PERIODIC REVIEW REPORT
JANUARY 2020 - DECEMBER 2020

FORMER SCIORE'S DRY CLEANERS SITE
TOWN OF WATKINS GLEN, NEW YORK 14891

NYSDEC Site No. 849003
Work Assignment No. D009812-04

Prepared for:

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

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

Prepared by:

TRC Engineers, Inc.
10 Maxwell Drive
Clifton Park, New York 12065

JUNE 2021

TRC Project No. 386554

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LIST OF ACRONYMS AND ABBREVIATIONS

AMSL	above mean sea level
COCs	Contaminants of Concern
DER	Department of Environmental Remediation
DTW	Depth to Water
DUSRs	Data Usability Summary Reports
ECs	Engineering Controls
EDD	Electronic Data Deliverable
EE	Environmental Easement
EPA	Environmental Protection Agency
FS	Feasibility Study
ft. bgs	feet below ground surface
ICs	Institutional Controls
IHWDS	Inactive Hazardous Waste Disposal Site
IRM	Interim Remedial Action
ND	Not detected
ng/L	nanograms per liter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	Tetrachloroethene
PFAS	Per- and Polyfluoroalkyl Substances
PRR	Periodic Review Report
PSA	Preliminary Site Assessment
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RI	Remedial Investigation
ROD	Record of Decision
SCG	Standard, Criteria, and Guidance
SMP	Site Management Plan
SMR	Site Management Report
SSDS	Sub-slab Depressurization System
SVI	Soil Vapor Intrusion
SVOCs	Semi-volatile Organic Compounds
TAL	Target Analyte List
TCL	Target Compound List
TRC	TRC Engineers, Inc.
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds
WA	Work Assignment
µg/L	micrograms per liter
ηg/L	nanograms per liter

Executive Summary

Category	Summary/Results	
Engineering Controls	• Sub-Slab Depressurization System	
Institutional Controls	• SMP (2007) • EE (2012)	• Site-Use and Redevelopment Restriction • Groundwater Use Restriction • SVI Evaluation for New Site-Development
Site Classification	Class 4	
Site Management Plan	SMP Rev. No. 1 January 2007	
Certification/Reporting Period	The Certification Period is undefined in the SMP. The SMP indicates that the property owner(s) shall periodically certify that site use is compliant with the ICs and the ECs are in place and performing to their specifications. SMRs are not required.	
Inspection	**Frequency**	
Site Inspection	As determined by NYSDEC.	
Monitoring	**Frequency**	
Groundwater	As determined by NYSDEC.	
Prior PRR/SMR Recommendations	This PRR is the first to be completed for the Site since the SMP was approved in January 2007. No SMRs were completed for the Site.	
Site Management Activities	One site inspection, one round of groundwater level measurements, and one groundwater sampling event: • 08/27/2020 – Site inspection • 8/27/2020 – Groundwater level measurements • 08/27/2020 – 08/28/2020: Groundwater samples were collected from 7 of 9 monitoring wells in the monitoring well network. All samples were submitted to Eurofins/TestAmerica Laboratories for analysis of VOCs and metals. Additionally, six of the samples were also analyzed for PFAS and 1,4-Dioxane.	
Significant Findings or Concerns	No significant findings or concerns were identified during the site visit.	
Recommendations	1. Five-year Certification Period. 2. Five-year PRR Period. 3. Five-year groundwater sampling frequency. 4. Annual site inspection. If acceptable to the NYSDEC, the January 2007 SMP should be updated to reflect the above sampling/inspection/reporting frequency and PRR Certification Period.	
Cost Evaluation	The total cost of site management activities this reporting period was $30,334.00. This cost includes engineering and subcontractor costs (e.g., laboratory analytical, equipment, rentals, etc.). It should be noted that this total does not include any direct costs incurred by the NYSDEC in support of the project.	

1.0 Introduction

This PRR has been prepared for the Former Sciore's Dry Cleaners (referred to as "the Site") and covers the period, January 1, 2020 through December 31, 2020. The report was prepared in accordance with the NYSDEC Notice to Proceed dated February 27, 2020 for WA No. D009812-04, the NYSDEC-approved Scope of Work dated July 20, 2020 and NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation. A Site summary and applicable remedial program information are summarized below.

Site Information			
Site Name:	Former Sciore's Dry Cleaners	**NYSDEC Site No:**	849003
Site Location:	Fourth and Decatur Street, Watkins Glen, Schuyler County, New York	**Remedial Program:**	Inactive Hazardous Waste Disposal
Site Type:	Dry Cleaners	**Classification:**	04
Parcel Identification(s):	65.54-1-36, Schuyler County Tax Maps	**Parcel Acreage / EE Acreage:**	0.34
Selected Remedy:	Sub-Slab Depressurization system, Groundwater Monitoring	**Site COC(s):**	• VOCs • Metals
Current Remedial Program Phase:	Site Management	**Institutional Controls:**	• SMP (2007) • EE (2012)
Post-Remediation Monitoring and Sampling Frequency:	Groundwater monitoring and site inspection as determined by NYSDEC	**Engineering Controls:**	Sub-Slab Depressurization System
Monitoring Locations:	Onsite monitoring wells (3) Off-site monitoring wells (6)	**Required Reporting:**	At a frequency determined by NYSDEC

1.1 Site Location, Ownership, and Description

The Site is located at 129 – 135 East 4th Street in the Town of Watkins Glen, Schuyler County, New York and is identified as Section 65.54 Block 1 Lot 36 on the Schuyler County Tax Map. The Site parcel has an overall property area of approximately 0.34 acres, is bounded to the north by Fourth Street, to the south by Fifth Street, to the east by North Decatur Street, and to the west by the Watkins Glen Methodist Church. Site location and layout maps are provided on **Figure 1** and **Figure 2**, respectively.

1.2 Investigation/Remedial History

The Sciore's Dry Cleaning business operated in the center of the building on the Site from the early 1950's to the 1970s. In addition to the building, the cleaners utilized a storage shed located behind the building where solvents for the operations were stored. The shed was removed in 1981, however, the concrete pad that the shed was built on was not removed. In September 1999, an investigation for a pending sale of the property revealed that PCE was present in the local groundwater. It is inferred that PCE was likely stored in the shed from the beginning of dry-cleaning operations until the removal of the shed, during which time an unknown quantity of PCE had been released into the soil.

Following the detection of PCE in the groundwater, the NYSDEC contracted the Harding Lawson Associates to perform a PSA. The PSA field work included a geophysical survey, direct push groundwater and soil sampling, micro well installation, indoor air sampling and a land survey.

The Site was listed as a NYSDEC Class 2 Inactive Hazardous Waste Disposal Site in 2003. A RI/FS was initiated by the NYSDEC in November 2003 for the purpose of defining the nature and extent of contamination, and to evaluate potential remedial alternatives. The RI activities were completed in December 2005 and consisted of the installation of twelve soil borings and three monitoring wells in addition to the six microwells installed during the PSA. Additionally, groundwater, sub-slab soil vapor, indoor air, and outdoor air samples were collected. Due to the elevated levels of VOCs detected during the VI investigation, an IRM was conducted immediately following the completion of the RI. The IRM consisted of sealing the basement floor and installing an SSD system in the on-site structure at 129 – 135 East 4th Street as well as sealing the basement floor and installing an SSDS in one offsite structure located across the street (**Figure 2**).

In March 2006, the NYSDEC issued a Record of Decision (ROD) for site remediation. The chosen remedy was Vapor Intrusion Abatement and long-term groundwater monitoring. The remediation goals mentioned in the ROD are to eliminate, to the extent practical, the exposure of individuals to PCE in groundwater and indoor air, as well as to attain ambient groundwater quality standards. The NYSDEC approved the SMP in January 2007 which established restrictions on site use and development, restricted the use of groundwater as a private potable water source without necessary water quality treatment, required the installation and maintenance of sub-slab depressurization system to mitigate VI, and required long-term groundwater monitoring. In 2014, the site was reclassified from a Class 2 to a Class 4 Inactive Waste Disposal Site.

A Custodial Record detailing known and available Site reports and the Notification of Demolition and Renovation are included in **Appendix A.**

1.3 Remaining Contamination

Remediation at the Site is complete. Prior to remediation, the primary contaminants of concern were tetrachloroethene (PCE) and its associated daughter products. PCE was found in the soil on the Site; however, concentrations were well below the SCOs for unrestricted use (1.3 ppm). Residual contamination in the groundwater and is being managed under the SMP. Soil vapor is also a concern at the Site and appropriate actions have been taken to address exposures related to soil vapor intrusion.

1.4 Regulatory Requirements/Cleanup Goals

A summary of the RAOs, as found in the March 2006 ROD, include the following:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Restore the ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the Site.

2.0 Institutional and Engineering Control Plan Compliance

2.1 Institutional Controls

The Former Sciore's Dry Cleaners Site's inclusion on the Registry of Inactive Hazardous Waste Disposal Sites, EE, and SMP act as the ICs.

The 2007 SMP and 2012 EE defines the following for the Site:

- Compliance with the EE and the SMP by the Grantor and the Grantor's successors and assigns.
- All ECs must be operated and maintained as specified in the SMP.
- All ECs on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Groundwater, soil vapor, and other environmental or public health monitoring must be performed as defined by the SMP.
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP.
- Institutional controls identified in the EE may not be discontinued without an amendment or extinguishment of the EE.
- The Site property may only be used for restricted-residential, commercial and industrial uses provided that the long-term Engineering and Institutional Controls included in the SMP are employed.
- The Site property may not be used for a higher level of use, such as unrestricted, residential use without additional remediation and amendment of the EE, as approved by the NYSDEC.
- The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended use as determined by the New York State Department of Health (NYSDOH) and the Steuben County Department of Health.
- Continued operation of the Sub Slab Depressurization (SSD) systems in the on-site building and one offsite building until the remedial objectives are achieved. Both SSDS are managed by the respective property owners. NYSDEC sends a letter to remind each property owner to contact NYSDEC if they have questions or repairs are needed.
- A provision for evaluation of the potential for soil vapor intrusion of structures adjacent and down gradient of the Site was performed, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.
- Vegetable gardens and farming on the property are prohibited.
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will

be made by an expert that the NYSDEC finds acceptable. The Certification for 2020 is included in **Appendix B**.

- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the owner of the Controlled Property to assure compliance with the restrictions identified by the EE.

2.2 Engineering Controls

The Site ECs include two sub-slab depressurization systems. One system was installed in the structure on the Site property. The second was installed in a structure on a property across the street and to the north of the Site.

The SSDS in the on-site located at 129 – 135 East 4th Street was installed in the basement of the structure in March 2008. Construction details include five extraction points, a blower and a vent stack constructed of PVC on the exterior of the building. Three extraction points penetrate the concrete floor of the basement in the structure. Two additional vapor extraction points are located at either end of a wooden box constructed to maintain a negative vacuum where the soil is exposed along the stone foundation and corner of the basement floor. All five extraction points are manifolded to one PVC pipe exiting the external wall on the southeast side of the building. A RadonAway Blower and discharge stack extend above the structure to vent any vapors collected by the system. The SSDS is maintained by the Site owner. The 2020 IC/EC certification form completed by the owner confirming the performance and effectiveness of the selected remedy, including the on-site SSDS, is included in **Appendix B**.

The SSDS in the off-site building was installed in the basement of the structure in March 2008. The basement floor is comprised primarily of concrete with approximately 300 sq. feet of exposed dirt floor on the southwest corner. Approximately 200 sq. ft. of the exposed dirt floor section is covered by 4 x 8 sheets of plywood. The remaining 100 sq. ft. was uncovered prior to completing the SSDS installation. Construction details include four extraction points, a blower and vent stack constructed of PVC on the exterior of the building. Three vapor extraction points penetrate the concrete floor and one extraction point penetrates the plywood floor area. Each of the joints between the edges of the plywood sheets and the extraction point through the plywood were sealed with Pecora Dynatrol sealant. The small section of dirt floor was covered with an EPDM membrane. The edges of the membrane covering the exposed dirt section were sealed to the foundation wall and the concrete floor. All four extraction points are manifolded to one PVC pipe exiting the external wall on the northwest side of the building. A RadonAway Blower and discharge stack extend above the structure to vent any vapors collected by the system. As noted above, NYSDEC sends a letter to remind the current owner of the offsite property to contact NYSDEC if they have questions or repairs are needed. Maintenance for the SSDS are completed separately from the site inspection and groundwater sampling activities completed in connection with the Site.

3.0 Monitoring and Sampling Plan Compliance

The 2007 SMP was prepared to manage contamination remaining on the Site and ensure that the remedy remains effective by restricting site use, site development, and soil management. The January 2007 SMP specifies the following Site monitoring and sampling activities:

Summary of January 2007 SMP Site Monitoring and Sampling Plan			
Site Management Activity	**Frequency**	**Location**	**Laboratory Analysis**
Site Inspection	With each groundwater sampling event at the discretion of NYSDEC	Site property and surrounding area	Not Applicable
Groundwater Sampling	At the discretion of NYSDEC	• MW-1 • MW-2 • MW-3 • MW-4 • MW-5 • MW-6 • MW-7 • MW-8 • MW-9	• TCL VOCs by EPA Method 8260 • TAL Metals Methods 6010 and 7470
SMR	Not required	Not Applicable	Not Applicable
Site Inspection Report	Following each inspection event	Not Applicable	Not Applicable
PRR	Following site inspection and sampling event at the discretion of NYSDEC	Not Applicable	Not Applicable

Additionally, six monitoring wells were selected for a one-time sampling event for emerging contaminants. Monitoring wells MW-1, MW-3, MW-4, MW-5, MW-7, MW-8, and MW-9 were selected for the sampling and analysis of PFAS by EPA Method 537 (modified) and 1,4-dioxane by EPA Method 8270 SIM.

3.1 Site Inspection

TRC conducted a site inspection on Wednesday, August 26th, 2020, in accordance with the SMP. The Site inspection was conducted to document the condition of the Site monitoring wells, overall site conditions, and to collect groundwater samples from the seven wells.

A summary of the Site visit is as follows:

Summary of Site Inspection August 2020		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
Monitoring Well Network	All well casings and covers were in good condition. All well locks were in place and functional. Monitoring well MW-4 could not be located. MW-6 was dry during the time of the site visit.	No routine maintenance or corrective measures needed at this time.
Groundwater gauging and sampling	Seven of the nine monitoring (MW-1, MW-2, MW-3, MW-5, MW-7, MW-8 and MW-9) were sampled utilizing USEPA low-flow sampling methods.	No routine maintenance or corrective measures needed at this time.

Field activity reports and photographic logs from the inspection activities can be found in **Appendix C**.

3.2 Groundwater Monitoring Summary

3.2.1 Groundwater Gauging

On August 26th, 2020, prior to groundwater sample collection, all wells were gauged for depth to groundwater to evaluate potential groundwater flow direction. Monitoring well MW-6 was dry at the time of the gauging event. Monitoring well MW-4 was not gauged because the well could not be located. The groundwater surface elevation contours with an interpretation of groundwater flow direction for the overburden wells are presented on **Figure 3**. The groundwater gauging and elevation information can be found on **Table 1**. A summary of the hydrogeologic information is presented below:

August 2020 Hydrogeologic Summary			
Number of Wells Gauged	**Hydrogeologic Units**	**Hydrogeologic Strata**	**Monitoring Wells per Unit**
7	1	Overburden	9
Overburden Groundwater Elevation Range			
Highest groundwater elevation: 446.15 feet AMSL (MW-3) Lowest groundwater elevation: 445.56 feet AMSL (MW-9)			
Inferred Overburden Groundwater Flow Direction			
North			

3.2.2 Groundwater Sampling

TRC collected groundwater samples from 7 of the 9 monitoring wells in the monitoring well network utilizing standard low-flow sampling techniques from August 27 through August 28, 2020. A groundwater sample was not collected from MW-4 since it could not be located and MW-6 as it was dry at the time of gauging. Groundwater sampling logs can be found in **Appendix D**. All 7 groundwater samples, in addition to standard QA/QC samples collected at the frequencies specified in TRC's April 2011 Generic QAPP, were submitted to Eurofins/TestAmerica Laboratories for analysis. Additionally, the six wells (MW-1, MW-3, MW-5, MW-7, MW-8, and MW-9) were selected for emerging contaminant sampling and were submitted for analysis using USEPA Method 537 Modified for PFAS and USEPA Method 8270 SIM for 1,4-Dioxane.

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

Summary of Groundwater Monitoring Well Details and Sampling Activities August 2020.

Well ID	Monitoring Well Details				August 2020 Groundwater Sampling Event		
	Northing*	Easting*	Screen Zone (ft. bgs)	Material Screened	DTW (ft. bgs)	SMP Analytes	Notes
MW-1	867644.8	742154.6	Unknown	Overburden	12.89	VOCs, Metals	PFAS, 1,4-Dioxane collected
MW-2	867680.0	742263.4	Unknown	Overburden	12.49	VOCs, Metals	
MW-3	867611.8	742336.7	12.30 – 22.30	Overburden	13.65	VOCs, Metals	PFAS, 1,4-Dioxane collected
MW-4	867487.1	742285.9	12.10 – 22.10	Overburden	--	Not Sampled	Not located
MW-5	867589.6	742226.2	11.10 – 21.10	Overburden	13.28	VOCs, Metals	PFAS, 1,4-Dioxane collected
MW-6	867788.1	742267.9	Unknown	Overburden	--	Not Sampled	Well dry
MW-7	867619.1	742369.8	Unknown	Overburden	12.61	VOCs, Metals	PFAS, 1,4-Dioxane collected
MW-8	867967.8	742312.4	Unknown	Overburden	9.40	VOCs, Metals	PFAS, 1,4-Dioxane collected
MW-9	868158.4	742078.1	Unknown	Overburden	7.51	VOCs, Metals	PFAS, 1,4-Dioxane collected

Notes:
* NAD 83 - New York State Plane Central in Feet.

Additional construction details are in included on **Table 1**.

3.2.3 Groundwater Analytical Results

Groundwater analytical data for VOCs, TAL metals, and emerging contaminants can be found in **Table 2** through **Table 4**, respectively. The DUSRs can be found in **Appendix E**. Detected compounds exceeding their respective NYSDEC Class GA Values for each well are illustrated on **Figure 5**. A summary of the August 2020 groundwater analytical results is provided below:

Summary of Groundwater Analytical Results – VOCs and Metals August 2020				
Constituent	**SCG**	**Concentration Range (µg/L)**	**Location with Highest Detection**	**Frequency Exceeding SCG**
VOCs				
Tetrachloroethene	5	ND – 27.0	MW-2	3/7
Metals				
Chromium	50	ND – 5,400	MW-9	3/7
Iron	300	ND – 28,700	MW-9	4/7
Manganese	300	ND – 810	MW-9	2/7
Nickel	100	ND - 720	MW-9	2/7
Sodium	20,000	70,500 – 111,000	MW-7	7/7

Additionally, a summary of the results for the groundwater samples from monitoring wells MW-1, MW-3 MW-5, MW-7, MW-8 and MW-9 that were analyzed for emerging contaminants are presented below:

Summary of Groundwater Analytical Results - Emerging Contaminants August 2020				
Constituent	**SCG***	**Concentration Range (ηg/L)**	**Location with Highest Detection**	**Frequency Exceeding SCG**
PFAS				
No Results above Recommended Guidance Values				
1,4-Dioxane				
Constituent	**SCG****	**Concentration Range (µg/L)**	**Location with Highest Detection**	**Frequency Exceeding SCG**
No Results above Recommended Guidance Values				

Notes:
* - Recommended Guidance Values from the Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs, October 2020.
** - New York State Drinking Water Quality Council recommended maximum contaminant levels to the New York State Health Commissioner, December 2018.

4.0 Cost Summary

The total estimated cost of the site management activities for 2020 (January 1, 2020 through December 31, 2020) is approximately $30,334.00. Site management activities included project management/administration, site inspection, sampling of 7 of 9 monitoring wells. Analysis of 6 samples for TCL VOCs, TAL metals and mercury, 1,4-dioxane and PFAS, and 1 sample for TCL VOCs, TAL metals and mercury, and preparation of a PRR. The total includes engineering and subcontractor costs, as well as expenses associated with the project. It should be noted that the total does not include costs incurred by NYSDEC for project support. A summary of the 2020 site management costs is presented below:

Summary of Site Management Costs January 1, 2020 through December 31, 2020		
Cost Item	**Amount Expended (January 1, 2020 through December 31, 2020)**	**Percent of Total Cost**
Engineering Support		
TRC	$25,674.00	85%
Subcontractors		
Eurofins/TestAmerica	$3,376.00	11%
Expenses		
TRC	$1,284.00	4%
Total Cost	**$30,334.00**	----

The following provides a review of each cost item:

- Engineering support includes labor costs associated with project management (e.g., WA Package preparation, monthly invoicing, project scheduling and coordination, etc.), site inspections, groundwater sampling, and reporting (i.e., site inspection report, DUSR, EDDs and PRR).
- Subcontractors include analytical laboratory costs associated with the groundwater sampling event.
- Expense costs include travel, equipment, and supplies in support of the site inspection, groundwater sampling event, and routine site maintenance activities.

5.0 Conclusions and Recommendations

5.1 Conclusions

- Based on the groundwater elevations measured during the August 2020 sampling event, groundwater flow in the overburden appears to be to the north of the Site. This observation is consistent with historical reporting.
- The metals chromium, Iron, Manganese, Nickel, and Sodium were detected at concentrations above their respective Class GA Values in several monitoring wells. While these metals are likely not indicative of Site contaminant migration and are typically regulated for aesthetic purposes such as odor, taste, and clarity in drinking water, they may be indicative of the overall geochemical quality of the groundwater at the Site.
- Site COCs, including CVOCs were detected at concentrations exceeding their respective Class GA Values in groundwater samples collected from the Site. These exceedances, primarily PCE, are located in monitoring wells MW-02, MW-03, and MW-09. These wells are located hydraulically downgradient of the Site indicating that Site-related groundwater contamination migrated off site. However, the concentrations are similar to the concentrations historically observed in these wells indicating the plume is likely stable.
- Historical reporting indicates that downward vertical migration is likely inhibited by the finer-grained silty clay underlying the upper, coarse, gravely loam typically encountered around 20 ft bgs.
- PFAS compounds and 1,4-dioxane were not detected at concentrations exceeding their respective recommended guidance values in any wells that were sampled.
- Site and groundwater use were consistent with the restrictions set forth in the ROD, the January 2007 SMP and 2012 EE. Groundwater monitoring activities were completed in August 2020 for the 2020 certification period. A site inspection and an inspection report were also completed. The ICs operated as intended during this reporting period.
- The remedy continued to be protective of human health and the environment during this reporting period.

5.2 Recommendations

- Annual site inspections should be established to verify the ICs and ECs are in-place and effective and to observe any future development of the Site. One site inspection report should also be completed following the inspection event. Severe weather event inspections (and associated reports) should be completed as needed.
- A routine Certification Period should be established for the Site. A five-year Certification Period with a PRR frequency of one report five years is recommended. The Certification Period should be calendar year beginning January 1st to calendar year ending December 31st, with the next PRR covering the reporting period beginning January 1, 2021 and ending December 31, 2026. At the discretion of NYSDEC, a SMR would not be required when a PRR is due the same year.
- Water level measurements should continue to be collected at the 9 monitoring wells during inspection and groundwater monitoring events.

- The January 2007 SMP should be revised to reflect the above changes/modifications, if the changes are acceptable to the NYSDEC.

6.0 Certification of Engineering and Institutional Controls

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

- The institutional and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by DER;
- Nothing has occurred that would impair the ability of such control to protect public health and the environment; and,
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control.

TRC Engineers, Inc.

Prepared By: 

Nathan T. Kranes, P.G

Project Manager

Reviewed By: 

Jeffrey W. LaRock, P.G.

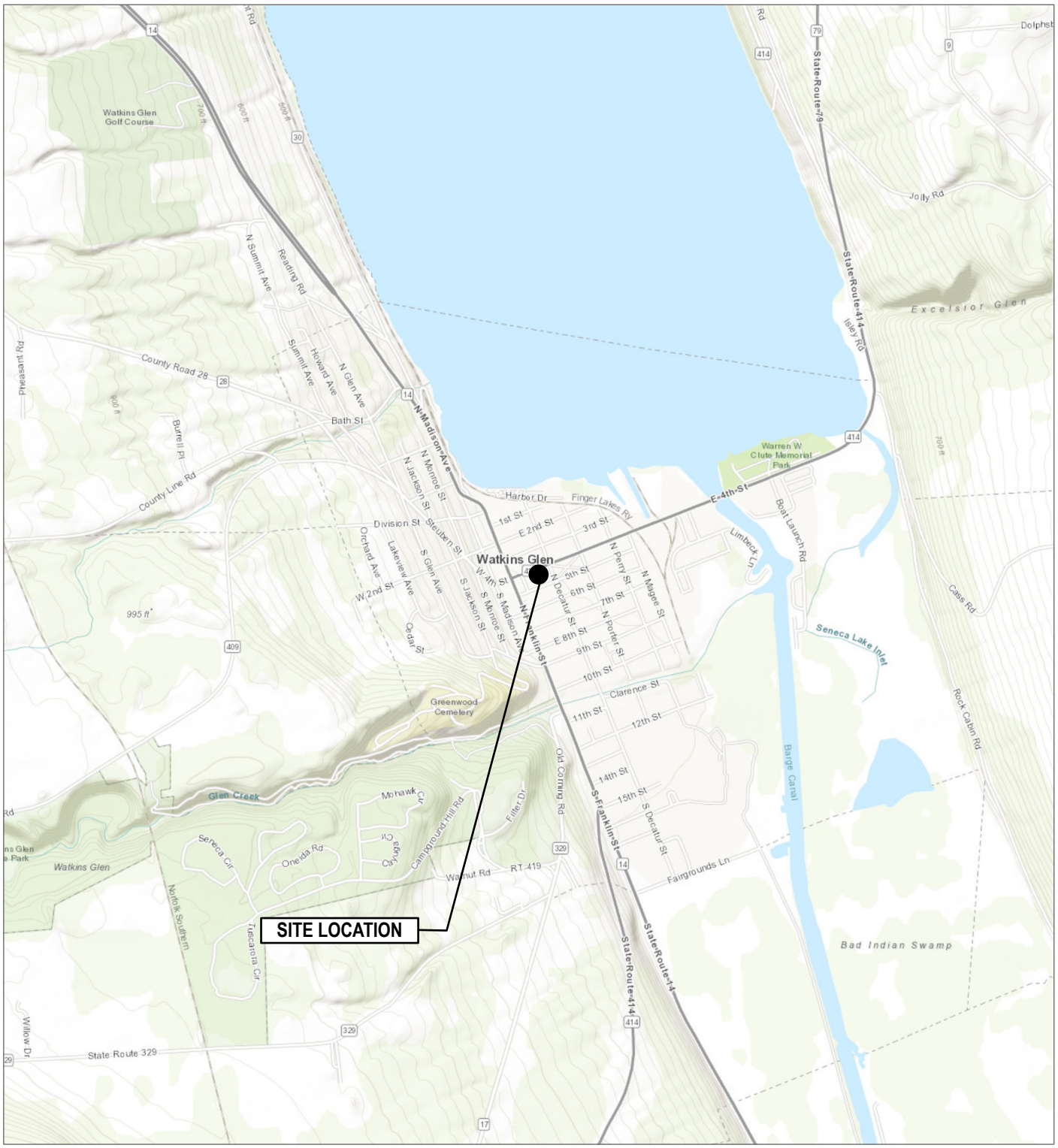
Senior Technical Reviewer

7.0 Future Site Activities

Based on the recommendations in Section 5.0, the following site management activities will be completed during the next PRR reporting period (January 2021 to December 2026):

- Site Inspections – Annual (next scheduled: Q3 2021)
- Severe Weather Event Inspection – As needed
- Groundwater – Every 5 years (next scheduled: Q3 2025)
- PRR – Every 5 years (next scheduled: Q1 2026)

FIGURES



LEGEND

● SITE LOCATION

BASE MAP: USGS TOPOGRAPHIC IMAGERY
DATA SOURCES: TRC

N

0 1,000 2,000

FEET

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

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SCIORE'S DRY CLEANERS - SITE NO. 849003
129-135 EAST 4TH STREET
WATKINS GLEN, NEW YORK

TITLE:

SITE LOCATION MAP

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 21
CHECKED BY:	C. SEROWIK		
APPROVED BY:	N. KRANES		**FIGURE 1**
DATE:	JUNE 2021		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

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

- MONITORING WELL
- TAX PARCEL BOUNDARY
- SSDS SUB SLAB DEPRESSURIZATION SYSTEM

N

1:1,200
1" = 100'

BASE MAP: GOOGLE SATELLITE 2020
DATA SOURCES: TRC

0 100 200 FEET

PROJECT: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SCIORE'S DRY CLEANERS - SITE NO. 849003 129-135 EAST 4TH STREET WATKINS GLEN, NEW YORK			
TITLE: SITE LAYOUT MAP			
DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 21
CHECKED BY:	C. SEROWIK	FIGURE 2	
APPROVED BY:	N. KRANES		
DATE:	JUNE 2021		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

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

- MONITORING WELL
- TAX PARCEL BOUNDARY
- INFERRED GROUNDWATER FLOW DIRECTION
- GROUNDWATER ELEVATION CONTOUR (0.25' INTERVALS)

NOTES:

Potentiometric surface elevations and groundwater samples were collected on August 27 and 28, 2020.

N

1:1,200
1" = 100'

BASE MAP: GOOGLE SATELLITE
DATA SOURCES: TRC

0 100 200 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SCIORE'S DRY CLEANERS - SITE NO. 849003
129-135 EAST 4TH STREET
WATKINS GLEN, NEW YORK

TITLE:
GROUNDWATER SURFACE ELEVATIONS AND FLOW MAP - AUGUST 2020

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 21
CHECKED BY:	C. SEROWIK	FIGURE 3	
APPROVED BY:	N. KRANES		
DATE:	JUNE 2021		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

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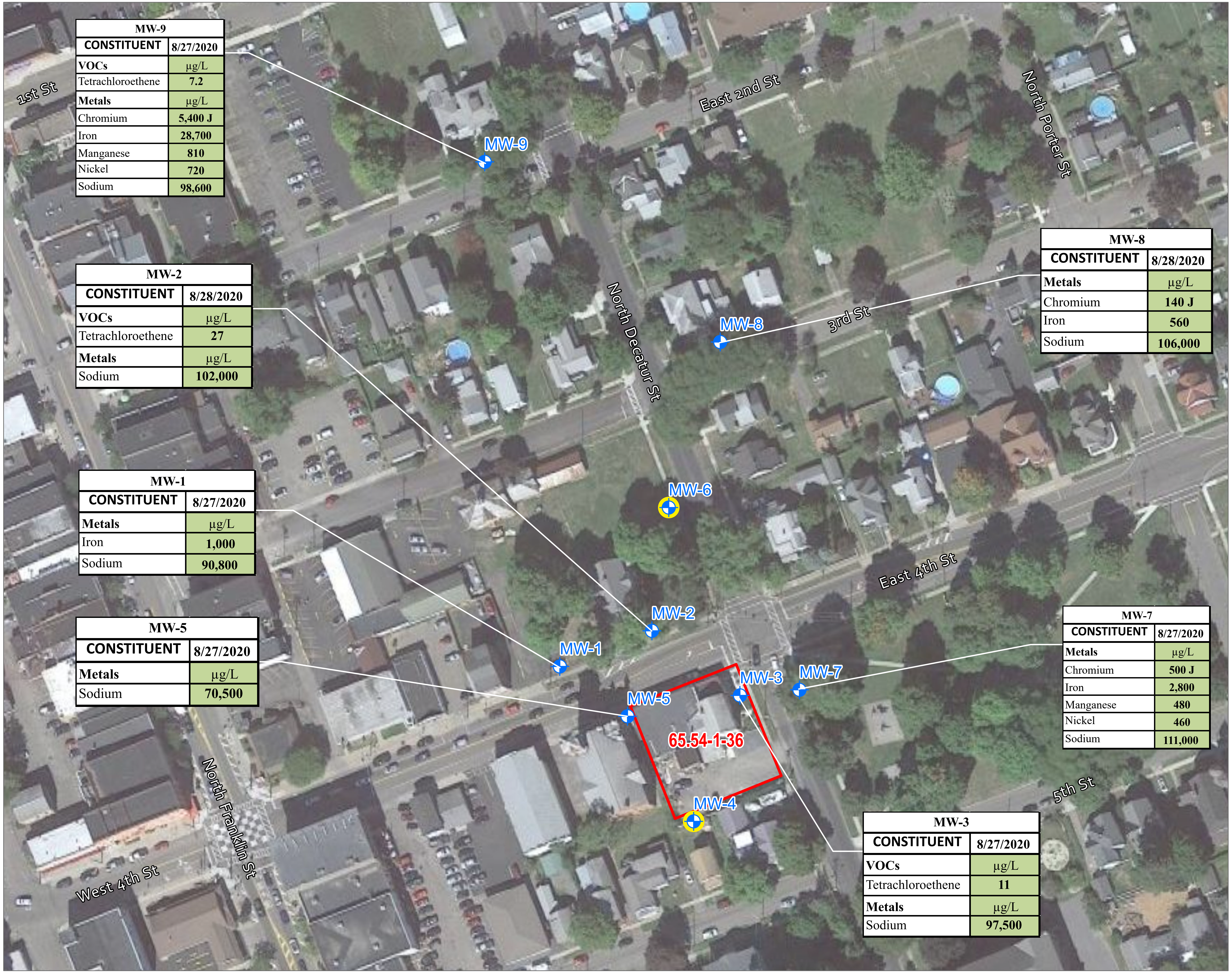

MW-9	
CONSTITUENT	8/27/2020
VOCs	µg/L
Tetrachloroethene	**7.2**
Metals	µg/L
Chromium	**5,400 J**
Iron	**28,700**
Manganese	**810**
Nickel	**720**
Sodium	**98,600**

MW-2	
CONSTITUENT	8/28/2020
VOCs	µg/L
Tetrachloroethene	**27**
Metals	µg/L
Sodium	**102,000**

MW-1	
CONSTITUENT	8/27/2020
Metals	µg/L
Iron	**1,000**
Sodium	**90,800**

MW-5	
CONSTITUENT	8/27/2020
Metals	µg/L
Sodium	**70,500**

MW-8	
CONSTITUENT	8/28/2020
Metals	µg/L
Chromium	**140 J**
Iron	**560**
Sodium	**106,000**

MW-7	
CONSTITUENT	8/27/2020
Metals	µg/L
Chromium	**500 J**
Iron	**2,800**
Manganese	**480**
Nickel	**460**
Sodium	**111,000**

MW-3	
CONSTITUENT	8/27/2020
VOCs	µg/L
Tetrachloroethene	**11**
Metals	µg/L
Sodium	**97,500**

LEGEND

- MONITORING WELL
- TAX PARCEL BOUNDARY
- LOCATION NOT SAMPLED

CONSTITUENT	Class GA Values*
VOCs	**µg/L**
Tetrachloroethene	5
Metals	**µg/L**
Chromium	50
Iron	300
Manganese	300
Nickel	100
Sodium	20,000

NOTES:

ug/L - micrograms per liter
J - Estimated value
Values shown in bold and shaded type exceed the listed Guidance value.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.

N

1:1,200
1" = 100'

BASE MAP: GOOGLE SATELLITE 2020
DATA SOURCES: TRC

0 100 200 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SCIORE'S DRY CLEANERS - SITE NO. 849003
129-135 EAST 4TH STREET
WATKINS GLEN, NEW YORK

TITLE: SUMMARY OF DETECTED COMPOUNDS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS/GUIDANCE - AUGUST 2020

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 21
CHECKED BY:	C. SEROWIK		FIGURE 4
APPROVED BY:	N. KRANES		
DATE:	JUNE 2021		

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10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

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

- MONITORING WELL
- TAX PARCEL BOUNDARY
- > 25 ug/L TETRACHLOROETHENE
- 5 - 25 ug/L TETRACHLOROETHENE
- < 5 ug/L TETRACHLOROETHENE

NOTES:

ND - No Tetrachloroethene detected above specified quantitation limits.
NS - Not Sampled

N

1:1,200
1" = 100'

BASE MAP: GOOGLE SATELLITE 2020
DATA SOURCES: TRC

0 100 200 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SCIORE'S DRY CLEANERS - SITE NO. 849003
129-135 EAST 4TH STREET
WATKINS GLEN, NEW YORK

TITLE:
TOTAL CHLORINATED VOLATILE ORGANIC CARBON (CVOCS) IN GROUNDWATER - AUGUST 2020

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 21
CHECKED BY:	C. SEROWIK	FIGURE 5	
APPROVED BY:	N. KRANES		
DATE:	JUNE 2021		

TRC

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Clifton Park, NY 12065
Phone: 518-348-1190

TABLES

Table 4
New York State Department of Environmental Conservation
Former Sciore's Dry Cleaners - Site No. 849003
Watkins Glen, New York
Summary of Emerging Contaminants in Groundwater Samples - August 2020

		Sample Location:	MW-1		MW-2		MW-3		MW-5		MW-7		MW-8		MW-9			
		Sample Name:	SCD-MW-1		SCD-MW-2		SCD-MW-3		SCD-MW-5		SCD-MW-7		SCD-MW-8		SCD-MW-9			
		Laboratory Sample Identification:	480-174454-4		480-174454-7		480-174454-2		480-174454-3		480-174454-1		480-174454-6		480-174454-5			
		Sample Date:	08/27/2020		08/28/2020		08/27/2020		08/27/2020		08/27/2020		08/28/2020		08/27/2020			
Semivolatile Organic Compounds (SVOCs)	Unit	Class GA Value*	Results		Results		Results		Results		Results		Results		Results			
1,4-Dioxane	ug/L	1	0.20	U	NA		0.20	U	0.20	U	0.20	U	0.20	U	0.20	U		
Per- and Poly-Fluorinated Alkyl substances (PFAS)	Unit	Class GA Value**	Results		Results		Results		Results		Results		Results		Results			
Perfluorobutanoic acid (PFBA)	ng/L	100	**1.0**	**J**	NA		**1.8**		**3.0**		**1.6**	**J**	**1.0**	**J**	**2.2**			
Perfluoropentanoic acid (PFPeA)	ng/L	100	1.7	U	NA		**1.1**	**J**	**5.9**		**1.7**	**J**	**0.67**	**J**	**0.79**	**J**		
Perfluorohexanoic acid (PFHxA)	ng/L	100	1.7	U	NA		**1.2**	**J**	**3.3**		**1.9**		1.8	U	1.8	U		
Perfluoroheptanoic acid (PFHpA)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	**0.84**	**J**	1.8	U	1.8	U		
Perfluorooctanoic acid (PFOA)	ng/L	10	1.7	U	NA		**1.6**	**J**	**1.4**	**J**	**2.6**		1.8	U	**1.2**	**J**		
Perfluorononanoic acid (PFNA)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	1.8	U	1.8	U	1.8	U		
Perfluorodecanoic acid (PFDA)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	1.8	U	1.8	U	1.8	U		
Perfluoroundecanoic acid (PFUnA)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	1.8	U	1.8	U	1.8	U		
Perfluorododecanoic acid (PFDoA)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	1.8	U	1.8	U	1.8	U		
Perfluorotridecanoic acid (PFTriA)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	1.8	U	1.8	U	1.8	U		
Perfluorotetradecanoic acid (PFTeA)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	1.8	U	1.8	U	1.8	U		
Perfluorobutanesulfonic acid (PFBS)	ng/L	100	**3.2**		NA		**3.2**		**2.8**		**2.7**		**2.0**		**2.3**			
Perfluorohexanesulfonic acid (PFHxS)	ng/L	100	**1.3**	**J**	NA		**2.1**		**1.7**		**1.4**	**J**	**0.85**	**J**	**1.3**	**J**		
Perfluoroheptanesulfonic acid (PFHpS)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	1.8	U	1.8	U	1.8	U		
Perfluorooctanesulfonic acid (PFOS)	ng/L	10	**1.4**	**J**	NA		**3.2**		**2.9**		**4.6**		**0.93**	**J**	**2.5**			
Perfluorodecanesulfonic acid (PFDS)	ng/L	100	1.7	U	NA		1.8	U	1.7	U	1.8	U	1.8	U	1.8	U		
Perfluorooctane Sulfonamide (PFOSA)	ng/L	100	8.7	U	NA		8.9	U	8.6	U	9.0	U	8.8	U	9.0	U		
2-(N-methyl perfluorooctanesulfonamido) acetic acid (N-MeFOSAA)	ng/L	100	17	U	NA		18	U	17	U	18	U	18	U	18	U		
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine (N-EtFOSAA)	ng/L	100	17	U	NA		18	U	17	U	18	U	18	U	18	U		
6:2 Perfluorooctane Sulfonate (6:2 FTS)	ng/L	100	17	U	NA		18	U	17	U	18	U	18	U	18	U		
8:2 Perfluorodecane Sulfonate (8:2 FTS)	ng/L	100	17	U	NA		18	U	17	U	18	U	18	U	18	U		
Total PFAS	ng/L	500	***6.90***	***J***	*NA*		***14.2***	***J***	***21.0***	***J***	***17.3***	***J***	***5.45***	***J***	***10.3***	***J***		

Notes:

ng/L - nanograms per liter.

ug/L - micrograms per liter.

J - Estimated value.

NA - Sample not analyzed for the listed analyte

U - Analyte was not detected at specified quantitation limit.

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

Values in bold and shaded type exceed the listed NYSDEC standards.

* - New York State Drinking Water Standard for Public Water Systems.

** - Guidelines for Sampling and Analysis of PFAS, NYSDEC Part 375 Remedial Programs, October 2020.

Table 3
New York State Department of Environmental Conservation
Former Sciore's Dry Cleaners - Site No. 849003
Watkins Glen, New York
Summary of Metals in Groundwater Samples - August 2020

		Sample Location:	MW-1		MW-2		MW-3		MW-5		MW-7		MW-8		MW-9					
		Sample Name:	SCD-MW-1		SCD-MW-2		SCD-MW-3		SCD-MW-5		SCD-MW-7		SCD-MW-8		SCD-MW-9					
		Laboratory Sample Identification:	480-174454-4		480-174454-7		480-174454-2		480-174454-3		480-174454-1		480-174454-6		480-174454-5					
		Sample Date:	08/27/2020		08/28/2020		08/27/2020		08/27/2020		08/27/2020		08/28/2020		08/27/2020					
Metals, total	Unit	Class GA Value*	Results		Results		Results		Results		Results		Results		Results					
Aluminum	ug/L	NC	**790**		**120**	**J**	200	U	**200**		**60**	**J**	200	U	**460**					
Antimony	ug/L	3	20	U	20	U	20	U	20	U	20	U	20	U	20	U				
Arsenic	ug/L	25	15	U	15	U	15	U	15	U	15	U	15	U	**7.4**	**J**				
Barium	ug/L	1,000	**68**		**65**		**70**		**50**		**67**		**55**		**97**					
Beryllium	ug/L	3	2	U	2	U	2	U	2	U	2	U	2	U	2	U				
Cadmium	ug/L	5	2	U	2	U	2	U	2	U	2	U	2	U	2	U				
Calcium	ug/L	NC	**79,300**		**85,700**		**87,900**		**59,500**		**87,800**		**83,100**		**82,800**					
Chromium	ug/L	50	**1.5**	**J**	4	U	4	U	4	U	**500**	**J**	**140**	**J**	**5,400**	**J**				
Cobalt	ug/L	NC	4	U	4	U	4	U	4	U	**22**		**0.83**	**J**	**57**					
Copper	ug/L	200	**4.2**	**J**	10	U	10	U	10	U	**11**		**3.6**	**J**	**160**					
Iron	ug/L	300	**1,000**		**120**		50	U	**220**		**2,800**		**560**		**28,700**					
Lead	ug/L	25	10	U	10	U	10	U	10	U	10	U	10	U	10	U				
Magnesium	ug/L	35,000	**18,800**		**20,800**		**21,500**		**13,800**		**21,100**		**20,100**		**19,200**					
Manganese	ug/L	300	**140**		**17**		3	U	**270**		**480**		**8.6**		**810**					
Mercury	ug/L	0.7	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
Nickel	ug/L	100	**1.5**	**J**	10	U	10	U	10	U	**460**		**33**		**720**					
Potassium	ug/L	NC	**5,700**		**4,900**		**5,200**		**5,700**		**3,400**		**3,600**		**4,400**					
Selenium	ug/L	10	25	U	25	U	25	U	25	U	25	U	25	U	25	U				
Silver	ug/L	50	6	U	6	U	6	U	6	U	6	U	6	U	6	U				
Sodium	ug/L	20,000	**90,800**		**102,000**		**97,500**		**70,500**		**111,000**		**106,000**		**98,600**					
Thallium	ug/L	0.5	20	U	20	U	20	U	20	U	20	U	20	U	20	U				
Vanadium	ug/L	NC	5	U	5	U	5	U	5	U	5	U	5	U	**11**					
Zinc	ug/L	2,000	**4.8**	**J**	10	U	10	U	10	U	10	U	10	U	**3.2**	**J**				

Notes:

ug/L - micrograms per liter.

J - Estimated value.

NC - No NYSDEC Class GA Value exists for this analyte.

U - Analyte was not detected at specified quantitation limit.

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

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

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

Table 2
New York State Department of Environmental Conservation
Former Sciore's Dry Cleaners - Site No. 849003
Watkins Glen, New York
Summary of VOCs in Groundwater Samples - August 2020

			Sample Location:	MW-1	MW-2	MW-3	MW-5	MW-7	MW-8	MW-9
			Sample Name:	SCD-MW-1	SCD-MW-2	SCD-MW-3	SCD-MW-5	SCD-MW-7	SCD-MW-8	SCD-MW-9
			Laboratory Sample Identification:	480-174454-4	480-174454-7	480-174454-2	480-174454-3	480-174454-1	480-174454-6	480-174454-5
			Sample Date:	08/27/2020	08/28/2020	08/27/2020	08/27/2020	08/27/2020	08/28/2020	08/27/2020
Volatile Organic Carbons (VOCs)	Unit	Class GA Value*		Results	Results	Results	Results	Results	Results	Results
1,1,1-Trichloroethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro- 1,2,2-trifluoroethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	ug/L	0.04		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	3		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	0.6		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	3		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	3		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	ug/L	50		10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	50		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	ug/L	NC		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	ug/L	50		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	ug/L	1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	50		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	50		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	60		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	ug/L	7		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	0.4(a)		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	NC		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	50		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.0006		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	ug/L	NC		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl tert-butyl ether	ug/L	10		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	ug/L	NC		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	5		1.0 U	**27**	**11**	**1.6**	1.0 U	**1.2**	**7.2**
Toluene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	0.4(a)		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	2		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	ug/L	5		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Notes:

ug/L - micrograms per liter.

U - Analyte was not detected at specified quantitation limit.

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

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

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

(a) - criteria applicable to the sum of the cis and trans isomers.

Table 1
New York State Department Of Environmental Conservation
Sciore's Dry Cleaners Site - Site No. 849003
Watkins Glen, New York
Summary of Depth to Water Measurements and Groundwater Elevations

Well ID	Screened Formation	TOR Elevation (feet AMSL)	Gauge Date	Depth to Water (feet below TOR)	Depth to Bottom (feet below TOR)	Groundwater Elev. (feet AMSL)
MW-1	Overburden	458.86	8/26/2020	12.89	19.16	445.97
MW-2	Overburden	458.47	8/26/2020	12.49	15.66	445.98
MW-3	Overburden	459.80	8/26/2020	13.65	22.13	446.15
MW-4	Overburden	460.61	8/26/2020	N/A	N/A	N/A
MW-5	Overburden	459.26	8/26/2020	13.28	21.04	445.98
MW-6	Overburden	457.19	8/26/2020	Dry	10.75	Dry
MW-7	Overburden	458.69	8/26/2020	12.61	18.73	446.08
MW-8	Overburden	455.23	8/26/2020	9.40	17.94	445.83
MW-9	Overburden	453.07	8/26/2020	7.51	16.33	445.56

Notes

Elev. : Elevation
AMSL : Above Mean Sea Level
ID : Identification
TOR : Top of Riser
N/A : Not located

APPENDIX A

CUSTODIAL RECORD

PERTINENT SITE DOCUMENTS

FORMER SCIORE'S DRY CLEANERS (849003)

Harding Lawson Associates, *Final Preliminary Site Assessment Report for Tobe's Breakfast House site,* March 2002

NYSDEC, *Referral Memorandum for a Remedial Investigation / Feasibility Study and Interim Remedial Measures for the Tobe's Breakfast House site,* May 2003

NYSDEC, *Remedial Investigation / Feasibility Study Work Plan for the Tobe's Breakfast House site,* February 2004

Environmental Resources Management, *Project Management Work Plan for the Tobe's Breakfast House site,* February 2004

Environmental Resources Management, *Citizens Participation Plan for the Former Sciore's Dry Cleaners site,* May 2004

NYSDEC, *Remedial Investigation / Feasibility Study Fact Sheet for the Forer Sciore's Dry Cleaners site,* June 2004

NYSDEC, *Standby Contractor Authorization Form to conduct a Interim Remedial Measure for the Former Sciore's Dry Cleaners site*, August 2005

NYSDEC, *Proposed Remedial Action Plan for the Former Sciore's Dry Cleaners site,* March 2006

Environmental Resources Management, *Final Remedial Investigation Report (Volume 1 of 2) for the Former Sciore's Dry Cleaners site,* March 2006

Environmental Resources Management, *Final Remedial Investigation Report (Volume 2 of 2) for the Former Sciore's Dry Cleaners site,* March 2006

NYSDEC, *Proposed Remedial Action Plan Fact Sheet for the Former Sciore's Dry Cleaners site,* March 2006

Environmental Resource Management, *Site Management Plan*, January 2007

New York State Department of Environmental Conservation
Sciore's Dry Cleaners Site - Site No. 849003
Town of Watkins Glen, New York
Monitoring Well Construction Summary

Monitoring Well	Installation Date	Well Diameter (inches)	Well Material	Total Depth (feet bgs)	Screened Formation	Screen			Elevation (feet AMSL)				Location	
						Top (feet bgs)	Bottom (feet bgs)	Length (feet)	Riser	Ground Surface	Screen		Northing*	Easting*
											Top	Bottom		
MW-1	N/A	1	PVC	N/A	Overburden	N/A	N/A	N/A	458.86	459.00	N/A	N/A	867644.8	742154.6
MW-2	N/A	1	PVC	N/A	Overburden	N/A	N/A	N/A	458.47	458.60	N/A	N/A	867680.0	742263.4
MW-3	10/18/2001	1	PVC	23.0	Overburden	12.30	22.30	10.00	459.80	459.71	447.41	437.41	867611.8	742336.7
MW-4	10/19/2001	1	PVC	28.0	Overburden	12.10	22.10	10.00	460.61	460.70	448.60	438.60	867487.1	742285.9
MW-5	11/1/2001	1	PVC	21.4	Overburden	11.10	21.10	10.00	459.26	459.40	448.30	438.30	867589.6	742226.2
MW-6	N/A	2	PVC	N/A	Overburden	N/A	N/A	N/A	457.19	457.40	N/A	N/A	867788.1	742267.9
MW-7	N/A	2	PVC	N/A	Overburden	N/A	N/A	N/A	458.69	458.92	N/A	N/A	867619.1	742369.8
MW-8	N/A	2	PVC	N/A	Overburden	N/A	N/A	N/A	455.23	455.50	N/A	N/A	867967.8	742312.4
MW-9	N/A	2	PVC	N/A	Overburden	N/A	N/A	N/A	453.07	453.40	N/A	N/A	868158.4	742078.1

Notes

AMSL : above mean sea level

feet bgs : feet below ground surface

PVC : polyvinyl chloride

N/A : not avaliable

* Coordinate System - NAD83 New York State Plane Central Feet

APPENDIX B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-720
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

3/4/2020

Gary R. Savard, Jr.
507 N Franklin Street
Watkins Glen, NY 14891

Re: Property Owner Survey: Site Management Periodic Review
Parcel: 65.54-1-36
Site Name: Sciorie's Dry Cleaners
Site No.: 849003
Site Address: 129 - 135 East 4th Street
Watkins Glen, NY 14891-

Dear Property Owner:

This letter and attached survey have been mailed to you because you are the listed property owner (or their contact) on which a State Superfund site exists that is currently in the Site Management (SM) phase of remediation. This letter is meant to serve as an informative reminder to you and any tenants, occupants or users of the property that sites in active Site Management must undergo a periodic progress review to ensure that the selected remedy continues to be protective. This process and resulting report, referred to as the Periodic Review Report (PRR), documents the implementation of site specific SM requirements. Section 6.3(b) of DER-10 Technical Guidance for Site Investigation and Remediation (see "IV. Reference Documents" in the attached) provides guidance regarding the information that is included in a typical PRR. Additionally, the site referenced may be comprised of multiple tax parcels with different owners. This letter only pertains to the portion of the site that exists on property which is under your direct ownership. To assist the NYSDEC in its periodic review, please respond, sign and date the attached survey (Enclosure 1 "Institutional and Engineering Controls - Property Owner Survey") by March 31, 2020.

Site Management is defined in regulation at 6 NYCRR 375-1.2(at), and in Chapter 6 of DER-10 (see also "III. Helpful Definitions" in the attached). SM may be governed by multiple individual documents (e.g., an Operation, Maintenance, and Monitoring Plan; a Soil Management Plan; etc.) or under the umbrella of one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

Enclosure 2
Survey Instructions

I. Verification of Site Details (Box 1 and Box 2):
Answer the YES/NO questions in the Verification of Site Details Section. The Property Owner may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional / Engineering Controls (Boxes 3, 4, and 5)
Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Property Owner should petition the Department separately to request approval to remove the control.

In Box 5, complete the certification for all components, as applicable, by checking the corresponding YES/NO checkbox.

If you cannot respond "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why a "YES" response could not be rendered. Note that this survey form should be submitted even if an IC or EC cannot be certified at this time.

III. Helpful Definitions
"Change of use" means the erection of any structure on a site, the paving of a site for use as a roadway or parking lot, the creation of a park or other recreational facility on a site, any activity that is likely to disrupt or expose contamination or increase direct human or environmental exposure, or any other conduct that will or may tend to prevent or significantly interfere with a proposed, ongoing, or completed remedial program.

"Site management" means the activities undertaken as the last phase of the remedial program at a site which continue after a certificate of completion is issued. Site management is conducted in accordance with a site management plan, which identifies and implements the institutional and engineering controls required for a site, as well as any necessary monitoring and/or operation and maintenance of the remedy.

IV. Reference Documents

DER-10	http://www.dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf
Part 375-2.2(a)	http://www.dec.ny.gov/regs/4373.html#15089

Enclosure 1
Institutional and Engineering Controls - Property Owner Survey

Site Details **Box 1**

Site No. **849003**

Site Name Sciorie's Dry Cleaners

Site Address: 129 - 135 East 4th Street Zip Code: 14891-
City/Town: Watkins Glen
County: Schuyler
Site Acreage: 0.3

Reporting Period: March 01, 2015 to March 01, 2020

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

Box 2

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

George D. Mahler Jr. (Forrethead Realty, LLC) 4-10-2020

Signature of Property Owner Date

APPENDIX C

DAILY INSPECTION REPORT

Report No.20200826 **(Site Name) –** Sciore's Dry Cleaners **NYSDEC Site No.** 849003 **Date:** 8/26/2020

NYSDEC
Division of Environmental Remediation

NYSDEC Contract No. D009812

Superintendent:

NYSDEC PM: **Brianna Scharf**

Consultant PM: **Nathan Kranes**

Consultant Site Inspectors:

Steve Johansson & Cait Serowik

Site Location: Watkins Glen, New York

Weather Conditions

General Description	Clear, Dry	AM	Clear, Dry	PM
Temperature	65°F	AM	81°F	PM
Wind	5mph E	AM	5mph E	PM

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

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

Health & Safety Comments

Summary of Work Performed	Arrived at site:	**10:00**	Departed Site:	**16:00**

TRC Engineers, Inc. (TRC) conducted an annual site inspection and groundwater gauging/sampling event on Wednesday, August 26, 2020 at the Sciore's Dry Cleaners Site, located on East 4th Street in the town of Watkins Glen, New York. The site inspection was performed to document the status of the monitoring wells and overall site conditions. The inspection included walking the perimeter of the site, as well as observing the on-site and off-site monitoring wells. Following the inspection, the wells were gauged and were all found to be in good condition except for MW-4, which could not be located. Additionally, MW-6 was unable to be sampled, as the well was dry when gauged. TRC collected groundwater samples from the remaining 7 site monitoring wells. Six of the seven groundwater samples were submitted for analysis using EPA method 537 modified for PFAS, Standard list of 21 and EPA method 8270 SIM for 1, 4-dioxane. All wells were submitted for analysis using EPA method 6010C for Metals and EPA method 8260C for TCL VOCs + 10 TICs.

Equipment/Material Tracking
If any box below is checked "Yes", provide explanation under "Material Tracking Comments".

Were there any vehicles which did not display proper D.O.T numbers and placards?	*Yes	No	NA X
Were there any vehicles which were not tarped?	* Yes	No	NA X
Were there any vehicles which were not decontaminated prior to exiting the work site?	* Yes	No	NA X

Personnel and Equipment

Individual	Company	Trade	Total Hours
Steven Johansson	TRC	Project Engineer	6
Cait Serowik	TRC	Project Geologist	6

Equipment Description	Contractor/Vendor	Quantity	Used
PID	Pine Environmental	1	
Landfill Gas Meter	Pine Environmental	1	
Oil/Water Interface Probe	Pine Environmental	1	
YSI	Pine Environmental	1	
Peristaltic Pump	Pine Environmental	1	

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

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

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives

Name	Representing
NA	

Project Schedule Comments

Issues Pending

Interaction with Public, Property Owners, Media, etc.
The property owner met TRC on site.

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

Site Photographs (Descriptions Below)

Photo 1: View looking down onto MW-1.

Photo 2: View looking northwest towards the site.

Comments

Site Inspector(s): Cait Serowik / Steve Johansson	**Date: 8/26/2020**

DAILY HEALTH CHECKLIST

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

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes ☐	No ☒
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes ☐	No ☒
3. Has anyone at this location had contact with anyone known to have COVID-19 in the past 14 days?	Yes ☐	No ☒
4. Does anyone at this locaton have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes ☐	No ☒
5. Does the Department and its contractors have your permission to enter the property at this time?	Yes ☐	No ☒
If Yes to any of 1-4 above: • If it is not critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone or conduct service without entry. • If it is critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry.	Yes ☐	No ☐

Comments:

NUISANCE CHECKLIST

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

APPENDIX D

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Sciore's Dry Cleaners
PROJECT NUMBER	386554.0000.0000
SAMPLE ID	SDC-MW-1
SAMPLE TIME	14:20

LOCATION ID	MW-1
DATE	28-Aug
START TIME	13:40
END TIME	14:15
SITE NAME/NUMBER	
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	12.91 FT	**FINAL DTW (BMP)**	13.02 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	19.16 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	6.25 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.005 GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.256 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.340 GAL	**DRAWDOWN/ TOTAL PURGED**	0.002	**PRESSURE TO PUMP**	- PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1340	**BEGIN PURGING**									
1350		250	22.54	0.958	6.74	10.49	6.90	101	20.16	
1400		250	22.31	0.948	6.74	3.49	1.30	100	20.16	
1405		250	22.76	0.966	6.73	2.86	1.60	87	20.16	
1410		250	22.13	0.956	6.73	2.37	0.00	95	20.16	
1415		250	22.11	0.960	6.73	2.21	0.00	94	20.16	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**22.0**	**0.960**	**6.7**	**2.2**	**0.0**	**94**		

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

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Heron
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[X] PID	MiniRAE
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI Pro DSS
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[ ] TURB. METER	
[ ] WATTERA	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[X] PUMP	Geotech
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER	
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS	NO. TYPE

ANALYTICAL PARAMETERS

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

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 2.34

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

SKETCH/NOTES

One inch well, drawn down rate could not be measured.

Sampler Signature: Print Name: Cait Serowik

Checked By: Nate Kranes Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Sciore's Dry Cleaners
PROJECT NUMBER	386554.0000.0000
SAMPLE ID	SDC-MW-2
SAMPLE TIME	10:00

LOCATION ID	MW-2
DATE	28-Aug
START TIME	9:05
END TIME	15:05
SITE NAME/NUMBER	
PAGE	1 OF 1

WELL DIAMETER (INCHES) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	12.47 FT	**FINAL DTW (BMP)**	12.62 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	15.66 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	3.19 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.006 GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.131 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	5.2 GAL	**DRAWDOWN/ TOTAL PURGED**	0.001	**PRESSURE TO PUMP**	- PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
905	**BEGIN PURGING**									
915		250	17.09	1.09	6.78	4.50	70.8	120	16.66	
925		250	16.61	1.09	6.68	3.42	25.2	123	16.66	
930		250	16.62	1.09	6.66	2.95	9.9	130	16.66	
935		250	16.55	1.09	6.64	3.15	17.3	129	16.66	
940		250	16.57	1.08	6.66	2.61	4.4	130	16.66	
945		250	16.46	1,08	6.63	2.77	5.3	135	16.66	
950		250	16.49	1.08	6.66	2.69	3.7	134	16.66	

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

16.0	**1.080**	**6.7**	**2.7**	**3.7**	**134**	

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

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [X] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

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

EQUIPMENT USED
- [X] WL METER Heron
- [X] PID MiniRAE
- [X] WQ METER YSI Pro DSS
- [ ] TURB. METER
- [X] PUMP Geotech
- [ ] OTHER
- [ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

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

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 5.2

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

SKETCH/NOTES

One inch well, draw down rate could not be measured.

Sampler Signature: Print Name: Cait Serowik

Checked By: Nate Kranes Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Sciore's Dry Cleaners	**LOCATION ID**	**DATE** 27-Aug
PROJECT NUMBER	386554.0000.0000	**START TIME** 14:55	**END TIME** 16:40
SAMPLE ID SDC-MW-3	**SAMPLE TIME** 12:00	**SITE NAME/NUMBER**	**PAGE** 1 OF 1

WELL DIAMETER (INCHES) [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	7.21 FT	**FINAL DTW (BMP)**	7.72 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	16.5 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	9.29 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.021 GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.381 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	4.94 GAL	**DRAWDOWN/ TOTAL PURGED**	0.004	**PRESSURE TO PUMP**	- PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1455	**BEGIN PURGING**									
1505	7.52	200	12.3	0.073	4.94	0.81	12.00	242.9	16	
1510	7.62	200	10.8	0.065	4.87	1.09	9.50	254.6	16	
1515	7.72	200	10.3	0.059	4.82	2.00	20.20	267.8	16	
1520	7.72	200	10.4	0.055	4.79	2.42	19.50	274.1	16	
1525	7.72	200	11.1	0.059	4.78	2.60	21.30	284.6	16	
1530	7.72	200	111.2	0.061	4.80	2.57	24.80	286.9	16	
1535	7.72	200	10.2	0.069	4.93	2.50	31.70	290.6	16	
1540	7.72	200	10.3	0.075	4.97	2.44	10.00	292.6	16	
1545	7.72	200	9.9	0.084	5.10	2.21	8.10	293.1	16	
1550	7.72	200	9.5	0.094	5.16	2.01	8.90	293.7	16	
1555	7.72	200	10.3	0.109	5.28	1.81	8.20	292.1	16	
1600	7.72	200	10.6	0.120	5.34	1.72	5.10	289.8	16	
1605	7.72	200	10.9	0.134	5.44	1.59	5.30	287.6	16	
1610	7.72	200	11.1	0.145	5.50	1.53	5.80	285.4	16	
1615	7.72	200	10.9	0.155	5.55	1.43	6.90	283.9	16	
1620	7.72	200	9.9	0.164	5.59	1.34	9.20	282.6	16	
1625	7.72	200	10.3	0.169	5.61	1.26	10.40	282	16	
1630	7.72	200	10.5	0.171	5.62	1.25	10.80	281.8	16	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**11.0**	**0.171**	**5.6**	**1.3**	**10.8**	**280**		

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

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [X] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [X] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

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

EQUIPMENT USED
- [X] WL METER Heron
- [X] PID MiniRAE
- [X] WQ METER YSI Pro DSS
- [ ] TURB. METER
- [X] PUMP Geotech
- [ ] OTHER
- [ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

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

PURGE OBSERVATIONS

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

NUMBER OF GALLONS GENERATED: 4.94

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

SKETCH/NOTES

One inch well, draw down rate could not be measured.

Sampler Signature: Print Name: Caitlin Serowik

Checked By: Nate Kranes Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Sciore's Dry Cleaners
PROJECT NUMBER	386554.0000.0000
SAMPLE ID	SDC-MW-5
SAMPLE TIME	13:10

LOCATION ID	
DATE	27-Aug
START TIME	12:20
END TIME	13:10
SITE NAME/NUMBER	
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	13.27 FT	**FINAL DTW (BMP)**	13.54 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	21.04 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	7.77 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.044 GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.274 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.6 GAL	**DRAWDOWN/ TOTAL PURGED**	0.017	**PRESSURE TO PUMP**	- PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1220	**BEGIN PURGING**									
1230		200	24.09	0.679	6.83	9.88	72.60	100		
1240		200	20.02	0.740	6.67	7.72	32.70	110		
1245		200	18.49	0.759	6.63	6.99	22.40	112		
1250		200	19.34	0.752	6.61	6.21	15.41	116		
1255		200	18.84	0.757	6.55	6.58	7.40	120		
1300		200	18.54	0.757	6.48	6.50	8.00	124		
1305		200	18.08	0.767	6.47	6.42	9.80	128		
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**18.0**	**0.767**	**6.5**	**6.4**	**9.8**	**128**		

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

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Heron
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[X] PID	MiniRAE
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI Pro DSS
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[ ] TURB. METER	
[ ] WATTERA	[ ] HEXANE	[X] LDPE TUBING	[ ] OTHER	[X] PUMP	Geotech
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER	
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS	NO. TYPE

ANALYTICAL PARAMETERS

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

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 2.6

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

SKETCH/NOTES

Sampler Signature: Print Name: Caitlin Serowik

Checked By: Nate Kranes Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Sciore's Dry Cleaners
PROJECT NUMBER	386554.0000.0000
SAMPLE ID	SDC-MW-7
SAMPLE TIME	10:15

LOCATION ID	MW-7
DATE	27-Aug
START TIME	9:20
END TIME	10:15
SITE NAME/NUMBER	
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	12.64 FT	**FINAL DTW (BMP)**	12.72 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	18.73 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	6.09 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.013 GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.999 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	1.82 GAL	**DRAWDOWN/ TOTAL PURGED**	0.007	**PRESSURE TO PUMP**	- PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
920	**BEGIN PURGING**									
930	12.71	200	17.71	1.120	6.12	3.86	149.00	-34		
940	12.71	200	17.01	1.120	6.16	3.67	67.40	-33		
945	12.72	200	16.89	1.130	6.18	3.46	55.80	-29		
950	12.72	200	16.69	1.130	6.18	3.45	35.00	-21		
955	12.72	200	17.26	1.120	6.18	3.35	32.00	-15		
1000	12.72	200	16.79	1.120	6.18	3.32	28.30	-14		
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**17.0**	**1.120**	**6.2**	**3.3**	**28.3**	**-14**		

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

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [X] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [X] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

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

EQUIPMENT USED
- [X] WL METER Heron
- [X] PID MiniRAE
- [X] WQ METER YSI Pro DSS
- [ ] TURB. METER
- [X] PUMP Geotech
- [ ] OTHER
- [ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

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

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 1.82

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

SKETCH/NOTES

Sampler Signature: Print Name: Caitlin Serowik

Checked By: Nate Kranes Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Sciore's Dry Cleaners	**LOCATION ID**	MW-8
PROJECT NUMBER	386554.0000.0000	**START TIME**	10:20
SAMPLE ID	SDC-MW-8	**SAMPLE TIME**	11:10
DATE	28-Aug	**END TIME**	11:10
SITE NAME/NUMBER		**PAGE**	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	9.45 FT	**FINAL DTW (BMP)**	9.45 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	17.94 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	8.49 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.000 GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.39236 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.08 GAL	**DRAWDOWN/ TOTAL PURGED**	0.000	**PRESSURE TO PUMP**	- PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1020	**BEGIN PURGING**									
1030	9.45	200	19.76	0.932	6.82	9.91	214.00	105		
1040	9.45	200	19.19	0.964	6.75	2.92	79.50	78		
1045	9.45	200	18.95	0.988	6.70	2.40	40.70	66		
1050	9.45	200	18.86	0.986	6.67	2.16	26.10	63		
1055	9.45	200	18.73	0.991	6.63	1.99	9.40	56		
11:00	9.45	200	18.64	0.999	6.60	1.00	4.60	54		
11:05	9.45	200	18.64	0.995	6.51	1.00	3.20	57		
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**19.0**	**0.995**	**6.5**	**1.0**	**3.2**	**57**		

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

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Heron
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[X] PID	MiniRAE
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI Pro DSS
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[ ] TURB. METER	
[ ] WATTERA	[ ] HEXANE	[X] LDPE TUBING	[ ] OTHER	[X] PUMP	Geotech
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER	
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS	NO. TYPE

ANALYTICAL PARAMETERS

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

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED — YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: 2.08

NO-PURGE METHOD UTILIZED — YES [ ] NO [X]

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

SKETCH/NOTES

Sampler Signature: Print Name: Caitlin Serowik

Checked By: Nate Kranes Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Sciore's Dry Cleaners
PROJECT NUMBER	386554.0000.0000
SAMPLE ID	SDC-MW-9
SAMPLE TIME	16:20

LOCATION ID	MW-9
DATE	28-Aug
START TIME	14:45
END TIME	16:20
SITE NAME/NUMBER	
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	7.48 FT	**FINAL DTW (BMP)**	8.27 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	16.33 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	8.85 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.130 GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.451 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.6 GAL	**DRAWDOWN/ TOTAL PURGED**	0.050	**PRESSURE TO PUMP**	- PSI

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

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1445	**BEGIN PURGING**									
1455										Very Silty
1505										No readings collected due to silt
1510										No readings collected due to silt
1515										No readings collected due to silt
1520	7.63	250	23.83	0.983	6.65	2.18	407.00	89	12	
1525	7.63	250	19.80	1.080	6.53	3.05	394.00	82	12	
1530	7.63	250	19.05	1.080	6.67	2.68	343.00	95	12	
1535	7.63	250	18.79	1.090	6.57	2.53	298.00	101		
1540	7.63	250	18.79	1.090	6.53	2.48	242.00	105		
1545	7.63	250	18.87	1.090	6.54	2.42	192.00	106		
1550	7.63	250	18.82	1.070	6.54	2.18	168.00	107		
1555	7.63	250	18.74	1.070	6.56	2.52	153.00	104		
1600	7.63	250	18.65	1.070	6.59	2.41	132.00	103		
1605	7.63	250	18.80	1.060	6.63	2.37	117.00	101		
1610	7.63	250	18.79	1.070	6.65	2.33	115.00	100		
1615	7.63	250	18.75	1.070	6.67	2.33	107.00	105		
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**19.0**	**1.070**	**6.7**	**2.3**	**107.0**	**105**		

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

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Heron
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[X] PID	MiniRAE
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI Pro DSS
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[ ] TURB. METER	
[ ] WATTERA	[ ] HEXANE	[X] LDPE TUBING	[ ] OTHER	[X] PUMP	Geotech
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER	
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS NO.	TYPE

ANALYTICAL PARAMETERS

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

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

NO-PURGE METHOD UTILIZED: YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: 2.6

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

SKETCH/NOTES

Sampler Signature: Print Name: Caitlin Serowik

Checked By: Nate Kranes Date:

APPENDIX E

Data Usability Summary Report

Site: Scorie's Dry Cleaners
Laboratory: Eurofins TestAmerica – Amherst, NY and Burlington, VT
SDG No.: 480-174454-1
Parameters: Per- and Poly-fluoroalkyl Substances, 1,4-Dioxane
Data Reviewer: Kristen Morin/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: October 1, 2020

Samples Reviewed and Evaluation Summary

6 Groundwater Samples: SCD-MW-1, SCD-MW-3, SCD-MW-5, SCD-MW-7, SCD-MW-8, SCD-MW-9

1 Equipment Blank Sample: SCD-MW-EB (analyzed for PFAS only)

The above-listed groundwater and equipment blank samples were collected on August 27 and 28, 2020 and were analyzed for the following parameters:

- 1,4-Dioxane by SW-846 8270D with Selective Ion Monitoring (SIM)
- Per- and Poly-fluoroalkyl substances (PFAS) (21 target analytes) based on EPA Method 537.1 (modified) using Test America – Burlington, VT standard operating procedure (SOP) BR-LC-009, revision 4.0, effective date 04/12/19.

The samples were analyzed for 1,4-dioxane by Eurofins TestAmerica – Amherst, NY and for PFAS by Eurofins TestAmerica – Burlington, VT. The data validation was performed in accordance with the following guidance, modified for the methodologies utilized:

- USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002), January 2017
- USEPA National Functional Guidelines for High Resolution Superfund Methods Data Review (EPA-542-B-16-001), April 2016
- USEPA Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537 (EPA 910-R-18-001), November 2018
- New York State Department of Environmental Conservation Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids, January 2020

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- * Data Completeness
- * Holding Times and Sample Preservation
- * GC/MS Tunes (1,4-Dioxane only)
- Initial and Continuing Calibrations
- * Blanks
- * Surrogate Recoveries (1,4-Dioxane only)
- * Isotopically Labeled Surrogate Results (PFAS only)
- * Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- * Laboratory Control Sample (LCS) Results

*	•	Internal Standards
NA	•	Field Duplicate Results
	•	Sample Results and Reported Quantitation Limits (QLs)
*	•	Target Compound Identification

*	-	All criteria were met.
NA	-	Field duplicates were not associated with this sample set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. There were no qualifications applied to the data because of sampling error. Qualifications applied to the data because of analytical error are discussed below.

- Potential uncertainty exists for select PFAS results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met.

GC/MS Tunes (1,4-Dioxane only)

All criteria were met in the 1,4-dioxane analyses.

Initial and Continuing Calibrations

1,4-Dioxane

The percent relative standard deviation (%RSD) was within the method acceptance criteria in the initial calibration (IC). The percent difference (%D) met the method acceptance criteria in the continuing calibration (CC) standard associated with the samples in this data set.

PFAS

The %RSDs were within the acceptance criteria in the IC. The %Ds met the acceptance criteria in the CC standards associated with the samples in this data set with one exception. The %D for NMeFOSAA (47.6%) in the CC standard (CCV 200-158505/6 analyzed on 09/02/20 at 15:34) associated with all samples, was above the laboratory's acceptance criteria (40%). However, no validation actions were taken on this basis since the concentration of NMeFOSAA in this CC standard was equal to the QL for this compound and since the %D of NMeFOSAA was within the acceptance criteria (50%) for low-level calibration standards.

Blanks

1,4-Dioxane

1,4-Dioxane was not detected in the associated method blank.

PFAS

Target PFAS compounds were not detected in the associated method blank or the equipment blank.

Surrogate Recoveries (1,4-Dioxane only)

The surrogate percent recoveries (%Rs) met the laboratory acceptance criteria.

Isotopically Labeled Surrogate Results (PFAS only)

Eighteen isotopically labeled surrogate were spiked into the samples prior to extraction for isotope dilution quantitation. The %Rs were within the acceptance criteria.

MS/MSD Results

MS/MSD analyses were performed on sample SCD-MW-7 for 1,4-dioxane and PFAS. The %Rs and relative percent differences met the laboratory acceptance criteria.

LCS Results

The LCS %Rs were within the laboratory acceptance criteria for the 1,4-dioxane and PFAS analyses.

Internal Standards

1,4-Dioxane

The %Rs for the internal standard 1,4-dichlorobenzene-d_4 met the laboratory limits of 50-150% in the 1,4-dioxane analyses.

PFAS

The isotopically labeled internal standard 13C2-PFOA was added to each sample prior to injection to monitor for ion suppression/enhancement at the instrument level. The %Rs met the laboratory limits of 50-150% in the PFAS analyses.

Field Duplicate Results

There were no field duplicates associated with this data set.

Sample Results and Reported Quantitation Limits

Sample calculations were spot-checked; there were no errors noted. The results for select PFAS in several samples were detected below the lowest calibration standard and QL. These results

were qualified as estimated (J) by the laboratory.

There were no dilutions performed on samples in this data set.

The laboratory indicated on the preparation batch worksheet that the sample containers for samples SCD-MW-7 and SCD-MW-9 were placed in an oven and dried; sediment was discarded after the aqueous portion was drawn through the solid-phase extraction cartridge. After drying, the laboratory added the final extraction/elution solvent to the containers and completed the extraction per the laboratory's SOP; no validation action was taken on this basis.

Target Compound Identification

1,4-Dioxane

All criteria were met for 1,4-dioxane.

PFAS

Extracted ion chromatograms were reviewed to verify the target compound identifications. The laboratory manually integrated several peaks to ensure the inclusion of linear and branched isomers for PFOA, PFOS, NEtFOSAA, NMeFOSAA, and/or PFHxS; and/or to ensure proper integration of all PFAS.

Two precursor/product ion transitions were used for identification for all compounds except for PFBA, PFPeA, PFOSA, NMeFOSAA, NEtFOSAA, 6:2 FTS, and 8:2 FTS which only used one precursor/product ion transition for identification. The ratios between the two precursor/product ion transitions were within the laboratory acceptance criteria for detected compounds.

QUALIFIED FORM 1s

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-7 Lab Sample ID: 480-174454-1

Matrix: Water Lab File ID: Z002125.D

Analysis Method: 8270D SIM ID Date Collected: 08/27/2020 10:15

Extract. Method: 3510C Date Extracted: 08/31/2020 14:48

Sample wt/vol: 1000(mL) Date Analyzed: 09/01/2020 17:14

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 547687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-3 Lab Sample ID: 480-174454-2

Matrix: Water Lab File ID: Z002131.D

Analysis Method: 8270D SIM ID Date Collected: 08/27/2020 12:00

Extract. Method: 3510C Date Extracted: 08/31/2020 14:48

Sample wt/vol: 1000(mL) Date Analyzed: 09/01/2020 19:30

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 547687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	23		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-5 Lab Sample ID: 480-174454-3

Matrix: Water Lab File ID: Z002132.D

Analysis Method: 8270D SIM ID Date Collected: 08/27/2020 13:10

Extract. Method: 3510C Date Extracted: 08/31/2020 14:48

Sample wt/vol: 1000(mL) Date Analyzed: 09/01/2020 19:53

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 547687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-1 Lab Sample ID: 480-174454-4

Matrix: Water Lab File ID: Z002133.D

Analysis Method: 8270D SIM ID Date Collected: 08/27/2020 14:20

Extract. Method: 3510C Date Extracted: 08/31/2020 14:48

Sample wt/vol: 1000(mL) Date Analyzed: 09/01/2020 20:16

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 547687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-9 Lab Sample ID: 480-174454-5

Matrix: Water Lab File ID: Z002134.D

Analysis Method: 8270D SIM ID Date Collected: 08/27/2020 16:20

Extract. Method: 3510C Date Extracted: 08/31/2020 14:48

Sample wt/vol: 1000(mL) Date Analyzed: 09/01/2020 20:38

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 547687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	26		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-8 Lab Sample ID: 480-174454-6

Matrix: Water Lab File ID: Z002135.D

Analysis Method: 8270D SIM ID Date Collected: 08/28/2020 11:10

Extract. Method: 3510C Date Extracted: 08/31/2020 14:48

Sample wt/vol: 1000(mL) Date Analyzed: 09/01/2020 21:01

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 547687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	26		15-110

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-7 Lab Sample ID: 480-174454-1

Matrix: Water Lab File ID: PA200902A24.d

Analysis Method: 537 (modified) Date Collected: 08/27/2020 10:15

Extraction Method: 3535 Date Extracted: 09/01/2020 13:01

Sample wt/vol: 277.2(mL) Date Analyzed: 09/02/2020 18:04

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 158505 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.6	J	1.8	0.90
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.7	J	1.8	0.57
307-24-4	Perfluorohexanoic acid (PFHxA)	1.9		1.8	0.69
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.84	J	1.8	0.82
335-67-1	Perfluorooctanoic acid (PFOA)	2.6		1.8	0.73
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.69
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.70
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.53
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.54
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.83
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.7		1.8	0.44
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J	1.8	0.72
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.86
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.81
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.6		1.8	0.55
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		9.0	9.0
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.4
27619-97-2	6:2 FTS	ND		18	5.0
39108-34-4	8:2 FTS	ND		18	2.6

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-3 Lab Sample ID: 480-174454-2

Matrix: Water Lab File ID: PA200902A27.d

Analysis Method: 537 (modified) Date Collected: 08/27/2020 12:00

Extraction Method: 3535 Date Extracted: 09/01/2020 13:01

Sample wt/vol: 281.1(mL) Date Analyzed: 09/02/2020 18:28

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 158505 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.8		1.8	0.89
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.1	J	1.8	0.56
307-24-4	Perfluorohexanoic acid (PFHxA)	1.2	J	1.8	0.68
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.81
335-67-1	Perfluorooctanoic acid (PFOA)	1.6	J	1.8	0.72
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.68
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.69
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.52
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.53
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.82
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.2		1.8	0.44
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.1		1.8	0.71
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.84
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.80
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.2		1.8	0.54
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.9	8.9
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.3
27619-97-2	6:2 FTS	ND		18	4.9
39108-34-4	8:2 FTS	ND		18	2.6

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-5 Lab Sample ID: 480-174454-3

Matrix: Water Lab File ID: PA200902A28.d

Analysis Method: 537 (modified) Date Collected: 08/27/2020 13:10

Extraction Method: 3535 Date Extracted: 09/01/2020 13:01

Sample wt/vol: 291.5(mL) Date Analyzed: 09/02/2020 18:37

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 158505 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.0		1.7	0.86
2706-90-3	Perfluoropentanoic acid (PFPeA)	5.9		1.7	0.54
307-24-4	Perfluorohexanoic acid (PFHxA)	3.3		1.7	0.65
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.78
335-67-1	Perfluorooctanoic acid (PFOA)	1.4	J	1.7	0.69
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.66
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.67
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.51
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.79
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.8		1.7	0.42
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.7		1.7	0.69
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.81
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.77
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.9		1.7	0.52
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.6	8.6
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.3
27619-97-2	6:2 FTS	ND		17	4.7
39108-34-4	8:2 FTS	ND		17	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-1 Lab Sample ID: 480-174454-4

Matrix: Water Lab File ID: PA200902A29.d

Analysis Method: 537 (modified) Date Collected: 08/27/2020 14:20

Extraction Method: 3535 Date Extracted: 09/01/2020 13:01

Sample wt/vol: 286.8(mL) Date Analyzed: 09/02/2020 18:45

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 158505 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.0	J	1.7	0.87
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.55
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.66
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.79
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.7	0.71
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.67
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.68
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.52
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.80
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.2		1.7	0.43
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.3	J	1.7	0.70
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.83
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.78
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.4	J	1.7	0.53
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.7	8.7
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.3
27619-97-2	6:2 FTS	ND		17	4.8
39108-34-4	8:2 FTS	ND		17	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-9 Lab Sample ID: 480-174454-5

Matrix: Water Lab File ID: PA200902A30.d

Analysis Method: 537 (modified) Date Collected: 08/27/2020 16:20

Extraction Method: 3535 Date Extracted: 09/01/2020 13:01

Sample wt/vol: 276.9(mL) Date Analyzed: 09/02/2020 18:53

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 158505 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.2		1.8	0.90
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.79	J	1.8	0.57
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.69
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.82
335-67-1	Perfluorooctanoic acid (PFOA)	1.2	J	1.8	0.73
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.70
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.70
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.53
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.54
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.83
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.3		1.8	0.44
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.3	J	1.8	0.72
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.86
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.81
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.5		1.8	0.55
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		9.0	9.0
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.4
27619-97-2	6:2 FTS	ND		18	5.0
39108-34-4	8:2 FTS	ND		18	2.6

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-8 Lab Sample ID: 480-174454-6

Matrix: Water Lab File ID: PA200902A31.d

Analysis Method: 537 (modified) Date Collected: 08/28/2020 11:10

Extraction Method: 3535 Date Extracted: 09/01/2020 13:01

Sample wt/vol: 283.4(mL) Date Analyzed: 09/02/2020 19:02

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 158505 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.0	J	1.8	0.88
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.67	J	1.8	0.56
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.67
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.80
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.8	0.71
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.68
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.69
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.52
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.53
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.81
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.0		1.8	0.43
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.85	J	1.8	0.71
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.84
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.79
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.93	J	1.8	0.54
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.8	8.8
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.3
27619-97-2	6:2 FTS	ND		18	4.9
39108-34-4	8:2 FTS	ND		18	2.6

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-174454-1

SDG No.:

Client Sample ID: SCD-MW-EB Lab Sample ID: 480-174454-8

Matrix: Water Lab File ID: PA200902A32.d

Analysis Method: 537 (modified) Date Collected: 08/28/2020 13:15

Extraction Method: 3535 Date Extracted: 09/01/2020 13:01

Sample wt/vol: 275.8(mL) Date Analyzed: 09/02/2020 19:10

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 158505 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.8	0.91
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.8	0.57
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.69
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.82
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.8	0.73
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.70
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.71
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.53
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.54
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.83
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.44
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.73
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.86
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.82
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.55
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		9.1	9.1
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.4
27619-97-2	6:2 FTS	ND		18	5.0
39108-34-4	8:2 FTS	ND		18	2.6

QC NONCONFORMANCE DOCUMENTATION

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-174454-1

SDG No.:

Lab Sample ID: CCV 200-158505/6 Calibration Date: 09/02/2020 15:34

Instrument ID: LC812 Calib Start Date: 07/16/2020 13:57

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/16/2020 14:39

Lab File ID: PA200902A06.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.7997	0.8124		0.508	0.500	1.6	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.8357	0.8224		0.492	0.500	-1.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.8435	0.8873		0.465	0.442	5.2	40.0
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	1.533	1.607		0.490	0.467	4.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8152	0.8357		0.513	0.500	2.5	40.0
Perfluoropentanesulfonic acid	AveID	1.029	1.028		0.469	0.469	-0.0	50.0
HFPO-DA	AveID	1.975	1.371		0.347	0.500	-30.6	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	0.9265	0.8993		0.442	0.455	-2.9	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.8230	0.9189		0.558	0.500	11.7	40.0
DONA	AveID	2.349	2.654		0.532	0.471	13.0	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.9462	1.006		0.506	0.476	6.3	50.0
6:2 FTS	AveID	0.6742	0.7160		0.503	0.474	6.2	40.0
Perfluorooctanoic acid (PFOA)	AveID	0.8736	0.9328		0.534	0.500	6.8	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.8605	0.9076		0.489	0.464	5.5	40.0
Perfluorononanoic acid (PFNA)	AveID	0.8868	0.9336		0.526	0.500	5.3	40.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	0.7301	0.8164		0.521	0.466	11.8	50.0
Perfluorononanesulfonic acid	AveID	0.7323	0.6864		0.450	0.480	-6.3	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.7913	0.9656		0.610	0.500	22.0	40.0
8:2 FTS	AveID	0.2991	0.3170		0.508	0.479	6.0	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.7662	0.8574		0.560	0.500	11.9	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7295	1.077		0.738	0.500	47.6*	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.5470	0.5653		0.498	0.482	3.4	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.6515	0.7132		0.547	0.500	9.5	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7628	0.5733		0.376	0.500	-24.8	40.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	0.6394	0.7115		0.524	0.471	11.3	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.7784	0.8719		0.560	0.500	12.0	40.0
10:2 FTS	AveID	0.1704	0.2042		0.578	0.482	19.8	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.1758	0.1448		0.399	0.484	-17.6	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.6528	0.6840		0.524	0.500	4.8	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1866	0.1987		0.532	0.500	6.4	40.0

FORM VII 537 (modified)

Data Usability Summary Report

Site: Scorie's Dry Cleaners
Laboratory: Eurofins TestAmerica Buffalo – Amherst, NY
SDG No.: 480-174454-1
Parameters: Metals
Data Reviewer: Kristen Morin/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: October 2, 2020

Sample Reviewed and Evaluation Summary

7 Groundwater Samples: SCD-MW-1, SCD-MW-2, SCD-MW-3, SCD-MW-5, SCD-MW-7, SCD-MW-8, SCD-MW-9

The above-listed groundwater samples were collected on August 27 and 28, 2020 and were analyzed for metals by SW-846 Methods 6010C/7470A.

The data validation was performed in accordance with *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA-540-R-2017-001),* January 2017, modified for the SW-846 methodologies utilized.

The data were evaluated based on the following parameters:

	•	Overall Evaluation of Data and Potential Usability Issues
	•	Data Completeness
*	•	Holding Times and Sample Preservation
	•	Initial and Continuing Calibrations
*	•	Interference Check Sample (ICS) Results
	•	Blanks
	•	Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
NA	•	Laboratory Duplicate Results
*	•	Serial Dilution Results
*	•	Laboratory Control Sample (LCS) Results
NA	•	Field Duplicate Results
	•	Sample Results and Reported Quantitation Limits (QLs)

*	-	All criteria were met.
NA	-	Field duplicates and laboratory duplicates were not associated with this sample set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select metals results that were detected between the method detection limit (MDL) and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive result for zinc in sample SCD-MW-2 was qualified as nondetect (U) at the QL

due to method blank contamination. This result can be used for project objectives as a nondetect result, which may have a minor impact on the data usability.

- The positive results for chromium in samples SCD-MW-1, SCD-MW-7, SCD-MW-8, and SCD-MW-9 were qualified as estimated (J) due to high recovery in the MS/MSD analyses. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with the following exception. Results for sodium were not reported in the method blank and LCS for batch 547602 on the summary forms associated with several samples in this data set. The laboratory was contacted during validation and provided a revised report to correct this issue.

Holding Times and Sample Preservation

All holding time and sample preservation method criteria were met for the metals analyses.

Initial and Continuing Calibrations

The initial calibration verification and continuing calibration verification percent recoveries (%Rs) met the method acceptance limits for the metals analyses. All initial calibration coefficients were >0.995, as applicable. The low-level check standard %Rs met the acceptance limits of 70-130% with one exception. The %R for sodium (136%) was above the acceptance limits in the low-level check standard analyzed on 9/2/20 at 01:02 (CCVL 480-547844/37) associated with samples SCD-MW-3, SCD-MW-5, and SCD-MW-7. No validation actions were required on this basis since the results for sodium in the associated samples were >10x the QL.

ICS Results

All analytes recovered within the acceptance limits in the ICSAB sample analyses. There were several analytes detected as positive and/or negative interference in the ICSA analyses. However, the interferents, aluminum, calcium, iron and magnesium, were not detected in any samples in this data set at levels comparable to the ICSA solution. Therefore, ICS interferences were not evaluated.

Blanks

Target analytes were not detected in the initial calibration blanks. The following table summarizes the method blank (MB) and continuing calibration blank (CCB) contaminants, the concentrations detected, and the resulting validation actions.

Blank ID	Analyte	Blank Concentration	Validation Actions
CCB 480-547844/36	Sodium	0.459 J mg/L	Qualification was not required since sodium was detected at >10x the blank concentration in the associated samples.
Associated samples: SCD-MW-3, SCD-MW-5, SCD-MW-7			
MB 480-547762/1-A	Zinc	0.00189 J mg/L	The positive result for zinc in sample SCD-MW-2 was qualified as nondetect (U) at the QL since the result was < the QL. Qualification was not required for the remaining associated sample since zinc was not detected.
Associated samples: SCD-MW-2, SCD-MW-8			

MS/MSD Results

MS/MSD analyses were performed on sample SCD-MW-7 for all metals; a post digestion spike (PDS) was also performed on this sample for all metals except mercury. The %Rs and relative percent differences (RPDs), where applicable, were within the laboratory acceptance limits in the MS/MSD and PDS analyses with the following exceptions. The %Rs for chromium in the MS/MSD (158%/126%) were outside of the acceptance limits (75-125%); the %R for chromium was within the acceptance limits in the PDS. Therefore, the positive results for chromium in samples SCD-MW-1, SCD-MW-7, SCD-MW-8, and SCD-MW-9 were qualified as estimated (J). Qualification was not required in the remaining groundwater samples since chromium was not detected in these samples.

Qualification of the data is not required in the case of nonconformances when the sample concentration is >4x the spike concentration; thus, these results were not evaluated or summarized in this report.

Laboratory Duplicate Results

Laboratory duplicate analyses were not performed on any samples in this data set.

Serial Dilution Results

A serial dilution analysis was performed on sample SCD-MW-7 for all metals. All criteria were met.

LCS Results

The %Rs for all metals met the laboratory acceptance criteria in the LCS analyses.

Field Duplicate Results

No field duplicate pairs were submitted with this sample set.

Sample Results and Reported Quantitation Limits

Select metal results were reported between the MDL and QL. These results were qualified as estimated (J) in the associated samples by the laboratory. Sample calculations were spot-checked; there were no errors noted.

There were no dilutions performed on any samples in this data set.

QUALIFIED FORM 1s

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SCD-MW-7 | Lab Sample ID: 480-174454-1

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-174454-1

SDG ID.:

Matrix: Water | Date Sampled: 08/27/2020 10:15

Reporting Basis: WET | Date Received: 08/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.060	0.20	0.060	mg/L	J		1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	0.067	0.0020	0.00070	mg/L		~~^~~	1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	87.8	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	0.50	0.0040	0.0010	mg/L	J	~~F1~~	1	6010C
7440-48-4	Cobalt	0.022	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	0.011	0.010	0.0016	mg/L			1	6010C
7439-89-6	Iron	2.8	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	21.1	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	0.48	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	0.46	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	3.4	0.50	0.10	mg/L			1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	111	1.0	0.32	mg/L		~~B ^~~	1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	ND	0.010	0.0015	mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020	0.00012	mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SCD-MW-3 | Lab Sample ID: 480-174454-2

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-174454-1

SDG ID.:

Matrix: Water | Date Sampled: 08/27/2020 12:00

Reporting Basis: WET | Date Received: 08/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20	0.060	mg/L			1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	0.070	0.0020	0.00070	mg/L		^	1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	87.9	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040	0.0010	mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	ND	0.010	0.0016	mg/L			1	6010C
7439-89-6	Iron	ND	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	21.5	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	ND	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	ND	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	5.2	0.50	0.10	mg/L			1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	97.5	1.0	0.32	mg/L		B ^	1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	ND	0.010	0.0015	mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020	0.00012	mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SCD-MW-5 Lab Sample ID: 480-174454-3

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG ID.:

Matrix: Water Date Sampled: 08/27/2020 13:10

Reporting Basis: WET Date Received: 08/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.20	0.20	0.060	mg/L			1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	0.050	0.0020	0.00070	mg/L		^	1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	59.5	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040	0.0010	mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	ND	0.010	0.0016	mg/L			1	6010C
7439-89-6	Iron	0.22	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	13.8	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	0.27	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	ND	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	5.7	0.50	0.10	mg/L			1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	70.5	1.0	0.32	mg/L		B ^	1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	ND	0.010	0.0015	mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020	0.00012	mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SCD-MW-1 | Lab Sample ID: 480-174454-4

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-174454-1

SDG ID.:

Matrix: Water | Date Sampled: 08/27/2020 14:20

Reporting Basis: WET | Date Received: 08/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.79	0.20	0.060	mg/L			1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	0.068	0.0020	0.00070	mg/L		~~^~~	1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	79.3	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	0.0015	0.0040	0.0010	mg/L	~~J~~ J		1	6010C
7440-48-4	Cobalt	ND	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	0.0042	0.010	0.0016	mg/L	J		1	6010C
7439-89-6	Iron	1.0	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	18.8	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	0.14	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	0.0015	0.010	0.0013	mg/L	J		1	6010C
7440-09-7	Potassium	5.7	0.50	0.10	mg/L			1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	90.8	1.0	0.32	mg/L		~~B~~	1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	0.0048	0.010	0.0015	mg/L	J		1	6010C
7439-97-6	Mercury	ND	0.00020	0.00012	mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SCD-MW-9 Lab Sample ID: 480-174454-5

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG ID.:

Matrix: Water Date Sampled: 08/27/2020 16:20

Reporting Basis: WET Date Received: 08/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.46	0.20	0.060	mg/L			1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	0.0074	0.015	0.0056	mg/L	J		1	6010C
7440-39-3	Barium	0.097	0.0020	0.00070	mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	82.8	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	5.4	0.0040	0.0010	mg/L	J		1	6010C
7440-48-4	Cobalt	0.057	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	0.16	0.010	0.0016	mg/L			1	6010C
7439-89-6	Iron	28.7	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	19.2	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	0.81	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	0.72	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	4.4	0.50	0.10	mg/L			1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	98.6	1.0	0.32	mg/L		B	1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	0.011	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	0.0032	0.010	0.0015	mg/L	J		1	6010C
7439-97-6	Mercury	ND	0.00020	0.00012	mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SCD-MW-8 Lab Sample ID: 480-174454-6

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG ID.:

Matrix: Water Date Sampled: 08/28/2020 11:10

Reporting Basis: WET Date Received: 08/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20	0.060	mg/L			1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	0.055	0.0020	0.00070	mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	83.1	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	0.14	0.0040	0.0010	mg/L	J		1	6010C
7440-48-4	Cobalt	0.00083	0.0040	0.00063	mg/L	J		1	6010C
7440-50-8	Copper	0.0036	0.010	0.0016	mg/L	J		1	6010C
7439-89-6	Iron	0.56	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	20.1	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	0.0086	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	0.033	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	3.6	0.50	0.10	mg/L			1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	106	1.0	0.32	mg/L			1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	ND	0.010	0.0015	mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020	0.00012	mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SCD-MW-2 Lab Sample ID: 480-174454-7

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG ID.:

Matrix: Water Date Sampled: 08/28/2020 10:00

Reporting Basis: WET Date Received: 08/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.12	0.20	0.060	mg/L	J		1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	0.065	0.0020	0.00070	mg/L		^	1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	85.7	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040	0.0010	mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	ND	0.010	0.0016	mg/L			1	6010C
7439-89-6	Iron	0.12	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	20.8	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	0.017	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	ND	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	4.9	0.50	0.10	mg/L			1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	102	1.0	0.32	mg/L			1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	ND/0.01 U ~~0.0050~~	0.010	0.0015	mg/L	~~J------~~	~~B--~~	1	6010C
7439-97-6	Mercury	ND	0.00020	0.00012	mg/L			1	7470A

QC NONCONFORMANCE DOCUMENTATION

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG No.:

ICV Source: MEI_10_CCVL_00335 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00335

Analyte	CCVL 480-547844/37 09/02/2020 01:02				CCVL 480-547844/49 09/02/2020 01:48				CCVL 480-547844/55 09/02/2020 02:32			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.197	J	0.200	99	0.203		0.200	102	0.186	J	0.200	93
Antimony	0.0170	J	0.0200	85	0.0186	J	0.0200	93	0.0173	J	0.0200	87
Arsenic	0.0148	J	0.0150	98	0.0146	J	0.0150	98	0.0154		0.0150	103
Barium	0.00206		0.00200	103	0.00204		0.00200	102	0.00201		0.00200	101
Beryllium	0.00201		0.00200	101	0.00200		0.00200	100	0.00199	J	0.00200	100
Cadmium	0.00210		0.00200	105	0.00202		0.00200	101	0.00203		0.00200	102
Calcium	0.520		0.500	104	0.516		0.500	103	0.505		0.500	101
Chromium	0.00392	J	0.00400	98	0.00433		0.00400	108	0.00398	J	0.00400	100
Cobalt	0.00365	J	0.00400	91	0.00376	J	0.00400	94	0.00366	J	0.00400	92
Copper	0.00924	J	0.0100	92	0.00980	J	0.0100	98	0.00974	J	0.0100	97
Iron	0.0535		0.0500	107	0.0533		0.0500	107	0.0541		0.0500	108
Lead	0.0109		0.0100	109	0.0107		0.0100	107	0.0103		0.0100	103
Magnesium	0.202		0.200	101	0.201		0.200	101	0.197	J	0.200	99
Manganese	0.00334		0.00300	111	0.00335		0.00300	112	0.00336		0.00300	112
Nickel	0.0104		0.0100	104	0.0105		0.0100	105	0.0105		0.0100	105
Potassium	0.517		0.500	103	0.474	J	0.500	95	0.483	J	0.500	97
Selenium	0.0223	J	0.0250	89	0.0224	J	0.0250	90	0.0265		0.0250	106
Silver	0.00510	J	0.00600	85	0.00504	J	0.00600	84	0.00562	J	0.00600	94
Sodium	1.37		1.01	136	1.17		1.01	116	1.10		1.01	109
Thallium	0.0196	J	0.0200	98	0.0190	J	0.0200	95	0.0190	J	0.0200	95
Vanadium	0.00490	J	0.00500	98	0.00509		0.00500	102	0.00498	J	0.00500	100
Zinc	0.0108		0.0100	108	0.0103		0.0100	103	0.00986	J	0.0100	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-174454-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-547844/6 09/01/2020 11:12		CCB 480-547844/19 09/01/2020 23:27		CCB 480-547844/24 09/02/2020 00:12		CCB 480-547844/36 09/02/2020 00:59	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		0.165	J	ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND				ND		0.459	J
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-547762/1-A
Matrix: Water
Analysis Batch: 548027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.00189	J	0.010	0.0015	mg/L		09/02/20 08:47	09/02/20 17:43	1

Lab Sample ID: LCS 480-547762/2-A
Matrix: Water
Analysis Batch: 548027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.98		mg/L		100	80 - 120
Antimony	0.200	0.213		mg/L		107	80 - 120
Arsenic	0.200	0.210		mg/L		105	80 - 120
Barium	0.200	0.216	^	mg/L		108	80 - 120
Beryllium	0.200	0.212		mg/L		106	80 - 120
Cadmium	0.200	0.204		mg/L		102	80 - 120
Calcium	10.0	10.18		mg/L		102	80 - 120
Chromium	0.200	0.206		mg/L		103	80 - 120
Cobalt	0.200	0.198		mg/L		99	80 - 120
Copper	0.200	0.203		mg/L		102	80 - 120
Iron	10.0	9.98		mg/L		100	80 - 120
Lead	0.200	0.202		mg/L		101	80 - 120
Magnesium	10.0	10.18		mg/L		102	80 - 120
Manganese	0.200	0.205		mg/L		102	80 - 120
Nickel	0.200	0.199		mg/L		100	80 - 120
Potassium	10.0	9.93		mg/L		99	80 - 120
Selenium	0.200	0.205		mg/L		103	80 - 120
Silver	0.0500	0.0495		mg/L		99	80 - 120
Sodium	10.0	9.96		mg/L		99	80 - 120
Thallium	0.200	0.206		mg/L		103	80 - 120
Vanadium	0.200	0.205		mg/L		102	80 - 120
Zinc	0.200	0.208		mg/L		104	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-547548/1-A
Matrix: Water
Analysis Batch: 547756

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547548

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		09/01/20 12:14	09/01/20 15:43	1

Lab Sample ID: LCS 480-547548/2-A
Matrix: Water
Analysis Batch: 547756

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00735		mg/L		110	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-547602/2-A
Matrix: Water
Analysis Batch: 547844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547602

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.200	0.195		mg/L		97	80 - 120
Calcium	10.0	9.87		mg/L		99	80 - 120
Chromium	0.200	0.210		mg/L		105	80 - 120
Cobalt	0.200	0.190		mg/L		95	80 - 120
Copper	0.200	0.197		mg/L		99	80 - 120
Iron	10.0	9.96		mg/L		100	80 - 120
Lead	0.200	0.196		mg/L		98	80 - 120
Magnesium	10.0	9.81		mg/L		98	80 - 120
Manganese	0.200	0.203		mg/L		101	80 - 120
Nickel	0.200	0.196		mg/L		98	80 - 120
Potassium	10.0	9.74		mg/L		97	80 - 120
Selenium	0.200	0.192		mg/L		96	80 - 120
Silver	0.0500	0.0482		mg/L		96	80 - 120
Thallium	0.200	0.199		mg/L		99	80 - 120
Vanadium	0.200	0.196		mg/L		98	80 - 120
Zinc	0.200	0.212		mg/L		106	80 - 120

Lab Sample ID: 480-174454-1 MS
Matrix: Water
Analysis Batch: 547844

Client Sample ID: SCD-MW-7
Prep Type: Total/NA
Prep Batch: 547602

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.060	J	10.0	10.54		mg/L		105	75 - 125
Antimony	ND		0.200	0.208		mg/L		104	75 - 125
Arsenic	ND		0.200	0.214		mg/L		107	75 - 125
Barium	0.067	^	0.200	0.270	^	mg/L		101	75 - 125
Beryllium	ND		0.200	0.208		mg/L		104	75 - 125
Cadmium	ND		0.200	0.201		mg/L		101	75 - 125
Calcium	87.8		10.0	96.09	4	mg/L		83	75 - 125
Chromium	0.50	F1	0.200	0.817	F1	mg/L		158	75 - 125
Cobalt	0.022		0.200	0.219		mg/L		99	75 - 125
Copper	0.011		0.200	0.217		mg/L		103	75 - 125
Iron	2.8		10.0	13.10		mg/L		103	75 - 125
Lead	ND		0.200	0.205		mg/L		102	75 - 125
Magnesium	21.1		10.0	30.39		mg/L		93	75 - 125
Manganese	0.48		0.200	0.654		mg/L		87	75 - 125
Nickel	0.46		0.200	0.636		mg/L		87	75 - 125
Potassium	3.4		10.0	13.64		mg/L		102	75 - 125
Selenium	ND		0.200	0.201		mg/L		101	75 - 125
Silver	ND		0.0500	0.0495		mg/L		99	75 - 125
Sodium	111	B ^	10.0	118.6	^ 4	mg/L		75	75 - 125
Thallium	ND		0.200	0.203		mg/L		102	75 - 125
Vanadium	ND		0.200	0.203		mg/L		101	75 - 125
Zinc	ND		0.200	0.214		mg/L		107	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-174454-1 MSD
Client Sample ID: SCD-MW-7
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 547844
Prep Batch: 547602

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.060	J	10.0	10.43		mg/L		104	75 - 125	1	20
Antimony	ND		0.200	0.208		mg/L		104	75 - 125	0	20
Arsenic	ND		0.200	0.213		mg/L		107	75 - 125	0	20
Barium	0.067	^	0.200	0.270	^	mg/L		101	75 - 125	0	20
Beryllium	ND		0.200	0.208		mg/L		104	75 - 125	0	20
Cadmium	ND		0.200	0.203		mg/L		101	75 - 125	1	20
Calcium	87.8		10.0	95.08	4	mg/L	N/A	73	75 - 125	1	20
Chromium	0.50	F1	0.200	0.753	F1	mg/L		126	75 - 125	8	20
Cobalt	0.022		0.200	0.221		mg/L		100	75 - 125	1	20
Copper	0.011		0.200	0.216		mg/L		102	75 - 125	0	20
Iron	2.8		10.0	13.09		mg/L		103	75 - 125	0	20
Lead	ND		0.200	0.203		mg/L		102	75 - 125	1	20
Magnesium	21.1		10.0	30.27		mg/L		92	75 - 125	0	20
Manganese	0.48		0.200	0.701		mg/L		111	75 - 125	7	20
Nickel	0.46		0.200	0.689		mg/L		113	75 - 125	8	20
Potassium	3.4		10.0	13.54		mg/L		101	75 - 125	1	20
Selenium	ND		0.200	0.203		mg/L		101	75 - 125	1	20
Silver	ND		0.0500	0.0488		mg/L		98	75 - 125	2	20
Sodium	111	B ^	10.0	117.3	^ 4	mg/L	N/A	63	75 - 125	1	20
Thallium	ND		0.200	0.205		mg/L		102	75 - 125	1	20
Vanadium	ND		0.200	0.204		mg/L		102	75 - 125	0	20
Zinc	ND		0.200	0.214		mg/L		107	75 - 125	0	20

Lab Sample ID: MB 480-547762/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 548027
Prep Batch: 547762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/02/20 08:47	09/02/20 17:43	1
Antimony	ND		0.020	0.0068	mg/L		09/02/20 08:47	09/02/20 17:43	1
Arsenic	ND		0.015	0.0056	mg/L		09/02/20 08:47	09/02/20 17:43	1
Barium	ND	^	0.0020	0.00070	mg/L		09/02/20 08:47	09/02/20 17:43	1
Beryllium	ND		0.0020	0.00030	mg/L		09/02/20 08:47	09/02/20 17:43	1
Cadmium	ND		0.0020	0.00050	mg/L		09/02/20 08:47	09/02/20 17:43	1
Calcium	ND		0.50	0.10	mg/L		09/02/20 08:47	09/02/20 17:43	1
Chromium	ND		0.0040	0.0010	mg/L		09/02/20 08:47	09/02/20 17:43	1
Cobalt	ND		0.0040	0.00063	mg/L		09/02/20 08:47	09/02/20 17:43	1
Copper	ND		0.010	0.0016	mg/L		09/02/20 08:47	09/02/20 17:43	1
Iron	ND		0.050	0.019	mg/L		09/02/20 08:47	09/02/20 17:43	1
Lead	ND		0.010	0.0030	mg/L		09/02/20 08:47	09/02/20 17:43	1
Magnesium	ND		0.20	0.043	mg/L		09/02/20 08:47	09/02/20 17:43	1
Manganese	ND		0.0030	0.00040	mg/L		09/02/20 08:47	09/02/20 17:43	1
Nickel	ND		0.010	0.0013	mg/L		09/02/20 08:47	09/02/20 17:43	1
Potassium	ND		0.50	0.10	mg/L		09/02/20 08:47	09/02/20 17:43	1
Selenium	ND		0.025	0.0087	mg/L		09/02/20 08:47	09/02/20 17:43	1
Silver	ND		0.0060	0.0017	mg/L		09/02/20 08:47	09/02/20 17:43	1
Sodium	ND		1.0	0.32	mg/L		09/02/20 08:47	09/02/20 17:43	1
Thallium	ND		0.020	0.010	mg/L		09/02/20 08:47	09/02/20 17:43	1
Vanadium	ND		0.0050	0.0015	mg/L		09/02/20 08:47	09/02/20 17:43	1