2020 PERIODIC REVIEW REPORT
AMERICAN THERMOSTAT SITE
NYSDEC SITE NO. 420006

WORK ASSIGNMENT NO. D009809-01

Prepared for:

New York State Department of Environmental Conservation
Albany, New York

Prepared by:

MACTEC Engineering and Geology, P.C.
Portland, Maine

MACTEC: 3616206098

MAY 2021

2020 PERIODIC REVIEW REPORT
AMERICAN THERMOSTAT SITE
NYSDEC SITE NO. 420006

WORK ASSIGNMENT NO. D009809-01

Prepared for:

New York State Department of Environmental Conservation
Albany, New York

Prepared by:

MACTEC Engineering and Geology, P.C.
Portland, Maine

MACTEC: 3616206098

MAY 2021

Submitted by:

Jean Firth, P.G.
Project Manager

Approved by:

Nicole Bonsteel, P.E.
Technical Reviewer

TABLE OF CONTENTS

LIST OF FIGURES

Figure

LIST OF TABLES

Table

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AT	American Thermostat Company
bgs	below ground surface
BOD	Basis of Design
cis-1,2-DCE	cis-1,2-dichloroethene
EC	engineering control(s)
EW	bedrock well
GAC	granular activated carbon
gpm	gallon(s) per minute
GWETS	groundwater extraction and treatment system
IC	institutional control(s)
lbs	pounds
LTM	long-term monitoring
MACTEC	MACTEC Engineering and Consulting/Geology, P.C.
µg/l	microgram(s) per liter
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	operation and maintenance
OM&M	Operation, Maintenance and Monitoring
OU	operable unit
OW	overburden well

GLOSSARY OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

PCE	tetrachloroethene
PLC	Programmable Logic Controller
POET	point of entry treatment system
PRR	periodic review report
RAO	Remedial Action Objective
ROD	Record of Decision
RSO	remedial systems optimization
Site	American Thermostat site
SM	Site Management
SMP	Site Management Plan
SVI	soil vapor intrusion
TCE	trichloroethene
USEPA	United States Environmental Protection Agency
VI	vapor intrusion
VOC	volatile organic compound

EXECUTIVE SUMMARY

The American Thermostat site (NYSDEC Site No. 420006; herein referred to as the Site) consists of approximately eight acres and is located in South Cairo, Town of Catskill, Greene County, New York. The Site has been remediated in accordance with Record of Decision (ROD) for Operable Unit 1 (OU1) (potable water supply) (United States Environmental Protection Agency [USEPA], 1988) and OU2 (soil, sediment, surface water, groundwater, and building contamination) (USEPA, 1990). The Site includes an active groundwater extraction and treatment system (GWETS). The contaminants of concern are volatile organic compounds including tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE), and vinyl chloride. Remedial goals outlined in Record of Decision (ROD) documents for the Site are instituted to ensure protection of groundwater from Site contaminants in soil, restore groundwater to drinking water standards or until a point has been reached at which contaminant concentrations in the groundwater "level off," and reduce risk to human health and the environment. Current Site Management (SM) requirements for monitoring the performance and effectiveness of the remedial measures completed at the Site consist of operating the groundwater extraction and treatment system to maintain hydraulic control in the source area, routine inspection, sampling, and reporting.

The GWETS has been operational since 1998, and monitoring results have indicated that achieving groundwater cleanup goals in a reasonable period of time will not be possible. The exposure pathways resulting from Site contaminants being released into the environment have either been eliminated through previous and current actions (i.e., extension of the public water supply and thermal treatment of shallow contaminated soil, as well as residential point of entry treatment [POET] systems), or are not complete (i.e., vapor intrusion). However, vapor mitigation of the on-Site American Thermostat building may be warranted if occupancy of the currently vacant building resumes. The objective of treating groundwater "until federal and state standards for the organic contaminants have been achieved" is not realistic at this Site. As a result, the Remedial Action Objective (RAO) for the Site has been redefined to focus on hydraulic containment of the source area. This is an achievable goal that is protective and cost-effective.

Based on information gathered as part of the Remedial Systems Optimization (RSO) investigation and the updated conceptual site model, optimization measures to the GWETS were initiated in 2013

and completed in 2017. By focusing on hydraulic containment of the source area, and by eliminating extraction of water from off-site deep bedrock extraction wells, it was anticipated that the northwestern edge of the PCE plume would separate from the remainder of the plume and migrate towards Catskill Creek. Therefore, the effectiveness of the GWETS would increase, operating costs would decrease, groundwater would continue to be treated and its quality gradually improved with time; and data obtained from ongoing monitoring activities would be used to evaluate migration pathways and potential receptors.

This Periodic Review Report summarizes SM activities completed at the Site from January 2018 through December 2020. Based on activities completed in 2020, the Site use and activities are in compliance with the Site Management Plan (SMP) requirements (MACTEC, 2018a), the institutional controls/engineering controls (IC/ECs) remain in-place, the GWETS is performing as designed, and Site controls are effective in protecting the public health and environment.

During the reporting period, the GWETS was shut down on several occasions due to system alarms, modifications, and maintenance periods.

Water level measurements were collected semiannually from 2018 to 2020 to monitor hydraulic control of the source area. Based on measurements from April 2018 and April 2019, pumping elevation setpoints of bedrock extraction wells and extraction well pump rates were modified in 2018 and 2019, respectively, to limit over-pumping and treatment of clean off-site groundwater. Groundwater samples were collected in October 2018 and January 2020 as part of the long-term monitoring program established for the Site. GWETS performance monitoring occurred monthly. Results from these monitoring programs demonstrate the system is performing effectively in maintaining an inward hydraulic gradient to the Site.

As expected, the groundwater plume's concentration core continues to respond to the reconfiguration of extraction well pumping and the residual off-site groundwater contamination appears to be migrating toward Catskill Creek as predicted.

At the request of the NYSDEC, a project review meeting was held in 2020 to discuss current Site remedial objectives and status, as well as to present treament system alternatives for the continued

optimization and monitoring of system efficiency and of hydraulic control of the source in the vicinity of the Site.

1.0 SITE OVERVIEW

1.1 SITE HISTORY AND DESCRIPTION

American Thermostat Company (AT) produced thermostats and used chlorinated and non-chlorinated solvents in its manufacturing from 1954 to 1985. The waste solvents were disposed on the property and/or discharged to the septic system.

In 1981, the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) sampled nearby residential wells and detected tetrachloroethene (PCE) exceeding the federal maximum contaminant levels. Shortly thereafter, the United States Environmental Protections Agency (USEPA) took over management of the American Thermostat site (Site) and installed a point of entry treatment (POET) system consisting of carbon filtration units on affected homeowners' wells. AT ended Site operations in 1985, and in 1987, the USEPA commissioned a focused Feasibility Study to evaluate an alternate water supply for the affected residents. In 1988, a Record of Decision (ROD) was signed for Operable Unit 1 (OU1) that outlined an extension of the existing public water supply as well as maintaining POET systems for several private wells, including the communal water supply for the Country Estates trailer park located northwest of the Site. The USEPA conducted a Remedial Investigation for soil, surface water, and groundwater at the Site. In 1990, the ROD for OU2 was issued outlining mitigation measures for the source area, including implementation of a groundwater extraction and treatment system (GWETS).

The ROD for OU2 states: "The groundwater treatment will continue until federal and state standards for the organic contaminants have been achieved in the groundwater throughout the contaminated plume area or until a point has been reached at which contaminant concentrations in the groundwater 'level off'. At that point, the remedy will be reevaluated for its effectiveness." It was assumed in the OU2 ROD that the selected remedial alternative for groundwater would take up to 30 years to achieve cleanup levels (5 micrograms per liter [µg/L] for PCE).

The GWETS became fully operational in 1998 and the USEPA conducted 5-year reviews in 2003, 2008, 2013, and 2018. In 2008, following 10 years of Site management (SM) by the USEPA, the Site

was transferred to the NYSDEC. A Periodic Review Report (PRR) for reporting period 2010 through 2011 was completed by MACTEC for the NYSDEC (MACTEC Engineering and Consulting, P.C. [MACTEC], 2012a). This review indicated that monitoring of plume concentrations was primarily conducted at active extraction wells, and concentrations of Site contaminants appeared to be steady and/or slightly trending downward in the plume area. However, in the source area, concentrations remained elevated (above 1,000 µg/L) and declining at an even slower rate, indicating that concentrations may be sustained by the presence of a residual contaminant source. It appeared that groundwater treatment had reached a point at which contaminant concentrations had more or less "leveled off" and it was recommended that the remedial action be reevaluated for its effectiveness.

In the Spring/Summer of 2012, a Remedial System Optimization (RSO) Implementation field investigation was conducted. Results of the RSO Implementation activities suggested numerous recommendations for improvement regarding the groundwater remedy (MACTEC, 2013a). Specific to the GWETS, a Basis of Design (BOD) Memorandum (MACTEC, 2013b) was prepared following the Final RSO Implementation Activities Report to define proposed modifications to the groundwater treatment system for a more streamlined system to improve effectiveness and lower operating costs.

In the winter of 2012, the vapor intrusion (VI) pathway within the plume boundaries was evaluated (MACTEC, 2012b). Soil VI (SVI) sampling indicated a potential migration pathway of vapors to the Site manufacturing building and the adjacent Hook property (Structure 3). A sump cover was added to the existing basement sump within Structure 3 by the property owner to reduce potential exposure to vapors.

From 2013 through the end of 2015, the majority of GWETS improvements proposed in the BOD Memorandum were completed. In 2016 and 2017, GWETS operation modifications and troubleshooting efforts optimized flow and groundwater elevation, and reduced routine maintenance requirements. A new control system was installed at the extraction wells and within the main plant.

In 2018, a geothermal heating/cooling assessment was performed at the Site to evaluate utilization of extracted, treated groundwater as a means to reduce utility expenditures and greenhouse gas output. Details of the assessment are summarized in Section 2.6.

Additional modifications to the GWETS were completed from 2018 to 2020 as part of continued optimization efforts. Modifications included, but were not limited to, well pump programming adjustments and system components upgrades, as discussed in Section 2.1.2

Currently, the GWETS consists of five bedrock extraction wells and seven overburden extraction wells, and discharges treated water to a surface drainage swale on the eastern side of the Site that eventually leads to Catskill Creek. Besides the GWETS, the groundwater remedial measure includes the three residential POET systems described in Sections 2.1.3 and 2.2.2.

1.2 PHYSICAL SETTING

The Site is located in a rural residential area in South Cairo, Town of Catskill, Greene County, New York, approximately thirty miles southwest of Albany and five miles west of the Village of Catskill. The approximately eight-acre site is bordered by Routes 23B and Route 23 on the north and south, respectively, by a residential property on the west, and by New York State (NYS)-owned property to the east (see Figure 1.1). The Site contains the former American Thermostat building and the water treatment plant constructed for the implementation of the groundwater remedy.

The topography within the vicinity of the Site is characterized by the gently rolling foothills of the Catskill Mountains, which are deeply incised by stream channels. The Site is located on a slight ridge overlooking Catskill Creek Valley. Immediately west of the facility is a small valley which includes Tributary B, a tributary of Catskill Creek. East of the facility is Tributary A, which also flows into Catskill Creek, located approximately a quarter mile to the east of the Site.

Regionally, the bedrock within Greene County consists of interbedded shales and sandstones of Devonian age, known as the Catskill Formation. The Catskill Formation is made up of four, distinct bedrock groups. From oldest to youngest, these groups are Hamilton, Genesee, Sonya, and West Falls, and the Site location lies within the Hamilton Group. In the vicinity of the Site, the bedrock is at an average depth of 28 to 30 feet below ground surface (bgs); however, in the vicinity of the former manufacturing building, bedrock is approximately 100 feet bgs. The overburden material overlying the bedrock consists primarily of glacially derived soils.

A groundwater investigation as part of RSO Implementation activities indicated that there is limited hydraulic connection between the overburden and bedrock at the Site. Overburden groundwater is perched and slowly drains laterally toward low lying areas, and vertically into the bedrock aquifer. Bedrock groundwater level fluctuations recorded during RSO Implementation activities were compared to barometric fluctuations over the same time-period. The resulting relationship between water level fluctuation and barometric fluctuation indicated that the bedrock aquifer is likely semi-confined.

The area surrounding the Site is characterized as rural-residential. There are a few full-time residences, vacation homes, and several small businesses in the vicinity of the Site. The American Thermostat Corporation was the only manufacturing facility in the area.

Approximately 5,000 people live within a 3-mile radius of the Site in low-density residential areas. Prior to the public water supply line installation in 1992, to protect the public from exposure to contaminated groundwater, all homes within a ½- mile of the Site used private wells. At present, various residences and businesses within the immediate vicinity of the Site receive water from the municipal water supply of the Village of Catskill. However, while a municipal water supply was provided, property owners were not required to connect to the system. Therefore, the need for POET systems remains in three private residential wells and the Country Estates trailer park within the limits of the groundwater plume. These wells are equipped and mitigated with POET systems and are monitored regularly.

Catskill Creek is classified as a trout stream and has considerable recreational value to local and visiting fishermen. The creek is also an auxiliary water supply for the Village of Catskill.

1.3 CLEANUP GOALS AND REMEDIAL PROGRESS

Remedial goals outlined in the ROD were defined to protect groundwater from Site soil contaminants, to restore groundwater to drinking water standards or until contaminant concentrations "level off," and to reduce risk to human health and the environment (USEPA, 1990). The Final RSO Implementation Activities Report (MATEC, 2013a) concluded that groundwater cleanup goals would not be achieved in a reasonable period of time. Therefore, the remedial objective was redefined and implemented in 2013 to be limited to source control and (on-Site) hydraulic containment of

grossly contaminated groundwater (MACTEC, 2014). This is currently being achieved through the use of five bedrock extraction wells and seven overburden wells.

Pumping of former off-site extraction wells hydraulically maintained the shape and direction of the plume against the natural groundwater flow path towards Catskill Creek. The RSO investigation findings predicted that eliminating extraction of groundwater from off-site deep bedrock extraction wells would allow the northwestern edge of the PCE plume to separate from the main plume and migrate towards Catskill Creek. As a result, a small portion of the off-site plume would be drawn into the Country Estates supply wells where it would be treated via its existing treatment system, and the remainder of the plume would begin to slowly move toward Catskill Creek where it would eventually discharge and dilute to low concentrations (MACTEC, 2013a).

In September 2012, pumping was ceased at the off-site bedrock extraction wells EW-10, EW-11, EW-12, and EW-14, located between the Country Estates supply wells and the Site. Operation, maintenance, and performance monitoring of the POET system for the Country Estates supply wells was transferred from the NYSDEC to the County Estates owner in April 2010. The sampling frequency of pre-treatment (influent) water at the Country Estate Wells, CE-1 and CE-2, was reduced from quarterly to a 15-month sampling frequency in 2014 following the shutdown of the off-site extraction well network in 2012.

Influent groundwater samples collected from the Country Estates supply well, CE-1, historically have contained low to no detections of PCE, TCE, 1,2-DCE, and vinyl chloride (Appendix D). CE-1 is no longer used to track the off-site PCE plume and was last sampled during the 2016 long-term monitoring (LTM) event. It is not currently in service and serves as an emergency back up well to CE-2, the main supply well.

Analytical results from influent groundwater samples collected in October 2012 from the Country Estates main supply well, CE-2, exhibited a decrease in PCE and TCE concentrations from concentrations observed in samples collected in August 2012 (Appendix D). Following the shutdown of pumps in off-site bedrock extraction wells EW-10, EW-11, EW-12, and EW-14, sample results from the Site's LTM program have continued to show a declining trend of PCE and TCE concentrations in CE-2 below the New York State (NYS) Class GA Water Quality Standards (Class GA Standard) of 5 µg/L for PCE (Appendix B) and TCE (NYSDEC, 1998). This declining trend

indicates that the groundwater plume has successfully detached and is migrating away from CE-2 and that matrix diffusion from bedrock fractures is a continuing source of Site contaminants of concern at the Country Estate supply well. Movement of the western end of the plume away from the Country Estates supply wells toward Catskill Creek is further evidenced by an increase in PCE concentrations from 2014 to 2020 in the downgradient monitoring well EW-13 (located approximately 1,500 feet east of CE-2). Monitoring of the off-site migration and natural attenuation of the plume is accomplished with the LTM program and is further discussed within Section 2.0.

2.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

The Site Management Plan (SMP) for the Site includes an institutional controls/engineering controls (ICs/ECs) Plan, Operation and Maintenance (O&M) Plan, LTM Plan, and associated reporting (MACTEC, 2018a). SM requirements are summarized in Table 2.1. The content of Table 2.1 is a combination of the requirements specified in the SMP and those implemented as part of the RSO Implementation recommendations (MACTEC, 2013a).

2.1 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS

ICs/ECs provide added protection measures for potentially exposed receptors over and above natural attenuation mechanisms and source area remedial measures. ICs for the Site include restrictions to soil excavation, groundwater use and well installations, and a monitoring plan. Adherence to the ICs is required by and implemented under the SMP. ECs consist of the GWETS, the Site perimeter fence, monitoring wells, residential POET systems, and an alternate water supply (MACTEC, 2018a).

Groundwater is captured by the GWETS to confine the plume extent and migration and to recover contaminant mass. The Site perimeter fence prohibits unauthorized access to the GWETS building and is inspected monthly. Monitoring wells (on- and off-site) are used for collecting groundwater samples and elevation measurements as part of the LTM program. POET systems for three residences without city water, directing potentially affected residential groundwater through two-stage granular activated carbon (GAC) filtration, is monitored through routine maintenance and collection and analysis of groundwater samples taken quarterly from the three residential POET systems. An alternate water supply consisting of a public water supply line, extended to the vicinity of the Site from the Village of Catskill in 1992, is maintained by the Village of Catskill.

RSO Implementation field activities in 2012 identified surface and subsurface soil PCE contamination at the Site that exceeds the ROD cleanup goal of 1 milligram per kilogram. Surface soil contamination was identified immediately adjacent to the former manufacturing building (MACTEC, 2013a). To control exposure to contaminated soils, an IC was established requiring written permission from the NYSDEC to excavate Site soils as well as adherence to the excavation plan included in the SMP (MACTEC, 2018a).

The former manufacturing building is currently used for the storage vintage cars slated for restoration. If the owner uses the building for any activity other than the current use for storage, vapor mitigation may be necessary to address worker exposure via SVI.

2.1.1 Site Controls and Evaluation

Requirements for the Site controls are presented on Table 2.1. Effectiveness of the groundwater remedial measures is directly related to maintenance and monitoring of treatment processes related to the GWETS, and monitoring and maintenance of the residential POET systems. Progress of groundwater remediation is tracked through the performance of the GWETS, through the LTM program (Table 2.2), through the interpretation of plume extent, and through the evaluation of trends in concentration over time (MACTEC, 2013a). Observations regarding each of these components are discussed in the following subsections.

2.1.2 Groundwater Extraction and Treatment System

Operating parameters for the GWETS include monitoring volume treated (gallons), flow rate and flow per reporting period (approximately monthly), system downtime, and total volatile organic compounds (VOCs) extracted from groundwater. These quantities are presented in Tables 2.3, 2.4, and 2.5. During 2020, the treatment plant processed approximately 9.8 million gallons of groundwater at an average flow rate of approximately 21.7 gallons per minute (gpm) and removed approximately 190 pounds of total VOCs. A summary of GWETS performance monitoring results for 2020 are provided in Table 2.6 and Appendix A. Summaries of 2018 and 2019 GWETS performance monitoring results were included in their respective annual reports (MACTEC, 2019 and 2020).

In 2018, GWETS modifications included, but were not limited to, modification of pumping elevation setpoints of bedrock extraction wells to further limit over-pumping and treatment of clean off-site groundwater (implemented after the April 2018 hydraulic monitoring event), air stripper cleaning and maintenance, and an upgrade of the 1-inch diameter discharge pump effluent piping to 2-inch diameter to increase pumping capacity. Additionally, pump intake elevations and operational elevations were checked to verify extraction wells were operating within the appropriate elevation ranges. The building sump transducer was programmed to include high-level sump pump operation

(float switch fault), and the main control panel (MCP) was programmed to indicate when system shutdowns occur. A comprehensive list of GWETS modifications completed in 2018 was included in the 2018 Annual Report (MACTEC, 2019). In 2019, minor modifications to extraction well pump rates were completed to further reduce unnecessary controlling of clean water from off-site. Modifications completed in 2019 were included in the 2019 Annual Report (MACTEC, 2020).

Maintenance and monitoring of the three residential POET systems (Klinke, Kubler, and Viella) was performed on a quarterly basis and/or as needed at the request of the resident. Sampling results for 2020 are summarized in Table 2.7 and indicate that the POET systems appear to be operating as intended; no exceedances of NYS Class GA standards for Site-related VOCs were observed.

In 2020, GWETS modifications included, but were not limited to, the replacement of backup power supply batteries at active extraction wells and at the GWETS' main control panel, the repair of damaged aboveground piping within active extraction well EW-2's aboveground vault, the replacement of two effluent discharge pumps to increase GWETS discharge efficiency, and programming updates to individual active extraction well Programmable Logic Controllers (PLC) allowing for remote access to well PLCs if necessary. An inspection of the treatment building's sump was completed to identify possible cracks that may allow inward seeping of water during large rain events or as the water table rises. No substantial cracks were identified that would require the sump to be sealed with waterproof barrier spray. A roof leak identified in 2019 near a ceiling-mounted propane heater exhaust duct within the treatment building was repaired.

A New York State Uniform Fire Prevention and Building Code inspection of the treatment building was completed in 2019 which identified open electrical wires at the southern portion of the building. A junction box was installed to enclose the wires in June 2020 to address this violation. In October 2020, Precision Environmental Services, Inc. replaced Structure 3's sump basin, including sump basin cover, to prevent vapor exposure potential. Standing water was observed in Structure 3's exterior basement stairwell in December 2020 and it was assumed the basement potentially contained standing water. Waste characterization samples were collected from the stairwell and an inspection of the structure's basement is scheduled for 2021. A NYSDEC Health and Safety Unit inspector performed a safety walkthrough of the treatment building in October 2020. Action items identified during the inspection were addressed and completed in December 2020 and include:

- installation of carbon monoxide detectors within the treatment building,

- repair of holes on the treatment building's exterior metal siding,
- repair of warped, wooden mid-rail guardrail system leading the second floor within the treatment building, and
- removal of a debris pile staged in the treatment building from interior cleaning and organization activities in 2019 and 2020.

2.1.3 Residential POET Systems

While municipal water is supplied through the town distribution system to many houses in the area, three residences located outside the area of the municipal water supply and within the residual off-site plume are equipped with POET systems. Monitoring, maintenance, and reporting are conducted on a quarterly basis. Modifications to the POET systems is described in the Section 2.2.2.

2.2 OPERATION AND MAINTENANCE PLAN

The remedial measures in place require routine inspection, sampling, and maintenance to provide effective remediation and reduction of exposure to Site-related contaminants. O&M procedures and requirements are presented in the SMP (MACTEC, 2018). The O&M Plan was revised in the 2018 SMP to incorporate the numerous changes implemented at the Site from 2013 to 2017. The following subsections describe requirements and compliance with the O&M Plan with respect to the GWETS and individual residential POET systems.

2.2.1 Groundwater Extraction and Treatment System

Monthly progress reports were generated in 2020 to summarize GWETS system operation and to present operational and maintenance data to the NYSDEC.

A total of twelve extraction wells were active and include five bedrock wells (EWs) and seven overburden wells (OWs):

- EW-2, EW-6, EW-7, EW-9, EW-16
- OW-2, OW-3, OW-5, OW-7, OW-13, OW-14, OW-16

Extraction well EW-2 is not operating at the time of the submittal of this report due to a pump fault alarm. Repairs and/or modifications are planned for 2021.

During 2020, approximately 9.8 million gallons of extracted groundwater were processed with an average flow rate of approximately 21.7 gpm, and approximately 190 pounds of total VOCs were removed (Tables 2.3 and 2.5). System influent and effluent samples were collected and analyzed monthly for VOCs; therefore, mass removal is an approximation.

During 2020, approximately 45 days were reported as downtime (Table 2.4). The GWETS was shut down on several occasions in 2020 due to system alarms and modification and maintenance periods. Downtime represented approximately 12 percent of total available operating time.

Approximate system downtime for the GWETS fluctuated from 2018, 2019, and 2020: 66 days (MACTEC, 2019), 17 days (MACTEC, 2020), and 45 days, respectively. The total amount of water treated by the system from 2018 through 2020 decreased minimally compared to the 2015 through 2018 reporting period (approximately 37 and 38 million gallons, respectively) (Table 2.3).

Class GA standards and guidance values were used for comparison to the treated groundwater being discharged to the swale. These numerical limits are applicable at the point of treated groundwater effluent discharge at the end of the force main which leads to the unnamed Tributary A (a Class C surface water body) prior to discharging to the Catskill Creek.

In 2018, GWETS monthly effluent samples exceeded Class GA standards and guidance values for VOCs from May to August, and for iron in August, indicating diminishing performance of the air stripper. Therefore, the air stripper was disassembled, cleaned, and reassembled in September 2018. Subsequent monthly effluent samples did not exceed Class GA standards and guidance values for Site-related VOCs or iron in 2018 (MACTEC, 2019), or in 2019 (MACTEC, 2020) or 2020, and therefore met surface discharge limits. The system performance monitoring results for 2020 are presented in Table 2.6.

2.2.2 Residential POET Systems

Maintenance and monitoring of the three residential POET systems (Klinke, Kubler, and Viella) was performed on a quarterly basis. Quarterly samples were collected between GAC filters, and no exceedances of NYS Class GA standards for Site-related VOCs were observed in 2018 (MACTEC, 2019), 2019 (MACTEC, 2020), or 2020 (Table 2.7). Samples were collected from the three

residential wells before filtration as part of the October 2018 and January 2020 LTM events and did not contain detections of Site-related VOCs. Results for October 2018 were included in the 2018 Annual Report (MACTEC, 2019). Results for January 2020 are included in Table 2.7. Sampling results indicate that the POET systems appear to be operating as intended.

From 2018 to 2020, improvements to and routine maintenance of the three individual POET systems was completed and include the following:

Klinke Residence

- Installation of a mounting system to more effectively secure POET system components to the wall and of a pre-filtration pressure gauge to monitor differential pressure across filters.
- Replacement of two filter housings, the ultraviolet sanitizing unit, and system piping.
- Quarterly inspections of the POET system and sampling of treated water from between two GAC filters.
- Routine maintenance:
    - Replacement of inline particulate filter, GAC filter(s), and ultraviolet bulb, as necessary.

Kubler Residence

- Replacement of the ultraviolet sanitizing unit
- Quarterly inspections of the POET system and sampling of treated water from between two GAC filters.
- Routine maintenance:
    - Replacement of inline particulate filter, GAC filter(s), and ultraviolet bulb, as necessary.

Viella Residence

- Replacement of the ultraviolet sanitizing unit
- Quarterly inspections of the POET system and sampling of treated water from between two GAC filters.
- Routine maintenance:
    - Replacement of inline particulate filter, GAC filter(s), and ultraviolet bulb, as necessary.

2.3 LONG-TERM MONITORING

The LTM program has been designed to monitor the effect of the GWETS on contaminant levels in groundwater in the vicinity of the Site, to monitor long-term trends in concentrations of contaminants in groundwater, and to evaluate the effectiveness of the remedial actions (MACTEC, 2018a). This is accomplished through groundwater sampling and analysis, and through the collection of water level measurements from select wells to generate bedrock and overburden potentiometric surface maps. Since 2014, groundwater sampling events for the Site have been performed on a 15-month basis.

Groundwater samples were collected and analyzed for VOCs from select wells (Table 2.2) during the October 2018 and January 2020 LTM events and the data was used to delineate the PCE plume. Data tables and figures from the 2018 LTM event were included in the 2018 Annual Report (MACTEC, 2019). Figures depicting well locations, bedrock and overburden potentiometric surfaces, and the inferred bedrock and overburden groundwater PCE plumes from the 2020 LTM event are included as Figures 2.1, 2.2, 2.3, 2.4, and 2.5, respectively.

From January 21 to 23, 2020, water levels were measured in twenty monitoring wells, five bedrock extraction wells, and seven overburden extraction wells (Table 2.8). Groundwater elevation readings for active extraction wells were collected from each well's control panel. Figure 2.2 depicts the bedrock potentiometric surface when the bedrock extraction wells are pumping and demonstrates groundwater flow is toward the Site; groundwater is no longer flowing to the west from the Site. Consistent with historical elevations, the groundwater elevation at IW-10 is approximately 67 feet higher than that measured in IW-8, which is located approximately 200 feet southeast of IW-10. Based on a recent Google Earth image, the pond in Tributary B, just west of IW-10, is approximately 223 feet in elevation. It is likely that the pond is hydraulically connected to IW-10 and as a result is affecting/controlling groundwater levels in the well.

During the January 2020 LTM event, samples were collected from a total of 30 locations. Based on a recommendation resulting from the USEPA 2018 Five-Year Review, samples were collected from monitoring wells M-8 and M-9 in January 2020 and added to the LTM well network. During this event, it was discovered that the passive diffusion bag (PDB) in EW-14 detached from its tether between its placement in October 2018 and its removal in January 2020. A new PDB was deployed

on January 22, 2020 and sampled on July 21, 2020. Extraction well EW-2 was off-line during the LTM event and therefore was not sampled. During December 2019, power to EW-2's control panel was lost due to a severed power cable, and a subsequent freezing event resulted in breakage of piping in EW-2's aboveground vault. Power was restored to the well in January 2020 and the damaged piping was replaced in May 2020. Transducer reading errors were encountered upon bringing EW-2 back online in May and therefore EW-2 was manually shut off to prevent potential pump burnout. Following further troubleshooting, proper function was restored on July 21, 2020. Additional LTM samples were collected from monitoring wells MW-112 and MW-113 on July 20, 2020, following a request from the USEPA based upon the 2018 Five-Year Review, and added to the LTM well network. At the request of the NYSDEC, samples for the analysis of emerging contaminants (1,4-dioxane and per- and polyfluoroalkyl substances) were collected from extraction wells EW-9 and OW-14 on October 5, 2020. Analytical results are presented in Table 2.10.

Table 2.9 summarizes January 2020 LTM results observed at concentrations exceeding NYS Class GA water quality standards. The principal compounds detected were PCE, TCE, cis-1,2-DCE, trans-1,2-dichloroethene, and vinyl chloride. The highest concentrations of PCE and TCE in bedrock were observed in groundwater at EW-7 and EW-16. The highest concentrations of Site VOCs in overburden were observed in OW-3 and OW-14. These findings are consistent with results observed since the re-configuration of the GWETS. Laboratory results for samples were provided to NYSDEC in electronic document delivery format for loading into EQuIS. Historical groundwater results for Site VOCs are provided in Appendix D.

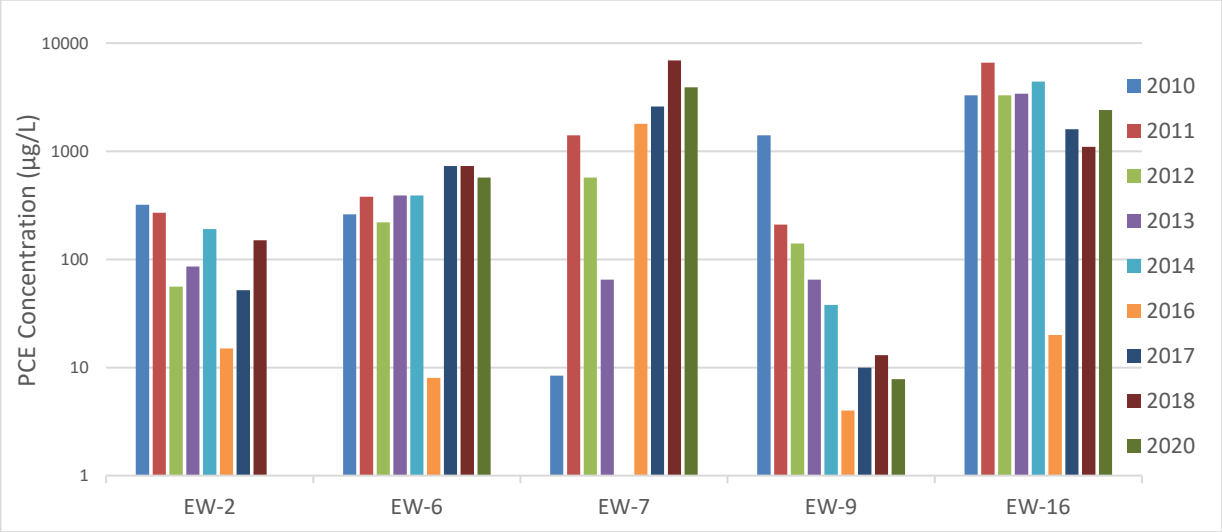
In response to comments received from the USEPA in the Five-Year Review completed in 2018, a figure depicting the overburden groundwater PCE plume at the Site was prepared for the January 2020 LTM event (Figure 2.5). The nature and extent of the plume is largely heterogenous with steep concentration gradients that are consistent with previous sampling events at the Site. These observations are in agreement with the conceptual site model that overburden groundwater is not migrating horizontally beyond the influence of the overburden extraction well network and is primarily vertically flow dominated within the fractured till.

The core of the bedrock groundwater PCE plume is centered around EW-16 and shows signs of changing shape and shifting toward Catskill Creek, likely as a result of the discontinuance of off-site extraction wells. The leading edge of the plume, as evidenced by PCE detected at EW-13, is

interpreted to be beyond the influence of the on-Site extraction system and is expected to continue to migrate towards Catskill Creek.

The histogram plot shown below presents PCE concentrations over time in the bedrock extraction wells. PCE concentrations in the bedrock extraction wells supports plume capture resulting from re-focusing the extraction of groundwater with the re-configured GWETS in 2017 (and no longer extracting clean water from off-site extraction wells). Additional modifications, including adjustments to pumping elevation setpoints of bedrock extraction wells in 2018 and to pumping rates in extraction wells in 2019, were completed to further optimize plume capture.

PCE Concentrations in Bedrock Extraction Wells



Time-series plots of PCE in select wells (Appendix B) were prepared to evaluate the long-term effectiveness of the modified extraction well network. Overburden extraction well OW-14 and bedrock extraction well EW-16 were selected to monitor the on-Site changes in groundwater quality. They have shown consistently high concentrations of PCE over their sampling history and have exhibited a general downward trend in PCE concentrations beginning in 2013/2014 through 2020.

Monitoring well M-5 was selected to monitor the northeastward (off-site) progression of the plume following shutdown of northwest, off-site extraction wells in September 2012 (MACTEC, 2013b). The 2013 RSO Implementation Activities Report hypothesized that discontinued pumping from off-site, northwest extraction wells would allow the lower concentration portion of the PCE plume in

that area to migrate towards Catskill Creek where it would eventually discharge and quickly be diluted to below detection levels. Figures from 2012 through 2020 reveal northeastward movement of the plume as predicted (MACTEC, 2013d, 2014, 2015, 2017, 2018c, 2019, 2020). Although PCE was not detected in M-5 during the January 2020 LTM event, cis-1,2-DCE and vinyl chloride were observed demonstrating degradation of PCE.

Country Estates primary supply well, CE-2, has been used to track, in time-series, the distal end (i.e., northwest tip) of the residual, off-site plume. LTM sample results from December 2014 to January 2020 continue to show a reduction of PCE concentrations in CE-2 below the NYS PCE standard of 5 µg/L (Appendix B), indicating that the groundwater plume has successfully detached and is migrating away from CE-2 and that matrix diffusion from bedrock fractures is a continuing source of Site contaminants of concern at the Country Estate supply well. Movement of the western end of the plume away from the Country Estates supply wells toward Catskill Creek is further evidenced by an increase in PCE concentrations from 2014 to 2020 in the downgradient monitoring well EW-13 (located approximately 1,500 feet east of CE-2).

Constituent trend analyses for key monitoring wells OW-14, EW-16, M-5, and CE-2 were performed using the Mann-Kendall test. The test results for PCE, cis-1,2-DCE, and vinyl chloride are included in Appendix C. Overall, trends observed for PCE and associated daughter products are stable or indicate some declining trend in concentrations.

The next LTM sampling event will be conducted in April 2021. The objective of establishing hydraulic capture of contaminated bedrock groundwater in close proximity to the Site has been achieved and supported through observations of changes in concentration resulting from the extraction well array modifications implemented in 2013 and completed in 2017, with additional minor modifications in completed in 2018 and 2019. The changes in groundwater concentrations will continue to be monitored during the 15-month sampling events.

2.4 SEMIANNUAL HYDRAULIC MONITORING

Water level measurements are collected semiannually to monitor the hydraulic gradient resulting from previous GWETS modifications (2013 to 2017) and to evaluate hydraulic control of the bedrock groundwater plume in the near vicinity of the Site. Based on measurements from April 2018 and

April 2019, pumping elevation setpoints of bedrock extraction wells and extraction well pump rates were modified in 2018 and 2019, respectively, to limit over-pumping and treatment of clean off-site groundwater. Water level measurements collected in October 2018 and October 2019 reflect optimization efforts of well pump programming instituted after the corresponding April 2018 and April 2019 monitoring events and demonstrates that the updated extraction rates are effective at maintaining hydraulic control of the groundwater plume in the near vicinity of the Site. Water level measurements from April and October 2018 and 2019 were included in their respective annual reports (MACTEC, 2019 and 2020).

During June and November 2020, water levels were measured in select monitoring wells, bedrock extraction wells, and overburden extraction wells as part of semiannual hydraulic monitoring activities (Table 2.8). Depth to water levels were manually measured in nine monitoring wells and groundwater elevation measurements from twelve active extraction wells were recorded via transducer measurements at the master control panel. Bedrock potentiometric surface maps were generated for each measurement event (Figures 2.6 and 2.7). The bedrock potentiometric surface maps for the June and November 2020 events show groundwater flow, in proximity to the plume, is inwards toward the Site with the bedrock extraction wells actively pumping. Groundwater flow in the overburden is generally to the northeast in the direction of Catskill Creek. Overburden potentiometric surface maps for June and November 2020 were not generated. Bedrock and overburden maps (Figures 2.2 and 2.3) were generated for the January 2020 event as it is a more extensive set of well measurements collected as part of the LTM synoptic round.

Consistent with historical data, the groundwater elevation at IW-10 is significantly higher than the groundwater elevation of IW-8, which is located approximately 200 feet to the southeast. It is assumed that the man-made pond in Tributary B, to the west of IW-10, is hydraulically connected to the IW-10 via bedrock fractures and is therefore creating a mound of groundwater and a localized high point in groundwater elevation. This groundwater mound may be further exaggerated by the previously identified bedrock knob in the area (MACTEC, 2013a). The presence of this groundwater mound does not negatively impact pumping operations and may even aid the GWETS system in controlling the groundwater plume.

2.5 PROJECT REVIEW MEETING

On Septemeber, 28, 2020, at the request of the NYSDEC, a project review meeting was held to discuss current site remedial objectives and to evaluate the efficiency of current treatment system operations. Treament system alternatives were discussed to address residual soil contamination, inferred to be present under the site manufacturing building as well as beyond the southern site fence boundary, to limit impacts to overburden and bedrock groundwater in an effort to decrease the period in which the system would need to be operated to meet RAOs. Further evaluation will be conducted in 2021 to determine the most expeditious and efficient manner to implement the remedy to meet Site objectives. Recommendations presented during the meeting are included in Section 4.4

2.6 GEOTHERMAL EVALUATION

In May 2018, ground source heat pumps (GSHP) and Solar Photovoltaic (PV) (commonly accepted energy conservation measures that are applicable to the American Thermostat Site) were evaluated for space heating or cooling of the Site building (via GSHP) and for local electric power generation (via Solar PV). A GSHP system utilizes the earth, specifically groundwater, as a heat source or heat sink, depending upon the season, to provide heating and/or cooling for a building, as groundwater temperature never drops below approximately 45 degrees Fahrenheit.

The evaluation concluded that the Site represents an excellent candidate as a pilot project for repurposing existing groundwater extraction technologies in a unique way to reduce utility expenditures and greenhouse gas output. In the proposed scheme, the Solar PV offsets the GSHP system and the GSHP system eliminates propane usage while utilizing existing process infrastructure. Typically, the most expensive component of a GSHP system is the well and exterior piping infrastructure; however, the infrastructure is already present on-Site within the modified GWETS. The integration of either energy conservation measure would be straightforward given these specific inherent Site advantages. The assessment was summarized in the Ground Source Heating and Solar Photovoltaic Evaluation letter (MACTEC, 2018b).

3.0 COST CONTROL SUMMARY

A cost summary for 2020 is provided below by task. As shown, most of the SM costs for were incurred for operation and maintenance of the GWETS. Costs breakdowns for 2018 and 2019 were presented in their respective annual reports (MACTEC, 2019 and 2020).

Task 1[a] (Scoping)	
Labor	$11,200.87
Task 2[a] (SMP Update)	
Labor	$0
Tasks 2[b] and 3[a] (GWETS OM&M) [c]	
Labor	$152,168
Lodging, Travel, and MI&E	$9,562
Shipping	$156
Waste Disposal	$0
Phone/Internet	$1,048
Plowing	$7,245
Supplies & Equipment	$18,054
Electricity*	$9,572
Propane*	$2,331
Subcontractor Services	$3,228
Water*	$308
Laboratory Services [d] *	$3,293
	$206,965
Task 3[b] (LTM)	
Labor	$8,576
Lodging, Travel, and MI&E	$1,803
Shipping	$66
Supplies & Equipment	$76
Laboratory Services [d] *	$4,000
	$14,521
Tasks 4[b] and 5[a] (Reporting, including PRR)	
Labor	$59,354
Annual Total:	**$292,041**

NOTES:

[a] Task is associated with the current Work Assignment No. D009809-01.

[b] Task is associated with the previous Work Assignment No. D007619-01.

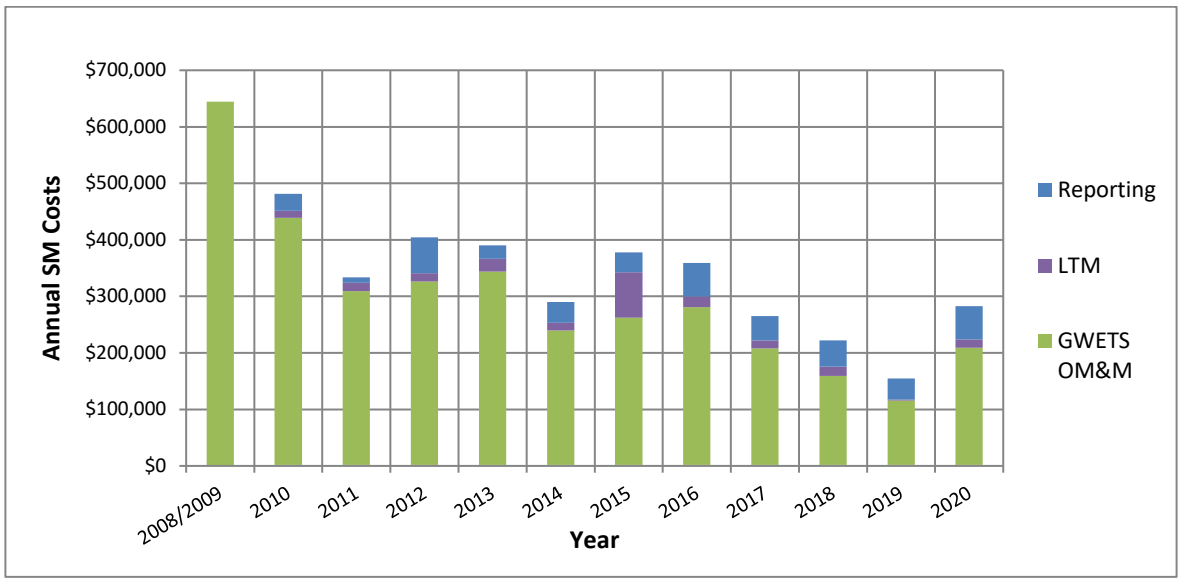
[c] Includes residential POET system operation, maintenance, and monitoring.

[d] Individual costs for Laboratory Services under GWETS OM&M and LTM were estimated using the total laboratory services cost provided by the NYSDEC for 2020. Analytical costs from the January 2020 LTM sampling event, additional LTM sampling in July 2020, and emerging contaminants sampling in October 2020 are included in the Laboratory Services cost under Task 3 (LTM).

* NYSDEC direct expense.

Annual costs for 2020 were greater than in 2018 and 2019 due to additional LTM and emerging contaminants sampling activities, the maintenance and replacement of two effluent discharge pumps and associated labor costs, the electrical troubleshooting and piping repair at EW-2, the oversight of sump replacement activities at Structure 3, waste characterization sampling of standing water in the exterior basement stairwell at Structure 3, and repairs identified during the October health and safety inspection performed by the NYSDEC. Costs are anticipated to be lower in 2021.

Since the NYSDEC assumed responsibility for the Site, annual OM&M costs have decreased by 56 percent. Optimization measures to reduce the overall operating expenses have been and will continue to be implemented in an effort to provide further cost savings at the Site.



Notes:

GWETS OM&M includes Country Estates and residential POET system OM&M, as applicable.

2008/2009: Costs as of 10/1/2008.

2010: Reporting includes preparation of 2008/2009 PRR.

2012: GWETS OM&M includes preparation of detailed design drawings for GWETS improvements; Reporting includes preparation of SMP and 2010/2011 PRR.

2013: GWETS OM&M does not include preparation of detailed design drawings for GWETS improvements or implementation of RSO improvements. LTM includes conducting hydraulic effectiveness monitoring and EW-9 step test.

2014: Reporting includes 2014 PRR and drafting SMP update. OM&M does not include GWETS modifications.

2015: GWETS OM&M includes oversight and coordination of GWETS upgrades/modifications; LTM reflects quarterly residential POET system OM&M, extraction well decommissioning, EW-5 over drilling/MW conversion, and EW-5 investigation derived waste disposal.

2016 & 2017: GWETS OM&M includes modifications, GWETS commissioning; Reporting includes PRR preparation and SMP updates.

2018: GWETS OM&M includes GWETS commissioning and optimization and monitoring well decommissioning inventory; Reporting includes annual report preparation and SMP updates.

2019: GWETS OM&M includes regular inspections and maintenance; LTM reflects quarterly residential POET system OM&M; Reporting includes annual report preparation.

2020: GWETS OM&M includes routine and non-routine inspections and maintenance, pump replacements, and quarterly residential POET system OM&M; LTM reflects January and July 2020 groundwater monitoring & sampling event, and emerging contaminants sampling in October 2020; Reporting includes 2019 Annual Report, initial 2020 PRR preparation, and 2020 MPRs.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on information gathered as part of the 2012 RSO investigation, the RAO for the Site was redefined and implemented in 2013 to focus on hydraulic containment of the source area in the vicinity of the Site. Optimization efforts of the GWETS to achieve the RAO were initiated in 2013 and completed in 2017, with additional minor modifications completed in 2018 and 2019. By focusing on hydraulic control of the source area in the vicinity of the Site, the off-site, northwestern edge of the PCE plume appears to be separating from the remainder of the plume and migrating to the northeast where it will eventually discharge and dilute to low concentrations toward Catskill Creek. Following completion of optimization measures from 2013 to 2017, and as evidenced during the reporting period (January 2018 through December 2020), effectiveness of the GWETS at achieving the RAO has increased, operating costs have decreased, and the GWETS is continuing to treat groundwater within the Site's source area to reduce contaminant mass.

4.1 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS

The current ICs/ECs are adequate to achieve the objectives for protection of human health and the environment based on current Site use. ICs for the Site, including a restriction on soil excavation, groundwater use and well installations, and a monitoring plan, remain in-place and adhered to. A soil vapor exposure pathway exists at the former manufacturing building; however, the building is currently used for storage purposes only. Mitigation would be necessary to address exposure to SVI should the building be occupied.

ECs include the GWETS, the Site perimeter fence, monitoring wells, the three residential POET systems, and an alternate water supply. The GWETS remains effective at treating impacted groundwater and at preventing further migration of impacted groundwater, as evidenced by monthly effluent sampling data that met surface water discharge criteria, and by LTM and semiannual monitoring data collected from on- and off-site monitoring wells. The Site perimeter fence is inspected monthly and continues to restrict unauthorized access to the GWETS building. Based on quarterly sample results from the three residential POET systems, no exceedances of Site-related VOCs were identified from 2018 to 2020 indicating the POET systems are operating as intended. The alternate water supply (public water supply line) is maintained by the Village of Catskill.

4.2 OPERATION AND MAINTENANCE PLAN

The remedial measures in place require routine inspection, sampling, and maintenance to provide effective remediation and reduction of exposure to Site-related contaminants. Compliance with procedures and requirements in the SMP was maintained during the reporting period. Site-related VOCs and iron in effluent water samples did not exceed Class GA standards and guidance values during the reporting period, thus meeting surface discharge limits, with the exception of May through August 2018. VOC exceedances in monthly effluent samples from May to August 2018 indicated diminishing performance of the air stripper; therefore, the air stripper was disassembled, cleaned, and reassembled in September 2018. Semiannual cleaning of the air stripper was added to the O&M schedule to maintain air stripper efficiency. Maintenance, monitoring, and sampling of the three residential POET systems was performed on a quarterly basis, and no exceedances of Site-related VOCs were observed from 2018 to 2020. Sampling results indicate that the POET systems appear to be operating as intended. Monthly progress reports, generated during the reporting period summarizing GWETS operational and maintenance data, will continue to be generated and submitted to the NYSDEC.

4.3 GROUNDWATER MONITORING PROGRAM

Monitoring the migration and/or degradation of the plume is accomplished through the LTM program in accordance with the SMP. The objective of establishing hydraulic capture of contaminated bedrock groundwater in close proximity to the Site, resulting from extraction well array modifications initiated in 2013 and completed in 2017, has been achieved and is supported through evaluation of concentration changes in data from LTM events. Data from the 2018 and 2020 LTM events continue to show the core of the plume is maintained hydraulically in the vicinity of the Site and that the northwest edge of the residual, and the off-site plume is continuing to migrate northeastward toward Catskill Creek, as evidenced by increased PCE concentrations in off-site monitoring well EW-13. Changes in groundwater concentrations and plume movement will continue to be monitored during the 15-month LTM events. The next LTM sampling event will be conducted in April 2021.

4.4 RECOMMENDATIONS

In an effort to continue optimizing system efficiency and remedial progress, and to provide further cost savings at the Site, the following are recommended:

- Continued implementation, review, and evaluation of the existing ICs/ECs, O&M Plan, and groundwater monitoring program, as applicable.
- Continued routine GWETS maintenance.
    - Maintain air stripper efficiency through regularly scheduled (semiannual) air stripper cleaning using the washer wand. This does not require disassembly of the air stripper, rather the trays are power washed through the viewports using a washer wand.
    - Perform annual inspection of building heaters.
    - Install 1/8" diameter elbows on bag filter pressure relief valves (3) to contain potential spray during system maintenance activities.
    - Conduct general housekeeping activities to improve work processes and eliminate general clutter.
    - Troubleshoot well components as needed to maintain normal system operation.
- Preparation a final well decommissioning plan for wells no longer used on-Site, following the NYSDEC's review and approval of a draft plan submitted in 2019, and decommission wells in 2021.
- Decommissioning of the building septic tank and associated plumbing facilities to reduce costs associated with its maintenance. The GWETS has not been staffed full-time since 2017 and the septic tank and plumbing facilities are no longer necessary.
- Preparation of a plan to evaluate treatment system alternatives to meet the Site remedial objective in a more expeditious and efficient manner based on discussions during the NYSDEC meeting in September 2020.
- Preparation of a scope of work to reduce sampling frequency at the three residences containing POET systems.
    - Collect quarterly influent (pre-treatment) samples in addition to current between-filter samples collected quarterly.
    - Reduce sampling frequency to semiannually.
    - Evaluate future decommissioning of the POET systems.
- Further evaluation of the potential for geothermal heating/cooling on-Site utilizing extracted and treated groundwater.

5.0 REFERENCES

MACTEC, 2020. 2019 Annual Report. Prepared for the New York State Department of Environmental Conservation. February 4, 2020.

MACTEC, 2019. 2018 Annual Report. Prepared for the New York State Department of Environmental Conservation. January 31, 2019.

MACTEC, 2018a. Site Management Plan, American Thermostat Site (Site No. 420006), Revision 4. Prepared for the New York State Department of Environmental Conservation. November 29, 2018.

MACTEC, 2018b. Ground Source Heating and Solar Photovoltaic Evaluation. Prepared for the New York State Department of Environmental Conservation. October 19, 2018.

MACTEC, 2018c. 2017 Periodic Review Report. Prepared for the New York State Department of Environmental Conservation. January 2018.

MACTEC, 2017. Periodic Review Report (2016). Prepared for the New York State Department of Environmental Conservation. January 2017.

MACTEC, 2015. Periodic Review Report (2014). Prepared for the New York State Department of Environmental Conservation. January 2015.

MACTEC, 2014. Periodic Review Report (2013). Prepared for the New York State Department of Environmental Conservation. March 2014.

MACTEC, 2013a. Final RSO Implementation Activities Report, American Thermostat Site (Site No. 420006). Prepared for the New York State Department of Environmental Conservation. January 10, 2013.

MACTEC, 2013b. Basis of Design Memorandum, American Thermostat Site (Site No. 420006), Treatment Plan Improvements. Prepared for the New York State Department of Environmental Conservation. January 29, 2013.

MACTEC, 2013c. Basis of Design Memorandum, Extraction Well & System Monitoring Improvements, American Thermostat Site (Site No. 420006), Prepared for the New York State Department of Environmental Conservation. May 24, 2013.

MACTEC, 2013d. Periodic Review Report (2012). Prepared for the New York State Department of Environmental Conservation. February 2013.

MACTEC, 2012a. Periodic Review Report (2010-2011). Prepared for the New York State Department of Environmental Conservation. May 2012.

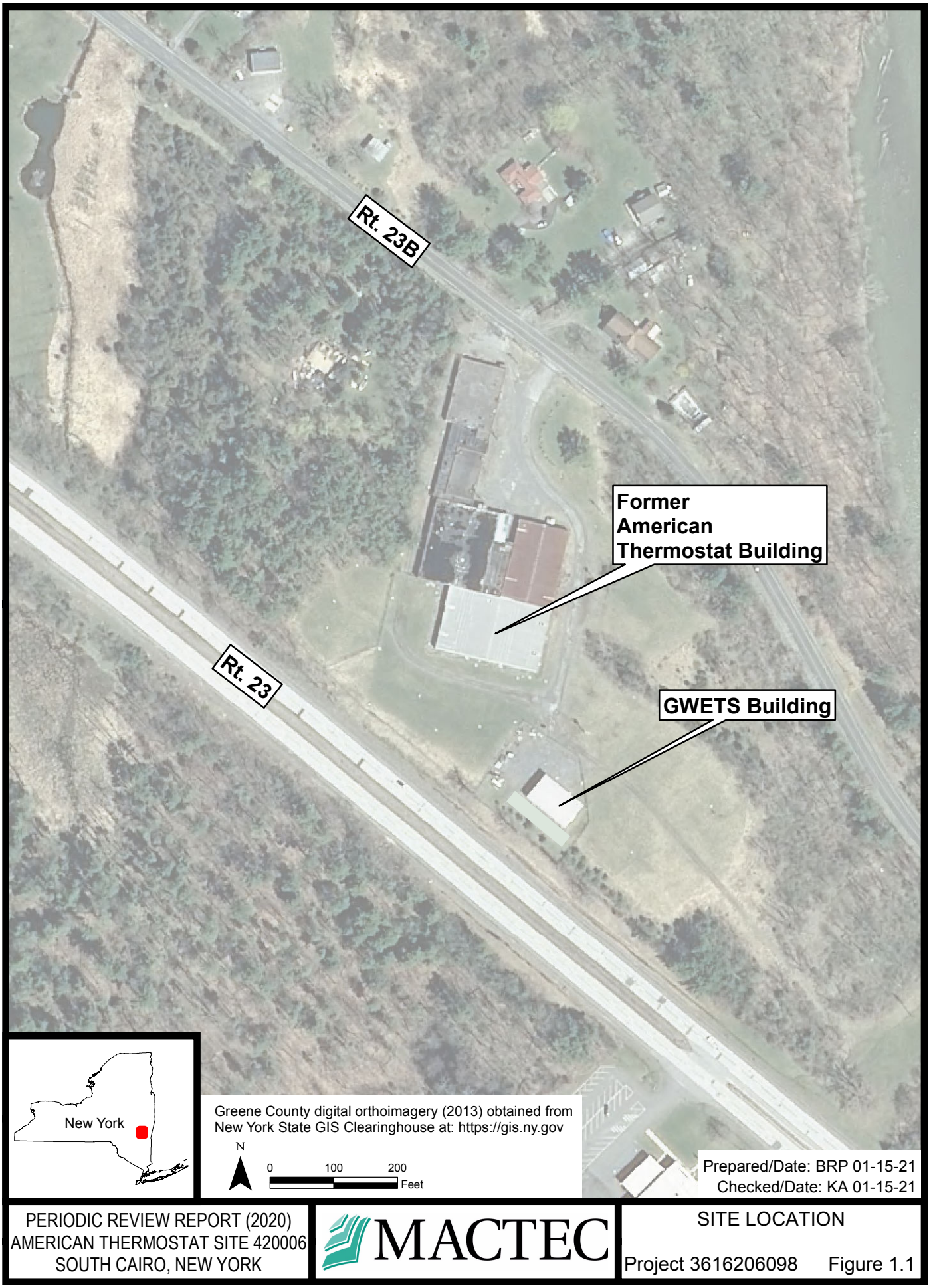
MACTEC, 2012b. Confidential Soil Vapor Intrusion Evaluation (SVIE) Letter Report, American Thermostat Site Characterization – Site Number 4-20-006. Prepared for the New York State Department of Environmental Conservation. May 18, 2012.

New York State Department of Environmental Conservation (NYSDEC), 1998. Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. October 1998 (revised).

United States Environmental Protection Agency (USEPA), 1990. USEPA Region II – Record of Decision, Operable Unit 2, American Thermostat site, South Cairo, Greene County, New York. June 29, 1990.

USEPA, 1988. USEPA Region II – Record of Decision for the American Thermostat site, South Cairo, Greene County, New York. January 7, 1988.

FIGURES



Prepared/Date: BRP 01-15-21
Checked/Date: KA 01-15-21

PERIODIC REVIEW REPORT (2020)
AMERICAN THERMOSTAT SITE 420006
SOUTH CAIRO, NEW YORK

MACTEC

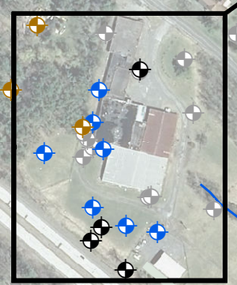
SITE LOCATION

Project 3616206098 Figure 1.1

Document: P:\Projects\NYSDEC_General NYSDEC Information D009809\Database\GIS\American Thermostat GIS\MapDocuments\AmericanThermostat_SiteLocMap.mxd
PDF: P:\Projects\NYSDEC\American Thermostat SM\4.0 Invest_Remed\4.5 Draft Reports\2020 PRR Draft\Figures\Figure 1 - Site Location.pdf 01-15-2021 12:29 PM brian.peters

Document: P:\Projects\NYSDEC__General NYSDEC Information D009809\Database\GIS\American Thermostat GIS\MapDocuments\Periodic Review Report\PRR_2020_Locations_11x17LS_Inset.mxd PDF: P:\Projects\NYSDEC\American Thermostat SM\8.0 Project Deliverables\8.1 Reports\8.1.4 Routine Reports\PRR 2020\Figures\Figure 2.1 - Groundwater Well Locations.pdf 03-08-2021 2:41 PM brian.peters

KLINKE
KUBLER
VIELLA
R-1
CE-2
CE-1
EW-14
SPEENBURGH
M-6
M-5
EW-13
R-6
IW-14
R-18
EW-15
EW-11
M-4
EW-12
R-19
M-14
IW-12
EW-10
M-12
R-11
MW-05
M-7
R-12
M-10
UNK-Well-01
IW-11
EW-8
IW-10
IW-8
IW-9
EW-9
I-30
M-8
MW-02
WB-1A
MUELLER



Legend

- Monitoring Well
- Residential Well with Point of Entry Treatment System
- Overburden Extraction Well
- Bedrock Extraction Well
- Well Could Not be Located
- Well Removed from Service/Not Monitored

N

0 210 420 Feet

Greene County digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: https://gis.ny.gov

Prepared/Date: BRP 03-08-21
Checked/Date: KA 03-08-21

PERIODIC REVIEW REPORT (2020)
AMERICAN THERMOSTAT SITE (420006)
SOUTH CAIRO, NEW YORK

MACTEC

GROUNDWATER WELL LOCATIONS

Project 3616206098 Figure 2.1

EW-14
NM

M-5
171.22

EW-13
167.25

M-6
218.86

EW-15
219.27

M-4
169.05

EW-11
168.40

EW-12
173.26

EW-10
221.97

Tributary B

EW-8
151.06

IW-10
227.07

IW-8
159.99

IW-9
160.47

EW-9
147.21

EW-7
154.64

M-8
249.13

EW-4
151.26

EW-16
124.16

EW-2
NM

EW-6
157.94

EW-3
160.74

EW-5
254.75

M-9
174.78

200
180
220
160
240
140
140
240
220
200
180
160

Legend

- Bedrock Well
- Extraction Well
- Interpreted Bedrock Groundwater Contour, feet above mean sea level
- Interpreted Groundwater Flow Direction

Depth to Water measurements collected January 21-23, 2020.
NM - Well not measured.
Inferred groundwater gradient.

N

0 125 250 Feet

Greene County digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: https://gis.ny.gov

Prepared/Date: BRP 01-15-21
Checked/Date: KA 01-15-21

PERIODIC REVIEW REPORT (2020)
AMERICAN THERMOSTAT SITE 420006
SOUTH CAIRO, NEW YORK

MACTEC

JANUARY 2020 INTERPRETED BEDROCK POTENTIOMETRIC SURFACE (PUMPING)
Project 3616206098 Figure 2.2

Document: P:\Projects\NYSDEC_General NYSDEC Information D009809\Database\GIS\American Thermostat GIS\MapDocuments\Periodic Review Report\PRR_GW_2020_11x17P.mxd PDF: P:\Projects\NYSDEC\American Thermostat SM4.0 Invest_Remed\4.5 Draft Reports\2020 PRR Draft\Figures\Figure 3 - Jan 2020 Bedrock GW.pdf 01-15-2021 1:36 PM brian.peters

MW-108
NM

MW-109
NM

OW-2
245.03

OW-3
238.81

OW-7
250.57

OW-5
250.20

MW-104
228.88

OW-13
253.95

OW-14
249.24

OW-16
247.81

MW-113
251.69

MW-112
253.54

240

245

250

252

Tributary A

Legend

- Overburden Well
- Extraction Well
- Interpreted Bedrock Groundwater Contour, feet above mean sea level
- Interpreted Groundwater Flow Direction

Depth to Water measurements collected January 21-23, 2020.
NM - Well not measured.
Inferred groundwater gradient.

N

0 40 80 Feet

Greene County digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: https://gis.ny.gov

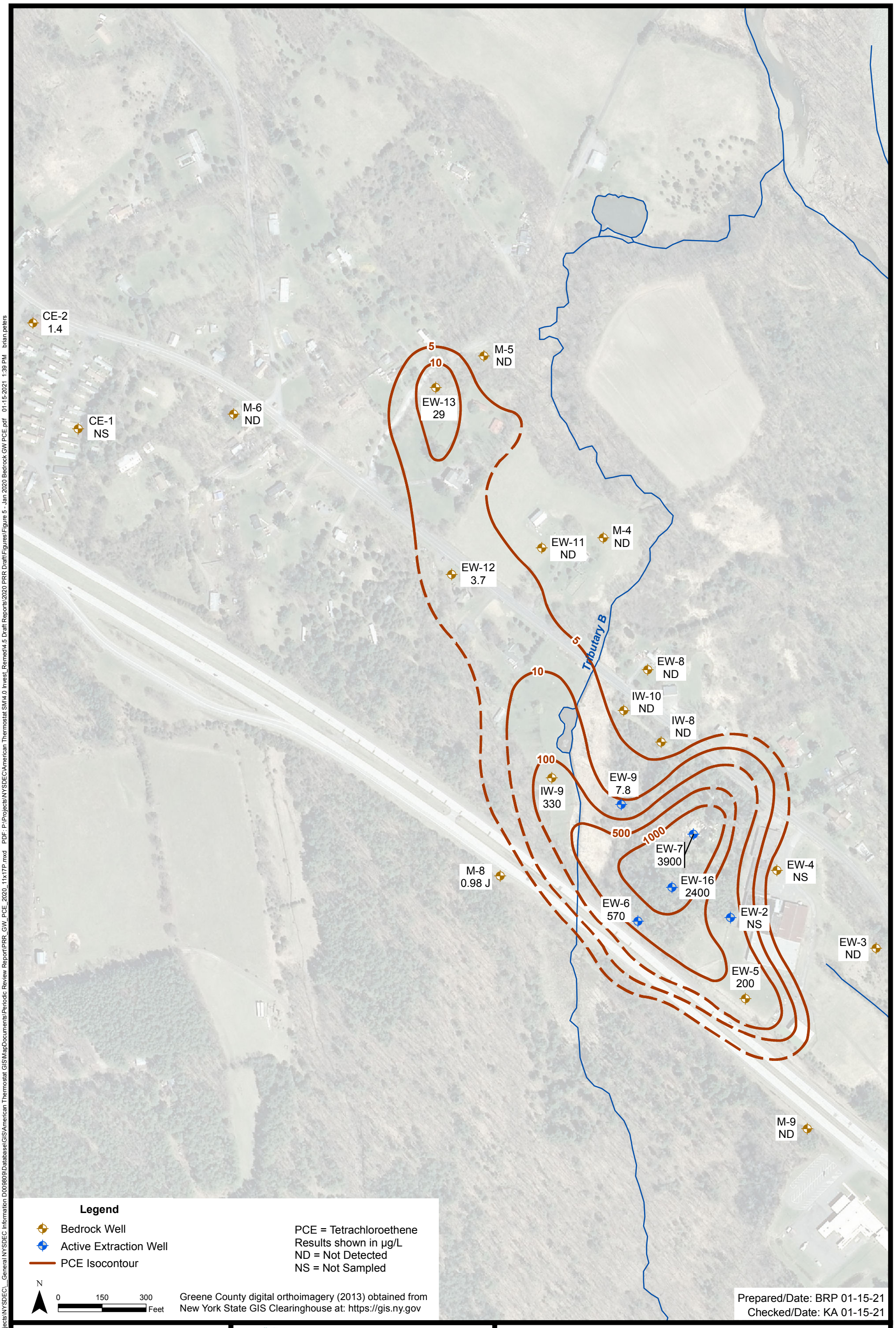
Prepared/Date: BRP 01-15-21
Checked/Date: KA 01-15-21

PERIODIC REVIEW REPORT (2020)
AMERICAN THERMOSTAT SITE 420006
SOUTH CAIRO, NEW YORK

MACTEC

JANUARY 2020 INTERPRETED OVERBURDEN POTENTIOMETRIC SURFACE (PUMPING)
Project 3616206098

Figure 2.3



PERIODIC REVIEW REPORT (2020)
AMERICAN THERMOSTAT SITE 420006
SOUTH CAIRO, NEW YORK

MACTEC

BEDROCK GROUNDWATER PCE PLUME
JANUARY 2020

Project 3616206098

Figure 2.4

Document: P:\Projects\NYSDEC_General NYSDEC Information D009809\Database\GIS\American Thermostat SM4.0 Invest_Remed\4.5 Draft Reports\2020 PRR Draft\Figures\Figure 5 - Jan 2020 Bedrock GW PCE.pdf 01-15-2021 1:39 PM brian.peters
PRR_GW_PCE_2020_11x17P.mxd PDF: P:\Projects\NYSDEC\American Thermostat SM4.0 Invest_Remed\4.5 Draft Reports\2020 PRR Draft\Figures\Figure 5 - Jan 2020 Bedrock GW PCE.pdf

OW-2
1200

1,000
2,500
5,000
10,000

OW-3
11000

OW-5
4200

OW-7
670

OW-13
3500

OW-14
7400

5,000
2,500
1,000

OW-16
240

MW-113
940

MW-112
1.4

Tributary A

Legend

- Overburden Well
- Extraction Well
- Interpretive PCE Isocontour
- (Dashed where inferred)

PCE = Tetrachloroethene
Results shown in µg/L
ND = Not Detected
Note: Results for MW-112 and MW-113 are from July 20, 2020

N

0 40 80 Feet

Greene County digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: https://gis.ny.gov

Prepared/Date: BRP 03-19-21
Checked/Date: KA 03-19-21

PERIODIC REVIEW REPORT (2020)
AMERICAN THERMOSTAT SITE 420006
SOUTH CAIRO, NEW YORK

MACTEC

OVERBURDEN GROUNDWATER PCE PLUME
JANUARY 2020
Project 3616206098

Figure 2.5

Document: P:\Projects\NYSDEC_General NYSDEC Information D009809\Database\GIS\American Thermostat GIS\MapDocuments\Periodic Review Report\PRR_GW_PCE_2020_11x17P.mxd PDF: P:\Projects\NYSDEC\American Thermostat SM\8.0 Project Deliverables\8.1 Reports\8.1.4 Routine Reports\PRR 2020\Figures\Figure 2.5 - Jan 2020 Overburden GW PCE.pdf 03-19-2021 9:20 AM brian.peters

Tributary B

EW-8
154.63

IW-10
226.92

IW-8
162.43

IW-9
162.42

EW-9
158.21

EW-7
160.64

EW-4
162.2

M-8
247.33

EW-16
141.16

EW-6
169.94

EW-2
157.13

EW-3
162.47

EW-5
254.57

M-9
174.44

160
180
200
220
240

Legend

- Bedrock Well
- Extraction Well
- Interpreted Bedrock Groundwater Contour, feet above mean sea level
- Interpreted Groundwater Flow Direction

Depth to Water measurements collected June 23, 2020.
Inferred groundwater gradient.
EW-2 and EW-9 offline during measurement event.

N

0 75 150 Feet

Greene County digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: https://gis.ny.gov

Prepared/Date: BRP 01-19-21
Checked/Date: KA 01-19-21

PERIODIC REVIEW REPORT (2020)
AMERICAN THERMOSTAT SITE 420006
SOUTH CAIRO, NEW YORK

MACTEC

JUNE 2020 INTERPRETED BEDROCK POTENTIOMETRIC SURFACE (PUMPING)
Project 3616206098 Figure 2.6

Document: P:\Projects\NYSDEC_General NYSDEC Information D009809\Database\GIS\American Thermostat GIS\MapDocuments\Periodic Review Report\PRR_GW_2020_11x17P.mxd PDF: P:\Projects\NYSDEC\American Thermostat SMI\4.0 Invest_Remed\4.5 Draft Reports\2020 PRR Draft\Figures\Figure 2.6 - Jun 2020 Bedrock GW.pdf 01-19-2021 4:52 PM brian.peters

Tributary B

EW-8
141.31

IW-10
228.8

IW-8
153.97

IW-9
150.79

EW-9
150.21

EW-7
154.64

EW-4
149.29

M-8
249.87

EW-16
124.16

EW-6
157.94

EW-2
149.17

EW-3
149.64

EW-5
254.33

M-9
171.87

140
160
180
200
220
240

Legend

- Bedrock Well
- Extraction Well
- Interpreted Bedrock Groundwater Contour, feet above mean sea level
- Interpreted Groundwater Flow Direction

Depth to Water measurements collected November 3, 2020.
Inferred groundwater gradient.
EW-2 offline during measurement event.

N

0 75 150 Feet

Greene County digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: https://gis.ny.gov

Prepared/Date: BRP 01-19-21
Checked/Date: KA 01-19-21

PERIODIC REVIEW REPORT (2020)
AMERICAN THERMOSTAT SITE 420006
SOUTH CAIRO, NEW YORK

MACTEC

NOVEMBER 2020 INTERPRETED BEDROCK POTENTIOMETRIC SURFACE (PUMPING)
Project 3616206098

Figure 2.7

Document: P:\Projects\NYSDEC_General NYSDEC Information D009809\Database\GIS\American Thermostat GIS\MapDocuments\Periodic Review Report\PRR_GW_2020_11x17P.mxd PDF: P:\Projects\NYSDEC\American Thermostat SMI\4.0 Invest_Remed\4.5 Draft Reports\2020 PRR Draft\Figures\Figure 2.7 - Nov 2020 Bedrock GW.pdf 01-19-2021 5:05 PM brian.peters

TABLES

Table 2.1: Site Management Requirements

Component	Action	Required Frequency	Comments/Recommendations
Groundwater Extraction and Treatment System			
GWETS Operation Checklist	Inspection	Each O&M visit	Check groundwater treatment system operation: flow rates, meter readings, system components.
Extraction Wells	Inspection	Each O&M visit	Check extraction wells, housing, control panels.
Control Panel, Heaters	Inspection	Each O&M visit	Check function of control panel indicating lights. In cold weather verify pilot light operation of heaters.
Safety Equipment, Treatment Plant Lighting	Inspection	Monthly	Inspect safety equipment (ladders, eyewash, fire extinguishers, etc.). Inspect plant lighting for proper operation.
Site Security	Inspection	Monthly	Check treatment building door locks, fencing, and site perimeter fence for defects.
Air Stripper	Inspection/ Maintenance	Annually	Perform cleaning of air stripper unit trays and sump, if necessary.
Treatment Plant Heaters	Inspection/ Maintenance	Annually	Annual inspection and cleaning of heaters; to be performed by a licensed subcontractor.
Groundwater Monitoring System	Inspection	15-Month	Visually inspect well pads/locks at site wells; repair as necessary to maintain integrity and security.
System Performance Monitoring			
Influent Header (SP-1)	Plant influent water sampling	Monthly	Grab sample collected to monitor and evaluate GWETS performance.
Treatment Plant Discharge (SP-39)	Plant effluent water sampling	Monthly	Grab sample collected to monitor and evaluate GWETS performance.
Point of Entry Treatment System			
POET System	Residential water supply sampling and inspection	Quarterly	Grab sample collected between carbon filters to monitor and evaluate water supply and GAC performace. Perform system maintenance on carbon filters and UV system as needed, annual at a minimum.
Environmental Monitoring			
Groundwater Elevation Monitoring	Groundwater elevation measurements	Semiannually (spring and fall)	Collect groundwater elevation measurements for active extraction wells and select monitoring wells to monitor hydraulic control of the plume near the site.
Environmental Groundwater Sampling	Groundwater sampling of 31 wells	15-Month sampling interval	Grab/PDB samples collected from 31 locations including: public supply wells, monitoring wells, active bedrock and overburden extraction wells, and residential water supply wells before GAC filters.

Notes:

GAC = Granular activated carbon
GWETS = Groundwater extraction and treatment system
O&M = Operation and maintenance
PDB = Passive diffusion bag
POET = Point of entry treatment
UV = Ultraviolet

Prepared by: KAA 01/15/21
Checked by: JMF 01/22/21

Table 2.2: Long-Term Monitoring and System Performance Sampling Matrix

Well ID/Sampling Location	Water Level Measurements	VOCs	Sample Description
Monitoring Wells (15-Month LTM)[1]			
CE-1[2]		X	Grab, before filters
CE-2		X	Grab, before filters
EW-3	X	X	PDB
EW-4[3]	X	X	PDB
EW-5	X	X	PDB
EW-8	X	X	PDB
EW-10	X		NA
EW-11	X	X	PDB
EW-12	X	X	PDB
EW-13	X	X	PDB
EW-14[4]			NA
EW-15	X		NA
IW-8	X	X	PDB
IW-9	X	X	PDB
IW-10	X	X	PDB
M-4	X	X	PDB
M-5	X	X	PDB
M-6	X	X	Grab
M-8[5]	X	X	PDB
M-9[5]	X	X	PDB
Mueller	X	X	PDB
MW-112[6]	X	X	Grab
MW-113[6]	X	X	Grab
Active Bedrock Extraction Wells (15-Month LTM)[1]			
EW-2[7]	X	X	Grab
EW-6	X	X	Grab
EW-7	X	X	Grab
EW-9	X	X	Grab
EW-16	X	X	Grab
Active Overburden Extraction Wells (15-Month LTM)[1]			
OW-2	X	X	Grab
OW-3	X	X	Grab
OW-5	X	X	Grab
OW-7	X	X	Grab
OW-13	X	X	Grab
OW-14	X	X	Grab
OW-16	X	X	Grab
Residential Wells (15-Month LTM)[1]			
VIELLA		X	Grab, before filters
KUBLER		X	Grab, before filters
KLINKE		X	Grab, before filters
Residential Well POET System Performance (Quarterly)			
KLINKE_BET		X	Grab, between filters
KUBLER_BET		X	Grab, between filters
VIELLA_BET		X	Grab, between filters
GWETS Performance (Monthly)			
PS-INFLUENT	Influent	VOCs, Metals, TDS, TSS	Grab
PS-AS-EFFLUENT	Air stripper effluent water	VOCs	Grab

Notes:

[1] = 15-Month LTM occurred January 21-23, 2020.

[2] = CE-1 not in service; acts as an emergency backup well to CE-2 for Country Estates.

[3] = PDB detached from tether between October 2018 and January 2020. A new PDB was deployed on January 22, 2020, and sampled on July 21, 2020.

[4] = Well is inaccessible; located within a storage shed on a private property.

[5] = Wells added to LTM network per 2018 EPA Five-Year Review recommendation.

[6] = Wells sampled on July 20, 2020, based on 2018 EPA Five-Year Review recommendation.

[7] = EW-2 was off-line from December 2019 to July 21, 2020 due to severed power cable in conduit and subsequent freezing causing breakage of piping in aboveground vault, and transducer reading errors; therefore was not sampled during January 2020 LTM event or July 20-21, 2020.

GWETS = Groundwater extraction and treatment system
LTM = Long-term monitoring
NA = Not applicable
PDB = Passive diffusion bag
POET = Point of entry treatment
TDS = Total dissolved solids
TSS = Total suspended solids
VOCs = Volatile organic compounds

Prepared by: KAA 01/15/21
Checked by: JMF 01/22/21

Table 2.3: Treatment Plant Monthly Throughput

Calendar Year	Month												Total for Calendar Year (Gallons)	Cumulative Total Throughput (Gallons)
	January	February	March	April	May	June	July	August	September	October	November	December		
1998	-	-	-	-	-	-	-	1,845,307	2,326,580	2,000,099	1,387,734	1,515,814	9,075,534	9,075,534
1999	2,327,342	1,946,464	1,570,828	1,986,297	1,876,550	1,810,328	1,880,672	2,865,086	2,849,292	2,967,620	2,840,040	2,996,042	27,916,561	36,992,095
2000	2,188,662	1,828,969	2,782,069	2,625,243	2,689,205	2,515,671	2,845,066	2,656,221	2,790,754	3,191,008	2,906,470	3,089,535	32,108,873	69,100,968
2001	3,154,385	3,202,253	3,397,280	3,325,592	3,507,403	3,241,052	2,846,350	3,323,930	3,116,812	3,172,179	2,668,748	2,676,774	37,632,758	106,733,726
2002	2,643,561	2,400,906	2,581,039	3,015,136	2,827,722	3,087,176	3,109,504	2,969,001	2,826,453	3,126,848	3,151,070	3,043,354	34,781,770	141,515,496
2003	3,112,140	2,640,103	3,032,627	2,956,081	2,279,599	2,817,292	2,828,580	2,862,294	2,805,159	2,889,540	2,703,444	1,743,574	32,670,433	174,185,929
2004	1,452,060	1,323,679	1,433,444	1,621,998	1,511,813	1,378,343	1,829,427	2,488,132	2,214,838	2,016,922	2,147,628	2,218,612	21,636,896	195,822,825
2005	1,969,101	1,627,579	1,505,083	1,888,648	1,679,210	1,635,094	1,679,658	1,675,021	1,668,387	1,048,462	1,753,165	1,804,582	19,933,990	215,756,815
2006	1,850,648	1,724,943	1,726,705	1,860,726	2,038,414	2,225,379	1,700,523	1,505,840	1,573,918	2,365,602	2,542,691	1,570,319	22,685,708	238,442,523
2007	1,860,431	1,484,866	1,797,869	1,651,491	1,595,631	1,567,880	1,656,624	1,680,981	1,559,100	1,624,903	1,628,116	1,779,807	19,887,699	258,330,222
2008	1,621,909	1,661,136	1,872,515	1,922,613	1,496,402	1,519,804	1,344,964	2,366,862	2,053,268	2,649,688	2,172,569	2,466,153	23,147,883	281,478,105
2009	2,009,299	1,973,492	2,109,251	2,164,940	2,086,536	2,069,749	2,413,904	1,461,639	1,572,872	1,962,537	1,782,527	2,171,560	23,778,306	305,256,411
2010	1,715,140	1,562,130	2,144,107	1,972,606	1,692,254	1,657,835	1,710,898	1,814,591	1,502,900	1,736,300	1,505,900	1,799,400	20,814,061	326,070,472
2011	1,660,400	1,608,200	1,677,100	1,807,700	1,869,800	1,617,700	1,626,100	1,676,400	1,764,200	1,646,400	1,806,000	1,966,500	20,726,500	346,796,972
2012	1,617,600	1,592,100	1,545,800	976,300	1,050,200	655,200	435,000	1,572,000	1,098,900	1,363,800	1,223,500	1,351,200	14,481,600	361,278,572
2013	1,287,600	1,165,900	1,213,400	1,213,400	1,024,000	560,000	-	368,300	282,600	1,133,000	1,240,188	950,031	10,438,419	371,716,991
2014	605,868	537,554	828,412	1,311,895	1,181,124	1,036,409	1,101,365	968,790	516,422	771,419	643,451	804,076	10,306,785	382,023,776
2015	1,055,444	726,839	818,456	829,691	918,585	1,174,145	1,364,309	1,069,571	1,424,510	890,175	-	251,416	10,523,141	392,546,917
2016	1,028,212	1,142,661	1,197,620	1,176,265	1,105,646	1,027,389	1,159,271	1,156,925	1,179,487	1,145,887	936,208	953,286	13,208,857	405,755,774
2017	1,492,216	906,043	1,123,788	1,197,556	1,049,899	1,426,931	1,168,068	1,576,200	928,859	1,428,789	863,212	1,231,949	14,393,510	420,149,284
2018	1,225,869	1,362,944	983,689	968,599	1,548,696	1,134,499	1,470,999	97,588	287,744	1,076,410	863,088	1,227,285	12,247,410	432,396,694
2019	1,589,576	1,274,721	1,562,495	1,217,017	1,343,215	1,222,569	1,222,569	1,063,488	1,114,585	1,141,511	902,426	755,511	14,409,683	446,806,377
2020	499,106	1,258,095	679,114	720,765	523,678	409,470	731,479	860,427	1,191,122	784,850	1,149,568	1,037,075	9,844,749	456,651,126

Note:

-Plant modifications resulted in plant shut down during the months of July 2013 and November 2015.

Prepared by: KAA 01/15/21
Checked by: JMF 01/22/21

Table 2.4: Estimated Groundwater Extraction and Treatment System Downtime

Year	Month	Estimated Downtime (days)
2020	January	16.19
	February	2.62
	March	2.95
	April	1.06
	May	0.33
	June	10.49
	July	2.47
	August	0.06
	September	2.07
	October	6.03
	November	0.11
	December	0.92
	Total for Year	45.29

Prepared by: KAA 01/19/21
Checked by: JMF 01/22/21

Table 2.5: Total VOCs in Extracted Groundwater (lbs)

Month	Calendar Year											
	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
January	-	26.5	57.5	42.7	28.1	38.2	29.7	39.4	33.8	32.3	23.9	23.0
February	-	49.3	47.2	42.6	26.0	37.3	31.3	33.0	28.5	19.8	24.3	18.5
March	-	43.7	62.3	50.5	28.3	43.8	39.2	20.5	27.2	28.8	34.0	20.0
April	-	39.2	58.7	44.1	43.4	44.8	42.0	21.8	29.0	34.4	30.6	21.0
May	-	26.7	43.7	54.4	42.5	34.1	34.6	29.6	40.2	19.8	22.7	23.8
June	-	31.0	50.0	45.5	44.8	45.5	32.6	23.6	44.1	18.7	14.7	19.4
July	-	23.9	40.8	34.7	40.5	32.7	32.1	24.3	13.1	20.2	11.8	25.3
August	104.7	47.3	41.5	41.2	38.5	42.0	31.6	14.3	14.1	16.4	24.7	15.8
September	24.5	39.0	33.9	29.5	37.3	51.9	26.9	17.5	24.4	15.8	21.8	14.8
October	42.4	63.2	34.6	71.5	36.9	49.3	36.0	15.2	40.1	15.8	24.8	16.9
November	26.6	58.1	42.7	23.9	42.3	35.1	26.8	31.8	40.4	20.2	24.1	19.9
December	35.0	66.9	49.9	27.9	42.8	34.4	34.3	31.3	23.1	21.9	25.3	26.5
Total for Calendar Year (lbs)	233	515	563	509	451	489	397	302	358	264	283	245
Cumulative Total VOCs (lbs)	233	748	1,311	1,820	2,271	2,760	3,157	3,460	3,818	4,082	4,364	4,609

Prepared by: AJN 01/15/21
Checked by: KAA 01/18/21

Table 2.5: Total VOCs in Extracted Groundwater (lbs)

Month	Calendar Year										
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
January	19.0	18.2	18.5	21.8	7.5	14.1	24.0	13.9	25.1	17.8	9.8
February	19.4	15.9	18.6	27.9	11.0	6.4	19.1	37.0	21.5	17.7	23.4
March	30.6	35.5	18.0	30.2	25.1	6.1	18.0	10.3	10.8	20.4	10.0
April	23.6	26.3	18.8	18.7	18.1	15.5	32.1	27.0	20.6	15.8	20.2
May	15.1	25.1	24.0	18.6	26.1	15.5	14.4	10.5	18.1	14.6	13.2
June	13.9	22.9	5.4	13.1	15.6	16.8	17.6	18.6	14.1	12.4	22.2
July	12.0	19.5	27.5	-	13.0	16.9	14.1	10.0	13.5	20.7	20.3
August	9.8	19.8	39.6	20.0	40.3	14.2	9.5	20.5	7.8	16.9	7.5
September	13.7	25.0	12.8	10.4	7.0	17.4	9.5	10.9	9.2	71.6	14.5
October	21.8	22.5	29.2	17.1	8.9	10.5	13.4	7.1	23.9	8.3	9.1
November	18.0	19.8	23.9	18.5	14.0	-	8.6	6.1	15.5	27.8	25.9
December	30.4	22.5	17.0	14.1	10.7	8.9	16.1	8.0	18.7	22.5	14.1
Total for Calendar Year (lbs)	227	273	253	211	197	142	196	180	199	267	190
Cumulative Total VOCs (lbs)	4,836	5,109	5,363	5,573	5,770	5,912	6,109	6,289	6,487	6,754	6,944

Notes:

lbs = Pounds

VOCs = Volatile organic compounds

-Total VOCs in Extracted Groundwater equals GWETS influent total VOCs concentrations per month multiplied by the monthly flow rate and the monthly system operating duration

-July 2013 and November 2015, system down for plant modifications

Prepared by: AJN 01/15/21
Checked by: KAA 01/18/21

Table 2.6: System Performance Sampling Results

Parameter				1,2-Dichloroethene (total)	Tetrachloro-ethene	Trichloro-ethene	Vinyl Chloride	Barium	Iron	Total Dissolved Solids
Units				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
NYS Class C Criteria				-	1[a]	40[b]	-	-	300[a]	-
Location	**Matrix**	**Date**	**Field Sample ID**							
PS-Influent	L	1/13/2020	PS-INFLUENT	680	**1,300**	**370**	20 U	57.6	50 U	336
PS-Influent	L	2/18/2020	PS-INFLUENT	640	**1,200**	**350**	40 U	54	50 U	340
PS-Influent	L	3/6/2020	PS-INFLUENT	610	**870 J-**	**260**	20 U	60.2	50 U	328
PS-Influent	L	4/1/2020	PS-INFLUENT	1100	**1,700 J-**	**550 J-**	20 U	25.6	50 U	324
PS-Influent	L	5/5/2020	PS-INFLUENT	920	**1500 J-**	**590**	20 U	35.4	50 U	421
PS-Influent	L	6/4/2020	PS-INFLUENT	1800	**3500**	**1200**	32	76.5	142	316
PS-Influent	L	7/7/2020	PS-INFLUENT	1500	**1,500**	**330**	25 J	38.1	50	351
PS-Influent	L	8/17/2020	PS-INFLUENT	690	**290**	**64**	13	65.6	50 U	414
PS-Influent	L	9/21/2020	PS-INFLUENT	640 J-	**690 J-**	**110**	14	69	50 U	414
PS-Influent	L	10/5/2020	PS-INFLUENT	680	**550 J-**	**120**	17 J	52.6	50 U	349
PS-Influent	L	11/3/2020	PS-INFLUENT	830	**1600**	**230**	20 U	86.8	272	505
PS-Influent	L	12/4/2020	PS-INFLUENT	440	**1100 J-**	**270**	11	59.3	50 U	364
Air Stripper Eff	L	1/13/2020	PS-AS EFFLUENT	2 U	1 U	1 U	1 U	54.5	50 U	336
Air Stripper Eff	L	2/18/2020	PS-AS-EFFLUENT	2 U	1 U	1 U	1 U	54.1	50 UJ	284
Air Stripper Eff	L	3/6/2020	PS-AS EFFLUENT	2 U	1 U	1 U	1 U	61.3	50 U	300
Air Stripper Eff	L	4/1/2020	PS-AS EFFLUENT	2 U	1 U	1 U	1 U	33.6	50 U	342
Air Stripper Eff	L	5/5/2020	PS-AS EFFLUENT	2 U	1 U	1 U	1 U	35.2	50 U	465
Air Stripper Eff	L	6/4/2020	PS-AS EFFLUENT	2 U	1 U	1 U	1 U	81	265	450
Air Stripper Eff	L	7/7/2020	PS-AS EFFLUENT	2 U	1 U	1 U	1 U	38.6	50 U	345
Air Stripper Eff	L	8/17/2020	PS-AS EFFLUENT	2 U	1 U	1 U	1 U	64.5	50 U	430
Air Stripper Eff	L	9/21/2020	PS-AS-EFFLUENT	2 U	1 U	1 U	1 U	69	50 U	415
Air Stripper Eff	L	10/5/2020	PS-AS-EFFLUENT	2 U	1 U	1 U	1 U	54	50 U	474
Air Stripper Eff	L	11/3/2020	PS-AS-EFFLUENT	2 U	1 U	1 U	1 U	42.2	50 U	389
Air Stripper Eff	L	12/4/2020	PS-AS-EFFLUENT	2 U	1 U	1 U	1 U	57	50 U	349

Notes:

[a] = Guidance value
[b] = Standard
" - " = No criteria
FD = Field Duplicate
FS = Field Sample
J = Estimated value
J- = Estimated value, biased low
L = Liquid
mg/L = Milligrams per liter
NYS = New York State
µg/L = Micrograms per liter
U = Not detected
Bold = Exceeds standard or guidance value

Prepared by: KMS 01/19/21
Checked by: KAA 01/19/21

Table 2.7: Residential Treatment System Sampling Results

Parameter			1,2-Dichloroethene (total)	Cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloro-ethene	Trichloro-ethene	Vinyl chloride
Units			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYS Class GA Standard			5	5	5	5	5	2
Location	**Sample Date**	**Description**						
KLINKE	1/21/2020	Before Filters	2 U	1 U	1 U	1 U	1 U	1 U
KLINKE	1/21/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
KLINKE	6/15/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
KLINKE	8/17/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
KLINKE	11/3/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
KUBLER	1/21/2020	Before Filters	2 U	1 U	1 U	1 U	1 U	1 U
KUBLER	1/21/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
KUBLER	6/23/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
KUBLER	8/17/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
KUBLER	11/3/2020	Between Filters	2 U	1 U	1 U	0.77 J	1 U	1 U
VIELLA	1/21/2020	Before Filters	2 U	1 U	1 U	1 U	1 U	1 U
VIELLA	1/21/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
VIELLA	6/23/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
VIELLA	8/17/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U
VIELLA	11/3/2020	Between Filters	2 U	1 U	1 U	1 U	1 U	1 U

Notes:

J = Estimated value
NYS = New York State
U = Not detected
µg/L = Micrograms per liter

Prepared by: KMS 01/19/21
Checked by: KAA 01/19/21

Table 2.8: Long-Term Monitoring and Semiannual Groundwater Elevations

Well ID/ Sampling Location	Measurement Point Elevation (ft. msl)	Well Depth (ft.)	Monitoring Interval	Measurement Point Reference	LTM		Semiannual			
					DTW January 2020 (ft. btoc)	GW Elevation January 2020 (ft. msl)[1]	DTW June 2020 (ft. btoc)	GW Elevation June 2020 (ft. msl)[2]	DTW November 2020 (ft. btoc)	GW Elevation November 2020 (ft. msl)[3]
Monitoring Wells										
CE-1[4]	224.91	535.00	bedrock	TOC	NM	NM	NM	NM	NM	NM
CE-2	224.95	287.00	bedrock	TOC	NM	NM	NM	NM	NM	NM
EW-3	259.67	295.00	bedrock	TOC	98.93	160.74	97.20	162.47	110.03	149.64
EW-4	256.01	322.00	bedrock	TOC	104.75	151.26	93.81	162.20	106.72	149.29
EW-5	259.85	235.20	bedrock	TOC	5.10	254.75	5.28	254.57	5.52	254.33
EW-8	223.93	318.00	bedrock	TOC	72.87	151.06	69.30	154.63	82.62	141.31
EW-10	234.09	225.00	NA	TOC	12.12	221.97	NM	NM	NM	NM
EW-11	231.40	172.20	bedrock	TOC	63.00	168.40	NM	NM	NM	NM
EW-12	232.76	270.50	bedrock	TOC	59.50	173.26	NM	NM	NM	NM
EW-13	217.06	360.00	bedrock	TOC	49.81	167.25	NM	NM	NM	NM
EW-14 [5]	234.85	185.00	NA	TOC	NM	NM	NM	NM	NM	NM
EW-15	232.47	275.00	NA	TOC	13.20	219.27	NM	NM	NM	NM
IW-8	239.47	391.80	bedrock	TOC	79.48	159.99	77.04	162.43	85.50	153.97
IW-9	224.37	358.10	bedrock	TOC	63.90	160.47	61.95	162.42	73.58	150.79
IW-10	235.57	176.30	bedrock	TOC	8.50	227.07	8.65	226.92	6.77	228.80
M-4	232.19	200.00	bedrock	TOC	63.14	169.05	NM	NM	NM	NM
M-5	213.88	200.00	bedrock	TOC	42.66	171.22	NM	NM	NM	NM
M-6	248.31	100.00	bedrock	TOC	29.45	218.86	NM	NM	NM	NM
M-8	261.57	200.00	bedrock	TOC	12.44	249.13	14.24	247.33	11.70	249.87
M-9	256.39	200.00	bedrock	TOC	81.61	174.78	81.95	174.44	84.52	171.87
Mueller	183.25	114.00	bedrock	TOC	17.03	166.22	NM	NM	NM	NM
MW-112	256.60	25.10	overburden	TOC	3.06	253.54	NM	NM	NM	NM
MW-113	257.38	25.00	overburden	TOC	5.69	251.69	NM	NM	NM	NM

Prepared by: AJN 01/15/21
Checked by: KAA 01/18/21

Table 2.8: Long-Term Monitoring and Semiannual Groundwater Elevations

Well ID/ Sampling Location	Measurement Point Elevation (ft. msl)	Well Depth (ft.)	Monitoring Interval	Measurement Point Reference	LTM		Semiannual			
					DTW January 2020 (ft. btoc)	GW Elevation January 2020 (ft. msl)[1]	DTW June 2020 (ft. btoc)	GW Elevation June 2020 (ft. msl)[2]	DTW November 2020 (ft. btoc)	GW Elevation November 2020 (ft. msl)[3]
Active Bedrock Extraction Wells										
EW-2 [6]	255.29	322.00	bedrock	TOC/PLC	NM	NM	98.16	157.13	106.12	149.17
EW-6	242.94	325.00	bedrock	TOC/PLC	NM	159.94 [7]	NM	169.94 [7]	NM	157.94 [7]
EW-7	251.64	227.00	bedrock	TOC/PLC	NM	155.64 [7]	NM	160.64 [7]	NM	155.64 [7]
EW-9	236.21	365.00	bedrock	TOC/PLC	NM	152.21 [7]	NM	158.21 [7]	NM	150.21 [7]
EW-16	248.16	417.00	bedrock	TOC/PLC	NM	131.16 [7]	NM	141.16 [7]	NM	124.16 [7]
Active Overburden Extraction Wells										
OW-2	257.03	30.00	overburden	TOC/PLC	NM	245.03 [7]	NM	245.03 [7]	NM	245.03 [7]
OW-3	256.81	25.00	overburden	TOC/PLC	NM	238.81 [7]	NM	238.81 [7]	NM	249.81 [7]
OW-5	258.20	30.00	overburden	TOC/PLC	NM	250.20 [7]	NM	261.20 [7]	NM	264.20 [7]
OW-7	254.57	25.00	overburden	TOC/PLC	NM	250.57 [7]	NM	245.57 [7]	NM	249.57 [7]
OW-13	259.95	29.50	overburden	TOC/PLC	NM	253.95 [7]	NM	263.95 [7]	NM	268.95 [7]
OW-14	261.24	30.00	overburden	TOC/PLC	NM	249.24 [7]	NM	249.24 [7]	NM	249.24 [7]
OW-16	259.81	30.00	overburden	TOC/PLC	NM	247.81 [7]	NM	247.81 [7]	NM	248.81 [7]

Notes:

[1] = Water levels measured January 21-23, 2020, under pumping conditions with EW-2 offline
[2] = Water levels measured on 6/23/2020 under pumping conditions with EW-2 and EW-9 offline
[3] = Water levels measured on 11/3/2020 under pumping conditions with EW-2 offline
[4] = CE-1 not in service; acts as an emergency backup well to CE-2 for Country Estates
[5] = Well is inaccessible; located within a storage shed on a private property
[6] = EW-2 off-line during LTM event due to severed power cable in conduit and subsequent freezing causing breakage of piping in aboveground vault
[7] = Measurement collected from extraction well panel
btoc = Below top of casing
DTW = Depth to water
ft. = Feet
GW = Groundwater
msl = Mean sea level
LTM = Long-term monitoring
NA = Not available
NM = Not measured
PLC = Programmable logic controller
TOC = Top of casing

Prepared by: AJN 01/15/21
Checked by: KAA 01/18/21

Table 2.9: Groundwater Monitoring Results Above New York State Standards

		Parameter	1,2-Dichloroethene (total)	Cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloro-ethene	Trichloro-ethene	Vinyl chloride
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		NYS Class GA Standard	5	5	5	5	5	2
Location	**Sample Date**	**Sample ID**						
CE-2	1/22/2020	CE-2	1.4 J	1.4	1 U	1.4	1.3	1 U
EW-3	1/23/2020	EW-3	**5.1**	**5.1**	1 U	1 U	1 U	**4.6**
EW-4	7/21/2020	EW-4	**5.7**	4.6	1.1	1 U	1 U	1 U
EW-5	1/23/2020	EW-5	**210**	**210**	8 U	**200**	**64**	8 U
EW-6	1/22/2020	EW-6	**150**	**150**	10 U	**570**	**150**	9.2 J
EW-7	1/22/2020	EW-7	**1200**	**1200**	100 U	**3900**	**1400**	100 U
EW-8	1/23/2020	EW-8	3.5	3.5	1 U	1 U	1 U	1.1
EW-9	1/22/2020	EW-9	**74**	**74**	2 U	**7.8**	4.2	**8.2**
EW-11	1/23/2020	EW-11	**5.5**	**5.5**	1 U	1 U	1 U	1 U
EW-12	1/23/2020	EW-12	2 U	1 U	1 U	3.7	1 U	1 U
EW-13	1/22/2020	EW-13	**15**	**15**	1 U	**29**	2.9	1.4
EW-16	1/22/2020	EW-16	**1500**	**1500**	20 U	**2400**	**1000**	**28**
IW-8	1/23/2020	IW-8	2 U	1 U	1 U	1 U	1 U	1 U
IW-9	1/23/2020	IW-9	**880**	**880**	25 U	**330**	**410**	25 U
IW-10	1/23/2020	IW-10	3.8	3.8	1 U	1 U	1.3	1 U
M-4	1/23/2020	M-4	2 U	1 U	1 U	1 U	1 U	1 U
M-5	1/22/2020	M-5	**14**	**14**	1 U	1 U	1 U	**4.6**
M-6	1/23/2020	M-6	2 U	1 U	1 U	1 U	1 U	1 U
M-8	1/23/2020	M-8	**7.1**	**7.1**	1 U	0.98 J	1	1 U
M-9	1/23/2020	M-9	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	1/22/2020	MUELLER	2 U	1 U	1 U	1 U	1 U	1 U
MW-112	7/20/2020	MW-112	2 U	1 U	1 U	1.4	0.7 J	1 U
MW-113	7/20/2020	MW-113	40 U	20 U	20 U	**940**	20 U	20 U
OW-2	1/22/2020	OW-2	**89**	**89**	20 U	**1200**	**25**	20 U
OW-3	1/22/2020	OW-3	**220**	**220**	80 U	**11000**	**210**	80 U
OW-5	1/22/2020	OW-5	**1100**	**1100**	100 U	**4200**	**230**	100 U
OW-7	1/22/2020	OW-7	**160**	**160**	10 U	**670**	**180**	10 U
OW-13	1/22/2020	OW-13	**1100**	**1100**	50 U	**3500**	**280**	5 U
OW-14	1/22/2020	OW-14	**980**	**980**	100 U	**7400**	**770**	100 U
OW-16	1/22/2020	OW-16	**47**	**47**	5 U	**240**	**20**	5 U

Notes:

J = Estimated value
NYS = New York State
U = Not detected

µg/L = Micrograms per liter
Bold = Exceeds standard

Prepared by: KMS 01/19/21
Checked by: KAA 01/19/21

Table 2.10: Emerging Contaminants Sampling Results

		Location	EW-9	EW-9	OW-14
		Sample Date	10/5/2020	10/5/2020	10/5/2020
		Sample ID	EW-9	EW-9 DUP	OW-14
		QC Code	FS	FD	FS
Method	**Parameter**	**Units**			
8270D-SIM	1,4-Dioxane	µg/L	0.19 U	0.19 U	0.2 U
537 (Modified)	6:2 Fluorotelomer sulfonate (6:2 FTS)	ng/L	4.32 U	4.38 U	4.4 U
537 (Modified)	8:2 Fluorotelomer sulfonate (8:2 FTS)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	N-ethyl perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ng/L	4.32 U	4.38 U	4.4 U
537 (Modified)	N-methyl perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ng/L	4.32 U	4.38 U	4.4 U
537 (Modified)	Perfluorobutanesulfonic acid (PFBS)	ng/L	1.73 U	1.75 U	**0.49 J**
537 (Modified)	Perfluorobutanoic acid (PFBA)	ng/L	4.32 U	4.38 U	**2.67 J**
537 (Modified)	Perfluorodecanesulfonic acid (PFDS)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	Perfluorodecanoic acid (PFDA)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	Perfluorododecanoic acid (PFDoA)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	Perfluoroheptanesulfonic acid (PFHpS)	ng/L	1.75 U	1.75 U	1.76 U
537 (Modified)	Perfluoroheptanoic acid (PFHpA)	ng/L	1.73 U	1.75 U	**0.96** J+
537 (Modified)	Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	Perfluorohexanoic acid (PFHxA)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	Perfluorononanoic acid (PFNA)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	Perfluorooctanesulfonamide (FOSA)	ng/L	**1.76 J**	**3.34 J**	1.76 U
537 (Modified)	Perfluorooctanesulfonic acid (PFOS)	ng/L	1.73 U	1.75 U	**2.54**
537 (Modified)	Perfluorooctanoic acid (PFOA)	ng/L	1.73 U	1.75 U	**1.82**
537 (Modified)	Perfluoropentanoic acid (PFPeA)	ng/L	1.73 U	**0.46 J**	**1.41 J**
537 (Modified)	Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	Perfluorotridecanoic acid (PFTrDA)	ng/L	1.73 U	1.75 U	1.76 U
537 (Modified)	Perfluoroundecanoic acid (PFUnDA)	ng/L	1.73 U	1.75 U	1.76 U

Notes:

Bold = Detection
FD = Field Duplicate
FS = Field Sample
J = Estimated value
J+ = Estimated value, biased high
ng/L = Nanograms per liter
µg/L = Micrograms per liter
U = Not detected

Created by: KMS 01/19/21
Checked by: KAA 01/19/21

APPENDIX A

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM COMPONENT PERFORMANCE

		Location	Air Stripper Eff		Air Stripper Eff		Air Stripper Eff		Air Stripper Eff		Air Stripper Eff		Air Stripper Eff	
		Field Sample Date	1/13/2020		2/18/2020		3/6/2020		4/1/2020		4/1/2020		5/5/2020	
		Lab Sample Delivery Group	480-165117-1		480-166581-1		480-167132-1		480-168125-1		480-168124-1		480-169501-1	
		Field Sample ID	PS - AS EFFLUENT		PS-AS-EFFLUENT		PS-AS EFFLUENT		PS-AS EFFLUENT		PS-AS-EFFLUENT		PS-AS EFFLUENT	
		Qc Code	FS		FS		FS		FS		FS		FS	
		Fraction	T		T		T		T		D		T	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	1,1,2,2-Tetrachloroethane	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	1,1,2-Trichloroethane	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	1,1-Dichloroethene	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	1,2-Dichloroethane	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	1,2-Dichloroethene (total)	µg/L	2	U	2	U	2	U	2	U			2	U
SW8260C	2-Hexanone	µg/L	5	U	5	U	5	U	5	U			5	U
SW8260C	Acetone	µg/L	10	U	10	U	10	U	10	U			10	U
SW8260C	Carbon disulfide	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	Carbon tetrachloride	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	Chloroform	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	Chloromethane	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	cis-1,2-Dichloroethene	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	Methylene chloride	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	Tetrachloroethene	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	Toluene	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	trans-1,2-Dichloroethene	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	Trichloroethene	µg/L	1	U	1	U	1	U	1	U			1	U
SW8260C	Vinyl chloride	µg/L	1	U	1	U	1	U	1	U			1	U
SW6010C	Aluminum	µg/L	200	U	200	U	200	U	200	U	200	U	200	U
SW6010C	Arsenic	µg/L	6	U	6.4	J-	6	U	6	U	6	U	6	U
SW6010C	Barium	µg/L	54.5		54.1		61.3		33.6		33		35.2	
SW6010C	Cadmium	µg/L	1	U	1	UJ	1	U	1	U	1	U	1	U
SW6010C	Chromium	µg/L	4	U	4	UJ	4	U	4	U	4	U	4	U
SW6010C	Copper	µg/L	10	U	10	UJ	10	U	10	U	10	U	10	U
SW6010C	Iron	µg/L	50	U	50	UJ	50	U	50	U	50	U	50	U
SW6010C	Lead	µg/L	3	U	3	UJ	3	U	3	U	3	U	3	U
SW6010C	Manganese	µg/L	36.8		37.5	J-	40.2		54.9		40		47.6	
SW6010C	Nickel	µg/L	10	U	10	UJ	10	U	10	U	10	U	10	U
SW6010C	Zinc	µg/L	10	U	10	UJ	10	U	10	U	10	U	10	U
SW7470A	Mercury	µg/L	0.12	U	0.12	U	0.12	U	0.12	U			0.12	U
SM2540C	Total Dissolved Solids	mg/L	336		284		300		342				465	
SM2540D	Total Suspended Solids	mg/L	4	U	4	U	4.4		7.2				4	U

Notes:
µg/L= Micrograms per liter
mg/L = Milligrams per liter
FS = Field Sample
FD = Field Duplicate

Created by: KMS 01/19/21
Checked by: KAA 01/19/21

		Location	Air Stripper Eff		Air Stripper Eff		Air Stripper Eff		Air Stripper Eff		Air Stripper Eff		Air Stripper Eff	
		Field Sample Date	6/4/2020		7/7/2020		8/17/2020		9/21/2020		10/5/2020		11/3/2020	
		Lab Sample Delivery Group	480-170856-1		480-172121-1		480-173950-1		480-175416-1		480-176064-1		480-177616-1	
		Field Sample ID	PS-AS EFFLUENT		PS-AS EFFLUENT		PS-AS EFFLUENT		PS-AS-EFFLUENT		PS-AS-EFFLUENT		PS-AS-EFFLUENT	
		Qc Code	FS		FS		FS		FS		FS		FS	
		Fraction	T		T		T		T		T		T	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,1-Dichloroethene	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichloroethene (total)	µg/L	2	U	2	U	2	U	2	U	2	U	2	U
SW8260C	2-Hexanone	µg/L	5	U	5	U	5	U	5	U	5	U	5	U
SW8260C	Acetone	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW8260C	Carbon disulfide	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Chloroform	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Chloromethane	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Methylene chloride	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Tetrachloroethene	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Toluene	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Trichloroethene	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Vinyl chloride	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW6010C	Aluminum	µg/L	200	U	200	U	200	U	200	U	200	U	200	U
SW6010C	Arsenic	µg/L	6	U	6	U	6	U	6	U	6	U	6	U
SW6010C	Barium	µg/L	81		38.6		64.5		69		54		42.2	
SW6010C	Cadmium	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW6010C	Chromium	µg/L	4	U	4	U	4	U	4	U	4	U	4	U
SW6010C	Copper	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW6010C	Iron	µg/L	265		50	U	50	U	50	U	50	U	50	U
SW6010C	Lead	µg/L	3	U	3	U	3	U	3	U	3	U	3	U
SW6010C	Manganese	µg/L	273		56.8		42.5		43		33.1		49.2	
SW6010C	Nickel	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW6010C	Zinc	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW7470A	Mercury	µg/L	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U
SM2540C	Total Dissolved Solids	mg/L	450		345		430		415		474		389	
SM2540D	Total Suspended Solids	mg/L	4	U	4	U	4	U	4	U	4	U	4	U

Notes:
µg/L= Micrograms per liter
mg/L = Milligrams per liter
FS = Field Sample
FD = Field Duplicate

Created by: KMS 01/19/21
Checked by: KAA 01/19/21

		Location	Air Stripper Eff		PS-Influent		PS-Influent		PS-Influent		PS-Influent		PS-Influent	
		Field Sample Date	12/4/2020		1/13/2020		2/18/2020		3/6/2020		4/1/2020		4/1/2020	
		Lab Sample Delivery Group	480-179021-1		480-165117-1		480-166581-1		480-167132-1		480-168124-1		480-168124-1	
		Field Sample ID	PS-AS-EFFLUENT		PS - INFLUENT		PS-INFLUENT		PS-INFLUENT		PS-AS-INFLUENT		PS-INFLUENT	
		Qc Code	FS		FS		FS		FS		FS		FS	
		Fraction	T		T		T		T		D		T	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	µg/L	1	U	20	U	40	U	20	U			20	U
SW8260C	1,1,2,2-Tetrachloroethane	µg/L	1	U	20	U	40	U	20	U			20	UJ
SW8260C	1,1,2-Trichloroethane	µg/L	1	U	20	U	40	U	20	U			20	U
SW8260C	1,1-Dichloroethene	µg/L	1	U	20	U	40	U	20	U			20	U
SW8260C	1,2-Dichloroethane	µg/L	1	U	20	U	40	U	20	U			20	UJ
SW8260C	1,2-Dichloroethene (total)	µg/L	2	U	680		640		610				1100	
SW8260C	2-Hexanone	µg/L	5	U	100	U	200	U	100	U			100	U
SW8260C	Acetone	µg/L	10	U	200	U	400	U	200	U			200	U
SW8260C	Carbon disulfide	µg/L	1	U	20	U	40	U	20	U			20	U
SW8260C	Carbon tetrachloride	µg/L	1	U	20	U	40	U	20	U			20	U
SW8260C	Chloroform	µg/L	1	U	20	U	40	U	42				20	U
SW8260C	Chloromethane	µg/L	1	U	20	U	40	U	20	U			20	U
SW8260C	cis-1,2-Dichloroethene	µg/L	1	U	680		640		610				1100	J-
SW8260C	Methylene chloride	µg/L	1	U	20	U	38	J	20	U			20	U
SW8260C	Tetrachloroethene	µg/L	1	U	1300		1200		870	J-			1700	J-
SW8260C	Toluene	µg/L	1	U	20	U	40	U	20	U			20	UJ
SW8260C	trans-1,2-Dichloroethene	µg/L	1	U	20	U	40	U	20	U			20	U
SW8260C	Trichloroethene	µg/L	1	U	370		350		260				550	J-
SW8260C	Vinyl chloride	µg/L	1	U	20	U	40	U	20	U			20	U
SW6010C	Aluminum	µg/L	200	U	200	U	200	U	200	U	200	U	200	U
SW6010C	Arsenic	µg/L	6	U	6	U	6	U	6	U	6	U	6	U
SW6010C	Barium	µg/L	57		57.6		54		60.2		32		25.6	
SW6010C	Cadmium	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW6010C	Chromium	µg/L	4	U	4	U	4	U	4	U	4	U	4	U
SW6010C	Copper	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW6010C	Iron	µg/L	50	U	50	U	50	U	50	U	50	U	50	U
SW6010C	Lead	µg/L	3	U	3	U	3	U	3	U	3	U	3	U
SW6010C	Manganese	µg/L	38.7		40.8		32.2		33.3		33		28.8	
SW6010C	Nickel	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW6010C	Zinc	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW7470A	Mercury	µg/L	0.12	U	0.12	U	0.12	U	0.12	U			0.12	U
SM2540C	Total Dissolved Solids	mg/L	349		336		340		328				324	
SM2540D	Total Suspended Solids	mg/L	4	U	4	U	4	U	5.2				4	U

Notes:
µg/L= Micrograms per liter
mg/L = Milligrams per liter
FS = Field Sample
FD = Field Duplicate

Created by: KMS 01/19/21
Checked by: KAA 01/19/21

		Location	PS-Influent		PS-Influent		PS-Influent		PS-Influent		PS-Influent		PS-Influent	
		Field Sample Date	4/1/2020		5/5/2020		6/4/2020		7/7/2020		8/17/2020		9/21/2020	
		Lab Sample Delivery Group	480-168124-1		480-169501-1		480-170856-1		480-172121-1		480-173950-1		480-175416-1	
		Field Sample ID	PS-INFLUENT		PS-INFLUENT		PS-INFLUENT		PS-INFLUENT		PS-INFLUENT		PS-INFLUENT	
		Qc Code	FS		FS		FS		FS		FS		FS	
		Fraction	D		T		T		T		T		T	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	1,1,2,2-Tetrachloroethane	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	1,1,2-Trichloroethane	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	1,1-Dichloroethene	µg/L			20	U	20	U	2.8		1.3		10	U
SW8260C	1,2-Dichloroethane	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	1,2-Dichloroethene (total)	µg/L			920		1800		1500		690		640	J-
SW8260C	2-Hexanone	µg/L			100	U	100	U	5	U	5	U	50	U
SW8260C	Acetone	µg/L			200	U	200	U	10	U	10	U	100	U
SW8260C	Carbon disulfide	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	Carbon tetrachloride	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	Chloroform	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	Chloromethane	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	cis-1,2-Dichloroethene	µg/L			920	J-	1800		1500		690	J-	640	J-
SW8260C	Methylene chloride	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	Tetrachloroethene	µg/L			1500	J-	3500		1500		290		690	J-
SW8260C	Toluene	µg/L			20	U	20	U	1	U	1	U	10	U
SW8260C	trans-1,2-Dichloroethene	µg/L			20	U	20	U	25	U	10	U	10	U
SW8260C	Trichloroethene	µg/L			590		1200		330		64		110	
SW8260C	Vinyl chloride	µg/L			20	U	32		25	J	13		14	
SW6010C	Aluminum	µg/L	200	U	200	U	200	U	200	U	200	U	200	U
SW6010C	Arsenic	µg/L	6	U	6	U	6	U	6	U	6	U	6	U
SW6010C	Barium	µg/L	32		35.4		76.5		38.1		65.6		69	
SW6010C	Cadmium	µg/L	1	U	1	U	1	U	1	U	1	U	1	U
SW6010C	Chromium	µg/L	4	U	4	U	4	U	4	U	4	U	4	U
SW6010C	Copper	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW6010C	Iron	µg/L	50	U	50	U	142		50		50	U	50	U
SW6010C	Lead	µg/L	3	U	3	U	3	U	3	U	3	U	3	U
SW6010C	Manganese	µg/L	43		55.7		258		42.6		42.6		46	
SW6010C	Nickel	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW6010C	Zinc	µg/L	10	U	10	U	10	U	10	U	10	U	10	U
SW7470A	Mercury	µg/L			0.12	U	0.12	U	0.12	U	0.12	U	0.12	U
SM2540C	Total Dissolved Solids	mg/L			421		316		351		414		414	
SM2540D	Total Suspended Solids	mg/L			4	U	4	U	4	U	4	U	4	U

Notes:
µg/L= Micrograms per liter
mg/L = Milligrams per liter
FS = Field Sample
FD = Field Duplicate

Created by: KMS 01/19/21
Checked by: KAA 01/19/21

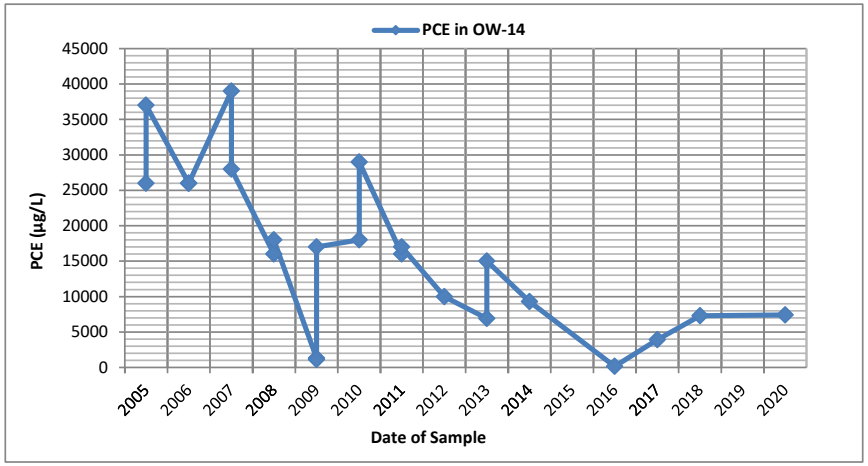
		Location	PS-Influent		PS-Influent		PS-Influent	
		Field Sample Date	10/5/2020		11/3/2020		12/4/2020	
		Lab Sample Delivery Group	480-176064-1		480-177616-1		480-179021-1	
		Field Sample ID	PS-INFLUENT		PS-INFLUENT		PS-INFLUENT	
		Qc Code	FS		FS		FS	
		Fraction	T		T		T	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	µg/L	10	U	20	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	µg/L	10	U	20	U	1	U
SW8260C	1,1,2-Trichloroethane	µg/L	10	U	20	U	1	U
SW8260C	1,1-Dichloroethene	µg/L	10	U	20	U	1	
SW8260C	1,2-Dichloroethane	µg/L	10	U	20	U	1	U
SW8260C	1,2-Dichloroethene (total)	µg/L	680		830		440	
SW8260C	2-Hexanone	µg/L	50	U	100	U	5	U
SW8260C	Acetone	µg/L	100	U	200	U	10	U
SW8260C	Carbon disulfide	µg/L	10	U	20	U	1	U
SW8260C	Carbon tetrachloride	µg/L	10	U	20	U	1	U
SW8260C	Chloroform	µg/L	10	U	20	U	1	U
SW8260C	Chloromethane	µg/L	10	U	20	U	1	U
SW8260C	cis-1,2-Dichloroethene	µg/L	680		830		440	J-
SW8260C	Methylene chloride	µg/L	13		20	U	1	U
SW8260C	Tetrachloroethene	µg/L	550	J-	1600		1100	J-
SW8260C	Toluene	µg/L	10	U	20	U	1	U
SW8260C	trans-1,2-Dichloroethene	µg/L	10	U	20	U	2.6	
SW8260C	Trichloroethene	µg/L	120		230		270	
SW8260C	Vinyl chloride	µg/L	17	J	20	U	11	
SW6010C	Aluminum	µg/L	200	U	200	U	200	U
SW6010C	Arsenic	µg/L	6	U	6	U	6	U
SW6010C	Barium	µg/L	52.6		86.8		59.3	
SW6010C	Cadmium	µg/L	1	U	1	U	1	U
SW6010C	Chromium	µg/L	4	U	4	U	4	U
SW6010C	Copper	µg/L	10	U	10	U	10	U
SW6010C	Iron	µg/L	50	U	272		50	U
SW6010C	Lead	µg/L	3	U	3	U	3	U
SW6010C	Manganese	µg/L	28.5		47.8		40.9	
SW6010C	Nickel	µg/L	10	U	10	U	10	U
SW6010C	Zinc	µg/L	10	U	10	U	10	U
SW7470A	Mercury	µg/L	0.12	U	0.12	U	0.12	U
SM2540C	Total Dissolved Solids	mg/L	349		505		364	
SM2540D	Total Suspended Solids	mg/L	4	U	7.2		4	U

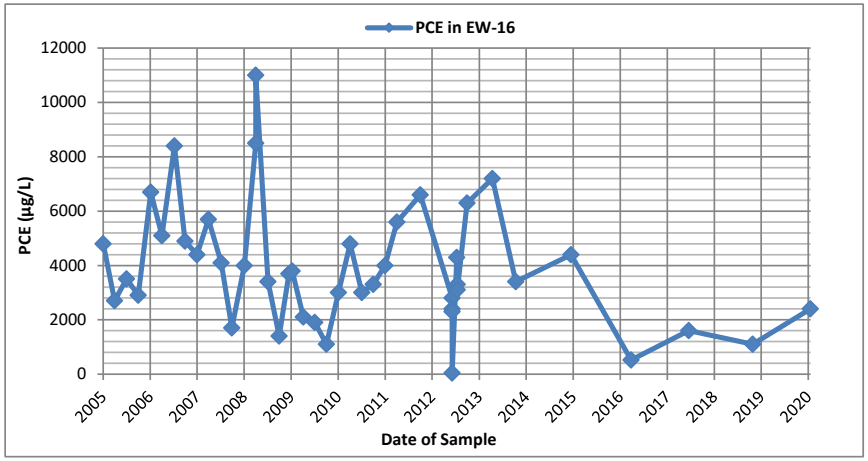
Notes:
µg/L= Micrograms per liter
mg/L = Milligrams per liter
FS = Field Sample
FD = Field Duplicate

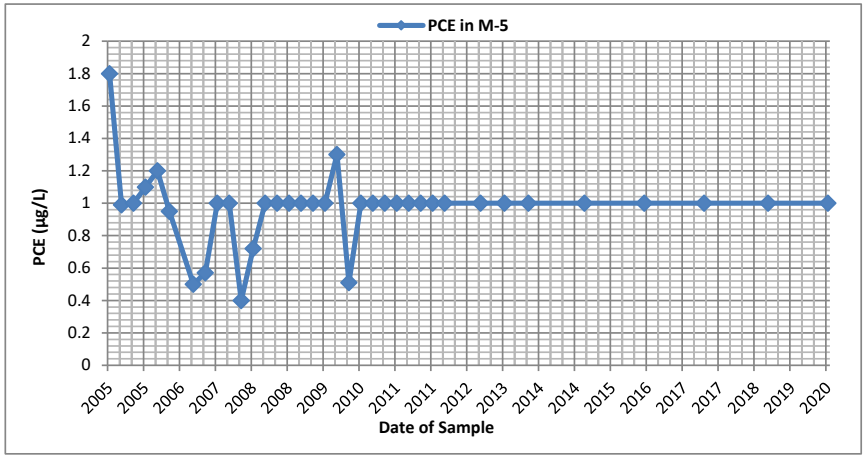
Created by: KMS 01/19/21
Checked by: KAA 01/19/21

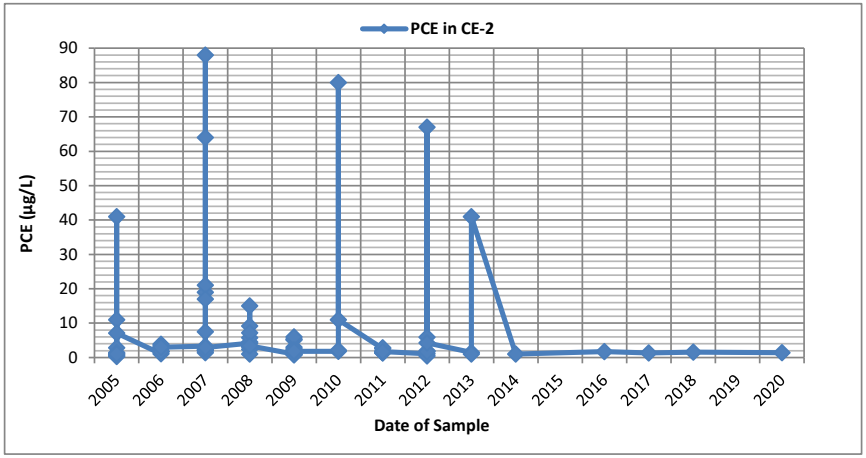
APPENDIX B

TIME-SERIES PLOTS OF KEY WELLS


PCE in OW-14
PCE (µg/L)
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Date of Sample


PCE in EW-16
PCE (µg/L)
12000
10000
8000
6000
4000
2000
0
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Date of Sample


PCE in M-5
PCE (µg/L)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2005 2005 2006 2007 2008 2008 2009 2010 2011 2011 2012 2013 2014 2014 2015 2016 2017 2017 2018 2019 2020
Date of Sample


PCE in CE-2
PCE (µg/L)
90
80
70
60
50
40
30
20
10
0
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Date of Sample

APPENDIX C

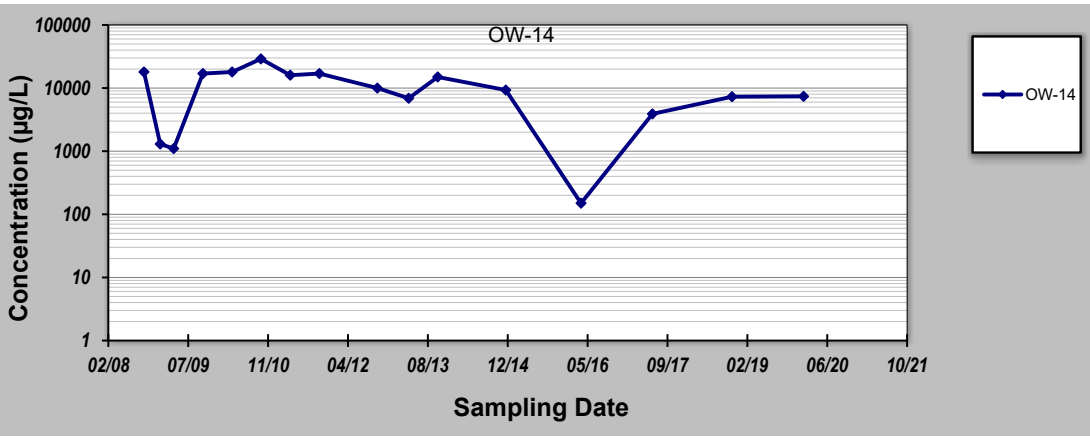
CONSTITUENT TREND ANALYSES OF KEY WELLS

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	PCE
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID: OW-14

Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)
1	10/2/2008	18000
2	1/12/2009	1300
3	4/6/2009	1100
4	10/6/2009	17000
5	4/7/2010	18000
6	10/4/2010	29000
7	4/6/2011	16000
8	10/5/2011	17000
9	10/2/2012	10000
10	4/16/2013	6900
11	10/15/2013	15000
12	12/15/2014	9300
13	3/30/2016	150
14	6/20/2017	3900
15	10/31/2018	7300
16	1/22/2020	7400
17		
18		
19		
20		
Coefficient of Variation:		0.72
Mann-Kendall Statistic (S):		-38
Confidence Factor:		95.2%
Concentration Trend:		Decreasing



Notes:

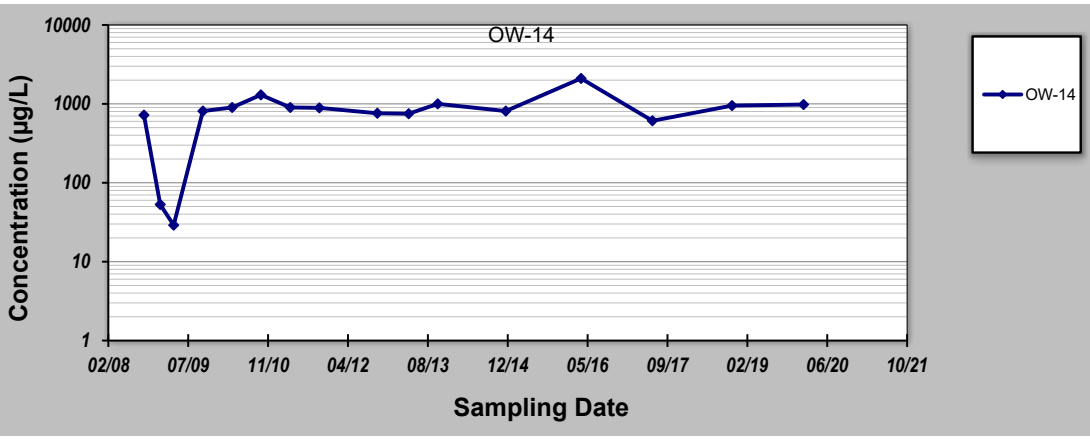
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	cis-1,2-DCE
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID: OW-14

Sampling Event	Sampling Date	CIS-1,2-DCE CONCENTRATION (µg/L)
1	10/2/2008	720
2	1/12/2009	53
3	4/6/2009	29
4	10/6/2009	810
5	4/7/2010	900
6	10/4/2010	1300
7	4/6/2011	900
8	10/5/2011	890
9	10/2/2012	760
10	4/16/2013	750
11	10/15/2013	1000
12	12/15/2014	810
13	3/30/2016	2100
14	6/20/2017	610
15	10/31/2018	950
16	1/22/2020	980
17		
18		
19		
20		
Coefficient of Variation:		0.55
Mann-Kendall Statistic (S):		36
Confidence Factor:		94.2%
Concentration Trend:		Prob. Increasing



Notes:

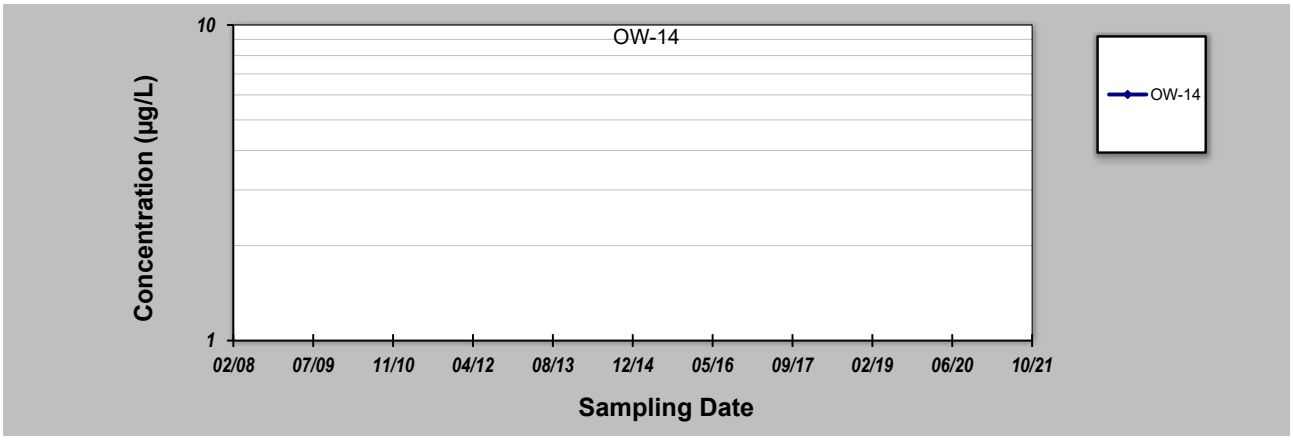
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	Vinyl Chloride
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID: OW-14

Sampling Event	Sampling Date	VINYL CHLORIDE CONCENTRATION (µg/L)
1	10/2/2008	Mostly ND - Stable
2	1/12/2009	
3	4/6/2009	
4	10/6/2009	
5	4/7/2010	
6	10/4/2010	
7	4/6/2011	
8	10/5/2011	
9	10/2/2012	
10	4/16/2013	
11	10/15/2013	
12	12/15/2014	
13	3/30/2016	
14	6/20/2017	
15	10/31/2018	
16	1/22/2020	
17		
18		
19		
20		
Coefficient of Variation:		
Mann-Kendall Statistic (S):		
Confidence Factor:		
Concentration Trend:		



Notes:

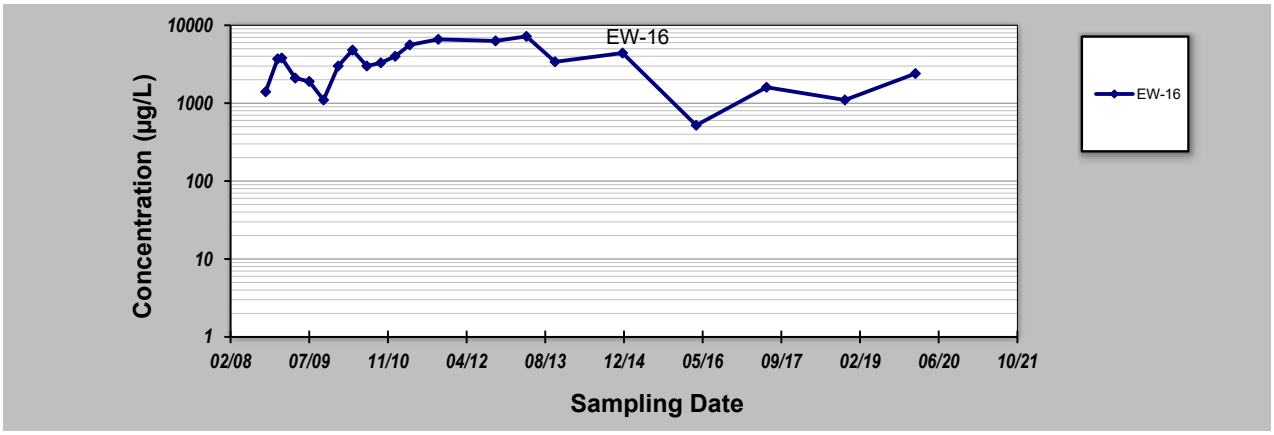
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.
4. Results have two historic detections, most recently in 2011.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	PCE
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID: EW-16

Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)
1	10/2/2008	1400
2	12/17/2008	3700
3	1/12/2009	3800
4	4/8/2009	2100
5	7/6/2009	1900
6	10/5/2009	1100
7	1/6/2010	3000
8	4/7/2010	4800
9	7/7/2010	3000
10	10/4/2010	3300
11	1/3/2011	4000
12	4/6/2011	5600
13	10/4/2011	6600
14	10/2/2012	6300
15	4/16/2013	7200
16	10/15/2013	3400
17	12/18/2014	4400
18	3/30/2016	520
19	6/20/2017	1600
20	10/31/2018	1100
21	1/22/2020	2400
22		
23		
24		
25		
Coefficient of Variation:		0.62
Mann-Kendall Statistic (S):		-3
Confidence Factor:		52.2%
Concentration Trend:		Stable



Notes:

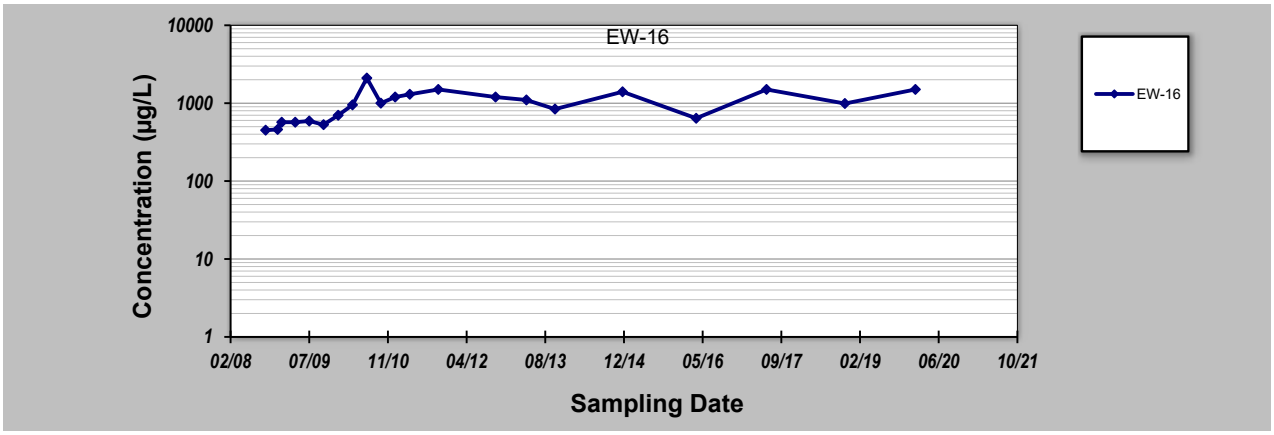
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.
4. Non-Detects are reported as the detection limit from the January 2020 laboratory analysis.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	cis-1,2-DCE
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID:	EW-16						

Sampling Event	Sampling Date	CIS-1,2-DCE CONCENTRATION (µg/L)						
1	10/2/2008	450						
2	12/17/2008	460						
3	1/12/2009	570						
4	4/8/2009	570						
5	7/6/2009	590						
6	10/5/2009	530						
7	1/6/2010	700						
8	4/7/2010	950						
9	7/7/2010	2100						
10	10/4/2010	1000						
11	1/3/2011	1200						
12	4/6/2011	1300						
13	10/4/2011	1500						
14	10/2/2012	1200						
15	4/16/2013	1100						
16	10/15/2013	840						
17	12/18/2014	1400						
18	3/30/2016	640						
19	6/20/2017	1500						
20	10/31/2018	990						
21	1/22/2020	1500						
22								
23								
24								
25								
Coefficient of Variation:		0.44						
Mann-Kendall Statistic (S):		111						
Confidence Factor:		>99.9%						
Concentration Trend:		Increasing						



Notes:

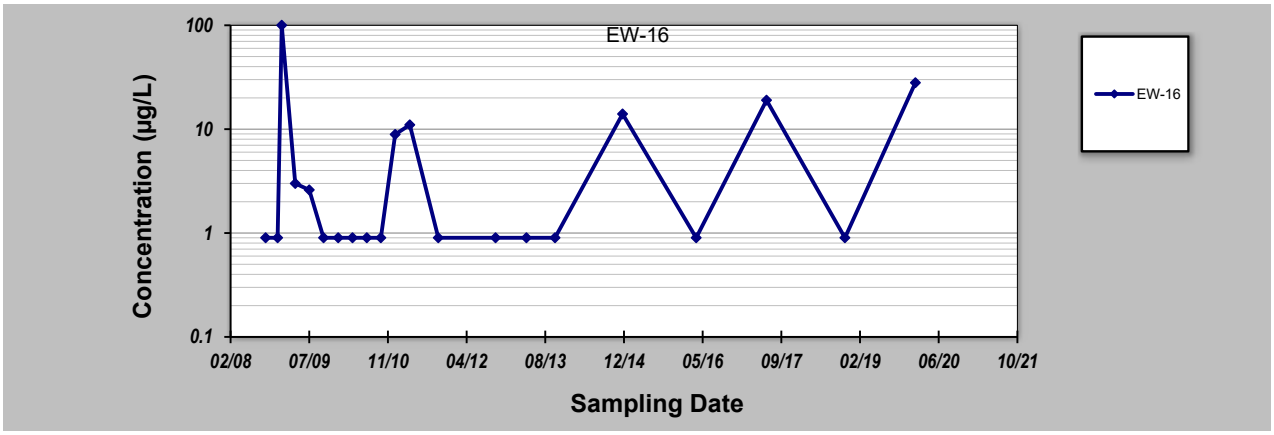
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	Vinyl Chloride
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID: EW-16

Sampling Event	Sampling Date	VINYL CHLORIDE CONCENTRATION (µg/L)
1	10/2/2008	0.9
2	12/17/2008	0.9
3	1/12/2009	100
4	4/8/2009	3
5	7/6/2009	2.6
6	10/5/2009	0.9
7	1/6/2010	0.9
8	4/7/2010	0.9
9	7/7/2010	0.9
10	10/4/2010	0.9
11	1/3/2011	8.9
12	4/6/2011	11
13	10/4/2011	0.9
14	10/2/2012	0.9
15	4/16/2013	0.9
16	10/15/2013	0.9
17	12/18/2014	14
18	3/30/2016	0.9
19	6/20/2017	19
20	10/31/2018	0.9
21	1/22/2020	28
22		
23		
24		
25		
Coefficient of Variation:		2.33
Mann-Kendall Statistic (S):		20
Confidence Factor:		71.5%
Concentration Trend:		No Trend



Notes:

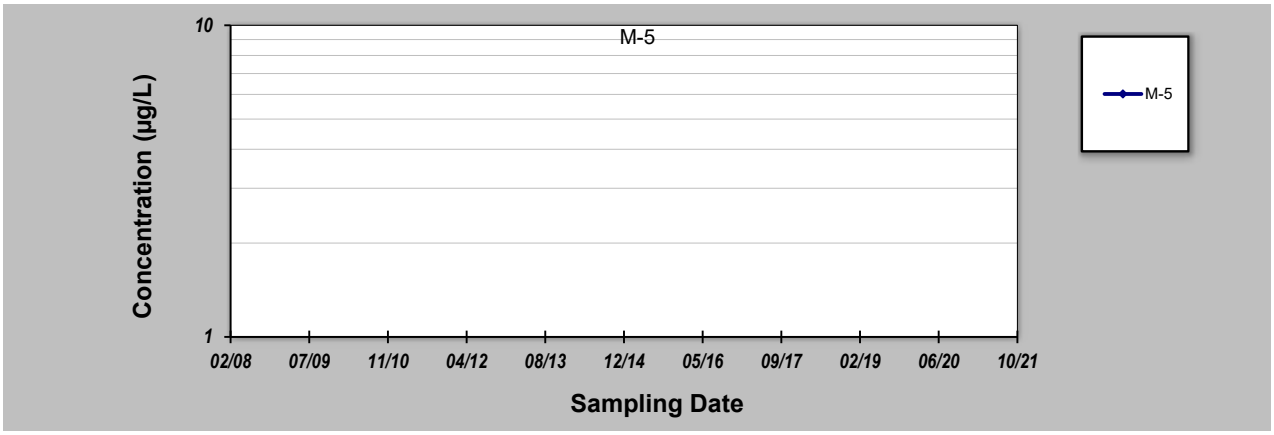
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.
4. Non-Detects are reported as the detection limit from the January 2020 laboratory analysis.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC 420006	Constituent:	PCE
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID:	M-5						

Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	10/6/2008	Mostly ND - Stable						
2	1/13/2009							
3	4/7/2009							
4	7/7/2009							
5	10/6/2009							
6	1/6/2010							
7	4/8/2010							
8	7/7/2010							
9	10/6/2010							
10	1/4/2011							
11	4/11/2011							
12	7/6/2011							
13	10/6/2011							
14	1/4/2012							
15	10/5/2012							
16	4/17/2013							
17	10/16/2013							
18	12/16/2014							
19	3/29/2016							
20	6/20/2017							
21	10/30/2018							
22	1/22/2020							
23								
24								
25								
Coefficient of Variation:								
Mann-Kendall Statistic (S):								
Confidence Factor:								
Concentration Trend:								



Notes:

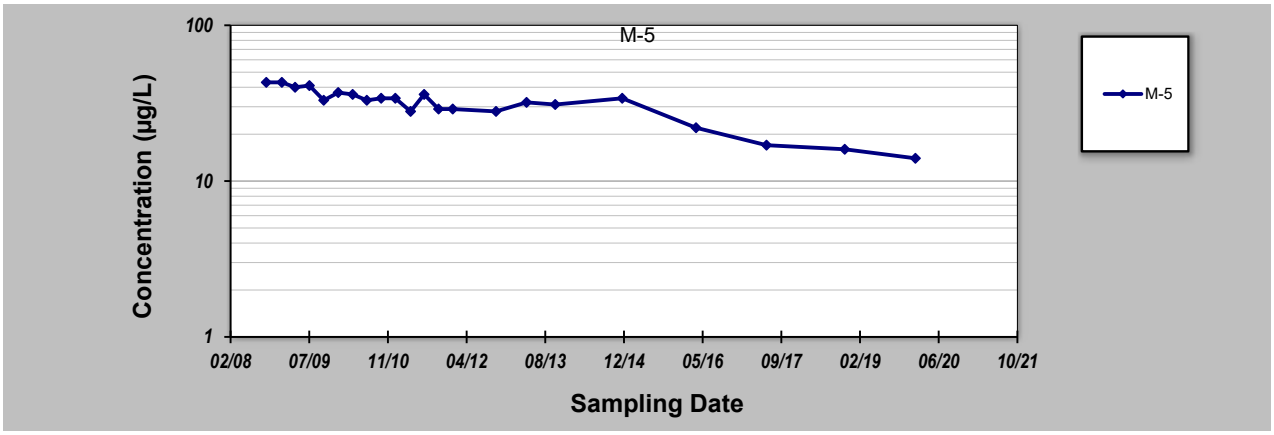
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.
4. Results show two historical detections, most recently in 2010.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	cis-1,2-DCE
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID: M-5

Sampling Event	Sampling Date	CIS-1,2-DCE CONCENTRATION (µg/L)
1	10/6/2008	43
2	1/13/2009	43
3	4/7/2009	40
4	7/7/2009	41
5	10/6/2009	33
6	1/6/2010	37
7	4/8/2010	36
8	7/7/2010	33
9	10/6/2010	34
10	1/4/2011	34
11	4/11/2011	28
12	7/6/2011	36
13	10/6/2011	29
14	1/4/2012	29
15	10/5/2012	28
16	4/17/2013	32
17	10/16/2013	31
18	12/16/2014	34
19	3/29/2016	22
20	6/20/2017	17
21	10/30/2018	16
22	1/22/2020	14
23		
24		
25		
Coefficient of Variation:		0.26
Mann-Kendall Statistic (S):		-163
Confidence Factor:		>99.9%
Concentration Trend:		Decreasing



Notes:

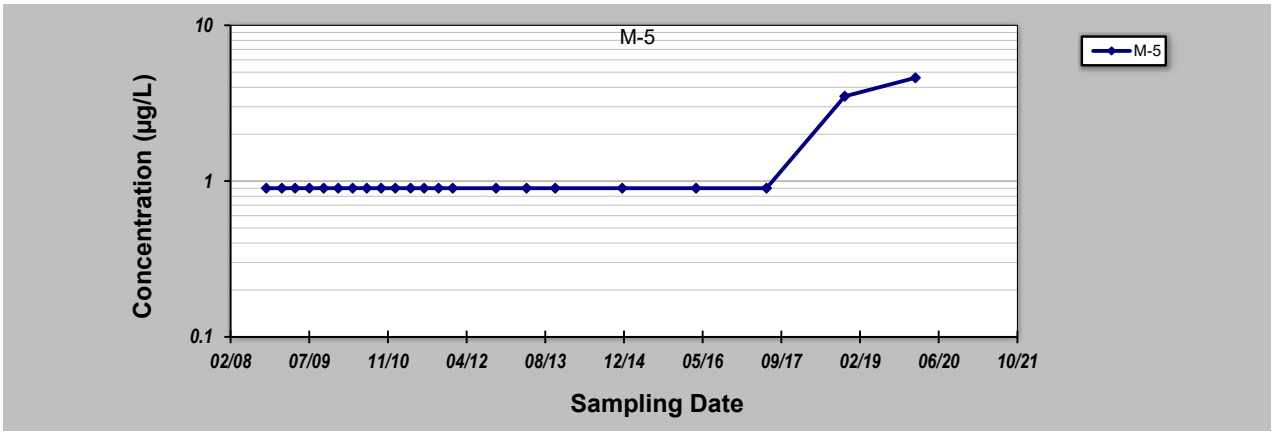
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	Vinyl Chloride
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID:	M-5						

Sampling Event	Sampling Date	VINYL CHLORIDE CONCENTRATION (µg/L)						
1	10/6/2008	0.9						
2	1/13/2009	0.9						
3	4/7/2009	0.9						
4	7/7/2009	0.9						
5	10/6/2009	0.9						
6	1/6/2010	0.9						
7	4/8/2010	0.9						
8	7/7/2010	0.9						
9	10/6/2010	0.9						
10	1/4/2011	0.9						
11	4/11/2011	0.9						
12	7/6/2011	0.9						
13	10/6/2011	0.9						
14	1/4/2012	0.9						
15	10/5/2012	0.9						
16	4/17/2013	0.9						
17	10/16/2013	0.9						
18	12/16/2014	0.9						
19	3/29/2016	0.9						
20	6/20/2017	0.9						
21	10/30/2018	3.5						
22	1/22/2020	4.6						
23								
24								
25								
Coefficient of Variation:		0.79						
Mann-Kendall Statistic (S):		41						
Confidence Factor:		86.9%						
Concentration Trend:		No Trend						



Notes:

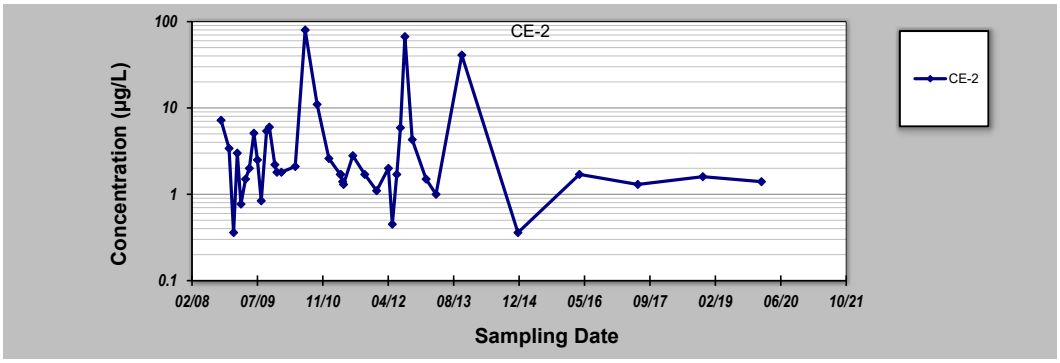
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.
4. Non-Detects are reported as the detection limit from the January 2020 laboratory analysis.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	PCE
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID:	CE-2

Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)
1	10/1/2008	7.2
2	12/1/2008	3.4
3	1/5/2009	0.36
4	2/2/2009	3
5	3/2/2009	0.77
6	4/6/2009	1.5
7	5/5/2009	2
8	6/9/2009	5.1
9	7/6/2009	2.5
10	8/4/2009	0.84
11	9/14/2009	5.4
12	10/5/2009	6
13	11/16/2009	2.2
14	12/2/2009	1.8
15	1/5/2010	1.8
16	4/21/2010	2.1
17	7/6/2010	80
18	10/5/2010	11
19	1/3/2011	2.6
20	3/31/2011	1.7
21	4/4/2011	1.7
22	4/18/2011	1.4
23	4/25/2011	1.3
24	7/5/2011	2.8
25	10/4/2011	1.7
26	1/3/2012	1.1
27	4/2/2012	2
28	5/2/2012	0.45
29	6/5/2012	1.7
30	7/3/2012	5.9
31	8/6/2012	67
32	10/1/2012	4.3
33	1/15/2013	1.5
34	4/1/2013	1
35	10/15/2013	41
36	12/18/2014	0.36
37	4/1/2016	1.7
38	6/21/2017	1.3
39	10/31/2018	1.6
40	1/22/2020	1.4
Coefficient of Variation:		2.38
Mann-Kendall Statistic (S):		-128
Confidence Factor:		93.0%
Concentration Trend:		Prob. Decreasing



Notes:

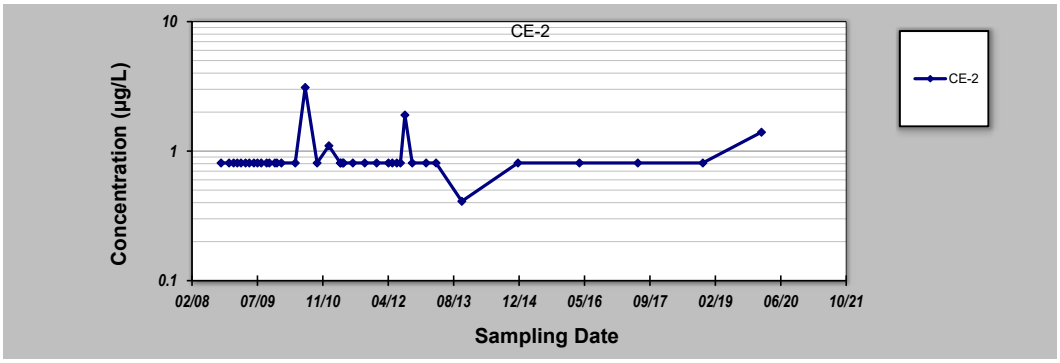
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.
4. Non-Detects are reported as the detection limit from the January 2020 laboratory analysis.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	cis-1,2-DCE
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID:	CE-2

Sampling Event	Sampling Date	CIS-1,2-DCE CONCENTRATION (µg/L)
1	10/1/2008	0.81
2	12/1/2008	0.81
3	1/5/2009	0.81
4	2/2/2009	0.81
5	3/2/2009	0.81
6	4/6/2009	0.81
7	5/5/2009	0.81
8	6/9/2009	0.81
9	7/6/2009	0.81
10	8/4/2009	0.81
11	9/14/2009	0.81
12	10/5/2009	0.81
13	11/16/2009	0.81
14	12/2/2009	0.81
15	1/5/2010	0.81
16	4/21/2010	0.81
17	7/6/2010	3.1
18	10/5/2010	0.81
19	1/3/2011	1.1
20	3/31/2011	0.81
21	4/4/2011	0.81
22	4/18/2011	0.81
23	4/25/2011	0.81
24	7/5/2011	0.81
25	10/4/2011	0.81
26	1/3/2012	0.81
27	4/2/2012	0.81
28	5/2/2012	0.81
29	6/5/2012	0.81
30	7/3/2012	0.81
31	8/6/2012	1.9
32	10/1/2012	0.81
33	1/15/2013	0.81
34	4/1/2013	0.81
35	10/15/2013	0.41
36	12/18/2014	0.81
37	4/1/2016	0.81
38	6/21/2017	0.81
39	10/31/2018	0.81
40	1/22/2020	1.4
Coefficient of Variation:		0.46
Mann-Kendall Statistic (S):		21
Confidence Factor:		59.2%
Concentration Trend:		No Trend



Notes:

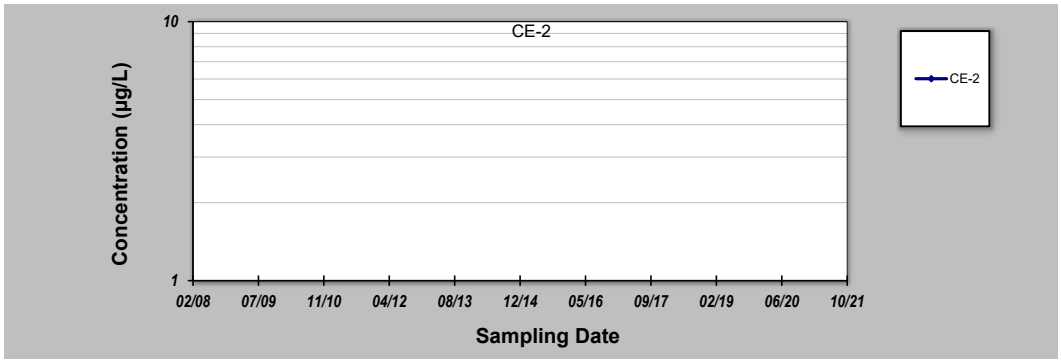
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.
4. Non-Detects are reported as the detection limit from the January 2020 laboratory analysis.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	15-Mar-21	Job ID:	3616206098
Facility Name:	American Thermostat NYSDEC Site 420006	Constituent:	Vinyl Chloride
Conducted By:	Haley Plante	Concentration Units:	µg/L

Sampling Point ID:	CE-2						

Sampling Event	Sampling Date	VINYL CHLORIDE CONCENTRATION (µg/L)						
1	10/1/2008	All ND						
2	12/1/2008							
3	1/5/2009							
4	2/2/2009							
5	3/2/2009							
6	4/6/2009							
7	5/5/2009							
8	6/9/2009							
9	7/6/2009							
10	8/4/2009							
11	9/14/2009							
12	10/5/2009							
13	11/16/2009							
14	12/2/2009							
15	1/5/2010							
16	4/21/2010							
17	7/6/2010							
18	10/5/2010							
19	1/3/2011							
20	3/31/2011							
21	4/4/2011							
22	4/18/2011							
23	4/25/2011							
24	7/5/2011							
25	10/4/2011							
26	1/3/2012							
27	4/2/2012							
28	5/2/2012							
29	6/5/2012							
30	7/3/2012							
31	8/6/2012							
32	10/1/2012							
33	1/15/2013							
34	4/1/2013							
35	10/15/2013							
36	12/18/2014							
37	4/1/2016							
38	6/21/2017							
39	10/31/2018							
40	1/22/2020							
Coefficient of Variation:								
Mann-Kendall Statistic (S):								
Confidence Factor:								
Concentration Trend:								



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

APPENDIX D

HISTORICAL GROUNDWATER RESULTS – SITE VOCs

			Method Class		VOCs					
			Parameter		1,2-Dichloroethene (total)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloro-ethene	Trichloro-ethene	Vinyl chloride
			NYS Class GA Standard		5	5	5	5	5	2
Location	Date	Sample ID	QC Code	Units	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
CE-1	10/1/2008	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/1/2008	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	11/3/2008	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	11/3/2008	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	12/1/2008	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	12/1/2008	CE-1 BET	FS	µg/L	2 U	1 U	1 U	**0.4** J	1 U	1 U
CE-1	1/5/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/5/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	3/16/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	3/16/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/6/2009	CE-1 BEF	FS	µg/L	2 U, N1	1 U, N1	1 U, N1	1 U, N1	1 U, N1	1 U, N1
CE-1	4/6/2009	CE-1 BET	FS	µg/L	2 U, N1	1 U, N1	1 U, N1	1 U, N1	1 U, N1	1 U, N1
CE-1	5/5/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	5/5/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/6/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/6/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	8/4/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	8/4/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	9/14/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	9/14/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/5/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/5/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	11/3/2009	BLIND DUP	FD	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	11/3/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	11/3/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	12/2/2009	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	**0.41** J	1 U	1 U
CE-1	12/2/2009	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/5/2010	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/5/2010	CE-1 BET	FS	µg/L	2 U	1 U	1 U	**0.4** J	1 U	1 U
CE-1	3/22/2010	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	3/22/2010	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/6/2010	BLIND DUP 1	FD	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/6/2010	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/6/2010	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/6/2010	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/6/2010	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/6/2010	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/6/2010	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/5/2010	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/5/2010	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/5/2010	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U

			Method Class		VOCs					
			Parameter		1,2-Dichloroethene (total)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloro-ethene	Trichloro-ethene	Vinyl chloride
			NYS Class GA Standard		5	5	5	5	5	2
Location	Date	Sample ID	QC Code	Units	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
CE-1	1/3/2011	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	**2**	1 U	1 U
CE-1	1/3/2011	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	**0.69** J	1 U	1 U
CE-1	1/3/2011	CE-1 BET	FS	µg/L	2 U	1 U	1 U	**0.57** J	1 U	1 U
CE-1	3/31/2011	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	3/31/2011	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	3/31/2011	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/4/2011	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/4/2011	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/4/2011	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/11/2011	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/11/2011	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/11/2011	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/18/2011	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/18/2011	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/18/2011	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/25/2011	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/25/2011	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/25/2011	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/5/2011	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/5/2011	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/5/2011	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/4/2011	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/4/2011	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/4/2011	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/3/2012	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/3/2012	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/3/2012	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/2/2012	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/2/2012	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/2/2012	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	5/2/2012	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	5/2/2012	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	5/2/2012	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	6/5/2012	CE-1 AFT 6/5/2012	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	6/5/2012	CE-1 BEF 6/5/2012	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	6/5/2012	CE-1 BET 6/5/2012	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/3/2012	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/3/2012	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	7/3/2012	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	8/6/2012	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	8/6/2012	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U

Method Class					VOCs					
Parameter					1,2-Dichloroethene (total)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloro-ethene	Trichloro-ethene	Vinyl chloride
NYS Class GA Standard					5	5	5	5	5	2
Location	Date	Sample ID	QC Code	Units	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
CE-1	8/6/2012	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/1/2012	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/1/2012	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	10/1/2012	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/7/2013	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/7/2013	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	1/7/2013	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/1/2013	CE-1 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/1/2013	CE-1 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	4/1/2013	CE-1 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-1	12/18/2014	CE-1	FS	µg/L	2 U	1 U	1 U	**2.5**	**0.57** J	1 U
CE-1	3/30/2016	CE-1	FS	µg/L	**5.9**	**5.9**	1 U	1 U	**0.81** J	1 U
CE-2	10/1/2008	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**7.2**	**1.7**	1 U
CE-2	10/1/2008	CE-2 BET	FS	µg/L	**1.4** J	**1.4**	1 U	**0.59** J	1 U	1 U
CE-2	11/3/2008	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	11/3/2008	CE-2 BET	FS	µg/L	**1.3** J	**1.3**	1 U	1 U	1 U	1 U
CE-2	12/1/2008	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**3.4**	**0.88** J	1 U
CE-2	12/1/2008	CE-2 BET	FS	µg/L	**1.1** J	**1.1**	1 U	**0.74** J	**0.69** J	1 U
CE-2	1/5/2009	BLIND DUP	FD	µg/L	2 U	1 U	1 U	**2.6**	**0.66** J	1 U
CE-2	1/5/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	1/5/2009	CE-2 BET	FS	µg/L	**1.1** J	**1.1**	1 U	1 U	**0.56** J	1 U
CE-2	2/2/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**3**	**1.1**	1 U
CE-2	2/2/2009	CE-2 BET	FS	µg/L	**0.82** J	**0.82** J	1 U	1 U	**0.54** J	1 U
CE-2	3/2/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**0.77** J	1 U	1 U
CE-2	3/2/2009	CE-2 BET	FS	µg/L	2 U	**0.7** J	1 U	1 U	**0.67** J	1 U
CE-2	4/6/2009	CE-2 BEF	FS	µg/L	2 U, N1	1 U, N1	1 U, N1	**1.5** N1	**0.51** N1,J	1 U, N1
CE-2	4/6/2009	CE-2 BET	FS	µg/L	2 U, N1	**0.59** N1,J	1 U, N1	**0.46** N1,J	**0.61** N1,J	1 U, N1
CE-2	5/5/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**2**	**0.65** J	1 U
CE-2	5/5/2009	CE-2 BET	FS	µg/L	2 U	**0.65** J	1 U	**0.6** J	**0.64** J	1 U
CE-2	6/9/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**5.1**	**1.4**	1 U
CE-2	6/9/2009	CE-2 BET	FS	µg/L	2 U	1 U	1 U	**0.67** J	**0.65** J	1 U
CE-2	7/6/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**2.5**	**0.79** J	1 U
CE-2	7/6/2009	CE-2 BET	FS	µg/L	2 U	**0.5** J	1 U	**0.76** J	**0.85** J	1 U
CE-2	8/4/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**0.84** J	1 U	1 U
CE-2	8/4/2009	CE-2 BET	FS	µg/L	2 U	1 U	1 U	**0.72** J	**0.72** J	1 U
CE-2	9/14/2009	BLIND DUP	FD	µg/L	2 U	1 U	1 U	**5.4**	**1.6**	1 U
CE-2	9/14/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**5.4**	**1.5**	1 U
CE-2	9/14/2009	CE-2 BET	FS	µg/L	2 U	1 U	1 U	**0.88** J	**0.82** J	1 U
CE-2	10/5/2009	BLIND DUP	FD	µg/L	2 U	1 U	1 U	**0.96** J	**0.93** J	1 U
CE-2	10/5/2009	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**6**	**1.5**	1 U
CE-2	10/5/2009	CE-2 BET	FS	µg/L	2 U	1 U	1 U	**0.95** J	**0.9** J	1 U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

Method Class					VOCs											
Parameter					1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
NYS Class GA Standard					5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
CE-2	11/16/2009	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**2.2**		1	U	1	U
CE-2	11/16/2009	CE-2 BET	FS	µg/L	2	U	**0.6**	J	1	U	**1.1**		**0.89**	J	1	U
CE-2	12/2/2009	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**1.8**		**0.6**	J	1	U
CE-2	12/2/2009	CE-2 BET	FS	µg/L	2	U	**0.48**	J	1	U	**1.2**		**1.1**		1	U
CE-2	1/5/2010	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**1.8**		1	U	1	U
CE-2	1/5/2010	CE-2 BET	FS	µg/L	2	U	1	U	1	U	**1.3**		**0.86**	J	1	U
CE-2	4/21/2010	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/21/2010	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**2.1**		**0.68**	J	1	U
CE-2	4/21/2010	CE-2 BET	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	7/6/2010	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	7/6/2010	CE-2 BEF	FS	µg/L	**3.1**		**3.1**		1	U	**80**		**8.2**		1	U
CE-2	7/6/2010	CE-2 BET	FS	µg/L	2	U	1	U	1	U	**0.6**	J	1	U	1	U
CE-2	10/5/2010	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	10/5/2010	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**11**		**1.8**		1	U
CE-2	10/5/2010	CE-2 BET	FS	µg/L	**1.3**	J	**1.3**		1	U	**2.7**		**0.88**	J	1	U
CE-2	1/3/2011	BLIND DUP 1	FD	µg/L	2	U	1	U	1	U	**2.3**		**0.58**	J	1	U
CE-2	1/3/2011	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	1/3/2011	CE-2 BEF	FS	µg/L	**1.1**	J	**1.1**		1	U	**2.6**		**0.81**	J	1	U
CE-2	1/3/2011	CE-2 BET	FS	µg/L	2	U	1	U	1	U	**2.6**		**0.67**	J	1	U
CE-2	3/31/2011	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	3/31/2011	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**1.7**		**0.47**	J	1	U
CE-2	3/31/2011	CE-2 BET	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/4/2011	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/4/2011	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**1.7**		1	U	1	U
CE-2	4/4/2011	CE-2 BET	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/11/2011	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/11/2011	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**1.5**		1	U	1	U
CE-2	4/11/2011	CE-2 BET	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/18/2011	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/18/2011	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**1.4**		1	U	1	U
CE-2	4/18/2011	CE-2 BET	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/25/2011	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	4/25/2011	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**1.3**		1	U	1	U
CE-2	4/25/2011	CE-2 BET	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	7/5/2011	BLIND DUP	FD	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	7/5/2011	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	7/5/2011	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**2.8**		**1.2**		1	U
CE-2	7/5/2011	CE-2 BET	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	10/4/2011	BLIND DUP	FD	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	10/4/2011	CE-2 AFT	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
CE-2	10/4/2011	CE-2 BEF	FS	µg/L	2	U	1	U	1	U	**1.7**		1	U	1	U

Method Class					VOCs					
Parameter					1,2-Dichloroethene (total)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloro-ethene	Trichloro-ethene	Vinyl chloride
NYS Class GA Standard					5	5	5	5	5	2
Location	Date	Sample ID	QC Code	Units	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
CE-2	10/4/2011	CE-2 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	1/3/2012	CE-2 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	1/3/2012	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**1.1**	1 U	1 U
CE-2	1/3/2012	CE-2 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	4/2/2012	CE-2 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	4/2/2012	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**2**	**0.73** J	1 U
CE-2	4/2/2012	CE-2 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	5/2/2012	CE-2 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	5/2/2012	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**0.45** J	1 U	1 U
CE-2	5/2/2012	CE-2 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	6/5/2012	CE-2 AFT 6/5/2012	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	6/5/2012	CE-2 BEF 6/5/2012	FS	µg/L	2 U	1 U	1 U	**1.7**	**0.49** J	1 U
CE-2	6/5/2012	CE-2 BET 6/5/2012	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	7/3/2012	CE-2 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	7/3/2012	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**5.9**	**1.2**	1 U
CE-2	7/3/2012	CE-2 BET	FS	µg/L	2 U	1 U	1 U	**0.65** J	1 U	1 U
CE-2	8/6/2012	CE-2 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	8/6/2012	CE-2 BEF	FS	µg/L	**1.9** J	**1.9**	1 U	**67**	**8.3**	1 U
CE-2	8/6/2012	CE-2 BET	FS	µg/L	2 U	1 U	1 U	**6.7**	**1.1**	1 U
CE-2	10/1/2012	CE-2 AFT	FS	µg/L	2 U	1 U	1 U	**0.42** J	1 U	1 U
CE-2	10/1/2012	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**4.3**	**1**	1 U
CE-2	10/1/2012	CE-2 BET	FS	µg/L	2 U	1 U	1 U	**1.5**	**0.59** J	1 U
CE-2	1/15/2013	CE-2 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	1/15/2013	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**1.5**	1 U	1 U
CE-2	1/15/2013	CE-2 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	4/1/2013	CE-2 AFT	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	4/1/2013	CE-2 BEF	FS	µg/L	2 U	1 U	1 U	**1**	1 U	1 U
CE-2	4/1/2013	CE-2 BET	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	10/15/2013	CE-2 BEF	FS	µg/L	**0.41** J	**0.41** J	1 U	**41**	**4.2**	1 U
CE-2	12/18/2014	CE-2	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
CE-2	4/1/2016	CE-2	FS	µg/L	2 U	1 U	1 U	**1.7**	**0.49** J	1 U
CE-2	6/21/2017	CE-2 BEF	FS	µg/L	2 UJ	1 UJ	1 UJ	**1.3** J	1 UJ	1 UJ
CE-2	10/31/2018	CE-2 BEF	FS	µg/L	2 UJ	1 UJ	1 UJ	**1.6** J	**0.52** J	1 UJ
CE-2	1/22/2020	CE-2	FS	µg/L	**1.4** J	**1.4**	1 U	**1.4**	**1.3**	1 U
EW-1	4/9/2009	EW-1	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
EW-1	10/19/2009	EW-1	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
EW-1	1/5/2010	EW-1	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
EW-1	4/7/2010	EW-1	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
EW-1	7/7/2010	EW-1	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
EW-1	10/4/2010	EW-1	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
EW-1	1/3/2011	EW-1	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U

Method Class					VOCs											
Parameter					1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
NYS Class GA Standard					5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
EW-1	4/6/2011	EW-1	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-1	7/5/2011	EW-1	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-1	10/4/2011	EW-1	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-1	6/6/2012	420006-EW1-080 6/6/2012	FS	µg/L			1	U	1	U	1	U	1	U	1	U
EW-1	6/6/2012	420006-EW1-123 6/6/2012	FS	µg/L			1	U	1	U	**0.53**	J	1	U	1	U
EW-1	6/6/2012	420006-EW1-184 6/6/2012	FS	µg/L			1	U	1	U	**0.43**	J	1	U	1	U
EW-1	10/5/2012	EW-1	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-2	10/2/2008	EW-2	FS	µg/L	**40**		**40**		1	U	**240**		**31**		1	U
EW-2	12/17/2008	BLIND DUP	FD	µg/L	**43**		**43**		1	U	**310**		**34**		1.2	U
EW-2	12/17/2008	EW-2	FS	µg/L	**38**		**38**		1	U	**240**		**29**		1	U
EW-2	1/12/2009	BLIND DUP	FD	µg/L	200	U,D08	100	U,D08	100	U,D08	100	U,D08	100	U,D08	100	U,D08
EW-2	1/12/2009	EW-2	FS	µg/L	**34**	D08	**34**	D08	4	U,D08	**250**	D08	**30**	D08	4	U,D08
EW-2	4/6/2009	EW-2	FS	µg/L	**33**	D08, N1	**31**	D08, N1	**1.6**	D08,N1,J	**150**	D08, N1	**18**	D08, N1	4	U,D08,N1
EW-2	7/6/2009	EW-2	FS	µg/L	**35**	D08	**33**	D08	**1.9**	D08,J	**150**	D08	**17**	D08	2	U, D08
EW-2	10/5/2009	EW-2	FS	µg/L	**49**	D08	**46**	D08	**2.2**	D08,J	**220**	D08	**23**	D08	4	U, D08
EW-2	1/6/2010	EW-2	FS	µg/L	**49**	D08	**47**	D08	**2.4**	D08,J	**510**	D08	**48**	D08	4	U, D08
EW-2	4/7/2010	EW-2	FS	µg/L	**69**	D08	**65**	D08	**3.3**	D08	**240**	D08	**45**	D08	2	U, D08
EW-2	7/7/2010	EW-2	FS	µg/L	**45**	D08	**41**	D08	**4.1**	D08	**230**	D08	**20**	D08	4	U, D08
EW-2	10/4/2010	EW-2	FS	µg/L	**170**	D08	**170**	D08	4	U, D08	**320**	D08	**90**	D08	4	U, D08
EW-2	1/3/2011	EW-2	FS	µg/L	**130**		**130**		**2.7**		**270**		**39**		1	U
EW-2	4/6/2011	EW-2	FS	µg/L	**210**		**210**		**4.1**		**160**		**37**		1	U
EW-2	7/5/2011	EW-2	FS	µg/L	**73**		**70**		**3.1**		**230**		**18**		**1.5**	
EW-2	10/4/2011	EW-2	FS	µg/L	**86**		**86**		4	U	**270**		**28**		4	U
EW-2	1/3/2012	EW-2	FS	µg/L	**72**		**70**		**2.3**		**290**		**31**		**1.6**	
EW-2	6/6/2012	420006-EW2-110 6/6/2012	FS	µg/L			**500**		200	U	**11000**		**2600**		200	U
EW-2	6/6/2012	420006-EW2-188 6/6/2012	FS	µg/L			**460**		200	U	**11000**		**2300**		200	U
EW-2	6/6/2012	420006-EW2-225 6/6/2012	FS	µg/L			**480**		200	U	**12000**		**2400**		200	U
EW-2	6/6/2012	420006-EW2-313 6/6/2012	FS	µg/L			**360**		200	U	**10000**	J	**1800**		200	U
EW-2	7/18/2012	420006-EW02-310	FS	µg/L			**1400**		**6.8**		**6000**		**1700**		**5.2**	
EW-2	10/2/2012	EW-2	FS	µg/L	**130**		**130**		5	U	**280**		**56**		**6.4**	
EW-2	4/16/2013	EW-2	FS	µg/L	**53**		**50**		**2.7**		**58**		**6.4**		**3.8**	
EW-2	10/15/2013	EW-2	FS	µg/L	**150**		**150**		**3.9**		**86**		**15**		**3.7**	
EW-2	12/15/2014	EW-2	FS	µg/L	**260**		**260**		5	U	**190**		**54**		**15**	
EW-2	3/30/2016	EW-2	FS	µg/L	**130**		**130**		5	U	**120**		**15**		**14**	
EW-2	6/20/2017	EW-2	FS	µg/L	**61**		**61**		1	U	**52**		**7.1**		**12**	
EW-2	10/31/2018	EW-2	FS	µg/L	**190**		**190**		4	U	**150**		**16**		**18**	
EW-3	4/29/2013	EW-3-125	FS	µg/L	**13**		**12**		**0.97**	J	1	U	1	U	1	U
EW-3	4/29/2013	EW-3200	FS	µg/L	**17**		**16**		**1.3**		1	U	1	U	1	U
EW-3	4/29/2013	EW-3275	FS	µg/L	**23**		**21**		**1.9**		1	U	1	U	1	U
EW-3	11/5/2013	EW-3	FS	µg/L	**55**		**50**		**4.5**		1	U	**9**		**3.3**	
EW-3	12/17/2014	EW-3	FS	µg/L	**30**		**30**		1	U	1	U	1	U	**6.1**	

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

			Method Class		VOCs											
			Parameter		1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
			NYS Class GA Standard		5		5		5		5		5		2	
Location	**Date**	**Sample ID**	**QC Code**	**Units**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
EW-3	3/29/2016	EW-3	FS	µg/L	**39**		**38**		**0.95**	J	1	U	**0.83**	J	**6.3**	
EW-3	6/21/2017	EW-3	FS	µg/L	**6.8**		**6.8**		1	U	1	U	1	U	**3.7**	
EW-3	10/30/2018	EW-3	FS	µg/L	**8.6**		**8.6**		1	U	1	U	1	U	**9.7**	
EW-3	1/23/2020	EW-3	FS	µg/L	**5.1**		**5.1**		1	U	1	U	1	U	**4.6**	
EW-4	6/6/2012	420006-EW4-125 6/6/2012	FS	µg/L			**3.1**		1	U	1	U	1	U	1	U
EW-4	6/6/2012	420006-EW4-178 6/6/2012	FS	µg/L			**8.2**		**2**		1	U	1	U	1	U
EW-4	6/6/2012	420006-EW4-258 6/6/2012	FS	µg/L			**11**		**2.9**		1	U	1	U	1	U
EW-4	6/6/2012	420006-EW4-302 6/6/2012	FS	µg/L			**13**		**2.6**		**0.44**	J	1	U	1	U
EW-4	4/29/2013	EW-4302	FS	µg/L	**13**		**10**		**2.8**		1	U	1	U	1	U
EW-4	11/5/2013	EW-4	FS	µg/L	**44**		**42**		**2.3**		1	U	**13**		**1.8**	
EW-4	12/17/2014	EW-4	FS	µg/L	**16**		**13**		**2.8**		1	U	1	U	1	U
EW-4	3/29/2016	EW-4	FS	µg/L	**17**		**14**		**3.2**		1	U	1	U	1	U
EW-4	6/21/2017	EW-4	FS	µg/L	**11**		**8.4**		**2.7**		1	U	1	U	1	U
EW-4	10/30/2018	EW-4	FS	µg/L	**9.6**		**8.1**		**1.5**		1	U	1	U	1	U
EW-4	7/21/2020	EW-4	FS	µg/L	**5.7**		**4.6**		**1.1**		1	U	1	U	1	U
EW-5	6/6/2012	420006-EW5-150 6/6/2012	FS	µg/L			**210**		20	U	**890**		**130**		20	U
EW-5	6/6/2012	420006-EW5-202 6/6/2012	FS	µg/L			**200**		10	U	**610**		**100**		10	U
EW-5	6/6/2012	420006-EW5-283 6/6/2012	FS	µg/L			**190**		4	U	**150**		**49**		4	U
EW-5	7/12/2012	420006-EW05-280	FS	µg/L			**330**		**5.1**		5	U	**3.7**	J	5	U
EW-5	4/29/2013	EW-5150	FS	µg/L	**120**		**120**		1	U	**260**		**55**		1	U
EW-5	11/5/2013	EW-5	FS	µg/L	**1100**		**1100**		**3.9**		**38**		**27**		2	U
EW-5	12/17/2014	EW-5	FS	µg/L	**45**		**45**		4	U	**200**		**18**		4	U
EW-5	10/5/2015	EW-5	FS	µg/L	**170**		**170**	F1	4	U	**290**	F1	**80**		4	U
EW-5	3/29/2016	EW-5	FS	µg/L	**300**		**300**		4	U	**330**		**120**		**4.6**	
EW-5	6/21/2017	EW-5	FS	µg/L	**310**		**310**		4	U	**600**	J	**120**		**7**	
EW-5	10/30/2018	EW-5	FS	µg/L	**260**		**260**		8	U	**340**		**88**		**9.1**	
EW-5	1/23/2020	EW-5	FS	µg/L	**210**		**210**		8	U	**200**		**64**		8	U
EW-6	10/2/2008	EW-6	FS	µg/L	**84**		**84**		1	U	**320**		**74**		1.2	U
EW-6	12/17/2008	EW-6	FS	µg/L	**69**		**69**		1	U	**440**		**84**		1.2	U
EW-6	1/12/2009	EW-6	FS	µg/L	**78**	D08	**78**	D08	5	U,D08	**310**	D08	**65**	D08	5	U,D08
EW-6	4/8/2009	EW-6	FS	µg/L	**100**	D08	**98**	D08	**1.6**	D08,J	**370**	D08	**90**	D08	5	U, D08
EW-6	10/5/2009	EW-6	FS	µg/L	**120**	D08	**120**	D08	**1.4**		**410**	D08	**130**	D08	1	U
EW-6	4/7/2010	EW-6	FS	µg/L	**120**	D08	**120**	D08	5	U, D08	**270**	D08	**73**	D08	5	U, D08
EW-6	10/4/2010	EW-6	FS	µg/L	**110**	D08	**110**	D08	5	U, D08	**260**	D08	**65**	D08	5	U, D08
EW-6	4/6/2011	EW-6	FS	µg/L	**290**		**290**		**2.6**		**1300**		**280**		**2.1**	
EW-6	10/4/2011	EW-6	FS	µg/L	**180**		**180**		5	U	**380**		**160**		5	U
EW-6	10/2/2012	EW-6	FS	µg/L	**330**		**330**		5	U	**580**		**220**		5	U
EW-6	4/16/2013	EW-6	FS	µg/L	**220**		**220**		8	U	**550**		**150**		8	U
EW-6	10/15/2013	EW-6	FS	µg/L	**180**		**180**		**4.1**	J	**390**		**140**		5	U
EW-6	12/18/2014	EW-6	FS	µg/L	**300**		**300**		8	U	**390**		**120**		8	U
EW-6	3/30/2016	EW-6	FS	µg/L	**200**		**200**		8	U	**690**		**180**		8	U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

Method Class					VOCs											
Parameter					1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
NYS Class GA Standard					5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
EW-6	6/20/2017	EW-6	FS	µg/L	**160**		**160**		8	U	**730**		**170**		8	U
EW-6	10/31/2018	EW-6	FS	µg/L	**130**		**130**		10	U	**730**		**140**		10	U
EW-6	1/22/2020	EW-6	FS	µg/L	**150**		**150**		10	U	**570**		**150**		**9.2**	J
EW-7	10/2/2008	EW-7	FS	µg/L	**720**		**710**		**8.8**		**78**		**66**		2.4	U
EW-7	12/17/2008	EW-7	FS	µg/L	**500**		**490**		**5.3**		**660**		**280**		2.4	U
EW-7	1/12/2009	EW-7	FS	µg/L	**1200**	D08	**1200**	D08	20	U,D08	**2200**	H2,D08	**1500**	D08	20	U,D08
EW-7	4/8/2009	EW-7	FS	µg/L	**660**	D08, N1	**650**	D08, N1	**8**	D08,N1,J	**2400**	D08, N1	**1300**	D08, N1	20	U,D08,N1
EW-7	7/6/2009	EW-7	FS	µg/L	**1200**	D08	**1200**	D08	20	U, D08	**3800**	D08	**1900**	D08	20	U, D08
EW-7	10/5/2009	EW-7	FS	µg/L	**720**	D08	**710**	D08	**11**	D08	**18**	D08	**49**	D08	10	U, D08
EW-7	1/6/2010	EW-7	FS	µg/L	**530**	D08	**520**	D08	**9.4**	D08	**7**	D08,J	**19**	D08	8	U, D08
EW-7	4/7/2010	EW-7	FS	µg/L	**870**	D08	**870**	D08	**7**	D08,J	**2000**	D08	**970**	D08	8	U, D08
EW-7	7/7/2010	BLIND DUP	FD	µg/L	**440**	D08	**430**	D08	**11**	D08	8	U, D08	**27**	D08	8	U, D08
EW-7	7/7/2010	EW-7	FS	µg/L	**460**	D08	**450**	D08	**11**	D08	8	U, D08	**27**	D08	8	U, D08
EW-7	10/4/2010	EW-7	FS	µg/L	**490**	D08	**480**	D08	**12**	D08	**8.4**	D08,J	**26**	D08	10	U, D08
EW-7	1/3/2011	EW-7	FS	µg/L	**590**		**580**		**10**		**66**		**79**		1	U
EW-7	4/18/2011	EW-7	FS	µg/L	**680**		**670**		**12**		**730**		**310**		1	U
EW-7	10/4/2011	EW-7	FS	µg/L	**710**		**710**		10	U	**1400**		**650**		10	U
EW-7	10/2/2012	EW-7	FS	µg/L	**860**		**860**		20	U	**990**		**570**		20	U
EW-7	4/16/2013	EW-7	FS	µg/L	**480**		**470**		**11**		**260**		**110**		10	U
EW-7	10/15/2013	EW-7	FS	µg/L	**480**		**470**		**9.2**		**65**		**34**		6.7	U
EW-7	3/30/2016	EW-7	FS	µg/L	**950**		**940**		**9.1**	J	**3700**		**1800**		10	U
EW-7	6/20/2017	EW-7	FS	µg/L	**1300**		**1300**		40	U	**2600**		**1200**		40	U
EW-7	10/31/2018	EW-7	FS	µg/L	**1300**		**1300**		100	U	**6900**		**2200**		**14**	
EW-7	1/22/2020	EW-7	FS	µg/L	**1200**		**1200**		100	U	**3900**		**1400**		100	U
EW-8	4/29/2013	EW-8100	FS	µg/L	**1.2**	J	**1.2**		1	U	1	U	1	U	1	U
EW-8	4/29/2013	EW-8200	FS	µg/L	**4.3**		**4.3**		1	U	**0.82**	J	**0.95**	J	1	U
EW-8	4/29/2013	EW-8300	FS	µg/L	**3.7**		**3.7**		1	U	**0.45**	J	**0.55**	J	1	U
EW-8	11/5/2013	EW-8	FS	µg/L	**3.9**		**3.9**		1	U	1	U	1	U	1	U
EW-8	12/17/2014	EW-8	FS	µg/L	**2.8**		**2.8**		1	U	1	U	1	U	1	U
EW-8	3/29/2016	EW-8	FS	µg/L	**4.1**		**4.1**		1	U	1	U	1	U	1	U
EW-8	6/21/2017	EW-8	FS	µg/L	**4**		**4**		1	U	1	U	1	U	1	U
EW-8	10/30/2018	EW-8	FS	µg/L	**1.9**	J	**1.9**		1	U	1	U	**0.53**	J	**1**	
EW-8	1/23/2020	EW-8	FS	µg/L	**3.5**		**3.5**		1	U	1	U	1	U	**1.1**	
EW-9	10/2/2008	EW-9	FS	µg/L	**140**		**140**		1	U	**240**		**86**		1.2	U
EW-9	4/7/2009	EW-9	FS	µg/L	**88**	D08	**86**	D08	**1.6**	D08,J	**230**	D08	**69**	D08	5	U, D08
EW-9	10/6/2009	EW-9	FS	µg/L	**280**	D08	**280**	D08	**2.9**		**500**	D08	**250**	D08	1	U
EW-9	4/7/2010	EW-9	FS	µg/L	**210**	D08	**200**	D08	**2.9**	D08,J	**270**	D08	**140**	D08	4	U, D08
EW-9	10/4/2010	BLIND DUP	FD	µg/L	**560**	D08	**550**	D08	8	U, D08	**1600**	D08	**580**	D08	8	U, D08
EW-9	10/4/2010	EW-9	FS	µg/L	**590**	D08	**590**	D08	**6.2**	D08	**1400**	D08	**580**	D08	4	U, D08
EW-9	4/6/2011	BLIND DUP 2	FD	µg/L	**400**		**400**		**5.6**		**460**		**230**		1	U
EW-9	4/6/2011	EW-9	FS	µg/L	**420**		**420**		**5.7**		**460**		**250**		1	U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

Method Class					VOCs											
Parameter					1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
NYS Class GA Standard					5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
EW-9	10/4/2011	EW-9	FS	µg/L	**230**		**230**		4	U	**210**		**140**		4	U
EW-9	10/2/2012	EW-9	FS	µg/L	**290**		**280**		**5.4**		**180**		**140**		4	U
EW-9	4/16/2013	EW-9	FS	µg/L	**130**		**130**		**2.6**		**73**		**48**		2	U
EW-9	10/15/2013	EW-9	FS	µg/L	**130**		**130**		**3.1**		**65**		**44**		2.5	U
EW-9	12/15/2014	EW-9	FS	µg/L	**200**		**200**		**3.6**	J	**38**		**20**		4	U
EW-9	3/30/2016	EW-9	FS	µg/L	**150**		**150**		4	U	**45**		**18**		4	U
EW-9	6/20/2017	EW-9	FS	µg/L	**97**		**95**		**1.8**	J	**10**		**5.2**		**3.4**	
EW-9	12/28/2018	EW-9	FS	µg/L	**90**		**90**		4	U	**13**		**6.5**		**12**	
EW-9	1/22/2020	EW-9	FS	µg/L	**74**		**74**		2	U	**7.8**		**4.2**		**8.2**	
EW-10	10/1/2008	EW-10	FS	µg/L	**22**		**22**		1	U	**480**		**110**		1	U
EW-10	4/7/2009	EW-10	FS	µg/L	**20**		**20**		1	U	**350**	D08	**110**	D08	1	U
EW-10	10/6/2009	EW-10	FS	µg/L	**7.6**		**7.6**		1	U	**110**	D08	**12**		1	U
EW-10	4/7/2010	EW-10	FS	µg/L	**15**	D08	**15**	D08	4	U, D08	**200**	D08	**87**	D08	4	U, D08
EW-10	10/4/2010	EW-10	FS	µg/L	**7.7**	D08	**7.7**	D08	2	U, D08	**100**	D08	**11**	D08	2	U, D08
EW-10	4/6/2011	EW-10	FS	µg/L	**98**		**98**		1	U	**1100**		**500**		1	U
EW-10	10/4/2011	EW-10	FS	µg/L	**38**		**38**		4	U	**240**		**130**		4	U
EW-10	10/4/2012	EW-10	FS	µg/L	**12**		**12**		2	U	**100**		**23**		2	U
EW-11	10/1/2008	EW-11	FS	µg/L	**76**		**75**		**0.68**	J	**46**		**12**		1	U
EW-11	4/7/2009	EW-11	FS	µg/L	**110**	D08	**110**	D08	**1.4**		**31**		**12**		1	U
EW-11	10/6/2009	EW-11	FS	µg/L	**120**	D08	**120**	D08	**1.7**		**140**	D08	**41**		1	U
EW-11	4/7/2010	EW-11	FS	µg/L	**100**	D08	**100**	D08	**3.1**		**39**		**21**		1	U
EW-11	10/4/2010	EW-11	FS	µg/L	**180**	D08	**180**	D08	**4.6**	D08	**110**	D08	**47**	D08	2	U, D08
EW-11	4/6/2011	EW-11	FS	µg/L	**170**		**160**		**5.6**		**21**		**14**		4	U
EW-11	10/4/2011	EW-11	FS	µg/L	**120**		**110**		**5.4**		**17**		**12**		2	U
EW-11	6/7/2012	420006-EW11-078	FS	µg/L			1	U	1	U	**0.42**	J	1	U	1	U
EW-11	6/7/2012	420006-EW11-117	FS	µg/L			**2.1**		1	U	**0.45**	J	1	U	1	U
EW-11	6/7/2012	420006-EW11-160	FS	µg/L			**3.2**		1	U	1	U	1	U	**3.1**	
EW-11	7/10/2012	420006-EW11-079	FS	µg/L			**3.2**		1	U	1.6	U	**0.56**	J	1	U
EW-11	10/4/2012	EW-11	FS	µg/L	**120**		**110**		**7**		**8.5**		**5**		2	U
EW-11	4/29/2013	EW-11117	FS	µg/L	**31**		**31**		1	U	1	U	1	U	1	U
EW-11	11/5/2013	EW-11	FS	µg/L	**6.8**		**6.8**		1	U	1	U	1	U	1	U
EW-11	12/17/2014	EW-11	FS	µg/L	**1.1**	J	**1.1**		1	U	1	U	1	U	1	U
EW-11	3/29/2016	EW-11	FS	µg/L	**4.9**		**4.9**		1	U	1	U	1	U	1	U
EW-11	6/21/2017	EW-11	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-11	10/31/2018	EW-11	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-11	1/23/2020	EW-11	FS	µg/L	**5.5**		**5.5**		1	U	1	U	1	U	1	U
EW-12	10/1/2008	EW-12	FS	µg/L	**180**		**180**		1	U	**1200**		**370**		1	U
EW-12	1/12/2009	EW-12	FS	µg/L	**140**	D08	**140**	D08	4	U,D08	**670**	H2,D08	**260**	D08	4	U,D08
EW-12	4/7/2009	EW-12	FS	µg/L	**160**	D08, N1	**150**	D08, N1	**1**	D08,N1,J	**88**	D08, N1	**74**	D08, N1	4	U,D08,N1
EW-12	7/6/2009	BLIND DUP	FD	µg/L	**180**	D08	**180**	D08	4	U, D08	**260**	D08	**160**	D08	4	U, D08
EW-12	7/6/2009	EW-12	FS	µg/L	**180**	D08	**180**	D08	4	U, D08	**250**	D08	**170**	D08	4	U, D08

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

Method Class					VOCs											
Parameter					1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
NYS Class GA Standard					5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
EW-12	10/6/2009	EW-12	FS	µg/L	**180**	D08	**180**	D08	4	U, D08	**650**	D08	**320**	D08	4	U, D08
EW-12	1/6/2010	EW-12	FS	µg/L	**150**	D08	**150**	D08	**1.2**	D08,J	**190**	D08	**120**	D08	2	U, D08
EW-12	4/7/2010	EW-12	FS	µg/L	**100**	D08	**100**	D08	2	U, D08	**26**	D08	**21**	D08	2	U, D08
EW-12	7/6/2010	EW-12	FS	µg/L	**180**	D08	**180**	D08	**2.2**	D08	**160**	D08	**110**	D08	2	U, D08
EW-12	10/4/2010	EW-12	FS	µg/L	**170**	D08	**170**	D08	2	U, D08	**51**	D08	**37**	D08	2	U, D08
EW-12	1/3/2011	EW-12	FS	µg/L	**140**		**140**		1	U	**17**		**9.7**		1	U
EW-12	4/6/2011	EW-12	FS	µg/L	**150**		**150**		**1.6**		**100**		**84**		1	U
EW-12	10/4/2011	EW-12	FS	µg/L	**56**		**56**		1	U	**4.3**		**2.6**		**3.7**	
EW-12	6/7/2012	420006-EW12-076 6/7/2012	FS	µg/L			**22**		1	U	**14**		**8.6**		1	U
EW-12	6/7/2012	420006-EW12-115 6/7/2012	FS	µg/L			**23**		1	U	**18**		**9.2**		1	U
EW-12	6/7/2012	420006-EW12-140 6/7/2012	FS	µg/L			**23**		1	U	**16**		**8.6**		1	U
EW-12	6/7/2012	420006-EW12-251 6/7/2012	FS	µg/L			1	U	1	U	1	U	1	U	**4.3**	
EW-12	7/18/2012	420006-EW12-140	FS	µg/L			**25**		1	U	**140**		**24**		1	U
EW-12	10/4/2012	EW-12	FS	µg/L	**110**		**92**		1	U	**81**		**45**		1	U
EW-12	4/29/2013	EW-12115	FS	µg/L	2	U	1	U	1	U	**3.4**		**0.67**	J	1	U
EW-12	11/5/2013	EW-12	FS	µg/L	**3.5**		**3.5**		1	U	**28**		**3.2**		1	U
EW-12	12/17/2014	EW-12	FS	µg/L	2	U	1	U	1	U	**3.1**		**0.53**	J	1	U
EW-12	3/29/2016	EW-12	FS	µg/L	2	U	1	U	1	U	**6.4**		**0.83**	J	1	U
EW-12	6/21/2017	EW-12	FS	µg/L	2	U	1	U	1	U	**4.2**		**0.52**	J	1	U
EW-12	10/30/2018	EW-12	FS	µg/L	2	U	1	U	1	U	**4.8**		**0.53**	J	1	U
EW-12	1/23/2020	EW-12	FS	µg/L	2	U	1	U	1	U	**3.7**		1	U	1	U
EW-13	4/29/2013	EW-13100	FS	µg/L	**2.9**		**2.9**		1	U	**20**		**3.2**		1	U
EW-13	4/29/2013	EW-13200	FS	µg/L	**12**		**12**		1	U	**13**		**3.6**		1	U
EW-13	4/29/2013	EW-13300	FS	µg/L	**14**		**14**		1	U	**14**		**3.7**		1	U
EW-13	11/5/2013	EW-13	FS	µg/L	**15**		**15**		1	U	**31**		**4**		1	U
EW-13	12/17/2014	EW-13	FS	µg/L	**12**		**12**		1	U	**21**		**3.5**		1	U
EW-13	3/29/2016	EW-13	FS	µg/L	**20**		**20**		1	U	**25**		**4.3**		1	U
EW-13	6/20/2017	EW-13	FS	µg/L	**16**		**16**		1	U	**26**		**3.7**		1	U
EW-13	10/30/2018	EW-13	FS	µg/L	**11**		**11**		1	U	**32**		**3**		1	U
EW-13	1/22/2020	EW-13	FS	µg/L	**15**		**15**		1	U	**29**		**2.9**		**1.4**	
EW-14	10/1/2008	EW-14	FS	µg/L	**38**		**38**		1	U	**0.68**	J	**4.9**		1	U
EW-14	1/21/2009	EW-14	FS	µg/L	**34**		**34**		1	U	1	U	**6.1**		1	U
EW-14	4/7/2009	EW-14	FS	µg/L	**27**	N1	**27**	N1	1	U, N1	1	U, N1	**6.9**	N1	1	U, N1
EW-14	7/6/2009	EW-14	FS	µg/L	**32**		**32**		1	U	1	U	**5.7**		1	U
EW-14	10/6/2009	EW-14	FS	µg/L	**23**		**23**		1	U	**4.6**		**5.1**		1	U
EW-14	1/6/2010	EW-14	FS	µg/L	**21**		**21**		1	U	**0.4**	J	**5**		1	U
EW-14	4/7/2010	EW-14	FS	µg/L	**22**		**22**		1	U	**0.54**	J	**4.8**		1	U
EW-14	7/6/2010	EW-14	FS	µg/L	**27**		**27**		1	U	1	U	**4.6**		1	U
EW-14	10/4/2010	EW-14	FS	µg/L	**35**		**35**		1	U	1	U	**3**		1	U
EW-14	1/3/2011	EW-14	FS	µg/L	**24**		**24**		1	U	1	U	**3.5**		1	U
EW-14	4/6/2011	EW-14	FS	µg/L	**23**		**23**		1	U	1	U	**4.1**		1	U

Method Class					VOCs											
Parameter					1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
NYS Class GA Standard					5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
EW-14	10/4/2011	EW-14	FS	µg/L	**29**		**29**		1	U	1	U	**4.2**		1	U
EW-14	10/4/2012	EW-14	FS	µg/L	**37**		**37**		1	U	1	U	**2.3**		1	U
EW-15	4/6/2011	EW-15	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-15	10/18/2011	EW-15	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-15	10/5/2012	EW-15	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
EW-16	10/2/2008	EW-16	FS	µg/L	**450**		**450**		2.5	U	**1400**		**690**		4.8	U
EW-16	12/17/2008	EW-16	FS	µg/L	**460**		**460**		2.5	U	**3700**		**1200**		4.8	U
EW-16	1/12/2009	EW-16	FS	µg/L	**570**	D08	**570**	D08	100	U,D08	**3800**	D08	**1500**	D08	100	U,D08
EW-16	4/8/2009	EW-16	FS	µg/L	**570**	D08, N1	**570**	D08, N1	**2.9**	D08, N1	**2100**	D08, N1	**1000**	D08, N1	**3**	D08, N1
EW-16	7/6/2009	EW-16	FS	µg/L	**590**	D08	**590**	D08	**2.6**	D08,J	**1900**	D08	**1100**	D08	**2.6**	D08,J
EW-16	10/5/2009	EW-16	FS	µg/L	**530**	D08	**530**	D08	20	U, D08	**1100**	D08	**560**	D08	20	U, D08
EW-16	1/6/2010	EW-16	FS	µg/L	**700**	D08	**700**	D08	20	U, D08	**3000**	D08	**1500**	D08	20	U, D08
EW-16	4/7/2010	EW-16	FS	µg/L	**950**	D08	**950**	D08	40	U, D08	**4800**	D08	**2400**	D08	40	U, D08
EW-16	7/7/2010	EW-16	FS	µg/L	**2100**	D08	**2100**	D08	40	U, D08	**3000**	D08	**2000**	D08	40	U, D08
EW-16	10/4/2010	EW-16	FS	µg/L	**1000**	D08	**1000**	D08	40	U, D08	**3300**	D08	**1900**	D08	40	U, D08
EW-16	1/3/2011	BLIND DUP 2	FD	µg/L	**880**	H	**880**	H	**5**		**2400**	H	**1500**	H	**7.8**	
EW-16	1/3/2011	EW-16	FS	µg/L	**1200**		**1200**		**5.2**		**4000**		**2100**		**8.9**	
EW-16	4/6/2011	EW-16	FS	µg/L	**1300**		**1300**		**7.3**		**5600**		**2600**		**11**	
EW-16	10/4/2011	EW-16	FS	µg/L	**1500**		**1500**		40	U	**6600**		**3800**		40	U
EW-16	6/7/2012	420006-EW16-100	FS	µg/L			**920**		**3.6**		**2800**		**860**		**9.4**	
EW-16	6/7/2012	420006-EW16-210	FS	µg/L			**880**		**3.6**		**2400**		**820**		**7.4**	
EW-16	6/7/2012	420006-EW16-320	FS	µg/L			**880**		25	U	**2300**		**820**		25	U
EW-16	6/7/2012	420006-EW16-405	FS	µg/L			**4200**		40	U	40	U	40	U	**61**	
EW-16	7/13/2012	420006-EW16-100	FS	µg/L			**3300**		**22**		**4300**		**2500**		**13**	
EW-16	7/13/2012	420006-EW16-100D	FD	µg/L			**3200**		**20**		**4200**		**2500**		**13**	
EW-16	7/17/2012	420006-EW16-320	FS	µg/L			**2500**		**11**		**3300**		**1500**		**8**	
EW-16	7/17/2012	420006-EW16-404	FS	µg/L			**3200**		**11**		**3100**		**1600**		**94**	
EW-16	10/2/2012	EW-16	FS	µg/L	**1200**		**1200**		100	U	**6300**		**3300**		100	U
EW-16	4/16/2013	EW-16	FS	µg/L	**1100**		**1100**		40	U	**7200**		**3100**		40	U
EW-16	10/15/2013	EW-16	FS	µg/L	**840**		**840**		50	U	**3400**		**1800**		50	U
EW-16	12/18/2014	EW-16	FS	µg/L	**1400**		**1400**		8	U	**4400**		**2000**		**14**	
EW-16	3/30/2016	EW-16	FS	µg/L	**640**		**640**		20	U	**520**		**400**		20	U
EW-16	6/20/2017	EW-16	FS	µg/L	**1500**		**1500**		20	U	**1600**		**1300**		**19**	J
EW-16	10/31/2018	EW-16	FS	µg/L	**990**		**990**		20	U	**1100**		**530**		20	U
EW-16	1/22/2020	EW-16	FS	µg/L	**1500**		**1500**		20	U	**2400**		**1000**		**28**	
IW-8	6/7/2012	420006-IW8-095 6/7/2012	FS	µg/L			1	U	1	U	**0.89**	J	**0.55**	J	1	U
IW-8	6/7/2012	420006-IW8-150 6/7/2012	FS	µg/L			1	U	1	U	**0.99**	J	1	U	1	U
IW-8	6/7/2012	420006-IW8-339 6/7/2012	FS	µg/L			1	U	1	U	**1.3**		**0.51**	J	1	U
IW-8	4/29/2013	IW-8339	FS	µg/L	2	U	1	U	1	U	**0.55**	J	1	U	1	U
IW-8	11/5/2013	IW-8	FS	µg/L	**8.3**		**6.9**		**1.4**		1	U	**1.9**		**1.3**	
IW-8	12/17/2014	IW-8	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

Method Class					VOCs											
Parameter					1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
NYS Class GA Standard					5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
IW-8	3/29/2016	IW-8	FS	µg/L	**1.1**	J	**1.1**		1	U	**0.66**	J	**0.65**	J	1	U
IW-8	6/21/2017	IW-8	FS	µg/L	2	U	1	U	1	U	**0.65**	J	1	U	1	U
IW-8	10/30/2018	IW-8	FS	µg/L	2	U	1	U	1	U	**0.55**	J	1	U	1	U
IW-8	1/23/2020	IW-8	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
IW-9	6/7/2012	420006-IW9-085 6/7/2012	FS	µg/L			**200**		20	U	**1200**		**620**		20	U
IW-9	6/7/2012	420006-IW9-085 DUP 6/7/2012	FD	µg/L			**220**		20	U	**1300**		**680**		20	U
IW-9	6/7/2012	420006-IW9-107 6/7/2012	FS	µg/L			**260**		50	U	**3200**		**1400**		50	U
IW-9	6/7/2012	420006-IW9-206 6/7/2012	FS	µg/L			**310**		40	U	**2900**	J	**1900**	J	40	U
IW-9	6/7/2012	420006-IW9-333 6/7/2012	FS	µg/L			**250**		50	U	**3400**		**1700**		50	U
IW-9	7/19/2012	420006-IW09-108	FS	µg/L			**280**		**1.8**		**5900**		**2200**		1	U
IW-9	7/19/2012	420006-IW09-334	FS	µg/L			**540**		**2.6**		**7300**		**3400**		**37**	
IW-9	4/29/2013	IW-9333	FS	µg/L	**270**		**270**		**1.3**		**570**		**820**		1	U
IW-9	11/5/2013	IW-9	FS	µg/L	**310**		**310**		**1.2**		**1300**		**970**		1	U
IW-9	12/17/2014	IW-9	FS	µg/L	**1000**		**1000**		25	U	**630**		**540**		25	U
IW-9	3/29/2016	IW-9	FS	µg/L	**960**		**960**		25	U	**240**		**270**		**41**	
IW-9	6/21/2017	IW-9	FS	µg/L	**830**		**830**		25	U	**330**		**390**		25	U
IW-9	10/30/2018	IW-9	FS	µg/L	**840**	J	**840**	J	25	U	**550**		**550**		25	U
IW-9	1/23/2020	IW-9	FS	µg/L	**880**		**880**		25	U	**330**		**410**		25	U
IW-10	6/7/2012	420006-IW10-016 6/7/2012	FS	µg/L			**2.2**		1	U	**0.51**	J	**1.4**		1	U
IW-10	6/7/2012	420006-IW10-040 6/7/2012	FS	µg/L			**2.1**		1	U	**0.96**	J	**1.5**		1	U
IW-10	6/7/2012	420006-IW10-140 6/7/2012	FS	µg/L			**2.3**		1	U	1	U	1	U	**3.3**	
IW-10	4/29/2013	IW-10040	FS	µg/L	2	U	1	U	1	U	**0.82**	J	**0.58**	J	1	U
IW-10	11/5/2013	IW-10	FS	µg/L	2	U	1	U	1	U	**0.67**	J	1	U	1	U
IW-10	12/17/2014	IW-10	FS	µg/L	**7**		**7**		1	U	1	U	1	U	1	U
IW-10	3/29/2016	IW-10	FS	µg/L	**19**		**19**		1	U	**10**		**2.9**		1	U
IW-10	6/21/2017	IW-10	FS	µg/L	**10**		**10**		1	U	1	U	**2**		1	U
IW-10	10/30/2018	IW-10	FS	µg/L	**5.7**		**5.7**		1	U	1	U	**1.8**		1	U
IW-10	1/23/2020	IW-10	FS	µg/L	**3.8**		**3.8**		1	U	1	U	**1.3**		1	U
IW-12	6/7/2012	420006-IW12-075 6/7/2012	FS	µg/L			**5.1**		1	U	**1.2**		**1.3**		1	U
IW-12	6/7/2012	420006-IW12-125 6/7/2012	FS	µg/L			**140**		**5.7**		**2.6**		**16**		2	U
IW-12	6/7/2012	420006-IW12-158 6/7/2012	FS	µg/L			**130**		**3.9**		2	U	2	U	**8.4**	
IW-12	7/19/2012	420006-IW12-124	FS	µg/L			**170**		**13**	J	**170**	NJ	**51**	NJ	**1.8**	J
IW-14	6/7/2012	420006-IW14-080 6/7/2012	FS	µg/L			1	U	1	U	1	U	1	U	1	U
IW-14	6/7/2012	420006-IW14-140 6/7/2012	FS	µg/L			**0.85**	J	1	U	1	U	1	U	1	U
IW-14	6/7/2012	420006-IW14-189 6/7/2012	FS	µg/L			**6.6**		1	U	1	U	**0.5**	J	1	U
IW-14	6/7/2012	420006-IW14-290 6/7/2012	FS	µg/L			**7.2**		1	U	1	U	1	U	1	U
IW-14	7/20/2012	420006-IW14-084	FS	µg/L			3	U	2	U	**130**	NJ	11	U	2	U
IW-14	7/20/2012	420006-IW14-188	FS	µg/L			4	U	4	U	**220**	NJ	**21**	NJ	4	U
M-4	4/29/2013	M-4080	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
M-4	4/29/2013	M-4130	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
M-4	4/29/2013	M-4180	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

					Method Class		VOCs											
					Parameter		1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
					NYS Class GA Standard		5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
M-4	11/5/2013	M-4	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-4	12/17/2014	M-4	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-4	3/29/2016	M-4	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-4	6/21/2017	M-4	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-4	10/31/2018	M-4	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-4	1/23/2020	M-4	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-5	10/6/2008	M-5	FS	µg/L	**43**		**43**		1	U	1	U	**2**		1	U	1	U
M-5	1/13/2009	M-5	FS	µg/L	**43**		**43**		1	U	1	U	1	U	1	U	1	U
M-5	4/7/2009	M-5	FS	µg/L	**40**	N1	**40**	N1	**0.46**	N1,J	1	U, N1	**1.8**	N1	1	U, N1		
M-5	7/7/2009	M-5	FS	µg/L	**41**		**41**		1	U	1	U	**1.9**		1	U		
M-5	10/6/2009	M-5	FS	µg/L	**33**		**33**		1	U	**1.3**		**1.8**		1	U		
M-5	1/6/2010	BLIND DUP	FD	µg/L	**36**		**36**		1	U	1	U	**1.6**		1	U		
M-5	1/6/2010	M-5	FS	µg/L	**38**		**37**		**0.45**	J	**0.51**	J	**1.7**		1	U		
M-5	4/8/2010	M-5	FS	µg/L	**36**		**36**		**0.48**	J	1	U	**1.6**		1	U		
M-5	7/7/2010	M-5	FS	µg/L	**33**		**33**		1	U	1	U	**1.7**		1	U		
M-5	10/6/2010	M-5	FS	µg/L	**34**		**34**		1	U	1	U	**1.5**		1	U		
M-5	1/4/2011	M-5	FS	µg/L	**34**		**34**		1	U	1	U	**1.5**		1	U		
M-5	4/11/2011	M-5	FS	µg/L	**28**		**28**		1	U	1	U	**1.2**		1	U		
M-5	7/6/2011	M-5	FS	µg/L	**36**		**36**		1	U	1	U	**1.5**		1	U		
M-5	10/6/2011	M-5	FS	µg/L	**29**		**29**		1	U	1	U	**1.3**		1	U		
M-5	1/4/2012	M-5	FS	µg/L	**29**		**29**		1	U	1	U	**1.3**		1	U		
M-5	10/5/2012	M-5	FS	µg/L	**28**		**28**		1	U	1	U	**0.98**	J	1	U		
M-5	4/17/2013	M-5	FS	µg/L	**32**		**32**		1	U	1	U	**1.1**		1	U		
M-5	10/16/2013	M-5	FS	µg/L	**31**		**31**		**0.35**	J	1	U	**0.73**	J	1	U		
M-5	12/16/2014	M-5	FS	µg/L	**34**		**34**		1	U	1	U	**0.69**	J	1	U		
M-5	3/29/2016	M-5	FS	µg/L	**23**		**22**		**1.1**		1	U	1	U	1	U		
M-5	6/20/2017	M-5	FS	µg/L	**18**		**17**		**1.1**		1	U	1	U	1	U		
M-5	10/30/2018	M-5	FS	µg/L	**16**		**16**		1	U	1	U	1	U	**3.5**			
M-5	1/22/2020	M-5	FS	µg/L	**14**		**14**		1	U	1	U	1	U	**4.6**			
M-6	4/29/2013	M-6	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-6	10/16/2013	M-6	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-6	12/16/2014	M-6	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-6	3/30/2016	M-6	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-6	6/21/2017	M-6	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-6	10/30/2018	M-6	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-6	1/23/2020	M-6	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
M-8	1/23/2020	M-8	FS	µg/L	**7.1**		**7.1**		1	U	1	U	**0.98**	J	**1**		1	U
M-9	1/23/2020	M-9	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
MUELLER	10/6/2008	MUELLER	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U
MUELLER	4/7/2009	MUELLER	FS	µg/L	2	U, N1	1	U, N1	1	U, N1	1	U, N1	1	U, N1,M7			1	U, N1
MUELLER	7/7/2009	MUELLER	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U	1	U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

			Method Class		VOCs					
			Parameter		1,2-Dichloroethene (total)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloro-ethene	Trichloro-ethene	Vinyl chloride
			NYS Class GA Standard		5	5	5	5	5	2
Location	Date	Sample ID	QC Code	Units	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
MUELLER	10/6/2009	MUELLER	FS	µg/L	**0.71** J	**0.71** J	1 U	**1.6**	1 U	1 U
MUELLER	7/19/2010	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	10/6/2010	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	4/11/2011	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	7/6/2011	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	10/6/2011	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	1/4/2012	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	10/5/2012	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	4/17/2013	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	10/16/2013	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	12/16/2014	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	3/29/2016	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	6/20/2017	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	10/30/2018	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MUELLER	1/22/2020	MUELLER	FS	µg/L	2 U	1 U	1 U	1 U	1 U	1 U
MW-104	6/7/2012	420006-MW104-079	FS	µg/L		1 U	1 U	1 U	1 U	1 U
MW-108	6/7/2012	420006-MW108-083	FS	µg/L		1 U	1 U	**0.49** J	1 U	1 U
MW-109	6/7/2012	420006-MW109-083	FS	µg/L		1 U	1 U	1 U	1 U	1 U
MW-112	6/7/2012	420006-MW112-019	FS	µg/L		1 U	1 U	**1.5**	1 U	1 U
MW-112	6/7/2012	420006-MW112-019 DUP	FD	µg/L		1 U	1 U	**1.5**	1 U	1 U
MW-112	7/20/2020	MW-112	FS	µg/L	2 U	1 U	1 U	**1.4**	**0.7** J	1 U
MW-113	6/7/2012	420006-MW113-018	FS	µg/L		20 U	20 UJ	**1400** J	20 U	20 U
MW-113	7/20/2020	MW-113	FS	µg/L	40 U	20 U	20 U	**940**	20 U	20 U
OW-1	10/2/2008	OW-1	FS	µg/L	**85**	**85**	1 U	**200**	**24**	1 U
OW-1	4/7/2009	OW-1	FS	µg/L	**90** D08	**90** D08	4 U, D08	**450** D08	**30** D08	**3.7** D08,J
OW-1	10/5/2009	OW-1	FS	µg/L	**91**	**90**	**0.69** J	**130** D08,P-HS	**48**	**0.51** J
OW-1	4/7/2010	OW-1	FS	µg/L	**130** D08	**130** D08	4 U, D08	**310** H2,D08,P-H	**51** D08	4 U, D08
OW-1	10/4/2010	OW-1	FS	µg/L	**98** D08	**98** D08	2 U, D08	**160** D08	**22** D08	2 U, D08
OW-1	4/6/2011	OW-1	FS	µg/L	**160**	**160**	**1**	**320**	**40**	1 U
OW-1	10/6/2011	OW-1	FS	µg/L	**98**	**98**	2 U	**160**	**25**	2 U
OW-1	10/4/2012	OW-1	FS	µg/L	**60**	**60**	1 U	**79**	**21**	**1.6**
OW-2	10/2/2008	OW-2	FS	µg/L	**120**	**120**	1 U	**360**	**16**	1.2 U
OW-2	1/12/2009	OW-2	FS	µg/L	40 U,D08	20 U,D08	20 U,D08	**2400** H2,D08	20 U,D08	20 U,D08
OW-2	4/6/2009	OW-2	FS	µg/L	**29** D08,J	**29** D08	20 U, D08	**2900** D08	**30** D08	20 U, D08
OW-2	10/5/2009	OW-2	FS	µg/L	**190** D08	**190** D08	10 U, D08	**700** D08	**35** D08	10 U, D08
OW-2	4/7/2010	OW-2	FS	µg/L	**70** D08	**70** D08	10 U, D08	**1200** H2,D08,P-H	**33** D08	10 U, D08
OW-2	10/4/2010	OW-2	FS	µg/L	**49** D08	**49** D08	20 U, D08	**1700** D08	**30** D08	20 U, D08
OW-2	4/6/2011	OW-2	FS	µg/L	**110**	**110**	1 U	**1500**	**35**	1 U
OW-2	10/18/2011	OW-2	FS	µg/L	**67**	**67**	20 U	**1100**	**28**	20 U
OW-2	10/2/2012	OW-2	FS	µg/L	**73**	**73**	20 U	**1200**	**26**	20 U
OW-2	4/16/2013	OW-2	FS	µg/L	**70**	**70**	20 U	**1800**	**27**	20 U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

Method Class					VOCs											
Parameter					1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
NYS Class GA Standard					5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
OW-2	10/15/2013	OW-2	FS	µg/L	**32**	J	**32**		25	U	**1900**		**20**	J	25	U
OW-2	12/15/2014	OW-2	FS	µg/L	**66**		**66**		20	U	**1100**		**23**		20	U
OW-2	3/30/2016	OW-2	FS	µg/L	**110**		**110**		20	U	**1300**		**26**		20	U
OW-2	6/20/2017	OW-2	FS	µg/L	**38**	J	**38**		20	U	**470**		**19**	J	20	U
OW-2	10/31/2018	OW-2	FS	µg/L	**76**		**76**		20	U	**840**		**24**		20	U
OW-2	1/22/2020	OW-2	FS	µg/L	**89**		**89**		20	U	**1200**		**25**		20	U
OW-3	10/2/2008	OW-3	FS	µg/L	87	U	**70**		16	U	**7400**		**140**		30	U
OW-3	1/12/2009	OW-3	FS	µg/L	**400**	D08	**400**	D08	120	U,D08	**20000**	H2,D08	**700**	D08	120	U,D08
OW-3	4/6/2009	OW-3	FS	µg/L	**64**	D08	**64**	D08	25	U, D08	**2200**	D08	**110**	D08	25	U, D08
OW-3	10/5/2009	OW-3	FS	µg/L	**100**	D08,J	**100**	D08,J	**4.3**		**10000**	D08	**240**	D08	**2.8**	
OW-3	4/7/2010	OW-3	FS	µg/L	**110**	D08	**110**	D08	50	U, D08	**8300**	D08	**250**	D08	50	U, D08
OW-3	10/4/2010	OW-3	FS	µg/L	**90**	D08,J	**90**	D08,J	100	U, D08	**9500**	D08	**210**	D08	100	U, D08
OW-3	4/6/2011	OW-3	FS	µg/L	**88**		**85**		**2.7**		**7800**		**180**		1	U
OW-3	10/18/2011	OW-3	FS	µg/L	160	U	80	U	80	U	**5400**		**150**		80	U
OW-3	10/3/2012	OW-3	FS	µg/L	160	U	80	U	80	U	**4500**		**110**		80	U
OW-3	4/16/2013	OW-3	FS	µg/L	**84**	J	**84**		80	U	**7900**		**190**		80	U
OW-3	10/15/2013	OW-3	FS	µg/L	**75**	J	**75**	J	170	U	**8600**		**180**		170	U
OW-3	12/15/2014	OW-3	FS	µg/L	**120**	J	**120**		80	U	**5100**		**110**		80	U
OW-3	3/30/2016	OW-3	FS	µg/L	**160**		**160**		80	U	**11000**		**190**		80	U
OW-3	6/20/2017	OW-3	FS	µg/L	400	U	200	U	200	U	**4800**		**110**	J	200	U
OW-3	10/31/2018	OW-3	FS	µg/L	**180**		**180**		80	U	**6500**		**150**		80	U
OW-3	1/22/2020	OW-3	FS	µg/L	**220**		**220**		80	U	**11000**		**210**		80	U
OW-5	10/2/2008	OW-5	FS	µg/L	**440**		**440**		16	U	**8900**		**130**		30	U
OW-5	1/12/2009	OW-5	FS	µg/L	**82**	H2,D08	**82**	H2,D08	10	U,H2,D08	**840**	H2,D08	**180**	H2,D08	10	U,H2,D08
OW-5	4/6/2009	OW-5	FS	µg/L	**49**	D08	**49**	D08	5	U, D08	**370**	D08	**38**	D08	5	U, D08
OW-5	10/5/2009	OW-5	FS	µg/L	**490**	D08,P-HS	**490**	D08,P-HS	**1.6**		**4700**	D08,P-HS	**120**	D08,HS,J	**6.1**	
OW-5	4/7/2010	OW-5	FS	µg/L	**680**	D08	**680**	D08	200	U, D08	**12000**	D08	**220**	D08	200	U, D08
OW-5	10/4/2010	OW-5	FS	µg/L	**590**	D08	**590**	D08	200	U, D08	**13000**	D08	**210**	D08	200	U, D08
OW-5	4/6/2011	BLIND DUP 1	FD	µg/L	**550**		**550**		**1.2**		**7500**		**150**		**3.8**	
OW-5	4/6/2011	OW-5	FS	µg/L	**500**		**500**		**0.98**	J	**8300**		**150**		**4**	
OW-5	10/18/2011	OW-5	FS	µg/L	**490**		**490**		130	U	**8400**		**160**		130	U
OW-5	10/2/2012	OW-5	FS	µg/L	**570**		**570**		130	U	**6300**		**150**		130	U
OW-5	4/16/2013	OW-5	FS	µg/L	**1000**		**1000**		100	U	**14000**		**250**		100	U
OW-5	10/15/2013	OW-5	FS	µg/L	**2200**		**2200**		200	U	**9300**		**320**		200	U
OW-5	3/30/2016	OW-5	FS	µg/L	**2400**		**2400**		200	U	**7300**		**420**		200	U
OW-5	6/20/2017	OW-5	FS	µg/L	**900**	J	**900**	J	50	UJ	**1500**	J	**96**	J	**5.8**	J
OW-5	10/31/2018	OW-5	FS	µg/L	**1600**	J	**1600**	J	100	U	**5200**	J	**310**		100	U
OW-5	1/22/2020	OW-5	FS	µg/L	**1100**		**1100**		100	U	**4200**		**230**		100	U
OW-6	10/2/2008	OW-6	FS	µg/L	**18**		**18**		1	U	**27**		**8.9**		1	U
OW-6	12/17/2008	OW-6	FS	µg/L	**16**		**16**		1	U	**28**		**8.1**		1	U
OW-6	1/12/2009	OW-6	FS	µg/L	**15**		**15**		1	U	**23**		**7.1**		1	U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

					Method Class		VOCs											
					Parameter		1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
					NYS Class GA Standard		5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
OW-6	4/8/2009	OW-6	FS	µg/L	**17**		**17**		1	U	**27**		**7.8**		1	U
OW-6	10/5/2009	OW-6	FS	µg/L	**23**		**23**		1	U	**25**		**9.9**		1	U
OW-6	4/7/2010	OW-6	FS	µg/L	**18**		**18**		1	U	**26**		**8.4**		1	U
OW-6	10/4/2010	OW-6	FS	µg/L	**23**		**23**		1	U	**17**		**8.2**		1	U
OW-6	10/5/2011	OW-6	FS	µg/L	**30**		**30**		1	U	**31**		**8.8**		**1.4**	
OW-7	10/2/2008	OW-7	FS	µg/L	**99**		**99**		1.3	U	**1000**		**49**		2.4	U
OW-7	12/17/2008	OW-7	FS	µg/L	**100**		**100**		2.5	U	**1000**		**45**		4.8	U
OW-7	1/12/2009	OW-7	FS	µg/L	**130**	D08	**130**	D08	10	U,D08	**1200**	H2,D08	**57**	D08	10	U,D08
OW-7	4/8/2009	BLIND DUP	FD	µg/L	**140**	D08	**140**	D08	20	U, D08	**1300**	D08	**62**	D08	20	U, D08
OW-7	4/8/2009	OW-7	FS	µg/L	**110**	D08	**110**	D08	10	U, D08	**1100**	D08	**49**	D08	10	U, D08
OW-7	10/5/2009	OW-7	FS	µg/L	**170**	D08	**170**	D08	**0.48**	J	**1400**	D08	**120**	D08	**0.62**	J
OW-7	4/7/2010	OW-7	FS	µg/L	**100**	D08	**100**	D08	20	U, D08	**850**	D08	**44**	D08	20	U, D08
OW-7	10/4/2010	OW-7	FS	µg/L	**210**	D08	**210**	D08	8	U, D08	**400**	D08	**37**	D08	**9.5**	D08
OW-7	4/6/2011	OW-7	FS	µg/L	**77**		**77**		1	U	**600**		**47**		1	U
OW-7	10/5/2011	OW-7	FS	µg/L	**99**		**99**		10	U	**730**		**64**		10	U
OW-7	10/2/2012	OW-7	FS	µg/L	**98**		**98**		10	U	**620**		**51**		10	U
OW-7	4/16/2013	OW-7	FS	µg/L	**110**		**110**		10	U	**680**		**71**		10	U
OW-7	10/15/2013	OW-7	FS	µg/L	**87**		**87**		4	U	**200**		**36**		4	U
OW-7	12/18/2014	OW-7	FS	µg/L	**30**		**30**		1	U	**74**		**13**		1	U
OW-7	3/30/2016	OW-7	FS	µg/L	**1700**		**1700**		20	U	20	U	20	U	20	U
OW-7	6/20/2017	OW-7	FS	µg/L	**12**		**12**		1	U	**47**		**6**		1	U
OW-7	10/31/2018	OW-7	FS	µg/L	**120**		**120**		10	U	**230**		**45**		10	U
OW-7	1/22/2020	OW-7	FS	µg/L	**160**		**160**		10	U	**670**		**180**		10	U
OW-9	10/2/2008	OW-9	FS	µg/L	**25**		**25**		1	U	**280**		**7.1**		1.2	U
OW-9	4/8/2009	OW-9	FS	µg/L	**20**	D08	**20**	D08	5	U, D08	**270**	D08	**5.6**	D08	5	U, D08
OW-9	10/5/2009	OW-9	FS	µg/L	**77**		**75**		**1.4**		**310**	D08	**9.7**		1	U
OW-9	4/7/2010	OW-9	FS	µg/L	**120**	D08	**120**	D08	5	U, D08	**370**	D08	**9.2**	D08	5	U, D08
OW-9	10/4/2010	OW-9	FS	µg/L	**100**	D08	**100**	D08	5	U, D08	**320**	D08	**10**	D08	5	U, D08
OW-9	4/6/2011	OW-9	FS	µg/L	**200**		**200**		1	U	**440**		**14**		1	U
OW-9	10/5/2011	OW-9	FS	µg/L	**270**		**270**		10	U	**440**		**20**		10	U
OW-9	10/4/2012	OW-9	FS	µg/L	**910**		**910**		10	U	**910**		**55**		**9.1**	J
OW-10	10/2/2008	OW-10	FS	µg/L	**6.6**		**6.6**		1	U	**330**		**7.4**		1.2	U
OW-10	4/8/2009	OW-10	FS	µg/L	**6.7**	D08,J	**6.7**	D08	5	U, D08	**360**	D08	**5.8**	D08	5	U, D08
OW-10	10/5/2009	BLIND DUP 2	FD	µg/L	**530**	D08,P-HS	**530**	D08,P-HS	**1.5**		**7400**	D08,P-HS	**150**	D08,HS,J	**5.8**	
OW-10	10/5/2009	OW-10	FS	µg/L	**11**		**11**		1	U	**310**	D08	**17**		1	U
OW-10	4/7/2010	OW-10	FS	µg/L	**8.8**	D08,J	**8.8**	D08	5	U, D08	**380**	D08	**6.6**	D08	5	U, D08
OW-10	10/4/2010	OW-10	FS	µg/L	**7.9**	D08,J	**7.9**	D08	5	U, D08	**300**	D08	**6.6**	D08	5	U, D08
OW-10	4/6/2011	OW-10	FS	µg/L	**7.7**	J	**7.7**		5	U	**330**		**5.8**		5	U
OW-10	10/5/2011	OW-10	FS	µg/L	**12**		**12**		5	U	**320**		**8.3**		5	U
OW-11	10/2/2008	OW-11	FS	µg/L	**140**		**140**		1	U	**220**		**55**		**10**	
OW-11	4/8/2009	OW-11	FS	µg/L	**500**	D08	**490**	D08	**2.4**	D08,J	**700**	D08	**190**	D08	**38**	D08

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

					Method Class		VOCs											
					Parameter		1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
					NYS Class GA Standard		5		5		5		5		5		2	
Location	Date	Sample ID	QC Code	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
OW-11	10/5/2009	OW-11	FS	µg/L	**690**	D08	**690**	D08	**3.6**		**810**	D08	**270**	D08	**76**	
OW-11	4/7/2010	OW-11	FS	µg/L	**110**	D08	**110**	D08	2	U, D08	**150**	D08	**110**	D08	**1.6**	D08,J
OW-11	10/4/2010	OW-11	FS	µg/L	**3500**	D08	**3500**	D08	**10**	D08	**3400**	D08	**920**	D08	**500**	D08
OW-11	4/6/2011	OW-11	FS	µg/L	**250**		**250**		**0.96**	J	**340**		**94**		**15**	
OW-11	10/5/2011	OW-11	FS	µg/L	**250**		**250**		8	U	**270**		**79**		**24**	
OW-11	10/4/2012	OW-11	FS	µg/L	**85**		**85**		1	U	**90**		**20**		**8.3**	
OW-12	10/2/2008	OW-12	FS	µg/L	**68**		**68**		1	U	**34**		**19**		**49**	
OW-12	12/17/2008	OW-12	FS	µg/L	**680**		**730**		**4.2**		**160**		**96**		**100**	
OW-12	1/12/2009	OW-12	FS	µg/L	**600**	H2,D08	**600**	H2,D08	4	U,D08	4	U,D08	4	U,D08	**150**	D08
OW-12	4/8/2009	OW-12	FS	µg/L	**270**	D08	**270**	D08	**1.4**	D08,J	**48**	D08	**11**	D08	**110**	D08
OW-12	10/5/2009	OW-12	FS	µg/L	**270**	D08	**270**	D08	**1.1**		**6.9**		**5.1**		**220**	D08
OW-12	4/7/2010	OW-12	FS	µg/L	**510**	D08	**510**	D08	**2.8**	D08,J	**20**	D08	**15**	D08	**220**	D08
OW-12	10/4/2010	OW-12	FS	µg/L	**94**	D08	**94**	D08	2	U, D08	**12**	D08	**12**	D08	**120**	D08
OW-12	4/6/2011	OW-12	FS	µg/L	**150**		**150**		2	U	**27**		**7**		**91**	
OW-12	10/5/2011	OW-12	FS	µg/L	**300**		**300**		2	U	**14**		**7**		**140**	
OW-12	10/4/2012	OW-12	FS	µg/L	**73**		**73**		5	U	**25**		**9.7**		**76**	
OW-13	10/2/2008	OW-13	FS	µg/L	**120**		**120**		1.3	U	**730**		**11**		2.4	U
OW-13	12/17/2008	OW-13	FS	µg/L	**120**		**120**		1.3	U	**770**		**10**		2.4	U
OW-13	1/12/2009	OW-13	FS	µg/L	**110**	D08	**110**	D08	10	U,D08	**580**	D08	10	U,D08	10	U,D08
OW-13	4/8/2009	OW-13	FS	µg/L	**94**	D08	**94**	D08	10	U, D08	**740**	D08	**11**	D08	10	U, D08
OW-13	10/6/2009	OW-13	FS	µg/L	**170**	D08	**170**	D08	1	U	**930**	D08	**25**		1	U
OW-13	4/7/2010	OW-13	FS	µg/L	**130**	D08	**130**	D08	10	U, D08	**690**	D08	**14**	D08	10	U, D08
OW-13	10/4/2010	OW-13	FS	µg/L	**180**	D08	**180**	D08	10	U, D08	**790**	D08	**18**	D08	10	U, D08
OW-13	4/6/2011	OW-13	FS	µg/L	**110**		**110**		1	U	**800**		**14**		**0.96**	J
OW-13	10/5/2011	OW-13	FS	µg/L	**130**		**130**		10	U	**630**		**16**		10	U
OW-13	10/2/2012	OW-13	FS	µg/L	**120**		**120**		10	U	**440**		**14**		10	U
OW-13	4/17/2013	OW-13	FS	µg/L	**180**		**180**		10	U	**790**		**15**		10	U
OW-13	10/15/2013	OW-13	FS	µg/L	**140**		**140**		11	U	**670**		**15**		11	U
OW-13	3/30/2016	OW-13	FS	µg/L	**70**		**70**		5	U	**140**		**13**		5	U
OW-13	6/20/2017	OW-13	FS	µg/L	**32**		**32**		5	U	**120**		**6**		5	U
OW-13	10/30/2018	OW-13	FS	µg/L	**75**		**75**		5	U	**230**		**8.1**		5	U
OW-13	1/22/2020	OW-13	FS	µg/L	**1100**		**1100**		50	U	**3500**		**280**		5	U
OW-14	10/2/2008	OW-14	FS	µg/L	**720**		**720**		25	U	**18000**		**1000**		48	U
OW-14	1/12/2009	OW-14	FS	µg/L	**53**	H2,D08	**53**	H2,D08	20	U,H2,D08	**1300**	H2,D08	**62**	H2,D08	20	U,H2,D08
OW-14	4/6/2009	OW-14	FS	µg/L	**29**	D08,J	**29**	D08	20	U, D08	**1100**	D08	**40**	D08	20	U, D08
OW-14	10/6/2009	OW-14	FS	µg/L	**810**	D08	**810**	D08	**3.5**		**17000**	D08	**1800**	D08	**36**	
OW-14	4/7/2010	OW-14	FS	µg/L	**900**	D08	**900**	D08	200	U, D08	**18000**	D08	**1400**	D08	200	U, D08
OW-14	10/4/2010	OW-14	FS	µg/L	**1300**	D08	**1300**	D08	200	U, D08	**29000**	D08	**2100**	D08	200	U, D08
OW-14	4/6/2011	OW-14	FS	µg/L	**900**		**900**		**3.4**		**16000**		**1200**		**32**	
OW-14	10/5/2011	BLIND DUP	FD	µg/L	**890**		**890**		10	U	**16000**		**1300**		**37**	
OW-14	10/5/2011	OW-14	FS	µg/L	**890**		**890**		200	U	**17000**		**1300**		200	U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

					Method Class		VOCs											
					Parameter		1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
					NYS Class GA Standard		5		5		5		5		5		2	
Location	**Date**	**Sample ID**	**QC Code**	**Units**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
OW-14	10/2/2012	OW-14	FS	µg/L	**760**		**760**		200	U	**10000**		**880**		200	U
OW-14	4/16/2013	OW-14	FS	µg/L	**750**		**750**		100	U	**6900**		**520**		100	U
OW-14	10/15/2013	OW-14	FS	µg/L	**1000**		**1000**		250	U	**15000**		**1100**		250	U
OW-14	12/15/2014	OW-14	FS	µg/L	**810**		**810**		100	U	**9300**		**810**		100	U
OW-14	3/30/2016	OW-14	FS	µg/L	**2100**		**2100**		40	U	**150**		**460**		40	U
OW-14	6/20/2017	OW-14	FS	µg/L	**610**		**610**		40	U	**3900**		**1000**		40	U
OW-14	10/31/2018	OW-14	FS	µg/L	**950**		**950**		100	U	**7300**		**680**		100	U
OW-14	1/22/2020	OW-14	FS	µg/L	**980**		**980**		100	U	**7400**		**770**		100	U
OW-15	10/2/2008	OW-15	FS	µg/L	**260**		**260**		1.3	U	**320**		**41**		**20**	
OW-15	12/17/2008	OW-15	FS	µg/L	**370**		**370**		1.3	U	**430**		**71**		**56**	
OW-15	1/12/2009	OW-15	FS	µg/L	**1800**	H2,D08	**1800**	H2,D08	10	U,D08	**460**	D08	**270**	D08	**480**	D08
OW-15	4/8/2009	OW-15	FS	µg/L	**370**	D08	**370**	D08	**1.2**	D08,J	**350**	D08	**51**	D08	**56**	D08
OW-15	10/5/2009	OW-15	FS	µg/L	**410**	D08	**410**	D08	**0.97**	J	**190**	D08	**58**		**25**	
OW-15	4/7/2010	OW-15	FS	µg/L	**230**	D08	**230**	D08	5	U, D08	**330**	D08	**41**	D08	**40**	D08
OW-15	10/4/2010	OW-15	FS	µg/L	**280**	D08	**280**	D08	4	U, D08	**210**	D08	**29**	D08	**64**	D08
OW-15	4/6/2011	OW-15	FS	µg/L	**160**		**160**		2	U	**330**		**32**		**19**	
OW-15	10/5/2011	OW-15	FS	µg/L	**210**		**210**		5	U	**270**		**27**		**34**	
OW-15	10/4/2012	OW-15	FS	µg/L	**63**		**63**		2	U	**130**		**23**		2	U
OW-16	10/2/2008	OW-16	FS	µg/L	**90**		**90**		1	U	**360**		**34**		1	U
OW-16	4/8/2009	OW-16	FS	µg/L	**16**		**16**		1	U	**100**	D08	**13**		1	U
OW-16	10/6/2009	OW-16	FS	µg/L	**20**	D08	**20**	D08	8	U, D08	**550**	D08	**42**	D08	8	U, D08
OW-16	4/7/2010	OW-16	FS	µg/L	**140**	D08	**140**	D08	8	U, D08	**920**	D08	**84**	D08	8	U, D08
OW-16	10/4/2010	OW-16	FS	µg/L	**65**	D08	**65**	D08	8	U, D08	**450**	D08	**38**	D08	8	U, D08
OW-16	4/6/2011	OW-16	FS	µg/L	**63**		**63**		1	U	**490**		**39**		1	U
OW-16	10/5/2011	OW-16	FS	µg/L	**560**		**580**		10	U	**8700**		**610**		10	U
OW-16	10/2/2012	OW-16	FS	µg/L	**93**		**93**		4	U	**250**		**35**		4	U
OW-16	4/16/2013	OW-16	FS	µg/L	**89**		**89**		10	U	**430**		**45**		10	U
OW-16	10/15/2013	OW-16	FS	µg/L	**99**		**99**		13	U	**850**		**89**		13	U
OW-16	3/31/2016	OW-16	FS	µg/L	**110**		**110**		10	U	**350**		**59**		10	U
OW-16	6/20/2017	OW-16	FS	µg/L	**62**		**62**		10	U	**200**		**20**		10	U
OW-16	10/31/2018	OW-16	FS	µg/L	**470**		**470**		80	U	**2300**		**290**		80	U
OW-16	1/22/2020	OW-16	FS	µg/L	**47**		**47**		5	U	**240**		**20**		5	U
R-1	10/6/2008	R-1	FS	µg/L	**47**		**47**		1	U	**1.2**		**1.4**		1	U
R-1	1/13/2009	R-1	FS	µg/L	**17**		**17**		1	U	1	U	1	U	1	U
R-1	4/6/2009	R-1	FS	µg/L	**24**	N1	**24**	N1	1	U, N1	**1.2**	N1	**0.89**	N1,J	1	U, N1
R-1	7/7/2009	R-1	FS	µg/L	**24**		**24**		1	U	**1.3**		**0.77**	J	1	U
R-1	10/6/2009	R1	FS	µg/L	**23**		**23**		1	U	**3**		**0.62**	J	1	U
R-1	1/6/2010	R-1	FS	µg/L	**20**		**20**		1	U	**1.5**		**0.66**	J	1	U
R-1	4/8/2010	R-1	FS	µg/L	**1.2**	J	**1.2**		1	U	**0.49**	J	1	U	1	U
R-1	7/7/2010	R-1	FS	µg/L	**24**		**24**		1	U	**1.1**		**0.65**	J	1	U
R-1	10/6/2010	BLIND DUP	FD	µg/L	**17**		**17**		1	U	**0.97**	J	**0.74**	J	1	U

Created By: KMS 03/11/21
Checked By: KAA 03/15/21

					Method Class											
					VOCs											
					Parameter		1,2-Dichloroethene (total)		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloro-ethene		Trichloro-ethene		Vinyl chloride	
					NYS Class GA Standard		5		5		5		5		5		2	
Location	**Date**	**Sample ID**	**QC Code**	**Units**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
R-1	10/6/2010	R-1	FS	µg/L	**17**		**17**		1	U	**0.84**	J	**0.66**	J	1	U
R-1	1/4/2011	R-1	FS	µg/L	**16**		**16**		1	U	**1.4**		**0.74**	J	1	U
R-1	4/5/2011	R-1	FS	µg/L	**19**		**19**		1	U	**1.6**		**1**		1	U
R-1	7/6/2011	R-1	FS	µg/L	**17**		**17**		1	U	**1.2**		**0.63**	J	1	U
R-1	10/6/2011	R-1	FS	µg/L	**2.9**		**2.9**		1	U	**0.77**	J	1	U	1	U
R-1	1/4/2012	R-1	FS	µg/L	**16**		**16**		1	U	**1.2**		**0.51**	J	1	U
R-1	10/4/2012	R-1	FS	µg/L	2	U	1	U	1	U	1	U	1	U	1	U
SPEENBURGH	10/6/2008	SPEENBURGH	FS	µg/L	**150**		**150**		**1.2**		**1.2**		**17**		1	U
SPEENBURGH	1/13/2009	SPEENBURGH	FS	µg/L	**44**		**44**		1	U	1	U	**2.7**		1	U
SPEENBURGH	4/7/2009	SPEENBURGH	FS	µg/L	**160**	D08, N1	**160**	D08, N1	**1.3**	N1	1	U, N1	**8.4**	N1	1	U, N1
SPEENBURGH	4/11/2011	SPEENBURGH	FS	µg/L	**140**		**140**		**1.3**		1	U	**1.6**		1	U
SPEENBURGH	7/6/2011	SPEENBURGH	FS	µg/L	**50**		**50**		1	U	1	U	**0.63**	J	1	U
SPEENBURGH	10/6/2011	SPEENBURGH	FS	µg/L	**91**		**90**		**1.1**		1	U	**0.65**	J	1	U
SPEENBURGH	1/4/2012	SPEENBURGH	FS	µg/L	**100**		**100**		**1**		1	U	**1.2**		1	U
SPEENBURGH	10/5/2012	SPEENBURGH	FS	µg/L	**130**		**130**		2	U	2	U	2	U	2	U

Notes:
- A blank cell indicates that the compound was not analyzed for.
- Bolded values indicate a detection of the corresponding standard.
- Bolded, gray-shaded values indicate an exceedance of the corresponding standard.
D08 = dilution required due to high concentration of target compound(s)
FS = field sample
FD = field duplicate
H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
J = estimated value
N1 = estimated value
NYS = New York State
P-H = sample container contained headspace
U = not detected
µg/L = micrograms per liter
VOCs = volatile organic compounds

Created By: KMS 03/11/21
Checked By: KAA 03/15/21