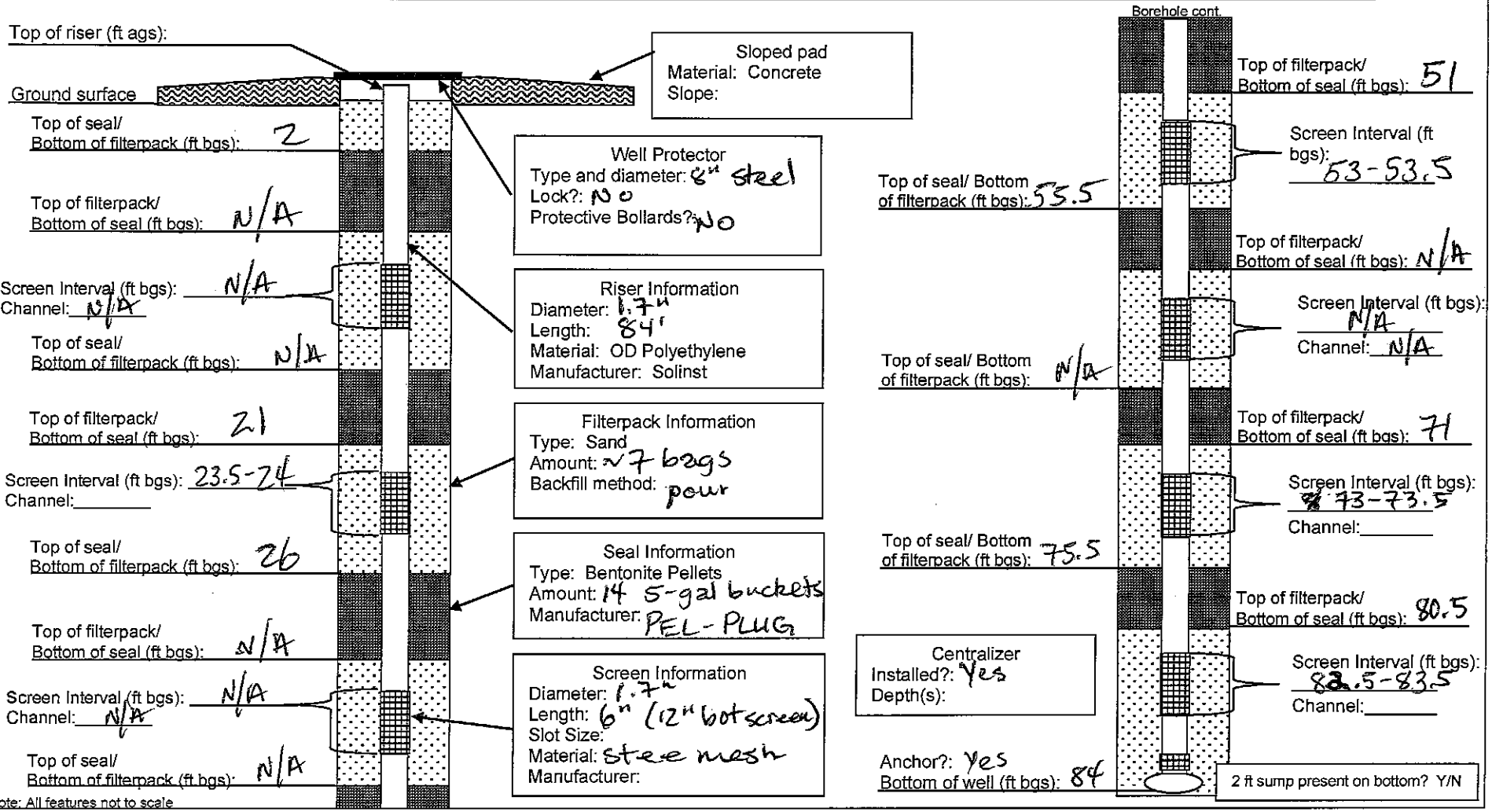
EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT- 05	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 01/26/23	# Channels utilized: 4
	Time Finished: 2330	Borehole Diameter: 6"
Location: 1 Adams Blvd	Depth to Water:	Borehole Depth: 84'
Site Geologist: L. Backman-Lowe	Drilling Method: Rotosonic	Outer Casing?: No



RECORD OF MONITORING WELL CONSTRUCTION

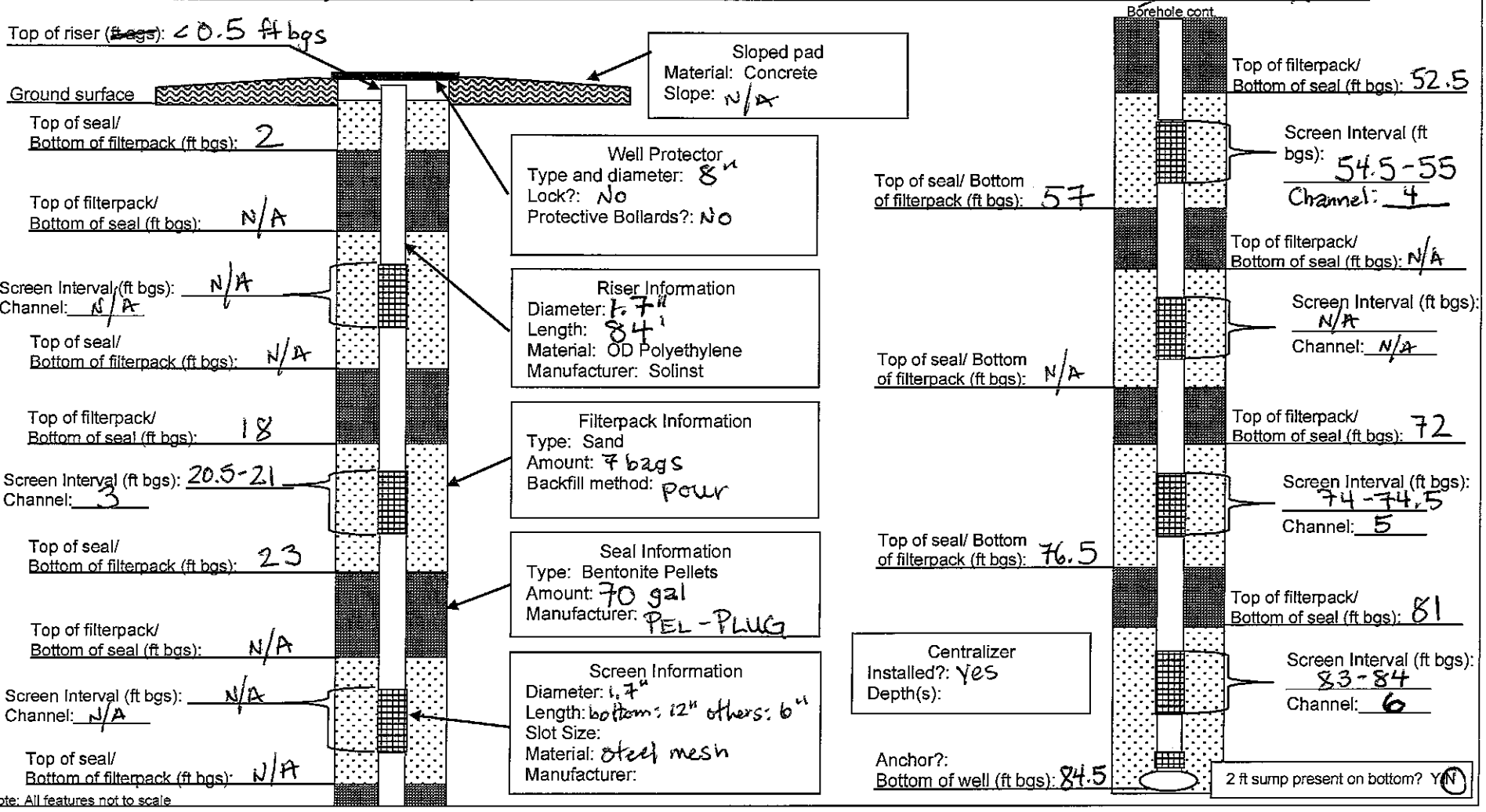
(FLUSH MOUNT CMT WELL)

EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT-06	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 01/27/23	# Channels utilized: 4
	Time Finished: 2240	Borehole Diameter: 6"
Location: 1 Adams Blvd	Depth to Water:	Borehole Depth: 84'
Site Geologist: L. Backmann-Lowe	Drilling Method: Rotosonic	Outer Casing?: No



RECORD OF MONITORING WELL CONSTRUCTION
(FLUSH MOUNT CMT WELL)

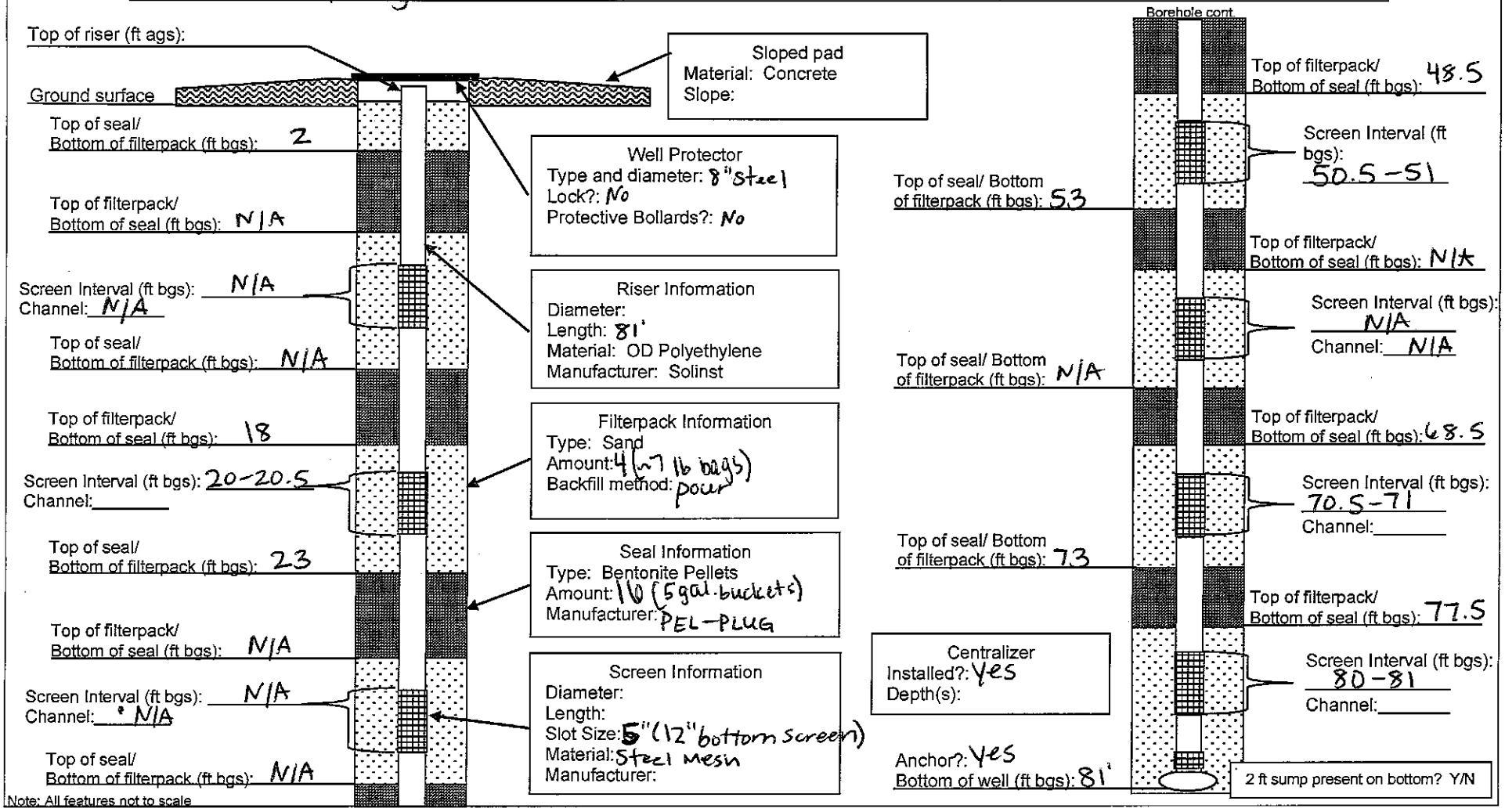
EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT- 07	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 01/24/23	# Channels utilized: 4
	Time Finished: 0440	Borehole Diameter: 6"
Location: 1 Adams Blvd	Depth to Water: ~19.5	Borehole Depth: 84.5'
Site Geologist: L. Backman-Lowe	Drilling Method: Rotosonic	Outer Casing?: ~~Yes~~ No



RECORD OF MONITORING WELL CONSTRUCTION

(FLUSH MOUNT CMT WELL)

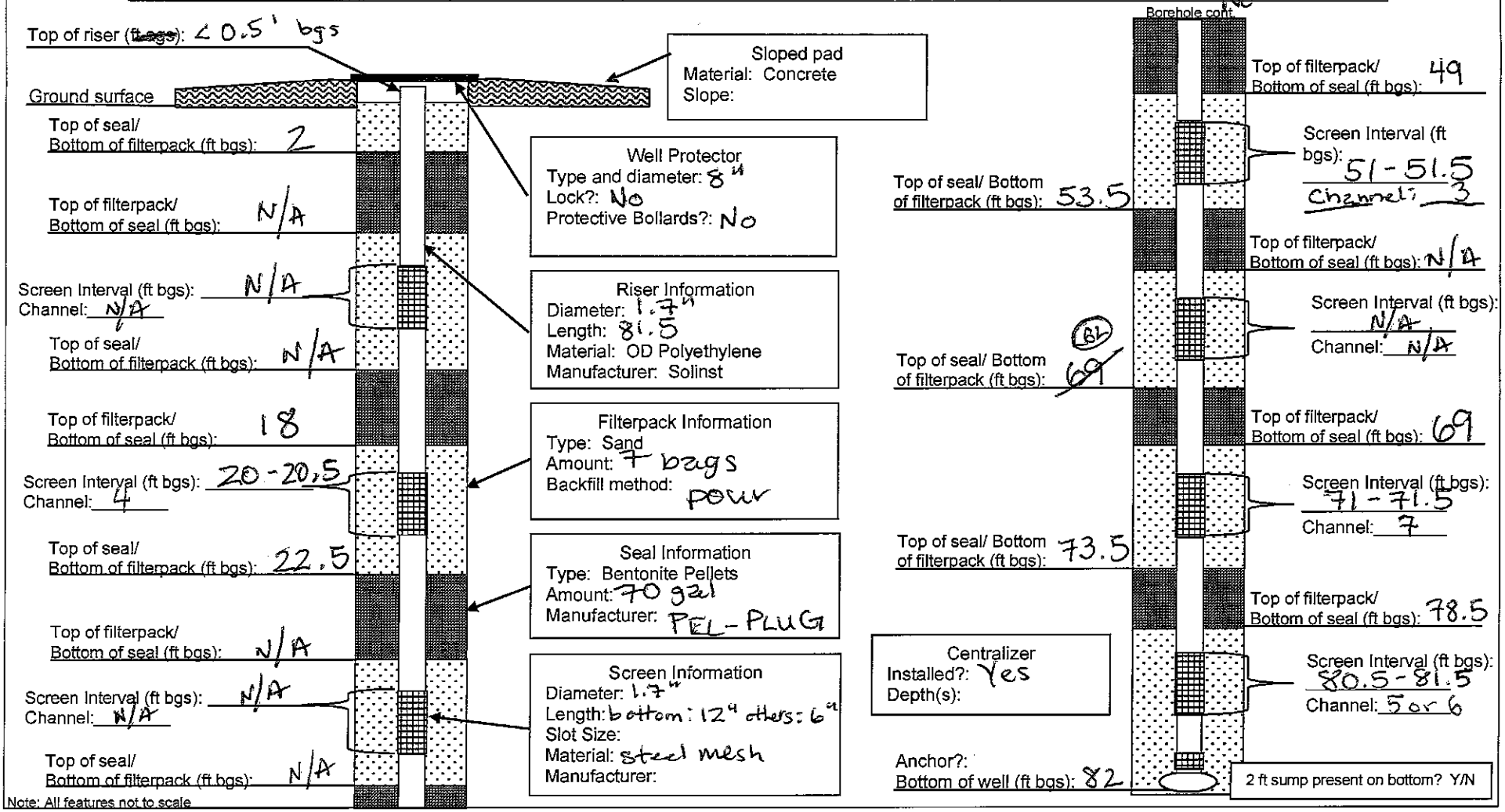
EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT- 08	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 1/28/22	# Channels utilized: 4
	Time Finished: 1733	Borehole Diameter: 6"
Location: 1 Adams Blvd	Depth to Water: 24 ft. bgs	Borehole Depth: 81'
Site Geologist: H. Young	Drilling Method: Rotosonic	Outer Casing?: No



RECORD OF MONITORING WELL CONSTRUCTION

(FLUSH MOUNT CMT WELL)

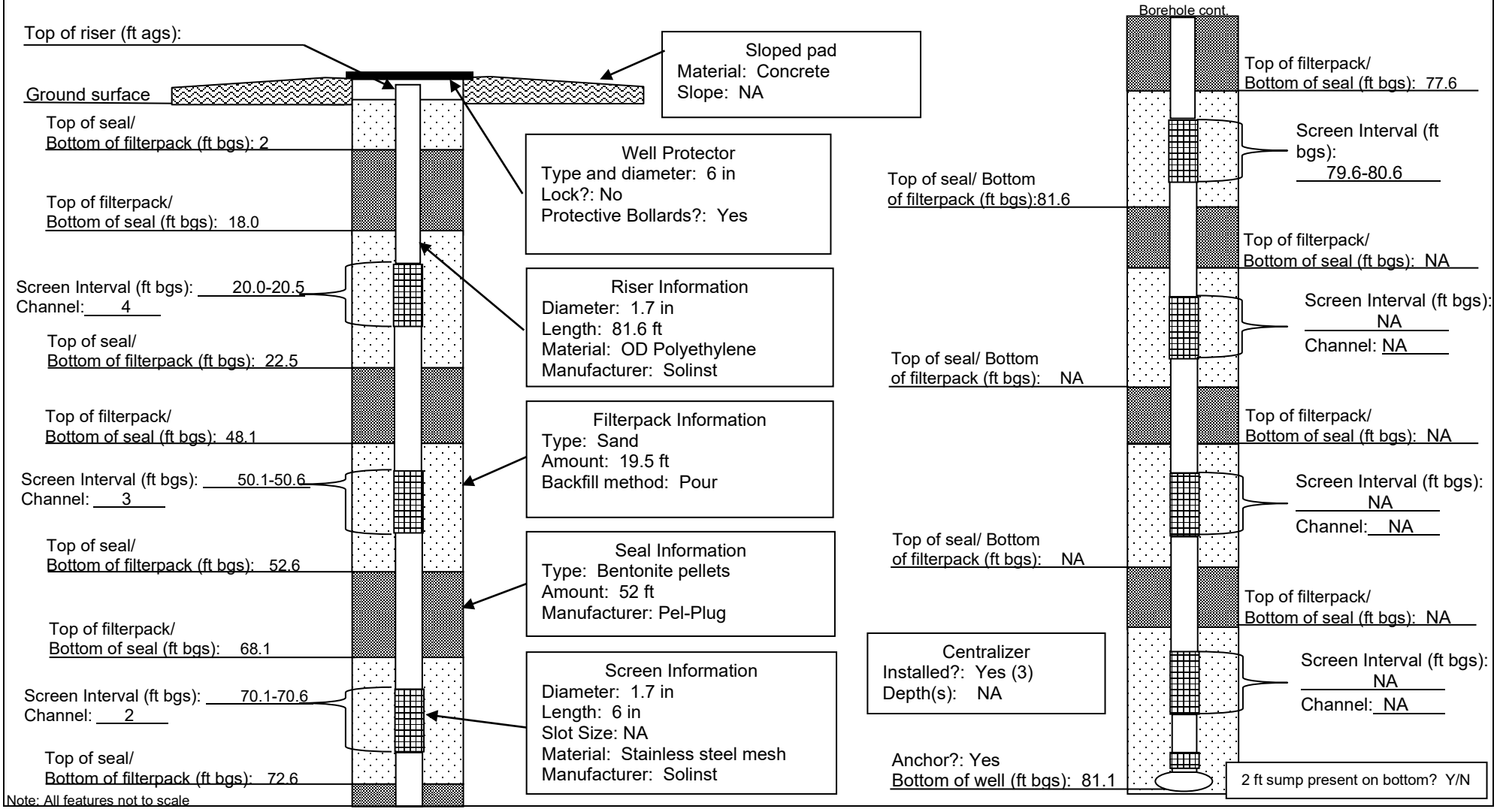
EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT- 09	CMT System (Circle):
	Permit No.: NA	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 01/25/23	# Channels utilized: 4
	Time Finished: 2320	Borehole Diameter: 6"
Location: 1 Adams Blvd	Depth to Water:	Borehole Depth: 82'
Site Geologist: L. Backman - Lowe	Drilling Method: Rotosonic	Outer Casing?: Yes (No) 6"



RECORD OF MONITORING WELL CONSTRUCTION

(FLUSH MOUNT CMT WELL)

EA Engineering, Science, and Technology, Inc.	Monitoring Well/Soil Boring ID No.: CMT-10	CMT System (Circle):
	Permit No.:	3-Channel (7-Channel)
Project Name/ Project No.: Heatset RSO (1602518)	Date Installed: 11/16/2022	# Channels utilized: 4
	Time Finished: 1030	Borehole Diameter: 6 in
Location: 1 Adams Blvd	Depth to Water: 22.5 ft	Borehole Depth: 81.5 ft
Site Geologist: E. Fenner	Drilling Method: Rotosonic	Outer Casing?: No



Appendix E

Data Usability Summary Reports

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ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
NATIONAL HEATSET PRINTING, NEW YORK

Client: EA Engineering, Science and Technology, Syracuse, New York
SDG: R2302543
Laboratory: ALS Environmental, Rochester, New York
Site: National Heatset Printing, Babylon, New York
Date: June 13, 2023

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	152140-CMT-8-4-032123	R2302543-001	Water
2	152140-CMT-1-1-032123	R2302543-002	Water
2RE	152140-CMT-1-1-032123RE	R2302543-002RE	Water
3	152140-CMT-6-1-032123	R2302543-003	Water
4	152140-CMT-1-6-032123	R2302543-004	Water
5	152140-CMT-10-2-032123	R2302543-005	Water
6	152140-CMT-10-1-032123	R2302543-006	Water
7	152140-CMT-10-3-032123	R2302543-007	Water
8	152140-CMT-8-3-032123	R2302543-008	Water
9	152140-CMT-8-2-032123	R2302543-009	Water
10	152140-CMT-1-5-032123	R2302543-010	Water
11	152140-CMT-5-1-032123	R2302543-011	Water
12	152140-CMT-6-3-032123	R2302543-012	Water
12DL	152140-CMT-6-3-032123DL	R2302543-012DL	Water
13	152140-FD-03-032223	R2302543-013	Water
13DL	152140-FD-03-032223DL	R2302543-013DL	Water
14	152140-CMT-3-3-032223	R2302543-014	Water
15	152140-CMT-5-7-032223	R2302543-015	Water
16	152140-CMT-5-5-032223	R2302543-016	Water
17	152140-CMT-6-4-032223	R2302543-017	Water
17DL	152140-CMT-6-4-032223DL	R2302543-017DL	Water
18	152140-CMT-2-1-032223	R2302543-018	Water
18MS	152140-CMT-2-1-032223MS	R2302543-018MS	Water
18MSD	152140-CMT-2-1-032223MSD	R2302543-018MSD	Water
19	152140-CMT-5-3-032223	R2302543-019	Water
19DL	152140-CMT-5-3-032223DL	R2302543-019DL	Water
20	152140-CMT-2-6-032223	R2302543-020	Water

A Data Usability Summary Review was performed on the analytical data for twenty water samples collected on March 21-22, 2023 by EA Engineering at the National Heatset Printing site in Babylon, New York. The samples were analyzed under Environmental Protection Agency (USEPA) Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW-846 Method 8260C

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 1, September 2016: Low/Medium Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

Organics

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibration exhibited acceptable %RSD values and/or correlation coefficients and mean RRF values.

Continuing Calibration

- The following table presents compounds that exceeded percent difference (%D) criteria and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D	Qualifier	Affected Samples
03/31/23 (0903)	trans-1,4-Dichloro-2-butene	26.9%	UJ	3, 11, 12DL, 13DL, 14, 17, 19, 20

Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations of methylene chloride, 2-butanone, toluene or acetone (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
RQ2303711-04	1,4-Dichlorobenzene	0.24	None	All Associated ND
	m,p-Xylenes	0.22	None	
RQ2303790-04	1,4-Dichlorobenzene	0.21	None	All Associated ND

Field Blank

- Field QC samples were not collected.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate percent recoveries (%R).

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Laboratory Control Samples

- The LCS exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Compound Quantitation

- Several samples were analyzed at various dilutions due to sample foaming. The reporting limits were adjusted accordingly. No action was required.
- Several samples were flagged (E) by the laboratory for tetrachloroethene indicating calibration range exceedances. The samples were reanalyzed at a dilution. The dilution results for this compound should be used for reporting purposes.
- Sample 2 was flagged (E) by the laboratory for cis-1,2-dichloroethene indicating a calibration range exceedance. The sample was reanalyzed without dilution. The original result was qualified estimated (J) and should be used for reporting purposes.

Tentatively Identified Compounds (TICs)

- TICs were not reported.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

Compound	152140-FD-03-032223 ug/L	152140-CMT-3-3-032223 ug/L	RPD	Qualifier
Chloroform	4.5	5.2	14%	None
Tetrachloroethene	1400	1400	0%	
Trichloroethene	9.1	8.8	3%	
cis-1,2-Dichloroethene	4.3	2.4	57%	None - <5X LOQ

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: _____ Dated: 6/23/23

Nancy Weaver
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 17:51
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-8-4-032123	**Units:**	ug/L
Lab Code:	R2302543-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/30/23 19:59	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/30/23 19:59	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/30/23 19:59	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 19:59	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	03/30/23 19:59	
2-Hexanone	ND U	50	5.0	1.0	5	03/30/23 19:59	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/30/23 19:59	
Acetone	ND U	100	50	25	5	03/30/23 19:59	
Acrylonitrile	ND U	500	25	4.5	5	03/30/23 19:59	
Benzene	ND U	25	5.0	1.0	5	03/30/23 19:59	
Bromochloromethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
Bromoform	ND U	25	5.0	1.3	5	03/30/23 19:59	
Bromomethane	ND U	25	5.0	3.5	5	03/30/23 19:59	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/30/23 19:59	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/30/23 19:59	
Chlorobenzene	ND U	25	5.0	1.0	5	03/30/23 19:59	
Chloroethane	ND U	25	5.0	1.2	5	03/30/23 19:59	
Chloroform	ND U	25	5.0	2.6	5	03/30/23 19:59	
Chloromethane	ND U	25	5.0	4.0	5	03/30/23 19:59	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
Dibromomethane	ND U	25	5.0	1.0	5	03/30/23 19:59	
Methylene Chloride	ND U	25	5.0	3.3	5	03/30/23 19:59	
Ethylbenzene	ND U	25	5.0	1.0	5	03/30/23 19:59	
Iodomethane	ND U	50	25	22	5	03/30/23 19:59	
Styrene	ND U	25	5.0	1.0	5	03/30/23 19:59	
Tetrachloroethene (PCE)	**64**	25	5.0	1.1	5	03/30/23 19:59	
Toluene	ND U	25	5.0	1.0	5	03/30/23 19:59	
Trichloroethene (TCE)	**58**	25	5.0	1.0	5	03/30/23 19:59	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/30/23 19:59	
Vinyl Acetate	ND U	50	10	5.5	5	03/30/23 19:59	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/30/23 19:59	
Xylenes, Total	ND U	25	15	1.2	5	03/30/23 19:59	
cis-1,2-Dichloroethene	**4.6 J**	25	5.0	1.2	5	03/30/23 19:59	

MT 6/13/23

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 17:51
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-8-4-032123	**Units:**	ug/L
Lab Code:	R2302543-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/30/23 19:59	
m,p-Xylenes	ND U	25	10	1.0	5	03/30/23 19:59	
o-Xylene	ND U	25	5.0	1.0	5	03/30/23 19:59	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/30/23 19:59	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/30/23 19:59	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	03/30/23 19:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 114	03/30/23 19:59	
Dibromofluoromethane	100	80 - 119	03/30/23 19:59	
Toluene-d8	100	89 - 112	03/30/23 19:59	

ALS Group USA, Corp.
dba ALS Environmental

2

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 16:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-1-032123	**Units:**	ug/L
Lab Code:	R2302543-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,1,1-Trichloroethane (TCA)	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,1,2,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,1,2-Trichloroethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,1-Dichloroethane (1,1-DCA)	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,1-Dichloroethene (1,1-DCE)	**0.80 J**	10	2.0	0.40	2	03/30/23 22:18	
1,2,3-Trichloropropane	ND U	10	2.0	0.52	2	03/30/23 22:18	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	10	2.0	0.90	2	03/30/23 22:18	
1,2-Dibromoethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,2-Dichlorobenzene	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,2-Dichloroethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,2-Dichloropropane	ND U	10	2.0	0.40	2	03/30/23 22:18	
1,4-Dichlorobenzene	ND U	10	2.0	0.40	2	03/30/23 22:18	
2-Butanone (MEK)	ND U	20	2.0	1.6	2	03/30/23 22:18	
2-Hexanone	ND U	20	2.0	0.40	2	03/30/23 22:18	
4-Methyl-2-pentanone	ND U	20	2.0	0.40	2	03/30/23 22:18	
Acetone	ND U	40	20	10	2	03/30/23 22:18	
Acrylonitrile	ND U	200	10	1.8	2	03/30/23 22:18	
Benzene	ND U	10	2.0	0.40	2	03/30/23 22:18	
Bromochloromethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
Bromodichloromethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
Bromoform	ND U	10	2.0	0.50	2	03/30/23 22:18	
Bromomethane	ND U	10	2.0	1.4	2	03/30/23 22:18	
Carbon Disulfide	ND U	20	2.0	0.84	2	03/30/23 22:18	
Carbon Tetrachloride	ND U	10	2.0	0.68	2	03/30/23 22:18	
Chlorobenzene	ND U	10	2.0	0.40	2	03/30/23 22:18	
Chloroethane	ND U	10	2.0	0.46	2	03/30/23 22:18	
Chloroform	ND U	10	2.0	1.1	2	03/30/23 22:18	
Chloromethane	ND U	10	2.0	1.6	2	03/30/23 22:18	
Dibromochloromethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
Dibromomethane	ND U	10	2.0	0.40	2	03/30/23 22:18	
Methylene Chloride	ND U	10	2.0	1.3	2	03/30/23 22:18	
Ethylbenzene	ND U	10	2.0	0.40	2	03/30/23 22:18	
Iodomethane	ND U	20	10	8.6	2	03/30/23 22:18	
Styrene	ND U	10	2.0	0.40	2	03/30/23 22:18	
Tetrachloroethene (PCE)	**110**	10	2.0	0.42	2	03/30/23 22:18	
Toluene	ND U	10	2.0	0.40	2	03/30/23 22:18	
Trichloroethene (TCE)	**34**	10	2.0	0.40	2	03/30/23 22:18	
Trichlorofluoromethane (CFC 11)	ND U	10	2.0	0.48	2	03/30/23 22:18	
Vinyl Acetate	ND U	20	4.0	2.2	2	03/30/23 22:18	
Vinyl Chloride	ND U	10	2.0	0.40	2	03/30/23 22:18	
Xylenes, Total	ND U	10	6.0	0.46	2	03/30/23 22:18	
cis-1,2-Dichloroethene	**440 E**	10	2.0	0.46	2	03/30/23 22:18	

MT 6/13/23

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 16:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-1-032123	**Units:**	ug/L
Lab Code:	R2302543-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	10	2.0	0.40	2	03/30/23 22:18	
m,p-Xylenes	ND U	10	4.0	0.40	2	03/30/23 22:18	
o-Xylene	ND U	10	2.0	0.40	2	03/30/23 22:18	
trans-1,2-Dichloroethene	ND U	10	2.0	0.40	2	03/30/23 22:18	
trans-1,3-Dichloropropene	ND U	10	2.0	0.46	2	03/30/23 22:18	
trans-1,4-Dichloro-2-butene	ND U	10	2.0	1.6	2	03/30/23 22:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 114	03/30/23 22:18	
Dibromofluoromethane	90	80 - 119	03/30/23 22:18	
Toluene-d8	89	89 - 112	03/30/23 22:18	

MT 6/13/23

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2RE

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 16:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-1-032123	**Units:**	ug/L
Lab Code:	R2302543-002	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,1,1-Trichloroethane (TCA)	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,1,2,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,1,2-Trichloroethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,1-Dichloroethane (1,1-DCA)	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,1-Dichloroethene (1,1-DCE)	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,2,3-Trichloropropane	ND U	10	2.0	0.52	2	03/31/23 18:05	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	10	2.0	0.90	2	03/31/23 18:05	
1,2-Dibromoethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,2-Dichlorobenzene	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,2-Dichloroethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,2-Dichloropropane	ND U	10	2.0	0.40	2	03/31/23 18:05	
1,4-Dichlorobenzene	ND U	10	2.0	0.40	2	03/31/23 18:05	
2-Butanone (MEK)	ND U	20	2.0	1.6	2	03/31/23 18:05	
2-Hexanone	ND U	20	2.0	0.40	2	03/31/23 18:05	
4-Methyl-2-pentanone	ND U	20	2.0	0.40	2	03/31/23 18:05	
Acetone	ND U	40	20	10	2	03/31/23 18:05	
Acrylonitrile	ND U	200	10	1.8	2	03/31/23 18:05	
Benzene	ND U	10	2.0	0.40	2	03/31/23 18:05	
Bromochloromethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
Bromodichloromethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
Bromoform	ND U	10	2.0	0.50	2	03/31/23 18:05	
Bromomethane	ND U	10	2.0	1.4	2	03/31/23 18:05	
Carbon Disulfide	ND U	20	2.0	0.84	2	03/31/23 18:05	
Carbon Tetrachloride	ND U	10	2.0	0.68	2	03/31/23 18:05	
Chlorobenzene	ND U	10	2.0	0.40	2	03/31/23 18:05	
Chloroethane	ND U	10	2.0	0.46	2	03/31/23 18:05	
Chloroform	ND U	10	2.0	1.1	2	03/31/23 18:05	
Chloromethane	ND U	10	2.0	1.6	2	03/31/23 18:05	
Dibromochloromethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
Dibromomethane	ND U	10	2.0	0.40	2	03/31/23 18:05	
Methylene Chloride	ND U	10	2.0	1.3	2	03/31/23 18:05	
Ethylbenzene	ND U	10	2.0	0.40	2	03/31/23 18:05	
Iodomethane	ND U	20	10	8.6	2	03/31/23 18:05	
Styrene	ND U	10	2.0	0.40	2	03/31/23 18:05	
Tetrachloroethene (PCE)	**49** D	10	2.0	0.42	2	03/31/23 18:05	
Toluene	ND U	10	2.0	0.40	2	03/31/23 18:05	
Trichloroethene (TCE)	**14** D	10	2.0	0.40	2	03/31/23 18:05	
Trichlorofluoromethane (CFC 11)	ND U	10	2.0	0.48	2	03/31/23 18:05	
Vinyl Acetate	ND U	20	4.0	2.2	2	03/31/23 18:05	
Vinyl Chloride	ND U	10	2.0	0.40	2	03/31/23 18:05	
Xylenes, Total	ND U	10	6.0	0.46	2	03/31/23 18:05	
cis-1,2-Dichloroethene	**180** D	10	2.0	0.46	2	03/31/23 18:05	

MM 6/13/23

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2RE

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 16:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-1-032123	**Units:**	ug/L
Lab Code:	R2302543-002	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	10	2.0	0.40	2	03/31/23 18:05	
m,p-Xylenes	ND U	10	4.0	0.40	2	03/31/23 18:05	
o-Xylene	ND U	10	2.0	0.40	2	03/31/23 18:05	
trans-1,2-Dichloroethene	ND U	10	2.0	0.40	2	03/31/23 18:05	
trans-1,3-Dichloropropene	ND U	10	2.0	0.46	2	03/31/23 18:05	
trans-1,4-Dichloro-2-butene	ND U	10	2.0	1.6	2	03/31/23 18:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 114	03/31/23 18:05	
Dibromofluoromethane	96	80 - 119	03/31/23 18:05	
Toluene-d8	99	89 - 112	03/31/23 18:05	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 17:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-1-032123	**Units:**	ug/L
Lab Code:	R2302543-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 12:42	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	03/31/23 12:42	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 12:42	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	03/31/23 12:42	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	03/31/23 12:42	
1,1-Dichloroethene (1,1-DCE)	ND U	50	10	2.0	10	03/31/23 12:42	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	03/31/23 12:42	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	03/31/23 12:42	
1,2-Dibromoethane	ND U	50	10	2.0	10	03/31/23 12:42	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 12:42	
1,2-Dichloroethane	ND U	50	10	2.0	10	03/31/23 12:42	
1,2-Dichloropropane	ND U	50	10	2.0	10	03/31/23 12:42	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 12:42	
2-Butanone (MEK)	ND U	100	10	7.8	10	03/31/23 12:42	
2-Hexanone	**2.9 J**	100	10	2.0	10	03/31/23 12:42	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	03/31/23 12:42	
Acetone	ND U	200	100	50	10	03/31/23 12:42	
Acrylonitrile	ND U	1000	50	9.0	10	03/31/23 12:42	
Benzene	ND U	50	10	2.0	10	03/31/23 12:42	
Bromochloromethane	ND U	50	10	2.0	10	03/31/23 12:42	
Bromodichloromethane	ND U	50	10	2.0	10	03/31/23 12:42	
Bromoform	ND U	50	10	2.5	10	03/31/23 12:42	
Bromomethane	ND U	50	10	7.0	10	03/31/23 12:42	
Carbon Disulfide	ND U	100	10	4.2	10	03/31/23 12:42	
Carbon Tetrachloride	ND U	50	10	3.4	10	03/31/23 12:42	
Chlorobenzene	ND U	50	10	2.0	10	03/31/23 12:42	
Chloroethane	ND U	50	10	2.3	10	03/31/23 12:42	
Chloroform	ND U	50	10	5.1	10	03/31/23 12:42	
Chloromethane	ND U	50	10	8.0	10	03/31/23 12:42	
Dibromochloromethane	ND U	50	10	2.0	10	03/31/23 12:42	
Dibromomethane	ND U	50	10	2.0	10	03/31/23 12:42	
Methylene Chloride	ND U	50	10	6.5	10	03/31/23 12:42	
Ethylbenzene	ND U	50	10	2.0	10	03/31/23 12:42	
Iodomethane	ND U	100	50	43	10	03/31/23 12:42	
Styrene	ND U	50	10	2.0	10	03/31/23 12:42	
Tetrachloroethene (PCE)	**5.1 J**	50	10	2.1	10	03/31/23 12:42	
Toluene	ND U	50	10	2.0	10	03/31/23 12:42	
Trichloroethene (TCE)	ND U	50	10	2.0	10	03/31/23 12:42	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	03/31/23 12:42	
Vinyl Acetate	ND U	100	20	11	10	03/31/23 12:42	
Vinyl Chloride	ND U	50	10	2.0	10	03/31/23 12:42	
Xylenes, Total	ND U	50	30	2.3	10	03/31/23 12:42	
cis-1,2-Dichloroethene	**6.9 J**	50	10	2.3	10	03/31/23 12:42	

MM 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 17:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-1-032123	**Units:**	ug/L
Lab Code:	R2302543-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	03/31/23 12:42	
m,p-Xylenes	ND U	50	20	2.0	10	03/31/23 12:42	
o-Xylene	ND U	50	10	2.0	10	03/31/23 12:42	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	03/31/23 12:42	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	03/31/23 12:42	
trans-1,4-Dichloro-2-butene	ND U	50	10	7.8	10	03/31/23 12:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 114	03/31/23 12:42	
Dibromofluoromethane	97	80 - 119	03/31/23 12:42	
Toluene-d8	100	89 - 112	03/31/23 12:42	

MT 04/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 15:28
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-6-032123	**Units:**	ug/L
Lab Code:	R2302543-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 00:13	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	03/31/23 00:13	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 00:13	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	03/31/23 00:13	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	03/31/23 00:13	
1,1-Dichloroethene (1,1-DCE)	**3.2 J**	50	10	2.0	10	03/31/23 00:13	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	03/31/23 00:13	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	03/31/23 00:13	
1,2-Dibromoethane	ND U	50	10	2.0	10	03/31/23 00:13	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 00:13	
1,2-Dichloroethane	ND U	50	10	2.0	10	03/31/23 00:13	
1,2-Dichloropropane	ND U	50	10	2.0	10	03/31/23 00:13	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 00:13	
2-Butanone (MEK)	ND U	100	10	7.8	10	03/31/23 00:13	
2-Hexanone	ND U	100	10	2.0	10	03/31/23 00:13	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	03/31/23 00:13	
Acetone	ND U	200	100	50	10	03/31/23 00:13	
Acrylonitrile	ND U	1000	50	9.0	10	03/31/23 00:13	
Benzene	ND U	50	10	2.0	10	03/31/23 00:13	
Bromochloromethane	ND U	50	10	2.0	10	03/31/23 00:13	
Bromodichloromethane	ND U	50	10	2.0	10	03/31/23 00:13	
Bromoform	ND U	50	10	2.5	10	03/31/23 00:13	
Bromomethane	ND U	50	10	7.0	10	03/31/23 00:13	
Carbon Disulfide	ND U	100	10	4.2	10	03/31/23 00:13	
Carbon Tetrachloride	ND U	50	10	3.4	10	03/31/23 00:13	
Chlorobenzene	ND U	50	10	2.0	10	03/31/23 00:13	
Chloroethane	ND U	50	10	2.3	10	03/31/23 00:13	
Chloroform	ND U	50	10	5.1	10	03/31/23 00:13	
Chloromethane	ND U	50	10	8.0	10	03/31/23 00:13	
Dibromochloromethane	ND U	50	10	2.0	10	03/31/23 00:13	
Dibromomethane	ND U	50	10	2.0	10	03/31/23 00:13	
Methylene Chloride	ND U	50	10	6.5	10	03/31/23 00:13	
Ethylbenzene	ND U	50	10	2.0	10	03/31/23 00:13	
Iodomethane	ND U	100	50	43	10	03/31/23 00:13	
Styrene	ND U	50	10	2.0	10	03/31/23 00:13	
Tetrachloroethene (PCE)	**1900**	50	10	2.1	10	03/31/23 00:13	
Toluene	ND U	50	10	2.0	10	03/31/23 00:13	
Trichloroethene (TCE)	**110**	50	10	2.0	10	03/31/23 00:13	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	03/31/23 00:13	
Vinyl Acetate	ND U	100	20	11	10	03/31/23 00:13	
Vinyl Chloride	ND U	50	10	2.0	10	03/31/23 00:13	
Xylenes, Total	ND U	50	30	2.3	10	03/31/23 00:13	
cis-1,2-Dichloroethene	**1600**	50	10	2.3	10	03/31/23 00:13	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 15:28
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-6-032123	**Units:**	ug/L
Lab Code:	R2302543-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	03/31/23 00:13	
m,p-Xylenes	ND U	50	20	2.0	10	03/31/23 00:13	
o-Xylene	ND U	50	10	2.0	10	03/31/23 00:13	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	03/31/23 00:13	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	03/31/23 00:13	
trans-1,4-Dichloro-2-butene	ND U	50	10	7.8	10	03/31/23 00:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 114	03/31/23 00:13	
Dibromofluoromethane	98	80 - 119	03/31/23 00:13	
Toluene-d8	99	89 - 112	03/31/23 00:13	

MM 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 14:52
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-10-2-032123	**Units:**	ug/L
Lab Code:	R2302543-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/30/23 20:22	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/30/23 20:22	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/30/23 20:22	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 20:22	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	03/30/23 20:22	
2-Hexanone	ND U	50	5.0	1.0	5	03/30/23 20:22	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/30/23 20:22	
Acetone	ND U	100	50	25	5	03/30/23 20:22	
Acrylonitrile	ND U	500	25	4.5	5	03/30/23 20:22	
Benzene	ND U	25	5.0	1.0	5	03/30/23 20:22	
Bromochloromethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
Bromoform	ND U	25	5.0	1.3	5	03/30/23 20:22	
Bromomethane	ND U	25	5.0	3.5	5	03/30/23 20:22	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/30/23 20:22	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/30/23 20:22	
Chlorobenzene	ND U	25	5.0	1.0	5	03/30/23 20:22	
Chloroethane	ND U	25	5.0	1.2	5	03/30/23 20:22	
Chloroform	ND U	25	5.0	2.6	5	03/30/23 20:22	
Chloromethane	ND U	25	5.0	4.0	5	03/30/23 20:22	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
Dibromomethane	ND U	25	5.0	1.0	5	03/30/23 20:22	
Methylene Chloride	ND U	25	5.0	3.3	5	03/30/23 20:22	
Ethylbenzene	ND U	25	5.0	1.0	5	03/30/23 20:22	
Iodomethane	ND U	50	25	22	5	03/30/23 20:22	
Styrene	ND U	25	5.0	1.0	5	03/30/23 20:22	
Tetrachloroethene (PCE)	**5.2 J**	25	5.0	1.1	5	03/30/23 20:22	
Toluene	ND U	25	5.0	1.0	5	03/30/23 20:22	
Trichloroethene (TCE)	ND U	25	5.0	1.0	5	03/30/23 20:22	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/30/23 20:22	
Vinyl Acetate	ND U	50	10	5.5	5	03/30/23 20:22	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/30/23 20:22	
Xylenes, Total	ND U	25	15	1.2	5	03/30/23 20:22	
cis-1,2-Dichloroethene	ND U	25	5.0	1.2	5	03/30/23 20:22	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 14:52
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-10-2-032123	**Units:**	ug/L
Lab Code:	R2302543-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/30/23 20:22	
m,p-Xylenes	ND U	25	10	1.0	5	03/30/23 20:22	
o-Xylene	ND U	25	5.0	1.0	5	03/30/23 20:22	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/30/23 20:22	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/30/23 20:22	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	03/30/23 20:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 114	03/30/23 20:22	
Dibromofluoromethane	98	80 - 119	03/30/23 20:22	
Toluene-d8	100	89 - 112	03/30/23 20:22	

MT 6/12/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 15:50
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-10-1-032123	**Units:**	ug/L
Lab Code:	R2302543-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/30/23 20:46	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/30/23 20:46	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/30/23 20:46	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 20:46	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	03/30/23 20:46	
2-Hexanone	ND U	50	5.0	1.0	5	03/30/23 20:46	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/30/23 20:46	
Acetone	ND U	100	50	25	5	03/30/23 20:46	
Acrylonitrile	ND U	500	25	4.5	5	03/30/23 20:46	
Benzene	ND U	25	5.0	1.0	5	03/30/23 20:46	
Bromochloromethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
Bromoform	ND U	25	5.0	1.3	5	03/30/23 20:46	
Bromomethane	ND U	25	5.0	3.5	5	03/30/23 20:46	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/30/23 20:46	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/30/23 20:46	
Chlorobenzene	ND U	25	5.0	1.0	5	03/30/23 20:46	
Chloroethane	ND U	25	5.0	1.2	5	03/30/23 20:46	
Chloroform	ND U	25	5.0	2.6	5	03/30/23 20:46	
Chloromethane	ND U	25	5.0	4.0	5	03/30/23 20:46	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
Dibromomethane	ND U	25	5.0	1.0	5	03/30/23 20:46	
Methylene Chloride	ND U	25	5.0	3.3	5	03/30/23 20:46	
Ethylbenzene	ND U	25	5.0	1.0	5	03/30/23 20:46	
Iodomethane	ND U	50	25	22	5	03/30/23 20:46	
Styrene	ND U	25	5.0	1.0	5	03/30/23 20:46	
Tetrachloroethene (PCE)	**2.3 J**	25	5.0	1.1	5	03/30/23 20:46	
Toluene	ND U	25	5.0	1.0	5	03/30/23 20:46	
Trichloroethene (TCE)	ND U	25	5.0	1.0	5	03/30/23 20:46	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/30/23 20:46	
Vinyl Acetate	ND U	50	10	5.5	5	03/30/23 20:46	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/30/23 20:46	
Xylenes, Total	ND U	25	15	1.2	5	03/30/23 20:46	
cis-1,2-Dichloroethene	ND U	25	5.0	1.2	5	03/30/23 20:46	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 15:50
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-10-1-032123	**Units:**	ug/L
Lab Code:	R2302543-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/30/23 20:46	
m,p-Xylenes	ND U	25	10	1.0	5	03/30/23 20:46	
o-Xylene	ND U	25	5.0	1.0	5	03/30/23 20:46	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/30/23 20:46	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/30/23 20:46	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	03/30/23 20:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 114	03/30/23 20:46	
Dibromofluoromethane	95	80 - 119	03/30/23 20:46	
Toluene-d8	99	89 - 112	03/30/23 20:46	

MH 6/13/23

ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 13:20
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-10-3-032123	**Units:**	ug/L
Lab Code:	R2302543-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	03/30/23 19:36	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 19:36	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 19:36	
2-Hexanone	**0.26 J**	10	1.0	0.20	1	03/30/23 19:36	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	03/30/23 19:36	
Acetone	ND U	20	10	5.0	1	03/30/23 19:36	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 19:36	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 19:36	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 19:36	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 19:36	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 19:36	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Chloroethane	ND U	5.0	1.0	0.23	1	03/30/23 19:36	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 19:36	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 19:36	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 19:36	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 19:36	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Tetrachloroethene (PCE)	**0.82 J**	5.0	1.0	0.21	1	03/30/23 19:36	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Trichloroethene (TCE)	**0.26 J**	5.0	1.0	0.20	1	03/30/23 19:36	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 19:36	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 19:36	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 19:36	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 19:36	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 13:20
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-10-3-032123	**Units:**	ug/L
Lab Code:	R2302543-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 19:36	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 19:36	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 19:36	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	03/30/23 19:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 114	03/30/23 19:36	
Dibromofluoromethane	99	80 - 119	03/30/23 19:36	
Toluene-d8	100	89 - 112	03/30/23 19:36	

MT 04/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 15:19
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-8-3-032123	**Units:**	ug/L
Lab Code:	R2302543-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/30/23 21:09	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/30/23 21:09	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/30/23 21:09	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 21:09	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	03/30/23 21:09	
2-Hexanone	**6.3 J**	50	5.0	1.0	5	03/30/23 21:09	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/30/23 21:09	
Acetone	ND U	100	50	25	5	03/30/23 21:09	
Acrylonitrile	ND U	500	25	4.5	5	03/30/23 21:09	
Benzene	ND U	25	5.0	1.0	5	03/30/23 21:09	
Bromochloromethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
Bromoform	ND U	25	5.0	1.3	5	03/30/23 21:09	
Bromomethane	ND U	25	5.0	3.5	5	03/30/23 21:09	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/30/23 21:09	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/30/23 21:09	
Chlorobenzene	ND U	25	5.0	1.0	5	03/30/23 21:09	
Chloroethane	ND U	25	5.0	1.2	5	03/30/23 21:09	
Chloroform	ND U	25	5.0	2.6	5	03/30/23 21:09	
Chloromethane	ND U	25	5.0	4.0	5	03/30/23 21:09	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
Dibromomethane	ND U	25	5.0	1.0	5	03/30/23 21:09	
Methylene Chloride	ND U	25	5.0	3.3	5	03/30/23 21:09	
Ethylbenzene	ND U	25	5.0	1.0	5	03/30/23 21:09	
Iodomethane	ND U	50	25	22	5	03/30/23 21:09	
Styrene	ND U	25	5.0	1.0	5	03/30/23 21:09	
Tetrachloroethene (PCE)	**7.2 J**	25	5.0	1.1	5	03/30/23 21:09	
Toluene	ND U	25	5.0	1.0	5	03/30/23 21:09	
Trichloroethene (TCE)	ND U	25	5.0	1.0	5	03/30/23 21:09	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/30/23 21:09	
Vinyl Acetate	ND U	50	10	5.5	5	03/30/23 21:09	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/30/23 21:09	
Xylenes, Total	ND U	25	15	1.2	5	03/30/23 21:09	
cis-1,2-Dichloroethene	ND U	25	5.0	1.2	5	03/30/23 21:09	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 15:19
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-8-3-032123	**Units:**	ug/L
Lab Code:	R2302543-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/30/23 21:09	
m,p-Xylenes	ND U	25	10	1.0	5	03/30/23 21:09	
o-Xylene	ND U	25	5.0	1.0	5	03/30/23 21:09	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/30/23 21:09	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/30/23 21:09	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	03/30/23 21:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 114	03/30/23 21:09	
Dibromofluoromethane	98	80 - 119	03/30/23 21:09	
Toluene-d8	103	89 - 112	03/30/23 21:09	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 14:20
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-8-2-032123	**Units:**	ug/L
Lab Code:	R2302543-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/30/23 21:32	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/30/23 21:32	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/30/23 21:32	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 21:32	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	03/30/23 21:32	
2-Hexanone	**4.0 J**	50	5.0	1.0	5	03/30/23 21:32	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/30/23 21:32	
Acetone	ND U	100	50	25	5	03/30/23 21:32	
Acrylonitrile	ND U	500	25	4.5	5	03/30/23 21:32	
Benzene	ND U	25	5.0	1.0	5	03/30/23 21:32	
Bromochloromethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
Bromoform	ND U	25	5.0	1.3	5	03/30/23 21:32	
Bromomethane	ND U	25	5.0	3.5	5	03/30/23 21:32	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/30/23 21:32	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/30/23 21:32	
Chlorobenzene	ND U	25	5.0	1.0	5	03/30/23 21:32	
Chloroethane	ND U	25	5.0	1.2	5	03/30/23 21:32	
Chloroform	ND U	25	5.0	2.6	5	03/30/23 21:32	
Chloromethane	ND U	25	5.0	4.0	5	03/30/23 21:32	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
Dibromomethane	ND U	25	5.0	1.0	5	03/30/23 21:32	
Methylene Chloride	ND U	25	5.0	3.3	5	03/30/23 21:32	
Ethylbenzene	ND U	25	5.0	1.0	5	03/30/23 21:32	
Iodomethane	ND U	50	25	22	5	03/30/23 21:32	
Styrene	ND U	25	5.0	1.0	5	03/30/23 21:32	
Tetrachloroethene (PCE)	**10 J**	25	5.0	1.1	5	03/30/23 21:32	
Toluene	ND U	25	5.0	1.0	5	03/30/23 21:32	
Trichloroethene (TCE)	**1.4 J**	25	5.0	1.0	5	03/30/23 21:32	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/30/23 21:32	
Vinyl Acetate	ND U	50	10	5.5	5	03/30/23 21:32	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/30/23 21:32	
Xylenes, Total	ND U	25	15	1.2	5	03/30/23 21:32	
cis-1,2-Dichloroethene	ND U	25	5.0	1.2	5	03/30/23 21:32	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 14:20
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-8-2-032123	**Units:**	ug/L
Lab Code:	R2302543-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/30/23 21:32	
m,p-Xylenes	ND U	25	10	1.0	5	03/30/23 21:32	
o-Xylene	ND U	25	5.0	1.0	5	03/30/23 21:32	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/30/23 21:32	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/30/23 21:32	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	03/30/23 21:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 114	03/30/23 21:32	
Dibromofluoromethane	90	80 - 119	03/30/23 21:32	
Toluene-d8	91	89 - 112	03/30/23 21:32	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 14:13
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-5-032123	**Units:**	ug/L
Lab Code:	R2302543-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,1,1-Trichloroethane (TCA)	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,1,2,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,1,2-Trichloroethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,1-Dichloroethane (1,1-DCA)	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,1-Dichloroethene (1,1-DCE)	**0.60 J**	10	2.0	0.40	2	03/30/23 22:41	
1,2,3-Trichloropropane	ND U	10	2.0	0.52	2	03/30/23 22:41	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	10	2.0	0.90	2	03/30/23 22:41	
1,2-Dibromoethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,2-Dichlorobenzene	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,2-Dichloroethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,2-Dichloropropane	ND U	10	2.0	0.40	2	03/30/23 22:41	
1,4-Dichlorobenzene	ND U	10	2.0	0.40	2	03/30/23 22:41	
2-Butanone (MEK)	ND U	20	2.0	1.6	2	03/30/23 22:41	
2-Hexanone	ND U	20	2.0	0.40	2	03/30/23 22:41	
4-Methyl-2-pentanone	ND U	20	2.0	0.40	2	03/30/23 22:41	
Acetone	ND U	40	20	10	2	03/30/23 22:41	
Acrylonitrile	ND U	200	10	1.8	2	03/30/23 22:41	
Benzene	ND U	10	2.0	0.40	2	03/30/23 22:41	
Bromochloromethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
Bromodichloromethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
Bromoform	ND U	10	2.0	0.50	2	03/30/23 22:41	
Bromomethane	ND U	10	2.0	1.4	2	03/30/23 22:41	
Carbon Disulfide	ND U	20	2.0	0.84	2	03/30/23 22:41	
Carbon Tetrachloride	ND U	10	2.0	0.68	2	03/30/23 22:41	
Chlorobenzene	ND U	10	2.0	0.40	2	03/30/23 22:41	
Chloroethane	ND U	10	2.0	0.46	2	03/30/23 22:41	
Chloroform	ND U	10	2.0	1.1	2	03/30/23 22:41	
Chloromethane	ND U	10	2.0	1.6	2	03/30/23 22:41	
Dibromochloromethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
Dibromomethane	ND U	10	2.0	0.40	2	03/30/23 22:41	
Methylene Chloride	ND U	10	2.0	1.3	2	03/30/23 22:41	
Ethylbenzene	ND U	10	2.0	0.40	2	03/30/23 22:41	
Iodomethane	ND U	20	10	8.6	2	03/30/23 22:41	
Styrene	ND U	10	2.0	0.40	2	03/30/23 22:41	
Tetrachloroethene (PCE)	**2.7 J**	10	2.0	0.42	2	03/30/23 22:41	
Toluene	ND U	10	2.0	0.40	2	03/30/23 22:41	
Trichloroethene (TCE)	**0.76 J**	10	2.0	0.40	2	03/30/23 22:41	
Trichlorofluoromethane (CFC 11)	ND U	10	2.0	0.48	2	03/30/23 22:41	
Vinyl Acetate	ND U	20	4.0	2.2	2	03/30/23 22:41	
Vinyl Chloride	ND U	10	2.0	0.40	2	03/30/23 22:41	
Xylenes, Total	ND U	10	6.0	0.46	2	03/30/23 22:41	
cis-1,2-Dichloroethene	**380**	10	2.0	0.46	2	03/30/23 22:41	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 14:13
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-5-032123	**Units:**	ug/L
Lab Code:	R2302543-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	10	2.0	0.40	2	03/30/23 22:41	
m,p-Xylenes	ND U	10	4.0	0.40	2	03/30/23 22:41	
o-Xylene	ND U	10	2.0	0.40	2	03/30/23 22:41	
trans-1,2-Dichloroethene	ND U	10	2.0	0.40	2	03/30/23 22:41	
trans-1,3-Dichloropropene	ND U	10	2.0	0.46	2	03/30/23 22:41	
trans-1,4-Dichloro-2-butene	ND U	10	2.0	1.6	2	03/30/23 22:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 114	03/30/23 22:41	
Dibromofluoromethane	95	80 - 119	03/30/23 22:41	
Toluene-d8	99	89 - 112	03/30/23 22:41	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 16:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-1-032123	**Units:**	ug/L
Lab Code:	R2302543-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/31/23 13:05	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/31/23 13:05	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/31/23 13:05	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/31/23 13:05	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	03/31/23 13:05	
2-Hexanone	ND U	50	5.0	1.0	5	03/31/23 13:05	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/31/23 13:05	
Acetone	ND U	100	50	25	5	03/31/23 13:05	
Acrylonitrile	ND U	500	25	4.5	5	03/31/23 13:05	
Benzene	ND U	25	5.0	1.0	5	03/31/23 13:05	
Bromochloromethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
Bromoform	ND U	25	5.0	1.3	5	03/31/23 13:05	
Bromomethane	ND U	25	5.0	3.5	5	03/31/23 13:05	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/31/23 13:05	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/31/23 13:05	
Chlorobenzene	ND U	25	5.0	1.0	5	03/31/23 13:05	
Chloroethane	ND U	25	5.0	1.2	5	03/31/23 13:05	
Chloroform	ND U	25	5.0	2.6	5	03/31/23 13:05	
Chloromethane	ND U	25	5.0	4.0	5	03/31/23 13:05	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
Dibromomethane	ND U	25	5.0	1.0	5	03/31/23 13:05	
Methylene Chloride	ND U	25	5.0	3.3	5	03/31/23 13:05	
Ethylbenzene	ND U	25	5.0	1.0	5	03/31/23 13:05	
Iodomethane	ND U	50	25	22	5	03/31/23 13:05	
Styrene	ND U	25	5.0	1.0	5	03/31/23 13:05	
Tetrachloroethene (PCE)	**11 J**	25	5.0	1.1	5	03/31/23 13:05	
Toluene	ND U	25	5.0	1.0	5	03/31/23 13:05	
Trichloroethene (TCE)	ND U	25	5.0	1.0	5	03/31/23 13:05	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/31/23 13:05	
Vinyl Acetate	ND U	50	10	5.5	5	03/31/23 13:05	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/31/23 13:05	
Xylenes, Total	ND U	25	15	1.2	5	03/31/23 13:05	
cis-1,2-Dichloroethene	**3.0 J**	25	5.0	1.2	5	03/31/23 13:05	

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Analytical Report

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Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 16:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-1-032123	**Units:**	ug/L
Lab Code:	R2302543-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/31/23 13:05	
m,p-Xylenes	ND U	25	10	1.0	5	03/31/23 13:05	
o-Xylene	ND U	25	5.0	1.0	5	03/31/23 13:05	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/31/23 13:05	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/31/23 13:05	
trans-1,4-Dichloro-2-butene	ND U/UJ	25	5.0	3.9	5	03/31/23 13:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 114	03/31/23 13:05	
Dibromofluoromethane	96	80 - 119	03/31/23 13:05	
Toluene-d8	99	89 - 112	03/31/23 13:05	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-3-032123	**Units:**	ug/L
Lab Code:	R2302543-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,1,1-Trichloroethane (TCA)	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,1,2,2-Tetrachloroethane	**0.95 J**	13	2.5	0.50	2.5	03/30/23 23:04	
1,1,2-Trichloroethane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,1-Dichloroethane (1,1-DCA)	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,1-Dichloroethene (1,1-DCE)	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,2,3-Trichloropropane	ND U	13	2.5	0.65	2.5	03/30/23 23:04	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	13	2.5	1.2	2.5	03/30/23 23:04	
1,2-Dibromoethane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,2-Dichlorobenzene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,2-Dichloroethane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,2-Dichloropropane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
1,4-Dichlorobenzene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
2-Butanone (MEK)	**13 J**	25	2.5	2.0	2.5	03/30/23 23:04	
2-Hexanone	ND U	25	2.5	0.50	2.5	03/30/23 23:04	
4-Methyl-2-pentanone	ND U	25	2.5	0.50	2.5	03/30/23 23:04	
Acetone	ND U	50	25	13	2.5	03/30/23 23:04	
Acrylonitrile	ND U	250	13	2.3	2.5	03/30/23 23:04	
Benzene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Bromochloromethane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Bromodichloromethane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Bromoform	ND U	13	2.5	0.63	2.5	03/30/23 23:04	
Bromomethane	ND U	13	2.5	1.8	2.5	03/30/23 23:04	
Carbon Disulfide	**1.4 J**	25	2.5	1.1	2.5	03/30/23 23:04	
Carbon Tetrachloride	ND U	13	2.5	0.85	2.5	03/30/23 23:04	
Chlorobenzene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Chloroethane	ND U	13	2.5	0.58	2.5	03/30/23 23:04	
Chloroform	**1.7 J**	13	2.5	1.3	2.5	03/30/23 23:04	
Chloromethane	ND U	13	2.5	2.0	2.5	03/30/23 23:04	
Dibromochloromethane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Dibromomethane	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Methylene Chloride	ND U	13	2.5	1.7	2.5	03/30/23 23:04	
Ethylbenzene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Iodomethane	ND U	25	13	11	2.5	03/30/23 23:04	
Styrene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Tetrachloroethene (PCE)	690 ~~720~~ **E**	~~13~~ 25	~~2.5~~ 5.0	~~0.53~~ 1.1	~~2.5~~ 5	03/30/23 23:04	
Toluene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Trichloroethene (TCE)	**5.5 J**	13	2.5	0.50	2.5	03/30/23 23:04	
Trichlorofluoromethane (CFC 11)	ND U	13	2.5	0.60	2.5	03/30/23 23:04	
Vinyl Acetate	ND U	25	5.0	2.8	2.5	03/30/23 23:04	
Vinyl Chloride	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
Xylenes, Total	ND U	13	7.5	0.58	2.5	03/30/23 23:04	
cis-1,2-Dichloroethene	**1.6 J**	13	2.5	0.58	2.5	03/30/23 23:04	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-3-032123	**Units:**	ug/L
Lab Code:	R2302543-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
m,p-Xylenes	ND U	13	5.0	0.50	2.5	03/30/23 23:04	
o-Xylene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
trans-1,2-Dichloroethene	ND U	13	2.5	0.50	2.5	03/30/23 23:04	
trans-1,3-Dichloropropene	ND U	13	2.5	0.58	2.5	03/30/23 23:04	
trans-1,4-Dichloro-2-butene	ND U	13	2.5	2.0	2.5	03/30/23 23:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 114	03/30/23 23:04	
Dibromofluoromethane	100	80 - 119	03/30/23 23:04	
Toluene-d8	102	89 - 112	03/30/23 23:04	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-3-032123	**Units:**	ug/L
Lab Code:	R2302543-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/31/23 18:28	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/31/23 18:28	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/31/23 18:28	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/31/23 18:28	
2-Butanone (MEK)	**15 DJ**	50	5.0	3.9	5	03/31/23 18:28	
2-Hexanone	ND U	50	5.0	1.0	5	03/31/23 18:28	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/31/23 18:28	
Acetone	ND U	100	50	25	5	03/31/23 18:28	
Acrylonitrile	ND U	500	25	4.5	5	03/31/23 18:28	
Benzene	ND U	25	5.0	1.0	5	03/31/23 18:28	
Bromochloromethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
Bromoform	ND U	25	5.0	1.3	5	03/31/23 18:28	
Bromomethane	ND U	25	5.0	3.5	5	03/31/23 18:28	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/31/23 18:28	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/31/23 18:28	
Chlorobenzene	ND U	25	5.0	1.0	5	03/31/23 18:28	
Chloroethane	ND U	25	5.0	1.2	5	03/31/23 18:28	
Chloroform	ND U	25	5.0	2.6	5	03/31/23 18:28	
Chloromethane	ND U	25	5.0	4.0	5	03/31/23 18:28	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
Dibromomethane	ND U	25	5.0	1.0	5	03/31/23 18:28	
Methylene Chloride	ND U	25	5.0	3.3	5	03/31/23 18:28	
Ethylbenzene	ND U	25	5.0	1.0	5	03/31/23 18:28	
Iodomethane	ND U	50	25	22	5	03/31/23 18:28	
Styrene	ND U	25	5.0	1.0	5	03/31/23 18:28	
Tetrachloroethene (PCE)	**690 D**	25	5.0	1.1	5	03/31/23 18:28	
Toluene	ND U	25	5.0	1.0	5	03/31/23 18:28	
Trichloroethene (TCE)	**5.4 DJ**	25	5.0	1.0	5	03/31/23 18:28	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/31/23 18:28	
Vinyl Acetate	ND U	50	10	5.5	5	03/31/23 18:28	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/31/23 18:28	
Xylenes, Total	ND U	25	15	1.2	5	03/31/23 18:28	
cis-1,2-Dichloroethene	**1.5 DJ**	25	5.0	1.2	5	03/31/23 18:28	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-3-032123	**Units:**	ug/L
Lab Code:	R2302543-012	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/31/23 18:28	
m,p-Xylenes	ND U	25	10	1.0	5	03/31/23 18:28	
o-Xylene	ND U	25	5.0	1.0	5	03/31/23 18:28	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/31/23 18:28	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/31/23 18:28	
trans-1,4-Dichloro-2-butene	ND U UJ	25	5.0	3.9	5	03/31/23 18:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 114	03/31/23 18:28	
Dibromofluoromethane	99	80 - 119	03/31/23 18:28	
Toluene-d8	102	89 - 112	03/31/23 18:28	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-FD-03-032223	**Units:**	ug/L
Lab Code:	R2302543-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/30/23 23:27	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/30/23 23:27	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/30/23 23:27	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 23:27	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	03/30/23 23:27	
2-Hexanone	ND U	50	5.0	1.0	5	03/30/23 23:27	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/30/23 23:27	
Acetone	ND U	100	50	25	5	03/30/23 23:27	
Acrylonitrile	ND U	500	25	4.5	5	03/30/23 23:27	
Benzene	ND U	25	5.0	1.0	5	03/30/23 23:27	
Bromochloromethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
Bromoform	ND U	25	5.0	1.3	5	03/30/23 23:27	
Bromomethane	ND U	25	5.0	3.5	5	03/30/23 23:27	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/30/23 23:27	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/30/23 23:27	
Chlorobenzene	ND U	25	5.0	1.0	5	03/30/23 23:27	
Chloroethane	ND U	25	5.0	1.2	5	03/30/23 23:27	
Chloroform	**4.5 J**	25	5.0	2.6	5	03/30/23 23:27	
Chloromethane	ND U	25	5.0	4.0	5	03/30/23 23:27	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
Dibromomethane	ND U	25	5.0	1.0	5	03/30/23 23:27	
Methylene Chloride	ND U	25	5.0	3.3	5	03/30/23 23:27	
Ethylbenzene	ND U	25	5.0	1.0	5	03/30/23 23:27	
Iodomethane	ND U	50	25	22	5	03/30/23 23:27	
Styrene	ND U	25	5.0	1.0	5	03/30/23 23:27	
Tetrachloroethene (PCE)	1400 ~~1500~~ E	~~25~~ 50	~~5.0~~ 10	~~1.1~~ 2.1	~~5~~ 10	03/30/23 23:27	
Toluene	ND U	25	5.0	1.0	5	03/30/23 23:27	
Trichloroethene (TCE)	**9.1 J**	25	5.0	1.0	5	03/30/23 23:27	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/30/23 23:27	
Vinyl Acetate	ND U	50	10	5.5	5	03/30/23 23:27	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/30/23 23:27	
Xylenes, Total	ND U	25	15	1.2	5	03/30/23 23:27	
cis-1,2-Dichloroethene	**4.3 J**	25	5.0	1.2	5	03/30/23 23:27	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-FD-03-032223	**Units:**	ug/L
Lab Code:	R2302543-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/30/23 23:27	
m,p-Xylenes	ND U	25	10	1.0	5	03/30/23 23:27	
o-Xylene	ND U	25	5.0	1.0	5	03/30/23 23:27	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/30/23 23:27	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/30/23 23:27	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	03/30/23 23:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 114	03/30/23 23:27	
Dibromofluoromethane	98	80 - 119	03/30/23 23:27	
Toluene-d8	100	89 - 112	03/30/23 23:27	

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Analytical Report

13DL

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-FD-03-032223	**Units:**	ug/L
Lab Code:	R2302543-013	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 18:51	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	03/31/23 18:51	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 18:51	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	03/31/23 18:51	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	03/31/23 18:51	
1,1-Dichloroethene (1,1-DCE)	ND U	50	10	2.0	10	03/31/23 18:51	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	03/31/23 18:51	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	03/31/23 18:51	
1,2-Dibromoethane	ND U	50	10	2.0	10	03/31/23 18:51	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 18:51	
1,2-Dichloroethane	ND U	50	10	2.0	10	03/31/23 18:51	
1,2-Dichloropropane	ND U	50	10	2.0	10	03/31/23 18:51	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 18:51	
2-Butanone (MEK)	ND U	100	10	7.8	10	03/31/23 18:51	
2-Hexanone	ND U	100	10	2.0	10	03/31/23 18:51	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	03/31/23 18:51	
Acetone	ND U	200	100	50	10	03/31/23 18:51	
Acrylonitrile	ND U	1000	50	9.0	10	03/31/23 18:51	
Benzene	ND U	50	10	2.0	10	03/31/23 18:51	
Bromochloromethane	ND U	50	10	2.0	10	03/31/23 18:51	
Bromodichloromethane	ND U	50	10	2.0	10	03/31/23 18:51	
Bromoform	ND U	50	10	2.5	10	03/31/23 18:51	
Bromomethane	ND U	50	10	7.0	10	03/31/23 18:51	
Carbon Disulfide	ND U	100	10	4.2	10	03/31/23 18:51	
Carbon Tetrachloride	ND U	50	10	3.4	10	03/31/23 18:51	
Chlorobenzene	ND U	50	10	2.0	10	03/31/23 18:51	
Chloroethane	ND U	50	10	2.3	10	03/31/23 18:51	
Chloroform	**5.2 ØJ**	50	10	5.1	10	03/31/23 18:51	
Chloromethane	ND U	50	10	8.0	10	03/31/23 18:51	
Dibromochloromethane	ND U	50	10	2.0	10	03/31/23 18:51	
Dibromomethane	ND U	50	10	2.0	10	03/31/23 18:51	
Methylene Chloride	ND U	50	10	6.5	10	03/31/23 18:51	
Ethylbenzene	ND U	50	10	2.0	10	03/31/23 18:51	
Iodomethane	ND U	100	50	43	10	03/31/23 18:51	
Styrene	ND U	50	10	2.0	10	03/31/23 18:51	
Tetrachloroethene (PCE)	**1400 Ø**	50	10	2.1	10	03/31/23 18:51	
Toluene	ND U	50	10	2.0	10	03/31/23 18:51	
Trichloroethene (TCE)	**8.9 ØJ**	50	10	2.0	10	03/31/23 18:51	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	03/31/23 18:51	
Vinyl Acetate	ND U	100	20	11	10	03/31/23 18:51	
Vinyl Chloride	ND U	50	10	2.0	10	03/31/23 18:51	
Xylenes, Total	ND U	50	30	2.3	10	03/31/23 18:51	
cis-1,2-Dichloroethene	**4.1 ØJ**	50	10	2.3	10	03/31/23 18:51	

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Analytical Report

13DL

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-FD-03-032223	**Units:**	ug/L
Lab Code:	R2302543-013	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	03/31/23 18:51	
m,p-Xylenes	ND U	50	20	2.0	10	03/31/23 18:51	
o-Xylene	ND U	50	10	2.0	10	03/31/23 18:51	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	03/31/23 18:51	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	03/31/23 18:51	
trans-1,4-Dichloro-2-butene	ND U VS	50	10	7.8	10	03/31/23 18:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 114	03/31/23 18:51	
Dibromofluoromethane	96	80 - 119	03/31/23 18:51	
Toluene-d8	96	89 - 112	03/31/23 18:51	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 12:54
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-3-3-032223	**Units:**	ug/L
Lab Code:	R2302543-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 16:32	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	03/31/23 16:32	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 16:32	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	03/31/23 16:32	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	03/31/23 16:32	
1,1-Dichloroethene (1,1-DCE)	ND U	50	10	2.0	10	03/31/23 16:32	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	03/31/23 16:32	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	03/31/23 16:32	
1,2-Dibromoethane	ND U	50	10	2.0	10	03/31/23 16:32	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 16:32	
1,2-Dichloroethane	ND U	50	10	2.0	10	03/31/23 16:32	
1,2-Dichloropropane	ND U	50	10	2.0	10	03/31/23 16:32	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 16:32	
2-Butanone (MEK)	ND U	100	10	7.8	10	03/31/23 16:32	
2-Hexanone	ND U	100	10	2.0	10	03/31/23 16:32	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	03/31/23 16:32	
Acetone	ND U	200	100	50	10	03/31/23 16:32	
Acrylonitrile	ND U	1000	50	9.0	10	03/31/23 16:32	
Benzene	ND U	50	10	2.0	10	03/31/23 16:32	
Bromochloromethane	ND U	50	10	2.0	10	03/31/23 16:32	
Bromodichloromethane	ND U	50	10	2.0	10	03/31/23 16:32	
Bromoform	ND U	50	10	2.5	10	03/31/23 16:32	
Bromomethane	ND U	50	10	7.0	10	03/31/23 16:32	
Carbon Disulfide	ND U	100	10	4.2	10	03/31/23 16:32	
Carbon Tetrachloride	ND U	50	10	3.4	10	03/31/23 16:32	
Chlorobenzene	ND U	50	10	2.0	10	03/31/23 16:32	
Chloroethane	ND U	50	10	2.3	10	03/31/23 16:32	
Chloroform	**5.2 J**	50	10	5.1	10	03/31/23 16:32	
Chloromethane	ND U	50	10	8.0	10	03/31/23 16:32	
Dibromochloromethane	ND U	50	10	2.0	10	03/31/23 16:32	
Dibromomethane	ND U	50	10	2.0	10	03/31/23 16:32	
Methylene Chloride	ND U	50	10	6.5	10	03/31/23 16:32	
Ethylbenzene	ND U	50	10	2.0	10	03/31/23 16:32	
Iodomethane	ND U	100	50	43	10	03/31/23 16:32	
Styrene	ND U	50	10	2.0	10	03/31/23 16:32	
Tetrachloroethene (PCE)	**1400**	50	10	2.1	10	03/31/23 16:32	
Toluene	ND U	50	10	2.0	10	03/31/23 16:32	
Trichloroethene (TCE)	**8.8 J**	50	10	2.0	10	03/31/23 16:32	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	03/31/23 16:32	
Vinyl Acetate	ND U	100	20	11	10	03/31/23 16:32	
Vinyl Chloride	ND U	50	10	2.0	10	03/31/23 16:32	
Xylenes, Total	ND U	50	30	2.3	10	03/31/23 16:32	
cis-1,2-Dichloroethene	**2.4 J**	50	10	2.3	10	03/31/23 16:32	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 12:54
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-3-3-032223	**Units:**	ug/L
Lab Code:	R2302543-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	03/31/23 16:32	
m,p-Xylenes	ND U	50	20	2.0	10	03/31/23 16:32	
o-Xylene	ND U	50	10	2.0	10	03/31/23 16:32	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	03/31/23 16:32	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	03/31/23 16:32	
trans-1,4-Dichloro-2-butene	ND U	50	10	7.8	10	03/31/23 16:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 114	03/31/23 16:32	
Dibromofluoromethane	90	80 - 119	03/31/23 16:32	
Toluene-d8	92	89 - 112	03/31/23 16:32	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 08:00
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-7-032223	**Units:**	ug/L
Lab Code:	R2302543-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	04/03/23 13:07	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	04/03/23 13:07	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	04/03/23 13:07	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	04/03/23 13:07	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	04/03/23 13:07	
1,1-Dichloroethene (1,1-DCE)	**3.9 J**	50	10	2.0	10	04/03/23 13:07	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	04/03/23 13:07	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	04/03/23 13:07	
1,2-Dibromoethane	ND U	50	10	2.0	10	04/03/23 13:07	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	04/03/23 13:07	
1,2-Dichloroethane	ND U	50	10	2.0	10	04/03/23 13:07	
1,2-Dichloropropane	ND U	50	10	2.0	10	04/03/23 13:07	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	04/03/23 13:07	
2-Butanone (MEK)	ND U	100	10	7.8	10	04/03/23 13:07	
2-Hexanone	ND U	100	10	2.0	10	04/03/23 13:07	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	04/03/23 13:07	
Acetone	ND U	200	100	50	10	04/03/23 13:07	
Acrylonitrile	ND U	1000	50	9.0	10	04/03/23 13:07	
Benzene	ND U	50	10	2.0	10	04/03/23 13:07	
Bromochloromethane	ND U	50	10	2.0	10	04/03/23 13:07	
Bromodichloromethane	ND U	50	10	2.0	10	04/03/23 13:07	
Bromoform	ND U	50	10	2.5	10	04/03/23 13:07	
Bromomethane	ND U	50	10	7.0	10	04/03/23 13:07	
Carbon Disulfide	ND U	100	10	4.2	10	04/03/23 13:07	
Carbon Tetrachloride	ND U	50	10	3.4	10	04/03/23 13:07	
Chlorobenzene	ND U	50	10	2.0	10	04/03/23 13:07	
Chloroethane	ND U	50	10	2.3	10	04/03/23 13:07	
Chloroform	ND U	50	10	5.1	10	04/03/23 13:07	
Chloromethane	ND U	50	10	8.0	10	04/03/23 13:07	
Dibromochloromethane	ND U	50	10	2.0	10	04/03/23 13:07	
Dibromomethane	ND U	50	10	2.0	10	04/03/23 13:07	
Methylene Chloride	ND U	50	10	6.5	10	04/03/23 13:07	
Ethylbenzene	ND U	50	10	2.0	10	04/03/23 13:07	
Iodomethane	ND U	100	50	43	10	04/03/23 13:07	
Styrene	ND U	50	10	2.0	10	04/03/23 13:07	
Tetrachloroethene (PCE)	**1500**	50	10	2.1	10	04/03/23 13:07	
Toluene	ND U	50	10	2.0	10	04/03/23 13:07	
Trichloroethene (TCE)	**54**	50	10	2.0	10	04/03/23 13:07	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	04/03/23 13:07	
Vinyl Acetate	ND U	100	20	11	10	04/03/23 13:07	
Vinyl Chloride	ND U	50	10	2.0	10	04/03/23 13:07	
Xylenes, Total	ND U	50	30	2.3	10	04/03/23 13:07	
cis-1,2-Dichloroethene	**7.8 J**	50	10	2.3	10	04/03/23 13:07	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 08:00
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-7-032223	**Units:**	ug/L
Lab Code:	R2302543-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	04/03/23 13:07	
m,p-Xylenes	ND U	50	20	2.0	10	04/03/23 13:07	
o-Xylene	ND U	50	10	2.0	10	04/03/23 13:07	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	04/03/23 13:07	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	04/03/23 13:07	
trans-1,4-Dichloro-2-butene	ND U	50	10	7.8	10	04/03/23 13:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 114	04/03/23 13:07	
Dibromofluoromethane	99	80 - 119	04/03/23 13:07	
Toluene-d8	100	89 - 112	04/03/23 13:07	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 10:47
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-5-032223	**Units:**	ug/L
Lab Code:	R2302543-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	100	20	4.0	20	04/03/23 13:30	
1,1,1-Trichloroethane (TCA)	ND U	100	20	4.0	20	04/03/23 13:30	
1,1,2,2-Tetrachloroethane	ND U	100	20	4.0	20	04/03/23 13:30	
1,1,2-Trichloroethane	ND U	100	20	4.0	20	04/03/23 13:30	
1,1-Dichloroethane (1,1-DCA)	ND U	100	20	4.0	20	04/03/23 13:30	
1,1-Dichloroethene (1,1-DCE)	ND U	100	20	4.0	20	04/03/23 13:30	
1,2,3-Trichloropropane	ND U	100	20	5.2	20	04/03/23 13:30	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	100	20	9.0	20	04/03/23 13:30	
1,2-Dibromoethane	ND U	100	20	4.0	20	04/03/23 13:30	
1,2-Dichlorobenzene	ND U	100	20	4.0	20	04/03/23 13:30	
1,2-Dichloroethane	ND U	100	20	4.0	20	04/03/23 13:30	
1,2-Dichloropropane	ND U	100	20	4.0	20	04/03/23 13:30	
1,4-Dichlorobenzene	ND U	100	20	4.0	20	04/03/23 13:30	
2-Butanone (MEK)	ND U	200	20	16	20	04/03/23 13:30	
2-Hexanone	ND U	200	20	4.0	20	04/03/23 13:30	
4-Methyl-2-pentanone	ND U	200	20	4.0	20	04/03/23 13:30	
Acetone	ND U	400	200	100	20	04/03/23 13:30	
Acrylonitrile	ND U	2000	100	18	20	04/03/23 13:30	
Benzene	ND U	100	20	4.0	20	04/03/23 13:30	
Bromochloromethane	ND U	100	20	4.0	20	04/03/23 13:30	
Bromodichloromethane	ND U	100	20	4.0	20	04/03/23 13:30	
Bromoform	ND U	100	20	5.0	20	04/03/23 13:30	
Bromomethane	ND U	100	20	14	20	04/03/23 13:30	
Carbon Disulfide	ND U	200	20	8.4	20	04/03/23 13:30	
Carbon Tetrachloride	ND U	100	20	6.8	20	04/03/23 13:30	
Chlorobenzene	ND U	100	20	4.0	20	04/03/23 13:30	
Chloroethane	ND U	100	20	4.6	20	04/03/23 13:30	
Chloroform	ND U	100	20	11	20	04/03/23 13:30	
Chloromethane	ND U	100	20	16	20	04/03/23 13:30	
Dibromochloromethane	ND U	100	20	4.0	20	04/03/23 13:30	
Dibromomethane	ND U	100	20	4.0	20	04/03/23 13:30	
Methylene Chloride	ND U	100	20	13	20	04/03/23 13:30	
Ethylbenzene	ND U	100	20	4.0	20	04/03/23 13:30	
Iodomethane	ND U	200	100	86	20	04/03/23 13:30	
Styrene	ND U	100	20	4.0	20	04/03/23 13:30	
Tetrachloroethene (PCE)	**2100**	100	20	4.2	20	04/03/23 13:30	
Toluene	ND U	100	20	4.0	20	04/03/23 13:30	
Trichloroethene (TCE)	**37 J**	100	20	4.0	20	04/03/23 13:30	
Trichlorofluoromethane (CFC 11)	ND U	100	20	4.8	20	04/03/23 13:30	
Vinyl Acetate	ND U	200	40	22	20	04/03/23 13:30	
Vinyl Chloride	ND U	100	20	4.0	20	04/03/23 13:30	
Xylenes, Total	ND U	100	60	4.6	20	04/03/23 13:30	
cis-1,2-Dichloroethene	**69 J**	100	20	4.6	20	04/03/23 13:30	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 10:47
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-5-032223	**Units:**	ug/L
Lab Code:	R2302543-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	100	20	4.0	20	04/03/23 13:30	
m,p-Xylenes	ND U	100	40	4.0	20	04/03/23 13:30	
o-Xylene	ND U	100	20	4.0	20	04/03/23 13:30	
trans-1,2-Dichloroethene	ND U	100	20	4.0	20	04/03/23 13:30	
trans-1,3-Dichloropropene	ND U	100	20	4.6	20	04/03/23 13:30	
trans-1,4-Dichloro-2-butene	ND U	100	20	16	20	04/03/23 13:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 114	04/03/23 13:30	
Dibromofluoromethane	96	80 - 119	04/03/23 13:30	
Toluene-d8	98	89 - 112	04/03/23 13:30	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 08:58
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-4-032223	**Units:**	ug/L
Lab Code:	R2302543-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,1,2,2-Tetrachloroethane	**0.29 J**	5.0	1.0	0.20	1	03/31/23 15:46	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	03/31/23 15:46	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/31/23 15:46	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
2-Butanone (MEK)	**1.5 J**	10	1.0	0.78	1	03/31/23 15:46	
2-Hexanone	ND U	10	1.0	0.20	1	03/31/23 15:46	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	03/31/23 15:46	
Acetone	ND U	20	10	5.0	1	03/31/23 15:46	
Acrylonitrile	ND U	100	5.0	0.90	1	03/31/23 15:46	
Benzene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Bromoform	ND U	5.0	1.0	0.25	1	03/31/23 15:46	
Bromomethane	ND U	5.0	1.0	0.70	1	03/31/23 15:46	
Carbon Disulfide	**0.79 J**	10	1.0	0.42	1	03/31/23 15:46	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/31/23 15:46	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Chloroethane	ND U	5.0	1.0	0.23	1	03/31/23 15:46	
Chloroform	**1.5 J**	5.0	1.0	0.51	1	03/31/23 15:46	
Chloromethane	ND U	5.0	1.0	0.80	1	03/31/23 15:46	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/31/23 15:46	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Iodomethane	ND U	10	5.0	4.3	1	03/31/23 15:46	
Styrene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Tetrachloroethene (PCE)	370 ~~440~~ E	~~5.0~~ 25	1.0 50	~~0.2~~ 1.1	~~1~~ 5	03/31/23 15:46	
Toluene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Trichloroethene (TCE)	**2.9 J**	5.0	1.0	0.20	1	03/31/23 15:46	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/31/23 15:46	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/31/23 15:46	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/31/23 15:46	
cis-1,2-Dichloroethene	**0.27 J**	5.0	1.0	0.23	1	03/31/23 15:46	

MM 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 08:58
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-4-032223	**Units:**	ug/L
Lab Code:	R2302543-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/31/23 15:46	
o-Xylene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/31/23 15:46	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/31/23 15:46	
trans-1,4-Dichloro-2-butene	ND U VS	5.0	1.0	0.78	1	03/31/23 15:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 114	03/31/23 15:46	
Dibromofluoromethane	98	80 - 119	03/31/23 15:46	
Toluene-d8	101	89 - 112	03/31/23 15:46	

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Analytical Report

17DL

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 08:58
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-4-032223	**Units:**	ug/L
Lab Code:	R2302543-017	**Basis:**	NA

Use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	04/03/23 14:17	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	04/03/23 14:17	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	04/03/23 14:17	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	04/03/23 14:17	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	04/03/23 14:17	
2-Hexanone	ND U	50	5.0	1.0	5	04/03/23 14:17	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	04/03/23 14:17	
Acetone	ND U	100	50	25	5	04/03/23 14:17	
Acrylonitrile	ND U	500	25	4.5	5	04/03/23 14:17	
Benzene	ND U	25	5.0	1.0	5	04/03/23 14:17	
Bromochloromethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
Bromodichloromethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
Bromoform	ND U	25	5.0	1.3	5	04/03/23 14:17	
Bromomethane	ND U	25	5.0	3.5	5	04/03/23 14:17	
Carbon Disulfide	ND U	50	5.0	2.1	5	04/03/23 14:17	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	04/03/23 14:17	
Chlorobenzene	ND U	25	5.0	1.0	5	04/03/23 14:17	
Chloroethane	ND U	25	5.0	1.2	5	04/03/23 14:17	
Chloroform	ND U	25	5.0	2.6	5	04/03/23 14:17	
Chloromethane	ND U	25	5.0	4.0	5	04/03/23 14:17	
Dibromochloromethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
Dibromomethane	ND U	25	5.0	1.0	5	04/03/23 14:17	
Methylene Chloride	ND U	25	5.0	3.3	5	04/03/23 14:17	
Ethylbenzene	ND U	25	5.0	1.0	5	04/03/23 14:17	
Iodomethane	ND U	50	25	22	5	04/03/23 14:17	
Styrene	ND U	25	5.0	1.0	5	04/03/23 14:17	
Tetrachloroethene (PCE)	370 D	25	5.0	1.1	5	04/03/23 14:17	
Toluene	ND U	25	5.0	1.0	5	04/03/23 14:17	
Trichloroethene (TCE)	2.7 DJ	25	5.0	1.0	5	04/03/23 14:17	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	04/03/23 14:17	
Vinyl Acetate	ND U	50	10	5.5	5	04/03/23 14:17	
Vinyl Chloride	ND U	25	5.0	1.0	5	04/03/23 14:17	
Xylenes, Total	ND U	25	15	1.2	5	04/03/23 14:17	
cis-1,2-Dichloroethene	ND U	25	5.0	1.2	5	04/03/23 14:17	

MM 6/13/23

17 DL

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 08:58
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-4-032223	**Units:**	ug/L
Lab Code:	R2302543-017	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	04/03/23 14:17	
m,p-Xylenes	ND U	25	10	1.0	5	04/03/23 14:17	
o-Xylene	ND U	25	5.0	1.0	5	04/03/23 14:17	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	04/03/23 14:17	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	04/03/23 14:17	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	04/03/23 14:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 114	04/03/23 14:17	
Dibromofluoromethane	99	80 - 119	04/03/23 14:17	
Toluene-d8	102	89 - 112	04/03/23 14:17	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 10:38
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-2-1-032223	**Units:**	ug/L
Lab Code:	R2302543-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 00:36	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	03/31/23 00:36	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 00:36	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	03/31/23 00:36	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	03/31/23 00:36	
1,1-Dichloroethene (1,1-DCE)	ND U	50	10	2.0	10	03/31/23 00:36	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	03/31/23 00:36	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	03/31/23 00:36	
1,2-Dibromoethane	ND U	50	10	2.0	10	03/31/23 00:36	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 00:36	
1,2-Dichloroethane	ND U	50	10	2.0	10	03/31/23 00:36	
1,2-Dichloropropane	ND U	50	10	2.0	10	03/31/23 00:36	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 00:36	
2-Butanone (MEK)	ND U	100	10	7.8	10	03/31/23 00:36	
2-Hexanone	ND U	100	10	2.0	10	03/31/23 00:36	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	03/31/23 00:36	
Acetone	ND U	200	100	50	10	03/31/23 00:36	
Acrylonitrile	ND U	1000	50	9.0	10	03/31/23 00:36	
Benzene	ND U	50	10	2.0	10	03/31/23 00:36	
Bromochloromethane	ND U	50	10	2.0	10	03/31/23 00:36	
Bromodichloromethane	ND U	50	10	2.0	10	03/31/23 00:36	
Bromoform	ND U	50	10	2.5	10	03/31/23 00:36	
Bromomethane	ND U	50	10	7.0	10	03/31/23 00:36	
Carbon Disulfide	ND U	100	10	4.2	10	03/31/23 00:36	
Carbon Tetrachloride	ND U	50	10	3.4	10	03/31/23 00:36	
Chlorobenzene	ND U	50	10	2.0	10	03/31/23 00:36	
Chloroethane	ND U	50	10	2.3	10	03/31/23 00:36	
Chloroform	ND U	50	10	5.1	10	03/31/23 00:36	
Chloromethane	ND U	50	10	8.0	10	03/31/23 00:36	
Dibromochloromethane	ND U	50	10	2.0	10	03/31/23 00:36	
Dibromomethane	ND U	50	10	2.0	10	03/31/23 00:36	
Methylene Chloride	ND U	50	10	6.5	10	03/31/23 00:36	
Ethylbenzene	ND U	50	10	2.0	10	03/31/23 00:36	
Iodomethane	ND U	100	50	43	10	03/31/23 00:36	
Styrene	ND U	50	10	2.0	10	03/31/23 00:36	
Tetrachloroethene (PCE)	**1100**	50	10	2.1	10	03/31/23 00:36	
Toluene	ND U	50	10	2.0	10	03/31/23 00:36	
Trichloroethene (TCE)	**9.1 J**	50	10	2.0	10	03/31/23 00:36	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	03/31/23 00:36	
Vinyl Acetate	ND U	100	20	11	10	03/31/23 00:36	
Vinyl Chloride	ND U	50	10	2.0	10	03/31/23 00:36	
Xylenes, Total	ND U	50	30	2.3	10	03/31/23 00:36	
cis-1,2-Dichloroethene	**4.1 J**	50	10	2.3	10	03/31/23 00:36	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 10:38
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-2-1-032223	**Units:**	ug/L
Lab Code:	R2302543-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	03/31/23 00:36	
m,p-Xylenes	ND U	50	20	2.0	10	03/31/23 00:36	
o-Xylene	ND U	50	10	2.0	10	03/31/23 00:36	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	03/31/23 00:36	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	03/31/23 00:36	
trans-1,4-Dichloro-2-butene	ND U	50	10	7.8	10	03/31/23 00:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 114	03/31/23 00:36	
Dibromofluoromethane	97	80 - 119	03/31/23 00:36	
Toluene-d8	95	89 - 112	03/31/23 00:36	

WH 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:22
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-3-032223	**Units:**	ug/L
Lab Code:	R2302543-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 16:55	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	03/31/23 16:55	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	03/31/23 16:55	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	03/31/23 16:55	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	03/31/23 16:55	
1,1-Dichloroethene (1,1-DCE)	ND U	50	10	2.0	10	03/31/23 16:55	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	03/31/23 16:55	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	03/31/23 16:55	
1,2-Dibromoethane	ND U	50	10	2.0	10	03/31/23 16:55	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 16:55	
1,2-Dichloroethane	ND U	50	10	2.0	10	03/31/23 16:55	
1,2-Dichloropropane	ND U	50	10	2.0	10	03/31/23 16:55	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	03/31/23 16:55	
2-Butanone (MEK)	ND U	100	10	7.8	10	03/31/23 16:55	
2-Hexanone	ND U	100	10	2.0	10	03/31/23 16:55	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	03/31/23 16:55	
Acetone	ND U	200	100	50	10	03/31/23 16:55	
Acrylonitrile	ND U	1000	50	9.0	10	03/31/23 16:55	
Benzene	ND U	50	10	2.0	10	03/31/23 16:55	
Bromochloromethane	ND U	50	10	2.0	10	03/31/23 16:55	
Bromodichloromethane	ND U	50	10	2.0	10	03/31/23 16:55	
Bromoform	ND U	50	10	2.5	10	03/31/23 16:55	
Bromomethane	ND U	50	10	7.0	10	03/31/23 16:55	
Carbon Disulfide	ND U	100	10	4.2	10	03/31/23 16:55	
Carbon Tetrachloride	ND U	50	10	3.4	10	03/31/23 16:55	
Chlorobenzene	ND U	50	10	2.0	10	03/31/23 16:55	
Chloroethane	ND U	50	10	2.3	10	03/31/23 16:55	
Chloroform	ND U	50	10	5.1	10	03/31/23 16:55	
Chloromethane	ND U	50	10	8.0	10	03/31/23 16:55	
Dibromochloromethane	ND U	50	10	2.0	10	03/31/23 16:55	
Dibromomethane	ND U	50	10	2.0	10	03/31/23 16:55	
Methylene Chloride	ND U	50	10	6.5	10	03/31/23 16:55	
Ethylbenzene	ND U	50	10	2.0	10	03/31/23 16:55	
Iodomethane	ND U	100	50	43	10	03/31/23 16:55	
Styrene	ND U	50	10	2.0	10	03/31/23 16:55	
Tetrachloroethene (PCE)	1900 ~~2000~~ E	~~50~~ 100	~~10~~ 20	~~2.1~~ 4.2	~~10~~ 20	03/31/23 16:55	
Toluene	ND U	50	10	2.0	10	03/31/23 16:55	
Trichloroethene (TCE)	**30 J**	50	10	2.0	10	03/31/23 16:55	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	03/31/23 16:55	
Vinyl Acetate	ND U	100	20	11	10	03/31/23 16:55	
Vinyl Chloride	ND U	50	10	2.0	10	03/31/23 16:55	
Xylenes, Total	ND U	50	30	2.3	10	03/31/23 16:55	
cis-1,2-Dichloroethene	**9.1 J**	50	10	2.3	10	03/31/23 16:55	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:22
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-3-032223	**Units:**	ug/L
Lab Code:	R2302543-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	03/31/23 16:55	
m,p-Xylenes	ND U	50	20	2.0	10	03/31/23 16:55	
o-Xylene	ND U	50	10	2.0	10	03/31/23 16:55	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	03/31/23 16:55	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	03/31/23 16:55	
trans-1,4-Dichloro-2-butene	ND U US	50	10	7.8	10	03/31/23 16:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 114	03/31/23 16:55	
Dibromofluoromethane	95	80 - 119	03/31/23 16:55	
Toluene-d8	99	89 - 112	03/31/23 16:55	

MM 6/13/23

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19DL

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:22
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-3-032223	**Units:**	ug/L
Lab Code:	R2302543-019	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	100	20	4.0	20	04/03/23 13:53	
1,1,1-Trichloroethane (TCA)	ND U	100	20	4.0	20	04/03/23 13:53	
1,1,2,2-Tetrachloroethane	ND U	100	20	4.0	20	04/03/23 13:53	
1,1,2-Trichloroethane	ND U	100	20	4.0	20	04/03/23 13:53	
1,1-Dichloroethane (1,1-DCA)	ND U	100	20	4.0	20	04/03/23 13:53	
1,1-Dichloroethene (1,1-DCE)	ND U	100	20	4.0	20	04/03/23 13:53	
1,2,3-Trichloropropane	ND U	100	20	5.2	20	04/03/23 13:53	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	100	20	9.0	20	04/03/23 13:53	
1,2-Dibromoethane	ND U	100	20	4.0	20	04/03/23 13:53	
1,2-Dichlorobenzene	ND U	100	20	4.0	20	04/03/23 13:53	
1,2-Dichloroethane	ND U	100	20	4.0	20	04/03/23 13:53	
1,2-Dichloropropane	ND U	100	20	4.0	20	04/03/23 13:53	
1,4-Dichlorobenzene	ND U	100	20	4.0	20	04/03/23 13:53	
2-Butanone (MEK)	ND U	200	20	16	20	04/03/23 13:53	
2-Hexanone	ND U	200	20	4.0	20	04/03/23 13:53	
4-Methyl-2-pentanone	ND U	200	20	4.0	20	04/03/23 13:53	
Acetone	ND U	400	200	100	20	04/03/23 13:53	
Acrylonitrile	ND U	2000	100	18	20	04/03/23 13:53	
Benzene	ND U	100	20	4.0	20	04/03/23 13:53	
Bromochloromethane	ND U	100	20	4.0	20	04/03/23 13:53	
Bromodichloromethane	ND U	100	20	4.0	20	04/03/23 13:53	
Bromoform	ND U	100	20	5.0	20	04/03/23 13:53	
Bromomethane	ND U	100	20	14	20	04/03/23 13:53	
Carbon Disulfide	ND U	200	20	8.4	20	04/03/23 13:53	
Carbon Tetrachloride	ND U	100	20	6.8	20	04/03/23 13:53	
Chlorobenzene	ND U	100	20	4.0	20	04/03/23 13:53	
Chloroethane	ND U	100	20	4.6	20	04/03/23 13:53	
Chloroform	ND U	100	20	11	20	04/03/23 13:53	
Chloromethane	ND U	100	20	16	20	04/03/23 13:53	
Dibromochloromethane	ND U	100	20	4.0	20	04/03/23 13:53	
Dibromomethane	ND U	100	20	4.0	20	04/03/23 13:53	
Methylene Chloride	ND U	100	20	13	20	04/03/23 13:53	
Ethylbenzene	ND U	100	20	4.0	20	04/03/23 13:53	
Iodomethane	ND U	200	100	86	20	04/03/23 13:53	
Styrene	ND U	100	20	4.0	20	04/03/23 13:53	
Tetrachloroethene (PCE)	**1900 D**	100	20	4.2	20	04/03/23 13:53	
Toluene	ND U	100	20	4.0	20	04/03/23 13:53	
Trichloroethene (TCE)	**35 BJ**	100	20	4.0	20	04/03/23 13:53	
Trichlorofluoromethane (CFC 11)	ND U	100	20	4.8	20	04/03/23 13:53	
Vinyl Acetate	ND U	200	40	22	20	04/03/23 13:53	
Vinyl Chloride	ND U	100	20	4.0	20	04/03/23 13:53	
Xylenes, Total	ND U	100	60	4.6	20	04/03/23 13:53	
cis-1,2-Dichloroethene	**9.4 BJ**	100	20	4.6	20	04/03/23 13:53	

MT 6/13/23

ALS Group USA, Corp.
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Analytical Report

19DL

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:22
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-5-3-032223	**Units:**	ug/L
Lab Code:	R2302543-019	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	100	20	4.0	20	04/03/23 13:53	
m,p-Xylenes	ND U	100	40	4.0	20	04/03/23 13:53	
o-Xylene	ND U	100	20	4.0	20	04/03/23 13:53	
trans-1,2-Dichloroethene	ND U	100	20	4.0	20	04/03/23 13:53	
trans-1,3-Dichloropropene	ND U	100	20	4.6	20	04/03/23 13:53	
trans-1,4-Dichloro-2-butene	ND U	100	20	16	20	04/03/23 13:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 114	04/03/23 13:53	
Dibromofluoromethane	98	80 - 119	04/03/23 13:53	
Toluene-d8	99	89 - 112	04/03/23 13:53	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:00
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-2-6-032223	**Units:**	ug/L
Lab Code:	R2302543-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,1,1-Trichloroethane (TCA)	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,1,2,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,1,2-Trichloroethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,1-Dichloroethane (1,1-DCA)	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,1-Dichloroethene (1,1-DCE)	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,2,3-Trichloropropane	ND U	10	2.0	0.52	2	03/31/23 16:09	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	10	2.0	0.90	2	03/31/23 16:09	
1,2-Dibromoethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,2-Dichlorobenzene	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,2-Dichloroethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,2-Dichloropropane	ND U	10	2.0	0.40	2	03/31/23 16:09	
1,4-Dichlorobenzene	ND U	10	2.0	0.40	2	03/31/23 16:09	
2-Butanone (MEK)	ND U	20	2.0	1.6	2	03/31/23 16:09	
2-Hexanone	ND U	20	2.0	0.40	2	03/31/23 16:09	
4-Methyl-2-pentanone	ND U	20	2.0	0.40	2	03/31/23 16:09	
Acetone	ND U	40	20	10	2	03/31/23 16:09	
Acrylonitrile	ND U	200	10	1.8	2	03/31/23 16:09	
Benzene	ND U	10	2.0	0.40	2	03/31/23 16:09	
Bromochloromethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
Bromodichloromethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
Bromoform	ND U	10	2.0	0.50	2	03/31/23 16:09	
Bromomethane	ND U	10	2.0	1.4	2	03/31/23 16:09	
Carbon Disulfide	ND U	20	2.0	0.84	2	03/31/23 16:09	
Carbon Tetrachloride	ND U	10	2.0	0.68	2	03/31/23 16:09	
Chlorobenzene	ND U	10	2.0	0.40	2	03/31/23 16:09	
Chloroethane	ND U	10	2.0	0.46	2	03/31/23 16:09	
Chloroform	ND U	10	2.0	1.1	2	03/31/23 16:09	
Chloromethane	ND U	10	2.0	1.6	2	03/31/23 16:09	
Dibromochloromethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
Dibromomethane	ND U	10	2.0	0.40	2	03/31/23 16:09	
Methylene Chloride	ND U	10	2.0	1.3	2	03/31/23 16:09	
Ethylbenzene	ND U	10	2.0	0.40	2	03/31/23 16:09	
Iodomethane	ND U	20	10	8.6	2	03/31/23 16:09	
Styrene	ND U	10	2.0	0.40	2	03/31/23 16:09	
Tetrachloroethene (PCE)	**120**	10	2.0	0.42	2	03/31/23 16:09	
Toluene	ND U	10	2.0	0.40	2	03/31/23 16:09	
Trichloroethene (TCE)	**1.8 J**	10	2.0	0.40	2	03/31/23 16:09	
Trichlorofluoromethane (CFC 11)	ND U	10	2.0	0.48	2	03/31/23 16:09	
Vinyl Acetate	ND U	20	4.0	2.2	2	03/31/23 16:09	
Vinyl Chloride	ND U	10	2.0	0.40	2	03/31/23 16:09	
Xylenes, Total	ND U	10	6.0	0.46	2	03/31/23 16:09	
cis-1,2-Dichloroethene	ND U	10	2.0	0.46	2	03/31/23 16:09	

ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302543
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:00
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-2-6-032223	**Units:**	ug/L
Lab Code:	R2302543-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	10	2.0	0.40	2	03/31/23 16:09	
m,p-Xylenes	ND U	10	4.0	0.40	2	03/31/23 16:09	
o-Xylene	ND U	10	2.0	0.40	2	03/31/23 16:09	
trans-1,2-Dichloroethene	ND U	10	2.0	0.40	2	03/31/23 16:09	
trans-1,3-Dichloropropene	ND U	10	2.0	0.46	2	03/31/23 16:09	
trans-1,4-Dichloro-2-butene	ND U UJ	10	2.0	1.6	2	03/31/23 16:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 114	03/31/23 16:09	
Dibromofluoromethane	96	80 - 119	03/31/23 16:09	
Toluene-d8	100	89 - 112	03/31/23 16:09	

MT 4/13/23

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
NATIONAL HEATSET PRINTING, NEW YORK

Client: EA Engineering, Science and Technology, Syracuse, New York
SDG: R2302544
Laboratory: ALS Environmental, Rochester, New York
Site: National Heatset Printing, Babylon, New York
Date: June 13, 2023

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	152140-CMT-3-6-032223	R2302544-001	Water
2	152140-CMT-2-7-032223	R2302544-002	Water
3	152140-CMT-6-7-032223	R2302544-003	Water
3DL	152140-CMT-6-7-032223DL	R2302544-003DL	Water
4	152140-CMT-4-5-032223	R2302544-004	Water
5	152140-CMT-7-5-032223	R2302544-005	Water
6	152140-CMT-4-4-032223	R2302544-006	Water
7	152140-CMT-7-3-032223	R2302544-007	Water
8	152140-CMT-8-5-032223	R2302544-008	Water
9	152140-CMT-3-7-032223	R2302544-009	Water
10	152140-CMT-3-2-032223	R2302544-010	Water
11	152140-CMT-4-6-032223	R2302544-011	Water
12	152140-CMT-9-4-032223	R2302544-012	Water
13	152140-CMT-7-4-032223	R2302544-013	Water
14	152140-CMT-2-4-032223	R2302544-014	Water
15	152140-CMT-10-6-032323	R2302544-015	Water
15MS	152140-CMT-10-6-032323MS	R2302544-015MS	Water
15MSD	152140-CMT-10-6-032323MSD	R2302544-015MSD	Water
16	152140-CMT-1-2-032323	R2302544-016	Water
17	152140-CMT-9-3-032323	R2302544-017	Water
18	152140-CMT-7-6-032323	R2302544-018	Water
19	152140-CMT-9-1-032323	R2302544-019	Water
20	152140-CMT-9-2-032323	R2302544-020	Water
21	152140-TripBlank-032323	R2302544-021	Water
22	152140-FD-04-032323	R2302544-022	Water

A Data Usability Summary Review was performed on the analytical data for twenty-one water samples and one aqueous trip blank sample collected on March 22-23, 2023 by EA Engineering at the National Heatset Printing site in Babylon, New York. The samples were analyzed under Environmental Protection Agency (USEPA) Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW-846 Method 8260C

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 1, September 2016: Low/Medium Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

Organics

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes. There were no qualifications.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibration exhibited acceptable %RSD values and/or correlation coefficients and mean RRF values.

Continuing Calibration

- The continuing calibrations exhibited acceptable percent difference (%D) and RRF values.

Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations of methylene chloride, 2-butanone, toluene or acetone (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
RQ2303790-04	1,4-Dichlorobenzene	0.21	None	All Associated ND

Field Blank

- Field QC samples are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
152140-TripBlank-032323	None - ND	-	-	-

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate percent recoveries (%R).

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Laboratory Control Samples

- The LCS exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Compound Quantitation

- Several samples were analyzed at various dilutions due to sample foaming. The reporting limits were adjusted accordingly. No action was required.
- Sample 3 flagged (E) by the laboratory for tetrachloroethene indicating a calibration range exceedance. The sample was reanalyzed at a dilution. The dilution results for this compound should be used for reporting purposes.

Tentatively Identified Compounds (TICs)

- TICs were not reported.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

Compound	152140-CMT-1-2-032323 ug/L	152140-FD-04-032323 ug/L	RPD	Qualifier
1,4-Dichlorobenzene	42	ND	NC	None
Carbon Tetrachloride	ND	58	NC	
Chloroform	ND	79	NC	
Tetrachloroethene	20000	18000	11%	

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: _____ Dated: 6/23/23

Nancy Weaver
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:58
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-3-6-032223	**Units:**	ug/L
Lab Code:	R2302544-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	04/03/23 14:40	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/23 14:40	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
2-Butanone (MEK)	**2.6 J**	10	1.0	0.78	1	04/03/23 14:40	
2-Hexanone	**1.7 J**	10	1.0	0.20	1	04/03/23 14:40	
4-Methyl-2-pentanone	**0.36 J**	10	1.0	0.20	1	04/03/23 14:40	
Acetone	**14 J**	20	10	5.0	1	04/03/23 14:40	
Acrylonitrile	ND U	100	5.0	0.90	1	04/03/23 14:40	
Benzene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Bromochloromethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/23 14:40	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/23 14:40	
Carbon Disulfide	ND U	10	1.0	0.42	1	04/03/23 14:40	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/23 14:40	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/23 14:40	
Chloroform	ND U	5.0	1.0	0.51	1	04/03/23 14:40	
Chloromethane	ND U	5.0	1.0	0.80	1	04/03/23 14:40	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Dibromomethane	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Methylene Chloride	ND U	5.0	1.0	0.65	1	04/03/23 14:40	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Iodomethane	ND U	10	5.0	4.3	1	04/03/23 14:40	
Styrene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Tetrachloroethene (PCE)	**6.0**	5.0	1.0	0.21	1	04/03/23 14:40	
Toluene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Trichloroethene (TCE)	**2.3 J**	5.0	1.0	0.20	1	04/03/23 14:40	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/23 14:40	
Vinyl Acetate	ND U	10	2.0	1.1	1	04/03/23 14:40	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
Xylenes, Total	ND U	5.0	3.0	0.23	1	04/03/23 14:40	
cis-1,2-Dichloroethene	**99**	5.0	1.0	0.23	1	04/03/23 14:40	

MT 6/13/23

ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:58
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-3-6-032223	**Units:**	ug/L
Lab Code:	R2302544-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/03/23 14:40	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/23 14:40	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/23 14:40	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	04/03/23 14:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 114	04/03/23 14:40	
Dibromofluoromethane	96	80 - 119	04/03/23 14:40	
Toluene-d8	95	89 - 112	04/03/23 14:40	

2

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-2-7-032223	**Units:**	ug/L
Lab Code:	R2302544-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	04/03/23 15:03	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	04/03/23 15:03	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	04/03/23 15:03	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	04/03/23 15:03	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	04/03/23 15:03	
2-Hexanone	ND U	50	5.0	1.0	5	04/03/23 15:03	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	04/03/23 15:03	
Acetone	ND U	100	50	25	5	04/03/23 15:03	
Acrylonitrile	ND U	500	25	4.5	5	04/03/23 15:03	
Benzene	ND U	25	5.0	1.0	5	04/03/23 15:03	
Bromochloromethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
Bromodichloromethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
Bromoform	ND U	25	5.0	1.3	5	04/03/23 15:03	
Bromomethane	ND U	25	5.0	3.5	5	04/03/23 15:03	
Carbon Disulfide	ND U	50	5.0	2.1	5	04/03/23 15:03	
Carbon Tetrachloride	**2.5 J**	25	5.0	1.7	5	04/03/23 15:03	
Chlorobenzene	ND U	25	5.0	1.0	5	04/03/23 15:03	
Chloroethane	ND U	25	5.0	1.2	5	04/03/23 15:03	
Chloroform	ND U	25	5.0	2.6	5	04/03/23 15:03	
Chloromethane	ND U	25	5.0	4.0	5	04/03/23 15:03	
Dibromochloromethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
Dibromomethane	ND U	25	5.0	1.0	5	04/03/23 15:03	
Methylene Chloride	ND U	25	5.0	3.3	5	04/03/23 15:03	
Ethylbenzene	ND U	25	5.0	1.0	5	04/03/23 15:03	
Iodomethane	ND U	50	25	22	5	04/03/23 15:03	
Styrene	ND U	25	5.0	1.0	5	04/03/23 15:03	
Tetrachloroethene (PCE)	**600**	25	5.0	1.1	5	04/03/23 15:03	
Toluene	ND U	25	5.0	1.0	5	04/03/23 15:03	
Trichloroethene (TCE)	**3.9 J**	25	5.0	1.0	5	04/03/23 15:03	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	04/03/23 15:03	
Vinyl Acetate	ND U	50	10	5.5	5	04/03/23 15:03	
Vinyl Chloride	ND U	25	5.0	1.0	5	04/03/23 15:03	
Xylenes, Total	ND U	25	15	1.2	5	04/03/23 15:03	
cis-1,2-Dichloroethene	ND U	25	5.0	1.2	5	04/03/23 15:03	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 09:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-2-7-032223	**Units:**	ug/L
Lab Code:	R2302544-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	04/03/23 15:03	
m,p-Xylenes	ND U	25	10	1.0	5	04/03/23 15:03	
o-Xylene	ND U	25	5.0	1.0	5	04/03/23 15:03	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	04/03/23 15:03	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	04/03/23 15:03	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	04/03/23 15:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 114	04/03/23 15:03	
Dibromofluoromethane	94	80 - 119	04/03/23 15:03	
Toluene-d8	95	89 - 112	04/03/23 15:03	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 12:23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-7-032223	**Units:**	ug/L
Lab Code:	R2302544-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,1,1-Trichloroethane (TCA)	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,1,2,2-Tetrachloroethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,1,2-Trichloroethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,1-Dichloroethane (1,1-DCA)	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,1-Dichloroethene (1,1-DCE)	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,2,3-Trichloropropane	ND U	13	2.5	0.65	2.5	04/03/23 15:26	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	13	2.5	1.2	2.5	04/03/23 15:26	
1,2-Dibromoethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,2-Dichlorobenzene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,2-Dichloroethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,2-Dichloropropane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
1,4-Dichlorobenzene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
2-Butanone (MEK)	ND U	25	2.5	2.0	2.5	04/03/23 15:26	
2-Hexanone	ND U	25	2.5	0.50	2.5	04/03/23 15:26	
4-Methyl-2-pentanone	ND U	25	2.5	0.50	2.5	04/03/23 15:26	
Acetone	ND U	50	25	13	2.5	04/03/23 15:26	
Acrylonitrile	ND U	250	13	2.3	2.5	04/03/23 15:26	
Benzene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Bromochloromethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Bromodichloromethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Bromoform	ND U	13	2.5	0.63	2.5	04/03/23 15:26	
Bromomethane	ND U	13	2.5	1.8	2.5	04/03/23 15:26	
Carbon Disulfide	ND U	25	2.5	1.1	2.5	04/03/23 15:26	
Carbon Tetrachloride	ND U	13	2.5	0.85	2.5	04/03/23 15:26	
Chlorobenzene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Chloroethane	ND U	13	2.5	0.58	2.5	04/03/23 15:26	
Chloroform	**1.7 J**	13	2.5	1.3	2.5	04/03/23 15:26	
Chloromethane	ND U	13	2.5	2.0	2.5	04/03/23 15:26	
Dibromochloromethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Dibromomethane	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Methylene Chloride	ND U	13	2.5	1.7	2.5	04/03/23 15:26	
Ethylbenzene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Iodomethane	ND U	25	13	11	2.5	04/03/23 15:26	
Styrene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Tetrachloroethene (PCE)	480 ~~540~~ E	~~13~~ 75	~~2.5~~ 50	~~0.53~~ 1.1	~~2.5~~ 5	04/03/23 15:26	
Toluene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Trichloroethene (TCE)	**3.7 J**	13	2.5	0.50	2.5	04/03/23 15:26	
Trichlorofluoromethane (CFC 11)	ND U	13	2.5	0.60	2.5	04/03/23 15:26	
Vinyl Acetate	ND U	25	5.0	2.8	2.5	04/03/23 15:26	
Vinyl Chloride	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
Xylenes, Total	ND U	13	7.5	0.58	2.5	04/03/23 15:26	
cis-1,2-Dichloroethene	ND U	13	2.5	0.58	2.5	04/03/23 15:26	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 12:23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-7-032223	**Units:**	ug/L
Lab Code:	R2302544-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
m,p-Xylenes	ND U	13	5.0	0.50	2.5	04/03/23 15:26	
o-Xylene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
trans-1,2-Dichloroethene	ND U	13	2.5	0.50	2.5	04/03/23 15:26	
trans-1,3-Dichloropropene	ND U	13	2.5	0.58	2.5	04/03/23 15:26	
trans-1,4-Dichloro-2-butene	ND U	13	2.5	2.0	2.5	04/03/23 15:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 114	04/03/23 15:26	
Dibromofluoromethane	99	80 - 119	04/03/23 15:26	
Toluene-d8	98	89 - 112	04/03/23 15:26	

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Analytical Report

3DL

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 12:23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-7-032223	**Units:**	ug/L
Lab Code:	R2302544-003	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	04/04/23 18:25	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	04/04/23 18:25	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	04/04/23 18:25	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	04/04/23 18:25	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	04/04/23 18:25	
2-Hexanone	ND U	50	5.0	1.0	5	04/04/23 18:25	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	04/04/23 18:25	
Acetone	ND U	100	50	25	5	04/04/23 18:25	
Acrylonitrile	ND U	500	25	4.5	5	04/04/23 18:25	
Benzene	ND U	25	5.0	1.0	5	04/04/23 18:25	
Bromochloromethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
Bromodichloromethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
Bromoform	ND U	25	5.0	1.3	5	04/04/23 18:25	
Bromomethane	ND U	25	5.0	3.5	5	04/04/23 18:25	
Carbon Disulfide	ND U	50	5.0	2.1	5	04/04/23 18:25	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	04/04/23 18:25	
Chlorobenzene	ND U	25	5.0	1.0	5	04/04/23 18:25	
Chloroethane	ND U	25	5.0	1.2	5	04/04/23 18:25	
Chloroform	ND U	25	5.0	2.6	5	04/04/23 18:25	
Chloromethane	ND U	25	5.0	4.0	5	04/04/23 18:25	
Dibromochloromethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
Dibromomethane	ND U	25	5.0	1.0	5	04/04/23 18:25	
Methylene Chloride	ND U	25	5.0	3.3	5	04/04/23 18:25	
Ethylbenzene	ND U	25	5.0	1.0	5	04/04/23 18:25	
Iodomethane	ND U	50	25	22	5	04/04/23 18:25	
Styrene	ND U	25	5.0	1.0	5	04/04/23 18:25	
Tetrachloroethene (PCE)	**480 D**	25	5.0	1.1	5	04/04/23 18:25	
Toluene	ND U	25	5.0	1.0	5	04/04/23 18:25	
Trichloroethene (TCE)	**3.4 DJ**	25	5.0	1.0	5	04/04/23 18:25	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	04/04/23 18:25	
Vinyl Acetate	ND U	50	10	5.5	5	04/04/23 18:25	
Vinyl Chloride	ND U	25	5.0	1.0	5	04/04/23 18:25	
Xylenes, Total	ND U	25	15	1.2	5	04/04/23 18:25	
cis-1,2-Dichloroethene	ND U	25	5.0	1.2	5	04/04/23 18:25	

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3DL

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 12:23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-6-7-032223	**Units:**	ug/L
Lab Code:	R2302544-003	**Basis:**	NA

use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	04/04/23 18:25	
m,p-Xylenes	ND U	25	10	1.0	5	04/04/23 18:25	
o-Xylene	ND U	25	5.0	1.0	5	04/04/23 18:25	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	04/04/23 18:25	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	04/04/23 18:25	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	04/04/23 18:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 114	04/04/23 18:25	
Dibromofluoromethane	98	80 - 119	04/04/23 18:25	
Toluene-d8	101	89 - 112	04/04/23 18:25	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 15:51
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-4-5-032223	**Units:**	ug/L
Lab Code:	R2302544-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	04/03/23 15:49	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	04/03/23 15:49	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	04/03/23 15:49	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	04/03/23 15:49	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	04/03/23 15:49	
1,1-Dichloroethene (1,1-DCE)	ND U	50	10	2.0	10	04/03/23 15:49	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	04/03/23 15:49	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	04/03/23 15:49	
1,2-Dibromoethane	ND U	50	10	2.0	10	04/03/23 15:49	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	04/03/23 15:49	
1,2-Dichloroethane	ND U	50	10	2.0	10	04/03/23 15:49	
1,2-Dichloropropane	ND U	50	10	2.0	10	04/03/23 15:49	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	04/03/23 15:49	
2-Butanone (MEK)	ND U	100	10	7.8	10	04/03/23 15:49	
2-Hexanone	ND U	100	10	2.0	10	04/03/23 15:49	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	04/03/23 15:49	
Acetone	ND U	200	100	50	10	04/03/23 15:49	
Acrylonitrile	ND U	1000	50	9.0	10	04/03/23 15:49	
Benzene	ND U	50	10	2.0	10	04/03/23 15:49	
Bromochloromethane	ND U	50	10	2.0	10	04/03/23 15:49	
Bromodichloromethane	ND U	50	10	2.0	10	04/03/23 15:49	
Bromoform	ND U	50	10	2.5	10	04/03/23 15:49	
Bromomethane	ND U	50	10	7.0	10	04/03/23 15:49	
Carbon Disulfide	ND U	100	10	4.2	10	04/03/23 15:49	
Carbon Tetrachloride	ND U	50	10	3.4	10	04/03/23 15:49	
Chlorobenzene	ND U	50	10	2.0	10	04/03/23 15:49	
Chloroethane	ND U	50	10	2.3	10	04/03/23 15:49	
Chloroform	ND U	50	10	5.1	10	04/03/23 15:49	
Chloromethane	ND U	50	10	8.0	10	04/03/23 15:49	
Dibromochloromethane	ND U	50	10	2.0	10	04/03/23 15:49	
Dibromomethane	ND U	50	10	2.0	10	04/03/23 15:49	
Methylene Chloride	ND U	50	10	6.5	10	04/03/23 15:49	
Ethylbenzene	ND U	50	10	2.0	10	04/03/23 15:49	
Iodomethane	ND U	100	50	43	10	04/03/23 15:49	
Styrene	ND U	50	10	2.0	10	04/03/23 15:49	
Tetrachloroethene (PCE)	**1400**	50	10	2.1	10	04/03/23 15:49	
Toluene	ND U	50	10	2.0	10	04/03/23 15:49	
Trichloroethene (TCE)	**8.5 J**	50	10	2.0	10	04/03/23 15:49	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	04/03/23 15:49	
Vinyl Acetate	ND U	100	20	11	10	04/03/23 15:49	
Vinyl Chloride	ND U	50	10	2.0	10	04/03/23 15:49	
Xylenes, Total	ND U	50	30	2.3	10	04/03/23 15:49	
cis-1,2-Dichloroethene	ND U	50	10	2.3	10	04/03/23 15:49	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 15:51
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-4-5-032223	**Units:**	ug/L
Lab Code:	R2302544-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	04/03/23 15:49	
m,p-Xylenes	ND U	50	20	2.0	10	04/03/23 15:49	
o-Xylene	ND U	50	10	2.0	10	04/03/23 15:49	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	04/03/23 15:49	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	04/03/23 15:49	
trans-1,4-Dichloro-2-butene	ND U	50	10	7.8	10	04/03/23 15:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 114	04/03/23 15:49	
Dibromofluoromethane	98	80 - 119	04/03/23 15:49	
Toluene-d8	102	89 - 112	04/03/23 15:49	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 16:08
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-7-5-032223	**Units:**	ug/L
Lab Code:	R2302544-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	04/03/23 16:12	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	04/03/23 16:12	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	04/03/23 16:12	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	04/03/23 16:12	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	04/03/23 16:12	
1,1-Dichloroethene (1,1-DCE)	ND U	50	10	2.0	10	04/03/23 16:12	
1,2,3-Trichloropropane	ND U	50	10	2.6	10	04/03/23 16:12	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	04/03/23 16:12	
1,2-Dibromoethane	ND U	50	10	2.0	10	04/03/23 16:12	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	04/03/23 16:12	
1,2-Dichloroethane	ND U	50	10	2.0	10	04/03/23 16:12	
1,2-Dichloropropane	ND U	50	10	2.0	10	04/03/23 16:12	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	04/03/23 16:12	
2-Butanone (MEK)	ND U	100	10	7.8	10	04/03/23 16:12	
2-Hexanone	ND U	100	10	2.0	10	04/03/23 16:12	
4-Methyl-2-pentanone	ND U	100	10	2.0	10	04/03/23 16:12	
Acetone	ND U	200	100	50	10	04/03/23 16:12	
Acrylonitrile	ND U	1000	50	9.0	10	04/03/23 16:12	
Benzene	ND U	50	10	2.0	10	04/03/23 16:12	
Bromochloromethane	ND U	50	10	2.0	10	04/03/23 16:12	
Bromodichloromethane	ND U	50	10	2.0	10	04/03/23 16:12	
Bromoform	ND U	50	10	2.5	10	04/03/23 16:12	
Bromomethane	ND U	50	10	7.0	10	04/03/23 16:12	
Carbon Disulfide	ND U	100	10	4.2	10	04/03/23 16:12	
Carbon Tetrachloride	ND U	50	10	3.4	10	04/03/23 16:12	
Chlorobenzene	ND U	50	10	2.0	10	04/03/23 16:12	
Chloroethane	ND U	50	10	2.3	10	04/03/23 16:12	
Chloroform	ND U	50	10	5.1	10	04/03/23 16:12	
Chloromethane	ND U	50	10	8.0	10	04/03/23 16:12	
Dibromochloromethane	ND U	50	10	2.0	10	04/03/23 16:12	
Dibromomethane	ND U	50	10	2.0	10	04/03/23 16:12	
Methylene Chloride	ND U	50	10	6.5	10	04/03/23 16:12	
Ethylbenzene	ND U	50	10	2.0	10	04/03/23 16:12	
Iodomethane	ND U	100	50	43	10	04/03/23 16:12	
Styrene	ND U	50	10	2.0	10	04/03/23 16:12	
Tetrachloroethene (PCE)	**19 J**	50	10	2.1	10	04/03/23 16:12	
Toluene	ND U	50	10	2.0	10	04/03/23 16:12	
Trichloroethene (TCE)	ND U	50	10	2.0	10	04/03/23 16:12	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	04/03/23 16:12	
Vinyl Acetate	ND U	100	20	11	10	04/03/23 16:12	
Vinyl Chloride	ND U	50	10	2.0	10	04/03/23 16:12	
Xylenes, Total	ND U	50	30	2.3	10	04/03/23 16:12	
cis-1,2-Dichloroethene	ND U	50	10	2.3	10	04/03/23 16:12	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 16:08
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-7-5-032223	**Units:**	ug/L
Lab Code:	R2302544-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	04/03/23 16:12	
m,p-Xylenes	ND U	50	20	2.0	10	04/03/23 16:12	
o-Xylene	ND U	50	10	2.0	10	04/03/23 16:12	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	04/03/23 16:12	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	04/03/23 16:12	
trans-1,4-Dichloro-2-butene	ND U	50	10	7.8	10	04/03/23 16:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 114	04/03/23 16:12	
Dibromofluoromethane	98	80 - 119	04/03/23 16:12	
Toluene-d8	98	89 - 112	04/03/23 16:12	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 14:32
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-4-4-032223	**Units:**	ug/L
Lab Code:	R2302544-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	04/03/23 16:35	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	04/03/23 16:35	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	04/03/23 16:35	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	04/03/23 16:35	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	04/03/23 16:35	
2-Hexanone	ND U	50	5.0	1.0	5	04/03/23 16:35	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	04/03/23 16:35	
Acetone	ND U	100	50	25	5	04/03/23 16:35	
Acrylonitrile	ND U	500	25	4.5	5	04/03/23 16:35	
Benzene	ND U	25	5.0	1.0	5	04/03/23 16:35	
Bromochloromethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
Bromodichloromethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
Bromoform	ND U	25	5.0	1.3	5	04/03/23 16:35	
Bromomethane	ND U	25	5.0	3.5	5	04/03/23 16:35	
Carbon Disulfide	ND U	50	5.0	2.1	5	04/03/23 16:35	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	04/03/23 16:35	
Chlorobenzene	ND U	25	5.0	1.0	5	04/03/23 16:35	
Chloroethane	ND U	25	5.0	1.2	5	04/03/23 16:35	
Chloroform	ND U	25	5.0	2.6	5	04/03/23 16:35	
Chloromethane	ND U	25	5.0	4.0	5	04/03/23 16:35	
Dibromochloromethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
Dibromomethane	ND U	25	5.0	1.0	5	04/03/23 16:35	
Methylene Chloride	ND U	25	5.0	3.3	5	04/03/23 16:35	
Ethylbenzene	ND U	25	5.0	1.0	5	04/03/23 16:35	
Iodomethane	ND U	50	25	22	5	04/03/23 16:35	
Styrene	ND U	25	5.0	1.0	5	04/03/23 16:35	
Tetrachloroethene (PCE)	**220**	25	5.0	1.1	5	04/03/23 16:35	
Toluene	ND U	25	5.0	1.0	5	04/03/23 16:35	
Trichloroethene (TCE)	**5.4 J**	25	5.0	1.0	5	04/03/23 16:35	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	04/03/23 16:35	
Vinyl Acetate	ND U	50	10	5.5	5	04/03/23 16:35	
Vinyl Chloride	ND U	25	5.0	1.0	5	04/03/23 16:35	
Xylenes, Total	ND U	25	15	1.2	5	04/03/23 16:35	
cis-1,2-Dichloroethene	**44**	25	5.0	1.2	5	04/03/23 16:35	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 14:32
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-4-4-032223	**Units:**	ug/L
Lab Code:	R2302544-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	04/03/23 16:35	
m,p-Xylenes	ND U	25	10	1.0	5	04/03/23 16:35	
o-Xylene	ND U	25	5.0	1.0	5	04/03/23 16:35	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	04/03/23 16:35	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	04/03/23 16:35	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	04/03/23 16:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 114	04/03/23 16:35	
Dibromofluoromethane	92	80 - 119	04/03/23 16:35	
Toluene-d8	91	89 - 112	04/03/23 16:35	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 14:24
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-7-3-032223	**Units:**	ug/L
Lab Code:	R2302544-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	04/03/23 16:58	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/23 16:58	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	04/03/23 16:58	
2-Hexanone	**0.45 J**	10	1.0	0.20	1	04/03/23 16:58	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/03/23 16:58	
Acetone	ND U	20	10	5.0	1	04/03/23 16:58	
Acrylonitrile	ND U	100	5.0	0.90	1	04/03/23 16:58	
Benzene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Bromochloromethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/23 16:58	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/23 16:58	
Carbon Disulfide	ND U	10	1.0	0.42	1	04/03/23 16:58	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/23 16:58	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/23 16:58	
Chloroform	ND U	5.0	1.0	0.51	1	04/03/23 16:58	
Chloromethane	ND U	5.0	1.0	0.80	1	04/03/23 16:58	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Dibromomethane	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Methylene Chloride	ND U	5.0	1.0	0.65	1	04/03/23 16:58	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Iodomethane	ND U	10	5.0	4.3	1	04/03/23 16:58	
Styrene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Tetrachloroethene (PCE)	**1.6 J**	5.0	1.0	0.21	1	04/03/23 16:58	
Toluene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/23 16:58	
Vinyl Acetate	ND U	10	2.0	1.1	1	04/03/23 16:58	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
Xylenes, Total	ND U	5.0	3.0	0.23	1	04/03/23 16:58	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/03/23 16:58	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 14:24
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-7-3-032223	**Units:**	ug/L
Lab Code:	R2302544-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/03/23 16:58	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/23 16:58	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/23 16:58	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	04/03/23 16:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 114	04/03/23 16:58	
Dibromofluoromethane	91	80 - 119	04/03/23 16:58	
Toluene-d8	91	89 - 112	04/03/23 16:58	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 14:41
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-8-5-032223	**Units:**	ug/L
Lab Code:	R2302544-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	04/03/23 17:21	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/23 17:21	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	04/03/23 17:21	
2-Hexanone	ND U	10	1.0	0.20	1	04/03/23 17:21	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/03/23 17:21	
Acetone	ND U	20	10	5.0	1	04/03/23 17:21	
Acrylonitrile	ND U	100	5.0	0.90	1	04/03/23 17:21	
Benzene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Bromochloromethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/23 17:21	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/23 17:21	
Carbon Disulfide	ND U	10	1.0	0.42	1	04/03/23 17:21	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/23 17:21	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/23 17:21	
Chloroform	**0.84 J**	5.0	1.0	0.51	1	04/03/23 17:21	
Chloromethane	ND U	5.0	1.0	0.80	1	04/03/23 17:21	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Dibromomethane	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Methylene Chloride	ND U	5.0	1.0	0.65	1	04/03/23 17:21	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Iodomethane	ND U	10	5.0	4.3	1	04/03/23 17:21	
Styrene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Tetrachloroethene (PCE)	**33**	5.0	1.0	0.21	1	04/03/23 17:21	
Toluene	**0.41 J**	5.0	1.0	0.20	1	04/03/23 17:21	
Trichloroethene (TCE)	**49**	5.0	1.0	0.20	1	04/03/23 17:21	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/23 17:21	
Vinyl Acetate	ND U	10	2.0	1.1	1	04/03/23 17:21	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
Xylenes, Total	**0.38 J**	5.0	3.0	0.23	1	04/03/23 17:21	
cis-1,2-Dichloroethene	**7.7**	5.0	1.0	0.23	1	04/03/23 17:21	

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Analytical Report

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Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 14:41
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-8-5-032223	**Units:**	ug/L
Lab Code:	R2302544-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
m,p-Xylenes	**0.38 J**	5.0	2.0	0.20	1	04/03/23 17:21	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/23 17:21	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/23 17:21	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	04/03/23 17:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 114	04/03/23 17:21	
Dibromofluoromethane	92	80 - 119	04/03/23 17:21	
Toluene-d8	93	89 - 112	04/03/23 17:21	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 11:02
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-3-7-032223	**Units:**	ug/L
Lab Code:	R2302544-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	250	50	10	50	04/03/23 17:44	
1,1,1-Trichloroethane (TCA)	ND U	250	50	10	50	04/03/23 17:44	
1,1,2,2-Tetrachloroethane	ND U	250	50	10	50	04/03/23 17:44	
1,1,2-Trichloroethane	ND U	250	50	10	50	04/03/23 17:44	
1,1-Dichloroethane (1,1-DCA)	ND U	250	50	10	50	04/03/23 17:44	
1,1-Dichloroethene (1,1-DCE)	ND U	250	50	10	50	04/03/23 17:44	
1,2,3-Trichloropropane	ND U	250	50	13	50	04/03/23 17:44	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	250	50	23	50	04/03/23 17:44	
1,2-Dibromoethane	ND U	250	50	10	50	04/03/23 17:44	
1,2-Dichlorobenzene	ND U	250	50	10	50	04/03/23 17:44	
1,2-Dichloroethane	ND U	250	50	10	50	04/03/23 17:44	
1,2-Dichloropropane	ND U	250	50	10	50	04/03/23 17:44	
1,4-Dichlorobenzene	ND U	250	50	10	50	04/03/23 17:44	
2-Butanone (MEK)	ND U	500	50	39	50	04/03/23 17:44	
2-Hexanone	ND U	500	50	10	50	04/03/23 17:44	
4-Methyl-2-pentanone	ND U	500	50	10	50	04/03/23 17:44	
Acetone	ND U	1000	500	250	50	04/03/23 17:44	
Acrylonitrile	ND U	5000	250	45	50	04/03/23 17:44	
Benzene	ND U	250	50	10	50	04/03/23 17:44	
Bromochloromethane	ND U	250	50	10	50	04/03/23 17:44	
Bromodichloromethane	ND U	250	50	10	50	04/03/23 17:44	
Bromoform	ND U	250	50	13	50	04/03/23 17:44	
Bromomethane	ND U	250	50	35	50	04/03/23 17:44	
Carbon Disulfide	ND U	500	50	21	50	04/03/23 17:44	
Carbon Tetrachloride	ND U	250	50	17	50	04/03/23 17:44	
Chlorobenzene	ND U	250	50	10	50	04/03/23 17:44	
Chloroethane	ND U	250	50	12	50	04/03/23 17:44	
Chloroform	ND U	250	50	26	50	04/03/23 17:44	
Chloromethane	ND U	250	50	40	50	04/03/23 17:44	
Dibromochloromethane	ND U	250	50	10	50	04/03/23 17:44	
Dibromomethane	ND U	250	50	10	50	04/03/23 17:44	
Methylene Chloride	ND U	250	50	33	50	04/03/23 17:44	
Ethylbenzene	ND U	250	50	10	50	04/03/23 17:44	
Iodomethane	ND U	500	250	220	50	04/03/23 17:44	
Styrene	ND U	250	50	10	50	04/03/23 17:44	
Tetrachloroethene (PCE)	**5000**	250	50	11	50	04/03/23 17:44	
Toluene	ND U	250	50	10	50	04/03/23 17:44	
Trichloroethene (TCE)	**28 J**	250	50	10	50	04/03/23 17:44	
Trichlorofluoromethane (CFC 11)	ND U	250	50	12	50	04/03/23 17:44	
Vinyl Acetate	ND U	500	100	55	50	04/03/23 17:44	
Vinyl Chloride	ND U	250	50	10	50	04/03/23 17:44	
Xylenes, Total	ND U	250	150	12	50	04/03/23 17:44	
cis-1,2-Dichloroethene	ND U	250	50	12	50	04/03/23 17:44	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 11:02
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-3-7-032223	**Units:**	ug/L
Lab Code:	R2302544-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	250	50	10	50	04/03/23 17:44	
m,p-Xylenes	ND U	250	100	10	50	04/03/23 17:44	
o-Xylene	ND U	250	50	10	50	04/03/23 17:44	
trans-1,2-Dichloroethene	ND U	250	50	10	50	04/03/23 17:44	
trans-1,3-Dichloropropene	ND U	250	50	12	50	04/03/23 17:44	
trans-1,4-Dichloro-2-butene	ND U	250	50	39	50	04/03/23 17:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 114	04/03/23 17:44	
Dibromofluoromethane	92	80 - 119	04/03/23 17:44	
Toluene-d8	95	89 - 112	04/03/23 17:44	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 12:02
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-3-2-032223	**Units:**	ug/L
Lab Code:	R2302544-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	04/03/23 18:07	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/23 18:07	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	04/03/23 18:07	
2-Hexanone	**0.41 J**	10	1.0	0.20	1	04/03/23 18:07	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/03/23 18:07	
Acetone	ND U	20	10	5.0	1	04/03/23 18:07	
Acrylonitrile	ND U	100	5.0	0.90	1	04/03/23 18:07	
Benzene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Bromochloromethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/23 18:07	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/23 18:07	
Carbon Disulfide	ND U	10	1.0	0.42	1	04/03/23 18:07	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/23 18:07	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/23 18:07	
Chloroform	ND U	5.0	1.0	0.51	1	04/03/23 18:07	
Chloromethane	ND U	5.0	1.0	0.80	1	04/03/23 18:07	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Dibromomethane	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Methylene Chloride	ND U	5.0	1.0	0.65	1	04/03/23 18:07	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Iodomethane	ND U	10	5.0	4.3	1	04/03/23 18:07	
Styrene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Tetrachloroethene (PCE)	**78**	5.0	1.0	0.21	1	04/03/23 18:07	
Toluene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Trichloroethene (TCE)	**2.2 J**	5.0	1.0	0.20	1	04/03/23 18:07	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/23 18:07	
Vinyl Acetate	ND U	10	2.0	1.1	1	04/03/23 18:07	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
Xylenes, Total	ND U	5.0	3.0	0.23	1	04/03/23 18:07	
cis-1,2-Dichloroethene	**3.2 J**	5.0	1.0	0.23	1	04/03/23 18:07	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 12:02
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-3-2-032223	**Units:**	ug/L
Lab Code:	R2302544-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/03/23 18:07	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/23 18:07	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/23 18:07	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	04/03/23 18:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 114	04/03/23 18:07	
Dibromofluoromethane	91	80 - 119	04/03/23 18:07	
Toluene-d8	90	89 - 112	04/03/23 18:07	

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Analytical Report

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Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 16:55
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-4-6-032223	**Units:**	ug/L
Lab Code:	R2302544-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	100	20	4.0	20	04/03/23 18:30	
1,1,1-Trichloroethane (TCA)	ND U	100	20	4.0	20	04/03/23 18:30	
1,1,2,2-Tetrachloroethane	ND U	100	20	4.0	20	04/03/23 18:30	
1,1,2-Trichloroethane	ND U	100	20	4.0	20	04/03/23 18:30	
1,1-Dichloroethane (1,1-DCA)	ND U	100	20	4.0	20	04/03/23 18:30	
1,1-Dichloroethene (1,1-DCE)	ND U	100	20	4.0	20	04/03/23 18:30	
1,2,3-Trichloropropane	ND U	100	20	5.2	20	04/03/23 18:30	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	100	20	9.0	20	04/03/23 18:30	
1,2-Dibromoethane	ND U	100	20	4.0	20	04/03/23 18:30	
1,2-Dichlorobenzene	ND U	100	20	4.0	20	04/03/23 18:30	
1,2-Dichloroethane	ND U	100	20	4.0	20	04/03/23 18:30	
1,2-Dichloropropane	ND U	100	20	4.0	20	04/03/23 18:30	
1,4-Dichlorobenzene	ND U	100	20	4.0	20	04/03/23 18:30	
2-Butanone (MEK)	ND U	200	20	16	20	04/03/23 18:30	
2-Hexanone	ND U	200	20	4.0	20	04/03/23 18:30	
4-Methyl-2-pentanone	ND U	200	20	4.0	20	04/03/23 18:30	
Acetone	ND U	400	200	100	20	04/03/23 18:30	
Acrylonitrile	ND U	2000	100	18	20	04/03/23 18:30	
Benzene	ND U	100	20	4.0	20	04/03/23 18:30	
Bromochloromethane	ND U	100	20	4.0	20	04/03/23 18:30	
Bromodichloromethane	ND U	100	20	4.0	20	04/03/23 18:30	
Bromoform	ND U	100	20	5.0	20	04/03/23 18:30	
Bromomethane	ND U	100	20	14	20	04/03/23 18:30	
Carbon Disulfide	ND U	200	20	8.4	20	04/03/23 18:30	
Carbon Tetrachloride	ND U	100	20	6.8	20	04/03/23 18:30	
Chlorobenzene	ND U	100	20	4.0	20	04/03/23 18:30	
Chloroethane	ND U	100	20	4.6	20	04/03/23 18:30	
Chloroform	ND U	100	20	11	20	04/03/23 18:30	
Chloromethane	ND U	100	20	16	20	04/03/23 18:30	
Dibromochloromethane	ND U	100	20	4.0	20	04/03/23 18:30	
Dibromomethane	ND U	100	20	4.0	20	04/03/23 18:30	
Methylene Chloride	ND U	100	20	13	20	04/03/23 18:30	
Ethylbenzene	ND U	100	20	4.0	20	04/03/23 18:30	
Iodomethane	ND U	200	100	86	20	04/03/23 18:30	
Styrene	ND U	100	20	4.0	20	04/03/23 18:30	
Tetrachloroethene (PCE)	**1800**	100	20	4.2	20	04/03/23 18:30	
Toluene	ND U	100	20	4.0	20	04/03/23 18:30	
Trichloroethene (TCE)	**13 J**	100	20	4.0	20	04/03/23 18:30	
Trichlorofluoromethane (CFC 11)	ND U	100	20	4.8	20	04/03/23 18:30	
Vinyl Acetate	ND U	200	40	22	20	04/03/23 18:30	
Vinyl Chloride	ND U	100	20	4.0	20	04/03/23 18:30	
Xylenes, Total	ND U	100	60	4.6	20	04/03/23 18:30	
cis-1,2-Dichloroethene	ND U	100	20	4.6	20	04/03/23 18:30	

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Analytical Report

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Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 16:55
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-4-6-032223	**Units:**	ug/L
Lab Code:	R2302544-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	100	20	4.0	20	04/03/23 18:30	
m,p-Xylenes	ND U	100	40	4.0	20	04/03/23 18:30	
o-Xylene	ND U	100	20	4.0	20	04/03/23 18:30	
trans-1,2-Dichloroethene	ND U	100	20	4.0	20	04/03/23 18:30	
trans-1,3-Dichloropropene	ND U	100	20	4.6	20	04/03/23 18:30	
trans-1,4-Dichloro-2-butene	ND U	100	20	16	20	04/03/23 18:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	86	85 - 114	04/03/23 18:30	
Dibromofluoromethane	91	80 - 119	04/03/23 18:30	
Toluene-d8	92	89 - 112	04/03/23 18:30	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 17:35
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-9-4-032223	**Units:**	ug/L
Lab Code:	R2302544-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	100	20	4.0	20	04/03/23 18:53	
1,1,1-Trichloroethane (TCA)	ND U	100	20	4.0	20	04/03/23 18:53	
1,1,2,2-Tetrachloroethane	ND U	100	20	4.0	20	04/03/23 18:53	
1,1,2-Trichloroethane	ND U	100	20	4.0	20	04/03/23 18:53	
1,1-Dichloroethane (1,1-DCA)	ND U	100	20	4.0	20	04/03/23 18:53	
1,1-Dichloroethene (1,1-DCE)	ND U	100	20	4.0	20	04/03/23 18:53	
1,2,3-Trichloropropane	ND U	100	20	5.2	20	04/03/23 18:53	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	100	20	9.0	20	04/03/23 18:53	
1,2-Dibromoethane	ND U	100	20	4.0	20	04/03/23 18:53	
1,2-Dichlorobenzene	ND U	100	20	4.0	20	04/03/23 18:53	
1,2-Dichloroethane	ND U	100	20	4.0	20	04/03/23 18:53	
1,2-Dichloropropane	ND U	100	20	4.0	20	04/03/23 18:53	
1,4-Dichlorobenzene	ND U	100	20	4.0	20	04/03/23 18:53	
2-Butanone (MEK)	ND U	200	20	16	20	04/03/23 18:53	
2-Hexanone	ND U	200	20	4.0	20	04/03/23 18:53	
4-Methyl-2-pentanone	ND U	200	20	4.0	20	04/03/23 18:53	
Acetone	ND U	400	200	100	20	04/03/23 18:53	
Acrylonitrile	ND U	2000	100	18	20	04/03/23 18:53	
Benzene	ND U	100	20	4.0	20	04/03/23 18:53	
Bromochloromethane	ND U	100	20	4.0	20	04/03/23 18:53	
Bromodichloromethane	ND U	100	20	4.0	20	04/03/23 18:53	
Bromoform	ND U	100	20	5.0	20	04/03/23 18:53	
Bromomethane	ND U	100	20	14	20	04/03/23 18:53	
Carbon Disulfide	ND U	200	20	8.4	20	04/03/23 18:53	
Carbon Tetrachloride	ND U	100	20	6.8	20	04/03/23 18:53	
Chlorobenzene	ND U	100	20	4.0	20	04/03/23 18:53	
Chloroethane	ND U	100	20	4.6	20	04/03/23 18:53	
Chloroform	ND U	100	20	11	20	04/03/23 18:53	
Chloromethane	ND U	100	20	16	20	04/03/23 18:53	
Dibromochloromethane	ND U	100	20	4.0	20	04/03/23 18:53	
Dibromomethane	ND U	100	20	4.0	20	04/03/23 18:53	
Methylene Chloride	ND U	100	20	13	20	04/03/23 18:53	
Ethylbenzene	ND U	100	20	4.0	20	04/03/23 18:53	
Iodomethane	ND U	200	100	86	20	04/03/23 18:53	
Styrene	ND U	100	20	4.0	20	04/03/23 18:53	
Tetrachloroethene (PCE)	**2200**	100	20	4.2	20	04/03/23 18:53	
Toluene	ND U	100	20	4.0	20	04/03/23 18:53	
Trichloroethene (TCE)	**16 J**	100	20	4.0	20	04/03/23 18:53	
Trichlorofluoromethane (CFC 11)	ND U	100	20	4.8	20	04/03/23 18:53	
Vinyl Acetate	ND U	200	40	22	20	04/03/23 18:53	
Vinyl Chloride	ND U	100	20	4.0	20	04/03/23 18:53	
Xylenes, Total	ND U	100	60	4.6	20	04/03/23 18:53	
cis-1,2-Dichloroethene	**18 J**	100	20	4.6	20	04/03/23 18:53	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 17:35
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-9-4-032223	**Units:**	ug/L
Lab Code:	R2302544-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	100	20	4.0	20	04/03/23 18:53	
m,p-Xylenes	ND U	100	40	4.0	20	04/03/23 18:53	
o-Xylene	ND U	100	20	4.0	20	04/03/23 18:53	
trans-1,2-Dichloroethene	ND U	100	20	4.0	20	04/03/23 18:53	
trans-1,3-Dichloropropene	ND U	100	20	4.6	20	04/03/23 18:53	
trans-1,4-Dichloro-2-butene	ND U	100	20	16	20	04/03/23 18:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 114	04/03/23 18:53	
Dibromofluoromethane	96	80 - 119	04/03/23 18:53	
Toluene-d8	97	89 - 112	04/03/23 18:53	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 15:08
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-7-4-032223	**Units:**	ug/L
Lab Code:	R2302544-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	04/04/23 15:21	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/04/23 15:21	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
1,4-Dichlorobenzene	**0.42 J**	5.0	1.0	0.20	1	04/04/23 15:21	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	04/04/23 15:21	
2-Hexanone	**0.29 J**	10	1.0	0.20	1	04/04/23 15:21	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/04/23 15:21	
Acetone	ND U	20	10	5.0	1	04/04/23 15:21	
Acrylonitrile	ND U	100	5.0	0.90	1	04/04/23 15:21	
Benzene	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Bromochloromethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Bromoform	ND U	5.0	1.0	0.25	1	04/04/23 15:21	
Bromomethane	ND U	5.0	1.0	0.70	1	04/04/23 15:21	
Carbon Disulfide	ND U	10	1.0	0.42	1	04/04/23 15:21	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/04/23 15:21	
Chlorobenzene	**0.20 J**	5.0	1.0	0.20	1	04/04/23 15:21	
Chloroethane	ND U	5.0	1.0	0.23	1	04/04/23 15:21	
Chloroform	ND U	5.0	1.0	0.51	1	04/04/23 15:21	
Chloromethane	ND U	5.0	1.0	0.80	1	04/04/23 15:21	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Dibromomethane	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Methylene Chloride	ND U	5.0	1.0	0.65	1	04/04/23 15:21	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Iodomethane	ND U	10	5.0	4.3	1	04/04/23 15:21	
Styrene	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.21	1	04/04/23 15:21	
Toluene	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/04/23 15:21	
Vinyl Acetate	ND U	10	2.0	1.1	1	04/04/23 15:21	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
Xylenes, Total	ND U	5.0	3.0	0.23	1	04/04/23 15:21	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/04/23 15:21	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 15:08
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-7-4-032223	**Units:**	ug/L
Lab Code:	R2302544-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/04/23 15:21	
o-Xylene	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/04/23 15:21	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/04/23 15:21	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	04/04/23 15:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 114	04/04/23 15:21	
Dibromofluoromethane	96	80 - 119	04/04/23 15:21	
Toluene-d8	99	89 - 112	04/04/23 15:21	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 07:46
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-2-4-032223	**Units:**	ug/L
Lab Code:	R2302544-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	04/04/23 18:02	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/04/23 18:02	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
2-Butanone (MEK)	**1.7 J**	10	1.0	0.78	1	04/04/23 18:02	
2-Hexanone	**1.7 J**	10	1.0	0.20	1	04/04/23 18:02	
4-Methyl-2-pentanone	**0.24 J**	10	1.0	0.20	1	04/04/23 18:02	
Acetone	**9.4 J**	20	10	5.0	1	04/04/23 18:02	
Acrylonitrile	ND U	100	5.0	0.90	1	04/04/23 18:02	
Benzene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Bromochloromethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Bromoform	ND U	5.0	1.0	0.25	1	04/04/23 18:02	
Bromomethane	ND U	5.0	1.0	0.70	1	04/04/23 18:02	
Carbon Disulfide	ND U	10	1.0	0.42	1	04/04/23 18:02	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/04/23 18:02	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Chloroethane	ND U	5.0	1.0	0.23	1	04/04/23 18:02	
Chloroform	ND U	5.0	1.0	0.51	1	04/04/23 18:02	
Chloromethane	ND U	5.0	1.0	0.80	1	04/04/23 18:02	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Dibromomethane	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Methylene Chloride	ND U	5.0	1.0	0.65	1	04/04/23 18:02	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Iodomethane	ND U	10	5.0	4.3	1	04/04/23 18:02	
Styrene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Tetrachloroethene (PCE)	**63**	5.0	1.0	0.21	1	04/04/23 18:02	
Toluene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Trichloroethene (TCE)	**1.8 J**	5.0	1.0	0.20	1	04/04/23 18:02	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/04/23 18:02	
Vinyl Acetate	ND U	10	2.0	1.1	1	04/04/23 18:02	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
Xylenes, Total	ND U	5.0	3.0	0.23	1	04/04/23 18:02	
cis-1,2-Dichloroethene	**6.2**	5.0	1.0	0.23	1	04/04/23 18:02	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/22/23 07:46
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-2-4-032223	**Units:**	ug/L
Lab Code:	R2302544-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/04/23 18:02	
o-Xylene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/04/23 18:02	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/04/23 18:02	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	04/04/23 18:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 114	04/04/23 18:02	
Dibromofluoromethane	96	80 - 119	04/04/23 18:02	
Toluene-d8	94	89 - 112	04/04/23 18:02	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 11:53
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-10-6-032323	**Units:**	ug/L
Lab Code:	R2302544-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	04/03/23 20:25	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	04/03/23 20:25	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	04/03/23 20:25	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	04/03/23 20:25	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	04/03/23 20:25	
2-Hexanone	ND U	50	5.0	1.0	5	04/03/23 20:25	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	04/03/23 20:25	
Acetone	ND U	100	50	25	5	04/03/23 20:25	
Acrylonitrile	ND U	500	25	4.5	5	04/03/23 20:25	
Benzene	ND U	25	5.0	1.0	5	04/03/23 20:25	
Bromochloromethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
Bromodichloromethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
Bromoform	ND U	25	5.0	1.3	5	04/03/23 20:25	
Bromomethane	ND U	25	5.0	3.5	5	04/03/23 20:25	
Carbon Disulfide	ND U	50	5.0	2.1	5	04/03/23 20:25	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	04/03/23 20:25	
Chlorobenzene	ND U	25	5.0	1.0	5	04/03/23 20:25	
Chloroethane	ND U	25	5.0	1.2	5	04/03/23 20:25	
Chloroform	ND U	25	5.0	2.6	5	04/03/23 20:25	
Chloromethane	ND U	25	5.0	4.0	5	04/03/23 20:25	
Dibromochloromethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
Dibromomethane	ND U	25	5.0	1.0	5	04/03/23 20:25	
Methylene Chloride	ND U	25	5.0	3.3	5	04/03/23 20:25	
Ethylbenzene	ND U	25	5.0	1.0	5	04/03/23 20:25	
Iodomethane	ND U	50	25	22	5	04/03/23 20:25	
Styrene	ND U	25	5.0	1.0	5	04/03/23 20:25	
Tetrachloroethene (PCE)	**680**	25	5.0	1.1	5	04/03/23 20:25	
Toluene	ND U	25	5.0	1.0	5	04/03/23 20:25	
Trichloroethene (TCE)	**26**	25	5.0	1.0	5	04/03/23 20:25	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	04/03/23 20:25	
Vinyl Acetate	ND U	50	10	5.5	5	04/03/23 20:25	
Vinyl Chloride	ND U	25	5.0	1.0	5	04/03/23 20:25	
Xylenes, Total	ND U	25	15	1.2	5	04/03/23 20:25	
cis-1,2-Dichloroethene	**65**	25	5.0	1.2	5	04/03/23 20:25	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 11:53
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-10-6-032323	**Units:**	ug/L
Lab Code:	R2302544-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	04/03/23 20:25	
m,p-Xylenes	ND U	25	10	1.0	5	04/03/23 20:25	
o-Xylene	ND U	25	5.0	1.0	5	04/03/23 20:25	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	04/03/23 20:25	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	04/03/23 20:25	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	04/03/23 20:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 114	04/03/23 20:25	
Dibromofluoromethane	99	80 - 119	04/03/23 20:25	
Toluene-d8	103	89 - 112	04/03/23 20:25	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 12:41
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-2-032323	**Units:**	ug/L
Lab Code:	R2302544-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	1000	200	40	200	04/04/23 16:07	
1,1,1-Trichloroethane (TCA)	ND U	1000	200	40	200	04/04/23 16:07	
1,1,2,2-Tetrachloroethane	ND U	1000	200	40	200	04/04/23 16:07	
1,1,2-Trichloroethane	ND U	1000	200	40	200	04/04/23 16:07	
1,1-Dichloroethane (1,1-DCA)	ND U	1000	200	40	200	04/04/23 16:07	
1,1-Dichloroethene (1,1-DCE)	ND U	1000	200	40	200	04/04/23 16:07	
1,2,3-Trichloropropane	ND U	1000	200	52	200	04/04/23 16:07	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	1000	200	90	200	04/04/23 16:07	
1,2-Dibromoethane	ND U	1000	200	40	200	04/04/23 16:07	
1,2-Dichlorobenzene	ND U	1000	200	40	200	04/04/23 16:07	
1,2-Dichloroethane	ND U	1000	200	40	200	04/04/23 16:07	
1,2-Dichloropropane	ND U	1000	200	40	200	04/04/23 16:07	
1,4-Dichlorobenzene	**42 J**	1000	200	40	200	04/04/23 16:07	
2-Butanone (MEK)	ND U	2000	200	160	200	04/04/23 16:07	
2-Hexanone	ND U	2000	200	40	200	04/04/23 16:07	
4-Methyl-2-pentanone	ND U	2000	200	40	200	04/04/23 16:07	
Acetone	ND U	4000	2000	1000	200	04/04/23 16:07	
Acrylonitrile	ND U	20000	1000	180	200	04/04/23 16:07	
Benzene	ND U	1000	200	40	200	04/04/23 16:07	
Bromochloromethane	ND U	1000	200	40	200	04/04/23 16:07	
Bromodichloromethane	ND U	1000	200	40	200	04/04/23 16:07	
Bromoform	ND U	1000	200	50	200	04/04/23 16:07	
Bromomethane	ND U	1000	200	140	200	04/04/23 16:07	
Carbon Disulfide	ND U	2000	200	84	200	04/04/23 16:07	
Carbon Tetrachloride	ND U	1000	200	68	200	04/04/23 16:07	
Chlorobenzene	ND U	1000	200	40	200	04/04/23 16:07	
Chloroethane	ND U	1000	200	46	200	04/04/23 16:07	
Chloroform	ND U	1000	200	110	200	04/04/23 16:07	
Chloromethane	ND U	1000	200	160	200	04/04/23 16:07	
Dibromochloromethane	ND U	1000	200	40	200	04/04/23 16:07	
Dibromomethane	ND U	1000	200	40	200	04/04/23 16:07	
Methylene Chloride	ND U	1000	200	130	200	04/04/23 16:07	
Ethylbenzene	ND U	1000	200	40	200	04/04/23 16:07	
Iodomethane	ND U	2000	1000	860	200	04/04/23 16:07	
Styrene	ND U	1000	200	40	200	04/04/23 16:07	
Tetrachloroethene (PCE)	**20000**	1000	200	42	200	04/04/23 16:07	
Toluene	ND U	1000	200	40	200	04/04/23 16:07	
Trichloroethene (TCE)	ND U	1000	200	40	200	04/04/23 16:07	
Trichlorofluoromethane (CFC 11)	ND U	1000	200	48	200	04/04/23 16:07	
Vinyl Acetate	ND U	2000	400	220	200	04/04/23 16:07	
Vinyl Chloride	ND U	1000	200	40	200	04/04/23 16:07	
Xylenes, Total	ND U	1000	600	46	200	04/04/23 16:07	
cis-1,2-Dichloroethene	ND U	1000	200	46	200	04/04/23 16:07	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 12:41
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-1-2-032323	**Units:**	ug/L
Lab Code:	R2302544-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	1000	200	40	200	04/04/23 16:07	
m,p-Xylenes	ND U	1000	400	40	200	04/04/23 16:07	
o-Xylene	ND U	1000	200	40	200	04/04/23 16:07	
trans-1,2-Dichloroethene	ND U	1000	200	40	200	04/04/23 16:07	
trans-1,3-Dichloropropene	ND U	1000	200	46	200	04/04/23 16:07	
trans-1,4-Dichloro-2-butene	ND U	1000	200	160	200	04/04/23 16:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 114	04/04/23 16:07	
Dibromofluoromethane	96	80 - 119	04/04/23 16:07	
Toluene-d8	96	89 - 112	04/04/23 16:07	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 09:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-9-3-032323	**Units:**	ug/L
Lab Code:	R2302544-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	130	25	5.0	25	04/04/23 16:30	
1,1,1-Trichloroethane (TCA)	ND U	130	25	5.0	25	04/04/23 16:30	
1,1,2,2-Tetrachloroethane	ND U	130	25	5.0	25	04/04/23 16:30	
1,1,2-Trichloroethane	ND U	130	25	5.0	25	04/04/23 16:30	
1,1-Dichloroethane (1,1-DCA)	ND U	130	25	5.0	25	04/04/23 16:30	
1,1-Dichloroethene (1,1-DCE)	ND U	130	25	5.0	25	04/04/23 16:30	
1,2,3-Trichloropropane	ND U	130	25	6.5	25	04/04/23 16:30	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	130	25	12	25	04/04/23 16:30	
1,2-Dibromoethane	ND U	130	25	5.0	25	04/04/23 16:30	
1,2-Dichlorobenzene	ND U	130	25	5.0	25	04/04/23 16:30	
1,2-Dichloroethane	ND U	130	25	5.0	25	04/04/23 16:30	
1,2-Dichloropropane	ND U	130	25	5.0	25	04/04/23 16:30	
1,4-Dichlorobenzene	ND U	130	25	5.0	25	04/04/23 16:30	
2-Butanone (MEK)	ND U	250	25	20	25	04/04/23 16:30	
2-Hexanone	ND U	250	25	5.0	25	04/04/23 16:30	
4-Methyl-2-pentanone	ND U	250	25	5.0	25	04/04/23 16:30	
Acetone	ND U	500	250	130	25	04/04/23 16:30	
Acrylonitrile	ND U	2500	130	23	25	04/04/23 16:30	
Benzene	ND U	130	25	5.0	25	04/04/23 16:30	
Bromochloromethane	ND U	130	25	5.0	25	04/04/23 16:30	
Bromodichloromethane	ND U	130	25	5.0	25	04/04/23 16:30	
Bromoform	ND U	130	25	6.3	25	04/04/23 16:30	
Bromomethane	ND U	130	25	18	25	04/04/23 16:30	
Carbon Disulfide	ND U	250	25	11	25	04/04/23 16:30	
Carbon Tetrachloride	ND U	130	25	8.5	25	04/04/23 16:30	
Chlorobenzene	ND U	130	25	5.0	25	04/04/23 16:30	
Chloroethane	ND U	130	25	5.8	25	04/04/23 16:30	
Chloroform	ND U	130	25	13	25	04/04/23 16:30	
Chloromethane	ND U	130	25	20	25	04/04/23 16:30	
Dibromochloromethane	ND U	130	25	5.0	25	04/04/23 16:30	
Dibromomethane	ND U	130	25	5.0	25	04/04/23 16:30	
Methylene Chloride	ND U	130	25	17	25	04/04/23 16:30	
Ethylbenzene	ND U	130	25	5.0	25	04/04/23 16:30	
Iodomethane	ND U	250	130	110	25	04/04/23 16:30	
Styrene	ND U	130	25	5.0	25	04/04/23 16:30	
Tetrachloroethene (PCE)	**2700**	130	25	5.3	25	04/04/23 16:30	
Toluene	ND U	130	25	5.0	25	04/04/23 16:30	
Trichloroethene (TCE)	**11 J**	130	25	5.0	25	04/04/23 16:30	
Trichlorofluoromethane (CFC 11)	ND U	130	25	6.0	25	04/04/23 16:30	
Vinyl Acetate	ND U	250	50	28	25	04/04/23 16:30	
Vinyl Chloride	ND U	130	25	5.0	25	04/04/23 16:30	
Xylenes, Total	ND U	130	75	5.8	25	04/04/23 16:30	
cis-1,2-Dichloroethene	**7.5 J**	130	25	5.8	25	04/04/23 16:30	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 09:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-9-3-032323	**Units:**	ug/L
Lab Code:	R2302544-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	130	25	5.0	25	04/04/23 16:30	
m,p-Xylenes	ND U	130	50	5.0	25	04/04/23 16:30	
o-Xylene	ND U	130	25	5.0	25	04/04/23 16:30	
trans-1,2-Dichloroethene	ND U	130	25	5.0	25	04/04/23 16:30	
trans-1,3-Dichloropropene	ND U	130	25	5.8	25	04/04/23 16:30	
trans-1,4-Dichloro-2-butene	ND U	130	25	20	25	04/04/23 16:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 114	04/04/23 16:30	
Dibromofluoromethane	97	80 - 119	04/04/23 16:30	
Toluene-d8	101	89 - 112	04/04/23 16:30	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 10:48
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-7-6-032323	**Units:**	ug/L
Lab Code:	R2302544-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	04/04/23 15:44	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/04/23 15:44	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
1,4-Dichlorobenzene	**0.31 J**	5.0	1.0	0.20	1	04/04/23 15:44	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	04/04/23 15:44	
2-Hexanone	ND U	10	1.0	0.20	1	04/04/23 15:44	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/04/23 15:44	
Acetone	ND U	20	10	5.0	1	04/04/23 15:44	
Acrylonitrile	ND U	100	5.0	0.90	1	04/04/23 15:44	
Benzene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Bromochloromethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Bromoform	ND U	5.0	1.0	0.25	1	04/04/23 15:44	
Bromomethane	ND U	5.0	1.0	0.70	1	04/04/23 15:44	
Carbon Disulfide	ND U	10	1.0	0.42	1	04/04/23 15:44	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/04/23 15:44	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Chloroethane	ND U	5.0	1.0	0.23	1	04/04/23 15:44	
Chloroform	ND U	5.0	1.0	0.51	1	04/04/23 15:44	
Chloromethane	ND U	5.0	1.0	0.80	1	04/04/23 15:44	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Dibromomethane	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Methylene Chloride	ND U	5.0	1.0	0.65	1	04/04/23 15:44	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Iodomethane	ND U	10	5.0	4.3	1	04/04/23 15:44	
Styrene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Tetrachloroethene (PCE)	**0.88 J**	5.0	1.0	0.21	1	04/04/23 15:44	
Toluene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Trichloroethene (TCE)	**1.7 J**	5.0	1.0	0.20	1	04/04/23 15:44	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/04/23 15:44	
Vinyl Acetate	ND U	10	2.0	1.1	1	04/04/23 15:44	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
Xylenes, Total	ND U	5.0	3.0	0.23	1	04/04/23 15:44	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/04/23 15:44	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 10:48
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-7-6-032323	**Units:**	ug/L
Lab Code:	R2302544-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/04/23 15:44	
o-Xylene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/04/23 15:44	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/04/23 15:44	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	04/04/23 15:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 114	04/04/23 15:44	
Dibromofluoromethane	98	80 - 119	04/04/23 15:44	
Toluene-d8	100	89 - 112	04/04/23 15:44	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 10:25
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-9-1-032323	**Units:**	ug/L
Lab Code:	R2302544-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	100	20	4.0	20	04/04/23 16:53	
1,1,1-Trichloroethane (TCA)	ND U	100	20	4.0	20	04/04/23 16:53	
1,1,2,2-Tetrachloroethane	ND U	100	20	4.0	20	04/04/23 16:53	
1,1,2-Trichloroethane	ND U	100	20	4.0	20	04/04/23 16:53	
1,1-Dichloroethane (1,1-DCA)	ND U	100	20	4.0	20	04/04/23 16:53	
1,1-Dichloroethene (1,1-DCE)	ND U	100	20	4.0	20	04/04/23 16:53	
1,2,3-Trichloropropane	ND U	100	20	5.2	20	04/04/23 16:53	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	100	20	9.0	20	04/04/23 16:53	
1,2-Dibromoethane	ND U	100	20	4.0	20	04/04/23 16:53	
1,2-Dichlorobenzene	ND U	100	20	4.0	20	04/04/23 16:53	
1,2-Dichloroethane	ND U	100	20	4.0	20	04/04/23 16:53	
1,2-Dichloropropane	ND U	100	20	4.0	20	04/04/23 16:53	
1,4-Dichlorobenzene	ND U	100	20	4.0	20	04/04/23 16:53	
2-Butanone (MEK)	ND U	200	20	16	20	04/04/23 16:53	
2-Hexanone	ND U	200	20	4.0	20	04/04/23 16:53	
4-Methyl-2-pentanone	ND U	200	20	4.0	20	04/04/23 16:53	
Acetone	ND U	400	200	100	20	04/04/23 16:53	
Acrylonitrile	ND U	2000	100	18	20	04/04/23 16:53	
Benzene	ND U	100	20	4.0	20	04/04/23 16:53	
Bromochloromethane	ND U	100	20	4.0	20	04/04/23 16:53	
Bromodichloromethane	ND U	100	20	4.0	20	04/04/23 16:53	
Bromoform	ND U	100	20	5.0	20	04/04/23 16:53	
Bromomethane	ND U	100	20	14	20	04/04/23 16:53	
Carbon Disulfide	ND U	200	20	8.4	20	04/04/23 16:53	
Carbon Tetrachloride	ND U	100	20	6.8	20	04/04/23 16:53	
Chlorobenzene	ND U	100	20	4.0	20	04/04/23 16:53	
Chloroethane	ND U	100	20	4.6	20	04/04/23 16:53	
Chloroform	ND U	100	20	11	20	04/04/23 16:53	
Chloromethane	ND U	100	20	16	20	04/04/23 16:53	
Dibromochloromethane	ND U	100	20	4.0	20	04/04/23 16:53	
Dibromomethane	ND U	100	20	4.0	20	04/04/23 16:53	
Methylene Chloride	ND U	100	20	13	20	04/04/23 16:53	
Ethylbenzene	ND U	100	20	4.0	20	04/04/23 16:53	
Iodomethane	ND U	200	100	86	20	04/04/23 16:53	
Styrene	ND U	100	20	4.0	20	04/04/23 16:53	
Tetrachloroethene (PCE)	**2600**	100	20	4.2	20	04/04/23 16:53	
Toluene	ND U	100	20	4.0	20	04/04/23 16:53	
Trichloroethene (TCE)	**32 J**	100	20	4.0	20	04/04/23 16:53	
Trichlorofluoromethane (CFC 11)	ND U	100	20	4.8	20	04/04/23 16:53	
Vinyl Acetate	ND U	200	40	22	20	04/04/23 16:53	
Vinyl Chloride	ND U	100	20	4.0	20	04/04/23 16:53	
Xylenes, Total	ND U	100	60	4.6	20	04/04/23 16:53	
cis-1,2-Dichloroethene	**18 J**	100	20	4.6	20	04/04/23 16:53	

MT 6/13/23

ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 10:25
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-9-1-032323	**Units:**	ug/L
Lab Code:	R2302544-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	100	20	4.0	20	04/04/23 16:53	
m,p-Xylenes	ND U	100	40	4.0	20	04/04/23 16:53	
o-Xylene	ND U	100	20	4.0	20	04/04/23 16:53	
trans-1,2-Dichloroethene	ND U	100	20	4.0	20	04/04/23 16:53	
trans-1,3-Dichloropropene	ND U	100	20	4.6	20	04/04/23 16:53	
trans-1,4-Dichloro-2-butene	ND U	100	20	16	20	04/04/23 16:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 114	04/04/23 16:53	
Dibromofluoromethane	99	80 - 119	04/04/23 16:53	
Toluene-d8	100	89 - 112	04/04/23 16:53	

MT 6/13/23

ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 09:46
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-9-2-032323	**Units:**	ug/L
Lab Code:	R2302544-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	100	20	4.0	20	04/04/23 17:16	
1,1,1-Trichloroethane (TCA)	ND U	100	20	4.0	20	04/04/23 17:16	
1,1,2,2-Tetrachloroethane	ND U	100	20	4.0	20	04/04/23 17:16	
1,1,2-Trichloroethane	ND U	100	20	4.0	20	04/04/23 17:16	
1,1-Dichloroethane (1,1-DCA)	ND U	100	20	4.0	20	04/04/23 17:16	
1,1-Dichloroethene (1,1-DCE)	ND U	100	20	4.0	20	04/04/23 17:16	
1,2,3-Trichloropropane	ND U	100	20	5.2	20	04/04/23 17:16	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	100	20	9.0	20	04/04/23 17:16	
1,2-Dibromoethane	ND U	100	20	4.0	20	04/04/23 17:16	
1,2-Dichlorobenzene	ND U	100	20	4.0	20	04/04/23 17:16	
1,2-Dichloroethane	ND U	100	20	4.0	20	04/04/23 17:16	
1,2-Dichloropropane	ND U	100	20	4.0	20	04/04/23 17:16	
1,4-Dichlorobenzene	ND U	100	20	4.0	20	04/04/23 17:16	
2-Butanone (MEK)	ND U	200	20	16	20	04/04/23 17:16	
2-Hexanone	ND U	200	20	4.0	20	04/04/23 17:16	
4-Methyl-2-pentanone	ND U	200	20	4.0	20	04/04/23 17:16	
Acetone	ND U	400	200	100	20	04/04/23 17:16	
Acrylonitrile	ND U	2000	100	18	20	04/04/23 17:16	
Benzene	ND U	100	20	4.0	20	04/04/23 17:16	
Bromochloromethane	ND U	100	20	4.0	20	04/04/23 17:16	
Bromodichloromethane	ND U	100	20	4.0	20	04/04/23 17:16	
Bromoform	ND U	100	20	5.0	20	04/04/23 17:16	
Bromomethane	ND U	100	20	14	20	04/04/23 17:16	
Carbon Disulfide	ND U	200	20	8.4	20	04/04/23 17:16	
Carbon Tetrachloride	ND U	100	20	6.8	20	04/04/23 17:16	
Chlorobenzene	ND U	100	20	4.0	20	04/04/23 17:16	
Chloroethane	ND U	100	20	4.6	20	04/04/23 17:16	
Chloroform	ND U	100	20	11	20	04/04/23 17:16	
Chloromethane	ND U	100	20	16	20	04/04/23 17:16	
Dibromochloromethane	ND U	100	20	4.0	20	04/04/23 17:16	
Dibromomethane	ND U	100	20	4.0	20	04/04/23 17:16	
Methylene Chloride	ND U	100	20	13	20	04/04/23 17:16	
Ethylbenzene	ND U	100	20	4.0	20	04/04/23 17:16	
Iodomethane	ND U	200	100	86	20	04/04/23 17:16	
Styrene	ND U	100	20	4.0	20	04/04/23 17:16	
Tetrachloroethene (PCE)	**2700**	100	20	4.2	20	04/04/23 17:16	
Toluene	ND U	100	20	4.0	20	04/04/23 17:16	
Trichloroethene (TCE)	**9.4 J**	100	20	4.0	20	04/04/23 17:16	
Trichlorofluoromethane (CFC 11)	ND U	100	20	4.8	20	04/04/23 17:16	
Vinyl Acetate	ND U	200	40	22	20	04/04/23 17:16	
Vinyl Chloride	ND U	100	20	4.0	20	04/04/23 17:16	
Xylenes, Total	ND U	100	60	4.6	20	04/04/23 17:16	
cis-1,2-Dichloroethene	**5.2 J**	100	20	4.6	20	04/04/23 17:16	

MT 4/13/23

ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23 09:46
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-CMT-9-2-032323	**Units:**	ug/L
Lab Code:	R2302544-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	100	20	4.0	20	04/04/23 17:16	
m,p-Xylenes	ND U	100	40	4.0	20	04/04/23 17:16	
o-Xylene	ND U	100	20	4.0	20	04/04/23 17:16	
trans-1,2-Dichloroethene	ND U	100	20	4.0	20	04/04/23 17:16	
trans-1,3-Dichloropropene	ND U	100	20	4.6	20	04/04/23 17:16	
trans-1,4-Dichloro-2-butene	ND U	100	20	16	20	04/04/23 17:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 114	04/04/23 17:16	
Dibromofluoromethane	93	80 - 119	04/04/23 17:16	
Toluene-d8	89	89 - 112	04/04/23 17:16	

ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-TripBlank-032323	**Units:**	ug/L
Lab Code:	R2302544-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	04/04/23 14:12	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/04/23 14:12	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	04/04/23 14:12	
2-Hexanone	ND U	10	1.0	0.20	1	04/04/23 14:12	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/04/23 14:12	
Acetone	ND U	20	10	5.0	1	04/04/23 14:12	
Acrylonitrile	ND U	100	5.0	0.90	1	04/04/23 14:12	
Benzene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Bromochloromethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Bromoform	ND U	5.0	1.0	0.25	1	04/04/23 14:12	
Bromomethane	ND U	5.0	1.0	0.70	1	04/04/23 14:12	
Carbon Disulfide	ND U	10	1.0	0.42	1	04/04/23 14:12	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/04/23 14:12	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Chloroethane	ND U	5.0	1.0	0.23	1	04/04/23 14:12	
Chloroform	ND U	5.0	1.0	0.51	1	04/04/23 14:12	
Chloromethane	ND U	5.0	1.0	0.80	1	04/04/23 14:12	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Dibromomethane	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Methylene Chloride	ND U	5.0	1.0	0.65	1	04/04/23 14:12	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Iodomethane	ND U	10	5.0	4.3	1	04/04/23 14:12	
Styrene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.21	1	04/04/23 14:12	
Toluene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/04/23 14:12	
Vinyl Acetate	ND U	10	2.0	1.1	1	04/04/23 14:12	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
Xylenes, Total	ND U	5.0	3.0	0.23	1	04/04/23 14:12	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/04/23 14:12	

MM 6/13/23

ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-TripBlank-032323	**Units:**	ug/L
Lab Code:	R2302544-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/04/23 14:12	
o-Xylene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/04/23 14:12	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/04/23 14:12	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	04/04/23 14:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 114	04/04/23 14:12	
Dibromofluoromethane	99	80 - 119	04/04/23 14:12	
Toluene-d8	100	89 - 112	04/04/23 14:12	

mr 6/13/23

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-FD-04-032323	**Units:**	ug/L
Lab Code:	R2302544-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	500	100	20	100	04/04/23 17:39	
1,1,1-Trichloroethane (TCA)	ND U	500	100	20	100	04/04/23 17:39	
1,1,2,2-Tetrachloroethane	ND U	500	100	20	100	04/04/23 17:39	
1,1,2-Trichloroethane	ND U	500	100	20	100	04/04/23 17:39	
1,1-Dichloroethane (1,1-DCA)	ND U	500	100	20	100	04/04/23 17:39	
1,1-Dichloroethene (1,1-DCE)	ND U	500	100	20	100	04/04/23 17:39	
1,2,3-Trichloropropane	ND U	500	100	26	100	04/04/23 17:39	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	500	100	45	100	04/04/23 17:39	
1,2-Dibromoethane	ND U	500	100	20	100	04/04/23 17:39	
1,2-Dichlorobenzene	ND U	500	100	20	100	04/04/23 17:39	
1,2-Dichloroethane	ND U	500	100	20	100	04/04/23 17:39	
1,2-Dichloropropane	ND U	500	100	20	100	04/04/23 17:39	
1,4-Dichlorobenzene	ND U	500	100	20	100	04/04/23 17:39	
2-Butanone (MEK)	ND U	1000	100	78	100	04/04/23 17:39	
2-Hexanone	ND U	1000	100	20	100	04/04/23 17:39	
4-Methyl-2-pentanone	ND U	1000	100	20	100	04/04/23 17:39	
Acetone	ND U	2000	1000	500	100	04/04/23 17:39	
Acrylonitrile	ND U	10000	500	90	100	04/04/23 17:39	
Benzene	ND U	500	100	20	100	04/04/23 17:39	
Bromochloromethane	ND U	500	100	20	100	04/04/23 17:39	
Bromodichloromethane	ND U	500	100	20	100	04/04/23 17:39	
Bromoform	ND U	500	100	25	100	04/04/23 17:39	
Bromomethane	ND U	500	100	70	100	04/04/23 17:39	
Carbon Disulfide	ND U	1000	100	42	100	04/04/23 17:39	
Carbon Tetrachloride	**58 J**	500	100	34	100	04/04/23 17:39	
Chlorobenzene	ND U	500	100	20	100	04/04/23 17:39	
Chloroethane	ND U	500	100	23	100	04/04/23 17:39	
Chloroform	**79 J**	500	100	51	100	04/04/23 17:39	
Chloromethane	ND U	500	100	80	100	04/04/23 17:39	
Dibromochloromethane	ND U	500	100	20	100	04/04/23 17:39	
Dibromomethane	ND U	500	100	20	100	04/04/23 17:39	
Methylene Chloride	ND U	500	100	65	100	04/04/23 17:39	
Ethylbenzene	ND U	500	100	20	100	04/04/23 17:39	
Iodomethane	ND U	1000	500	430	100	04/04/23 17:39	
Styrene	ND U	500	100	20	100	04/04/23 17:39	
Tetrachloroethene (PCE)	**18000**	500	100	21	100	04/04/23 17:39	
Toluene	ND U	500	100	20	100	04/04/23 17:39	
Trichloroethene (TCE)	ND U	500	100	20	100	04/04/23 17:39	
Trichlorofluoromethane (CFC 11)	ND U	500	100	24	100	04/04/23 17:39	
Vinyl Acetate	ND U	1000	200	110	100	04/04/23 17:39	
Vinyl Chloride	ND U	500	100	20	100	04/04/23 17:39	
Xylenes, Total	ND U	500	300	23	100	04/04/23 17:39	
cis-1,2-Dichloroethene	ND U	500	100	23	100	04/04/23 17:39	

MH 6/13/23

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302544
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/23/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-FD-04-032323	**Units:**	ug/L
Lab Code:	R2302544-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	500	100	20	100	04/04/23 17:39	
m,p-Xylenes	ND U	500	200	20	100	04/04/23 17:39	
o-Xylene	ND U	500	100	20	100	04/04/23 17:39	
trans-1,2-Dichloroethene	ND U	500	100	20	100	04/04/23 17:39	
trans-1,3-Dichloropropene	ND U	500	100	23	100	04/04/23 17:39	
trans-1,4-Dichloro-2-butene	ND U	500	100	78	100	04/04/23 17:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 114	04/04/23 17:39	
Dibromofluoromethane	98	80 - 119	04/04/23 17:39	
Toluene-d8	103	89 - 112	04/04/23 17:39	

MT 6/13/23

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
NATIONAL HEATSET PRINTING, NEW YORK

Client: EA Engineering, Science and Technology, Syracuse, New York
SDG: R2302546
Laboratory: ALS Environmental, Rochester, New York
Site: National Heatset Printing, Babylon, New York
Date: June 13, 2023

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	152140-MW-3S(onsite)-032123	R2302546-001	Water
2	152140-MW-1D(onsite)-032123	R2302546-002	Water
3	152140-MW-14S-032123	R2302546-003	Water
4	152140-FD-02-032123	R2302546-004	Water
5	152140-MW-2AD-032123	R2302546-005	Water
6	152140-MW-2S(onsite)-032123	R2302546-006	Water
6MS	152140-MW-2S(onsite)-032123MS	R2302546-006MS	Water
6MSD	152140-MW-2S(onsite)-032123MSD	R2302546-006MSD	Water
7	152140-MW-1S(onsite)-032123	R2302546-007	Water
8	152140-MW-2D(onsite)-032123	R2302546-008	Water
8DL	152140-MW-2D(onsite)-032123DL	R2302546-008DL	Water
9	152140-MW-5S-032123	R2302546-009	Water
10	152140-MW-5D-032123	R2302546-010	Water
11	152140-DDC-2PD-032123	R2302546-011	Water
12	152140-MW-15S-032123	R2302546-012	Water
13	152140-MW-15D-032123	R2302546-013	Water
13DL	152140-MW-15D-032123DL	R2302546-013DL	Water
14	152140-DDC-4-PD-032123	R2302546-014	Water
15	152140-DDC-2-PS-032123	R2302546-015	Water
16	152140-MW-14D-032123	R2302546-016	Water
17	152140-MW-3D(onsite)-032123	R2302546-017	Water
18	152140-DDC-4-PS-032123	R2302546-018	Water
19	152140-MW-2A-032123	R2302546-019	Water

A Data Usability Summary Review was performed on the analytical data for nineteen water samples collected on March 21, 2023 by EA Engineering at the National Heatset Printing site in Babylon, New York. The samples were analyzed under Environmental Protection Agency (USEPA) Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW-846 Method 8260C

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 1, September 2016: Low/Medium Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

Organics

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibration exhibited acceptable %RSD values and/or correlation coefficients and mean RRF values.

Continuing Calibration

- The following table presents compounds that exceeded percent difference (%D) criteria and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D	Qualifier	Affected Samples
03/29/23 (2109)	1,1-Dichloroethene	20.7%	UJ	1-11, 13-19
	1,2,3-Trichloropropane	23.4%	UJ	
	4-Methyl-2-pentanone	31.5%	UJ	
	Chloroethane	32.2%	UJ	
	trans-1,4-Dichloro-2-butene	34.8%	UJ	

Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations of methylene chloride, 2-butanone, toluene or acetone (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
RQ2303640-04	1,4-Dichlorobenzene	0.28	U	1, 4, 9, 15, 19
	m,p-Xylenes	0.20	None	All Associated ND
RQ2303711-04	1,4-Dichlorobenzene	0.24	None	All Associated ND
	m,p-Xylenes	0.22	None	

Field Blank

- Field QC samples were not collected.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate percent recoveries (%R).

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

MS/MSD Sample ID	Compound	MS %R/MSD %R/RPD	Qualifier
6	1,1,2,2-Tetrachloroethane	OK/69%/OK	UJ
	1,2,3-Trichloropropane	69%/66%/OK	None - See CCAL
	1,2-Dibromo-3-chloropropane	56%/57%/OK	UJ
	2-Butanone	48%/47%/OK	
	2-Hexanone	49%/49%/OK	
	4-Methyl-2-pentanone	53%/53%/OK	None - See CCAL
	Bromomethane	OK/148%/OK	None - Sample ND

Laboratory Control Samples

- The LCS exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Compound Quantitation

- Several samples were analyzed at various dilutions due to sample foaming. The reporting limits were adjusted accordingly. No action was required.
- Samples 8 and 13 were flagged (E) by the laboratory for tetrachloroethene indicating calibration range exceedances. The samples were reanalyzed at a dilution. The dilution results for this compound should be used for reporting purposes.

Tentatively Identified Compounds (TICs)

- TICs were not reported.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

Compound	152140-FD-02-032123 ug/L	152140-MW-2A-032123 ug/L	RPD	Qualifier
Tetrachloroethene	1.1	1.2	9%	None

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: _____ Dated: 6/23/23

Nancy Weaver fw
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-3S(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,1-Dichloroethene (1,1-DCE)	ND U U5	5.0	1.0	0.20	1	03/29/23 23:04	
1,2,3-Trichloropropane	ND U U5	5.0	1.0	0.26	1	03/29/23 23:04	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/29/23 23:04	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
1,4-Dichlorobenzene	**0.23 BJ** U	5.0	1.0	0.20	1	03/29/23 23:04	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/29/23 23:04	
2-Hexanone	ND U	10	1.0	0.20	1	03/29/23 23:04	
4-Methyl-2-pentanone	ND U U5	10	1.0	0.20	1	03/29/23 23:04	
Acetone	ND U	20	10	5.0	1	03/29/23 23:04	
Acrylonitrile	ND U	100	5.0	0.90	1	03/29/23 23:04	
Benzene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Bromoform	ND U	5.0	1.0	0.25	1	03/29/23 23:04	
Bromomethane	ND U	5.0	1.0	0.70	1	03/29/23 23:04	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/29/23 23:04	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/29/23 23:04	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Chloroethane	ND U U5	5.0	1.0	0.23	1	03/29/23 23:04	
Chloroform	ND U	5.0	1.0	0.51	1	03/29/23 23:04	
Chloromethane	ND U	5.0	1.0	0.80	1	03/29/23 23:04	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/29/23 23:04	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Iodomethane	ND U	10	5.0	4.3	1	03/29/23 23:04	
Styrene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Tetrachloroethene (PCE)	**1.4 J**	5.0	1.0	0.21	1	03/29/23 23:04	
Toluene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/29/23 23:04	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/29/23 23:04	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/29/23 23:04	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/29/23 23:04	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:05
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-3S(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/29/23 23:04	
o-Xylene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/29/23 23:04	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/29/23 23:04	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	03/29/23 23:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 114	03/29/23 23:04	
Dibromofluoromethane	97	80 - 119	03/29/23 23:04	
Toluene-d8	98	89 - 112	03/29/23 23:04	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:37
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-1D(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	03/29/23 23:27	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/29/23 23:27	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/29/23 23:27	
2-Hexanone	ND U	10	1.0	0.20	1	03/29/23 23:27	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	03/29/23 23:27	
Acetone	ND U	20	10	5.0	1	03/29/23 23:27	
Acrylonitrile	ND U	100	5.0	0.90	1	03/29/23 23:27	
Benzene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Bromoform	ND U	5.0	1.0	0.25	1	03/29/23 23:27	
Bromomethane	ND U	5.0	1.0	0.70	1	03/29/23 23:27	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/29/23 23:27	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/29/23 23:27	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Chloroethane	ND U	5.0	1.0	0.23	1	03/29/23 23:27	
Chloroform	ND U	5.0	1.0	0.51	1	03/29/23 23:27	
Chloromethane	ND U	5.0	1.0	0.80	1	03/29/23 23:27	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/29/23 23:27	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Iodomethane	ND U	10	5.0	4.3	1	03/29/23 23:27	
Styrene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Tetrachloroethene (PCE)	**2.7 J**	5.0	1.0	0.21	1	03/29/23 23:27	
Toluene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Trichloroethene (TCE)	**1.1 J**	5.0	1.0	0.20	1	03/29/23 23:27	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/29/23 23:27	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/29/23 23:27	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/29/23 23:27	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/29/23 23:27	

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Analytical Report

2

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:37
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-1D(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/29/23 23:27	
o-Xylene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/29/23 23:27	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/29/23 23:27	
trans-1,4-Dichloro-2-butene	ND UJ	5.0	1.0	0.78	1	03/29/23 23:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 114	03/29/23 23:27	
Dibromofluoromethane	97	80 - 119	03/29/23 23:27	
Toluene-d8	97	89 - 112	03/29/23 23:27	

MT 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:07
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-14S-032123	**Units:**	ug/L
Lab Code:	R2302546-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	03/29/23 23:50	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/29/23 23:50	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/29/23 23:50	
2-Hexanone	ND U	10	1.0	0.20	1	03/29/23 23:50	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	03/29/23 23:50	
Acetone	ND U	20	10	5.0	1	03/29/23 23:50	
Acrylonitrile	ND U	100	5.0	0.90	1	03/29/23 23:50	
Benzene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Bromoform	ND U	5.0	1.0	0.25	1	03/29/23 23:50	
Bromomethane	ND U	5.0	1.0	0.70	1	03/29/23 23:50	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/29/23 23:50	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/29/23 23:50	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Chloroethane	ND U	5.0	1.0	0.23	1	03/29/23 23:50	
Chloroform	ND U	5.0	1.0	0.51	1	03/29/23 23:50	
Chloromethane	ND U	5.0	1.0	0.80	1	03/29/23 23:50	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/29/23 23:50	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Iodomethane	ND U	10	5.0	4.3	1	03/29/23 23:50	
Styrene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Tetrachloroethene (PCE)	**0.90 J**	5.0	1.0	0.21	1	03/29/23 23:50	
Toluene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/29/23 23:50	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/29/23 23:50	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/29/23 23:50	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/29/23 23:50	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:07
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-14S-032123	**Units:**	ug/L
Lab Code:	R2302546-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/29/23 23:50	
o-Xylene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/29/23 23:50	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/29/23 23:50	
trans-1,4-Dichloro-2-butene	ND U VS	5.0	1.0	0.78	1	03/29/23 23:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 114	03/29/23 23:50	
Dibromofluoromethane	98	80 - 119	03/29/23 23:50	
Toluene-d8	97	89 - 112	03/29/23 23:50	

MH 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-FD-02-032123	**Units:**	ug/L
Lab Code:	R2302546-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,1-Dichloroethene (1,1-DCE)	ND U VS	5.0	1.0	0.20	1	03/30/23 00:13	
1,2,3-Trichloropropane	ND U VS	5.0	1.0	0.26	1	03/30/23 00:13	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 00:13	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
1,4-Dichlorobenzene	0.24 BJ U	5.0	1.0	0.20	1	03/30/23 00:13	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 00:13	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 00:13	
4-Methyl-2-pentanone	ND U VS	10	1.0	0.20	1	03/30/23 00:13	
Acetone	ND U	20	10	5.0	1	03/30/23 00:13	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 00:13	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 00:13	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 00:13	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 00:13	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 00:13	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Chloroethane	ND U VS	5.0	1.0	0.23	1	03/30/23 00:13	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 00:13	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 00:13	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 00:13	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 00:13	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Tetrachloroethene (PCE)	1.1 J	5.0	1.0	0.21	1	03/30/23 00:13	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 00:13	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 00:13	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 00:13	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 00:13	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-FD-02-032123	**Units:**	ug/L
Lab Code:	R2302546-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 00:13	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 00:13	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 00:13	
trans-1,4-Dichloro-2-butene	ND U/UJ	5.0	1.0	0.78	1	03/30/23 00:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 114	03/30/23 00:13	
Dibromofluoromethane	97	80 - 119	03/30/23 00:13	
Toluene-d8	99	89 - 112	03/30/23 00:13	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 12:59
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2AD-032123	**Units:**	ug/L
Lab Code:	R2302546-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,1-Dichloroethene (1,1-DCE)	ND U VS	5.0	1.0	0.20	1	03/30/23 00:36	
1,2,3-Trichloropropane	ND U VS	5.0	1.0	0.26	1	03/30/23 00:36	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 00:36	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 00:36	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 00:36	
4-Methyl-2-pentanone	ND U VS	10	1.0	0.20	1	03/30/23 00:36	
Acetone	ND U	20	10	5.0	1	03/30/23 00:36	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 00:36	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 00:36	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 00:36	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 00:36	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 00:36	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Chloroethane	ND U VS	5.0	1.0	0.23	1	03/30/23 00:36	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 00:36	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 00:36	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 00:36	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 00:36	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Tetrachloroethene (PCE)	**21**	5.0	1.0	0.21	1	03/30/23 00:36	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Trichloroethene (TCE)	**0.94 J**	5.0	1.0	0.20	1	03/30/23 00:36	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 00:36	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 00:36	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 00:36	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 00:36	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 12:59
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2AD-032123	**Units:**	ug/L
Lab Code:	R2302546-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 00:36	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 00:36	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 00:36	
trans-1,4-Dichloro-2-butene	ND U/UJ	5.0	1.0	0.78	1	03/30/23 00:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 114	03/30/23 00:36	
Dibromofluoromethane	96	80 - 119	03/30/23 00:36	
Toluene-d8	97	89 - 112	03/30/23 00:36	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:06
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2S(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
1,1,2,2-Tetrachloroethane	ND U VS	5.0	1.0	0.20	1	03/30/23 00:59	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
1,1-Dichloroethene (1,1-DCE)	ND U VS	5.0	1.0	0.20	1	03/30/23 00:59	
1,2,3-Trichloropropane	ND U VS	5.0	1.0	0.26	1	03/30/23 00:59	
1,2-Dibromo-3-chloropropane (DBCP)	ND U VS	5.0	1.0	0.45	1	03/30/23 00:59	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
2-Butanone (MEK)	ND U VS	10	1.0	0.78	1	03/30/23 00:59	
2-Hexanone	ND U VS	10	1.0	0.20	1	03/30/23 00:59	
4-Methyl-2-pentanone	ND U VS	10	1.0	0.20	1	03/30/23 00:59	
Acetone	ND U	20	10	5.0	1	03/30/23 00:59	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 00:59	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 00:59	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 00:59	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 00:59	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 00:59	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Chloroethane	ND U VS	5.0	1.0	0.23	1	03/30/23 00:59	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 00:59	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 00:59	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 00:59	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 00:59	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Tetrachloroethene (PCE)	**0.83 J**	5.0	1.0	0.21	1	03/30/23 00:59	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 00:59	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 00:59	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 00:59	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 00:59	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:06
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2S(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 00:59	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 00:59	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 00:59	
trans-1,4-Dichloro-2-butene	ND U/UJ	5.0	1.0	0.78	1	03/30/23 00:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 114	03/30/23 00:59	
Dibromofluoromethane	97	80 - 119	03/30/23 00:59	
Toluene-d8	99	89 - 112	03/30/23 00:59	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:20
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-1S(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,1-Dichloroethene (1,1-DCE)	ND U UJ	5.0	1.0	0.20	1	03/30/23 01:22	
1,2,3-Trichloropropane	ND U UJ	5.0	1.0	0.26	1	03/30/23 01:22	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 01:22	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 01:22	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 01:22	
4-Methyl-2-pentanone	ND U UJ	10	1.0	0.20	1	03/30/23 01:22	
Acetone	ND U	20	10	5.0	1	03/30/23 01:22	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 01:22	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 01:22	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 01:22	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 01:22	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 01:22	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Chloroethane	ND U UJ	5.0	1.0	0.23	1	03/30/23 01:22	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 01:22	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 01:22	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 01:22	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 01:22	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Tetrachloroethene (PCE)	**0.29 J**	5.0	1.0	0.21	1	03/30/23 01:22	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 01:22	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 01:22	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 01:22	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 01:22	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:20
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-1S(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 01:22	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 01:22	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 01:22	
trans-1,4-Dichloro-2-butene	ND U/UJ	5.0	1.0	0.78	1	03/30/23 01:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 114	03/30/23 01:22	
Dibromofluoromethane	93	80 - 119	03/30/23 01:22	
Toluene-d8	94	89 - 112	03/30/23 01:22	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:10
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2D(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	50	10	2.0	10	03/30/23 05:59	
1,1,1-Trichloroethane (TCA)	ND U	50	10	2.0	10	03/30/23 05:59	
1,1,2,2-Tetrachloroethane	ND U	50	10	2.0	10	03/30/23 05:59	
1,1,2-Trichloroethane	ND U	50	10	2.0	10	03/30/23 05:59	
1,1-Dichloroethane (1,1-DCA)	ND U	50	10	2.0	10	03/30/23 05:59	
1,1-Dichloroethene (1,1-DCE)	ND ~~U~~ UJ	50	10	2.0	10	03/30/23 05:59	
1,2,3-Trichloropropane	ND ~~U~~ UJ	50	10	2.6	10	03/30/23 05:59	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	50	10	4.5	10	03/30/23 05:59	
1,2-Dibromoethane	ND U	50	10	2.0	10	03/30/23 05:59	
1,2-Dichlorobenzene	ND U	50	10	2.0	10	03/30/23 05:59	
1,2-Dichloroethane	ND U	50	10	2.0	10	03/30/23 05:59	
1,2-Dichloropropane	ND U	50	10	2.0	10	03/30/23 05:59	
1,4-Dichlorobenzene	ND U	50	10	2.0	10	03/30/23 05:59	
2-Butanone (MEK)	ND U	100	10	7.8	10	03/30/23 05:59	
2-Hexanone	ND U	100	10	2.0	10	03/30/23 05:59	
4-Methyl-2-pentanone	ND ~~U~~ UJ	100	10	2.0	10	03/30/23 05:59	
Acetone	ND U	200	100	50	10	03/30/23 05:59	
Acrylonitrile	ND U	1000	50	9.0	10	03/30/23 05:59	
Benzene	ND U	50	10	2.0	10	03/30/23 05:59	
Bromochloromethane	ND U	50	10	2.0	10	03/30/23 05:59	
Bromodichloromethane	ND U	50	10	2.0	10	03/30/23 05:59	
Bromoform	ND U	50	10	2.5	10	03/30/23 05:59	
Bromomethane	ND U	50	10	7.0	10	03/30/23 05:59	
Carbon Disulfide	ND U	100	10	4.2	10	03/30/23 05:59	
Carbon Tetrachloride	**10 J**	50	10	3.4	10	03/30/23 05:59	
Chlorobenzene	ND U	50	10	2.0	10	03/30/23 05:59	
Chloroethane	ND ~~U~~ UJ	50	10	2.3	10	03/30/23 05:59	
Chloroform	**5.8 J**	50	10	5.1	10	03/30/23 05:59	
Chloromethane	ND U	50	10	8.0	10	03/30/23 05:59	
Dibromochloromethane	ND U	50	10	2.0	10	03/30/23 05:59	
Dibromomethane	ND U	50	10	2.0	10	03/30/23 05:59	
Methylene Chloride	ND U	50	10	6.5	10	03/30/23 05:59	
Ethylbenzene	ND U	50	10	2.0	10	03/30/23 05:59	
Iodomethane	ND U	100	50	43	10	03/30/23 05:59	
Styrene	ND U	50	10	2.0	10	03/30/23 05:59	
Tetrachloroethene (PCE)	3800 ~~3400~~ E	~~50~~ 730	~~10~~ 25	~~2.1~~ 5.3	~~10~~ 25	03/30/23 05:59	
Toluene	ND U	50	10	2.0	10	03/30/23 05:59	
Trichloroethene (TCE)	**4.0 J**	50	10	2.0	10	03/30/23 05:59	
Trichlorofluoromethane (CFC 11)	ND U	50	10	2.4	10	03/30/23 05:59	
Vinyl Acetate	ND U	100	20	11	10	03/30/23 05:59	
Vinyl Chloride	ND U	50	10	2.0	10	03/30/23 05:59	
Xylenes, Total	ND U	50	30	2.3	10	03/30/23 05:59	
cis-1,2-Dichloroethene	ND U	50	10	2.3	10	03/30/23 05:59	

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Analytical Report

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Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:10
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2D(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	50	10	2.0	10	03/30/23 05:59	
m,p-Xylenes	ND U	50	20	2.0	10	03/30/23 05:59	
o-Xylene	ND U	50	10	2.0	10	03/30/23 05:59	
trans-1,2-Dichloroethene	ND U	50	10	2.0	10	03/30/23 05:59	
trans-1,3-Dichloropropene	ND U	50	10	2.3	10	03/30/23 05:59	
trans-1,4-Dichloro-2-butene	ND U VS	50	10	7.8	10	03/30/23 05:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 114	03/30/23 05:59	
Dibromofluoromethane	96	80 - 119	03/30/23 05:59	
Toluene-d8	98	89 - 112	03/30/23 05:59	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:10
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2D(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	130	25	5.0	25	03/30/23 18:50	
1,1,1-Trichloroethane (TCA)	ND U	130	25	5.0	25	03/30/23 18:50	
1,1,2,2-Tetrachloroethane	ND U	130	25	5.0	25	03/30/23 18:50	
1,1,2-Trichloroethane	ND U	130	25	5.0	25	03/30/23 18:50	
1,1-Dichloroethane (1,1-DCA)	ND U	130	25	5.0	25	03/30/23 18:50	
1,1-Dichloroethene (1,1-DCE)	ND U	130	25	5.0	25	03/30/23 18:50	
1,2,3-Trichloropropane	ND U	130	25	6.5	25	03/30/23 18:50	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	130	25	12	25	03/30/23 18:50	
1,2-Dibromoethane	ND U	130	25	5.0	25	03/30/23 18:50	
1,2-Dichlorobenzene	ND U	130	25	5.0	25	03/30/23 18:50	
1,2-Dichloroethane	ND U	130	25	5.0	25	03/30/23 18:50	
1,2-Dichloropropane	ND U	130	25	5.0	25	03/30/23 18:50	
1,4-Dichlorobenzene	ND U	130	25	5.0	25	03/30/23 18:50	
2-Butanone (MEK)	ND U	250	25	20	25	03/30/23 18:50	
2-Hexanone	ND U	250	25	5.0	25	03/30/23 18:50	
4-Methyl-2-pentanone	**9.3 DJ**	250	25	5.0	25	03/30/23 18:50	
Acetone	ND U	500	250	130	25	03/30/23 18:50	
Acrylonitrile	ND U	2500	130	23	25	03/30/23 18:50	
Benzene	ND U	130	25	5.0	25	03/30/23 18:50	
Bromochloromethane	ND U	130	25	5.0	25	03/30/23 18:50	
Bromodichloromethane	ND U	130	25	5.0	25	03/30/23 18:50	
Bromoform	ND U	130	25	6.3	25	03/30/23 18:50	
Bromomethane	ND U	130	25	18	25	03/30/23 18:50	
Carbon Disulfide	ND U	250	25	11	25	03/30/23 18:50	
Carbon Tetrachloride	**10 DJ**	130	25	8.5	25	03/30/23 18:50	
Chlorobenzene	ND U	130	25	5.0	25	03/30/23 18:50	
Chloroethane	ND U	130	25	5.8	25	03/30/23 18:50	
Chloroform	ND U	130	25	13	25	03/30/23 18:50	
Chloromethane	ND U	130	25	20	25	03/30/23 18:50	
Dibromochloromethane	ND U	130	25	5.0	25	03/30/23 18:50	
Dibromomethane	ND U	130	25	5.0	25	03/30/23 18:50	
Methylene Chloride	ND U	130	25	17	25	03/30/23 18:50	
Ethylbenzene	ND U	130	25	5.0	25	03/30/23 18:50	
Iodomethane	ND U	250	130	110	25	03/30/23 18:50	
Styrene	ND U	130	25	5.0	25	03/30/23 18:50	
Tetrachloroethene (PCE)	**3800 D**	130	25	5.3	25	03/30/23 18:50	
Toluene	ND U	130	25	5.0	25	03/30/23 18:50	
Trichloroethene (TCE)	ND U	130	25	5.0	25	03/30/23 18:50	
Trichlorofluoromethane (CFC 11)	ND U	130	25	6.0	25	03/30/23 18:50	
Vinyl Acetate	ND U	250	50	28	25	03/30/23 18:50	
Vinyl Chloride	ND U	130	25	5.0	25	03/30/23 18:50	
Xylenes, Total	ND U	130	75	5.8	25	03/30/23 18:50	
cis-1,2-Dichloroethene	ND U	130	25	5.8	25	03/30/23 18:50	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:10
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2D(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	130	25	5.0	25	03/30/23 18:50	
m,p-Xylenes	ND U	130	50	5.0	25	03/30/23 18:50	
o-Xylene	ND U	130	25	5.0	25	03/30/23 18:50	
trans-1,2-Dichloroethene	ND U	130	25	5.0	25	03/30/23 18:50	
trans-1,3-Dichloropropene	ND U	130	25	5.8	25	03/30/23 18:50	
trans-1,4-Dichloro-2-butene	ND U	130	25	20	25	03/30/23 18:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 114	03/30/23 18:50	
Dibromofluoromethane	97	80 - 119	03/30/23 18:50	
Toluene-d8	100	89 - 112	03/30/23 18:50	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 12:10
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-5S-032123	**Units:**	ug/L
Lab Code:	R2302546-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,1-Dichloroethene (1,1-DCE)	ND U US	5.0	1.0	0.20	1	03/30/23 01:45	
1,2,3-Trichloropropane	ND U US	5.0	1.0	0.26	1	03/30/23 01:45	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 01:45	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
1,4-Dichlorobenzene	**0.79 B** U	5.0	1.0	0.20	1	03/30/23 01:45	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 01:45	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 01:45	
4-Methyl-2-pentanone	ND U US	10	1.0	0.20	1	03/30/23 01:45	
Acetone	ND U	20	10	5.0	1	03/30/23 01:45	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 01:45	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 01:45	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 01:45	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 01:45	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 01:45	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Chloroethane	ND U US	5.0	1.0	0.23	1	03/30/23 01:45	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 01:45	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 01:45	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 01:45	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 01:45	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Tetrachloroethene (PCE)	**0.30 J**	5.0	1.0	0.21	1	03/30/23 01:45	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 01:45	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 01:45	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 01:45	
cis-1,2-Dichloroethene	**0.62 J**	5.0	1.0	0.23	1	03/30/23 01:45	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 12:10
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-5S-032123	**Units:**	ug/L
Lab Code:	R2302546-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 01:45	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 01:45	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 01:45	
trans-1,4-Dichloro-2-butene	ND U/US	5.0	1.0	0.78	1	03/30/23 01:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 114	03/30/23 01:45	
Dibromofluoromethane	95	80 - 119	03/30/23 01:45	
Toluene-d8	93	89 - 112	03/30/23 01:45	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:54
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-5D-032123	**Units:**	ug/L
Lab Code:	R2302546-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,1,1-Trichloroethane (TCA)	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,1,2,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,1,2-Trichloroethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,1-Dichloroethane (1,1-DCA)	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,1-Dichloroethene (1,1-DCE)	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,2,3-Trichloropropane	ND U	10	2.0	0.52	2	03/30/23 04:50	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	10	2.0	0.90	2	03/30/23 04:50	
1,2-Dibromoethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,2-Dichlorobenzene	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,2-Dichloroethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,2-Dichloropropane	ND U	10	2.0	0.40	2	03/30/23 04:50	
1,4-Dichlorobenzene	ND U	10	2.0	0.40	2	03/30/23 04:50	
2-Butanone (MEK)	ND U	20	2.0	1.6	2	03/30/23 04:50	
2-Hexanone	ND U	20	2.0	0.40	2	03/30/23 04:50	
4-Methyl-2-pentanone	ND U	20	2.0	0.40	2	03/30/23 04:50	
Acetone	ND U	40	20	10	2	03/30/23 04:50	
Acrylonitrile	ND U	200	10	1.8	2	03/30/23 04:50	
Benzene	ND U	10	2.0	0.40	2	03/30/23 04:50	
Bromochloromethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
Bromodichloromethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
Bromoform	ND U	10	2.0	0.50	2	03/30/23 04:50	
Bromomethane	ND U	10	2.0	1.4	2	03/30/23 04:50	
Carbon Disulfide	ND U	20	2.0	0.84	2	03/30/23 04:50	
Carbon Tetrachloride	ND U	10	2.0	0.68	2	03/30/23 04:50	
Chlorobenzene	ND U	10	2.0	0.40	2	03/30/23 04:50	
Chloroethane	ND U	10	2.0	0.46	2	03/30/23 04:50	
Chloroform	ND U	10	2.0	1.1	2	03/30/23 04:50	
Chloromethane	ND U	10	2.0	1.6	2	03/30/23 04:50	
Dibromochloromethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
Dibromomethane	ND U	10	2.0	0.40	2	03/30/23 04:50	
Methylene Chloride	ND U	10	2.0	1.3	2	03/30/23 04:50	
Ethylbenzene	ND U	10	2.0	0.40	2	03/30/23 04:50	
Iodomethane	ND U	20	10	8.6	2	03/30/23 04:50	
Styrene	ND U	10	2.0	0.40	2	03/30/23 04:50	
Tetrachloroethene (PCE)	**320**	10	2.0	0.42	2	03/30/23 04:50	
Toluene	ND U	10	2.0	0.40	2	03/30/23 04:50	
Trichloroethene (TCE)	**4.1 J**	10	2.0	0.40	2	03/30/23 04:50	
Trichlorofluoromethane (CFC 11)	ND U	10	2.0	0.48	2	03/30/23 04:50	
Vinyl Acetate	ND U	20	4.0	2.2	2	03/30/23 04:50	
Vinyl Chloride	ND U	10	2.0	0.40	2	03/30/23 04:50	
Xylenes, Total	ND U	10	6.0	0.46	2	03/30/23 04:50	
cis-1,2-Dichloroethene	**5.7 J**	10	2.0	0.46	2	03/30/23 04:50	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:54
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-5D-032123	**Units:**	ug/L
Lab Code:	R2302546-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	10	2.0	0.40	2	03/30/23 04:50	
m,p-Xylenes	ND U	10	4.0	0.40	2	03/30/23 04:50	
o-Xylene	ND U	10	2.0	0.40	2	03/30/23 04:50	
trans-1,2-Dichloroethene	ND U	10	2.0	0.40	2	03/30/23 04:50	
trans-1,3-Dichloropropene	ND U	10	2.0	0.46	2	03/30/23 04:50	
trans-1,4-Dichloro-2-butene	ND U/UJ	10	2.0	1.6	2	03/30/23 04:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 114	03/30/23 04:50	
Dibromofluoromethane	97	80 - 119	03/30/23 04:50	
Toluene-d8	100	89 - 112	03/30/23 04:50	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:35
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-DDC-2PD-032123	**Units:**	ug/L
Lab Code:	R2302546-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	03/30/23 03:40	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 03:40	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 03:40	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 03:40	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	03/30/23 03:40	
Acetone	ND U	20	10	5.0	1	03/30/23 03:40	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 03:40	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 03:40	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 03:40	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 03:40	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 03:40	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Chloroethane	ND U	5.0	1.0	0.23	1	03/30/23 03:40	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 03:40	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 03:40	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 03:40	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 03:40	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Tetrachloroethene (PCE)	**46**	5.0	1.0	0.21	1	03/30/23 03:40	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Trichloroethene (TCE)	**2.4 J**	5.0	1.0	0.20	1	03/30/23 03:40	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 03:40	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 03:40	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 03:40	
cis-1,2-Dichloroethene	**0.85 J**	5.0	1.0	0.23	1	03/30/23 03:40	

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Analytical Report

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Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:35
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-DDC-2PD-032123	**Units:**	ug/L
Lab Code:	R2302546-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 03:40	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 03:40	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 03:40	
trans-1,4-Dichloro-2-butene	ND U/UJ	5.0	1.0	0.78	1	03/30/23 03:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 114	03/30/23 03:40	
Dibromofluoromethane	96	80 - 119	03/30/23 03:40	
Toluene-d8	100	89 - 112	03/30/23 03:40	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:24
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-15S-032123	**Units:**	ug/L
Lab Code:	R2302546-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.26	1	03/30/23 18:04	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 18:04	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 18:04	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 18:04	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	03/30/23 18:04	
Acetone	ND U	20	10	5.0	1	03/30/23 18:04	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 18:04	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 18:04	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 18:04	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 18:04	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 18:04	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Chloroethane	ND U	5.0	1.0	0.23	1	03/30/23 18:04	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 18:04	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 18:04	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 18:04	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 18:04	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Tetrachloroethene (PCE)	**1.8 J**	5.0	1.0	0.21	1	03/30/23 18:04	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 18:04	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 18:04	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 18:04	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 18:04	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:24
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-15S-032123	**Units:**	ug/L
Lab Code:	R2302546-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 18:04	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 18:04	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 18:04	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	03/30/23 18:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 114	03/30/23 18:04	
Dibromofluoromethane	97	80 - 119	03/30/23 18:04	
Toluene-d8	101	89 - 112	03/30/23 18:04	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-15D-032123	**Units:**	ug/L
Lab Code:	R2302546-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,1,1-Trichloroethane (TCA)	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,1,2,2-Tetrachloroethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,1,2-Trichloroethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,1-Dichloroethane (1,1-DCA)	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,1-Dichloroethene (1,1-DCE)	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,2,3-Trichloropropane	ND U	10	2.0	0.52	2	03/30/23 05:36	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	10	2.0	0.90	2	03/30/23 05:36	
1,2-Dibromoethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,2-Dichlorobenzene	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,2-Dichloroethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,2-Dichloropropane	ND U	10	2.0	0.40	2	03/30/23 05:36	
1,4-Dichlorobenzene	ND U	10	2.0	0.40	2	03/30/23 05:36	
2-Butanone (MEK)	ND U	20	2.0	1.6	2	03/30/23 05:36	
2-Hexanone	ND U	20	2.0	0.40	2	03/30/23 05:36	
4-Methyl-2-pentanone	ND U	20	2.0	0.40	2	03/30/23 05:36	
Acetone	ND U	40	20	10	2	03/30/23 05:36	
Acrylonitrile	ND U	200	10	1.8	2	03/30/23 05:36	
Benzene	ND U	10	2.0	0.40	2	03/30/23 05:36	
Bromochloromethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
Bromodichloromethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
Bromoform	ND U	10	2.0	0.50	2	03/30/23 05:36	
Bromomethane	ND U	10	2.0	1.4	2	03/30/23 05:36	
Carbon Disulfide	ND U	20	2.0	0.84	2	03/30/23 05:36	
Carbon Tetrachloride	**1.1 J**	10	2.0	0.68	2	03/30/23 05:36	
Chlorobenzene	ND U	10	2.0	0.40	2	03/30/23 05:36	
Chloroethane	ND U	10	2.0	0.46	2	03/30/23 05:36	
Chloroform	ND U	10	2.0	1.1	2	03/30/23 05:36	
Chloromethane	ND U	10	2.0	1.6	2	03/30/23 05:36	
Dibromochloromethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
Dibromomethane	ND U	10	2.0	0.40	2	03/30/23 05:36	
Methylene Chloride	ND U	10	2.0	1.3	2	03/30/23 05:36	
Ethylbenzene	ND U	10	2.0	0.40	2	03/30/23 05:36	
Iodomethane	ND U	20	10	8.6	2	03/30/23 05:36	
Styrene	ND U	10	2.0	0.40	2	03/30/23 05:36	
Tetrachloroethene (PCE)	410 ~~410~~ E	10 ~~10~~ 25	2.0 ~~2.0~~ 5.0	0.42 ~~0.42~~ 1.1	2 ~~2~~ 5	03/30/23 05:36	
Toluene	ND U	10	2.0	0.40	2	03/30/23 05:36	
Trichloroethene (TCE)	**1.5 J**	10	2.0	0.40	2	03/30/23 05:36	
Trichlorofluoromethane (CFC 11)	ND U	10	2.0	0.48	2	03/30/23 05:36	
Vinyl Acetate	ND U	20	4.0	2.2	2	03/30/23 05:36	
Vinyl Chloride	ND U	10	2.0	0.40	2	03/30/23 05:36	
Xylenes, Total	ND U	10	6.0	0.46	2	03/30/23 05:36	
cis-1,2-Dichloroethene	ND U	10	2.0	0.46	2	03/30/23 05:36	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-15D-032123	**Units:**	ug/L
Lab Code:	R2302546-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	10	2.0	0.40	2	03/30/23 05:36	
m,p-Xylenes	ND U	10	4.0	0.40	2	03/30/23 05:36	
o-Xylene	ND U	10	2.0	0.40	2	03/30/23 05:36	
trans-1,2-Dichloroethene	ND U	10	2.0	0.40	2	03/30/23 05:36	
trans-1,3-Dichloropropene	ND U	10	2.0	0.46	2	03/30/23 05:36	
trans-1,4-Dichloro-2-butene	ND U/US	10	2.0	1.6	2	03/30/23 05:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 114	03/30/23 05:36	
Dibromofluoromethane	97	80 - 119	03/30/23 05:36	
Toluene-d8	99	89 - 112	03/30/23 05:36	

MT 4/13/23

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Analytical Report

13DL

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-15D-032123	**Units:**	ug/L
Lab Code:	R2302546-013	**Basis:**	NA

Use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,1,1-Trichloroethane (TCA)	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,1,2,2-Tetrachloroethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,1,2-Trichloroethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,1-Dichloroethane (1,1-DCA)	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,1-Dichloroethene (1,1-DCE)	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,2,3-Trichloropropane	ND U	25	5.0	1.3	5	03/30/23 18:27	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	25	5.0	2.3	5	03/30/23 18:27	
1,2-Dibromoethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,2-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,2-Dichloroethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,2-Dichloropropane	ND U	25	5.0	1.0	5	03/30/23 18:27	
1,4-Dichlorobenzene	ND U	25	5.0	1.0	5	03/30/23 18:27	
2-Butanone (MEK)	ND U	50	5.0	3.9	5	03/30/23 18:27	
2-Hexanone	ND U	50	5.0	1.0	5	03/30/23 18:27	
4-Methyl-2-pentanone	ND U	50	5.0	1.0	5	03/30/23 18:27	
Acetone	ND U	100	50	25	5	03/30/23 18:27	
Acrylonitrile	ND U	500	25	4.5	5	03/30/23 18:27	
Benzene	ND U	25	5.0	1.0	5	03/30/23 18:27	
Bromochloromethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
Bromodichloromethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
Bromoform	ND U	25	5.0	1.3	5	03/30/23 18:27	
Bromomethane	ND U	25	5.0	3.5	5	03/30/23 18:27	
Carbon Disulfide	ND U	50	5.0	2.1	5	03/30/23 18:27	
Carbon Tetrachloride	ND U	25	5.0	1.7	5	03/30/23 18:27	
Chlorobenzene	ND U	25	5.0	1.0	5	03/30/23 18:27	
Chloroethane	ND U	25	5.0	1.2	5	03/30/23 18:27	
Chloroform	ND U	25	5.0	2.6	5	03/30/23 18:27	
Chloromethane	ND U	25	5.0	4.0	5	03/30/23 18:27	
Dibromochloromethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
Dibromomethane	ND U	25	5.0	1.0	5	03/30/23 18:27	
Methylene Chloride	ND U	25	5.0	3.3	5	03/30/23 18:27	
Ethylbenzene	ND U	25	5.0	1.0	5	03/30/23 18:27	
Iodomethane	ND U	50	25	22	5	03/30/23 18:27	
Styrene	ND U	25	5.0	1.0	5	03/30/23 18:27	
Tetrachloroethene (PCE)	**410 D**	25	5.0	1.1	5	03/30/23 18:27	
Toluene	ND U	25	5.0	1.0	5	03/30/23 18:27	
Trichloroethene (TCE)	**1.6 BJ**	25	5.0	1.0	5	03/30/23 18:27	
Trichlorofluoromethane (CFC 11)	ND U	25	5.0	1.2	5	03/30/23 18:27	
Vinyl Acetate	ND U	50	10	5.5	5	03/30/23 18:27	
Vinyl Chloride	ND U	25	5.0	1.0	5	03/30/23 18:27	
Xylenes, Total	ND U	25	15	1.2	5	03/30/23 18:27	
cis-1,2-Dichloroethene	ND U	25	5.0	1.2	5	03/30/23 18:27	

MA 4/13/23

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Analytical Report

13DL

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-15D-032123	**Units:**	ug/L
Lab Code:	R2302546-013	**Basis:**	NA use original

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	25	5.0	1.0	5	03/30/23 18:27	
m,p-Xylenes	ND U	25	10	1.0	5	03/30/23 18:27	
o-Xylene	ND U	25	5.0	1.0	5	03/30/23 18:27	
trans-1,2-Dichloroethene	ND U	25	5.0	1.0	5	03/30/23 18:27	
trans-1,3-Dichloropropene	ND U	25	5.0	1.2	5	03/30/23 18:27	
trans-1,4-Dichloro-2-butene	ND U	25	5.0	3.9	5	03/30/23 18:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 114	03/30/23 18:27	
Dibromofluoromethane	94	80 - 119	03/30/23 18:27	
Toluene-d8	96	89 - 112	03/30/23 18:27	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 09:35
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-DDC-4-PD-032123	**Units:**	ug/L
Lab Code:	R2302546-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,1-Dichloroethene (1,1-DCE)	ND U VS	5.0	1.0	0.20	1	03/30/23 02:08	
1,2,3-Trichloropropane	ND U VS	5.0	1.0	0.26	1	03/30/23 02:08	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 02:08	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 02:08	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 02:08	
4-Methyl-2-pentanone	ND U VS	10	1.0	0.20	1	03/30/23 02:08	
Acetone	ND U	20	10	5.0	1	03/30/23 02:08	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 02:08	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 02:08	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 02:08	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 02:08	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 02:08	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Chloroethane	ND U VS	5.0	1.0	0.23	1	03/30/23 02:08	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 02:08	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 02:08	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 02:08	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 02:08	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Tetrachloroethene (PCE)	**1.8 J**	5.0	1.0	0.21	1	03/30/23 02:08	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 02:08	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 02:08	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 02:08	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 02:08	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 09:35
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-DDC-4-PD-032123	**Units:**	ug/L
Lab Code:	R2302546-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 02:08	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 02:08	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 02:08	
trans-1,4-Dichloro-2-butene	ND U/US	5.0	1.0	0.78	1	03/30/23 02:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	86	85 - 114	03/30/23 02:08	
Dibromofluoromethane	94	80 - 119	03/30/23 02:08	
Toluene-d8	97	89 - 112	03/30/23 02:08	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:42
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-DDC-2-PS-032123	**Units:**	ug/L
Lab Code:	R2302546-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,1-Dichloroethene (1,1-DCE)	ND U UJ	5.0	1.0	0.20	1	03/30/23 02:31	
1,2,3-Trichloropropane	ND U UJ	5.0	1.0	0.26	1	03/30/23 02:31	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 02:31	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
1,4-Dichlorobenzene	**0.49 BJ** U	5.0	1.0	0.20	1	03/30/23 02:31	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 02:31	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 02:31	
4-Methyl-2-pentanone	ND U UJ	10	1.0	0.20	1	03/30/23 02:31	
Acetone	ND U	20	10	5.0	1	03/30/23 02:31	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 02:31	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 02:31	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 02:31	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 02:31	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 02:31	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Chloroethane	ND U UJ	5.0	1.0	0.23	1	03/30/23 02:31	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 02:31	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 02:31	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 02:31	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 02:31	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Tetrachloroethene (PCE)	**1.3 J**	5.0	1.0	0.21	1	03/30/23 02:31	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Trichloroethene (TCE)	**0.43 J**	5.0	1.0	0.20	1	03/30/23 02:31	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 02:31	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 02:31	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 02:31	
cis-1,2-Dichloroethene	**1.2 J**	5.0	1.0	0.23	1	03/30/23 02:31	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 11:42
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-DDC-2-PS-032123	**Units:**	ug/L
Lab Code:	R2302546-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 02:31	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 02:31	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 02:31	
trans-1,4-Dichloro-2-butene	ND U/UJ	5.0	1.0	0.78	1	03/30/23 02:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 114	03/30/23 02:31	
Dibromofluoromethane	95	80 - 119	03/30/23 02:31	
Toluene-d8	97	89 - 112	03/30/23 02:31	

NM 6/13/23

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-14D-032123	**Units:**	ug/L
Lab Code:	R2302546-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,1-Dichloroethene (1,1-DCE)	ND U UJ	5.0	1.0	0.20	1	03/30/23 04:03	
1,2,3-Trichloropropane	ND U UJ	5.0	1.0	0.26	1	03/30/23 04:03	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 04:03	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 04:03	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 04:03	
4-Methyl-2-pentanone	ND U UJ	10	1.0	0.20	1	03/30/23 04:03	
Acetone	ND U	20	10	5.0	1	03/30/23 04:03	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 04:03	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 04:03	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 04:03	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 04:03	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 04:03	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Chloroethane	ND U UJ	5.0	1.0	0.23	1	03/30/23 04:03	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 04:03	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 04:03	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 04:03	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 04:03	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Tetrachloroethene (PCE)	**29**	5.0	1.0	0.21	1	03/30/23 04:03	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Trichloroethene (TCE)	**1.2 J**	5.0	1.0	0.20	1	03/30/23 04:03	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 04:03	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 04:03	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 04:03	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 04:03	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 08:43
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-14D-032123	**Units:**	ug/L
Lab Code:	R2302546-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 04:03	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 04:03	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 04:03	
trans-1,4-Dichloro-2-butene	ND U/US	5.0	1.0	0.78	1	03/30/23 04:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 114	03/30/23 04:03	
Dibromofluoromethane	97	80 - 119	03/30/23 04:03	
Toluene-d8	99	89 - 112	03/30/23 04:03	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:55
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-3D(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,1-Dichloroethene (1,1-DCE)	ND U VS	5.0	1.0	0.20	1	03/30/23 04:27	
1,2,3-Trichloropropane	ND U VS	5.0	1.0	0.26	1	03/30/23 04:27	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 04:27	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 04:27	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 04:27	
4-Methyl-2-pentanone	ND U VS	10	1.0	0.20	1	03/30/23 04:27	
Acetone	ND U	20	10	5.0	1	03/30/23 04:27	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 04:27	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 04:27	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 04:27	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 04:27	
Carbon Tetrachloride	**0.41 J**	5.0	1.0	0.34	1	03/30/23 04:27	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Chloroethane	ND U VS	5.0	1.0	0.23	1	03/30/23 04:27	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 04:27	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 04:27	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 04:27	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 04:27	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Tetrachloroethene (PCE)	**200**	5.0	1.0	0.21	1	03/30/23 04:27	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Trichloroethene (TCE)	**1.1 J**	5.0	1.0	0.20	1	03/30/23 04:27	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 04:27	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 04:27	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 04:27	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 04:27	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 10:55
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-3D(onsite)-032123	**Units:**	ug/L
Lab Code:	R2302546-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 04:27	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 04:27	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 04:27	
trans-1,4-Dichloro-2-butene	ND U/UJ	5.0	1.0	0.78	1	03/30/23 04:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 114	03/30/23 04:27	
Dibromofluoromethane	99	80 - 119	03/30/23 04:27	
Toluene-d8	101	89 - 112	03/30/23 04:27	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 09:31
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-DDC-4-PS-032123	**Units:**	ug/L
Lab Code:	R2302546-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,1-Dichloroethene (1,1-DCE)	ND U VS	5.0	1.0	0.20	1	03/30/23 02:54	
1,2,3-Trichloropropane	ND U VS	5.0	1.0	0.26	1	03/30/23 02:54	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 02:54	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 02:54	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 02:54	
4-Methyl-2-pentanone	ND U VS	10	1.0	0.20	1	03/30/23 02:54	
Acetone	ND U	20	10	5.0	1	03/30/23 02:54	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 02:54	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 02:54	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 02:54	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 02:54	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 02:54	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Chloroethane	ND U VS	5.0	1.0	0.23	1	03/30/23 02:54	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 02:54	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 02:54	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 02:54	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 02:54	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Tetrachloroethene (PCE)	**1.6 J**	5.0	1.0	0.21	1	03/30/23 02:54	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 02:54	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 02:54	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 02:54	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 02:54	

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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 09:31
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-DDC-4-PS-032123	**Units:**	ug/L
Lab Code:	R2302546-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 02:54	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 02:54	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 02:54	
trans-1,4-Dichloro-2-butene	ND U/J5	5.0	1.0	0.78	1	03/30/23 02:54	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 114	03/30/23 02:54	
Dibromofluoromethane	93	80 - 119	03/30/23 02:54	
Toluene-d8	92	89 - 112	03/30/23 02:54	

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ALS Group USA, Corp.
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Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 12:36
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2A-032123	**Units:**	ug/L
Lab Code:	R2302546-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,1-Dichloroethene (1,1-DCE)	ND U U5	5.0	1.0	0.20	1	03/30/23 03:17	
1,2,3-Trichloropropane	ND U U5	5.0	1.0	0.26	1	03/30/23 03:17	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	03/30/23 03:17	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
1,4-Dichlorobenzene	0.24 BJ U	5.0	1.0	0.20	1	03/30/23 03:17	
2-Butanone (MEK)	ND U	10	1.0	0.78	1	03/30/23 03:17	
2-Hexanone	ND U	10	1.0	0.20	1	03/30/23 03:17	
4-Methyl-2-pentanone	ND U U5	10	1.0	0.20	1	03/30/23 03:17	
Acetone	ND U	20	10	5.0	1	03/30/23 03:17	
Acrylonitrile	ND U	100	5.0	0.90	1	03/30/23 03:17	
Benzene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Bromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Bromodichloromethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Bromoform	ND U	5.0	1.0	0.25	1	03/30/23 03:17	
Bromomethane	ND U	5.0	1.0	0.70	1	03/30/23 03:17	
Carbon Disulfide	ND U	10	1.0	0.42	1	03/30/23 03:17	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	03/30/23 03:17	
Chlorobenzene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Chloroethane	ND U U5	5.0	1.0	0.23	1	03/30/23 03:17	
Chloroform	ND U	5.0	1.0	0.51	1	03/30/23 03:17	
Chloromethane	ND U	5.0	1.0	0.80	1	03/30/23 03:17	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Dibromomethane	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Methylene Chloride	ND U	5.0	1.0	0.65	1	03/30/23 03:17	
Ethylbenzene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Iodomethane	ND U	10	5.0	4.3	1	03/30/23 03:17	
Styrene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Tetrachloroethene (PCE)	1.2 J	5.0	1.0	0.21	1	03/30/23 03:17	
Toluene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	03/30/23 03:17	
Vinyl Acetate	ND U	10	2.0	1.1	1	03/30/23 03:17	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
Xylenes, Total	ND U	5.0	3.0	0.23	1	03/30/23 03:17	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	03/30/23 03:17	

MA 6/13/23

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	EA Engineering, Science, and Technology (EAEST)	**Service Request:**	R2302546
Project:	National Heatset Printing Site/1602518	**Date Collected:**	03/21/23 12:36
Sample Matrix:	Water	**Date Received:**	03/25/23 08:55
Sample Name:	152140-MW-2A-032123	**Units:**	ug/L
Lab Code:	R2302546-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	03/30/23 03:17	
o-Xylene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	03/30/23 03:17	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	03/30/23 03:17	
trans-1,4-Dichloro-2-butene	ND U	5.0	1.0	0.78	1	03/30/23 03:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 114	03/30/23 03:17	
Dibromofluoromethane	97	80 - 119	03/30/23 03:17	
Toluene-d8	101	89 - 112	03/30/23 03:17	

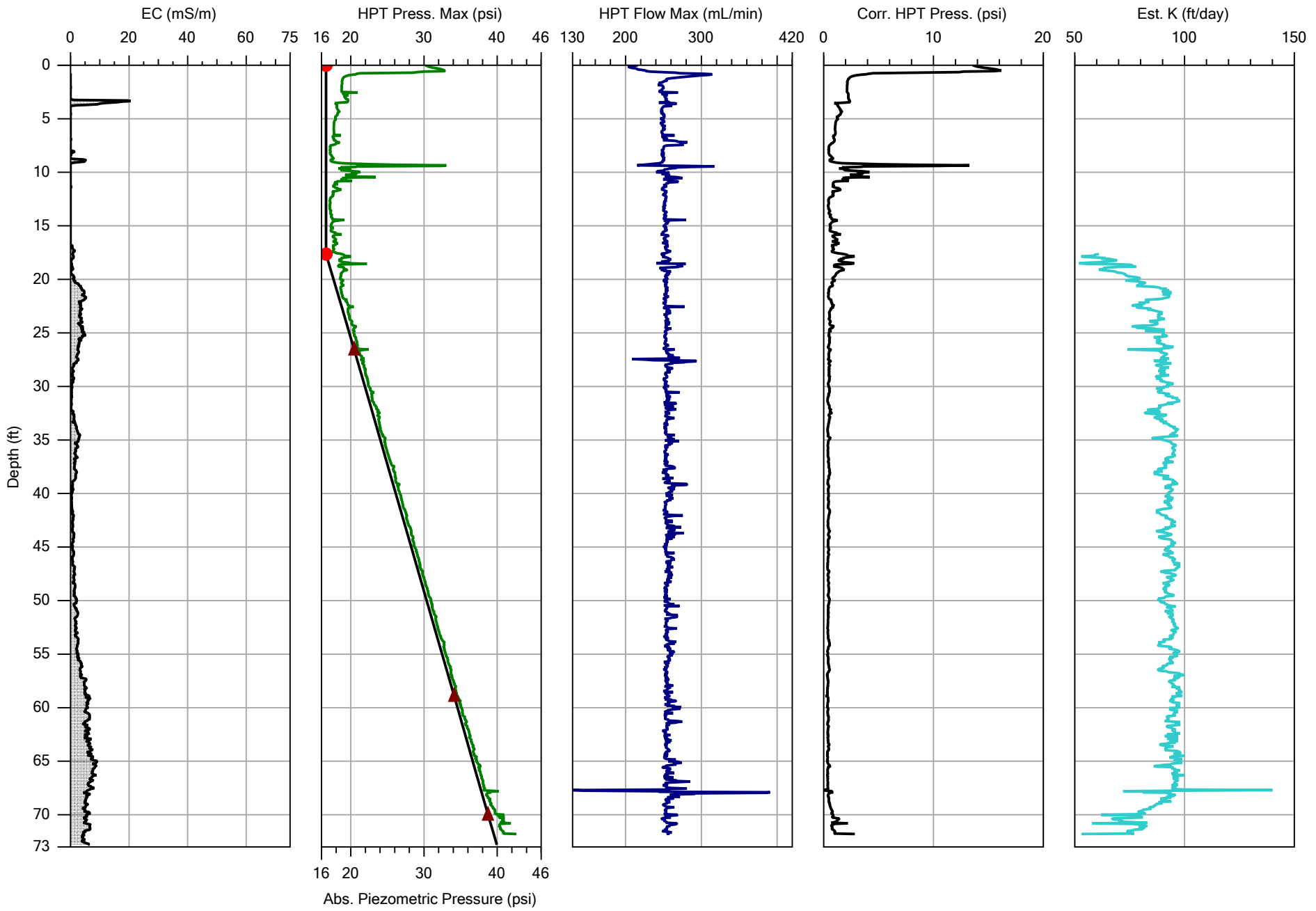
MT 6/13/23

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Appendix F

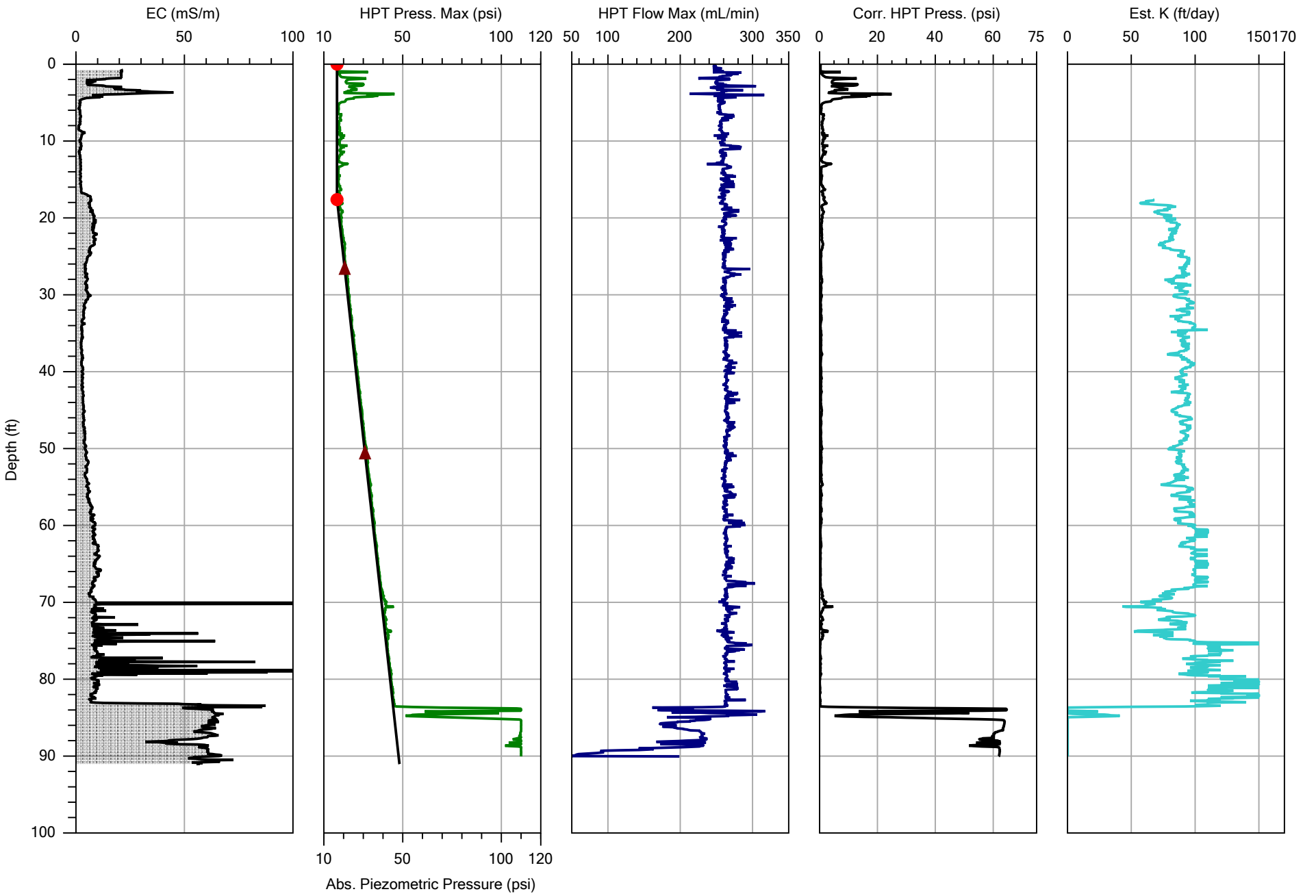
Hydraulic Profiling Logs

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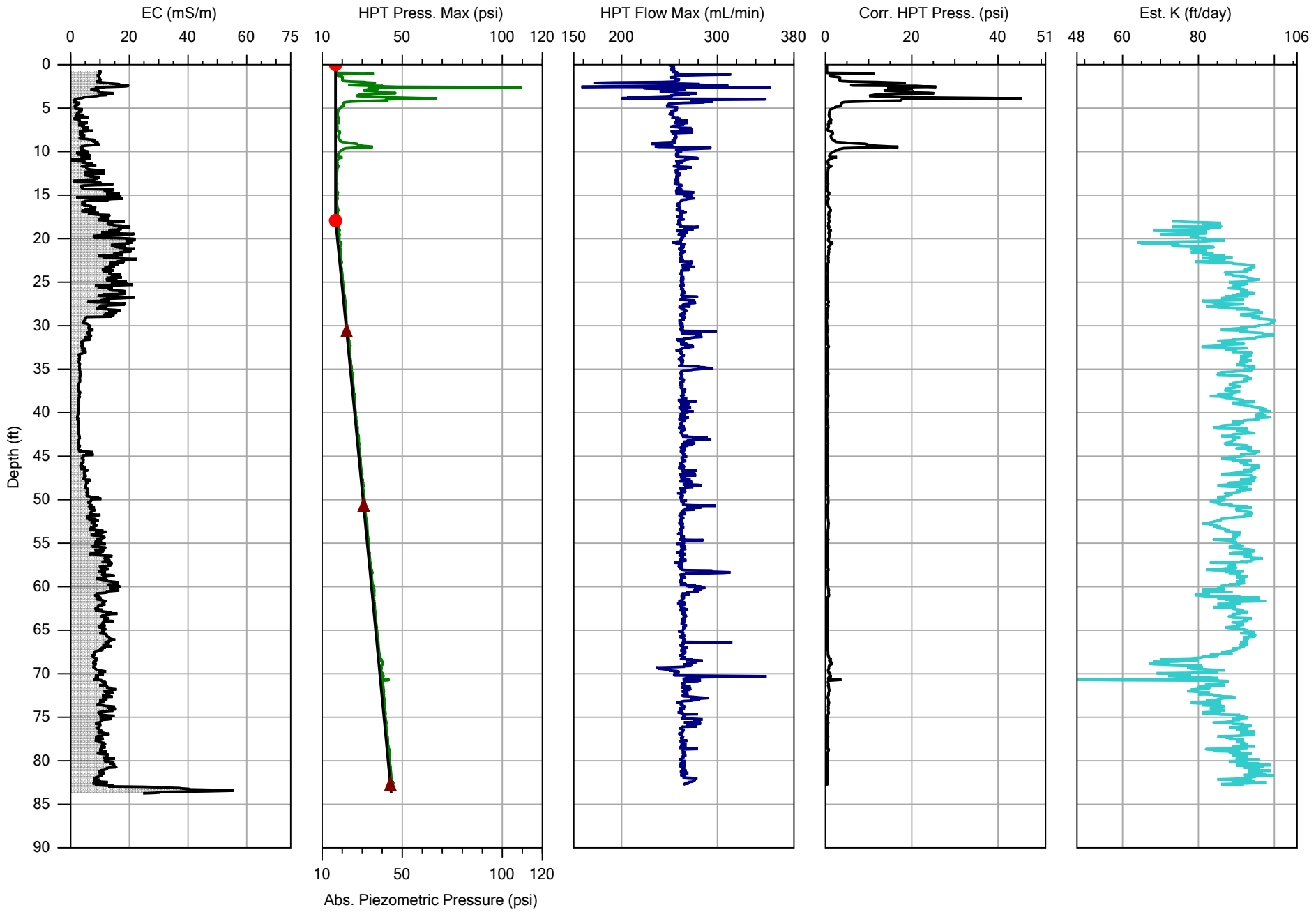
CASCADE
DRILLING | TECHNICAL SERVICES

		File: HPT-01.MHP
Company: Cascade	Operator: vince mesuda	Date: 06/27/22
Project ID: Babylon HPT	Client: EA	Location: Babylon



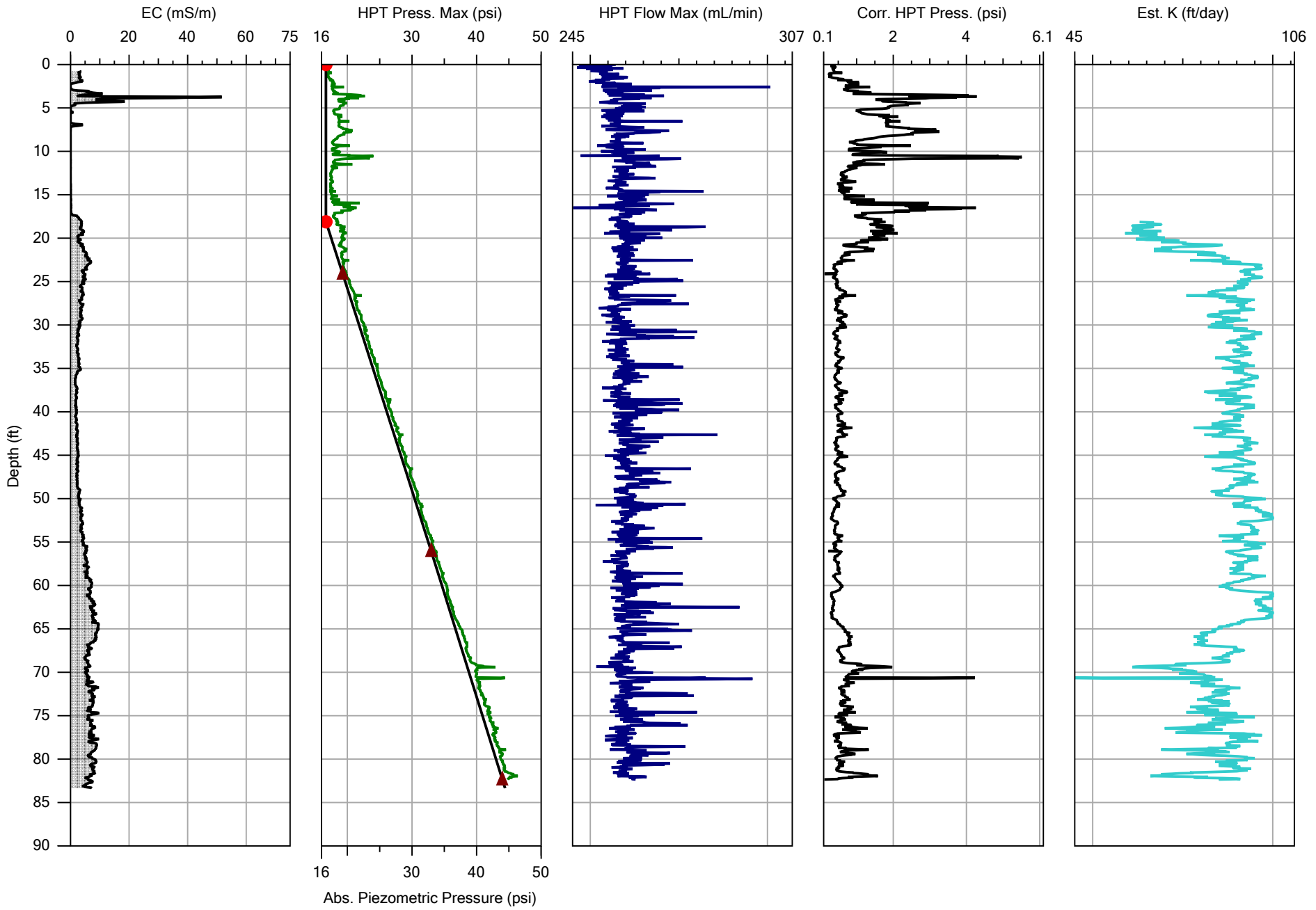
CASCADE
DRILLING | TECHNICAL SERVICES

		File: HPT-03.MHP
Company: Cascade	Operator: vince mesuda	Date: 06/28/22
Project ID: Babylon HPT	Client: EA	Location: Babylon



CASCADE
DRILLING | TECHNICAL SERVICES

		File: HPT-05.MHP
Company: Cascade	Operator: vince mesuda	Date: 06/28/22
Project ID: Babylon HPT	Client: EA	Location: Babylon



CASCADE
DRILLING | TECHNICAL SERVICES

		File: HPT-09.MHP
Company: Cascade	Operator: vince mesuda	Date: 06/28/22
Project ID: Babylon HPT	Client: EA	Location: Babylon

Appendix G

Oil Fingerprinting Analytical Report

(Provided Separately)

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Appendix H

Mass Flux Data and Calculations

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MASS FLUX CALCULATION WORKSHEET

CLIENT: NYSDEC JOB NUMBER: 1602518

SUBJECT: National Heatset Printing Company Site
Mass Flux / Mass Discharge Calculation

BY: TCR CHECKED BY: MEM DATE: 5/7/2024

WORKING EQUATION NO. 1

Mass Flux (J) = C x K x i

Where: J = Mass Flux of Area (grams/(day*ft$^{2)}$)
C = Cadmium (Cd) Concentration (mg/L)
K = Hydraulic Conductivity (ft/day)
i = Hydraulic Gradient (L/L)

Calculated:	Value	Units	Source
K =	89.35	ft/day	*Average hydraulic conductivity from HPT results*
			March 20th, 2023 Gauging Event
	39.62	ft amsl	*GW elev. CMT1 - Averaged over the four sampling ports*
	38.71	ft amsl	*GW elev. MW 15D*
	560.15	ft	*Distance from CMT1 to MW15D*
i =	0.0016	ft/ft	

Given: C = ug/L *PCE Concentrations (ug/L) from March 2023 Sampling Event*

Transect 1					
CMT-6		CMT5		CMT4	
Depth (ft bgs)	PCE (ug/L)	Depth (ft bgs)	PCE (ug/L)	Depth (ft bgs)	PCE (ug/L)
23.30	5.10	22.90	11	20.92	220
43.42	690.00	52.36	1900	53.30	1400
63.88	370.00	73.40	2100	63.54	1800
83.00	480.00	83.30	1500	83.00	6500000

Transect 2					
CMT-7		CMT-9		CMT-10	
Depth (ft bgs)	PCE (ug/L)	Depth (ft bgs)	PCE (ug/L)	Depth (ft bgs)	PCE (ug/L)
19.95	1.60	20.50	2600	19.96	2.30
52.54	ND	50.50	2700	51.10	5.20
72.35	19.00	70.50	2700	75.00	0.82
81.80	0.88	80.00	2200	79.80	680.00

MASS FLUX CALCULATION WORKSHEET

CLIENT: NYSDEC JOB NUMBER: 1602518

SUBJECT: National Heatset Printing Company Site
Mass Flux / Mass Discharge Calculation

BY: TCR CHECKED BY: MEM DATE: 5/7/2024

MASS FLUX CALCULATION EXAMPLE - CMT-6 Deepest Port

C		K		i		unit conversion					
0.48 ~~mg~~ / ~~L~~	X	89.35 ~~ft~~ / **day**	X	0.0016	X	1 / 1,000	**gm** / ~~mg~~	X	28.32 ~~L~~ / 1 **ft³**	=	0.0020 gm/(day*ft²)

Calculated: J = gm/(day*ft²)

Transect 1

CMT-6	CMT5	CMT4
Mass Flux (J) gm/(day*ft2)		
2.10E-05	4.52E-05	9.04E-04
2.84E-03	7.81E-03	5.76E-03
1.52E-03	8.63E-03	7.40E-03
1.97E-03	6.17E-03	2.67E+01

Transect 2

CMT-7	CMT-9	CMT-10
Mass Flux (J) gm/(day*ft²)		
6.58E-06	1.07E-02	9.45E-06
ND	1.11E-02	2.14E-05
7.81E-05	1.11E-02	3.37E-06
3.62E-06	9.04E-03	2.80E-03

WORKING EQUATION NO. 2

Mass Discharge (D) = J x A

Where: D = Mass Discharge (grams/day)
J = Mass Flux of Area (grams/(day*ft²))
A = Discharge Zone Area (ft²)

Calculated: A = Discharge Zone Area for the deepest port of CMT-6 (ft²)

Length	57.53	ft
Height	9.56	ft
Cross Sectional Area	549.99	ft²

Source

The area was calculated for each CMT port with the screen as the midpoint
Half the distance between CMT-6 and CMT-5 multiplied by two
Half the vertical distance between the deeper CMT port and the next deepest port

Horizontal Lengths between CMT Wells	
CMT-6	57.53
CMT-5	60.96
CMT-4	64.4
CMT-7	107.6
CMT-9	111.815
CMT-10	116.03

Vertical Lengths between midpoints of CMT ports

Depths	CMT-6	CMT-5	CMT-4	CMT-7	CMT-9	CMT-10
1 (Shallow)	20.12	29.46	32.38	32.59	30	31.14
2	20.29	25.25	21.31	26.2	25	27.52
3	19.79	15.47	14.85	14.63	14.75	14.35
4 (Deep)	9.56	4.95	9.73	4.725	4.75	2.4

Transect 1

CMT-6	CMT5	CMT4
Cross Sectional Area		
1157.5	1795.9	2085.3
1167.3	1539.2	1372.4
1138.5	943.1	956.3
550.0	301.8	626.6

Transect 2

CMT-7	CMT-9	CMT-10
Cross Sectional Area		
3506.7	3354.5	3613.2
2819.1	2795.4	3193.1
1574.2	1649.3	1665.0
508.4	531.1	278.5

MASS FLUX CALCULATION WORKSHEET

CLIENT: NYSDEC JOB NUMBER: 1602518

SUBJECT: National Heatset Printing Company Site
Mass Flux / Mass Discharge Calculation

BY: TCR CHECKED BY: MEM DATE: 5/7/2024

MASS DISCHARGE CALCULATION - CMT-6 Deepest Port

$$J \times A = 0.0020 \ \frac{gm}{day \cdot ft^2} \times 549.99 \ ft^2 = 1.09 \ gm/day$$

Transect 1

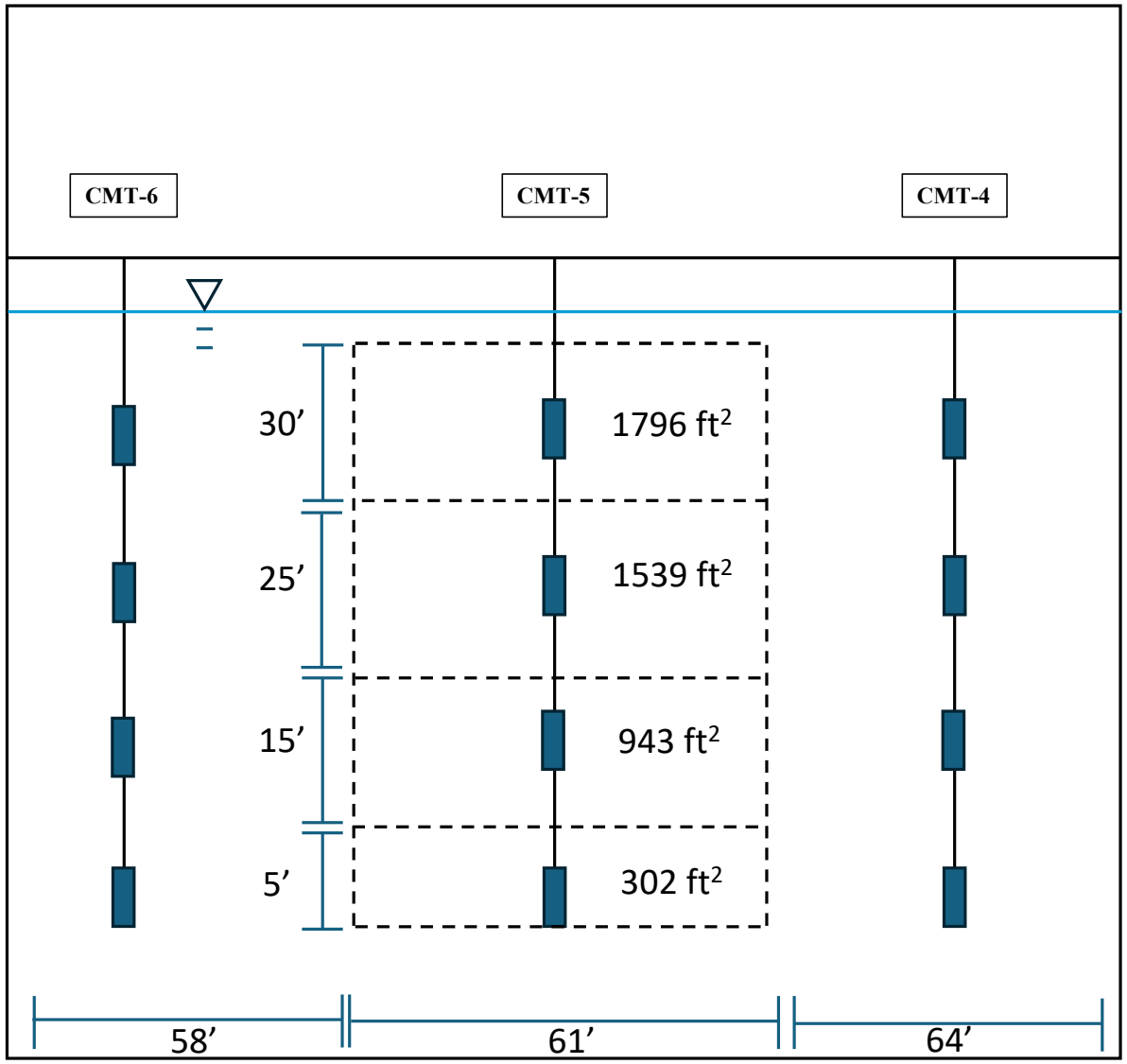
CMT-6	CMT5	CMT4
Mass Discharge (gm/day)		
0.0	0.1	1.9
3.3	12.0	7.9
1.7	8.1	7.1
1.1	1.9	--

Transect 2

CMT-7	CMT-9	CMT-10
Mass Discharge (gm/day)		
0.0	35.9	0.0
ND	31.0	0.1
0.1	18.3	0.0
0.0	4.8	0.8

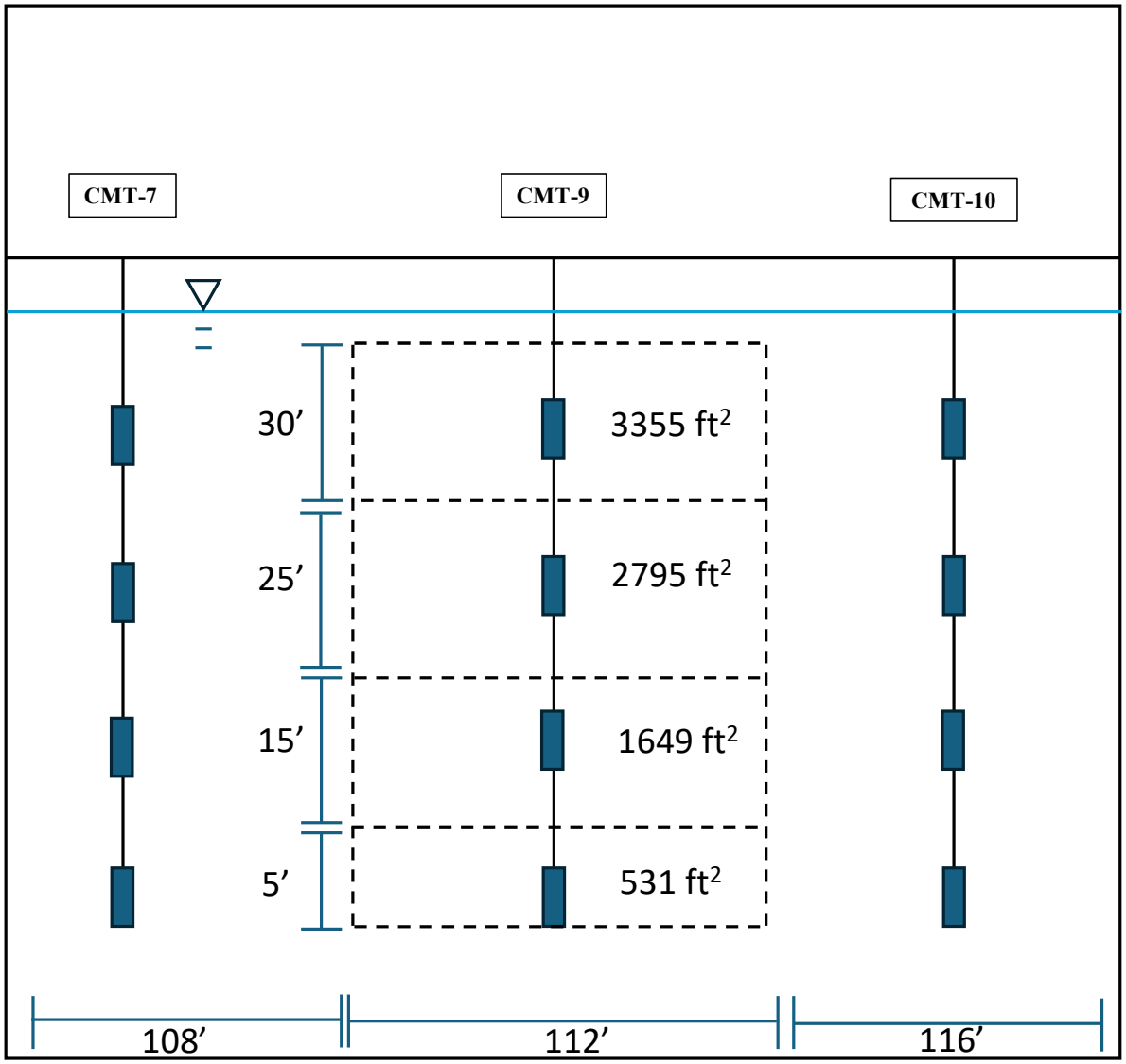
Sum of Mass Discharge for Transect 1 45.1 gm/day

Sum of Mass Discharge for Transect 2 91.0 gm/day



Qualitative depiction of mass discharge zones for Transect 1 (CMT-6 to CMT-4)
National Heatset Printing Company Site
Remedial System Optimization Report

EA Engineering, P.C.
and Its Affiliate
EA Science and Technology



Qualitative depiction of mass discharge zones for Transect 2 (CMT-7 to CMT-10)
National Heatset Printing Company Site
Remedial System Optimization Report

EA Engineering, P.C.
and Its Affiliate
EA Science and Technology

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Appendix I

NYSDEC Technology Screening Matrixes

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In-Situ Chemical Oxidation Feasibility Analysis - National Heatset Site - DNAPL Source Area

PERFORMANCE MEASURE	STOP ISCO is not a feasible alternative at this site	CAUTION More information needed or considerations to be addressed prior to ISCO selection	PROCEED ISCO is a feasible alternative
	METRIC		
Remedial Objectives *Are objectives achievable with technology and limitations understood?*	• Technology will not reduce the source mass or groundwater concentrations to acceptable levels and/or protect downgradient receptors.	• Significant groundwater contamination will potentially remain after implementation. Further evaluation of ISCO or a combination of remedial alternatives should be considered.	• Goals match ISCO capabilities for the given conditions and an honest comparison of alternatives has been performed.
Hydrogeologic Conditions can vary depending on the oxidant used. *How will oxidant react with subsurface?* *Is there potential for migration?* *Are there metals present that will oxidize?* *What are the soil characteristics?*	• Soil has high chemical oxidant demand. • Hydraulic conductivity is less than 10-6 cm/sec. • Soil heterogeneity will limit distribution of the oxidant. • Injectability is low and will limit distribution of the oxidant. • There is potential for uncontrolled migration of oxidant or contaminants or byproducts. • High groundwater velocity for oxidants that require longer contact time.	• Known conditions are conducive to the proposed ISCO technology, but site conditions warrant additional considerations to ensure appropriate remedy selection (i.e., soil moisture/saturation, permeability, particle size distribution, soil porosity, manmade conduits, depth to contamination, plume size). • High groundwater table could lead to daylighting of oxidants. • Understand presence of bedrock and interaction with overburden aquifers.	• Materials in soil are a granular porous material with high permeability. Groundwater velocity provides adequate contact time for the oxidant. • Soils are saturated. • Soil heterogeneity can be overcome with injection system design. • Hydraulic conductivity greater than 10-4 cm/sec. • Pilot Testing indicates injectability is acceptable.
Contaminant Chemistry and Distribution *What are the characteristics of the NAPL present?*	• Contaminants are not amenable to oxidation. • Concentrations present are low and widely distributed. • High NAPL mass/presence of mobile NAPL (ISCO treatment of NAPL is possible but will require a high oxidant dose and multiple treatments). • Presence of redox-sensitive metals and nitrate levels. • Baseline conditions for pH, redox potential, dissolved oxygen, dissolved carbon dioxide, temperature, alkalinity, and specific conductance indicate reducing conditions in the aquifer. • Presence of an ongoing release or uncontrolled source.	• Not all potential migration pathways been identified and evaluated. • Byproducts will be left behind that inhibit biodegradation of the target contaminant. • Baseline conditions for pH, redox potential, dissolved oxygen, dissolved carbon dioxide, temperature, alkalinity, and specific conductance have not been established. • NAPL has not been characterized.	• Contaminants present can be destroyed with the proposed oxidant. • Groundwater concentrations are present at higher concentrations where oxidation is an appropriate remedial technology. • Aquifer chemistry is suitable for oxidation and byproducts are not anticipated based on treatability testing results. • The source zone has been identified and the treatment zone is defined. • NAPL is not present or identified as residual.
Subsurface Utilities/Debris/Obstructions *Are there subsurface objects that could impact the effectiveness of ISCO?*	• Presence of debris, tanks, utilities, or structures present with the potential to confound or preclude the vertical migration of vapor/application of remedial agents. • Presence of downgradient receptors that may be impacted by oxidant.	• Comprehensive evaluation (tracer tests, high-resolution site characterization, knowledge of previous records and reports) has been performed and identified subsurface complicators which may limit effectiveness. • Manmade conduits in the vicinity must be located and closely monitored to prevent potentially explosive atmospheres and preferential pathways. • Presence of bedrock.	• Subsurface anomalies/utilities are well defined and pose minimal impediment to implementation. • Site geology allows for injection access.
Source Area Accessibility *What is the size of the contamination area?* *Where is the source of contamination?*	• Presence of inaccessible source area(s) which may result in incomplete removal or need for additional remedial elements, such as multiple applications. • Potential for rebound if source is not directly treated.	• Demolition or other non-standard design is required to access source area. • Source area is relatively large. • Climate may affect accessibility to source area. • Minor issues for access to contaminant.	• Source area is well-defined, readily accessible and adjacent property access has been considered, if necessary.
Geochemistry *What are the chemical characteristics of the geology that may impact ISCO results?*	• Presence of insufficient moisture content of soil. • Metals that will cause overreaction are present. • High levels of oxidant demand in soils. • Pilot testing demonstrated that ISCO will not be effective in reducing contaminant concentrations or may mobilize other contaminants.	• There is a need to evaluate chemical properties, including organic content of soil, concentrations, metals, and compounds present. • Pilot testing has not been conducted or more data collection is needed to support the feasibility of a technology.	• Physical and chemical parameters generally support ISCO. • Non-carbonate geology is present. • There is low soil oxidant demand. • Pilot testing has successfully identified an appropriate oxidant and dose.
Cost *Is ISCO a cost-effective solution?*	• Cost is not realistic or prohibitive. • Enhancement technologies, when needed, may be costly or their implementation may be challenging. • Total volume of oxidant is large and costly. • Alternative technology can meet remedial goals at lower cost.	• Factors effecting the cost still need to be evaluated (i.e., volume of oxidant, plume size, time for reaction to take place, groundwater concentrations, etc.). • Incomplete investigation may transfer unacceptable risk to the contractor, increasing cost. • An alternate technology may need to be used following initial ISCO application which needs to be considered in the overall cost.	• After investigation activities are complete, costs are competitive. • Relatively lower cost of treatment compared to excavation and disposal, ex-situ treatment, or conventional pump and treat.
ISCO Technology Applicability *Were techniques or technologies sufficiently evaluated to consider ISCO alternative?*	• Specific site contaminants may not be amenable to ISCO mechanisms. • Alternative technology is clearly preferable.	• Additional evaluation of key design parameters are needed to determine applicability of ISCO, including determining the most effective methodology. • Which oxidant is most applicable based on the site conditions?	• A specific ISCO technology has been identified and site conditions are favorable for successful implementation. It can be used effectively with: PAHs, pesticides, chlorinated solvents, petroleum hydrocarbons, etc.

In Situ Chemical Reduction Feasibility Analysis
National Heatset Site - DNAPL Source Area

PERFORMANCE MEASURE	STOP ISCR is not a feasible alternative at this site	CAUTION More information needed or considerations to be addressed prior to ISCR selection	PROCEED ISCR is a feasible alternative
	METRIC		
Remedial Objectives *Are objectives achievable with technology and limitations understood?*	• Remedial objectives will not be achieved by the application of this technology. • Technology will not reduce the source mass or groundwater concentrations to acceptable levels and/or protect downgradient receptors. • Duration to achieve remedial objectives is too long	• Residual groundwater contamination will potentially remain after implementation. Further evaluation of ISCR or a combination of remedial alternatives should be considered to achieve remedial objectives. • Duration to achieve remedial objectives is longer than desired or needs further evaluation.	• Goals match ISCR capabilities for the given conditions and a detailed comparison of alternatives has been performed. • Can achieve remedial goals in within desired time frames.
Hydrogeologic Conditions *Is there potential for migration?* *What are the soil characteristics?*	• Hydraulic conductivity is less than 10^{-6} cm/sec and fracturing is not amenable to site conditions or a permeable reactive barrier (PRB) can not be placed at the site. • Soil heterogeneity will limit distribution of the reductant. • Injectability is low and will limit distribution of the reductant. • There is potential for uncontrolled migration of reductants or contaminants or byproducts. • High groundwater velocity or high groundwater flux that is not suitable for reductant application. • The majority of the mass is in the vadose zone	• Known conditions are conducive to the proposed ISCR technology, but site conditions warrant additional considerations to ensure appropriate remedy selection (i.e., soil moisture/saturation, permeability, particle size distribution, soil porosity, manmade conduits, depth to contamination, plume size). • High groundwater table could lead to daylighting of reductant. • There is a need to evaluate structural safety including the following :Is subsurface fracturing required for injection and could it lead to daylighting of reductant? Are the onsite structures/pavement stable enough to withstand subsurface fracturing? Is deep trenching for permeable reactive barrier safe for the site structures? • The presence of bedrock and interaction with overburden aquifers is not clearly understood. • There is the potential for off gassing causing VI issues in existing structures. • There is the potential for reagents to enter and effect surface waters.	• Materials in soil are a granular porous material with high permeability. • Groundwater velocity provides adequate contact time for the reductant. • Soils are saturated. • Soil heterogeneity can be overcome with injection system design. • Hydraulic conductivity greater than 10^{-4} cm/sec and acceptable groundwater velocity for reductant application. • Pilot testing indicates injectability is acceptable or selected material is suitable for PRB application. PRB longevity is adequate.
ISCR Technology Applicability *Were techniques or technologies sufficiently evaluated to consider ISCR alternative?*	• Specific site contaminants may not be amenable to ISCR mechanisms. • Alternative technology is clearly preferable. • Pilot testing was unsuccessful at achieving constituent reduction.	• Additional evaluation of key design parameters are needed to determine applicability of ISCR, including determining the most effective methodology and the most applicable reductant based on site conditions. • Which reductant is most applicable based on the site conditions? • There is a need for pilot testing in controlled area(s) to help ensure treatment effectiveness.	• A specific ISCR technology has been identified and site conditions are favorable for successful implementation. It can be used effectively with: chlorinated solvents, oxidation-reduction potential sensitive metals (e.g., hexavalent chromium), petroleum hydrocarbons, and energetic compounds (e.g. RDX, TNT etc.). • Reagent has been used successfully at similar sites.
Baseline Conditions, Contaminant Chemistry and Distribution *What are the characteristics of the geochemical conditions? Is NAPL present? What is the extent of contamination?*	• Contaminants are not amenable to chemical reduction. • Concentrations present are low and widely distributed. • High nonaqueous phase liquid (NAPL) mass/presence of mobile NAPL (ISCR treatment of NAPL is possible but will require a high reductant dose and multiple treatments). • Baseline conditions indicate strong oxidizing conditions in the aquifer that makes ISCR application cost prohibitive. e.g. for pH (<4 SU), redox potential (>200 mV), and dissolved oxygen (>5 mg/L) etc. • Presence of an ongoing release or uncontrolled source. Generally remediation should be applied after the release or the uncontrolled source is stopped such that stoichiometric demand calculations and mass flux calculations can be performed for designing the remedy	• Not all potential migration pathways have been identified and evaluated. • Byproducts will be left behind that inhibit further reduction and/or biodegradation of the target contaminant. • Product left behind may make land difficult for future use e.g., high iron concentration in shallow overburden with high water table may dissuade developers. • Baseline conditions for pH, redox potential, dissolved oxygen, dissolved carbon dioxide, temperature, alkalinity, and specific conductance have not been established. • NAPL has not been characterized or determined to be present.	• Contaminants present can be destroyed with the proposed reductant . • Groundwater concentrations are present at higher concentrations where chemical reduction an appropriate remedial technology. • Baseline conditions are suitable for reduction and undesirable byproducts are not anticipated based on treatability/pilot testing results or existing literature. • The source zone has been identified and the treatment zone is defined. • NAPL is not present or it has been identified as limited residual. Note: EZVI is proposed, which is miscible with and targets NAPL

In Situ Chemical Reduction Feasibility Analysis
National Heatset Site - DNAPL Source Area

PERFORMANCE MEASURE	STOP ISCR is not a feasible alternative at this site	CAUTION More information needed or considerations to be addressed prior to ISCR selection	PROCEED ISCR is a feasible alternative
	METRIC		
Geochemistry *What are the chemical characteristics that may impact ISCR results? Conditions can vary depending on the reductant used. Are there metals present that may migrate? Mineral formation? Treatability testing?*	• Presence of insufficient moisture content of soil. • Other metals present in the reductant will cause groundwater criteria exceedance or may migrate offsite. • High levels of reductant passivating constituents or constituents reducing the reactivity of reductant in groundwater e.g., sulfate, carbonate, calcium, silica, silicates, phosphate, oxygen, and nitrate are present. • Formation of minerals that may coat and block the heterogeneous reactivity of reductants e.g. formation of magnetite (Fe3O4) or goethite (α-FeOOH) on zero valent iron (ZVI) surface is observed in high levels. • Treatability testing and/or pilot testing demonstrated that ISCR will not be effective in reducing contaminant concentrations or may mobilize other contaminants. • There is high reductant demand- include reductant demand based on stoichiometry, based on treatability testing and/or pilot test, and based on contaminant and precipitation flux. Sufficient reductant can not be delivered to subsurface to achieve objectives. • Was biofouling evaluated i.e., does the site have high anaerobic metal reducing and/or sulfate reducing bacteria that may lead to biofouling and reduce the effectiveness of chemical reductant. • Estimated concentration of secondary water quality parameters post ISCR operations e.g., sulfate, chloride, pH, metals, and total dissolved solids etc. are not acceptable for regulatory compliance e.g., if the treated groundwater pH changes too acidic (<3S.U) or too basic (>11 S.U) for long term at the property boudary or at a downgradient receptor location. Secondary water quality parameters should not exceeed federal or state specific criteria for long term particulalry if there are downgradient water supply wells that can be potentially impacted. A short term exceedance should be reviewed on a case by case basis.	• There is a need to evaluate chemical properties, including organic content of soil, concentrations, metals, compounds present, and secondary water quality changes. • Treatability testing and/or Pilot testing has not been conducted or more data collection is needed to support the feasibility of ISCR technology. • Low to medium soil reductant demand is estimated but has not been confirmed- include reductant demand based on stoichiometry, based on treatability testing and/or pilot test, and based on contaminant and precipitation flux.	• Physical and chemical parameters generally support ISCR. • Other metals present in the reductant will not cause groundwater criteria exceedance or and minimal offsite migration is anticipated. • Reductant passivating constituents or constituents reducing the reactivity of reductant in groundwater i.e. carbonate, sulfate, calcium, silica, silicates, phosphate, oxygen, and nitrate are not present in high concentrations. • Formations of minerals on ZVI surface that may adversely reduce the longevity of ZVI is not observed in treatability testing and/or pilot testing. • Confirmed low to medium soil reductant demand- include reductant demand based on stoichiometry, based on treatability testing and/or pilot test, and based on contaminant and precipitation flux. • Treatability testing/Pilot testing has successfully identified an appropriate reductant and dose and sufficient longevity of the reductant was observed/calculated that will overcome the total Lifecyle demand of the reductant. • Microbial testing and pilot testing did not indicate biofouling issues. • Estimated concentration of secondary water quality parameters post ISCR operations e.g., sulfate, chloride, pH, metals, and total dissolved solids etc. are acceptable for regulatory compliance.
Subsurface Utilities/Debris/Obstructions *Are there subsurface objects that could impact the effectiveness of ISCR?*	• Presence of debris, tanks, utilities, or structures with the potential to confound or preclude the horizontal and/or vertical migration of vapor/application of remedial agents. • Presence of downgradient receptors that may be impacted by reductant. • Utility presence leads to uncontrollable preferential pathways, daylighting, and unpredictable or uneven distribution of reagents.	• Comprehensive evaluation (tracer tests, high-resolution site characterization, knowledge of previous records and reports) has been performed and identified subsurface complicators which may limit effectiveness. • Manmade conduits in the vicinity must be located and closely monitored to prevent potentially preferential pathways. • Presence of bedrock.	• Subsurface anomalies/utilities are well defined and pose minimal impediment to implementation. • Site geology allows for injection access or installation of a permeable reactive barrier.
Source Area Accessibility *What is the size of the contamination area? Where is the source of contamination?*	• Presence of inaccessible source area(s) which may result in incomplete removal or need for additional remedial elements, such as multiple applications. • Potential for rebound if source is not directly treated. • The source area cannot be cut off from the receptor(s) after ISCR application (e.g., if being used as PRB).	• Demolition or other non-standard design is required to access source area. • Source area is relatively large. • Climate may affect accessibility to source area. • Minor issues for access to contaminant.	• Source area is well-defined, readily accessible and adjacent property access has been considered, if necessary.
Cost *Is ISCR a cost-effective solution?*	• Cost is not realistic or prohibitive. • Enhancement technologies, when needed, may be costly or their implementation may be challenging. • Total volume of reductant required is large and costly. • Alternative technology can meet remedial goals at lower cost. • Reagents for ISCR are not available.	• Factors effecting the cost still need to be evaluated (i.e., volume of reductant, plume size, time for reaction to take place, groundwater concentrations, etc.). • Incomplete investigation may transfer unacceptable risk to the contractor, increasing cost. • An alternate technology may need to be used following initial ISCR application which needs to be considered in the overall cost. • There is potential that the reagents for ISCR are not available, or will require a longer than desired lead time.	• After investigation activities are complete, costs are competitive. • Relatively lower cost of treatment compared to excavation and disposal, ex-situ treatment, or conventional pump and treat. • Reagents for ISCR are readily available.

Note: Typical reductants include zero valent iron (ZVI), Iron sulfide (FeS), Calcium Polysulfide (CPS), and Sodium metabisulfite. Reductants such as ZVI are often included with bioremediation amendments to synergistically reduce contamination and bring anerobic reducing environment as secondary treatment mechanism.

Acronym List: ISCR- In Situ Chemical Reduction; NAPL- nonaqueous phase liquid; PRB- Permeable Reactive Barrier; ZVI- Zero Valent Iron.

Helpful Resources/Weblinks:

ITRC. 2011. Permeable Reactive Barrier, Technology Update. Prepared by: Interstate Technology & Regulatory Council, PRB: Technology Update Team. June www.itrcweb.org.

Suthersan et.al., 2017. Remediation Engineering, Design Concepts, Second Edition. CRC Press, Taylor & Francis Group.

https://clu-in.org/techfocus/default.focus/sec/In_Situ_Chemical_Reduction/cat/Overview/

https://www.frtr.gov/matrix/In-Situ-Chemical-Reduction/#Resources

In Situ Thermal Remediation Feasibility Analysis
National Heatset Site - DNAPL Source Area[5]

INSITU THERMAL REMEDIATION (ITR) FEASIBILITY ANALYSIS	Stop - ITR is not a feasible alternative at this site	Caution - more information needed or considerations to be addrerssed prior to ITR selection.	Proceed - ITR is a feasible alternative.
Performance Measure	Metric		
Remedial Objectives	Are objectives achievable with technology and limitations understood? Is a direct comparison of alternatives achievable?	Is significant groundwater contamination going to remain after implementation (ppm-level)?	Goals match ITR capabilites for the given conditions. An honest comparison of Alternatives has been performed.
Thermal Technology Applicability	Have specific techniques or technologies been identified based on site conditions? Generalities adversely effect procurement outcomes.	Is ITR really the most readily implementable technology, compared to other alternatives such as excavation followed by polishing?	A specific ITR technology has been identified and site conditions are favorable for successful implementation.
Subsurface Heterogeneity/Permeability	Does the site demonstrate high geologic heterogeneity and have a high depth to bedrock?[1]	Are geologic conditions condusive to the proposed thermal technology? Are there potential complications with site conditions?[3]	Favorable geologic conditions (relatively homogenous strata) are present and ITR technology was selected according to permeabiltiy characteristics.[4]
Groundwater Flow Characteristics	Does the site have high/unfavorable groundwater flow (above 1 foot per day [ft/d] [2])? Will costly flow control strategies be required?	Is groundwater flow less than 1 foot per day (ft/d) or within the acceptable range of the proposed ITR technology?	Groundwater flow conditions present favorable wetting of soils without creating a detrimental heat sink.
Subsurface Utilities/Debris/Obstructions	Is debris, tanks, utilities, structures present, potentially confounding or precluding the vertical migration of vapor or application of heat?	Have comprehensive evaluations been perfomed to identify subsurface complicators which may limit effectiveness?	Subsurface annomolies/utilities are well defined and pose minimal impediment to implementation.
Source Area Accessibility	Is there inaccessible source area(s) which may result in incomplete removal, or the need for additional remedial elements?	Is demolition or other non-standard design required to access source area?	Source area is readily accessible and adjacent property access has been considered if necessary.
Utility Evaluation (Electric and Gas)	Is Electric/Gas available, available without significant infrastructure improvements, and available in a reasonable timeframe?	Has a Planner-level evaluation of available energy sources been performed? Onsite storage of LPG may conflict with nearby land uses.	Planner-level evaluation demonstrates adequate energy sources for desired ITR technology. If LNG, storage does not conflict with nearby land use.
Cost	Is cost realistic, prohibitive? Treatment volume is a primary factor in the cost of ITR.	Have the factors effecting cost been evaluated? Incomplete investigation may transfer unacceptable risk to the Contractor increasing cost.	Complete investigation and cost competative. Relatively lower cost of treatment compared to excavation and disposal, exsitu treatment or conventional pump and treat.

SEE- steam enhanced extraction

TCH- thermal conduction heating

ERH- electrical resistance heating

1. - Low permeable materials (hydraulic conductivity of less than 10-4 cm/sec) are unfavorable for SEE technologies.
2. - except for SEE
3. - i.e., soil moisture, clay content, permeability, depth to contamination
4. - i.e., moderate/high permeabillity or thin clay layers (<10 ft) for SEE and low permeabilty layers and subsurface moisture for ERH.
5. Will also incidentally treat dissolved plume in same footprint as source area.

In Situ Chemical Reduction Feasibility Analysis National Heatset Site - Dissolved Phase Groudwater Plume

PERFORMANCE MEASURE	STOP ISCR is not a feasible alternative at this site	CAUTION More information needed or considerations to be addressed prior to ISCR selection	PROCEED ISCR is a feasible alternative
	METRIC		
Remedial Objectives *Are objectives achievable with technology and limitations understood?*	• Remedial objectives will not be achieved by the application of this technology. • Technology will not reduce the source mass or groundwater concentrations to acceptable levels and/or protect downgradient receptors. • Duration to achieve remedial objectives is too long	• Residual groundwater contamination will potentially remain after implementation[1]. Further evaluation of ISCR or a combination of remedial alternatives should be considered to achieve remedial objectives. • Duration to achieve remedial objectives is longer than desired or needs further evaluation.	• Goals match ISCR capabilities for the given conditions and a detailed comparison of alternatives has been performed. • Can achieve remedial goals in within desired time frames.
Hydrogeologic Conditions *Is there potential for migration?* *What are the soil characteristics?*	• Hydraulic conductivity is less than 10^{-6} cm/sec and fracturing is not amenable to site conditions or a permeable reactive barrier (PRB) can not be placed at the site. • Soil heterogeneity will limit distribution of the reductant. • Injectability is low and will limit distribution of the reductant. • There is potential for uncontrolled migration of reductants or contaminants or byproducts. • High groundwater velocity or high groundwater flux that is not suitable for reductant application. • The majority of the mass is in the vadose zone	• Known conditions are conducive to the proposed ISCR technology, but site conditions warrant additional considerations to ensure appropriate remedy selection (i.e., soil moisture/saturation, permeability, particle size distribution, soil porosity, manmade conduits, depth to contamination, plume size). • High groundwater table could lead to daylighting of reductant. • There is a need to evaluate structural safety including the following :Is subsurface fracturing required for injection and could it lead to daylighting of reductant? Are the onsite structures/pavement stable enough to withstand subsurface fracturing? Is deep trenching for permeable reactive barrier safe for the site structures? • The presence of bedrock and interaction with overburden aquifers is not clearly understood. • There is the potential for off gassing causing VI issues in existing structures. • There is the potential for reagents to enter and effect surface waters.	• Materials in soil are a granular porous material with high permeability. • Groundwater velocity provides adequate contact time for the reductant. • Soils are saturated. • Soil heterogeneity can be overcome with injection system design. • Hydraulic conductivity greater than 10^{-4} cm/sec and acceptable groundwater velocity for reductant application. • Pilot testing indicates injectability is acceptable or selected material is suitable for PRB application. PRB longevity is adequate.
ISCR Technology Applicability *Were techniques or technologies sufficiently evaluated to consider ISCR alternative?*	• Specific site contaminants may not be amenable to ISCR mechanisms. • Alternative technology is clearly preferable. • Pilot testing was unsuccessful at achieving constituent reduction.	• Additional evaluation of key design parameters are needed to determine applicability of ISCR, including determining the most effective methodology and the most applicable reductant based on site conditions. • Which reductant is most applicable based on the site conditions? • There is a need for pilot testing in controlled area(s) to help ensure treatment effectiveness.	• A specific ISCR technology has been identified and site conditions are favorable for successful implementation. It can be used effectively with: chlorinated solvents, oxidation-reduction potential sensitive metals (e.g., hexavalent chromium), petroleum hydrocarbons, and energetic compounds (e.g. RDX, TNT etc.). • Reagent has been used successfully at similar sites.
Baseline Conditions, Contaminant Chemistry and Distribution *What are the characteristics of the geochemical conditions? Is NAPL present? What is the extent of contamination?*	• Contaminants are not amenable to chemical reduction. • Concentrations present are low and widely distributed. • High nonaqueous phase liquid (NAPL) mass/presence of mobile NAPL (ISCR treatment of NAPL is possible but will require a high reductant dose and multiple treatments). • Baseline conditions indicate strong oxidizing conditions in the aquifer that makes ISCR application cost prohibitive. e.g. for pH (<4 SU), redox potential (>200 mV), and dissolved oxygen (>5 mg/L) etc. • Presence of an ongoing release or uncontrolled source. Generally remediation should be applied after the release or the uncontrolled source is stopped such that stoichiometric demand calculations and mass flux calculations can be performed for designing the remedy	• Not all potential migration pathways have been identified and evaluated. • Byproducts will be left behind that inhibit further reduction and/or biodegradation of the target contaminant. • Product left behind may make land difficult for future use e.g., high iron concentration in shallow overburden with high water table may dissuade developers. • Baseline conditions for pH, redox potential, dissolved oxygen, dissolved carbon dioxide, temperature, alkalinity, and specific conductance have not been established. • NAPL has not been characterized or determined to be present.	• Contaminants present can be destroyed with the proposed reductant . • Groundwater concentrations are present at higher concentrations where chemical reduction an appropriate remedial technology. • Baseline conditions are suitable for reduction and undesirable byproducts are not anticipated based on treatability/pilot testing results or existing literature. • The source zone has been identified and the treatment zone is defined. • NAPL is not present or it has been identified as limited residual[1].

Notes:

1. Intended to be combined with DNAPL source remediation.

In Situ Chemical Reduction Feasibility Analysis National Heatset Site - Dissolved Phase Groundwater Plume

PERFORMANCE MEASURE	STOP ISCR is not a feasible alternative at this site	CAUTION More information needed or considerations to be addressed prior to ISCR selection	PROCEED ISCR is a feasible alternative
	METRIC		
Geochemistry *What are the chemical characteristics that may impact ISCR results? Conditions can vary depending on the reductant used. Are there metals present that may migrate? Mineral formation? Treatability testing?*	• Presence of insufficient moisture content of soil. • Other metals present in the reductant will cause groundwater criteria exceedance or may migrate offsite. • High levels of reductant passivating constituents or constituents reducing the reactivity of reductant in groundwater e.g., sulfate, carbonate, calcium, silica, silicates, phosphate, oxygen, and nitrate are present. • Formation of minerals that may coat and block the heterogeneous reactivity of reductants e.g. formation of magnetite (Fe3O4) or goethite (α-FeOOH) on zero valent iron (ZVI) surface is observed in high levels. • Treatability testing and/or pilot testing demonstrated that ISCR will not be effective in reducing contaminant concentrations or may mobilize other contaminants. • There is high reductant demand- include reductant demand based on stoichiometry, based on treatability testing and/or pilot test, and based on contaminant and precipitation flux. Sufficient reductant can not be delivered to subsurface to achieve objectives. • Was biofouling evaluated i.e., does the site have high anaerobic metal reducing and/or sulfate reducing bacteria that may lead to biofouling and reduce the effectiveness of chemical reductant. • Estimated concentration of secondary water quality parameters post ISCR operations e.g., sulfate, chloride, pH, metals, and total dissolved solids etc. are not acceptable for regulatory compliance e.g., if the treated groundwater pH changes too acidic (<3S.U) or too basic (>11 S.U) for long term at the property boudary or at a downgradient receptor location. Secondary water quality parameters should not exceeed federal or state specific criteria for long term particulalry if there are downgradient water supply wells that can be potentially impacted. A short term exceedance should be reviewed on a case by case basis.	• There is a need to evaluate chemical properties, including organic content of soil, concentrations, metals, compounds present, and secondary water quality changes. • Treatability testing and/or Pilot testing has not been conducted or more data collection is needed to support the feasibility of ISCR technology. • Low to medium soil reductant demand is estimated but has not been confirmed- include reductant demand based on stoichiometry, based on treatability testing and/or pilot test, and based on contaminant and precipitation flux.	• Physical and chemical parameters generally support ISCR. • Other metals present in the reductant will not cause groundwater criteria exceedance or and minimal offsite migration is anticipated. • Reductant passivating constituents or constituents reducing the reactivity of reductant in groundwater i.e. carbonate, sulfate, calcium, silica, silicates, phosphate, oxygen, and nitrate are not present in high concentrations. • Formations of minerals on ZVI surface that may adversely reduce the longevity of ZVI is not observed in treatability testing and/or pilot testing. • Confirmed low to medium soil reductant demand- include reductant demand based on stoichiometry, based on treatability testing and/or pilot test, and based on contaminant and precipitation flux. • Treatability testing/Pilot testing has successfully identified an appropriate reductant and dose and sufficient longevity of the reductant was observed/calculated that will overcome the total Lifecyle demand of the reductant. • Microbial testing and pilot testing did not indicate biofouling issues. • Estimated concentration of secondary water quality parameters post ISCR operations e.g., sulfate, chloride, pH, metals, and total dissolved solids etc. are acceptable for regulatory compliance.
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Source Area Accessibility *What is the size of the contamination area? Where is the source of contamination?*	• Presence of inaccessible source area(s) which may result in incomplete removal or need for additional remedial elements, such as multiple applications. • Potential for rebound if source is not directly treated. • The source area cannot be cut off from the receptor(s) after ISCR application (e.g., if being used as PRB).	• Demolition or other non-standard design is required to access source area. • Source area is relatively large. • Climate may affect accessibility to source area. • Minor issues for access to contaminant.	• Source area is well-defined, readily accessible and adjacent property access has been considered, if necessary.
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https://clu-in.org/techfocus/default.focus/sec/In_Situ_Chemical_Reduction/cat/Overview/

https://www.frtr.gov/matrix/In-Situ-Chemical-Reduction/#Resources

Appendix J

Cost Backup

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In Situ Chemical Reduction with Bioaugmentation via Angled and Vertical Direct Push Injection - Source Area, 30-85 ft depth				
Items	**Quantity**	**Unit**	**Unit Cost**	**Total Cost**
Pre-Injection Sampling				
Labor	120	Hr	$ 85.00	$ 10,200.00
Analysis - VOCs, total and dissolved Fe, Sulfate, Nitrate, TOC, alkalinity, chloride, and dissolved gases	48	Ea	$ 242.00	$ 11,616.00
Equipment and Shipping	1	LS	$ 1,500.00	$ 1,500.00
Travel	1	LS	$ 4,354.00	$ 4,354.00
Construction (First Year)				
Substrate, drilling/injection equipment and crew	1	LS	$ 1,790,000.00	$ 1,790,000.00
Follow up Injection (75% of first injection)	1	LS	$ 1,342,500.00	$ 1,342,500.00
Construction and Operation Subtotal				$ 3,160,170.00
Long Term Groundwater Monitoring (52% of Pre-Injection Sampling, VOCs only)				
Quarterly GW Mon	1	LS	$ 60,000.00	$ 60,000.00
Lifetime Long Term Monitoring (Quarterly first year of each injection, semi annual to year 10, annual years 11-30)				$ 516,980.41
Capital and LTM Subtotal				$ 3,677,150.41
Design	5%			$ 183,857.52
Project/Construction Management	5%			$ 183,857.52
Total Estimated NPV (Capital + LTM + Management)				$ 4,044,865.45
Add 20% Contingency				$ 4,853,838.54

Thermal Conduction Heating via Angled and Vertical Wells and Borings - Source Area, full depth				
Items	**Quantity**	**Unit**	**Unit Cost**	**Total Cost**
Pre-Treatment Sampling				
Labor	120	Hr	$ 85.00	$ 10,200.00
Analysis - VOCs, Incl. QA/QC	48	Ea	$ 58.00	$ 2,784.00
Equipment and Shipping	1	LS	$ 1,500.00	$ 1,500.00
Travel	1	LS	$ 4,354.00	$ 4,354.00
Construction				
Drilling/installation, operation	1	LS	$ 7,560,000.00	$ 7,560,000.00
Utilities	1	LS	$ 1,860,000.00	$ 1,860,000.00
Post Treatment Soil Sampling				
Drilling- angled and vertical, 5 pts	5	Day	$10,000	$50,000
Labor	90	Hr	$85	$7,650
Analysis - VOCs, Incl. QA/QC	30	Ea	58	$1,740
Construction and Operation Subotal				**$ 9,498,228.00**
Long Term Groundwater Monitoring (75% of Pre-Injection Sampling)				
Quarterly GW Mon	1	LS	$ 60,000.00	$ 60,000.00
Lifetime Long Term Monitoring (Quarterly first three years of treatment, annual				$ 393,462.12
Capital and LTM Subtotal				$ 7,972,300.12
Design	5%			$ 398,615.01
Project/Construction Management	5%			$ 398,615.01
Total Estimated NPV (Capital + LTM + Management)				$ 8,769,530.14
Add 20% Contingency				$ 10,523,436.16

In Situ Chemical Oxidation via Angled and Vertical Direct Push Injection - Source Area				
Items	**Quantity**	**Unit**	**Unit Cost**	**Total Cost**
Pre-Injection Sampling				
Labor	120	Hr	$ 85.00	$ 10,200.00
Analysis - VOCs	48	Ea	$ 58.00	$ 2,784.00
Equipment and Shipping	1	LS	$ 1,500.00	$ 1,500.00
Travel	1	LS	$ 4,354.00	$ 4,354.00
Construction (First Year)				
Substrate, drilling/injection equipment and crew	1	LS	$ 2,250,000.00	$ 2,250,000.00
Follow up Injections (50% of first injection)	1	LS	$ 1,687,500.00	$ 1,687,500.00
			Lifetime Follow Up Annual Injections - 5 years, 10% reduction each year	$ 5,269,948.89
Construction and Operation Subtotal				$ 9,226,286.89
Quarterly Groundwater Monitoring (75% of Pre-Injection Sampling)				
Quarterly GW Mon - per year	1	LS	$ 60,000.00	$ 60,000.00
Lifetime Long Term Monitoring (Quarterly years 1-10, annual years 11-30)				$ 640,391.88
Capital and LTM Subtotal				$ 9,866,678.77
Design	2%			$ 197,333.58
Project/Construction Management	5%			$ 493,333.94
Total Estimated NPV (Capital + LTM + Management)				$ 10,557,346.28
Add 20% Contingency				$ 12,668,815.54

Surfactant-Enhanced Aquifer Remediation				
Items	**Quantity**	**Unit**	**Unit Cost**	**Total Cost**
Pre-Injection Sampling				
Labor	120	Hr	$ 85.00	$ 10,200.00
Analysis - VOCs	48	Ea	$ 58.00	$ 2,784.00
Equipment and Shipping	1	LS	$ 1,500.00	$ 1,500.00
Travel	1	LS	$ 4,354.00	$ 4,354.00
Construction				
Drilling	50	Day	$ 10,000.00	$ 500,000.00
Labor - Installation	1250	Hr	$ 85.00	$ 106,250.00
Equipment	1	LS	$ 2,000,000.00	$ 2,000,000.00
Surfactant Chemicals	1	LS	$ 2,000,000.00	$ 2,000,000.00
Utilities	5	Year	$ 60,000.00	$ 300,000.00
Operation				
Labor - 10 hrs per day 5 days per week, 2 ppl	26000	Hr	$ 85.00	$ 2,210,000.00
Construction and Operation Subtotal				$ 7,135,088.00
Quarterly Groundwater Monitoring (75% of Pre-Injection Sampling)				
Quarterly GW Mon - per year	1	LS	$ 60,000.00	$ 60,000.00
Lifetime Long Term Monitoring (Quarterly years 1-10, annual years 11-30)				$ 640,391.88
Capital and LTM Subtotal				$ 7,475,479.88
Design	5%			$ 373,773.99
Project/Construction Management	10%			$ 747,547.99
Total Estimated NPV (Capital + LTM + Management)				$ 8,596,801.86
Add 20% Contingency				$ 10,316,162.24